



October 31, 2018

Lynn Nakashima  
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700 Heinz Avenue, Suite 200C  
Berkeley, California 94710

Sara Ziff  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, California 94105

**Subject: Corporation Yard, Building 120 Concrete Sampling Summary  
Richmond Field Station Site  
University of California, Berkeley**

Dear Ms. Nakashima and Ms. Ziff:

On behalf of the University of California Berkeley, Tetra Tech, Inc. collected concrete surface samples at Building 120 at the Richmond Field Station (RFS) on September 11, 2018. This letter provides a summary of the sampling approach and results. The sampling was conducted consistent with the sampling letter approach dated August 15, 2018.

### **Background**

Building 120 is located within the Corporation Yard and was constructed in the 1960s when it housed a trash incinerator for UC Berkeley campus solid wastes. After the incinerator was removed in the 1970s, the building was used primarily by the RFS Facilities Management staff to store maintenance chemicals (a 1989 report describes storage of drums of thinner, kerosene and petroleum hydrocarbons), oils and waste oils. Currently the building is vacant as was requested by DTSC during the Corporation Yard removal action conducted in October and November 2017.

Building 120 is immediately adjacent to the Corporation Yard removal action Excavation 3A. Soil samples from Excavation 3A exhibited elevated concentrations of total polychlorinated biphenyls (PCB) up to 36,000 milligrams per kilogram (mg/kg). Concrete samples were collected in response to recommendations by U.S. Environmental Protection Agency following review of preliminary data from Excavation 3A. The purposes of the sampling are to (1) evaluate worker-exposure safety, and (2) determine if there are residues of historic spills of PCB-containing fluids that could have leaked out of the building to become the source of PCBs found in Excavation 3A.

### **Sampling Approach**

Sampling protocols adhered to *Standard Operation Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls*, prepared by U.S. EPA Region 1, dated May 2011, unless otherwise noted below.

- The concrete footing of Building 120 measures 11.33 feet by 23.25 feet, or approximately 265 square feet. As a result, three locations B120-01, B120-02, and B120-03 were sampled. Concrete core samples were collected at the surface at each location from 0 to 0.5 inches within the concrete. Sample locations are shown on Figure 1.
- Sample locations were selected from the east (B120-01), central (B120-02), and west (B120-03) portions of the foundation. B120-01 and B120-03 were selected in the center of the foundation. B120-02 was selected along the southern portion of the foundation which is nearest to the contamination identified during the Corporation Yard removal action. No staining was observed during the field effort; therefore, the samples were collected from originally-proposed locations.
- B120-02 was collected in triplicate (R1, R2, R3) within 1 foot of each other with the intent of evaluating the precision of the sampling method, site heterogeneity, field sampling and the laboratory analysis variability. Following sample collection and submittal to the laboratory, sample R2 was unintentionally compromised by the laboratory, and as a result the sample was not usable. On September 24, UC Berkeley alerted EPA and DTSC of the sample status and both agencies approved the use of duplicates instead of triplicates instead of recollecting the compromised triplicate.
- Prior to sampling, the entire foundation area was cleared with a brush of all visible debris including leaves, dirt, or dust. The surface of each sampling location was wiped with alconox and water prior to sampling. The drill bit was decontaminated with disposable brushes with alconox and water between each sample location over paper towels to absorb any excess water. The brushes and paper towels were disposed of in an on-site solid waste receptacle.
- The concrete was sampled using a concrete core bit attached to a hand drill. The bit provided approximately 30 grams of concrete which was placed directly into an 8-oz jar to be analyzed for PCBs by EPA Method 8082 with 3540C Soxhlet Extraction and dioxins by EPA Method 8290. The dioxin analysis was not run on the replicate samples.
- A temperature blank was not required since the samples will be delivered to a local laboratory within 2 hours of sample collection.
- Field split samples and proficiency testing/performance evaluation samples were not recommended or required for this investigation.
- The sample jars were labeled, protected with bubble wrap, placed into re-sealable plastic bags, and packed into an insulated cooler under appropriate chain-of-custody protocols. The samples were taken directly from the field to Enthalpy Analytical in Berkeley, California.

## Sample Results

Sample results for PCB and dioxin were compared to the cleanup goals of 1 mg/kg and 16.4 ng/kg, respectively, as established in the Removal Action Workplan (RAW), dated July 18, 2014. All results were below the cleanup goals. Sample results are provided in Table 1. Attachment 1 includes the complete laboratory data package, including chain-of-custody.

## Replicate Evaluation

The sampling letter approach identified the evaluation of relative standard deviation (RSD) with a benchmark goal of 35 RSD for this project. Since one of the triplicates was compromised, an RSD cannot

Ms. Lynn Nakashima  
Ms. Sara Ziff  
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be calculated. The relative percent difference (RPD) between the duplicate results for total Aroclors (0.67 and 0.276 mg/kg) is 83%. The difference in concentrations of the duplicate results for B120-02 total Aroclor is 0.39 mg/kg. While the RPD is high, the small difference between the reported results support that the data are usable for this investigation.

## Conclusions

Sample results indicate that there is no adverse effect to worker-exposure safety at B120 due to exposure to PCB or dioxins in the concrete footing. RFS workers may continue to use B120 for its intended use of equipment storage. Sample results do not indicate that there are residues of historic spills of PCB-containing fluids from the concrete footing that could have leaked out of the building to become the source of PCBs found in Excavation 3A.

If you have any questions or comments regarding this submittal, please call me at (415) 497-9060.

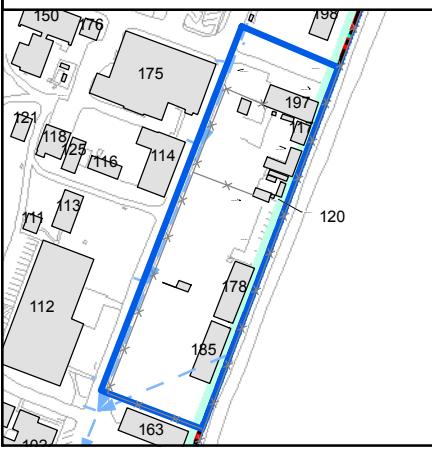
Sincerely,



Jason Brodersen, P.G.  
Project Manager

Attachments: Figure 1, B120 Sample Locations  
Table 1, B120 Concrete Results  
Appendix 1, Complete Laboratory Results

cc: Alicia Bihler, UC Berkeley EH&S



✖ Sample Location



TETRATECH

**Richmond Field Station Site  
University of California, Berkeley**

**Building 120 Sample Locations**

**Table 1 B120 Concrete Results, Corporation Yard Removal Action Implementation**

University of California, Berkeley, Richmond Field Station Site

**Polychlorinated Biphenyls (mg/kg)**

Sample ID	Sample Location	Sample Date	AROCLOR-1016	AROCLOR-1221	AROCLOR-1232	AROCLOR-1242	AROCLOR-1248	AROCLOR-1254	AROCLOR-1260	TOTAL AROCLOR
B120-01	B120	9/11/2018	0.02 U	0.04 U	0.02 U	0.02 U	0.02 U	0.38	0.093	0.473
B120-02-R1	B120	9/11/2018	0.019 U	0.038 U	0.019 U	0.019 U	0.019 U	0.55	0.12	0.67
B120-02-R3	B120	9/11/2018	0.019 U	0.039 U	0.019 U	0.019 U	0.019 U	0.22	0.056	0.276
B120-03	B120	9/11/2018	0.019 U	0.039 U	0.019 U	0.019 U	0.019 U	0.019 U	0.01 J	0.01

**Dioxins (ng/kg)**

Sample ID	Sample Location	Sample Date	1,2,3,4,6,7,8-HPCDD	1,2,3,4,6,7,8-HPCDF	1,2,3,4,7,8,9-HPCDF	1,2,3,4,7,8-HXCDD	1,2,3,4,7,8-HXCDF	1,2,3,6,7,8-HXCDD	1,2,3,6,7,8-HXCFD	1,2,3,7,8,9-HXCDD	1,2,3,7,8,9-HXCDF
B120-01	B120	9/11/2018	310	77.8	3.51 J	3.46 J	4.91 J	17.9	6.33	8	1.46 J
B120-02-R1	B120	9/11/2018	62.3	13.6	10.1 U	1.39 J	1.69 J	3.96 J	2.02 J	3.47 J	10.1 U
B120-03	B120	9/11/2018	6.19 J	1.08 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U

**Table 1 B120 Concrete Results, Corporation Yard Removal Action Implementation**

University of California, Berkeley, Richmond Field Station Site

**Dioxins (ng/kg)**

Sample ID	Sample Location	Sample Date	1,2,3,7,8-PECDD	1,2,3,7,8-PECDF	2,3,4,6,7,8-HXCDF	2,3,4,7,8-PECDF	2,3,7,8-TCDD	2,3,7,8-TCDF	OCDD	OCDF
B120-01	B120	9/11/2018	2.59 J	1 J	7.87	4.16 J	1.26 U	2.74	1,720	52.3
B120-02-R1	B120	9/11/2018	1.56 J	0.836 J	2.03 J	1.6 J	2.02 U	5.45	277	6.99 J
B120-03	B120	9/11/2018	10 U	10 U	10 U	10 U	2 U	2 U	26.5	20 U

**Dioxins (ng/kg)**

Sample ID	Sample Location	Sample Date	TOTAL HPCDD	TOTAL HPCDF	TOTAL HXCDD	TOTAL HXCDF	TOTAL PECDD	TOTAL PECDF	TOTAL TCDD	TOTAL TCDF	DIOXIN TEQ
B120-01	B120	9/11/2018	541	177 J	102 J	184 J	12.4 J	81.1 J	0.351 J	21.7	13.58
B120-02-R1	B120	9/11/2018	132	23.9	47.2 J	32.1 J	9.33 J	27.9 J	0.574 J	19.3	4.91
B120-03	B120	9/11/2018	13 J	1.77 J	1.39 J	1.15 J	10 U	0.557 J	2 U	0.389 J	0.08

Notes

No concentrations exceed the PCB cleanup level of 1 mg/kg.

No concentrations exceed the dioxin toxic equivalency quotient (TEQ) level of 16.4 ng/kg.

HPCDD	Heptachlorodibenzo-p-dioxin	mg/kg	Milligrams per kilogram	PECDF	Pentachlorodibenzofuran
HPCDF	Heptachlorodibenzofuran	ng/kg	Nanograms per kilogram	TCDD	Tetrachlorodibenzo-p-dioxin
HXCDD	Hexachlorodibenzo-p-dioxin	OCDD	Octachlorodibenzo-p-dioxin	TCDF	Tetrachlorodibenzofuran
HXCDF	Hexachlorodibenzofuran	OCDF	Octachlorodibenzofuran	TEQ	Toxicity equivalence quotient
J	Estimated value	PECDD	Pentachlorodibenzo-p-dioxin	U	Nondetected at limit reported

**Attachment 1**

**Complete Laboratory Results**



ENTHALPY

ANALYTICAL



# Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 303137

## ANALYTICAL REPORT

PCBs

Tetra Tech EMI  
1999 Harrison Street  
Oakland, CA 94612

Project : 103S582302.01

Level : IV

Sample ID	Lab ID
B120-01	303137-001
B120-02-R1	303137-002
B-120-02-R3	303137-005
B120-03	303137-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Date: 10/10/2018

Will Rice  
Project Manager  
[will.rice@enthalpy.com](mailto:will.rice@enthalpy.com)  
(510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE  
PCBS (EPA 8082)**

Laboratory number: 303137  
Client: Tetra Tech EMI  
Project: 103S582302.01  
Request Date: 09/12/18  
Samples Received: 09/11/18

This data package contains sample and QC results for four concrete samples, requested for the above referenced project on 09/12/18. See attached cooler receipt form for any sample receipt problems or discrepancies.

**PCBs (EPA 8082):**

All samples underwent sulfuric acid cleanup using EPA Method 3665A.

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B.

No analytical problems were encountered.

**Chain of Custody**



**SAMPLE RECEIPT CHECKLIST**Section 1: Login # 303137Client: Intertech  
Project: RFS B120Date Received: 9/11/16Section 2: Samples received in a cooler?  Yes, how many? \_\_\_\_\_  No (skip Section 3 below)If no cooler Sample Temp (°C): 22.8 using IR Gun #  A, or  B Samples received on ice directly from the field. Cooling process had begun

If in cooler: Date Opened \_\_\_\_\_ By (print) \_\_\_\_\_ (sign) \_\_\_\_\_

Shipping info (if applicable) \_\_\_\_\_

Are custody seals present?  No, or  Yes. If yes, where?  on cooler,  on samples,  on package Date: \_\_\_\_\_ How many \_\_\_\_\_  Signature,  Initials,  NoneWere custody seals intact upon arrival?  Yes  No  N/ASection 3: **Important : Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) \_\_\_\_\_

 Bubble Wrap,  Foam blocks,  Bags,  None,  Cloth material,  Cardboard,  Styrofoam,  Paper towels Samples received on ice directly from the field. Cooling process had begunType of ice used :  Wet,  Blue/Gel,  NoneTemperature blank(s) included?  Yes,  NoTemperature measured using  Thermometer ID: \_\_\_\_\_ or IR Gun #  A  B

Cooler Temp (°C): #1: \_\_\_\_\_, #2: \_\_\_\_\_, #3: \_\_\_\_\_, #4: \_\_\_\_\_, #5: \_\_\_\_\_, #6: \_\_\_\_\_, #7: \_\_\_\_\_

**Section 4:**

Were custody papers dry, filled out properly, and the project identifiable

 YES  NO  N/A

Were Method 5035 sampling containers present?

If YES, what time were they transferred to freezer?

Did all bottles arrive unbroken/unopened?

Are there any missing / extra samples?

Are samples in the appropriate containers for indicated tests?

Are sample labels present, in good condition and complete?

Does the container count match the COC?

Do the sample labels agree with custody papers?

Was sufficient amount of sample sent for tests requested?

Did you change the hold time in LIMS for unpreserved VOAs?

Did you change the hold time in LIMS for preserved terracores?

Are bubbles &gt; 6mm absent in VOA samples?

Was the client contacted concerning this sample delivery?

If YES, who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**Section 5:**

Are the samples appropriately preserved? (if N/A, skip the rest of section 5)

 YES  NO  N/A

Did you check preservatives for all bottles for each sample?

Did you document your preservative check?

pH strip lot# \_\_\_\_\_ pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_

Preservative added:

 H<sub>2</sub>SO<sub>4</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ HCl lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ HNO<sub>3</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ NaOH lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_**Section 6:**Explanations/Comments: Limited sampleDate Logged in 9/12/18By (print) AC (sign) ACDate Labeled 9/12/18By (print) AC (sign) AC CM

## **Results & QC Summary**

**Polychlorinated Biphenyls (PCBs)**

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Field ID:	B120-01	Batch#:	263784
Lab ID:	303137-001	Sampled:	09/11/18
Matrix:	Miscell.	Received:	09/11/18
Units:	ug/Kg	Prepared:	09/21/18
Basis:	as received	Analyzed:	09/26/18
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	7.0
Aroclor-1221	ND	40	19
Aroclor-1232	ND	20	9.2
Aroclor-1242	ND	20	8.5
Aroclor-1248	ND	20	9.1
Aroclor-1254	380	20	7.2
Aroclor-1260	93	20	4.6

Surrogate	%REC	Limits
Decachlorobiphenyl	82	37-170

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

**Polychlorinated Biphenyls (PCBs)**

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Field ID:	B120-02-R1	Batch#:	263784
Lab ID:	303137-002	Sampled:	09/11/18
Matrix:	Miscell.	Received:	09/11/18
Units:	ug/Kg	Prepared:	09/21/18
Basis:	as received	Analyzed:	09/26/18
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	19	6.8
Aroclor-1221	ND	38	18
Aroclor-1232	ND	19	8.9
Aroclor-1242	ND	19	8.2
Aroclor-1248	ND	19	8.7
Aroclor-1254	550	19	7.0
Aroclor-1260	120	19	4.4

Surrogate	%REC	Limits
Decachlorobiphenyl	93	37-170

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

**Polychlorinated Biphenyls (PCBs)**

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Field ID:	B-120-02-R3	Batch#:	263784
Lab ID:	303137-005	Sampled:	09/11/18
Matrix:	Miscell.	Received:	09/11/18
Units:	ug/Kg	Prepared:	09/21/18
Basis:	as received	Analyzed:	09/26/18
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	19	6.9
Aroclor-1221	ND	39	19
Aroclor-1232	ND	19	9.0
Aroclor-1242	ND	19	8.3
Aroclor-1248	ND	19	8.9
Aroclor-1254	220	19	7.1
Aroclor-1260	56	19	4.5

Surrogate	%REC	Limits
Decachlorobiphenyl	101	37-170

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

**Polychlorinated Biphenyls (PCBs)**

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Field ID:	B120-03	Batch#:	263784
Lab ID:	303137-006	Sampled:	09/11/18
Matrix:	Miscell.	Received:	09/11/18
Units:	ug/Kg	Prepared:	09/21/18
Basis:	as received	Analyzed:	09/26/18
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	19	6.9
Aroclor-1221	ND	39	19
Aroclor-1232	ND	19	9.1
Aroclor-1242	ND	19	8.3
Aroclor-1248	ND	19	8.9
Aroclor-1254	ND	19	7.1
Aroclor-1260	10 J	19	4.5

Surrogate	%REC	Limits
Decachlorobiphenyl	111	37-170

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

**Batch QC Report**
**Polychlorinated Biphenyls (PCBs)**

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC948760	Batch#:	263784
Matrix:	Soil	Prepared:	09/21/18
Units:	ug/Kg	Analyzed:	09/24/18

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	7.1
Aroclor-1221	ND	40	19
Aroclor-1232	ND	20	9.3
Aroclor-1242	ND	20	8.6
Aroclor-1248	ND	20	9.1
Aroclor-1254	ND	20	7.3
Aroclor-1260	ND	20	4.6

Surrogate	%REC	Limits
Decachlorobiphenyl	127	37-170

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

**Batch QC Report**
**Polychlorinated Biphenyls (PCBs)**

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Matrix:	Soil	Batch#:	263784
Units:	ug/Kg	Prepared:	09/21/18
Diln Fac:	1.000	Analyzed:	09/24/18

Type: BS Lab ID: QC948761

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	500.0	695.3	139	59-160
Aroclor-1260	500.0	682.0	136	59-170
Surrogate	%REC	Limits		
Decachlorobiphenyl	139	37-170		

Type: BSD Lab ID: QC948762

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	500.0	608.4	122	59-160	13	35
Aroclor-1260	500.0	641.8	128	59-170	6	42
Surrogate	%REC	Limits				
Decachlorobiphenyl	131	37-170				

RPD= Relative Percent Difference

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7.0

Confirmation Report for 303137 PCBS Miscell.  
Enthalpy Analytical - Berkeley

Units: ug/Kg

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
303137-001	B120-01	Aroclor-1254	381.4	453.6	17	19
303137-001	B120-01	Aroclor-1260	93.04	72.85	24	-22
303137-002	B120-02-R1	Aroclor-1254	551.1	475.7	15	-14
303137-002	B120-02-R1	Aroclor-1260	117.5	95.19	21	-19
303137-005	B-120-02-R3	Aroclor-1254	221.2	211.2	5	-5
303137-005	B-120-02-R3	Aroclor-1260	55.58	41.84	28	-25
303137-006	B120-03	Aroclor-1260	10.03 J	6.297	46	-37

J=estimated

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## ENTHALPY INITIAL CALIBRATION FOR 303137 PCBS Miscell.: EPA 8082

Inst : GC06  
 Calnum : 208328928001  
 Units : pg/uL

Name : ar-1254-228ical  
 Date : 17-AUG-2018 01:57  
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	228_032	208328928032	AR2154_10	17-AUG-2018 01:57	S36635
L2	228_033	208328928033	AR2154_250	17-AUG-2018 02:25	S36637 (10X)
L3	228_034	208328928034	AR2154_500	17-AUG-2018 02:53	S36638 (10X)
L4	228_035	208328928035	AR2154_100	17-AUG-2018 03:21	S36636
L5	228_036	208328928036	AR2154_250	17-AUG-2018 03:49	S36637
L6	228_037	208328928037	AR2154_500	17-AUG-2018 04:17	S36638
L7	228_038	208328928038	AR2154_1000	17-AUG-2018 04:45	S36639

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Aroclor-1254 Peak # 1	A	194.40	223.04	319.84	334.40	321.10	307.75	277.74	LINR	-13.314	0.00357		282.61	0.996	.99	20		
Aroclor-1254 Peak # 2	A	242.20	360.56	432.80	415.05	419.28	405.98	366.45	LINR	-12.676	0.00270		377.47	0.997	.99	20		
Aroclor-1254 Peak # 3	A	164.30	273.00	194.80	322.59	332.68	333.43	300.06	LINR	-3.7105	0.00327		274.41	0.996	.99	20		
Aroclor-1254 Peak # 4	A	349.70	274.84	449.36	451.12	513.13	507.73	486.56	LINR	2.00331	0.00203		433.21	0.999	.99	20		
Aroclor-1254 Peak # 5	A	348.90	117.56	277.46	222.70	310.28	365.98	377.00	LINR	22.7582	0.00261		288.56	0.998	.99	20		
Aroclor-1254 Peak # 1	B	236.40	192.04	326.90	331.63	359.79	348.71	312.77	LINR	-8.2256	0.00314		301.18	0.996	.99	20		
Aroclor-1254 Peak # 2	B	295.90	211.36	407.20	373.87	404.16	373.48	335.95	LINR	-13.418	0.00294		343.13	0.995	.99	20		
Aroclor-1254 Peak # 3	B	105.90	101.36	176.54	201.15	228.08	220.34	208.61	LINR	1.17967	0.00472		177.43	0.998	.99	20		
Aroclor-1254 Peak # 4	B	151.90	205.04	346.56	387.19	419.45	465.11	425.50	LINR	5.79489	0.00229		342.96	0.997	.99	20		
Aroclor-1254 Peak # 5	B	23.800	31.000	160.30	177.95	236.79	326.11	328.10	LINR	32.2800	0.00296		183.44	0.996	.99	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1254 Peak # 1	A	10.000	-164	25.000	-74	50.000	-13	100.00	6	250.00	9	500.00	7	1000.0	-2
Aroclor-1254 Peak # 2	A	10.000	-161	25.000	-53	50.000	-8	100.00	-1	250.00	8	500.00	7	1000.0	-2
Aroclor-1254 Peak # 3	A	10.000	-83	25.000	-26	50.000	-44	100.00	2	250.00	7	500.00	8	1000.0	-2
Aroclor-1254 Peak # 4	A	10.000	-9	25.000	-36	50.000	-5	100.00	-6	250.00	5	500.00	3	1000.0	-1
Aroclor-1254 Peak # 5	A	10.000	219	25.000	22	50.000	18	100.00	-19	250.00	-10	500.00	0	1000.0	1
Aroclor-1254 Peak # 1	B	10.000	-108	25.000	-73	50.000	-14	100.00	-4	250.00	10	500.00	8	1000.0	-2
Aroclor-1254 Peak # 2	B	10.000	-147	25.000	-91	50.000	-7	100.00	-3	250.00	14	500.00	7	1000.0	-3
Aroclor-1254 Peak # 3	B	10.000	-38	25.000	-47	50.000	-14	100.00	-4	250.00	8	500.00	4	1000.0	-1
Aroclor-1254 Peak # 4	B	10.000	-7	25.000	-30	50.000	-9	100.00	-5	250.00	-1	500.00	8	1000.0	-2
Aroclor-1254 Peak # 5	B	10.000	230	25.000	38	50.000	12	100.00	-15	250.00	-17	500.00	3	1000.0	0

JC1 08/17/18 : Corrected automatically drawn baseline in all levels.

JC1 08/17/18 : peaks in linear cal for 608 passing

Analyst: JC1

Date: 08/17/18

Reviewer: EAH

Date: 08/17/18

Instrument amount = a0 + response \* a1 + response^2 \* a2; LINR=Linear regression

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208328928001

ENTHALPY 2ND SOURCE CALIBRATION SUMMARY FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Name : ar-1254-228ical  
Calnum : 208328928001 Cal Date : 17-AUG-2018

ICV 208328928040 (228\_040 17-AUG-2018) stds: S36641

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1254	A	250.0	246.5	pg/uL	-1	15	
Aroclor-1254	B	250.0	232.8	pg/uL	-7	15	

Analyst: JC1 Date: 08/17/18 Reviewer: EAH Date: 08/17/18  
Page 1 of 1 208328928001 ICVs

## ENTHALPY INITIAL CALIBRATION FOR 303137 PCBS Miscell.: EPA 8082

Inst : GC06  
 Calnum : 208344656001  
 Units : pg/uL

Name : ar-1660\_239\_ical  
 Date : 27-AUG-2018 12:48

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	239_010	208344656010	PCB10_2	27-AUG-2018 12:48	S37418
L2	239_011	208344656011	PCB25_5	27-AUG-2018 13:16	S37419
L3	239_012	208344656012	PCB100_20	27-AUG-2018 13:44	S37420
L4	239_013	208344656013	PCB250_50	27-AUG-2018 14:12	S37421
L5	239_014	208344656014	PCB500_100	27-AUG-2018 14:40	S37422
L6	239_015	208344656015	PCB750_150	27-AUG-2018 15:08	S37423
L7	239_016	208344656016	PCB1000_200	27-AUG-2018 15:36	S37424

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	400.40	380.16	371.42	336.37	292.87	269.24	255.73	AVRG	R		0.00304		329.45	17	.99	20		
Aroclor-1016 Peak # 2	A	491.60	489.28	459.17	434.37	389.45	366.02	349.76	AVRG	R		0.00235		425.66	14	.99	20		
Aroclor-1016 Peak # 3	A	238.80	249.92	246.72	256.09	231.47	221.94	204.74	AVRG	R		0.00424		235.67	8	.99	20		
Aroclor-1016 Peak # 4	A	144.40	182.56	189.41	172.72	152.64	143.62	136.99	AVRG	R		0.00624		160.33	13	.99	20		
Aroclor-1016 Peak # 5	A	202.50	219.44	230.02	218.98	190.20	175.14	163.28	AVRG	R		0.00500		199.94	12	.99	20		
Aroclor-1260 Peak # 1	A	799.10	770.60	796.39	687.21	586.34	526.59	500.65	AVRG	R		0.00150		666.70	19	.99	20		
Aroclor-1260 Peak # 2	A	595.80	600.80	699.24	651.10	574.78	519.03	495.29	AVRG	R		0.00169		590.86	12	.99	20		
Aroclor-1260 Peak # 3	A	419.20	315.76	362.69	326.92	306.29	275.26	264.84	AVRG	R		0.00308		324.42	16	.99	20		
Aroclor-1260 Peak # 4	A	836.60	858.80	950.86	879.64	785.64	695.54	676.56	AVRG	R		0.00123		811.95	12	.99	20		
Aroclor-1260 Peak # 5	A	368.80	385.40	458.77	440.42	392.05	349.64	342.72	AVRG	R		0.00256		391.11	11	.99	20		
Decachlorobiphenyl	A	11241	9854.2	10008	8464.5	7287.4	6188.9	6024.2	QUAD	A	23613.6	8054.06	-11.3052	8438.2	0.996	.99	20		
Aroclor-1016 Peak # 1	B	181.90	172.56	172.59	165.82	154.07	156.17	146.04	AVRG	R		0.00609		164.17	8	.99	20		
Aroclor-1016 Peak # 2	B	610.00	617.80	656.88	657.69	574.85	541.53	539.52	AVRG	R		0.00167		599.75	8	.99	20		
Aroclor-1016 Peak # 3	B	301.70	293.80	289.88	293.27	252.70	238.71	239.63	AVRG	R		0.00367		272.81	10	.99	20		
Aroclor-1016 Peak # 4	B	165.40	160.00	167.01	167.36	149.52	139.75	136.97	AVRG	R		0.00645		155.15	8	.99	20		
Aroclor-1016 Peak # 5	B	261.20	261.28	274.73	269.24	231.75	226.31	217.75	AVRG	R		0.00402		248.89	9	.99	20		
Aroclor-1260 Peak # 1	B	601.20	572.04	682.05	655.93	576.04	532.17	501.08	AVRG	R		0.00170		588.64	11	.99	20		
Aroclor-1260 Peak # 2	B	555.00	577.28	626.95	616.72	574.23	539.99	495.02	AVRG	R		0.00176		569.31	8	.99	20		
Aroclor-1260 Peak # 3	B	455.00	326.56	359.89	355.82	333.43	305.55	289.81	AVRG	R		0.00289		346.58	16	.99	20		
Aroclor-1260 Peak # 4	B	698.10	684.00	930.36	879.08	780.53	706.90	692.86	AVRG	R		0.00130		767.40	13	.99	20		
Aroclor-1260 Peak # 5	B	360.00	410.00	511.78	462.95	434.78	392.18	393.06	AVRG	R		0.00236		423.54	12	.99	20		
Decachlorobiphenyl	B	11433	9980.4	10463	9456.3	8187.2	7004.6	6817.8	AVRG	R		1.11E-4		9049.0	19	.99	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1016 Peak # 1	A	10.000	<b>22</b>	25.000	15	100.00	13	250.00	2	500.00	-11	750.00	-18	1000.0	<b>-22</b>
Aroclor-1016 Peak # 2	A	10.000	15	25.000	15	100.00	8	250.00	2	500.00	-9	750.00	-14	1000.0	-18
Aroclor-1016 Peak # 3	A	10.000	1	25.000	6	100.00	5	250.00	9	500.00	-2	750.00	-6	1000.0	-13
Aroclor-1016 Peak # 4	A	10.000	-10	25.000	14	100.00	18	250.00	8	500.00	-5	750.00	-10	1000.0	-15
Aroclor-1016 Peak # 5	A	10.000	1	25.000	10	100.00	15	250.00	10	500.00	-5	750.00	-12	1000.0	-18
Aroclor-1260 Peak # 1	A	10.000	20	25.000	16	100.00	19	250.00	3	500.00	-12	750.00	<b>-21</b>	1000.0	<b>-25</b>
Aroclor-1260 Peak # 2	A	10.000	1	25.000	2	100.00	18	250.00	10	500.00	-3	750.00	-12	1000.0	-16
Aroclor-1260 Peak # 3	A	10.000	<b>29</b>	25.000	-3	100.00	12	250.00	1	500.00	-6	750.00	-15	1000.0	-18
Aroclor-1260 Peak # 4	A	10.000	3	25.000	6	100.00	17	250.00	8	500.00	-3	750.00	-14	1000.0	-17
Aroclor-1260 Peak # 5	A	10.000	-6	25.000	-1	100.00	17	250.00	13	500.00	0	750.00	-11	1000.0	-12
Decachlorobiphenyl	A	2.0000	<b>-107</b>	5.0000	<b>-36</b>	20.000	13	50.000	7	100.00	2	150.00	-7	200.00	3
Aroclor-1016 Peak # 1	B	10.000	11	25.000	5	100.00	5	250.00	1	500.00	-6	750.00	-5	1000.0	-11
Aroclor-1016 Peak # 2	B	10.000	2	25.000	3	100.00	10	250.00	10	500.00	-4	750.00	-10	1000.0	-10
Aroclor-1016 Peak # 3	B	10.000	11	25.000	8	100.00	6	250.00	7	500.00	-7	750.00	-12	1000.0	-12
Aroclor-1016 Peak # 4	B	10.000	7	25.000	3	100.00	8	250.00	8	500.00	-4	750.00	-10	1000.0	-12
Aroclor-1016 Peak # 5	B	10.000	5	25.000	5	100.00	10	250.00	8	500.00	-7	750.00	-9	1000.0	-13
Aroclor-1260 Peak # 1	B	10.000	2	25.000	-3	100.00	16	250.00	11	500.00	-2	750.00	-10	1000.0	-15
Aroclor-1260 Peak # 2	B	10.000	-3	25.000	1	100.00	10	250.00	8	500.00	1	750.00	-5	1000.0	-13
Aroclor-1260 Peak # 3	B	10.000	<b>31</b>	25.000	-6	100.00	4	250.00	3	500.00	-4	750.00	-12	1000.0	-16
Aroclor-1260 Peak # 4	B	10.000	-9	25.000	-11	100.00	<b>21</b>	250.00	15	500.00	2	750.00	-8	1000.0	-10
Aroclor-1260 Peak # 5	B	10.000	-15	25.000	-3	100.00	<b>21</b>	250.00	9	500.00	3	750.00	-7	1000.0	-7
Decachlorobiphenyl	B	2.0000	<b>26</b>	5.0000	10	20.000	16	50.000	5	100.00	-10	150.00	<b>-23</b>	200.00	<b>-25</b>

JC1 08/27/18 : Corrected automatically drawn baseline in all levels.

Analyst: JC1

Date: 08/27/18

Reviewer: TKM

Date: 08/27/18

X=A: Instrument response = a0 + amount \* a1 + amount^2 \* a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response \* a1 + response^2 \* a2; AVRG=Average response factor; QUAD=Quadratic regression

ENTHALPY 2ND SOURCE CALIBRATION SUMMARY FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Name : ar-1660\_239\_ical  
Calnum : 208344656001 Cal Date : 27-AUG-2018

ICV 208344656018 (239\_018 27-AUG-2018) stds: S37446

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	250.0	277.5	pg/uL	11	15	
Aroclor-1260	A	250.0	281.2	pg/uL	12	15	
Aroclor-1016	B	250.0	262.5	pg/uL	5	15	
Aroclor-1260	B	250.0	278.3	pg/uL	11	15	

Analyst: JC1

Date: 08/27/18

Reviewer: TKM

Date: 08/27/18

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208344656001 ICVs

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
Seqnum : 208385010009 File : 267\_009 Time : 24-SEP-2018 15:29  
Cal : 208344656001 Caldate : 27-AUG-2018  
Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	534.1	pg/uL	7	15	
Aroclor-1260	A			500.0	504.6	pg/uL	1	15	
Decachlorobiphenyl	A	8438.2	10613	100.0	168.9	pg/uL	69	15	c+
Aroclor-1016	B			500.0	461.4	pg/uL	-8	15	
Aroclor-1260	B			500.0	473.4	pg/uL	-5	15	
Decachlorobiphenyl	B	9049.0	9039.5	100.0	99.89	pg/uL	0	15	

JC1 09/24/18 : Corrected automatically drawn baseline.

Analyst: JC1 Date: 09/24/18 Reviewer: EAH Date: 09/25/18

+high bias c=CCV

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208385010009

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
Seqnum : 208385010022 File : 267\_022 Time : 24-SEP-2018 23:52  
Cal : 208344656001 Caldate : 27-AUG-2018  
Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	568.9	pg/uL	14	15	
Aroclor-1260	A			500.0	534.1	pg/uL	7	15	
Decachlorobiphenyl	A	8438.2	11603	100.0	193.9	pg/uL	<b>94</b>	15	c+
Aroclor-1016	B			500.0	508.7	pg/uL	2	15	
Aroclor-1260	B			500.0	495.5	pg/uL	-1	15	
Decachlorobiphenyl	B	9049.0	10291	100.0	113.7	pg/uL	14	15	

JC1 09/25/18 : Corrected automatically drawn baseline.

Analyst: JC1 Date: 09/25/18 Reviewer: EAH Date: 09/25/18

+high bias c=CCV

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208385010022

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
Seqnum : 208385010073.1 File : 267\_073 Time : 26-SEP-2018 01:25  
Cal : 208344656001 Caldate : 27-AUG-2018  
Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	488.0	pg/uL	-2	15	
Aroclor-1260	A			500.0	505.7	pg/uL	1	15	
Decachlorobiphenyl	A	8438.2	11170	100.0	182.5	pg/uL	83	15	c+
Aroclor-1016	B			500.0	455.7	pg/uL	-9	15	
Aroclor-1260	B			500.0	433.8	pg/uL	-13	15	
Decachlorobiphenyl	B	9049.0	9621.5	100.0	106.3	pg/uL	6	15	

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

+high bias c=CCV

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208385010073.1

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : AR2154\_500 IDF : 1.0  
Seqnum : 208385010074 File : 267\_074 Time : 26-SEP-2018 01:53  
Cal : 208328928001 Caldate : 17-AUG-2018  
Standards: S38368

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1254	A	500.0	450.4	pg/uL	-10	15	
Aroclor-1254	B	500.0	489.0	pg/uL	-2	15	

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18  
Page 1 of 1 208385010074

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
 Seqnum : 208385010085 File : 267\_085 Time : 26-SEP-2018 07:01  
 Cal : 208344656001 Caldate : 27-AUG-2018  
 Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	462.4	pg/uL	-8	15	
Aroclor-1260	A			500.0	436.6	pg/uL	-13	15	
Decachlorobiphenyl	A	8438.2	9103.7	100.0	136.1	pg/uL	<b>36</b>	15	c+
Aroclor-1016	B			500.0	476.3	pg/uL	-5	15	
Aroclor-1260	B			500.0	423.4	pg/uL	-15	15	
Decachlorobiphenyl	B	9049.0	7871.7	100.0	86.99	pg/uL	-13	15	

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

+high bias c=CCV

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208385010085

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : AR2154\_500 IDF : 1.0  
Seqnum : 208385010086 File : 267\_086 Time : 26-SEP-2018 07:29  
Cal : 208328928001 Caldate : 17-AUG-2018  
Standards: S38368

Analyte	Ch	Spiked	Quant	Units	%D	Max	%D	Flags
Aroclor-1254	A	500.0	453.0	pg/uL	-9	15		
Aroclor-1254	B	500.0	467.8	pg/uL	-6	15		

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18  
Page 1 of 1 208385010086

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
Seqnum : 208385010092 File : 267\_092 Time : 26-SEP-2018 11:01  
Cal : 208344656001 Caldate : 27-AUG-2018  
Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	502.4	pg/uL	0	15	
Aroclor-1260	A			500.0	550.0	pg/uL	10	15	
Decachlorobiphenyl	A	8438.2	10338	100.0	162.5	pg/uL	62	15	c+
Aroclor-1016	B			500.0	466.0	pg/uL	-7	15	
Aroclor-1260	B			500.0	502.5	pg/uL	0	15	
Decachlorobiphenyl	B	9049.0	9175.1	100.0	101.4	pg/uL	1	15	

JC1 09/26/18 : Corrected automatically drawn baseline.

Analyst: JC1 Date: 09/26/18 Reviewer: EAH Date: 09/26/18

+high bias c=CCV

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208385010092

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : AR2154\_500 IDF : 1.0  
Seqnum : 208385010093.1 File : 267\_093 Time : 26-SEP-2018 11:29  
Cal : 208328928001 Caldate : 17-AUG-2018  
Standards: S38368

Analyte	Ch	Spiked	Quant	Units	%D	Max	%D	Flags
Aroclor-1254	A	500.0	539.7	pg/uL	8	15		
Aroclor-1254	B	500.0	542.2	pg/uL	8	15		

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

RDG: 09/26/18 \* JC1: 09/26/18 EAH: 09/26/18

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208385010093.1

## CURTIS &amp; TOMPKINS SEQUENCE SUMMARY FOR 208328928

Instrument : GC06  
 Method : EPA 8082

Begun : 08/16/18 10:08  
 SOP Version : pcb\_rv11

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	228_001	X	HEX			08/16/18 10:08	1.0	
002	228_002	CCV	PCB500_100			08/16/18 10:36	1.0	1
003	228_003	CCV	AR2154_500			08/16/18 11:04	1.0	2
004	228_004	BLANK	QC943690	Soil	262472	08/16/18 12:50	1.0	
005	228_005	BS	QC943691	Soil	262472	08/16/18 13:18	1.0	
006	228_006	BSD	QC943692	Soil	262472	08/16/18 13:46	1.0	
007	228_007	SAMPLE	302238-001	Soil	262472	08/16/18 14:14	1.0	
008	228_008	SAMPLE	302238-002	Soil	262472	08/16/18 14:42	1.0	
009	228_009	SAMPLE	302238-003	Soil	262472	08/16/18 15:10	1.0	
010	228_010	CCV	PCB500_100			08/16/18 15:39	1.0	1
011	228_011	CCV	AR2154_500			08/16/18 16:07	1.0	2
012	228_012	SAMPLE	302238-004	Soil	262472	08/16/18 16:36	1.0	
013	228_013	SAMPLE	302238-005	Soil	262472	08/16/18 17:04	1.0	
014	228_014	SAMPLE	302238-006	Soil	262472	08/16/18 17:32	1.0	
015	228_015	SAMPLE	302238-007	Soil	262472	08/16/18 18:00	1.0	
016	228_016	SAMPLE	302238-008	Soil	262472	08/16/18 18:28	1.0	
017	228_017	SAMPLE	302238-009	Soil	262472	08/16/18 18:57	1.0	
018	228_018	SAMPLE	302238-010	Soil	262472	08/16/18 19:25	1.0	
019	228_019	SAMPLE	302238-011	Soil	262472	08/16/18 19:52	1.0	
020	228_020	SAMPLE	302238-012	Soil	262472	08/16/18 20:21	1.0	
021	228_021	SAMPLE	302238-013	Soil	262472	08/16/18 20:48	1.0	
022	228_022	CCV	PCB500_100			08/16/18 21:16	1.0	1
023	228_023	CCV	AR2154_500			08/16/18 21:45	1.0	2
024	228_024	SAMPLE	302238-014	Soil	262472	08/16/18 22:13	1.0	
025	228_025	SAMPLE	302238-015	Soil	262472	08/16/18 22:41	1.0	
026	228_026	SAMPLE	302238-016	Soil	262472	08/16/18 23:09	1.0	
027	228_027	CCV	PCB500_100			08/16/18 23:37	1.0	1
028	228_028	CCV	AR2154_500			08/17/18 00:05	1.0	2
029	228_029	X	HEX			08/17/18 00:33	1.0	
030	228_030	X	HEX			08/17/18 01:01	1.0	
031	228_031	IB	CALIB			08/17/18 01:29	1.0	
032	228_032	ICAL	AR2154_10			08/17/18 01:57	1.0	3
033	228_033	ICAL	AR2154_250			08/17/18 02:25	1.0	4
034	228_034	ICAL	AR2154_500			08/17/18 02:53	1.0	5
035	228_035	ICAL	AR2154_100			08/17/18 03:21	1.0	6
036	228_036	ICAL	AR2154_250			08/17/18 03:49	1.0	4
037	228_037	ICAL	AR2154_500			08/17/18 04:17	1.0	5
038	228_038	ICAL	AR2154_1000			08/17/18 04:45	1.0	7
039	228_039	X	HEX			08/17/18 05:13	1.0	
040	228_040	ICV	ULTRA_1254			08/17/18 05:41	1.0	8
041	228_041	X	HEX			08/17/18 06:09	1.0	

JC1 08/17/18 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 41.

## CURTIS &amp; TOMPKINS SEQUENCE SUMMARY FOR 208344656

Instrument : GC06  
 Method : EPA 8082

Begun : 08/27/18 08:16  
 SOP Version : pcb\_rv11

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	239_001	X	HEX			08/27/18 08:16	1.0	
002	239_002	X	HEX			08/27/18 08:44	1.0	
003	239_003	CCV	PCB500_100			08/27/18 09:12	1.0	1
004	239_004	CCV	AR2154_500			08/27/18 09:40	1.0	2
005	239_005	CCV	PCB500_100			08/27/18 10:25	1.0	1
006	239_006	X	PRIMER			08/27/18 10:56	1.0	
007	239_007	X	HEX			08/27/18 11:24	1.0	
008	239_008	X	HEX			08/27/18 11:52	1.0	
009	239_009	IB	CALIB			08/27/18 12:20	1.0	
010	239_010	ICAL	PCB10_2			08/27/18 12:48	1.0	3
011	239_011	ICAL	PCB25_5			08/27/18 13:16	1.0	4
012	239_012	ICAL	PCB100_20			08/27/18 13:44	1.0	5
013	239_013	ICAL	PCB250_50			08/27/18 14:12	1.0	6
014	239_014	ICAL	PCB500_100			08/27/18 14:40	1.0	7
015	239_015	ICAL	PCB750_150			08/27/18 15:08	1.0	8
016	239_016	ICAL	PCB1000_200			08/27/18 15:36	1.0	9
017	239_017	X	HEX			08/27/18 16:04	1.0	
018	239_018	ICV	ULTRA_1660			08/27/18 16:32	1.0	10
019	239_019	X	HEX			08/27/18 17:16	1.0	
020	239_020	CCV	PCB500_100			08/27/18 17:44	1.0	1
021	239_021	CCV	AR2154_500			08/27/18 18:35	1.0	2
022	239_022	SAMPLE	302647-024	Soil	262780	08/27/18 19:03	1.0	
023	239_023	SAMPLE	302647-025	Soil	262780	08/27/18 19:31	2.0	
024	239_024	SAMPLE	302647-026	Soil	262780	08/27/18 19:59	1.0	
025	239_025	SAMPLE	302647-027	Soil	262780	08/27/18 20:27	2.0	
026	239_026	SAMPLE	302647-028	Soil	262780	08/27/18 20:55	1.0	
027	239_027	SAMPLE	302647-029	Soil	262780	08/27/18 21:23	1.0	
028	239_028	SAMPLE	302647-030	Soil	262780	08/27/18 21:51	2.0	
029	239_029	SAMPLE	302647-031	Soil	262780	08/27/18 22:19	1.0	
030	239_030	SAMPLE	302647-032	Soil	262780	08/27/18 22:47	1.0	
031	239_031	SAMPLE	302647-033	Soil	262780	08/27/18 23:15	1.0	
032	239_032	CCV	PCB500_100			08/27/18 23:43	1.0	1
033	239_033	CCV	AR2154_500			08/28/18 00:11	1.0	2
034	239_034	SAMPLE	302647-034	Soil	262780	08/28/18 00:39	1.0	
035	239_035	SAMPLE	302647-035	Soil	262780	08/28/18 01:07	1.0	
036	239_036	SAMPLE	302647-036	Soil	262780	08/28/18 01:35	1.0	
037	239_037	CCV	PCB500_100			08/28/18 02:03	1.0	1
038	239_038	CCV	AR2154_500			08/28/18 02:31	1.0	2

JC1 08/28/18 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

## CURTIS &amp; TOMPKINS SEQUENCE SUMMARY FOR 208385010

Instrument : GC06  
 Method : EPA 8082

Begun : 09/24/18 08:50  
 SOP Version : pcb\_rv11

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	267_001	X	HEX			09/24/18 08:50	1.0		
002	267_002	X	HEX			09/24/18 09:18	1.0		
003	267_003	CCV	PCB500_100			09/24/18 09:46	1.0	1	
004	267_004	CCV	AR2154_500			09/24/18 10:14	1.0	2	
005	267_005	MS	QC948701	Soil	263736	09/24/18 13:02	1.0		
006	267_006	MSD	QC948702	Soil	263736	09/24/18 13:30	1.0		
007	267_007	MS	QC948701	Soil	263736	09/24/18 14:11	1.0		
008	267_008	MSD	QC948702	Soil	263736	09/24/18 14:39	1.0		
009	267_009	CCV	PCB500_100			09/24/18 15:29	1.0	1	
010	267_010	CCV	AR2154_500			09/24/18 15:57	1.0	2	
011	267_011	BLANK	QC948857	Soil	263811	09/24/18 18:44	1.0		
012	267_012	LCS	QC948858	Soil	263811	09/24/18 19:12	1.0		
013	267_013	MSS	303413-005	Soil	263811	09/24/18 19:40	2.0		
014	267_014	MS	QC948859	Soil	263811	09/24/18 20:08	2.0		
015	267_015	MSD	QC948860	Soil	263811	09/24/18 20:36	2.0		
016	267_016	BLANK	QC948760	Soil	263784	09/24/18 21:04	1.0		
017	267_017	BS	QC948761	Soil	263784	09/24/18 21:32	1.0		
018	267_018	BSD	QC948762	Soil	263784	09/24/18 22:00	1.0		
019	267_019	BLANK	QC948736	Soil	263777	09/24/18 22:28	1.0		
020	267_020	BS	QC948737	Soil	263777	09/24/18 22:56	1.0		
021	267_021	BSD	QC948738	Soil	263777	09/24/18 23:24	1.0		
022	267_022	CCV	PCB500_100			09/24/18 23:52	1.0	1	
023	267_023	CCV	AR2154_500			09/25/18 00:20	1.0	2	
024	267_024	SAMPLE	303231-046	Soil	263784	09/25/18 00:48	1.0		
025	267_025	SAMPLE	303231-047	Soil	263784	09/25/18 01:16	1.0		
026	267_026	SAMPLE	303231-048	Soil	263784	09/25/18 01:44	1.0		
027	267_027	SAMPLE	303231-049	Soil	263784	09/25/18 02:12	1.0		
028	267_028	SAMPLE	303231-050	Soil	263784	09/25/18 02:40	1.0		
029	267_029	SAMPLE	303231-051	Soil	263784	09/25/18 03:08	1.0		
030	267_030	SAMPLE	303231-052	Soil	263784	09/25/18 03:36	1.0		
031	267_031	SAMPLE	303411-004	Soil	263811	09/25/18 04:04	1.0		
032	267_032	SAMPLE	303217-001	Soil	263777	09/25/18 04:32	1.0		6:PCB1260#2=1800
033	267_033	SAMPLE	303217-002	Soil	263777	09/25/18 05:00	1.0		
034	267_034	CCV	PCB500_100			09/25/18 05:28	1.0	1	
035	267_035	CCV	AR2154_500			09/25/18 05:56	1.0	2	
036	267_036	SAMPLE	303217-003	Soil	263777	09/25/18 06:24	1.0		1:PCB1260#4=1100
037	267_037	SAMPLE	303217-004	Soil	263777	09/25/18 06:52	1.0		
038	267_038	SAMPLE	303217-005	Soil	263777	09/25/18 07:20	1.0		
039	267_039	SAMPLE	303217-006	Soil	263777	09/25/18 07:48	1.0		
040	267_040	SAMPLE	303217-007	Soil	263777	09/25/18 08:16	1.0		6:PCB1260#5=2200
041	267_041	SAMPLE	303217-008	Soil	263777	09/25/18 08:44	1.0		
042	267_042	SAMPLE	303217-009	Soil	263777	09/25/18 09:12	1.0		
043	267_043	SAMPLE	303217-010	Soil	263777	09/25/18 09:40	1.0		
044	267_044	CCV	PCB500_100			09/25/18 10:08	1.0	1	
045	267_045	CCV	AR2154_500			09/25/18 10:36	1.0	2	
046	267_046	BLANK	QC948987	Soil	263840	09/25/18 11:06	1.0		
047	267_047	LCS	QC948988	Soil	263840	09/25/18 11:35	1.0		
048	267_048	MSS	303517-001	Soil	263840	09/25/18 12:03	1.0		
049	267_049	MS	QC948989	Soil	263840	09/25/18 12:31	1.0		
050	267_050	MSD	QC948990	Soil	263840	09/25/18 12:59	1.0		
051	267_051	LOD	216647-059	Soil	263657	09/25/18 13:27	1.0		
052	267_052	LOD	216648-043	Water	263685	09/25/18 13:55	1.0		

## CURTIS &amp; TOMPKINS SEQUENCE SUMMARY FOR 208385010

Instrument : GC06  
 Method : EPA 8082

Begun : 09/24/18 08:50  
 SOP Version : pcb\_rv11

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	267_053	CCV	PCB500_100			09/25/18 14:23	1.0	1	
054	267_054	CCV	AR2154_500			09/25/18 14:51	1.0	2	
055	267_055	MSS	303413-005	Soil	263811	09/25/18 15:47	2.0		
056	267_056	MS	QC948859	Soil	263811	09/25/18 16:15	2.0		
057	267_057	MSD	QC948860	Soil	263811	09/25/18 16:43	2.0		
058	267_058	SAMPLE	303217-001	Soil	263777	09/25/18 17:11	10.0		
059	267_059	SAMPLE	303217-007	Soil	263777	09/25/18 17:39	10.0		
060	267_060	CCV	PCB500_100			09/25/18 18:07	1.0	1	
061	267_061	CCV	AR2154_500			09/25/18 19:49	1.0	2	
062	267_062	BLANK	QC949086	Soil	263863	09/25/18 20:17	1.0		
063	267_063	LCS	QC949087	Soil	263863	09/25/18 20:45	1.0		
064	267_064	MSS	303450-004	Soil	263863	09/25/18 21:13	5.0		diluted (client history)
065	267_065	MS	QC949088	Soil	263863	09/25/18 21:41	5.0		
066	267_066	MSD	QC949089	Soil	263863	09/25/18 22:09	5.0		
067	267_067	BLANK	QC948960	Air	263832	09/25/18 22:37	1.0		
068	267_068	BS	QC948961	Air	263832	09/25/18 23:05	1.0		
069	267_069	BSD	QC948962	Air	263832	09/25/18 23:33	1.0		
070	267_070	SAMPLE	303264-001	Soil	263863	09/26/18 00:01	2.0		
071	267_071	SAMPLE	303255-013	Soil	263863	09/26/18 00:29	1.0		
072	267_072	SAMPLE	303255-017	Soil	263863	09/26/18 00:57	1.0		
073	267_073	CCV	PCB500_100			09/26/18 01:25	1.0	1	
074	267_074	CCV	AR2154_500			09/26/18 01:53	1.0	3	
075	267_075	SAMPLE	303171-001	Soil	263863	09/26/18 02:21	2.0		diluted (client history)
076	267_076	SAMPLE	303217-011	Soil	263777	09/26/18 02:49	1.0		
077	267_077	SAMPLE	303217-012	Soil	263777	09/26/18 03:17	1.0		
078	267_078	SAMPLE	303217-013	Soil	263777	09/26/18 03:45	1.0		
079	267_079	SAMPLE	303217-014	Soil	263777	09/26/18 04:13	1.0		
080	267_080	SAMPLE	303217-015	Soil	263777	09/26/18 04:41	1.0		
081	267_081	SAMPLE	303217-016	Soil	263777	09/26/18 05:09	1.0		8:PCB1260#2=27000
082	267_082	SAMPLE	303217-017	Soil	263777	09/26/18 05:37	1.0		
083	267_083	SAMPLE	303217-018	Soil	263777	09/26/18 06:05	1.0		
084	267_084	SAMPLE	303137-001	Miscell.	263784	09/26/18 06:33	1.0		
085	267_085	CCV	PCB500_100			09/26/18 07:01	1.0	1	
086	267_086	CCV	AR2154_500			09/26/18 07:29	1.0	3	
087	267_087	SAMPLE	303137-002	Miscell.	263784	09/26/18 07:57	1.0		
088	267_088	SAMPLE	303137-005	Miscell.	263784	09/26/18 08:25	1.0		
089	267_089	SAMPLE	303137-006	Miscell.	263784	09/26/18 08:53	1.0		
090	267_090	SAMPLE	303166-029	Miscell.	263811	09/26/18 09:21	100.0		6:PCB1260#3=1400
091	267_091	SAMPLE	303166-029	Miscell.	263811	09/26/18 10:33	500.0		
092	267_092	CCV	PCB500_100			09/26/18 11:01	1.0	1	
093	267_093	CCV	AR2154_500			09/26/18 11:29	1.0	3	
094	267_094	SAMPLE	303217-016	Soil	263777	09/26/18 12:22	100.0		
095	267_095	CCV	PCB500_100			09/26/18 12:50	1.0	1	1:CL10BZ2=230

JC1 09/26/18 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 95.

**SAMPLE PREPARATION SUMMARY**

Batch # : 263784 Analysis : PCB  
 Started By : RD1 Prep Date : 21-SEP-2018 16:18 Finished By : AS1  
 Method : 3550C SOP Version : PCB\_3550\_rv15 Units : g  
 Spike #1 ID : S37913 Spike #2 ID : S37523

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
303137-001		Miscell.	5.05	10	1	1.98	.5					PCB	
303137-002		Miscell.	5.25	10	1	1.905	.5					PCB	
303137-005		Miscell.	5.16	10	1	1.938	.5					PCB	
303137-006		Miscell.	5.15	10	1	1.942	.5					PCB	
303231-046		Soil	5.37	10	1	1.862	.5					PCB	
303231-047		Soil	5.5	10	1	1.818	.5					PCB	
303231-048		Soil	5.43	10	1	1.842	.5					PCB	
303231-049		Soil	5.49	10	1	1.821	.5					PCB	
303231-050		Soil	5.34	10	1	1.873	.5					PCB	
303231-051		Soil	5.23	10	1	1.912	.5					PCB	
303231-052		Soil	5.22	10	1	1.916	.5					PCB	
QC948760	BLANK	Soil	5	10	1	2.0	.5					PCB	
QC948761	BS	Soil	5	10	1	2.0	.5	.5				PCB	
QC948762	BSD	Soil	5	10	1	2.0	.5	.5	.5			PCB	

JC1 09/25/18 : Matrix spikes were not performed for this analysis in batch 263784 due to insufficient sample amount.

Analyst: JC1 Date: 09/25/18 Reviewer: EAH Date: 09/25/18

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## PCB (8082) Soil Prep Log

version 201807

Enthalpy Analytical LLC - Berkeley

LIMS Batch No: 263784  
LIMS Analysis PCB  
Date Extracted: 9/21/18

- EPA 3550C Sonication
  - EPA 3546 Microwave
  - Other *EPA 3540C*

Page 1

BK 4300

MS/MSD not included due to:  insufficient volume, or  other (reason)

Balance ID: B-15 Has been calibrated?  Yes  No      Mfg & Lot # / LIMS # / Time      Initials / Date

~~0.25~~ \* / 0.5 Solvent-rinsed granular Na<sub>2</sub>SO<sub>4</sub> weighed out for QC samples  
dried with CH<sub>2</sub>Cl<sub>2</sub>-rinsed  granular Na<sub>2</sub>SO<sub>4</sub>  powder  
~~0.4~~ RD1 9/21/18 0.4 mL of surrogate solution was added to all samples  
RD1 9/21/18 0.5 mL of matrix spiking solution was added to all spikes  
++ CH<sub>2</sub>Cl<sub>2</sub> (lot# EM58110) : Acetone (lot# ) was added to all

sonicated 2 times w/ >100mL  sorbent extractor sp.萃取剂 was added to the reaction mixture.

sonicated 3 times w/  $\geq$ 100mL       soxhlet extractors on at least 200mL

Soxhlets off at

Extracts filtered through baked,  $\text{CH}_2\text{Cl}_2$ -rinsed powdered  $\text{Na}_2\text{SO}_4$

### Solvent exchanged with Hexane, Lot:

- Concentrated to final volume in boiling H<sub>2</sub>O bath

EPA 3665A Clean-up: vortexed w/ H<sub>2</sub>SO<sub>4</sub> Lot:

Centrifuged for 1 min; 5mL transferred to labelled vial

Relinquished to PCB group

Reinforced to PCB group

Continued from page 1

**Continued on page**

**Extraction Chemist / Date**

Continued from page 1  
Continued on page

**Reviewed by / Date**

## REPORTING SUMMARY FOR 303137 PCBS Miscell.

Sample ID	Analyte	Inst ID	Ch	Date & Time
303137-001	Aroclor-1016	GC06	A	09/26/18 06:33
303137-001	Aroclor-1221	GC06	A	09/26/18 06:33
303137-001	Aroclor-1232	GC06	A	09/26/18 06:33
303137-001	Aroclor-1242	GC06	A	09/26/18 06:33
303137-001	Aroclor-1248	GC06	A	09/26/18 06:33
303137-001	Aroclor-1254	GC06	A	09/26/18 06:33
303137-001	Aroclor-1260	GC06	A	09/26/18 06:33
303137-001	Decachlorobiphenyl	GC06	B	09/26/18 06:33
303137-002	Aroclor-1016	GC06	A	09/26/18 07:57
303137-002	Aroclor-1221	GC06	A	09/26/18 07:57
303137-002	Aroclor-1232	GC06	A	09/26/18 07:57
303137-002	Aroclor-1242	GC06	A	09/26/18 07:57
303137-002	Aroclor-1248	GC06	A	09/26/18 07:57
303137-002	Aroclor-1254	GC06	B	09/26/18 07:57
303137-002	Aroclor-1260	GC06	A	09/26/18 07:57
303137-002	Decachlorobiphenyl	GC06	B	09/26/18 07:57
303137-005	Aroclor-1016	GC06	A	09/26/18 08:25
303137-005	Aroclor-1221	GC06	A	09/26/18 08:25
303137-005	Aroclor-1232	GC06	A	09/26/18 08:25
303137-005	Aroclor-1242	GC06	A	09/26/18 08:25
303137-005	Aroclor-1248	GC06	A	09/26/18 08:25
303137-005	Aroclor-1254	GC06	A	09/26/18 08:25
303137-005	Aroclor-1260	GC06	B	09/26/18 08:25
303137-005	Decachlorobiphenyl	GC06	B	09/26/18 08:25
303137-006	Aroclor-1016	GC06	A	09/26/18 08:53
303137-006	Aroclor-1221	GC06	A	09/26/18 08:53
303137-006	Aroclor-1232	GC06	A	09/26/18 08:53
303137-006	Aroclor-1242	GC06	A	09/26/18 08:53
303137-006	Aroclor-1248	GC06	A	09/26/18 08:53
303137-006	Aroclor-1254	GC06	A	09/26/18 08:53
303137-006	Aroclor-1260	GC06	A	09/26/18 08:53
303137-006	Decachlorobiphenyl	GC06	B	09/26/18 08:53
QC948760	Aroclor-1016	GC06	A	09/24/18 21:04
QC948760	Aroclor-1221	GC06	A	09/24/18 21:04
QC948760	Aroclor-1232	GC06	A	09/24/18 21:04
QC948760	Aroclor-1242	GC06	A	09/24/18 21:04
QC948760	Aroclor-1248	GC06	A	09/24/18 21:04
QC948760	Aroclor-1254	GC06	A	09/24/18 21:04
QC948760	Aroclor-1260	GC06	A	09/24/18 21:04
QC948760	Decachlorobiphenyl	GC06	B	09/24/18 21:04
QC948761	Aroclor-1016	GC06	A	09/24/18 21:32
QC948761	Aroclor-1260	GC06	A	09/24/18 21:32
QC948761	Decachlorobiphenyl	GC06	B	09/24/18 21:32
QC948762	Aroclor-1016	GC06	A	09/24/18 22:00
QC948762	Aroclor-1260	GC06	A	09/24/18 22:00
QC948762	Decachlorobiphenyl	GC06	B	09/24/18 22:00

**Sample Raw Data**

### Polychlorinated Biphenyls (PCBs)

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Field ID:	B120-01	Batch#:	263784
Lab ID:	303137-001	Sampled:	09/11/18
Matrix:	Miscell.	Received:	09/11/18
Units:	ug/Kg	Prepared:	09/21/18
Basis:	as received	Analyzed:	09/26/18
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	7.0
Aroclor-1221	ND	40	19
Aroclor-1232	ND	20	9.2
Aroclor-1242	ND	20	8.5
Aroclor-1248	ND	20	9.1
Aroclor-1254	380	20	7.2
Aroclor-1260	93	20	4.6

Surrogate	%REC	Limits
Decachlorobiphenyl	82	37-170

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

## ENTHALPY SAMPLE USER REPORT FOR EPA 8082

Inst : GC06 Lab ID : 303137-001 Client ID : B120-01  
 Seqnum : 208385010084.1 Matrix : Miscell. Acct : TTEMI (MJD)  
 File : 267\_084 Batch : 263784 Time : 26-SEP-2018 06:33  
 IDF : 1.0 Raw Units : pg/uL Units : ug/Kg

5.05 g --> 10.0 ml = 1.98 ml/g PDF

Analyte	Ch	Cal	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1016	A	208344656001	27.21	54	48	11%	20		u x
Aroclor-1016 Peak # 1	A	208344656001	0	ND	9.47				
Aroclor-1016 Peak # 2	A	208344656001	0	ND	3.10				
Aroclor-1016 Peak # 3	A	208344656001	13.31	26.35	ND				
Aroclor-1016 Peak # 4	A	208344656001	67.99	134.63	187.94	33%			
Aroclor-1016 Peak # 5	A	208344656001	54.75	108.41	41.06	90%			
Aroclor-1221	A			ND			40		u
Aroclor-1232	A			ND			20		u
Aroclor-1242	A			ND			20		u
Aroclor-1248	A			ND			20		u
Aroclor-1254	A	208328928001	192.6	380	450	17%	20		u
Aroclor-1254 Peak # 1	A	208328928001	121.0	239.54	291.06	19%			
Aroclor-1254 Peak # 2	A	208328928001	196.1	388.22	400.97	3%			
Aroclor-1254 Peak # 3	A	208328928001	167.9	332.38	454.40	31%			
Aroclor-1254 Peak # 4	A	208328928001	204.9	405.83	463.78	13%			
Aroclor-1254 Peak # 5	A	208328928001	273.2	541.00	657.86	19%			
Aroclor-1260	A	208344656001	46.98	93	73	24%	20		u
Aroclor-1260 Peak # 1	A	208344656001	137.2	271.71 [omit]	268.97 [omit]	1%			
Aroclor-1260 Peak # 2	A	208344656001	200.9	397.81 [omit]	305.51 [omit]	26%			
Aroclor-1260 Peak # 3	A	208344656001	38.23	75.70	66.47	13%			
Aroclor-1260 Peak # 4	A	208344656001	47.95	94.94	61.80	42%			
Aroclor-1260 Peak # 5	A	208344656001	54.78	108.47	90.28	18%			

Surrogate	Ch	Cal	Raw	Spiked	Result	%Rec	Limits	Flags
Decachlorobiphenyl	B	208344656001	41.24	99.01	81.67	82	37-170	u

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

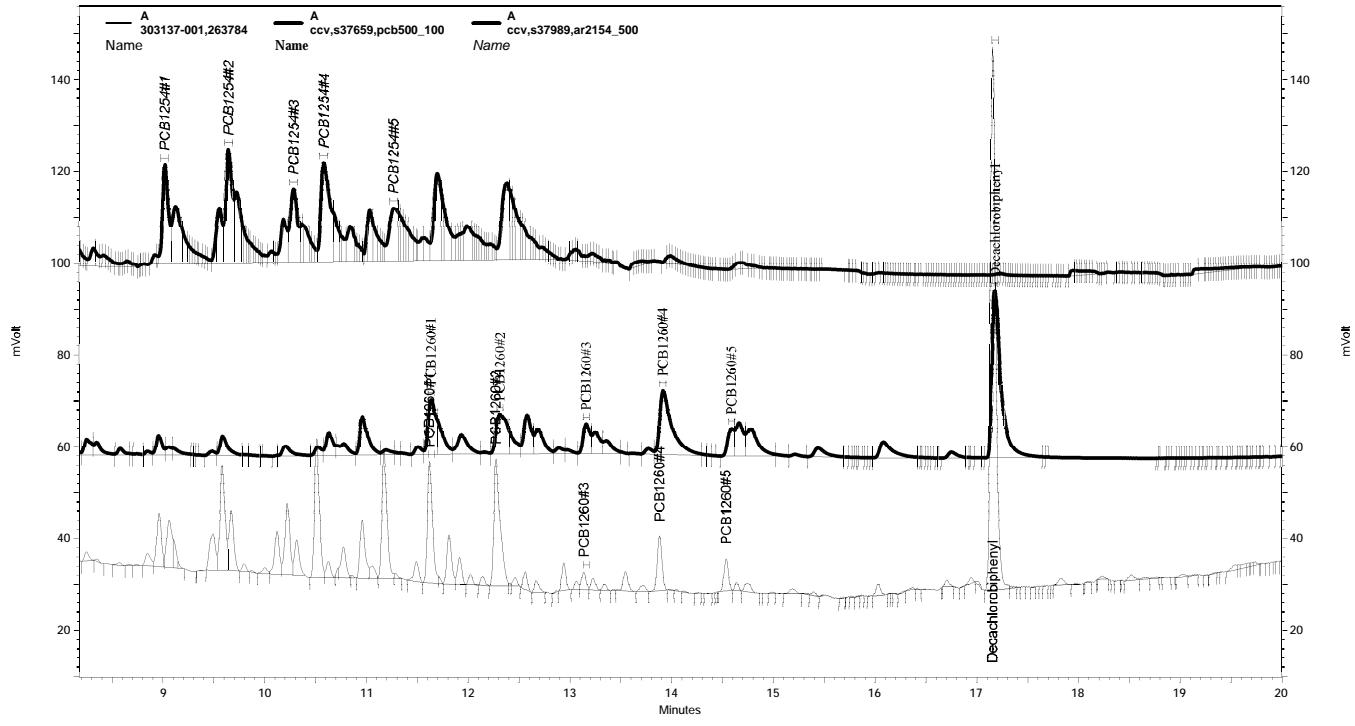
RDG 09/26/18 [Decachlorobiphenyl B]: Channel B for better CCV recovery.

RDG: 09/26/18 \* JC1: 09/26/18 EAH: 09/26/18

u=use x=false positive

Page 1 of 1

208385010084.1



— \|kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084, A

— \|kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073, A

— \|kraken\gdrive\ezchrom\Projects\GC06\Data\2018\262-016, A

Sample Name: 303137-001,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 6:33:30 AM  
Analysis Date: 9/26/2018 1:22:53 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.957	8.957	37661	120.966
PCB1254#2	9.583	9.583	77236	196.053
PCB1254#3	10.220	10.223	52529	167.852
PCB1254#4	10.510	10.520	100009	204.943
PCB1254#5	11.173	11.213	95927	273.204

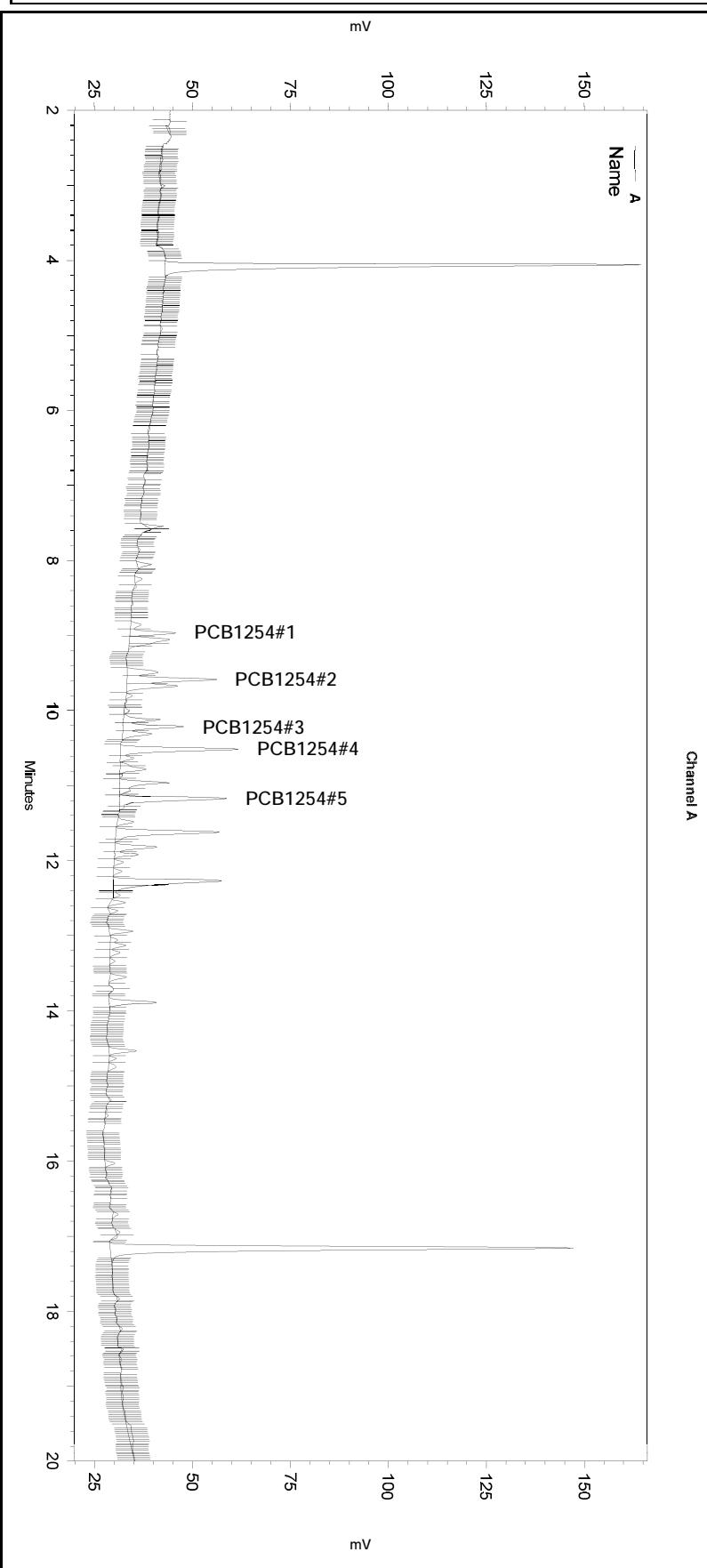
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.913	7.927	49365	146.984
PCB1254#2	8.453	8.470	73396	202.489
PCB1254#3	9.063	9.090	48382	229.472
PCB1254#4	9.293	0.000	99545	234.211
PCB1254#5	9.907	9.890	101295	332.220

Sample Name: 303137-001,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 6:33:30 AM  
Analysis Date: 9/26/2018 1:22:53 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

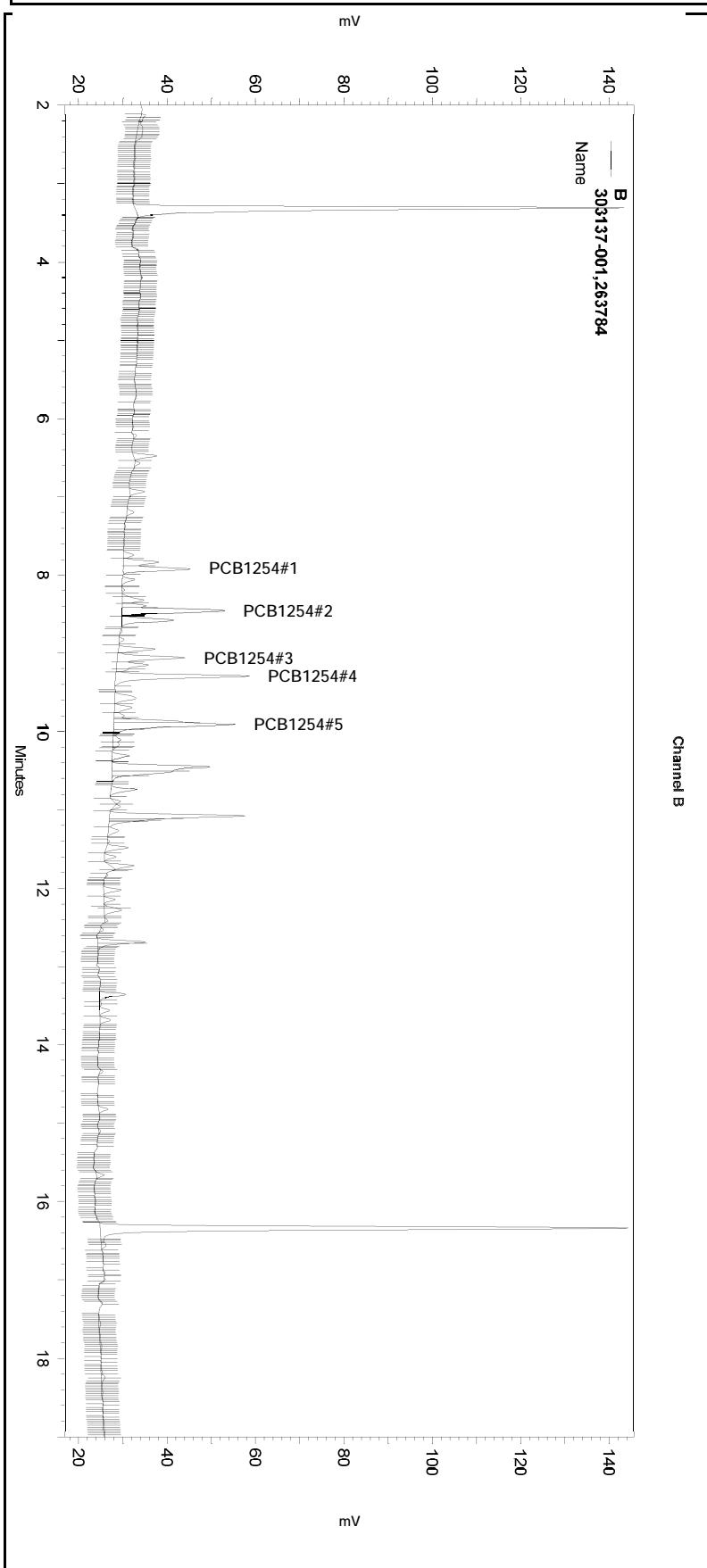
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	3.015	18.495	0
Yes	Manual Baseline	8.797	9.215	0
Yes	Manual Baseline	9.425	9.759	0
Yes	Manual Baseline	9.927	10.401	0
Yes	Manual Baseline	10.444	10.896	0
Yes	Manual Baseline	10.899	11.365	0
Yes	Manual Baseline	11.553	11.977	0
Yes	Manual Baseline	12.207	12.502	0
Yes	Reassign Peak	12.309	12.284	0
Yes	Split Peak	12.396	0	0
Yes	Manual Baseline	13.012	13.397	0
Yes	Reassign Peak	13.906	13.87	0
Yes	Reassign Peak	14.579	14.547	0
Yes	Manual Baseline	17.077	17.431	0

Sample Name: 303137-001,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 6:33:30 AM  
Analysis Date: 9/26/2018 1:22:53 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Valley to Valley	2.809	16.972	0	
Yes	Manual Baseline	7.662	7.993	0	
Yes	Manual Baseline	8.24	8.661	0	
Yes	Manual Baseline	8.883	9.425	0	
Yes	Reassign Peak	9.32	9.282	0	
Yes	Manual Baseline	9.464	10.24	0	
Yes	Manual Baseline	10.372	10.646	0	
Yes	Reassign Peak	10.514	10.445	0	
Yes	Manual Baseline	11.017	11.353	0	
Yes	Split Peak	11.114	0	0	
Yes	Reassign Peak	11.148	11.099	0	
Yes	Manual Baseline	11.951	12.351	0	
Yes	Reassign Peak	12.055	12.041	0	
Yes	Manual Baseline	12.062	12.046	0	
Yes	Manual Baseline	12.629	12.798	0	
Yes	Split Peak	12.696	0	0	
Yes	Reassign Peak	12.72	12.678	0	
Yes	Reassign Peak	12.743	12.717	0	
Yes	Manual Baseline	13.301	13.751	0	
Yes	Reassign Peak	13.463	13.391	0	
Yes	Manual Baseline	16.266	16.619	0	

Sample Name: 303137-001,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 6:33:30 AM  
 Analysis Date: 9/26/2018 12:04:19 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.063	4.057	371288	55.861
PCB1016#1		5.700		0.000 BDL
PCB1016#2		6.773		0.000 BDL
PCB1016#3	7.090	7.077	3136	13.307
PCB1016#4	7.540	7.537	10901	67.990
PCB1016#5	8.050	8.050	10946	54.747
PCB1260#1	11.620	11.637	91481	137.215
PCB1260#2	12.273	0.000	118701	200.894
PCB1260#3	13.137	13.160	12402	38.228
PCB1260#4	13.880	0.000	38930	47.946
PCB1260#5	14.537	0.000	21424	54.777
Decachlorobiphenyl	17.157	17.180	425470	53.986

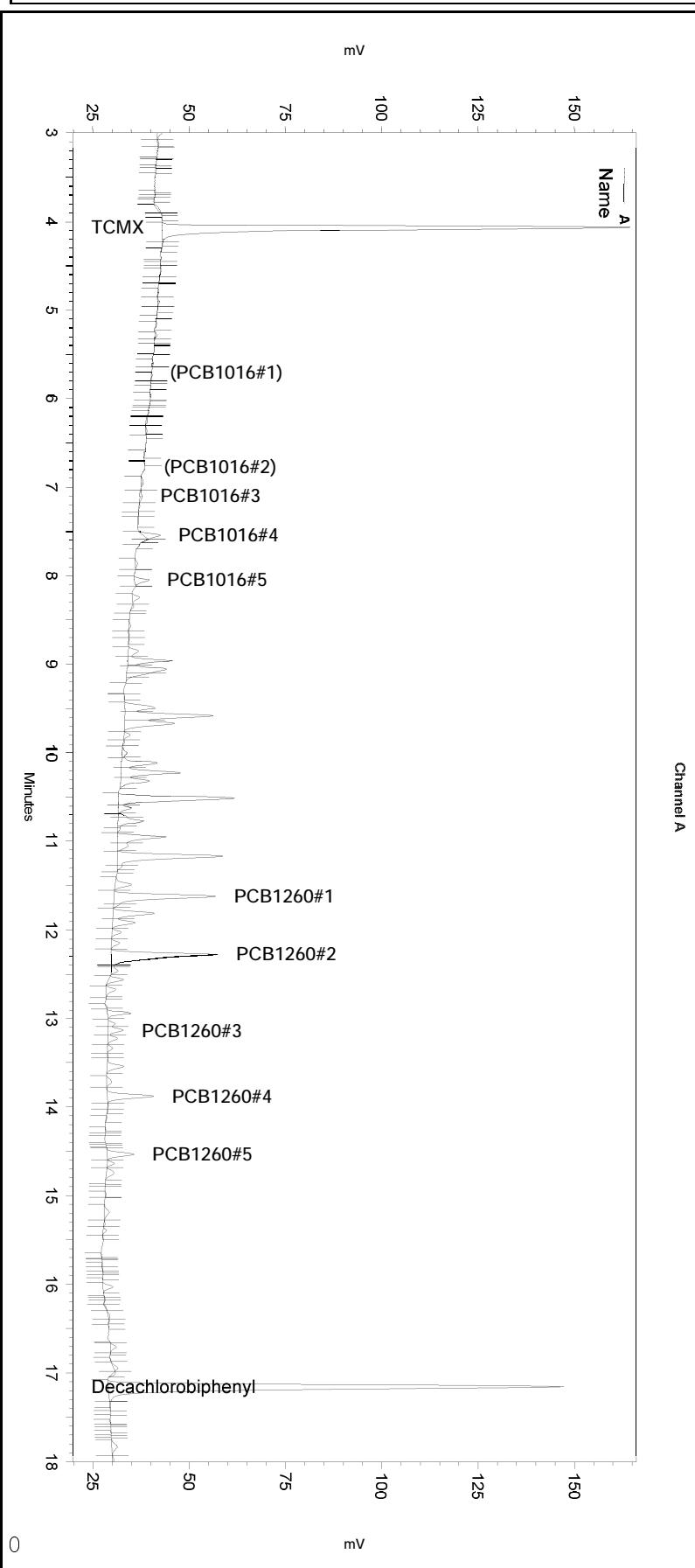
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.307	3.297	331845	49.927
PCB1016#1	4.790	4.790	785	4.782
PCB1016#2	5.717	5.737	940	1.567
PCB1016#3		5.947		0.000 BDL
PCB1016#4	6.480	6.483	14725	94.911
PCB1016#5	7.197	7.213	5161	20.736
PCB1260#1	10.447	10.493	79954	135.827
PCB1260#2	11.080	0.000	87835	154.282
PCB1260#3	12.020	0.000	11634	33.568
PCB1260#4	12.680	0.000	23951	31.210
PCB1260#5	13.353	13.437	19309	45.590
Decachlorobiphenyl	16.340	16.363	373206	41.243

Sample Name: 303137-001,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 6:33:30 AM  
Analysis Date: 9/26/2018 12:04:19 PM  
Sample Amount: 1



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No items selected for this section

-----< A >-----

No items selected for this section

#### Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

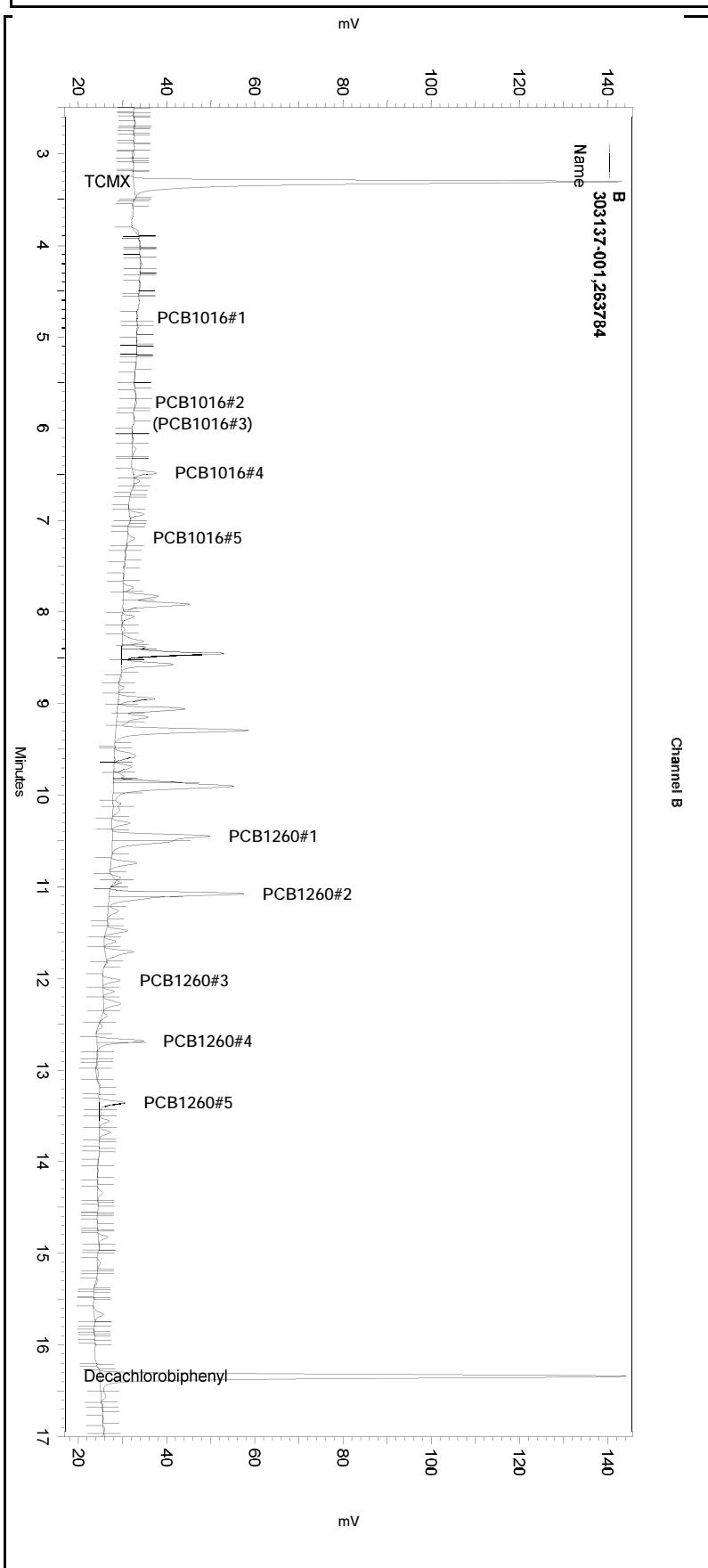
#### Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	3.015	18.495	0
Yes	Manual Baseline	8.797	9.215	0
Yes	Manual Baseline	9.425	9.759	0
Yes	Manual Baseline	9.927	10.401	0
Yes	Manual Baseline	10.444	10.896	0
Yes	Manual Baseline	10.899	11.365	0
Yes	Manual Baseline	11.553	11.977	0
Yes	Manual Baseline	12.207	12.502	0
Yes	Reassign Peak	12.309	12.284	0
Yes	Split Peak	12.396	0	0
Yes	Manual Baseline	13.012	13.397	0
Yes	Reassign Peak	13.906	13.87	0
Yes	Reassign Peak	14.579	14.547	0
Yes	Manual Baseline	17.077	17.431	0

Sample Name: 303137-001,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 6:33:30 AM  
Analysis Date: 9/26/2018 12:04:19 PM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Valley to Valley	2.809	16.972	0	
Yes	Manual Baseline	7.662	7.993	0	
Yes	Manual Baseline	8.24	8.661	0	
Yes	Manual Baseline	8.883	9.425	0	
Yes	Manual Baseline	9.464	10.24	0	
Yes	Manual Baseline	10.372	10.646	0	
Yes	Reassign Peak	10.514	10.445	0	
Yes	Manual Baseline	11.017	11.353	0	
Yes	Split Peak	11.114	0	0	
Yes	Reassign Peak	11.148	11.099	0	
Yes	Manual Baseline	11.951	12.351	0	
Yes	Reassign Peak	12.055	12.041	0	
Yes	Manual Baseline	12.062	12.046	0	
Yes	Manual Baseline	12.629	12.798	0	
Yes	Split Peak	12.696	0	0	
Yes	Reassign Peak	12.72	12.678	0	
Yes	Reassign Peak	12.743	12.717	0	
Yes	Manual Baseline	13.301	13.751	0	
Yes	Reassign Peak	13.463	13.391	0	
Yes	Manual Baseline	16.266	16.619	0	

Sample Name: 303137-001,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 6:33:30 AM  
 Analysis Date: 9/26/2018 11:16:59 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.063	4.057	391276	58.869
PCB1016#1		5.700		0.000 BDL
PCB1016#2		6.773		0.000 BDL
PCB1016#3	7.090	7.077	3956	16.786
PCB1016#4	7.540	7.537	22672	141.405
PCB1016#5	8.050	8.050	15823	79.140
PCB1260#1	11.620	11.637	98673	148.003
PCB1260#2		12.313		0.000 BDL
PCB1260#3	13.137	13.160	17160	52.894
PCB1260#4		13.917		0.000 BDL
PCB1260#5		14.590		0.000 BDL
Decachlorobiphenyl	17.157	17.180	424688	53.871

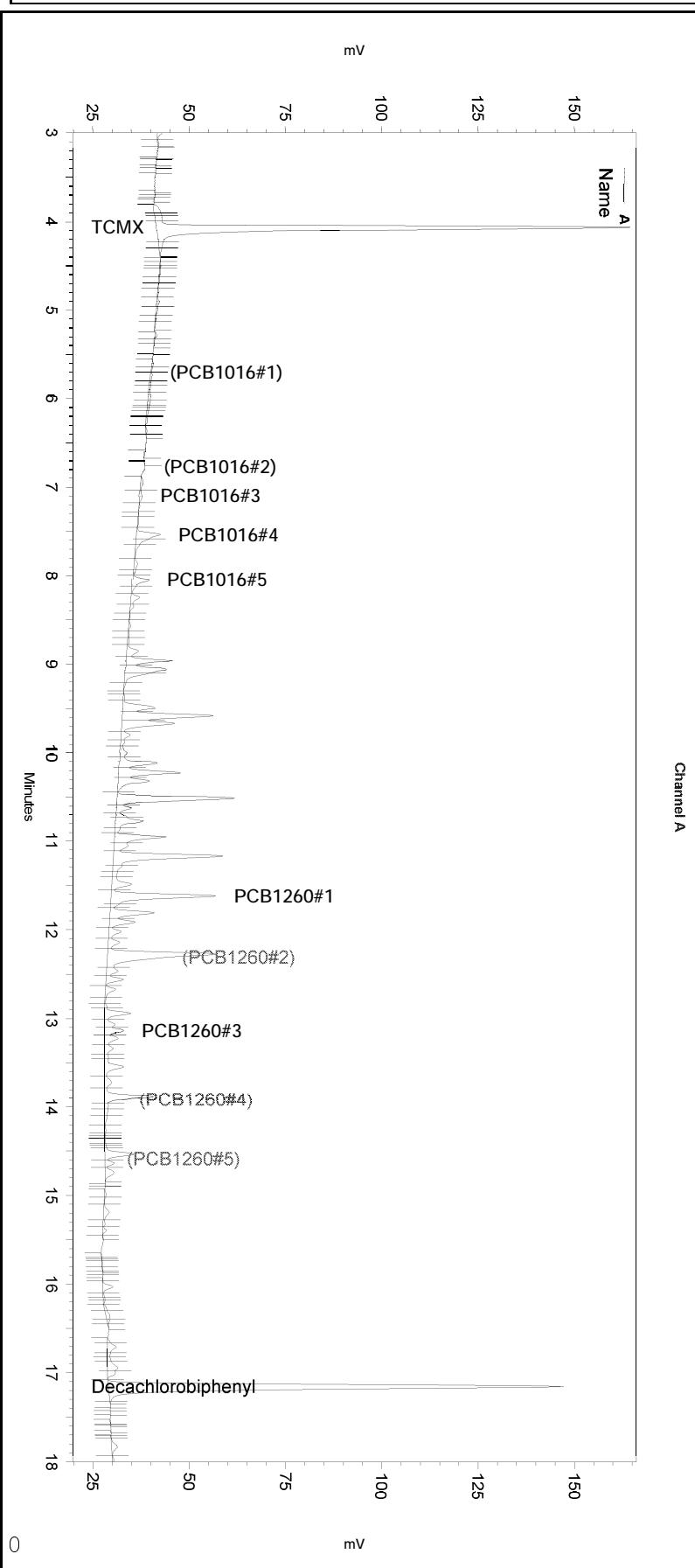
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.307	3.297	331845	49.927
PCB1016#1	4.790	4.790	910	5.543
PCB1016#2	5.717	5.737	3020	5.035
PCB1016#3		5.947		0.000 BDL
PCB1016#4	6.480	6.483	21440	138.193
PCB1016#5	7.197	7.213	8031	32.267
PCB1260#1	10.493	10.493	53708	91.240
PCB1260#2		11.147		0.000 BDL
PCB1260#3		12.060		0.000 BDL
PCB1260#4		12.743		0.000 BDL
PCB1260#5	13.467	13.437	1510	3.565
Decachlorobiphenyl	16.340	16.363	388087	42.887

Sample Name: 303137-001,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 6:33:30 AM  
Analysis Date: 9/26/2018 11:16:59 AM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0

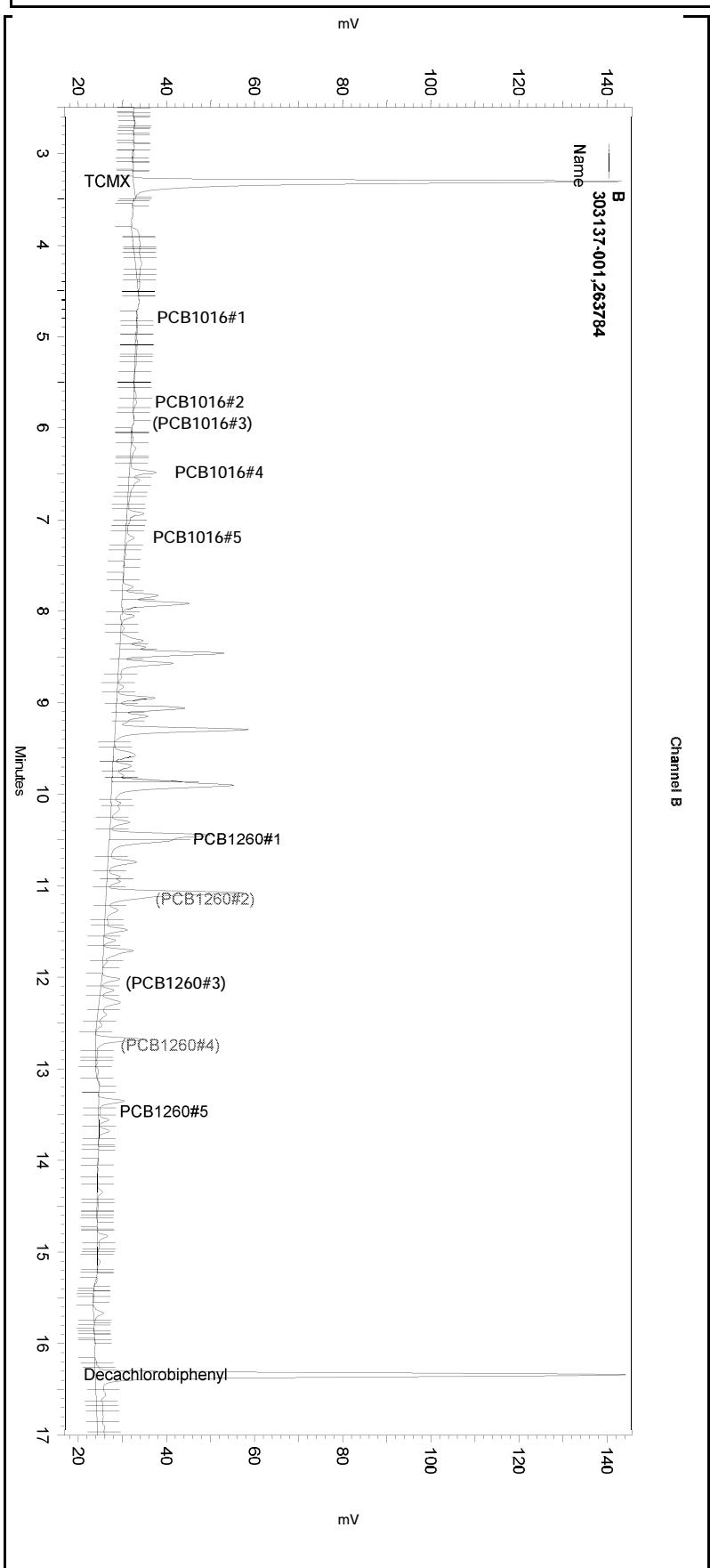
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-084

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Sample Name: 303137-001,263784  
Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-084  
Sequence File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Sequence\\2018\\267.seq  
Instrument: GC06 (Offline) Vial: 84 Operator: Pest 3. Analyst (lms2k3\\pest3)  
Method Name: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Method\\Ar1660\\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 6:33:30 AM  
Analysis Date: 9/26/2018 11:16:59 AM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-084

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

### Polychlorinated Biphenyls (PCBs)

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Field ID:	B120-02-R1	Batch#:	263784
Lab ID:	303137-002	Sampled:	09/11/18
Matrix:	Miscell.	Received:	09/11/18
Units:	ug/Kg	Prepared:	09/21/18
Basis:	as received	Analyzed:	09/26/18
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	19	6.8
Aroclor-1221	ND	38	18
Aroclor-1232	ND	19	8.9
Aroclor-1242	ND	19	8.2
Aroclor-1248	ND	19	8.7
Aroclor-1254	550	19	7.0
Aroclor-1260	120	19	4.4

Surrogate	%REC	Limits
Decachlorobiphenyl	93	37-170

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

## ENTHALPY SAMPLE USER REPORT FOR EPA 8082

Inst : GC06 Lab ID : 303137-002 Client ID : B120-02-R1  
Seqnum : 208385010087.1 Matrix : Miscell. Acct : TTEMI (MJD)  
File : 267\_087 Batch : 263784 Time : 26-SEP-2018 07:57  
IDF : 1.0 Raw Units : pg/uL Units : ug/Kg

5.25 g --> 10.0 ml = 1.905 ml/g PDF

Analyte	Ch	Cal	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1016	A	208344656001	23.37	45	39	13%	19		u x
Aroclor-1016 Peak # 1	A	208344656001	0.5585	1.06	1.54	37%			
Aroclor-1016 Peak # 2	A	208344656001	1.057	2.01	0.40	133%			
Aroclor-1016 Peak # 3	A	208344656001	1.044	1.99	ND				
Aroclor-1016 Peak # 4	A	208344656001	59.62	113.56	154.10	30%			
Aroclor-1016 Peak # 5	A	208344656001	54.57	103.95	39.71	89%			
Aroclor-1221	A			ND			38		u
Aroclor-1232	A			ND			19		u
Aroclor-1242	A			ND			19		u
Aroclor-1248	A			ND			19		u
Aroclor-1254	B	208328928001	289.3	550	480	15%	19		u
Aroclor-1254 Peak # 1	B	208328928001	175.2	333.69 [omit]	298.90 [omit]	11%			
Aroclor-1254 Peak # 2	B	208328928001	243.4	463.68	457.54	1%			
Aroclor-1254 Peak # 3	B	208328928001	310.3	591.13	425.55	33%			
Aroclor-1254 Peak # 4	B	208328928001	314.2	598.51	543.93	10%			
Aroclor-1254 Peak # 5	B	208328928001	453.0	862.92 [omit]	827.04 [omit]	4%			
Aroclor-1260	A	208344656001	61.70	120	95	21%	19		l u
Aroclor-1260 Peak # 1	A	208344656001	230.1	438.26 [omit]	418.51 [omit]	5%			
Aroclor-1260 Peak # 2	A	208344656001	356.3	678.61 [omit]	537.20 [omit]	23%			
Aroclor-1260 Peak # 3	A	208344656001	40.20	76.57	66.14	15%			
Aroclor-1260 Peak # 4	A	208344656001	52.70	100.38	87.17	14%			
Aroclor-1260 Peak # 5	A	208344656001	92.20	175.62	132.26	28%			

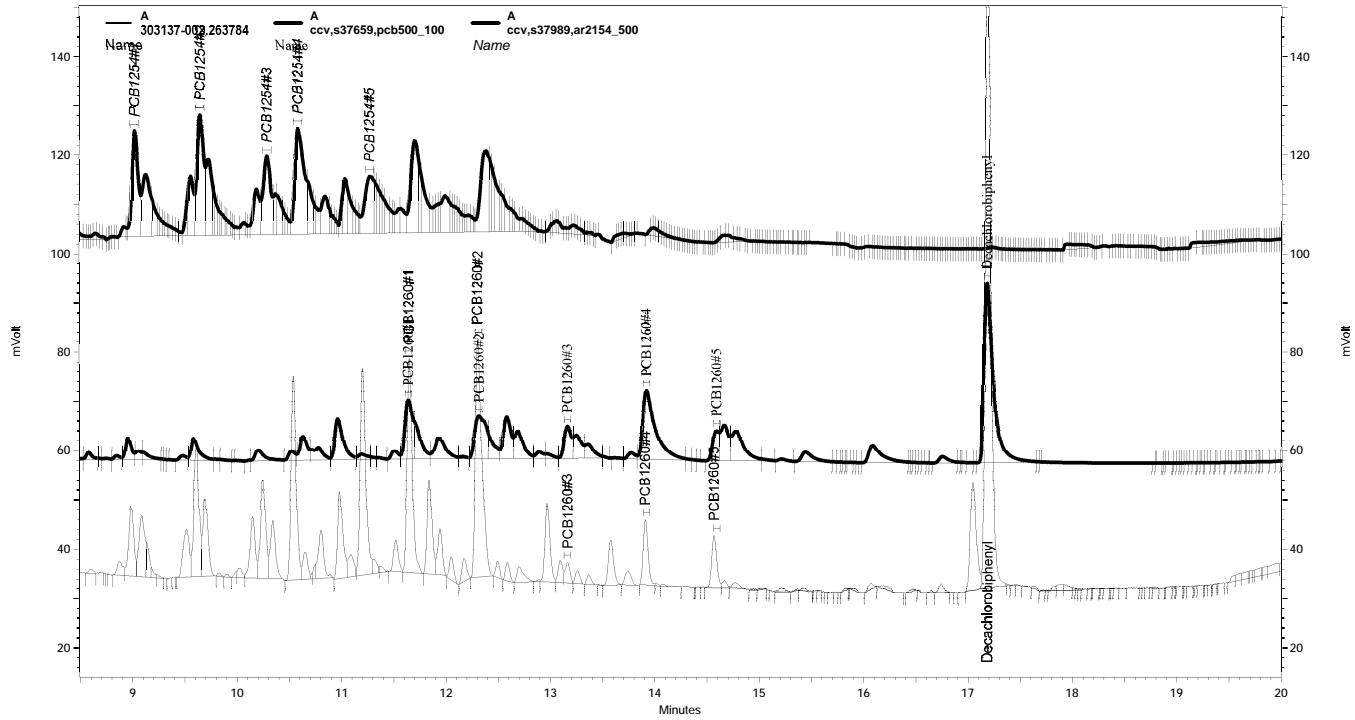
Surrogate	Ch	Cal	Raw	Spiked	Result	%Rec	Limits	Flags
Decachlorobiphenyl	B	208344656001	46.31	95.24	88.21	93	37-170	u

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

RDG 09/26/18 [Decachlorobiphenyl B]: Channel B for better CCV recovery.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

l=false positive flag altered u=use x=false positive



—— \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-087, A

—— \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-073, A

—— \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\262-016, A

Sample Name: 303137-002,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:57:31 AM  
Analysis Date: 9/26/2018 1:42:07 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.983	8.957	47745	156.921
PCB1254#2	9.610	9.583	93574	240.207
PCB1254#3	10.247	10.223	69541	223.414
PCB1254#4	10.537	10.520	139739	285.564
PCB1254#5	11.200	11.213	157591	434.196

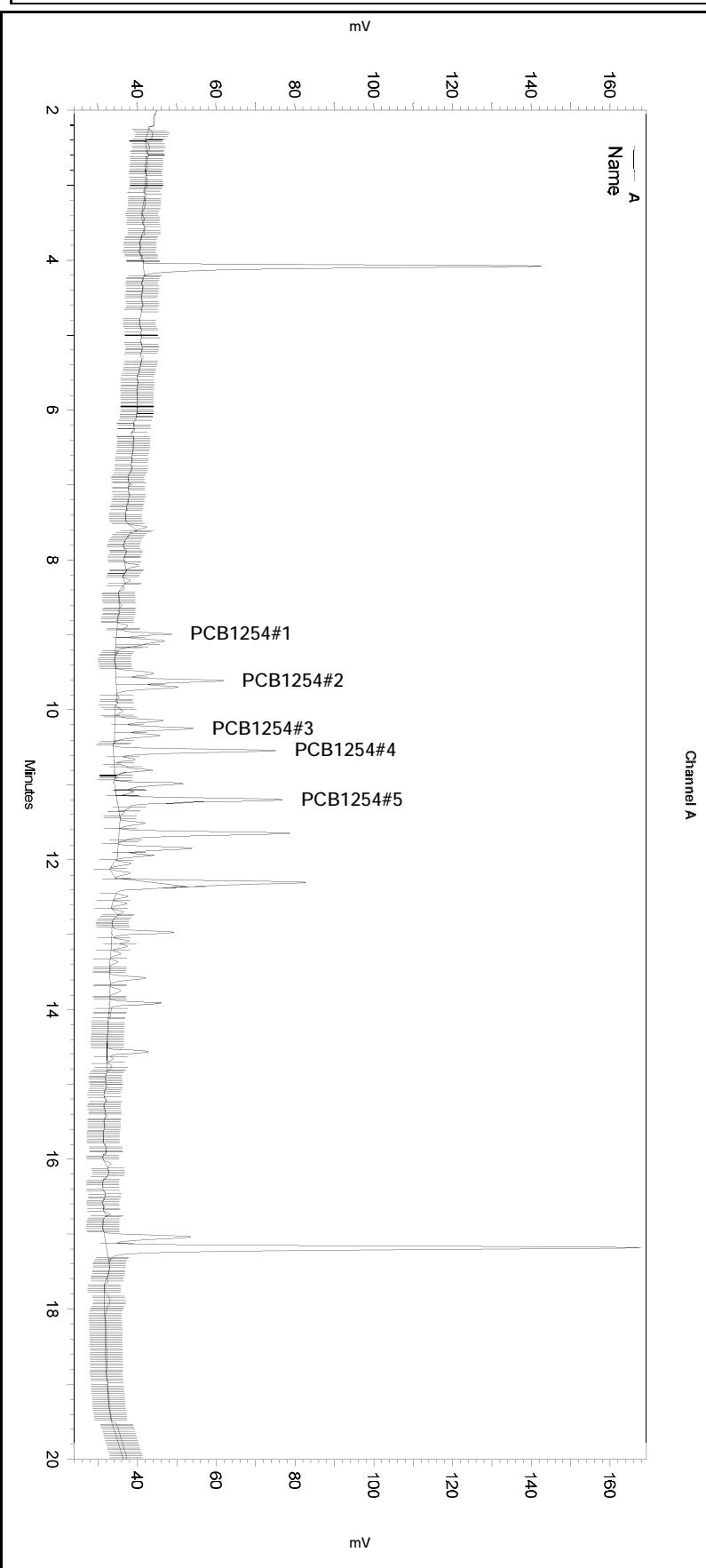
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.940	7.927	58335	175.187
PCB1254#2	8.480	8.470	87315	243.434
PCB1254#3	9.090	9.090	65521	310.343
PCB1254#4	9.323	9.340	134412	314.217
PCB1254#5	9.937	9.890	142095	453.031

Sample Name: 303137-002,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:57:31 AM  
Analysis Date: 9/26/2018 1:42:07 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

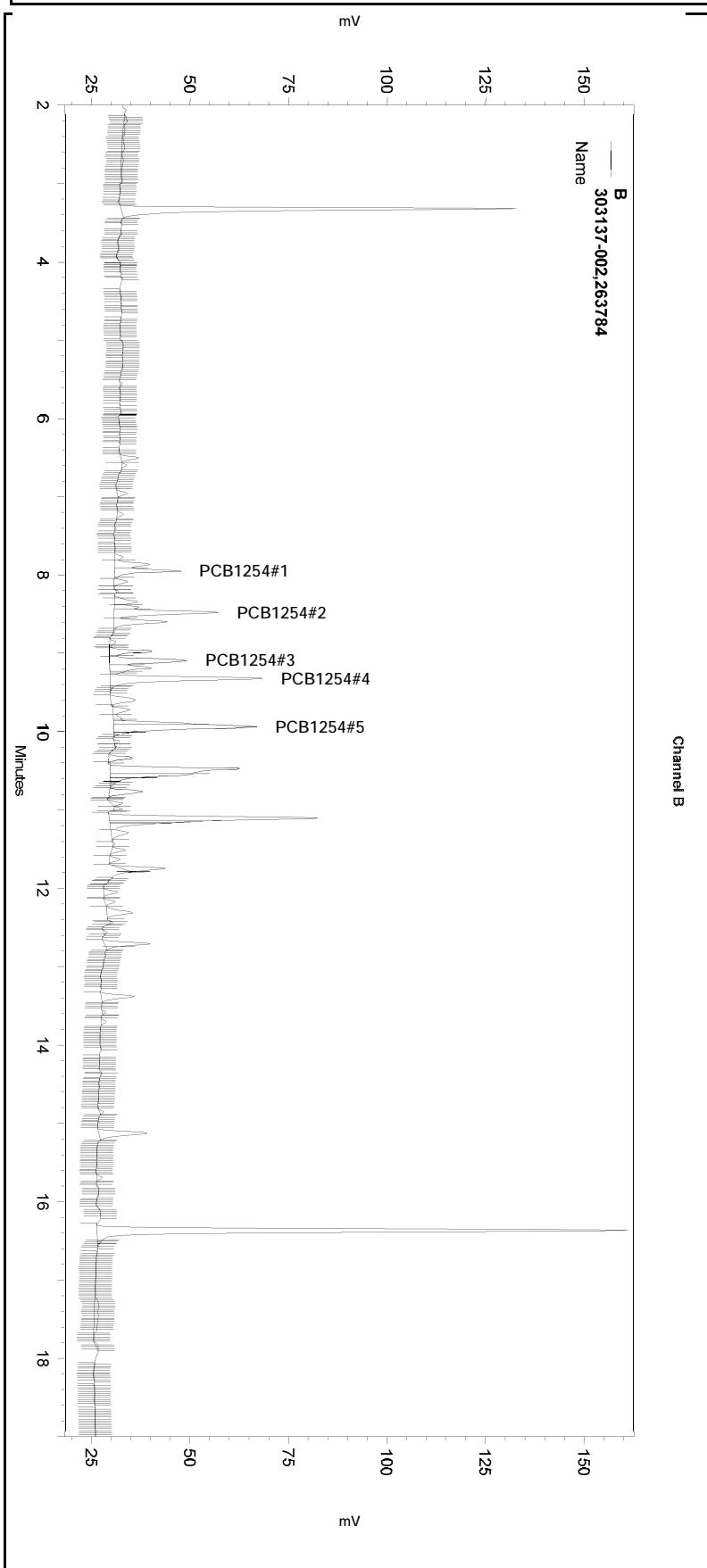
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	3.838	17.573	0
Yes	Manual Baseline	8.814	9.304	0
Yes	Manual Baseline	9.422	9.794	0
Yes	Manual Baseline	9.948	10.437	0
Yes	Manual Baseline	10.461	10.933	0
Yes	Manual Baseline	10.927	11.459	0
Yes	Manual Baseline	11.447	12.013	0
Yes	Manual Baseline	12.838	13.314	0
Yes	Manual Baseline	13.852	14.124	0
Yes	Manual Baseline	14.475	14.844	0
Yes	Manual Baseline	16.974	17.421	0

Sample Name: 303137-002,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:57:31 AM  
Analysis Date: 9/26/2018 1:42:07 PM  
Sample Amount: 1



General Method Parameters				
No items selected for this section				
< B >				
No items selected for this section				
Integration Events				
Enabled	Event Type	Start	Stop	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1
Manual Integration Fixes				
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087				
Enabled	Event Type	Start	Stop	Value
Yes	Valley to Valley	2.942	16.922	0
Yes	Manual Baseline	7.676	8.174	0
Yes	Manual Baseline	8.25	8.738	0
Yes	Manual Baseline	8.797	9.507	0
Yes	Manual Baseline	9.654	10.071	0
Yes	Reassign Peak	9.877	9.959	0
Yes	Manual Baseline	10.387	10.704	0
Yes	Manual Baseline	11.032	11.463	0
Yes	Split Peak	11.143	0	0
Yes	Reassign Peak	11.168	11.117	0
Yes	Split Peak	12.743	0	0
Yes	Reassign Peak	12.773	12.725	0
Yes	Reassign Peak	13.441	13.409	0
Yes	Manual Baseline	16.273	16.572	0

Sample Name: 303137-002,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 7:57:31 AM  
 Analysis Date: 9/26/2018 1:40:07 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.083	4.057	297169	44.710
PCB1016#1	5.690	5.700	184	0.558
PCB1016#2	6.767	6.773	450	1.057
PCB1016#3	7.063	7.077	246	1.044
PCB1016#4	7.567	7.537	9559	59.619
PCB1016#5	8.073	8.050	10911	54.572
PCB1260#1	11.647	11.637	153398	230.087
PCB1260#2	12.303	12.313	210508	356.272
PCB1260#3	13.163	13.160	13042	40.201
PCB1260#4	13.907	13.917	42791	52.702
PCB1260#5	14.563	14.590	36061	92.201
Decachlorobiphenyl	17.183	17.180	494839	64.314

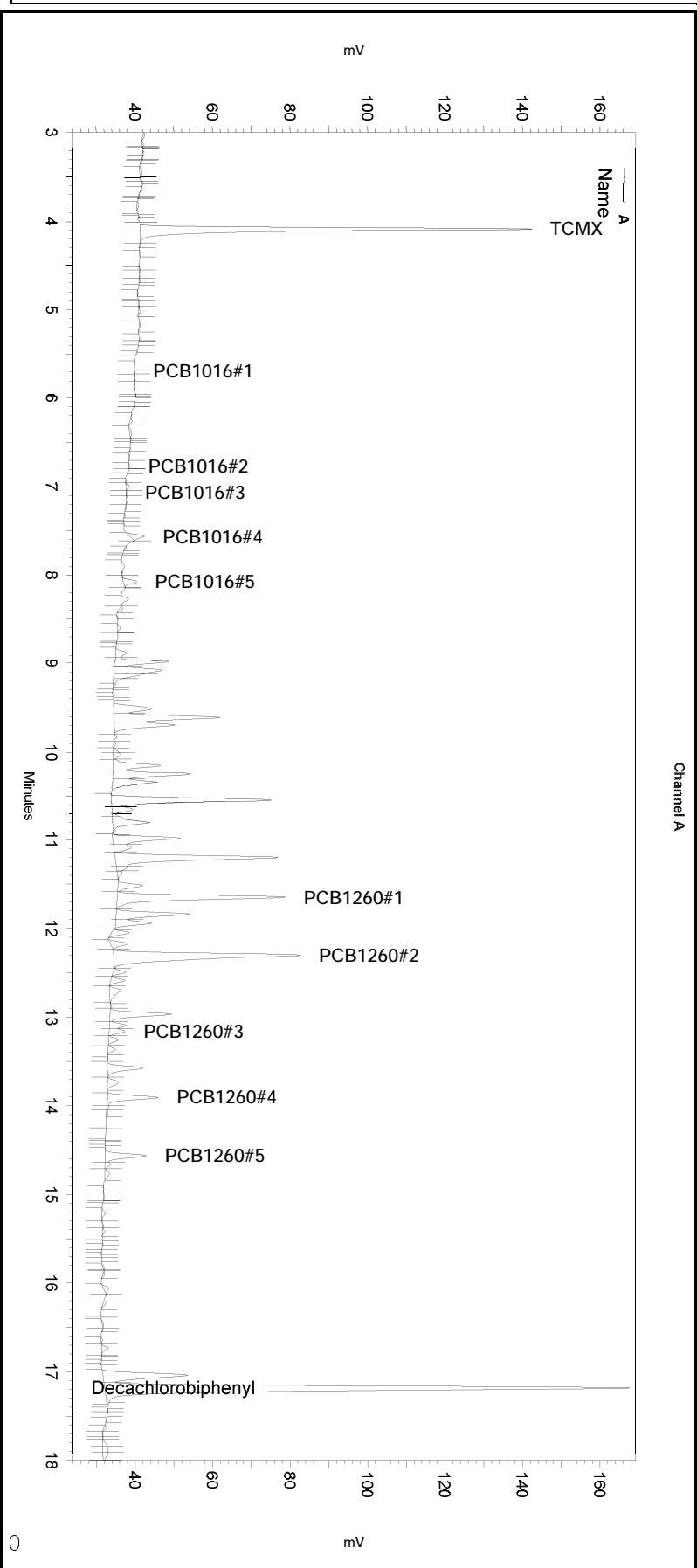
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.320	3.297	273381	41.131
PCB1016#1	4.767	4.790	133	0.810
PCB1016#2	5.740	5.737	127	0.212
PCB1016#3		5.947		0.000 BDL
PCB1016#4	6.503	6.483	12552	80.905
PCB1016#5	7.220	7.213	5189	20.848
PCB1260#1	10.470	10.493	129334	219.715
PCB1260#2	11.107	11.147	160563	282.029
PCB1260#3	12.047	12.060	12035	34.725
PCB1260#4	12.707	12.743	35119	45.763
PCB1260#5	13.380	0.000	29408	69.435
Decachlorobiphenyl	16.363	16.363	419070	46.311

Sample Name: 303137-002,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:57:31 AM  
Analysis Date: 9/26/2018 1:40:07 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

#### Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

#### Manual Integration Fixes

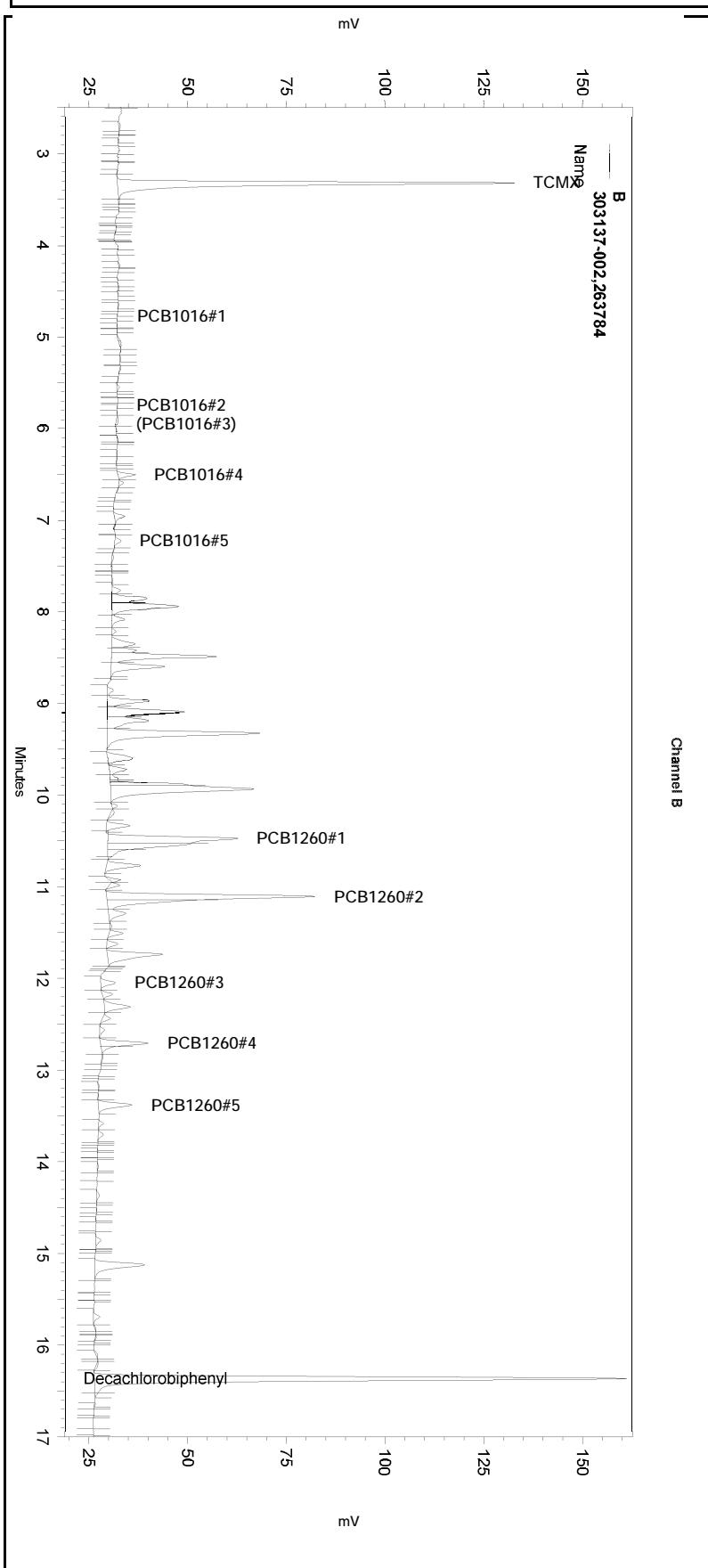
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	3.838	17.573	0
Yes	Manual Baseline	8.814	9.304	0
Yes	Manual Baseline	9.422	9.794	0
Yes	Manual Baseline	9.948	10.437	0
Yes	Manual Baseline	10.461	10.933	0
Yes	Manual Baseline	10.927	11.459	0
Yes	Manual Baseline	11.447	12.013	0
Yes	Manual Baseline	12.838	13.314	0
Yes	Manual Baseline	13.852	14.124	0
Yes	Manual Baseline	14.475	14.844	0
Yes	Manual Baseline	16.974	17.421	0

Channel A

Sample Name: 303137-002,263784  
Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-087  
Sequence File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Sequence\\2018\\267.seq  
Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\\pest3)  
Method Name: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Method\\Ar1660\\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:57:31 AM  
Analysis Date: 9/26/2018 1:40:07 PM  
Sample Amount: 1



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--< General Method Parameters >-----  
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No items selected for this section  
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--< B >-----  
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No items selected for this section  
-----  
Integration Events  
-----  

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

  
Manual Integration Fixes  
-----  
Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-087  

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Valley to Valley	2.942	16.922	0	
Yes	Manual Baseline	7.676	8.174	0	
Yes	Manual Baseline	8.25	8.738	0	
Yes	Manual Baseline	8.797	9.507	0	
Yes	Manual Baseline	9.654	10.071	0	
Yes	Manual Baseline	10.387	10.704	0	
Yes	Manual Baseline	11.032	11.463	0	
Yes	Split Peak	11.143	0	0	
Yes	Reassign Peak	11.168	11.117	0	
Yes	Split Peak	12.743	0	0	
Yes	Reassign Peak	12.773	12.725	0	
Yes	Reassign Peak	13.441	13.409	0	
Yes	Manual Baseline	16.273	16.572	0	

Sample Name: 303137-002,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 7:57:31 AM  
 Analysis Date: 9/26/2018 1:27:10 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.083	4.057	306167	46.064
PCB1016#1	5.690	5.700	2356	7.151
PCB1016#2	6.767	6.773	3789	8.901
PCB1016#3	7.063	7.077	2609	11.071
PCB1016#4	7.567	7.537	25728	160.466
PCB1016#5	8.073	8.050	21904	109.554
PCB1260#1	11.647	11.637	178314	267.459
PCB1260#2	12.303	12.313	230743	390.519
PCB1260#3	13.163	13.160	16033	49.420
PCB1260#4	13.907	13.917	46562	57.346
PCB1260#5	14.563	14.590	36426	93.134
Decachlorobiphenyl	17.183	17.180	510348	66.673

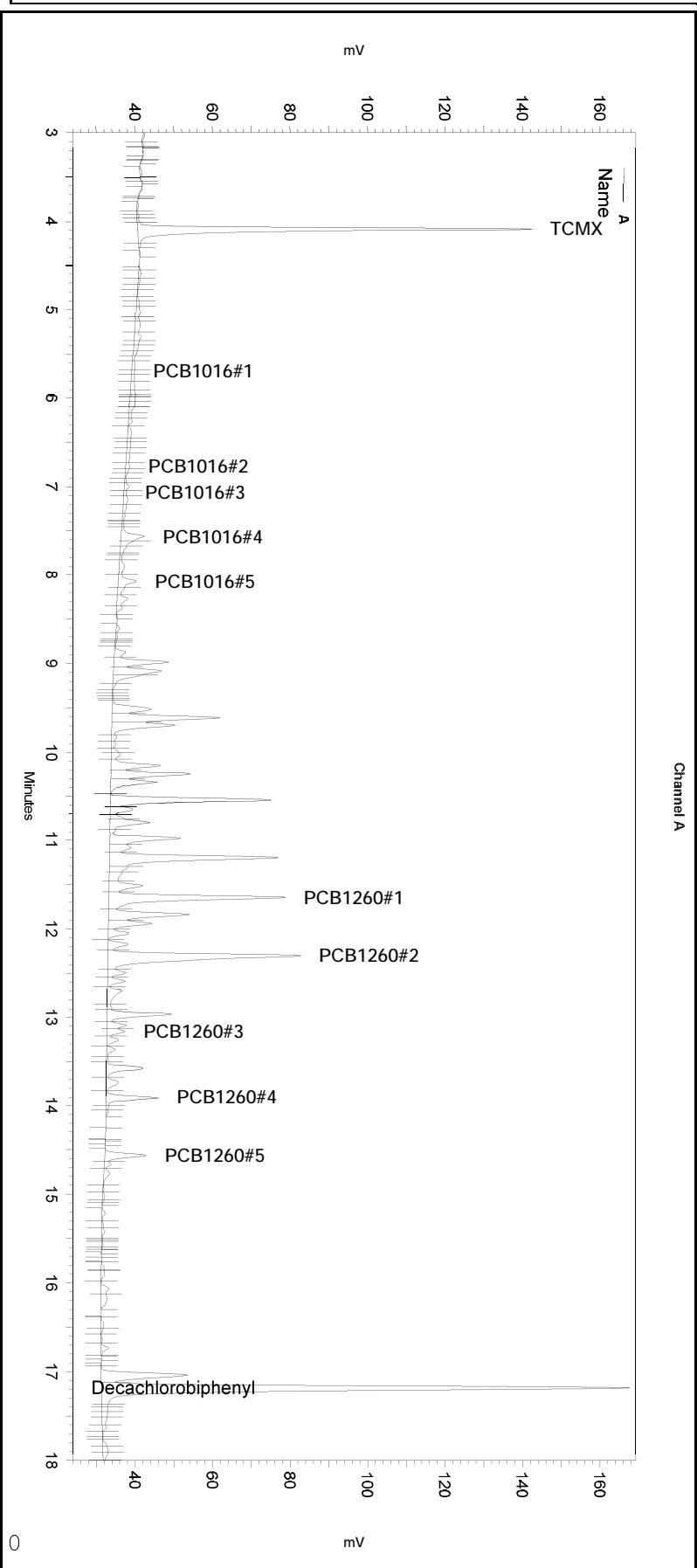
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.320	3.297	273476	41.145
PCB1016#1	4.767	4.790	1504	9.161
PCB1016#2	5.740	5.737	3454	5.759
PCB1016#3		5.947		0.000 BDL
PCB1016#4	6.503	6.483	22860	147.345
PCB1016#5	7.220	7.213	14240	57.213
PCB1260#1	10.470	10.493	138303	234.952
PCB1260#2		11.147		0.000 BDL
PCB1260#3	12.047	12.060	14276	41.191
PCB1260#4		12.743		0.000 BDL
PCB1260#5		13.437		0.000 BDL
Decachlorobiphenyl	16.363	16.363	422668	46.709

Sample Name: 303137-002,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:57:31 AM  
Analysis Date: 9/26/2018 1:27:10 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

#### Integration Events

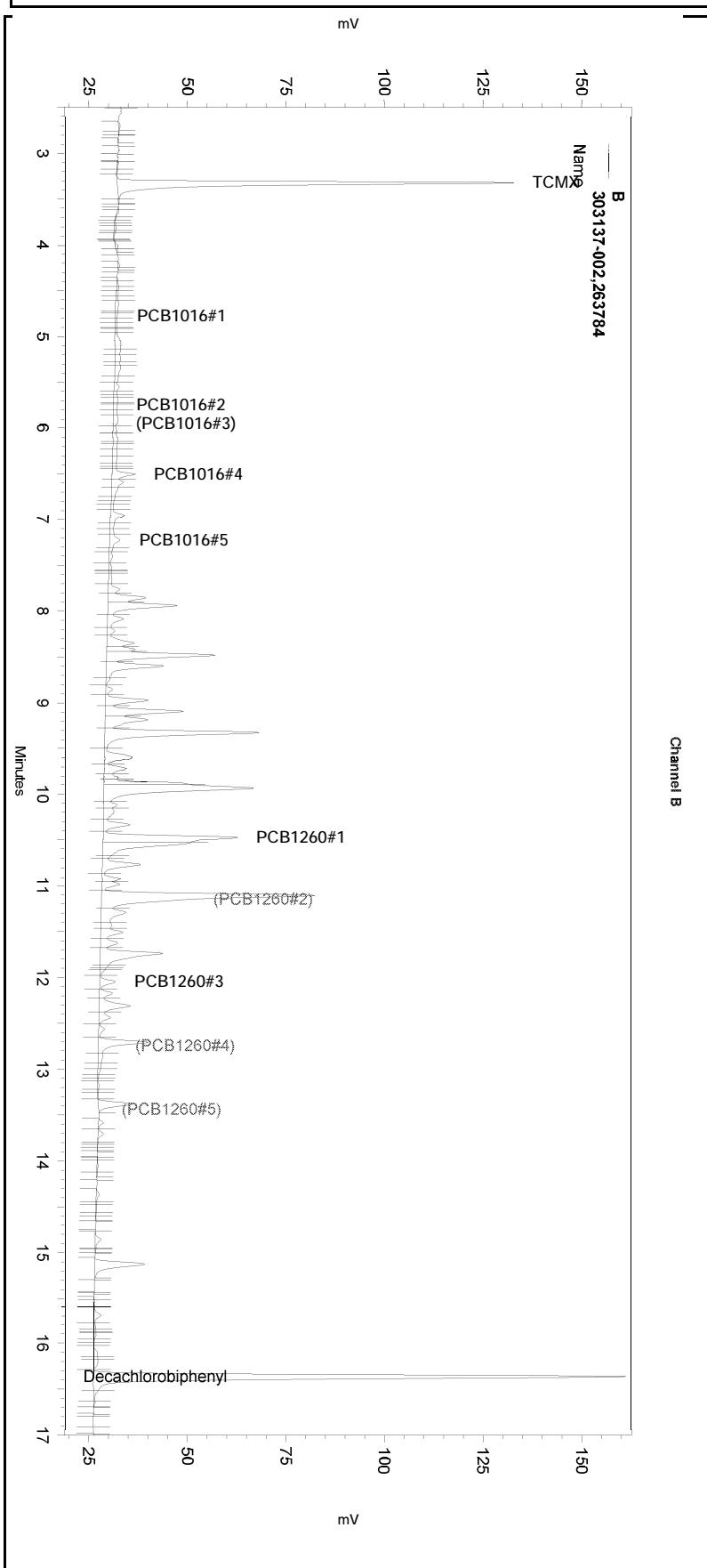
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

#### Manual Integration Fixes

Data File:	\\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-087		Start	Stop
Enabled	Event Type	(Minutes)	(Minutes)	Value
None				

Sample Name: 303137-002,263784  
Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-087  
Sequence File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Sequence\\2018\\267.seq  
Instrument: GC06 (Offline) Vial: 87 Operator: Pest 3. Analyst (lms2k3\\pest3)  
Method Name: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Method\\Ar1660\\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:57:31 AM  
Analysis Date: 9/26/2018 1:27:10 PM  
Sample Amount: 1



-----  
--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-087

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

### Polychlorinated Biphenyls (PCBs)

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Field ID:	B-120-02-R3	Batch#:	263784
Lab ID:	303137-005	Sampled:	09/11/18
Matrix:	Miscell.	Received:	09/11/18
Units:	ug/Kg	Prepared:	09/21/18
Basis:	as received	Analyzed:	09/26/18
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	19	6.9
Aroclor-1221	ND	39	19
Aroclor-1232	ND	19	9.0
Aroclor-1242	ND	19	8.3
Aroclor-1248	ND	19	8.9
Aroclor-1254	220	19	7.1
Aroclor-1260	56	19	4.5

Surrogate	%REC	Limits
Decachlorobiphenyl	101	37-170

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

## ENTHALPY SAMPLE USER REPORT FOR EPA 8082

Inst : GC06 Lab ID : 303137-005 Client ID : B-120-02-R3  
 Seqnum : 208385010088.1 Matrix : Miscell. Acct : TTEMI (MJD)  
 File : 267\_088 Batch : 263784 Time : 26-SEP-2018 08:25  
 IDF : 1.0 Raw Units : pg/uL Units : ug/Kg

5.16 g --> 10.0 ml = 1.938 ml/g PDF

Analyte	Ch	Cal	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1016	A	208344656001	10.63	21	20	4%	19		u x
Aroclor-1016 Peak # 1	A	208344656001	0	ND	0.12				
Aroclor-1016 Peak # 2	A	208344656001	0.01410	0.03	ND				
Aroclor-1016 Peak # 3	A	208344656001	0	ND	ND				
Aroclor-1016 Peak # 4	A	208344656001	29.55	57.27	77.73	30%			
Aroclor-1016 Peak # 5	A	208344656001	23.57	45.68	20.81	75%			
Aroclor-1221	A			ND			39		u
Aroclor-1232	A			ND			19		u
Aroclor-1242	A			ND			19		u
Aroclor-1248	A			ND			19		u
Aroclor-1254	A	208328928001	114.1	220	210	5%	19		l u
Aroclor-1254 Peak # 1	A	208328928001	41.83	81.06 [omit]	135.21 [omit]	50%			
Aroclor-1254 Peak # 2	A	208328928001	108.4	210.02	174.30	19%			
Aroclor-1254 Peak # 3	A	208328928001	98.56	191.00	203.47	6%			
Aroclor-1254 Peak # 4	A	208328928001	135.5	262.56	255.75	3%			
Aroclor-1254 Peak # 5	A	208328928001	191.3	370.80 [omit]	411.34 [omit]	10%			
Aroclor-1260	B	208344656001	28.68	56	42	28%	19		u
Aroclor-1260 Peak # 1	B	208344656001	39.58	76.70	187.97 [omit]	84%			
Aroclor-1260 Peak # 2	B	208344656001	127.5	247.03 [omit]	285.31 [omit]	14%			
Aroclor-1260 Peak # 3	B	208344656001	12.30	23.83 [omit]	24.03	1%			
Aroclor-1260 Peak # 4	B	208344656001	20.08	38.92	38.92	0%			
Aroclor-1260 Peak # 5	B	208344656001	26.38	51.13	62.57	20%			

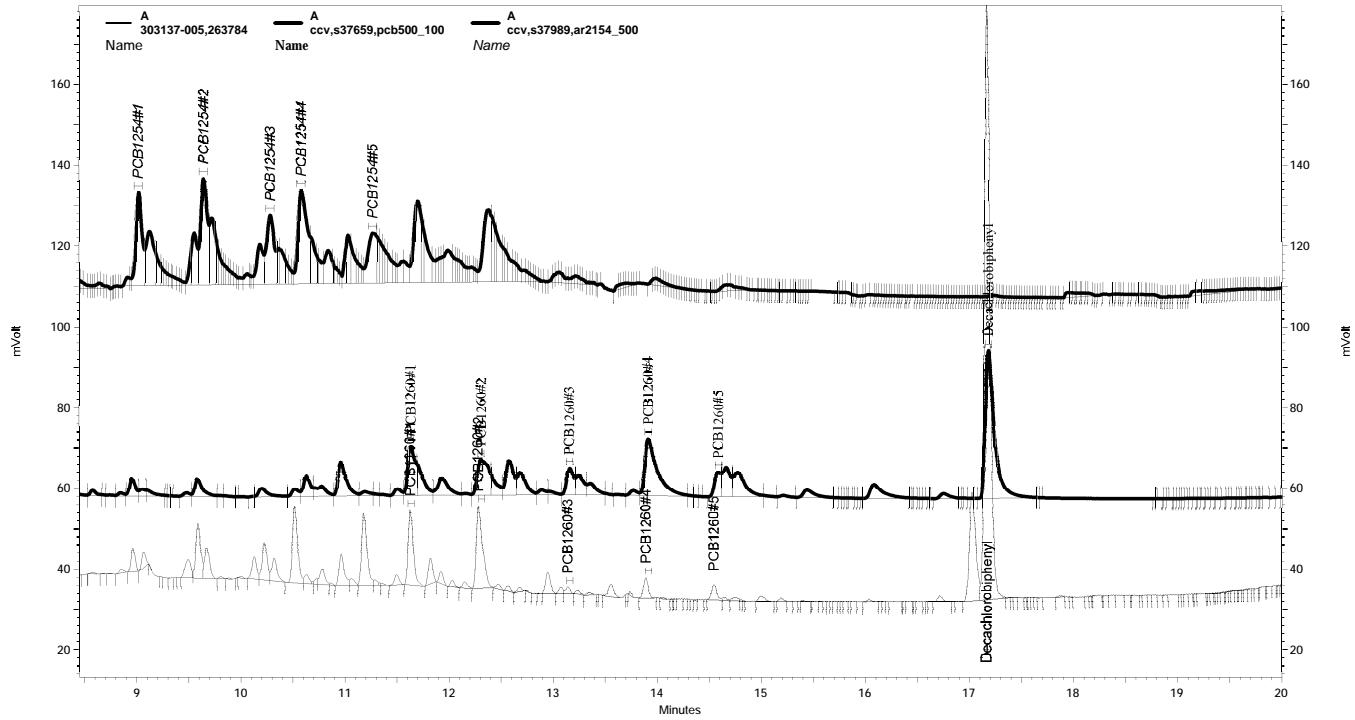
Surrogate	Ch	Cal	Raw	Spiked	Result	%Rec	Limits	Flags
Decachlorobiphenyl	B	208344656001	50.49	96.90	97.85	101	37-170	u

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

RDG 09/26/18 [Decachlorobiphenyl B]: Channel B for better CCV recovery.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

l=false positive flag altered u=use x=false positive



— \|kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088, A

— \|kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073, A

— \|kraken\gdrive\ezchrom\Projects\GC06\Data\2018\262-016, A

Sample Name: 303137-005,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:25:31 AM  
Analysis Date: 9/26/2018 1:51:13 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.967	8.957	15465	41.826
PCB1254#2	9.590	9.583	44791	108.371
PCB1254#3	10.230	10.223	31312	98.556
PCB1254#4	10.520	10.520	65777	135.479
PCB1254#5	11.183	11.213	64569	191.335

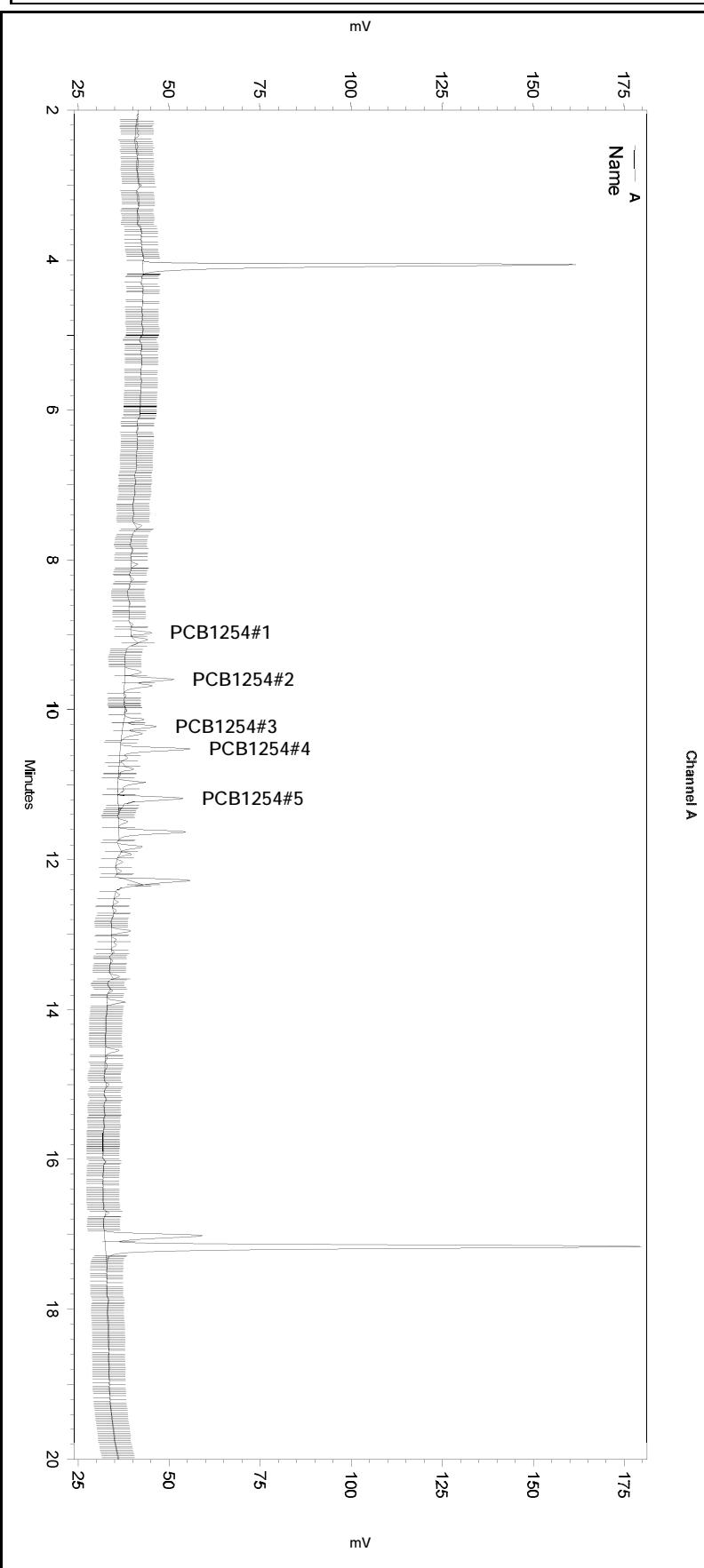
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.920	7.927	24806	69.768
PCB1254#2	8.460	8.470	35136	89.941
PCB1254#3	9.073	9.090	22001	104.992
PCB1254#4	9.307	9.340	54987	131.968
PCB1254#5	9.920	9.890	60779	212.250

Sample Name: 303137-005,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:25:31 AM  
Analysis Date: 9/26/2018 1:51:13 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

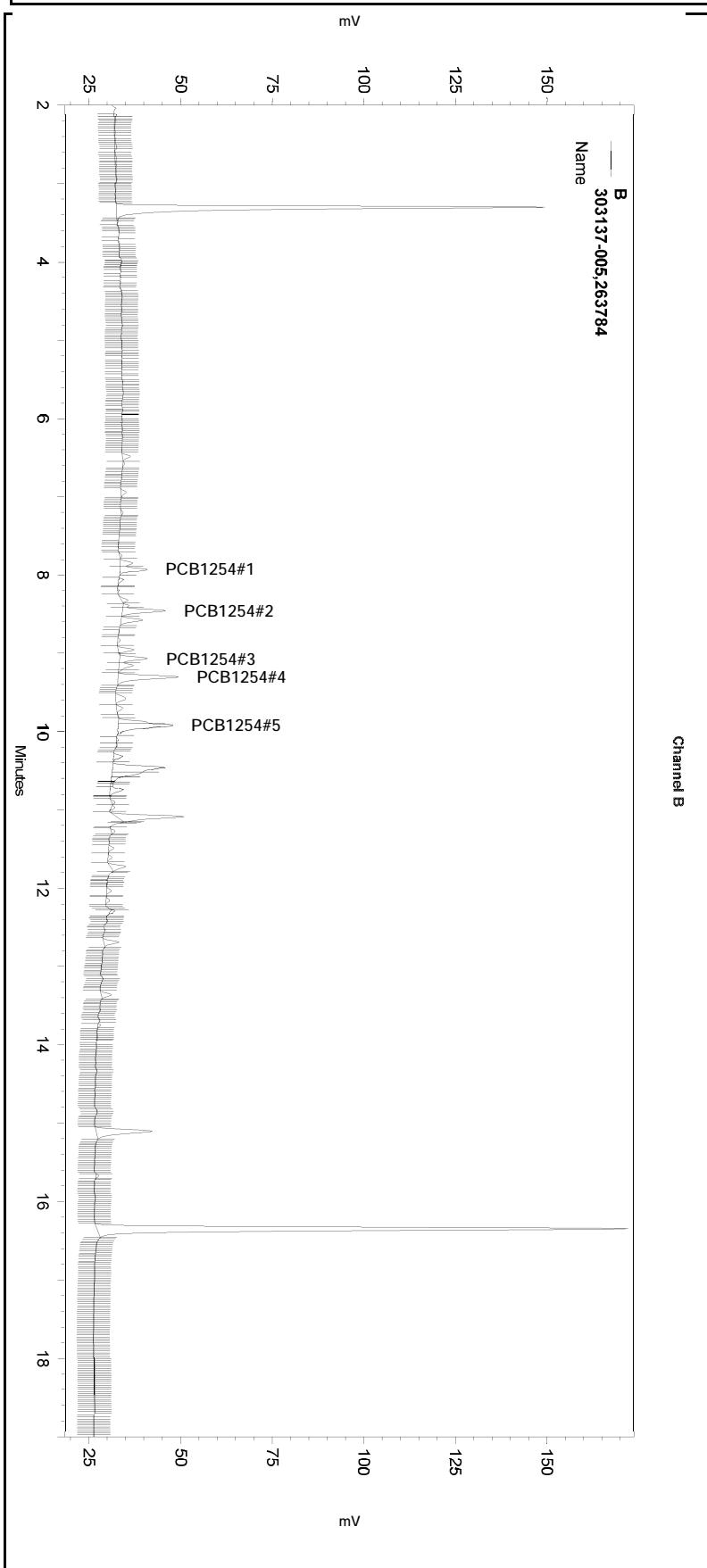
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	3.701	17.867	0
Yes	Manual Baseline	9.387	9.765	0
Yes	Manual Baseline	10.062	10.44	0
Yes	Manual Baseline	10.428	10.907	0
Yes	Manual Baseline	10.907	11.399	0
Yes	Manual Baseline	12.899	13.207	0
Yes	Manual Baseline	14.481	14.871	0
Yes	Reassign Peak	14.586	14.549	0
Yes	Manual Baseline	16.932	17.456	0

Sample Name: 303137-005,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:25:31 AM  
Analysis Date: 9/26/2018 1:51:13 PM  
Sample Amount: 1



-----  
--< General Method Parameters >-----  
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No items selected for this section  
-----  
--< B >-----  
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No items selected for this section  
-----  
Integration Events  
-----  

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

  
Manual Integration Fixes  
-----  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Valley to Valley	2.959	16.889	0	
Yes	Manual Baseline	3.245	3.529	0	
Yes	Manual Baseline	7.786	8.004	0	
Yes	Manual Baseline	8.371	8.647	0	
Yes	Manual Baseline	8.997	9.252	0	
Yes	Manual Baseline	9.817	10.048	0	
Yes	Reassign Peak	9.854	9.895	0	
Yes	Manual Baseline	10.39	10.826	0	
Yes	Split Peak	11.153	0	0	
Yes	Reassign Peak	11.192	11.062	0	
Yes	Reassign Peak	12.058	12.03	0	
Yes	Reassign Peak	12.737	12.709	0	
Yes	Manual Baseline	13.43	13.347	0	
Yes	Manual Baseline	13.437	13.402	0	
Yes	Reassign Peak	13.45	13.395	0	

Sample Name: 303137-005,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 8:25:31 AM  
 Analysis Date: 9/26/2018 1:49:13 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.067	4.057	353719	53.218
PCB1016#1		5.700		0.000 BDL
PCB1016#2	6.767	6.773	6	0.014
PCB1016#3		7.077		0.000 BDL
PCB1016#4	7.547	7.537	4738	29.551
PCB1016#5	8.057	8.050	4713	23.572
PCB1260#1	11.630	11.637	64665	96.993
PCB1260#2	12.283	12.313	86986	147.219
PCB1260#3	13.140	13.160	4022	12.397
PCB1260#4	13.890	13.917	16305	20.081
PCB1260#5	14.543	0.000	12627	32.285
Decachlorobiphenyl	17.167	17.180	538805	71.053

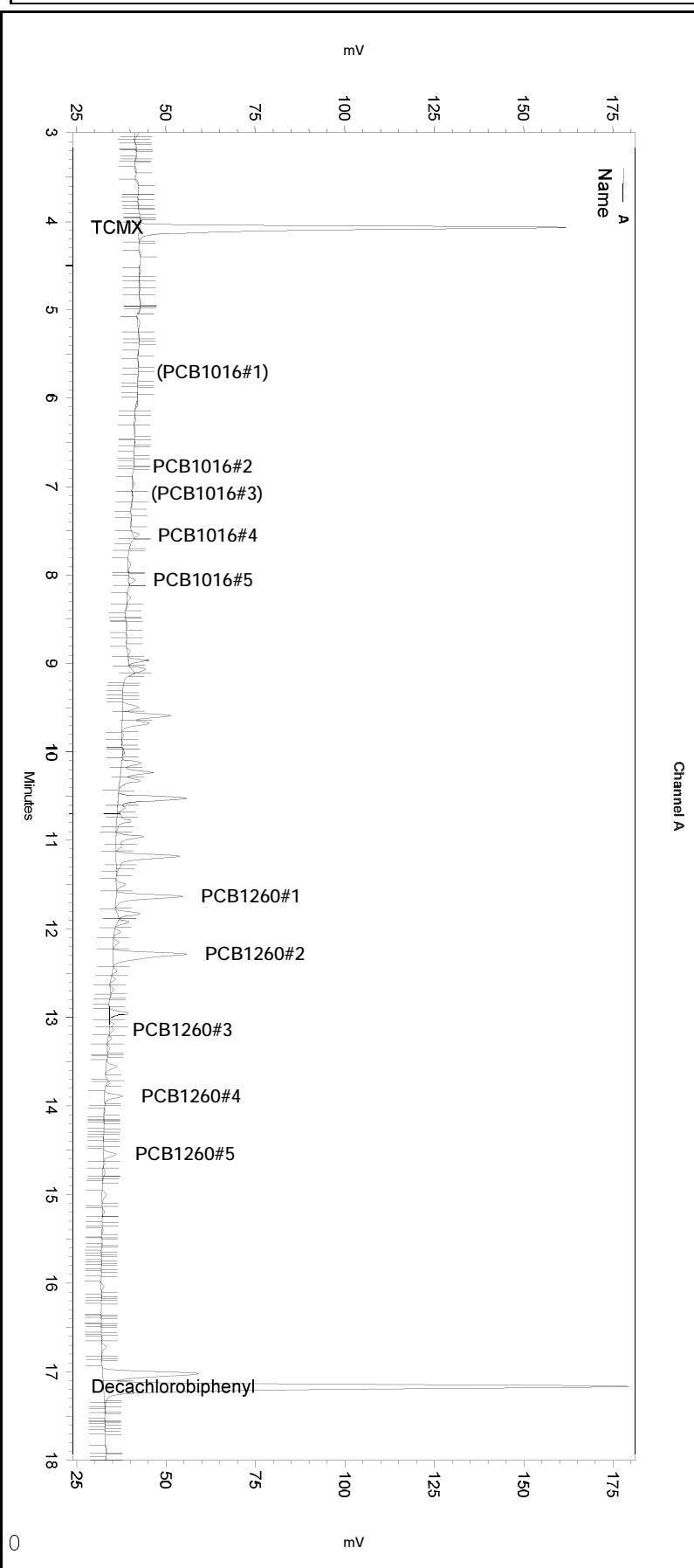
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.303	3.297	320817	48.268
PCB1016#1	4.787	4.790	10	0.061
PCB1016#2	5.720	5.737	0	0.000
PCB1016#3		5.947		0.000 BDL
PCB1016#4	6.483	6.483	6223	40.111
PCB1016#5	7.207	7.213	2672	10.735
PCB1260#1	10.513	10.493	23296	39.576
PCB1260#2	11.090	11.147	72569	127.468
PCB1260#3	12.030	0.000	4262	12.297
PCB1260#4	12.690	0.000	15412	20.083
PCB1260#5	13.363	0.000	11174	26.383
Decachlorobiphenyl	16.347	16.363	456883	50.490

Sample Name: 303137-005,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:25:31 AM  
Analysis Date: 9/26/2018 1:49:13 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

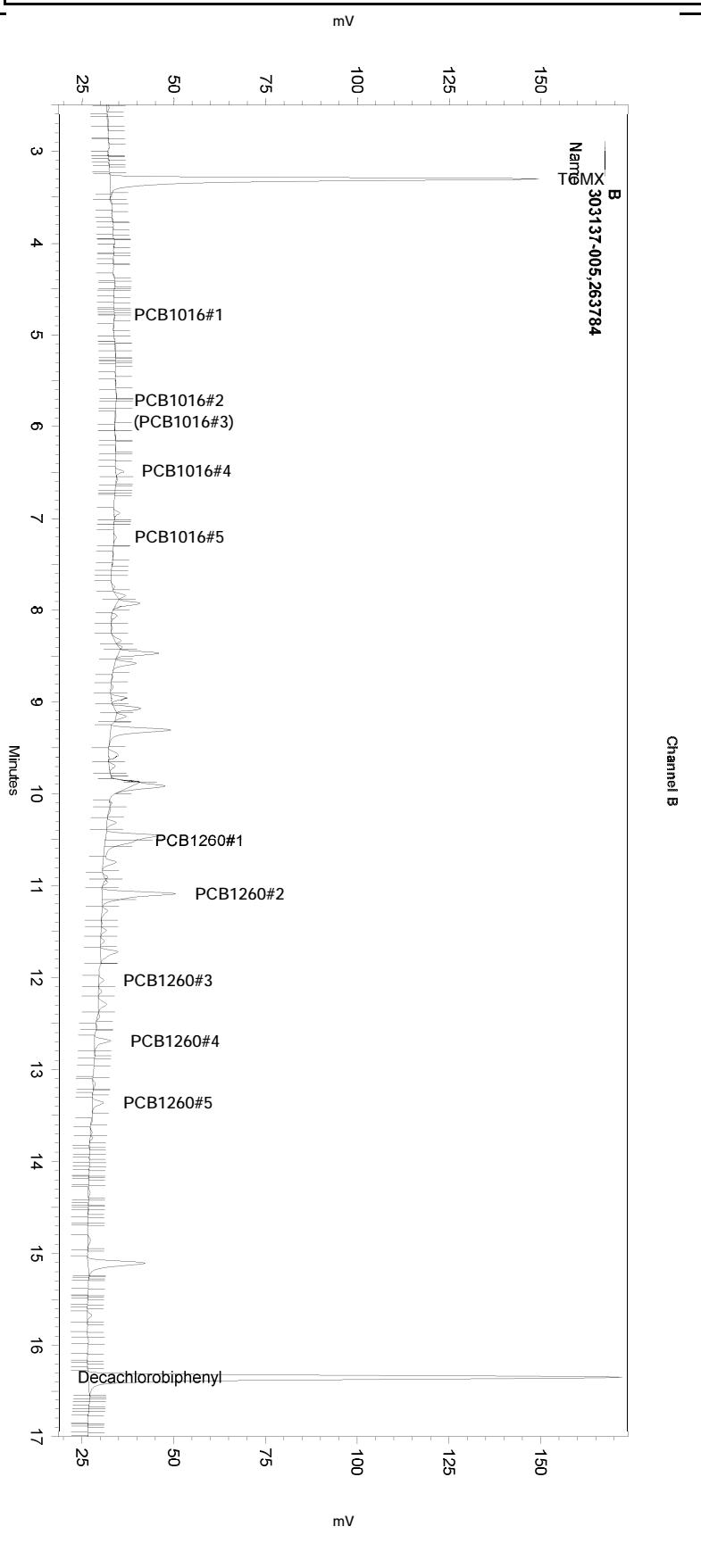
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Start Stop

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	3.701	17.867	0
Yes	Manual Baseline	9.387	9.765	0
Yes	Manual Baseline	10.062	10.44	0
Yes	Manual Baseline	10.428	10.907	0
Yes	Manual Baseline	10.907	11.399	0
Yes	Manual Baseline	12.899	13.207	0
Yes	Manual Baseline	14.481	14.871	0
Yes	Reassign Peak	14.586	14.549	0
Yes	Manual Baseline	16.932	17.456	0

Sample Name: 303137-005,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:25:31 AM  
Analysis Date: 9/26/2018 1:49:13 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> B <-----

No items selected for this section

#### Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	0	1

#### Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Valley to Valley	2.959	16.889	0	
Yes	Manual Baseline	3.245	3.529	0	
Yes	Manual Baseline	10.39	10.826	0	
Yes	Split Peak	11.153	0	0	
Yes	Reassign Peak	11.192	11.062	0	
Yes	Reassign Peak	12.058	12.03	0	
Yes	Reassign Peak	12.737	12.709	0	
Yes	Manual Baseline	13.43	13.347	0	
Yes	Manual Baseline	13.437	13.402	0	
Yes	Reassign Peak	13.45	13.395	0	

Sample Name: 303137-005,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 8:25:31 AM  
 Analysis Date: 9/26/2018 1:27:15 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.067	4.057	355924	53.550
PCB1016#1		5.700		0.000 BDL
PCB1016#2	6.767	6.773	990	2.326
PCB1016#3		7.077		0.000 BDL
PCB1016#4	7.547	7.537	12208	76.141
PCB1016#5	8.057	8.050	9542	47.725
PCB1260#1	11.630	11.637	75032	112.543
PCB1260#2	12.283	12.313	97132	164.390
PCB1260#3	13.140	13.160	7608	23.451
PCB1260#4	13.890	13.917	17377	21.402
PCB1260#5		14.590		0.000 BDL
Decachlorobiphenyl	17.167	17.180	537992	70.927

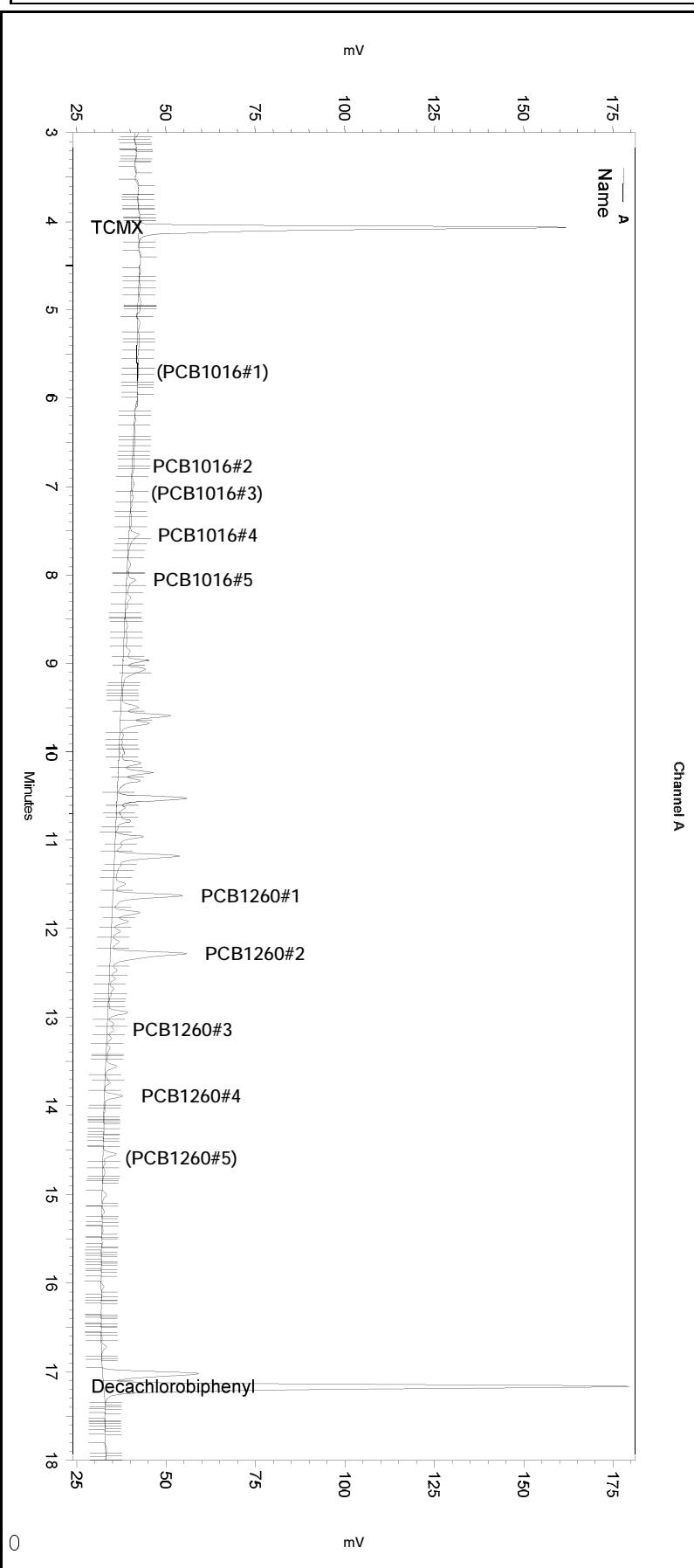
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.303	3.297	321924	48.435
PCB1016#1	4.787	4.790	470	2.863
PCB1016#2	5.720	5.737	1175	1.959
PCB1016#3		5.947		0.000 BDL
PCB1016#4	6.483	6.483	8206	52.892
PCB1016#5	7.207	7.213	4762	19.133
PCB1260#1	10.513	10.493	35430	60.189
PCB1260#2		11.147		0.000 BDL
PCB1260#3		12.060		0.000 BDL
PCB1260#4		12.743		0.000 BDL
PCB1260#5		13.437		0.000 BDL
Decachlorobiphenyl	16.347	16.363	456883	50.490

Sample Name: 303137-005,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:25:31 AM  
Analysis Date: 9/26/2018 1:27:15 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

#### Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

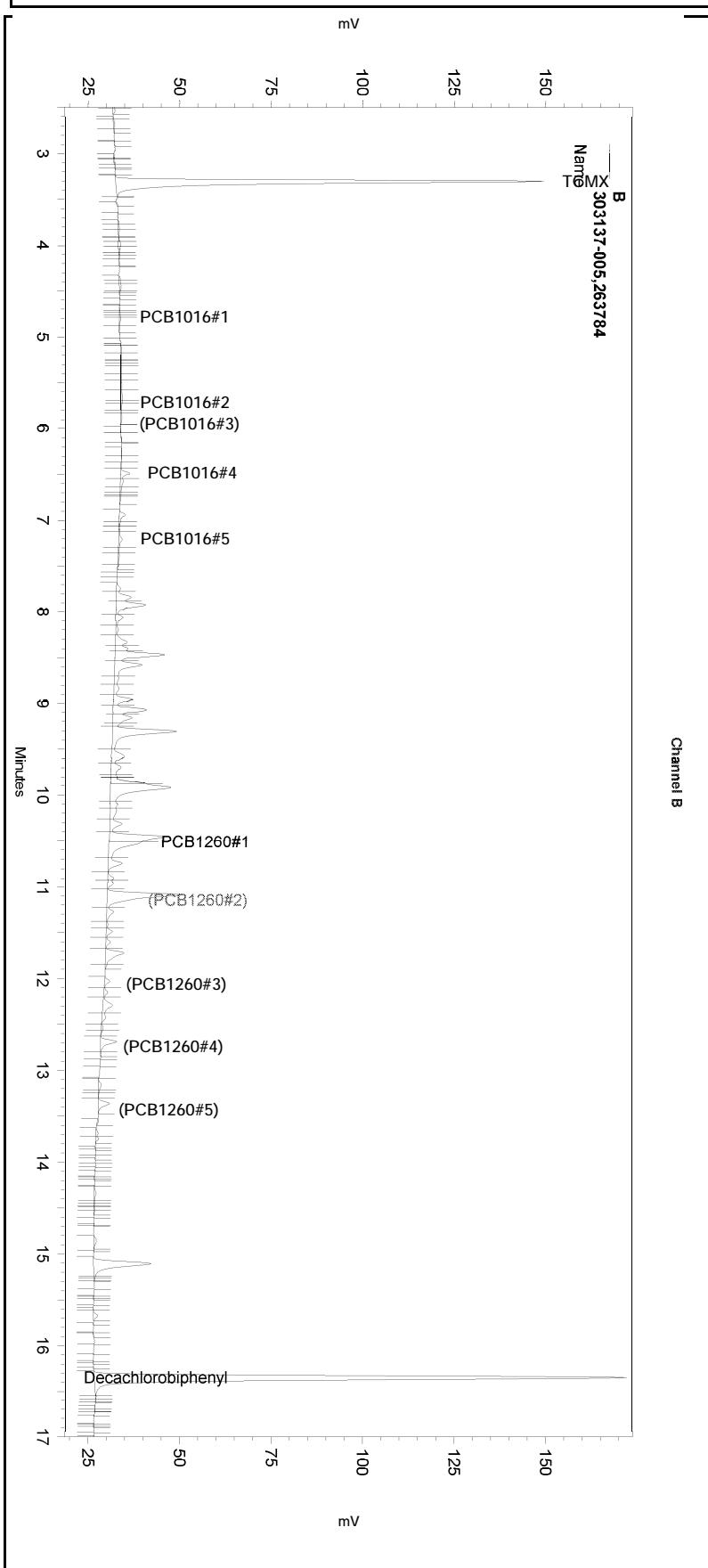
#### Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Start Stop

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: 303137-005,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 88 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:25:31 AM  
Analysis Date: 9/26/2018 1:27:15 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> B <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-088

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

### Polychlorinated Biphenyls (PCBs)

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Field ID:	B120-03	Batch#:	263784
Lab ID:	303137-006	Sampled:	09/11/18
Matrix:	Miscell.	Received:	09/11/18
Units:	ug/Kg	Prepared:	09/21/18
Basis:	as received	Analyzed:	09/26/18
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	19	6.9
Aroclor-1221	ND	39	19
Aroclor-1232	ND	19	9.1
Aroclor-1242	ND	19	8.3
Aroclor-1248	ND	19	8.9
Aroclor-1254	ND	19	7.1
Aroclor-1260	10 J	19	4.5

Surrogate	%REC	Limits
Decachlorobiphenyl	111	37-170

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

## ENTHALPY SAMPLE USER REPORT FOR EPA 8082

Inst : GC06 Lab ID : 303137-006 Client ID : B120-03  
 Seqnum : 208385010089.1 Matrix : Miscell. Acct : TTEMI (MJD)  
 File : 267\_089 Batch : 263784 Time : 26-SEP-2018 08:53  
 Cal : 208344656001 Caldate : 27-AUG-2018  
 IDF : 1.0 Raw Units : pg/uL Units : ug/Kg

5.15 g --> 10.0 ml = 1.942 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Blank	Flags
Aroclor-1016	A	2.516	ND	ND	11%	19		u
Aroclor-1016 Peak # 1	A	0	ND	2.65				
Aroclor-1016 Peak # 2	A	0.3430	0.67	0.23	96%			
Aroclor-1016 Peak # 3	A	0	ND	ND				
Aroclor-1016 Peak # 4	A	6.143	11.93	18.89	45%			
Aroclor-1016 Peak # 5	A	6.092	11.83	5.55	72%			
Aroclor-1221	A		ND			39		u
Aroclor-1232	A		ND			19		u
Aroclor-1242	A		ND			19		u
Aroclor-1248	A		ND			19		u
Aroclor-1254	A		ND			19		u
Aroclor-1260	A	5.167	10 J	6.3 J	46%	19		l u
Aroclor-1260 Peak # 1	A	26.52	51.50 [omit]	39.78 [omit]	26%			
Aroclor-1260 Peak # 2	A	35.77	69.47 [omit]	58.64 [omit]	17%			
Aroclor-1260 Peak # 3	A	3.986	7.74	9.64	22%			
Aroclor-1260 Peak # 4	A	4.183	8.12	9.11	11%			
Aroclor-1260 Peak # 5	A	7.333	14.24	0.14	196%			

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
Decachlorobiphenyl	B	55.29	97.09	107.4	111	37-170	u

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

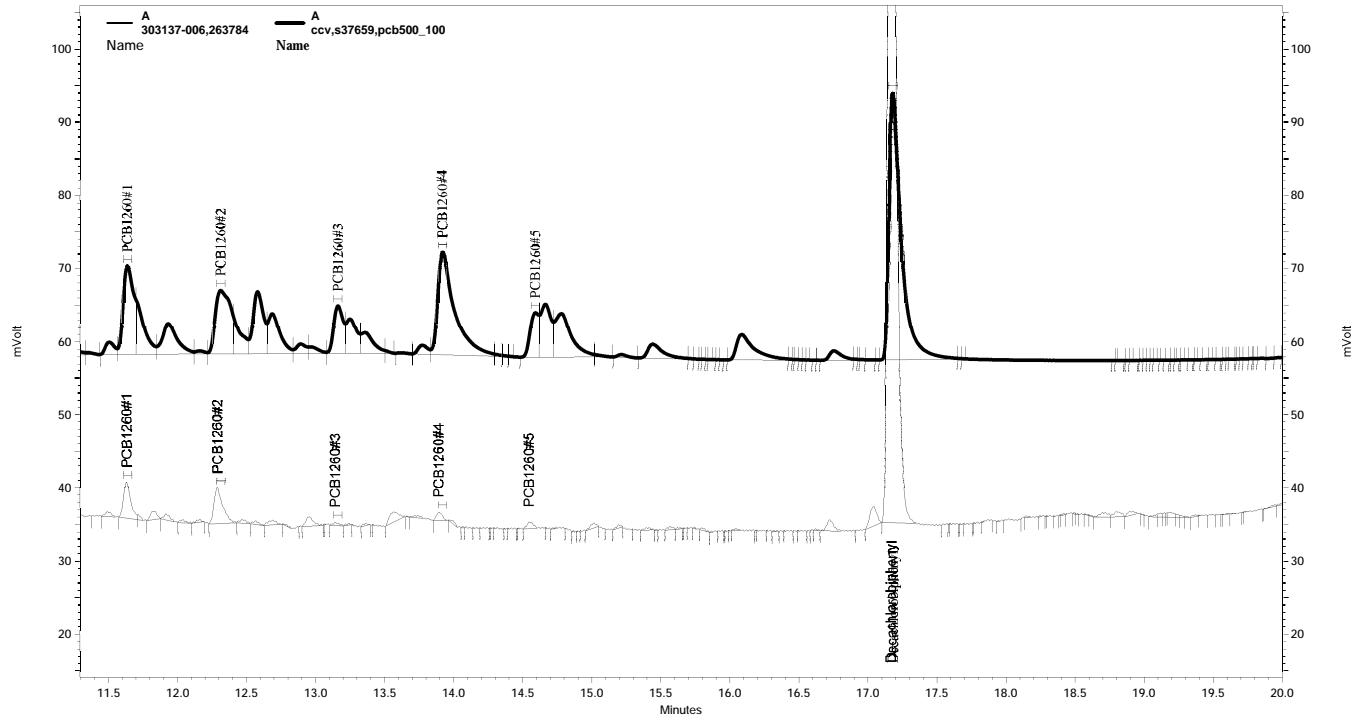
RDG 09/26/18 [Decachlorobiphenyl B]: Channel B for better CCV recovery.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

l=false positive flag altered u=use

Page 1 of 1

208385010089.1



—— \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-089, A

—— \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-073, A

Sample Name: 303137-006,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-089  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 89 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 8:53:32 AM  
 Analysis Date: 9/26/2018 1:56:32 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.067	4.057	372379	56.026
PCB1016#1		5.700		0.000 BDL
PCB1016#2	6.767	6.773	146	0.343
PCB1016#3		7.077		0.000 BDL
PCB1016#4	7.543	7.537	985	6.143
PCB1016#5	8.057	8.050	1218	6.092
PCB1260#1	11.633	11.637	17681	26.520
PCB1260#2	12.290	12.313	21138	35.775
PCB1260#3	13.140	13.160	1293	3.986
PCB1260#4	13.890	13.917	3396	4.183
PCB1260#5	14.543	0.000	2868	7.333
Decachlorobiphenyl	17.167	17.180	575166	76.750

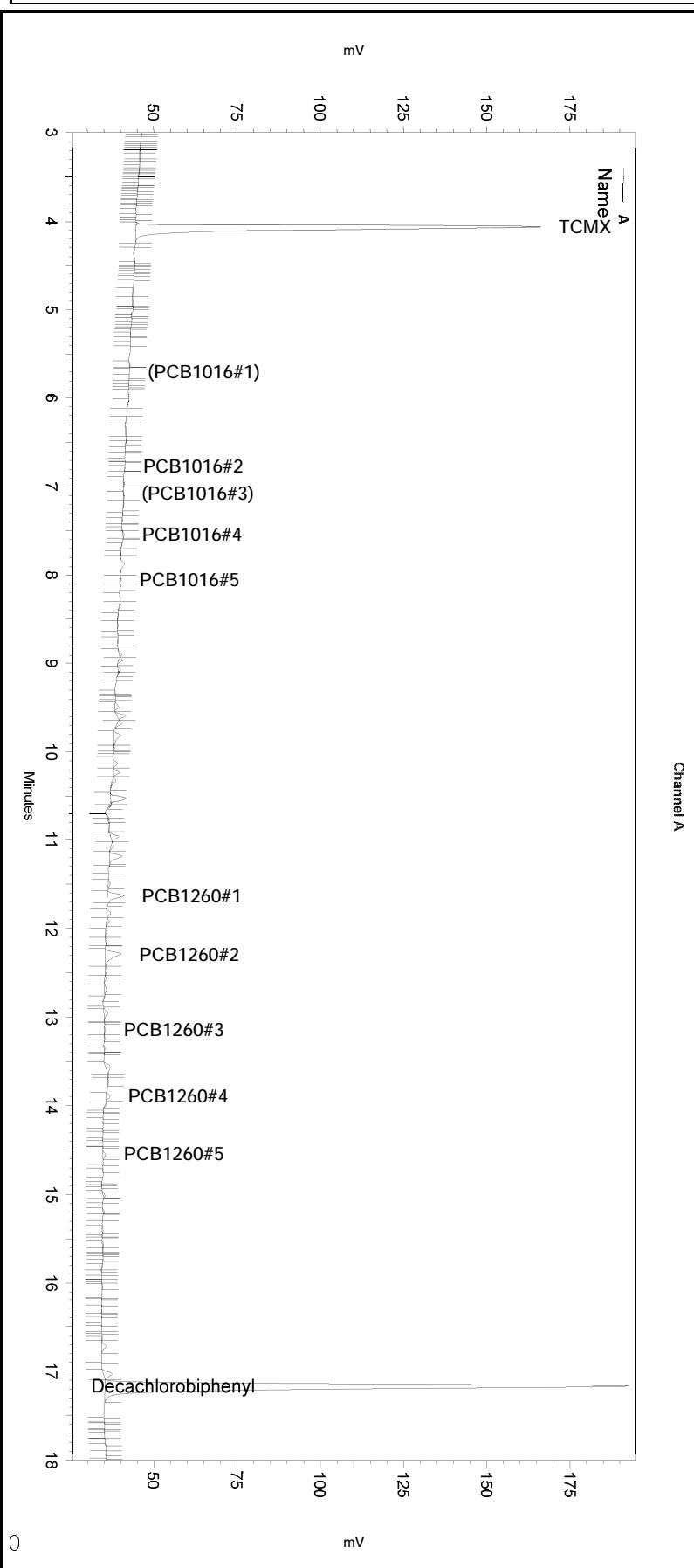
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.303	3.297	355556	53.495
PCB1016#1	4.767	4.790	224	1.364
PCB1016#2	5.713	5.737	72	0.120
PCB1016#3		5.947		0.000 BDL
PCB1016#4	6.483	6.483	1509	9.726
PCB1016#5	7.207	7.213	711	2.857
PCB1260#1	10.457	10.493	12058	20.484
PCB1260#2	11.090	0.000	17194	30.201
PCB1260#3	12.040	12.060	1721	4.966
PCB1260#4	12.690	0.000	3601	4.692
PCB1260#5	13.420	13.437	30	0.071
Decachlorobiphenyl	16.347	16.363	500329	55.291

Sample Name: 303137-006,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-089  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 89 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:53:32 AM  
Analysis Date: 9/26/2018 1:56:32 PM  
Sample Amount: 1



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General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

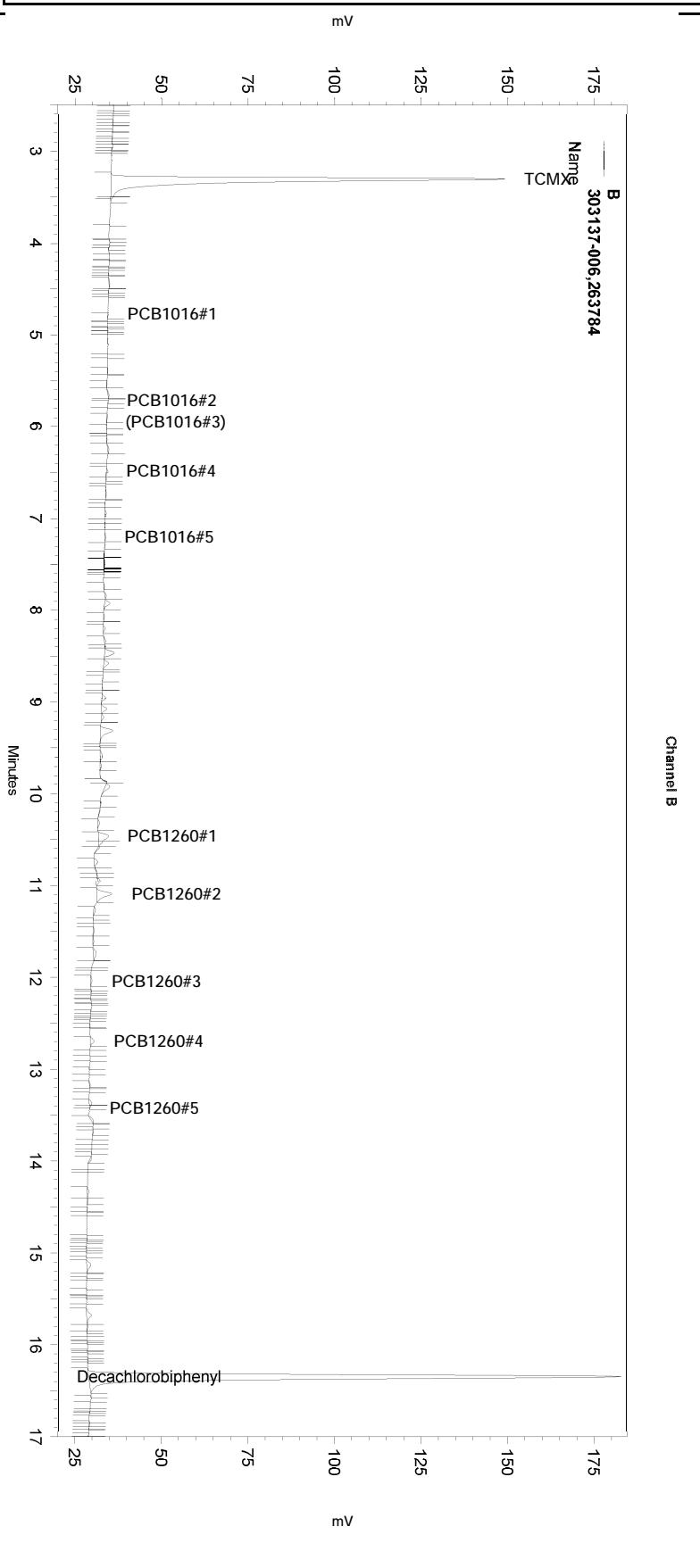
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-089  
Start Stop

Enabled	Event Type	(Minutes)	(Minutes)	Value
Yes	Valley to Valley	3.642	18.064	0
Yes	Manual Baseline	11.573	11.753	0
Yes	Reassign Peak	14.591	14.563	0
Yes	Reset Baseline	17.345	0	0

Sample Name: 303137-006,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-089  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 89 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:53:32 AM  
Analysis Date: 9/26/2018 1:56:32 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-089

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Valley to Valley	3.042	16.806	0	
Yes	Manual Baseline	3.229	3.569	0	
Yes	Manual Baseline	10.414	10.575	0	
Yes	Reassign Peak	10.538	10.481	0	
Yes	Manual Baseline	11.019	11.188	0	
Yes	Reassign Peak	11.146	11.109	0	
Yes	Manual Baseline	12.648	12.749	0	
Yes	Reassign Peak	12.743	12.706	0	
Yes	Manual Baseline	13.326	13.441	0	

Sample Name: 303137-006,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-089  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 89 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 8:53:32 AM  
 Analysis Date: 9/26/2018 1:27:19 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.067	4.057	377300	56.766
PCB1016#1		5.700		0.000 BDL
PCB1016#2	6.767	6.773	2069	4.861
PCB1016#3		7.077		0.000 BDL
PCB1016#4	7.543	7.537	5497	34.285
PCB1016#5	8.057	8.050	6169	30.855
PCB1260#1	11.633	11.637	18272	27.407
PCB1260#2	12.290	12.313	22761	38.522
PCB1260#3	13.140	13.160	3372	10.394
PCB1260#4	13.890	13.917	12772	15.730
PCB1260#5		14.590		0.000 BDL
Decachlorobiphenyl	17.167	17.180	583271	78.035

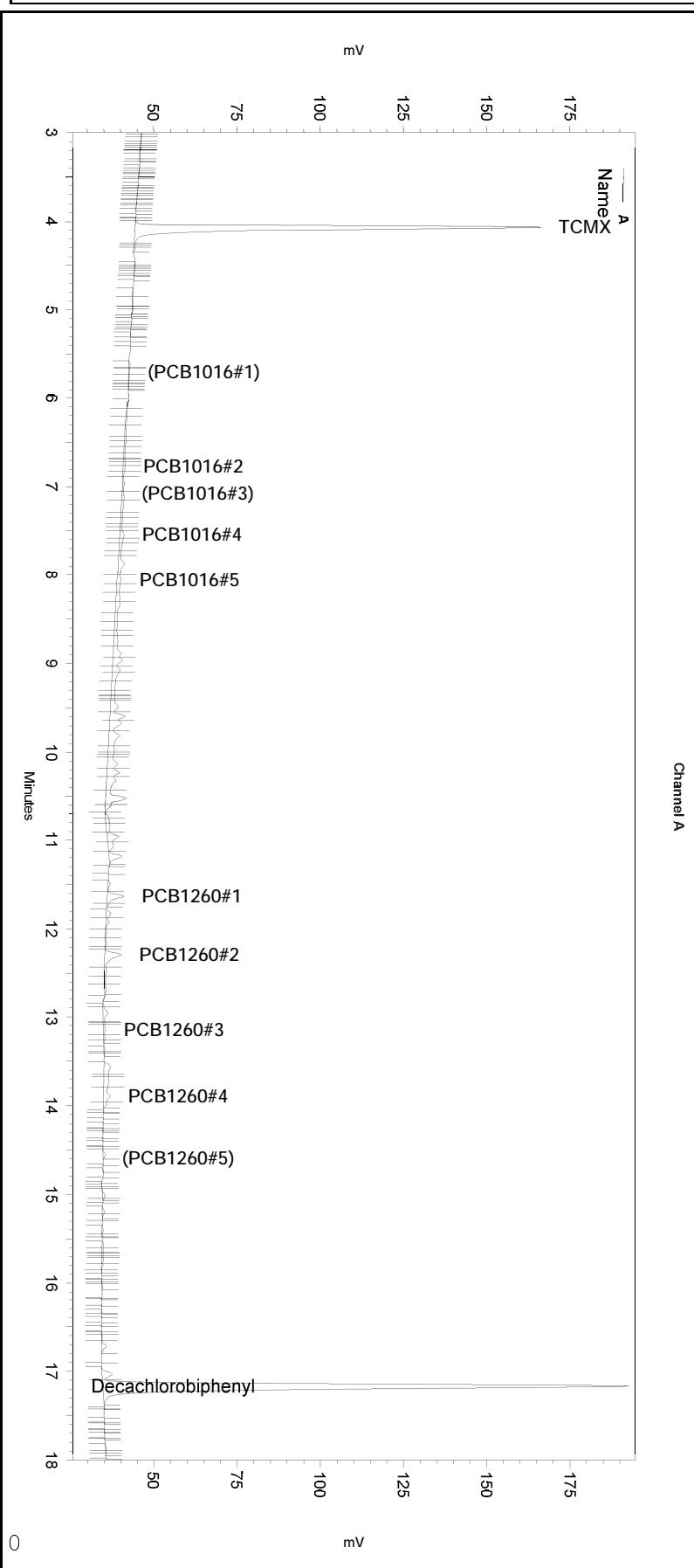
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.303	3.297	356708	53.668
PCB1016#1	4.767	4.790	224	1.364
PCB1016#2	5.713	5.737	1738	2.898
PCB1016#3		5.947		0.000 BDL
PCB1016#4	6.483	6.483	2484	16.011
PCB1016#5	7.207	7.213	2040	8.196
PCB1260#1	10.520	10.493	6539	11.109
PCB1260#2		11.147		0.000 BDL
PCB1260#3	12.040	12.060	1721	4.966
PCB1260#4		12.743		0.000 BDL
PCB1260#5	13.420	13.437	220	0.519
Decachlorobiphenyl	16.347	16.363	501050	55.371

Sample Name: 303137-006,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-089  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 89 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:53:32 AM  
Analysis Date: 9/26/2018 1:27:19 PM  
Sample Amount: 1



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Integration Events

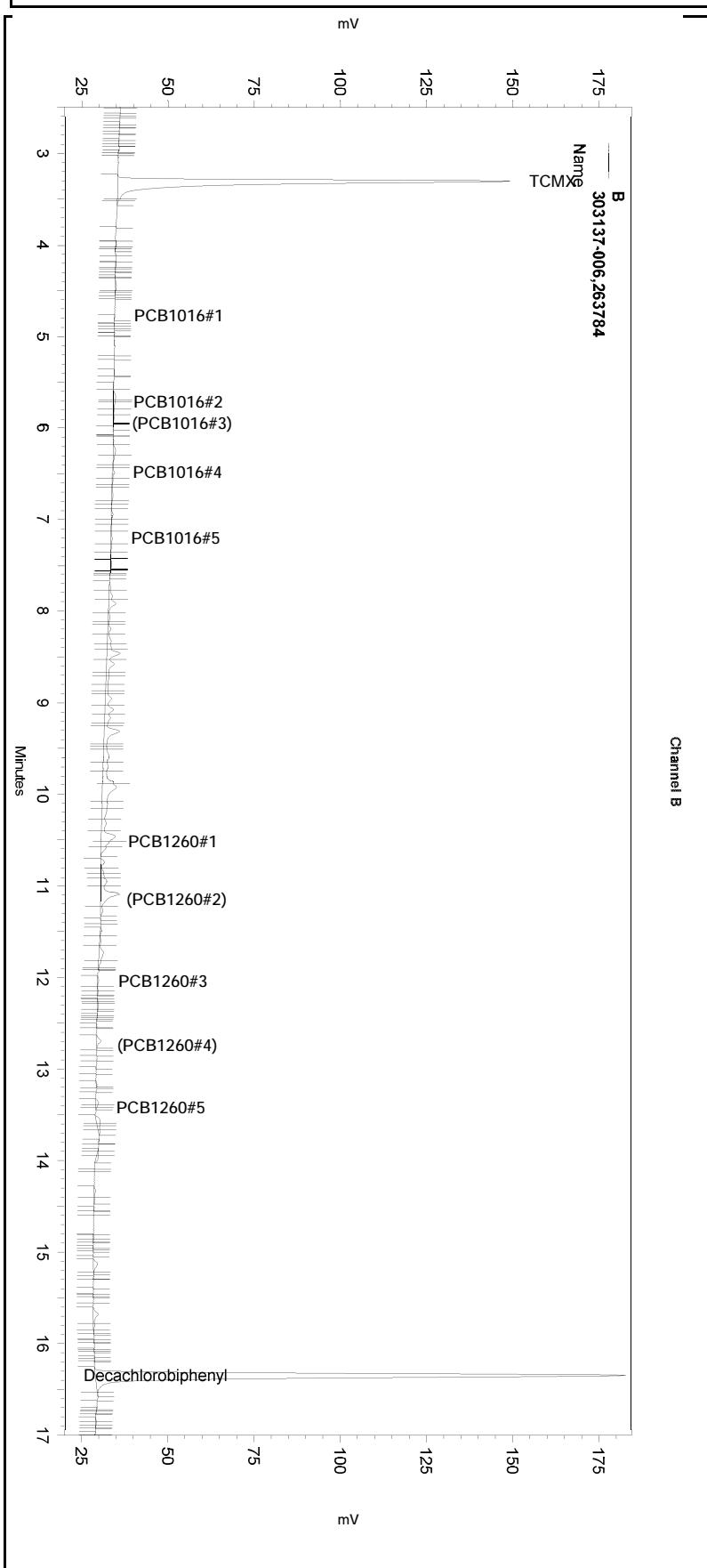
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

Manual Integration Fixes

=====  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-089  
Start Stop  
Enabled Event Type (Minutes) (Minutes) Value  
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None

Sample Name: 303137-006,263784  
Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-089  
Sequence File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Sequence\\2018\\267.seq  
Instrument: GC06 (Offline) Vial: 89 Operator: Pest 3. Analyst (lms2k3\\pest3)  
Method Name: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Method\\Ar1660\\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 8:53:32 AM  
Analysis Date: 9/26/2018 1:27:19 PM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-089

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

**QC Raw Data**

Batch QC Report

**Polychlorinated Biphenyls (PCBs)**

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Matrix:	Soil	Batch#:	263784
Units:	ug/Kg	Prepared:	09/21/18
Diln Fac:	1.000	Analyzed:	09/24/18

Type: BS Lab ID: QC948761

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	500.0	695.3	139	59-160
Aroclor-1260	500.0	682.0	136	59-170

Surrogate	%REC	Limits
Decachlorobiphenyl	139	37-170

Type: BSD Lab ID: QC948762

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	500.0	608.4	122	59-160	13	35
Aroclor-1260	500.0	641.8	128	59-170	6	42

Surrogate	%REC	Limits
Decachlorobiphenyl	131	37-170

RPD= Relative Percent Difference

Page 1 of 1

7.0

ENTHALPY SPIKE USER REPORT FOR 303137 PCBS Miscell.  
EPA 8082

Type : BS	Type : BSD
Inst : GC06	Inst : GC06
Seqnum : 208385010017.2	Seqnum : 208385010018.2
File : 267_017	File : 267_018
IDF : 1.0	IDF : 1.0
Lab ID : QC948761	Lab ID : QC948762
Matrix : Soil	Matrix : Soil
Batch : 263784	Batch : 263784
Time : 24-SEP-2018 21:32	Time : 24-SEP-2018 22:00
Cal : 208344656001	Cal : 208344656001
Units : ug/Kg	

BS: 5.00 g --> 10.0 ml = 2.0 ml/g PDF

BSD: 5.00 g --> 10.0 ml = 2.0 ml/g PDF

Analyte	Spiked	BS Raw	BS Result	Ch	%Rec	BSD Raw	BSD Result	Ch	%Rec	Limits	RPD	Lim	Flags
Aroclor-1016	500.0	347.7	695.3	A	139	304.2	608.4	A	122	59-160	13	35	u
Aroclor-1016 Peak # 1		346.4	692.8	A		289.4	578.8	A					
Aroclor-1016 Peak # 2		355.8	711.6	A		314.6	629.2	A					
Aroclor-1016 Peak # 3		330.9	661.8	A		291.6	583.3	A					
Aroclor-1016 Peak # 4		369.9	739.8	A		321.3	642.5	A					
Aroclor-1016 Peak # 5		335.3	670.7	A		304.0	608.0	A					
Aroclor-1260	500.0	341.0	682.0	A	136	320.9	641.8	A	128	59-170	6	42	u
Aroclor-1260 Peak # 1		328.5	657.1	A		295.2	590.4	A					
Aroclor-1260 Peak # 2		243.7	487.4	A		218.1	436.3	A					
Aroclor-1260 Peak # 3		383.3	766.5	A		361.5	722.9	A					
Aroclor-1260 Peak # 4		449.8	899.7	A		461.0	922.0	A					
Aroclor-1260 Peak # 5		299.6	599.3	A		268.8	537.6	A					
Decachlorobiphenyl	100.0	69.66	139.3	B	139	65.64	131.3	B	131	37-170			u

JC1 09/25/18 [Decachlorobiphenyl B]: ch. B for better ccv [general version]

JC1 09/25/18 : Corrected automatically drawn baseline. [general version]

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

u=use

Page 1 of 1

208385010018.2

Sample Name: **bs,qc948761,263784**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-017  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 17 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
 Run Date: 9/24/2018 9:32:29 PM  
 Analysis Date: 9/25/2018 11:34:54 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.947	3.933	438685	66.002
PCB1016#1	5.573	5.567	114128	346.415
PCB1016#2	6.633	6.637	151445	355.785
PCB1016#3	6.937	6.937	77978	330.881
PCB1016#4	7.437	7.440	59308	369.904
PCB1016#5	7.900	7.890	67048	335.345
PCB1260#1	11.460	11.453	219036	328.539
PCB1260#2	12.117	12.107	143998	243.708
PCB1260#3	12.973	12.967	124337	383.257
PCB1260#4	13.727	13.723	365250	449.844
PCB1260#5	14.390	14.370	117195	299.644
Decachlorobiphenyl	16.987	16.977	717176	100.209

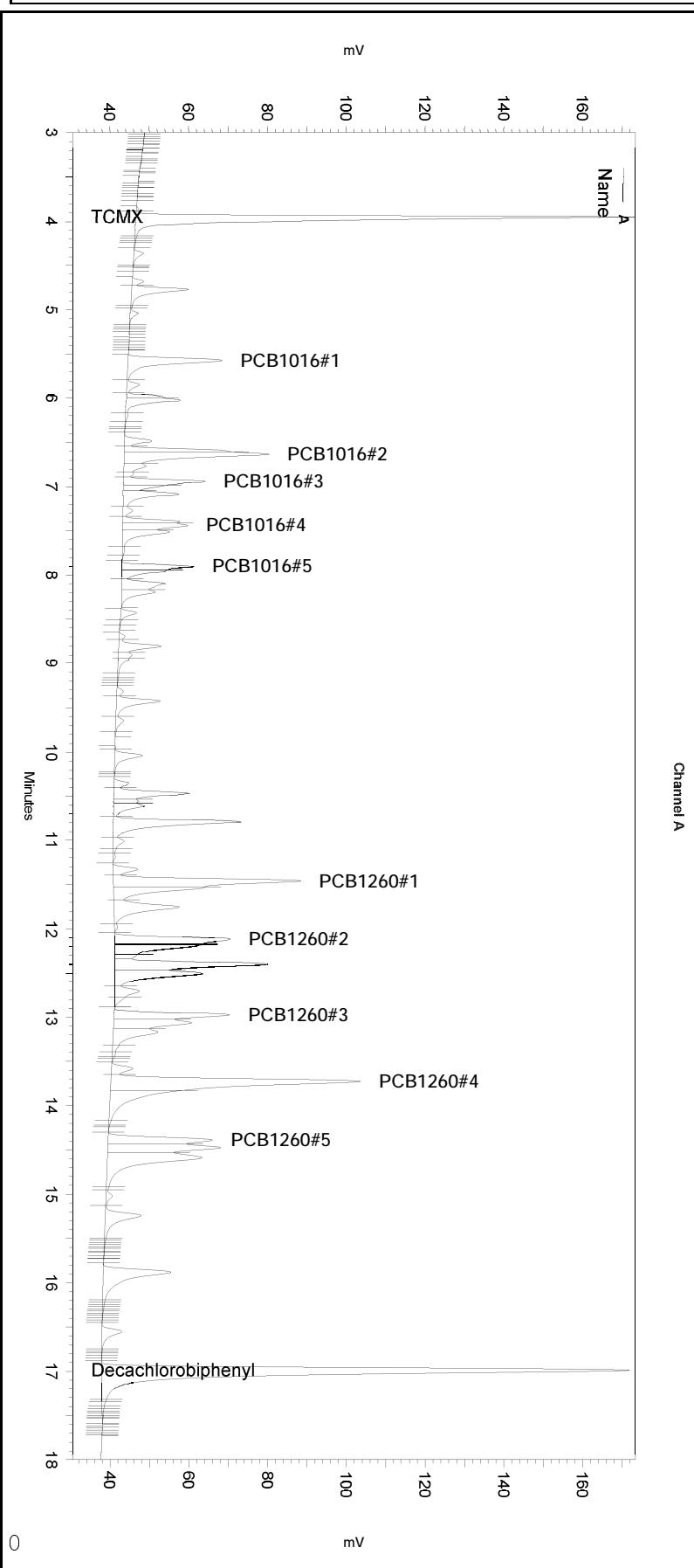
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.207	3.180	420314	63.238
PCB1016#1	4.680	0.000	38521	234.647
PCB1016#2	5.617	0.000	185660	309.561
PCB1016#3	5.823	0.000	96537	353.858
PCB1016#4	6.357	0.000	41570	267.942
PCB1016#5	7.080	0.000	68805	276.443
PCB1260#1	10.320	10.290	176294	299.492
PCB1260#2	10.963	0.000	143835	252.647
PCB1260#3	11.887	11.857	121356	350.153
PCB1260#4	12.557	0.000	292565	381.240
PCB1260#5	13.247	13.217	126806	299.399
Decachlorobiphenyl	16.183	16.163	630356	69.661

Sample Name: **bs,qc948761,263784**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-017  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 17 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 9:32:29 PM  
Analysis Date: 9/25/2018 11:34:54 AM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

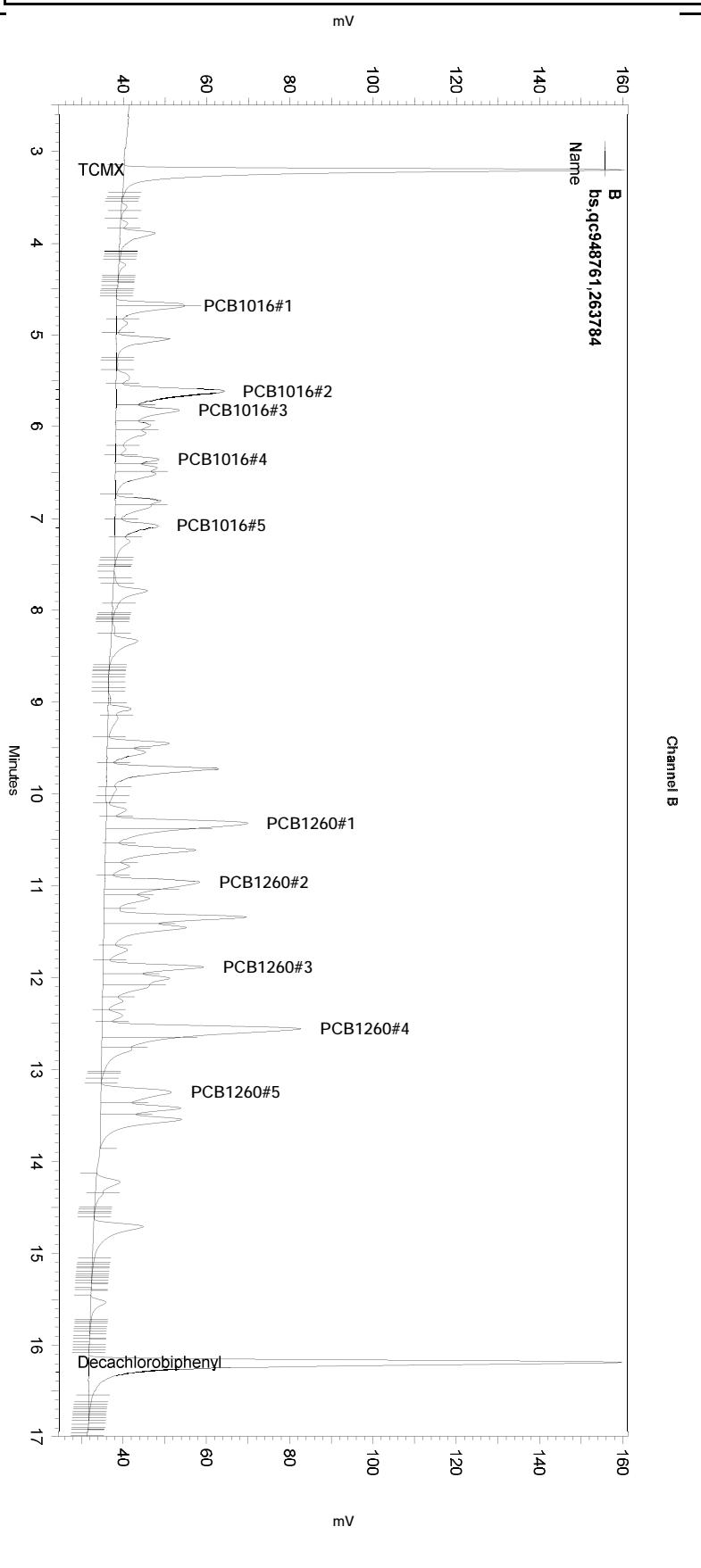
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.884	0	0
Yes	Reset Baseline	8.366	0	0
Yes	Manual Baseline	12.034	12.886	0
Yes	Split Peak	13.83	0	0

Sample Name: **bs,qc948761,263784**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-017  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 17 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 9:32:29 PM  
Analysis Date: 9/25/2018 11:34:54 AM  
Sample Amount: 1



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----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-017

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Reassign Peak	4.622	4.671	0	
Yes	Split Peak	4.683	0	0	
Yes	Reassign Peak	5.551	5.617	0	
Yes	Reassign Peak	5.791	5.82	0	
Yes	Reassign Peak	6.304	6.378	0	
Yes	Reassign Peak	7.023	7.09	0	
Yes	Split Peak	10.376	0	0	
Yes	Reassign Peak	10.91	10.976	0	
Yes	Split Peak	11.036	0	0	
Yes	Reassign Peak	12.517	12.566	0	
Yes	Split Peak	12.649	0	0	
Yes	Reset Baseline	13.86	0	0	

Sample Name: **bs,qc948761,263784**

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-017

Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq

Instrument: GC06 Vial: 17 Operator: lims2k3\pest3

Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7

Run Date: 9/24/2018 9:32:29 PM

Analysis Date: 9/24/2018 9:56:27 PM

Sample Amount: 1

**\*GC06\*****PCB - ECD Instrument Results**

Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.947	3.933	438685	66.002
PCB1016#1	5.573	5.567	114128	346.415
PCB1016#2	6.633	6.637	151982	357.046
PCB1016#3	6.937	6.937	86797	368.302
PCB1016#4	7.437	7.440	60407	376.758
PCB1016#5	7.900	7.890	69679	348.504
PCB1260#1	11.460	11.453	219036	328.539
PCB1260#2	12.117	12.107	132174	223.697
PCB1260#3	12.973	12.967	124337	383.257
PCB1260#4	13.727	13.723	463319	570.626
PCB1260#5	14.390	14.370	117195	299.644
Decachlorobiphenyl	16.987	16.977	717176	100.209

**\*GC06\*****PCB - ECD Instrument Results**

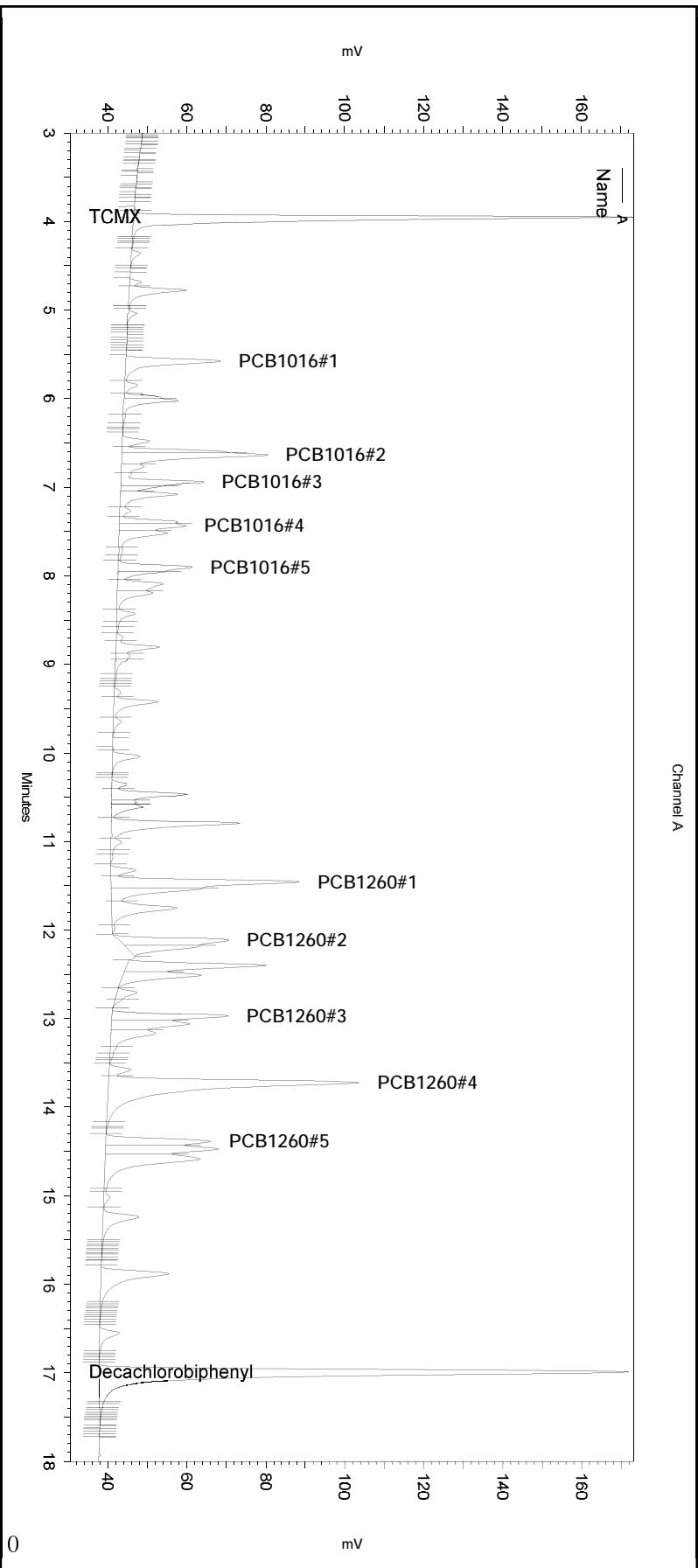
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.207	3.180	420314	63.238
PCB1016#1		4.637		0.000 BDL
PCB1016#2		5.573		0.000 BDL
PCB1016#3		5.783		0.000 BDL
PCB1016#4		6.320		0.000 BDL
PCB1016#5		7.037		0.000 BDL
PCB1260#1	10.320	10.290	269804	458.349
PCB1260#2		10.923		0.000 BDL
PCB1260#3	11.887	11.857	127864	368.931
PCB1260#4		12.520		0.000 BDL
PCB1260#5	13.247	13.217	139911	330.341
Decachlorobiphenyl	16.183	16.163	630356	69.661

Sample Name: **bs,qc948761,263784**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-017  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 17 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 9:32:29 PM  
Analysis Date: 9/24/2018 9:56:27 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

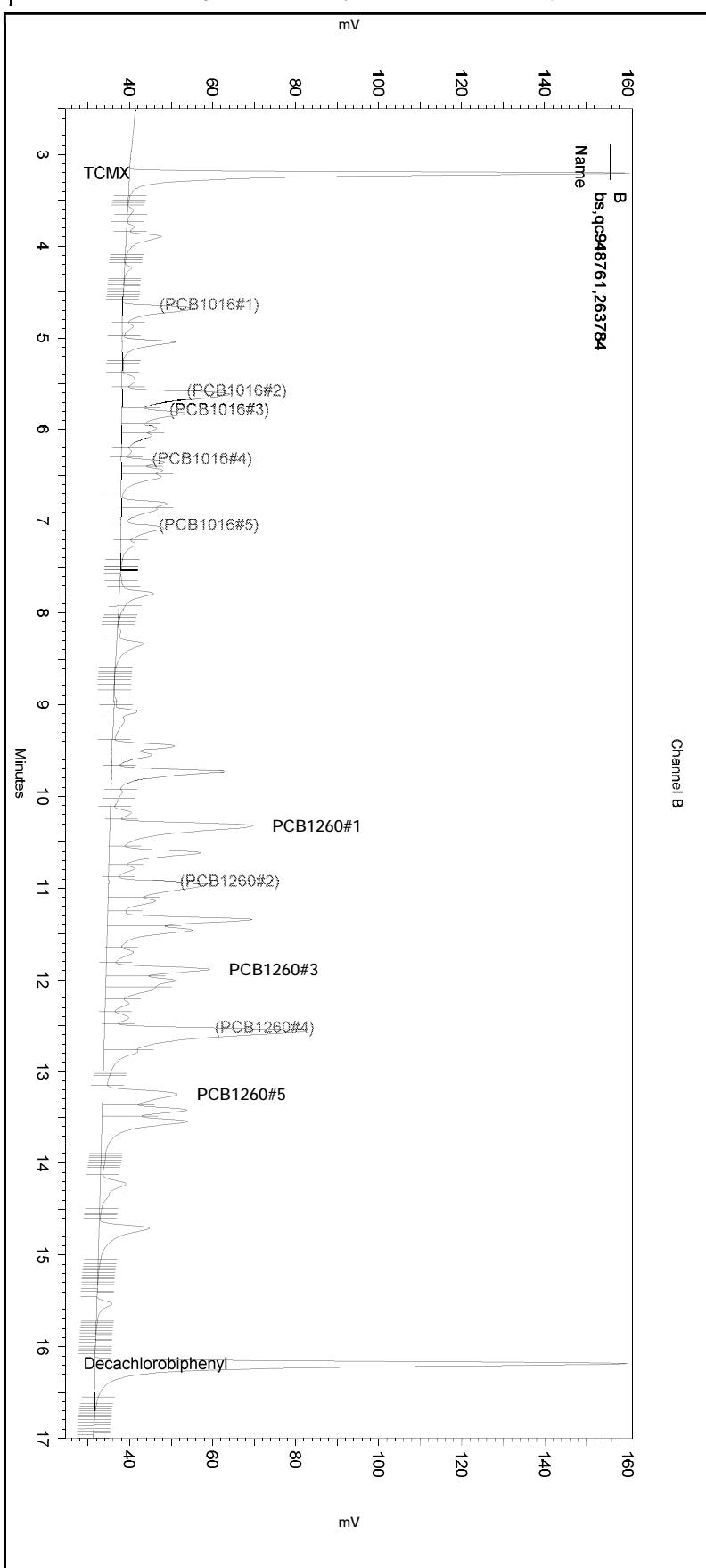
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-017\_03C4.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Sample Name: **bs,qc948761,263784**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-017  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 17 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 9:32:29 PM  
Analysis Date: 9/24/2018 9:56:27 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

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Data File: C:\Documents and Settings\All Users\Application  
Data\Chromatography\System\Recovery Data\Instrument.10112\267-017\_03C4.lmp  
Start Stop  
Enabled Event Type (Minutes) (Minutes) Value  
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None

Sample Name: **bsd,qc948762,263784**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-018  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
 Run Date: 9/24/2018 10:00:29 PM  
 Analysis Date: 9/25/2018 11:36:22 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

---

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.947	3.933	356243	53.598
PCB1016#1	5.570	5.567	95347	289.409
PCB1016#2	6.633	6.637	133906	314.581
PCB1016#3	6.937	6.937	68728	291.631
PCB1016#4	7.437	7.440	51511	321.274
PCB1016#5	7.900	7.890	60778	303.985
PCB1260#1	11.460	11.453	196805	295.194
PCB1260#2	12.117	12.107	128887	218.134
PCB1260#3	12.977	12.967	117269	361.471
PCB1260#4	13.730	13.723	374291	460.979
PCB1260#5	14.390	14.370	105135	268.809
Decachlorobiphenyl	16.990	16.977	682605	94.304

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**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

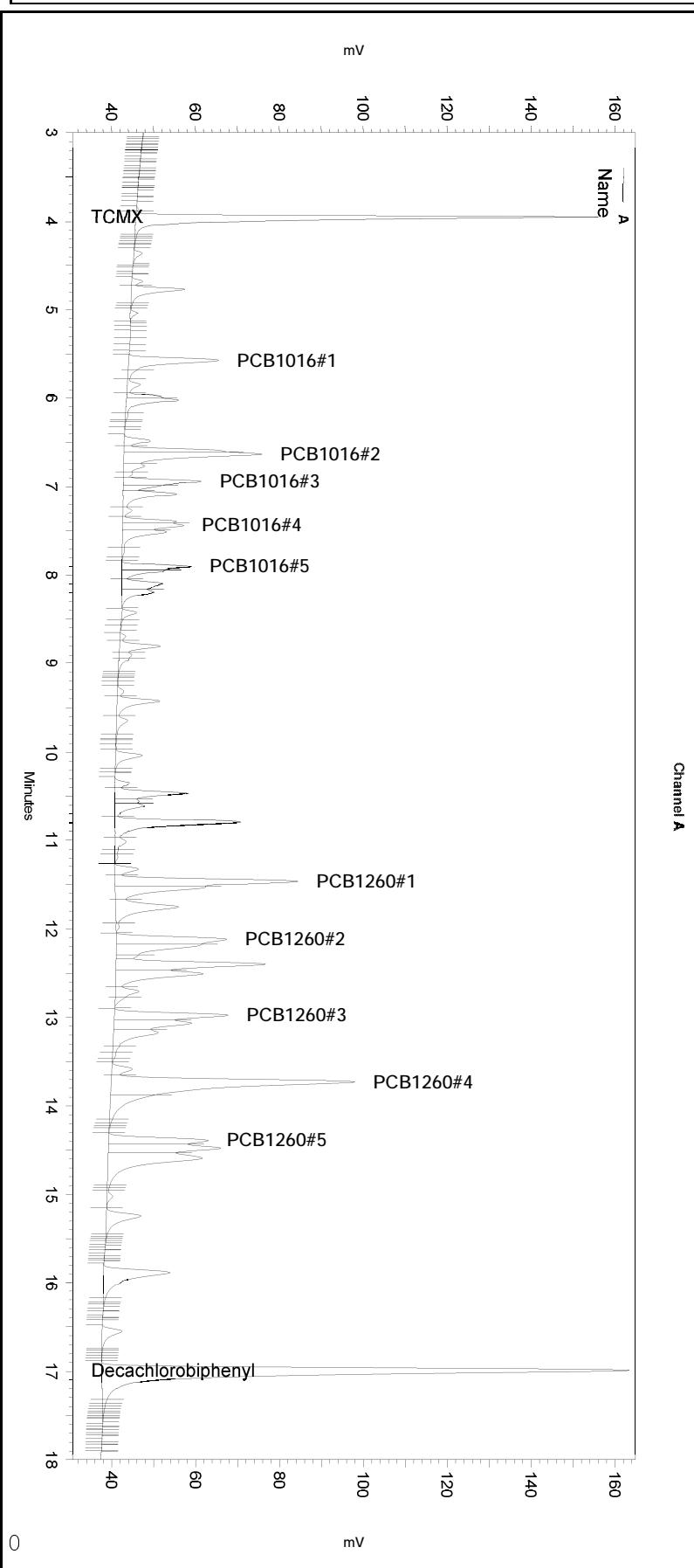
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**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.207	3.180	338183	50.881
PCB1016#1	4.680	0.000	33464	203.843
PCB1016#2	5.617	0.000	168956	281.710
PCB1016#3	5.823	0.000	91080	333.855
PCB1016#4	6.357	0.000	37778	243.500
PCB1016#5	7.080	0.000	64324	258.439
PCB1260#1	10.323	0.000	165419	281.017
PCB1260#2	10.967	0.000	118869	208.794
PCB1260#3	11.890	0.000	114880	331.468
PCB1260#4	12.563	0.000	279034	363.608
PCB1260#5	13.250	0.000	117627	277.726
Decachlorobiphenyl	16.187	16.163	593980	65.641

Sample Name: bsd,qc948762,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-018  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 10:00:29 PM  
Analysis Date: 9/25/2018 11:36:22 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

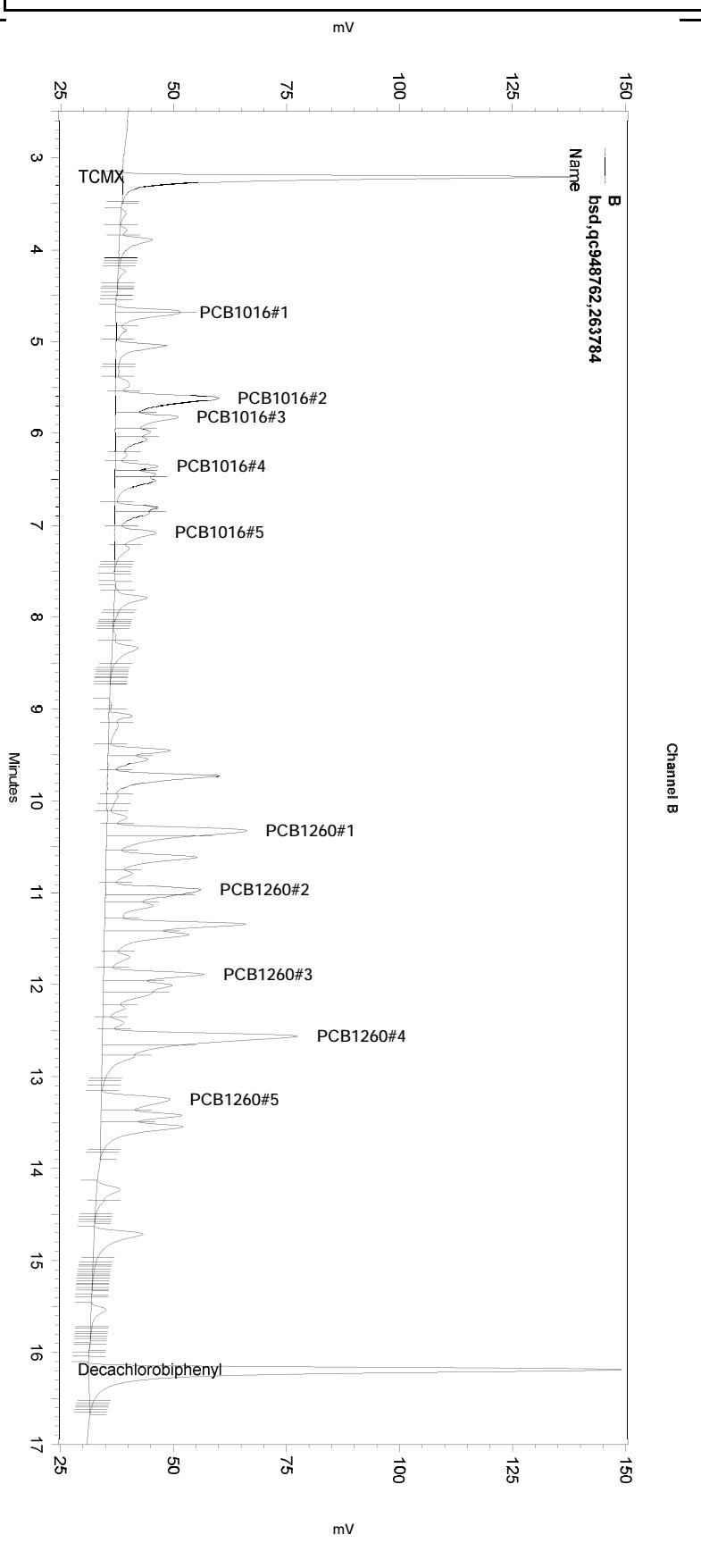
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.887	0	0
Yes	Reset Baseline	8.372	0	0
Yes	Manual Baseline	12.046	12.891	0
Yes	Split Peak	13.873	0	0

Sample Name: bsd,qc948762,263784  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-018  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
 Run Date: 9/24/2018 10:00:29 PM  
 Analysis Date: 9/25/2018 11:36:22 AM  
 Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-018

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Reassign Peak	4.623	4.673	0	
Yes	Split Peak	4.684	0	0	
Yes	Reassign Peak	5.546	5.615	0	
Yes	Reassign Peak	5.775	5.826	0	
Yes	Reassign Peak	6.323	6.351	0	
Yes	Reassign Peak	7.041	7.076	0	
Yes	Reassign Peak	10.267	10.332	0	
Yes	Split Peak	10.38	0	0	
Yes	Reassign Peak	10.925	10.979	0	
Yes	Reassign Peak	11.835	11.889	0	
Yes	Reassign Peak	12.515	12.595	0	
Yes	Split Peak	12.66	0	0	
Yes	Reassign Peak	13.21	13.269	0	
Yes	Reset Baseline	13.9	0	0	
Yes	Reset Baseline	16.671	0	0	

Sample Name: bsd,qc948762,263784

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-018

Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq

Instrument: GC06 Vial: 18 Operator: lims2k3\pest3

Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7

Run Date: 9/24/2018 10:00:29 PM

Analysis Date: 9/24/2018 10:24:26 PM

Sample Amount: 1

**\*GC06\*****PCB - ECD Instrument Results**

Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.947	3.933	356243	53.598
PCB1016#1	5.570	5.567	95347	289.409
PCB1016#2	6.633	6.637	134285	315.471
PCB1016#3	6.937	6.937	76496	324.592
PCB1016#4	7.437	7.440	52334	326.407
PCB1016#5	7.900	7.890	62819	314.194
PCB1260#1	11.460	11.453	196805	295.194
PCB1260#2	12.117	12.107	118523	200.593
PCB1260#3	12.977	12.967	117269	361.471
PCB1260#4	13.730	13.723	435230	536.032
PCB1260#5	14.390	14.370	105135	268.809
Decachlorobiphenyl	16.990	16.977	682605	94.304

**\*GC06\*****PCB - ECD Instrument Results**

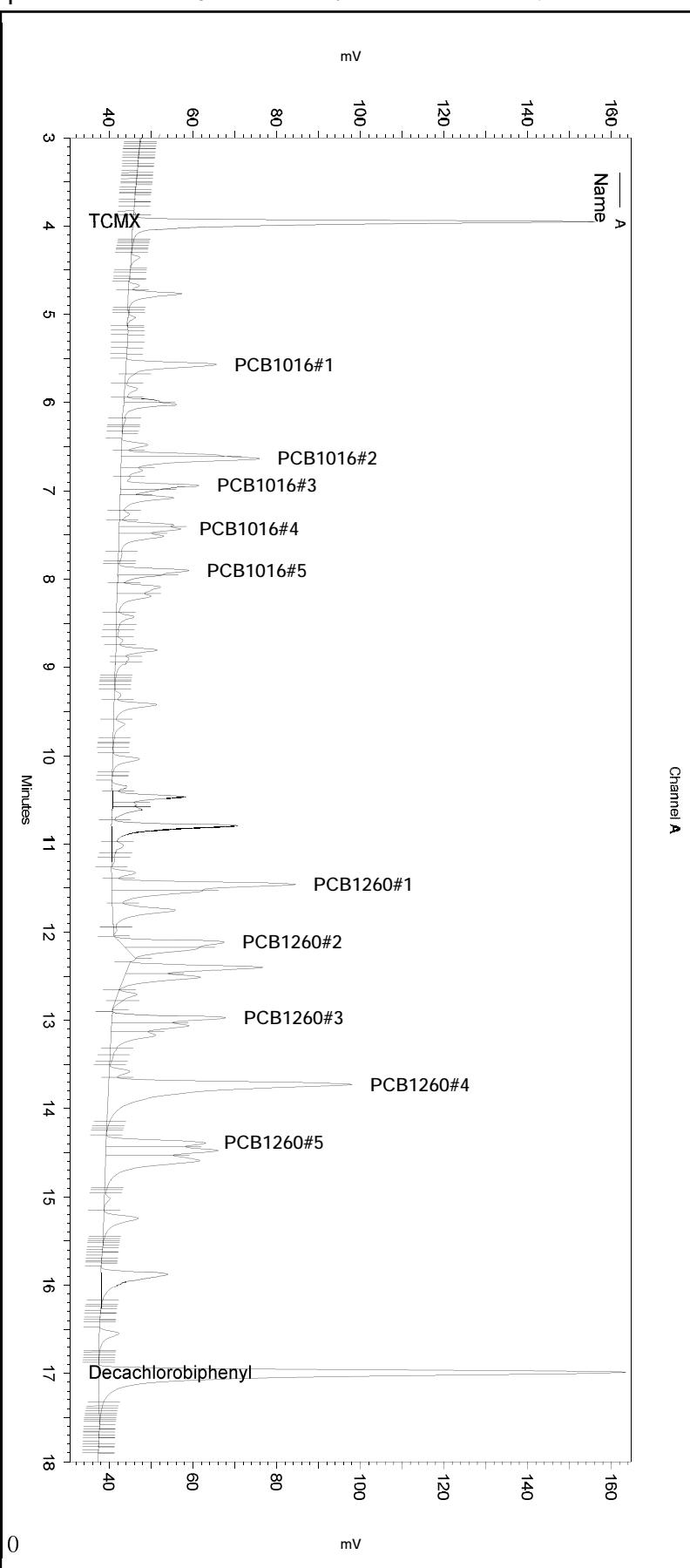
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.207	3.180	338183	50.881
PCB1016#1		4.637		0.000 BDL
PCB1016#2		5.573		0.000 BDL
PCB1016#3		5.783		0.000 BDL
PCB1016#4		6.320		0.000 BDL
PCB1016#5		7.037		0.000 BDL
PCB1260#1		10.290		0.000 BDL
PCB1260#2		10.923		0.000 BDL
PCB1260#3		11.857		0.000 BDL
PCB1260#4		12.520		0.000 BDL
PCB1260#5		13.217		0.000 BDL
Decachlorobiphenyl	16.187	16.163	599181	66.215

Sample Name: bsd,qc948762,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-018  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 18 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 10:00:29 PM  
Analysis Date: 9/24/2018 10:24:26 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

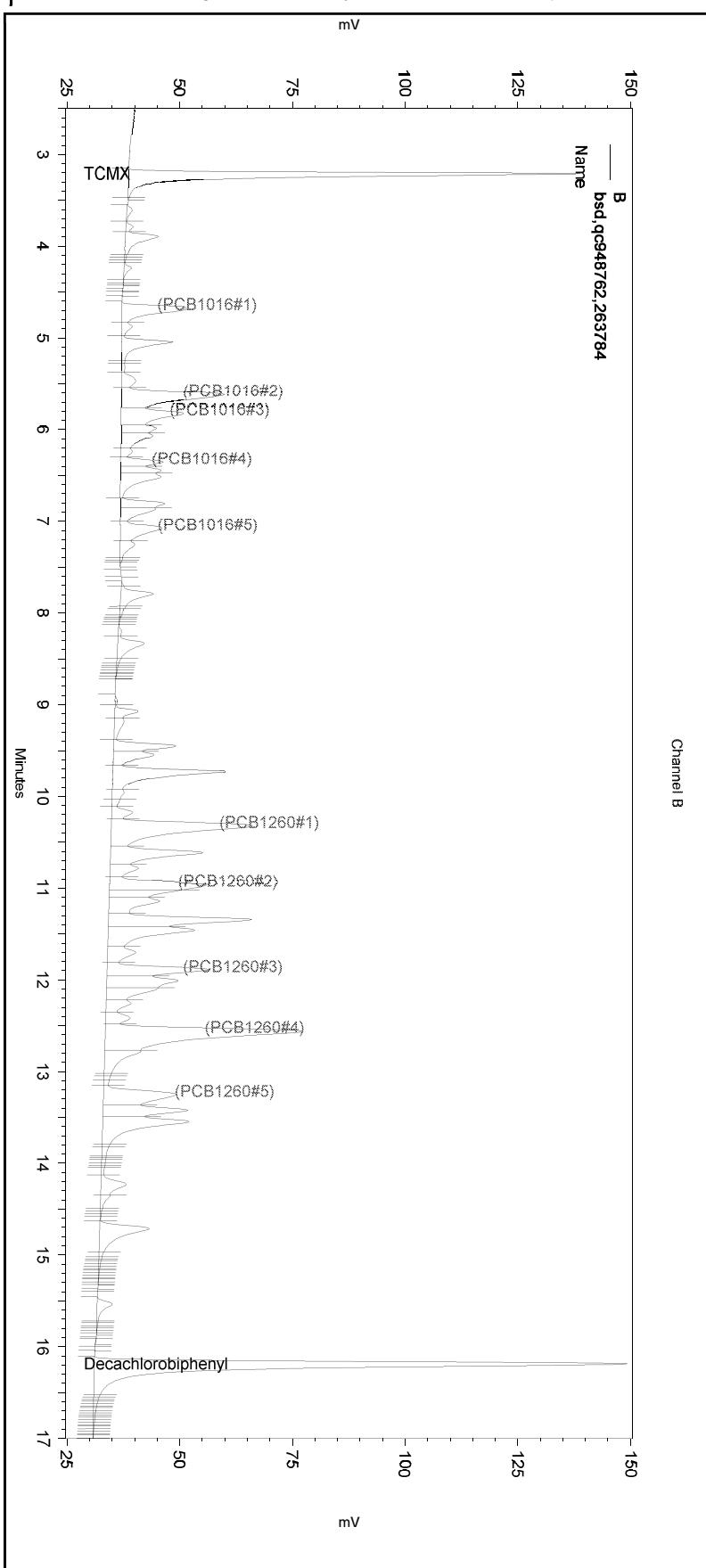
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-018\_03C5.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: bsd,qc948762,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-018  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 18 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 10:00:29 PM  
Analysis Date: 9/24/2018 10:24:26 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\Chromatography\System\Recovery Data\Instrument.10112\267-018\_03C5.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

## Batch QC Report

**Polychlorinated Biphenyls (PCBs)**

Lab #:	303137	Prep:	EPA 3550C
Client:	Tetra Tech EMI	Analysis:	EPA 8082
Project#:	103S582302.01		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC948760	Batch#:	263784
Matrix:	Soil	Prepared:	09/21/18
Units:	ug/Kg	Analyzed:	09/24/18

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	7.1
Aroclor-1221	ND	40	19
Aroclor-1232	ND	20	9.3
Aroclor-1242	ND	20	8.6
Aroclor-1248	ND	20	9.1
Aroclor-1254	ND	20	7.3
Aroclor-1260	ND	20	4.6

Surrogate	%REC	Limits
Decachlorobiphenyl	127	37-170

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

ENTHALPY BLANK USER REPORT FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Lab ID : QC948760  
Seqnum : 208385010016.2 Matrix : Soil  
File : 267\_016 Batch : 263784 Time : 24-SEP-2018 21:04  
Cal : 208344656001 Caldate : 27-AUG-2018  
IDF : 1.0 Raw Units : pg/uL Units : ug/Kg

5.00 g --> 10.0 ml = 2.0 ml/g PDF

Analyte	Ch	Raw	Result	Conf	RPD	RL	Flags
Aroclor-1016	A	0.06919	ND	ND	136%	20	u
Aroclor-1016 Peak # 1	A	0.05464	0.11	ND			
Aroclor-1016 Peak # 2	A	0.2913	0.58	0.02	189%		
Aroclor-1016 Peak # 3	A	0	ND	0.05			
Aroclor-1016 Peak # 4	A	0	ND	ND			
Aroclor-1016 Peak # 5	A	0	ND	0.06			
Aroclor-1221	A		ND		40	u	
Aroclor-1232	A		ND		20	u	
Aroclor-1242	A		ND		20	u	
Aroclor-1248	A		ND		20	u	
Aroclor-1254	A		ND		20	u	
Aroclor-1260	A	0.03628	ND	ND	65%	20	u
Aroclor-1260 Peak # 1	A	0.04200	0.08	ND			
Aroclor-1260 Peak # 2	A	0	ND	0.03			
Aroclor-1260 Peak # 3	A	0.06781	0.14	0.06	81%		
Aroclor-1260 Peak # 4	A	0	ND	ND			
Aroclor-1260 Peak # 5	A	0.07159	0.14	0.10	36%		

Surrogate	Ch	Raw	Spiked	Result	%Rec	Limits	Flags
Decachlorobiphenyl	B	63.30	100.0	126.6	127	37-170	u

JC1 09/25/18 : Corrected automatically drawn baseline. [general version]

JC1 09/25/18 [Decachlorobiphenyl B]: ch. B for better ccv [general version]

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

u=use

Page 1 of 1

208385010016.2

Sample Name: **mb,qc948760,263784**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-016  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
 Run Date: 9/24/2018 9:04:27 PM  
 Analysis Date: 9/25/2018 11:33:08 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.957	3.933	416113	62.605
PCB1016#1	5.567	5.567	18	0.055
PCB1016#2	6.640	6.637	124	0.291
PCB1016#3		6.937		0.000 BDL
PCB1016#4		7.440		0.000 BDL
PCB1016#5	7.893	7.890	0	0.000
PCB1260#1	11.440	11.453	28	0.042
PCB1260#2		12.107		0.000 BDL
PCB1260#3	12.967	12.967	22	0.068
PCB1260#4		13.723		0.000 BDL
PCB1260#5	14.367	14.370	28	0.072
Decachlorobiphenyl	17.000	16.977	665564	91.442

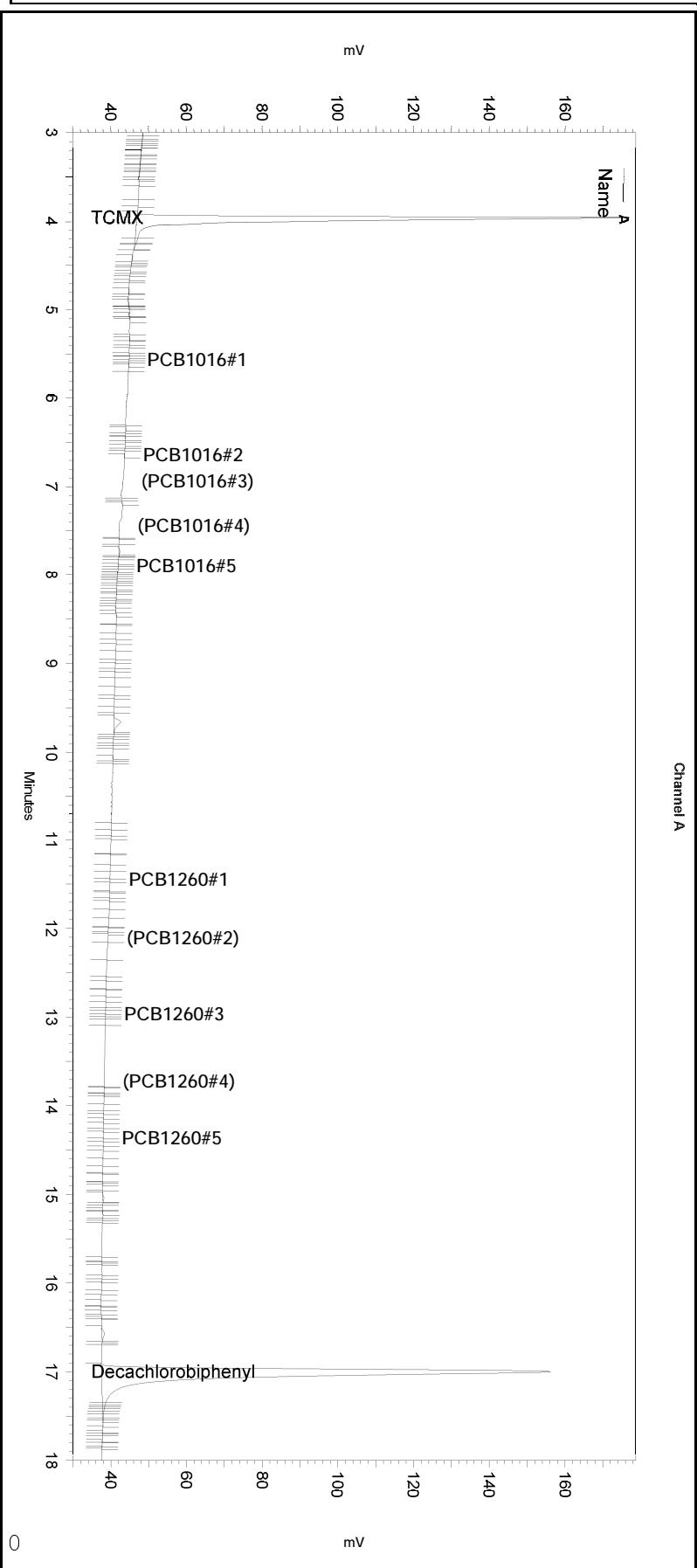
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.217	0.000	390898	58.812
PCB1016#1	4.620	4.637	0	0.000
PCB1016#2	5.557	5.573	5	0.008
PCB1016#3	5.787	5.783	7	0.026
PCB1016#4	6.313	6.320	0	0.000
PCB1016#5	7.057	7.037	8	0.032
PCB1260#1		10.290		0.000 BDL
PCB1260#2	10.933	10.923	8	0.014
PCB1260#3	11.833	11.857	10	0.029
PCB1260#4		12.520		0.000 BDL
PCB1260#5	13.190	13.217	21	0.050
Decachlorobiphenyl	16.193	0.000	572837	63.304

Sample Name: mb,qc948760,263784  
Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-016  
Sequence File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Sequence\\2018\\267.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3|pest1)  
Method Name: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Method\\Ar1660\\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 9:04:27 PM  
Analysis Date: 9/25/2018 11:33:08 AM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

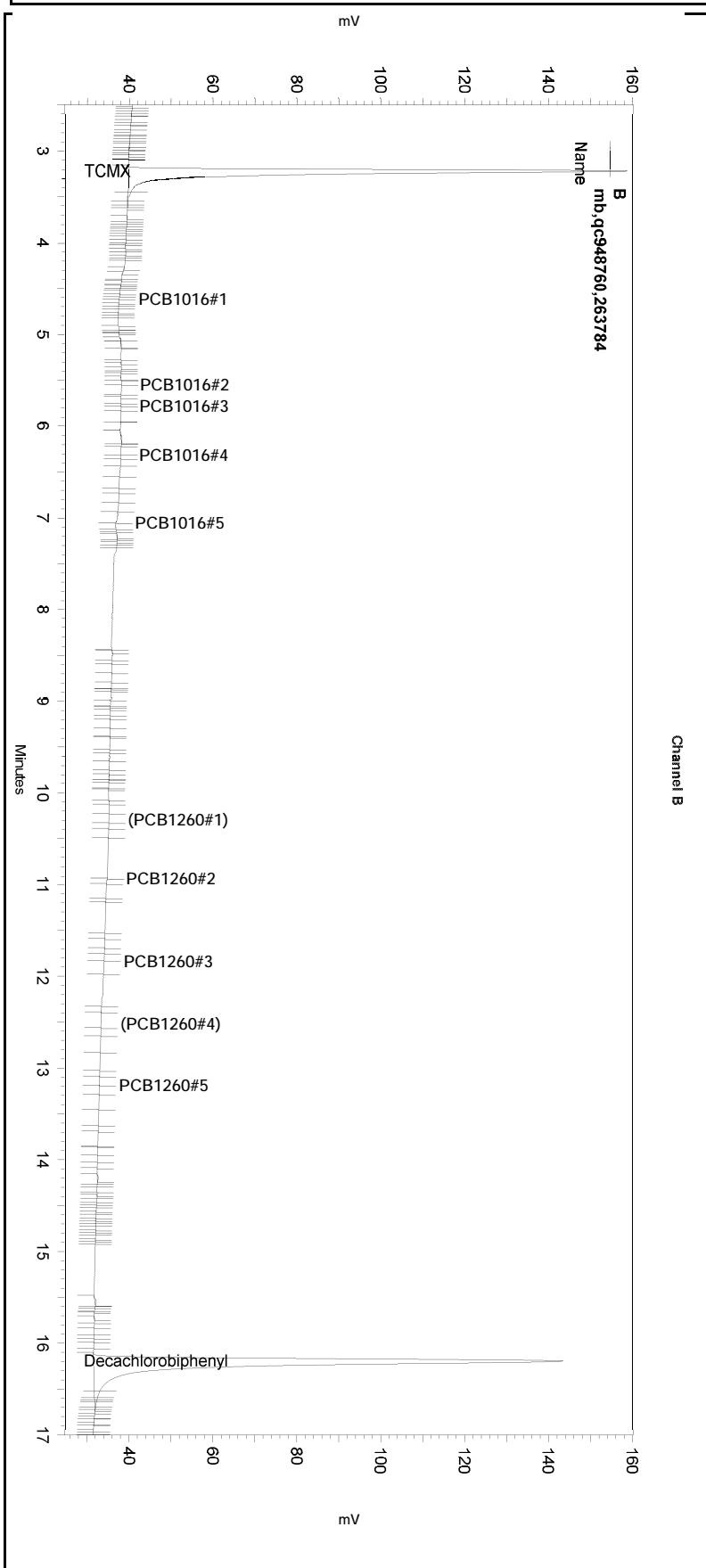
Manual Integration Fixes

Data File: \\kraken\\gdrive\\ezchrom\\Projects\\GC06\\Data\\2018\\267-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Valley to Valley	4.374	16.68	0

Sample Name: mb,qc948760,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-016  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 9:04:27 PM  
Analysis Date: 9/25/2018 11:33:08 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-016

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Reassign Peak	3.17	3.217	0	
Yes	Valley to Valley	3.766	15.791	0	
Yes	Reassign Peak	16.144	16.19	0	

Sample Name: **mb,qc948760,263784**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-016  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 Vial: N/A Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
 Run Date: 9/24/2018 9:04:27 PM  
 Analysis Date: 9/24/2018 9:28:25 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.957	3.933	417844	62.866
PCB1016#1	5.567	5.567	114	0.346
PCB1016#2	6.640	6.637	124	0.291
PCB1016#3		6.937		0.000 BDL
PCB1016#4		7.440		0.000 BDL
PCB1016#5	7.893	7.890	58	0.290
PCB1260#1	11.440	11.453	1	0.001
PCB1260#2		12.107		0.000 BDL
PCB1260#3	12.967	12.967	29	0.089
PCB1260#4		13.723		0.000 BDL
PCB1260#5	14.367	14.370	28	0.072
Decachlorobiphenyl	17.000	16.977	665564	91.442

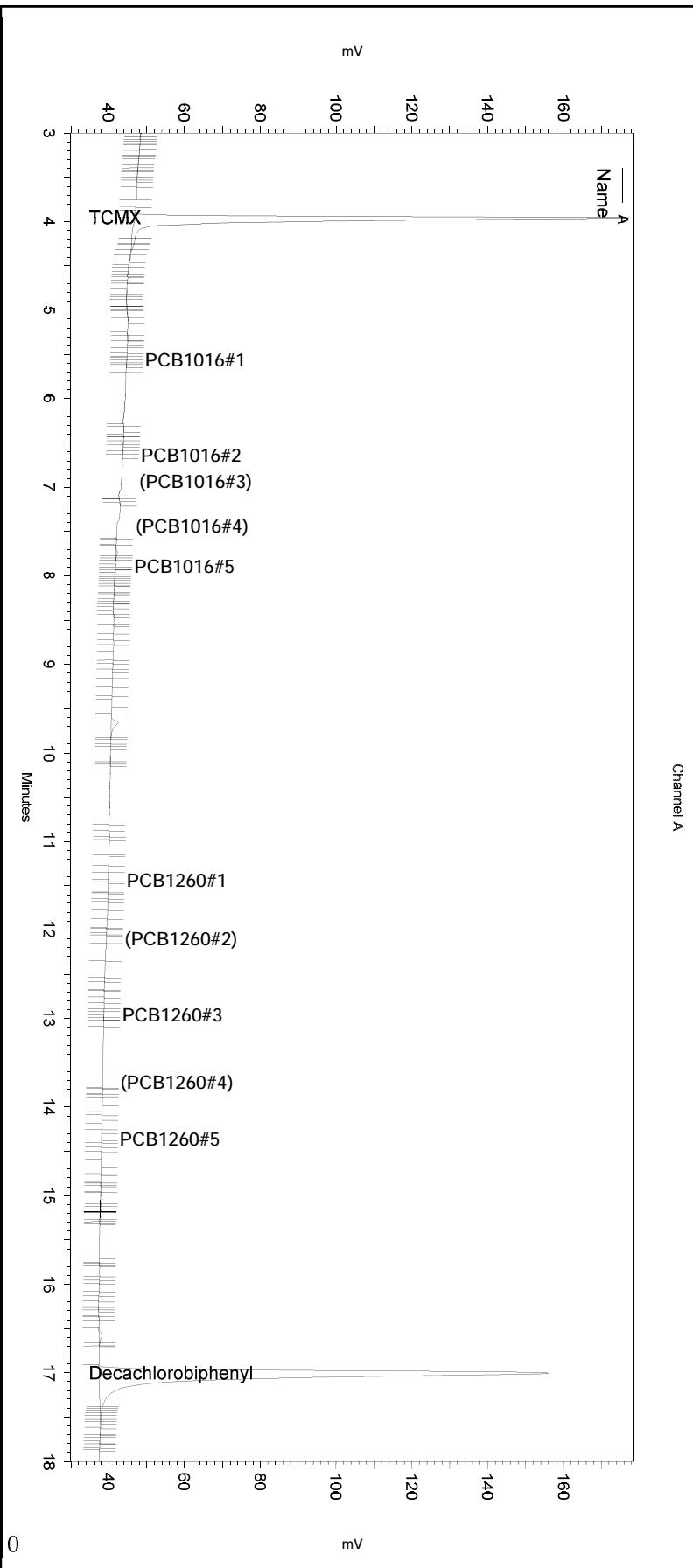
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX		3.180		0.000 BDL
PCB1016#1	4.620	4.637	0	0.000
PCB1016#2	5.557	5.573	5	0.008
PCB1016#3	5.787	5.783	10	0.037
PCB1016#4	6.313	6.320	0	0.000
PCB1016#5	7.057	7.037	8	0.032
PCB1260#1		10.290		0.000 BDL
PCB1260#2	10.933	10.923	8	0.014
PCB1260#3	11.833	11.857	10	0.029
PCB1260#4		12.520		0.000 BDL
PCB1260#5	13.190	13.217	21	0.050
Decachlorobiphenyl		16.163		0.000 BDL

Sample Name: mb,qc948760,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-016  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: N/A Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 9:04:27 PM  
Analysis Date: 9/24/2018 9:28:25 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

#### Integration Events

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Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

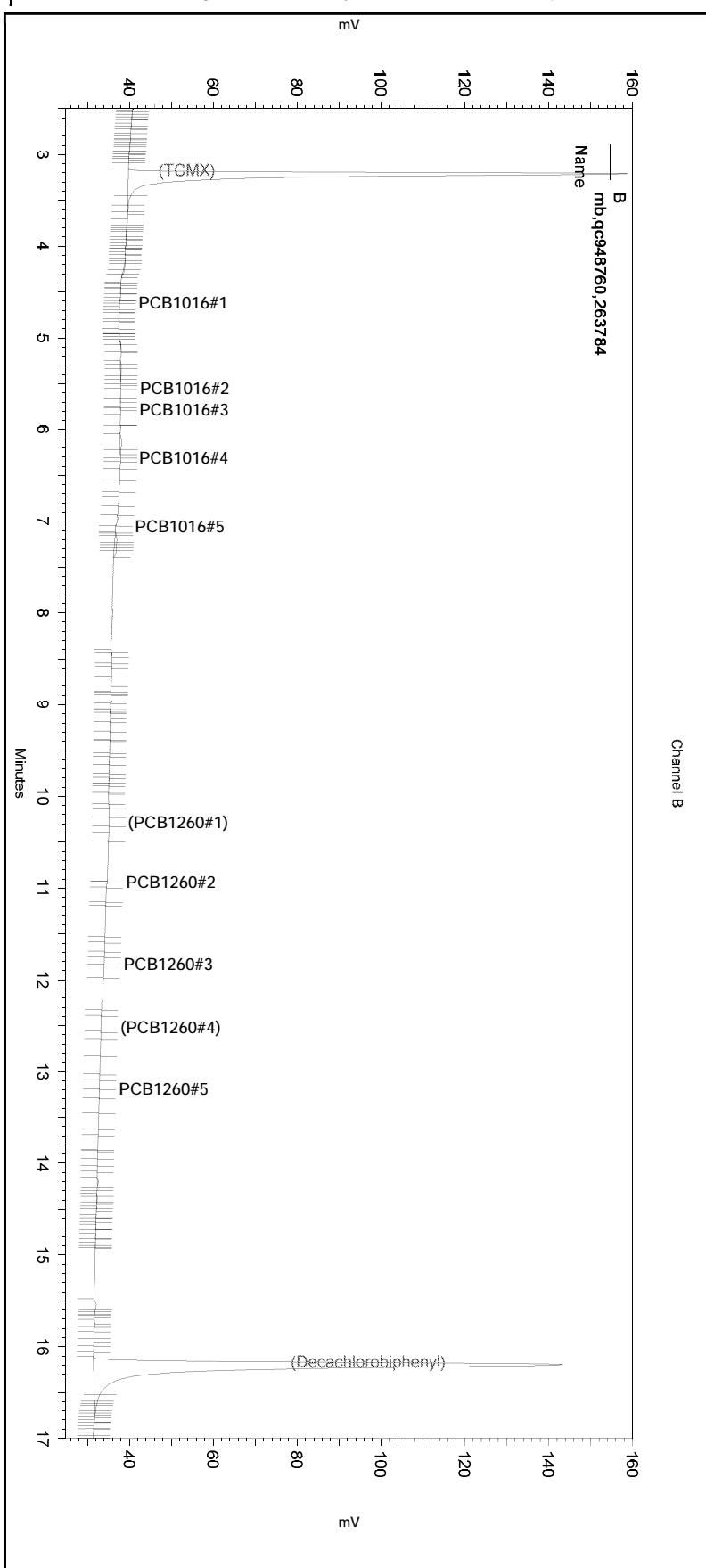
#### Manual Integration Fixes

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None				

Sample Name: mb,qc948760,263784  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-016  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: N/A Operator: iims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 9:04:27 PM  
Analysis Date: 9/24/2018 9:28:25 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-016\_03C3.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

**Initial Calibration Raw Data**

## ENTHALPY INITIAL CALIBRATION FOR 303137 PCBS Miscell.: EPA 8082

Inst : GC06  
 Calnum : 208328928001  
 Units : pg/uL

Name : ar-1254-228ical  
 Date : 17-AUG-2018 01:57  
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	228_032	208328928032	AR2154_10	17-AUG-2018 01:57	S36635
L2	228_033	208328928033	AR2154_250	17-AUG-2018 02:25	S36637 (10X)
L3	228_034	208328928034	AR2154_500	17-AUG-2018 02:53	S36638 (10X)
L4	228_035	208328928035	AR2154_100	17-AUG-2018 03:21	S36636
L5	228_036	208328928036	AR2154_250	17-AUG-2018 03:49	S36637
L6	228_037	208328928037	AR2154_500	17-AUG-2018 04:17	S36638
L7	228_038	208328928038	AR2154_1000	17-AUG-2018 04:45	S36639

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Aroclor-1254 Peak # 1	A	194.40	223.04	319.84	334.40	321.10	307.75	277.74	LINR	-13.314	0.00357		282.61	0.996	.99	20		
Aroclor-1254 Peak # 2	A	242.20	360.56	432.80	415.05	419.28	405.98	366.45	LINR	-12.676	0.00270		377.47	0.997	.99	20		
Aroclor-1254 Peak # 3	A	164.30	273.00	194.80	322.59	332.68	333.43	300.06	LINR	-3.7105	0.00327		274.41	0.996	.99	20		
Aroclor-1254 Peak # 4	A	349.70	274.84	449.36	451.12	513.13	507.73	486.56	LINR	2.00331	0.00203		433.21	0.999	.99	20		
Aroclor-1254 Peak # 5	A	348.90	117.56	277.46	222.70	310.28	365.98	377.00	LINR	22.7582	0.00261		288.56	0.998	.99	20		
Aroclor-1254 Peak # 1	B	236.40	192.04	326.90	331.63	359.79	348.71	312.77	LINR	-8.2256	0.00314		301.18	0.996	.99	20		
Aroclor-1254 Peak # 2	B	295.90	211.36	407.20	373.87	404.16	373.48	335.95	LINR	-13.418	0.00294		343.13	0.995	.99	20		
Aroclor-1254 Peak # 3	B	105.90	101.36	176.54	201.15	228.08	220.34	208.61	LINR	1.17967	0.00472		177.43	0.998	.99	20		
Aroclor-1254 Peak # 4	B	151.90	205.04	346.56	387.19	419.45	465.11	425.50	LINR	5.79489	0.00229		342.96	0.997	.99	20		
Aroclor-1254 Peak # 5	B	23.800	31.000	160.30	177.95	236.79	326.11	328.10	LINR	32.2800	0.00296		183.44	0.996	.99	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1254 Peak # 1	A	10.000	-164	25.000	-74	50.000	-13	100.00	6	250.00	9	500.00	7	1000.0	-2
Aroclor-1254 Peak # 2	A	10.000	-161	25.000	-53	50.000	-8	100.00	-1	250.00	8	500.00	7	1000.0	-2
Aroclor-1254 Peak # 3	A	10.000	-83	25.000	-26	50.000	-44	100.00	2	250.00	7	500.00	8	1000.0	-2
Aroclor-1254 Peak # 4	A	10.000	-9	25.000	-36	50.000	-5	100.00	-6	250.00	5	500.00	3	1000.0	-1
Aroclor-1254 Peak # 5	A	10.000	219	25.000	22	50.000	18	100.00	-19	250.00	-10	500.00	0	1000.0	1
Aroclor-1254 Peak # 1	B	10.000	-108	25.000	-73	50.000	-14	100.00	-4	250.00	10	500.00	8	1000.0	-2
Aroclor-1254 Peak # 2	B	10.000	-147	25.000	-91	50.000	-7	100.00	-3	250.00	14	500.00	7	1000.0	-3
Aroclor-1254 Peak # 3	B	10.000	-38	25.000	-47	50.000	-14	100.00	-4	250.00	8	500.00	4	1000.0	-1
Aroclor-1254 Peak # 4	B	10.000	-7	25.000	-30	50.000	-9	100.00	-5	250.00	-1	500.00	8	1000.0	-2
Aroclor-1254 Peak # 5	B	10.000	230	25.000	38	50.000	12	100.00	-15	250.00	-17	500.00	3	1000.0	0

JC1 08/17/18 : Corrected automatically drawn baseline in all levels.

JC1 08/17/18 : peaks in linear cal for 608 passing

Analyst: JC1

Date: 08/17/18

Reviewer: EAH

Date: 08/17/18

Instrument amount = a0 + response \* a1 + response^2 \* a2; LINR=Linear regression

Page 2 of 2

208328928001

ENTHALPY 2ND SOURCE CALIBRATION SUMMARY FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Name : ar-1254-228ical  
Calnum : 208328928001 Cal Date : 17-AUG-2018

ICV 208328928040 (228\_040 17-AUG-2018) stds: S36641

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1254	A	250.0	246.5	pg/uL	-1	15	
Aroclor-1254	B	250.0	232.8	pg/uL	-7	15	

Analyst: JC1 Date: 08/17/18 Reviewer: EAH Date: 08/17/18  
Page 1 of 1 208328928001 ICVs

Sample Name: **ical,s36635,ar2154\_10**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-032  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 32 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 1:57:01 AM  
Analysis Date: 8/17/2018 3:00:25 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.063	7.070	1944	10.000 CAL
PCB1254#2	7.663	7.667	2422	10.000 CAL
PCB1254#3	8.267	8.267	1643	10.000 CAL
PCB1254#4	8.543	8.547	3497	10.000 CAL
PCB1254#5	9.217	9.203	3489	10.000 CAL

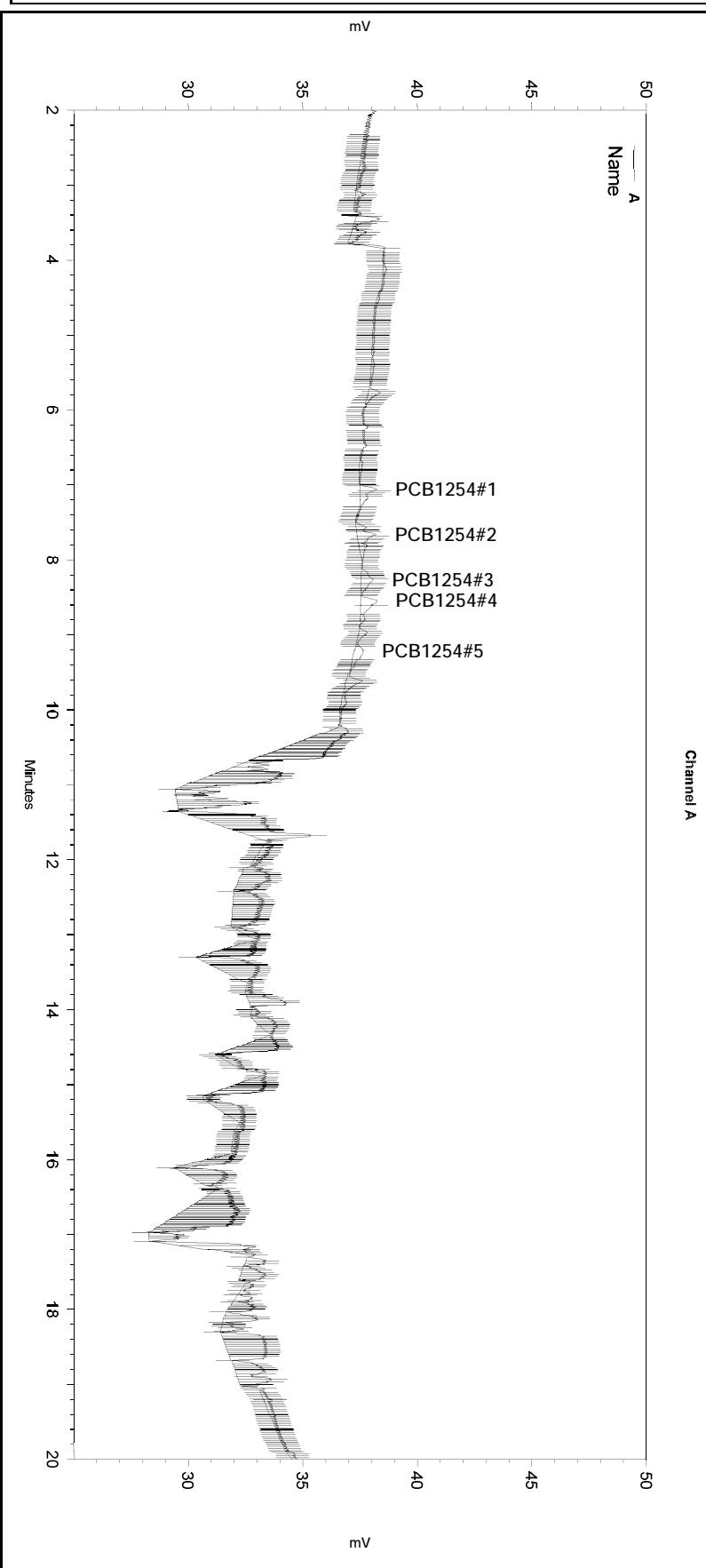
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.483	8.477	2364	10.000 CAL
PCB1254#2	9.033	9.023	2959	10.000 CAL
PCB1254#3	9.667	9.647	1059	10.000 CAL
PCB1254#4	9.890	9.880	1519	10.000 CAL
PCB1254#5	10.517	10.507	238	10.000 CAL

Sample Name: **ical,s36635,ar2154\_10**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-032  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 32 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 1:57:01 AM  
Analysis Date: 8/17/2018 3:00:25 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

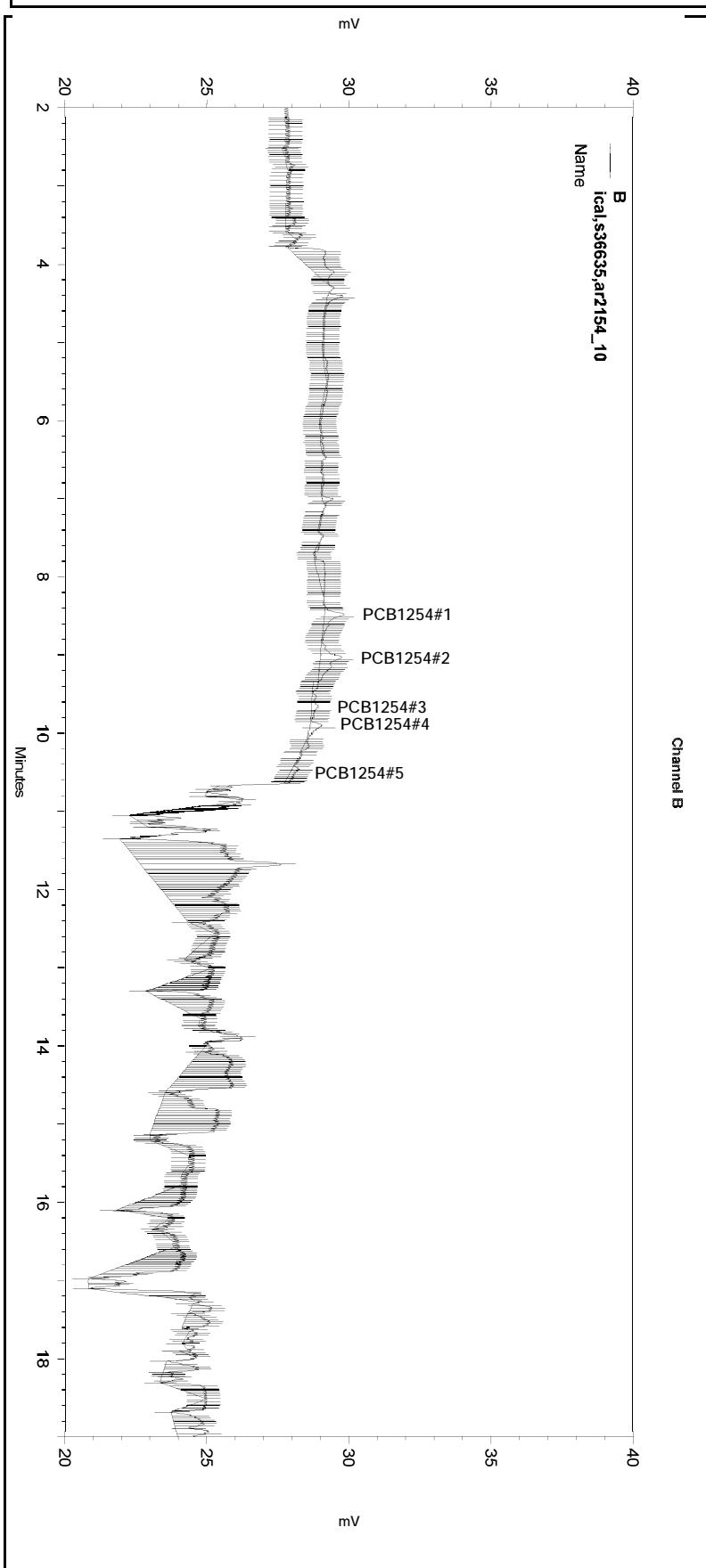
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-032

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	7.003	7.305	0
Yes	Disable End Peak Detection	8.227	8.309	0
Yes	Manual Baseline	8.475	8.886	0
Yes	Manual Peak	8.498	8.728	0
Yes	Split Peak	8.603	0	0
Yes	Manual Baseline	8.893	9.504	0
Yes	Manual Peak	9.152	9.336	0

Sample Name: **ical,s36635,ar2154\_10**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-032  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 32 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 1:57:01 AM  
Analysis Date: 8/17/2018 3:00:25 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-032

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Reset Baseline	8.258	0	0	
Yes	Manual Baseline	8.363	9.362	0	
Yes	Manual Baseline	9.475	9.823	0	
Yes	Manual Peak	9.6	9.703	0	
Yes	Manual Baseline	9.831	10.073	0	
Yes	Manual Peak	9.852	9.951	0	
Yes	Split Peak	9.934	0	0	
Yes	Split Peak	9.956	0	0	
Yes	Manual Baseline	10.328	10.649	0	
Yes	Manual Peak	10.426	10.55	0	
Yes	Split Peak	10.476	0	0	
Yes	Split Peak	10.505	0	0	
Yes	Split Peak	10.526	0	0	

Sample Name: **ical,s36635,ar2154\_10**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-032  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
 Instrument: GC06 Vial: 32 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
 Run Date: 8/17/2018 1:57:01 AM  
 Analysis Date: 8/17/2018 2:20:59 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.793	2.793	0	0.000
PCB1016#1		4.150		0.000 BDL
PCB1016#2	5.067	5.083	18	0.038
PCB1016#3	5.360	5.357	40	0.190
PCB1016#4		5.813		0.000 BDL
PCB1016#5	6.217	6.240	889	4.938
PCB1260#1	9.617	9.620	3252	4.660
PCB1260#2		10.247		0.000 BDL
PCB1260#3	11.083	11.083	2992	9.760
PCB1260#4	11.813	11.813	49	0.054
PCB1260#5	12.467	12.447	1061	14.416
Decachlorobiphenyl	14.990	15.010	97	0.007

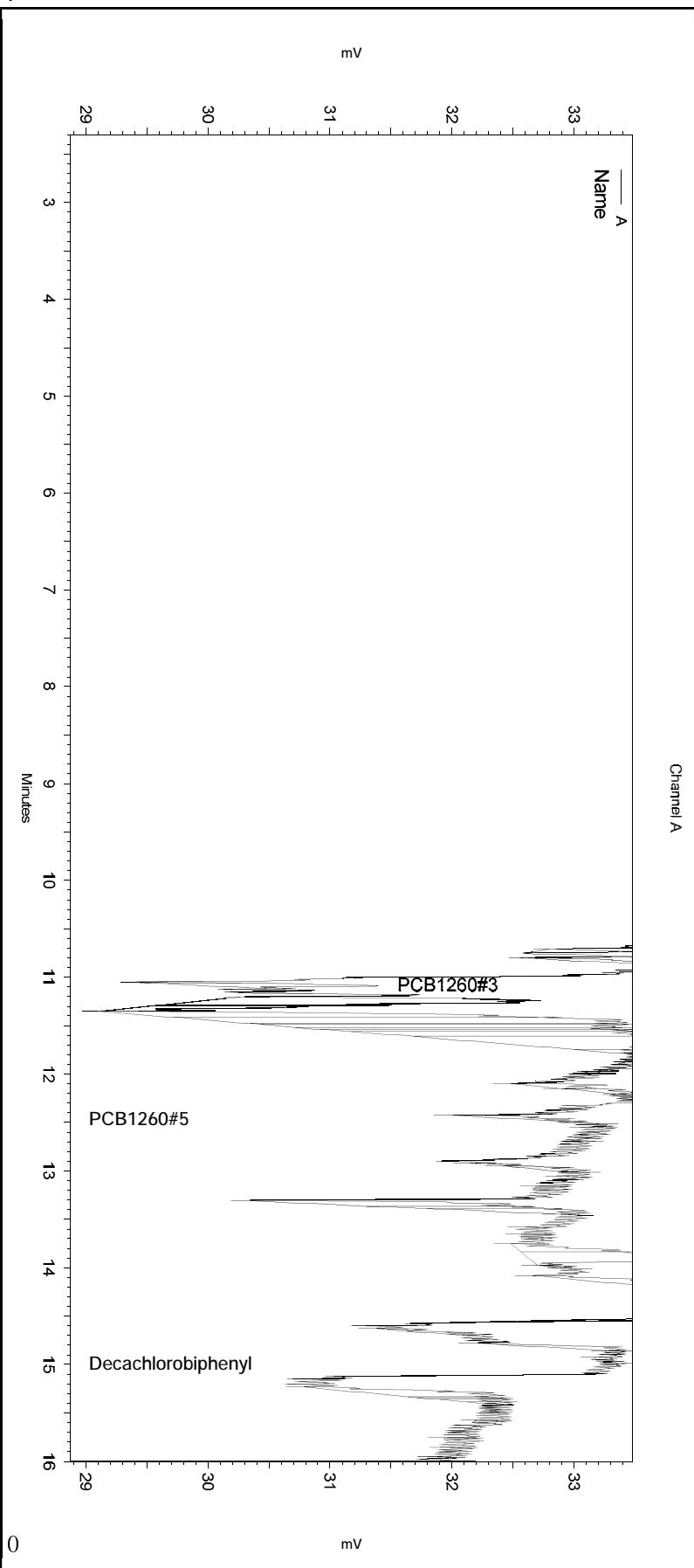
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.693	3.700	517	0.089
PCB1016#1	5.267	5.260	264	1.792
PCB1016#2	6.257	6.240	7	0.013
PCB1016#3	6.467	6.460	618	2.604
PCB1016#4	7.007	7.017	1683	12.449
PCB1016#5	7.740	7.760	35	0.164
PCB1260#1		11.047		0.000 BDL
PCB1260#2	11.690	11.690	6283	13.553
PCB1260#3	12.657	12.640	13	0.048
PCB1260#4		13.297		0.000 BDL
PCB1260#5	13.987	13.983	99	0.292
Decachlorobiphenyl		16.977		0.000 BDL

Sample Name: **ical,s36635,ar2154\_10**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-032  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 32 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 1:57:01 AM  
Analysis Date: 8/17/2018 2:20:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

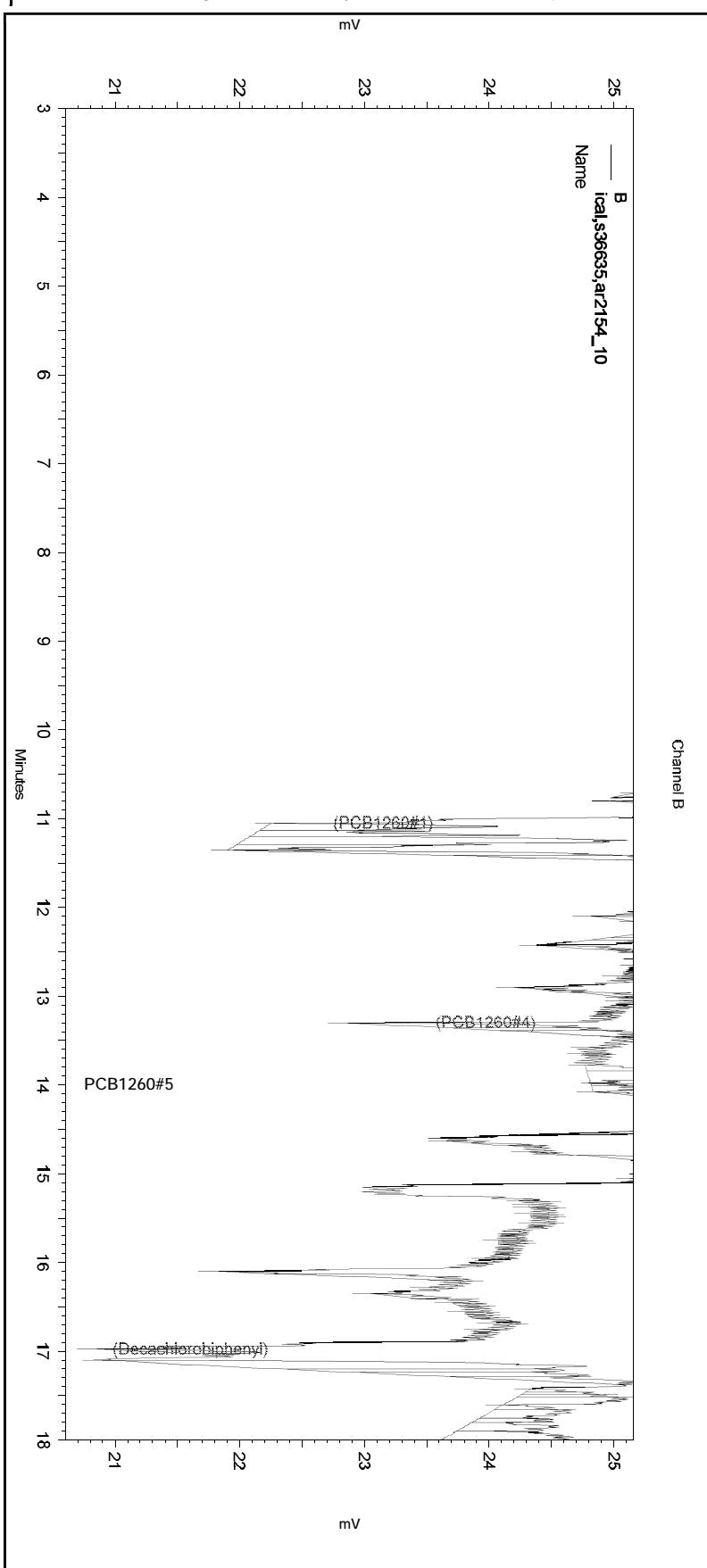
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-032\_FFBE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s36635,ar2154\_10**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-032  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 32 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 1:57:01 AM  
Analysis Date: 8/17/2018 2:20:59 AM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

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Data File: C:\Documents and Settings\All Users\Application  
Data\Chromatography\System\Recovery Data\Instrument.10112\228-032\_FFBE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s36637,10x,ar2154\_250**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-033  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 33 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:25:02 AM  
Analysis Date: 8/17/2018 12:04:04 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.067	7.070	5576	25.000 CAL
PCB1254#2	7.667	7.667	9014	25.000 CAL
PCB1254#3	8.290	8.267	6825	25.000 CAL
PCB1254#4	8.543	8.547	6871	25.000 CAL
PCB1254#5	9.217	9.203	2939	25.000 CAL

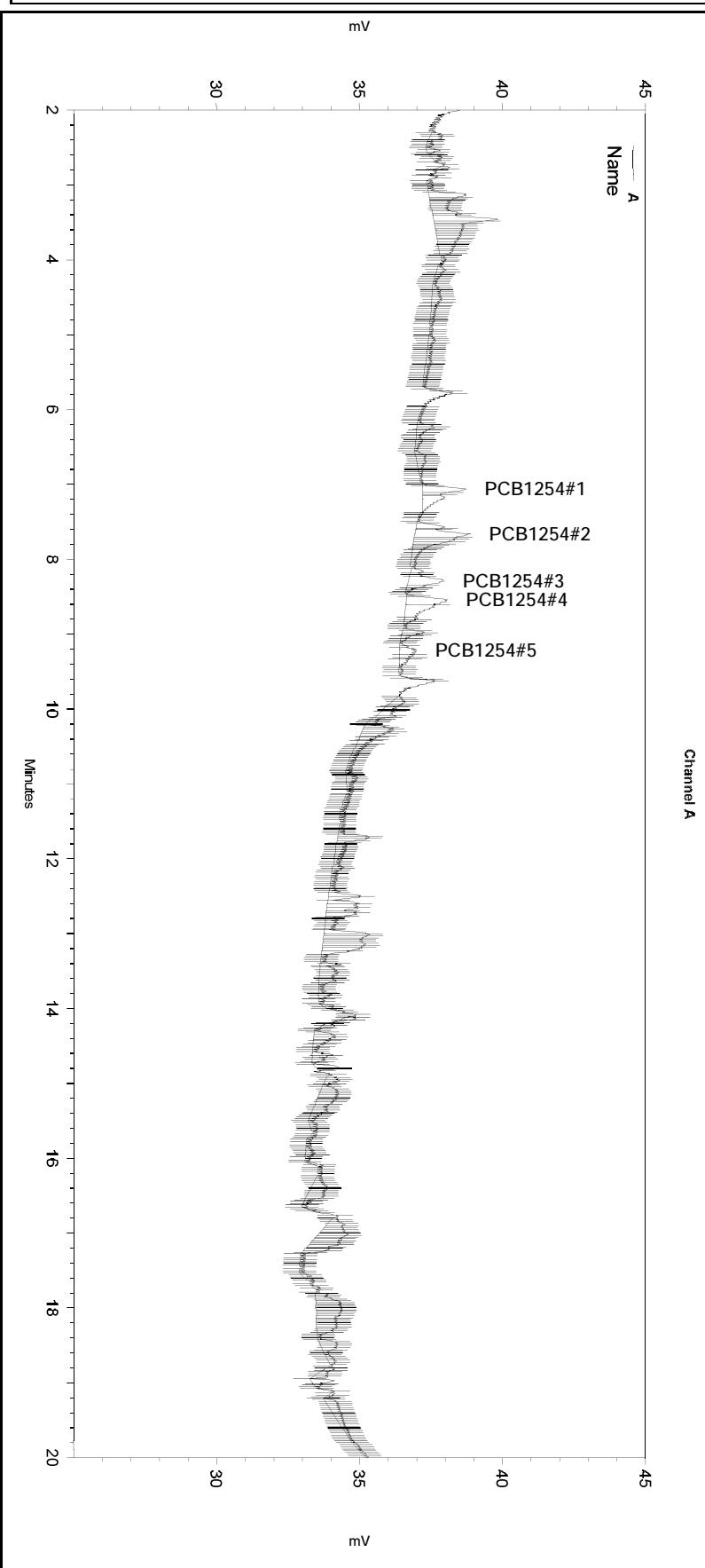
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.483	8.477	4801	25.000 CAL
PCB1254#2	9.040	9.023	5284	25.000 CAL
PCB1254#3	9.667	9.647	2534	25.000 CAL
PCB1254#4	9.893	9.880	5126	25.000 CAL
PCB1254#5	10.517	10.507	775	25.000 CAL

Sample Name: **ical,s36637,10x,ar2154\_250**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-033  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 33 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:25:02 AM  
Analysis Date: 8/17/2018 12:04:04 PM  
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

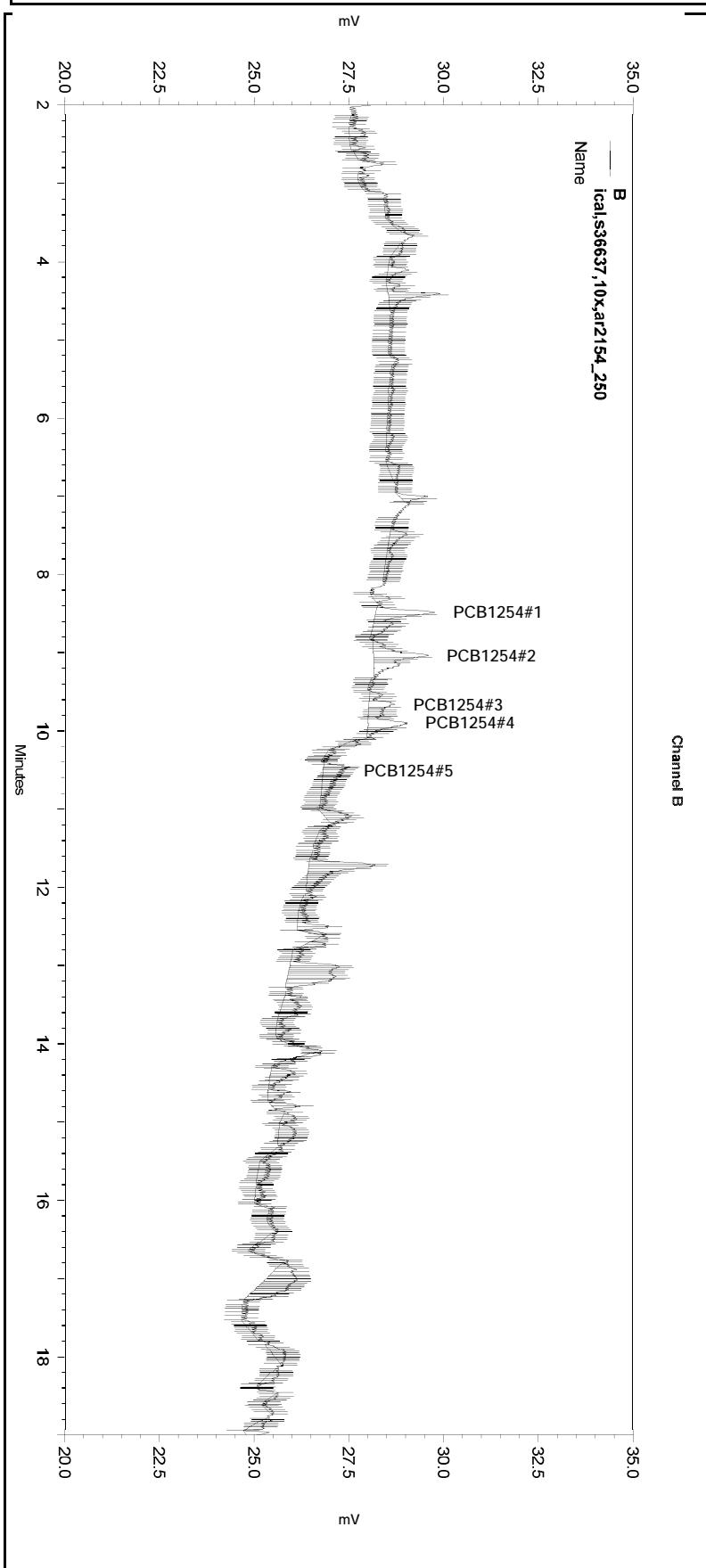
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-033

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	6.969	7.382	0
Yes	Disable End Peak Detection	7.666	7.713	0
Yes	Manual Baseline	8.101	8.451	0
Yes	Manual Peak	8.224	8.35	0
Yes	Manual Baseline	8.471	8.922	0
Yes	Manual Peak	8.501	8.604	0
Yes	Manual Baseline	9.122	9.422	0
Yes	Manual Peak	9.17	9.276	0

Sample Name: ical,s36637,10x,ar2154\_250  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-033  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 33 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:25:02 AM  
Analysis Date: 8/17/2018 12:04:04 PM  
Sample Amount: 1



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No items selected for this section  
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No items selected for this section  
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Integration Events  
-----  

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

  
Manual Integration Fixes  
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Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-033  
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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	8.832	9.34	0
Yes	Manual Baseline	9.487	10.076	0
Yes	Manual Peak	9.625	9.709	0
Yes	Manual Peak	9.851	9.959	0
Yes	Manual Baseline	10.397	10.998	0

Sample Name: **ical,s36637,10x,ar2154\_250**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-033  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
 Instrument: GC06 Vial: 33 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
 Run Date: 8/17/2018 2:25:02 AM  
 Analysis Date: 8/17/2018 2:48:59 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.767	2.793	2075	0.264
PCB1016#1	4.167	4.150	193	0.538
PCB1016#2	5.090	5.083	459	0.959
PCB1016#3		5.357		0.000 BDL
PCB1016#4	5.820	5.813	881	4.905
PCB1016#5	6.240	6.240	1890	10.497
PCB1260#1	9.617	9.620	5597	8.020
PCB1260#2	10.240	10.247	142	0.000
PCB1260#3	11.090	11.083	103	0.336
PCB1260#4	11.817	11.813	360	0.399
PCB1260#5	12.440	12.447	259	11.950
Decachlorobiphenyl	14.993	15.010	466	0.036

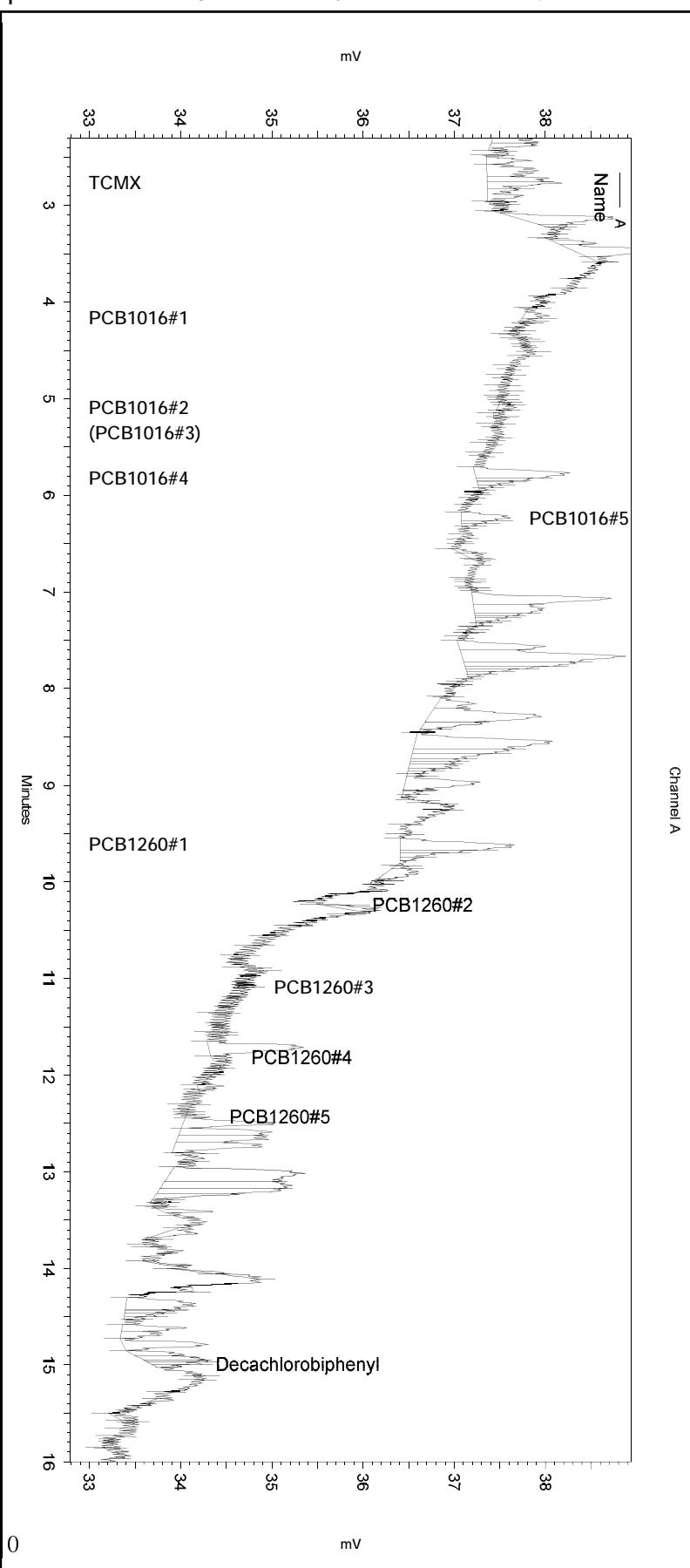
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.693	3.700	315	0.054
PCB1016#1	5.267	5.260	406	2.756
PCB1016#2	6.213	6.240	6	0.011
PCB1016#3		6.460		0.000 BDL
PCB1016#4	7.013	7.017	3925	29.032
PCB1016#5	7.740	7.760	73	0.343
PCB1260#1	11.067	11.047	1887	3.967
PCB1260#2	11.717	11.690	8285	17.871
PCB1260#3	12.667	12.640	232	0.848
PCB1260#4	13.290	13.297	136	0.209
PCB1260#5	13.967	13.983	289	0.851
Decachlorobiphenyl	16.987	16.977	770	0.098

Sample Name: ical,s36637,10x,ar2154\_250  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-033  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 33 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:25:02 AM  
Analysis Date: 8/17/2018 2:48:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

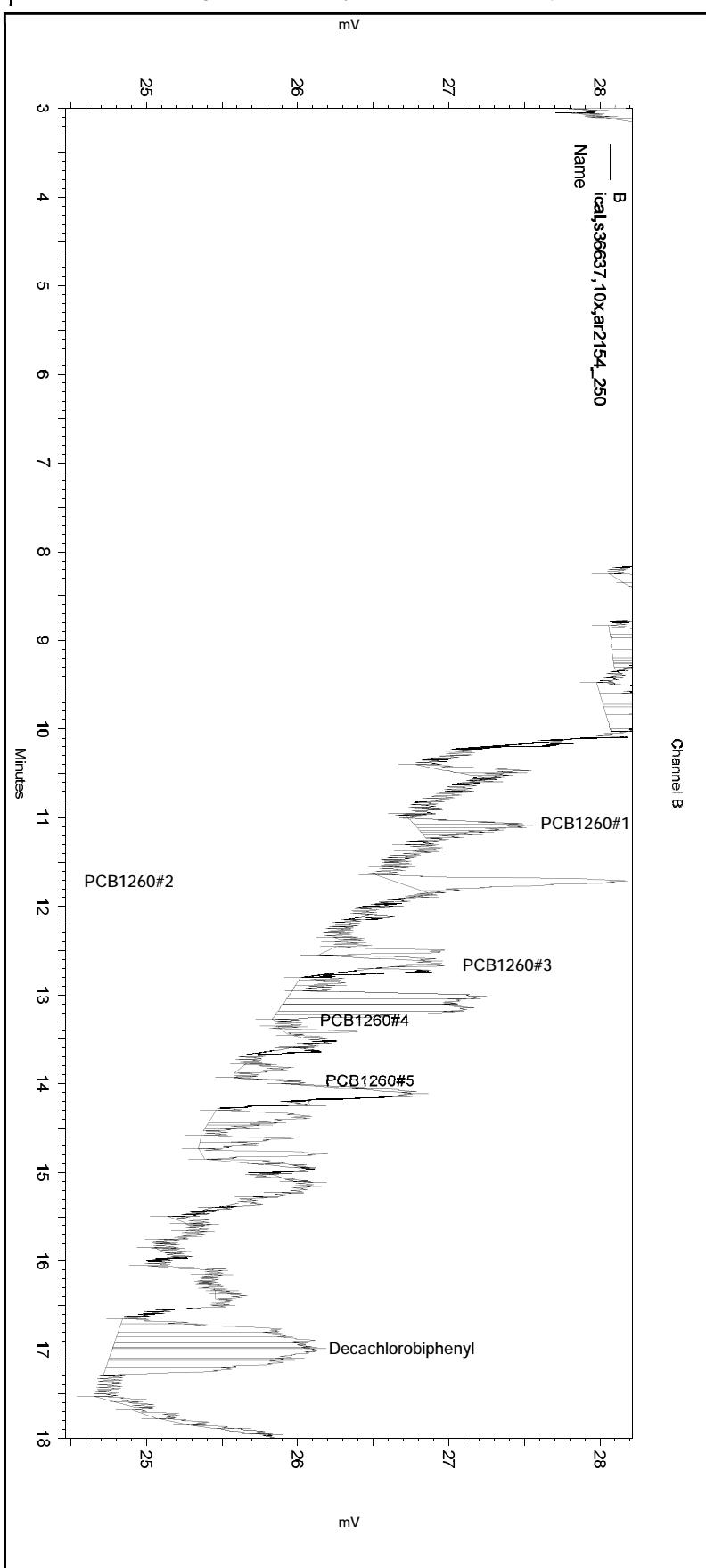
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-033\_FFBF.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: ical,s36637,10x,ar2154\_250  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-033  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 33 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:25:02 AM  
Analysis Date: 8/17/2018 2:48:59 AM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	(Minutes)	Value
Yes	Width			0	0	0.2
Yes	Threshold			0	0	50
Yes	Integration Off			0	2	0
Yes	Shoulder Sensitivity			3	18	1

Manual Integration Fixes

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Data File: C:\Documents and Settings\All Users\Application  
Data\Chromatography\System\Recovery Data\Instrument.10112\228-033\_FFBF.tmp

Enabled	Event Type	Start	Stop	(Minutes)	(Minutes)	Value
None						

Sample Name: **ical,s36638,10x,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-034  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 34 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:53:01 AM  
Analysis Date: 8/17/2018 12:04:12 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.070	7.070	15992	50.000 CAL
PCB1254#2	7.670	7.667	21640	50.000 CAL
PCB1254#3	8.267	8.267	9740	50.000 CAL
PCB1254#4	8.557	8.547	22468	50.000 CAL
PCB1254#5	9.240	9.203	13873	50.000 CAL

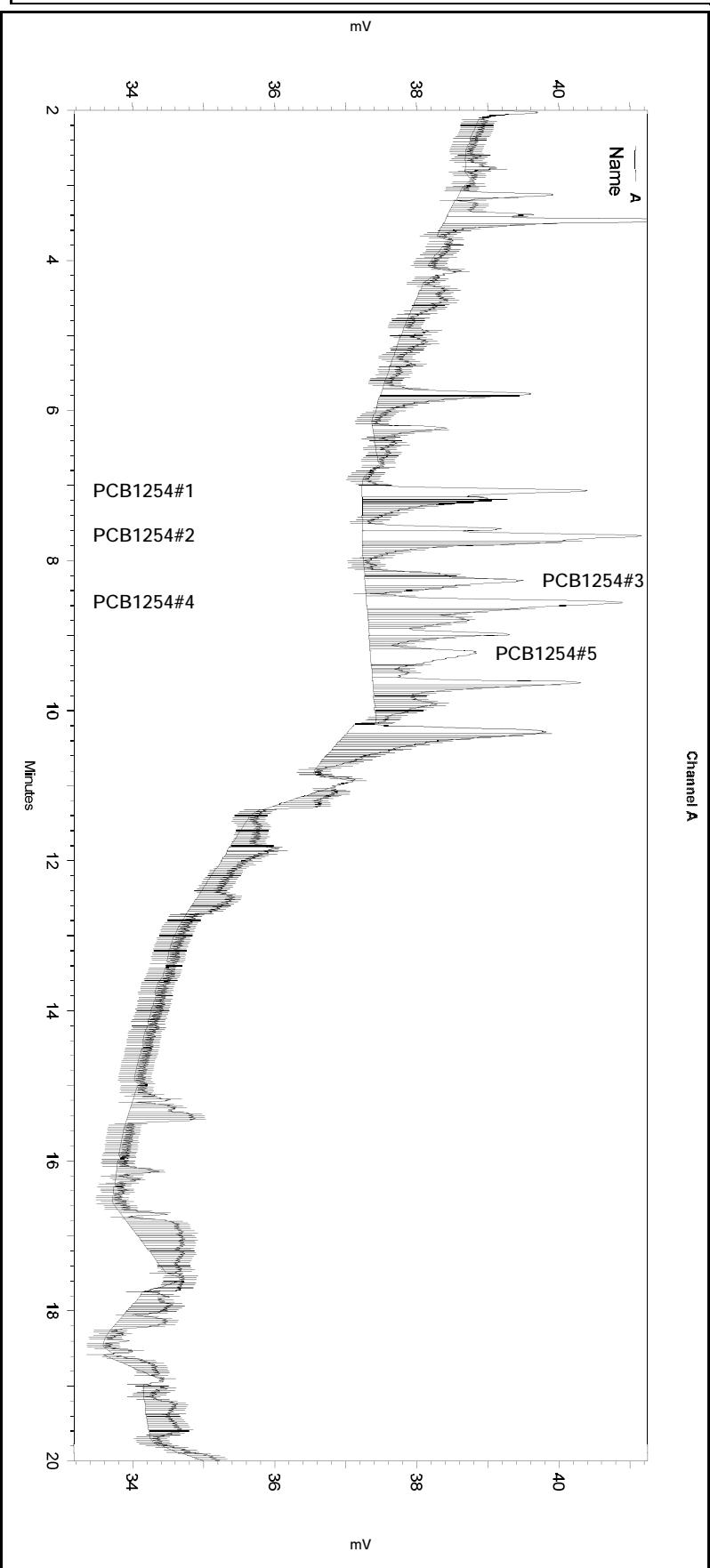
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.490	8.477	16345	50.000 CAL
PCB1254#2	9.033	9.023	20360	50.000 CAL
PCB1254#3	9.667	9.647	8827	50.000 CAL
PCB1254#4	9.907	9.880	17328	50.000 CAL
PCB1254#5	10.517	10.507	8015	50.000 CAL

Sample Name: ical,s36638,10x,ar2154\_500  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-034  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 34 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:53:01 AM  
Analysis Date: 8/17/2018 12:04:12 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

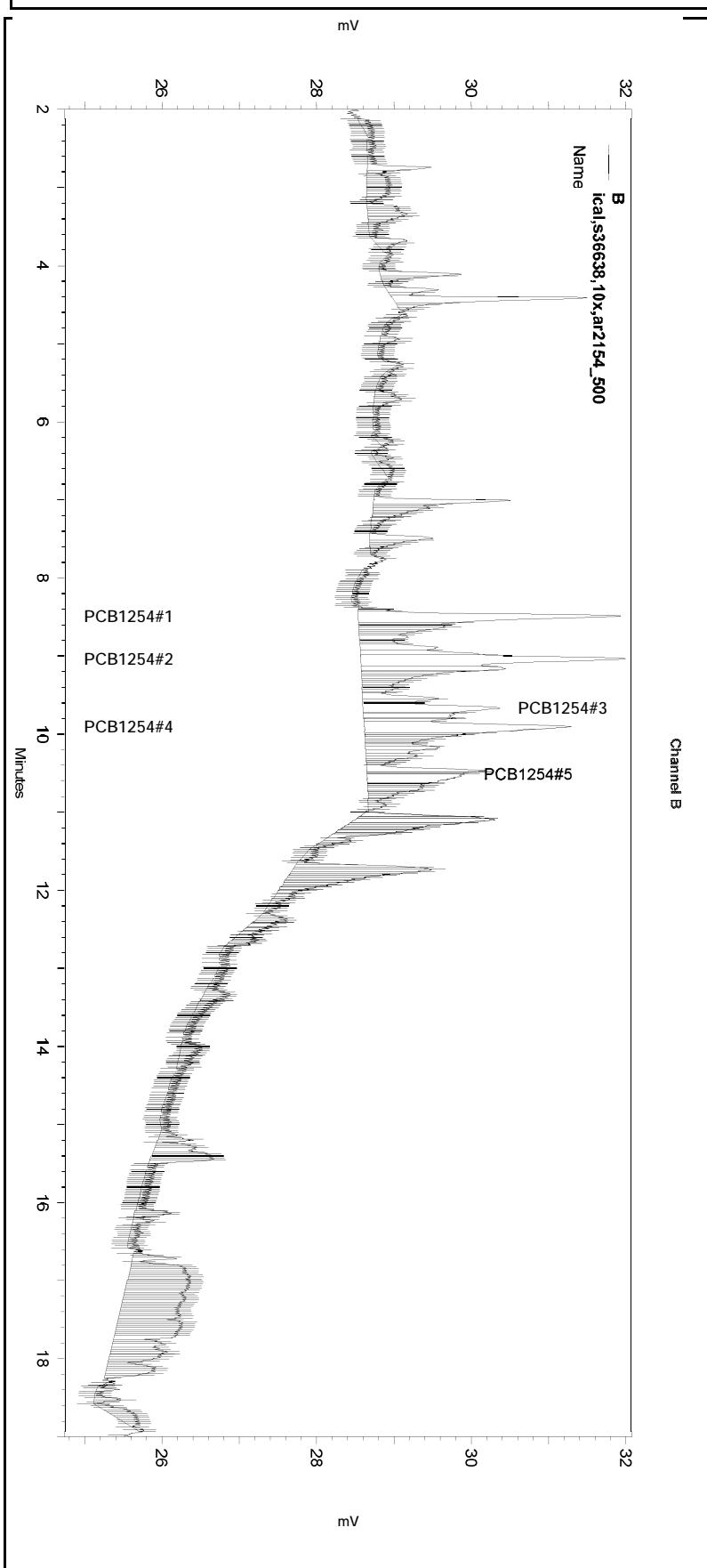
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-034

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Disable End Peak Detection	7.104	7.124	0
Yes	Manual Baseline	8.103	10.17	0
Yes	Disable End Peak Detection	8.233	8.32	0
Yes	Disable End Peak Detection	8.559	8.622	0
Yes	Manual Peak	9.173	9.381	0

Sample Name: **ical,s36638,10x,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-034  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 34 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:53:01 AM  
Analysis Date: 8/17/2018 12:04:12 PM  
Sample Amount: 1



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--< General Method Parameters >-----  
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No items selected for this section

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--< B >-----  
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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-034

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Manual Baseline	8.306	10.989	0	
Yes	Disable End Peak Detection	9.673	9.695	0	
Yes	Disable End Peak Detection	9.907	9.974	0	
Yes	Manual Peak	10.502	10.628	0	
Yes	Reset Baseline	10.992	0	0	

Sample Name: **ical,s36638,10x,ar2154\_500**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-034  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
 Instrument: GC06 Vial: 34 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
 Run Date: 8/17/2018 2:53:01 AM  
 Analysis Date: 8/17/2018 3:16:59 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.767	2.793	1329	0.169
PCB1016#1	4.167	4.150	395	1.101
PCB1016#2	5.090	5.083	523	1.092
PCB1016#3	5.357	5.357	67	0.319
PCB1016#4		5.813		0.000 BDL
PCB1016#5	6.240	6.240	3573	19.845
PCB1260#1	9.633	9.620	22887	32.795
PCB1260#2		10.247		0.000 BDL
PCB1260#3	11.067	11.083	574	1.872
PCB1260#4	11.813	11.813	330	0.366
PCB1260#5	12.460	12.447	8	11.178
Decachlorobiphenyl	14.990	15.010	66	0.005

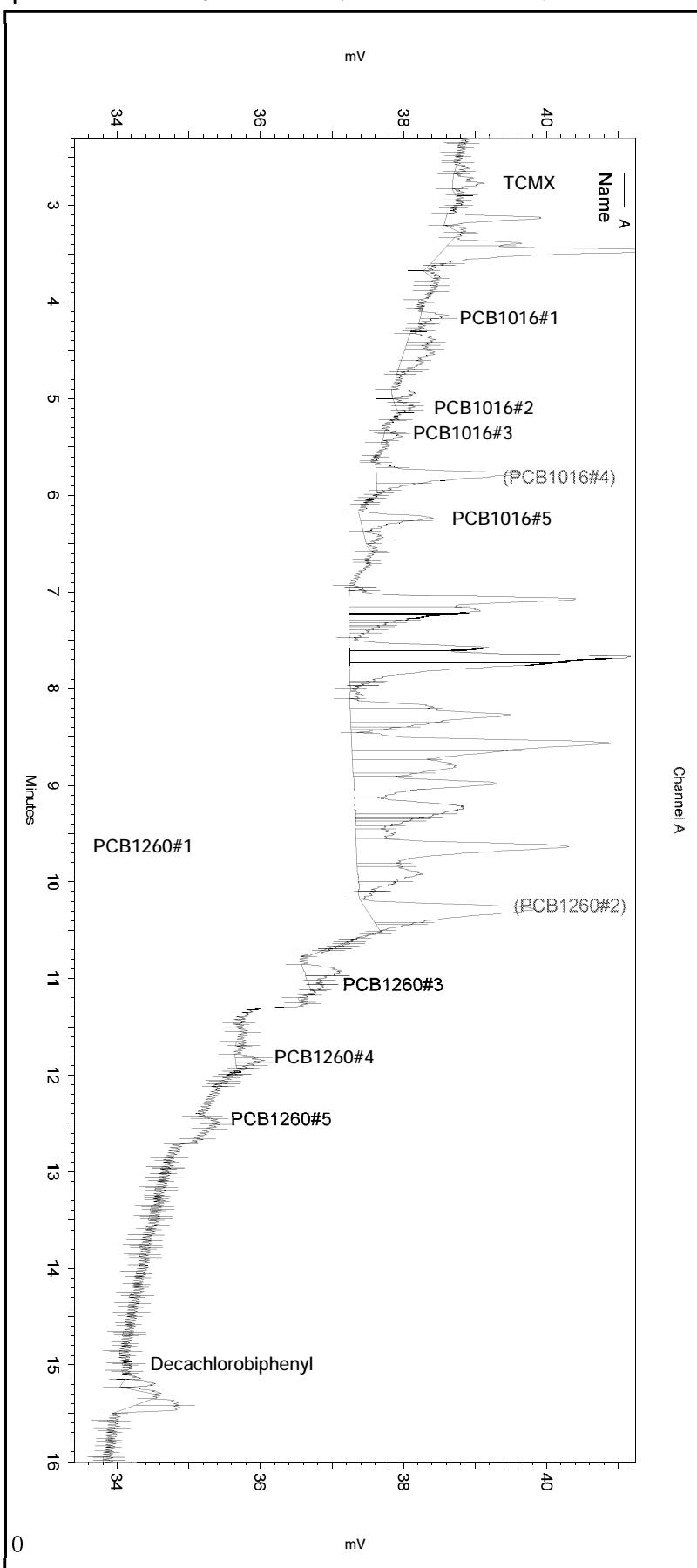
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.683	3.700	1318	0.228
PCB1016#1	5.267	5.260	1406	9.545
PCB1016#2	6.267	6.240	1309	2.402
PCB1016#3	6.467	6.460	679	2.861
PCB1016#4	7.017	7.017	7561	55.926
PCB1016#5	7.767	7.760	519	2.437
PCB1260#1		11.047		0.000 BDL
PCB1260#2		11.690		0.000 BDL
PCB1260#3	12.667	12.640	122	0.446
PCB1260#4	13.287	13.297	12	0.018
PCB1260#5	13.987	13.983	33	0.097
Decachlorobiphenyl	16.990	16.977	80	0.010

Sample Name: ical,s36638,10x,ar2154\_500  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-034  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 34 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:53:01 AM  
Analysis Date: 8/17/2018 3:16:59 AM  
Sample Amount: 1



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---< General Method Parameters >---

No items selected for this section

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## Interaction Events

Integration Events		Start	Stop	
Enabled	Event Type	(Minutes)	(Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

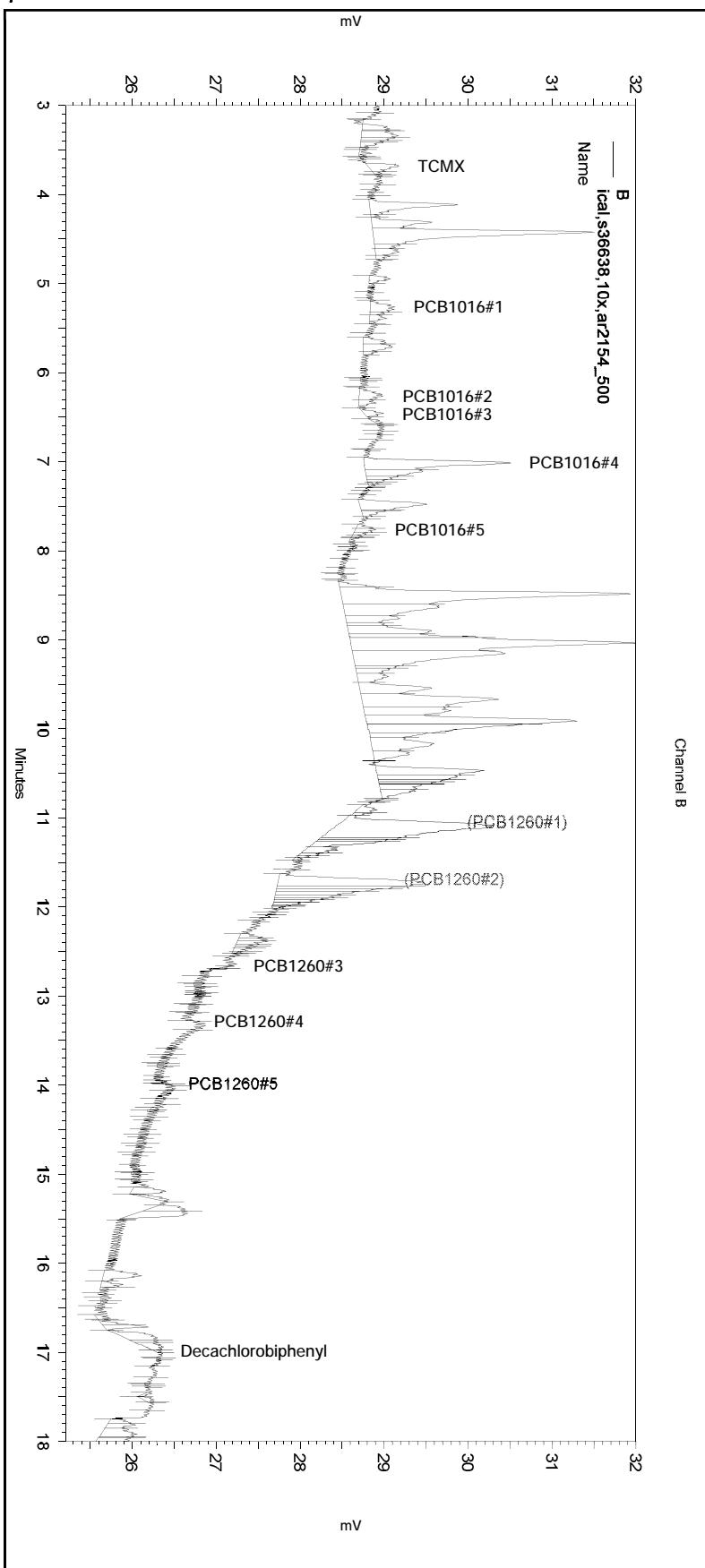
## Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-034\_FFC0.tmp

Enabled	Event Type	Start	Stop	(Minutes)	(Minutes)	Value
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None						

Sample Name: ical,s36638,10x,ar2154\_500  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-034  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 34 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 2:53:01 AM  
Analysis Date: 8/17/2018 3:16:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-034\_FFC0.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s36636,ar2154\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-035  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 35 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:21:00 AM  
Analysis Date: 8/17/2018 12:04:21 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.080	7.070	33440	100.000 CAL
PCB1254#2	7.680	7.667	41505	100.000 CAL
PCB1254#3	8.270	8.267	32259	100.000 CAL
PCB1254#4	8.563	8.547	45112	100.000 CAL
PCB1254#5	9.217	9.203	22270	100.000 CAL

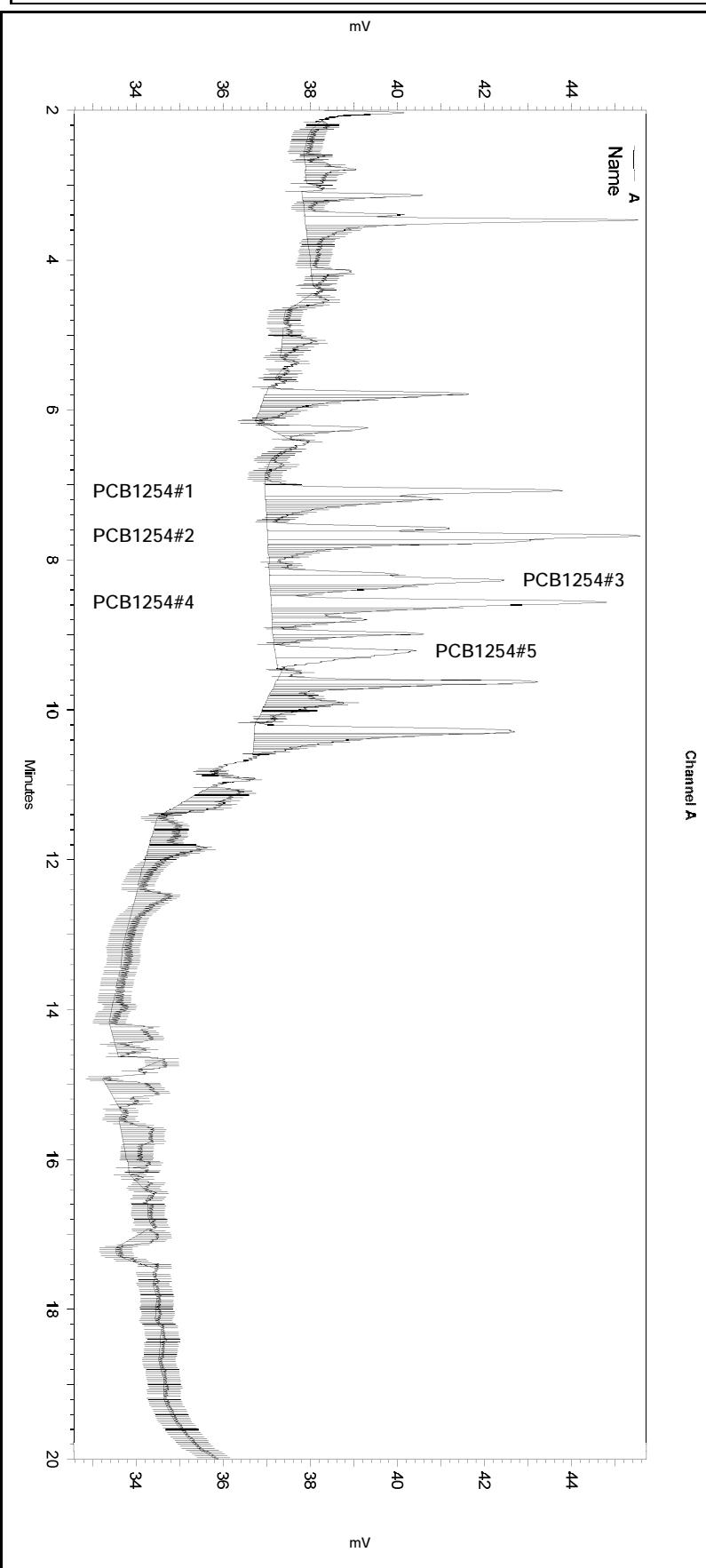
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.490	8.477	33163	100.000 CAL
PCB1254#2	9.040	9.023	37387	100.000 CAL
PCB1254#3	9.667	9.647	20115	100.000 CAL
PCB1254#4	9.907	9.880	38719	100.000 CAL
PCB1254#5	10.517	10.507	17795	100.000 CAL

Sample Name: **ical,s36636,ar2154\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-035  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 35 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:21:00 AM  
Analysis Date: 8/17/2018 12:04:21 PM  
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

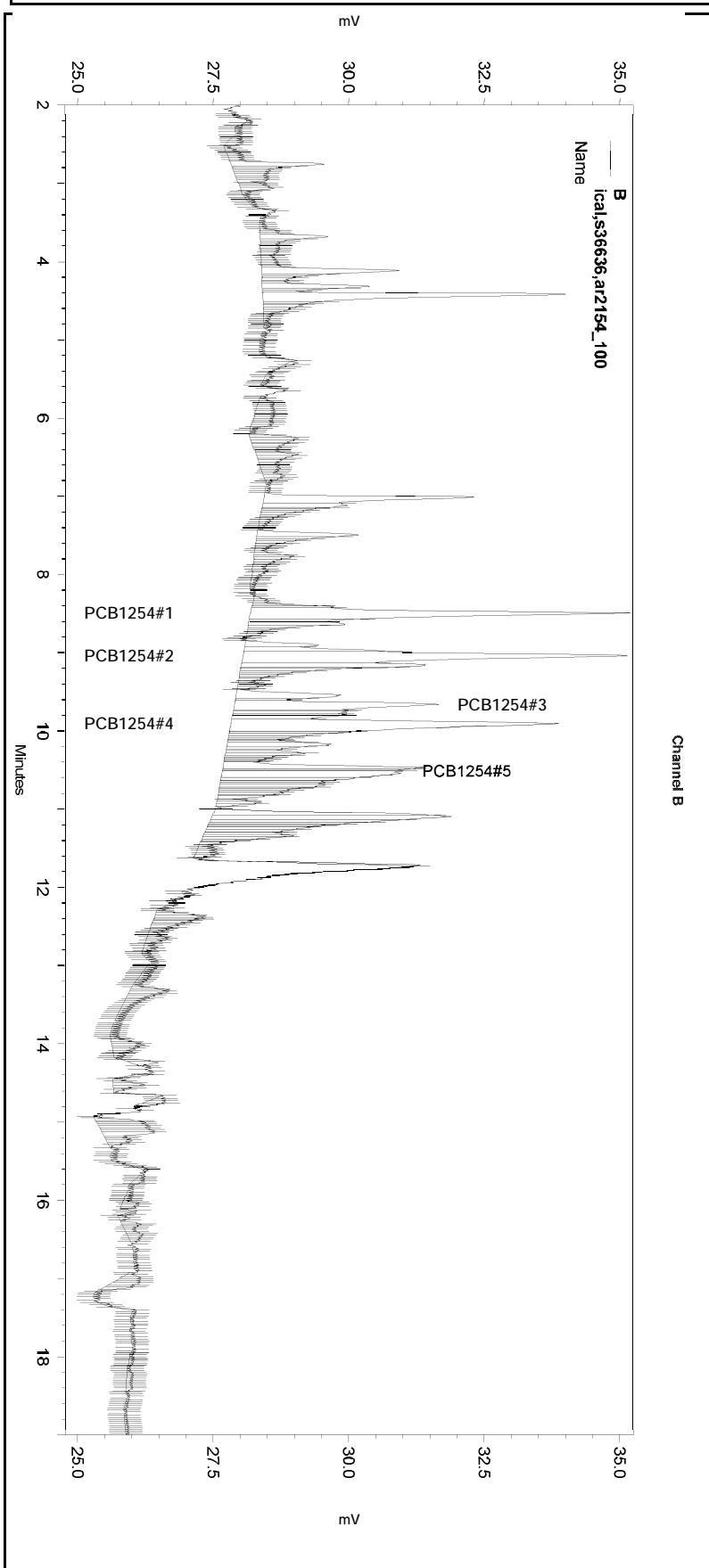
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-035

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Disable End Peak Detection	8.291	8.329	0
Yes	Disable End Peak Detection	8.593	8.641	0
Yes	Manual Peak	9.125	9.452	0
Yes	Manual Baseline	9.127	9.453	0
Yes	Split Peak	9.306	0	0
Yes	Reset Baseline	9.458	0	0

Sample Name: **ical,s36636,ar2154\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-035  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 35 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:21:00 AM  
Analysis Date: 8/17/2018 12:04:21 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-035

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Manual Baseline	8.244	11	0	
Yes	Disable End Peak Detection	9.699	9.723	0	
Yes	Disable End Peak Detection	9.918	9.996	0	
Yes	Manual Peak	10.502	10.611	0	

Sample Name: **ical,s36636,ar2154\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-035  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
 Instrument: GC06 Vial: 35 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
 Run Date: 8/17/2018 3:21:00 AM  
 Analysis Date: 8/17/2018 3:44:59 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.783	2.793	4980	0.633
PCB1016#1	4.157	4.150	3172	8.838
PCB1016#2	5.090	5.083	2584	5.397
PCB1016#3		5.357		0.000 BDL
PCB1016#4	5.783	5.813	29687	165.293
PCB1016#5	6.240	6.240	14859	82.530
PCB1260#1	9.633	9.620	34246	49.072
PCB1260#2		10.247		0.000 BDL
PCB1260#3	11.090	11.083	1107	3.611
PCB1260#4	11.840	11.813	3388	3.757
PCB1260#5		12.447		0.000 BDL
Decachlorobiphenyl	15.013	15.010	951	0.073

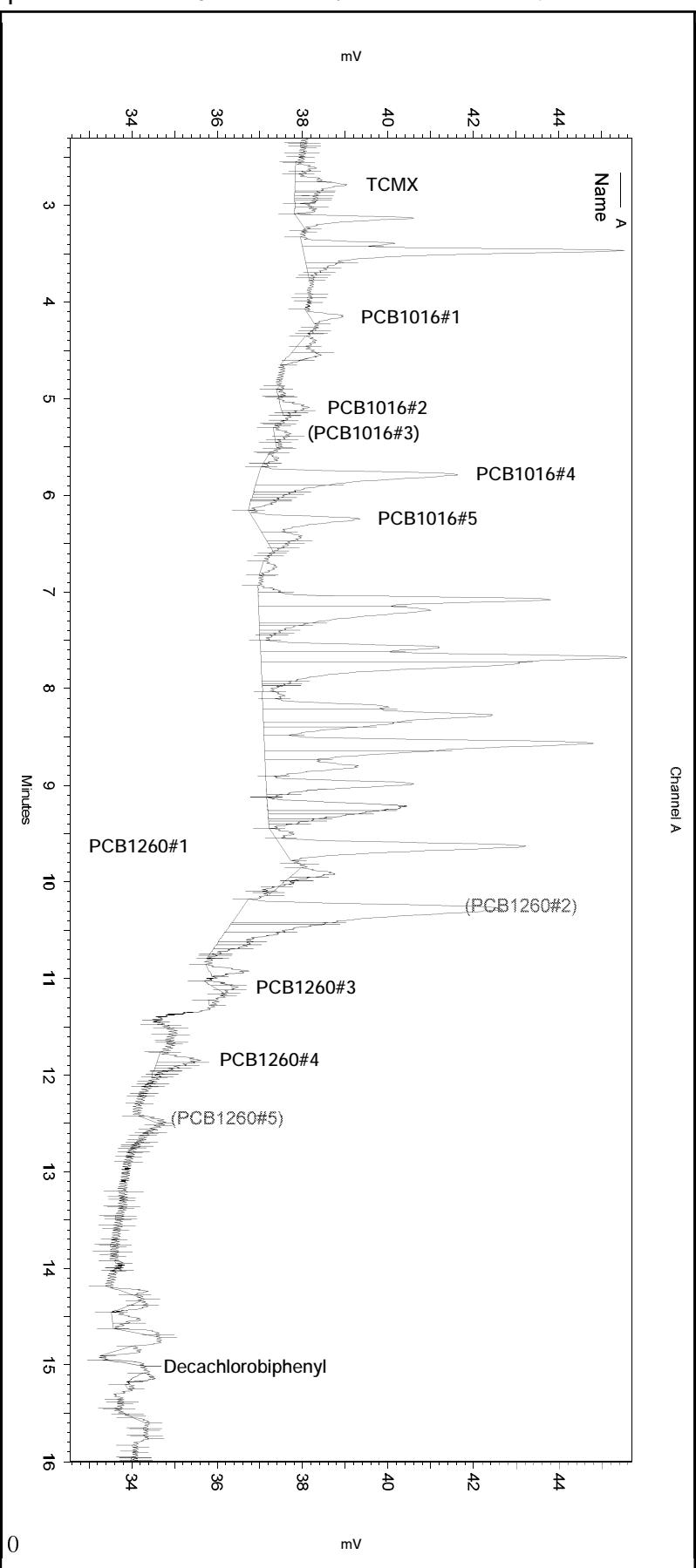
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.683	3.700	4010	0.693
PCB1016#1	5.290	5.260	3063	20.793
PCB1016#2	6.267	6.240	2484	4.558
PCB1016#3	6.467	6.460	1085	4.571
PCB1016#4	7.017	7.017	15618	115.521
PCB1016#5	7.767	7.760	2909	13.661
PCB1260#1		11.047		0.000 BDL
PCB1260#2	11.717	11.690	19930	42.990
PCB1260#3	12.640	12.640	707	2.584
PCB1260#4	13.317	13.297	2510	3.867
PCB1260#5	13.960	13.983	121	0.356
Decachlorobiphenyl	16.990	16.977	155	0.020

Sample Name: ical,s36636,ar2154\_100  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-035  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 35 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:21:00 AM  
Analysis Date: 8/17/2018 3:44:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

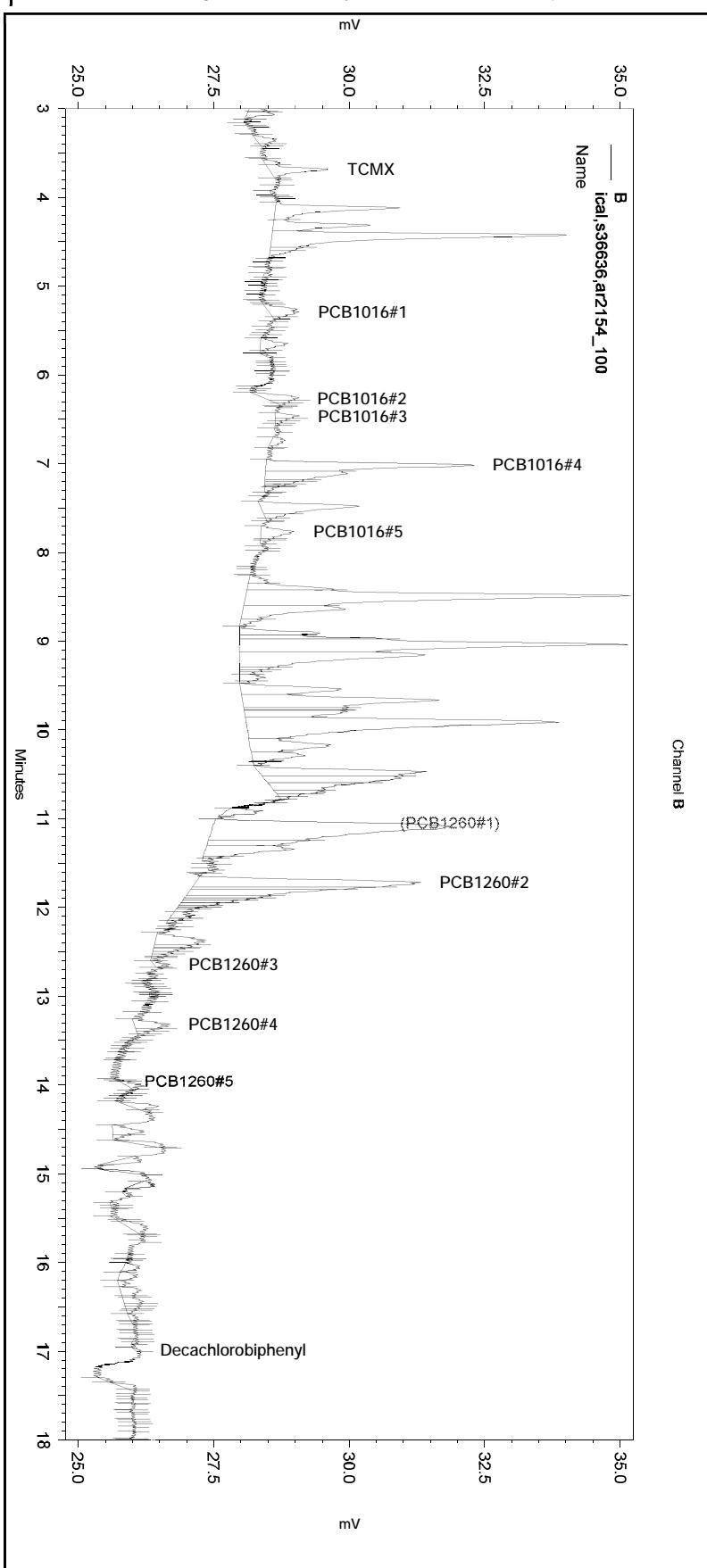
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-035\_FFC1.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: ical,s36636,ar2154\_100  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-035  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 35 Operator: lms2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:21:00 AM  
Analysis Date: 8/17/2018 3:44:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-035\_FFC1.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s36637,ar2154\_250**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-036  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 36 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:49:02 AM  
Analysis Date: 8/17/2018 12:04:30 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.067	7.070	80276	250.000 CAL
PCB1254#2	7.663	7.667	104819	250.000 CAL
PCB1254#3	8.260	8.267	83171	250.000 CAL
PCB1254#4	8.543	8.547	128283	250.000 CAL
PCB1254#5	9.193	9.203	77571	250.000 CAL

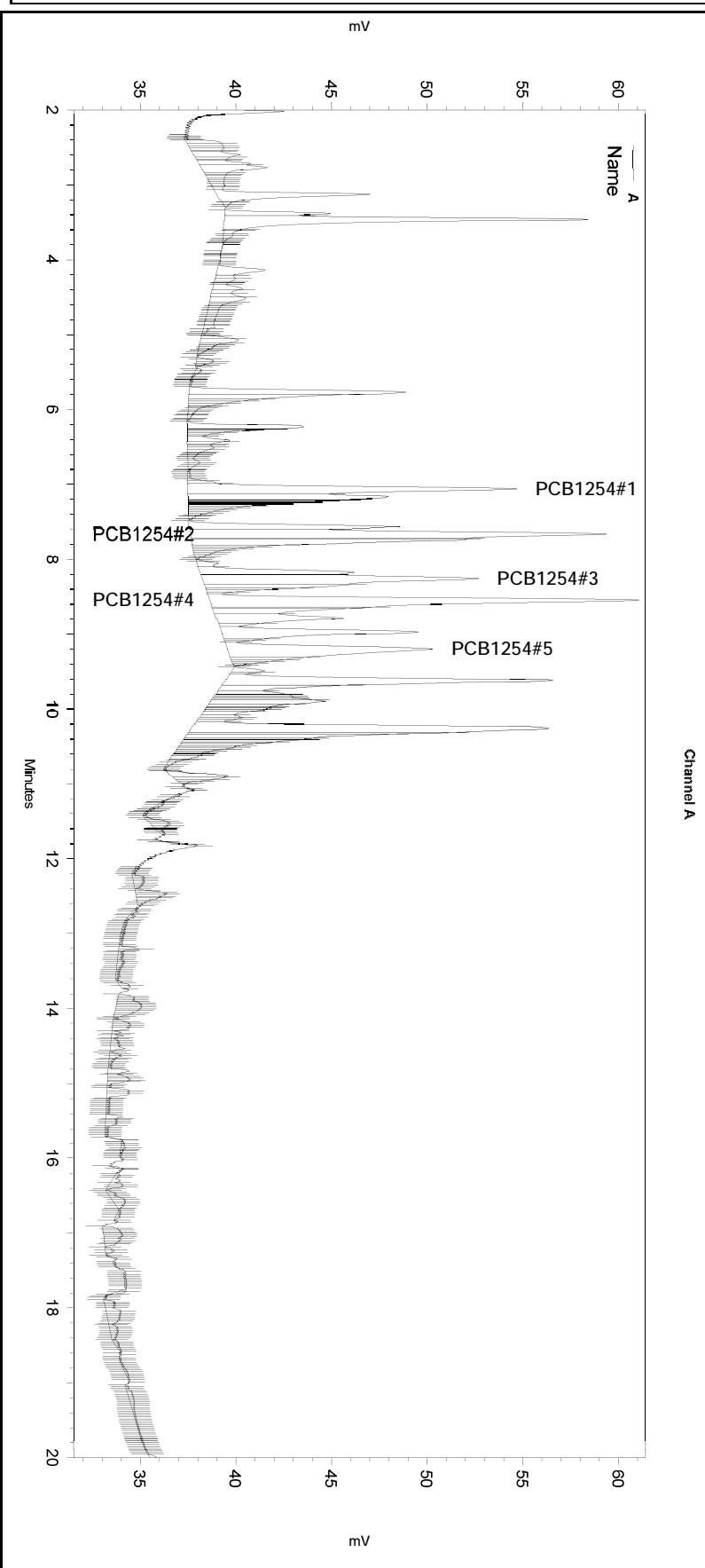
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.477	8.477	89947	250.000 CAL
PCB1254#2	9.020	9.023	101040	250.000 CAL
PCB1254#3	9.647	9.647	57020	250.000 CAL
PCB1254#4	9.890	9.880	104862	250.000 CAL
PCB1254#5	10.517	10.507	59197	250.000 CAL

Sample Name: ical,s36637,ar2154\_250  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-036  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 36 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:49:02 AM  
Analysis Date: 8/17/2018 12:04:30 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

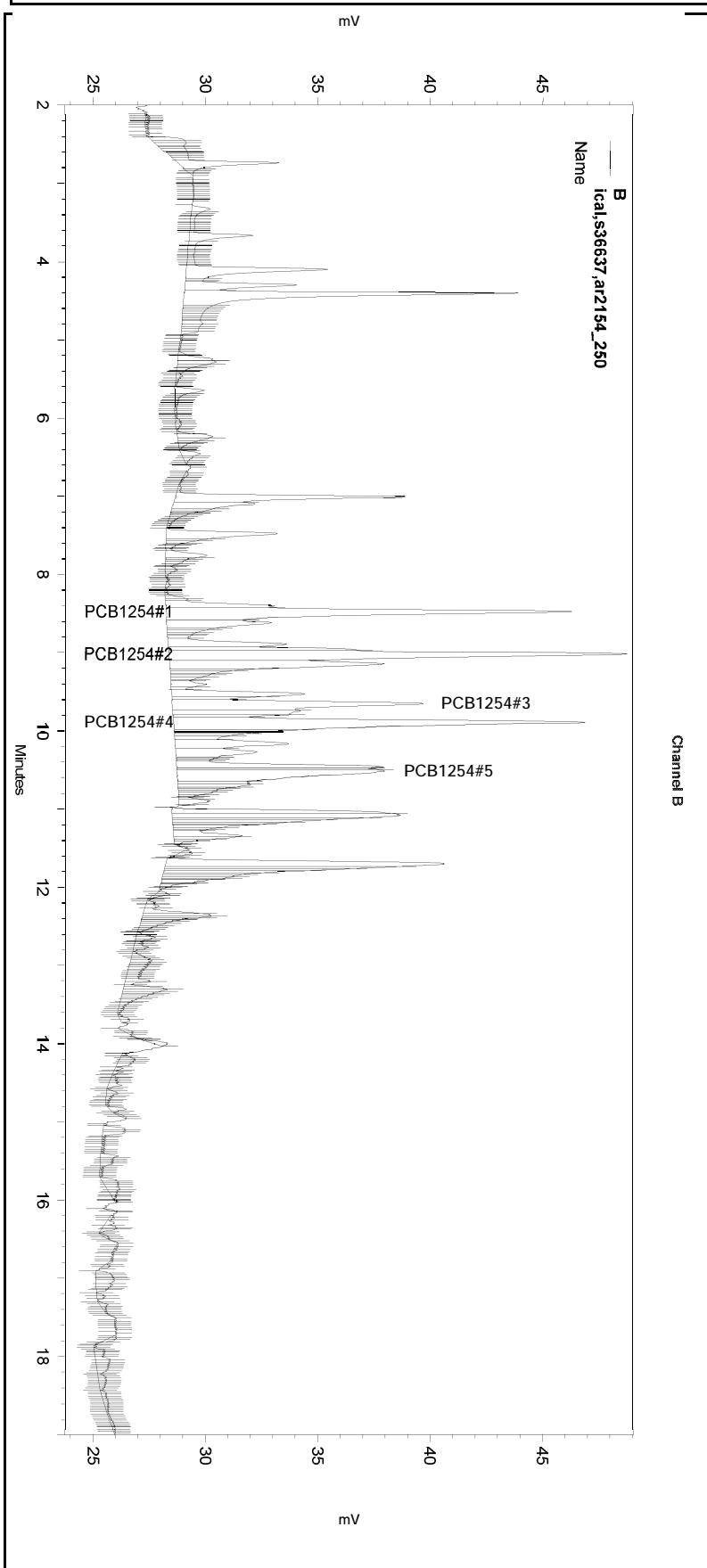
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-036

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.714	0	0
Yes	Disable End Peak Detection	9.218	9.293	0
Yes	Reset Baseline	9.432	0	0

Sample Name: **ical,s36637,ar2154\_250**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-036  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 36 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:49:02 AM  
Analysis Date: 8/17/2018 12:04:30 PM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

-----  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-036

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Disable End Peak Detection	10.493	10.645	0	
Yes	Reset Baseline	10.95	0	0	
Yes	Reset Baseline	10.969	0	0	

Sample Name: **ical,s36637,ar2154\_250**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-036  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
 Instrument: GC06 Vial: 36 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
 Run Date: 8/17/2018 3:49:02 AM  
 Analysis Date: 8/17/2018 4:12:59 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.763	2.793	13009	1.652
PCB1016#1	4.140	4.150	10453	29.124
PCB1016#2	5.067	5.083	11514	24.050
PCB1016#3	5.357	5.357	4396	20.914
PCB1016#4		5.813		0.000 BDL
PCB1016#5	6.230	6.240	33671	187.015
PCB1260#1	9.617	9.620	143643	205.830
PCB1260#2	10.257	10.247	168123	365.680
PCB1260#3	11.067	11.083	9434	30.775
PCB1260#4	11.817	11.813	14074	15.606
PCB1260#5	12.467	12.447	6271	30.403
Decachlorobiphenyl		15.010		0.000 BDL

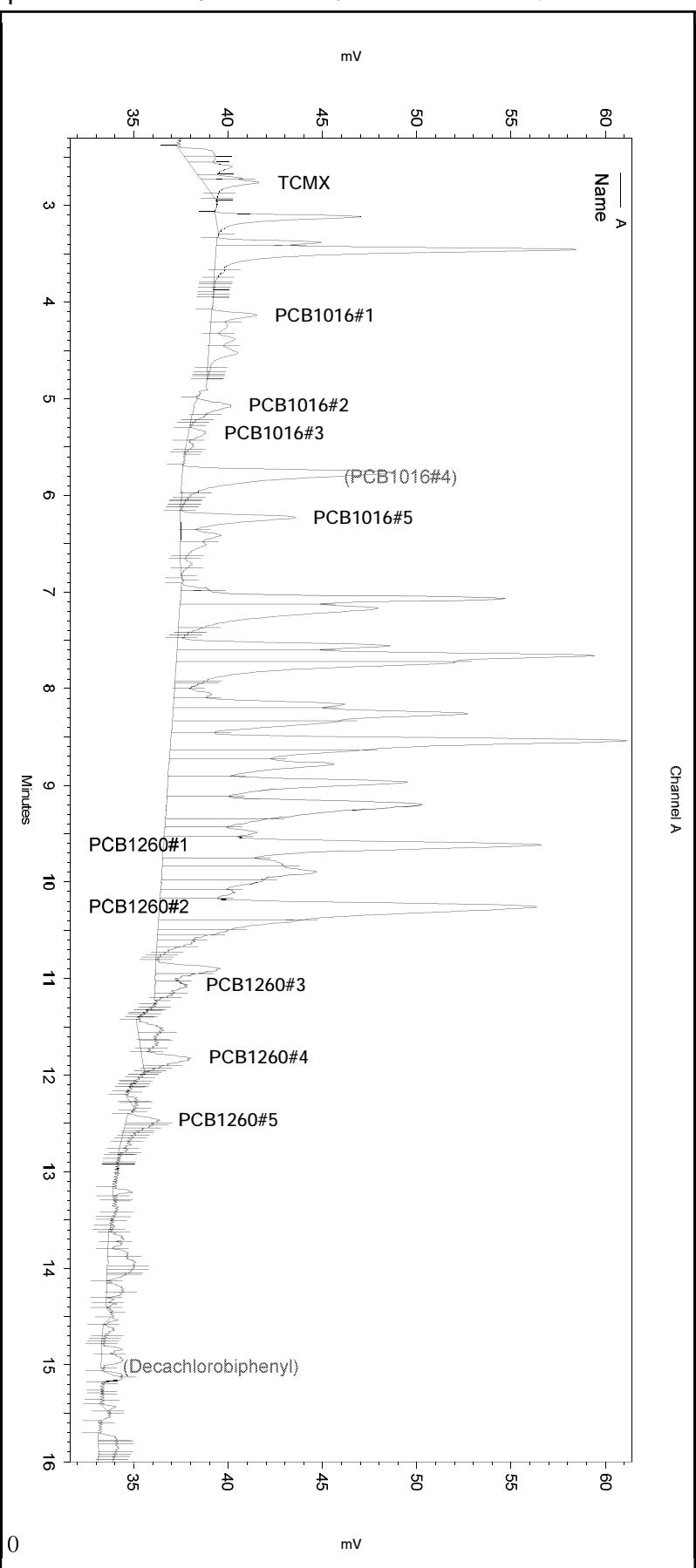
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.670	3.700	8998	1.556
PCB1016#1	5.267	5.260	5017	34.057
PCB1016#2	6.240	6.240	9622	17.657
PCB1016#3	6.463	6.460	3794	15.985
PCB1016#4	7.007	7.017	40435	299.083
PCB1016#5	7.757	7.760	5198	24.411
PCB1260#1		11.047		0.000 BDL
PCB1260#2	11.697	11.690	57432	123.882
PCB1260#3	12.640	12.640	2628	9.605
PCB1260#4	13.317	13.297	7640	11.769
PCB1260#5	13.993	13.983	15604	45.946
Decachlorobiphenyl	16.967	16.977	3054	0.388

Sample Name: ical,s36637,ar2154\_250  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-036  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 36 Operator: lms2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:49:02 AM  
Analysis Date: 8/17/2018 4:12:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

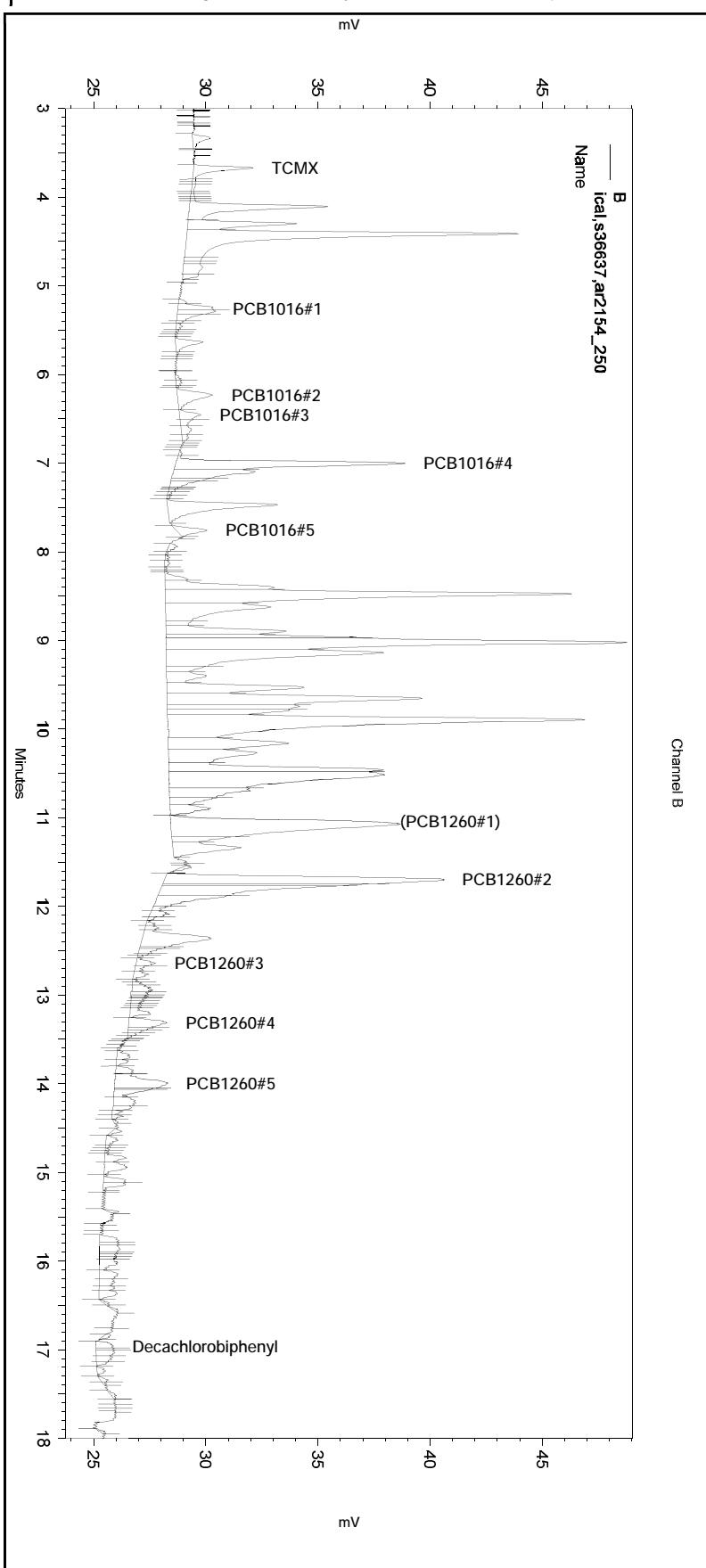
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-036\_FFC2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: ical,s36637,ar2154\_250  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-036  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 36 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 3:49:02 AM  
Analysis Date: 8/17/2018 4:12:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-036\_FFC2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s36638,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-037  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 37 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:17:02 AM  
Analysis Date: 8/17/2018 2:58:46 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.067	7.070	153875	500.000 CAL
PCB1254#2	7.660	7.667	202988	500.000 CAL
PCB1254#3	8.260	8.267	166713	500.000 CAL
PCB1254#4	8.540	8.547	253864	500.000 CAL
PCB1254#5	9.190	9.203	182992	500.000 CAL

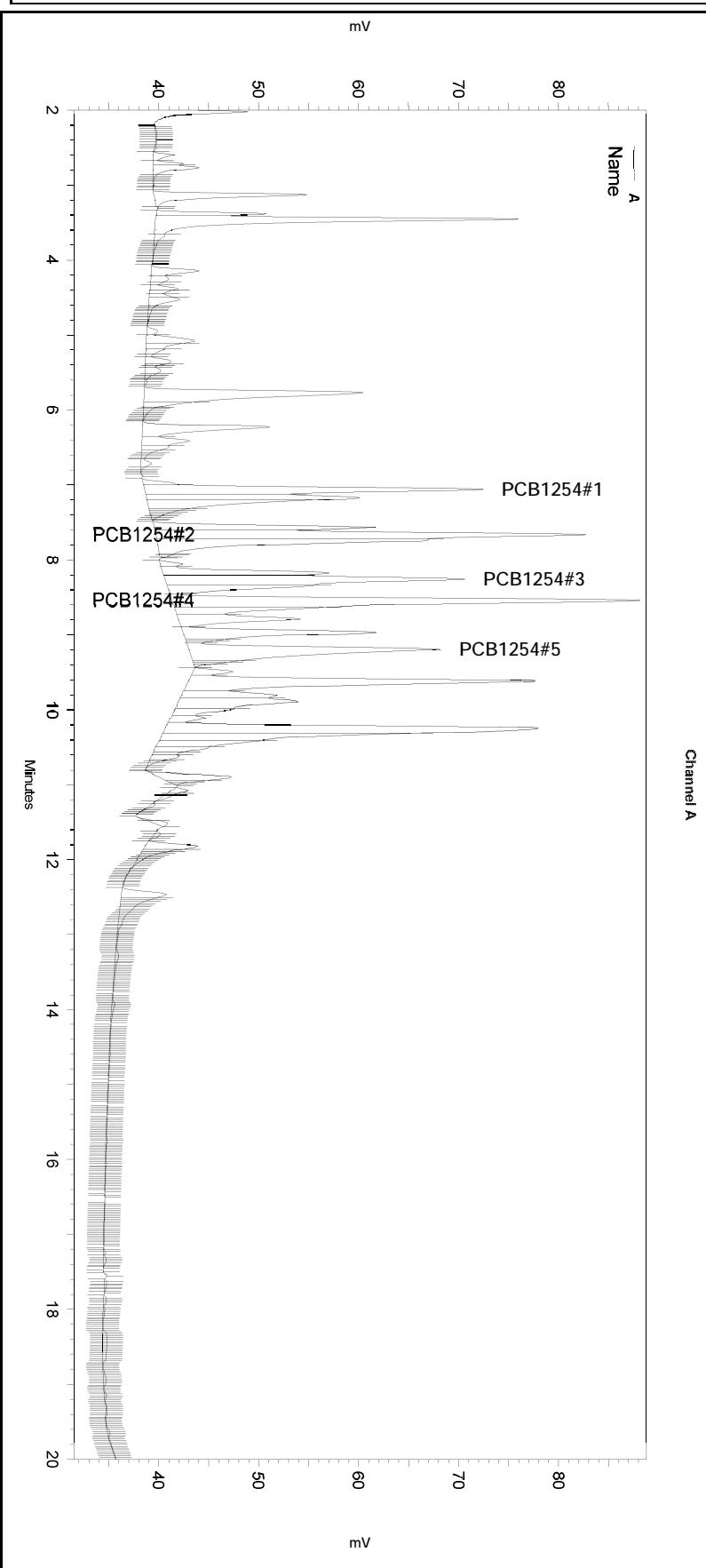
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.473	8.477	174354	500.000 CAL
PCB1254#2	9.020	9.023	186740	500.000 CAL
PCB1254#3	9.647	9.647	110168	500.000 CAL
PCB1254#4	9.883	9.880	232554	500.000 CAL
PCB1254#5	10.507	10.507	163056	500.000 CAL

Sample Name: ical,s36638,ar2154\_500  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-037  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 37 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:17:02 AM  
Analysis Date: 8/17/2018 2:58:46 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

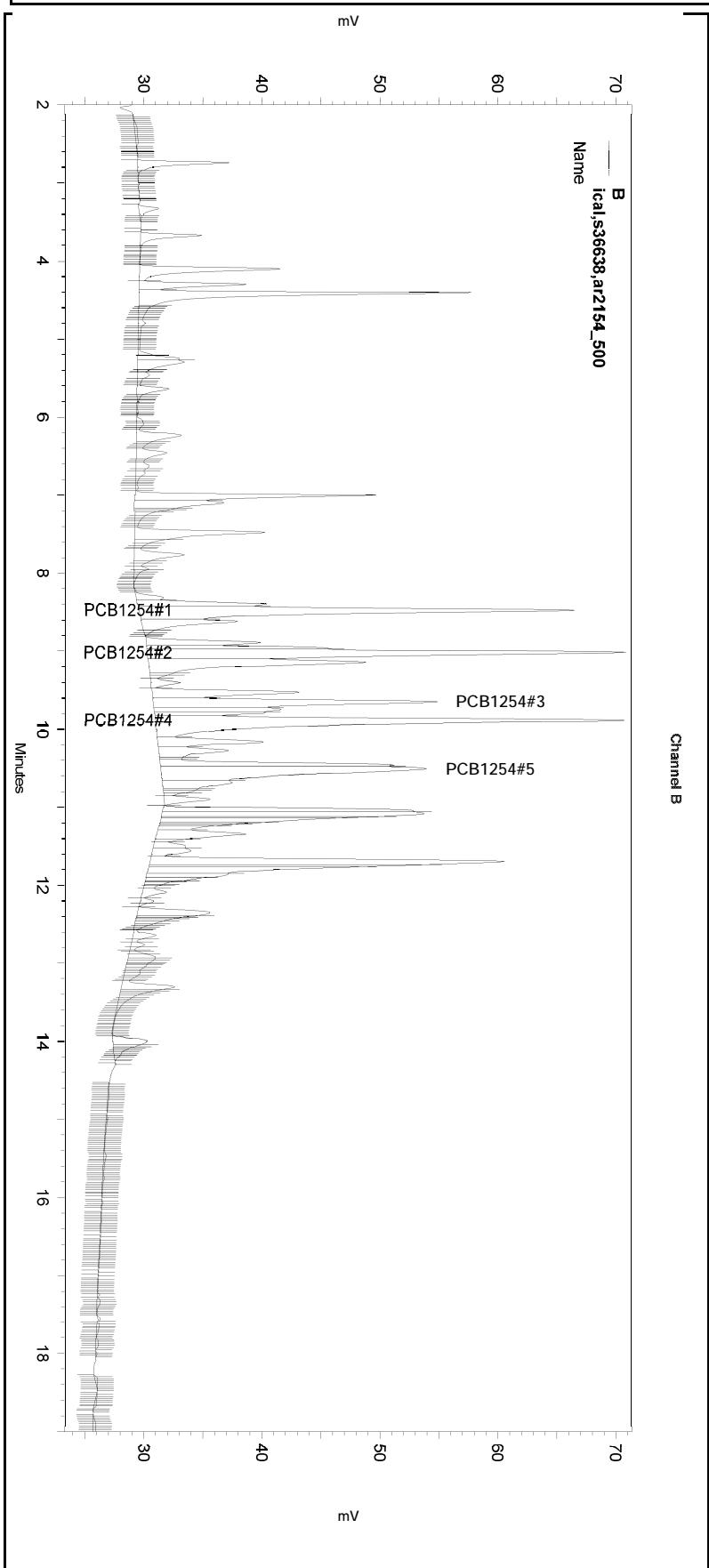
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-037

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.483	0	0
Yes	Reset Baseline	7.977	0	0
Yes	Reset Baseline	9.431	0	0

Sample Name: **ical,s36638,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-037  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 37 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:17:02 AM  
Analysis Date: 8/17/2018 2:58:46 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-037

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Reset Baseline	8.812	0	0	0
Yes	Disable End Peak Detection	10.544	10.578	0	0
Yes	Disable End Peak Detection	10.574	10.628	0	0
Yes	Reset Baseline	10.971	0	0	0

Sample Name: **ical,s36638,ar2154\_500**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-037  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
 Instrument: GC06 Vial: 37 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
 Run Date: 8/17/2018 4:17:02 AM  
 Analysis Date: 8/17/2018 4:40:58 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.767	2.793	18843	2.393
PCB1016#1	4.140	4.150	20165	56.184
PCB1016#2	5.080	5.083	31711	66.237
PCB1016#3	5.357	5.357	14091	67.037
PCB1016#4		5.813		0.000 BDL
PCB1016#5	6.227	6.240	68675	381.433
PCB1260#1	9.613	9.620	277313	397.370
PCB1260#2	10.250	10.247	346018	700.699
PCB1260#3	11.067	11.083	38286	124.892
PCB1260#4	11.817	11.813	59858	66.374
PCB1260#5	12.467	12.447	39648	131.574
Decachlorobiphenyl	14.990	15.010	19	0.001

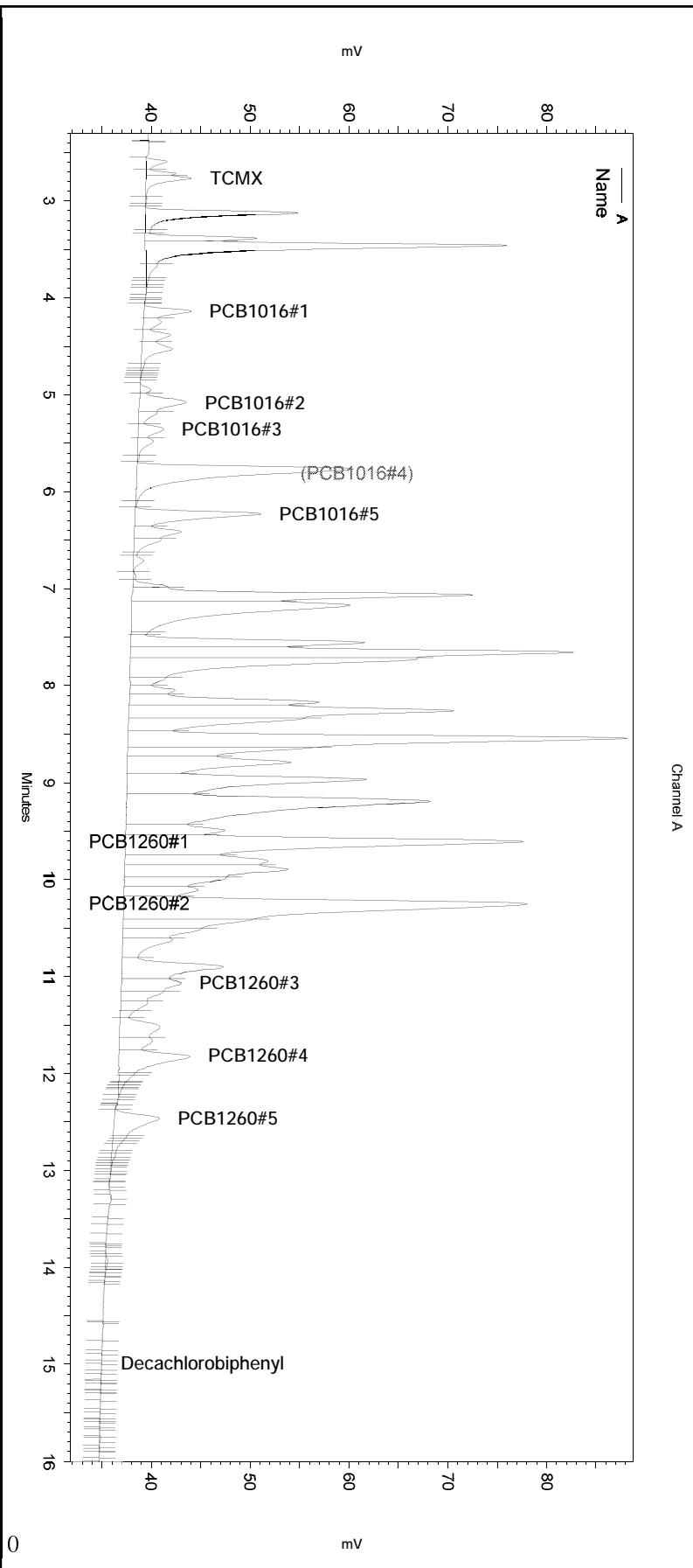
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.670	3.700	17170	2.969
PCB1016#1	5.247	5.260	10096	68.536
PCB1016#2	6.240	6.240	25560	46.905
PCB1016#3	6.460	6.460	15070	63.492
PCB1016#4	7.003	7.017	79141	585.377
PCB1016#5	7.757	7.760	24899	116.930
PCB1260#1		11.047		0.000 BDL
PCB1260#2	11.693	11.690	150293	324.186
PCB1260#3	12.640	12.640	20529	75.032
PCB1260#4	13.307	13.297	37465	57.713
PCB1260#5	13.993	13.983	24260	71.433
Decachlorobiphenyl	16.990	16.977	18	0.002

Sample Name: ical,s36638,ar2154\_500  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-037  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 37 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:17:02 AM  
Analysis Date: 8/17/2018 4:40:58 AM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

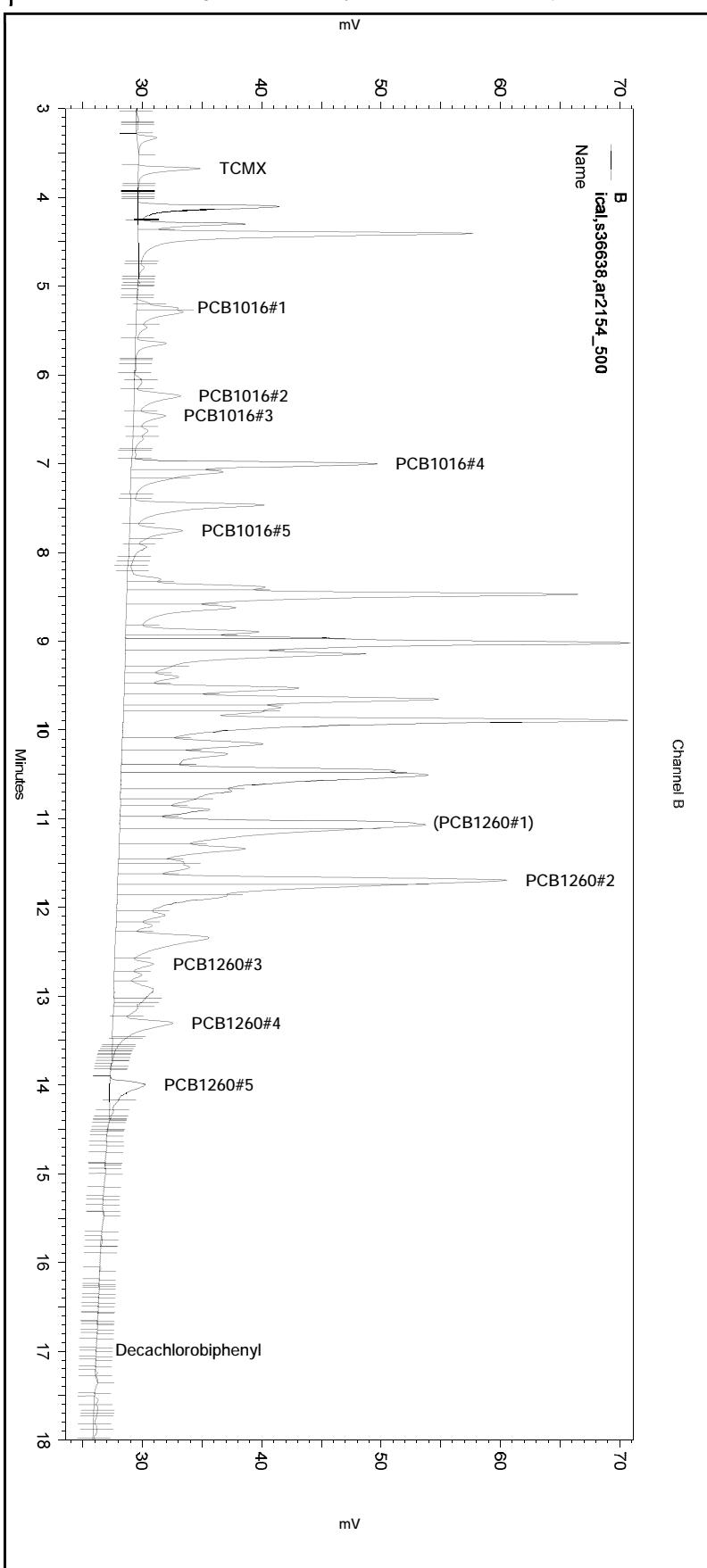
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-037\_FFC3.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s36638,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-037  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 37 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:17:02 AM  
Analysis Date: 8/17/2018 4:40:58 AM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-037\_FFC3.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s36639,ar2154\_1000**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-038  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 38 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:45:01 AM  
Analysis Date: 8/17/2018 12:04:45 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

A Results

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.067	7.070	277736	1000.000 CAL
PCB1254#2	7.660	7.667	366452	1000.000 CAL
PCB1254#3	8.260	8.267	300059	1000.000 CAL
PCB1254#4	8.540	8.547	486564	1000.000 CAL
PCB1254#5	9.187	9.203	377001	1000.000 CAL

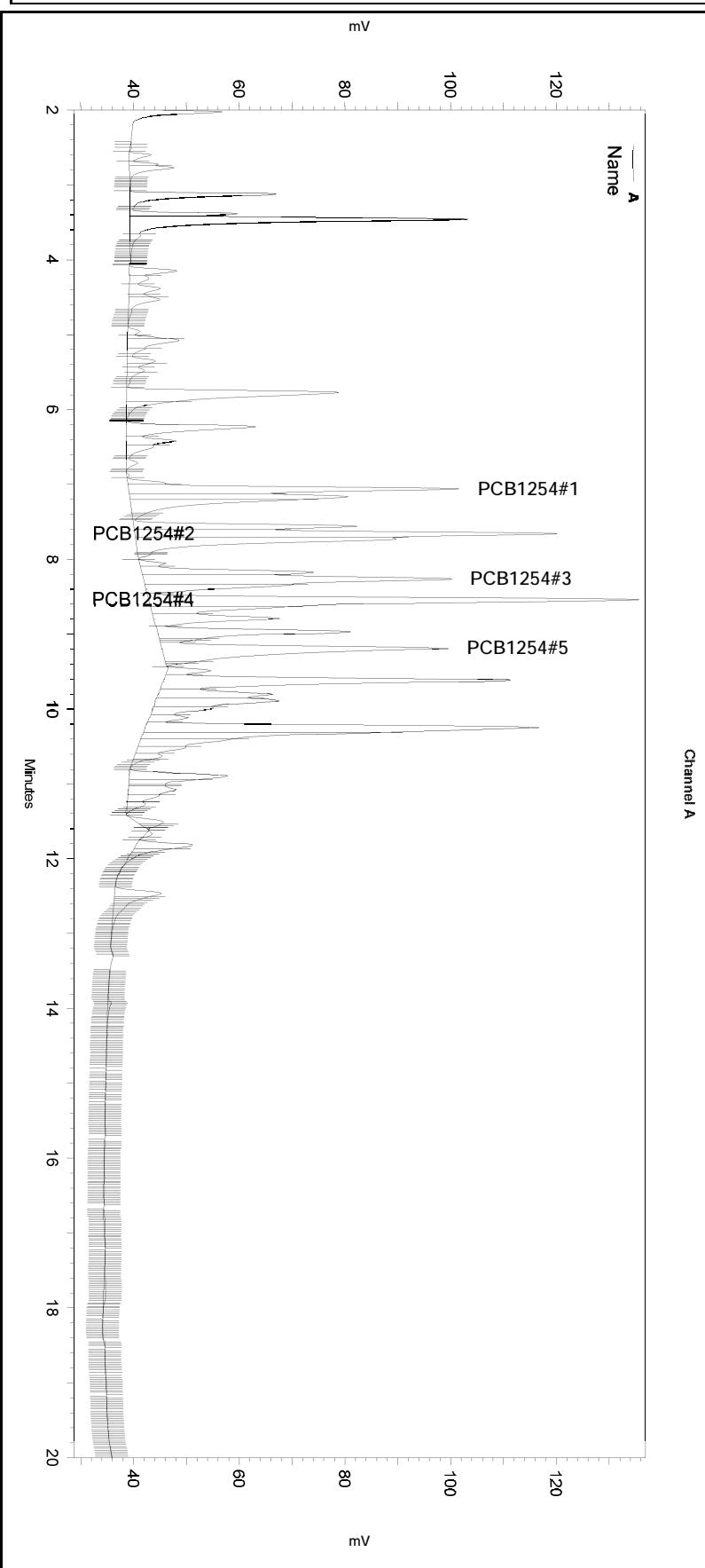
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

B Results

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.477	8.477	312773	1000.000 CAL
PCB1254#2	9.020	9.023	335949	1000.000 CAL
PCB1254#3	9.647	9.647	208611	1000.000 CAL
PCB1254#4	9.883	9.880	425497	1000.000 CAL
PCB1254#5	10.507	10.507	328097	1000.000 CAL

Sample Name: **ical,s36639,ar2154\_1000**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-038  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 38 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:45:01 AM  
Analysis Date: 8/17/2018 12:04:45 PM  
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

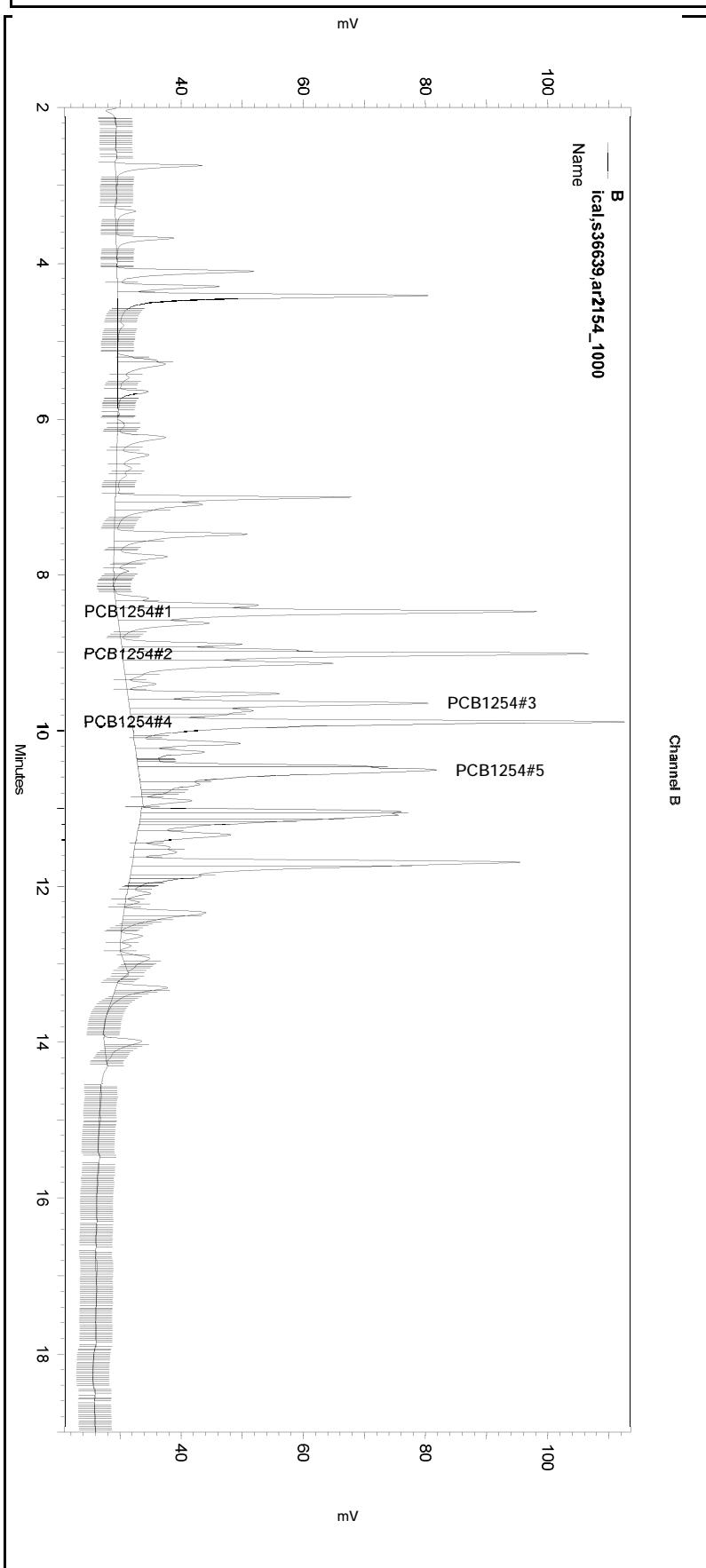
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-038

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	9.435	0	0

Sample Name: **ical,s36639,ar2154\_1000**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-038  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 38 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:45:01 AM  
Analysis Date: 8/17/2018 12:04:45 PM  
Sample Amount: 1



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No items selected for this section  
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No items selected for this section  
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Integration Events  
-----  
Enabled Event Type Start Stop (Minutes) (Minutes) Value  
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Yes Width 0 0 0.1  
Yes Threshold 0 0 2  
Yes Integration Off 0 2.1 0  
Yes Shoulder Sensitivity 3 18 1  
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Manual Integration Fixes  
-----  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-038  
Start Stop  
Enabled Event Type (Minutes) (Minutes) Value  
-----  
Yes Reset Baseline 10.969 0 0

Sample Name: **ical,s36639,ar2154\_1000**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-038  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
 Instrument: GC06 Vial: 38 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
 Run Date: 8/17/2018 4:45:01 AM  
 Analysis Date: 8/17/2018 5:08:59 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.767	2.793	33880	4.303
PCB1016#1	4.143	4.150	40694	113.383
PCB1016#2	5.080	5.083	62710	130.986
PCB1016#3	5.357	5.357	30095	143.174
PCB1016#4		5.813		0.000 BDL
PCB1016#5	6.230	6.240	131909	732.646
PCB1260#1	9.613	9.620	468594	671.463
PCB1260#2	10.250	10.247	616866	1132.523
PCB1260#3	11.067	11.083	81153	264.728
PCB1260#4	11.820	11.813	114408	126.862
PCB1260#5	12.467	12.447	54680	176.456
Decachlorobiphenyl	14.990	15.010	58	0.004

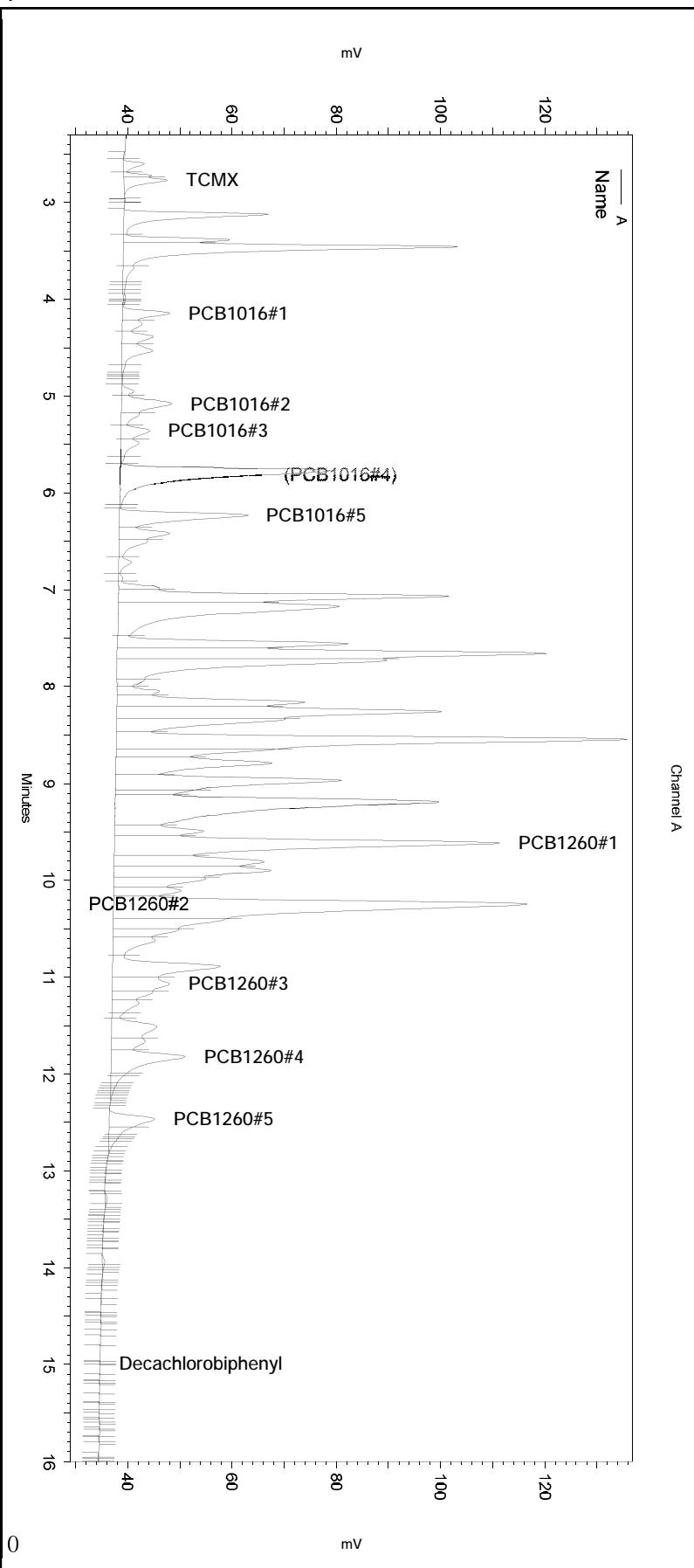
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.673	3.700	33768	5.839
PCB1016#1	5.250	5.260	18745	127.249
PCB1016#2	6.240	6.240	52662	96.641
PCB1016#3	6.463	6.460	30595	128.900
PCB1016#4	7.007	7.017	146990	1087.231
PCB1016#5	7.760	7.760	46781	219.691
PCB1260#1	11.043	11.047	36669	77.083
PCB1260#2	11.690	11.690	260684	562.303
PCB1260#3	12.640	12.640	15789	57.708
PCB1260#4	13.307	13.297	60710	93.520
PCB1260#5	13.993	13.983	48890	143.955
Decachlorobiphenyl	16.957	16.977	4	0.001

Sample Name: ical,s36639,ar2154\_1000  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-038  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 38 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:45:01 AM  
Analysis Date: 8/17/2018 5:08:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

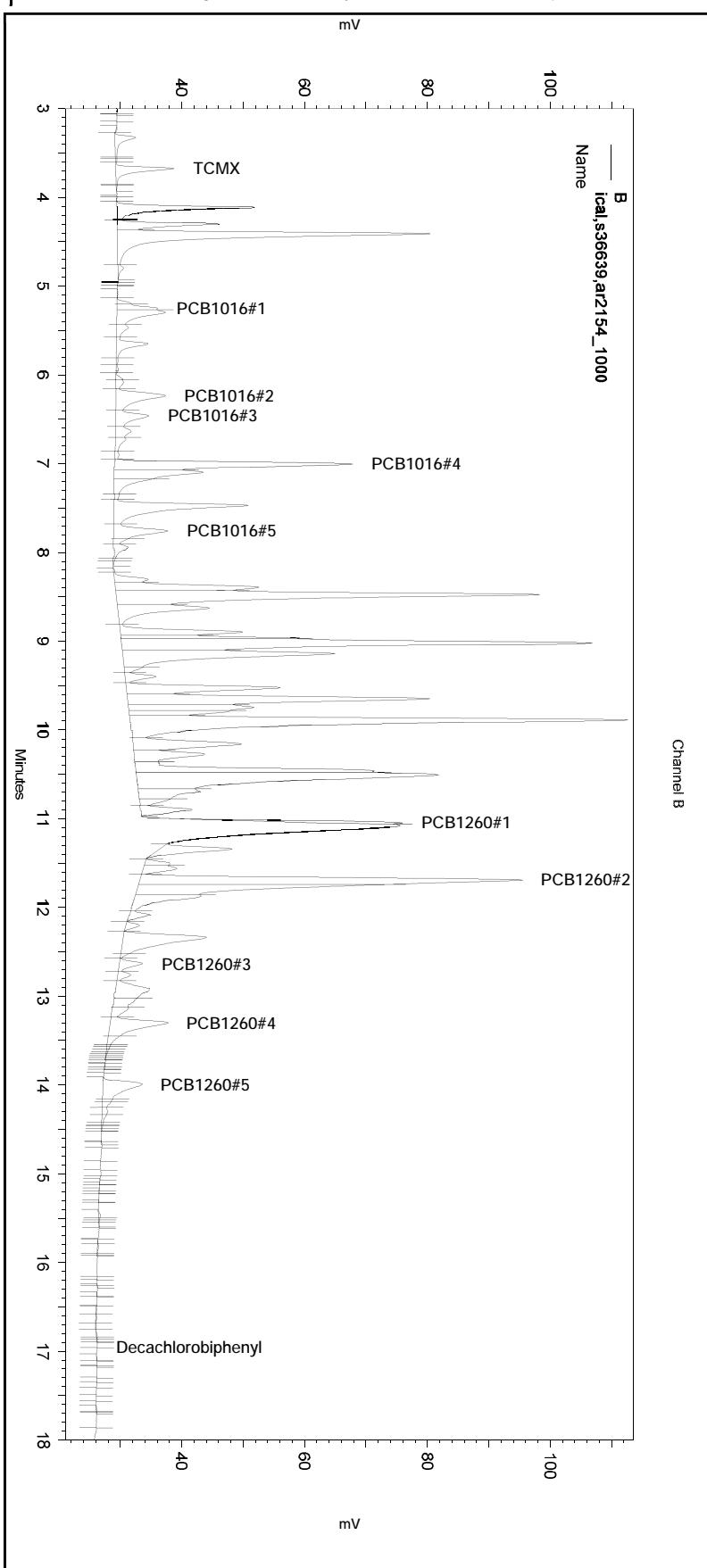
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-038\_FFC4.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s36639,ar2154\_1000**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-038  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 38 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 4:45:01 AM  
Analysis Date: 8/17/2018 5:08:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-038\_FFC4.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **icv,s36641,ultra\_1254**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-040  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 40 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 5:41:02 AM  
Analysis Date: 8/17/2018 3:01:55 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.073	7.070	78597	266.924
PCB1254#2	7.670	7.667	106596	275.399
PCB1254#3	8.270	8.267	80543	259.348
PCB1254#4	8.553	8.547	117556	240.550
PCB1254#5	9.207	9.203	64072	190.037

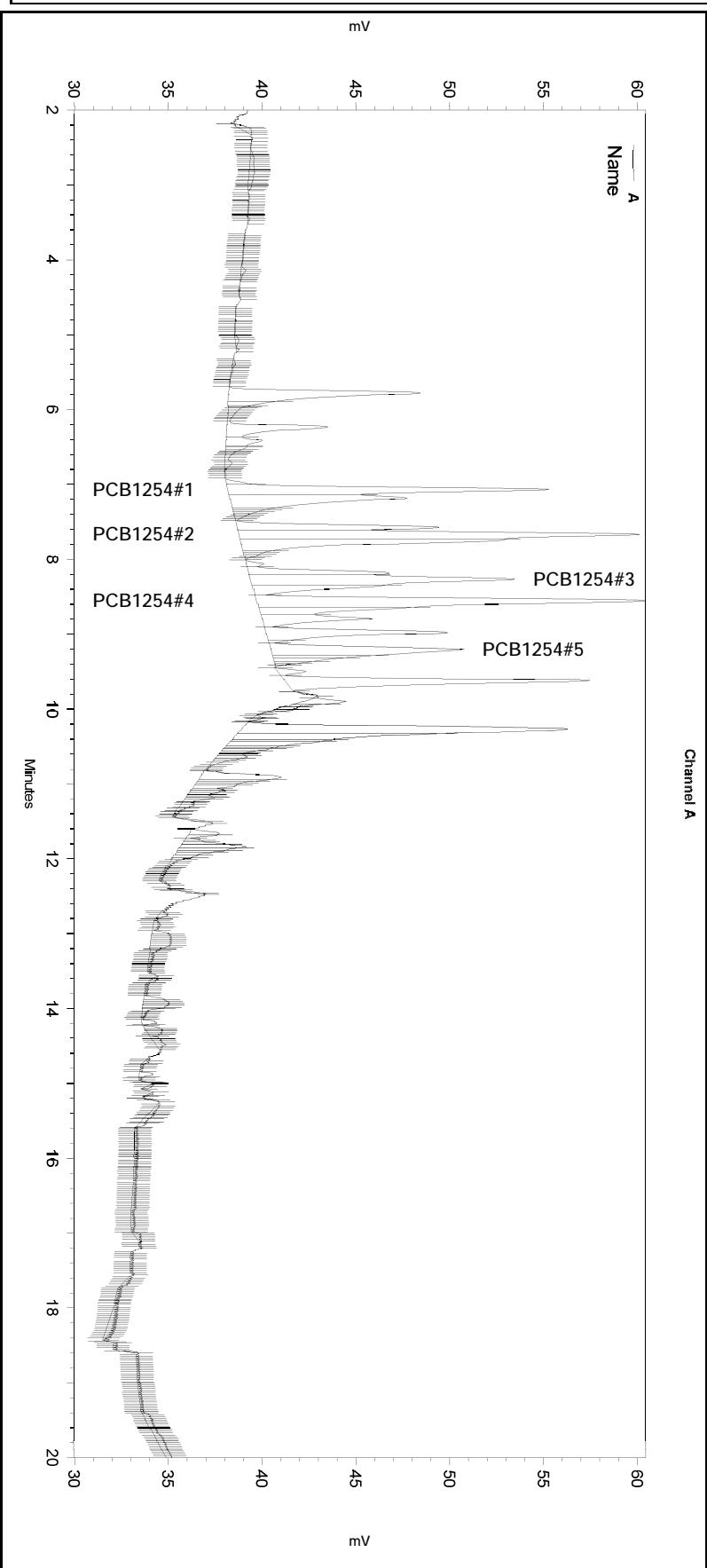
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.483	8.477	87291	266.228
PCB1254#2	9.030	9.023	94066	263.293
PCB1254#3	9.657	9.647	49367	234.120
PCB1254#4	9.893	9.880	91033	214.679
PCB1254#5	10.517	10.507	51843	185.790

Sample Name: **icv,s36641,ultra\_1254**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-040  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 40 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 5:41:02 AM  
Analysis Date: 8/17/2018 3:01:55 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

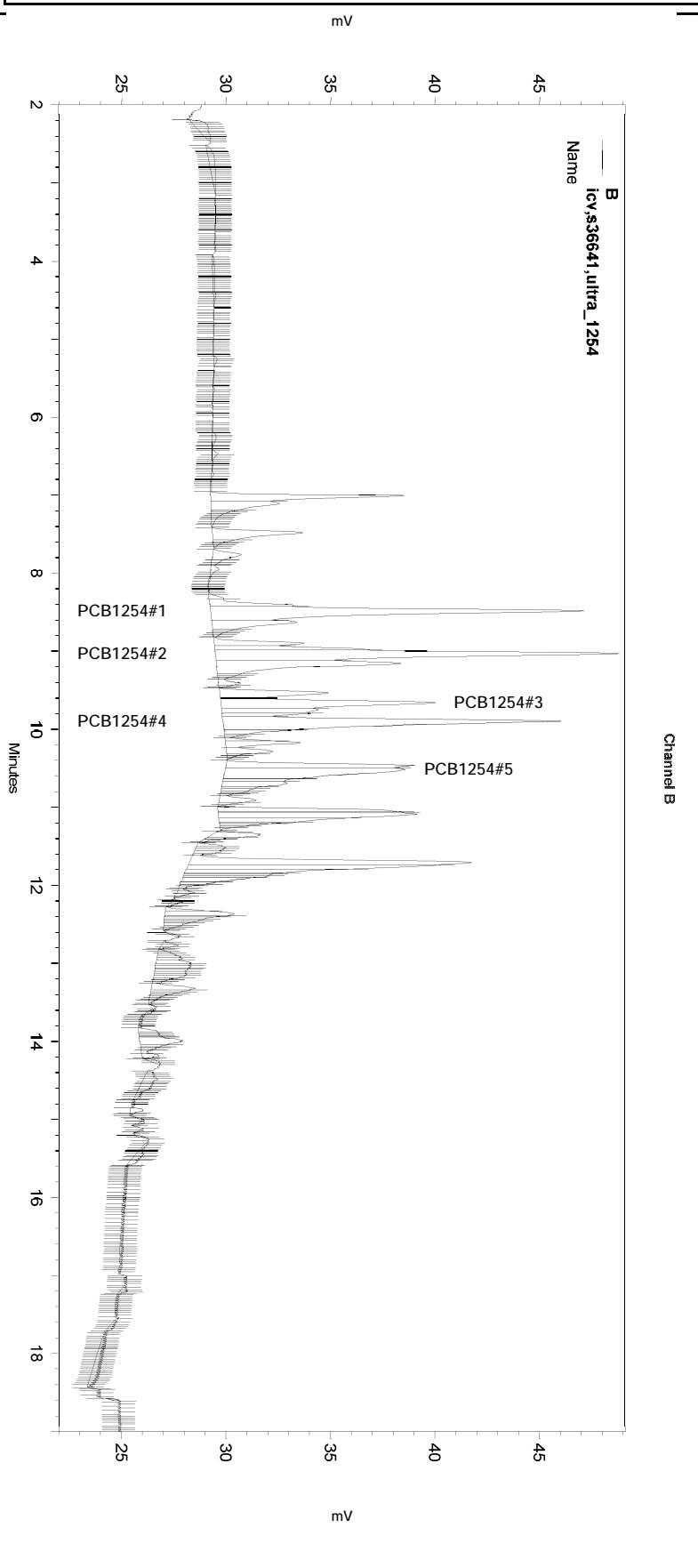
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-040

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	8.005	9.452	0
Yes	Disable End Peak Detection	9.226	9.288	0

Sample Name: **icv,s36641,ultra\_1254**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-040  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 (Offline) Vial: 40 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-228i.met

Software Version 3.1.7  
Run Date: 8/17/2018 5:41:02 AM  
Analysis Date: 8/17/2018 3:01:55 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> B <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

-----> Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-040

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Manual Baseline	10.392	10.987	0	
Yes	Disable End Peak Detection	10.541	10.577	0	
Yes	Disable End Peak Detection	10.577	10.624	0	

Sample Name: **icv,s36641,ultra\_1254**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-040  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
 Instrument: GC06 Vial: 40 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
 Run Date: 8/17/2018 5:41:02 AM  
 Analysis Date: 8/17/2018 6:04:59 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	2.790	2.793	245	0.031
PCB1016#1	4.140	4.150	1121	3.123
PCB1016#2	5.090	5.083	1228	2.565
PCB1016#3	5.357	5.357	99	0.471
PCB1016#4		5.813		0.000 BDL
PCB1016#5	6.233	6.240	31745	176.317
PCB1260#1	9.623	9.620	157048	225.039
PCB1260#2	10.267	10.247	181230	392.304
PCB1260#3	11.090	11.083	13631	44.466
PCB1260#4	11.840	11.813	25481	28.255
PCB1260#5	12.467	12.447	16927	62.936
Decachlorobiphenyl	15.017	15.010	4011	0.308

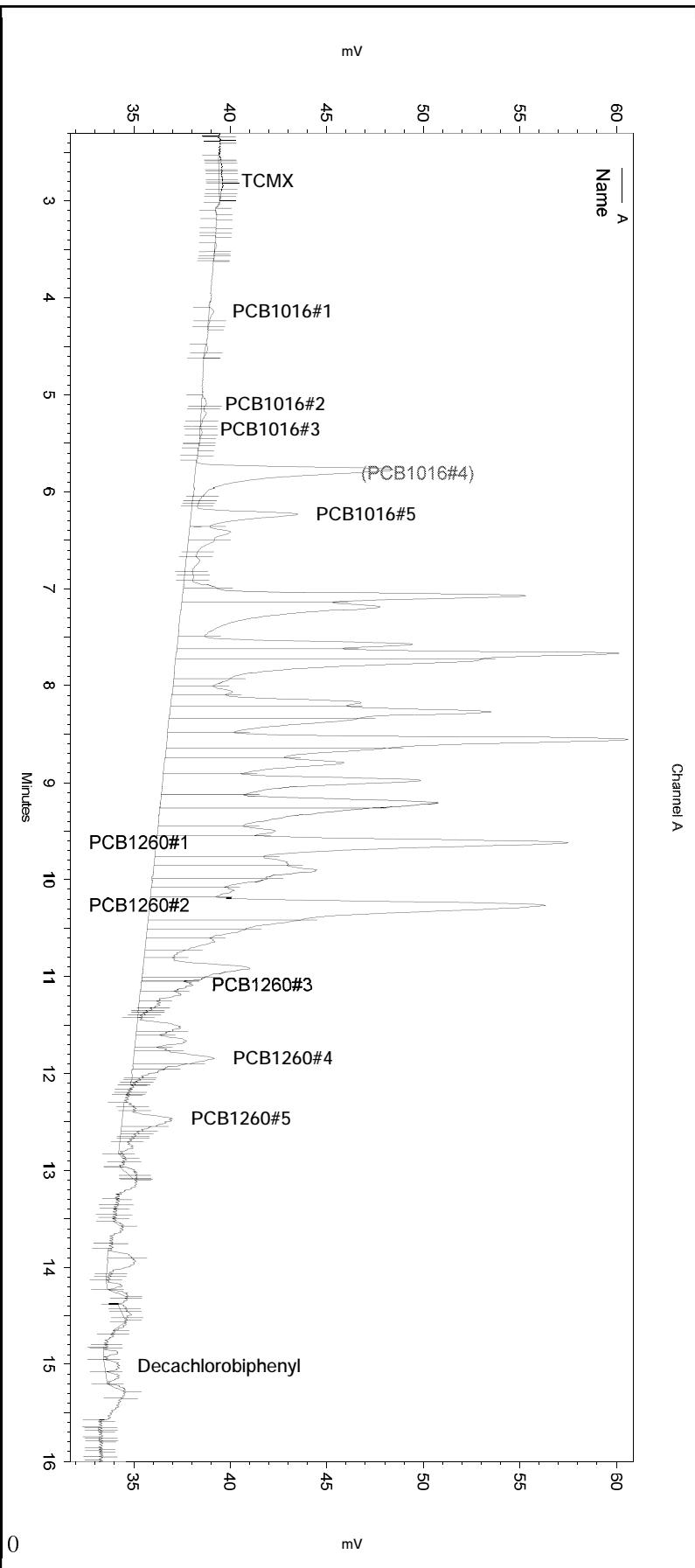
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.690	3.700	29	0.005
PCB1016#1	5.267	5.260	597	4.053
PCB1016#2	6.267	6.240	1161	2.131
PCB1016#3	6.467	6.460	857	3.611
PCB1016#4	7.013	7.017	36246	268.098
PCB1016#5	7.767	7.760	8202	38.518
PCB1260#1		11.047		0.000 BDL
PCB1260#2	11.707	11.690	122249	263.695
PCB1260#3	12.640	12.640	3840	14.035
PCB1260#4	13.317	13.297	9469	14.586
PCB1260#5	13.990	13.983	13217	38.917
Decachlorobiphenyl		16.977		0.000 BDL

Sample Name: **icv,s36641,ultra\_1254**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-040  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 40 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 5:41:02 AM  
Analysis Date: 8/17/2018 6:04:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

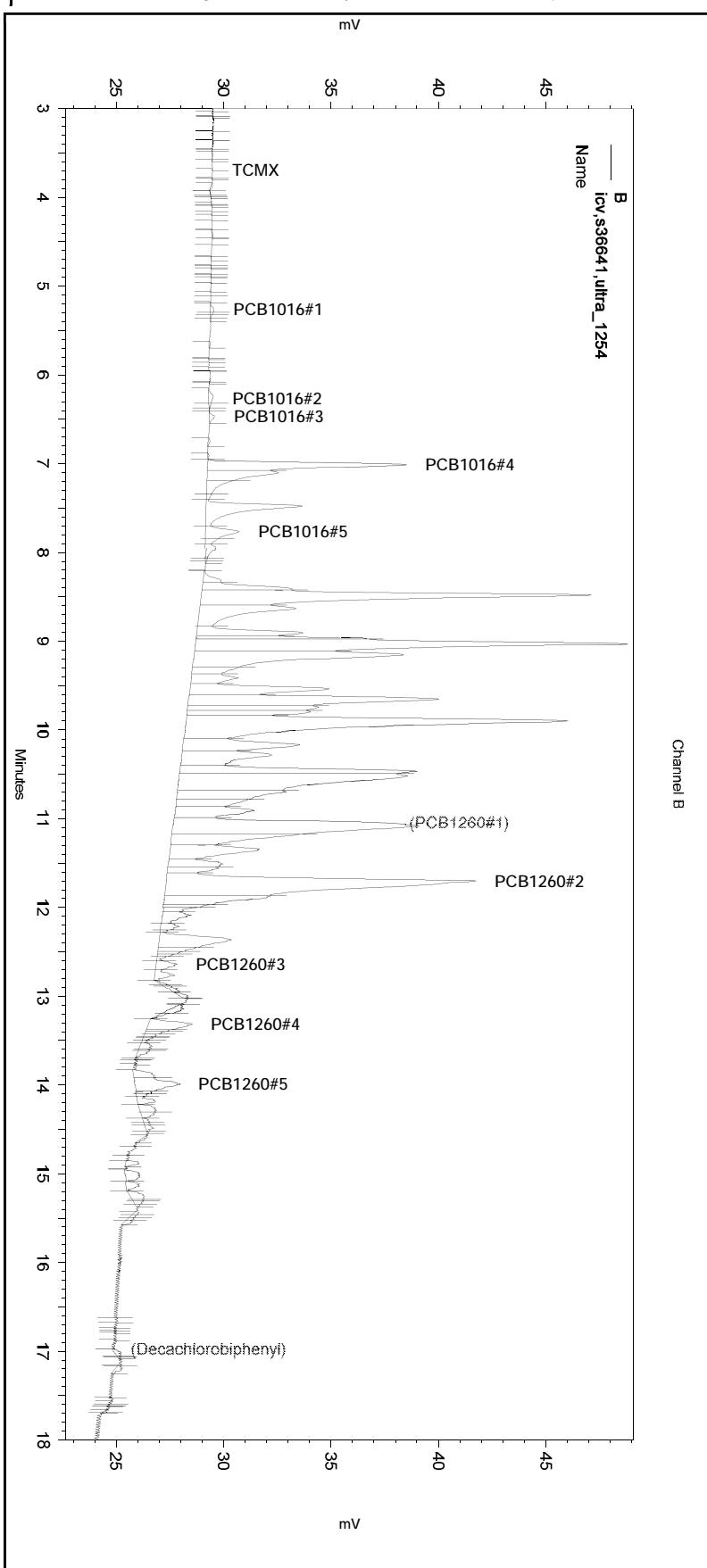
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-040\_FFC6.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **icv,s36641,ultra\_1254**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\228-040  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\228.seq  
Instrument: GC06 Vial: 40 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-228.met

Software Version 3.1.7  
Run Date: 8/17/2018 5:41:02 AM  
Analysis Date: 8/17/2018 6:04:59 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\228-040\_FFC6.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

## ENTHALPY INITIAL CALIBRATION FOR 303137 PCBS Miscell.: EPA 8082

Inst : GC06  
 Calnum : 208344656001  
 Units : pg/uL

Name : ar-1660\_239\_ical  
 Date : 27-AUG-2018 12:48

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	239_010	208344656010	PCB10_2	27-AUG-2018 12:48	S37418
L2	239_011	208344656011	PCB25_5	27-AUG-2018 13:16	S37419
L3	239_012	208344656012	PCB100_20	27-AUG-2018 13:44	S37420
L4	239_013	208344656013	PCB250_50	27-AUG-2018 14:12	S37421
L5	239_014	208344656014	PCB500_100	27-AUG-2018 14:40	S37422
L6	239_015	208344656015	PCB750_150	27-AUG-2018 15:08	S37423
L7	239_016	208344656016	PCB1000_200	27-AUG-2018 15:36	S37424

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	X	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	400.40	380.16	371.42	336.37	292.87	269.24	255.73	AVRG	R		0.00304		329.45	17	.99	20		
Aroclor-1016 Peak # 2	A	491.60	489.28	459.17	434.37	389.45	366.02	349.76	AVRG	R		0.00235		425.66	14	.99	20		
Aroclor-1016 Peak # 3	A	238.80	249.92	246.72	256.09	231.47	221.94	204.74	AVRG	R		0.00424		235.67	8	.99	20		
Aroclor-1016 Peak # 4	A	144.40	182.56	189.41	172.72	152.64	143.62	136.99	AVRG	R		0.00624		160.33	13	.99	20		
Aroclor-1016 Peak # 5	A	202.50	219.44	230.02	218.98	190.20	175.14	163.28	AVRG	R		0.00500		199.94	12	.99	20		
Aroclor-1260 Peak # 1	A	799.10	770.60	796.39	687.21	586.34	526.59	500.65	AVRG	R		0.00150		666.70	19	.99	20		
Aroclor-1260 Peak # 2	A	595.80	600.80	699.24	651.10	574.78	519.03	495.29	AVRG	R		0.00169		590.86	12	.99	20		
Aroclor-1260 Peak # 3	A	419.20	315.76	362.69	326.92	306.29	275.26	264.84	AVRG	R		0.00308		324.42	16	.99	20		
Aroclor-1260 Peak # 4	A	836.60	858.80	950.86	879.64	785.64	695.54	676.56	AVRG	R		0.00123		811.95	12	.99	20		
Aroclor-1260 Peak # 5	A	368.80	385.40	458.77	440.42	392.05	349.64	342.72	AVRG	R		0.00256		391.11	11	.99	20		
Decachlorobiphenyl	A	11241	9854.2	10008	8464.5	7287.4	6188.9	6024.2	QUAD	A	23613.6	8054.06	-11.3052	8438.2	0.996	.99	20		
Aroclor-1016 Peak # 1	B	181.90	172.56	172.59	165.82	154.07	156.17	146.04	AVRG	R		0.00609		164.17	8	.99	20		
Aroclor-1016 Peak # 2	B	610.00	617.80	656.88	657.69	574.85	541.53	539.52	AVRG	R		0.00167		599.75	8	.99	20		
Aroclor-1016 Peak # 3	B	301.70	293.80	289.88	293.27	252.70	238.71	239.63	AVRG	R		0.00367		272.81	10	.99	20		
Aroclor-1016 Peak # 4	B	165.40	160.00	167.01	167.36	149.52	139.75	136.97	AVRG	R		0.00645		155.15	8	.99	20		
Aroclor-1016 Peak # 5	B	261.20	261.28	274.73	269.24	231.75	226.31	217.75	AVRG	R		0.00402		248.89	9	.99	20		
Aroclor-1260 Peak # 1	B	601.20	572.04	682.05	655.93	576.04	532.17	501.08	AVRG	R		0.00170		588.64	11	.99	20		
Aroclor-1260 Peak # 2	B	555.00	577.28	626.95	616.72	574.23	539.99	495.02	AVRG	R		0.00176		569.31	8	.99	20		
Aroclor-1260 Peak # 3	B	455.00	326.56	359.89	355.82	333.43	305.55	289.81	AVRG	R		0.00289		346.58	16	.99	20		
Aroclor-1260 Peak # 4	B	698.10	684.00	930.36	879.08	780.53	706.90	692.86	AVRG	R		0.00130		767.40	13	.99	20		
Aroclor-1260 Peak # 5	B	360.00	410.00	511.78	462.95	434.78	392.18	393.06	AVRG	R		0.00236		423.54	12	.99	20		
Decachlorobiphenyl	B	11433	9980.4	10463	9456.3	8187.2	7004.6	6817.8	AVRG	R		1.11E-4		9049.0	19	.99	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1016 Peak # 1	A	10.000	<b>22</b>	25.000	15	100.00	13	250.00	2	500.00	-11	750.00	-18	1000.0	<b>-22</b>
Aroclor-1016 Peak # 2	A	10.000	15	25.000	15	100.00	8	250.00	2	500.00	-9	750.00	-14	1000.0	-18
Aroclor-1016 Peak # 3	A	10.000	1	25.000	6	100.00	5	250.00	9	500.00	-2	750.00	-6	1000.0	-13
Aroclor-1016 Peak # 4	A	10.000	-10	25.000	14	100.00	18	250.00	8	500.00	-5	750.00	-10	1000.0	-15
Aroclor-1016 Peak # 5	A	10.000	1	25.000	10	100.00	15	250.00	10	500.00	-5	750.00	-12	1000.0	-18
Aroclor-1260 Peak # 1	A	10.000	20	25.000	16	100.00	19	250.00	3	500.00	-12	750.00	<b>-21</b>	1000.0	<b>-25</b>
Aroclor-1260 Peak # 2	A	10.000	1	25.000	2	100.00	18	250.00	10	500.00	-3	750.00	-12	1000.0	-16
Aroclor-1260 Peak # 3	A	10.000	<b>29</b>	25.000	-3	100.00	12	250.00	1	500.00	-6	750.00	-15	1000.0	-18
Aroclor-1260 Peak # 4	A	10.000	3	25.000	6	100.00	17	250.00	8	500.00	-3	750.00	-14	1000.0	-17
Aroclor-1260 Peak # 5	A	10.000	-6	25.000	-1	100.00	17	250.00	13	500.00	0	750.00	-11	1000.0	-12
Decachlorobiphenyl	A	2.0000	<b>-107</b>	5.0000	<b>-36</b>	20.000	13	50.000	7	100.00	2	150.00	-7	200.00	3
Aroclor-1016 Peak # 1	B	10.000	11	25.000	5	100.00	5	250.00	1	500.00	-6	750.00	-5	1000.0	-11
Aroclor-1016 Peak # 2	B	10.000	2	25.000	3	100.00	10	250.00	10	500.00	-4	750.00	-10	1000.0	-10
Aroclor-1016 Peak # 3	B	10.000	11	25.000	8	100.00	6	250.00	7	500.00	-7	750.00	-12	1000.0	-12
Aroclor-1016 Peak # 4	B	10.000	7	25.000	3	100.00	8	250.00	8	500.00	-4	750.00	-10	1000.0	-12
Aroclor-1016 Peak # 5	B	10.000	5	25.000	5	100.00	10	250.00	8	500.00	-7	750.00	-9	1000.0	-13
Aroclor-1260 Peak # 1	B	10.000	2	25.000	-3	100.00	16	250.00	11	500.00	-2	750.00	-10	1000.0	-15
Aroclor-1260 Peak # 2	B	10.000	-3	25.000	1	100.00	10	250.00	8	500.00	1	750.00	-5	1000.0	-13
Aroclor-1260 Peak # 3	B	10.000	<b>31</b>	25.000	-6	100.00	4	250.00	3	500.00	-4	750.00	-12	1000.0	-16
Aroclor-1260 Peak # 4	B	10.000	-9	25.000	-11	100.00	<b>21</b>	250.00	15	500.00	2	750.00	-8	1000.0	-10
Aroclor-1260 Peak # 5	B	10.000	-15	25.000	-3	100.00	<b>21</b>	250.00	9	500.00	3	750.00	-7	1000.0	-7
Decachlorobiphenyl	B	2.0000	<b>26</b>	5.0000	10	20.000	16	50.000	5	100.00	-10	150.00	<b>-23</b>	200.00	<b>-25</b>

JC1 08/27/18 : Corrected automatically drawn baseline in all levels.

Analyst: JC1

Date: 08/27/18

Reviewer: TKM

Date: 08/27/18

X=A: Instrument response = a0 + amount \* a1 + amount^2 \* a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response \* a1 + response^2 \* a2; AVRG=Average response factor; QUAD=Quadratic regression

ENTHALPY 2ND SOURCE CALIBRATION SUMMARY FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Name : ar-1660\_239\_ical  
Calnum : 208344656001 Cal Date : 27-AUG-2018

ICV 208344656018 (239\_018 27-AUG-2018) stds: S37446

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	250.0	277.5	pg/uL	11	15	
Aroclor-1260	A	250.0	281.2	pg/uL	12	15	
Aroclor-1016	B	250.0	262.5	pg/uL	5	15	
Aroclor-1260	B	250.0	278.3	pg/uL	11	15	

Analyst: JC1

Date: 08/27/18

Reviewer: TKM

Date: 08/27/18

Page 1 of 1

208344656001 ICVs

Sample Name: **ical,s37418,pcb10\_2**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 12 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 12:48:19 PM  
 Analysis Date: 8/27/2018 4:20:44 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.283	4.273	15085	2.000 CAL
PCB1016#1	5.963	5.950	4004	10.000 CAL
PCB1016#2	7.043	7.040	4916	10.000 CAL
PCB1016#3	7.357	7.347	2388	10.000 CAL
PCB1016#4	7.867	7.860	1444	10.000 CAL
PCB1016#5	8.337	8.327	2025	10.000 CAL
PCB1260#1	11.920	11.913	7991	10.000 CAL
PCB1260#2	12.573	12.567	5958	10.000 CAL
PCB1260#3	13.440	13.433	4192	10.000 CAL
PCB1260#4	14.187	14.177	8366	10.000 CAL
PCB1260#5	14.843	14.837	3688	10.000 CAL
Decachlorobiphenyl	17.467	17.447	22481	2.000 CAL

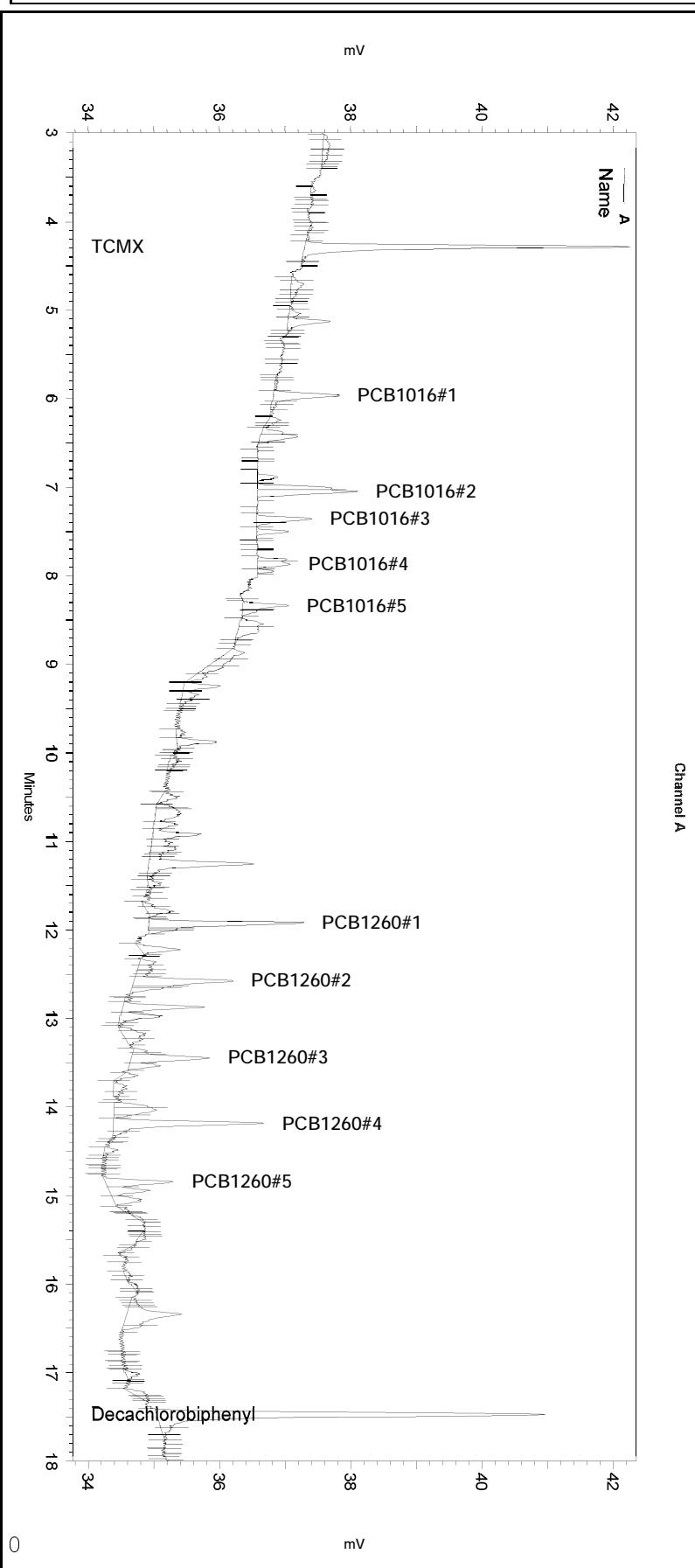
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.530	3.510	14431	2.000 CAL
PCB1016#1	5.057	5.033	1819	10.000 CAL
PCB1016#2	6.020	6.001	6100	10.000 CAL
PCB1016#3	6.240	6.213	3017	10.000 CAL
PCB1016#4	6.783	6.770	1654	10.000 CAL
PCB1016#5	7.517	7.497	2612	10.000 CAL
PCB1260#1	10.787	10.773	6012	10.000 CAL
PCB1260#2	11.430	11.417	5550	10.000 CAL
PCB1260#3	12.367	12.360	4550	10.000 CAL
PCB1260#4	13.030	13.010	6981	10.000 CAL
PCB1260#5	13.713	13.691	3600	10.000 CAL
Decachlorobiphenyl	16.693	16.677	22866	2.000 CAL

Sample Name: **ical,s37418,pcb10\_2**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 12 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 12:48:19 PM  
Analysis Date: 8/27/2018 4:20:44 PM  
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

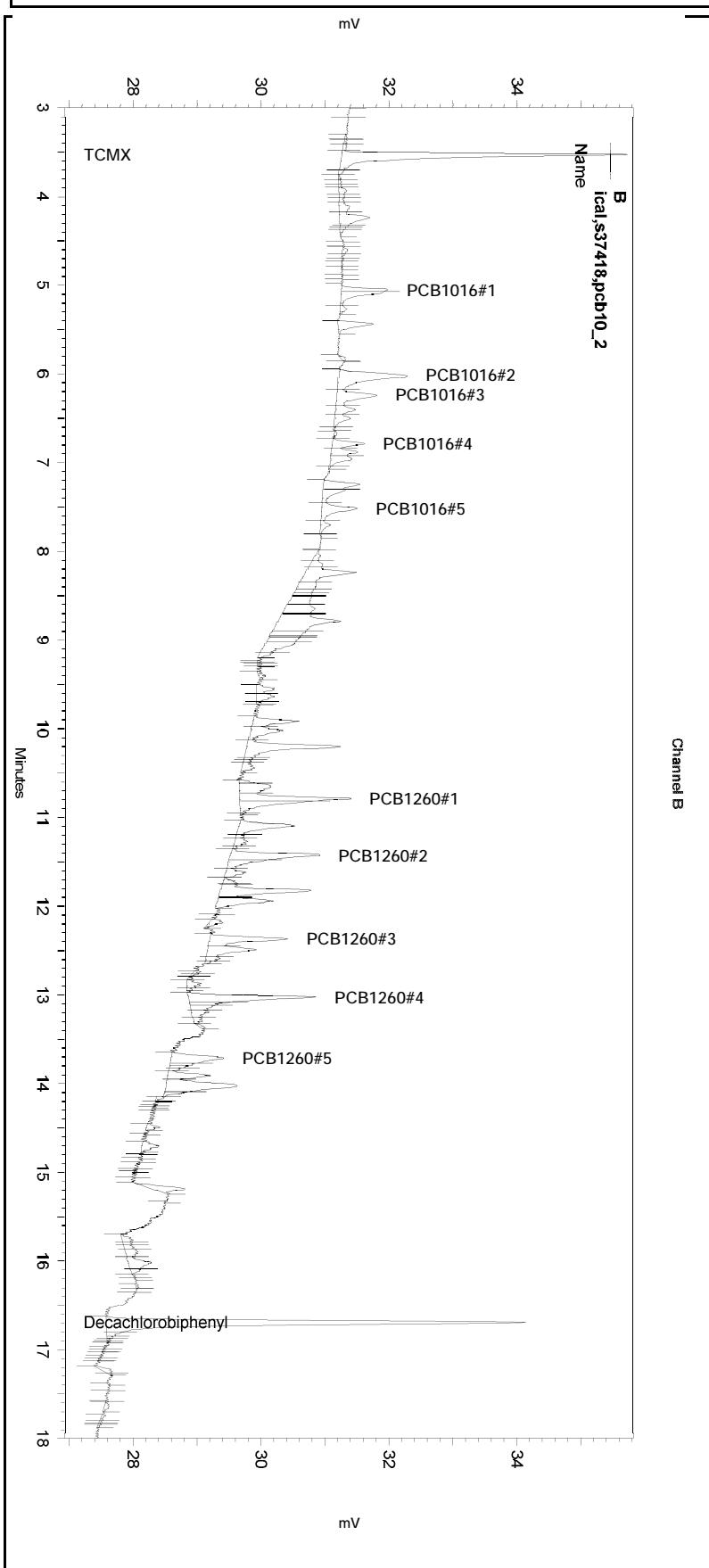
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.498	0	0
Yes	Split Peak	6.026	0	0
Yes	Split Peak	7.397	0	0
Yes	Reset Baseline	7.766	0	0
Yes	Reset Baseline	7.988	0	0
Yes	Reset Baseline	8.015	0	0
Yes	Reset Baseline	8.053	0	0
Yes	Reset Baseline	8.27	0	0
Yes	Split Peak	8.377	0	0
Yes	Reset Baseline	8.459	0	0
Yes	Reset Baseline	11.848	0	0
Yes	Split Peak	11.871	0	0
Yes	Split Peak	11.977	0	0
Yes	Reset Baseline	12.048	0	0
Yes	Reset Baseline	12.058	0	0
Yes	Manual Baseline	12.329	12.743	0
Yes	Split Peak	12.521	0	0
Yes	Split Peak	12.633	0	0
Yes	Reset Baseline	12.701	0	0
Yes	Reset Baseline	13.323	0	0
Yes	Split Peak	13.401	0	0
Yes	Reset Baseline	13.586	0	0
Yes	Reset Baseline	17.4	0	0

Sample Name: **ical,s37418,pcb10\_2**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 12 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 12:48:19 PM  
Analysis Date: 8/27/2018 4:20:44 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	5.073	0	0	
Yes	Reset Baseline	6.625	0	0	
Yes	Reset Baseline	7.072	0	0	
Yes	Split Peak	11.476	0	0	
Yes	Reset Baseline	12.277	0	0	
Yes	Reset Baseline	12.648	0	0	
Yes	Reset Baseline	12.968	0	0	
Yes	Split Peak	13.077	0	0	
Yes	Manual Peak	13.648	13.771	0	
Yes	Manual Baseline	13.648	14.148	0	
Yes	Disable End Peak Detection	13.733	13.755	0	
Yes	Manual Baseline	16.624	16.902	0	
Yes	Split Peak	16.803	0	0	

Sample Name: **ical,s37418,pcb10\_2**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 12 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 12:48:19 PM  
 Analysis Date: 8/27/2018 1:12:16 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.283	4.273	16047	2.038
PCB1016#1	5.963	5.950	4213	11.738
PCB1016#2	7.043	7.040	4916	10.268
PCB1016#3	7.357	7.347	2696	12.826
PCB1016#4	7.867	7.860	1923	10.707
PCB1016#5	8.337	8.327	2729	15.157
PCB1260#1	11.920	11.913	9855	14.122
PCB1260#2	12.573	12.567	5737	0.000
PCB1260#3	13.440	13.433	6221	20.293
PCB1260#4	14.187	14.177	8366	9.277
PCB1260#5	14.843	14.837	3688	22.484
Decachlorobiphenyl	17.467	17.457	25451	1.957

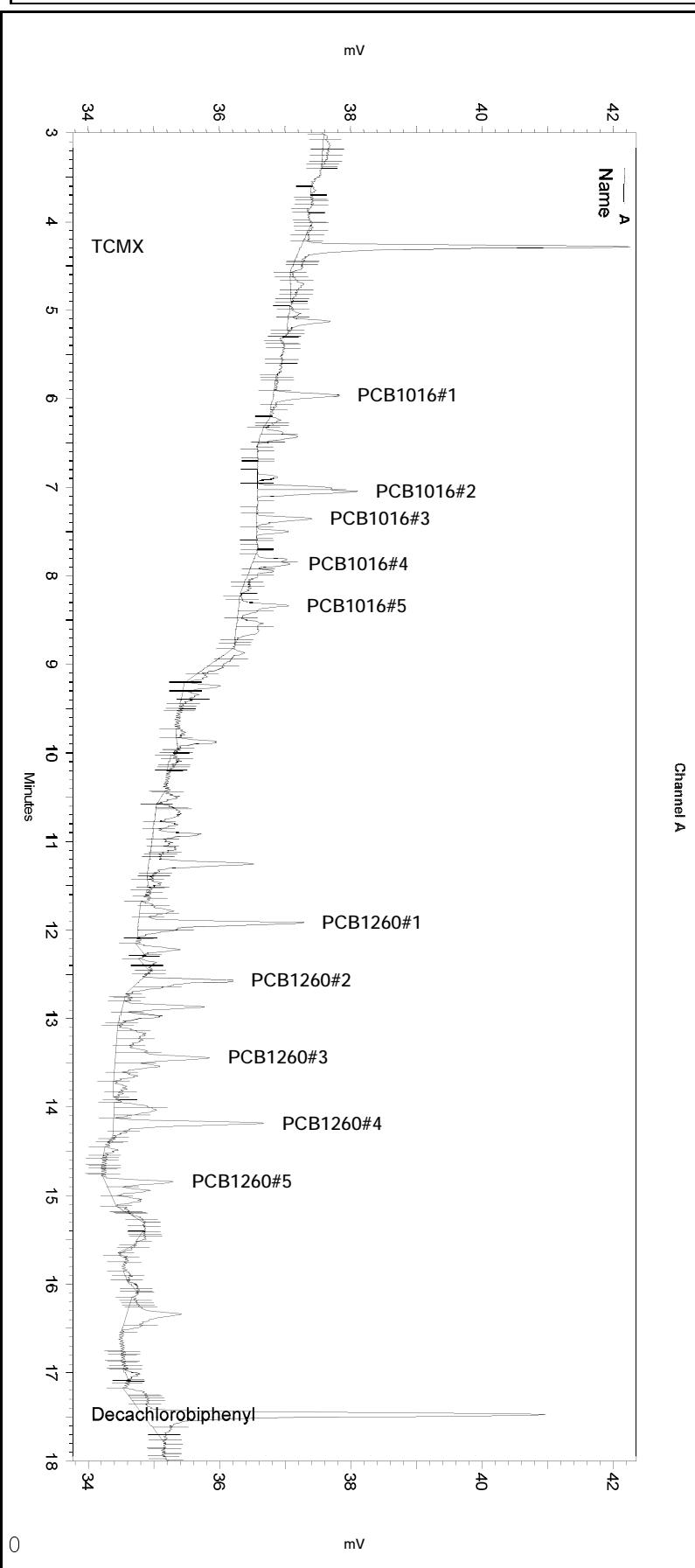
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.530	3.520	14431	2.495
PCB1016#1	5.057	5.043	3956	26.855
PCB1016#2	6.020	6.007	6209	11.394
PCB1016#3	6.240	6.223	3248	13.684
PCB1016#4	6.783	6.773	1995	14.756
PCB1016#5	7.517	7.507	2627	12.337
PCB1260#1	10.787	10.773	6012	12.638
PCB1260#2	11.430	11.417	7139	15.399
PCB1260#3	12.367	12.360	5815	21.254
PCB1260#4	13.030	13.020	8346	12.857
PCB1260#5	13.713	13.697	3084	9.081
Decachlorobiphenyl	16.693	16.687	22697	2.880

Sample Name: **ical,s37418,pcb10\_2**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 12 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 12:48:19 PM  
Analysis Date: 8/27/2018 1:12:16 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Shoulder Sensitivity	0	0	0

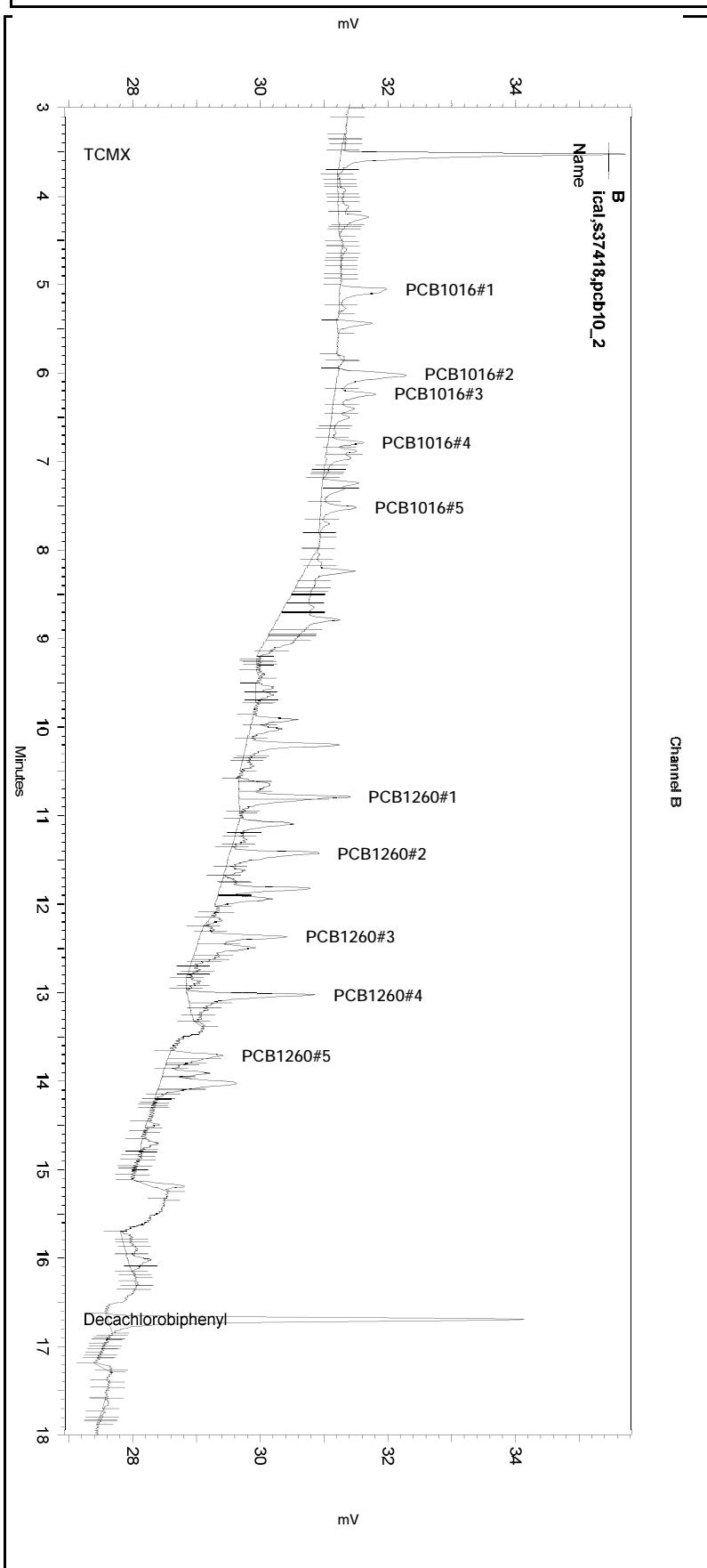
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s37418,pcb10\_2**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 12 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 12:48:19 PM  
Analysis Date: 8/27/2018 1:12:16 PM  
Sample Amount: 1



-----  
--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

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Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-010

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **ical,s37419,pcb25\_5**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 13 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 1:16:20 PM  
 Analysis Date: 8/27/2018 4:21:08 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.277	4.273	36071	5.000 CAL
PCB1016#1	5.957	5.950	9504	25.000 CAL
PCB1016#2	7.040	7.040	12232	25.000 CAL
PCB1016#3	7.350	7.347	6248	25.000 CAL
PCB1016#4	7.860	7.860	4564	25.000 CAL
PCB1016#5	8.330	8.327	5486	25.000 CAL
PCB1260#1	11.920	11.913	19265	25.000 CAL
PCB1260#2	12.573	12.567	15020	25.000 CAL
PCB1260#3	13.440	13.433	7894	25.000 CAL
PCB1260#4	14.183	14.177	21470	25.000 CAL
PCB1260#5	14.843	14.837	9635	25.000 CAL
Decachlorobiphenyl	17.467	17.447	49271	5.000 CAL

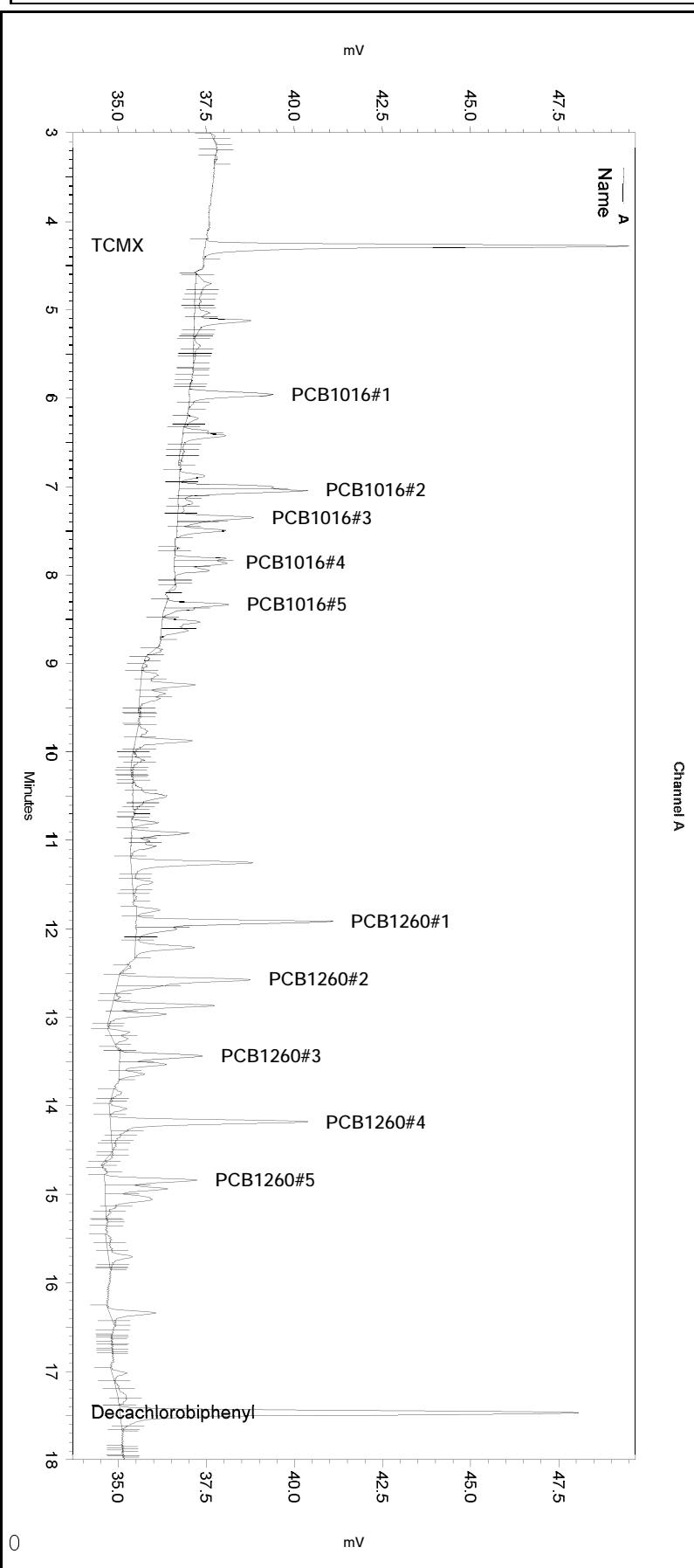
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.523	3.510	35357	5.000 CAL
PCB1016#1	5.047	5.033	4314	25.000 CAL
PCB1016#2	6.017	6.001	15445	25.000 CAL
PCB1016#3	6.233	6.213	7345	25.000 CAL
PCB1016#4	6.780	6.770	4000	25.000 CAL
PCB1016#5	7.510	7.497	6532	25.000 CAL
PCB1260#1	10.780	10.773	14301	25.000 CAL
PCB1260#2	11.420	11.417	14432	25.000 CAL
PCB1260#3	12.363	12.360	8164	25.000 CAL
PCB1260#4	13.023	13.010	17100	25.000 CAL
PCB1260#5	13.707	13.691	10250	25.000 CAL
Decachlorobiphenyl	16.690	16.677	49902	5.000 CAL

Sample Name: **ical,s37419,pcb25\_5**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 13 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 1:16:20 PM  
Analysis Date: 8/27/2018 4:21:08 PM  
Sample Amount: 1



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No items selected for this section

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#### Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

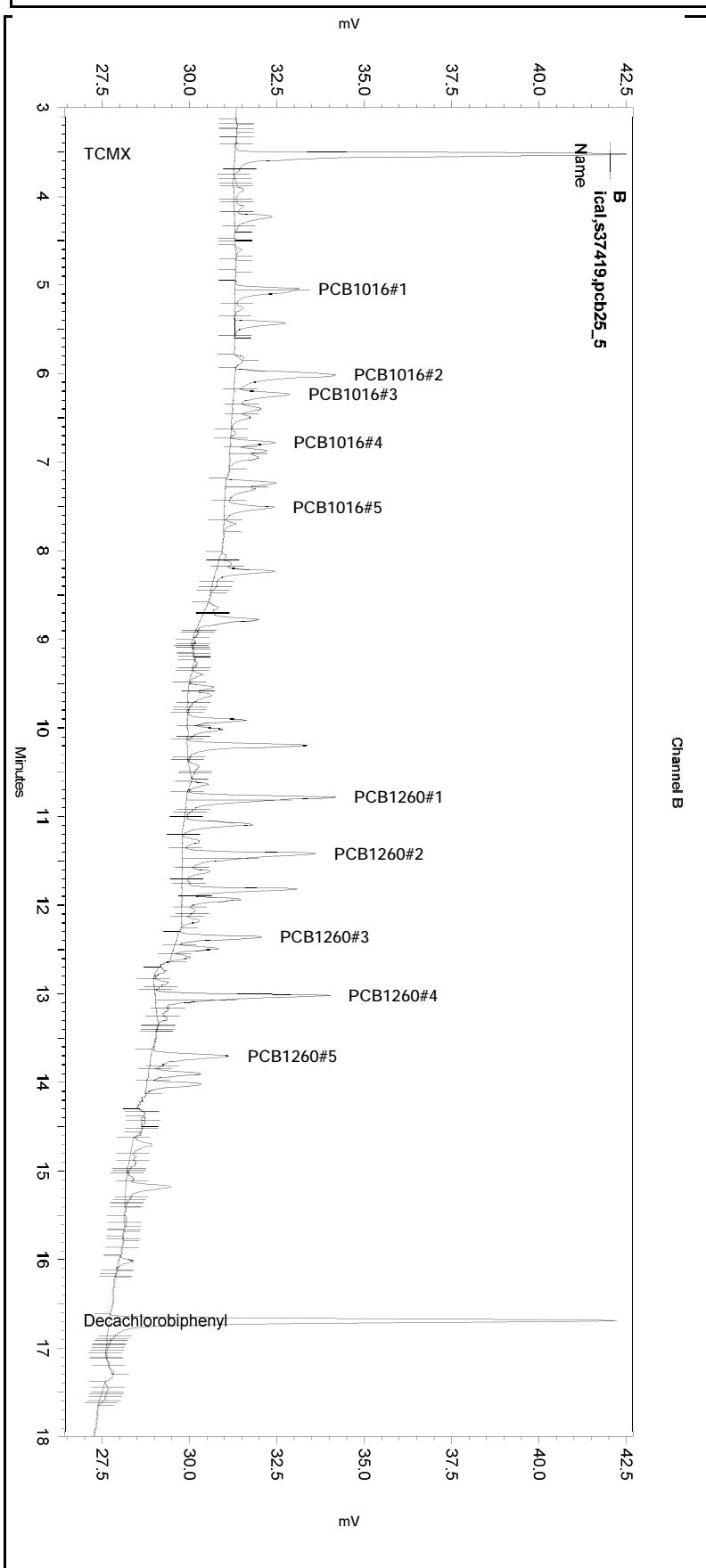
#### Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.122	0	0
Yes	Reset Baseline	6.184	0	0
Yes	Reset Baseline	6.775	0	0
Yes	Split Peak	7.107	0	0
Yes	Split Peak	7.382	0	0
Yes	Reset Baseline	7.575	0	0
Yes	Reset Baseline	7.629	0	0
Yes	Reset Baseline	8.095	0	0
Yes	Reset Baseline	8.256	0	0
Yes	Reset Baseline	8.739	0	0
Yes	Reset Baseline	11.688	0	0
Yes	Reset Baseline	11.738	0	0
Yes	Reset Baseline	12.325	0	0
Yes	Reset Baseline	12.377	0	0
Yes	Reset Baseline	13.303	0	0
Yes	Reset Baseline	13.375	0	0
Yes	Reset Baseline	13.713	0	0
Yes	Reset Baseline	13.782	0	0
Yes	Reset Baseline	17.379	0	0

Sample Name: **ical,s37419,pcb25\_5**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 13 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 1:16:20 PM  
Analysis Date: 8/27/2018 4:21:08 PM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	5.063	0	0	
Yes	Reset Baseline	7.09	0	0	
Yes	Reset Baseline	7.781	0	0	
Yes	Reset Baseline	10.578	0	0	
Yes	Split Peak	11.47	0	0	
Yes	Reset Baseline	12.247	0	0	
Yes	Reset Baseline	12.638	0	0	
Yes	Split Peak	13.069	0	0	
Yes	Reset Baseline	14.142	0	0	

Sample Name: **ical,s37419,pcb25\_5**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 13 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 1:16:20 PM  
 Analysis Date: 8/27/2018 2:44:30 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.277	4.273	36071	4.582
PCB1016#1	5.957	5.950	9844	27.428
PCB1016#2	7.040	7.040	14244	29.752
PCB1016#3	7.350	7.347	9245	43.982
PCB1016#4	7.860	7.860	6280	34.966
PCB1016#5	8.330	8.327	7941	44.106
PCB1260#1	11.920	11.913	22860	32.757
PCB1260#2	12.573	12.567	16207	25.249
PCB1260#3	13.440	13.433	10307	33.622
PCB1260#4	14.183	14.177	21470	23.807
PCB1260#5	14.843	14.837	9635	40.698
Decachlorobiphenyl	17.467	17.447	49889	3.835

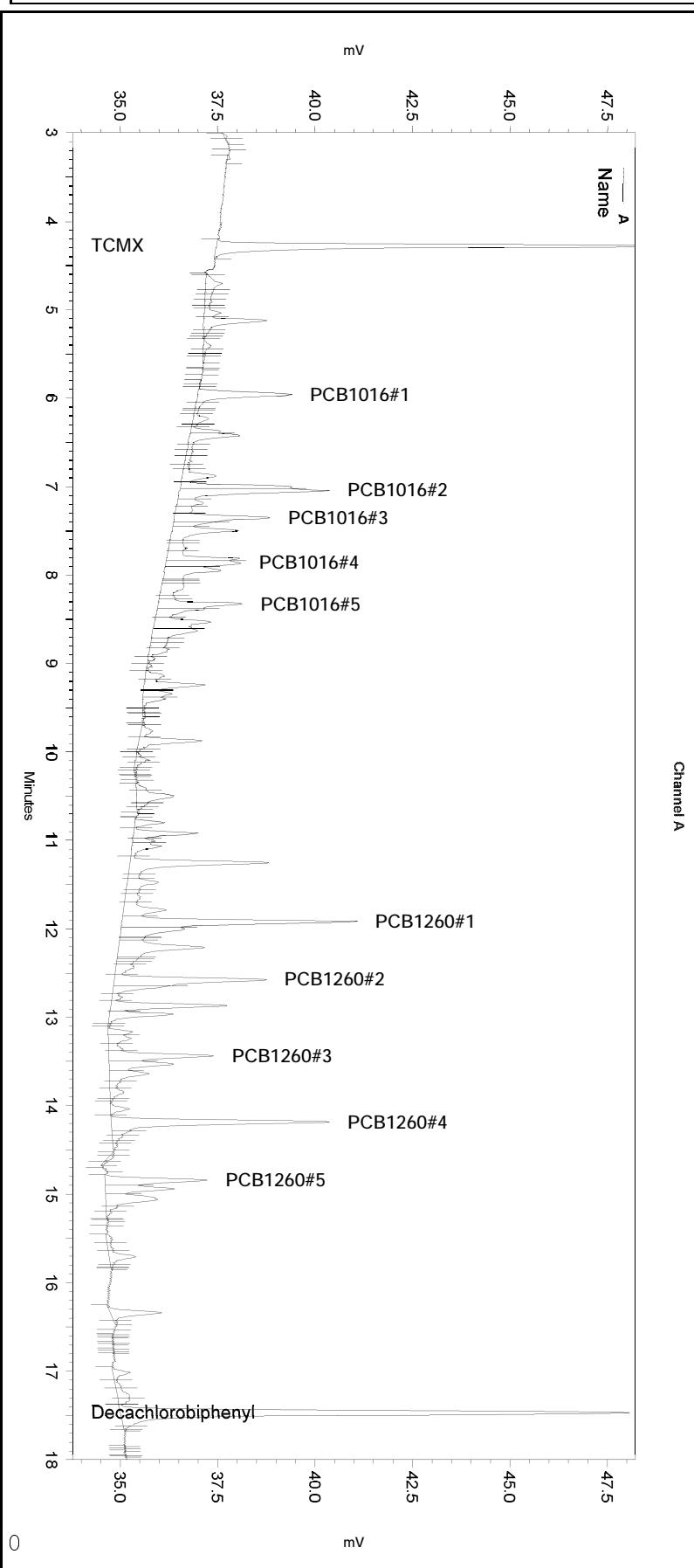
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.523	3.510	35357	6.114
PCB1016#1	5.047	5.033	9480	64.354
PCB1016#2	6.017	6.001	15681	28.776
PCB1016#3	6.233	6.213	7786	32.803
PCB1016#4	6.780	6.770	4679	34.609
PCB1016#5	7.510	7.497	8650	40.622
PCB1260#1	10.780	10.773	16191	34.036
PCB1260#2	11.420	11.417	24723	53.328
PCB1260#3	12.363	12.360	13877	50.720
PCB1260#4	13.023	13.010	21024	32.386
PCB1260#5	13.707	13.691	10517	30.967
Decachlorobiphenyl	16.690	16.677	49902	6.333

Sample Name: **ical,s37419,pcb25\_5**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 13 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 1:16:20 PM  
Analysis Date: 8/27/2018 2:44:30 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

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Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

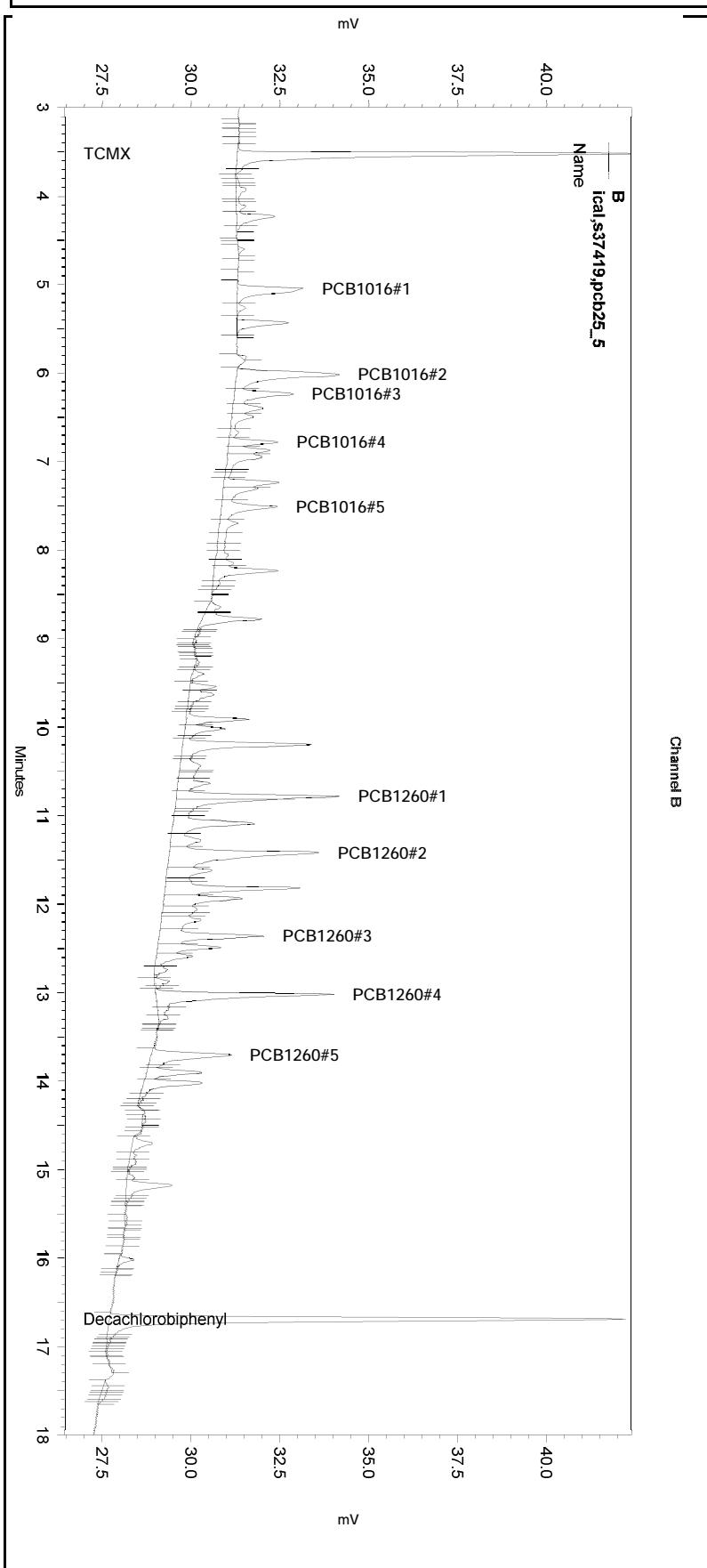
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Sample Name: **ical,s37419,pcb25\_5**  
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Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 1:16:20 PM  
Analysis Date: 8/27/2018 2:44:30 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

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Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-011

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **ical,s37420,pcb100\_20**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 14 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 1:44:19 PM  
 Analysis Date: 8/27/2018 4:21:18 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.273	4.273	141905	20.000 CAL
PCB1016#1	5.953	5.950	37142	100.000 CAL
PCB1016#2	7.040	7.040	45917	100.000 CAL
PCB1016#3	7.347	7.347	24672	100.000 CAL
PCB1016#4	7.860	7.860	18941	100.000 CAL
PCB1016#5	8.330	8.327	23002	100.000 CAL
PCB1260#1	11.917	11.913	79639	100.000 CAL
PCB1260#2	12.573	12.567	69924	100.000 CAL
PCB1260#3	13.437	13.433	36269	100.000 CAL
PCB1260#4	14.183	14.177	95086	100.000 CAL
PCB1260#5	14.843	14.837	45877	100.000 CAL
Decachlorobiphenyl	17.463	17.447	200157	20.000 CAL

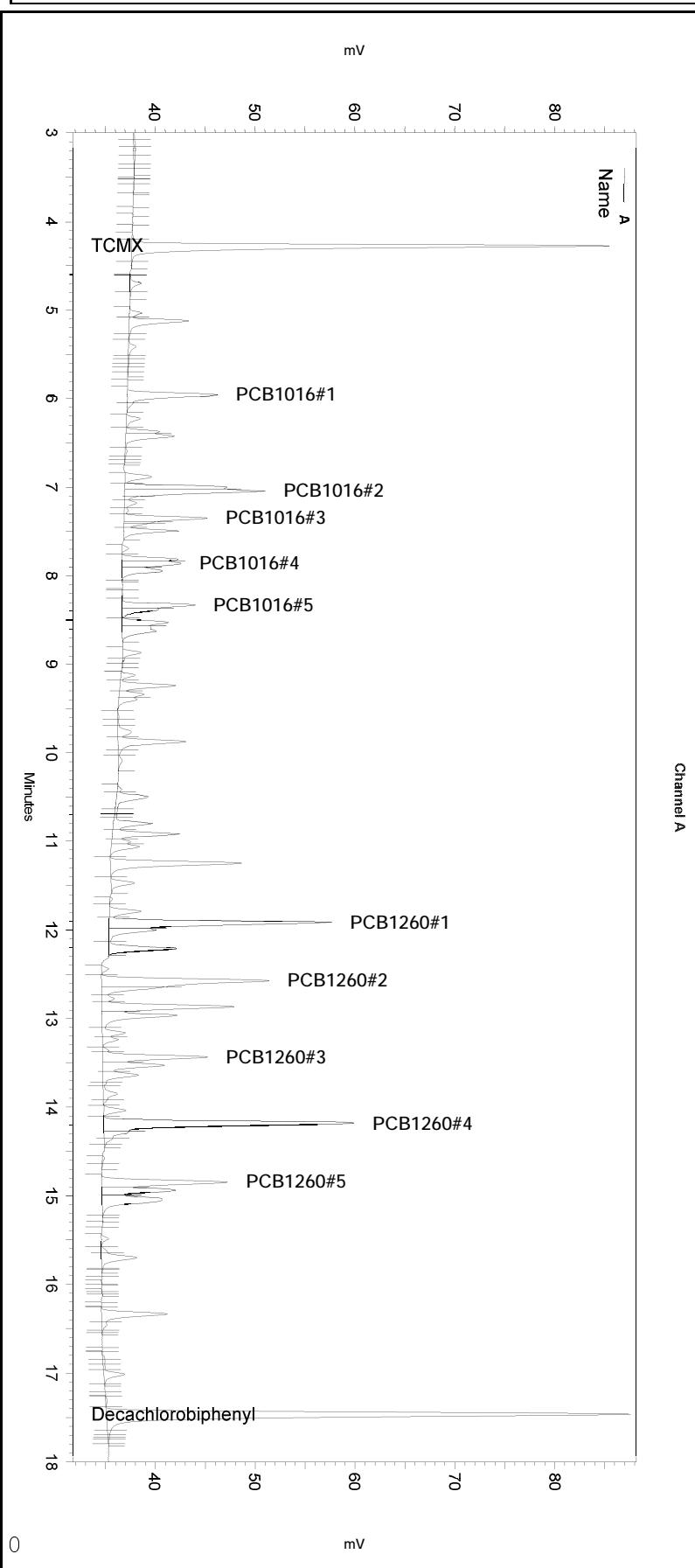
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.520	3.510	138361	20.000 CAL
PCB1016#1	5.043	5.033	17259	100.000 CAL
PCB1016#2	6.010	6.001	65688	100.000 CAL
PCB1016#3	6.227	6.213	28988	100.000 CAL
PCB1016#4	6.777	6.770	16701	100.000 CAL
PCB1016#5	7.510	7.497	27473	100.000 CAL
PCB1260#1	10.777	10.773	68205	100.000 CAL
PCB1260#2	11.417	11.417	62695	100.000 CAL
PCB1260#3	12.363	12.360	35989	100.000 CAL
PCB1260#4	13.020	13.010	93036	100.000 CAL
PCB1260#5	13.703	13.691	51178	100.000 CAL
Decachlorobiphenyl	16.687	16.677	209269	20.000 CAL

Sample Name: **ical,s37420,pcb100\_20**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 14 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 1:44:19 PM  
Analysis Date: 8/27/2018 4:21:18 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

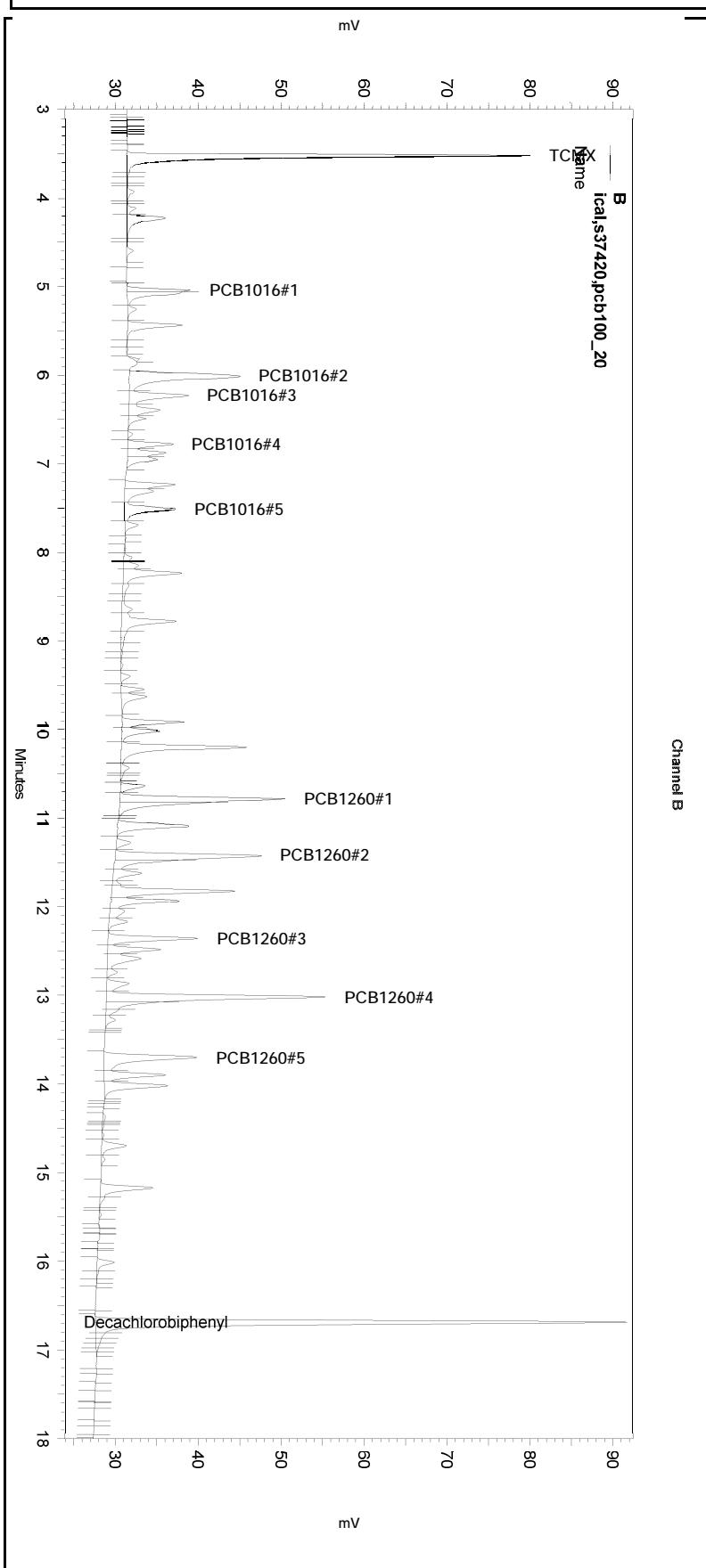
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	4.536	0	0
Yes	Reset Baseline	6.158	0	0
Yes	Reset Baseline	6.818	0	0
Yes	Split Peak	7.105	0	0
Yes	Split Peak	7.388	0	0
Yes	Reset Baseline	7.598	0	0
Yes	Reset Baseline	11.587	0	0
Yes	Reset Baseline	12.287	0	0
Yes	Reset Baseline	12.344	0	0
Yes	Reset Baseline	13.97	0	0
Yes	Reset Baseline	14.463	0	0

Sample Name: **ical,s37420,pcb100\_20**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 14 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 1:44:19 PM  
Analysis Date: 8/27/2018 4:21:18 PM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

-----  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	5.06	0	0	
Yes	Reset Baseline	5.372	0	0	
Yes	Reset Baseline	6.62	0	0	
Yes	Reset Baseline	7.063	0	0	
Yes	Reset Baseline	7.802	0	0	
Yes	Reset Baseline	9.818	0	0	
Yes	Reset Baseline	10.585	0	0	
Yes	Split Peak	11.462	0	0	
Yes	Split Peak	13.076	0	0	
Yes	Split Peak	16.808	0	0	

Sample Name: **ical,s37420,pcb100\_20**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 14 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 1:44:19 PM  
 Analysis Date: 8/27/2018 2:44:39 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.273	4.273	142800	18.138
PCB1016#1	5.953	5.950	37274	103.854
PCB1016#2	7.040	7.040	49070	102.495
PCB1016#3	7.347	7.347	29220	139.011
PCB1016#4	7.860	7.860	18941	105.461
PCB1016#5	8.330	8.327	23002	127.757
PCB1260#1	11.917	11.913	83483	119.625
PCB1260#2	12.573	12.567	70332	154.207
PCB1260#3	13.437	13.433	37254	121.526
PCB1260#4	14.183	14.177	97657	108.288
PCB1260#5	14.843	14.837	45877	150.223
Decachlorobiphenyl	17.463	17.447	200157	15.388

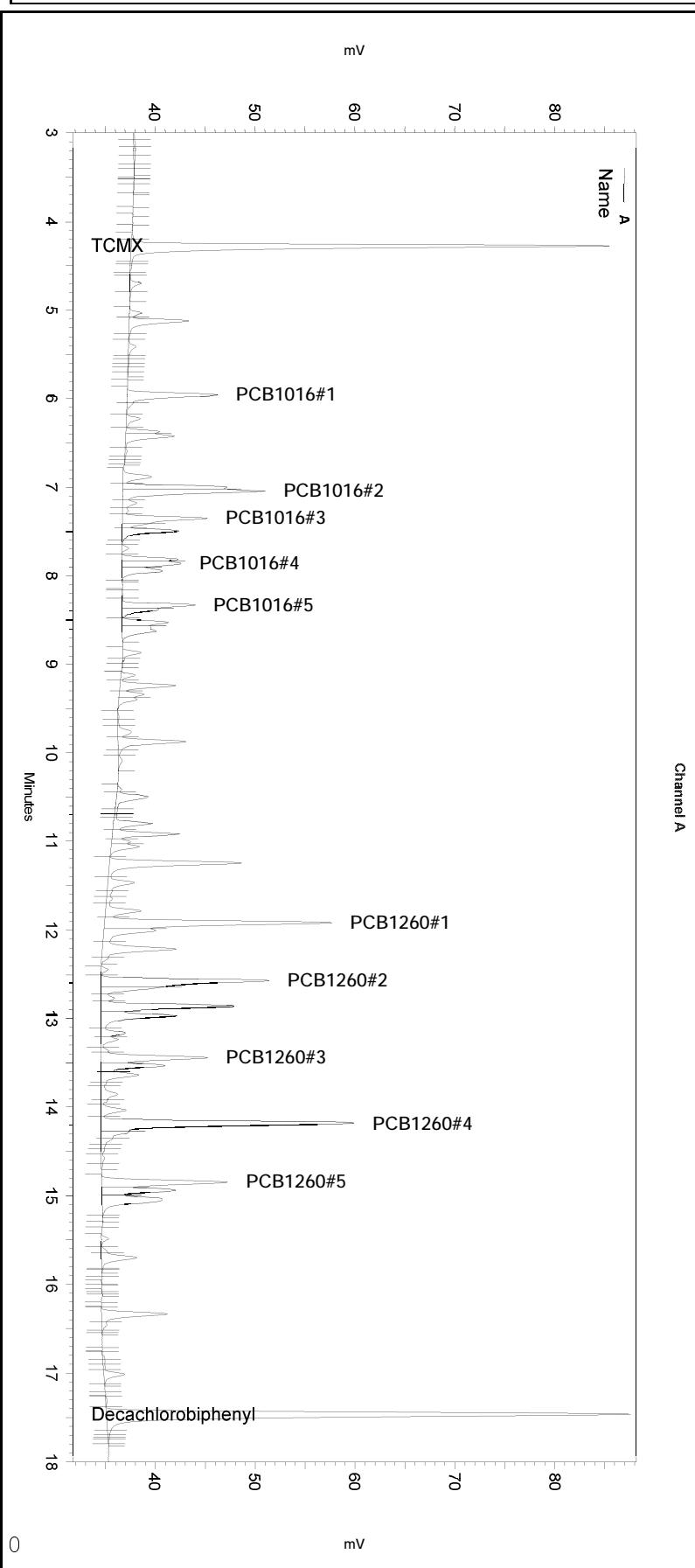
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.520	3.510	138361	23.924
PCB1016#1	5.043	5.033	38510	261.422
PCB1016#2	6.010	6.001	66065	121.237
PCB1016#3	6.227	6.213	29623	124.805
PCB1016#4	6.777	6.770	17774	131.468
PCB1016#5	7.510	7.497	28916	135.794
PCB1260#1	10.777	10.773	73459	154.421
PCB1260#2	11.417	11.417	88155	190.153
PCB1260#3	12.363	12.360	35989	131.538
PCB1260#4	13.020	13.010	108557	167.226
PCB1260#5	13.703	13.691	51178	150.692
Decachlorobiphenyl	16.687	16.677	213103	27.045

Sample Name: **ical,s37420,pcb100\_20**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 14 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 1:44:19 PM  
Analysis Date: 8/27/2018 2:44:39 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

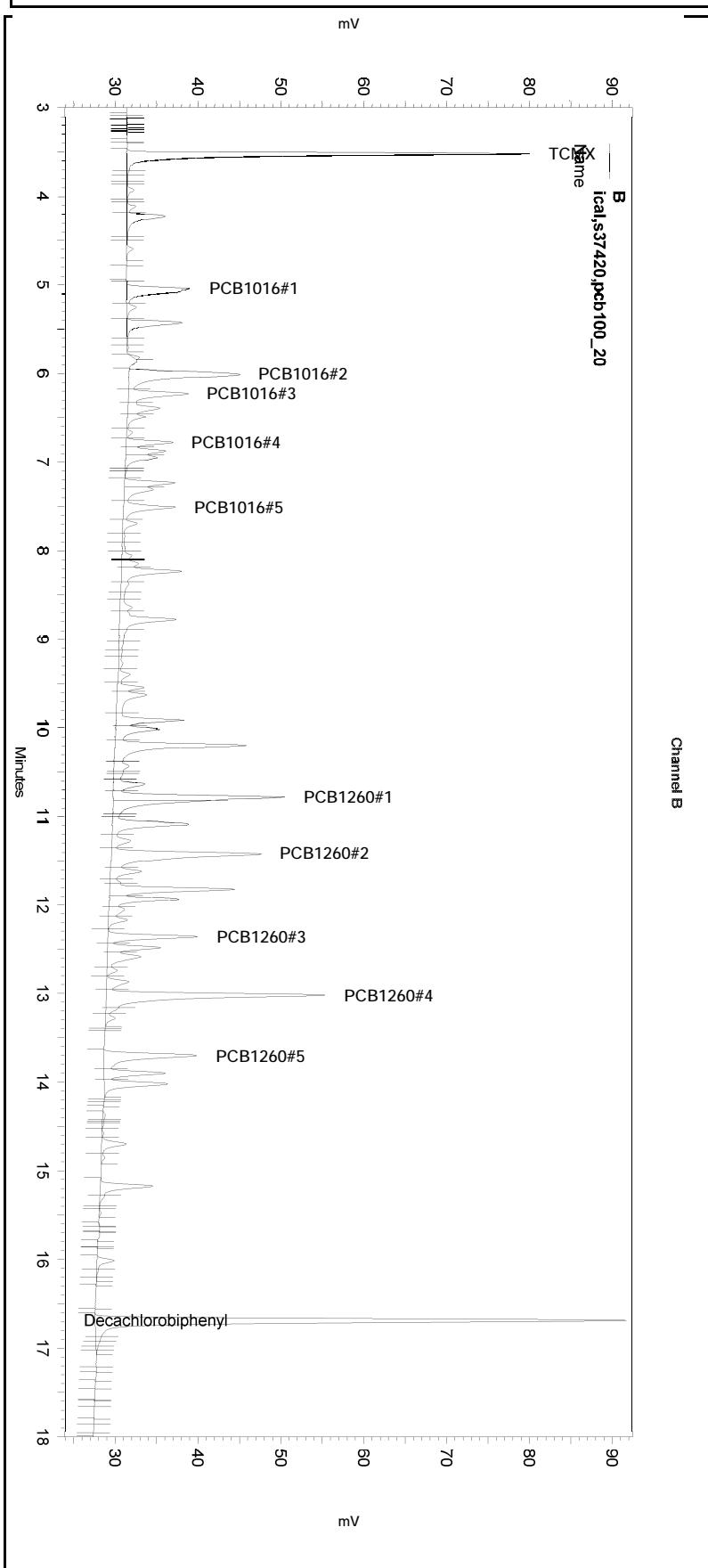
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s37420,pcb100\_20**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 14 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 1:44:19 PM  
Analysis Date: 8/27/2018 2:44:39 PM  
Sample Amount: 1



-----  
--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

-----  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-012

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **ical,s37421,pcb250\_50**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 2:12:20 PM  
 Analysis Date: 8/27/2018 4:21:27 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.267	4.273	340582	50.000 CAL
PCB1016#1	5.943	5.950	84093	250.000 CAL
PCB1016#2	7.030	7.040	108592	250.000 CAL
PCB1016#3	7.340	7.347	64022	250.000 CAL
PCB1016#4	7.850	7.860	43179	250.000 CAL
PCB1016#5	8.320	8.327	54746	250.000 CAL
PCB1260#1	11.907	11.913	171802	250.000 CAL
PCB1260#2	12.563	12.567	162774	250.000 CAL
PCB1260#3	13.427	13.433	81729	250.000 CAL
PCB1260#4	14.173	14.177	219909	250.000 CAL
PCB1260#5	14.833	14.837	110104	250.000 CAL
Decachlorobiphenyl	17.453	17.447	423226	50.000 CAL

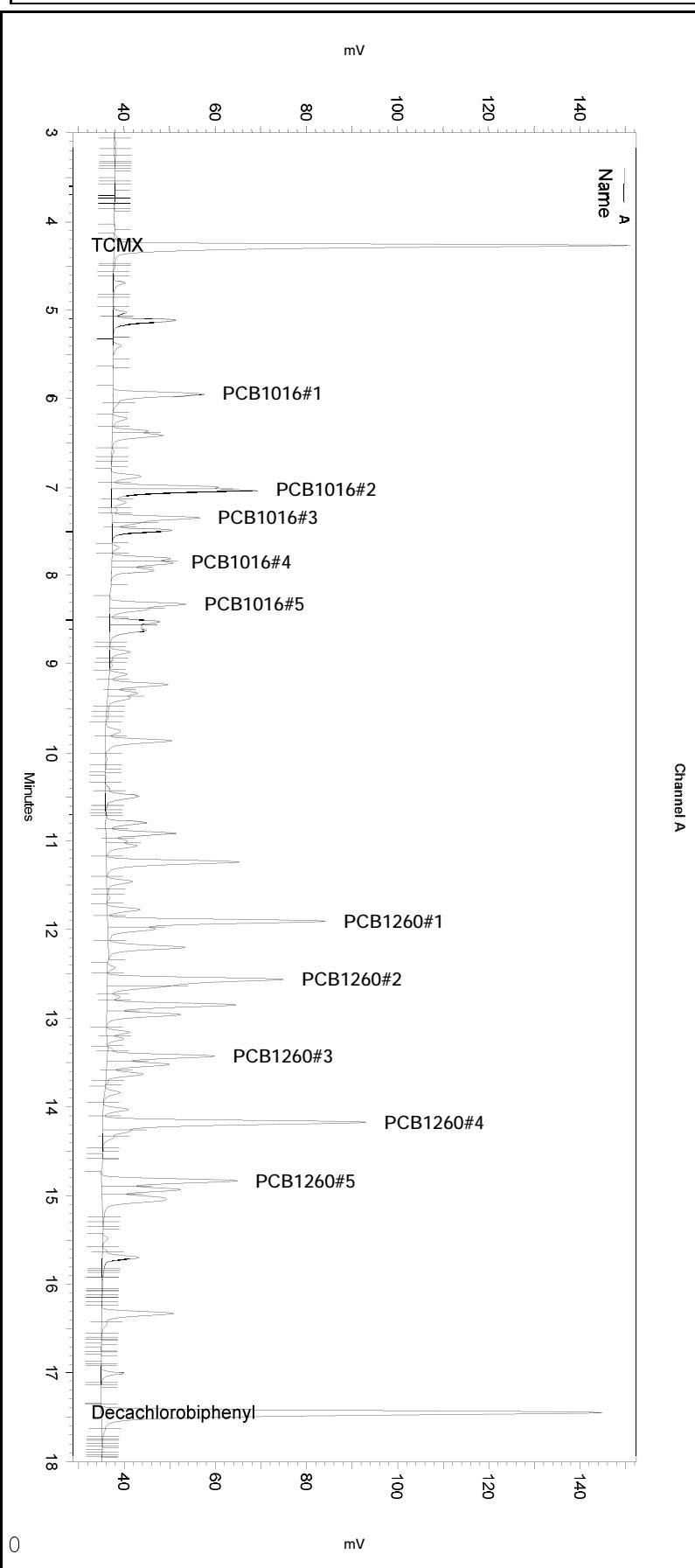
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.513	3.510	339202	50.000 CAL
PCB1016#1	5.033	5.033	41456	250.000 CAL
PCB1016#2	6.000	6.001	164422	250.000 CAL
PCB1016#3	6.217	6.213	73317	250.000 CAL
PCB1016#4	6.767	6.770	41841	250.000 CAL
PCB1016#5	7.500	7.497	67310	250.000 CAL
PCB1260#1	10.767	10.773	163982	250.000 CAL
PCB1260#2	11.407	11.417	154181	250.000 CAL
PCB1260#3	12.353	12.360	88954	250.000 CAL
PCB1260#4	13.010	13.010	219769	250.000 CAL
PCB1260#5	13.690	13.691	115737	250.000 CAL
Decachlorobiphenyl	16.677	16.677	472815	50.000 CAL

Sample Name: **ical,s37421,pcb250\_50**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 2:12:20 PM  
Analysis Date: 8/27/2018 4:21:27 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

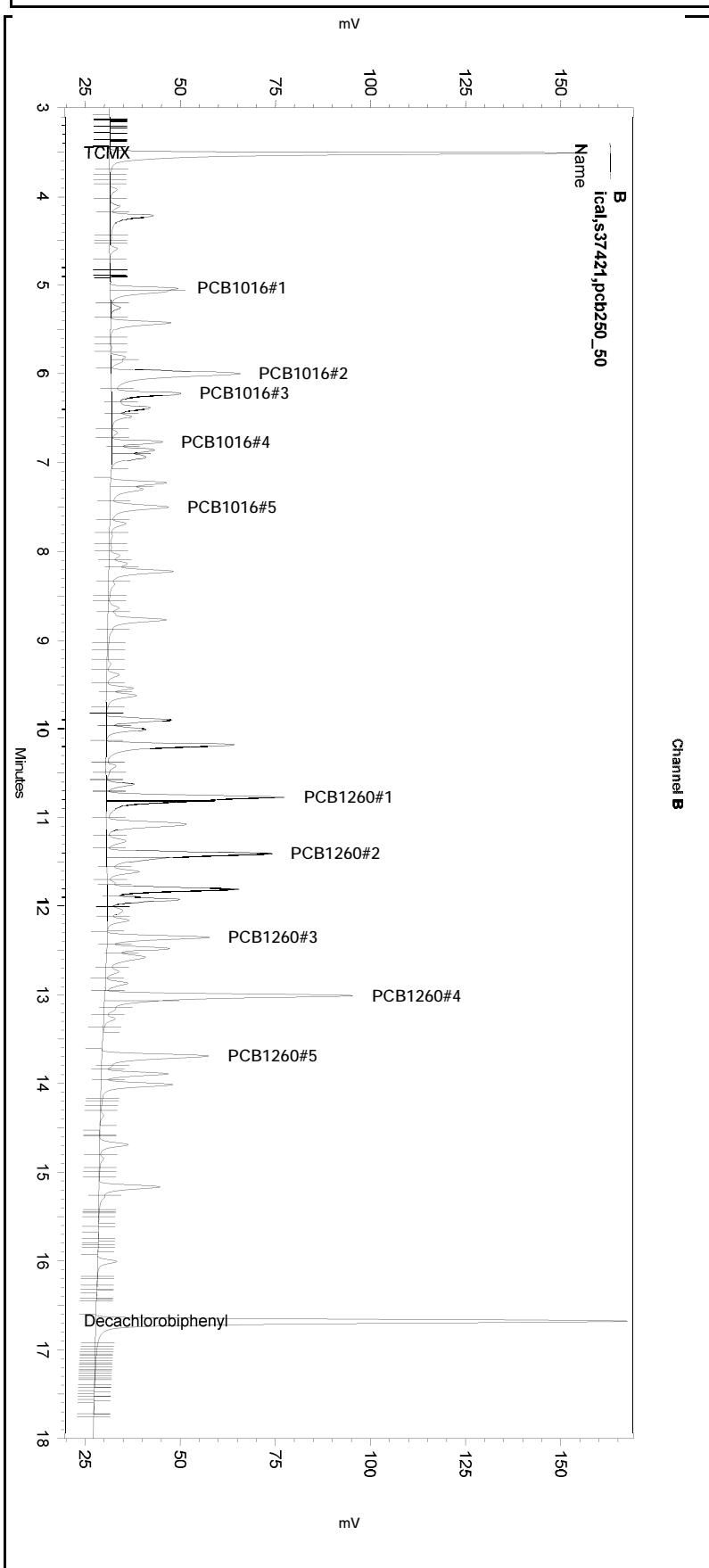
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	6.154	0	0
Yes	Reset Baseline	7.634	0	0
Yes	Reset Baseline	8.123	0	0
Yes	Reset Baseline	9.067	0	0
Yes	Reset Baseline	11.697	0	0
Yes	Reset Baseline	12.34	0	0
Yes	Reset Baseline	13.309	0	0
Yes	Reset Baseline	13.75	0	0
Yes	Reset Baseline	14.499	0	0

Sample Name: **ical,s37421,pcb250\_50**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 2:12:20 PM  
Analysis Date: 8/27/2018 4:21:27 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	5.054	0	0	
Yes	Manual Baseline	5.745	7.07	0	
Yes	Split Peak	11.456	0	0	
Yes	Reset Baseline	12.283	0	0	
Yes	Split Peak	13.066	0	0	
Yes	Reset Baseline	13.434	0	0	

Sample Name: **ical,s37421,pcb250\_50**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lims2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 2:12:20 PM  
 Analysis Date: 8/27/2018 2:39:48 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.267	4.273	340582	43.261
PCB1016#1	5.943	5.950	84673	235.918
PCB1016#2	7.030	7.040	110253	230.292
PCB1016#3	7.340	7.347	66535	316.534
PCB1016#4	7.850	7.860	45567	253.711
PCB1016#5	8.320	8.327	58165	323.059
PCB1260#1	11.907	11.913	177752	254.706
PCB1260#2	12.563	12.567	169478	368.449
PCB1260#3	13.427	13.433	88068	287.286
PCB1260#4	14.173	14.177	220681	244.704
PCB1260#5	14.833	14.837	110104	338.493
Decachlorobiphenyl	17.453	17.447	423226	32.537

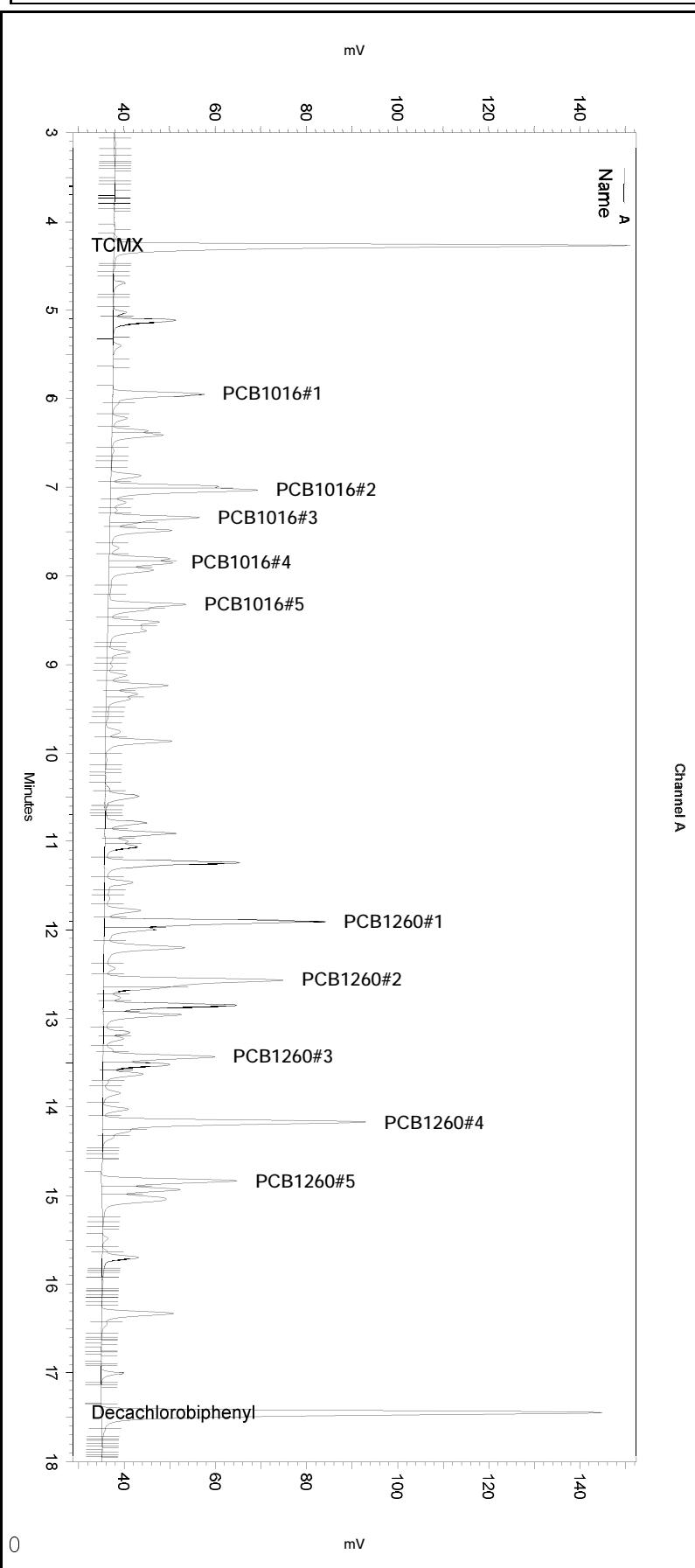
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.513	3.510	339202	58.652
PCB1016#1	5.033	5.033	89535	607.800
PCB1016#2	6.000	6.001	158797	291.410
PCB1016#3	6.217	6.213	70589	297.400
PCB1016#4	6.767	6.770	41651	308.077
PCB1016#5	7.500	7.497	67310	316.099
PCB1260#1	10.767	10.773	166688	350.402
PCB1260#2	11.407	11.417	203078	438.045
PCB1260#3	12.353	12.360	98488	359.969
PCB1260#4	13.010	13.010	261082	402.181
PCB1260#5	13.690	13.691	118578	349.149
Decachlorobiphenyl	16.677	16.677	472815	60.005

Sample Name: ical,s37421,pcb250\_50  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 2:12:20 PM  
Analysis Date: 8/27/2018 2:39:48 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> A <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

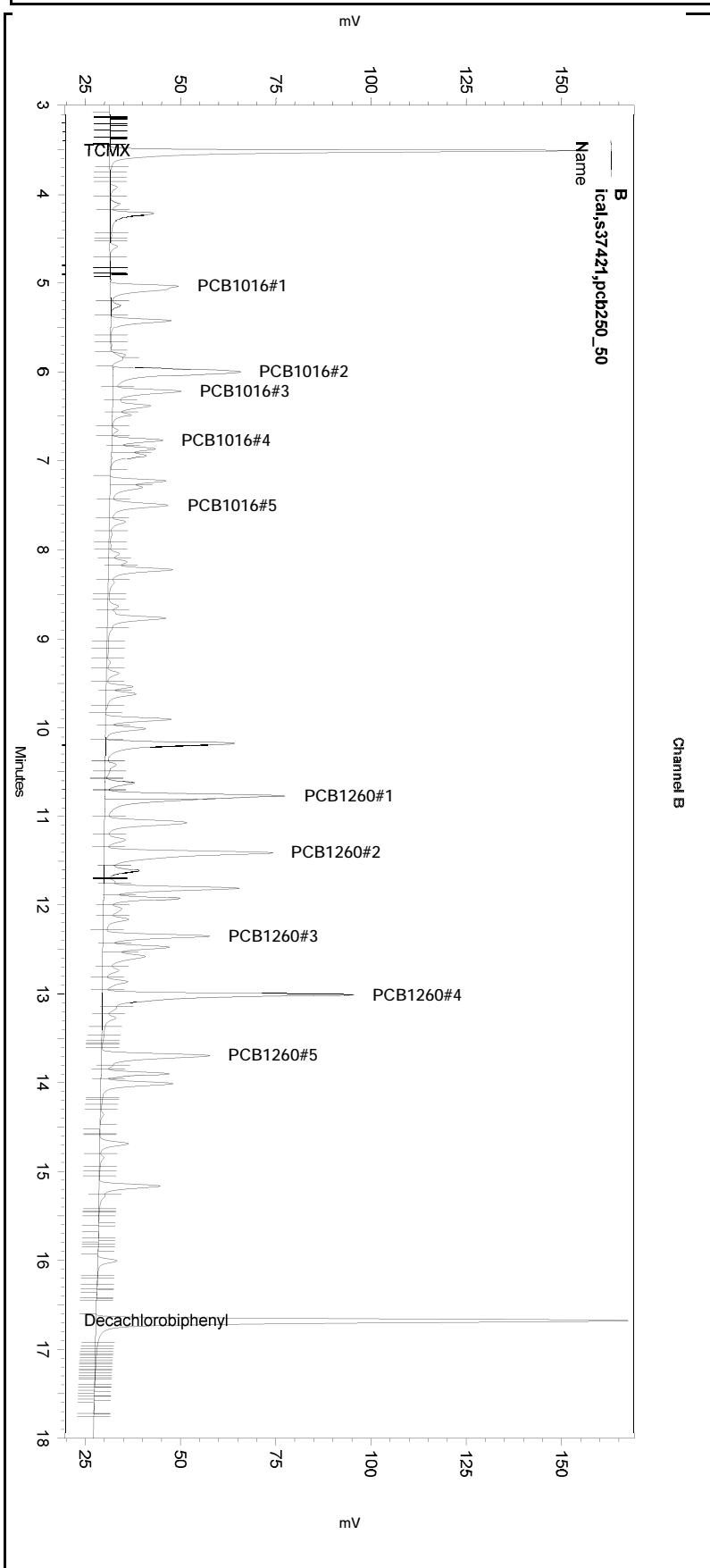
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Reset Baseline	8.123	0	0
No	Reset Baseline	11.697	0	0

Sample Name: **ical,s37421,pcb250\_50**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 2:12:20 PM  
Analysis Date: 8/27/2018 2:39:48 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-013

Enabled	Event Type	Start	Stop	(Minutes)	Value
No	Split Peak	5.054	0	0	
No	Manual Baseline	5.745	7.07	0	
No	Split Peak	11.456	0	0	
No	Split Peak	13.066	0	0	
No	Reset Baseline	13.434	0	0	

Sample Name: **ical,s37422,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 15 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 2:40:20 PM  
 Analysis Date: 8/27/2018 3:07:56 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.280	4.273	623049	100.000 CAL
PCB1016#1	5.957	5.950	146433	500.000 CAL
PCB1016#2	7.043	7.040	194727	500.000 CAL
PCB1016#3	7.353	7.347	115734	500.000 CAL
PCB1016#4	7.867	7.860	76322	500.000 CAL
PCB1016#5	8.333	8.327	95101	500.000 CAL
PCB1260#1	11.923	11.913	293171	500.000 CAL
PCB1260#2	12.577	12.567	287391	500.000 CAL
PCB1260#3	13.443	13.433	153145	500.000 CAL
PCB1260#4	14.187	14.177	392820	500.000 CAL
PCB1260#5	14.847	14.837	196026	500.000 CAL
Decachlorobiphenyl	17.467	17.447	728740	100.000 CAL

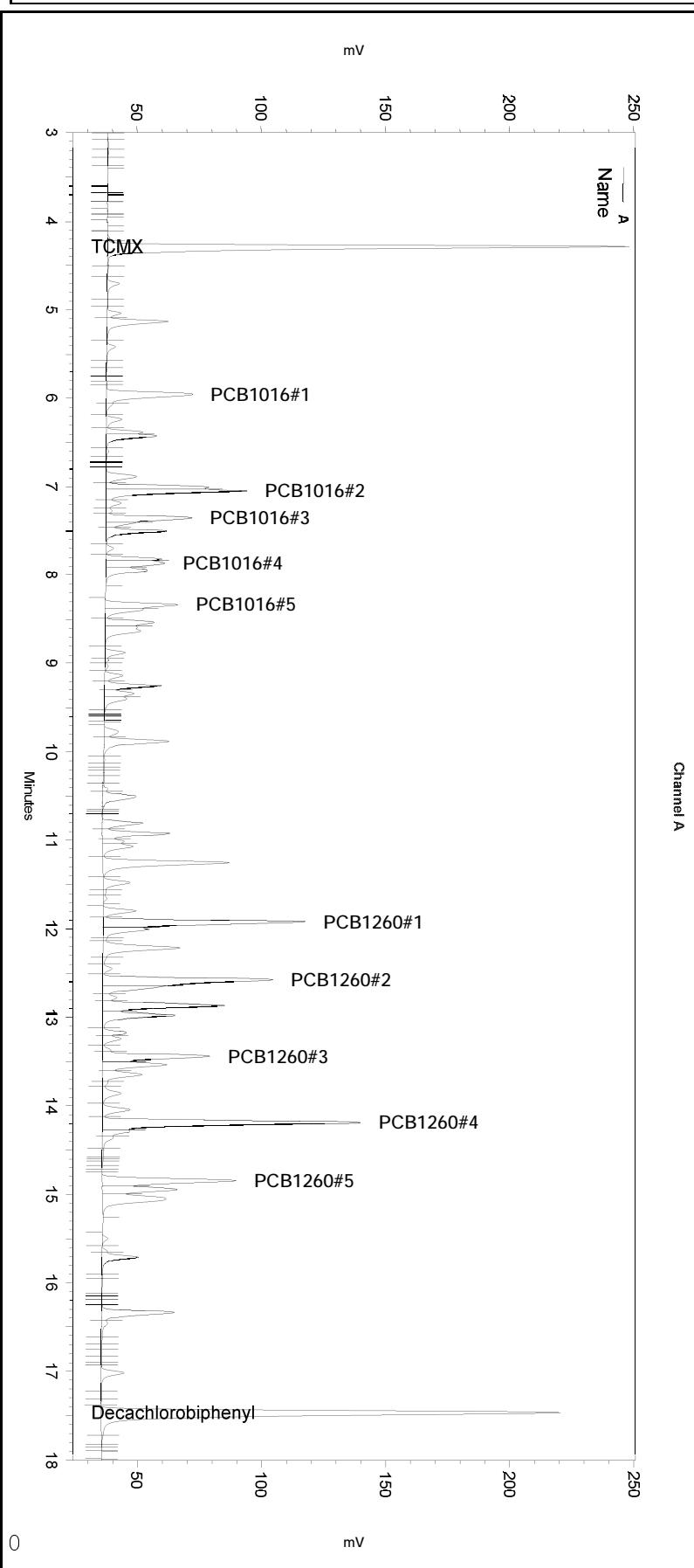
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.523	3.510	642447	100.000 CAL
PCB1016#1	5.047	5.033	77035	500.000 CAL
PCB1016#2	6.010	6.001	287425	500.000 CAL
PCB1016#3	6.230	6.213	126351	500.000 CAL
PCB1016#4	6.780	6.770	74762	500.000 CAL
PCB1016#5	7.513	7.497	115875	500.000 CAL
PCB1260#1	10.780	10.773	288022	500.000 CAL
PCB1260#2	11.420	11.417	287115	500.000 CAL
PCB1260#3	12.367	12.360	166714	500.000 CAL
PCB1260#4	13.023	13.010	390264	500.000 CAL
PCB1260#5	13.703	13.691	217392	500.000 CAL
Decachlorobiphenyl	16.693	16.677	818724	100.000 CAL

Sample Name: **ical,s37422,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 15 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 2:40:20 PM  
Analysis Date: 8/27/2018 3:07:56 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

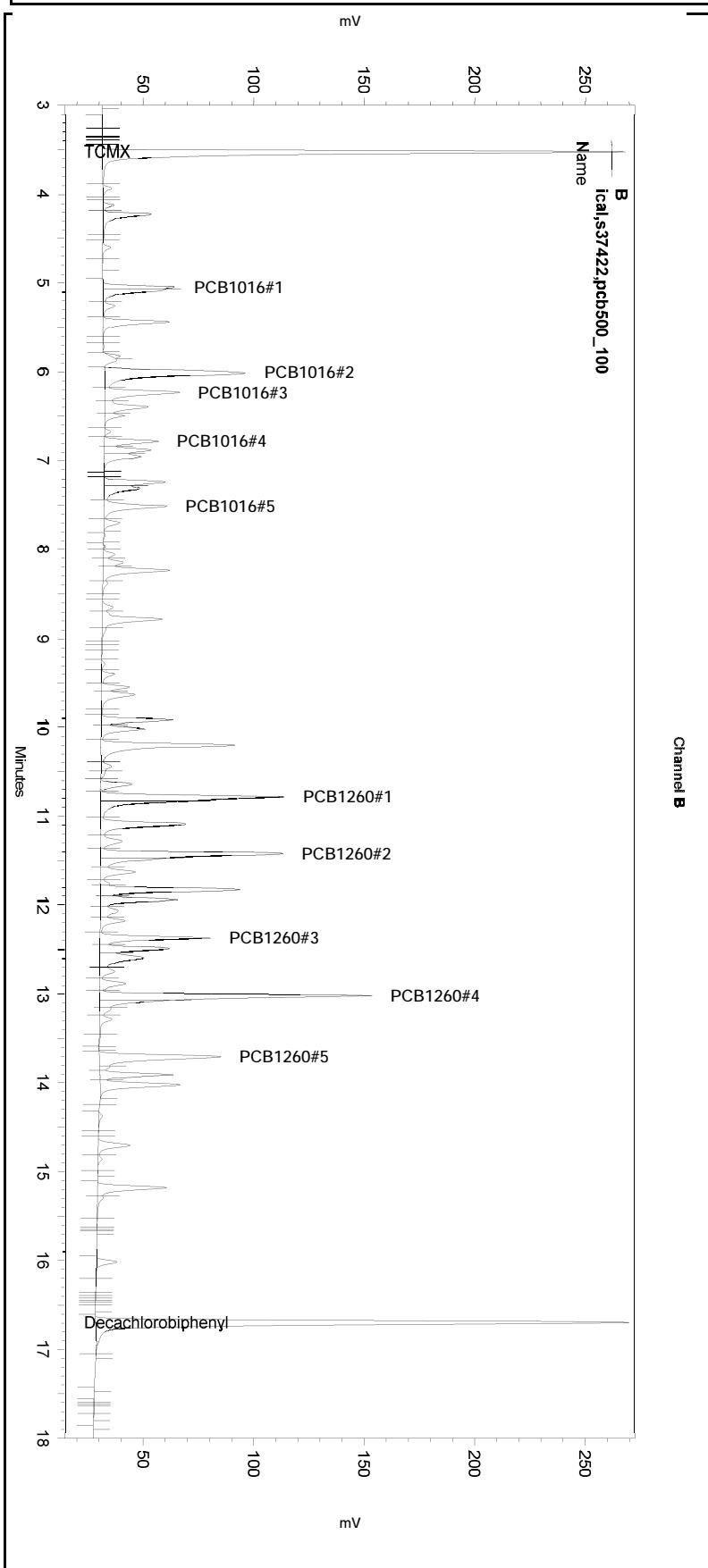
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.123	0	0
Yes	Reset Baseline	11.704	0	0
Yes	Reset Baseline	15.298	0	0

Sample Name: **ical,s37422,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 15 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
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Analysis Date: 8/27/2018 3:07:56 PM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	5.067	0	0	
Yes	Reset Baseline	7.794	0	0	
Yes	Split Peak	11.47	0	0	
Yes	Split Peak	13.07	0	0	
Yes	Manual Baseline	13.586	14.178	0	
Yes	Reset Baseline	17.103	0	0	

Sample Name: **ical,s37422,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 15 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 2:40:20 PM  
 Analysis Date: 8/27/2018 3:06:50 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.280	4.273	623049	87.408
PCB1016#1	5.957	5.950	146459	414.151
PCB1016#2	7.043	7.040	195660	413.811
PCB1016#3	7.353	7.347	117101	479.910
PCB1016#4	7.867	7.860	77955	455.291
PCB1016#5	8.333	8.327	95118	471.240
PCB1260#1	11.923	11.913	296876	405.002
PCB1260#2	12.577	12.567	291111	574.808
PCB1260#3	13.443	13.433	155590	429.484
PCB1260#4	14.187	14.177	395662	446.621
PCB1260#5	14.847	14.837	198902	555.219
Decachlorobiphenyl	17.467	17.447	728740	69.712

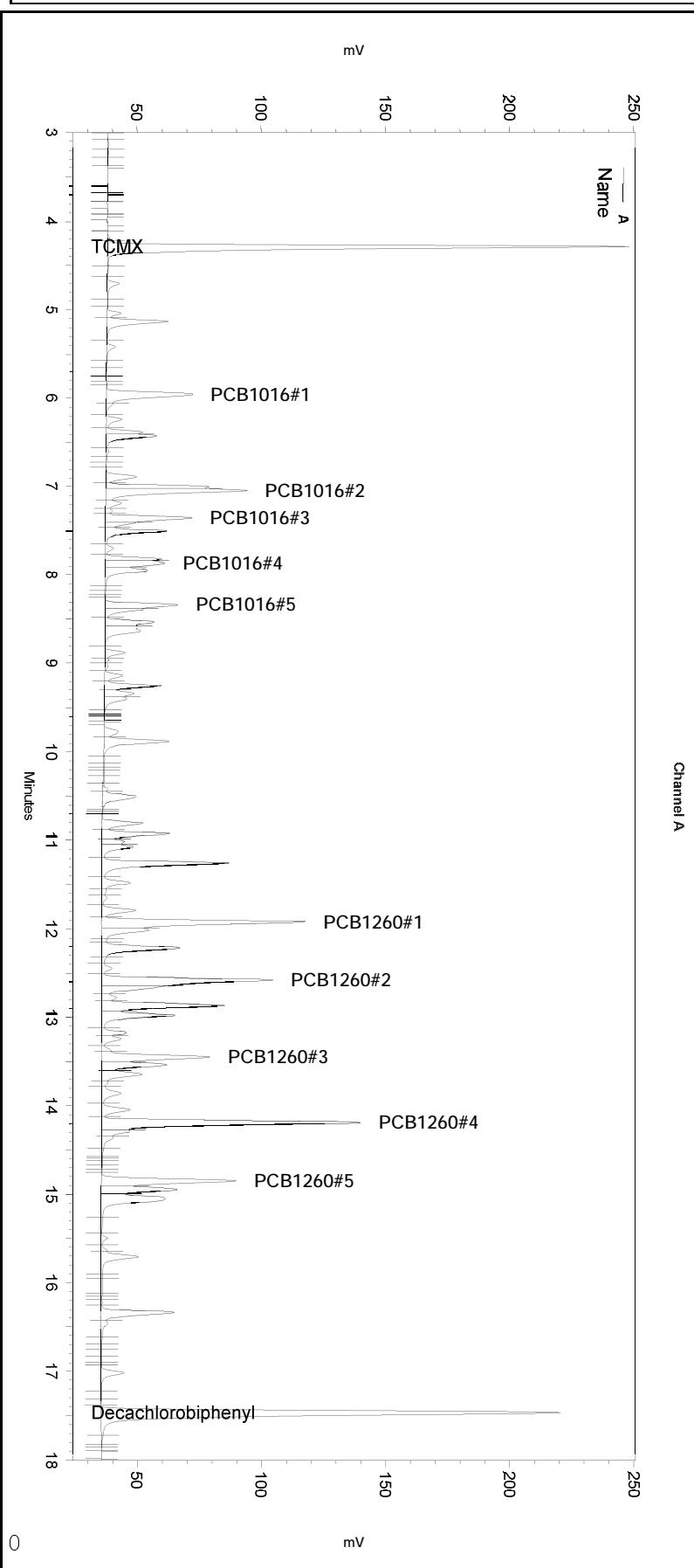
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.523	3.510	642447	101.200
PCB1016#1	5.047	5.033	162439	1044.095
PCB1016#2	6.010	6.001	287461	491.530
PCB1016#3	6.230	6.213	126411	473.683
PCB1016#4	6.780	6.770	74877	499.746
PCB1016#5	7.513	7.497	119900	508.818
PCB1260#1	10.780	10.773	288022	526.644
PCB1260#2	11.420	11.417	358028	662.850
PCB1260#3	12.367	12.360	166714	507.026
PCB1260#4	13.023	13.010	460214	625.650
PCB1260#5	13.703	13.691	194605	487.644
Decachlorobiphenyl	16.693	16.677	826174	91.328

Sample Name: **ical,s37422,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 15 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 2:40:20 PM  
Analysis Date: 8/27/2018 3:06:50 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

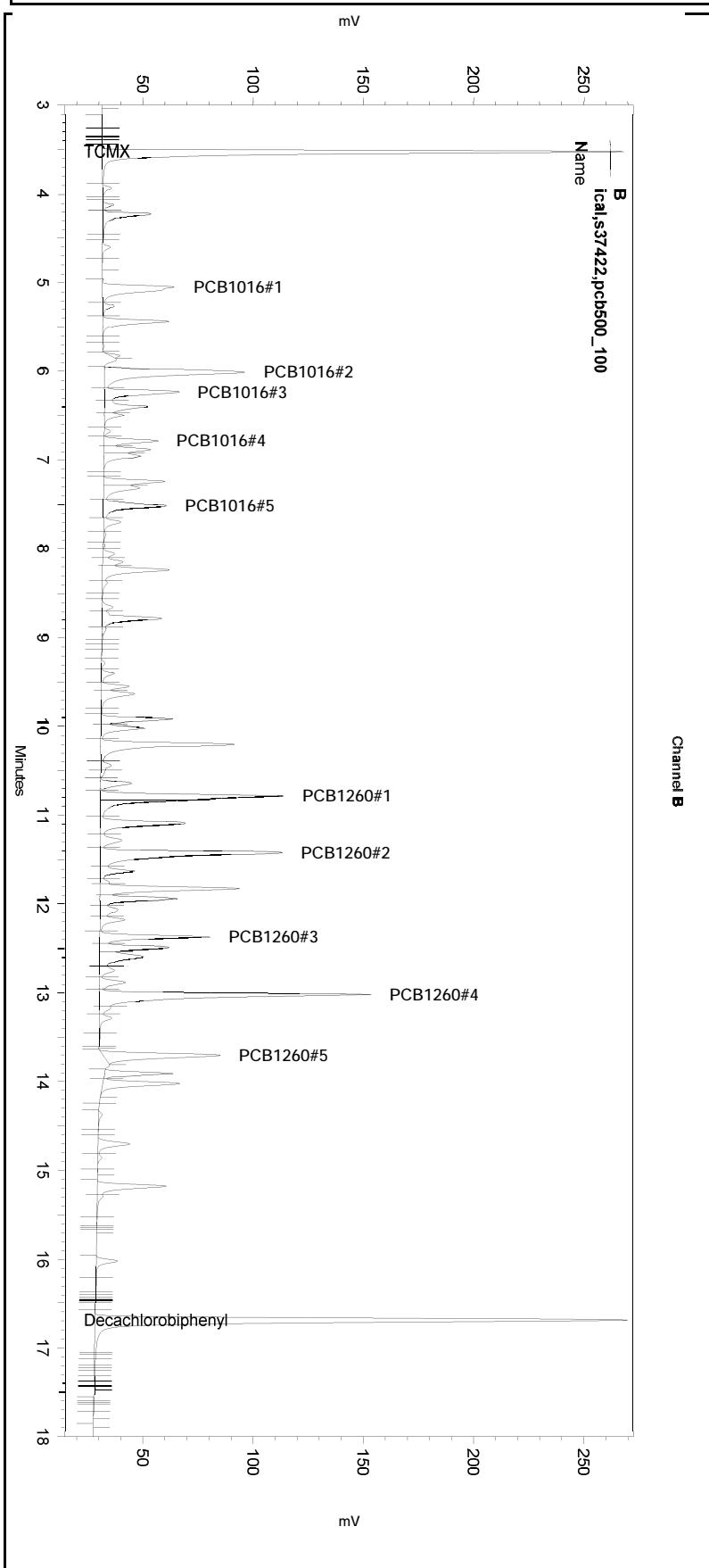
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s37422,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 15 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 2:40:20 PM  
Analysis Date: 8/27/2018 3:06:50 PM  
Sample Amount: 1



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--< General Method Parameters >-----

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-014

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **ical,s37423,pcb750\_150**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 16 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 3:08:20 PM  
 Analysis Date: 8/27/2018 3:42:13 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.277	4.273	889131	150.000 CAL
PCB1016#1	5.953	5.950	201930	750.000 CAL
PCB1016#2	7.040	7.040	274516	750.000 CAL
PCB1016#3	7.347	7.347	166457	750.000 CAL
PCB1016#4	7.860	7.860	107714	750.000 CAL
PCB1016#5	8.327	8.327	131354	750.000 CAL
PCB1260#1	11.913	11.913	394940	750.000 CAL
PCB1260#2	12.570	12.567	389271	750.000 CAL
PCB1260#3	13.437	13.433	206446	750.000 CAL
PCB1260#4	14.180	14.177	521657	750.000 CAL
PCB1260#5	14.840	14.837	262230	750.000 CAL
Decachlorobiphenyl	17.460	17.447	928331	150.000 CAL

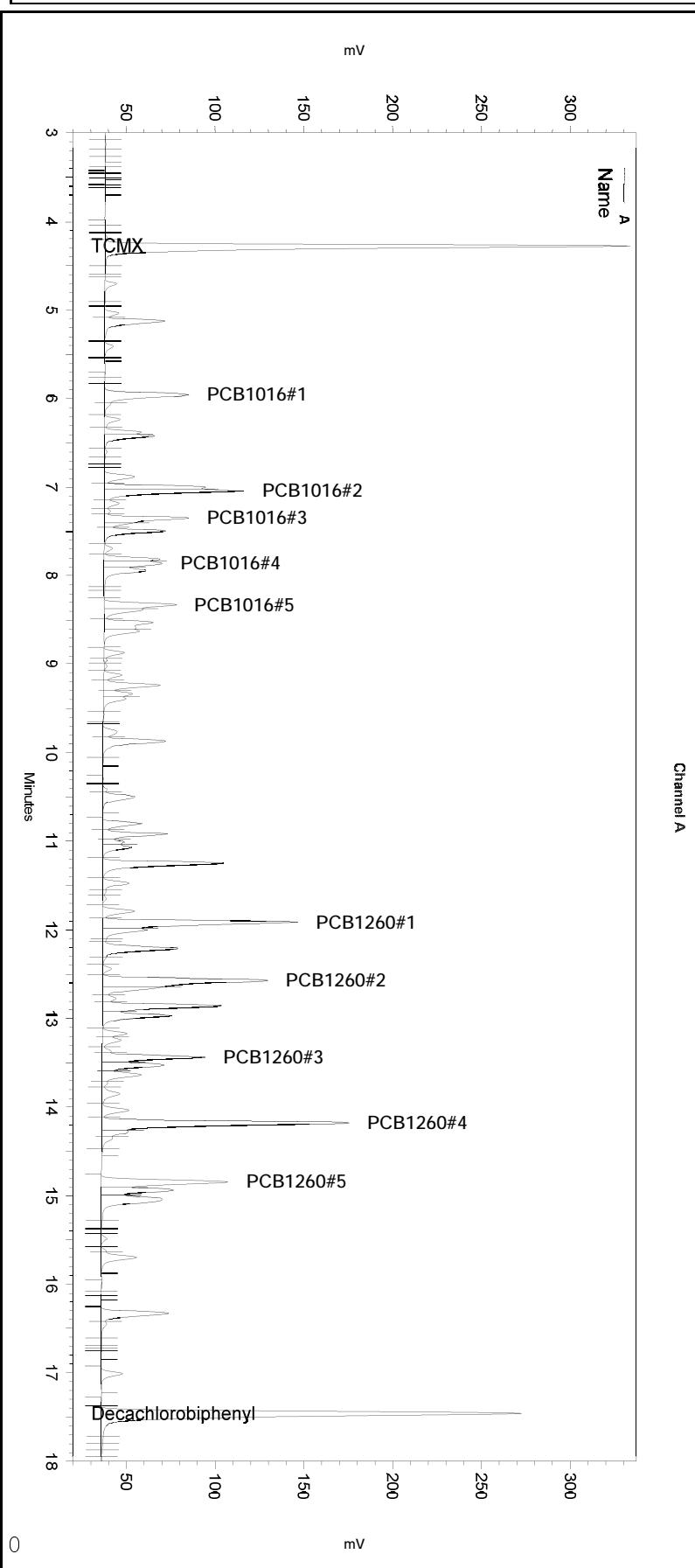
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.520	3.510	920873	150.000 CAL
PCB1016#1	5.043	5.033	117131	750.000 CAL
PCB1016#2	6.007	6.001	406144	750.000 CAL
PCB1016#3	6.223	6.213	179034	750.000 CAL
PCB1016#4	6.773	6.770	104813	750.000 CAL
PCB1016#5	7.507	7.497	169733	750.000 CAL
PCB1260#1	10.773	10.773	399124	750.000 CAL
PCB1260#2	11.413	11.417	404993	750.000 CAL
PCB1260#3	12.360	12.360	229162	750.000 CAL
PCB1260#4	13.017	13.010	530174	750.000 CAL
PCB1260#5	13.697	13.691	294137	750.000 CAL
Decachlorobiphenyl	16.683	16.677	1050690	150.000 CAL

Sample Name: **ical,s37423,pcb750\_150**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 16 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 3:08:20 PM  
Analysis Date: 8/27/2018 3:42:13 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

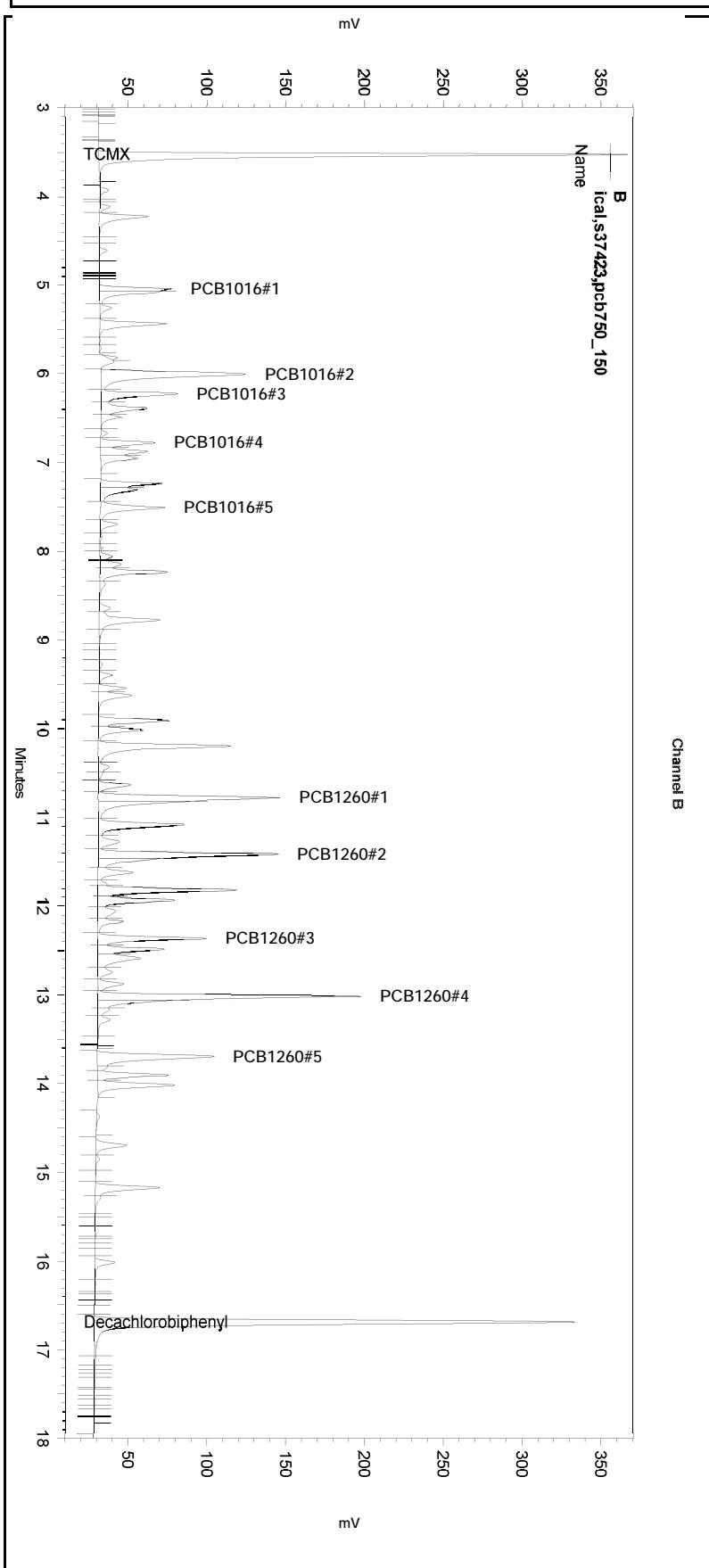
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.79	0	0
Yes	Reset Baseline	14.549	0	0

Sample Name: **ical,s37423,pcb750\_150**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 16 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 3:08:20 PM  
Analysis Date: 8/27/2018 3:42:13 PM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	5.066	0	0	
Yes	Split Peak	11.465	0	0	
Yes	Split Peak	13.063	0	0	
Yes	Manual Baseline	13.555	14.164	0	

Sample Name: **ical,s37423,pcb750\_150**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 16 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 3:08:20 PM  
 Analysis Date: 8/27/2018 3:41:16 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.277	4.273	889131	127.501
PCB1016#1	5.953	5.950	202003	582.605
PCB1016#2	7.040	7.040	275240	596.987
PCB1016#3	7.347	7.347	167370	674.389
PCB1016#4	7.860	7.860	108635	648.948
PCB1016#5	8.327	8.327	133639	662.756
PCB1260#1	11.913	11.913	395752	545.360
PCB1260#2	12.570	12.567	390660	738.238
PCB1260#3	13.437	13.433	208097	584.497
PCB1260#4	14.180	14.177	524635	602.151
PCB1260#5	14.840	14.837	262226	710.069
Decachlorobiphenyl	17.460	17.447	928331	94.813

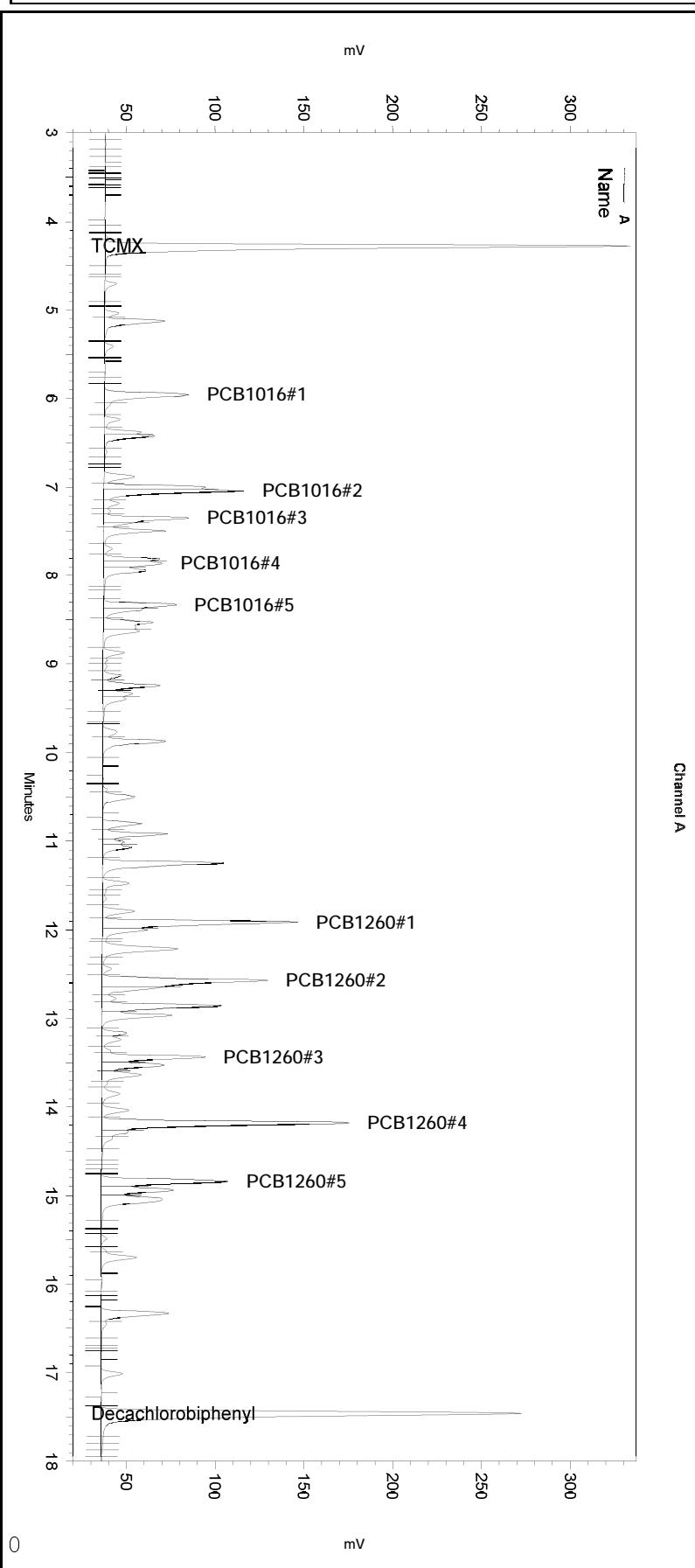
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.520	3.510	920873	142.419
PCB1016#1	5.043	5.033	227854	1441.805
PCB1016#2	6.007	6.001	406144	685.801
PCB1016#3	6.223	6.213	179034	662.714
PCB1016#4	6.773	6.770	104813	687.365
PCB1016#5	7.507	7.497	169733	706.804
PCB1260#1	10.773	10.773	399124	706.538
PCB1260#2	11.413	11.417	497329	892.966
PCB1260#3	12.360	12.360	229162	676.215
PCB1260#4	13.017	13.010	629364	836.225
PCB1260#5	13.697	13.691	262836	639.252
Decachlorobiphenyl	16.683	16.677	1050690	114.987

Sample Name: **ical,s37423,pcb750\_150**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 16 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 3:08:20 PM  
Analysis Date: 8/27/2018 3:41:16 PM  
Sample Amount: 1



-----> General Method Parameters <-----  
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No items selected for this section

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No items selected for this section

Integration Events

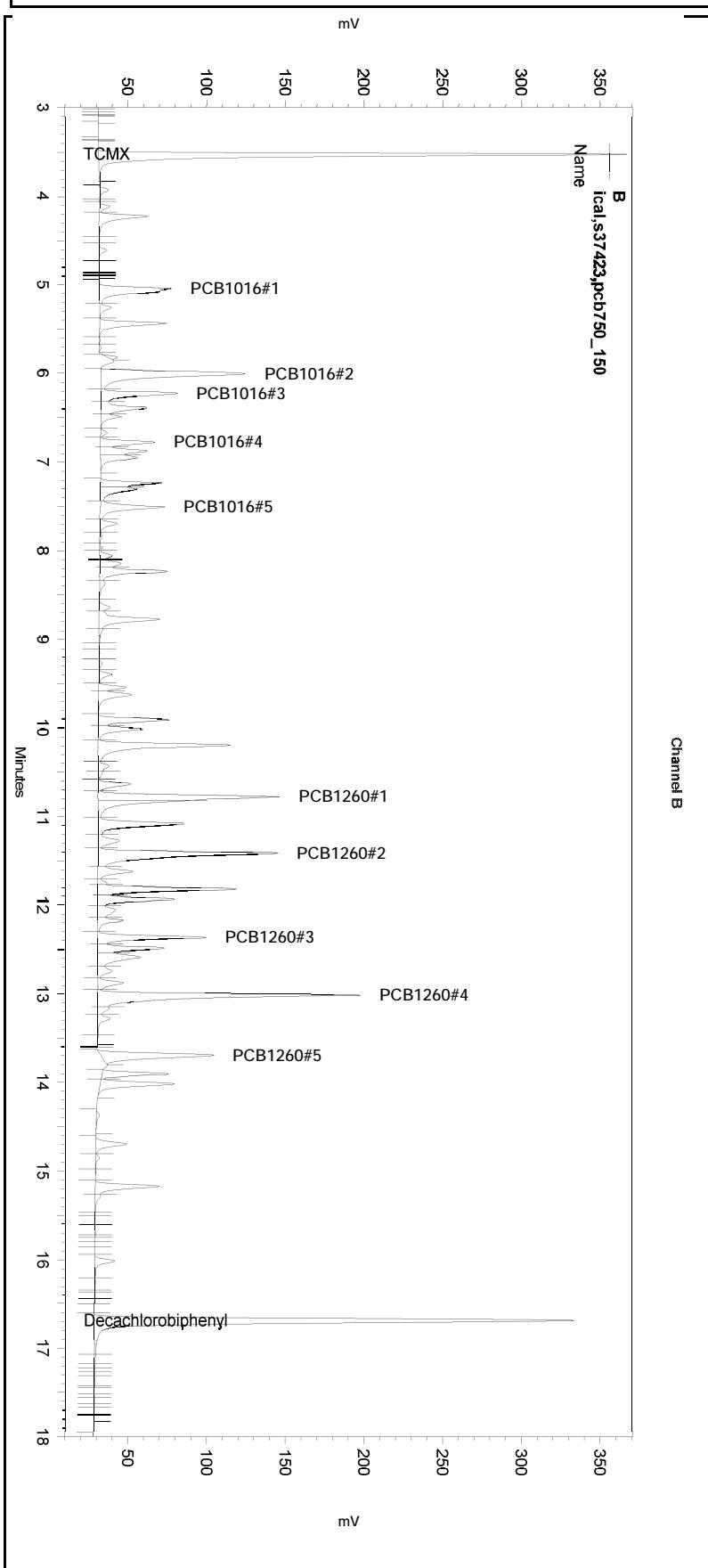
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Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

Manual Integration Fixes

Data File:	\\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015			
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ical,s37423,pcb750\_150**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 16 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 3:08:20 PM  
Analysis Date: 8/27/2018 3:41:16 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> B <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-015

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **ical,s37424,pcb1000\_200**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 3:36:19 PM  
 Analysis Date: 8/27/2018 4:02:44 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.283	4.273	1140900	200.000 CAL
PCB1016#1	5.960	5.950	255725	1000.000 CAL
PCB1016#2	7.047	7.040	349760	1000.000 CAL
PCB1016#3	7.357	7.347	204736	1000.000 CAL
PCB1016#4	7.867	7.860	136986	1000.000 CAL
PCB1016#5	8.337	8.327	163276	1000.000 CAL
PCB1260#1	11.920	11.913	500651	1000.000 CAL
PCB1260#2	12.577	12.567	495294	1000.000 CAL
PCB1260#3	13.443	13.433	264837	1000.000 CAL
PCB1260#4	14.187	14.177	676558	1000.000 CAL
PCB1260#5	14.847	14.837	342720	1000.000 CAL
Decachlorobiphenyl	17.467	17.447	1204838	200.000 CAL

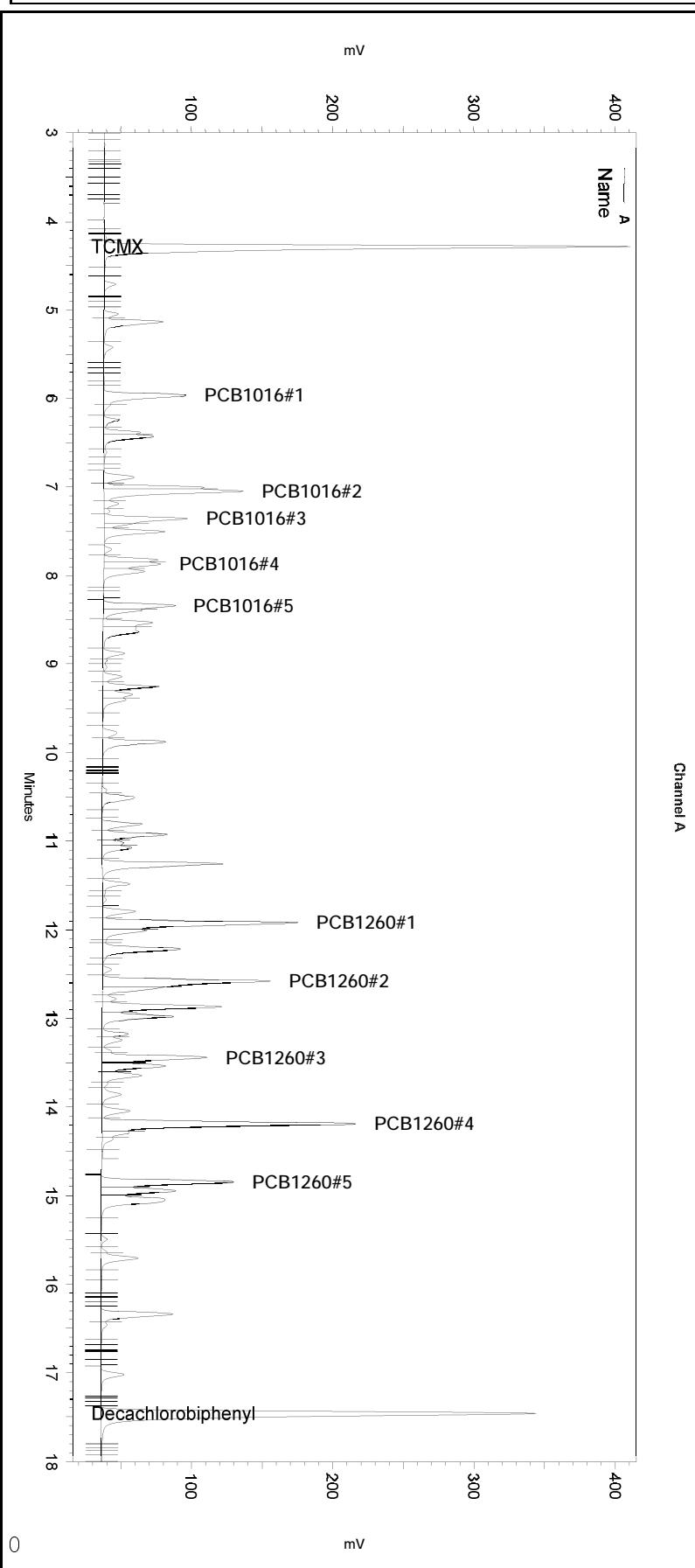
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.527	3.510	1194685	200.000 CAL
PCB1016#1	5.050	5.033	146043	1000.000 CAL
PCB1016#2	6.013	6.001	539520	1000.000 CAL
PCB1016#3	6.230	6.213	239630	1000.000 CAL
PCB1016#4	6.783	6.770	136971	1000.000 CAL
PCB1016#5	7.513	7.497	217750	1000.000 CAL
PCB1260#1	10.780	10.773	501079	1000.000 CAL
PCB1260#2	11.423	11.417	495015	1000.000 CAL
PCB1260#3	12.367	12.360	289813	1000.000 CAL
PCB1260#4	13.023	13.010	692858	1000.000 CAL
PCB1260#5	13.703	13.691	393055	1000.000 CAL
Decachlorobiphenyl	16.690	16.677	1363554	200.000 CAL

Sample Name: **ical,s37424,pcb1000\_200**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 3:36:19 PM  
Analysis Date: 8/27/2018 4:02:44 PM  
Sample Amount: 1



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

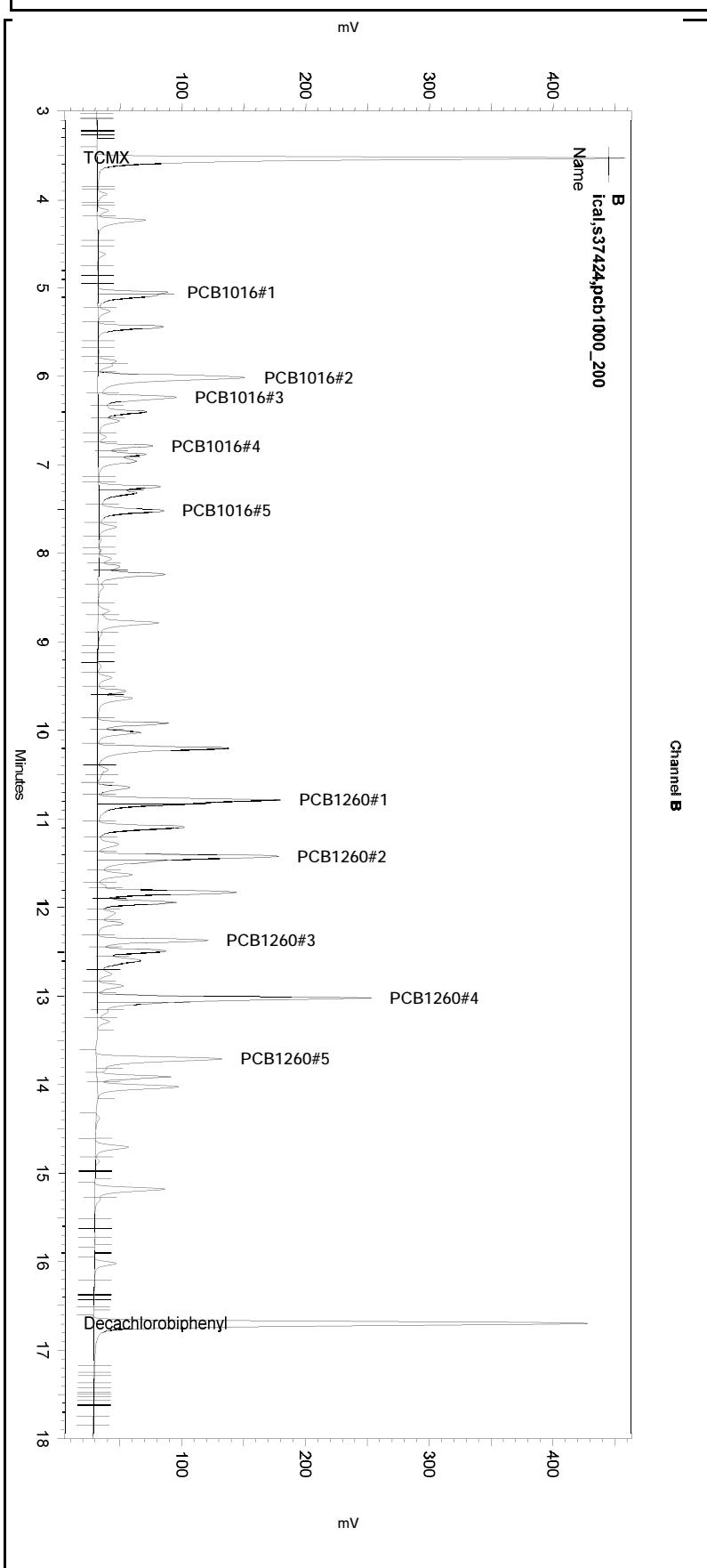
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	6.796	7.635	0
Yes	Reset Baseline	11.722	0	0
Yes	Reset Baseline	14.588	0	0

Sample Name: **ical,s37424,pcb1000\_200**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 3:36:19 PM  
Analysis Date: 8/27/2018 4:02:44 PM  
Sample Amount: 1



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No items selected for this section

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Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

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Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	5.074	0	0	
Yes	Reset Baseline	7.927	0	0	
Yes	Split Peak	11.467	0	0	
Yes	Split Peak	13.069	0	0	
Yes	Reset Baseline	13.385	0	0	
Yes	Manual Baseline	13.6	14.164	0	

Sample Name: **ical,s37424,pcb1000\_200**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 3:36:19 PM  
 Analysis Date: 8/27/2018 4:01:25 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.283	4.273	1140900	167.492
PCB1016#1	5.960	5.950	255725	750.986
PCB1016#2	7.047	7.040	337939	750.417
PCB1016#3	7.357	7.347	192170	766.149
PCB1016#4	7.867	7.860	136986	825.361
PCB1016#5	8.337	8.327	163276	812.621
PCB1260#1	11.920	11.913	503958	707.825
PCB1260#2	12.577	12.567	498952	935.440
PCB1260#3	13.443	13.433	267902	759.973
PCB1260#4	14.187	14.177	680920	807.284
PCB1260#5	14.847	14.837	343394	984.991
Decachlorobiphenyl	17.467	17.447	1204838	132.735

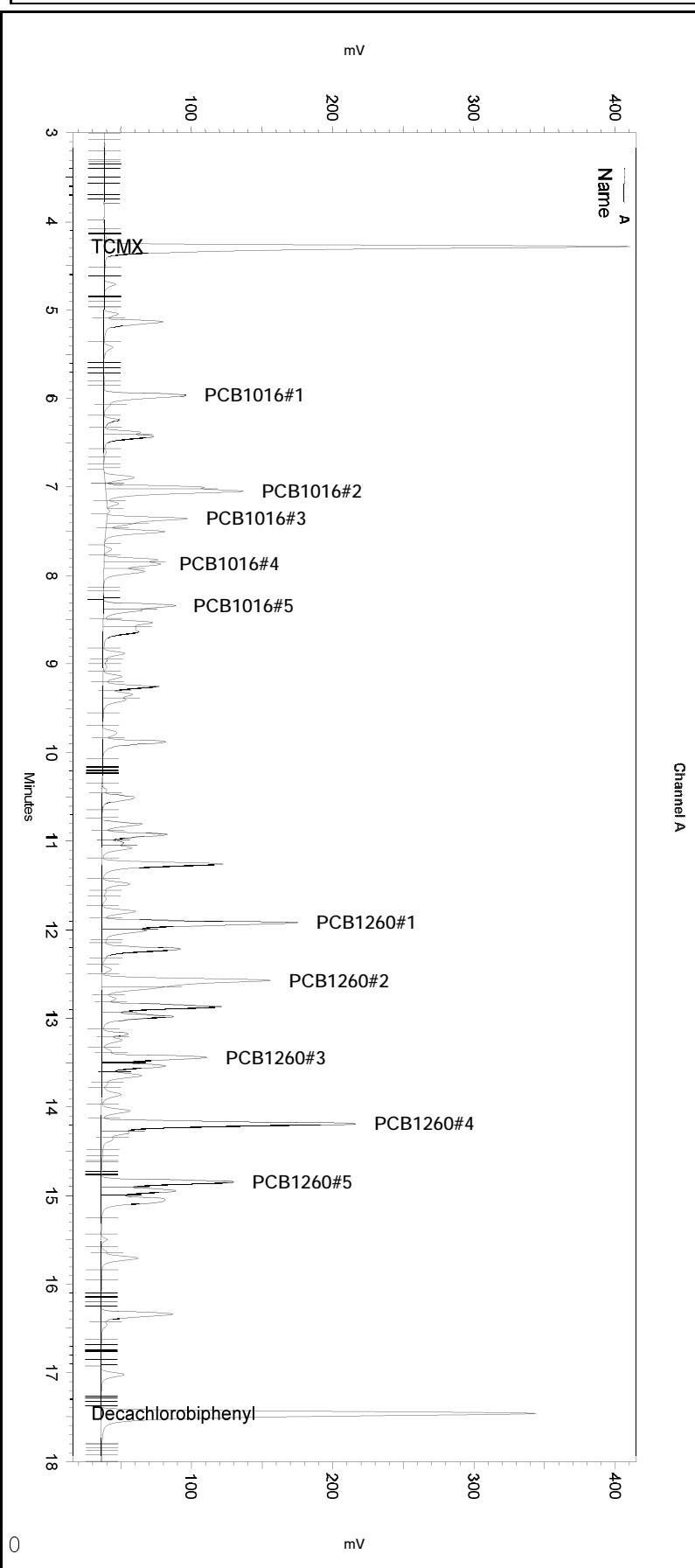
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.527	3.510	1196615	182.338
PCB1016#1	5.050	5.033	298874	1857.173
PCB1016#2	6.013	6.001	551658	922.246
PCB1016#3	6.230	6.213	248050	908.776
PCB1016#4	6.783	6.770	143955	929.242
PCB1016#5	7.513	7.497	235383	959.520
PCB1260#1	10.780	10.773	505662	869.480
PCB1260#2	11.423	11.417	641204	1130.962
PCB1260#3	12.367	12.360	296983	860.443
PCB1260#4	13.023	13.010	825496	1088.238
PCB1260#5	13.703	13.691	352737	847.199
Decachlorobiphenyl	16.690	16.677	1363554	149.914

Sample Name: **ical,s37424,pcb1000\_200**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 3:36:19 PM  
Analysis Date: 8/27/2018 4:01:25 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	0	0	0	

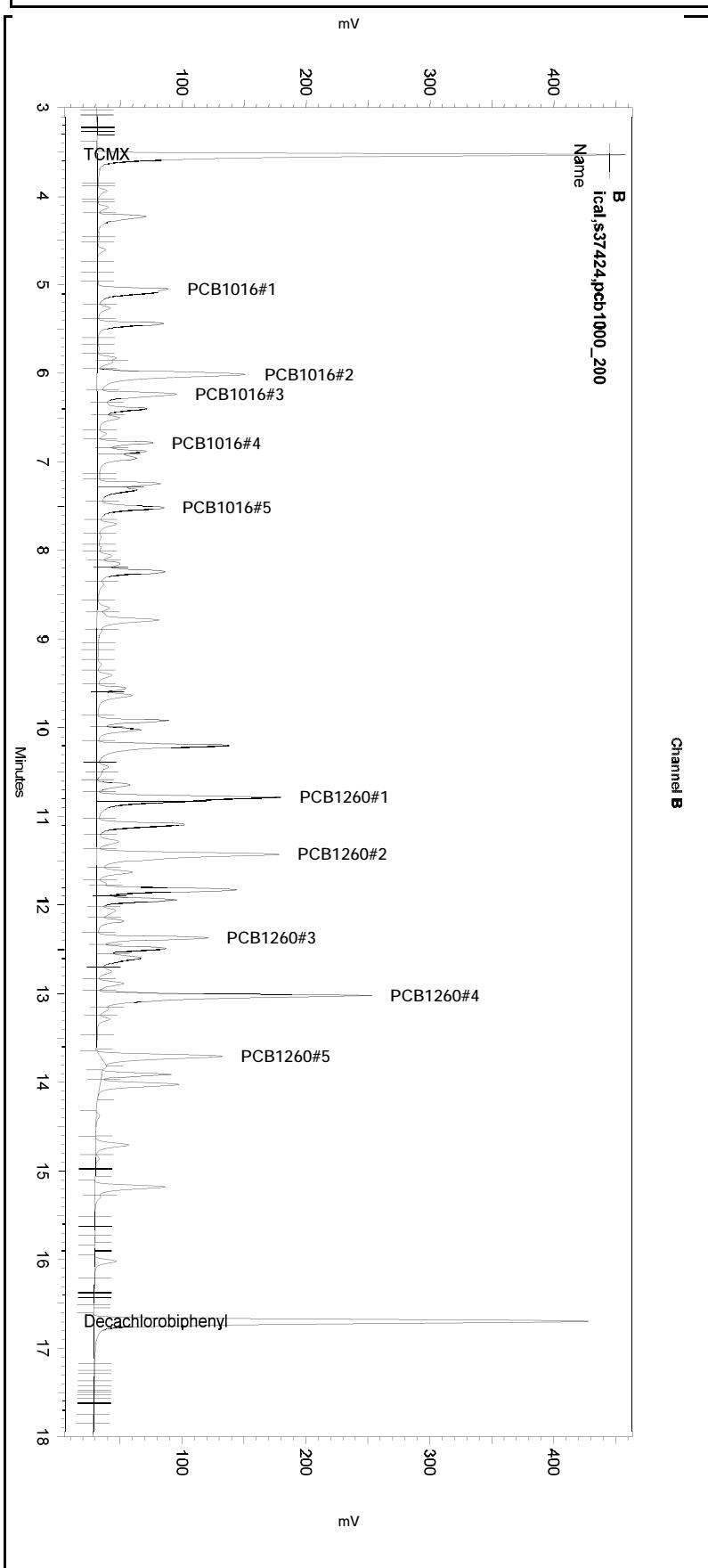
Manual Integration Fixes

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Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **ical,s37424,pcb1000\_200**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: N/A Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 3:36:19 PM  
Analysis Date: 8/27/2018 4:01:25 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-016

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **icv,s37446,ULTRA\_1660**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 4:32:21 PM  
Analysis Date: 8/27/2018 5:07:30 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.280	4.273	346895	52.191
PCB1016#1	5.957	5.950	88790	269.506
PCB1016#2	7.043	7.040	118028	277.279
PCB1016#3	7.350	7.347	66820	283.535
PCB1016#4	7.863	7.860	44836	279.642
PCB1016#5	8.330	8.327	55481	277.492
PCB1260#1	11.917	11.913	163644	245.455
PCB1260#2	12.573	12.567	139614	236.288
PCB1260#3	13.437	13.433	100687	310.358
PCB1260#4	14.183	14.177	256126	315.446
PCB1260#5	14.843	14.837	116790	298.609
Decachlorobiphenyl	17.463	17.447	439360	56.025

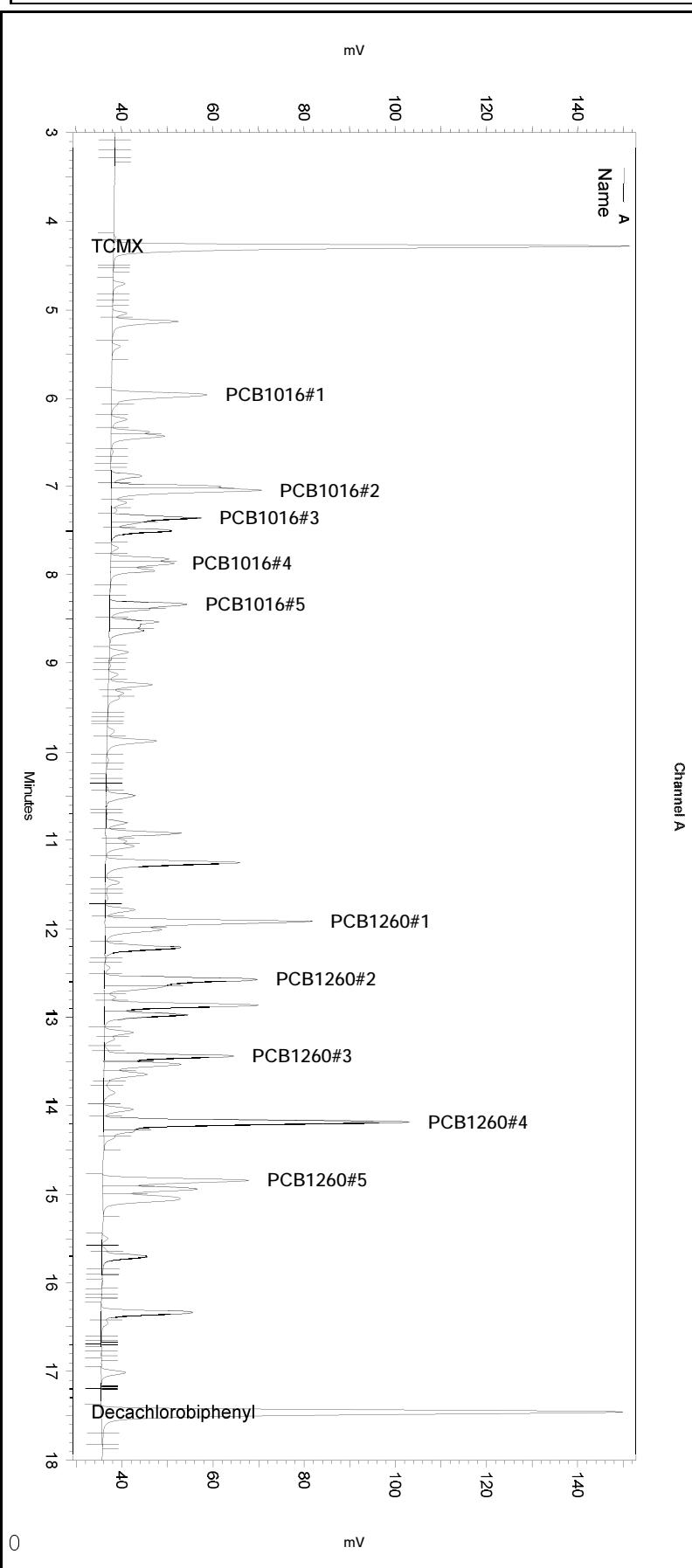
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.523	3.510	351429	52.874
PCB1016#1	5.047	5.033	42440	258.519
PCB1016#2	6.010	6.001	162530	270.995
PCB1016#3	6.230	6.213	72364	265.251
PCB1016#4	6.777	6.770	40989	264.197
PCB1016#5	7.510	7.497	63158	253.754
PCB1260#1	10.780	10.773	141885	241.037
PCB1260#2	11.420	11.417	136412	239.608
PCB1260#3	12.363	12.360	105302	303.832
PCB1260#4	13.020	13.010	239462	312.042
PCB1260#5	13.700	13.691	124997	295.127
Decachlorobiphenyl	16.687	16.677	483141	53.392

Sample Name: **icv,s37446,ULTRA\_1660**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 4:32:21 PM  
Analysis Date: 8/27/2018 5:07:30 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

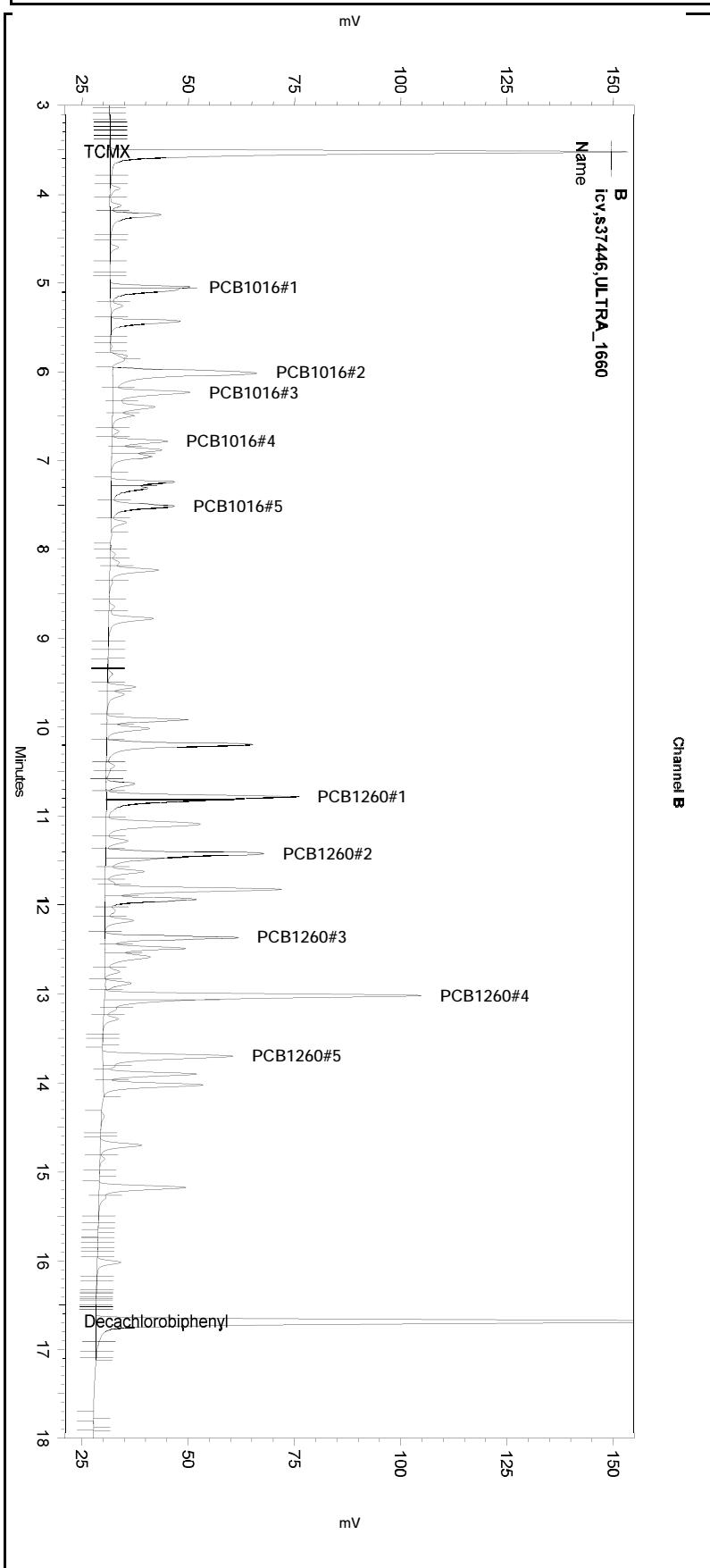
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Manual Baseline	6.81	7.628	0
Yes	Reset Baseline	8.785	0	0
Yes	Reset Baseline	14.501	0	0
Yes	Reset Baseline	15.246	0	0

Sample Name: **icv,s37446,ULTRA\_1660**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
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Analysis Date: 8/27/2018 5:07:30 PM  
Sample Amount: 1



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--< General Method Parameters >-----

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	5.063	0	0	
Yes	Reset Baseline	7.798	0	0	
Yes	Split Peak	10.812	0	0	
Yes	Split Peak	11.47	0	0	
Yes	Reset Baseline	12.82	0	0	
Yes	Split Peak	13.066	0	0	
Yes	Manual Baseline	13.601	14.159	0	
Yes	Reset Baseline	17.126	0	0	

Sample Name: **icv,s37446,ULTRA\_1660**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
 Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
 Run Date: 8/27/2018 4:32:21 PM  
 Analysis Date: 8/27/2018 5:05:23 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.280	4.273	346895	52.191
PCB1016#1	5.957	5.950	88790	269.506
PCB1016#2	7.043	7.040	114480	268.944
PCB1016#3	7.350	7.347	63099	267.746
PCB1016#4	7.863	7.860	44836	279.642
PCB1016#5	8.330	8.327	55770	278.938
PCB1260#1	11.917	11.913	163798	245.686
PCB1260#2	12.573	12.567	139993	236.930
PCB1260#3	13.437	13.433	101263	312.134
PCB1260#4	14.183	14.177	257755	317.453
PCB1260#5	14.843	14.837	117044	299.258
Decachlorobiphenyl	17.463	17.447	439360	56.025

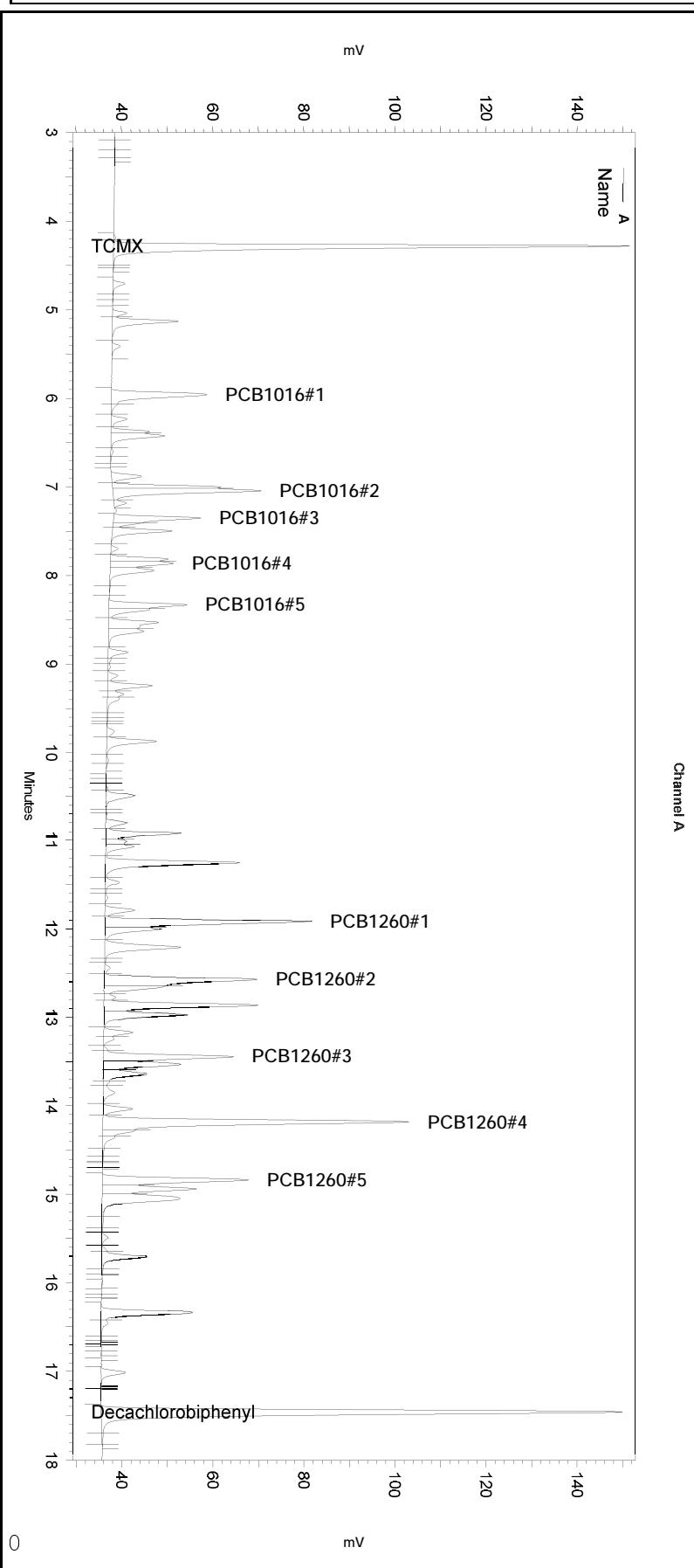
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.523	3.510	351429	52.874
PCB1016#1	5.047	5.033	95412	581.192
PCB1016#2	6.010	6.001	162530	270.995
PCB1016#3	6.230	6.213	72364	265.251
PCB1016#4	6.777	6.770	40989	264.197
PCB1016#5	7.510	7.497	65187	261.906
PCB1260#1	10.780	10.773	210479	357.566
PCB1260#2	11.420	11.417	170634	299.719
PCB1260#3	12.363	12.360	106432	307.093
PCB1260#4	13.020	13.010	290423	378.449
PCB1260#5	13.700	13.691	110369	260.590
Decachlorobiphenyl	16.687	16.677	485042	53.602

Sample Name: **icv,s37446,ULTRA\_1660**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 4:32:21 PM  
Analysis Date: 8/27/2018 5:05:23 PM  
Sample Amount: 1



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Integration Events

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Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

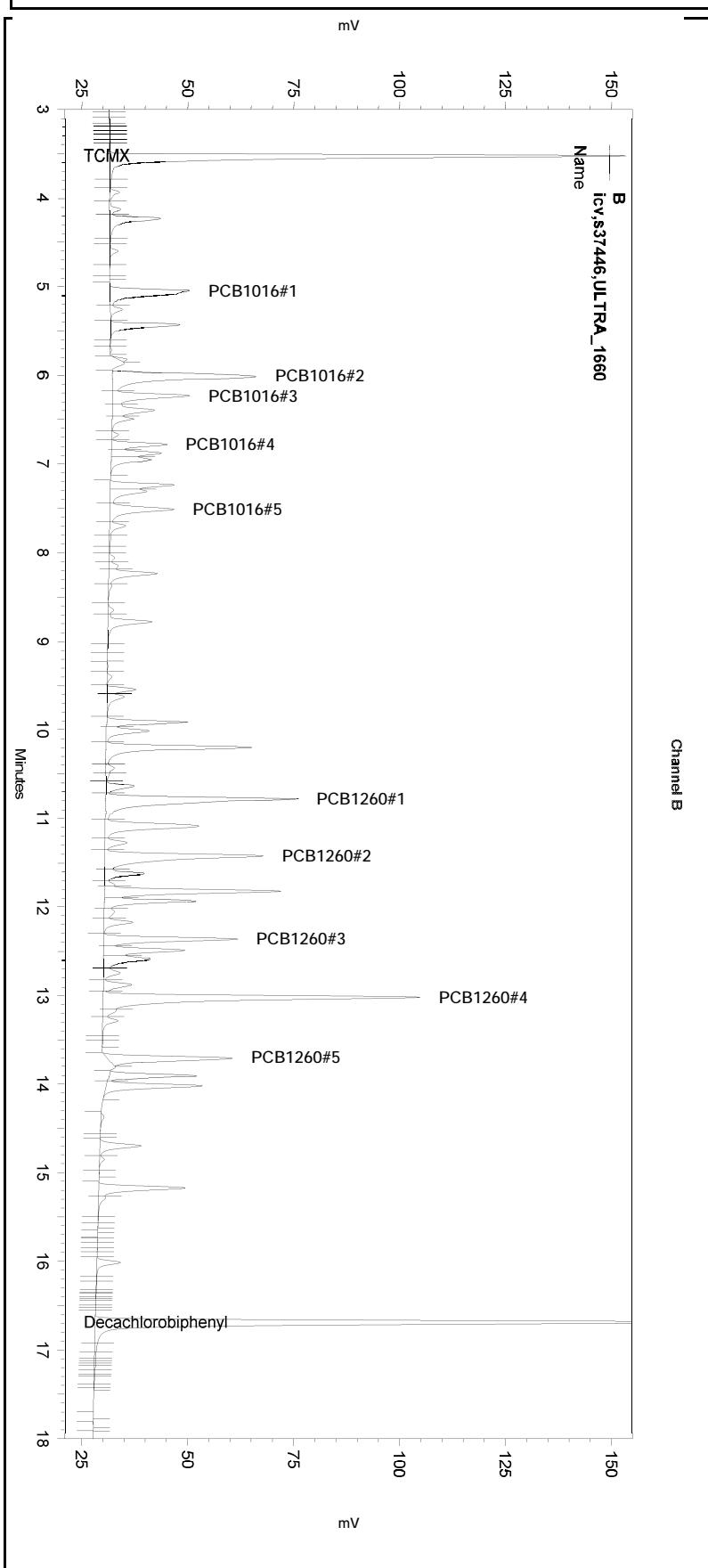
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Sample Name: **icv,s37446,ULTRA\_1660**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\239.seq  
Instrument: GC06 (Offline) Vial: 18 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-239i.met

Software Version 3.1.7  
Run Date: 8/27/2018 4:32:21 PM  
Analysis Date: 8/27/2018 5:05:23 PM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\239-018

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

**Continuing Calibration Verification Raw Data**

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
 Seqnum : 208385010009 File : 267\_009 Time : 24-SEP-2018 15:29  
 Cal : 208344656001 Caldate : 27-AUG-2018  
 Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	534.1	pg/uL	7	15	
Aroclor-1260	A			500.0	504.6	pg/uL	1	15	
Decachlorobiphenyl	A	8438.2	10613	100.0	168.9	pg/uL	69	15	c+
Aroclor-1016	B			500.0	461.4	pg/uL	-8	15	
Aroclor-1260	B			500.0	473.4	pg/uL	-5	15	
Decachlorobiphenyl	B	9049.0	9039.5	100.0	99.89	pg/uL	0	15	

JC1 09/24/18 : Corrected automatically drawn baseline.

Analyst: JC1 Date: 09/24/18 Reviewer: EAH Date: 09/25/18

+high bias c=CCV

Page 1 of 1

208385010009

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 11 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
 Run Date: 9/24/2018 3:29:48 PM  
 Analysis Date: 9/24/2018 4:15:13 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.960	3.933	691534	104.043
PCB1016#1	5.587	5.567	158085	479.838
PCB1016#2	6.647	6.637	230658	541.877
PCB1016#3	6.950	6.937	132663	562.924
PCB1016#4	7.450	7.440	89717	559.565
PCB1016#5	7.913	7.890	105265	526.490
PCB1260#1	11.470	11.453	350289	525.410
PCB1260#2	12.130	12.107	243864	412.725
PCB1260#3	12.983	12.967	162796	501.803
PCB1260#4	13.737	13.723	520152	640.622
PCB1260#5	14.397	14.370	173026	442.393
Decachlorobiphenyl	16.993	16.977	1061340	168.877

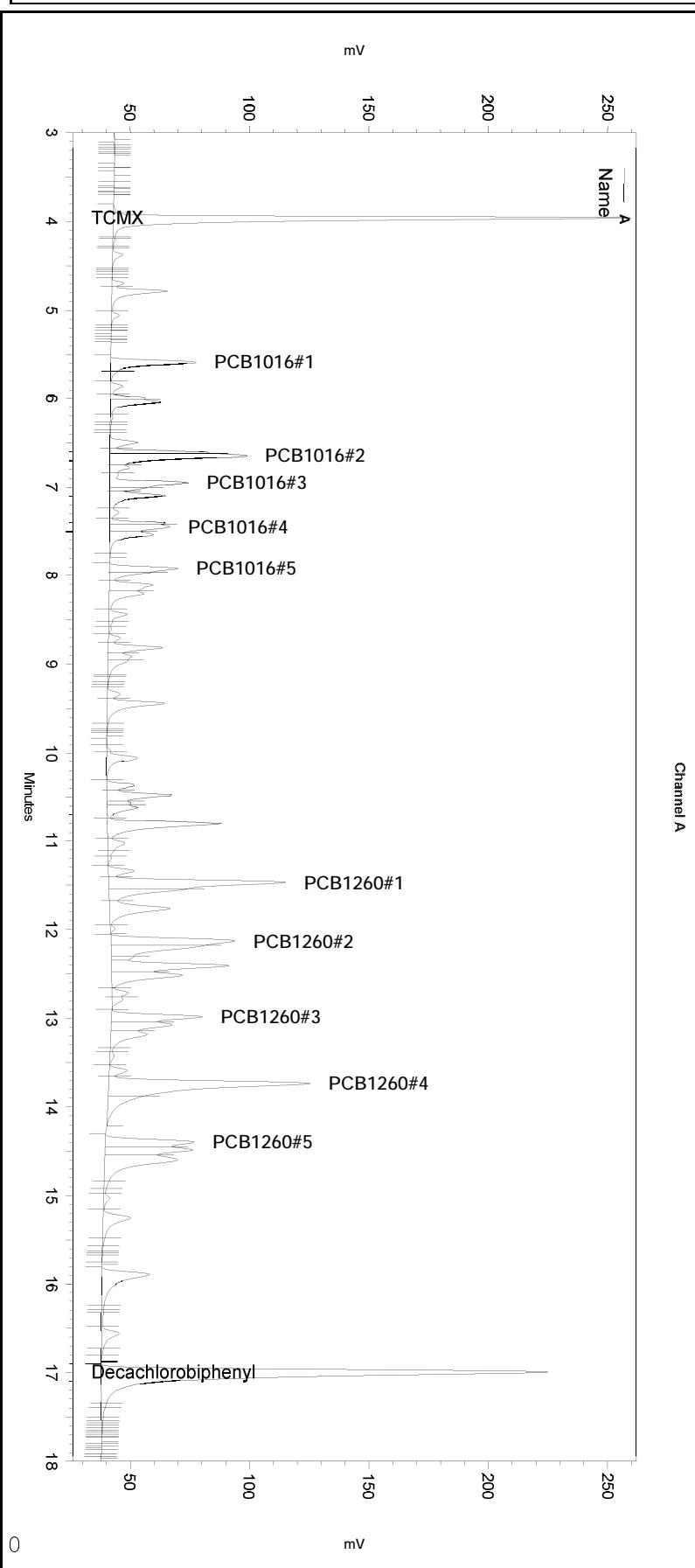
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.183	3.180	666181	100.229
PCB1016#1	4.647	4.637	68179	415.305
PCB1016#2	5.587	5.573	286635	477.923
PCB1016#3	5.797	5.783	142296	521.588
PCB1016#4	6.333	6.320	67948	437.963
PCB1016#5	7.057	7.037	113001	454.012
PCB1260#1	10.307	10.290	268815	456.668
PCB1260#2	10.950	10.923	287137	504.357
PCB1260#3	11.877	11.857	158295	456.735
PCB1260#4	12.547	12.520	399891	521.097
PCB1260#5	13.237	13.217	181366	428.219
Decachlorobiphenyl	16.177	16.163	903945	99.895

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 11 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 3:29:48 PM  
Analysis Date: 9/24/2018 4:15:13 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

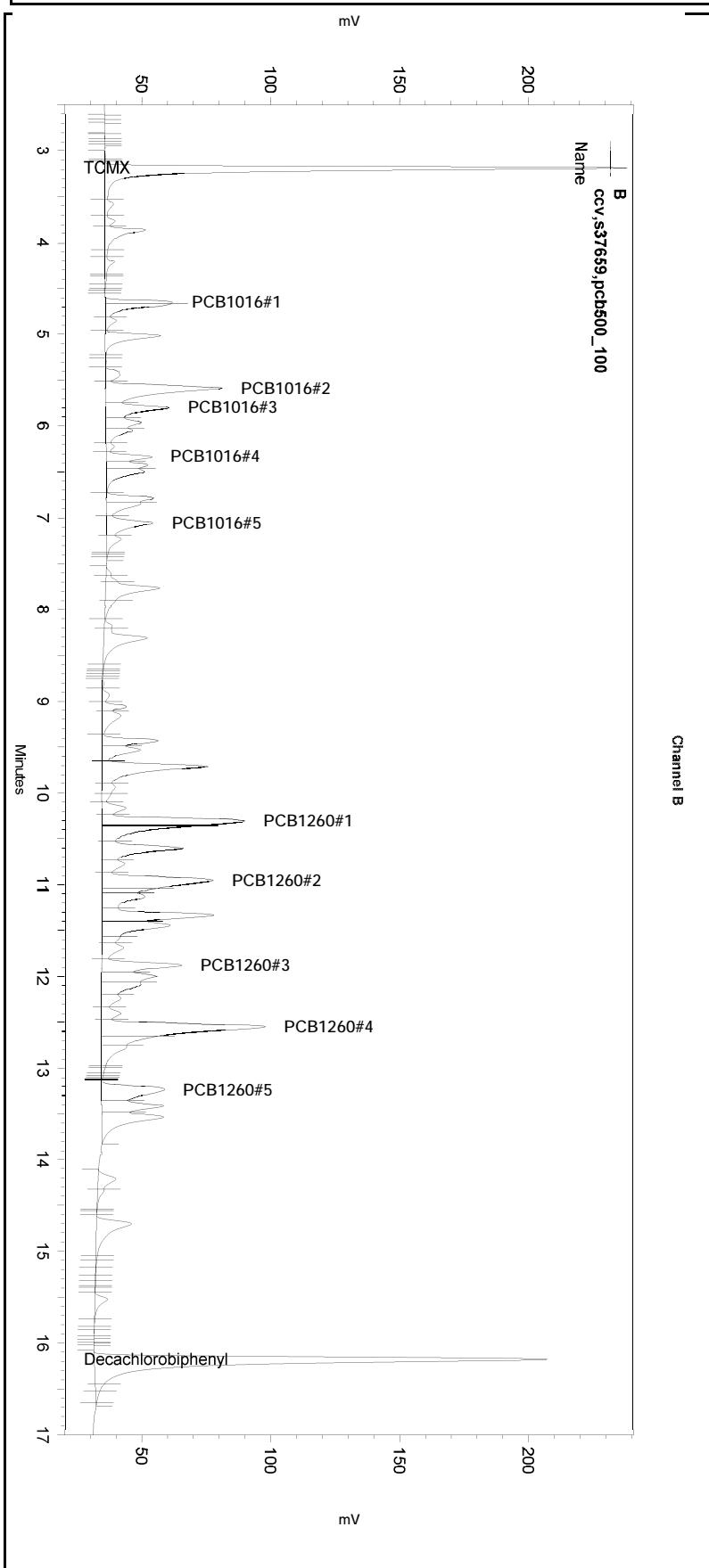
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	7.792	0	0
Yes	Manual Baseline	12.058	12.906	0
Yes	Split Peak	13.876	0	0
Yes	Reset Baseline	14.214	0	0

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 11 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 3:29:48 PM  
Analysis Date: 9/24/2018 4:15:13 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> B <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	0	1

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	4.663	0	0	0
Yes	Reset Baseline	7.46	0	0	0
Yes	Split Peak	10.355	0	0	0
Yes	Split Peak	11.037	0	0	0
Yes	Split Peak	12.651	0	0	0
Yes	Reset Baseline	13.824	0	0	0
Yes	Reset Baseline	16.684	0	0	0

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 11 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
 Run Date: 9/24/2018 3:29:48 PM  
 Analysis Date: 9/24/2018 4:14:06 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

---

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.960	3.933	691534	104.043
PCB1016#1	5.587	5.567	158222	480.254
PCB1016#2	6.647	6.637	232438	546.059
PCB1016#3	6.950	6.937	135796	576.218
PCB1016#4	7.450	7.440	92058	574.166
PCB1016#5	7.913	7.890	108391	542.125
PCB1260#1	11.470	11.453	350289	525.410
PCB1260#2	12.130	12.107	227210	384.539
PCB1260#3	12.983	12.967	163001	502.435
PCB1260#4	13.737	13.723	613513	755.606
PCB1260#5	14.397	14.370	173026	442.393
Decachlorobiphenyl	16.993	16.977	1061340	168.877

---

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

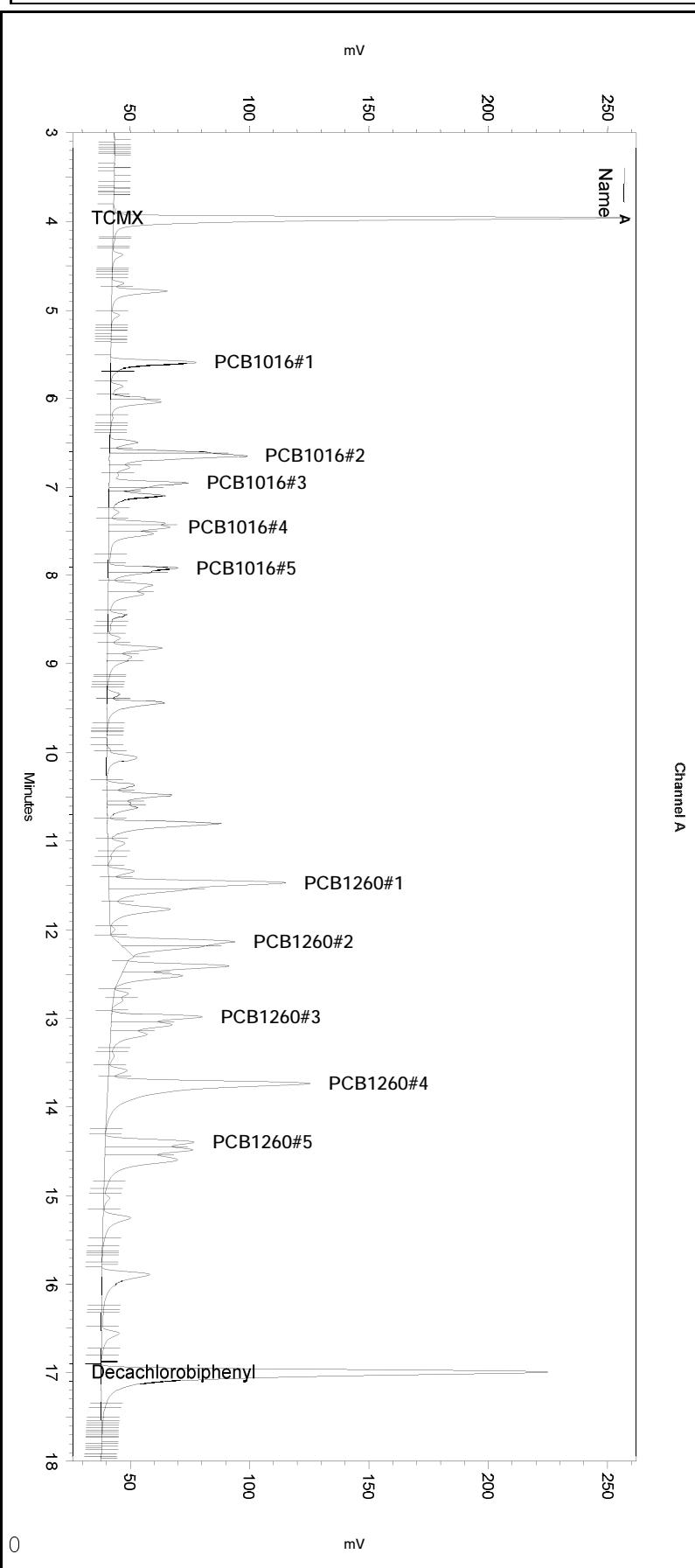
---

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.183	3.180	668994	100.652
PCB1016#1	4.647	4.637	166284	1012.902
PCB1016#2	5.587	5.573	301697	503.036
PCB1016#3	5.797	5.783	154463	566.186
PCB1016#4	6.333	6.320	77220	497.726
PCB1016#5	7.057	7.037	136059	546.654
PCB1260#1	10.307	10.290	443063	752.684
PCB1260#2	10.950	10.923	358527	629.754
PCB1260#3	11.877	11.857	171329	494.343
PCB1260#4	12.547	12.520	514256	670.125
PCB1260#5	13.237	13.217	206730	488.105
Decachlorobiphenyl	16.177	16.163	912129	100.799

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 11 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 3:29:48 PM  
Analysis Date: 9/24/2018 4:14:06 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> A <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	0	0	0	

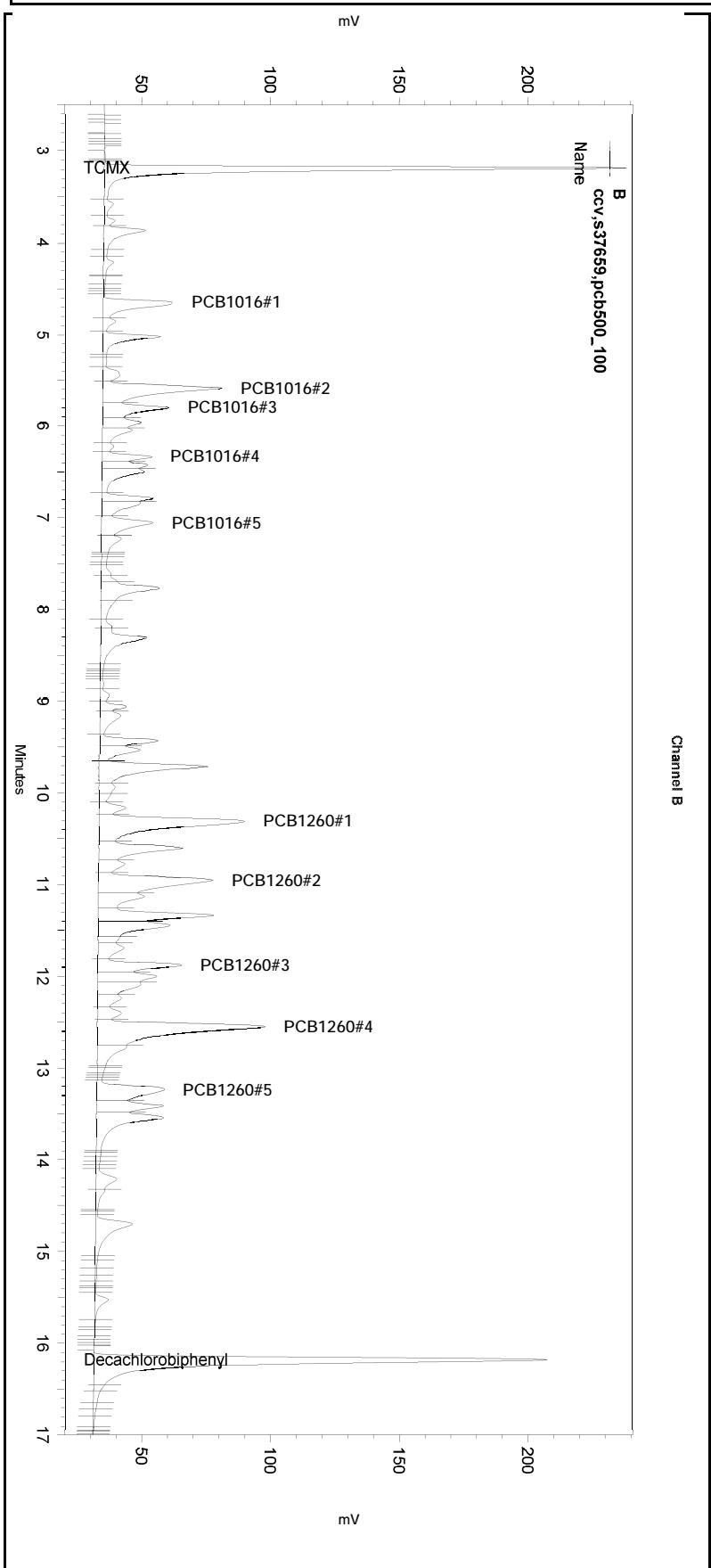
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 11 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267b.met

Software Version 3.1.7  
Run Date: 9/24/2018 3:29:48 PM  
Analysis Date: 9/24/2018 4:14:06 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> B <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-009

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
Seqnum : 208385010022 File : 267\_022 Time : 24-SEP-2018 23:52  
Cal : 208344656001 Caldate : 27-AUG-2018  
Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	568.9	pg/uL	14	15	
Aroclor-1260	A			500.0	534.1	pg/uL	7	15	
Decachlorobiphenyl	A	8438.2	11603	100.0	193.9	pg/uL	<b>94</b>	15	c+
Aroclor-1016	B			500.0	508.7	pg/uL	2	15	
Aroclor-1260	B			500.0	495.5	pg/uL	-1	15	
Decachlorobiphenyl	B	9049.0	10291	100.0	113.7	pg/uL	14	15	

JC1 09/25/18 : Corrected automatically drawn baseline.

Analyst: JC1 Date: 09/25/18 Reviewer: EAH Date: 09/25/18

+high bias c=CCV

Page 1 of 1

208385010022

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 22 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267c.met

Software Version 3.1.7  
 Run Date: 9/24/2018 11:52:27 PM  
 Analysis Date: 9/25/2018 11:12:37 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.990	3.990	761293	114.539
PCB1016#1	5.617	5.617	173115	525.459
PCB1016#2	6.680	6.680	257061	603.905
PCB1016#3	6.987	6.987	134959	572.666
PCB1016#4	7.487	7.487	98720	615.717
PCB1016#5	7.953	7.953	105268	526.505
PCB1260#1	11.513	11.513	370064	555.071
PCB1260#2	12.173	12.173	265325	449.047
PCB1260#3	13.030	13.030	170667	526.065
PCB1260#4	13.783	13.783	540352	665.501
PCB1260#5	14.450	14.450	185773	474.984
Decachlorobiphenyl	17.047	17.047	1160262	193.903

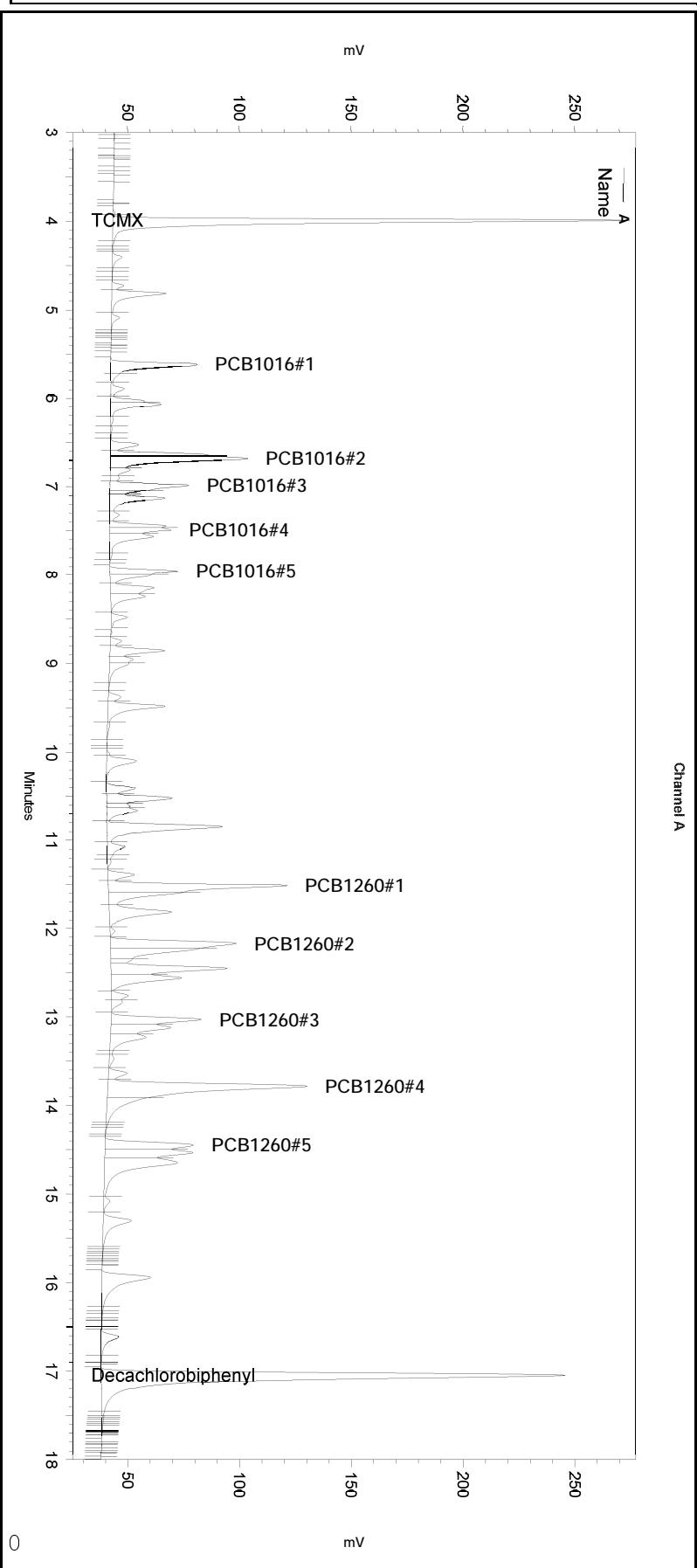
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.243	3.243	748924	112.678
PCB1016#1	4.713	4.713	70011	426.465
PCB1016#2	5.657	5.657	320213	533.909
PCB1016#3	5.867	5.867	161301	591.251
PCB1016#4	6.403	6.403	77595	500.143
PCB1016#5	7.127	7.127	122416	491.839
PCB1260#1	10.373	10.373	276789	470.215
PCB1260#2	11.013	11.013	299682	526.393
PCB1260#3	11.940	11.940	165218	476.710
PCB1260#4	12.613	12.613	408196	531.919
PCB1260#5	13.300	13.300	200117	472.491
Decachlorobiphenyl	16.240	16.240	1029115	113.727

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 22 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267c.met

Software Version 3.1.7  
Run Date: 9/24/2018 11:52:27 PM  
Analysis Date: 9/25/2018 11:12:37 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

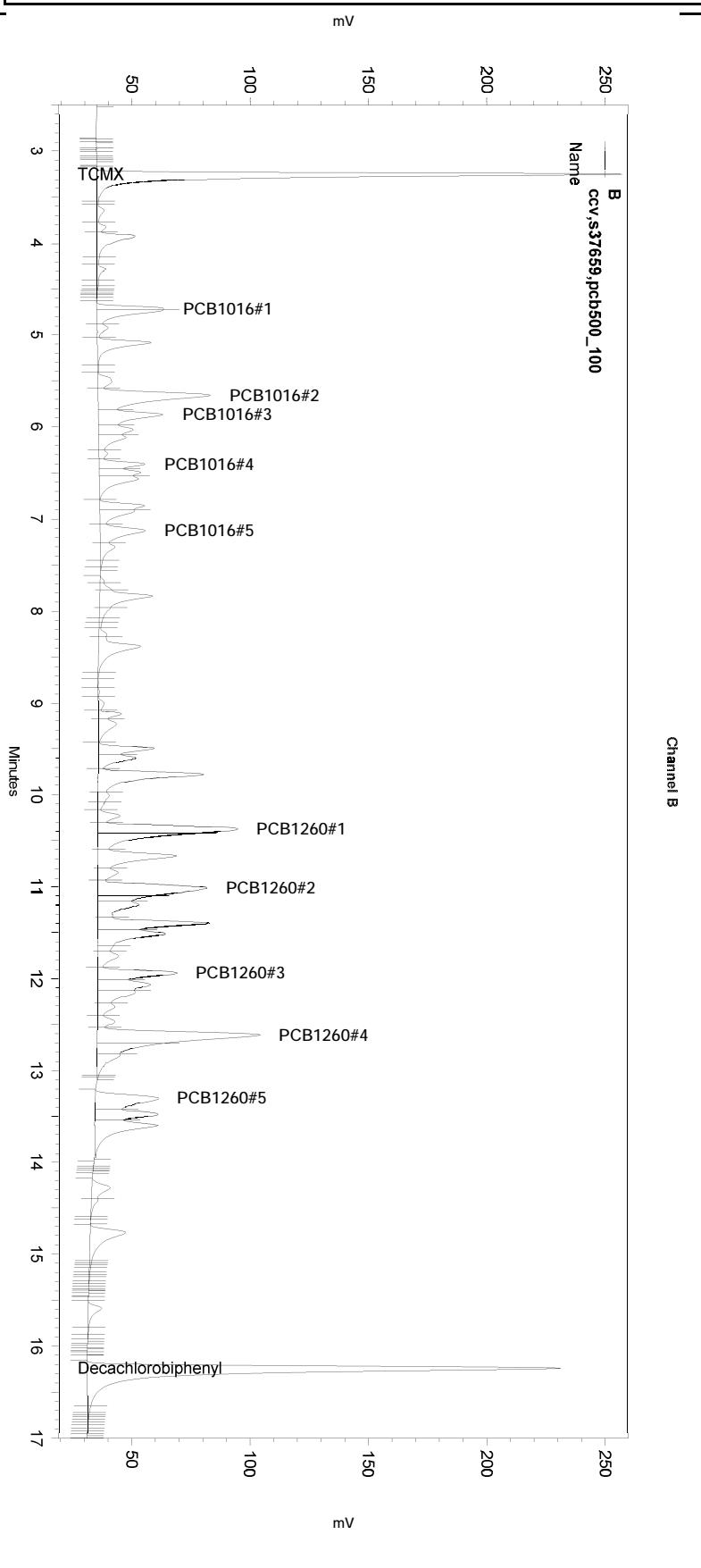
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	8.592	0	0
Yes	Manual Baseline	12.094	12.942	0
Yes	Split Peak	13.913	0	0

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 22 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267c.met

Software Version 3.1.7  
Run Date: 9/24/2018 11:52:27 PM  
Analysis Date: 9/25/2018 11:12:37 AM  
Sample Amount: 1



-----  
--< General Method Parameters >-----

No items selected for this section

-----  
--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	4.728	0	0	
Yes	Reset Baseline	7.552	0	0	
Yes	Split Peak	10.417	0	0	
Yes	Split Peak	11.101	0	0	
Yes	Split Peak	12.701	0	0	
Yes	Reset Baseline	13.096	0	0	

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 22 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267c.met

Software Version 3.1.7  
 Run Date: 9/24/2018 11:52:27 PM  
 Analysis Date: 9/25/2018 10:52:58 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.990	3.990	761293	114.539
PCB1016#1	5.617	5.617	173313	526.060
PCB1016#2	6.680	6.680	258740	607.849
PCB1016#3	6.987	6.987	136652	579.850
PCB1016#4	7.487	7.487	100245	625.228
PCB1016#5	7.953	7.953	109459	547.467
PCB1260#1	11.513	11.513	370064	555.071
PCB1260#2	12.173	12.173	246475	417.144
PCB1260#3	13.030	13.030	170667	526.065
PCB1260#4	13.783	13.783	638856	786.819
PCB1260#5	14.450	14.450	185773	474.984
Decachlorobiphenyl	17.047	17.047	1160262	193.903

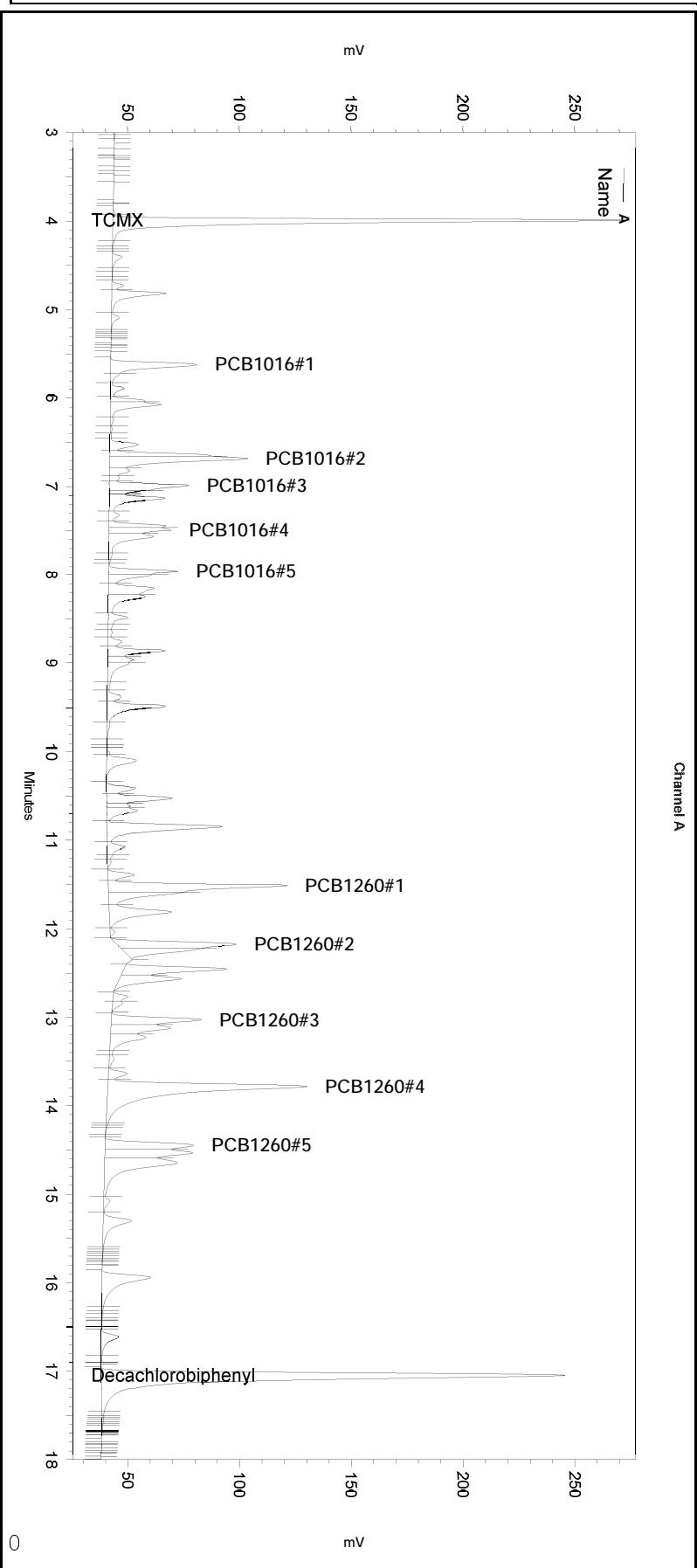
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.243	3.243	749377	112.746
PCB1016#1	4.713	4.713	178835	1089.355
PCB1016#2	5.657	5.657	332586	554.539
PCB1016#3	5.867	5.867	171531	628.749
PCB1016#4	6.403	6.403	86398	556.883
PCB1016#5	7.127	7.127	145575	584.887
PCB1260#1	10.373	10.373	461285	783.640
PCB1260#2	11.013	11.013	370605	650.969
PCB1260#3	11.940	11.940	174088	502.303
PCB1260#4	12.613	12.613	537366	700.240
PCB1260#5	13.300	13.300	202890	479.039
Decachlorobiphenyl	16.240	16.240	1029115	113.727

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 22 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267c.met

Software Version 3.1.7  
Run Date: 9/24/2018 11:52:27 PM  
Analysis Date: 9/25/2018 10:52:58 AM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> A <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	0	0	0	

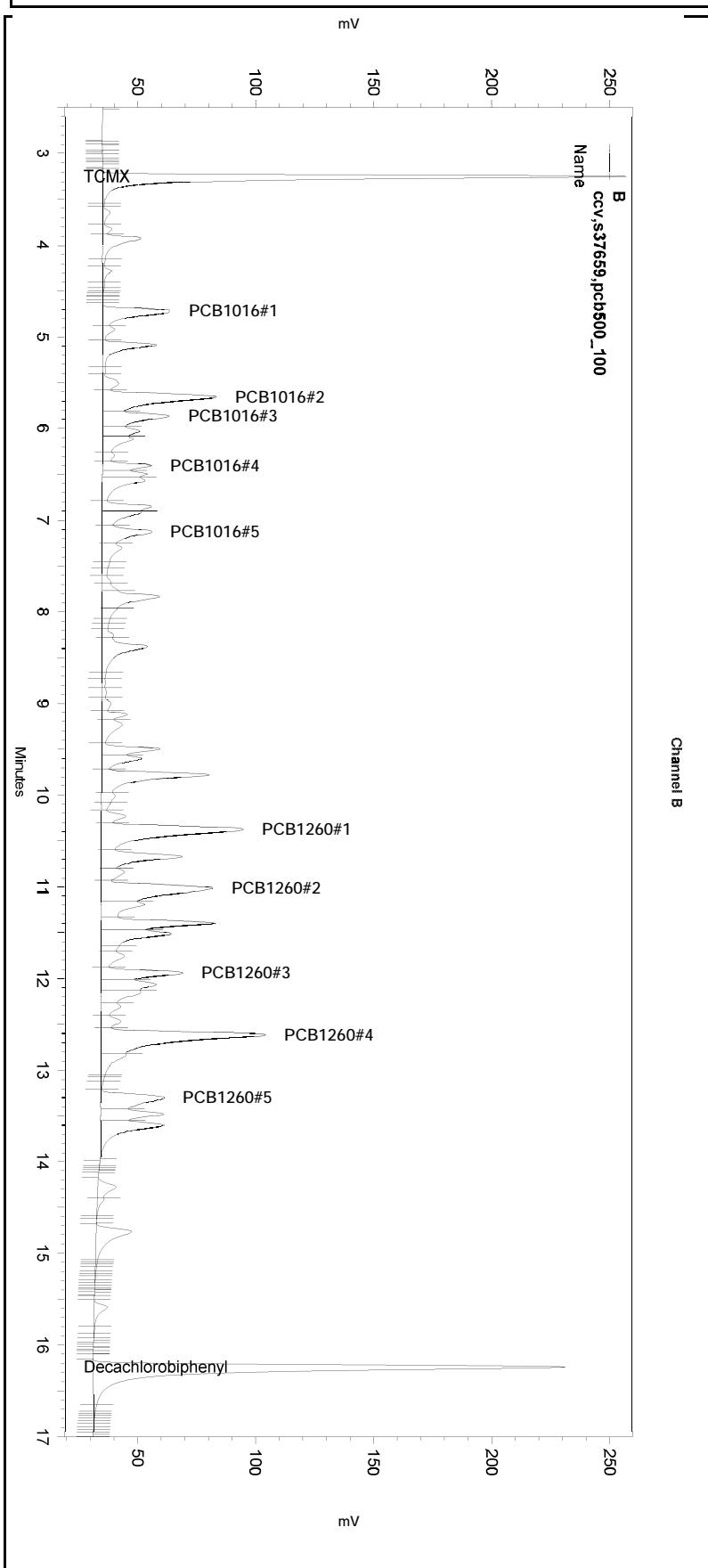
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 22 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267c.met

Software Version 3.1.7  
Run Date: 9/24/2018 11:52:27 PM  
Analysis Date: 9/25/2018 10:52:58 AM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> B <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-022

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
Seqnum : 208385010073.1 File : 267\_073 Time : 26-SEP-2018 01:25  
Cal : 208344656001 Caldate : 27-AUG-2018  
Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	488.0	pg/uL	-2	15	
Aroclor-1260	A			500.0	505.7	pg/uL	1	15	
Decachlorobiphenyl	A	8438.2	11170	100.0	182.5	pg/uL	83	15	c+
Aroclor-1016	B			500.0	455.7	pg/uL	-9	15	
Aroclor-1260	B			500.0	433.8	pg/uL	-13	15	
Decachlorobiphenyl	B	9049.0	9621.5	100.0	106.3	pg/uL	6	15	

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

+high bias c=CCV

Page 1 of 1

208385010073.1

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 73 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 1:25:29 AM  
 Analysis Date: 9/26/2018 4:22:38 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.057	4.057	698600	105.107
PCB1016#1	5.700	5.700	161222	489.360
PCB1016#2	6.773	6.773	227487	534.428
PCB1016#3	7.077	7.077	133393	566.021
PCB1016#4	7.537	7.537	59238	369.467
PCB1016#5	8.050	8.050	96132	480.811
PCB1260#1	11.637	11.637	310693	466.018
PCB1260#2	12.313	12.313	319387	540.543
PCB1260#3	13.160	13.160	152475	469.990
PCB1260#4	13.917	13.917	590894	727.748
PCB1260#5	14.590	14.590	126715	323.985
Decachlorobiphenyl	17.180	17.180	1117034	182.523

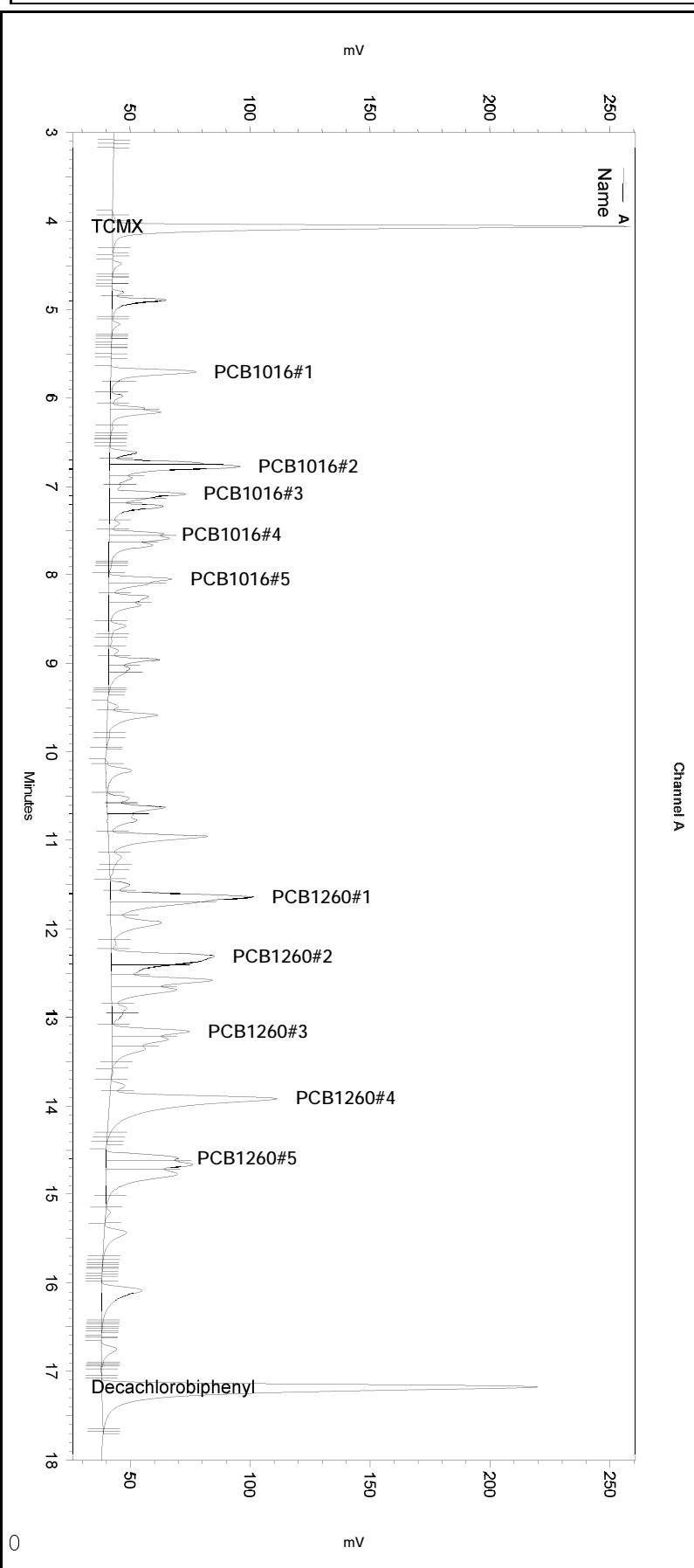
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.297	3.297	668867	100.633
PCB1016#1	4.790	4.790	83738	510.081
PCB1016#2	5.737	5.737	272458	454.285
PCB1016#3	5.947	5.947	136088	498.832
PCB1016#4	6.483	6.483	56926	366.920
PCB1016#5	7.213	7.213	111635	448.524
PCB1260#1	10.493	10.493	225414	382.938
PCB1260#2	11.147	11.147	315833	554.762
PCB1260#3	12.060	12.060	155452	448.532
PCB1260#4	12.743	12.743	301222	392.521
PCB1260#5	13.437	13.437	165228	390.116
Decachlorobiphenyl	16.363	16.363	962153	106.327

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 73 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:25:29 AM  
Analysis Date: 9/26/2018 4:22:38 PM  
Sample Amount: 1



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#### Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

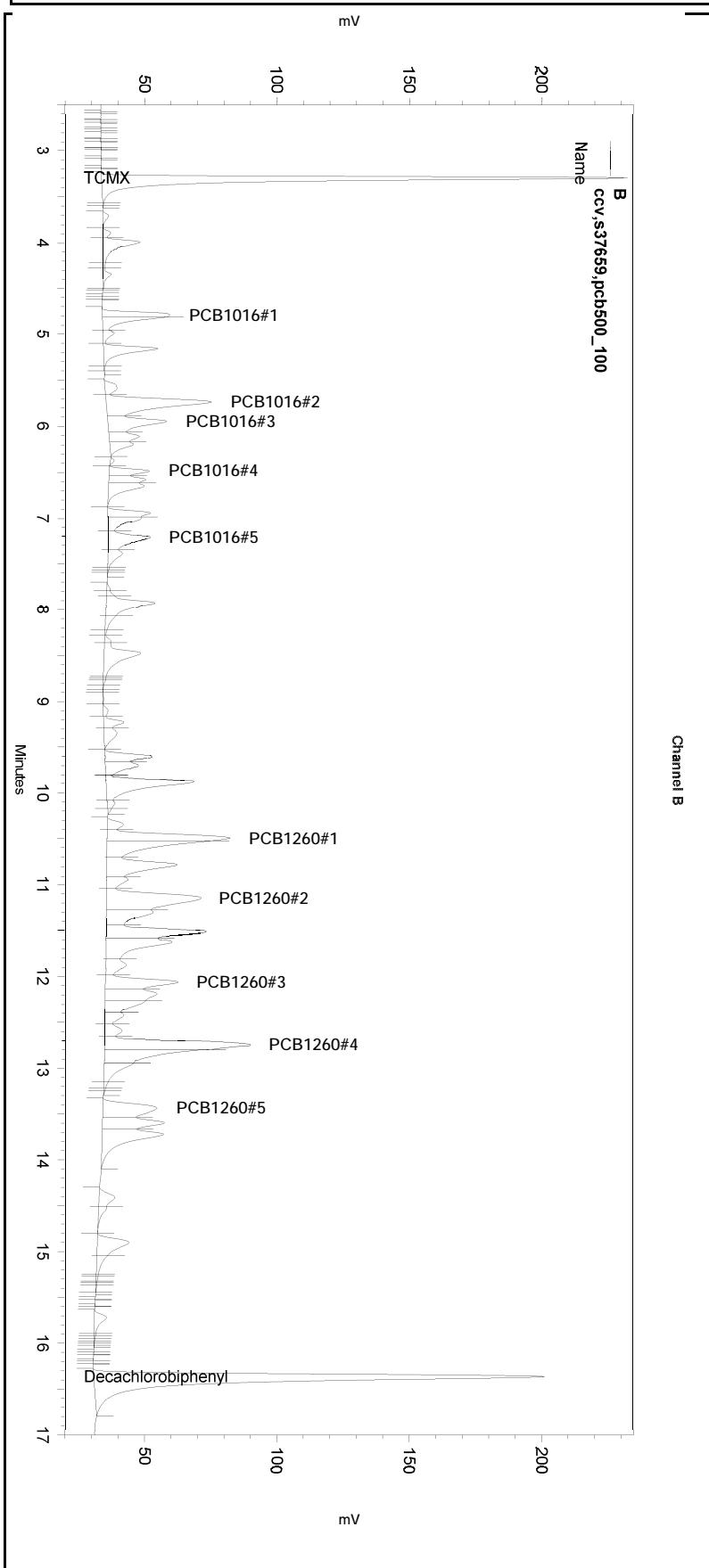
#### Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073  
Start Stop

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	9.354	0	0
Yes	Reset Baseline	11.432	0	0
Yes	Split Peak	12.403	0	0
Yes	Reset Baseline	13.568	0	0
Yes	Reset Baseline	14.429	0	0
Yes	Reset Baseline	15.142	0	0
Yes	Reset Baseline	17.701	0	0

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 73 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:25:29 AM  
Analysis Date: 9/26/2018 4:22:38 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

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Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	4.81	0	0	
Yes	Reset Baseline	5.447	0	0	
Yes	Reset Baseline	6.326	0	0	
Yes	Reset Baseline	6.863	0	0	
Yes	Reset Baseline	10.241	0	0	
Yes	Split Peak	10.527	0	0	
Yes	Reset Baseline	13.297	0	0	
Yes	Reset Baseline	14.107	0	0	
Yes	Reset Baseline	16.795	0	0	

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 73 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 1:25:29 AM  
 Analysis Date: 9/26/2018 4:22:20 PM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.057	4.057	698600	105.107
PCB1016#1	5.700	5.700	161222	489.360
PCB1016#2	6.773	6.773	227950	535.515
PCB1016#3	7.077	7.077	134374	570.184
PCB1016#4	7.537	7.537	60127	375.012
PCB1016#5	8.050	8.050	98192	491.114
PCB1260#1	11.637	11.637	331197	496.773
PCB1260#2	12.313	12.313	470575	796.420
PCB1260#3	13.160	13.160	181197	558.522
PCB1260#4	13.917	13.917	659329	812.033
PCB1260#5	14.590	14.590	137938	352.680
Decachlorobiphenyl	17.180	17.180	1134486	187.025

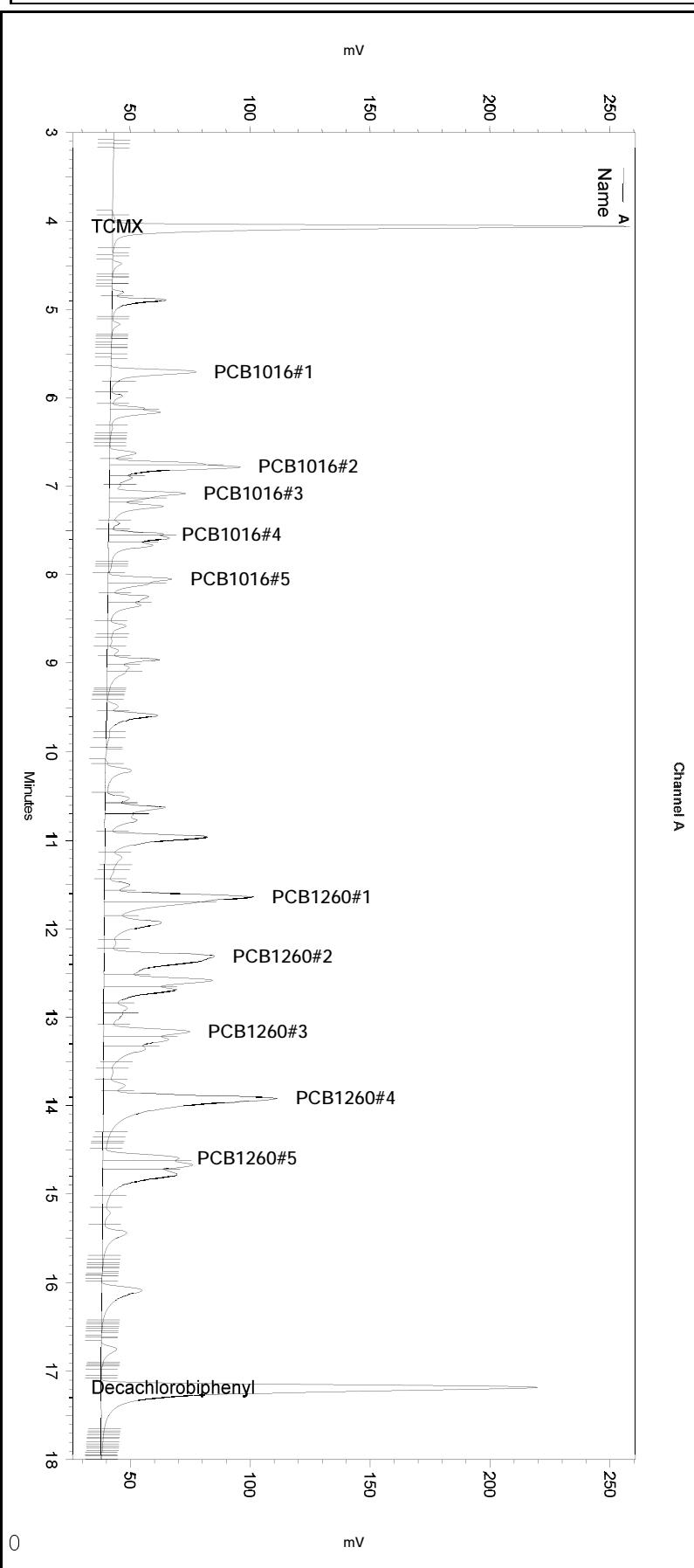
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.297	3.297	668867	100.633
PCB1016#1	4.790	4.790	161910	986.258
PCB1016#2	5.737	5.737	285683	476.335
PCB1016#3	5.947	5.947	150984	553.434
PCB1016#4	6.483	6.483	67164	432.909
PCB1016#5	7.213	7.213	115931	465.784
PCB1260#1	10.493	10.493	446730	758.914
PCB1260#2	11.147	11.147	345676	607.181
PCB1260#3	12.060	12.060	175113	505.261
PCB1260#4	12.743	12.743	319438	416.258
PCB1260#5	13.437	13.437	190090	448.817
Decachlorobiphenyl	16.363	16.363	980573	108.363

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 73 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:25:29 AM  
Analysis Date: 9/26/2018 4:22:20 PM  
Sample Amount: 1



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#### Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0
Yes	Disable End Peak Detection	12.29	12.314	0

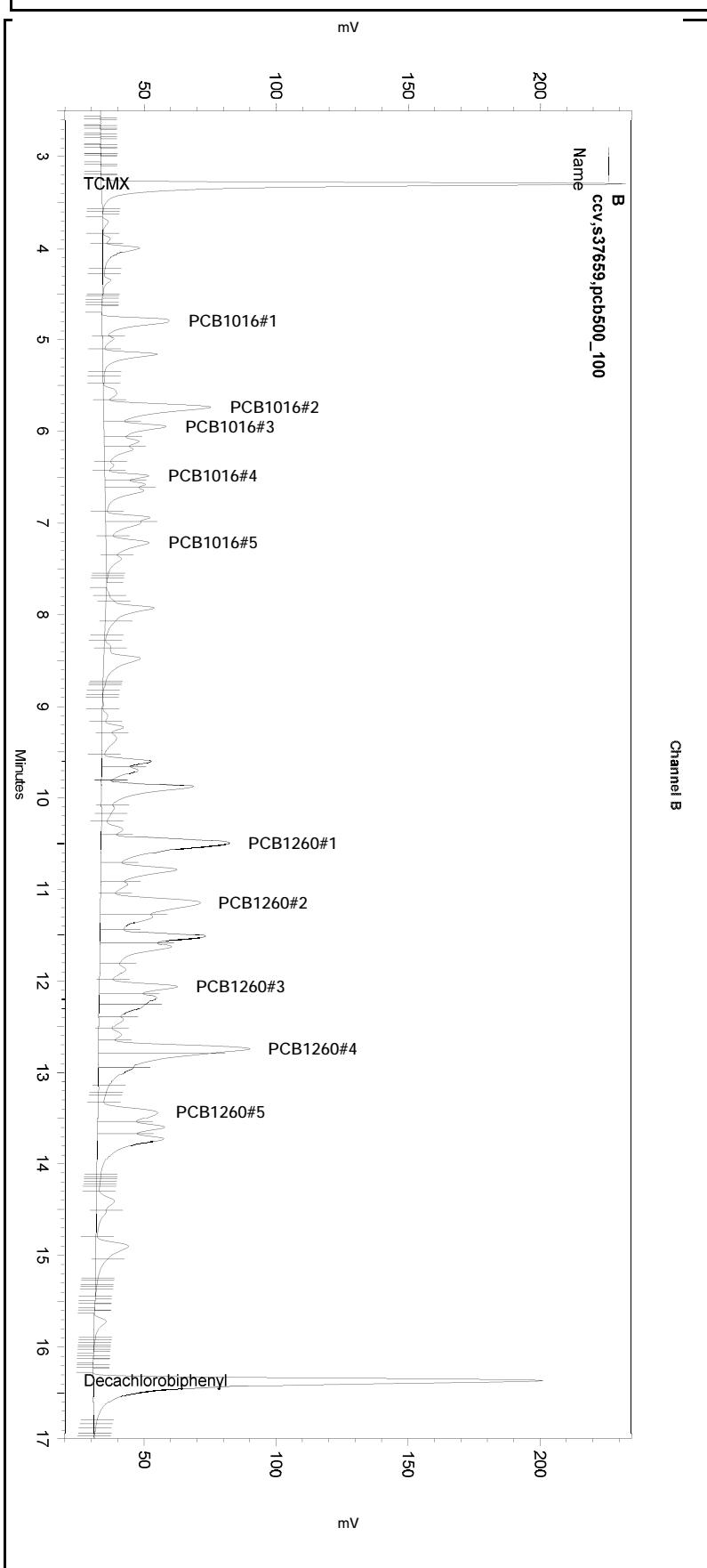
#### Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
No	Reset Baseline	9.354	0	0
No	Reset Baseline	11.432	0	0
No	Split Peak	12.403	0	0
No	Reset Baseline	13.568	0	0
No	Reset Baseline	14.429	0	0
No	Reset Baseline	15.142	0	0
No	Reset Baseline	17.701	0	0

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 73 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:25:29 AM  
Analysis Date: 9/26/2018 4:22:20 PM  
Sample Amount: 1



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Integration Events  
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Enabled Event Type Start Stop (Minutes) (Minutes) Value  
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Yes Width 0 0 0.2  
Yes Threshold 0 0 50  
Yes Integration Off 0 2 0  
Yes Shoulder Sensitivity 3 18 1  
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Manual Integration Fixes  
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Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-073  
Start Stop  
Enabled Event Type (Minutes) (Minutes) Value  
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No Split Peak 4.81 0 0  
No Reset Baseline 5.447 0 0  
No Reset Baseline 6.326 0 0  
No Reset Baseline 6.863 0 0  
No Reset Baseline 10.241 0 0  
No Split Peak 10.527 0 0  
No Reset Baseline 13.297 0 0  
No Reset Baseline 14.107 0 0  
No Reset Baseline 16.795 0 0

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : AR2154\_500 IDF : 1.0  
Seqnum : 208385010074 File : 267\_074 Time : 26-SEP-2018 01:53  
Cal : 208328928001 Caldate : 17-AUG-2018  
Standards: S38368

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1254	A	500.0	450.4	pg/uL	-10	15	
Aroclor-1254	B	500.0	489.0	pg/uL	-2	15	

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18  
Page 1 of 1 208385010074

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-074  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 74 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:53:29 AM  
Analysis Date: 9/26/2018 1:20:49 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.957	8.957	139684	484.730
PCB1254#2	9.583	9.583	184559	486.093
PCB1254#3	10.223	10.223	145459	471.367
PCB1254#4	10.520	10.520	230500	469.738
PCB1254#5	11.213	11.213	121633	340.317

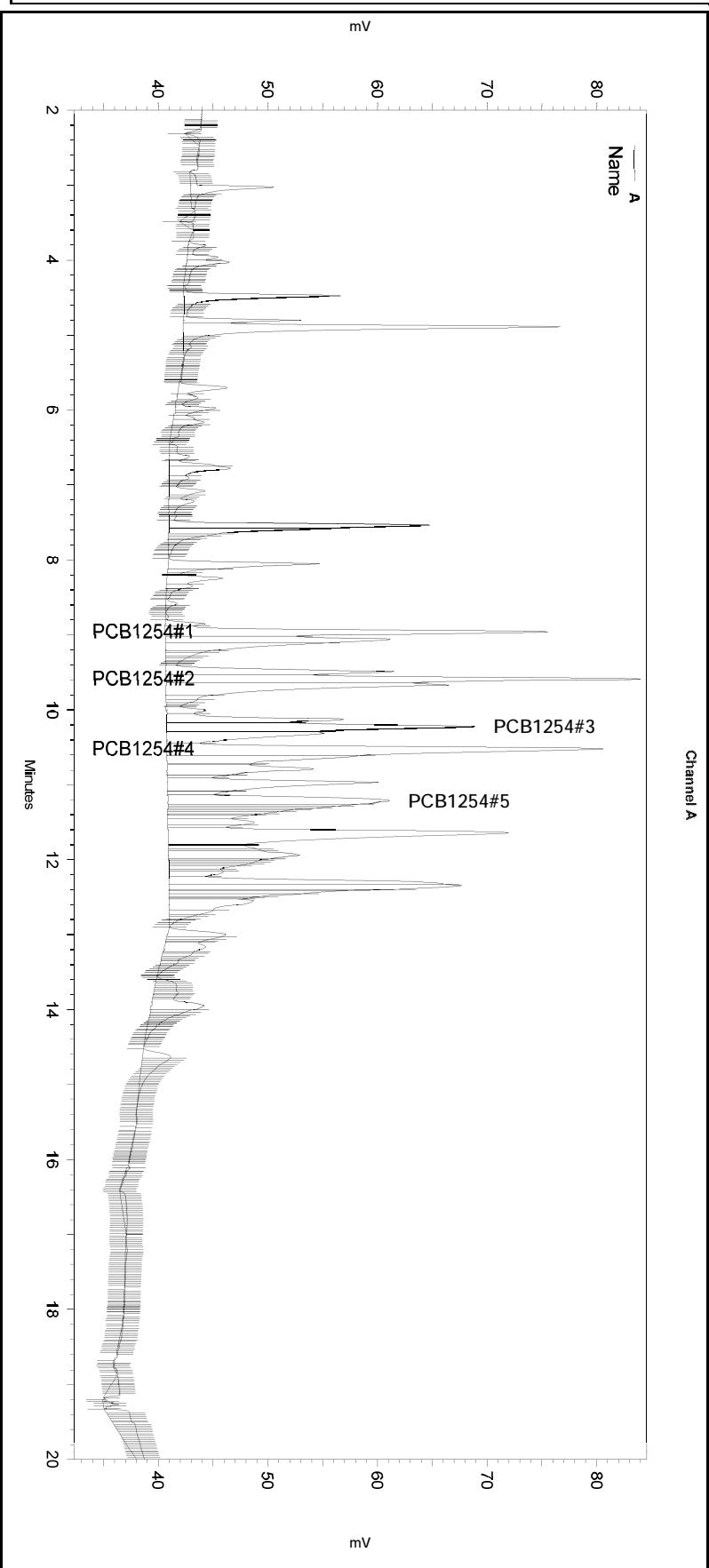
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.927	7.927	194316	602.728
PCB1254#2	8.470	8.470	196961	565.976
PCB1254#3	9.090	9.090	113428	536.395
PCB1254#4	9.340	9.340	186002	432.596
PCB1254#5	9.890	9.890	92859	307.240

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-074  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 74 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:53:29 AM  
Analysis Date: 9/26/2018 1:20:49 PM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

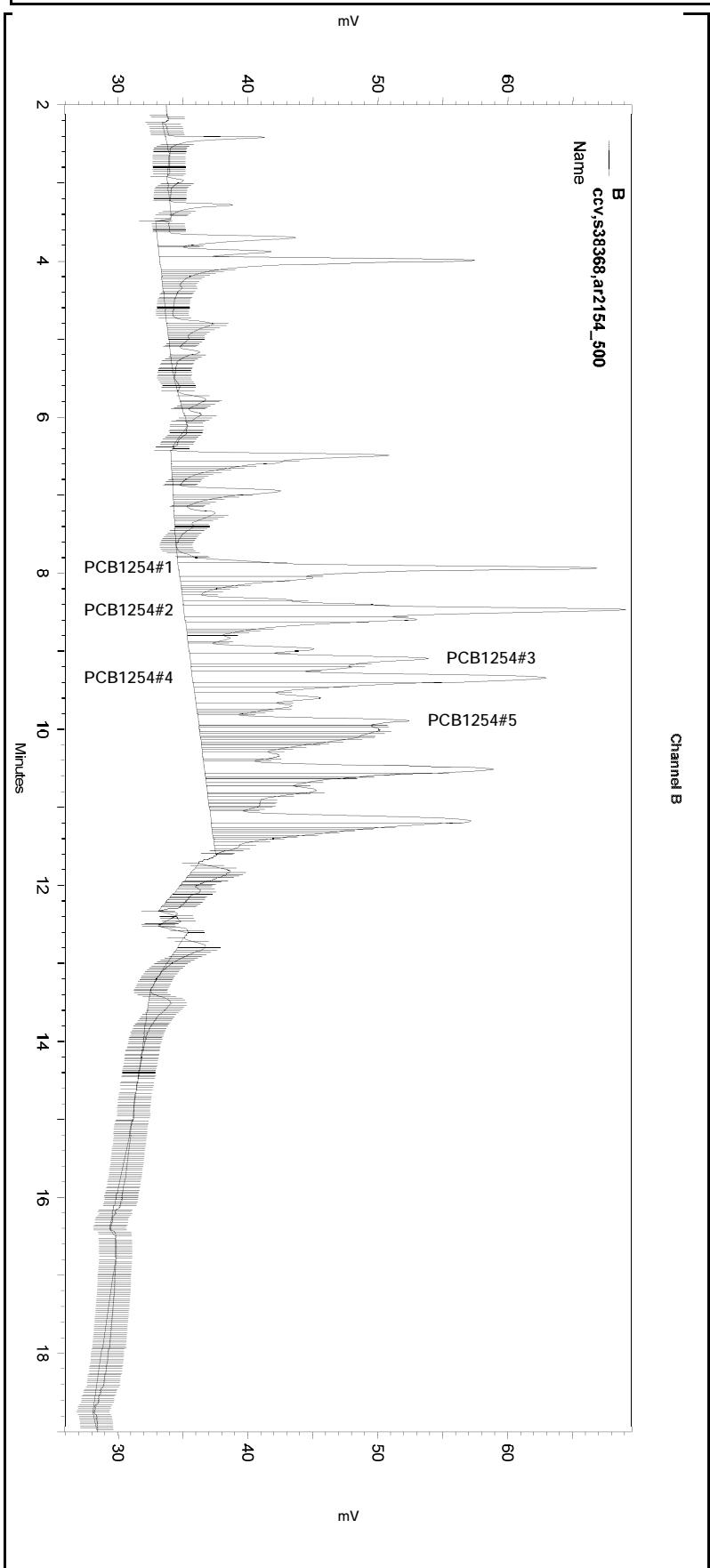
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-074

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	12.895	0	0

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-074  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 74 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:53:29 AM  
Analysis Date: 9/26/2018 1:20:49 PM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Reset Baseline	11.596	0	0	

Sample Name: **ccv,s38368,ar2154\_500**

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-074

Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq

Instrument: GC06 Vial: 74 Operator: lims2k3\pest3

Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267f.met

Software Version 3.1.7

Run Date: 9/26/2018 1:53:29 AM

Analysis Date: 9/26/2018 2:17:27 AM

Sample Amount: 1

**\*GC06\*****PCB - ECD Instrument Results**

Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.030	4.050	16806	2.529
PCB1016#1	5.707	5.697	18886	57.325
PCB1016#2	6.747	6.750	10113	23.758
PCB1016#3	7.083	7.080	17568	74.546
PCB1016#4	7.580	7.577	39049	243.549
PCB1016#5	8.050	8.040	65293	326.567
PCB1260#1	11.640	11.613	257549	386.306
PCB1260#2		12.273		0.000 BDL
PCB1260#3		13.130		0.000 BDL
PCB1260#4		13.883		0.000 BDL
PCB1260#5		14.550		0.000 BDL
Decachlorobiphenyl	17.140	17.147	6	0.000

**\*GC06\*****PCB - ECD Instrument Results**

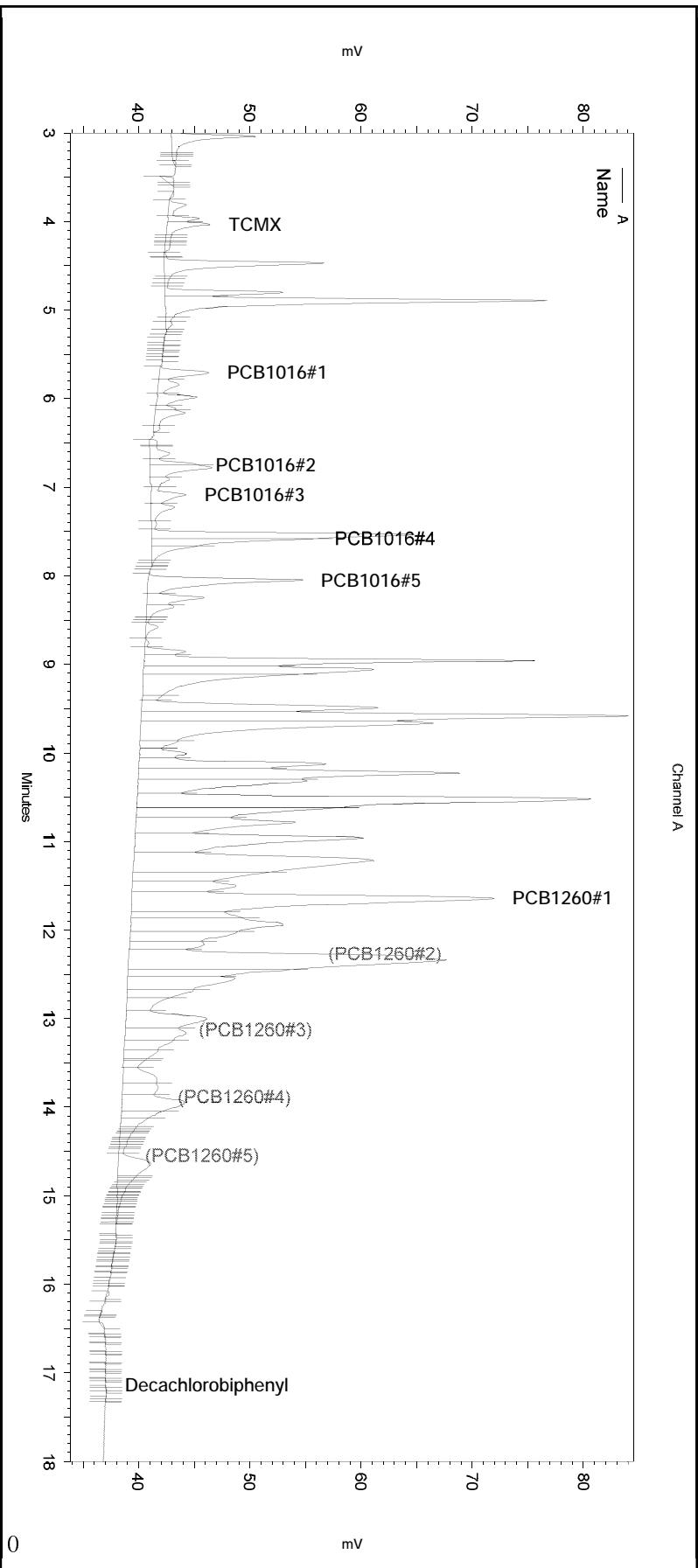
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.283	3.303	25795	3.881
PCB1016#1		4.783		0.000 BDL
PCB1016#2		5.727		0.000 BDL
PCB1016#3	5.967	5.937	12711	46.592
PCB1016#4	6.490	6.473	82128	529.361
PCB1016#5		7.197		0.000 BDL
PCB1260#1		10.483		0.000 BDL
PCB1260#2		11.123		0.000 BDL
PCB1260#3	12.067	12.050	13435	38.765
PCB1260#4		12.733		0.000 BDL
PCB1260#5		13.410		0.000 BDL
Decachlorobiphenyl		16.350		0.000 BDL

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-074  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 74 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267f.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:53:29 AM  
Analysis Date: 9/26/2018 2:17:27 AM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

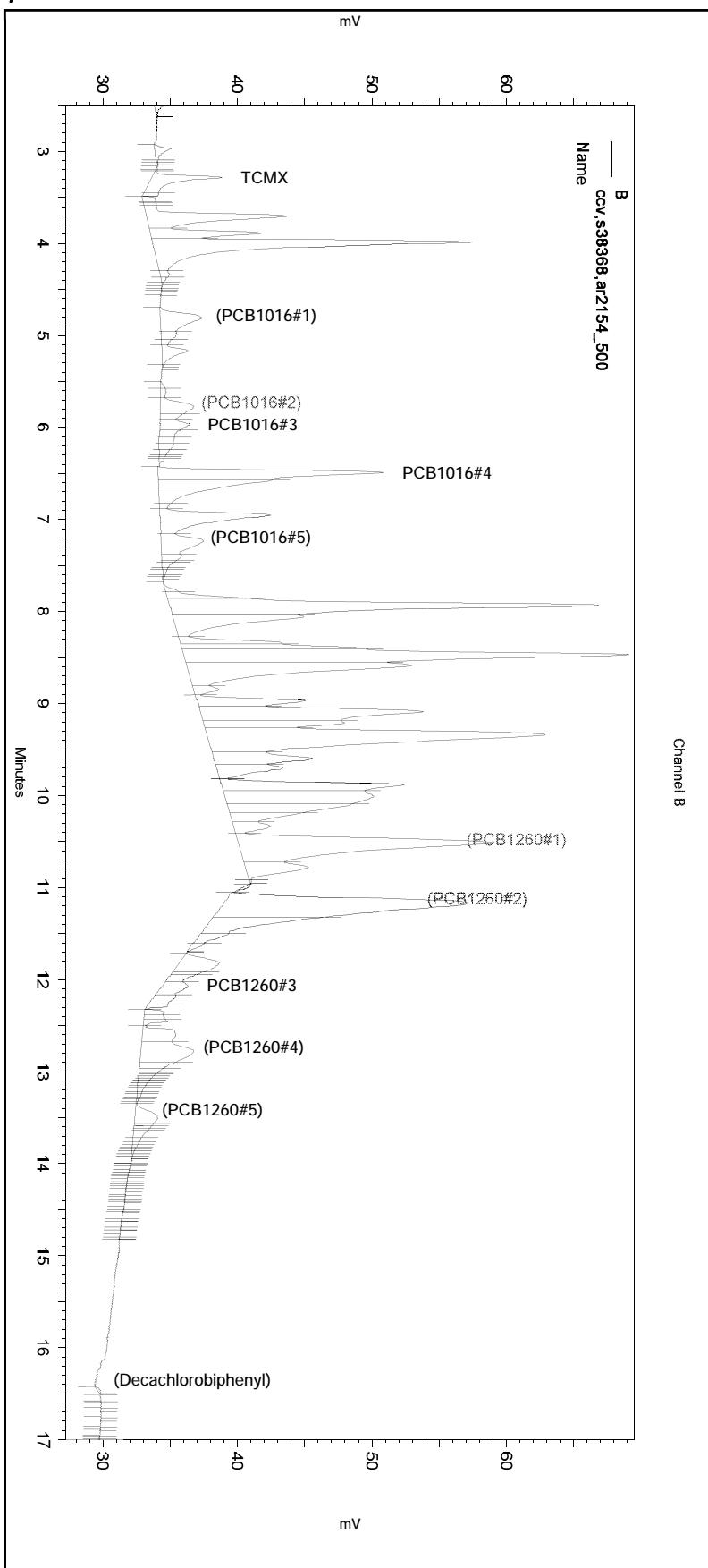
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-074\_03FD.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-074  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 74 Operator: lms2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267f.met

Software Version 3.1.7  
Run Date: 9/26/2018 1:53:29 AM  
Analysis Date: 9/26/2018 2:17:27 AM  
Sample Amount: 1



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No items selected for this section

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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-074\_03FD.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
 Seqnum : 208385010085 File : 267\_085 Time : 26-SEP-2018 07:01  
 Cal : 208344656001 Caldate : 27-AUG-2018  
 Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	462.4	pg/uL	-8	15	
Aroclor-1260	A			500.0	436.6	pg/uL	-13	15	
Decachlorobiphenyl	A	8438.2	9103.7	100.0	136.1	pg/uL	<b>36</b>	15	c+
Aroclor-1016	B			500.0	476.3	pg/uL	-5	15	
Aroclor-1260	B			500.0	423.4	pg/uL	-15	15	
Decachlorobiphenyl	B	9049.0	7871.7	100.0	86.99	pg/uL	-13	15	

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18

+high bias c=CCV

Page 1 of 1

208385010085

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 85 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 7:01:31 AM  
 Analysis Date: 9/26/2018 9:28:08 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.063	4.057	687356	103.415
PCB1016#1	5.710	5.700	156885	476.196
PCB1016#2	6.780	6.773	221507	520.379
PCB1016#3	7.087	7.077	115074	488.289
PCB1016#4	7.547	7.537	58244	363.268
PCB1016#5	8.060	8.050	92701	463.650
PCB1260#1	11.647	11.637	289109	433.644
PCB1260#2	12.317	12.313	267352	452.477
PCB1260#3	13.167	13.160	129535	399.279
PCB1260#4	13.923	13.917	480338	591.587
PCB1260#5	14.590	14.590	119661	305.949
Decachlorobiphenyl	17.190	17.180	910365	136.101

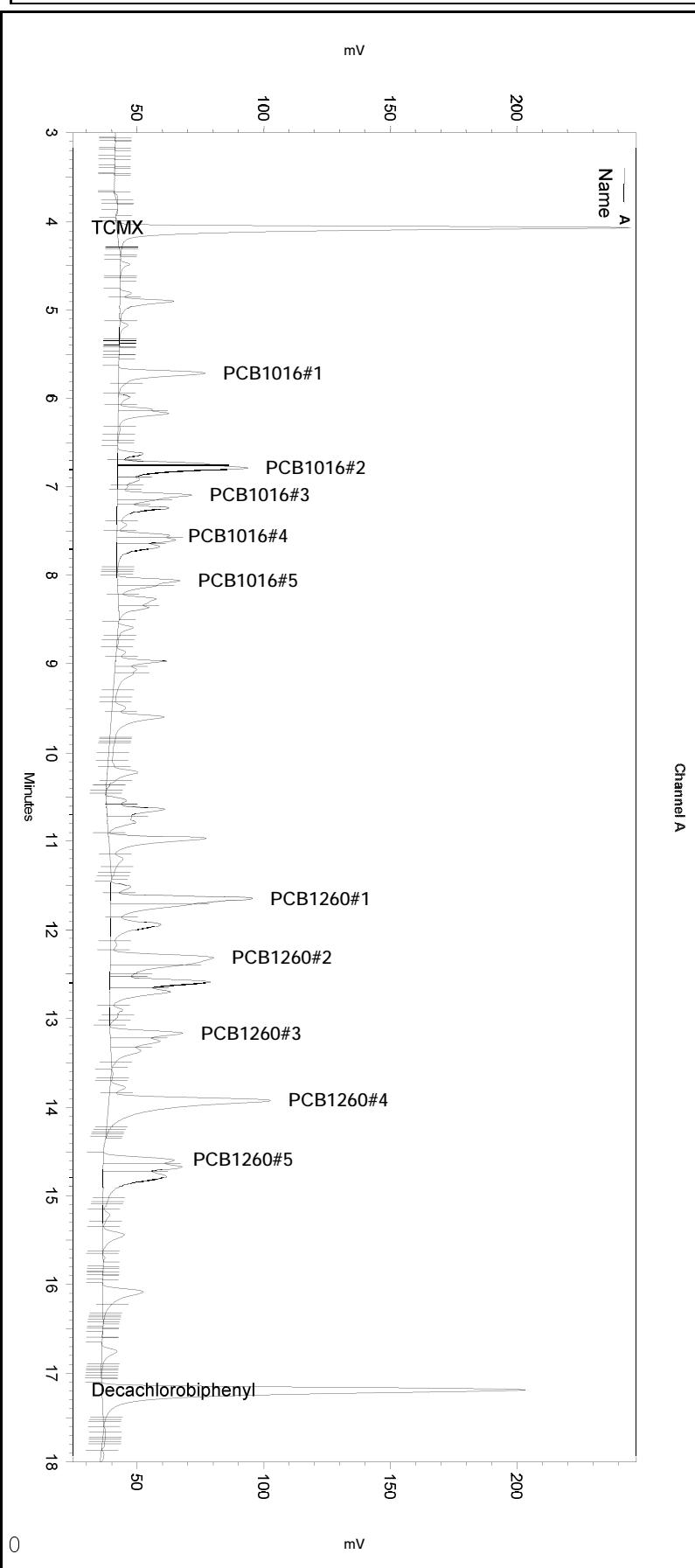
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.303	3.297	612306	92.124
PCB1016#1	4.807	4.790	95338	580.742
PCB1016#2	5.747	5.737	269767	449.798
PCB1016#3	5.957	5.947	140652	515.562
PCB1016#4	6.493	6.483	65285	420.798
PCB1016#5	7.223	7.213	103227	414.742
PCB1260#1	10.507	10.493	223218	379.207
PCB1260#2	11.157	11.147	284217	499.228
PCB1260#3	12.067	12.060	146991	424.119
PCB1260#4	12.743	12.743	412164	537.089
PCB1260#5	13.440	13.437	117436	277.275
Decachlorobiphenyl	16.370	16.363	787173	86.990

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 85 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:01:31 AM  
Analysis Date: 9/26/2018 9:28:08 AM  
Sample Amount: 1



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0

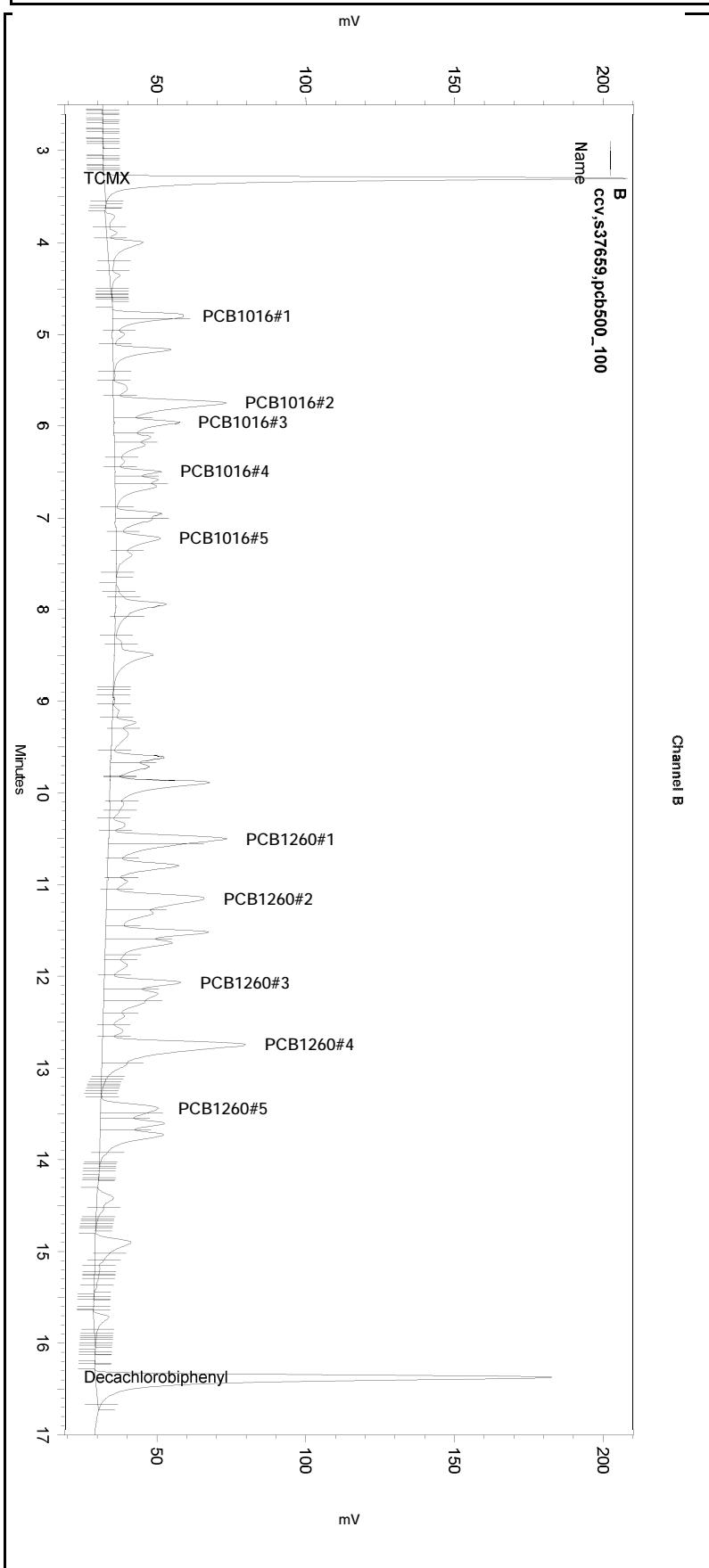
Manual Integration Fixes

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Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	7.028	0	0
Yes	Reset Baseline	8.501	0	0
Yes	Reset Baseline	11.43	0	0
Yes	Split Peak	12.394	0	0
Yes	Reset Baseline	13.56	0	0
Yes	Reset Baseline	14.343	0	0
Yes	Reset Baseline	17.596	0	0

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 85 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:01:31 AM  
Analysis Date: 9/26/2018 9:28:08 AM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

-----  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Split Peak	4.83	0	0	
Yes	Reset Baseline	7.647	0	0	
Yes	Split Peak	10.558	0	0	
Yes	Reset Baseline	16.733	0	0	

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 85 Operator: Pest 3. Analyst (lms2k3\pest3)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 7:01:31 AM  
 Analysis Date: 9/26/2018 9:14:12 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.063	4.057	693989	104.413
PCB1016#1	5.710	5.700	157493	478.041
PCB1016#2	6.780	6.773	227280	533.941
PCB1016#3	7.087	7.077	135277	574.016
PCB1016#4	7.547	7.537	64527	402.455
PCB1016#5	8.060	8.050	106209	531.212
PCB1260#1	11.647	11.637	307786	461.658
PCB1260#2	12.317	12.313	404271	684.204
PCB1260#3	13.167	13.160	150243	463.110
PCB1260#4	13.923	13.917	522667	643.720
PCB1260#5	14.590	14.590	120226	307.394
Decachlorobiphenyl	17.190	17.180	922394	138.531

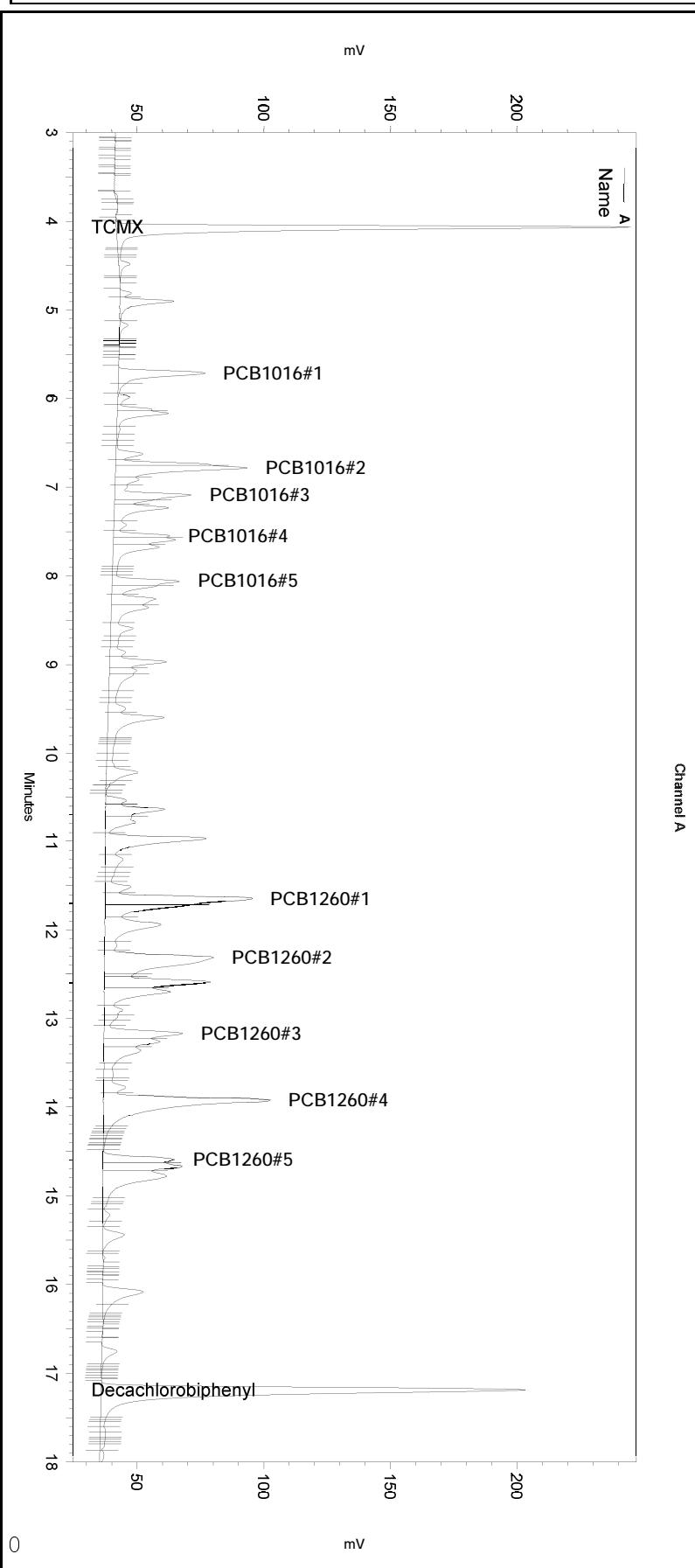
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.303	3.297	612306	92.124
PCB1016#1	4.807	4.790	155516	947.310
PCB1016#2	5.747	5.737	283975	473.487
PCB1016#3	5.957	5.947	152779	560.013
PCB1016#4	6.493	6.483	76228	491.332
PCB1016#5	7.223	7.213	132496	532.338
PCB1260#1	10.507	10.493	364785	619.704
PCB1260#2	11.157	11.147	299706	526.435
PCB1260#3	12.067	12.060	153935	444.155
PCB1260#4	12.743	12.743	419426	546.552
PCB1260#5	13.440	13.437	119262	281.587
Decachlorobiphenyl	16.370	16.363	797297	88.109

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 85 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:01:31 AM  
Analysis Date: 9/26/2018 9:14:12 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

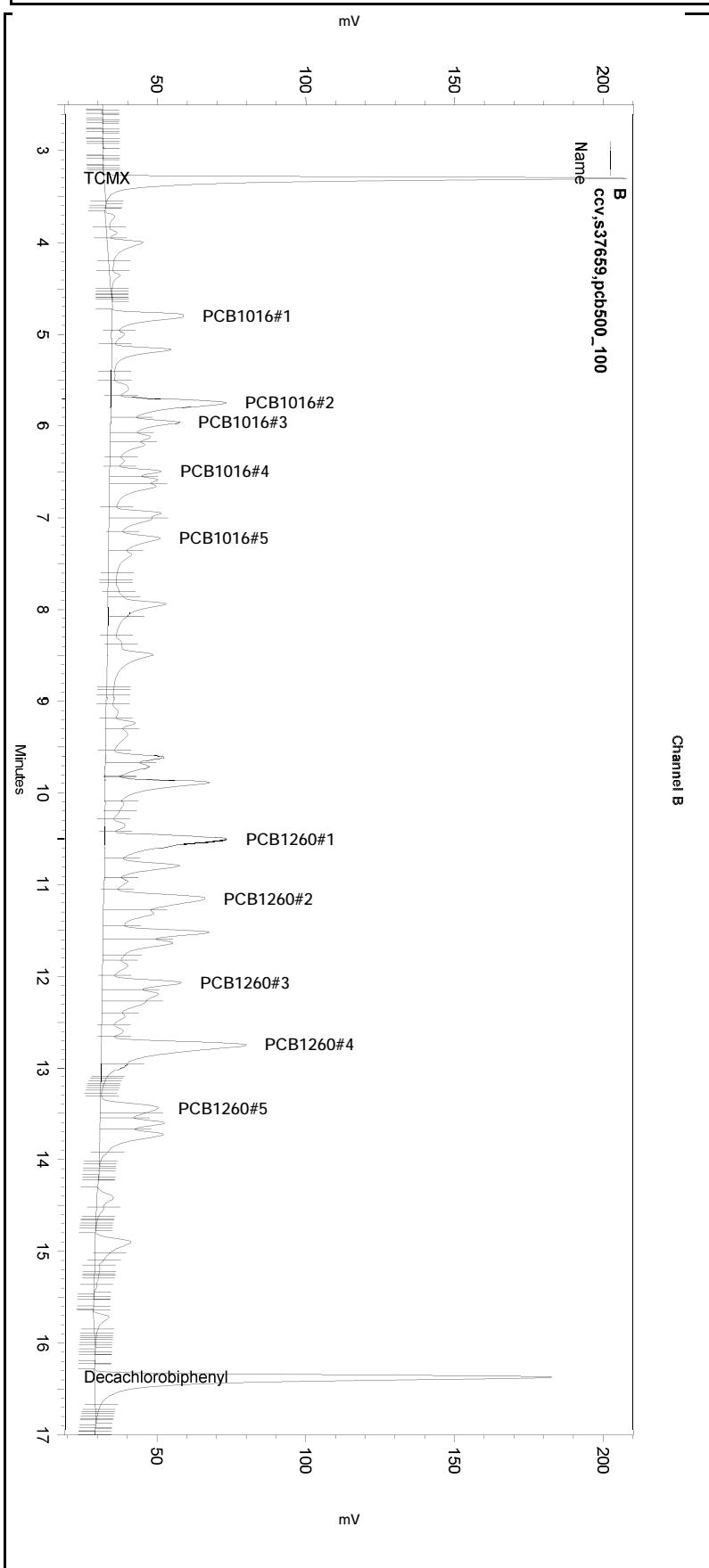
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 85 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:01:31 AM  
Analysis Date: 9/26/2018 9:14:12 AM  
Sample Amount: 1



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--< General Method Parameters >-----

No items selected for this section

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--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-085

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : AR2154\_500 IDF : 1.0  
Seqnum : 208385010086 File : 267\_086 Time : 26-SEP-2018 07:29  
Cal : 208328928001 Caldate : 17-AUG-2018  
Standards: S38368

Analyte	Ch	Spiked	Quant	Units	%D	Max	%D	Flags
Aroclor-1254	A	500.0	453.0	pg/uL	-9	15		
Aroclor-1254	B	500.0	467.8	pg/uL	-6	15		

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

Analyst: RDG Date: 09/26/18 Reviewer: EAH Date: 09/26/18  
Page 1 of 1 208385010086

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-086  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 86 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:29:30 AM  
Analysis Date: 9/26/2018 1:22:00 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.983	8.957	145297	504.743
PCB1254#2	9.607	9.583	194558	513.115
PCB1254#3	10.253	10.223	142960	463.205
PCB1254#4	10.543	10.520	239268	487.530
PCB1254#5	11.230	11.213	104743	296.221

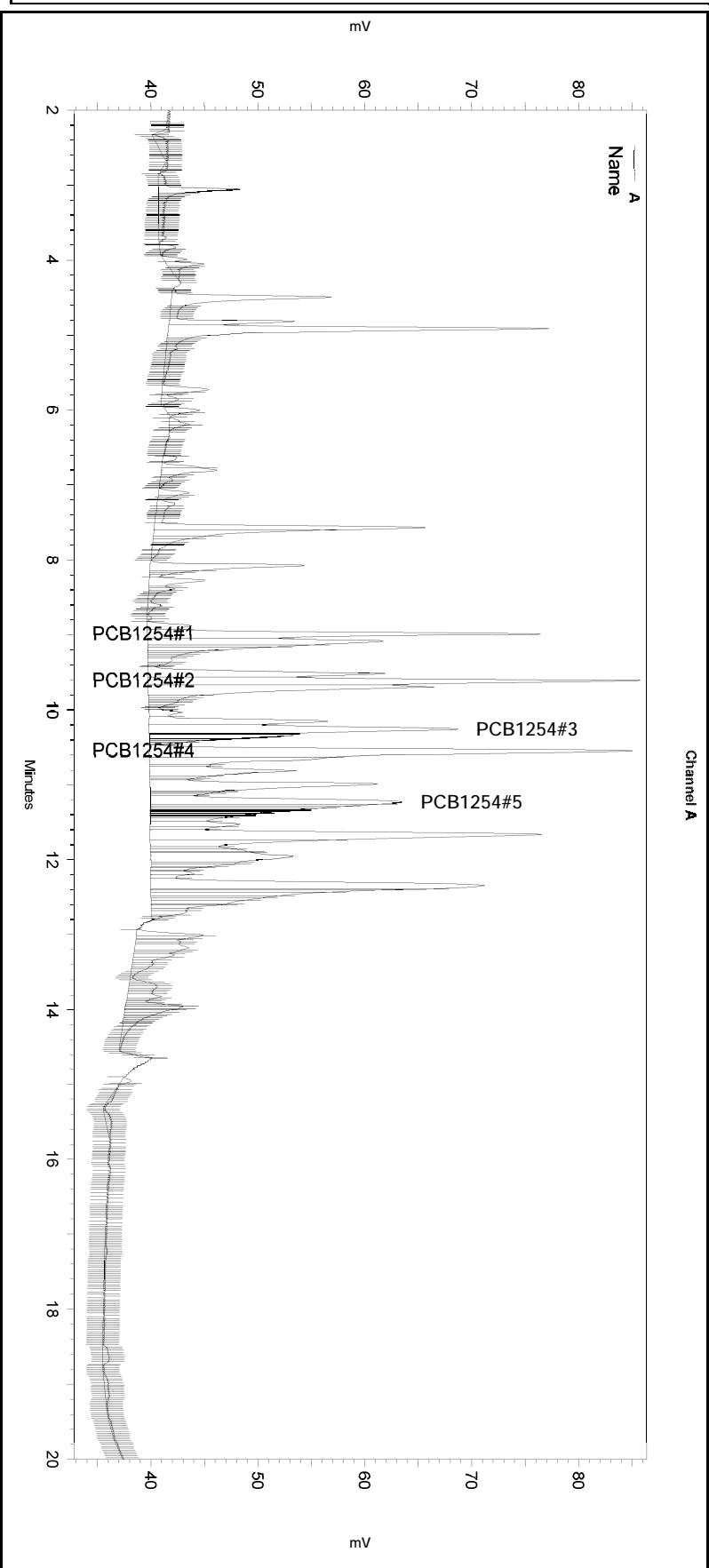
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.950	7.927	193200	599.219
PCB1254#2	8.493	8.470	199790	574.298
PCB1254#3	9.117	9.090	115779	547.488
PCB1254#4	9.357	9.340	173220	403.266
PCB1254#5	9.913	9.890	61696	214.965

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-086  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 86 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:29:30 AM  
Analysis Date: 9/26/2018 1:22:00 PM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.1
Yes	Threshold	0	0	2
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	3	18	1

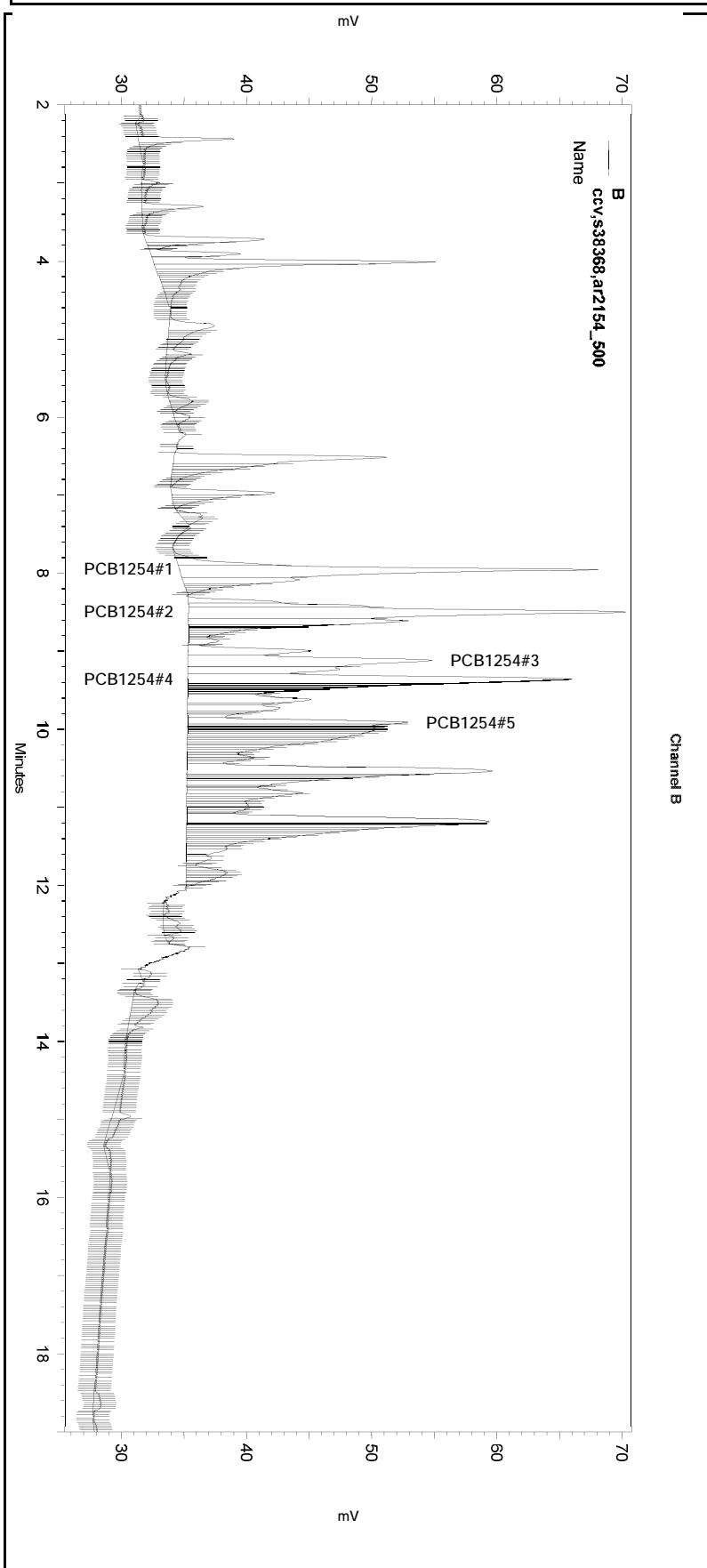
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-086

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Reset Baseline	12.805	0	0

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-086  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 86 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:29:30 AM  
Analysis Date: 9/26/2018 1:22:00 PM  
Sample Amount: 1



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No items selected for this section  
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--< B >-----  
-----  
No items selected for this section  
-----  
Integration Events  
-----  

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

  
Manual Integration Fixes  
-----  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-086  
-----  

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Manual Baseline	8.28	12.04	0	

Sample Name: **ccv,s38368,ar2154\_500**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-086  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 Vial: 86 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267f.met

Software Version 3.1.7  
 Run Date: 9/26/2018 7:29:30 AM  
 Analysis Date: 9/26/2018 7:53:27 AM  
 Sample Amount: 1

**\*GC06\***

**PCB - ECD Instrument Results**

Channel A: Stx-CLPesticides

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**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	4.057	4.050	17613	2.650
PCB1016#1		5.697		0.000 BDL
PCB1016#2	6.773	6.750	8757	20.573
PCB1016#3	7.107	7.080	11649	49.430
PCB1016#4	7.563	7.577	91197	568.796
PCB1016#5		8.040		0.000 BDL
PCB1260#1		11.613		0.000 BDL
PCB1260#2		12.273		0.000 BDL
PCB1260#3	13.107	13.130	10683	32.929
PCB1260#4		13.883		0.000 BDL
PCB1260#5		14.550		0.000 BDL
Decachlorobiphenyl		17.147		0.000 BDL

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**\*GC06\***

**PCB - ECD Instrument Results**

Channel B: Rtx-5

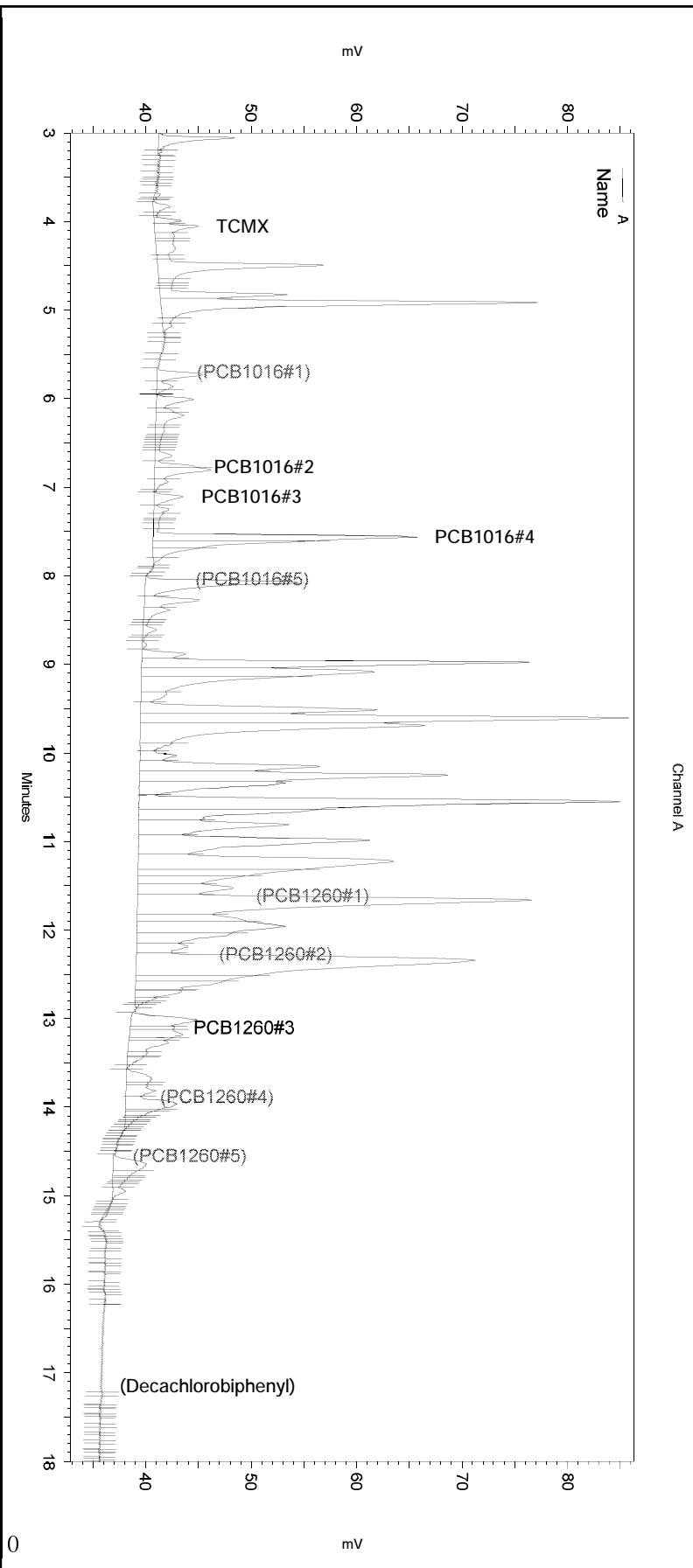
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**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.307	3.303	17804	2.679
PCB1016#1		4.783		0.000 BDL
PCB1016#2		5.727		0.000 BDL
PCB1016#3		5.937		0.000 BDL
PCB1016#4		6.473		0.000 BDL
PCB1016#5		7.197		0.000 BDL
PCB1260#1		10.483		0.000 BDL
PCB1260#2		11.123		0.000 BDL
PCB1260#3	12.040	12.050	4445	12.825
PCB1260#4		12.733		0.000 BDL
PCB1260#5		13.410		0.000 BDL
Decachlorobiphenyl		16.350		0.000 BDL

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-086  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 86 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267f.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:29:30 AM  
Analysis Date: 9/26/2018 7:53:27 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

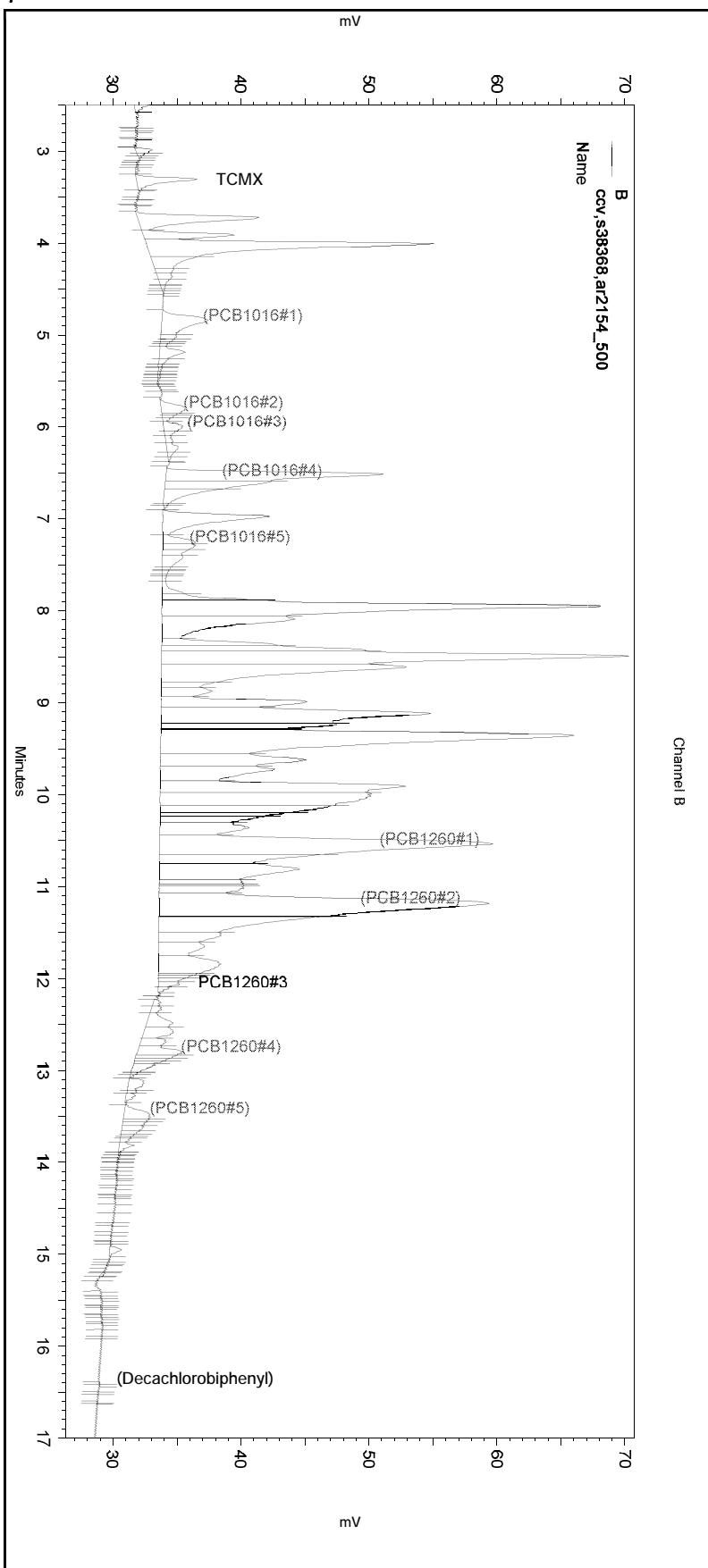
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-086\_0409.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-086  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 86 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267f.met

Software Version 3.1.7  
Run Date: 9/26/2018 7:29:30 AM  
Analysis Date: 9/26/2018 7:53:27 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-086\_0409.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : PCB500\_100 IDF : 1.0  
Seqnum : 208385010092 File : 267\_092 Time : 26-SEP-2018 11:01  
Cal : 208344656001 Caldate : 27-AUG-2018  
Standards: S37659

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	502.4	pg/uL	0	15	
Aroclor-1260	A			500.0	550.0	pg/uL	10	15	
Decachlorobiphenyl	A	8438.2	10338	100.0	162.5	pg/uL	62	15	c+
Aroclor-1016	B			500.0	466.0	pg/uL	-7	15	
Aroclor-1260	B			500.0	502.5	pg/uL	0	15	
Decachlorobiphenyl	B	9049.0	9175.1	100.0	101.4	pg/uL	1	15	

JC1 09/26/18 : Corrected automatically drawn baseline.

Analyst: JC1 Date: 09/26/18 Reviewer: EAH Date: 09/26/18

+high bias c=CCV

Page 1 of 1

208385010092

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 92 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267h.met

Software Version 3.1.7  
 Run Date: 9/26/2018 11:01:28 AM  
 Analysis Date: 9/26/2018 11:32:44 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.900	3.913	696474	104.787
PCB1016#1	5.520	5.537	158231	480.281
PCB1016#2	6.577	6.597	223576	525.240
PCB1016#3	6.880	6.897	118290	501.935
PCB1016#4	7.380	7.400	82170	512.494
PCB1016#5	7.843	7.860	98414	492.224
PCB1260#1	11.397	11.403	366223	549.310
PCB1260#2	12.050	12.057	294229	497.965
PCB1260#3	12.907	12.917	174388	537.534
PCB1260#4	13.657	13.663	522450	643.452
PCB1260#5	14.317	14.310	204134	521.930
Decachlorobiphenyl	16.917	16.917	1033758	162.474

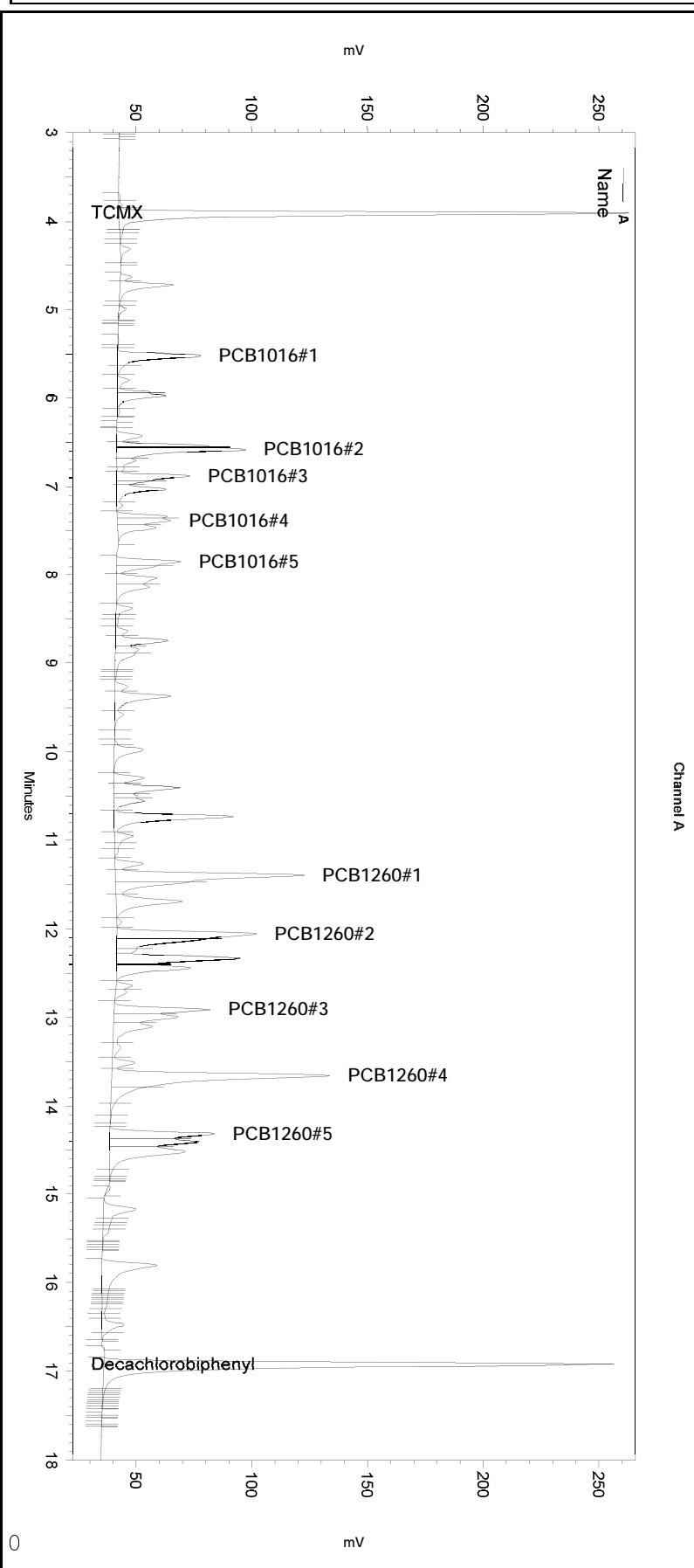
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.163	3.170	644649	96.990
PCB1016#1	4.633	4.627	64896	395.307
PCB1016#2	5.563	5.563	287977	480.160
PCB1016#3	5.770	5.773	148881	545.725
PCB1016#4	6.303	6.310	69522	448.108
PCB1016#5	7.023	7.027	114698	460.830
PCB1260#1	10.260	10.260	283663	481.892
PCB1260#2	10.897	10.893	303883	533.772
PCB1260#3	11.823	11.827	172719	498.353
PCB1260#4	12.490	12.490	390575	508.957
PCB1260#5	13.177	13.167	207306	489.465
Decachlorobiphenyl	16.117	16.133	917506	101.393

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 92 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267h.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:01:28 AM  
Analysis Date: 9/26/2018 11:32:44 AM  
Sample Amount: 1



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

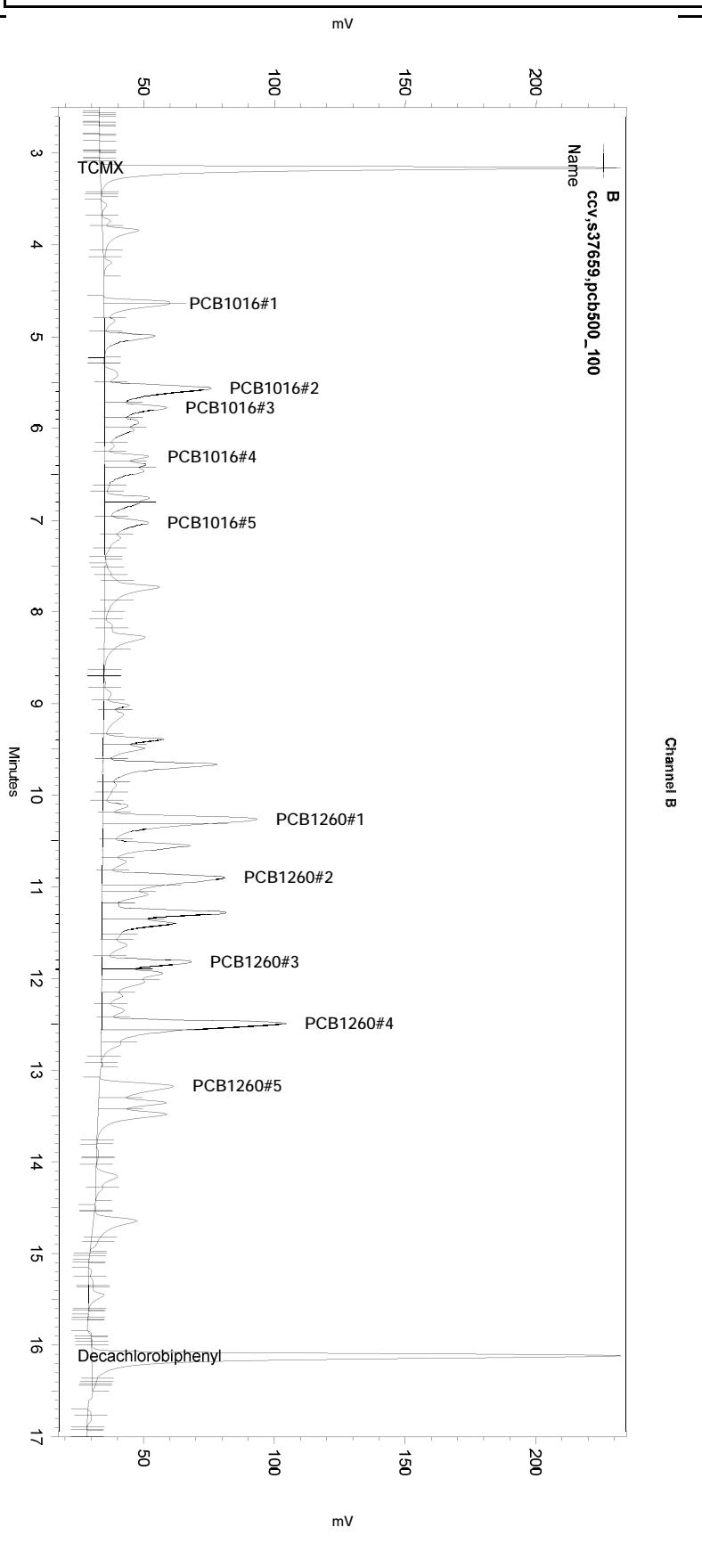
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.821	0	0
Yes	Reset Baseline	7.656	0	0
Yes	Manual Baseline	11.98	12.579	0
Yes	Split Peak	13.783	0	0
Yes	Reset Baseline	16.812	0	0

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 92 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267h.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:01:28 AM  
Analysis Date: 9/26/2018 11:32:44 AM  
Sample Amount: 1



-----> General Method Parameters <-----

No items selected for this section

-----> B <-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Reset Baseline	4.335	0	0	
Yes	Manual Peak	4.525	4.636	0	
Yes	Manual Baseline	4.543	5.221	0	
Yes	Reset Baseline	7.434	0	0	
Yes	Split Peak	10.306	0	0	
Yes	Split Peak	10.985	0	0	
Yes	Split Peak	12.567	0	0	
Yes	Reset Baseline	12.957	0	0	
Yes	Reset Baseline	15.913	0	0	
Yes	Reset Baseline	16.52	0	0	

Sample Name: **ccv,s37659,pcb500\_100**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 (Offline) Vial: 92 Operator: pest 1. Analyst (lms2k3\pest1)  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267h.met

Software Version 3.1.7  
 Run Date: 9/26/2018 11:01:28 AM  
 Analysis Date: 9/26/2018 11:30:25 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.900	3.913	696474	104.787
PCB1016#1	5.520	5.537	158231	480.281
PCB1016#2	6.577	6.597	224647	527.756
PCB1016#3	6.880	6.897	128173	543.871
PCB1016#4	7.380	7.400	85078	530.631
PCB1016#5	7.843	7.860	101175	506.034
PCB1260#1	11.397	11.403	366223	549.310
PCB1260#2	12.050	12.057	275931	466.997
PCB1260#3	12.907	12.917	174388	537.534
PCB1260#4	13.657	13.663	592330	729.517
PCB1260#5	14.317	14.310	204134	521.930
Decachlorobiphenyl	16.917	16.917	1052184	166.727

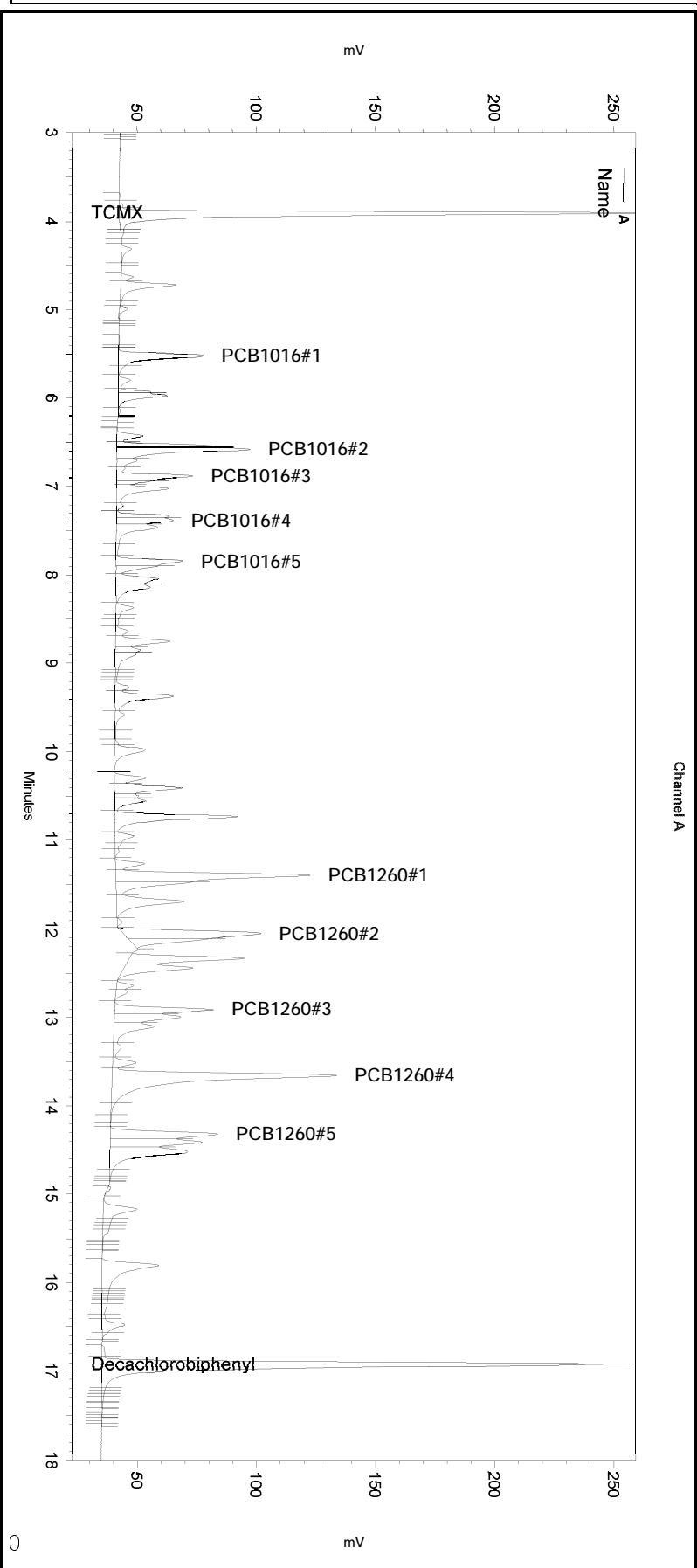
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.163	3.170	644649	96.990
PCB1016#1	4.633	4.627	178055	1084.604
PCB1016#2	5.563	5.563	307194	512.202
PCB1016#3	5.770	5.773	163395	598.926
PCB1016#4	6.303	6.310	79767	514.143
PCB1016#5	7.023	7.027	136953	550.245
PCB1260#1	10.260	10.260	472946	803.450
PCB1260#2	10.897	10.893	390774	686.396
PCB1260#3	11.823	11.827	187550	541.146
PCB1260#4	12.490	12.490	537695	700.668
PCB1260#5	13.177	13.167	223755	528.303
Decachlorobiphenyl	16.117	16.133	952777	105.291

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 92 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267h.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:01:28 AM  
Analysis Date: 9/26/2018 11:30:25 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0

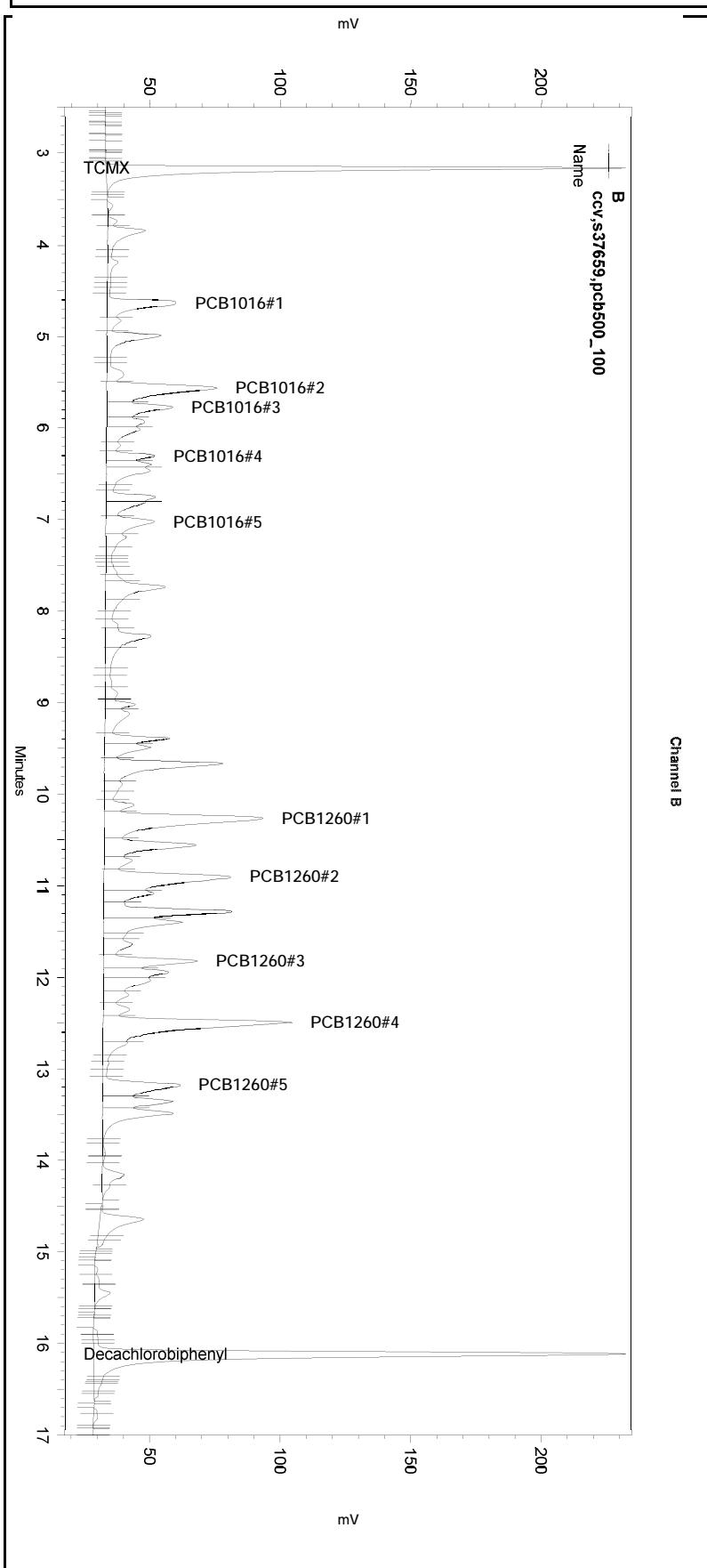
Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ccv,s37659,pcb500\_100**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 (Offline) Vial: 92 Operator: pest 1. Analyst (lms2k3\pest1)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267h.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:01:28 AM  
Analysis Date: 9/26/2018 11:30:25 AM  
Sample Amount: 1



-----  
--< General Method Parameters >-----

No items selected for this section

-----  
--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.2	
Yes	Threshold	0	0	50	
Yes	Integration Off	0	2	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-092

Enabled	Event Type	Start	Stop	(Minutes)	Value
None					

ENTHALPY CONTINUING CALIBRATION FOR 303137 PCBS Miscell.  
EPA 8082

Inst : GC06 Run Name : AR2154\_500 IDF : 1.0  
Seqnum : 208385010093.1 File : 267\_093 Time : 26-SEP-2018 11:29  
Cal : 208328928001 Caldate : 17-AUG-2018  
Standards: S38368

Analyte	Ch	Spiked	Quant	Units	%D	Max	%D	Flags
Aroclor-1254	A	500.0	539.7	pg/uL	8	15		
Aroclor-1254	B	500.0	542.2	pg/uL	8	15		

RDG 09/26/18 : Corrected automatically drawn baseline for all channels.

RDG: 09/26/18 \* JC1: 09/26/18 EAH: 09/26/18

Page 1 of 1

208385010093.1

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-093  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 93 Operator: Pest 3. Analyst (lms2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267c.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:29:26 AM  
Analysis Date: 9/26/2018 5:18:26 PM  
Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	8.757	8.757	148236	515.222
PCB1254#2	9.380	9.380	201930	533.038
PCB1254#3	10.017	10.017	157927	512.088
PCB1254#4	10.303	10.303	269777	549.439
PCB1254#5	10.967	10.967	216740	588.622

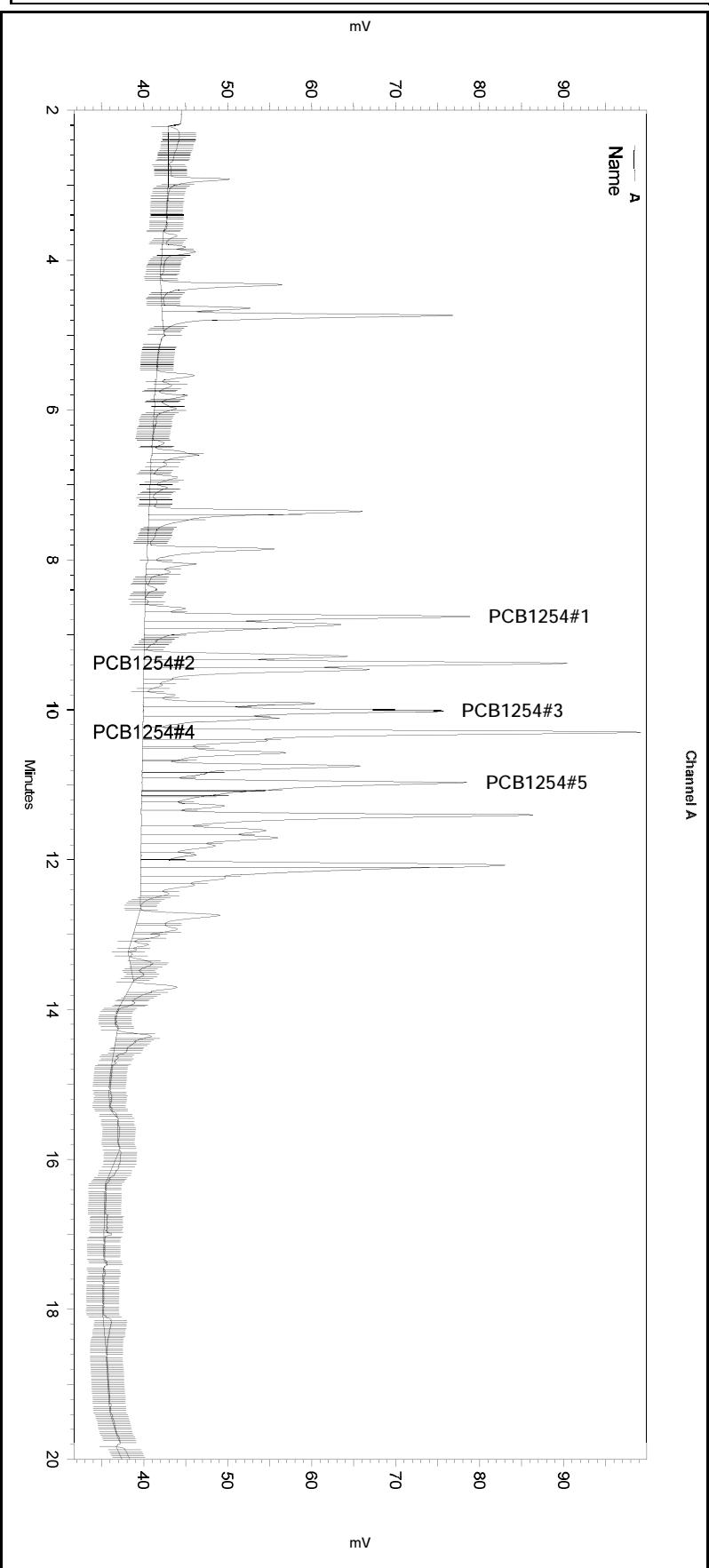
**\*GC06\***  
**PCB - ECD Instrument Results**  
Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
PCB1254#1	7.743	7.743	206773	641.894
PCB1254#2	8.283	8.283	206218	593.207
PCB1254#3	8.897	8.885	122169	577.640
PCB1254#4	9.130	9.123	229210	531.741
PCB1254#5	9.757	9.757	112900	366.583

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-093  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 93 Operator: Pest 3. Analyst (lims2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267c.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:29:26 AM  
Analysis Date: 9/26/2018 5:18:26 PM  
Sample Amount: 1



-----  
---< General Method Parameters >-----

No items selected for this section

-----  
---< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	(Minutes)	Value
Yes	Width	0	0	0.1		
Yes	Threshold	0	0	2		
Yes	Integration Off	0	2.1	0		
Yes	Shoulder Sensitivity	3	18	1		

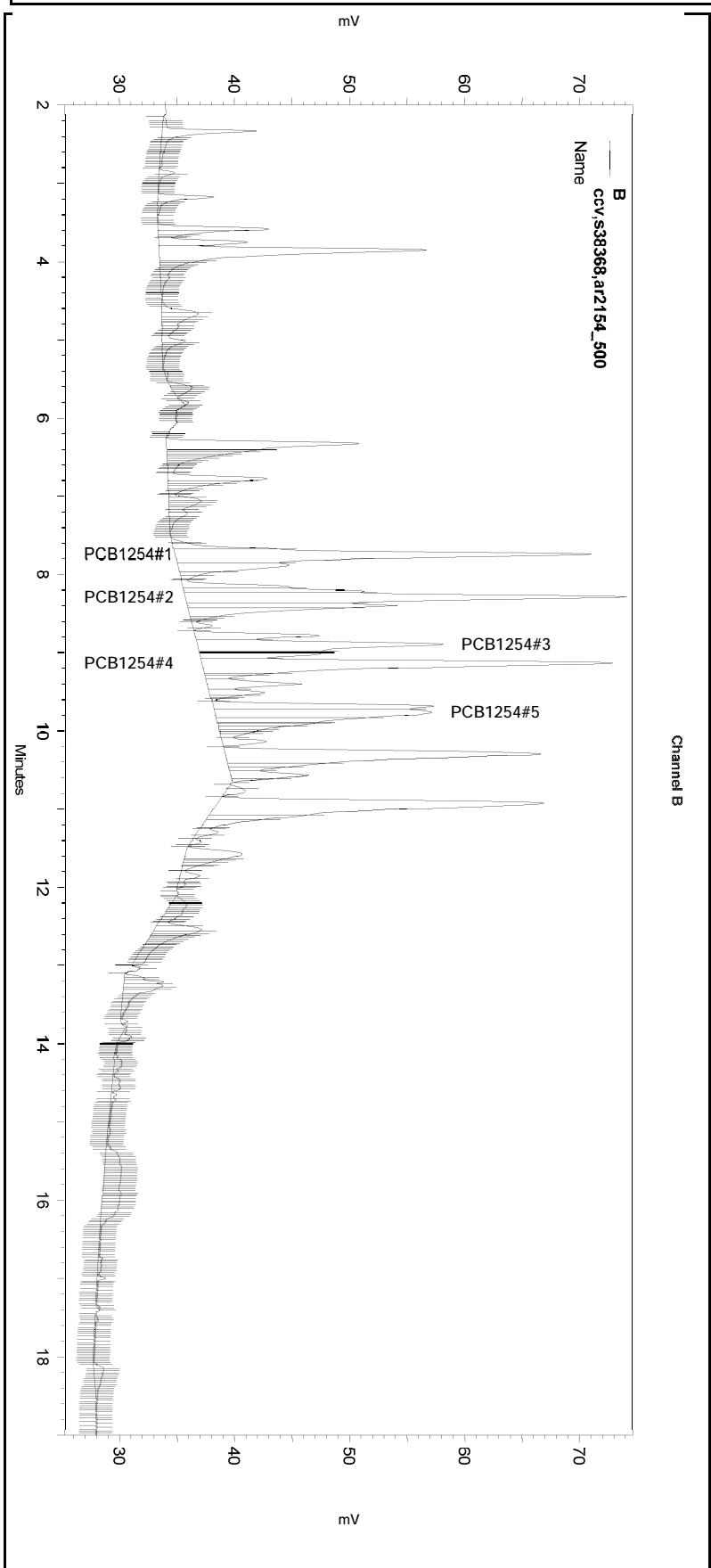
Manual Integration Fixes

-----  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-093

Enabled	Event Type	Start	Stop	(Minutes)	(Minutes)	Value
Yes	Reset Baseline	12.629	0	0		

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-093  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 93 Operator: Pest 3 Analyst (lims2k3\pest3)  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar2154\pcb-ar1254-267c.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:29:26 AM  
Analysis Date: 9/26/2018 5:18:26 PM  
Sample Amount: 1



-----  
--< General Method Parameters >-----

No items selected for this section

-----  
--< B >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Width	0	0	0.1	
Yes	Threshold	0	0	2	
Yes	Integration Off	0	2.1	0	
Yes	Shoulder Sensitivity	3	18	1	

Manual Integration Fixes

Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-093

Start Stop

Enabled	Event Type	Start	Stop	(Minutes)	Value
Yes	Disable End Peak Detection	9.18	9.192	0	
Yes	Disable End Peak Detection	9.765	9.82	0	
Yes	Reset Baseline	10.668	0	0	

Sample Name: **ccv,s38368,ar2154\_500**  
 Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-093  
 Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
 Instrument: GC06 Vial: 93 Operator: lims2k3\pest3  
 Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
 Run Date: 9/26/2018 11:29:26 AM  
 Analysis Date: 9/26/2018 11:53:23 AM  
 Sample Amount: 1

**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel A: Stx-CLPesticides

**A Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX		4.057		0.000 BDL
PCB1016#1		5.700		0.000 BDL
PCB1016#2		6.773		0.000 BDL
PCB1016#3		7.077		0.000 BDL
PCB1016#4		7.537		0.000 BDL
PCB1016#5	8.057	8.050	27375	136.918
PCB1260#1	11.610	11.637	86158	129.231
PCB1260#2	12.340	12.313	41230	69.779
PCB1260#3	13.140	13.160	12661	39.026
PCB1260#4	13.940	13.917	3652	4.498
PCB1260#5		14.590		0.000 BDL
Decachlorobiphenyl	17.190	17.180	91	0.000

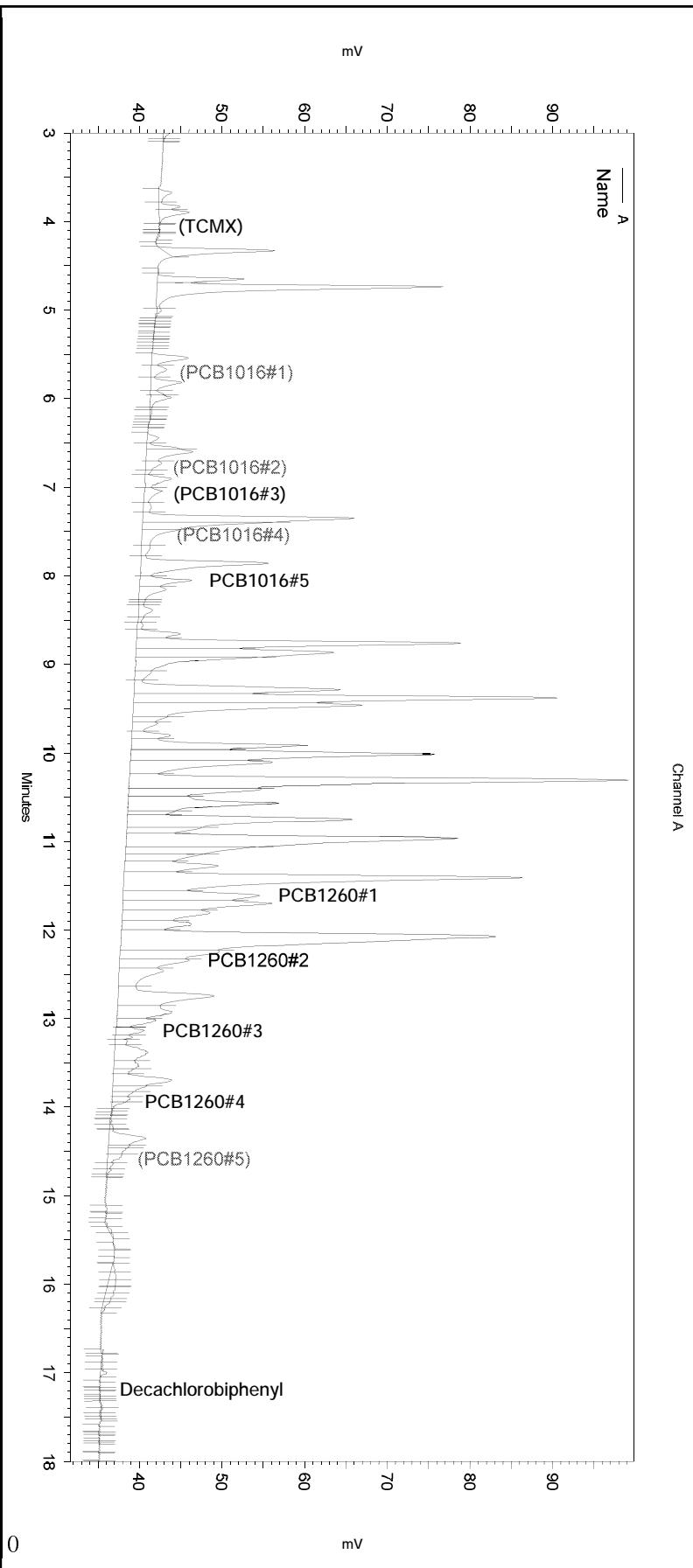
**\*GC06\***  
**PCB - ECD Instrument Results**  
 Channel B: Rtx-5

**B Results**

Name	RT	ExpRT	Area	Conc (ug/L)
TCMX	3.320	3.297	13	0.002
PCB1016#1		4.790		0.000 BDL
PCB1016#2		5.737		0.000 BDL
PCB1016#3	5.967	5.947	3591	13.163
PCB1016#4	6.473	6.483	19272	124.219
PCB1016#5	7.217	7.213	8429	33.866
PCB1260#1		10.493		0.000 BDL
PCB1260#2		11.147		0.000 BDL
PCB1260#3	12.067	12.060	15403	44.443
PCB1260#4	12.747	12.743	4142	5.397
PCB1260#5	13.447	13.437	205	0.484
Decachlorobiphenyl		16.363		0.000 BDL

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-093  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 93 Operator: lms2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:29:26 AM  
Analysis Date: 9/26/2018 11:53:23 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2.1	0
Yes	Shoulder Sensitivity	0	0	0
Yes	Reset Baseline	4.399	0	0

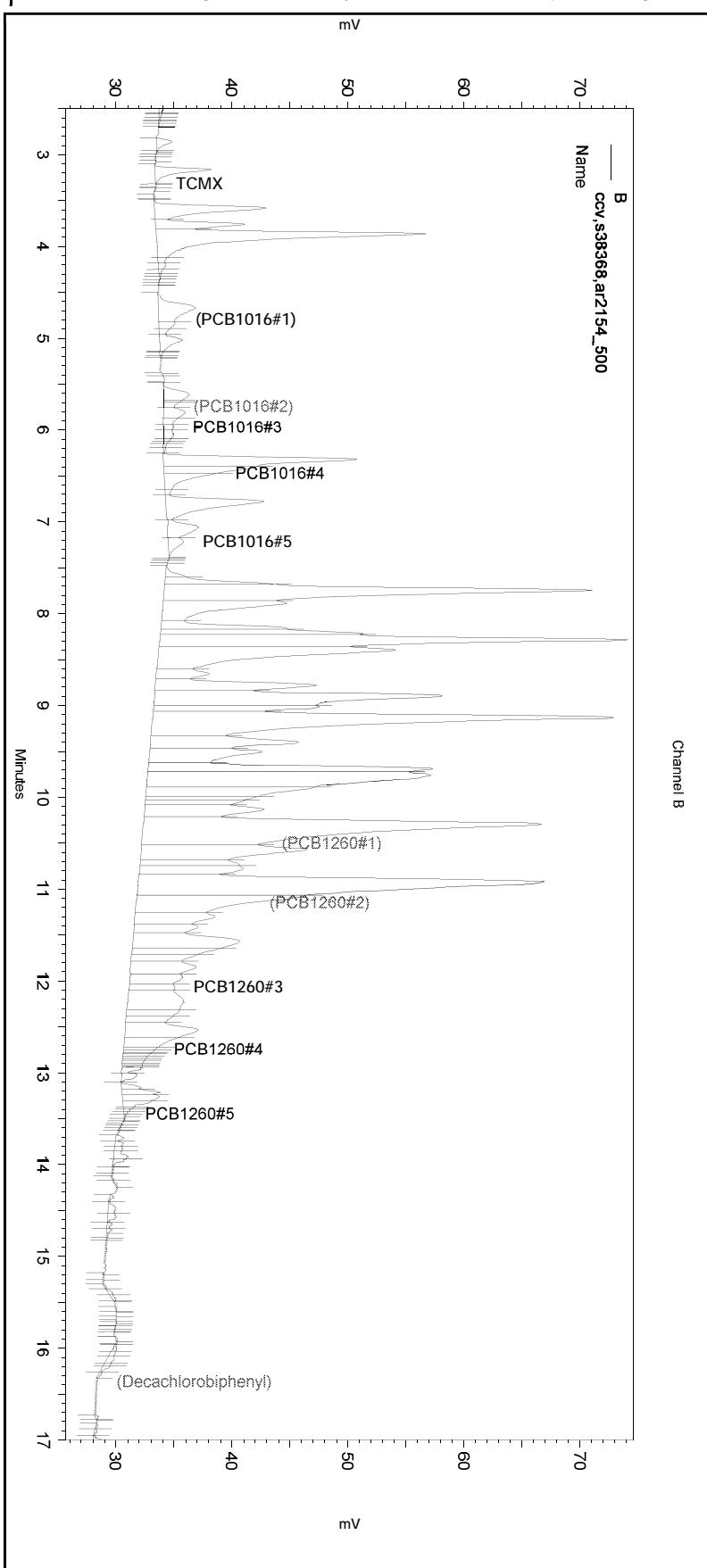
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-093\_0411.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sample Name: **ccv,s38368,ar2154\_500**  
Data File: \\kraken\gdrive\ezchrom\Projects\GC06\Data\2018\267-093  
Sequence File: \\kraken\gdrive\ezchrom\Projects\GC06\Sequence\2018\267.seq  
Instrument: GC06 Vial: 93 Operator: lims2k3\pest3  
Method Name: \\kraken\gdrive\ezchrom\Projects\GC06\Method\Ar1660\pcb-run-267g.met

Software Version 3.1.7  
Run Date: 9/26/2018 11:29:26 AM  
Analysis Date: 9/26/2018 11:53:23 AM  
Sample Amount: 1



-----< General Method Parameters >-----

No items selected for this section

-----< B >-----

No items selected for this section

#### Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50
Yes	Integration Off	0	2	0
Yes	Shoulder Sensitivity	3	18	1

#### Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10112\267-093\_0411.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

**Logbooks & Sequences**

## CURTIS &amp; TOMPKINS SEQUENCE SUMMARY FOR 208328928

Instrument : GC06  
 Method : EPA 8082

Begun : 08/16/18 10:08  
 SOP Version : pcb\_rv11

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	228_001	X	HEX			08/16/18 10:08	1.0	
002	228_002	CCV	PCB500_100			08/16/18 10:36	1.0	1
003	228_003	CCV	AR2154_500			08/16/18 11:04	1.0	2
004	228_004	BLANK	QC943690	Soil	262472	08/16/18 12:50	1.0	
005	228_005	BS	QC943691	Soil	262472	08/16/18 13:18	1.0	
006	228_006	BSD	QC943692	Soil	262472	08/16/18 13:46	1.0	
007	228_007	SAMPLE	302238-001	Soil	262472	08/16/18 14:14	1.0	
008	228_008	SAMPLE	302238-002	Soil	262472	08/16/18 14:42	1.0	
009	228_009	SAMPLE	302238-003	Soil	262472	08/16/18 15:10	1.0	
010	228_010	CCV	PCB500_100			08/16/18 15:39	1.0	1
011	228_011	CCV	AR2154_500			08/16/18 16:07	1.0	2
012	228_012	SAMPLE	302238-004	Soil	262472	08/16/18 16:36	1.0	
013	228_013	SAMPLE	302238-005	Soil	262472	08/16/18 17:04	1.0	
014	228_014	SAMPLE	302238-006	Soil	262472	08/16/18 17:32	1.0	
015	228_015	SAMPLE	302238-007	Soil	262472	08/16/18 18:00	1.0	
016	228_016	SAMPLE	302238-008	Soil	262472	08/16/18 18:28	1.0	
017	228_017	SAMPLE	302238-009	Soil	262472	08/16/18 18:57	1.0	
018	228_018	SAMPLE	302238-010	Soil	262472	08/16/18 19:25	1.0	
019	228_019	SAMPLE	302238-011	Soil	262472	08/16/18 19:52	1.0	
020	228_020	SAMPLE	302238-012	Soil	262472	08/16/18 20:21	1.0	
021	228_021	SAMPLE	302238-013	Soil	262472	08/16/18 20:48	1.0	
022	228_022	CCV	PCB500_100			08/16/18 21:16	1.0	1
023	228_023	CCV	AR2154_500			08/16/18 21:45	1.0	2
024	228_024	SAMPLE	302238-014	Soil	262472	08/16/18 22:13	1.0	
025	228_025	SAMPLE	302238-015	Soil	262472	08/16/18 22:41	1.0	
026	228_026	SAMPLE	302238-016	Soil	262472	08/16/18 23:09	1.0	
027	228_027	CCV	PCB500_100			08/16/18 23:37	1.0	1
028	228_028	CCV	AR2154_500			08/17/18 00:05	1.0	2
029	228_029	X	HEX			08/17/18 00:33	1.0	
030	228_030	X	HEX			08/17/18 01:01	1.0	
031	228_031	IB	CALIB			08/17/18 01:29	1.0	
032	228_032	ICAL	AR2154_10			08/17/18 01:57	1.0	3
033	228_033	ICAL	AR2154_250			08/17/18 02:25	1.0	4
034	228_034	ICAL	AR2154_500			08/17/18 02:53	1.0	5
035	228_035	ICAL	AR2154_100			08/17/18 03:21	1.0	6
036	228_036	ICAL	AR2154_250			08/17/18 03:49	1.0	4
037	228_037	ICAL	AR2154_500			08/17/18 04:17	1.0	5
038	228_038	ICAL	AR2154_1000			08/17/18 04:45	1.0	7
039	228_039	X	HEX			08/17/18 05:13	1.0	
040	228_040	ICV	ULTRA_1254			08/17/18 05:41	1.0	8
041	228_041	X	HEX			08/17/18 06:09	1.0	

JC1 08/17/18 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 41.

## CURTIS &amp; TOMPKINS SEQUENCE SUMMARY FOR 208344656

Instrument : GC06  
 Method : EPA 8082

Begun : 08/27/18 08:16  
 SOP Version : pcb\_rv11

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	239_001	X	HEX			08/27/18 08:16	1.0	
002	239_002	X	HEX			08/27/18 08:44	1.0	
003	239_003	CCV	PCB500_100			08/27/18 09:12	1.0	1
004	239_004	CCV	AR2154_500			08/27/18 09:40	1.0	2
005	239_005	CCV	PCB500_100			08/27/18 10:25	1.0	1
006	239_006	X	PRIMER			08/27/18 10:56	1.0	
007	239_007	X	HEX			08/27/18 11:24	1.0	
008	239_008	X	HEX			08/27/18 11:52	1.0	
009	239_009	IB	CALIB			08/27/18 12:20	1.0	
010	239_010	ICAL	PCB10_2			08/27/18 12:48	1.0	3
011	239_011	ICAL	PCB25_5			08/27/18 13:16	1.0	4
012	239_012	ICAL	PCB100_20			08/27/18 13:44	1.0	5
013	239_013	ICAL	PCB250_50			08/27/18 14:12	1.0	6
014	239_014	ICAL	PCB500_100			08/27/18 14:40	1.0	7
015	239_015	ICAL	PCB750_150			08/27/18 15:08	1.0	8
016	239_016	ICAL	PCB1000_200			08/27/18 15:36	1.0	9
017	239_017	X	HEX			08/27/18 16:04	1.0	
018	239_018	ICV	ULTRA_1660			08/27/18 16:32	1.0	10
019	239_019	X	HEX			08/27/18 17:16	1.0	
020	239_020	CCV	PCB500_100			08/27/18 17:44	1.0	1
021	239_021	CCV	AR2154_500			08/27/18 18:35	1.0	2
022	239_022	SAMPLE	302647-024	Soil	262780	08/27/18 19:03	1.0	
023	239_023	SAMPLE	302647-025	Soil	262780	08/27/18 19:31	2.0	
024	239_024	SAMPLE	302647-026	Soil	262780	08/27/18 19:59	1.0	
025	239_025	SAMPLE	302647-027	Soil	262780	08/27/18 20:27	2.0	
026	239_026	SAMPLE	302647-028	Soil	262780	08/27/18 20:55	1.0	
027	239_027	SAMPLE	302647-029	Soil	262780	08/27/18 21:23	1.0	
028	239_028	SAMPLE	302647-030	Soil	262780	08/27/18 21:51	2.0	
029	239_029	SAMPLE	302647-031	Soil	262780	08/27/18 22:19	1.0	
030	239_030	SAMPLE	302647-032	Soil	262780	08/27/18 22:47	1.0	
031	239_031	SAMPLE	302647-033	Soil	262780	08/27/18 23:15	1.0	
032	239_032	CCV	PCB500_100			08/27/18 23:43	1.0	1
033	239_033	CCV	AR2154_500			08/28/18 00:11	1.0	2
034	239_034	SAMPLE	302647-034	Soil	262780	08/28/18 00:39	1.0	
035	239_035	SAMPLE	302647-035	Soil	262780	08/28/18 01:07	1.0	
036	239_036	SAMPLE	302647-036	Soil	262780	08/28/18 01:35	1.0	
037	239_037	CCV	PCB500_100			08/28/18 02:03	1.0	1
038	239_038	CCV	AR2154_500			08/28/18 02:31	1.0	2

JC1 08/28/18 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

## CURTIS &amp; TOMPKINS SEQUENCE SUMMARY FOR 208385010

Instrument : GC06  
 Method : EPA 8082

Begun : 09/24/18 08:50  
 SOP Version : pcb\_rv11

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	267_001	X	HEX			09/24/18 08:50	1.0		
002	267_002	X	HEX			09/24/18 09:18	1.0		
003	267_003	CCV	PCB500_100			09/24/18 09:46	1.0	1	
004	267_004	CCV	AR2154_500			09/24/18 10:14	1.0	2	
005	267_005	MS	QC948701	Soil	263736	09/24/18 13:02	1.0		
006	267_006	MSD	QC948702	Soil	263736	09/24/18 13:30	1.0		
007	267_007	MS	QC948701	Soil	263736	09/24/18 14:11	1.0		
008	267_008	MSD	QC948702	Soil	263736	09/24/18 14:39	1.0		
009	267_009	CCV	PCB500_100			09/24/18 15:29	1.0	1	
010	267_010	CCV	AR2154_500			09/24/18 15:57	1.0	2	
011	267_011	BLANK	QC948857	Soil	263811	09/24/18 18:44	1.0		
012	267_012	LCS	QC948858	Soil	263811	09/24/18 19:12	1.0		
013	267_013	MSS	303413-005	Soil	263811	09/24/18 19:40	2.0		
014	267_014	MS	QC948859	Soil	263811	09/24/18 20:08	2.0		
015	267_015	MSD	QC948860	Soil	263811	09/24/18 20:36	2.0		
016	267_016	BLANK	QC948760	Soil	263784	09/24/18 21:04	1.0		
017	267_017	BS	QC948761	Soil	263784	09/24/18 21:32	1.0		
018	267_018	BSD	QC948762	Soil	263784	09/24/18 22:00	1.0		
019	267_019	BLANK	QC948736	Soil	263777	09/24/18 22:28	1.0		
020	267_020	BS	QC948737	Soil	263777	09/24/18 22:56	1.0		
021	267_021	BSD	QC948738	Soil	263777	09/24/18 23:24	1.0		
022	267_022	CCV	PCB500_100			09/24/18 23:52	1.0	1	
023	267_023	CCV	AR2154_500			09/25/18 00:20	1.0	2	
024	267_024	SAMPLE	303231-046	Soil	263784	09/25/18 00:48	1.0		
025	267_025	SAMPLE	303231-047	Soil	263784	09/25/18 01:16	1.0		
026	267_026	SAMPLE	303231-048	Soil	263784	09/25/18 01:44	1.0		
027	267_027	SAMPLE	303231-049	Soil	263784	09/25/18 02:12	1.0		
028	267_028	SAMPLE	303231-050	Soil	263784	09/25/18 02:40	1.0		
029	267_029	SAMPLE	303231-051	Soil	263784	09/25/18 03:08	1.0		
030	267_030	SAMPLE	303231-052	Soil	263784	09/25/18 03:36	1.0		
031	267_031	SAMPLE	303411-004	Soil	263811	09/25/18 04:04	1.0		
032	267_032	SAMPLE	303217-001	Soil	263777	09/25/18 04:32	1.0		6:PCB1260#2=1800
033	267_033	SAMPLE	303217-002	Soil	263777	09/25/18 05:00	1.0		
034	267_034	CCV	PCB500_100			09/25/18 05:28	1.0	1	
035	267_035	CCV	AR2154_500			09/25/18 05:56	1.0	2	
036	267_036	SAMPLE	303217-003	Soil	263777	09/25/18 06:24	1.0		1:PCB1260#4=1100
037	267_037	SAMPLE	303217-004	Soil	263777	09/25/18 06:52	1.0		
038	267_038	SAMPLE	303217-005	Soil	263777	09/25/18 07:20	1.0		
039	267_039	SAMPLE	303217-006	Soil	263777	09/25/18 07:48	1.0		
040	267_040	SAMPLE	303217-007	Soil	263777	09/25/18 08:16	1.0		6:PCB1260#5=2200
041	267_041	SAMPLE	303217-008	Soil	263777	09/25/18 08:44	1.0		
042	267_042	SAMPLE	303217-009	Soil	263777	09/25/18 09:12	1.0		
043	267_043	SAMPLE	303217-010	Soil	263777	09/25/18 09:40	1.0		
044	267_044	CCV	PCB500_100			09/25/18 10:08	1.0	1	
045	267_045	CCV	AR2154_500			09/25/18 10:36	1.0	2	
046	267_046	BLANK	QC948987	Soil	263840	09/25/18 11:06	1.0		
047	267_047	LCS	QC948988	Soil	263840	09/25/18 11:35	1.0		
048	267_048	MSS	303517-001	Soil	263840	09/25/18 12:03	1.0		
049	267_049	MS	QC948989	Soil	263840	09/25/18 12:31	1.0		
050	267_050	MSD	QC948990	Soil	263840	09/25/18 12:59	1.0		
051	267_051	LOD	216647-059	Soil	263657	09/25/18 13:27	1.0		
052	267_052	LOD	216648-043	Water	263685	09/25/18 13:55	1.0		

## CURTIS &amp; TOMPKINS SEQUENCE SUMMARY FOR 208385010

Instrument : GC06  
 Method : EPA 8082

Begun : 09/24/18 08:50  
 SOP Version : pcb\_rv11

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	267_053	CCV	PCB500_100			09/25/18 14:23	1.0	1	
054	267_054	CCV	AR2154_500			09/25/18 14:51	1.0	2	
055	267_055	MSS	303413-005	Soil	263811	09/25/18 15:47	2.0		
056	267_056	MS	QC948859	Soil	263811	09/25/18 16:15	2.0		
057	267_057	MSD	QC948860	Soil	263811	09/25/18 16:43	2.0		
058	267_058	SAMPLE	303217-001	Soil	263777	09/25/18 17:11	10.0		
059	267_059	SAMPLE	303217-007	Soil	263777	09/25/18 17:39	10.0		
060	267_060	CCV	PCB500_100			09/25/18 18:07	1.0	1	
061	267_061	CCV	AR2154_500			09/25/18 19:49	1.0	2	
062	267_062	BLANK	QC949086	Soil	263863	09/25/18 20:17	1.0		
063	267_063	LCS	QC949087	Soil	263863	09/25/18 20:45	1.0		
064	267_064	MSS	303450-004	Soil	263863	09/25/18 21:13	5.0		diluted (client history)
065	267_065	MS	QC949088	Soil	263863	09/25/18 21:41	5.0		
066	267_066	MSD	QC949089	Soil	263863	09/25/18 22:09	5.0		
067	267_067	BLANK	QC948960	Air	263832	09/25/18 22:37	1.0		
068	267_068	BS	QC948961	Air	263832	09/25/18 23:05	1.0		
069	267_069	BSD	QC948962	Air	263832	09/25/18 23:33	1.0		
070	267_070	SAMPLE	303264-001	Soil	263863	09/26/18 00:01	2.0		
071	267_071	SAMPLE	303255-013	Soil	263863	09/26/18 00:29	1.0		
072	267_072	SAMPLE	303255-017	Soil	263863	09/26/18 00:57	1.0		
073	267_073	CCV	PCB500_100			09/26/18 01:25	1.0	1	
074	267_074	CCV	AR2154_500			09/26/18 01:53	1.0	3	
075	267_075	SAMPLE	303171-001	Soil	263863	09/26/18 02:21	2.0		diluted (client history)
076	267_076	SAMPLE	303217-011	Soil	263777	09/26/18 02:49	1.0		
077	267_077	SAMPLE	303217-012	Soil	263777	09/26/18 03:17	1.0		
078	267_078	SAMPLE	303217-013	Soil	263777	09/26/18 03:45	1.0		
079	267_079	SAMPLE	303217-014	Soil	263777	09/26/18 04:13	1.0		
080	267_080	SAMPLE	303217-015	Soil	263777	09/26/18 04:41	1.0		
081	267_081	SAMPLE	303217-016	Soil	263777	09/26/18 05:09	1.0		8:PCB1260#2=27000
082	267_082	SAMPLE	303217-017	Soil	263777	09/26/18 05:37	1.0		
083	267_083	SAMPLE	303217-018	Soil	263777	09/26/18 06:05	1.0		
084	267_084	SAMPLE	303137-001	Miscell.	263784	09/26/18 06:33	1.0		
085	267_085	CCV	PCB500_100			09/26/18 07:01	1.0	1	
086	267_086	CCV	AR2154_500			09/26/18 07:29	1.0	3	
087	267_087	SAMPLE	303137-002	Miscell.	263784	09/26/18 07:57	1.0		
088	267_088	SAMPLE	303137-005	Miscell.	263784	09/26/18 08:25	1.0		
089	267_089	SAMPLE	303137-006	Miscell.	263784	09/26/18 08:53	1.0		
090	267_090	SAMPLE	303166-029	Miscell.	263811	09/26/18 09:21	100.0		6:PCB1260#3=1400
091	267_091	SAMPLE	303166-029	Miscell.	263811	09/26/18 10:33	500.0		
092	267_092	CCV	PCB500_100			09/26/18 11:01	1.0	1	
093	267_093	CCV	AR2154_500			09/26/18 11:29	1.0	3	
094	267_094	SAMPLE	303217-016	Soil	263777	09/26/18 12:22	100.0		
095	267_095	CCV	PCB500_100			09/26/18 12:50	1.0	1	1:CL10BZ2=230

JC1 09/26/18 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 95.

## SAMPLE PREPARATION SUMMARY

Batch # : 263784 Analysis : PCB  
 Started By : RD1 Prep Date : 21-SEP-2018 16:18 Finished By : AS1  
 Method : 3550C SOP Version : PCB\_3550\_rv15 Units : g  
 Spike #1 ID : S37913 Spike #2 ID : S37523

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
303137-001		Miscell.	5.05	10	1	1.98	.5					PCB	
303137-002		Miscell.	5.25	10	1	1.905	.5					PCB	
303137-005		Miscell.	5.16	10	1	1.938	.5					PCB	
303137-006		Miscell.	5.15	10	1	1.942	.5					PCB	
303231-046		Soil	5.37	10	1	1.862	.5					PCB	
303231-047		Soil	5.5	10	1	1.818	.5					PCB	
303231-048		Soil	5.43	10	1	1.842	.5					PCB	
303231-049		Soil	5.49	10	1	1.821	.5					PCB	
303231-050		Soil	5.34	10	1	1.873	.5					PCB	
303231-051		Soil	5.23	10	1	1.912	.5					PCB	
303231-052		Soil	5.22	10	1	1.916	.5					PCB	
QC948760	BLANK	Soil	5	10	1	2.0	.5					PCB	
QC948761	BS	Soil	5	10	1	2.0	.5	.5				PCB	
QC948762	BSD	Soil	5	10	1	2.0	.5	.5	.5			PCB	

JC1 09/25/18 : Matrix spikes were not performed for this analysis in batch 263784 due to insufficient sample amount.

Analyst: JC1 Date: 09/25/18 Reviewer: EAH Date: 09/25/18

Page 1 of 1

## PCB (8082) Soil Prep Log

version 201807

Enthalpy Analytical LLC - Berkeley

LIMS Batch No: 263784  
LIMS Analysis PCB  
Date Extracted: 9/21/18

- EPA 3550C Sonication
  - EPA 3546 Microwave
  - Other *EPA 3540C*

Page 1

BK 4300

MS/MSD not included due to:  insufficient volume, or  other (reason)

Balance ID: B-15 Has been calibrated?  Yes  No      Mfg & Lot # / LIMS # / Time      Initials / Date

~~0.25~~ \* / 0.5 Solvent-rinsed granular Na<sub>2</sub>SO<sub>4</sub> weighed out for QC samples  
dried with CH<sub>2</sub>Cl<sub>2</sub>-rinsed  granular Na<sub>2</sub>SO<sub>4</sub>  powder  
~~0.4~~ RD1 9/21/18 0.4 mL of surrogate solution was added to all samples  
RD1 9/21/18 0.5 mL of matrix spiking solution was added to all spikes  
++ CH<sub>2</sub>Cl<sub>2</sub> (lot# EM58110) : Acetone (lot# ) was added to all

sonicated 2 times w/ >100mL  sorbent extractor sp.萃取剂 was added to the reaction mixture.

sonicated 3 times w/  $\geq$ 100mL       soxhlet extractors on at least 200mL

Soxhlets off at

Extracts filtered through baked,  $\text{CH}_2\text{Cl}_2$ -rinsed powdered  $\text{Na}_2\text{SO}_4$

### Solvent exchanged with Hexane, Lot:

- Concentrated to final volume in boiling H<sub>2</sub>O bath

EPA 3665A Clean-up: vortexed w/ H<sub>2</sub>SO<sub>4</sub> Lot:

Centrifuged for 1 min; 5mL transferred to labelled vial

Relinquished to PCB group

Reinforced to PCB group

Continued from page 1

**Continued on page**

**Extraction Chemist / Date**

Continued from page 1  
Continued on page

Reviewed by / Date

## **Standards**



# Certificate of Analysis



## Aroclor 1254 Solution

**Product Number:** PP-352

**Page:** 1 of 1

**Lot Number:** CK-4255

**Lot Issue Date:** 31-Dec-2013

**Expiration Date:** 31-Jan-2022

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1254	011097-69-1	RM00922	100.4 ± 0.5 µg/mL

**Matrix:** isoctane (2,2,4-trimethylpentane)

**Storage:** Store at Room Temperature (15-30°C).

1254 aroclor 100 ug/ml SRC  
1254\_U in Isooctane  
MA 26-JUN-14 100 ug/mL  
S25029 A I Expires: 31-JAN-22

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 17025  
Accredited  
A2LA  
Cert. No. 0851-01

ISO 9001  
Registered  
TUV USA, Inc.  
Cert. No. 08-1009

William D. Leahy  
Quality Assurance Manager



# Certificate of Analysis



## Method 8082 Calibration Mixture

Product Number: PPM-8082

Page: 1 of 1

Lot Number: CM-5400

Lot Issue Date: 16-Oct-2015

Expiration Date: 30-Nov-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1016	012674-11-2	NT01016	1001 ± 5 µg/mL
Aroclor 1260	011096-82-5	NT01023	1004 ± 5 µg/mL

Matrix: isoctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

1716-1600 aroclor 1000 ug/ mL  
1600.0 in Isooctane  
031-21-022-16 1000 ug/mL  
S30958 A Expires: 30-Nov-16

D 9/21/2016

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001  
Registered  
TUV USA, Inc.

William J. Leary  
Quality Assurance Manager



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://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. : 32039

Lot No.: A0120262

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : October 31, 2022

Storage: 25°C nominal

Handling: This product contains PCBs.

### 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	Aroclor 1016 CAS # 12674-11-2 Purity ----%	1,001.6 µg/mL (Lot W-125-04)	+/- 5.8779	µg/mL	Gravimetric
			+/- 31.7447	µg/mL	Unstressed
			+/- 41.4691	µg/mL	Stressed
2	Aroclor 1260 CAS # 11096-82-5 Purity ----%	1,008.8 µg/mL (Lot W-129-06)	+/- 5.9202	µg/mL	Gravimetric
			+/- 31.9729	µg/mL	Unstressed
			+/- 41.7672	µg/mL	Stressed

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

AROCLOR 1016/1260 MIX  
1,000 µg/mL  
110-54-3  
99%  
32039-A 1 Expires 31-OCT-2022

9/23/17



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)

## Certificate of Analysis



ISO Guide 34 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. : 32011

Lot No.: A0121952

Description : Aroclor® 1254 Standard

Aroclor® 1254 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : January 31, 2023

Storage: 25°C nominal

Handling: This product contains PCBs.

### 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	Aroclor 1254 CAS # 11097-69-1 Purity ----%	996.0 µg/mL (Lot 124-191-B)	+/- 5.9159 µg/mL	+/- 31.5804 µg/mL	Gravimetric Unstressed Stressed

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

AROCLOR 1254 1ML/AMPUL 1000  
110-54-3 11097-69-1  
332387 A 1 Expire: 31-JAN-23  
*PP 3/21/17*

S35386



## CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)


ISO Guide 34 Accredited  
 Reference Material Producer  
 Certificate #3222.01



ISO/IEC 17025 Accredited  
 Testing Laboratory  
 Certificate #3222.02

## 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. : 32007

Lot No.: A0126078

Description : Aroclor® 1221 Standard

Aroclor® 1221 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : June 30, 2023

Storage: 25°C nominal

Handling: This product contains PCBs.

## CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1221 CAS # 11104-28-2 Purity ----%	1,008.4 µg/mL	+/- 5.9179	µg/mL	Gravimetric

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

**Column:**  
30m x .25mm x .2um  
Rtx-CLP II (cat.# 11323)

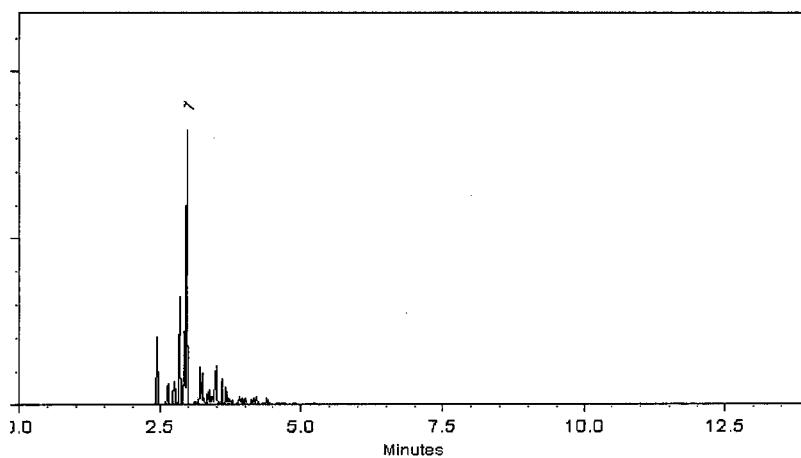
**Carrier Gas:**  
helium-constant pressure 20 psi.

**Temp. Program:**  
200°C to 300°C  
@ 25°C/min. ( hold 10 min.)

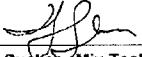
**Inj. Temp:**  
250°C

**Det. Temp:**  
300°C

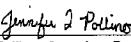
**Det. Type:**  
ECD



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.

  
Tom Suckar - Mix Technician

Date Mixed: 22-Mar-2017      Balance: 1125113331

  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Mar-2017

Manufactured under Restek's ISO 9001:2008  
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 Guides 34 and 35. The certified combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at [www.restek.com/Contact-Us](http://www.restek.com/Contact-Us) for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at [www.restek.com/Contact-Us](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules 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:**

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



# Certificate of Analysis



## Pesticides Surrogate Standard Spiking Solution

**Product Number:** ISM-320

**Page:** 1 of 1

**Lot Number:** CM-6063A

**Lot Issue Date:** 28-Dec-2017

**Expiration Date:** 31-Jan-2020

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
2,4,5,6-tetrachloro-m-xylene	000877-09-8	RM09246	200.5 ± 1.0 µg/mL
decachlorobiphenyl (BZ # 209)	002051-24-3	RM01256	200.6 ± 1.0 µg/mL

**Matrix:** acetone

**Storage:** Store at Room Temperature (15° to 30°C).

pest surrogate std spike ■ SRC  
in Acetone  
PSS 200 ug/mL  
CNC 17-JAN-18  
S35686 | Expires: 31-JAN-20

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001  
Registered  
TUV USA, Inc.

John Russo  
President

Monica Bourgeois  
Director of QA/RA

Continued from Page \_\_\_\_\_

**RES2154\_S (S# 366341)**, EXP: 06-APR-18 Prepared (initials & date): PL 4/9/18

F:\qc\forms\gc-hplc\AR1221+1254.doc, 10/16/17

- Rinsed and partially filled a **100 mL** class A volumetric flask with hexane (Lot#: PL 116513)
- Added **1.0 mL AR21\_R** @ 1,000 µg/mL (S# 35186, Exp: 31-JUN-23)
- Added **1.0 mL AR54\_R** @ 1,000 µg/mL (S# 32181, Exp: 31-JAN-23)
- Brought to final volume with hexane (same lot#), inverted to mix, and transferred to (3) 40 mL amber VOA vials
- Calculations:  $AR1254 = (1mL / 100mL) * (1,000 \mu\text{g/mL}) * 1000 \text{ mL/L} = 10,000 \mu\text{g/L}$

<b>RESTEK</b> 32007 Danger 1 mL Lot# A0126078 Expire: 06/2023 Store: 25°C nominal Aroclor® 1221 Standard This product contains PCBs. 1000 µg/mL each in Hexane Full information for the chemical is provided on the outside package	<b>RESTEK</b> 32011 Danger 1 mL Lot# A0121952 Expire: 01/2023 Store: 25°C nominal Aroclor® 1254 Standard This product contains PCBs. 1000 µg/mL each in Hexane Full information for the chemical is provided on the outside package	10 mg/L secondary 1221/125 WRK RES2154_S RDG 09-APR-18 10 mg/L S36634 D I Expires: 06-OCT-18
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### AR2154 5-Point ICAL

F:\qc\forms\gc-hplc\AR1221+1254.doc, 10/16/17

Prepared (initials & date): PL 4/9/18

- Rinsed and partially filled class A volumetric flasks with hexane (Lot#: PL 116513)
- Added corresponding amount of **RES2154\_S** @10,000µg/L (S# 36634, Exp: 06-APR-18)
- Brought to final volume with hexane (same lot#), inverted to mix, and transferred to 40 mL amber VOA vials

Level	LIMS Name	RES2154_S Volume (mL)	Final Volume (mL)	Final Concentration (µg/L)
1.	AR2154_10	0.025	25	10
2.	AR2154_100	0.25	25	100
3.	AR2154_250	2.5	100	250
4.	AR2154_500	5.0	100	500
5.	AR2154_1000	2.5	25	1,000

- Calculation (Level 1) =  $AR1254 = (0.025\text{mL}/25\text{mL}) * (10,000 \mu\text{g/L}) = 10 \mu\text{g/L}$

**LABELS ON THE NEXT PAGE (1P)** PL 4/9/18

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Ron A R

Signed

04/09/18

Date

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Signed

Date

Project PCB STANDARD PREPBK4112

Continued from Page \_\_\_\_\_

AR2154 ICAL #1 WRK AR2154 10 in Hexane RDG 09-APR-18 10 ug/L S36635 B I Expires: 06-OCT-18 <i>PG 4/9/18</i>	AR2154 ICAL#2 WRK AR2154 100 in Hexane RDG 09-APR-18 100 ug/L S36636 B I Expires: 06-OCT-18 <i>PG 4/9/18</i>
AR2154 ICAL#3 WRK AR2154 250 in Hexane RDG 09-APR-18 250 ug/L S36637 D I Expires: 06-OCT-18 <i>PG 4/9/18</i>	AR2154 ICAL#4 WRK AR2154 500 in Hexane RDG 09-APR-18 500 ug/L S36638 D I Expires: 06-OCT-18 <i>PG 4/9/18</i>
AR2154 ICAL#5 WRK AR2154 1000 in Hexane RDG 09-APR-18 1000 ug/L S36639 B I Expires: 06-OCT-18 <i>PG 4/9/18</i>	

**ULTRA\_1254 (S# 36641, EXP: 06-OCT-18)** Prepared (initials & date): JCI 4-9-18

F:\qcforms\gc-hplc\AR1221+1254.doc, 10/16/17

- Rinsed and partially filled a **100 mL** class A volumetric flask with hexane (Lot#: FC 179173)
- Added **0.25 mL** **1254\_U** @ 100 µg/mL (S# 25029, Exp: 31-JAN-22)
- Brought to final volume with hexane (same lot#), inverted to mix, and transferred to (3) 40 mL amber VOA vials
- Calculations:  $AR1254 = (0.25mL/100mL) * (100 \mu g/mL) * 1,000mL/L = 250 \mu g/L$

**ULTRA\_1221 (S# 36642, EXP: 30-SEP-18)**Prepared (initials & date):  
JCI 4-9-18

F:\qcforms\gc-hplc\AR1221+1254.doc, 10/16/17

- Rinsed and partially filled a **100 mL** class A volumetric flasks with hexane (Lot#: FC 179173)
- Added **0.25 mL** of **1221\_U** @ 100 µg/mL (S# 30767, Exp: 30-SEP-18)
- Brought to final volume with hexane (same lot# as above)
- Inverted to mix and transferred to (3) 40 mL amber VOA vials
- Calculations:  $AR1221 = (0.25mL/100mL) * (100 \mu g/mL) * 1,000mL/L = 250 \mu g/L$

ULTRA_1254 WRK ULTRA_1254 in Hexane JC1 09-APR-18 250 ug/L S36641 D I Expires: 06-OCT-18	<i>JCI</i> Ultra_1221 WRK ULTRA_1221 in Hexane JC1 09-APR-18 250 ug/L S36642 D I Expires: 30-SEP-18
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4-9-18

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Date

Project PCB Standard Prep

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BK 4172

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**RES16/60\_S (S# 37417, EXP: 19-DEC-18)** Prepared (initials & date): **JCL 6-22-18**

F:\qc\forms\gc-hplc\AR1016+1260.doc, 10/16/17

- Rinsed and partially filled a 100 mL class A volumetric flask with hexane (Lot#: DT 405)
- Added 1.0 mL PSS @200 µg/mL ( S# 35686, Exp: 31-JAN-20 )
- Added 1.0 mL AR\_16/60 @1,000 µg/mL (S# 32385, Exp: 31-OCT-22 )
- Brought to final volume with hexane (same lot#), inverted to mix, and transferred to (3) 40 mL amber VOA vials
- Calculations: Surrogates = (1mL / 100mL) \* (200 µg/mL) \* 1000 mL/L = 2,000 µg/L

$$\text{AR1016/1260} = (1\text{mL} / 100\text{mL}) * (1000 \mu\text{g/mL}) * 1000\text{mL/L} = 10,000 \mu\text{g/L}$$

10 mg/L secondary 1016/126 WRK  
RES1660\_S  
JC1 22-JUN-18  
S37417 D I Expires: 19-DEC-18

*JCL*  
RESTEK  
32039  
Danger 1 mL  
Lot# A0120262  
Expire: 10/2022 Store: 25°C nominal  
Aroclor® 1016/1260 Mix  
This product contains PCBs.  
1000 µg/mL each in Hexane  
Full label information for this chemicals is provided on the outside package

ISM-320-1  
Lot: CM-6063A  
Exp: 01/31/2020  
**ULTRA**  
Pesticides Surrogate Standard  
Spiking Solution  
2 analyte(s) at 200 µg/mL in  
acetone  
250 Smith St, No Kingstown, RI 02852 USA  
For Lab Use Only

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*6-22-18*

Date

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Date

Project PCB Standard PrepBK 417.2

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**AR1660 7-Point ICAL**

F:\qc\forms\gc-hplc\AR1016+1260.doc, 10/16/17

Prepared (initials & date): JCI  
Honeywell 6-22-18

- Rinsed and partially filled a class A volumetric flask with hexane (Lot#: DT 405)
- Added corresponding amount of **RES16/60\_S** (S37417, Exp: 19-DEC-18)
- Brought to final volume with hexane (same lot#), inverted to mix, and transferred to 40 mL amber VOA vials

Level	LIMS Name	RES16/60 Volume (mL)	Final Volume (mL)	Final Conc (µg/L) Spike/Surr
1.	PCB10_2 <u>S 37418</u>	-0.10-0.05 <u>JCI</u>	100-50 <u>6-22-18</u>	10 / 2
2.	PCB25_5 <u>S 37419</u>	0.25	100	25 / 5
3.	PCB100_20 <u>S 37420</u>	1.0	100	100 / 20
4.	PCB250_50 <u>S 37421</u>	-5.0-2.5 <u>JCI-6-22-18</u>	200-100	250 / 50
5.	PCB500_100 <u>S 37422</u>	10.0-5 <u>JCI 6-22-18</u>	200-100	500 / 100
6.	PCB750_150 <u>S 37423</u>	7.5	100	750 / 150
7.	PCB1K_200 <u>S 37424</u>	10.0-5 <u>JCI 6-22-18</u>	100-50	1000 / 200

- Calculation (Level 1) = AR1016/1260 = (0.1mL/100mL) \* (10,000 µg/L) = 10 µg/L  
Surrogates = (0.1mL/100mL) \* (2,000 µg/L) = 2 µg/L

PCB ICAL #1 WRK  
 PCB10\_2  
 JC1 22-JUN-18      2-10 ug/L  
 S37418 C I Expires: 19-DEC-18

PCB ICAL #5 WRK  
 PCB500\_100  
 JC1 22-JUN-18      100-500 ug/L  
 S37422 D I Expires: 19-DEC-18

PCB ICAL #2 WRK  
 PCB25\_5  
 JC1 22-JUN-18      5-25 ug/L  
 S37419 D I Expires: 19-DEC-18

PCB ICAL #6 WRK  
 PCB750\_150  
 JC1 22-JUN-18      150-750 ug/L  
 S37423 D I Expires: 19-DEC-18

PCB ICAL #3 WRK  
 PCB100\_20  
 JC1 22-JUN-18      20-100 ug/L  
 S37420 D I Expires: 19-DEC-18

PCB ICAL #7 WRK  
 PCB1K\_200  
 JC1 22-JUN-18      200-1000 ug/L  
 S37424 C I Expires: 19-DEC-18

PCB ICAL #4 WRK  
 PCB250\_50  
 JC1 22-JUN-18      50-250 ug/L  
 S37421 D I Expires: 19-DEC-18

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Date

6-22-18

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Date

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**PCBULTRA\_S (S# S37445, EXP: 22-DEC-18)** Prepared (initials & date): PKB 26/12/18

F:\qc\forms\gc-hplc\AR1016+1260.doc, 10/16/17

- Rinsed and partially filled a **100mL** class A volumetric flask with hexane (Lot#: HANNAH DT 415)
- Added **1.0 mL** of **1660\_U** @ 1000 µg/mL (S# S37445, Exp: 26-MAY-19)
- Added **1.0 mL** of **PSS** @ 200 µg/mL (S# S35686, Exp: 07/23 31-JAN-20)  
*PKB 6/18/18*
- Brought to final volume with hexane (same lot#)
- Inverted to mix and transferred to (3) 40 mL amber VOA vials
- Calculations: AR1016/1260 = (1.0mL / 100mL) \* (1000 µg/mL) \* 1,000mL/L = 10,000 µg/L

$$\text{TCMX/DCB} = (1.0\text{mL} / 100\text{mL}) * (200 \mu\text{g/mL}) * 1,000\text{mL/L} = 2,000 \mu\text{g/L}$$

**ULTRA\_1660 (S# S37446, EXP: 22-DEC-18)** Prepared (initials & date): PKB 26/12/18

F:\qc\forms\gc-hplc\AR1016+1260.doc, 10/16/17

- Rinsed and partially filled a **100mL** class A volumetric flask with hexane (Lot#: HANNAH DT 415)
- Added **2.5 mL** of **PCBULTRA\_S (S# S37445, Exp: 22-DEC-18)**
- Brought to final volume with hexane (same lot#)
- Inverted to mix, and transferred to (3) 40 mL amber VOA vials
- Calculations: AR1016/1260 = (2.5mL / 100mL) \* (10,000 µg/L) = 250 µg/L  
TCMX/DCB = (2.5mL / 100mL) \* (2,000 µg/L) = 50 µg/L

ultra 1660 +surv wrk 2000- WRK  
PCBULTRA\_S in Hexane  
RDG 25-JUN-18 2000-10000 ug/L  
S37445 D I Expires: 22-DEC-18

ISM-320-1  
Lot: CM-8063A  
Exp: 01/31/2020  
Pesticides Surrogate Standard  
Spiking Solution  
2 analyte(s) at 1000 µg/mL in  
acetone  
250 Smith St, No Kingstown, RI 02852 USA  
*PKB 26/12/18*

Ultra\_1660 PCB 50-250 ug/L WRK  
ULTRA\_1660 in Hexane  
RDG 25-JUN-18 50-250 ug/L  
S37446 D I Expires: 22-DEC-18

PPM-8082-1  
Lot CM-5400  
Exp: 11/30/2019  
Method 8082 Calibration Mixture  
2 analyte(s) at 1000 µg/mL in  
isooctane (2,2,4-trimethylpentane)  
250 Smith St, No Kingstown, RI 02852 USA  
*PKB 26/12/18*

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Date \_\_\_\_\_

TITLE

Contn

Initials: RD1 Date Prepared: 7/02/2018 PCB (Ar1016/1260) Spiking Standard

LIMS Name: PCB16/60 SPIKE Expires: 29-DEC-18 Standard # S 37523  
F:\qc\forms\xlab\recipe\_PCB1660 spike.doc, v2, 3/15/17

1. Rinsed a 200mL class A volumetric flask with CH<sub>2</sub>Cl<sub>2</sub> (lot# EM 58068)  
3 times and dried with N2(g).
2. Partially filled flask with 1:1 MeOH/ CH<sub>2</sub>Cl<sub>2</sub> (MeOH lot# FC177145,  
CH<sub>2</sub>Cl<sub>2</sub> lot# EM 58068)
3. Added 1.0mL 1660\_U (S# 35349 EXP:30-NOV-19)  
Calculation: (1.0mL/200.0mL)\*(1000µg/1.0mL) = 5 µg/mL

PPM-8082-1  
Lot: CM-5400 1 mL  
Exp: 11/30/2019  
Method 8082 Calibration Mixture *Ultra*  
2 analyte(s) at 1000 µg/mL in  
isooctane (2,2,4-trimethylpentane)  
250 Smith St, No Kingstown, RI 02852 USA *For Lab Use Only*  
RD 7/2/18

4. Brought up to volume with 1:1 MeOH/ CH<sub>2</sub>Cl<sub>2</sub> ( same lot numbers )
5. Inverted 3 times to mix and transferred to (5) 40ml VOA vials
6. Stored in freezer at < -10°C

Aroclors 1016 & 1260 @ 5µg WRK  
PCB 16/60 SPIKE in Methanol 5 µg/mL  
RD1 02-JUL-18 Expires: 29-DEC-18  
S37523 G 1 RD 7/02/2018

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SIGNATURE 	DATE 7/02/2018
DISCLOSED TO AND UNDERSTOOD BY	DATE
PROPRIETARY INFORMATION	

Project PCB Standard Prep

BK4172

Continued from Page \_\_\_\_\_

**PCB250\_50** (S# 35105), EXP: 15-JAN-18

F:\qc\forms\gc-hplc\AR1016+1260.doc, 10/16/17

Prepared (initials & date): JCL  
11-29-17

- Rinsed and partially filled a **200mL** class A volumetric flask with hexane (Lot#: 174710)
- Added **5.0 mL** of **RES16/60\_S** (S# 33754), Exp: 15-JAN-18)
- Brought to final volume with hexane (same lot#)
- Inverted to mix and transferred to (6) 40 mL amber VOA vials
- Calculations:  $AR1016/1260 = (5.0\text{mL} / 200\text{mL}) * (10,000 \mu\text{g/L}) = 250 \mu\text{g/L}$

$$\text{TCMX/DCB} = (5.0\text{mL} / 200\text{mL}) * (2,000 \mu\text{g/L}) = 50 \mu\text{g/L}$$

JCL

**PCB500\_100** (S# 35243), EXP: 15-JAN-18

F:\qc\forms\gc-hplc\AR1016+1260.doc, 10/16/17

Prepared (initials & date): JCL  
12-12-17

- Rinsed and partially filled a **100mL** class A volumetric flask with hexane (Lot#: 172635)
- Added **5.0 mL** of **RES16/60\_S** (S# 33754), Exp: 15-JAN-18)
- Brought to final volume with hexane (same lot#)
- Inverted to mix, and transferred to (3) 40 mL amber VOA vials
- Calculations:  $AR1016/1260 = (5.0\text{mL} / 100\text{mL}) * (10,000 \mu\text{g/L}) = 500 \mu\text{g/L}$   
 $\text{TCMX/DCB} = (5.0\text{mL} / 100\text{mL}) * (2,000 \mu\text{g/L}) = 100 \mu\text{g/L}$

JCL

PCB I CAL #5 WRK

PCB500\_100

JC1 12-DEC-17 100-500 ug/L

S35243 A I Expires: 15-JAN-18

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Date

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Date

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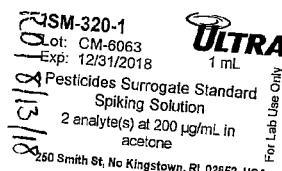
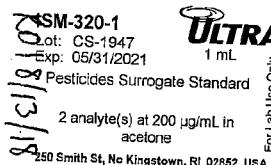
PROJECT

DATE

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Initials: RD1 Date Prepared: 8/13/2018 8081 & PCB Surrogate Standard  
LIMS Name: PEST/PCB SURR Expires: 31-DEC-18 Standard # S379131  
F:\VQC\forms\xlab\recipe\_pestpcb.surr.doc, v2, 3/15/17 # S37913 RD1 8/13/18

1. Rinsed a 1000mL class A volumetric flask with CH<sub>2</sub>Cl<sub>2</sub> (lot# EMS 8072 ) 3 times and dried with N<sub>2</sub>(g).
2. Partially filled flask with 1:1 MeOH/ CH<sub>2</sub>Cl<sub>2</sub> (MeOH lot# FC 177145 , CH<sub>2</sub>Cl<sub>2</sub> lot# EMS 8072 ) S# 35350 EXP: 31-DEC-18
3. Added 5.0mL PSS 200µg/mL (S# 37197 EXP: 31-MAY-21)  
Calculation: (5.0mL/1000.0mL)\*(200µg/1.0mL) = 1.0 µg/mL



4. Sonicated for 20 minutes
5. Brought up to volume with 1:1 MeOH/CH<sub>2</sub>Cl<sub>2</sub> ( same lot numbers )
6. Inverted 3 times to mix and transferred to (4) 250ml amber bottles.
7. Stored in freezer at < -10°C

TCMX & PCB 6 µg/mL WRK  
PEST/PCBSURR in Other  
RD1 13-AUG-18 1 µg/mL  
S37913 E I Expired: 31-DEC-18

RD1 8/13/2018

RD1 8/13/18

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8/13/18

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DATE

PROPRIETARY INFORMATION

9-25-18

**AR2154 500 CCV (S# 38368 , EXP: 06-OCT-18) prepared (initials & date): JC1**

- Rinsed and partially filled a **100 mL** class A volumetric flasks with hexane (Lot#: **DT 405**)
- Added **5.0 mL** of **RES2154\_S** (S# **36634** , Exp: **06-OCT-18**)
- Brought to final volume with hexane (same lot# as above)
- Inverted to mix and transferred to (3) 40 mL amber VOA vials
- Calculation:  $(5.0 \text{ mL}/100 \text{ mL})(10,000 \text{ ug/L}) = 500 \text{ ug/L}$

AR2154 ICAL#4 WRK

AR2154 500

JC1 25-SEP-18

in Hexane

500 ug/L

S38368 A | Expires: 06-OCT-18

JC1

9-25-18

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Signed

9-25-18

Date

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\_\_\_\_\_  
Signed\_\_\_\_\_  
Date



# Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 303137

## ANALYTICAL REPORT

Subcontracted Products

Tetra Tech EMI  
1999 Harrison Street  
Oakland, CA 94612

Project : 103S582302.01

Level : IV

<u>Sample ID</u>	<u>Lab ID</u>
B120-01	303137-001
B120-02-R1	303137-002
B120-03	303137-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Date: 10/10/2018

Will Rice  
Project Manager  
[will.rice@enthalpy.com](mailto:will.rice@enthalpy.com)  
(510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE  
SUBCONTRACTED PRODUCTS (EPA 8290)**

Laboratory number: 303137  
Client: Tetra Tech EMI  
Project: 103S582302.01  
Request Date: 09/12/18  
Samples Received: 09/11/18

This data package contains sample and QC results for three concrete samples, requested for the above referenced project on 09/12/18. See attached cooler receipt form for any sample receipt problems or discrepancies.

**Dioxins and Furans (EPA 8290):**

Cape Fear Analytical in Wilmington, NC performed the analysis (NELAP certified). Please see the Cape Fear Analytical case narrative.

**Chain of Custody**



**SAMPLE RECEIPT CHECKLIST**Section 1: Login # 303137Client: Intertech  
Project: RFS B120Date Received: 9/11/16Section 2: Samples received in a cooler?  Yes, how many? \_\_\_\_\_  No (skip Section 3 below)If no cooler Sample Temp (°C): 22.8 using IR Gun #  A, or  B Samples received on ice directly from the field. Cooling process had begun

If in cooler: Date Opened \_\_\_\_\_ By (print) \_\_\_\_\_ (sign) \_\_\_\_\_

Shipping info (if applicable) \_\_\_\_\_

Are custody seals present?  No, or  Yes. If yes, where?  on cooler,  on samples,  on package Date: \_\_\_\_\_ How many \_\_\_\_\_  Signature,  Initials,  NoneWere custody seals intact upon arrival?  Yes  No  N/ASection 3: **Important : Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) \_\_\_\_\_

 Bubble Wrap,  Foam blocks,  Bags,  None,  Cloth material,  Cardboard,  Styrofoam,  Paper towels Samples received on ice directly from the field. Cooling process had begunType of ice used:  Wet,  Blue/Gel,  None Temperature blank(s) included?  Yes,  NoTemperature measured using  Thermometer ID: \_\_\_\_\_ or IR Gun #  A  B

Cooler Temp (°C): #1: \_\_\_\_\_, #2: \_\_\_\_\_, #3: \_\_\_\_\_, #4: \_\_\_\_\_, #5: \_\_\_\_\_, #6: \_\_\_\_\_, #7: \_\_\_\_\_

**Section 4:**Were custody papers dry, filled out properly, and the project identifiable Were Method 5035 sampling containers present?  

If YES, what time were they transferred to freezer? \_\_\_\_\_

Did all bottles arrive unbroken/unopened? Are there any missing / extra samples? Are samples in the appropriate containers for indicated tests? Are sample labels present, in good condition and complete? Does the container count match the COC? Do the sample labels agree with custody papers? Was sufficient amount of sample sent for tests requested? Did you change the hold time in LIMS for unpreserved VOAs? Did you change the hold time in LIMS for preserved terracores? Are bubbles > 6mm absent in VOA samples?  Was the client contacted concerning this sample delivery? 

If YES, who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**Section 5:**Are the samples appropriately preserved? (if N/A, skip the rest of section 5)  Did you check preservatives for all bottles for each sample? Did you document your preservative check? 

pH strip lot# \_\_\_\_\_ pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_

Preservative added:

 H<sub>2</sub>SO<sub>4</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ HCl lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ HNO<sub>3</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ NaOH lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_**Section 6:**Explanations/Comments: Limited sampleDate Logged in 9/12/18By (print) AC (sign) ACDate Labeled 9/12/18By (print) AC (sign) AC CM

**Laboratory Job Number 303137**

**Subcontracted Products**

**Cape Fear Analytical**

October 10, 2018

Mr. Mike Dahlquist  
Enthalpy Analytical LLC  
2323 Fifth Street  
Berkeley, California 94710

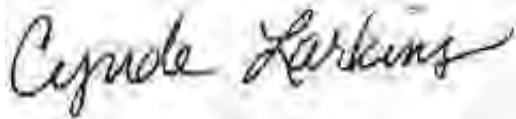
Re: Subcontract DXN / PCB's  
Work Order: 13953  
SDG: 303137

Dear Mr. Dahlquist:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on September 27, 2018. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at 910-795-0421.

Sincerely,



Cynde Larkins  
Project Manager

Enclosures

Enthalpy Berkeley

2323 Fifth Street  
Berkeley, CA 94710  
(510) 486-0900  
(510) 486-0532

CFA WO #13953

Project Number: 303137  
Site:

Subcontract Laboratory:  
Cape Fear Analytical  
3306 Kitty Hawk Road, Suite 120  
Wilmington, NC 28405  
(910) 795-0421  
ATTN: Cynde Larkins

Results due: Report Level: IV

Please send report to: Mike Dahlquist (mike.dahlquist@enthalpy.com)  
\*\*\* Please report using Sample ID rather than Enthalpy (Berkeley) Lab #.

Sample ID	Sampled	Matrix	Analysis	Lab #	Comments
B120-01	09/11 08:50	Miscell.	8290	303137-001	
B120-01	09/11 08:50	Miscell.	SDF	303137-001	
B120-02-R1	09/11 09:00	Miscell.	8290	303137-002	
B120-03	09/11 09:30	Miscell.	8290	303137-006	

Notes:	Relinquished By:	Received By:
	Date/Time: 4-26-18 11:57	Date/Time: 9/27/18 11:17

Signature on this form constitutes a firm Purchase Order for the services requested above.

Page 1 of 1

**SAMPLE RECEIPT CHECKLIST**

*Cape Fear Analytical*

Client: <i>Enthalpy Berkeley</i>			Work Order: <i>13953</i>			
Shipping Company: <i>FedEx</i>			Date/Time Received: <i>9/27/18 11:17</i>			
<b>Suspected Hazard Information</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NA <input checked="" type="checkbox"/> No Shipped as DOT Hazardous? <input checked="" type="checkbox"/> Samples identified as Foreign Soil? <input checked="" type="checkbox"/>			<b>DOE Site Sample Packages</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NA <input checked="" type="checkbox"/> No* Screened <0.5 mR/hr? <input checked="" type="checkbox"/> Samples < 2x background? <input checked="" type="checkbox"/>			
			* Notify RSO of any responses in this column immediately.			
<b>Air Sample Receipt Specifics</b> <input type="checkbox"/> Yes <input type="checkbox"/> NA <input checked="" type="checkbox"/> No Air sample in shipment? <input type="checkbox"/>			Air Witness:			
<b>Sample Receipt Criteria</b>			<b>Yes</b>	<b>NA</b>	<b>No</b>	<b>Comments/Qualifiers (required for Non-Conforming Items)</b>
1	Shipping containers received intact and sealed?		/			Circle Applicable: seals broken   damaged container   leaking container   other(describe) <i>Seals broken</i>
2	Chain of Custody documents included with shipment?		/			
3	Samples requiring cold preservation within 0-6°C?		/			Preservation Method: ice bags   blue ice   dry ice   none   other(describe) <i>51 + 0.3 = 54 °</i>
4	Aqueous samples found to have visible solids?		/			Sample IDs, containers affected:
5	Samples requiring chemical preservation at proper pH?		/			Sample IDs, containers affected and pH observed:  If preservative added, Lot#:
6	Samples requiring preservation have no residual chlorine?		/			Sample IDs, containers affected:  If preservative added, Lot#:
7	Samples received within holding time?		/			Sample IDs, tests affected:
8	Sample IDs on COC match IDs on containers?		/			Sample IDs, containers affected:
9	Date & time of COC match date & time on containers?		/			Sample IDs, containers affected: <i>No date or time on samples</i>
10	Number of containers received match number indicated on COC?	/				List type and number of containers / Sample IDs, containers affected: <i>3 - 4 oz clear</i>
11	COC form is properly signed in relinquished/received sections?	/				
Comments: <i>temp blank included</i>						

Checklist performed by: Initials: *Ph*

Date: *9/27/18*

CF-UD-F-7

# **High Resolution Dioxins and Furans Analysis**

# **Case Narrative**

**HDOX Case Narrative**  
**Enthalpy Analytical LLC (CURL)**  
**SDG 303137**  
**Work Order 13953**

**Method/Analysis Information**

**Product:** Dioxins/Furans by SW846 Method 8290A in Solids  
**Analytical Method:** SW846 8290A  
**Extraction Method:** SW846 3540C  
**Analytical Batch Number:** 38747  
**Clean Up Batch Number:** 38745  
**Extraction Batch Number:** 38744

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8290A:

<b>Sample ID</b>	<b>Client ID</b>
12022221	Method Blank (MB)
12022222	Laboratory Control Sample (LCS)
12022223	Laboratory Control Sample Duplicate (LCSD)
13953001	B120-01
13953002	B120-02-R1
13953003	B120-03

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 15.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

**Calibration Information**

**Initial Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

## **Continuing Calibration Verification (CCV) Requirements**

All associated calibration verification standard(s) (CCV) met the acceptance criteria.

## **Quality Control (QC) Information**

### **Certification Statement**

The test results presented in this document are certified to meet all requirements of the 2009 TNI Standard.

### **Method Blank (MB) Statement**

The MB(s) analyzed with this SDG met the acceptance criteria.

### **Surrogate Recoveries**

All surrogate recoveries were within the established acceptance criteria for this SDG.

### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

### **Laboratory Control Sample Duplicate (LCSD) Recovery**

The LCSD spike recoveries met the acceptance limits.

### **LCS/LCSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the LCS and LCSD met the acceptance limits.

### **QC Sample Designation**

A matrix spike and matrix spike duplicate analysis was not required for this SDG.

## **Technical Information**

### **Holding Time Specifications**

CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

### **Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

### **Sample Dilutions**

The samples in this SDG did not require dilutions.

### **Sample Re-extraction/Re-analysis**

Re-extractions or re-analyses were not required in this SDG.

## **Miscellaneous Information**

## **Nonconformance (NCR) Documentation**

A NCR was not required for this SDG.

## **Manual Integrations**

Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

## **System Configuration**

This analysis was performed on the following instrument configuration:

<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>
HRP750_3	Confirmation Analysis	TCDF Confirmation	DB-225	30m x 0.25mm, 0.25um
HRP750_2	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um

## **Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

# **Sample Data Summary**

## **Cape Fear Analytical, LLC**

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - [www.capefearanalytical.com](http://www.capefearanalytical.com)

### **Certificate of Analysis Report for**

**CURL001 Enthalpy Analytical LLC**

**Client SDG: 303137 CFA Work Order: 13953**

**The Qualifiers in this report are defined as follows:**

- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a surrogate compound
- J Value is estimated
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for, but not detected above the specified detection limit.

**Review/Validation**

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

**Signature:**



**Name:** Heather Patterson

**Date:** 10 OCT 2018

**Title:** Group Leader

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 13953001  
**Client Sample:** 8290 Soil  
**Client ID:** B120-01  
**Batch ID:** 38747  
**Run Date:** 10/03/2018 09:28  
**Data File:** A29SEP18B\_10-6  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001  
**Date Collected:** 09/11/2018 08:50  
**Date Received:** 09/27/2018 11:17  
**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 7.92 g

**Project:** CURL00312  
**Matrix:** SOIL  
**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.202		pg/g	0.202	1.26
40321-76-4	1,2,3,7,8-PeCDD	J	2.59		pg/g	0.391	6.31
39227-28-6	1,2,3,4,7,8-HxCDD	J	3.46		pg/g	0.836	6.31
57653-85-7	1,2,3,6,7,8-HxCDD		17.9		pg/g	0.705	6.31
19408-74-3	1,2,3,7,8,9-HxCDD		8.00		pg/g	0.795	6.31
35822-46-9	1,2,3,4,6,7,8-HpCDD		310		pg/g	1.92	6.31
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1720		pg/g	4.70	12.6
51207-31-9	2,3,7,8-TCDF		2.75		pg/g	0.303	1.26
57117-41-6	1,2,3,7,8-PeCDF	J	1.00		pg/g	0.326	6.31
57117-31-4	2,3,4,7,8-PeCDF	J	4.16		pg/g	0.290	6.31
70648-26-9	1,2,3,4,7,8-HxCDF	J	4.91		pg/g	0.634	6.31
57117-44-9	1,2,3,6,7,8-HxCDF		6.33		pg/g	0.551	6.31
60851-34-5	2,3,4,6,7,8-HxCDF		7.87		pg/g	0.616	6.31
72918-21-9	1,2,3,7,8,9-HxCDF	JK		1.46	pg/g	0.780	6.31
67562-39-4	1,2,3,4,6,7,8-HpCDF		77.8		pg/g	0.694	6.31
55673-89-7	1,2,3,4,7,8,9-HpCDF	J	3.51		pg/g	0.939	6.31
39001-02-0	1,2,3,4,6,7,8,9-OCDF		52.3		pg/g	0.995	12.6
41903-57-5	Total TCDDs	J	0.351	0.801	pg/g	0.202	1.26
36088-22-9	Total PeCDDs	J	12.4	14.8	pg/g	0.391	6.31
34465-46-8	Total HxCDDs	J	102	103	pg/g	0.705	6.31
37871-00-4	Total HpCDDs		541		pg/g	1.92	6.31
30402-14-3	Total TCDFs		21.7	25.6	pg/g	0.303	1.26
30402-15-4	Total PeCDFs	J	81.1		pg/g	0.076	6.31
55684-94-1	Total HxCDFs	J	184	185	pg/g	0.551	6.31
38998-75-3	Total HpCDFs	J	177		pg/g	0.694	6.31
3333-30-0	TEQ WHO2005 ND=0		13.4	13.6	pg/g		
3333-30-1	TEQ WHO2005 ND=0.5		13.6	13.7	pg/g		

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		216	253	pg/g	85.6	(40%-135%)
13C-1,2,3,7,8-PeCDD		218	253	pg/g	86.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		187	253	pg/g	74.1	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		213	253	pg/g	84.2	(40%-135%)
13C-OCDD		399	505	pg/g	79.1	(40%-135%)
13C-2,3,7,8-TCDF		186	253	pg/g	73.6	(40%-135%)
13C-1,2,3,7,8-PeCDF		199	253	pg/g	78.7	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		171	253	pg/g	67.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		185	253	pg/g	73.3	(40%-135%)

**Comments:****J** Value is estimated**K** Estimated Maximum Possible Concentration**U** Analyte was analyzed for, but not detected above the specified detection limit.

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

SDG Number:	303137	Client:	CURL001	Project:	CURL00312
Lab Sample ID:	13953001	Date Collected:	09/11/2018 08:50	Matrix:	SOIL
Client Sample:	8290 Soil	Date Received:	09/27/2018 11:17		
Client ID:	B120-01			Prep Basis:	As Received
Batch ID:	38747	Method:	SW846 8290A		
Run Date:	10/04/2018 02:03	Analyst:	MJC	Instrument:	HRP750
Data File:	A03OCT18A_2-22	Prep Method:	SW846 3540C	Dilution:	1
Prep Batch:	38744	Prep Aliquot:	7.92 g		
Prep Date:	01-OCT-18				

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
51207-31-9	2,3,7,8-TCDF		2.74		pg/g	1.87	1.26

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
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**Comments:**

- J Value is estimated
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for, but not detected above the specified detection limit.

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 13953002  
**Client Sample:** 8290 Soil  
**Client ID:** B120-02-R1  
**Batch ID:** 38747  
**Run Date:** 10/03/2018 10:16  
**Data File:** A29SEP18B\_10-7  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001  
**Date Collected:** 09/11/2018 09:00  
**Date Received:** 09/27/2018 11:17  
**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 4.95 g

**Project:** CURL00312  
**Matrix:** SOIL  
**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.274		pg/g	0.274	2.02
40321-76-4	1,2,3,7,8-PeCDD	J	1.56		pg/g	0.699	10.1
39227-28-6	1,2,3,4,7,8-HxCDD	JK		1.39	pg/g	0.634	10.1
57653-85-7	1,2,3,6,7,8-HxCDD	J	3.96		pg/g	0.533	10.1
19408-74-3	1,2,3,7,8,9-HxCDD	J	3.47		pg/g	0.602	10.1
35822-46-9	1,2,3,4,6,7,8-HpCDD		62.3		pg/g	1.40	10.1
3268-87-9	1,2,3,4,6,7,8,9-OCDD		277		pg/g	3.38	20.2
51207-31-9	2,3,7,8-TCDF		3.75		pg/g	0.545	2.02
57117-41-6	1,2,3,7,8-PeCDF	J	0.836		pg/g	0.262	10.1
57117-31-4	2,3,4,7,8-PeCDF	J	1.60		pg/g	0.234	10.1
70648-26-9	1,2,3,4,7,8-HxCDF	J	1.69		pg/g	0.570	10.1
57117-44-9	1,2,3,6,7,8-HxCDF	JK		2.02	pg/g	0.497	10.1
60851-34-5	2,3,4,6,7,8-HxCDF	J	2.03		pg/g	0.554	10.1
72918-21-9	1,2,3,7,8,9-HxCDF	U	0.703		pg/g	0.703	10.1
67562-39-4	1,2,3,4,6,7,8-HpCDF		13.6		pg/g	0.521	10.1
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	0.703		pg/g	0.703	10.1
39001-02-0	1,2,3,4,6,7,8,9-OCDF	J	6.99		pg/g	1.56	20.2
41903-57-5	Total TCDDs	J	0.574	2.21	pg/g	0.274	2.02
36088-22-9	Total PeCDDs	J	9.33	12.8	pg/g	0.699	10.1
34465-46-8	Total HxCDDs	J	47.2	53.3	pg/g	0.533	10.1
37871-00-4	Total HpCDDs		132		pg/g	1.40	10.1
30402-14-3	Total TCDFs		19.3	24.9	pg/g	0.545	2.02
30402-15-4	Total PeCDFs	J	27.9	29.0	pg/g	0.106	10.1
55684-94-1	Total HxCDFs	J	32.1	34.9	pg/g	0.497	10.1
38998-75-3	Total HpCDFs		23.9		pg/g	0.521	10.1
3333-30-0	TEQ WHO2005 ND=0		4.40	4.74	pg/g		
3333-30-1	TEQ WHO2005 ND=0.5		4.63	4.92	pg/g		

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		353	404	pg/g	87.3	(40%-135%)
13C-1,2,3,7,8-PeCDD		352	404	pg/g	87.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		307	404	pg/g	76.0	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		347	404	pg/g	85.8	(40%-135%)
13C-OCDD		627	808	pg/g	77.6	(40%-135%)
13C-2,3,7,8-TCDF		309	404	pg/g	76.4	(40%-135%)
13C-1,2,3,7,8-PeCDF		325	404	pg/g	80.5	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		277	404	pg/g	68.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		309	404	pg/g	76.4	(40%-135%)

**Comments:****J** Value is estimated**K** Estimated Maximum Possible Concentration**U** Analyte was analyzed for, but not detected above the specified detection limit.

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

SDG Number: 303137  
 Lab Sample ID: 13953002  
 Client Sample: 8290 Soil  
 Client ID: B120-02-R1  
 Batch ID: 38747  
 Run Date: 10/04/2018 02:26  
 Data File: A03OCT18A\_2-23  
 Prep Batch: 38744  
 Prep Date: 01-OCT-18

Client: CURL001  
 Date Collected: 09/11/2018 09:00  
 Date Received: 09/27/2018 11:17  
 Method: SW846 8290A  
 Analyst: MJC  
 Prep Method: SW846 3540C  
 Prep Aliquot: 4.95 g

Project: CURL00312  
 Matrix: SOIL  
 Prep Basis: As Received  
 Instrument: HRP750  
 Dilution: 1

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
51207-31-9	2,3,7,8-TCDF	K		5.45	pg/g	2.31	2.02

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits

**Comments:**

- J Value is estimated
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for, but not detected above the specified detection limit.

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 13953003  
**Client Sample:** 8290 Soil  
**Client ID:** B120-03  
**Batch ID:** 38747  
**Run Date:** 10/03/2018 11:04  
**Data File:** A29SEP18B\_10-8  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001  
**Date Collected:** 09/11/2018 09:30  
**Date Received:** 09/27/2018 11:17  
**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 4.99 g

**Project:** CURL00312  
**Matrix:** SOIL  
**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.221		pg/g	0.221	2.00
40321-76-4	1,2,3,7,8-PeCDD	U	0.366		pg/g	0.366	10.0
39227-28-6	1,2,3,4,7,8-HxCDD	U	0.525		pg/g	0.525	10.0
57653-85-7	1,2,3,6,7,8-HxCDD	U	0.445		pg/g	0.445	10.0
19408-74-3	1,2,3,7,8,9-HxCDD	U	0.501		pg/g	0.501	10.0
35822-46-9	1,2,3,4,6,7,8-HpCDD	J	6.19		pg/g	0.974	10.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		26.5		pg/g	3.08	20.0
51207-31-9	2,3,7,8-TCDF	U	0.334		pg/g	0.334	2.00
57117-41-6	1,2,3,7,8-PeCDF	U	0.264		pg/g	0.264	10.0
57117-31-4	2,3,4,7,8-PeCDF	U	0.235		pg/g	0.235	10.0
70648-26-9	1,2,3,4,7,8-HxCDF	U	0.254		pg/g	0.254	10.0
57117-44-9	1,2,3,6,7,8-HxCDF	U	0.22		pg/g	0.220	10.0
60851-34-5	2,3,4,6,7,8-HxCDF	U	0.246		pg/g	0.246	10.0
72918-21-9	1,2,3,7,8,9-HxCDF	U	0.313		pg/g	0.313	10.0
67562-39-4	1,2,3,4,6,7,8-HpCDF	J	1.08		pg/g	0.375	10.0
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	0.505		pg/g	0.505	10.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	0.95		pg/g	0.950	20.0
41903-57-5	Total TCDDs	U	0.221		pg/g	0.221	2.00
36088-22-9	Total PeCDDs	U	0.366	0.461	pg/g	0.366	10.0
34465-46-8	Total HxCDDs	J	1.39	3.20	pg/g	0.445	10.0
37871-00-4	Total HpCDDs	J	13.0		pg/g	0.974	10.0
30402-14-3	Total TCDFs	J	0.389	1.31	pg/g	0.334	2.00
30402-15-4	Total PeCDFs	J	0.557	1.52	pg/g	0.114	10.0
55684-94-1	Total HxCDFs	J	1.15		pg/g	0.220	10.0
38998-75-3	Total HpCDFs	J	1.77		pg/g	0.375	10.0
3333-30-0	TEQ WHO2005 ND=0		0.0806	0.0806	pg/g		
3333-30-1	TEQ WHO2005 ND=0.5		0.558	0.558	pg/g		

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		360	401	pg/g	89.8	(40%-135%)
13C-1,2,3,7,8-PeCDD		357	401	pg/g	89.0	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		296	401	pg/g	73.9	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		338	401	pg/g	84.4	(40%-135%)
13C-OCDD		592	802	pg/g	73.9	(40%-135%)
13C-2,3,7,8-TCDF		297	401	pg/g	74.1	(40%-135%)
13C-1,2,3,7,8-PeCDF		334	401	pg/g	83.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		267	401	pg/g	66.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		294	401	pg/g	73.3	(40%-135%)

**Comments:****J** Value is estimated**K** Estimated Maximum Possible Concentration**U** Analyte was analyzed for, but not detected above the specified detection limit.

# **Quality Control Summary**

**Hi-Res Dioxins/Furans**  
**Surrogate Recovery Report**

SDG Number: 303137

Matrix Type: SOLID

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Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12022222	LCS for batch 38744	13C-2,3,7,8-TCDD 13C-1,2,3,7,8-PeCDD 13C-1,2,3,6,7,8-HxCDD 13C-1,2,3,4,6,7,8-HpCDD 13C-OCDD 13C-2,3,7,8-TCDF 13C-1,2,3,7,8-PeCDF 13C-1,2,3,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HpCDF		90.7 91.8 69.9 78.8 65.8 69.9 87.0 65.7 70.1	(40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%)
12022223	LCSD for batch 38744	13C-2,3,7,8-TCDD 13C-1,2,3,7,8-PeCDD 13C-1,2,3,6,7,8-HxCDD 13C-1,2,3,4,6,7,8-HpCDD 13C-OCDD 13C-2,3,7,8-TCDF 13C-1,2,3,7,8-PeCDF 13C-1,2,3,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HpCDF		95.5 90.2 67.6 78.1 69.5 71.4 88.6 61.7 68.9	(40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%)
12022221	MB for batch 38744	13C-2,3,7,8-TCDD 13C-1,2,3,7,8-PeCDD 13C-1,2,3,6,7,8-HxCDD 13C-1,2,3,4,6,7,8-HpCDD 13C-OCDD 13C-2,3,7,8-TCDF 13C-1,2,3,7,8-PeCDF 13C-1,2,3,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HpCDF		95.0 88.4 66.4 75.7 64.9 73.6 88.9 64.2 68.9	(40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%)
13953001	B120-01	13C-2,3,7,8-TCDD 13C-1,2,3,7,8-PeCDD 13C-1,2,3,6,7,8-HxCDD 13C-1,2,3,4,6,7,8-HpCDD 13C-OCDD 13C-2,3,7,8-TCDF 13C-1,2,3,7,8-PeCDF 13C-1,2,3,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HpCDF		85.6 86.2 74.1 84.2 79.1 73.6 78.7 67.6 73.3	(40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%)
13953002	B120-02-R1	13C-2,3,7,8-TCDD 13C-1,2,3,7,8-PeCDD 13C-1,2,3,6,7,8-HxCDD 13C-1,2,3,4,6,7,8-HpCDD 13C-OCDD 13C-2,3,7,8-TCDF 13C-1,2,3,7,8-PeCDF 13C-1,2,3,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HpCDF		87.3 87.2 76.0 85.8 77.6 76.4 80.5 68.6 76.4	(40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%) (40%-135%)
13953003	B120-03	13C-2,3,7,8-TCDD 13C-1,2,3,7,8-PeCDD		89.8 89.0	(40%-135%) (40%-135%)

## Hi-Res Dioxins/Furans

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## Surrogate Recovery Report

SDG Number: 303137

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
13953003	B120-03	13C-1,2,3,6,7,8-HxCDD		73.9	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		84.4	(40%-135%)
		13C-OCDD		73.9	(40%-135%)
		13C-2,3,7,8-TCDF		74.1	(40%-135%)
		13C-1,2,3,7,8-PeCDF		83.2	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		66.6	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		73.3	(40%-135%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

**Hi-Res Dioxins/Furans**  
**Quality Control Summary**  
**Spike Recovery Report**

**SDG Number:** 303137  
**Client ID:** LCS for batch 38744  
**Lab Sample ID:** 12022222  
**Instrument:** HRP750  
**Analyst:** MJC

**Sample Type:** Laboratory Control Sample  
**Matrix:** SOIL  
**Analysis Date:** 10/02/2018 18:08      **Dilution:** 1  
**Prep Batch ID:** 38744  
**Batch ID:** 38747

<b>CAS No.</b>	<b>Parmname</b>	<b>Amount</b>	<b>Spike</b>	<b>Recovery Acceptance</b>	
		<b>Added</b> pg/g	<b>Conc.</b> pg/g	<b>%</b>	<b>Limits</b>
1746-01-6	LCS	2,3,7,8-TCDD	20.0	21.3	106 70-130
40321-76-4	LCS	1,2,3,7,8-PeCDD	100	110	110 70-130
39227-28-6	LCS	1,2,3,4,7,8-HxCDD	100	119	119 70-130
57653-85-7	LCS	1,2,3,6,7,8-HxCDD	100	113	113 70-130
19408-74-3	LCS	1,2,3,7,8,9-HxCDD	100	118	118 70-130
35822-46-9	LCS	1,2,3,4,6,7,8-HpCDD	100	104	104 70-130
3268-87-9	LCS	1,2,3,4,6,7,8,9-OCDD	200	203	101 70-130
51207-31-9	LCS	2,3,7,8-TCDF	20.0	20.1	101 70-130
57117-41-6	LCS	1,2,3,7,8-PeCDF	100	107	107 70-130
57117-31-4	LCS	2,3,4,7,8-PeCDF	100	105	105 70-130
70648-26-9	LCS	1,2,3,4,7,8-HxCDF	100	122	122 70-130
57117-44-9	LCS	1,2,3,6,7,8-HxCDF	100	114	114 70-130
60851-34-5	LCS	2,3,4,6,7,8-HxCDF	100	120	120 70-130
72918-21-9	LCS	1,2,3,7,8,9-HxCDF	100	117	117 70-130
67562-39-4	LCS	1,2,3,4,6,7,8-HpCDF	100	110	110 70-130
55673-89-7	LCS	1,2,3,4,7,8,9-HpCDF	100	108	108 70-130
39001-02-0	LCS	1,2,3,4,6,7,8,9-OCDF	200	189	94.3 70-130

**Hi-Res Dioxins/Furans**  
**Quality Control Summary**  
**Spike Recovery Report**

SDG Number: 303137

Client ID: LCSD for batch 38744

Lab Sample ID: 12022223

Instrument: HRP750

Analyst: MJC

Sample Type: Laboratory Control Sample Duplicate

Matrix: SOIL

Analysis Date: 10/02/2018 18:56

Dilution: 1

Prep Batch ID: 38744

Batch ID: 38747

CAS No.	Parmname	Amount Added pg/g	Spike		Acceptance Limits	RPD %	Acceptance Limits
			Conc. pg/g	Recovery %			
1746-01-6	LCSD	2,3,7,8-TCDD	20.0	19.5	97.4	70-130	8.83
40321-76-4	LCSD	1,2,3,7,8-PeCDD	100	102	102	70-130	7.79
39227-28-6	LCSD	1,2,3,4,7,8-HxCDD	100	111	111	70-130	7.29
57653-85-7	LCSD	1,2,3,6,7,8-HxCDD	100	106	106	70-130	6.03
19408-74-3	LCSD	1,2,3,7,8,9-HxCDD	100	115	115	70-130	3.26
35822-46-9	LCSD	1,2,3,4,6,7,8-HpCDD	100	98.1	98.1	70-130	5.89
3268-87-9	LCSD	1,2,3,4,6,7,8,9-OCDD	200	195	97.6	70-130	3.84
51207-31-9	LCSD	2,3,7,8-TCDF	20.0	19.0	95.1	70-130	5.72
57117-41-6	LCSD	1,2,3,7,8-PeCDF	100	103	103	70-130	4.31
57117-31-4	LCSD	2,3,4,7,8-PeCDF	100	97.2	97.2	70-130	8.11
70648-26-9	LCSD	1,2,3,4,7,8-HxCDF	100	116	116	70-130	5.03
57117-44-9	LCSD	1,2,3,6,7,8-HxCDF	100	113	113	70-130	0.726
60851-34-5	LCSD	2,3,4,6,7,8-HxCDF	100	119	119	70-130	0.758
72918-21-9	LCSD	1,2,3,7,8,9-HxCDF	100	119	119	70-130	1.64
67562-39-4	LCSD	1,2,3,4,6,7,8-HpCDF	100	107	107	70-130	3.01
55673-89-7	LCSD	1,2,3,4,7,8,9-HpCDF	100	103	103	70-130	4.08
39001-02-0	LCSD	1,2,3,4,6,7,8,9-OCDF	200	186	92.9	70-130	1.47

**Method Blank Summary**

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SDG Number: 303137  
Client ID: MB for batch 38744  
Lab Sample ID: 12022221  
Column:

Client: CURL001  
Instrument ID: HRP750  
Prep Date: 01-OCT-18  
Matrix: SOIL  
Data File: A29SEP18B\_9-3  
Analyzed: 10/02/18 19:44

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 38744	12022222	A29SEP18B_9-1	10/02/18	1808
02 LCSD for batch 38744	12022223	A29SEP18B_9-2	10/02/18	1856
03 B120-01	13953001	A29SEP18B_10-6	10/03/18	0928
04 B120-02-R1	13953002	A29SEP18B_10-7	10/03/18	1016
05 B120-03	13953003	A29SEP18B_10-8	10/03/18	1104
06 B120-01	13953001	A03OCT18A_2-22	10/04/18	0203
07 B120-02-R1	13953002	A03OCT18A_2-23	10/04/18	0226

# **Sample Raw Data**

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 13953001  
**Client Sample:** 8290 Soil  
**Client ID:** B120-01  
**Batch ID:** 38747  
**Run Date:** 10/03/2018 09:28  
**Data File:** A29SEP18B\_10-6  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001  
**Date Collected:** 09/11/2018 08:50  
**Date Received:** 09/27/2018 11:17  
**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 7.92 g

**Project:** CURL00312  
**Matrix:** SOIL  
**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.202		pg/g	0.202	1.26
40321-76-4	1,2,3,7,8-PeCDD	J	2.59		pg/g	0.391	6.31
39227-28-6	1,2,3,4,7,8-HxCDD	J	3.46		pg/g	0.836	6.31
57653-85-7	1,2,3,6,7,8-HxCDD		17.9		pg/g	0.705	6.31
19408-74-3	1,2,3,7,8,9-HxCDD		8.00		pg/g	0.795	6.31
35822-46-9	1,2,3,4,6,7,8-HpCDD		310		pg/g	1.92	6.31
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1720		pg/g	4.70	12.6
51207-31-9	2,3,7,8-TCDF		2.75		pg/g	0.303	1.26
57117-41-6	1,2,3,7,8-PeCDF	J	1.00		pg/g	0.326	6.31
57117-31-4	2,3,4,7,8-PeCDF	J	4.16		pg/g	0.290	6.31
70648-26-9	1,2,3,4,7,8-HxCDF	J	4.91		pg/g	0.634	6.31
57117-44-9	1,2,3,6,7,8-HxCDF		6.33		pg/g	0.551	6.31
60851-34-5	2,3,4,6,7,8-HxCDF		7.87		pg/g	0.616	6.31
72918-21-9	1,2,3,7,8,9-HxCDF	JK		1.46	pg/g	0.780	6.31
67562-39-4	1,2,3,4,6,7,8-HpCDF		77.8		pg/g	0.694	6.31
55673-89-7	1,2,3,4,7,8,9-HpCDF	J	3.51		pg/g	0.939	6.31
39001-02-0	1,2,3,4,6,7,8,9-OCDF		52.3		pg/g	0.995	12.6
41903-57-5	Total TCDDs	J	0.351	0.801	pg/g	0.202	1.26
36088-22-9	Total PeCDDs	J	12.4	14.8	pg/g	0.391	6.31
34465-46-8	Total HxCDDs	J	102	103	pg/g	0.705	6.31
37871-00-4	Total HpCDDs		541		pg/g	1.92	6.31
30402-14-3	Total TCDFs		21.7	25.6	pg/g	0.303	1.26
30402-15-4	Total PeCDFs	J	81.1		pg/g	0.076	6.31
55684-94-1	Total HxCDFs	J	184	185	pg/g	0.551	6.31
38998-75-3	Total HpCDFs	J	177		pg/g	0.694	6.31
3333-30-0	TEQ WHO2005 ND=0		13.4	13.6	pg/g		
3333-30-1	TEQ WHO2005 ND=0.5		13.6	13.7	pg/g		

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		216	253	pg/g	85.6	(40%-135%)
13C-1,2,3,7,8-PeCDD		218	253	pg/g	86.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		187	253	pg/g	74.1	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		213	253	pg/g	84.2	(40%-135%)
13C-OCDD		399	505	pg/g	79.1	(40%-135%)
13C-2,3,7,8-TCDF		186	253	pg/g	73.6	(40%-135%)
13C-1,2,3,7,8-PeCDF		199	253	pg/g	78.7	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		171	253	pg/g	67.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		185	253	pg/g	73.3	(40%-135%)

**Comments:****J** Value is estimated**K** Estimated Maximum Possible Concentration**U** Analyte was analyzed for, but not detected above the specified detection limit.

**MassLynx 4.1****Quantify Sample Summary Report**

Method 8290 Quantification Report  
 Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.d|d  
 Last Altered: Tuesday, October 09, 2018 11:21:26 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:21:50 Eastern Standard Time

**Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**  
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RRT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDD	2.75e2	3.93e2	6.68e2	31.47	1.001	0.70	NO	0.072	0.0798	5.88e3	3153	1.9	1.03e4	2266	4.6	dd
2	12378-PeCDD	4.42e3	2.69e3	7.11e3	34.27	1.000	1.64	NO	1.026	0.155	7.06e4	4592	15.4	5.05e4	4711	10.7	db
3	123478-HxCDD	3.94e3	3.49e3	7.43e3	36.92	0.998	1.13	NO	1.370	0.331	8.94e4	7303	12.2	7.02e4	5675	12.4	bd
4	123678-HxCDD	2.52e4	2.03e4	4.56e4	37.00	1.001	1.24	NO	7.093	0.279	4.82e5	7303	66.0	3.65e5	5675	64.3	dd
5	123789-HxCDD	9.40e3	8.65e3	1.81e4	37.25	1.007	1.09	NO	3.169	0.315	1.76e5	7303	24.2	1.33e5	5675	23.5	dd
6	1234678-HpCDD	2.89e5	2.78e5	5.67e5	40.35	1.000	1.04	NO	122.745	0.762	3.81e6	8423	452.4	3.66e6	10261	357.1	bd
7	OCDD	1.16e6	1.32e6	2.48e6	44.64	1.000	0.88	NO	680.285	1.86	1.09e7	8016	1365.4	1.25e7	17836	699.3	bd
8	2378-TCDF	5.36e3	6.84e3	1.22e4	30.82	1.000	0.78	NO	1.089	0.120	8.56e4	3000	28.5	9.22e4	4474	20.6	dd
9	12378-PeCDF	2.34e3	1.50e3	3.84e3	33.47	1.000	1.57	NO	0.397	0.129	6.59e4	8200	8.0	4.28e4	3136	13.7	bb
10	23478-PeCDF	1.03e4	7.56e3	1.78e4	34.10	1.019	1.36	NO	1.647	0.115	2.41e5	8200	29.3	1.42e5	3136	45.3	db
11	123478-HxCDF	7.75e3	6.68e3	1.44e4	36.19	0.997	1.16	NO	1.944	0.251	1.65e5	7813	21.2	1.37e5	6560	20.9	bd
12	123678-HxCDF	1.13e4	1.01e4	2.14e4	36.29	1.000	1.12	NO	2.505	0.218	2.53e5	7813	32.4	1.87e5	6560	28.5	db
13	234678-HxCDF	1.31e4	1.07e4	2.38e4	36.78	1.014	1.23	NO	3.116	0.244	2.43e5	7813	31.1	1.95e5	6560	29.8	bb
14	123789-HxCDF	1.67e3	1.82e3	3.50e3	37.60	1.036	0.92	YES	0.580	0.309	2.99e4	7813	3.8	3.92e4	6560	6.0	MM
15	1234678-HpCDF	1.08e5	1.06e5	2.14e5	39.07	1.000	1.02	NO	30.793	0.275	1.72e6	5599	307.8	1.62e6	6091	266.5	bd
16	1234789-HpCDF	3.75e3	3.40e3	7.15e3	41.02	1.050	1.10	NO	1.389	0.372	5.79e4	5599	10.3	4.38e4	6091	7.2	bd
17	OCDF	4.34e4	4.78e4	9.12e4	44.94	1.007	0.91	NO	20.699	0.394	4.71e5	3619	130.1	5.23e5	3007	173.8	bd
18	13C-2378-TCDD	4.23e5	5.44e5	9.67e5	31.44	1.015	0.78	NO	85.637	0.131	7.68e6	5928	1295.8	9.97e6	3110	3206.9	bd
19	13C-12378-PeCDD	4.34e5	2.75e5	7.09e5	34.27	1.106	1.58	NO	86.159	0.141	9.42e6	3859	2440.3	5.92e6	3223	1837.7	bd
20	13C-123678-HxCDD	3.69e5	2.93e5	6.62e5	36.98	0.993	1.26	NO	74.100	0.237	6.67e6	5054	1319.8	5.48e6	8232	665.5	bd
21	13C-1234678-HpCDD	2.49e5	2.35e5	4.84e5	40.33	1.083	1.06	NO	84.233	0.327	3.30e6	6144	537.8	3.14e6	5662	554.8	bd
22	13C-OCDD	3.48e5	3.94e5	7.42e5	44.62	1.198	0.88	NO	158.171	0.495	3.32e6	6532	508.3	3.78e6	8079	468.3	bd
23	13C-2378-TCDF	5.28e5	6.91e5	1.22e6	30.82	0.995	0.76	NO	73.649	0.193	7.32e6	12899	567.8	9.35e6	6552	1427.6	bb
24	13C-12378-PeCDF	6.76e5	4.27e5	1.10e6	33.46	1.080	1.58	NO	78.734	0.162	1.53e7	7458	2056.1	9.87e6	6384	1546.3	bd
25	13C-123678-HxCDF	2.80e5	5.23e5	8.04e5	36.28	0.974	0.54	NO	67.642	0.158	5.40e6	5669	952.1	1.05e7	6121	1717.4	bd
26	13C-1234678-HpCDF	1.80e5	3.91e5	5.71e5	39.06	1.049	0.46	NO	73.260	0.151	2.74e6	3966	691.5	6.05e6	3410	1773.3	bd
27	13C-1234-TCDD	4.64e5	5.97e5	1.06e6	30.98	0.000	0.78	NO	100.000	0.140	7.07e6	5928	1192.9	9.13e6	3110	2936.3	bb
28	13C-123789-HxCDD	4.28e5	3.40e5	7.68e5	37.23	0.000	1.26	NO	100.000	0.275	6.73e6	5054	1331.2	5.28e6	8232	641.2	dd

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
 Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
 Last Altered: Tuesday, October 09, 2018 11:21:26 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:21:50 Eastern Standard Time

**Method:** C:\MassLynx\DEFAULT.T.PRO\methDB\CFA\_EPA8290\_A23AUG18.mdb **23 Aug 2018 12:08:58**  
**Calibration:** C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb **20 Aug 2018 13:48:29**

**Name:** A29SEP18B\_10-6, **Date:** 03-Oct-2018, **Time:** 09:28:08, **ID:** 13953001-1, **Description:** 38747, **Job:** HMR8290\_1S, **Task:** HRP750\_2, **User:** MJC

TD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-tetradioxins	8.61e2	7.99e2	1.66e3	28.28	1.08	YES	0.178	0.0798	1.41e4	3153	4.5	1.63e4	2266	7.2	MM	bb
2	Total-tetradioxins	5.47e1	9.20e1	1.47e2	27.64	0.59	YES	0.016	0.0798	2.89e3	3153	0.9	2.37e3	2266	1.0	bb	bb
3	Total-tetradioxins	1.19e2	5.91e1	1.78e2	25.59	2.02	YES	0.019	0.0798	2.95e3	3153	0.9	3.21e3	2266	1.4	bb	bb
4	Total-tetradioxins	1.69e2	7.93e1	2.48e2	31.13	2.13	YES	0.027	0.0798	5.71e3	3153	1.8	3.28e3	2266	1.4	bb	bb
5	Total-tetradioxins	7.14e1	5.39e1	1.25e2	30.81	1.32	YES	0.013	0.0798	2.44e3	3153	0.8	1.91e3	2266	0.8	bb	bb
6	Total-tetradioxins	1.10e2	2.60e2	3.70e2	30.69	0.42	YES	0.040	0.0798	3.27e3	3153	1.0	8.22e3	2266	3.6	bb	bb
7	Total-tetradioxins	1.34e2	1.14e2	2.47e2	30.55	1.18	YES	0.026	0.0798	3.89e3	3153	1.2	2.76e3	2266	1.2	bb	bb
8	Total-tetradioxins	2.02e2	1.75e2	3.76e2	30.30	1.15	YES	0.040	0.0798	4.15e3	3153	1.3	3.91e3	2266	1.7	db	db
9	Total-tetradioxins	3.04e2	2.51e2	5.55e2	30.25	1.21	YES	0.059	0.0798	5.80e3	3153	1.8	9.73e3	2266	4.3	cd	bd
10	Total-tetradioxins	5.98e2	7.03e2	1.30e3	30.13	0.85	NO	0.139	0.0798	9.50e3	3153	3.0	9.72e3	2266	4.3	MM	db
11	Total-tetradioxins	3.51e2	4.21e2	7.71e2	29.89	0.83	NO	0.083	0.0798	7.29e3	3153	2.3	6.63e3	2266	2.9	MM	MM
12	Total-tetradioxins	1.59e2	6.17e1	2.20e2	29.55	2.58	YES	0.024	0.0798	1.14e4	3153	3.6	2.21e3	2266	1.0	bb	bb
13	Total-tetradioxins	6.89e1	1.05e2	1.74e2	29.22	0.66	NO	0.019	0.0798	3.42e3	3153	1.1	5.26e3	2266	2.3	bb	bd
14	Total-tetradioxins	1.60e2	1.05e2	2.65e2	29.01	1.52	YES	0.028	0.0798	6.37e3	3153	2.0	3.56e3	2266	1.6	db	db
15	Total-tetradioxins	2.14e2	2.43e2	4.57e2	28.96	0.88	NO	0.049	0.0798	9.07e3	3153	2.9	4.54e3	2266	2.0	bd	bd
16	Total-tetradioxins	5.62e2	7.50e2	1.31e3	28.51	0.75	NO	0.141	0.0798	6.47e3	3153	2.1	1.32e4	2266	5.8	MM	MM
17	Total-tetradioxins	1.49e2	1.69e2	3.18e2	32.00	0.88	NO	0.034	0.0798	4.16e3	3153	1.3	4.70e3	2266	2.1	bd	bb
18	Total-tetradioxins	4.11e2	2.52e2	6.63e2	31.64	1.63	YES	0.071	0.0798	8.00e3	3153	2.5	6.39e3	2266	2.8	dd	bb
19	Total-tetradioxins	1.26e2	9.68e1	2.23e2	31.56	1.31	YES	0.024	0.0798	4.17e3	3153	1.3	5.36e3	2266	2.4	cd	bb
20	2378-TCDD	2.75e2	3.93e2	6.68e2	31.47	0.70	NO	0.072	0.0798	5.88e3	3153	1.9	1.03e4	2266	4.6	dd	bb
21	Total-tetradioxins	3.77e2	2.62e2	6.39e2	31.27	1.44	YES	0.068	0.0798	7.74e3	3153	2.5	5.60e3	2266	2.5	bb	db

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
 Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
 Last Altered: Tuesday, October 09, 2018 11:21:26 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:21:50 Eastern Standard Time

Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

## PD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-pentadioins	6.69e1	6.43e1	1.31e2	33.34	1.04	YES	0.019	0.155	6.50e3	4592	1.4	2.37e3	4711	0.5	bb	bd
2	Total-pentadioins	1.25e3	1.93e3	3.17e3	33.21	0.65	YES	0.458	0.155	3.24e4	4592	7.0	4.33e4	4711	9.2	bb	bb
3	Total-pentadioins	7.65e3	4.79e3	1.24e4	32.94	1.60	NO	1.796	0.155	1.50e5	4592	32.7	9.27e4	4711	19.7	bb	bd
4	Total-pentadioins	9.31e1	1.09e2	2.02e2	34.89	0.85	YES	0.029	0.155	5.60e3	4592	1.2	4.08e3	4711	0.9	bb	bb
5	Total-pentadioins	6.68e2	2.98e2	9.66e2	34.55	2.24	YES	0.139	0.155	1.79e4	4592	3.9	1.57e4	4711	3.3	bd	bd
6	Total-pentadioins	5.96e1	1.45e2	2.05e2	34.44	0.41	YES	0.030	0.155	3.54e3	4592	0.8	3.46e3	4711	0.7	bb	db
7	12378-PeCDD	4.42e3	2.69e3	7.11e3	34.27	1.64	NO	1.026	0.155	7.06e4	4592	15.4	5.05e4	4711	10.7	db	bd
8	Total-pentadioins	2.05e2	1.19e2	3.25e2	34.00	1.72	NO	0.047	0.155	9.16e3	4592	2.0	4.73e3	4711	1.0	cb	bb
9	Total-pentadioins	2.05e3	1.26e3	3.31e3	33.78	1.62	NO	0.478	0.155	3.37e4	4592	7.3	2.31e4	4711	4.9	cb	db
10	Total-pentadioins	2.25e3	1.22e3	3.47e3	33.65	1.85	YES	0.501	0.155	5.91e4	4592	12.9	3.31e4	4711	7.0	cd	dd
11	Total-pentadioins	3.03e3	2.26e3	5.29e3	33.60	1.34	NO	0.764	0.155	8.74e4	4592	19.0	5.09e4	4711	10.8	cd	dd
12	Total-pentadioins	3.60e3	2.16e3	5.76e3	33.49	1.66	NO	0.831	0.155	8.76e4	4592	19.1	5.86e4	4711	12.4	bd	dd

## HD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	123789-HxCDD	9.40e3	8.65e3	1.81e4	37.25	1.09	NO	3.169	0.315	1.76e5	7303	24.2	1.33e5	5675	23.5	cd	db
2	Total-hexadioins	7.10e2	1.11e3	1.82e3	37.15	0.64	YES	0.311	0.307	2.94e4	7303	4.0	2.77e4	5675	4.9	bd	dd
3	123678-HxCDD	2.52e4	2.03e4	4.56e4	37.00	1.24	NO	7.093	0.279	4.82e5	7303	66.0	3.65e5	5675	64.3	db	dd
4	123478-HxCDD	3.94e3	3.49e3	7.43e3	36.92	1.13	NO	1.370	0.331	8.94e4	7303	12.2	7.02e4	5675	12.4	bd	bd
5	Total-hexadioins	5.56e4	4.49e4	1.00e5	36.34	1.24	NO	17.181	0.307	8.85e5	7303	121.2	7.03e5	5675	123.9	bb	bd
6	Total-hexadioins	4.62e3	3.35e3	7.96e3	36.12	1.38	NO	1.362	0.307	9.62e4	7303	13.2	7.88e4	5675	13.9	bb	bb
7	Total-hexadioins	3.34e4	2.67e4	6.01e4	35.65	1.25	NO	10.270	0.307	7.03e5	7303	96.2	5.73e5	5675	101.0	bd	bb

## HPD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	1234678-HpCDD	2.89e5	2.78e5	5.67e5	40.35	1.04	NO	122.745	0.762	3.81e6	8423	452.4	3.66e6	10261	357.1	bd	bb
2	Total-heptadioins	2.12e5	2.10e5	4.22e5	39.41	1.01	NO	91.365	0.762	3.26e6	8423	386.5	3.19e6	10261	311.2	bb	bb

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report

Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
 Last Altered: Tuesday, October 09, 2018 11:21:26 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:21:50 Eastern Standard Time

Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

TF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-tetrafurans	8.89e2	1.22e3	2.11e3	26.95	0.73	NO	0.188	0.120	1.43e4	3000	4.8	1.41e4	4474	3.1	bb	MM
2	Total-tetrafurans	2.40e2	1.16e2	3.56e2	30.59	2.06	YES	0.032	0.120	8.56e3	3000	2.9	6.92e3	4474	1.5	bd	bd
3	Total-tetrafurans	5.23e2	4.57e2	9.80e2	30.42	1.14	YES	0.087	0.120	9.11e3	3000	3.0	5.51e3	4474	1.2	db	bb
4	Total-tetrafurans	1.05e3	1.24e3	2.29e3	30.21	0.85	NO	0.204	0.120	1.30e4	3000	4.3	1.72e4	4474	3.8	cd	MM
5	Total-tetrafurans	2.18e3	3.02e3	5.20e3	29.93	0.72	NO	0.464	0.120	2.32e4	3000	7.7	4.34e4	4474	9.7	bd	bb
6	Total-tetrafurans	6.11e3	8.79e3	1.49e4	29.47	0.69	NO	1.330	0.120	6.02e4	3000	20.1	1.24e5	4474	27.6	db	db
7	Total-tetrafurans	5.95e2	1.10e3	1.70e3	29.29	0.54	YES	0.152	0.120	9.32e3	3000	3.1	1.76e4	4474	3.9	bd	bd
8	Total-tetrafurans	3.10e3	3.29e3	6.38e3	28.82	0.94	YES	0.569	0.120	4.54e4	3000	15.1	4.34e4	4474	9.7	db	db
9	Total-tetrafurans	1.36e3	2.23e3	3.59e3	28.66	0.61	YES	0.320	0.120	2.21e4	3000	7.4	3.65e4	4474	8.2	cd	dd
10	Total-tetrafurans	5.35e3	6.85e3	1.22e4	28.55	0.78	NO	1.089	0.120	5.43e4	3000	18.1	9.87e4	4474	22.1	bd	bd
11	Total-tetrafurans	2.24e3	3.68e3	5.92e3	28.16	0.61	YES	0.528	0.120	2.07e4	3000	6.9	3.84e4	4474	8.6	MM	bb
12	Total-tetrafurans	1.91e3	2.61e3	4.53e3	27.86	0.73	NO	0.404	0.120	1.82e4	3000	6.1	2.25e4	4474	5.0	MM	MM
13	Total-tetrafurans	8.61e3	1.09e4	1.95e4	27.49	0.79	NO	1.738	0.120	9.70e4	3000	32.3	1.29e5	4474	28.8	bd	bb
14	Total-tetrafurans	2.34e3	3.10e3	5.44e3	32.08	0.76	NO	0.486	0.120	4.66e4	3000	15.5	6.82e4	4474	15.2	bd	bb
15	Total-tetrafurans	1.82e2	2.64e2	4.47e2	31.83	0.69	NO	0.040	0.120	3.77e3	3000	1.3	8.28e3	4474	1.9	bb	bb
16	Total-tetrafurans	6.76e1	3.74e2	4.42e2	31.28	0.18	YES	0.039	0.120	3.38e3	3000	1.1	8.99e3	4474	2.0	bb	db
17	Total-tetrafurans	8.17e3	9.64e3	1.78e4	31.11	0.85	NO	1.590	0.120	1.41e5	3000	46.9	1.63e5	4474	36.5	db	bd
18	2378-TCDF	5.36e3	6.84e3	1.22e4	30.82	0.78	NO	1.089	0.120	8.56e4	3000	28.5	9.22e4	4474	20.6	cd	db
19	Total-tetrafurans	2.05e2	5.65e2	7.70e2	30.63	0.36	YES	0.069	0.120	6.24e3	3000	2.1	1.02e4	4474	2.3	dd	dd

PF1

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-pentafurans (F1)	1.25e5	7.97e4	2.04e5	32.07	1.56	NO	19.964	0.0301	3.04e6	940	3239.1	2.03e6	1860	1091.4	bb	bb

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
Page 359 of 359  
Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
Last Altered: Tuesday, October 09, 2018 11:21:26 Eastern Standard Time  
Printed: Tuesday, October 09, 2018 11:21:50 Eastern Standard Time

Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

## PF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-pentafurans	3.40e2	3.78e2	7.18e2	33.78	0.90	YES	0.070	0.122	9.96e3	8200	1.2	8.78e3	3136	2.8	bb	dd
2	Total-pentafurans	5.49e3	3.64e3	9.14e3	33.63	1.51	NO	0.892	0.122	1.30e5	8200	15.8	7.90e4	3136	25.2	bb	dd
3	12378-PeCDF	2.34e3	1.50e3	3.84e3	33.47	1.57	NO	0.397	0.129	6.59e4	8200	8.0	4.28e4	3136	13.7	bb	dd
4	Total-pentafurans	8.02e2	4.95e2	1.30e3	33.37	1.62	NO	0.127	0.122	2.78e4	8200	3.4	1.19e4	3136	3.8	db	dd
5	Total-pentafurans	9.91e3	7.37e3	1.73e4	33.24	1.35	NO	1.687	0.122	2.15e5	8200	26.2	1.96e5	3136	62.6	bd	dd
6	Total-pentafurans	5.44e2	3.86e2	9.31e2	33.10	1.41	NO	0.091	0.122	1.71e4	8200	2.1	8.95e3	3136	2.9	bb	dd
7	Total-pentafurans	4.44e4	2.96e4	7.39e4	32.91	1.50	NO	7.222	0.122	7.39e5	8200	90.1	5.05e5	3136	161.0	MM	bd
8	23478-PeCDF	1.03e4	7.56e3	1.78e4	34.10	1.36	NO	1.647	0.115	2.41e5	8200	29.3	1.42e5	3136	45.3	db	db
9	Total-pentafurans	1.13e3	6.47e2	1.78e3	34.01	1.75	NO	0.174	0.122	2.79e4	8200	3.4	2.07e4	3136	6.6	bd	bd

## HF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	123789-HxCDF	1.67e3	1.82e3	3.50e3	37.60	0.92	YES	0.580	0.309	2.99e4	7813	3.8	3.92e4	6560	6.0	MM	db
2	234678-HxCDF	1.31e4	1.07e4	2.38e4	36.78	1.23	NO	3.116	0.244	2.43e5	7813	31.1	1.95e5	6560	29.8	bb	bb
3	123678-HxCDF	1.13e4	1.01e4	2.14e4	36.29	1.12	NO	2.505	0.218	2.53e5	7813	32.4	1.87e5	6560	28.5	db	db
4	123478-HxCDF	7.75e3	6.68e3	1.44e4	36.19	1.16	NO	1.944	0.251	1.65e5	7813	21.2	1.37e5	6560	20.9	bd	dd
5	Total-hexafurans	6.24e4	5.36e4	1.16e5	35.80	1.16	NO	15.657	0.252	1.32e6	7813	169.2	1.16e6	6560	177.2	bb	bd
6	Total-hexafurans	7.53e2	8.73e2	1.63e3	35.64	0.86	YES	0.219	0.252	1.75e4	7813	2.2	2.78e4	6560	4.2	bb	bb
7	Total-hexafurans	1.63e5	1.32e5	2.95e5	35.36	1.24	NO	39.857	0.252	3.86e6	7813	494.0	2.99e6	6560	455.8	db	db
8	Total-hexafurans	3.85e4	3.26e4	7.11e4	35.22	1.18	NO	9.593	0.252	8.85e5	7813	113.2	7.54e5	6560	114.9	bd	bd

Page 359 of 365  
Method 8290 Quantification Report  
**Quantify Totals Report MassLynx 4.1**

Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
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Printed: Tuesday, October 09, 2018 11:21:50 Eastern Standard Time

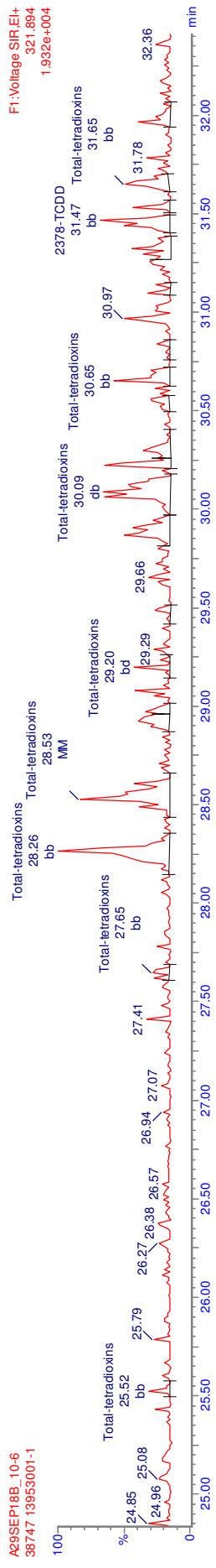
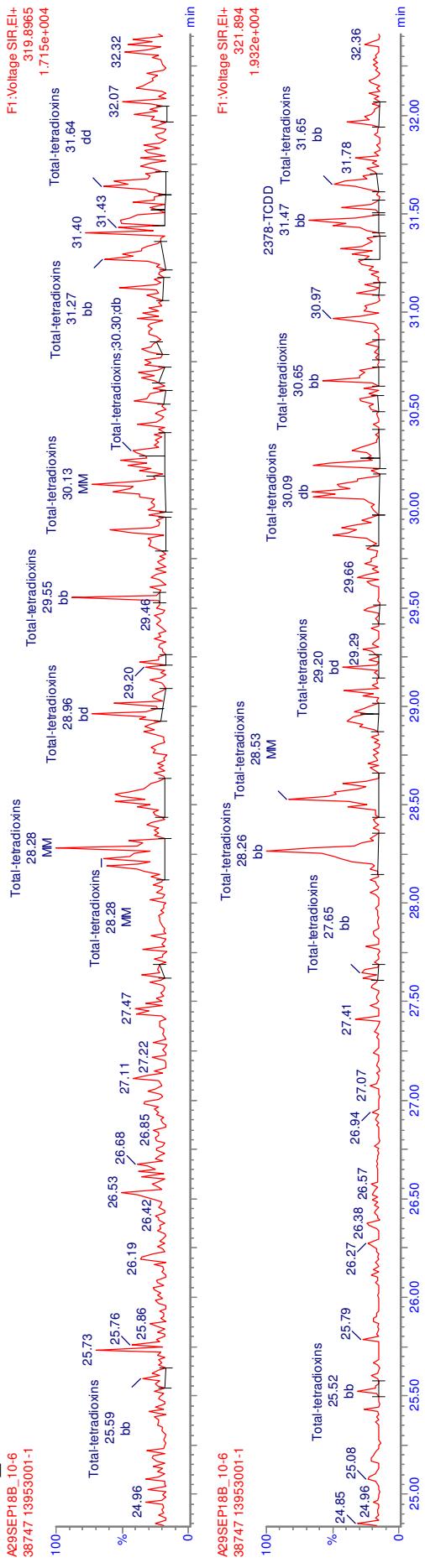
Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

**HPF**

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-heptafurans	8.67e1	2.45e2	3.31e2	41.52	0.35	YES	0.055	0.316	5.45e3	5599	1.0	1.79e4	6091	2.9	bb	bb
2	Total-heptafurans	1.81e2	2.77e2	4.58e2	41.19	0.65	YES	0.076	0.316	5.83e3	5599	1.0	1.51e4	6091	2.5	db	db
3	1234789-HpCDF	3.75e3	3.40e3	7.15e3	41.02	1.10	NO	1.389	0.372	5.79e4	5599	10.3	4.38e4	6091	7.2	bd	bd
4	Total-heptafurans	2.71e2	9.07e1	3.61e2	40.19	2.98	YES	0.060	0.316	2.06e4	5599	3.7	3.17e3	6091	0.5	bb	bb
5	Total-heptafurans	2.80e2	1.07e2	3.87e2	39.88	2.61	YES	0.064	0.316	2.03e4	5599	3.6	4.72e3	6091	0.8	bb	bb
6	Total-heptafurans	1.17e5	1.10e5	2.27e5	39.61	1.06	NO	37.516	0.316	1.89e6	5599	337.4	1.72e6	6091	282.2	bd	bd
7	Total-heptafurans	1.68e3	1.52e3	3.20e3	39.44	1.11	NO	0.529	0.316	2.72e4	5599	4.9	2.49e4	6091	4.1	db	db
8	Total-heptafurans	5.95e2	3.50e2	9.45e2	39.30	1.70	YES	0.156	0.316	1.59e4	5599	2.8	1.11e4	6091	1.8	dd	dd
9	1234678-HpCDF	1.08e5	1.06e5	2.14e5	39.07	1.02	NO	30.793	0.275	1.72e6	5599	307.8	1.62e6	6091	266.5	bd	bd

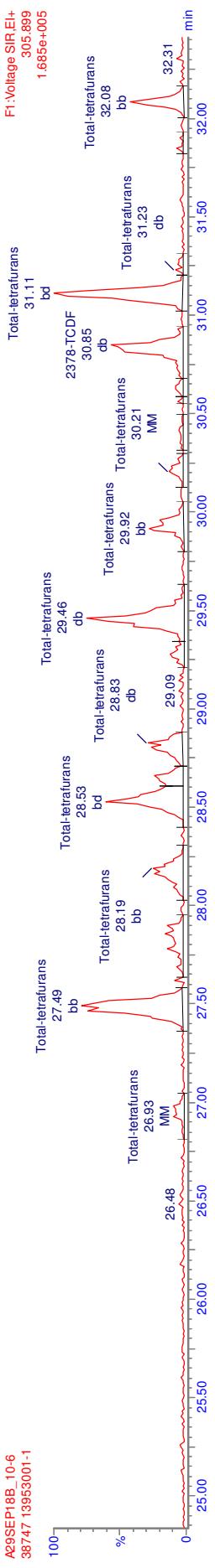
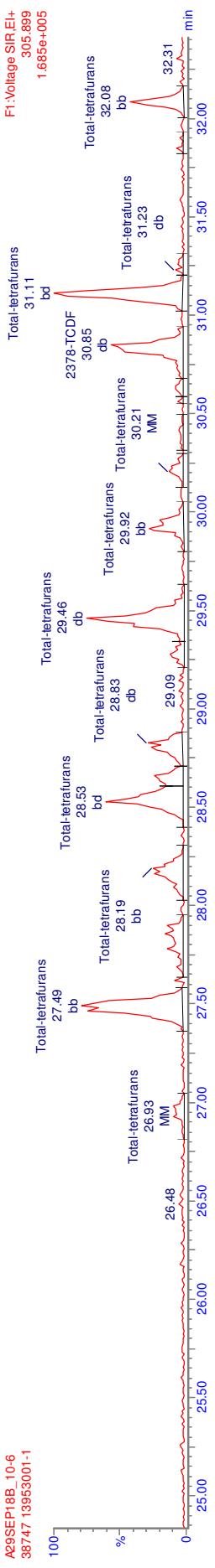
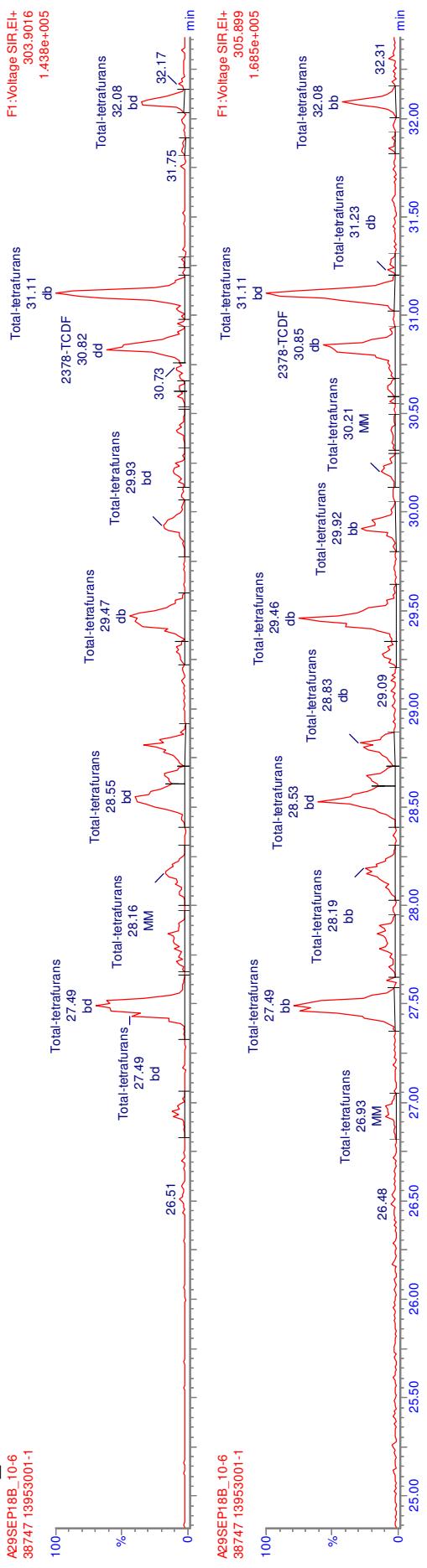
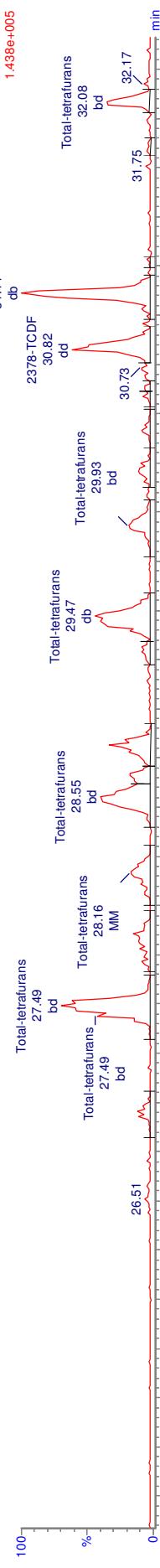
**MANUAL INTEGRATION**  
**METHOD 8290**  
**HRP750\_2**

A29SEP18B\_10-6  
38747 13953001-1



**MANUAL INTEGRATION**  
**METHOD 8290**  
**HRP750\_2**

A29SEP185\_10-6  
 38747 13953001-1

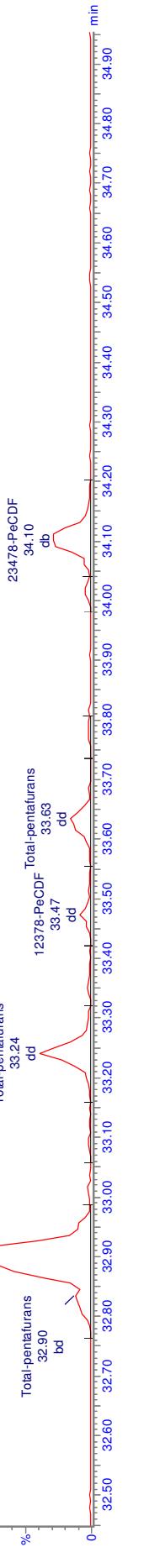
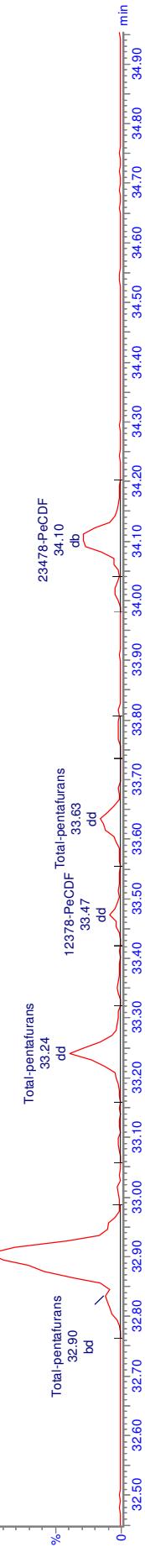
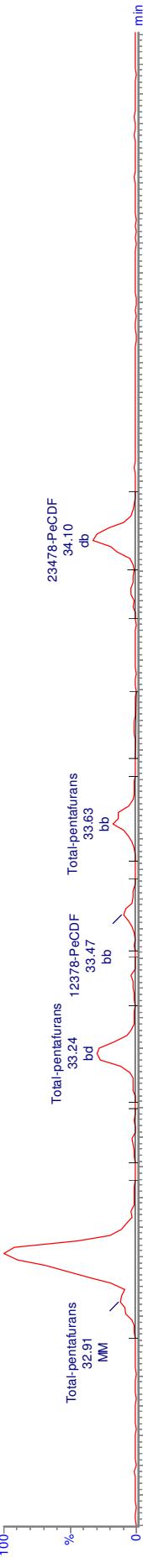


MANUAL INTEGRATION  
METHOD 8290

HRP750\_2

A29SEP18B\_0.6  
38747 13953001-1

F2\Voltage SIR\_EI+  
339.860  
7.446e-005



MANUAL INTEGRATION  
METHOD 8290

HRP750\_2

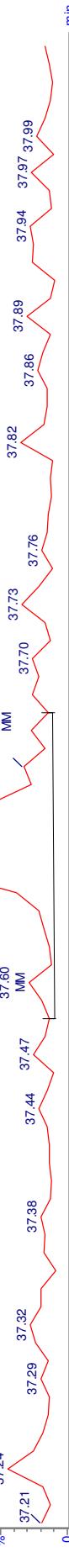
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38747 13953001-1

123789-HxCDF  
37.60  
MM

123789-HxCDF  
37.60  
MM

123789-HxCDF  
37.60  
MM

37.24  
37.21  
37.32  
37.29  
37.44  
37.47  
37.38  
37.35  
37.32  
37.30  
37.25



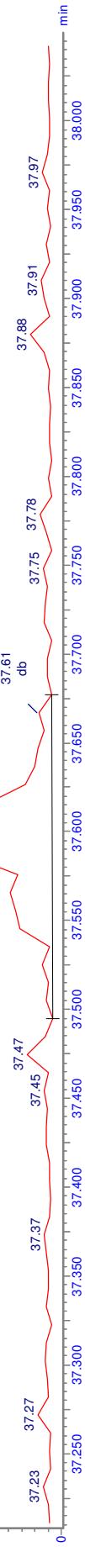
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38747 13953001-1

123789-HxCDF  
37.61  
db



F31Voltage SIR EI+  
373.821  
3.338e-004

F31Voltage SIR EI+  
375.818  
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Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

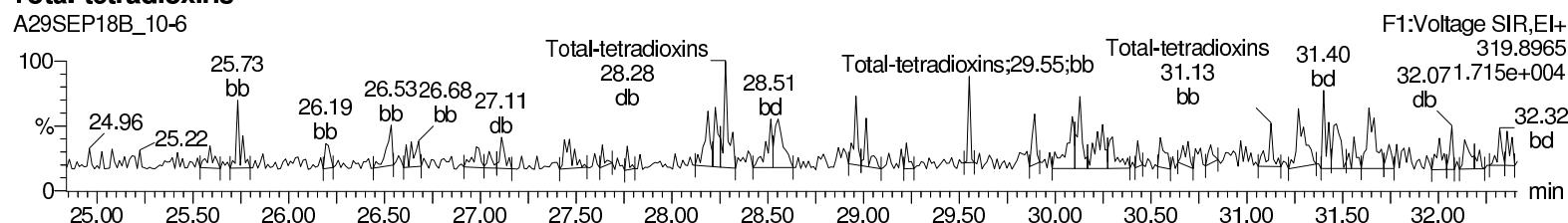
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Task: HRP750\_2, User: MJC**

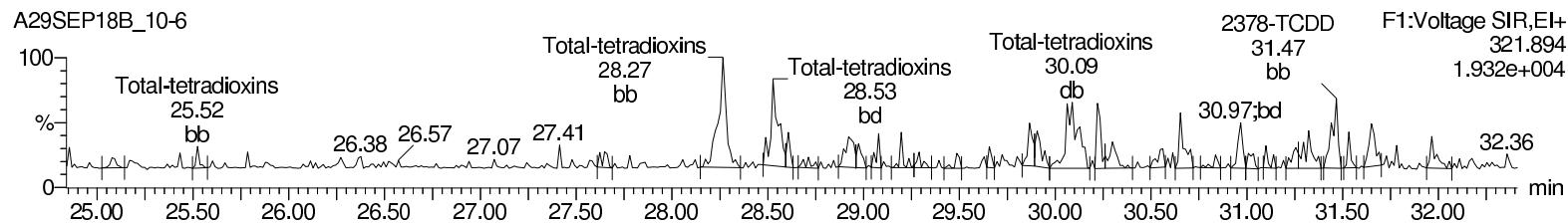
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A29SEP18B\_10-6



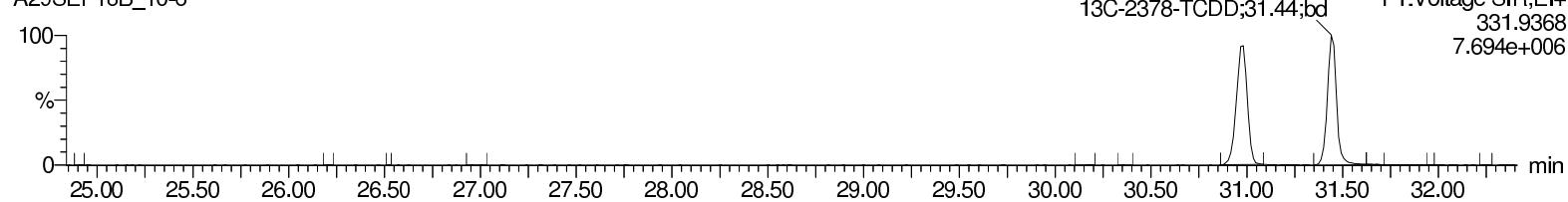
### Total-tetradioxins

A29SEP18B\_10-6



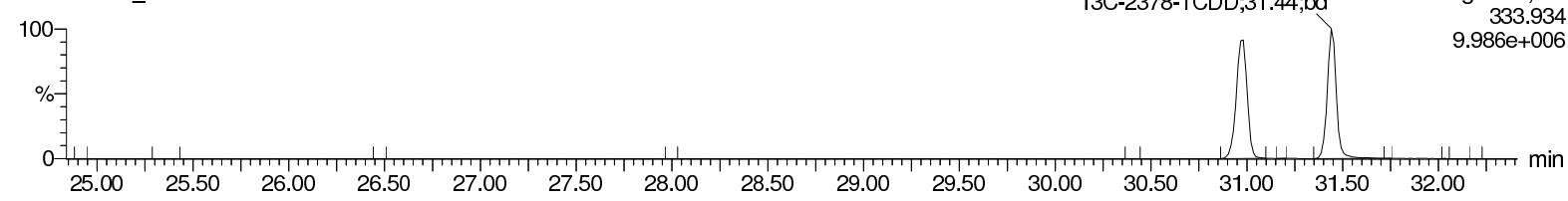
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A29SEP18B\_10-6



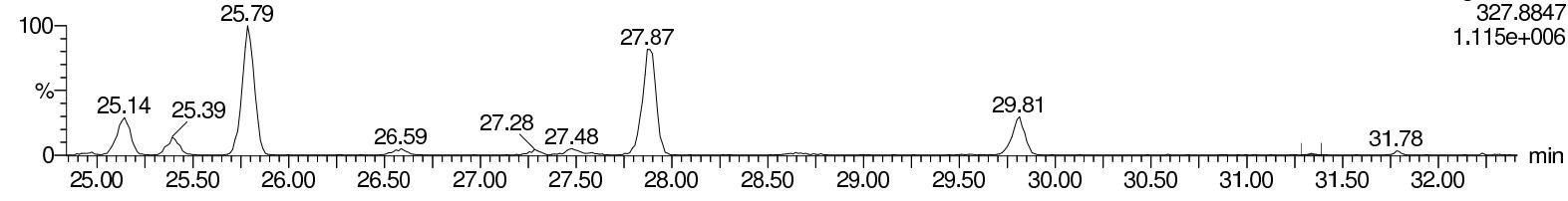
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A29SEP18B\_10-6



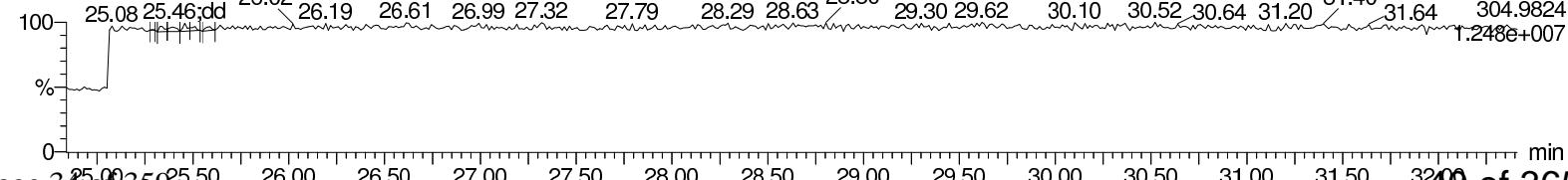
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A29SEP18B\_10-6



### Lock Mass F1

A29SEP18B\_10-6



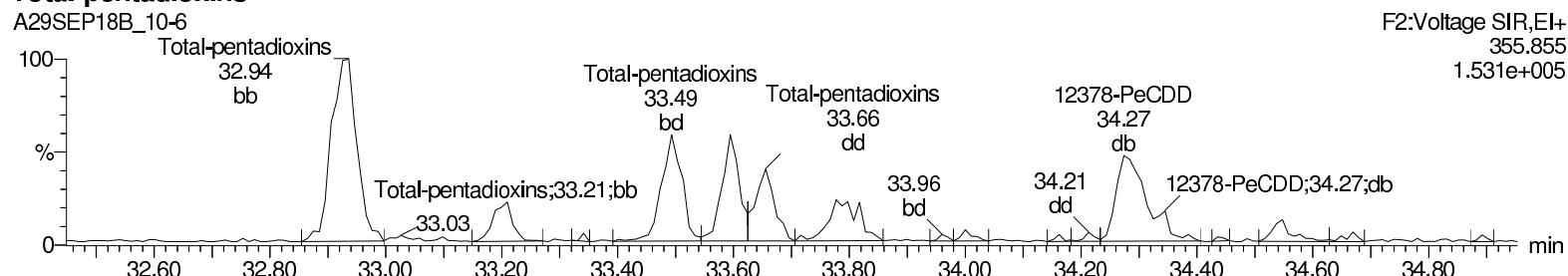
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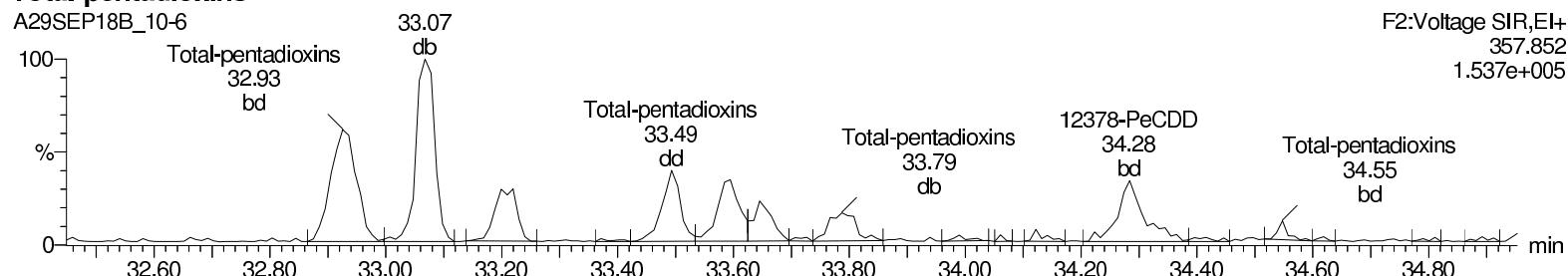
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Task: HRP750\_2, User: MJC**

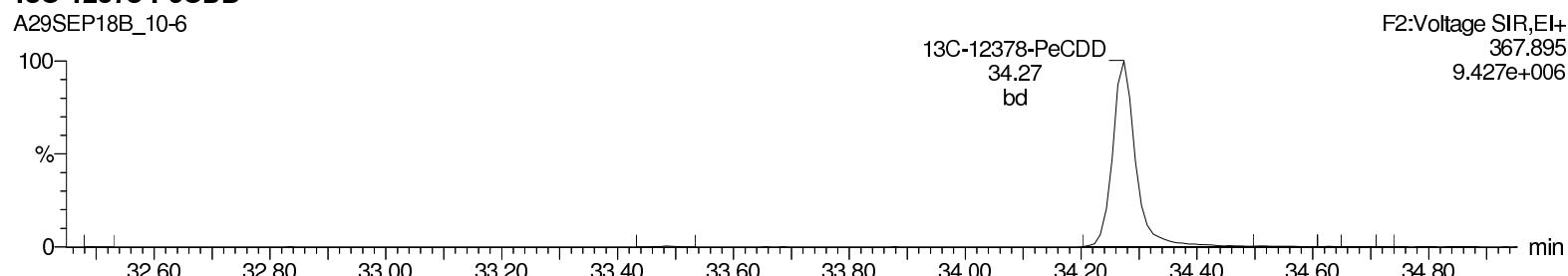
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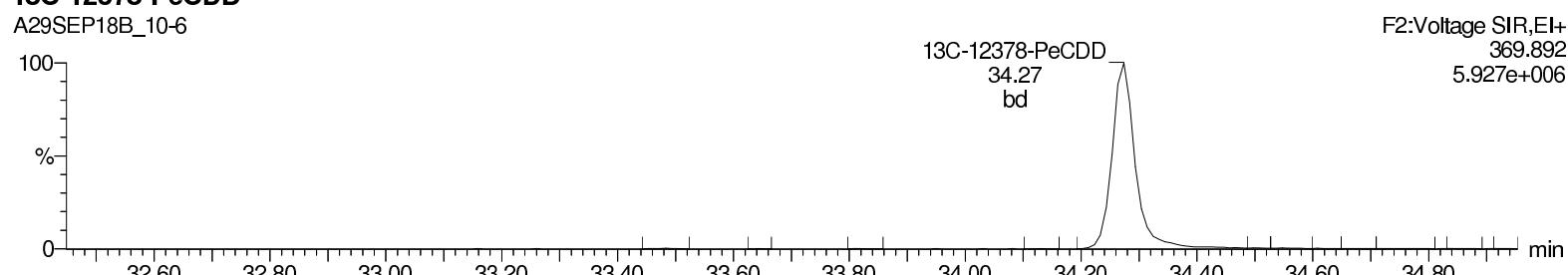
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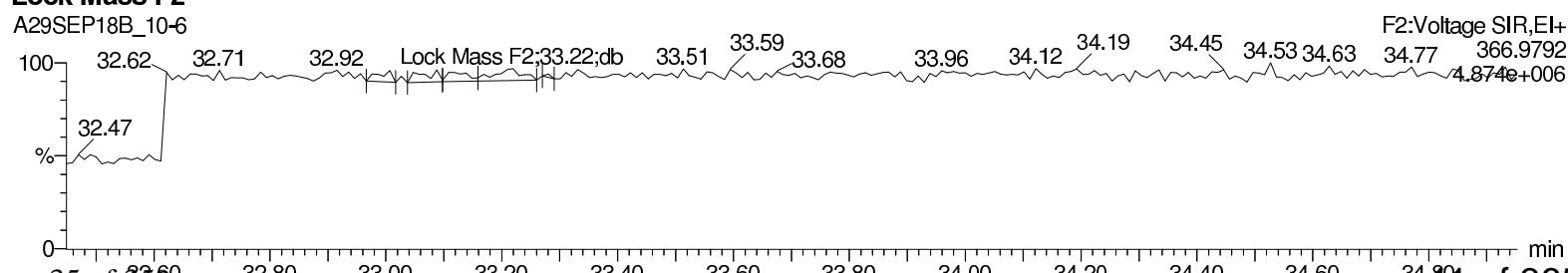
### 13C-12378-PeCDD



### 13C-12378-PeCDD



### Lock Mass F2



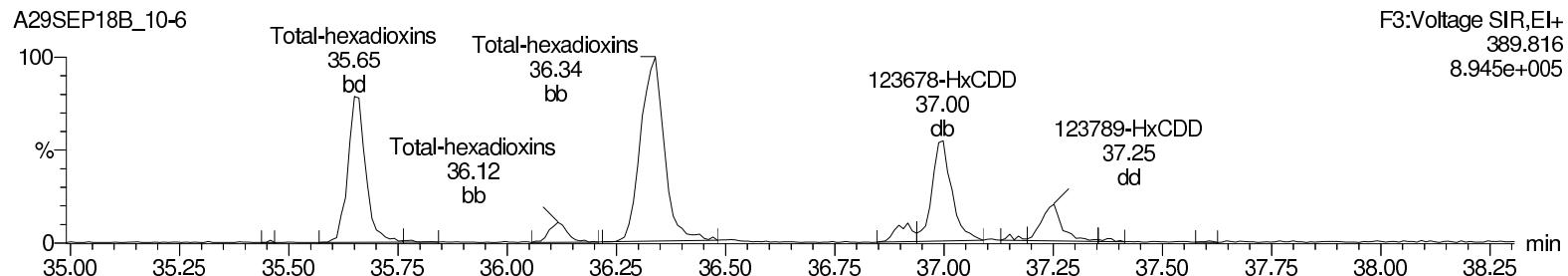
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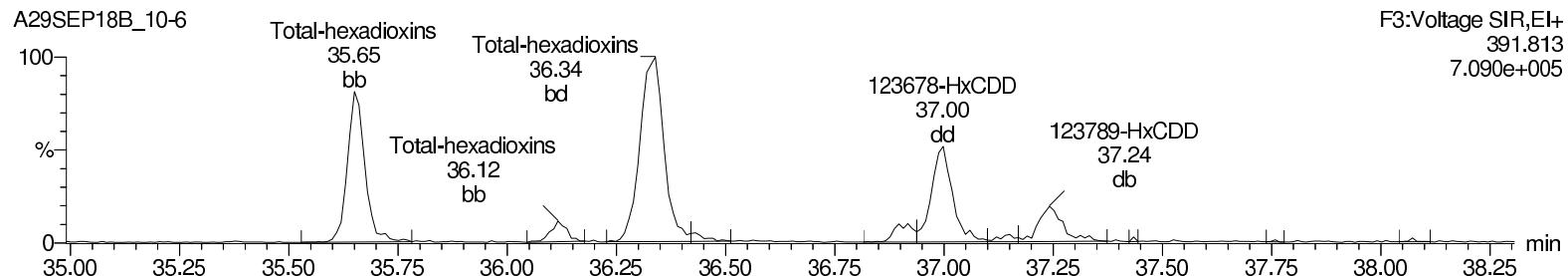
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Task: HRP750\_2, User: MJC**

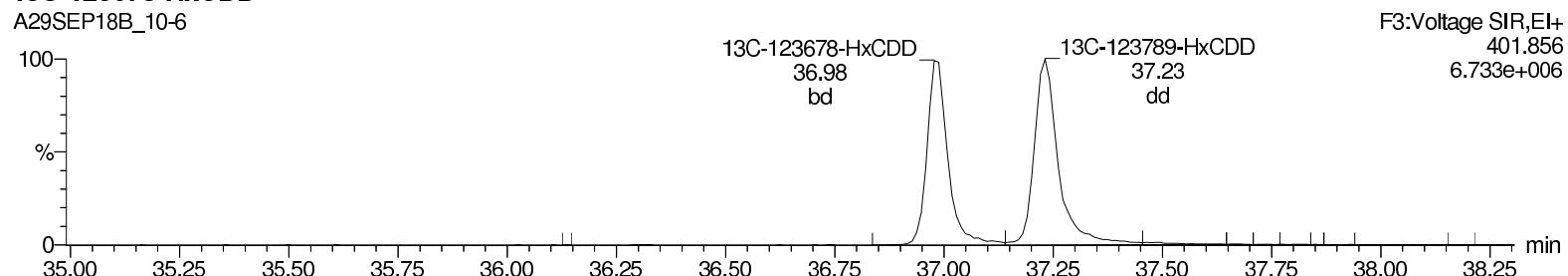
**Total-hexadioxins**



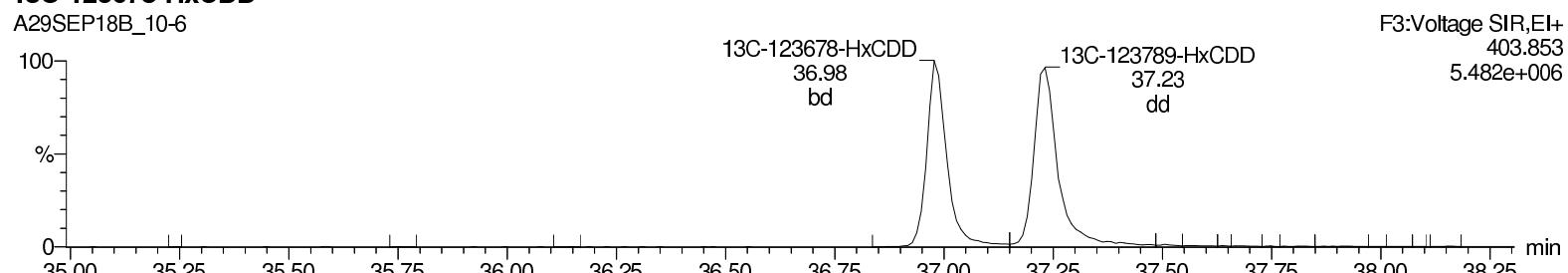
**Total-hexadioxins**



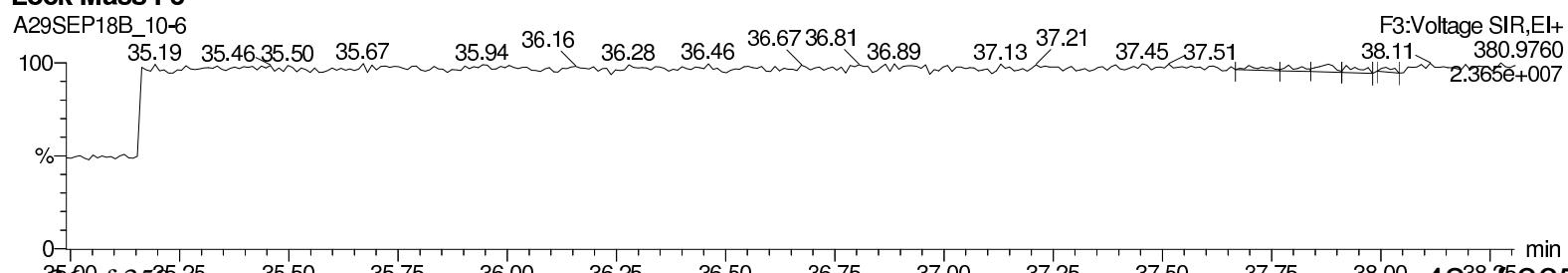
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**13C-123678-HxCDD**



**Lock Mass F3**



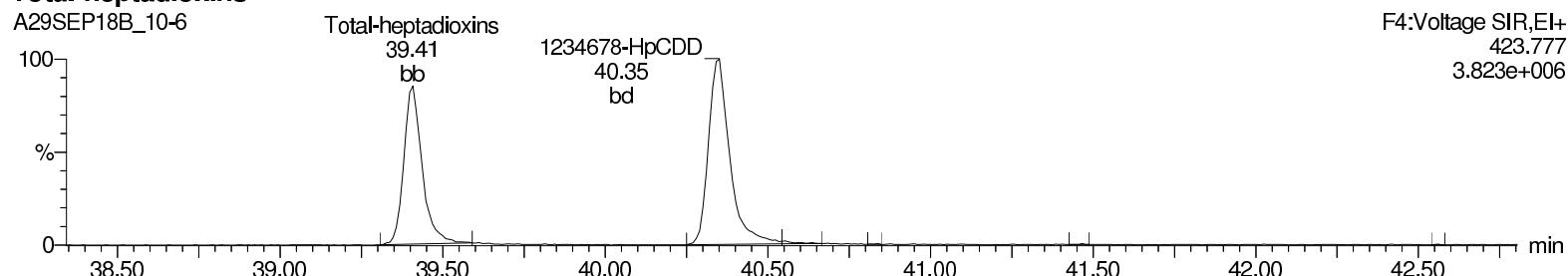
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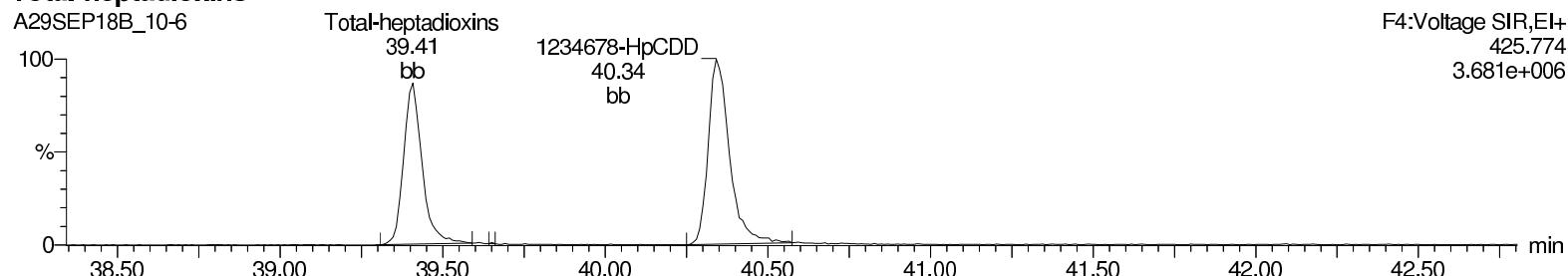
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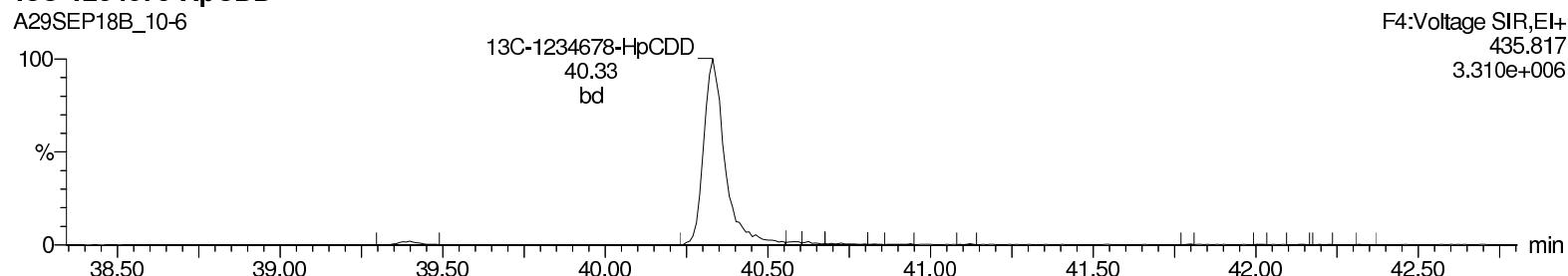
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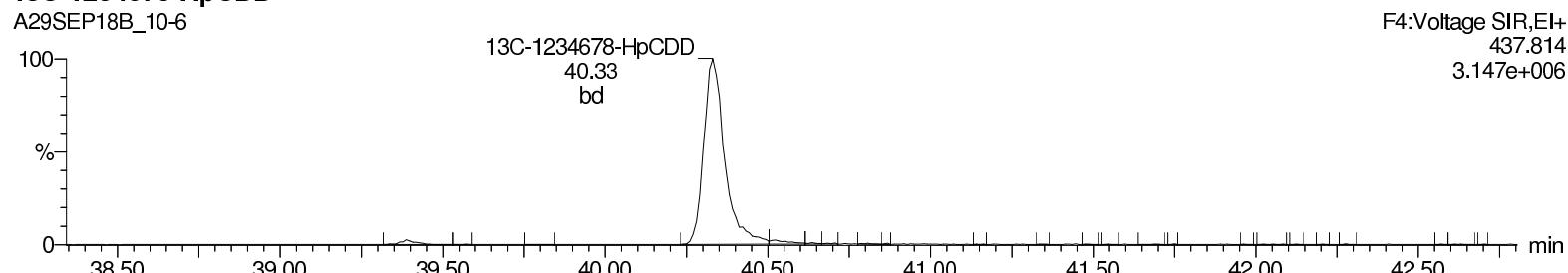
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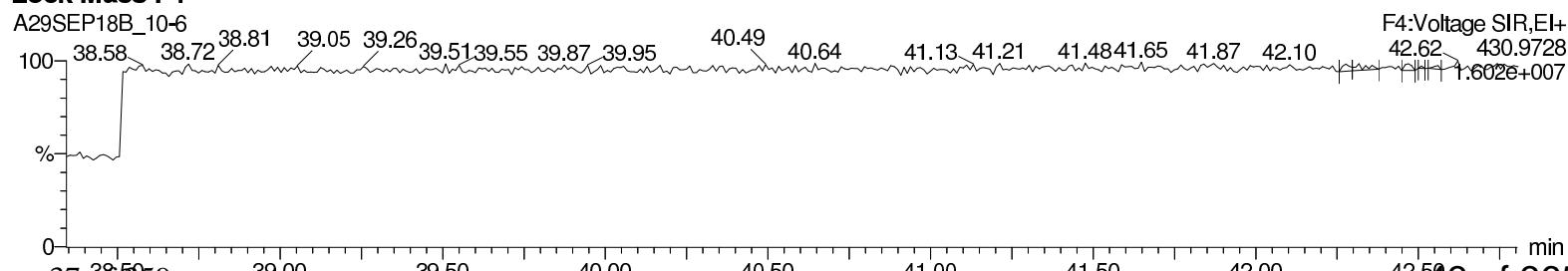
**13C-1234678-HpCDD**



**13C-1234678-HpCDD**



**Lock Mass F4**



**Quantify Sample Report**  
Method 8290 Quantification Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

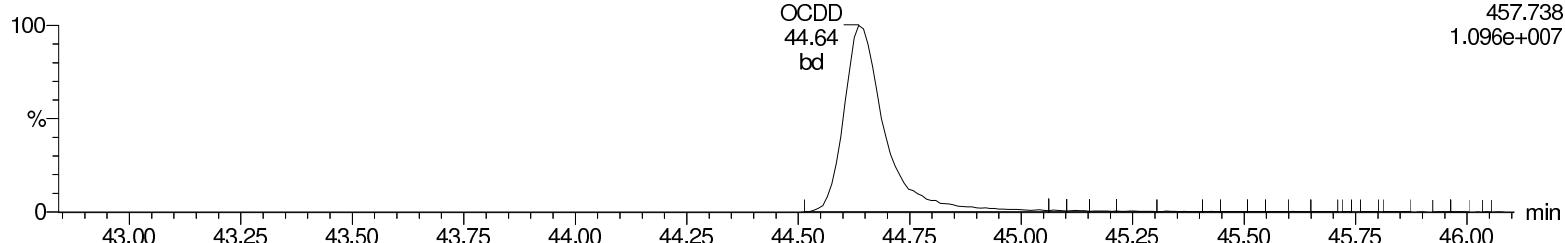
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Task: HRP750\_2, User: MJC**

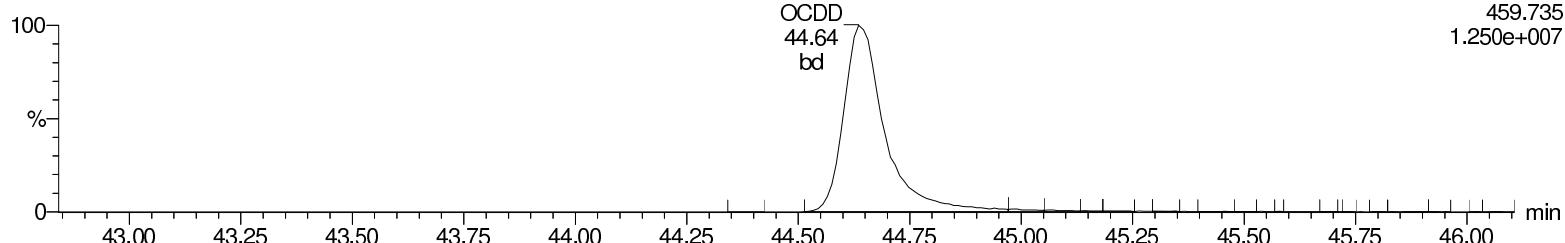
**OCDD**

A29SEP18B\_10-6



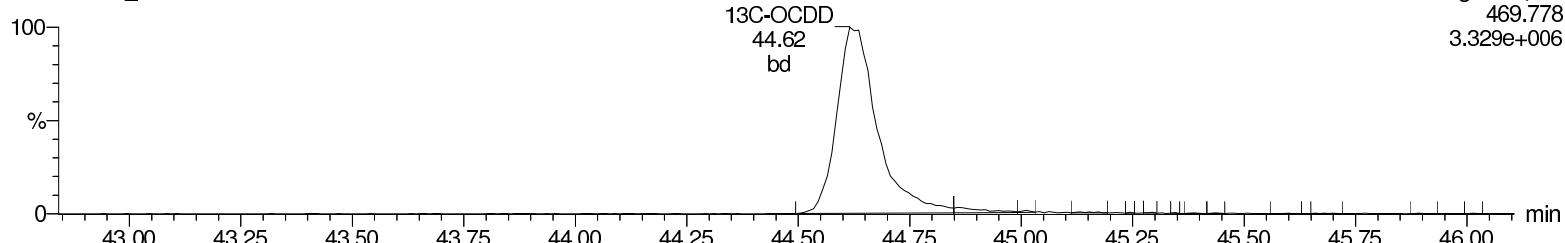
**OCDD**

A29SEP18B\_10-6



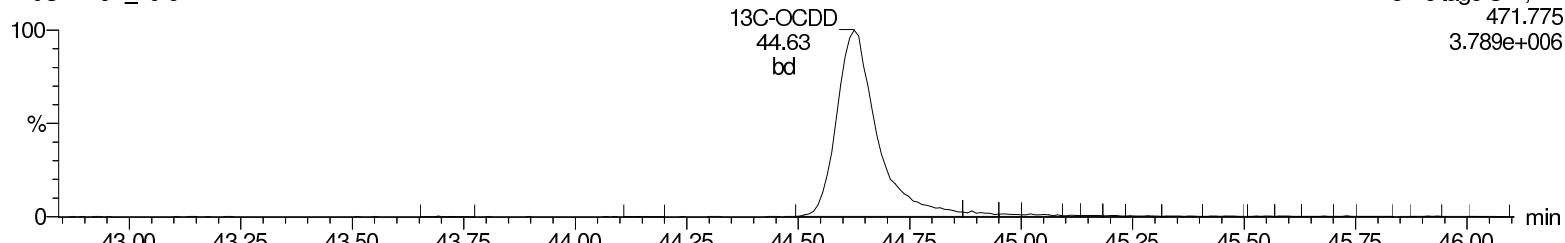
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A29SEP18B\_10-6



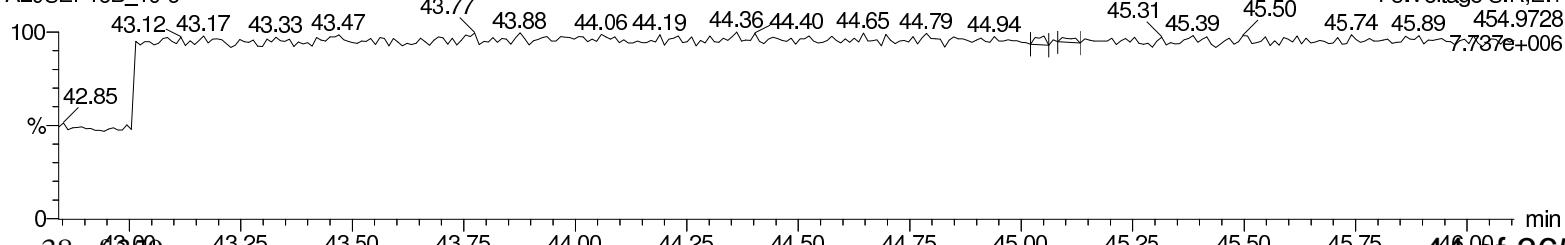
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A29SEP18B\_10-6



**Lock Mass F5**

A29SEP18B\_10-6



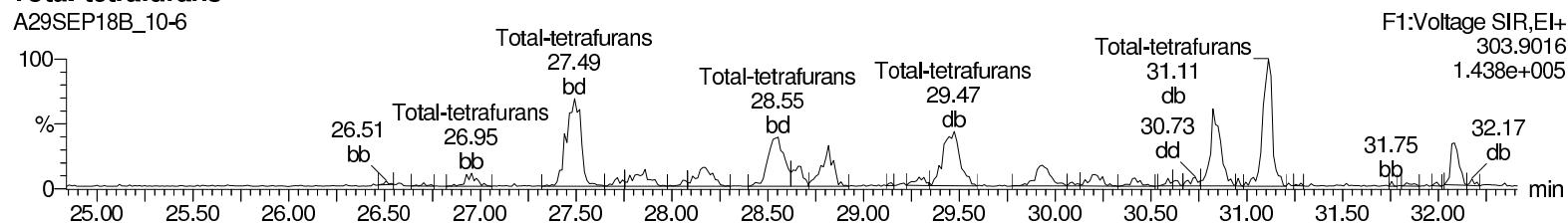
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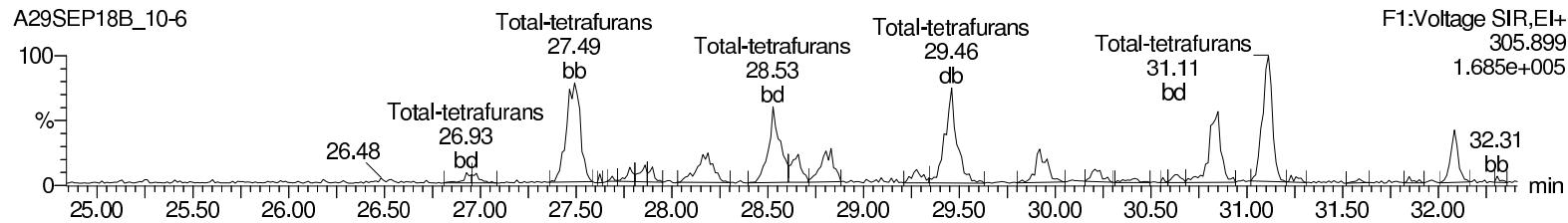
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**Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

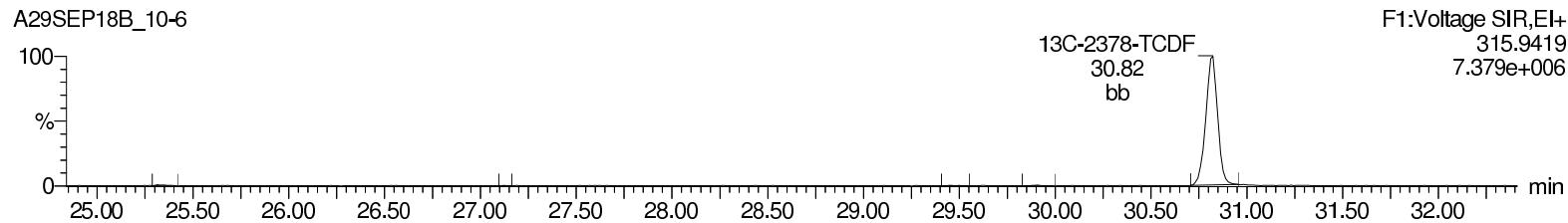
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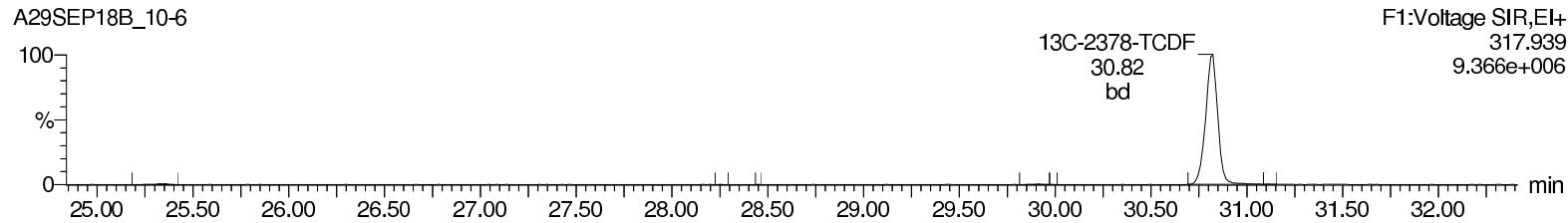
### Total-tetrafurans



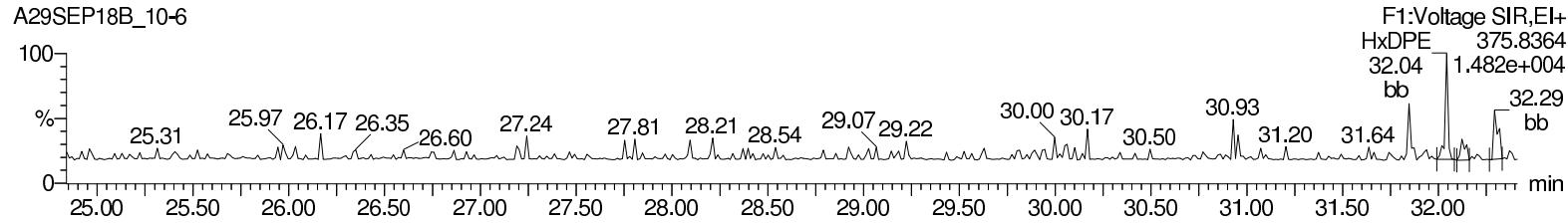
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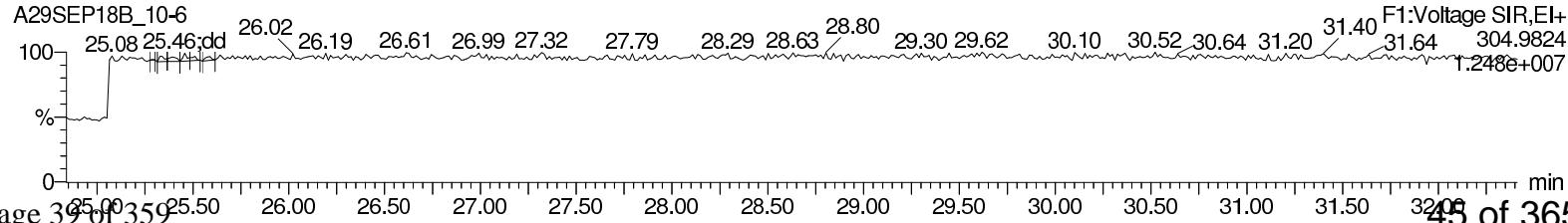
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### HxDPE



### Lock Mass F1



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

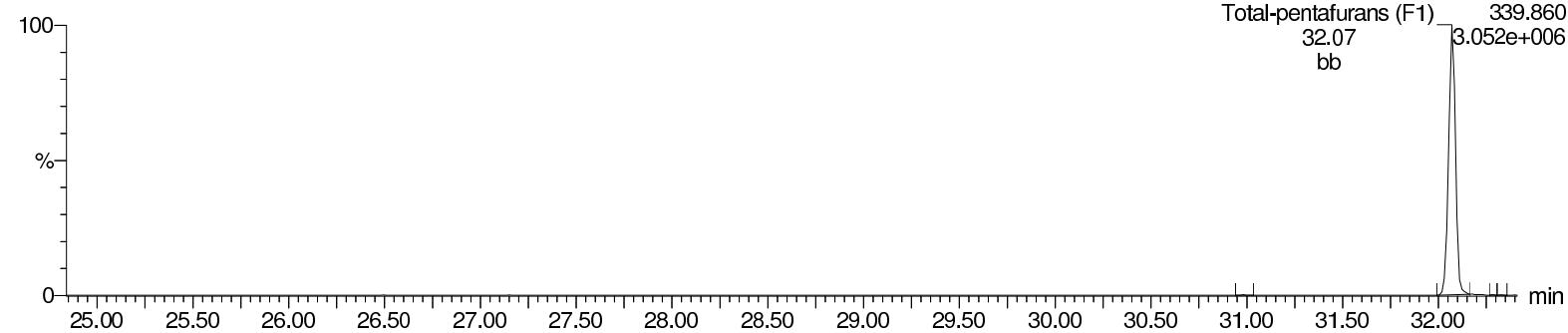
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Task: HRP750\_2, User: MJC

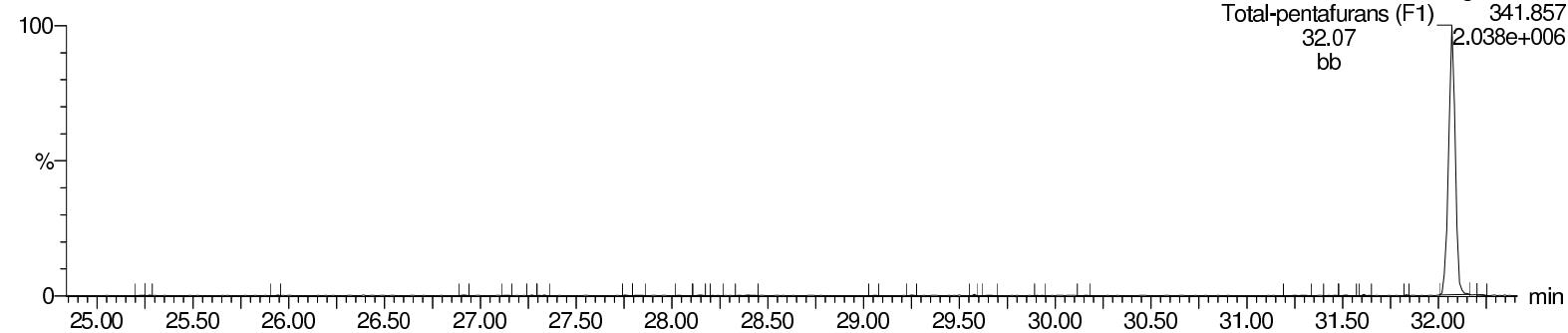
### Total-pentafurans (F1)

A29SEP18B\_10-6



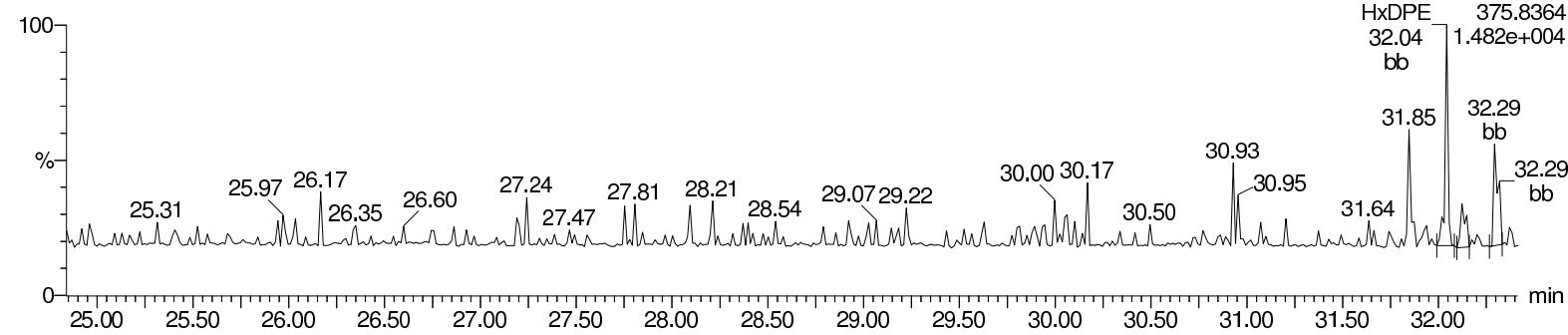
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A29SEP18B\_10-6



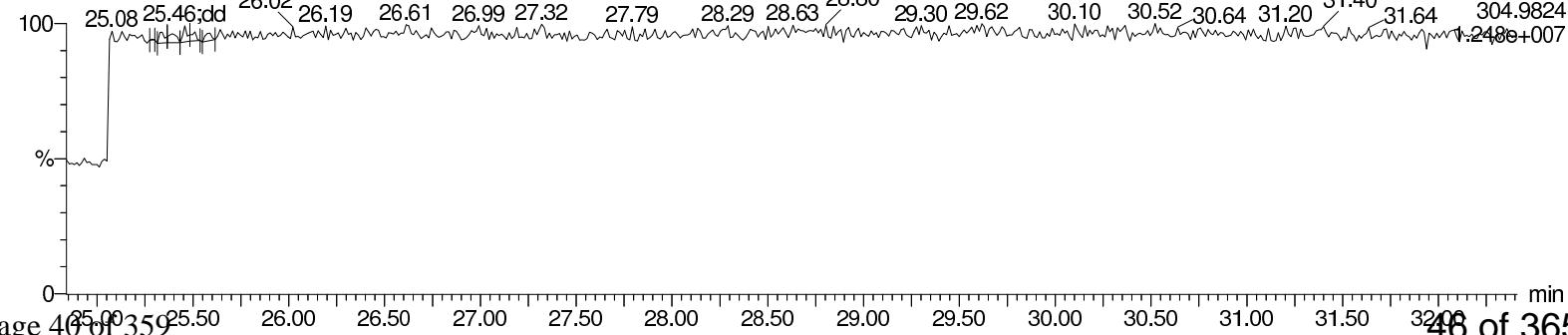
### HxDPE

A29SEP18B\_10-6



### Lock Mass F1

A29SEP18B\_10-6



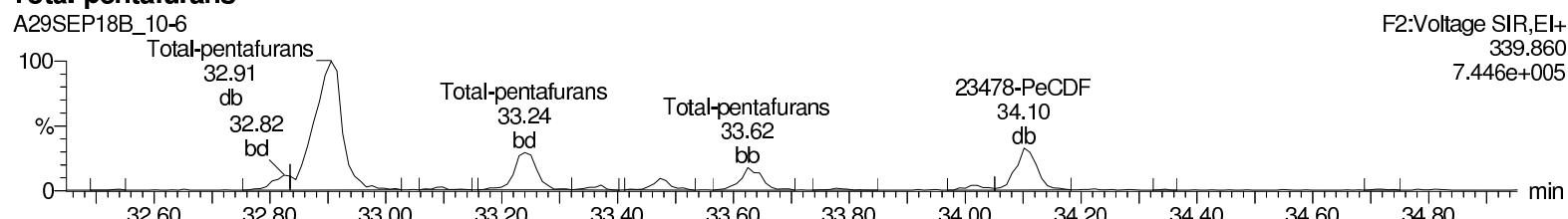
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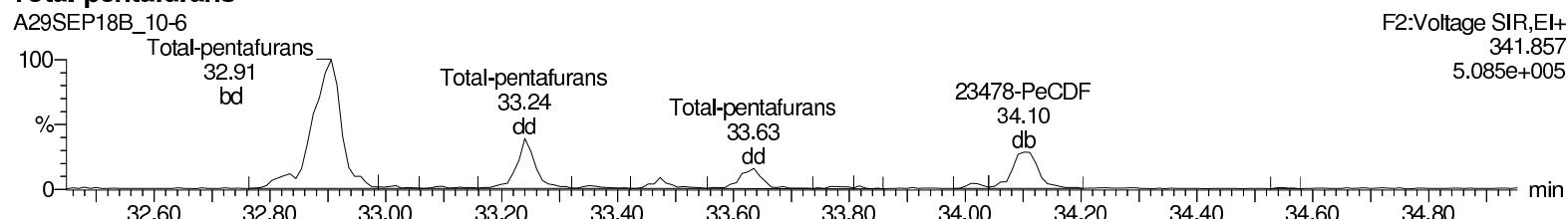
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Task: HRP750\_2, User: MJC**

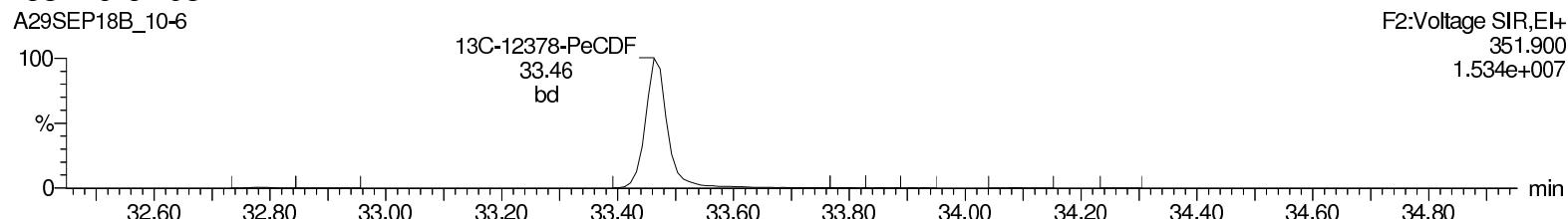
### Total-pentafurans



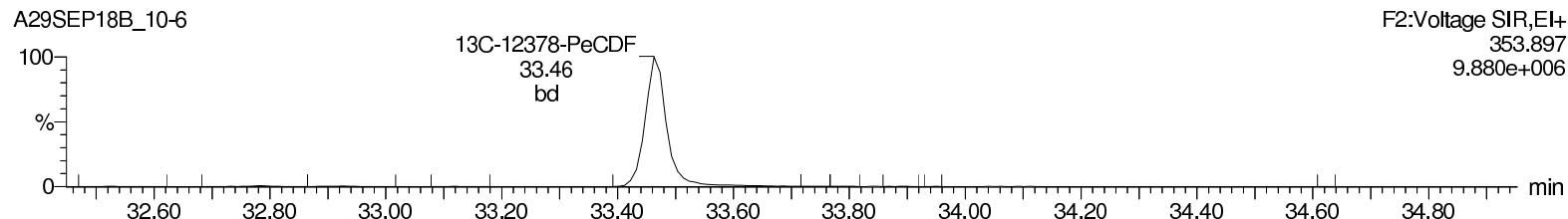
### Total-pentafurans



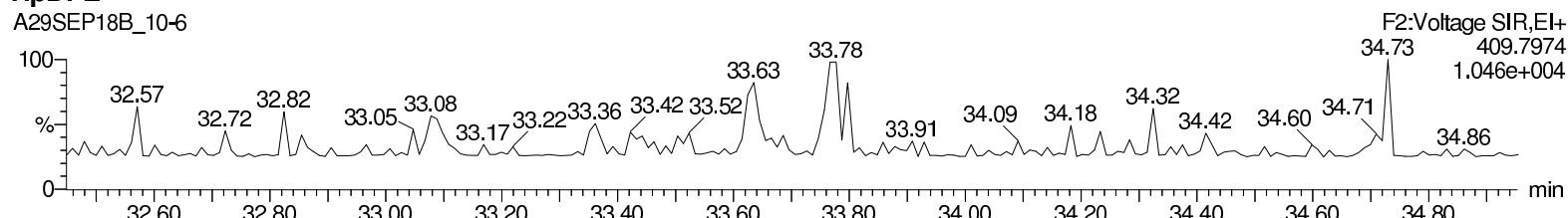
### 13C-12378-PeCDF



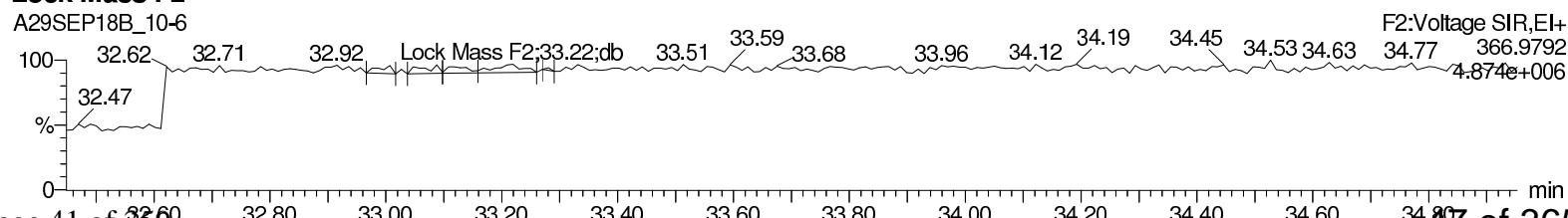
### 13C-12378-PeCDF



### HpDPE



### Lock Mass F2



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

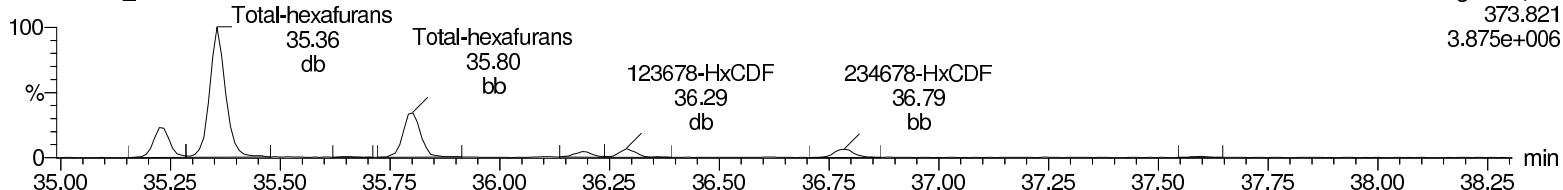
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

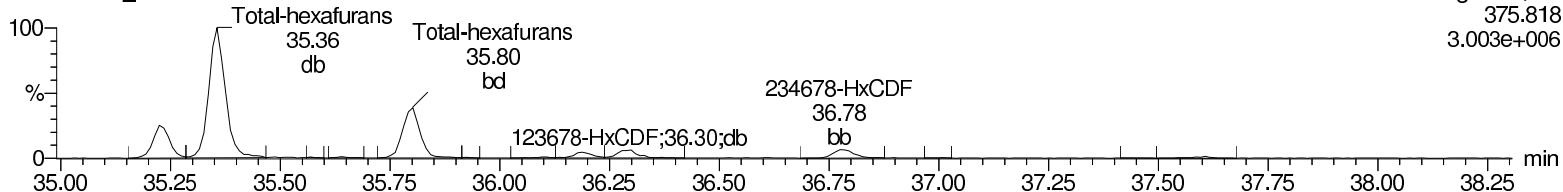
### Total-hexafurans

A29SEP18B\_10-6



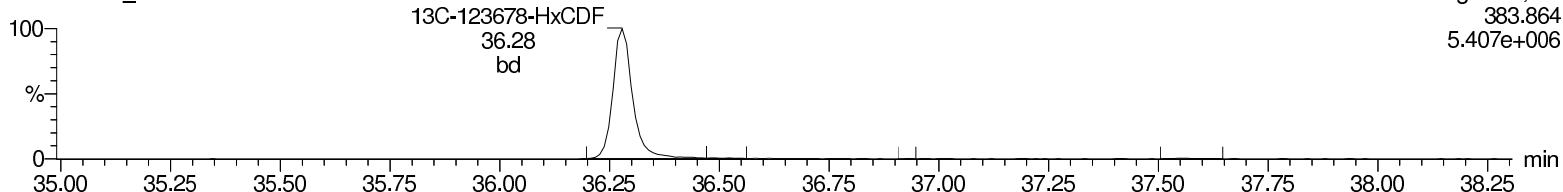
### Total-hexafurans

A29SEP18B\_10-6



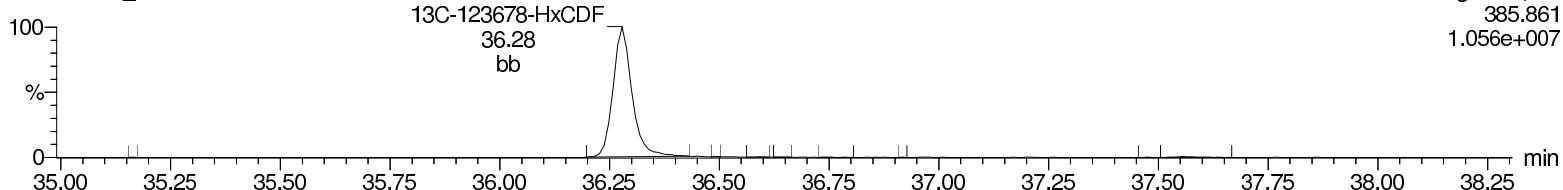
### 13C-123678-HxCDF

A29SEP18B\_10-6



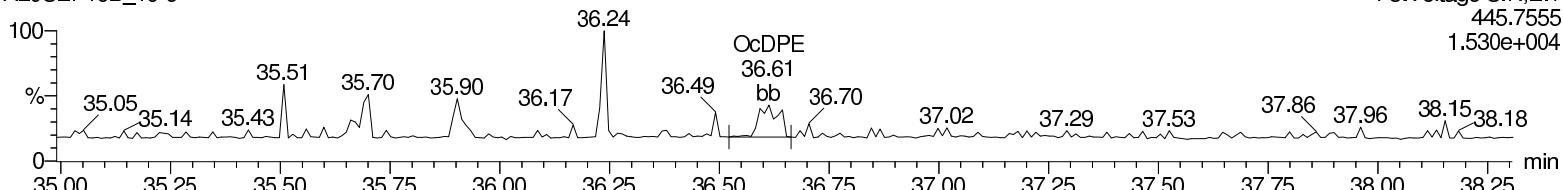
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A29SEP18B\_10-6



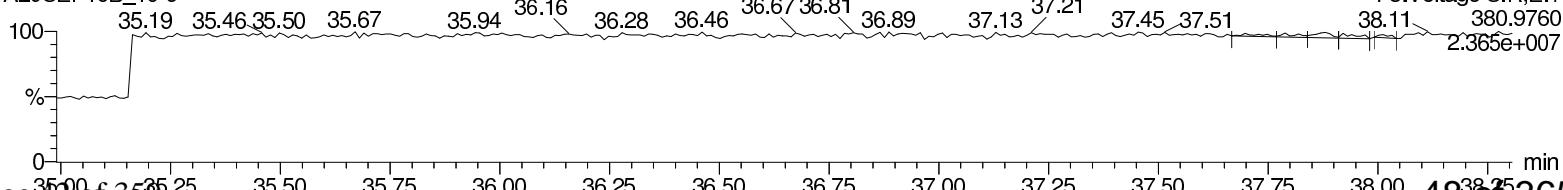
### OcDPE

A29SEP18B\_10-6



### Lock Mass F3

A29SEP18B\_10-6



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

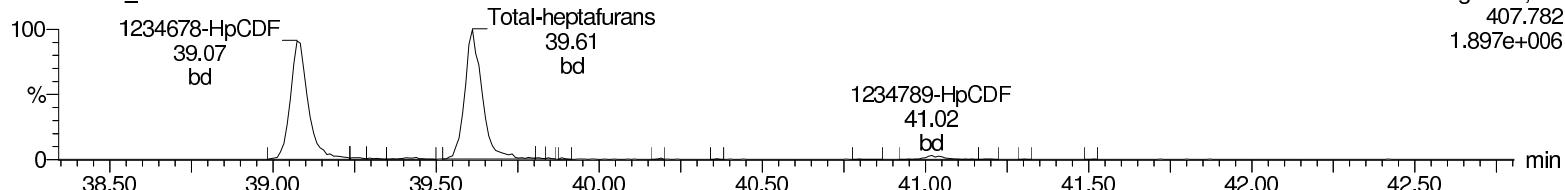
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

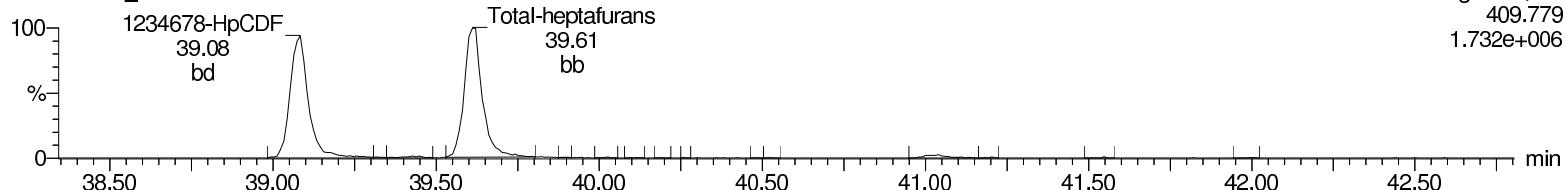
### Total-heptafurans

A29SEP18B\_10-6



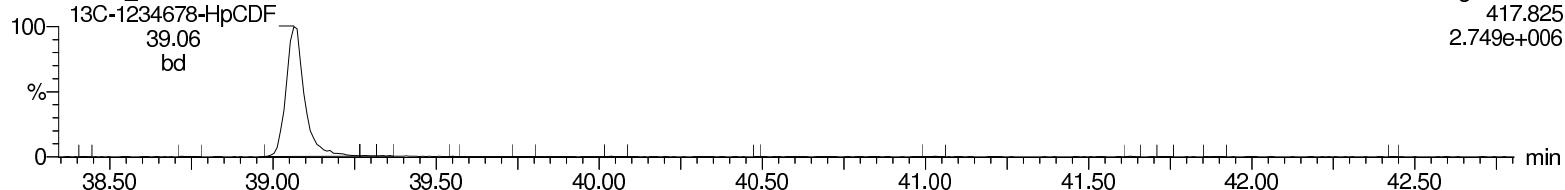
### Total-heptafurans

A29SEP18B\_10-6



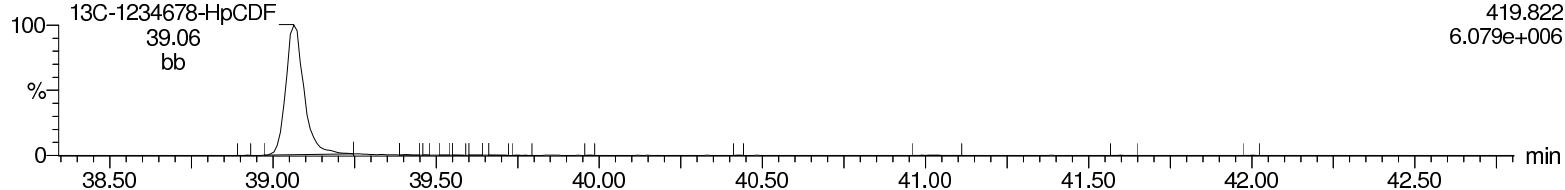
### 13C-1234678-HpCDF

A29SEP18B\_10-6



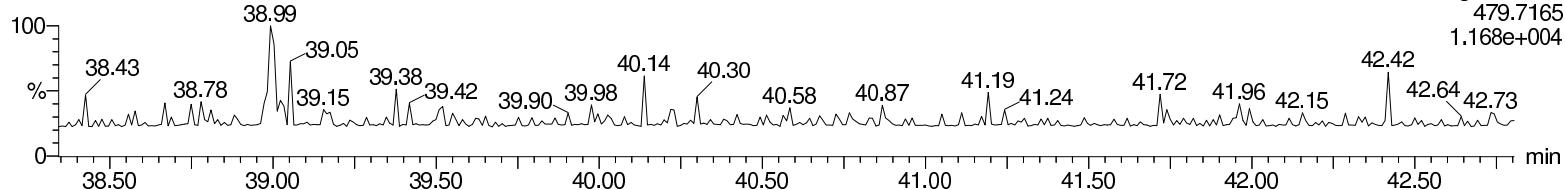
### 13C-1234678-HpCDF

A29SEP18B\_10-6



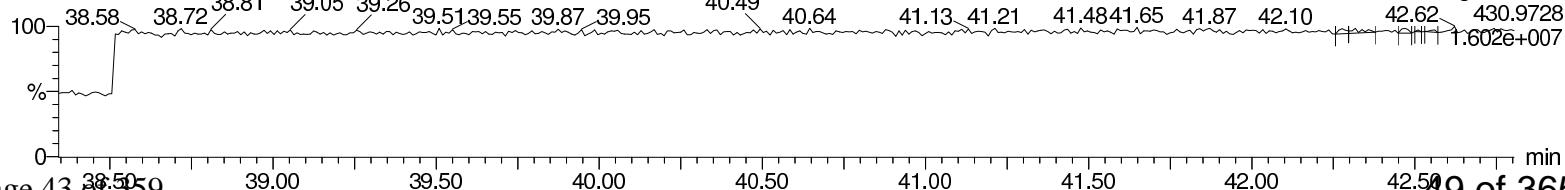
### NoDPE

A29SEP18B\_10-6



### Lock Mass F4

A29SEP18B\_10-6



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

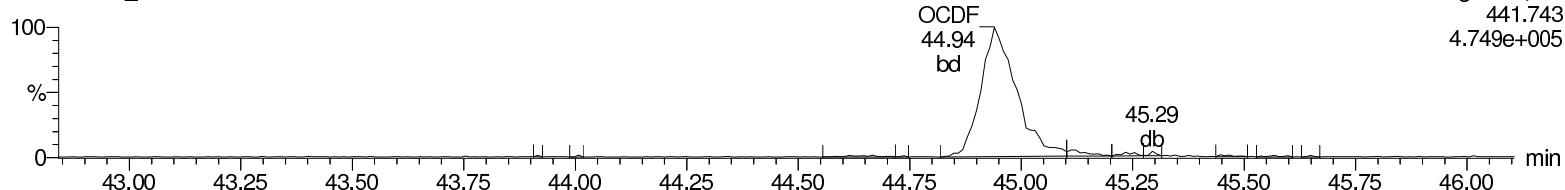
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-6, Date: 03-Oct-2018, Time: 09:28:08, ID: 13953001-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

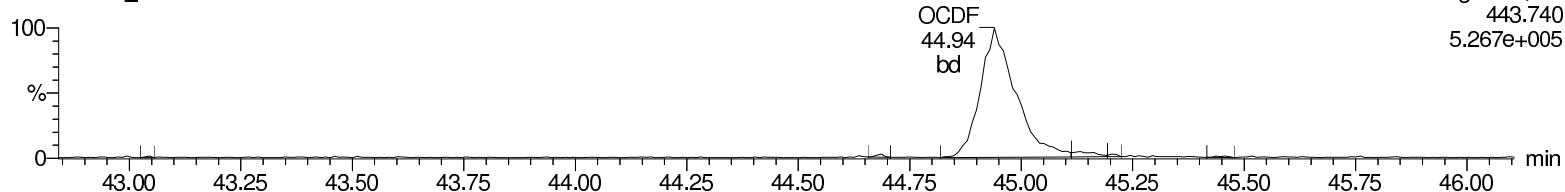
**OCDF**

A29SEP18B\_10-6



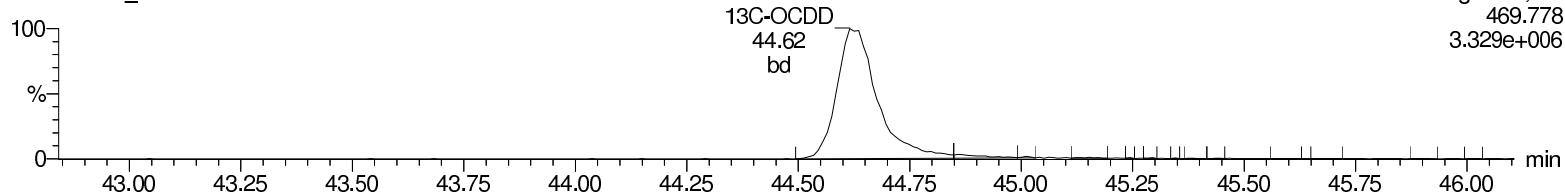
**OCDF**

A29SEP18B\_10-6



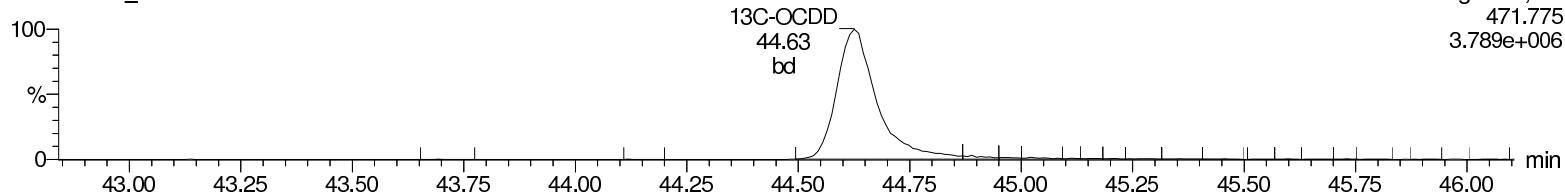
**13C-OCDD**

A29SEP18B\_10-6



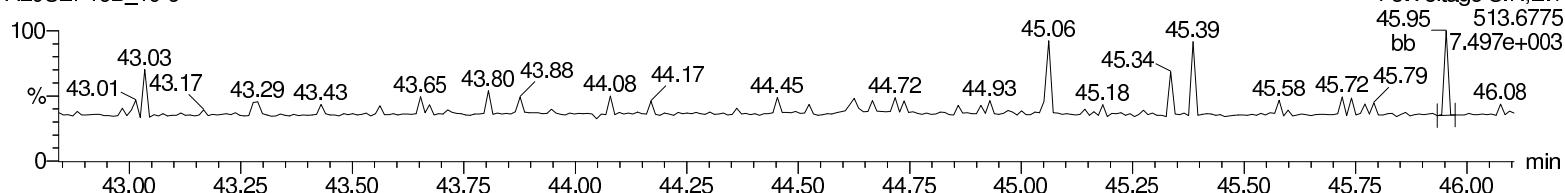
**13C-OCDD**

A29SEP18B\_10-6



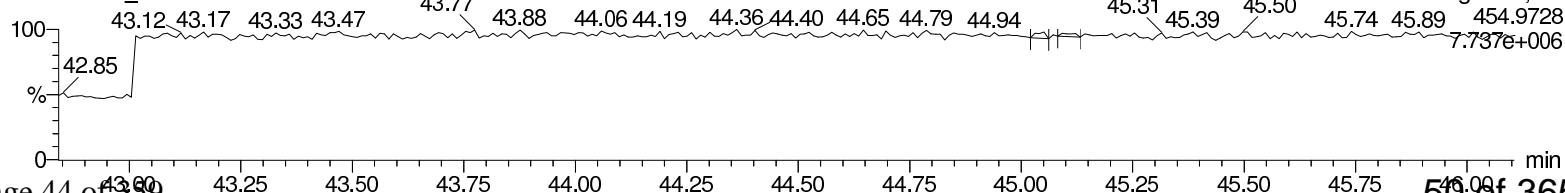
**DeDPE**

A29SEP18B\_10-6



**Lock Mass F5**

A29SEP18B\_10-6



**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

SDG Number:	303137	Client:	CURL001	Project:	CURL00312
Lab Sample ID:	13953001	Date Collected:	09/11/2018 08:50	Matrix:	SOIL
Client Sample:	8290 Soil	Date Received:	09/27/2018 11:17		
Client ID:	B120-01			Prep Basis:	As Received
Batch ID:	38747	Method:	SW846 8290A		
Run Date:	10/04/2018 02:03	Analyst:	MJC	Instrument:	HRP750
Data File:	A03OCT18A_2-22	Prep Method:	SW846 3540C	Dilution:	1
Prep Batch:	38744	Prep Aliquot:	7.92 g		
Prep Date:	01-OCT-18				

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
51207-31-9	2,3,7,8-TCDF		2.74		pg/g	1.87	1.26

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
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**Comments:**

- J Value is estimated
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for, but not detected above the specified detection limit.

**Name: A03OCT18A\_2-22, Date: 04-Oct-2018, Time: 02:03:14, ID: 13953001-2, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_3, User: MJC**

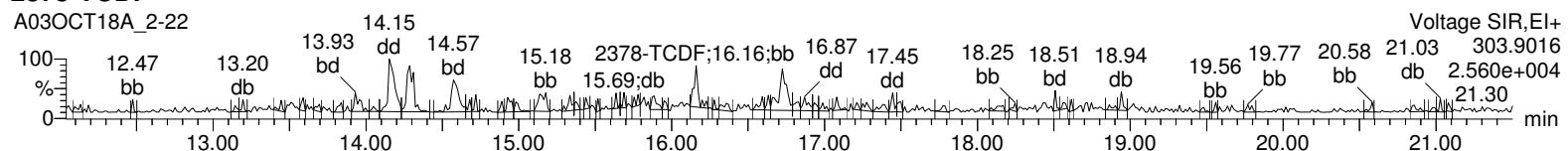
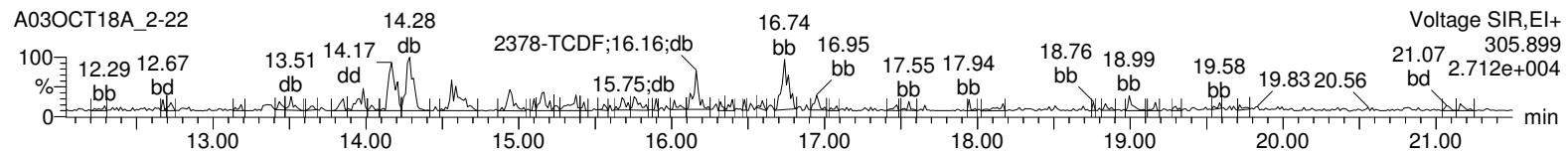
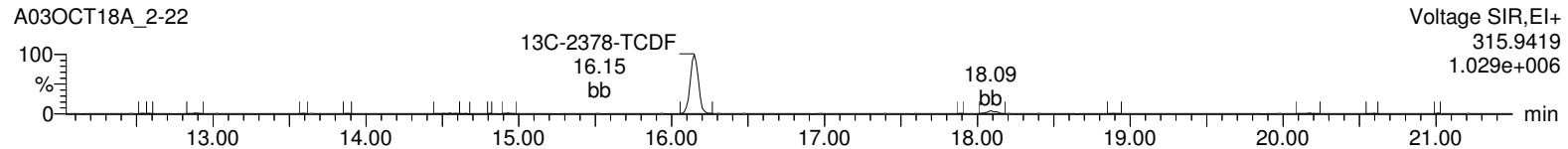
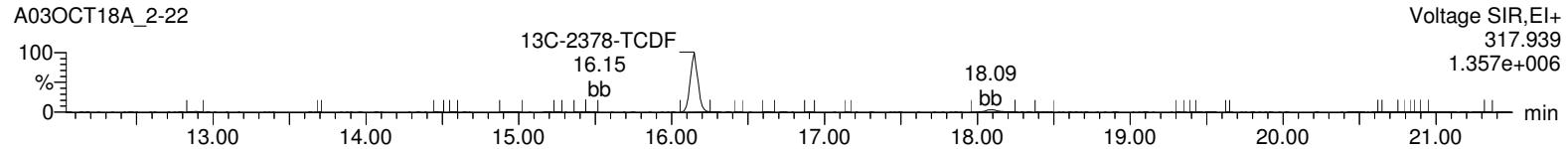
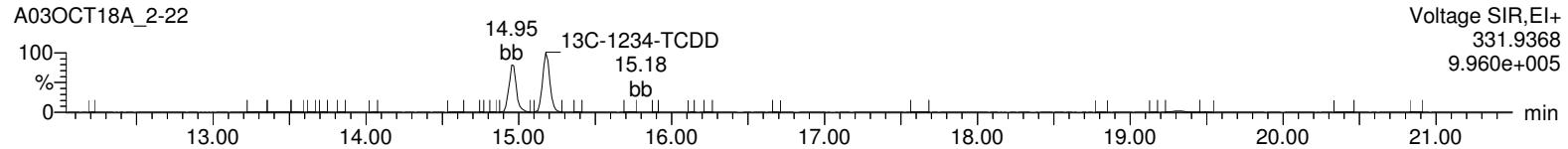
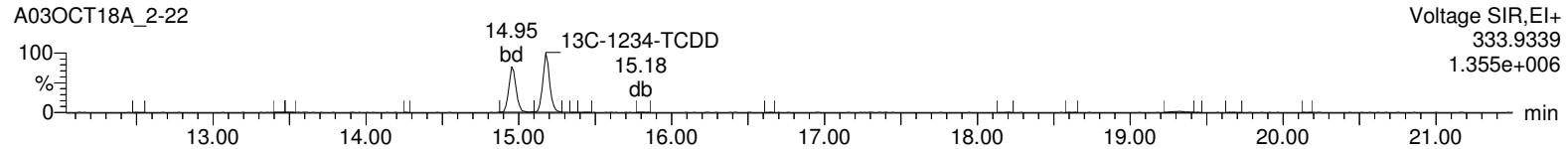
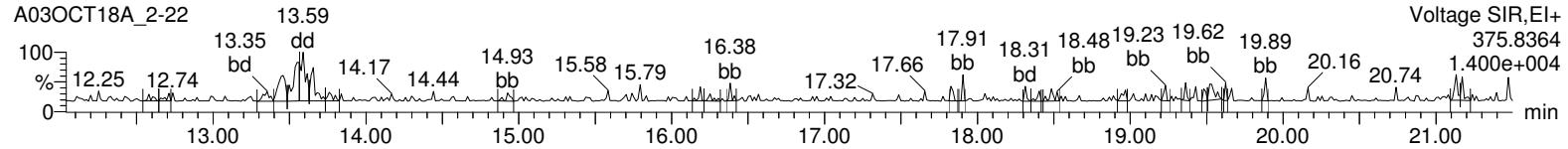
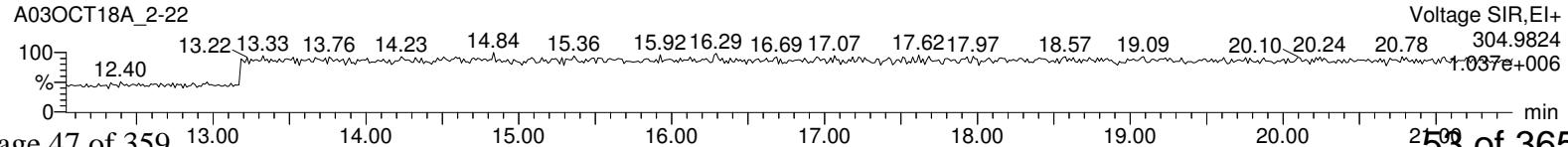
#	Name	Ion1 Area	Ion2 Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDF	6.09e2	7.18e2	1.33e3	16.16	1.001	0.85	NO	1.087	0.742	1.77e4	3469	5.1	1.77e4	2451	7.2	bb	db
2	13C-2378-TCDF	6.27e4	7.67e4	1.39e5	16.15	1.064	0.82	NO	84.172	0.625	1.02e6	3976	257.4	1.35e6	2375	568.6	bb	bb
3	13C-1234-TCDD	5.39e4	6.90e4	1.23e5	15.18	0.000	0.78	NO	100.000	0.529	9.91e5	2258	439.0	1.35e6	1727	781.1	bb	db

Dataset: Untitled

Last Altered: Thursday, October 04, 2018 09:39:04 Eastern Standard Time

Printed: Thursday, October 04, 2018 09:39:47 Eastern Standard Time

Name: A03OCT18A\_2-22, Date: 04-Oct-2018, Time: 02:03:14, ID: 13953001-2, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_3, User: MJC

**2378-TCDF****2378-TCDF****13C-2378-TCDF****13C-2378-TCDF****13C-1234-TCDD****13C-1234-TCDD****HxDPE****Lock Mass F1**

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 13953002  
**Client Sample:** 8290 Soil  
**Client ID:** B120-02-R1  
**Batch ID:** 38747  
**Run Date:** 10/03/2018 10:16  
**Data File:** A29SEP18B\_10-7  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001  
**Date Collected:** 09/11/2018 09:00  
**Date Received:** 09/27/2018 11:17  
**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 4.95 g

**Project:** CURL00312  
**Matrix:** SOIL  
**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.274		pg/g	0.274	2.02
40321-76-4	1,2,3,7,8-PeCDD	J	1.56		pg/g	0.699	10.1
39227-28-6	1,2,3,4,7,8-HxCDD	JK		1.39	pg/g	0.634	10.1
57653-85-7	1,2,3,6,7,8-HxCDD	J	3.96		pg/g	0.533	10.1
19408-74-3	1,2,3,7,8,9-HxCDD	J	3.47		pg/g	0.602	10.1
35822-46-9	1,2,3,4,6,7,8-HpCDD		62.3		pg/g	1.40	10.1
3268-87-9	1,2,3,4,6,7,8,9-OCDD		277		pg/g	3.38	20.2
51207-31-9	2,3,7,8-TCDF		3.75		pg/g	0.545	2.02
57117-41-6	1,2,3,7,8-PeCDF	J	0.836		pg/g	0.262	10.1
57117-31-4	2,3,4,7,8-PeCDF	J	1.60		pg/g	0.234	10.1
70648-26-9	1,2,3,4,7,8-HxCDF	J	1.69		pg/g	0.570	10.1
57117-44-9	1,2,3,6,7,8-HxCDF	JK		2.02	pg/g	0.497	10.1
60851-34-5	2,3,4,6,7,8-HxCDF	J	2.03		pg/g	0.554	10.1
72918-21-9	1,2,3,7,8,9-HxCDF	U	0.703		pg/g	0.703	10.1
67562-39-4	1,2,3,4,6,7,8-HpCDF		13.6		pg/g	0.521	10.1
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	0.703		pg/g	0.703	10.1
39001-02-0	1,2,3,4,6,7,8,9-OCDF	J	6.99		pg/g	1.56	20.2
41903-57-5	Total TCDDs	J	0.574	2.21	pg/g	0.274	2.02
36088-22-9	Total PeCDDs	J	9.33	12.8	pg/g	0.699	10.1
34465-46-8	Total HxCDDs	J	47.2	53.3	pg/g	0.533	10.1
37871-00-4	Total HpCDDs		132		pg/g	1.40	10.1
30402-14-3	Total TCDFs		19.3	24.9	pg/g	0.545	2.02
30402-15-4	Total PeCDFs	J	27.9	29.0	pg/g	0.106	10.1
55684-94-1	Total HxCDFs	J	32.1	34.9	pg/g	0.497	10.1
38998-75-3	Total HpCDFs		23.9		pg/g	0.521	10.1
3333-30-0	TEQ WHO2005 ND=0		4.40	4.74	pg/g		
3333-30-1	TEQ WHO2005 ND=0.5		4.63	4.92	pg/g		

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		353	404	pg/g	87.3	(40%-135%)
13C-1,2,3,7,8-PeCDD		352	404	pg/g	87.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		307	404	pg/g	76.0	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		347	404	pg/g	85.8	(40%-135%)
13C-OCDD		627	808	pg/g	77.6	(40%-135%)
13C-2,3,7,8-TCDF		309	404	pg/g	76.4	(40%-135%)
13C-1,2,3,7,8-PeCDF		325	404	pg/g	80.5	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		277	404	pg/g	68.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		309	404	pg/g	76.4	(40%-135%)

**Comments:****J** Value is estimated**K** Estimated Maximum Possible Concentration**U** Analyte was analyzed for, but not detected above the specified detection limit.

**MassLynx 4.1****Quantify Sample Summary Report**

Method 8290 Quantification Report  
 Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.d|d  
 Last Altered: Tuesday, October 09, 2018 11:29:54 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:30:23 Eastern Standard Time

**Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**  
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RRT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDD	1.40e2	1.39e2	2.79e2	31.43	1.000	1.01	YES	0.031	0.0679	5.07e3	2810	1.8	4.56e3	1818	2.5	bb
2	12378-PeCDD	1.56e3	1.01e3	2.57e3	34.24	1.000	1.55	NO	0.387	0.173	2.52e4	3954	6.4	1.84e4	6415	2.9	bb
3	123478-HxCDD	1.07e3	7.42e2	1.81e3	36.88	0.998	1.44	YES	0.343	0.157	2.72e4	3693	7.4	1.43e4	2433	5.9	bd
4	123678-HxCDD	3.31e3	2.82e3	6.13e3	36.97	1.001	1.17	NO	0.980	0.132	6.13e4	3693	16.6	5.33e4	2433	21.9	dd
5	123789-HxCDD	2.64e3	2.13e3	4.77e3	37.21	1.007	1.24	NO	0.860	0.149	4.98e4	3693	13.5	2.74e4	2433	11.3	dd
6	1234678-HpCDD	3.51e4	3.38e4	6.89e4	40.30	1.000	1.04	NO	15.426	0.347	4.93e5	4928	100.1	4.71e5	3408	138.2	bd
7	OCDD	1.09e5	1.23e5	2.32e5	44.62	1.000	0.88	NO	68.566	0.836	1.03e6	4719	219.3	1.22e6	6155	198.1	bd
8	2378-TCDF	4.26e3	5.99e3	1.03e4	30.82	1.001	0.71	NO	0.928	0.135	6.28e4	4159	15.1	9.45e4	4648	20.3	bb
9	12378-PeCDF	1.17e3	7.68e2	1.94e3	33.45	1.000	1.52	NO	0.207	0.0649	2.87e4	2383	12.1	1.62e4	3200	5.0	dd
10	23478-PeCDF	2.42e3	1.73e3	4.15e3	34.07	1.019	1.40	NO	0.395	0.0579	5.11e4	2383	21.5	3.77e4	3200	11.8	db
11	123478-HxCDF	1.62e3	1.38e3	2.99e3	36.16	0.997	1.17	NO	0.419	0.141	3.78e4	3674	10.3	3.15e4	4670	6.7	dd
12	123678-HxCDF	2.02e3	2.10e3	4.12e3	36.26	1.000	0.96	YES	0.501	0.123	5.37e4	3674	14.6	3.62e4	4670	7.8	db
13	234678-HxCDF	2.06e3	1.64e3	3.69e3	36.76	1.014	1.26	NO	0.502	0.137	4.25e4	3674	11.6	3.03e4	4670	6.5	bb
14	123789-HxCDF	3.32e2	3.21e2	6.54e2	37.56	1.036	1.03	YES	0.112	0.174	1.16e4	3674	3.2	1.28e4	4670	2.7	bb
15	1234678-HpCDF	1.22e4	1.09e4	2.32e4	39.04	1.001	1.12	NO	3.362	0.129	1.78e5	3455	51.6	1.68e5	2258	74.2	bb
16	1234789-HpCDF	9.64e1	1.86e2	2.83e2	40.99	1.050	0.52	YES	0.055	0.174	3.57e3	3455	1.0	4.66e3	2258	2.1	bb
17	OCDF	3.49e3	3.61e3	7.10e3	44.93	1.007	0.97	NO	1.730	0.386	4.15e4	2467	16.8	4.68e4	3602	13.0	bd
18	13C-2378-TCDD	4.07e5	5.29e5	9.36e5	31.43	1.015	0.77	NO	87.260	0.130	7.67e6	5854	1309.8	1.03e7	3318	3090.8	bb
19	13C-12378-PeCDD	4.17e5	2.65e5	6.82e5	34.25	1.107	1.57	NO	87.198	0.164	9.40e6	5803	1619.3	5.79e6	2652	2183.7	bd
20	13C-123678-HxCDD	3.62e5	2.82e5	6.44e5	36.95	0.993	1.28	NO	75.974	0.272	6.69e6	7289	917.7	5.57e6	7482	743.8	dd
21	13C-1234678-HpCDD	2.39e5	2.29e5	4.68e5	40.29	1.083	1.04	NO	85.784	0.311	3.21e6	5367	598.2	3.24e6	5058	588.4	bb
22	13C-OCDD	3.27e5	3.65e5	6.91e5	44.60	1.199	0.90	NO	155.179	0.391	3.13e6	5218	600.2	3.43e6	5948	576.0	bd
23	13C-2378-TCDF	5.17e5	6.85e5	1.20e6	30.80	0.995	0.75	NO	76.436	0.190	7.62e6	12520	608.4	9.72e6	7132	1362.5	bb
24	13C-12378-PeCDF	6.55e5	4.16e5	1.07e6	33.44	1.080	1.57	NO	80.492	0.105	1.50e7	4026	3729.8	9.94e6	5194	1913.6	bd
25	13C-123678-HxCDF	2.70e5	5.04e5	7.74e5	36.25	0.974	0.54	NO	68.618	0.169	5.58e6	5422	1029.5	1.02e7	6829	1500.5	bd
26	13C-1234678-HpCDF	1.79e5	3.87e5	5.65e5	39.02	1.049	0.46	NO	76.423	0.200	2.87e6	4033	712.7	6.03e6	5448	1107.1	bd
27	13C-1234-TCDD	4.44e5	5.65e5	1.01e6	30.95	0.000	0.79	NO	100.000	0.138	7.31e6	5854	1248.8	9.17e6	3318	2765.1	bb
28	13C-123789-HxCDD	4.10e5	3.19e5	7.30e5	37.20	0.000	1.29	NO	100.000	0.316	6.58e6	7289	903.2	5.09e6	7482	680.3	dd

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
 Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
 Last Altered: Tuesday, October 09, 2018 11:29:54 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:30:23 Eastern Standard Time

**Method:** C:\MassLynx\DEFAULT.T.PRO\WethDB\CFA\_EPA8290\_A23AUG18.mdb **23 Aug 2018 12:08:58**  
**Calibration:** C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb **20 Aug 2018 13:48:29**

**Name:** A29SEP18B\_10-7, **Date:** 03-Oct-2018, **Time:** 10:16:09, **ID:** 13953002-1, **Description:** 38747, **Job:** HMR8290\_1S, **Task:** HRP750\_2, **User:** MJC

**TD**

	Name	Ion1 Area	Ion2 Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-tetradioxins	1.25e3	1.03e3	2.29e3	28.24	1.22	YES	0.253	0.0679	1.72e4	2810	6.1	1.21e4	1818	6.7	MM	MM
2	Total-tetradioxins	7.68e1	2.26e2	3.03e2	30.71	0.34	YES	0.034	0.0679	2.87e3	2810	1.0	9.76e3	1818	5.4	cb	db
3	Total-tetradioxins	7.02e1	1.58e2	2.28e2	30.65	0.45	YES	0.025	0.0679	4.43e3	2810	1.6	5.77e3	1818	3.2	bd	bd
4	Total-tetradioxins	1.50e2	5.29e1	2.03e2	30.53	2.83	YES	0.022	0.0679	3.89e3	2810	1.4	2.65e3	1818	1.5	bb	bb
5	Total-tetradioxins	1.70e2	1.21e2	2.91e2	30.27	1.41	YES	0.032	0.0679	4.06e3	2810	1.4	3.56e3	1818	2.0	bb	db
6	Total-tetradioxins	5.39e2	7.49e2	1.29e3	30.08	0.72	NO	0.142	0.0679	7.26e3	2810	2.6	1.83e4	1818	10.1	db	bd
7	Total-tetradioxins	1.62e2	1.14e2	2.76e2	29.64	1.42	YES	0.030	0.0679	2.94e3	2810	1.0	4.06e3	1818	2.2	bb	bb
8	Total-tetradioxins	1.99e2	2.07e2	4.06e2	28.90	0.96	YES	0.045	0.0679	3.16e3	2810	1.1	3.64e3	1818	2.0	db	MM
9	Total-tetradioxins	6.91e2	6.85e2	1.38e3	28.57	1.01	YES	0.152	0.0679	9.08e3	2810	3.2	1.11e4	1818	6.1	MM	bb
10	Total-tetradioxins	5.41e1	9.88e1	1.53e2	31.68	0.55	YES	0.017	0.0679	3.37e3	2810	1.2	3.69e3	1818	2.0	dd	bb
11	2378-TCDD	1.40e2	1.39e2	2.79e2	31.43	1.01	YES	0.031	0.0679	5.07e3	2810	1.8	4.56e3	1818	2.5	bb	bb
12	Total-tetradioxins	6.24e1	1.59e2	2.22e2	31.28	0.39	YES	0.025	0.0679	2.96e3	2810	1.1	5.80e3	1818	3.2	bb	db
13	Total-tetradioxins	2.41e2	1.09e2	3.49e2	30.93	2.21	YES	0.039	0.0679	8.23e3	2810	2.9	3.84e3	1818	2.1	bb	bb

**PD**

	Name	Ion1 Area	Ion2 Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-pentadioxins	1.40e3	8.45e2	2.25e3	33.76	1.66	NO	0.338	0.1173	3.48e4	3954	8.8	1.43e4	6415	2.2	cb	db
2	Total-pentadioxins	9.97e2	7.04e2	1.70e3	33.64	1.42	NO	0.255	0.1173	2.83e4	3954	7.2	2.01e4	6415	3.1	dd	dd
3	Total-pentadioxins	1.78e3	9.54e2	2.74e3	33.58	1.87	YES	0.411	0.1173	4.81e4	3954	12.2	2.78e4	6415	4.3	dd	dd
4	Total-pentadioxins	1.84e3	1.12e3	2.96e3	33.46	1.64	NO	0.444	0.1173	5.14e4	3954	13.0	2.31e4	6415	3.6	bd	bd
5	Total-pentadioxins	7.03e2	2.20e3	2.90e3	33.17	0.32	YES	0.436	0.1173	1.66e4	3954	4.2	5.63e4	6415	8.8	bb	bb
6	Total-pentadioxins	6.26e1	7.85e3	7.91e3	33.06	0.01	YES	1.188	0.1173	3.70e3	3954	0.9	2.24e5	6415	34.9	db	bb
7	Total-pentadioxins	5.01e3	3.14e3	8.15e3	32.92	1.59	NO	1.224	0.1173	1.01e5	3954	25.5	8.34e4	6415	13.0	bd	bb
8	Total-pentadioxins	4.55e2	1.23e2	5.78e2	34.53	3.69	YES	0.087	0.1173	8.42e3	3954	2.1	3.58e3	6415	0.6	bb	bb
9	12378-PeCDD	1.56e3	1.01e3	2.57e3	34.24	1.55	NO	0.387	0.1173	2.52e4	3954	6.4	1.84e4	6415	2.9	bb	MM
10	Total-pentadioxins	2.49e2	1.16e2	3.65e2	33.97	2.16	YES	0.055	0.1173	6.17e3	3954	1.6	4.33e3	6415	0.7	bb	bb

**Quantify Totals Report MassLynx 4.1**  
**Method 8290 Quantification Report**

Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
 Last Altered: Tuesday, October 09, 2018 11:29:54 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:30:23 Eastern Standard Time

Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

**HD**

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	123789-HxCDD	2.64e3	2.13e3	4.77e3	37.21	1.24	NO	0.860	0.149	4.98e4	3693	13.5	2.74e4	2433	11.3	cd	db
2	Total-hexadioins	8.40e2	4.97e2	1.34e3	37.12	1.69	YES	0.235	0.145	1.42e4	3693	3.9	8.45e3	2433	3.5	cd	bd
3	123678-HxCDD	3.31e3	2.82e3	6.13e3	36.97	1.17	NO	0.980	0.132	6.13e4	3693	16.6	5.33e4	2433	21.9	dd	db
4	123478-HxCDD	1.07e3	7.42e2	1.81e3	36.88	1.44	YES	0.343	0.157	2.72e4	3693	7.4	1.43e4	2433	5.9	bd	bd
5	Total-hexadioins	1.05e3	6.91e2	1.74e3	36.39	1.52	YES	0.306	0.145	2.08e4	3693	5.6	2.67e4	2433	11.0	db	dd
6	Total-hexadioins	1.69e4	1.39e4	3.08e4	36.30	1.22	NO	5.413	0.145	2.73e5	3693	74.0	2.37e5	2433	97.4	bd	bd
7	Total-hexadioins	2.10e3	1.43e3	3.53e3	36.09	1.47	YES	0.620	0.145	5.24e4	3693	14.2	3.12e4	2433	12.8	bb	bb
8	Total-hexadioins	1.38e4	1.14e4	2.52e4	35.63	1.22	NO	4.425	0.145	3.26e5	3693	88.2	2.42e5	2433	99.4	bd	bb

**HPD**

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-heptadioins	9.77e1	1.35e2	2.33e2	41.79	0.72	YES	0.052	0.347	5.69e3	4928	1.2	6.31e3	3408	1.9	bb	bb
2	Total-heptadioins	5.78e2	3.07e2	8.85e2	40.47	1.88	YES	0.198	0.347	2.48e4	4928	5.0	1.28e4	3408	3.8	db	db
3	1234678-HpCDD	3.51e4	3.38e4	6.89e4	40.30	1.04	NO	15.426	0.347	4.93e5	4928	100.1	4.71e5	3408	138.2	bd	bd
4	Total-heptadioins	3.88e4	3.81e4	7.69e4	39.36	1.02	NO	17.218	0.347	6.02e5	4928	122.3	5.88e5	3408	172.5	bb	bd

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
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 Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
 Last Altered: Tuesday, October 09, 2018 11:29:54 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:30:23 Eastern Standard Time

Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

TF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-tetrafurans	3.51e3	4.70e3	8.21e3	27.45	0.75	NO	0.743	0.135	4.41e4	4159	10.6	7.17e4	4648	15.4	bb	
2	Total-tetrafurans	9.87e1	1.51e2	2.50e2	27.05	0.65	YES	0.023	0.135	4.23e3	4159	1.0	4.10e3	4648	0.9	db	
3	Total-tetrafurans	4.89e2	7.85e2	1.27e3	26.93	0.62	YES	0.115	0.135	7.65e3	4159	1.8	1.05e4	4648	2.3	bd	
4	2378-TCDF	4.26e3	5.99e3	1.03e4	30.82	0.71	NO	0.928	0.135	6.28e4	4159	15.1	9.45e4	4648	20.3	db	
5	Total-tetrafurans	3.52e2	6.09e2	9.61e2	30.39	0.58	YES	0.087	0.135	5.81e3	4159	1.4	7.91e3	4648	1.7	bd	
6	Total-tetrafurans	9.03e2	1.09e3	1.99e3	30.21	0.83	NO	0.180	0.135	1.35e4	4159	3.2	1.46e4	4648	3.1	MM	
7	Total-tetrafurans	2.12e3	2.26e3	4.38e3	29.91	0.94	YES	0.397	0.135	2.93e4	4159	7.1	3.41e4	4648	7.3	bd	
8	Total-tetrafurans	3.00e3	4.11e3	7.11e3	29.42	0.73	NO	0.644	0.135	3.05e4	4159	7.3	5.30e4	4648	11.4	db	
9	Total-tetrafurans	9.64e2	1.23e3	2.20e3	29.26	0.78	NO	0.199	0.135	1.59e4	4159	3.8	1.54e4	4648	3.3	bd	
10	Total-tetrafurans	2.38e2	2.34e2	4.71e2	29.10	1.02	YES	0.043	0.135	9.40e3	4159	2.3	1.13e4	4648	2.4	bb	
11	Total-tetrafurans	2.00e3	2.76e3	4.76e3	28.79	0.73	NO	0.431	0.135	2.27e4	4159	5.5	3.96e4	4648	8.5	db	
12	Total-tetrafurans	1.17e3	2.10e3	3.27e3	28.63	0.55	YES	0.296	0.135	1.91e4	4159	4.6	2.47e4	4648	5.3	dd	
13	Total-tetrafurans	1.70e3	1.67e3	3.36e3	28.54	1.02	YES	0.304	0.135	3.35e4	4159	8.1	2.13e4	4648	4.6	bd	
14	Total-tetrafurans	1.63e3	1.95e3	3.58e3	28.11	0.83	NO	0.324	0.135	1.62e4	4159	3.9	2.45e4	4648	5.3	MM	
15	Total-tetrafurans	2.15e3	2.12e3	4.27e3	27.85	1.01	YES	0.387	0.135	2.59e4	4159	6.2	1.94e4	4648	4.2	MM	
16	Total-tetrafurans	5.65e2	4.22e2	9.87e2	32.08	1.34	YES	0.089	0.135	1.48e4	4159	3.6	1.33e4	4648	2.9	bb	
17	Total-tetrafurans	6.72e1	1.59e2	2.27e2	31.22	0.42	YES	0.021	0.135	3.85e3	4159	0.9	5.89e3	4648	1.3	bb	
18	Total-tetrafurans	6.45e3	8.34e3	1.48e4	31.07	0.77	NO	1.339	0.135	1.08e5	4159	26.1	1.34e5	4648	28.8	bb	

PF1

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-pentafurans (F1)	1.76e4	1.18e4	2.94e4	32.06	1.49	NO	2.952	0.0263	4.22e5	978	431.0	2.78e5	1421	195.6	bb	
2	Total-pentafurans (F1)	6.79e1	6.78e1	1.36e2	31.70	1.00	YES	0.014	0.0263	3.76e3	978	3.8	2.11e3	1421	1.5	bb	

# Quantify Totals Report MassLynx 4.1

## Method 8290 Quantification Report

Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
 Last Altered: Tuesday, October 09, 2018 11:29:54 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:30:23 Eastern Standard Time

Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

PF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	23478-PeCDF	2.42e3	1.73e3	4.15e3	34.07	1.40	NO	0.395	0.0579	5.11e4	2383	21.5	3.77e4	3200	11.8	db	db
2	Total-pentafurans	1.20e3	6.31e2	1.83e3	34.00	1.90	YES	0.184	0.0612	3.58e4	2383	15.0	1.69e4	3200	5.3	bd	bd
3	Total-pentafurans	6.27e1	6.12e1	1.24e2	33.69	1.03	YES	0.012	0.0612	4.35e3	2383	1.8	5.53e3	3200	1.7	db	db
4	Total-pentafurans	2.37e3	1.49e3	3.86e3	33.62	1.59	NO	0.389	0.0612	5.10e4	2383	21.4	3.49e4	3200	10.9	bd	dd
5	12378-PeCDF	1.17e3	7.68e2	1.94e3	33.45	1.52	NO	0.207	0.0649	2.87e4	2383	12.1	1.62e4	3200	5.0	db	dd
6	Total-pentafurans	5.17e2	2.41e2	7.58e2	33.35	2.14	YES	0.076	0.0612	1.26e4	2383	5.3	8.32e3	3200	2.6	cd	dd
7	Total-pentafurans	3.83e3	2.65e3	6.48e3	33.23	1.45	NO	0.652	0.0612	7.85e4	2383	32.9	5.82e4	3200	18.2	dd	bd
8	Total-pentafurans	1.06e4	7.52e3	1.81e4	32.88	1.41	NO	1.825	0.0612	2.07e5	2383	87.0	1.34e5	3200	42.0	cd	db
9	Total-pentafurans	3.10e3	1.79e3	4.89e3	32.81	1.73	NO	0.492	0.0612	6.76e4	2383	28.4	4.49e4	3200	14.0	bd	bd

HF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-hexafurans	1.89e4	1.49e4	3.39e4	35.33	1.27	NO	4.745	0.141	4.67e5	3674	127.0	3.72e5	4670	79.7	db	dd
2	Total-hexafurans	4.34e3	3.79e3	8.13e3	35.20	1.14	NO	1.139	0.141	1.20e5	3674	32.8	9.13e4	4670	19.5	bd	bd
3	123789-HxCDF	3.32e2	3.21e2	6.54e2	37.56	1.03	YES	0.112	0.174	1.16e4	3674	3.2	1.28e4	4670	2.7	bb	MM
4	234678-HxCDF	2.06e3	1.64e3	3.69e3	36.76	1.26	NO	0.502	0.137	4.25e4	3674	11.6	3.03e4	4670	6.5	db	bb
5	Total-hexafurans	3.66e2	1.36e2	5.03e2	36.58	2.68	YES	0.070	0.141	8.92e3	3674	2.4	6.66e3	4670	1.4	bb	bb
6	123678-HxCDF	2.02e3	2.10e3	4.12e3	36.26	0.96	YES	0.501	0.123	5.37e4	3674	14.6	3.62e4	4670	7.8	db	db
7	123478-HxCDF	1.62e3	1.38e3	2.99e3	36.16	1.17	NO	0.419	0.141	3.78e4	3674	10.3	3.15e4	4670	6.7	cd	dd
8	Total-hexafurans	6.46e2	7.16e2	1.36e3	36.08	0.90	YES	0.191	0.141	1.33e4	3674	3.6	1.45e4	4670	3.1	bd	bd
9	Total-hexafurans	4.55e3	3.63e3	8.18e3	35.77	1.25	NO	1.146	0.141	1.02e5	3674	27.6	8.01e4	4670	17.1	bd	bb
10	Total-hexafurans	1.78e2	3.94e2	5.72e2	35.50	0.45	YES	0.080	0.141	8.33e3	3674	2.3	1.33e4	4670	2.8	bb	db

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Method 8290 Quantification Report  
**Quantify Totals Report MassLynx 4.1**

Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
Last Altered: Tuesday, October 09, 2018 11:29:54 Eastern Standard Time  
Printed: Tuesday, October 09, 2018 11:30:23 Eastern Standard Time

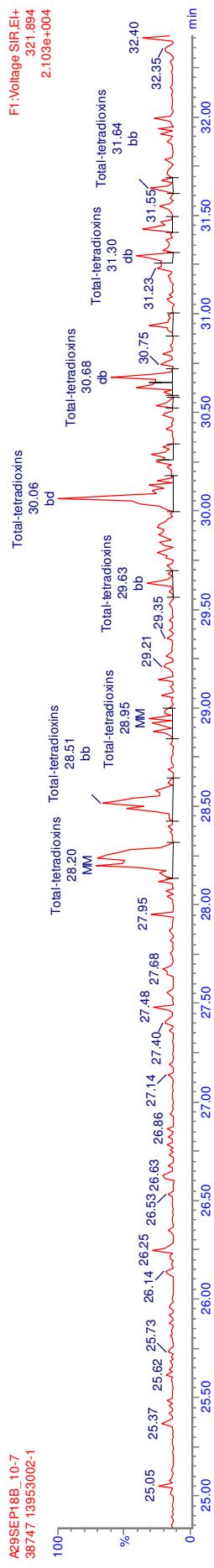
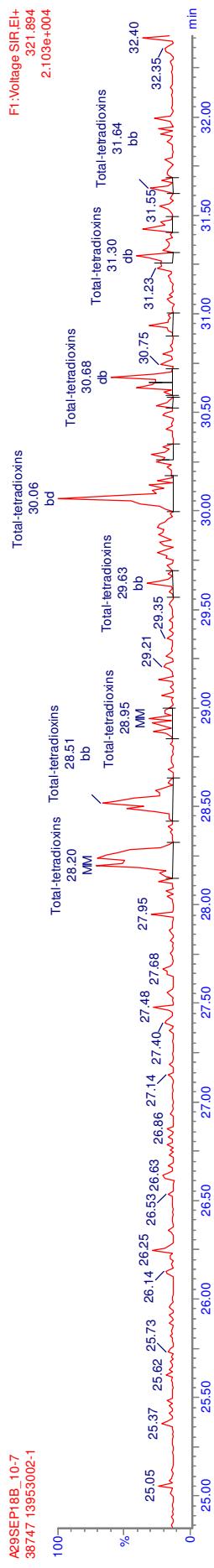
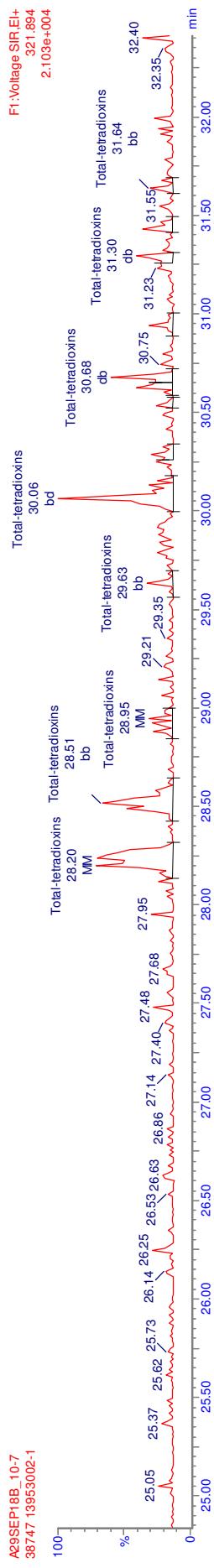
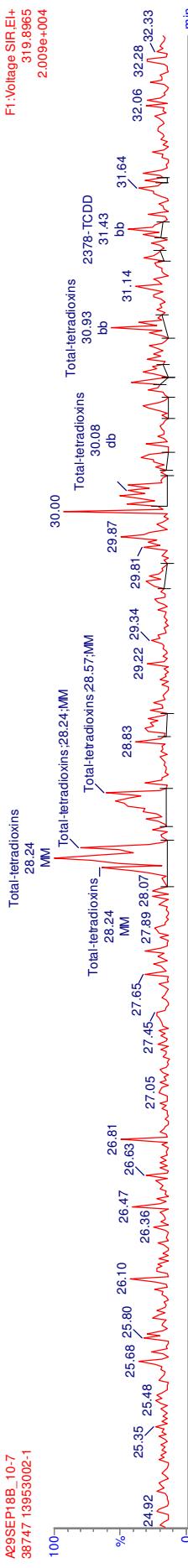
Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

**HPF**

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-heptafurans	1.11e2	6.38e1	1.75e2	40.20	1.74	YES	0.029	0.148	6.83e3	3455	2.0	3.84e3	2258	1.7	bb	
2	Total-heptafurans	2.60e2	2.39e2	4.99e2	39.70	1.09	NO	0.083	0.148	1.15e4	3455	3.3	1.24e4	2258	5.5	db	
3	Total-heptafurans	8.00e3	7.36e3	1.54e4	39.58	1.09	NO	2.563	0.148	1.41e5	3455	40.7	1.44e5	2258	63.9	bd	
4	Total-heptafurans	2.14e2	2.59e2	4.73e2	39.39	0.82	YES	0.079	0.148	9.79e3	3455	2.8	8.25e3	2258	3.7	bb	
5	1234678-HpCDF	1.22e4	1.09e4	2.32e4	39.04	1.12	NO	3.362	0.129	1.78e5	3455	51.6	1.68e5	2258	74.2	bd	
6	1234789-HpCDF	9.64e1	1.86e2	2.83e2	40.99	0.52	YES	0.055	0.174	3.57e3	3455	1.0	4.66e3	2258	2.1	db	

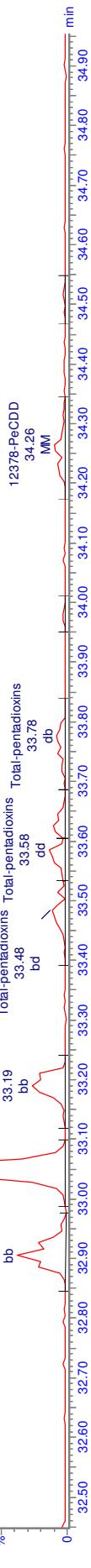
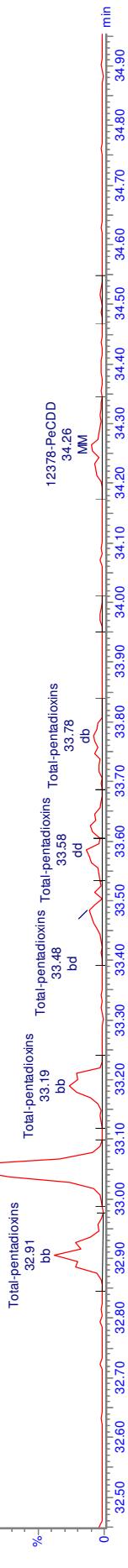
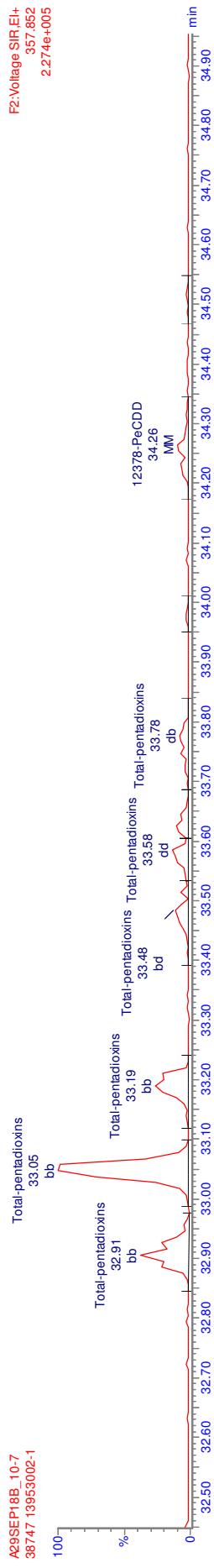
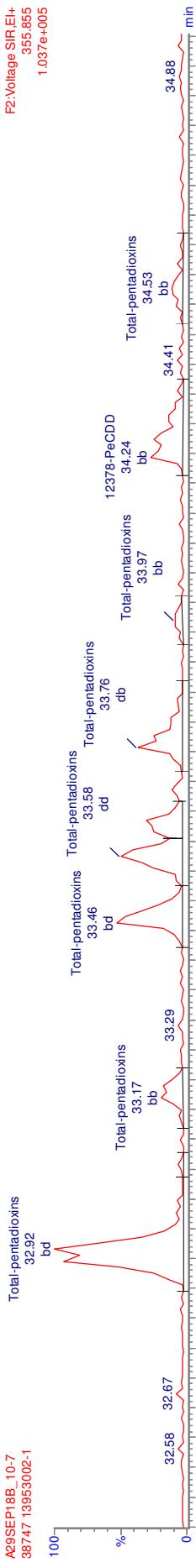
MANUAL INTEGRATION  
METHOD 8290

HRP750\_2  
A29SEP18B\_10-7  
38747 13953002-1



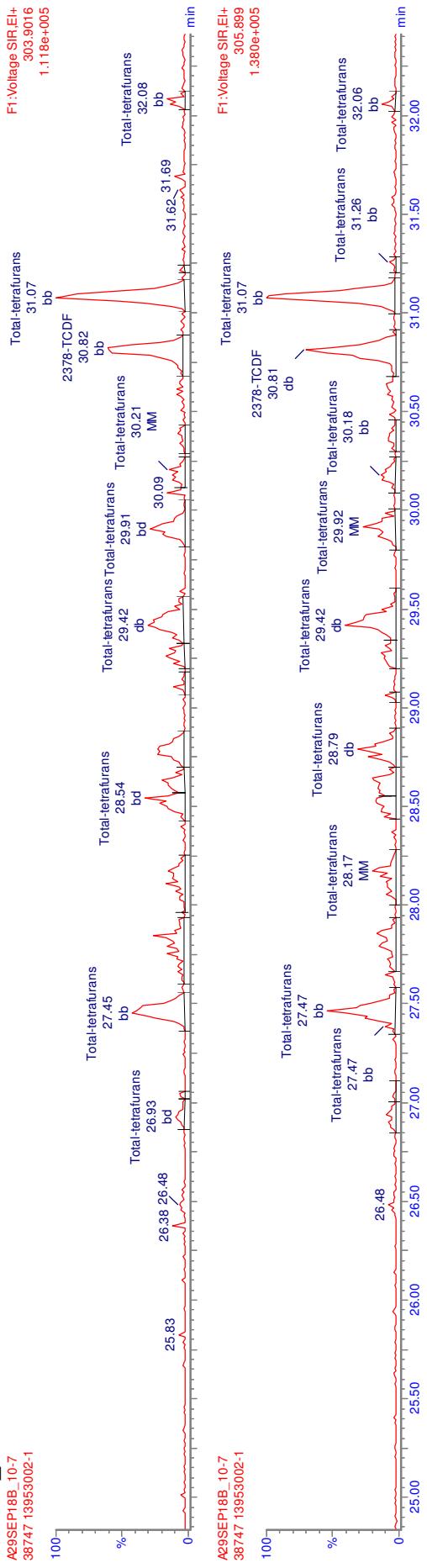
**MANUAL INTEGRATION**  
**METHOD 8290**  
**HRP750\_2**

A29SEP18B\_10-7  
38747 13953002-1



MANUAL INTEGRATION  
METHOD 8290  
HRP750\_2

A29SEP185\_10-7  
38747 13953002-1

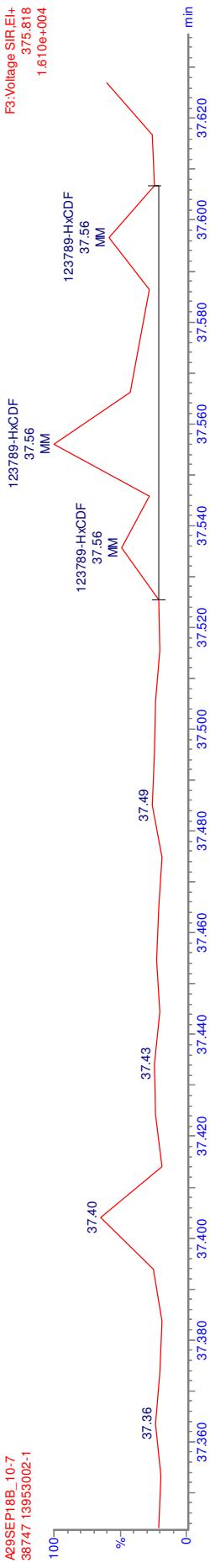
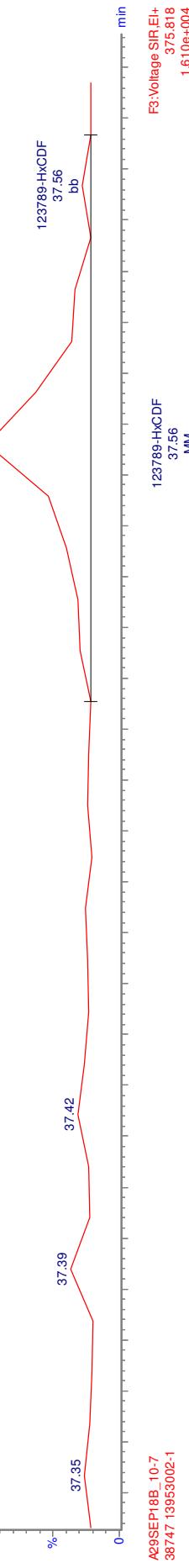


MANUAL INTEGRATION  
METHOD 8290

HRP750\_2

A29SEF18B\_10-7  
38747 13953002-1

F3) Voltage SIR\_EI+  
373.821  
1.478e-004



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

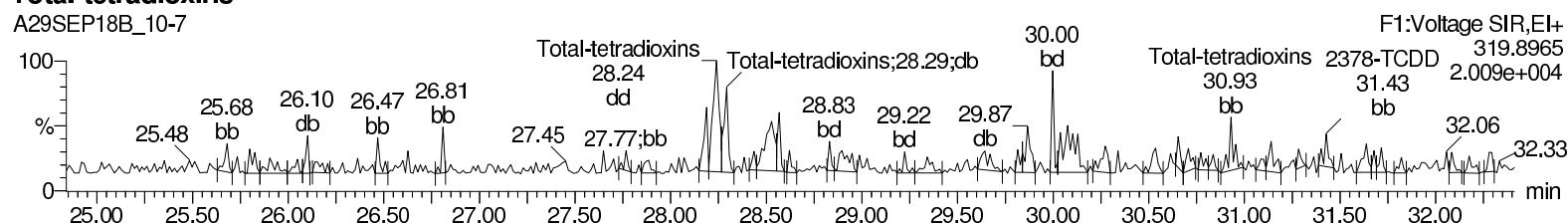
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

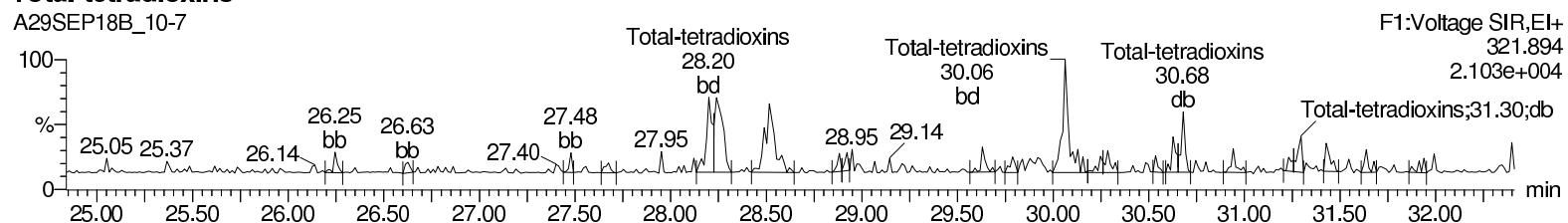
### Total-tetradioxins

A29SEP18B\_10-7



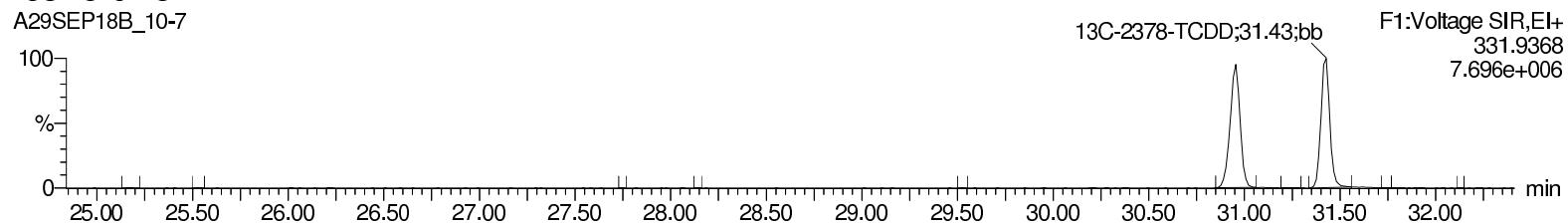
### Total-tetradioxins

A29SEP18B\_10-7



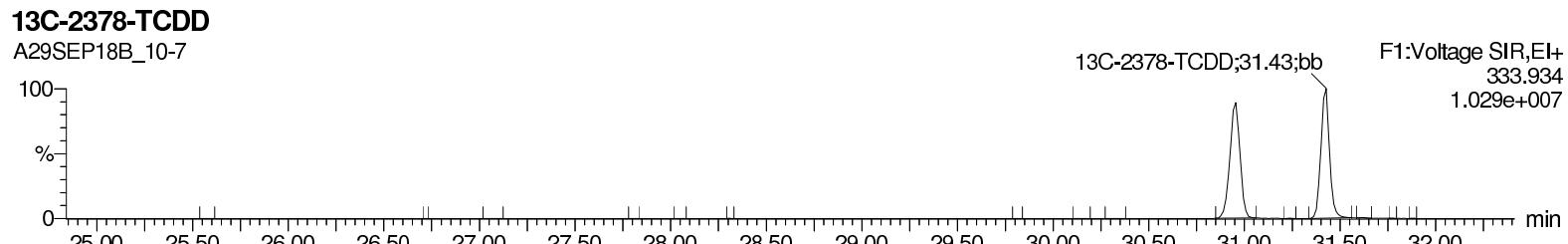
### 13C-2378-TCDD

A29SEP18B\_10-7



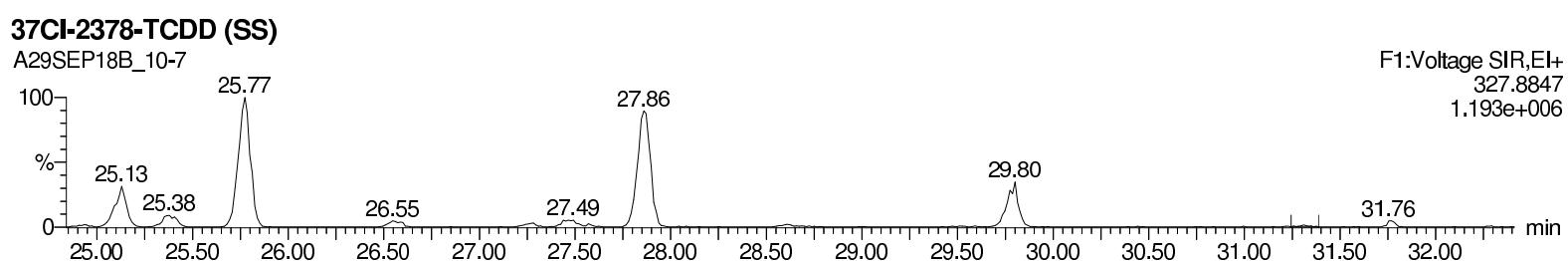
### 13C-2378-TCDD

A29SEP18B\_10-7



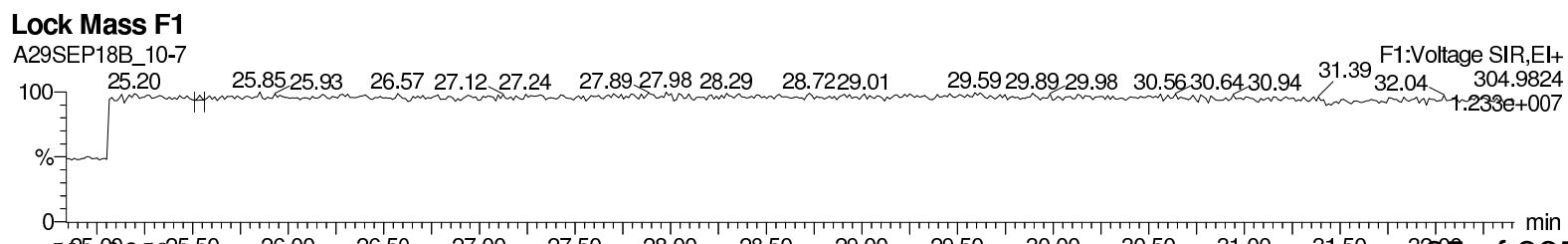
### 37CI-2378-TCDD (SS)

A29SEP18B\_10-7



### Lock Mass F1

A29SEP18B\_10-7



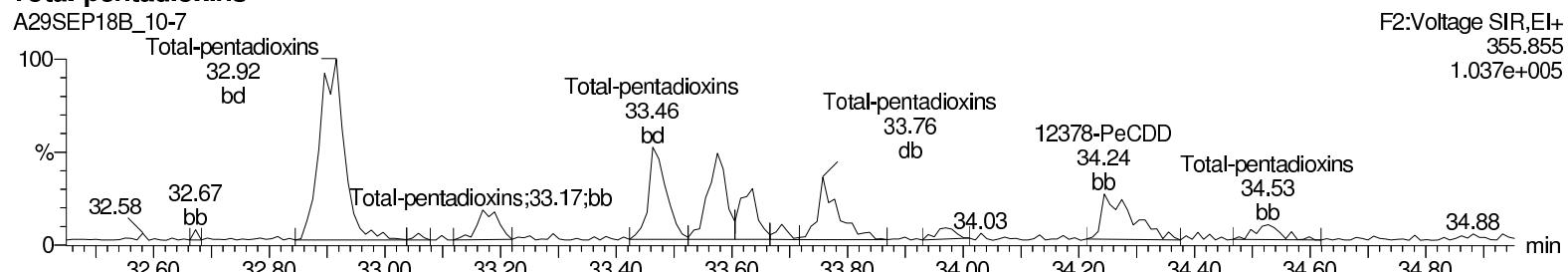
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

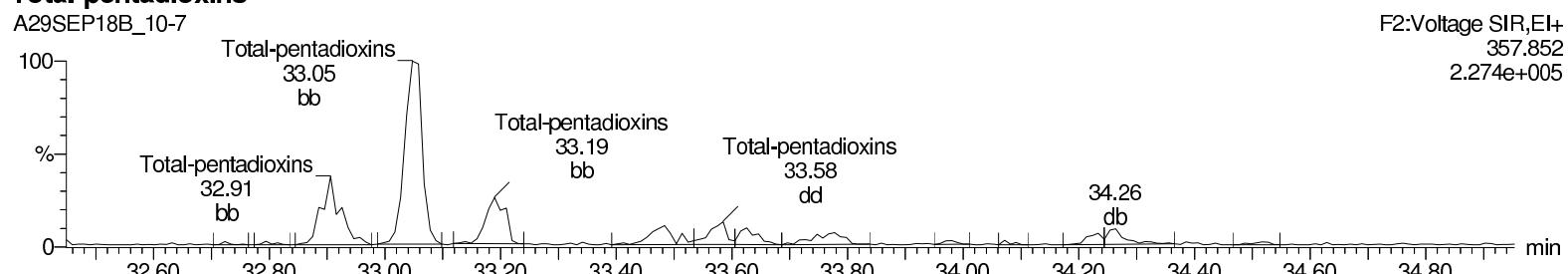
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

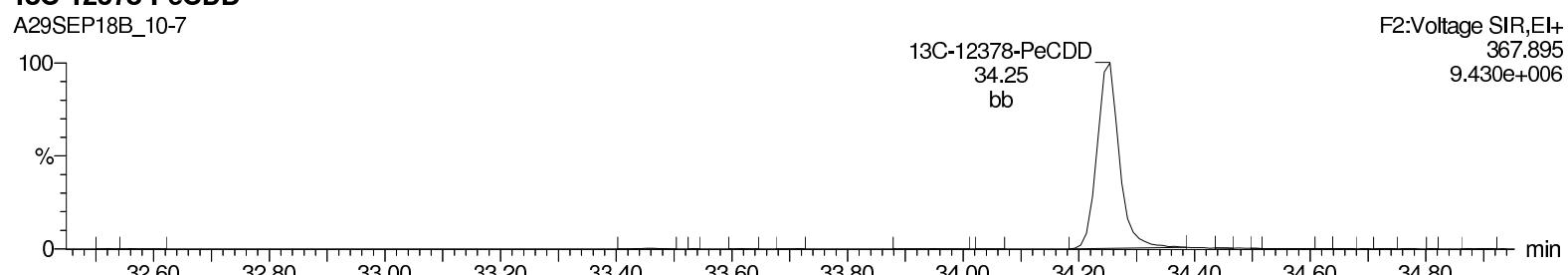
**Total-pentadioxins**



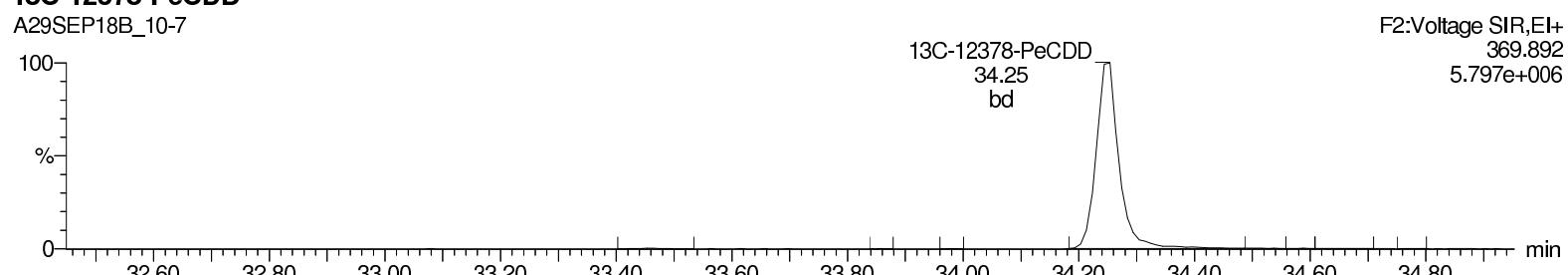
**Total-pentadioxins**



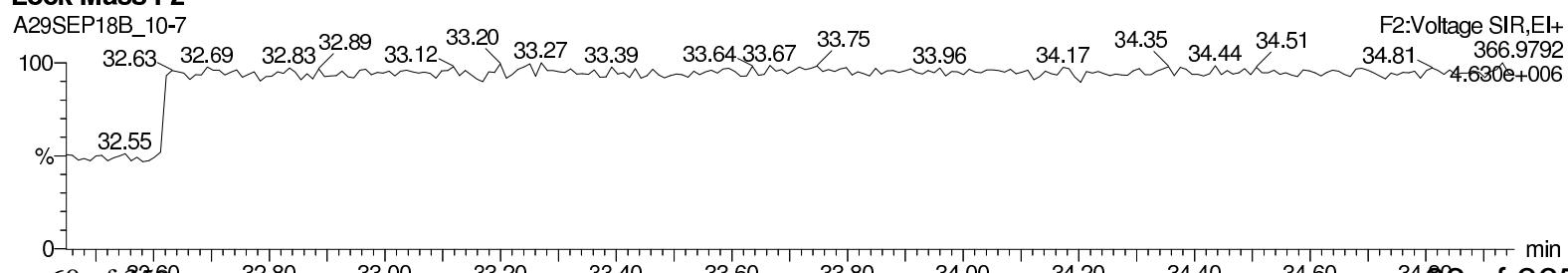
**13C-12378-PeCDD**



**13C-12378-PeCDD**



**Lock Mass F2**



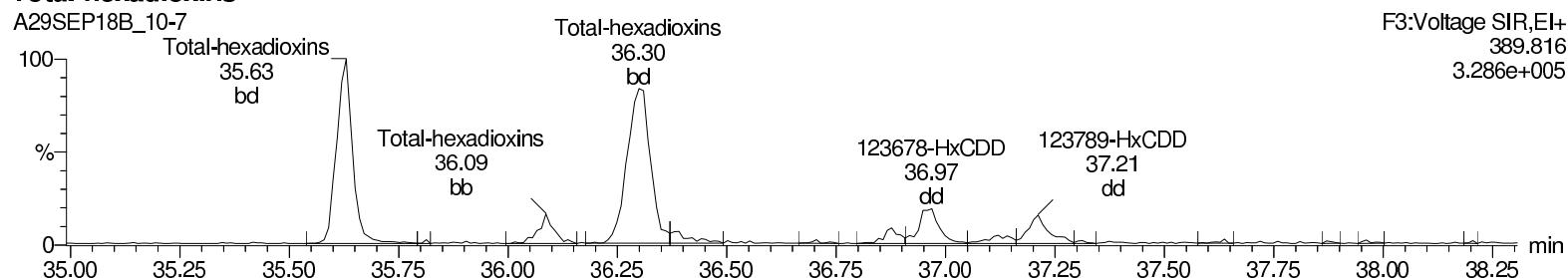
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

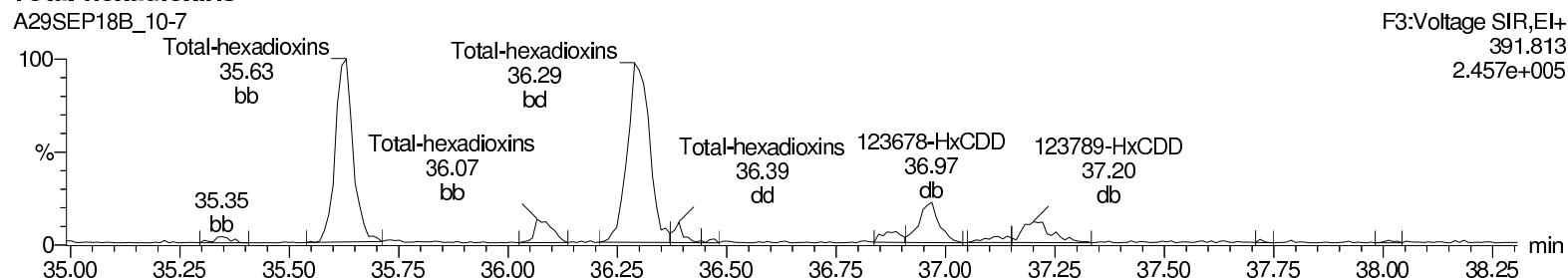
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

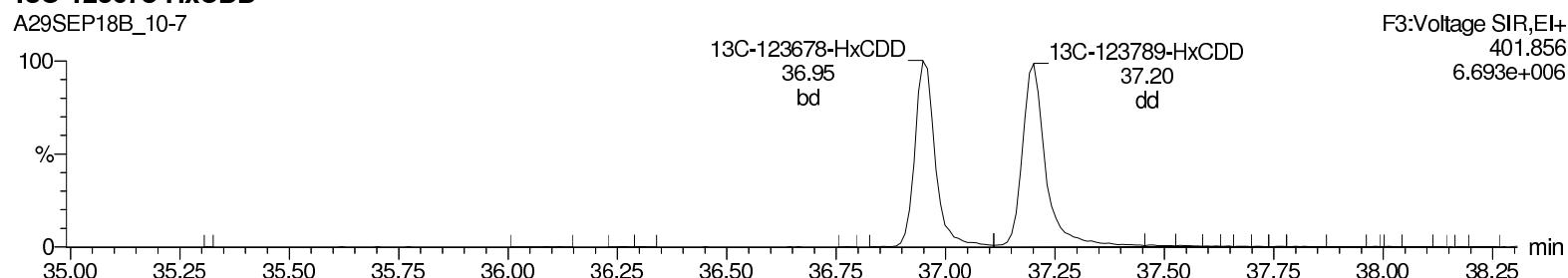
**Total-hexadioxins**



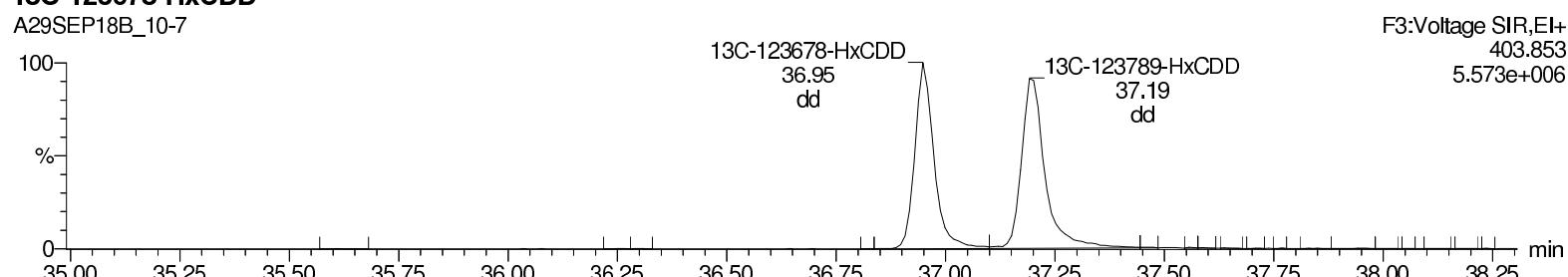
**Total-hexadioxins**



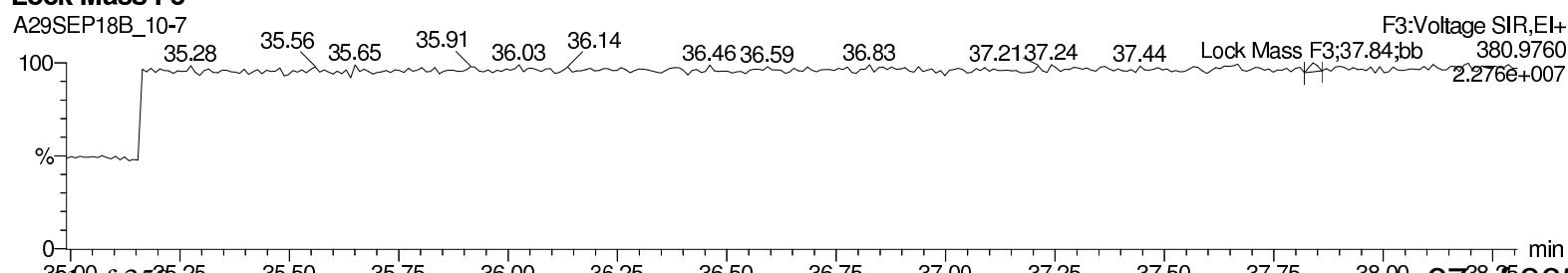
**13C-123678-HxCDD**



**13C-123678-HxCDD**



**Lock Mass F3**



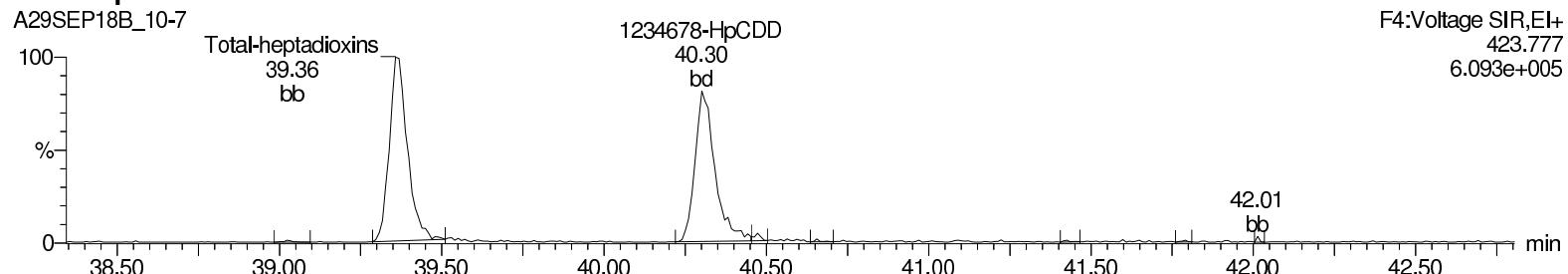
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Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

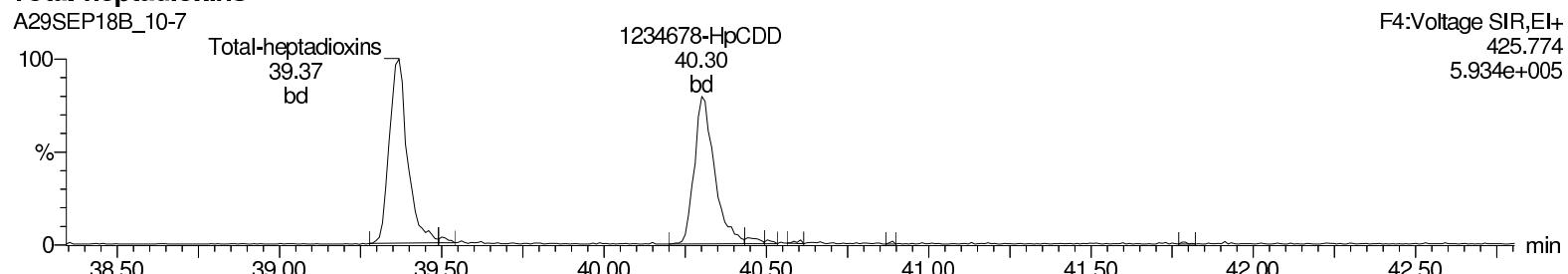
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

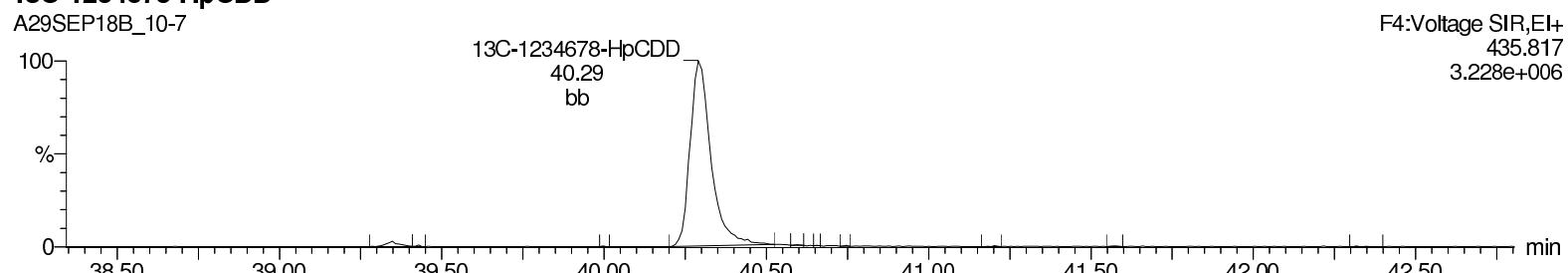
**Total-heptadioxins**



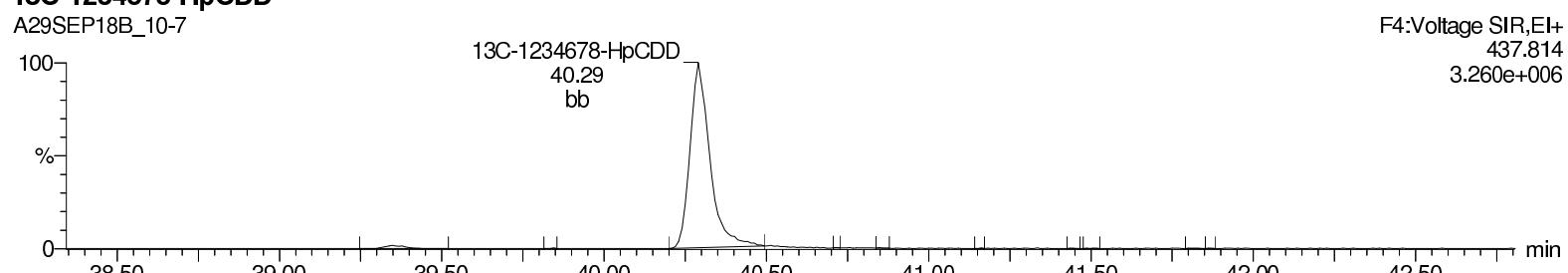
**Total-heptadioxins**



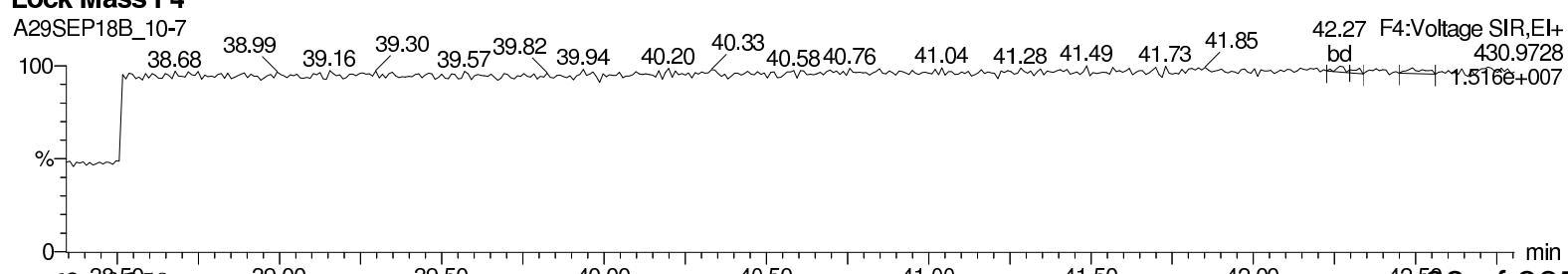
**13C-1234678-HpCDD**



**13C-1234678-HpCDD**



**Lock Mass F4**



**Quantify Sample Report**  
Method 8290 Quantification Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

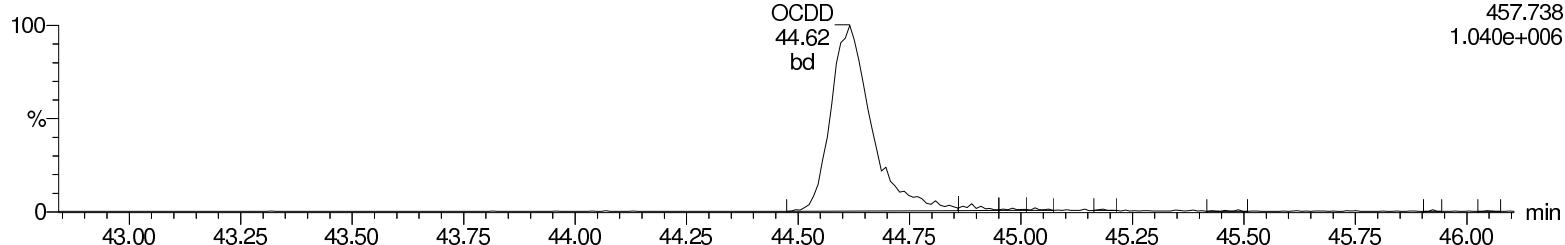
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

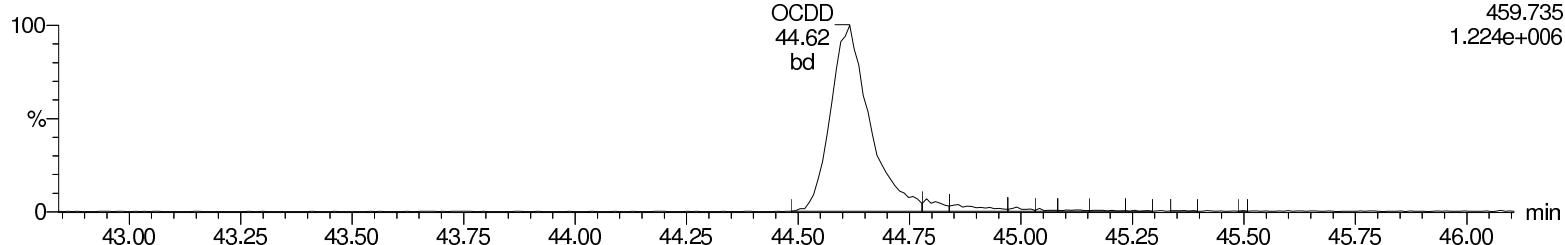
**OCDD**

A29SEP18B\_10-7



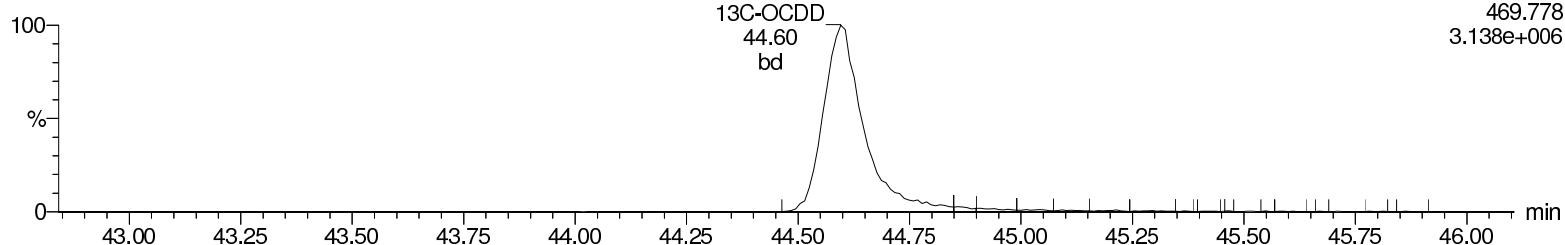
**OCDD**

A29SEP18B\_10-7



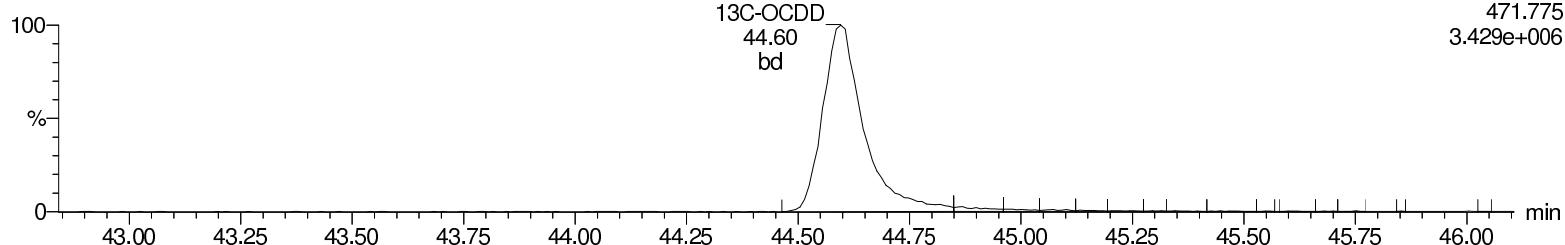
**13C-OCDD**

A29SEP18B\_10-7



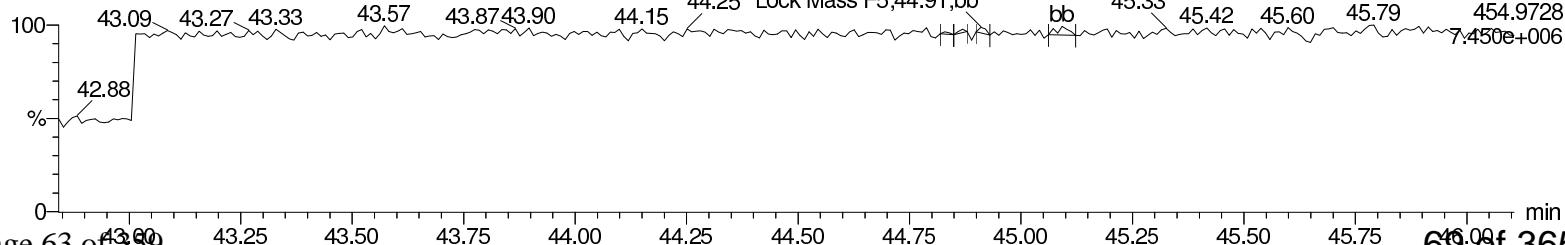
**13C-OCDD**

A29SEP18B\_10-7



**Lock Mass F5**

A29SEP18B\_10-7



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

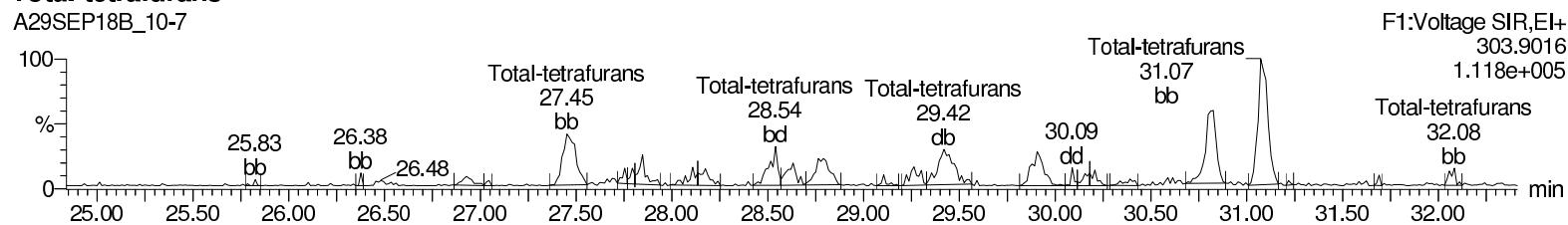
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

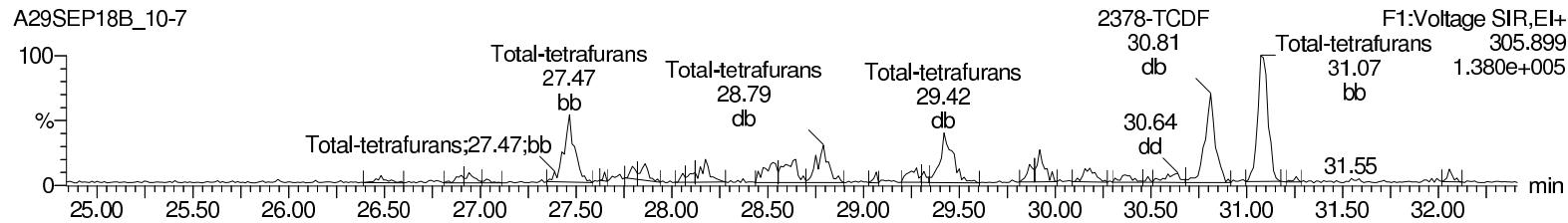
### Total-tetrafurans

A29SEP18B\_10-7



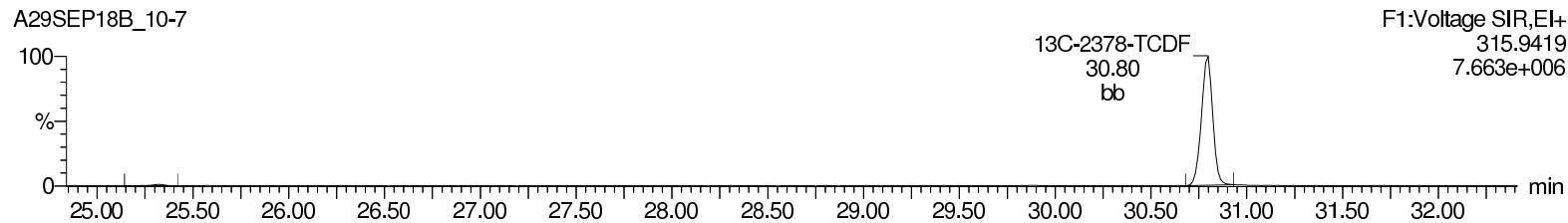
### Total-tetrafurans

A29SEP18B\_10-7



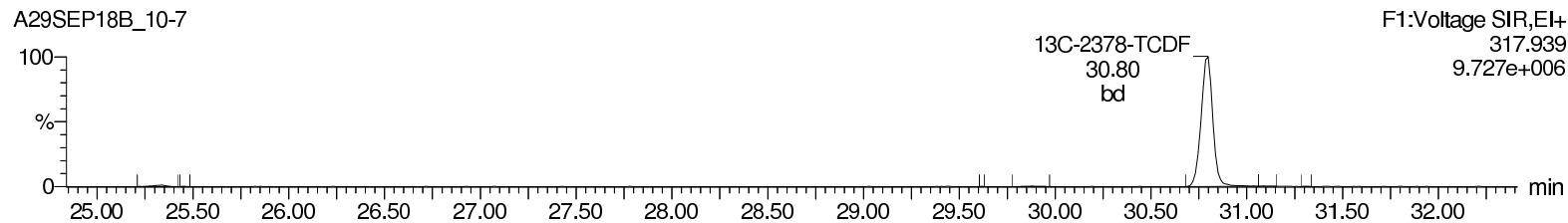
### 13C-2378-TCDF

A29SEP18B\_10-7



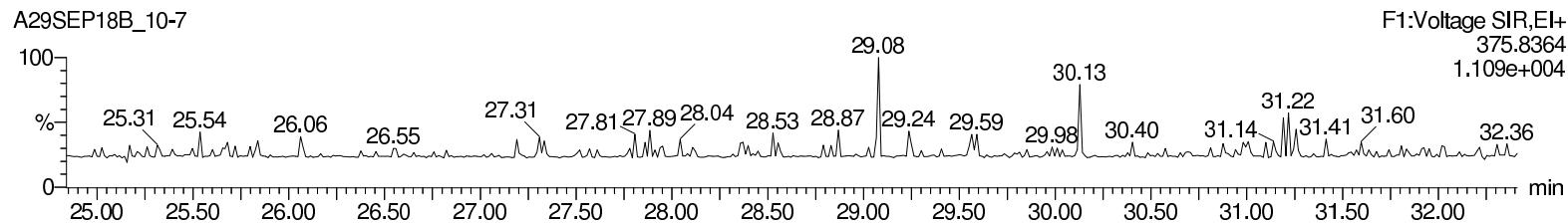
### 13C-2378-TCDF

A29SEP18B\_10-7



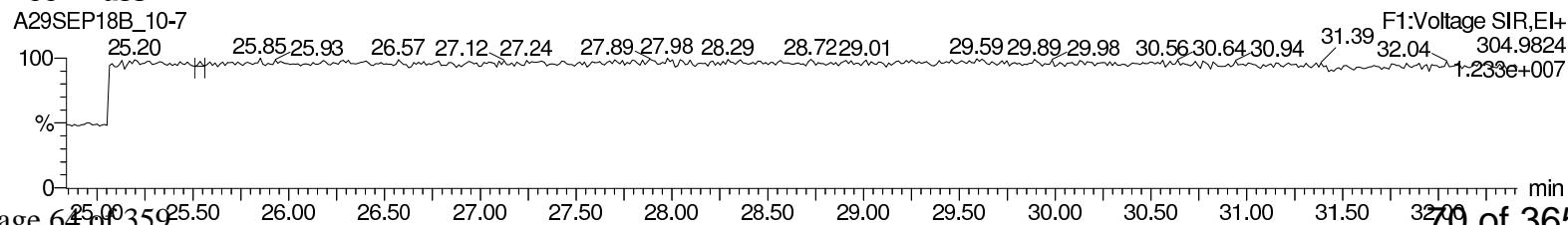
### HxDPE

A29SEP18B\_10-7



### Lock Mass F1

A29SEP18B\_10-7



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

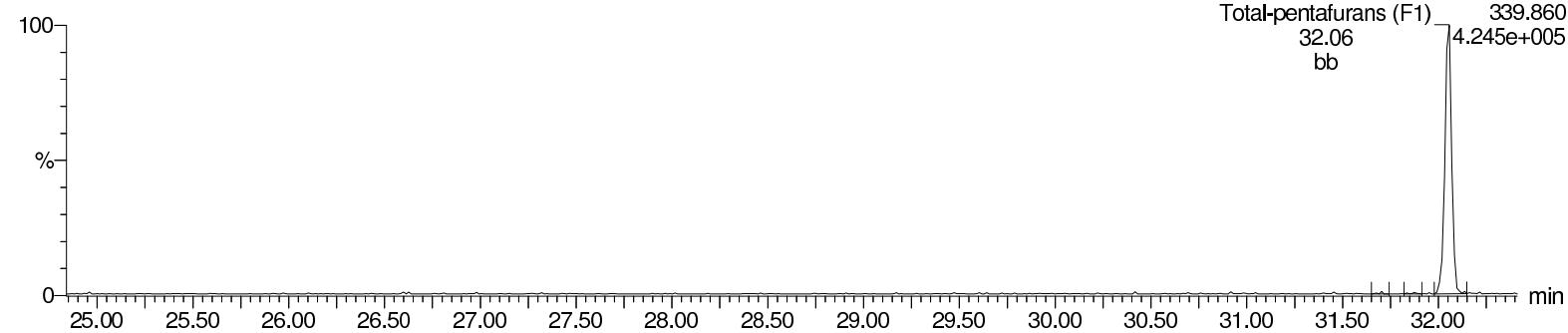
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

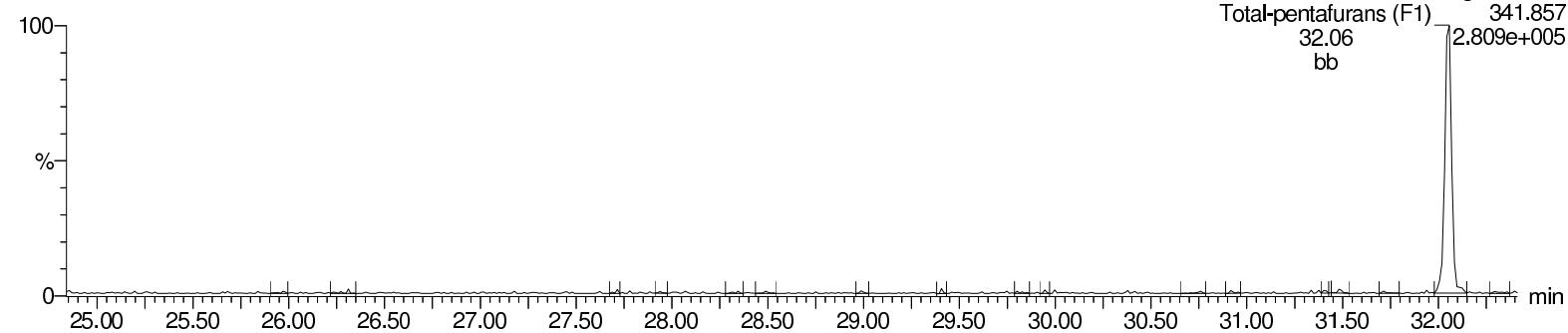
**Total-pentafurans (F1)**

A29SEP18B\_10-7



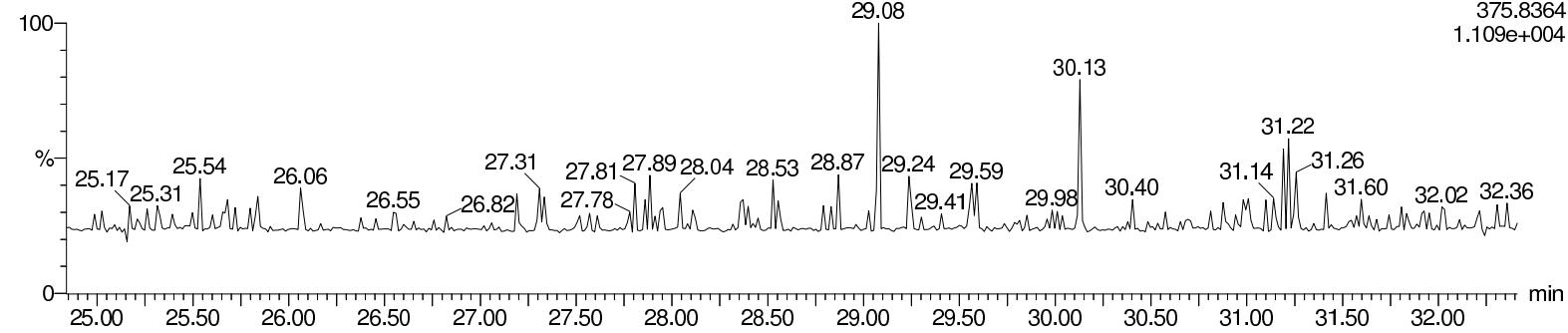
**Total-pentafurans (F1)**

A29SEP18B\_10-7



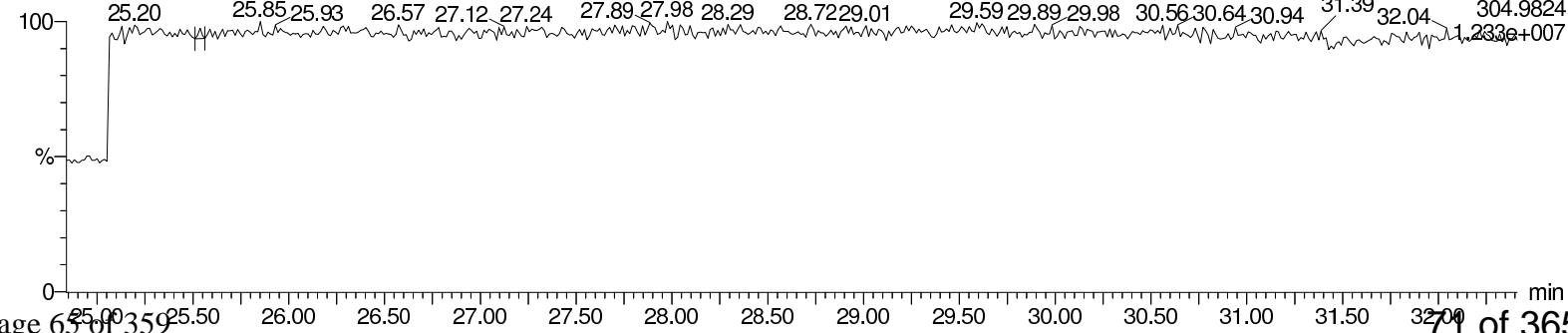
**HxDPE**

A29SEP18B\_10-7



**Lock Mass F1**

A29SEP18B\_10-7



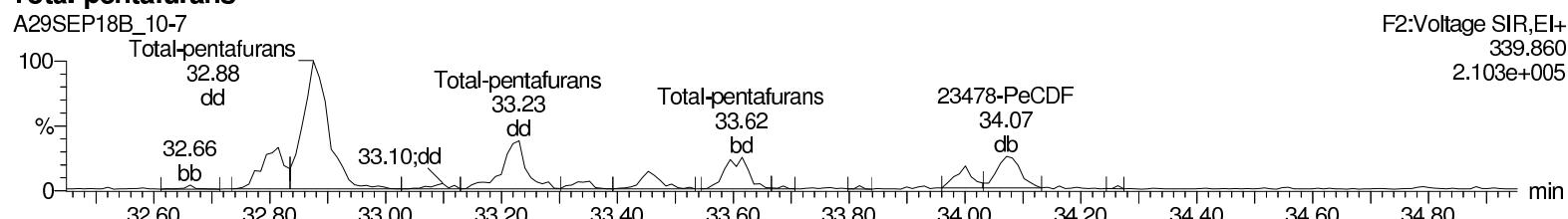
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

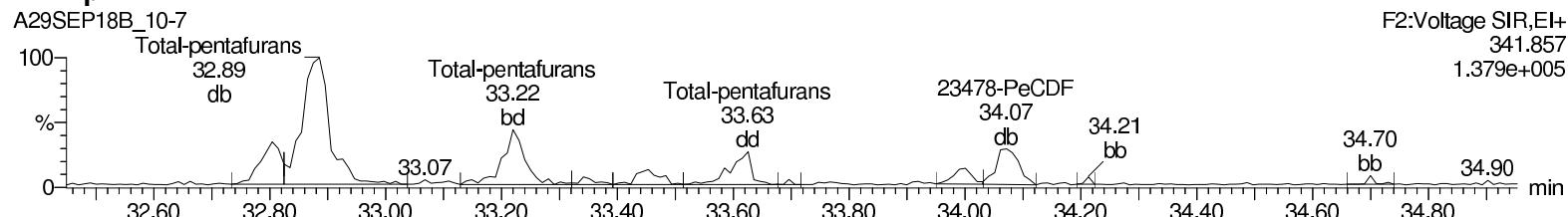
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

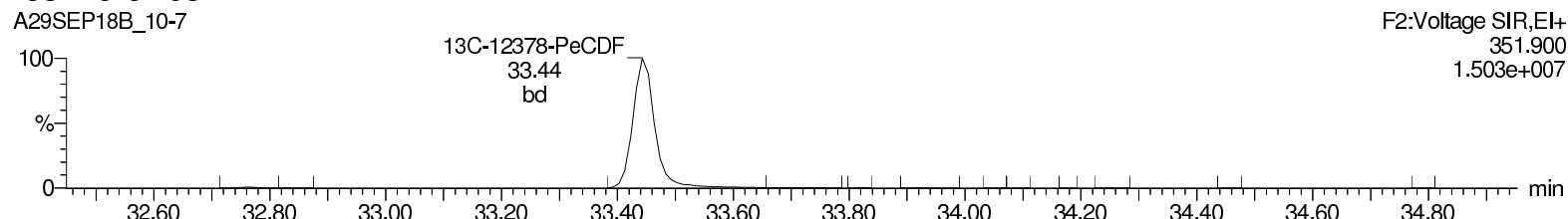
### Total-pentafurans



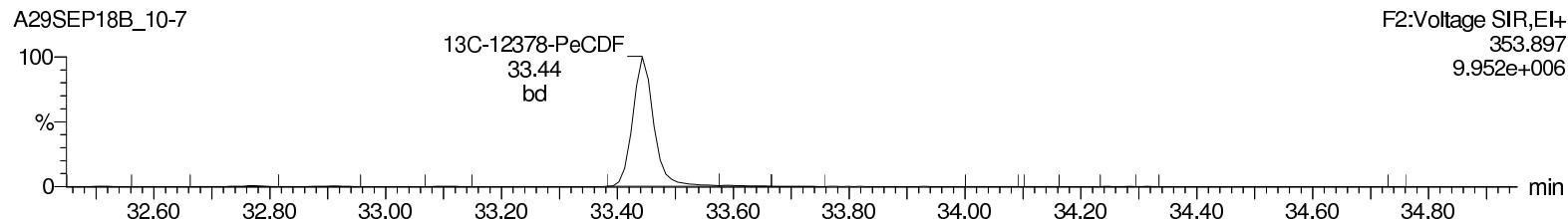
### Total-pentafurans



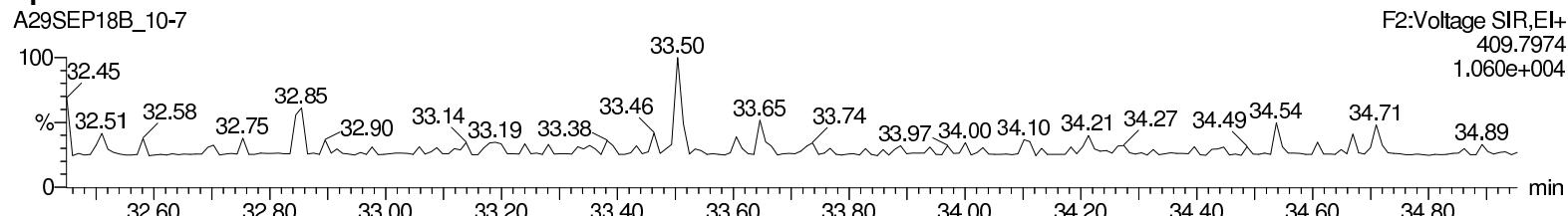
### 13C-12378-PeCDF



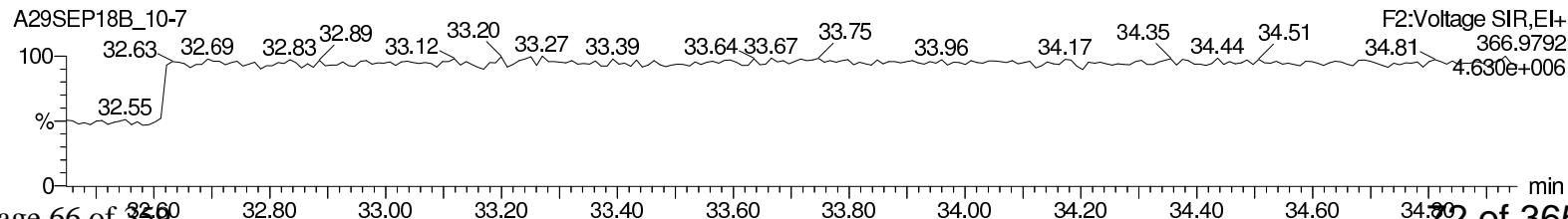
### 13C-12378-PeCDF



### HpDPE



### Lock Mass F2



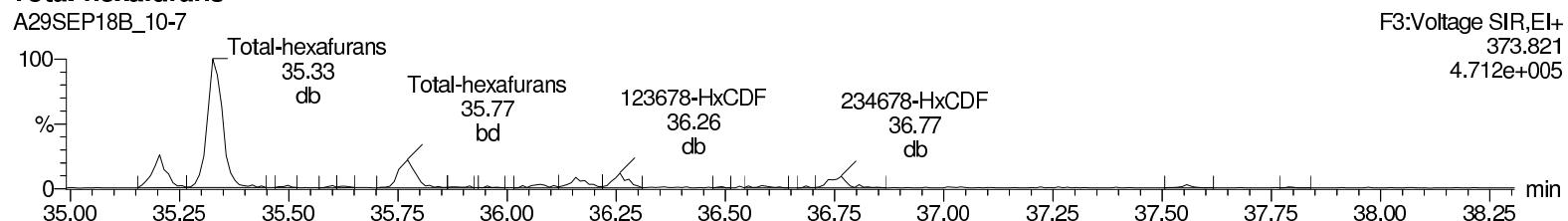
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

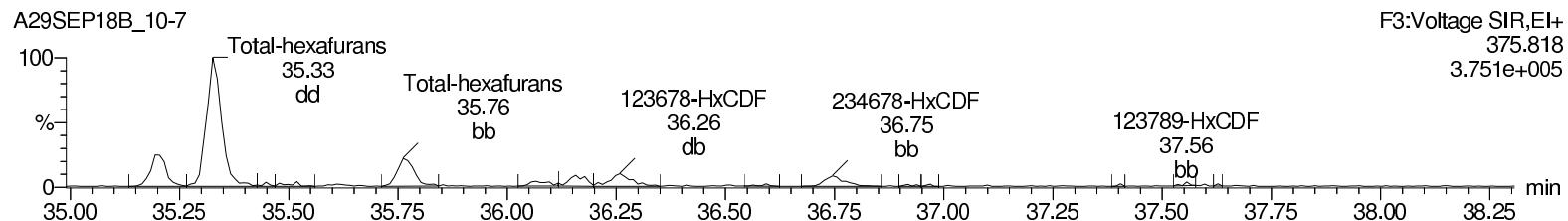
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

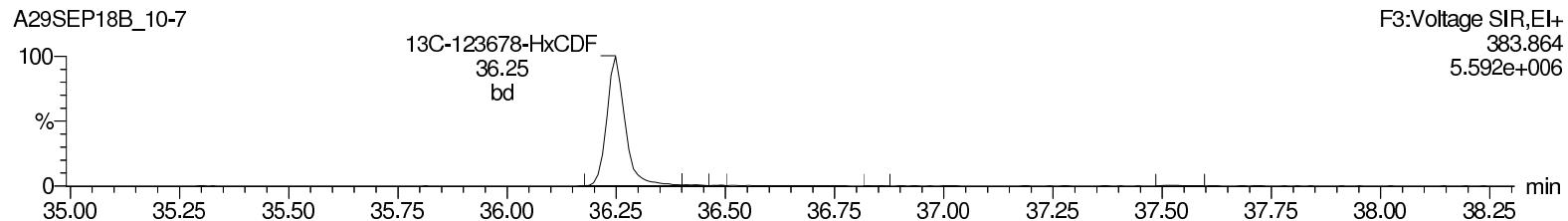
### Total-hexafurans



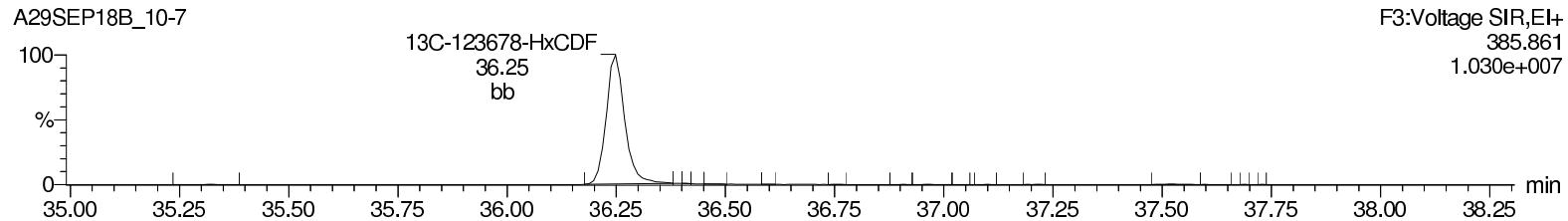
### Total-hexafurans



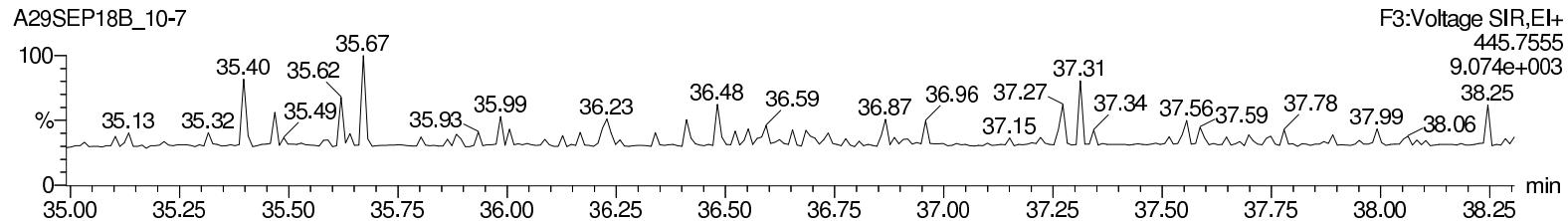
### 13C-123678-HxCDF



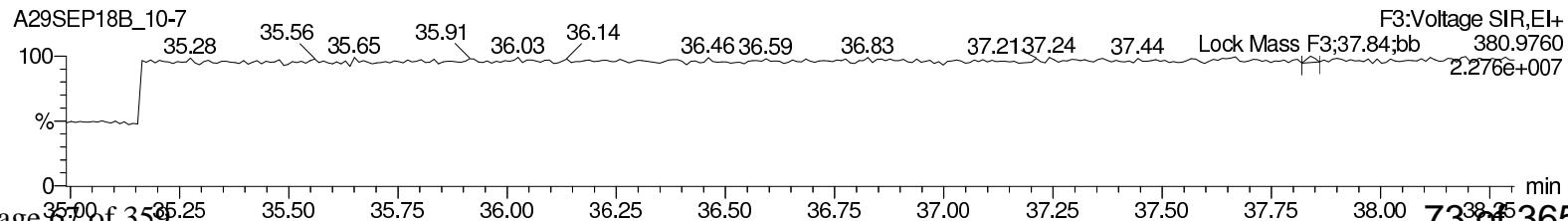
### 13C-123678-HxCDF



### OcDPE



### Lock Mass F3



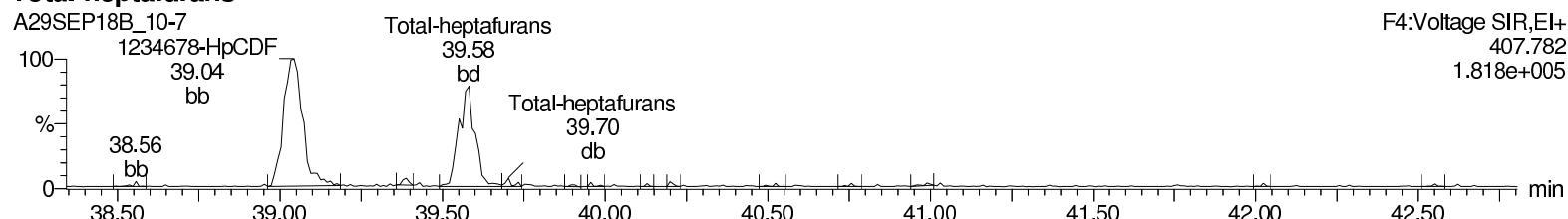
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

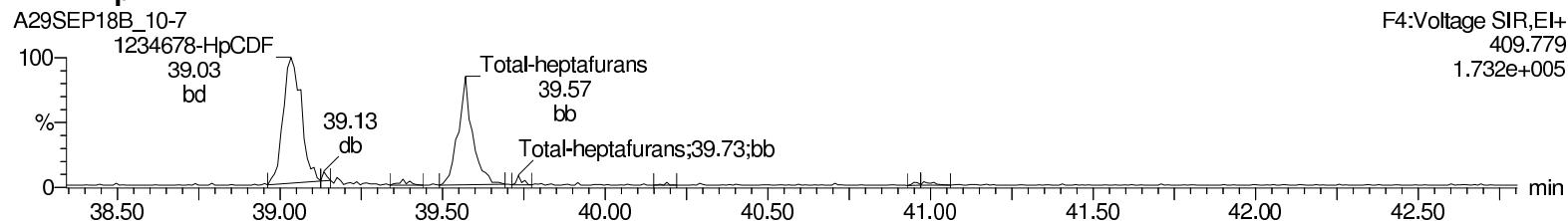
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

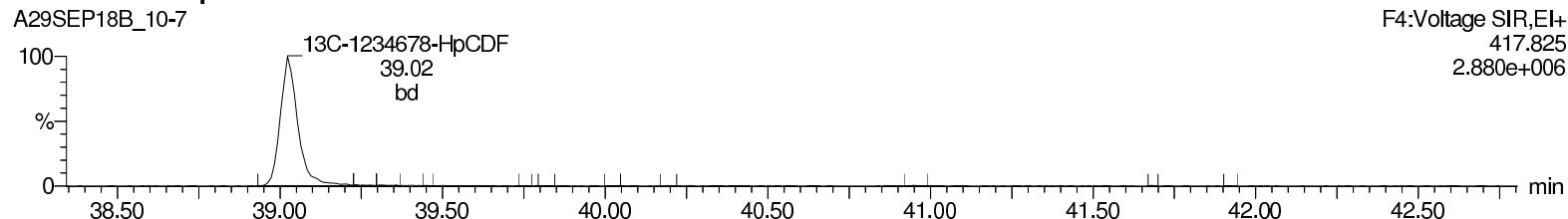
### Total-heptafurans



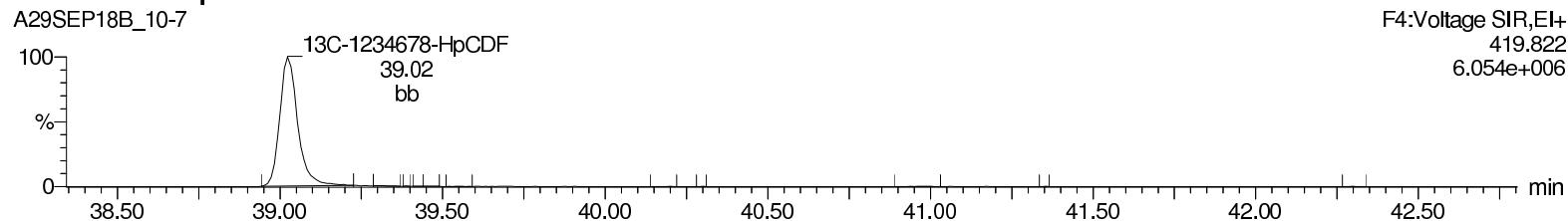
### Total-heptafurans



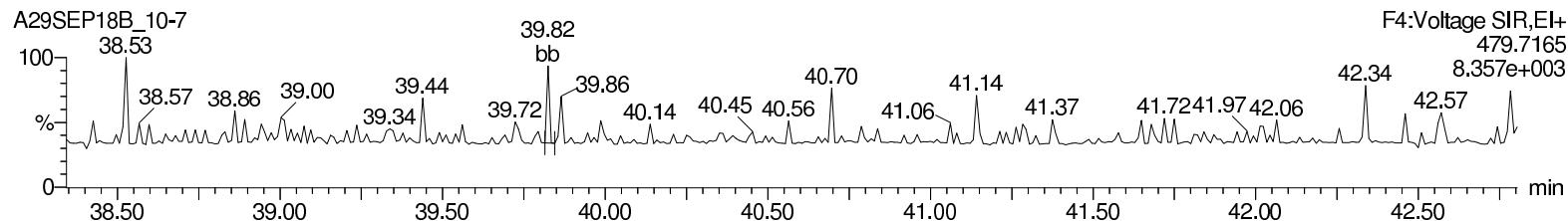
### 13C-1234678-HpCDF



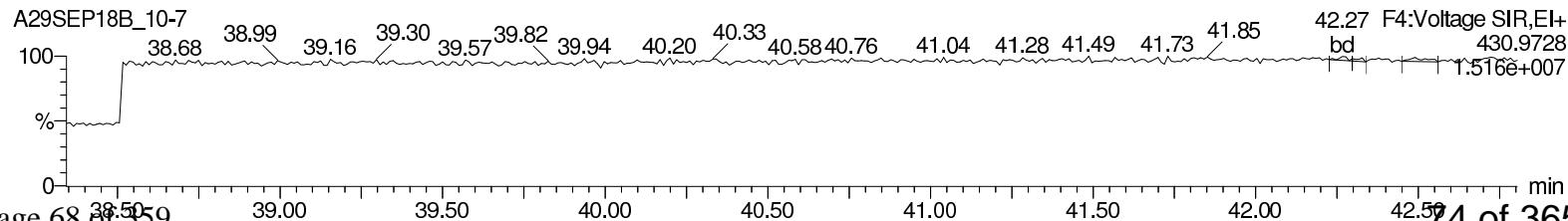
### 13C-1234678-HpCDF



### NoDPE



### Lock Mass F4



# Quantify Sample Report

MassLynx 4.1

## Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

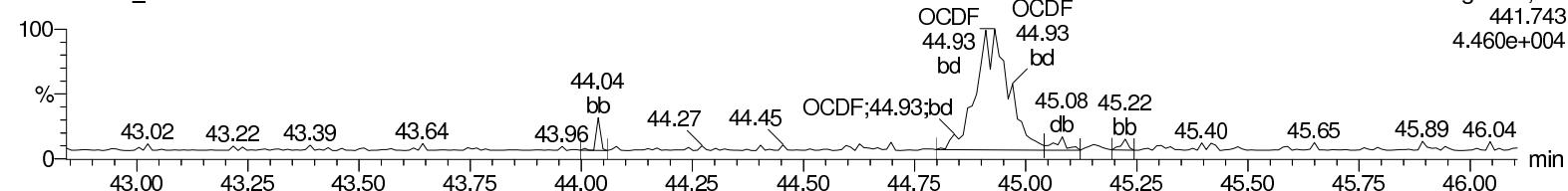
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

Name: A29SEP18B\_10-7, Date: 03-Oct-2018, Time: 10:16:09, ID: 13953002-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

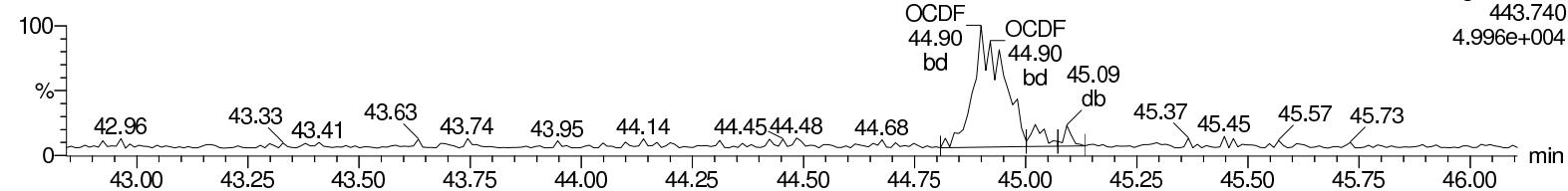
OCDF

A29SEP18B 10-7



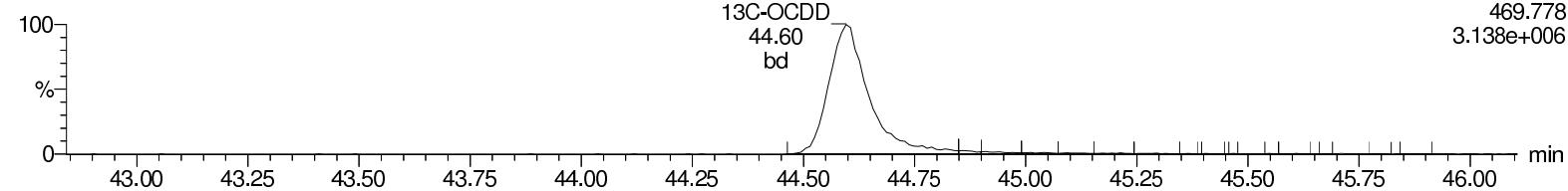
OCDF

A29SEP18B\_10-7



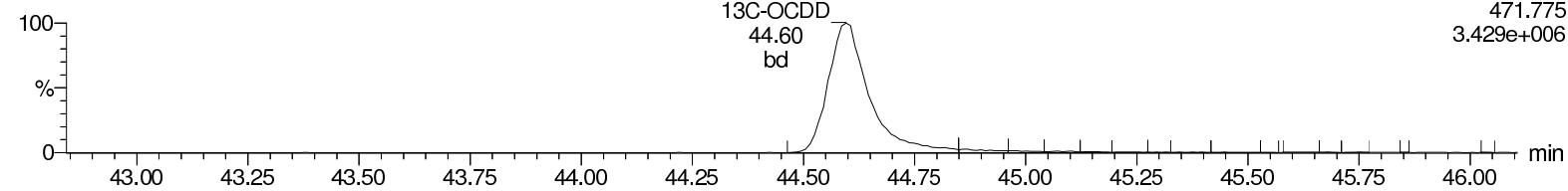
13C-OCDD

A29SEP18B\_10-7



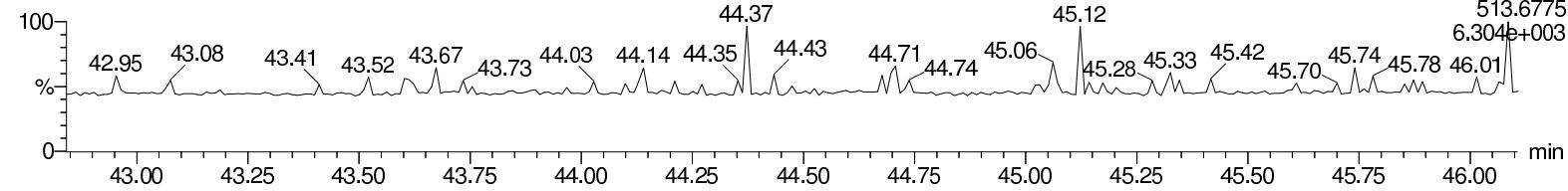
13C-OCDD

A29SEP18B\_10-7



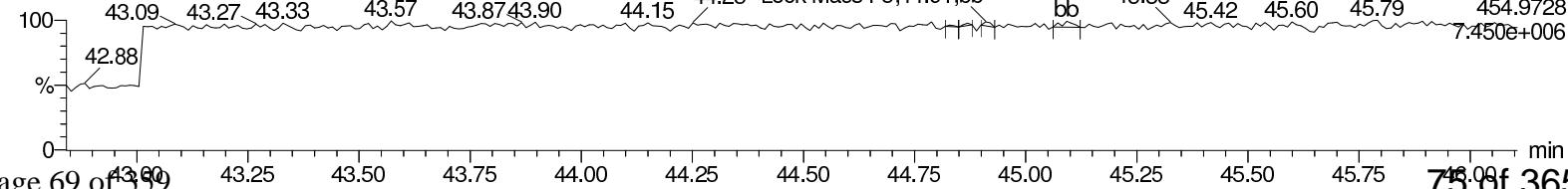
DeDPE

A29SEP18B\_10-7



Lock Mass F5

A29SEP18B\_10-7



**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

SDG Number: 303137  
 Lab Sample ID: 13953002  
 Client Sample: 8290 Soil  
 Client ID: B120-02-R1  
 Batch ID: 38747  
 Run Date: 10/04/2018 02:26  
 Data File: A03OCT18A\_2-23  
 Prep Batch: 38744  
 Prep Date: 01-OCT-18

Client: CURL001  
 Date Collected: 09/11/2018 09:00  
 Date Received: 09/27/2018 11:17  
 Method: SW846 8290A  
 Analyst: MJC  
 Prep Method: SW846 3540C  
 Prep Aliquot: 4.95 g

Project: CURL00312  
 Matrix: SOIL  
 Prep Basis: As Received  
 Instrument: HRP750  
 Dilution: 1

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
51207-31-9	2,3,7,8-TCDF	K		5.45	pg/g	2.31	2.02

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits

**Comments:**

- J Value is estimated
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for, but not detected above the specified detection limit.

Dataset: C:\MassLynx\Default.pro\Sample Results\CF-A03OCT18A\_2.qld  
 Last Altered: Thursday, October 04, 2018 09:50:55 Eastern Standard Time  
 Printed: Thursday, October 04, 2018 09:52:07 Eastern Standard Time

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**Name: A03OCT18A\_2-23, Date: 04-Oct-2018, Time: 02:26:17, ID: 13953002-2, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_3, User: MJC**

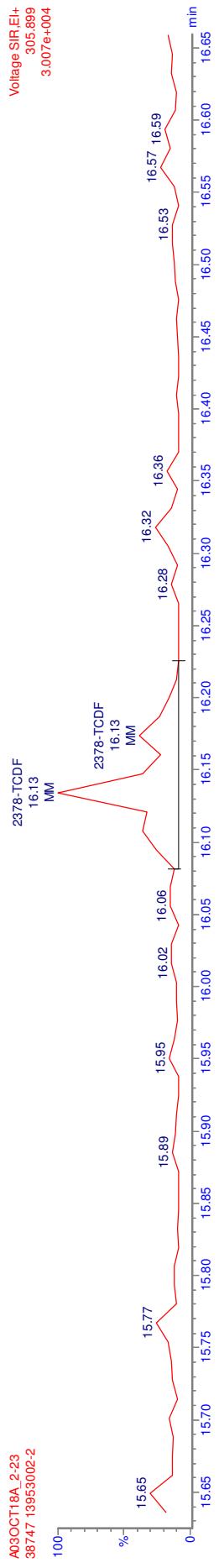
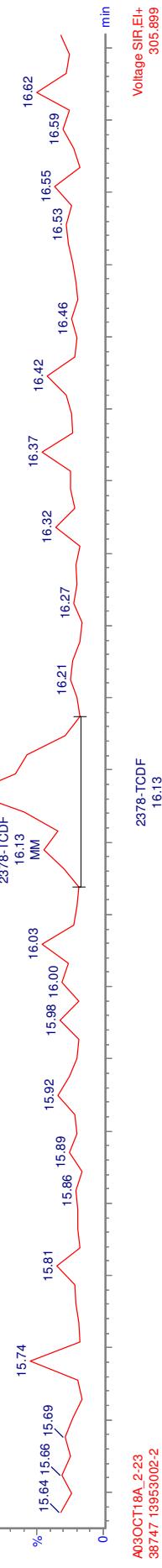
#	Name	Ion1 Area	Ion2 Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDF	6.25e2	9.99e2	1.62e3	16.13	1.001	0.63	YES	1.350	0.572	1.38e4	2408	5.8	2.74e4	2338	11.7	MM	MM
2	13C-2378-TCDF	5.78e4	7.95e4	1.37e5	16.12	1.064	0.73	NO	89.212	0.793	9.97e5	4377	227.7	1.37e6	3396	402.0	bb	bb
3	13C-1234-TCDD	5.05e4	6.36e4	1.14e5	15.15	0.000	0.80	NO	100.000	0.736	9.67e5	2684	360.1	1.25e6	2669	467.2	bd	bb

MANUAL INTEGRATION  
METHOD DXCF

A03OCT18A\_223  
38747 13953002-2

HRP750\_3

Voltage SIR\_EI+  
303.9016  
1.671e-004

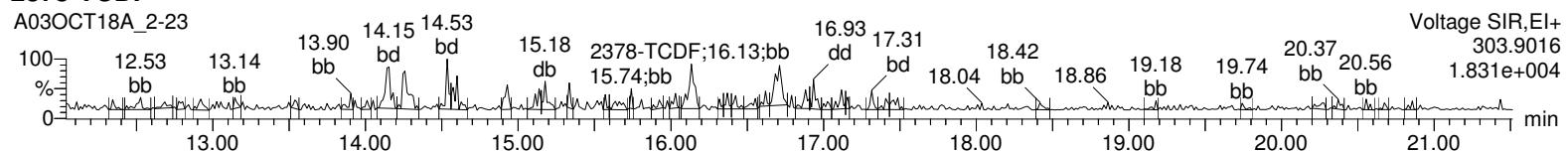
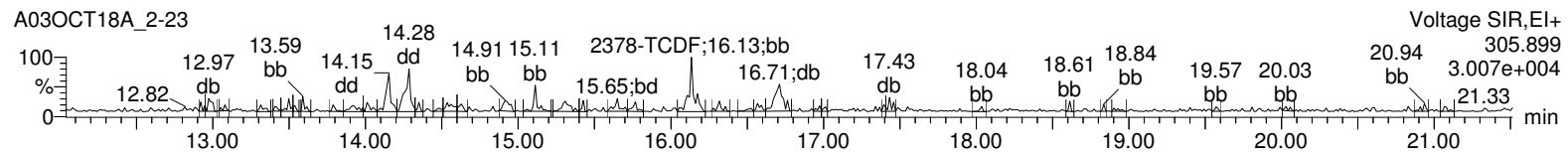
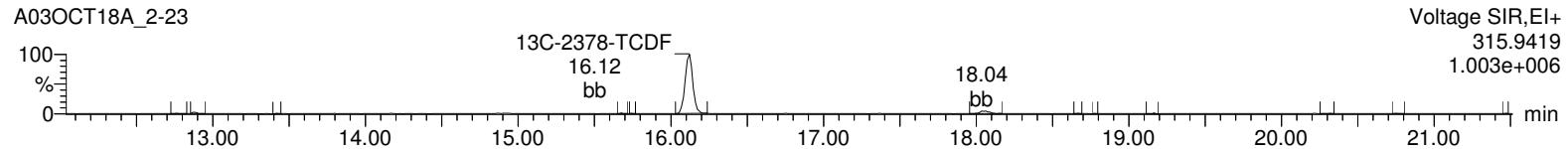
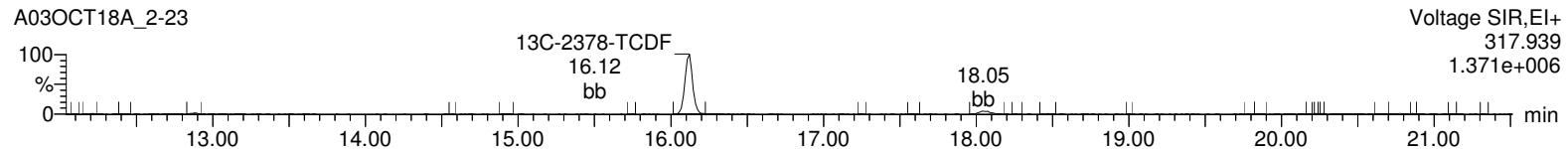
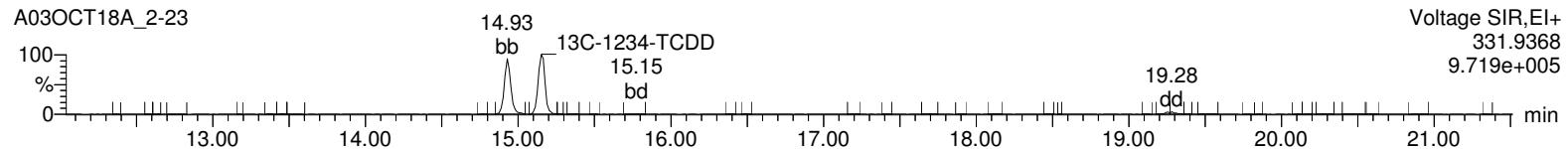
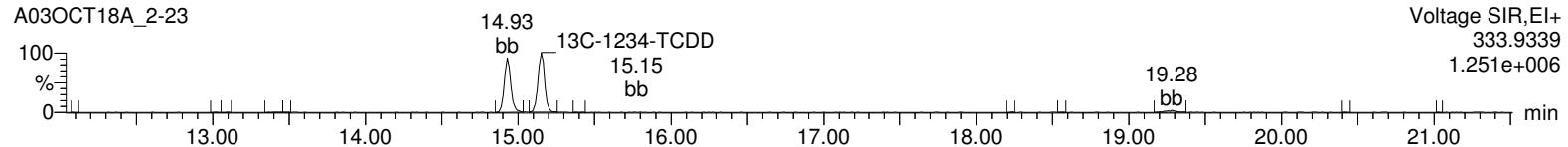
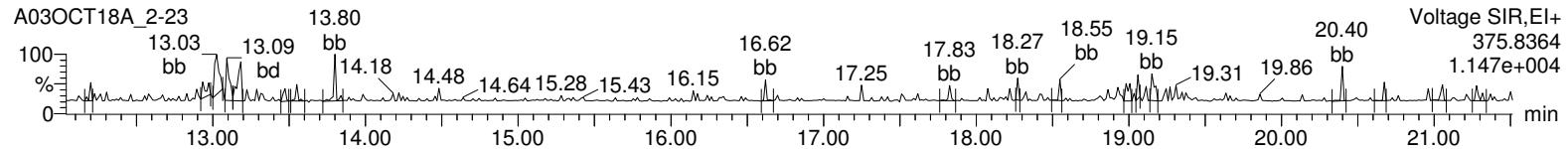
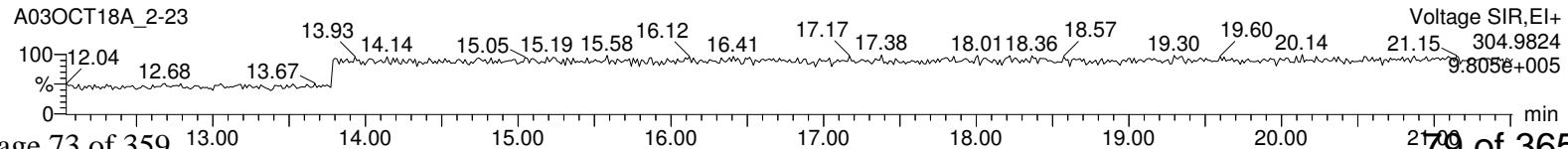


Dataset: Untitled

Last Altered: Thursday, October 04, 2018 09:39:04 Eastern Standard Time

Printed: Thursday, October 04, 2018 09:39:47 Eastern Standard Time

Name: A03OCT18A\_2-23, Date: 04-Oct-2018, Time: 02:26:17, ID: 13953002-2, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_3, User: MJC

**2378-TCDF****2378-TCDF****13C-2378-TCDF****13C-2378-TCDF****13C-1234-TCDD****13C-1234-TCDD****HxDPE****Lock Mass F1**

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 13953003  
**Client Sample:** 8290 Soil  
**Client ID:** B120-03  
**Batch ID:** 38747  
**Run Date:** 10/03/2018 11:04  
**Data File:** A29SEP18B\_10-8  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001  
**Date Collected:** 09/11/2018 09:30  
**Date Received:** 09/27/2018 11:17  
**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 4.99 g

**Project:** CURL00312  
**Matrix:** SOIL  
**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.221		pg/g	0.221	2.00
40321-76-4	1,2,3,7,8-PeCDD	U	0.366		pg/g	0.366	10.0
39227-28-6	1,2,3,4,7,8-HxCDD	U	0.525		pg/g	0.525	10.0
57653-85-7	1,2,3,6,7,8-HxCDD	U	0.445		pg/g	0.445	10.0
19408-74-3	1,2,3,7,8,9-HxCDD	U	0.501		pg/g	0.501	10.0
35822-46-9	1,2,3,4,6,7,8-HpCDD	J	6.19		pg/g	0.974	10.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		26.5		pg/g	3.08	20.0
51207-31-9	2,3,7,8-TCDF	U	0.334		pg/g	0.334	2.00
57117-41-6	1,2,3,7,8-PeCDF	U	0.264		pg/g	0.264	10.0
57117-31-4	2,3,4,7,8-PeCDF	U	0.235		pg/g	0.235	10.0
70648-26-9	1,2,3,4,7,8-HxCDF	U	0.254		pg/g	0.254	10.0
57117-44-9	1,2,3,6,7,8-HxCDF	U	0.22		pg/g	0.220	10.0
60851-34-5	2,3,4,6,7,8-HxCDF	U	0.246		pg/g	0.246	10.0
72918-21-9	1,2,3,7,8,9-HxCDF	U	0.313		pg/g	0.313	10.0
67562-39-4	1,2,3,4,6,7,8-HpCDF	J	1.08		pg/g	0.375	10.0
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	0.505		pg/g	0.505	10.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	0.95		pg/g	0.950	20.0
41903-57-5	Total TCDDs	U	0.221		pg/g	0.221	2.00
36088-22-9	Total PeCDDs	U	0.366	0.461	pg/g	0.366	10.0
34465-46-8	Total HxCDDs	J	1.39	3.20	pg/g	0.445	10.0
37871-00-4	Total HpCDDs	J	13.0		pg/g	0.974	10.0
30402-14-3	Total TCDFs	J	0.389	1.31	pg/g	0.334	2.00
30402-15-4	Total PeCDFs	J	0.557	1.52	pg/g	0.114	10.0
55684-94-1	Total HxCDFs	J	1.15		pg/g	0.220	10.0
38998-75-3	Total HpCDFs	J	1.77		pg/g	0.375	10.0
3333-30-0	TEQ WHO2005 ND=0		0.0806	0.0806	pg/g		
3333-30-1	TEQ WHO2005 ND=0.5		0.558	0.558	pg/g		

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		360	401	pg/g	89.8	(40%-135%)
13C-1,2,3,7,8-PeCDD		357	401	pg/g	89.0	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		296	401	pg/g	73.9	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		338	401	pg/g	84.4	(40%-135%)
13C-OCDD		592	802	pg/g	73.9	(40%-135%)
13C-2,3,7,8-TCDF		297	401	pg/g	74.1	(40%-135%)
13C-1,2,3,7,8-PeCDF		334	401	pg/g	83.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		267	401	pg/g	66.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		294	401	pg/g	73.3	(40%-135%)

**Comments:****J** Value is estimated**K** Estimated Maximum Possible Concentration**U** Analyte was analyzed for, but not detected above the specified detection limit.

## Quantify Sample Summary Report

### MassLynx 4.1

Method 8290 Quantification Report  
 Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.d|d  
 Last Altered: Tuesday, October 09, 2018 11:43:03 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:43:26 Eastern Standard Time

**Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**  
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDD						NO	0.0551		2448				1214				
2	12378-PeCDD						NO	0.0913		2225				3195				
3	123478-HxCDD	1.32e2	7.54e1	2.08e2	36.88	0.998	1.75	YES	0.039	0.131	4.37e3	2193	2.0	2.86e3	3131	0.9	bb	
4	123678-HxCDD	2.72e2	3.03e2	5.75e2	36.97	1.001	0.90	YES	0.091	0.111	7.69e3	2193	3.5	7.92e3	3131	2.5	MM	
5	123789-HxCDD	1.43e2	1.50e2	2.93e2	37.22	1.007	0.95	YES	0.052	0.125	4.75e3	2193	2.2	4.05e3	3131	1.3	db	
6	1234678-HxCDD	3.37e3	3.64e3	7.01e3	40.29	1.000	0.93	NO	1.544	0.243	4.11e4	3158	13.0	5.80e4	2570	22.6	MM	
7	OCDD	1.06e4	1.14e4	2.20e4	44.62	1.000	0.94	NO	6.600	0.769	1.18e5	6909	17.1	1.29e5	2393	54.0	bd	
8	2378-TCDF	2.64e2	4.88e2	7.52e2	30.81	1.000	0.54	YES	0.073	0.0833	6.78e3	1793	3.8	1.19e4	3146	3.8	dd	
9	12378-PeCDF						NO	0.0658		2958				2466				
10	23478-PeCDF	1.87e2	9.70e1	2.84e2	34.08	1.019	1.93	YES	0.027	0.0587	9.99e3	2958	3.4	4.32e3	2466	1.8	db	
11	123478-HxCDF	1.37e2	1.60e2	2.97e2	36.14	0.997	0.86	YES	0.041	0.0634	3.13e3	2005	1.6	4.45e3	1616	2.8	bd	
12	123678-HxCDF	1.73e2	9.76e1	2.71e2	36.27	1.001	1.77	YES	0.033	0.0550	3.98e3	2005	2.0	4.08e3	1616	2.5	db	
13	234678-HxCDF						NO	0.0615		2005				1616				
14	123789-HxCDF						NO	0.0780		2005				1616				
15	1234678-HpCDF	9.59e2	8.89e2	1.85e3	39.02	1.000	1.08	NO	0.270	0.0935	1.39e4	1789	7.8	1.35e4	2187	6.2	bb	
16	1234789-HpCDF						NO	0.126		1789				2187				
17	OCDF	4.37e2	3.41e2	7.78e2	44.89	1.007	1.28	YES	0.193	0.237	9.68e3	1486	6.5	5.17e3	1981	2.6	MM	
18	13C-2378-TCDD	4.10e5	5.20e5	9.30e5	31.43	1.015	0.79	NO	89.754	0.156	7.58e6	5770	1313.3	9.71e6	4383	2215.5	bd	
19	13C-12378-PeCDD	4.10e5	2.63e5	6.73e5	34.25	1.107	1.56	NO	89.038	0.249	9.25e6	6526	1417.7	5.92e6	5292	1118.7	bd	
20	13C-123678-HxCDD	3.65e5	2.83e5	6.48e5	36.95	0.993	1.29	NO	73.939	0.220	6.98e6	4754	1468.0	5.32e6	7420	717.2	bd	
21	13C-1234678-HpCDD	2.43e5	2.33e5	4.76e5	40.29	1.083	1.04	NO	84.358	0.302	3.16e6	5453	578.8	3.08e6	5329	578.6	bd	
22	13C-OCDD	3.21e5	3.59e5	6.80e5	44.60	1.199	0.89	NO	147.702	0.450	2.91e6	7637	381.0	3.15e6	5483	573.7	bd	
23	13C-2378-TCDF	4.86e5	6.41e5	1.13e6	30.80	0.995	0.76	NO	74.143	0.210	6.95e6	12166	571.5	9.08e6	7852	1156.2	bb	
24	13C-12378-PeCDF	6.52e5	4.19e5	1.07e6	33.44	1.080	1.56	NO	83.230	0.130	1.43e7	6690	2141.8	9.17e6	3832	2392.3	bd	
25	13C-123678-HxCDF	2.64e5	5.13e5	7.77e5	36.25	0.975	0.51	NO	66.611	0.155	5.25e6	4916	1068.7	1.06e7	6488	1635.8	bd	
26	13C-1234678-HpCDF	1.74e5	3.87e5	5.61e5	39.02	1.049	0.45	NO	73.342	0.176	2.71e6	2716	997.6	6.00e6	5805	1033.0	bd	
27	13C-1234-TCDD	4.29e5	5.45e5	9.74e5	30.95	0.000	0.79	NO	100.000	0.166	6.73e6	5770	1167.0	8.66e6	4383	1975.4	bd	
28	13C-123789-HxCDD	4.25e5	3.29e5	7.54e5	37.19	0.000	1.29	NO	100.000	0.255	6.72e6	4754	1413.0	5.24e6	7420	705.5	dd	

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
 Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
 Last Altered: Tuesday, October 09, 2018 11:43:03 Eastern Standard Time  
 Printed: Tuesday, October 09, 2018 11:43:26 Eastern Standard Time

**Method:** C:\MassLynx\DEFAULT.T.PRO\WethDB\CFA\_EPA8290\_A23AUG18.mdb **23 Aug 2018 12:08:58**  
**Calibration:** C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb **20 Aug 2018 13:48:29**

**Name:** A29SEP18B\_10-8, **Date:** 03-Oct-2018, **Time:** 11:04:10, **ID:** 13953003-1, **Description:** 38747, **Job:** HMS8290\_1S, **Task:** HRP750\_2, **User:** MJC

**TD**

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-tetradioxins	2.16e2	7.95e1	2.95e2	28.20	2.71	YES	0.033	0.0551	9.13e3	2448	3.7	2.11e3	1214	1.7	bd	bd
2	Total-tetradioxins	6.85e1	5.01e1	1.19e2	27.30	1.37	YES	0.013	0.0551	3.71e3	2448	1.5	2.26e3	1214	1.9	db	bb
3	Total-tetradioxins	8.73e1	6.55e1	1.53e2	26.34	1.33	YES	0.017	0.0551	3.61e3	2448	1.5	4.07e3	1214	3.3	bb	bb
4	Total-tetradioxins	6.79e1	6.44e1	1.32e2	30.18	1.05	YES	0.015	0.0551	1.26e3	2448	0.5	3.06e3	1214	2.5	bb	bb
5	Total-tetradioxins	1.48e2	6.73e1	2.15e2	29.84	2.20	YES	0.024	0.0551	9.60e3	2448	3.9	1.30e3	1214	1.1	db	bb
6	Total-tetradioxins	1.04e2	1.06e2	2.10e2	29.62	0.98	YES	0.023	0.0551	5.25e3	2448	2.1	2.67e3	1214	2.2	bb	bb
7	Total-tetradioxins	6.36e1	5.98e1	1.23e2	29.49	1.06	YES	0.014	0.0551	3.63e3	2448	1.5	2.18e3	1214	1.8	bd	bb
8	Total-tetradioxins	5.86e1	1.26e2	1.85e2	28.67	0.46	YES	0.021	0.0551	2.32e3	2448	0.9	8.33e3	1214	6.9	bb	bb
9	Total-tetradioxins	1.24e2	1.11e2	2.36e2	28.53	1.12	YES	0.026	0.0551	5.76e3	2448	2.4	6.56e3	1214	5.4	bb	bb
10	Total-tetradioxins	6.25e1	5.07e1	1.13e2	28.26	1.23	YES	0.013	0.0551	2.55e3	2448	1.0	1.65e3	1214	1.4	db	db

**PD**

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-pentadioxins	7.14e1	7.51e1	1.46e2	33.80	0.95	YES	0.022	0.0913	3.92e3	2225	1.8	1.68e3	3195	0.5	db	bb
2	Total-pentadioxins	1.21e2	8.75e1	2.08e2	33.49	1.38	NO	0.032	0.0913	4.10e3	2225	1.8	6.24e3	3195	2.0	db	bb
3	Total-pentadioxins	2.72e2	4.85e2	7.57e2	32.92	0.56	YES	0.115	0.0913	7.18e3	2225	3.2	2.06e4	3195	6.4	bb	bb
4	Total-pentadioxins	1.17e2	8.65e1	2.04e2	33.98	1.35	NO	0.031	0.0913	4.50e3	2225	2.0	5.39e3	3195	1.7	bb	bb

**HD**

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-hexadioxins	2.83e2	1.63e2	4.46e2	36.09	1.73	YES	0.078	0.122	9.79e3	2193	4.5	7.15e3	3131	2.3	bb	bb
2	Total-hexadioxins	1.02e3	9.66e2	1.99e3	35.62	1.06	NO	0.347	0.122	3.07e4	2193	14.0	2.62e4	3131	8.4	bb	bb
3	123789-HxCDD	1.43e2	1.50e2	2.93e2	37.22	0.95	YES	0.052	0.125	4.75e3	2193	2.2	4.05e3	3131	1.3	db	MM
4	123678-HxCDD	2.72e2	3.03e2	5.75e2	36.97	0.90	YES	0.091	0.111	7.69e3	2193	3.5	7.92e3	3131	2.5	MM	bb
5	122478-HxCDD	1.32e2	7.54e1	2.08e2	36.88	1.75	YES	0.039	0.131	4.37e3	2193	2.0	2.86e3	3131	0.9	bb	bb
6	Total-hexadioxins	1.77e3	8.17e2	2.59e3	36.31	2.17	YES	0.452	0.122	3.08e4	2193	14.0	1.42e4	3131	4.5	MM	bd

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
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Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
Last Altered: Tuesday, October 09, 2018 11:43:03 Eastern Standard Time  
Printed: Tuesday, October 09, 2018 11:43:26 Eastern Standard Time

Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

## HPD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	1234678-HpCDD	3.37e3	3.64e3	7.01e3	40.29	0.93	NO	1.544	0.243	4.11e4	3158	13.0	5.80e4	2570	22.6	MM	MM
2	Total-heptadioxins	6.57e1	1.23e2	1.89e2	39.64	0.53	YES	0.042	0.243	4.71e3	3158	1.5	6.13e3	2570	2.4	bb	bb
3	Total-heptadioxins	3.96e3	3.81e3	7.77e3	39.36	1.04	NO	1.711	0.243	6.37e4	3158	20.2	4.93e4	2570	19.2	MM	MM

## TF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-tetrafurans	8.42e1	7.26e1	1.57e2	28.04	1.16	YES	0.015	0.0833	5.76e3	1793	3.2	2.25e3	3146	0.7	bb	bd
2	Total-tetrafurans	6.15e1	1.54e2	2.16e2	27.86	0.40	YES	0.021	0.0833	2.61e3	1793	1.5	6.74e3	3146	2.1	bb	db
3	Total-tetrafurans	8.33e1	2.83e2	3.66e2	27.73	0.29	YES	0.035	0.0833	2.88e3	1793	1.6	1.50e4	3146	4.8	bb	dd
4	Total-tetrafurans	4.69e2	5.35e2	1.00e3	27.47	0.88	NO	0.097	0.0833	1.18e4	1793	6.6	9.52e3	3146	3.0	bb	bb
5	Total-tetrafurans	7.27e1	8.30e1	1.56e2	26.95	0.88	NO	0.015	0.0833	1.95e3	1793	1.1	1.96e3	3146	0.6	bb	db
6	Total-tetrafurans	6.60e1	7.05e1	1.37e2	26.53	0.94	YES	0.013	0.0833	2.18e3	1793	1.2	3.77e3	3146	1.2	db	bd
7	Total-tetrafurans	1.20e2	1.49e2	2.69e2	30.98	0.80	NO	0.026	0.0833	3.59e3	1793	2.0	2.44e3	3146	0.8	bd	dd
8	2378-TCDF	2.64e2	4.88e2	7.52e2	30.81	0.54	YES	0.073	0.0833	6.78e3	1793	3.8	1.19e4	3146	3.8	bb	dd
9	Total-tetrafurans	1.40e2	1.08e2	2.48e2	30.23	1.29	YES	0.024	0.0833	4.06e3	1793	2.3	3.32e3	3146	1.1	bb	db
10	Total-tetrafurans	1.62e2	3.61e2	5.23e2	29.93	0.45	YES	0.051	0.0833	4.10e3	1793	2.3	1.30e4	3146	4.1	db	db
11	Total-tetrafurans	8.67e1	1.93e2	2.79e2	29.89	0.45	YES	0.027	0.0833	3.16e3	1793	1.8	6.16e3	3146	2.0	bd	bd
12	Total-tetrafurans	9.61e1	9.98e1	1.96e2	29.52	0.96	YES	0.019	0.0833	4.86e3	1793	2.7	2.48e3	3146	0.8	db	dd
13	Total-tetrafurans	3.33e2	6.01e2	9.34e2	29.49	0.56	YES	0.090	0.0833	6.82e3	1793	3.8	9.84e3	3146	3.1	MM	bd
14	Total-tetrafurans	1.10e2	7.16e1	1.81e2	29.25	1.54	YES	0.018	0.0833	4.00e3	1793	2.2	2.49e3	3146	0.8	bb	bd
15	Total-tetrafurans	1.98e2	1.09e2	3.07e2	28.79	1.82	YES	0.030	0.0833	3.86e3	1793	2.2	3.13e3	3146	1.0	bb	dd
16	Total-tetrafurans	2.61e2	2.03e2	4.63e2	28.67	1.28	YES	0.045	0.0833	6.75e3	1793	3.8	7.10e3	3146	2.3	MM	MM
17	Total-tetrafurans	1.82e2	2.98e2	4.80e2	28.55	0.61	YES	0.046	0.0833	5.22e3	1793	2.9	6.05e3	3146	1.9	cd	MM
18	Total-tetrafurans	8.82e1	1.88e2	2.76e2	28.17	0.47	YES	0.027	0.0833	2.91e3	1793	1.6	4.17e3	3146	1.3	bb	dd
19	Total-tetrafurans	5.48e2	8.93e2	1.44e3	31.09	0.61	YES	0.139	0.0833	1.31e4	1793	7.3	1.31e4	3146	4.2	db	db

## PF1

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
	Total-pentafurans (F1)	1.29e3	1.09e3	2.37e3	32.06	1.18	YES	0.239	0.0285	2.77e4	929	29.8	2.39e4	1558	15.3	bb	bd

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
Page 359 of 365  
Dataset: C:\MassLynx\Default\pro\Sample Results\8290-A29SEP18B\_10.qld  
Last Altered: Tuesday, October 09, 2018 11:43:03 Eastern Standard Time  
Printed: Tuesday, October 09, 2018 11:43:26 Eastern Standard Time

Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC

## PF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	23478-PeCDF	1.87e2	9.70e1	2.84e2	34.08	1.93	YES	0.027	0.0587	9.99e3	2958	3.4	4.32e3	2466	1.8	db	bd
2	Total-pentafurans	1.11e2	2.05e2	3.16e2	33.63	0.54	YES	0.032	0.0621	6.57e3	2958	2.2	7.84e3	2466	3.2	bb	db
3	Total-pentafurans	6.91e1	5.95e1	1.29e2	33.30	1.16	YES	0.013	0.0621	3.33e3	2958	1.1	2.34e3	2466	1.0	db	dd
4	Total-pentafurans	2.97e2	1.09e2	4.07e2	33.21	2.72	YES	0.041	0.0621	7.32e3	2958	2.5	3.78e3	2466	1.5	cd	bd
5	Total-pentafurans	5.68e1	5.89e1	1.16e2	33.17	0.96	YES	0.012	0.0621	2.21e3	2958	0.7	2.01e3	2466	0.8	bd	db
6	Total-pentafurans	8.81e2	4.97e2	1.38e3	32.88	1.77	NO	0.139	0.0621	1.77e4	2958	6.0	9.81e3	2466	4.0	cd	db
7	Total-pentafurans	1.74e2	2.26e2	3.99e2	32.80	0.77	YES	0.040	0.0621	4.51e3	2958	1.5	5.18e3	2466	2.1	bd	bd

## HF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	123678-HxCDF	1.73e2	9.76e1	2.71e2	36.27	1.77	YES	0.033	0.0550	3.98e3	2005	2.0	4.08e3	1616	2.5	db	bb
2	122478-HxCDF	1.37e2	1.60e2	2.97e2	36.14	0.86	YES	0.041	0.0634	3.13e3	2005	1.6	4.45e3	1616	2.8	bd	bb
3	Total-hexafurans	1.17e3	8.78e2	2.05e3	35.33	1.34	NO	0.286	0.0635	2.78e4	2005	13.9	1.98e4	1616	12.2	dd	bo

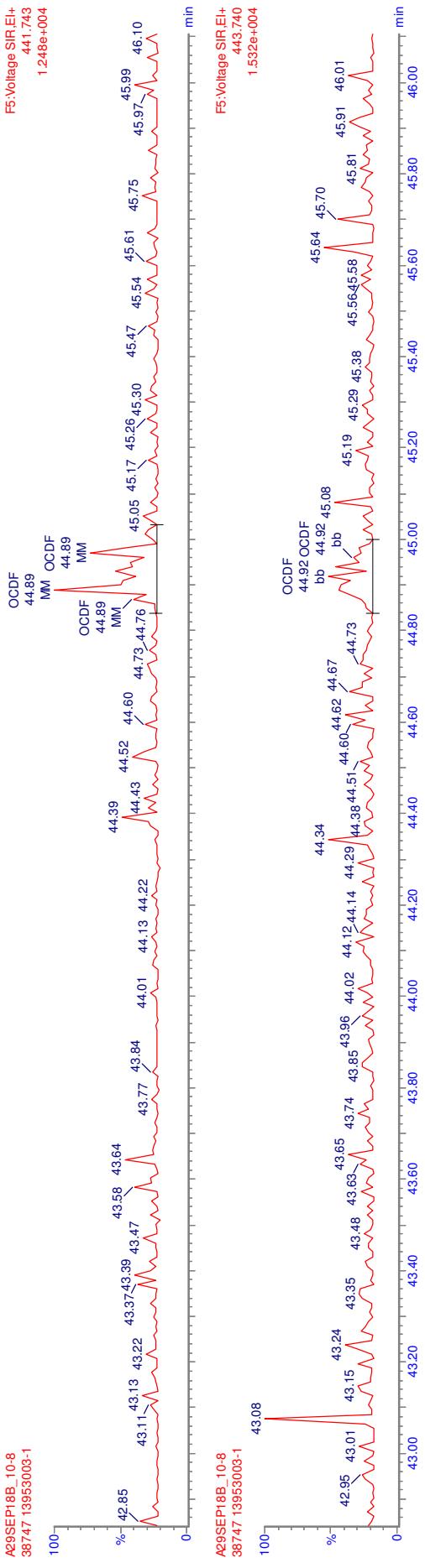
## HPF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-heptafurans	5.16e2	5.01e2	1.02e3	39.58	1.03	NO	0.171	0.107	1.74e4	1789	9.7	1.55e4	2187	7.1	MM	dd
2	1234678-HpCDF	9.59e2	8.89e2	1.85e3	39.02	1.08	NO	0.270	0.0935	1.39e4	1789	7.8	1.35e4	2187	6.2	bo	MM

MANUAL INTEGRATION  
METHOD 8290

HRP750\_2

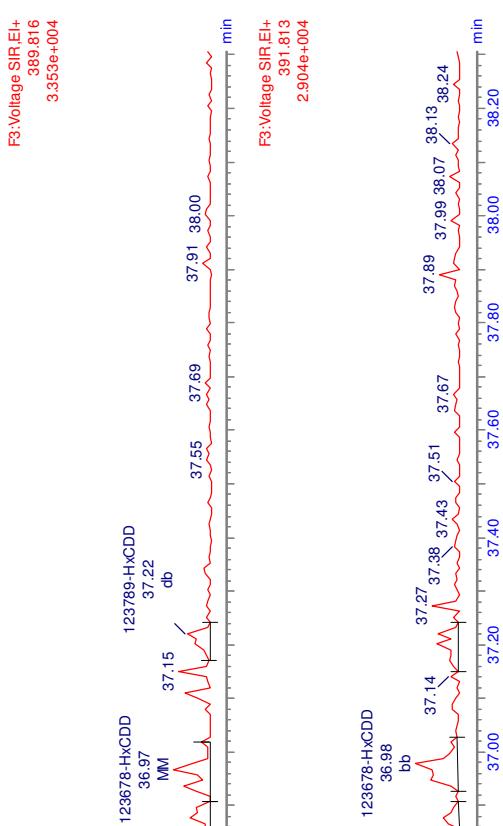
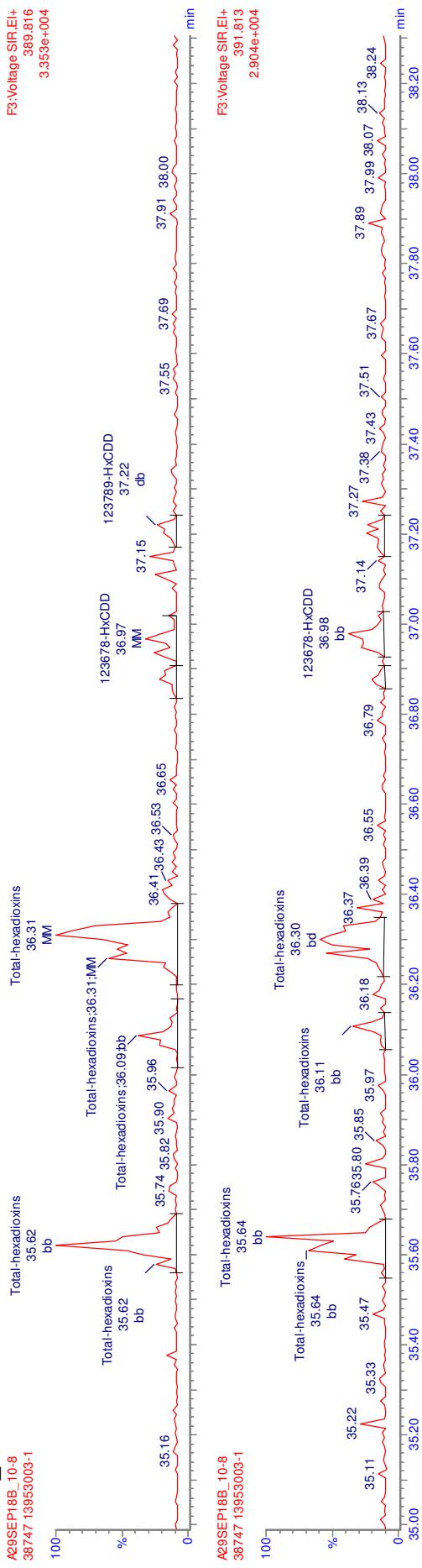
A29SEP18B\_10-8  
38747 13953003-1



MANUAL INTEGRATION  
METHOD 8290

HRP750\_2

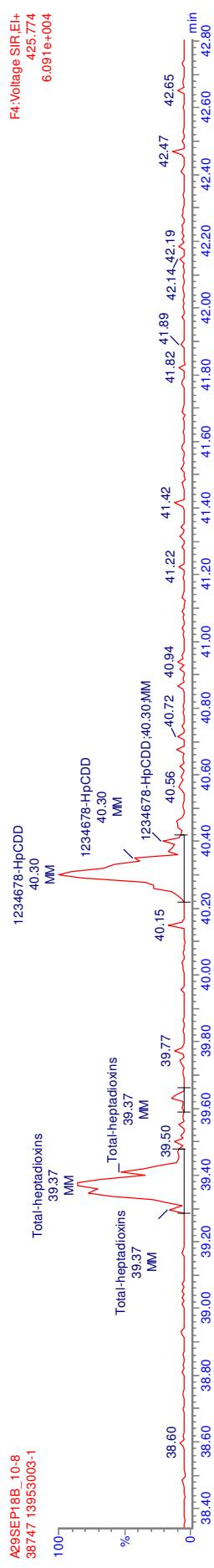
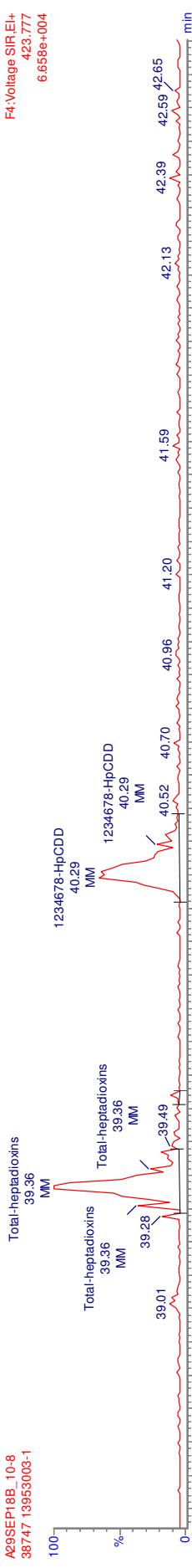
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38.47 / 13953003-1



**MANUAL INTEGRATION**  
**METHOD 8290**

**HRP750\_2**

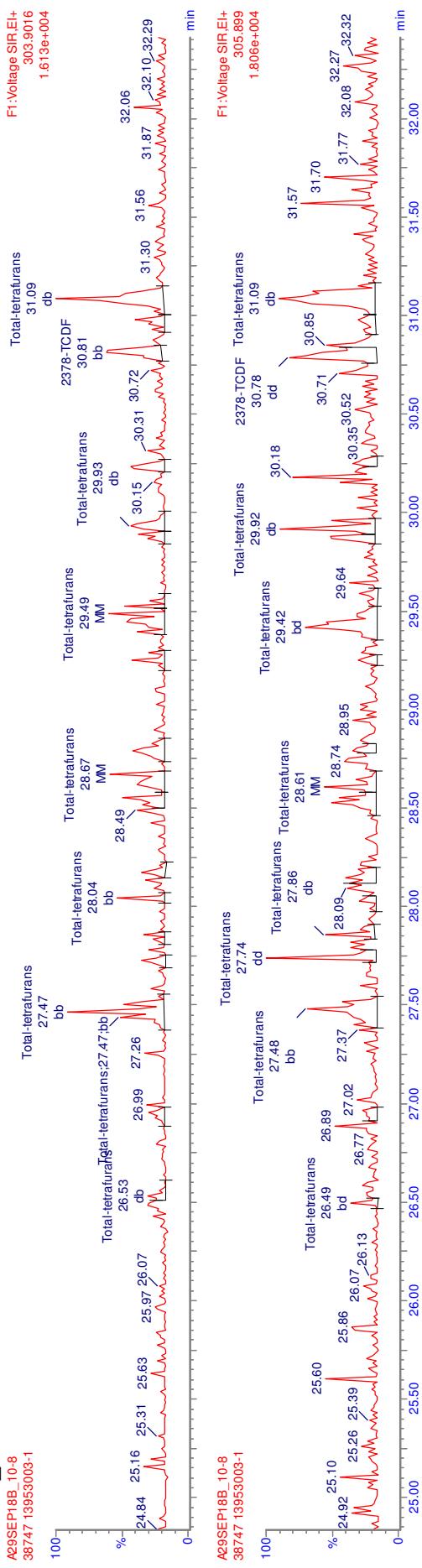
**A29SEP18B\_10-8  
38747 13953003-1**



MANUAL INTEGRATION  
METHOD 8290

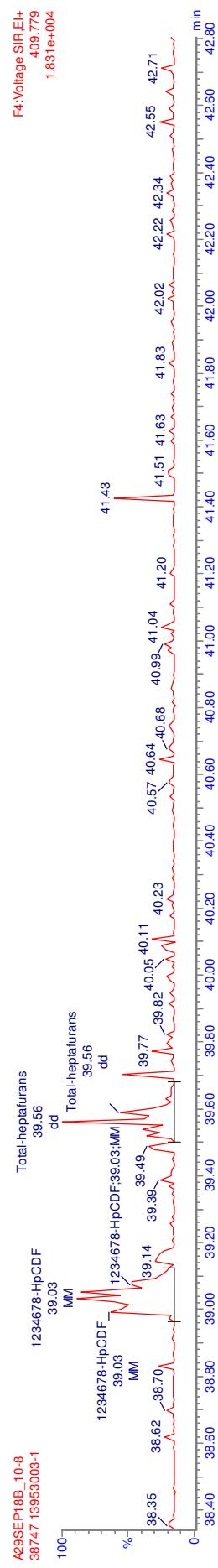
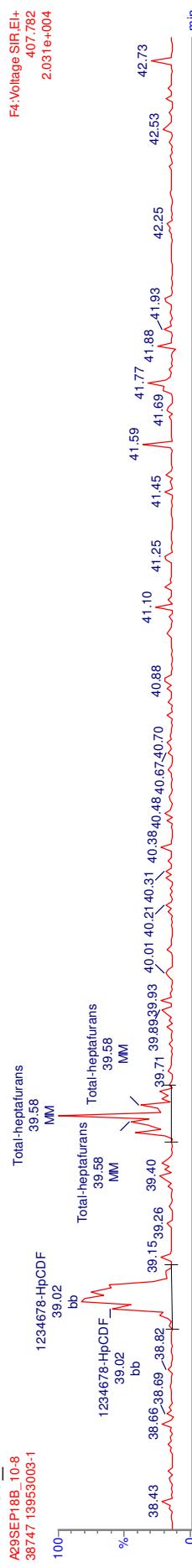
ME | HOD 8290

HRP/30\_2  
A29SEP18B\_10-8  
38747 13953003-1



MANUAL INTEGRATION  
METHOD 8290

Hep750 2



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

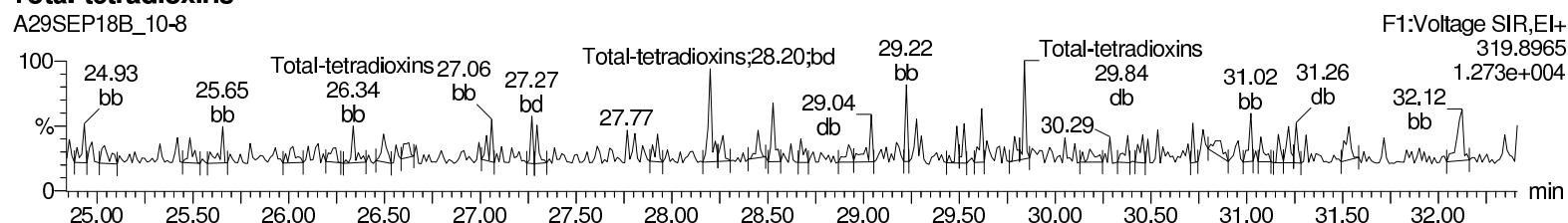
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Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

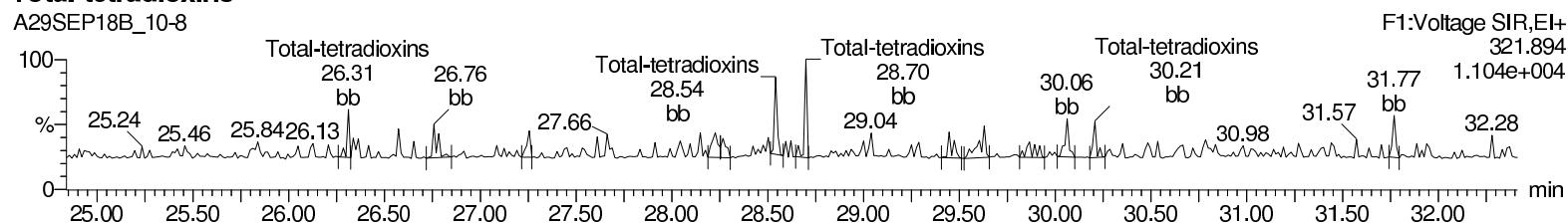
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A29SEP18B\_10-8



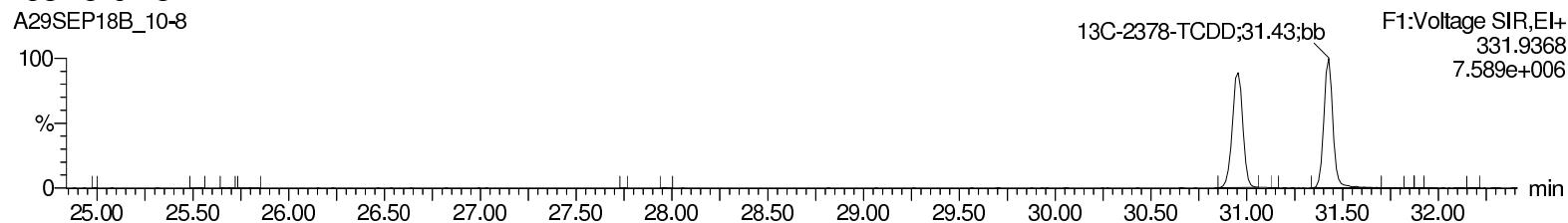
### Total-tetradioxins

A29SEP18B\_10-8



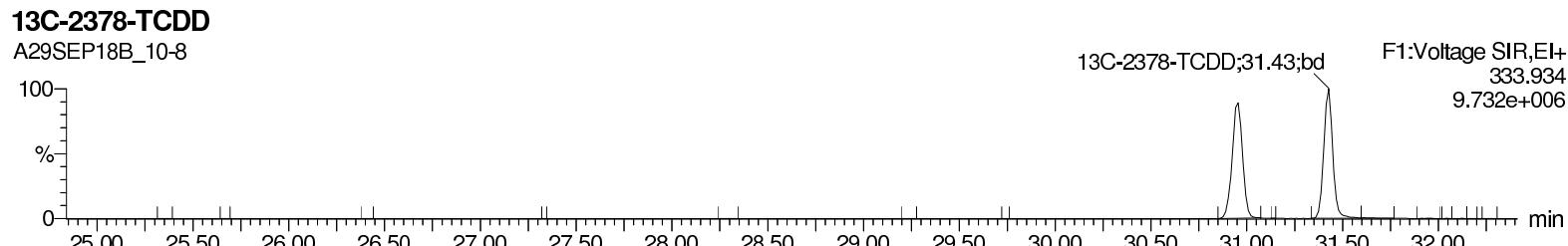
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A29SEP18B\_10-8



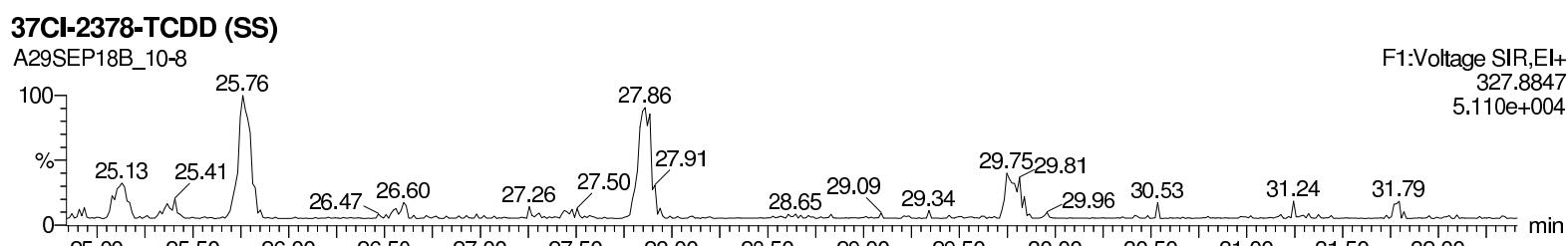
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A29SEP18B\_10-8



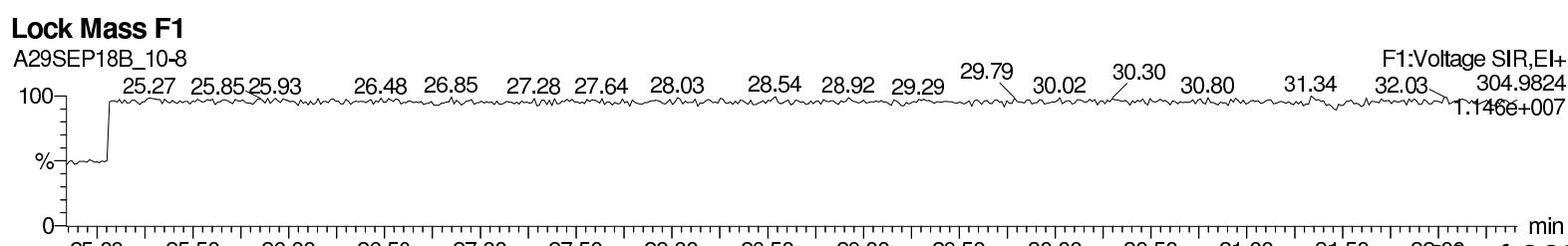
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A29SEP18B\_10-8



### Lock Mass F1

A29SEP18B\_10-8



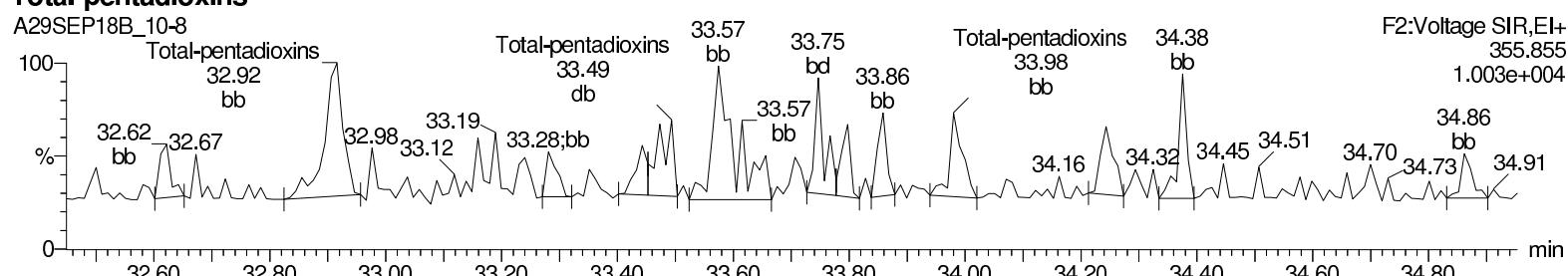
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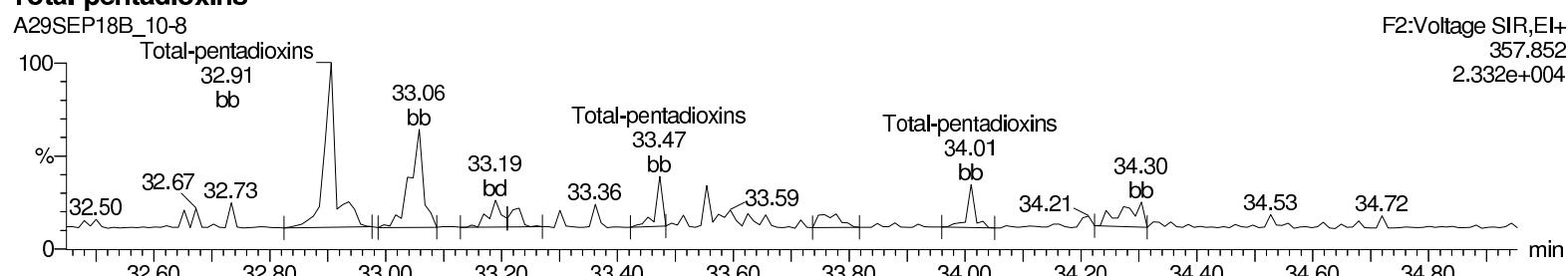
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Task: HRP750\_2, User: MJC**

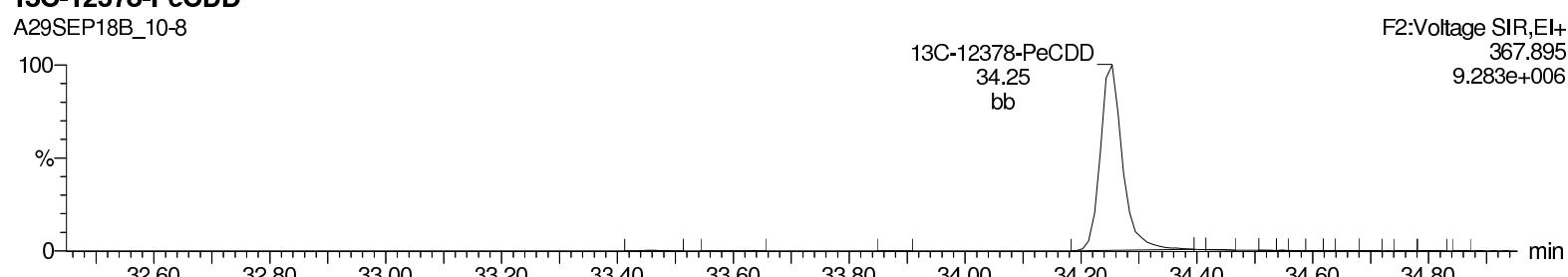
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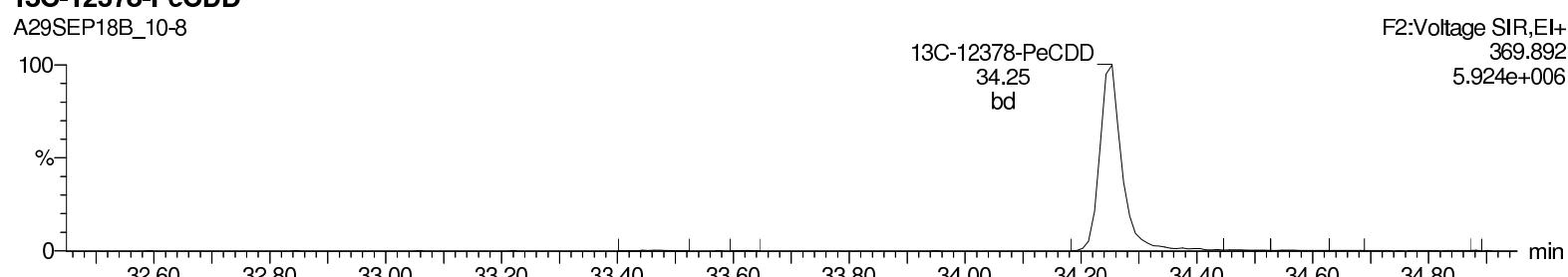
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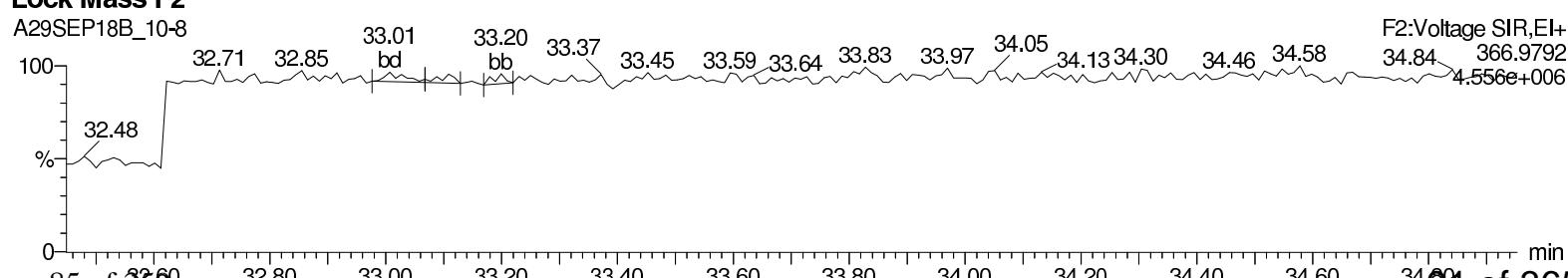
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**13C-12378-PeCDD**



**Lock Mass F2**



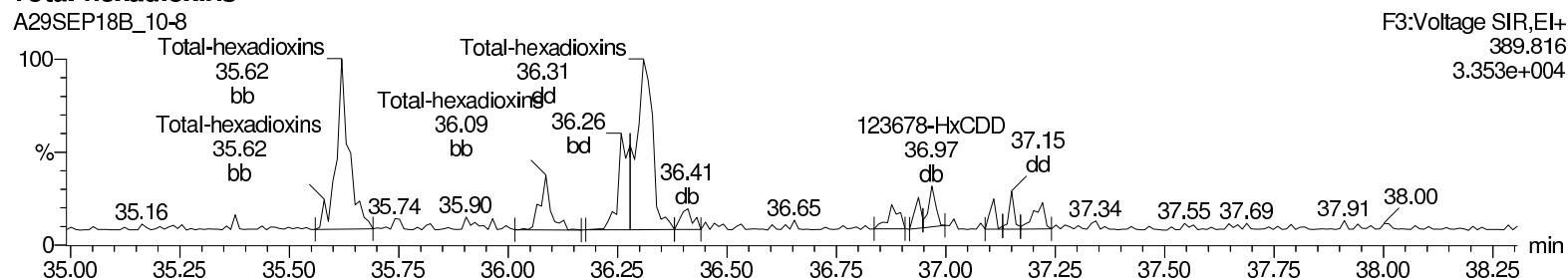
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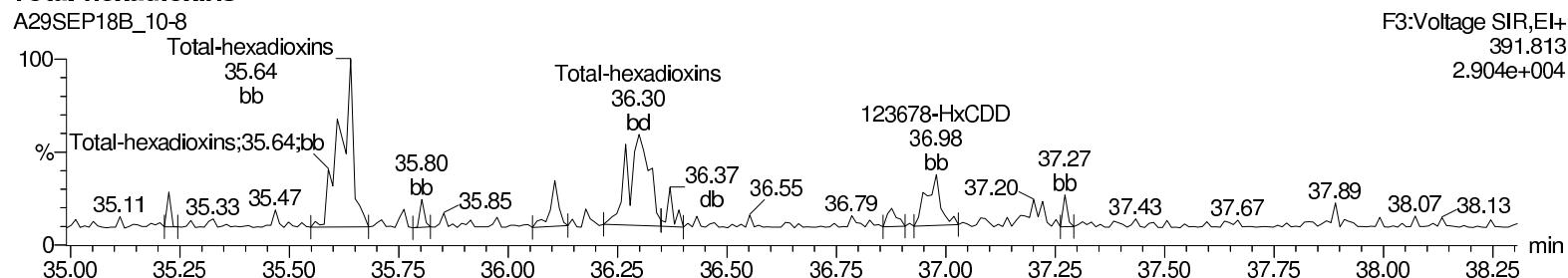
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Task: HRP750\_2, User: MJC

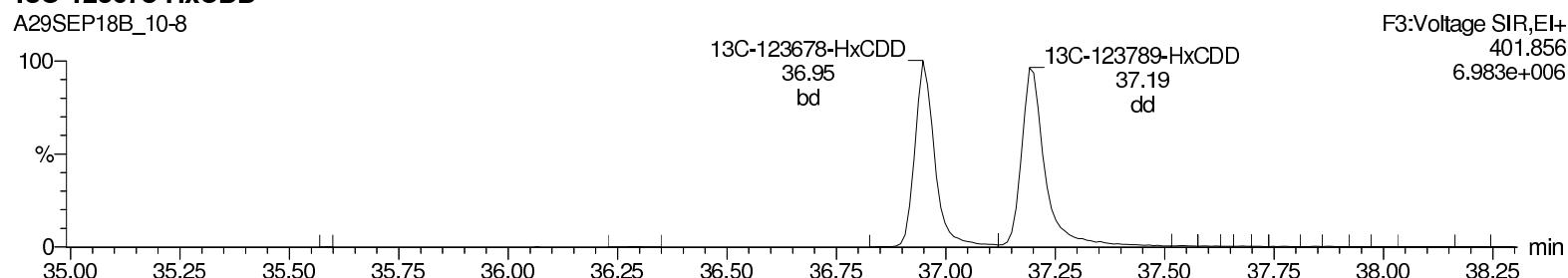
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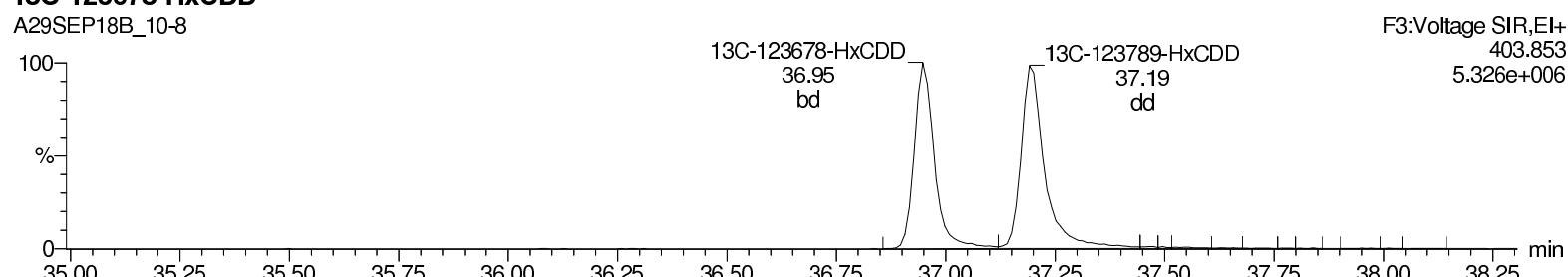
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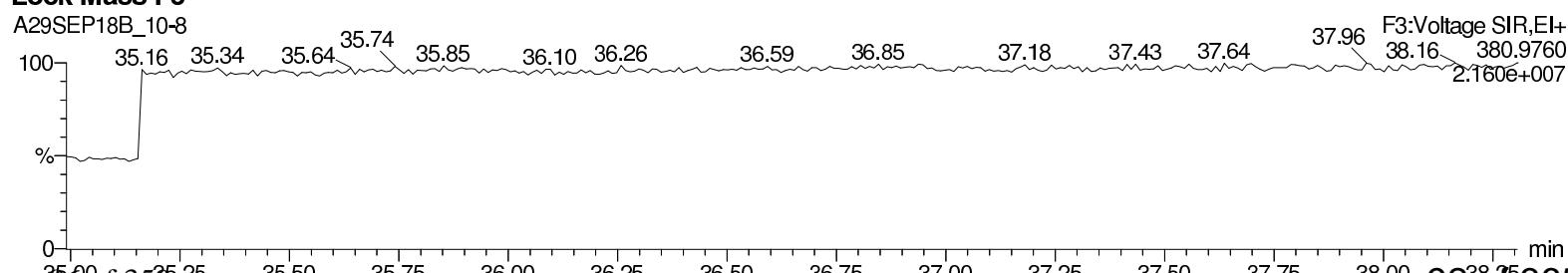
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### 13C-123678-HxCDD



### Lock Mass F3



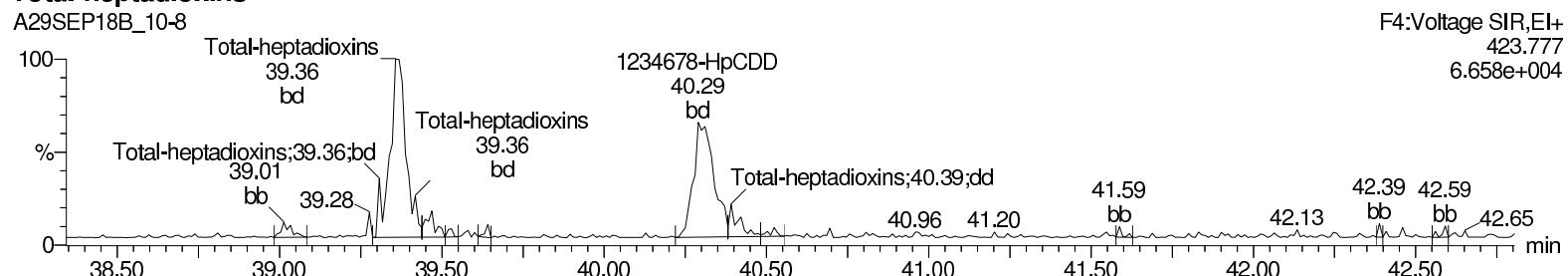
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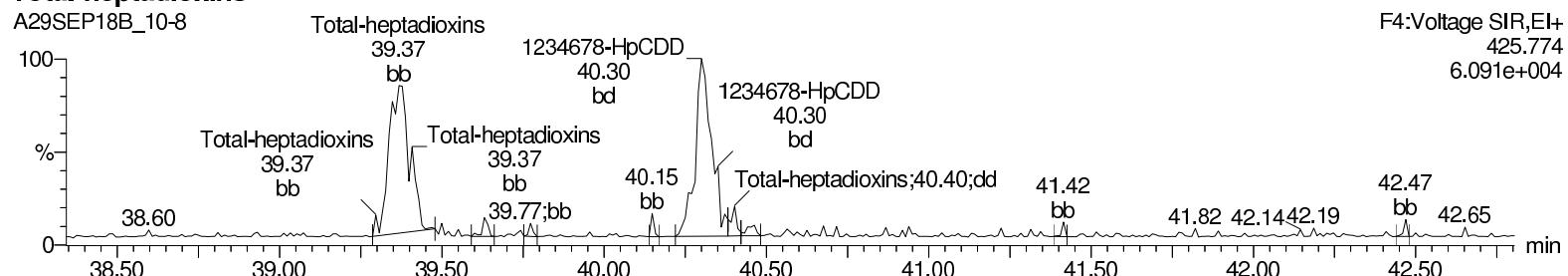
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Task: HRP750\_2, User: MJC**

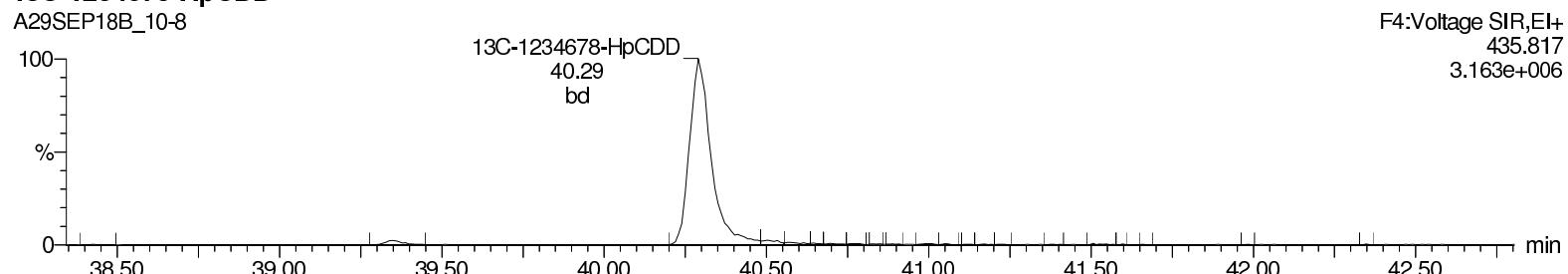
**Total-heptadioxins**



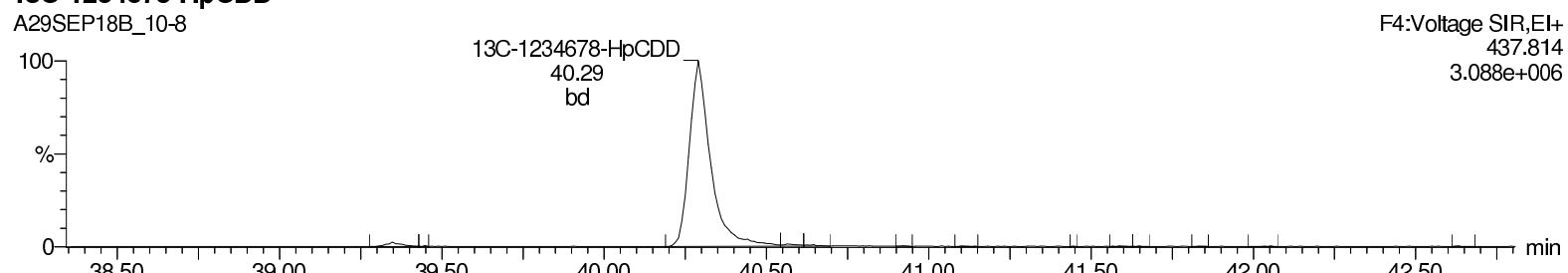
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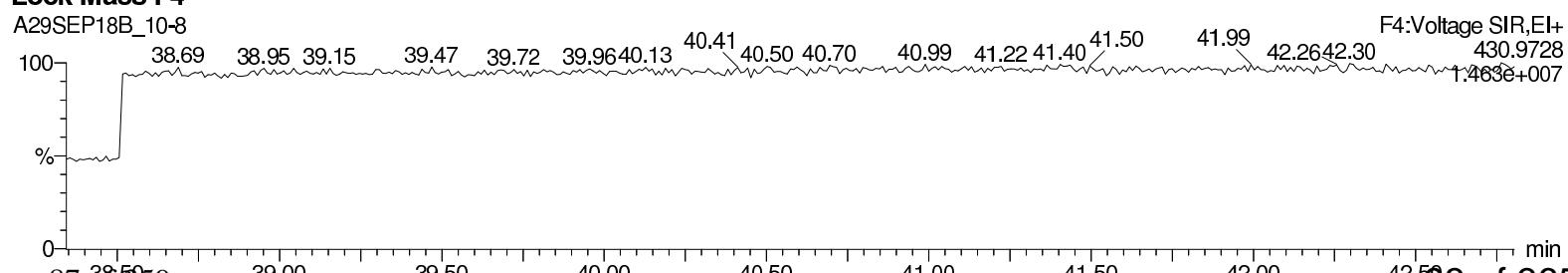
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**13C-1234678-HpCDD**



**Lock Mass F4**



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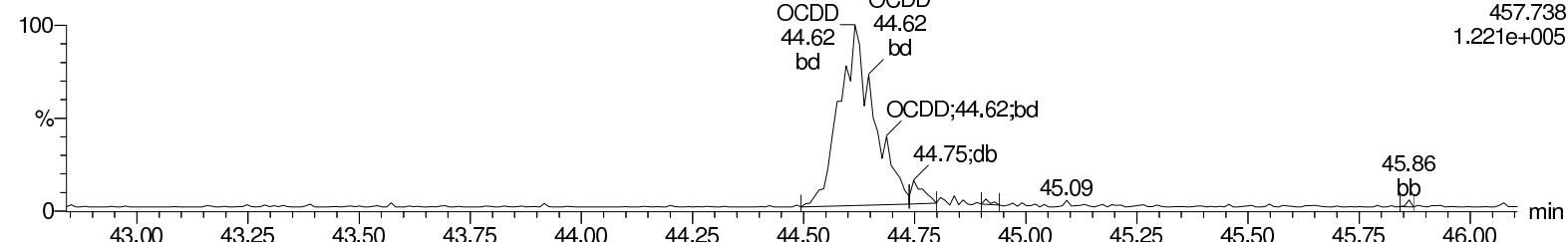
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Task: HRP750\_2, User: MJC**

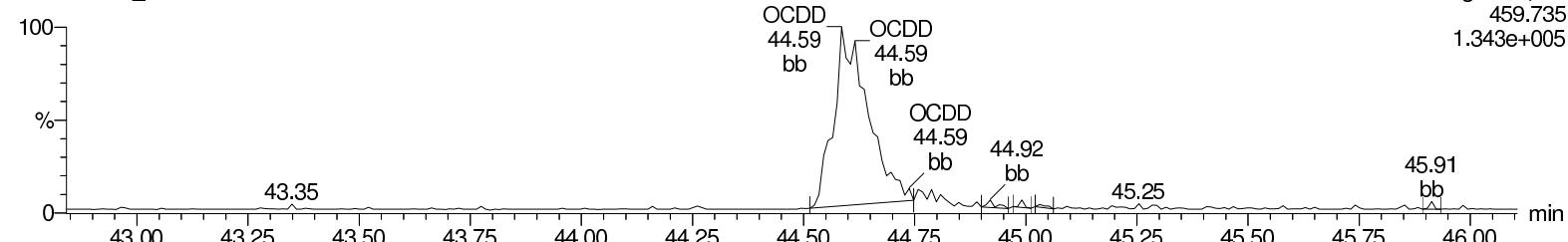
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A29SEP18B\_10-8



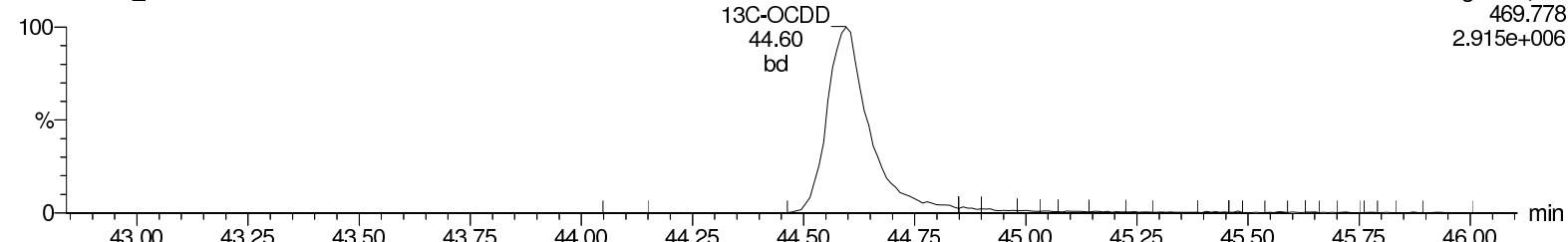
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A29SEP18B\_10-8



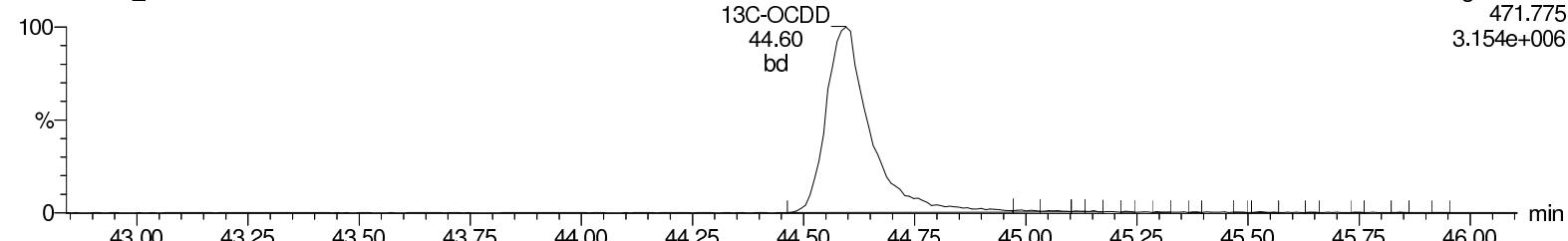
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A29SEP18B\_10-8



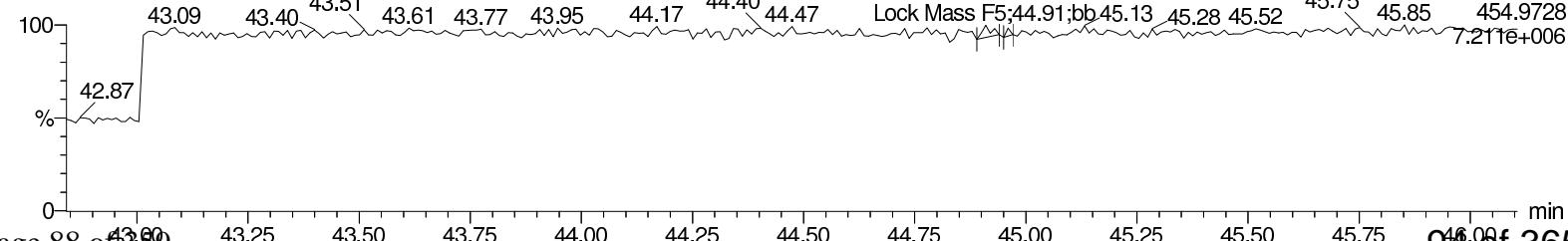
**13C-OCDD**

A29SEP18B\_10-8



**Lock Mass F5**

A29SEP18B\_10-8



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

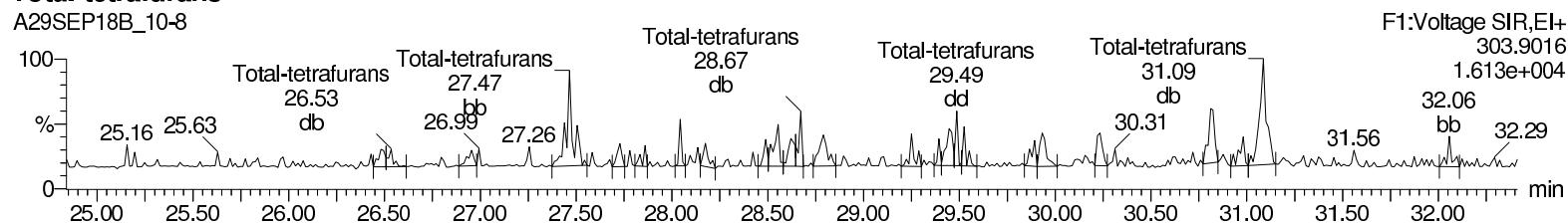
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

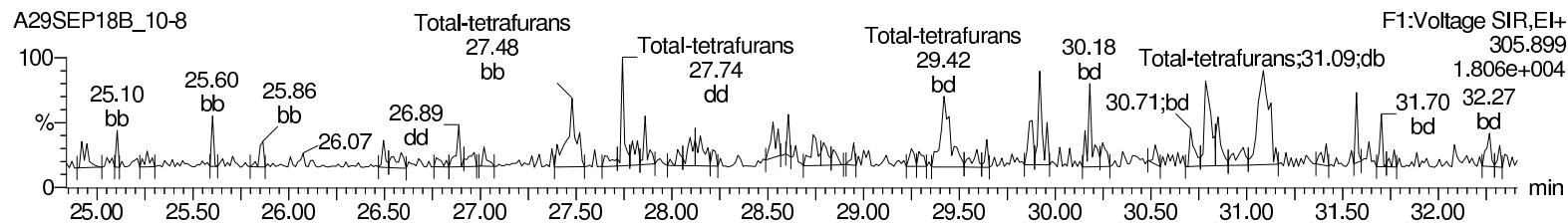
### Total-tetrafurans

A29SEP18B\_10-8



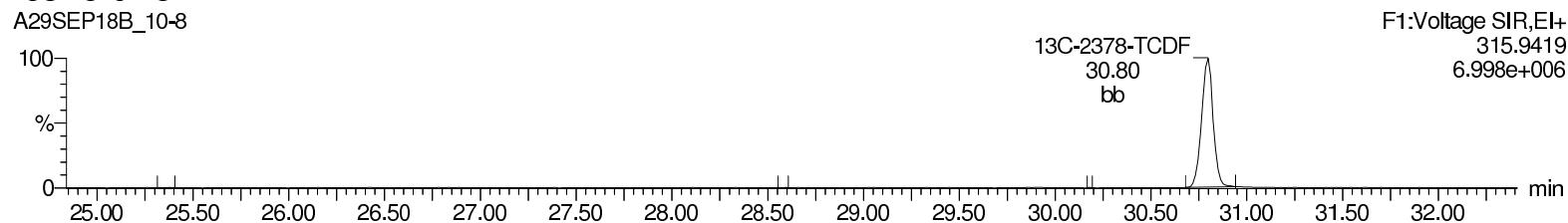
### Total-tetrafurans

A29SEP18B\_10-8



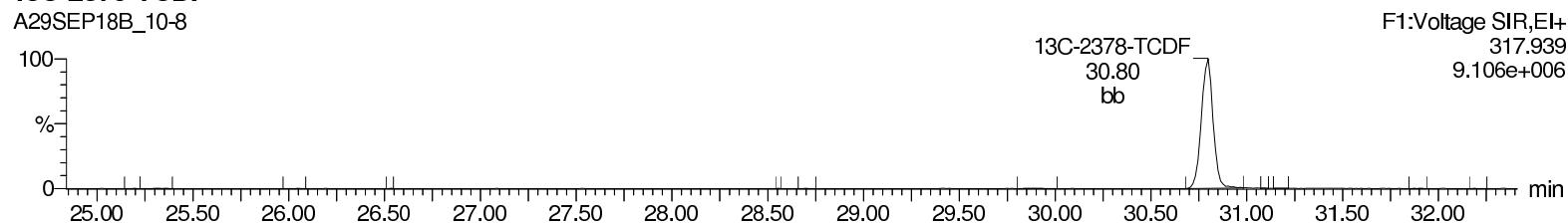
### 13C-2378-TCDF

A29SEP18B\_10-8



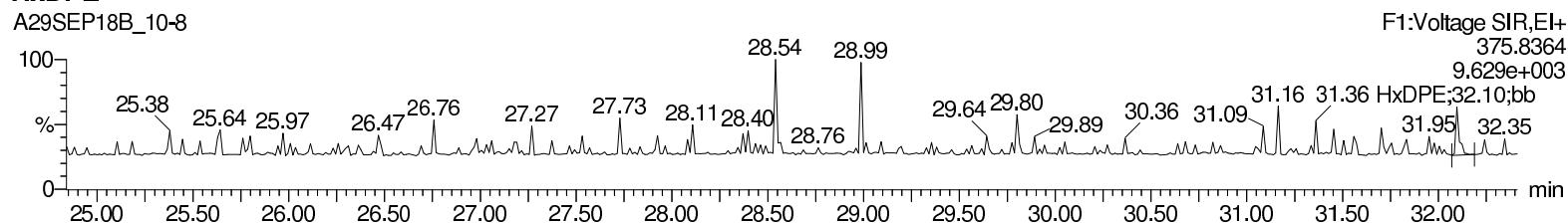
### 13C-2378-TCDF

A29SEP18B\_10-8



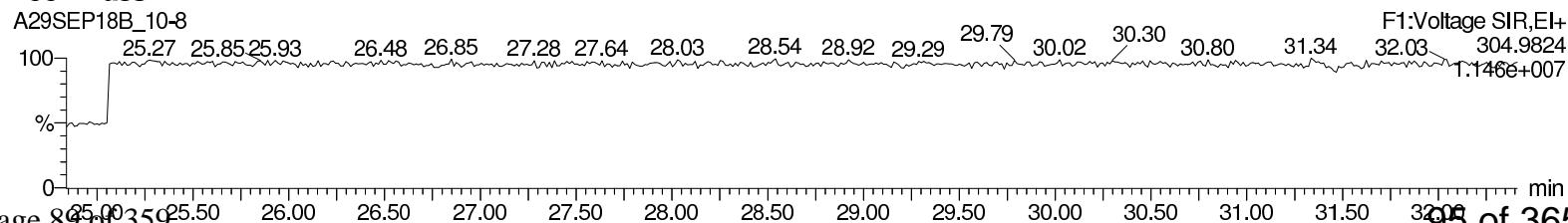
### HxDPE

A29SEP18B\_10-8



### Lock Mass F1

A29SEP18B\_10-8



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

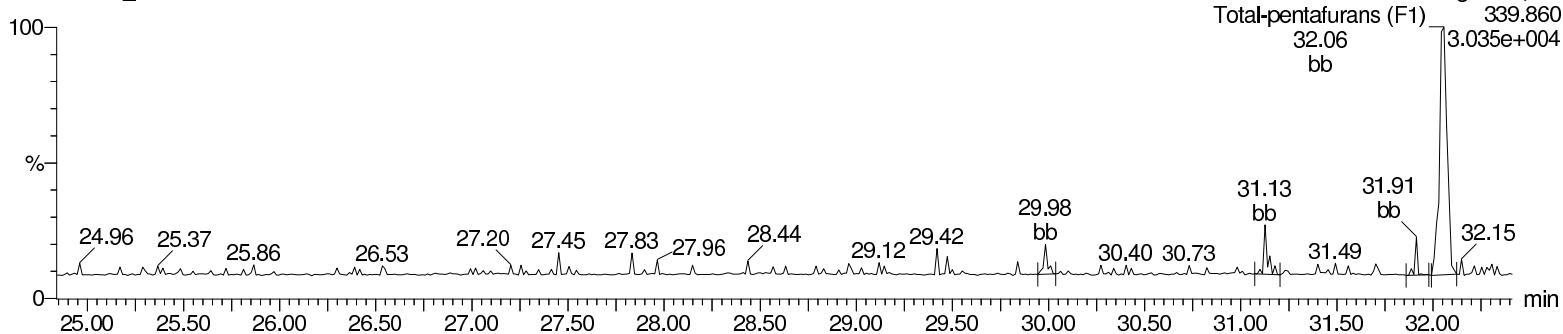
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

### Total-pentafurans (F1)

A29SEP18B\_10-8



F1:Voltage SIR,El+

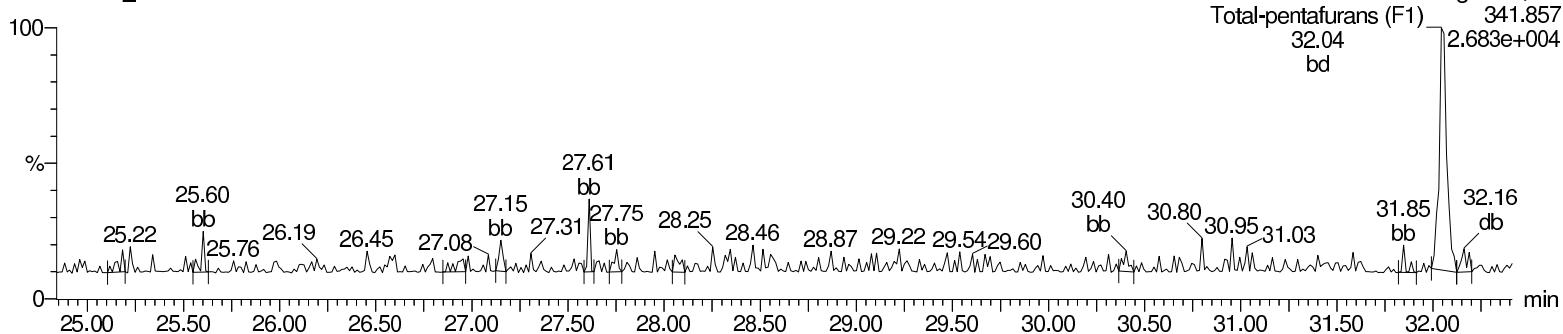
339.860

Total-pentafurans (F1)  
32.06  
bb

3.035e+004

### Total-pentafurans (F1)

A29SEP18B\_10-8



F1:Voltage SIR,El+

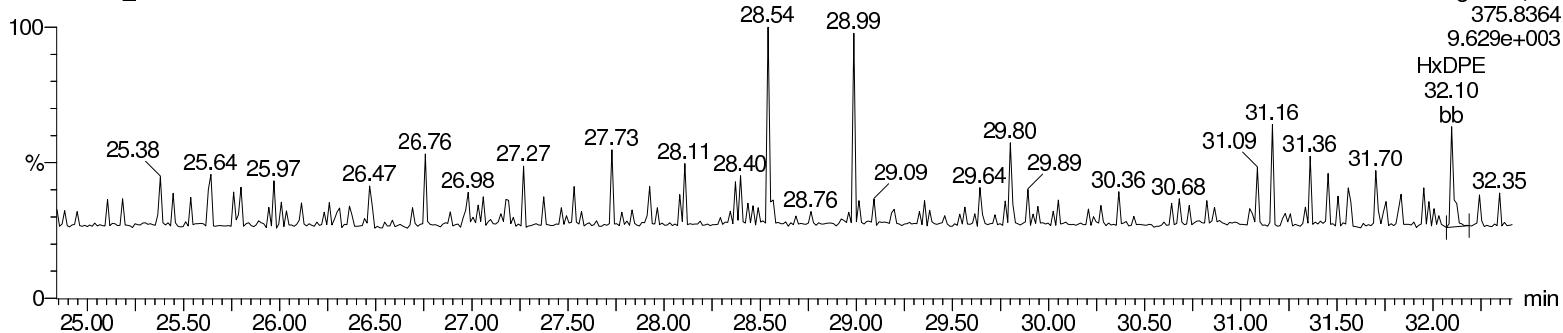
341.857

Total-pentafurans (F1)  
32.04  
bd

2.683e+004

### HxDPE

A29SEP18B\_10-8



F1:Voltage SIR,El+

375.8364

9.629e+003

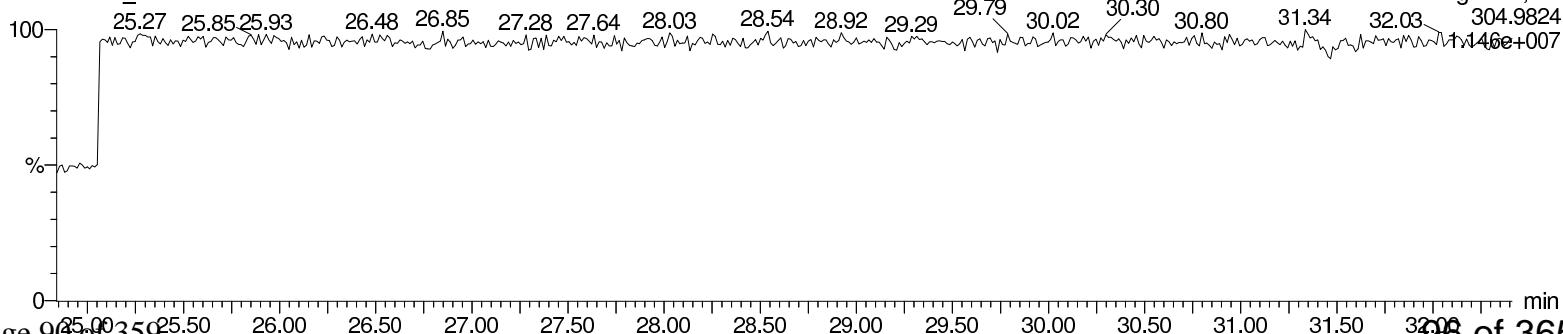
HxDPE

32.10

bb

### Lock Mass F1

A29SEP18B\_10-8



F1:Voltage SIR,El+

304.9824

1.146e+007

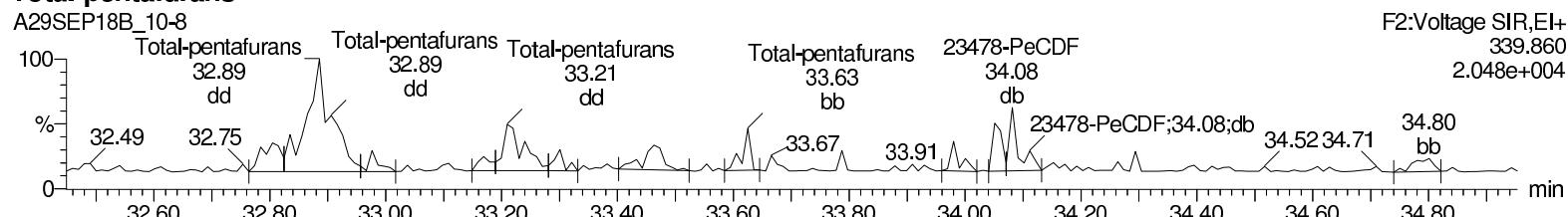
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

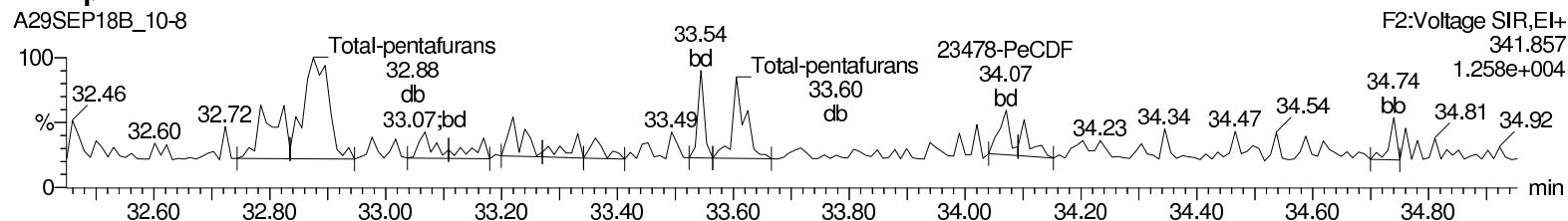
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

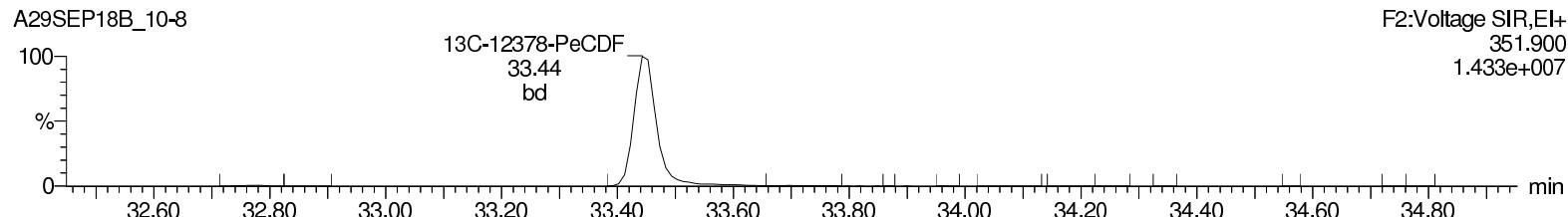
### Total-pentafurans



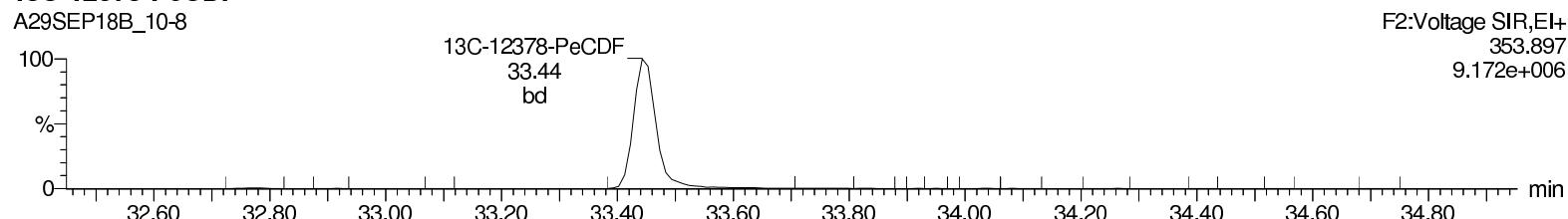
### Total-pentafurans



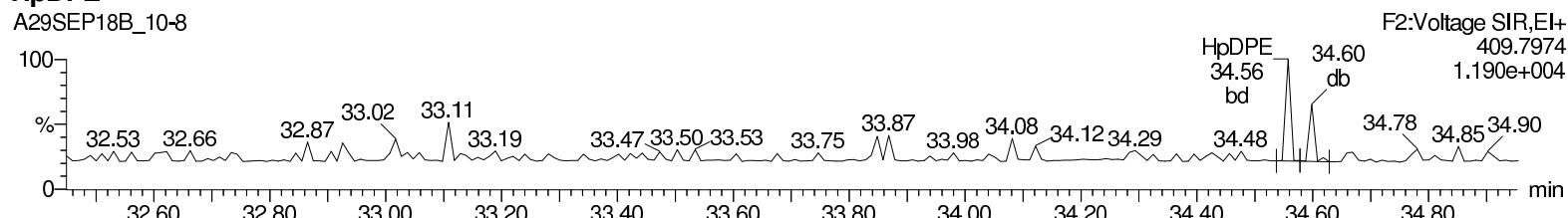
### 13C-12378-PeCDF



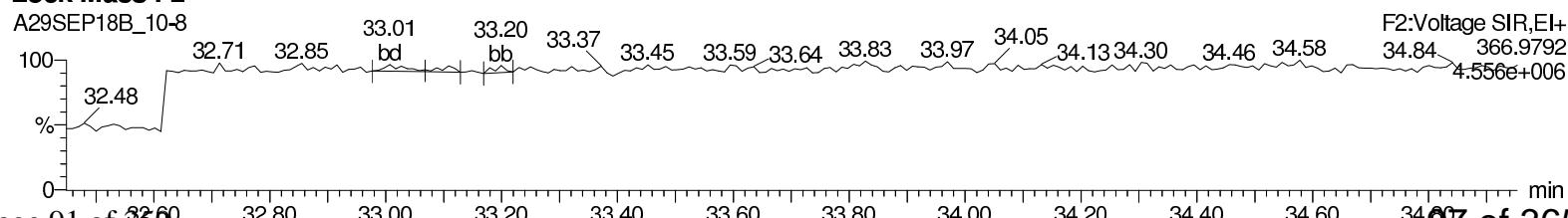
### 13C-12378-PeCDF



### HpDPE



### Lock Mass F2



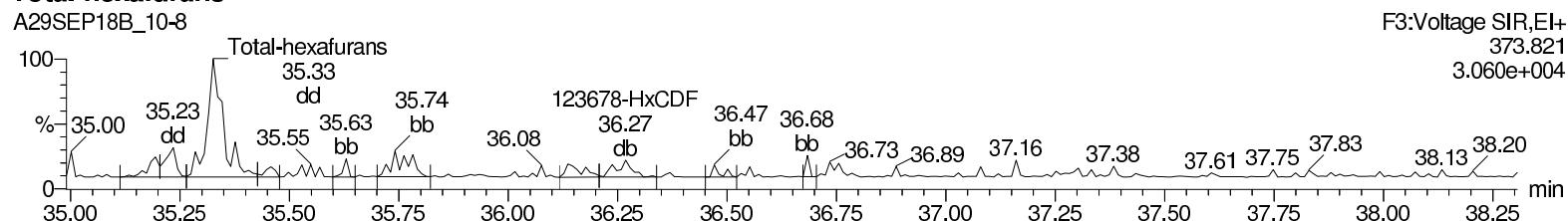
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

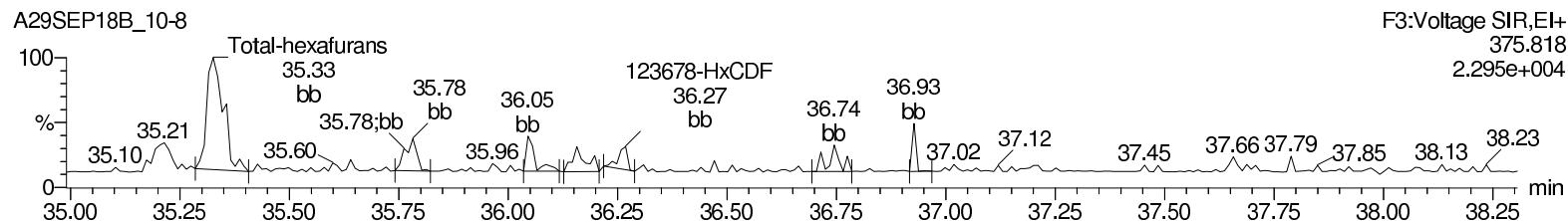
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC**

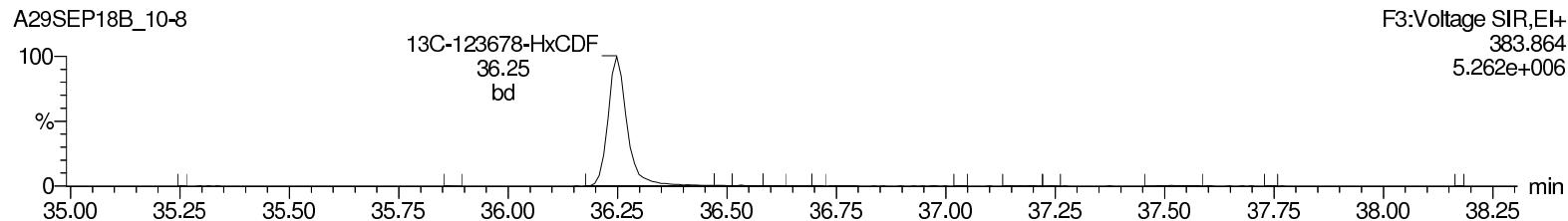
### Total-hexafurans



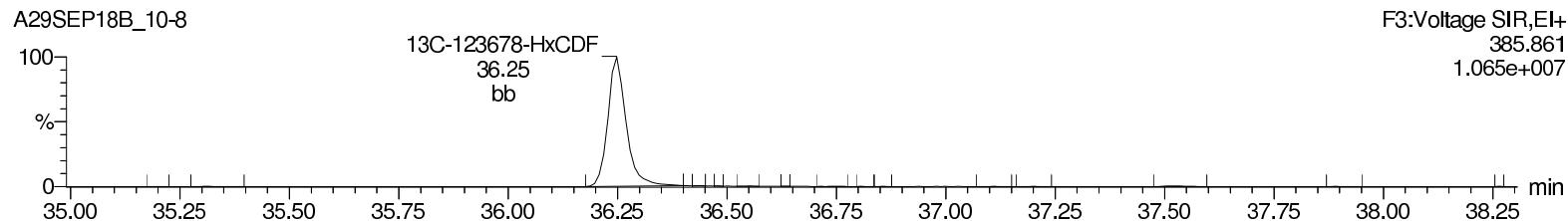
### Total-hexafurans



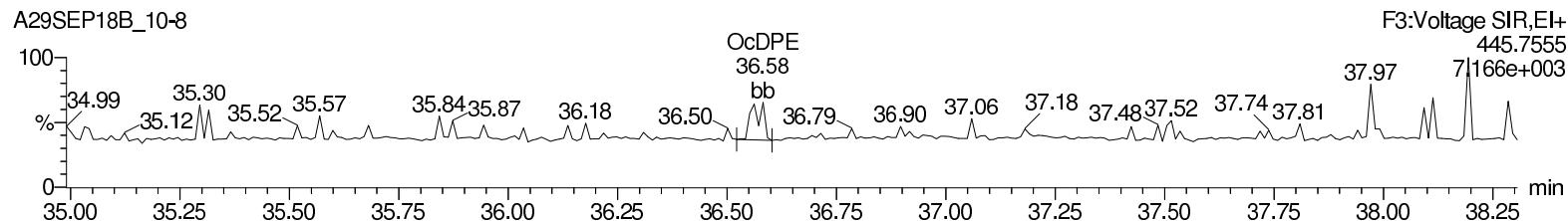
### 13C-123678-HxCDF



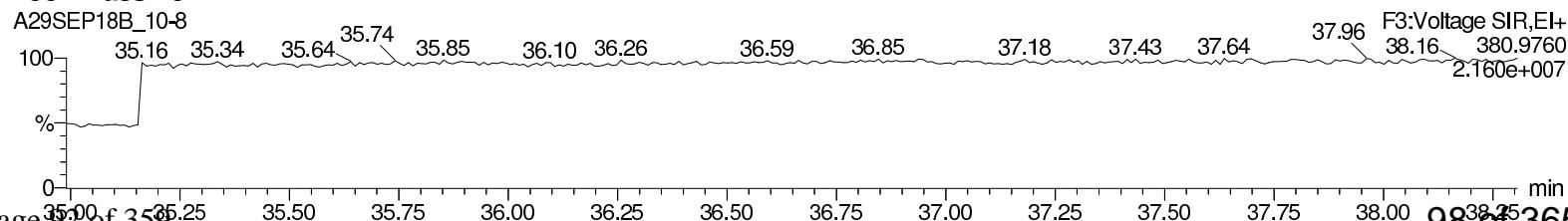
### 13C-123678-HxCDF



### OcDPE



### Lock Mass F3



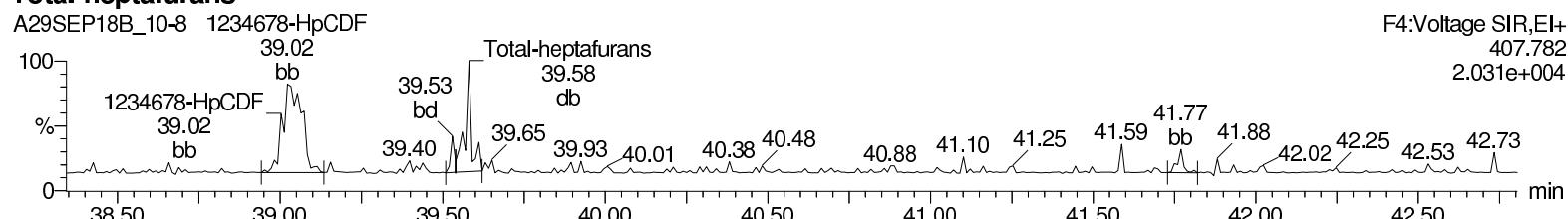
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

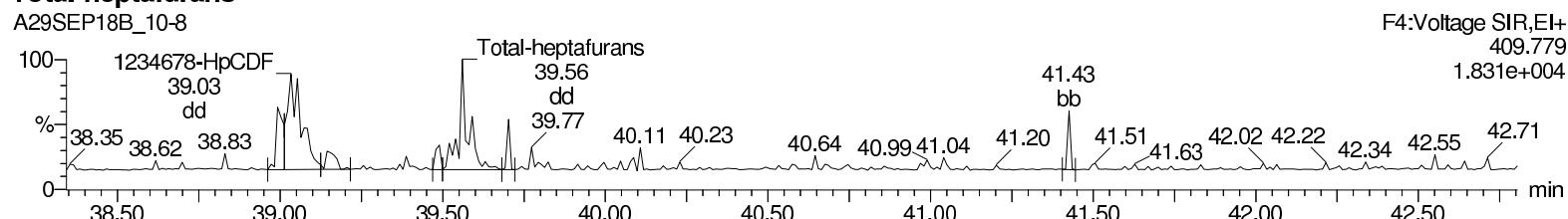
Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S,  
Task: HRP750\_2, User: MJC

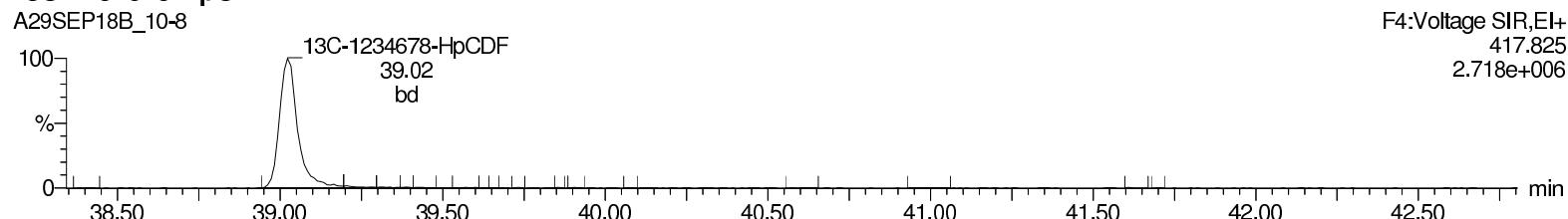
### Total-heptafurans



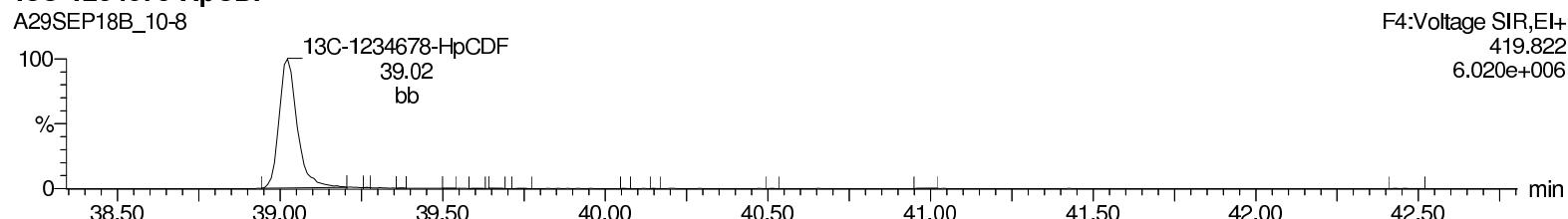
### Total-heptafurans



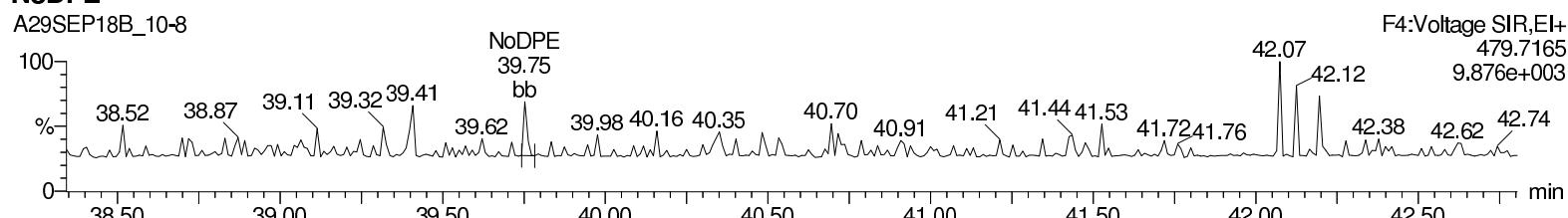
### 13C-1234678-HpCDF



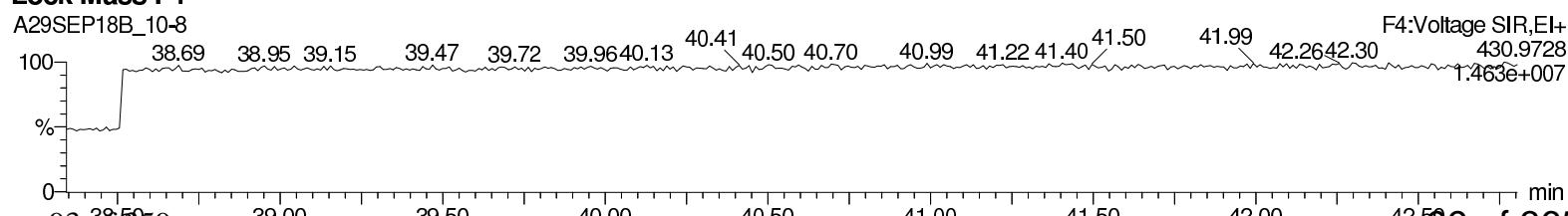
### 13C-1234678-HpCDF



### NoDPE



### Lock Mass F4



**Quantify Sample Report**  
Method 8290 Quantification Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_10.qld

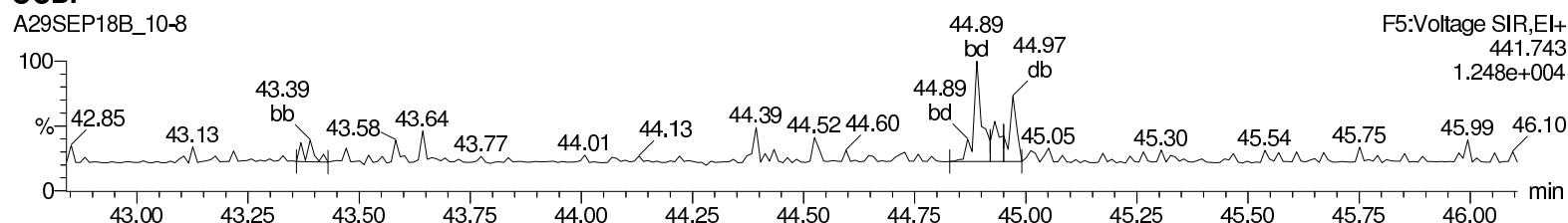
Last Altered: Wednesday, October 03, 2018 12:57:15 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:58:10 Eastern Standard Time

**Name: A29SEP18B\_10-8, Date: 03-Oct-2018, Time: 11:04:10, ID: 13953003-1, Description: 38747, Job: HMS8290\_1S, Task: HRP750\_2, User: MJC**

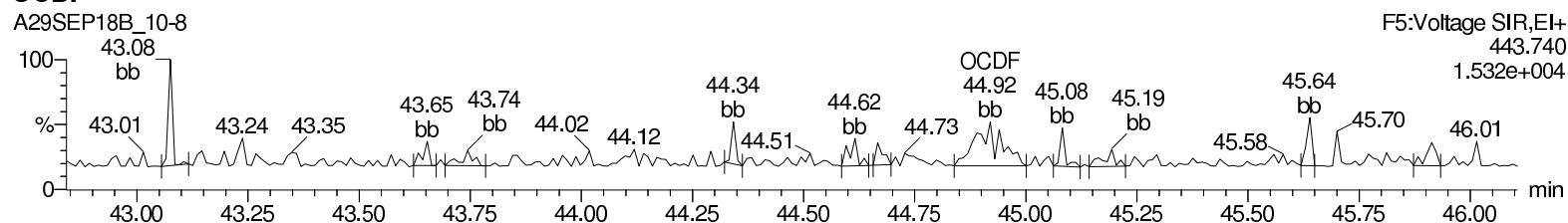
**OCDF**

A29SEP18B\_10-8



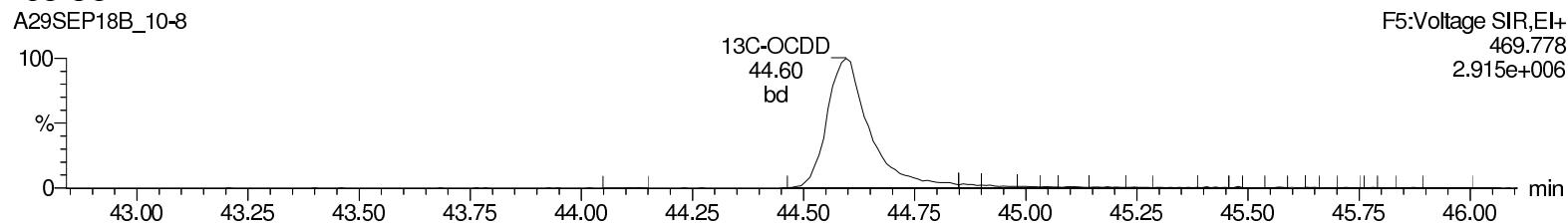
**OCDF**

A29SEP18B\_10-8



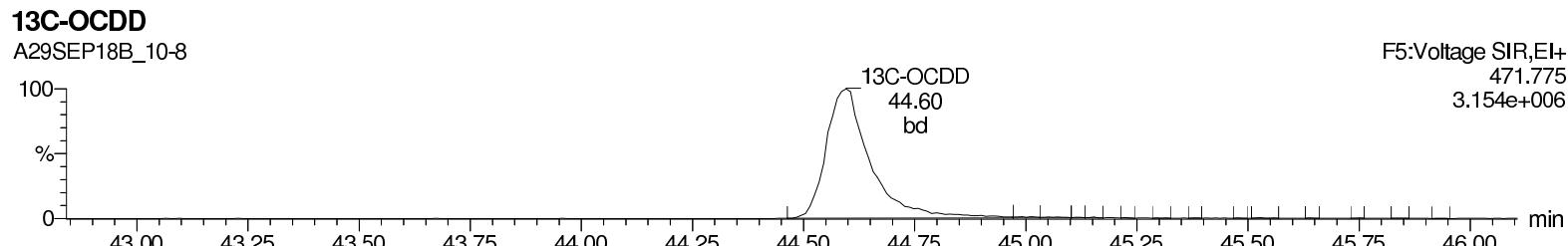
**13C-OCDD**

A29SEP18B\_10-8



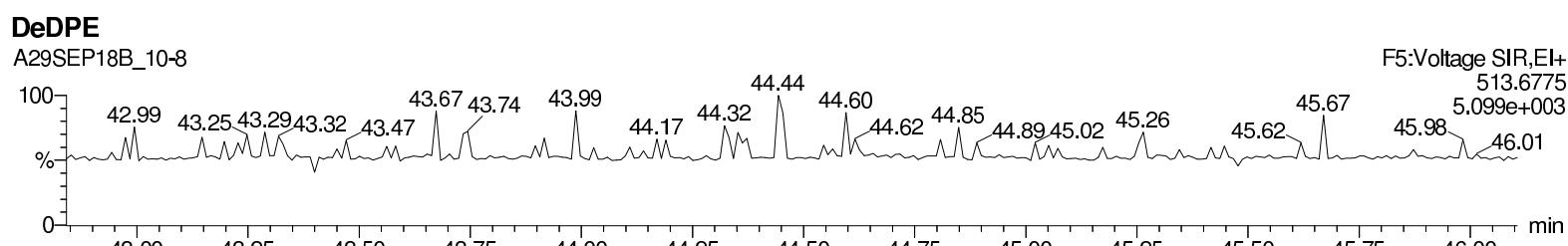
**13C-OCDD**

A29SEP18B\_10-8



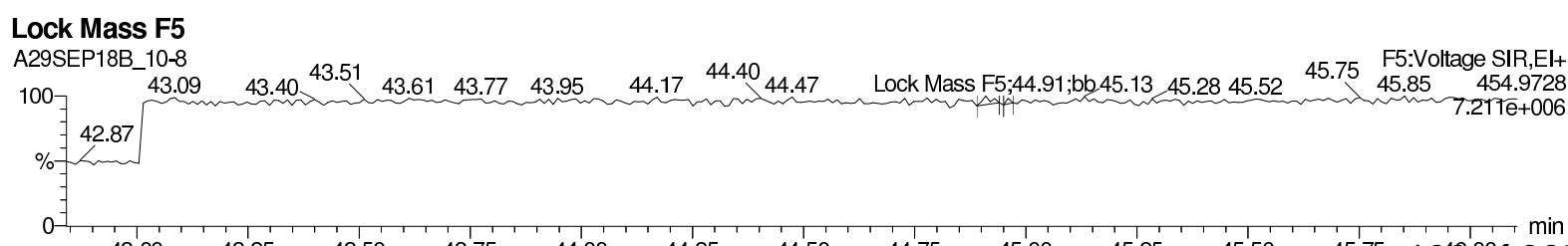
**DeDPE**

A29SEP18B\_10-8



**Lock Mass F5**

A29SEP18B\_10-8



# **Quality Control Raw Data**

**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 12022221  
**Client Sample:** QC for batch 38744  
**Client ID:** MB for batch 38744  
**Batch ID:** 38747  
**Run Date:** 10/02/2018 19:44  
**Data File:** A29SEP18B\_9-3  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001**Project:** CURL00312  
**Matrix:** SOIL

**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 10 g

**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.0806		pg/g	0.0806	1.00
40321-76-4	1,2,3,7,8-PeCDD	U	0.104		pg/g	0.104	5.00
39227-28-6	1,2,3,4,7,8-HxCDD	U	0.104		pg/g	0.104	5.00
57653-85-7	1,2,3,6,7,8-HxCDD	U	0.0882		pg/g	0.0882	5.00
19408-74-3	1,2,3,7,8,9-HxCDD	U	0.0994		pg/g	0.0994	5.00
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	0.188		pg/g	0.188	5.00
3268-87-9	1,2,3,4,6,7,8,9-OCDD	JK		0.420	pg/g	0.366	10.0
51207-31-9	2,3,7,8-TCDF	U	0.0928		pg/g	0.0928	1.00
57117-41-6	1,2,3,7,8-PeCDF	U	0.0684		pg/g	0.0684	5.00
57117-31-4	2,3,4,7,8-PeCDF	U	0.061		pg/g	0.061	5.00
70648-26-9	1,2,3,4,7,8-HxCDF	U	0.0888		pg/g	0.0888	5.00
57117-44-9	1,2,3,6,7,8-HxCDF	U	0.0772		pg/g	0.0772	5.00
60851-34-5	2,3,4,6,7,8-HxCDF	JK		0.092	pg/g	0.0862	5.00
72918-21-9	1,2,3,7,8,9-HxCDF	U	0.109		pg/g	0.109	5.00
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	0.0564		pg/g	0.0564	5.00
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	0.0762		pg/g	0.0762	5.00
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	0.252		pg/g	0.252	10.0
41903-57-5	Total TCDDs	U	0.0806		pg/g	0.0806	1.00
36088-22-9	Total PeCDDs	U	0.104		pg/g	0.104	5.00
34465-46-8	Total HxCDDs	U	0.0882		pg/g	0.0882	5.00
37871-00-4	Total HpCDDs	U	0.188		pg/g	0.188	5.00
30402-14-3	Total TCDFs	U	0.0928		pg/g	0.0928	1.00
30402-15-4	Total PeCDFs	U	0.0398		pg/g	0.0398	5.00
55684-94-1	Total HxCDFs	U	0.0772	0.092	pg/g	0.0772	5.00
38998-75-3	Total HpCDFs	U	0.0564		pg/g	0.0564	5.00
3333-30-0	TEQ WHO2005 ND=0		0.00		pg/g		
3333-30-1	TEQ WHO2005 ND=0.5		0.142	0.147	pg/g		

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		190	200	pg/g	95.0	(40%-135%)
13C-1,2,3,7,8-PeCDD		177	200	pg/g	88.4	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		133	200	pg/g	66.4	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		151	200	pg/g	75.7	(40%-135%)
13C-OCDD		260	400	pg/g	64.9	(40%-135%)
13C-2,3,7,8-TCDF		147	200	pg/g	73.6	(40%-135%)
13C-1,2,3,7,8-PeCDF		178	200	pg/g	88.9	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		128	200	pg/g	64.2	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		138	200	pg/g	68.9	(40%-135%)

**Comments:****J** Value is estimated**K** Estimated Maximum Possible Concentration**U** Analyte was analyzed for, but not detected above the specified detection limit.

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld  
Last Altered: Wednesday, October 03, 2018 16:52:41 Eastern Standard Time  
Printed: Wednesday, October 03, 2018 16:53:36 Eastern Standard Time

**Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**  
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29

**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	12378-TCDD						NO		0.0403		1601			1024				
2	12378-PeCDD	6.62e1	7.98e1	1.46e2	34.26	1.001	0.83	YES	0.024	0.0521	3.57e3	1744	2.0	5.57e3	1186	4.7	bb	bb
3	123478-HxCDD	1.12e2	6.98e1	1.82e2	36.95	1.000	1.61	YES	0.038	0.0522	2.63e3	1009	2.6	3.74e3	893	4.2	bb	bb
4	123678-HxCDD							NO	0.0441		1009							
5	123789-HxCDD							NO	0.0497		1009							
6	1234678-HpCDD							NO	0.0941		807							
7	OCDD	2.34e2	3.82e2	6.16e2	44.61	1.000	0.61	YES	0.210	0.183	3.21e3	845	3.8	6.58e3	1216	5.4	MM	MM
8	2378-TCDF	1.79e2	3.58e2	30.84	1.002	1.00		YES	0.037	0.0464	4.37e3	911	4.8	5.18e3	1624	3.2	bb	bb
9	12378-PeCDF	1.30e2	1.62e2	2.92e2	33.44	1.000	0.80	YES	0.031	0.0342	2.51e3	1229	2.0	4.03e3	1785	2.3	bb	bb
10	23478-PeCDF	2.18e2	9.85e1	3.17e2	34.08	1.019	2.22	YES	0.030	0.0305	6.04e3	1229	4.9	4.09e3	1785	2.3	bd	bb
11	123478-HxCDF	9.90e1	1.16e2	2.15e2	36.16	0.997	0.86	YES	0.031	0.0444	3.19e3	1176	2.7	3.26e3	1222	2.7	bd	bd
12	123678-HxCDF	2.04e2	7.04e1	2.74e2	36.24	1.000	2.90	YES	0.034	0.0386	4.32e3	1176	3.7	1.82e3	1222	1.5	db	db
13	234678-HxCDF	1.47e2	1.79e2	3.26e2	36.76	1.014	0.82	YES	0.046	0.0431	4.11e3	1176	3.5	7.61e3	1222	6.2	dd	bb
14	123789-HxCDF							NO	0.0547		1176							
15	1234678-HpCDF							NO	0.0282		448							
16	1234789-HpCDF	6.43e1	5.34e1	1.18e2	40.99	1.050	1.20	YES	0.025	0.0381	3.52e3	448	7.9	1.27e3	733	1.7	bb	bb
17	OCDF							NO	0.126		737							
18	13C-2378-TCDD	4.10e5	5.21e5	9.32e5	31.43	1.016	0.79	NO	94.985	0.124	7.43e6	4432	1676.0	9.40e6	3591	2618.7	bb	bb
19	13C-12378-PeCDD	3.89e5	2.43e5	6.32e5	34.24	1.107	1.60	NO	88.410	0.208	8.85e6	2982	2967.6	5.57e6	6811	818.5	bb	bd
20	13C-123678-HxCDD	3.25e5	2.57e5	5.81e5	36.95	0.993	1.26	NO	66.362	0.203	6.21e6	5622	1104.5	4.83e6	5844	826.3	bd	bd
21	13C-1234678-HpCDD	2.18e5	2.09e5	4.27e5	40.29	1.083	1.04	NO	75.679	0.286	2.87e6	6284	457.5	2.81e6	4139	678.6	bd	bd
22	13C-OCDD	2.81e5	3.17e5	5.98e5	44.58	1.199	0.89	NO	129.863	0.364	2.70e6	7115	379.5	2.88e6	3700	777.6	bd	bd
23	13C-2378-TCDF	4.68e5	5.91e5	1.06e6	30.78	0.995	0.79	NO	73.643	0.132	6.56e6	7485	876.5	8.44e6	5024	1680.8	bd	bb
24	13C-12378-PeCDF	6.55e5	4.26e5	1.08e6	33.44	1.081	1.54	NO	88.854	0.126	1.52e7	5024	3034.8	9.96e6	5052	1971.8	bd	bd
25	13C-123678-HxCDF	2.53e5	4.96e5	7.48e5	36.25	0.975	0.51	NO	64.205	0.147	4.94e6	4172	1182.9	9.41e6	6899	1363.2	bd	bd
26	13C-1234678-HpCDF	1.62e5	3.64e5	5.27e5	39.02	1.049	0.45	NO	68.875	0.157	2.65e6	3617	732.6	5.59e6	4155	1346.1	bd	bd
27	13C-1234-TCDD	4.10e5	5.13e5	9.22e5	30.94	0.000	0.80	NO	100.000	0.132	6.73e6	4432	1517.6	8.36e6	3591	2329.4	bb	bb
28	13C-123789-HxCDD	4.20e5	3.34e5	7.54e5	37.19	0.000	1.26	NO	100.000	0.236	6.78e6	5622	1206.7	5.48e6	5844	937.5	dd	dd

## Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
8 of 359  
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld  
Last Altered: Wednesday, October 03, 2018 16:52:41 Eastern Standard Time  
Printed: Wednesday, October 03, 2018 16:53:36 Eastern Standard Time

**Method:** C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_EPA8290\_A23AUG18.mdb **23 Aug 2018 12:08:58**  
**Calibration:** C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb **20 Aug 2018 13:48:29**

**Name:** A29SEP18B\_9-3, **Date:** 02-Oct-2018, **Time:** 19:44:16, **ID:** 12022221-1 MB, **Description:** , **Job:** %8290%, **Task:** HRP750\_2, **User:** MJC

### TD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1																	

### PD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	12378-PeCDD	6.62e1	7.98e1	1.46e2	34.26	0.83	YES	0.024	0.0521	3.57e3	1744	2.0	5.57e3	1186	4.7	bb	bb

### HD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	123478-HxCDD	1.12e2	6.98e1	1.82e2	36.95	1.61	YES	0.038	0.0522	2.63e3	1009	2.6	3.74e3	893	4.2	bb	bb

### HPD

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1																	

### TF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDF	1.79e2	1.79e2	3.58e2	30.84	1.00	YES	0.037	0.0464	4.37e3	911	4.8	5.18e3	1624	3.2	bb	bb
2	Total-tetrafurans	1.61e2	8.87e1	2.50e2	30.21	1.82	YES	0.026	0.0464	5.16e3	911	5.7	1.18e3	1624	0.7	bb	bd
3	Total-tetrafurans	1.63e2	1.27e2	2.90e2	29.91	1.29	YES	0.030	0.0464	3.37e3	911	3.7	3.73e3	1624	2.3	bb	bb
4	Total-tetrafurans	5.22e1	1.76e2	2.28e2	29.47	0.30	YES	0.023	0.0464	1.55e3	911	1.7	4.96e3	1624	3.1	bb	bb
5	Total-tetrafurans	9.31e1	6.40e1	1.57e2	26.89	1.46	YES	0.016	0.0464	1.99e3	911	2.2	1.47e3	1624	0.9	bb	bb

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	Total-pentafurans (F1)	9.68e1	1.51e2	2.48e2	32.06	0.64	YES	0.025	0.0199	2.78e3	507	5.5	3.16e3	1354	2.3	bb	bb

# Quantify Totals Report MassLynx 4.1

Method 8290 Quantification Report  
 Page 359 of 359  
 Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld  
 Last Altered: Wednesday, October 03, 2018 16:52:41 Eastern Standard Time  
 Printed: Wednesday, October 03, 2018 16:53:36 Eastern Standard Time

**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

## PF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	12378-PeCDF	1.30e2	1.62e2	2.92e2	33.44	0.80	YES	0.031	0.0342	2.51e3	1229	2.0	4.03e3	1785	2.3	bb	bb
2	Total-pentafurans	5.79e1	1.58e2	2.16e2	34.77	0.37	YES	0.021	0.0323	5.18e3	1229	4.2	4.81e3	1785	2.7	bb	bb
3	Total-pentafurans	9.98e1	8.04e1	1.80e2	34.37	1.24	YES	0.018	0.0323	8.68e3	1229	7.1	5.23e3	1785	2.9	bb	bb
4	23478-PeCDF	2.18e2	9.85e1	3.17e2	34.08	2.22	YES	0.030	0.0305	6.04e3	1229	4.9	4.09e3	1785	2.3	bd	bb

## HF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	123478-HxCDF	9.90e1	1.16e2	2.15e2	36.16	0.86	YES	0.031	0.0444	3.19e3	1176	2.7	3.26e3	1222	2.7	bd	bd
2	234678-HxCDF	1.47e2	1.79e2	3.26e2	36.76	0.82	YES	0.046	0.0431	4.11e3	1176	3.5	7.61e3	1222	6.2	cd	bb
3	123678-HxCDF	2.04e2	7.04e1	2.74e2	36.24	2.90	YES	0.034	0.0386	4.32e3	1176	3.7	1.82e3	1222	1.5	db	db

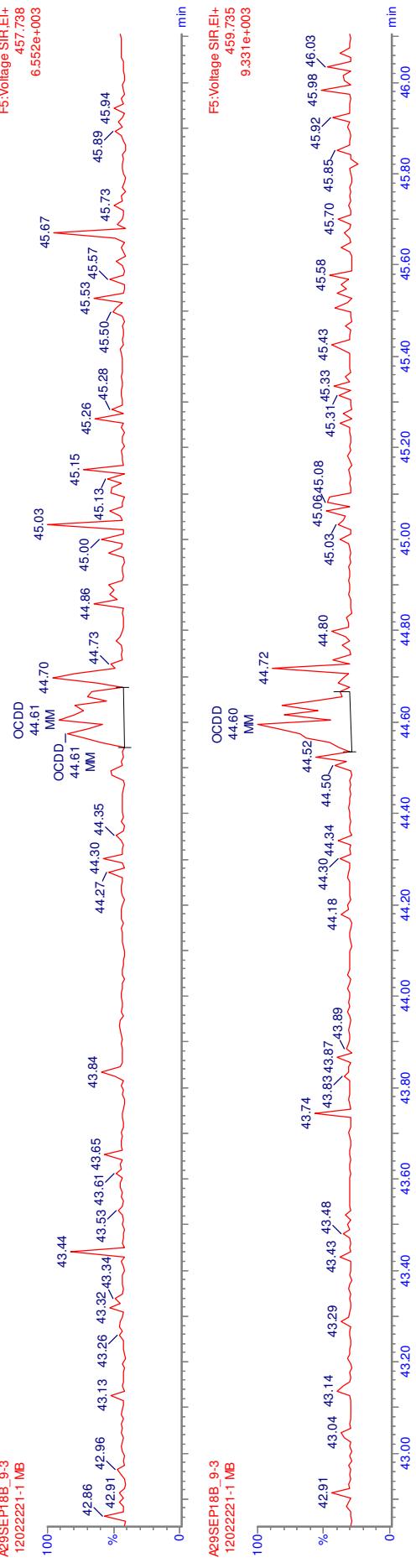
## HPF

	Name	Ion1Area	Ion2Area	Response	RT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	1234789-HpCDF	6.43e1	5.34e1	1.18e2	40.99	1.20	YES	0.025	0.0381	3.52e3	448	7.9	1.27e3	733	1.7	bb	bb

MANUAL INTEGRATION  
METHOD 8290

HRP750\_2

A29SEP16B\_9-3  
12022221-1 MB



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

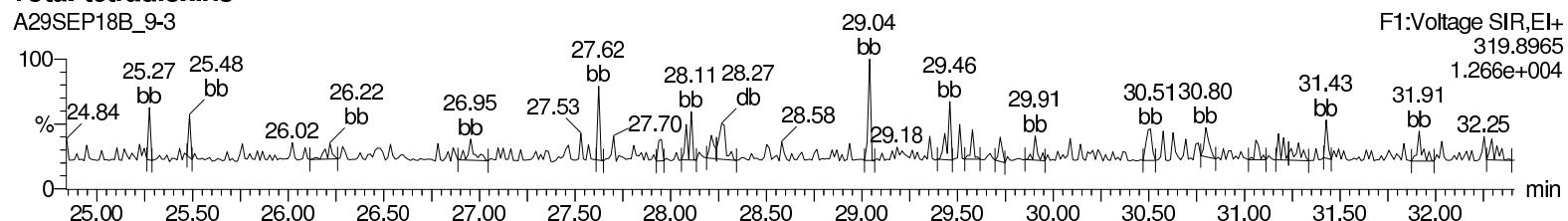
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

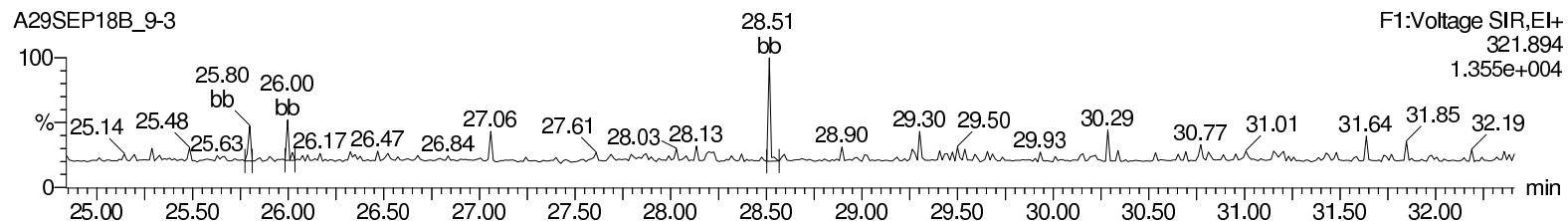
### Total-tetradioxins

A29SEP18B\_9-3



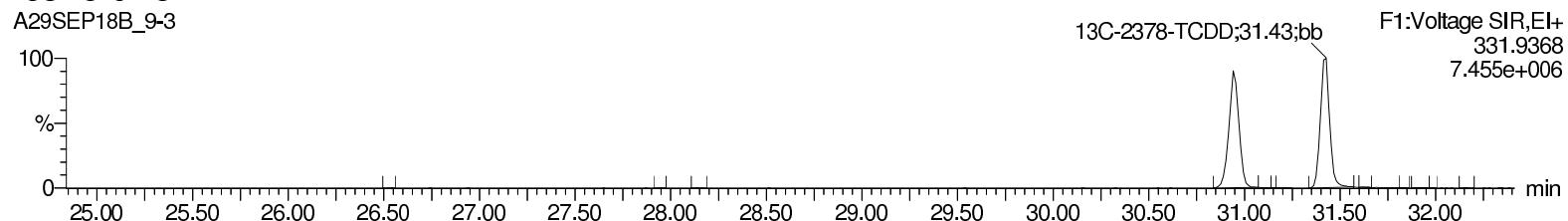
### Total-tetradioxins

A29SEP18B\_9-3



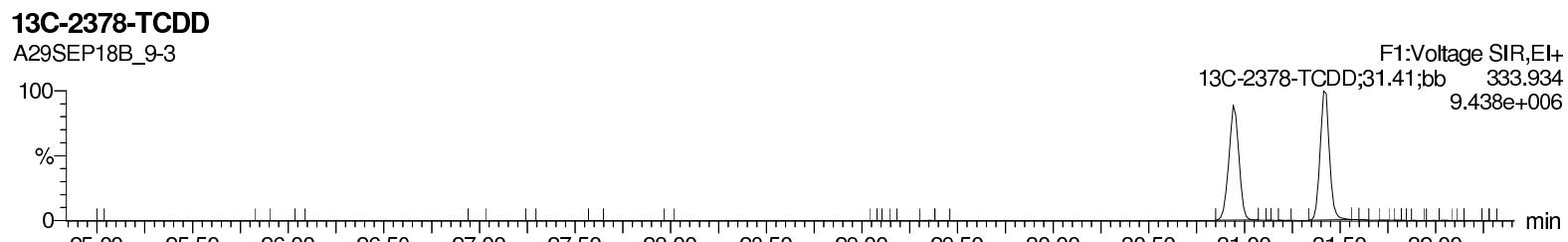
### 13C-2378-TCDD

A29SEP18B\_9-3



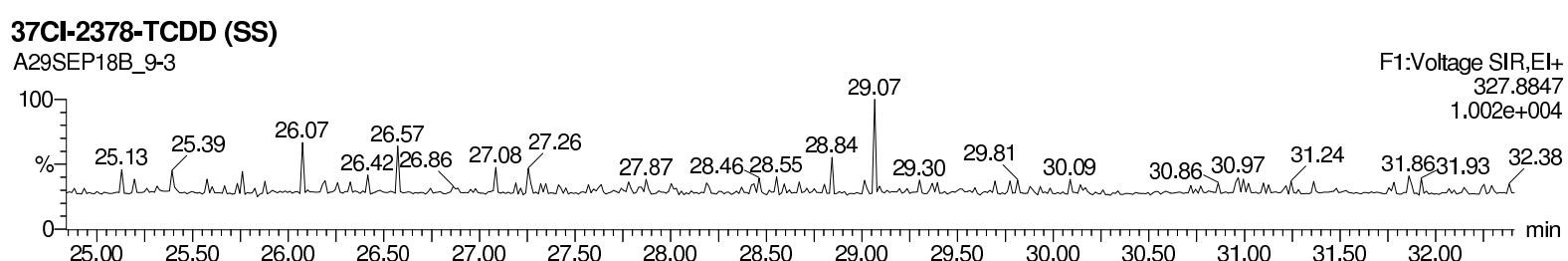
### 13C-2378-TCDD

A29SEP18B\_9-3



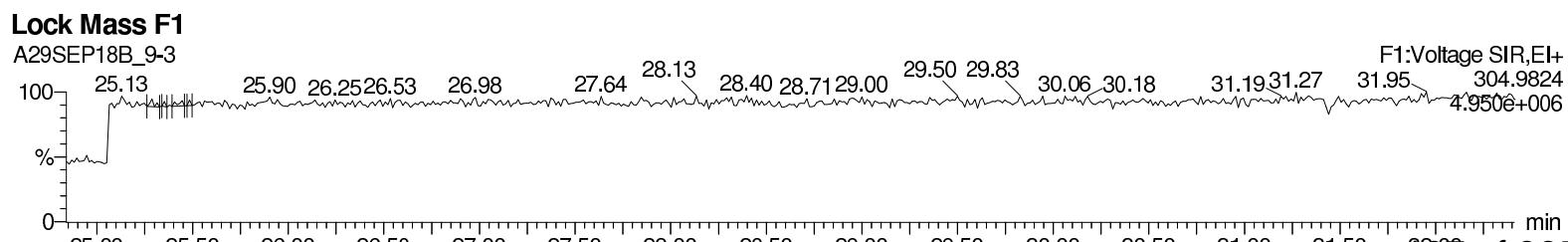
### 37Cl-2378-TCDD (SS)

A29SEP18B\_9-3



### Lock Mass F1

A29SEP18B\_9-3



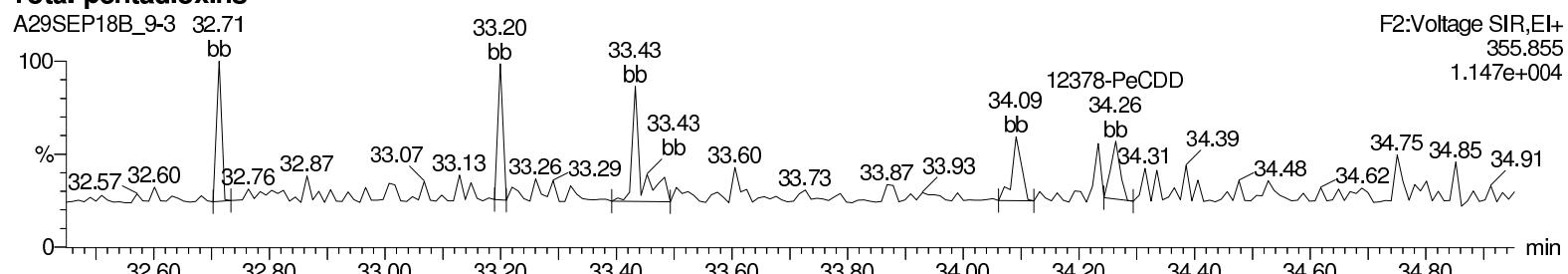
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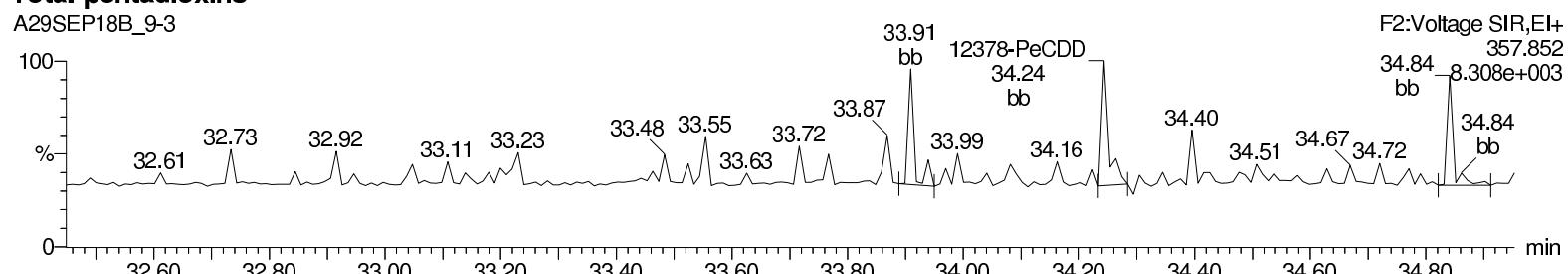
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**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

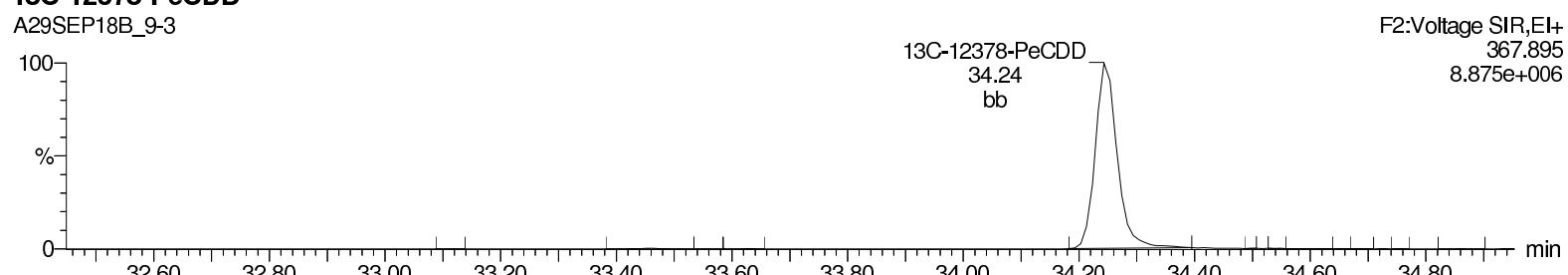
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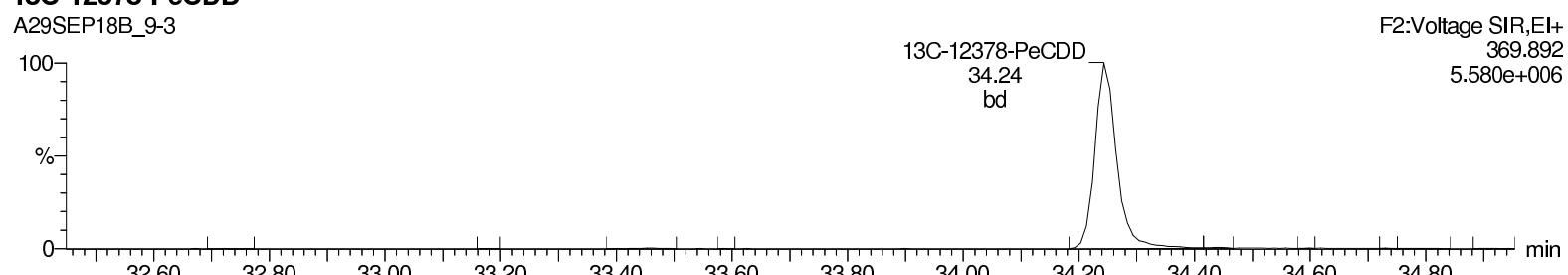
**Total-pentadioxins**



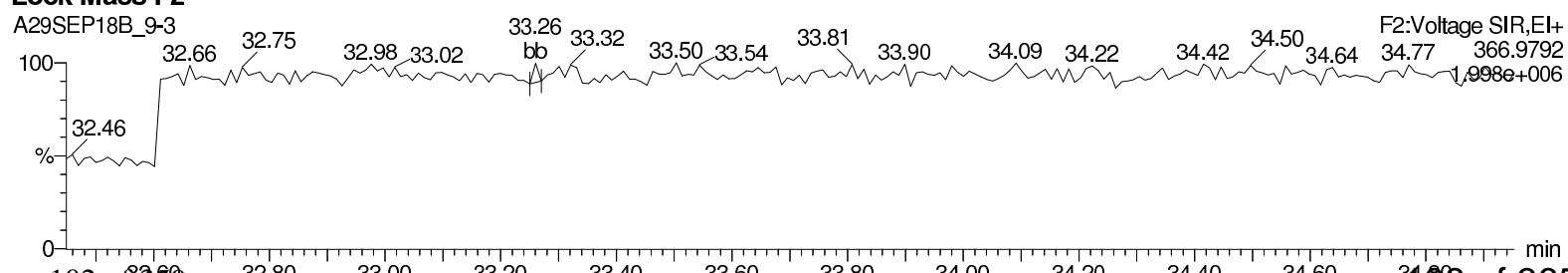
**13C-12378-PeCDD**



**13C-12378-PeCDD**



**Lock Mass F2**



# Quantify Sample Report

MassLynx 4.1

## Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

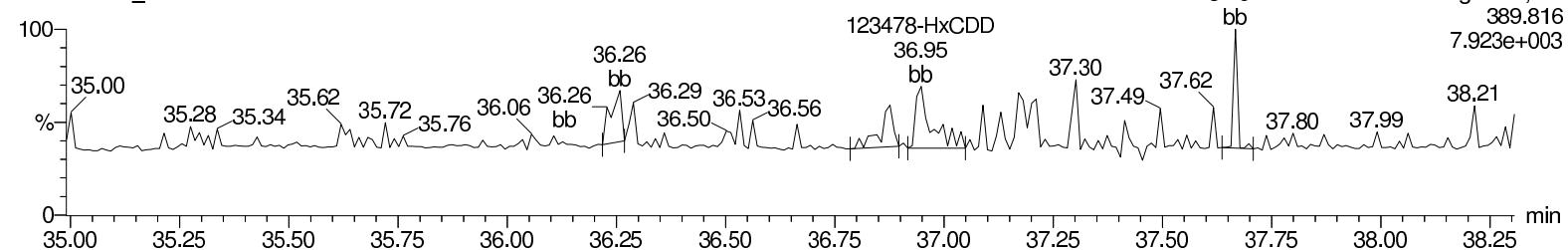
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC

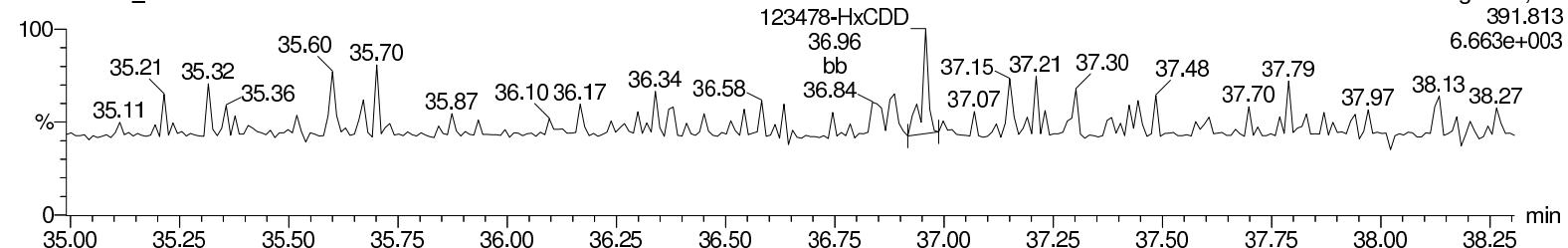
## Total-hexadioxins

A29SEP18B\_9-3



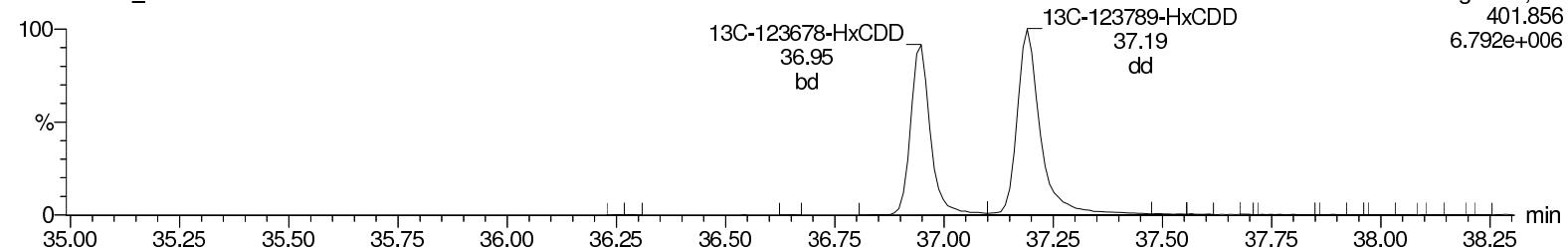
## Total-hexadioxins

A29SEP18B\_9-3



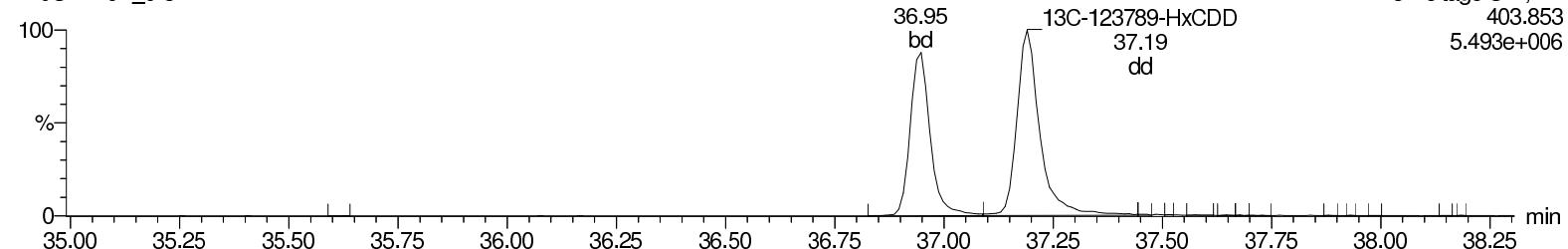
13C-123678-HxCDD

A29SEP18B 9-3



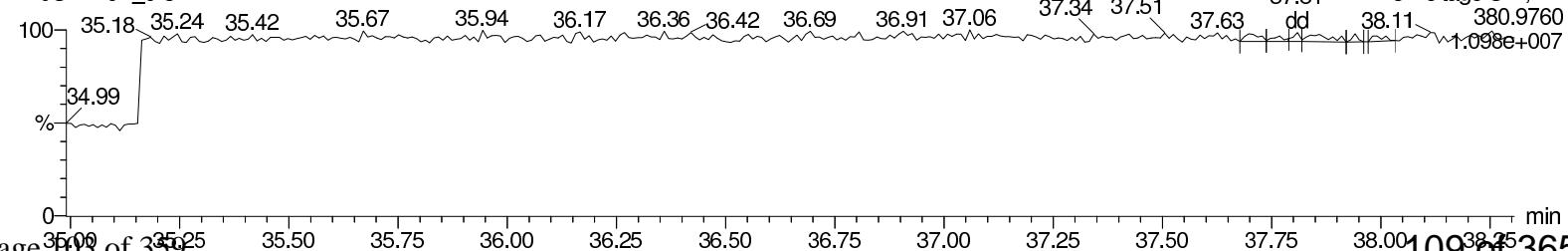
13C-123678-HxCDD

A29SEP18B 9-3



Lock Mass F3

A29SEP18B 9-3



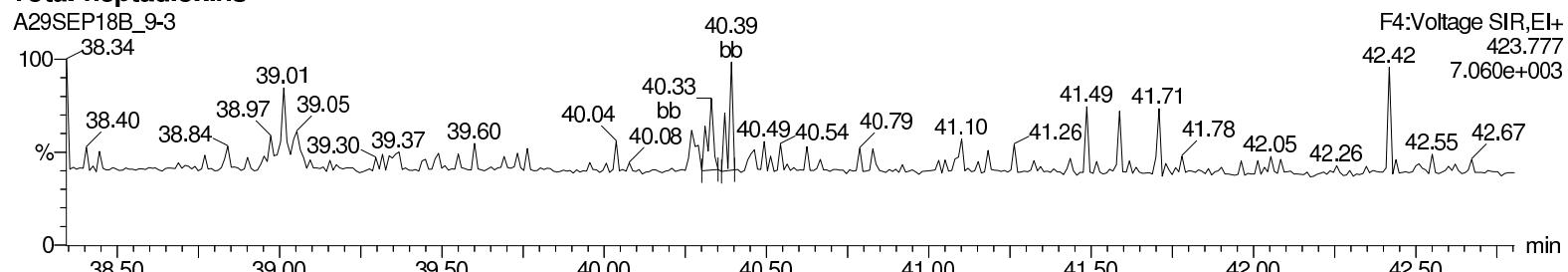
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Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

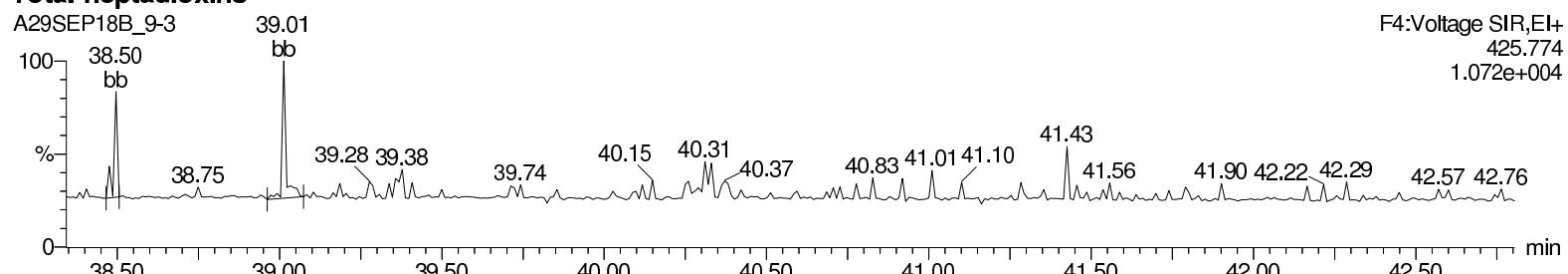
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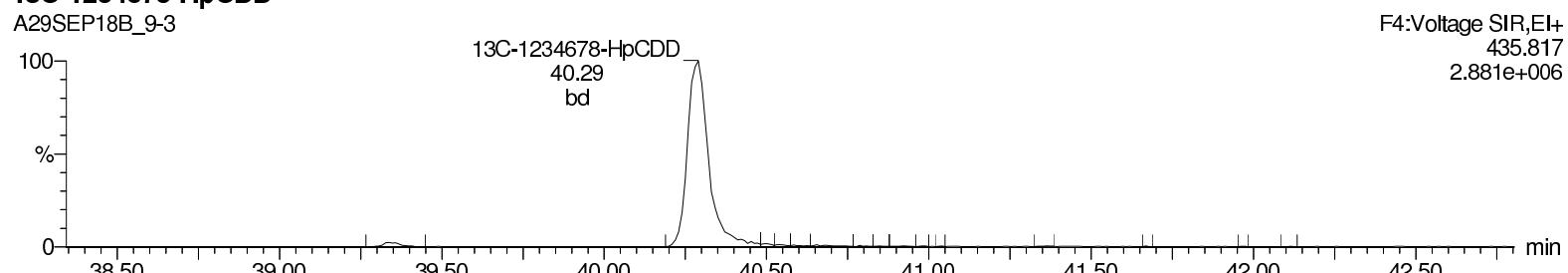
**Total-heptadioxins**



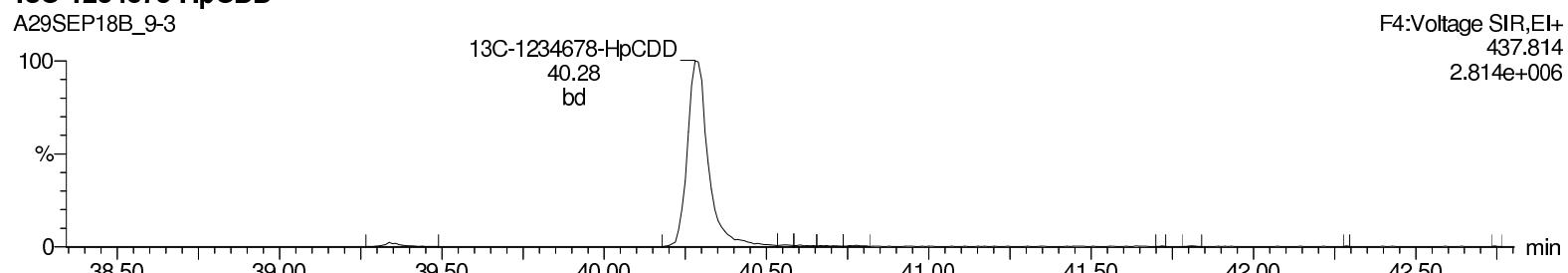
**Total-heptadioxins**



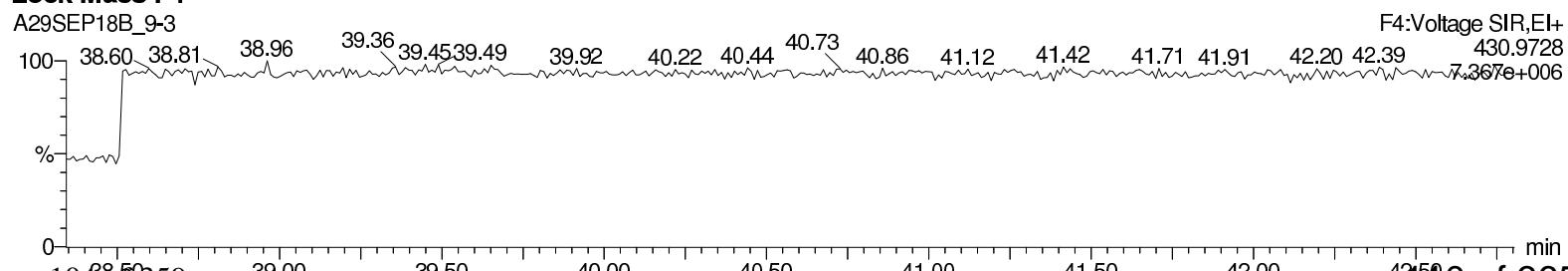
**13C-1234678-HpCDD**



**13C-1234678-HpCDD**



**Lock Mass F4**



**Quantify Sample Report**  
Method 8290 Quantification Report

**MassLynx 4.1**

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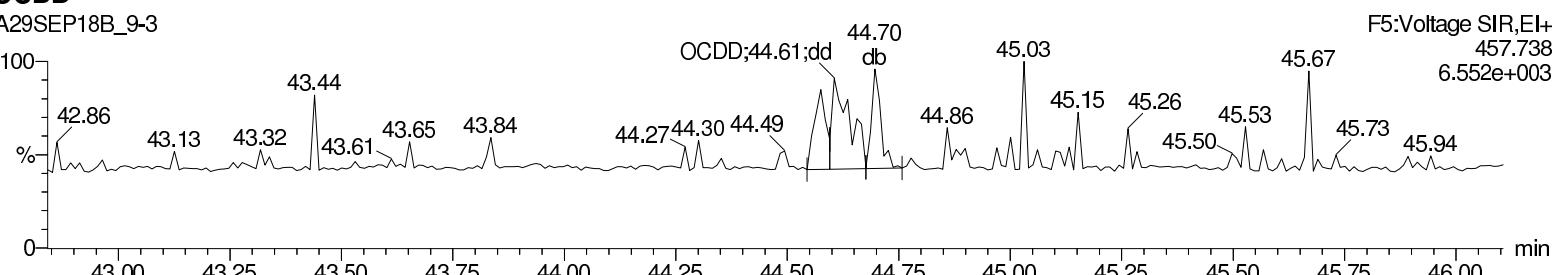
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Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

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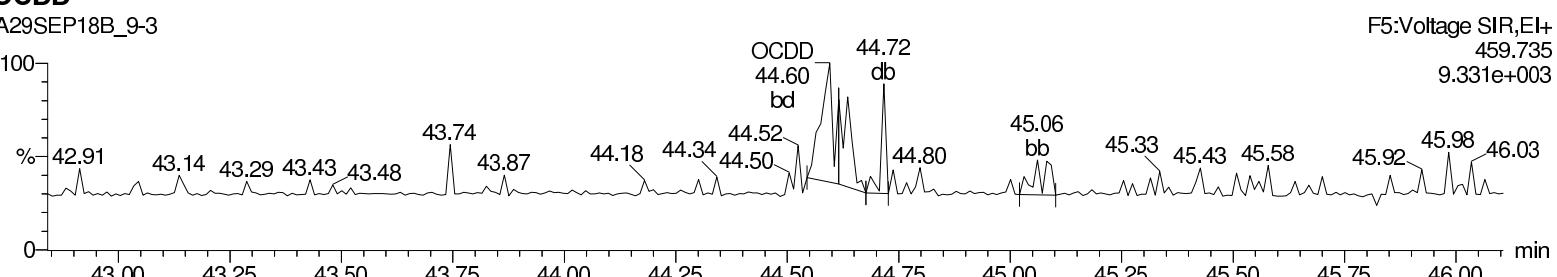
**OCDD**

A29SEP18B\_9-3



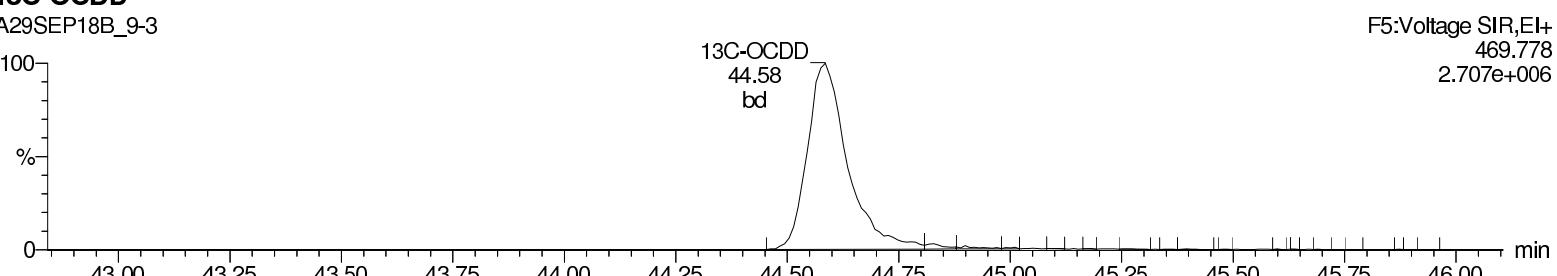
**OCDD**

A29SEP18B\_9-3



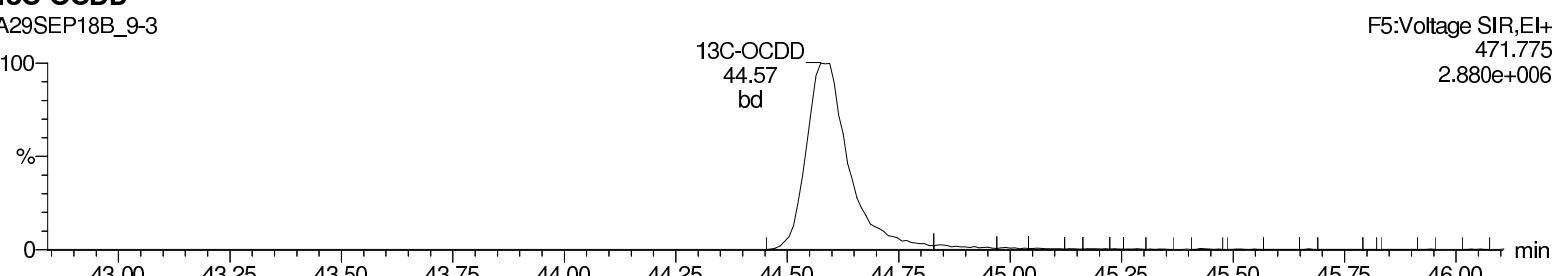
**13C-OCDD**

A29SEP18B\_9-3



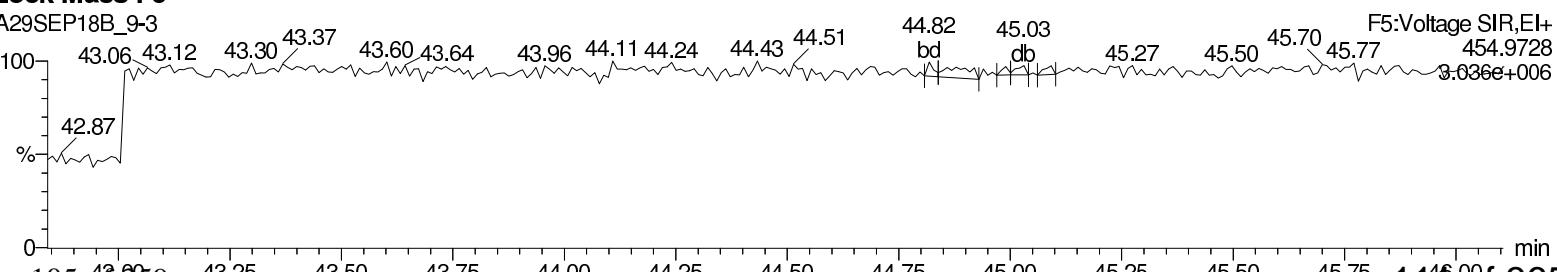
**13C-OCDD**

A29SEP18B\_9-3



**Lock Mass F5**

A29SEP18B\_9-3



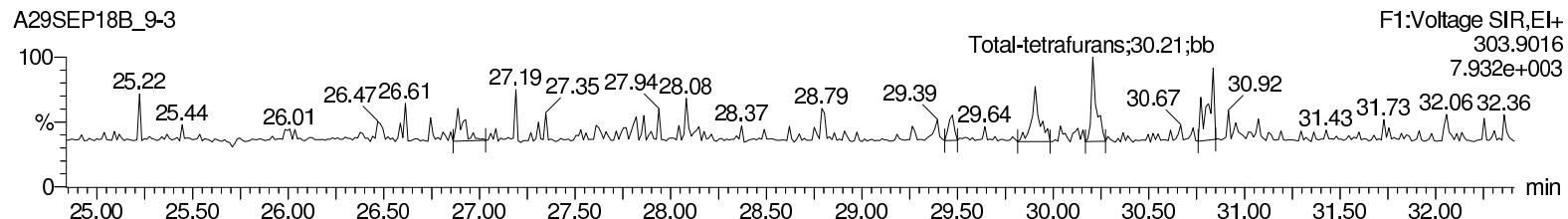
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

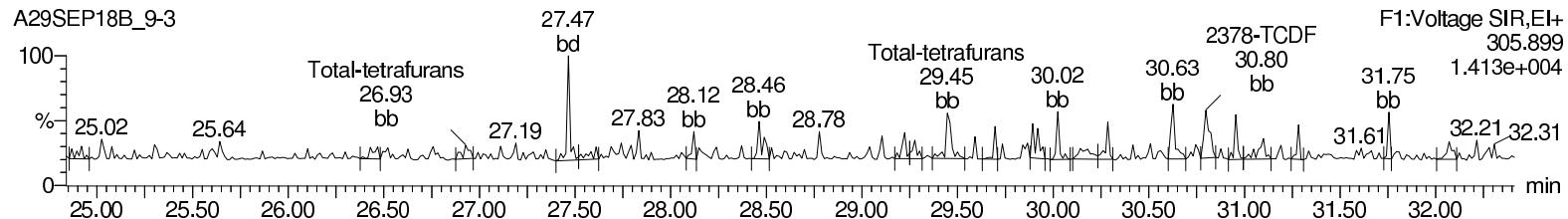
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**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

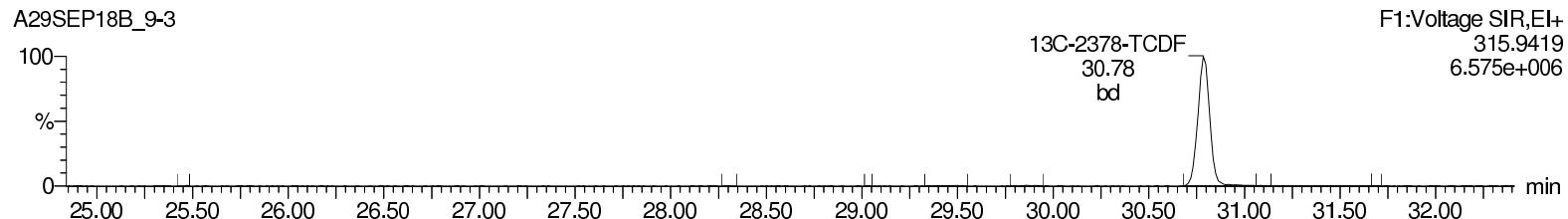
### Total-tetrafurans



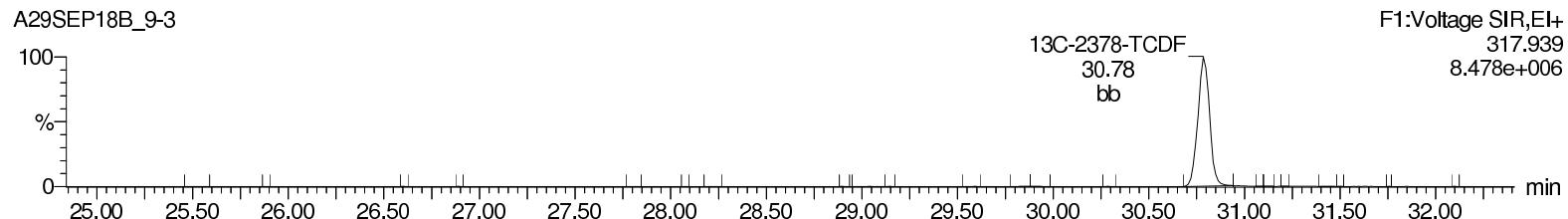
### Total-tetrafurans



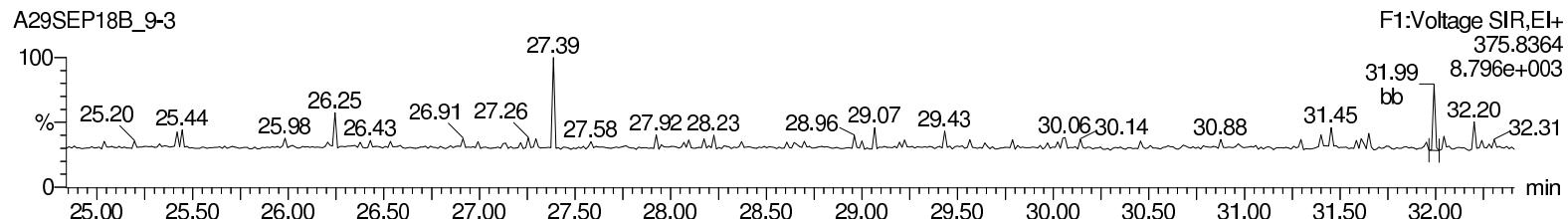
### 13C-2378-TCDF



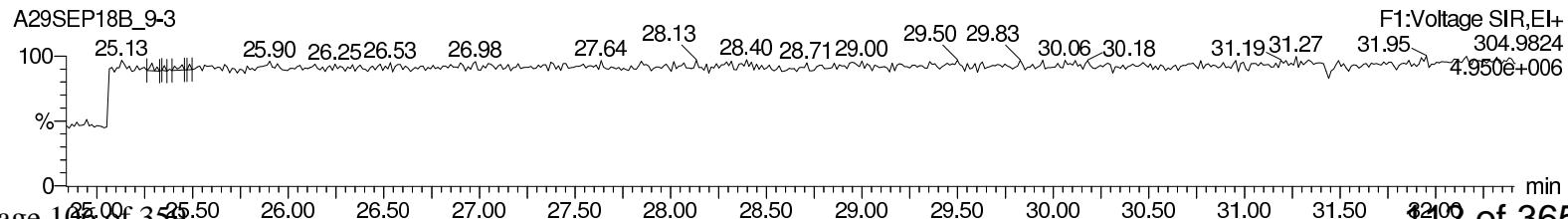
### 13C-2378-TCDF



### HxDPE



### Lock Mass F1



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

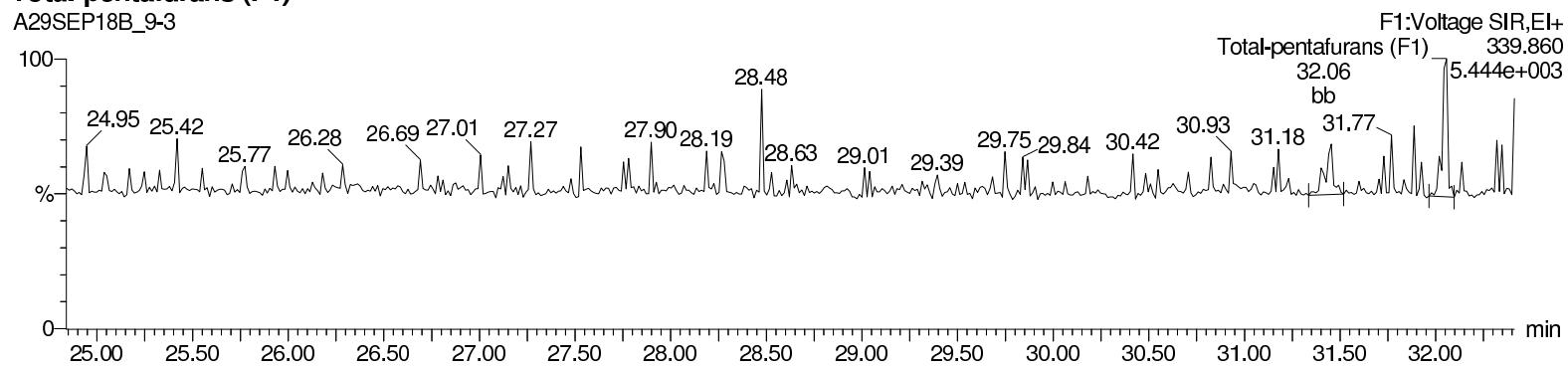
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Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

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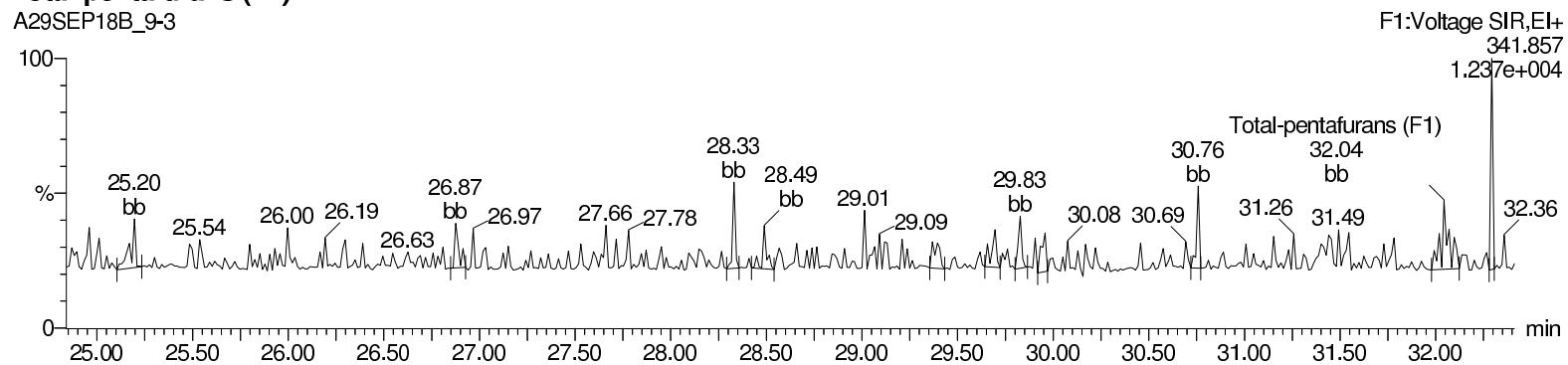
### Total-pentafurans (F1)

A29SEP18B\_9-3



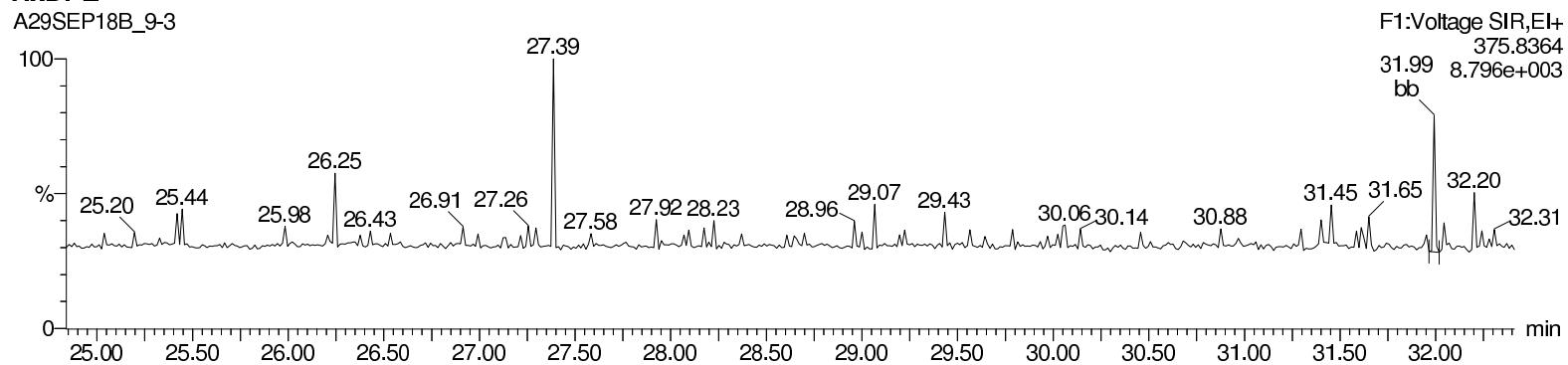
### Total-pentafurans (F1)

A29SEP18B\_9-3



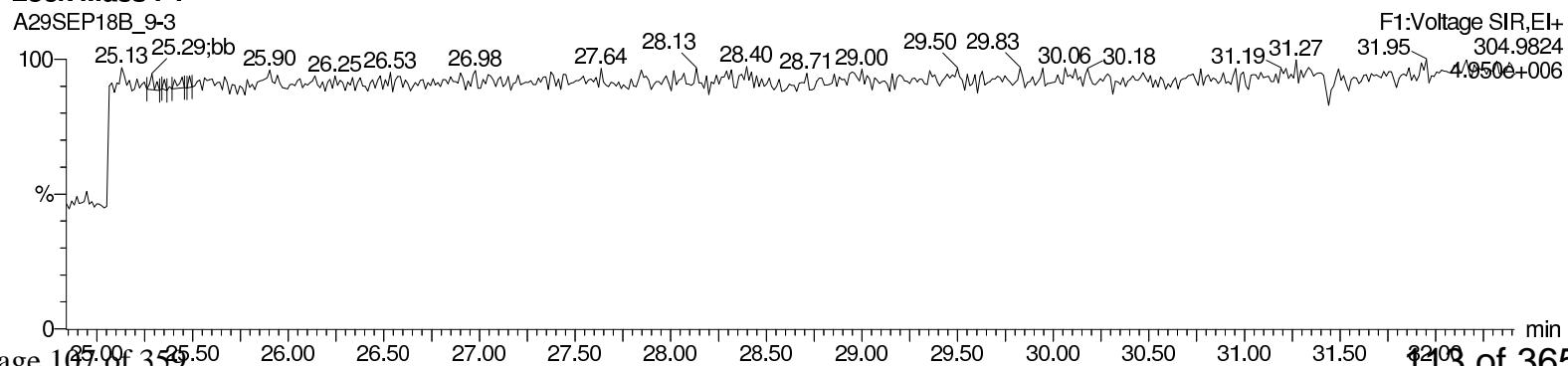
### HxDPE

A29SEP18B\_9-3



### Lock Mass F1

A29SEP18B\_9-3



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

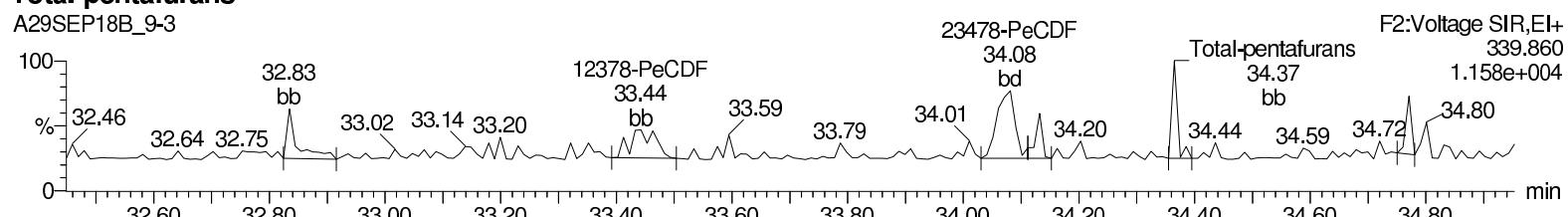
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

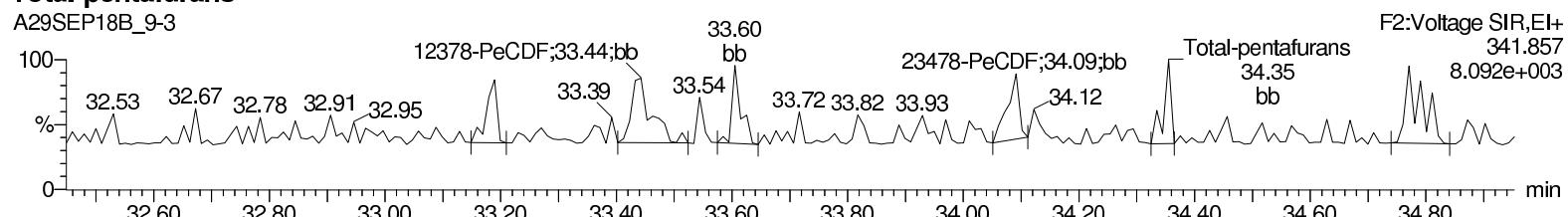
### Total-pentafurans

A29SEP18B\_9-3



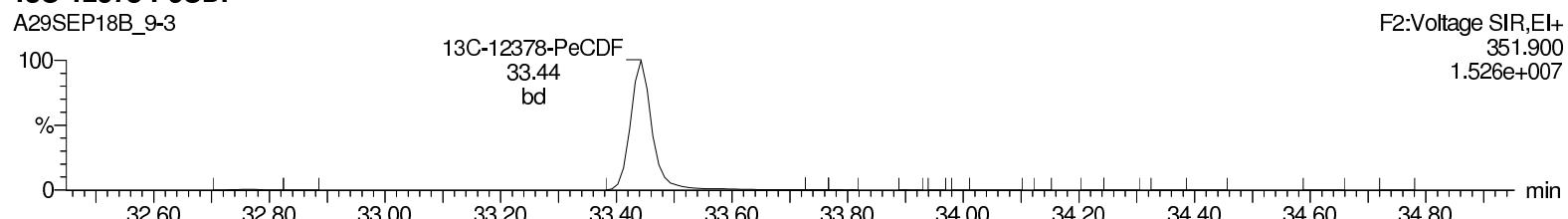
### Total-pentafurans

A29SEP18B\_9-3



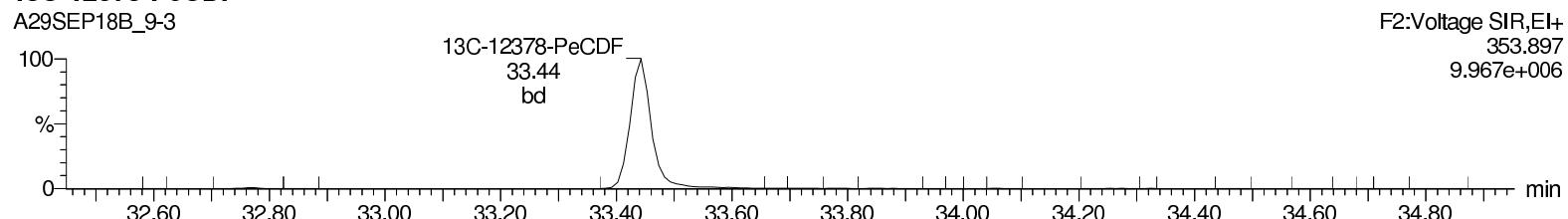
### 13C-12378-PeCDF

A29SEP18B\_9-3



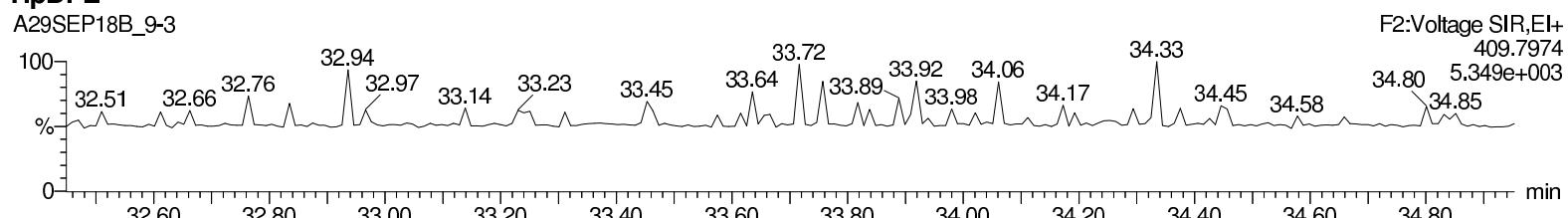
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A29SEP18B\_9-3



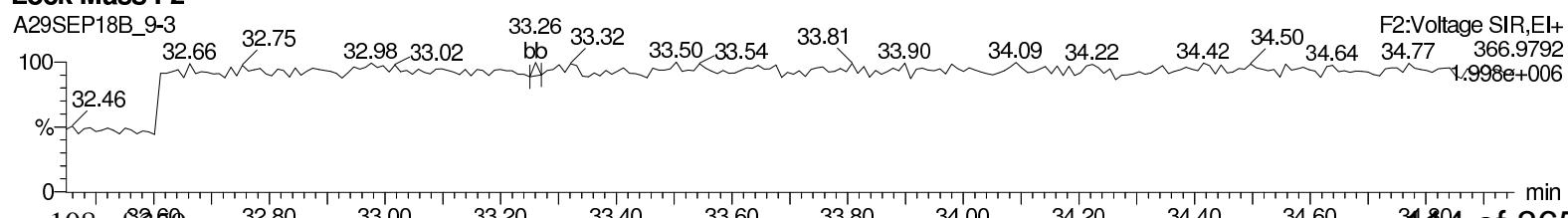
### HpDPE

A29SEP18B\_9-3



### Lock Mass F2

A29SEP18B\_9-3



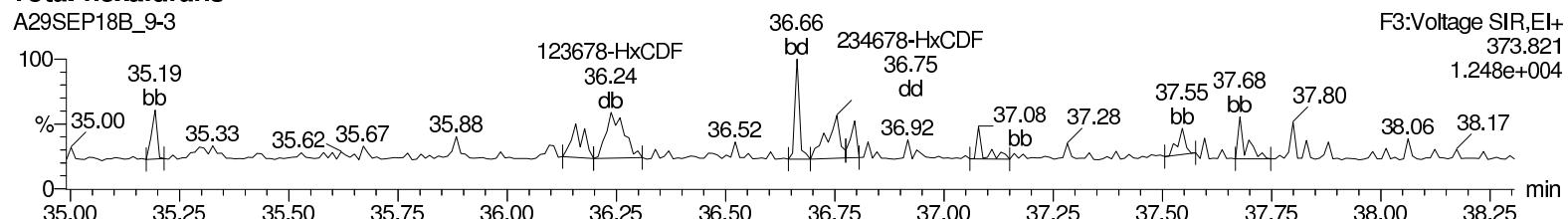
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

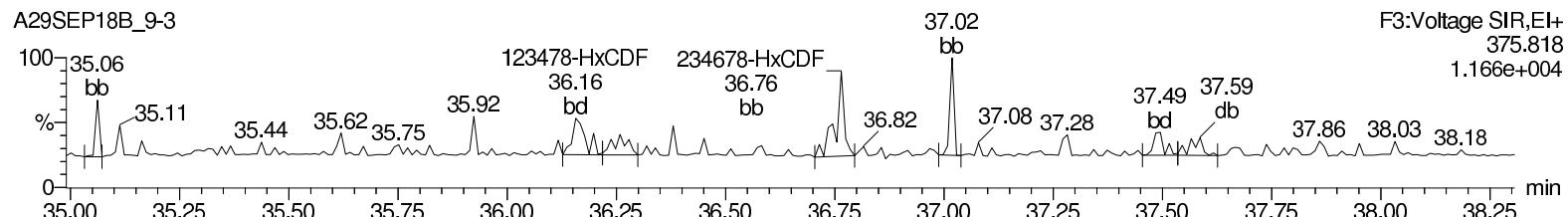
Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

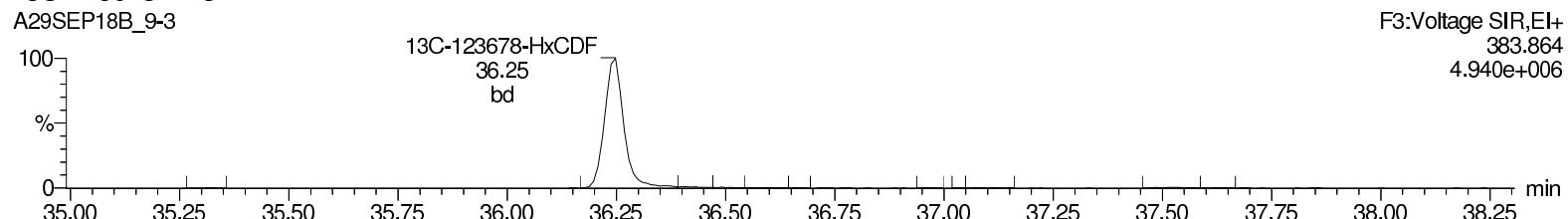
### Total-hexafurans



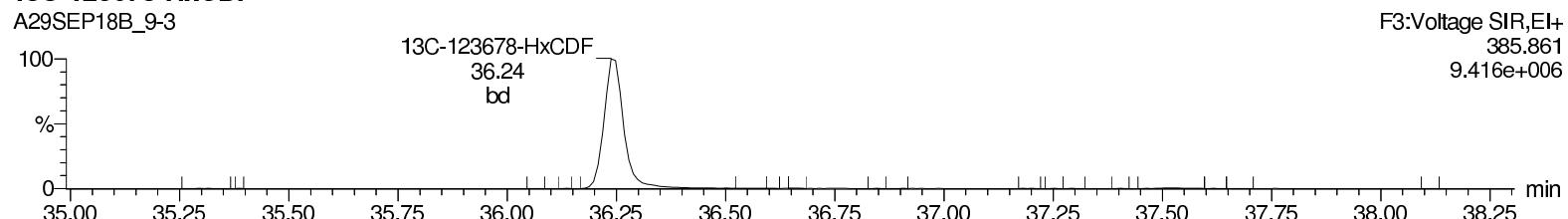
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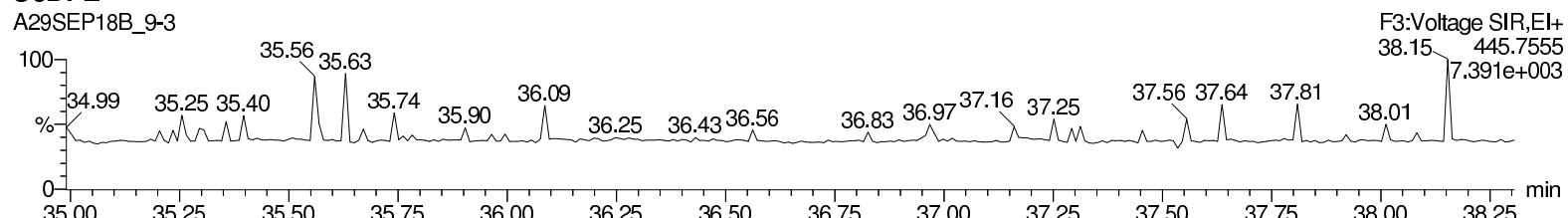
### 13C-123678-HxCDF



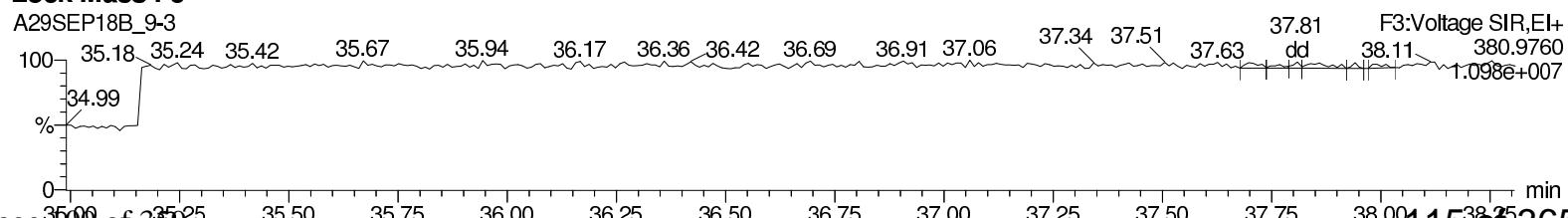
### 13C-123678-HxCDF



### OcDPE



### Lock Mass F3



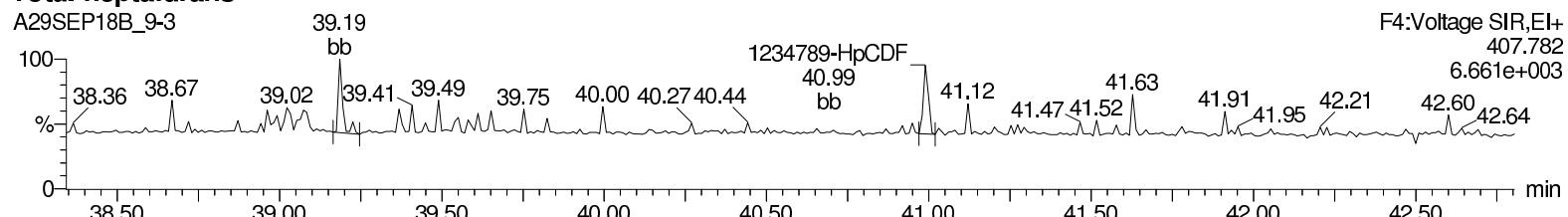
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

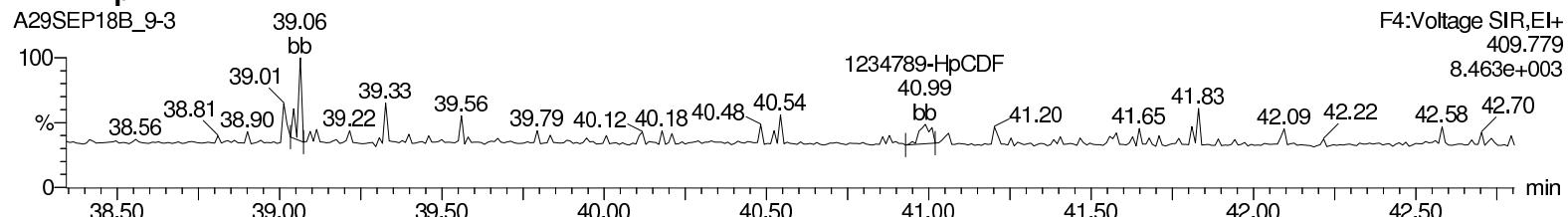
Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

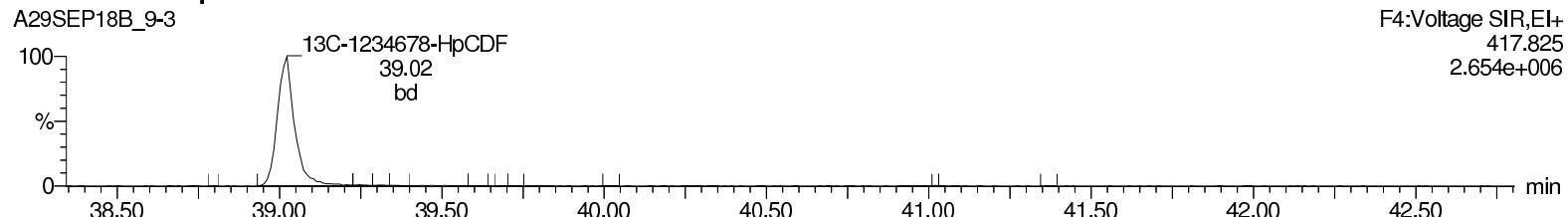
**Total-heptafurans**



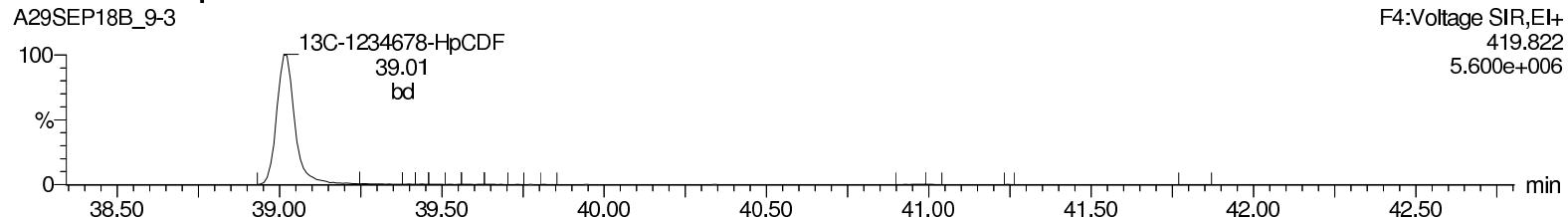
**Total-heptafurans**



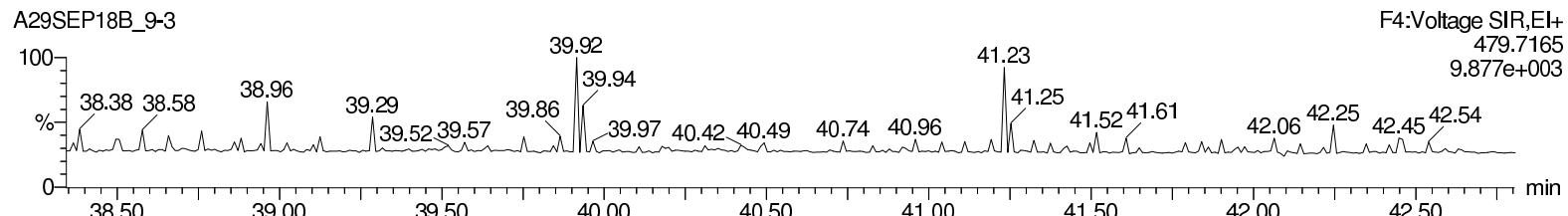
**13C-1234678-HpCDF**



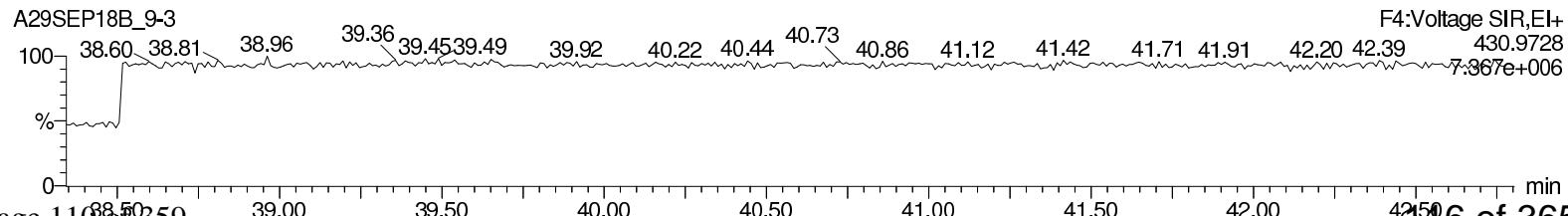
**13C-1234678-HpCDF**



**NoDPE**



**Lock Mass F4**



**Quantify Sample Report**  
Method 8290 Quantification Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

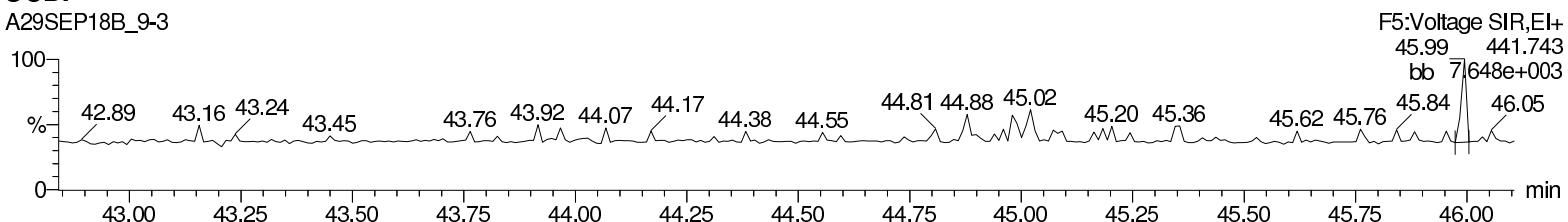
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-3, Date: 02-Oct-2018, Time: 19:44:16, ID: 12022221-1 MB, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

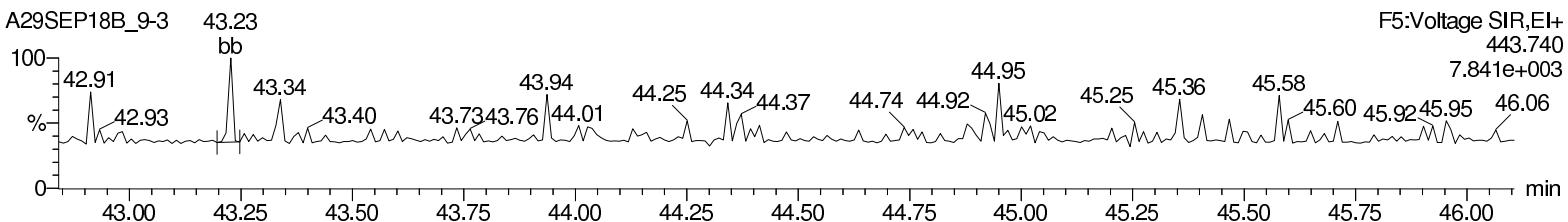
**OCDF**

A29SEP18B\_9-3



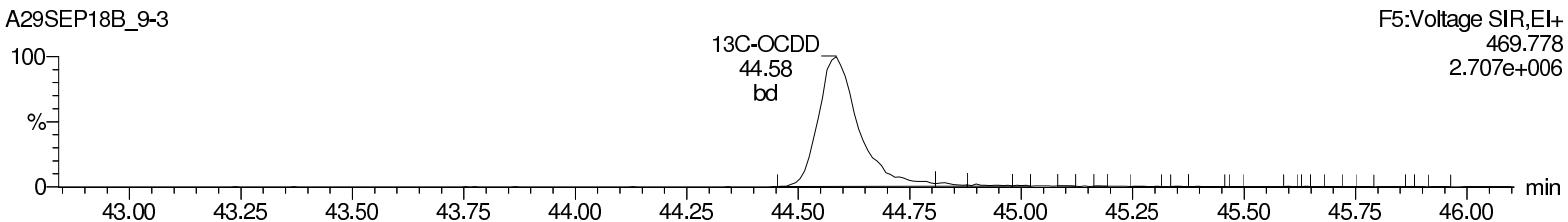
**OCDF**

A29SEP18B\_9-3



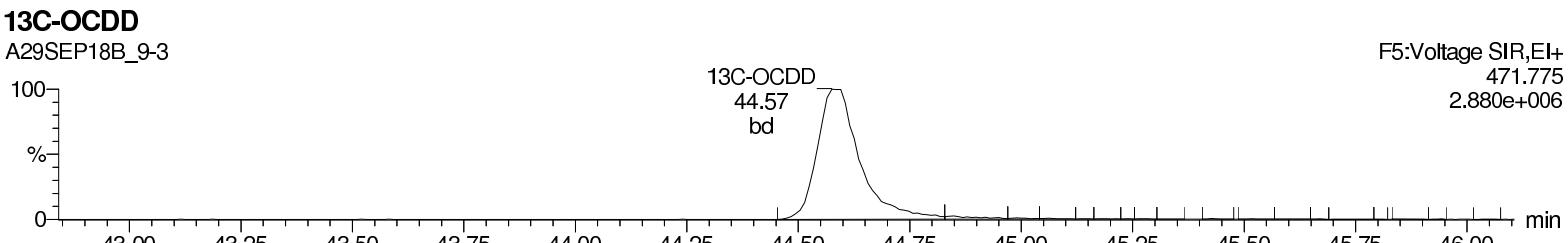
**13C-OCDD**

A29SEP18B\_9-3



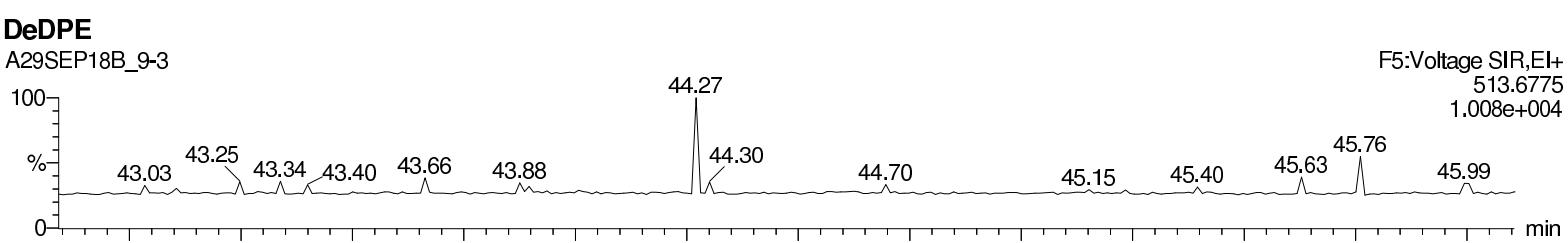
**13C-OCDD**

A29SEP18B\_9-3



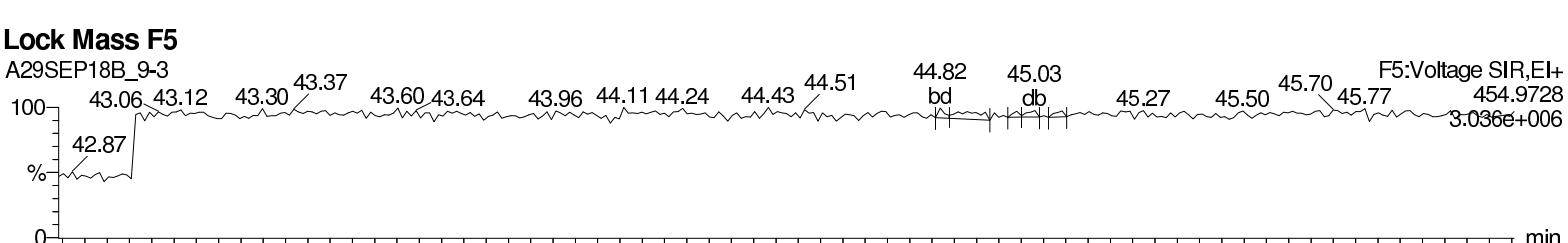
**DeDPE**

A29SEP18B\_9-3



**Lock Mass F5**

A29SEP18B\_9-3



**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 12022222  
**Client Sample:** QC for batch 38744  
**Client ID:** LCS for batch 38744  
**Batch ID:** 38747  
**Run Date:** 10/02/2018 18:08  
**Data File:** A29SEP18B\_9-1  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001**Project:** CURL00312  
**Matrix:** SOIL

**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 10 g

**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD		21.3		pg/g	0.130	1.00
40321-76-4	1,2,3,7,8-PeCDD		110		pg/g	0.254	5.00
39227-28-6	1,2,3,4,7,8-HxCDD		119		pg/g	0.440	5.00
57653-85-7	1,2,3,6,7,8-HxCDD		113		pg/g	0.372	5.00
19408-74-3	1,2,3,7,8,9-HxCDD		118		pg/g	0.418	5.00
35822-46-9	1,2,3,4,6,7,8-HpCDD		104		pg/g	0.550	5.00
3268-87-9	1,2,3,4,6,7,8,9-OCDD		203		pg/g	1.95	10.0
51207-31-9	2,3,7,8-TCDF		20.1		pg/g	0.204	1.00
57117-41-6	1,2,3,7,8-PeCDF		107		pg/g	0.326	5.00
57117-31-4	2,3,4,7,8-PeCDF		105		pg/g	0.292	5.00
70648-26-9	1,2,3,4,7,8-HxCDF		122		pg/g	0.478	5.00
57117-44-9	1,2,3,6,7,8-HxCDF		114		pg/g	0.416	5.00
60851-34-5	2,3,4,6,7,8-HxCDF		120		pg/g	0.464	5.00
72918-21-9	1,2,3,7,8,9-HxCDF		117		pg/g	0.588	5.00
67562-39-4	1,2,3,4,6,7,8-HpCDF		110		pg/g	0.554	5.00
55673-89-7	1,2,3,4,7,8,9-HpCDF		108		pg/g	0.750	5.00
39001-02-0	1,2,3,4,6,7,8,9-OCDF		189		pg/g	0.828	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		181	200	pg/g	90.7	(40%-135%)
13C-1,2,3,7,8-PeCDD		184	200	pg/g	91.8	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		140	200	pg/g	69.9	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		158	200	pg/g	78.8	(40%-135%)
13C-OCDD		263	400	pg/g	65.8	(40%-135%)
13C-2,3,7,8-TCDF		140	200	pg/g	69.9	(40%-135%)
13C-1,2,3,7,8-PeCDF		174	200	pg/g	87.0	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		131	200	pg/g	65.7	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		140	200	pg/g	70.1	(40%-135%)

**Comments:**

U Analyte was analyzed for, but not detected above the specified detection limit.

**MassLynx 4.1****Quantify Sample Summary Report**

Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

East Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 16:50:50 Eastern Standard Time

**Method:** C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_EPA8290\_A23AUG18.mdb **23 Aug 2018 12:08:58**  
**Calibration:** C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb **20 Aug 2018 13:48:29**

**Name:** A29SEP18B\_9-1, **Date:** 02-Oct-2018, **Time:** 18:08:58, **ID:** 12022222-1 **LCS, Description:** , **Job:** %8290%, **Task:** HRP750\_2, **User:** MJC

#	Name	Ion1Area	Ion2Area	Response	RRT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	12378-TCDD	3.92e4	4.94e4	8.86e4	31.43	1.000	0.79	NO	10.641	0.0650	8.62e5	2156	399.9	1.07e6	2350	455.2	bb
2	12378-PeCDD	2.10e5	1.31e5	3.41e5	34.25	1.000	1.61	NO	54.995	0.127	5.28e6	3864	1367.4	3.33e6	3876	858.4	bb
3	123478-HxCDD	1.66e5	1.35e5	3.01e5	36.86	0.998	1.23	NO	59.462	0.220	3.47e6	5417	640.0	2.89e6	3552	812.4	bd
4	123678-HxCDD	1.90e5	1.48e5	3.39e5	36.95	1.000	1.28	NO	56.524	0.186	3.94e6	5417	727.5	2.95e6	3552	830.1	dd
5	123789-HxCDD	1.73e5	1.42e5	3.14e5	37.20	1.007	1.22	NO	59.150	0.209	3.21e6	5417	591.7	2.58e6	3552	727.5	dd
6	1234678-HpCDD	1.13e5	1.09e5	2.23e5	40.29	1.000	1.03	NO	52.050	0.275	1.62e6	3216	504.0	1.64e6	3342	489.7	bd
7	OCDD	1.44e5	1.60e5	3.04e5	44.60	1.000	0.90	NO	101.386	0.975	1.36e6	5193	262.0	1.61e6	6065	264.8	bd
8	2378-TCDF	3.74e4	5.26e4	9.00e4	30.80	1.000	0.71	NO	10.065	0.102	6.03e5	2568	234.7	8.02e5	2936	273.2	bd
9	12378-PeCDF	2.94e5	1.88e5	4.82e5	33.44	1.000	1.56	NO	53.710	0.163	7.88e6	7788	1012.2	4.85e6	7127	680.3	bb
10	23478-PeCDF	3.22e5	2.08e5	5.30e5	34.06	1.019	1.54	NO	52.681	0.146	8.60e6	7788	1104.7	5.55e6	7127	778.1	bb
11	123478-HxCDF	2.40e5	1.94e5	4.34e5	36.15	0.998	1.23	NO	60.914	0.239	5.37e6	6433	834.9	4.35e6	8431	515.9	bd
12	123678-HxCDF	2.55e5	2.13e5	4.68e5	36.25	1.000	1.20	NO	57.089	0.208	5.55e6	6433	863.2	4.66e6	8431	552.9	dd
13	234678-HxCDF	2.44e5	1.96e5	4.40e5	36.74	1.014	1.24	NO	59.981	0.232	5.11e6	6433	794.4	4.24e6	8431	502.3	bb
14	123789-HxCDF	1.85e5	1.53e5	3.39e5	37.53	1.036	1.21	NO	58.459	0.294	3.24e6	6433	503.6	2.53e6	8431	299.6	bd
15	1234678-HpCDF	1.84e5	1.77e5	3.62e5	39.02	1.000	1.04	NO	54.940	0.277	3.10e6	5905	525.4	2.90e6	5714	506.9	bb
16	1234789-HpCDF	1.34e5	1.28e5	2.62e5	40.97	1.050	1.05	NO	53.868	0.375	1.87e6	5905	317.4	1.70e6	5714	298.1	bd
17	OCDF	1.62e5	1.80e5	3.42e5	44.90	1.007	0.90	NO	94.308	0.414	1.63e6	1949	838.7	1.76e6	3832	459.3	bd
18	13C-2378-TCDD	3.76e5	4.85e5	8.61e5	31.41	1.015	0.77	NO	90.700	0.130	7.83e6	5565	1407.1	1.01e7	2748	3669.2	bb
19	13C-12378-PeCDD	3.92e5	2.43e5	6.35e5	34.24	1.107	1.61	NO	91.750	0.208	9.59e6	5777	1659.6	5.87e6	3932	1492.9	bb
20	13C-123678-HxCDD	3.44e5	2.73e5	6.17e5	36.94	0.993	1.26	NO	69.911	0.160	6.93e6	4593	1509.3	5.68e6	5683	999.9	dd
21	13C-1234678-HpCDD	2.33e5	2.15e5	4.48e5	40.28	1.083	1.08	NO	78.844	0.231	3.24e6	5751	562.8	3.05e6	3810	800.6	bd
22	13C-OCDD	2.85e5	3.26e5	6.11e5	44.58	1.199	0.87	NO	131.657	0.322	2.75e6	4385	626.2	3.15e6	6480	485.8	bd
23	13C-2378-TCDF	4.28e5	5.45e5	9.73e5	30.78	0.995	0.79	NO	69.900	0.131	6.46e6	8208	787.1	8.19e6	4098	1998.3	bb
24	13C-12378-PeCDF	6.29e5	3.96e5	1.03e6	33.43	1.081	1.59	NO	87.024	0.102	1.60e7	3655	4384.9	1.06e7	4405	2398.0	bd
25	13C-123678-HxCDF	2.65e5	5.06e5	7.71e5	36.24	0.975	0.52	NO	65.674	0.122	5.78e6	3534	1636.5	1.07e7	6908	1543.7	dd
26	13C-1234678-HpCDF	1.68e5	3.72e5	5.40e5	39.00	1.049	0.45	NO	70.114	0.0928	2.67e6	2208	1210.0	5.96e6	2998	1988.2	bd
27	13C-1234-TCDD	3.92e5	5.01e5	8.93e5	30.94	0.000	0.78	NO	100.000	0.138	6.60e6	5565	1185.9	8.50e6	2748	3092.6	bb
28	13C-123789-HxCDD	4.20e5	3.40e5	7.60e5	37.18	0.000	1.23	NO	100.000	0.186	7.64e6	4593	1663.9	6.24e6	5683	1098.8	dd

**Quantify Sample Report**      **MassLynx 4.1**  
Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Method:** C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58

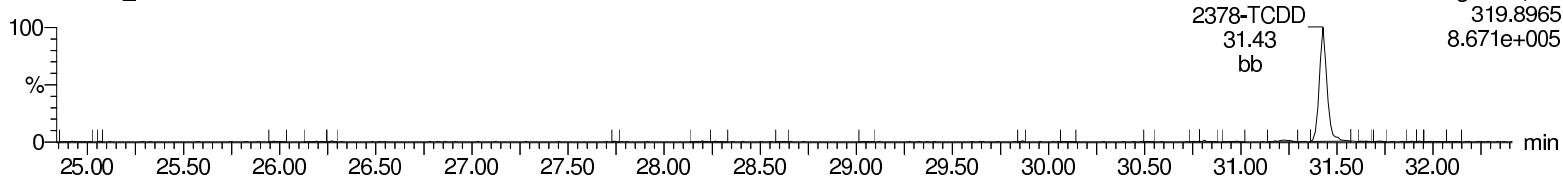
**Calibration:** C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29

**Name:** A29SEP18B\_9-1, **Date:** 02-Oct-2018, **Time:** 18:08:58, **ID:** 12022222-1 LCS, **Description:** , **Job:** %8290%, **Task:** HRP750\_2

**User:** MJC

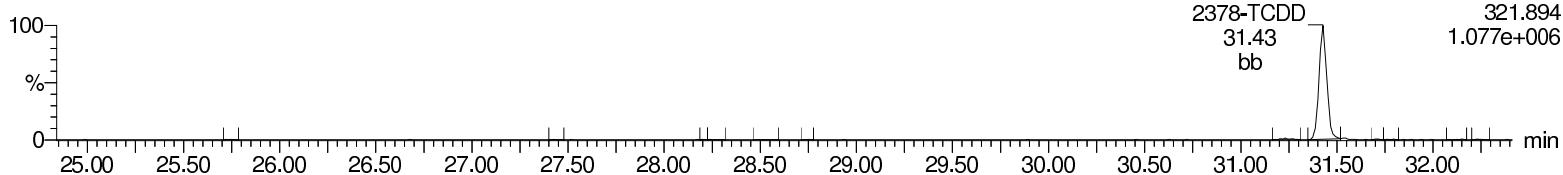
**Total-tetradioxins**

A29SEP18B\_9-1



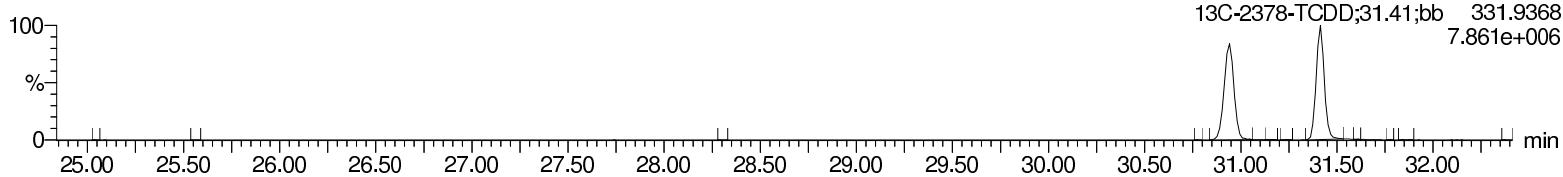
**Total-tetradioxins**

A29SEP18B\_9-1



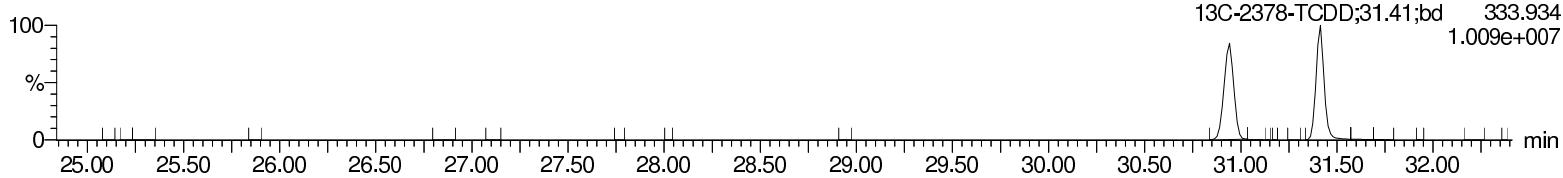
**13C-2378-TCDD**

A29SEP18B\_9-1



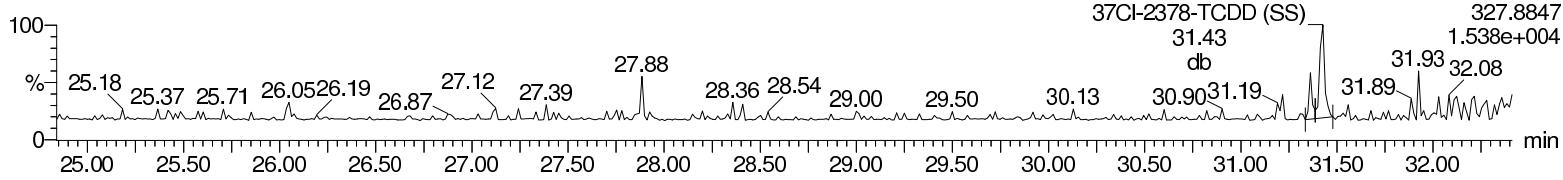
**13C-2378-TCDD**

A29SEP18B\_9-1



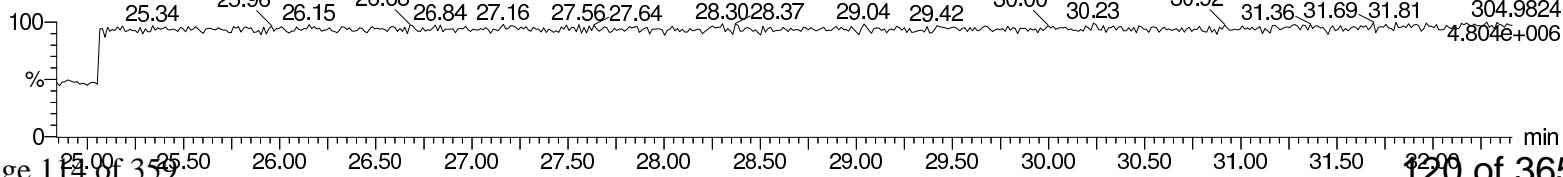
**37Cl-2378-TCDD (SS)**

A29SEP18B\_9-1



**Lock Mass F1**

A29SEP18B\_9-1



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

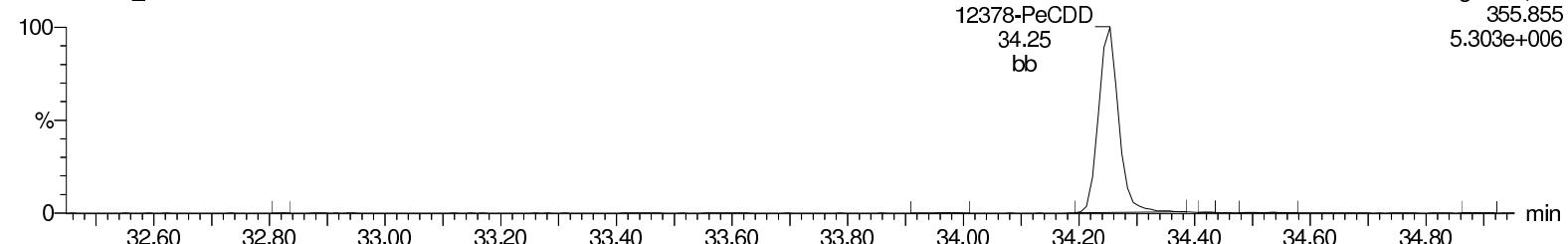
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2**  
**User: MJC**

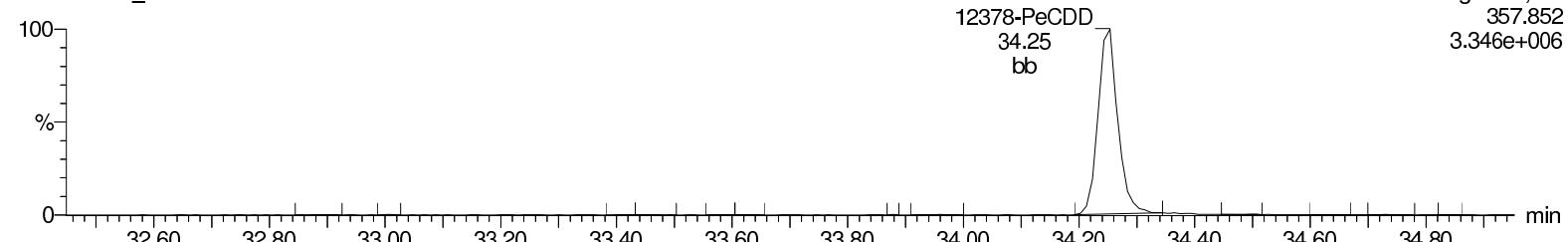
### Total-pentadioxins

A29SEP18B\_9-1



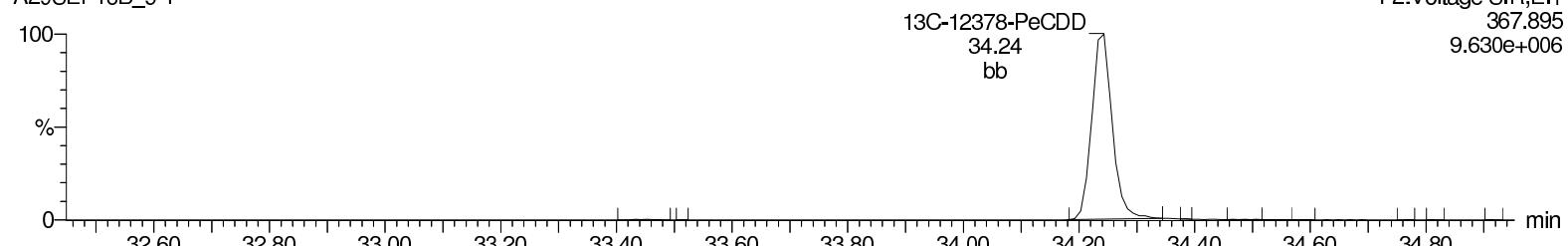
### Total-pentadioxins

A29SEP18B\_9-1



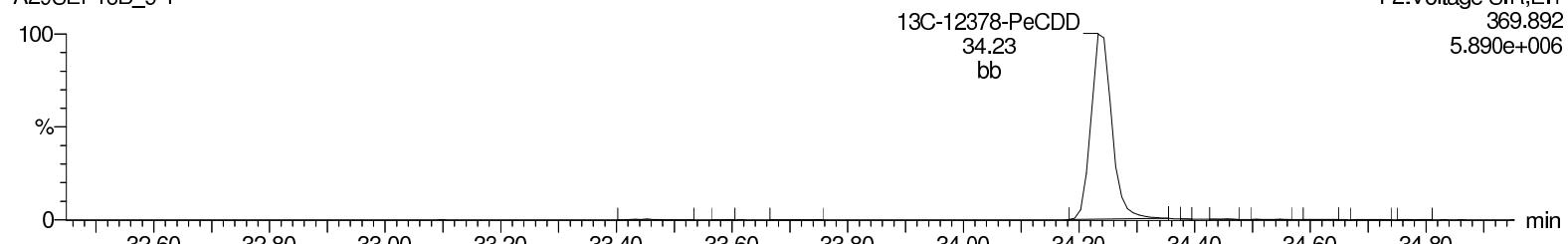
### 13C-12378-PeCDD

A29SEP18B\_9-1



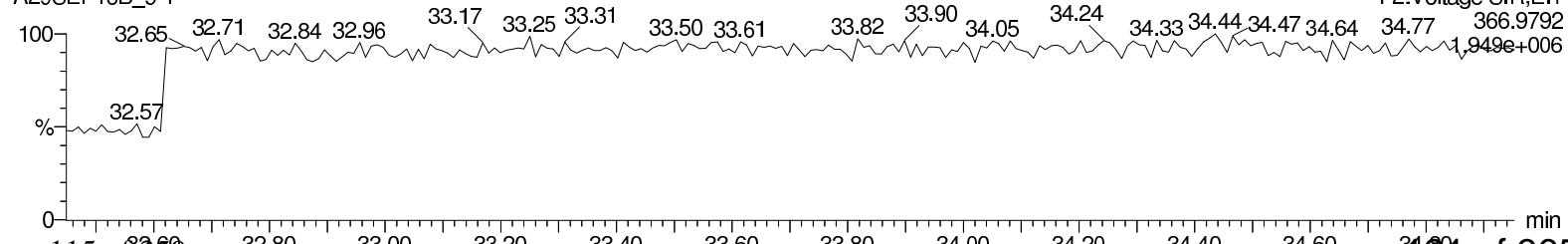
### 13C-12378-PeCDD

A29SEP18B\_9-1



### Lock Mass F2

A29SEP18B\_9-1



**Quantify Sample Report**  
Method 8290 Quantification Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

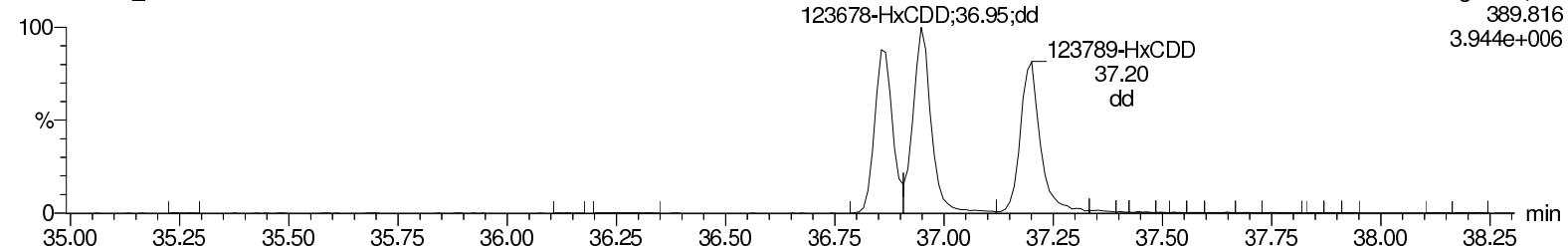
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2**  
**User: MJC**

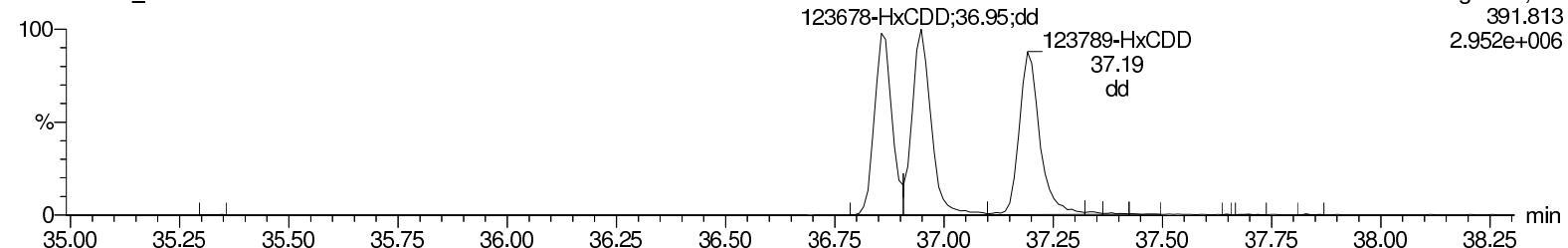
**Total-hexadioxins**

A29SEP18B\_9-1



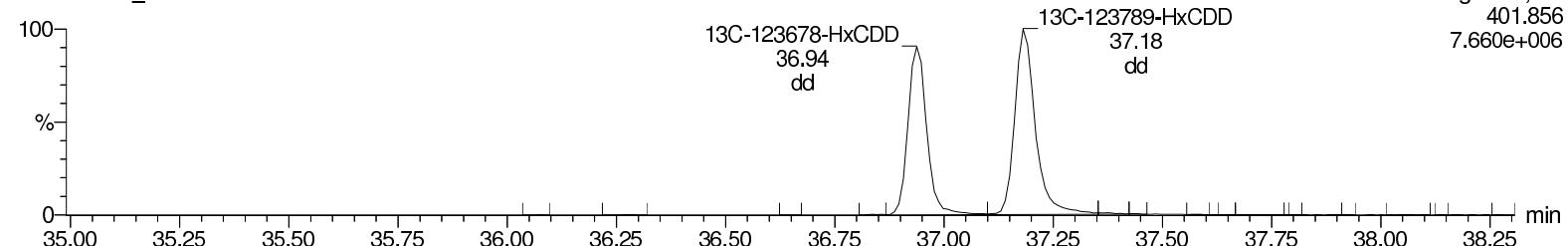
**Total-hexadioxins**

A29SEP18B\_9-1



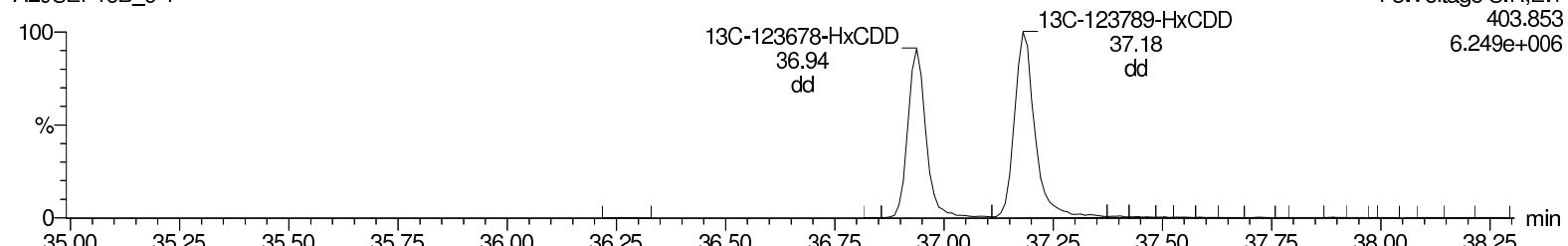
**13C-123678-HxCDD**

A29SEP18B\_9-1



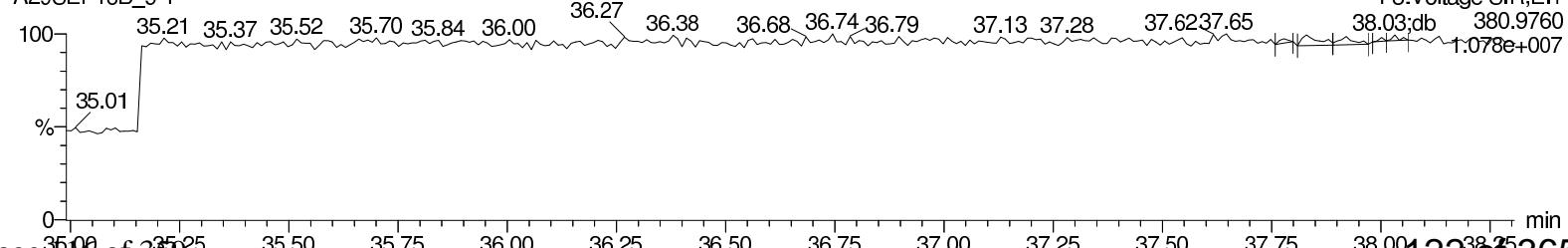
**13C-123678-HxCDD**

A29SEP18B\_9-1



**Lock Mass F3**

A29SEP18B\_9-1



**Quantify Sample Report**      **MassLynx 4.1**  
Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

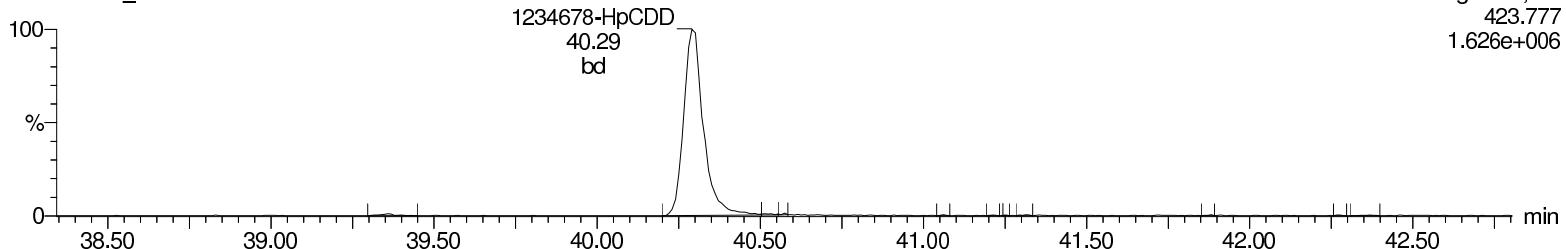
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2  
User: MJC

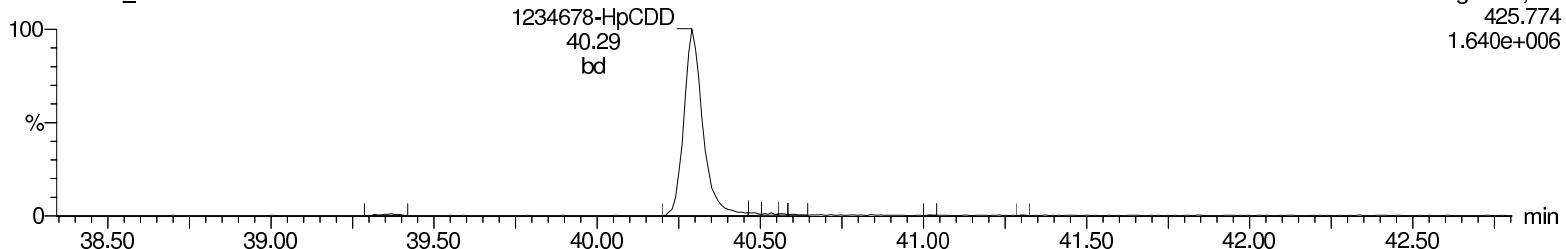
**Total-heptadioxins**

A29SEP18B\_9-1



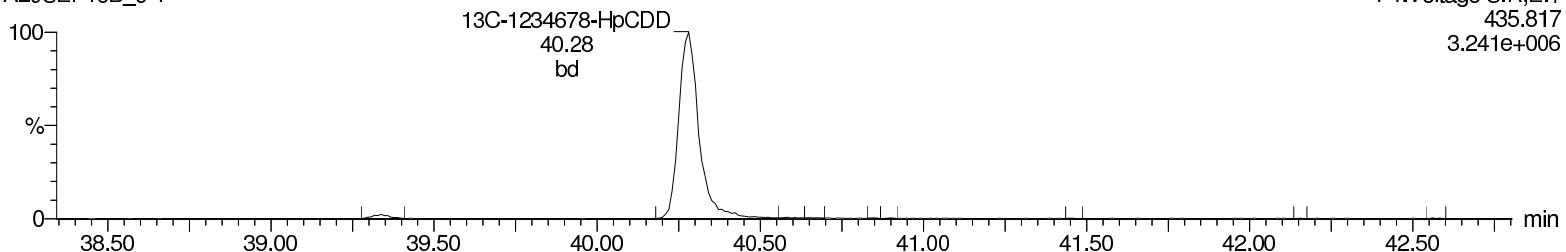
**Total-heptadioxins**

A29SEP18B\_9-1



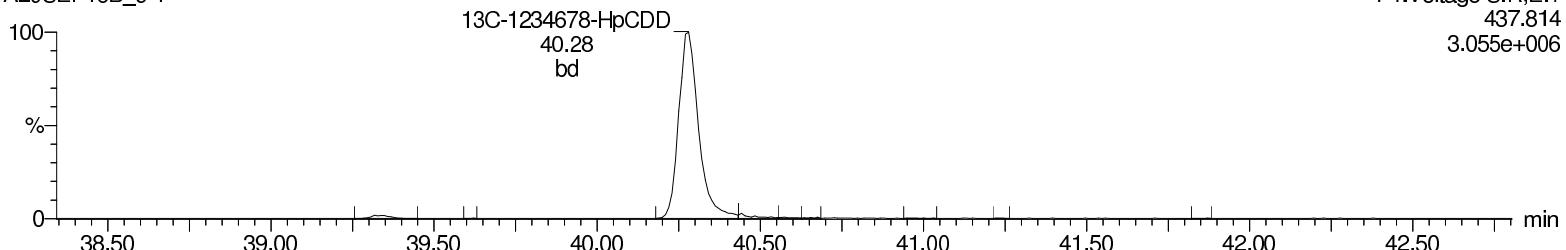
**13C-1234678-HpCDD**

A29SEP18B\_9-1



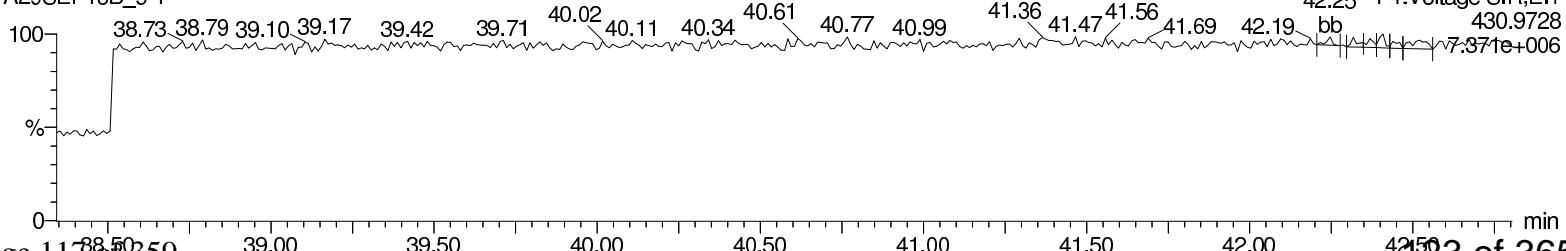
**13C-1234678-HpCDD**

A29SEP18B\_9-1



**Lock Mass F4**

A29SEP18B\_9-1



**Quantify Sample Report**      **MassLynx 4.1**  
Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

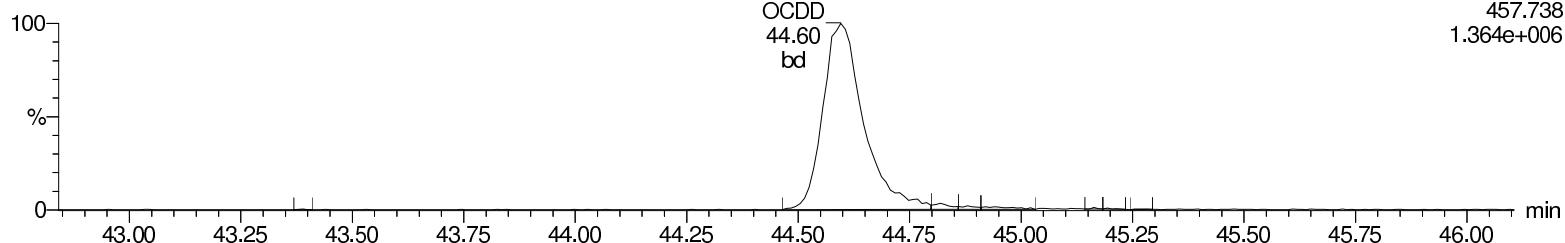
Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2  
User: MJC

**OCDD**

A29SEP18B\_9-1

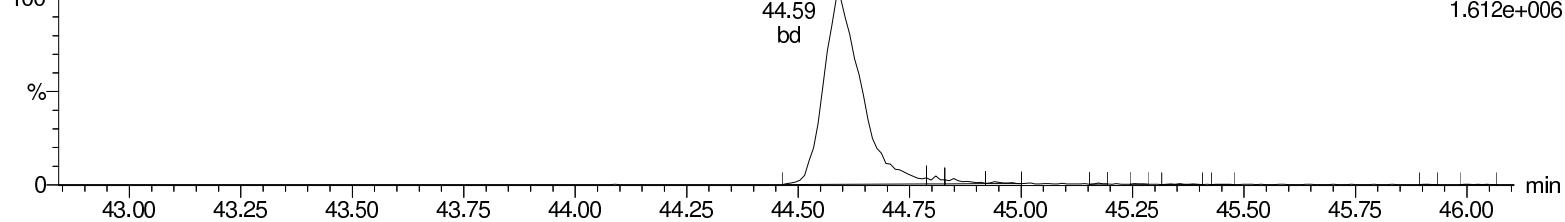
F5:Voltage SIR,EI+  
457.738  
1.364e+006



**OCDD**

A29SEP18B\_9-1

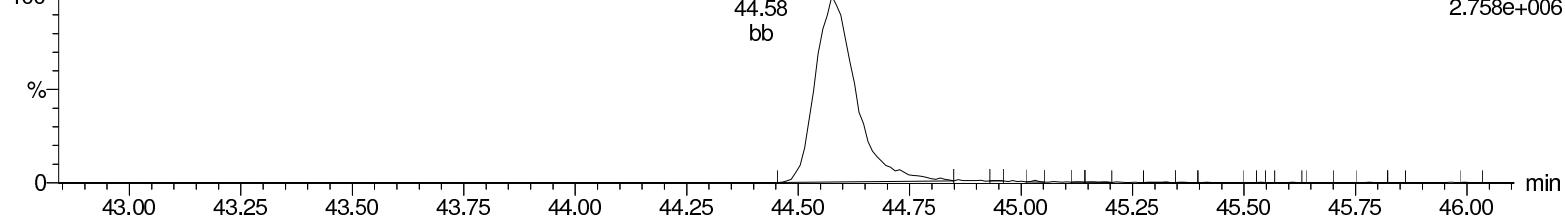
F5:Voltage SIR,EI+  
459.735  
1.612e+006



**13C-OCDD**

A29SEP18B\_9-1

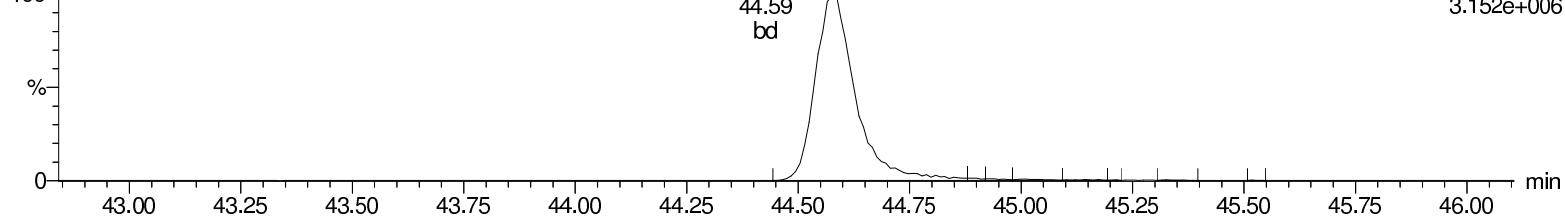
F5:Voltage SIR,EI+  
469.778  
2.758e+006



**13C-OCDD**

A29SEP18B\_9-1

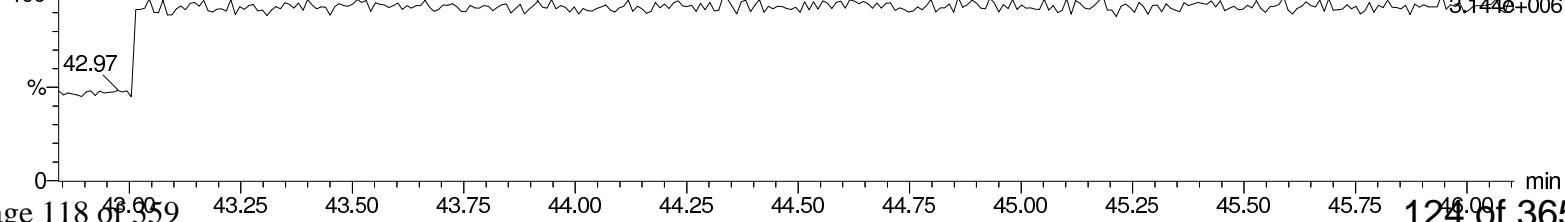
F5:Voltage SIR,EI+  
471.775  
3.152e+006



**Lock Mass F5**

A29SEP18B\_9-1

F5:Voltage SIR,EI+  
454.9728  
3.144e+006



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

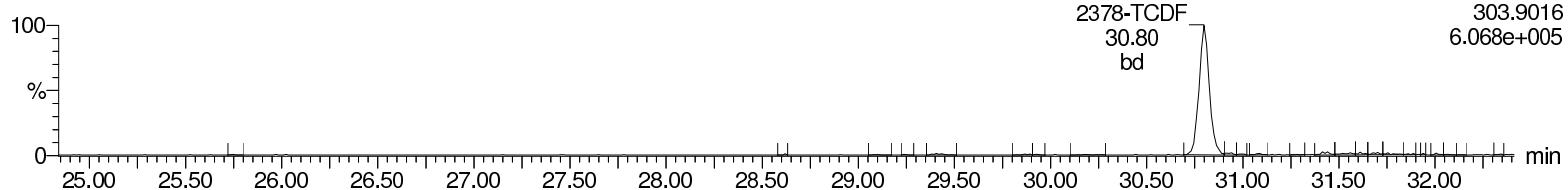
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2**  
**User: MJC**

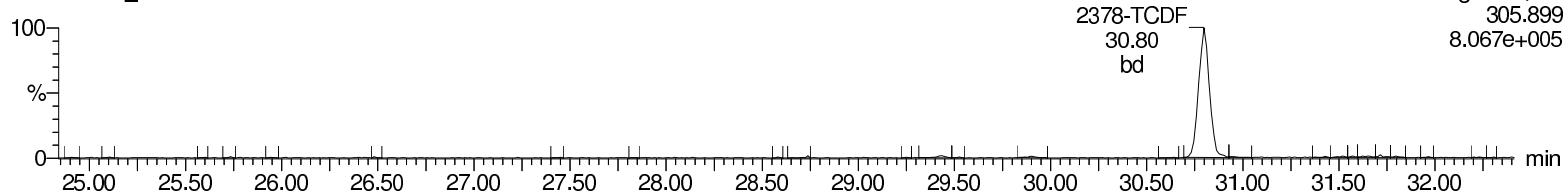
### Total-tetrafurans

A29SEP18B\_9-1



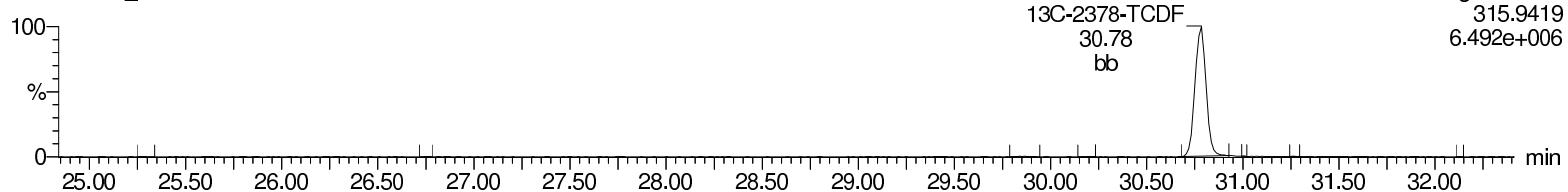
### Total-tetrafurans

A29SEP18B\_9-1



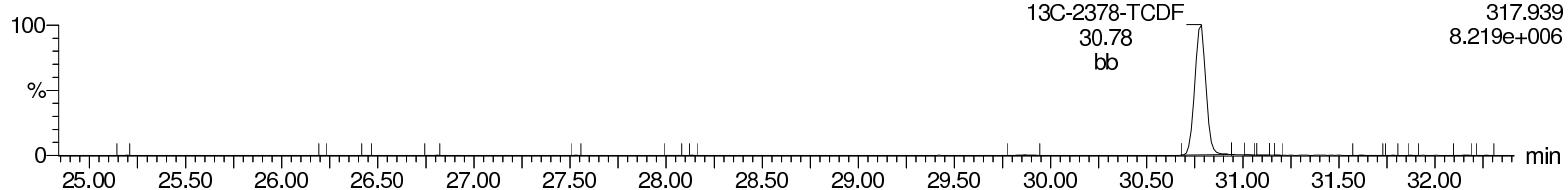
### 13C-2378-TCDF

A29SEP18B\_9-1



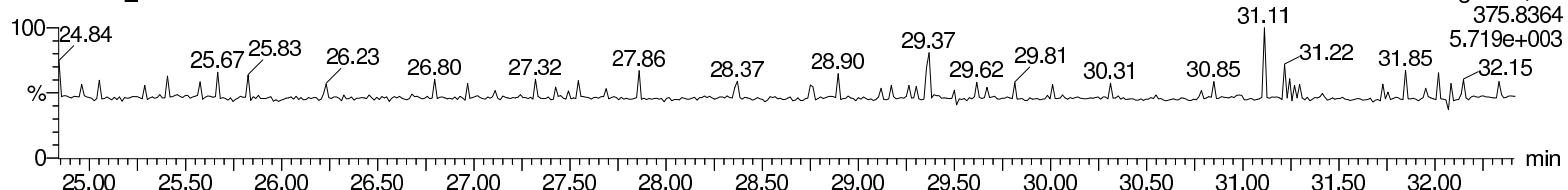
### 13C-2378-TCDF

A29SEP18B\_9-1



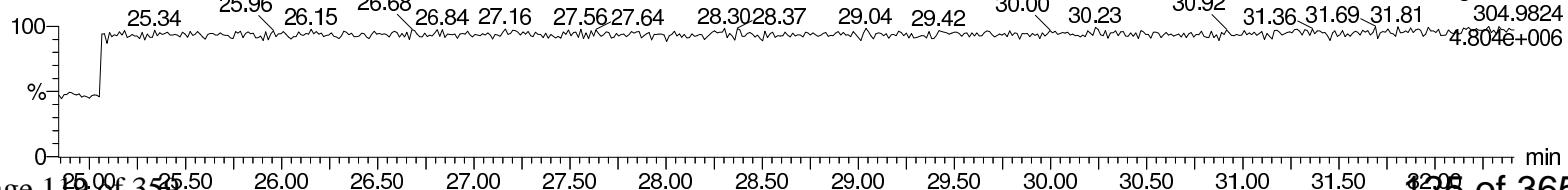
### HxDPE

A29SEP18B\_9-1



### Lock Mass F1

A29SEP18B\_9-1



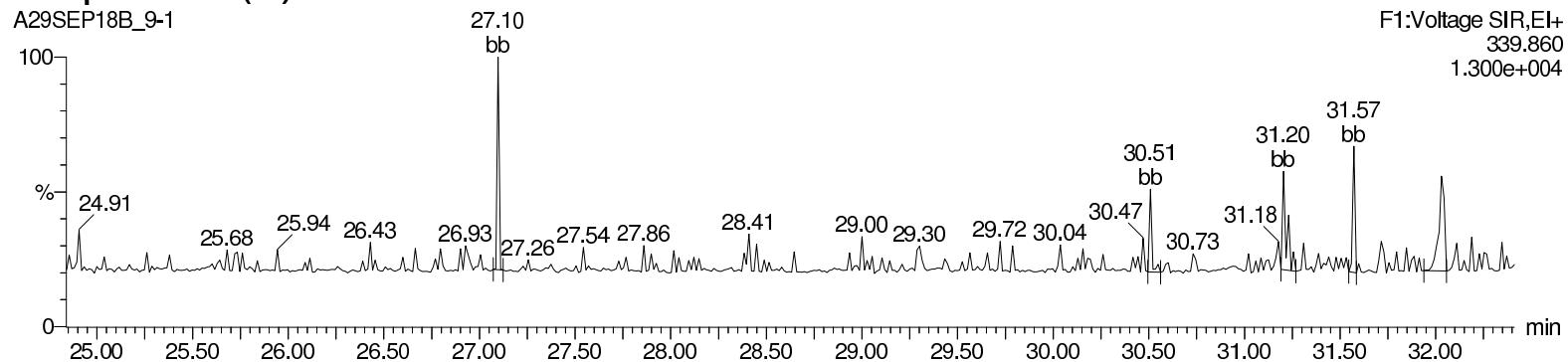
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

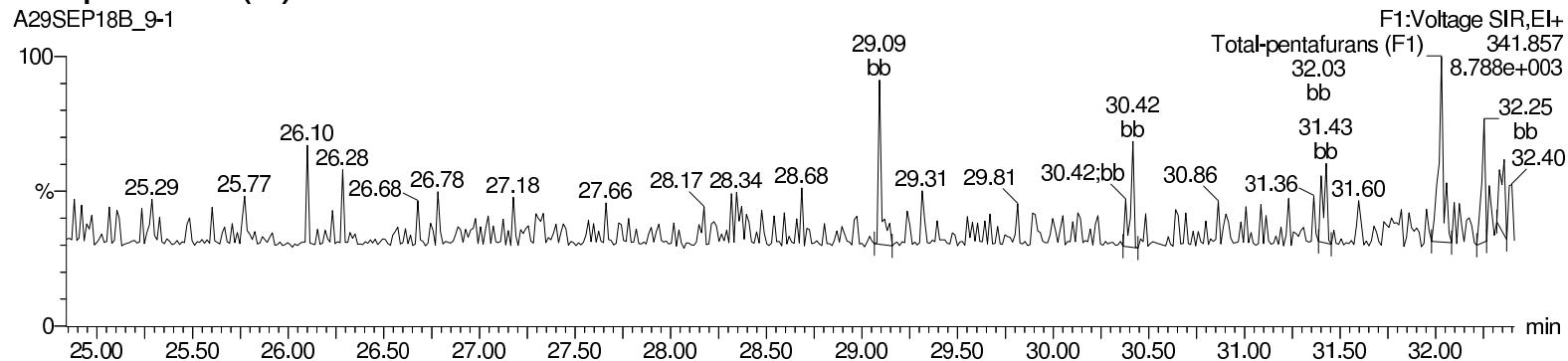
Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2  
User: MJC**

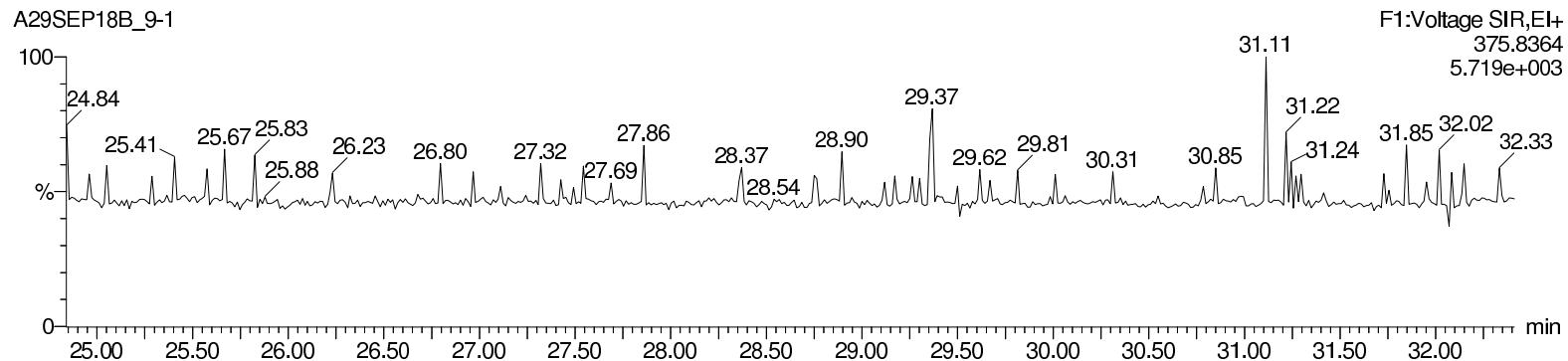
**Total-pentafurans (F1)**



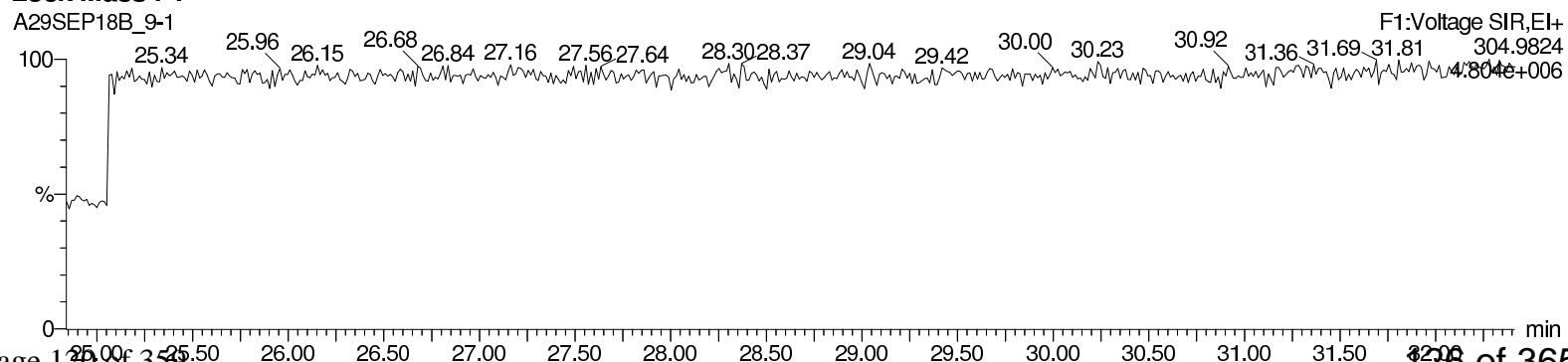
**Total-pentafurans (F1)**



**HxDPE**



**Lock Mass F1**



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

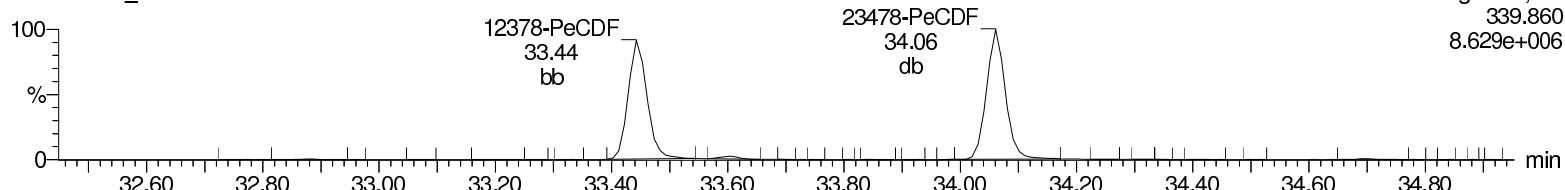
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2**  
**User: MJC**

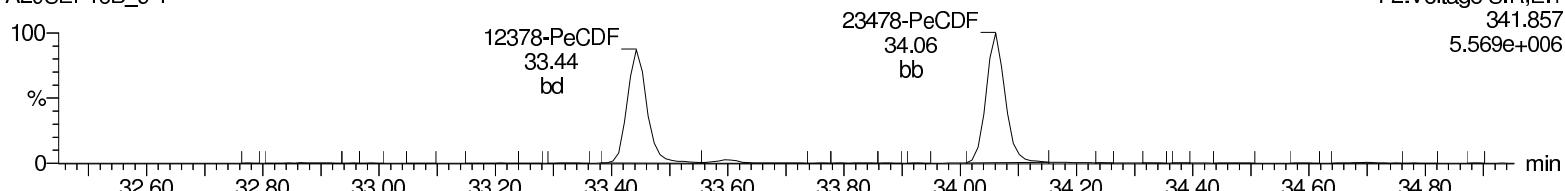
### Total-pentafurans

A29SEP18B\_9-1



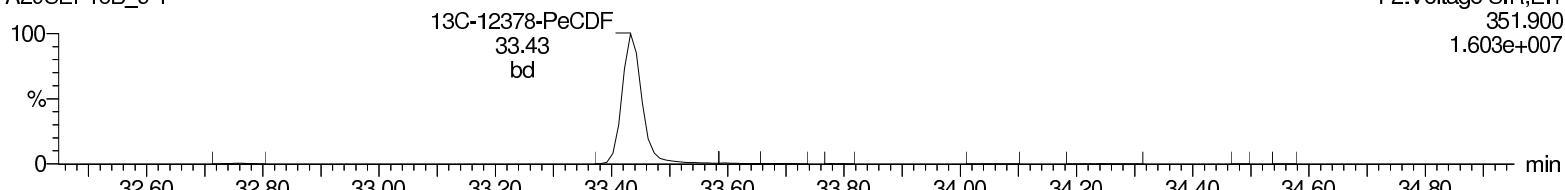
### Total-pentafurans

A29SEP18B\_9-1



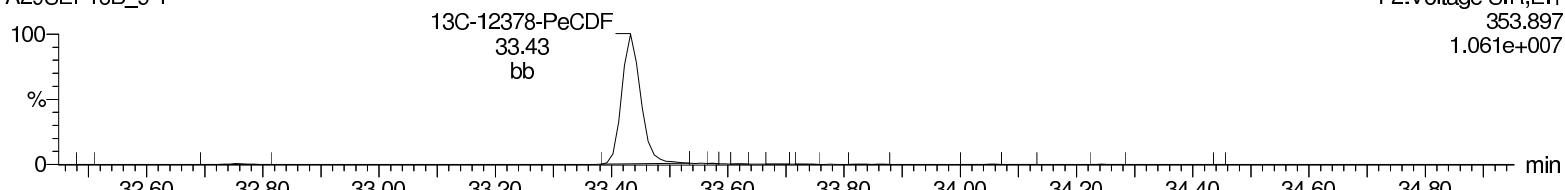
### 13C-12378-PeCDF

A29SEP18B\_9-1



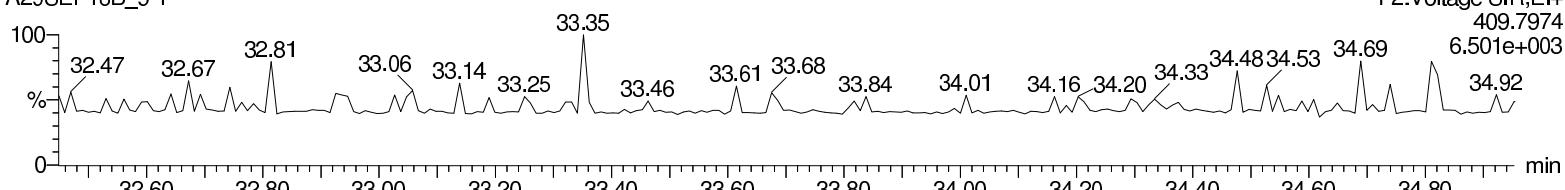
### 13C-12378-PeCDF

A29SEP18B\_9-1



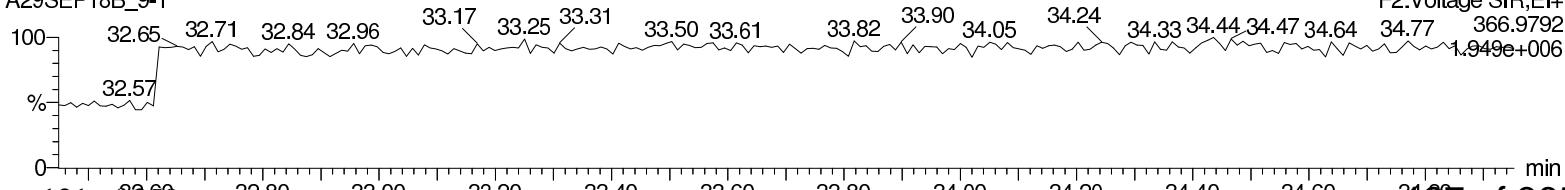
### HpDPE

A29SEP18B\_9-1



### Lock Mass F2

A29SEP18B\_9-1



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

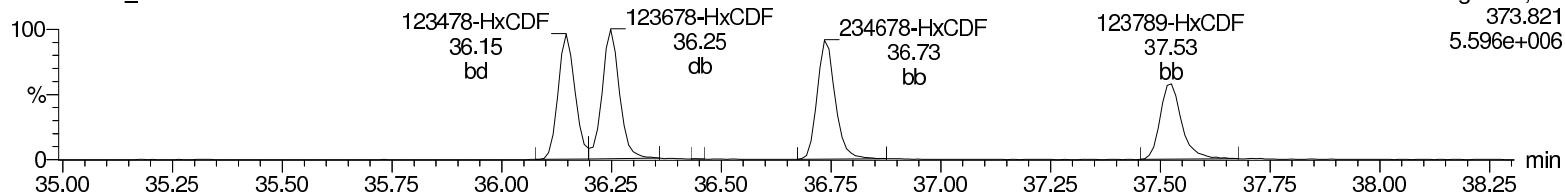
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2**  
**User: MJC**

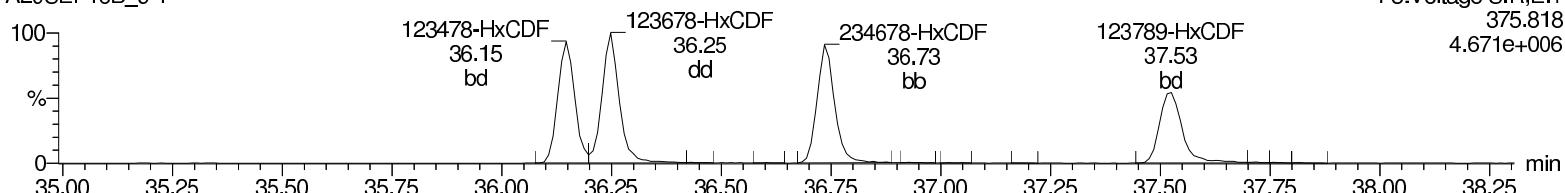
### Total-hexafurans

A29SEP18B\_9-1



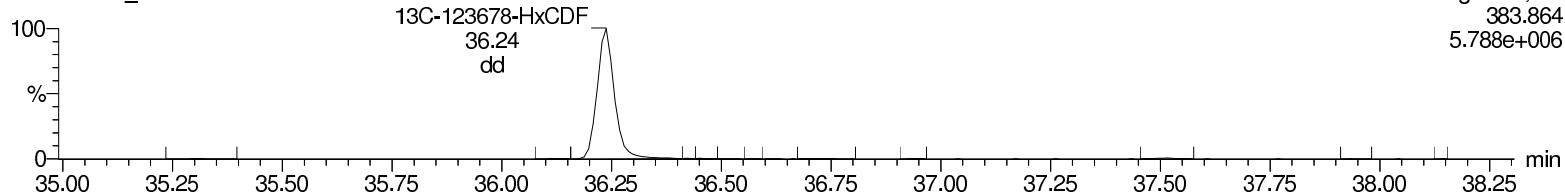
### Total-hexafurans

A29SEP18B\_9-1



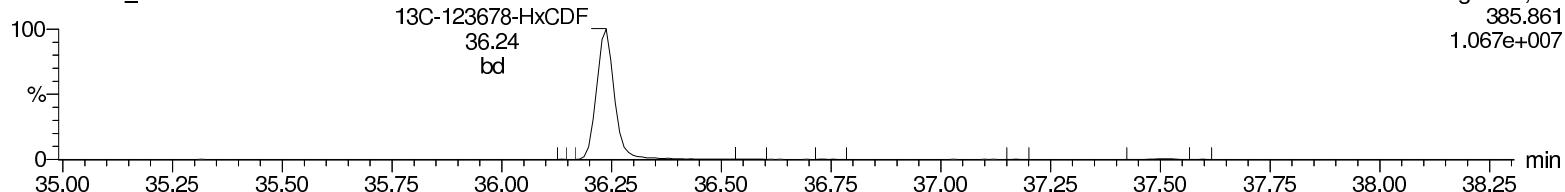
### 13C-123678-HxCDF

A29SEP18B\_9-1



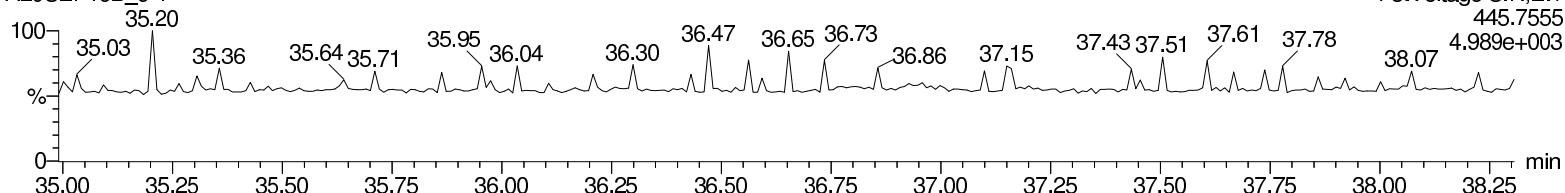
### 13C-123678-HxCDF

A29SEP18B\_9-1



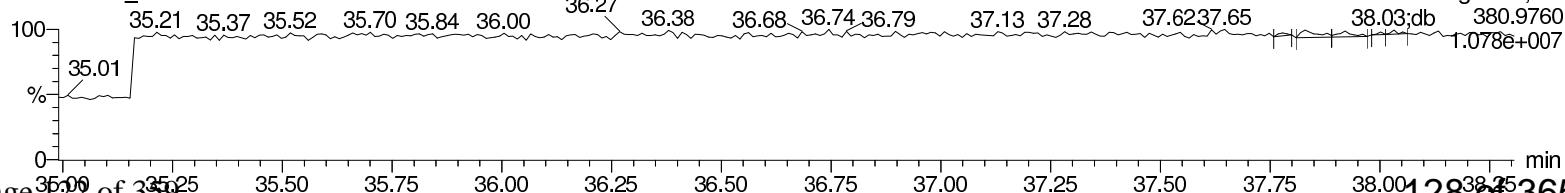
### OcDPE

A29SEP18B\_9-1



### Lock Mass F3

A29SEP18B\_9-1



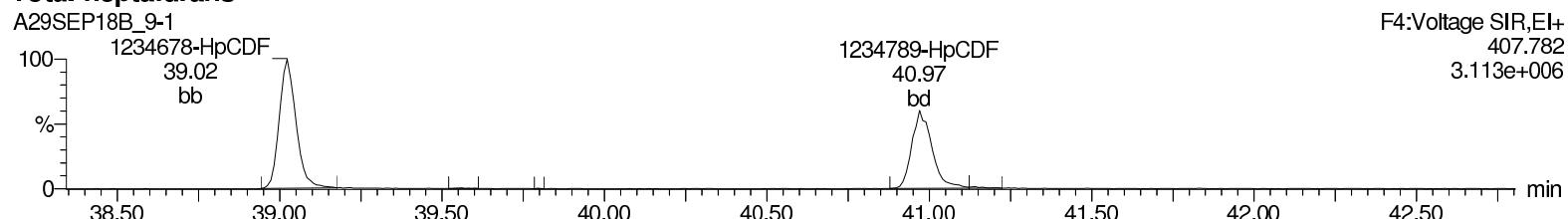
Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

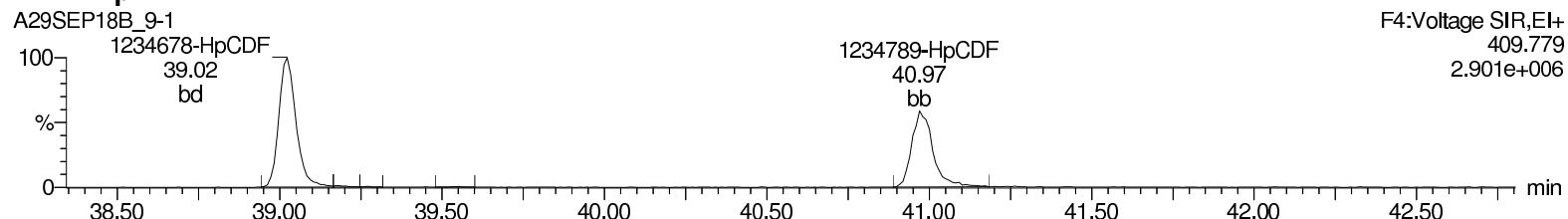
Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2**  
**User: MJC**

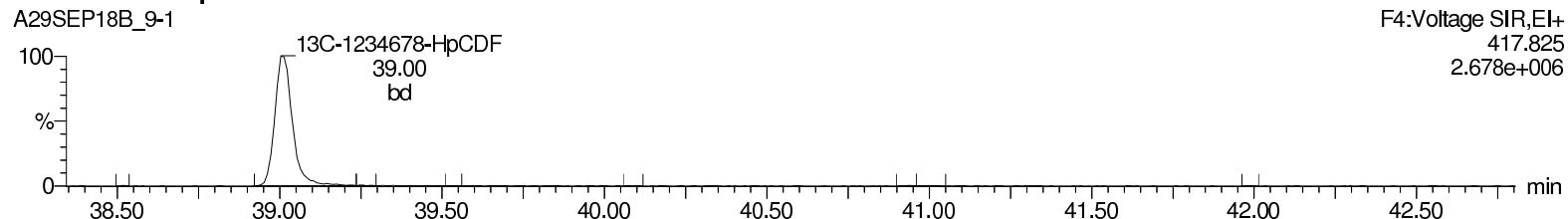
### Total-heptafurans



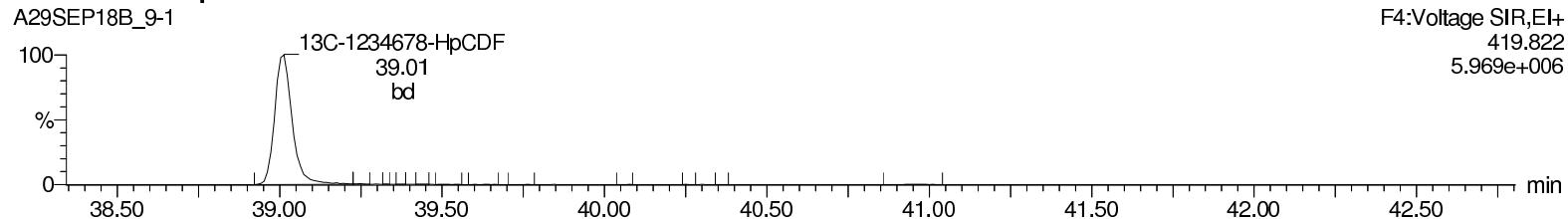
### Total-heptafurans



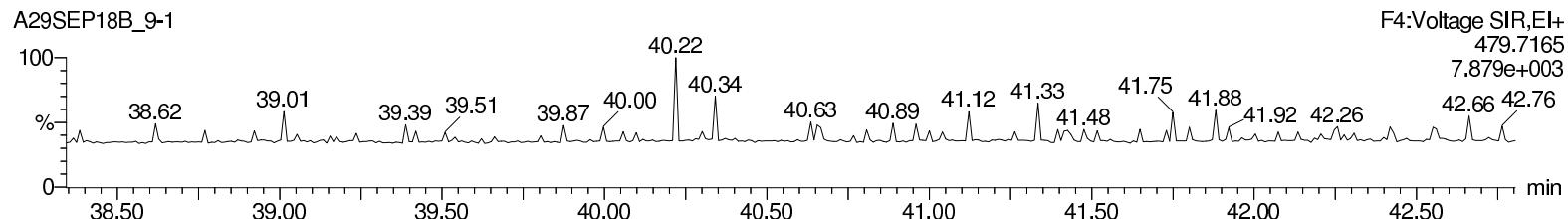
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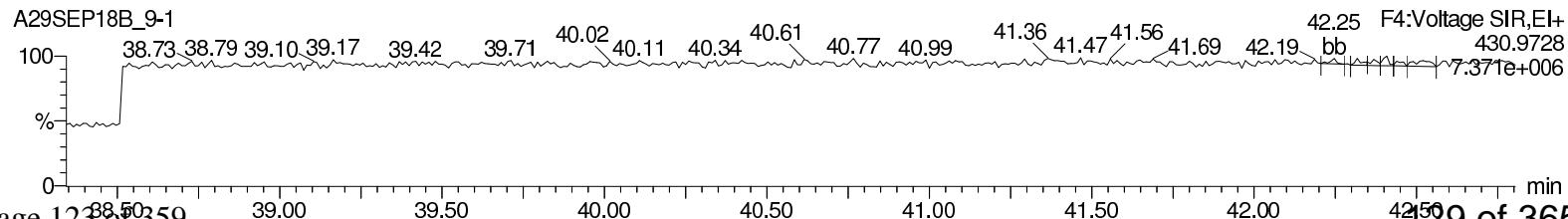
### 13C-1234678-HpCDF



### NoDPE



### Lock Mass F4



**Quantify Sample Report**  
Method 8290 Quantification Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

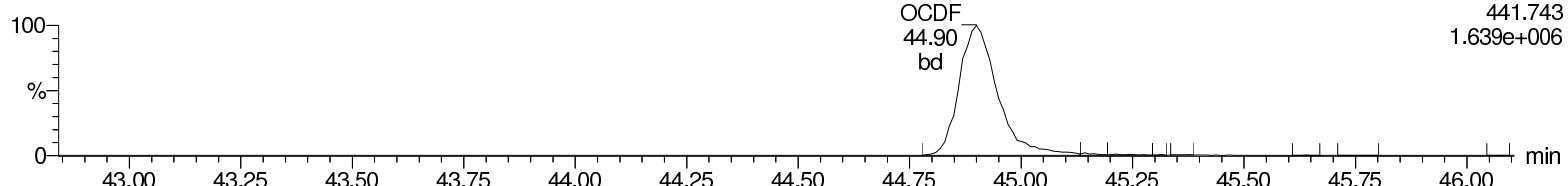
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-1, Date: 02-Oct-2018, Time: 18:08:58, ID: 12022222-1 LCS, Description: , Job: %8290%, Task: HRP750\_2**  
**User: MJC**

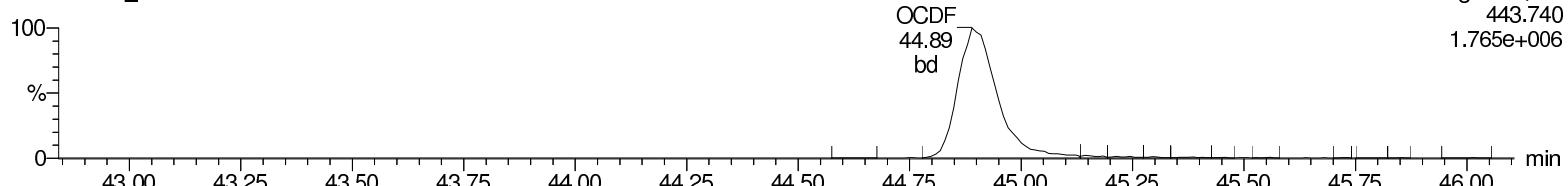
**OCDF**

A29SEP18B\_9-1



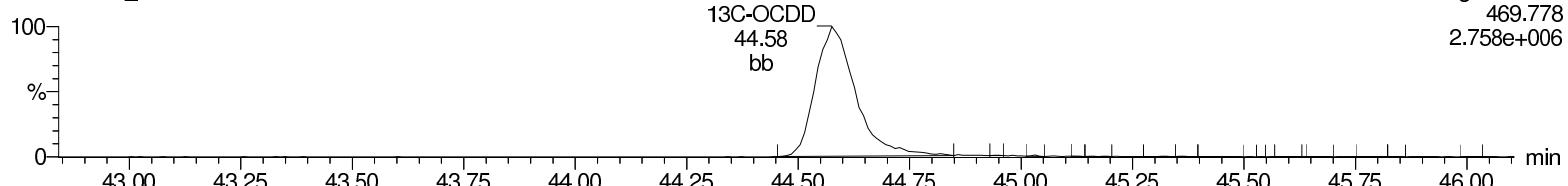
**OCDF**

A29SEP18B\_9-1



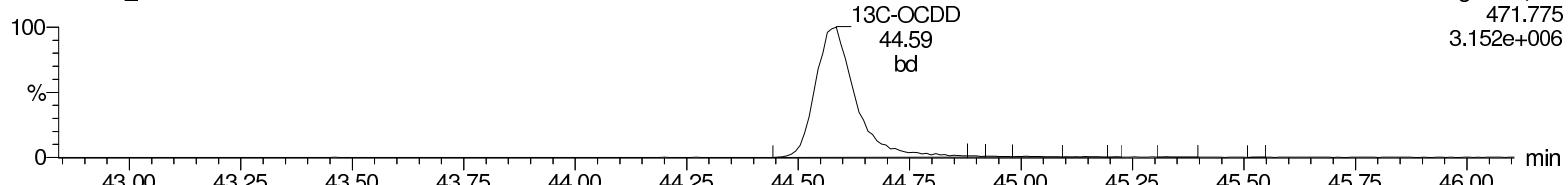
**13C-OCDD**

A29SEP18B\_9-1



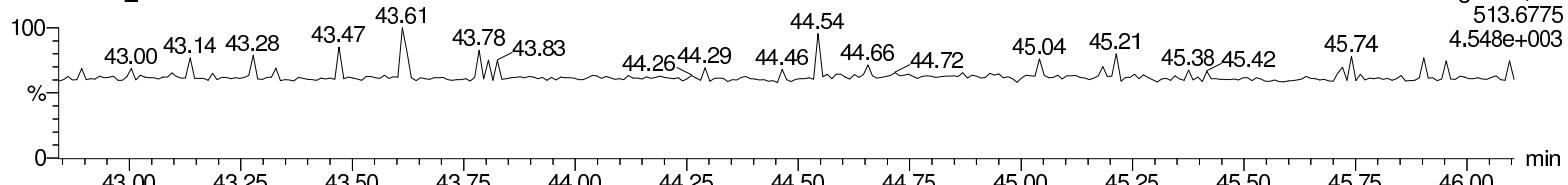
**13C-OCDD**

A29SEP18B\_9-1



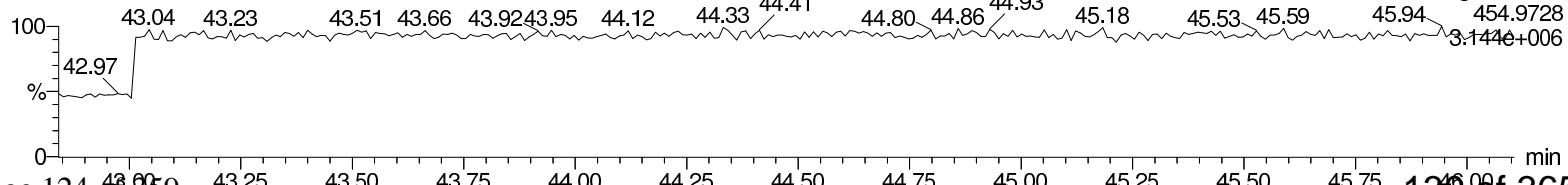
**DeDPE**

A29SEP18B\_9-1



**Lock Mass F5**

A29SEP18B\_9-1



**Hi-Res Dioxins/Furans  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

**SDG Number:** 303137  
**Lab Sample ID:** 12022223  
**Client Sample:** QC for batch 38744  
**Client ID:** LCSD for batch 38744  
**Batch ID:** 38747  
**Run Date:** 10/02/2018 18:56  
**Data File:** A29SEP18B\_9-2  
**Prep Batch:** 38744  
**Prep Date:** 01-OCT-18

**Client:** CURL001  
**Method:** SW846 8290A  
**Analyst:** MJC  
**Prep Method:** SW846 3540C  
**Prep Aliquot:** 10 g

**Project:** CURL00312  
**Matrix:** SOIL  
**Prep Basis:** As Received  
**Instrument:** HRP750  
**Dilution:** 1

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD		19.5		pg/g	0.108	1.00
40321-76-4	1,2,3,7,8-PeCDD		102		pg/g	0.264	5.00
39227-28-6	1,2,3,4,7,8-HxCDD		111		pg/g	0.542	5.00
57653-85-7	1,2,3,6,7,8-HxCDD		106		pg/g	0.458	5.00
19408-74-3	1,2,3,7,8,9-HxCDD		115		pg/g	0.516	5.00
35822-46-9	1,2,3,4,6,7,8-HpCDD		98.1		pg/g	0.478	5.00
3268-87-9	1,2,3,4,6,7,8,9-OCDD		195		pg/g	1.24	10.0
51207-31-9	2,3,7,8-TCDF		19.0		pg/g	0.144	1.00
57117-41-6	1,2,3,7,8-PeCDF		103		pg/g	0.312	5.00
57117-31-4	2,3,4,7,8-PeCDF		97.2		pg/g	0.278	5.00
70648-26-9	1,2,3,4,7,8-HxCDF		116		pg/g	0.518	5.00
57117-44-9	1,2,3,6,7,8-HxCDF		113		pg/g	0.450	5.00
60851-34-5	2,3,4,6,7,8-HxCDF		119		pg/g	0.502	5.00
72918-21-9	1,2,3,7,8,9-HxCDF		119		pg/g	0.636	5.00
67562-39-4	1,2,3,4,6,7,8-HpCDF		107		pg/g	0.452	5.00
55673-89-7	1,2,3,4,7,8,9-HpCDF		103		pg/g	0.610	5.00
39001-02-0	1,2,3,4,6,7,8,9-OCDF		186		pg/g	0.932	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		191	200	pg/g	95.5	(40%-135%)
13C-1,2,3,7,8-PeCDD		180	200	pg/g	90.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		135	200	pg/g	67.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		156	200	pg/g	78.1	(40%-135%)
13C-OCDD		278	400	pg/g	69.5	(40%-135%)
13C-2,3,7,8-TCDF		143	200	pg/g	71.4	(40%-135%)
13C-1,2,3,7,8-PeCDF		177	200	pg/g	88.6	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		123	200	pg/g	61.7	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		138	200	pg/g	68.9	(40%-135%)

**Comments:**

U Analyte was analyzed for, but not detected above the specified detection limit.

**MassLynx 4.1****Quantify Sample Summary Report**

Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld  
 East Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time  
 Printed: Wednesday, October 03, 2018 16:51:50 Eastern Standard Time

**Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**  
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RRT	RA	Fail?	pg/uL	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	12378-TCDD	3.88e4	4.92e4	8.80e4	31.43	1.000	0.79	NO	9.741	0.0539	7.53e5	1921	391.8	9.37e5	1825	513.6	bb
2	12378-PeCDD	1.96e5	1.24e5	3.20e5	34.25	1.000	1.58	NO	50.870	0.132	4.76e6	4916	968.7	2.87e6	3082	930.8	bb
3	123478-HxCDD	1.56e5	1.23e5	2.79e5	36.87	0.998	1.27	NO	55.280	0.271	3.15e6	5407	582.5	2.43e6	5428	447.8	bd
4	123678-HxCDD	1.74e5	1.44e5	3.18e5	36.95	1.000	1.21	NO	53.217	0.229	3.19e6	5407	590.6	2.64e6	5428	486.6	dd
5	123789-HxCDD	1.69e5	1.35e5	3.03e5	37.20	1.007	1.25	NO	57.250	0.258	2.84e6	5407	525.2	2.32e6	5428	427.5	dd
6	1234678-HpCDD	1.08e5	1.06e5	2.14e5	40.30	1.000	1.02	NO	49.072	0.239	1.55e6	3116	498.3	1.47e6	2554	573.8	bd
7	OCDD	1.46e5	1.72e5	3.18e5	44.60	1.001	0.85	NO	97.562	0.622	1.43e6	3636	393.2	1.58e6	4025	392.0	bd
8	2378-TCDF	3.84e4	5.12e4	8.96e4	30.81	1.001	0.75	NO	9.505	0.0722	5.12e5	1622	315.8	7.15e5	2280	313.5	bd
9	12378-PeCDF	2.96e5	1.88e5	4.85e5	33.44	1.000	1.57	NO	51.442	0.156	6.98e6	7171	973.0	4.48e6	6783	660.9	bd
10	23478-PeCDF	3.16e5	1.97e5	5.13e5	34.06	1.019	1.60	NO	48.576	0.139	7.87e6	7171	1097.6	5.16e6	6783	760.2	bb
11	123478-HxCDF	2.22e5	1.77e5	3.99e5	36.15	0.998	1.25	NO	57.923	0.259	5.01e6	9617	521.5	3.89e6	5346	728.2	bd
12	123678-HxCDF	2.53e5	1.97e5	4.50e5	36.25	1.000	1.28	NO	56.676	0.225	5.09e6	9617	528.8	3.96e6	5346	740.2	dd
13	234678-HxCDF	2.37e5	1.86e5	4.23e5	36.74	1.014	1.27	NO	59.528	0.251	4.65e6	9617	483.2	3.73e6	5346	698.2	bd
14	123789-HxCDF	1.85e5	1.48e5	3.33e5	37.53	1.036	1.25	NO	59.427	0.318	2.99e6	9617	310.8	2.44e6	5346	456.9	bd
15	1234678-HpCDF	1.79e5	1.77e5	3.55e5	39.02	1.000	1.01	NO	53.310	0.226	2.98e6	5586	534.2	2.80e6	4718	593.3	bd
16	1234789-HpCDF	1.30e5	1.25e5	2.55e5	40.98	1.050	1.04	NO	51.714	0.305	1.82e6	5586	324.9	1.62e6	4718	342.6	bd
17	OCDF	1.76e5	1.91e5	3.67e5	44.90	1.007	0.92	NO	92.933	0.466	1.72e6	3295	522.1	1.90e6	3645	521.9	bd
18	13C-2378-TCDD	4.13e5	5.22e5	9.35e5	31.41	1.015	0.79	NO	95.517	0.135	7.94e6	4819	1647.7	9.94e6	3614	2750.3	bd
19	13C-12378-PeCDD	3.96e5	2.47e5	6.44e5	34.24	1.107	1.60	NO	90.194	0.218	9.57e6	5512	1736.5	5.89e6	4420	1333.3	bb
20	13C-123678-HxCDD	3.43e5	2.72e5	6.15e5	36.94	0.993	1.26	NO	67.624	0.158	6.81e6	4279	1591.1	5.50e6	5446	1010.9	bd
21	13C-1234678-HpCDD	2.37e5	2.21e5	4.58e5	40.28	1.083	1.07	NO	78.136	0.284	3.21e6	5896	544.9	3.12e6	5389	579.6	bd
22	13C-OCDD	3.13e5	3.51e5	6.65e5	44.58	1.199	0.89	NO	138.982	0.343	2.96e6	5855	504.9	3.31e6	5277	627.2	bd
23	13C-2378-TCDF	4.50e5	5.75e5	1.03e6	30.78	0.995	0.78	NO	71.445	0.144	6.45e6	8290	778.1	8.28e6	4861	1703.3	bb
24	13C-12378-PeCDF	6.58e5	4.18e5	1.08e6	33.43	1.081	1.57	NO	88.643	0.137	1.56e7	5377	2905.4	1.02e7	5230	1957.3	bd
25	13C-123678-HxCDF	2.57e5	4.90e5	7.46e5	36.24	0.975	0.52	NO	61.657	0.124	5.38e6	5650	952.6	1.03e7	4556	2256.1	bb
26	13C-1234678-HpCDF	1.73e5	3.74e5	5.47e5	39.01	1.049	0.46	NO	68.871	0.131	2.96e6	3464	854.4	5.99e6	3575	1676.1	bd
27	13C-1234-TCDD	4.05e5	5.16e5	9.20e5	30.94	0.000	0.78	NO	100.000	0.144	6.45e6	4819	1338.8	8.12e6	3614	2245.9	bb
28	13C-123789-HxCDD	4.35e5	3.48e5	7.83e5	37.18	0.000	1.25	NO	100.000	0.183	7.38e6	4279	1724.5	6.03e6	5446	1106.7	dd

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

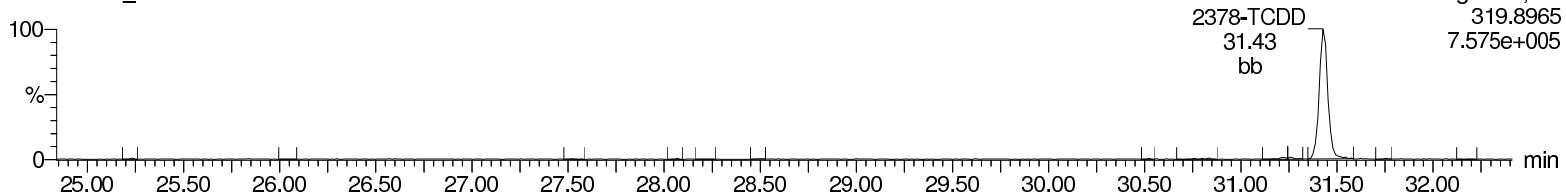
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

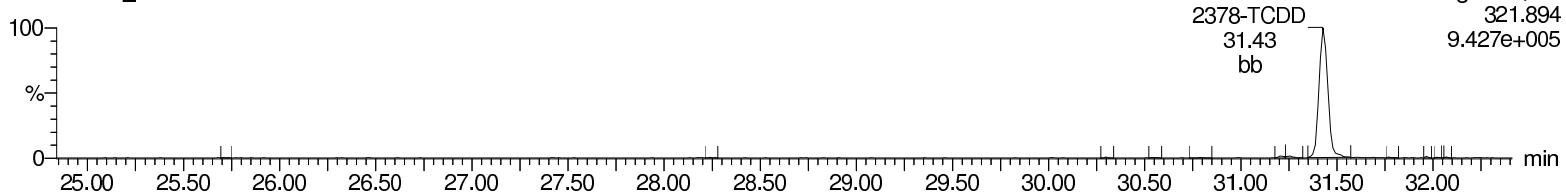
### Total-tetradioxins

A29SEP18B\_9-2



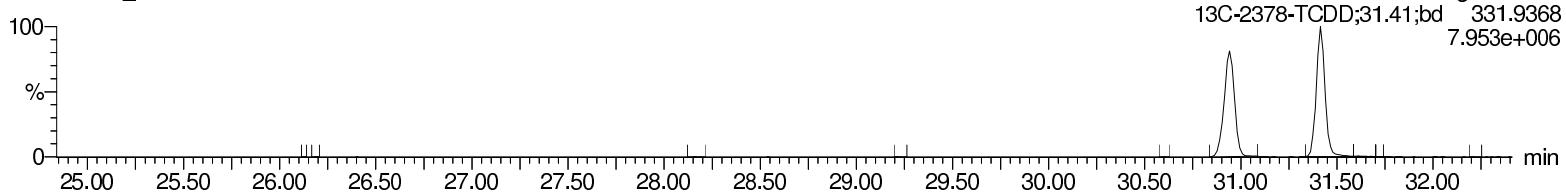
### Total-tetradioxins

A29SEP18B\_9-2



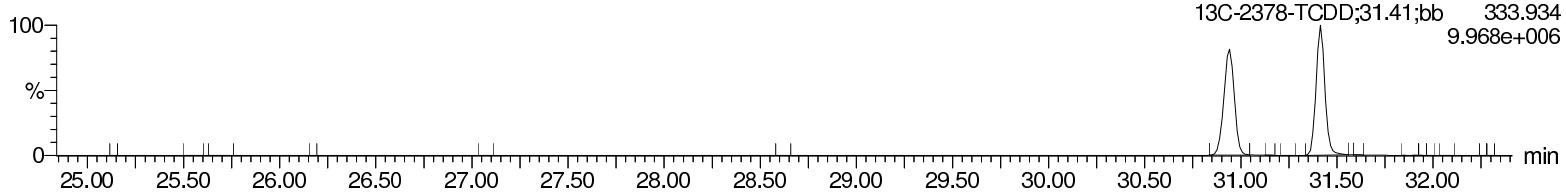
### 13C-2378-TCDD

A29SEP18B\_9-2



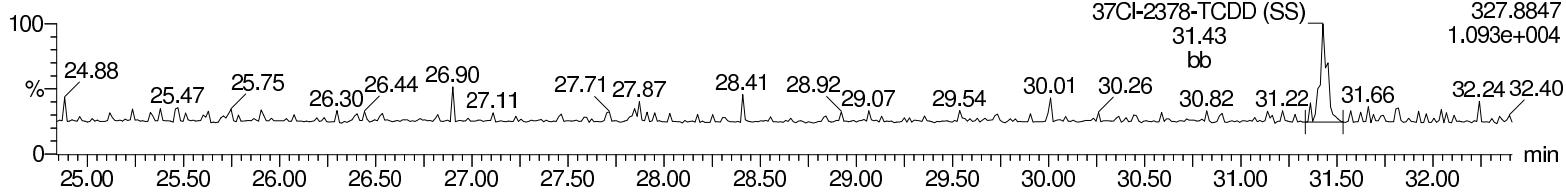
### 13C-2378-TCDD

A29SEP18B\_9-2



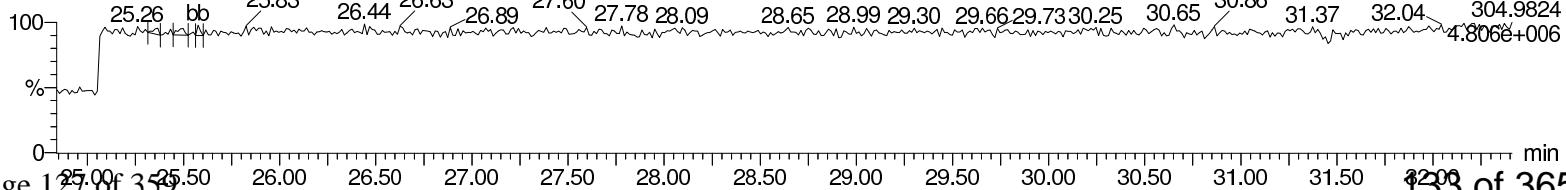
### 37Cl-2378-TCDD (SS)

A29SEP18B\_9-2



### Lock Mass F1

A29SEP18B\_9-2



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

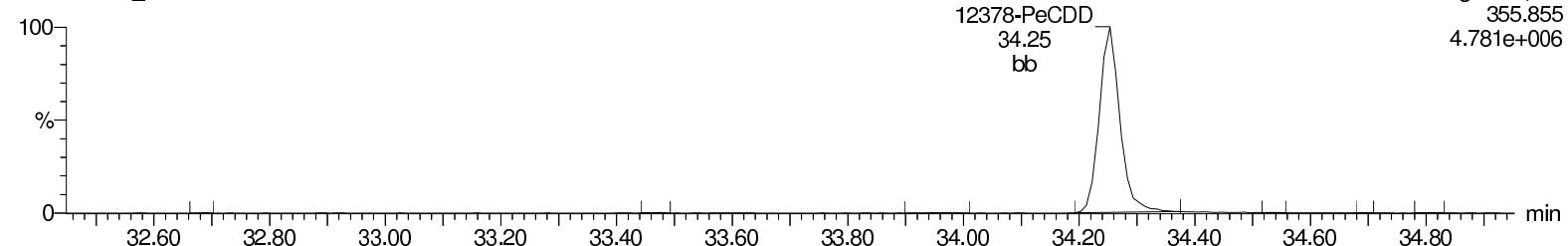
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%,  
Task: HRP750\_2, User: MJC**

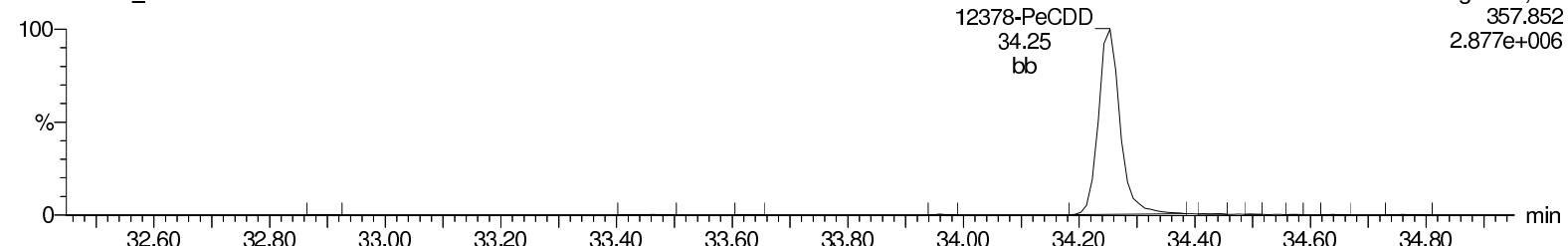
**Total-pentadioxins**

A29SEP18B\_9-2



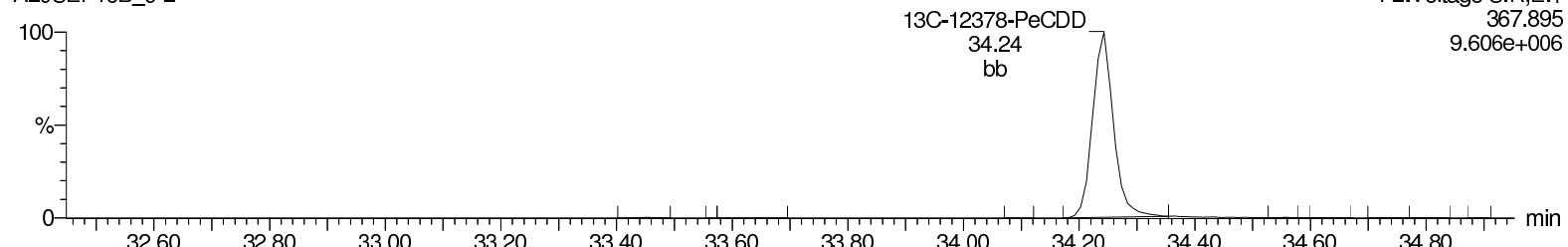
**Total-pentadioxins**

A29SEP18B\_9-2



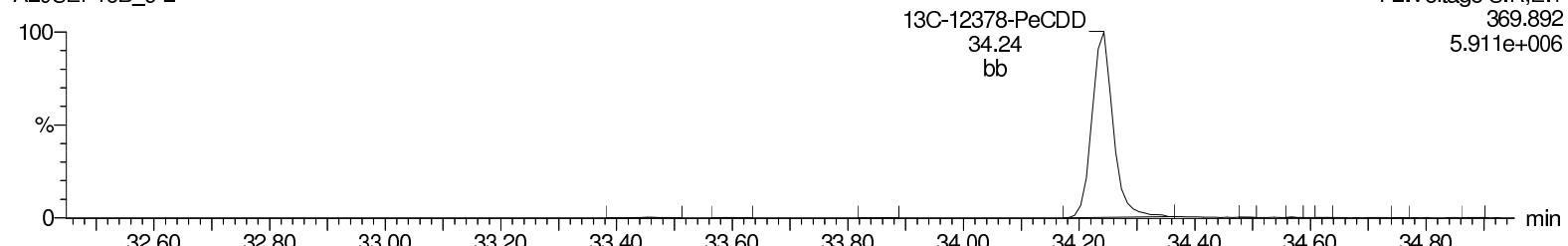
**13C-12378-PeCDD**

A29SEP18B\_9-2



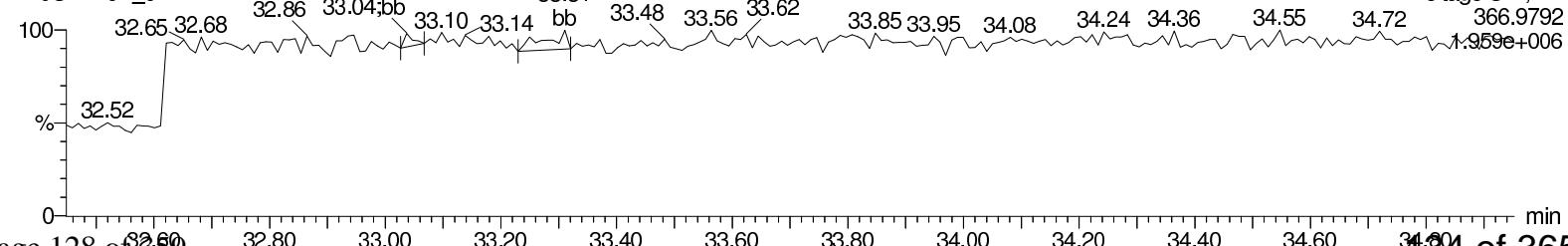
**13C-12378-PeCDD**

A29SEP18B\_9-2



**Lock Mass F2**

A29SEP18B\_9-2



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

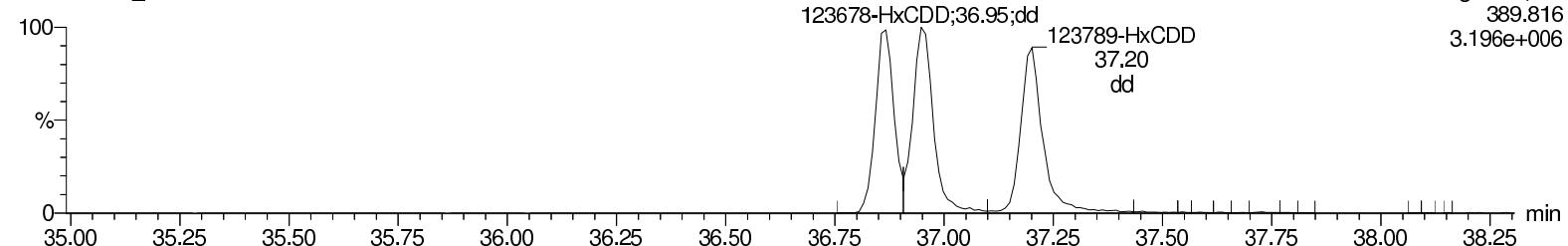
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Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%,  
Task: HRP750\_2, User: MJC**

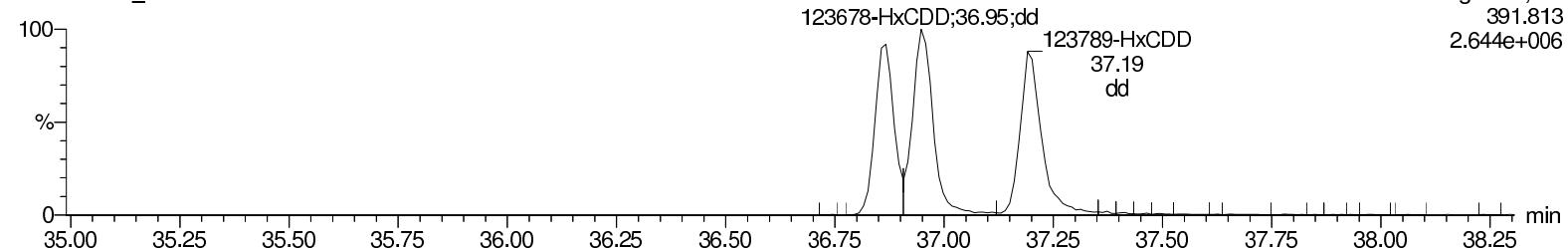
**Total-hexadioxins**

A29SEP18B\_9-2



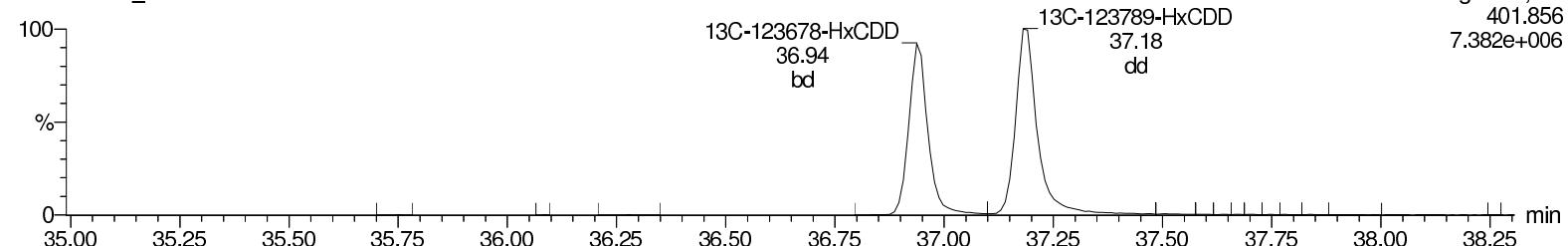
**Total-hexadioxins**

A29SEP18B\_9-2



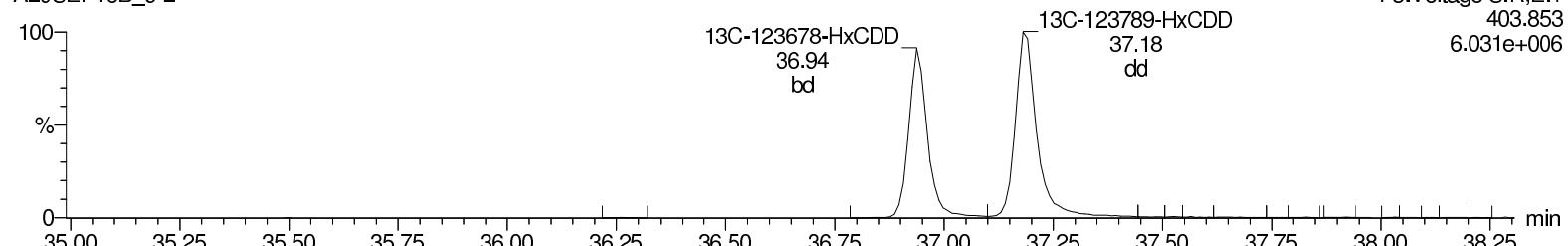
**13C-123678-HxCDD**

A29SEP18B\_9-2



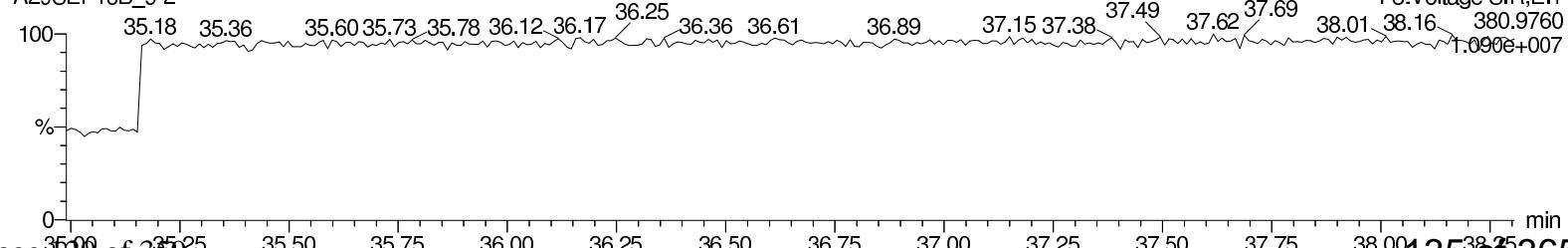
**13C-123678-HxCDD**

A29SEP18B\_9-2



**Lock Mass F3**

A29SEP18B\_9-2



**Quantify Sample Report**      **MassLynx 4.1**  
Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

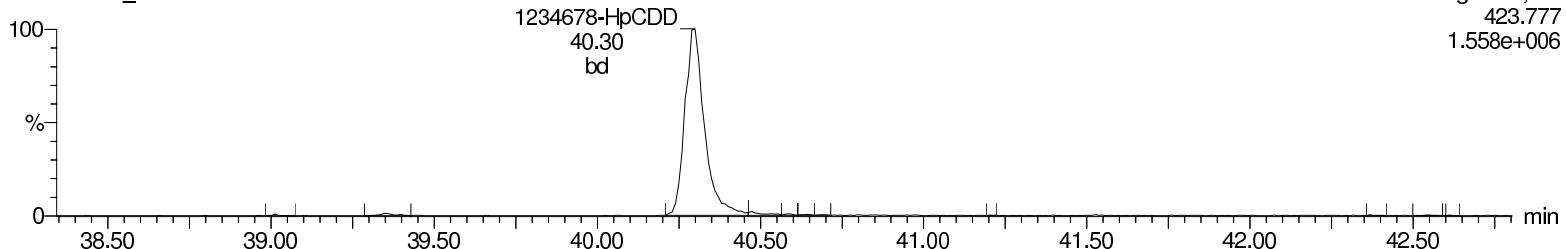
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%,  
Task: HRP750\_2, User: MJC**

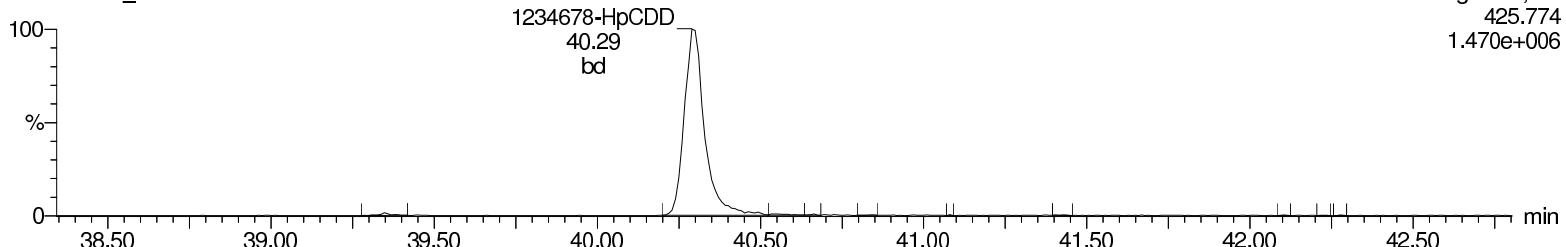
**Total-heptadioxins**

A29SEP18B\_9-2



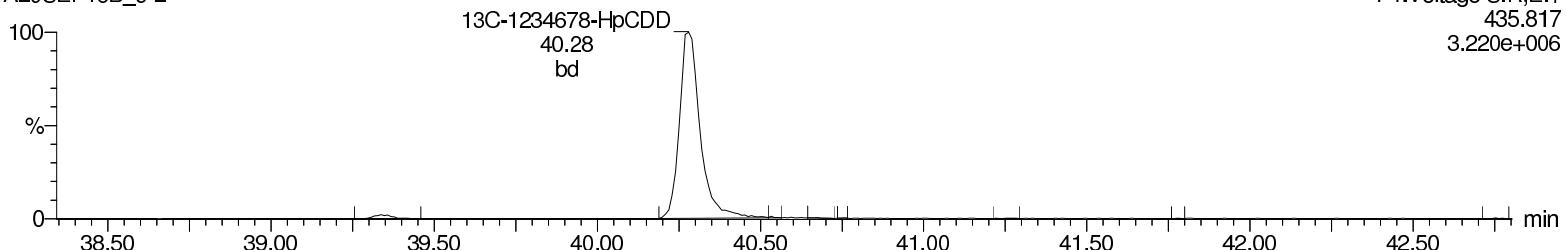
**Total-heptadioxins**

A29SEP18B\_9-2



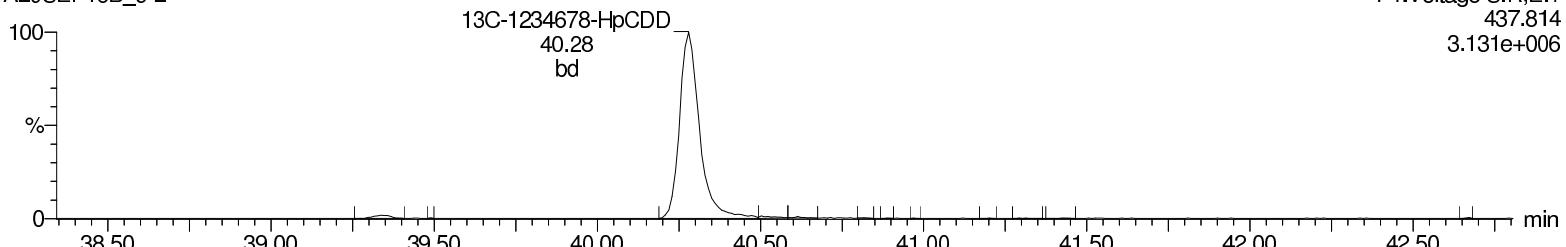
**13C-1234678-HpCDD**

A29SEP18B\_9-2



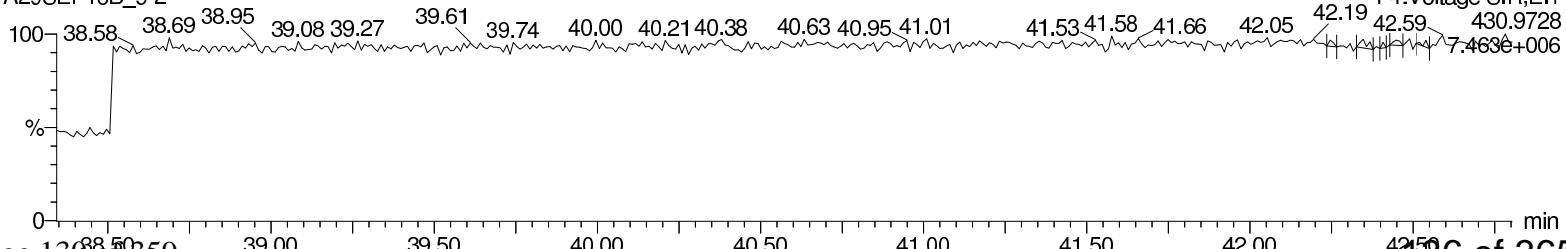
**13C-1234678-HpCDD**

A29SEP18B\_9-2



**Lock Mass F4**

A29SEP18B\_9-2



**Quantify Sample Report**      **MassLynx 4.1**  
Method 8290 Quantification Report

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

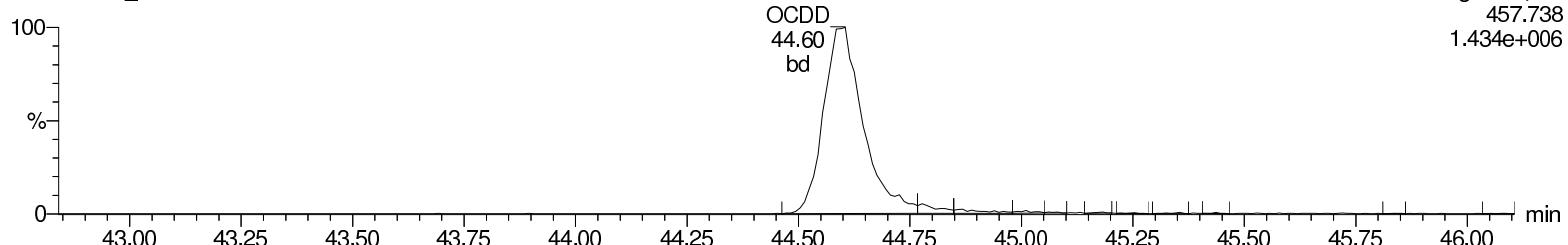
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%,  
Task: HRP750\_2, User: MJC**

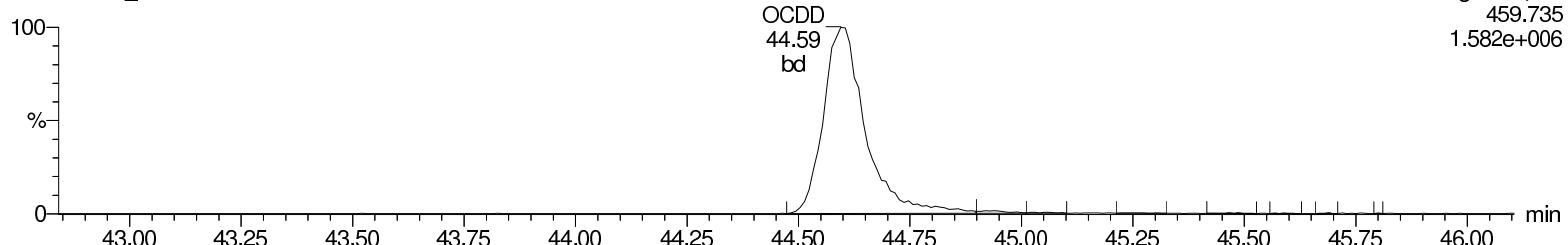
**OCDD**

A29SEP18B\_9-2



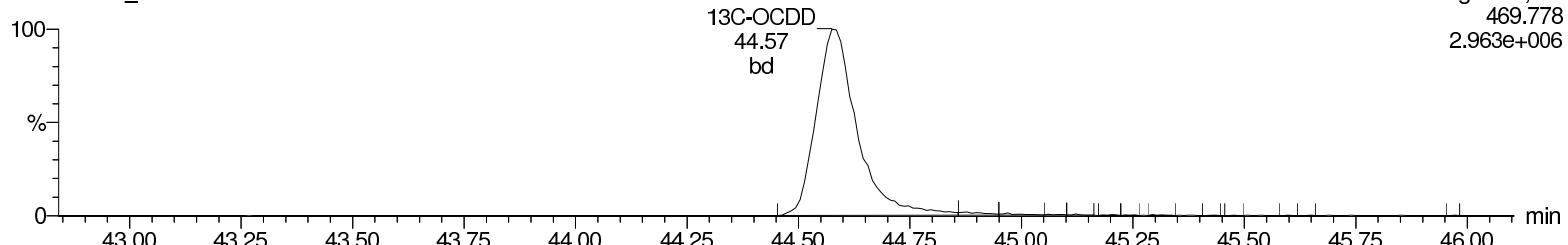
**OCDD**

A29SEP18B\_9-2



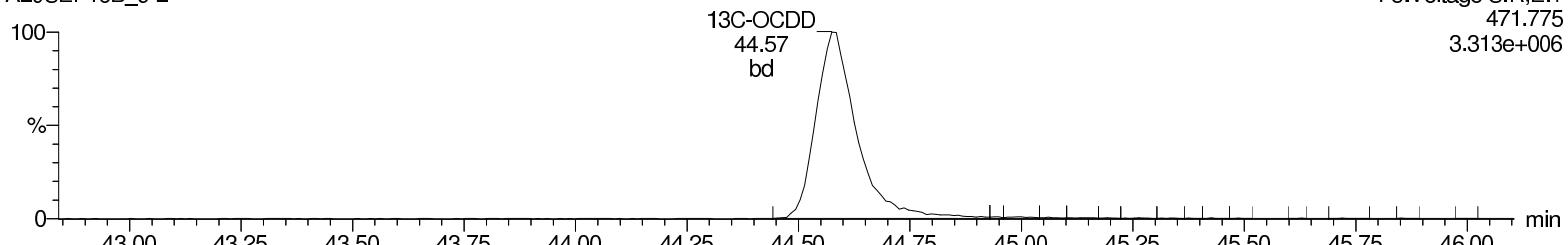
**13C-OCDD**

A29SEP18B\_9-2



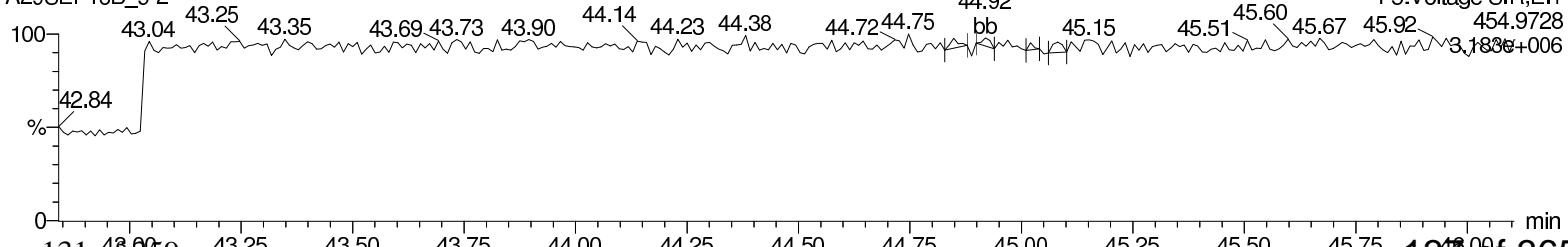
**13C-OCDD**

A29SEP18B\_9-2



**Lock Mass F5**

A29SEP18B\_9-2



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

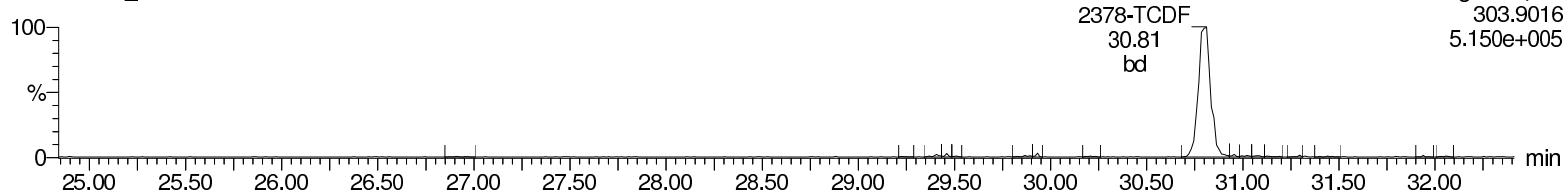
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

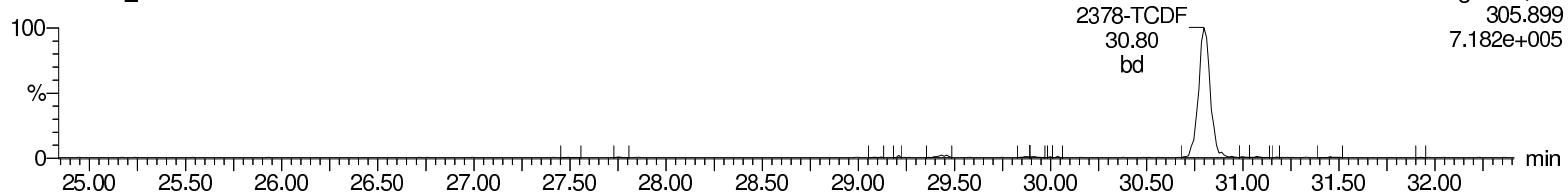
### Total-tetrafurans

A29SEP18B\_9-2



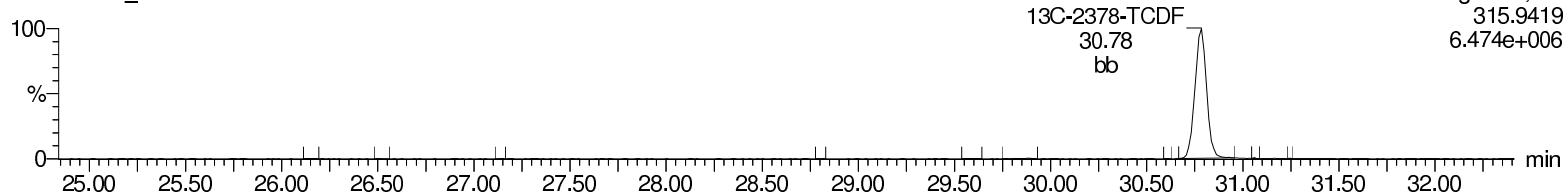
### Total-tetrafurans

A29SEP18B\_9-2



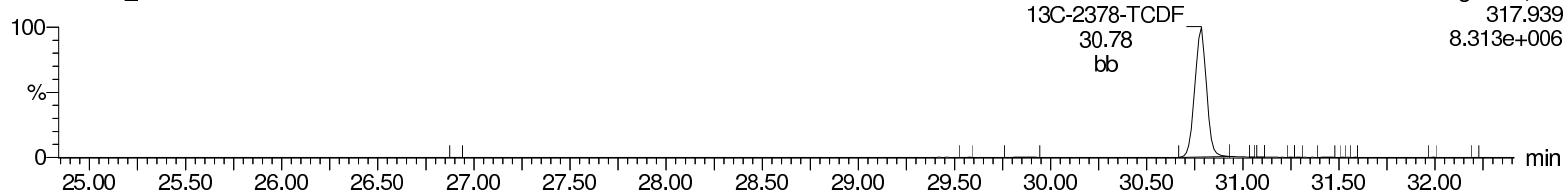
### 13C-2378-TCDF

A29SEP18B\_9-2



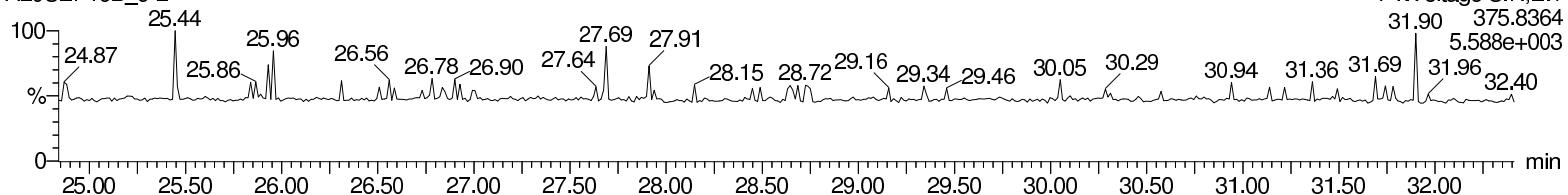
### 13C-2378-TCDF

A29SEP18B\_9-2



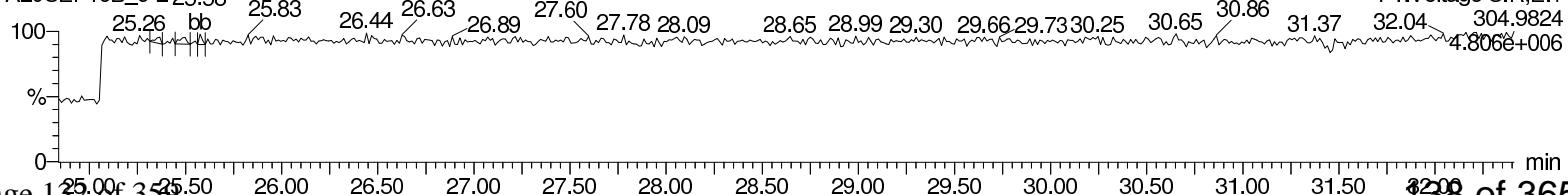
### HxDPE

A29SEP18B\_9-2



### Lock Mass F1

A29SEP18B\_9-2



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

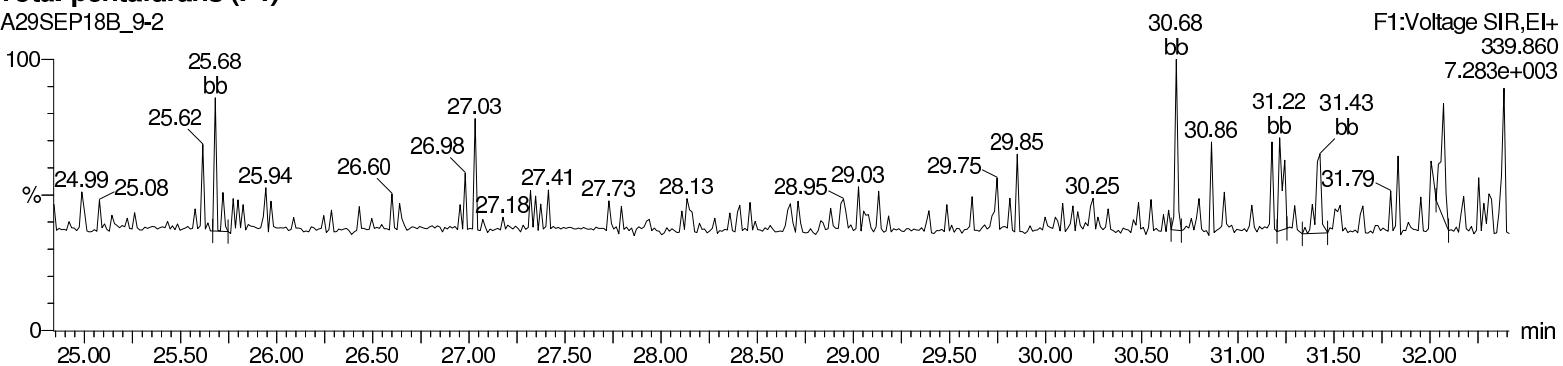
Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

**Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%, Task: HRP750\_2, User: MJC**

**Total-pentafurans (F1)**

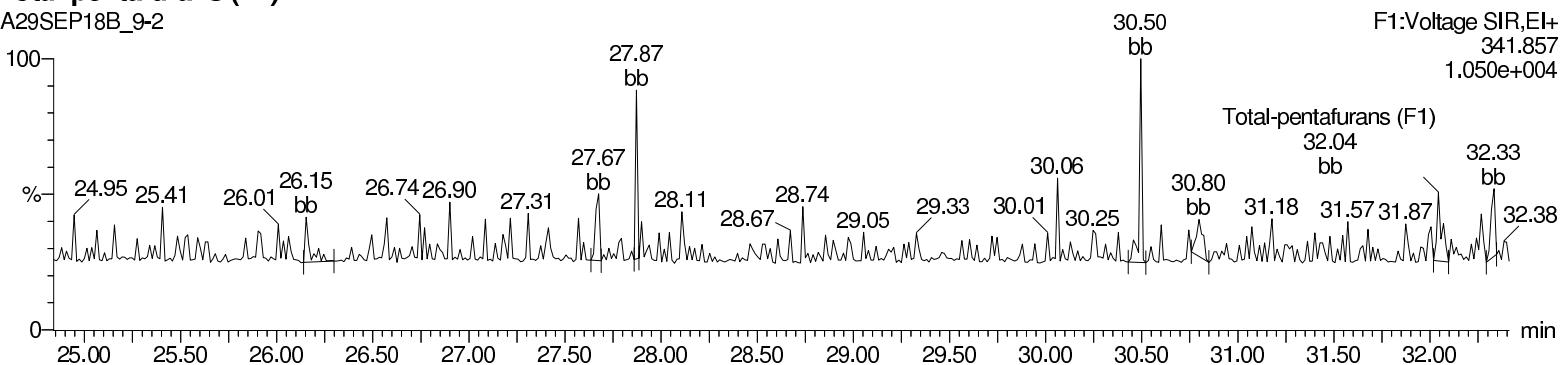
A29SEP18B\_9-2



F1:Voltage SIR,El+  
339.860  
7.283e+003

**Total-pentafurans (F1)**

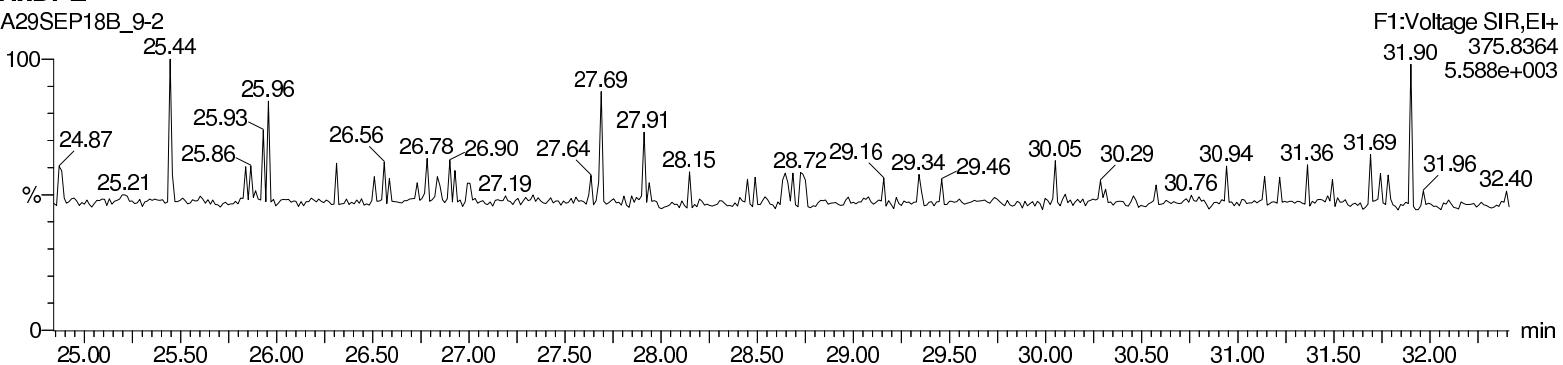
A29SEP18B\_9-2



F1:Voltage SIR,El+  
341.857  
1.050e+004

**HxDPE**

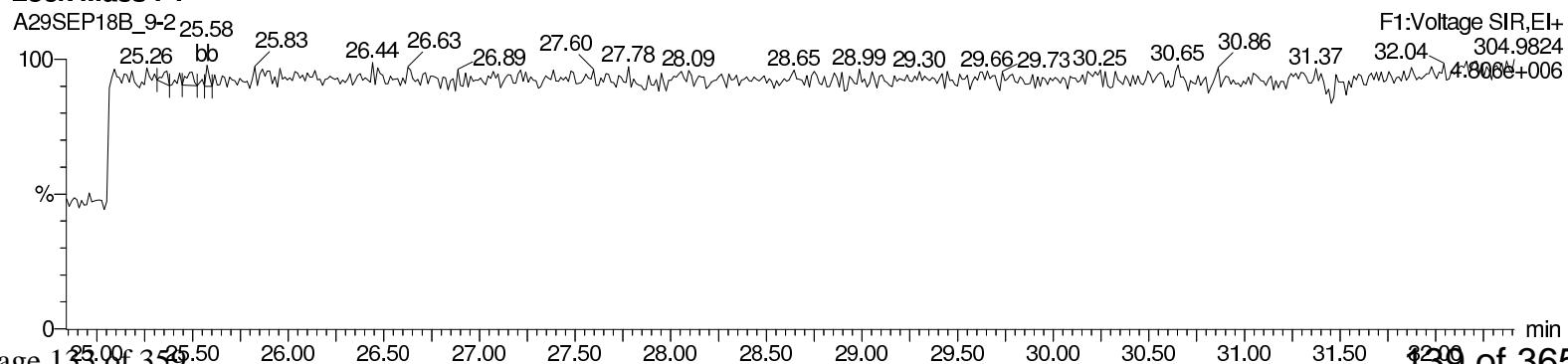
A29SEP18B\_9-2



F1:Voltage SIR,El+  
31.90 375.8364  
5.588e+003

**Lock Mass F1**

A29SEP18B\_9-2



F1:Voltage SIR,El+  
32.04 304.9824  
4.800e+006

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

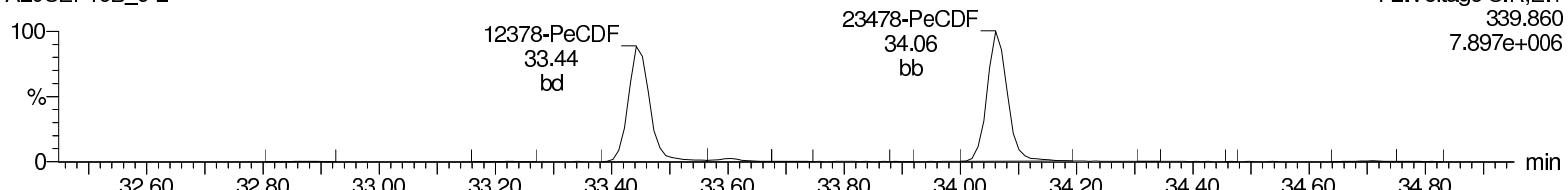
Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%,

Task: HRP750\_2, User: MJC

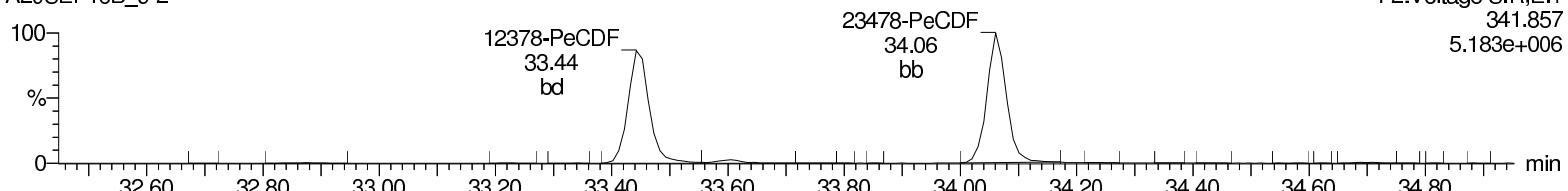
### Total-pentafurans

A29SEP18B\_9-2



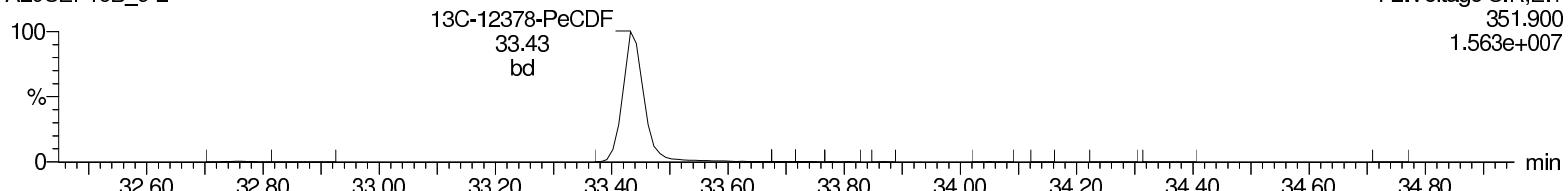
### Total-pentafurans

A29SEP18B\_9-2



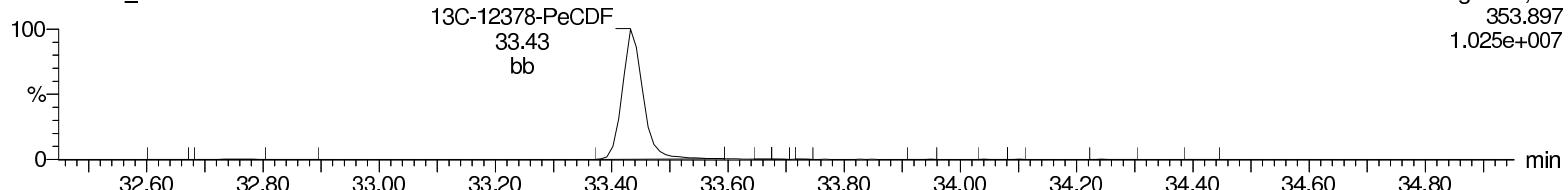
### 13C-12378-PeCDF

A29SEP18B\_9-2



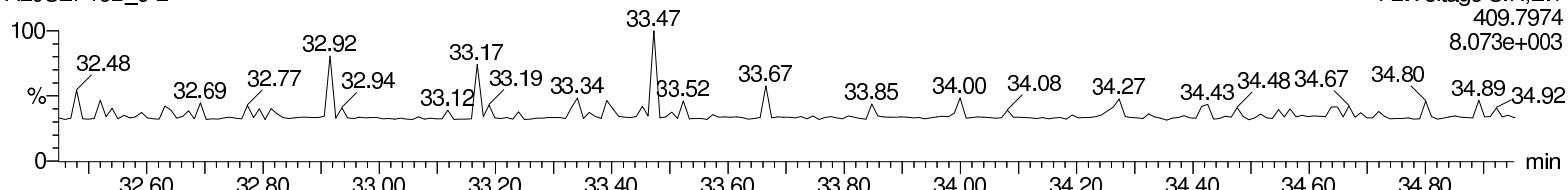
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A29SEP18B\_9-2



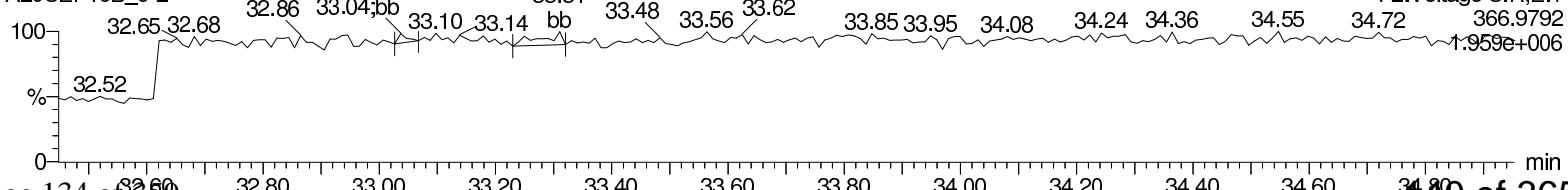
### HpDPE

A29SEP18B\_9-2



### Lock Mass F2

A29SEP18B\_9-2



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

Last Altered: Wednesday, October 03, 2018 09:30:38 Eastern Standard Time

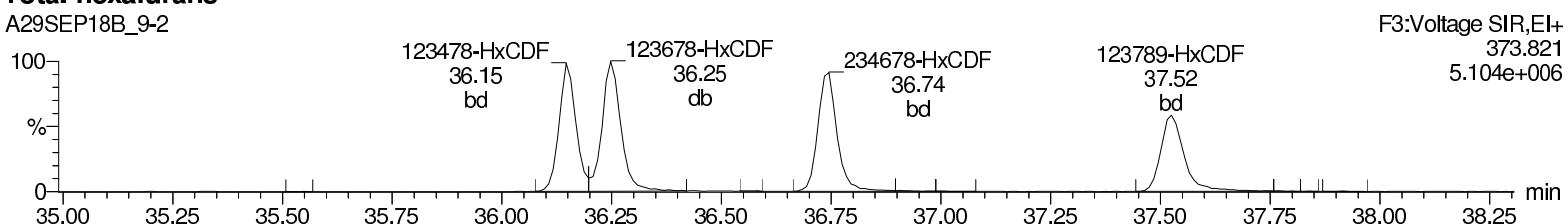
Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%,

Task: HRP750\_2, User: MJC

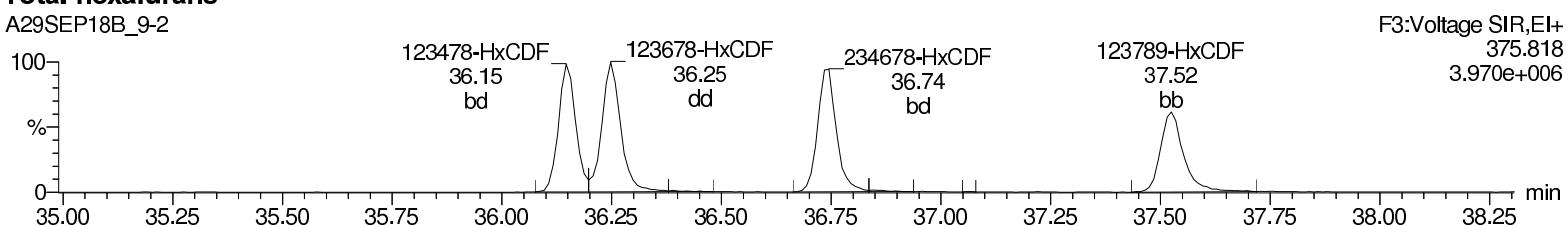
### Total-hexafurans

A29SEP18B\_9-2



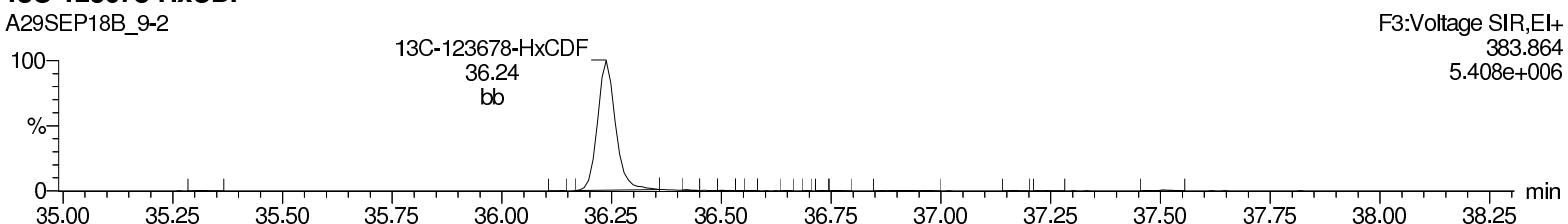
### Total-hexafurans

A29SEP18B\_9-2



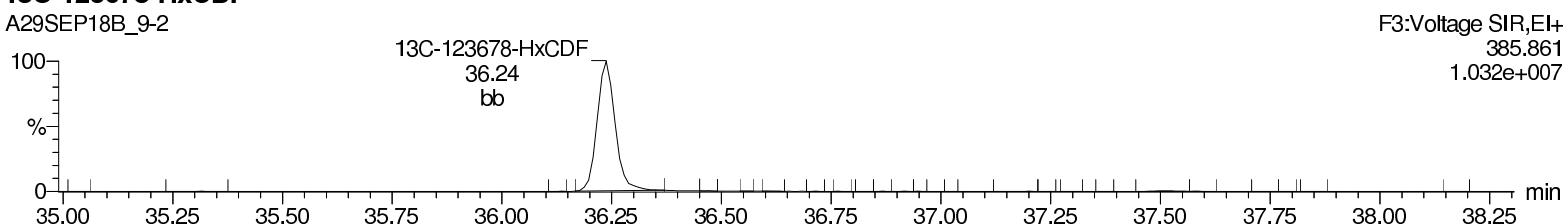
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A29SEP18B\_9-2



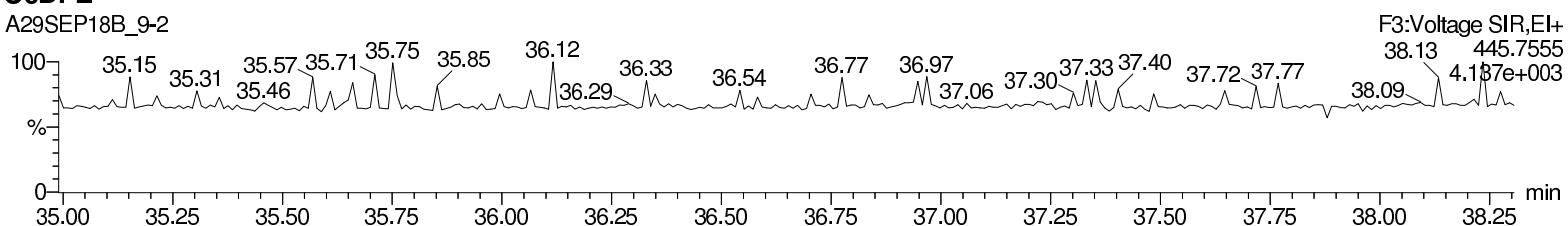
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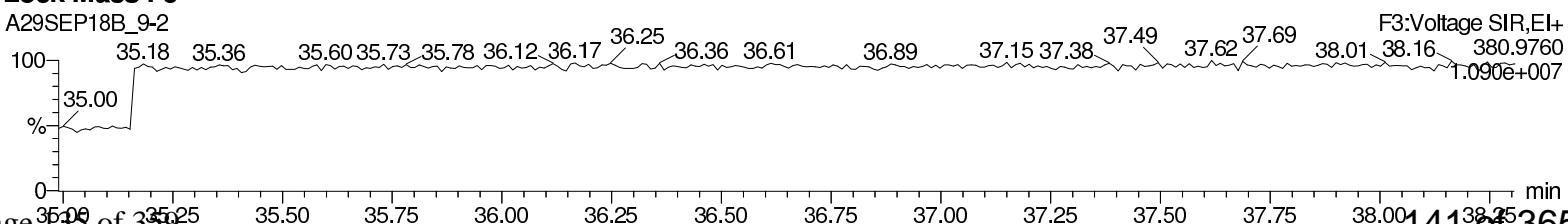
### OcDPE

A29SEP18B\_9-2



### Lock Mass F3

A29SEP18B\_9-2



Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

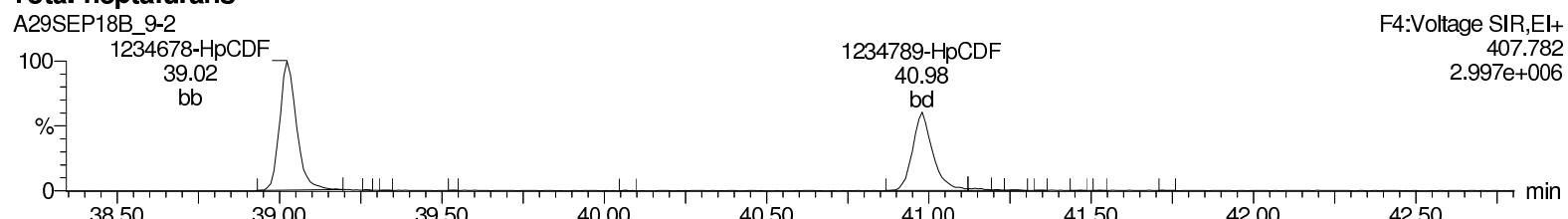
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Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

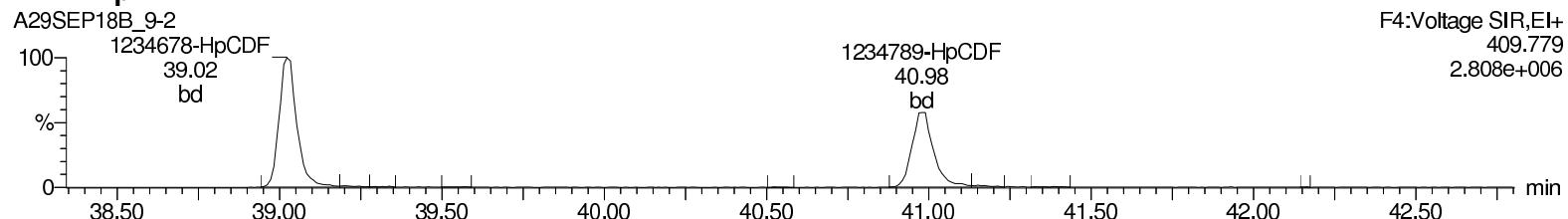
Name: A29SEP18B\_9-2, Date: 02-Oct-2018, Time: 18:56:13, ID: 12022223-1 LCSD, Description: , Job: %8290%,

Task: HRP750\_2, User: MJC

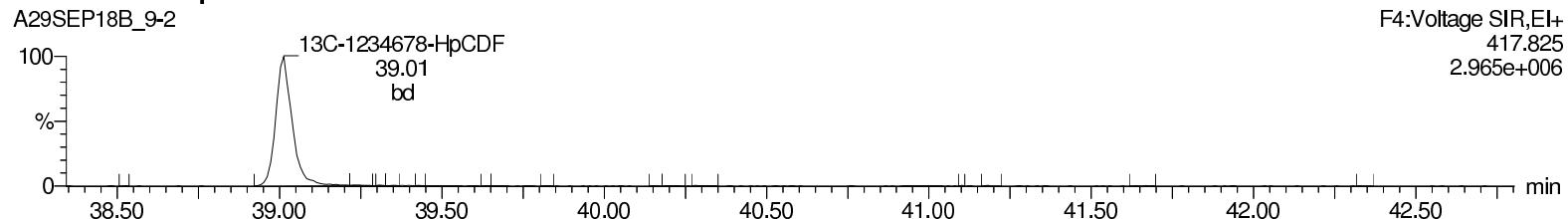
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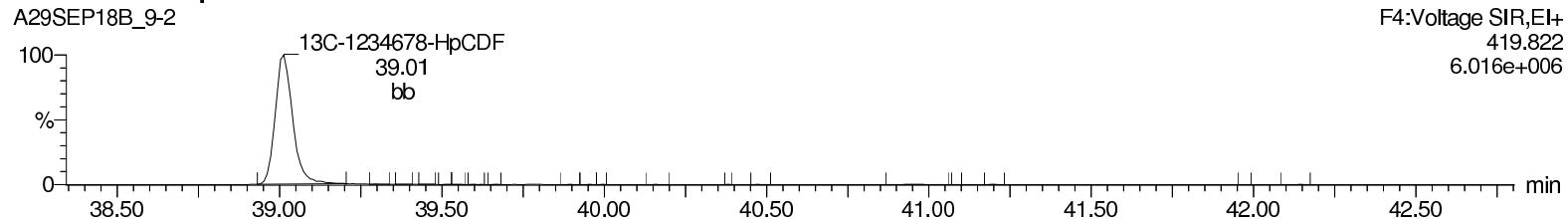
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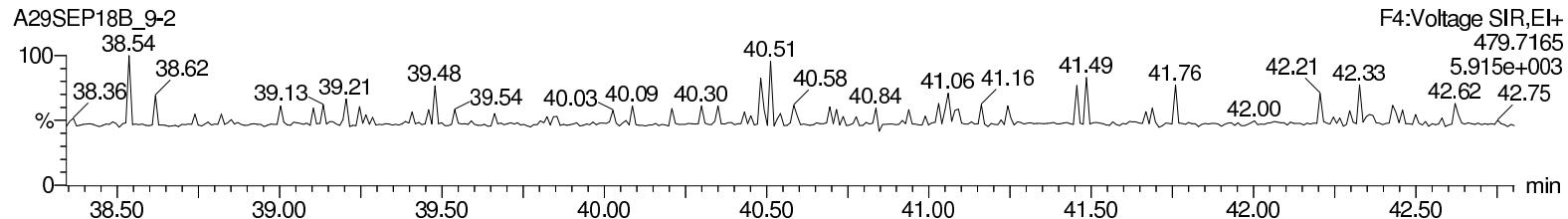
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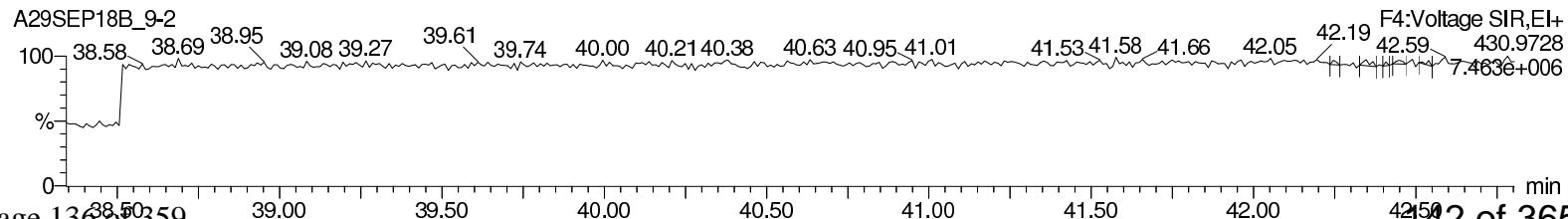
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### NoDPE



### Lock Mass F4



**Quantify Sample Report**  
Method 8290 Quantification Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\Sample Results\8290-A29SEP18B\_9.qld

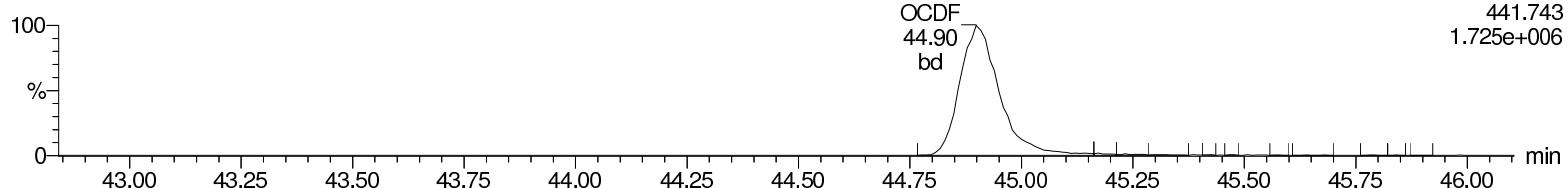
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Printed: Wednesday, October 03, 2018 09:31:35 Eastern Standard Time

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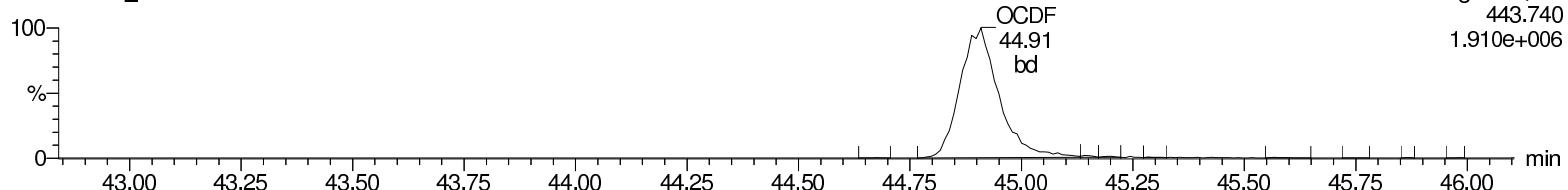
**OCDF**

A29SEP18B\_9-2



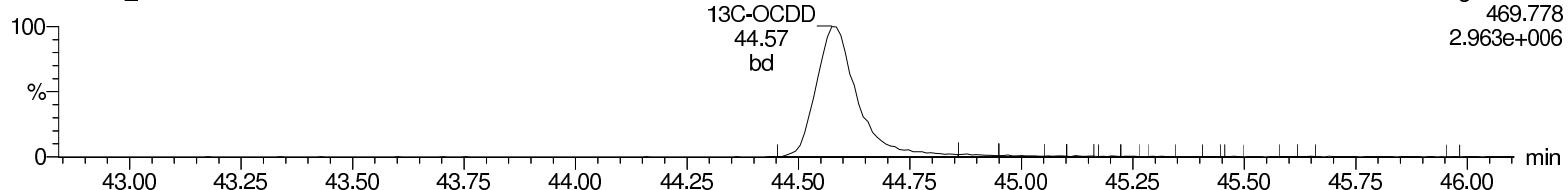
**OCDF**

A29SEP18B\_9-2



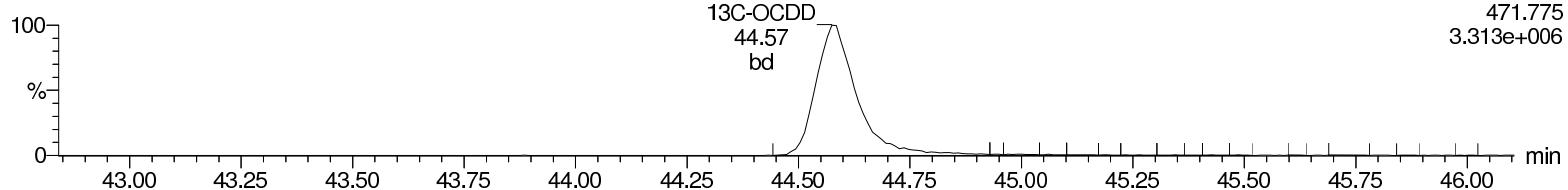
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A29SEP18B\_9-2



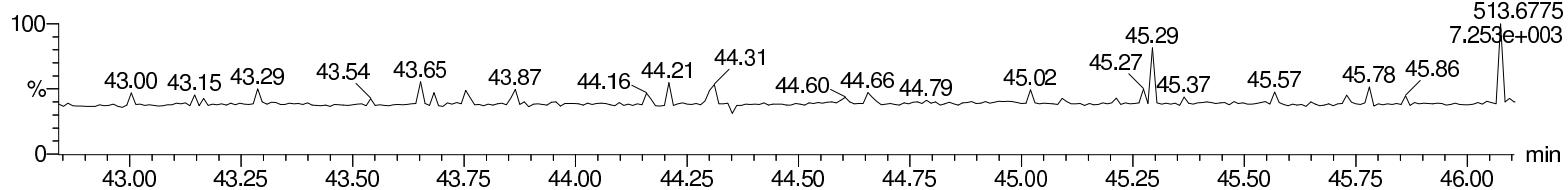
**13C-OCDD**

A29SEP18B\_9-2



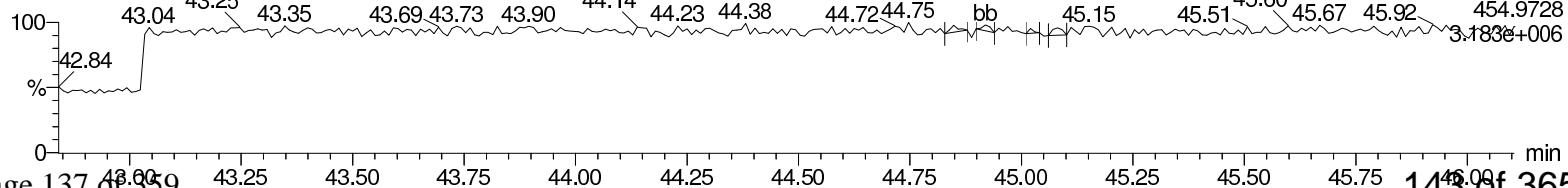
**DeDPE**

A29SEP18B\_9-2



**Lock Mass F5**

A29SEP18B\_9-2



# **Logbooks**

# Prep Logbook

## 3540C Solid Extraction for Method 8290A

**Batch ID:** 38744

**Verified by:** \_\_\_\_\_

**Analyst:** Amalie Walker

**Method:** SW846 3540C

**Lab SOP:**

**Instrument:** Ohaus Scout Pro 400

Sample ID	Start Run Date	Aliquot (g)	ES Amount (uL)	ES Serial#	MX Amount (uL)	MX Serial#	Decanted? (Y/N)
12022221 MB	01-OCT-2018 15:22	10	40	WD181001-03 .05 ng/uL			N
12022222 LCS	01-OCT-2018 15:22	10	40	WD181001-03 40 .05 ng/uL	WD180926-03 .005 ng/uL		N
12022223 LCSD	01-OCT-2018 15:22	10	40	WD181001-03 40 .05 ng/uL	WD180926-03 .005 ng/uL		N
13866001 - 2	01-OCT-2018 15:22	1.02	40	WD181001-03 .05 ng/uL			N
13866002 - 2	01-OCT-2018 15:22	1.05	40	WD181001-03 .05 ng/uL			N
13869001 - 2	01-OCT-2018 15:22	1.12	40	WD181001-03 .05 ng/uL			N
13869002 - 2	01-OCT-2018 15:22	1	40	WD181001-03 .05 ng/uL			N
13913001	01-OCT-2018 15:22	11.7	40	WD181001-03 .05 ng/uL			N
12022224 MS (13913001)	01-OCT-2018 15:22	11.73	40	WD181001-03 40 .05 ng/uL	WD180926-03 .005 ng/uL		N
12022225 MSD (13913001)	01-OCT-2018 15:22	11.71	40	WD181001-03 40 .05 ng/uL	WD180926-03 .005 ng/uL		N
13913002	01-OCT-2018 15:22	13.1	40	WD181001-03 .05 ng/uL			N
13913003	01-OCT-2018 15:22	11.42	40	WD181001-03 .05 ng/uL			N
13928001	01-OCT-2018 15:22	15.43	40	WD181001-03 .05 ng/uL			N
13928002	01-OCT-2018 15:22	12.39	40	WD181001-03 .05 ng/uL			N
13929001	01-OCT-2018 15:22	11.1	40	WD181001-03 .05 ng/uL			N
13952001	01-OCT-2018 15:22	11.08	40	WD181001-03 .05 ng/uL			N
13952002	01-OCT-2018 15:22	12.22	40	WD181001-03 .05 ng/uL			N
13953001	01-OCT-2018 15:22	7.92	40	WD181001-03 .05 ng/uL			N
13953002	01-OCT-2018 15:22	4.95	40	WD181001-03 .05 ng/uL			N
13953003	01-OCT-2018 15:22	4.99	40	WD181001-03 .05 ng/uL			N

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
REAGENT	Silica Gel		1138989-A	25	g	Finish Date/Time: 02-OCT-18 09:28
REAGENT	Purified tridecane		1139906-C	500	uL	
REAGENT	Toluene		1140290-A	350	mL	
REAGENT	Thimbles		1141010-A.1	1	each	

# Prep Logbook

Batch ID: 38744

Verified by: \_\_\_\_\_

Analyst: Amalie Walker

Method: SW846 3540C

Lab SOP:

Instrument: Ohaus Scout Pro 400

Sample ID	Start Run Date	Aliquot (g)	ES Amount (uL)	ES Serial#	MX Amount (uL)	MX Serial#	Decanted? (Y/N)
REAGENT	Acetone		1141471-A.9	1	mL	—	—
REAGENT	Baked Ottawa Sand		1141548	10	g	—	—
REAGENT	Thimbles		1141765-A.4	1	each	—	—
STANDARD	8290 Extraction Standard		WD181001-03	40	uL	—	—

# Prep Logbook

## Cleanup Procedure for Solids

**Batch ID:** 38745

**Verified by:** \_\_\_\_\_

**Analyst:** Mike Medwedeff

**Lab SOP:**  
Instrument: No analytical instrument

Sample ID	Start Run Date	Cleanup Type	Train	Aliqout Analyzed (percent)
12022221 MB	02-OCT-2018 10:30	AB Silica Florisil	179	100
12022222 LCS	02-OCT-2018 10:30	AB Silica Florisil	137	100
12022223 LCSD	02-OCT-2018 10:30	AB Silica Florisil	76	100
13866001 - 2	02-OCT-2018 10:30	AB Silica Florisil	43	100
13866002 - 2	02-OCT-2018 10:30	AB Silica Florisil	139	100
13869001 - 2	02-OCT-2018 10:30	AB Silica Florisil	64	100
13869002 - 2	02-OCT-2018 10:30	AB Silica Florisil	135	100
13913001	02-OCT-2018 10:30	AB Silica Florisil	173	100
12022224 MS (13913001)	02-OCT-2018 10:30	AB Silica Florisil	158	100
12022225 MSD (13913001)	02-OCT-2018 10:30	AB Silica Florisil	12	100
13913002	02-OCT-2018 10:30	AB Silica Florisil	114	100
13913003	02-OCT-2018 10:30	AB Silica Florisil	1	100
13928001	02-OCT-2018 10:30	AB Silica Florisil	138	100
13928002	02-OCT-2018 10:30	AB Silica Florisil	150	100
13929001	02-OCT-2018 10:30	AB Silica Florisil	74	100
13952001	02-OCT-2018 10:30	AB Silica Florisil	71	100
13952002	02-OCT-2018 10:30	AB Silica Florisil	160	100
13953001	02-OCT-2018 10:30	AB Silica Florisil	162	100
13953002	02-OCT-2018 10:30	AB Silica Florisil	166	100
13953003	02-OCT-2018 10:30	AB Silica Florisil	26	100

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
REAGENT	Silica Gel		1138989-A	2	g	
REAGENT	Florisil		1139893-A	1.5	g	
REAGENT	Sodium Sulfate		1141118-A	3	g	
REAGENT	Glass Wool		1141412-A.2	1	each	

# Prep Logbook

Batch ID: 38745

Verified by: \_\_\_\_\_

Analyst: Mike Medwedeff

Lab SOP:

Instrument: No analytical instrument

Sample ID	Start Run Date	Cleanup Type	Train	Aliqout Analyzed (percent)
REAGENT	Methylene Chloride		1141418-A	100 mL
REAGENT	Hexane		1141519-A.20	150 mL
REAGENT	Hexane		1141521-A.21	150 mL
REAGENT	Hexane		1141523-A.22	150 mL
REAGENT	Base silica		1141583-C	3 g
REAGENT	Acid silica		1141585	7 g

# Prep Logbook

## Method 8290A HRMS Solid Analysis

**Batch ID:** 38747

**Analyst:** Matt Cash

**Method:** SW846 8290A

Verified by: \_\_\_\_\_

**Lab SOP:** CF-OA-E-002 REV# 15

**Instrument:** Waters Autospec Premier  
High-Resolution GC/MS

Sample ID	Start Run Date	Final Volume (uL)	Prep Factor (Final Volume /Aliquot) (uL/g)	Dilution	Dilution Type	Injection Volume (uL)	Vial Prep Date
12022222 LCS	02-OCT-2018 18:08	20	2	1	Internal	1	02-OCT-2018
12022223 LCSD	02-OCT-2018 18:56	20	2	1	Internal	1	02-OCT-2018
12022221 MB	02-OCT-2018 19:44	20	2	1	Internal	1	02-OCT-2018
13869001 - 2	02-OCT-2018 22:08	20	17.85714	1	Internal	1	02-OCT-2018
13869002 - 2	02-OCT-2018 22:56	20	20	1	Internal	1	02-OCT-2018
13913001	02-OCT-2018 23:44	20	1.7094	1	Internal	1	02-OCT-2018
12022224 MS (13913001)	03-OCT-2018 00:32	20	1.70503	1	Internal	1	02-OCT-2018
12022225 MSD (13913001)	03-OCT-2018 01:20	20	1.70794	1	Internal	1	02-OCT-2018
13913002	03-OCT-2018 02:08	20	1.52672	1	Internal	1	02-OCT-2018
13913003	03-OCT-2018 02:56	20	1.75131	1	Internal	1	02-OCT-2018
13928002	03-OCT-2018 06:16	20	1.61421	1	Internal	1	02-OCT-2018
13952002	03-OCT-2018 08:40	20	1.63666	1	Internal	1	02-OCT-2018
13953001	03-OCT-2018 09:28	20	2.52525	1	Internal	1	02-OCT-2018
13953002	03-OCT-2018 10:16	20	4.0404	1	Internal	1	02-OCT-2018
13953003	03-OCT-2018 11:04	20	4.00802	1	Internal	1	02-OCT-2018
13929001	05-OCT-2018 03:30	20	1.8018	1	Internal	1	02-OCT-2018
13952001	05-OCT-2018 04:18	20	1.80505	1	Internal	1	02-OCT-2018
13928001	05-OCT-2018 05:06	20	1.29618	10	Internal	1	02-OCT-2018
13913001 - 2	04-OCT-2018 00:30	20	1.7094	1	Internal	1	02-OCT-2018
12022224 - 2 MS (13913001)	04-OCT-2018 00:54	20	1.70503	1	Internal	1	02-OCT-2018
12022225 - 2 MSD (13913001)	04-OCT-2018 01:17	20	1.70794	1	Internal	1	02-OCT-2018
13913002 - 2	04-OCT-2018 01:40	20	1.52672	1	Internal	1	02-OCT-

# Prep Logbook

**Batch ID:** 38747

**Verified by:** \_\_\_\_\_

**Analyst:** Matt Cash

**Method:** SW846 8290A

**Lab SOP:** CF-OA-E-002 REV# 15

**Instrument:** Waters Autospec Premier

High-Resolution GC/MS

Sample ID	Start Run Date	Final Volume (uL)	Prep Factor (Final Volume /Aliquot) (uL/g)	Dilution	Dilution Type	Injection Volume (uL)	Vial Prep Date
13953001 - 2	04-OCT-2018 02:03	20	2.52525	1	Internal	1	02-OCT-2018
13953002 - 2	04-OCT-2018 02:26	20	4.0404	1	Internal	1	02-OCT-2018

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
REAGENT		8290 Injection Standard	WD181002-06	20	uL	
STANDARD		8290 Injection Standard	WD181002-06	20	uL	

# **Initial Calibration Data**

# Runlog Information

*8290 ICR*

*21 Aug 18*

	Name	Instrument	Run Date	Procedure	Analyst	Batch ID	Sample Info	Injection Volume
•	A18AUG18A-1	HRP750_2	18-AUG-2018 08:42	A18AUG18A	Matt Cash		CS3WT UD180517-01.2 CPSQ6	1 uL
•	A18AUG18A-2	HRP750_2	18-AUG-2018 09:29	A18AUG18A	Matt Cash		SB DIBLK1F	1 uL
•	A18AUG18A-3	HRP750_2	18-AUG-2018 10:17	A18AUG18A	Matt Cash		CS0.5 UD170815-01.2	1 uL
•	A18AUG18A-4	HRP750_2	18-AUG-2018 11:06	A18AUG18A	Matt Cash		CS1 UD180112-03 CS13R	1 uL
•	A18AUG18A-5	HRP750_2	18-AUG-2018 11:54	A18AUG18A	Matt Cash		CS2 UD180112-04 CS23R	1 uL
•	A18AUG18A-6	HRP750_2	18-AUG-2018 12:42	A18AUG18A	Matt Cash		CS3 UD180112-05 CS3FX	1 uL
•	A18AUG18A-7	HRP750_2	18-AUG-2018 13:30	A18AUG18A	Matt Cash		CS4 UD180112-06 CS43P	1 uL
•	A18AUG18A-8	HRP750_2	18-AUG-2018 14:18	A18AUG18A	Matt Cash		CS5 UD180112-07 CS53R	1 uL
•	A18AUG18A-9	HRP750_2	18-AUG-2018 15:07	A18AUG18A	Matt Cash		SB DIBLK1G	1 uL
•	A18AUG18A-10	HRP750_2	18-AUG-2018 15:55	A18AUG18A	Matt Cash		CS3WT UD180517-01.2 CPSQ7	1 uL

PFKK2

Inst: KRP750\_2

Anal: MJL

Experiment Calibration Report

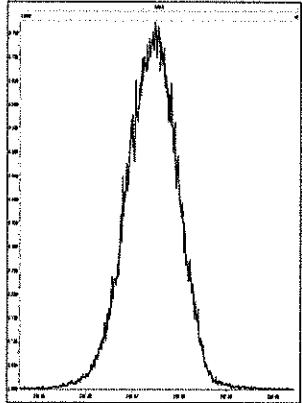
MassLynx 4.1

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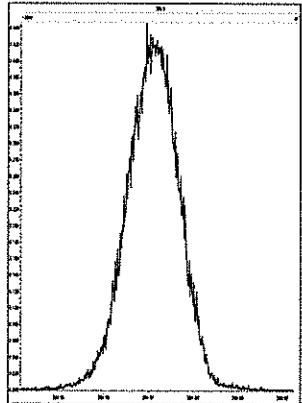
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Printed: Saturday, August 18, 2018 08:40:05 Eastern Standard Time

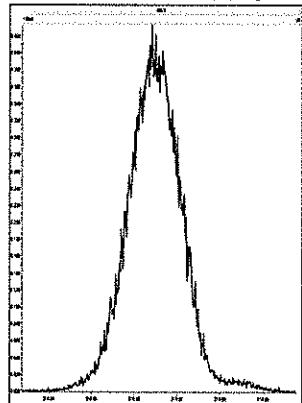
M 292.9824 R 11574



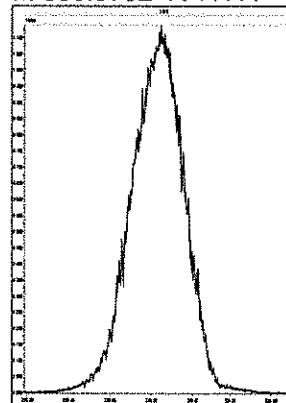
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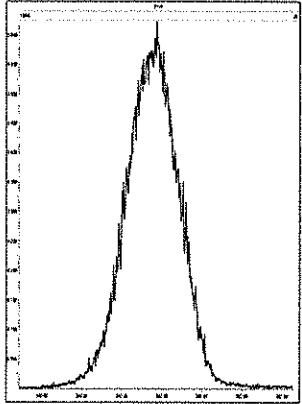
M 318.9792 R 11015



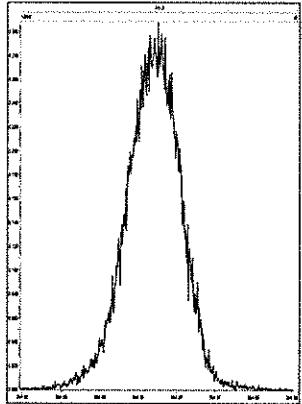
M 330.9792 R 11111



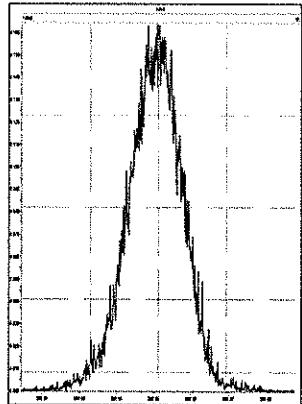
M 342.9792 R 10962



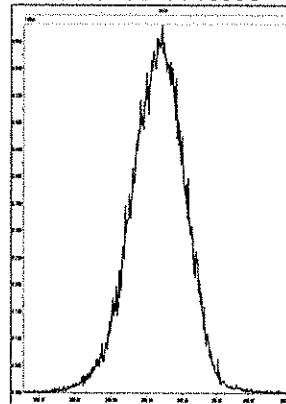
M 354.9792 R 11014



M 366.9792 R 11414



M 380.9760 R 10595



PFKK2

Inst: HRP750\_2

Anal: MJC

Experiment Calibration Report

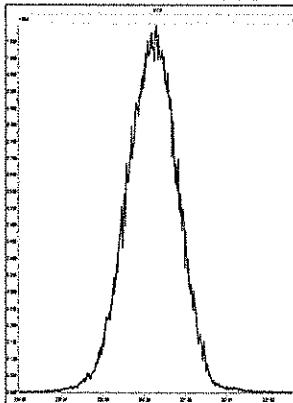
MassLynx 4.1

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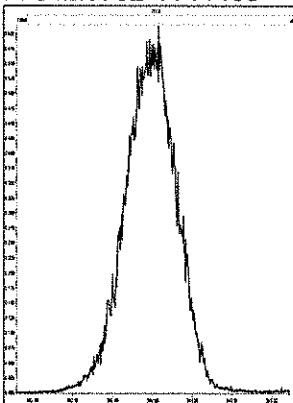
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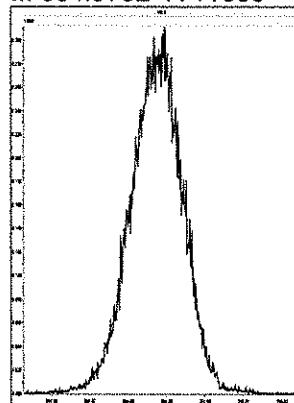
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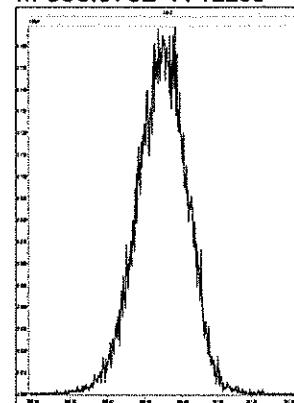
M 342.9792 R 11466



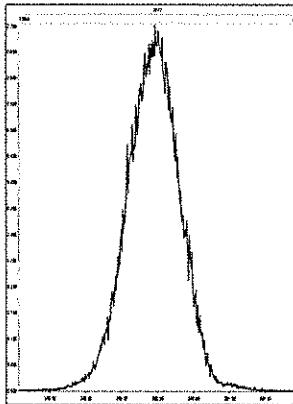
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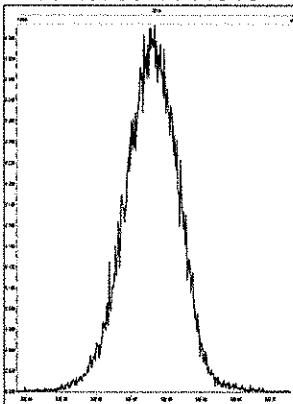
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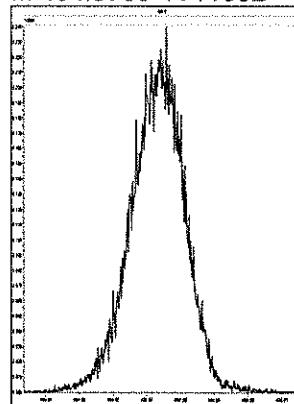
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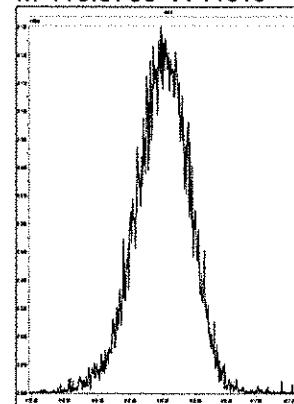
M 392.9760 R 11010



M 404.9760 R 11682



M 416.9760 R 11310



PFKK2

Inst: HRP750-2

Anal: MJL

Experiment Calibration Report

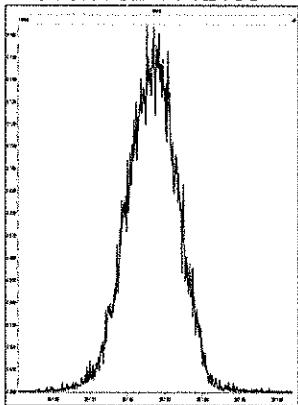
MassLynx 4.1

Page 1 of 1

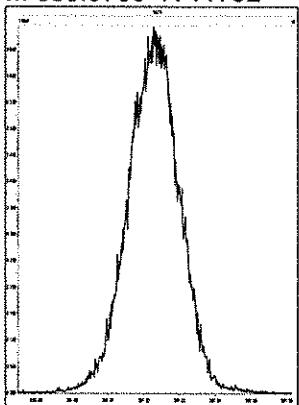
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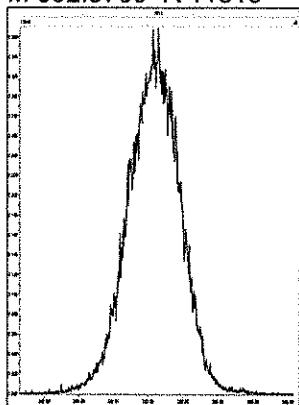
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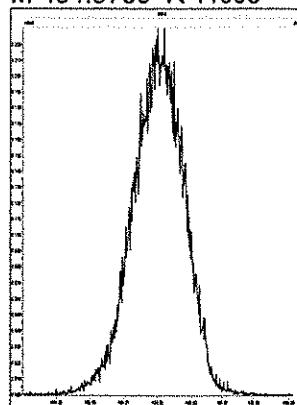
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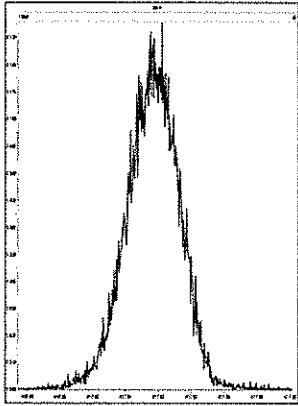
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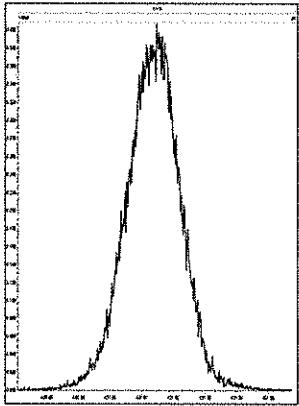
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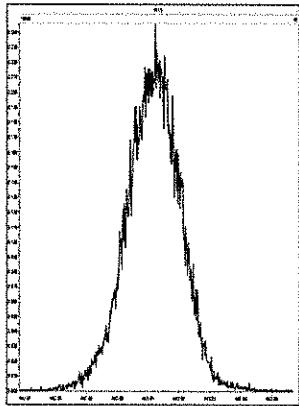
M 416.9760 R 11467



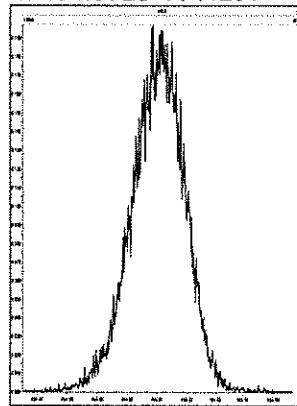
M 430.9728 R 10778



M 442.9728 R 11211



M 454.9728 R 11261



PFKK2

Inst: HRP750-2

Anal: MJC

Experiment Calibration Report

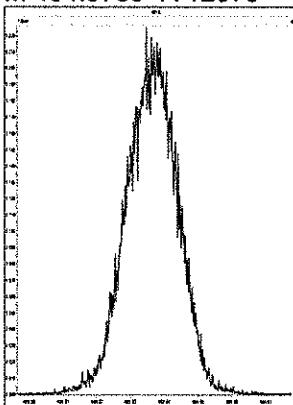
MassLynx 4.1

Page 1 of 1

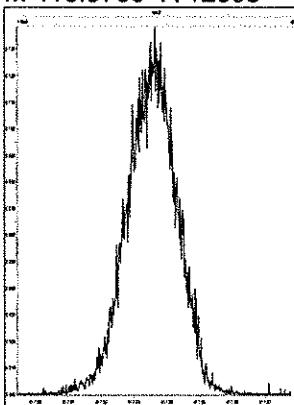
File: Experiment: dioxin\_db5ms.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Saturday, August 18, 2018 08:41:07 Eastern Standard Time

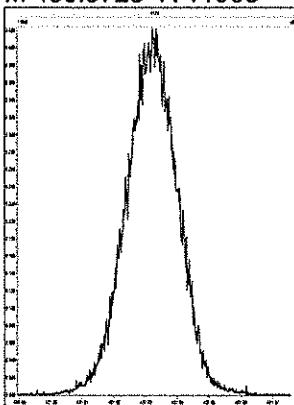
M 404.9760 R 12079



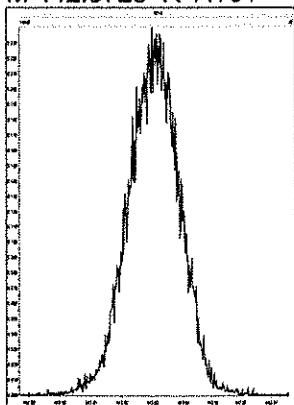
M 416.9760 R 12558



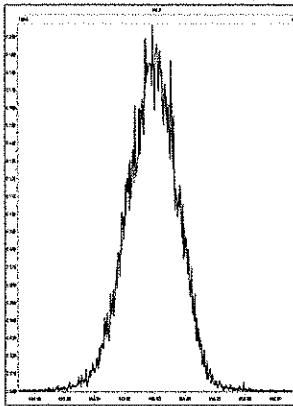
M 430.9728 R 11903



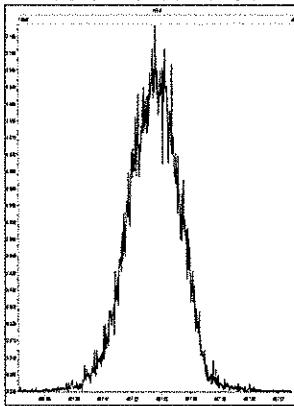
M 442.9728 R 11734



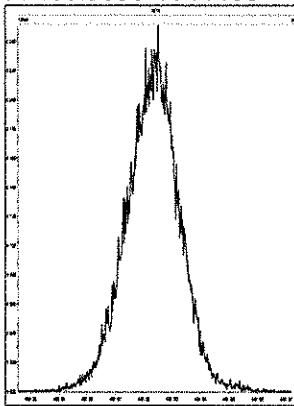
M 454.9728 R 11848



M 466.9728 R 11791



M 480.9696 R 11109



PFKK2

Inst: HRP750-2

Anal: MJL

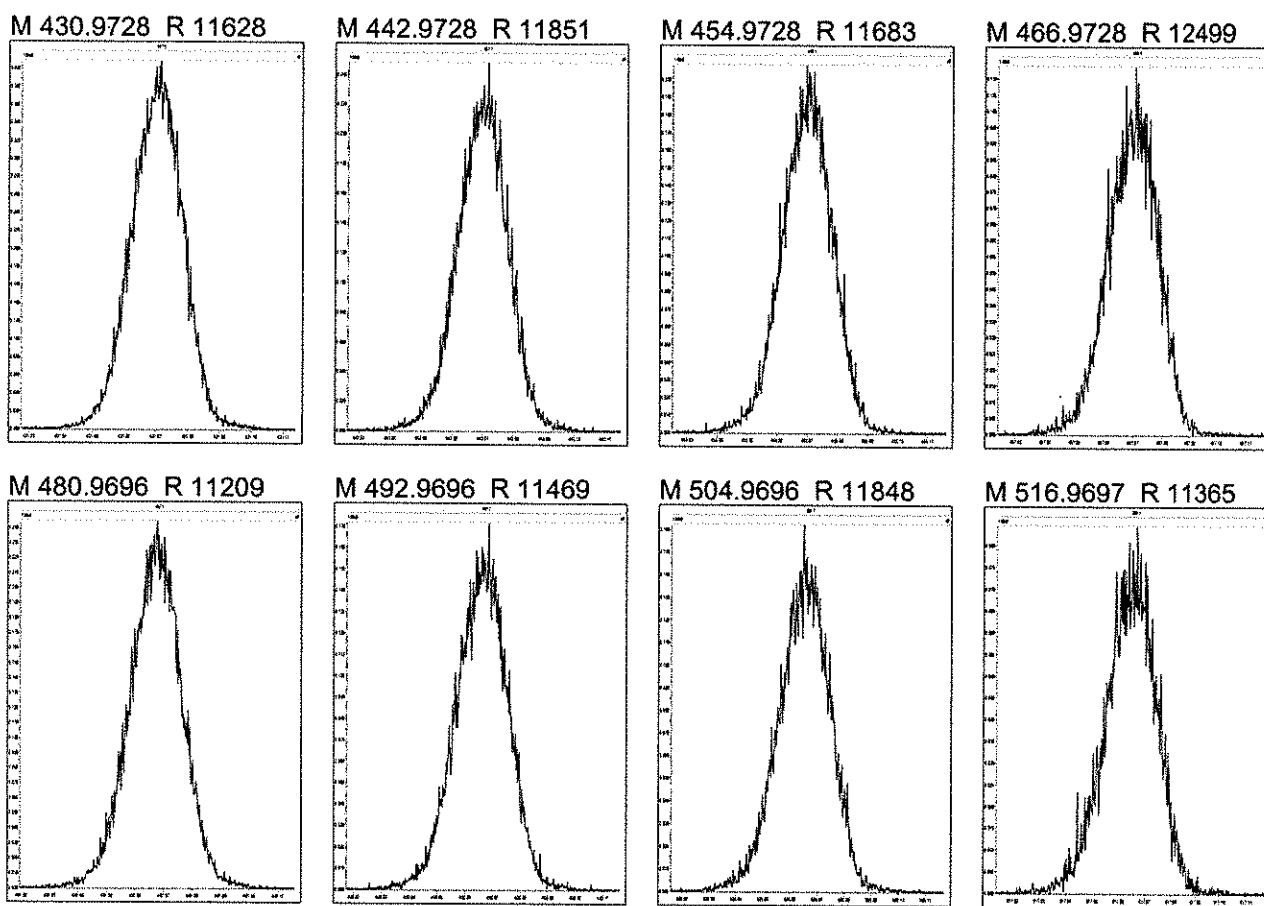
Experiment Calibration Report

MassLynx 4.1

Page 1 of 1

File: Experiment: dioxin\_db5ms.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Saturday, August 18, 2018 08:41:29 Eastern Standard Time

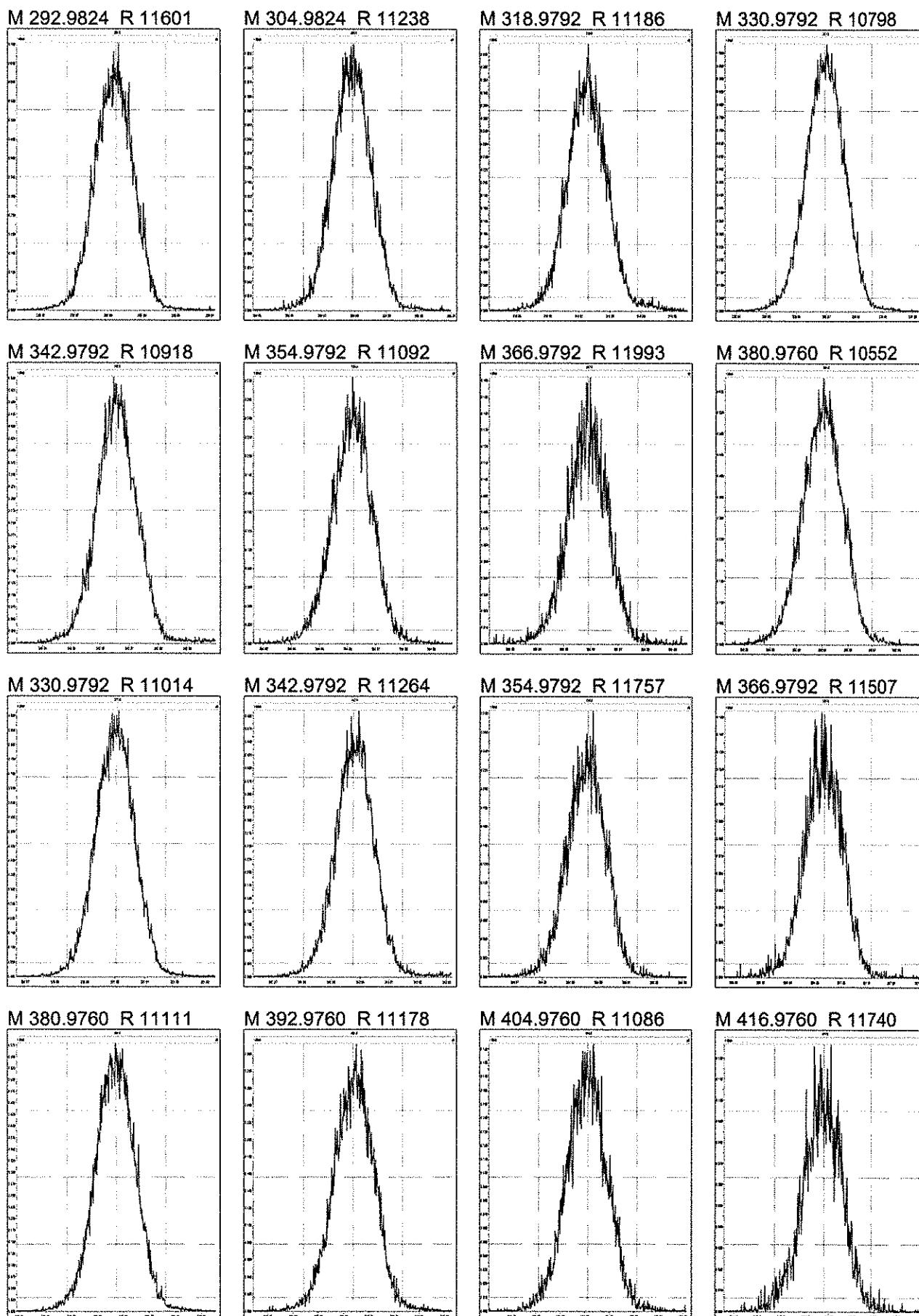


## Resolution Check Report

MassLynx 4.1

Page 1 of 3

Printed: Saturday, August 18, 2018 16:52:00 Eastern Standard Time

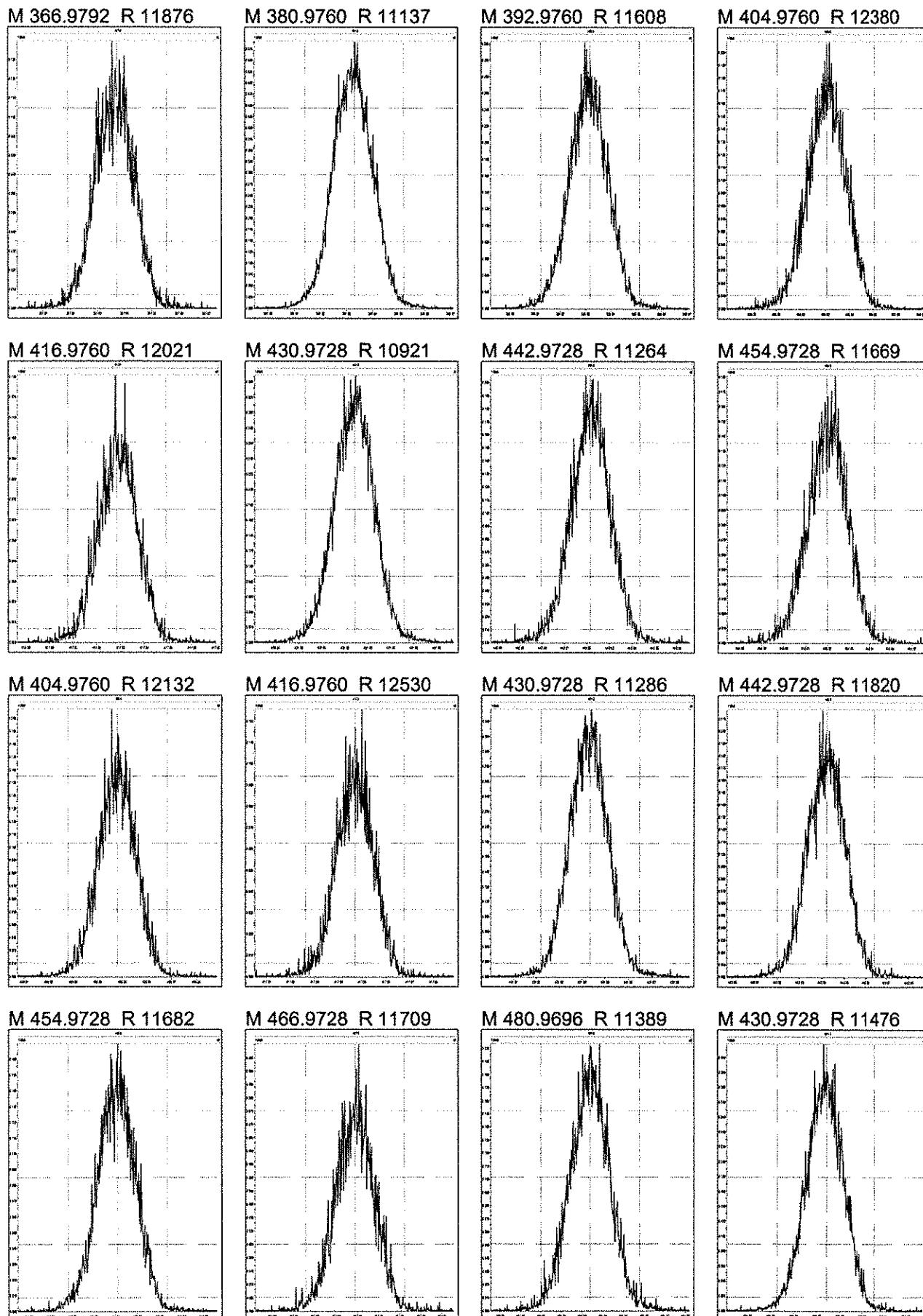


## Resolution Check Report

MassLynx 4.1

Page 2 of 3

Printed: Saturday, August 18, 2018 16:52:00 Eastern Standard Time



PFKF3

Inst: HRP7SO-2

Anal: MTC

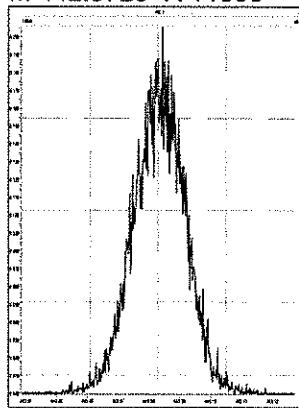
Resolution Check Report

MassLynx 4.1

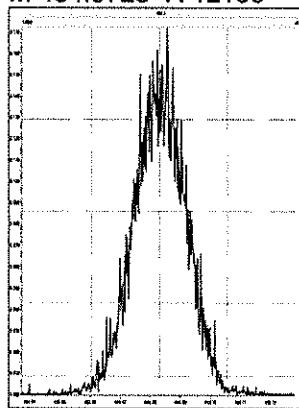
Page 3 of 3

Printed: Saturday, August 18, 2018 16:52:00 Eastern Standard Time

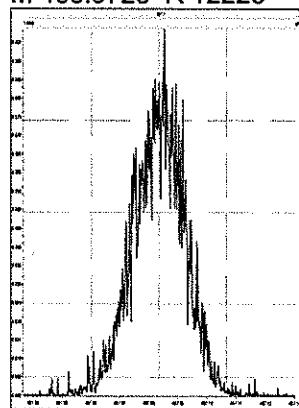
M 442.9728 R 11995



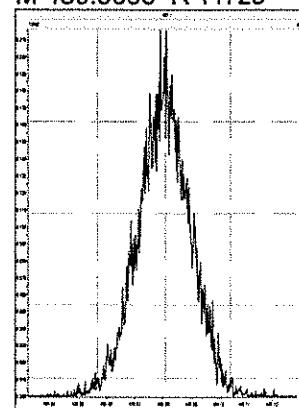
M 454.9728 R 12136



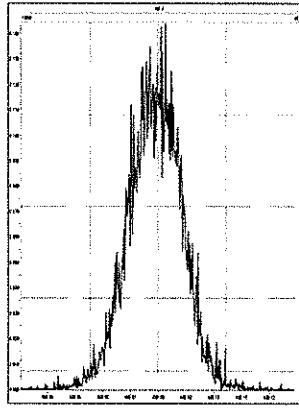
M 466.9728 R 12226



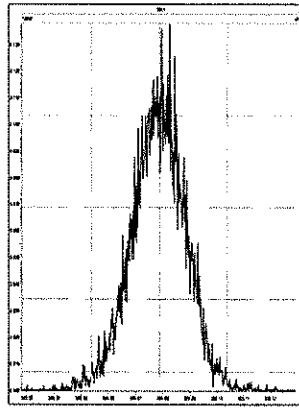
M 480.9696 R 11723



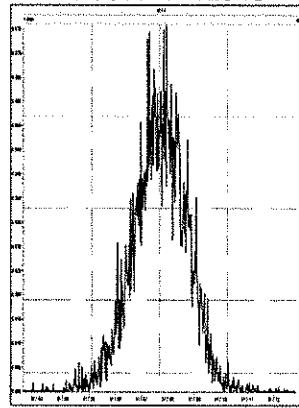
M 492.9696 R 11628



M 504.9696 R 12438



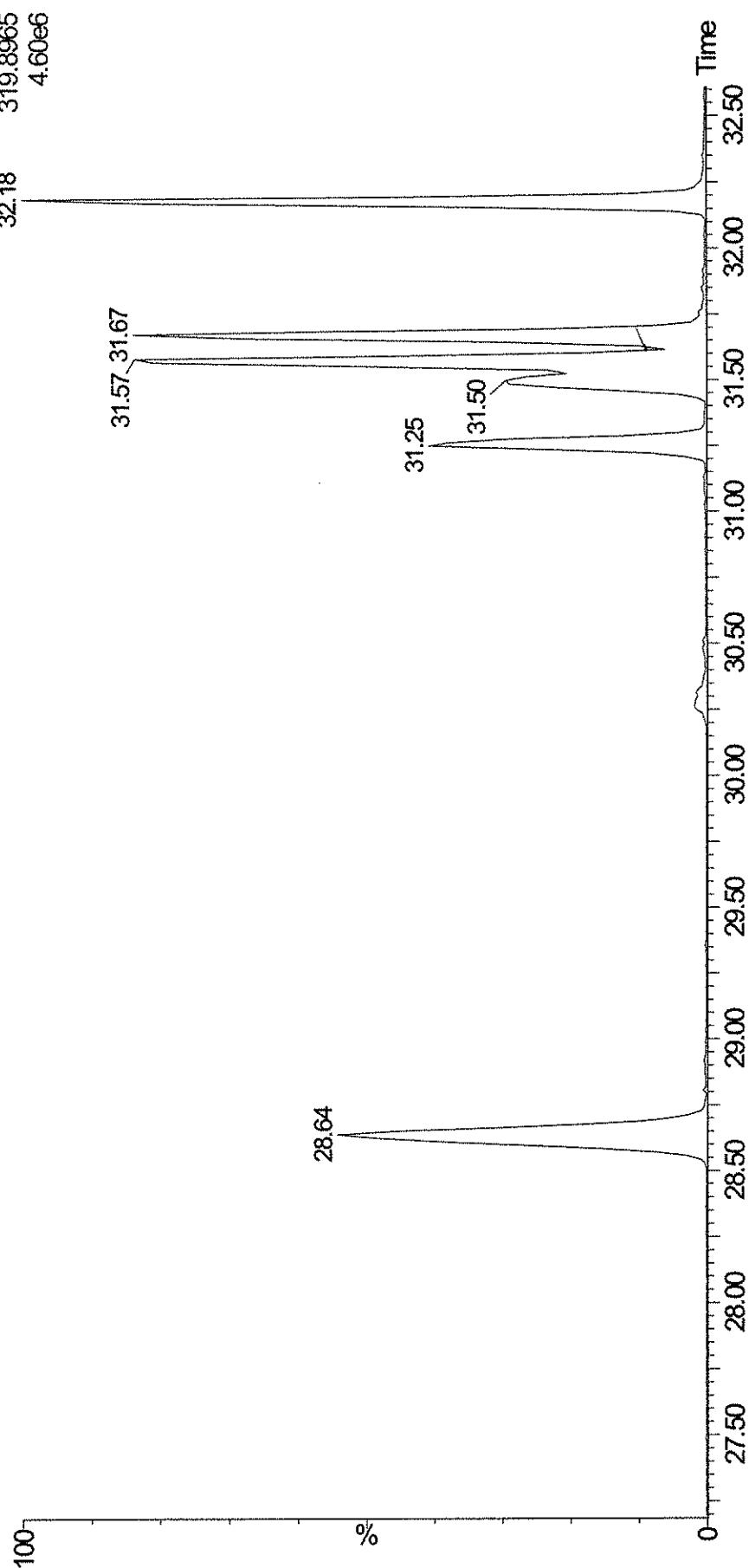
M 516.9697 R 12345



COLUMN CHECK (2378-TCDD 7%)  
**CS3WT UD180517-01.2 CPSQ6**  
A18AUG18A-1

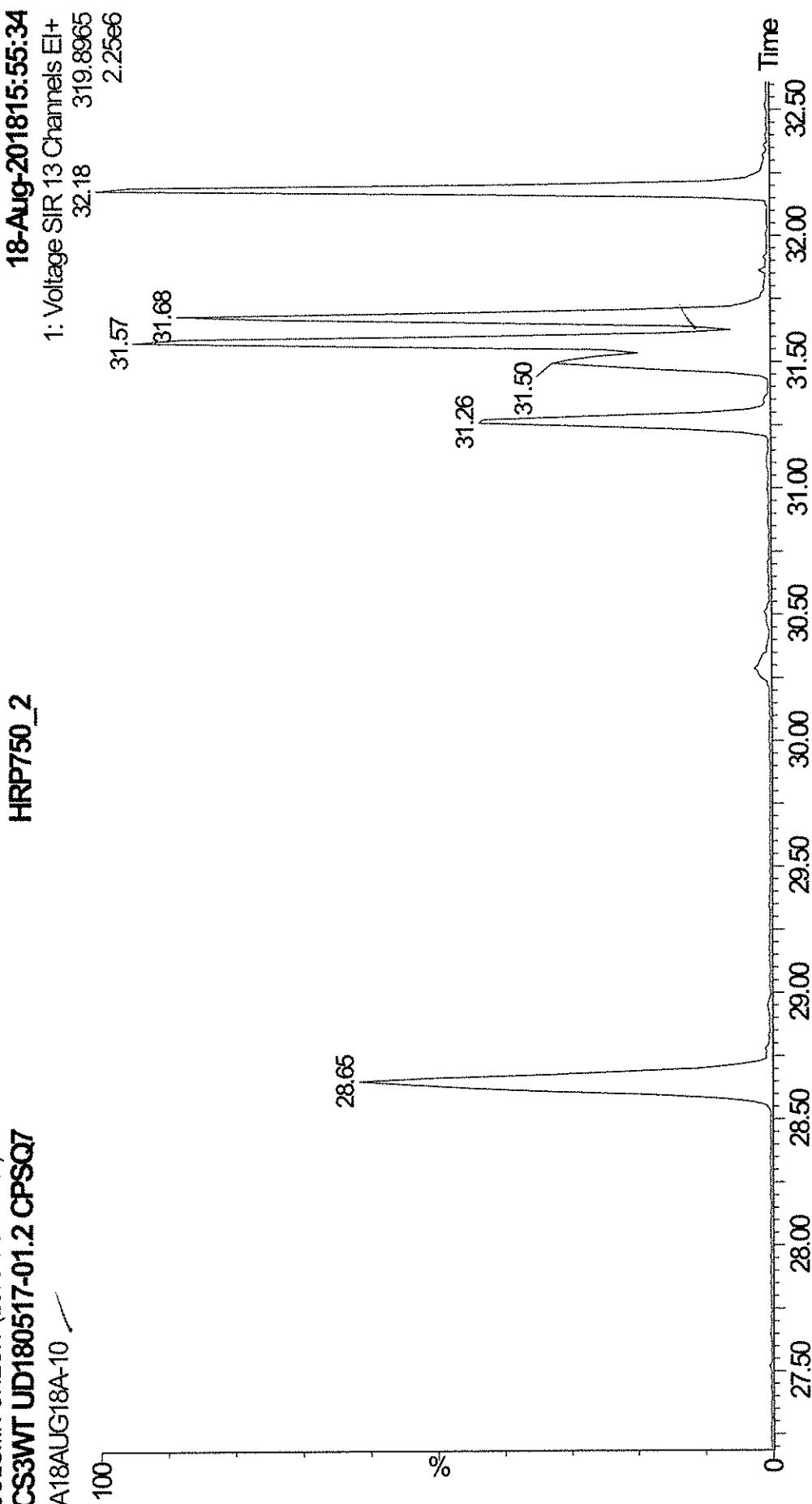
**HRP750\_2**

**18-Aug-2018 08:42:12**  
1: Voltage SIR 13 Channels El+  
32.18  
319.8965  
4.60e6



COLUMN CHECK (2378-TCDD 6%)  
**CS3WT UD180517-01.2 CPSQ7**  
A18AUG18A-10

**HRP750\_2**



## Quantify Sample Summary Report

## MassLynx 4.1

Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A18AUG18A-1.qld  
Last Altered: Monday, August 20, 2018 11:21:28 Eastern Standard Time  
Printed: Monday, August 20, 2018 11:22:23 Eastern Standard Time

Method: C:\MassLynx\Default.pro\Methdb\WDM\_A08AUG18.mdb 09 Aug 2018 09:19:01  
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\1613-A18AUG17.cdb 21 Aug 2017 10:02:05  
Name: A18AUG18A-1, Date: 18-Aug-2018, Time: 08:42:12, ID: CS3WT UD180517-01.2 CPSQ6, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

Name	RT
1 First TCDF	26.89
2 Last TCDF	32.24
3 First PeCDF	32.22
4 Last PeCDF	34.92
5 First HxCDF	35.41
6 Last HxCDF	37.79
7 First HpCDF	39.30
8 Last HpCDF	41.31
9 OCDF	45.31
10 First TCDD	28.64
11 2378-TCDD	31.67
12 Last TCDD	32.18
13 First PeCDD	33.08
14 Last PeCDD	34.73
15 First HxCDD	35.84
16 Last HxCDD	37.45
17 First HpCDD	39.64
18 Last HpCDD	40.60
19 OCDD	44.99

**Quantify Sample Report**      **MassLynx 4.1**  
**Method Window Defining Report**

Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A18AUG18A-1.qld

Last Altered: Monday, August 20, 2018 11:21:28 Eastern Standard Time

Printed: Monday, August 20, 2018 11:22:23 Eastern Standard Time

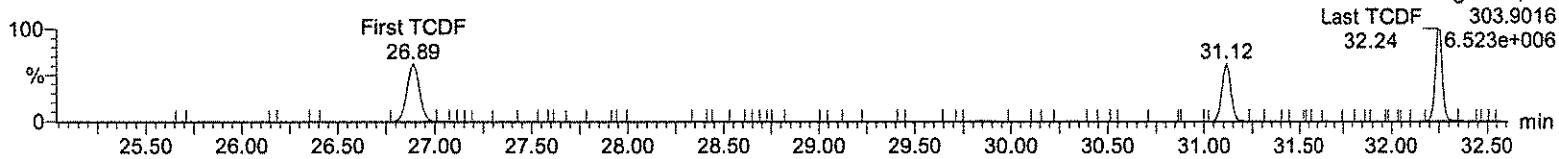
Method: C:\MassLynx\Default.pro\Methdb\WDM\_A08AUG18.mdb 09 Aug 2018 09:19:01

Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\1613-A18AUG17.cdb 21 Aug 2017 10:02:05

Name: A18AUG18A-1, Date: 18-Aug-2018, Time: 08:42:12, ID: CS3WT UD180517-01.2 CPSQ6, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

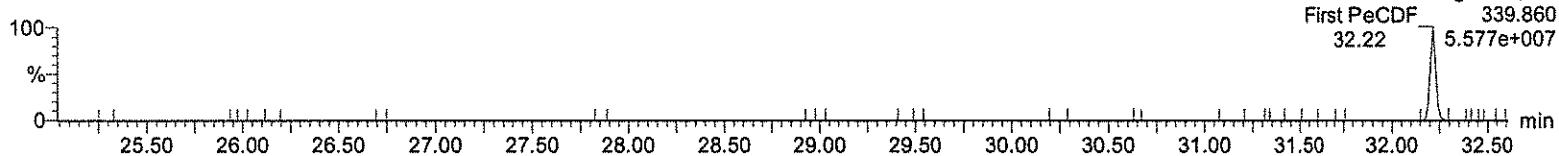
**First TCDF**

A18AUG18A-1



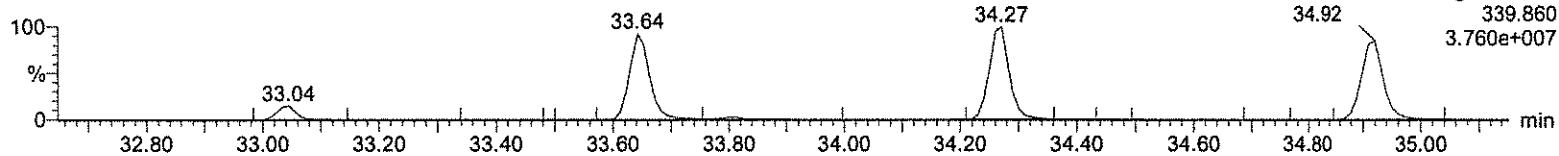
**First PeCDF**

A18AUG18A-1



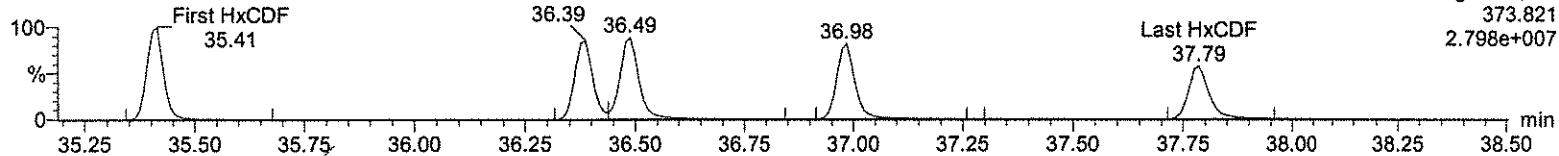
**Last PeCDF**

A18AUG18A-1



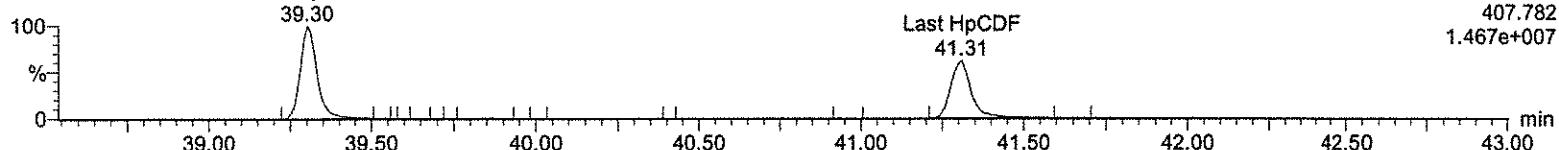
**First HxCDF**

A18AUG18A-1



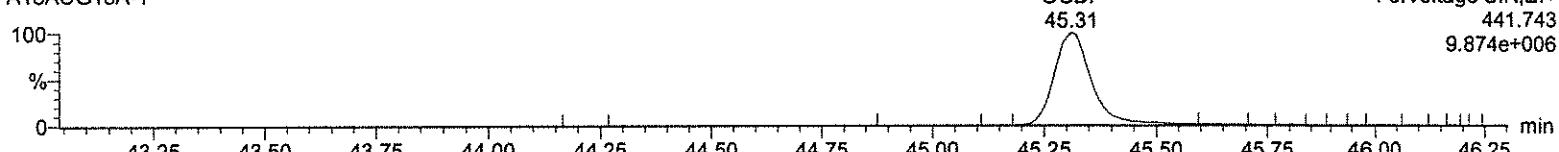
**First HpCDF**

A18AUG18A-1



**OCDF**

A18AUG18A-1



Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A18AUG18A-1.qld

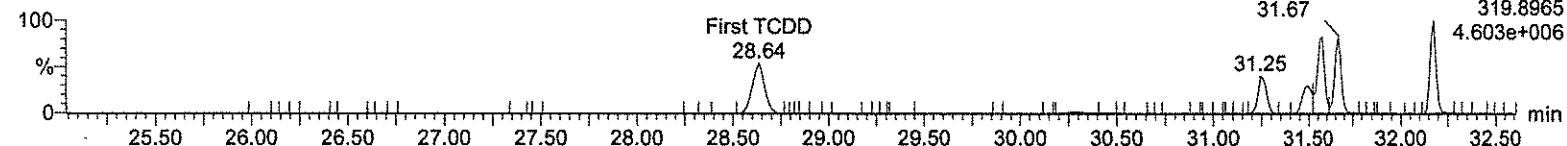
Last Altered: Monday, August 20, 2018 11:21:28 Eastern Standard Time

Printed: Monday, August 20, 2018 11:22:23 Eastern Standard Time

Name: A18AUG18A-1, Date: 18-Aug-2018, Time: 08:42:12, ID: CS3WT UD180517-01.2 CPSQ6, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

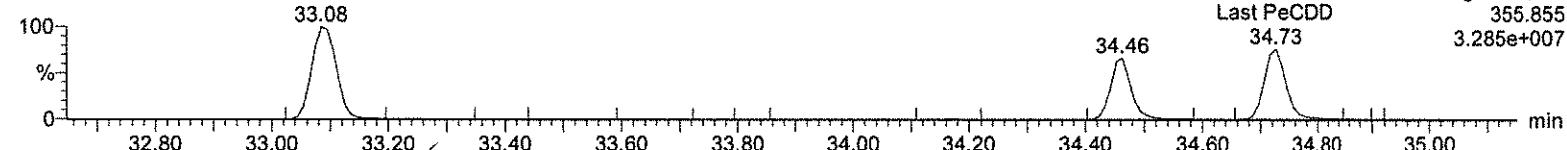
First TCDD

A18AUG18A-1



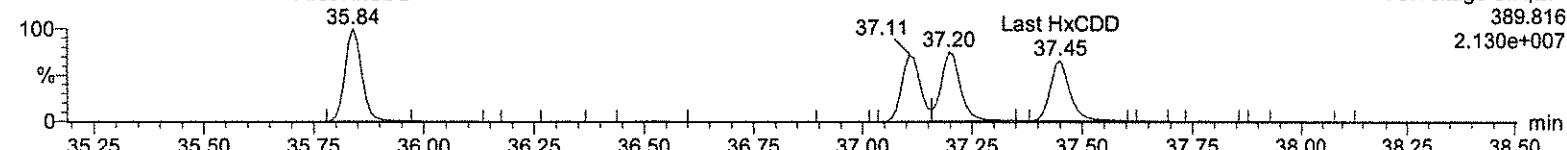
First PeCDD

A18AUG18A-1



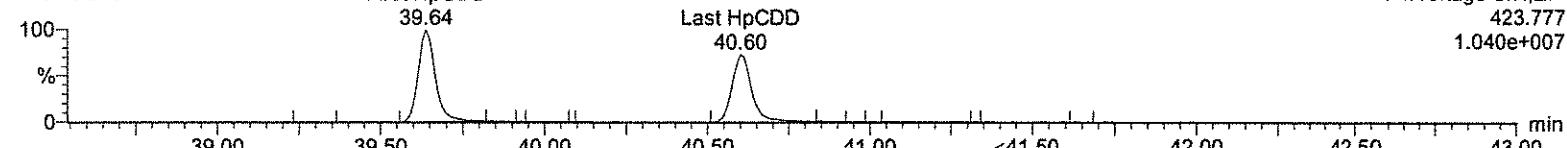
First HxCDD

A18AUG18A-1



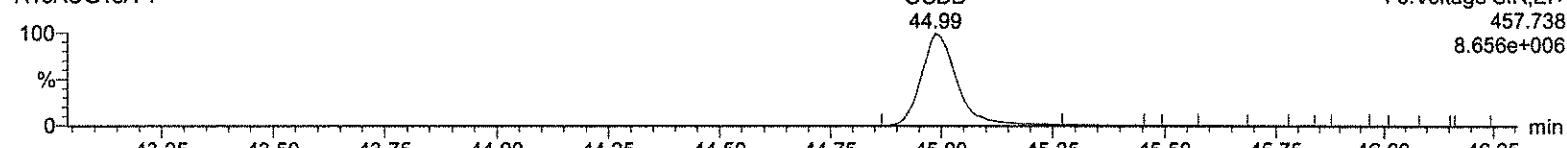
First HpCDD

A18AUG18A-1



OCDD

A18AUG18A-1



## Quantify Sample Summary Report

## MassLynx 4.1

Page Method Window Defining Report  
160 of 359 Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 11:26:52 Eastern Standard Time  
Printed: Monday, August 20, 2018 11:27:28 Eastern Standard Time

**Method: C:\MassLynx\DEFAULT.PRO\MethodDB\WDM\_A08AUG18.mdb 09 Aug 2018 09:19:01**  
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\1613-A18AUG17.cdb 21 Aug 2017 10:02:05**

**Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC**

Name	RT
1 First TCDF	26.90
2 Last TCDF	32.26
3 First PeCDF	32.23
4 Last PeCDF	34.93
5 First HxCDF	35.41
6 Last HxCDF	37.80
7 First HpCDF	39.31
8 Last HpCDF	41.31
9 OCDF	45.32
10 First TCDD	28.65
11 2378-TCDD	31.68
12 Last TCDD	32.18
13 First PeCDD	33.10
14 Last PeCDD	34.74
15 First HxCDD	35.85
16 Last HxCDD	37.46
17 First HpCDD	39.65
18 Last HpCDD	40.61
19 OCDD	45.00

Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 11:26:52 Eastern Standard Time

Printed: Monday, August 20, 2018 11:27:28 Eastern Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\WDM\_A08AUG18.mdb 09 Aug 2018 09:19:01

Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\1613-A18AUG17.cdb 21 Aug 2017 10:02:05

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

#### First TCDF

A18AUG18A-10



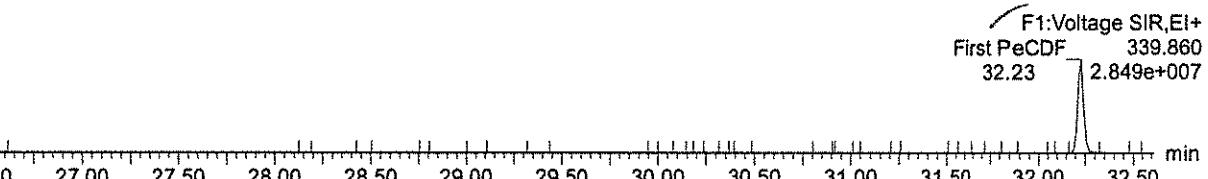
F1:Voltage SIR,El+

Last TCDF 32.26

303.9016 3.694e+006

#### First PeCDF

A18AUG18A-10



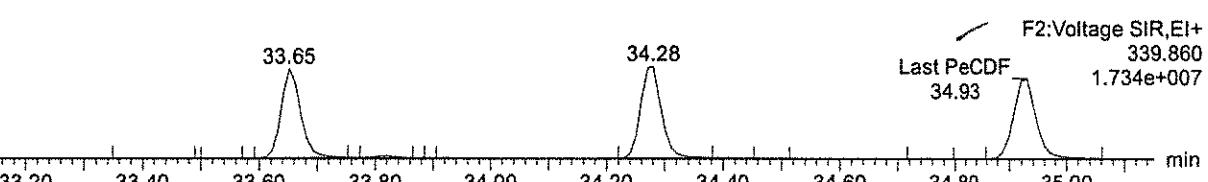
F1:Voltage SIR,El+

First PeCDF 32.23

339.860 2.849e+007

#### Last PeCDF

A18AUG18A-10



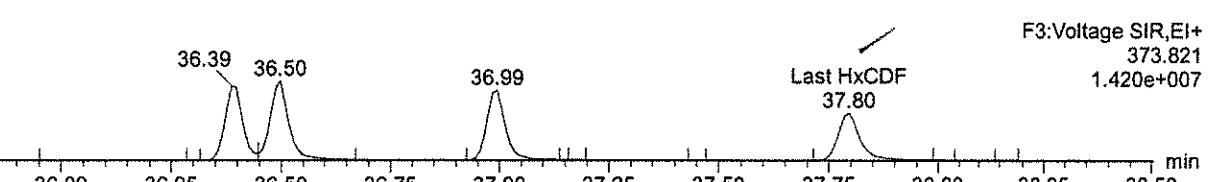
F2:Voltage SIR,El+

Last PeCDF 34.93

339.860 1.734e+007

#### First HxCDF

A18AUG18A-10



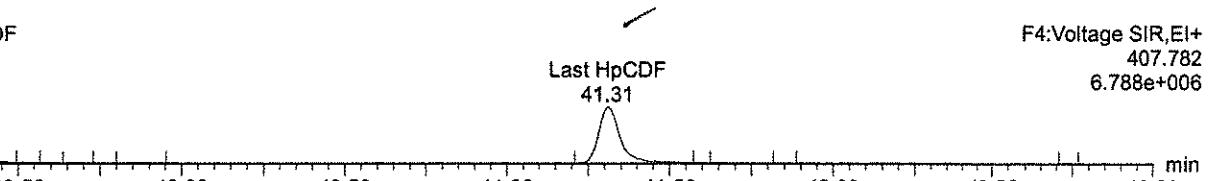
F3:Voltage SIR,El+

373.821

1.420e+007

#### First HpCDF

A18AUG18A-10



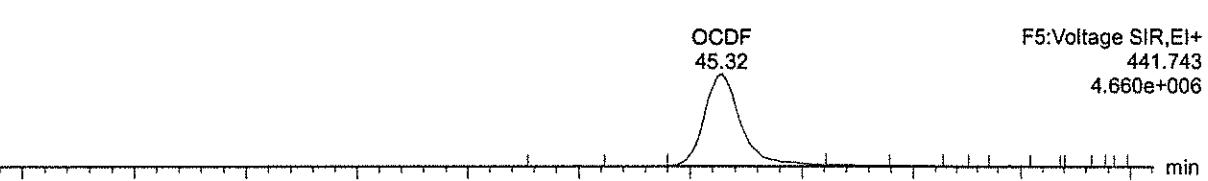
F4:Voltage SIR,El+

407.782

6.788e+006

#### OCDF

A18AUG18A-10



F5:Voltage SIR,El+

441.743

4.660e+006

**Quantify Sample Report**      **MassLynx 4.1**  
Method Window Defining Report

Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A18AUG18A-10.qld

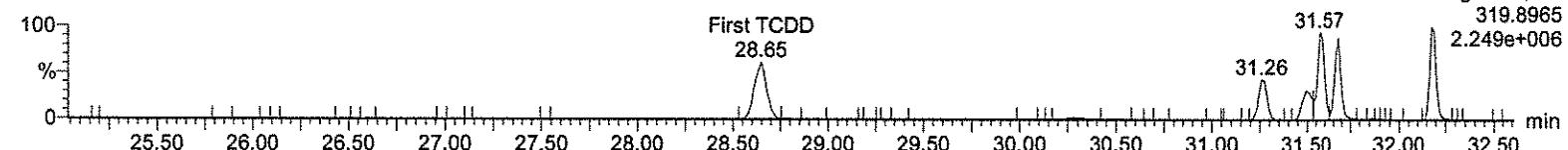
Last Altered: Monday, August 20, 2018 11:26:52 Eastern Standard Time

Printed: Monday, August 20, 2018 11:27:28 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description:,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

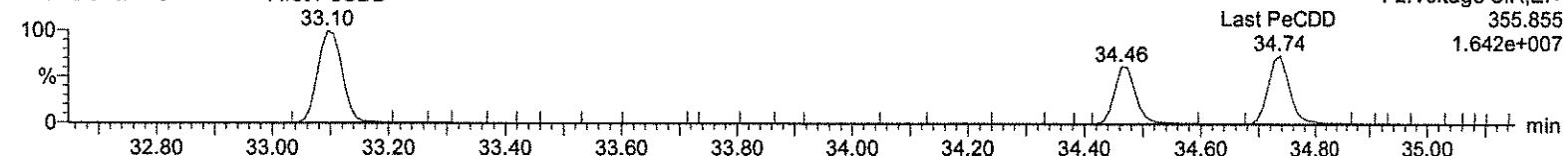
**First TCDD**

A18AUG18A-10



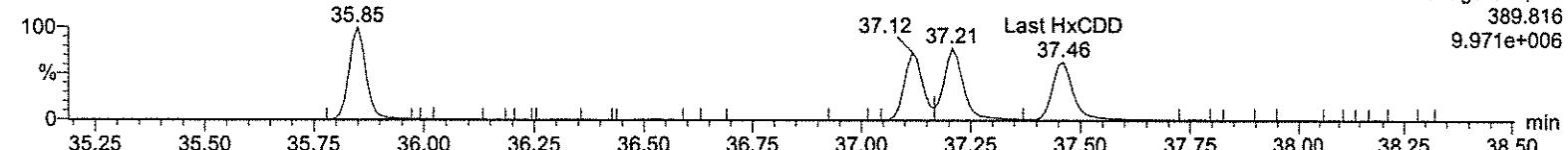
**First PeCDD**

A18AUG18A-10



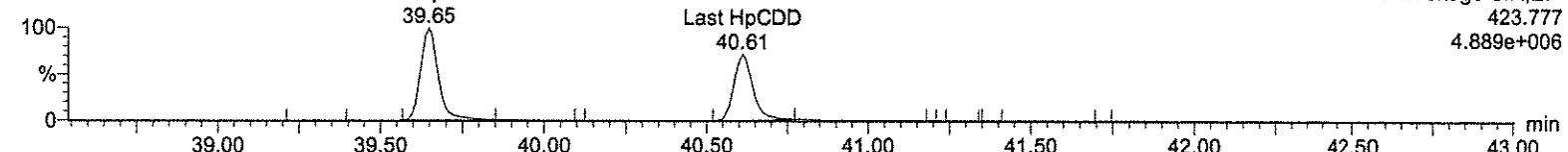
**First HxCDD**

A18AUG18A-10



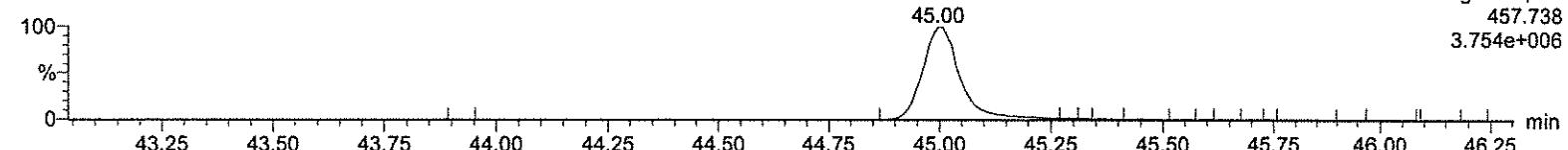
**First HpCDD**

A18AUG18A-10



**OCDD**

A18AUG18A-10



A18AUG18A  
ICAL Name:  
Instrument  
ICAL Date:  
HP R750\_1  
8/18/2018

8000D Evaluation of 8290A Initial Calibration

Parameter	Measured										True										%Error		
	CS0.5	CS1	CS2	CS3	CS4	CS5	CS0.5	CS1	CS2	CS3	CS4	CS5	CS0.5	CS1	CS2	CS3	CS4	CS5	Limit	?	Limit	?	
2378-TcDD	0.237	0.491	1.91	10.2	41.9	210	0.25	0.5	2	10	50	200	5.20	1.80	4.40	-1.72	16.3	-5.11	30	OK	0.688	20	OK
12378-PeCDD	1.16	2.44	9.95	51.1	207	1045	1.25	2.5	10	50	250	1000	7.20	2.44	0.550	-2.17	17.2	-4.50	30	OK	0.756	20	OK
123478-HxCDD	1.24	2.50	9.48	50.8	201	1037	1.25	2.5	10	50	250	1000	0.480	0.120	5.20	-1.60	19.6	-3.74	30	OK	0.859	20	OK
123678-HxCDD	1.18	2.41	9.90	51.5	207	1035	1.25	2.5	10	50	250	1000	5.36	3.48	1.02	-2.98	17.3	-3.52	30	OK	0.726	20	OK
123789-HxCDD	1.16	2.44	9.89	52.5	206	1030	1.25	2.5	10	50	250	1000	7.20	2.60	1.10	-4.98	17.7	-3.04	30	OK	0.813	20	OK
1234678-HxCDD	1.09	2.42	9.93	51.2	215	1071	1.25	2.5	10	50	250	1000	13.0	3.32	0.690	-2.46	14.0	-7.08	30	OK	0.865	20	OK
OCDD	2.40	4.64	19.1	104	421	2132	2.5	5	20	100	500	2000	4.16	7.22	4.75	-4.22	15.8	-6.60	30	OK	0.803	20	OK
2378-TcDF	0.236	0.484	1.99	10.2	40.9	210	0.25	0.5	2	10	50	200	5.60	3.20	0.650	-2.35	18.1	-4.87	30	OK	0.800	20	OK
123789-PeCDF	1.18	2.38	9.88	50.8	207	1071	1.25	2.5	10	50	250	1000	6.00	4.92	1.20	-1.62	17.3	-7.14	30	OK	0.828	20	OK
23478-PeCDF	1.24	2.34	9.38	51.1	208	1075	1.25	2.5	10	50	250	1000	1.04	6.40	6.17	-2.24	16.9	-7.53	30	OK	0.856	20	OK
123478-HxCDF	1.21	2.44	9.77	51.8	205	1020	1.25	2.5	10	50	250	1000	3.28	2.60	2.30	-3.66	18.0	-2.01	30	OK	0.731	20	OK
123678-HxCDF	1.20	2.44	9.68	52.5	207	1013	1.25	2.5	10	50	250	1000	4.00	2.52	3.25	-4.95	17.2	-1.32	30	OK	0.709	20	OK
234678-HxCDF	1.17	2.35	9.82	53.2	209	1038	1.25	2.5	10	50	250	1000	6.80	5.84	1.82	-6.37	16.6	-3.77	30	OK	0.825	20	OK
123789-HxCDF	1.19	2.34	9.65	54.0	206	1039	1.25	2.5	10	50	250	1000	4.96	6.40	3.48	-8.00	17.6	-3.89	30	OK	0.935	20	OK
1234678-HpCDF	1.28	2.31	9.75	50.4	204	1046	1.25	2.5	10	50	250	1000	-2.48	7.48	2.51	-0.726	18.2	-4.59	30	OK	0.845	20	OK
1234789-HpCDF	1.17	2.39	9.46	50.6	210	1104	1.25	2.5	10	50	250	1000	6.64	4.44	5.44	-1.27	16.1	-10.4	30	OK	0.928	20	OK
OCDF	2.27	4.75	18.6	102	430	2228	2.5	5	20	100	500	2000	9.12	5.04	6.91	-2.02	13.9	-11.4	30	OK	0.968	20	OK
13C-2378-TcDD	96.3	95.8	99.8	100	100	108	100	100	100	100	100	100	3.70	4.18	0.154	-0.148	-0.238	-7.65	30	OK	0.180	20	OK
13C-12378-PeCDD	91.9	91.7	94.1	98.4	104	120	100	100	100	100	100	100	8.14	8.32	5.88	1.56	-3.79	-20.1	30	OK	1.18	20	OK
13C-123678-HxCDD	99.4	99.2	98.0	100.0	101	102	100	100	100	100	100	100	0.625	0.777	1.99	0.020	-1.37	-2.04	30	OK	0.0219	20	OK
13C-1234678-HpCDD	103	105	99.5	97.3	95.0	100	100	100	100	100	100	100	-2.51	-5.20	0.479	2.66	5.01	-0.441	30	OK	0.132	20	OK
13C-OCDD	198	208	191	196	189	218	200	200	200	200	200	200	1.15	-3.97	4.47	2.03	5.26	-8.94	30	OK	0.298	20	OK
13C-2378-TcDF	98.6	96.0	99.9	103	101	102	100	100	100	100	100	100	1.45	3.99	0.129	-3.00	-0.543	-2.02	30	OK	0.0629	20	OK
13C-12378-PeDF	94.7	94.4	96.2	98.9	102	114	100	100	100	100	100	100	5.27	5.60	3.82	1.13	-2.23	-13.6	30	OK	0.529	20	OK
13C-123678-HxCDF	98.8	101	102	98.9	100	99.8	100	100	100	100	100	100	1.17	-0.548	-1.67	1.13	-0.288	0.206	30	OK	0.0117	20	OK
13C-123478-HpCDF	103	103	103	100	101	94.8	98.3	100	100	100	100	100	-3.13	-3.22	-0.0270	-0.557	5.21	1.73	30	OK	0.101	20	OK
13C-123478-HxCDD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
13C-123789-HxCDD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
37C-2378-TcDD (SS)	0.246	0.476	1.93	10.3	41.2	209	0.250	0.5	2	10	50	200	1.60	4.80	3.75	-2.90	17.7	-4.49	30	OK	0.76	20	OK
13C-23478-PeCDF (SS)	98.0	97.3	98.3	102	101	104	100	100	100	100	100	100	2.04	2.71	1.68	-2.07	-0.849	-3.50	30	OK	0.06	20	OK
13C-123478-HxCDF (SS)	102	102	99.0	101	98.3	97.6	100	100	100	100	100	100	-2.02	-2.09	1.01	-1.02	1.70	2.43	30	OK	0.04	20	OK
13C-123478-HpCDF (SS)	100	101	100	101	100	101	100	100	100	100	100	100	-0.0460	-1.44	-0.322	1.22	1.78	-1.19	30	OK	0.02	20	OK
13C-123478-HxCDF (SS)	98.5	103	95.3	98.9	100	104	100	100	100	100	100	100	1.47	2.62	4.67	-1.10	-0.414	-4.21	30	OK	0.10	20	OK

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$$\text{Part 2: } \% \text{ Error} = \frac{(0.25 - 0.237)}{0.25} \times 100 = 5.2$$

Page 1 of 1

Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A08AUG18.mdb 08 Aug 2018 12:08:43  
Calibration: C:\MassLynx\Default.pro\Curvedb\8290-A18AUG18.cdb 20 Aug 2018 13:48:29

Date: 18-Aug-2018, Job: A18AUG18A, User: MJC, Task: HRP750\_2, Description:

Name	ICAL RRF
1 2378-TCDD	0.966
2 12378-PeCDD	0.977
3 123478-HxCDD	0.820
4 123678-HxCDD	0.971
5 123789-HxCDD	0.861
6 1234678-HpCDD	0.955
7 OCDD	0.981
8 2378-TCDF	0.919
9 12378-PeCDF	0.875
10 23478-PeCDF	0.981
11 123478-HxCDF	0.923
12 123678-HxCDF	1.063
13 234678-HxCDF	0.951
14 123789-HxCDF	0.751
15 1234678-HpCDF	1.219
16 1234789-HpCDF	0.902
17 OCDF	1.187
18 13C-2378-TCDD	1.064
19 13C-12378-PeCDD	0.775
20 13C-123678-HxCDD	1.162
21 13C-1234678-HpCDD	0.748
22 13C-OCDD	0.611
23 13C-2378-TCDF	1.560
24 13C-12378-PeCDF	1.320
25 13C-123678-HxCDF	1.546
26 13C-1234678-HpCDF	1.014
27 13C-1234-TCDD	1.000
28 13C-123789-HxCDD	1.000
29 37Cl-2378-TCDD (SS)	1.015
30 13C-23478-PeCDF (SS)	0.990
31 13C-123478-HxCDF (SS)	0.819
32 13C-123478-HxCDD (SS)	0.834
33 13C-1234789-HpCDF (SS)	0.715

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A08AUG18.mdb 08 Aug 2018 12:08:43****Calibration: 20 Aug 2018 13:48:29****Compound name: 2378-TCDD**

Response Factor: 0.966186

RRF SD: 0.0434853, Relative SD: 4.50072

Response type: Internal Std ( Ref 18 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	0.250	31.67	0.24	0.915	0.966	db
A18AUG18A-4	CS1 UD180112-03 CS1...	0.500	31.68	0.49	0.949	0.966	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	2.000	31.68	1.91	0.924	0.966	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	10.000	31.67	10.17	0.983	0.966	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	40.000	31.68	41.85	1.011	0.966	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	200.000	31.68	210.22	1.016	0.966	bb

**Compound name: 12378-PeCDD**

Response Factor: 0.976829

RRF SD: 0.0427437, Relative SD: 4.37576

Response type: Internal Std ( Ref 19 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	34.46	1.16	0.906	0.977	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	34.47	2.44	0.953	0.977	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	34.47	9.94	0.971	0.977	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	34.46	51.09	0.998	0.977	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	34.47	207.08	1.011	0.977	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	34.47	1044.98	1.021	0.977	bb

**Compound name: 123478-HxCDD**

Response Factor: 0.81961

RRF SD: 0.0243066, Relative SD: 2.96562

Response type: Internal Std ( Ref 20 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	37.12	1.24	0.816	0.820	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	37.12	2.50	0.819	0.820	dd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	37.12	9.48	0.777	0.820	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	37.12	50.80	0.833	0.820	dd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	37.13	200.90	0.823	0.820	bd
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	37.13	1037.39	0.850	0.820	bd

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Compound name: 123678-HxCDD**

Response Factor: 0.970895

RRF SD: 0.0375219, Relative SD: 3.86467

Response type: Internal Std ( Ref 20 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	37.21	1.18	0.919	0.971 db
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	37.22	2.41	0.937	0.971 dd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	37.21	9.90	0.961	0.971 dd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	37.21	51.49	1.000	0.971 dd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	37.22	206.73	1.004	0.971 dd
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	37.21	1035.24	1.005	0.971 dd

**Compound name: 123789-HxCDD**

Response Factor: 0.861112

RRF SD: 0.038982, Relative SD: 4.52694

Response type: Internal Std ( Ref 20 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	37.45	1.16	0.799	0.861 bd
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	37.46	2.43	0.839	0.861 dd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	37.46	9.89	0.852	0.861 dd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	37.45	52.49	0.904	0.861 dd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	37.46	205.80	0.886	0.861 dd
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	37.46	1030.38	0.887	0.861 dd

**Compound name: 1234678-HpCDD**

Response Factor: 0.954662

RRF SD: 0.0729873, Relative SD: 7.64535

Response type: Internal Std ( Ref 21 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	40.60	1.09	0.831	0.955 bb
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	40.61	2.42	0.923	0.955 bd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	40.61	9.93	0.948	0.955 bd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	40.61	51.23	0.978	0.955 bb
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	40.62	214.92	1.026	0.955 bd
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	40.61	1070.83	1.022	0.955 bb

**Compound name: OCDD**

Response Factor: 0.98104

RRF SD: 0.0591022, Relative SD: 6.02445

Response type: Internal Std ( Ref 22 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF M
A18AUG18A-3	CS0.5 UD170815-01.2	2.500	44.99	2.40	0.940	0.981 bd
A18AUG18A-4	CS1 UD180112-03 CS1...	5.000	45.01	4.64	0.910	0.981 bd

## Quantify Compound Summary Report MassLynx 4.1

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

*8290 20 Aug 18*

## Compound name: OCDD

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-5	CS2 UD180112-04 CS2...	20.000	45.00	19.05	0.935	0.981	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	45.00	104.22	1.022	0.981	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	400.000	45.01	421.24	1.033	0.981	bd
A18AUG18A-8	CS5 UD180112-07 CS5...	2000.000	45.01	2131.98	1.046	0.981	bd

## Compound name: 2378-TCDF

Response Factor: 0.919017

RRF SD: 0.0362561, Relative SD: 3.9451

Response type: Internal Std ( Ref 23 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

$$\text{CS0.5 RRF} = \frac{(4.5413)(10)}{(3.4146)(0.25)} = 0.867$$

$$\text{RRF SD} = \frac{0.00059}{5} = \frac{0.0363}{0.919 \times 100} = 3.95$$

$$5.514/6 = 0.919$$

## Compound name: 12378-PeCDF

Response Factor: 0.875425

RRF SD: 0.0440963, Relative SD: 5.03713

Response type: Internal Std ( Ref 24 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	0.250	31.12	0.24	0.867	0.919	dd
A18AUG18A-4	CS1 UD180112-03 CS1...	0.500	31.13	0.48	0.889	0.919	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	2.000	31.13	1.99	0.913	0.919	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	10.000	31.12	10.23	0.941	0.919	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	40.000	31.13	40.93	0.940	0.919	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	200.000	31.13	209.74	0.964	0.919	bb

## Compound name: 23478-PeCDF

Response Factor: 0.981138

RRF SD: 0.0549122, Relative SD: 5.59678

Response type: Internal Std ( Ref 24 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	34.27	1.24	0.971	0.981	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	34.28	2.34	0.918	0.981	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	34.28	9.38	0.921	0.981	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	34.27	51.12	1.003	0.981	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	34.28	207.72	1.019	0.981	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	34.28	1075.26	1.055	0.981	bb

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Compound name: 123478-HxCDF**

Response Factor: 0.923398

RRF SD: 0.0279933, Relative SD: 3.03155

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	36.39	1.21	0.893	0.923	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	36.40	2.44	0.899	0.923	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	36.39	9.77	0.902	0.923	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	36.39	51.83	0.957	0.923	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	36.40	204.92	0.946	0.923	bd
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	36.40	1020.12	0.942	0.923	bd

**Compound name: 123678-HxCDF**

Response Factor: 1.06336

RRF SD: 0.040276, Relative SD: 3.78761

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	36.49	1.20	1.020	1.063	dd
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	36.50	2.44	1.037	1.063	dd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	36.50	9.67	1.029	1.063	dd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	36.49	52.48	1.116	1.063	dd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	36.50	207.03	1.101	1.063	db
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	36.50	1013.24	1.077	1.063	db

**Compound name: 234678-HxCDF**

Response Factor: 0.951159

RRF SD: 0.0532426, Relative SD: 5.59766

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	36.99	1.17	0.887	0.951	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	36.99	2.35	0.896	0.951	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	36.99	9.82	0.934	0.951	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	36.98	53.19	1.012	0.951	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	36.99	208.60	0.992	0.951	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	37.00	1037.71	0.987	0.951	bd

**Compound name: 123789-HxCDF**

Response Factor: 0.750688

RRF SD: 0.0432239, Relative SD: 5.7579

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	37.79	1.19	0.713	0.751	dd
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	37.80	2.34	0.703	0.751	bb

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Compound name: 123789-HxCDF**

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	37.80	9.65	0.725	0.751	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	37.79	54.00	0.811	0.751	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	37.80	205.93	0.773	0.751	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	37.80	1038.92	0.780	0.751	bb

**Compound name: 1234678-HpCDF**

Response Factor: 1.21887

RRF SD: 0.0530924, Relative SD: 4.35587

Response type: Internal Std ( Ref 26 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	39.31	1.28	1.249	1.219	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	39.31	2.31	1.128	1.219	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	39.31	9.75	1.188	1.219	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	39.31	50.36	1.228	1.219	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	39.32	204.42	1.246	1.219	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	39.31	1045.85	1.275	1.219	bb

**Compound name: 1234789-HpCDF**

Response Factor: 0.90152

RRF SD: 0.0606345, Relative SD: 6.72581

Response type: Internal Std ( Ref 26 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	1.250	41.32	1.17	0.842	0.902	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	2.500	41.33	2.39	0.862	0.902	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	10.000	41.31	9.46	0.852	0.902	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	50.000	41.30	50.63	0.913	0.902	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	41.32	209.63	0.945	0.902	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	1000.000	41.32	1104.08	0.995	0.902	bb

**Compound name: OCDF**

Response Factor: 1.18737

RRF SD: 0.0991178, Relative SD: 8.34769

Response type: Internal Std ( Ref 22 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	2.500	45.31	2.27	1.079	1.187	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	5.000	45.33	4.75	1.128	1.187	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	20.000	45.31	18.62	1.105	1.187	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	45.31	102.02	1.211	1.187	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	400.000	45.33	430.48	1.278	1.187	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	2000.000	45.33	2228.18	1.323	1.187	bb

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Compound name: 13C-2378-TCDD**

Response Factor: 1.06368

RRF SD: 0.0450725, Relative SD: 4.23741

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	31.65	96.30	1.024	1.064	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	31.67	95.82	1.019	1.064	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	31.67	99.85	1.062	1.064	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	31.65	100.15	1.065	1.064	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	31.67	100.24	1.066	1.064	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	31.67	107.65	1.145	1.064	bb

**Compound name: 13C-12378-PeCDD**

Response Factor: 0.7754

RRF SD: 0.0843229, Relative SD: 10.8748

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	34.45	91.86	0.712	0.775	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	34.46	91.68	0.711	0.775	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	34.46	94.13	0.730	0.775	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	34.45	98.44	0.763	0.775	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	34.46	103.79	0.805	0.775	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	34.46	120.11	0.931	0.775	bb

**Compound name: 13C-123678-HxCDD**

Response Factor: 1.16185

RRF SD: 0.0172048, Relative SD: 1.48081

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	37.19	99.38	1.155	1.162	dd
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	37.20	99.22	1.153	1.162	dd
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	37.20	98.01	1.139	1.162	dd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	37.19	99.98	1.162	1.162	dd
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	37.21	101.37	1.178	1.162	dd
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	37.20	102.04	1.186	1.162	dd

**Compound name: 13C-1234678-HpCDD**

Response Factor: 0.747839

RRF SD: 0.0271392, Relative SD: 3.62902

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	40.59	102.50	0.767	0.748	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	40.60	105.20	0.787	0.748	bd

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Compound name: 13C-1234678-HpCDD**

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	40.60	99.52	0.744	0.748	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	40.59	97.34	0.728	0.748	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	40.60	94.99	0.710	0.748	bd
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	40.60	100.44	0.751	0.748	bb

**Compound name: 13C-OCDD**

Response Factor: 0.610513

RRF SD: 0.0333029, Relative SD: 5.45491

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	200.000	44.98	197.70	0.603	0.611	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	200.000	44.99	207.93	0.635	0.611	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	200.000	44.99	191.05	0.583	0.611	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	200.000	44.98	195.95	0.598	0.611	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	200.000	44.99	189.48	0.578	0.611	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	200.000	45.01	217.88	0.665	0.611	bd

**Compound name: 13C-2378-TCDF**

Response Factor: 1.55959

RRF SD: 0.039111, Relative SD: 2.50778

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	31.10	98.55	1.537	1.560	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	31.12	96.01	1.497	1.560	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	31.12	99.87	1.558	1.560	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	31.10	103.00	1.606	1.560	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	31.12	100.54	1.568	1.560	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	31.12	102.02	1.591	1.560	bb

**Compound name: 13C-12378-PeCDF**

Response Factor: 1.31966

RRF SD: 0.0959439, Relative SD: 7.27033

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	33.64	94.73	1.250	1.320	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	33.65	94.40	1.246	1.320	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	33.64	96.18	1.269	1.320	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	33.64	98.87	1.305	1.320	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	33.65	102.23	1.349	1.320	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	33.64	113.58	1.499	1.320	bb

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Compound name: 13C-123678-HxCDF**

Response Factor: 1.54586

RRF SD: 0.0167286, Relative SD: 1.08215

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	36.48	98.83	1.528	1.546	dd
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	36.49	100.55	1.554	1.546	dd
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	36.49	101.67	1.572	1.546	dd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	36.48	98.87	1.528	1.546	db
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	36.49	100.29	1.550	1.546	db
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	36.49	99.79	1.543	1.546	dd

**Compound name: 13C-1234678-HpCDF**

Response Factor: 1.0139

RRF SD: 0.0322381, Relative SD: 3.1796

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	39.29	103.13	1.046	1.014	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	39.30	103.22	1.047	1.014	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	39.30	100.03	1.014	1.014	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	39.29	100.56	1.020	1.014	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	39.30	94.80	0.961	1.014	bd
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	39.30	98.27	0.996	1.014	bd

**Compound name: 13C-1234-TCDD**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	31.25	100.00	1.000	1.000	bb
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	31.26	100.00	1.000	1.000	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	31.25	100.00	1.000	1.000	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	31.25	100.00	1.000	1.000	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	31.26	100.00	1.000	1.000	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	31.25	100.00	1.000	1.000	bb

**Compound name: 13C-123789-HxCDD**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	37.44	100.00	1.000	1.000	dd
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	37.45	100.00	1.000	1.000	dd

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Compound name: 13C-123789-HxCDD**

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	37.45	100.00	1.000	1.000	dd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	37.44	100.00	1.000	1.000	dd
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	37.45	100.00	1.000	1.000	dd
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	37.45	100.00	1.000	1.000	dd

**Compound name: 37Cl-2378-TCDD (SS)**

Response Factor: 1.01504

RRF SD: 0.0398244, Relative SD: 3.92342

Response type: Internal Std ( Ref 18 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	0.250	31.67	0.25	0.998	1.015	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	0.500	31.68	0.48	0.966	1.015	bb
A18AUG18A-5	CS2 UD180112-04 CS2...	2.000	31.68	1.92	0.977	1.015	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	10.000	31.67	10.29	1.044	1.015	bb
A18AUG18A-7	CS4 UD180112-06 CS43P	40.000	31.68	41.15	1.044	1.015	bb
A18AUG18A-8	CS5 UD180112-07 CS5...	200.000	31.68	208.99	1.061	1.015	bb

**Compound name: 13C-23478-PeCDF (SS)**

Response Factor: 0.990484

RRF SD: 0.0249017, Relative SD: 2.5141

Response type: Internal Std ( Ref 24 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	34.26	97.96	0.970	0.990	db
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	34.27	97.30	0.964	0.990	db
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	34.27	98.32	0.974	0.990	db
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	34.26	102.07	1.011	0.990	db
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	34.27	100.85	0.999	0.990	db
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	34.27	103.50	1.025	0.990	db

**Compound name: 13C-123478-HxCDF (SS)**

Response Factor: 0.818606

RRF SD: 0.016083, Relative SD: 1.96468

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	36.38	102.02	0.835	0.819	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	36.39	102.09	0.836	0.819	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	36.38	99.00	0.810	0.819	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	36.38	101.02	0.827	0.819	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	36.39	98.30	0.805	0.819	bd
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	36.39	97.57	0.799	0.819	bd

**Quantify Compound Summary Report    MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

**Compound name: 13C-123478-HxCDD (SS)**

Response Factor: 0.833886

RRF SD: 0.0107019, Relative SD: 1.28338

Response type: Internal Std ( Ref 20 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	37.11	100.05	0.834	0.834	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	37.12	101.44	0.846	0.834	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	37.11	100.32	0.837	0.834	bd
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	37.11	98.78	0.824	0.834	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	37.12	98.22	0.819	0.834	bd
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	37.12	101.19	0.844	0.834	bd

**Compound name: 13C-1234789-HpCDF (SS)**

Response Factor: 0.71547

RRF SD: 0.0226216, Relative SD: 3.16178

Response type: Internal Std ( Ref 26 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/uL	RRF	AvgRRF	M
A18AUG18A-3	CS0.5 UD170815-01.2	100.000	41.29	98.53	0.705	0.715	bd
A18AUG18A-4	CS1 UD180112-03 CS1...	100.000	41.30	102.62	0.734	0.715	bd
A18AUG18A-5	CS2 UD180112-04 CS2...	100.000	41.30	95.33	0.682	0.715	bb
A18AUG18A-6	CS3 UD180112-05 CS3...	100.000	41.29	98.90	0.708	0.715	bd
A18AUG18A-7	CS4 UD180112-06 CS43P	100.000	41.30	100.41	0.718	0.715	bd
A18AUG18A-8	CS5 UD180112-07 CS5...	100.000	41.31	104.21	0.746	0.715	bb

## Quantify Sample Summary Report

## MassLynx 4.1

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld  
 Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time  
 Calibration: 20 Aug 2018 13:48:29  
 Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

*1802Aug18*

Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A08AUG18.mdb 08 Aug 2018 12:08:43

Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

#	Name	Ion1/Area	Ion2/Area	Response	RT	RRT	RA	Fail?	pg/uL	RRF	Mean	SD	EDL	Height	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDD	2.41e3	2.78e3	5.20e3	31.67	1.00	0.87	NO	0.237	0.915	0.966	4.50	0.0235	5.97e4	2672	22.4	6.14e4	1910	32.2	db	bb
2	12378-PeCDD	1.04e4	7.53e3	1.79e4	34.46	1.00	1.38	NO	1.160	0.906	0.977	4.38	0.0315	2.68e5	2918	91.7	1.79e5	1738	102.9	bb	bd
3	123478-HxCDD	8.72e3	7.36e3	1.61e4	37.12	1.00	1.18	NO	1.244	0.816	0.820	2.97	0.0753	1.76e5	3785	46.5	1.42e5	3087	46.1	bd	bd
4	123678-HxCDD	9.78e3	8.33e3	1.81e4	37.21	1.00	1.17	NO	1.183	0.919	0.971	3.86	0.0635	1.79e5	3785	47.3	1.77e5	3087	57.2	db	db
5	123789-HxCDD	8.51e3	7.24e3	1.58e4	37.45	1.01	1.17	NO	1.160	0.799	0.861	4.53	0.0716	1.53e5	3785	40.5	1.63e5	3087	52.9	bd	bd
6	1234678-HpCDD	5.52e3	5.35e3	1.09e4	40.60	1.00	1.03	NO	1.088	0.831	0.955	7.65	0.0788	9.23e4	2277	40.5	7.39e4	2373	31.1	bb	bb
7	OCDD	9.13e3	1.03e4	1.94e4	44.99	1.00	0.89	NO	2.396	0.940	0.981	6.02	0.143	1.07e5	2888	37.1	1.25e5	1894	65.9	bd	bd
8	2378-TCDF	3.08e3	4.31e3	7.39e3	31.12	1.00	0.71	NO	0.236	0.867	0.919	3.95	0.0296	5.95e4	2666	22.3	7.76e4	4100	18.9	dd	db
9	12378-PeCDF	1.67e4	1.18e4	2.85e4	33.65	1.00	1.41	NO	1.175	0.823	0.875	5.04	0.0371	4.29e5	3157	135.8	2.68e5	5352	50.1	bd	dd
10	23478-PeCDF	2.02e4	1.35e4	3.37e4	34.27	1.02	1.50	NO	1.237	0.971	0.981	5.60	0.0331	5.13e5	3157	162.4	3.54e5	5352	66.1	bb	bd
11	123478-HxCDF	1.30e4	1.03e4	2.33e4	36.39	1.00	1.26	NO	1.209	0.893	0.923	3.03	0.0404	2.75e5	3396	81.1	2.24e5	2696	82.9	bd	bd
12	123678-HxCDF	1.45e4	1.21e4	2.66e4	36.49	1.00	1.19	NO	1.200	1.020	1.063	3.79	0.0351	2.94e5	3396	86.6	2.56e5	2696	95.0	dd	dd
13	234678-HxCDF	1.25e4	1.09e4	2.31e4	36.99	1.01	1.18	NO	1.165	0.887	0.951	5.60	0.0353	2.99e5	3396	88.2	2.40e5	2696	88.9	bd	bd
14	123789-HxCDF	1.05e4	8.07e3	1.86e4	37.79	1.04	1.31	NO	1.188	0.713	0.751	5.76	0.0497	1.89e5	3396	55.7	1.62e5	2696	60.0	dd	bd
15	1234678-HpCDF	1.15e4	1.08e4	2.23e4	39.31	1.00	1.06	NO	1.281	1.249	1.219	4.36	0.0347	2.10e5	1852	113.4	1.81e5	2102	86.1	bd	dd
16	1234789-HpCDF	7.23e3	7.80e3	1.50e4	41.32	1.05	0.93	NO	1.167	0.842	0.902	6.73	0.0469	9.48e4	1852	51.2	1.20e5	2102	56.9	bb	bb
17	OCDF	1.02e4	1.20e4	2.22e4	45.31	1.01	0.85	NO	2.272	1.079	1.187	8.35	0.129	1.30e5	2733	47.7	1.42e5	2474	57.6	bd	bd
18	13C-2378-TCDD	9.92e5	1.28e6	2.27e6	31.65	1.01	0.77	NO	96.297	1.024	1.064	4.24	0.0797	2.21e7	8552	2578.5	2.86e7	5709	5015.6	bb	bb
19	13C-12378-PeCDD	6.69e5	6.11e5	1.58e6	34.45	1.10	1.58	NO	91.860	0.712	0.775	10.87	0.113	2.32e7	8287	2802.4	1.48e7	6401	2307.4	bb	bb
20	13C-123678-HxCDD	8.86e5	6.91e5	1.58e6	37.19	0.99	1.28	NO	99.375	1.155	1.162	1.48	0.144	1.56e7	7007	2232.3	1.24e7	8494	1456.7	dd	dd
21	13C-123478-HpCDD	5.28e5	5.20e5	1.05e6	40.59	1.08	1.02	NO	102.505	0.767	0.748	3.63	0.228	7.79e6	8197	949.8	7.49e6	7575	988.7	bb	bb
22	13C-OCDD	7.75e5	8.74e5	1.65e6	44.98	1.20	0.89	NO	197.700	0.603	0.611	5.45	0.348	7.98e6	9890	807.0	8.89e6	9821	905.2	bd	bd
23	13C-2378-TCDF	1.50e6	1.91e6	3.41e6	31.10	1.00	0.78	NO	98.554	1.537	1.560	2.51	0.108	2.73e7	18996	1436.7	3.46e7	9462	3657.3	bb	bb
24	13C-12378-PeCDF	1.69e6	1.08e6	2.77e6	33.64	1.08	1.56	NO	94.732	1.250	1.320	7.27	0.110	4.00e7	14167	2820.9	2.55e7	10270	2484.8	bb	bd
25	13C-123678-HxCDF	7.30e5	1.36e6	2.09e6	36.48	0.97	0.54	NO	98.826	1.528	1.546	1.08	0.225	1.43e7	13946	1022.8	2.66e7	18313	1450.5	dd	db
26	13C-123478-HpCDF	4.41e5	9.88e5	1.43e6	39.29	1.05	0.45	NO	103.134	1.046	1.014	3.18	0.234	7.21e6	12426	579.9	1.61e7	9563	1688.7	bd	bd
27	13C-1234-TCDD	9.71e5	1.25e6	2.22e6	31.25	0.00	0.78	NO	100.000	1.000	1.000	0.00	0.0847	1.84e7	8552	2154.0	2.35e7	5709	4109.8	bb	bb
28	13C-123789-HxCDD	7.57e5	6.09e5	1.37e6	37.44	0.00	1.24	NO	100.000	1.000	1.000	0.00	0.167	1.28e7	7007	1832.2	1.03e7	8494	1207.5	dd	dd
29	37Cl-2378-TCDD (SS)	5.67e3	5.67e3	5.67e3	31.67	1.00	0.246	NO	97.962	0.970	0.990	2.51	0.0941	4.10e7	14167	2892.2	2.59e7	10270	2526.1	db	db
30	13C-23478-PeCDF (SS)	1.64e6	1.05e6	2.69e6	34.26	1.02	1.57	NO	97.962	0.970	0.990	2.51	0.0941	4.10e7	14167	2892.2	2.59e7	10270	2526.1	db	db

**Quantify Sample Summary Report****MassLynx 4.1**

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.prol\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time  
Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time**Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	RRF	Mean	RSR	Height1	Height2	S/N1	S/N2	Noise1	Noise2	M1	M2	
31	13C-123478-HxCDF (SS)	5.95e5	1.15e6	1.74e6	36.38	1.00	0.52	NO	102.023	0.835	0.819	1.96	0.242	1.28e7	13946	916.5	2.40e7	18313	1312.8	bd	bd
32	13C-123478-HxCDD (SS)	7.35e5	5.81e5	1.32e6	37.11	1.00	1.26	NO	100.046	0.834	0.834	1.28	0.167	1.49e7	7007	2121.7	1.18e7	8494	1388.3	bd	bd
33	13C-1234789-HpCDF (SS)	3.13e5	6.94e5	1.01e6	41.29	1.05	0.45	NO	98.529	0.705	0.715	3.16	0.329	4.27e6	12426	343.7	9.64e6	9563	1008.4	bd	bd

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

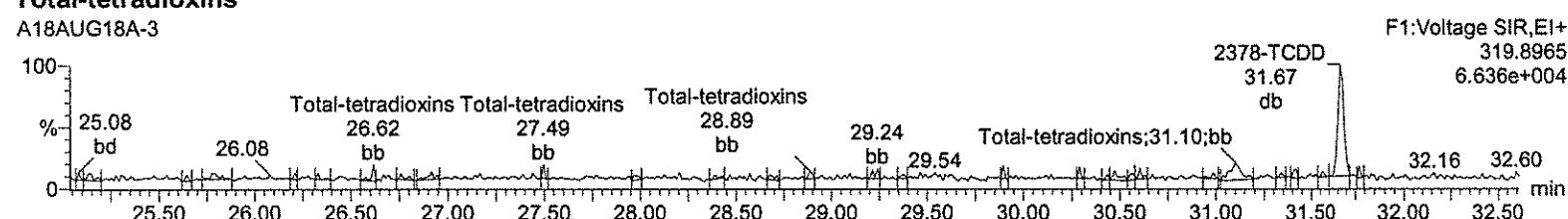
Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A08AUG18.mdb 08 Aug 2018 12:08:43

Calibration: 20 Aug 2018 13:48:29

Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

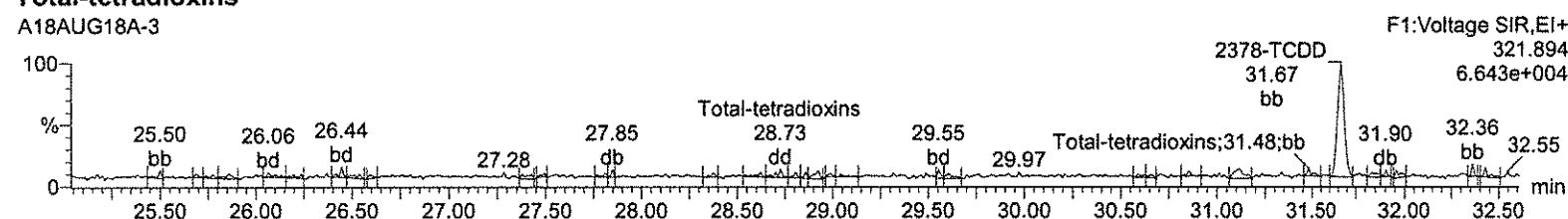
### Total-tetradioxins

A18AUG18A-3



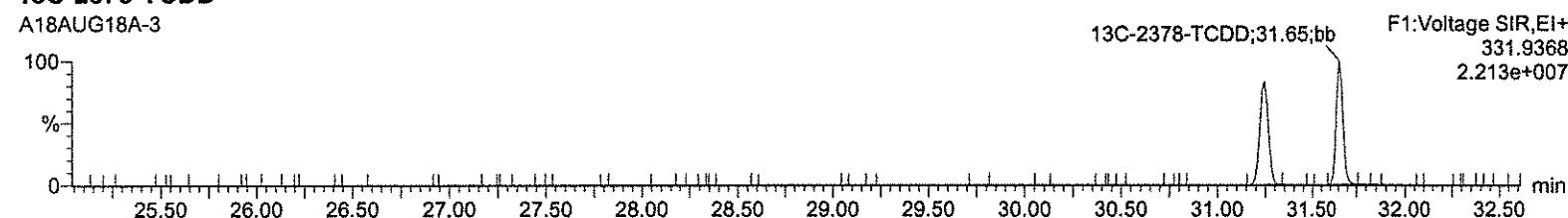
### Total-tetradioxins

A18AUG18A-3



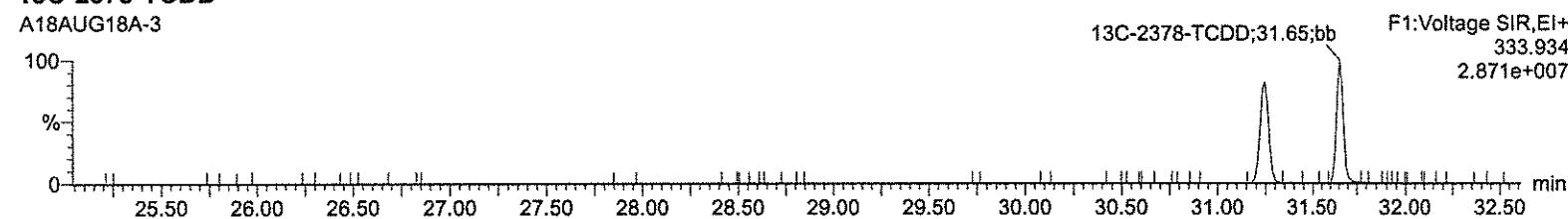
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A18AUG18A-3



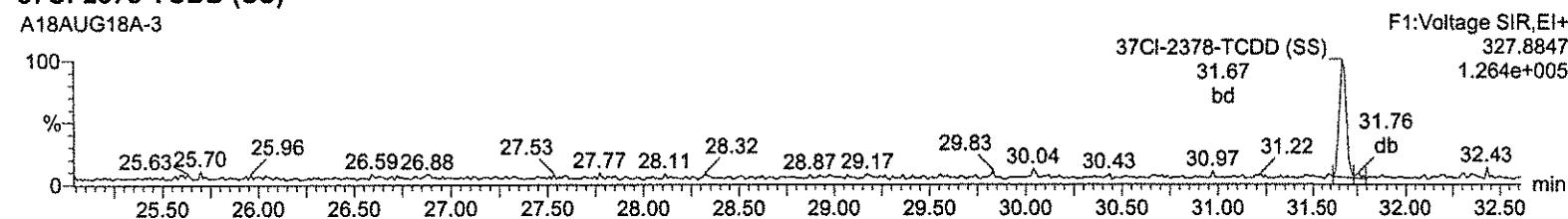
### 13C-2378-TCDD

A18AUG18A-3



### 37Cl-2378-TCDD (SS)

A18AUG18A-3



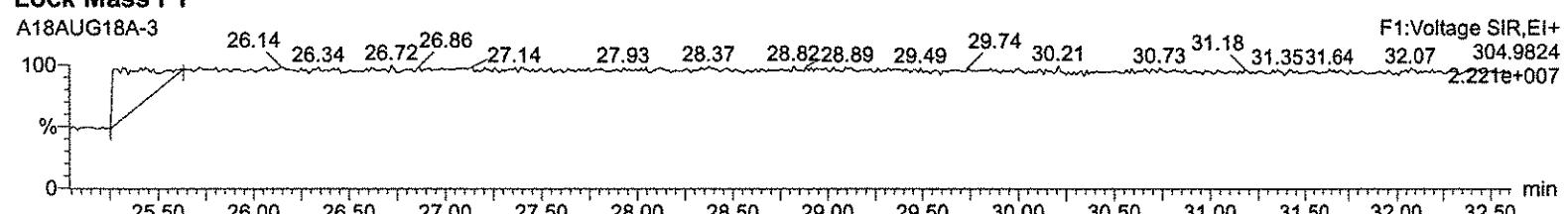
Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

Lock Mass F1



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

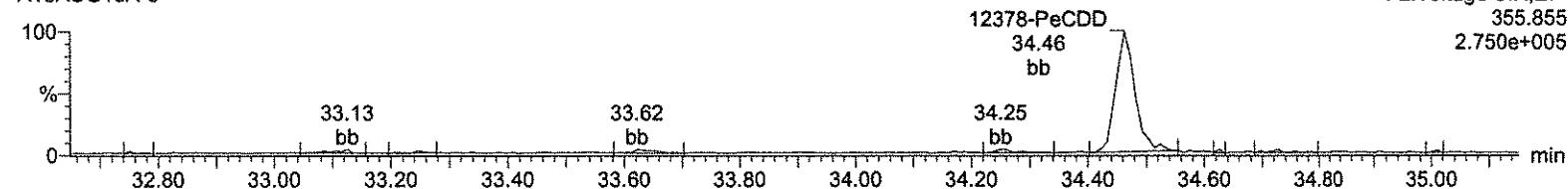
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

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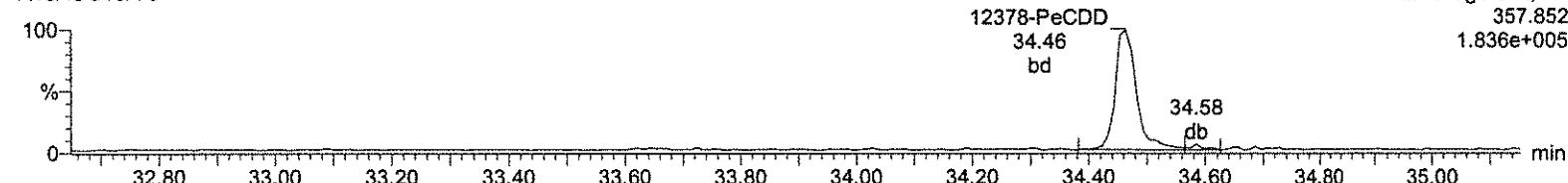
Total-pentadioxins

A18AUG18A-3



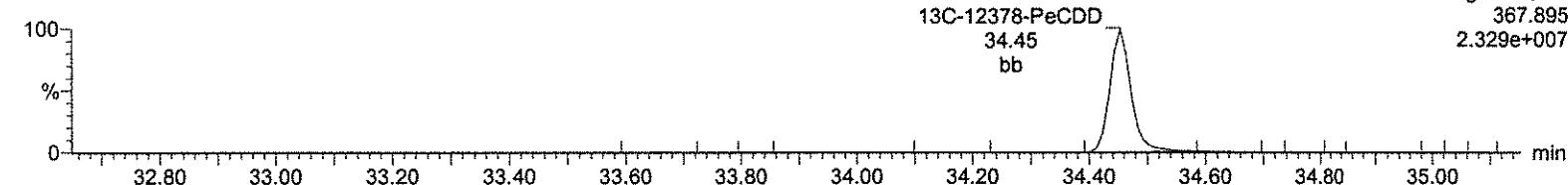
Total-pentadioxins

A18AUG18A-3



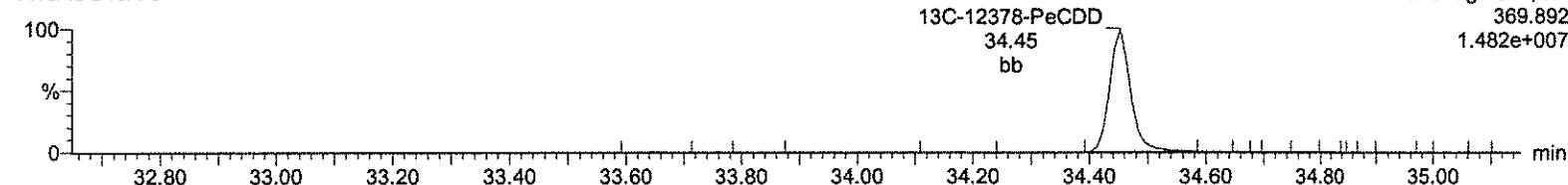
13C-12378-PeCDD

A18AUG18A-3



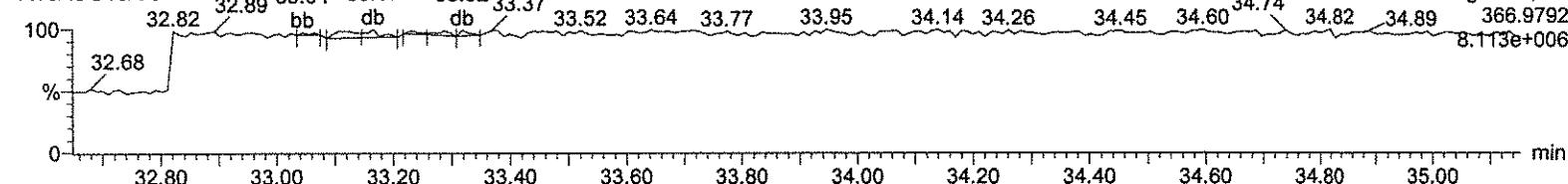
13C-12378-PeCDD

A18AUG18A-3



Lock Mass F2

A18AUG18A-3



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

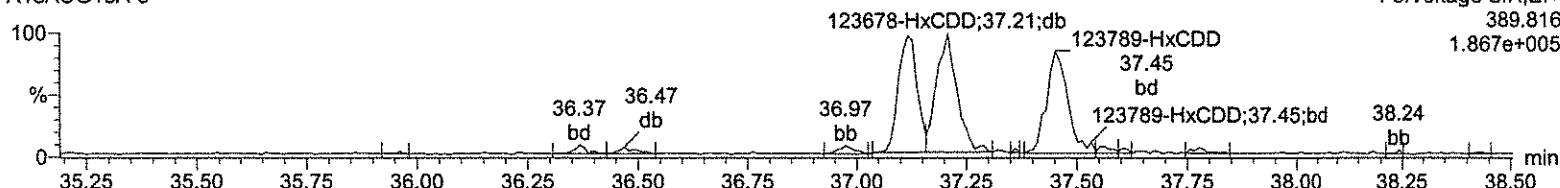
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

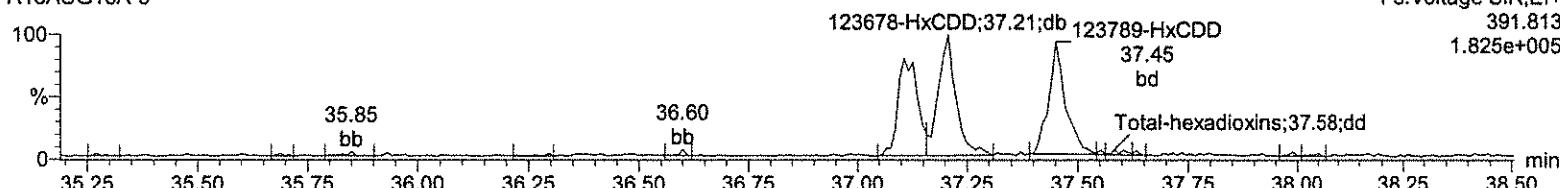
### Total-hexadioxins

A18AUG18A-3



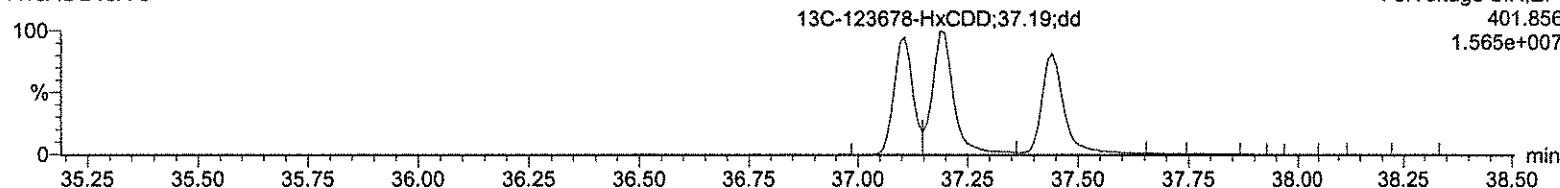
### Total-hexadioxins

A18AUG18A-3



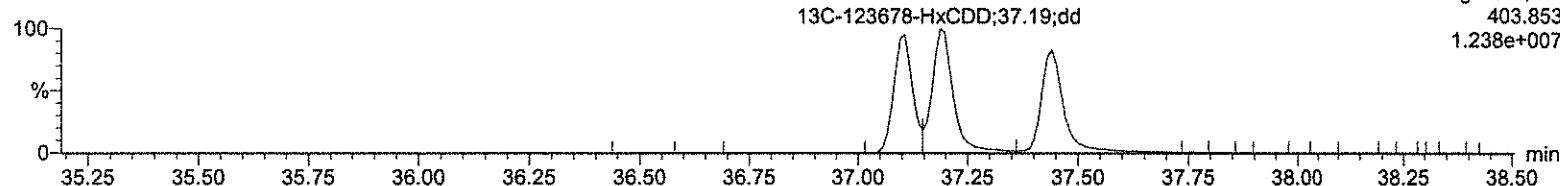
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A18AUG18A-3



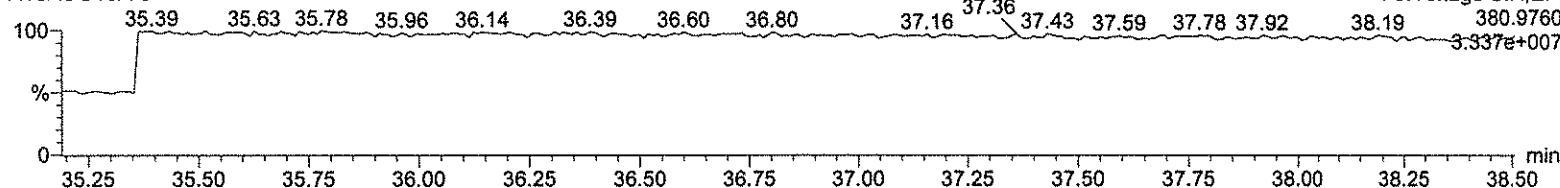
### 13C-123678-HxCDD

A18AUG18A-3



### Lock Mass F3

A18AUG18A-3



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

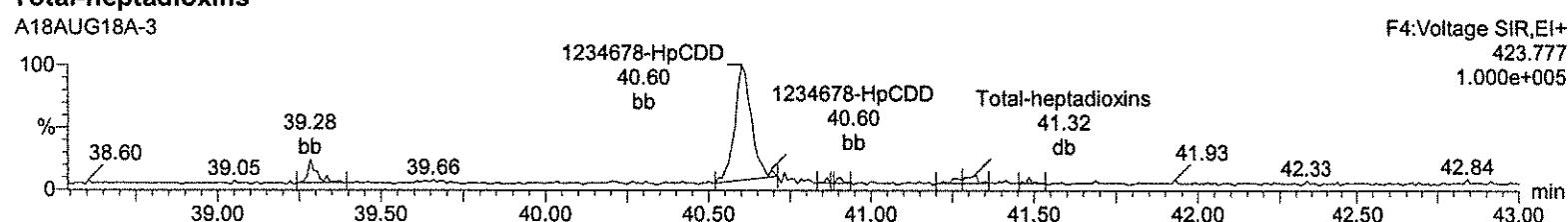
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

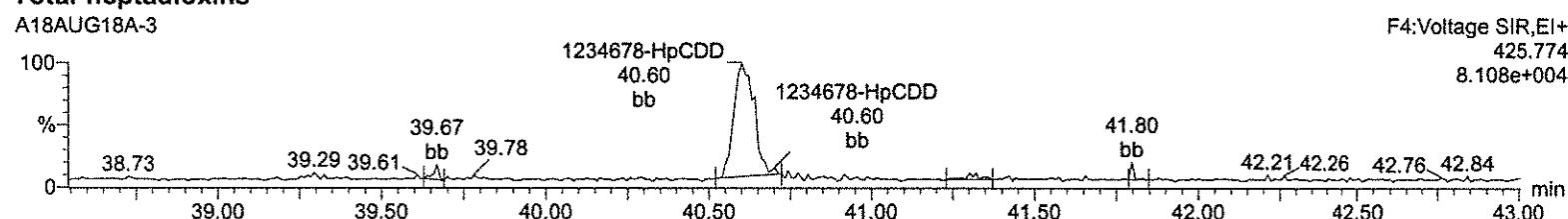
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A18AUG18A-3



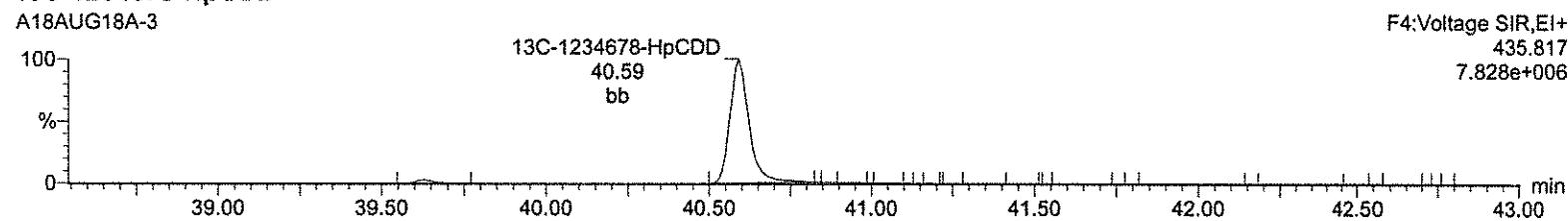
### Total-heptadioxins

A18AUG18A-3



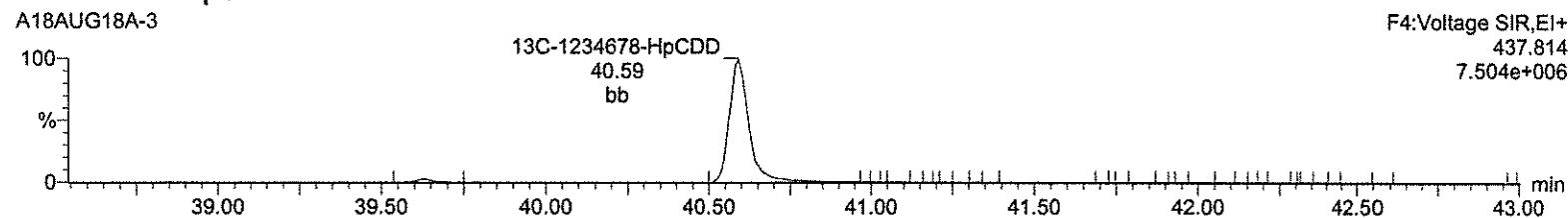
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A18AUG18A-3



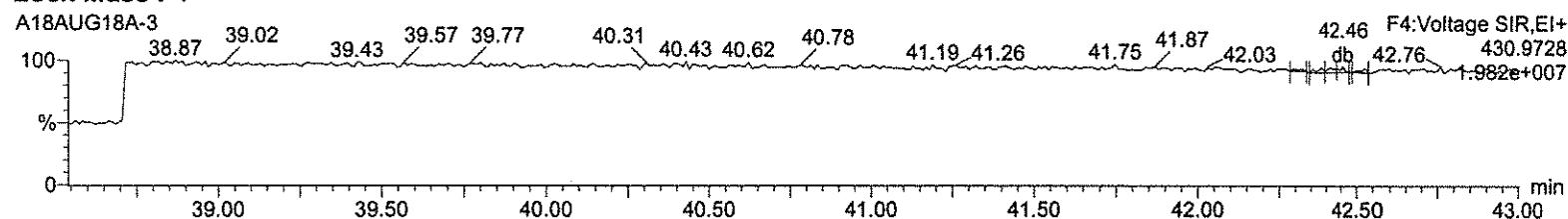
### 13C-1234678-HpCDD

A18AUG18A-3



### Lock Mass F4

A18AUG18A-3



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

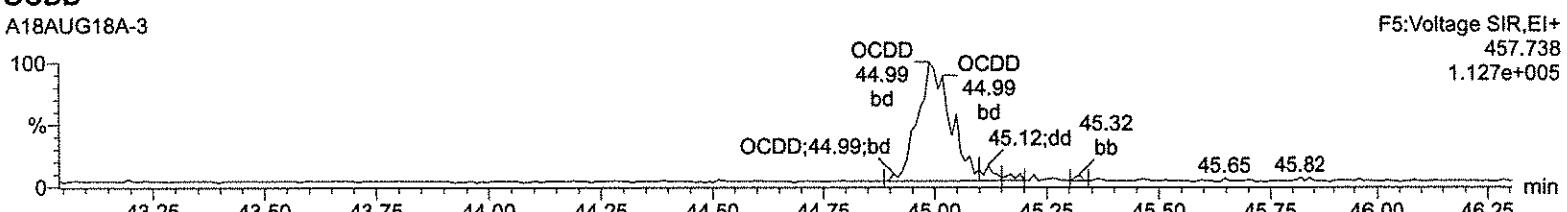
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

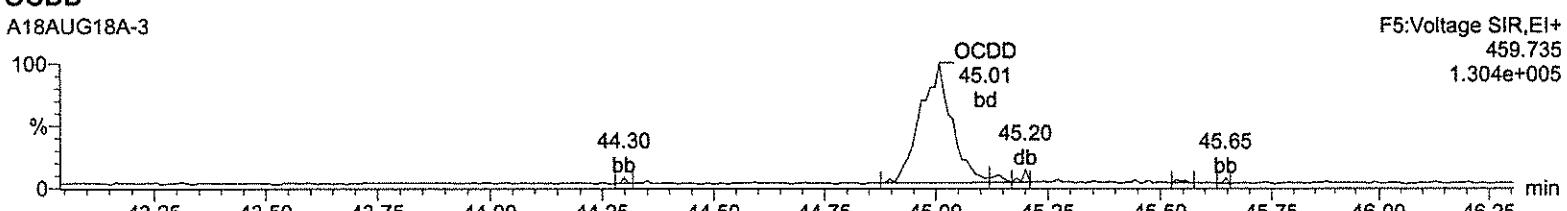
### OCDD

A18AUG18A-3



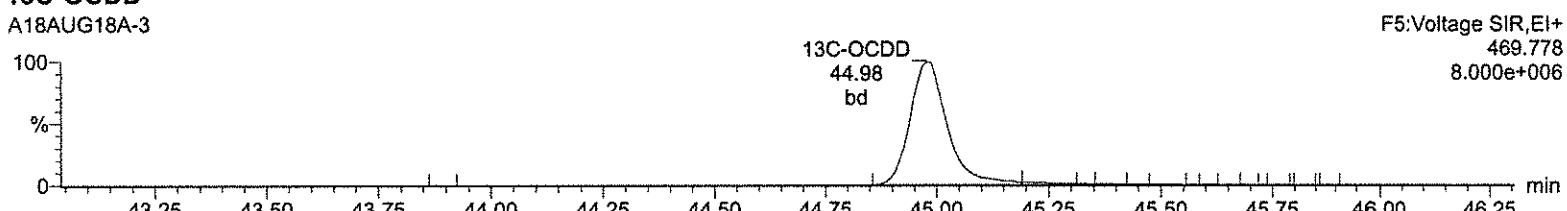
### OCDD

A18AUG18A-3



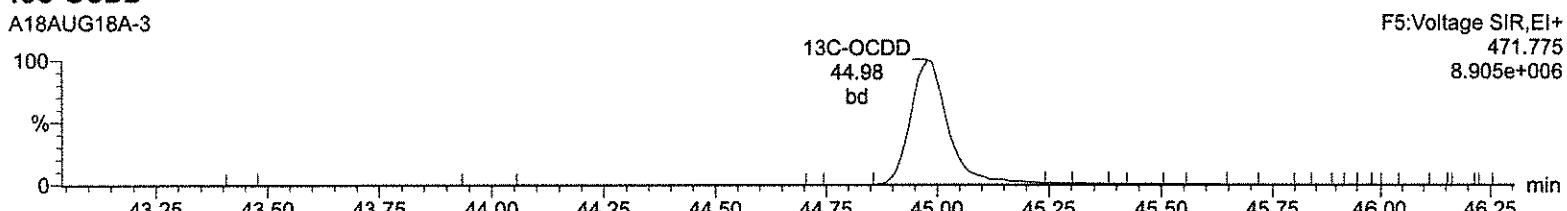
### 13C-OCDD

A18AUG18A-3



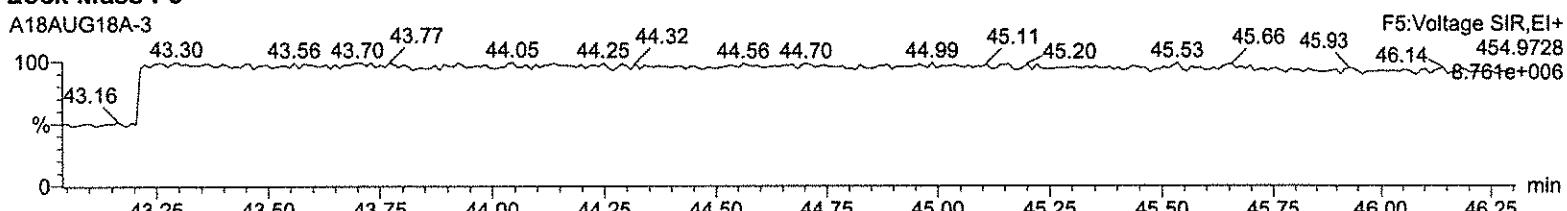
### 13C-OCDD

A18AUG18A-3



### Lock Mass F5

A18AUG18A-3



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

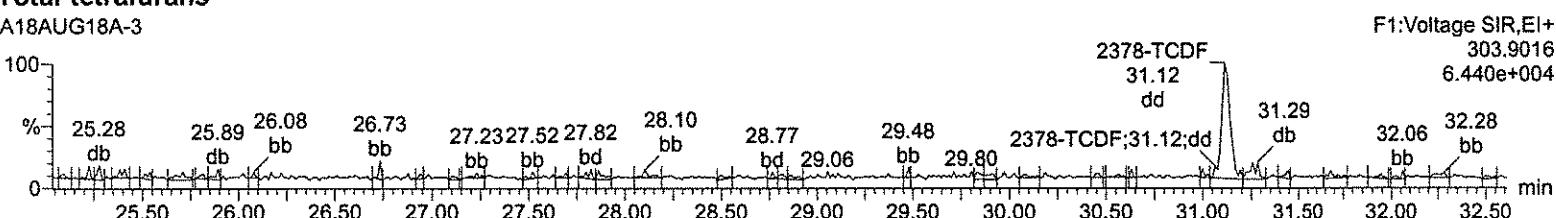
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Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

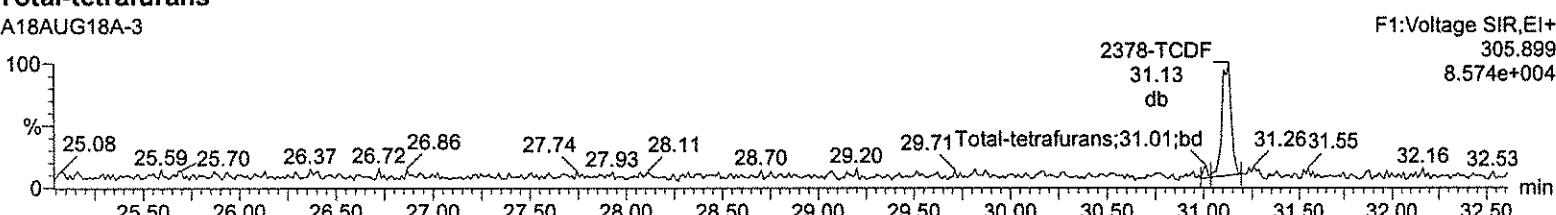
### Total-tetrafurans

A18AUG18A-3



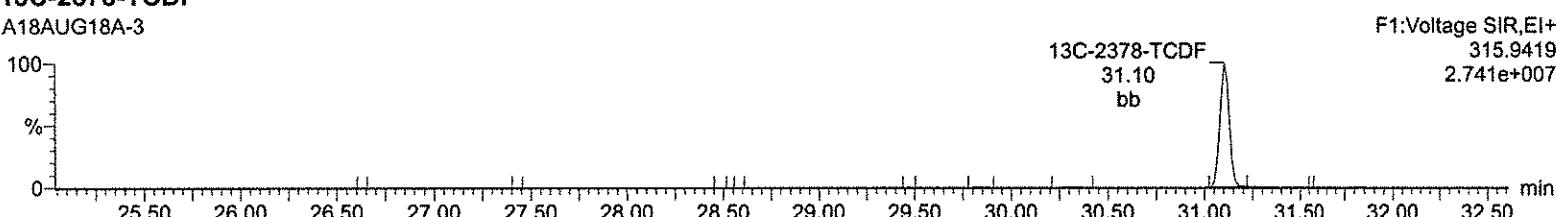
### Total-tetrafurans

A18AUG18A-3



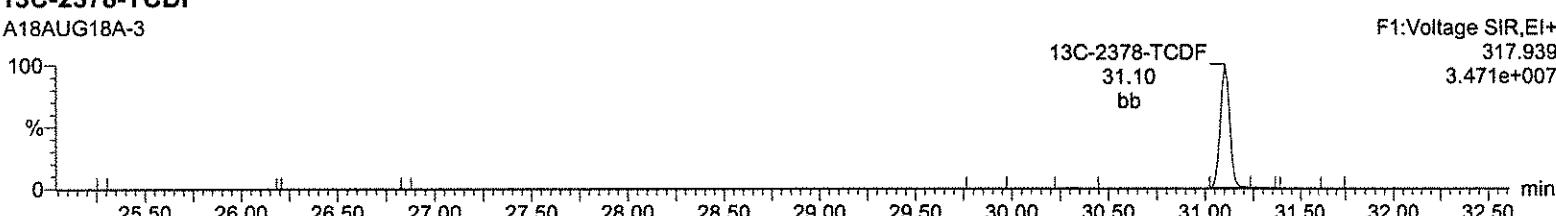
### 13C-2378-TCDF

A18AUG18A-3



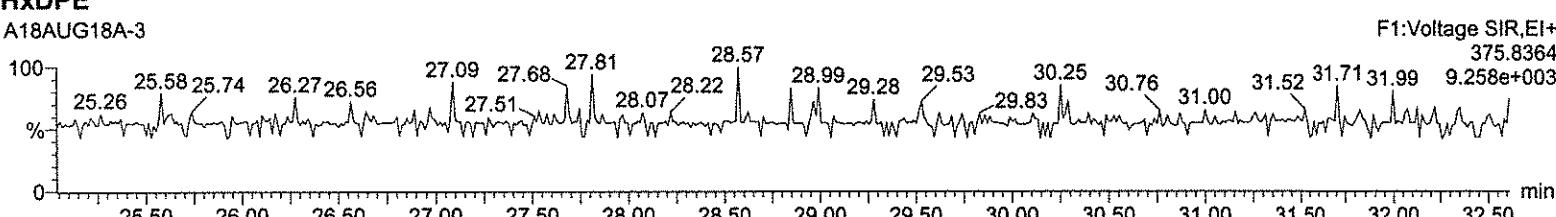
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A18AUG18A-3



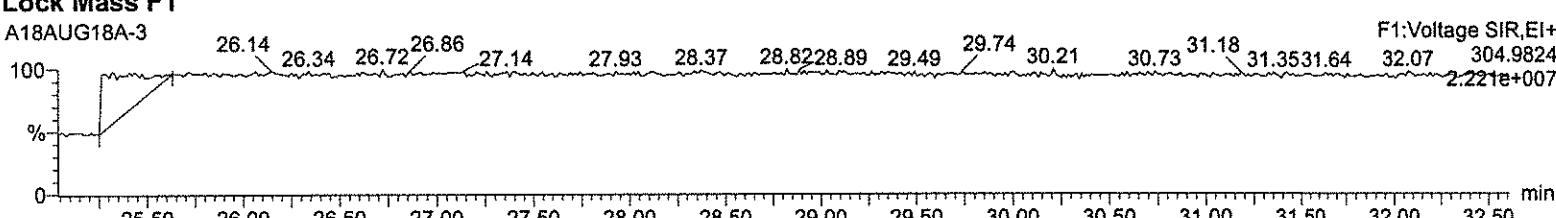
### HxDPE

A18AUG18A-3



### Lock Mass F1

A18AUG18A-3



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

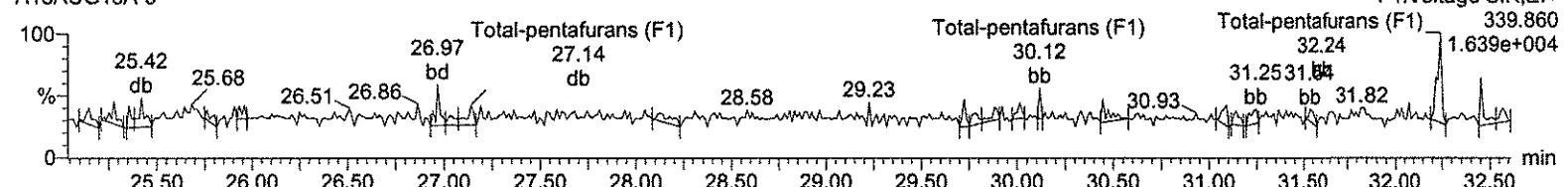
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

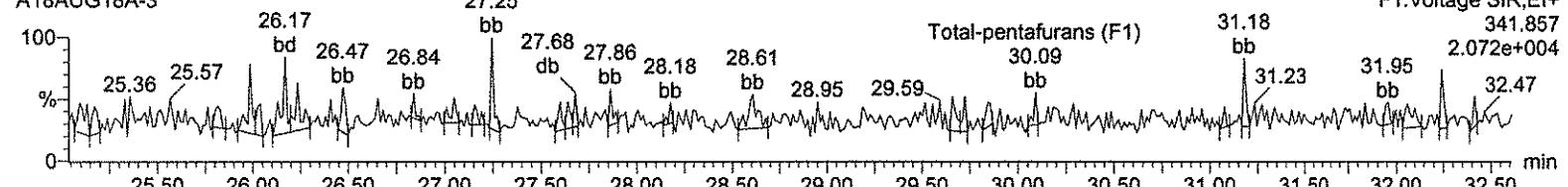
### Total-pentafurans (F1)

A18AUG18A-3



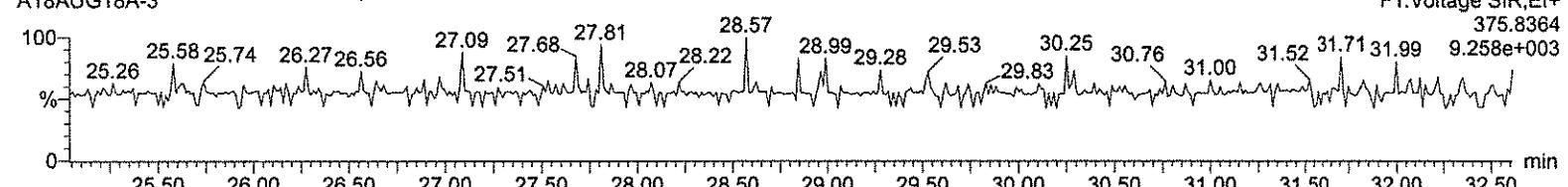
### Total-pentafurans (F1)

A18AUG18A-3



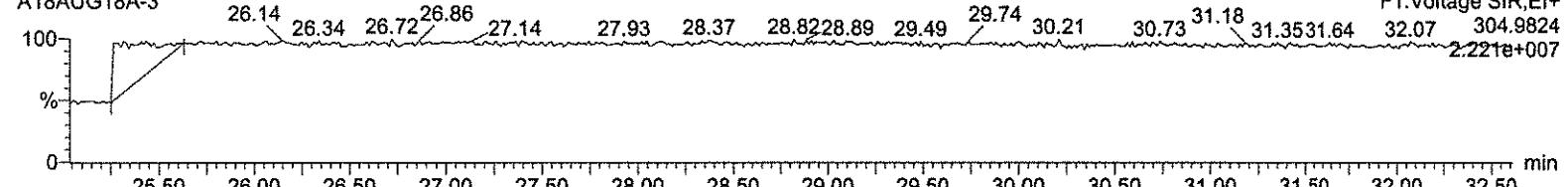
### HxDPE

A18AUG18A-3



### Lock Mass F1

A18AUG18A-3



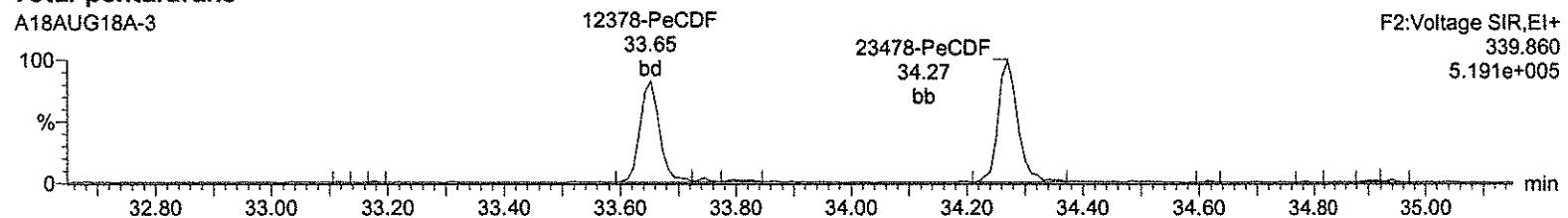
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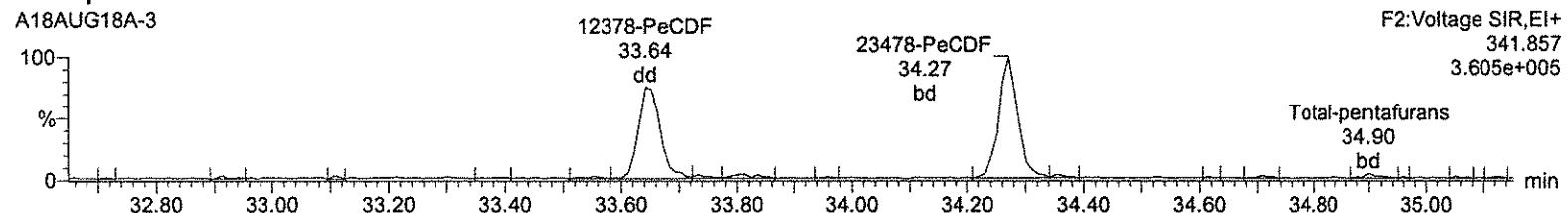
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Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

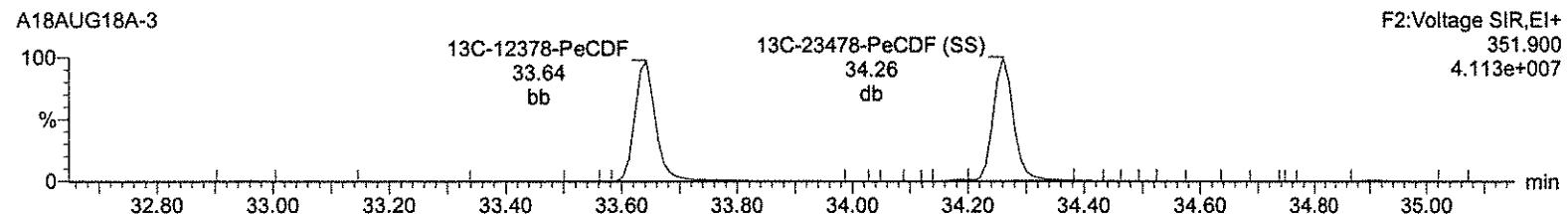
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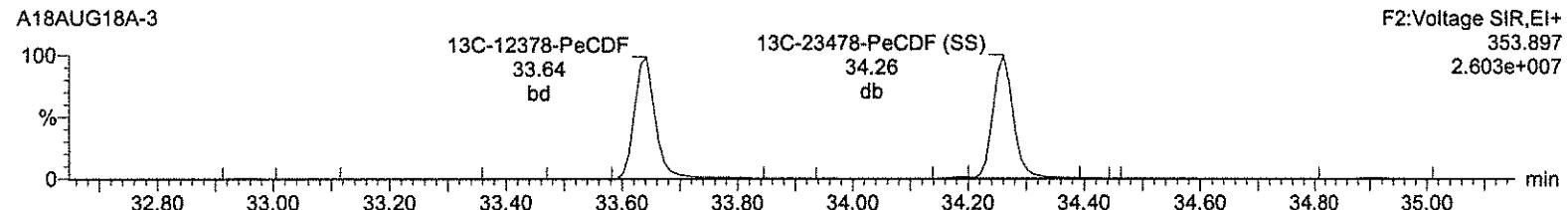
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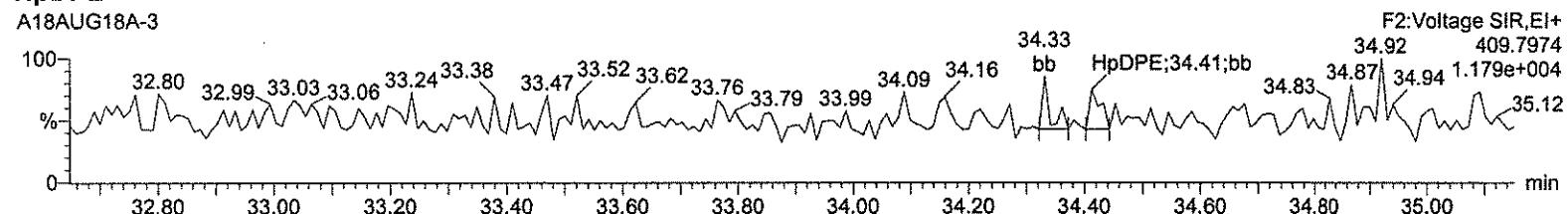
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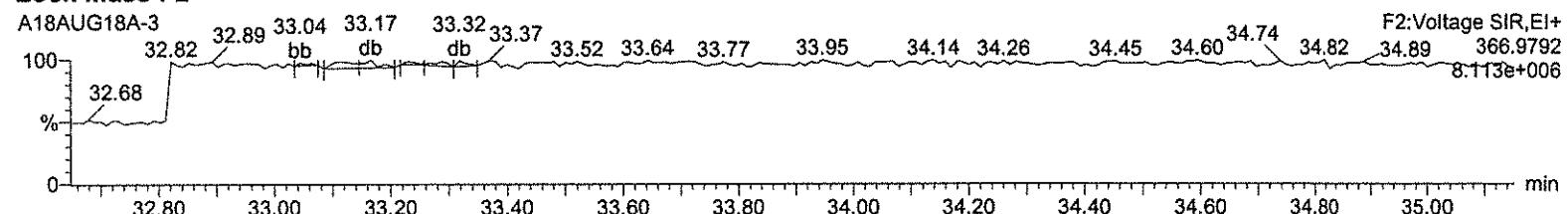
### 13C-12378-PeCDF



### HpDPE



### Lock Mass F2



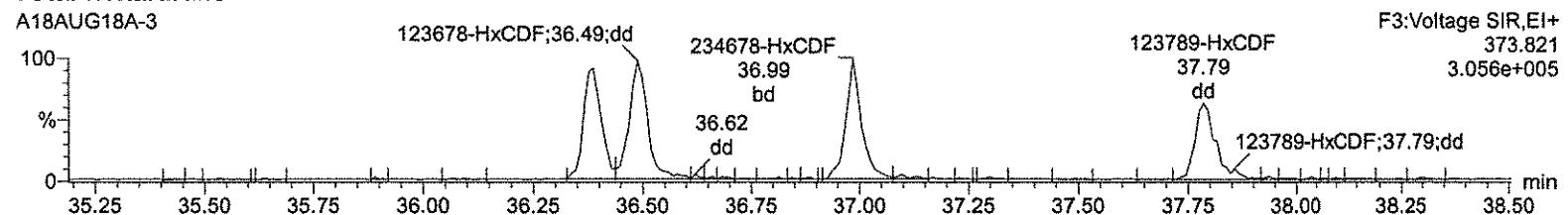
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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

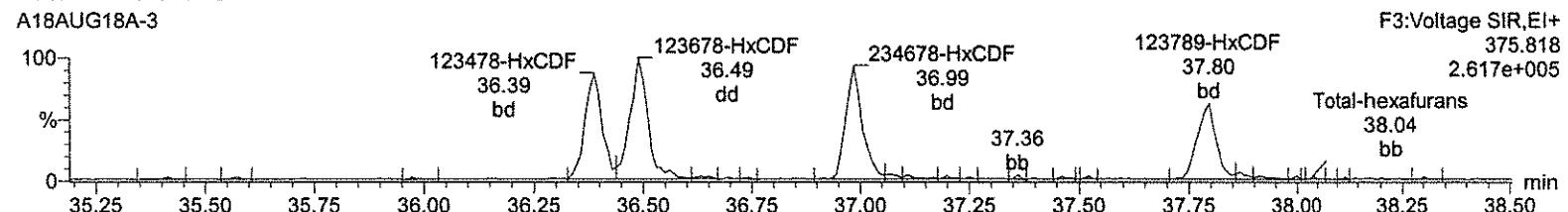
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Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

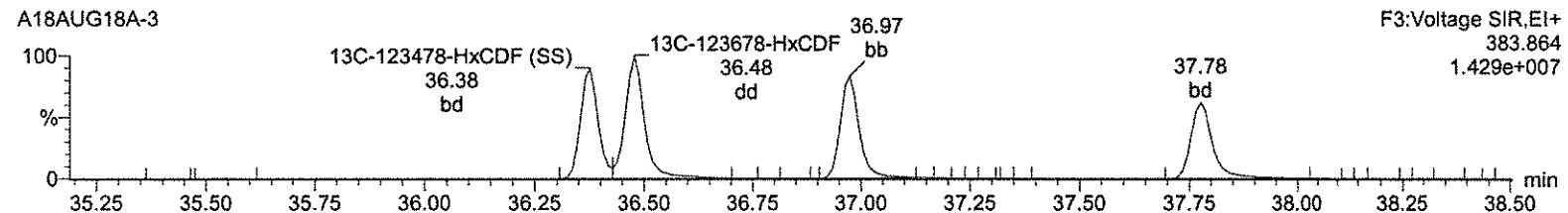
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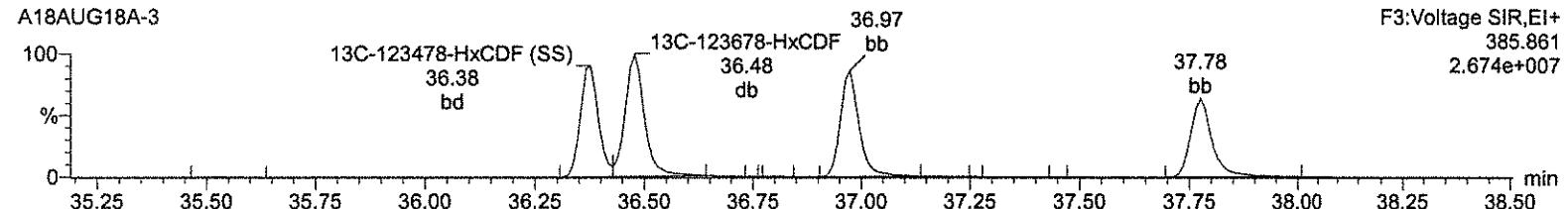
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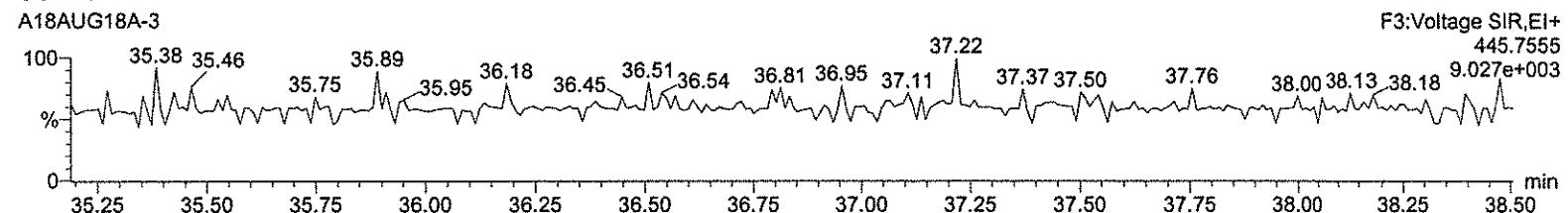
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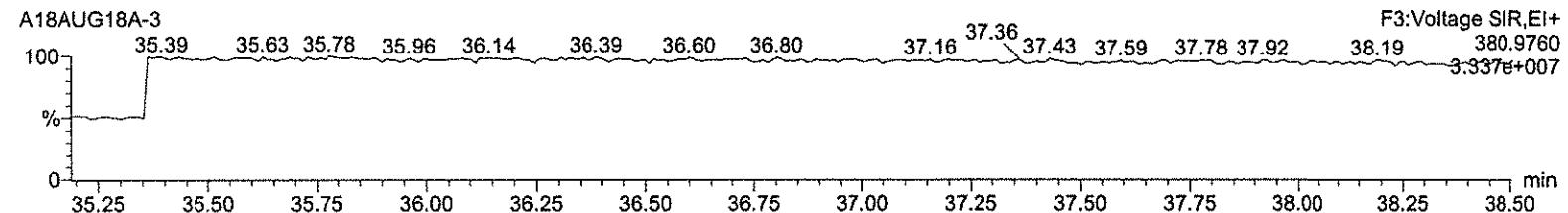
### 13C-123678-HxCDF



### OcDPE



### Lock Mass F3



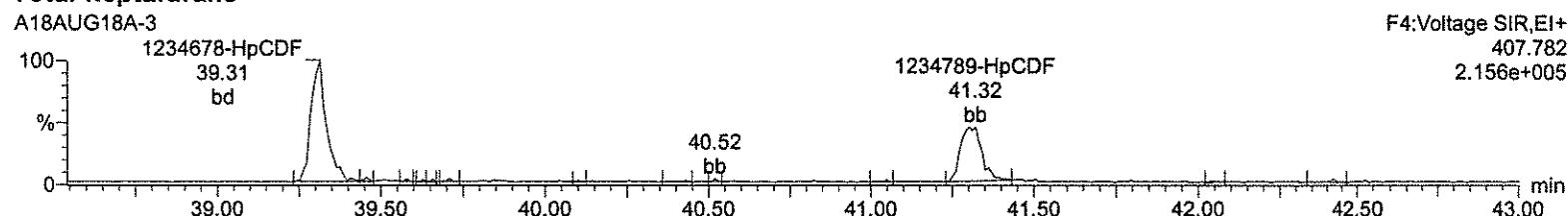
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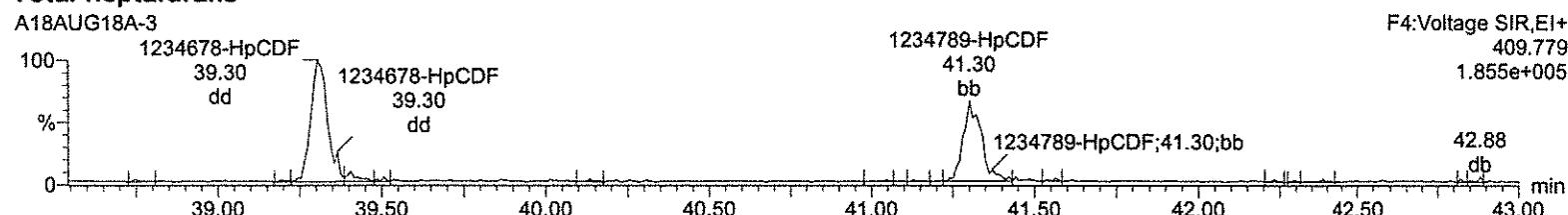
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Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

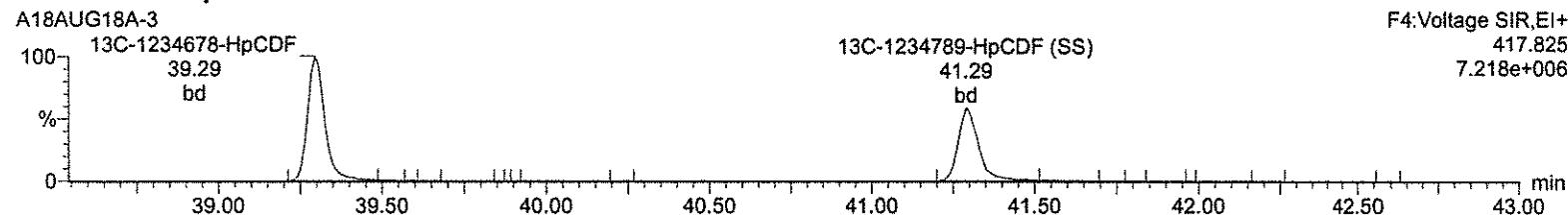
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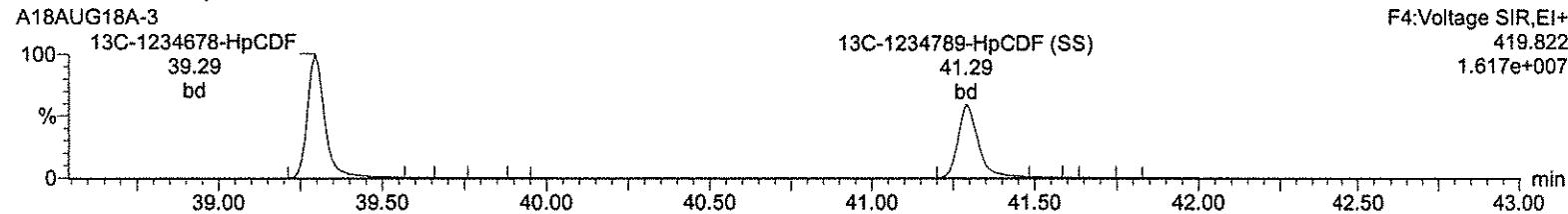
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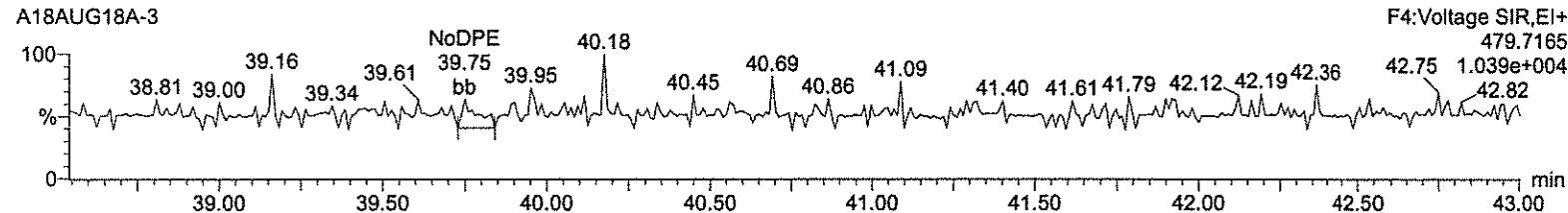
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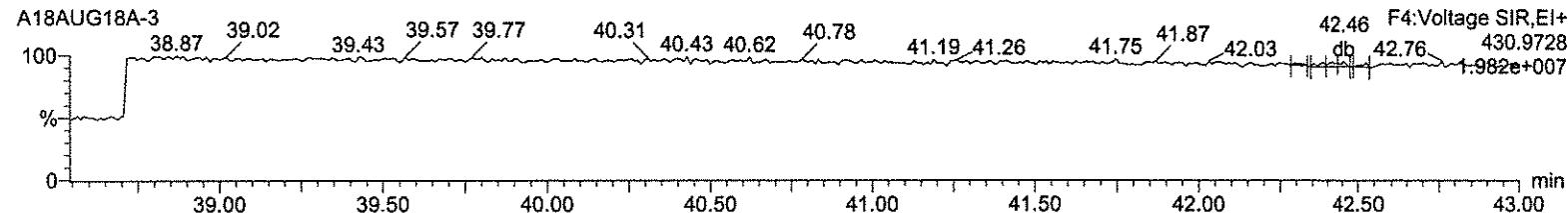
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### NoDPE



### Lock Mass F4



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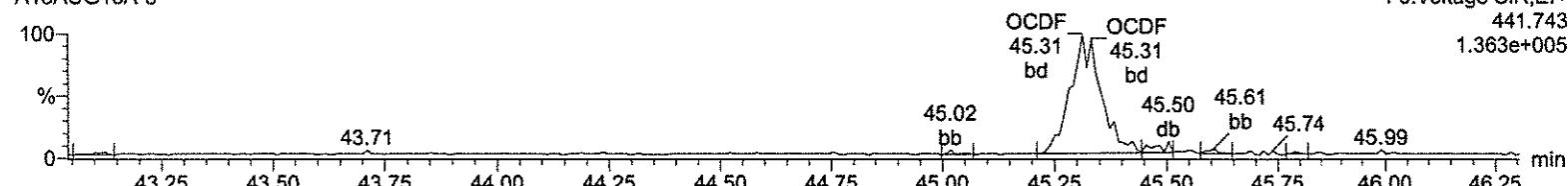
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Name: A18AUG18A-3, Date: 18-Aug-2018, Time: 10:17:55, ID: CS0.5 UD170815-01.2, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

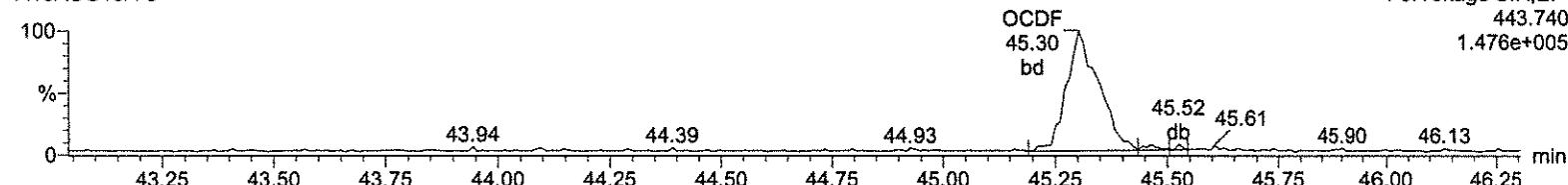
#### OCDF

A18AUG18A-3



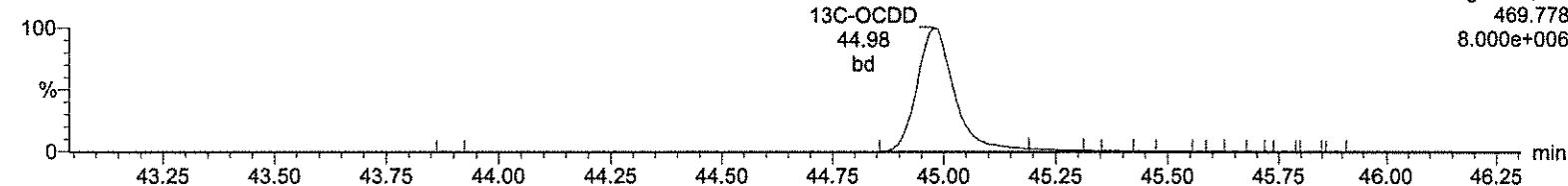
#### OCDF

A18AUG18A-3



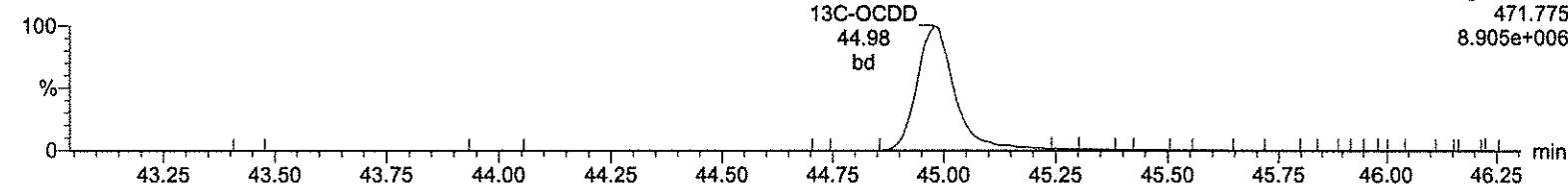
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A18AUG18A-3



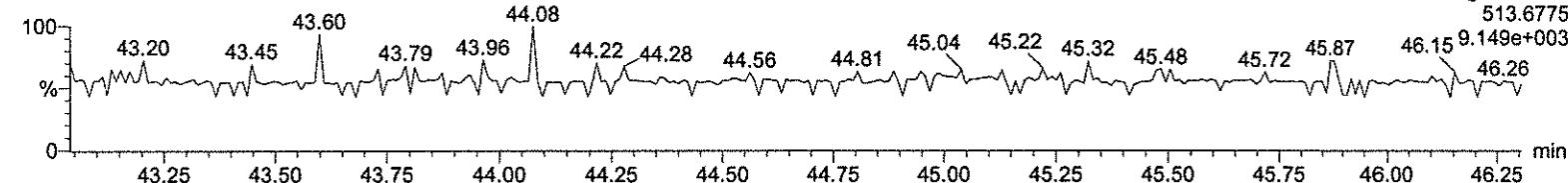
#### 13C-OCDD

A18AUG18A-3



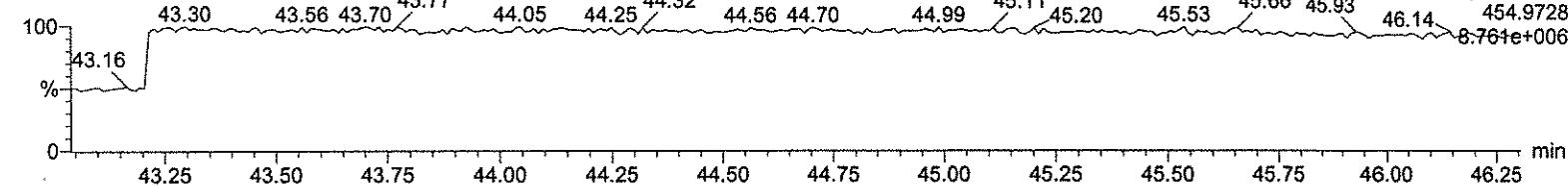
#### DeDPE

A18AUG18A-3



#### Lock Mass F5

A18AUG18A-3



## Quantify Sample Summary Report

## MassLynx 4.1

Page Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qd  
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 Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

*Aug 21 Aug 18*

Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

#	Name	Ion1/Area	Ion2/Area	Response	RT	RRT	RA	Fail?	pg/uL	RRF	Mean / RSD	EDL	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDD	5.00e3	6.30e3	1.13e4	31.68	1.00	0.79	NO	0.491	0.949	0.966	4.50	0.0250	1.08e5	3099	35.0	1.39e5	2217	62.7	bb
2	12378-PeCDD	2.38e4	1.58e4	3.96e4	34.47	1.00	1.50	NO	2.439	0.953	0.977	4.38	0.0326	6.37e5	3320	191.9	3.78e5	1853	204.2	bd
3	123478-HxCDD	1.99e4	1.57e4	3.56e4	37.12	1.00	1.27	NO	2.497	0.819	0.820	2.97	0.0573	3.97e5	2969	133.8	3.34e5	2883	116.0	dd
4	123678-HxCDD	2.25e4	1.82e4	4.07e4	37.22	1.00	1.24	NO	2.413	0.937	0.971	3.86	0.0484	4.12e5	2969	138.9	3.30e5	2883	114.4	dd
5	123789-HxCDD	2.01e4	1.63e4	3.64e4	37.46	1.01	1.23	NO	2.435	0.839	0.861	4.53	0.0545	3.62e5	2969	121.9	3.22e5	2883	111.7	dd
6	1234678-HpCDD	1.39e4	1.34e4	2.74e4	40.61	1.00	1.04	NO	2.417	0.923	0.955	7.65	0.0919	1.97e5	2969	66.4	2.16e5	2912	74.3	bd
7	OCDD	2.05e4	2.31e4	4.35e4	45.01	1.00	0.89	NO	4.639	0.910	0.981	6.02	0.127	2.50e5	1614	154.9	2.88e5	3339	86.2	bd
8	2378-TCDF	6.73e3	8.83e3	1.56e4	31.13	1.00	0.76	NO	0.484	0.889	0.919	3.95	0.0282	1.22e5	1857	66.0	1.58e5	4844	32.6	bb
9	12378-PeCDF	3.71e4	2.35e4	6.06e4	33.65	1.00	1.58	NO	2.377	0.832	0.875	5.04	0.0374	9.03e5	2923	309.1	5.79e5	6192	93.5	bd
10	23478-PeCDF	4.14e4	2.55e4	6.69e4	34.28	1.02	1.62	NO	2.340	0.918	0.981	5.60	0.0333	1.09e6	2923	373.5	7.12e5	6192	115.0	bb
11	123478-HxCDF	2.86e4	2.41e4	5.27e4	36.40	1.00	1.19	NO	2.435	0.899	0.923	3.03	0.0433	6.47e5	4601	140.7	5.38e5	2915	184.5	bd
12	123678-HxCDF	3.34e4	2.73e4	6.07e4	36.50	1.00	1.22	NO	2.437	1.037	1.063	3.79	0.0376	6.96e5	4601	151.3	5.29e5	2915	181.6	dd
13	234678-HxCDF	2.82e4	2.43e4	5.25e4	36.99	1.01	1.16	NO	2.354	0.896	0.951	5.60	0.0420	6.27e5	4601	136.2	4.68e5	2915	160.5	bd
14	123789-HxCDF	2.25e4	1.86e4	4.12e4	37.80	1.04	1.21	NO	2.340	0.703	0.751	5.76	0.0532	4.40e5	4601	95.6	3.35e5	2915	114.9	bb
15	1234678-HpCDF	2.18e4	2.27e4	4.45e4	39.31	1.00	0.96	NO	2.313	1.128	1.219	4.36	0.0544	3.77e5	2735	137.7	3.73e5	4132	90.3	bd
16	1234789-HpCDF	1.76e4	1.64e4	3.40e4	41.33	1.05	1.08	NO	2.389	0.862	0.902	6.73	0.0736	2.48e5	2735	90.7	2.51e5	4132	60.7	bd
17	OCDF	2.48e4	2.91e4	5.40e4	45.33	1.01	0.85	NO	4.748	1.128	1.187	8.35	0.0988	2.79e5	1917	145.5	3.16e5	2742	115.4	bd
18	13C-2378-TCDD	1.05e6	1.34e6	2.38e6	31.67	1.01	0.78	NO	95.822	1.019	1.064	4.24	0.0806	2.41e7	9977	2416.6	3.02e7	5603	5395.6	bb
19	13C-12378-PeCDD	1.02e6	6.44e5	1.66e6	34.46	1.10	1.58	NO	91.678	0.711	0.775	10.87	0.103	2.48e7	6371	3900.3	1.57e7	8094	1941.0	bb
20	13C-123678-HxCDD	9.69e5	7.69e5	1.74e6	37.20	0.99	1.26	NO	99.223	1.153	1.162	1.48	0.136	1.74e7	9798	1772.6	1.42e7	6959	2041.3	dd
21	13C-1234678-HpCDD	6.09e5	5.77e5	1.19e6	40.60	1.08	1.06	NO	105.198	0.787	0.748	3.63	0.227	8.61e6	8443	1019.3	8.02e6	9579	836.8	bd
22	13C-OCDD	9.08e5	1.01e6	1.91e6	44.99	1.20	0.90	NO	207.934	0.635	0.611	5.45	0.341	9.42e6	9503	991.8	1.03e7	12587	819.7	bd
23	13C-2378-TCDF	1.54e6	1.96e6	3.50e6	31.12	1.00	0.78	NO	96.008	1.497	1.560	2.51	0.0788	2.84e7	15060	1884.4	3.59e7	7269	4936.4	bb
24	13C-12378-PeCDF	1.78e6	1.13e6	2.91e6	33.65	1.08	1.57	NO	94.403	1.246	1.320	7.27	0.107	4.26e7	17970	2369.9	2.75e7	7736	3550.7	bb
25	13C-123678-HxCDF	8.04e5	1.54e6	2.34e6	36.49	0.97	0.52	NO	100.548	1.554	1.546	1.08	0.146	1.61e7	9746	1655.6	3.02e7	14183	2127.1	dd
26	13C-1234678-HpCDF	4.91e5	1.09e6	1.58e6	39.30	1.05	0.45	NO	103.215	1.047	1.014	3.18	0.161	8.05e6	7400	1088.3	1.79e7	9861	1811.0	bd
27	13C-123478-TCDD	1.04e6	1.30e6	2.34e6	31.26	0.00	0.80	NO	100.000	1.000	1.000	0.00	0.0857	2.02e7	9977	2027.6	2.47e7	5603	4411.1	bb
28	13C-123789-HxCDD	8.39e5	6.68e5	1.51e6	37.45	0.00	1.26	NO	100.000	1.000	1.000	0.00	0.158	1.48e7	9798	1506.6	1.19e7	6959	1707.9	dd
29	37Cl-2378-TCDD (SS)	1.15e4	1.15e4	2.81e6	34.27	1.02	1.57	NO	0.476	0.966	1.015	3.92	0.0175	2.58e5	3904	66.1		4183	2127.1	dd
30	13C-23478-PeCDF (SS)	1.71e6	1.09e6	2.81e6	31.68	1.00									17970	2470.2	2.80e7	7736	3620.6	db
31	13C-123478-HxCDF (SS)	6.62e5	1.30e6	1.96e6	36.39	1.00	0.51	NO	102.088	0.836	0.819	1.96	0.155	1.44e7	9746	1472.4	2.71e7	14183	1910.6	bd
32	13C-123478-HxCDD (SS)	8.23e5	6.47e5	1.47e6	37.12	1.00	1.27	NO	101.439	0.846	0.834	1.28	0.161	1.67e7	9798	1708.1	1.33e7	6959	1913.4	bd
33	13C-1234789-HpCDF (SS)	3.60e5	7.98e5	1.16e6	41.30	1.05	0.45	NO	102.621	0.734	0.715	3.16	0.233	4.98e6	7400	673.4	1.10e7	9861	1113.3	bd

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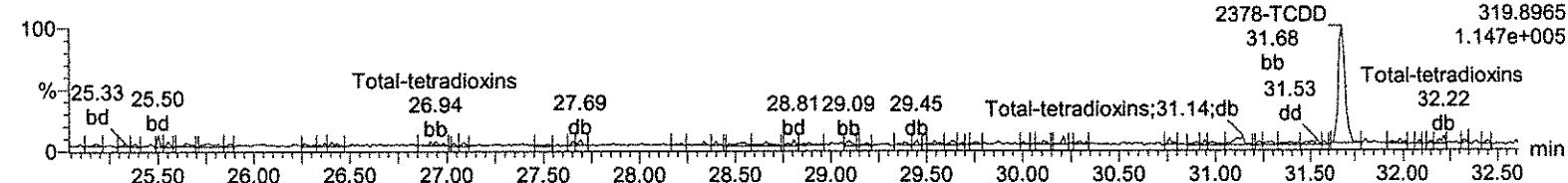
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Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

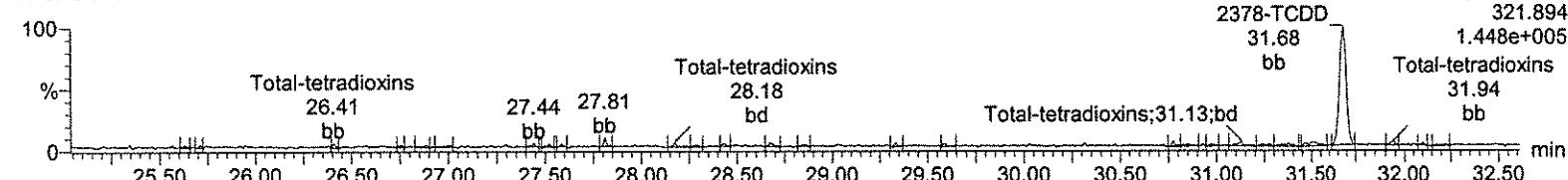
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A18AUG18A-4



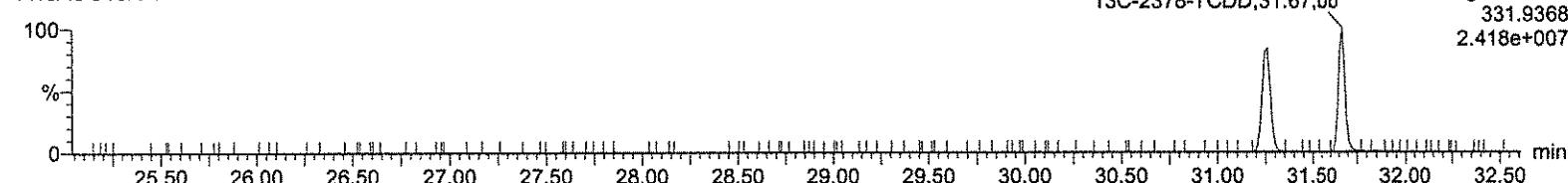
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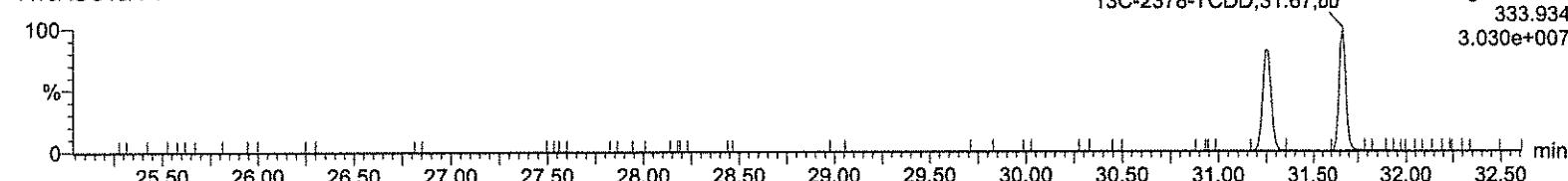
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A18AUG18A-4



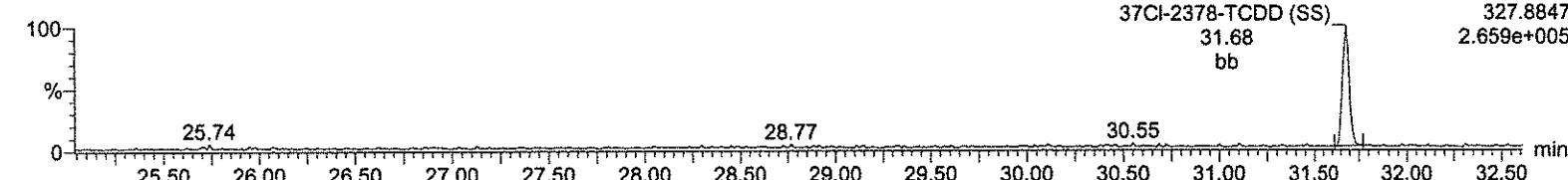
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A18AUG18A-4



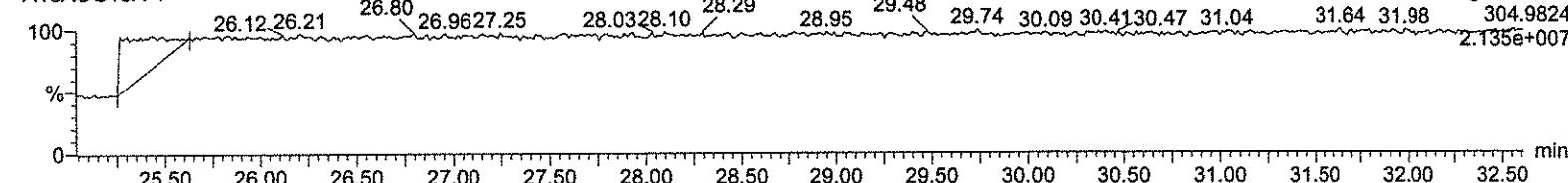
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A18AUG18A-4



### Lock Mass F1

A18AUG18A-4



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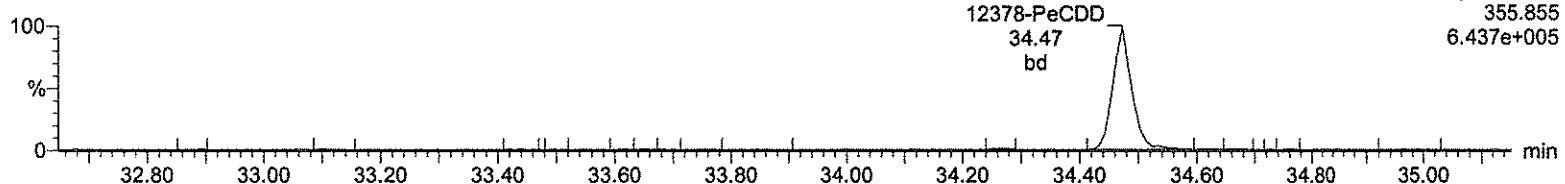
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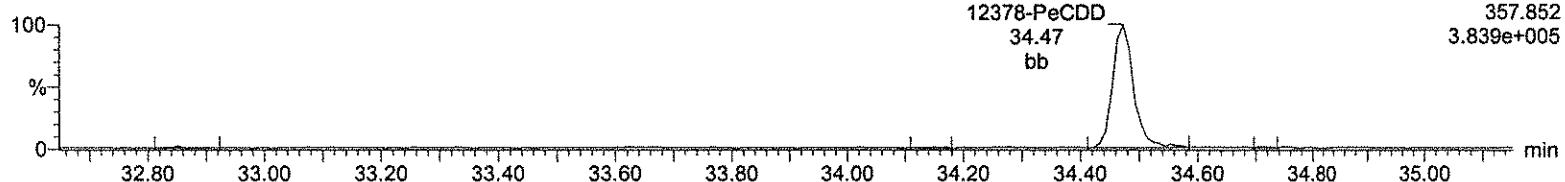
#### Total-pentadioxins

A18AUG18A-4



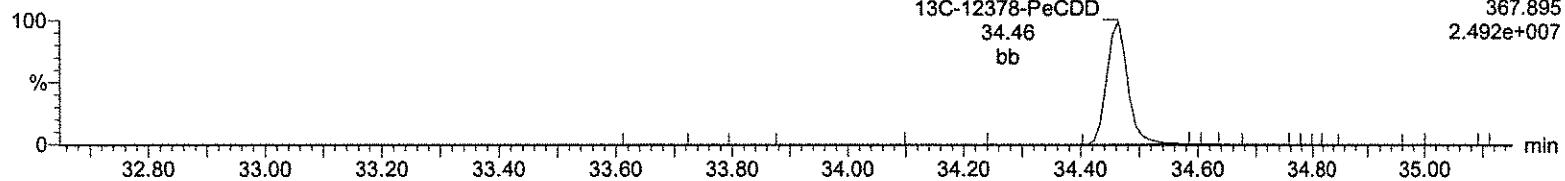
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A18AUG18A-4



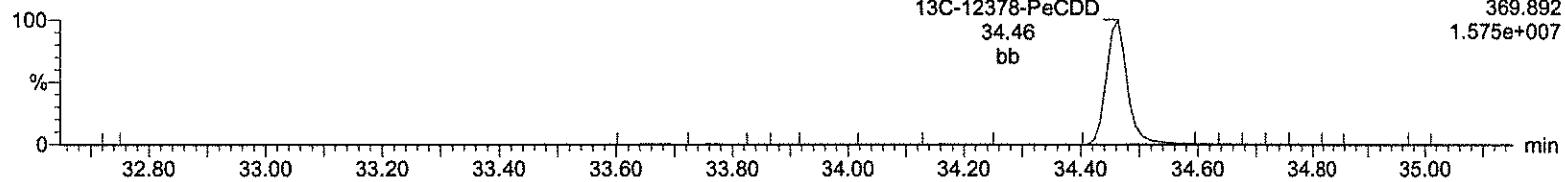
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A18AUG18A-4



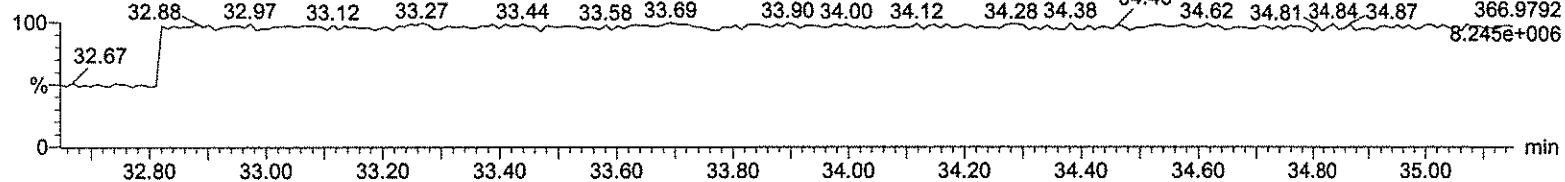
#### 13C-12378-PeCDD

A18AUG18A-4



#### Lock Mass F2

A18AUG18A-4



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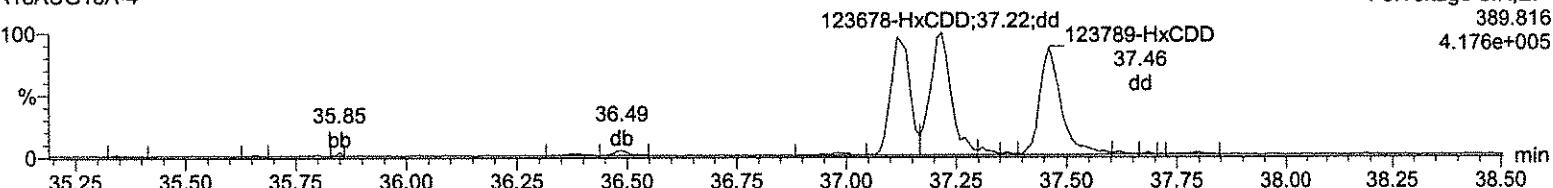
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Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

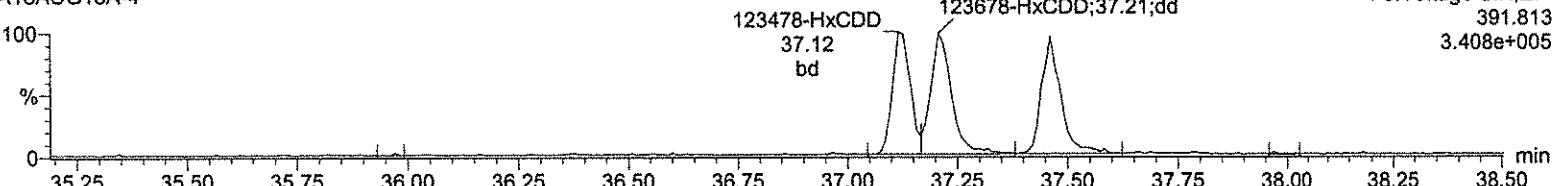
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A18AUG18A-4



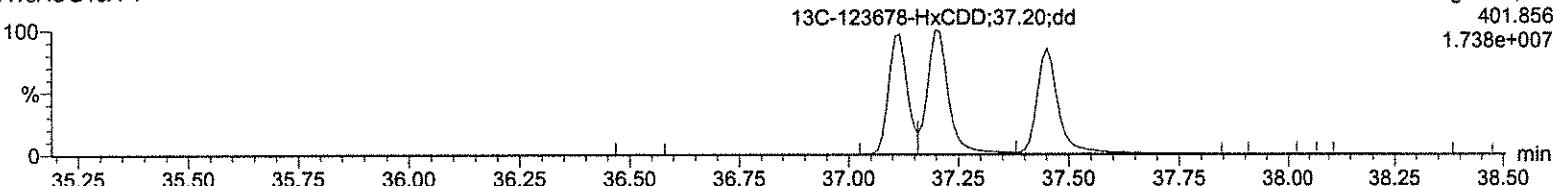
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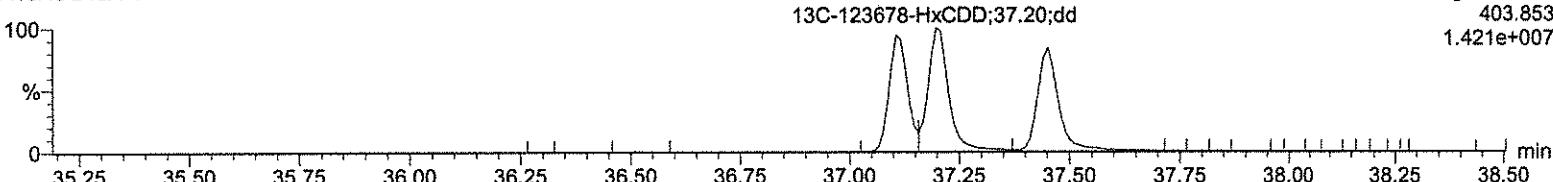
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A18AUG18A-4



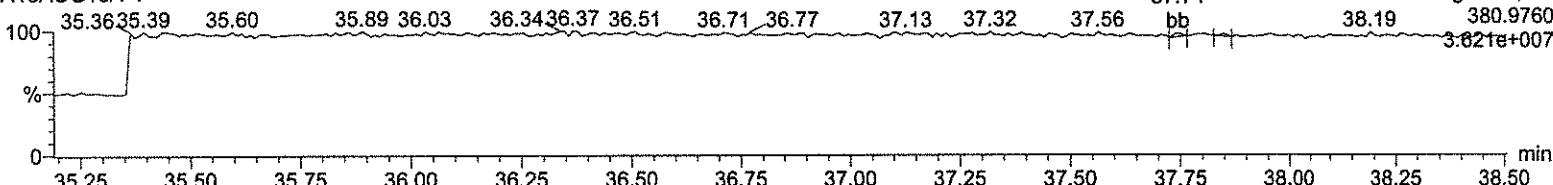
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A18AUG18A-4



### Lock Mass F3

A18AUG18A-4



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

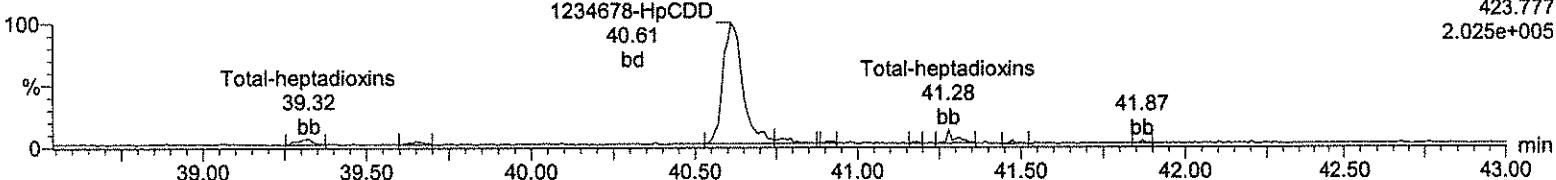
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

### Total-heptadioxins

A18AUG18A-4

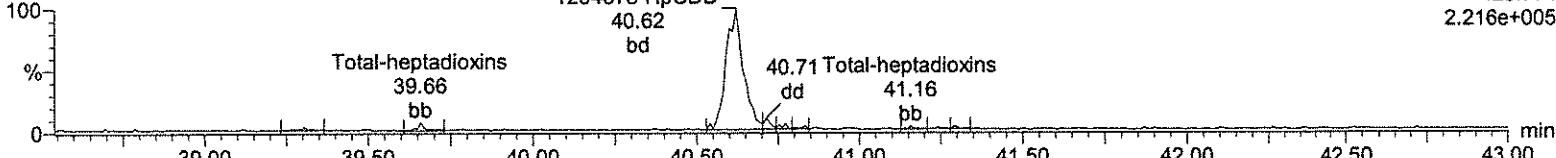
F4:Voltage SIR,El+  
423.777  
2.025e+005



### Total-heptadioxins

A18AUG18A-4

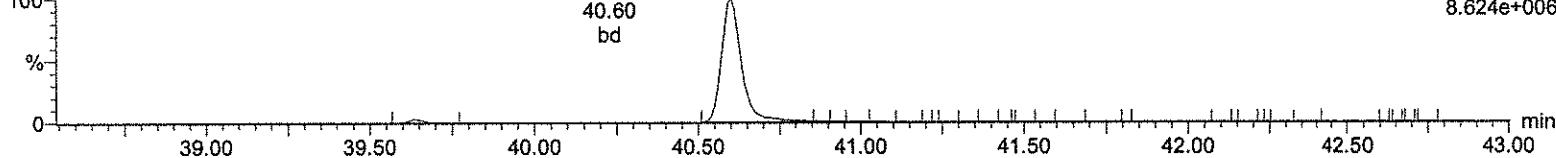
F4:Voltage SIR,El+  
425.774  
2.216e+005



### 13C-1234678-HpCDD

A18AUG18A-4

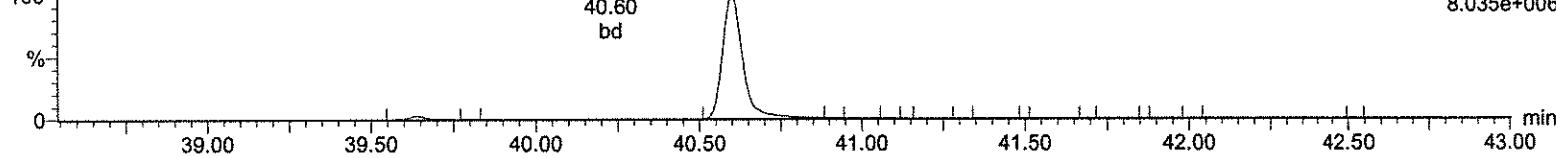
F4:Voltage SIR,El+  
435.817  
8.624e+006



### 13C-1234678-HpCDD

A18AUG18A-4

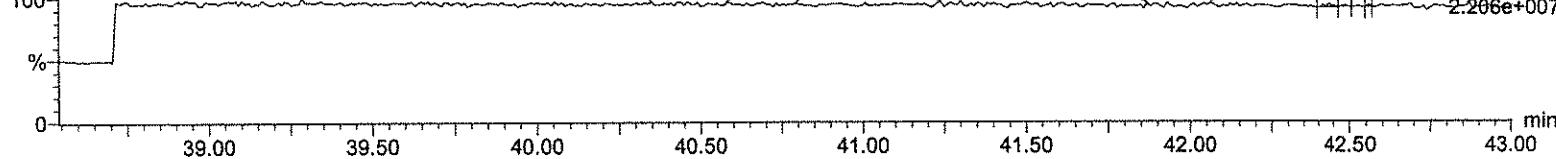
F4:Voltage SIR,El+  
437.814  
8.035e+006



### Lock Mass F4

A18AUG18A-4

F4:Voltage SIR,El+  
430.9728  
2.206e+007



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

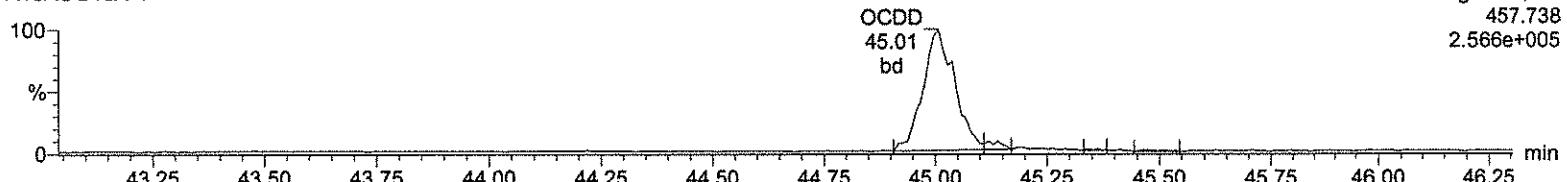
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

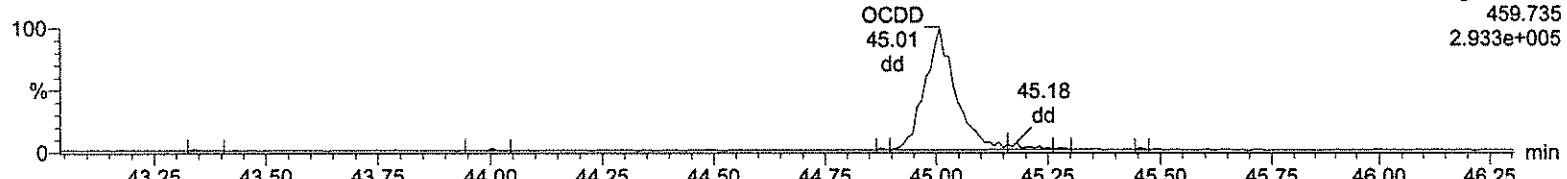
### OCDD

A18AUG18A-4



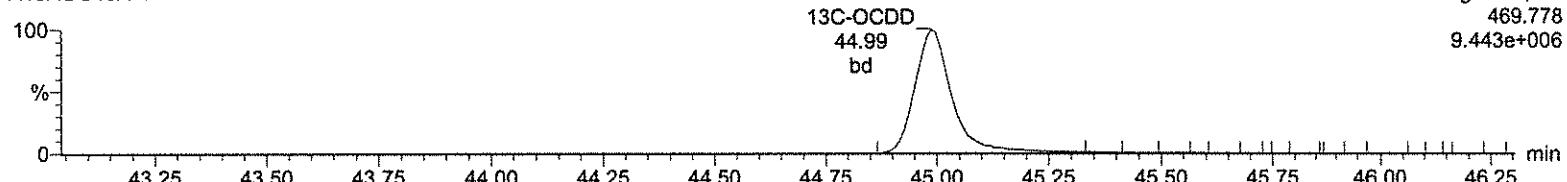
### OCDD

A18AUG18A-4



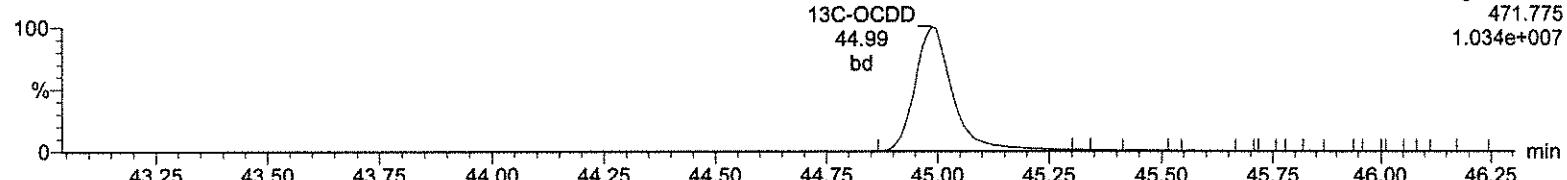
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A18AUG18A-4



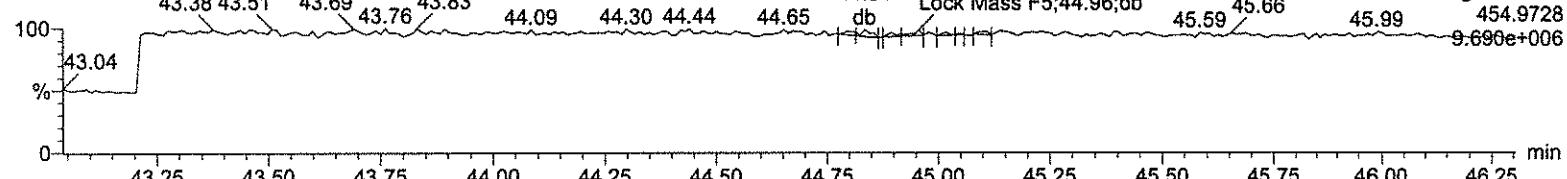
### 13C-OCDD

A18AUG18A-4



### Lock Mass F5

A18AUG18A-4



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

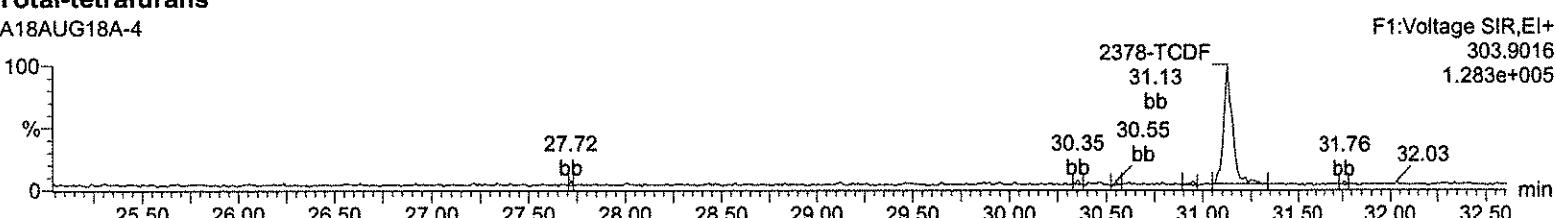
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

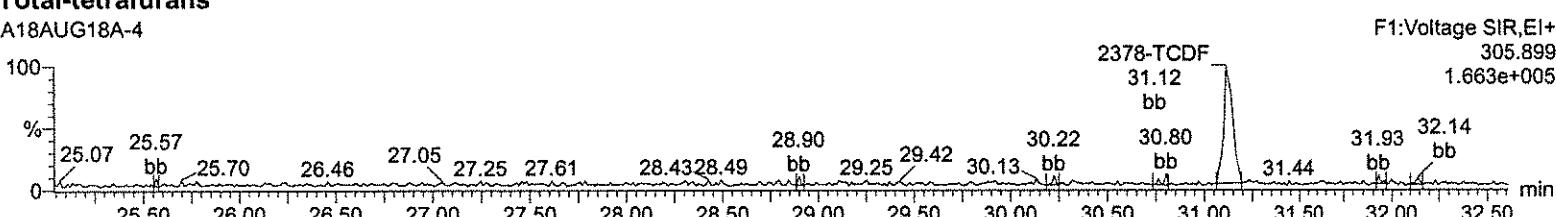
### Total-tetrafurans

A18AUG18A-4



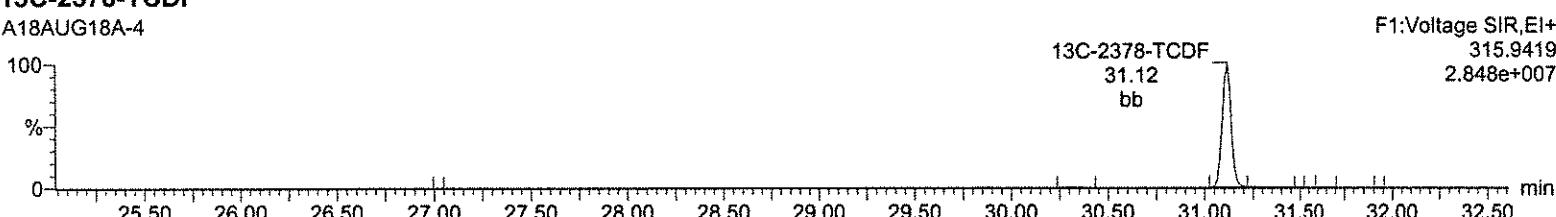
### Total-tetrafurans

A18AUG18A-4



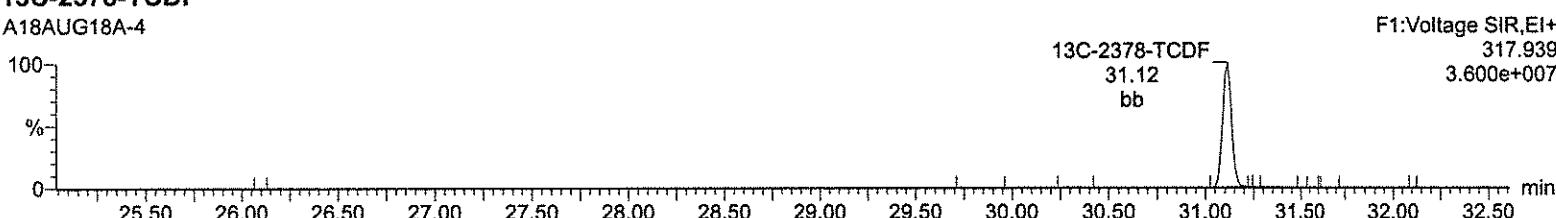
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A18AUG18A-4



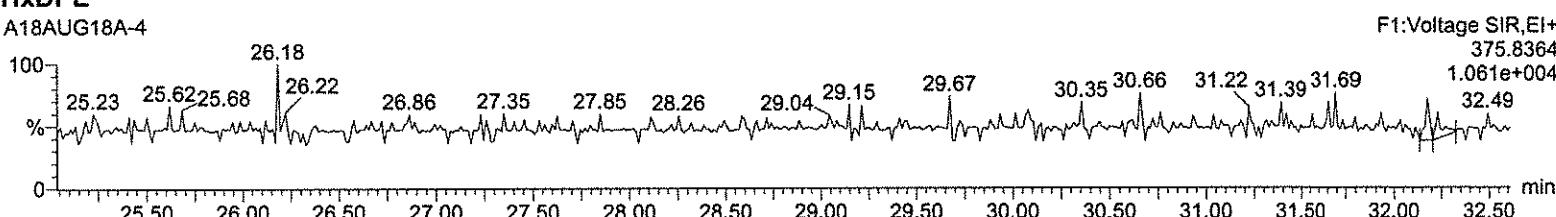
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A18AUG18A-4



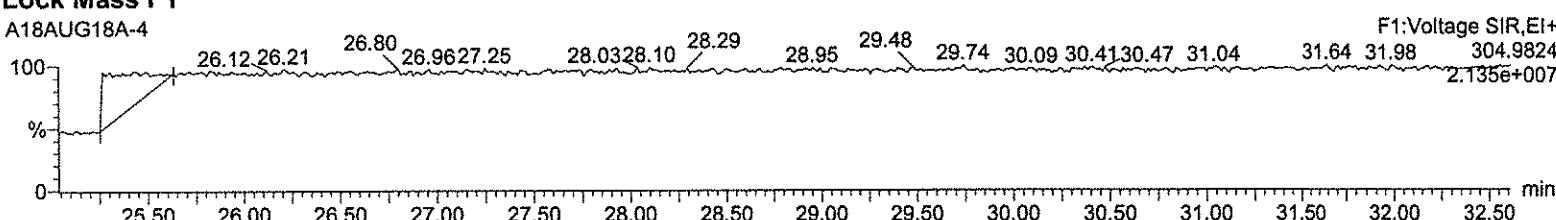
### HxDPE

A18AUG18A-4



### Lock Mass F1

A18AUG18A-4



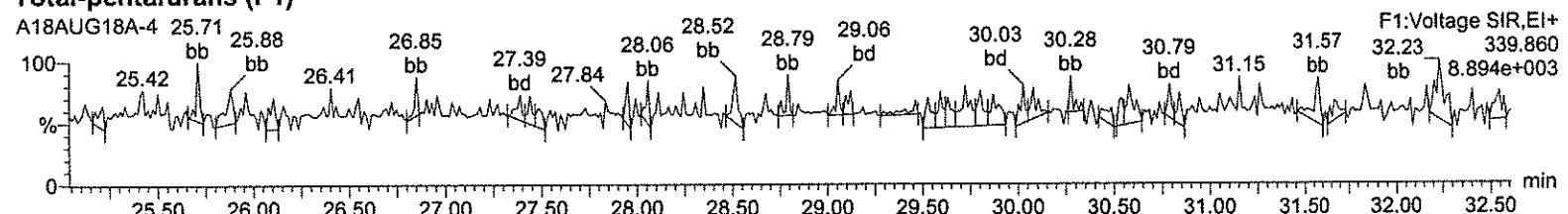
Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

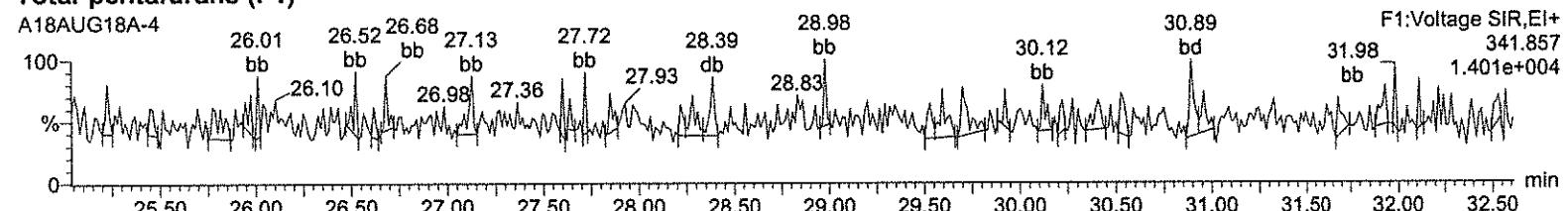
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

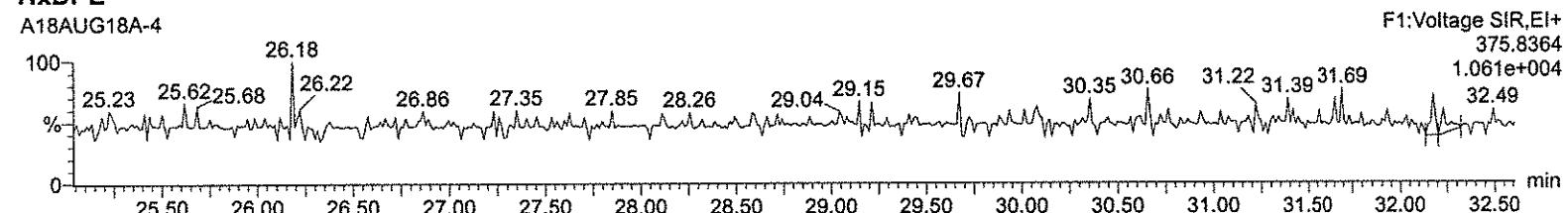
Total-pentafurans (F1)



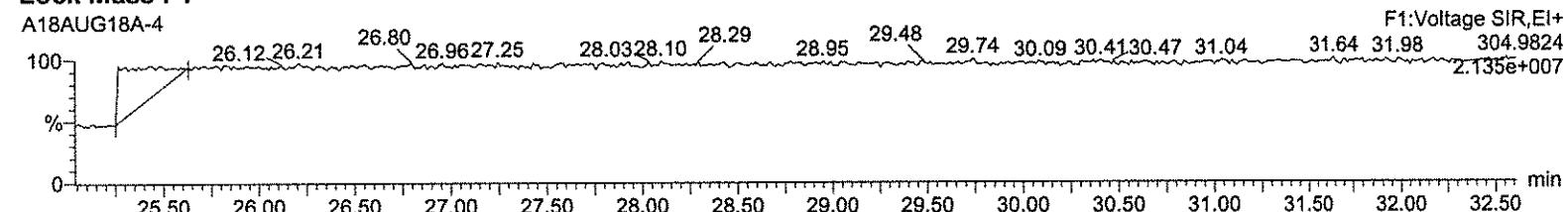
Total-pentafurans (F1)



HxDPE



Lock Mass F1



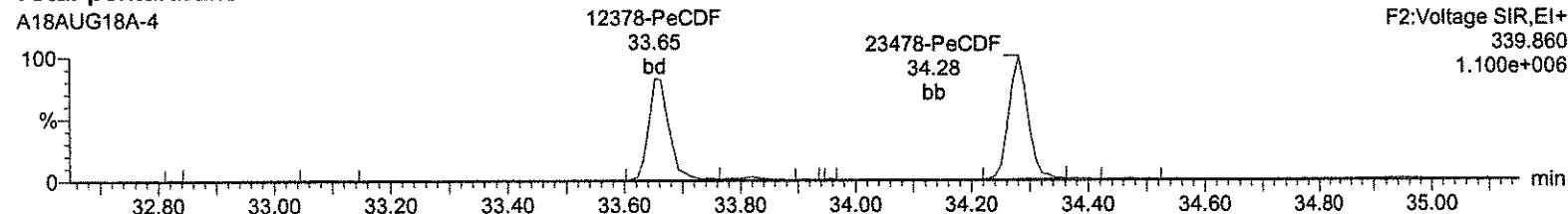
Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

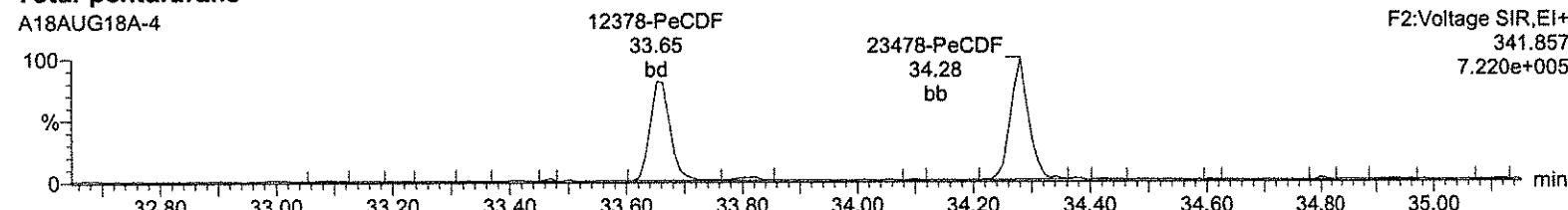
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Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

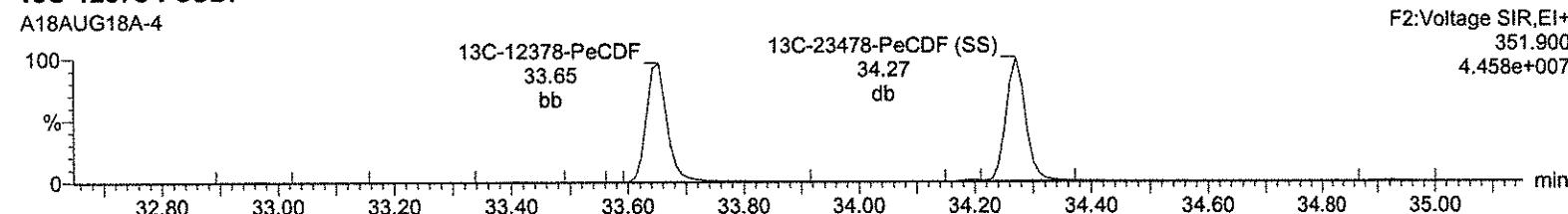
Total-pentafurans



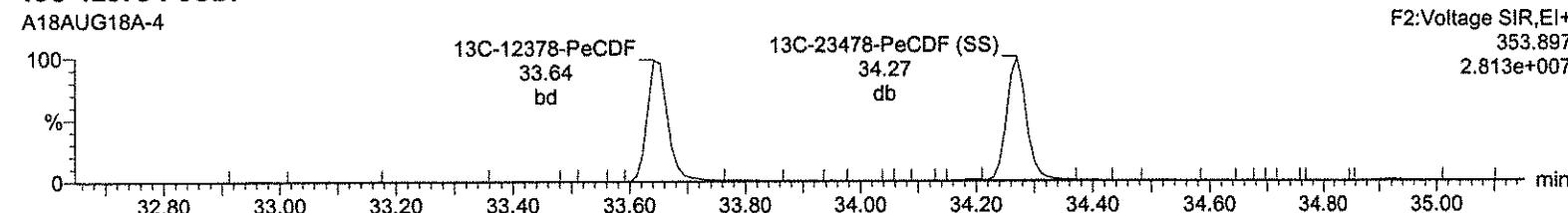
Total-pentafurans



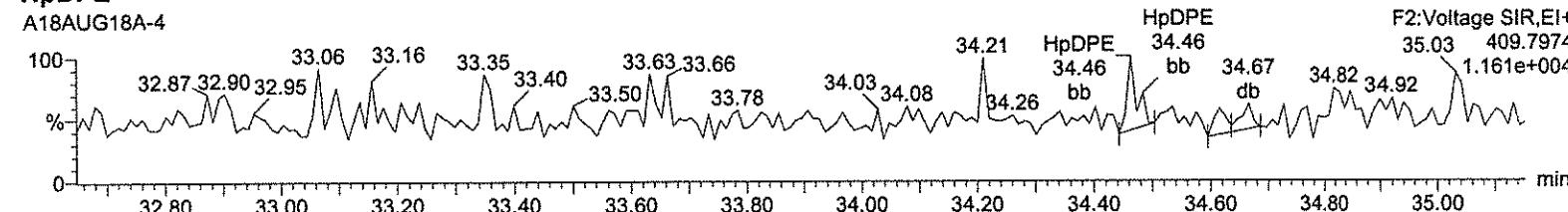
13C-12378-PeCDF



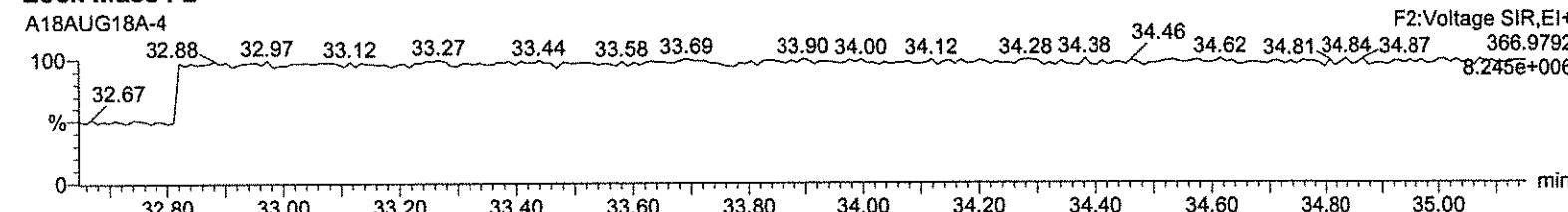
13C-12378-PeCDF



HpDPE



Lock Mass F2



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

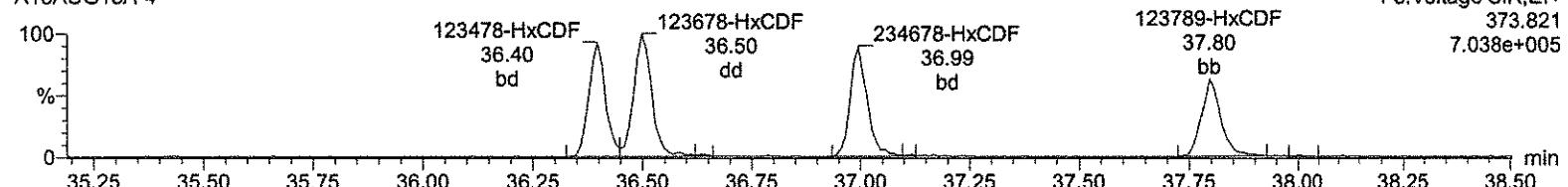
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

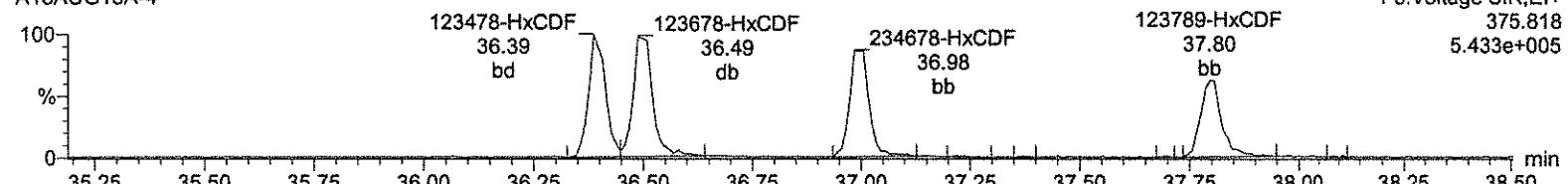
Total-hexafurans

A18AUG18A-4



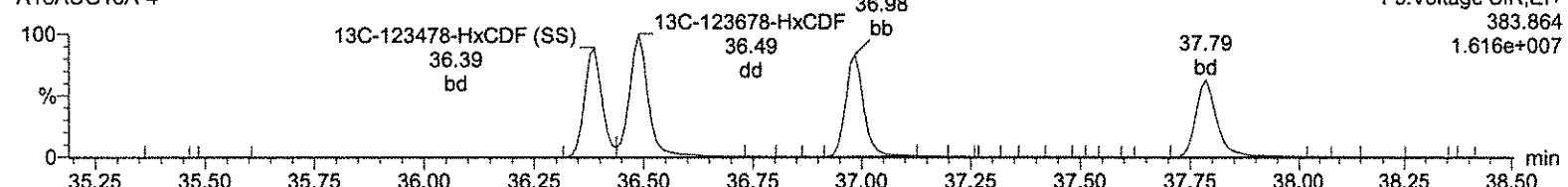
Total-hexafurans

A18AUG18A-4



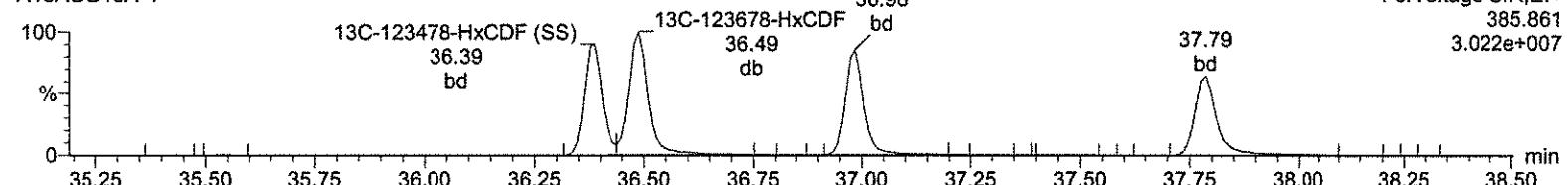
13C-123678-HxCDF

A18AUG18A-4



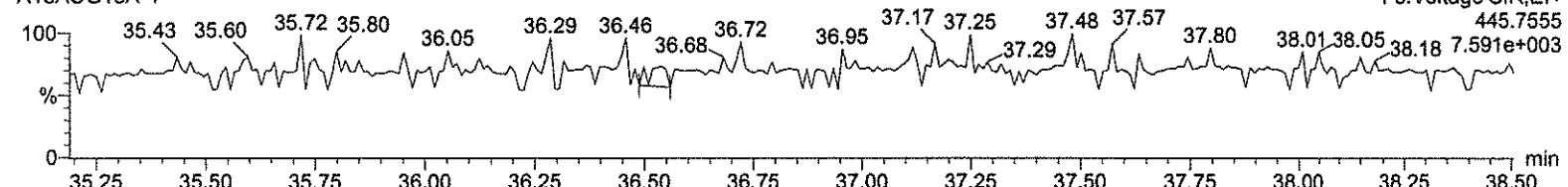
13C-123678-HxCDF

A18AUG18A-4



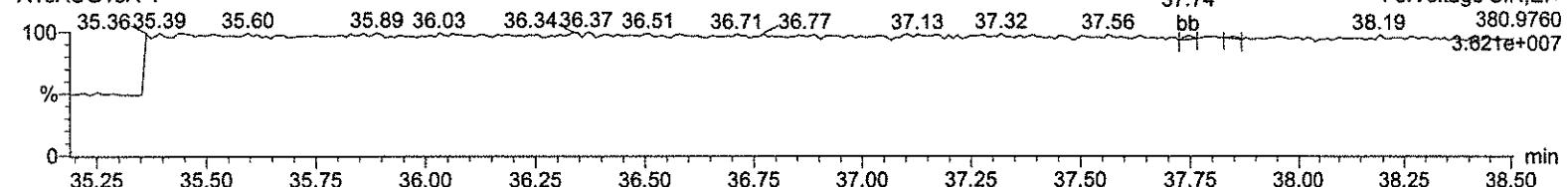
OcDPE

A18AUG18A-4



Lock Mass F3

A18AUG18A-4



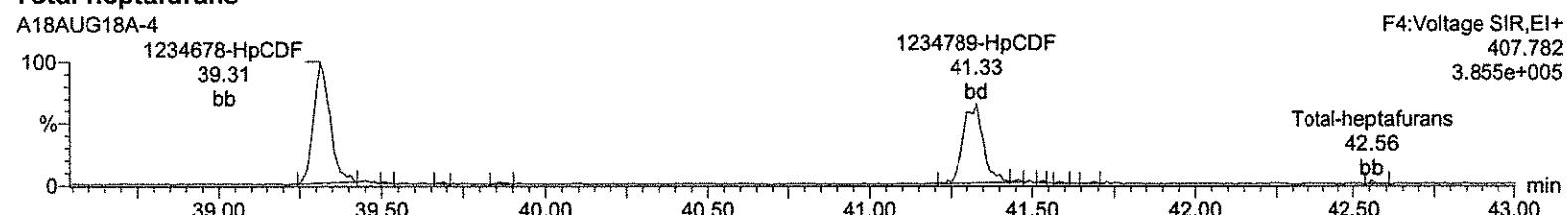
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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

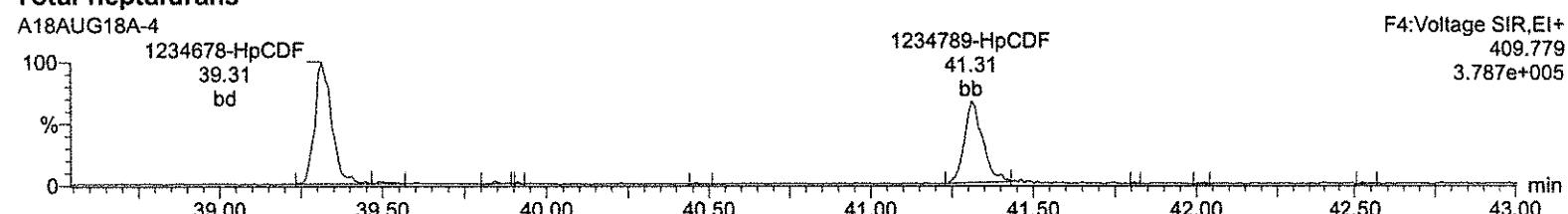
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Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

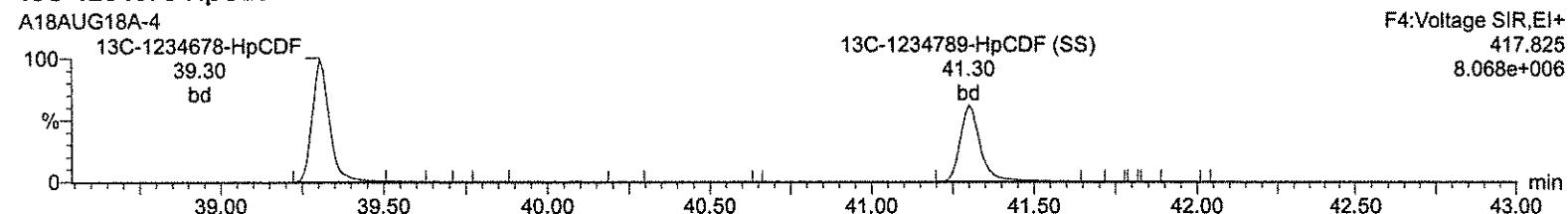
### Total-heptafurans



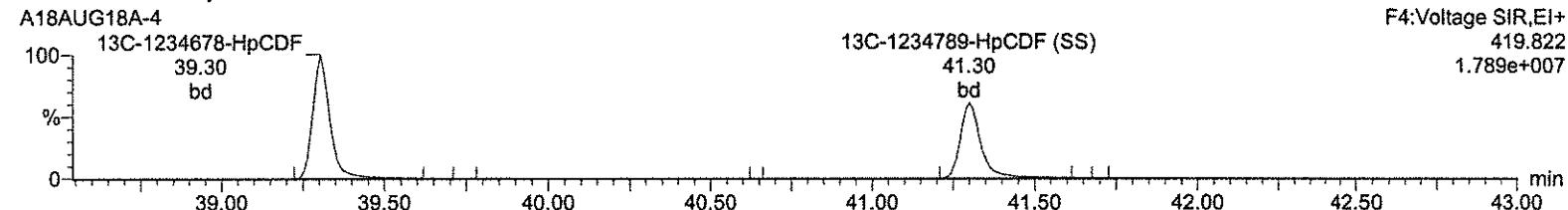
### Total-heptafurans



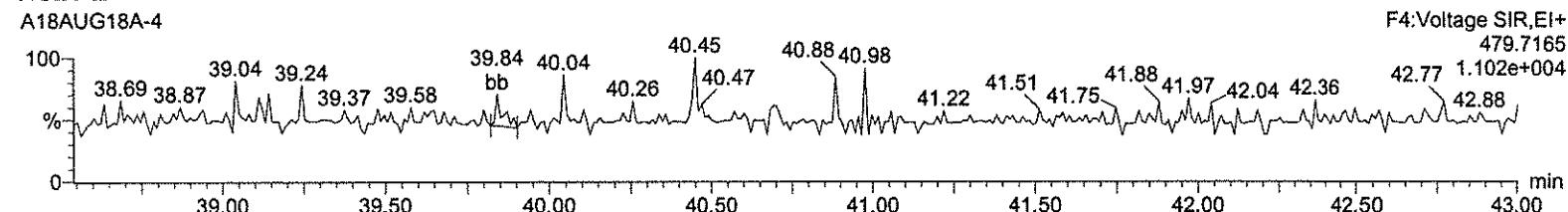
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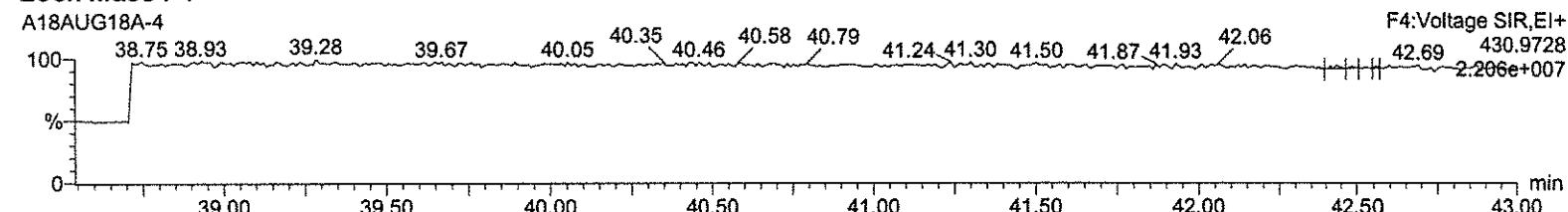
### 13C-1234678-HpCDF



### NoDPE



### Lock Mass F4



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

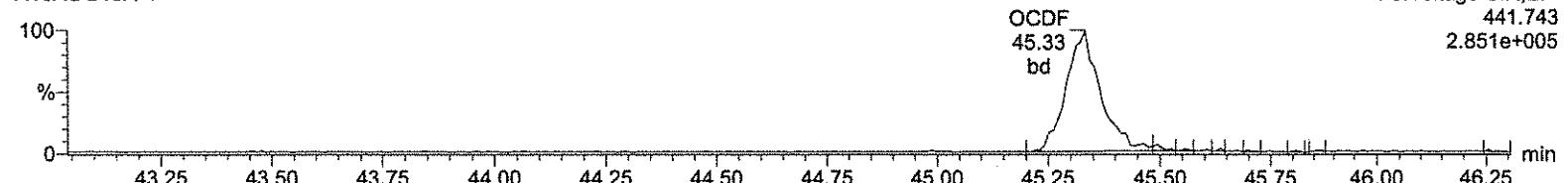
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-4, Date: 18-Aug-2018, Time: 11:06:04, ID: CS1 UD180112-03 CS13R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

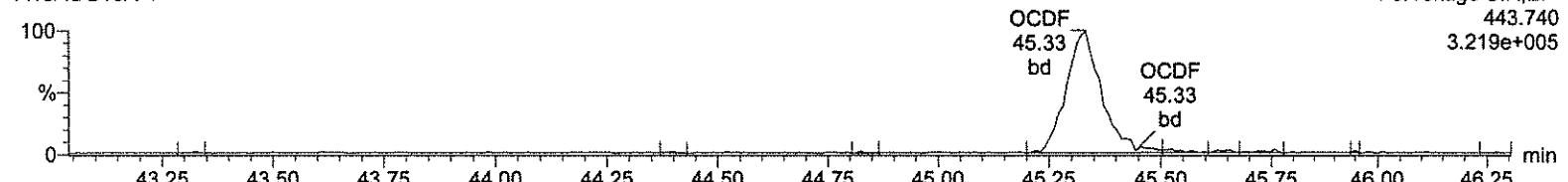
### OCDF

A18AUG18A-4



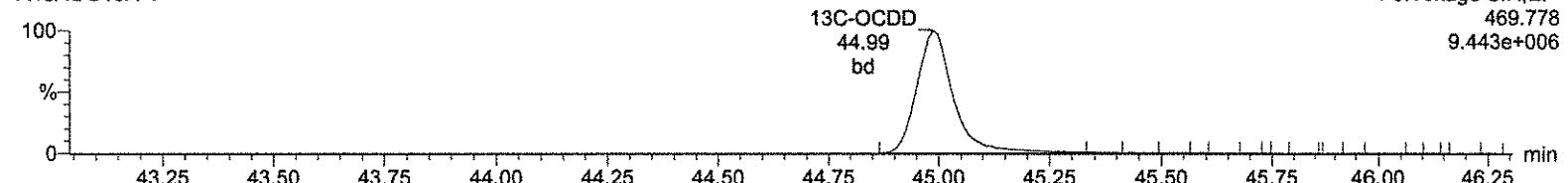
### OCDF

A18AUG18A-4



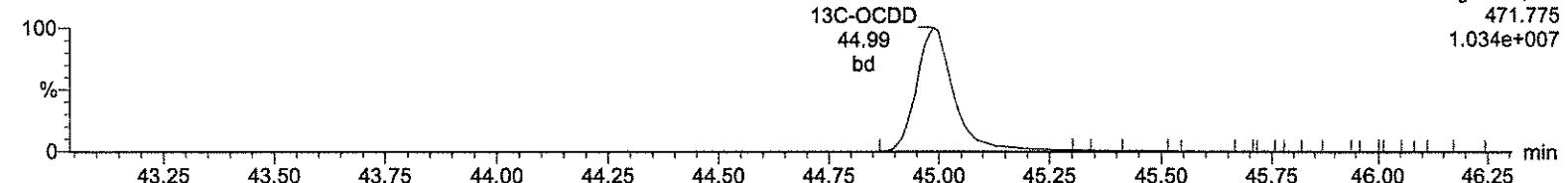
### 13C-OCDD

A18AUG18A-4



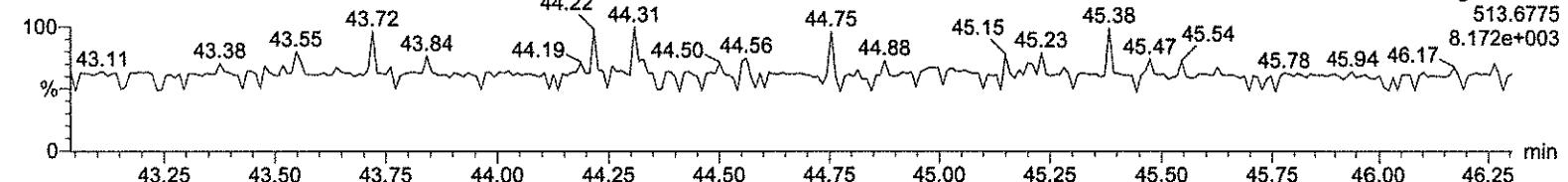
### 13C-OCDD

A18AUG18A-4



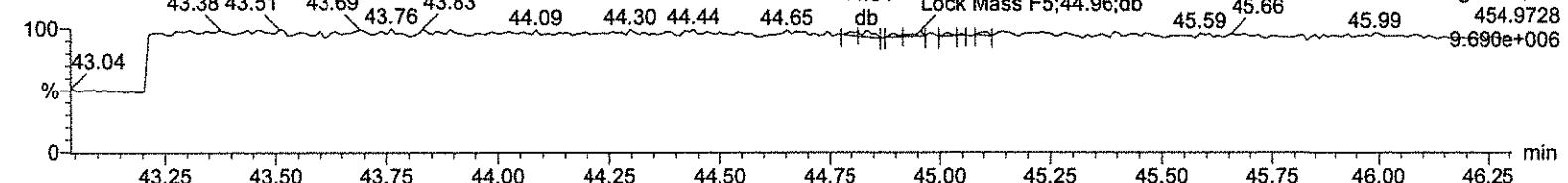
### DeDPE

A18AUG18A-4



### Lock Mass F5

A18AUG18A-4



## Quantify Sample Summary Report

## MassLynx 4.1

Page Method 8290\ICAL\_Report

Dataset: C:\MassLynx\Default.pro\ICAL\_Results\8290-A18AUG18A.qld  
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time  
Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

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*2021 Aug 05*

Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

#	Name	Ion1 Area	Ion2 Area	Response	RT	RRT	RA	Fail?	pg/uL	RRF	Mean	RSI	EDL	Height	Noise1	S/N1	Height2	Noise2	S/N2	M1	M2
1	2378-TCDF	1.86e4	2.41e4	4.27e4	31.68	1.00	0.77	NO	1.912	0.924	0.966	4.50	0.0277	3.80e6	3076	123.4	5.01e5	2327	215.2	bb	bb
2	12378-PeCDD	9.57e4	5.86e4	1.54e5	34.47	1.00	1.63	NO	9.945	0.971	0.977	4.38	0.0437	2.25e6	3583	628.4	1.32e6	2552	519.1	bd	bb
3	123478-HxCDD	7.02e4	5.54e4	1.26e5	37.12	1.00	1.27	NO	9.480	0.777	0.820	2.97	0.105	1.42e6	5829	243.7	1.12e6	4016	279.0	bd	bd
4	123678-HxCDD	8.50e4	7.04e4	1.55e5	37.21	1.00	1.21	NO	9.898	0.961	0.971	3.86	0.0887	1.60e6	5829	274.2	1.27e6	4016	315.4	dd	dd
5	123789-HxCDD	7.70e4	6.08e4	1.38e5	37.46	1.01	1.27	NO	9.890	0.852	0.861	4.53	0.100	1.34e6	5829	230.4	1.08e6	4016	263.4	dd	dd
6	1234678-HpCDD	5.14e4	4.88e4	1.00e5	40.61	1.00	1.05	NO	9.931	0.948	0.955	7.65	0.124	7.26e5	3684	197.1	7.09e5	3220	220.1	bd	bd
7	OCDD	7.40e4	8.08e4	1.55e5	45.00	1.00	0.92	NO	19.051	0.935	0.981	6.02	0.251	7.86e5	4393	178.9	8.82e5	3833	230.1	bd	bd
8	2378-TCDF	2.64e4	3.55e4	6.19e4	31.13	1.00	0.74	NO	1.987	0.913	0.919	3.95	0.0321	5.05e5	2614	193.1	6.45e5	4405	146.5	bb	bd
9	12378-PeCDD	1.46e5	9.33e4	2.39e5	33.66	1.00	1.56	NO	9.880	0.865	0.875	5.04	0.0641	3.34e6	6673	500.2	2.19e6	7965	275.5	bd	bd
10	23478-PeCDD	1.53e5	1.01e5	2.54e5	34.28	1.02	1.52	NO	9.383	0.921	0.981	5.60	0.0572	3.81e6	6673	571.5	2.44e6	7965	305.7	bb	bb
11	123478-HxCDF	1.11e5	9.08e4	2.01e5	36.39	1.00	1.22	NO	9.770	0.902	0.923	3.03	0.126	2.41e6	10282	234.3	1.93e6	8603	224.9	bd	bd
12	123878-HxCDF	1.27e5	1.03e5	2.30e5	36.50	1.00	1.23	NO	9.675	1.029	1.063	3.79	0.110	2.36e6	10282	229.5	1.99e6	8603	230.8	dd	dd
13	234678-HxCDF	1.14e5	9.39e4	2.08e5	36.99	1.01	1.22	NO	9.818	0.934	0.951	5.60	0.123	2.28e6	10282	221.4	1.76e6	8603	204.5	bd	bd
14	123789-HxCDF	8.95e4	7.22e4	1.62e5	37.80	1.04	1.24	NO	9.652	0.725	0.751	5.76	0.155	1.62e6	10282	157.1	1.24e6	8603	144.6	bd	bd
15	1234678-HpCDD	8.68e4	8.44e4	1.71e5	39.31	1.00	1.03	NO	9.749	1.188	1.219	4.36	0.106	1.39e6	5308	262.2	1.35e6	6512	207.4	bd	bd
16	1234789-HpCDD	6.13e4	6.15e4	1.23e5	41.31	1.05	1.00	NO	9.456	0.852	0.902	6.73	0.143	8.24e5	5308	155.2	8.01e5	6512	123.0	bb	bb
17	OCDF	8.56e4	9.75e4	1.83e5	45.31	1.01	0.88	NO	18.618	1.105	1.187	8.35	0.242	8.83e5	2974	296.9	1.07e6	6634	160.8	bb	bd
18	13C-2378-TCDD	1.01e6	1.30e6	2.31e6	31.67	1.01	0.78	NO	99.846	1.062	1.064	4.24	0.0724	2.22e7	8033	2761.9	2.74e7	5039	5445.2	bb	bd
19	13C-12378-PeCDD	9.70e5	6.18e5	1.59e6	34.46	1.10	1.57	NO	94.125	0.730	0.775	10.87	0.104	2.19e7	10135	2164.1	1.38e7	3527	3915.9	bb	bb
20	13C-123678-HxCDD	9.00e5	7.17e5	1.62e6	37.20	0.99	1.25	NO	98.015	1.139	1.162	1.48	0.198	1.59e7	13285	1197.6	1.27e7	8280	1528.1	dd	dd
21	13C-1234678-HpCDD	5.45e5	5.12e5	1.06e6	40.60	1.08	1.07	NO	99.521	0.744	0.748	3.63	0.3228	7.50e6	11142	672.8	7.21e6	11817	610.2	bd	bd
22	13C-OCDD	7.88e5	8.68e5	1.86e6	44.99	1.20	0.91	NO	191.050	0.583	0.611	5.45	0.282	7.94e6	6951	1143.0	8.62e6	9170	939.8	bd	bd
23	13C-2378-TCDF	1.48e6	1.91e6	3.39e6	31.12	1.00	0.77	NO	99.871	1.558	1.560	2.51	0.0866	2.60e7	14378	1805.5	3.36e7	8533	3943.5	bb	bb
24	13C-12378-PeCDF	1.69e6	1.07e6	2.76e6	33.64	1.08	1.58	NO	96.184	1.269	1.320	7.27	0.126	4.00e7	13936	2868.1	2.58e7	14217	1812.2	bd	bd
25	13C-123678-HxCDD	7.68e5	1.46e6	2.23e6	36.49	0.97	0.52	NO	101.669	1.572	1.546	1.08	0.292	1.39e7	15352	907.3	2.64e7	26984	977.3	dd	dd
26	13C-1234678-HpCDD	4.41e5	9.99e5	1.44e6	39.30	1.05	0.44	NO	100.027	1.014	1.014	3.18	0.178	7.04e6	7033	1000.4	1.57e7	9844	1590.2	bd	bd
27	13C-123478-TCDD	9.62e5	1.21e6	2.18e6	31.25	0.00	0.79	NO	100.000	1.000	1.000	0.00	0.0770	1.88e7	8033	2334.5	2.35e7	5039	4669.8	bb	bb
28	13C-123789-HxCDD	7.86e5	6.35e5	1.42e6	37.45	0.00	1.24	NO	100.000	1.000	1.000	0.00	0.230	1.30e7	13285	975.8	1.03e7	8280	1242.4	dd	dd
29	37Cl-2378-TCDD (SS)	4.51e4	4.51e4	31.68	1.00	1.925	0.977	1.015	3.92	0.0193	9.88e5	3969	249.0	bb	bb	bb	bb	bb	bb	bb	bb
30	13C-23478-PeCDF (SS)	1.64e6	1.05e6	2.69e6	34.27	1.02	1.56	NO	98.316	0.974	0.990	2.51	0.109	3.96e7	13936	2838.9	2.50e7	14217	1759.8	db	db
31	13C-123478-HxCDD (SS)	6.17e5	1.19e6	1.81e6	36.38	1.00	0.62	NO	98.995	0.810	0.819	1.96	0.320	1.27e7	15352	827.1	2.51e7	26984	930.9	bd	bd
32	13C-123478-HxCDD (SS)	7.53e5	6.00e5	1.35e6	37.11	1.00	1.25	NO	100.322	0.837	0.834	1.28	0.226	1.51e7	13285	1136.4	1.25e7	8280	1509.0	bd	bd
33	13C-1234789-HpCDF (SS)	2.98e5	6.84e5	9.82e5	41.30	1.05	0.44	NO	95.328	0.682	0.715	3.16	0.257	4.06e6	7033	577.3	9.07e6	9844	9212	bb	bb

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

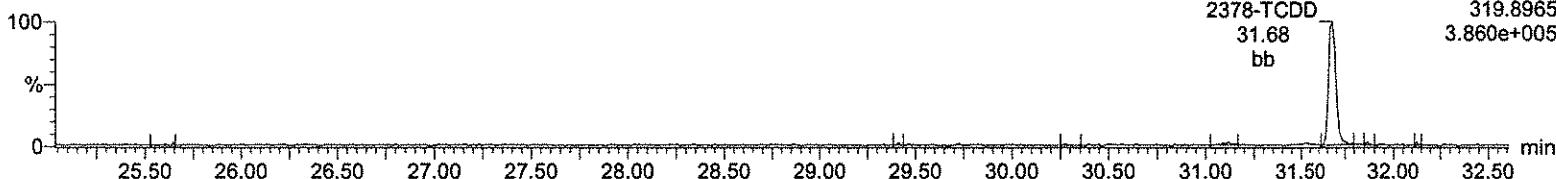
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

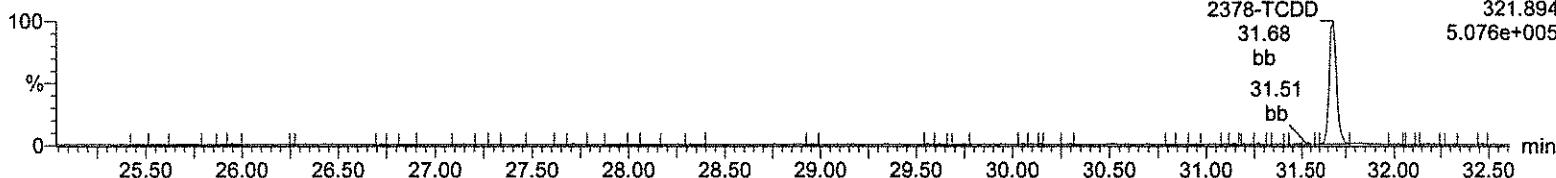
#### Total-tetradiioxins

A18AUG18A-5



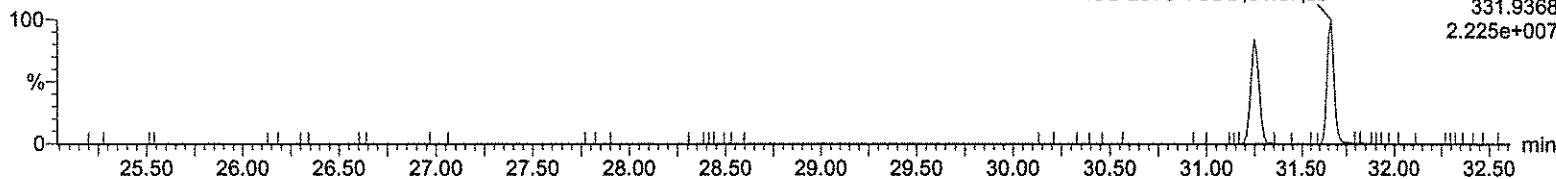
#### Total-tetradiioxins

A18AUG18A-5



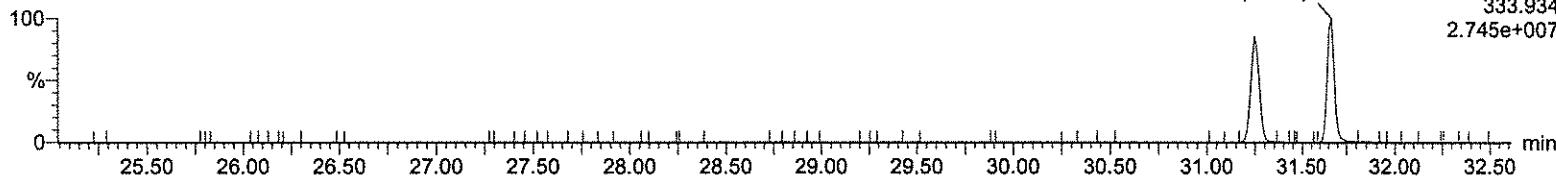
#### 13C-2378-TCDD

A18AUG18A-5



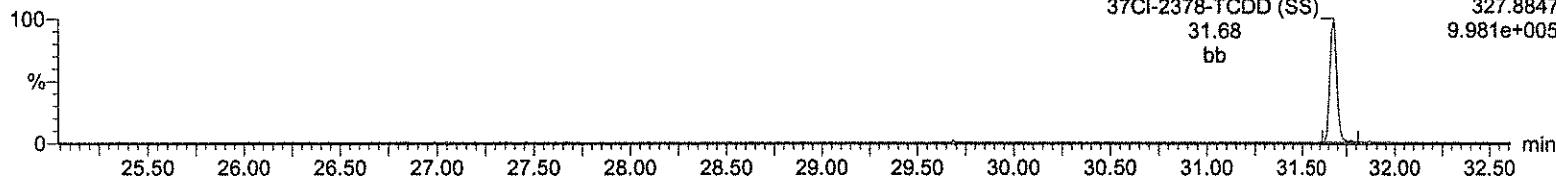
#### 13C-2378-TCDD

A18AUG18A-5



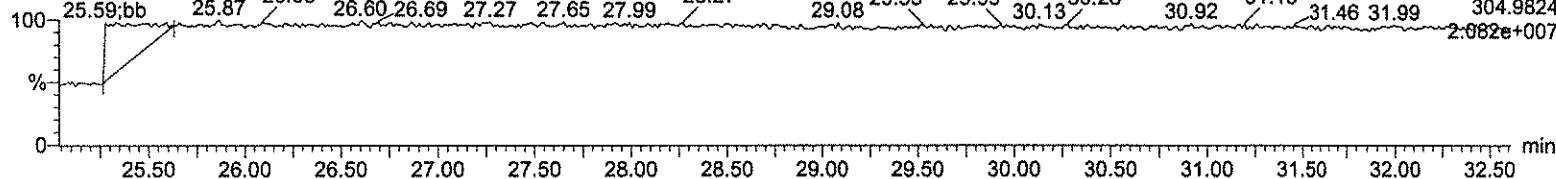
#### 37Cl-2378-TCDD (SS)

A18AUG18A-5



#### Lock Mass F1

A18AUG18A-5



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

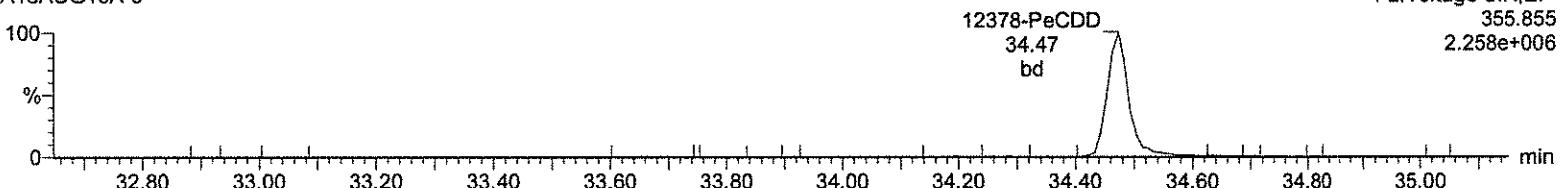
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Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

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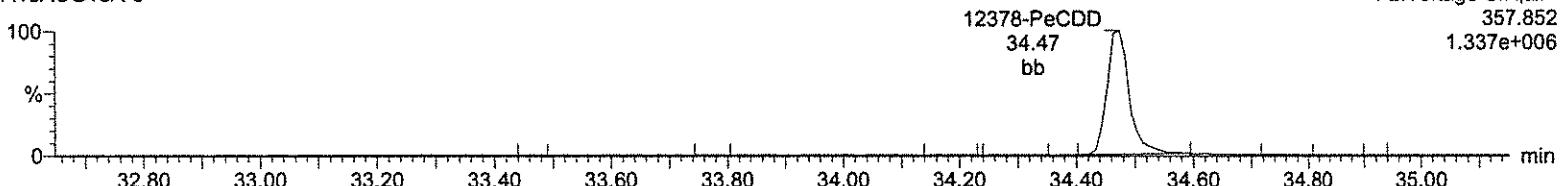
Total-pentadioxins

A18AUG18A-5



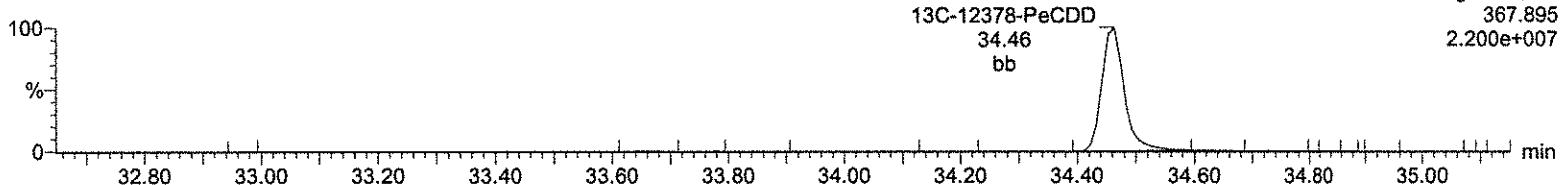
Total-pentadioxins

A18AUG18A-5



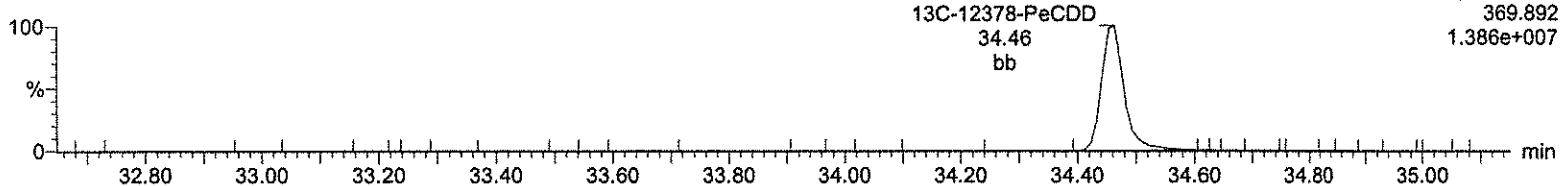
13C-12378-PeCDD

A18AUG18A-5



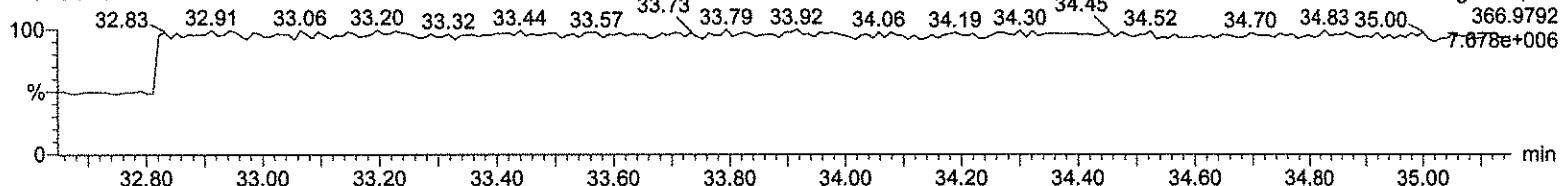
13C-12378-PeCDD

A18AUG18A-5



Lock Mass F2

A18AUG18A-5



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

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Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

Total-hexadioxins

A18AUG18A-5

F3:Voltage SIR,EI+

389.816

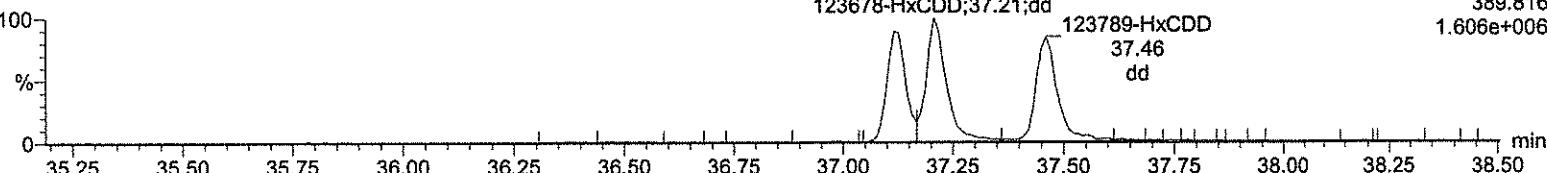
1.606e+006

123678-HxCDD;37.21;dd

123789-HxCDD

37.46

dd



Total-hexadioxins

A18AUG18A-5

F3:Voltage SIR,EI+

391.813

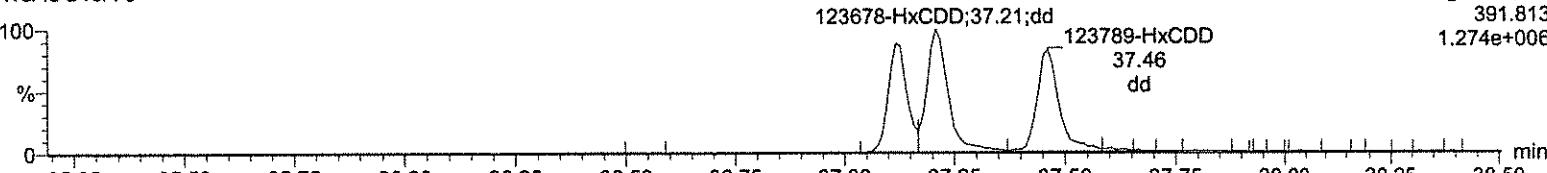
1.274e+006

123678-HxCDD;37.21;dd

123789-HxCDD

37.46

dd



13C-123678-HxCDD

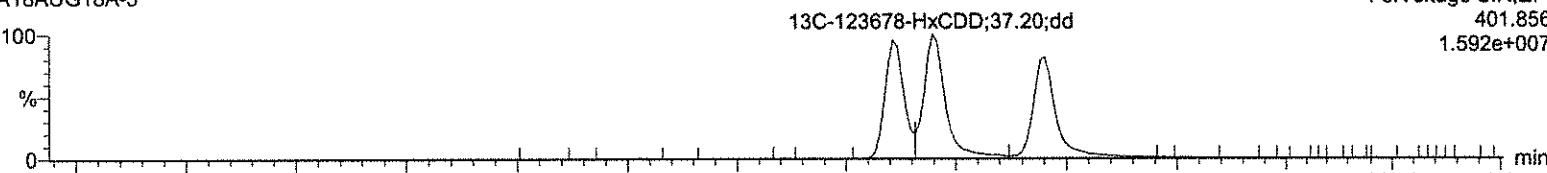
A18AUG18A-5

F3:Voltage SIR,EI+

401.856

1.592e+007

13C-123678-HxCDD;37.20;dd



13C-123678-HxCDD

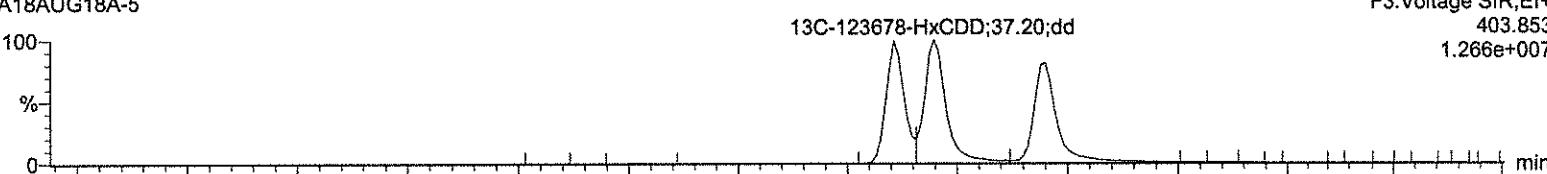
A18AUG18A-5

F3:Voltage SIR,EI+

403.853

1.266e+007

13C-123678-HxCDD;37.20;dd



Lock Mass F3

A18AUG18A-5

F3:Voltage SIR,EI+

380.9760

3.192e+007

35.37

35.46

35.72

35.85

35.95

36.15

36.26

36.50

36.77

36.88

36.98

37.14

37.49

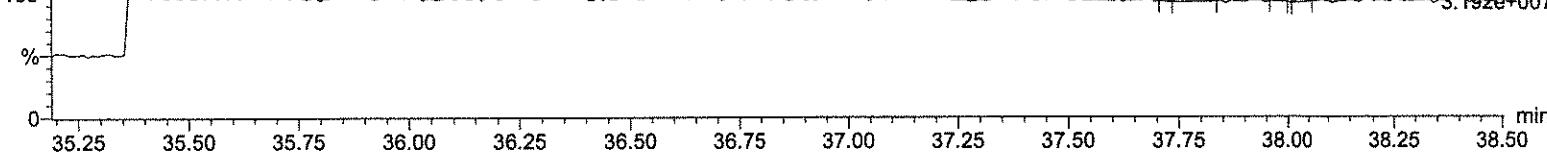
37.68

38.03

bb

38.19

3.192e+007



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qlt

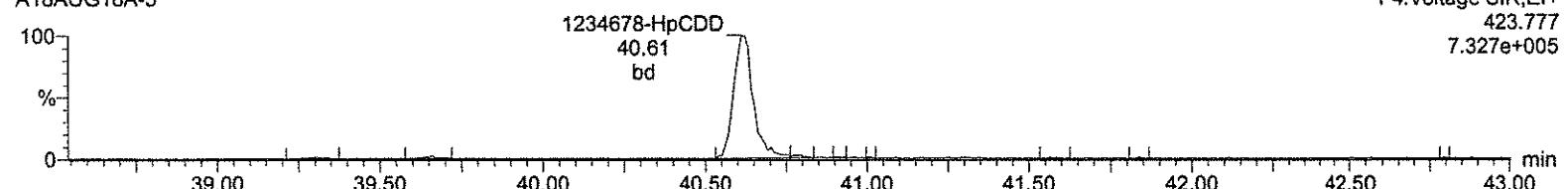
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

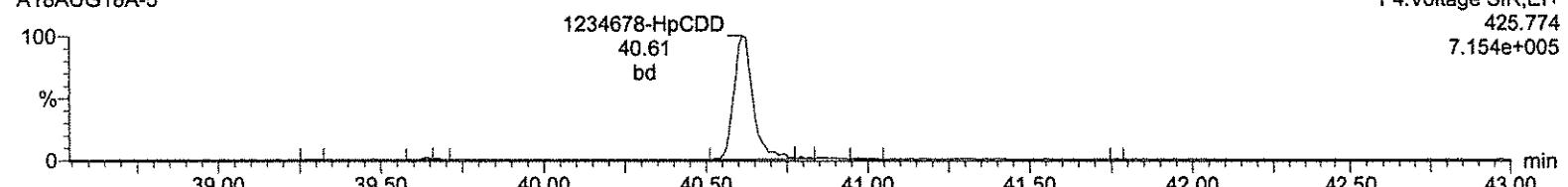
### Total-heptadioxins

A18AUG18A-5



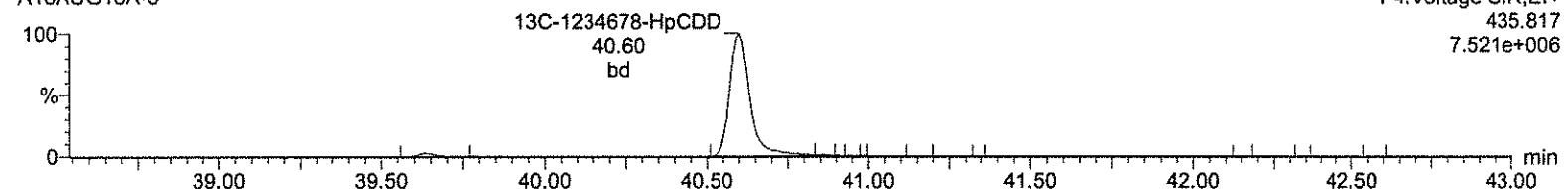
### Total-heptadioxins

A18AUG18A-5



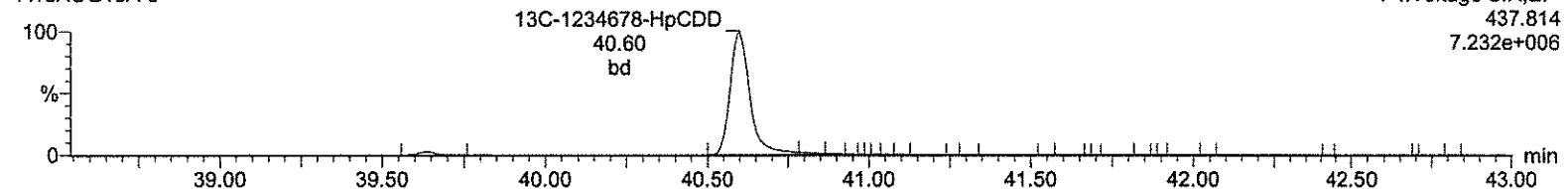
### 13C-1234678-HpCDD

A18AUG18A-5



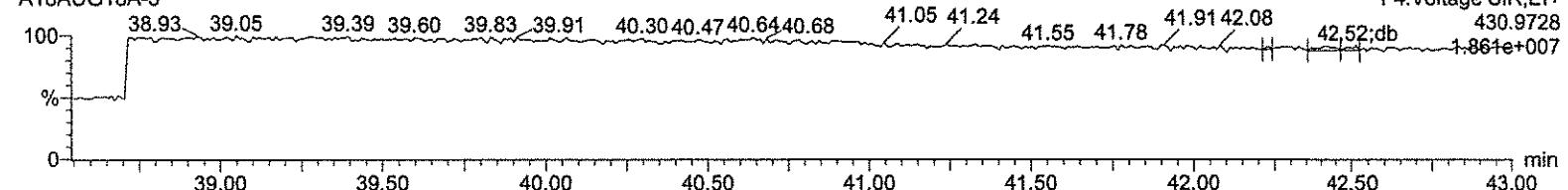
### 13C-1234678-HpCDD

A18AUG18A-5



### Lock Mass F4

A18AUG18A-5



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

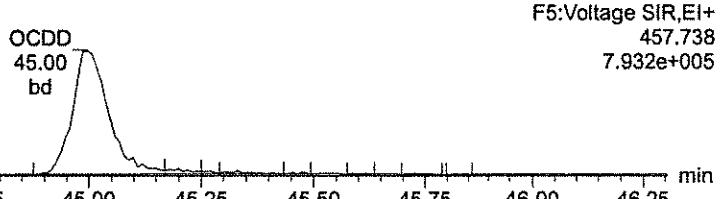
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

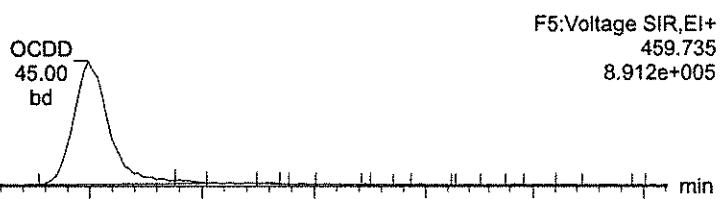
OCDD

A18AUG18A-5



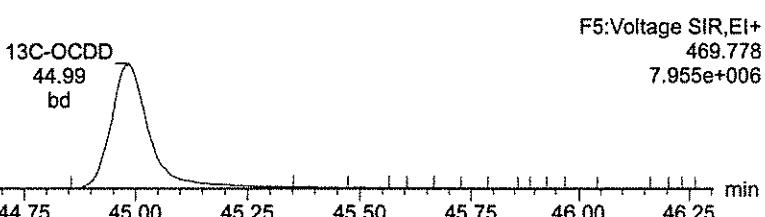
OCDD

A18AUG18A-5



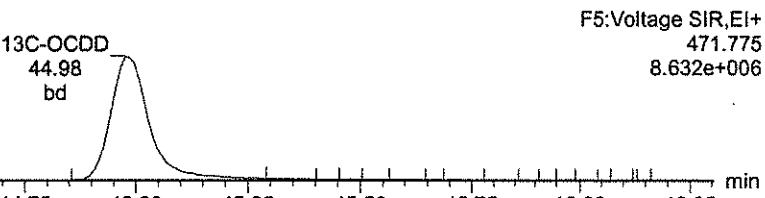
13C-OCDD

A18AUG18A-5



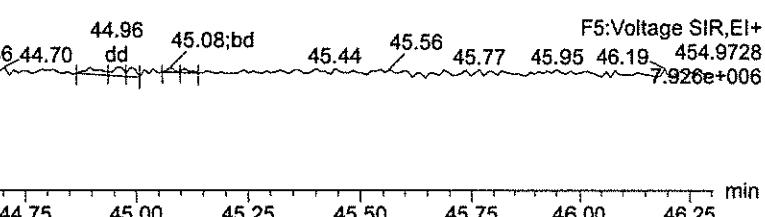
13C-OCDD

A18AUG18A-5



Lock Mass F5

A18AUG18A-5



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

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Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

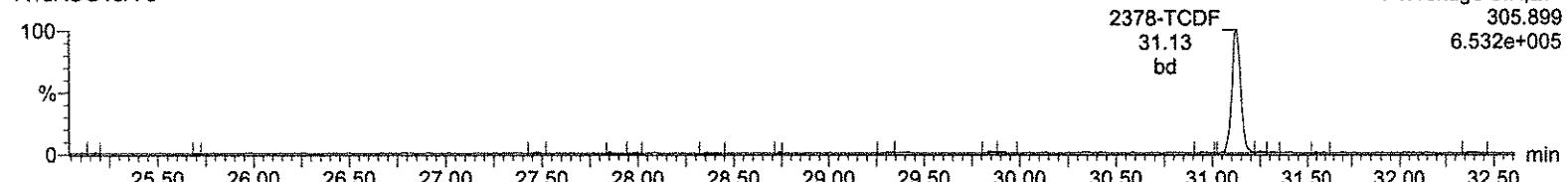
### Total-tetrafurans

A18AUG18A-5



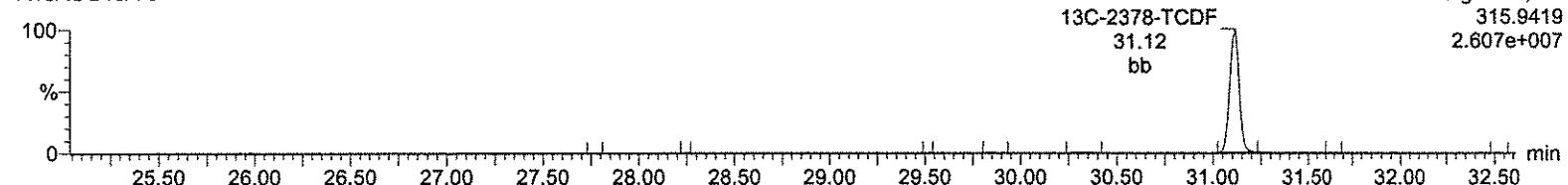
### Total-tetrafurans

A18AUG18A-5



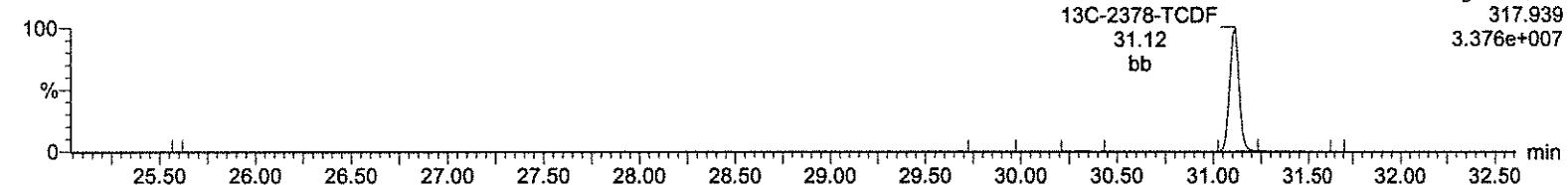
### 13C-2378-TCDF

A18AUG18A-5



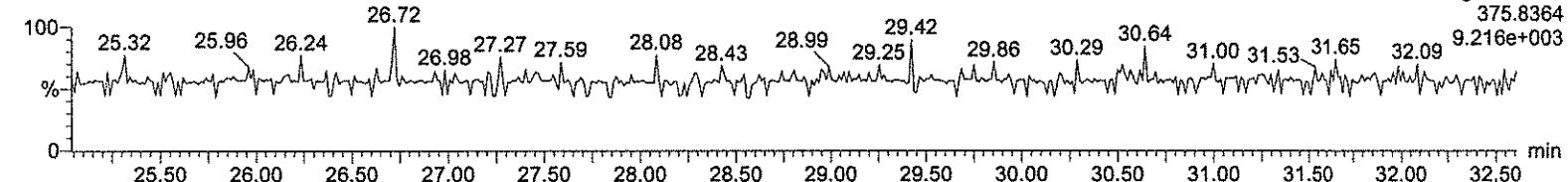
### 13C-2378-TCDF

A18AUG18A-5



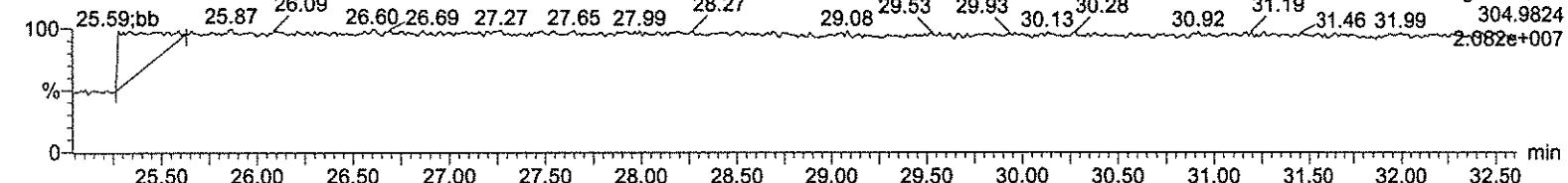
### HxDPE

A18AUG18A-5



### Lock Mass F1

A18AUG18A-5



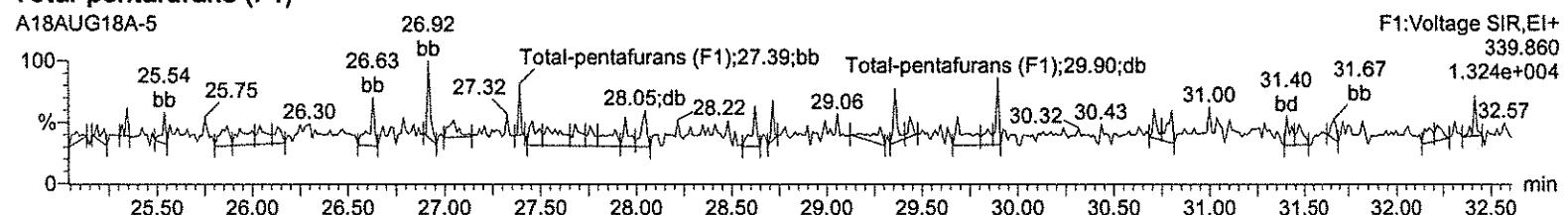
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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

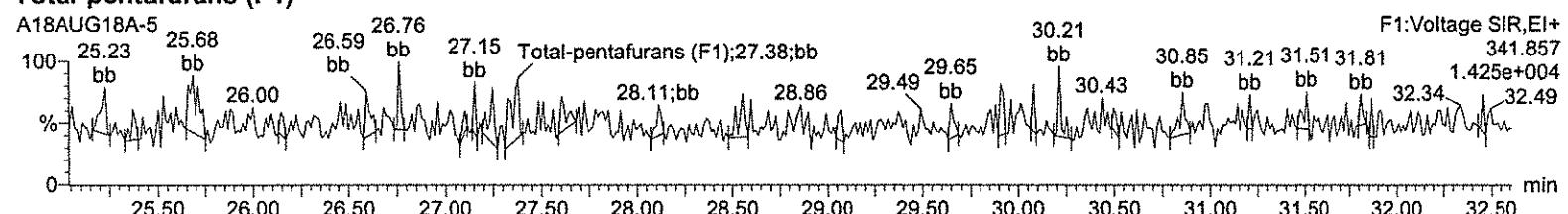
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Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

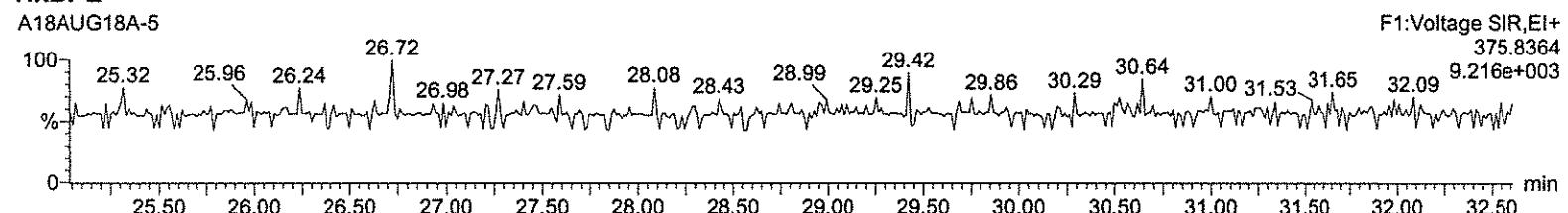
Total-pentafurans (F1)



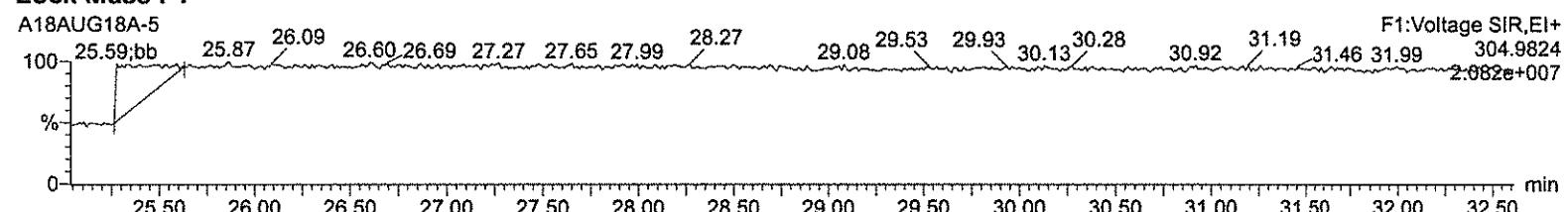
Total-pentafurans (F1)



HxDPE



Lock Mass F1



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

### Total-pentafurans

A18AUG18A-5

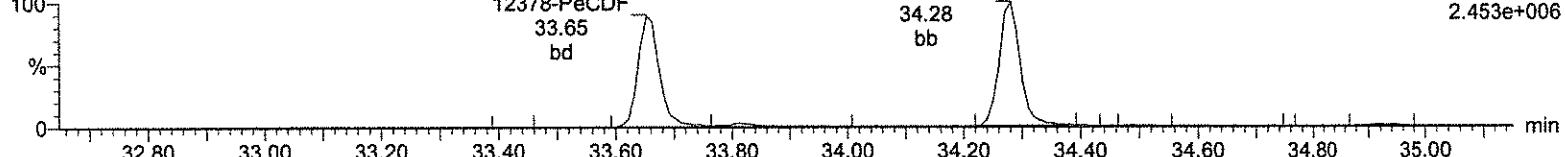
F2:Voltage SIR,EI+  
339.860  
3.835e+006



### Total-pentafurans

A18AUG18A-5

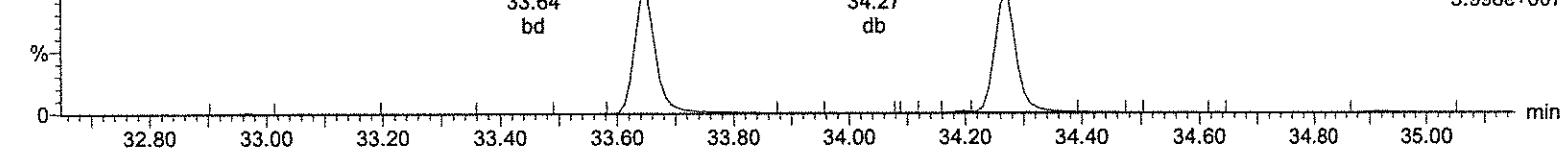
F2:Voltage SIR,EI+  
341.857  
2.453e+006



### 13C-12378-PeCDF

A18AUG18A-5

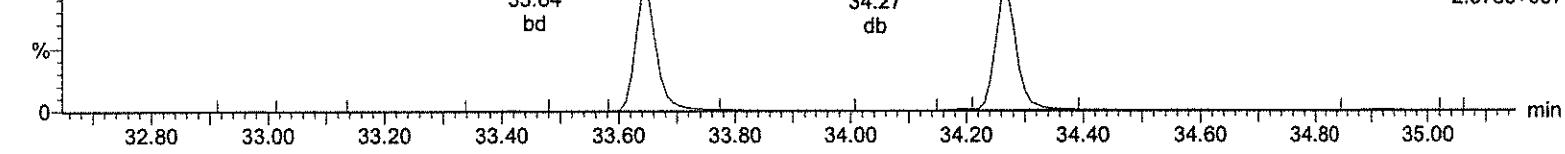
F2:Voltage SIR,EI+  
351.900  
3.998e+007



### 13C-12378-PeCDF

A18AUG18A-5

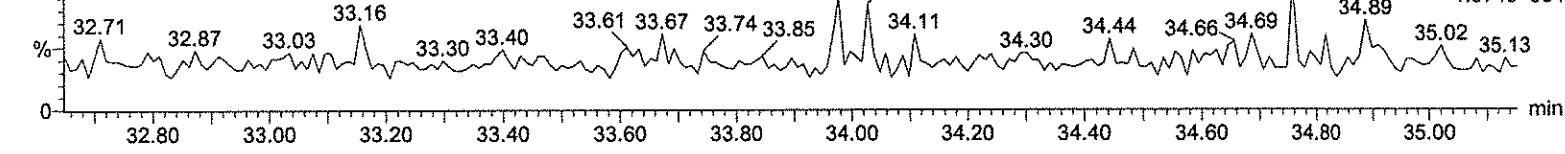
F2:Voltage SIR,EI+  
353.897  
2.578e+007



### HpDPE

A18AUG18A-5

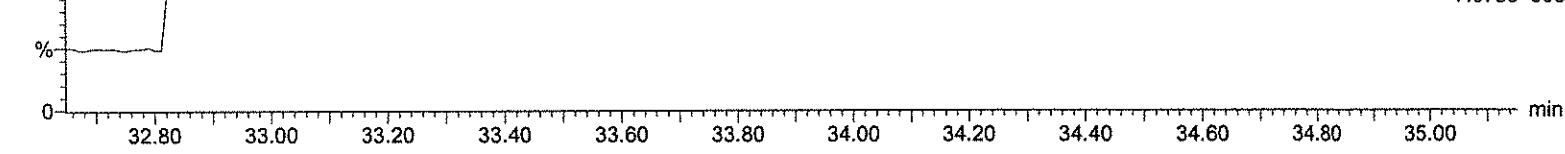
F2:Voltage SIR,EI+  
409.7974  
1.574e+004



### Lock Mass F2

A18AUG18A-5

F2:Voltage SIR,EI+  
366.9792  
7.678e+006



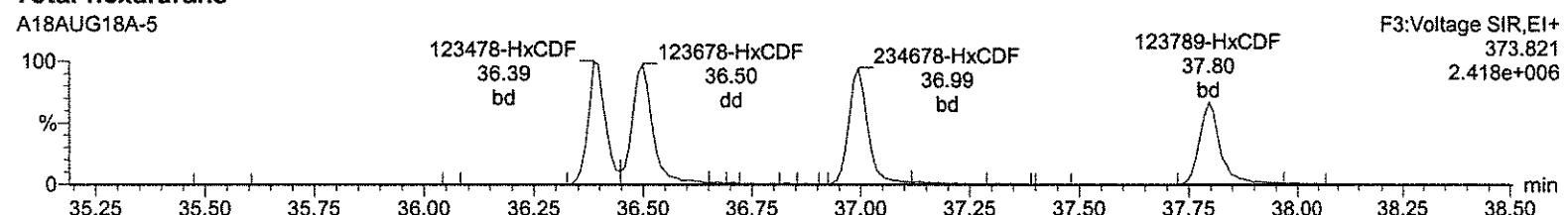
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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

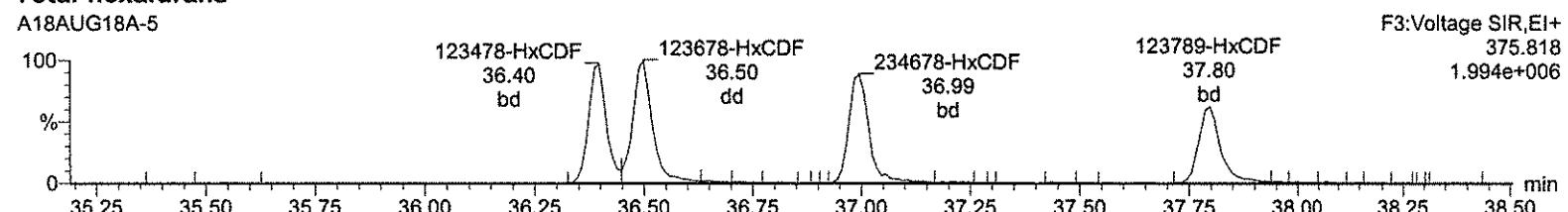
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Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

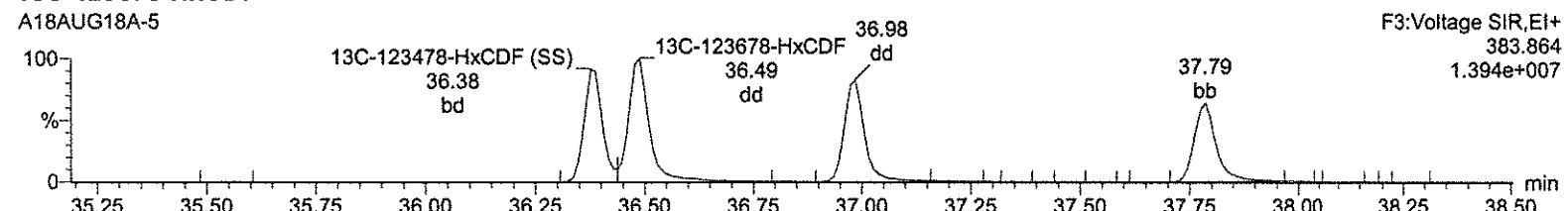
### Total-hexafurans



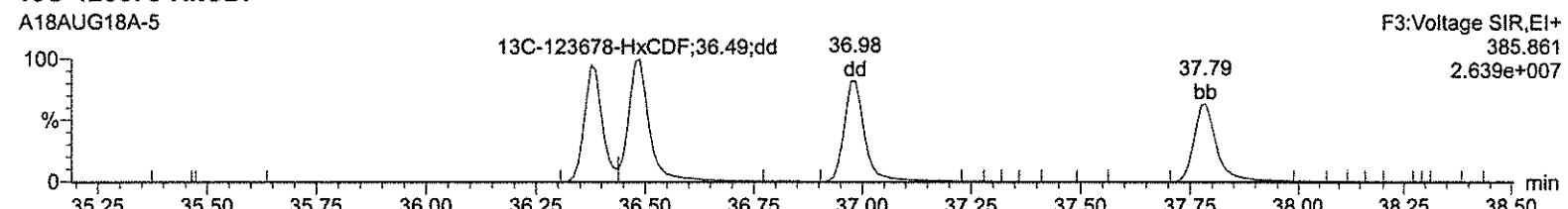
### Total-hexafurans



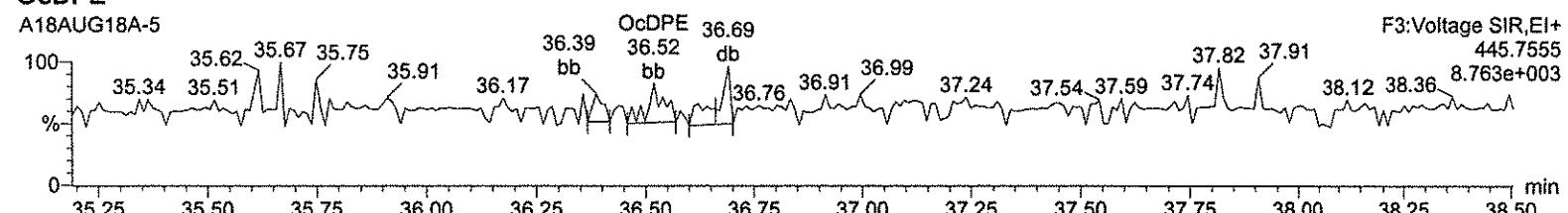
### 13C-123678-HxCDF



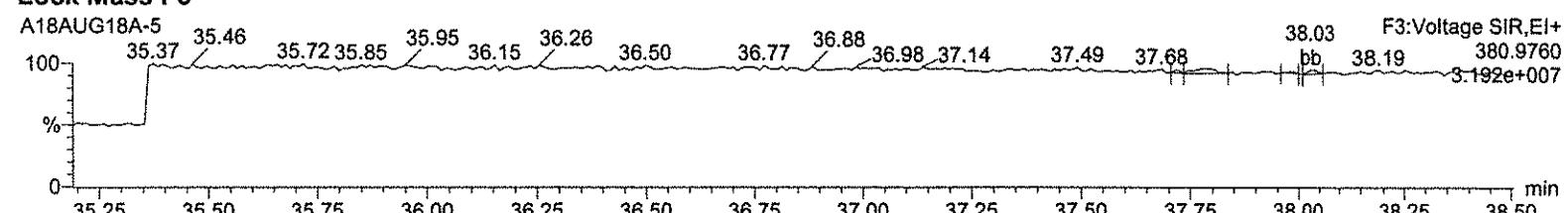
### 13C-123678-HxCDF



### OcDPE



### Lock Mass F3



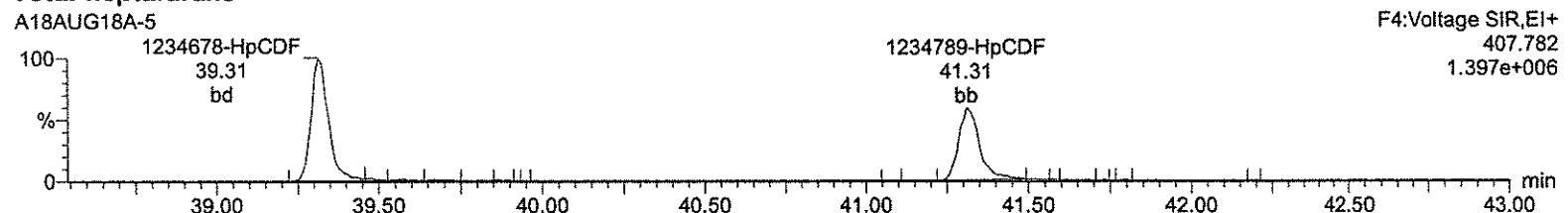
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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

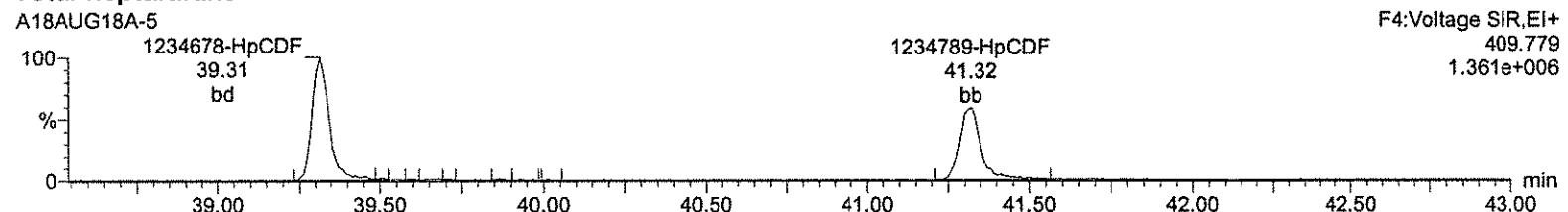
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

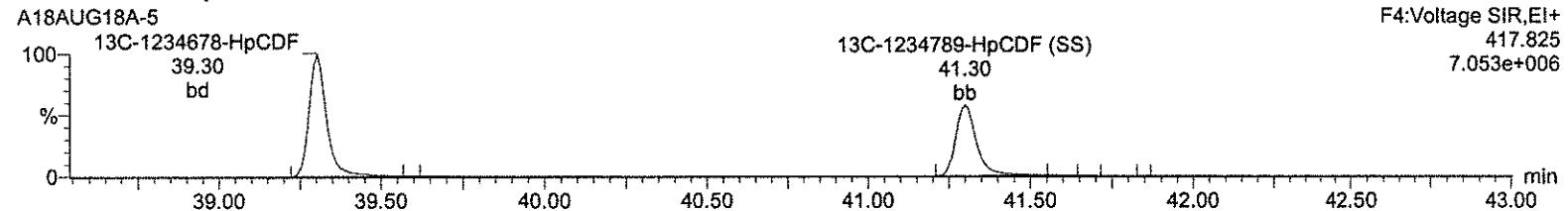
### Total-heptafurans



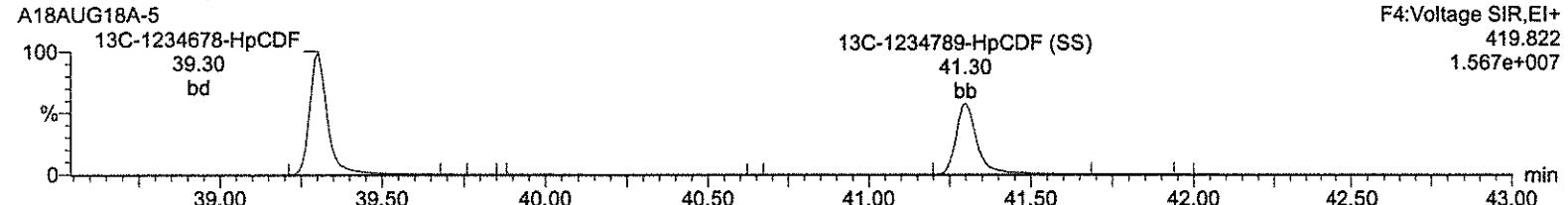
### Total-heptafurans



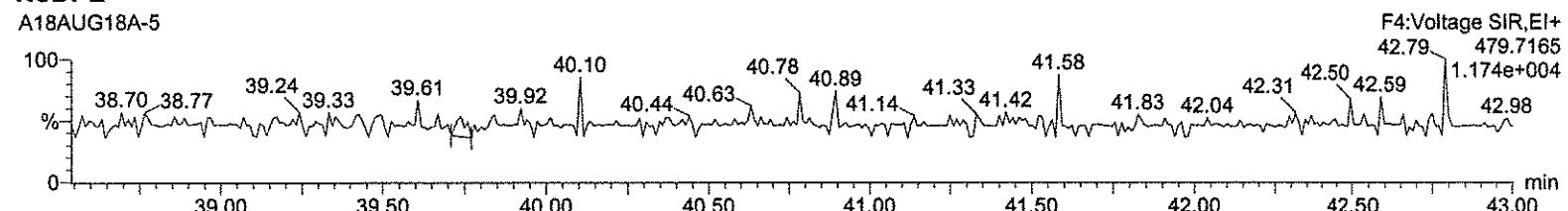
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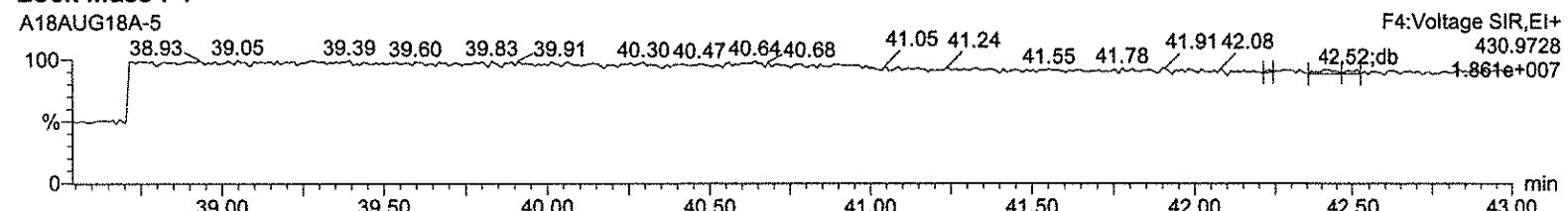
### 13C-1234678-HpCDF



### NoDPE



### Lock Mass F4



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

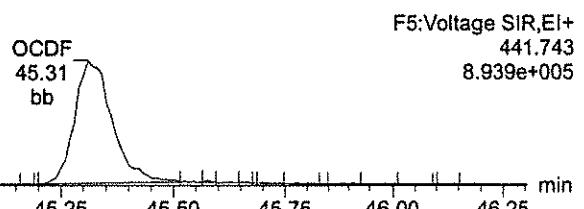
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-5, Date: 18-Aug-2018, Time: 11:54:21, ID: CS2 UD180112-04 CS23R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

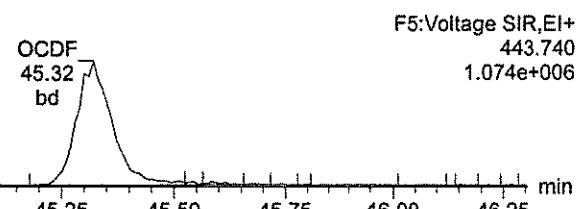
#### OCDF

A18AUG18A-5



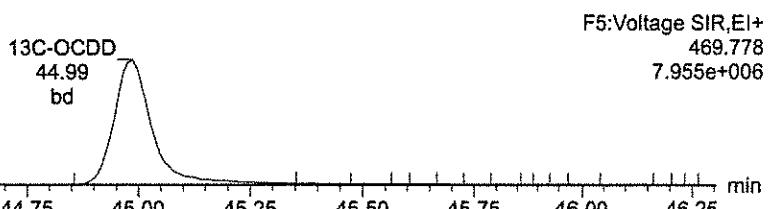
#### OCDF

A18AUG18A-5



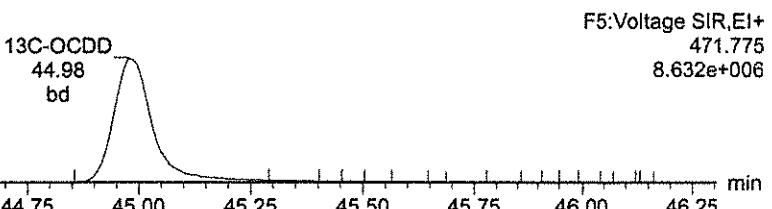
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A18AUG18A-5



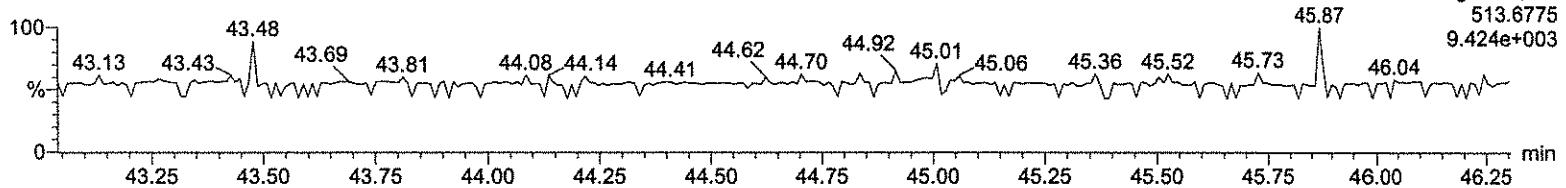
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A18AUG18A-5



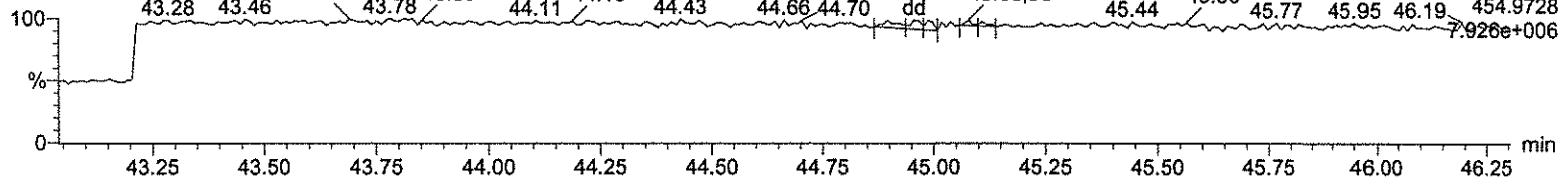
#### DeDPE

A18AUG18A-5



#### Lock Mass F5

A18AUG18A-5



## PaQuantify Sample Summary Report

## MassLynx 4.1

C:\MassLynx\Default.prol\ICAL\_Results\8290-A18AUG18A.qld  
Method 8290 ICAL\_Report

Dataset: 213 of 355  
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time  
Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

### Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

#	Name	Ion/Area	Ion2/Area	Response	RT	RRT	RA	Fall?	pg/µl	RRF	Mean	SD	EDL	Height	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDF	1.06e5	2.46e5	31.67	1.00	0.76	NO	10.172	0.983	0.966	4.50	0.0255	2.38e6	2572	924.8	3.02e6	2776	1083.7	bb	bd	
2	12378-PeCDD	5.43e5	3.50e5	8.93e5	34.46	1.00	1.55	NO	51.086	0.998	0.977	4.38	0.0588	1.24e7	5147	2404.6	7.89e6	3760	2099.1	bb	bb
3	123478-HxCDD	4.29e5	3.46e5	7.76e5	37.12	1.00	1.24	NO	50.800	0.833	0.820	2.97	0.181	8.72e6	8445	1033.0	7.16e6	10273	696.7	dd	dd
4	123678-HxCDD	5.17e5	4.14e5	9.31e5	37.21	1.00	1.25	NO	51.491	1.000	0.971	3.86	0.153	8.82e6	8445	1043.9	6.91e6	10273	672.3	dd	dd
5	123789-HxCDD	4.73e5	3.69e5	8.42e5	37.45	1.01	1.28	NO	52.490	0.904	0.861	4.53	0.172	7.68e6	8445	909.7	6.20e6	10273	603.6	dd	dd
6	1234678-HpCDD	2.85e5	2.85e5	5.71e5	40.61	1.00	1.00	NO	51.231	0.978	0.955	7.65	0.237	4.29e6	7209	595.1	3.95e6	8010	492.9	bb	bd
7	OCDD	4.60e5	5.20e5	9.81e5	45.00	1.00	0.89	NO	104.216	1.022	0.981	6.02	0.402	4.71e6	8675	542.7	5.29e6	6495	815.2	bd	bd
8	2378-TCDF	1.54e5	2.00e5	3.54e5	31.12	1.00	0.77	NO	10.235	0.941	0.919	3.95	0.0336	2.56e6	3024	846.5	3.48e6	4804	724.9	bb	bd
9	12378-PeCDF	8.25e5	5.37e5	1.36e6	33.65	1.00	1.54	NO	50.809	0.890	0.875	5.04	0.111	1.88e7	17249	1088.6	1.21e7	10416	1163.9	bd	bd
10	23478-PeCDF	9.34e5	6.01e5	1.54e6	34.27	1.02	1.55	NO	51.121	1.003	0.981	5.60	0.0990	2.24e7	17249	1300.6	1.42e7	10416	1365.0	bb	bb
11	123478-HxCDF	6.46e5	5.27e5	1.17e6	36.39	1.00	1.22	NO	51.828	0.957	0.923	3.03	0.180	1.34e7	18240	735.5	1.10e7	12351	887.8	bd	bd
12	123678-HxCDF	7.65e5	6.03e5	1.37e6	36.49	1.00	1.27	NO	52.476	1.116	1.063	3.79	0.156	1.39e7	18240	760.1	1.13e7	12351	913.1	dd	db
13	234678-HxCDF	6.84e5	5.56e5	1.24e6	36.98	1.01	1.23	NO	53.185	1.012	0.951	5.60	0.174	1.35e7	18240	737.4	1.09e7	12351	884.3	bd	bd
14	123789-HxCDF	5.54e5	4.40e5	9.94e5	37.79	1.04	1.26	NO	53.999	0.811	0.751	5.76	0.221	9.13e6	18240	500.7	7.24e6	12351	586.0	bd	bd
15	1234678-HpCDF	5.12e5	4.92e5	1.00e6	39.31	1.00	1.04	NO	50.363	1.228	1.219	4.36	0.160	7.97e6	10245	778.3	7.88e6	10217	771.7	bb	bd
16	1234789-HpCDF	3.80e5	3.66e5	7.46e5	41.30	1.05	1.04	NO	50.633	0.913	0.902	6.73	0.217	4.92e6	10245	480.6	4.81e6	10217	470.6	bd	bd
17	OCDF	5.48e5	6.14e5	1.16e6	45.31	1.01	0.89	NO	102.024	1.211	1.187	8.35	0.390	5.69e6	7683	740.6	6.21e6	10124	613.0	bd	bd
18	13C-2378-TCDC	1.10e6	1.40e6	2.50e6	31.65	1.01	0.78	NO	100.148	1.065	1.064	4.24	0.0842	2.38e7	9144	2601.7	3.00e7	6642	4515.9	bb	bb
19	13C-12378-PeCDD	1.10e6	6.91e5	1.79e6	34.45	1.10	1.59	NO	98.436	0.763	0.775	10.87	0.0882	2.38e7	7351	3234.9	1.49e7	4704	3169.5	bb	bb
20	13C-123678-HxCDD	1.04e6	8.27e5	1.86e6	37.19	0.99	1.25	NO	99.978	1.162	1.162	1.48	0.218	1.76e7	13809	1272.5	1.42e7	13312	1066.3	dd	dd
21	13C-1234678-HpCDD	5.91e5	5.76e5	1.17e6	40.59	1.08	1.03	NO	97.340	0.728	0.748	3.63	0.239	8.51e6	8788	968.0	8.11e6	10392	780.4	bd	bd
22	13C-OCDD	9.09e5	1.01e6	1.92e6	44.98	1.20	0.90	NO	95.950	0.598	0.611	5.45	0.309	9.10e6	9859	923.3	1.04e7	10351	1003.3	bd	bd
23	13C-2378-TCDF	1.65e6	2.12e6	3.77e6	31.10	1.00	0.78	NO	103.004	1.606	1.560	2.51	0.0853	2.78e7	15056	1843.7	3.57e7	8396	4257.6	bb	bb
24	13C-12378-PeCDF	1.85e6	1.21e6	3.06e6	33.64	1.08	1.52	NO	98.873	1.305	1.320	7.27	0.133	4.30e7	16798	2558.9	2.71e7	14217	1902.9	bb	bd
25	13C-123678-HxCDF	8.39e5	1.61e6	2.45e6	36.48	0.97	0.52	NO	98.874	1.528	1.546	1.08	0.203	1.58e7	15932	990.7	3.01e7	17770	1695.0	db	db
26	13C-1234678-HpCDF	4.95e5	1.14e6	1.63e6	39.29	1.05	0.43	NO	100.557	1.020	1.014	3.18	0.222	7.92e6	11544	685.8	1.75e7	12641	1385.1	bb	bd
27	13C-123478-TCDC	1.04e6	1.30e6	2.35e6	31.25	0.00	0.80	NO	100.000	1.000	0.00	0.0896	1.96e7	9144	2142.5	2.36e7	6642	3558.0	bb	bb	
28	13C-123789-HxCDD	8.99e5	7.05e5	1.60e6	37.44	0.00	1.27	NO	100.000	1.000	0.00	0.253	1.50e7	13809	1088.0	1.20e7	13312	898.5	dd	dd	
29	13C-2378-TCDC (SS)	2.61e5	2.61e5	3.16e5	31.67	1.00			10.290	1.044	1.015	3.92	0.0174	5.61e6	3843	1459.8		bb			
30	13C-23478-PeCDF (SS)	1.89e6	1.20e6	3.09e6	34.26	1.02	1.57	NO	102.074	1.011	0.990	2.51	0.110	4.55e7	16798	2706.2	2.88e7	14217	2022.3	db	db
31	13C-123478-HxCDF (SS)	6.84e5	1.34e6	2.03e6	36.38	1.00	0.51	NO	101.023	0.827	0.819	1.96	0.223	1.40e7	15932	877.6	2.73e7	17770	1537.5	bd	bd
32	13C-123478-HxCDD (SS)	8.60e5	6.74e5	1.53e6	37.11	1.00	1.28	NO	98.779	0.824	0.834	1.28	0.257	1.72e7	13809	1244.5	1.33e7	13312	1002.5	bd	bd
33	13C-1234789-HpCDF (SS)	3.57e5	7.99e5	1.16e6	41.29	1.05	0.45	NO	98.896	0.708	0.715	3.16	0.323	4.76e6	11544	412.6	1.04e7	12641	822.4	bd	bd

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

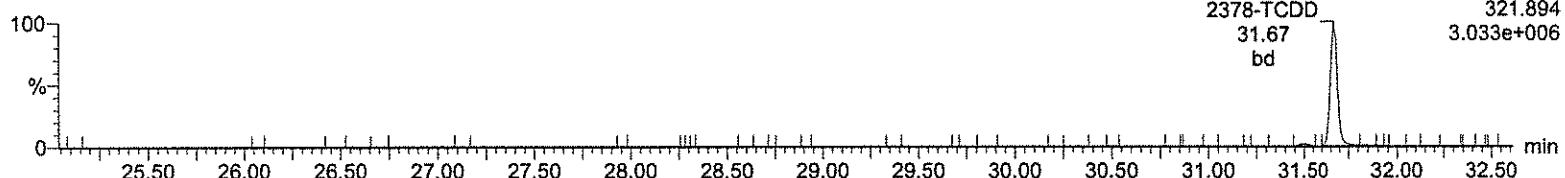
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A18AUG18A-6



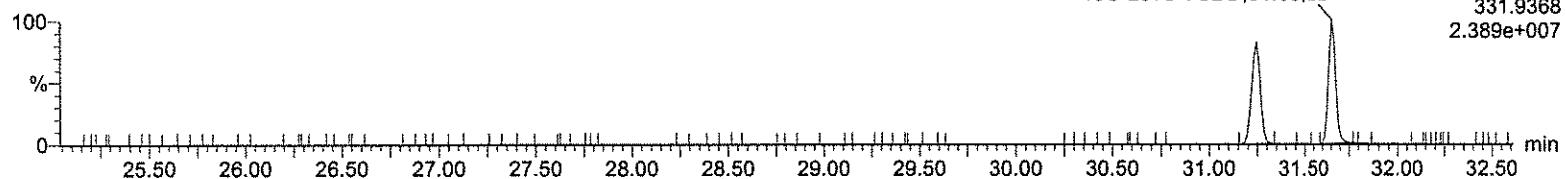
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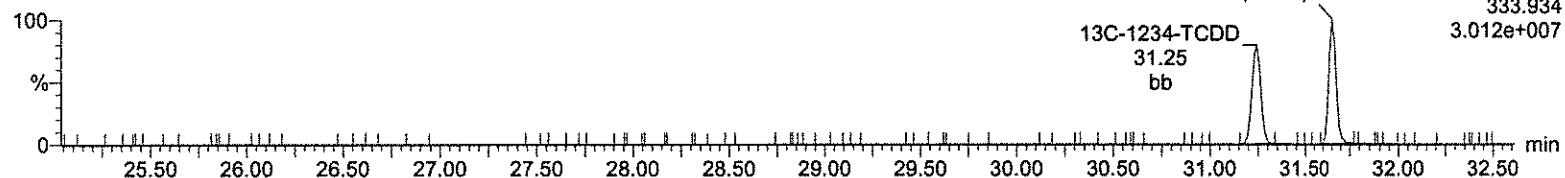
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A18AUG18A-6



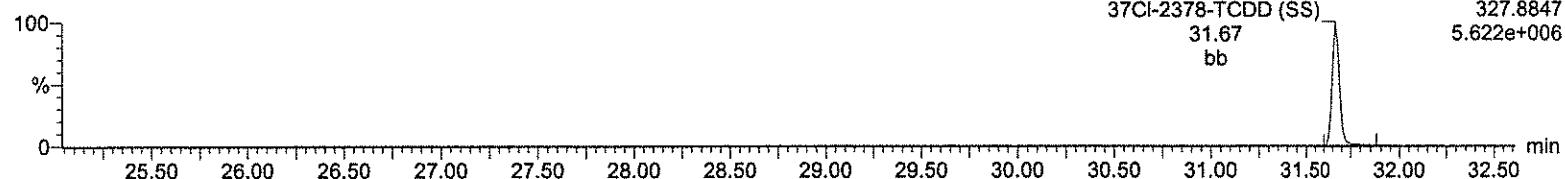
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A18AUG18A-6



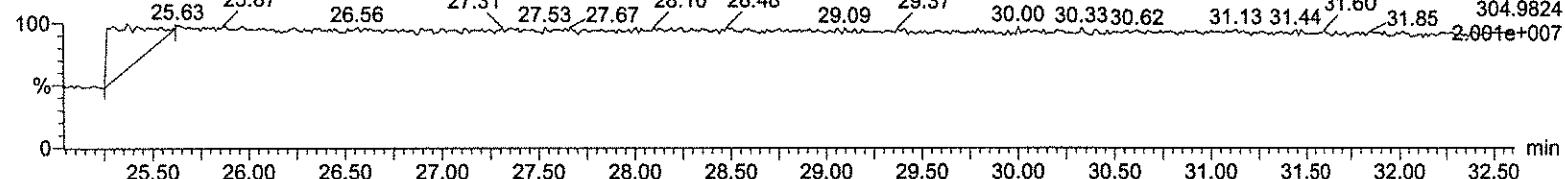
#### 37Cl-2378-TCDD (SS)

A18AUG18A-6



#### Lock Mass F1

A18AUG18A-6



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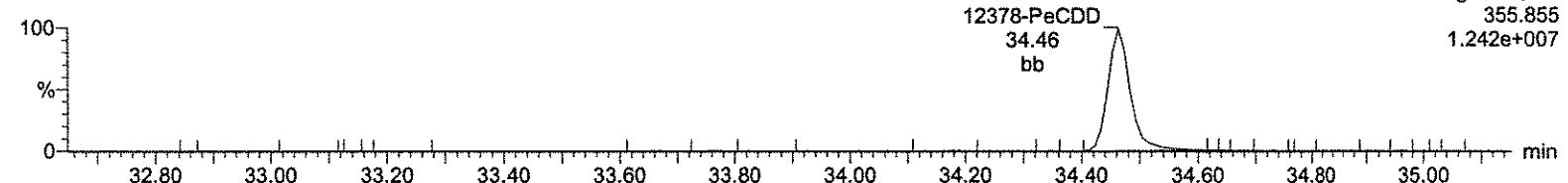
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Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

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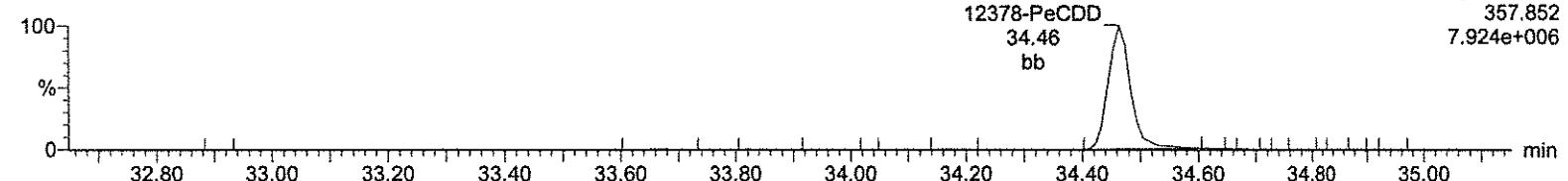
### Total-pentadioxins

A18AUG18A-6



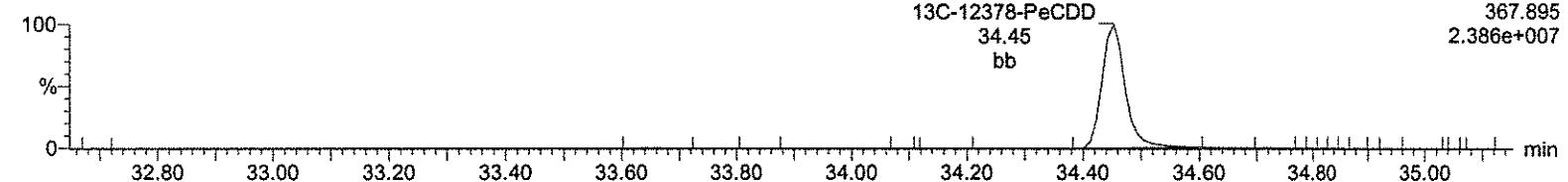
### Total-pentadioxins

A18AUG18A-6



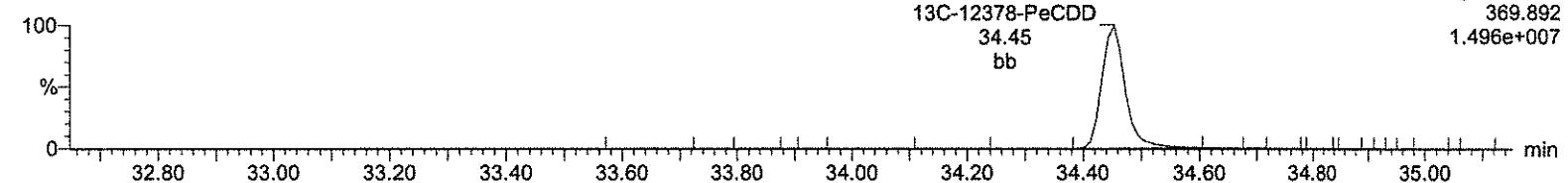
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A18AUG18A-6



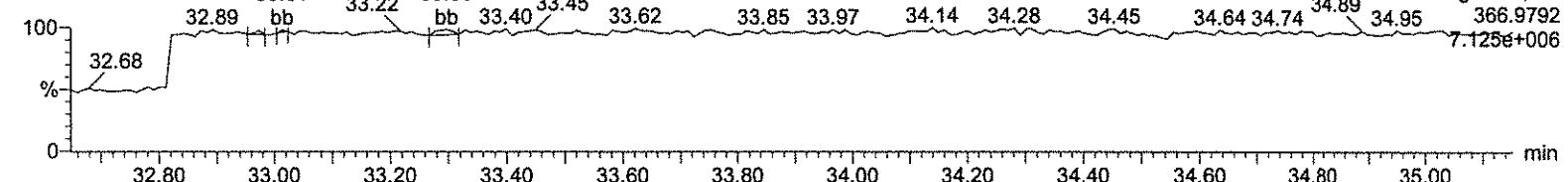
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A18AUG18A-6



### Lock Mass F2

A18AUG18A-6



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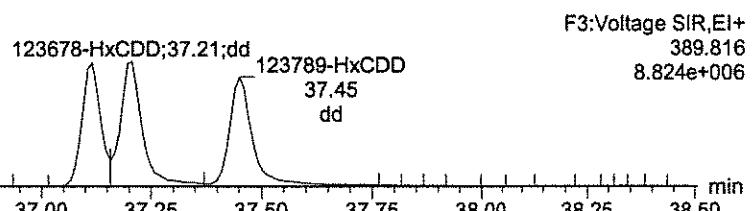
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Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

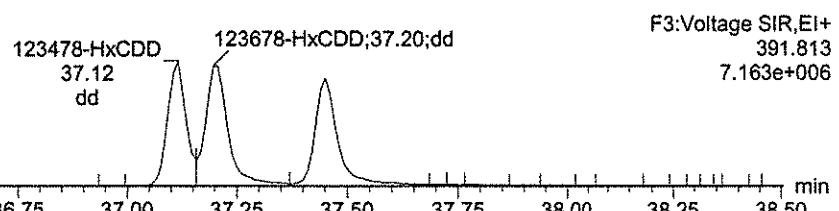
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A18AUG18A-6



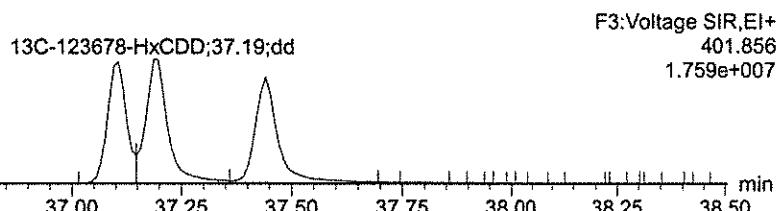
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A18AUG18A-6



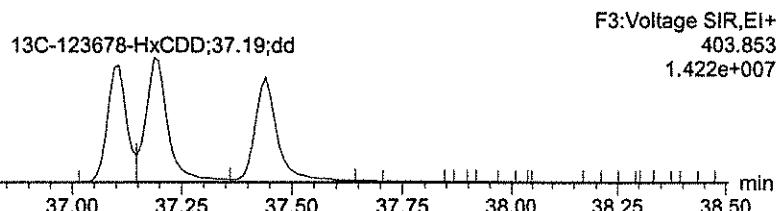
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A18AUG18A-6



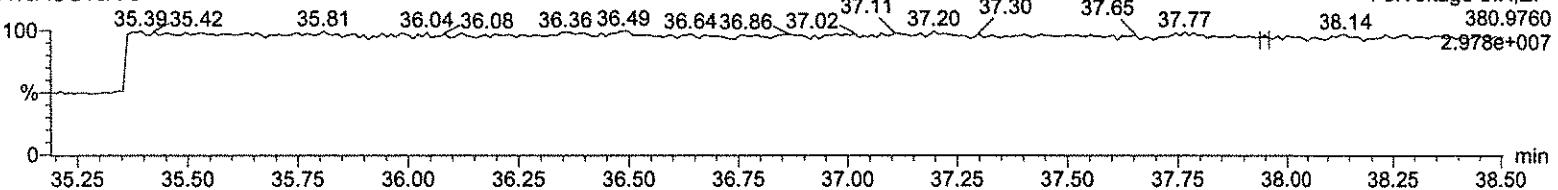
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A18AUG18A-6



### Lock Mass F3

A18AUG18A-6



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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

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Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

Total-heptadioxins

A18AUG18A-6

F4:Voltage SIR,El+

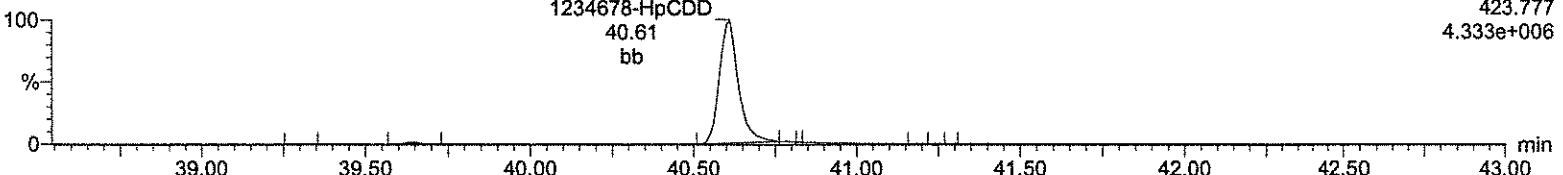
423.777

4.333e+006

1234678-HpCDD

40.61

bb



Total-heptadioxins

A18AUG18A-6

F4:Voltage SIR,El+

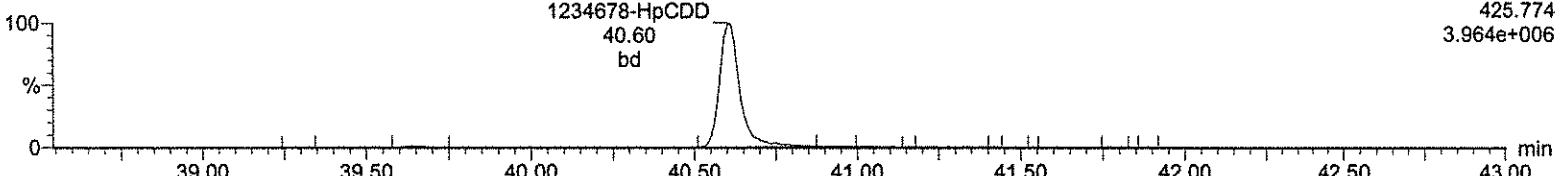
425.774

3.964e+006

1234678-HpCDD

40.60

bd



13C-1234678-HpCDD

A18AUG18A-6

F4:Voltage SIR,El+

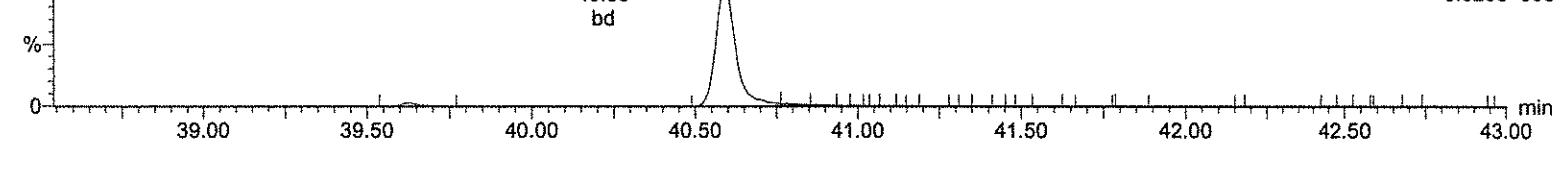
435.817

8.525e+006

13C-1234678-HpCDD

40.59

bd



13C-1234678-HpCDD

A18AUG18A-6

F4:Voltage SIR,El+

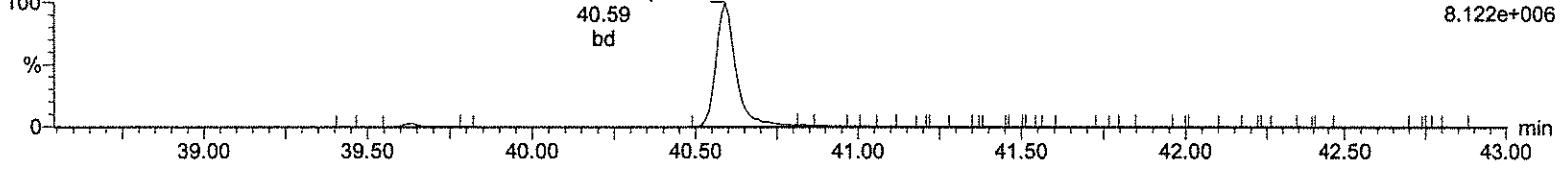
437.814

8.122e+006

13C-1234678-HpCDD

40.59

bd



Lock Mass F4

A18AUG18A-6

F4:Voltage SIR,El+

430.9728

1.802e+007

38.79 38.83

39.16 39.26

39.68

39.98 40.20

40.43

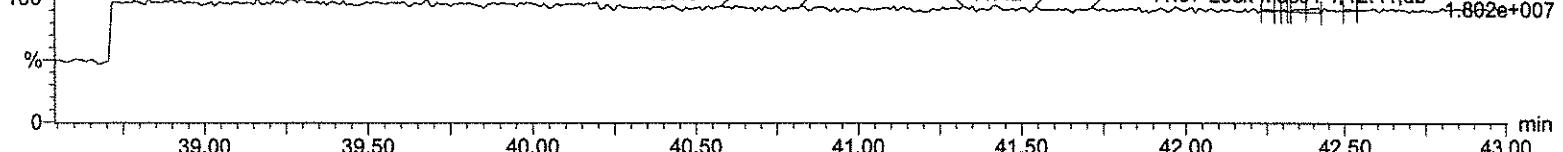
40.58 40.82

41.32

41.42 41.54

41.72 41.97

Lock Mass F4;42.41;db



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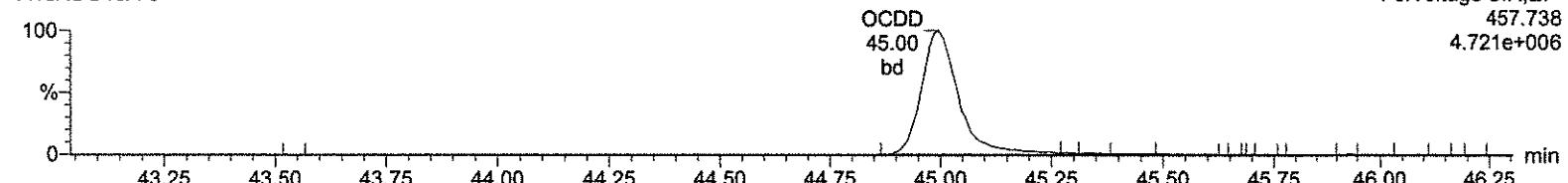
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Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

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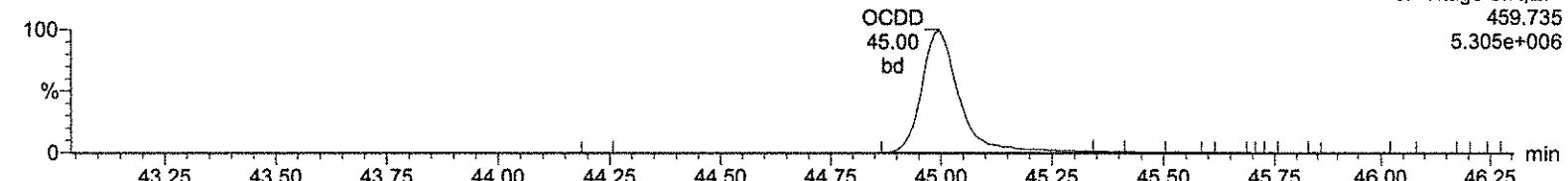
OCDD

A18AUG18A-6



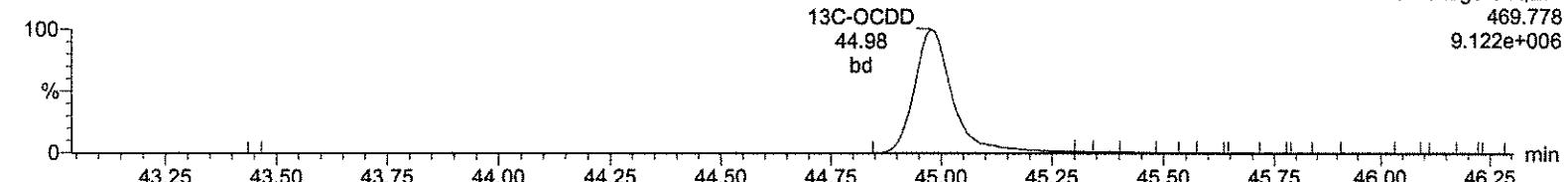
OCDD

A18AUG18A-6



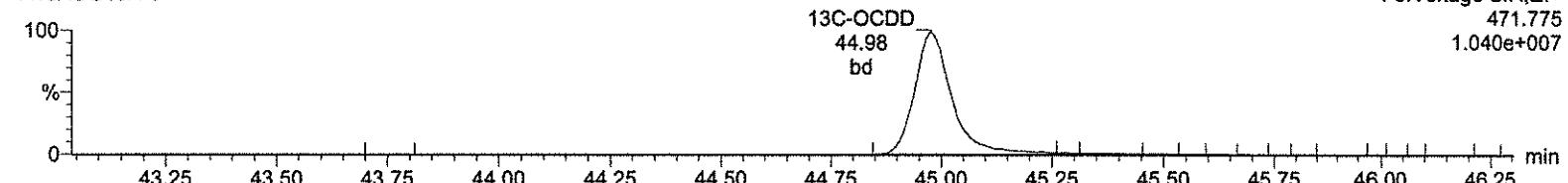
13C-OCDD

A18AUG18A-6



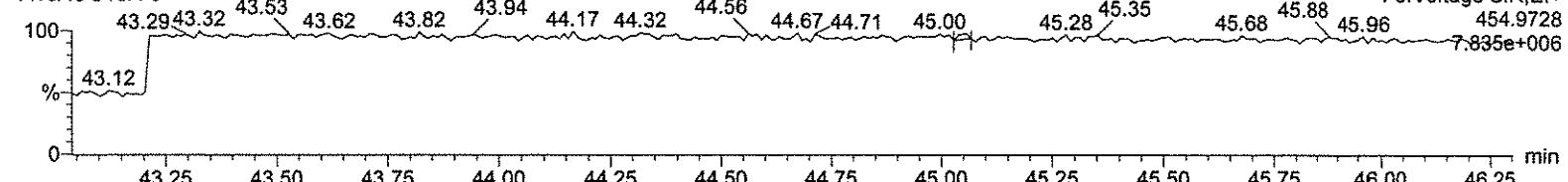
13C-OCDD

A18AUG18A-6



Lock Mass F5

A18AUG18A-6



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

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Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

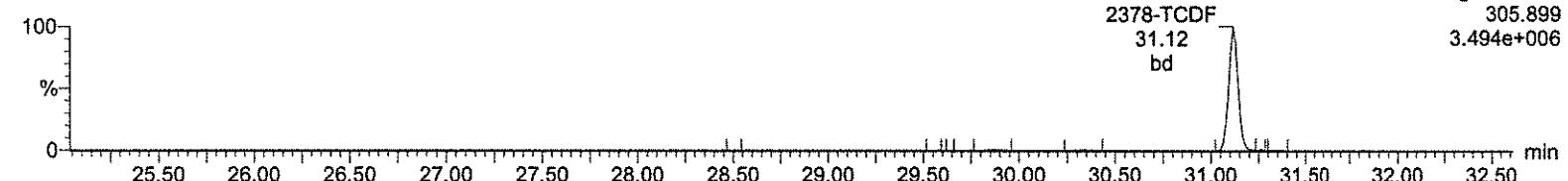
#### Total-tetrafurans

A18AUG18A-6



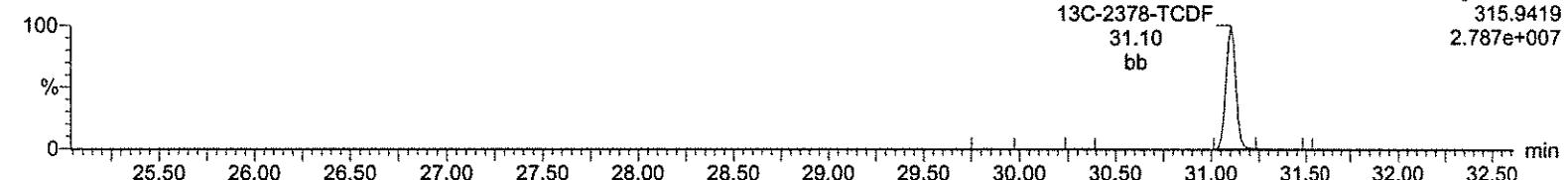
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A18AUG18A-6



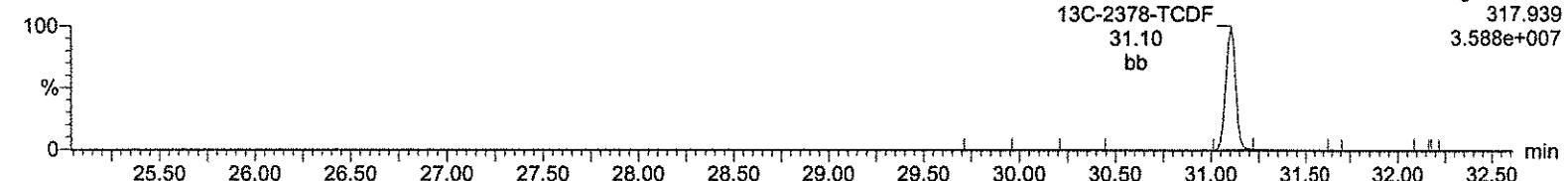
#### 13C-2378-TCDF

A18AUG18A-6



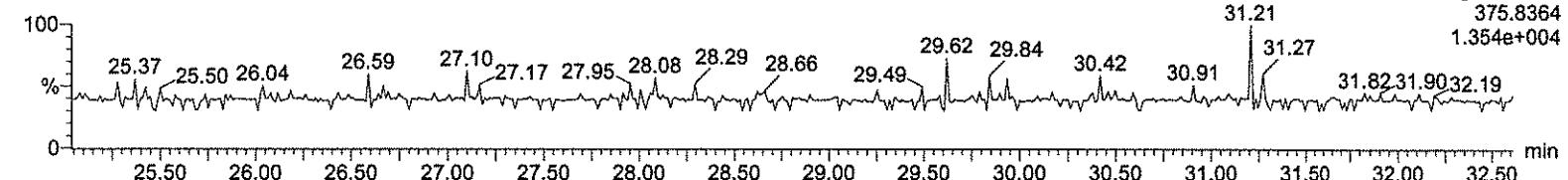
#### 13C-2378-TCDF

A18AUG18A-6



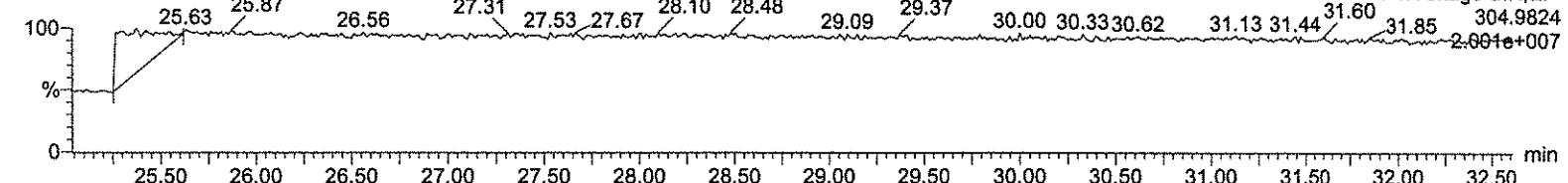
#### HxDPE

A18AUG18A-6



#### Lock Mass F1

A18AUG18A-6



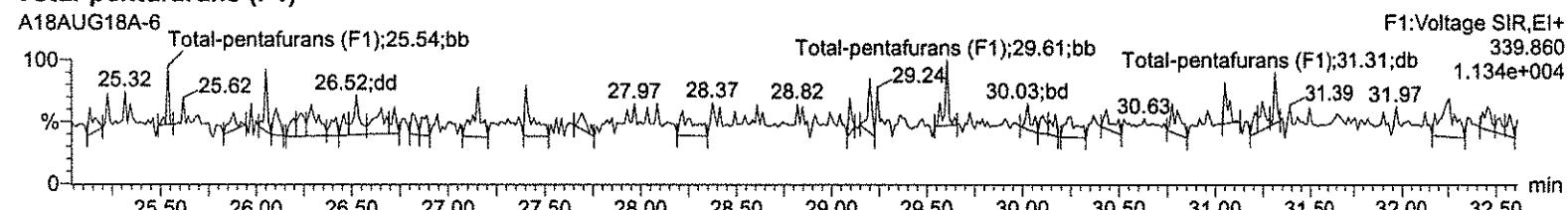
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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

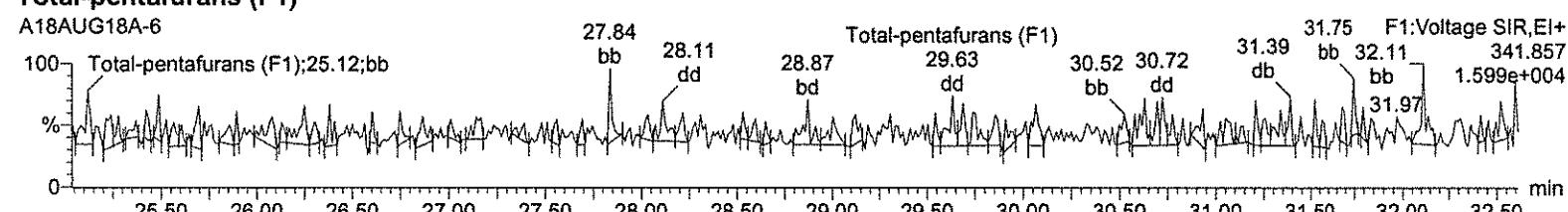
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

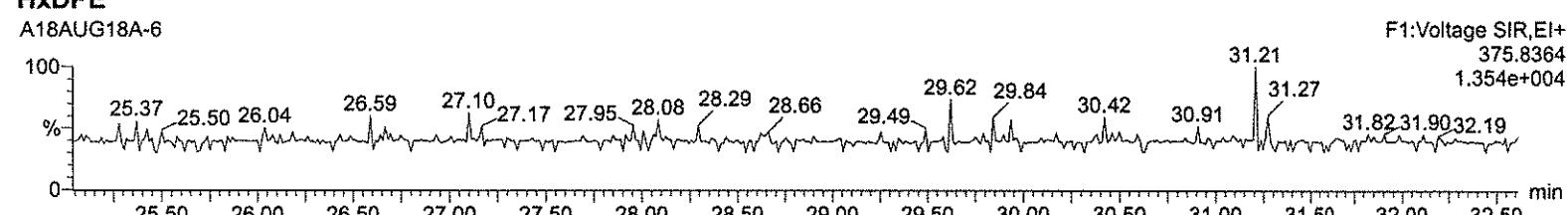
### Total-pentafurans (F1)



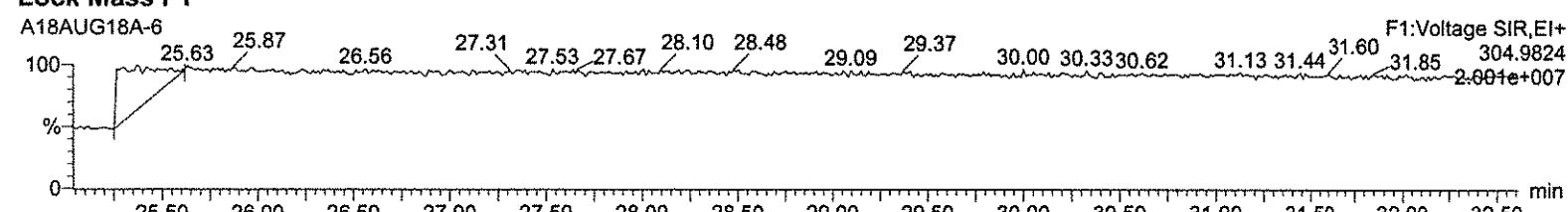
### Total-pentafurans (F1)



### HxDPE



### Lock Mass F1



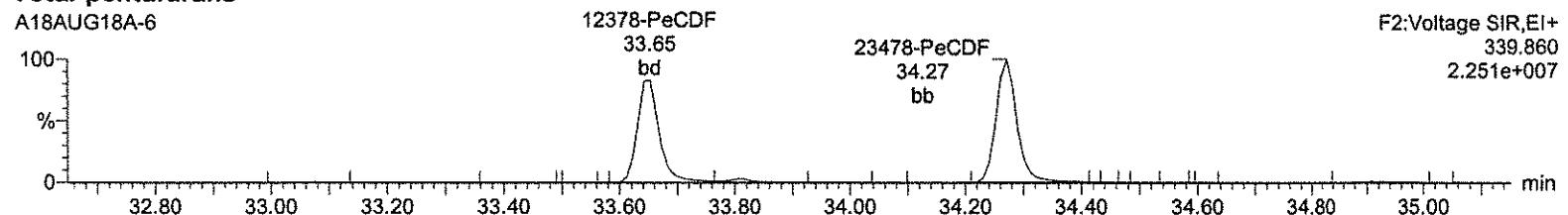
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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

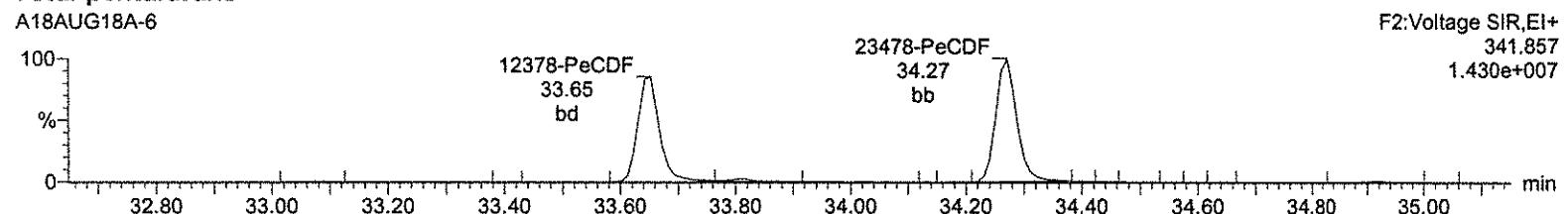
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

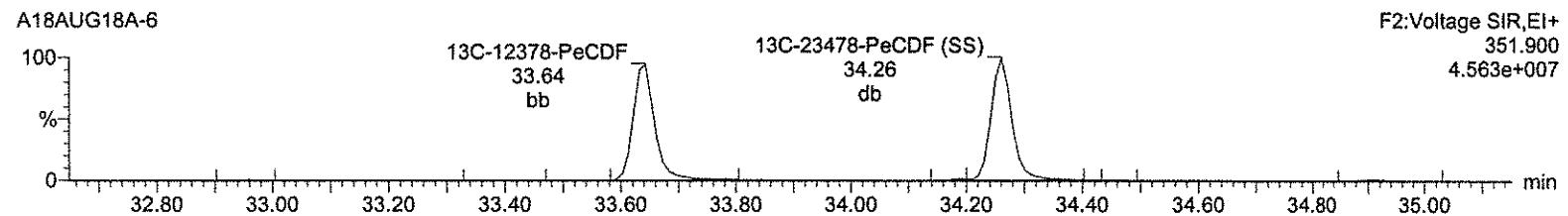
#### Total-pentafurans



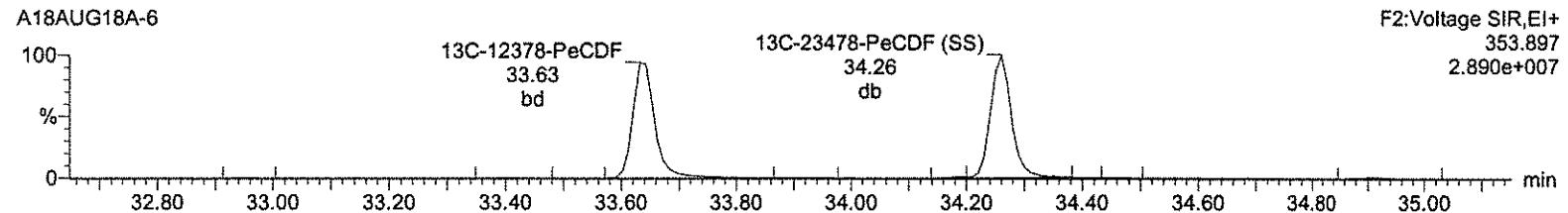
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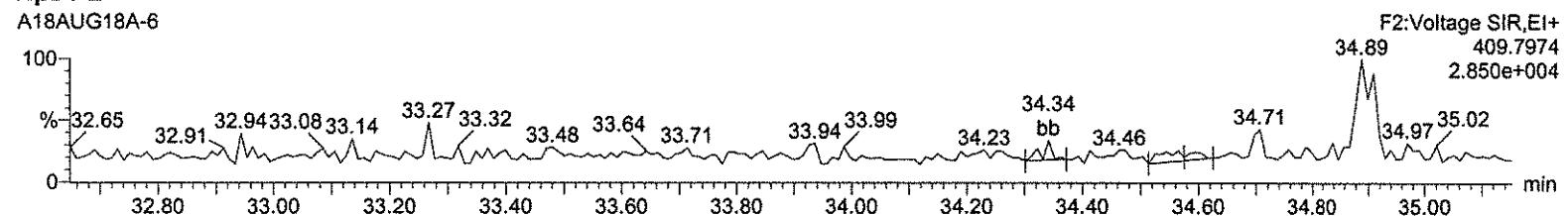
#### 13C-12378-PeCDF



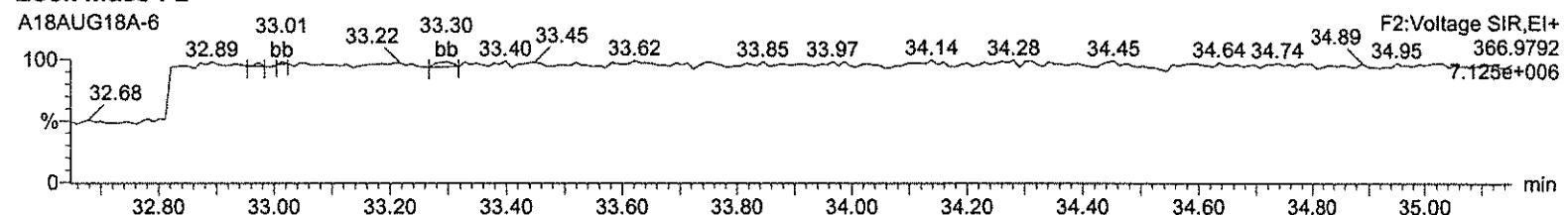
#### 13C-12378-PeCDF



#### HpDPE



#### Lock Mass F2



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

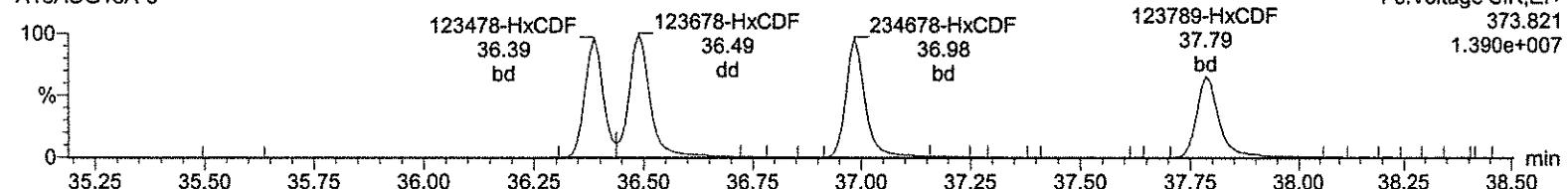
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

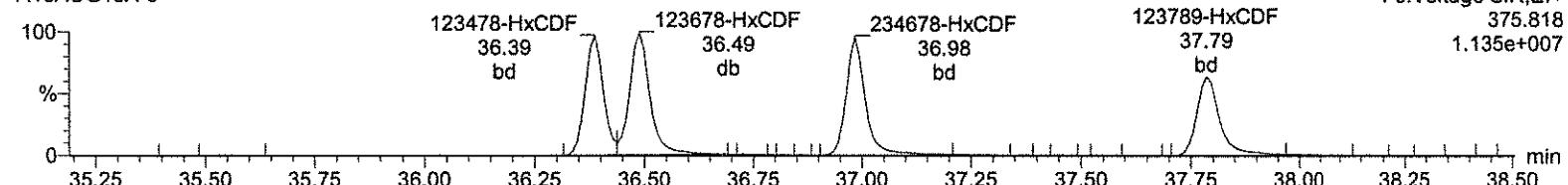
### Total-hexafurans

A18AUG18A-6



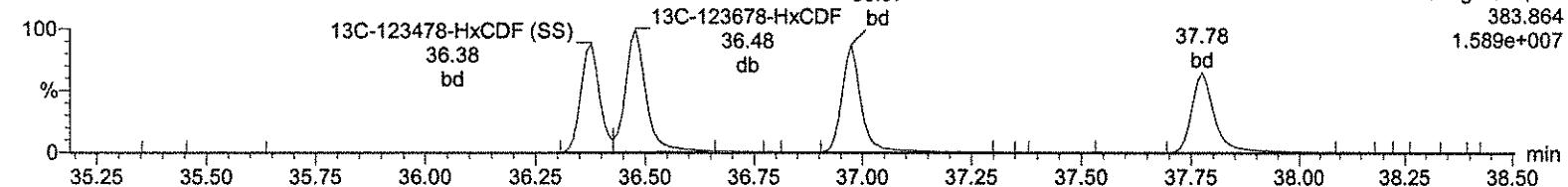
### Total-hexafurans

A18AUG18A-6



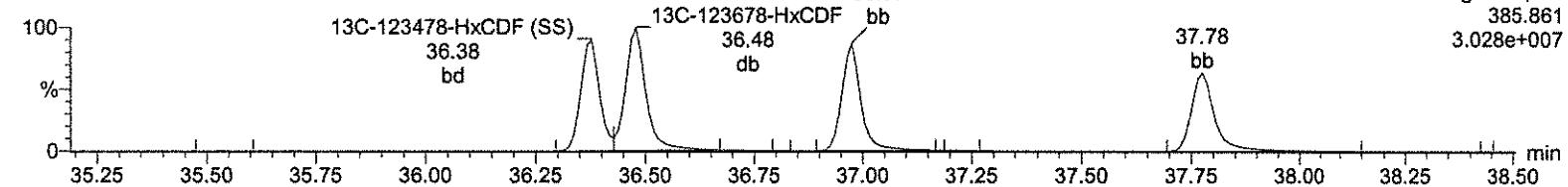
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A18AUG18A-6



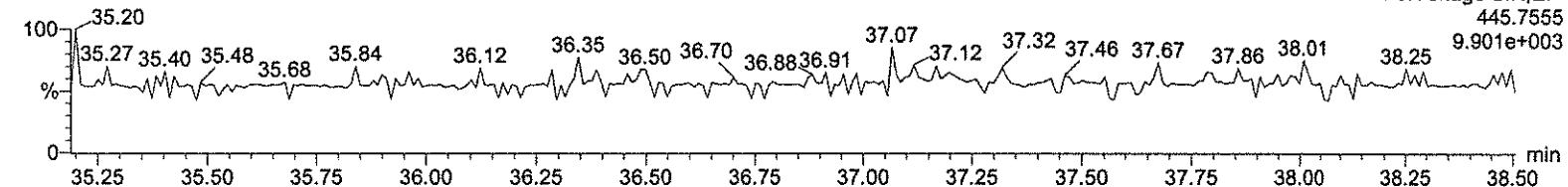
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A18AUG18A-6



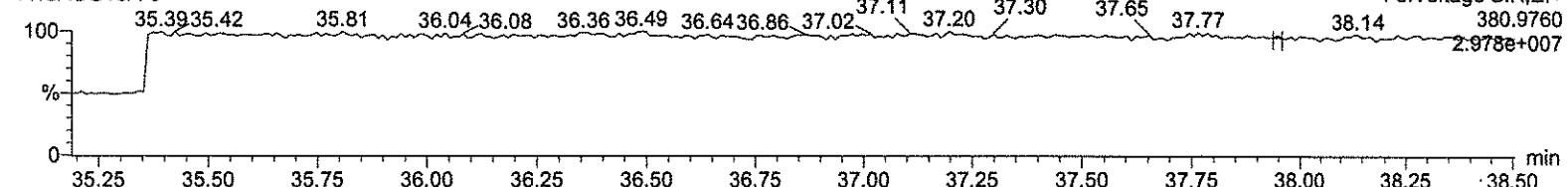
### OcDPE

A18AUG18A-6



### Lock Mass F3

A18AUG18A-6



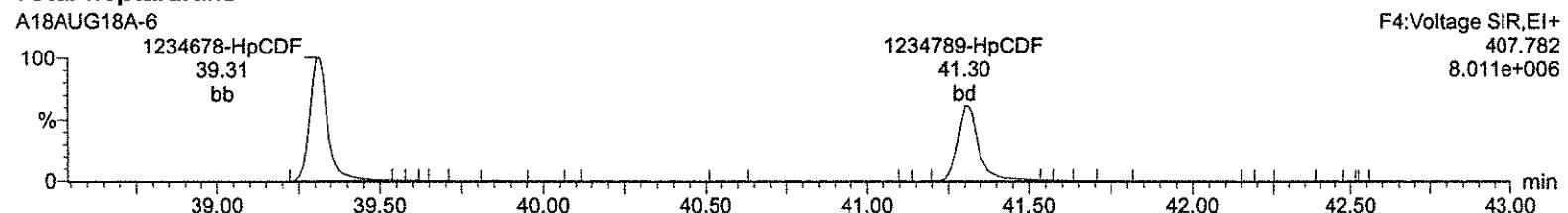
Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

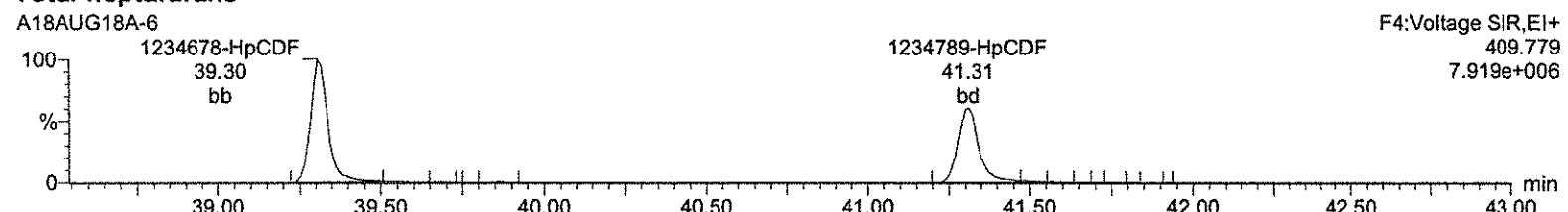
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

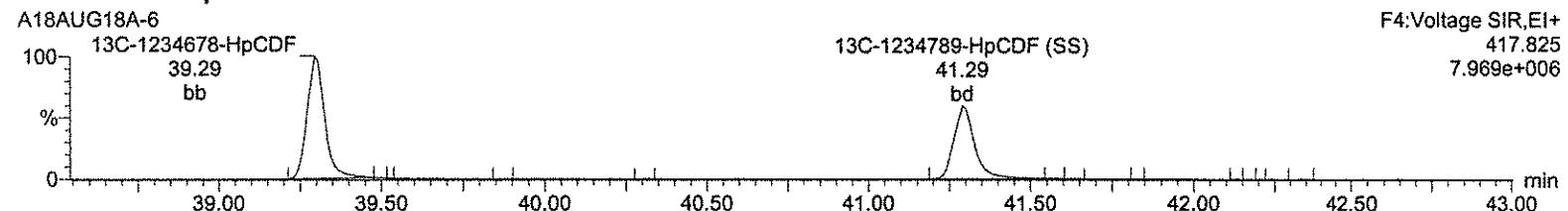
### Total-heptafurans



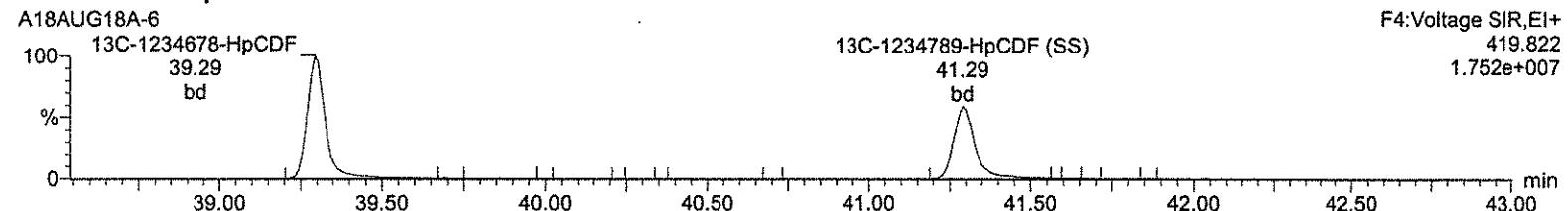
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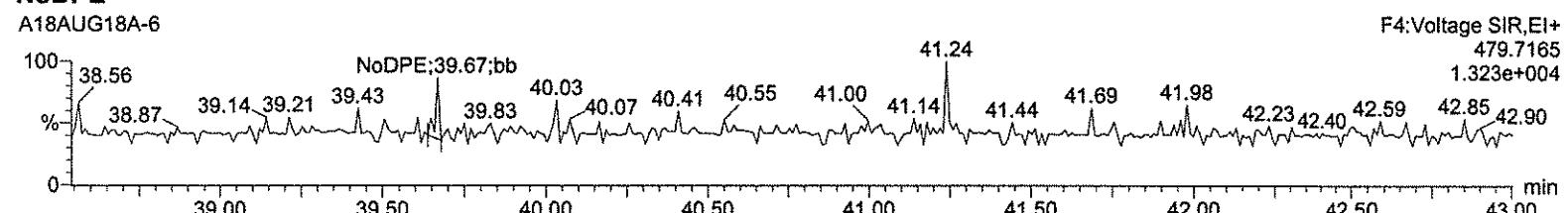
### 13C-1234678-HpCDF



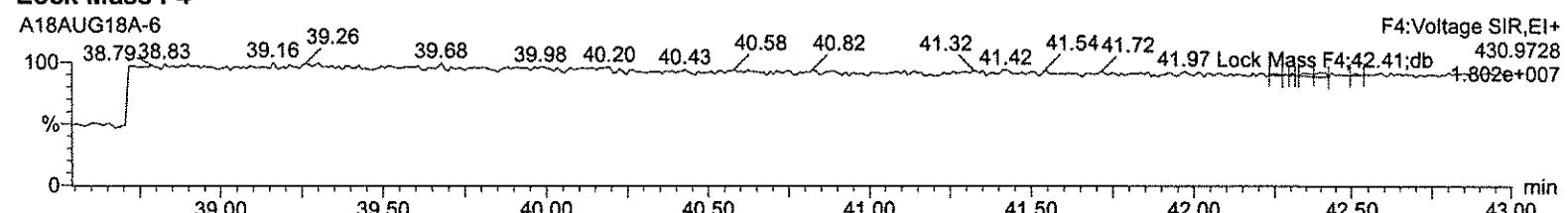
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### NoDPE



### Lock Mass F4



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

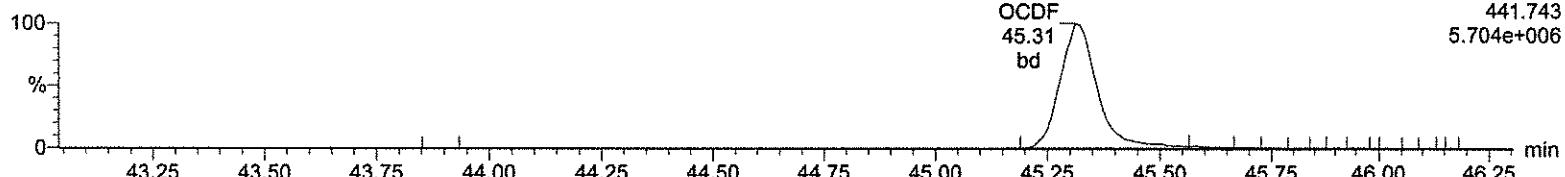
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-6, Date: 18-Aug-2018, Time: 12:42:30, ID: CS3 UD180112-05 CS3FX, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

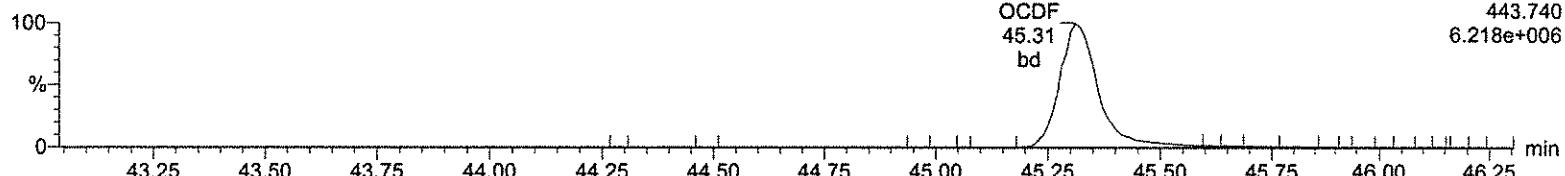
#### OCDF

A18AUG18A-6



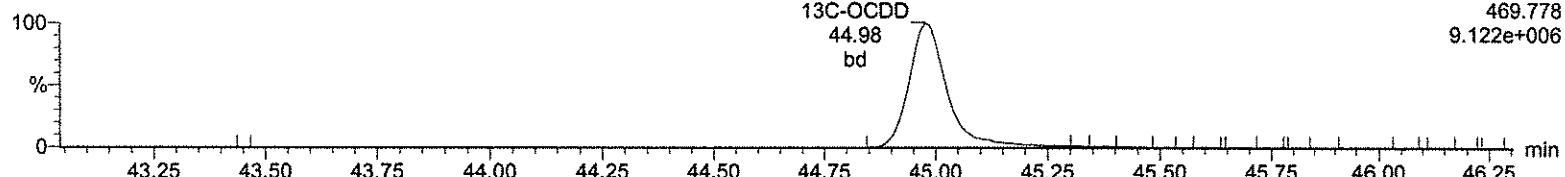
#### OCDF

A18AUG18A-6



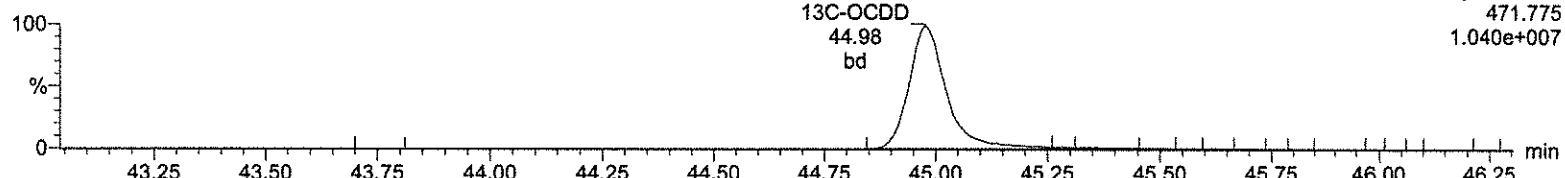
#### 13C-OCDD

A18AUG18A-6



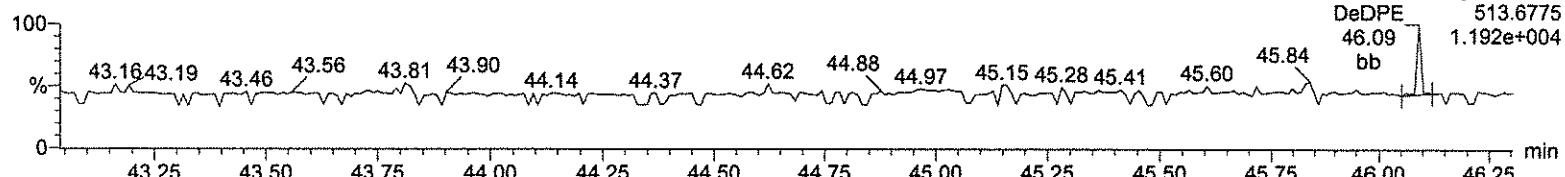
#### 13C-OCDD

A18AUG18A-6



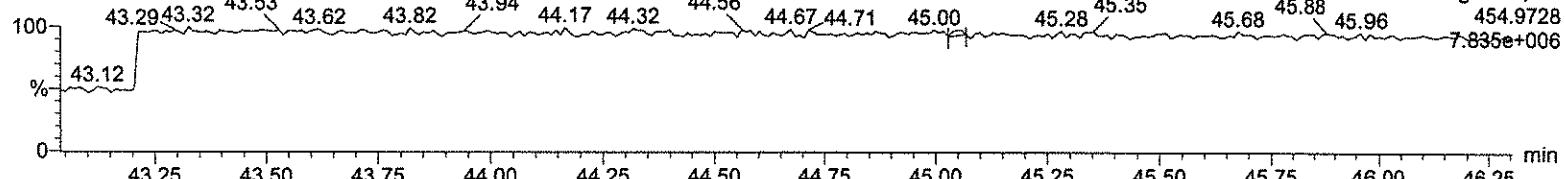
#### DeDPE

A18AUG18A-6



#### Lock Mass F5

A18AUG18A-6



## Quantify Sample Summary Report

## MassLynx 4.1

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default\pro\ICAL\_Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time  
Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: Job: A18AUG18A, Task: HRP750\_2, User: MJC

#	Name	Ion1 Area	Ion2 Area	Response	RT	RRT	pg/uL	RFU	Mean	RSD	EDL	Height	Noise1	S/N1	Height2	Noise2	S/N2	M	M2	
1	2378-TCD	4.47e5	5.60e5	1.01e6	31.68	1.00	0.80	NO	41.854	1.011	0.966	4.50	0.0396	1.03e7	4452	2317.0	1.28e7	3892	3294.2	bb
2	12378-PeCDD	2.31e6	1.49e6	3.80e6	34.47	1.00	1.55	NO	207.076	1.011	0.977	4.38	0.114	5.57e7	9864	5648.7	3.59e7	9895	3629.2	bb
3	123478-HxCDD	1.82e6	1.47e6	3.29e6	37.13	1.00	1.24	NO	200.899	0.823	0.820	2.97	0.267	3.86e7	19535	1973.4	3.05e7	11337	2689.4	bd
4	123678-HxCDD	2.23e6	1.78e6	4.02e6	37.22	1.00	1.25	NO	206.727	1.004	0.971	3.86	0.225	3.97e7	19555	2034.6	3.16e7	11337	2790.3	dd
5	123789-HxCDD	1.96e6	1.58e6	3.55e6	37.46	1.01	1.24	NO	205.800	0.886	0.861	4.53	0.254	3.34e7	19535	1710.6	2.72e7	11337	2395.9	dd
6	1234678-HpCDD	1.26e6	1.21e6	2.48e6	40.62	1.00	1.04	NO	214.924	1.026	0.955	7.65	0.473	1.74e7	15463	1124.7	1.69e7	14006	1204.6	bd
7	OCDD	1.90e6	2.16e6	4.06e6	45.01	1.00	0.88	NO	421.238	1.033	0.981	6.02	0.631	2.03e7	10669	1901.5	2.32e7	15103	1534.1	bd
8	2378-TCDF	5.93e5	7.85e5	1.38e6	31.13	1.00	0.76	NO	40.931	0.940	0.919	3.95	0.0362	1.09e7	3199	3405.4	1.46e7	5320	2747.9	bb
9	12378-PeCDF	3.46e6	2.25e6	5.71e6	33.66	1.00	1.54	NO	206.777	0.905	0.875	5.04	0.168	8.29e7	25015	3314.5	5.31e7	18338	2896.2	bd
10	23478-PeCDF	3.90e6	2.52e6	6.42e6	34.28	1.02	1.55	NO	207.717	1.019	0.981	5.60	0.150	9.92e7	25015	3964.8	6.44e7	18338	3512.5	bb
11	123478-HxCDF	2.73e6	2.25e6	4.98e6	36.40	1.00	1.22	NO	204.919	0.946	0.923	3.03	0.253	6.00e7	24365	2462.2	4.90e7	22573	2169.5	bd
12	123678-HxCDF	3.16e6	2.64e6	5.80e6	36.50	1.00	1.20	NO	207.026	1.101	1.063	3.79	0.220	6.09e7	24365	2499.3	5.05e7	22573	2235.6	db
13	234678-HxCDF	2.90e6	2.33e6	5.23e6	36.99	1.01	1.25	NO	208.599	0.992	0.951	5.60	0.246	5.79e7	24365	2375.2	4.72e7	22573	2089.3	bd
14	123789-HxCDF	2.25e6	1.82e6	4.07e6	37.80	1.04	1.23	NO	205.931	0.773	0.751	5.76	0.312	3.98e7	24365	1634.7	3.25e7	22573	1440.9	bb
15	1234678-HpCDF	2.08e6	1.99e6	4.07e6	39.32	1.00	1.04	NO	204.424	1.246	1.219	4.36	0.359	3.25e7	24577	1321.7	3.15e7	21679	1454.1	bb
16	1234789-HpCDF	1.55e6	1.54e6	3.09e6	41.32	1.05	1.01	NO	209.632	0.945	0.902	6.73	0.485	2.17e7	24577	882.4	2.08e7	21679	961.3	bb
17	OCDF	2.35e6	2.67e6	5.02e6	45.33	1.01	0.88	NO	430.485	1.278	1.187	8.35	0.432	2.50e7	10324	2419.7	2.74e7	11049	2483.5	bb
18	13C-2378-TCDD	1.09e6	1.40e6	2.49e6	31.67	1.01	0.78	NO	100.238	1.066	1.064	4.24	0.0822	2.39e7	9477	2522.5	3.06e7	5691	5383.3	bb
19	13C-12378-PeCDD	1.16e6	7.24e5	1.88e6	34.46	1.10	1.60	NO	103.789	0.805	0.775	10.87	0.0957	2.73e7	8487	3213.1	1.74e7	4383	3970.4	bb
20	13C-123678-HxCDD	1.12e6	8.80e5	2.00e6	37.24	0.99	1.27	NO	101.371	1.178	1.162	1.48	0.160	1.97e7	11481	1720.2	1.57e7	9518	1652.1	dd
21	13C-1234678-HpCDD	6.18e5	5.89e5	1.21e6	40.60	1.08	1.05	NO	94.995	0.710	0.748	3.63	0.241	8.35e6	8929	935.4	8.14e6	11420	712.7	bd
22	13C-OCDD	9.08e5	1.06e6	1.97e6	44.99	1.20	0.86	NO	189.484	0.578	0.611	5.45	0.334	9.62e6	13278	724.4	1.07e7	9699	1105.2	bb
23	13C-2378-TCDF	1.61e6	2.06e6	3.66e6	31.12	1.00	0.78	NO	100.543	1.568	1.560	2.51	0.0858	2.80e7	15382	1821.7	3.61e7	7825	4619.4	bb
24	13C-12378-PeCDF	1.94e6	1.21e6	3.15e6	33.65	1.08	1.61	NO	102.228	1.349	1.320	7.27	0.111	4.53e7	13101	3458.7	2.92e7	12364	2364.9	bb
25	13C-123678-HxCDF	8.86e5	1.75e6	2.63e6	36.49	0.97	0.51	NO	100.288	1.550	1.546	1.08	0.191	1.69e7	13771	1229.4	3.26e7	19533	1667.4	db
26	13C-1234678-HpCDF	5.02e5	1.13e6	1.63e6	39.30	1.05	0.44	NO	94.795	0.961	1.014	3.18	0.203	8.13e6	10078	807.1	1.75e7	13116	1337.7	bd
27	13C-123478-TCDD	1.03e6	1.30e6	2.34e6	31.26	0.00	0.79	NO	100.000	1.000	1.000	0.00	0.0874	1.92e7	9477	2022.3	2.42e7	5691	4254.1	bb
28	13C-123789-HxCDD	9.48e5	7.51e5	1.70e6	37.45	0.00	1.26	NO	100.000	1.000	1.000	0.00	0.186	1.57e7	11481	1370.1	1.26e7	9518	1327.5	dd
29	37Cl-2378-TCDD (SS)	1.04e6	1.04e6	3.16e6	31.68	1.00	41.151	1.044	1.015	3.92	0.0196	2.40e7	4327	5543.9					bb	
30	13C-23478-PeCDF (SS)	1.92e6	1.23e6	3.15e6	34.27	1.02	1.56	NO	100.849	0.999	0.990	2.51	0.0875	4.79e7	13101	3657.7	3.10e7	12364	2505.4	db
31	13C-123478-HxCDF (SS)	7.17e5	1.40e6	2.12e6	36.39	1.00	0.51	NO	98.299	0.805	0.819	1.96	0.202	1.53e7	13771	1113.5	2.97e7	13116	1521.2	bd
32	13C-123478-HxCDD (SS)	9.20e5	7.19e5	1.64e6	37.12	1.00	1.28	NO	98.225	0.819	0.834	1.28	0.179	1.90e7	11481	1651.1	1.48e7	9518	1551.0	bd
33	13C-1234789-HpCDF (SS)	3.61e5	8.12e5	1.17e6	41.30	1.05	0.44	NO	100.414	0.718	0.715	3.16	0.306	4.82e6	10078	478.3	1.08e7	13116	819.6	bd

Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qd

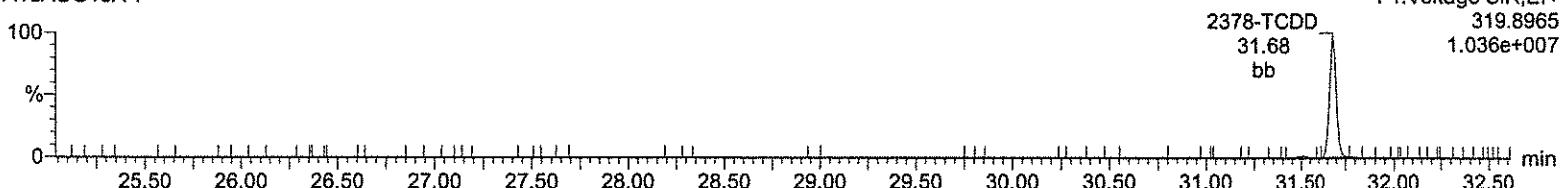
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

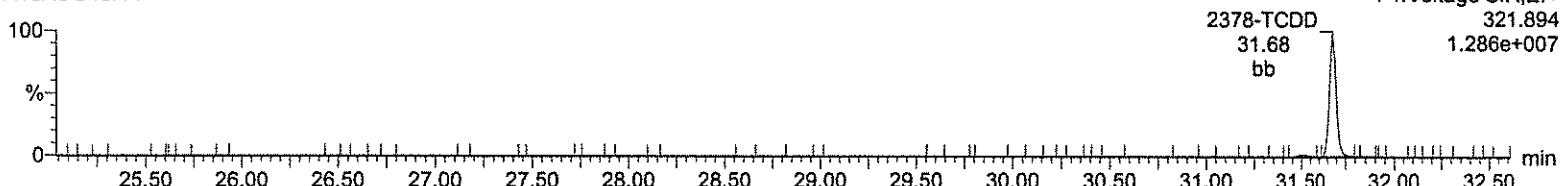
### Total-tetradiioxins

A18AUG18A-7



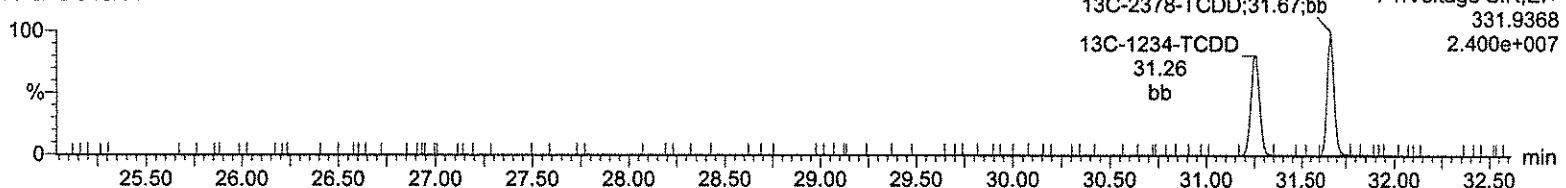
### Total-tetradiioxins

A18AUG18A-7



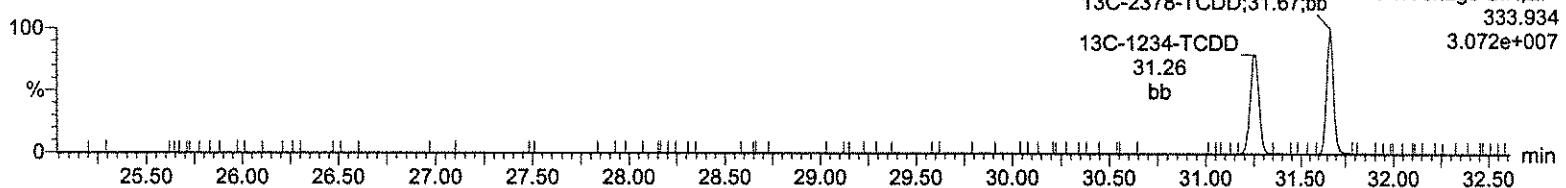
### 13C-2378-TCDD

A18AUG18A-7



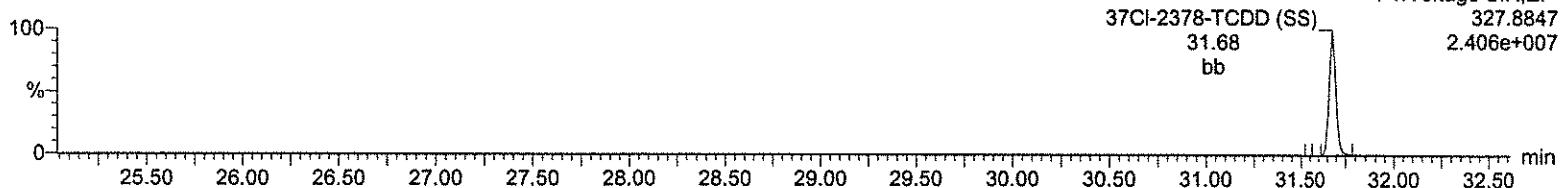
### 13C-2378-TCDD

A18AUG18A-7



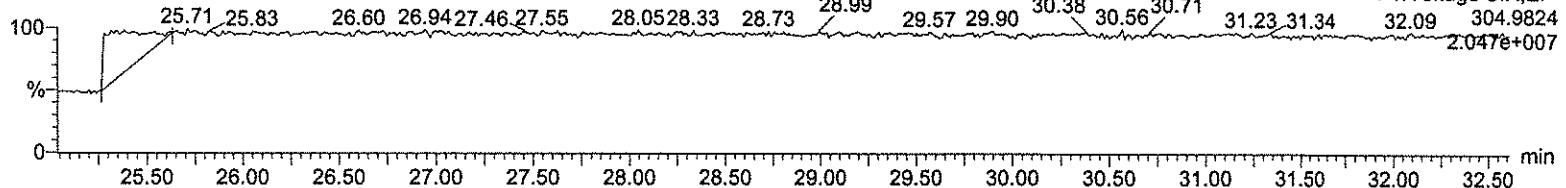
### 37Cl-2378-TCDD (SS)

A18AUG18A-7



### Lock Mass F1

A18AUG18A-7



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

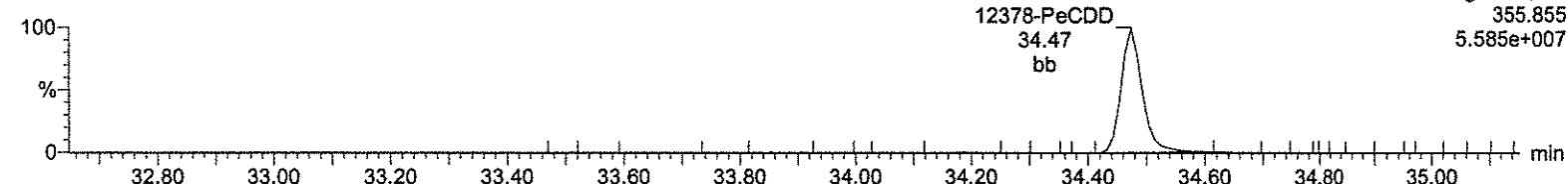
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

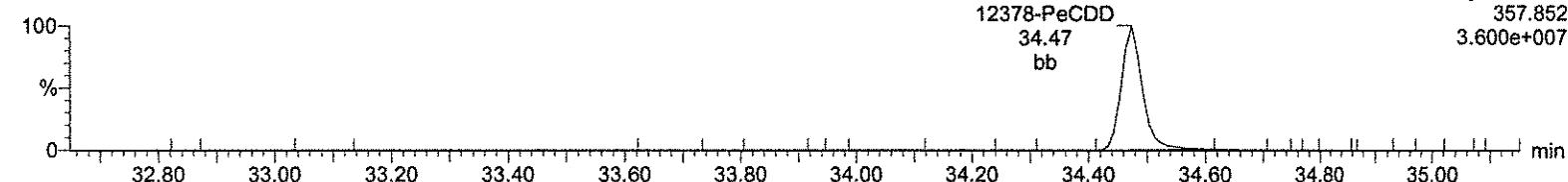
### Total-pentadioxins

A18AUG18A-7



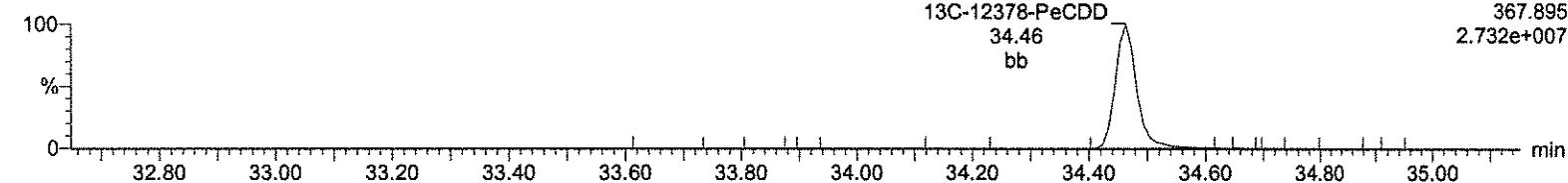
### Total-pentadioxins

A18AUG18A-7



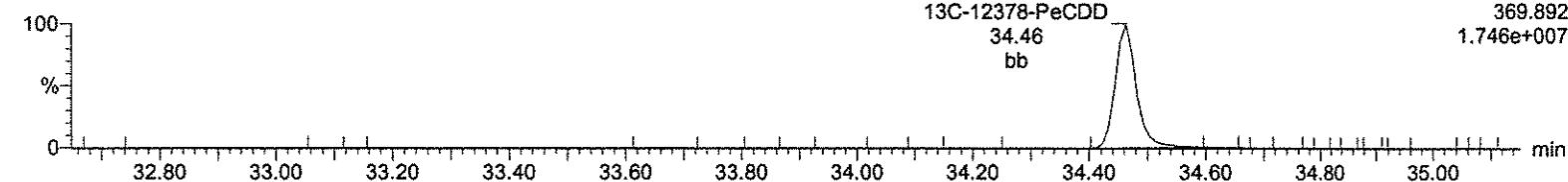
### 13C-12378-PeCDD

A18AUG18A-7



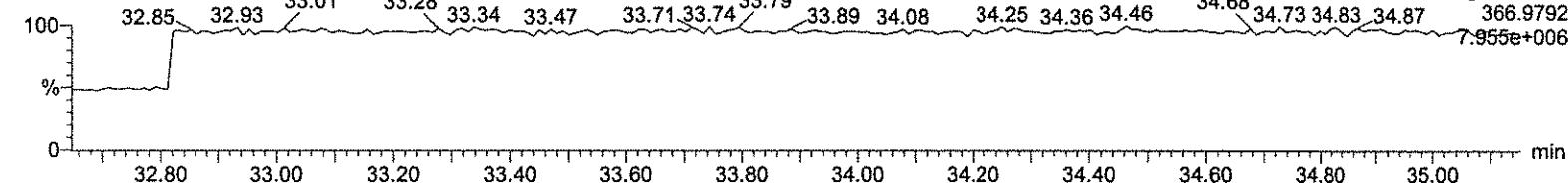
### 13C-12378-PeCDD

A18AUG18A-7



### Lock Mass F2

A18AUG18A-7



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

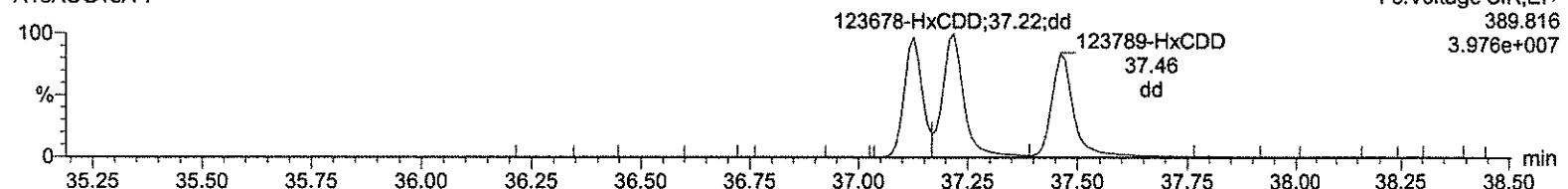
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

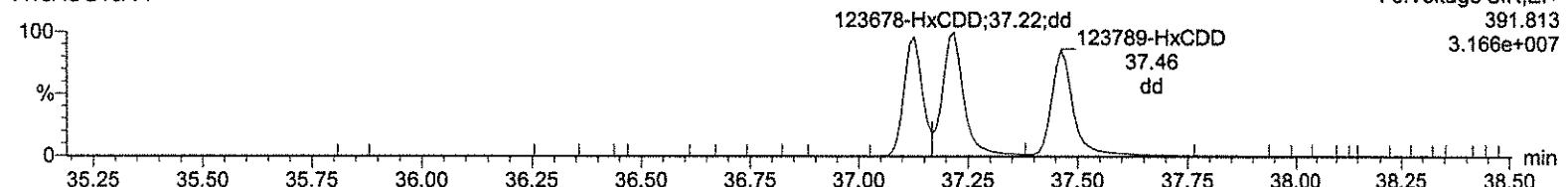
## Total-hexadioxins

A18AUG18A-7



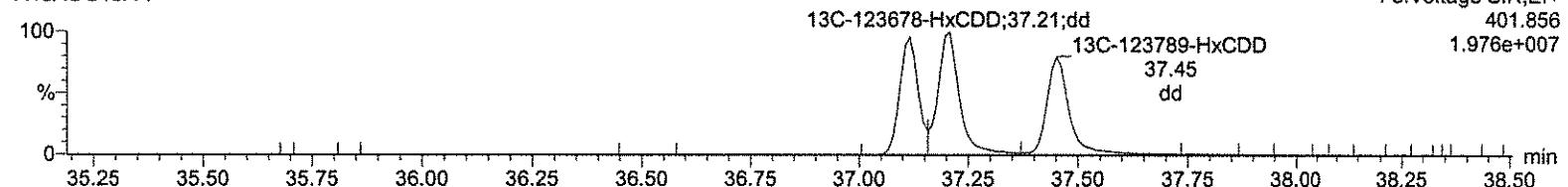
### Total-hexadioxins

A18AUG18A-7



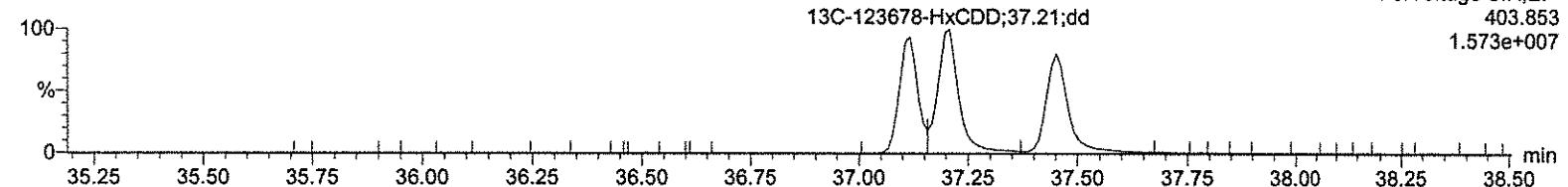
13C-123678-HxCDD

A18AUG18A-7



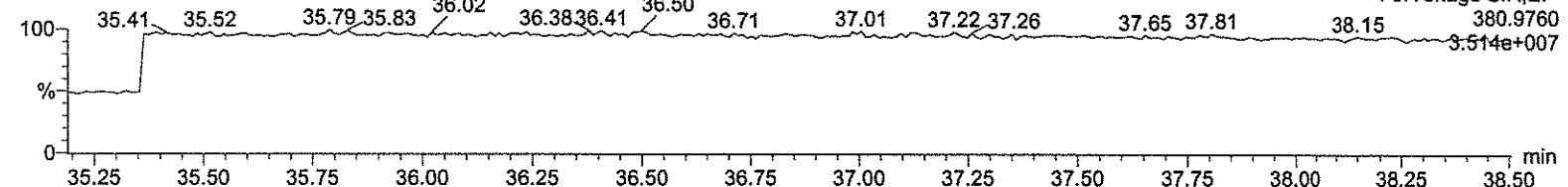
13C-123678-HxCDD

A18AUG18A-7



Lock Mass F3

A18AUG18A-7



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

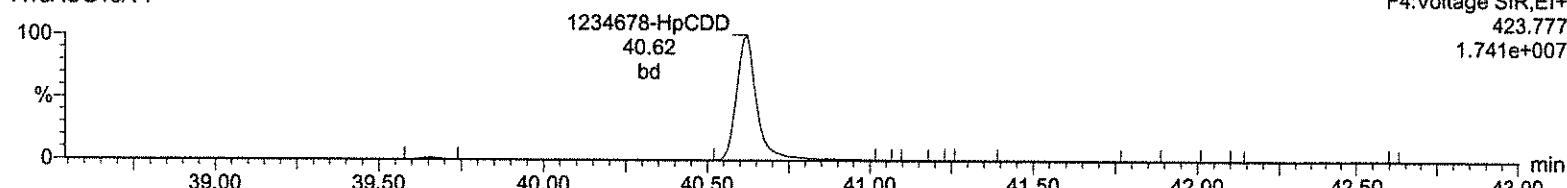
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

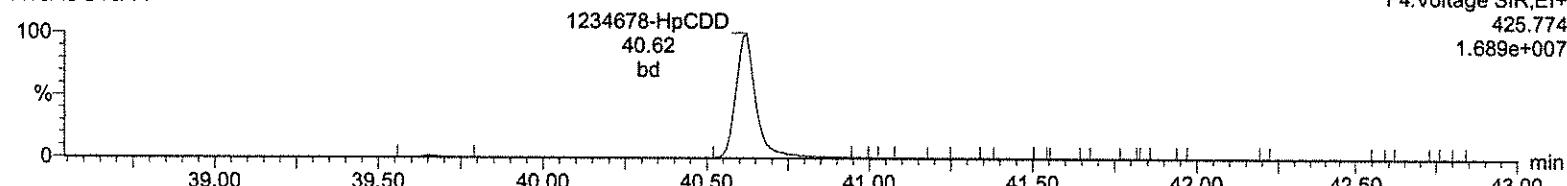
**Total-heptadioxins**

A18AUG18A-7



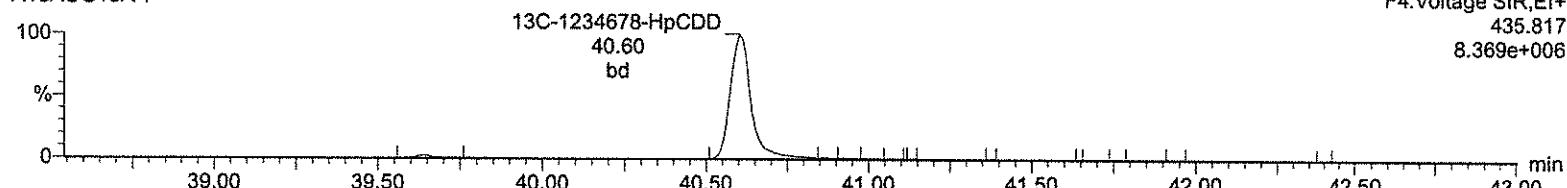
**Total-heptadioxins**

A18AUG18A-7



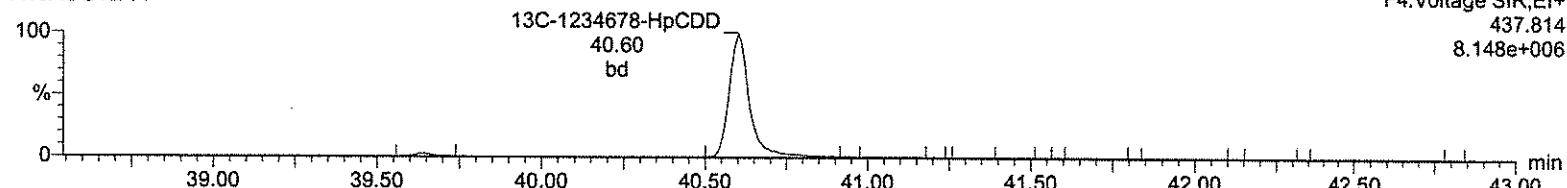
**13C-1234678-HpCDD**

A18AUG18A-7



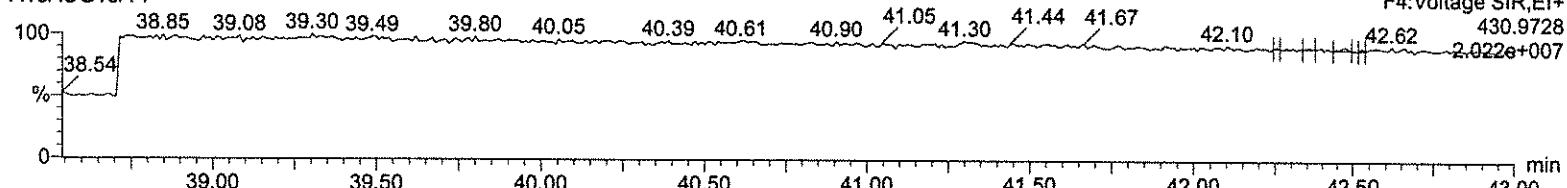
**13C-1234678-HpCDD**

A18AUG18A-7



**Lock Mass F4**

A18AUG18A-7



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

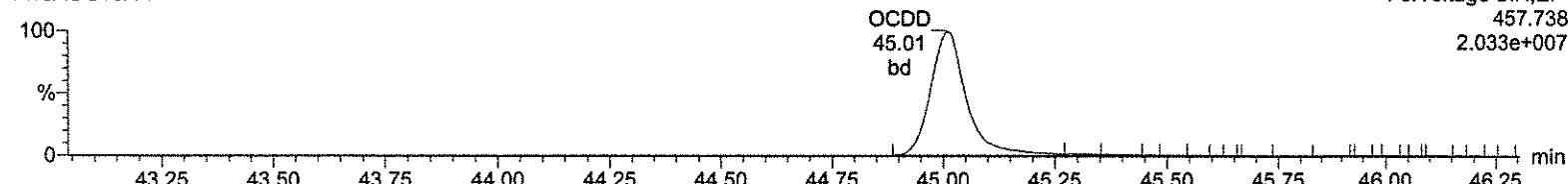
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A,  
Task: HRP750\_2, User: MJC

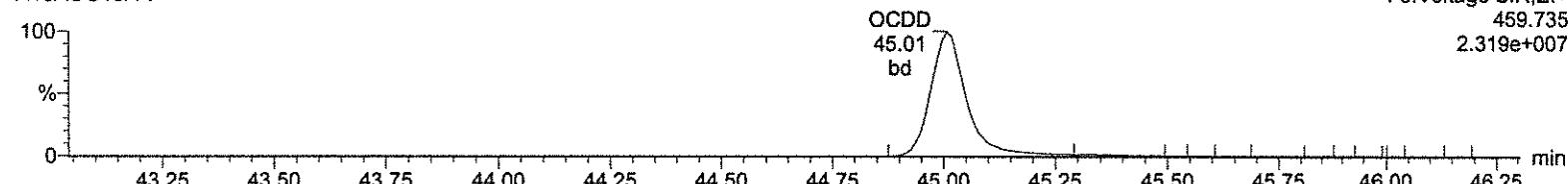
**OCDD**

A18AUG18A-7



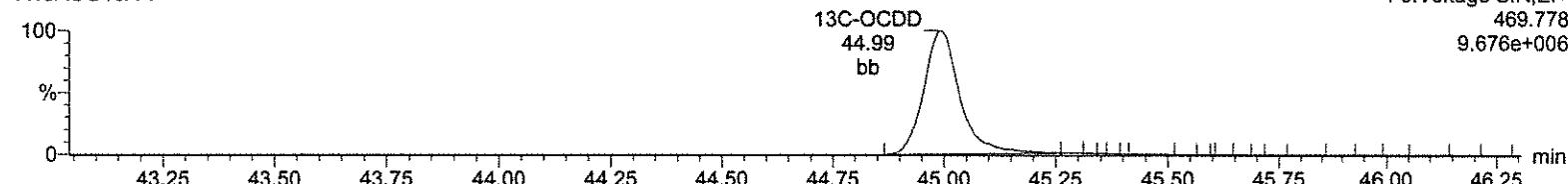
**OCDD**

A18AUG18A-7



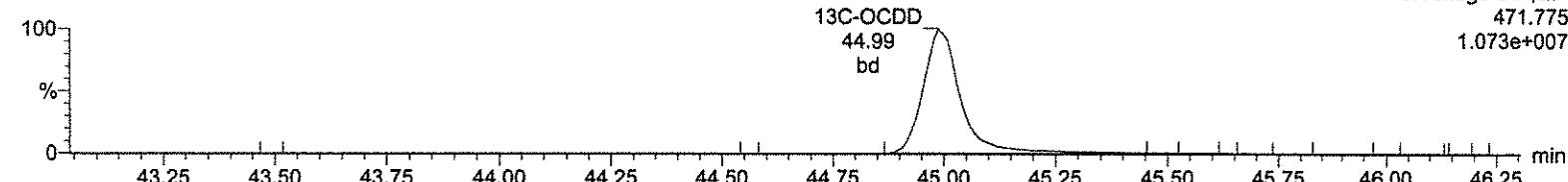
**13C-OCDD**

A18AUG18A-7



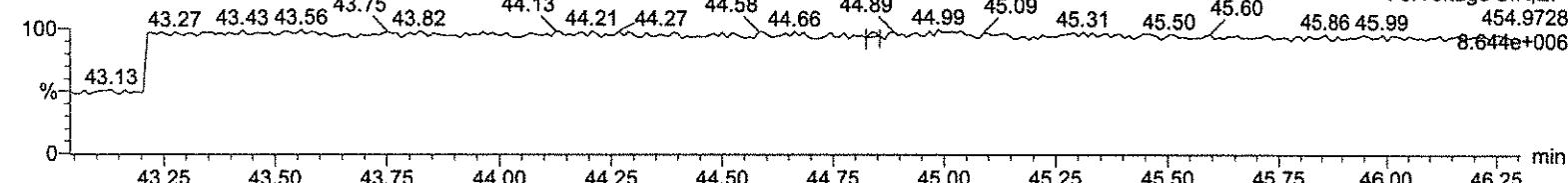
**13C-OCDD**

A18AUG18A-7



**Lock Mass F5**

A18AUG18A-7



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

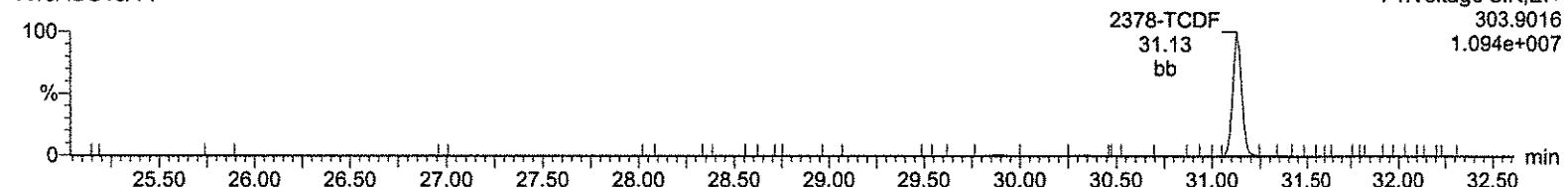
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

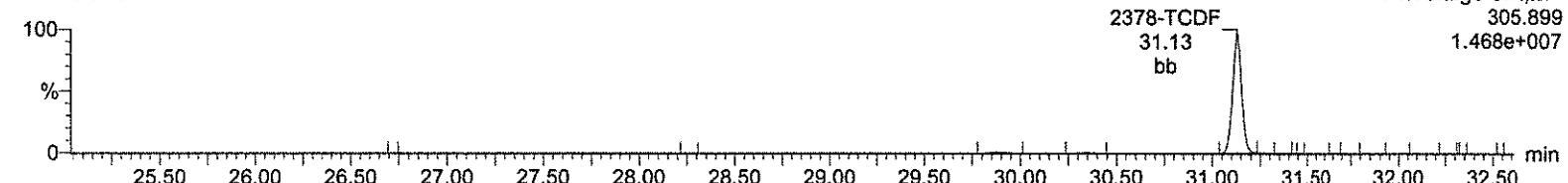
### Total-tetrafurans

A18AUG18A-7



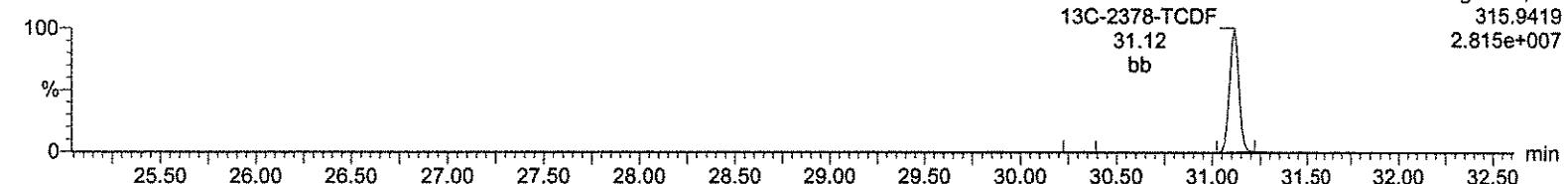
### Total-tetrafurans

A18AUG18A-7



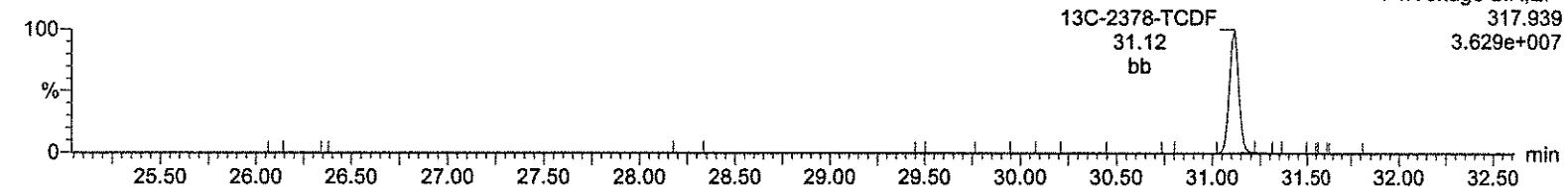
### 13C-2378-TCDF

A18AUG18A-7



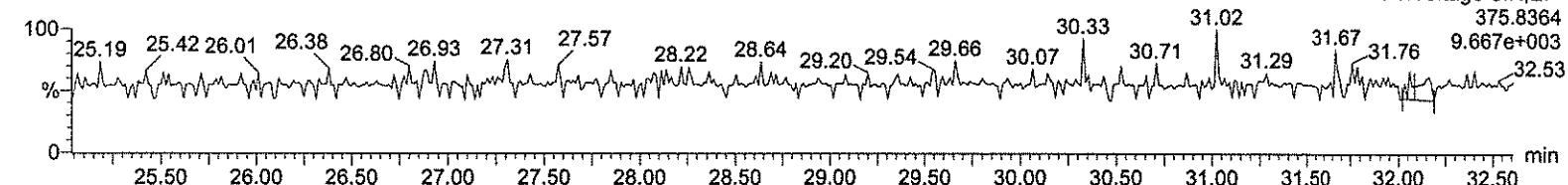
### 13C-2378-TCDF

A18AUG18A-7



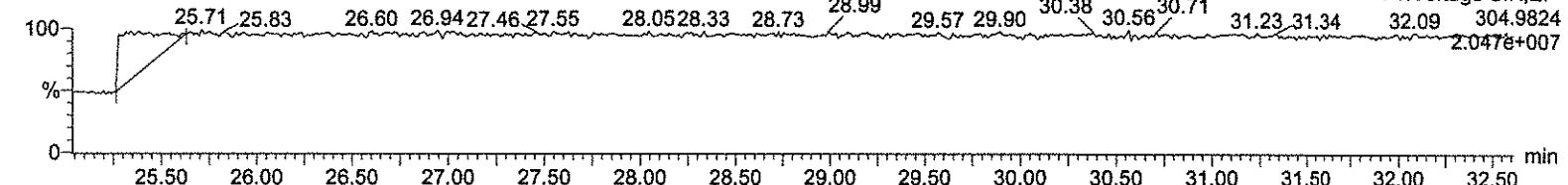
### HxDPE

A18AUG18A-7



### Lock Mass F1

A18AUG18A-7



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

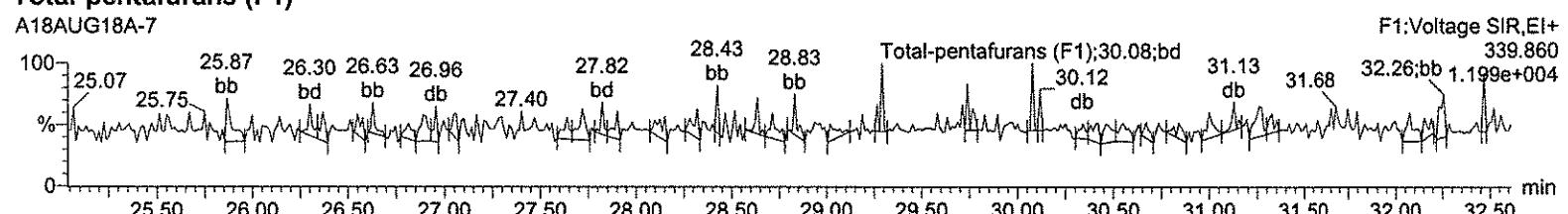
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

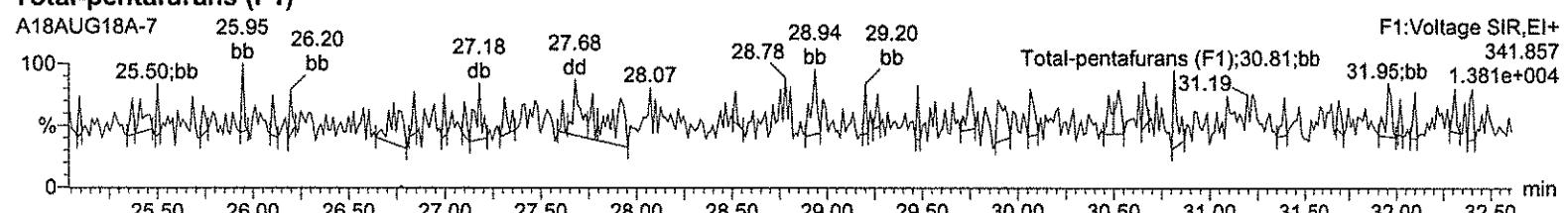
### Total-pentafurans (F1)

A18AUG18A-7



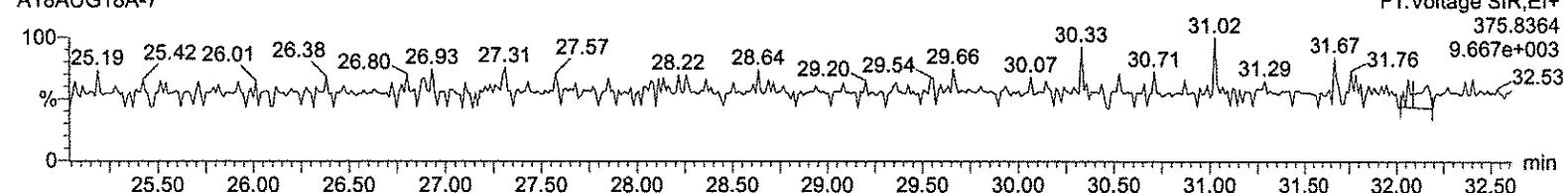
### Total-pentafurans (F1)

A18AUG18A-7



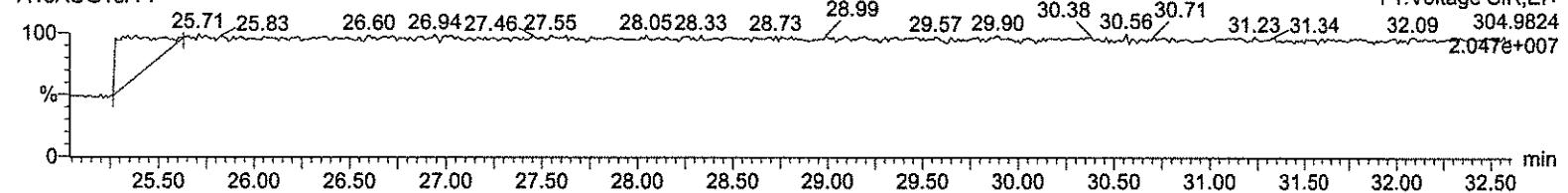
### HxDPE

A18AUG18A-7



### Lock Mass F1

A18AUG18A-7



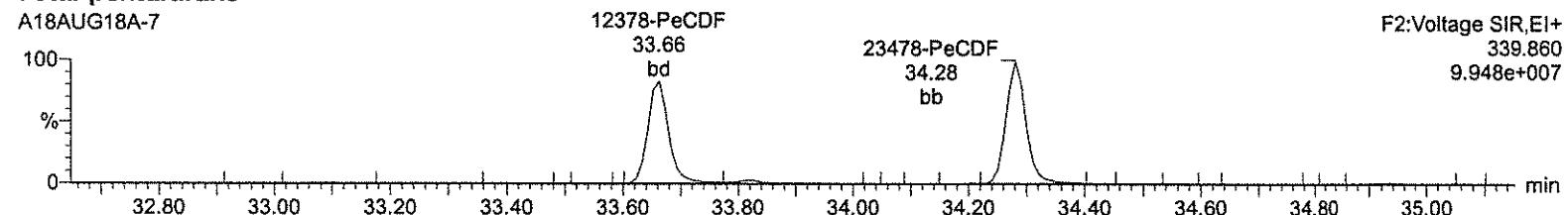
Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

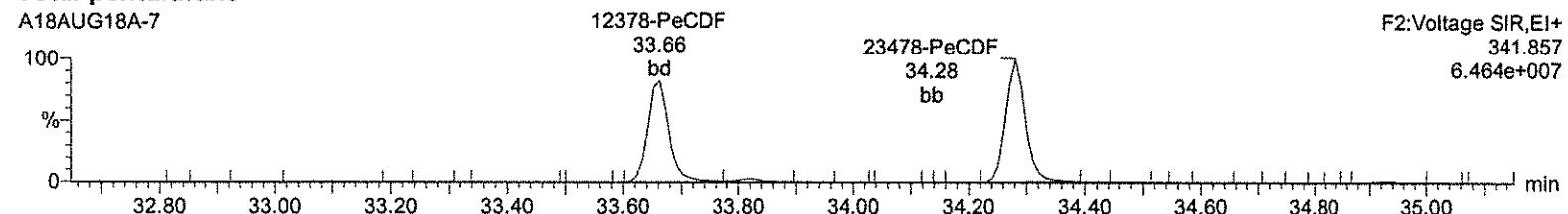
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

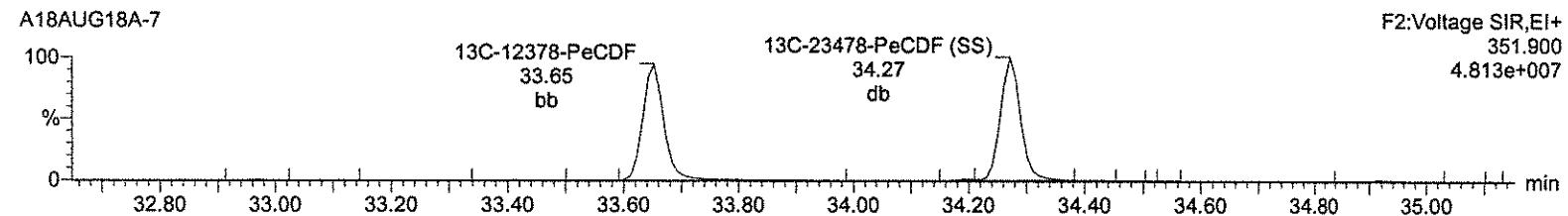
### Total-pentafurans



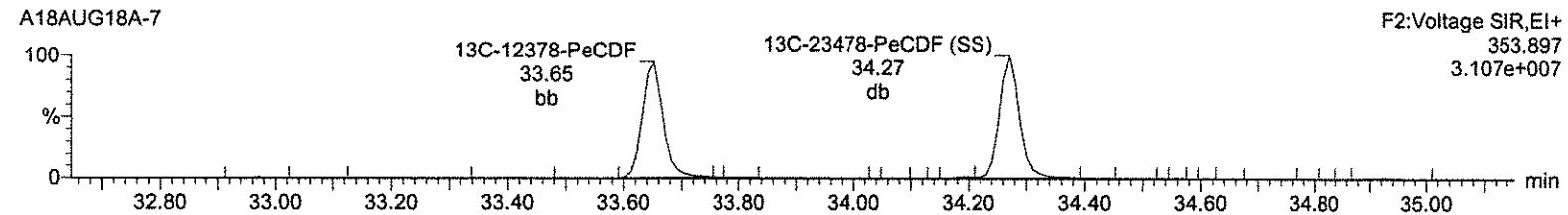
### Total-pentafurans



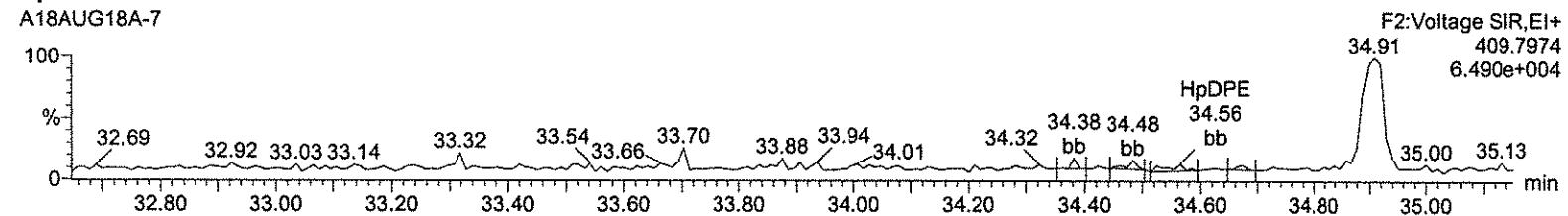
### 13C-12378-PeCDF



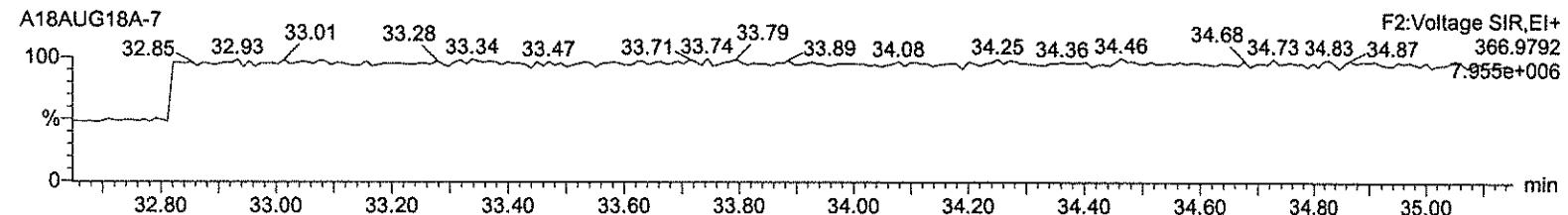
### 13C-12378-PeCDF



### HpDPE



### Lock Mass F2



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

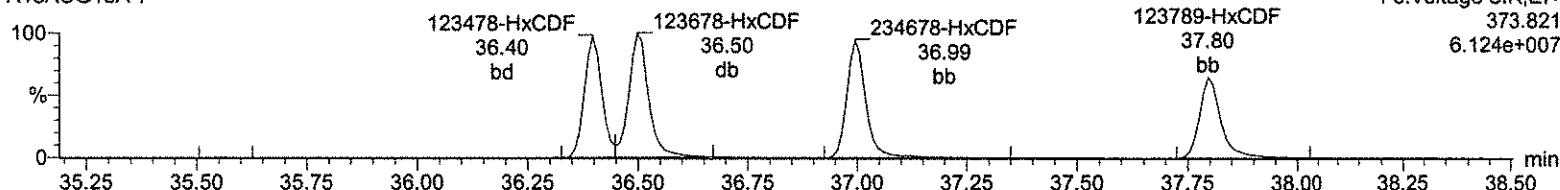
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

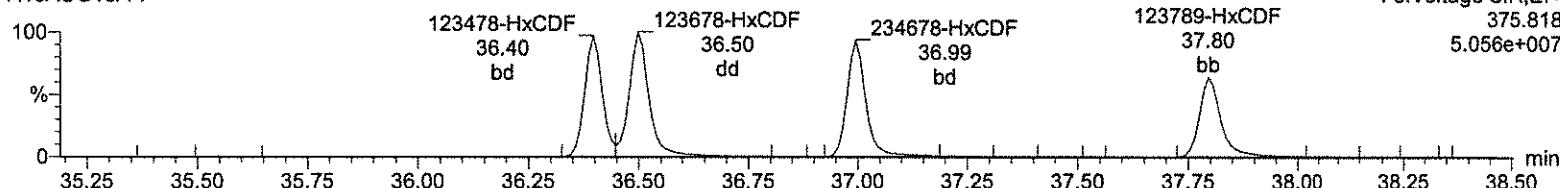
### Total-hexafurans

A18AUG18A-7



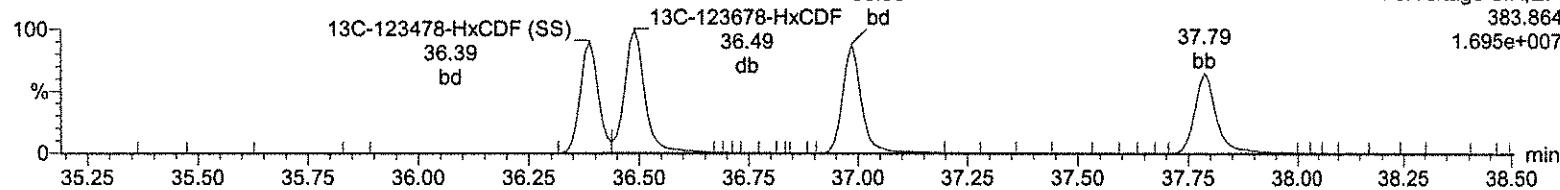
### Total-hexafurans

A18AUG18A-7



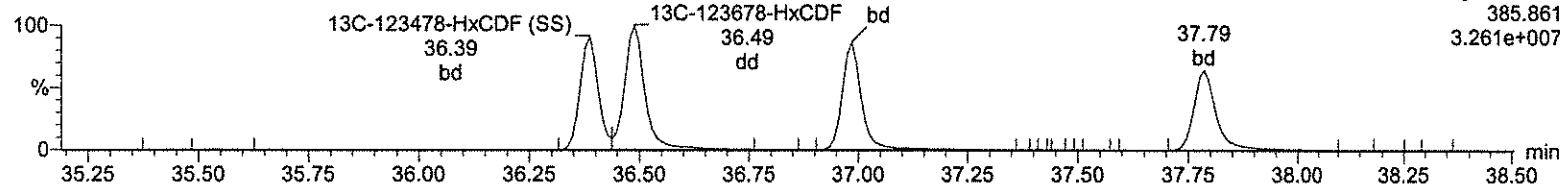
### 13C-123678-HxCDF

A18AUG18A-7



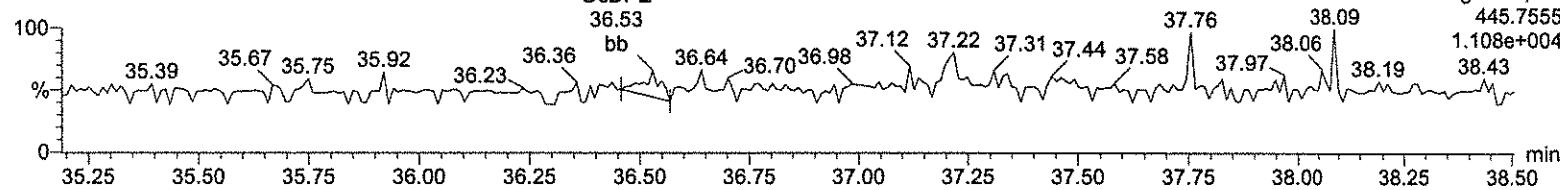
### 13C-123678-HxCDF

A18AUG18A-7



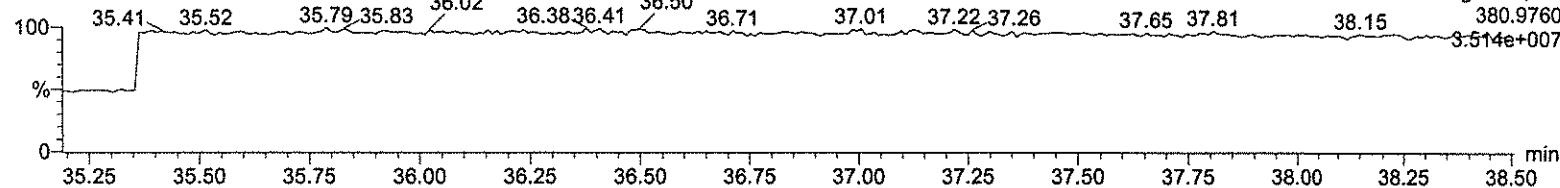
### OcDPE

A18AUG18A-7



### Lock Mass F3

A18AUG18A-7



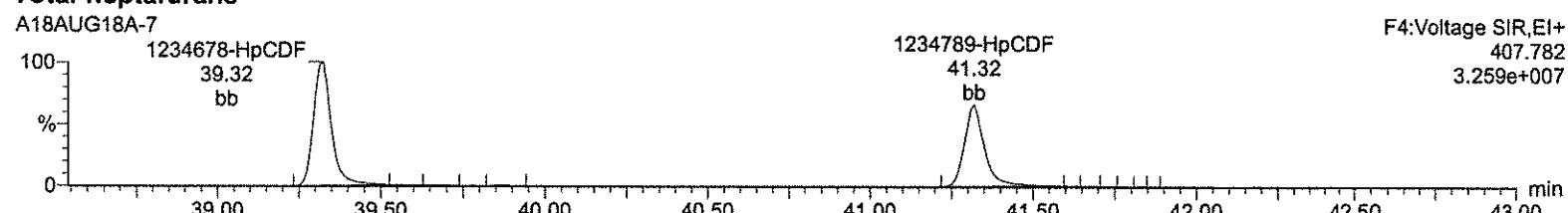
Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

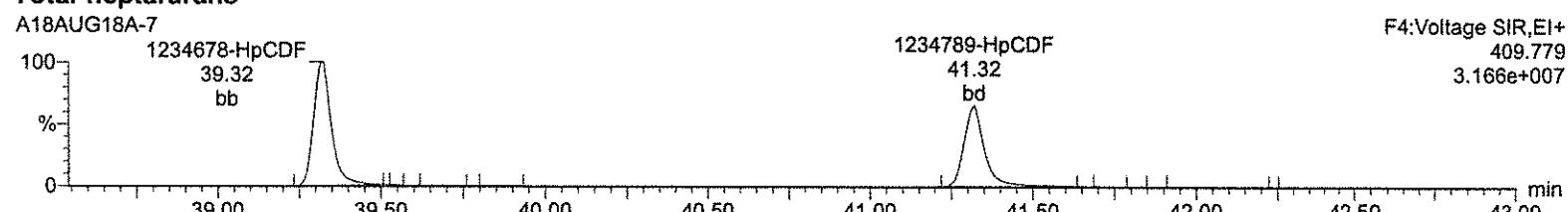
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

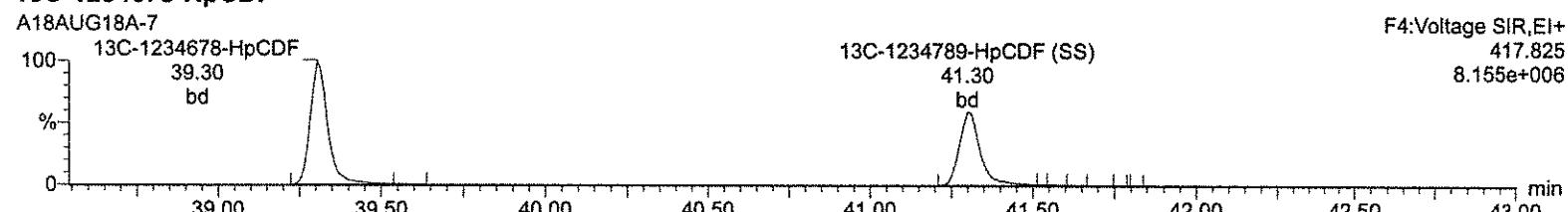
### Total-heptafurans



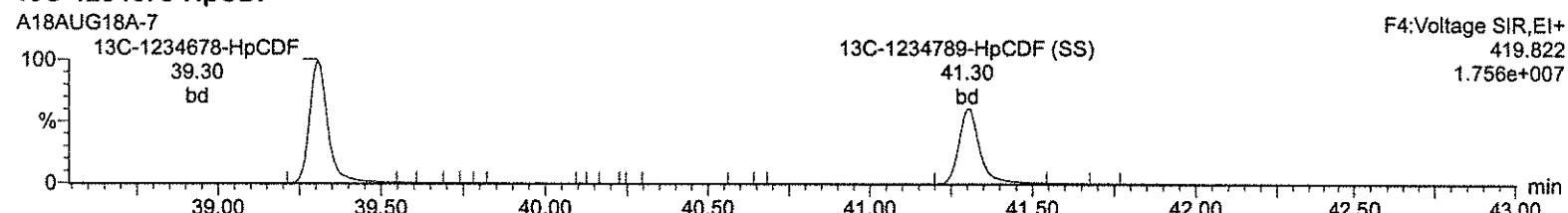
### Total-heptafurans



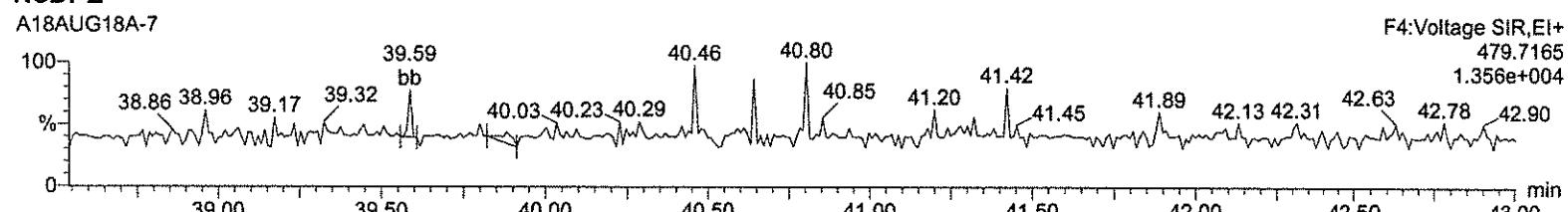
### 13C-1234678-HpCDF



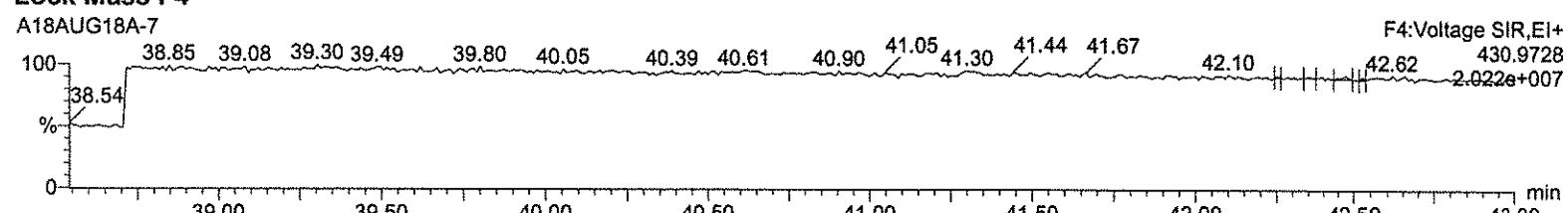
### 13C-1234678-HpCDF



### NoDPE



### Lock Mass F4



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qlb

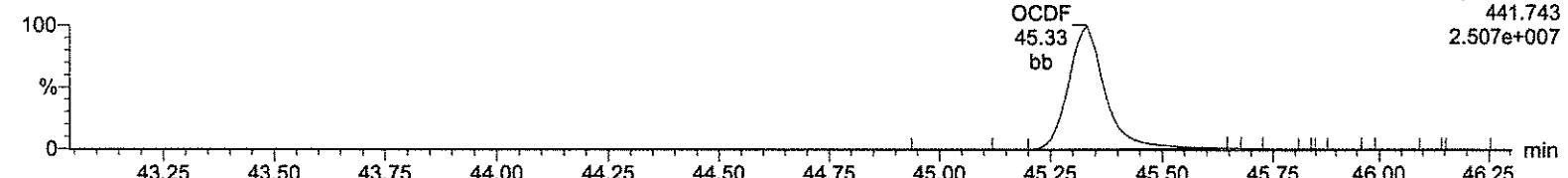
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-7, Date: 18-Aug-2018, Time: 13:30:40, ID: CS4 UD180112-06 CS43P, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

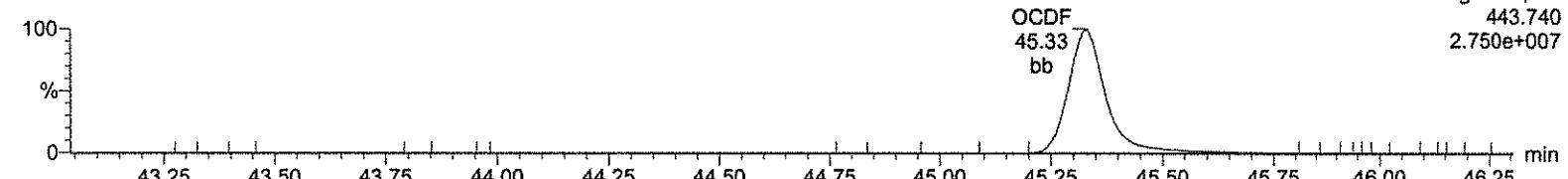
OCDF

A18AUG18A-7



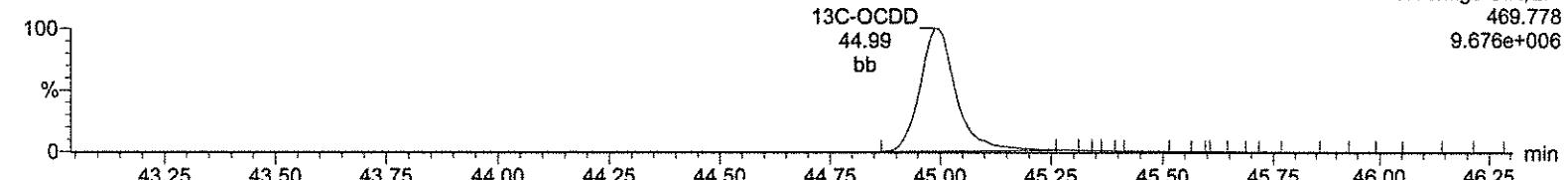
OCDF

A18AUG18A-7



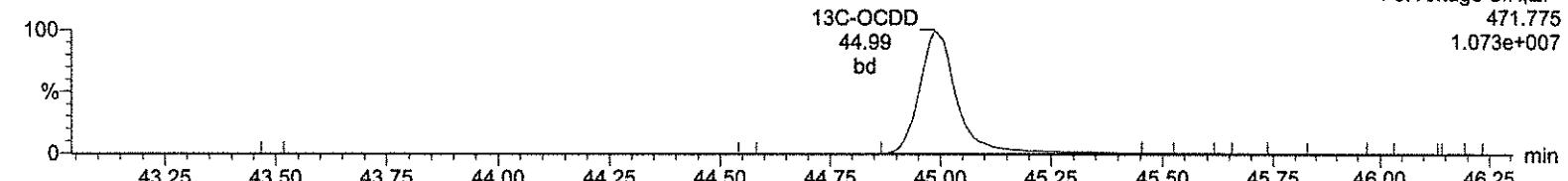
13C-OCDD

A18AUG18A-7



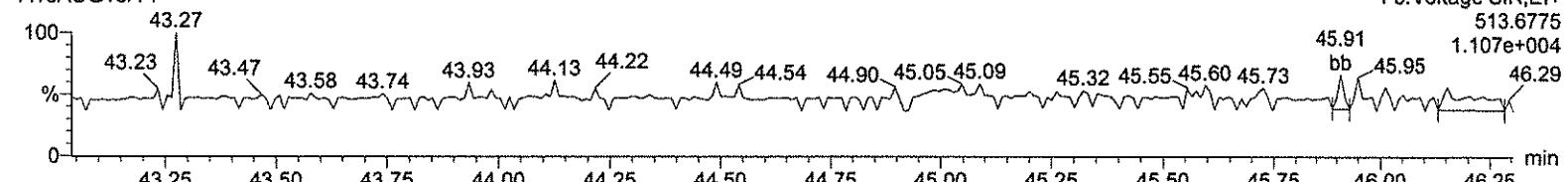
13C-OCDD

A18AUG18A-7



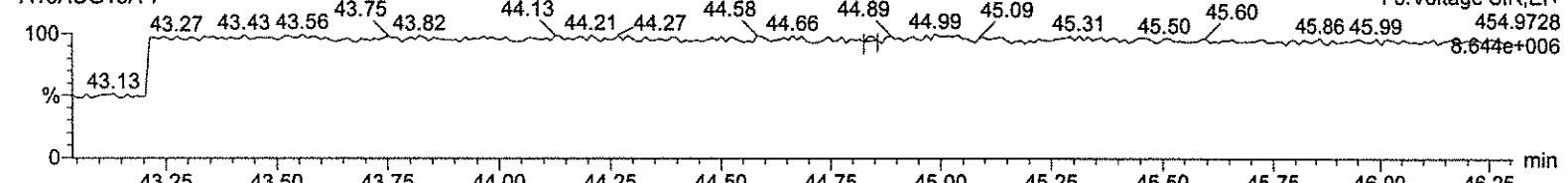
DeDPE

A18AUG18A-7



Lock Mass F5

A18AUG18A-7



## Quantify Sample Summary Report

## MassLynx 4.1

Method 8290 ICAL Report

Dataset: C:\MassLynx\Default.prol\ICAL\_Results\8290-A18AUG18A.qld  
 Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time  
 Printed: Monday, August 20, 2018 14:21:53 Eastern Standard Time

2021 Aug 2

Name: A18AUG18A-8, Date: 18-Aug-2018, Time: 14:18:58, ID: CS5 UD180112-07 CS53R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

#	Name	Ion1 Area	Ion2 Area	Response	RT	RRT	RA	Fail?	log/g/L	RRF ✓	Mean ✓	SD ✓	Height1 ✓	Noise1 ✓	S/N1	Height2 ✓	Noise2 ✓	S/N2	M1	M2
1	2378-TCDF	2.53e6	3.21e6	5.74e6	31.68	1.00	0.79	NO	210.215	1.016	0.966	4.50	0.0384	5.93e7	4484	13214.6	7.50e7	5047	14859.4	bb
2	12378-PeCDD	1.43e7	9.21e6	2.35e7	34.47	1.00	1.55	NO	1044.979	1.021	0.977	4.38	0.144	3.52e8	21209	16614.8	2.26e8	10124	22324.4	bb
3	123478-HxCDD	1.20e7	9.65e6	2.16e7	37.13	1.00	1.24	NO	1037.388	0.850	0.820	2.97	0.245	2.42e8	18735	12942.6	1.97e8	18511	10652.7	bd
4	123678-HxCDD	1.41e7	1.14e7	2.55e7	37.21	1.00	1.24	NO	1035.242	1.005	0.971	3.86	0.207	2.58e8	18735	13761.2	2.11e8	18511	11392.6	dd
5	123789-HxCDD	1.25e7	1.01e7	2.26e7	37.46	1.01	1.23	NO	1030.375	0.887	0.861	4.53	0.233	2.24e8	18735	11944.7	1.82e8	18511	9811.5	dd
6	1234678-HxCDD	8.40e6	8.06e6	1.65e7	40.61	1.00	1.04	NO	1070.828	1.022	0.955	7.65	0.596	1.24e8	28093	4411.0	1.20e8	23219	5172.3	bb
7	OCDD	1.40e7	1.58e7	2.98e7	45.01	1.00	0.89	NO	2131.975	1.046	0.981	6.02	0.878	1.51e8	18721	8061.5	1.71e8	31967	5342.6	bd
8	2378-TCDF	3.28e6	4.29e6	7.57e6	31.13	1.00	0.76	NO	209.736	0.964	0.919	3.95	0.0508	6.01e7	6357	9449.8	7.72e7	6673	11563.1	bb
9	12378-PeCDF	2.12e7	1.36e7	3.47e7	33.65	1.00	1.56	NO	1071.354	0.938	0.875	5.04	0.176	5.26e8	25671	20476.6	3.37e8	31368	10758.0	bd
10	23478-PeCDF	2.37e7	1.53e7	3.90e7	34.28	1.02	1.55	NO	1075.263	1.055	0.981	5.60	0.157	6.10e8	25671	23780.3	3.87e8	31368	12327.5	bb
11	123478-HxCDF	1.72e7	1.39e7	3.12e7	36.40	1.00	1.24	NO	1020.120	0.942	0.923	3.03	0.347	3.79e8	65371	5791.0	3.02e8	18710	16152.1	bd
12	123678-HxCDF	1.98e7	1.58e7	3.56e7	36.50	1.00	1.25	NO	1013.242	1.077	1.063	3.79	0.301	4.12e8	65371	6300.5	3.28e8	18710	17533.9	db
13	234678-HxCDF	1.81e7	1.46e7	3.26e7	37.00	1.01	1.24	NO	1037.706	0.987	0.951	5.60	0.337	3.60e8	65371	5511.0	2.90e8	18710	15525.4	bd
14	123789-HxCDF	1.43e7	1.15e7	2.55e7	37.80	1.04	1.24	NO	1038.920	0.780	0.751	5.76	0.426	2.53e8	65371	3870.3	2.02e8	18710	10809.6	bb
15	1234678-HpCDF	1.39e7	2.72e7	39.31	1.00	1.04	NO	1045.854	1.275	1.219	4.36	0.435	2.34e8	33165	7068.0	2.22e8	39865	5564.3	bb	
16	1234789-HpCDF	1.10e7	1.02e7	2.13e7	41.32	1.05	1.08	NO	1104.081	0.995	0.902	6.73	0.588	1.52e8	33165	4598.2	1.47e8	39865	3685.4	bb
17	OCDF	1.78e7	1.99e7	3.77e7	45.33	1.01	0.89	NO	2228.178	1.323	1.187	8.35	0.607	1.93e8	24718	7893.2	2.18e8	17726	12317.1	bb
18	13C-2378-TCDD	1.24e6	1.58e6	2.63e6	31.67	1.01	0.79	NO	107.649	1.145	1.064	4.24	0.0799	2.82e7	10188	2771.1	3.50e7	5526	6328.7	bb
19	13C-12378-PeCDD	1.41e6	8.92e5	2.30e6	34.46	1.10	1.58	NO	120.112	0.931	0.775	10.87	0.0626	3.40e7	3815	8912.2	2.10e7	5158	4073.1	bb
20	13C-123678-HxCDD	1.42e6	1.12e6	2.54e6	37.20	0.99	1.26	NO	102.037	1.186	1.162	1.48	0.114	2.59e7	11048	2343.6	2.10e7	8904	2354.8	dd
21	13C-1234678-HpCDD	8.22e5	7.89e5	1.61e6	40.60	1.08	1.04	NO	100.441	0.751	0.748	3.63	0.167	1.15e7	11035	1043.2	1.11e7	7861	1416.4	bd
22	13C-OCDD	1.36e6	1.49e6	2.85e6	45.01	1.20	0.92	NO	217.883	0.665	0.611	5.45	0.221	1.41e7	8026	1752.7	1.59e7	12369	1287.8	bd
23	13C-2378-TCDF	1.72e6	2.21e6	3.93e6	31.12	1.00	0.77	NO	102.020	1.591	1.560	2.51	0.0816	3.04e7	15194	2003.9	3.89e7	8335	4669.9	bb
24	13C-12378-PeCDF	2.25e6	1.45e6	3.70e6	33.64	1.08	1.55	NO	113.580	1.499	1.320	7.27	0.100	5.62e7	16566	3390.5	3.65e7	7922	4612.0	bb
25	13C-123678-HxCDF	1.13e6	2.18e6	3.31e6	36.49	0.97	0.52	NO	99.794	1.543	1.546	1.08	0.143	2.25e7	14383	1562.1	4.32e7	18931	2281.7	dd
26	13C-123478-HpCDF (SS)	6.71e5	1.47e6	2.14e6	39.30	1.05	0.46	NO	98.271	0.996	1.014	3.18	0.125	1.08e7	8451	1280.3	2.43e7	10705	2272.7	bd
27	13C-123478-TCDD	1.10e6	1.37e6	2.47e6	31.25	0.00	0.80	NO	100.000	1.000	1.000	0.00	0.0849	2.05e7	10188	2013.4	2.66e7	5526	4814.0	bb
28	13C-123789-HxCDD	1.19e6	9.52e5	2.14e6	37.45	0.00	1.25	NO	100.000	1.000	1.000	0.00	0.132	2.10e7	11048	1900.9	1.66e7	8904	1866.3	dd
29	37Cl-2378-TCDD (SS)	6.00e6	6.00e6	31.68	1.00	208.987	1.061	1.015	3.92	0.0227	1.39e8	5917	2354.3	4.32e7	18931	2281.7	dd	bb		
30	13C-23478-PeCDF (SS)	2.31e6	1.48e6	3.79e6	34.27	1.02	1.56	NO	103.503	1.025	0.990	2.51	0.0669	5.90e7	16566	35663.7	3.74e7	18931	1315.1	bd
31	13C-123478-HxCDF (SS)	8.98e5	1.74e6	2.64e6	36.39	1.00	0.51	NO	97.572	0.799	0.819	1.96	0.155	1.89e7	14383	1315.1	3.62e7	18931	1910.0	bd
32	13C-123478-HxCDD (SS)	1.20e6	9.44e5	2.14e6	37.12	1.00	1.27	NO	101.189	0.844	0.834	1.28	0.129	2.39e7	11048	2164.4	1.91e7	8904	2141.7	bd
33	13C-1234789-HpCDF (SS)	4.83e5	1.11e6	1.59e6	41.31	1.05	0.43	NO	104.212	0.746	0.715	3.16	0.194	6.86e6	8451	812.0	1.52e7	10705	1419.2	bb

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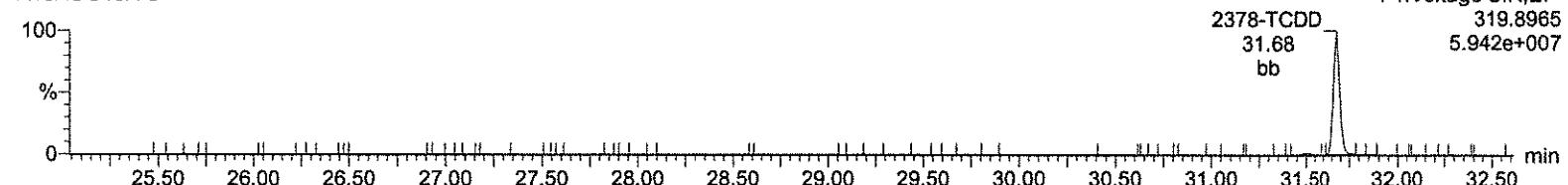
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Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-8, Date: 18-Aug-2018, Time: 14:18:58, ID: CS5 UD180112-07 CS53R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

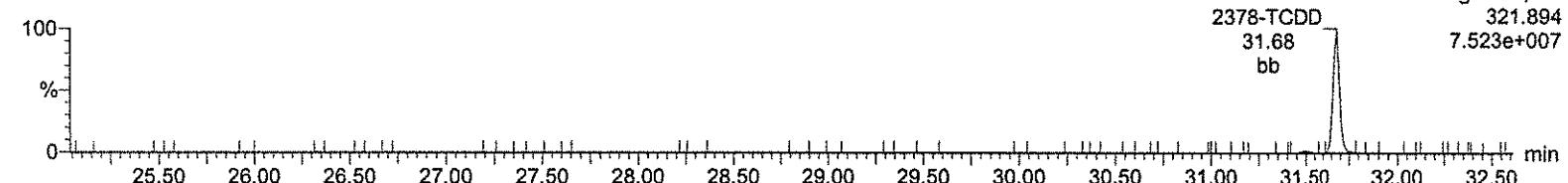
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A18AUG18A-8



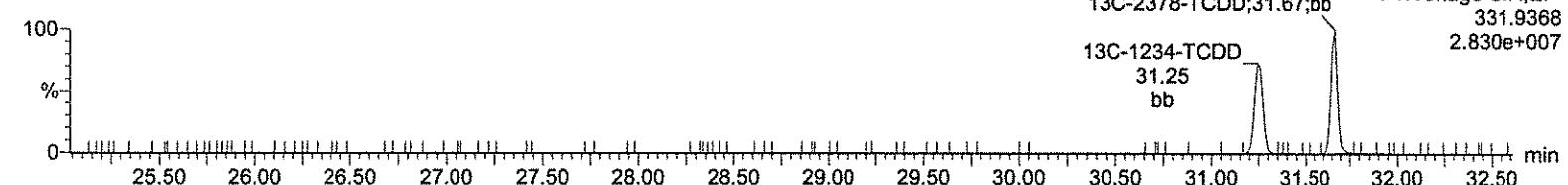
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A18AUG18A-8



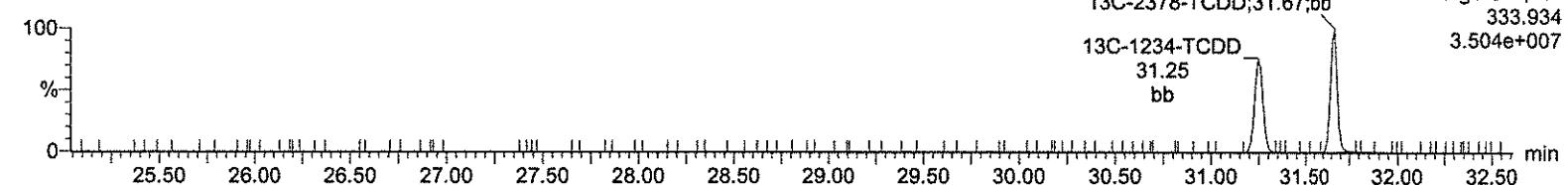
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A18AUG18A-8



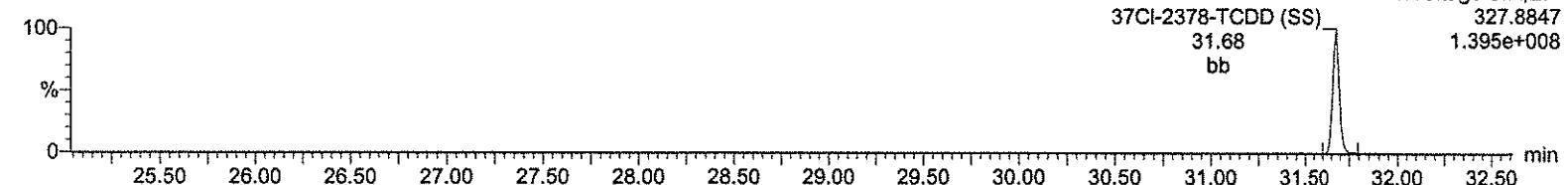
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A18AUG18A-8



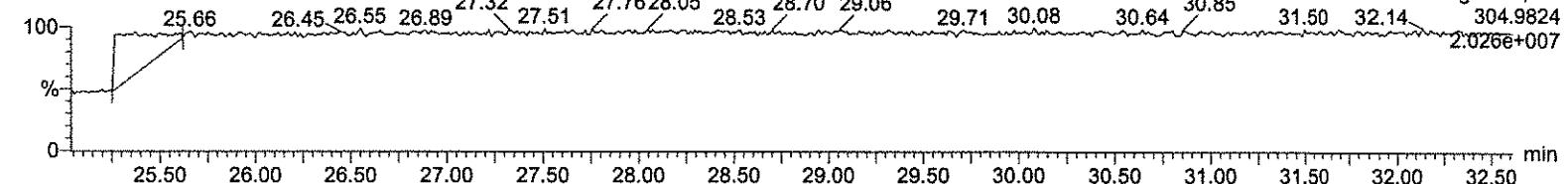
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A18AUG18A-8



### Lock Mass F1

A18AUG18A-8



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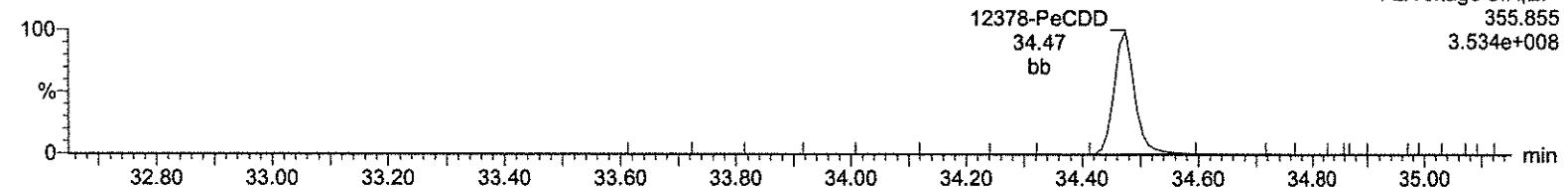
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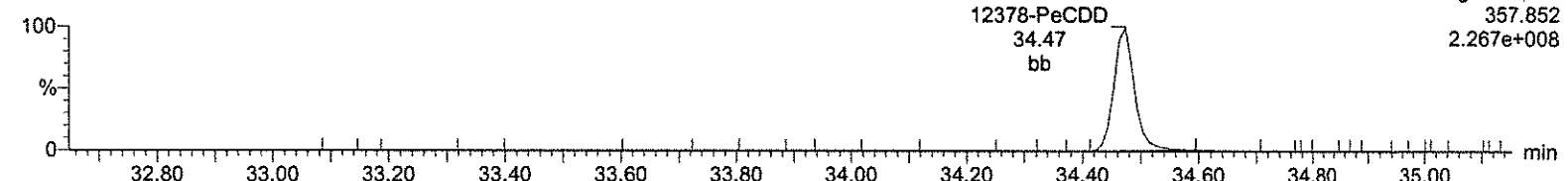
Total-pentadioxins

A18AUG18A-8



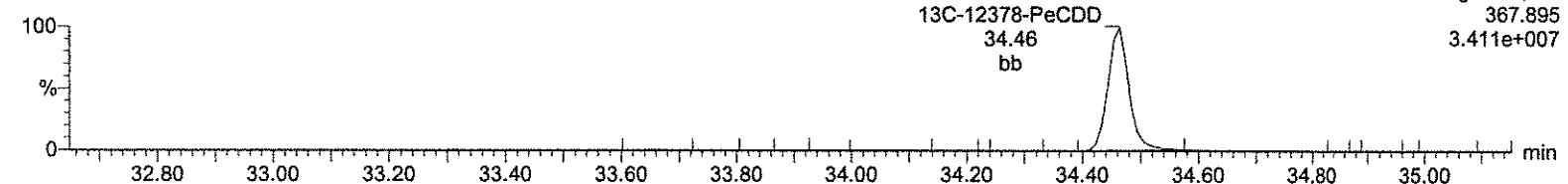
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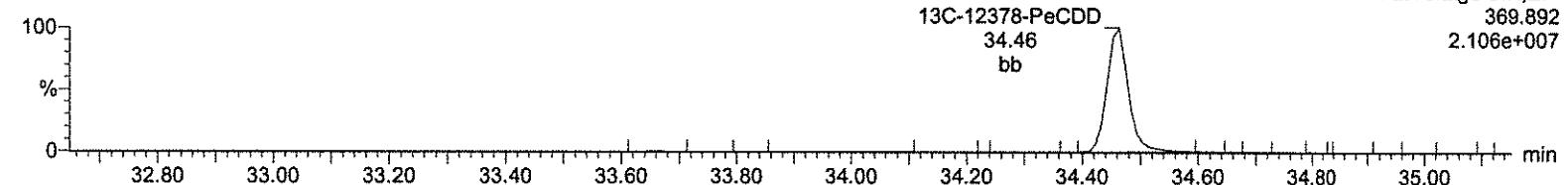
13C-12378-PeCDD

A18AUG18A-8



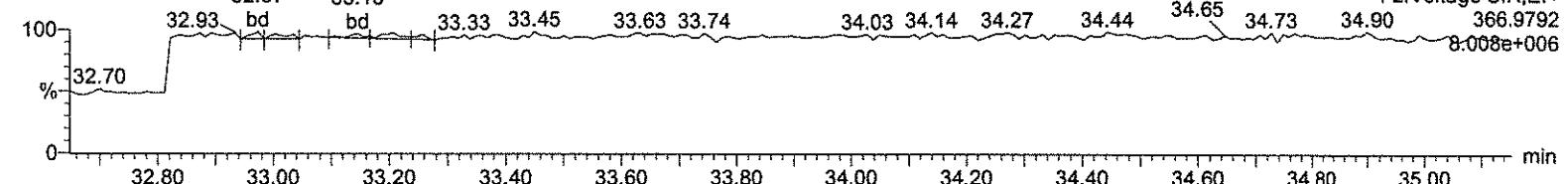
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A18AUG18A-8



Lock Mass F2

A18AUG18A-8



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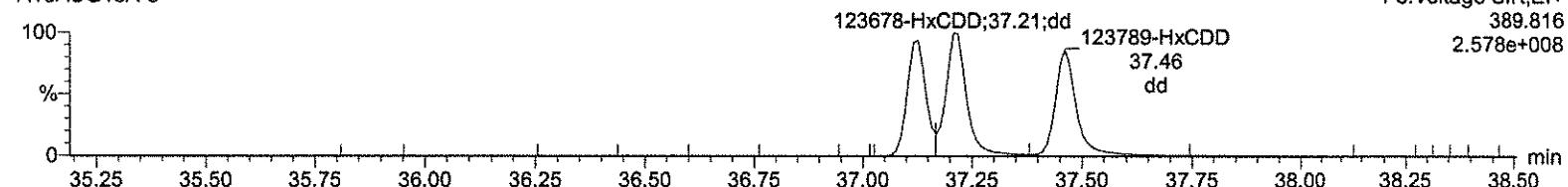
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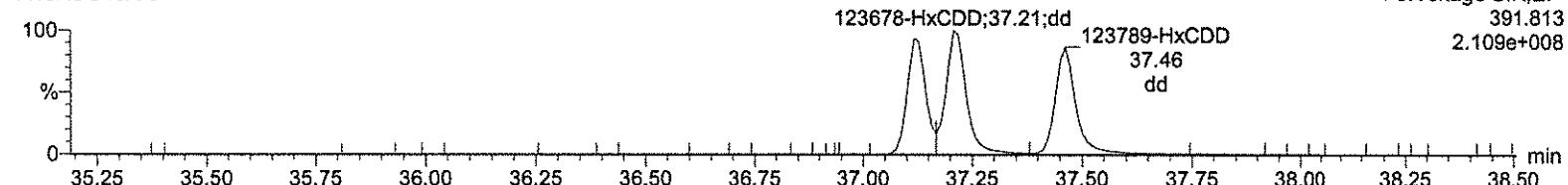
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A18AUG18A-8



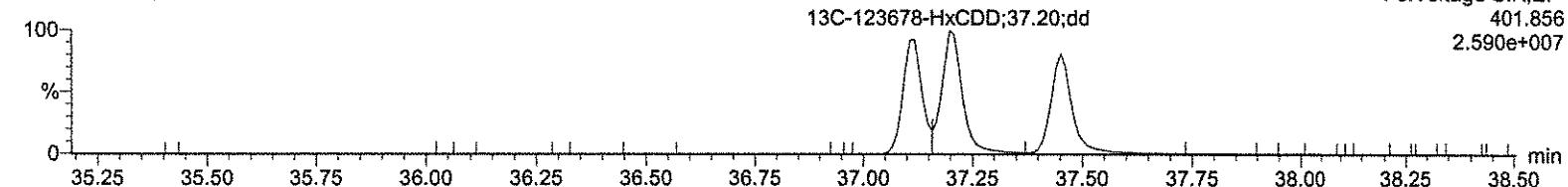
### Total-hexadioxins

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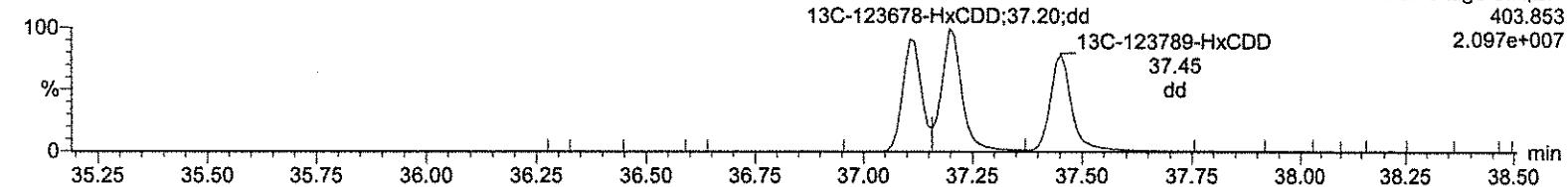
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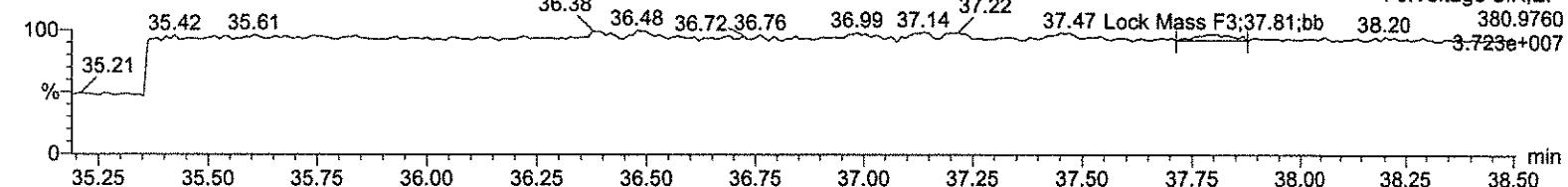
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### Lock Mass F3

A18AUG18A-8



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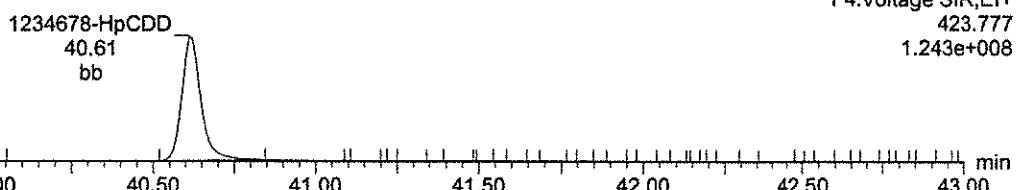
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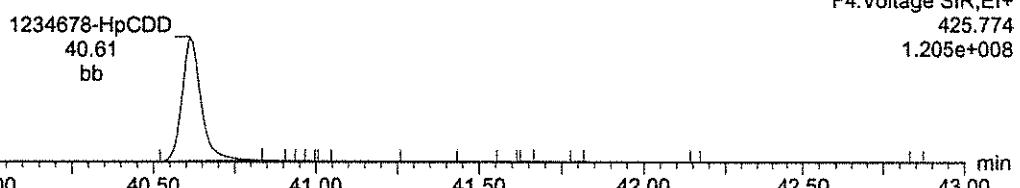
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A18AUG18A-8



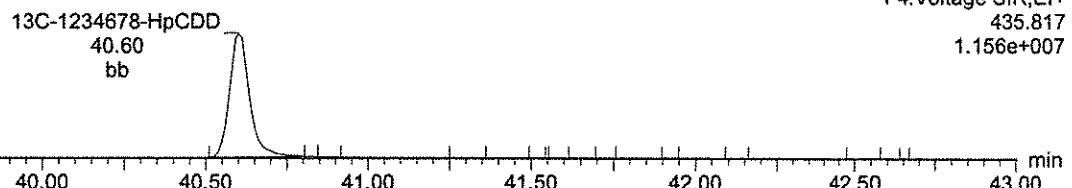
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A18AUG18A-8



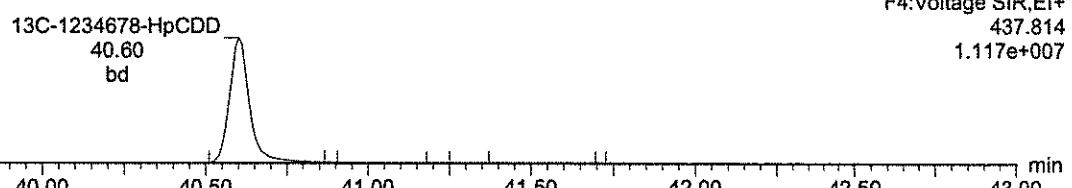
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A18AUG18A-8



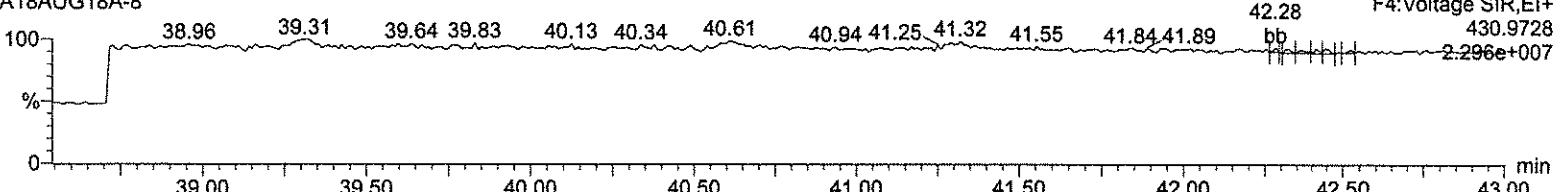
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A18AUG18A-8



### Lock Mass F4

A18AUG18A-8



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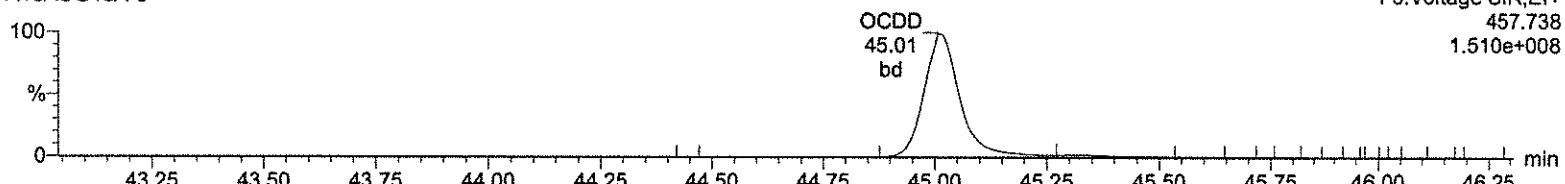
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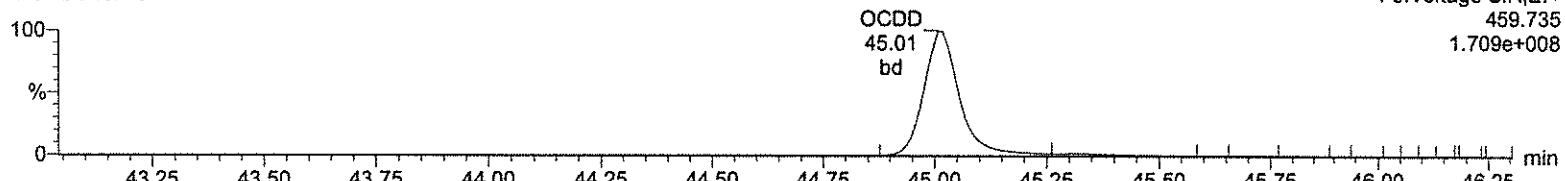
### OCDD

A18AUG18A-8



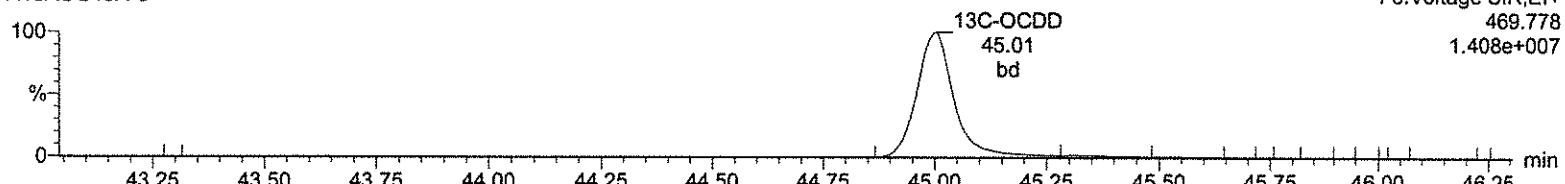
### OCDD

A18AUG18A-8



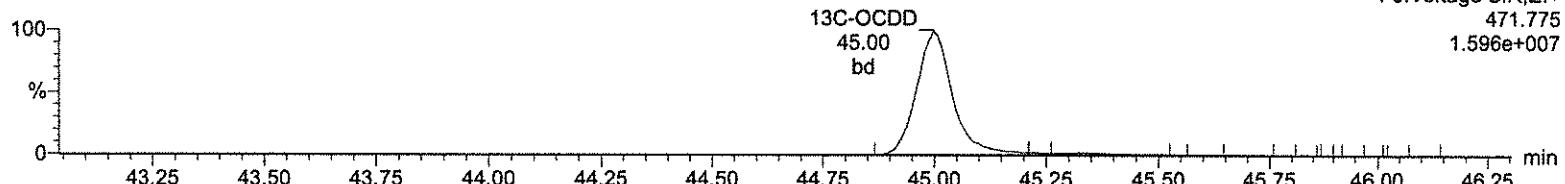
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A18AUG18A-8



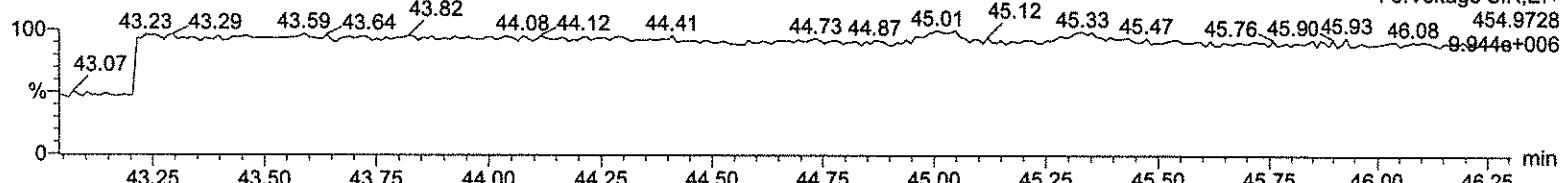
### 13C-OCDD

A18AUG18A-8



### Lock Mass F5

A18AUG18A-8



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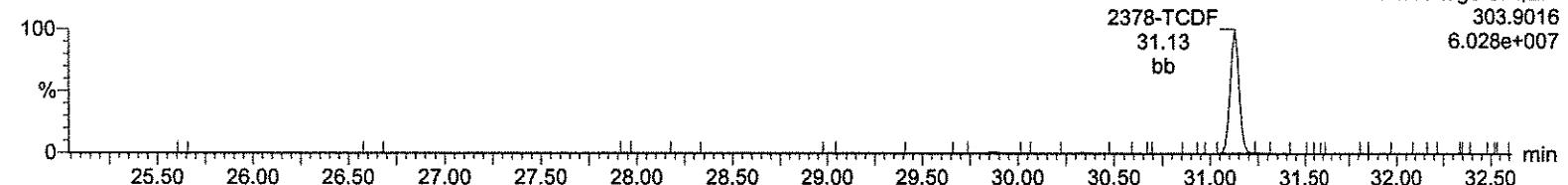
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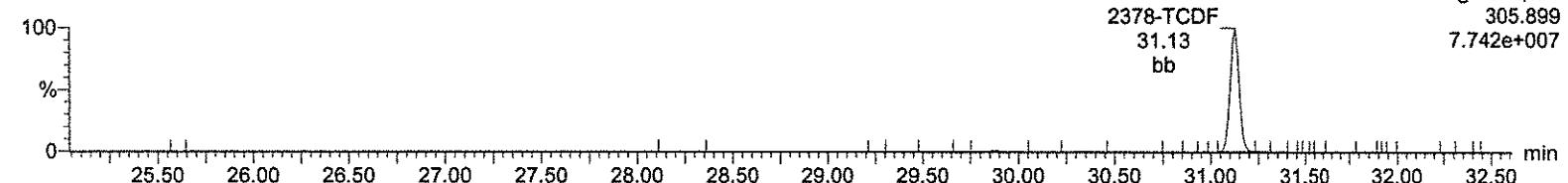
### Total-tetrafurans

A18AUG18A-8



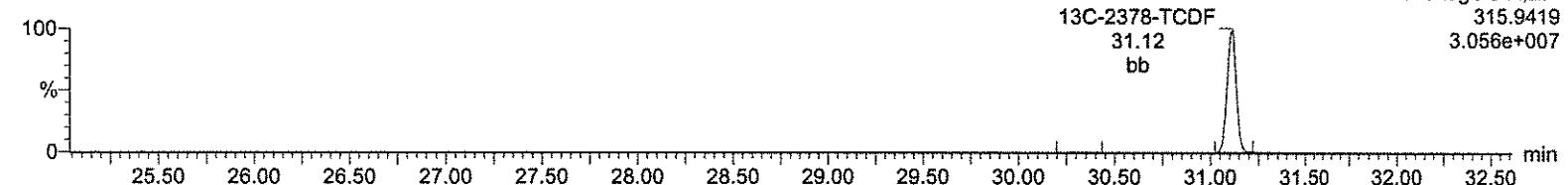
### Total-tetrafurans

A18AUG18A-8



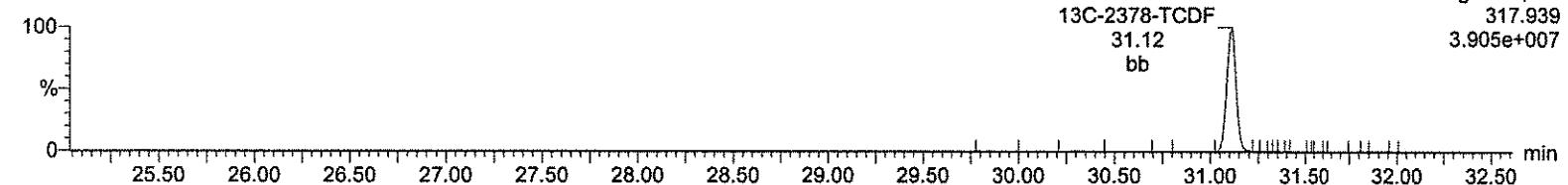
### 13C-2378-TCDF

A18AUG18A-8



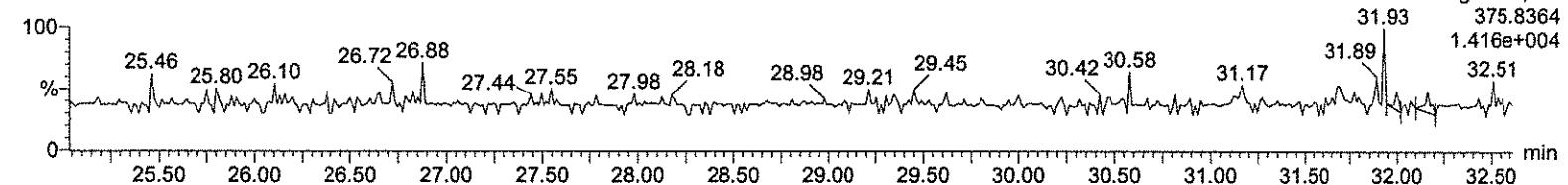
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A18AUG18A-8



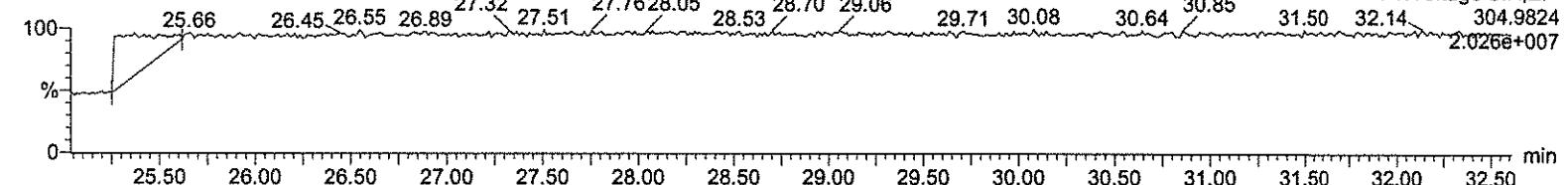
### HxDPE

A18AUG18A-8



### Lock Mass F1

A18AUG18A-8



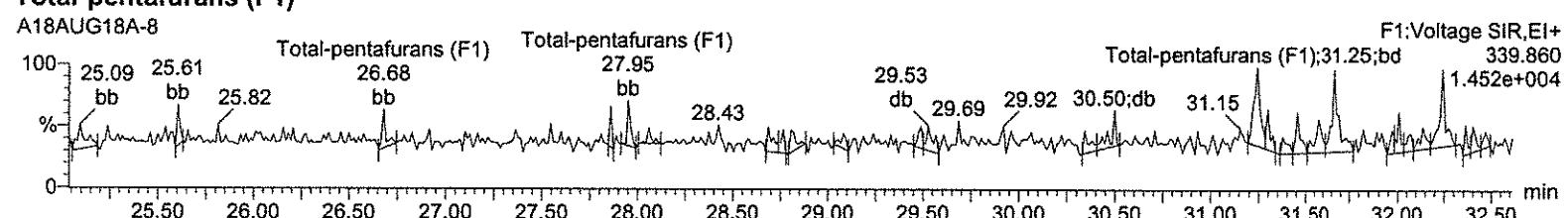
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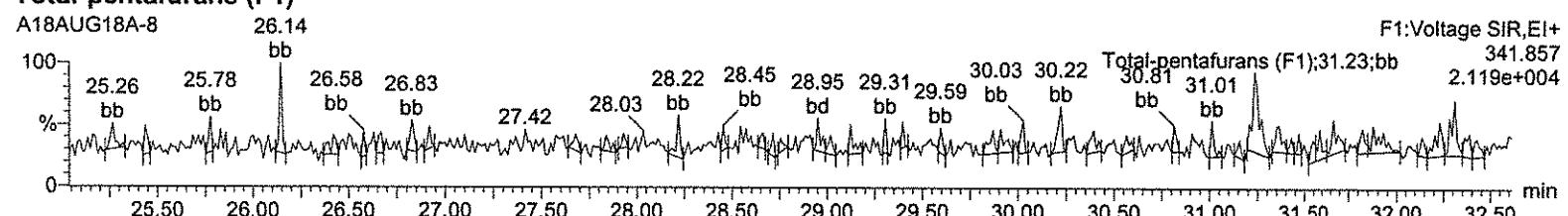
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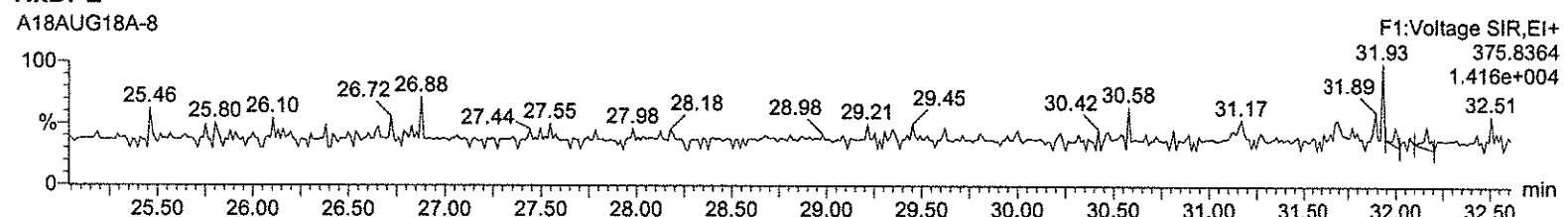
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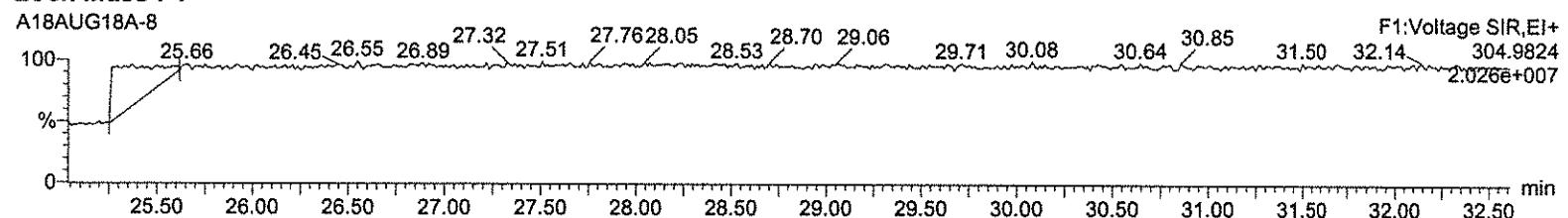
#### Total-pentafurans (F1)



#### HxDPE



#### Lock Mass F1



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

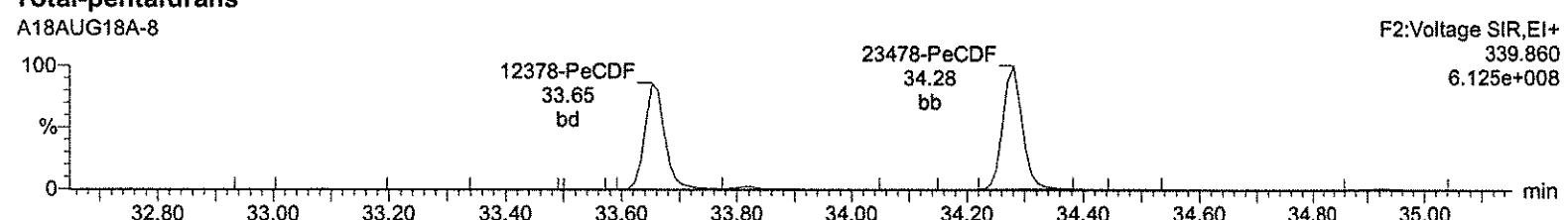
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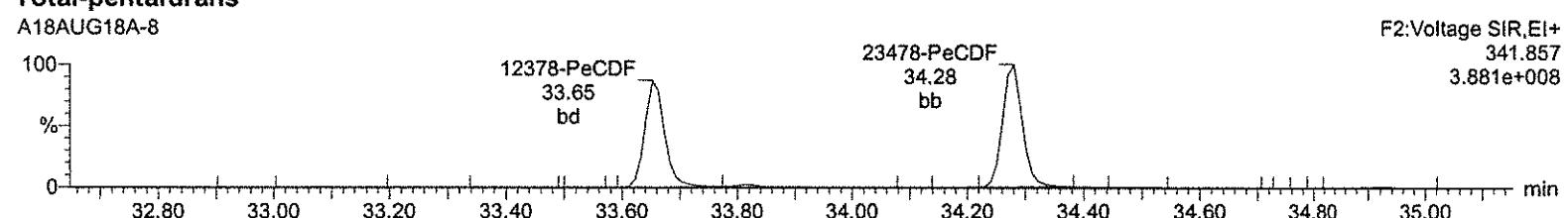
### Total-pentafurans

A18AUG18A-8



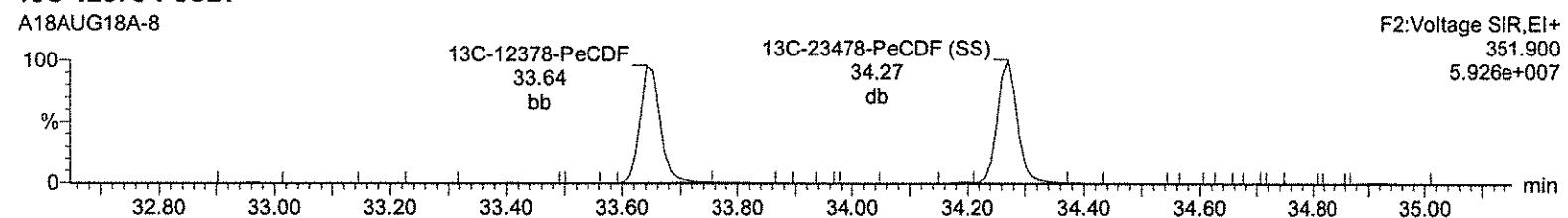
### Total-pentafurans

A18AUG18A-8



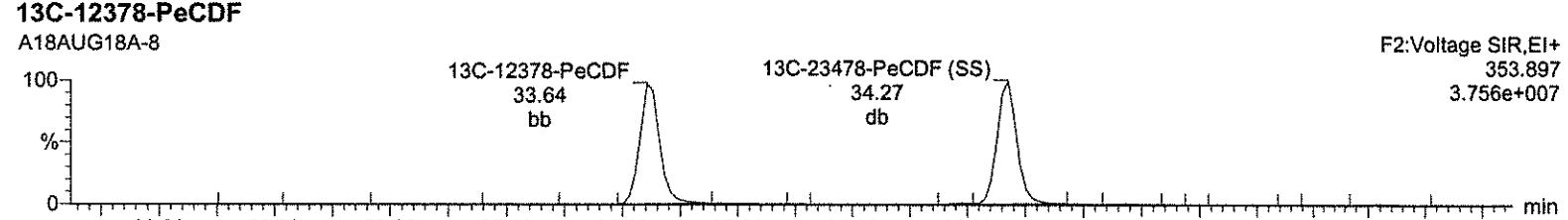
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A18AUG18A-8



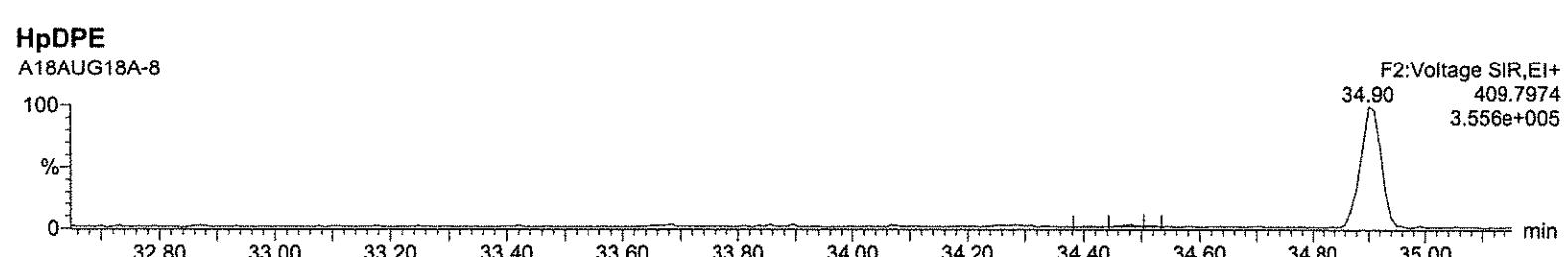
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A18AUG18A-8



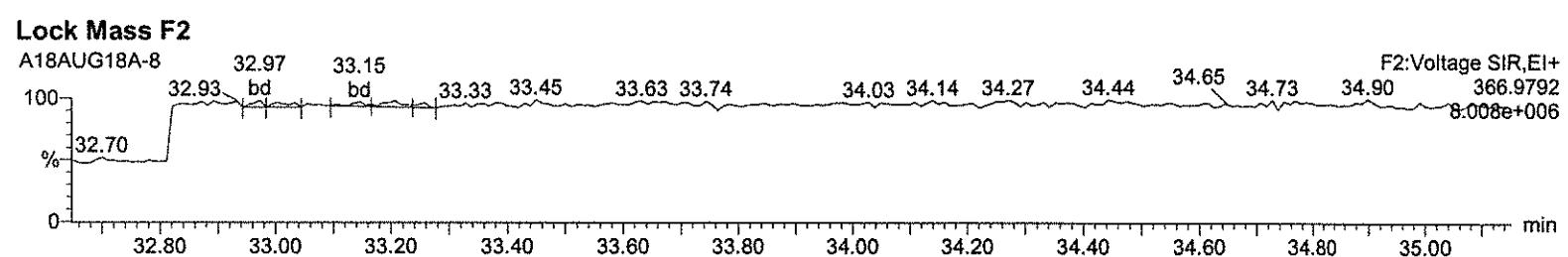
### HpDPE

A18AUG18A-8



### Lock Mass F2

A18AUG18A-8



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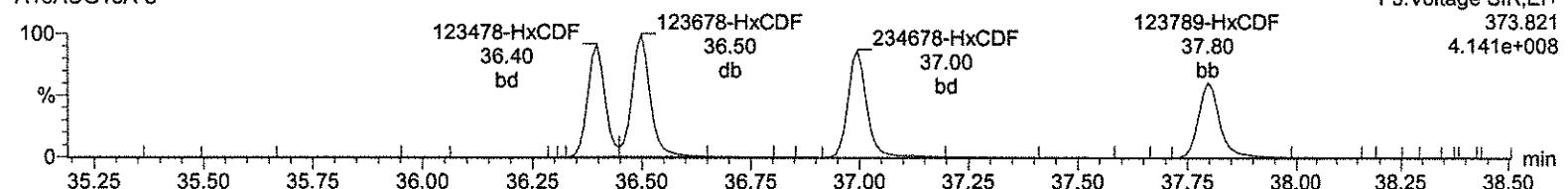
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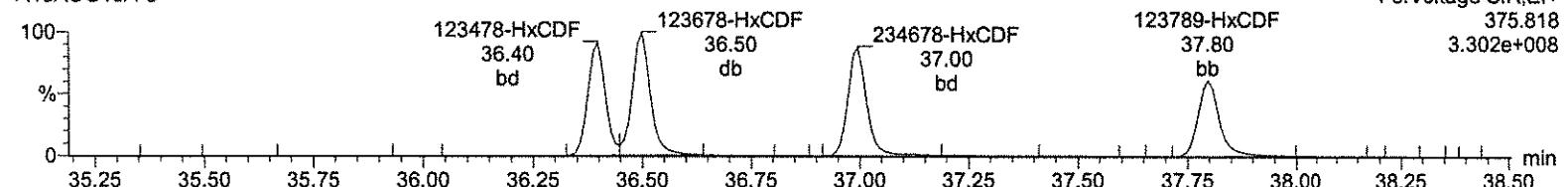
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A18AUG18A-8



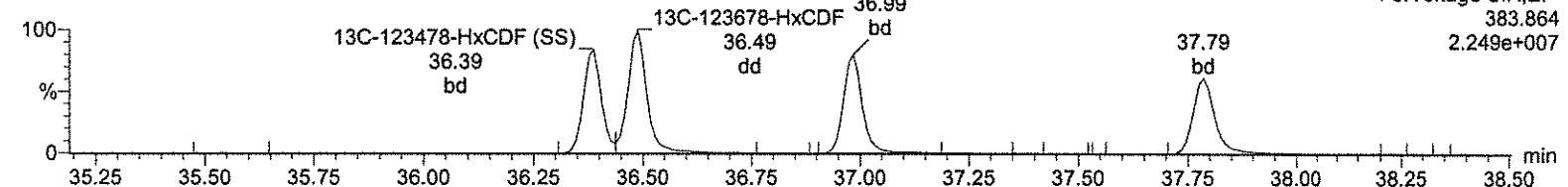
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A18AUG18A-8



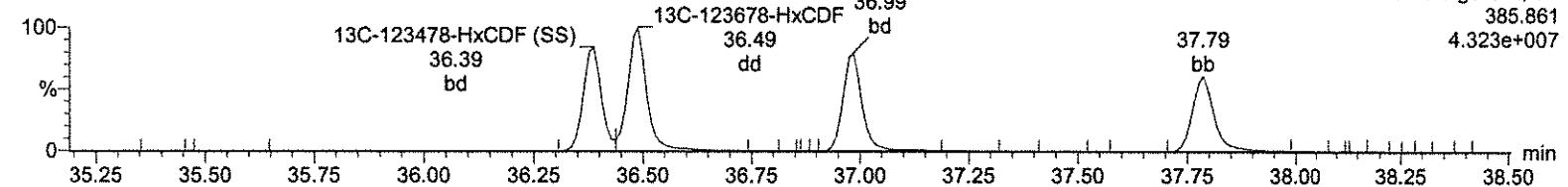
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A18AUG18A-8



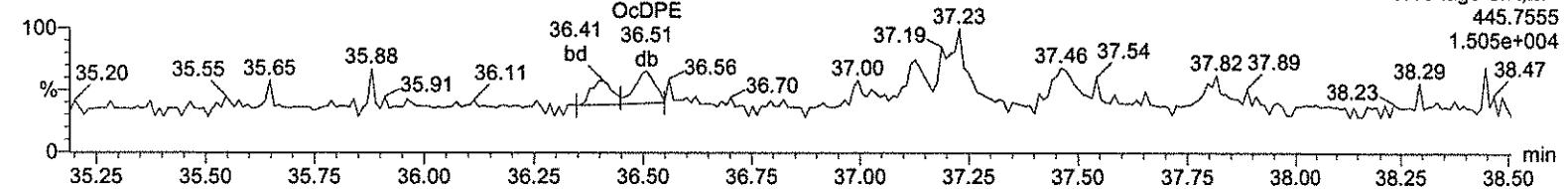
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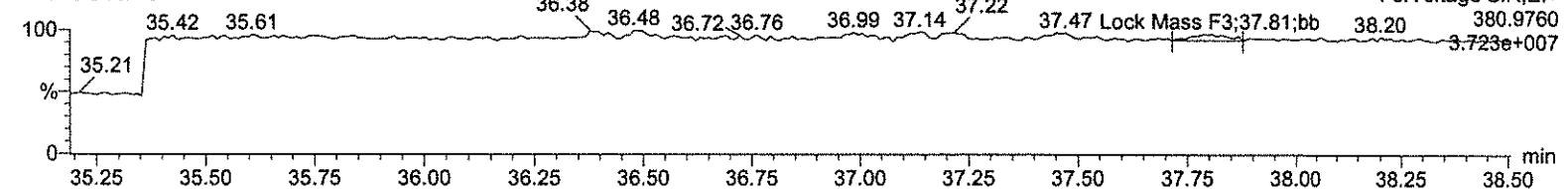
### OcDPE

A18AUG18A-8



### Lock Mass F3

A18AUG18A-8



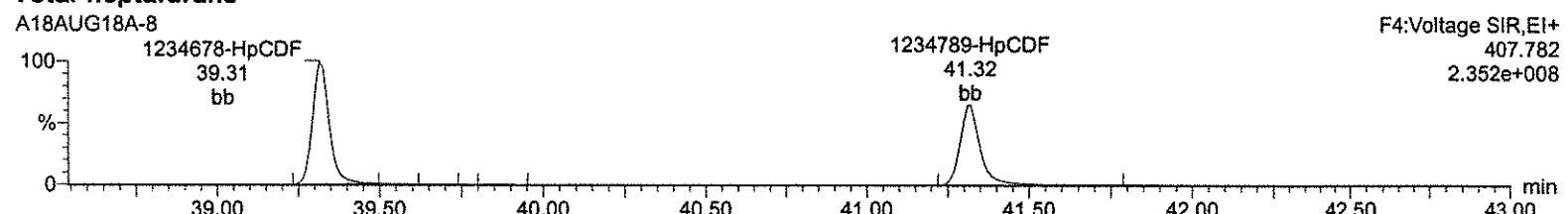
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Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

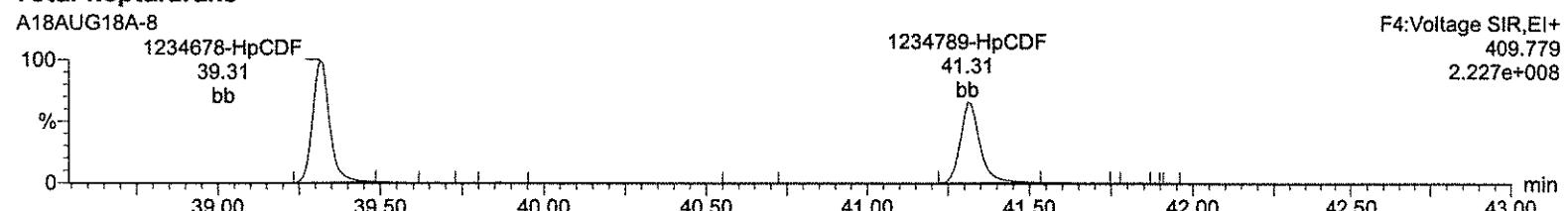
Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-8, Date: 18-Aug-2018, Time: 14:18:58, ID: CS5 UD180112-07 CS53R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

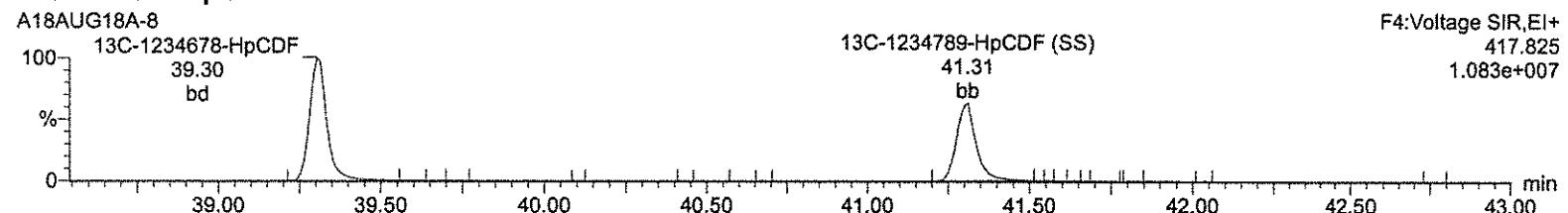
### Total-heptafurans



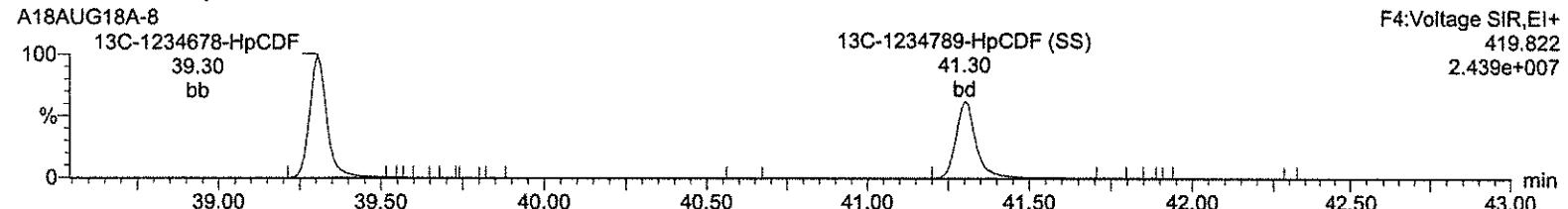
### Total-heptafurans



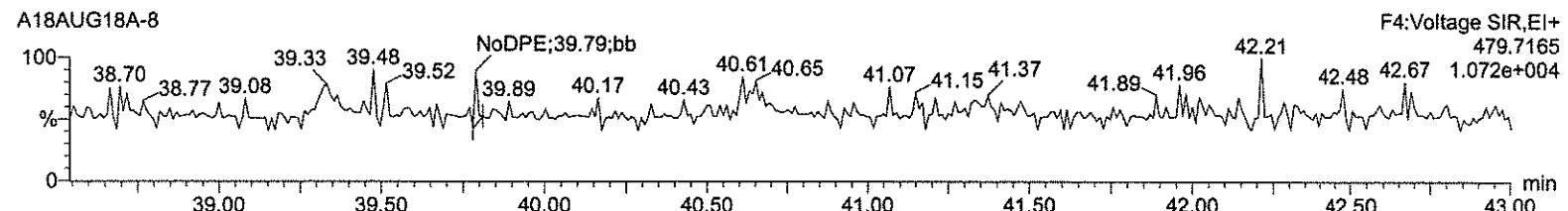
### 13C-1234678-HpCDF



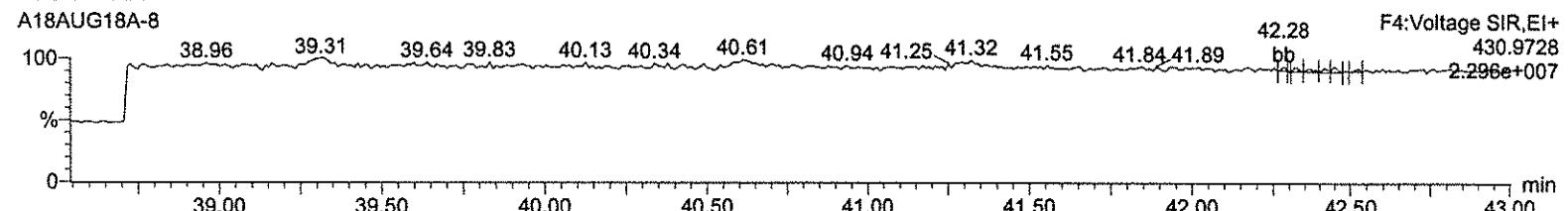
### 13C-1234678-HpCDF



### NoDPE



### Lock Mass F4



Dataset: C:\MassLynx\Default.pro\ICAL Results\8290-A18AUG18A.qld

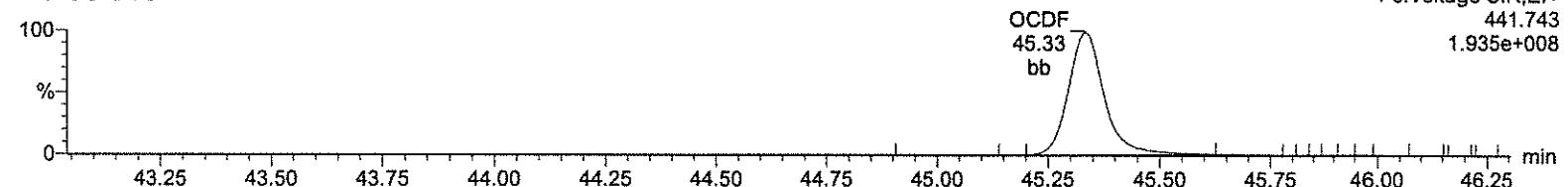
Last Altered: Monday, August 20, 2018 13:48:29 Eastern Standard Time

Printed: Monday, August 20, 2018 13:51:11 Eastern Standard Time

Name: A18AUG18A-8, Date: 18-Aug-2018, Time: 14:18:58, ID: CS5 UD180112-07 CS53R, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

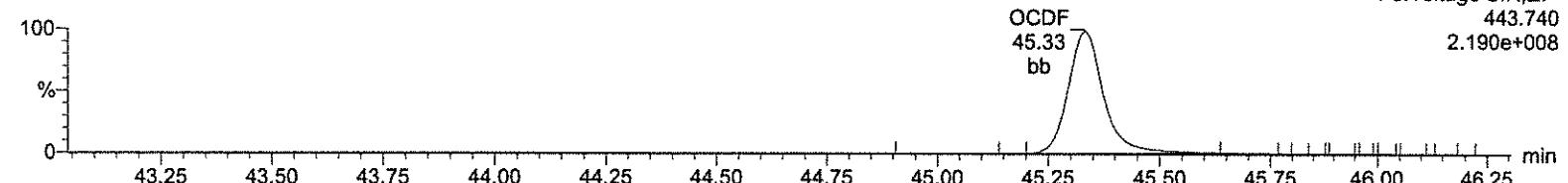
### OCDF

A18AUG18A-8



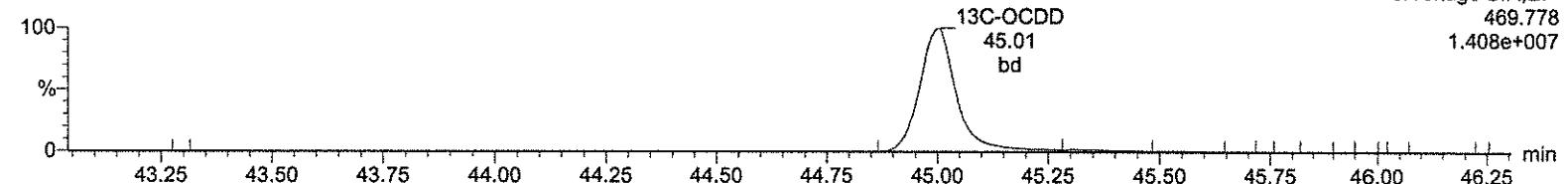
### OCDF

A18AUG18A-8



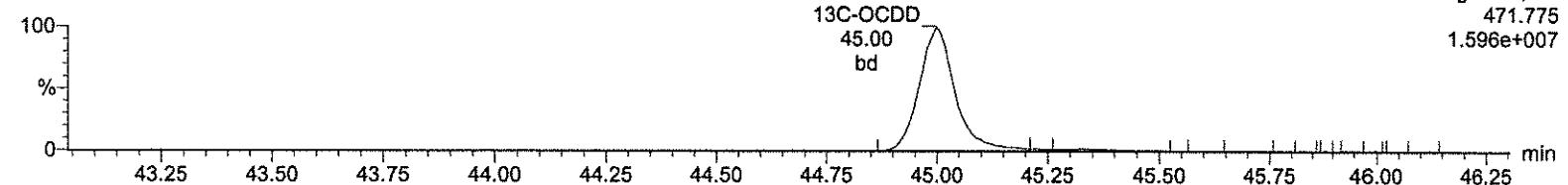
### 13C-OCDD

A18AUG18A-8



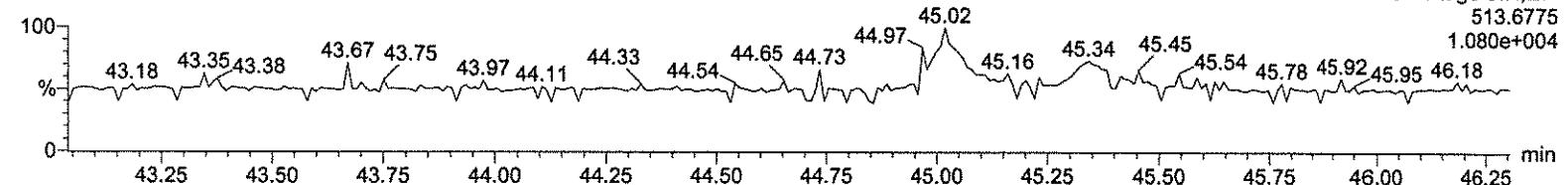
### 13C-OCDD

A18AUG18A-8



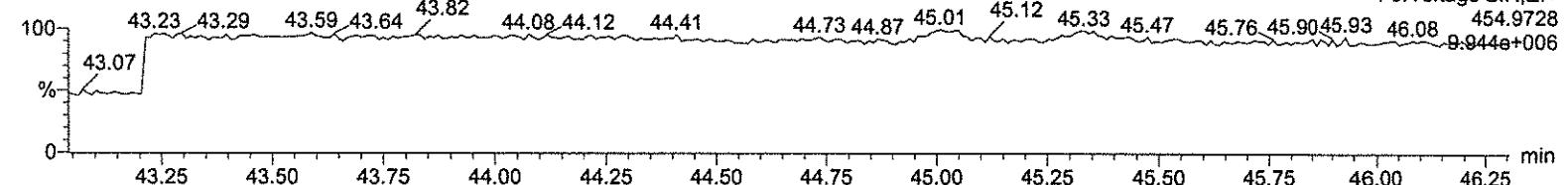
### DeDPE

A18AUG18A-8



### Lock Mass F5

A18AUG18A-8



## Quantify Sample Summary Report

## MassLynx 4.1

Method 8290 CCAL\_Report  
of 24 Dataset: C:\MassLynx\Default.pro\CCAL\_Results\8290-A18AUG18A-10.qld

Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time  
Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A08AUG18.mdb 08 Aug 2018 12:08:43  
Calibration: C:\MassLynx\Default.pro\Curvedb\8290-A18AUG18.cdb 20 Aug 2018 13:48:29

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	Fail?	pg/µL	EDL	RRF	Mean	%AD	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TcDD	8.75e4	1.15e5	2.02e5	31.68	1.000	0.76	NO	10.347	0.0565	1.000	0.966	3.5	1.97e6	4499	437.2	2.39e6	4812	496.0	db
2	12378-PeCDD	4.33e5	2.81e5	7.14e5	34.46	1.000	1.54	NO	49.976	0.132	0.976	0.977	-0.0	1.02e7	9648	1057.1	6.67e6	8634	772.2	bb
3	123478-HxCDD	3.53e5	2.82e5	6.35e5	37.12	0.998	1.25	NO	52.360	0.204	0.858	0.820	4.7	7.32e6	9793	747.2	5.86e6	8156	718.4	dd
4	123678-HxCDD	4.06e5	3.19e5	7.25e5	37.21	1.000	1.27	NO	50.458	0.172	0.980	0.971	0.9	7.78e6	9793	794.2	6.14e6	8156	752.5	dd
5	123789-HxCDD	3.66e5	2.89e5	6.55e5	37.46	1.007	1.27	NO	51.358	0.194	0.886	0.861	2.7	6.30e6	9793	643.8	5.01e6	8156	613.8	dd
6	1234678-HpCDD	2.35e5	4.70e5	40.61	1.000	1.00	NO	50.219	0.366	0.959	0.955	0.4	3.49e6	8561	407.7	3.32e6	10347	321.2	bb	
7	OCDD	3.69e5	4.23e5	7.92e5	45.00	1.000	0.87	NO	103.812	0.453	1.018	0.981	3.8	3.75e6	7860	476.7	4.26e6	6095	699.0	bd
8	2378-TcDF	1.19e5	1.51e5	2.69e5	31.13	1.001	0.79	NO	10.022	0.0615	0.921	0.919	0.2	2.33e6	5886	396.5	2.79e6	5644	494.0	bb
9	12378-PeCDF	6.43e5	4.27e5	1.07e6	33.65	1.000	1.51	NO	50.642	0.133	0.887	0.875	1.3	1.67e7	12476	1342.4	1.09e7	17549	620.7	bb
10	23478-PeCDF	7.19e5	4.64e5	1.18e6	34.28	1.019	1.55	NO	49.972	0.119	0.981	0.981	-0.1	1.73e7	12476	1384.8	1.12e7	17549	635.8	bb
11	123478-HxCDF	5.26e5	4.26e5	9.53e5	36.39	0.997	1.24	NO	51.792	0.198	0.956	0.923	3.6	1.14e7	16143	703.9	9.14e6	13227	691.1	dd
12	123678-HxCDF	5.83e5	4.70e5	1.05e6	36.50	1.001	1.24	NO	49.705	0.172	1.057	1.063	-0.6	1.22e7	16143	753.8	9.68e6	13227	731.8	db
13	234678-HxCDF	5.18e5	4.34e5	9.52e5	36.99	1.014	1.20	NO	50.237	0.192	0.956	0.951	0.5	1.07e7	16143	664.3	8.46e6	13227	639.3	bb
14	123789-HxCDF	4.19e5	3.40e5	7.59e5	37.80	1.036	1.23	NO	50.724	0.243	0.762	0.751	1.4	7.29e6	16143	451.5	5.83e6	13227	441.0	bd
15	1234678-HpCDF	4.12e5	4.00e5	8.12e5	39.31	1.000	1.03	NO	50.480	0.202	1.231	1.219	1.0	6.77e6	8856	764.2	6.48e6	11104	583.5	bd
16	1234789-HpCDF	3.12e5	3.02e5	6.13e5	41.31	1.051	1.03	NO	51.583	0.273	0.950	0.902	3.2	4.13e6	8856	466.5	4.03e6	11104	362.9	bd
17	OCDF	4.39e5	4.87e5	9.28e5	45.32	1.008	0.90	NO	100.236	0.348	1.190	1.187	0.2	4.65e6	6641	700.4	5.09e6	6329	804.2	bd
18	13C-2378-TcDD	8.92e5	1.13e6	2.02e6	31.67	1.013	0.79	NO	96.668	0.0852	1.028	1.064	-3.3	1.88e7	8296	2263.1	2.39e7	5789	4136.8	bb
19	13C-12378-PeCDD	8.95e5	5.67e5	1.48e6	34.45	1.103	1.58	NO	95.790	0.0900	0.743	0.775	-4.2	2.17e7	7081	3058.1	1.37e7	3759	3646.4	bd
20	13C-123678-HxCDD	8.12e5	6.68e5	1.48e6	37.20	0.993	1.22	NO	99.598	0.176	1.157	1.162	-0.4	1.47e7	8419	1748.3	1.20e7	9368	1280.5	dd
21	13C-1234678-HpCDD	5.00e5	4.80e5	9.80e5	40.60	1.084	1.04	NO	102.468	0.275	0.766	0.748	2.5	6.91e6	9107	758.6	6.62e6	8819	750.9	bd
22	13C-OCDD	7.35e5	8.21e5	1.56e6	44.98	1.201	0.90	NO	199.168	0.307	0.608	0.611	-0.4	7.41e6	10082	735.4	8.47e6	6250	1355.4	bd
23	13C-2378-TcDF	1.29e6	1.64e6	2.98e6	31.10	0.995	0.78	NO	95.296	0.0942	1.486	1.560	-4.7	2.24e7	14638	1526.0	2.89e7	8142	3549.2	bb
24	13C-12378-PeCDF	1.46e6	9.59e5	2.41e6	33.64	1.077	1.52	NO	92.944	0.133	1.227	1.320	-7.1	3.89e7	16078	2418.9	2.46e7	11143	2207.0	bd
25	13C-123678-HxCDF	6.69e5	1.32e6	1.99e6	36.48	0.974	0.51	NO	100.714	0.230	1.557	1.546	0.7	1.35e7	14599	925.0	2.59e7	16309	1586.1	db
26	13C-1234678-HpCDF	4.09e5	9.11e5	1.32e6	39.30	1.049	0.45	NO	101.694	0.203	1.031	1.014	1.7	6.27e6	9052	692.4	1.43e7	8908	1610.2	bd
27	13C-1234-TcDD	8.70e5	1.10e6	1.97e6	31.25	0.000	0.79	NO	100.000	0.0907	1.000	1.000	0.0	1.72e7	8296	2069.3	2.19e7	5789	3784.9	bb
28	13C-123789-HxCDD	7.14e5	5.65e5	1.28e6	37.45	0.000	1.26	NO	100.000	0.204	1.000	1.000	0.0	1.21e7	8419	1443.2	9.51e6	9368	1014.7	dd
29	37Cl-2378-TcDD (SS)	2.03e5	2.03e5	31.68	1.000	9.870	0.0272	1.002	0.015	-1.3	4.47e6	4709	948.9	-	-	-	-	-	bb	
30	13C-23478-PeCDF (SS)	1.46e6	9.35e5	2.39e6	34.26	1.018	1.56	NO	99.974	0.107	0.990	-0.0	3.51e7	16078	2180.1	2.30e7	11143	2064.0	db	

**Quantify Sample Summary Report**

Method 8290 CCAL Report

250 of 359

Dataset: C:\MassLynx\Default.prol\CCAL Results\8290-A18AUG18A-10.qid

Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time  
Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time**Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: , Job: A18AUG18A, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail2	pigUL	EDL	RRF	Mean	%D	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
31	13C-123478-HxCDF (SS)	5.51e5	1.07e6	1.62e6	36.38	0.997	0.51	NO	99.509	0.235	0.815	0.819	-0.5	1.23e7	14599	839.3	2.42e7	16309	1481.2	bd	bd
32	13C-123478-HxCDD (SS)	7.10e5	5.40e5	1.25e6	37.11	0.998	1.31	NO	101.248	0.199	0.844	0.834	1.2	1.40e7	8419	1728.7	1.18e7	9368	1261.5	bd	bd
33	13C-1234789-HpCDF (SS)	2.89e5	6.45e5	9.33e5	41.29	1.051	0.45	NO	98.881	0.310	0.707	0.715	-1.1	3.91e6	9052	432.3	8.45e6	8908	948.2	bd	bd

Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

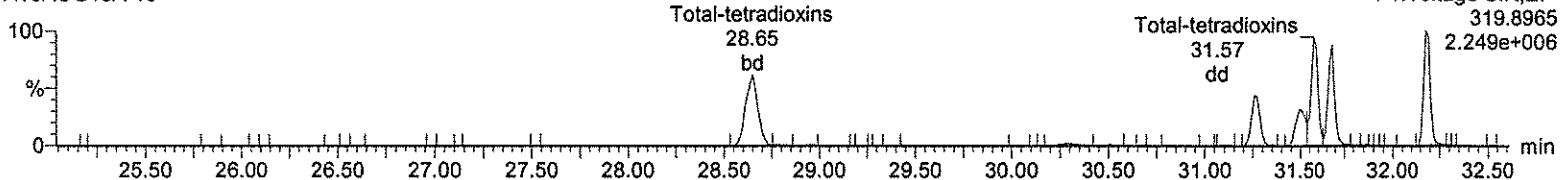
Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A08AUG18.mdb 08 Aug 2018 12:08:43

Calibration: C:\MassLynx\Default.pro\Curvedb\8290-A18AUG18.cdb 20 Aug 2018 13:48:29

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

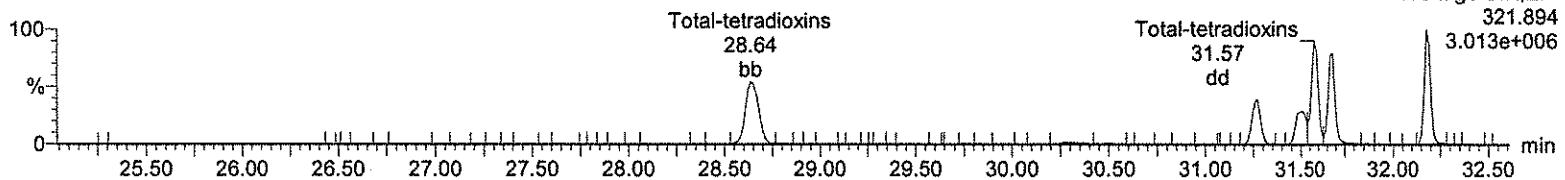
### Total-tetradioxins

A18AUG18A-10



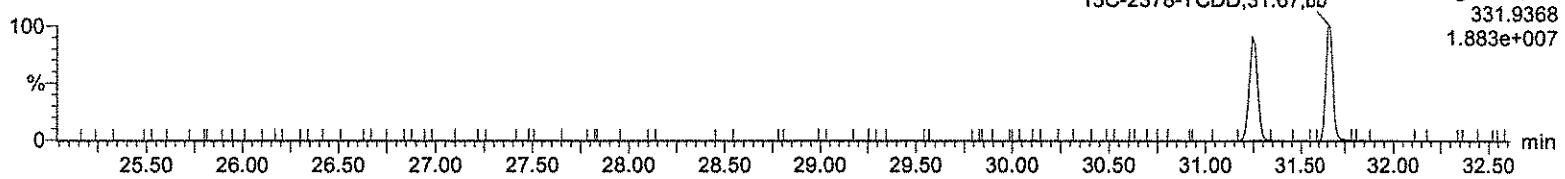
### Total-tetradioxins

A18AUG18A-10



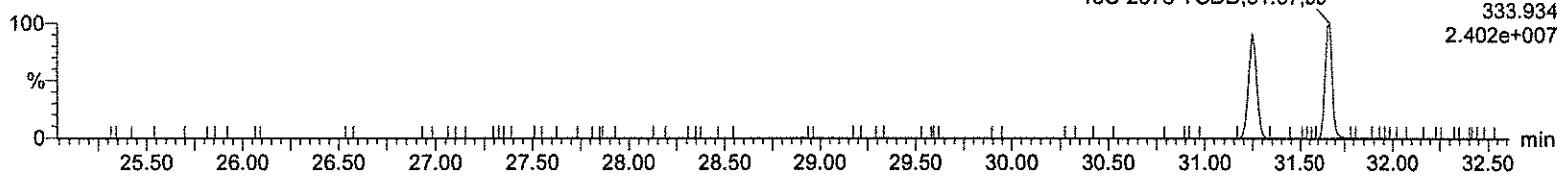
### 13C-2378-TCDD

A18AUG18A-10



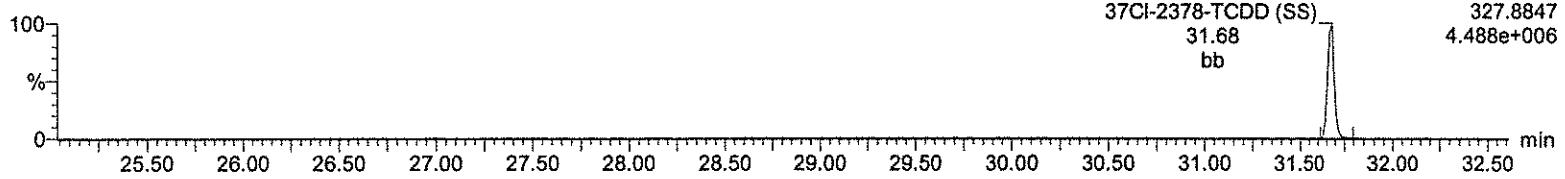
### 13C-2378-TCDD

A18AUG18A-10



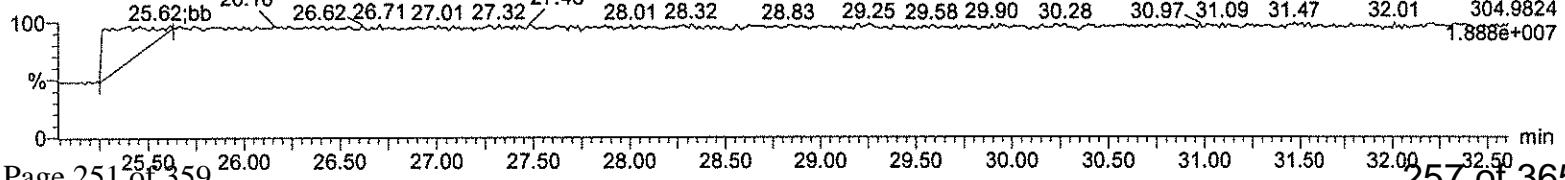
### 37CI-2378-TCDD (SS)

A18AUG18A-10



### Lock Mass F1

A18AUG18A-10



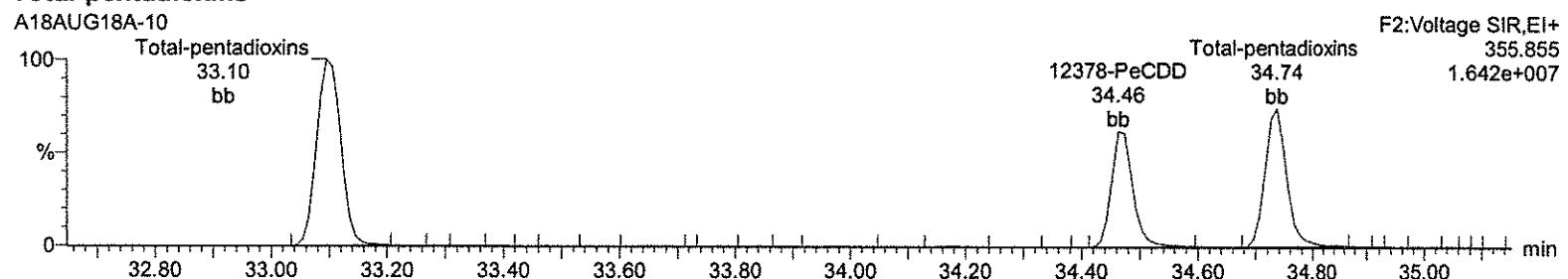
Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

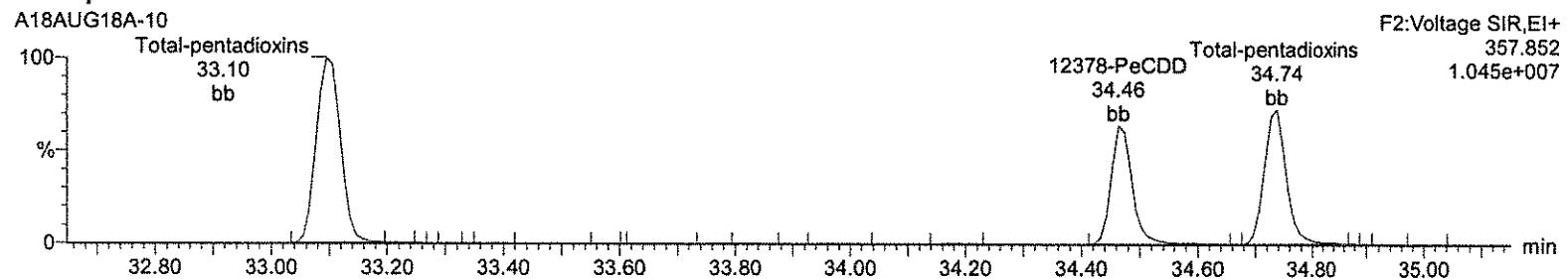
Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

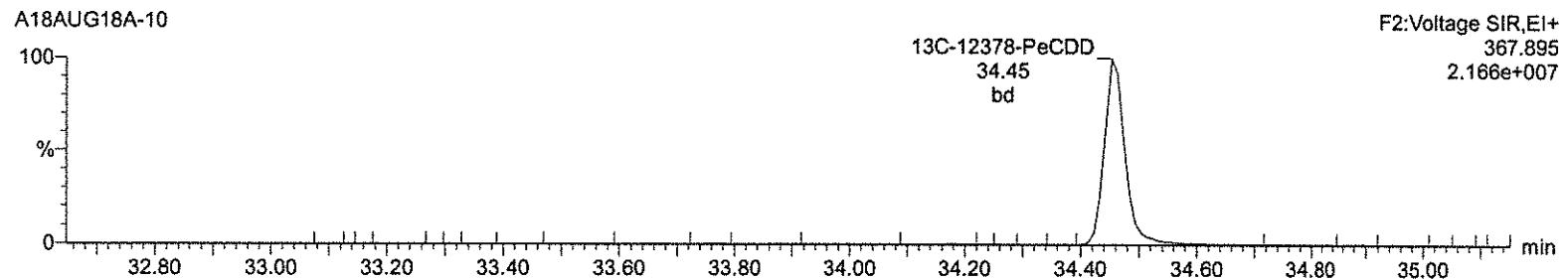
### Total-pentadioxins



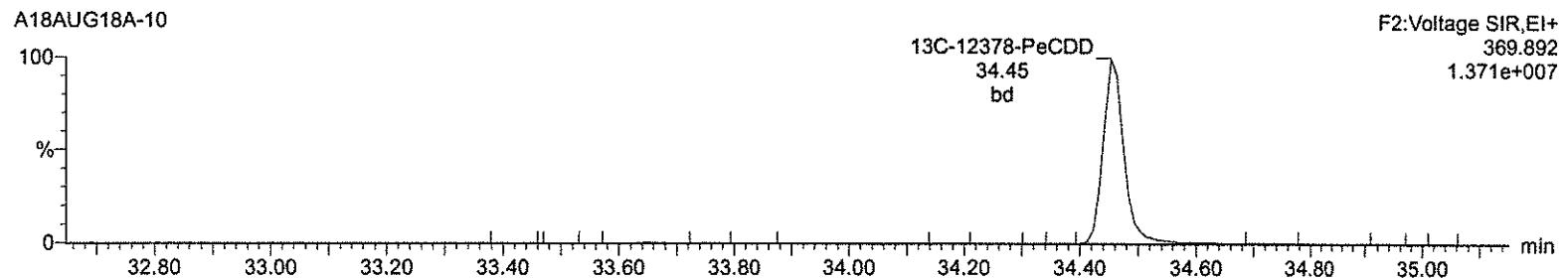
### Total-pentadioxins



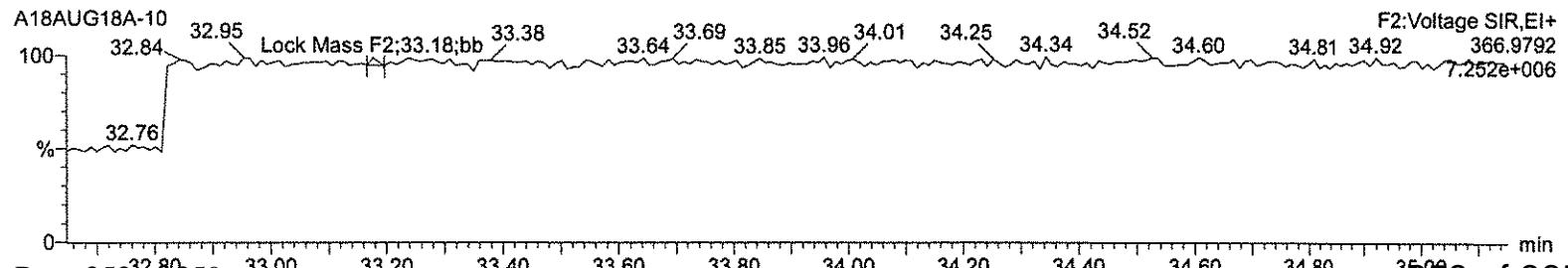
### 13C-12378-PeCDD



### 13C-12378-PeCDD



### Lock Mass F2



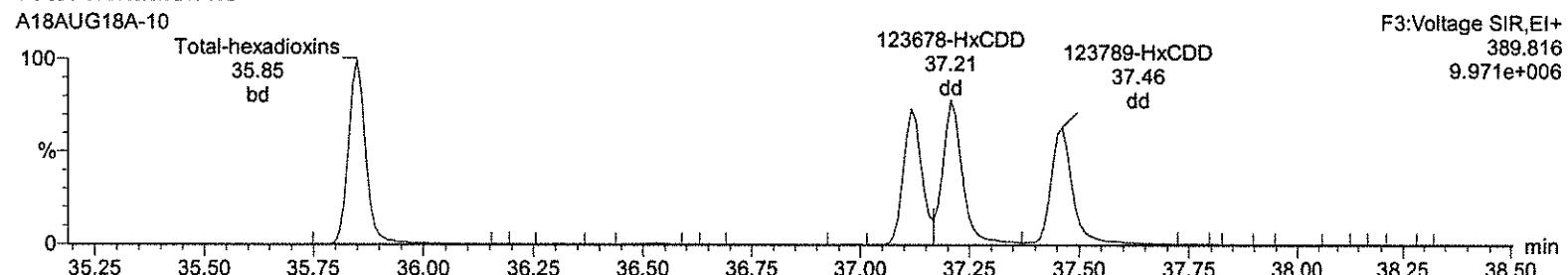
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Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

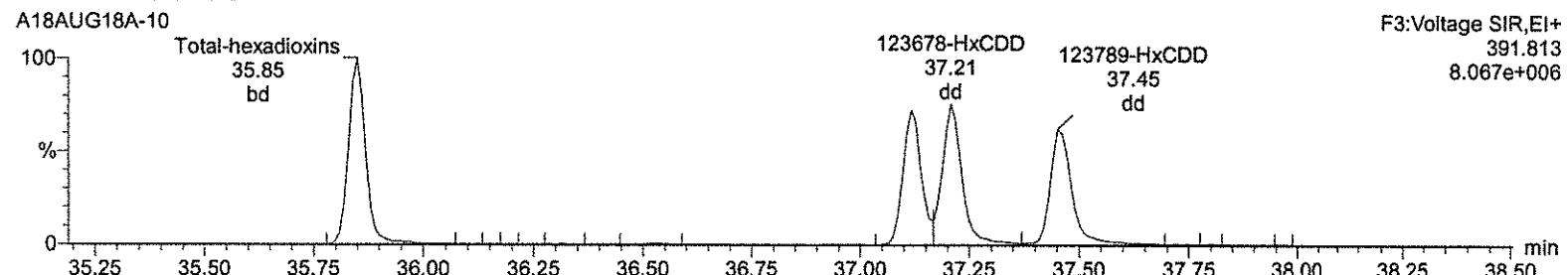
Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

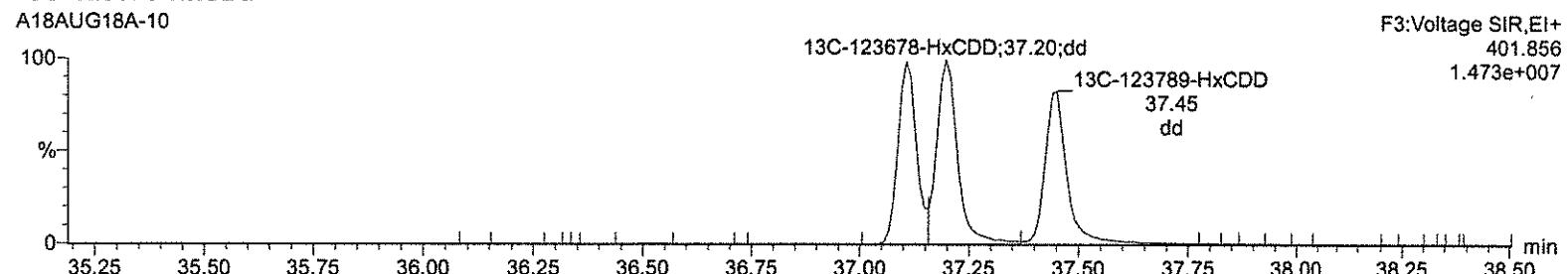
### Total-hexadioxins



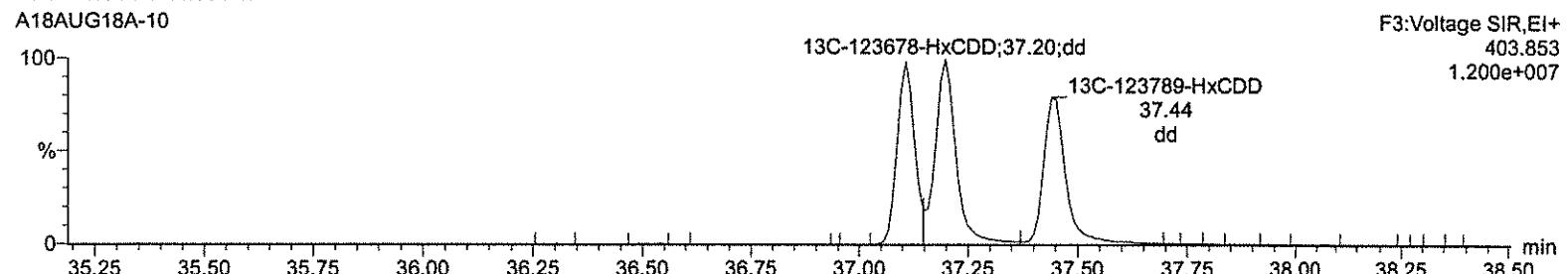
### Total-hexadioxins



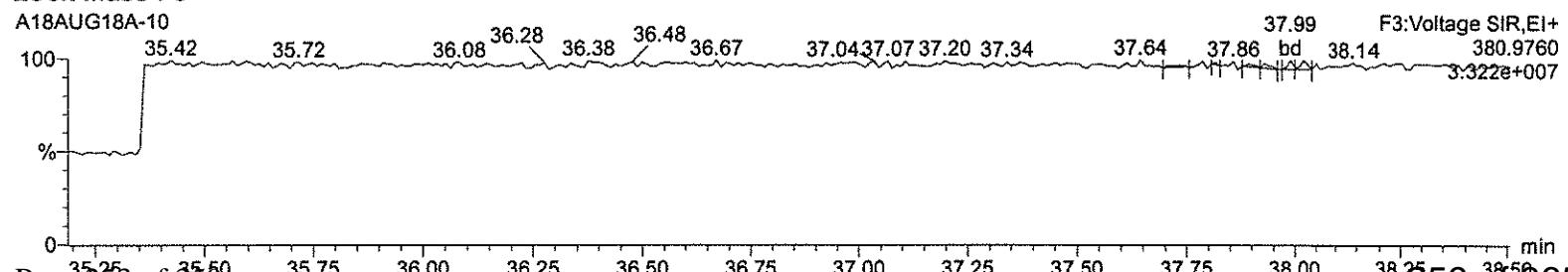
### 13C-123678-HxCDD



### 13C-123678-HxCDD



### Lock Mass F3



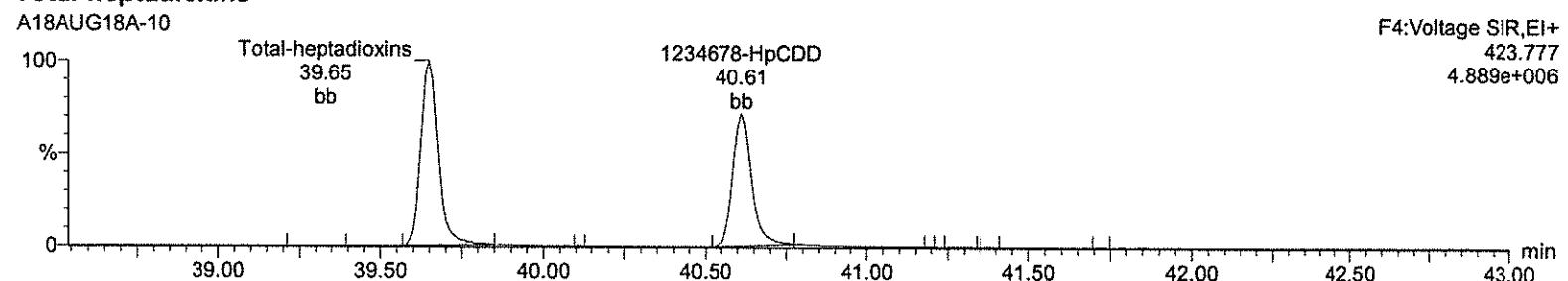
Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

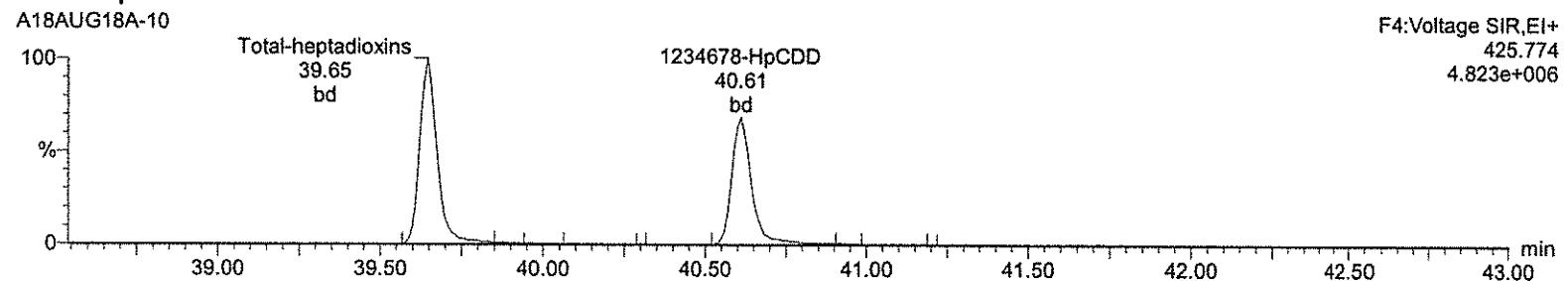
Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

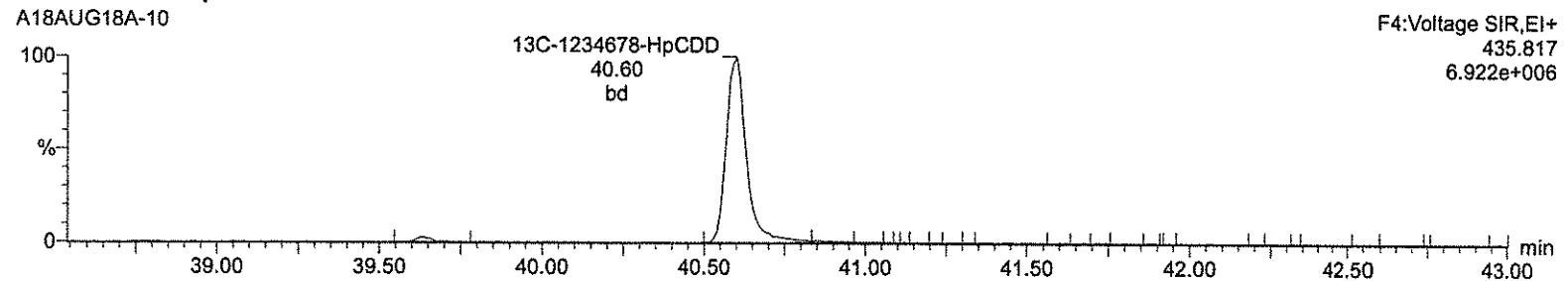
### Total-heptadioxins



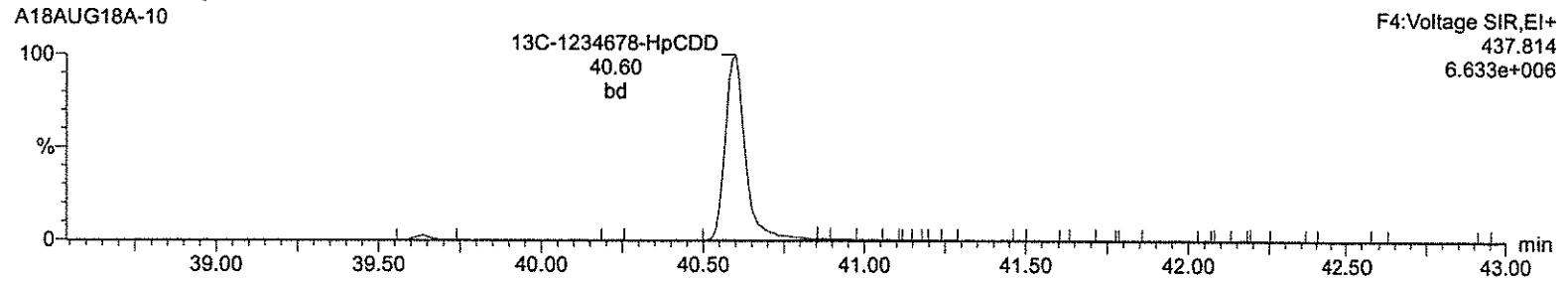
### Total-heptadioxins



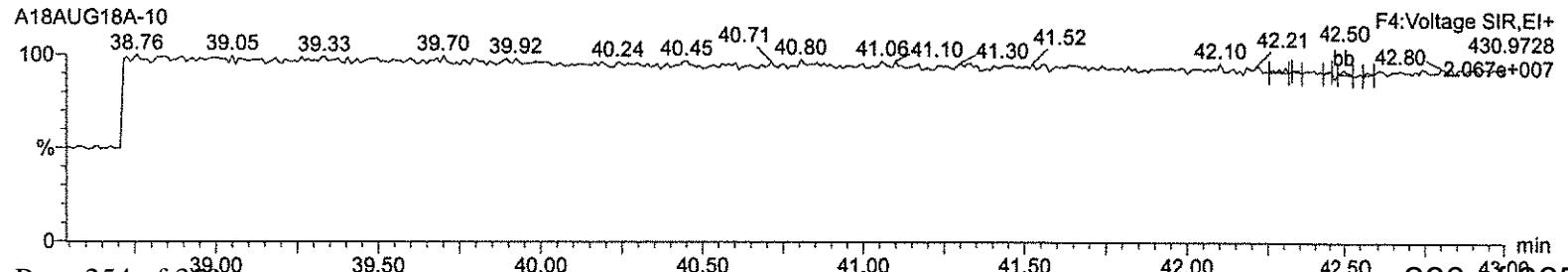
### 13C-1234678-HpCDD



### 13C-1234678-HpCDD



### Lock Mass F4



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

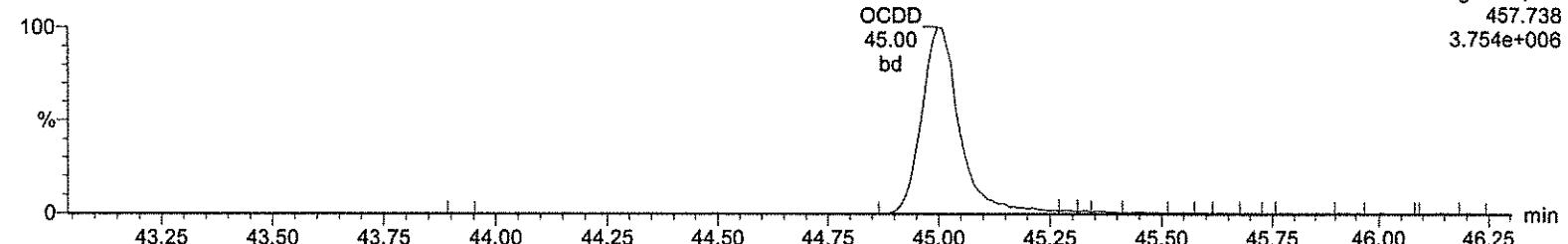
Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

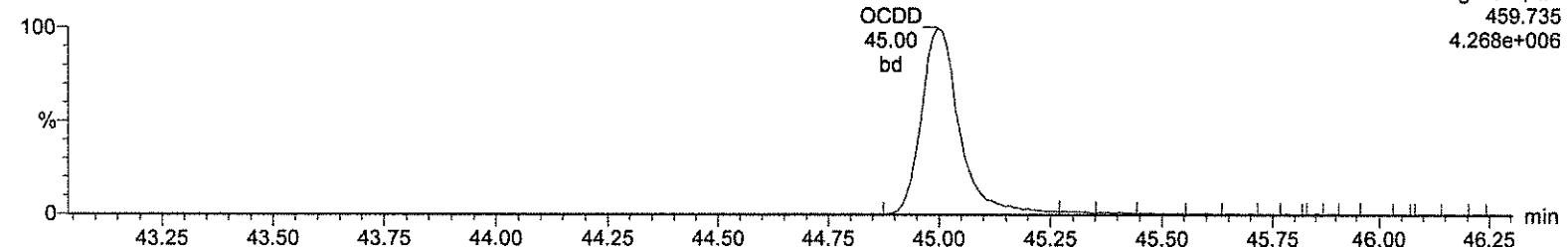
### OCDD

A18AUG18A-10



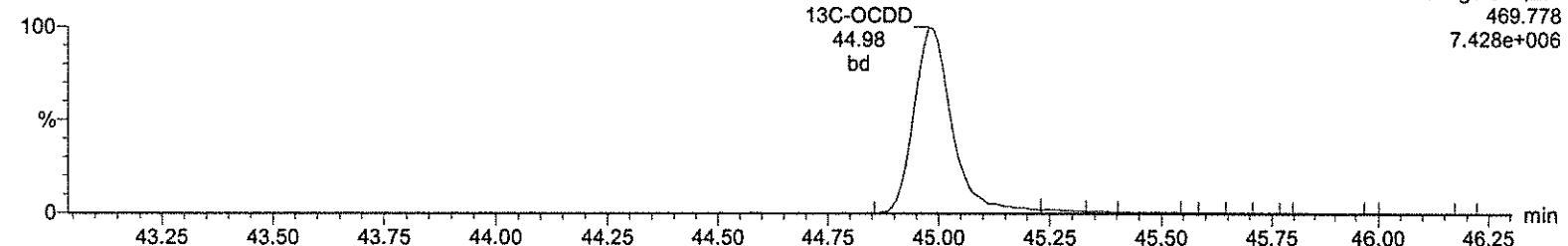
### OCDD

A18AUG18A-10



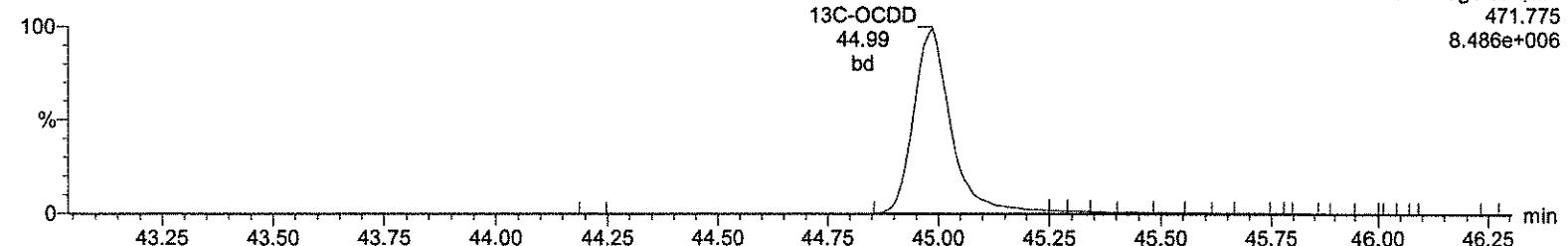
### 13C-OCDD

A18AUG18A-10



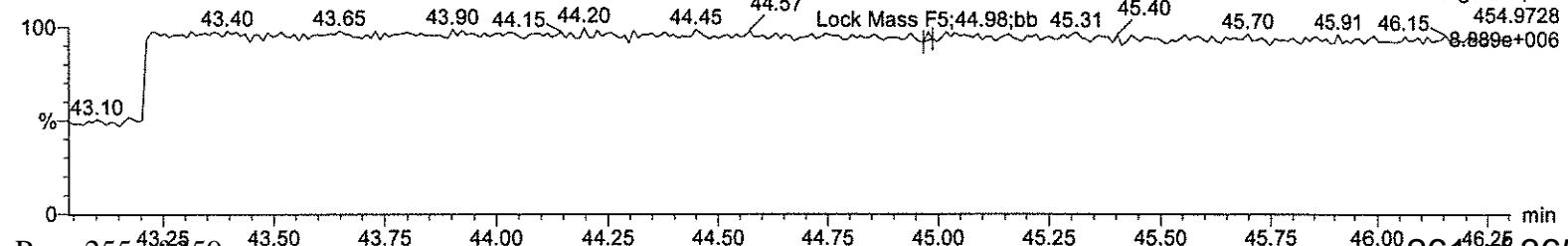
### 13C-OCDD

A18AUG18A-10



### Lock Mass F5

A18AUG18A-10



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

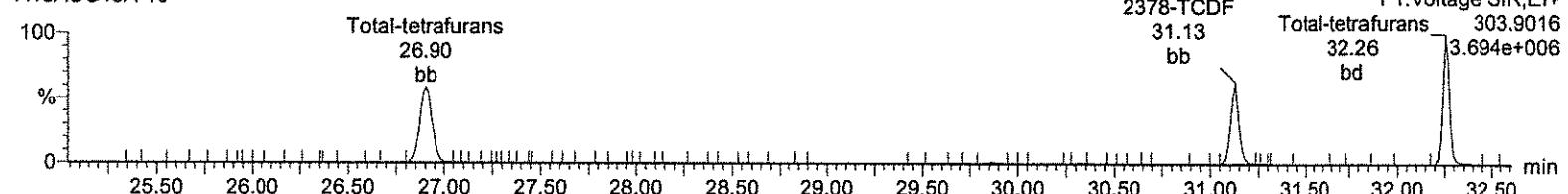
Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,

Job: A18AUG18A, Task: HRP750\_2, User: MJC

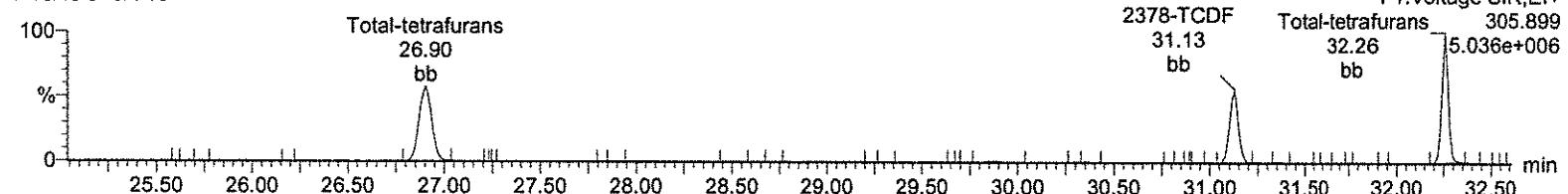
### Total-tetrafurans

A18AUG18A-10



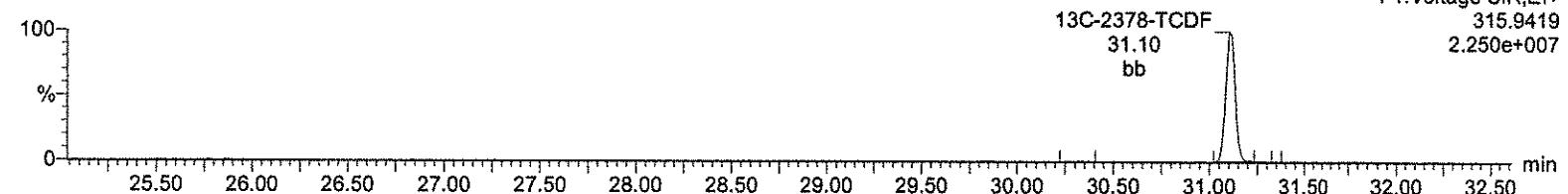
### Total-tetrafurans

A18AUG18A-10



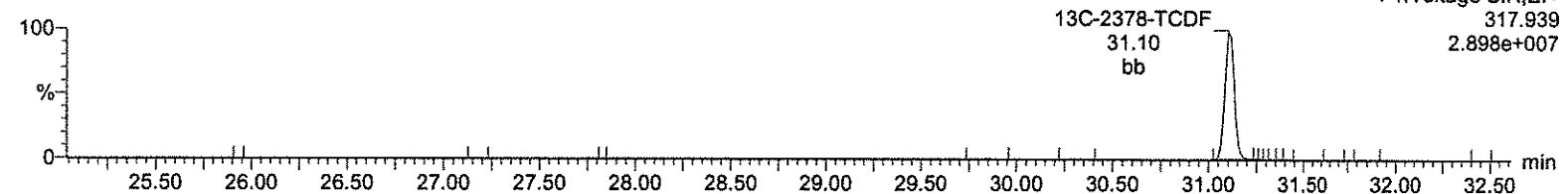
### 13C-2378-TCDF

A18AUG18A-10



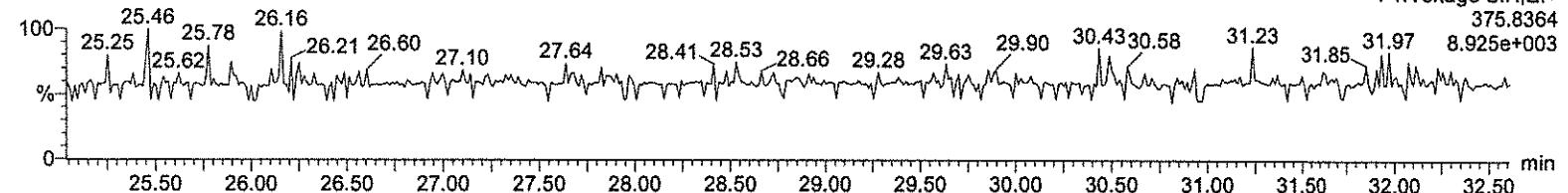
### 13C-2378-TCDF

A18AUG18A-10



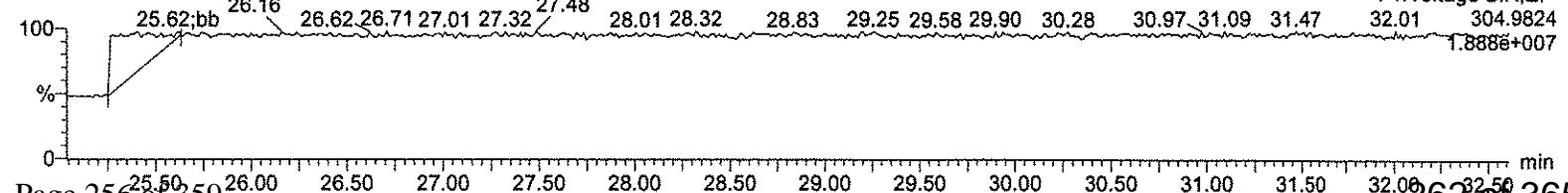
### HxDPE

A18AUG18A-10



### Lock Mass F1

A18AUG18A-10



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

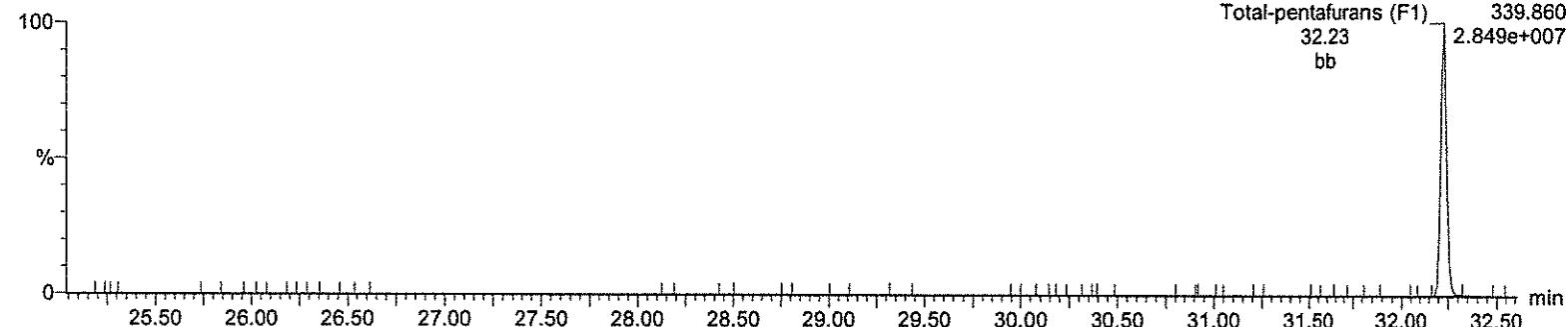
Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

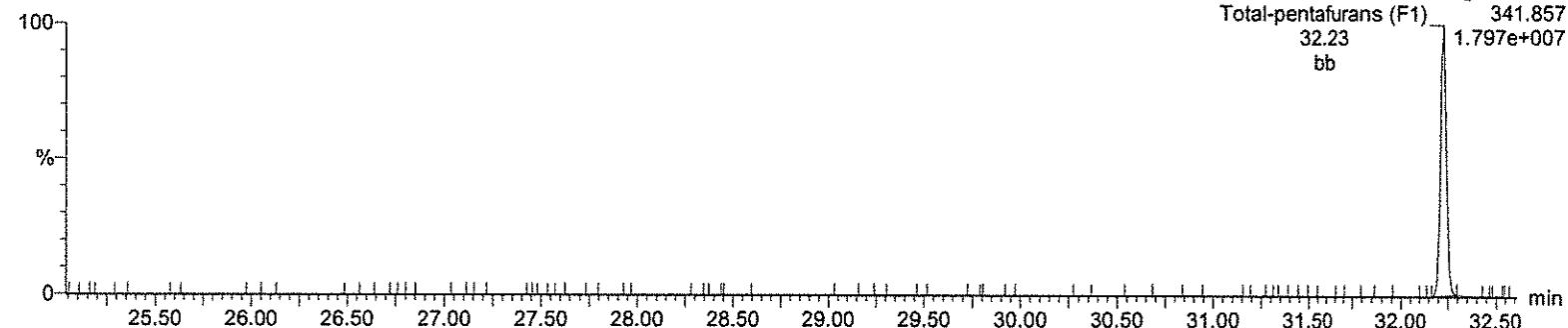
### Total-pentafurans (F1)

A18AUG18A-10



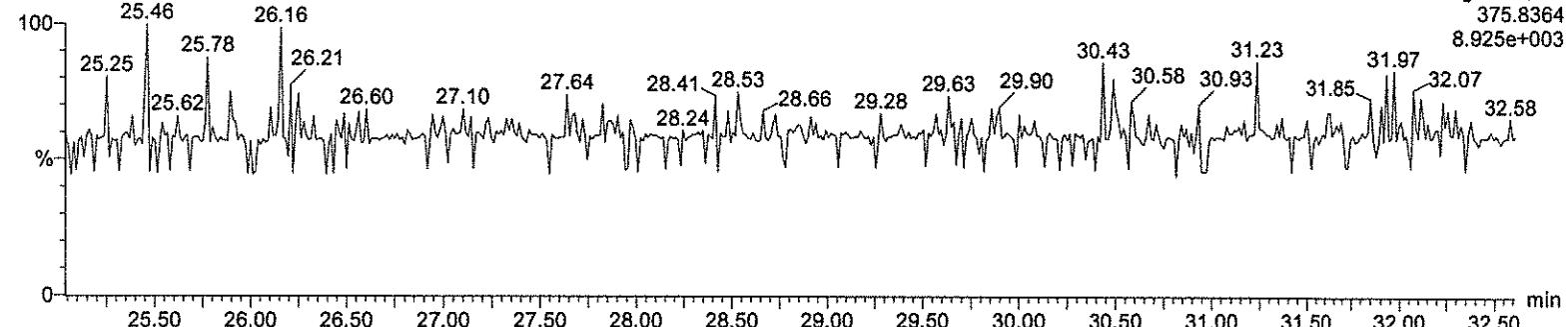
### Total-pentafurans (F1)

A18AUG18A-10



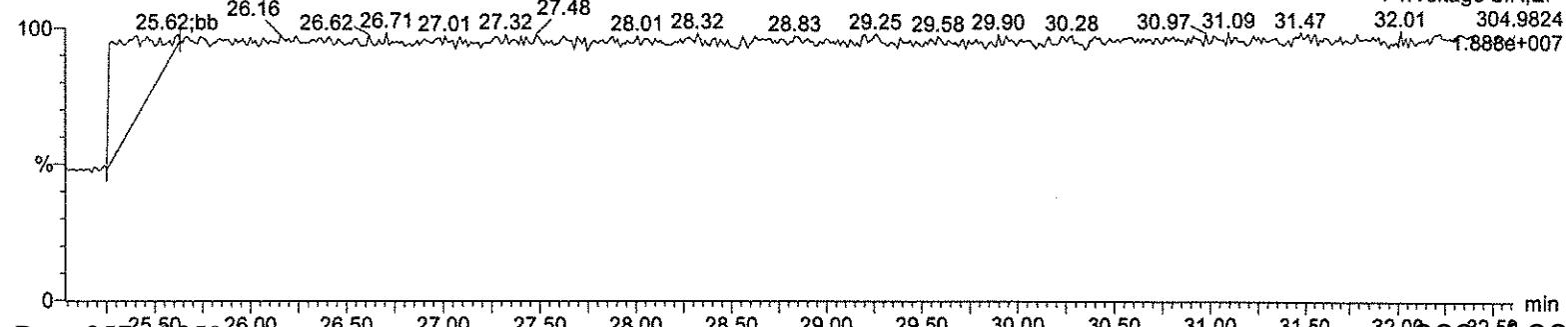
### HxDPE

A18AUG18A-10



### Lock Mass F1

A18AUG18A-10



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

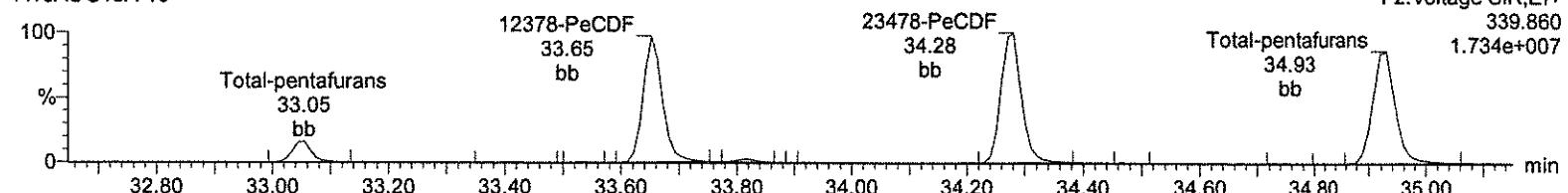
Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

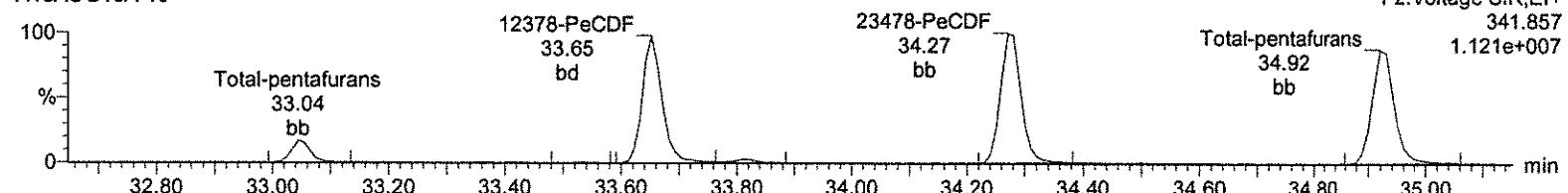
### Total-pentafurans

A18AUG18A-10



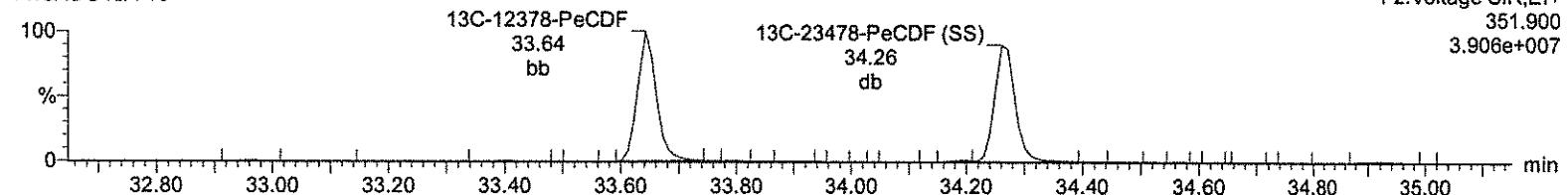
### Total-pentafurans

A18AUG18A-10



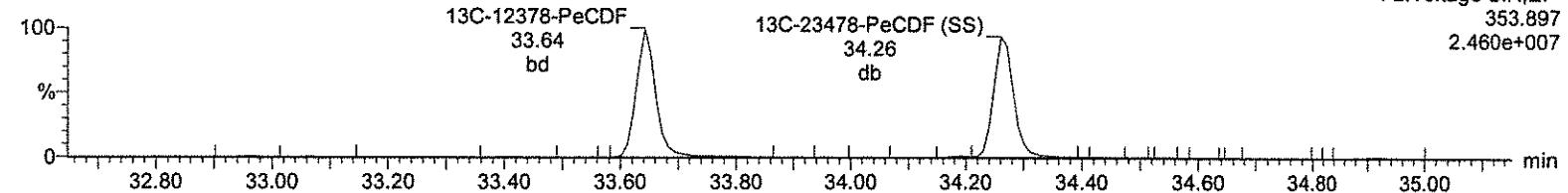
### 13C-12378-PeCDF

A18AUG18A-10



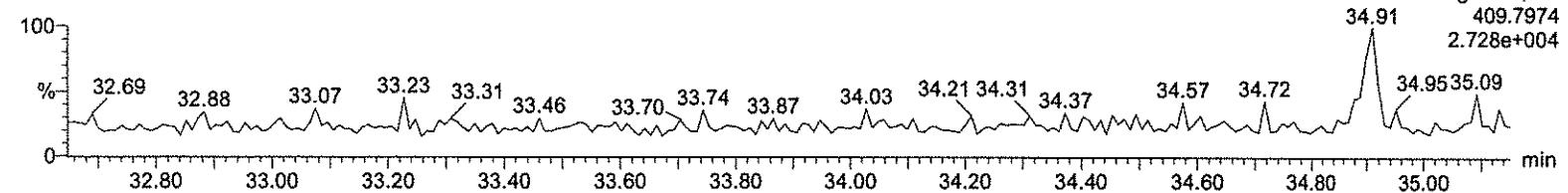
### 13C-12378-PeCDF

A18AUG18A-10



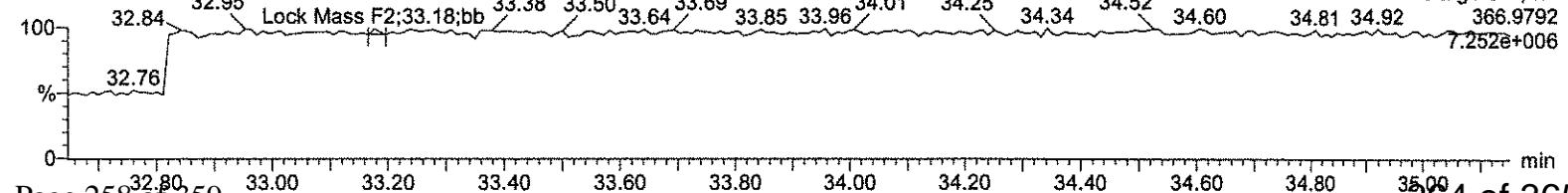
### HpDPE

A18AUG18A-10



### Lock Mass F2

A18AUG18A-10



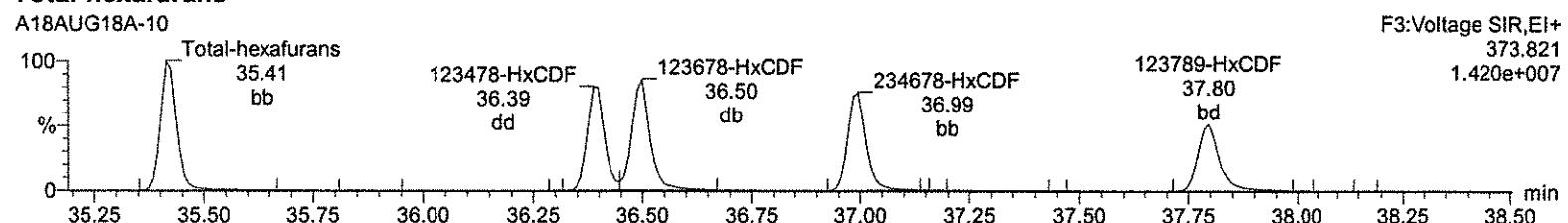
Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

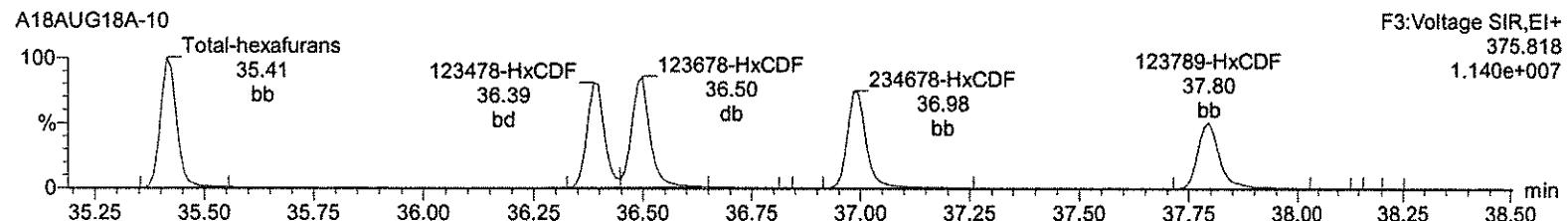
Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

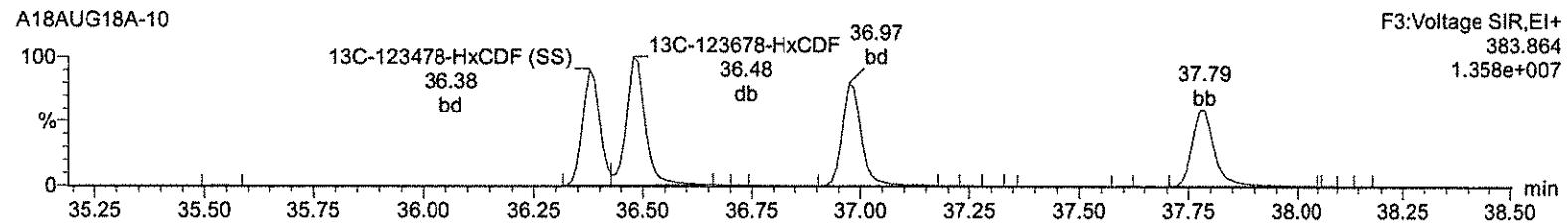
### Total-hexafurans



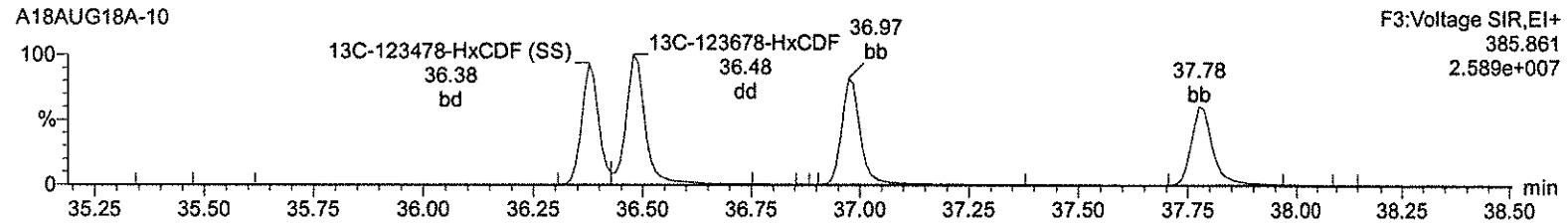
### Total-hexafurans



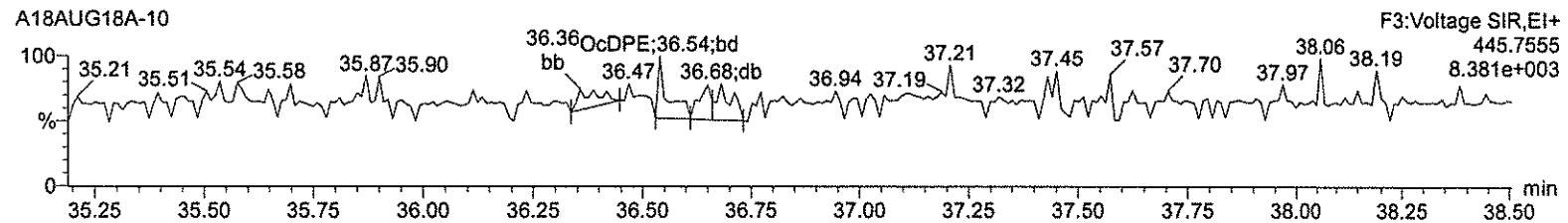
### 13C-123678-HxCDF



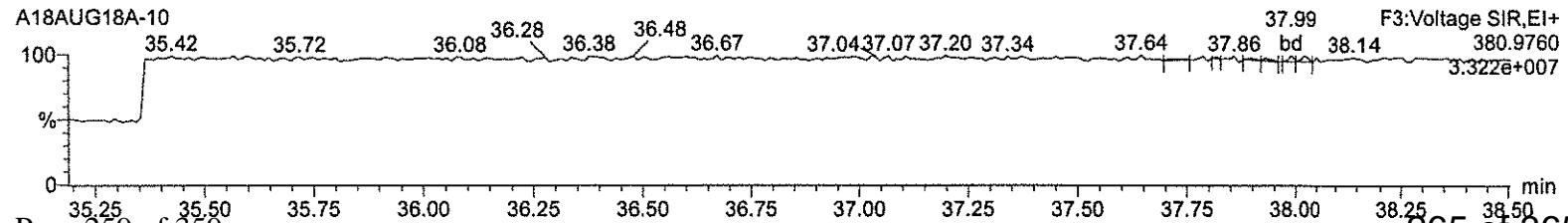
### 13C-123678-HxCDF



### OcDPE



### Lock Mass F3



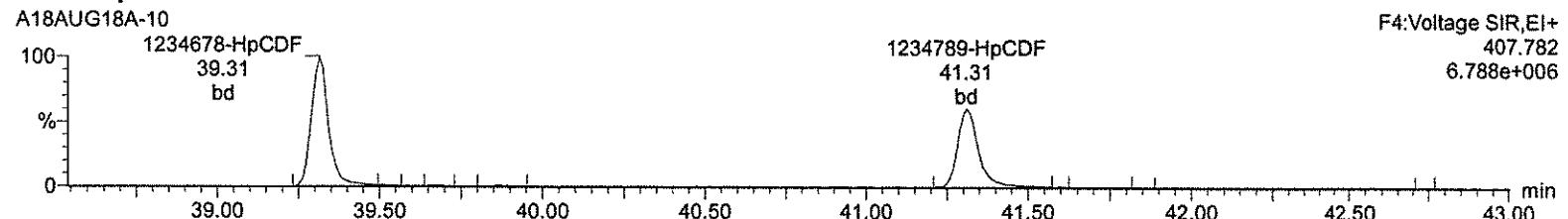
Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

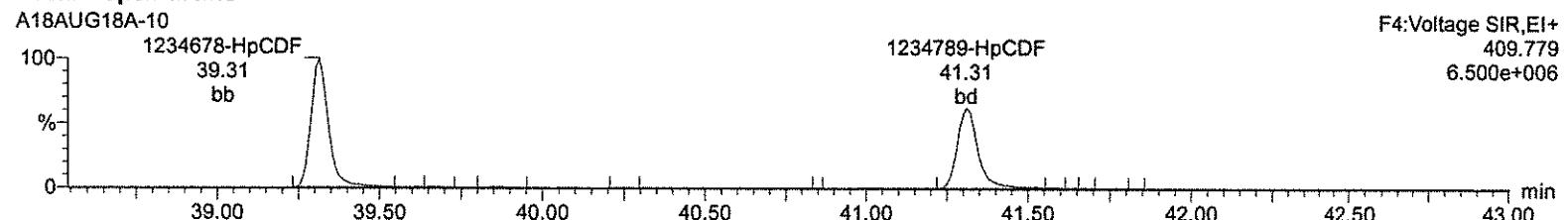
Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,  
Job: A18AUG18A, Task: HRP750\_2, User: MJC

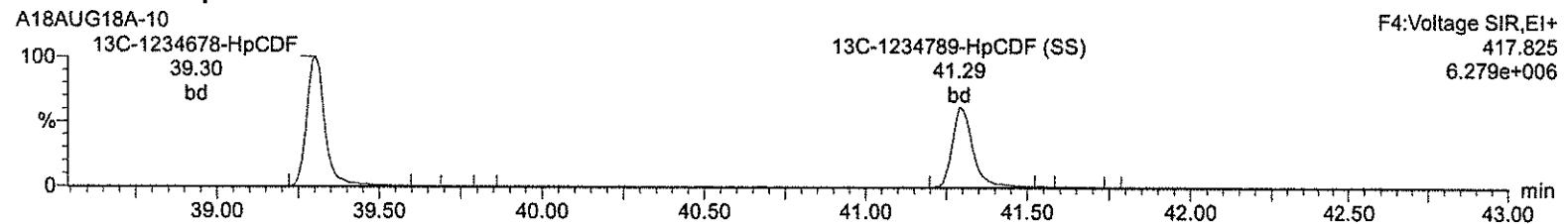
### Total-heptafurans



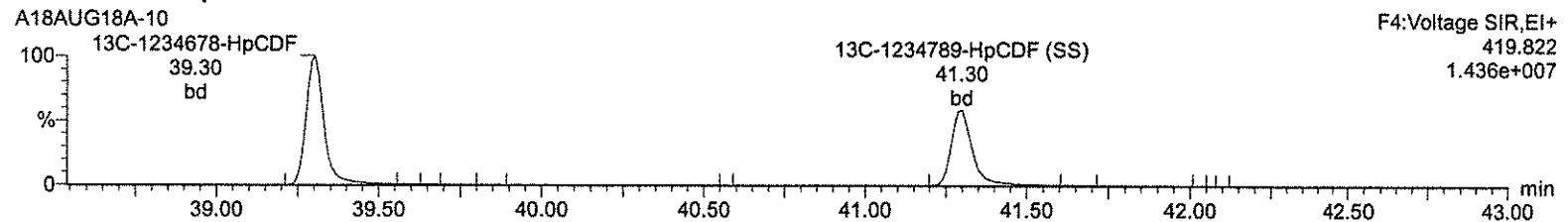
### Total-heptafurans



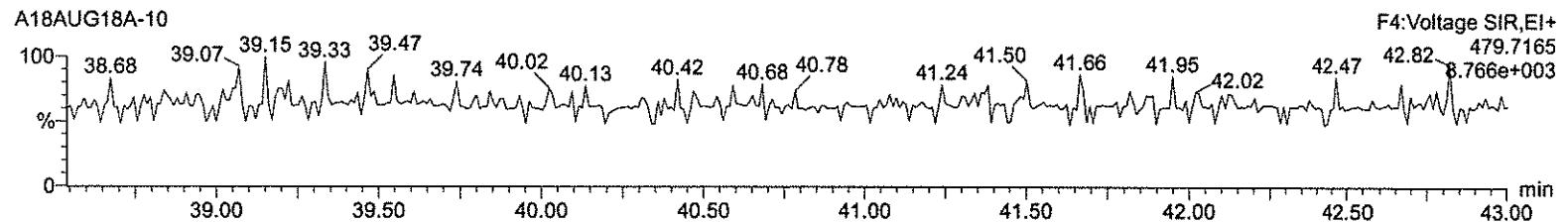
### 13C-1234678-HpCDF



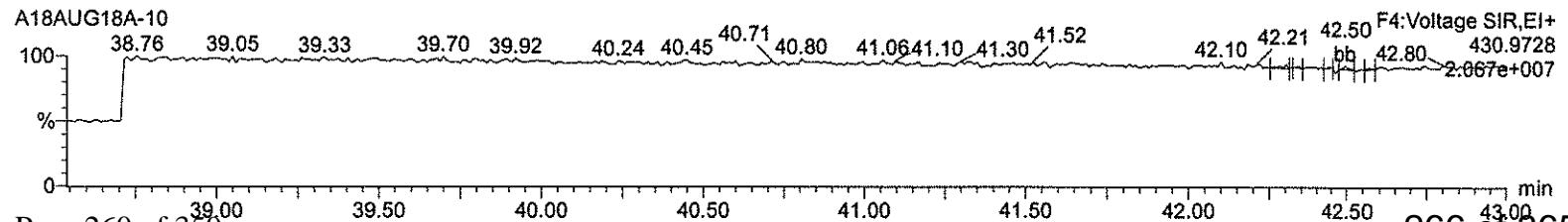
### 13C-1234678-HpCDF



### NoDPE



### Lock Mass F4



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A18AUG18A-10.qld

Last Altered: Monday, August 20, 2018 15:22:22 Eastern Standard Time

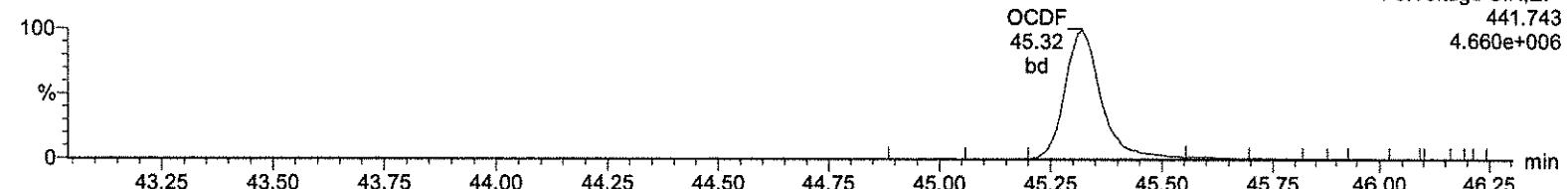
Printed: Monday, August 20, 2018 15:46:35 Eastern Standard Time

Name: A18AUG18A-10, Date: 18-Aug-2018, Time: 15:55:34, ID: CS3WT UD180517-01.2 CPSQ7, Description: ,

Job: A18AUG18A, Task: HRP750\_2, User: MJC

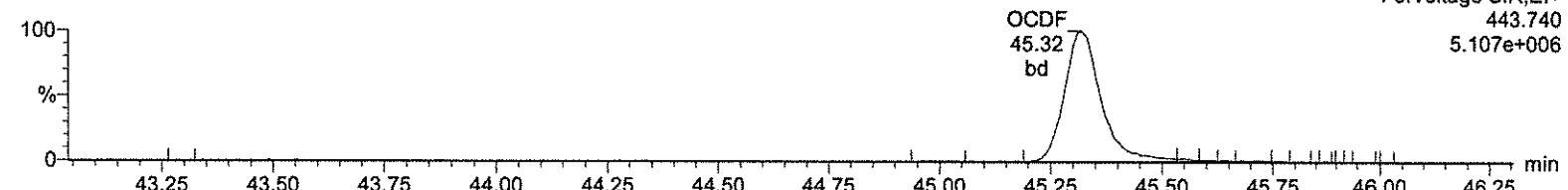
### OCDF

A18AUG18A-10



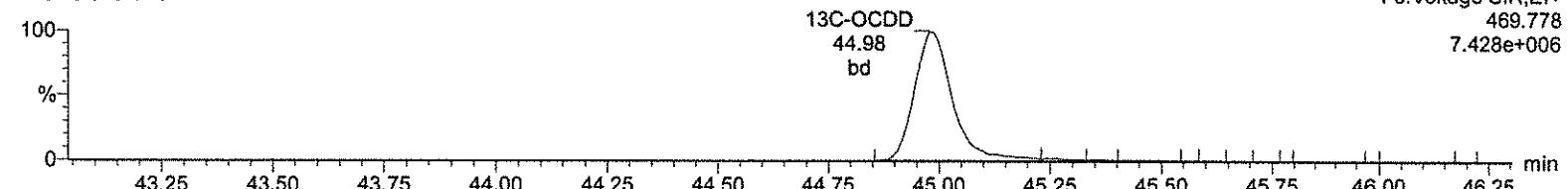
### OCDF

A18AUG18A-10



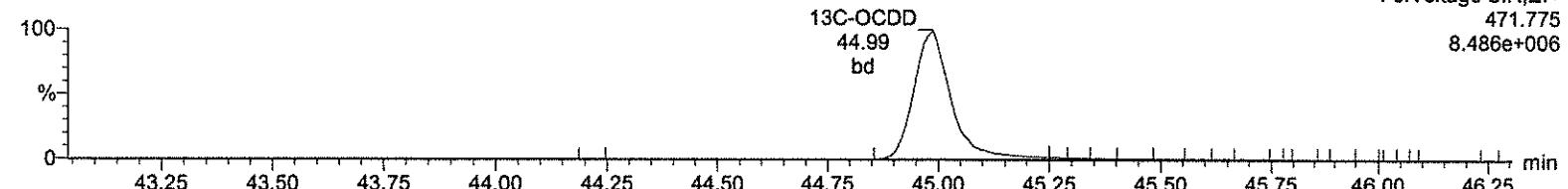
### 13C-OCDD

A18AUG18A-10



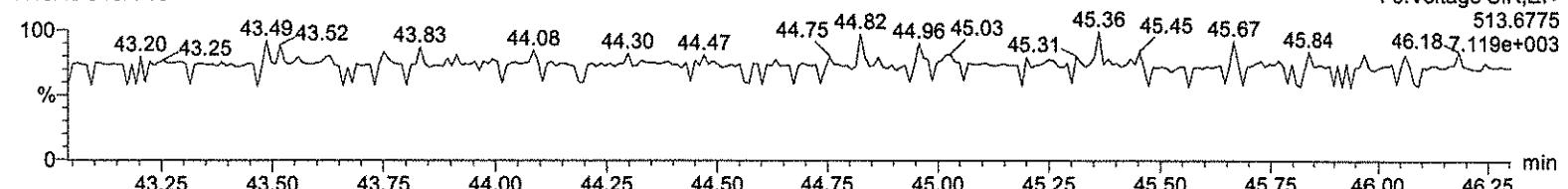
### 13C-OCDD

A18AUG18A-10



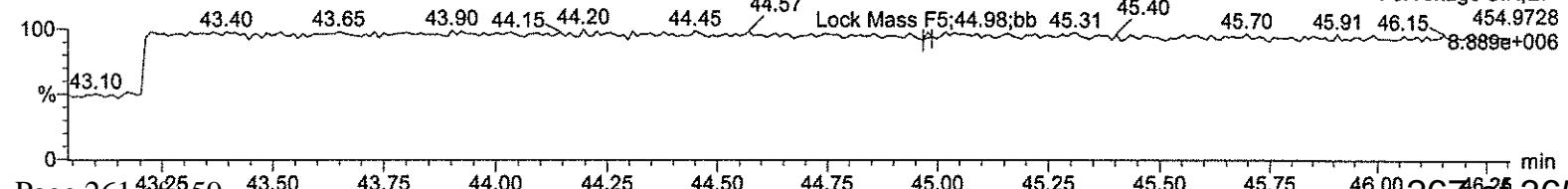
### DeDPE

A18AUG18A-10



### Lock Mass F5

A18AUG18A-10



# Runlog Information

*CF ICAL*

*7/28 AM 5/18*

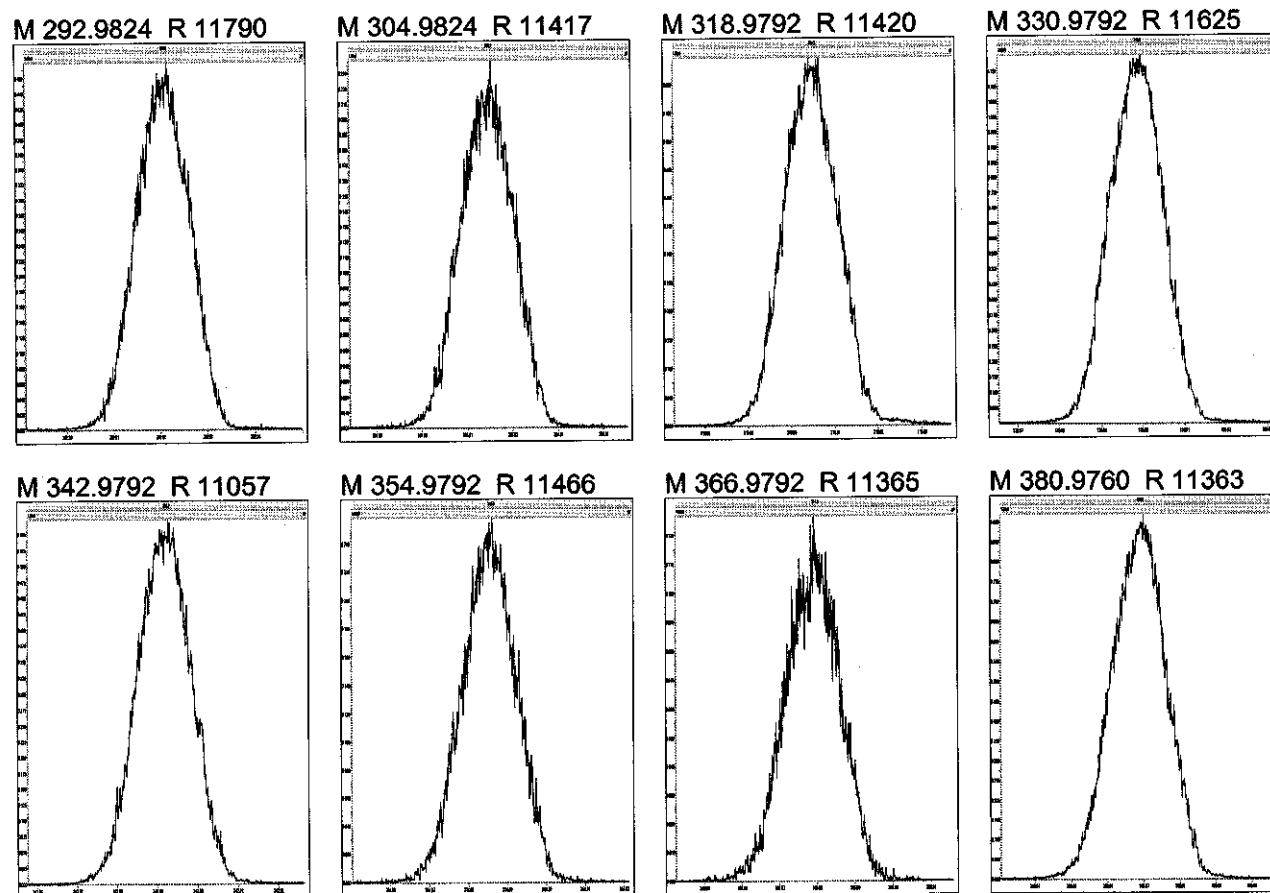
Name	Instrument	Run Date	Procedure	Analyst	Batch ID	Sample Info	Injection Volume
• A02MAY18A-1	HRP750_3	02-MAY-2018 10:57	A02MAY18A	Matt Cash		CS3WT 1613CS3 UD170810-01.7 CPSIY	1 uL
• A02MAY18A-2	HRP750_3	02-MAY-2018 11:24	A02MAY18A	Matt Cash		CPM225 WD180108-01 ISCAT	1 uL
• A02MAY18A-3	HRP750_3	02-MAY-2018 11:51	A02MAY18A	Matt Cash		SB	1 uL
• A02MAY18A-4	HRP750_3	02-MAY-2018 12:18	A02MAY18A	Matt Cash		CS0.5 UD170815-01.1	1 uL
• A02MAY18A-5	HRP750_3	02-MAY-2018 12:45	A02MAY18A	Matt Cash		CS1 UD170815-02 CS13M	1 uL
• A02MAY18A-6	HRP750_3	02-MAY-2018 13:12	A02MAY18A	Matt Cash		CS2 UD170815-03 CS23M	1 uL
• A02MAY18A-7	HRP750_3	02-MAY-2018 13:39	A02MAY18A	Matt Cash		CS3UD170815-04 CS3AJ	1 uL
• A02MAY18A-8	HRP750_3	02-MAY-2018 14:06	A02MAY18A	Matt Cash		CS4 UD170815-05 CS43K	1 uL
• A02MAY18A-9	HRP750_3	02-MAY-2018 14:33	A02MAY18A	Matt Cash		CS5 UD170815-06 CS53M	1 uL
• A02MAY18A-10	HRP750_3	02-MAY-2018 15:01	A02MAY18A	Matt Cash		SB	1 uL
• A02MAY18A-11	HRP750_3	02-MAY-2018 15:28	A02MAY18A	Matt Cash		CPM225 WD180108-01 ISCAU	1 uL
• A02MAY18A-12	HRP750_3	02-MAY-2018 15:55	A02MAY18A	Matt Cash		CS3WT 1613CS3 UD170810-01.7 CPSIZ	1 uL

## Experiment Calibration Report

MassLynx 4.1

File: Experiment: 225TCDF.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, May 02, 2018 10:56:52 Eastern Standard Time



PFKEZ

Inst: HRP750-3

Anal: MJC

Experiment Calibration Report

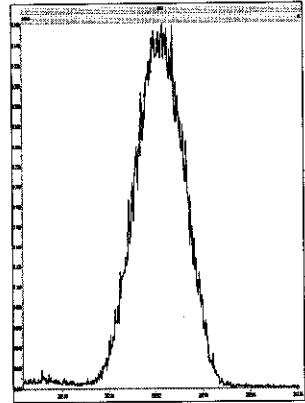
MassLynx 4.1

Page 1 of 1

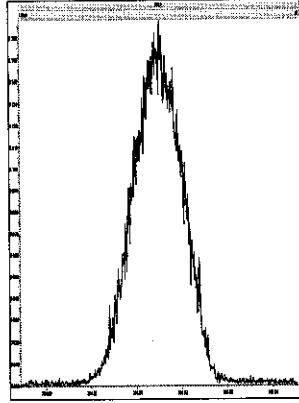
File: Experiment: 225TCDF.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, May 02, 2018 16:24:08 Eastern Standard Time

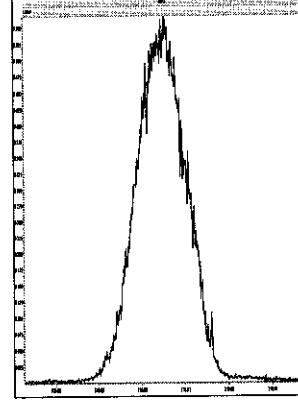
M 292.9824 R 12252



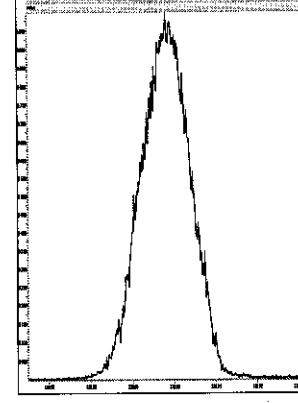
M 304.9824 R 12685



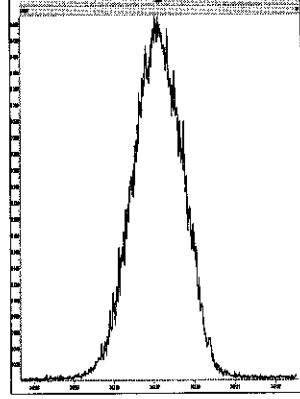
M 318.9792 R 12254



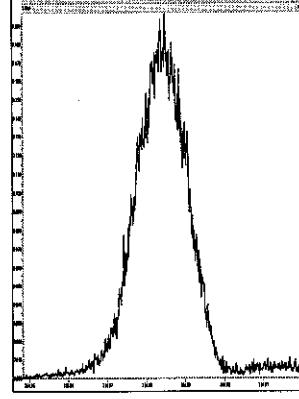
M 330.9792 R 12258



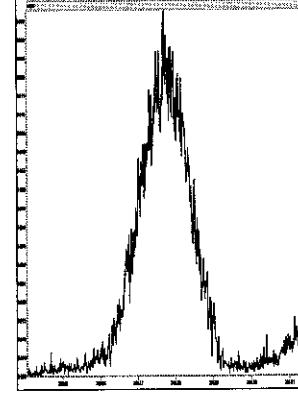
M 342.9792 R 11683



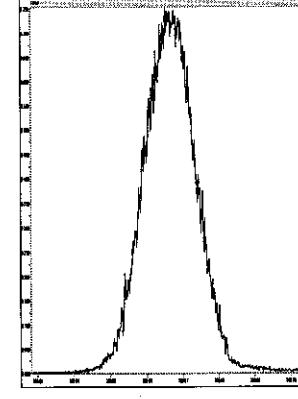
M 354.9792 R 11524



M 366.9792 R 12888



M 380.9760 R 11848



COLUMN CHECK (16% & 4%)  
METHOD DXCF

**CPM225 WD180108-01 ISCAT**  
A02MAY18A-2 /

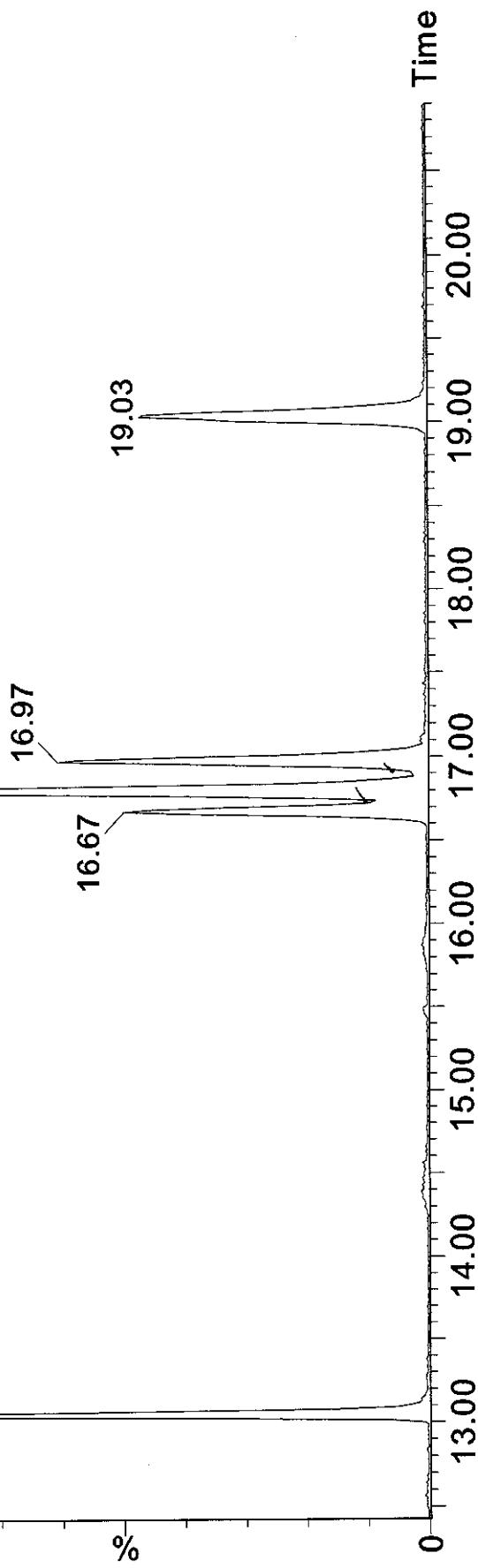
HRP750\_3

100  
13.05

16.80

02-May-2018 11:24:14  
Voltage SIR 13 Channels EI+  
303.9016  
2.07e6

%



COLUMN CHECK (19% & 3%)  
METHOD DXCF

**CPM225 WD180108-01 ISCAU**

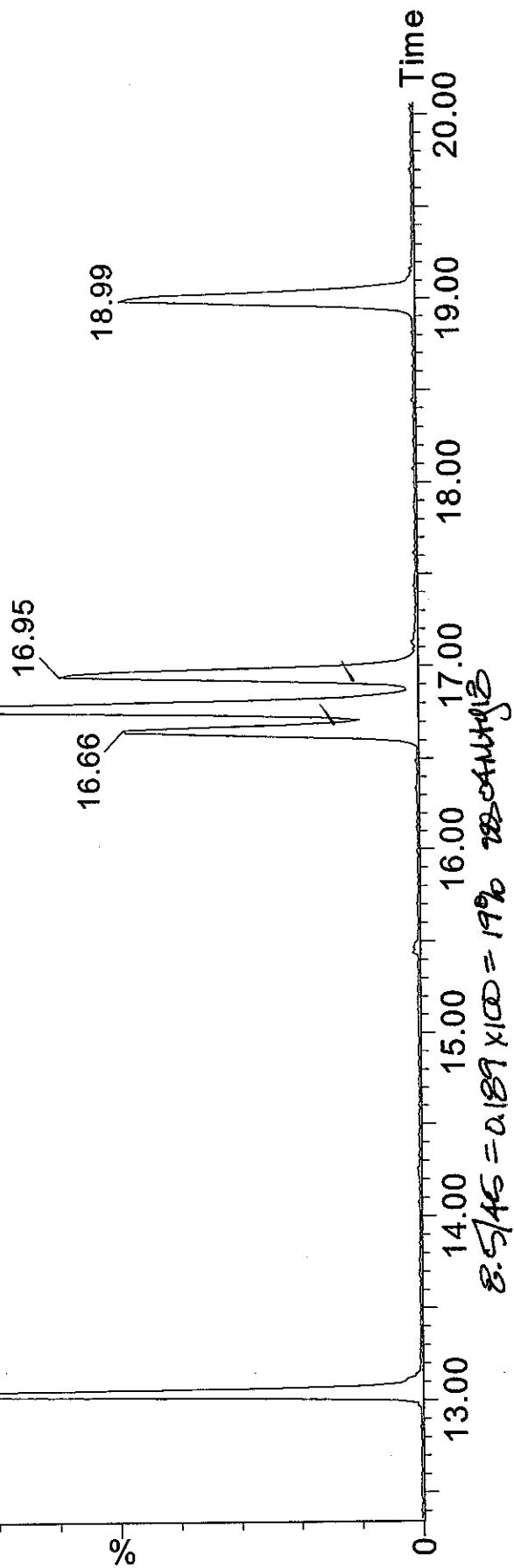
A02MAY18A-11  
13.04

100

%

**HRP750\_3**

02-May-2018 15:28:11  
Voltage SIR 13 Channels EI+  
303.9016  
1.89e6



$$8.5/46 = 0.182 \times 100 = 19\% \text{ RECOVERY}$$

**Quantify Compound Summary Report MassLynx 4.1**

Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\CF-A02MAY18A.qlid

Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time

Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

22304 MAY 18

Method: C:\MassLynx\Default.pro\Methdb\CFA\_225TCDF.mdb 22 Mar 2018 14:27:06

Calibration: C:\MassLynx\Default.pro\Curvedb\CF-A02MAY18.cdb 02 May 2018 16:26:15

**Compound name: 2378-TCDF**

Response Factor: 0.876348

RRF SD: 0.034817, Relative SD: 3.97297

Response type: Internal Std ( Ref 2 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

$$\text{CS1 RRF} = \frac{(1.71 \times 10^4)(100)}{(4.03 \times 10^4)(0.5)} = 0.849$$

$$\text{RRF SD} = \sqrt{\frac{0.034817}{5}} = \sqrt{\frac{0.006098}{5}} =$$

$$\frac{0.034817}{0.876348} \times 100 = 3.98$$

$$\text{Avg} = 5.253/\mu = 0.8716$$

Filename	Sample ID	Std. Conc	RT	pg/µL	RRF	AvgRRF	M	Inst ID
A02MAY18A-4	CS0.5 UD170815-01.1	0.250	16.79	0.26	0.904	0.876	bb	HRP750_3
A02MAY18A-5	CS1 UD170815-02 CS13M	0.500	16.79	0.48	0.849	0.876	bb	HRP750_3
A02MAY18A-6	CS2 UD170815-03 CS23M	2.000	16.80	1.88	0.824	0.876	bd	HRP750_3
A02MAY18A-7	CS3UD170815-04 CS3AJ	10.000	16.79	9.93	0.870	0.876	bb	HRP750_3
A02MAY18A-8	CS4 UD170815-05 CS43K	40.000	16.78	41.05	0.899	0.876	bb	HRP750_3
A02MAY18A-9	CS5 UD170815-06 CS53M	200.000	16.78	208.13	0.912	0.876	bb	HRP750_3

**Compound name: 13C-2378-TCDF**

Response Factor: 1.34825

RRF SD: 0.0355753, Relative SD: 2.63863

Response type: Internal Std ( Ref 3 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/µL	RRF	AvgRRF	M	Inst ID
A02MAY18A-4	CS0.5 UD170815-01.1	100.000	16.78	101.83	1.373	1.348	bb	HRP750_3
A02MAY18A-5	CS1 UD170815-02 CS13M	100.000	16.78	102.28	1.379	1.348	bb	HRP750_3
A02MAY18A-6	CS2 UD170815-03 CS23M	100.000	16.78	102.91	1.387	1.348	bb	HRP750_3
A02MAY18A-7	CS3UD170815-04 CS3AJ	100.000	16.78	98.47	1.328	1.348	bb	HRP750_3
A02MAY18A-8	CS4 UD170815-05 CS43K	100.000	16.76	97.69	1.317	1.348	bb	HRP750_3
A02MAY18A-9	CS5 UD170815-06 CS53M	100.000	16.76	96.82	1.305	1.348	bb	HRP750_3

**Compound name: 13C-1234-TCDD**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 3 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Filename	Sample ID	Std. Conc	RT	pg/µL	RRF	AvgRRF	M	Inst ID
A02MAY18A-4	CS0.5 UD170815-01.1	100.000	15.73	100.00	1.000	1.000	db	HRP750_3
A02MAY18A-5	CS1 UD170815-02 CS13M	100.000	15.71	100.00	1.000	1.000	bb	HRP750_3
A02MAY18A-6	CS2 UD170815-03 CS23M	100.000	15.71	100.00	1.000	1.000	bb	HRP750_3
A02MAY18A-7	CS3UD170815-04 CS3AJ	100.000	15.71	100.00	1.000	1.000	bb	HRP750_3
A02MAY18A-8	CS4 UD170815-05 CS43K	100.000	15.70	100.00	1.000	1.000	bb	HRP750_3
A02MAY18A-9	CS5 UD170815-06 CS53M	100.000	15.70	100.00	1.000	1.000	bb	HRP750_3

**Quantify Sample Summary Report**      **MassLynx 4.1**  
 Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.prolICAL\_Results\CF-A02MAY18A.qld  
 Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time  
 Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

*2204 MAY 18*

**Method:** C:\MassLynx\Default.pro\Methdb\CF\_A\_225TCDF.mdb 22 Mar 2018 14:27:06  
**Calibration:** C:\MassLynx\Default.pro\Curvedb\CF\_A02MAY18.cdb 02 May 2018 16:26:15

**Name: A02MAY18A-4, Date: 02-May-2018, Time: 12:18:24, ID: CS0.5 UD170815-01.1, Job: A02MAY18A, User: MJC, Task: HRP750\_3, Description:**

#	Name	Ion Area	Ion2 Area	Response	RT	RBI	RA	Fair?	pg/uL	RRE	Mean	RSD	EDL	Height	Noise	S/N	Height2	Noise2	S/N2	M	M2
1	2378-TCDF	3.75e3	4.57e3	8.31e3	16.79	1.00	0.82	NO	0.258	0.904	0.876	3.973	0.0389	5.96e4	3208	18.6	7.95e4	4.495	17.7	bb	
2	13C-2378-TCDF	1.60e6	2.08e6	3.68e6	16.78	1.07	0.77	NO	101.830	1.373	1.348	2.639	0.165	2.46e7	16529	1490.8	3.24e7	17731	1825.9	bb	
3	13C-1234-TCDD	1.18e6	1.50e6	2.68e6	15.73	0.00	0.79	NO	100.000	1.000	1.000	0.000	0.116	2.04e7	9751	2090.1	2.62e7	8161	3212.0	db	

**Quantify Sample Report**      **MassLynx 4.1**  
Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\CF-A02MAY18A.qld

Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time

Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

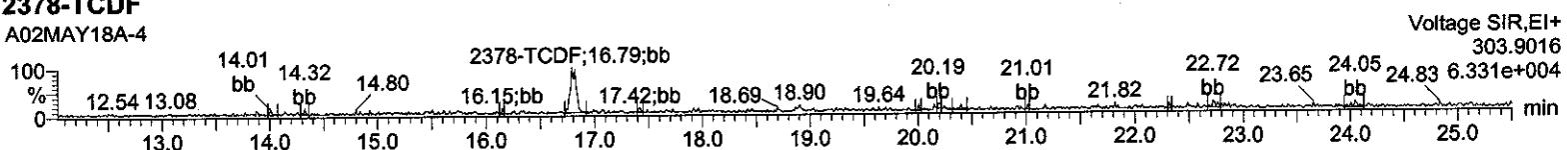
Method: C:\MassLynx\Default.pro\Methdb\CFA\_225TCDF.mdb 22 Mar 2018 14:27:06

Calibration: C:\MassLynx\Default.pro\Curvedb\CF-A02MAY18.cdb 02 May 2018 16:26:15

Name: A02MAY18A-4, Date: 02-May-2018, Time: 12:18:24, ID: CS0.5 UD170815-01.1, Job: A02MAY18A, User: MJC,  
Task: HRP750\_3, Description:

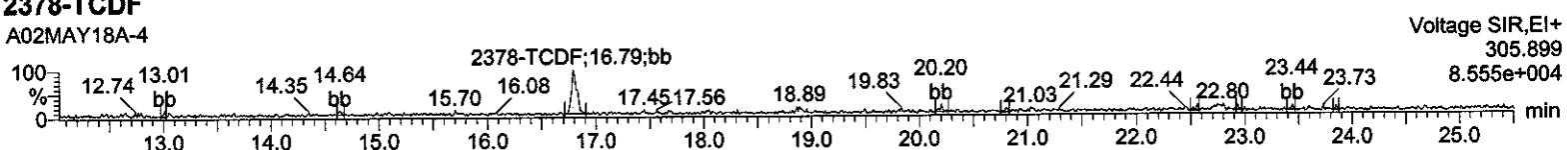
**2378-TCDF**

A02MAY18A-4



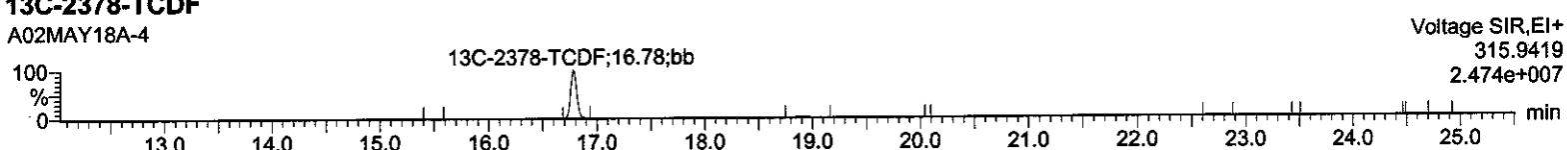
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A02MAY18A-4



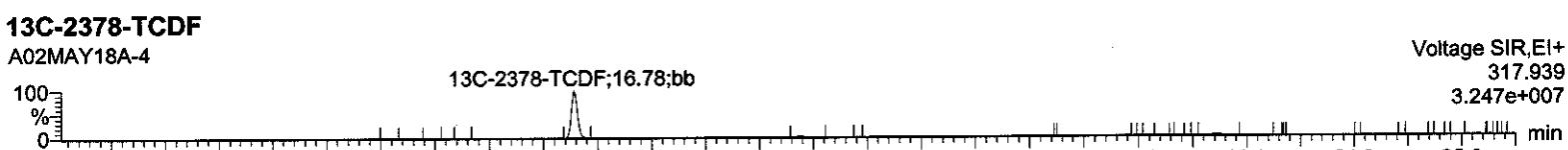
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A02MAY18A-4



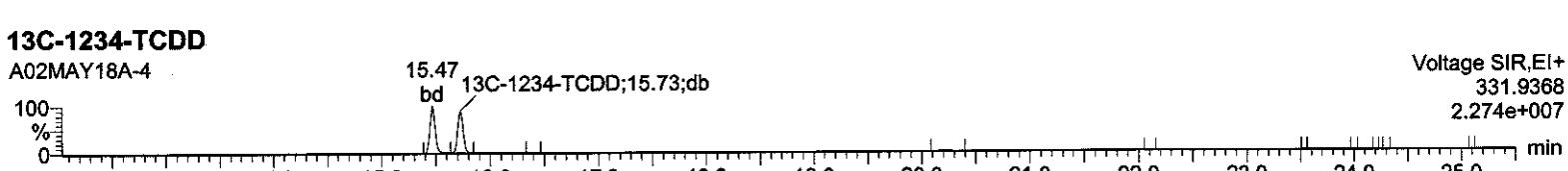
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A02MAY18A-4



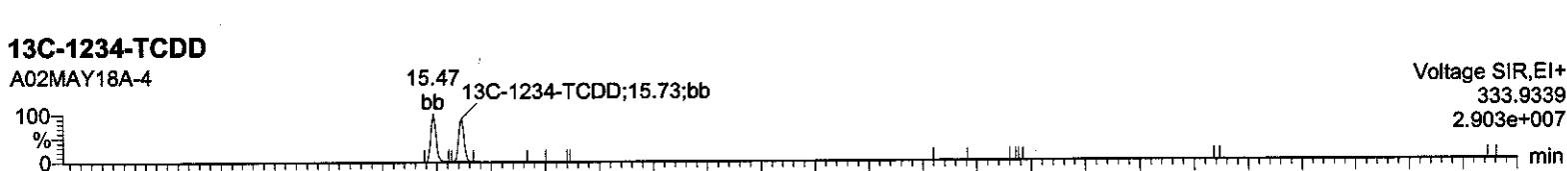
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A02MAY18A-4



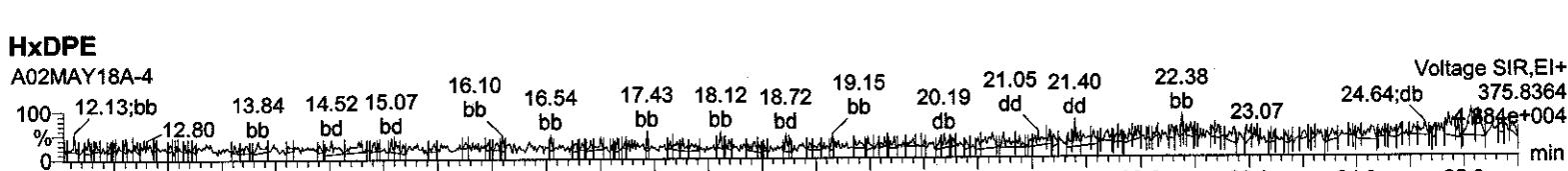
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A02MAY18A-4



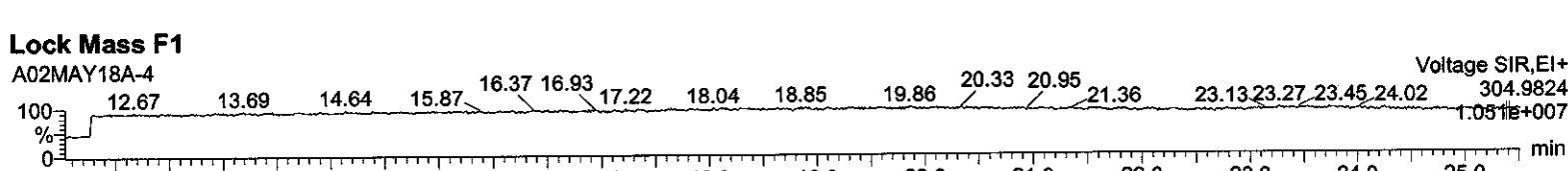
**HxDPE**

A02MAY18A-4



**Lock Mass F1**

A02MAY18A-4



**Quantify Sample Summary Report**      **MassLynx 4.1**  
 Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.prolICAL\_Results\CF-A02MAY18A.qld  
 Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time  
 Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

*2024 MAY 18*

Name: A02MAY18A-5, Date: 02-May-2018, Time: 12:45:30, ID: CS1JUD170815-02 CS13M, Job: A02MAY18A, User: MJC, Task: HRF750\_3, Description:

#	Name	Ion1Area	Ion2Area	Response	RT	RRI	RA	Fail?	RRF	Mean	RSD	Height	Noise1	S/N1	Height2	Noise2	S/N2	M	M2	
1	2378-TCDF	6.95e3	1.02e4	1.71e4	16.79	1.00	0.68	NO	0.484	0.849	0.876	3.973	0.0387	1.17e5	3657	32.1	1.58e5	4967	31.8	bb
2	13C-2378-TCDF	1.76e6	2.27e6	4.03e6	16.78	1.07	0.77	NO	102.285	1.379	1.348	2.639	0.142	2.77e7	17026	1627.6	3.54e7	17443	2029.4	bb
3	13C-1234-TCDD	1.29e6	1.63e6	2.92e6	15.71	0.00	0.79	NO	100.000	1.000	0.000	0.106	2.38e7	10146	2349.6	2.98e7	8850	3371.3	bb	

**Quantify Sample Report**      **MassLynx 4.1**  
Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\CF-A02MAY18A.qld

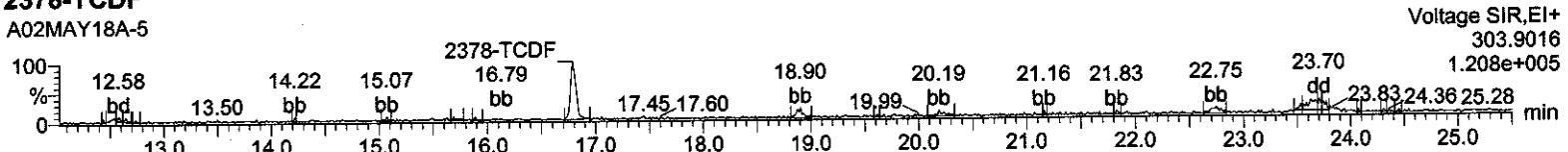
Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time

Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

Name: A02MAY18A-5, Date: 02-May-2018, Time: 12:45:30, ID: CS1 UD170815-02 CS13M, Job: A02MAY18A, User: MJC,  
Task: HRP750\_3, Description:

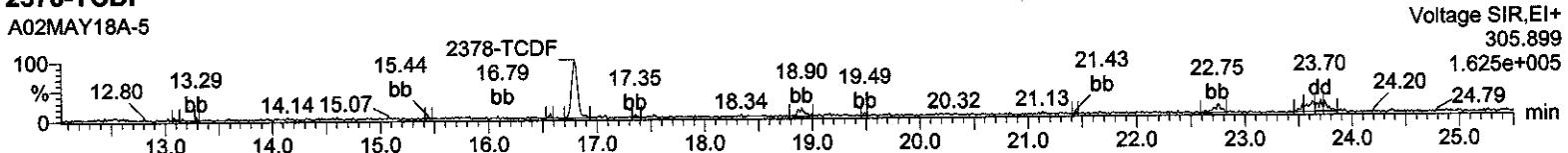
**2378-TCDF**

A02MAY18A-5



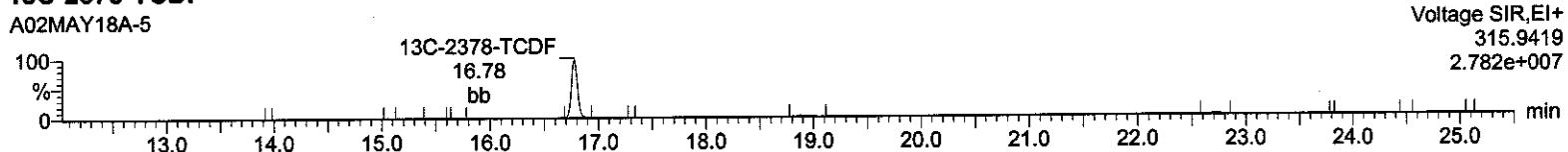
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A02MAY18A-5



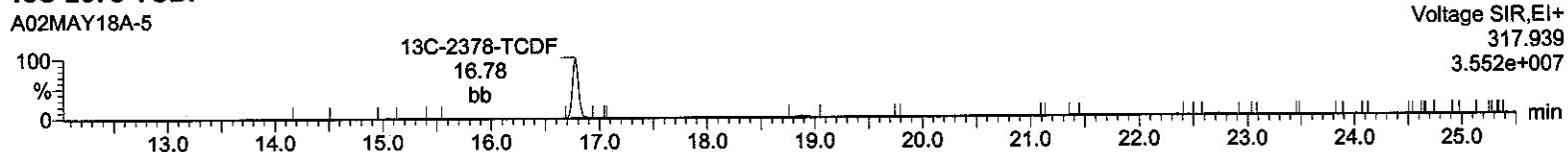
**13C-2378-TCDF**

A02MAY18A-5



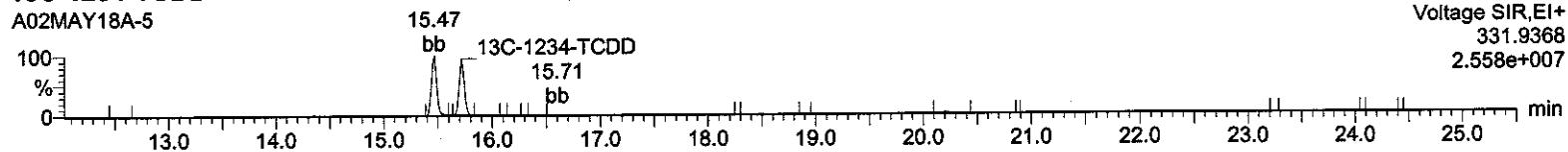
**13C-2378-TCDF**

A02MAY18A-5



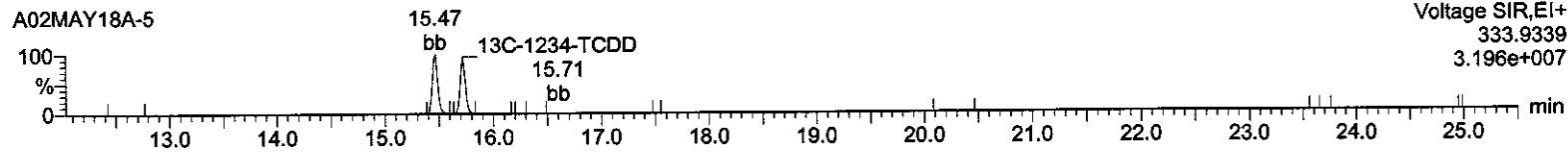
**13C-1234-TCDD**

A02MAY18A-5



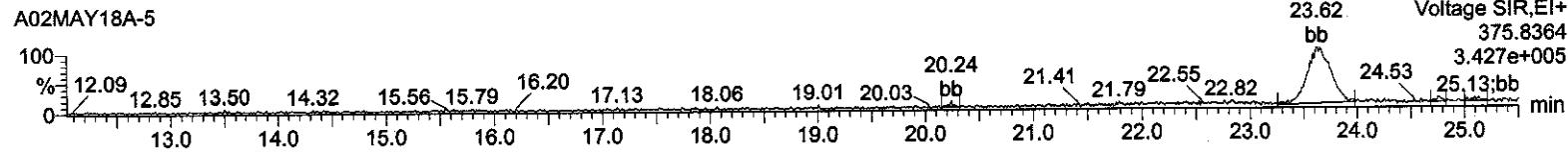
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A02MAY18A-5



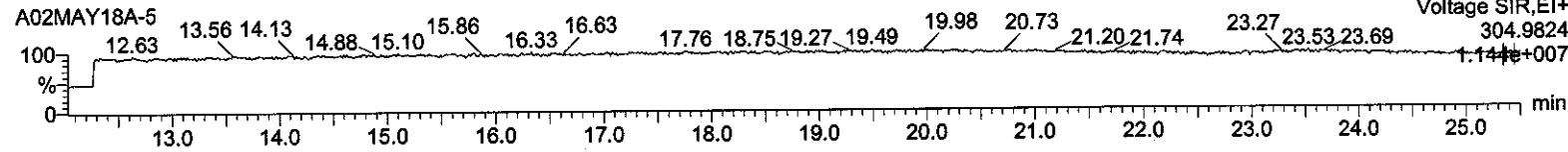
**HxDPE**

A02MAY18A-5



**Lock Mass F1**

A02MAY18A-5



**Quantify Sample Summary Report** **MassLynx 4.1**  
Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.prol\ICAL Results\CF-A02MAY18A.qld

Last Altered:

Wednesday, May 02, 2018 16:26:16 Eastern Standard Time  
Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

20204 MAY18A

Name: A02MAY18A-6, Date: 02-May-2018, Time: 13:12:37, ID: CS2UD170815-03 CS23M, Job: A02MAY18A, User: MJC, Task: HRP750\_3, Description:

#	Name	Ion1 Area	Ion2 Area	Response	RT	RRT	RRF	pg/uL	RRF / Mean	EDL	Height	Noise	S/N1	Height2	Noise2	S/N2	M	M2	
1	23:8-TCDF	2.87e4	3.74e4	6.62e4	16.80	1.00	0.77	NO	1.881	0.824	0.876	3.973	0.0418	4.66e5	4147	112.3	6.21e5	5115	121.4
2	13C-2378-TCDF	1.75e6	2.26e6	4.01e6	16.78	1.07	0.77	NO	102.907	1.387	1.348	2.639	0.173	2.76e7	19234	1435.9	3.52e7	20373	1727.3
3	13C-1234-TCDD	1.27e6	1.62e6	2.89e6	15.71	0.00	0.78	NO	100.000	1.000	0.000	1.000	0.116	2.24e7	10742	2085.2	2.90e7	8935	3248.0

**Quantify Sample Report**      **MassLynx 4.1**  
Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\CF-A02MAY18A.qld

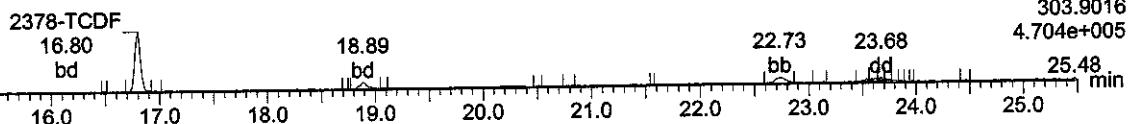
Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time

Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

Name: A02MAY18A-6, Date: 02-May-2018, Time: 13:12:37, ID: CS2 UD170815-03 CS23M, Job: A02MAY18A, User: MJC,  
Task: HRP750\_3, Description:

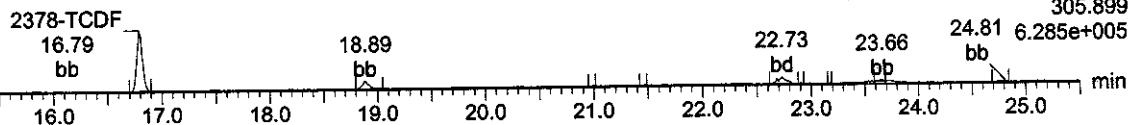
**2378-TCDF**

A02MAY18A-6



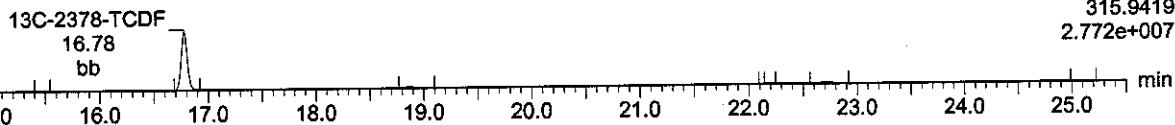
**2378-TCDF**

A02MAY18A-6



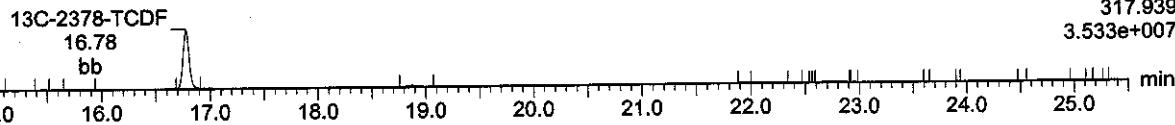
**13C-2378-TCDF**

A02MAY18A-6



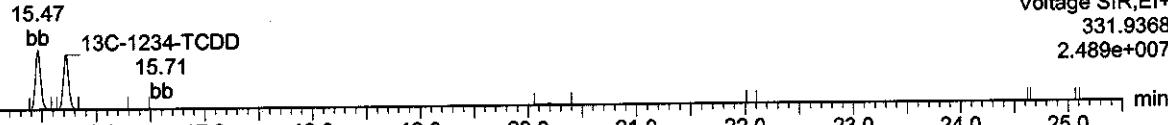
**13C-2378-TCDF**

A02MAY18A-6



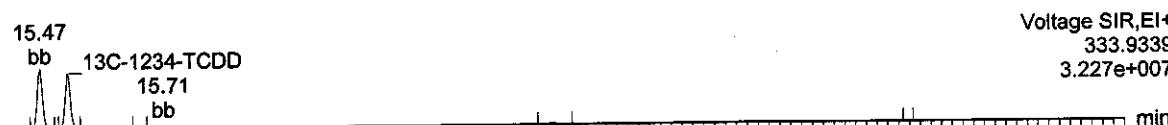
**13C-1234-TCDD**

A02MAY18A-6



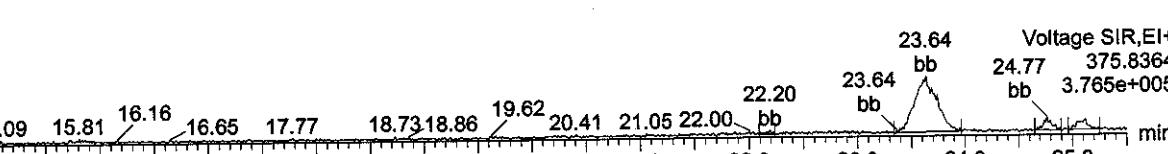
**13C-1234-TCDD**

A02MAY18A-6



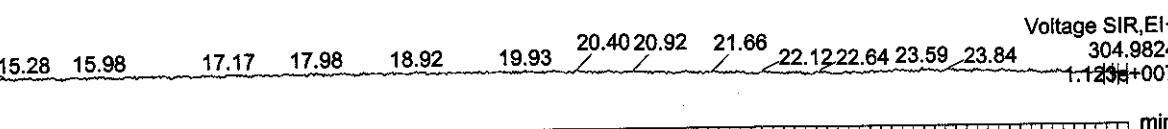
**HxDPE**

A02MAY18A-6



**Lock Mass F1**

A02MAY18A-6



**Quantify Sample Summary Report****MassLynx 4.1**

Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.prol\CAL Results\CF-A02MAY18A.qld

Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time  
Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time*280 MAY18***Name: A02MAY18A-7, Date: 02-May-2018, Time: 13:39:44, ID: CS3UB170815-04 CS3AJ, Job: A02MAY18A, User: MJC, Task: HRP750\_3, Description:**

#	Name	Ion Area	Ion2Area	Response	RT	RRT	RA	Fall?	pg/uL	RRE%	Mean	RSD	Height	Noise	SN1	Height2	Noise2	SN2	M	M2	
1	2378-TCDF	1.14e5	1.54e5	2.67e5	16.79	1.00	0.74	NO	9.925	0.870	3.973	0.0566	1.85e6	3808	485.3	2.33e6	5543	419.6	bb	bb	
2	13C-2378-TCDF	1.34e6	1.73e6	3.07e6	16.78	1.07	0.78	NO	98.465	1.328	1.348	2.639	0.184	2.06e7	16638	1237.8	2.62e7	16734	1568.4	bb	bb
3	13C-1234-TCDD	1.02e6	1.30e6	2.31e6	15.71	0.00	0.78	NO	100.000	1.000	1.000	0.000	0.136	1.77e7	10045	1765.8	2.30e7	8138	2831.2	bb	bb

**Quantify Sample Report**      **MassLynx 4.1**  
Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\CF-A02MAY18A.qld

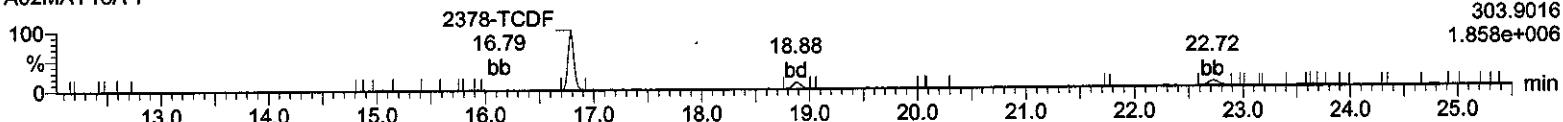
Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time

Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

Name: A02MAY18A-7, Date: 02-May-2018, Time: 13:39:44, ID: CS3UD170815-04 CS3AJ, Job: A02MAY18A, User: MJC,  
Task: HRP750\_3, Description:

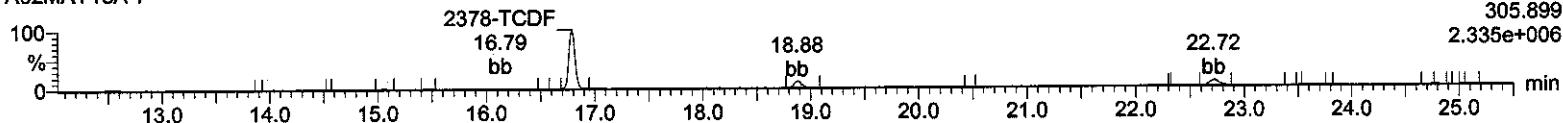
**2378-TCDF**

A02MAY18A-7



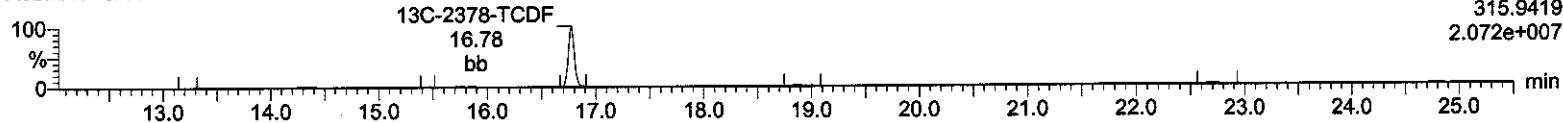
**2378-TCDF**

A02MAY18A-7



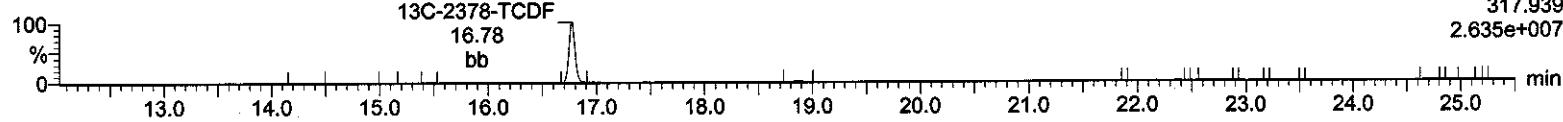
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A02MAY18A-7



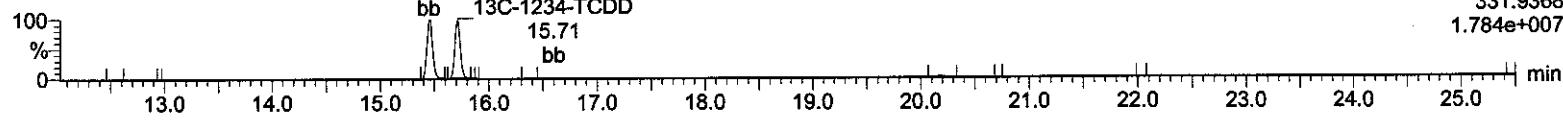
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A02MAY18A-7



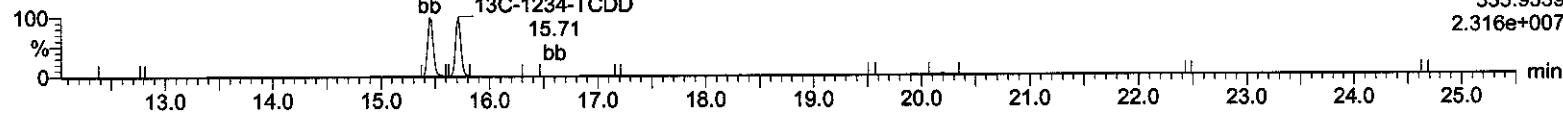
**13C-1234-TCDD**

A02MAY18A-7



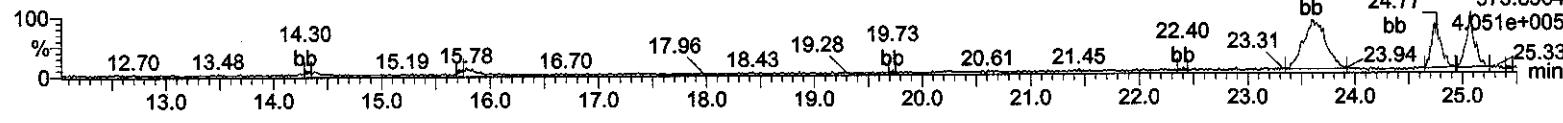
**13C-1234-TCDD**

A02MAY18A-7



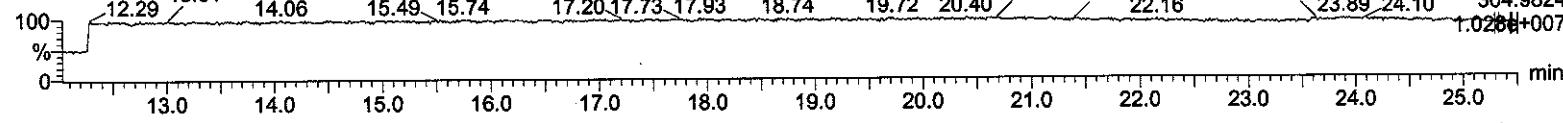
**HxDPE**

A02MAY18A-7



**Lock Mass F1**

A02MAY18A-7



**Quantify Sample Summary Report** **MassLynx 4.1**  
Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.prol\CAL\_Results\CF-A02MAY18A.qld  
Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time  
Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

*2020 AM 4/18/18*

Name: A02MAY18A-8, Date: 02-May-2018, Time: 14:06:51, ID: CS4UD170815-05 CS43K, Job: A02MAY18A, User: MJJC, Task: HRP750\_3, Description:

#	Name	Ion1Area	Ion2Area	Response	RT	RR1	RA	Fai?	Bg/uL	RRF	Mean	RSD	EDL	Height	Noise	SN	Height2	Noise2	SN2	M	M2
1	2378-TCDF	4.72e5	6.22e5	1.09e6	16.78	1.00	0.76	NO	41.047	0.899	0.876	3.973	0.0702	7.38e6	5133	1437.4	9.70e6	6716	1444.1	bb	bb
2	13C-2378-TCDF	1.33e6	1.71e6	3.04e6	16.76	1.07	0.78	NO	97.689	1.317	1.348	2.639	0.191	2.11e7	17134	1228.8	2.70e7	17077	1579.7	bb	bb
3	13C-1234-TCDD	1.01e6	2.31e6	1.29e6	15.79	-0.00	0.78	NO	100.000	1.000	1.000	0.000	0.144	1.75e7	10506	1670.3	2.25e7	8652	2594.9	bb	bb

**Quantify Sample Report**      **MassLynx 4.1**  
Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\CF-A02MAY18A.qld

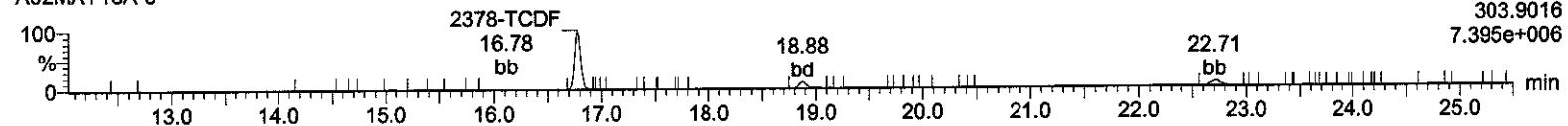
Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time

Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

Name: A02MAY18A-8, Date: 02-May-2018, Time: 14:06:51, ID: CS4 UD170815-05 CS43K, Job: A02MAY18A, User: MJC,  
Task: HRP750\_3, Description:

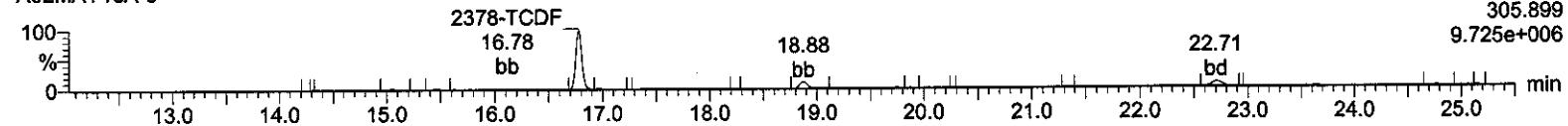
**2378-TCDF**

A02MAY18A-8



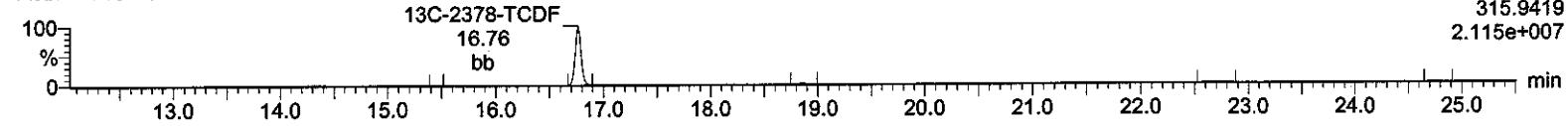
**2378-TCDF**

A02MAY18A-8



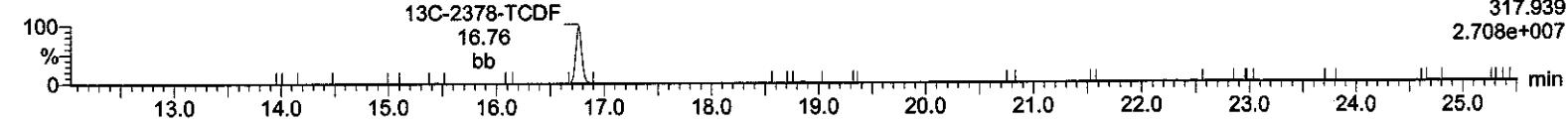
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A02MAY18A-8



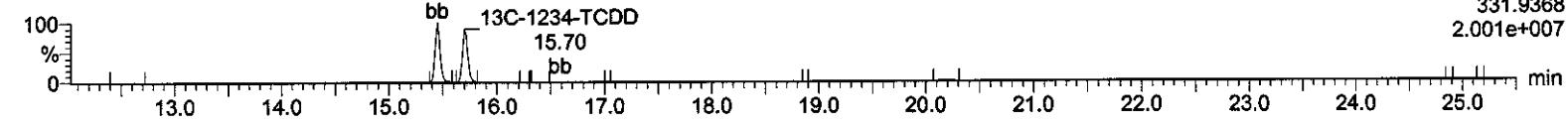
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A02MAY18A-8



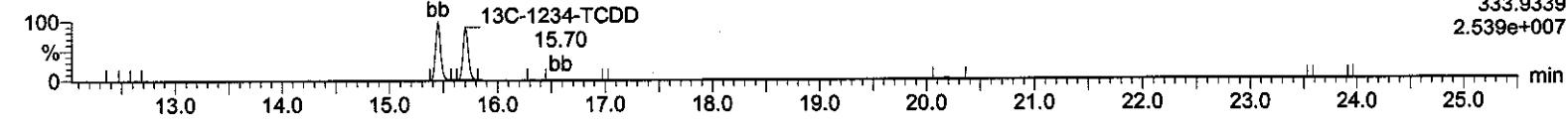
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A02MAY18A-8



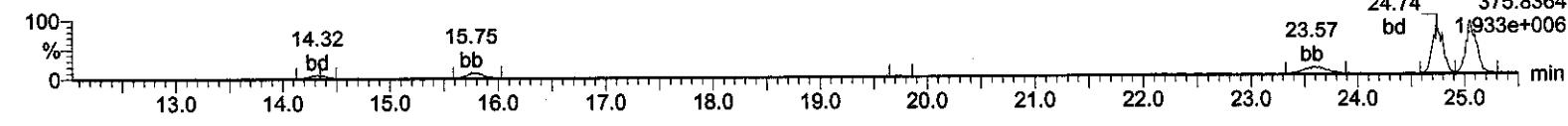
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A02MAY18A-8



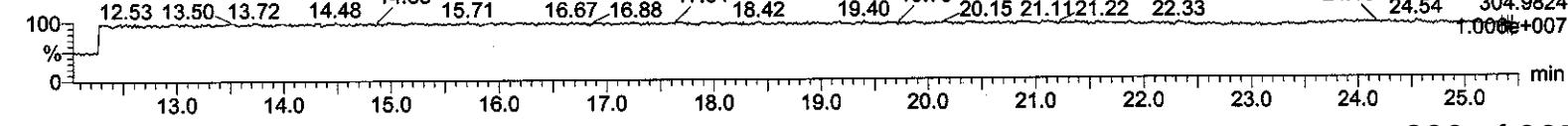
**HxDPE**

A02MAY18A-8



**Lock Mass F1**

A02MAY18A-8



**Quantify Sample Summary Report** **MassLynx 4.1**  
 Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.prol\ICAL Results\CF-A02MAY18A.qld  
 Last Altered: Wednesday, May 02, 2018 16:26:16 Eastern Standard Time  
 Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

20204MAY18

Name: A02MAY18A-9, Date: 02-May-2018, Time: 14:33:58, ID: CS5 UD170815-06 CS53M, Job: A02MAY18A, User: MJC, Task: HRP750\_3, Description:

#	Name	Ion Area	Ion2 Area	Response	RT	RF1	RA	Fair?	pg/uL	RRF	Mean	RSD	S/N1	S/N2	Height1	Height2	Noise1	Noise2	M1	M2
1	2378-TCDF	2.43e6	3.17e6	5.60e6	16.78	1.00	0.77	NO	208.129	0.912	0.876	3.973	0.111	3.57e7	8586	4157.5	4.75e7	9596	4945.4	
2	13C-2378-TCDF	1.34e6	1.73e6	3.07e6	16.76	1.07	0.78	NO	96.823	1.305	1.348	2.639	0.174	2.04e7	16331	1251.7	2.62e7	15677	1673.0	
3	13C-1234-TCDD	1.04e6	1.32e6	2.35e6	15.79	0.00	0.79	NO	100.000	1.000	0.000	1.000	0.127	1.80e7	9662	1863.4	2.29e7	7640	2993.7	

**Quantify Sample Report**      **MassLynx 4.1**  
Method DXCF TCDF Confirmation ICAL Report

Dataset: C:\MassLynx\Default.pro\ICAL Results\CF-A02MAY18A.qld

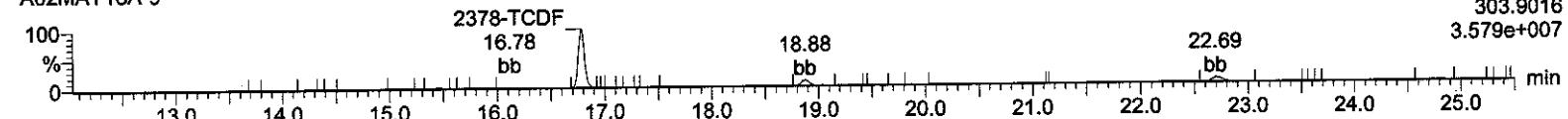
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Printed: Wednesday, May 02, 2018 16:27:44 Eastern Standard Time

Name: A02MAY18A-9, Date: 02-May-2018, Time: 14:33:58, ID: CS5 UD170815-06 CS53M, Job: A02MAY18A, User: MJC,  
Task: HRP750\_3, Description:

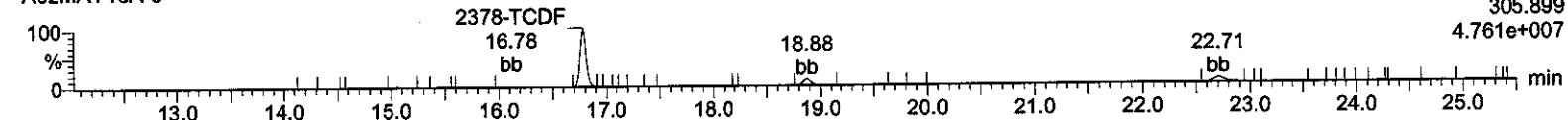
**2378-TCDF**

A02MAY18A-9



**2378-TCDF**

A02MAY18A-9



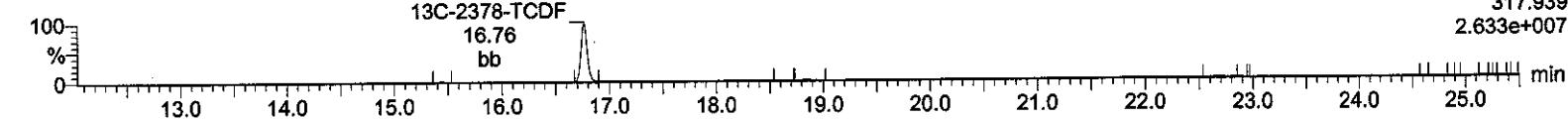
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A02MAY18A-9



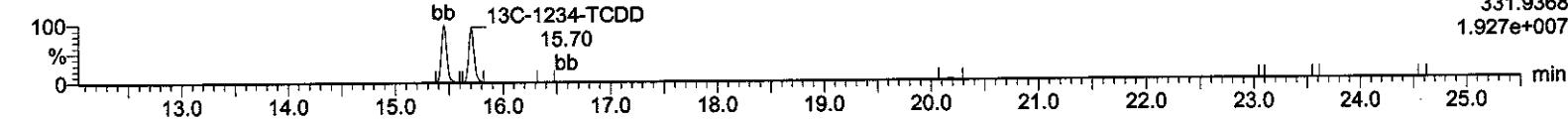
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A02MAY18A-9



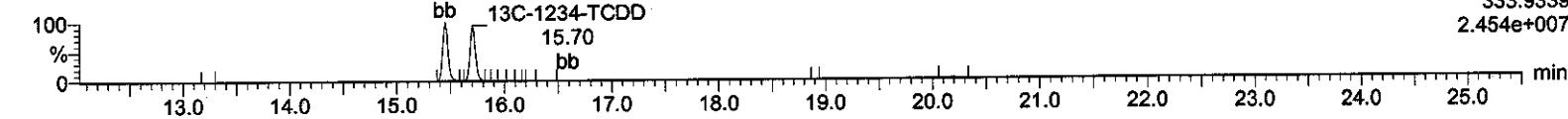
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A02MAY18A-9



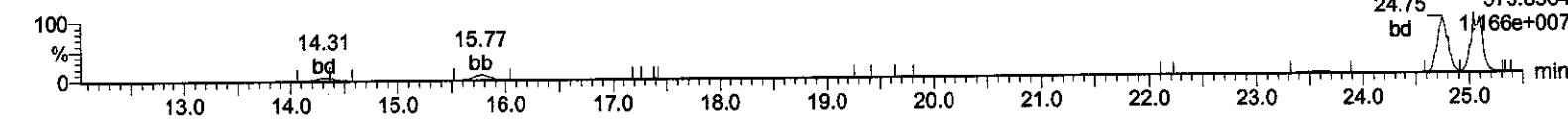
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A02MAY18A-9



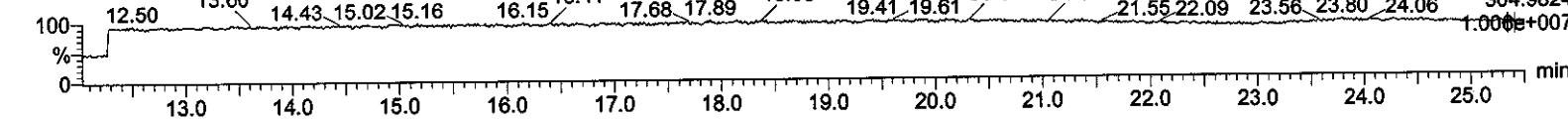
**HxDPE**

A02MAY18A-9



**Lock Mass F1**

A02MAY18A-9



**Quantify Sample Summary Report**  
Method DXCFTCDF & CCAL Report

Dataset: C:\MassLynx\Default.pro\CCAL Results\CF-A02MAY18A-12.qld  
 Last Altered: Wednesday, May 02, 2018 16:29:32 Eastern Standard Time  
 Printed: Wednesday, May 02, 2018 16:30:04 Eastern Standard Time

*20180411M4fJB*

Method: C:\MassLynx\DEFAULT.PRO\MethDB\CF\_A\_225TCDF.mdb 02 May 2018 16:27:15  
 Calibration: C:\MassLynx\Default.pro\Curvedb\CF-A02MAY18.cdb 02 May 2018 16:26:15

Name: A02MAY18A-12, Date: 02-May-2018, Time: 15:55:09, ID: CS3WT 1613CS3 UD170810-01.7 CPSIZ, Description: , Job: A02MAY18A, Task: HRP750\_3,  
 User: MJC

#	Name	Ion Area	Response	RT	RTT	RA	E12	E9U	ED	RRE	Mean	%D	Height	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TCDF	1.61e5	2.10e5	3.70e5	16.78	1.002	0.77	NO	10.478	0.0443	0.918	0.876	4.8	2.33e6	4287	543.8	3.19e6	4904	649.9	bb
2	13C-2378-TCDF	1.78e6	2.25e6	4.03e6	16.75	1.067	0.79	NO	90.176	0.127	1.216	1.348	-9.8	2.58e7	16641	1549.9	3.26e7	15141	2150.6	bb
3	13C-1234-TCD	1.47e6	1.85e6	3.32e6	15.70	0.000	0.80	NO	100.000	0.0873	1.000	1.000	0.0	2.46e7	8701	2827.3	3.15e7	7454	4227.0	bb

**Quantify Sample Report      MassLynx 4.1**

Method DXCF TCDF CCAL Report

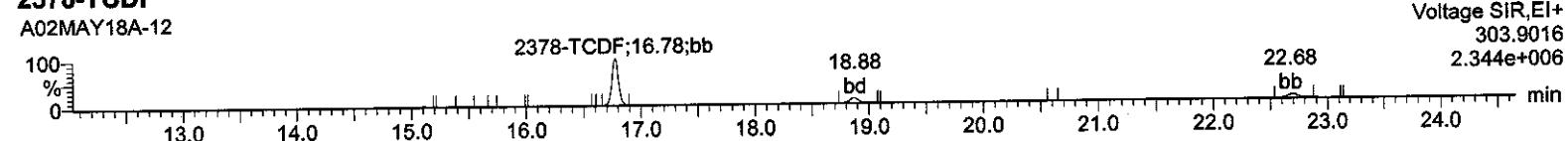
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Last Altered: Wednesday, May 02, 2018 16:29:32 Eastern Standard Time

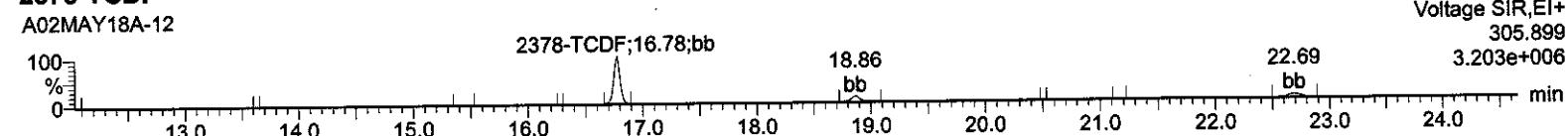
Printed: Wednesday, May 02, 2018 16:30:04 Eastern Standard Time

**Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_225TCDF.mdb 02 May 2018 16:27:15****Calibration: C:\MassLynx\Default.pro\Curvedb\CF-A02MAY18.cdb 02 May 2018 16:26:15****Name: A02MAY18A-12, Date: 02-May-2018, Time: 15:55:09, ID: CS3WT 1613CS3 UD170810-01.7 CPSIZ, Description: ,****Job: A02MAY18A, Task: HRP750\_3, User: MJC****2378-TCDF**

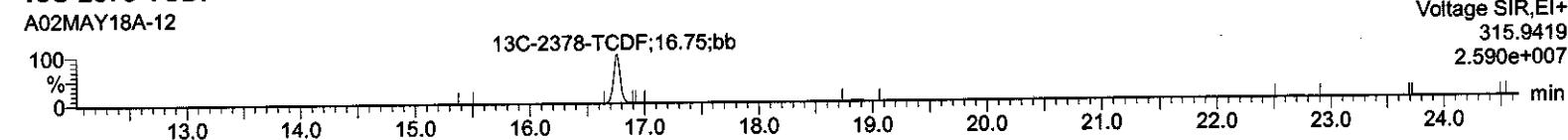
A02MAY18A-12

**2378-TCDF**

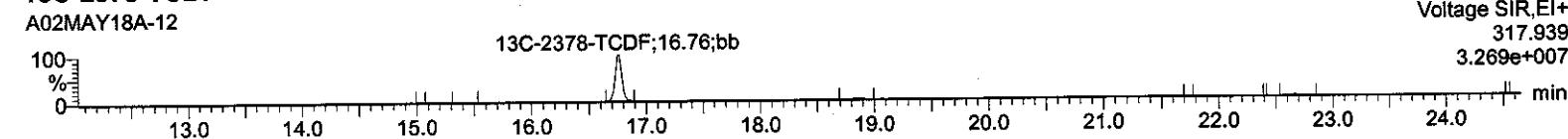
A02MAY18A-12

**13C-2378-TCDF**

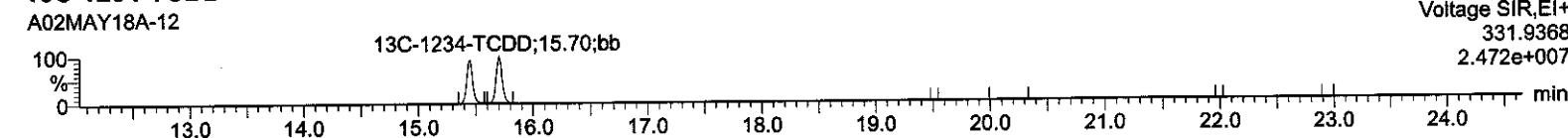
A02MAY18A-12

**13C-2378-TCDF**

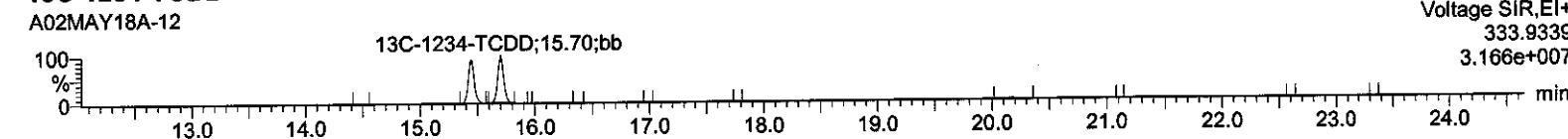
A02MAY18A-12

**13C-1234-TCDD**

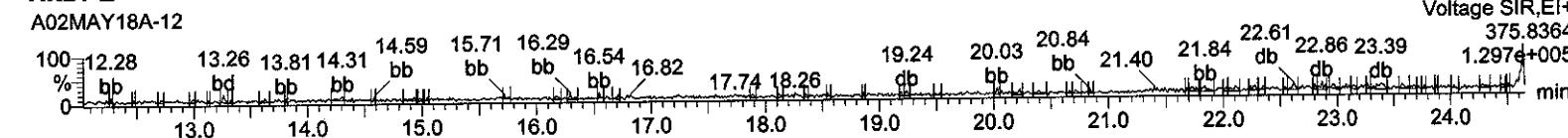
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**13C-1234-TCDD**

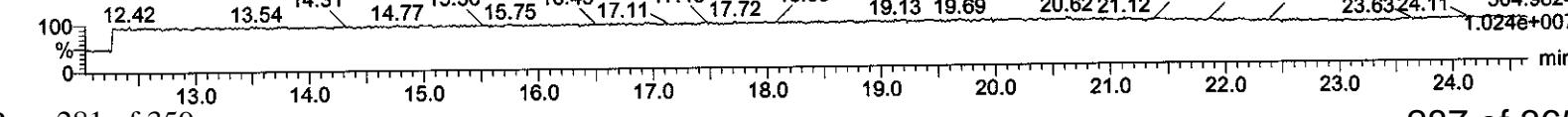
A02MAY18A-12

**HxDPE**

A02MAY18A-12

**Lock Mass F1**

A02MAY18A-12



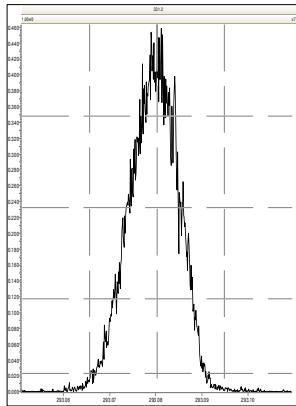
# **Continuing Calibration Data**

**RUN LOG****Instrument: HRP750\_2**

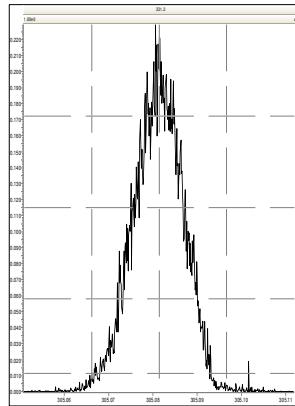
Name	Run Date	Analyst	Sample Information	Batch ID	Injection Volume	Ms Method	Tune Method
A29SEP18B_8-1	02-OCT-2018 07:37:13	Matt Cash	12022208-1 LCS		1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-2	02-OCT-2018 08:24:27	Matt Cash	12022209-1 LCSD		1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-3	02-OCT-2018 09:12:26	Matt Cash	12022207-1 MB		1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-4	02-OCT-2018 10:00:28	Matt Cash	13889001-1	38723	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-5	02-OCT-2018 10:48:27	Matt Cash	13938001-1	38724	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-6	02-OCT-2018 11:36:29	Matt Cash	13938002-1	38724	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-7	02-OCT-2018 12:24:33	Matt Cash	13938003-1	38724	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-8	02-OCT-2018 13:12:35	Matt Cash	13938004-1	38724	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-9	02-OCT-2018 14:00:38	Matt Cash	13938005-1	38724	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-10	02-OCT-2018 14:48:39	Matt Cash	13938006-1	38724	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-11	02-OCT-2018 15:36:42	Matt Cash	13881007-1	38678	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-12	02-OCT-2018 16:24:44	Matt Cash	13881010-1	38678	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_8-13	02-OCT-2018 17:12:46	Matt Cash	CS3WT UD180731-01.1		1 uL	dioxin_db5ms	10K_dx

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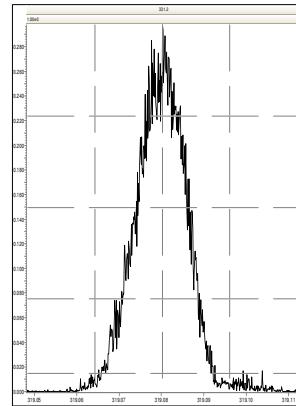
M 292.9824 R 12019



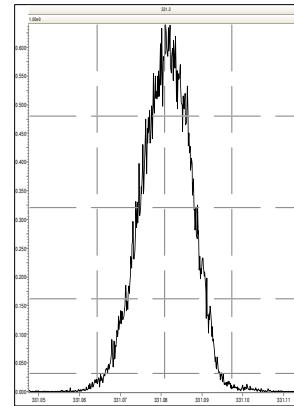
M 304.9824 R 12502



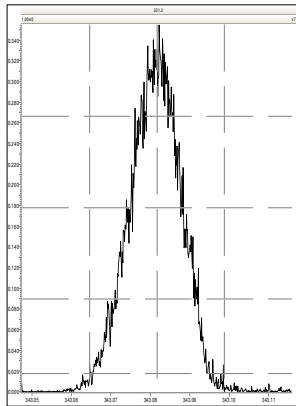
M 318.9792 R 12019



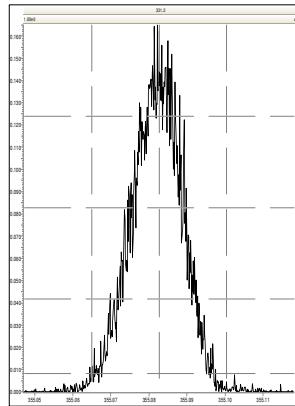
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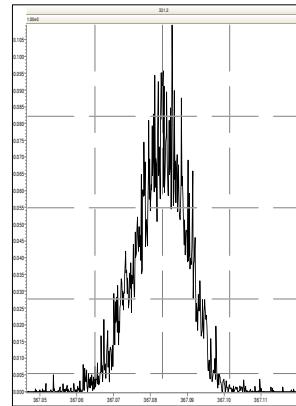
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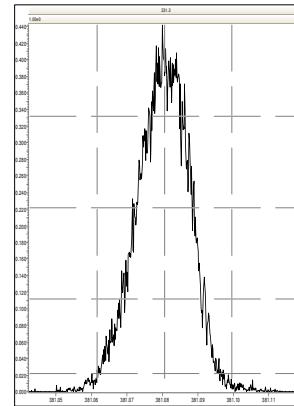
M 354.9792 R 12021



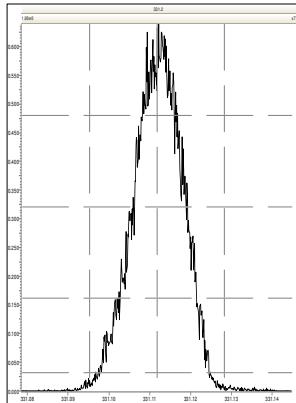
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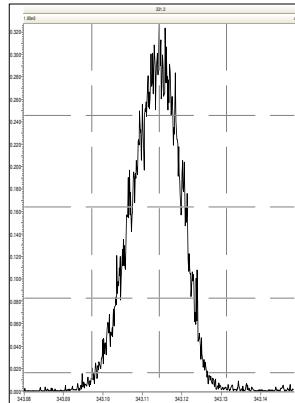
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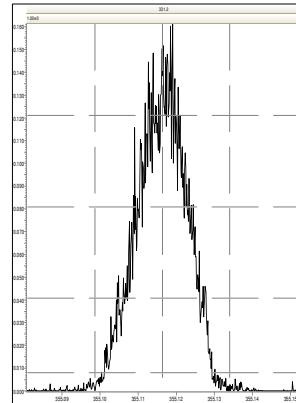
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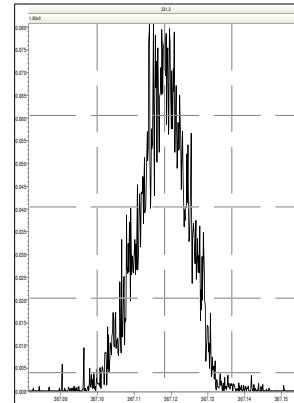
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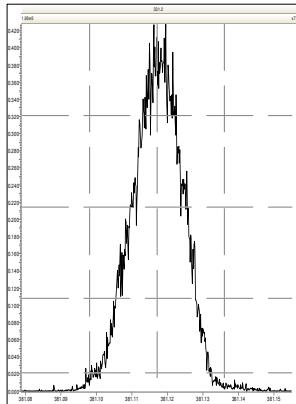
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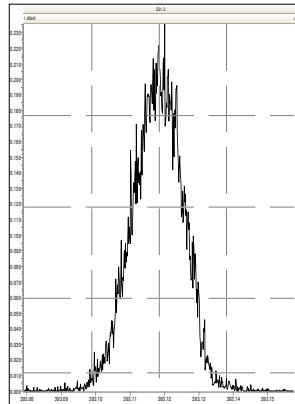
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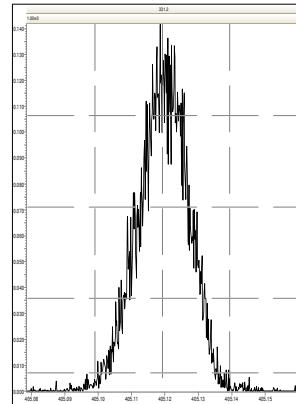
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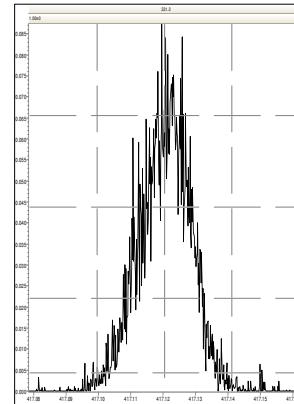
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M 404.9760 R 12226

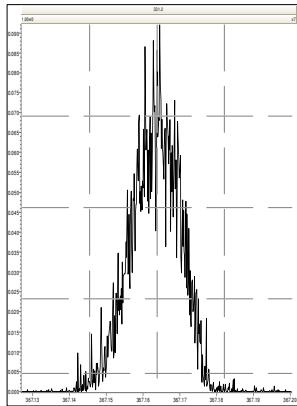


M 416.9760 R 12691

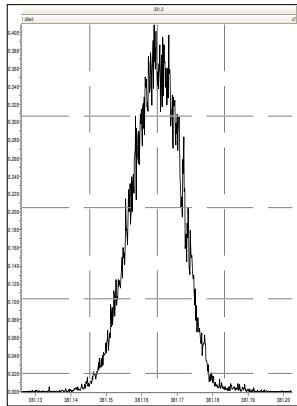


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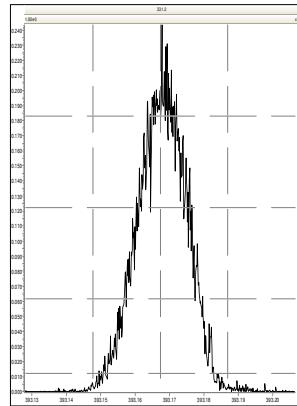
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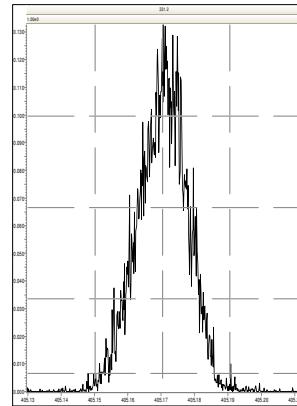
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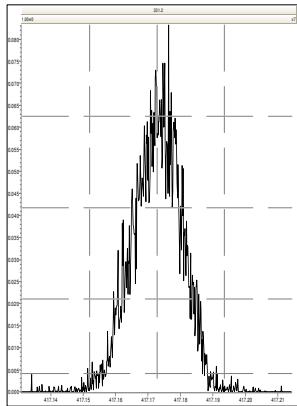
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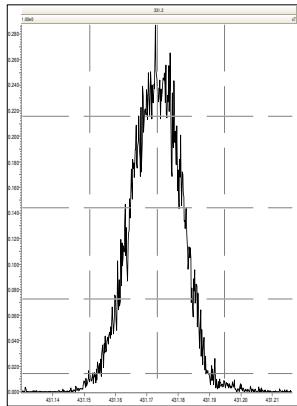
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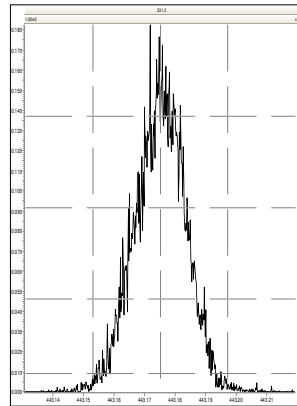
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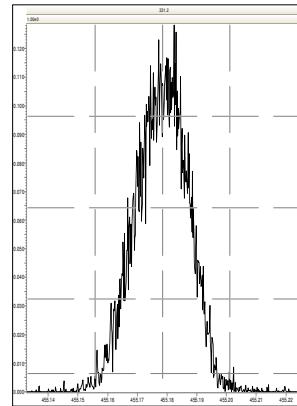
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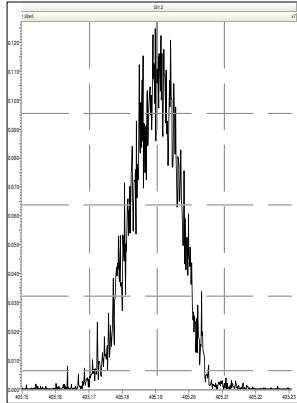
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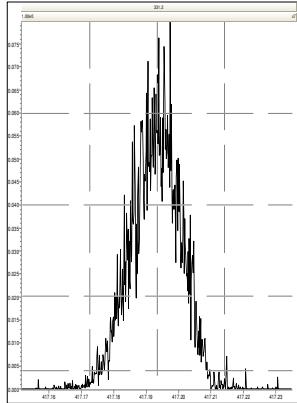
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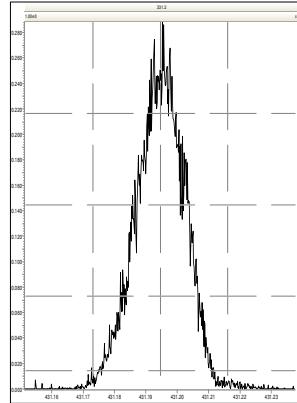
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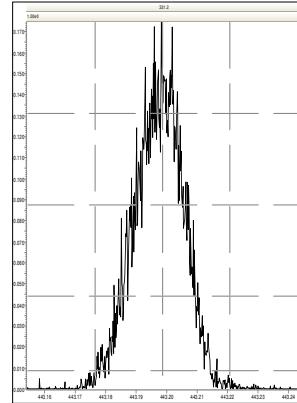
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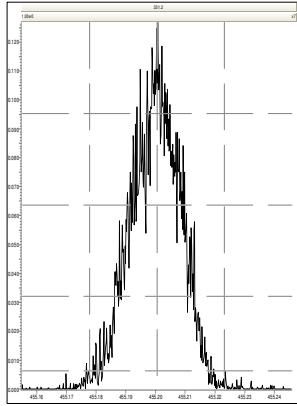
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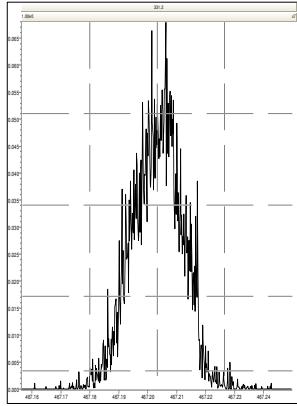
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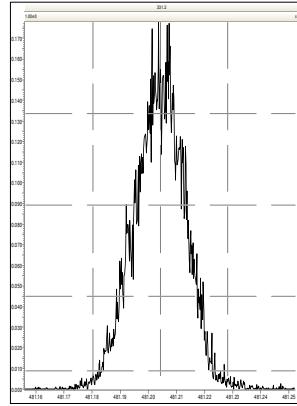
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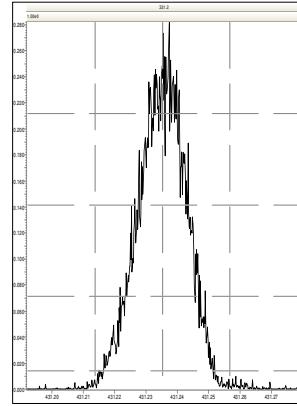
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M 480.9696 R 12048

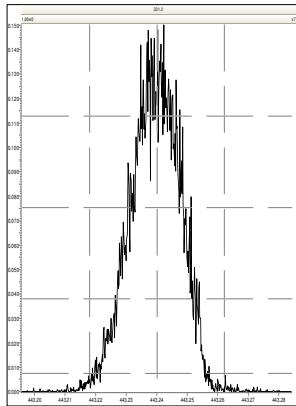


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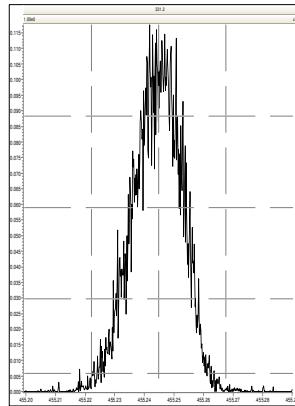


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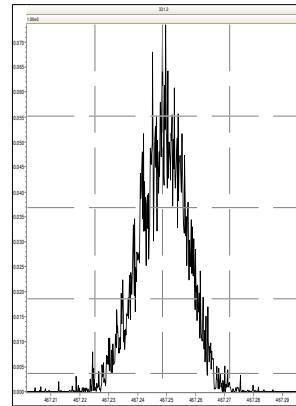
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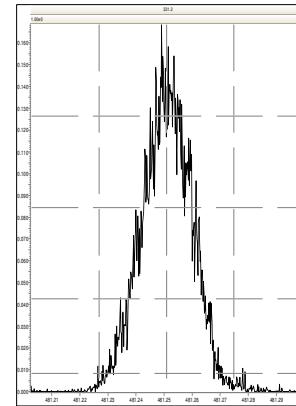
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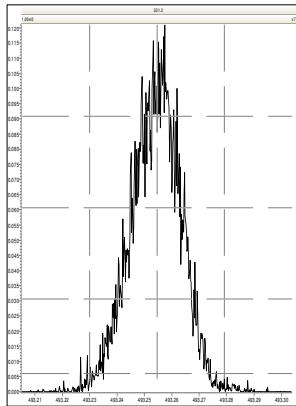
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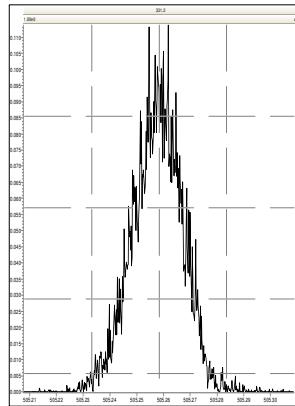
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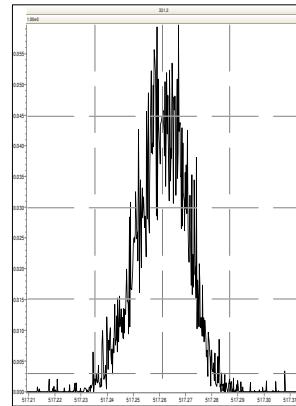
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M 504.9696 R 12570

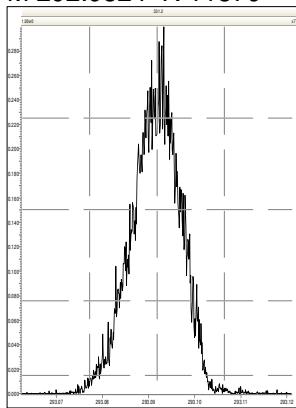


M 516.9697 R 13340

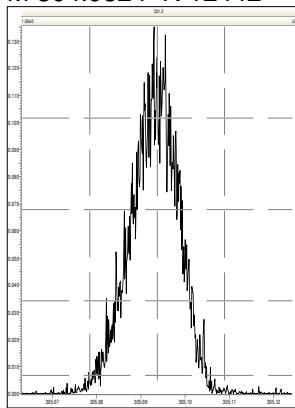


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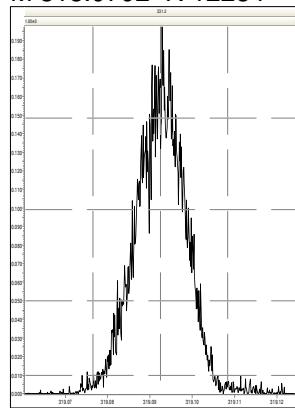
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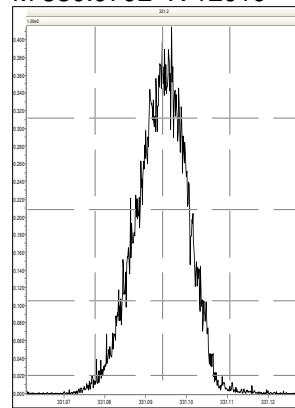
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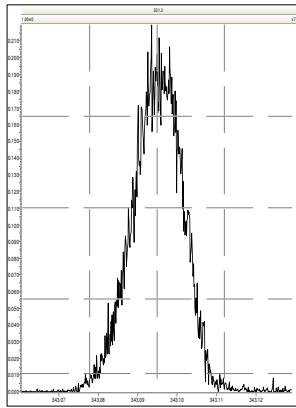
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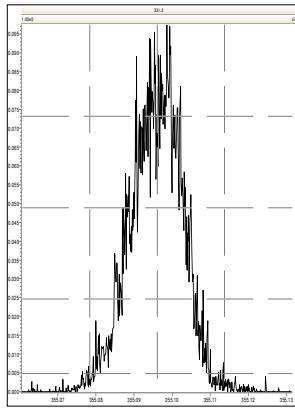
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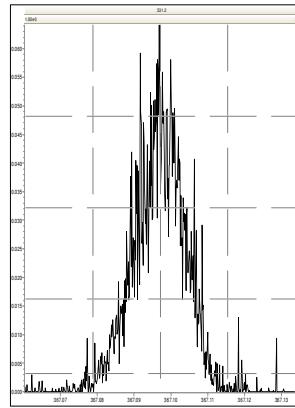
M 342.9792 R 12358



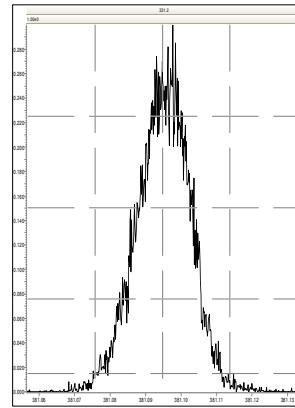
M 354.9792 R 11936



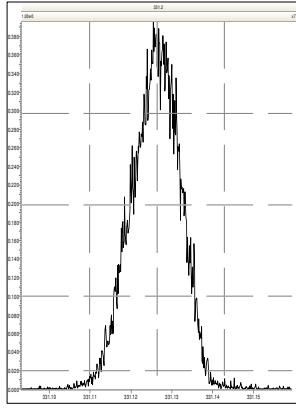
M 366.9792 R 12886



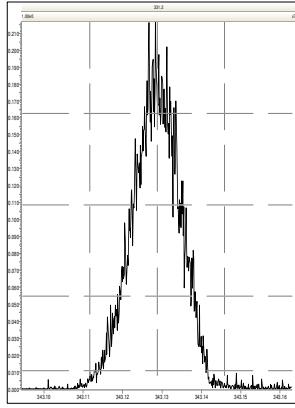
M 380.9760 R 10780



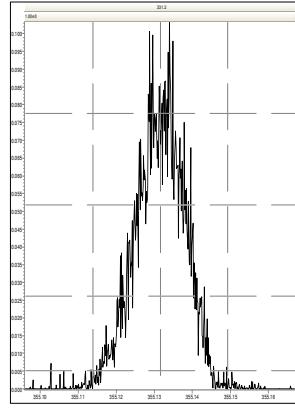
M 330.9792 R 12759



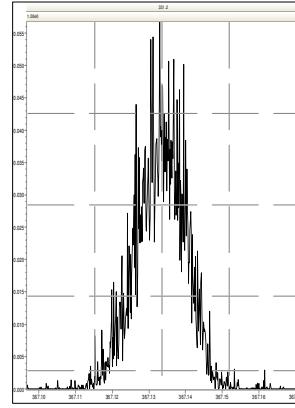
M 342.9792 R 12445



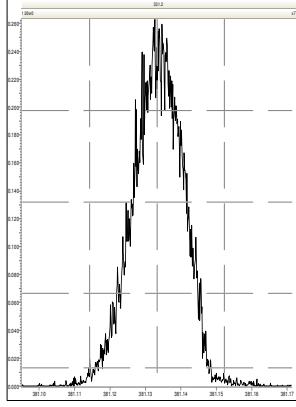
M 354.9792 R 12510



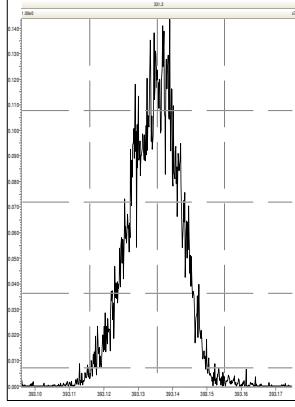
M 366.9792 R 13710



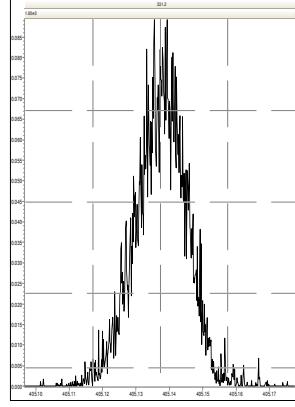
M 380.9760 R 12378



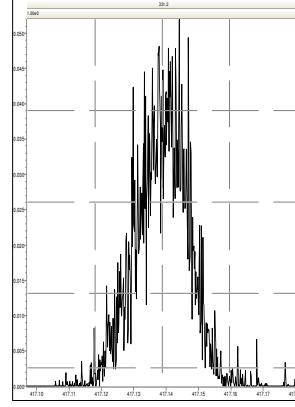
M 392.9760 R 12224



M 404.9760 R 12537

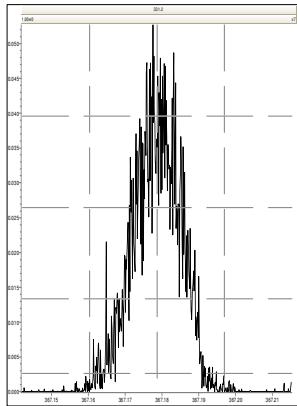


M 416.9760 R 12836

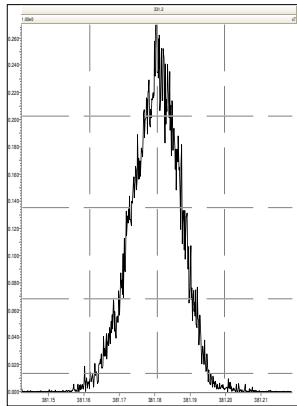


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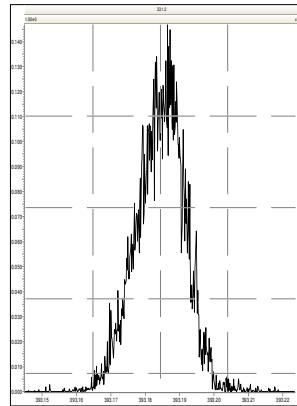
M 366.9792 R 14289



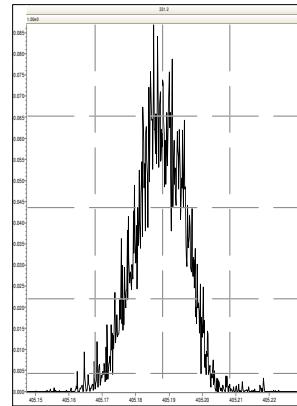
M 380.9760 R 12255



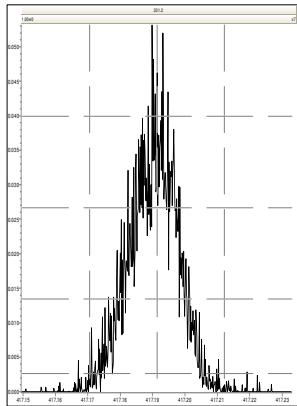
M 392.9760 R 12288



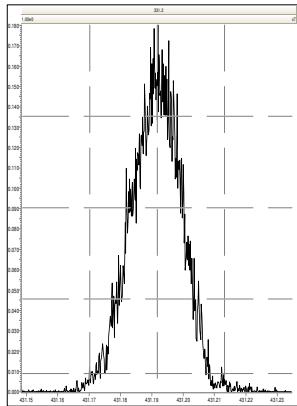
M 404.9760 R 12598



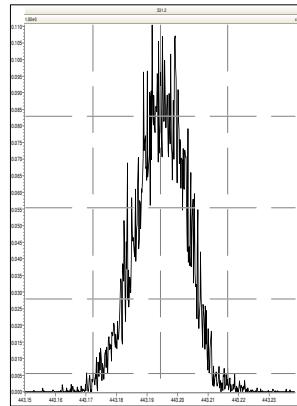
M 416.9760 R 14327



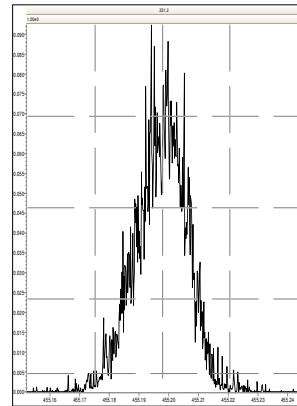
M 430.9728 R 12376



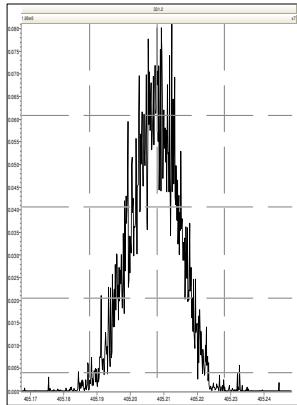
M 442.9728 R 12316



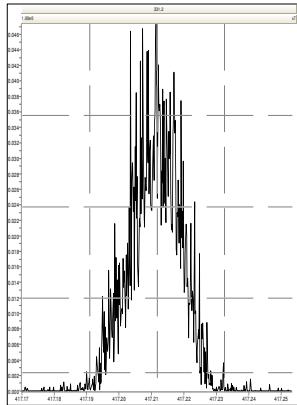
M 454.9728 R 12306



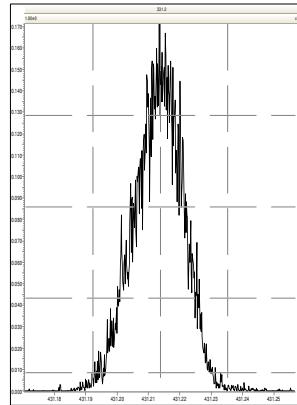
M 404.9760 R 13778



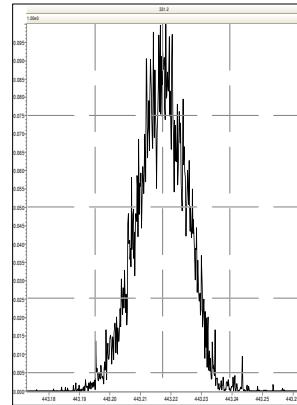
M 416.9760 R 13727



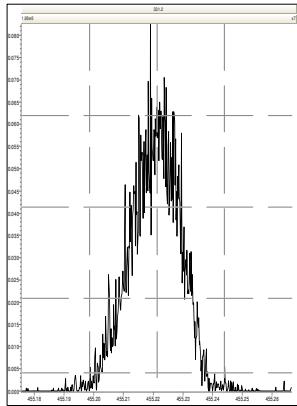
M 430.9728 R 12755



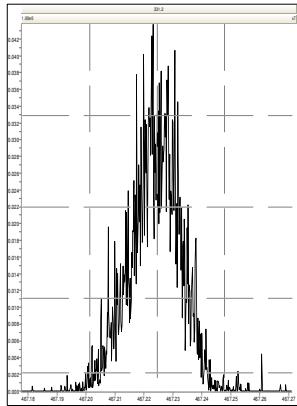
M 442.9728 R 12886



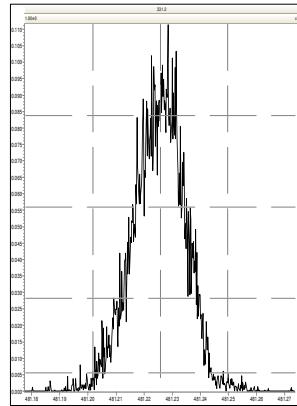
M 454.9728 R 12797



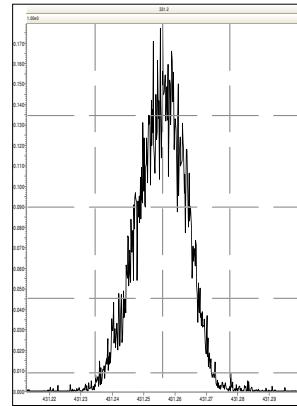
M 466.9728 R 13446



M 480.9696 R 12056

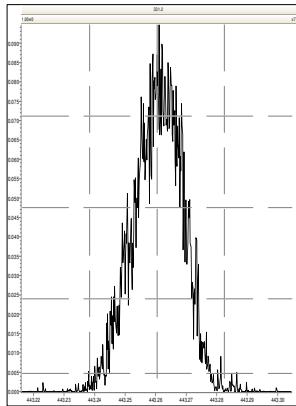


M 430.9728 R 12562

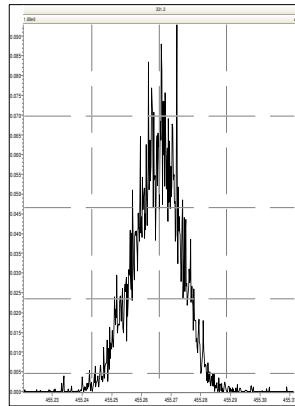


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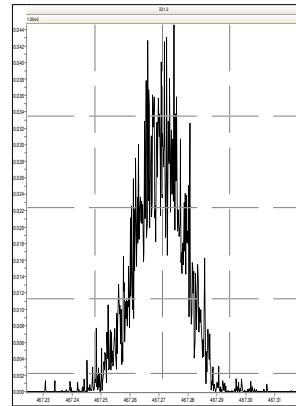
M 442.9728 R 13263



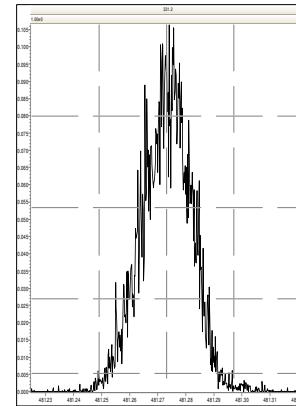
M 454.9728 R 13552



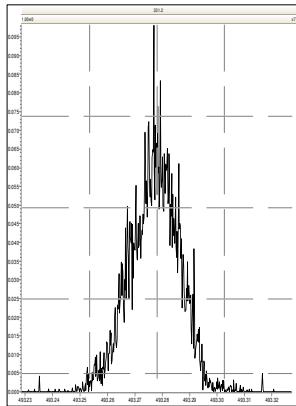
M 466.9728 R 13686



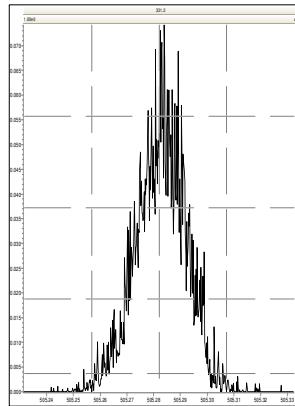
M 480.9696 R 12740



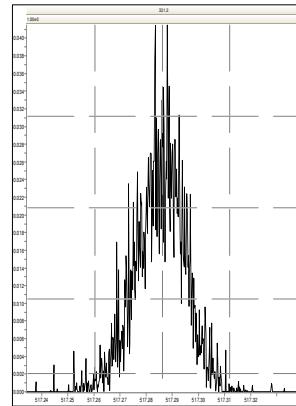
M 492.9696 R 12908



M 504.9696 R 13412



M 516.9697 R 13566



**MassLynx 4.1**

Method Window Defining Report  
Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A29SEP18B\_8-13.qld

East Altered: Wednesday, October 03, 2018 08:43:42 Eastern Standard Time  
Printed: Wednesday, October 03, 2018 08:44:18 Eastern Standard Time

**Method: C:\MassLynx\Default.pro\Methdb\WDM\_A23AUG18.mdb 24 Aug 2018 08:59:12**  
**Calibration: C:\MassLynx\Default.pro\Curvedb\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

	Name	RT
1	First TCDF	26.48
2	Last TCDF	32.06
3	First PeCDF	32.03
4	Last PeCDF	34.70
5	First HxCDF	35.19
6	Last HxCDF	37.53
7	First HpCDF	39.03
8	Last HpCDF	40.98
9	OCDF	44.91
10	First TCDD	28.21
11	2378-TCDD	31.43
12	Last TCDD	31.98
13	First PeCDD	32.91
14	Last PeCDD	34.52
15	First HxCDD	35.62
16	Last HxCDD	37.20
17	First HpCDD	39.36
18	Last HpCDD	40.30
19	OCDD	44.61

Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A29SEP18B\_8-13.qld

Last Altered: Wednesday, October 03, 2018 08:43:42 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:44:18 Eastern Standard Time

**Method: C:\MassLynx\Default.pro\Methdb\WDM\_A23AUG18.mdb 24 Aug 2018 08:59:12**

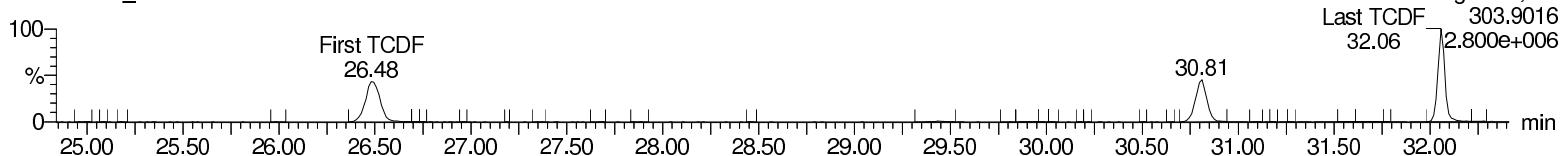
**Calibration: C:\MassLynx\Default.pro\Curvedb\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8,**

**Task: HRP750\_2, User: MJC**

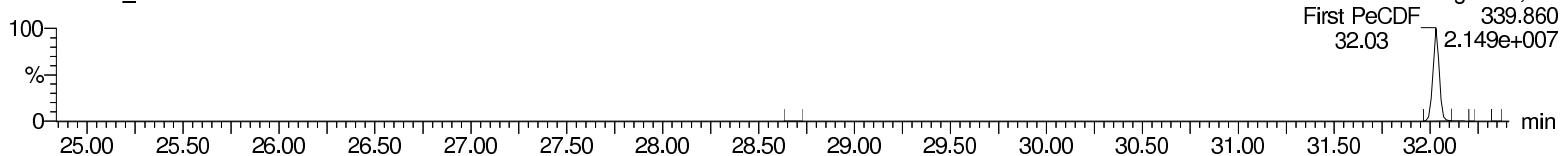
#### First TCDF

A29SEP18B\_8-13



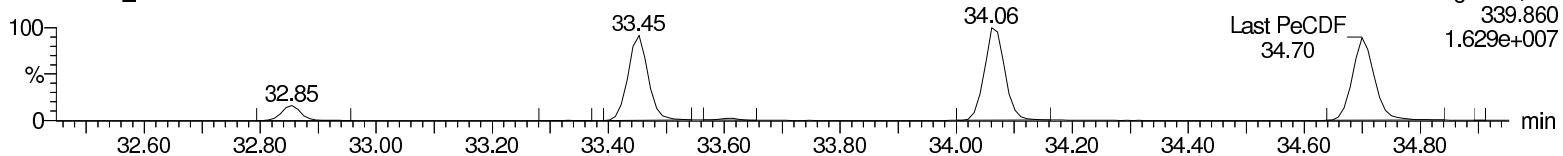
#### First PeCDF

A29SEP18B\_8-13



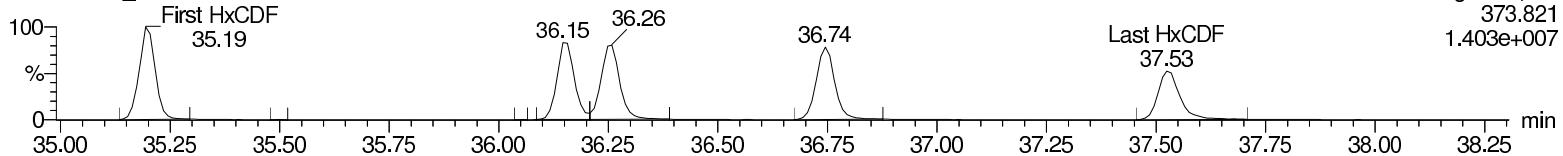
#### Last PeCDF

A29SEP18B\_8-13



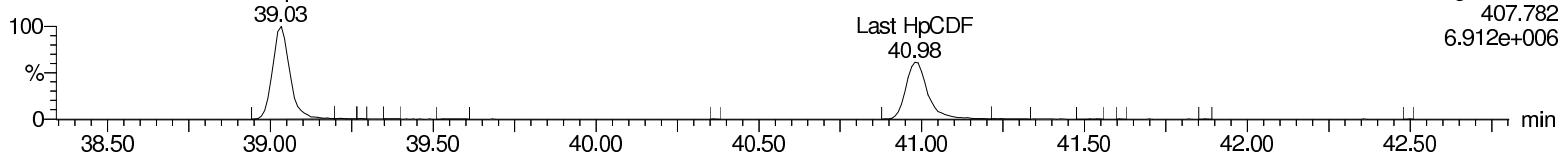
#### First HxCDF

A29SEP18B\_8-13



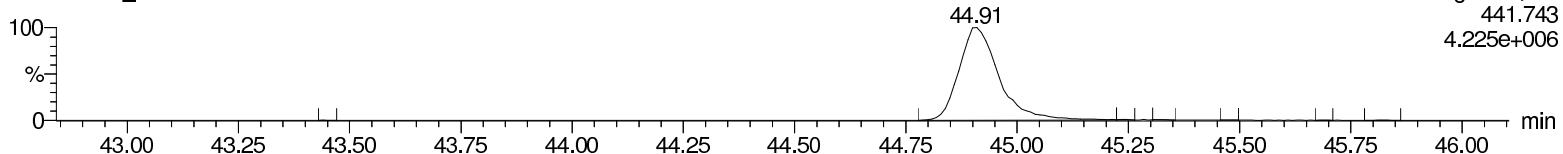
#### First HpCDF

A29SEP18B\_8-13



#### OCDF

A29SEP18B\_8-13



**Quantify Sample Report**  
Method Window Defining Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A29SEP18B\_8-13.qld

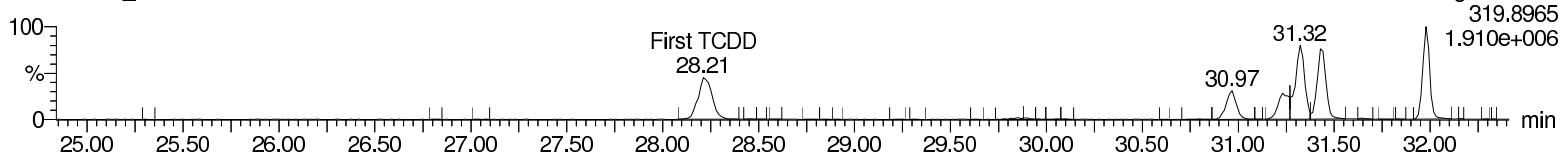
Last Altered: Wednesday, October 03, 2018 08:43:42 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:44:18 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

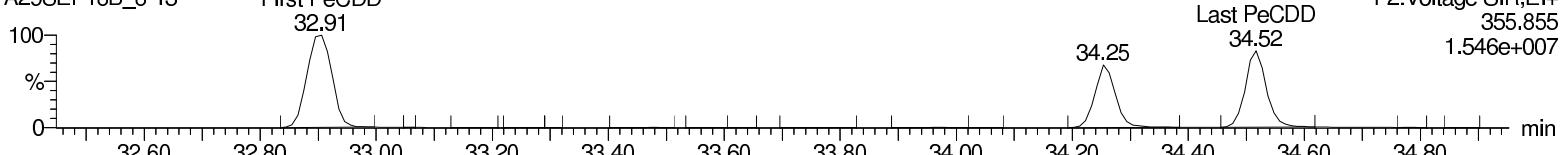
**First TCDD**

A29SEP18B\_8-13



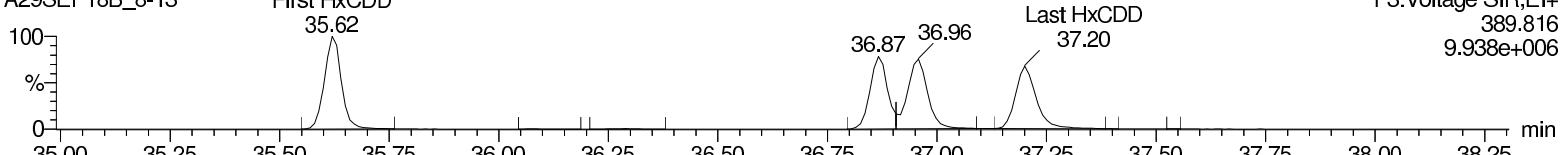
**First PeCDD**

A29SEP18B\_8-13



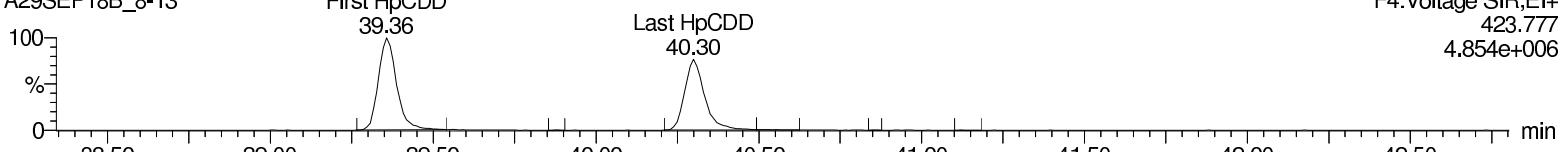
**First HxCDD**

A29SEP18B\_8-13



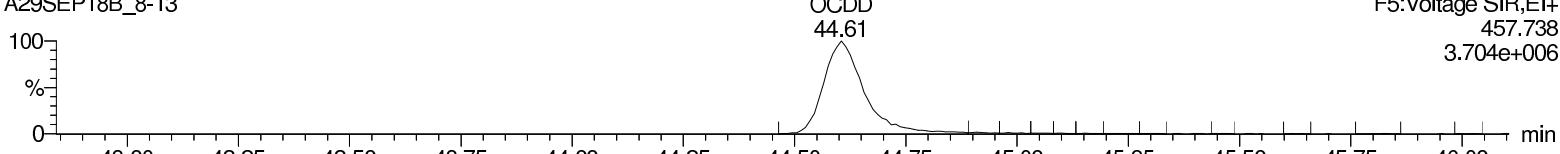
**First HpCDD**

A29SEP18B\_8-13



**OCDD**

A29SEP18B\_8-13



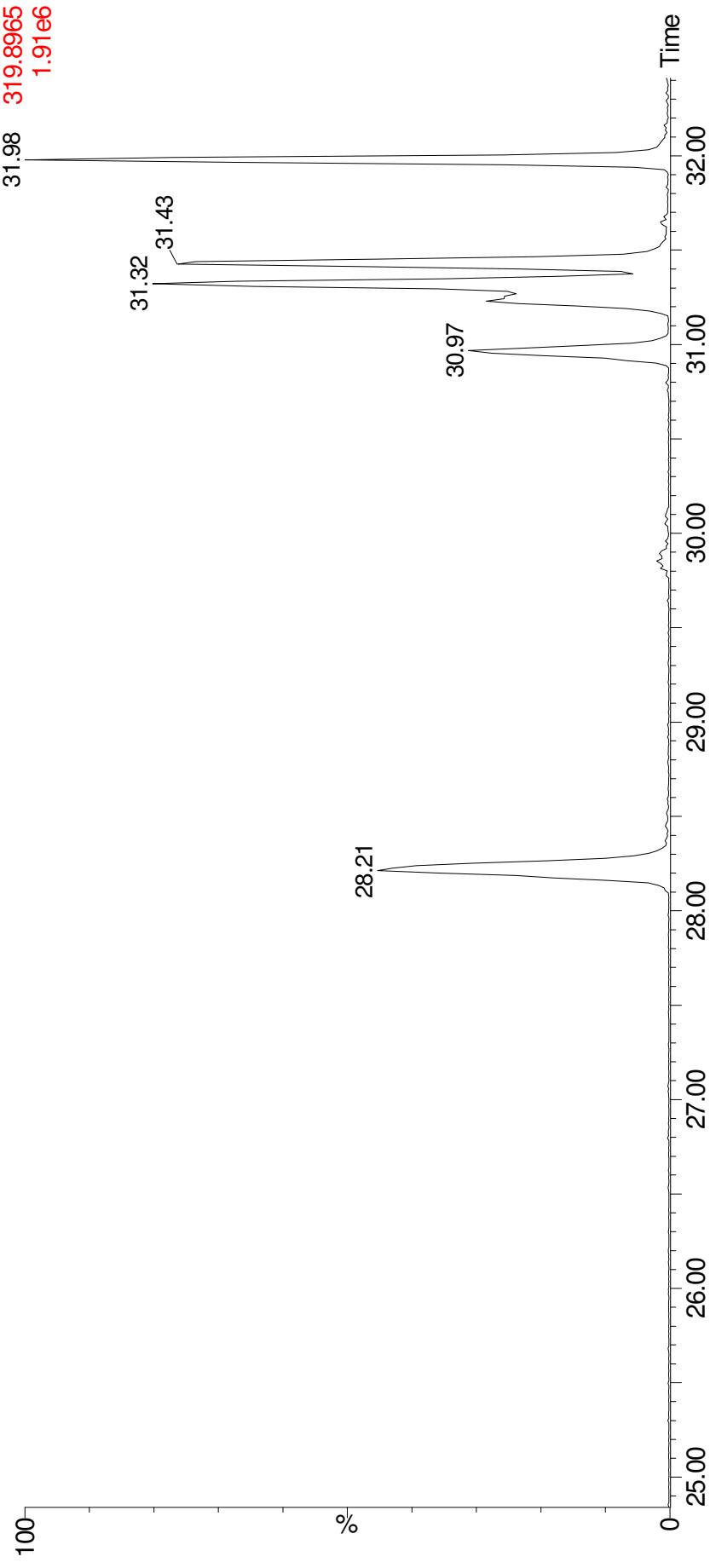
COLUMN CHECK (2378-TCDD 7%)

**CS3WT UD180731-01.1**

A29SEP18B\_8-13

**HRP750\_2**

**02-Oct-2018 17:12:46**  
1: Voltage SIR 13 Channels El+  
31.98 319.8965  
1.91e6



**Method: C:\MassLynx\Default\pro\Methdb\CFA\_EPA8290\_A23AUG18.mdb** 23 Aug 2018 12:08:58  
**Calibration: C:\MassLynx\DEFault.PRO\CurveDB\8290-A18AUG18.cdb** 20 Aug 2018 13:48:29

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	RRF	Mean	%D	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	23378-TcDD	7.74e4	9.95e4	1.77e5	31.43	1.000	0.738	NO	10.408	0.0736	1.006	0.966	4.1	1.45e6	5904	245.2	1.84e6	3584	512.7	db	
2	12378-PeCDD	4.28e5	2.71e5	6.99e5	34.25	1.000	1.58	NO	52.927	0.132	1.034	0.977	5.9	1.05e7	8333	1258.1	6.60e6	9135	722.5	bb	
3	123478-HxCDD	3.58e5	2.90e5	6.48e5	36.87	0.998	1.24	NO	53.373	0.190	0.875	0.820	6.7	7.80e6	9304	838.1	6.25e6	7847	796.0	bd	
4	123678-HxCDD	4.04e5	3.31e5	7.35e5	36.96	1.000	1.22	NO	51.079	0.160	0.992	0.971	2.2	7.54e6	9304	810.0	6.10e6	7847	777.7	dd	
5	123789-HxCDD	3.75e5	3.09e5	6.84e5	37.20	1.007	1.21	NO	53.583	0.181	0.923	0.861	7.2	6.75e6	9304	725.4	5.36e6	7847	683.2	db	
6	1234678-HpCDD	2.61e5	2.49e5	5.10e5	40.30	1.000	1.05	NO	50.106	0.184	0.957	0.955	0.2	3.72e6	4682	794.8	3.43e6	5488	625.7	bd	
7	OCDD	3.89e5	4.32e5	8.21e5	44.61	1.000	0.90	NO	102.138	0.396	1.002	0.981	2.1	3.70e6	6135	603.2	4.20e6	5853	717.6	bd	
8	23378-TcDF	8.55e4	1.13e5	1.98e5	30.81	1.001	0.76	NO	9.435	0.0734	0.867	0.919	-5.6	1.26e6	4336	290.0	1.65e6	4332	379.9	bb	
9	12378-PeCDF	5.92e5	3.84e5	9.76e5	33.45	1.000	1.54	NO	50.002	0.0931	0.875	0.875	0.0	1.49e7	10333	1442.6	9.24e6	8380	1102.9	bb	
10	23478-PeCDF	6.64e5	4.28e5	1.09e6	34.06	1.018	1.55	NO	49.918	0.0831	0.980	0.981	-0.2	1.62e7	10333	1570.1	1.06e7	8380	1263.9	bb	
11	123478-HxCDF	5.40e5	4.29e5	9.69e5	36.15	0.997	1.26	NO	57.069	0.186	1.054	0.923	14.1	1.16e7	13266	877.4	9.26e6	11692	791.9	bd	
12	123678-HxCDF	5.57e5	4.53e5	1.01e6	36.26	1.001	1.23	NO	51.689	0.162	1.099	1.063	3.4	1.13e7	13266	849.1	9.06e6	11692	774.6	db	
13	234678-HxCDF	5.37e5	4.24e5	9.61e5	36.74	1.014	1.26	NO	54.972	0.181	1.046	0.951	9.9	1.10e7	13266	828.6	8.64e6	11692	738.8	bb	
14	123789-HxCDF	4.29e5	3.47e5	7.76e5	37.53	1.036	1.23	NO	56.246	0.229	0.844	0.751	12.5	7.35e6	13266	553.7	5.93e6	11692	507.2	bb	
15	1234678-HpCDF	4.22e5	4.06e5	8.29e5	39.03	1.000	1.04	NO	53.808	0.136	1.312	1.219	7.6	6.90e6	7838	880.7	6.76e6	5450	1241.1	bd	
16	1234789-HpCDF	3.26e5	3.11e5	6.37e5	40.98	1.050	1.05	NO	55.913	0.184	1.008	0.902	11.8	4.24e6	7838	540.5	4.19e6	5450	769.1	bd	
17	OCDF	4.38e5	4.92e5	9.30e5	44.91	1.007	0.89	NO	95.608	0.231	1.135	1.187	-4.4	4.22e6	3113	1354.2	4.83e6	5335	904.7	bd	
18	13C-23787-TcDD	7.70e5	9.88e5	1.76e6	31.41	1.015	0.78	NO	114.306	0.103	1.216	1.064	14.3	1.46e7	5553	2630.8	1.93e7	4322	4457.9	bb	
19	13C-12378-PeCDD	8.26e5	5.27e5	1.35e6	34.24	1.106	1.57	NO	120.599	0.140	0.935	0.775	20.6	2.06e7	6280	32281.7	1.30e7	3483	3736.5	bb	
20	13C-123678-HxCDD	8.30e5	6.52e5	1.48e6	36.95	0.993	1.27	NO	96.103	0.120	1.117	1.162	-3.9	1.54e7	6494	2376.2	1.19e7	6358	1875.4	dd	
21	13C-1234678-HpCDD	5.50e5	5.17e5	1.07e6	40.29	1.083	1.06	NO	107.473	0.145	0.804	0.748	7.5	7.45e6	4848	1536.8	7.16e6	5198	1378.5	bd	
22	13C-OCDD	7.71e5	8.67e5	1.64e6	44.58	1.199	0.89	NO	202.145	0.221	0.617	0.611	1.1	7.26e6	5307	1368.3	8.18e6	7165	1141.6	bd	
23	13C-23787-TcDD	9.98e5	1.29e6	2.29e6	30.78	0.994	0.77	NO	101.402	0.0992	1.581	1.560	1.4	1.40e7	8211	1704.9	1.82e7	5661	3206.1	bb	
24	13C-12378-PeCDF	1.34e6	8.90e5	2.23e6	33.44	1.080	1.50	NO	116.792	0.195	1.541	1.320	16.8	3.44e7	13862	2480.8	2.20e7	9207	2391.8	bb	
25	13C-123678-HxCDF	6.37e5	1.20e6	1.84e6	36.24	0.974	0.53	NO	89.602	0.190	1.385	1.546	-10.4	1.26e7	9692	1296.5	2.46e7	17496	1406.2	dd	
26	13C-1234678-HpCDF	3.93e5	8.70e5	1.26e6	39.02	1.049	0.45	NO	93.883	0.113	0.952	1.014	-6.1	6.23e6	5897	1056.0	1.39e7	4741	2927.1	bb	
27	13C-123478-TcDD	6.33e5	8.14e5	1.45e6	30.95	0.000	0.78	NO	100.000	0.110	1.000	1.000	0.0	9.81e6	5553	1767.2	1.23e7	4322	2847.9	bb	
28	13C-123789-HxCDD	7.42e5	5.85e5	1.33e6	37.19	0.000	1.27	NO	100.000	0.139	1.000	1.000	0.0	1.29e7	6494	1992.7	1.01e7	6358	1583.8	dd	
29	37Cl-23787-TCDD (SS)	1.73e5	1.73e5	1.73e5	31.43	1.000	0.675	0.0198	9.982	0.105	-3.3	3.50e6	2684	1303.8	bb						
30	13C-23478-PeCDF (SS)	1.33e6	8.93e6	2.22e6	34.05	1.018	1.49	NO	100.616	0.101	0.997	0.990	0.6	3.28e7	13862	2365.7	2.21e7	9207	2400.6	bb	

East Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time  
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**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UDI180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	RRF	Mean	%D	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
31	13C-123478-HxCDF (SS)	5.47e5	1.06e6	1.61e6	36.14	0.997	0.51	NO	107.126	0.229	0.877	0.819	7.1	1.19e7	9692	1225.1	2.32e7	17496	1327.7	bd	bd
32	13C-123478-HxCDD (SS)	7.22e5	5.77e5	1.30e6	36.86	0.998	1.25	NO	105.092	0.140	0.876	0.834	5.1	1.52e7	6494	2335.7	1.20e7	6358	1892.5	dd	bd
33	13C-1234789-HpCDF (SS)	2.86e5	6.42e5	9.27e5	40.96	1.050	0.45	NO	102.606	0.186	0.734	0.715	2.6	3.78e6	5897	641.1	8.41e6	4741	1773.7	bb	bb

Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_8-13.qld

Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**

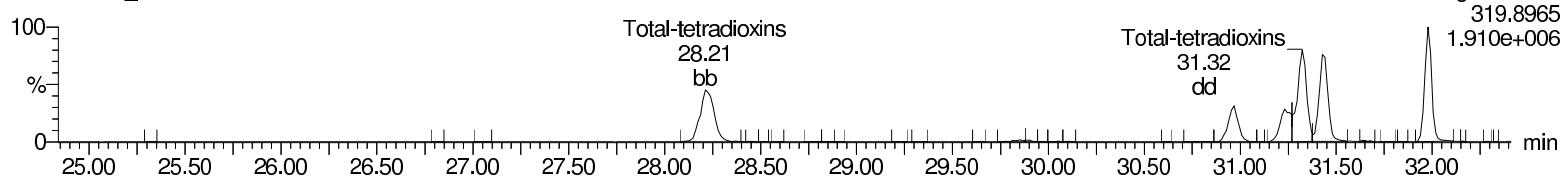
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8,**

**Task: HRP750\_2, User: MJC**

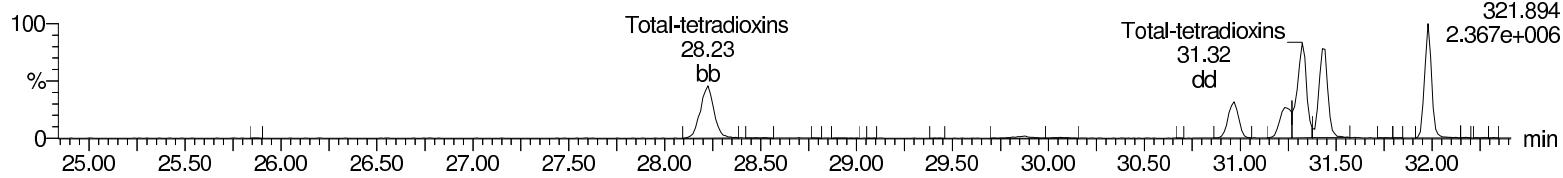
### Total-tetradioxins

A29SEP18B\_8-13



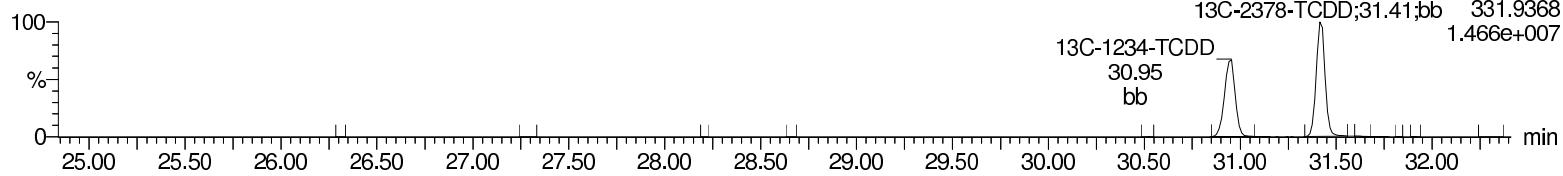
### Total-tetradioxins

A29SEP18B\_8-13



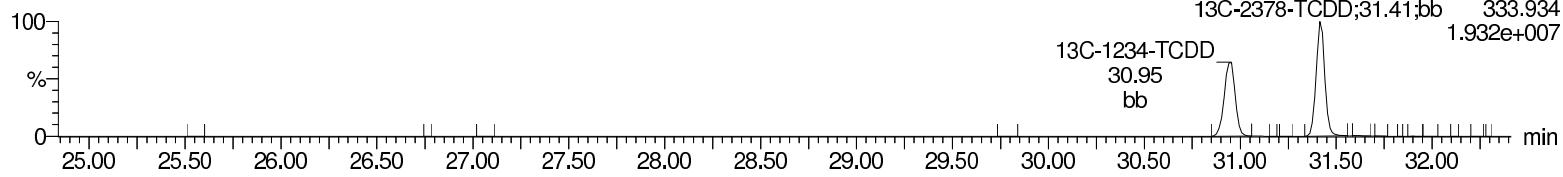
### 13C-2378-TCDD

A29SEP18B\_8-13



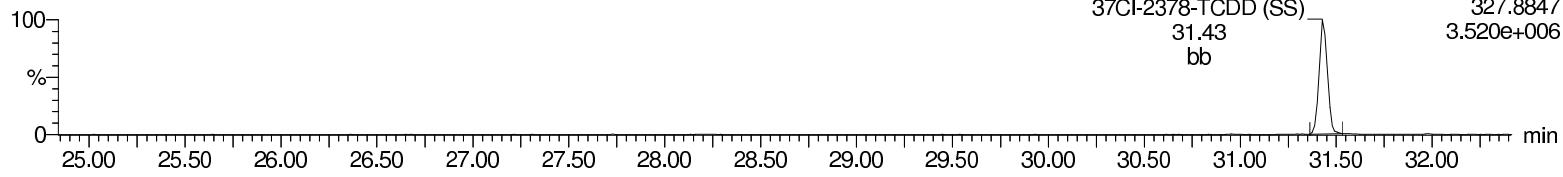
### 13C-2378-TCDD

A29SEP18B\_8-13



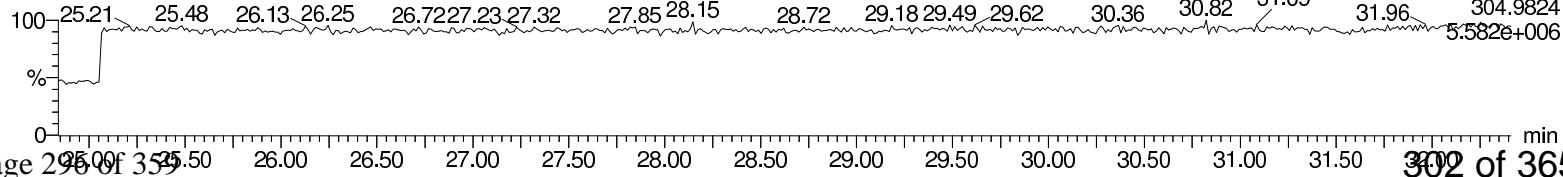
### 37Cl-2378-TCDD (SS)

A29SEP18B\_8-13



### Lock Mass F1

A29SEP18B\_8-13



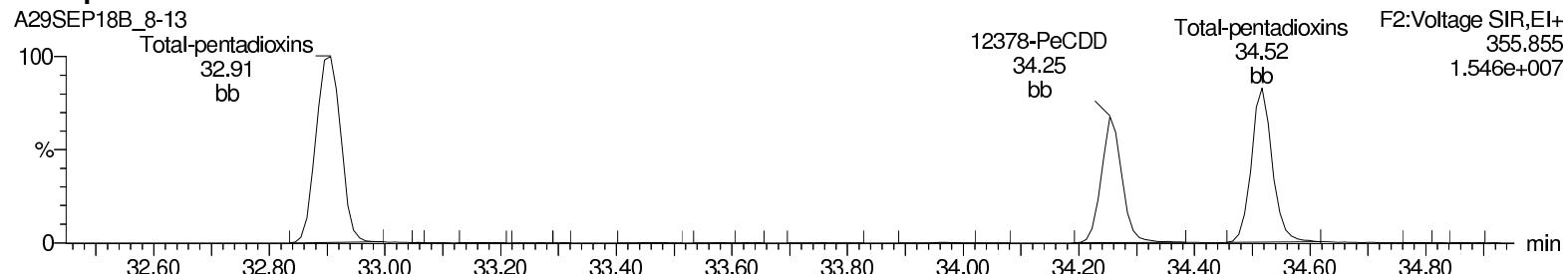
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Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

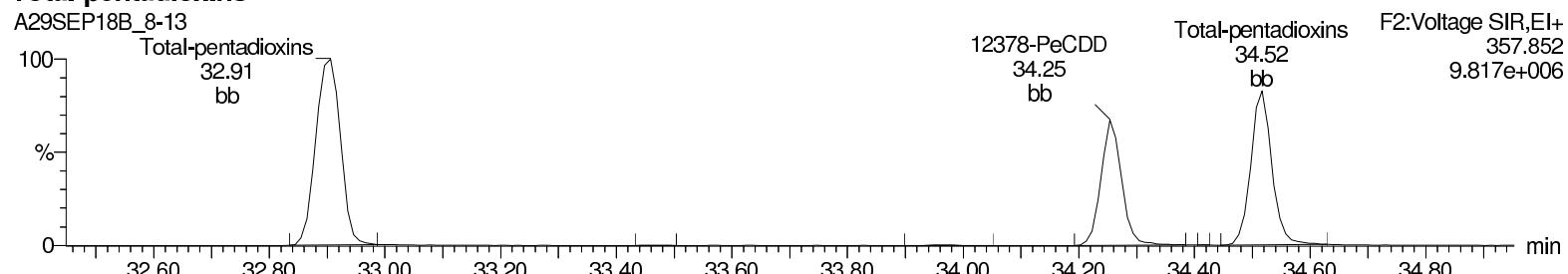
Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

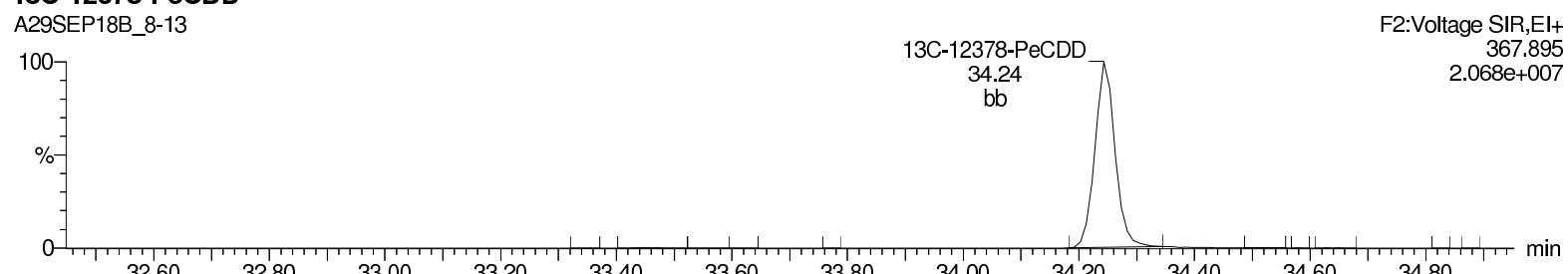
**Total-pentadioxins**



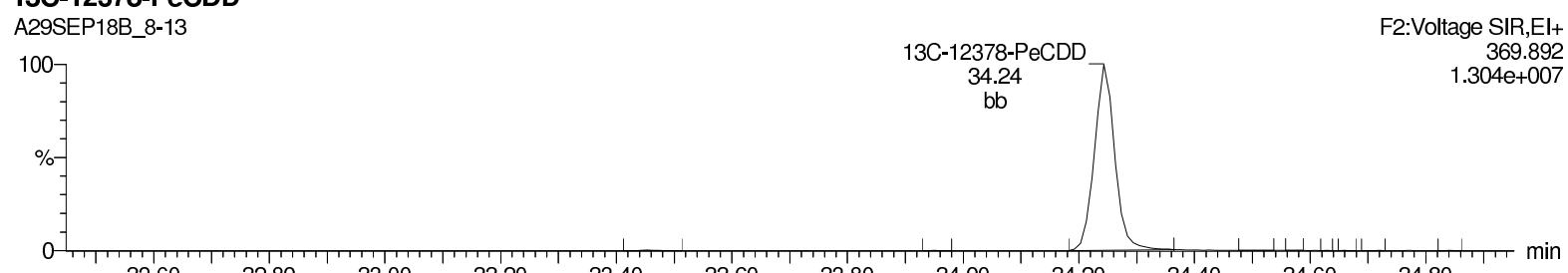
**Total-pentadioxins**



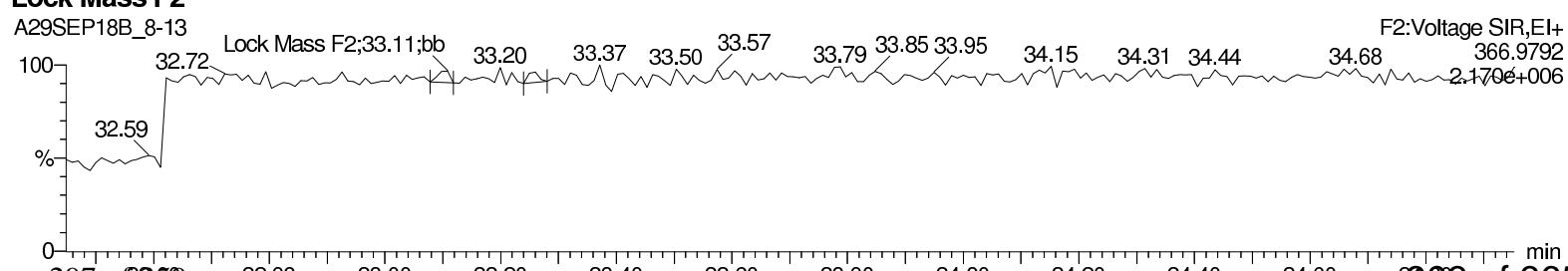
**13C-12378-PeCDD**



**13C-12378-PeCDD**



**Lock Mass F2**



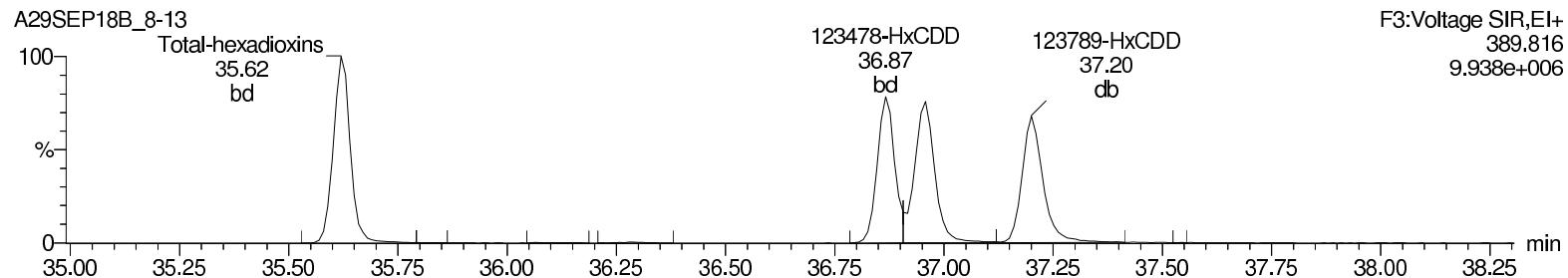
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Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

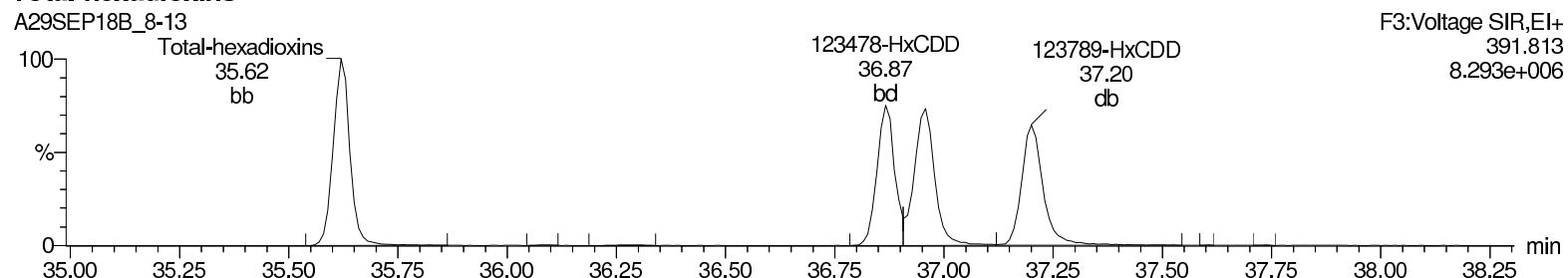
Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

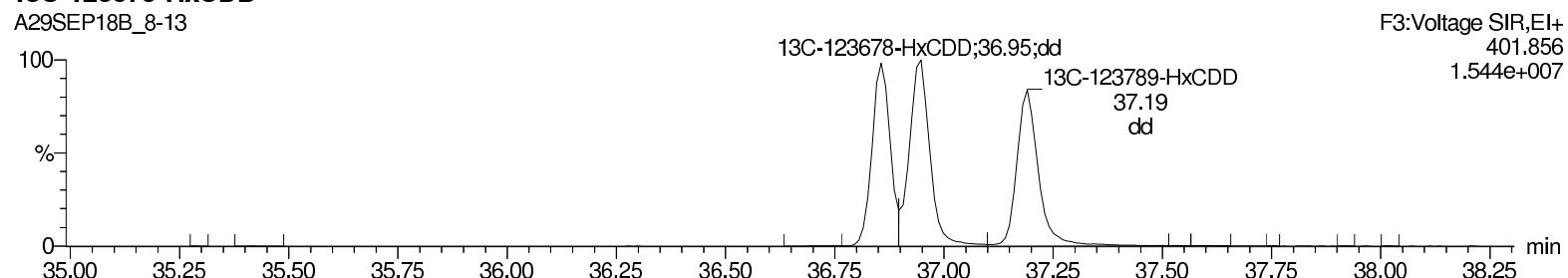
**Total-hexadioxins**



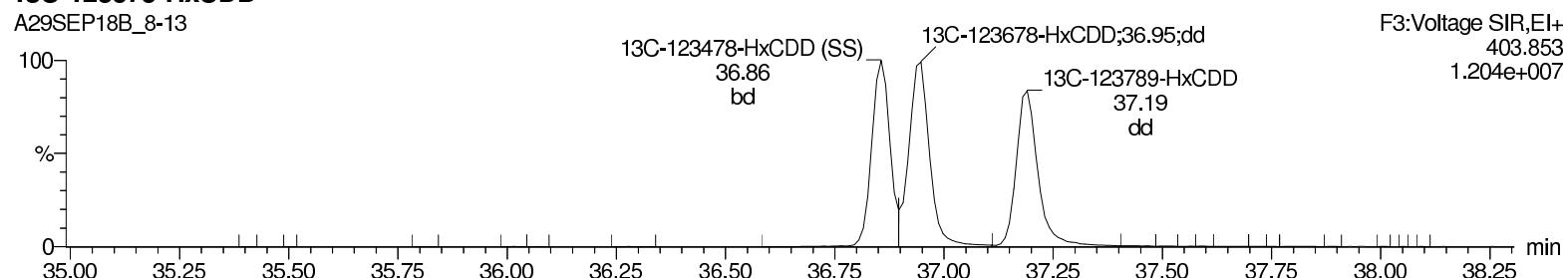
**Total-hexadioxins**



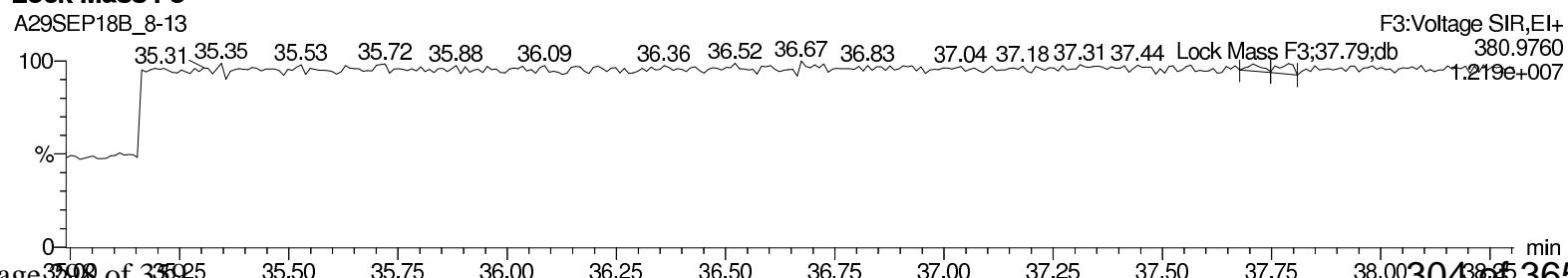
**13C-123678-HxCDD**



**13C-123678-HxCDD**



**Lock Mass F3**



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_8-13.qld

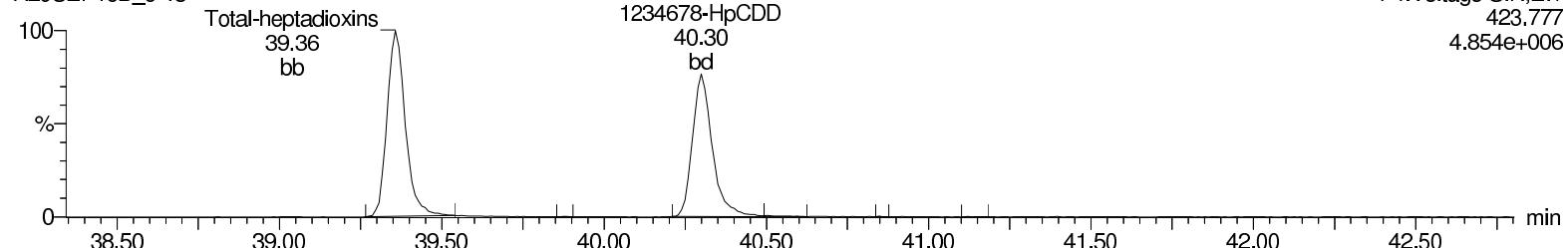
Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

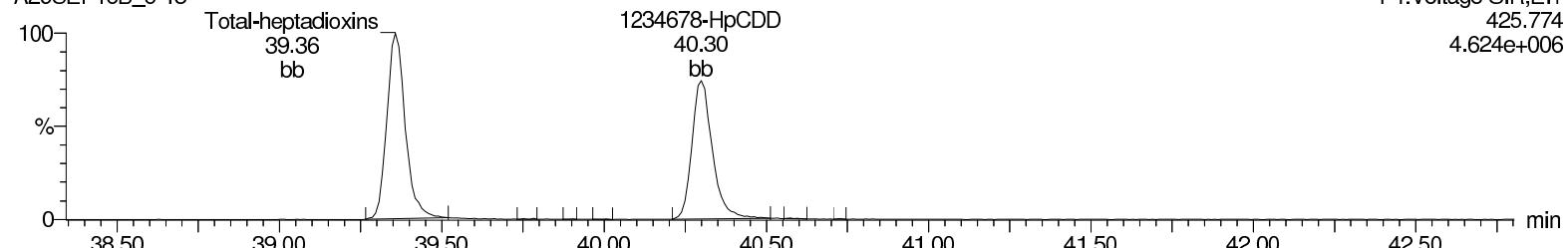
**Total-heptadioxins**

A29SEP18B\_8-13



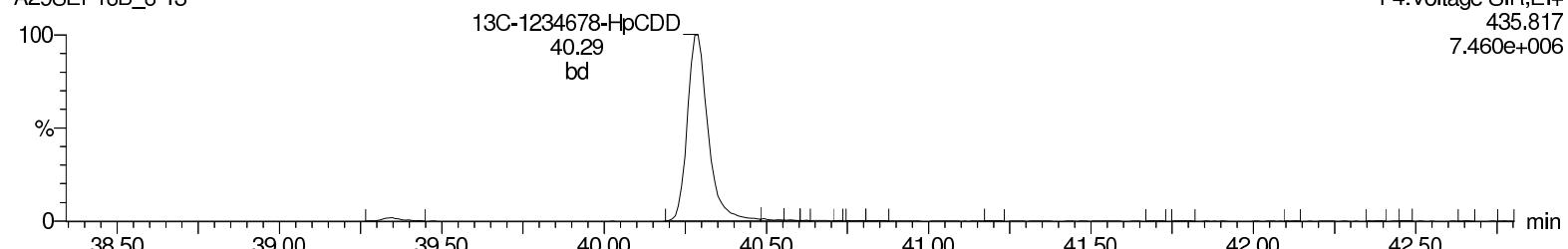
**Total-heptadioxins**

A29SEP18B\_8-13



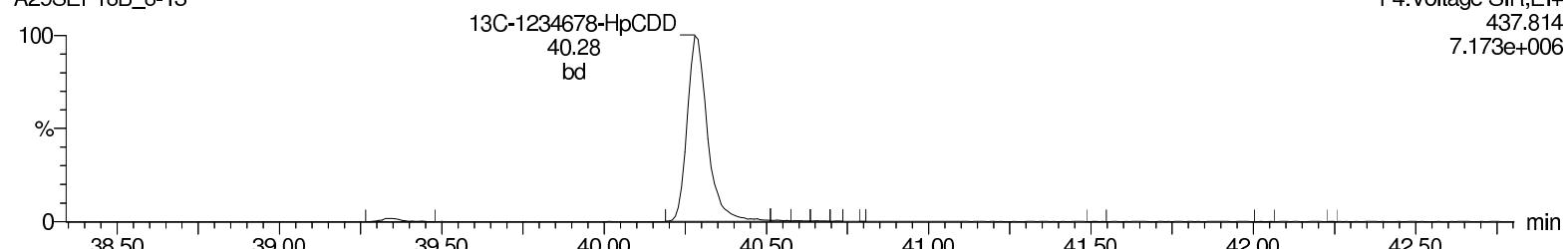
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A29SEP18B\_8-13



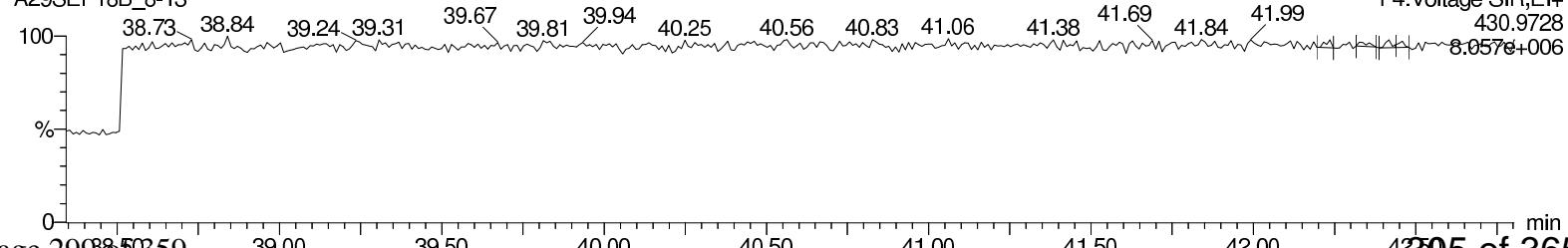
**13C-1234678-HpCDD**

A29SEP18B\_8-13



**Lock Mass F4**

A29SEP18B\_8-13



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_8-13.qld

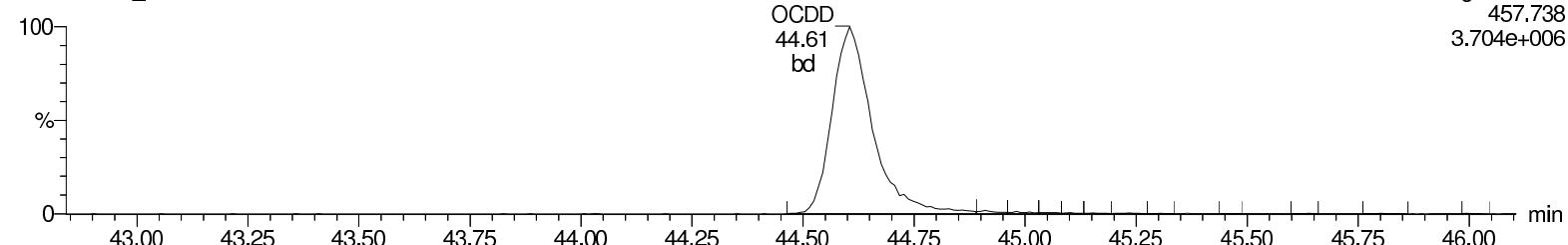
Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

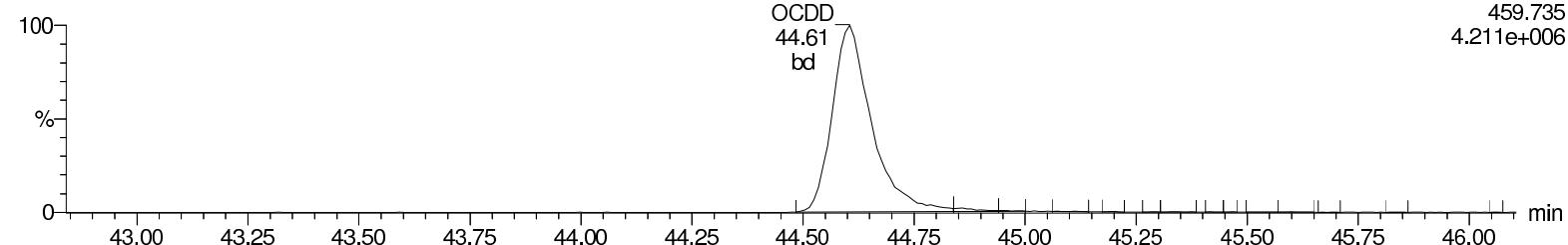
**OCDD**

A29SEP18B\_8-13



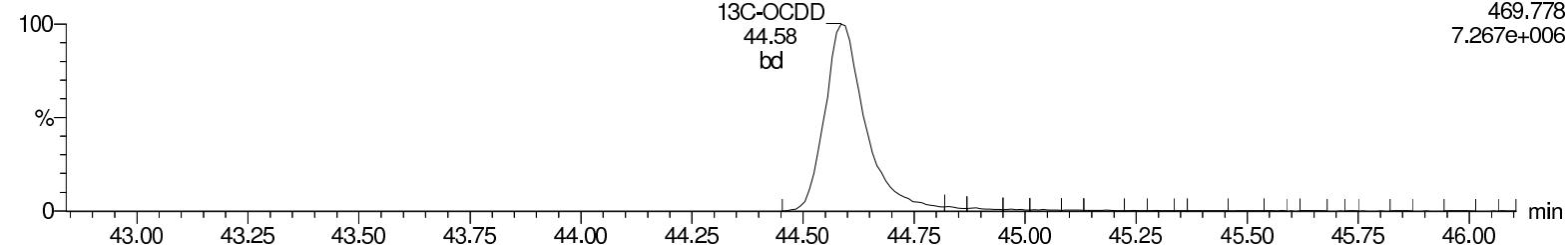
**OCDD**

A29SEP18B\_8-13



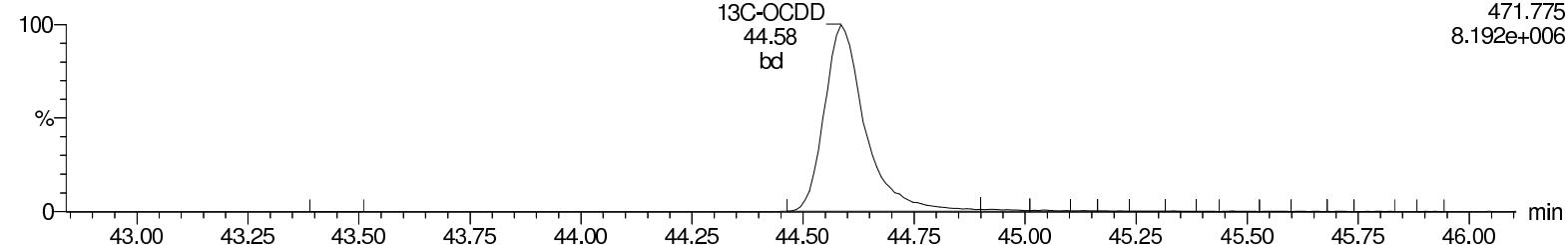
**13C-OCDD**

A29SEP18B\_8-13



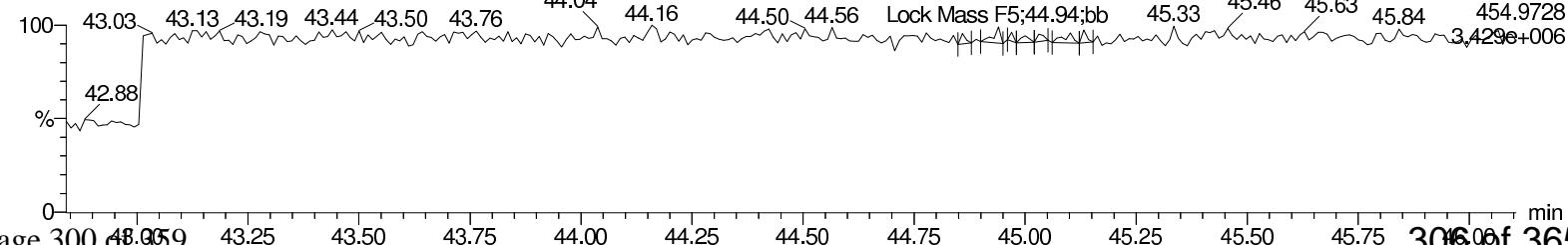
**13C-OCDD**

A29SEP18B\_8-13



**Lock Mass F5**

A29SEP18B\_8-13



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_8-13.qld

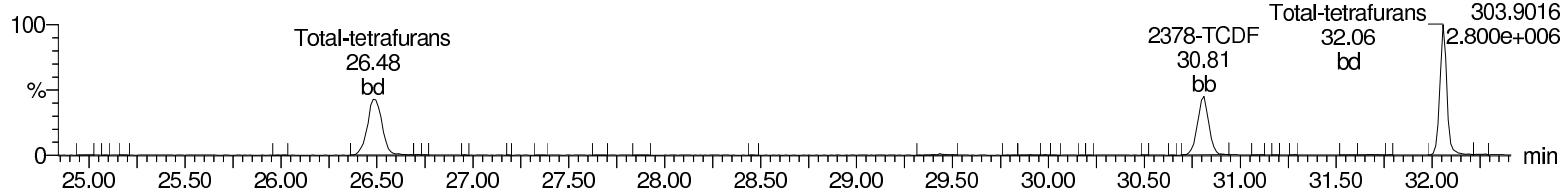
Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

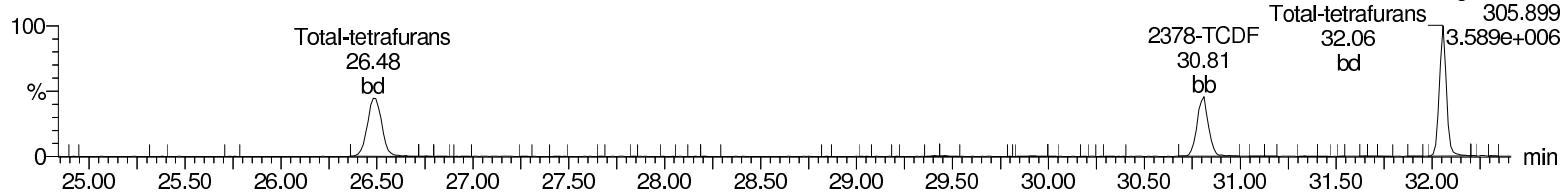
### Total-tetrafurans

A29SEP18B\_8-13



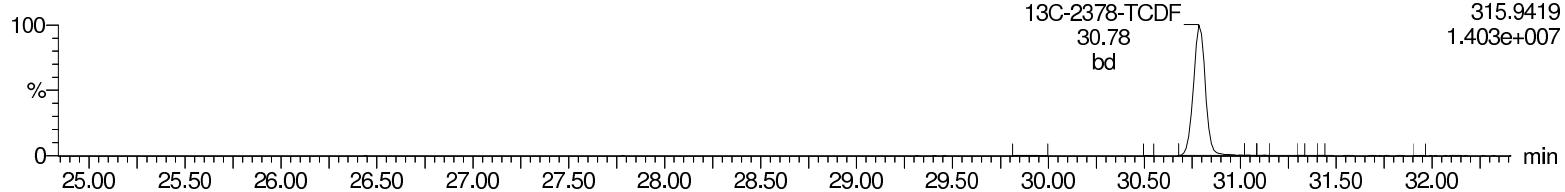
### Total-tetrafurans

A29SEP18B\_8-13



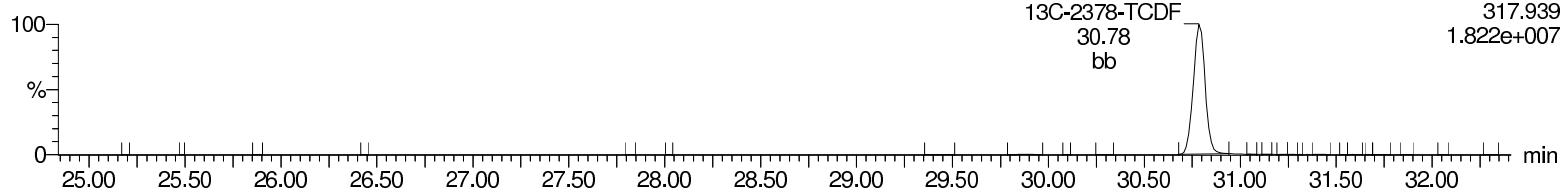
### 13C-2378-TCDF

A29SEP18B\_8-13



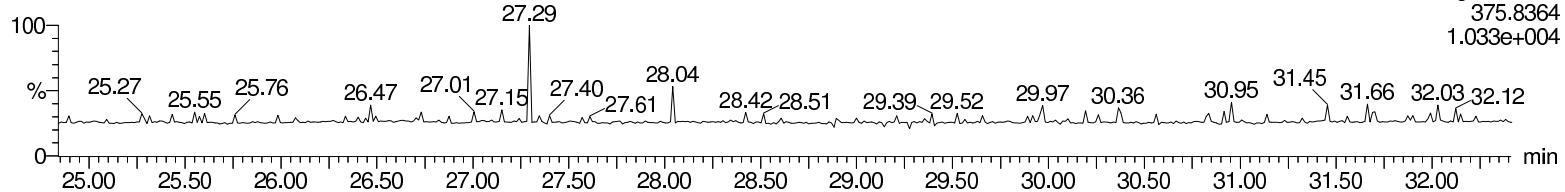
### 13C-2378-TCDF

A29SEP18B\_8-13



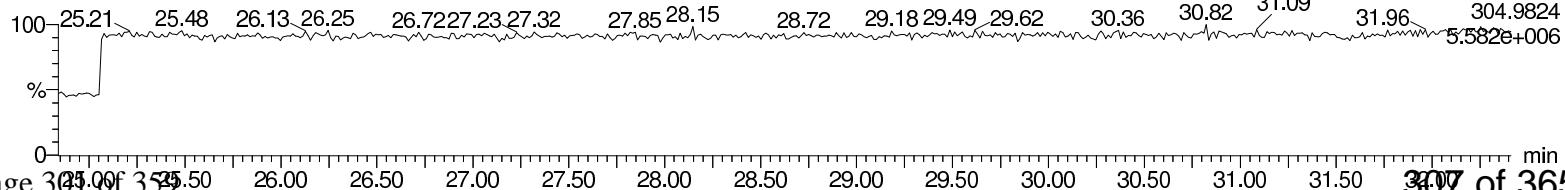
### HxDPE

A29SEP18B\_8-13



### Lock Mass F1

A29SEP18B\_8-13



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_8-13.qld

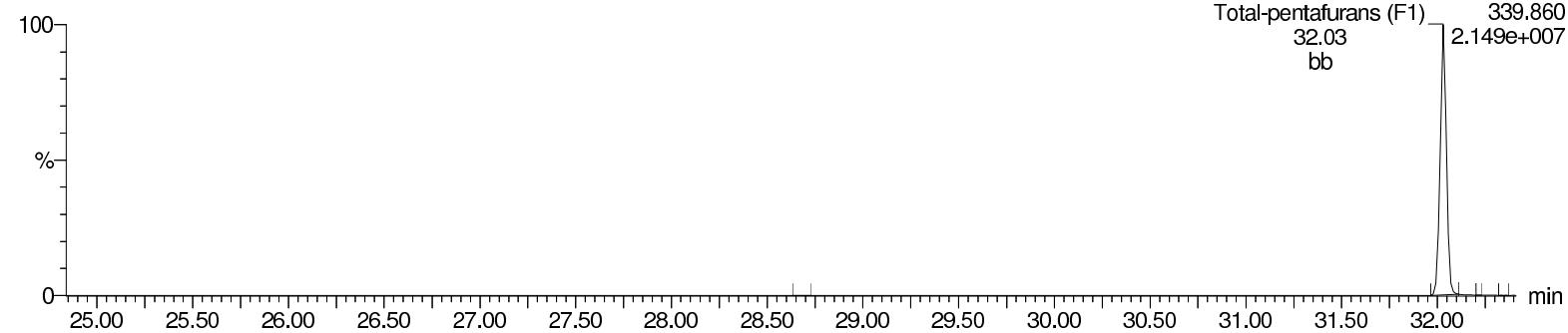
Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

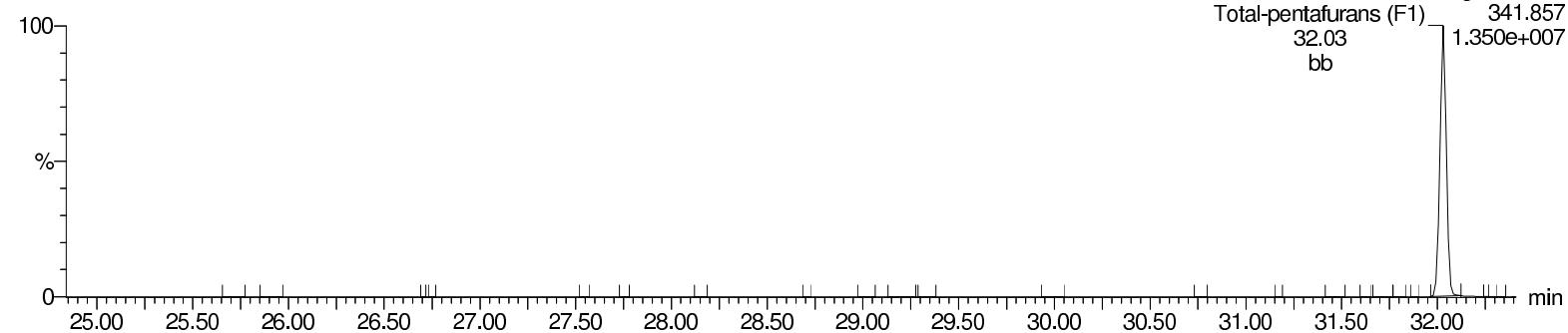
**Total-pentafurans (F1)**

A29SEP18B\_8-13



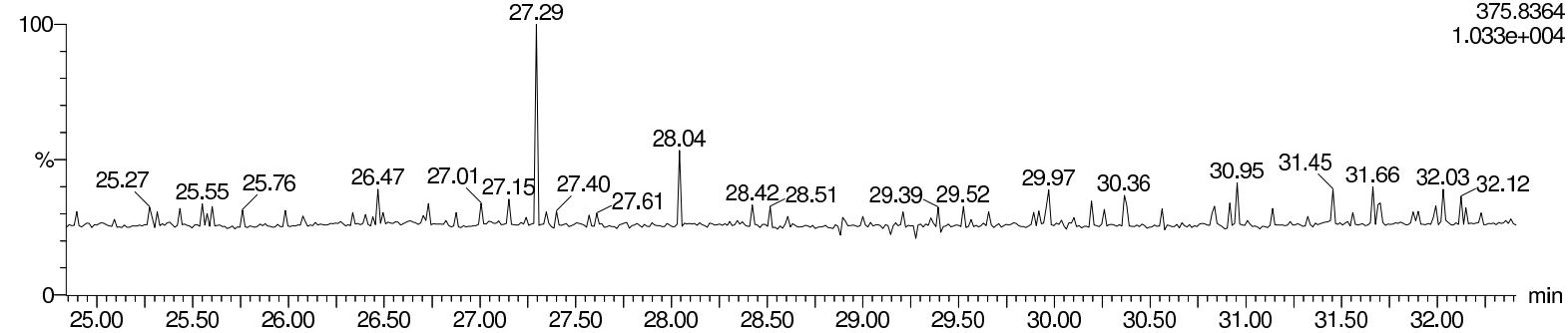
**Total-pentafurans (F1)**

A29SEP18B\_8-13



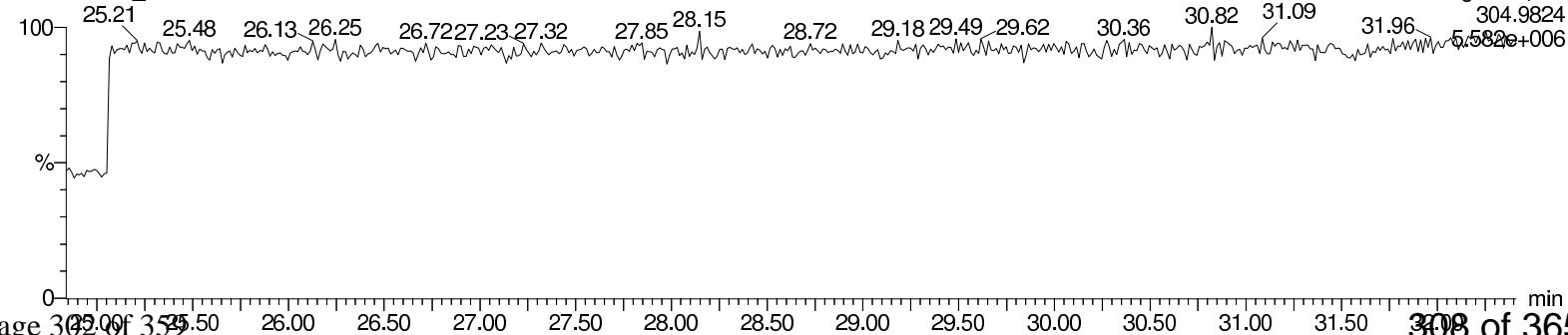
**HxDPE**

A29SEP18B\_8-13



**Lock Mass F1**

A29SEP18B\_8-13



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_8-13.qld

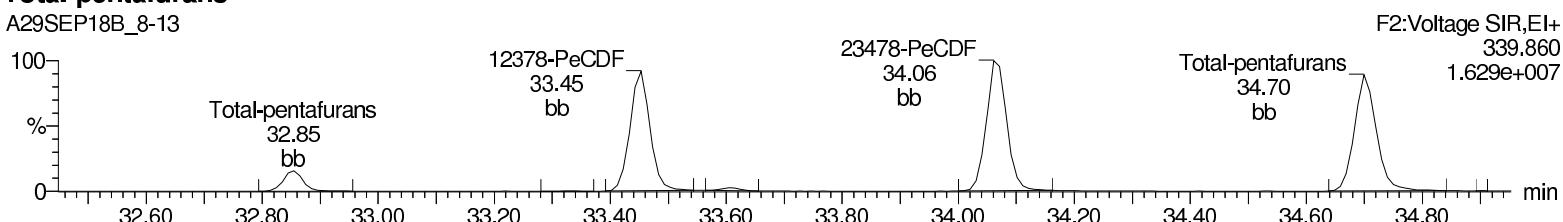
Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

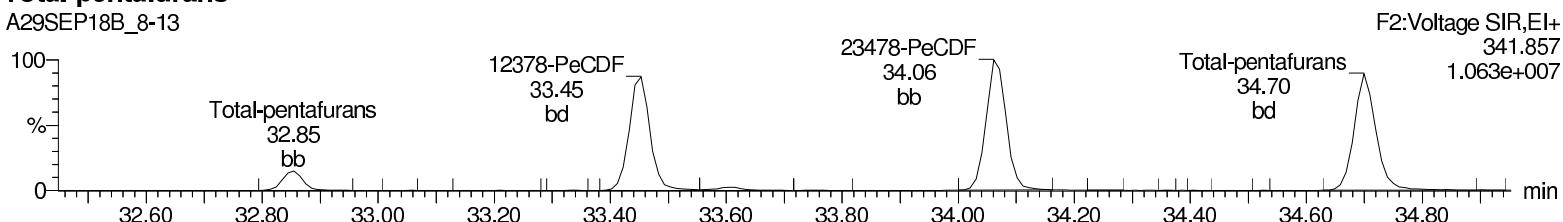
### Total-pentafurans

A29SEP18B\_8-13



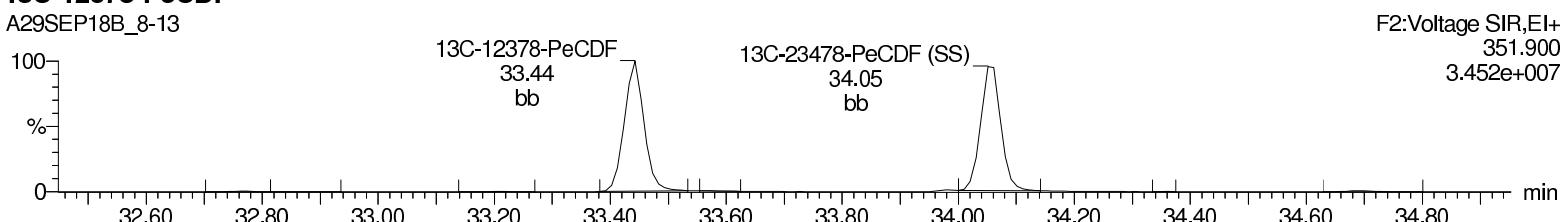
### Total-pentafurans

A29SEP18B\_8-13



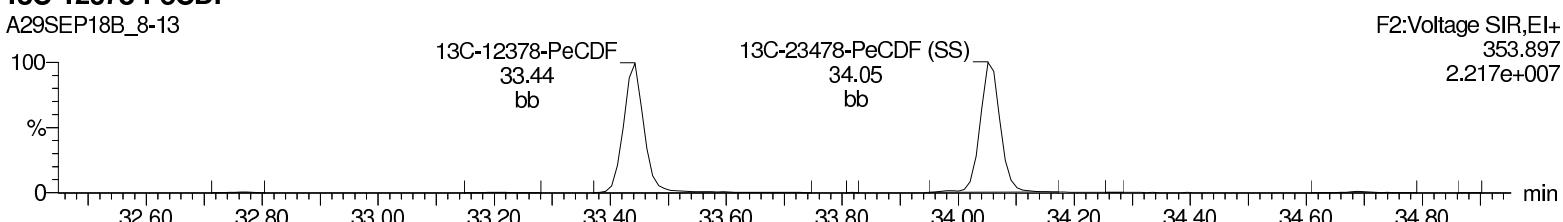
### 13C-12378-PeCDF

A29SEP18B\_8-13



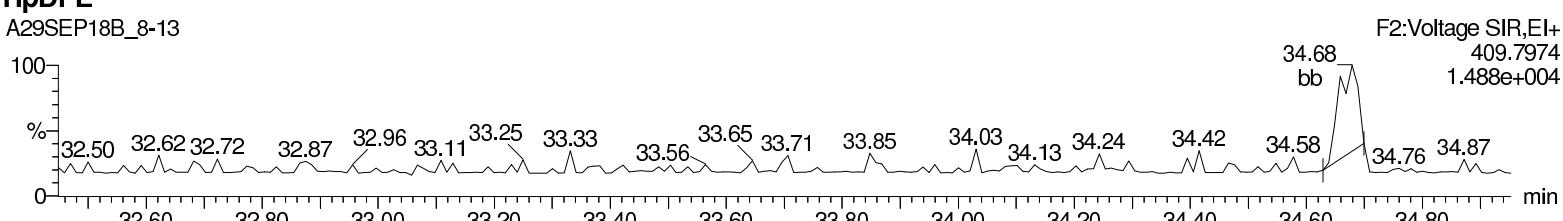
### 13C-12378-PeCDF

A29SEP18B\_8-13



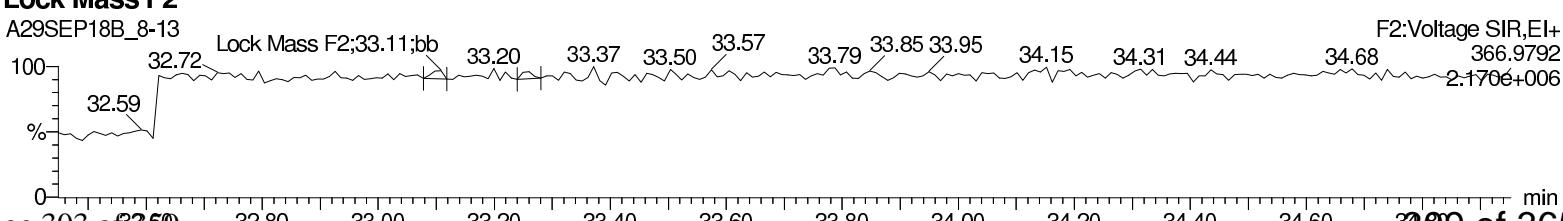
### HpDPE

A29SEP18B\_8-13



### Lock Mass F2

A29SEP18B\_8-13



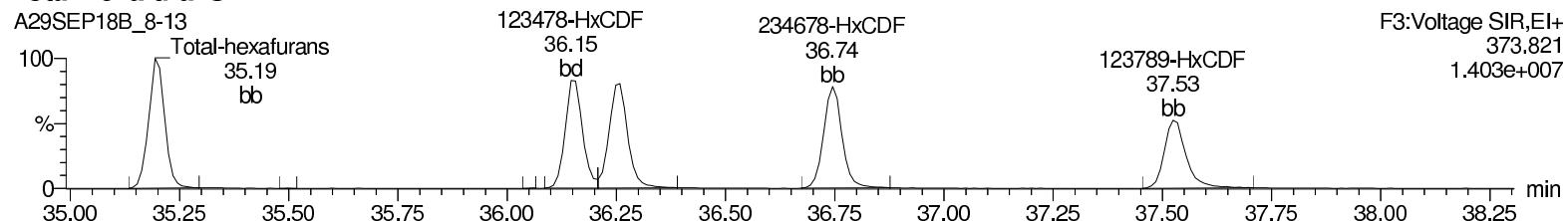
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Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

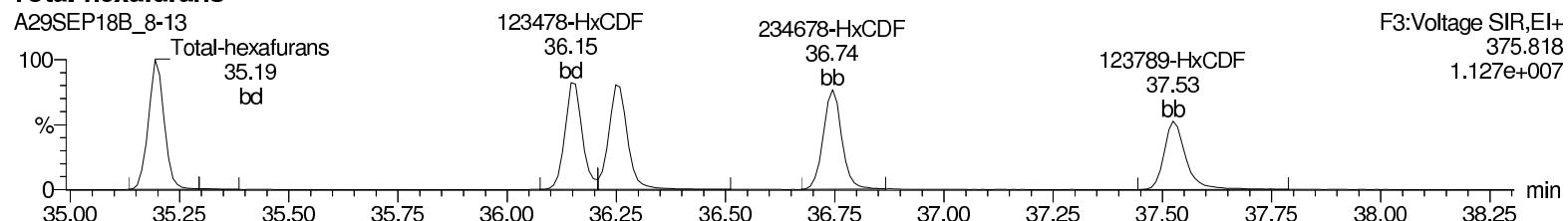
Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

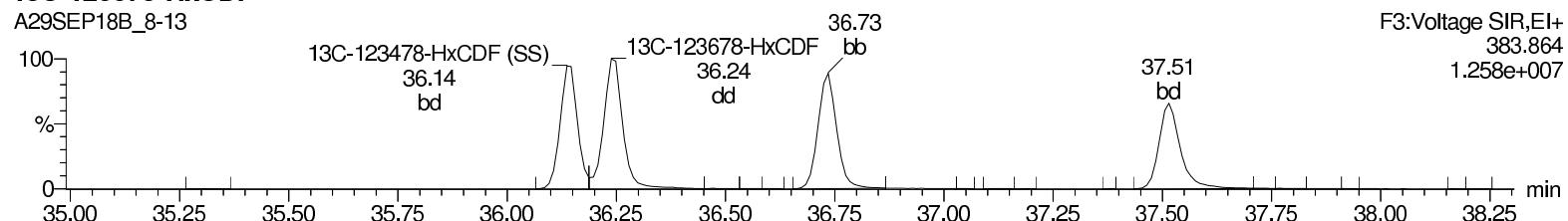
**Total-hexafurans**



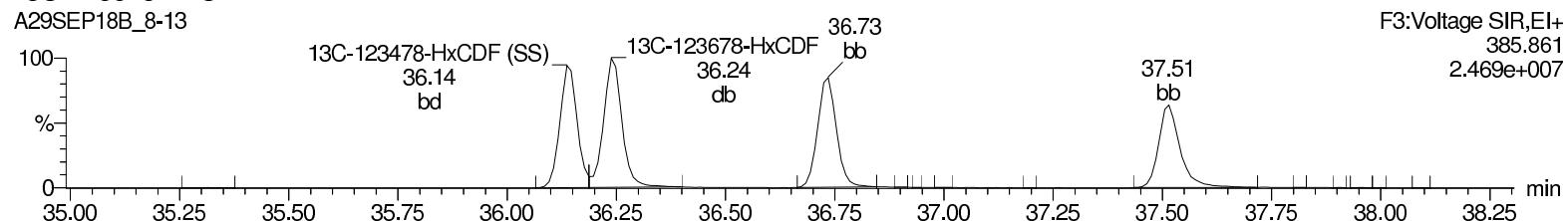
**Total-hexafurans**



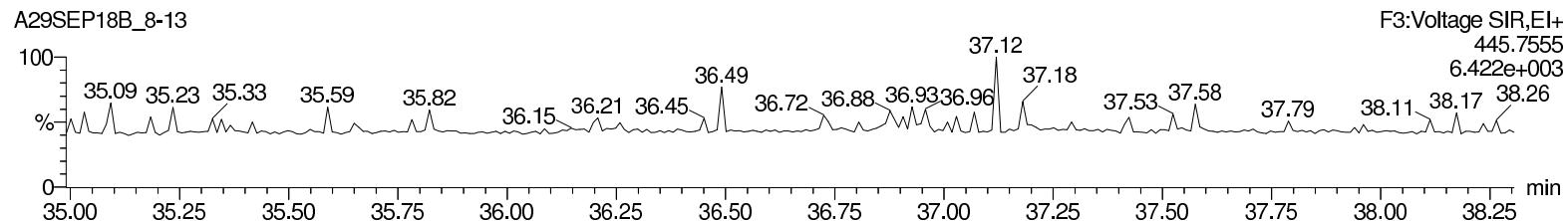
**13C-123678-HxCDF**



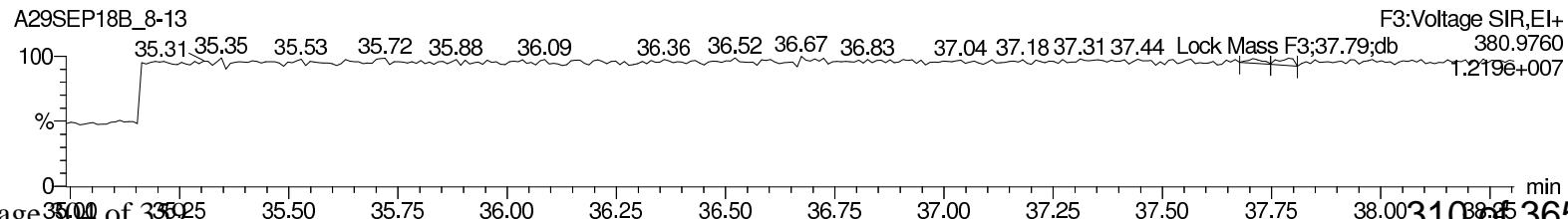
**13C-123678-HxCDF**



**OcDPE**



**Lock Mass F3**



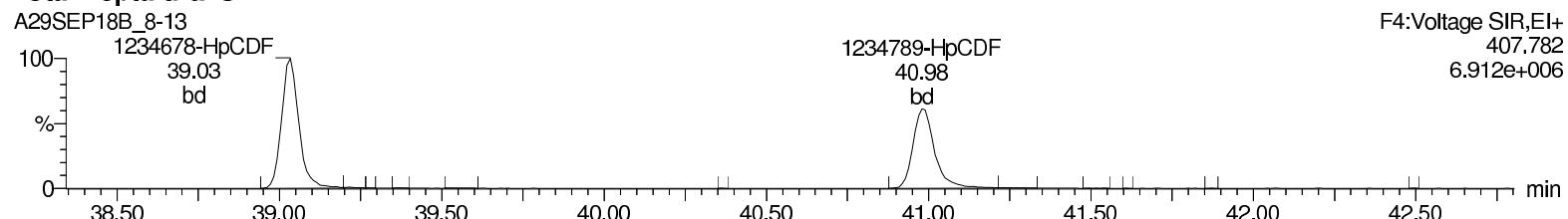
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Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

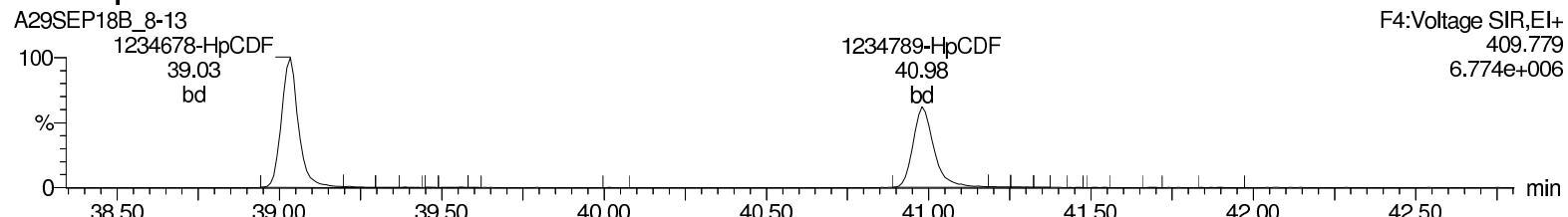
Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

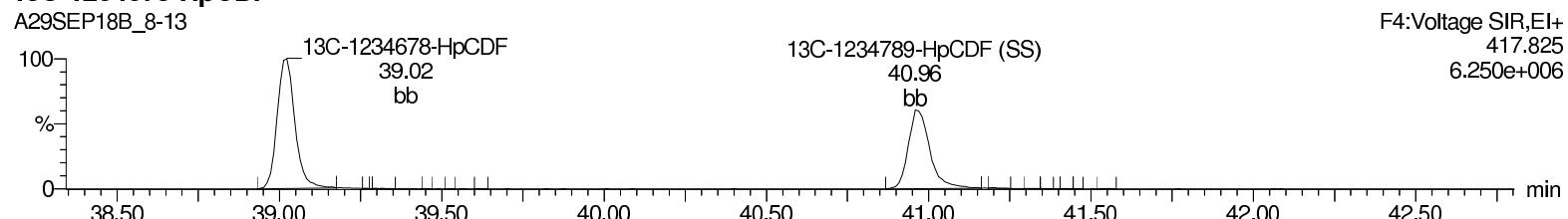
**Total-heptafurans**



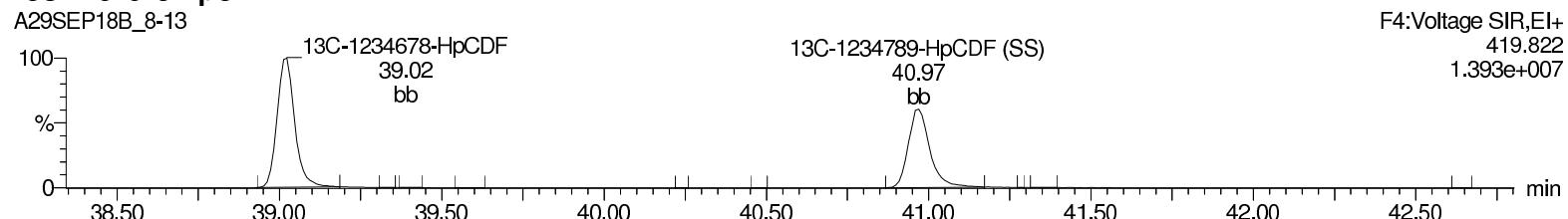
**Total-heptafurans**



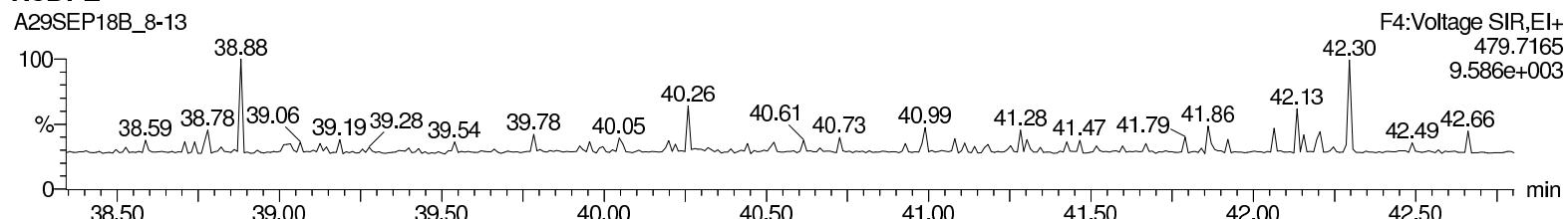
**13C-1234678-HpCDF**



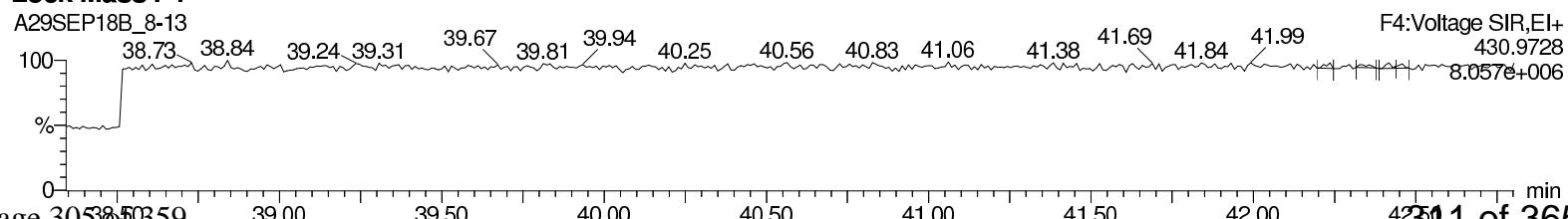
**13C-1234678-HpCDF**



**NoDPE**



**Lock Mass F4**



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_8-13.qld

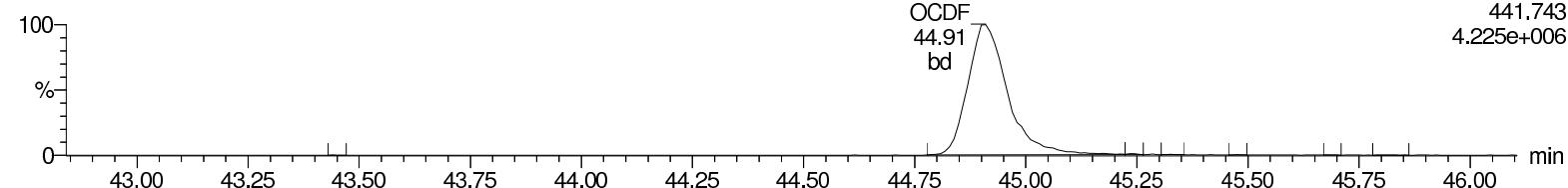
Last Altered: Wednesday, October 03, 2018 08:44:39 Eastern Standard Time

Printed: Wednesday, October 03, 2018 08:45:33 Eastern Standard Time

**Name: A29SEP18B\_8-13, Date: 02-Oct-2018, Time: 17:12:46, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_8, Task: HRP750\_2, User: MJC**

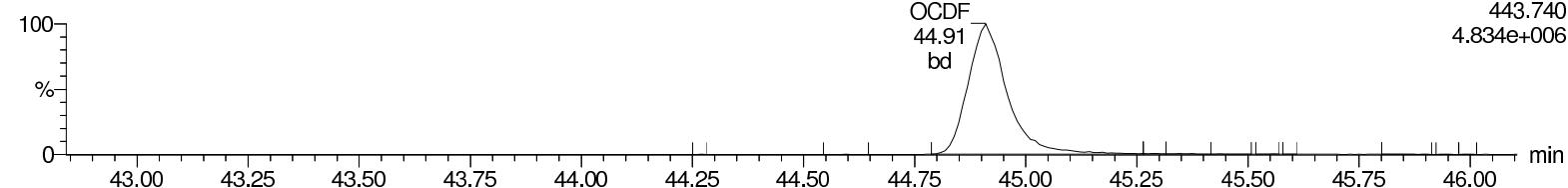
**OCDF**

A29SEP18B\_8-13



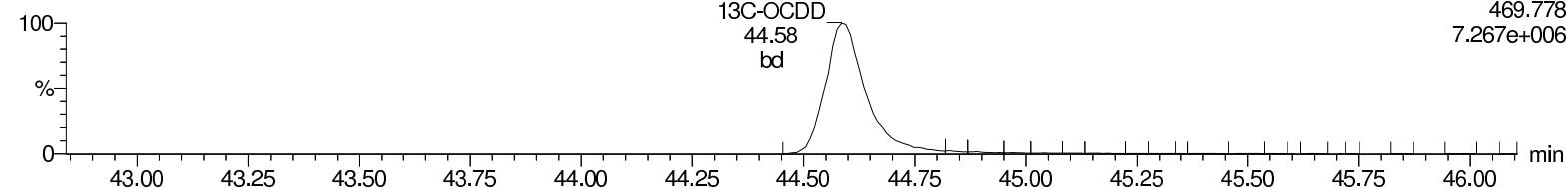
**OCDF**

A29SEP18B\_8-13



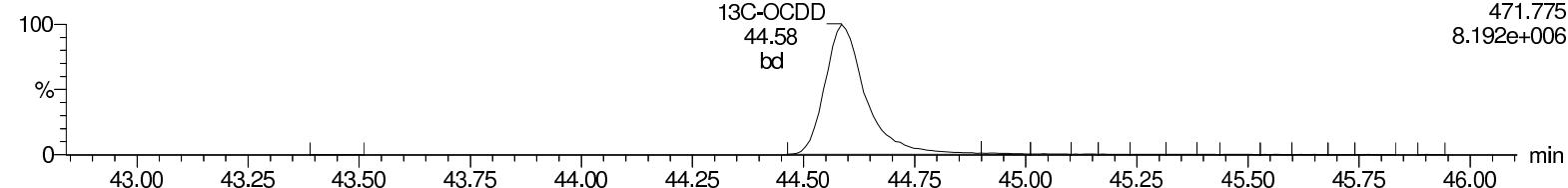
**13C-OCDD**

A29SEP18B\_8-13



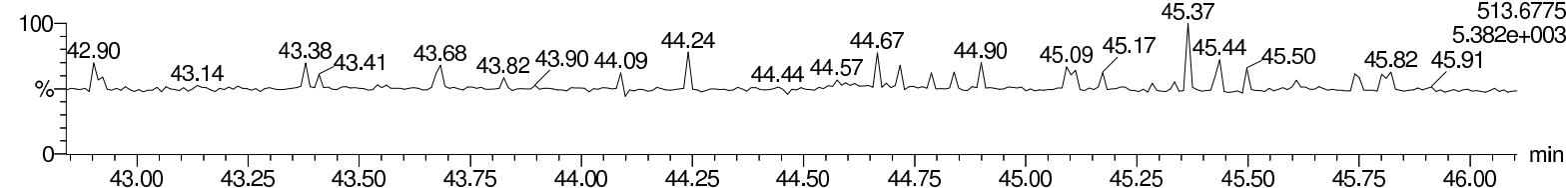
**13C-OCDD**

A29SEP18B\_8-13



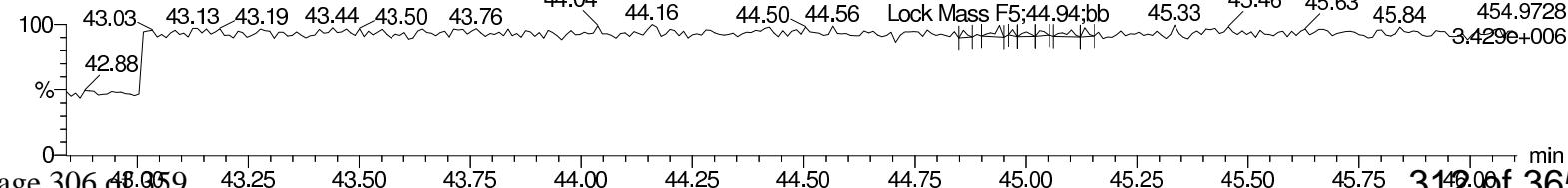
**DeDPE**

A29SEP18B\_8-13



**Lock Mass F5**

A29SEP18B\_8-13



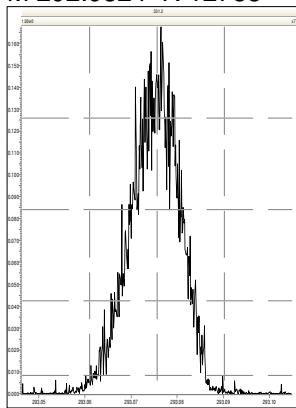
# RUN LOG

**Instrument: HRP750\_2**

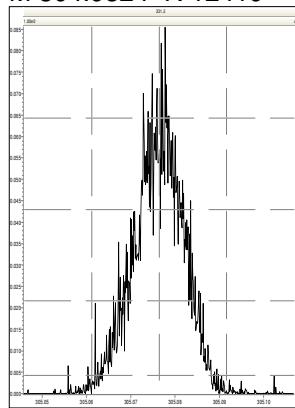
Name	Run Date	Analyst	Sample Information	Batch ID	Injection Volume	Ms Method	Tune Method
A29SEP18B_9-1	02-OCT-2018 18:08:58	Matt Cash	12022222-1 LCS		1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-2	02-OCT-2018 18:56:13	Matt Cash	12022223-1 LCSD		1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-3	02-OCT-2018 19:44:16	Matt Cash	12022221-1 MB		1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-4	02-OCT-2018 20:32:17	Matt Cash	13866001-2	38746	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-5	02-OCT-2018 21:20:21	Matt Cash	13866002-2	38746	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-6	02-OCT-2018 22:08:22	Matt Cash	13869001-2	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-7	02-OCT-2018 22:56:25	Matt Cash	13869002-2	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-8	02-OCT-2018 23:44:27	Matt Cash	13913001-1	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-9	03-OCT-2018 00:32:29	Matt Cash	12022224-1 MS	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-10	03-OCT-2018 01:20:31	Matt Cash	12022225-1 MSD	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-11	03-OCT-2018 02:08:32	Matt Cash	13913002-1	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-12	03-OCT-2018 02:56:34	Matt Cash	13913003-1	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_9-13	03-OCT-2018 03:44:36	Matt Cash	13928001-1	38747	1 uL	dioxin_db5ms	10K_dx
RR x10							
A29SEP18B_9-14	03-OCT-2018 04:32:37	Matt Cash	CS3WT UD180731-01.1		1 uL	dioxin_db5ms	10K_dx

Printed: Wednesday, October 03, 2018 05:28:46 Eastern Standard Time

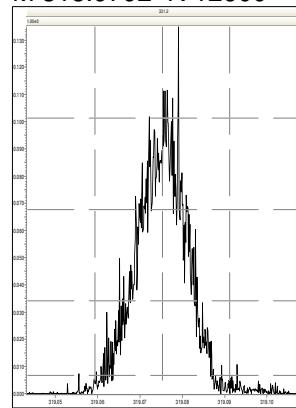
M 292.9824 R 12788



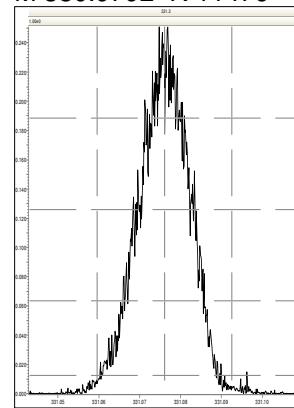
M 304.9824 R 12419



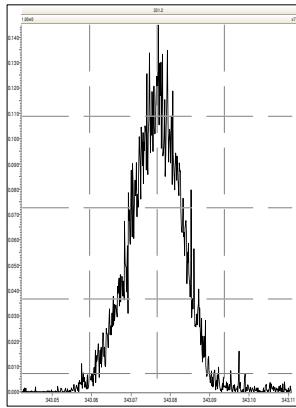
M 318.9792 R 12600



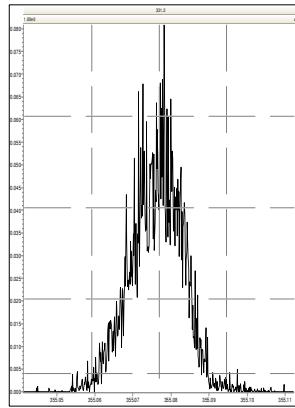
M 330.9792 R 11476



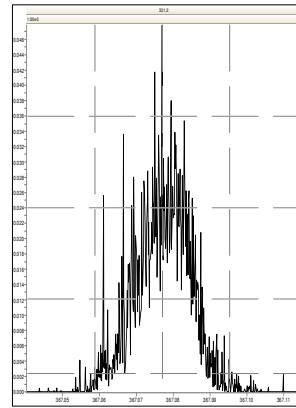
M 342.9792 R 12149



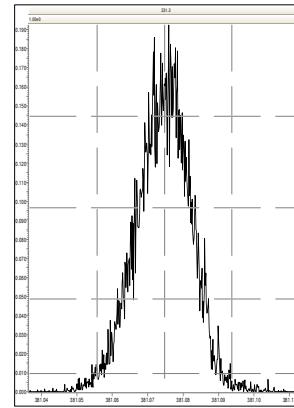
M 354.9792 R 12261



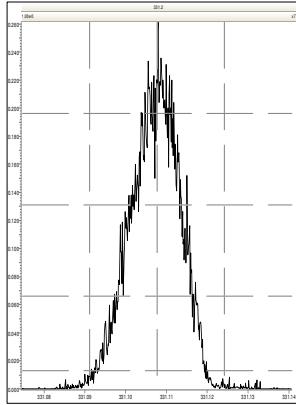
M 366.9792 R 12953



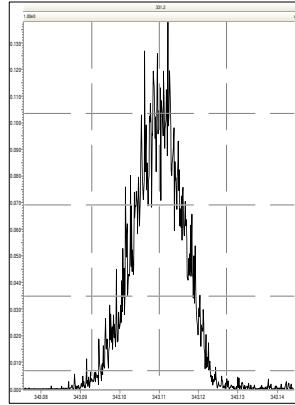
M 380.9760 R 11037



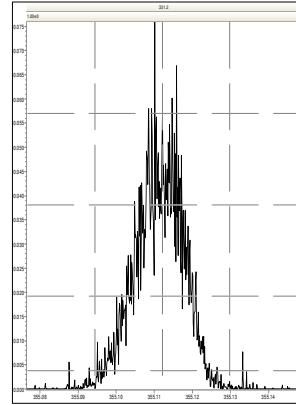
M 330.9792 R 12317



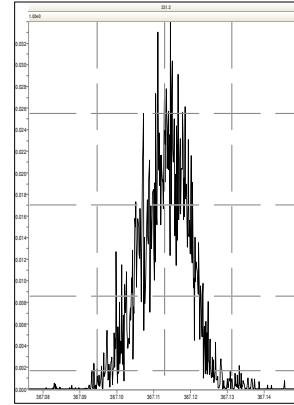
M 342.9792 R 12255



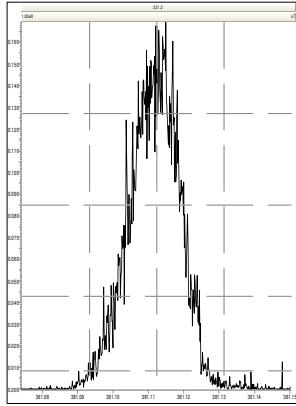
M 354.9792 R 12628



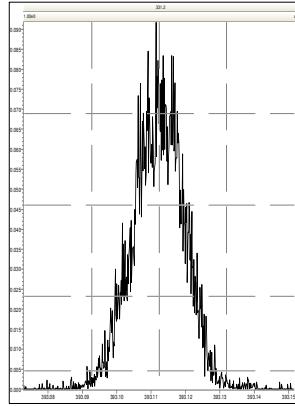
M 366.9792 R 15855



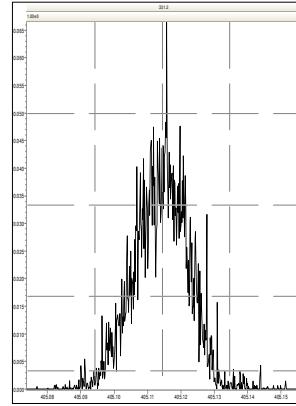
M 380.9760 R 11884



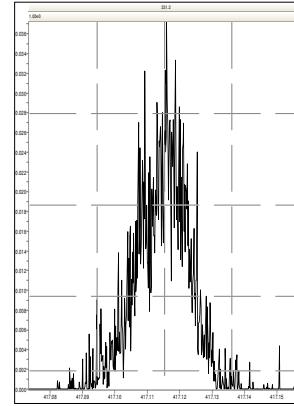
M 392.9760 R 12953



M 404.9760 R 12087

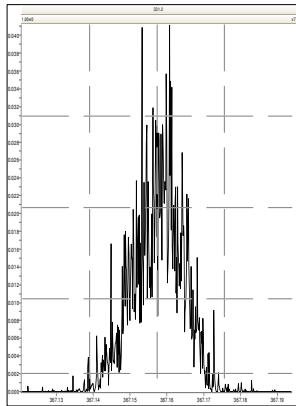


M 416.9760 R 13213

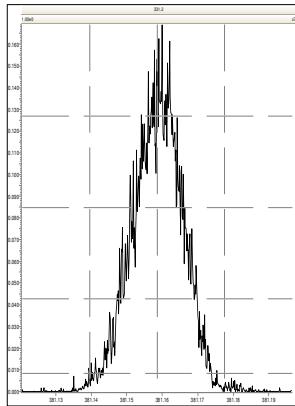


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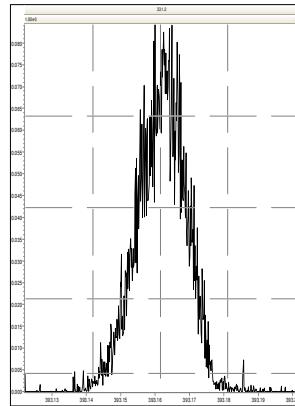
M 366.9792 R 14597



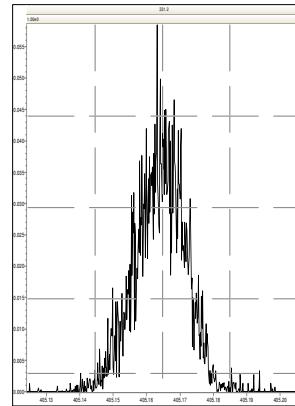
M 380.9760 R 12367



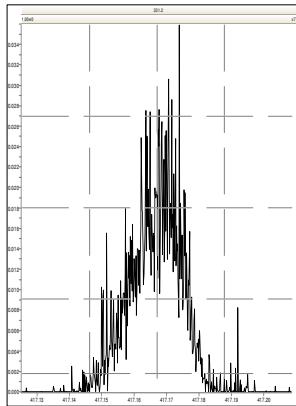
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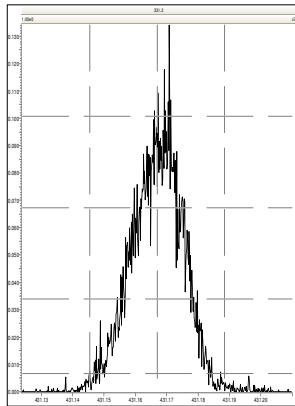
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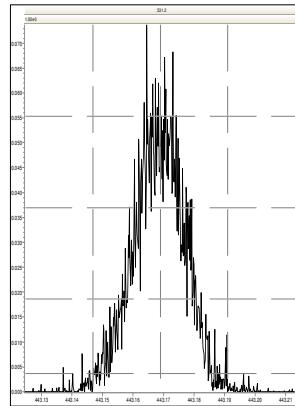
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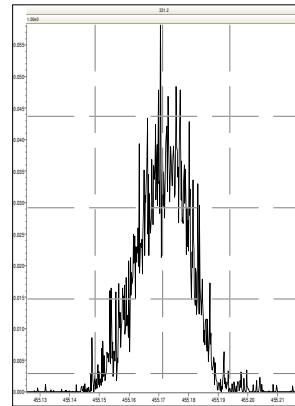
M 430.9728 R 11978



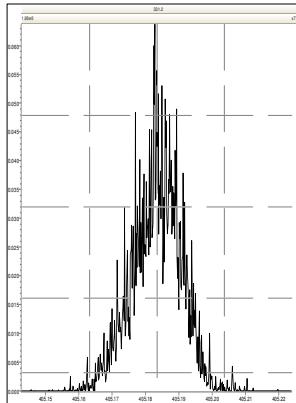
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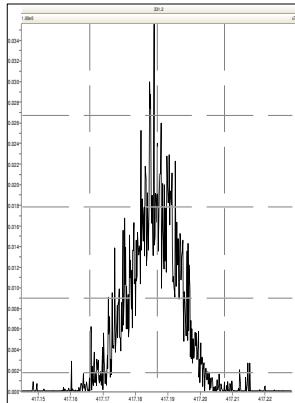
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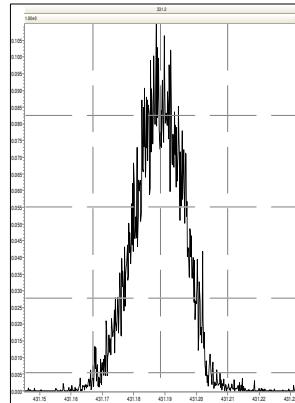
M 404.9760 R 13626



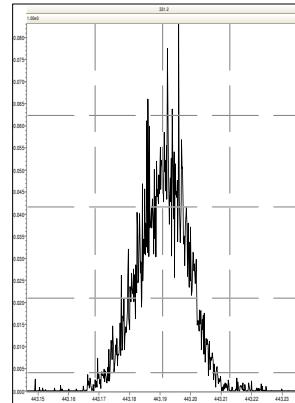
M 416.9760 R 15786



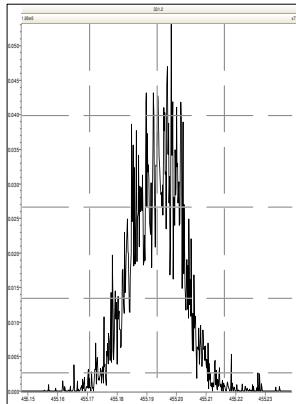
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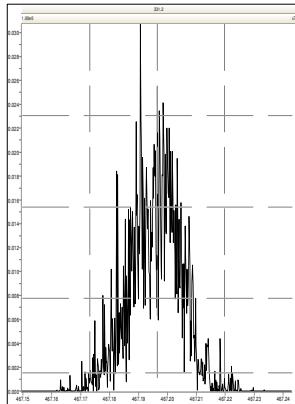
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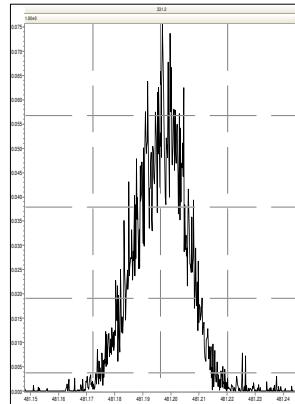
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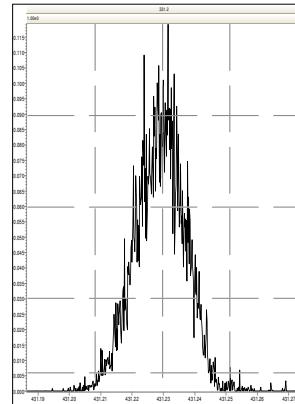
M 466.9728 R 16525



M 480.9696 R 12410

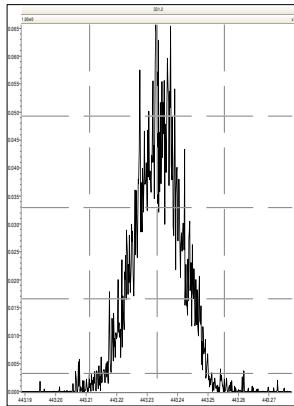


M 430.9728 R 12898

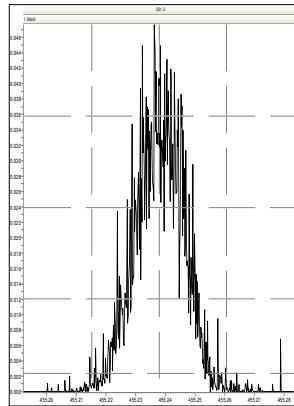


Printed: Wednesday, October 03, 2018 05:28:46 Eastern Standard Time

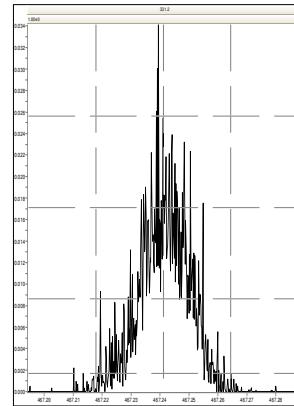
M 442.9728 R 13700



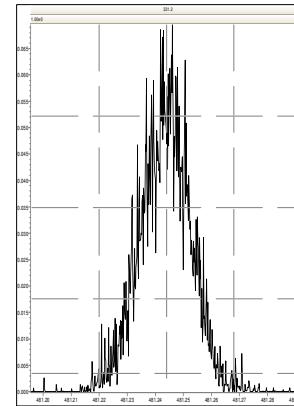
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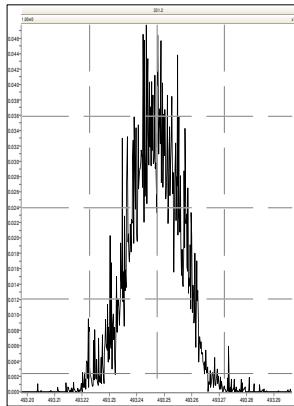
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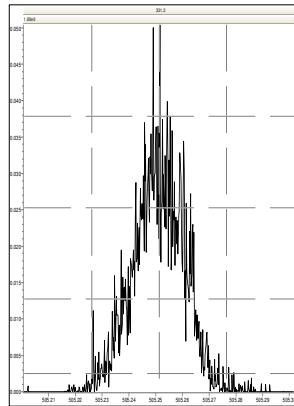
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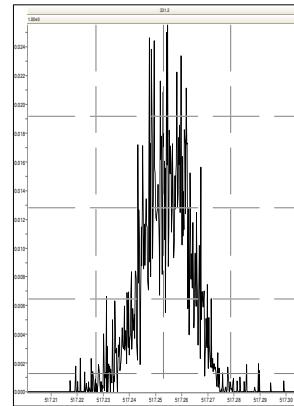
M 492.9696 R 13493



M 504.9696 R 14764



M 516.9697 R 14843



Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A29SEP18B\_9-14.qld  
 East Altered: Wednesday, October 03, 2018 09:22:59 Eastern Standard Time  
 Printed: Wednesday, October 03, 2018 09:26:26 Eastern Standard Time

**Method: C:\MassLynx\Default.pro\Methdb\WDM\_A23AUG18.mdb 24 Aug 2018 08:59:12**  
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

	Name	RT
1	First TCDF	26.48
2	Last TCDF	32.06
3	First PeCDF	32.03
4	Last PeCDF	34.70
5	First HxCDF	35.19
6	Last HxCDF	37.52
7	First HpCDF	39.02
8	Last HpCDF	40.98
9	OCDF	44.91
10	First TCDD	28.21
11	2378-TCDD	31.43
12	Last TCDD	31.98
13	First PeCDD	32.89
14	Last PeCDD	34.52
15	First HxCDD	35.62
16	Last HxCDD	37.19
17	First HpCDD	39.35
18	Last HpCDD	40.29
19	OCDD	44.59

**Quantify Sample Report**  
Method Window Defining Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A29SEP18B\_9-14.qld

Last Altered: Wednesday, October 03, 2018 09:22:59 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:26:26 Eastern Standard Time

**Method: C:\MassLynx\Default.pro\Methdb\WDM\_A23AUG18.mdb 24 Aug 2018 08:59:12**

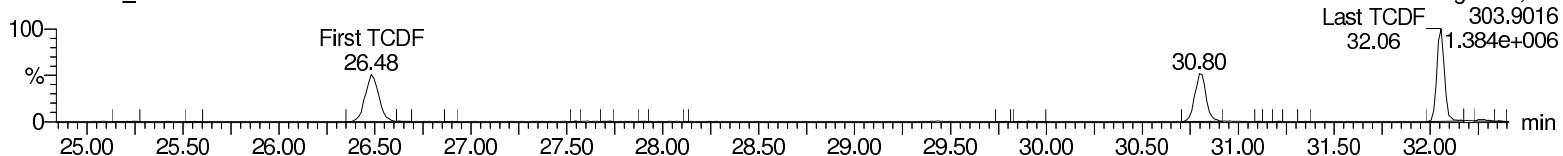
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9,**

**Task: HRP750\_2, User: MJC**

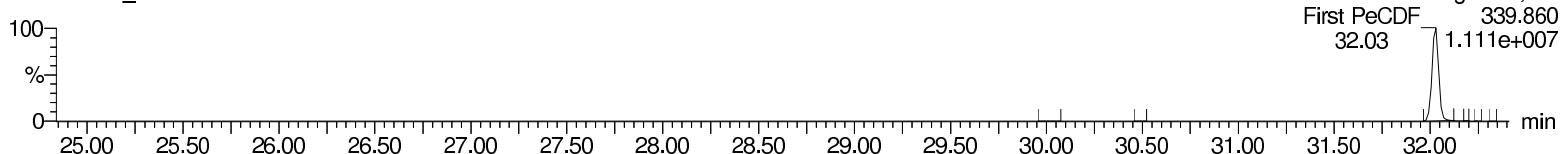
**First TCDF**

A29SEP18B\_9-14



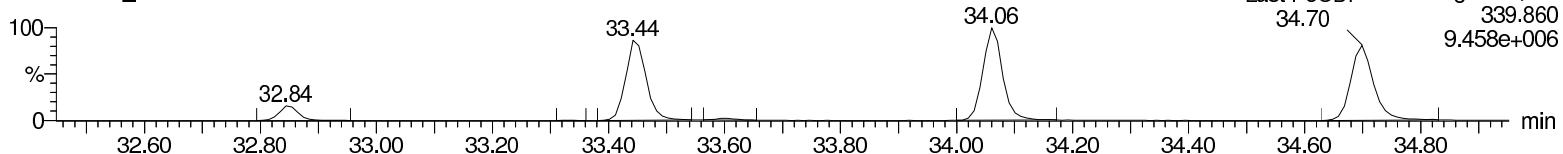
**First PeCDF**

A29SEP18B\_9-14



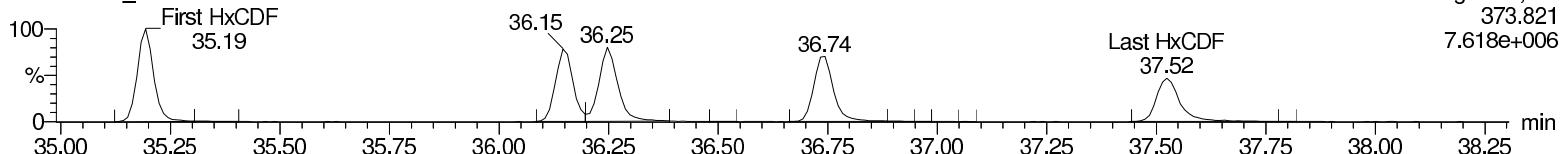
**Last PeCDF**

A29SEP18B\_9-14



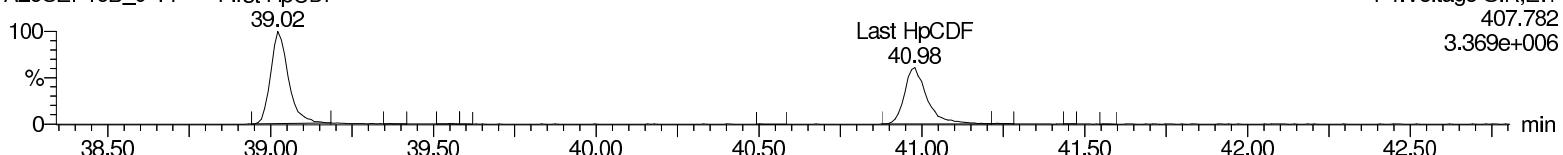
**First HxCDF**

A29SEP18B\_9-14



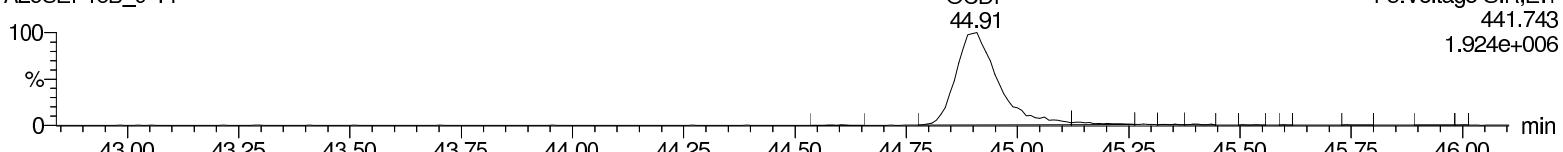
**First HpCDF**

A29SEP18B\_9-14



**OCDF**

A29SEP18B\_9-14



**Quantify Sample Report**  
Method Window Defining Report

**MassLynx 4.1**

Dataset: C:\MassLynx\Default.pro\WDM Results\WDM-A29SEP18B\_9-14.qld

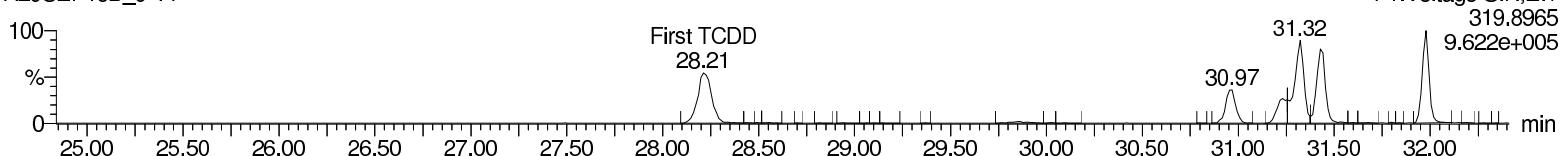
Last Altered: Wednesday, October 03, 2018 09:22:59 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:26:26 Eastern Standard Time

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

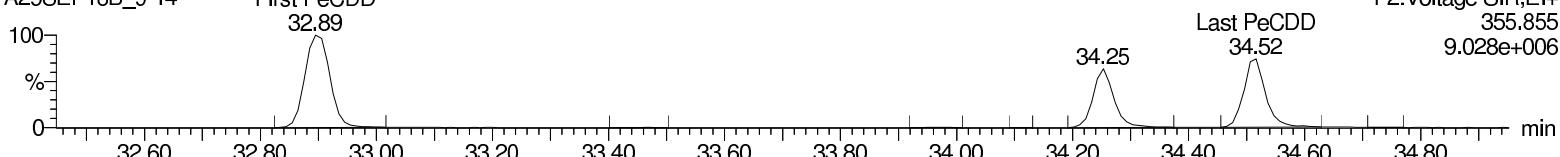
**First TCDD**

A29SEP18B\_9-14



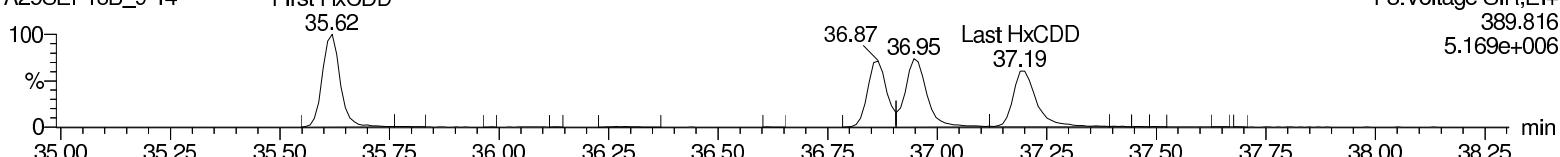
**First PeCDD**

A29SEP18B\_9-14



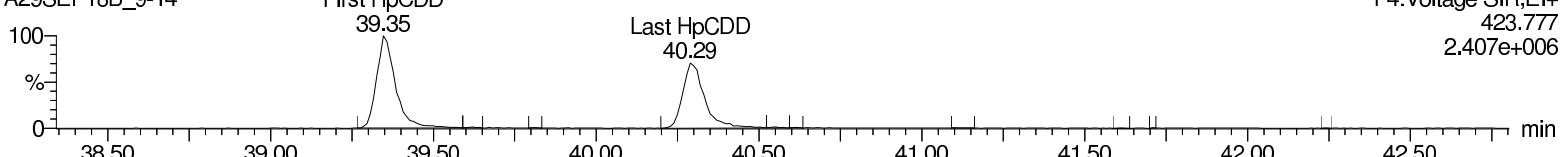
**First HxCDD**

A29SEP18B\_9-14



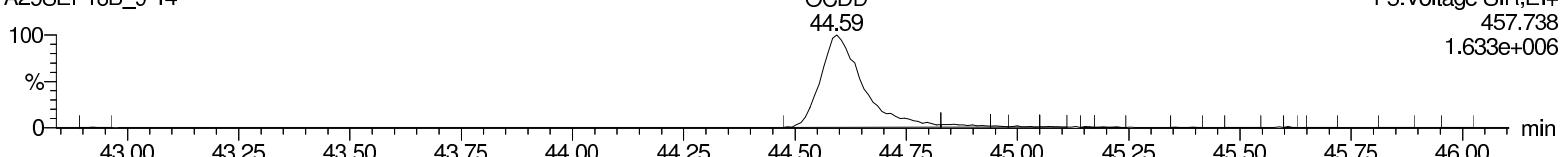
**First HpCDD**

A29SEP18B\_9-14



**OCDD**

A29SEP18B\_9-14



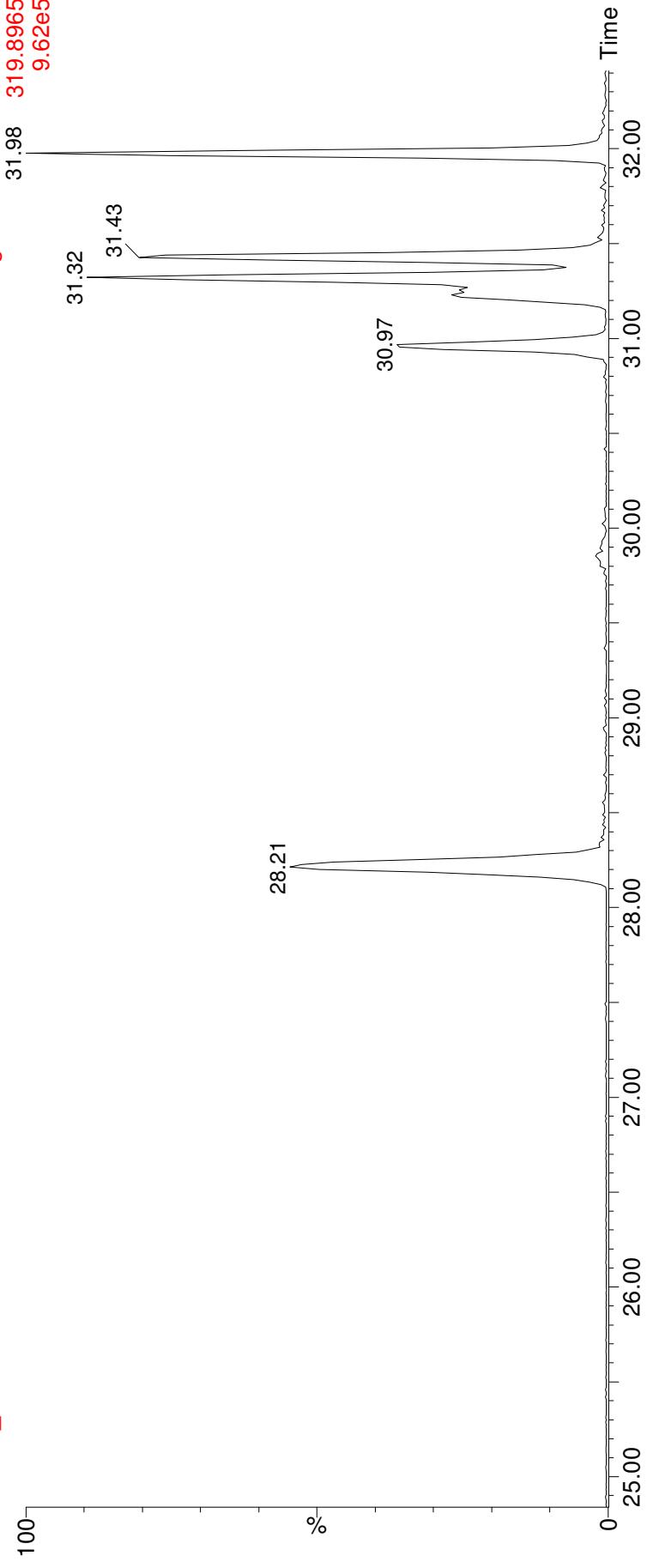
COLUMN CHECK (2378-TCDD 9%)

**CS3WT UD180731-01.1**

A29SEP18B\_9-14

**HRP750\_2**

**03-Oct-2018 04:32:37**  
1: Voltage SIR 13 Channels EI+  
31.98 319.8965  
9.62e5



Dataset: C:\MassLynx\Default\pro\CCAL\_Results\8290-A29SEP18B\_9-14.q\q  
 East Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time  
 Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Method: C:\MassLynx\Default\pro\Methdb\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**  
**Calibration: C:\MassLynx\DEFault.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

#	Name	IonArea	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	RRF	Mean	%D	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	2378-TcDD	4.09e4	9.19e4	31.43	1.000	0.80	NO	10.319	0.0795	0.997	0.966	3.2	7.71e5	2162	356.6	9.68e5	3450	280.7	dd	dd	
2	12378-PeCDD	2.36e5	3.84e5	34.25	1.000	1.59	NO	51.702	0.190	1.010	0.977	3.4	5.72e6	5702	1003.8	3.45e6	7714	447.0	bb	bb	
3	123478-HxCDD	1.85e5	3.35e5	36.87	0.998	1.24	NO	51.203	0.275	0.839	0.820	2.4	3.67e6	6771	542.2	3.02e6	6447	468.6	bd	bd	
4	123678-HxCDD	2.17e5	1.74e5	36.95	1.000	1.25	NO	50.553	0.232	0.982	0.971	1.1	3.82e6	6771	564.6	3.06e6	6447	475.0	dd	dd	
5	123789-HxCDD	1.95e5	3.52e5	37.19	1.007	1.25	NO	51.222	0.262	0.882	0.861	2.4	3.13e6	6771	461.8	2.63e6	6447	408.2	dd	dd	
6	1234678-HpCDD	1.30e5	2.52e5	40.29	1.000	1.07	NO	50.552	0.428	0.965	0.955	1.1	1.70e6	5615	302.4	1.60e6	5519	290.1	bd	bd	
7	OCDD	1.80e5	2.11e5	44.59	1.000	0.85	NO	102.298	0.968	1.004	0.981	2.3	1.63e6	5804	280.2	1.79e6	6511	274.5	bd	bd	
8	2378-TcDF	4.80e4	6.33e4	30.80	1.000	0.76	NO	9.445	0.105	0.868	0.919	-5.6	7.12e5	4129	172.4	9.14e5	3035	301.0	bb	bb	
9	12378-PeCDF	3.31e5	2.11e5	5.42e5	33.44	1.000	1.57	NO	50.148	0.236	0.878	0.875	0.3	8.14e6	14680	554.8	5.15e6	9679	532.5	bb	bb
10	23478-PeCDF	3.68e5	2.35e5	6.03e5	34.06	1.019	1.56	NO	49.831	0.211	0.978	0.981	-0.3	9.42e6	14680	641.4	5.92e6	9679	611.9	bb	bb
11	123478-HxCDF	2.72e5	2.21e5	4.93e5	36.15	0.997	1.23	NO	53.395	0.263	0.986	0.923	6.8	5.97e6	8765	680.9	4.80e6	9705	494.4	bd	bd
12	123678-HxCDF	3.03e5	2.49e5	5.52e5	36.25	1.000	1.21	NO	51.850	0.228	1.03	1.063	3.7	6.11e6	8765	696.7	4.91e6	9705	505.6	db	dd
13	234678-HxCDF	2.81e5	3.20e5	5.11e5	36.74	1.014	1.22	NO	53.687	0.255	1.021	0.951	7.4	5.36e6	8765	611.9	4.31e6	9705	443.7	bd	bd
14	123789-HxCDF	2.23e5	1.74e5	3.97e5	37.52	1.036	1.28	NO	52.838	0.323	0.793	0.751	5.7	3.56e6	8765	406.3	2.88e6	9705	296.9	bd	bd
15	1234678-HpCDF	2.10e5	2.03e5	4.14e5	39.02	1.000	1.03	NO	51.437	0.239	1.254	1.219	2.9	3.35e6	5468	612.8	3.10e6	6237	496.6	bb	bb
16	1234789-HpCDF	1.61e5	1.53e5	3.15e5	40.98	1.050	1.05	NO	52.882	0.323	0.953	0.902	5.8	2.04e6	5468	373.1	1.88e6	6237	301.6	bd	bd
17	OCDF	2.11e5	2.38e5	4.49e5	44.91	1.008	0.89	NO	97.059	1.02	1.152	1.187	-2.9	1.92e6	8151	235.1	2.12e6	7563	280.5	bd	bd
18	13C-2378-TcDD	3.99e5	5.22e5	9.21e5	31.41	1.015	0.76	NO	104.197	0.164	1.108	1.064	4.2	7.91e6	4439	1781.6	1.02e7	5157	1984.2	bb	bb
19	13C-12378-PeCDD	4.62e5	2.96e5	7.61e5	34.24	1.107	1.55	NO	118.098	0.174	0.916	0.775	18.1	1.10e7	3724	2955.1	7.02e6	3676	1910.6	bb	bb
20	13C-123678-HxCDD	4.47e5	3.51e5	7.98e5	36.94	0.993	1.27	NO	100.562	0.249	1.168	1.162	0.6	8.20e6	5511	1487.8	6.47e6	7367	878.8	dd	dd
21	13C-1234678-HpCDD	2.70e5	2.52e5	5.22e5	40.28	1.083	1.07	NO	102.185	0.349	0.764	0.748	2.2	3.52e6	7766	452.8	3.37e6	3842	876.3	bd	bd
22	13C-OCDD	3.72e5	4.07e5	7.79e5	44.57	1.199	0.92	NO	186.865	0.433	0.570	0.611	-6.6	3.10e6	6499	476.5	3.51e6	5261	666.4	bd	bd
23	13C-2378-TcDD	5.60e5	7.21e5	1.28e6	30.78	0.995	0.78	NO	98.831	0.116	1.541	1.560	-1.2	8.11e6	5423	1494.7	1.03e7	4473	2298.8	bd	bd
24	13C-12378-PeCDF	7.44e5	4.90e5	1.23e6	33.43	1.080	1.52	NO	112.498	0.254	1.485	1.320	12.5	1.78e7	8506	2086.9	1.17e7	9895	1181.7	bb	bb
25	13C-123678-HxCDF	3.41e5	6.60e5	1.00e6	36.24	0.974	0.52	NO	94.809	0.328	1.466	1.546	-5.2	6.47e6	10377	623.7	1.28e7	12165	1050.6	db	db
26	13C-1234678-HpCDF	2.07e5	4.52e5	6.60e5	39.01	1.049	0.46	NO	95.292	0.235	0.966	1.014	-4.7	3.16e6	3600	877.9	6.99e6	7004	997.3	bd	bd
27	13C-1234-TcDD	3.65e5	4.66e5	8.31e5	30.94	0.000	0.78	NO	100.000	0.175	1.000	0.000	-0.0	6.02e6	4439	1356.5	7.58e6	5157	1470.3	bb	bb
28	13C-12378-HxCDD	3.88e5	3.00e5	6.83e5	37.19	0.000	1.28	NO	100.000	0.289	1.000	0.000	0.0	6.24e6	5511	1132.1	4.96e6	7367	673.0	dd	dd
29	37Cl-2378-TCDD (SS)	8.94e4	8.94e4	31.43	1.000				9.560	0.0230	0.970	1.015	-4.4	1.79e6	1702	1053.5	bb				
30	13C-23478-PeCDF (SS)	7.45e5	4.79e5	1.22e6	34.05	1.018	1.56	NO	100.125	0.158	0.992	0.990	0.1	1.89e7	8506	2216.2	1.22e7	9895	1228.0	db	db

Dataset: C:\MassLynx\Default\pro\CCAL\_Results\8290-A29SEP18B\_9-14.qd  
 Last Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time  
 Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

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**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UDI180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	RRF	Mean	%D	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
31	13C-123478-HxCDF (SS)	2.89e5	5.58e5	8.47e5	36.14	0.997	0.52	NO	103.364	0.362	0.846	0.819	3.4	6.07e6	10377	584.9	1.18e7	12165	969.2	bd	bd
32	13C-123478-HxCDD (SS)	3.78e5	2.99e5	6.78e5	36.85	0.998	1.26	NO	101.839	0.264	0.849	0.834	1.8	7.56e6	5511	1372.2	5.95e6	7367	807.4	bd	bd
33	13C-1234789-HpCDF (SS)	1.43e5	3.29e5	4.71e5	40.97	1.050	0.43	NO	99.891	0.368	0.715	0.715	-0.1	1.83e6	3600	508.0	4.20e6	7004	600.0	bd	bd

Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_9-14.qld

Last Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**

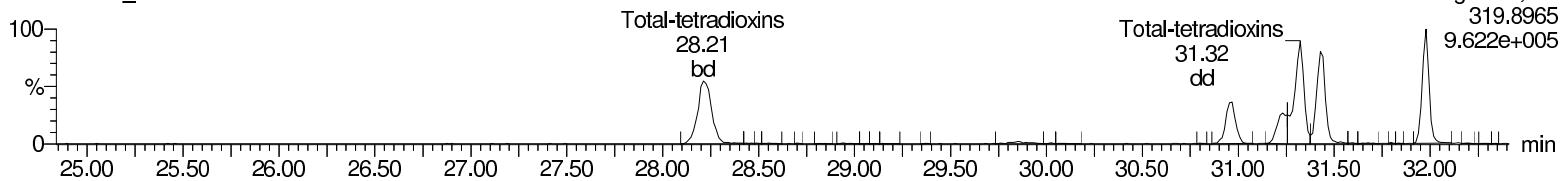
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9,**

**Task: HRP750\_2, User: MJC**

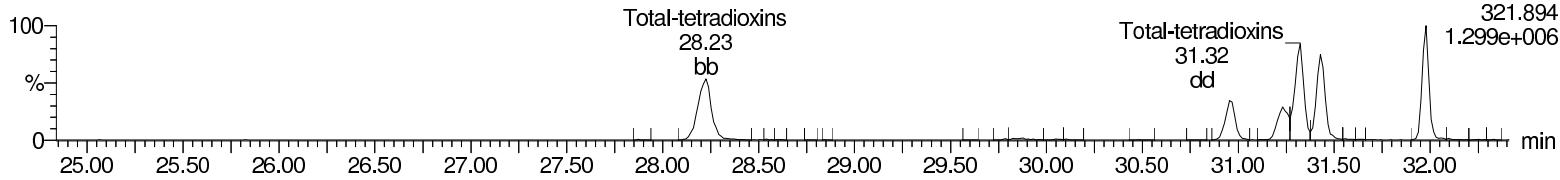
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A29SEP18B\_9-14



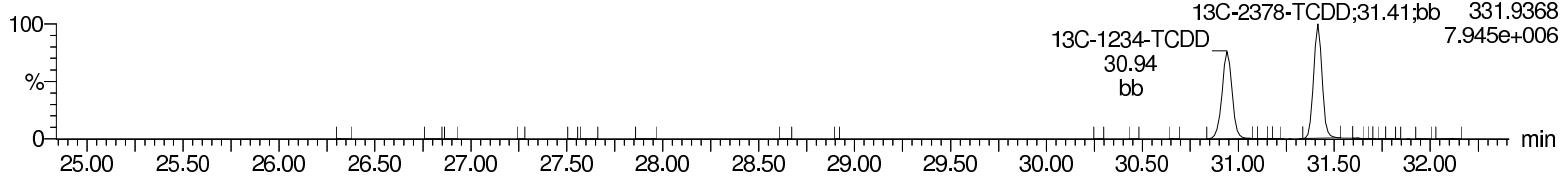
### Total-tetradioxins

A29SEP18B\_9-14



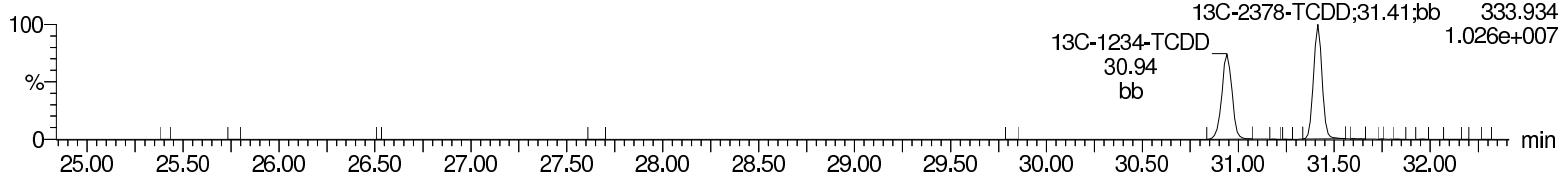
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A29SEP18B\_9-14



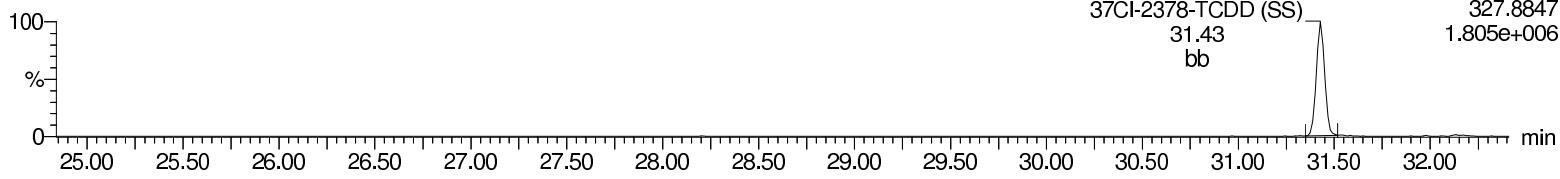
### 13C-2378-TCDD

A29SEP18B\_9-14



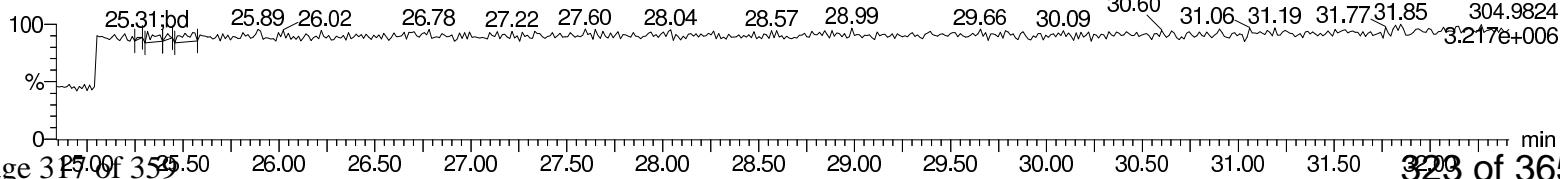
### 37Cl-2378-TCDD (SS)

A29SEP18B\_9-14



### Lock Mass F1

A29SEP18B\_9-14



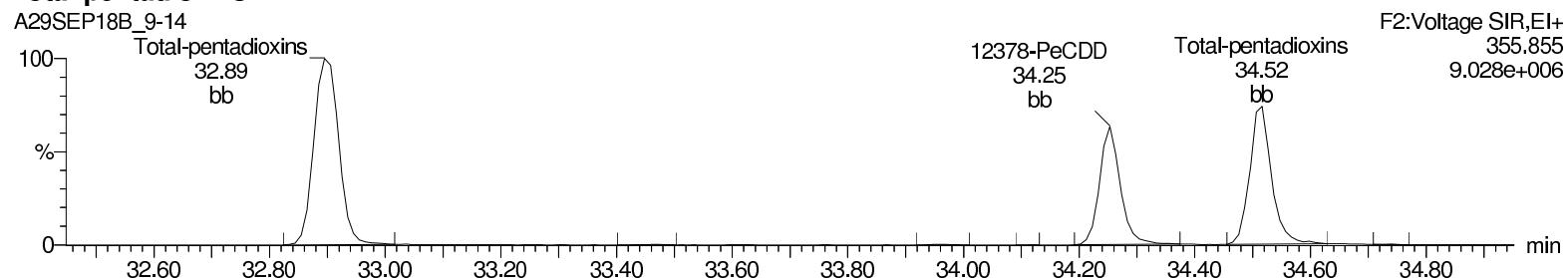
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Last Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time

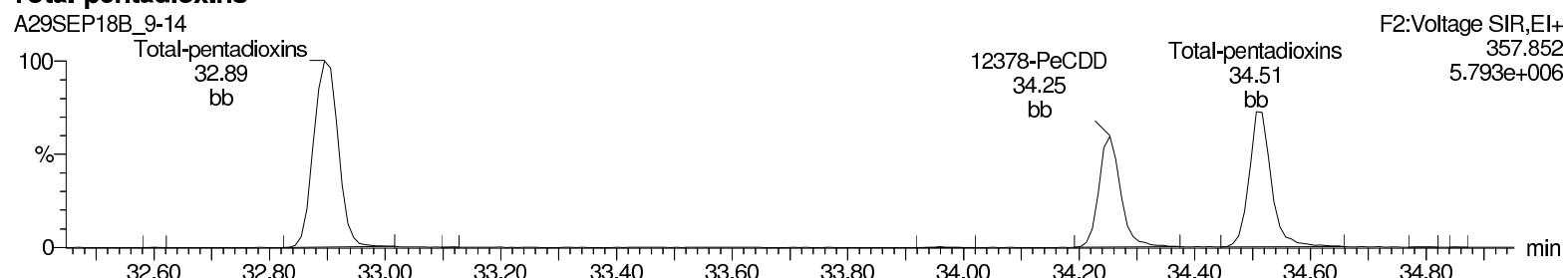
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Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC

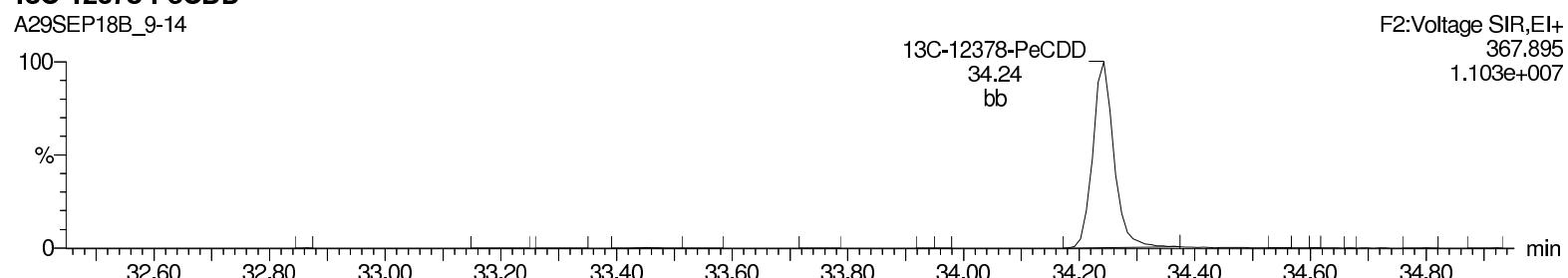
### Total-pentadioxins



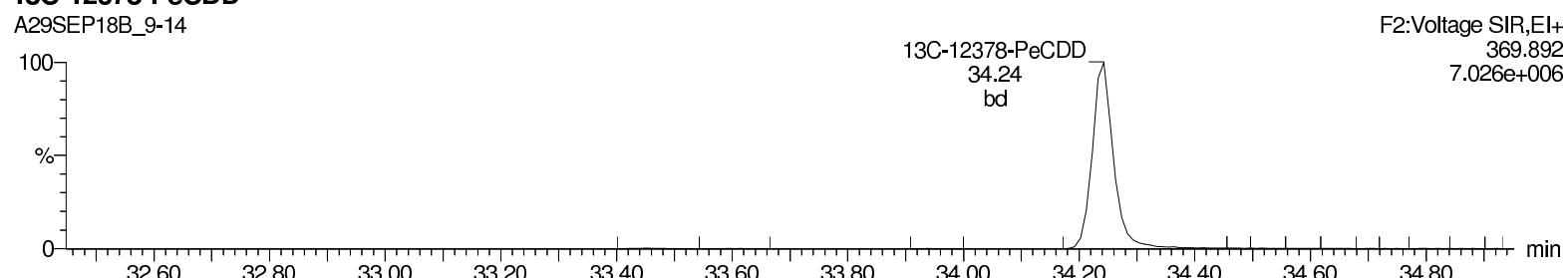
### Total-pentadioxins



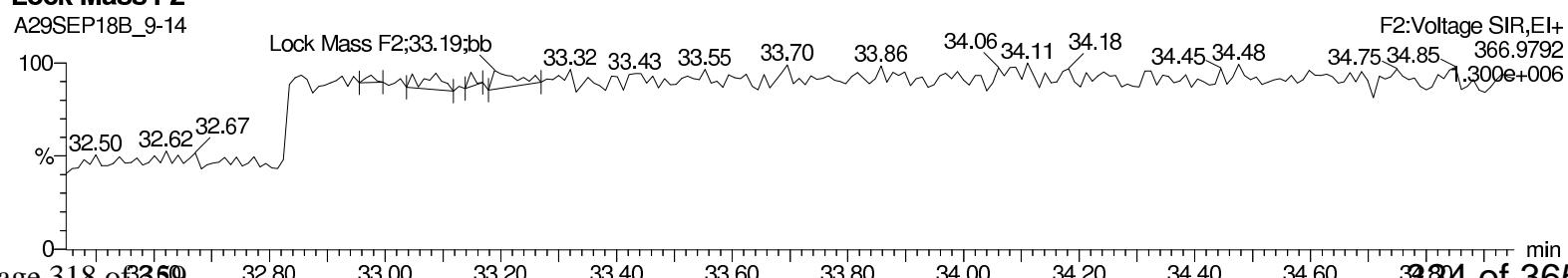
### 13C-12378-PeCDD



### 13C-12378-PeCDD



### Lock Mass F2



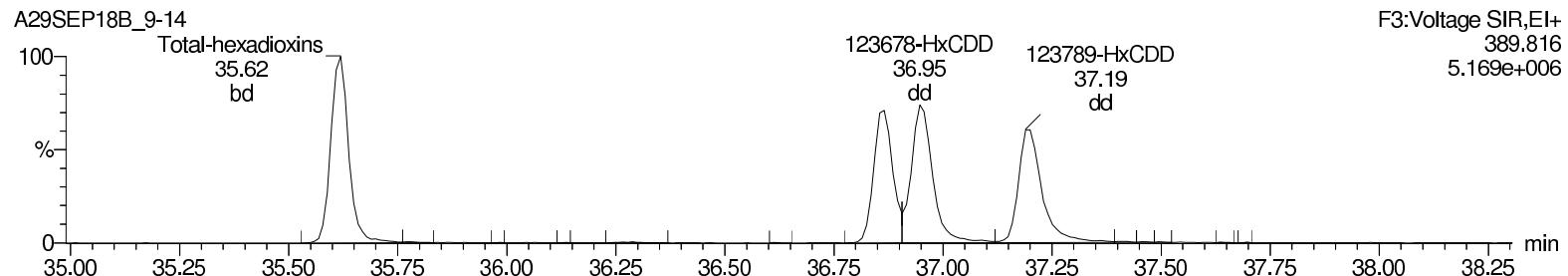
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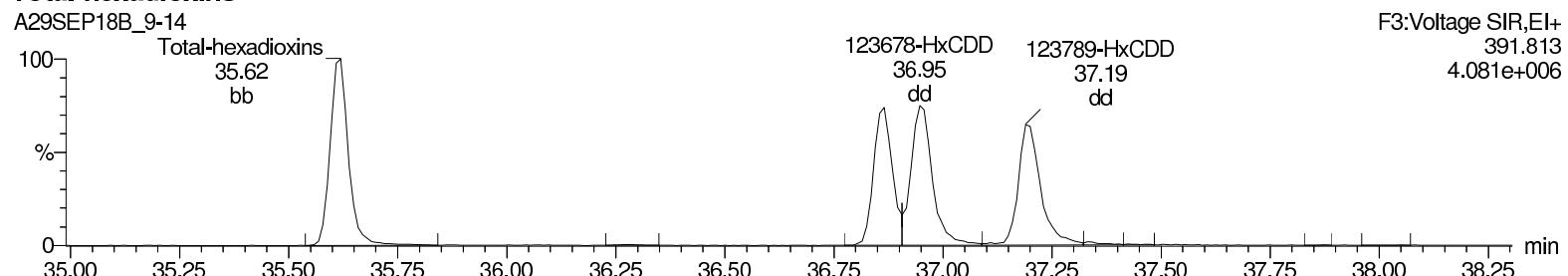
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**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

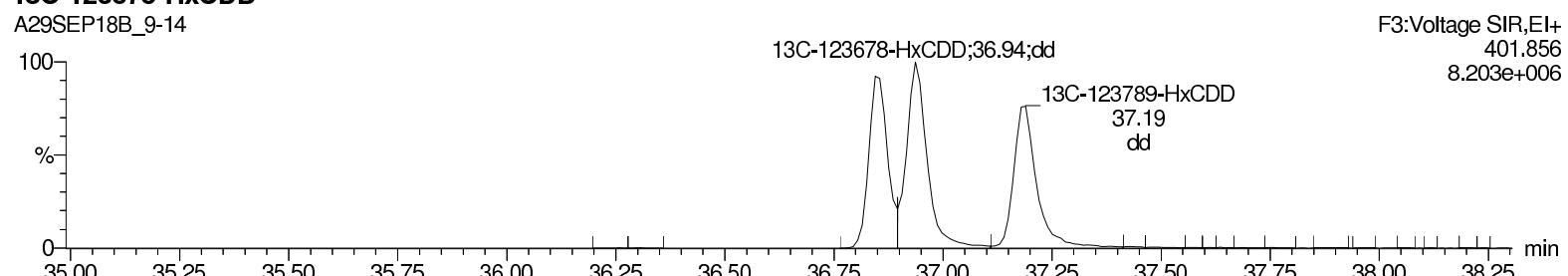
**Total-hexadioxins**



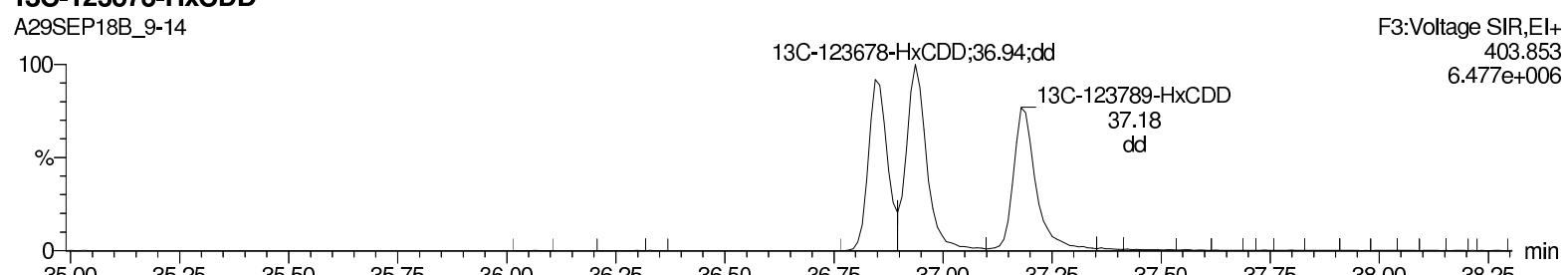
**Total-hexadioxins**



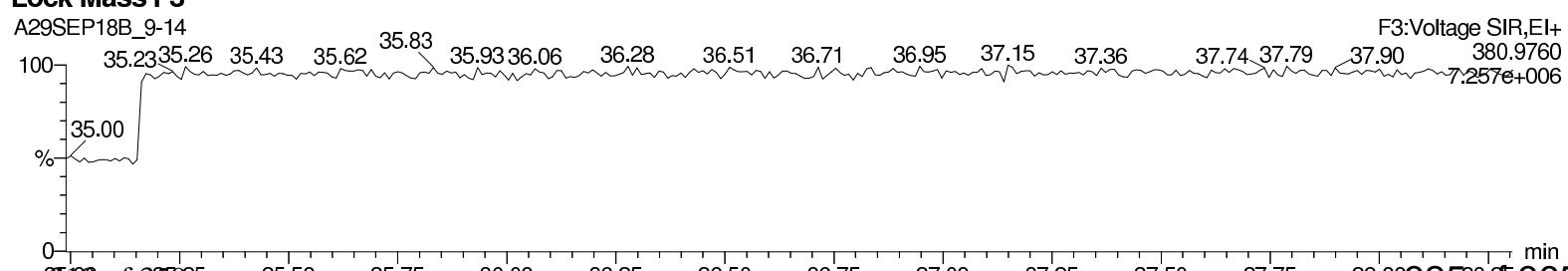
**13C-123678-HxCDD**



**13C-123678-HxCDD**



**Lock Mass F3**



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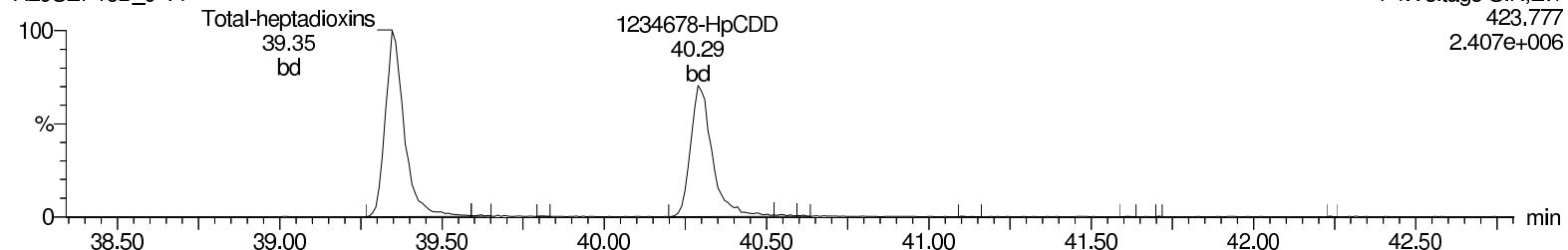
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Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

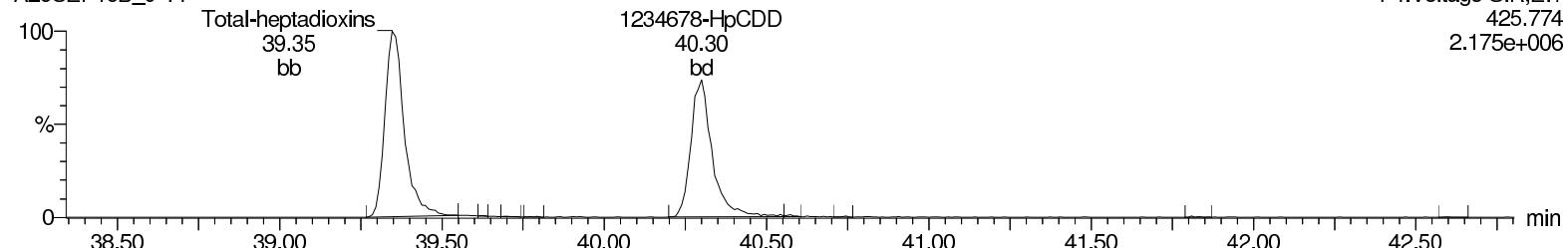
**Total-heptadioxins**

A29SEP18B\_9-14



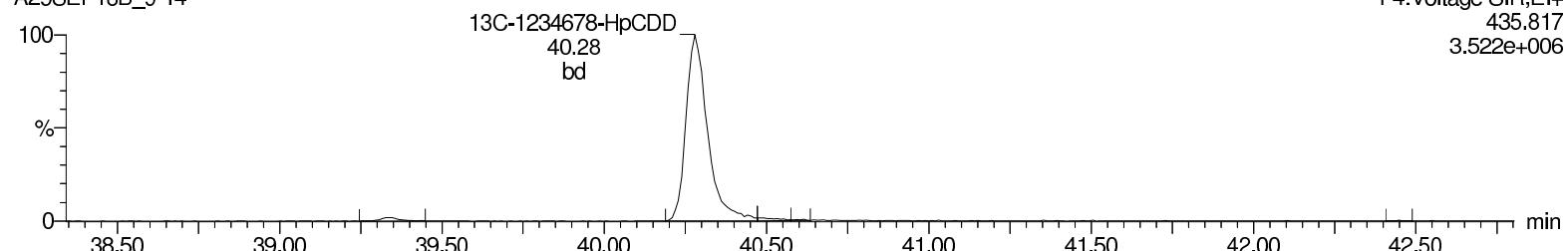
**Total-heptadioxins**

A29SEP18B\_9-14



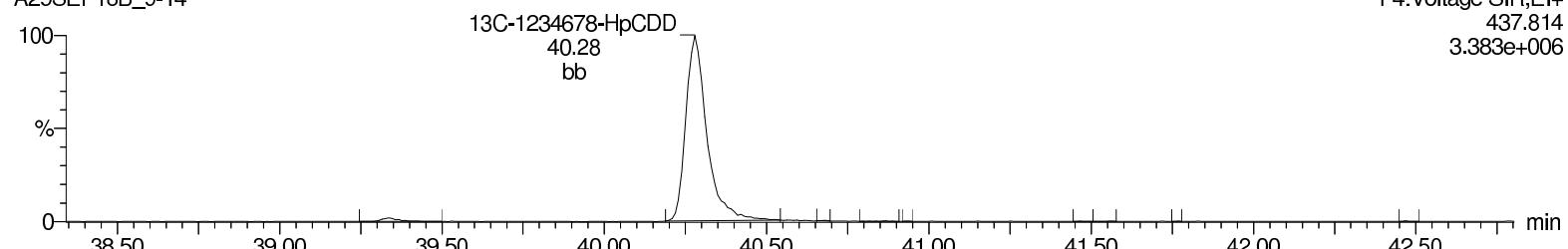
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A29SEP18B\_9-14



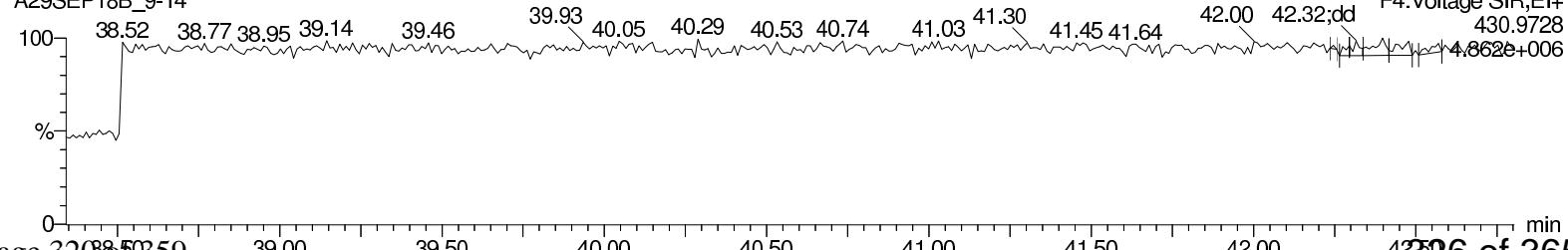
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A29SEP18B\_9-14



**Lock Mass F4**

A29SEP18B\_9-14



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_9-14.qld

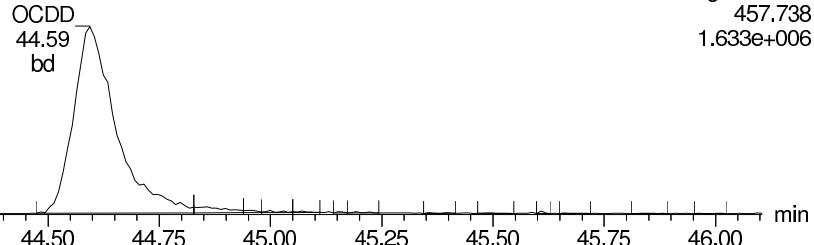
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Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

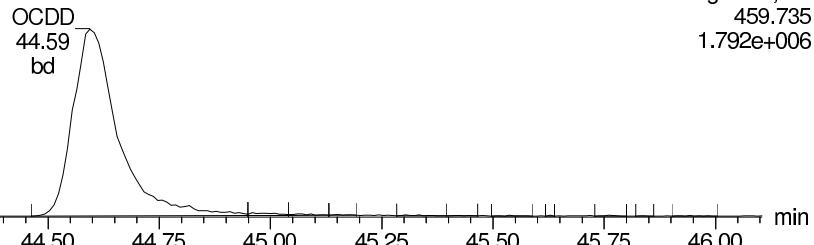
**OCDD**

A29SEP18B\_9-14



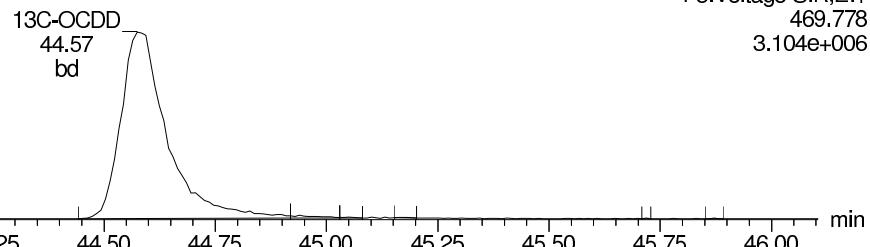
**OCDD**

A29SEP18B\_9-14



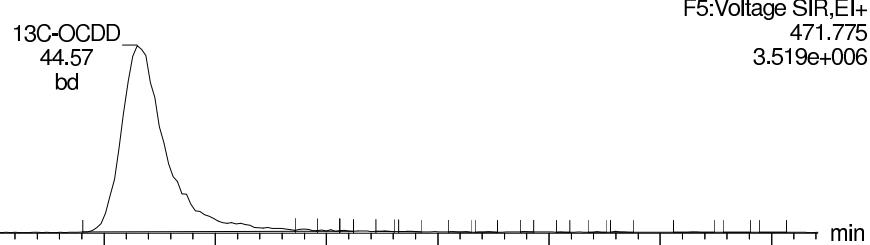
**13C-OCDD**

A29SEP18B\_9-14



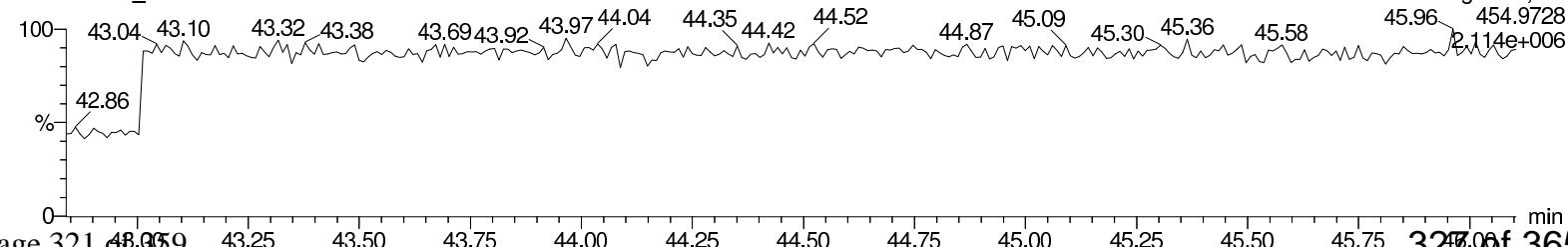
**13C-OCDD**

A29SEP18B\_9-14



**Lock Mass F5**

A29SEP18B\_9-14



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_9-14.qld

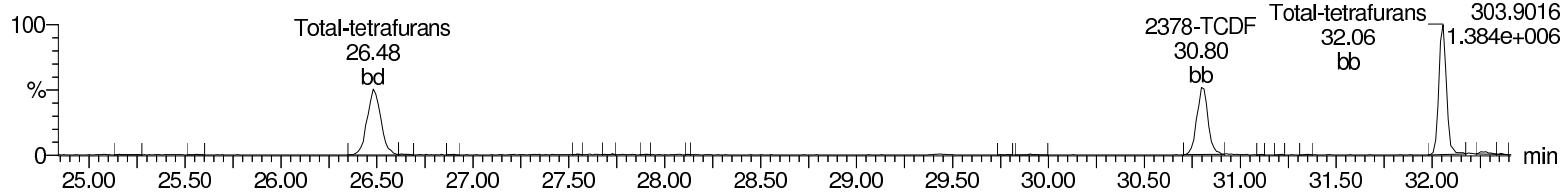
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Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

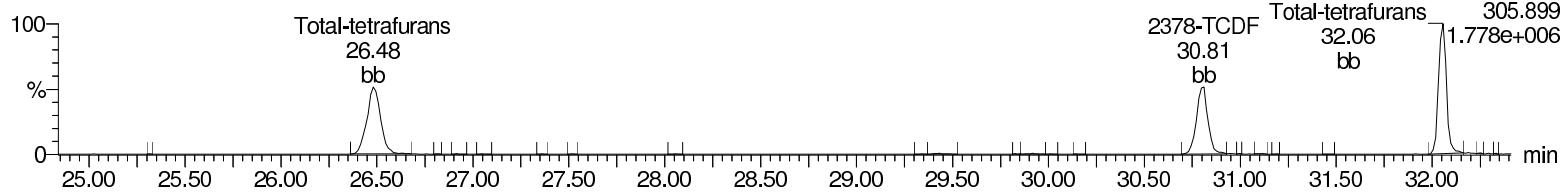
### Total-tetrafurans

A29SEP18B\_9-14



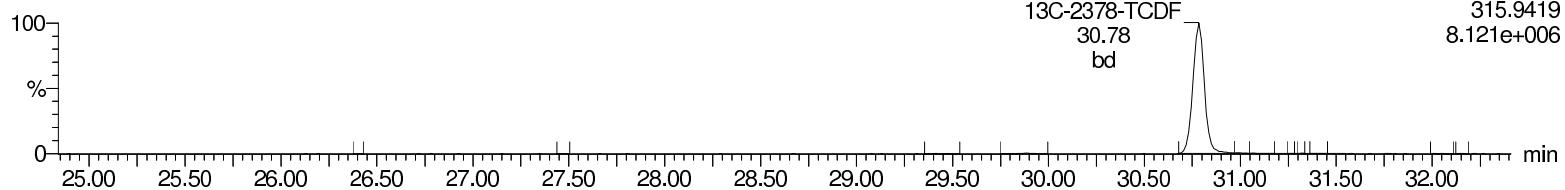
### Total-tetrafurans

A29SEP18B\_9-14



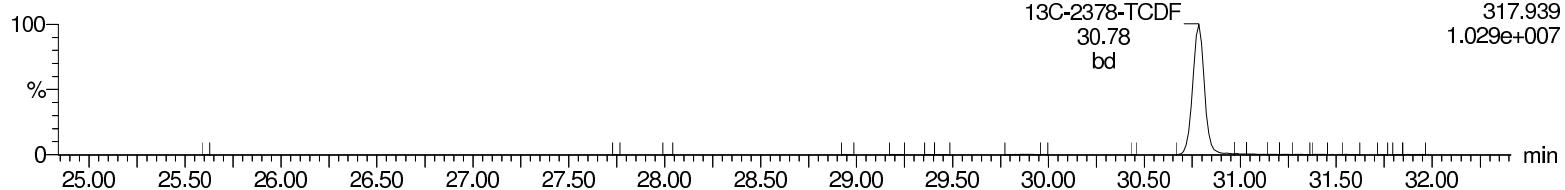
### 13C-2378-TCDF

A29SEP18B\_9-14



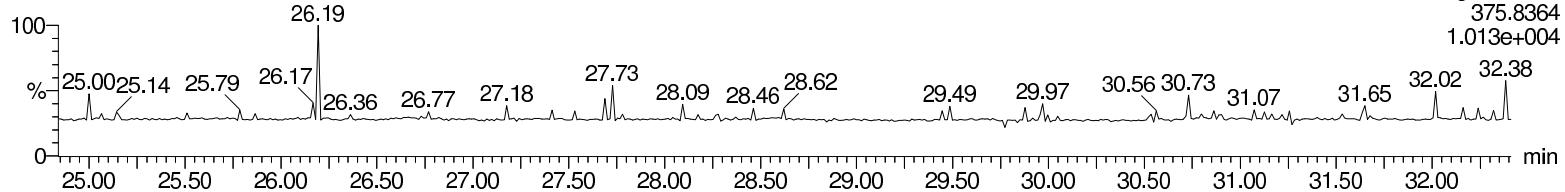
### 13C-2378-TCDF

A29SEP18B\_9-14



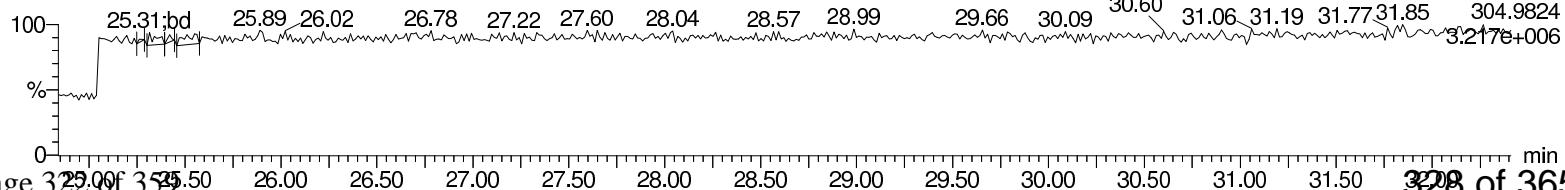
### HxDPE

A29SEP18B\_9-14



### Lock Mass F1

A29SEP18B\_9-14



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_9-14.qld

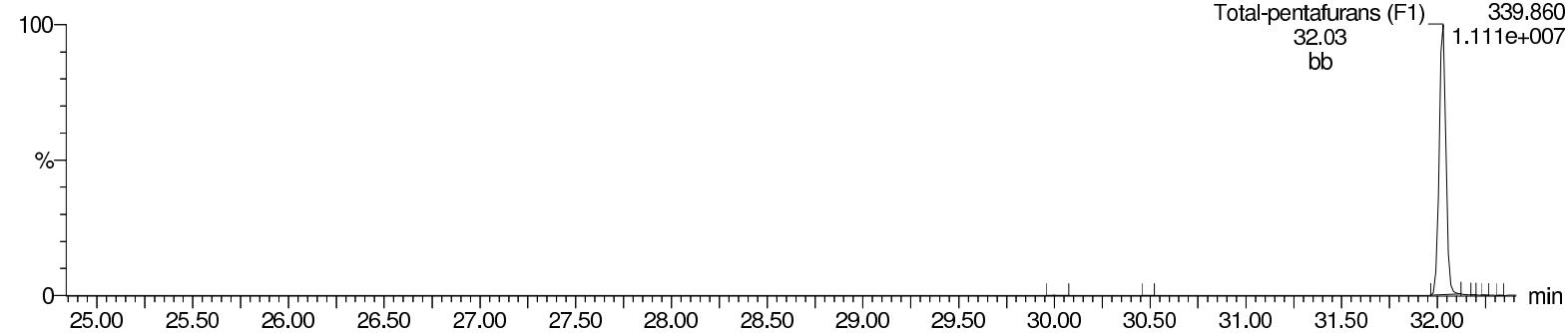
Last Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

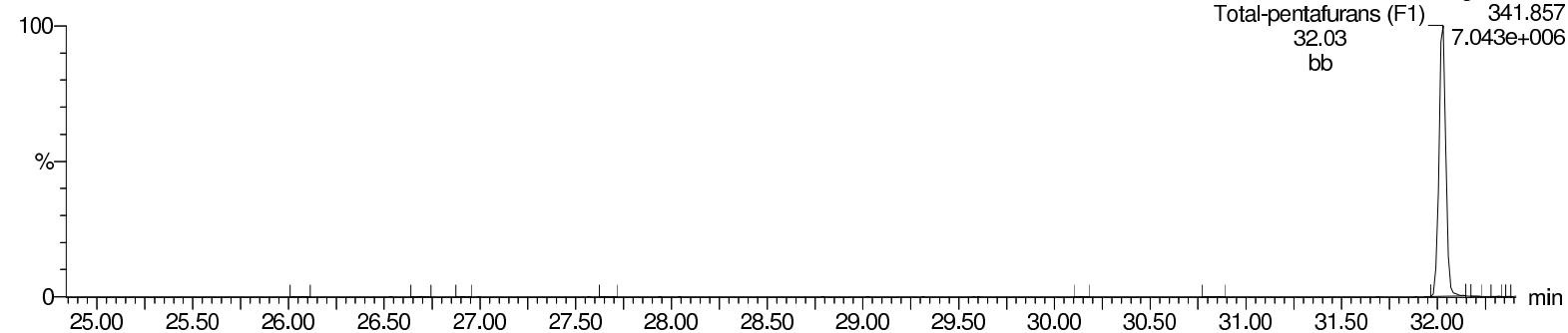
**Total-pentafurans (F1)**

A29SEP18B\_9-14



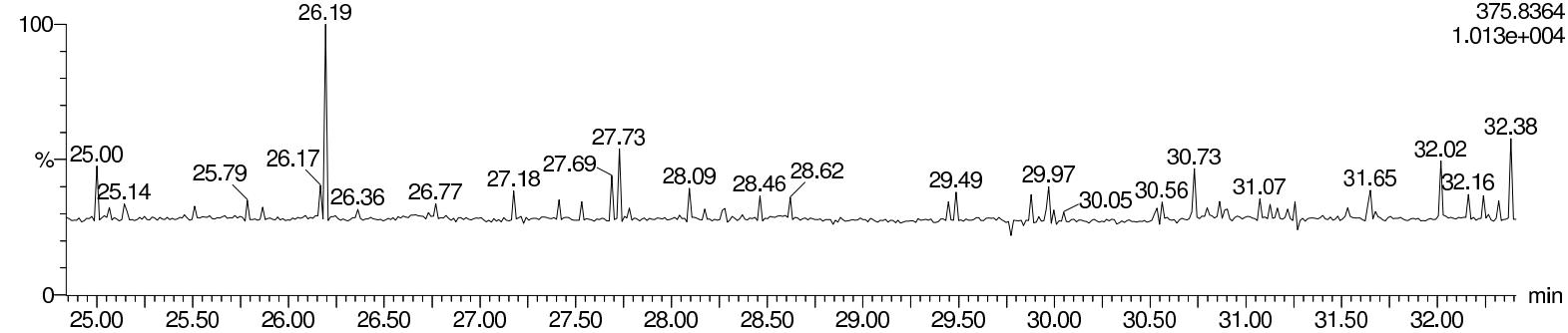
**Total-pentafurans (F1)**

A29SEP18B\_9-14



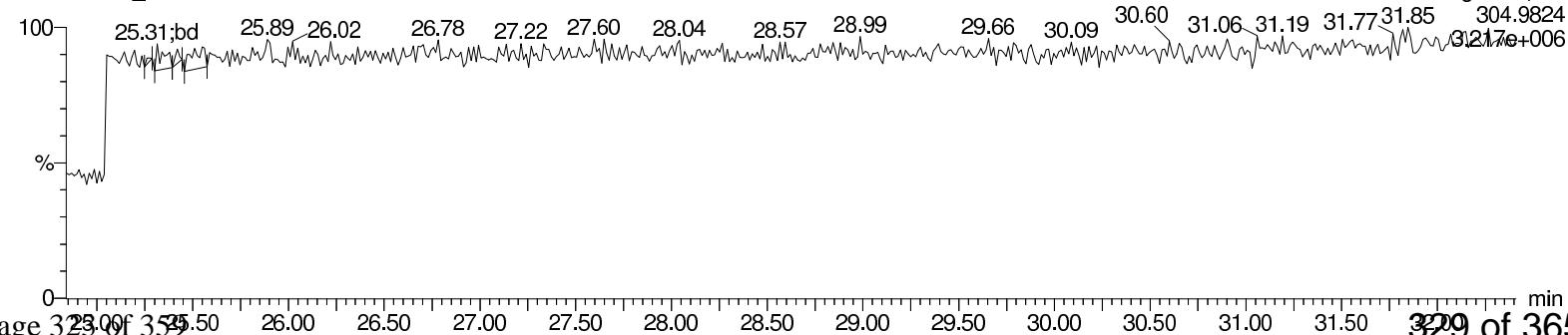
**HxDPE**

A29SEP18B\_9-14



**Lock Mass F1**

A29SEP18B\_9-14



## **Quantify Sample Report**

MassLynx 4.1

## Method 8290 CCAL Report

Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_9-14.qld

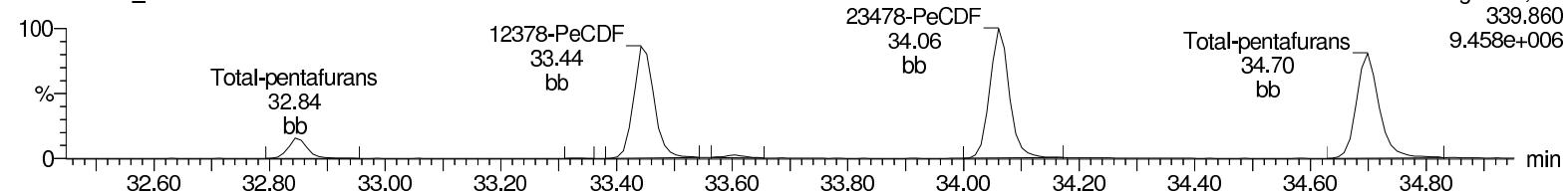
Last Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC

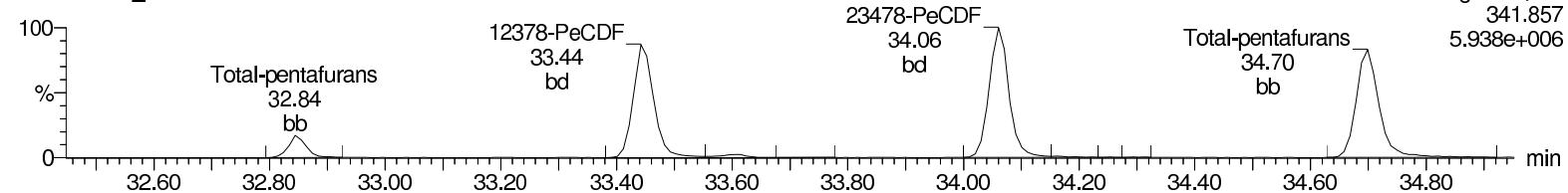
## Total-pentafurans

A29SEP18B 9-14



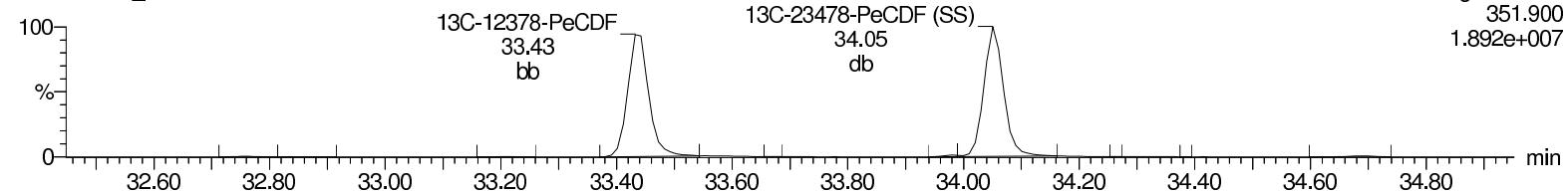
## Total-pentafurans

A29SEP18B 9-14



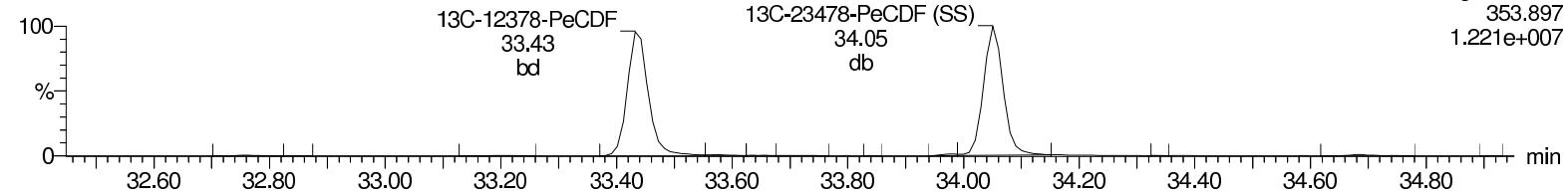
13C-12378-PeCDF

A29SEP18B\_9-14



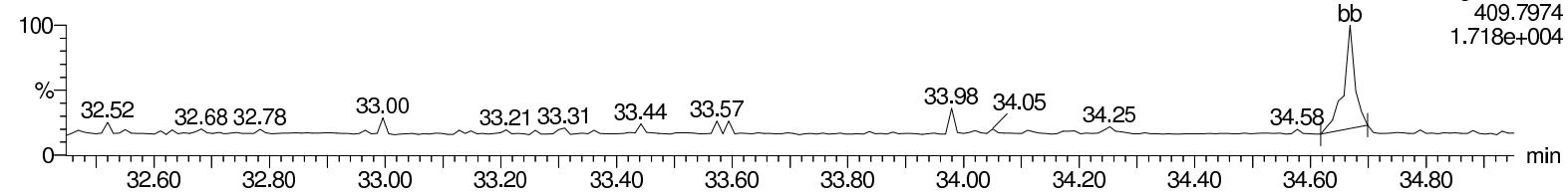
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A29SEP18B\_9-14



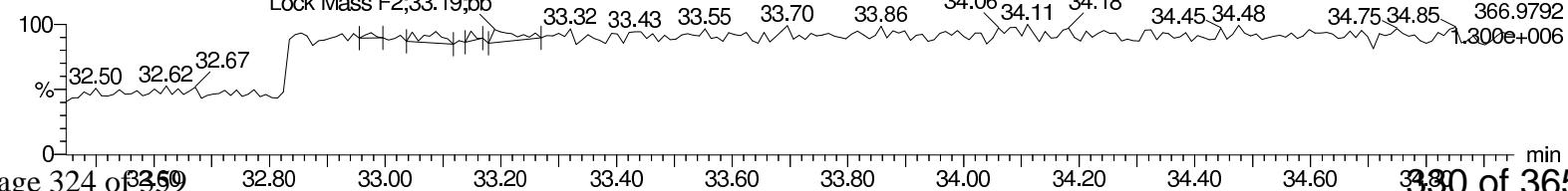
HpDPE

A29SEP18B\_9-14



Lock Mass F2

A29SEP18B\_9-14



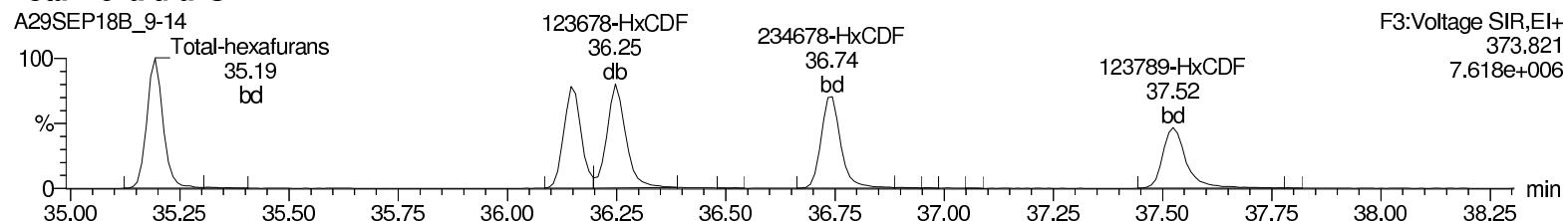
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Last Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time

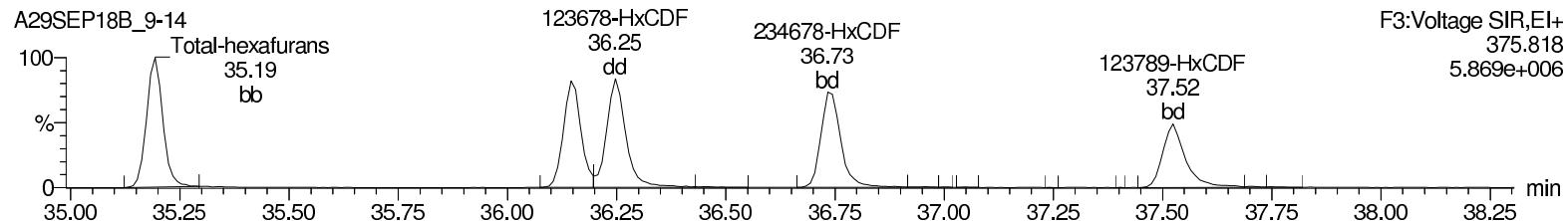
Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

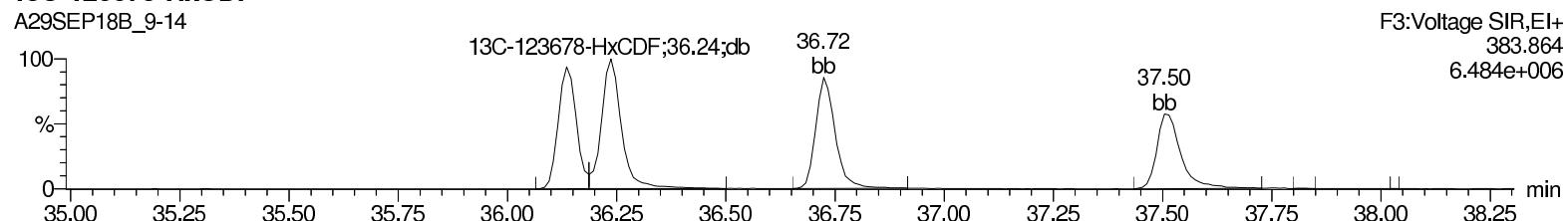
**Total-hexafurans**



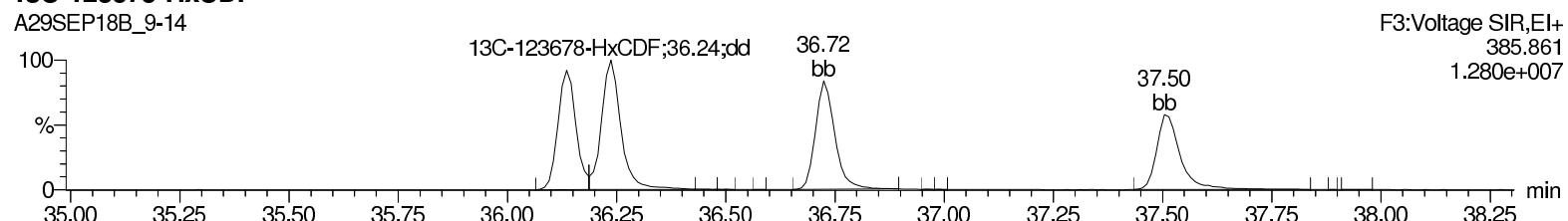
**Total-hexafurans**



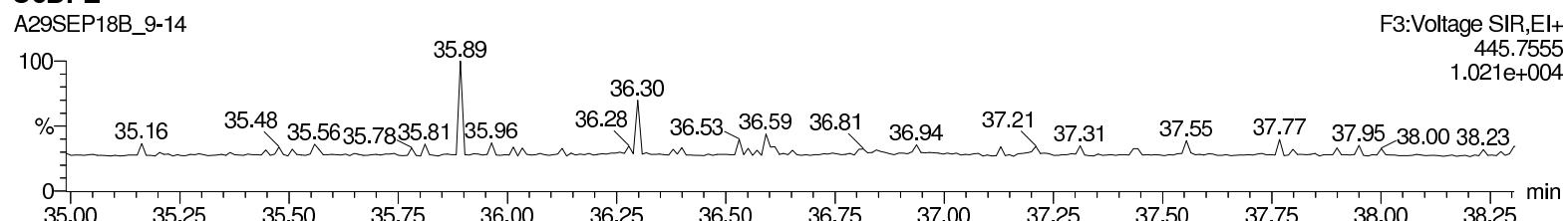
**13C-123678-HxCDF**



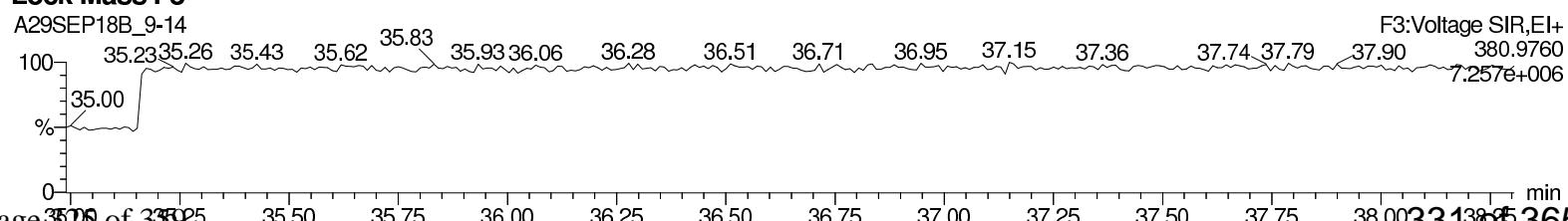
**13C-123678-HxCDF**



**OcDPE**



**Lock Mass F3**



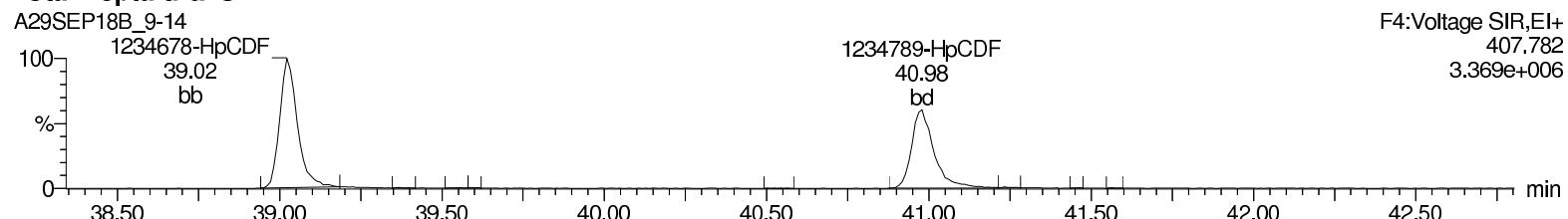
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Last Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time

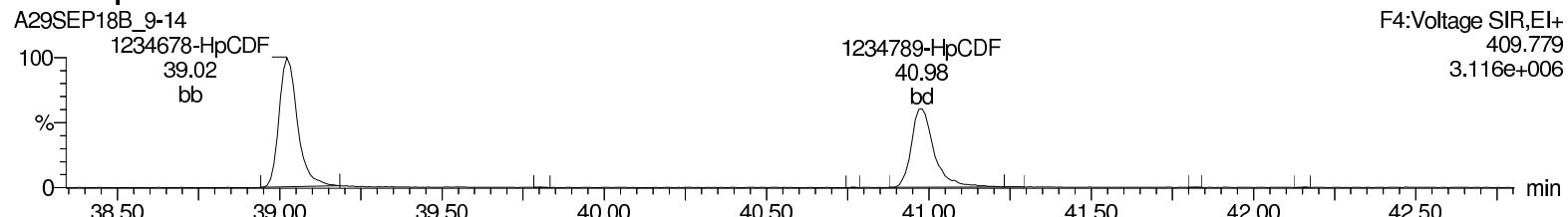
Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

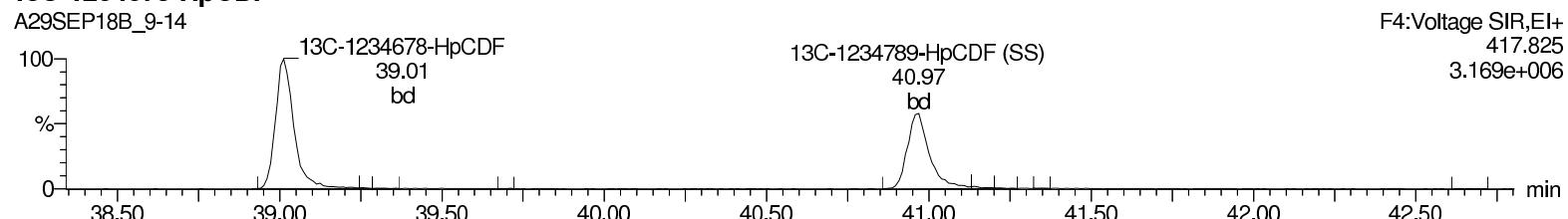
**Total-heptafurans**



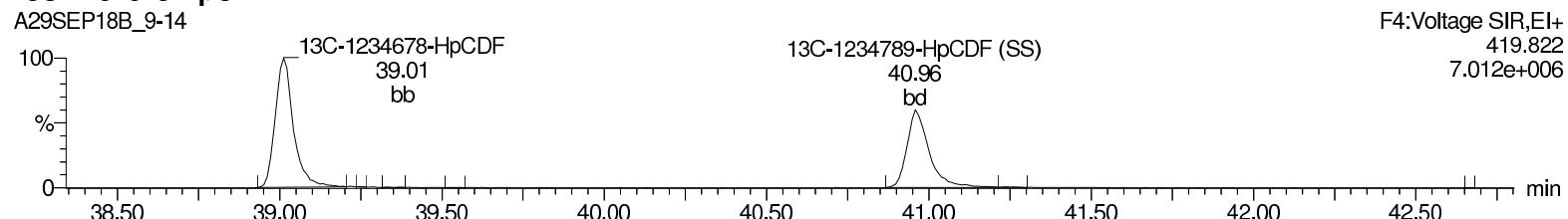
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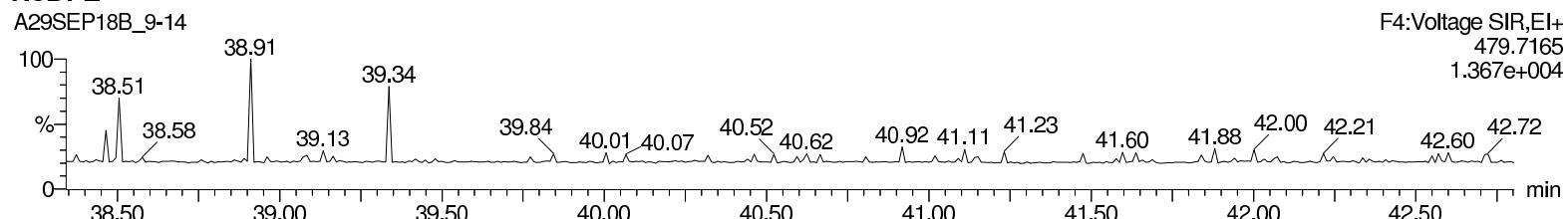
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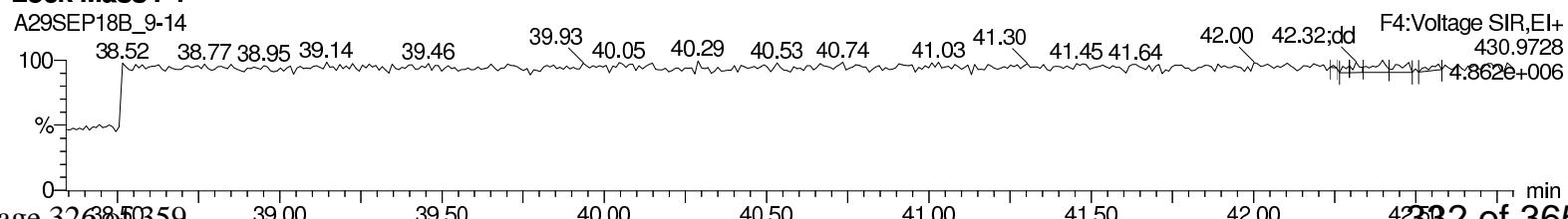
**13C-1234678-HpCDF**



**NoDPE**



**Lock Mass F4**



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_9-14.qld

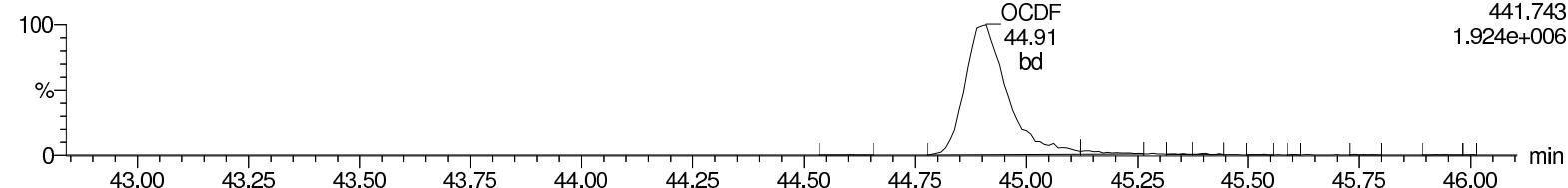
Last Altered: Wednesday, October 03, 2018 09:27:07 Eastern Standard Time

Printed: Wednesday, October 03, 2018 09:28:03 Eastern Standard Time

**Name: A29SEP18B\_9-14, Date: 03-Oct-2018, Time: 04:32:37, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_9, Task: HRP750\_2, User: MJC**

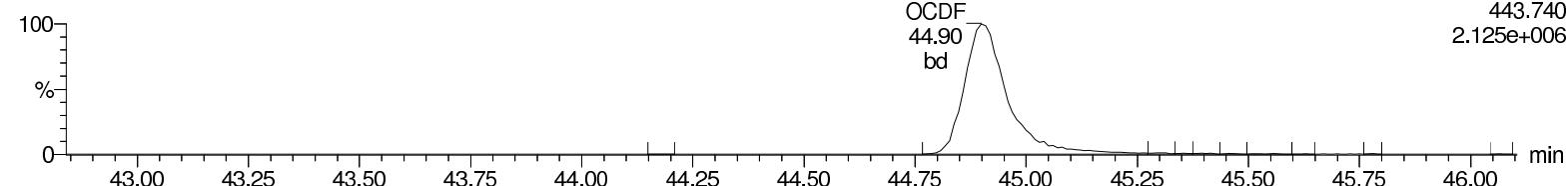
**OCDF**

A29SEP18B\_9-14



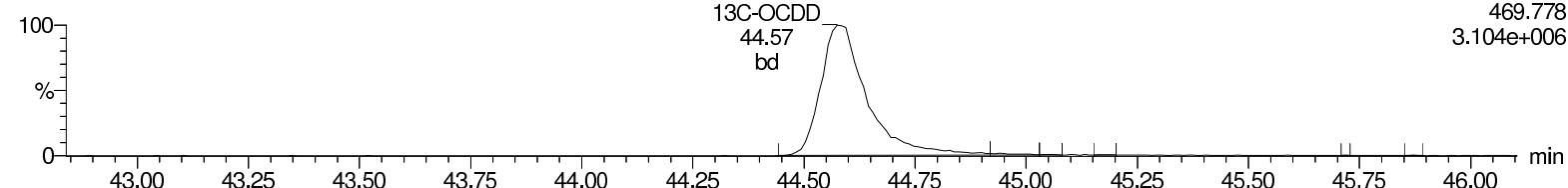
**OCDF**

A29SEP18B\_9-14



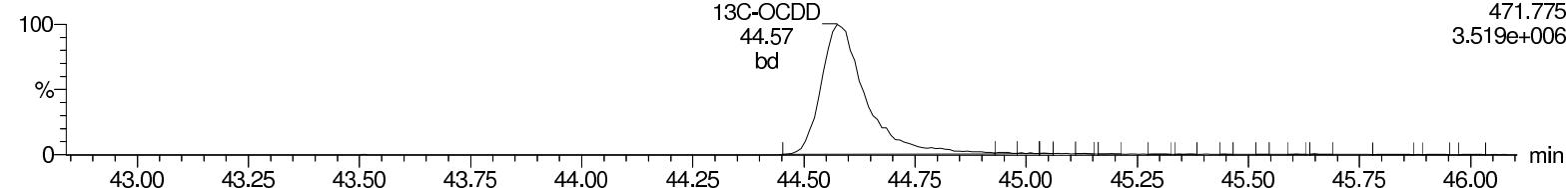
**13C-OCDD**

A29SEP18B\_9-14



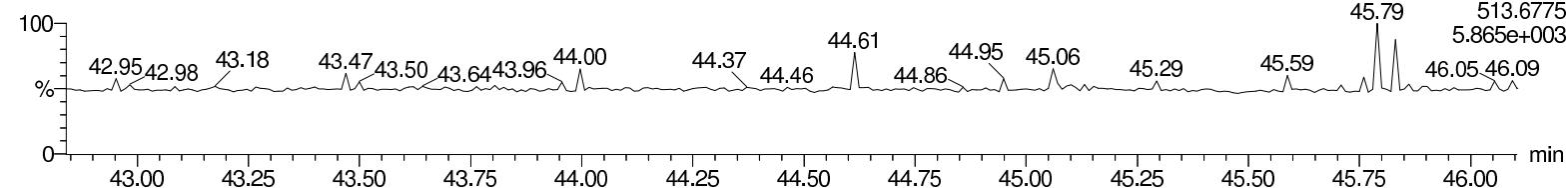
**13C-OCDD**

A29SEP18B\_9-14



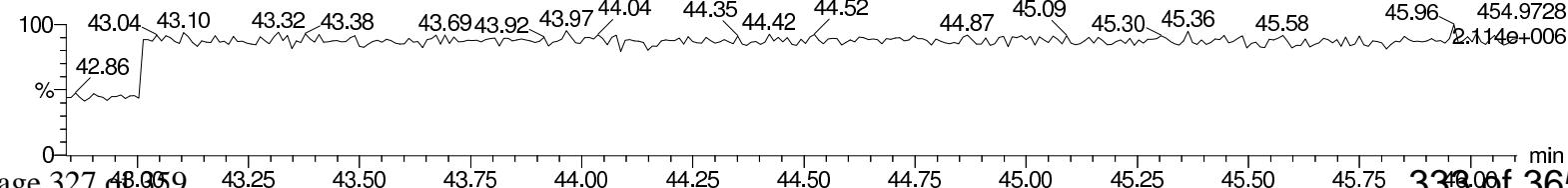
**DeDPE**

A29SEP18B\_9-14



**Lock Mass F5**

A29SEP18B\_9-14

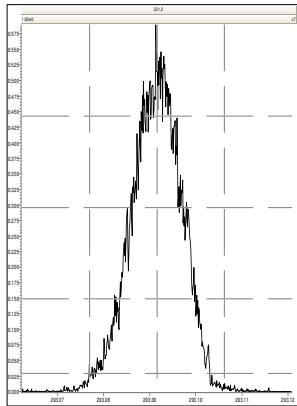


**RUN LOG****Instrument: HRP750\_2**

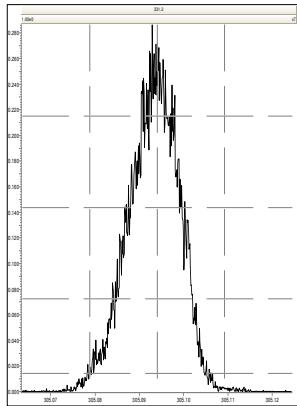
Name	Run Date	Analyst	Sample Information	Batch ID	Injection Volume	Ms Method	Tune Method
A29SEP18B_10-1	03-OCT-2018 05:28:50	Matt Cash	SB		1 uL	dioxin_db5ms	10K_dx
A29SEP18B_10-2	03-OCT-2018 06:16:04	Matt Cash	13928002-1	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_10-3	03-OCT-2018 07:04:03	Matt Cash	13929001-1	38747	1 uL	dioxin_db5ms	10K_dx
RR x1 c/o?							
A29SEP18B_10-4	03-OCT-2018 07:52:05	Matt Cash	13952001-1	38747	1 uL	dioxin_db5ms	10K_dx
RR x1 c/o?							
A29SEP18B_10-5	03-OCT-2018 08:40:05	Matt Cash	13952002-1	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_10-6	03-OCT-2018 09:28:08	Matt Cash	13953001-1	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_10-7	03-OCT-2018 10:16:09	Matt Cash	13953002-1	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_10-8	03-OCT-2018 11:04:10	Matt Cash	13953003-1	38747	1 uL	dioxin_db5ms	10K_dx
A29SEP18B_10-9	03-OCT-2018 11:52:12	Matt Cash	CS3WT UD180731-01.1		1 uL	dioxin_db5ms	10K_dx

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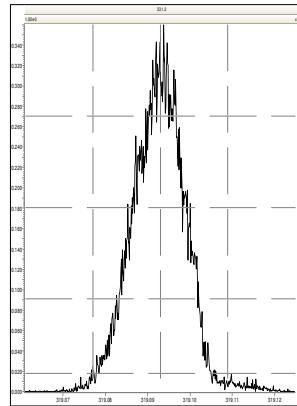
M 292.9824 R 11655



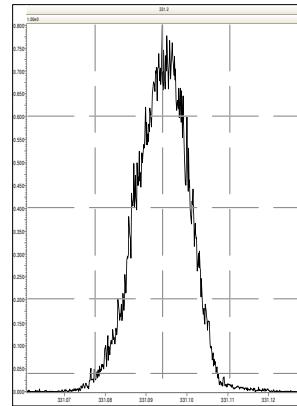
M 304.9824 R 11576



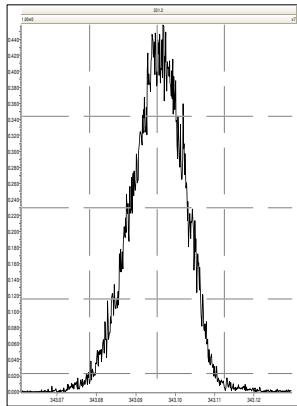
M 318.9792 R 12122



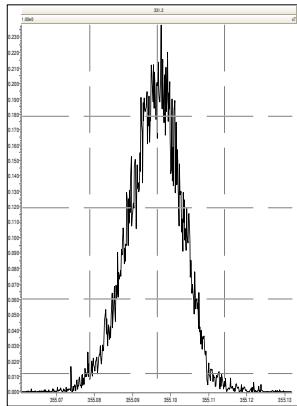
M 330.9792 R 11235



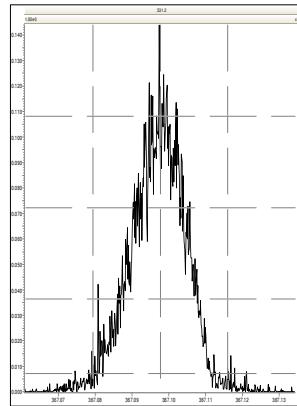
M 342.9792 R 11468



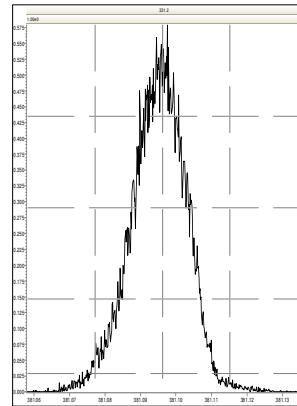
M 354.9792 R 12036



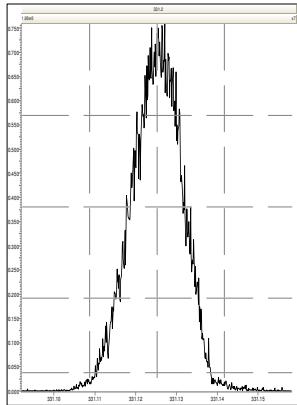
M 366.9792 R 11739



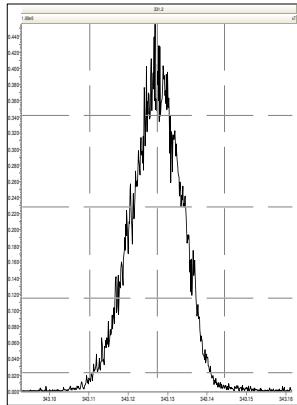
M 380.9760 R 10504



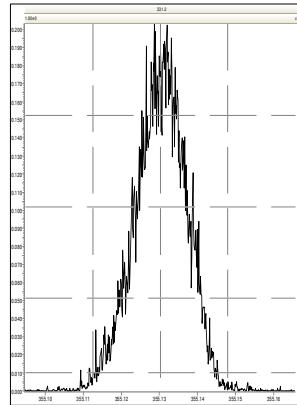
M 330.9792 R 11820



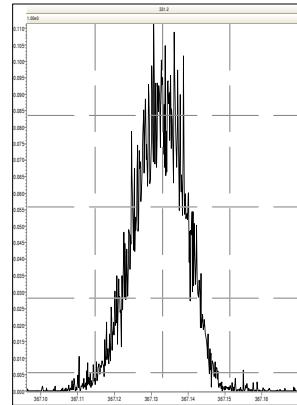
M 342.9792 R 11548



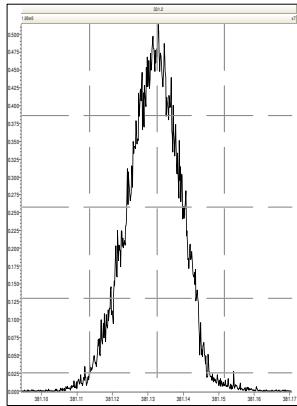
M 354.9792 R 11497



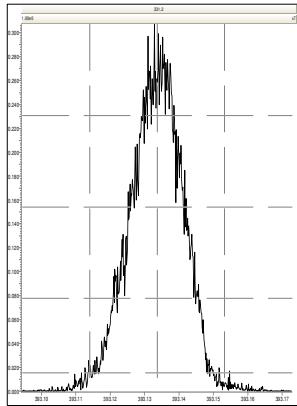
M 366.9792 R 12081



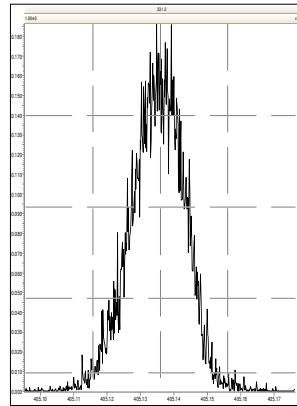
M 380.9760 R 11313



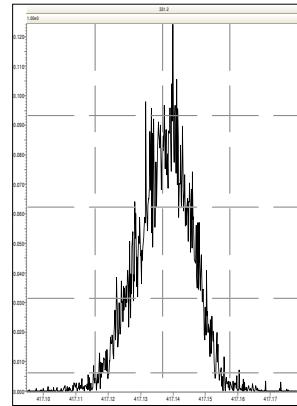
M 392.9760 R 11820



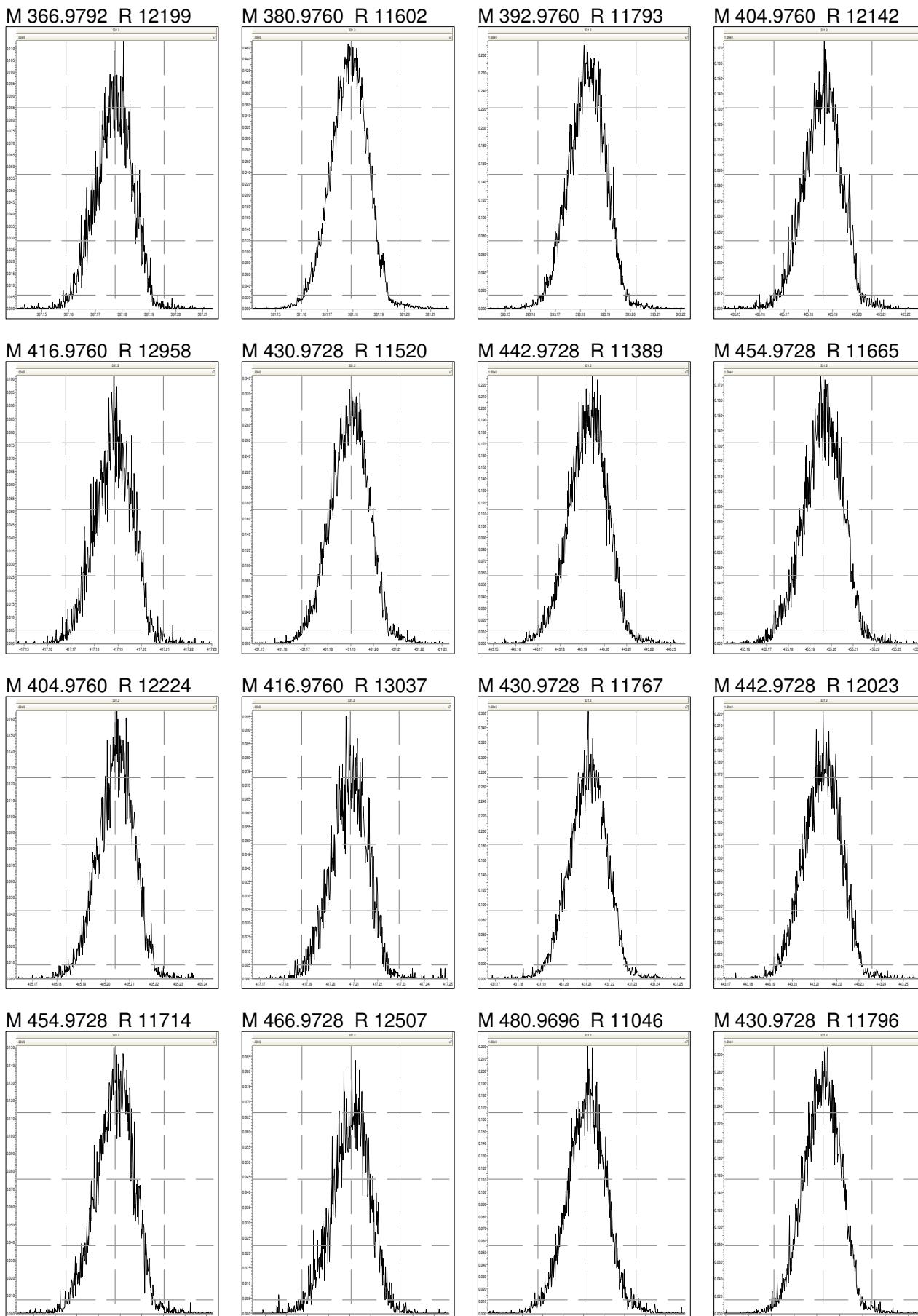
M 404.9760 R 11547



M 416.9760 R 12410

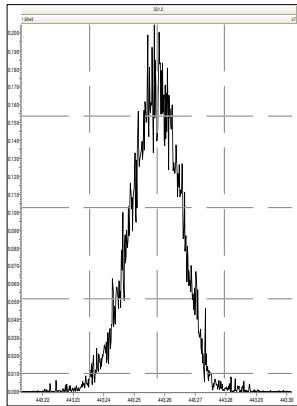


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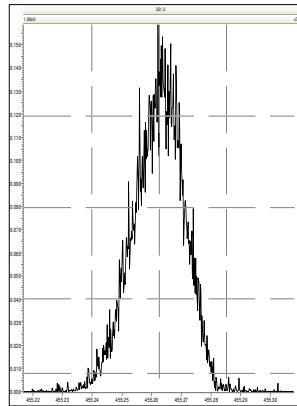


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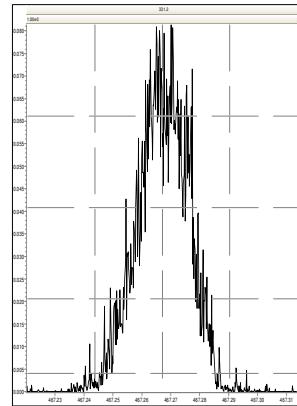
M 442.9728 R 12598



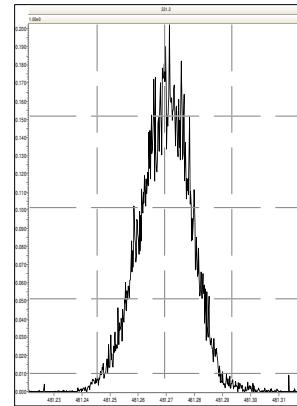
M 454.9728 R 11911



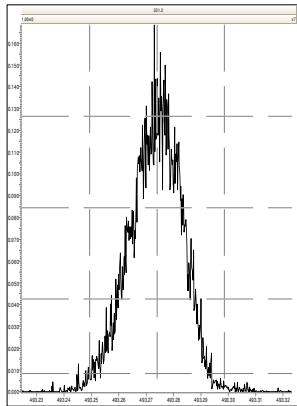
M 466.9728 R 12317



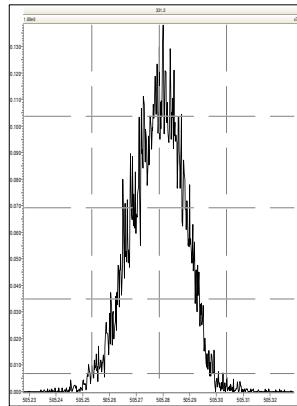
M 480.9696 R 11601



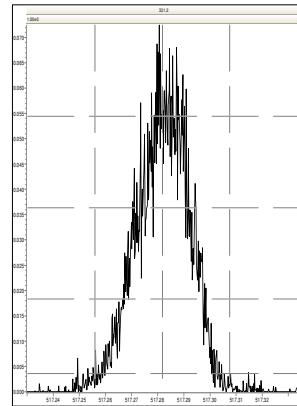
M 492.9696 R 12105



M 504.9696 R 12001



M 516.9697 R 12603



**Method: C:\MassLynx\Default\pro\Methdb\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**  
**Calibration: C:\MassLynx\Default\pro\Curvedb\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**
**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	RRF	Mean	%D	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
1	23378-TcDD	3.12e4	4.35e4	7.47e4	31.44	1.001	0.72	NO	9.981	0.119	0.964	0.966	-0.2	5.91e5	3046	194.0	8.12e5	3605	225.1	db	db
2	12378-PeCDD	2.03e5	1.27e5	3.30e5	34.25	1.000	1.60	NO	51.018	0.219	0.997	0.977	2.0	4.53e6	6877	658.5	2.87e6	5734	501.0	bb	bb
3	123478-HxCDD	1.63e5	1.32e5	2.95e5	36.87	0.998	1.23	NO	50.813	0.359	0.833	0.820	1.6	3.24e6	6340	511.3	2.75e6	8192	335.9	bd	bd
4	123678-HxCDD	1.91e5	1.53e5	3.44e5	36.96	1.000	1.25	NO	50.024	0.303	0.971	0.971	0.0	3.48e6	6340	548.2	2.79e6	8192	341.2	dd	dd
5	123789-HxCDD	1.67e5	1.32e5	2.99e5	37.20	1.007	1.27	NO	48.960	0.342	0.843	0.861	-2.1	2.75e6	6340	433.5	2.15e6	8192	262.8	dd	dd
6	1234678-HpCDD	1.04e5	1.05e5	2.09e5	40.30	1.000	1.00	NO	48.529	0.495	0.927	0.955	-2.9	1.35e6	3745	360.3	1.37e6	6899	198.1	bd	bd
7	OCDD	1.48e5	1.75e5	3.23e5	44.59	1.000	0.84	NO	103.183	0.974	1.012	0.981	3.2	1.28e6	4747	270.5	1.53e6	5769	264.5	bd	bd
8	23378-TcDF	3.97e4	5.42e4	9.39e4	30.81	1.001	0.73	NO	9.344	0.121	0.859	0.919	-6.6	6.04e5	2745	220.0	7.91e5	4187	189.0	bd	bb
9	12378-PeCDF	2.86e5	1.83e5	4.69e5	33.45	1.000	1.57	NO	48.992	0.208	0.858	0.875	-2.0	7.00e6	9024	775.3	4.48e6	9629	465.1	bd	bd
10	23478-PeCDF	3.22e5	2.04e5	5.26e5	34.07	1.019	1.57	NO	49.008	0.186	0.962	0.981	-2.0	7.97e6	9024	883.6	4.93e6	9629	512.0	bd	bb
11	123478-HxCDF	2.38e5	1.92e5	4.30e5	36.16	0.997	1.24	NO	52.388	0.312	0.967	0.923	4.8	5.00e6	9707	514.8	4.17e6	8952	466.0	bd	bd
12	123678-HxCDF	2.69e5	2.10e5	4.79e5	36.26	1.000	1.28	NO	50.707	0.271	1.078	1.063	1.4	5.26e6	9707	541.7	4.08e6	8952	455.4	db	db
13	234678-HxCDF	2.42e5	1.96e5	4.38e5	36.74	1.014	1.24	NO	51.842	0.303	0.986	0.951	3.7	4.77e6	9707	490.9	3.91e6	8952	436.8	bb	bb
14	123789-HxCDF	1.88e5	1.42e5	3.31e5	37.52	1.035	1.32	NO	49.586	0.384	0.744	0.751	-0.8	2.88e6	9707	296.6	2.20e6	8952	245.7	bb	bd
15	1234678-HpCDF	1.89e5	1.79e5	3.68e5	39.03	1.000	1.06	NO	52.701	0.266	1.285	1.219	5.4	2.91e6	5647	514.7	2.73e6	5601	487.2	bd	bd
16	1234789-HpCDF	1.36e5	1.25e5	2.61e5	40.98	1.050	1.09	NO	50.539	0.360	0.911	0.902	1.1	1.60e6	5647	283.1	1.48e6	5601	264.4	bd	bd
17	OCDF	1.76e5	1.93e5	3.68e5	44.90	1.007	0.91	NO	97.211	0.834	1.154	1.187	-2.8	1.49e6	4426	337.1	1.64e6	6462	254.4	bd	bd
18	13C-2378-TcDD	3.40e5	4.35e5	7.75e5	31.41	1.015	0.78	NO	105.817	0.277	1.126	1.064	5.8	6.33e6	7183	881.7	8.29e6	5823	1424.4	bd	bb
19	13C-12378-PeCDD	4.06e5	2.55e5	6.61e5	34.24	1.107	1.59	NO	123.921	0.210	0.961	0.775	23.9	9.07e6	3677	2457.2	5.84e6	3517	1661.0	bd	bd
20	13C-123678-HxCDD	3.88e5	3.20e5	7.09e5	36.95	0.993	1.21	NO	103.500	0.303	1.203	1.162	3.5	6.77e6	7969	849.1	5.42e6	5461	992.8	dd	dd
21	13C-1234678-HpCDD	2.34e5	2.17e5	4.51e5	40.29	1.083	1.08	NO	102.266	0.306	0.765	0.748	2.3	2.92e6	4386	666.0	2.71e6	4345	623.5	bd	bd
22	13C-OCDD	3.07e5	3.31e5	6.38e5	44.58	1.199	0.938	NO	177.401	0.693	0.542	0.611	-11.3	2.65e6	9077	291.8	2.94e6	7054	417.5	bd	bd
23	13C-2378-TcDD	4.78e5	6.15e5	1.09e6	30.78	0.995	0.78	NO	101.899	0.299	1.589	1.560	1.9	6.83e6	13187	518.3	8.93e6	7453	1197.5	bd	bd
24	13C-12378-PeCDF	6.65e5	4.29e5	1.09e6	33.44	1.081	1.55	NO	120.423	0.268	1.589	1.320	20.4	1.55e7	7956	1952.8	9.99e6	7663	1304.3	bd	bd
25	13C-123678-HxCDF	3.01e5	5.87e5	8.88e5	36.25	0.975	0.51	NO	97.468	0.404	1.507	1.546	-2.5	5.48e6	8410	651.6	1.04e7	15429	674.6	db	db
26	13C-1234678-HpCDF	1.77e5	3.95e5	5.72e5	39.02	1.049	0.45	NO	95.758	0.386	0.971	1.014	-4.2	2.68e6	6319	424.8	5.84e6	8621	677.1	bd	bd
27	13C-123478-TcDD	3.08e5	3.80e5	6.88e5	30.94	0.000	0.81	NO	100.000	0.294	1.000	0.0	0.94e6	7183	688.0	6.08e6	5823	1043.8	bb	bb	
28	13C-123789-HxCDD	3.22e5	2.67e5	5.89e5	37.19	0.000	1.21	NO	100.000	0.352	1.000	0.0	5.21e6	7969	654.4	4.10e6	5461	751.4	dd	dd	
29	37Cl-2378-TCDD (SS)	7.70e4	7.70e4	31.44	1.001	9.787	0.0444	0.993	0.015	-2.1	1.53e6	2606	588.0	bb	bb	bb	bb	bb	bb	bb	
30	13C-23478-PeCDF (SS)	6.52e5	4.27e5	1.08e6	34.06	1.018	1.53	NO	99.636	0.154	0.987	0.990	-0.4	1.56e7	7956	1966.4	1.01e7	7663	1312.8	db	db

Dataset: C:\MassLynx\Default\pro\CCAL\_Results\8290-A29SEP18B\_10-9.qd  
 Last Altered: Wednesday, October 03, 2018 12:51:18 Eastern Standard Time  
 Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UDI180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

#	Name	Ion1Area	Ion2Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	RRF	Mean	%D	Height1	Noise1	S/N1	Height2	Noise2	S/N2	M	M2
31	13C-123478-HxCDF (SS)	2.46e5	4.82e5	7.28e5	36.15	0.997	0.51	NO	100.113	0.450	0.820	0.819	0.1	5.15e6	8410	612.1	1.01e7	15429	655.1	bd	bd
32	13C-123478-HxCDD (SS)	3.32e5	2.43e5	5.75e5	36.85	0.998	1.37	NO	97.273	0.326	0.811	0.834	-2.7	6.75e6	7969	846.7	5.18e6	5461	948.8	bd	bd
33	13C-1234789-HpCDF (SS)	1.18e5	2.76e5	3.95e5	40.97	1.050	0.43	NO	96.360	0.603	0.689	0.715	-3.6	1.38e6	6319	217.7	3.31e6	8621	383.6	bd	bd

Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_10-9.qld

Last Altered: Wednesday, October 03, 2018 12:51:18 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

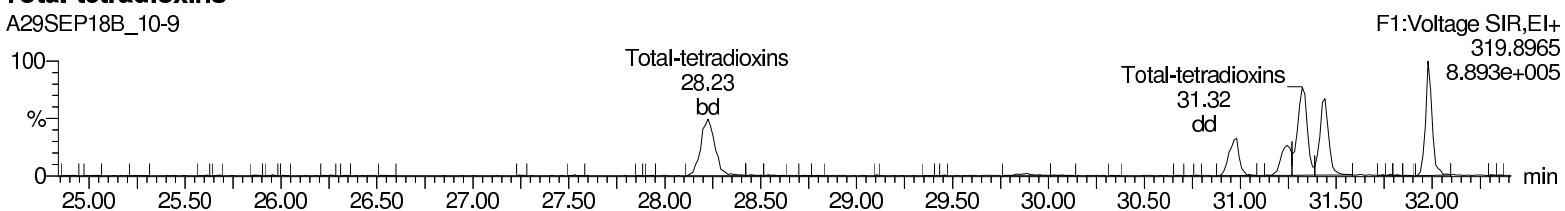
**Method: C:\MassLynx\Default.pro\Methdb\CFA\_EPA8290\_A23AUG18.mdb 23 Aug 2018 12:08:58**

**Calibration: C:\MassLynx\Default.pro\Curvedb\8290-A18AUG18.cdb 20 Aug 2018 13:48:29**

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

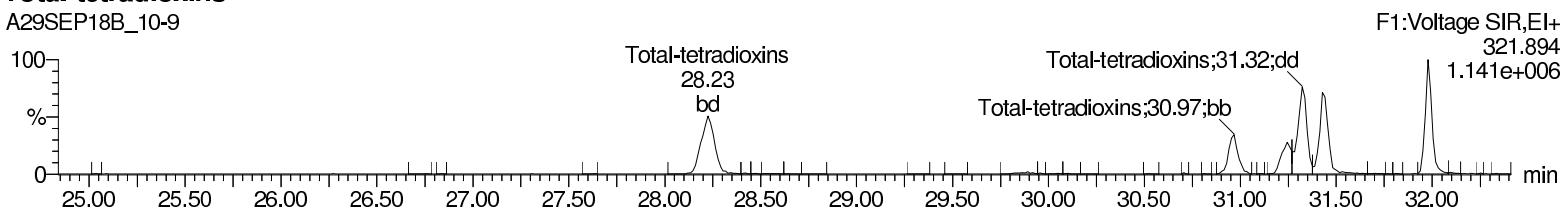
### Total-tetradioxins

A29SEP18B\_10-9



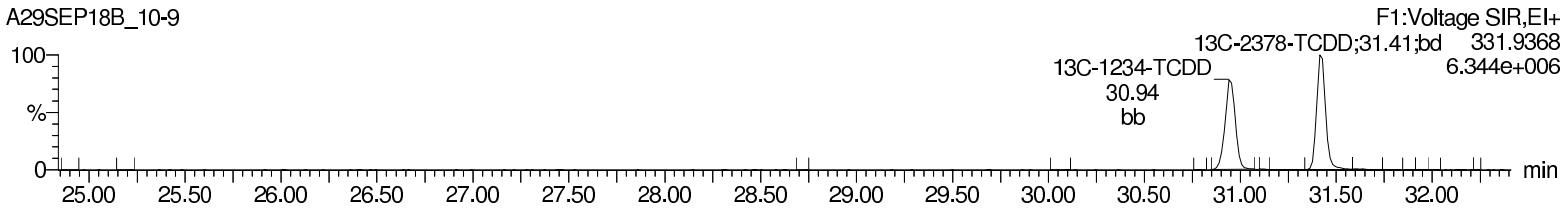
### Total-tetradioxins

A29SEP18B\_10-9



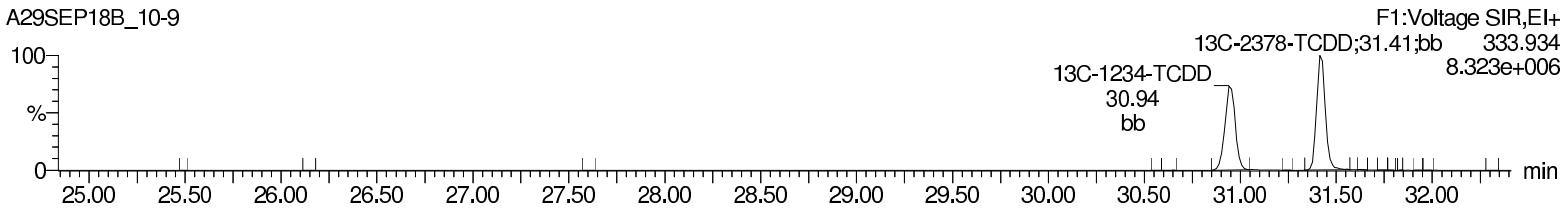
### 13C-2378-TCDD

A29SEP18B\_10-9



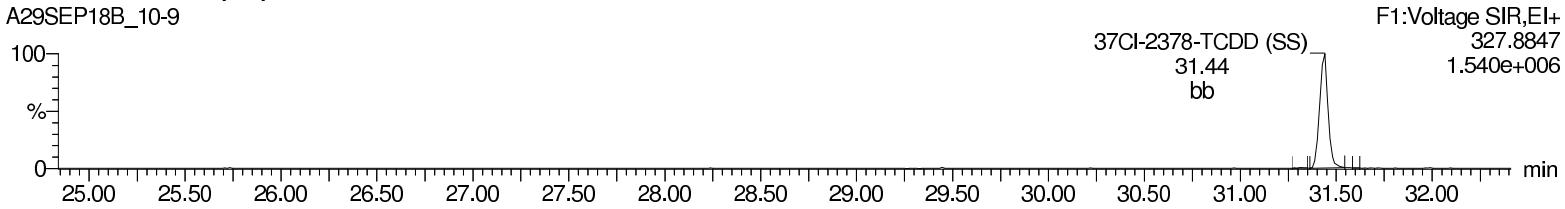
### 13C-2378-TCDD

A29SEP18B\_10-9



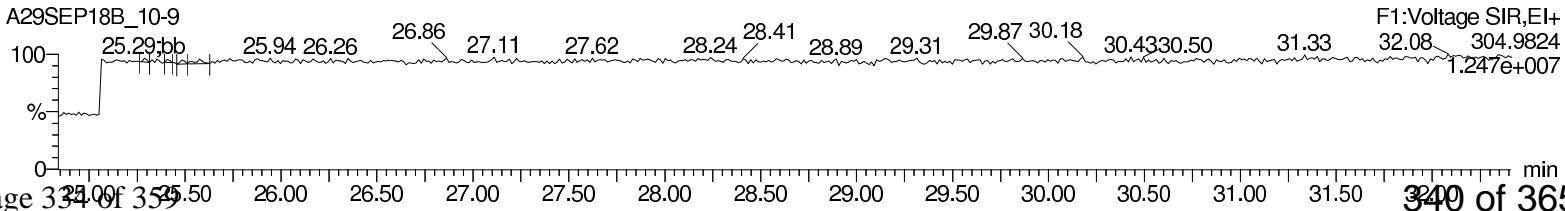
### 37Cl-2378-TCDD (SS)

A29SEP18B\_10-9



### Lock Mass F1

A29SEP18B\_10-9



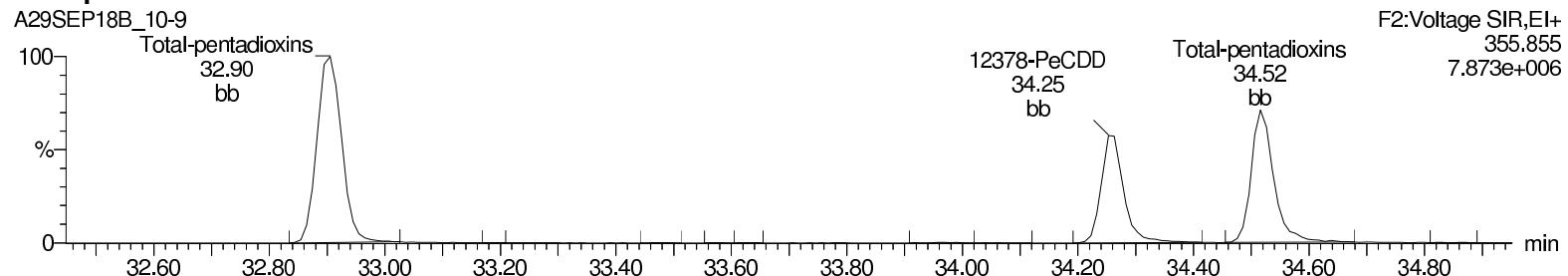
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Last Altered: Wednesday, October 03, 2018 12:51:18 Eastern Standard Time

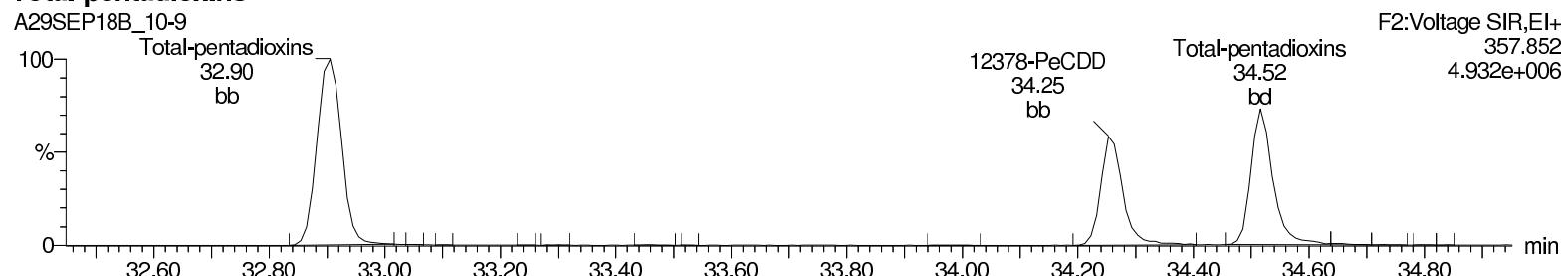
Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

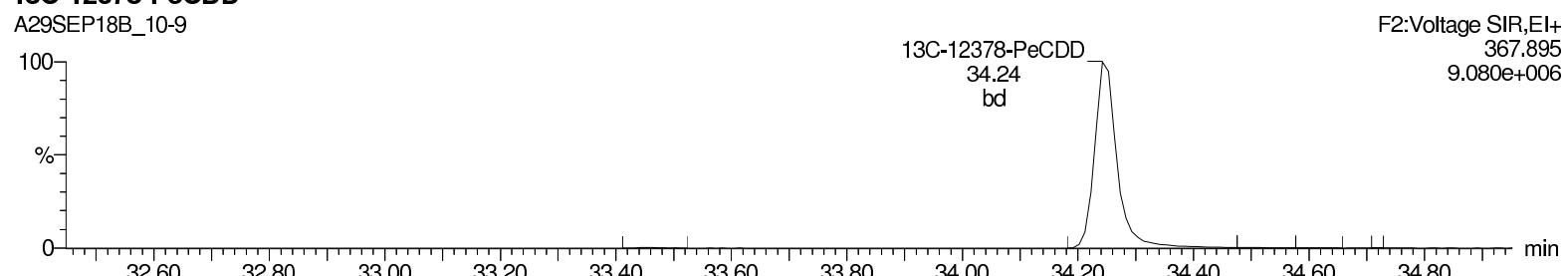
**Total-pentadioxins**



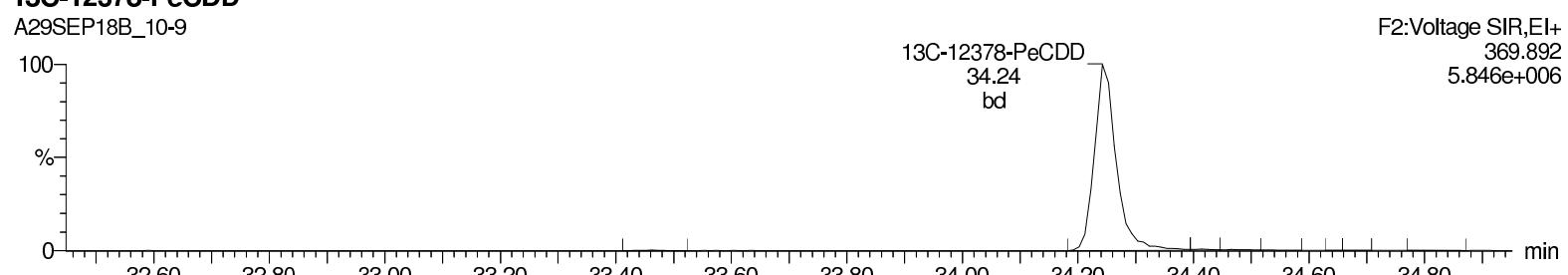
**Total-pentadioxins**



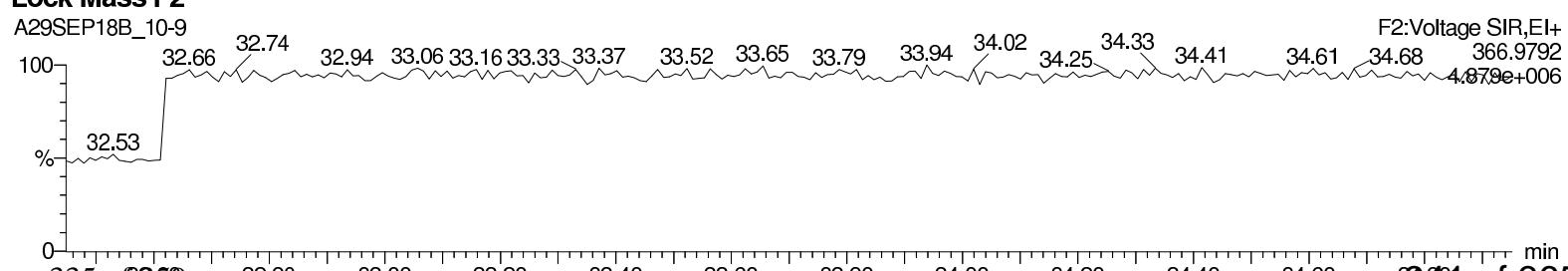
**13C-12378-PeCDD**



**13C-12378-PeCDD**



**Lock Mass F2**



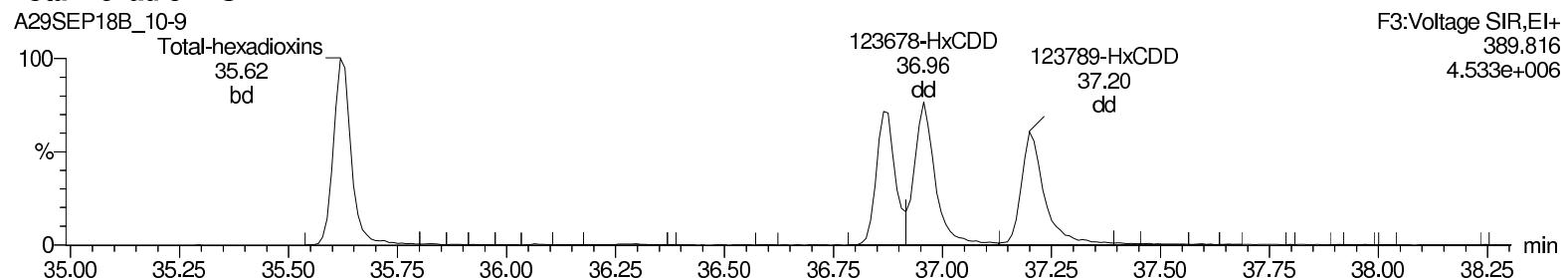
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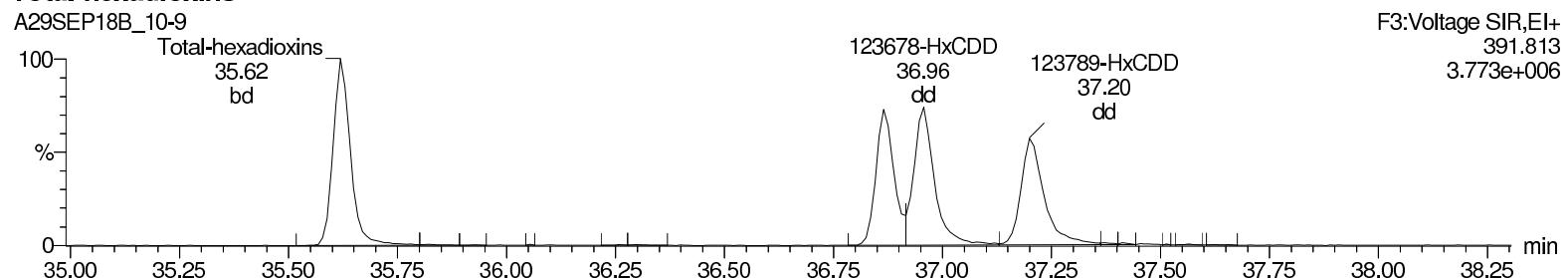
Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

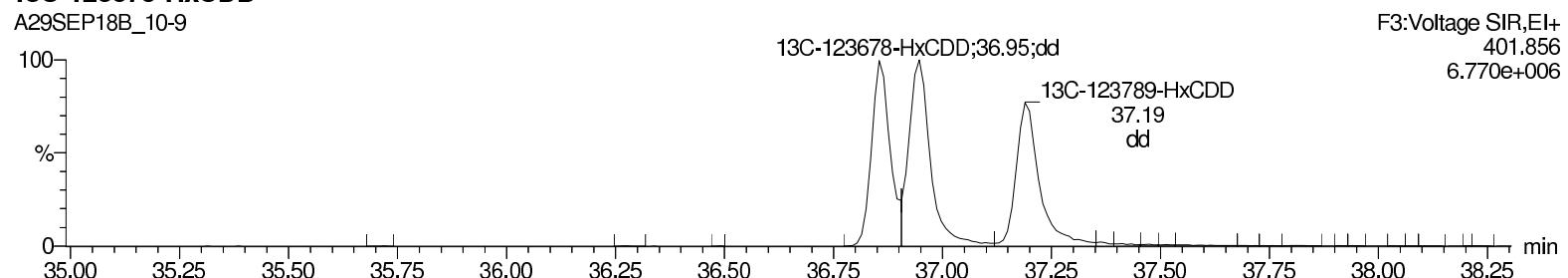
**Total-hexadioxins**



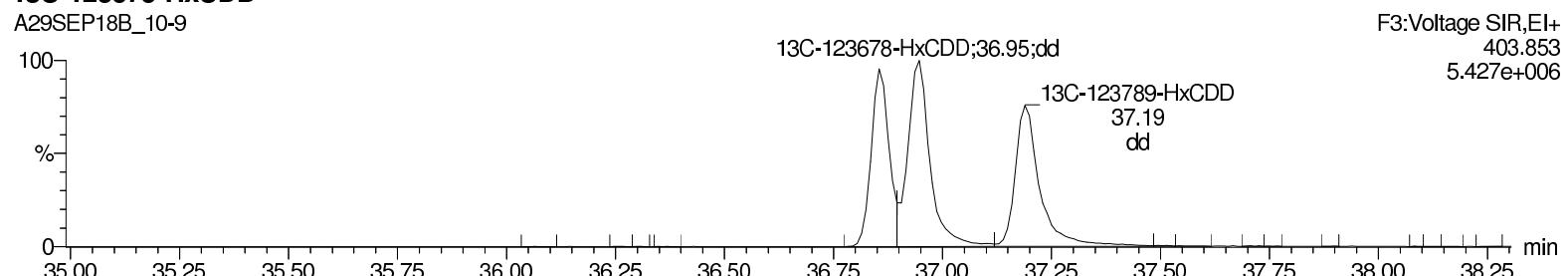
**Total-hexadioxins**



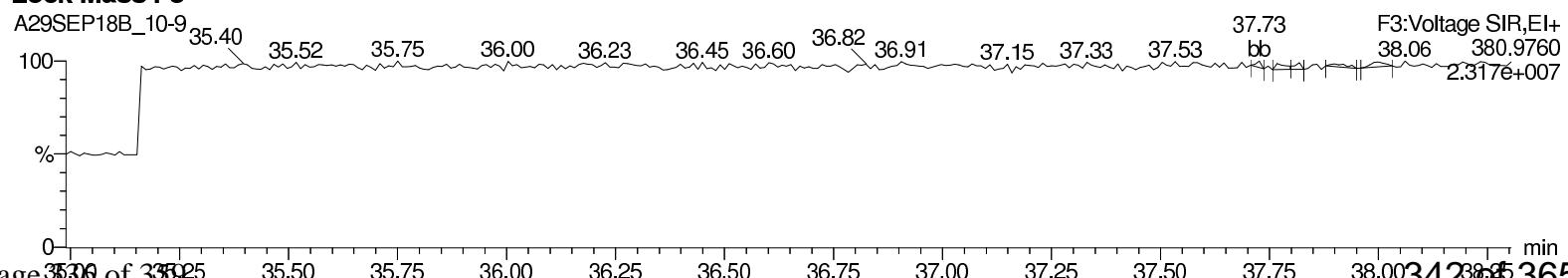
**13C-123678-HxCDD**



**13C-123678-HxCDD**



**Lock Mass F3**



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_10-9.qld

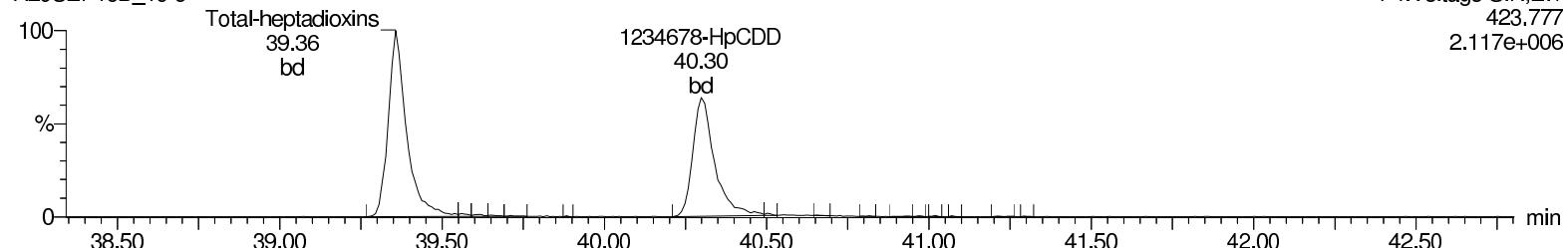
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Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

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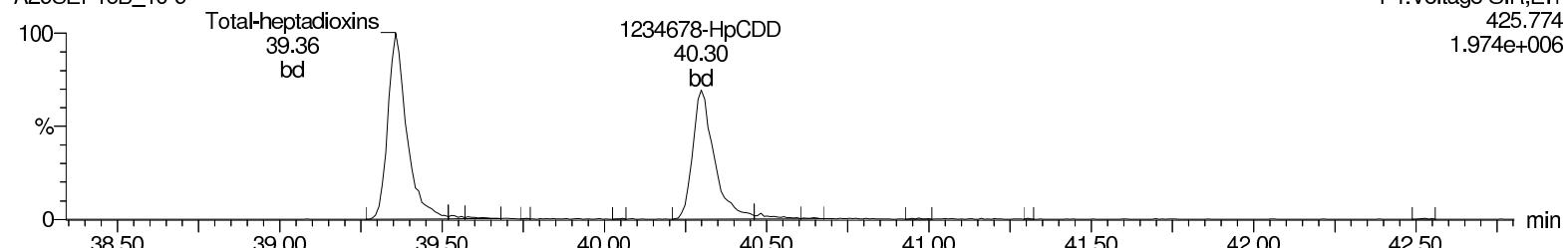
**Total-heptadioxins**

A29SEP18B\_10-9



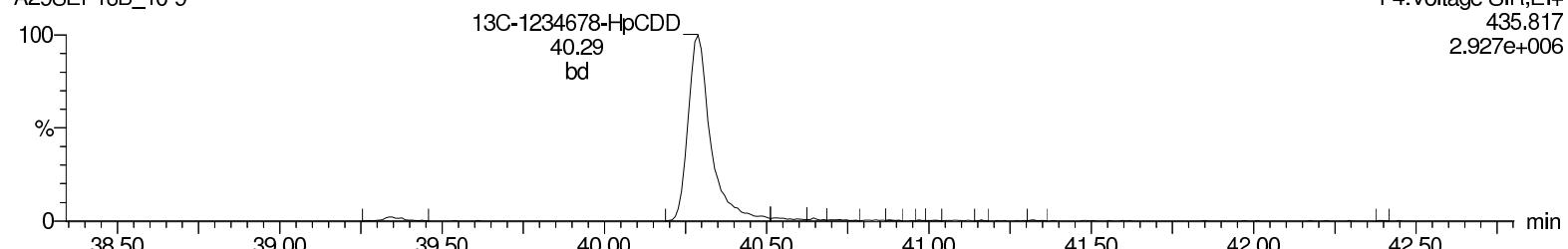
**Total-heptadioxins**

A29SEP18B\_10-9



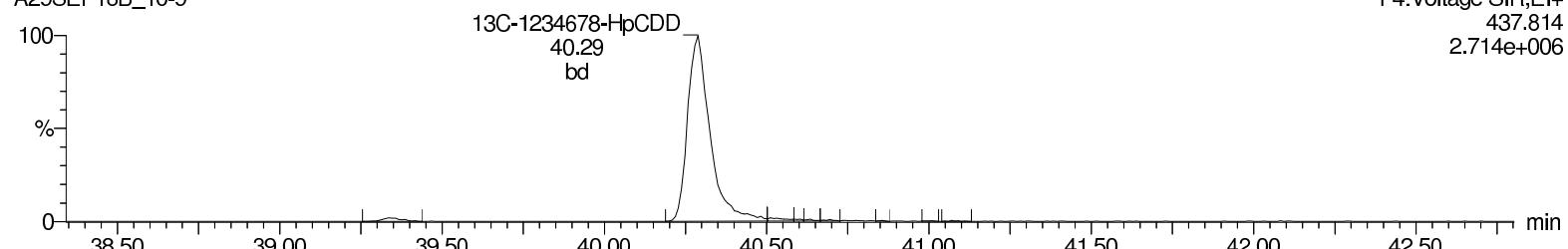
**13C-1234678-HpCDD**

A29SEP18B\_10-9



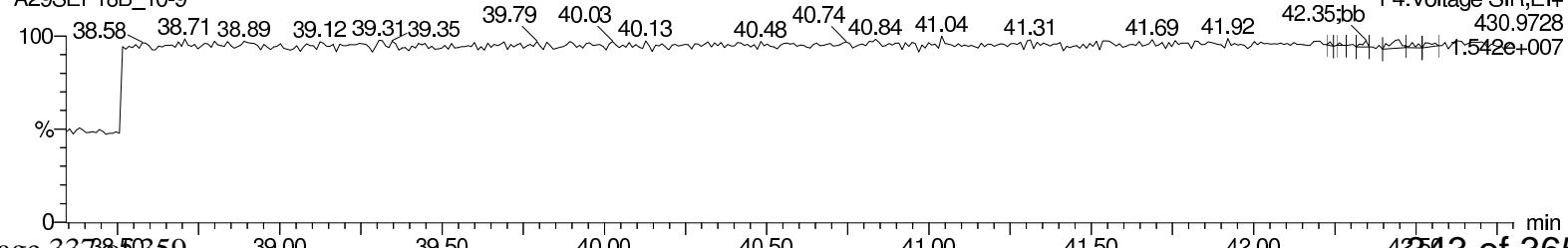
**13C-1234678-HpCDD**

A29SEP18B\_10-9



**Lock Mass F4**

A29SEP18B\_10-9



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_10-9.qld

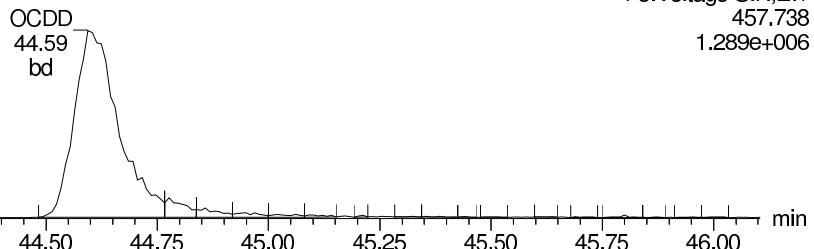
Last Altered: Wednesday, October 03, 2018 12:51:18 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

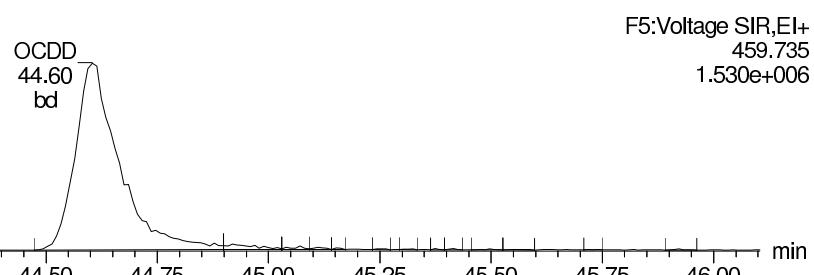
**OCDD**

A29SEP18B\_10-9



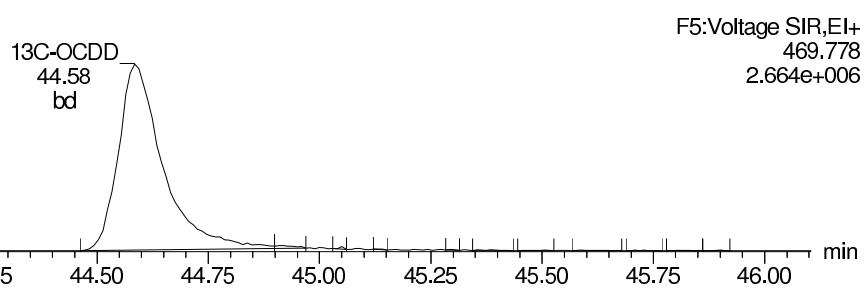
**OCDD**

A29SEP18B\_10-9



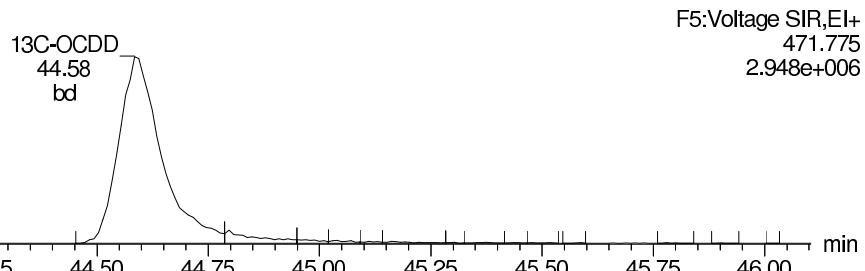
**13C-OCDD**

A29SEP18B\_10-9



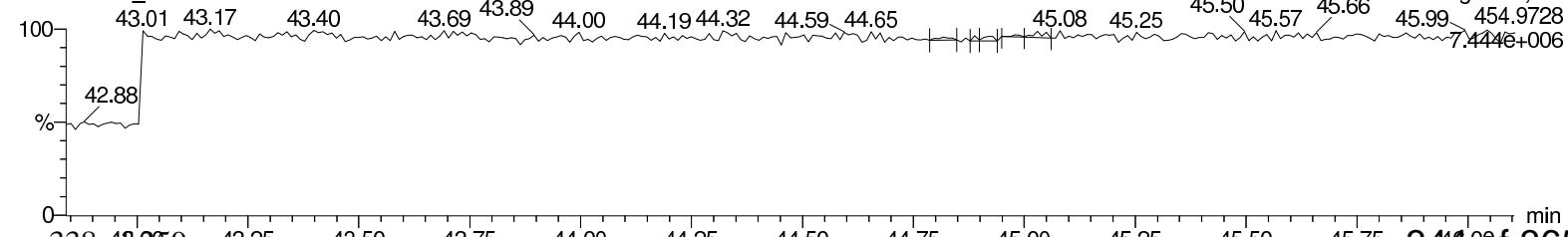
**13C-OCDD**

A29SEP18B\_10-9



**Lock Mass F5**

A29SEP18B\_10-9



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_10-9.qld

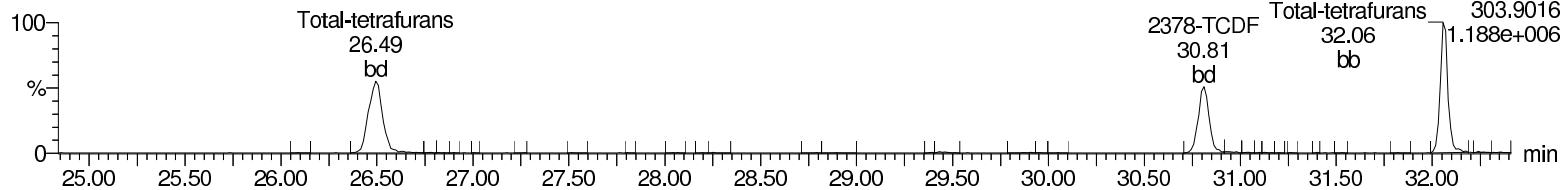
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Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

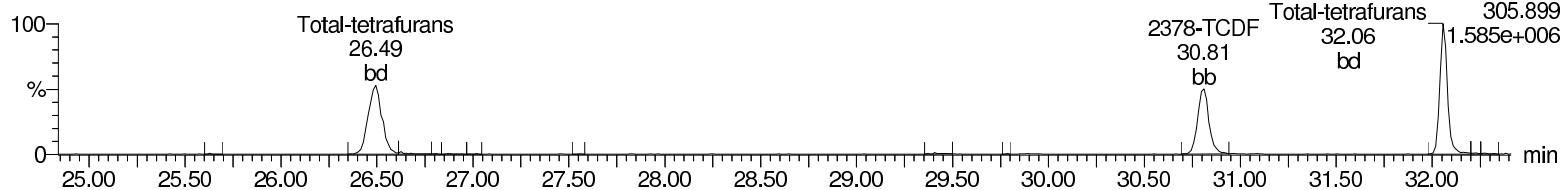
**Total-tetrafurans**

A29SEP18B\_10-9



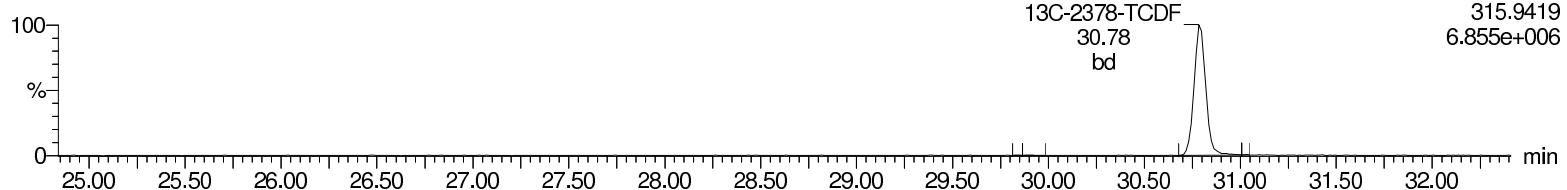
**Total-tetrafurans**

A29SEP18B\_10-9



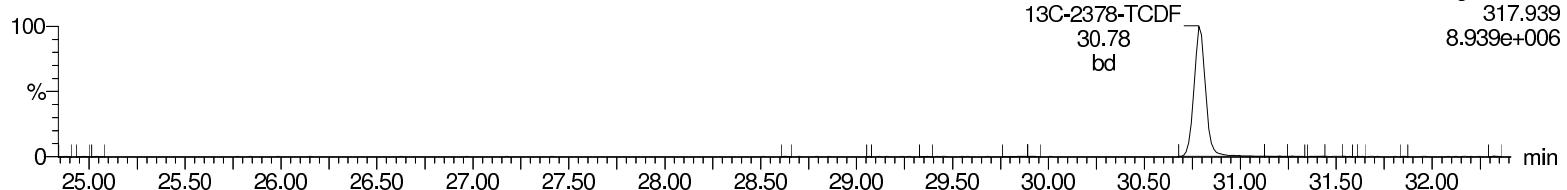
**13C-2378-TCDF**

A29SEP18B\_10-9



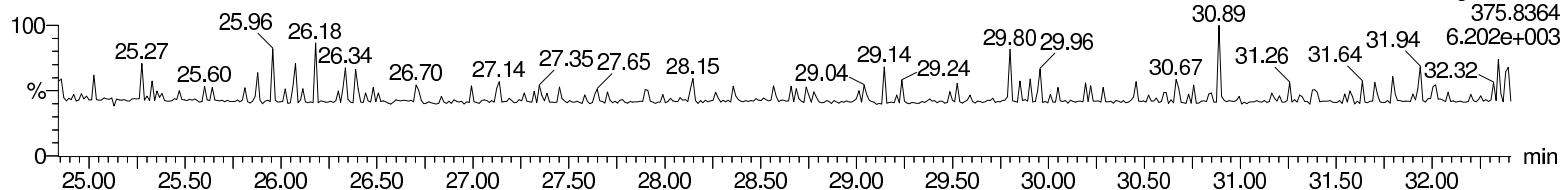
**13C-2378-TCDF**

A29SEP18B\_10-9



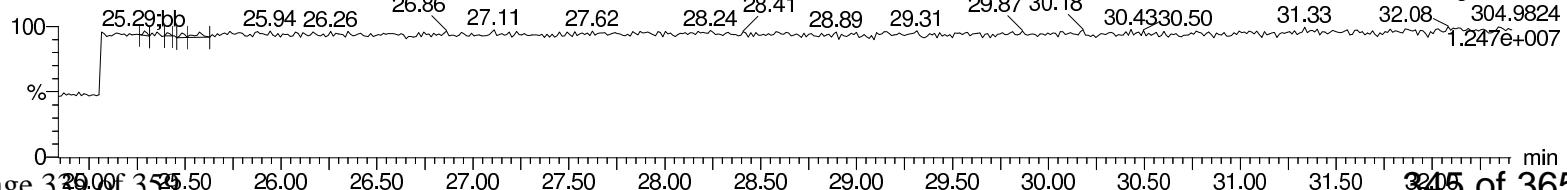
**HxDPE**

A29SEP18B\_10-9



**Lock Mass F1**

A29SEP18B\_10-9



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_10-9.qld

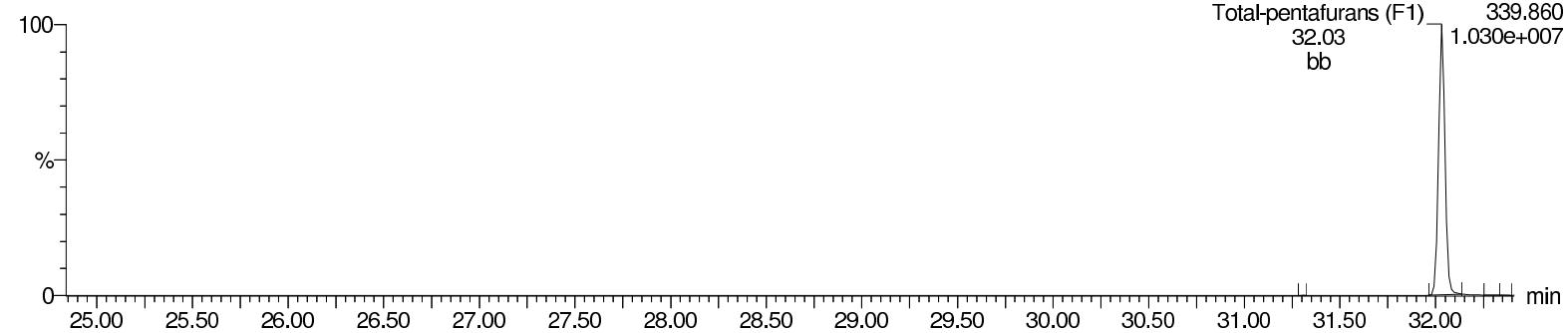
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Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

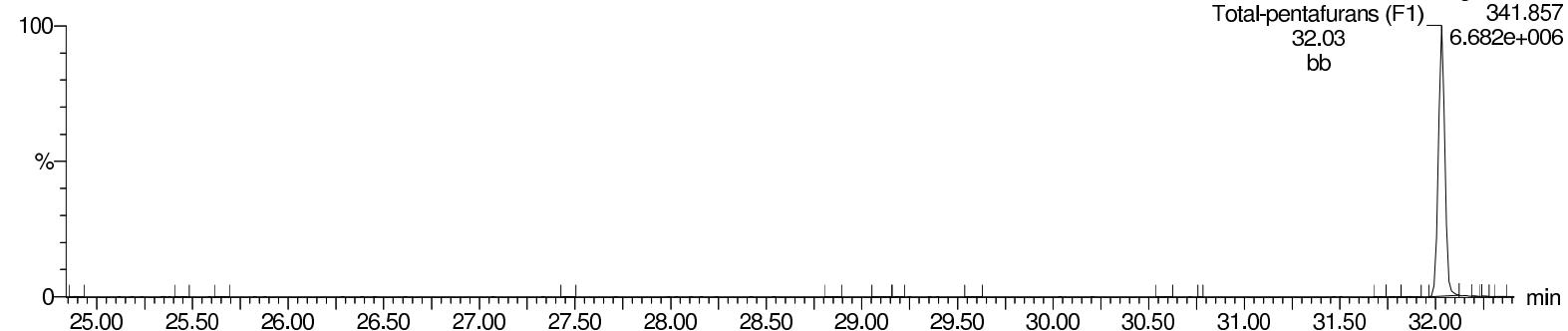
### Total-pentafurans (F1)

A29SEP18B\_10-9



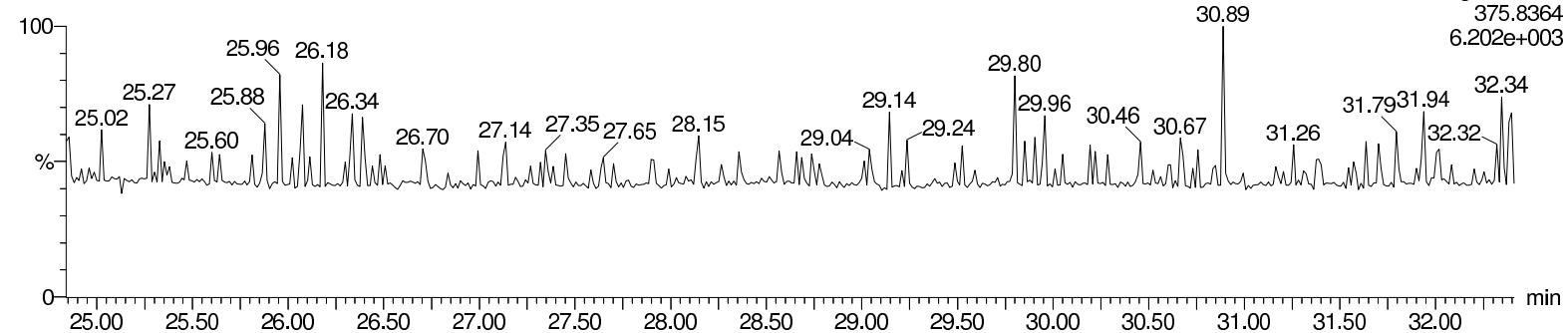
### Total-pentafurans (F1)

A29SEP18B\_10-9



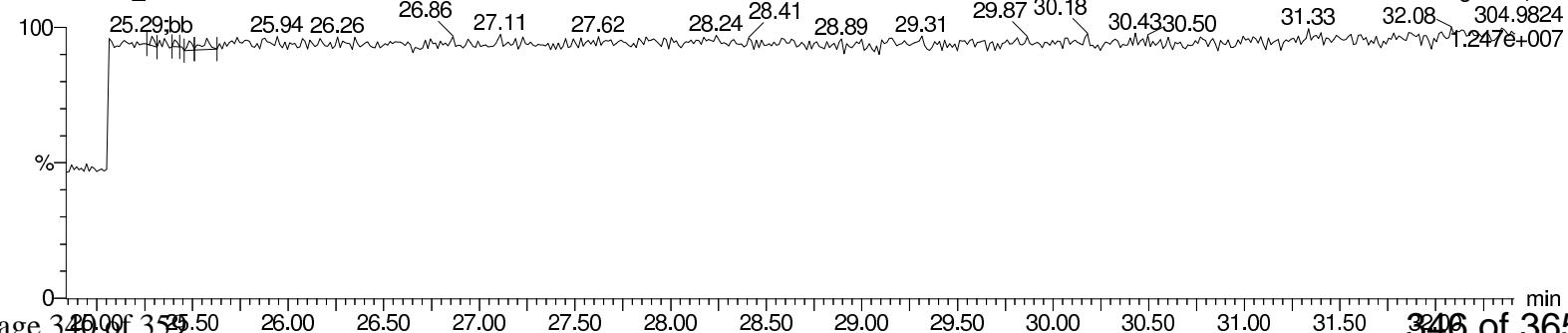
### HxDPE

A29SEP18B\_10-9



### Lock Mass F1

A29SEP18B\_10-9



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_10-9.qld

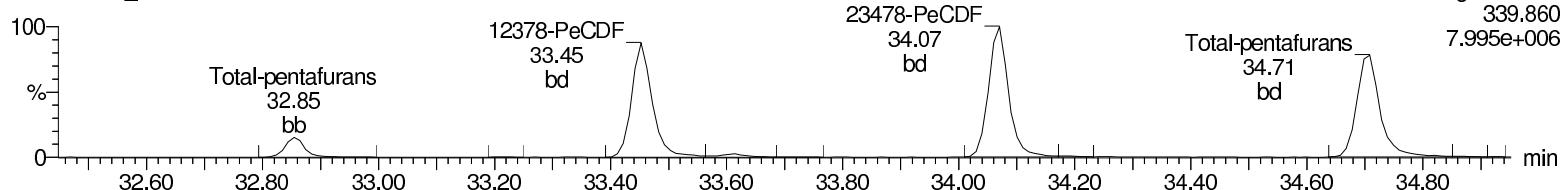
Last Altered: Wednesday, October 03, 2018 12:51:18 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

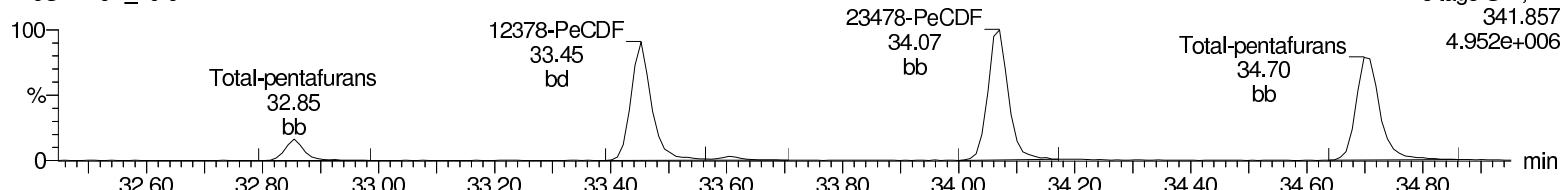
**Total-pentafurans**

A29SEP18B\_10-9



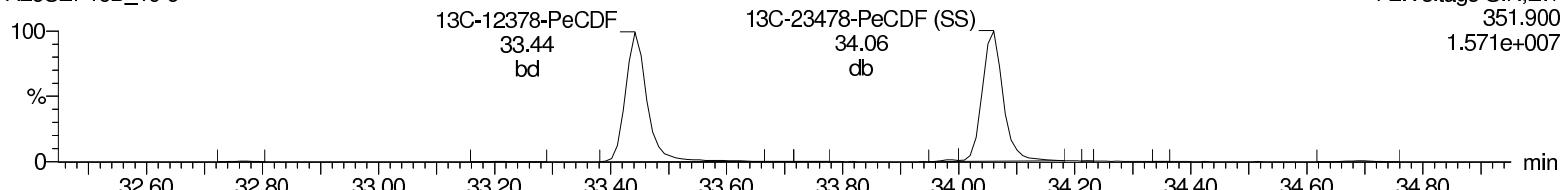
**Total-pentafurans**

A29SEP18B\_10-9



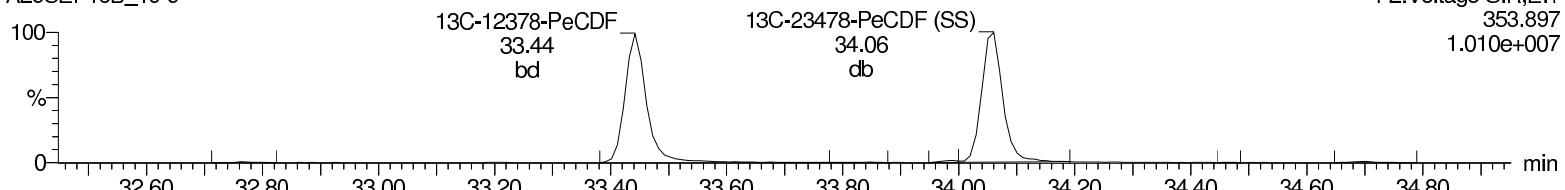
**13C-12378-PeCDF**

A29SEP18B\_10-9



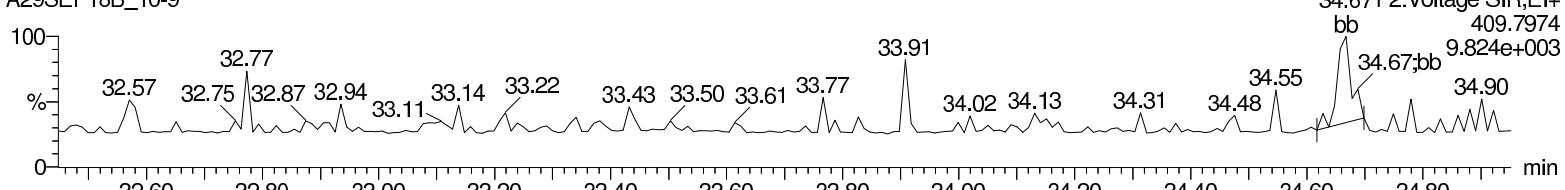
**13C-12378-PeCDF**

A29SEP18B\_10-9



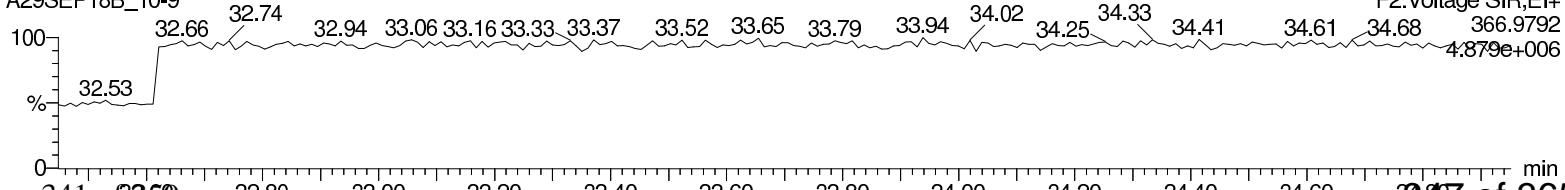
**HpDPE**

A29SEP18B\_10-9



**Lock Mass F2**

A29SEP18B\_10-9



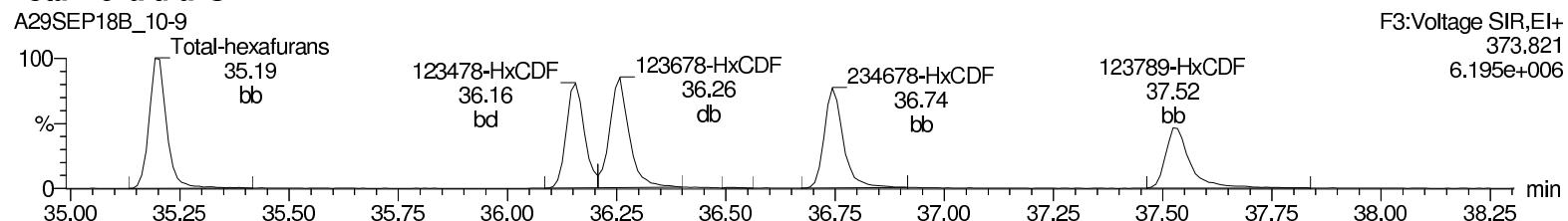
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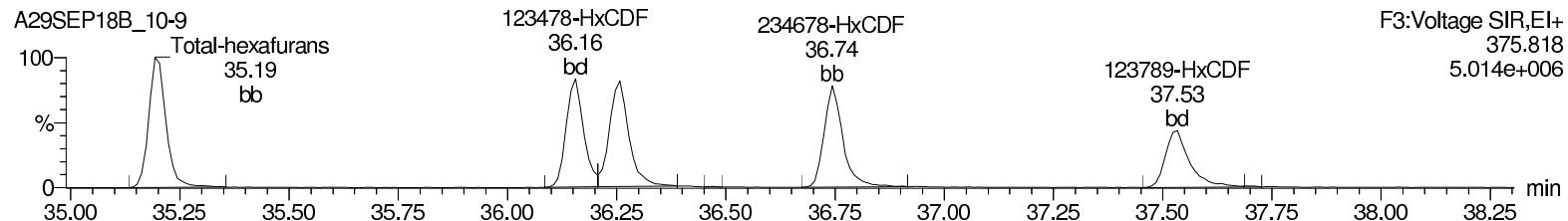
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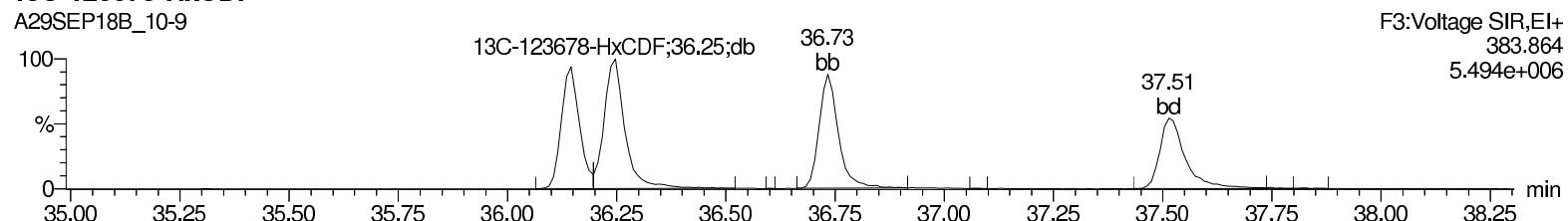
**Total-hexafurans**



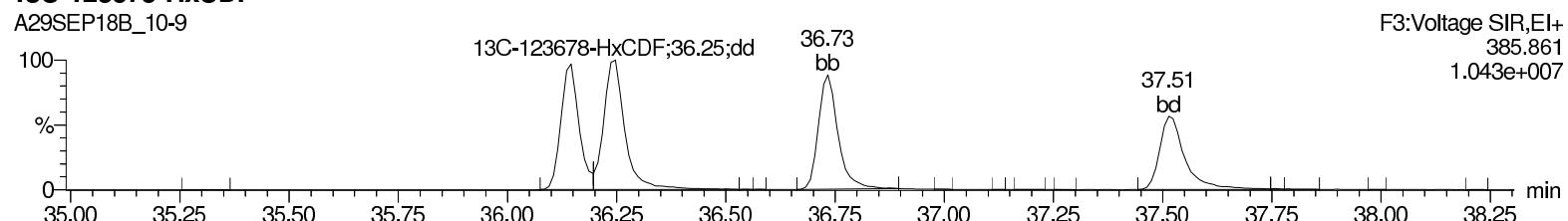
**Total-hexafurans**



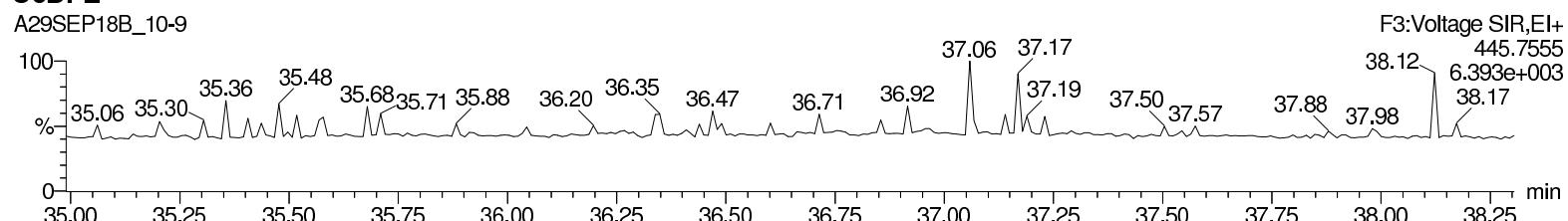
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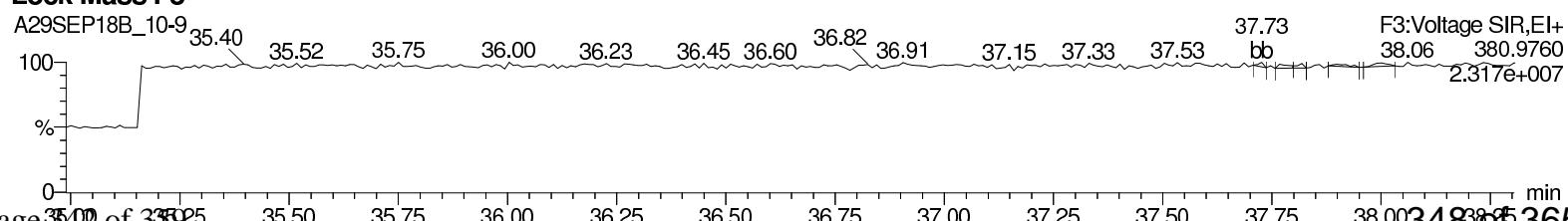
**13C-123678-HxCDF**



**OcDPE**



**Lock Mass F3**



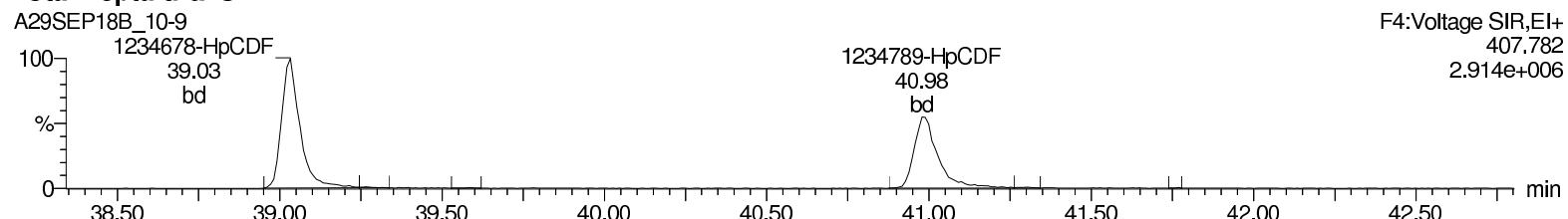
Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_10-9.qld

Last Altered: Wednesday, October 03, 2018 12:51:18 Eastern Standard Time

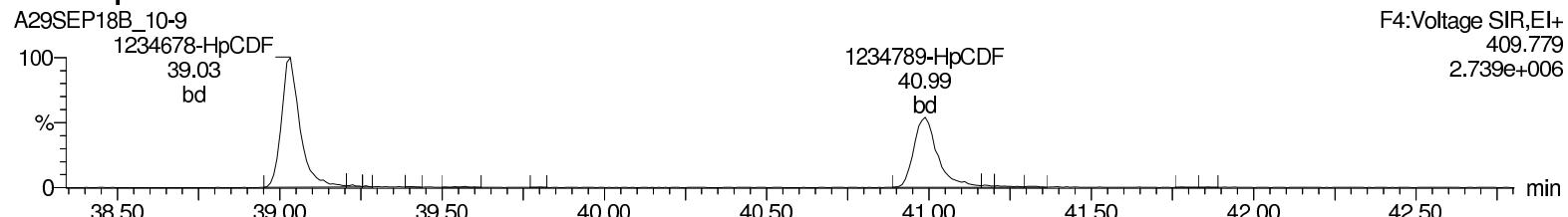
Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

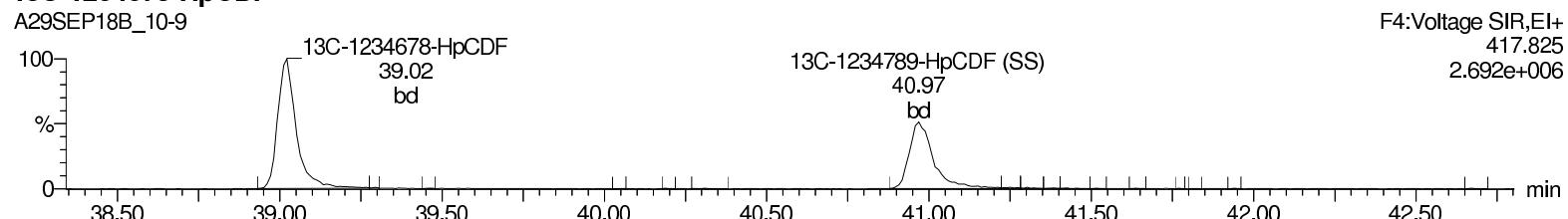
**Total-heptafurans**



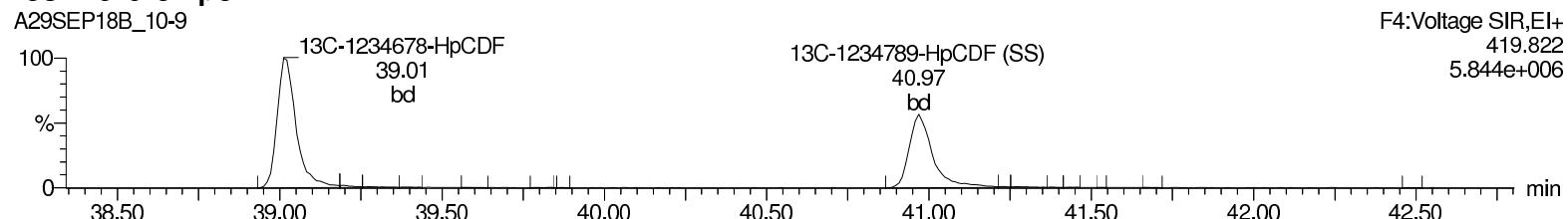
**Total-heptafurans**



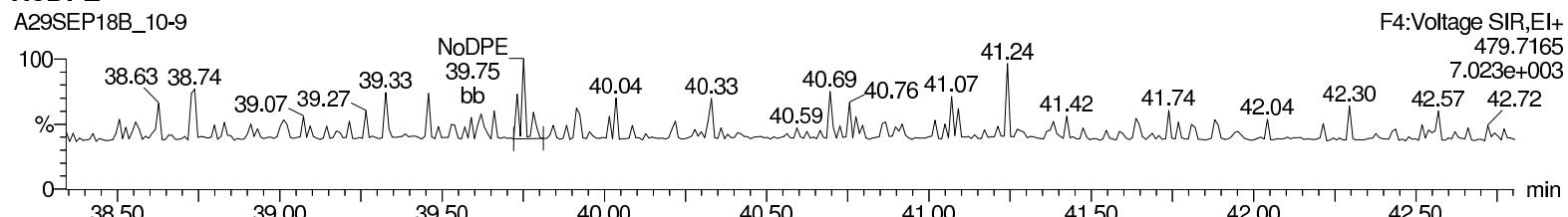
**13C-1234678-HpCDF**



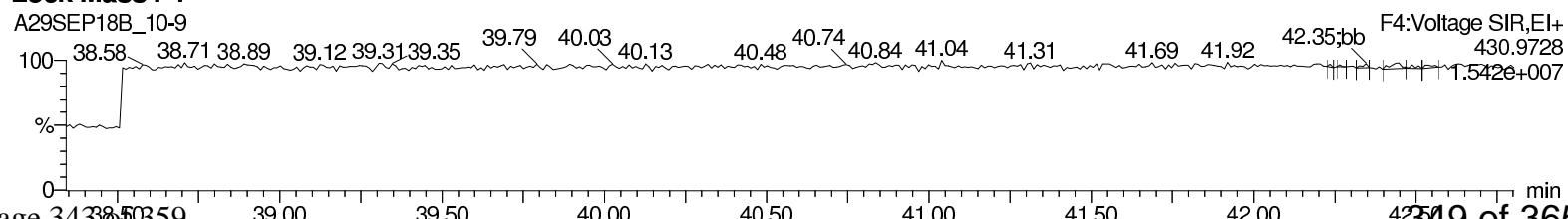
**13C-1234678-HpCDF**



**NoDPE**



**Lock Mass F4**



Dataset: C:\MassLynx\Default.pro\CCAL Results\8290-A29SEP18B\_10-9.qld

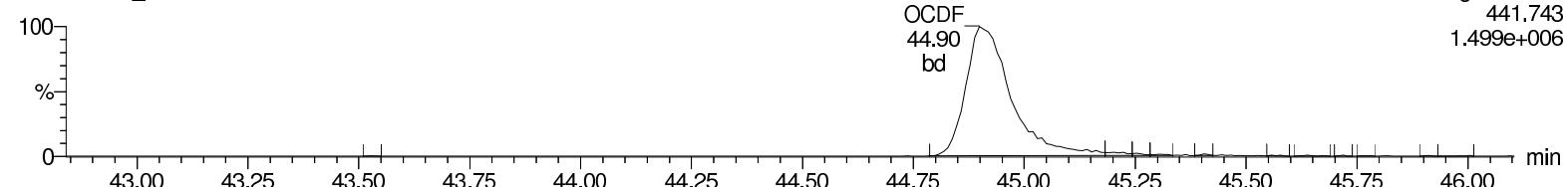
Last Altered: Wednesday, October 03, 2018 12:51:18 Eastern Standard Time

Printed: Wednesday, October 03, 2018 12:53:47 Eastern Standard Time

**Name: A29SEP18B\_10-9, Date: 03-Oct-2018, Time: 11:52:12, ID: CS3WT UD180731-01.1, Description: , Job: A29SEP18B\_10, Task: HRP750\_2, User: MJC**

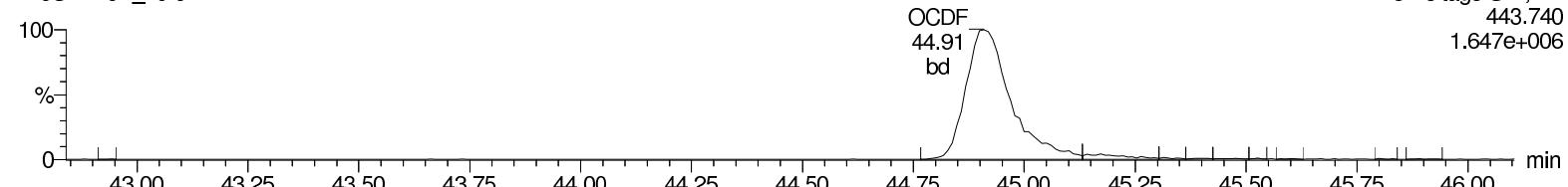
**OCDF**

A29SEP18B\_10-9



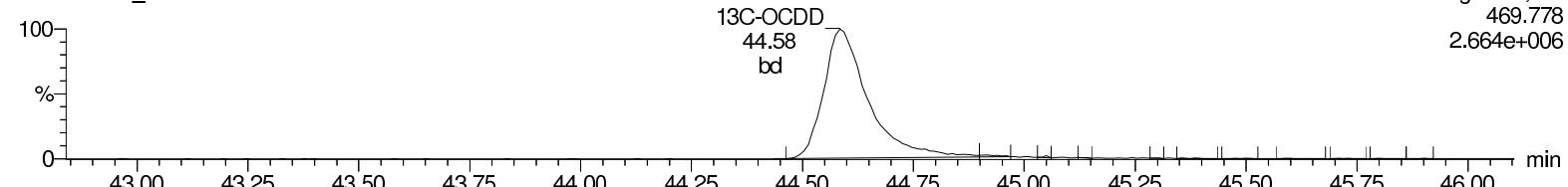
**OCDF**

A29SEP18B\_10-9



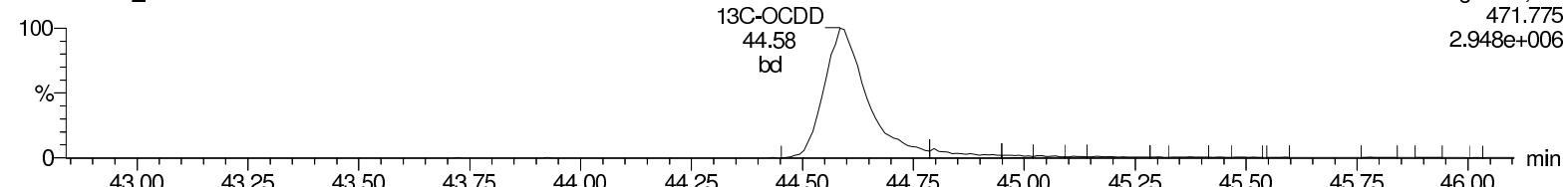
**13C-OCDD**

A29SEP18B\_10-9



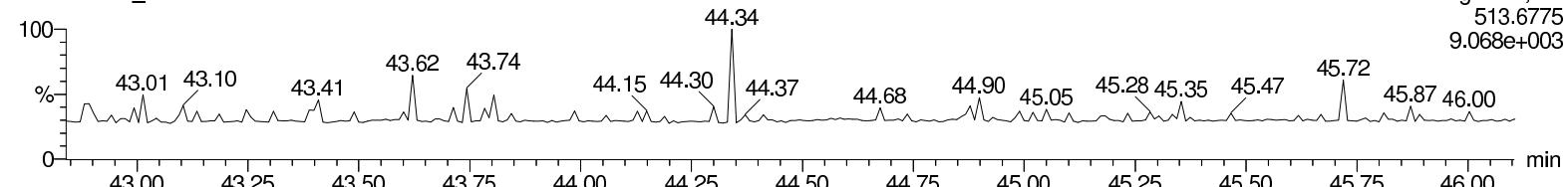
**13C-OCDD**

A29SEP18B\_10-9



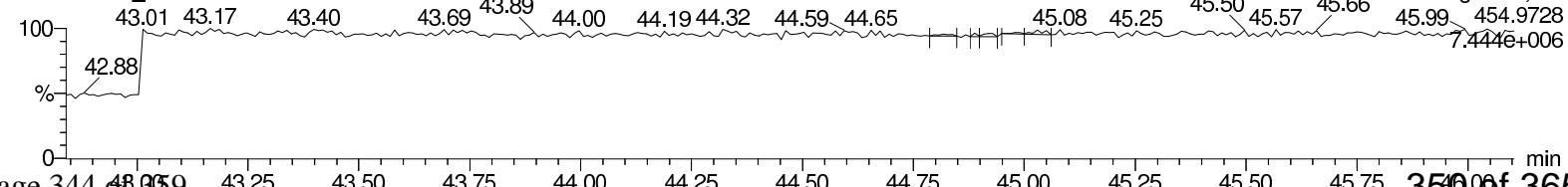
**DeDPE**

A29SEP18B\_10-9



**Lock Mass F5**

A29SEP18B\_10-9



## Runlog Information

*GCO4OCT18*

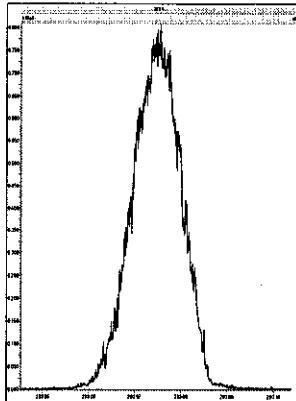
	Name	Instrument	Run Date	Procedure	Analyst	Batch ID	Sample Info	Injection Volume
•	A03OCT18A-1	HRP750_3	03-OCT-2018 13:44	A03OCT18A	Matt Cash		CS3WT 1613CS3 UD180517-09.3	1 uL
•	A03OCT18A-2	HRP750_3	03-OCT-2018 14:06	A03OCT18A	Matt Cash		CPM225 WD180621-01	1 uL
•	A03OCT18A-3	HRP750_3	03-OCT-2018 14:29	A03OCT18A	Matt Cash		SB	1 uL
•	A03OCT18A-4	HRP750_3	03-OCT-2018 14:52	HMS1613_1S	Matt Cash	38670	13867001-2	1 uL
•	A03OCT18A-5	HRP750_3	03-OCT-2018 15:16	HMS1613_1S	Matt Cash	38670	12022170-2 MS	1 uL
•	A03OCT18A-6	HRP750_3	03-OCT-2018 15:39	HMS1613_1S	Matt Cash	38670	12022171-2 MSD	1 uL
•	A03OCT18A-7	HRP750_3	03-OCT-2018 16:02	HMS1613_1S	Matt Cash	38670	13867003-2	1 uL
•	A03OCT18A-8	HRP750_3	03-OCT-2018 16:25	HMS1613_1S	Matt Cash	38670	13867004-2	1 uL
•	A03OCT18A-9	HRP750_3	03-OCT-2018 16:48	HMS1613_1S	Matt Cash	38670	13867009-2	1 uL
•	A03OCT18A-10	HRP750_3	03-OCT-2018 17:11	HMS1613_1S	Matt Cash	38670	13867010-2	1 uL
•	A03OCT18A-11	HRP750_3	03-OCT-2018 17:34	HMS1613_1S	Matt Cash	38670	13867014-2	1 uL
•	A03OCT18A_2-1	HRP750_3	03-OCT-2018 17:59	A03OCT18A_2	Matt Cash		CS3WT 1613CS3 UD180517-09.3	1 uL
•	A03OCT18A_2-2	HRP750_3	03-OCT-2018 18:22	A03OCT18A_2	Matt Cash		CPM225 WD180621-01	1 uL
•	A03OCT18A_2-3	HRP750_3	03-OCT-2018 18:45	A03OCT18A_2	Matt Cash		SB	1 uL
•	A03OCT18A_2-4	HRP750_3	03-OCT-2018 19:07	HMS8290_1S	Matt Cash	38678	13881001-2	1 uL
•	A03OCT18A_2-5	HRP750_3	03-OCT-2018 19:31	HMS8290_1S	Matt Cash	38678	13881003-2	1 uL
•	A03OCT18A_2-6	HRP750_3	03-OCT-2018 19:54	HMS8290_1S	Matt Cash	38678	13881004-2	1 uL
•	A03OCT18A_2-7	HRP750_3	03-OCT-2018 20:17	HMS8290_1S	Matt Cash	38678	13881005-2	1 uL

• A03OCT18A_2-8	HRP750_3	03-OCT-2018 20:40	HMS8290_1S	Matt Cash	38678	12022179-2 MS	1 uL
• A03OCT18A_2-9	HRP750_3	03-OCT-2018 21:03	HMS8290_1S	Matt Cash	38678	12022180-2 MSD	1 uL
• A03OCT18A_2-10	HRP750_3	03-OCT-2018 21:26	HMS1613_1S	Matt Cash	38717	13915001-2	1 uL
• A03OCT18A_2-11	HRP750_3	03-OCT-2018 21:49	HMS1613_1S	Matt Cash	38717	13923002-2	1 uL
• A03OCT18A_2-12	HRP750_3	03-OCT-2018 22:12	HMS1613_1S	Matt Cash	38717	13923003-2	1 uL
• A03OCT18A_2-13	HRP750_3	03-OCT-2018 22:35	HMS1613_1S	Matt Cash	38717	13923004-2	1 uL
• A03OCT18A_2-14	HRP750_3	03-OCT-2018 22:58	HMS1613_1S	Matt Cash	38717	13923005-2	1 uL
• A03OCT18A_2-15	HRP750_3	03-OCT-2018 23:21	HMS8290_1S	Matt Cash	38678	13881007-2	1 uL
• A03OCT18A_2-16	HRP750_3	03-OCT-2018 23:44	HMS8290_1S	Matt Cash	38678	13881010-2	1 uL
• A03OCT18A_2-17	HRP750_3	04-OCT-2018 00:07	HMS8290_1S	Matt Cash	38746	13866001-3	1 uL
• A03OCT18A_2-18	HRP750_3	04-OCT-2018 00:30	HMS8290_1S	Matt Cash	38747	13913001-2	1 uL
• A03OCT18A_2-19	HRP750_3	04-OCT-2018 00:54	HMS8290_1S	Matt Cash	38747	12022224-2 MS	1 uL
• A03OCT18A_2-20	HRP750_3	04-OCT-2018 01:17	HMS8290_1S	Matt Cash	38747	12022225-2 MSD	1 uL
• A03OCT18A_2-21	HRP750_3	04-OCT-2018 01:40	HMS8290_1S	Matt Cash	38747	13913002-2	1 uL
• A03OCT18A_2-22	HRP750_3	04-OCT-2018 02:03	HMS8290_1S	Matt Cash	38747	13953001-2	1 uL
• A03OCT18A_2-23	HRP750_3	04-OCT-2018 02:26	HMS8290_1S	Matt Cash	38747	13953002-2	1 uL
• A03OCT18A_2-24	HRP750_3	04-OCT-2018 02:49	A03OCT18A_2	Matt Cash		CS3WT 1613CS3 UD180517-09.3	1 uL

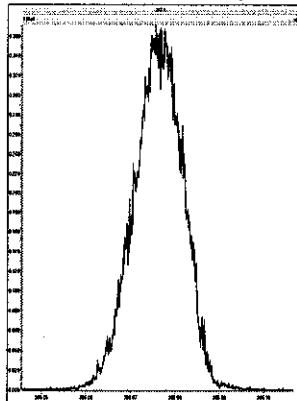
File: Experiment: 225TCDF.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, October 03, 2018 13:43:54 Eastern Standard Time

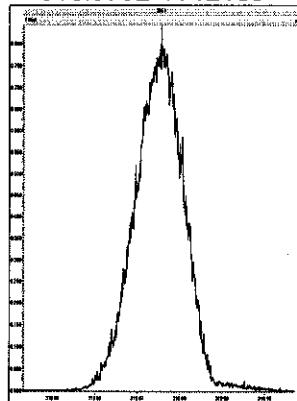
M 292.9824 R 12313



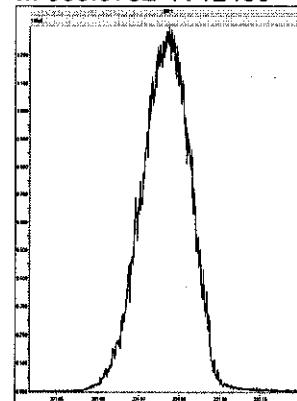
M 304.9824 R 12197



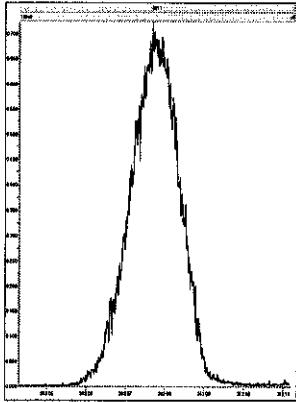
M 318.9792 R 12189



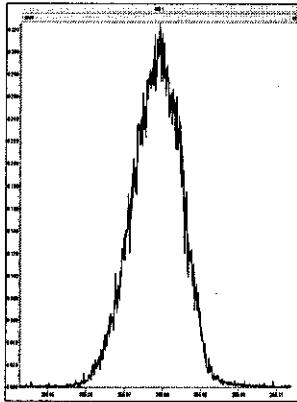
M 330.9792 R 12436



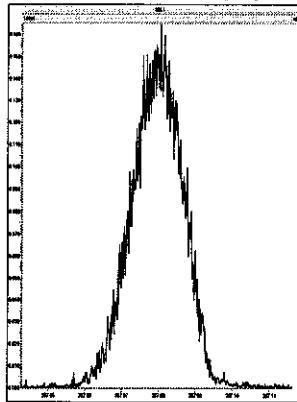
M 342.9792 R 12372



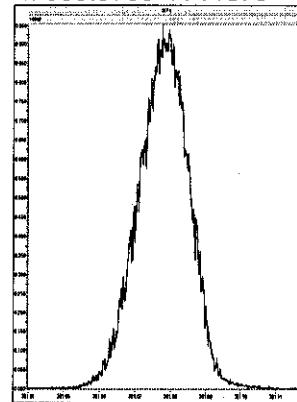
M 354.9792 R 11961



M 366.9792 R 12379

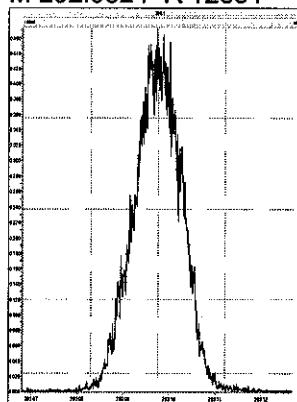


M 380.9760 R 11679

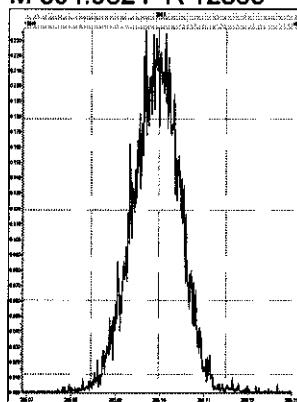


Printed: Wednesday, October 03, 2018 17:59:19 Eastern Standard Time

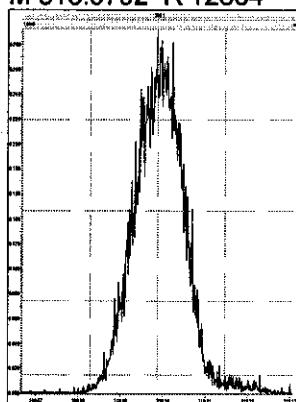
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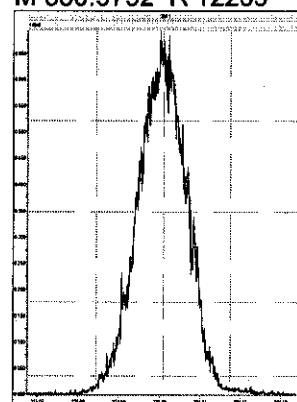
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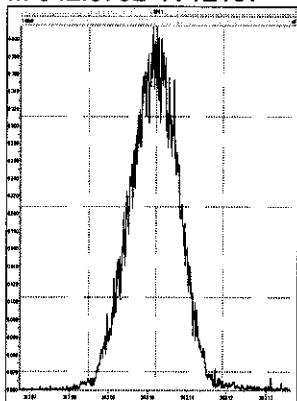
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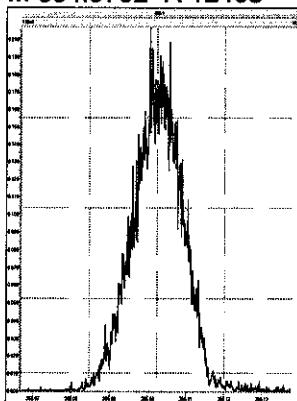
M 330.9792 R 12259



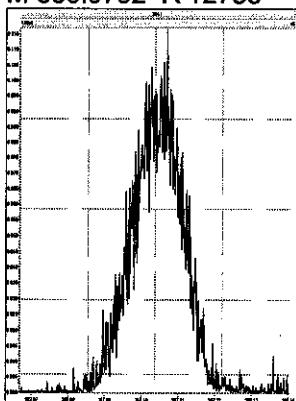
M 342.9792 R 12107



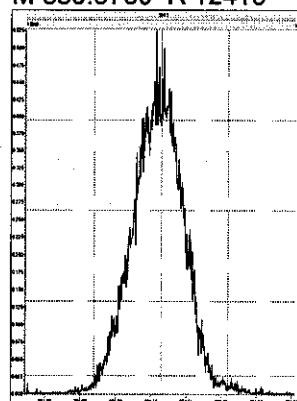
M 354.9792 R 12468



M 366.9792 R 12788

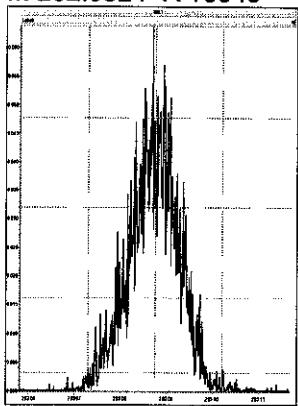


M 380.9760 R 12416

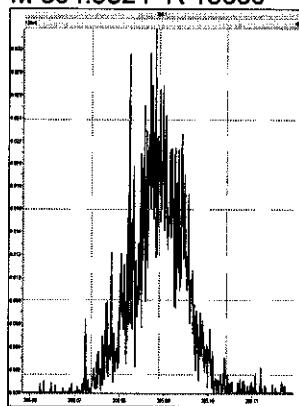


Printed: Thursday, October 04, 2018 03:14:12 Eastern Standard Time

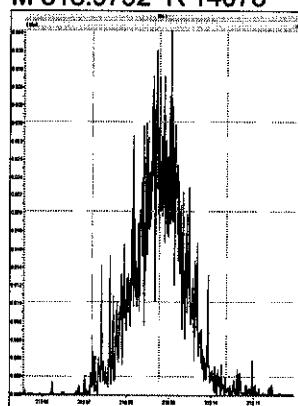
M 292.9824 R 13049



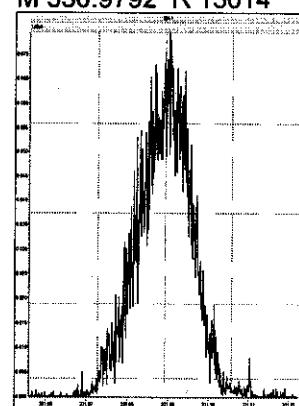
M 304.9824 R 13660



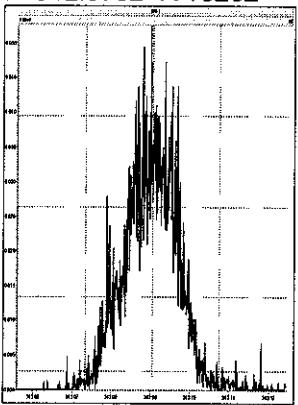
M 318.9792 R 14078



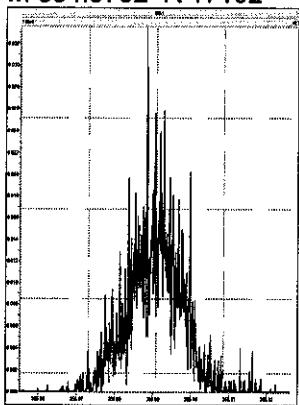
M 330.9792 R 13014



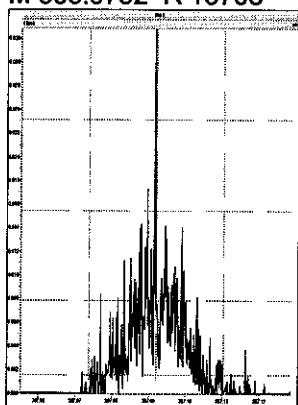
M 342.9792 R 13262



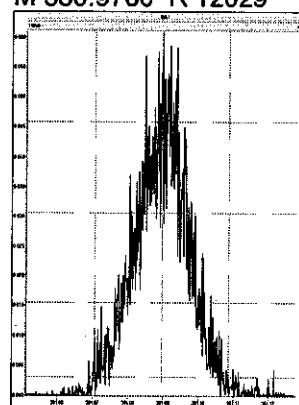
M 354.9792 R 17102



M 366.9792 R 16708



M 380.9760 R 12029



COLUMN CHECK (18% & 6%)  
METHOD DXCF  
**CPM225 WD180621-01**  
A03OCT18A2

**HRP750\_3**

100

12.70

16.15

16.03

16.31

%

13.64

14.00  
15.00  
16.00  
17.00  
18.00  
19.00  
20.00  
21.00

Time

03-Oct-2018 14:06:56  
Voltage SIR 13 Channels E+

303.9016  
1.00e6

COLUMN CHECK (15% & 5%)  
METHOD DXCF  
**CPM225 WD180621-01**  
A03OCT18A\_2-2

HRP750\_3

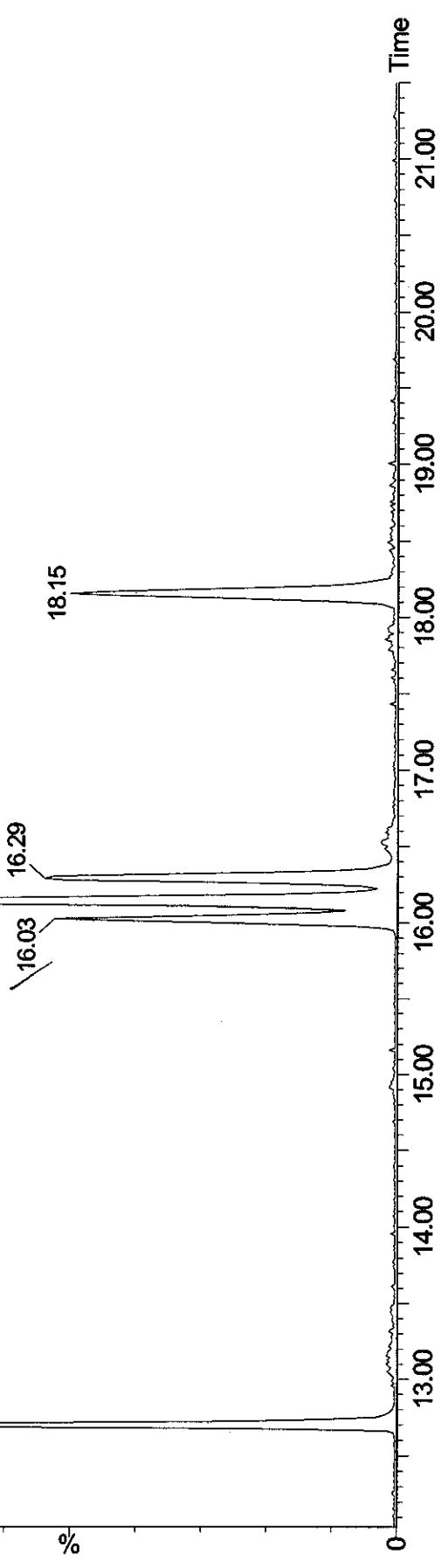
16.15

12.70

100

%

03-Oct-2018 18:22:03  
Voltage SIR 13 Channels El+  
303.9016  
1.24e6



**Quantify Sample Summary Report**

Method DXCF TCDF CCAL Report

Dataset: C:\MassLynx\Default.pro\CCAL Results\CF-A03OCT18A-1.qd

Last Altered: Thursday, October 04, 2018 09:06:19 Eastern Standard Time

Printed: Thursday, October 04, 2018 09:06:55 Eastern Standard Time

Oct 04 Oct 18

**MassLynx 4.1**

Method: C:\MassLynx\DEFAULT.PRO\MethDB\CF\_A\_225TCDF.mdb 29 Jun 2018 14:22:50  
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\CF-A02MAY18.cdb 02 May 2018 16:26:15

Name: A03OCT18A-1, Date: 03-Oct-2018, Time: 13:44:20, ID: CS3WT 1613CS3 UD180517-09.3, Description: , Job: A03OCT18A, Task: HRP750\_3, User: MJC

#	Name	Ion Area	Ion2 Area	Response	RT	RRT	RA	Fail?	ppml	EDL	RRF	Mean	%D	Height	S/N1	Height2	S/N2	M	M2
1	2378-TCDF	7.82e4	1.06e5	1.84e5	16.17	1.001	0.74	NO	10.451	0.0763	0.916	0.876	-4.5	1.34e6	3632	367.6	1.73e6	5169	333.9
2	13C-2378-TCDF	8.94e5	1.11e6	2.01e6	16.16	1.064	0.80	NO	112.965	0.216	1.523	1.348	13.0	1.47e7	14617	1002.9	1.81e7	9356	1930.0
3	13C-1234-TCDD	5.82e5	7.37e5	1.32e6	15.19	0.000	0.79	NO	100.000	0.194	1.000	1.000	0.0	1.09e7	9251	1178.6	1.35e7	6700	2010.0

**Quantify Sample Report**      **MassLynx 4.1**  
Method DXCF TCDF CCAL Report

Dataset: C:\MassLynx\Default.pro\CCAL Results\CF-A03OCT18A-1.qld

Last Altered: Thursday, October 04, 2018 09:06:19 Eastern Standard Time

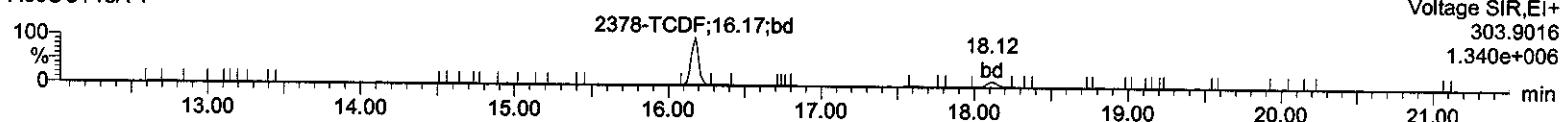
Printed: Thursday, October 04, 2018 09:06:55 Eastern Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_225TCDF.mdb 29 Jun 2018 14:22:50  
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\CF-A02MAY18.cdb 02 May 2018 16:26:15

Name: A03OCT18A-1, Date: 03-Oct-2018, Time: 13:44:20, ID: CS3WT 1613CS3 UD180517-09.3, Description: , Job: A03OCT18A  
Task: HRP750\_3, User: MJC

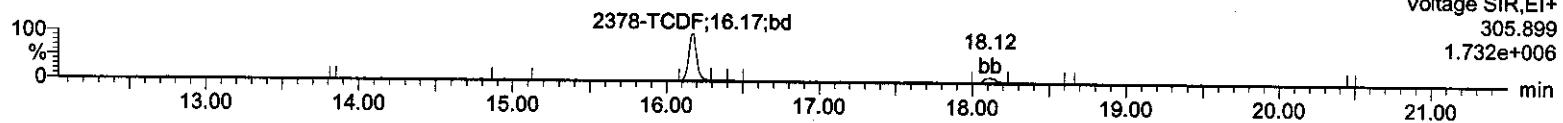
**2378-TCDF**

A03OCT18A-1



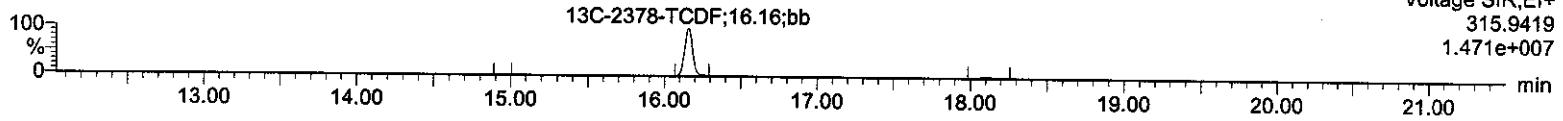
**2378-TCDF**

A03OCT18A-1



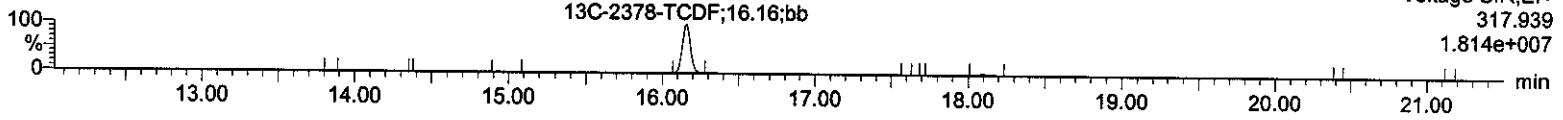
**13C-2378-TCDF**

A03OCT18A-1



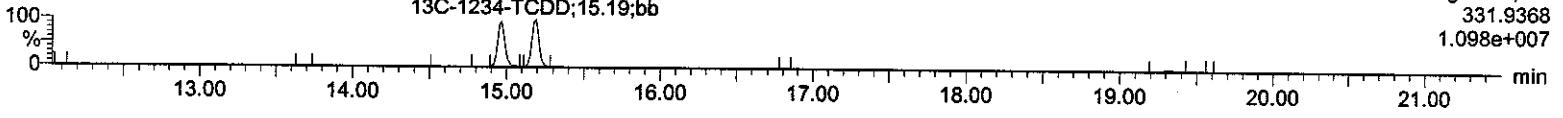
**13C-2378-TCDF**

A03OCT18A-1



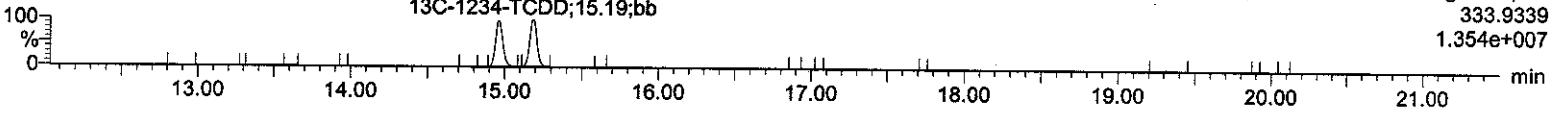
**13C-1234-TCDD**

A03OCT18A-1



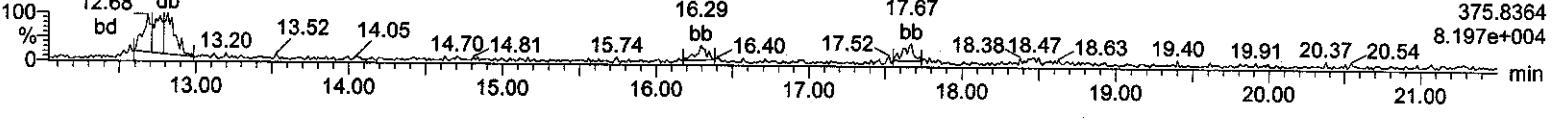
**13C-1234-TCDD**

A03OCT18A-1



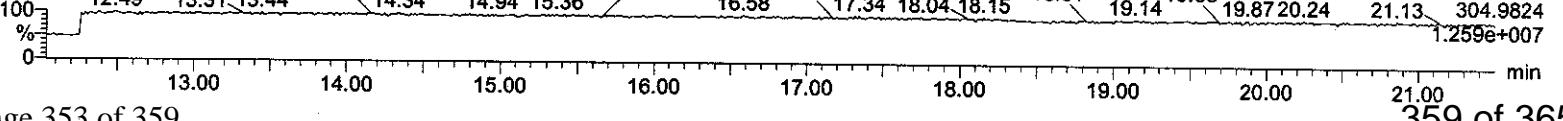
**HxDPE**

A03OCT18A-1 12.82



**Lock Mass F1**

A03OCT18A-1



**Quantify Sample Summary Report**

Method DXCF TCDF CCAL Report

Dataset: C:\MassLynx\Default.pro\CCAL\_Results\CF-A03OCT18A\_2-1.qld  
Last Altered: Thursday, October 04, 2018 09:28:48 Eastern Standard Time  
Printed: Thursday, October 04, 2018 09:29:20 Eastern Standard Time

**MassLynx 4.1**

Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_225TCDF.mdb 29 Jun 2018 14:22:50  
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\CF-A02MAY18.cdb 02 May 2018 16:26:15

Name: A03OCT18A\_2-1, Date: 03-Oct-2018, Time: 17:59:23, ID: CS3WT 1613CS3 UD180517-09.3, Description: , Job: A03OCT18A\_2, Task: HRP750\_3, User: MJC

#	Name	Ion/Area	Ion2/Area	Response	RT	RRT	RA	Fail?	pg/uL	EDL	RRF	Mean	%D	Height	Noise1	S/N1	Height2	Noise2	S/N2	M1	M2	
1	2378-TCDF	7.52e4	9.76e4	1.73e5	16.13	1.001	0.77	NO	10.595	0.0762	0.928	0.876	/	5.9	1.25e6	3944	316.6	1.65e6	4258	388.3	bd	bd
2	13C-2378-TCDF	8.22e5	1.04e6	1.86e6	16.12	1.064	0.79	NO	112.123	0.225	1.512	1.348	12.1	1.36e7	13655	983.7	1.70e7	8870	1921.2	bb	bb	
3	13C-1234-TCDD	5.52e5	6.79e5	1.23e6	15.15	0.000	0.81	NO	100.000	0.169	1.000	0.0	0.0	9.99e6	7439	1342.7	1.24e7	5089	2445.6	dd	bb	

**Quantify Sample Report      MassLynx 4.1**

Method DXCF TCDF CCAL Report

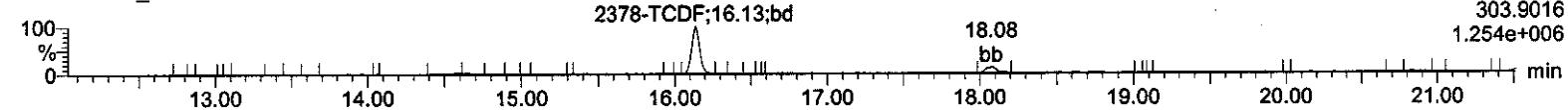
Dataset: C:\MassLynx\Default.pro\CCAL Results\CF-A03OCT18A\_2-1.qld

Last Altered: Thursday, October 04, 2018 09:28:48 Eastern Standard Time

Printed: Thursday, October 04, 2018 09:29:20 Eastern Standard Time

**Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_225TCDF.mdb 29 Jun 2018 14:22:50**  
**Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\CF-A02MAY18.cdb 02 May 2018 16:26:15****Name: A03OCT18A\_2-1, Date: 03-Oct-2018, Time: 17:59:23, ID: CS3WT 1613CS3 UD180517-09.3, Description: ,**  
**Job: A03OCT18A\_2, Task: HRP750\_3, User: MJC****2378-TCDF**

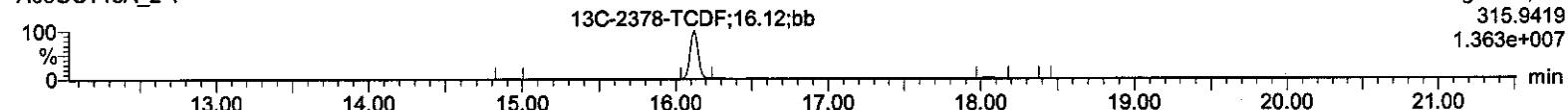
A03OCT18A\_2-1

**2378-TCDF**

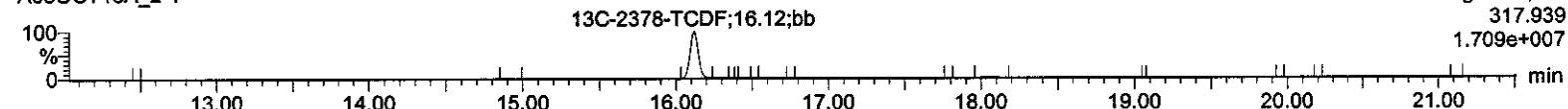
A03OCT18A\_2-1

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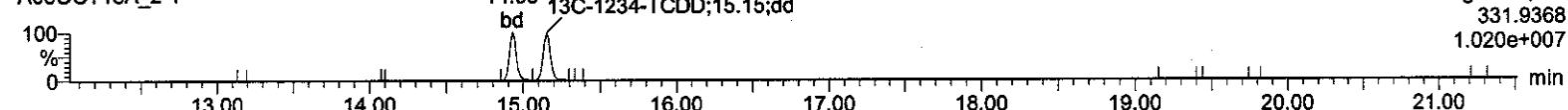
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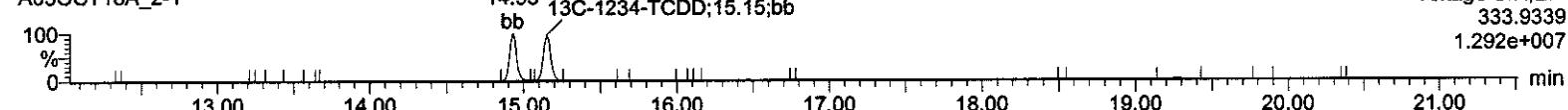
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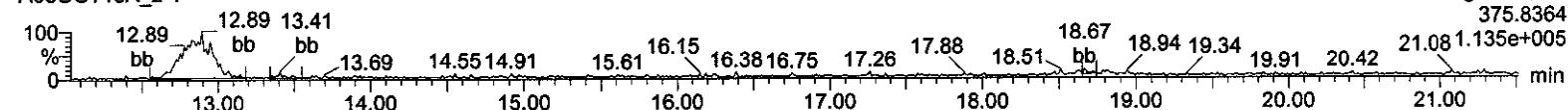
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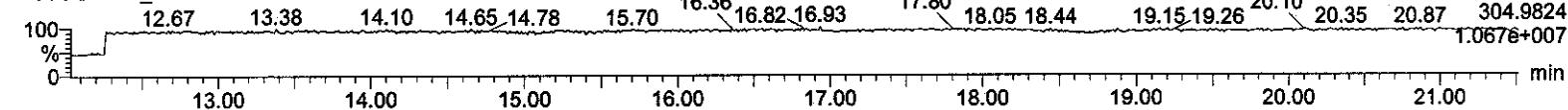
A03OCT18A\_2-1

**HxDPE**

A03OCT18A\_2-1

**Lock Mass F1**

A03OCT18A\_2-1



**Quantify Sample Summary Report**  
Method DXCF TCDF CCAL Report

C:\MassLynx\Default.pro\CCAL\_Results\CF-A03OCT18A\_2-24.qld

Dataset: Thursday, October 04, 2018 09:30:34 Eastern Standard Time

Last Altered: Thursday, October 04, 2018 09:33:08 Eastern Standard Time  
Printed: *03OCT18*
**Method:** C:\MassLynx\DEFAULT.PRO\MethDB\ICFA\_225TCDF.mdb 29 Jun 2018 14:22:50  
**Calibration:** C:\MassLynx\DEFAULT.PRO\CurveDB\CF-A02MAY18.cdb 02 May 2018 16:26:15
**Name:** A03OCT18A\_2-24, **Date:** 04-Oct-2018, **Time:** 02:49:22, **ID:** CS3WT 1613CS3 UD180517-09.3, **Description:** , **Job:** A03OCT18A\_2, **Task:** HRP750\_3, **User:** MJC

#	Name	Ion1 Area	Ion2 Area	Response	PRT	RT	RA	Fair?	pg/L	EDL	RRF	Mean	%D	Height1	Height2	SIN1	SIN2	M1	M2
1	2378-TCDF	4.43e3	5.64e3	1.01e4	16.13	1.002	0.79	NO	10.093	0.466	0.884	0.876	0.9	8.18e4	1680	48.7	9.61e4	1421	67.7
2	13C-2378-TCDF	4.99e4	6.40e4	1.14e5	16.11	1.064	0.78	NO	111.806	1.05	1.507	1.348	11.8	8.32e5	3768	220.7	1.05e6	2584	407.4
3	13C-1234-TCDD	3.40e4	4.16e4	7.56e4	15.14	0.900	0.82	NO	100.000	0.685	1.000	1.000	0.0	6.03e5	1797	335.6	7.69e5	1266	607.2

**Quantify Sample Report****MassLynx 4.1**

Method DXCF TCDF CCAL Report

Dataset: C:\MassLynx\Default.pro\CCAL Results\CF-A03OCT18A\_2-24.qld

Last Altered: Thursday, October 04, 2018 09:30:34 Eastern Standard Time

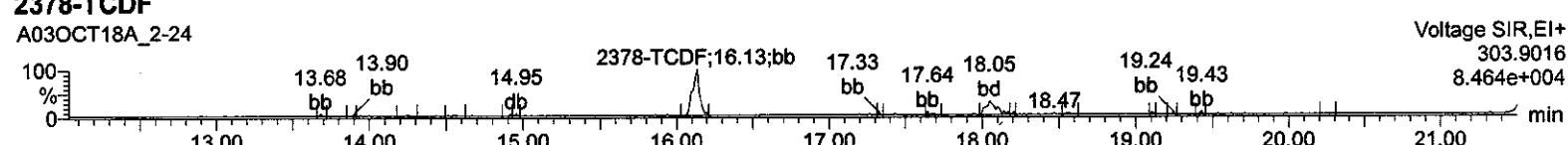
Printed: Thursday, October 04, 2018 09:33:08 Eastern Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\CFA\_225TCDF.mdb 29 Jun 2018 14:22:50

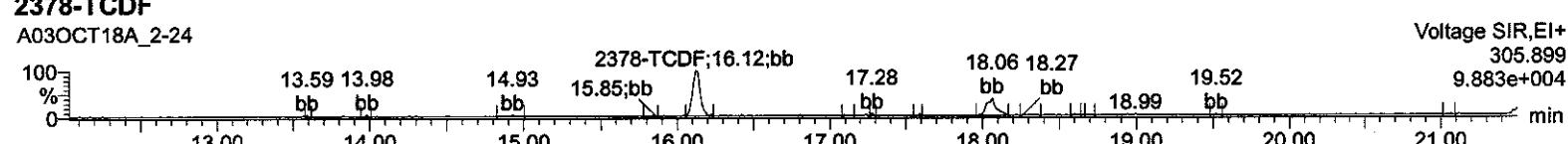
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\CF-A02MAY18.cdb 02 May 2018 16:26:15

Name: A03OCT18A\_2-24, Date: 04-Oct-2018, Time: 02:49:22, ID: CS3WT 1613CS3 UD180517-09.3, Description: ,  
Job: A03OCT18A\_2, Task: HRP750\_3, User: MJC**2378-TCDF**

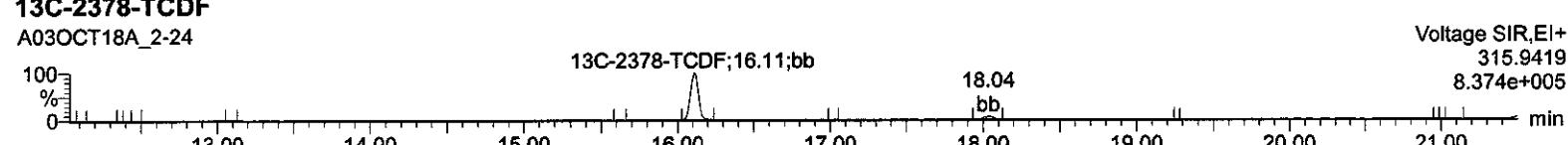
A03OCT18A\_2-24

**2378-TCDF**

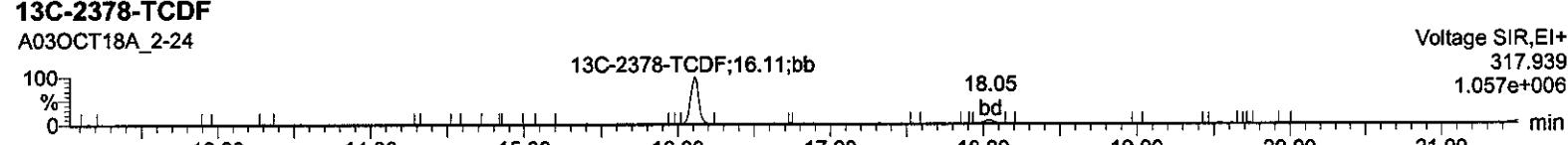
A03OCT18A\_2-24

**13C-2378-TCDF**

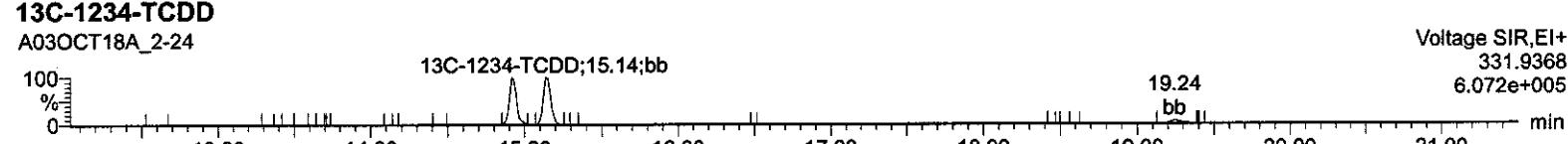
A03OCT18A\_2-24

**13C-2378-TCDF**

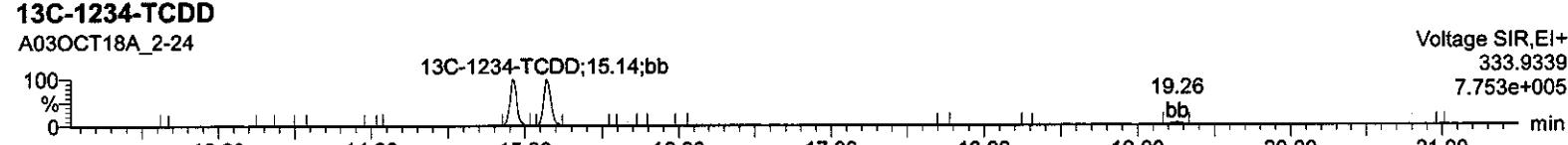
A03OCT18A\_2-24

**13C-1234-TCDD**

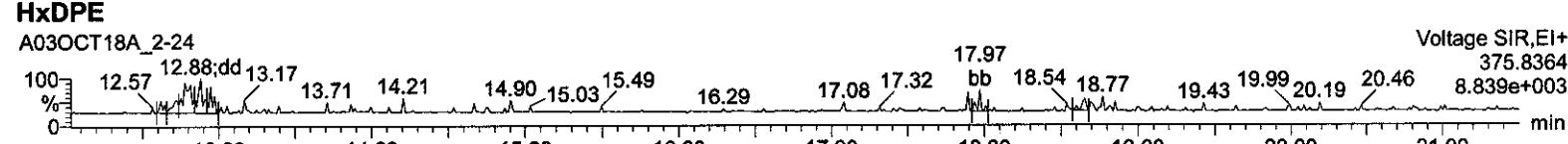
A03OCT18A\_2-24

**13C-1234-TCDD**

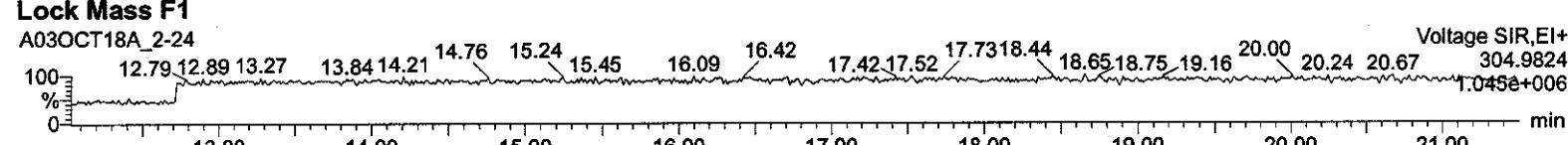
A03OCT18A\_2-24

**HxDPE**

A03OCT18A\_2-24

**Lock Mass F1**

A03OCT18A\_2-24



# **Miscellaneous**

**No non conformance reports were generated for this work order**