

## DoD Type I Data Package

**Prepared for:**

**Tidewater, Inc.**  
3761 Attucks Drive  
Powell OH 43065

Project: Great Kills Park Phase I RI OU2  
Groundwater and Water Samples  
Collected on 10/31/18

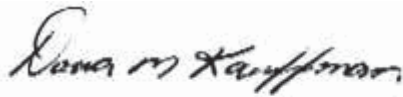
### SDG# TID15

GROUP	SAMPLE NUMBERS
2005271	9881308-9881314

A2LA (DoD) Cert. # 0001.01  
PA Cert. # 36-00037  
NY Cert. # 10670  
NJ Cert. # PA011  
NC Cert. # 521  
TX Cert. # T104704194-18-27  
AZ Cert. # AZ0780

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

Authorized by:



Date: 01/08/2019

Dana M. Kauffman  
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Kay Hower at (717) 556-7364.

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**Sample Reference List for SDG Number TID15  
with a Data Package Type of I-DOD**

**43062 - Tidewater, Inc.**

Project: Great Kills Park Phase I RI OU2

<b>Lab Sample Number</b>	<b>Client Sample ID</b>	<b>Collection Date</b>	<b>Date Received</b>
9881308	OU2TB103118-001	10/31/2018 08:45	11/02/2018 10:10
9881309	OU2-1-MW008WT	10/31/2018 12:10	11/02/2018 10:10
9881310	OU2-1-MW008WT-DUP	10/31/2018 12:10	11/02/2018 10:10
9881311	OU2-1-MW008WT-F	10/31/2018 12:10	11/02/2018 10:10
9881312	OU2-1-MW008WT-F-DUP	10/31/2018 12:10	11/02/2018 10:10
9881313	OU2-1-MW009WT	10/31/2018 16:55	11/02/2018 10:10
9881314	OU2-1-MW009WT-F	10/31/2018 16:55	11/02/2018 10:10

# Sample pH Log

SDG: TID15

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	*pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot#	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	**Chlorine Present?	Corrective Substance	CS Lot #	Record Date	Employee
9881308	038A	<-2	<-2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/13/2018 8:10:49PM	14951
9881309	008A	<-2	<-2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:06:05PM	12665
9881309	038A	<-2	<-2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/13/2018 8:10:48PM	14951
9881309	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:37:33PM	1201
9881309	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:42:21PM	1201
9881309	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:25:01PM	1201
9881309	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:20:12PM	1201
9881309	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:25:11PM	1201
9881309	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:19:46PM	1201
9881309	153E		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:20:06PM	1201
9881309	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:39:57PM	1201
9881309	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:38:10PM	1201
9881310	008A	<-2	<-2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:00:29PM	12665
9881310	038A	<-2	<-2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/13/2018 8:10:48PM	14951
9881310	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:37:44PM	1201
9881310	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:42:43PM	1201
9881310	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:12:13PM	1201
9881310	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:18:01PM	1201
9881310	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:21:06PM	1201
9881310	153E		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:19:53PM	1201
9881310	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:39:28PM	1201
9881310	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:38:03PM	1201
9881311	008A	<-2	<-2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:07:53PM	12665
9881312	008A	<-2	<-2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:04:17PM	12665
9881313	008A	<-2	<-2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:47:57PM	12665
9881313	038A	<-2	<-2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/13/2018 8:10:48PM	14951
9881313	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:39:36PM	1201
9881313	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:38:20PM	1201
9881313	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:19:15PM	1201
9881313	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:19:31PM	1201
9881313	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:25:19PM	1201
9881313	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:19:38PM	1201
9881313	153E		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:25:19PM	1201
9881313	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 9:04:24PM	1201
9881313	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:42:50PM	1201
9881314	008A	<-2	<-2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	11/2/2018 10:39:45PM	1201
9881314	008A	<-2	<-2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/2/2018 10:02:21PM	12665

LLI Sample Number   Bottle Code   Actual pH   Exp. pH   \*pH Check Code   Adj. pH   Adjusted Date   Adjusted Time   Preservative Added   Preservative Lot #   Supplied Bottle?   Sulfide Present?   Corrective Substance   CS Lot #   \*\*Chlorine Present?   Corrective Substance   CS Lot #   Record Date   Employee

<b>*pH Check Code Key</b>	<b>**Chlorine Present Code Key</b>
<p> <b>PK</b> = Original container checked - pH is within the correct range. (No preservative was added)  <b>PA</b> = Original container checked - pH adjusted to correct range. (Preservative was added)  <b>PV</b> = Volatile container checked  <b>PC</b> = pH checked (unpreserved container)  <b>SPK</b> = Subsampled from an original container. Original container checked - pH is within correct range  <b>SPA</b> = Subsampled from an original container. Subsample container checked - pH adjusted to correct range.  <b>SPC</b> = Subsampled from an original container. pH checked (unpreserved container).  <b>SUP</b> = Subsampled from original container. Unable to be preserved due to the matrix of the sample.  <b>UP</b> = Unable to preserve due to matrix of the sample.  <b>NA</b> = Not applicable                 </p>	<p> <b>NA</b> = Chlorine Not Checked  <b>Y</b> = Chlorine Present  <b>N</b> = Chlorine Not Present                 </p>

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**01163 GC/MS VOA Water Prep**

An undiluted aliquot of the water sample or a dilution of the sample is purged with an inert gas and the volatiles are collected on an adsorbent trap that is subsequently desorbed onto a gas chromatographic column.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 5030C, May 2003.

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**11996 VOCs- 25ml Water by 8260C**

The water sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS), SW-846 Method 8260C, August 2006.

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**00259 Mercury**

The solution resulting from the mercury digestion is analyzed by Cold Vapor AA.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7470A, September 1994

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**10635 ICP-WW, 3005A (tot rec) - U4**

The sample is digested with nitric acid and hydrochloric acid.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3005A, July 1992

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**10639 ICPMS - Water, 3020A - U4**

The sample is digested with nitric and hydrochloric acid.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3020A, July 1992

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**05713 WW SW846 Hg Digest**

The sample is heated at 95 c with nitric acid, sulfuric acid, potassium persulfate, and potassium permanganate. Excess potassium permanganate is reduced with sodium chloride/hydroxylamine hydrochloride. Mercuric ions are reduced to mercury metal using stannous chloride.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7470A, September 1994

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**13495 Thorium**

The solution resulting from the metals digestion is analyzed by Trace ICP.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010C, February 2007.

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**06023 Aluminum**  
**06024 Antimony**  
**06025 Arsenic**  
**06026 Barium**  
**06027 Beryllium**  
**06028 Cadmium**  
**06029 Calcium**  
**06031 Chromium**

06032 Cobalt  
06033 Copper  
06034 Iron  
06035 Lead  
06036 Magnesium  
06037 Manganese  
06039 Nickel  
06040 Potassium  
06041 Selenium  
06042 Silver  
06043 Sodium  
06045 Thallium  
13501 Uranium  
06048 Vanadium  
06049 Zinc

The solution resulting from the metals digestion is analyzed by ICP/MS.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6020A, February 2007.

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#### **10591 PCBs in Water by 8082A**

The sample is solvent extracted and exchanged to hexane. Sulfuric acid and florisil cleanups are performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8082A, Rev.1, February 2007.

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#### **10589 OC Pesticides in Water**

The sample is solvent extracted and exchanged to hexane. Florisil cleanup is performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8081B, February 2007.

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#### **00816 Water Sample Herbicide Extract**

The water sample is hydrolyzed and solvent cleanup is performed. The sample is then acidified and solvent extracted. The chlorophenoxy acids, phenols and related compounds are converted to methyl esters using derivatization with diazomethane. The extract is exchanged to hexane and florisil cleanup is performed to minimize interference.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8151A, December 1996.

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#### **11121 PCB Waters Update IV Ext**

#### **11120 Pesticide Waters Update IV Ext**

The sample is solvent extracted and exchanged to hexane. Florisil cleanup is performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3510C, Rev 3, December 1996

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**10407 Herb water 8151A Master**

The sample is hydrolyzed, acidified, and solvent extracted. The chlorophenoxy acids, phenols and related target compounds are converted to the methyl esters. Florisil cleanup is performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8151A, December 1996.

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**11010 8270D BNA Extraction****10466 BNA Water Extraction SIM**

The sample aliquot is extracted with methylene chloride by either separatory funnel or liquid/liquid apparatus. Extraction is performed at both a pH of 11 and 2. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3510C, Rev 3, December 1996

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**14244 SIM SVOAs 8270D MINI**

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry with Selected Ion Monitoring (SIM).

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270D (SIM), February 2007.

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**14241 SVOAs 8270D MINI**

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270D, February 2007.

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**10914 Dioxins/Furans in Water - SepF**

Aqueous samples are extracted with methylene chloride in a separatory funnel. The extract is concentrated for cleanup or instrumental analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8290A, Polychlorinated Dibenzo-p-Dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High Resolution Gas Chromatography/High Resolution Mass Spectrometry (HRGC/HRMS)

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**12936 Dioxins/Furans in Water - 8290**

The method provides procedures for the detection and quantitative measurement of polychlorinated dibenzo-p-dioxins (tetra- through octachlorinated homologues; PCDDs), and polychlorinated dibenzofurans (tetra- through octachlorinated homologues; PCDFs) in a variety of environmental matrices and at part-per-trillion (ppt) to part-per-quadrillion. The method requires the use of high-resolution gas chromatography and high-resolution mass spectrometry (HRGC/HRMS) on purified sample extracts.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8290A, Polychlorinated Dibenzo-p-Dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High Resolution Gas Chromatography/High Resolution Mass Spectrometry (HRGC/HRMS)

# **Analysis Reports / Field Chain of Custody**



## ANALYSIS REPORT

Prepared by

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster PA 17601

Prepared for:

Tidewater Inc.  
3761 Attucis Drive  
Powell OH 43065

Report Date: November 28 2018 14:16

**Project: Great Kills Park Phase I RI OU2**

Account # 43062  
Group Number: 2005271  
SDG: TID15  
PO Number: 2016-007-02  
State of Sample Origin: NJ

Electronic Copy To AECOM  
Electronic Copy To AECOM  
Electronic Copy To Tidewater Inc.  
Electronic Copy To AECOM

Attn: Devon Chicoine  
Attn: Colleen Scott  
Attn: Ryan Wensin  
Attn: John Schroeder

Respectfully Submitted



Kay Hower

(717) 556-7364

To view our laboratory's current scopes of accreditation please go to <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. Historical copies may be requested through our project manager.



### SAMPLE INFORMATION

<u>Client Sample Description</u>	<u>Sample Collection Date/Time</u>	<u>ELLE</u>
OU2TB103118-001 Grab Water	10/31/2018 08:45	9881308
OU2-1-MW008WT Grab Groundwater	10/31/2018 12:10	9881309
OU2-1-MW008WT-DUP Grab Groundwater	10/31/2018 12:10	9881310
OU2-1-MW008WT-F Filtered Grab Groundwater	10/31/2018 12:10	9881311
OU2-1-MW008WT-F-DUP Filtered Grab Groundwater	10/31/2018 12:10	9881312
OU2-1-MW009WT Grab Groundwater	10/31/2018 16:55	9881313
OU2-1-MW009WT-F Filtered Grab Groundwater	10/31/2018 16:55	9881314

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Project Name: Great Kills Park Phase I RI OU2  
ELLE Group #: 2005271

**General Comments:**

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

**Analysis Specific Comments:****SW-846 8260C 25mL purge, GC/MS Volatiles**

Sample #s: 9881308

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

Sample #s: 9881309, 9881310, 9881313

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated:  
acetone.

**SW-846 8270D, GC/MS Semivolatiles**

Sample #s: 9881309, 9881310, 9881313

Z=The response for a target analyte(s) in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s), the high response indicating increased sensitivity, and the target analyte(s) not being detected in the sample, the data is reported.

## **SW-846 8270D SIM, GC/MS Semivolatiles**

Sample #s: 9881309, 9881310, 9881313

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

## **SW-846 8081B, Pesticides**

Sample #s: 9881309, 9881310, 9881313

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Batch #: 183100009A (Sample number(s): 9881309-9881310, 9881313)

The recovery(ies) for one or more surrogates were below the acceptance window for sample(s) 9881309, 9881310, 9881313

## **SW-846 8082A, PCBs**

Batch #: 183100010A (Sample number(s): 9881309-9881310, 9881313)

The relative percent difference(s) for the following analyte(s) in the LCS/LCSD were outside acceptance windows: PCB-1016

## **SW-846 6010C, Metals**

Sample #s: 9881309, 9881310, 9881313

The ICV,CCV RSD is greater than 5% for Thorium.  
Outlier recovery/result: ICV, CCV RSD > 5%; Acceptance limits: < 5%  
ICV RSD%- 5.9%, reading 0.58, acceptance limits: 0.54-0.66  
1st CCV RSD%- 5.3%, reading 0.49, acceptance limits: 0.45-0.55  
2nd CCV RSD%- 10.7%, reading 0.48, acceptance limits: 0.45-0.55  
3rd CCV RSD%- 2.2%, reading 0.49, acceptance limits: 0.45-0.55

## **SW-846 6010C, Metals Dissolved**

Sample #s: 9881311, 9881312, 9881314

The ICV,CCV RSD is greater than 5% for Thorium.  
Outlier recovery/result: ICV, CCV RSD > 5%; Acceptance limits: < 5%  
ICV RSD%- 5.9%, reading 0.58, acceptance limits: 0.54-0.66  
1st CCV RSD%- 5.3%, reading 0.49, acceptance limits: 0.45-0.55  
2nd CCV RSD%- 10.7%, reading 0.48, acceptance limits: 0.45-0.55  
3rd CCV RSD%- 2.2%, reading 0.49, acceptance limits: 0.45-0.55

## **SW-846 6020A, Metals**

Batch #: 183091063901A (Sample number(s): 9881309-9881314 UNSPK: 9881311 BKG: 9881311)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Chromium

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: Arsenic, Iron, Magnesium, Manganese, Potassium, Sodium

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Chromium, Nickel

Batch #: 183091063901B (Sample number(s): 9881309-9881314 UNSPK: 9881311 BKG: 9881311)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:  
Calcium

Batch #: 183091063901D (Sample number(s): 9881309-9881314 UNSPK: 9881311 BKG: 9881311)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:  
Barium

### **SW-846 6020A, Metals Dissolved**

Batch #: 183091063901A (Sample number(s): 9881309-9881314 UNSPK: 9881311 BKG: 9881311)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Chromium

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:  
Arsenic, Iron, Magnesium, Manganese, Potassium, Sodium

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Chromium, Nickel

Batch #: 183091063901B (Sample number(s): 9881309-9881314 UNSPK: 9881311 BKG: 9881311)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:  
Calcium

Batch #: 183091063901D (Sample number(s): 9881309-9881314 UNSPK: 9881311 BKG: 9881311)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:  
Barium

### **SW-846 7470A, Metals**

Batch #: 183110571303 (Sample number(s): 9881309-9881314 UNSPK: 9881313 BKG: 9881313)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:  
Mercury

### **SW-846 7470A, Metals Dissolved**

Batch #: 183110571303 (Sample number(s): 9881309-9881314 UNSPK: 9881313 BKG: 9881313)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:  
Mercury

**Sample Description:** OU2TB103118-001 Grab Water  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881308  
**ELLE Group #:** 2005271  
**Matrix:** Water

**Project Name:** Great Kills Park Phase I RI OU2

**Submittal Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 08:45  
**SDG:** TID15-01TB

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Volatiles</b>		<b>SW-846 8260C 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>					
11996	Acetone	67-64-1	N.D.	0.9	2.0	5.0	1
11996	Benzene	71-43-2	N.D.	0.05	0.2	0.5	1
11996	Bromodichloromethane	75-27-4	N.D.	0.05	0.2	0.5	1
11996	Bromoform	75-25-2	N.D.	0.3	0.5	1.0	1
11996	Bromomethane	74-83-9	N.D.	0.07	0.2	0.5	1
11996	2-Butanone	78-93-3	N.D.	0.6	2.0	5.0	1
11996	Carbon Disulfide	75-15-0	N.D.	0.06	0.2	1.0	1
11996	Carbon Tetrachloride	56-23-5	N.D.	0.07	0.2	0.5	1
11996	Chlorobenzene	108-90-7	N.D.	0.06	0.2	0.5	1
11996	Chloroethane	75-00-3	N.D.	0.07	0.2	0.5	1
11996	Chloroform	67-66-3	N.D.	0.09	0.2	0.5	1
11996	Chloromethane	74-87-3	N.D.	0.06	0.2	0.5	1
11996	Cyclohexane	110-82-7	N.D.	0.05	0.2	0.5	1
11996	Cyclohexanone	108-94-1	N.D.	1.8	7.2	25	1
11996	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.1	0.4	0.5	1
11996	Dibromochloromethane	124-48-1	N.D.	0.07	0.2	0.5	1
11996	1,2-Dibromoethane	106-93-4	N.D.	0.06	0.2	0.5	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.06	0.2	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.06	0.2	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.07	0.2	0.5	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.05	0.2	0.5	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.07	0.2	0.5	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.05	0.2	0.5	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.06	0.2	0.5	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.05	0.2	0.5	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.06	0.2	0.5	1
11996	1,2-Dichloropropane	78-87-5	N.D.	0.06	0.2	0.5	1
11996	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.05	0.2	0.5	1
11996	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.06	0.2	0.5	1
11996	Ethylbenzene	100-41-4	N.D.	0.06	0.2	0.5	1
11996	Freon 113	76-13-1	N.D.	0.06	0.2	0.5	1
11996	2-Hexanone	591-78-6	N.D.	0.6	2.0	5.0	1
11996	Isopropylbenzene	98-82-8	N.D.	0.05	0.2	0.5	1
11996	Methyl Acetate	79-20-9	N.D.	0.1	0.2	1.0	1
11996	Methyl Tertiarybutyl Ether	1634-04-4	N.D.	0.05	0.2	0.5	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	0.7	2.0	5.0	1
11996	Methylcyclohexane	108-87-2	N.D.	0.05	0.2	0.5	1
11996	Methylene Chloride	75-09-2	0.07	0.07	0.2	0.5	1
11996	Styrene	100-42-5	N.D.	0.05	0.2	0.5	1
11996	1,1,1,2-Tetrachloroethane	79-34-5	N.D.	0.07	0.2	0.5	1

\*This limit was used in the evaluation of the final result



**Sample Description:** OU2TB103118-001 Grab Water  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881308  
**ELLE Group #:** 2005271  
**Matrix:** Water

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 08:45  
**SDG:** TID15-01TB

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Volatiles</b>		<b>SW-846 8260C 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
<b>purge</b>							
11996	Tetrachloroethene	127-18-4	N.D.	0.06	0.2	0.5	1
11996	Toluene	108-88-3	N.D.	0.07	0.2	0.5	1
11996	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.06	0.2	0.5	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.06	0.2	0.5	1
11996	1,1,2-Trichloroethane	79-00-5	N.D.	0.06	0.2	0.5	1
11996	Trichloroethene	79-01-6	N.D.	0.06	0.2	0.5	1
11996	Trichlorofluoromethane	75-69-4	N.D.	0.05	0.2	0.5	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	0.2	0.5	1
11996	Benzene (Total)	1330-20-7	N.D.	0.1	0.4	0.5	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20% criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

### Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:

- Thorium b SW-846 6010C
- Cyclohexanone b SW-846 8260C
- Bis(2-chloroethyl)ether b SW-846 8270D/SW-846 8270D SIM
- Di-n-butyl phthalate b SW-846 8270D SIM
- Hexachlorobenzene b SW-846 8270D SIM

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs- 25ml Water b 8260C	SW-846 8260C 25mL	1	1183171AA	11/13/2018 13:33	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	1183171AA	11/13/2018 13:32	Jennifer K Howe	1

\*This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881309  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Volatiles</b>		<b>SW-846 8260C 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>					
11996	Acetone	67-64-1	3.7 ☐	0.9	2.0	5.0	1
11996	Benzene	71-43-2	0.1 ☐	0.05	0.2	0.5	1
11996	Bromodichloromethane	75-27-4	N.D.	0.05	0.2	0.5	1
11996	Bromoform	75-25-2	N.D.	0.3	0.5	1.0	1
11996	Bromomethane	74-83-9	N.D.	0.07	0.2	0.5	1
11996	2-Butanone	78-93-3	N.D.	0.6	2.0	5.0	1
11996	Carbon Disulfide	75-15-0	N.D.	0.06	0.2	1.0	1
11996	Carbon Tetrachloride	56-23-5	N.D.	0.07	0.2	0.5	1
11996	Chlorobenzene	108-90-7	1.6	0.06	0.2	0.5	1
11996	Chloroethane	75-00-3	N.D.	0.07	0.2	0.5	1
11996	Chloroform	67-66-3	N.D.	0.09	0.2	0.5	1
11996	Chloromethane	74-87-3	0.1 ☐	0.06	0.2	0.5	1
11996	Cyclohexane	110-82-7	0.07 ☐	0.05	0.2	0.5	1
11996	Cyclohexanone	108-94-1	N.D.	1.8	7.2	25	1
11996	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.1	0.4	0.5	1
11996	Dibromochloromethane	124-48-1	N.D.	0.07	0.2	0.5	1
11996	1,2-Dibromoethane	106-93-4	N.D.	0.06	0.2	0.5	1
11996	1,2-Dichlorobenzene	95-50-1	0.1 ☐	0.06	0.2	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.06	0.2	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	0.2 ☐	0.07	0.2	0.5	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.05	0.2	0.5	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.07	0.2	0.5	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.05	0.2	0.5	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.06	0.2	0.5	1
11996	cis-1,2-Dichloroethene	156-59-2	0.09 ☐	0.05	0.2	0.5	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.06	0.2	0.5	1
11996	1,2-Dichloropropane	78-87-5	N.D.	0.06	0.2	0.5	1
11996	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.05	0.2	0.5	1
11996	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.06	0.2	0.5	1
11996	Ethylbenzene	100-41-4	N.D.	0.06	0.2	0.5	1
11996	Freon 113	76-13-1	N.D.	0.06	0.2	0.5	1
11996	2-Hexanone	591-78-6	N.D.	0.6	2.0	5.0	1
11996	Isopropylbenzene	98-82-8	N.D.	0.05	0.2	0.5	1
11996	Methyl Acetate	79-20-9	N.D.	0.1	0.2	1.0	1
11996	Methyl Tertiarybutyl Ether	1634-04-4	N.D.	0.05	0.2	0.5	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	0.7	2.0	5.0	1
11996	Methylcyclohexane	108-87-2	0.08 ☐	0.05	0.2	0.5	1
11996	Methylene Chloride	75-09-2	N.D.	0.07	0.2	0.5	1
11996	Styrene	100-42-5	N.D.	0.05	0.2	0.5	1
11996	1,1,1,2-Tetrachloroethane	79-34-5	N.D.	0.07	0.2	0.5	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881309  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submission Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 12:10  
SDG: TID15-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Volatiles</b>		<b>SW-846 8260C 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
<b>purge</b>							
11996	Tetrachloroethene	127-18-4	N.D.	0.06	0.2	0.5	1
11996	Toluene	108-88-3	0.2	0.07	0.2	0.5	1
11996	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.06	0.2	0.5	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.06	0.2	0.5	1
11996	1,1,2-Trichloroethane	79-00-5	N.D.	0.06	0.2	0.5	1
11996	Trichloroethene	79-01-6	N.D.	0.06	0.2	0.5	1
11996	Trichlorofluoromethane	75-69-4	N.D.	0.05	0.2	0.5	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	0.2	0.5	1
11996	Alkene (Total)	1330-20-7	N.D.	0.1	0.4	0.5	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20% criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated: acetone.

GC/MS Semivolatiles	SW-846 8270D	ug/l	ug/l	ug/l	ug/l		
14241	Aniline	62-53-3	N.D.	3	9	10	1
14241	Benzyl alcohol	100-51-6	N.D.	10	20	30	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1	2	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1	2	1
14241	4-Chloroaniline	106-47-8	N.D.	4	9	10	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1	2	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	0.8	1	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1	2	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1	2	1
14241	2,2-dioxabis(1-Chloropropane)	108-60-1	N.D.	0.5	1	2	1
Bis(2-chloroisopropyl) ether CAS 39638-32-9 and 2,2-Dioxabis(1-chloropropane) CAS 108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.							
14241	Dibenzofuran	132-64-9	N.D.	0.5	1	2	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1	2	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1	2	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1	2	1
14241	3,3-Dichlorobenzidine	91-94-1	N.D.	3	9	10	1

\*This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881309  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submittal Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 12:10  
SDG☐ TID15-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Semivolatiles SW-846 8270D ug/l ug/l ug/l ug/l</b>							
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1	2	1
14241	Diethylphthalate	84-66-2	N.D.	2	4	5	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	9	10	1
14241	Dimethylphthalate	131-11-3	N.D.	2	4	5	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	20	21	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	28	30	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	2	5	1
14241	2,6-Dinitrotoluene	606-20-2	N.D. ☐	0.5	1	2	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1	2	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	10	11	1
14241	Hexachloroethane	67-72-1	N.D.	1	2	5	1
14241	Isophorone	78-59-1	N.D.	0.5	1	2	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	0.2	0.5	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1	2	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1	2	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
14241	2-Nitroaniline	88-74-4	N.D. ☐	2	6	7	1
14241	3-Nitroaniline	99-09-2	N.D.	3	6	7	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	2	3	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1	2	1
14241	2-Nitrophenol	88-75-5	N.D.	3	9	10	1
14241	4-Nitrophenol	100-02-7	N.D.	10	20	30	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	2	3	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	2	3	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
14241	Di-n-octylphthalate	117-84-0	N.D.	5	10	11	1
14241	Pentachlorophenol	87-86-5	N.D.	1	4	5	1
14241	Phenol	108-95-2	N.D.	0.5	1	2	1
14241	Picridine	110-86-1	N.D.	2	4	5	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1	2	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1	2	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D. ☐	0.5	1	2	1

☐☐The response for a target analyte(s) in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) the high response indicating increased sensitivity and the target analyte(s) not being detected in the sample the data is reported.

GC/MS Semivolatiles	SW-846 8270D SIM	ug/l	ug/l	ug/l	ug/l
14244	Acenaphthene	83-32-9	0.6	0.01	0.03

☐☐This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881309  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Semivolatiles SW-846 8270D SIM</b>							
14244	Acenaphthylene	208-96-8	0.01 □	0.01	0.03	0.05	1
14244	Anthracene	120-12-7	0.1	0.01	0.03	0.05	1
14244	Benzo(a)anthracene	56-55-3	0.02 □	0.01	0.03	0.05	1
14244	Benzo(a)pyrene	50-32-8	N.D.	0.01	0.03	0.05	1
14244	Benzo(b)fluoranthene	205-99-2	0.01 □	0.01	0.03	0.05	1
14244	Benzo(g,h,i)perylene	191-24-2	N.D.	0.01	0.03	0.05	1
14244	Benzo(k)fluoranthene	207-08-9	N.D.	0.01	0.03	0.05	1
14244	Di-n-butylphthalate	84-74-2	0.7 □	0.05	0.1	1	1
14244	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.02	0.06	0.07	1
14244	Chrysene	218-01-9	0.03 □	0.01	0.03	0.05	1
14244	Dibenzo(a,h)anthracene	53-70-3	N.D.	0.02	0.06	0.07	1
14244	1,4-Dioxane	123-91-1	0.3 □	0.1	0.2	0.3	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	1	0.08	0.2	1	1
14244	Fluoranthene	206-44-0	0.1	0.01	0.03	0.05	1
14244	Fluorene	86-73-7	0.4	0.01	0.03	0.05	1
14244	Hexachlorobenzene	118-74-1	N.D.	0.01	0.03	0.05	1
14244	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.01	0.03	0.05	1
14244	Naphthalene	91-20-3	0.1	0.03	0.06	0.07	1
14244	Phenanthrene	85-01-8	0.6	0.03	0.06	0.07	1
14244	Pyrene	129-00-0	0.08	0.01	0.03	0.05	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

<b>Herbicides</b>		<b>SW-846 8151A</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10407	2,4-D	94-75-7	N.D. D2	0.24	0.48	0.58	1
10407	Dalapon	75-99-0	N.D. D2	1.7	3.5	3.8	1
10407	2,4-DB	94-82-6	N.D. D2	0.60	1.2	1.4	1
10407	Dicamba	1918-00-9	N.D. D2	0.077	0.15	0.29	1
10407	Dinoseb	88-85-7	N.D. D2	0.17	0.38	0.48	1
The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.							
10407	2,4-DP (Dichloroprop)	120-36-5	N.D. D1	0.15	0.31	0.48	1
10407	MCPA	94-74-6	N.D. D1	48	96	190	1
10407	MCPP	93-65-2	N.D. D1	48	96	190	1
10407	2,4,5-T	93-76-5	N.D. D1	0.062	0.12	0.14	1
10407	2,4,5-TP	93-72-1	N.D. D1	0.0096	0.029	0.048	1

<b>PCBs</b>		<b>SW-846 8082A</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10591	PCB-1016	12674-11-2	N.D. D1	0.081	0.24	0.41	1
10591	PCB-1221	11104-28-2	N.D. D1	0.081	0.24	0.41	1
10591	PCB-1232	11141-16-5	N.D. D1	0.16	0.33	0.41	1

□ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881309  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>PCBs</b>							
		<b>SW-846 8082A</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10591	PCB-1242	53469-21-9	N.D. D1	0.081	0.24	0.41	1
10591	PCB-1248	12672-29-6	N.D. D1	0.081	0.24	0.41	1
10591	PCB-1254	11097-69-1	N.D. D1	0.081	0.24	0.41	1
10591	PCB-1260	11096-82-5	N.D. D1	0.12	0.24	0.41	1
10591	PCB-1262	37324-23-5	N.D. D1	0.16	0.33	0.41	1
10591	PCB-1268	11100-14-4	N.D. D1	0.13	0.26	0.41	1
<b>Pesticides</b>							
		<b>SW-846 8081B</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10589	Aldrin	309-00-2	N.D. D1	0.0016	0.0057	0.0081	1
10589	Alpha BHC	319-84-6	0.018 D1	0.0024	0.0057	0.0081	1
10589	Beta BHC	319-85-7	N.D. D2	0.0028	0.0057	0.0081	1
10589	Gamma BHC - Lindane	58-89-9	N.D. D1	0.0016	0.0057	0.0081	1
10589	Alpha Chlordane	5103-71-9	N.D. D2	0.0024	0.0057	0.0081	1
10589	Chlordane	57-74-9	N.D. D1	0.13	0.26	0.41	1
10589	Gamma Chlordane	5103-74-2	N.D. D2	0.0057	0.016	0.016	1
10589	p,p-DDD	72-54-8	N.D. D1	0.0041	0.0081	0.016	1
10589	p,p-DDE	72-55-9	N.D. D1	0.0041	0.0081	0.016	1
10589	p,p-DDT	50-29-3	0.0067 D1	0.0042	0.0081	0.016	1
10589	Delta BHC	319-86-8	N.D. D1	0.0028	0.0057	0.0081	1
10589	Dieldrin	60-57-1	N.D. D2	0.0043	0.0081	0.016	1
10589	Endosulfan I	959-98-8	N.D. D2	0.0035	0.0073	0.0081	1
10589	Endosulfan II	33213-65-9	N.D. D2	0.012	0.024	0.024	1
10589	Endosulfan Sulfate	1031-07-8	N.D. D2	0.0047	0.0098	0.016	1
10589	Endrin	72-20-8	N.D. D2	0.0066	0.016	0.016	1
10589	Endrin Aldehyde	7421-93-4	N.D. D1	0.016	0.033	0.081	1
10589	Endrin Ketone	53494-70-5	N.D. D2	0.0041	0.0081	0.016	1
10589	Heptachlor	76-44-8	N.D. D1	0.0016	0.0057	0.0081	1
10589	Heptachlor Epoxide	1024-57-3	N.D. D1	0.0019	0.0057	0.0081	1
10589	Methoxychlor	72-43-5	N.D. D2	0.024	0.057	0.081	1
10589	Toxaphene	8001-35-2	N.D. D1	0.24	0.49	0.81	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Metals	SW-846 6010C	mg/l	mg/l	mg/l	mg/l		
13495	Thorium	7440-29-1	N.D.	0.205	0.400	0.500	1

The ICV/CCV RSD is greater than 5% for Thorium.  
Outlier recovery result: ICV/CCV RSD 5% Acceptance limits: < 5%  
ICV RSD - 5.9% reading 0.58 acceptance limits: 0.54-0.66  
1st CCV RSD - 5.3% reading 0.49 acceptance limits: 0.45-0.55  
2nd CCV RSD - 10.7% reading 0.48 acceptance limits: 0.45-0.55  
3rd CCV RSD - 2.2% reading 0.49 acceptance limits: 0.45-0.55

This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881309  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submission Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 12:10  
SDG☐ TID15-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Metals</b>							
<b>SW-846 6020A</b>			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06023	Aluminum	7429-90-5	N.D.	0.0197	0.0500	0.400	1
06024	Antimony☐	7440-36-0	N.D. K3	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0154	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	1.73	0.00075	0.0020	0.0040	1
06027	Berillium	7440-41-7	N.D.	0.000091	0.00025	0.00050	1
06028	Cadmium	7440-43-9	N.D.	0.00015	0.00050	0.0010	1
06029	Calcium	7440-70-2	263	0.299	1.00	3.50	5
06031	Chromium	7440-47-3	0.0025 ☐	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0025	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	N.D.	0.0099	0.0200	0.0400	1
06034	Iron	7439-89-6	42.2	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	N.D.	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	32.4	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.704	0.0049	0.0080	0.0100	1
06039	Nickel	7440-02-0	N.D.	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	19.9	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	39.5	0.0500	0.200	0.900	1
06045	Thallium	7440-28-0	N.D.	0.00011	0.00025	0.00050	1
13501	Uranium	7440-61-1	N.D.	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.0019	0.00024	0.00050	0.0010	1
06049	Zinc	7440-66-6	N.D.	0.0062	0.0120	0.0150	1
<b>SW-846 7470A</b>			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury☐	7439-97-6	N.D.	0.000050	0.00010	0.00020	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
ELLE Sample #: WW 9881309  
ELLE Group #: 2005271  
Matrix: Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submission Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 12:10  
SDG☐ TID15-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Dioxins/Furans</b>		<b>SW-846 8290A Feb 2007 Rev 1</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	
12936	2378-TCDD	1746-01-6	N.D.	0.0008	0.002	0.005	1
12936	12378-PeCDD	40321-76-4	N.D.	0.003	0.01	0.024	1
12936	123478-HxCDD	39227-28-6	N.D.	0.002	0.01	0.024	1
12936	123678-HxCDD	57653-85-7	N.D.	0.002	0.01	0.024	1
12936	123789-HxCDD	19408-74-3	N.D.	0.002	0.01	0.024	1
12936	1234678-HpCDD	35822-46-9	0.009 ☐	0.004	0.01	0.024	1
12936	OCDD	3268-87-9	0.11	0.035	0.070	0.11	1
12936	2378-TCDF	51207-31-9	N.D.	0.0008	0.002	0.005	1
12936	12378-PeCDF	57117-41-6	N.D.	0.003	0.01	0.024	1
12936	23478-PeCDF	57117-31-4	N.D.	0.002	0.01	0.024	1
12936	123478-HxCDF	70648-26-9	N.D.	0.002	0.01	0.024	1
12936	123678-HxCDF	57117-44-9	N.D.	0.002	0.01	0.024	1
12936	123789-HxCDF	72918-21-9	N.D.	0.002	0.01	0.024	1
12936	234678-HxCDF	60851-34-5	N.D.	0.002	0.01	0.024	1
12936	1234678-HpCDF	67562-39-4	0.005 ☐	0.002	0.01	0.024	1
12936	1234789-HpCDF	55673-89-7	N.D.	0.002	0.01	0.024	1
12936	OCDF	39001-02-0	0.006 ☐	0.006	0.019	0.048	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	74	40 - 135	0.002
13C12-12378-PeCDD	59	40 - 135	0.01
13C12-123478-HxCDD	62	40 - 135	0.01
13C12-123678-HxCDD	56	40 - 135	0.01
13C12-123789-HxCDD	57	40 - 135	0.01
13C12-1234678-HpCDD	57	40 - 135	0.01
13C12-OCDD	53	40 - 135	0.07
13C12-2378-TCDF	54	40 - 135	0.002
13C12-12378-PeCDF	53	40 - 135	0.01
13C12-23478-PeCDF	57	40 - 135	0.01
13C12-123478-HxCDF	53	40 - 135	0.01
13C12-123678-HxCDF	52	40 - 135	0.01
13C12-234678-HxCDF	49	40 - 135	0.01
13C12-123789-HxCDF	69	40 - 135	0.01
13C12-1234678-HpCDF	52	40 - 135	0.01
13C12-1234789-HpCDF	49	40 - 135	0.01
13C12-OCDF	46	40 - 135	0.02

**Dioxins/Furans Data Qualifiers:**

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Reporting Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column

☐ This limit was used in the evaluation of the final result



**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
ELLE Sample #: WW 9881309  
ELLE Group #: 2005271  
Matrix: Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submittal Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 12:10  
SDG☐: TID15-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Q	EMPC - Estimated Maximum Possible Concentration						
F	Interference is present						
S	Saturation of detection signal						
(3)	The Labeled Compound spike amount was less than the LOD.						

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

**Tidewater, Inc.**  
**ELLE Sample #:** WW 9881309  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submittal Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-02

### Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:

- Thorium b SW-846 6010C
- Cyclohexanone b SW-846 8260C
- Bis(2-chloroethyl)ether b SW-846 8270D/SW-846 8270D SIM
- Di-n-butyl phthalate b SW-846 8270D SIM
- Hexachlorobenzene b SW-846 8270D SIM

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs- 25ml Water b 8260C	SW-846 8260C 25mL purge	1	1183171AA	11/13/2018 13:54	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	1183171AA	11/13/2018 13:53	Jennifer K Howe	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAI026	11/08/2018 05:06	Ashley R Transue	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18309WAE026	11/07/2018 21:44	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18309WAE026	11/05/2018 18:38	Kate E Lutte	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAI026	11/06/2018 18:00	Mathias Opo	1
10407	Herb water 8151A Master	SW-846 8151A	1	183100005A	11/09/2018 09:01	Richard A Shober	1
10591	PCBs in Water b 8082A	SW-846 8082A	1	183100010A	11/08/2018 18:37	Kirby B Turner	1
10589	OC Pesticides in Water	SW-846 8081B	1	183100009A	11/14/2018 22:58	Andrea L Jones	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	183100010A	11/06/2018 21:45	Karen L Befer	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	183100009A	11/06/2018 21:45	Karen L Befer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	183100005A	11/06/2018 16:10	Ryan Dowd	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18313007	11/10/2018 15:06	Michaeliegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	1	18313007	11/09/2018 11:39	Deborah M Zimmerman	1
13495	Thorium	SW-846 6010C	1	183301063501	11/28/2018 09:49	Patricia Engle	1
06023	Aluminum	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06024	Antimony	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06025	Arsenic	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06026	Barium	SW-846 6020A	1	183091063901D	11/06/2018 18:39	Patricia Engle	1
06027	Beryllium	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06028	Cadmium	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06029	Calcium	SW-846 6020A	1	183091063901B	11/14/2018 11:08	Patricia Engle	5
06031	Chromium	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06032	Cobalt	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06033	Copper	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06034	Iron	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06035	Lead	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06036	Magnesium	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06037	Manganese	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06039	Nickel	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06040	Potassium	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06041	Selenium	SW-846 6020A	1	183091063901B	11/06/2018 18:39	Patricia Engle	1
06042	Silver	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06043	Sodium	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
06045	Thallium	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
13501	Uranium	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1

This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881309  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submission Date/Time: 11/02/2018 10:10

Collection Date/Time: 10/31/2018 12:10

SDG☐ TID15-02

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	183091063901A	11/12/2018 18:25	Bradley M Berlot	1
06049	☐inc	SW-846 6020A	1	183091063901A	11/06/2018 18:39	Patricia Engle	1
00259	Mercury☐	SW-846 7470A	1	183110571303	11/08/2018 13:08	Damaris Valentin	1
10635	ICP-WW☐3005A (tot rec) - U4	SW-846 3005A	1	183121063503	11/09/2018 15:20	☐Ella L Rice	1
10635	ICP-WW☐3005A (tot rec) - U4	SW-846 3005A	2	183301063501	11/26/2018 15:50	☐Ella L Rice	1
10639	ICPMS - Water☐3020A - U4	SW-846 3020A	1	183091063901	11/06/2018 06:30	James L Mert☐	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	183110571303	11/08/2018 08:25	Denise L Trimb☐	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-03FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Volatiles</b>		<b>SW-846 8260C 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>					
11996	Acetone	67-64-1	3.4 ☐	0.9	2.0	5.0	1
11996	Benzene	71-43-2	0.1 ☐	0.05	0.2	0.5	1
11996	Bromodichloromethane	75-27-4	N.D.	0.05	0.2	0.5	1
11996	Bromoform	75-25-2	N.D.	0.3	0.5	1.0	1
11996	Bromomethane	74-83-9	N.D.	0.07	0.2	0.5	1
11996	2-Butanone	78-93-3	N.D.	0.6	2.0	5.0	1
11996	Carbon Disulfide	75-15-0	N.D.	0.06	0.2	1.0	1
11996	Carbon Tetrachloride	56-23-5	N.D.	0.07	0.2	0.5	1
11996	Chlorobenzene	108-90-7	1.6	0.06	0.2	0.5	1
11996	Chloroethane	75-00-3	N.D.	0.07	0.2	0.5	1
11996	Chloroform	67-66-3	N.D.	0.09	0.2	0.5	1
11996	Chloromethane	74-87-3	0.1 ☐	0.06	0.2	0.5	1
11996	Cyclohexane	110-82-7	0.07 ☐	0.05	0.2	0.5	1
11996	Cyclohexanone	108-94-1	N.D.	1.8	7.2	25	1
11996	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.1	0.4	0.5	1
11996	Dibromochloromethane	124-48-1	N.D.	0.07	0.2	0.5	1
11996	1,2-Dibromoethane	106-93-4	N.D.	0.06	0.2	0.5	1
11996	1,2-Dichlorobenzene	95-50-1	0.1 ☐	0.06	0.2	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.06	0.2	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	0.2 ☐	0.07	0.2	0.5	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.05	0.2	0.5	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.07	0.2	0.5	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.05	0.2	0.5	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.06	0.2	0.5	1
11996	cis-1,2-Dichloroethene	156-59-2	0.09 ☐	0.05	0.2	0.5	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.06	0.2	0.5	1
11996	1,2-Dichloropropane	78-87-5	N.D.	0.06	0.2	0.5	1
11996	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.05	0.2	0.5	1
11996	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.06	0.2	0.5	1
11996	Ethylbenzene	100-41-4	N.D.	0.06	0.2	0.5	1
11996	Freon 113	76-13-1	N.D.	0.06	0.2	0.5	1
11996	2-Hexanone	591-78-6	N.D.	0.6	2.0	5.0	1
11996	Isopropylbenzene	98-82-8	N.D.	0.05	0.2	0.5	1
11996	Methyl Acetate	79-20-9	N.D.	0.1	0.2	1.0	1
11996	Methyl Tertiarybutyl Ether	1634-04-4	N.D.	0.05	0.2	0.5	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	0.7	2.0	5.0	1
11996	Methylcyclohexane	108-87-2	0.08 ☐	0.05	0.2	0.5	1
11996	Methylene Chloride	75-09-2	N.D.	0.07	0.2	0.5	1
11996	Styrene	100-42-5	N.D.	0.05	0.2	0.5	1
11996	1,1,1,2-Tetrachloroethane	79-34-5	N.D.	0.07	0.2	0.5	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG#:** TID15-03FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Volatiles SW-846 8260C 25mL</b>							
<b>purge</b>							
11996	Tetrachloroethene	127-18-4	N.D.	0.06	0.2	0.5	1
11996	Toluene	108-88-3	0.2	0.07	0.2	0.5	1
11996	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.06	0.2	0.5	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.06	0.2	0.5	1
11996	1,1,2-Trichloroethane	79-00-5	N.D.	0.06	0.2	0.5	1
11996	Trichloroethene	79-01-6	N.D.	0.06	0.2	0.5	1
11996	Trichlorofluoromethane	75-69-4	N.D.	0.05	0.2	0.5	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	0.2	0.5	1
11996	Alkene (Total)	1330-20-7	N.D.	0.1	0.4	0.5	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20% criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated: acetone.

GC/MS Semivolatiles	SW-846 8270D	ug/l	ug/l	ug/l	ug/l		
14241	Aniline	62-53-3	N.D.	3	9	10	
14241	Benzyl alcohol	100-51-6	N.D.	10	20	30	
14241	4-Bromophenylphenyl ether	101-55-3	N.D.	0.5	1	2	
14241	Carbazole	86-74-8	N.D.	0.5	1	2	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1	2	
14241	4-Chloroaniline	106-47-8	N.D.	4	9	10	
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1	2	
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	0.8	1	
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1	2	
14241	4-Chlorophenylphenyl ether	7005-72-3	N.D.	0.5	1	2	
14241	2,2-Dimethylbis(1-Chloropropane)	108-60-1	N.D.	0.5	1	2	
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2-Dimethylbis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.							
14241	Dibenzofuran	132-64-9	N.D.	0.5	1	2	
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1	2	
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1	2	
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1	2	
14241	3,3-Dichlorobenzidine	91-94-1	N.D.	3	9	10	

\*This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submittal Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 12:10  
SDG☐ TID15-03FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Semivolatiles SW-846 8270D</b>			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1	2	1
14241	Diethylphthalate	84-66-2	N.D.	2	4	5	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	9	10	1
14241	Dimethylphthalate	131-11-3	N.D.	2	4	5	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	20	21	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	28	30	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	2	5	1
14241	2,6-Dinitrotoluene	606-20-2	N.D. ☐	0.5	1	2	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1	2	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	10	11	1
14241	Hexachloroethane	67-72-1	N.D.	1	2	5	1
14241	Isophorone	78-59-1	N.D.	0.5	1	2	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	0.2	0.5	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1	2	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1	2	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
14241	2-Nitroaniline	88-74-4	N.D. ☐	2	6	7	1
14241	3-Nitroaniline	99-09-2	N.D.	3	6	7	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	2	3	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1	2	1
14241	2-Nitrophenol	88-75-5	N.D.	3	9	10	1
14241	4-Nitrophenol	100-02-7	N.D.	10	20	30	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	2	3	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	2	3	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
14241	Di-n-octylphthalate	117-84-0	N.D.	5	10	11	1
14241	Pentachlorophenol	87-86-5	N.D.	1	4	5	1
14241	Phenol	108-95-2	N.D.	0.5	1	2	1
14241	Pyridine	110-86-1	N.D.	2	4	5	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1	2	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1	2	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D. ☐	0.5	1	2	1

☐☐The response for a target analyte(s) in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) the high response indicating increased sensitivity and the target analyte(s) not being detected in the sample the data is reported.

GC/MS Semivolatiles	SW-846 8270D SIM	ug/l	ug/l	ug/l	ug/l
14244	Acenaphthene	83-32-9	0.6	0.01	0.03

☐☐This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG#:** TID15-03FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Semivolatiles SW-846 8270D SIM</b>							
14244	Acenaphthylene	208-96-8	0.01 □	0.01	0.03	0.05	1
14244	Anthracene	120-12-7	0.09	0.01	0.03	0.05	1
14244	Benzo(a)anthracene	56-55-3	N.D.	0.01	0.03	0.05	1
14244	Benzo(a)pyrene	50-32-8	N.D.	0.01	0.03	0.05	1
14244	Benzo(b)fluoranthene	205-99-2	N.D.	0.01	0.03	0.05	1
14244	Benzo(g,h,i)perylene	191-24-2	N.D.	0.01	0.03	0.05	1
14244	Benzo(k)fluoranthene	207-08-9	N.D.	0.01	0.03	0.05	1
14244	Di-n-butylphthalate	84-74-2	0.6 □	0.05	0.1	1	1
14244	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.02	0.06	0.07	1
14244	Chrysene	218-01-9	0.01 □	0.01	0.03	0.05	1
14244	Dibenzo(a,h)anthracene	53-70-3	N.D.	0.02	0.06	0.07	1
14244	1,4-Dioxane	123-91-1	0.3 □	0.1	0.2	0.3	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	0.9 □	0.08	0.2	1	1
14244	Fluoranthene	206-44-0	0.1	0.01	0.03	0.05	1
14244	Fluorene	86-73-7	0.3	0.01	0.03	0.05	1
14244	Hexachlorobenzene	118-74-1	N.D.	0.01	0.03	0.05	1
14244	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.01	0.03	0.05	1
14244	Naphthalene	91-20-3	0.1	0.03	0.06	0.07	1
14244	Phenanthrene	85-01-8	0.6	0.03	0.06	0.07	1
14244	Pyrene	129-00-0	0.07	0.01	0.03	0.05	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

<b>Herbicides</b>		<b>SW-846 8151A</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10407	2,4-D	94-75-7	N.D. D2	0.24	0.48	0.58	1
10407	Dalapon	75-99-0	N.D. D2	1.7	3.5	3.8	1
10407	2,4-DB	94-82-6	N.D. D2	0.61	1.3	1.4	1
10407	Dicamba	1918-00-9	N.D. D2	0.077	0.15	0.29	1
10407	Dinoseb	88-85-7	N.D. D2	0.17	0.38	0.48	1
The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.							
10407	2,4-DP (Dichloroprop)	120-36-5	N.D. D1	0.15	0.31	0.48	1
10407	MCPA	94-74-6	N.D. D1	48	96	190	1
10407	MCPP	93-65-2	N.D. D1	48	96	190	1
10407	2,4,5-T	93-76-5	N.D. D1	0.063	0.13	0.14	1
10407	2,4,5-TP	93-72-1	N.D. D1	0.0096	0.029	0.048	1

<b>PCBs</b>		<b>SW-846 8082A</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10591	PCB-1016	12674-11-2	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1221	11104-28-2	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1232	11141-16-5	N.D. D1	0.16	0.32	0.40	1

□ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-03FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>PCBs</b>							
<b>SW-846 8082A</b>			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10591	PCB-1242	53469-21-9	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1248	12672-29-6	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1254	11097-69-1	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1260	11096-82-5	N.D. D1	0.12	0.24	0.40	1
10591	PCB-1262	37324-23-5	N.D. D1	0.16	0.32	0.40	1
10591	PCB-1268	11100-14-4	N.D. D1	0.13	0.26	0.40	1
<b>Pesticides</b>							
<b>SW-846 8081B</b>			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10589	Aldrin	309-00-2	N.D. D1	0.0016	0.0057	0.0081	1
10589	Alpha BHC	319-84-6	0.014 D2	0.0024	0.0057	0.0081	1
10589	Beta BHC	319-85-7	N.D. D2	0.0028	0.0057	0.0081	1
10589	Gamma BHC - Lindane	58-89-9	N.D. D1	0.0016	0.0057	0.0081	1
10589	Alpha Chlordane	5103-71-9	N.D. D2	0.0024	0.0057	0.0081	1
10589	Chlordane	57-74-9	N.D. D1	0.13	0.26	0.40	1
10589	Gamma Chlordane	5103-74-2	N.D. D2	0.0057	0.016	0.016	1
10589	p,p-DDD	72-54-8	N.D. D1	0.0040	0.0081	0.016	1
10589	p,p-DDE	72-55-9	N.D. D1	0.0040	0.0081	0.016	1
10589	p,p-DDT	50-29-3	N.D. D1	0.0042	0.0081	0.016	1
10589	Delta BHC	319-86-8	N.D. D2	0.0028	0.0057	0.0081	1
10589	Dieldrin	60-57-1	N.D. D2	0.0043	0.0081	0.016	1
10589	Endosulfan I	959-98-8	N.D. D1	0.0035	0.0073	0.0081	1
10589	Endosulfan II	33213-65-9	N.D. D2	0.012	0.024	0.024	1
10589	Endosulfan Sulfate	1031-07-8	N.D. D2	0.0047	0.0097	0.016	1
10589	Endrin	72-20-8	N.D. D1	0.0066	0.016	0.016	1
10589	Endrin Aldehyde	7421-93-4	N.D. D1	0.016	0.032	0.081	1
10589	Endrin Ketone	53494-70-5	N.D. D1	0.0040	0.0081	0.016	1
10589	Heptachlor	76-44-8	N.D. D1	0.0016	0.0057	0.0081	1
10589	Heptachlor Epoxide	1024-57-3	N.D. D1	0.0019	0.0057	0.0081	1
10589	Methoxychlor	72-43-5	N.D. D1	0.024	0.057	0.081	1
10589	Toxaphene	8001-35-2	N.D. D1	0.24	0.49	0.81	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Metals	SW-846 6010C	mg/l	mg/l	mg/l	mg/l		
13495	Thorium	7440-29-1	N.D.	0.205	0.400	0.500	1

The ICV/CCV RSD is greater than 5% for Thorium.  
Outlier recovery result: ICV/CCV RSD 5% Acceptance limits: < 5%  
ICV RSD - 5.9% reading 0.58 acceptance limits: 0.54-0.66  
1st CCV RSD - 5.3% reading 0.49 acceptance limits: 0.45-0.55  
2nd CCV RSD - 10.7% reading 0.48 acceptance limits: 0.45-0.55  
3rd CCV RSD - 2.2% reading 0.49 acceptance limits: 0.45-0.55

This limit was used in the evaluation of the final result



**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG** □ TID15-03FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Metals</b>							
<b>SW-846 6020A</b>			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06023	Aluminum	7429-90-5	N.D.	0.0197	0.0500	0.400	1
06024	Antimony □	7440-36-0	N.D. K3	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0155	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	1.62	0.00075	0.0020	0.0040	1
06027	Beryllium	7440-41-7	N.D.	0.000091	0.00025	0.00050	1
06028	Cadmium	7440-43-9	N.D.	0.00015	0.00050	0.0010	1
06029	Calcium	7440-70-2	261	0.299	1.00	3.50	5
06031	Chromium	7440-47-3	0.0027 □	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0023	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	N.D.	0.0099	0.0200	0.0400	1
06034	Iron	7439-89-6	41.8	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	N.D.	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	32.0	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.684	0.0049	0.0080	0.0100	1
06039	Nickel	7440-02-0	0.00063 □	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	19.9	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	39.5	0.0500	0.200	0.900	1
06045	Thallium	7440-28-0	N.D.	0.00011	0.00025	0.00050	1
13501	Uranium	7440-61-1	N.D.	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.0022	0.00024	0.00050	0.0010	1
06049	Zinc	7440-66-6	N.D.	0.0062	0.0120	0.0150	1
<b>SW-846 7470A</b>			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury □	7439-97-6	N.D.	0.000050	0.00010	0.00020	1

□ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG** □ TID15-03FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Dioxins/Furans</b>		<b>SW-846 8290A Feb 2007 Rev 1</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	
12936	2378-TCDD	1746-01-6	N.D.	0.0009	0.002	0.005	1
12936	12378-PeCDD	40321-76-4	N.D.	0.003	0.01	0.025	1
12936	123478-HxCDD	39227-28-6	N.D.	0.002	0.01	0.025	1
12936	123678-HxCDD	57653-85-7	N.D.	0.002	0.01	0.025	1
12936	123789-HxCDD	19408-74-3	N.D.	0.002	0.01	0.025	1
12936	1234678-HpCDD	35822-46-9	0.01 □	0.004	0.01	0.025	1
12936	OCDD	3268-87-9	0.11	0.036	0.072	0.11	1
12936	2378-TCDF	51207-31-9	N.D.	0.0008	0.002	0.005	1
12936	12378-PeCDF	57117-41-6	N.D.	0.003	0.01	0.025	1
12936	23478-PeCDF	57117-31-4	N.D.	0.002	0.01	0.025	1
12936	123478-HxCDF	70648-26-9	N.D.	0.002	0.01	0.025	1
12936	123678-HxCDF	57117-44-9	N.D.	0.002	0.01	0.025	1
12936	123789-HxCDF	72918-21-9	N.D.	0.002	0.01	0.025	1
12936	234678-HxCDF	60851-34-5	N.D.	0.002	0.01	0.025	1
12936	1234678-HpCDF	67562-39-4	0.005 □	0.002	0.01	0.025	1
12936	1234789-HpCDF	55673-89-7	N.D.	0.002	0.01	0.025	1
12936	OCDF	39001-02-0	0.007 □	0.006	0.020	0.050	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	70	40 - 135	0.002
13C12-12378-PeCDD	59	40 - 135	0.01
13C12-123478-HxCDD	58	40 - 135	0.01
13C12-123678-HxCDD	52	40 - 135	0.01
13C12-123789-HxCDD	56	40 - 135	0.01
13C12-1234678-HpCDD	54	40 - 135	0.01
13C12-OCDD	54	40 - 135	0.07
13C12-2378-TCDF	55	40 - 135	0.002
13C12-12378-PeCDF	54	40 - 135	0.01
13C12-23478-PeCDF	55	40 - 135	0.01
13C12-123478-HxCDF	45	40 - 135	0.01
13C12-123678-HxCDF	44	40 - 135	0.01
13C12-234678-HxCDF	44	40 - 135	0.01
13C12-123789-HxCDF	61	40 - 135	0.01
13C12-1234678-HpCDF	48	40 - 135	0.01
13C12-1234789-HpCDF	48	40 - 135	0.01
13C12-OCDF	46	40 - 135	0.02

**Dioxins/Furans Data Qualifiers:**

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Reporting Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column

□ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
ELLE Sample #: WW 9881310  
ELLE Group #: 2005271  
Matrix: Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submittal Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 12:10  
SDG☐ TID15-03FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Q	EMPC - Estimated Maximum Possible Concentration						
F	Interference is present						
S	Saturation of detection signal						
(3)	The Labeled Compound spike amount was less than the LOD.						

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

**Tidewater, Inc.**  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submittal Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG#:** TID15-03FD

### Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:

- Thorium b SW-846 6010C
- Cyclohexanone b SW-846 8260C
- Bis(2-chloroethyl) ether b SW-846 8270D/SW-846 8270D SIM
- Di-n-butyl phthalate b SW-846 8270D SIM
- Hexachlorobenzene b SW-846 8270D SIM

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs- 25ml Water b 8260C	SW-846 8260C 25mL purge	1	1183171AA	11/13/2018 14:16	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	1183171AA	11/13/2018 14:15	Jennifer K Howe	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAI026	11/08/2018 05:35	Ashley R Transue	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18309WAE026	11/07/2018 22:13	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18309WAE026	11/05/2018 18:38	Kate E Lutte	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAI026	11/06/2018 18:00	Mathias Opo	1
10407	Herb water 8151A Master	SW-846 8151A	1	183100005A	11/09/2018 09:34	Richard A Shober	1
10591	PCBs in Water b 8082A	SW-846 8082A	1	183100010A	11/08/2018 18:48	Kirby B Turner	1
10589	OC Pesticides in Water	SW-846 8081B	1	183100009A	11/14/2018 23:23	Andrea L Jones	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	183100010A	11/06/2018 21:45	Karen L Beier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	183100009A	11/06/2018 21:45	Karen L Beier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	183100005A	11/06/2018 16:10	Ryan Dowd	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18313007	11/10/2018 16:03	Michaeliegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	1	18313007	11/09/2018 11:39	Deborah M Zimmerman	1
13495	Thorium	SW-846 6010C	1	183301063501	11/28/2018 09:52	Patricia Engle	1
06023	Aluminum	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06024	Antimony	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06025	Arsenic	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06026	Barium	SW-846 6020A	1	183091063901D	11/06/2018 18:47	Patricia Engle	1
06027	Beryllium	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06028	Cadmium	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06029	Calcium	SW-846 6020A	1	183091063901B	11/14/2018 11:10	Patricia Engle	5
06031	Chromium	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06032	Cobalt	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06033	Copper	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06034	Iron	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06035	Lead	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06036	Magnesium	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06037	Manganese	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06039	Nickel	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06040	Potassium	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06041	Selenium	SW-846 6020A	1	183091063901B	11/06/2018 18:47	Patricia Engle	1
06042	Silver	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06043	Sodium	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
06045	Thallium	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1
13501	Uranium	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patricia Engle	1

This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-DUP Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881310  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submission Date/Time: 11/02/2018 10:10

Collection Date/Time: 10/31/2018 12:10

SDG☐ TID15-03FD

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	183091063901A	11/12/2018 18:31	Bradley M Berlot	1
06049	☐inc	SW-846 6020A	1	183091063901A	11/06/2018 18:47	Patrick ☐Engle	1
00259	Mercur☐	SW-846 7470A	1	183110571303	11/08/2018 13:10	Damar☐Valentin	1
10635	ICP-WW☐3005A (tot rec) - U4	SW-846 3005A	1	183121063503	11/09/2018 15:20	☐Ella L Rice	1
10635	ICP-WW☐3005A (tot rec) - U4	SW-846 3005A	2	183301063501	11/26/2018 15:50	☐Ella L Rice	1
10639	ICPMS - Water☐3020A - U4	SW-846 3020A	1	183091063901	11/06/2018 06:30	James L Mert☐	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	183110571303	11/08/2018 08:25	Denise L Trimb☐	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-F Filtered Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881311  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-04

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Metals Dissolved</b>							
		<b>SW-846 6010C</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
13495	Thorium	7440-29-1	N.D.	0.205	0.400	0.500	1
The ICV/CCV RSD is greater than 5% for Thorium. Outlier recover/result: ICV/CCV RSD 5% Acceptance limits: < 5% ICV RSD - 5.9% reading 0.58 acceptance limits: 0.54-0.66 1st CCV RSD - 5.3% reading 0.49 acceptance limits: 0.45-0.55 2nd CCV RSD - 10.7% reading 0.48 acceptance limits: 0.45-0.55 3rd CCV RSD - 2.2% reading 0.49 acceptance limits: 0.45-0.55							
		<b>SW-846 6020A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06023	Aluminum	7429-90-5	N.D.	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	N.D. K3	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0170	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	1.82	0.00075	0.0020	0.0040	1
06027	Beryllium	7440-41-7	N.D.	0.000091	0.00025	0.00050	1
06028	Cadmium	7440-43-9	N.D.	0.00015	0.00050	0.0010	1
06029	Calcium	7440-70-2	277	0.299	1.00	3.50	5
06031	Chromium	7440-47-3	0.0023	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0028	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	N.D.	0.0099	0.0200	0.0400	1
06034	Iron	7439-89-6	45.9	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	N.D.	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	35.3	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.766	0.0049	0.0080	0.0100	1
06039	Nickel	7440-02-0	N.D.	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	21.7	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	43.3	0.0500	0.200	0.900	1
06045	Thallium	7440-28-0	N.D.	0.00011	0.00025	0.00050	1
13501	Uranium	7440-61-1	N.D.	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.0019	0.00024	0.00050	0.0010	1
06049	Zinc	7440-66-6	N.D.	0.0062	0.0120	0.0150	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000050	0.00010	0.00020	1

### Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:  
Thorium b SW-846 6010C  
This sample was field filtered for dissolved metals.

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-F Filtered Grab Groundwater  
Great Kills Park, NY

**Tidewater, Inc.**  
**ELLE Sample #:** WW 9881311  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-04

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13495	Thorium	SW-846 6010C	1	183301063501	11/28/2018 10:00	Patric Engle	1
06023	Aluminum	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06024	Antimony	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06025	Arsenic	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06026	Barium	SW-846 6020A	1	183091063901D	11/06/2018 18:22	Patric Engle	1
06027	Beryllium	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06028	Cadmium	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06029	Calcium	SW-846 6020A	1	183091063901B	11/14/2018 10:55	Patric Engle	5
06031	Chromium	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06032	Cobalt	SW-846 6020A	1	183091063901A	11/12/2018 18:10	Bradley M Berlot	1
06033	Copper	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06034	Iron	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06035	Lead	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06036	Magnesium	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06037	Manganese	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06039	Nickel	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06040	Potassium	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06041	Selenium	SW-846 6020A	1	183091063901B	11/06/2018 18:22	Patric Engle	1
06042	Silver	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06043	Sodium	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06045	Thallium	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
13501	Uranium	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
06048	Vanadium	SW-846 6020A	1	183091063901A	11/12/2018 18:10	Bradley M Berlot	1
06049	Zinc	SW-846 6020A	1	183091063901A	11/06/2018 18:22	Patric Engle	1
00259	Mercury	SW-846 7470A	1	183110571303	11/08/2018 13:12	Damar Valentin	1
10635	ICP-WW 3005A (tot rec) - U4	SW-846 3005A	1	183121063503	11/09/2018 15:20	Ella L Rice	1
10635	ICP-WW 3005A (tot rec) - U4	SW-846 3005A	2	183301063501	11/26/2018 15:50	Ella L Rice	1
10639	ICPMS - Water 3020A - U4	SW-846 3020A	1	183091063901	11/06/2018 06:30	James L Mert	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	183110571303	11/08/2018 08:25	Denise L Trimb	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW008WT-F-DUP Filtered Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881312  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-05FD

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Metals Dissolved</b>							
		<b>SW-846 6010C</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
13495	Thorium	7440-29-1	N.D.	0.205	0.400	0.500	1
The ICV/CCV RSD is greater than 5% for Thorium. Outlier recover/result: ICV/CCV RSD 5% Acceptance limits: < 5% ICV RSD - 5.9% reading 0.58 acceptance limits: 0.54-0.66 1st CCV RSD - 5.3% reading 0.49 acceptance limits: 0.45-0.55 2nd CCV RSD - 10.7% reading 0.48 acceptance limits: 0.45-0.55 3rd CCV RSD - 2.2% reading 0.49 acceptance limits: 0.45-0.55							
		<b>SW-846 6020A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06023	Aluminum	7429-90-5	N.D.	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	N.D. K3	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0150	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	1.71	0.00075	0.0020	0.0040	1
06027	Beryllium	7440-41-7	N.D.	0.000091	0.00025	0.00050	1
06028	Cadmium	7440-43-9	N.D.	0.00015	0.00050	0.0010	1
06029	Calcium	7440-70-2	272	0.299	1.00	3.50	5
06031	Chromium	7440-47-3	0.0019	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0023	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	N.D.	0.0099	0.0200	0.0400	1
06034	Iron	7439-89-6	44.4	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	N.D.	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	34.3	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.746	0.0049	0.0080	0.0100	1
06039	Nickel	7440-02-0	N.D.	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	21.3	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	41.8	0.0500	0.200	0.900	1
06045	Thallium	7440-28-0	N.D.	0.00011	0.00025	0.00050	1
13501	Uranium	7440-61-1	N.D.	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.0018	0.00024	0.00050	0.0010	1
06049	Zinc	7440-66-6	N.D.	0.0062	0.0120	0.0150	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000050	0.00010	0.00020	1

### Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:  
 Thorium b SW-846 6010C  
 This sample was field filtered for dissolved metals.

☐ This limit was used in the evaluation of the final result



**Sample Description:** OU2-1-MW008WT-F-DUP Filtered Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881312  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submittal Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 12:10  
**SDG:** TID15-05FD

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13495	Thorium	SW-846 6010C	1	183301063501	11/28/2018 10:03	Patric Engle	1
06023	Aluminum	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06024	Antimony	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06025	Arsenic	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06026	Barium	SW-846 6020A	1	183091063901D	11/06/2018 18:49	Patric Engle	1
06027	Beryllium	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06028	Cadmium	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06029	Calcium	SW-846 6020A	1	183091063901B	11/14/2018 11:12	Patric Engle	5
06031	Chromium	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06032	Cobalt	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06033	Copper	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06034	Iron	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06035	Lead	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06036	Magnesium	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06037	Manganese	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06039	Nickel	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06040	Potassium	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06041	Selenium	SW-846 6020A	1	183091063901B	11/06/2018 18:49	Patric Engle	1
06042	Silver	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06043	Sodium	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06045	Thallium	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
13501	Uranium	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
06048	Vanadium	SW-846 6020A	1	183091063901A	11/12/2018 18:33	Bradley M Berlot	1
06049	Zinc	SW-846 6020A	1	183091063901A	11/06/2018 18:49	Patric Engle	1
00259	Mercury	SW-846 7470A	1	183110571303	11/08/2018 13:14	Damar Valentin	1
10635	ICP-WW 3005A (tot rec) - U4	SW-846 3005A	1	183121063503	11/09/2018 15:20	Ella L Rice	1
10635	ICP-WW 3005A (tot rec) - U4	SW-846 3005A	2	183301063501	11/26/2018 15:50	Ella L Rice	1
10639	ICPMS - Water 3020A - U4	SW-846 3020A	1	183091063901	11/06/2018 06:30	James L Mert	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	183110571303	11/08/2018 08:25	Denise L Trimb	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881313  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 16:55  
**SDG:** TID15-06

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Volatiles</b>		<b>SW-846 8260C 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>					
11996	Acetone	67-64-1	2.2 ☐	0.9	2.0	5.0	1
11996	Benzene	71-43-2	N.D.	0.05	0.2	0.5	1
11996	Bromodichloromethane	75-27-4	N.D.	0.05	0.2	0.5	1
11996	Bromoform	75-25-2	N.D.	0.3	0.5	1.0	1
11996	Bromomethane	74-83-9	N.D.	0.07	0.2	0.5	1
11996	2-Butanone	78-93-3	N.D.	0.6	2.0	5.0	1
11996	Carbon Disulfide	75-15-0	N.D.	0.06	0.2	1.0	1
11996	Carbon Tetrachloride	56-23-5	N.D.	0.07	0.2	0.5	1
11996	Chlorobenzene	108-90-7	N.D.	0.06	0.2	0.5	1
11996	Chloroethane	75-00-3	N.D.	0.07	0.2	0.5	1
11996	Chloroform	67-66-3	N.D.	0.09	0.2	0.5	1
11996	Chloromethane	74-87-3	0.2 ☐	0.06	0.2	0.5	1
11996	Cyclohexane	110-82-7	N.D.	0.05	0.2	0.5	1
11996	Cyclohexanone	108-94-1	N.D.	1.8	7.2	25	1
11996	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.1	0.4	0.5	1
11996	Dibromochloromethane	124-48-1	N.D.	0.07	0.2	0.5	1
11996	1,2-Dibromoethane	106-93-4	N.D.	0.06	0.2	0.5	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.06	0.2	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.06	0.2	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.07	0.2	0.5	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.05	0.2	0.5	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.07	0.2	0.5	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.05	0.2	0.5	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.06	0.2	0.5	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.05	0.2	0.5	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.06	0.2	0.5	1
11996	1,2-Dichloropropane	78-87-5	N.D.	0.06	0.2	0.5	1
11996	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.05	0.2	0.5	1
11996	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.06	0.2	0.5	1
11996	Ethylbenzene	100-41-4	N.D.	0.06	0.2	0.5	1
11996	Freon 113	76-13-1	N.D.	0.06	0.2	0.5	1
11996	2-Hexanone	591-78-6	N.D.	0.6	2.0	5.0	1
11996	Isopropylbenzene	98-82-8	N.D.	0.05	0.2	0.5	1
11996	Methyl Acetate	79-20-9	N.D.	0.1	0.2	1.0	1
11996	Methyl Tertiarybutyl Ether	1634-04-4	N.D.	0.05	0.2	0.5	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	0.7	2.0	5.0	1
11996	Methylcyclohexane	108-87-2	N.D.	0.05	0.2	0.5	1
11996	Methylene Chloride	75-09-2	N.D.	0.07	0.2	0.5	1
11996	Styrene	100-42-5	N.D.	0.05	0.2	0.5	1
11996	1,1,1,2-Tetrachloroethane	79-34-5	N.D.	0.07	0.2	0.5	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881313  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 16:55  
**SDG:** TID15-06

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Volatiles</b>		<b>SW-846 8260C 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
<b>purge</b>							
11996	Tetrachloroethene	127-18-4	N.D.	0.06	0.2	0.5	1
11996	Toluene	108-88-3	N.D.	0.07	0.2	0.5	1
11996	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.06	0.2	0.5	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.06	0.2	0.5	1
11996	1,1,2-Trichloroethane	79-00-5	N.D.	0.06	0.2	0.5	1
11996	Trichloroethene	79-01-6	N.D.	0.06	0.2	0.5	1
11996	Trichlorofluoromethane	75-69-4	N.D.	0.05	0.2	0.5	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	0.2	0.5	1
11996	ene (Total)	1330-20-7	N.D.	0.1	0.4	0.5	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20% criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated: acetone.

GC/MS Semivolatiles	SW-846 8270D	ug/l	ug/l	ug/l	ug/l		
14241	Aniline	62-53-3	N.D.	3	9	10	1
14241	Benzyl alcohol	100-51-6	N.D.	10	20	30	1
14241	4-Bromophenylphenyl ether	101-55-3	N.D.	0.5	1	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1	2	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1	2	1
14241	4-Chloroaniline	106-47-8	N.D.	4	9	10	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1	2	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	0.8	1	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1	2	1
14241	4-Chlorophenylphenyl ether	7005-72-3	N.D.	0.5	1	2	1
14241	2,2-dioxibis(1-Chloropropane)	108-60-1	N.D.	0.5	1	2	1
Bis(2-chloroisopropyl) ether CAS 39638-32-9 and 2,2-Dioxibis(1-chloropropane) CAS 108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.							
14241	Dibenzofuran	132-64-9	N.D.	0.5	1	2	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1	2	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1	2	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1	2	1
14241	3,3-Dichlorobenzidine	91-94-1	N.D.	3	9	10	1

\*This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
ELLE Sample #: WW 9881313  
ELLE Group #: 2005271  
Matrix: Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submission Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 16:55  
SDG☐ TID15-06

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Semivolatiles SW-846 8270D ug/l ug/l ug/l ug/l</b>							
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1	2	1
14241	Diethylphthalate	84-66-2	N.D.	2	4	5	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	9	10	1
14241	Dimethylphthalate	131-11-3	N.D.	2	4	5	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	20	21	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	28	30	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	2	5	1
14241	2,6-Dinitrotoluene	606-20-2	N.D. ☐	0.5	1	2	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1	2	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	10	11	1
14241	Hexachloroethane	67-72-1	N.D.	1	2	5	1
14241	Isophorone	78-59-1	N.D.	0.5	1	2	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	0.2	0.5	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1	2	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1	2	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
14241	2-Nitroaniline	88-74-4	N.D. ☐	2	6	7	1
14241	3-Nitroaniline	99-09-2	N.D.	3	6	7	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	2	3	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1	2	1
14241	2-Nitrophenol	88-75-5	N.D.	3	9	10	1
14241	4-Nitrophenol	100-02-7	N.D.	10	20	30	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	2	3	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	2	3	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
14241	Di-n-octylphthalate	117-84-0	N.D.	5	10	11	1
14241	Pentachlorophenol	87-86-5	N.D.	1	4	5	1
14241	Phenol	108-95-2	N.D.	0.5	1	2	1
14241	Pyridine	110-86-1	N.D.	2	4	5	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1	2	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1	2	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D. ☐	0.5	1	2	1

☐The response for a target analyte(s) in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) the high response indicating increased sensitivity and the target analyte(s) not being detected in the sample the data is reported.

GC/MS Semivolatiles	SW-846 8270D SIM	ug/l	ug/l	ug/l	ug/l
14244	Acenaphthene	83-32-9	N.D.	0.01	0.03

☐This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881313  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 16:55  
**SDG:** TID15-06

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>GC/MS Semivolatiles SW-846 8270D SIM</b>							
14244	Acenaphthylene	208-96-8	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Anthracene	120-12-7	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Benzo(a)anthracene	56-55-3	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Benzo(a)pyrene	50-32-8	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Benzo(b)fluoranthene	205-99-2	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Benzo(g,h,i)perylene	191-24-2	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Benzo(k)fluoranthene	207-08-9	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Di-n-butylphthalate	84-74-2	0.1 □	0.05 ug/l	0.1 ug/l	1 ug/l	1
14244	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.02 ug/l	0.06 ug/l	0.07 ug/l	1
14244	Chrysene	218-01-9	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Dibenzo(a,h)anthracene	53-70-3	N.D.	0.02 ug/l	0.06 ug/l	0.07 ug/l	1
14244	1,4-Dioxane	123-91-1	N.D.	0.1 ug/l	0.2 ug/l	0.3 ug/l	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	0.5 □	0.08 ug/l	0.2 ug/l	1 ug/l	1
14244	Fluoranthene	206-44-0	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Fluorene	86-73-7	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Hexachlorobenzene	118-74-1	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1
14244	Naphthalene	91-20-3	N.D.	0.03 ug/l	0.06 ug/l	0.07 ug/l	1
14244	Phenanthrene	85-01-8	N.D.	0.03 ug/l	0.06 ug/l	0.07 ug/l	1
14244	Pyrene	129-00-0	N.D.	0.01 ug/l	0.03 ug/l	0.05 ug/l	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

<b>Herbicides</b>		<b>SW-846 8151A</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10407	2,4-D	94-75-7	N.D. D2	0.24	0.48	0.57	1
10407	Dalapon	75-99-0	N.D. D2	1.7	3.4	3.8	1
10407	2,4-DB	94-82-6	N.D. D1	0.60	1.2	1.4	1
10407	Dicamba	1918-00-9	N.D. D1	0.077	0.15	0.29	1
10407	Dinoseb	88-85-7	N.D. D1	0.17	0.38	0.48	1
The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.							
10407	2,4-DP (Dichloroprop)	120-36-5	N.D. D1	0.15	0.31	0.48	1
10407	MCPA	94-74-6	N.D. D1	48	96	190	1
10407	MCPP	93-65-2	N.D. D1	48	96	190	1
10407	2,4,5-T	93-76-5	N.D. D1	0.062	0.12	0.14	1
10407	2,4,5-TP	93-72-1	N.D. D2	0.0096	0.029	0.048	1

<b>PCBs</b>		<b>SW-846 8082A</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10591	PCB-1016	12674-11-2	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1221	11104-28-2	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1232	11141-16-5	N.D. D1	0.16	0.32	0.40	1

□ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881313  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 16:55  
**SDG:** TID15-06

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>PCBs</b>							
		<b>SW-846 8082A</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10591	PCB-1242	53469-21-9	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1248	12672-29-6	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1254	11097-69-1	N.D. D1	0.081	0.24	0.40	1
10591	PCB-1260	11096-82-5	N.D. D1	0.12	0.24	0.40	1
10591	PCB-1262	37324-23-5	N.D. D1	0.16	0.32	0.40	1
10591	PCB-1268	11100-14-4	N.D. D1	0.13	0.26	0.40	1
<b>Pesticides</b>							
		<b>SW-846 8081B</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
10589	Aldrin	309-00-2	N.D. D1	0.0016	0.0056	0.0081	1
10589	Alpha BHC	319-84-6	0.024 D1	0.0024	0.0056	0.0081	1
10589	Beta BHC	319-85-7	N.D. D1	0.0027	0.0056	0.0081	1
10589	Gamma BHC - Lindane	58-89-9	N.D. D1	0.0016	0.0056	0.0081	1
10589	Alpha Chlordane	5103-71-9	N.D. D1	0.0024	0.0056	0.0081	1
10589	Chlordane	57-74-9	N.D. D1	0.13	0.26	0.40	1
10589	Gamma Chlordane	5103-74-2	N.D. D1	0.0056	0.016	0.016	1
10589	p,p-DDD	72-54-8	N.D. D1	0.0040	0.0081	0.016	1
10589	p,p-DDE	72-55-9	N.D. D1	0.0040	0.0081	0.016	1
10589	p,p-DDT	50-29-3	N.D. D1	0.0042	0.0081	0.016	1
10589	Delta BHC	319-86-8	N.D. D1	0.0027	0.0056	0.0081	1
10589	Dieldrin	60-57-1	N.D. D1	0.0043	0.0081	0.016	1
10589	Endosulfan I	959-98-8	N.D. D1	0.0035	0.0073	0.0081	1
10589	Endosulfan II	33213-65-9	N.D. D1	0.012	0.024	0.024	1
10589	Endosulfan Sulfate	1031-07-8	N.D. D1	0.0047	0.0097	0.016	1
10589	Endrin	72-20-8	N.D. D1	0.0065	0.016	0.016	1
10589	Endrin Aldehyde	7421-93-4	N.D. D1	0.016	0.032	0.081	1
10589	Endrin Ketone	53494-70-5	N.D. D1	0.0040	0.0081	0.016	1
10589	Heptachlor	76-44-8	N.D. D2	0.0016	0.0056	0.0081	1
10589	Heptachlor Epoxide	1024-57-3	N.D. D1	0.0019	0.0056	0.0081	1
10589	Methoxychlor	72-43-5	N.D. D1	0.024	0.056	0.081	1
10589	Toxaphene	8001-35-2	N.D. D1	0.24	0.48	0.81	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Metals	SW-846 6010C	mg/l	mg/l	mg/l	mg/l		
13495	Thorium	7440-29-1	N.D.	0.205	0.400	0.500	1

The ICV/CCV RSD is greater than 5% for Thorium.  
Outlier recovery result: ICV/CCV RSD 5% Acceptance limits: < 5%  
ICV RSD - 5.9% reading 0.58 acceptance limits: 0.54-0.66  
1st CCV RSD - 5.3% reading 0.49 acceptance limits: 0.45-0.55  
2nd CCV RSD - 10.7% reading 0.48 acceptance limits: 0.45-0.55  
3rd CCV RSD - 2.2% reading 0.49 acceptance limits: 0.45-0.55

\*This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881313  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submittal Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 16:55  
SDG☐ TID15-06

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Metals</b>		<b>SW-846 6020A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06023	Aluminum	7429-90-5	N.D.	0.0197	0.0500	0.400	1
06024	Antimony☐	7440-36-0	N.D. K3	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0028	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	0.0736	0.00075	0.0020	0.0040	1
06027	Berillium	7440-41-7	N.D.	0.000091	0.00025	0.00050	1
06028	Cadmium	7440-43-9	N.D.	0.00015	0.00050	0.0010	1
06029	Calcium	7440-70-2	87.4	0.0598	0.200	0.700	1
06031	Chromium	7440-47-3	N.D.	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.00032 ☐	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	N.D.	0.0099	0.0200	0.0400	1
06034	Iron	7439-89-6	2.38	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	N.D.	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	25.2	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	1.19	0.0049	0.0080	0.0100	1
06039	Nickel	7440-02-0	N.D.	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	4.76	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	19.4	0.0500	0.200	0.900	1
06045	Thallium	7440-28-0	N.D.	0.00011	0.00025	0.00050	1
13501	Uranium	7440-61-1	0.0011	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.00028 ☐	0.00024	0.00050	0.0010	1
06049	Zinc	7440-66-6	N.D.	0.0062	0.0120	0.0150	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury☐	7439-97-6	N.D.	0.000050	0.00010	0.00020	1

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
ELLE Sample #: WW 9881313  
ELLE Group #: 2005271  
Matrix: Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submission Date/Time: 11/02/2018 10:10  
Collection Date/Time: 10/31/2018 16:55  
SDG☐ TID15-06

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Dioxins/Furans</b>							
	<b>SW-846 8290A Feb 2007 Rev 1</b>		<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	
12936	2378-TCDD	1746-01-6	N.D.	0.0008	0.002	0.005	1
12936	12378-PeCDD	40321-76-4	N.D.	0.003	0.01	0.024	1
12936	123478-HxCDD	39227-28-6	N.D.	0.002	0.01	0.024	1
12936	123678-HxCDD	57653-85-7	N.D.	0.002	0.01	0.024	1
12936	123789-HxCDD	19408-74-3	N.D.	0.002	0.01	0.024	1
12936	1234678-HpCDD	35822-46-9	N.D.	0.004	0.01	0.024	1
12936	OCDD	3268-87-9	N.D.	0.035	0.070	0.11	1
12936	2378-TCDF	51207-31-9	N.D.	0.0008	0.002	0.005	1
12936	12378-PeCDF	57117-41-6	N.D.	0.003	0.01	0.024	1
12936	23478-PeCDF	57117-31-4	N.D.	0.002	0.01	0.024	1
12936	123478-HxCDF	70648-26-9	N.D.	0.002	0.01	0.024	1
12936	123678-HxCDF	57117-44-9	N.D.	0.002	0.01	0.024	1
12936	123789-HxCDF	72918-21-9	N.D.	0.002	0.01	0.024	1
12936	234678-HxCDF	60851-34-5	N.D.	0.002	0.01	0.024	1
12936	1234678-HpCDF	67562-39-4	N.D.	0.002	0.01	0.024	1
12936	1234789-HpCDF	55673-89-7	N.D.	0.002	0.01	0.024	1
12936	OCDF	39001-02-0	N.D.	0.006	0.019	0.049	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	74	40 - 135	0.002
13C12-12378-PeCDD	60	40 - 135	0.01
13C12-123478-HxCDD	61	40 - 135	0.01
13C12-123678-HxCDD	56	40 - 135	0.01
13C12-123789-HxCDD	62	40 - 135	0.01
13C12-1234678-HpCDD	60	40 - 135	0.01
13C12-OCDD	64	40 - 135	0.07
13C12-2378-TCDF	59	40 - 135	0.002
13C12-12378-PeCDF	56	40 - 135	0.01
13C12-23478-PeCDF	59	40 - 135	0.01
13C12-123478-HxCDF	47	40 - 135	0.01
13C12-123678-HxCDF	46	40 - 135	0.01
13C12-234678-HxCDF	49	40 - 135	0.01
13C12-123789-HxCDF	70	40 - 135	0.01
13C12-1234678-HpCDF	51	40 - 135	0.01
13C12-1234789-HpCDF	55	40 - 135	0.01
13C12-OCDF	52	40 - 135	0.02

**Dioxins/Furans Data Qualifiers:**

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Reporting Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column

☐ This limit was used in the evaluation of the final result



**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
ELLE Sample #: WW 9881313  
ELLE Group #: 2005271  
Matrix: Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submittal Date/Time: 11/02/2018 10:10

Collection Date/Time: 10/31/2018 16:55

SDG☐ TID15-06

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Q	EMPC - Estimated Maximum Possible Concentration						
F	Interference is present						
S	Saturation of detection signal						
(3)	The Labeled Compound spike amount was less than the LOD.						

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

**Tidewater, Inc.**  
**ELLE Sample #:** WW 9881313  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submittal Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 16:55  
**SDG:** TID15-06

### Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:

- Thorium b SW-846 6010C
- Cyclohexanone b SW-846 8260C
- Bis(2-chloroethyl)ether b SW-846 8270D/SW-846 8270D SIM
- Di-n-butyl phthalate b SW-846 8270D SIM
- Hexachlorobenzene b SW-846 8270D SIM

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs- 25ml Water b 8260C	SW-846 8260C 25mL purge	1	1183171AA	11/13/2018 14:37	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	1183171AA	11/13/2018 14:36	Jennifer K Howe	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAI026	11/08/2018 06:03	Ashley R Transue	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18309WAE026	11/07/2018 22:43	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18309WAE026	11/05/2018 18:38	Kate E Lutte	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAI026	11/06/2018 18:00	Mathias Opo	1
10407	Herb water 8151A Master	SW-846 8151A	1	183100005A	11/09/2018 10:07	Richard A Shober	1
10591	PCBs in Water b 8082A	SW-846 8082A	1	183100010A	11/08/2018 18:58	Kirby B Turner	1
10589	OC Pesticides in Water	SW-846 8081B	1	183100009A	11/15/2018 00:40	Andrea L Jones	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	183100010A	11/06/2018 21:45	Karen L Befer	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	183100009A	11/06/2018 21:45	Karen L Befer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	183100005A	11/06/2018 16:10	Ryan Dowd	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18313007	11/10/2018 16:59	Michaeliegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	1	18313007	11/09/2018 11:39	Deborah M Zimmerman	1
13495	Thorium	SW-846 6010C	1	183301063501	11/28/2018 10:05	Patricia Engle	1
06023	Aluminum	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06024	Antimony	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06025	Arsenic	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06026	Barium	SW-846 6020A	1	183091063901D	11/06/2018 18:51	Patricia Engle	1
06027	Beryllium	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06028	Cadmium	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06029	Calcium	SW-846 6020A	1	183091063901B	11/12/2018 18:35	Bradley M Berlot	1
06031	Chromium	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06032	Cobalt	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06033	Copper	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06034	Iron	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06035	Lead	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06036	Magnesium	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06037	Manganese	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06039	Nickel	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06040	Potassium	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06041	Selenium	SW-846 6020A	1	183091063901B	11/06/2018 18:51	Patricia Engle	1
06042	Silver	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06043	Sodium	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
06045	Thallium	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1
13501	Uranium	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patricia Engle	1

This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881313  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

Submission Date/Time: 11/02/2018 10:10

Collection Date/Time: 10/31/2018 16:55

SDG☐ TID15-06

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	183091063901A	11/12/2018 18:35	Bradley M Berlot	1
06049	☐inc	SW-846 6020A	1	183091063901A	11/06/2018 18:51	Patrick ☐Engle	1
00259	Mercury☐	SW-846 7470A	1	183110571303	11/08/2018 12:56	Damar ☐Valentin	1
10635	ICP-WW☐3005A (tot rec) - U4	SW-846 3005A	1	183121063503	11/09/2018 15:20	☐Ella L Rice	1
10635	ICP-WW☐3005A (tot rec) - U4	SW-846 3005A	2	183301063501	11/26/2018 15:50	☐Ella L Rice	1
10639	ICPMS - Water☐3020A - U4	SW-846 3020A	1	183091063901	11/06/2018 06:30	James L Mert☐	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	183110571303	11/08/2018 08:25	Denise L Trimb☐	1

☐☐This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT-F Filtered Grab Groundwater  
Great Kills Park, NY

Tidewater, Inc.  
**ELLE Sample #:** WW 9881314  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 16:55  
**SDG:** TID15-07

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
<b>Metals Dissolved</b>							
	<b>SW-846 6010C</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
13495	Thorium	7440-29-1	N.D.	0.205	0.400	0.500	1
The ICV/CCV RSD is greater than 5% for Thorium. Outlier recover/result: ICV/CCV RSD > 5% Acceptance limits: < 5% ICV RSD - 5.9% reading 0.58 acceptance limits: 0.54-0.66 1st CCV RSD - 5.3% reading 0.49 acceptance limits: 0.45-0.55 2nd CCV RSD - 10.7% reading 0.48 acceptance limits: 0.45-0.55 3rd CCV RSD - 2.2% reading 0.49 acceptance limits: 0.45-0.55							
	<b>SW-846 6020A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06023	Aluminum	7429-90-5	N.D.	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	N.D. K3	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0029	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	0.0692	0.00075	0.0020	0.0040	1
06027	Beryllium	7440-41-7	N.D.	0.000091	0.00025	0.00050	1
06028	Cadmium	7440-43-9	N.D.	0.00015	0.00050	0.0010	1
06029	Calcium	7440-70-2	85.8	0.0598	0.200	0.700	1
06031	Chromium	7440-47-3	N.D.	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.00019	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	N.D.	0.0099	0.0200	0.0400	1
06034	Iron	7439-89-6	2.43	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	N.D.	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	26.9	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	1.25	0.0049	0.0080	0.0100	1
06039	Nickel	7440-02-0	0.0011	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	5.01	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	20.7	0.0500	0.200	0.900	1
06045	Thallium	7440-28-0	N.D.	0.00011	0.00025	0.00050	1
13501	Uranium	7440-61-1	0.0012	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	N.D.	0.00024	0.00050	0.0010	1
06049	Zinc	7440-66-6	N.D.	0.0062	0.0120	0.0150	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000050	0.00010	0.00020	1

### Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:  
Thorium b SW-846 6010C  
This sample was field filtered for dissolved metals.

☐ This limit was used in the evaluation of the final result

**Sample Description:** OU2-1-MW009WT-F Filtered Grab Groundwater  
Great Kills Park, NY

**Tidewater, Inc.**  
**ELLE Sample #:** WW 9881314  
**ELLE Group #:** 2005271  
**Matrix:** Groundwater

**Project Name:** Great Kills Park Phase I RI OU2

**Submission Date/Time:** 11/02/2018 10:10  
**Collection Date/Time:** 10/31/2018 16:55  
**SDG:** TID15-07

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13495	Thorium	SW-846 6010C	1	183301063501	11/28/2018 09:33	Patric Engle	1
06023	Aluminum	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06024	Antimony	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06025	Arsenic	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06026	Barium	SW-846 6020A	1	183091063901D	11/06/2018 18:54	Patric Engle	1
06027	Beryllium	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06028	Cadmium	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06029	Calcium	SW-846 6020A	1	183091063901B	11/12/2018 18:37	Bradley M Berlot	1
06031	Chromium	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06032	Cobalt	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06033	Copper	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06034	Iron	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06035	Lead	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06036	Magnesium	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06037	Manganese	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06039	Nickel	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06040	Potassium	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06041	Selenium	SW-846 6020A	1	183091063901B	11/06/2018 18:54	Patric Engle	1
06042	Silver	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06043	Sodium	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06045	Thallium	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
13501	Uranium	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
06048	Vanadium	SW-846 6020A	1	183091063901A	11/12/2018 18:37	Bradley M Berlot	1
06049	Zinc	SW-846 6020A	1	183091063901A	11/06/2018 18:54	Patric Engle	1
00259	Mercury	SW-846 7470A	1	183110571303	11/08/2018 13:16	Damar Valentin	1
10635	ICP-WW 3005A (tot rec) - U4	SW-846 3005A	1	183121063503	11/09/2018 15:20	Ella L Rice	1
10635	ICP-WW 3005A (tot rec) - U4	SW-846 3005A	2	183301063501	11/26/2018 15:50	Ella L Rice	1
10639	ICPMS - Water 3020A - U4	SW-846 3020A	1	183091063901	11/06/2018 06:30	James L Mert	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	183110571303	11/08/2018 08:25	Denise L Trimb	1

☐ This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations to demonstrate precision and accuracy at a batch level a LCS/LCSD was performed unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

### Method Blank

Analysis Name	Result	DL**	LOD	LOQ
	ug/l	ug/l	ug/l	ug/l
Batch number: I183171AA	Sample number(s): 9881308-9881310 9881313			
Acetone	N.D.	0.9	2.0	5.0
Benzene	N.D.	0.05	0.2	0.5
Bromodichloromethane	N.D.	0.05	0.2	0.5
Bromoform	N.D.	0.3	0.5	1.0
Bromomethane	N.D.	0.07	0.2	0.5
2-Butanone	N.D.	0.6	2.0	5.0
Carbon Disulfide	N.D.	0.06	0.2	1.0
Carbon Tetrachloride	N.D.	0.07	0.2	0.5
Chlorobenzene	N.D.	0.06	0.2	0.5
Chloroethane	N.D.	0.07	0.2	0.5
Chloroform	N.D.	0.09	0.2	0.5
Chloromethane	N.D.	0.06	0.2	0.5
Cyclohexane	N.D.	0.05	0.2	0.5
Cyclohexanone	N.D.	1.8	7.2	25
1,2-Dibromo-3-chloropropane	N.D.	0.1	0.4	0.5
Dibromochloromethane	N.D.	0.07	0.2	0.5
1,2-Dibromoethane	N.D.	0.06	0.2	0.5
1,2-Dichlorobenzene	N.D.	0.06	0.2	0.5
1,3-Dichlorobenzene	N.D.	0.06	0.2	0.5
1,4-Dichlorobenzene	N.D.	0.07	0.2	0.5
Dichlorodifluoromethane	N.D.	0.05	0.2	0.5
1,1-Dichloroethane	N.D.	0.07	0.2	0.5
1,2-Dichloroethane	N.D.	0.05	0.2	0.5
1,1-Dichloroethene	N.D.	0.06	0.2	0.5
cis-1,2-Dichloroethene	N.D.	0.05	0.2	0.5
trans-1,2-Dichloroethene	N.D.	0.06	0.2	0.5
1,2-Dichloropropane	N.D.	0.06	0.2	0.5
cis-1,3-Dichloropropene	N.D.	0.05	0.2	0.5
trans-1,3-Dichloropropene	N.D.	0.06	0.2	0.5
Ethylbenzene	N.D.	0.06	0.2	0.5
Freon 113	N.D.	0.06	0.2	0.5
2-Hexanone	N.D.	0.6	2.0	5.0
Isopropylbenzene	N.D.	0.05	0.2	0.5
Methyl Acetate	N.D.	0.1	0.2	1.0
Methyl Tertiary Butyl Ether	N.D.	0.05	0.2	0.5
4-Methyl-2-Pentanone	N.D.	0.7	2.0	5.0
Methylcyclohexane	N.D.	0.05	0.2	0.5
Methylene Chloride	N.D.	0.07	0.2	0.5
Styrene	N.D.	0.05	0.2	0.5

☐ Outside of specification

☐ This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

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### Method Blank (continued)

Analysis Name	Result	DL** ug/l	LOD ug/l	LOQ ug/l
1,1,2,2-Tetrachloroethane	N.D.	0.07	0.2	0.5
Tetrachloroethene	N.D.	0.06	0.2	0.5
Toluene	N.D.	0.07	0.2	0.5
1,2,4-Trichlorobenzene	N.D.	0.06	0.2	0.5
1,1,1-Trichloroethane	N.D.	0.06	0.2	0.5
1,1,2-Trichloroethane	N.D.	0.06	0.2	0.5
Trichloroethene	N.D.	0.06	0.2	0.5
Trichlorofluoromethane	N.D.	0.05	0.2	0.5
Vinyl Chloride	N.D.	0.1	0.2	0.5
Benzene (Total)	N.D.	0.1	0.4	0.5
Batch number: 18309WAE026	Sample number(s): 9881309-9881310-9881313			
Acenaphthene	N.D.	0.01	0.03	0.05
Acenaphthylene	N.D.	0.01	0.03	0.05
Anthracene	N.D.	0.01	0.03	0.05
Benzo(a)anthracene	N.D.	0.01	0.03	0.05
Benzo(a)pyrene	N.D.	0.01	0.03	0.05
Benzo(b)fluoranthene	N.D.	0.01	0.03	0.05
Benzo(ghi)perylene	N.D.	0.01	0.03	0.05
Benzo(k)fluoranthene	N.D.	0.01	0.03	0.05
Di-n-butylphthalate	0.1 ☐	0.05	0.1	1
bis(2-Chloroethyl)ether	N.D.	0.02	0.06	0.07
Chrysene	N.D.	0.01	0.03	0.05
Dibenzo(a,h)anthracene	N.D.	0.02	0.06	0.07
1,4-Dioxane	N.D.	0.1	0.2	0.3
bis(2-Ethylhexyl)phthalate	0.3 ☐	0.08	0.2	1
Fluoranthene	N.D.	0.01	0.03	0.05
Fluorene	N.D.	0.01	0.03	0.05
Hexachlorobenzene	N.D.	0.01	0.03	0.05
Indeno(1,2,3-cd)pyrene	N.D.	0.01	0.03	0.05
Naphthalene	N.D.	0.03	0.06	0.07
Phenanthrene	N.D.	0.03	0.06	0.07
Pyrene	N.D.	0.01	0.03	0.05
Batch number: 18310WAI026	Sample number(s): 9881309-9881310-9881313			
Aniline	N.D.	3	9	10
Benzyl alcohol	N.D.	10	20	30
4-Bromophenyl-phenylether	N.D.	0.5	1	2
Carbazole	N.D.	0.5	1	2
4-Chloro-3-methylphenol	N.D.	0.5	1	2
4-Chloroaniline	N.D.	4	9	10
bis(2-Chloroethoxy)methane	N.D.	0.5	1	2
2-Chloronaphthalene	N.D.	0.4	0.8	1
2-Chlorophenol	N.D.	0.5	1	2
4-Chlorophenyl-phenylether	N.D.	0.5	1	2
2,2-bis(1-Chloropropane)	N.D.	0.5	1	2

☐ Outside of specification

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(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### Method Blank (continued)

Analysis Name	Result	DL** ug/l	LOD ug/l	LOQ ug/l
Dibenzofuran	N.D.	0.5	1	2
1,2-Dichlorobenzene	N.D.	0.5	1	2
1,3-Dichlorobenzene	N.D.	0.5	1	2
1,4-Dichlorobenzene	N.D.	0.5	1	2
3,3'-Dichlorobenzidine	N.D.	3	9	10
2,4-Dichlorophenol	N.D.	0.5	1	2
Diethylphthalate	N.D.	2	4	5
2,4-Dimethylphenol	N.D.	3	9	10
Dimethylphthalate	N.D.	2	4	5
4,6-Dinitro-2-methylphenol	N.D.	8	20	21
2,4-Dinitrophenol	N.D.	14	28	30
2,4-Dinitrotoluene	N.D.	1	2	5
2,6-Dinitrotoluene	N.D.	0.5	1	2
Hexachlorobutadiene	N.D.	0.5	1	2
Hexachlorocyclopentadiene	N.D.	5	10	11
Hexachloroethane	N.D.	1	2	5
Isophorone	N.D.	0.5	1	2
2-Methylnaphthalene	N.D.	0.1	0.2	0.5
2-Methylphenol	N.D.	0.5	1	2
4-Methylphenol	N.D.	0.5	1	2
2-Nitroaniline	N.D.	2	6	7
3-Nitroaniline	N.D.	3	6	7
4-Nitroaniline	N.D.	0.9	2	3
Nitrobenzene	N.D.	0.5	1	2
2-Nitrophenol	N.D.	3	9	10
4-Nitrophenol	N.D.	10	20	30
N-Nitroso-di-n-propylamine	N.D.	0.7	2	3
N-Nitrosodiphenylamine	N.D.	0.7	2	3
Di-n-octylphthalate	N.D.	5	10	11
Pentachlorophenol	N.D.	1	4	5
Phenol	N.D.	0.5	1	2
Piperidine	N.D.	2	4	5
1,2,4-Trichlorobenzene	N.D.	0.5	1	2
2,4,5-Trichlorophenol	N.D.	0.5	1	2
2,4,6-Trichlorophenol	N.D.	0.5	1	2
Batch number: 183100005A	Sample number(s): 9881309-9881310,9881313			
2,4-D	N.D.	0.25	0.50	0.60
Dalapon	N.D.	1.8	3.6	4.0
2,4-DB	N.D.	0.63	1.3	1.5
Dicamba	N.D.	0.080	0.16	0.30
Dinoseb	N.D.	0.18	0.40	0.50
2,4-DP (Dichloroprop)	N.D.	0.16	0.32	0.50
MCPA	N.D.	50	100	200
MCPP	N.D.	50	100	200

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(2) The unspiked result was more than four times the spike added.

(3) The surrogate spike amount was less than the LOD.



## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### Method Blank (continued)

Analysis Name	Result	DL**	LOD	LOQ
	ug/l	ug/l	ug/l	ug/l
2:4:5-T	N.D.	0.065	0.13	0.15
2:4:5-TP	N.D.	0.010	0.030	0.050
Batch number: 183100010A	Sample number(s): 9881309-9881310-9881313			
PCB-1016	N.D.	0.080	0.24	0.40
PCB-1221	N.D.	0.080	0.24	0.40
PCB-1232	N.D.	0.16	0.32	0.40
PCB-1242	N.D.	0.080	0.24	0.40
PCB-1248	N.D.	0.080	0.24	0.40
PCB-1254	N.D.	0.080	0.24	0.40
PCB-1260	N.D.	0.12	0.24	0.40
PCB-1262	N.D.	0.16	0.32	0.40
PCB-1268	N.D.	0.13	0.26	0.40
Batch number: 183100009A	Sample number(s): 9881309-9881310-9881313			
Aldrin	N.D.	0.0016	0.0056	0.0080
Alpha BHC	N.D.	0.0024	0.0056	0.0080
Beta BHC	N.D.	0.0027	0.0056	0.0080
Gamma BHC - Lindane	N.D.	0.0016	0.0056	0.0080
Alpha Chlordane	N.D.	0.0024	0.0056	0.0080
Chlordane	N.D.	0.13	0.26	0.40
Gamma Chlordane	N.D.	0.0056	0.016	0.016
p,p-DDD	N.D.	0.0040	0.0080	0.016
p,p-DDE	N.D.	0.0040	0.0080	0.016
p,p-DDT	N.D.	0.0042	0.0080	0.016
Delta BHC	N.D.	0.0027	0.0056	0.0080
Dieldrin	N.D.	0.0042	0.0080	0.016
Endosulfan I	N.D.	0.0034	0.0072	0.0080
Endosulfan II	N.D.	0.012	0.024	0.024
Endosulfan Sulfate	N.D.	0.0046	0.0096	0.016
Endrin	N.D.	0.0065	0.016	0.016
Endrin Aldehyde	N.D.	0.016	0.032	0.080
Endrin Ketone	N.D.	0.0040	0.0080	0.016
Heptachlor	N.D.	0.0016	0.0056	0.0080
Heptachlor Epoxide	N.D.	0.0018	0.0056	0.0080
Methoxychlor	N.D.	0.024	0.056	0.080
Toxaphene	N.D.	0.24	0.48	0.80
	mg/l	mg/l	mg/l	mg/l
Batch number: 183091063901A	Sample number(s): 9881309-9881314			
Aluminum	N.D.	0.0197	0.0500	0.400
Antimony	N.D.	0.00041	0.0010	0.0020
Arsenic	N.D.	0.00068	0.0016	0.0020
Beryllium	N.D.	0.000091	0.00025	0.00050
Cadmium	N.D.	0.00015	0.00050	0.0010
Chromium	N.D.	0.00070	0.0020	0.0040

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(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### Method Blank (continued)

Analysis Name	Result	DL**	LOD	LOQ
	mg/l	mg/l	mg/l	mg/l
Cobalt	N.D.	0.00016	0.00050	0.0010
Copper	N.D.	0.0099	0.0200	0.0400
Iron	N.D.	0.0228	0.0800	0.100
Lead	N.D.	0.0011	0.0024	0.0030
Magnesium	N.D.	0.0104	0.0250	0.100
Manganese	N.D.	0.0049	0.0080	0.0100
Nickel	N.D.	0.00060	0.0020	0.0040
Potassium	N.D.	0.107	0.200	0.400
Silver	N.D.	0.00017	0.00040	0.00050
Sodium	N.D.	0.0500	0.200	0.900
Thallium	N.D.	0.00011	0.00025	0.00050
Uranium	N.D.	0.00011	0.00050	0.00050
Vanadium	N.D.	0.00024	0.00050	0.0010
Zinc	N.D.	0.0062	0.0120	0.0150

Batch number: 183091063901B	Sample number(s): 9881309-9881314			
Calcium	N.D.	0.0598	0.200	0.700
Selenium	N.D.	0.00065	0.0016	0.0020
Batch number: 183091063901D	Sample number(s): 9881309-9881314			
Barium	N.D.	0.00075	0.0020	0.0040
Batch number: 183110571303	Sample number(s): 9881309-9881314			
Mercury	N.D.	0.000050	0.00010	0.00020
Batch number: 183301063501	Sample number(s): 9881309-9881314			
Thorium	N.D.	0.205	0.400	0.500

Analysis Name	Result	DL**	LOD	LOQ
	ng/l	ng/l	ng/l	ng/l
Batch number: 18313007	Sample number(s): 9881309-9881310;9881313			
2378-TCDD	N.D.	0.0009	0.002	0.005
12378-PeCDD	N.D.	0.003	0.010	0.025
123478-HxCDD	N.D.	0.003	0.010	0.025
123678-HxCDD	N.D.	0.003	0.010	0.025
123789-HxCDD	N.D.	0.003	0.010	0.025
1234678-HpCDD	N.D.	0.005	0.010	0.025
OCDD	N.D.	0.036	0.073	0.11
2378-TCDF	N.D.	0.0008	0.002	0.005
12378-PeCDF	N.D.	0.003	0.010	0.025
23478-PeCDF	N.D.	0.003	0.010	0.025
123478-HxCDF	N.D.	0.003	0.010	0.025
123678-HxCDF	N.D.	0.003	0.010	0.025
123789-HxCDF	N.D.	0.003	0.010	0.025
234678-HxCDF	N.D.	0.003	0.010	0.025
1234678-HpCDF	N.D.	0.003	0.010	0.025
1234789-HpCDF	N.D.	0.003	0.010	0.025

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(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### Method Blank (continued)

Analysis Name	Result	DL**	LOD	LOQ
	ng/l	ng/l	ng/l	ng/l
OCDF	N.D.	0.006	0.020	0.050

### LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: I183171AA									
Sample number(s): 9881308-9881310:9881313									
Acetone	37.5	43.94	37.5	42.08	117	112	39-160	4	20
Benzene	5.00	5.16	5.00	5.12	103	102	79-120	1	20
Bromodichloromethane	5.00	4.87	5.00	4.78	97	96	79-125	2	20
Bromoform	5.00	4.45	5.00	4.32	89	86	66-130	3	20
Bromomethane	5.00	3.47	5.00	3.35	69	67	53-141	4	20
2-Butanone	37.5	39.69	37.5	38.09	106	102	56-143	4	20
Carbon Disulfide	5.00	4.94	5.00	4.83	99	97	64-133	2	20
Carbon Tetrachloride	5.00	5.27	5.00	5.16	105	103	72-136	2	20
Chlorobenzene	5.00	5.47	5.00	5.44	109	109	82-118	1	20
Chloroethane	5.00	4.01	5.00	3.87	80	77	60-138	4	20
Chloroform	5.00	5.11	5.00	5.01	102	100	79-124	2	20
Chloromethane	5.00	3.97	5.00	3.84	79	77	50-139	3	20
Cyclohexane	5.00	4.45	5.00	4.36	89	87	71-130	2	20
Cyclohexanone	125	86.95	125	87.94	70	70	26-147	1	30
1,2-Dibromo-3-chloropropane	5.00	5.45	5.00	5.45	109	109	62-128	0	20
Dibromochloromethane	5.00	5.09	5.00	5.01	102	100	74-126	1	20
1,2-Dibromoethane	5.00	5.22	5.00	5.25	104	105	77-121	1	20
1,2-Dichlorobenzene	5.00	5.07	5.00	5.00	101	100	80-119	1	20
1,3-Dichlorobenzene	5.00	5.01	5.00	4.94	100	99	80-119	1	20
1,4-Dichlorobenzene	5.00	5.08	5.00	4.98	102	100	79-118	2	20
Dichlorodifluoromethane	5.00	3.88	5.00	3.73	78	75	32-152	4	20
1,1-Dichloroethane	5.00	5.02	5.00	4.93	100	99	77-125	2	20
1,2-Dichloroethane	5.00	4.92	5.00	4.76	98	95	73-128	3	20
1,1-Dichloroethene	5.00	5.53	5.00	5.42	111	108	71-131	2	20
cis-1,2-Dichloroethene	5.00	5.18	5.00	5.16	104	103	78-123	0	20
trans-1,2-Dichloroethene	5.00	5.31	5.00	5.23	106	105	75-124	1	20
1,2-Dichloropropane	5.00	5.30	5.00	5.22	106	104	78-122	1	20
cis-1,3-Dichloropropene	5.00	4.42	5.00	4.41	88	88	75-124	0	20
trans-1,3-Dichloropropene	5.00	4.68	5.00	4.69	94	94	73-127	0	20
Ethylbenzene	5.00	5.17	5.00	5.14	103	103	79-121	1	20
Freon 113	5.00	5.76	5.00	5.62	115	112	70-136	3	20
2-Hexanone	25	26.41	25	25.13	106	101	57-139	5	20
Isopropylbenzene	5.00	5.10	5.00	5.09	102	102	72-131	0	20
Methyl Acetate	5.00	6.11	5.00	5.67	122	113	56-136	8	20

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(2) The unspiked result was more than four times the spike added.

(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	5.00	4.22	5.00	4.32	84	86	71-124	2	20
4-Methyl-2-Pentanone	25	25.75	25	24.94	103	100	67-130	3	20
Methylcyclohexane	5.00	4.58	5.00	4.59	92	92	72-132	0	20
Methylene Chloride	5.00	5.28	5.00	5.20	106	104	74-124	2	20
Styrene	5.00	5.23	5.00	5.22	105	104	78-123	0	20
1,1,2,2-Tetrachloroethane	5.00	5.19	5.00	5.12	104	102	71-121	1	20
Tetrachloroethene	5.00	4.95	5.00	4.88	99	98	74-129	1	20
Toluene	5.00	5.23	5.00	5.16	105	103	80-121	2	20
1,2,4-Trichlorobenzene	5.00	4.33	5.00	4.41	87	88	69-130	2	20
1,1,1-Trichloroethane	5.00	5.01	5.00	4.88	100	98	74-131	3	20
1,1,2-Trichloroethane	5.00	5.58	5.00	5.60	112	112	80-119	0	20
Trichloroethene	5.00	5.11	5.00	5.00	102	100	79-123	2	20
Trichlorofluoromethane	5.00	4.54	5.00	4.42	91	88	65-141	3	20
Vinyl Chloride	5.00	4.21	5.00	4.10	84	82	58-137	3	20
Ulenes (Total)	15	15.37	15	15.27	102	102	79-121	1	20
	ug/l	ug/l	ug/l	ug/l					
Batch number: 18309WAE026	Sample number(s): 9881309-9881310:9881313								
Acenaphthene	1.00	0.927	1.00	0.941	93	94	48-114	1	20
Acenaphthylene	1.00	0.894	1.00	0.905	89	91	35-121	1	20
Anthracene	1.00	0.927	1.00	0.894	93	89	53-119	4	20
Benzo(a)anthracene	1.00	1.09	1.00	1.06	109	106	59-120	3	20
Benzo(a)pyrene	1.00	1.12	1.00	1.05	112	105	53-120	6	20
Benzo(b)fluoranthene	1.00	1.21	1.00	1.11	121	111	53-126	9	20
Benzo(g,h,i)perylene	1.00	1.12	1.00	1.01	112	101	44-128	10	20
Benzo(k)fluoranthene	1.00	1.15	1.00	1.11	115	111	54-125	4	20
Di-n-butylphthalate	1.00	1.05	1.00	0.988	105	99	60-145	6	20
bis(2-Chloroethyl)ether	1.00	1.06	1.00	1.01	106	101	40-116	4	20
Chrysene	1.00	1.08	1.00	1.05	108	105	57-120	4	20
Dibenzo(a,h)anthracene	1.00	1.13	1.00	1.02	113	102	44-131	10	20
1,4-Dioxane	1.00	0.703	1.00	0.645	70	64	10-113	9	30
bis(2-Ethylhexyl)phthalate	1.00	1.17	1.00	1.10	117	110	55-173	6	20
Fluoranthene	1.00	0.968	1.00	0.961	97	96	58-120	1	20
Fluorene	1.00	0.865	1.00	0.874	87	87	50-118	1	20
Hexachlorobenzene	1.00	0.742	1.00	0.885	74	89	46-124	18	20
Indeno(1,2,3-cd)pyrene	1.00	1.19	1.00	1.06	119	106	48-130	11	20
Naphthalene	1.00	0.820	1.00	0.902	82	90	43-114	9	20
Phenanthrene	1.00	1.06	1.00	1.08	106	108	53-115	1	20
Pyrene	1.00	1.05	1.00	1.03	105	103	53-121	1	20
Batch number: 18310WAI026	Sample number(s): 9881309-9881310:9881313								
Aniline	50	25.83	50	28.93	52	58	29-101	11	30
Benzyl alcohol	50	42.18	50	44.33	84	89	31-112	5	20
4-Bromophenyl-phenylether	50	34.6	50	33.91	69	68	55-124	2	20

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(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Carbazole	50	45.8	50	47.08	92	94	60-122	3	20
4-Chloro-3-methylphenol	50	43.39	50	44.01	87	88	52-119	1	20
4-Chloroaniline	50	35.12	50	36.24	70	72	33-117	3	20
bis(2-Chloroethoxy)methane	50	41.55	50	41.98	83	84	48-120	1	20
2-Chloronaphthalene	50	32.33	50	29.85	65	60	40-116	8	20
2-Chlorophenol	50	37.1	50	40.21	74	80	38-117	8	20
4-Chlorophenylphenylether	50	32.55	50	30.85	65	62	53-121	5	20
2,2-dimethyl-1,3-dichloropropane	50	33.49	50	33.75	67	67	48-118	1	30
Dibenzofuran	50	37.97	50	35.24	76	70	53-118	7	20
1,2-Dichlorobenzene	50	27.6	50	27.76	55	56	32-111	1	20
1,3-Dichlorobenzene	50	25.74	50	26.7	51	53	28-110	4	20
1,4-Dichlorobenzene	50	26.66	50	26.36	53	53	29-112	1	20
3,3'-Dichlorobenzidine	50	39.29	50	39.82	79	80	27-129	1	20
2,4-Dichlorophenol	50	42.56	50	43.12	85	86	47-121	1	20
Diethylphthalate	50	31.54	50	30.86	63	62	56-125	2	20
2,4-Dimethylphenol	50	34.33	50	34.01	69	68	31-124	1	20
Dimethylphthalate	50	25.02	50	22.27	50	45	45-127	12	20
4,6-Dinitro-2-methylphenol	50	46.96	50	47.22	94	94	44-137	1	20
2,4-Dinitrophenol	100	100.61	100	101.53	101	102	23-143	1	20
2,4-Dinitrotoluene	50	46.08	50	45.86	92	92	57-128	0	20
2,6-Dinitrotoluene	50	50.37	50	48.24	101	96	57-124	4	20
Hexachlorobutadiene	50	24.61	50	23.36	49	47	22-124	5	20
Hexachlorocyclopentadiene	100	10.32	100	10.07	10	10	10-117	2	30
Hexachloroethane	50	22.53	50	22	45	44	21-115	2	20
Isophorone	50	40.93	50	41.27	82	83	42-124	1	20
2-Methylnaphthalene	50	33.12	50	31.59	66	63	40-121	5	20
2-Methylphenol	50	36.24	50	38.74	72	77	30-117	7	20
4-Methylphenol	50	38.39	50	40.66	77	81	25-120	6	20
2-Nitroaniline	50	49.78	50	48.1	100	96	55-127	3	20
3-Nitroaniline	50	42.95	50	41.21	86	82	41-128	4	20
4-Nitroaniline	50	40.47	50	39.97	81	80	53-111	1	30
Nitrobenzene	50	40.44	50	39.72	81	79	45-121	2	20
2-Nitrophenol	50	43.48	50	43.93	87	88	47-123	1	20
4-Nitrophenol	50	24.79	50	24.6	50	49	28-88	1	30
N-Nitroso-di-n-propylamine	50	39.44	50	40.7	79	81	49-119	3	20
N-Nitrosodiphenylamine	50	46.3	50	46.46	93	93	51-123	0	20
Di-n-octylphthalate	50	41.4	50	42.45	83	85	51-140	3	20
Pentachlorophenol	50	44.52	50	47.7	89	95	35-138	7	20
Phenol	50	21.24	50	24.16	42	48	23-82	13	30
Picridine	50	19.43	50	20.58	39	41	13-83	6	30
1,2,4-Trichlorobenzene	50	28.9	50	27.68	58	55	29-116	4	20
2,4,5-Trichlorophenol	50	46.73	50	45.85	93	92	53-123	2	20
2,4,6-Trichlorophenol	50	48.39	50	48.55	97	97	50-125	0	20

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(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 183100005A	Sample number(s): 9881309-9881310:9881313								
2,4-D	2.50	2.43	2.50	2.36	97	94	45-152	3	30
Dalapon	6.26	4.56	6.26	5.30	73	85	19-139	15	30
2,4-DB	2.51	2.47	2.51	2.37	98	94	35-153	4	30
Dicamba	0.250	0.248	0.250	0.241	99	96	50-141	3	30
Dinoseb	1.25	1.30	1.25	1.32	104	106	19-133	2	30
2,4-DP (Dichloroprop)	2.50	2.49	2.50	2.52	99	101	46-159	1	30
MCPA	503.93	476.5	503.93	476.54	95	95	35-144	0	30
MCPP	250.58	279.96	250.58	284.98	112	114	33-157	2	30
2,4,5-T	0.250	0.264	0.250	0.264	106	105	42-147	0	30
2,4,5-TP	0.250	0.272	0.250	0.262	109	105	51-134	4	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 183100010A	Sample number(s): 9881309-9881310:9881313								
PCB-1016	5.01	3.45	5.01	4.72	69	94	46-129	31	30
PCB-1260	5.00	3.95	5.00	5.36	79	107	45-134	30	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 183100009A	Sample number(s): 9881309-9881310:9881313								
Aldrin	0.100	0.0893			89		45-134		
Alpha BHC	0.102	0.0960			94		54-138		
Beta BHC	0.100	0.0934			93		56-136		
Gamma BHC - Lindane	0.102	0.0977			96		59-134		
Alpha Chlordane	0.100	0.0966			97		60-129		
Gamma Chlordane	0.100	0.100			100		56-136		
p,p-DDD	0.204	0.228			112		56-143		
p,p-DDE	0.200	0.202			101		57-135		
p,p-DDT	0.204	0.223			109		51-143		
Delta BHC	0.100	0.0907			91		52-142		
Dieldrin	0.204	0.218			107		60-136		
Endosulfan I	0.102	0.0968			95		62-126		
Endosulfan II	0.200	0.200			100		52-135		
Endosulfan Sulfate	0.202	0.225			112		62-133		
Endrin	0.202	0.240			119		60-138		
Endrin Aldehyde	0.202	0.207			102		51-132		
Endrin Ketone	0.200	0.214			107		58-134		
Heptachlor	0.102	0.0931			91		54-130		
Heptachlor Epoxide	0.100	0.100			100		61-133		
Methoxychlor	1.02	1.16			114		54-145		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 183091063901A	Sample number(s): 9881309-9881314								
Aluminum	2.00	2.10			105		84-117		
Antimony	0.00600	0.00651			109		85-117		

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## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Arsenic	0.0100	0.0101			101		84-116		
Berillium	0.00400	0.00408			102		83-121		
Cadmium	0.00500	0.00512			102		87-115		
Chromium	0.0500	0.0546			109		85-116		
Cobalt	0.250	0.241			96		86-115		
Copper	0.0500	0.0485			97		85-118		
Iron	1.00	1.08			108		87-118		
Lead	0.0150	0.0152			101		88-115		
Magnesium	2.00	2.13			106		83-118		
Manganese	0.0500	0.0539			108		87-115		
Nickel	0.0500	0.0493			99		85-117		
Potassium	10	10.47			105		87-115		
Silver	0.0500	0.0505			101		85-116		
Sodium	10	10.59			106		85-117		
Thallium	0.00200	0.00208			104		82-116		
Uranium	0.0250	0.0255			102		86-115		
Vanadium	0.0500	0.0533			107		86-115		
Zinc	0.500	0.482			96		83-119		

Batch number: 183091063901B	Sample number(s): 9881309-9881314								
Calcium	4.00	4.27			107		87-118		
Selenium	0.0100	0.0104			104		80-120		

Batch number: 183091063901D	Sample number(s): 9881309-9881314								
Barium	0.0500	0.0463			93		86-114		

Batch number: 183110571303	Sample number(s): 9881309-9881314								
Mercury	0.00100	0.000819			82		82-119		

Batch number: 183301063501	Sample number(s): 9881309-9881314								
Thorium	0.500	0.464			93		88-113		

Analysis Name	OPR Spike Added ng/l	OPR Conc ng/l	OPRD Spike Added ng/l	OPRD Conc ng/l	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 18313007	Sample number(s): 9881309-9881310:9881313								
2378-TCDD	0.200	0.205			102		71-125		
12378-PeCDD	1.00	1.08			108		76-121		
123478-HxCDD	1.00	1.05			105		80-126		
123678-HxCDD	1.00	1.05			105		78-134		
123789-HxCDD	1.00	1.06			106		76-137		
1234678-HpCDD	1.00	1.05			105		79-122		
OCDD	2.00	2.06			103		81-135		
2378-TCDF	0.200	0.206			103		72-138		
12378-PeCDF	1.00	1.04			104		82-130		

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## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### OPR/OPRD (continued)

Analysis Name	OPR Spike Added ng/l	OPR Conc ng/l	OPRD Spike Added ng/l	OPRD Conc ng/l	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
23478-PeCDF	1.00	1.05			105		77-129		
123478-HxCDF	1.00	1.10			110		80-130		
123678-HxCDF	1.00	1.09			109		79-131		
123789-HxCDF	1.00	1.06			106		83-130		
234678-HxCDF	1.00	1.09			109		81-130		
1234678-HpCDF	1.00	1.09			109		81-130		
1234789-HpCDF	1.00	1.09			109		77-128		
OCDF	2.00	2.11			105		66-150		

### MS/MSD

Unspiked (UNSPK) the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 183091063901A	Sample number(s): 9881309-9881314 UNSPK: 9881311									
Aluminum	N.D.	2.00	2.05	2.00	2.04	102	102	84-117	0	20
Antimony	N.D.	0.00600	0.00698	0.00600	0.00659	116	110	85-117	6	20
Arsenic	0.0170	0.0100	0.0247	0.0100	0.0240	77	70	84-116	3	20
Beryllium	N.D.	0.00400	0.00404	0.00400	0.00415	101	104	83-121	3	20
Cadmium	N.D.	0.00500	0.00493	0.00500	0.00435	99	87	87-115	13	20
Chromium	0.00231	0.0500	0.0663	0.0500	0.0665	128	128	85-116	0	20
Cobalt	0.00282	0.250	0.250	0.250	0.240	99	95	86-115	4	20
Copper	N.D.	0.0500	0.0493	0.0500	0.0484	99	97	85-118	2	20
Iron	45.94	1.00	40.75	1.00	43.66	-519 (2)	-228 (2)	87-118	7	20
Lead	N.D.	0.0150	0.0160	0.0150	0.0159	107	106	88-115	1	20
Magnesium	35.34	2.00	32.65	2.00	34.44	-134 (2)	-45 (2)	83-118	5	20
Manganese	0.766	0.0500	0.725	0.0500	0.757	-82 (2)	-17 (2)	87-115	4	20
Nickel	N.D.	0.0500	0.0517	0.0500	0.0539	103	108	85-117	4	20
Potassium	21.69	10	29.22	10	30.32	75	86	87-115	4	20
Silver	N.D.	0.0500	0.0510	0.0500	0.0488	102	98	85-116	4	20
Sodium	43.29	10	48.45	10	49.27	52 (2)	60 (2)	85-117	2	20
Thallium	N.D.	0.00200	0.00199	0.00200	0.00206	100	103	82-116	3	20
Uranium	N.D.	0.0250	0.0263	0.0250	0.0266	105	106	75-125	1	20
Vanadium	0.00190	0.0500	0.0537	0.0500	0.0552	104	107	86-115	3	20
Zinc	N.D.	0.500	0.495	0.500	0.475	99	95	83-119	4	20
Batch number: 183091063901B	Sample number(s): 9881309-9881314 UNSPK: 9881311									
Calcium	276.68	4.00	251.75	4.00	265.09	-623 (2)	-290 (2)	87-118	5	20
Selenium	N.D.	0.0100	0.0110	0.0100	0.0104	110	104	80-120	5	20

Outside of specification

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(3) The surrogate spike amount was less than the LOD.



## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### MS/MSD (continued)

Unspiked (UNSPK) the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 183091063901D Barium	Sample number(s): 9881309-9881314 UNSPK: 9881311 1.82	0.0500	1.63	0.0500	1.66	-371 (2)	-311 (2)	86-114	2	20
Batch number: 183110571303 Mercury	Sample number(s): 9881309-9881314 UNSPK: 9881313 N.D.	0.00100	0.000832	0.00100	0.000796	83	80	82-119	4	20
Batch number: 183301063501 Thorium	Sample number(s): 9881309-9881314 UNSPK: 9881314 N.D.	0.500	0.456	0.500	0.425	91	85	75-125	7	20

### Laboratory Duplicate

Background (BKG) the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 183091063901A	Sample number(s): 9881309-9881314 BKG: 9881311			
Aluminum	N.D.	N.D.	0 (1)	20
Antimony	N.D.	N.D.	0 (1)	20
Arsenic	0.0170	0.0148	14	20
Beryllium	N.D.	N.D.	0 (1)	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	0.00231	0.00693	100 (1)	20
Cobalt	0.00282	0.00244	15 (1)	20
Copper	N.D.	N.D.	0 (1)	20
Iron	45.94	43.55	5	20
Lead	N.D.	N.D.	0 (1)	20
Magnesium	35.34	33.86	4	20
Manganese	0.766	0.723	6	20
Nickel	N.D.	0.000796	200 (1)	20
Potassium	21.69	20.92	4	20
Silver	N.D.	N.D.	0 (1)	20
Sodium	43.29	41.18	5	20
Thallium	N.D.	N.D.	0 (1)	20
Uranium	N.D.	N.D.	0 (1)	20
Vanadium	0.00190	0.00162	16 (1)	20
Zinc	N.D.	N.D.	0 (1)	20
Batch number: 183091063901B	Sample number(s): 9881309-9881314 BKG: 9881311			
Calcium	276.68	272.35	2	20
Selenium	N.D.	N.D.	0 (1)	20

Outside of specification

This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### Laboratory Duplicate (continued)

Background (BKG) is the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 183091063901D Barium	Sample number(s): 9881309-9881314 BKG: 9881311 1.82	1.70	7	20
Batch number: 183110571303 Mercury	Sample number(s): 9881309-9881314 BKG: 9881313 N.D.	N.D.	0 (1)	20
Batch number: 183301063501 Thorium	Sample number(s): 9881309-9881314 BKG: 9881314 N.D.	N.D.	0 (1)	20

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water blank 8260C

Batch number: 1183171AA

	Dibromofluoromethane		1,2-Dichloroethane-d4		Toluene-d8		4-Bromofluorobenzene	
	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)
9881308	110	0.5	113	0.5	101	0.5	91	0.5
9881309	105	0.5	108	0.5	98	0.5	106	0.5
9881310	104	0.5	108	0.5	99	0.5	105	0.5
9881313	107	0.5	111	0.5	101	0.5	92	0.5
Blank	107	0.5	111	0.5	102	0.5	93	0.5
LCS	99	0.5	108	0.5	103	0.5	97	0.5
LCSD	100	0.5	106	0.5	103	0.5	98	0.5
Limits:	80-119		81-118		89-112		85-114	

Analysis Name: SIM SVOAs 8270D MINI

Batch number: 18309WAE026

	Fluoranthene-d10		Benzo(a)pyrene-d12		1-Methylnaphthalene-d10	
	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)
9881309	111	0.4	89	0.4	84	0.4
9881310	116	0.4	90	0.4	89	0.4
9881313	106	0.4	48	0.4	89	0.4
Blank	109	0.4	100	0.4	82	0.4
LCS	95	0.4	98	0.4	79	0.4
LCSD	94	0.4	94	0.4	90	0.4

☐ Outside of specification

☐ This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: SIM SVOAs 8270D MINI  
Batch number: 18309WAE026

Limits: 38-119 18-129 29-112

Analysis Name: SVOAs 8270D MINI  
Batch number: 18310WAI026

	Phenol-d6		2-Fluorophenol		2,4,6-Tribromophenol		Nitrobenzene-d5		2-Fluorobiphenyl		Terphenyl-d14	
	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)
9881309	30	81	44	81	87	81	78	40	76	40	91	40
9881310	48	81	58	81	95	81	65	40	65	40	72	40
9881313	42	81	49	81	94	81	64	40	69	40	83	40
Blank	31	80	45	80	98	80	73	40	50	40	96	40
LCS	39	80	53	80	99	80	77	40	69	40	92	40
LCSD	43	80	59	80	101	80	77	40	67	40	94	40
Limits:	10-72		19-119		43-140		44-120		44-119		50-134	

Analysis Name: Herb water 8151A Master  
Batch number: 183100005A

	2,4-DCAA-D1		2,4-DCAA-D2	
	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)
9881309	100	0.19	86	0.19
9881310	97	0.19	87	0.19
9881313	82	0.19	72	0.19
Blank	86	0.20	74	0.20
LCS	95	0.20	95	0.20
LCSD	91	0.20	92	0.20
Limits:	32-138		32-138	

Analysis Name: OC Pesticides in Water  
Batch number: 183100009A

	Tetrachloro-m-xylene-D1		Decachlorobiphenyl-D1		Tetrachloro-m-xylene-D2		Decachlorobiphenyl-D2	
	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)
9881309	40	0.024	18	0.024	34	0.024	15	0.024
9881310	29	0.024	16	0.024	24	0.024	15	0.024
9881313	44	0.024	47	0.024	38	0.024	44	0.024
Blank	93	0.024	116	0.024	86	0.024	115	0.024
LCS	95	0.024	83	0.024	90	0.024	80	0.024
Limits:	44-124		32-149		44-124		32-149	

☐ Outside of specification

☐ This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PCBs in Water b0802A  
Batch number: 183100010A

	Tetrachloro-m-xylene-D1		Decachlorobiphenyl-D1		Tetrachloro-m-xylene-D2		Decachlorobiphenyl-D2	
	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)
9881309	114	0.024	33	0.024	108	0.024	32	0.024
9881310	73	0.024	28	0.024	71	0.024	28	0.024
9881313	114	0.024	83	0.024	108	0.024	86	0.024
Blank	64	0.024	60	0.024	60	0.024	62	0.024
LCS	71	0.024	57	0.024	70	0.024	58	0.024
LCSD	97	0.024	67	0.024	95	0.024	68	0.024
Limits:	33-137		10-148		33-137		10-148	

Analysis Name: Dioxins/Furans in Water - 8290  
Batch number: 18313007

	13C12-2378-TCDD		13C12-12378-PeCDD		13C12-123478-HxCDD		13C12-123678-HxCDD		13C12-123789-HxCDD		13C12-1234678-HpCDD	
	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)
9881309	74	0.002	59	0.01	62	0.01	56	0.01	57	0.01	57	0.01
9881310	70	0.002	59	0.01	58	0.01	52	0.01	56	0.01	54	0.01
9881313	74	0.002	60	0.01	61	0.01	56	0.01	62	0.01	60	0.01
Blank	72	0.002	71	0.01	73	0.01	70	0.01	66	0.01	73	0.01
OPR	71	0.002	69	0.01	73	0.01	70	0.01	65	0.01	66	0.01
Limits:	40-135		40-135		40-135		40-135		40-135		40-135	

	13C12-OCDD		13C12-2378-TCDF		13C12-12378-PeCDF		13C12-23478-PeCDF		13C12-123478-HxCDF		13C12-123678-HxCDF	
	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)
9881309	53	0.07	54	0.002	53	0.01	57	0.01	53	0.01	52	0.01
9881310	54	0.07	55	0.002	54	0.01	55	0.01	45	0.01	44	0.01
9881313	64	0.07	59	0.002	56	0.01	59	0.01	47	0.01	46	0.01
Blank	70	0.07	61	0.002	67	0.01	68	0.01	64	0.01	63	0.01
OPR	59	0.07	56	0.002	65	0.01	63	0.01	67	0.01	65	0.01
Limits:	40-135		40-135		40-135		40-135		40-135		40-135	

	13C12-234678-HxCDF		13C12-123789-HxCDF		13C12-1234678-HpCDF		13C12-1234789-HpCDF		13C12-OCDF	
	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)
9881309	49	0.01	69	0.01	52	0.01	49	0.01	46	0.02
9881310	44	0.01	61	0.01	48	0.01	48	0.01	46	0.02
9881313	49	0.01	70	0.01	51	0.01	55	0.01	52	0.02
Blank	58	0.01	71	0.01	67	0.01	67	0.01	65	0.02

☐ Outside of specification

☐ This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

(3) The surrogate spike amount was less than the LOD.

## Quality Control Summary

Client Name: Tidewater Inc.  
Reported: 11/28/2018 14:16

Group Number: 2005271

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Dioxins/Furans in Water - 8290

Batch number: 18313007

	13C12-234678-HxCDF		13C12-123789-HxCDF		13C12-1234678-HpCDF		13C12-1234789-HpCDF		13C12-OCDF	
	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)	%Rec	LOD (ng/l)
OPR	56	0.01	66	0.01	66	0.01	61	0.01	56	0.02
Limits:	40-135		40-135		40-135		40-135		40-135	

☐ Outside of specification

☐☐ This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

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(3) The surrogate spike amount was less than the LOD.





2005271

Location	Great Kills Park		Shipping	
Cooler No	GKP-035		Survey Log #	GKP-035
			Date	11-1-18
Shipping Survey			Surveyor	H. White

Smear Results in dpm/100 cm <sup>2</sup>		Dose Rate (microR)	
Location	α Result	β result	γ result
Right	<MDA	<MDA	5
Back	<MDA	<MDA	5
Left	<MDA	<MDA	4
Front Side	<MDA	<MDA	5
Top	<MDA	<MDA	5
Bottom	<MDA	<MDA	5



Meter	3030 E	MircoRem
Serial No.	217607	19142
Detector	43-10	
Serial No.	229364	
Cal Due Date	9/10/2019	
MDA	200/2000βγ	

**Comments**  
Dose Rate on contact

Surveyor:	H. White	Reviewer:	B. Cole
Signature:	<i>H. White</i>	Signature:	<i>B. Cole</i>
Date	11-1-18	Date	11-1-18



Client: Tidewater

**GKP Phase I RI OU2**

**Delivery and Receipt Information**

Delivery Method:	<u>Fed Ex</u>	Arrival Timestamp:	<u>11/02/2018 10:10</u>
Number of Packages:	<u>3</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>NY</u>		

**Arrival Condition Summary**

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace $\geq$ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	No	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Nicole Reiff (25684) at 14:13 on 11/02/2018

**Samples Chilled Details: GKP Phase I RI OU2**

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	0.5	DT	Wet	Y	Bagged	N
2	DT146	1.0	DT	Wet	Y	Bagged	N
3	DT146	0.0	DT	Wet	Y	Bagged	N

**Samples Not Intact Details: GKP Phase I RI OU2**

Sample ID on Label	Bottle Code	Bottle Quantity	Container Salvageable?	Comments
OU2-1-MW008WT	40 ml glass vial (GC/MS) - HCl	1	N	



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>BMQL</b>	Below Minimum Quantitation Level	<b>mL</b>	milliliter(s)
<b>C</b>	degrees Celsius	<b>MPN</b>	Most Probable Number
<b>cfu</b>	colony forming units	<b>N.D.</b>	non-detect
<b>CP Units</b>	cobalt-chloroplatinate units	<b>ng</b>	nanogram(s)
<b>F</b>	degrees Fahrenheit	<b>NTU</b>	nephelometric turbidity units
<b>g</b>	gram(s)	<b>pg/L</b>	picogram/liter
<b>IU</b>	International Units	<b>RL</b>	Reporting Limit
<b>kg</b>	kilogram(s)	<b>TNTC</b>	Too Numerous To Count
<b>L</b>	liter(s)	<b>µg</b>	microgram(s)
<b>lb.</b>	pound(s)	<b>µL</b>	microliter(s)
<b>m3</b>	cubic meter(s)	<b>umhos/cm</b>	micromhos/cm
<b>meq</b>	milliequivalents	<b>MCL</b>	Maximum Contamination Limit
<b>mg</b>	milligram(s)		
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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# Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value $\geq$ the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column $>40\%$ . The lower result is reported.
P^	Concentration difference between the primary and confirmation column $> 40\%$ . The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column $>100\%$ . The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

# **Volatiles by GC/MS Data**

# **Case Narrative/Conformance Summary**

## **Volatiles by GC/MS**

## Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.  
SDG: TID15

### GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix		DF	Comments
		Liquid	Solid		
9881308	OU2TB103118-001	X		1	Trip Blank
9881309	OU2-1-MW008WT	X		1	
9881310	OU2-1-MW008WT-DUP	X		1	Field Duplicate Sample
9881313	OU2-1-MW009WT	X		1	

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below.  
See QC Reference List for Associated Batch QC Samples

### SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

### HOLDING TIME:

All holding times were met.

### PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

### CALIBRATION/STANDARDIZATION:

(Sample number(s): 9881308-9881310, 9881313: Analysis: 11996)  
The response for a target analyte(s) in the initial and/or continuing calibration verification criteria marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s), the data is reported.

### QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

#### MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

## Case Narrative/Conformance Summary

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

### GC/MS Volatiles

Fraction: Volatiles by GC/MS

#### SAMPLE ANALYSIS:

(Sample number(s): 9881309-9881310, 9881313: Analysis: 11996)  
A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.  
The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated:  
acetone.

(Sample number(s): 9881308: Analysis: 11996)  
A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

#### Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

# **Quality Control and Calibration Summary Forms**

## **Volatiles by GC/MS**

**Quality Control Reference List**  
**GC/MS Volatiles**

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

**Fraction: Volatiles by GC/MS**

<b>Analysis</b>	<b>Batch Number</b>	<b>Sample Number</b>	<b>Analysis Date</b>
VOCs- 25ml Water by 8260C	I183171AA	VBLKI42	11/13/2018 11:25
		LCSI42	11/13/2018 09:38
		LCDI42	11/13/2018 09:59
		LCSI43	11/13/2018 10:21
		LCDI43	11/13/2018 10:42
		9881308	11/13/2018 13:33
		9881309	11/13/2018 13:54
		9881310	11/13/2018 14:16
		9881313	11/13/2018 14:37



Fraction: Volatiles by GC/MS

I183171AA / VBLKI42 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Dichlorodifluoromethane	11/13/18	N.D.	ug/l	0.05	0.2	0.5
Chloromethane	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Vinyl Chloride	11/13/18	N.D.	ug/l	0.1	0.2	0.5
Bromomethane	11/13/18	N.D.	ug/l	0.07	0.2	0.5
Chloroethane	11/13/18	N.D.	ug/l	0.07	0.2	0.5
Trichlorofluoromethane	11/13/18	N.D.	ug/l	0.05	0.2	0.5
1,1-Dichloroethene	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Freon 113	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Acetone	11/13/18	N.D.	ug/l	0.9	2.0	5.0
Carbon Disulfide	11/13/18	N.D.	ug/l	0.06	0.2	1.0
Methyl Acetate	11/13/18	N.D.	ug/l	0.1	0.2	1.0
Methylene Chloride	11/13/18	N.D.	ug/l	0.07	0.2	0.5
trans-1,2-Dichloroethene	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Methyl Tertiary Butyl Ether	11/13/18	N.D.	ug/l	0.05	0.2	0.5
1,1-Dichloroethane	11/13/18	N.D.	ug/l	0.07	0.2	0.5
2-Butanone	11/13/18	N.D.	ug/l	0.6	2.0	5.0
cis-1,2-Dichloroethene	11/13/18	N.D.	ug/l	0.05	0.2	0.5
Chloroform	11/13/18	N.D.	ug/l	0.09	0.2	0.5
1,1,1-Trichloroethane	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Cyclohexane	11/13/18	N.D.	ug/l	0.05	0.2	0.5
Carbon Tetrachloride	11/13/18	N.D.	ug/l	0.07	0.2	0.5
Benzene	11/13/18	N.D.	ug/l	0.05	0.2	0.5
1,2-Dichloroethane	11/13/18	N.D.	ug/l	0.05	0.2	0.5
Trichloroethene	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Methylcyclohexane	11/13/18	N.D.	ug/l	0.05	0.2	0.5
1,2-Dichloropropane	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Bromodichloromethane	11/13/18	N.D.	ug/l	0.05	0.2	0.5
cis-1,3-Dichloropropene	11/13/18	N.D.	ug/l	0.05	0.2	0.5
4-Methyl-2-Pentanone	11/13/18	N.D.	ug/l	0.7	2.0	5.0
Toluene	11/13/18	N.D.	ug/l	0.07	0.2	0.5
trans-1,3-Dichloropropene	11/13/18	N.D.	ug/l	0.06	0.2	0.5
1,1,2-Trichloroethane	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Tetrachloroethene	11/13/18	N.D.	ug/l	0.06	0.2	0.5
2-Hexanone	11/13/18	N.D.	ug/l	0.6	2.0	5.0
Dibromochloromethane	11/13/18	N.D.	ug/l	0.07	0.2	0.5
1,2-Dibromoethane	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Chlorobenzene	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Ethylbenzene	11/13/18	N.D.	ug/l	0.06	0.2	0.5
Xylene (Total)	11/13/18	N.D.	ug/l	0.1	0.4	0.5
Styrene	11/13/18	N.D.	ug/l	0.05	0.2	0.5
Bromoform	11/13/18	N.D.	ug/l	0.3	0.5	1.0
Isopropylbenzene	11/13/18	N.D.	ug/l	0.05	0.2	0.5
Cyclohexanone	11/13/18	N.D.	ug/l	1.8	7.2	25
1,1,2,2-Tetrachloroethane	11/13/18	N.D.	ug/l	0.07	0.2	0.5
1,3-Dichlorobenzene	11/13/18	N.D.	ug/l	0.06	0.2	0.5

Fraction: Volatiles by GC/MS

<b>I183171AA / VBLKI42 Analyte</b>	<b>Analysis Date</b>	<b>Blank Results</b>	<b>Units</b>	<b>DL</b>	<b>LOD</b>	<b>LOQ</b>
1,4-Dichlorobenzene	11/13/18	N.D.	ug/l	0.07	0.2	0.5
1,2-Dichlorobenzene	11/13/18	N.D.	ug/l	0.06	0.2	0.5
1,2-Dibromo-3-chloropropane	11/13/18	N.D.	ug/l	0.1	0.4	0.5
1,2,4-Trichlorobenzene	11/13/18	N.D.	ug/l	0.06	0.2	0.5

Fraction: Volatiles by GC/MS

I183171AA Sample	1,2-Dichloroethane-d4		4-Bromofluorobenzene		Dibromofluoromethane		Toluene-d8	
	Spike Added	10 ug/l	Spike Added	10 ug/l	Spike Added	10 ug/l	Spike Added	10 ug/l
	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLK142	111	81 - 118	93	85 - 114	107	80 - 119	102	89 - 112
LCSI42	108	81 - 118	97	85 - 114	99	80 - 119	103	89 - 112
LCDI42	106	81 - 118	98	85 - 114	100	80 - 119	103	89 - 112
9881308	113	81 - 118	91	85 - 114	110	80 - 119	101	89 - 112
9881309	108	81 - 118	106	85 - 114	105	80 - 119	98	89 - 112
9881310	108	81 - 118	105	85 - 114	104	80 - 119	99	89 - 112
9881313	111	81 - 118	92	85 - 114	107	80 - 119	101	89 - 112

SDG: TID15  
Matrix: LIQUID

GC/MS Volatiles  
Fraction: Volatiles by GC/MS

LCS: LCS142 LCSD: LCD142  Analyte	Batch: I183171AA (Sample number(s): 9881308-9881310, 9881313 )							
	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
Dichlorodifluoromethane	5.00	3.88	3.73	78	75	32-152	4	20
Chloromethane	5.00	3.97	3.84	79	77	50-139	3	20
Vinyl Chloride	5.00	4.21	4.10	84	82	58-137	3	20
Bromomethane	5.00	3.47	3.35	69	67	53-141	4	20
Chloroethane	5.00	4.01	3.87	80	77	60-138	4	20
Trichlorofluoromethane	5.00	4.54	4.42	91	88	65-141	3	20
1,1-Dichloroethene	5.00	5.53	5.42	111	108	71-131	2	20
Freon 113	5.00	5.76	5.62	115	112	70-136	3	20
Acetone	37.5	43.94	42.08	117	112	39-160	4	20
Carbon Disulfide	5.00	4.94	4.83	99	97	64-133	2	20
Methyl Acetate	5.00	6.11	5.67	122	113	56-136	8	20
Methylene Chloride	5.00	5.28	5.20	106	104	74-124	2	20
trans-1,2-Dichloroethene	5.00	5.31	5.23	106	105	75-124	1	20
Methyl Tertiary Butyl Ether	5.00	4.22	4.32	84	86	71-124	2	20
1,1-Dichloroethane	5.00	5.02	4.93	100	99	77-125	2	20
2-Butanone	37.5	39.69	38.09	106	102	56-143	4	20
cis-1,2-Dichloroethene	5.00	5.18	5.16	104	103	78-123	0	20
Chloroform	5.00	5.11	5.01	102	100	79-124	2	20
1,1,1-Trichloroethane	5.00	5.01	4.88	100	98	74-131	3	20
Cyclohexane	5.00	4.45	4.36	89	87	71-130	2	20
Carbon Tetrachloride	5.00	5.27	5.16	105	103	72-136	2	20
Benzene	5.00	5.16	5.12	103	102	79-120	1	20
1,2-Dichloroethane	5.00	4.92	4.76	98	95	73-128	3	20
Trichloroethene	5.00	5.11	5.00	102	100	79-123	2	20
Methylcyclohexane	5.00	4.58	4.59	92	92	72-132	0	20
1,2-Dichloropropane	5.00	5.30	5.22	106	104	78-122	1	20
Bromodichloromethane	5.00	4.87	4.78	97	96	79-125	2	20
cis-1,3-Dichloropropene	5.00	4.42	4.41	88	88	75-124	0	20
4-Methyl-2-Pentanone	25	25.75	24.94	103	100	67-130	3	20
Toluene	5.00	5.23	5.16	105	103	80-121	2	20
trans-1,3-Dichloropropene	5.00	4.68	4.69	94	94	73-127	0	20
1,1,2-Trichloroethane	5.00	5.58	5.60	112	112	80-119	0	20
Tetrachloroethene	5.00	4.95	4.88	99	98	74-129	1	20
2-Hexanone	25	26.41	25.13	106	101	57-139	5	20
Dibromochloromethane	5.00	5.09	5.01	102	100	74-126	1	20
1,2-Dibromoethane	5.00	5.22	5.25	104	105	77-121	1	20
Chlorobenzene	5.00	5.47	5.44	109	109	82-118	1	20
Ethylbenzene	5.00	5.17	5.14	103	103	79-121	1	20
Xylene (Total)	15	15.37	15.27	102	102	79-121	1	20
Styrene	5.00	5.23	5.22	105	104	78-123	0	20
Bromoform	5.00	4.45	4.32	89	86	66-130	3	20
Isopropylbenzene	5.00	5.10	5.09	102	102	72-131	0	20

SDG: TID15  
Matrix: LIQUID

**GC/MS Volatiles**  
**Fraction: Volatiles by GC/MS**

LCS: LCS142 LCSD: LCDI42  Analyte	Batch: I183171AA (Sample number(s): 9881308-9881310, 9881313 )							
	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
1,1,2,2-Tetrachloroethane	5.00	5.19	5.12	104	102	71-121	1	20
1,3-Dichlorobenzene	5.00	5.01	4.94	100	99	80-119	1	20
1,4-Dichlorobenzene	5.00	5.08	4.98	102	100	79-118	2	20
1,2-Dichlorobenzene	5.00	5.07	5.00	101	100	80-119	1	20
1,2-Dibromo-3-chloropropane	5.00	5.45	5.45	109	109	62-128	0	20
1,2,4-Trichlorobenzene	5.00	4.33	4.41	87	88	69-130	2	20

LCS: LCS143 LCSD: LCDI43  Analyte	Batch: I183171AA (Sample number(s): 9881308-9881310, 9881313 )							
	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
Cyclohexanone	125	86.95	87.94	70	70	26-147	1	30

Fraction: Volatiles by GC/MS

11996: VOCs- 25ml Water by 8260C Analyte Name	Default DL	Default LOD	Default LOQ	Units
Dichlorodifluoromethane	.05	.2	0.5	ug/l
Chloromethane	.06	.2	0.5	ug/l
Vinyl Chloride	.1	.2	0.5	ug/l
Bromomethane	.07	.2	0.5	ug/l
Chloroethane	.07	.2	0.5	ug/l
Trichlorofluoromethane	.05	.2	0.5	ug/l
1,1-Dichloroethene	.06	.2	0.5	ug/l
Freon 113	.06	.2	0.5	ug/l
Acetone	.9	2	5.0	ug/l
Carbon Disulfide	.06	.2	1.0	ug/l
Methyl Acetate	.1	.2	1.0	ug/l
Methylene Chloride	.07	.2	0.5	ug/l
trans-1,2-Dichloroethene	.06	.2	0.5	ug/l
Methyl Tertiary Butyl Ether	.05	.2	0.5	ug/l
1,1-Dichloroethane	.07	.2	0.5	ug/l
2-Butanone	.6	2	5.0	ug/l
cis-1,2-Dichloroethene	.05	.2	0.5	ug/l
Chloroform	.09	.2	0.5	ug/l
1,1,1-Trichloroethane	.06	.2	0.5	ug/l
Cyclohexane	.05	.2	0.5	ug/l
Carbon Tetrachloride	.07	.2	0.5	ug/l
Benzene	.05	.2	0.5	ug/l
1,2-Dichloroethane	.05	.2	0.5	ug/l
Trichloroethene	.06	.2	0.5	ug/l
Methylcyclohexane	.05	.2	0.5	ug/l
1,2-Dichloropropane	.06	.2	0.5	ug/l
Bromodichloromethane	.05	.2	0.5	ug/l
cis-1,3-Dichloropropene	.05	.2	0.5	ug/l
4-Methyl-2-Pentanone	.7	2	5.0	ug/l
Toluene	.07	.2	0.5	ug/l
trans-1,3-Dichloropropene	.06	.2	0.5	ug/l
1,1,2-Trichloroethane	.06	.2	0.5	ug/l
Tetrachloroethene	.06	.2	0.5	ug/l
2-Hexanone	.6	2	5.0	ug/l
Dibromochloromethane	.07	.2	0.5	ug/l
1,2-Dibromoethane	.06	.2	0.5	ug/l
Chlorobenzene	.06	.2	0.5	ug/l
Ethylbenzene	.06	.2	0.5	ug/l
Xylene (Total)	.1	.4	0.5	ug/l
Styrene	.05	.2	0.5	ug/l
Bromoform	.3	.5	1.0	ug/l
Isopropylbenzene	.05	.2	0.5	ug/l
Cyclohexanone	1.8	7.2	25	ug/l
1,1,2,2-Tetrachloroethane	.07	.2	0.5	ug/l
1,3-Dichlorobenzene	.06	.2	0.5	ug/l
1,4-Dichlorobenzene	.07	.2	0.5	ug/l
1,2-Dichlorobenzene	.06	.2	0.5	ug/l

Fraction: Volatiles by GC/MS

11996: VOCs- 25ml Water by 8260C Analyte Name	Default DL	Default LOD	Default LOQ	Units
1,2-Dibromo-3-chloropropane	.1	.4	0.5	ug/l
1,2,4-Trichlorobenzene	.06	.2	0.5	ug/l

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_  
 Lab File ID: il09t02.d      BFB Injection Date: 07/09/18  
 Instrument ID: HP19930      BFB Injection Time: 12:15  
 Matrix: (soil/water) WATER      Level: (low/med) LOW      Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.00
75	30.0 - 60.0% of mass 95	53.91
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.86
173	Less than 2.0% of mass 174	0.49 ( 0.53)1
174	Greater than 50.0% of mass 95	93.14
175	5.0 - 9.0% of mass 174	6.81 ( 7.32)1
176	Greater than 95.0%, but less than 101.0% of mass 174	88.76 (95.30)1
177	5.0 - 9.0% of mass 176	5.65 ( 6.37)2

1-Value is % mass 174      2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD25	il09i01.d	07/09/18	12:45
02	VSTD10	il09i02.d	07/09/18	13:06
03	VSTD5	il09i03.d	07/09/18	13:27
04	VSTD2	il09i04.d	07/09/18	13:49
05	VSTD1	il09i05.d	07/09/18	14:10
06	VSTD.5	il09i06.d	07/09/18	14:31
07	VSTD.2	il09i07.d	07/09/18	14:52
08	MDL0.1 - MDL0.1	il09m01.d	07/09/18	15:14
09	LCSILG	il09v01.d	07/09/18	15:35



5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_  
 Lab File ID: is11t52.d      BFB Injection Date: 09/11/18  
 Instrument ID: HP19930      BFB Injection Time: 18:35  
 Matrix: (soil/water) WATER      Level: (low/med) LOW      Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.29
75	30.0 - 60.0% of mass 95	48.33
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.05
173	Less than 2.0% of mass 174	0.87 ( 0.97)1
174	Greater than 50.0% of mass 95	89.60
175	5.0 - 9.0% of mass 174	6.45 ( 7.20)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.55 (95.49)1
177	5.0 - 9.0% of mass 176	5.71 ( 6.68)2

1-Value is % mass 174      2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD25	is11i51.d	09/11/18	19:20
02	VSTD10	is11i52.d	09/11/18	19:41
03	VSTD5	is11i53.d	09/11/18	20:02
04	VSTD2	is11i54.d	09/11/18	20:24
05	VSTD1	is11i55.d	09/11/18	20:45
06	VSTD.5	is11i56.d	09/11/18	21:06
07	VSTD.2	is11i57.d	09/11/18	21:27
08	LCSISMC	is11v51.d	09/11/18	22:11
09	MDL0.1 - MDL0.1	is11m51.d	09/12/18	00:18

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_  
 Lab File ID: in13t01.d      BFB Injection Date: 11/13/18  
 Instrument ID: HP19930      BFB Injection Time: 08:19  
 Matrix: (soil/water) WATER      Level: (low/med) LOW      Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.97
75	30.0 - 60.0% of mass 95	50.83
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.44
173	Less than 2.0% of mass 174	1.15 ( 1.31)1
174	Greater than 50.0% of mass 95	87.56
175	5.0 - 9.0% of mass 174	6.74 ( 7.69)1
176	Greater than 95.0%, but less than 101.0% of mass 174	84.08 (96.03)1
177	5.0 - 9.0% of mass 176	5.41 ( 6.43)2

1-Value is % mass 174      2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD10	in13c01.d	11/13/18	08:55
02	VSTD10	in13c02.d	11/13/18	09:16
03	LCSI42	in13l01.d	11/13/18	09:38
04	LCSI44	in13l31.d	11/13/18	09:38
05	LCDI42	in13l02.d	11/13/18	09:59
06	LCDI44	in13l32.d	11/13/18	09:59
07	LCSI43	in13l03.d	11/13/18	10:21
08	LCSI45	in13l33.d	11/13/18	10:21
09	LCDI43	in13l04.d	11/13/18	10:42
10	LCDI45	in13l34.d	11/13/18	10:42
11	MDLI42 - MDLI42	in13m01.d	11/13/18	11:03
12	MDLI44 - MDLI44	in13m02.d	11/13/18	11:03
13	VBLKI42	in13b01.d	11/13/18	11:25
14	VBLKI44	in13b30.d	11/13/18	11:25
15	9881308	in13s02.d	11/13/18	13:33
16	9881309	in13s03.d	11/13/18	13:54
17	9881310	in13s04.d	11/13/18	14:16
18	9881313	in13s05.d	11/13/18	14:37
19	9866560	in13s35.d	11/13/18	14:58
20	9866561	in13s36.d	11/13/18	15:20
21	9866593	in13s37.d	11/13/18	15:41
22	9881105DL	in13s40.d	11/13/18	16:45

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_  
 Lab File ID: in13t01.d      BFB Injection Date: 11/13/18  
 Instrument ID: HP19930      BFB Injection Time: 08:19  
 Matrix: (soil/water) WATER      Level: (low/med) LOW      Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.97
75	30.0 - 60.0% of mass 95	50.83
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.44
173	Less than 2.0% of mass 174	1.15 ( 1.31)1
174	Greater than 50.0% of mass 95	87.56
175	5.0 - 9.0% of mass 174	6.74 ( 7.69)1
176	Greater than 95.0%, but less than 101.0% of mass 174	84.08 (96.03)1
177	5.0 - 9.0% of mass 176	5.41 ( 6.43)2

1-Value is % mass 174      2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	9881107DL	in13s41.d	11/13/18	17:06
24	9894003	in13s43.d	11/13/18	17:27
25	9894002	in13s42.d	11/13/18	17:48
26	9894002DL	in13s46.d	11/13/18	18:09
27	9894004	in13s44.d	11/13/18	18:31
28	9894005	in13s45.d	11/13/18	18:52
29	SECC010	in13c03.d	11/13/18	19:13
30	SECD010	in13c04.d	11/13/18	19:34

6A  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930 Calibration Date(s): 07/09/18 07/09/18  
 Heated Purge: (Y/N) Y Calibration Times: 12:45 14:52  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID:	RRF0.2= i109i07.d	RRF0.5= i109i06.d	RRF 1 = i109i05.d	RRF 2 = i109i04.d	RRF 5 = i109i03.d	RRF 10= i109i02.d	RRF 25= i109i01.d		%	CAL.
COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	RSD	METHOD
Dichlorodifluoromethane	#0.4882	0.6317	0.6327	0.6421	0.6311	0.6248	0.6224	0.6104	9	AVG #
Chloromethane	#0.4946	0.4506	0.4407	0.4483	0.4341	0.4278	0.4234	0.4456	5	AVG #
Vinyl Chloride	#0.4192	0.4453	0.4317	0.4459	0.4335	0.4239	0.4122	0.4302	3	AVG #
1,3-Butadiene	0.2342	0.2978	0.2932	0.3069	0.2975	0.2913	0.2824	0.2862	8	AVG
Bromomethane	#0.4820	0.4158	0.4076	0.4061	0.3922	0.3735	0.3584	0.4051	10	AVG #
Chloroethane	#0.2787	0.2574	0.2535	0.2563	0.2484	0.2354	0.2237	0.2505	7	AVG #
Dichlorofluoromethane	0.7807	0.6910	0.6563	0.6690	0.6241	0.6106	0.5771	0.6584	10	AVG
Trichlorofluoromethane	#0.6232	0.7625	0.7494	0.7796	0.7586	0.7465	0.7288	0.7355	7	AVG #
Ethyl ether	0.2303	0.2411	0.2407	0.2521	0.2499	0.2509	0.2393	0.2435	3	AVG
Freon 123a	0.3315	0.3884	0.3808	0.3885	0.3802	0.3748	0.3613	0.3722	5	AVG
Acrolein	1.9372	2.0202	1.9965	2.0103	1.9783	2.0178	1.7921	1.9646	4	AVG
1,1-Dichloroethene	#0.2224	0.2623	0.2560	0.2596	0.2583	0.2619	0.2551	0.2537	6	AVG #
Freon 113	#0.2013	0.3012	0.3033	0.3175	0.3151	0.3163	0.3069	0.2945	14	AVG #
Acetone	#3.4684	3.0794	2.9317	2.8330	2.8007	2.7934	2.5457	2.9218	10	AVG #
Methyl Iodide	0.4831	0.5155	0.5157	0.5277	0.5293	0.5417	0.5326	0.5208	4	AVG
Carbon Disulfide	#0.7291	0.7502	0.7519	0.7621	0.7527	0.7682	0.7541	0.7526	2	AVG #
Allyl Chloride	0.5586	0.5646	0.5284	0.5451	0.5459	0.5474	0.5254	0.5451	3	AVG
Methyl Acetate	#5.4703	6.5126	7.0580	6.8873	6.6014	7.0102	6.8920	6.6331	8	AVG #
Methylene Chloride	#0.2894	0.2983	0.2858	0.2888	0.2867	0.2875	0.2743	0.2873	2	AVG #
t-Butyl Alcohol	1.3316	1.3079	1.3120	1.2812	1.3250	1.3230	1.1692	1.2928	4	AVG
Acrylonitrile	2.9557	2.9820	3.2340	3.2559	3.3176	3.4028	3.1404	3.1841	5	AVG
trans-1,2-Dichloroethene	#0.2829	0.2907	0.2841	0.2903	0.2900	0.2930	0.2844	0.2879	1	AVG #
Methyl Tertiary Butyl Ether	#0.7556	0.7816	0.7818	0.7990	0.8095	0.8106	0.7614	0.7856	3	AVG #
n-Hexane	0.4592	0.4590	0.4795	0.4877	0.4868	0.4725	0.4741	0.4741	3	AVG
1,1-Dichloroethane	#0.5506	0.5710	0.5742	0.5794	0.5771	0.5841	0.5462	0.5689	3	AVG #
di-Isopropyl Ether	0.9886	1.0240	1.0268	1.0408	1.0564	1.0627	0.9943	1.0276	3	AVG
2-Chloro-1,3-Butadiene	0.5134	0.5276	0.5489	0.5503	0.5563	0.5351	0.5386	0.5386	3	AVG
Ethyl t-butyl ether	0.9322	0.9685	0.9532	0.9719	0.9844	0.9887	0.9240	0.9604	3	AVG
cis-1,2-Dichloroethene	#0.3210	0.3256	0.3284	0.3328	0.3326	0.3350	0.3259	0.3288	2	AVG #
2,2-Dichloropropane	0.4736	0.5184	0.5160	0.5296	0.5296	0.5350	0.5142	0.5166	4	AVG
2-Butanone	#4.6302	4.8554	4.8836	4.9441	4.9189	5.0825	4.6056	4.8458	4	AVG #
Propionitrile	1.0926	1.1949	1.2235	1.2185	1.2447	1.2555	1.1412	1.1958	5	AVG
Methacrylonitrile	3.8610	4.0881	4.1141	4.1914	4.1307	4.2603	3.8849	4.0758	4	AVG
Bromochloromethane	0.1311	0.1417	0.1434	0.1484	0.1481	0.1488	0.1456	0.1438	4	AVG
Tetrahydrofuran	1.2506	1.2589	1.2431	1.2799	1.2615	1.2935	1.1732	1.2515	3	AVG
Chloroform	#0.5595	0.5753	0.5695	0.5807	0.5791	0.5846	0.5597	0.5726	2	AVG #
1,1,1-Trichloroethane	#0.5048	0.5585	0.5521	0.5600	0.5618	0.5670	0.5481	0.5503	4	AVG #
Cyclohexane	#0.6127	0.5645	0.5893	0.5856	0.5798	0.5540	0.5810	0.5810	4	AVG #
Cyclohexane (2)	#0.4526	0.4462	0.4633	0.4637	0.4629	0.4487	0.4563	0.4563	2	AVG #
Cyclohexane (3)	#0.1724	0.1699	0.1734	0.1753	0.1740	0.1680	0.1722	0.1722	2	AVG #
1,1-Dichloropropene	0.3829	0.4458	0.4343	0.4492	0.4485	0.4476	0.4334	0.4345	5	AVG
Carbon Tetrachloride	#0.4075	0.4762	0.4735	0.5010	0.5024	0.5109	0.5025	0.4820	7	AVG #
Isobutyl Alcohol	0.4331	0.3677	0.3865	0.3851	0.3955	0.4056	0.3664	0.3914	6	AVG
Benzene	#1.1839	1.2253	1.2206	1.2353	1.2249	1.2348	1.1779	1.2147	2	AVG #
1,2-Dichloroethane	#0.4372	0.4226	0.4015	0.4046	0.4060	0.4080	0.3876	0.4097	4	AVG #
1,2-Dichloroethane (2)	#0.0198	0.0278	0.0292	0.0304	0.0305	0.0309	0.0297	0.0283	14	AVG #<-
t-Amyl methyl ether	0.8349	0.8324	0.8319	0.8473	0.8597	0.8585	0.7993	0.8377	2	AVG
n-Heptane	0.4338	0.5454	0.5275	0.5255	0.5356	0.5419	0.5272	0.5196	7	AVG
n-Butanol	0.2601	0.2767	0.2989	0.3089	0.3262	0.2807	0.2919	0.2919	8	AVG
Trichloroethene	#0.3117	0.3273	0.3317	0.3395	0.3409	0.3443	0.3351	0.3329	3	AVG #
Methylcyclohexane	#0.5803	0.5817	0.6142	0.6257	0.6055	0.6056	0.6022	0.6022	3	AVG #
1,2-Dichloropropane	#0.2961	0.3030	0.3010	0.3080	0.3118	0.3136	0.2976	0.3045	2	AVG #

# Compounds with required minimum RRF.  
 All compounds must meet a maximum %RSD of 20.

6A  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930 Calibration Date(s): 07/09/18 07/09/18  
 Heated Purge: (Y/N) Y Calibration Times: 12:45 14:52  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID:	RRF0.2= i109i07.d	RRF0.5= i109i06.d	RRF 1 = i109i05.d	RRF 2 = i109i04.d	RRF 5 = i109i03.d	RRF 10= i109i02.d	RRF 25= i109i01.d		%	CAL.
COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	RSD	METHOD
Methyl Methacrylate	5.7291	6.8508	7.5942	7.8102	7.9467	8.1592	7.6554	7.3922	11	AVG
Dibromomethane	0.1430	0.1514	0.1513	0.1552	0.1579	0.1582	0.1543	0.1530	3	AVG
1,4-Dioxane		0.0654	0.0675	0.0770	0.0630	0.0727	0.0502	0.0660	14	AVG
1,4-Dioxane (2)		0.0435	0.0469	0.0576	0.0474	0.0538	0.0371	0.0477	15	AVG
Bromodichloromethane	#0.3684	0.3901	0.3985	0.4135	0.4292	0.4437	0.4329	0.4109	7	AVG #
2-Nitropropane	3.1873	3.3113	3.2804	3.3151	3.3885	3.5228	3.2246	3.3186	3	AVG
cis-1,3-Dichloropropene	#	0.4298	0.4478	0.4603	0.4842	0.4943	0.4810	0.4662	5	AVG #
4-Methyl-2-Pentanone	#10.861	11.879	12.106	12.446	12.577	12.555	10.596	11.860	7	AVG #
Toluene	#0.9600	0.9994	0.9975	1.0049	0.9931	0.9956	0.9351	0.9837	3	AVG #
trans-1,3-Dichloropropene	#0.4389	0.4653	0.4785	0.5015	0.5205	0.5354	0.5014	0.4916	7	AVG #
Ethyl Methacrylate		0.3897	0.4107	0.4317	0.4524	0.4489	0.4195	0.4255	6	AVG
1,1,2-Trichloroethane	#0.2567	0.2675	0.2766	0.2810	0.2776	0.2787	0.2595	0.2711	4	AVG #
Tetrachloroethene	#0.4826	0.5125	0.5026	0.5130	0.5207	0.5199	0.5002	0.5074	3	AVG #
1,3-Dichloropropane	0.4562	0.4790	0.4731	0.4832	0.4838	0.4801	0.4425	0.4711	3	AVG
2-Hexanone	#8.2484	8.6276	8.7038	8.7687	8.8115	8.8566	7.4852	8.5002	6	AVG #
Dibromochloromethane	#0.3153	0.3237	0.3374	0.3569	0.3752	0.3842	0.3668	0.3514	8	AVG #
1,2-Dibromoethane	#0.2377	0.2543	0.2606	0.2667	0.2714	0.2728	0.2566	0.2600	5	AVG #
Chlorobenzene	#1.0418	1.0987	1.0733	1.0872	1.0851	1.0911	1.0433	1.0744	2	AVG #
1,1,1,2-Tetrachloroethane	#0.3577	0.3898	0.3949	0.4108	0.4282	0.4406	0.4382	0.4086	7	AVG
Ethylbenzene	#1.8708	1.9814	1.9528	1.9889	2.0007	1.9983	1.8592	1.9503	3	AVG #
m+p-Xylene	#0.7081	0.7477	0.7609	0.7727	0.7759	0.7904	0.7655	0.7602	3	AVG #
o-Xylene	#0.7090	0.7556	0.7468	0.7623	0.7758	0.7924	0.7736	0.7594	4	AVG #
Styrene	#0.9770	1.0862	1.1126	1.1788	1.2146	1.2388	1.1901	1.1426	8	AVG #
Bromoform	#0.1745	0.1881	0.1945	0.2145	0.2345	0.2459	0.2434	0.2136	13	AVG #
Isopropylbenzene	#1.8213	1.9623	1.9805	2.0394	2.0557	2.0646	1.9286	1.9789	4	AVG #
1,1,2,2-Tetrachloroethane	#0.5570	0.5790	0.5997	0.6301	0.6420	0.6552	0.6286	0.6131	6	AVG #
Bromobenzene	0.7936	0.8398	0.8513	0.8785	0.9120	0.9734	1.0504	0.8999	10	AVG
trans-1,4-Dichloro-2-butene	3.2847	3.6631	3.9600	4.1708	4.3539	4.3703	3.4975	3.9000	11	AVG
1,2,3-Trichloropropane	0.1680	0.1801	0.1781	0.1783	0.1846	0.1830	0.1761	0.1783	3	AVG
n-Propylbenzene	3.7911	4.0971	4.1486	4.2374	4.2513	4.2670	3.9469	4.1056	4	AVG
2-Chlorotoluene	0.7650	0.8117	0.8028	0.8164	0.8411	0.8602	0.8466	0.8205	4	AVG
1,3,5-Trimethylbenzene	2.6938	2.8564	2.9186	2.9651	3.0696	3.1094	2.9994	2.9446	5	AVG
4-Chlorotoluene	0.7644	0.8124	0.8260	0.8298	0.8495	0.8672	0.8636	0.8304	4	AVG
tert-Butylbenzene	0.5731	0.5950	0.6137	0.6339	0.6502	0.6766	0.6936	0.6337	7	AVG
Pentachloroethane	0.4358	0.4868	0.4995	0.5622	0.6003	0.6238	0.6639	0.5532	15	AVG
1,2,4-Trimethylbenzene	2.7139	2.8409	2.9096	3.0168	3.0903	3.1749	3.0772	2.9748	5	AVG
sec-Butylbenzene	3.3221	3.7353	3.7307	3.8717	3.9576	4.0247	3.8578	3.7857	6	AVG
1,3-Dichlorobenzene	#1.5348	1.6031	1.6080	1.6623	1.7394	1.8366	1.9234	1.7011	8	AVG #
p-Isopropyltoluene		3.0404	3.1486	3.2829	3.4173	3.5885	3.5739	3.3419	7	AVG
1,4-Dichlorobenzene	#1.6683	1.7088	1.6739	1.7023	1.7411	1.8097	1.8749	1.7399	4	AVG #
1,2,3-Trimethylbenzene	1.3166	1.2914	1.3012	1.3405	1.3852	1.4118	1.4382	1.3550	4	AVG
Benzyl Chloride	0.1611	0.1804	0.2176	0.2282	0.2669	0.2767	0.2781	0.2298	20	AVG
n-Butylbenzene	1.3274	1.3858	1.4446	1.5588	1.6350	1.6942	1.6753	1.5316	10	AVG
1,2-Dichlorobenzene	#1.5009	1.5454	1.5185	1.5568	1.6056	1.6494	1.6631	1.5771	4	AVG #
1,2-Dibromo-3-chloropropane	#1.4097	1.6427	1.8482	1.9642	2.1136	2.3123	2.2341	1.9321	17	AVG #
1,3,5-Trichlorobenzene	1.0541	1.1177	1.1592	1.2116	1.3013	1.3710	1.4241	1.2342	11	AVG
1,2,4-Trichlorobenzene	#0.8883	0.9481	0.9863	1.0540	1.1366	1.1954	1.2389	1.0639	12	AVG #
Hexachlorobutadiene	0.3708	0.3982	0.4159	0.4464	0.4712	0.5150	0.5406	0.4512	14	AVG
Naphthalene	1.7502	1.7665	1.8571	1.9556	2.0742	2.0956	1.9696	1.9241	7	AVG
1,2,3-Trichlorobenzene	0.8294	0.8255	0.8552	0.9024	0.9666	0.9939	0.9841	0.9082	8	AVG
Dibromofluoromethane	0.2604	0.2607	0.2611	0.2627	0.2606	0.2621	0.2597	0.2610	0	AVG

# Compounds with required minimum RRF.  
 All compounds must meet a maximum %RSD of 20.

6A  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_      SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930      Calibration Date(s): 07/09/18      07/09/18  
 Heated Purge: (Y/N) Y      Calibration Times: 12:45      14:52  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID:      RRF0.2= i109i07.d      RRF0.5= i109i06.d      RRF 1 = i109i05.d  
 RRF 2 = i109i04.d      RRF 5 = i109i03.d      RRF 10= i109i02.d      RRF 25= i109i01.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
Dibromofluoromethane (2)	0.2685	0.2669	0.2685	0.2686	0.2676	0.2673	0.2672	0.2678	0	AVG
1,2-Dichloroethane-d4	0.0495	0.0491	0.0501	0.0499	0.0493	0.0491	0.0500	0.0496	1	AVG
1,2-Dichloroethane-d4 (2)	0.2930	0.2947	0.2953	0.2982	0.2903	0.2923	0.2905	0.2935	1	AVG
1,2-Dichloroethane-d4 (3)	0.0315	0.0314	0.0326	0.0320	0.0317	0.0315	0.0318	0.0318	1	AVG
Toluene-d8	1.2810	1.2734	1.2853	1.2730	1.2490	1.2263	1.1564	1.2492	4	AVG
Toluene-d8 (2)	0.8277	0.8214	0.8271	0.8234	0.8047	0.7921	0.7473	0.8062	4	AVG
4-Bromofluorobenzene	0.5035	0.5021	0.5035	0.4995	0.4925	0.4835	0.4574	0.4917	3	AVG
4-Bromofluorobenzene (2)	0.4523	0.4554	0.4539	0.4526	0.4494	0.4399	0.4186	0.4460	3	AVG

Average %RSD      6

# Compounds with required minimum RRF.  
 All compounds must meet a maximum %RSD of 20.

# Internal Standard Area and Retention Time Summary

## Initial Calibration Standards:

```

/chem2/HP19930.i/18jul09i.b/il09i01.d    VSTD025
/chem2/HP19930.i/18jul09i.b/il09i02.d    VSTD010
/chem2/HP19930.i/18jul09i.b/il09i03.d    VSTD005
/chem2/HP19930.i/18jul09i.b/il09i04.d    VSTD002
/chem2/HP19930.i/18jul09i.b/il09i05.d    VSTD001
/chem2/HP19930.i/18jul09i.b/il09i06.d    VSTD0.5
/chem2/HP19930.i/18jul09i.b/il09i07.d    VSTD0.2
    
```

### Area Summary

File ID:

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Internal Standard Name	il09i01.d	il09i02.d	il09i03.d	il09i04.d	il09i05.d	il09i06.d	il09i07.d	Avg. Area	%RSD	In Spec
t-Butyl Alcohol-d10	220317	201611	206773	198470	198165	194867	198985	202741	4	Yes
Fluorobenzene	2117377	2046779	2043535	2024178	2046981	2000960	1978744	2036936	2	Yes
Chlorobenzene-d5	1751898	1618210	1588004	1555416	1557507	1524391	1502345	1585396	5	Yes
1,4-Dichlorobenzene-d4	958571	902335	898863	887530	887508	862203	855012	893146	4	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

### RT Summary

File ID:

=====

Internal Standard Name	il09i01.d	il09i02.d	il09i03.d	il09i04.d	il09i05.d	il09i06.d	il09i07.d	Avg. RT
t-Butyl Alcohol-d10	4.147	4.147	4.159	4.166	4.153	4.147	4.153	4.153
Fluorobenzene	7.671	7.665	7.671	7.671	7.671	7.665	7.671	7.669
Chlorobenzene-d5	11.152	11.152	11.152	11.152	11.152	11.152	11.152	11.152
1,4-Dichlorobenzene-d4	13.036	13.030	13.036	13.030	13.030	13.030	13.030	13.031

\* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 07/10/2018 at 13:07.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930 ICV Date: 07/09/18 Time: 15:35  
 Lab File ID: il09v01.d Init. Calib. Date(s): 07/09/18 07/09/18  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT
# Dichlorodifluoromethane	0.6104	0.4578	3.75	5	-25 #
# Chloromethane	0.4456	0.3834	4.30	5	-14 #
# Vinyl Chloride	0.4302	0.3923	4.56	5	-9 #
1,3-Butadiene	0.2862	0.2974	5.20	5	4 #
# Bromomethane	0.4051	0.3127	3.86	5	-23 #
# Chloroethane	0.2505	0.2193	4.38	5	-12 #
Dichlorofluoromethane	0.6584	0.6102	4.63	5	-7 #
# Trichlorofluoromethane	0.7355	0.6495	4.42	5	-12 #
Ethyl ether	0.2435	0.2340	4.81	5	-4 #
Freon 123a	0.3722	0.3731	5.01	5	0 #
Acrolein	1.9646	2.0933	39.96	37.5	7 #
# 1,1-Dichloroethene	0.2537	0.2652	5.23	5	5 #
# Freon 113	0.2945	0.2981	5.06	5	1 #
# Acetone	2.9218	2.8239	35.24	37.5	-6 #
Methyl Iodide	0.5208	0.4974	4.78	5	-4 #
# Carbon Disulfide	0.7526	0.6839	4.54	5	-9 #
Allyl Chloride	0.5451	0.4671	4.28	5	-14 #
# Methyl Acetate	6.6331	8.0397	6.06	5	21 #
# Methylene Chloride	0.2873	0.2815	4.90	5	-2 #
t-Butyl Alcohol	1.2928	1.2392	47.93	50	-4 #
Acrylonitrile	3.1841	3.5431	27.82	25	11 #
# trans-1,2-Dichloroethene	0.2879	0.2873	4.99	5	0 #
# Methyl Tertiary Butyl Ether	0.7856	0.7657	4.87	5	-3 #
n-Hexane	0.4741	0.4415	4.66	5	-7 #
# 1,1-Dichloroethane	0.5689	0.5549	4.88	5	-2 #
di-Isopropyl Ether	1.0276	1.0271	5.00	5	0 #
2-Chloro-1,3-Butadiene	0.5386	0.5224	4.85	5	-3 #
Ethyl t-butyl ether	0.9604	0.9329	4.86	5	-3 #
# cis-1,2-Dichloroethene	0.3288	0.3272	4.98	5	0 #
2,2-Dichloropropane	0.5166	0.5087	4.92	5	-2 #
# 2-Butanone	4.8458	5.2680	40.77	37.5	9 #
Propionitrile	1.1958	1.3172	41.30	37.5	10 #
Methacrylonitrile	4.0758	4.5920	42.25	37.5	13 #
Bromochloromethane	0.1438	0.1319	4.59	5	-8 #
Tetrahydrofuran	1.2515	1.3494	26.96	25	8 #
# Chloroform	0.5726	0.5604	4.89	5	-2 #

# Compounds with required minimum RRF.  
 Maximum % Drift = 30 %



INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930 ICV Date: 07/09/18 Time: 15:35  
 Lab File ID: il09v01.d Init. Calib. Date(s): 07/09/18 07/09/18  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT
# 1,1,1-Trichloroethane	0.5503	0.5422	4.93	5	-1 #
# Cyclohexane	0.5810	0.5462	4.70	5	-6 #
1,1-Dichloropropene	0.4345	0.4209	4.84	5	-3
# Carbon Tetrachloride	0.4820	0.4792	4.97	5	-1 #
Isobutyl Alcohol	0.3914	0.3749	119.73	125	-4
# Benzene	1.2147	1.1832	4.87	5	-3 #
# 1,2-Dichloroethane	0.4097	0.3844	4.69	5	-6 #
t-Amyl methyl ether	0.8377	0.8249	4.92	5	-2
n-Heptane	0.5196	0.4927	4.74	5	-5
n-Butanol	0.2919	0.2828	242.23	250	-3
# Trichloroethene	0.3329	0.3232	4.85	5	-3 #
# Methylcyclohexane	0.6022	0.5225	4.34	5	-13 #
# 1,2-Dichloropropene	0.3045	0.3045	5.00	5	0 #
Methyl Methacrylate	7.3922	8.6832	5.87	5	17
Dibromomethane	0.1530	0.1509	4.93	5	-1
1,4-Dioxane	0.0660	0.0568	107.60	125	-14
# Bromodichloromethane	0.4109	0.4011	4.88	5	-2 #
2-Nitropropane	3.3186	3.3596	5.06	5	1
# cis-1,3-Dichloropropene	0.4662	0.4453	4.78	5	-4 #
# 4-Methyl-2-Pentanone	11.8600	13.2315	27.89	25	12 #
# Toluene	0.9837	0.9630	4.90	5	-2 #
# trans-1,3-Dichloropropene	0.4916	0.4814	4.90	5	-2 #
Ethyl Methacrylate	0.4255	0.4182	4.91	5	-2
# 1,1,2-Trichloroethane	0.2711	0.2725	5.03	5	1 #
# Tetrachloroethene	0.5074	0.4949	4.88	5	-2 #
1,3-Dichloropropene	0.4711	0.4563	4.84	5	-3
# 2-Hexanone	8.5002	9.3036	27.36	25	9 #
# Dibromochloromethane	0.3514	0.3491	4.97	5	-1 #
# 1,2-Dibromoethane	0.2600	0.2587	4.98	5	0 #
# Chlorobenzene	1.0744	1.0408	4.84	5	-3 #
1,1,1,2-Tetrachloroethane	0.4086	0.4067	4.98	5	0
# Ethylbenzene	1.9503	1.9276	4.94	5	-1 #
# m+p-Xylene	0.7602	0.7469	9.83	10	-2 #
# o-Xylene	0.7594	0.7318	4.82	5	-4 #
# Styrene	1.1426	1.1672	5.11	5	2 #
# Bromoform	0.2136	0.2072	4.85	5	-3 #

# Compounds with required minimum RRF.  
 Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930 ICV Date: 07/09/18 Time: 15:35  
 Lab File ID: il09v01.d Init. Calib. Date(s): 07/09/18 07/09/18  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT
# Isopropylbenzene	1.9789	1.9865	5.02	5	0 #
# 1,1,2,2-Tetrachloroethane	0.6131	0.5909	4.82	5	-4 #
Bromobenzene	0.8999	0.8542	4.75	5	-5
trans-1,4-Dichloro-2-butene	3.9000	4.8439	31.05	25	24
1,2,3-Trichloropropane	0.1783	0.1775	4.98	5	0
n-Propylbenzene	4.1056	4.0955	4.99	5	0
2-Chlorotoluene	0.8205	0.8118	4.95	5	-1
1,3,5-Trimethylbenzene	2.9446	2.9112	4.94	5	-1
4-Chlorotoluene	0.8304	0.7983	4.81	5	-4
tert-Butylbenzene	0.6337	0.6240	4.92	5	-2
Pentachloroethane	0.5532	0.5306	4.80	5	-4
1,2,4-Trimethylbenzene	2.9748	2.9221	4.91	5	-2
sec-Butylbenzene	3.7857	3.7613	4.97	5	-1
# 1,3-Dichlorobenzene	1.7011	1.6190	4.76	5	-5 #
p-Isopropyltoluene	3.3419	3.2779	4.90	5	-2
# 1,4-Dichlorobenzene	1.7399	1.6441	4.72	5	-6 #
1,2,3-Trimethylbenzene	1.3550	1.2738	4.70	5	-6
Benzyl Chloride	0.2298	0.2324	5.06	5	1
n-Butylbenzene	1.5316	1.5269	4.98	5	0
# 1,2-Dichlorobenzene	1.5771	1.5146	4.80	5	-4 #
# 1,2-Dibromo-3-chloropropane	1.9321	2.2116	5.72	5	14 #
1,3,5-Trichlorobenzene	1.2342	1.1886	4.82	5	-4
# 1,2,4-Trichlorobenzene	1.0639	1.0019	4.71	5	-6 #
Hexachlorobutadiene	0.4512	0.4396	4.87	5	-3
Naphthalene	1.9241	1.8011	4.68	5	-6
1,2,3-Trichlorobenzene	0.9082	0.8442	4.65	5	-7

Average %Drift 5

# Compounds with required minimum RRF.  
 Maximum % Drift = 30 %

6A  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

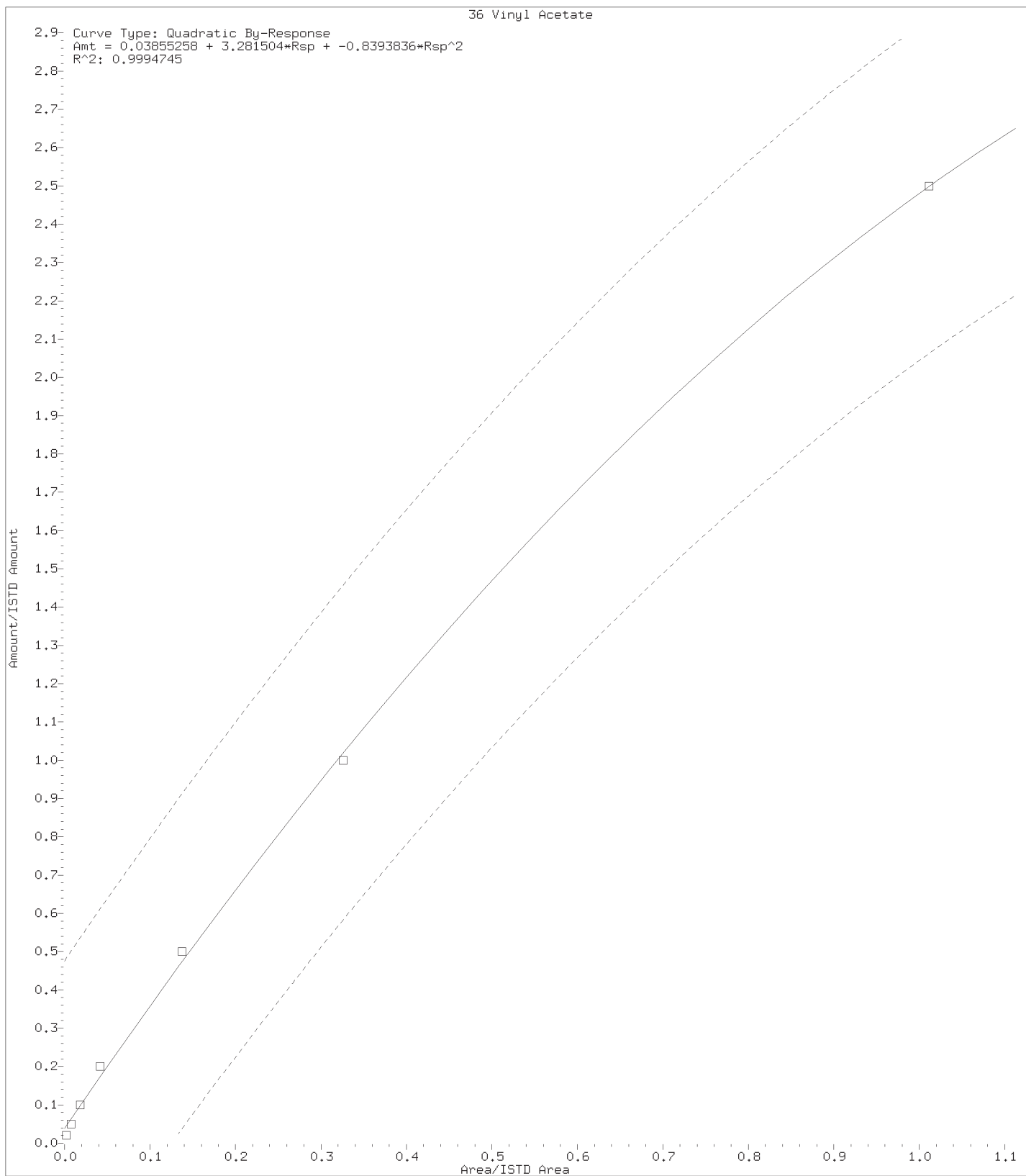
Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930 Calibration Date(s): 09/11/18 09/11/18  
 Heated Purge: (Y/N) Y Calibration Times: 19:20 21:27  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID: RRF0.2= is11i57.d RRF0.5= is11i56.d RRF 1 = is11i55.d  
 RRF 2 = is11i54.d RRF 5 = is11i53.d RRF 10= is11i52.d RRF 25= is11i51.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
Acetonitrile	1.3842	1.2072	1.3765	1.3409	1.4295	1.3874	1.4358	1.3659	6	AVG
Vinyl Acetate	0.0899	0.1533	0.1808	0.2082	0.2747	0.3258	0.4045	0.2339	46	2NDDEG
Methyl Acrylate	0.0543	0.0726	0.0905	0.1138	0.1533	0.1675	0.1885	0.1201	42	2NDDEG
1-Chlorobutane	0.2660	0.3700	0.4178	0.4717	0.5515	0.5476	0.6065	0.4616	26	2NDDEG
Chloroacetonitrile	0.0095	0.0104	0.0105	0.0111	0.0118	0.0114	0.0119	0.0110	8	AVG
2-Chloroethyl vinyl ether	0.0116	0.0394	0.0537	0.0608	0.0807	0.0914	0.1052	0.0632	51	2NDDEG
cis-1,4-Dichloro-2-butene	1.3645	1.8968	2.2657	2.5811	3.5204	4.4565	5.4215	3.0724	48	2NDDEG
Cyclohexanone	0.1388	0.2046	0.2501	0.3502	0.5482	0.5903	0.5736	0.3794	50	2NDDEG
Hexachloroethane	0.4630	0.5264	0.5771	0.5729	0.6215	0.6239		0.5641	11	AVG

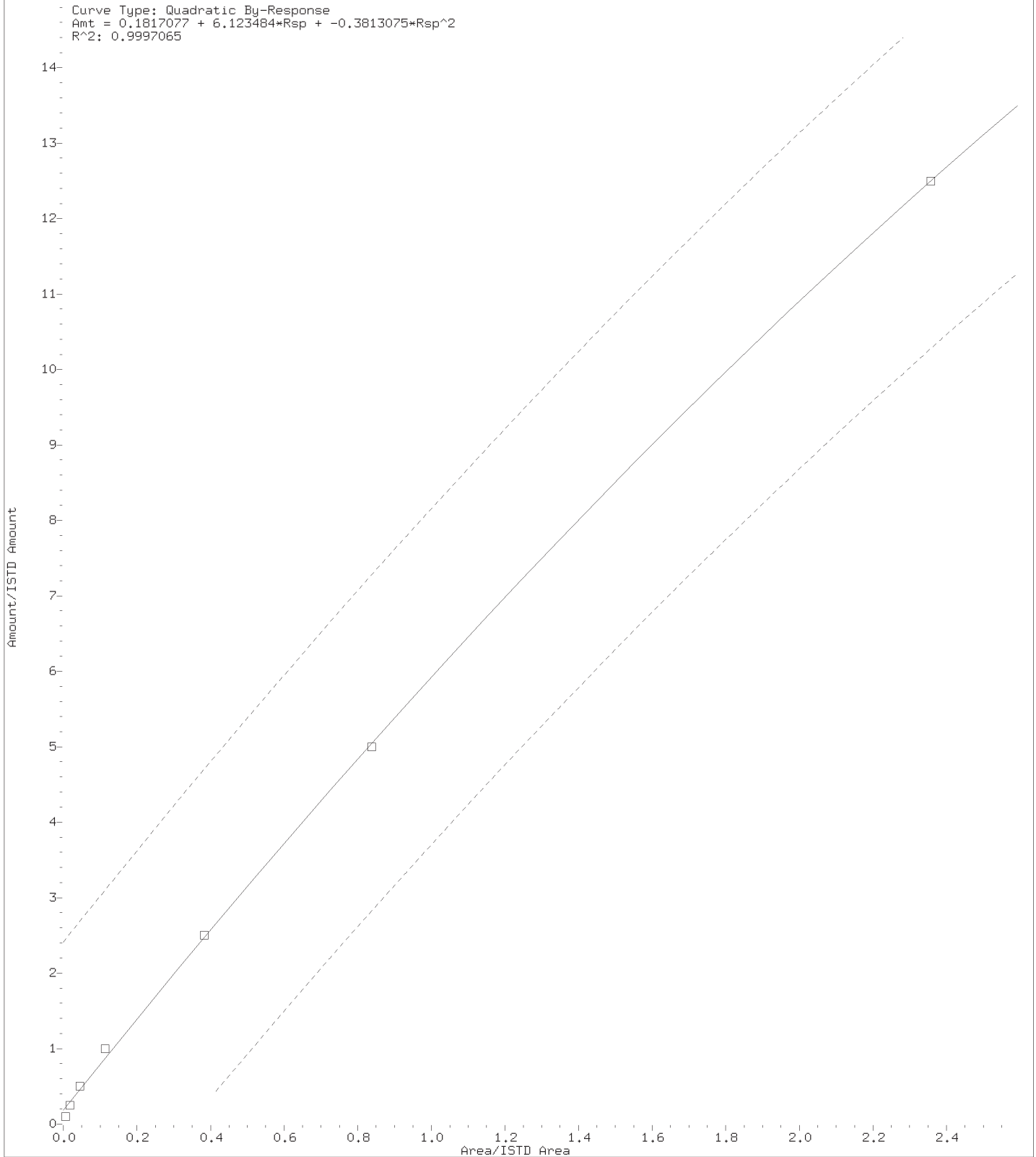
Average %RSD 32

# Compounds with required minimum RRF.  
 All compounds must meet a maximum %RSD of 20.



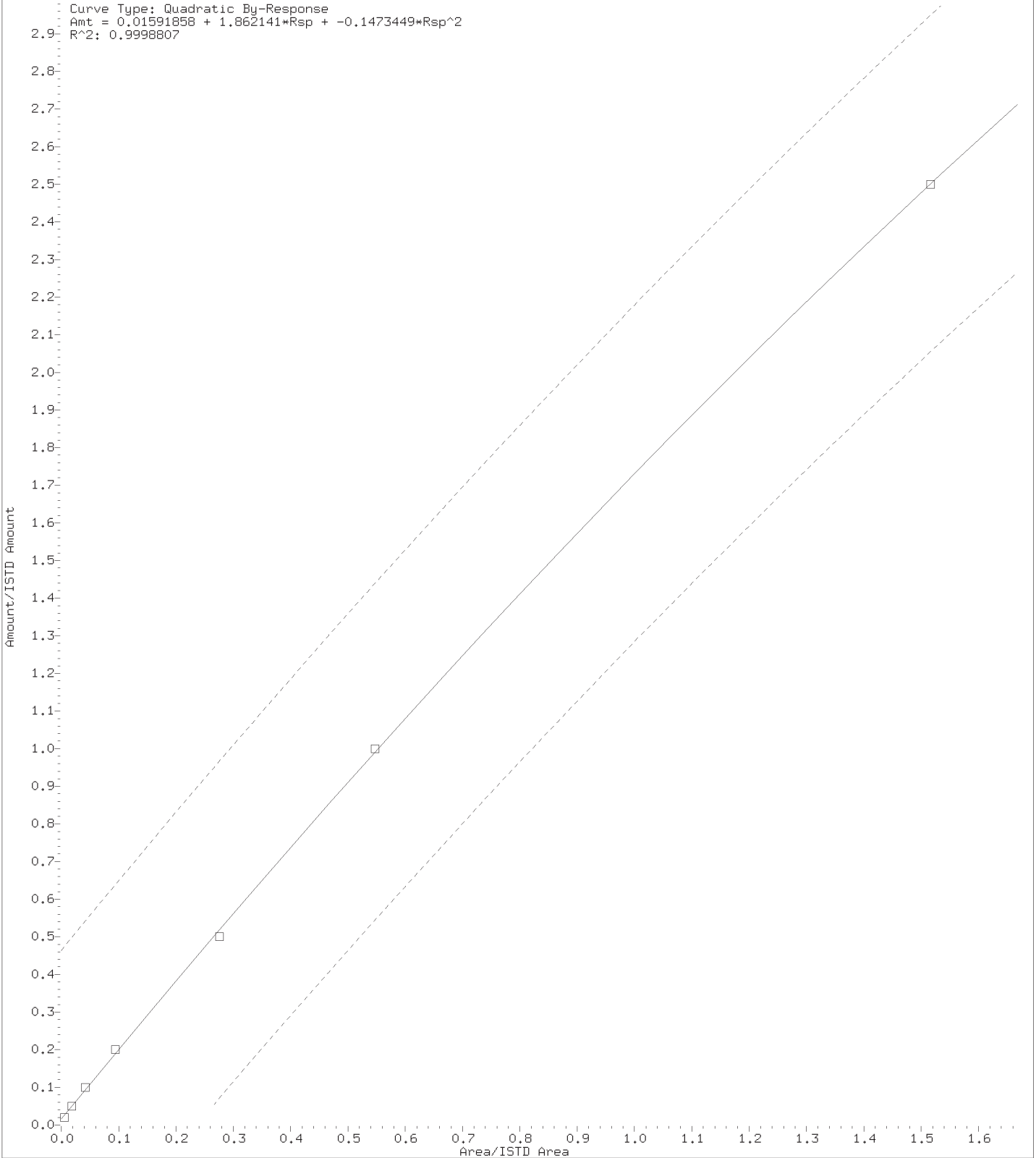
Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:37.  
Target 3.5 esignature user ID: ads01731

43 Methyl Acrylate



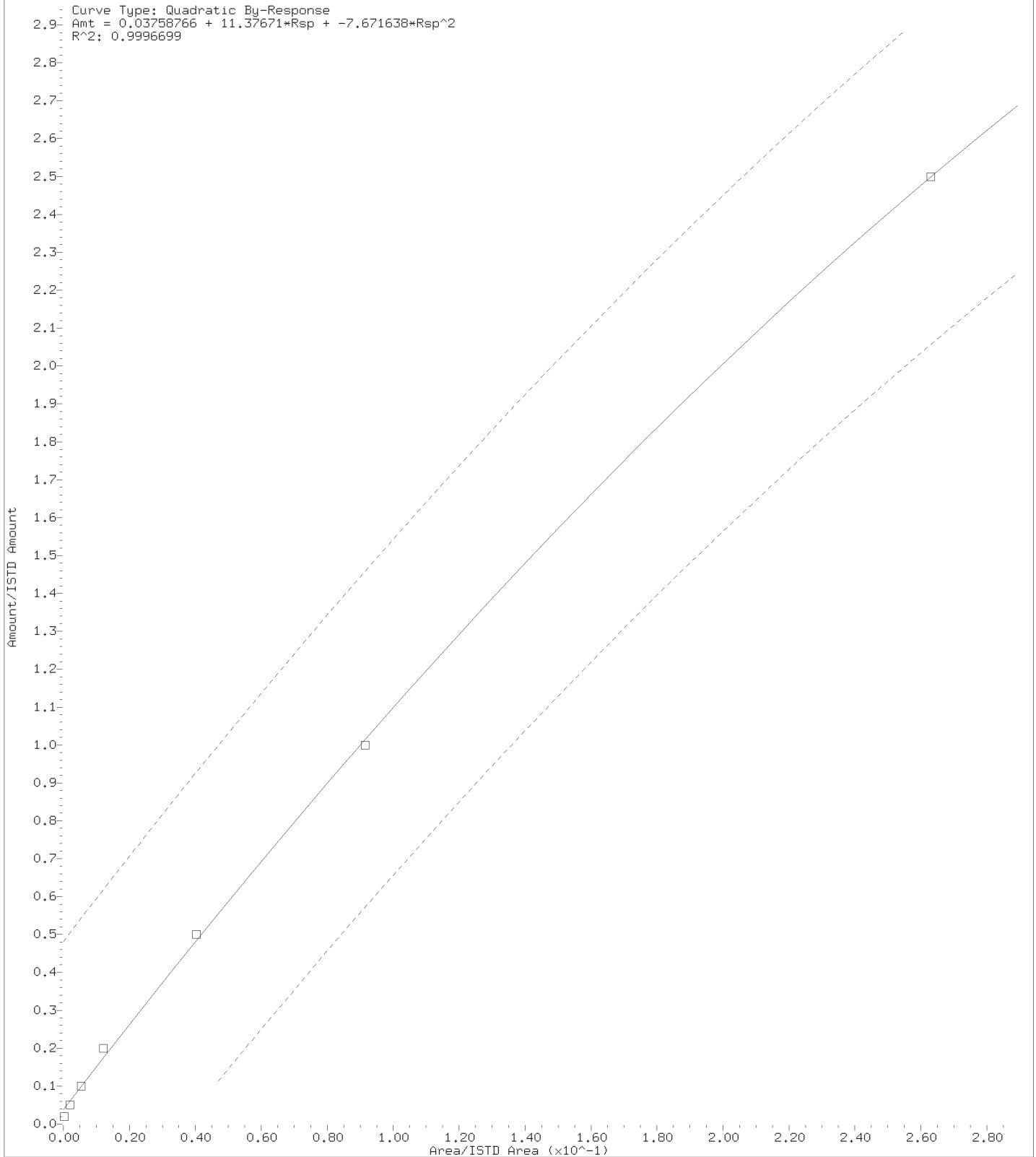
Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:37.  
Target 3.5 esignature user ID: ads01731

53 1-Chlorobutane



Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:37.  
Target 3.5 esignature user ID: ads01731

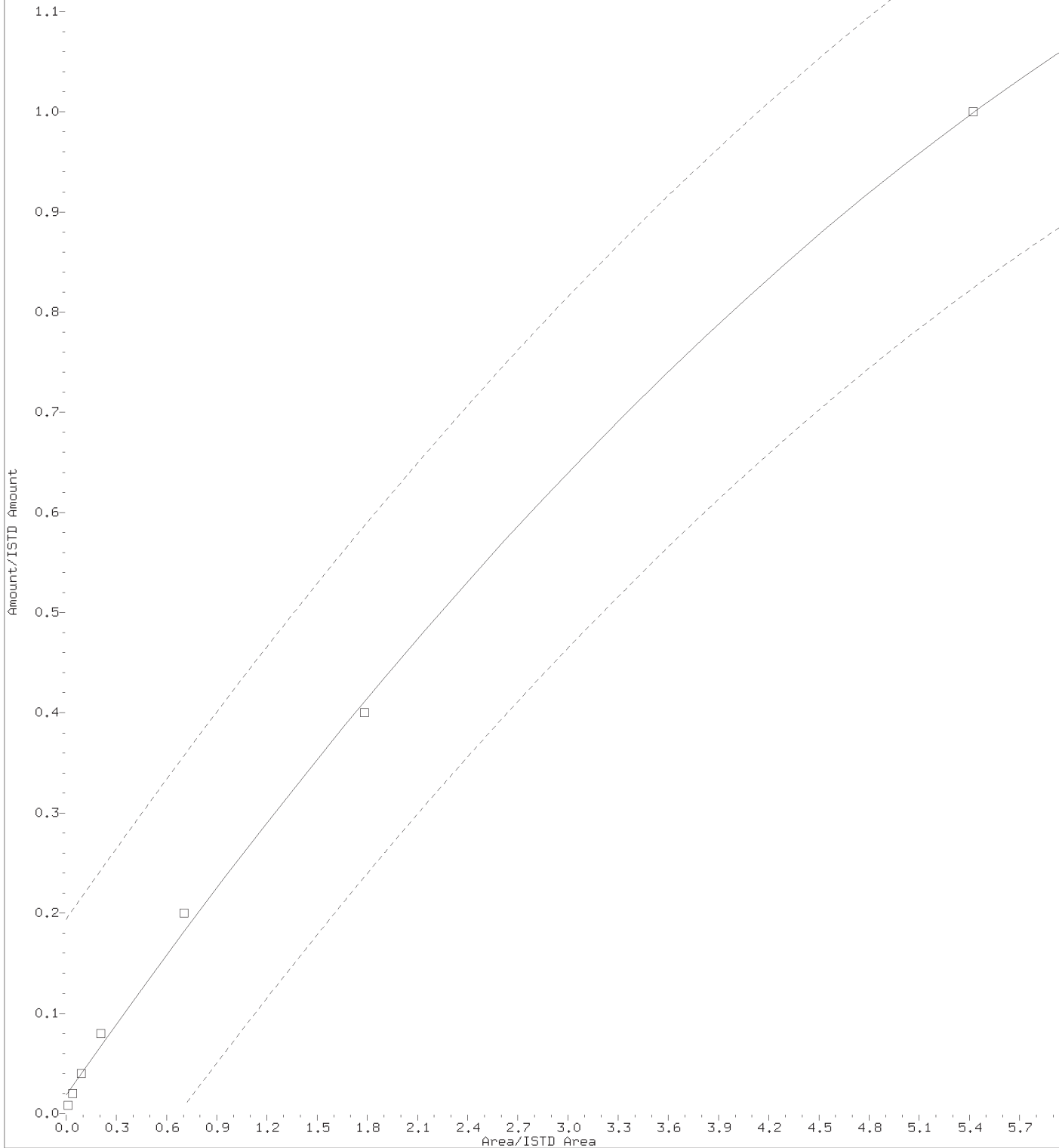
78 2-Chloroethyl vinyl ether



Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:37.  
Target 3.5 esignature user ID: ads01731

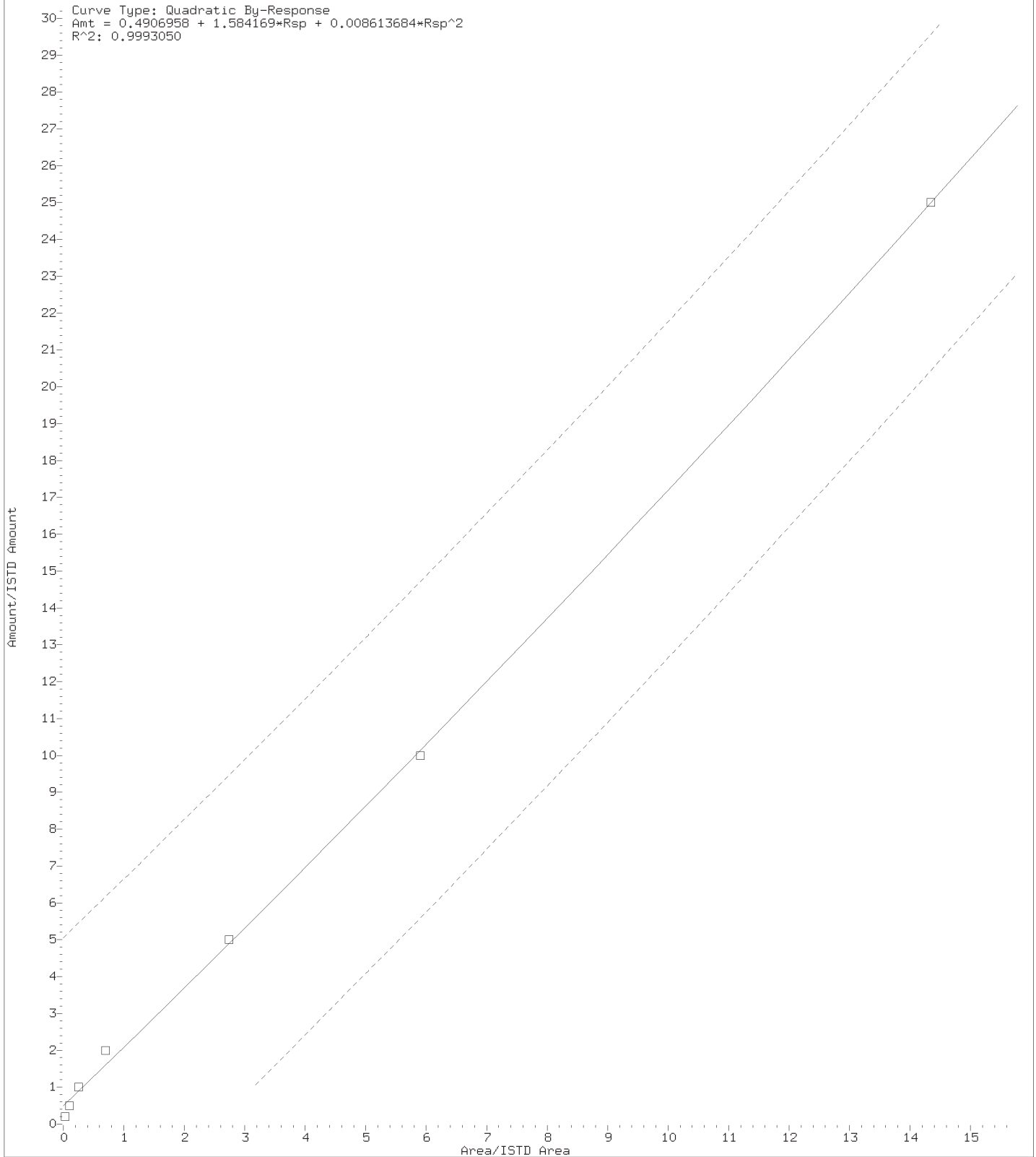
109 cis-1,4-Dichloro-2-butene

- Curve Type: Quadratic By-Response  
Amt = 0.01843767 + 0.2395475\*Rsp + -0.01081953\*Rsp^2  
R^2: 0.9989098



Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:37.  
Target 3.5 esignature user ID: ads01731





Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:37.  
Target 3.5 esignature user ID: ads01731

# Internal Standard Area and Retention Time Summary

## Initial Calibration Standards:

```

/chem2/HP19930.i/18sep11b.b/is11i51.d    VSTD025
/chem2/HP19930.i/18sep11b.b/is11i52.d    VSTD010
/chem2/HP19930.i/18sep11b.b/is11i53.d    VSTD005
/chem2/HP19930.i/18sep11b.b/is11i54.d    VSTD002
/chem2/HP19930.i/18sep11b.b/is11i55.d    VSTD001
/chem2/HP19930.i/18sep11b.b/is11i56.d    VSTD0.5
/chem2/HP19930.i/18sep11b.b/is11i57.d    VSTD0.2
    
```

## Area Summary

File ID:

=====

Internal Standard Name	is11i51.d	is11i52.d	is11i53.d	is11i54.d	is11i55.d	is11i56.d	is11i57.d	Avg. Area	%RSD	In Spec
t-Butyl Alcohol-d10	175499	179853	170089	170114	152061	157002	156015	165805	6	Yes
Fluorobenzene	2231314	2307634	2203836	2232564	2137199	2131245	2088157	2190278	3	Yes
Chlorobenzene-d5	1872333	1914470	1834815	1848452	1771837	1751953	1713096	1815279	4	Yes
1,4-Dichlorobenzene-d4	994688	1012720	957352	959133	913411	929428	930765	956785	4	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

## RT Summary

File ID:

=====

Internal Standard Name	is11i51.d	is11i52.d	is11i53.d	is11i54.d	is11i55.d	is11i56.d	is11i57.d	Avg. RT
t-Butyl Alcohol-d10	4.166	4.159	4.166	4.160	4.178	4.172	4.178	4.168
Fluorobenzene	7.671	7.671	7.671	7.671	7.677	7.671	7.677	7.673
Chlorobenzene-d5	11.140	11.146	11.146	11.146	11.146	11.146	11.146	11.145
1,4-Dichlorobenzene-d4	13.017	13.018	13.018	13.018	13.017	13.017	13.017	13.017

\* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 11/07/2018 at 10:15.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930 ICV Date: 09/11/18 Time: 22:11  
 Lab File ID: is11v51.d Init. Calib. Date(s): 09/11/18 09/11/18  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT
Acetonitrile	1.3659	1.4277	39.20	37.5	5
Vinyl Acetate	0.2339	0.3437	12.93	12.5	3
Methyl Acrylate	0.1201	0.1643	26.32	25	5
1-Chlorobutane	0.4616	0.4856	4.59	5	-8
Chloroacetonitrile	0.0110	0.0112	255.58	250	2
2-Chloroethyl vinyl ether	0.0632	0.0801	4.81	5	-4
cis-1,4-Dichloro-2-butene	3.0724	3.2104	10.19	12.5	-19
Cyclohexanone	0.3794	0.5644	137.15	125	10
Hexachloroethane	0.5641	0.5985	5.30	5	6

Average %Drift 7

# Compounds with required minimum RRF.  
 Maximum % Drift = 30 %

Lancaster Laboratories  
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

```

/chem2/HP19930.i/18jul09i.b/il09i07.d
/chem2/HP19930.i/18jul09i.b/il09i06.d
/chem2/HP19930.i/18jul09i.b/il09i05.d
/chem2/HP19930.i/18jul09i.b/il09i04.d
/chem2/HP19930.i/18jul09i.b/il09i03.d
/chem2/HP19930.i/18jul09i.b/il09i02.d
/chem2/HP19930.i/18jul09i.b/il09i01.d
    
```

File /chem2/HP19930.i/18jul09i.b/il09i02.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP19930.i/18nov13a.b/in13c01.d

RT Summary

File ID:  
=====

Internal Standard Name	in13c01.d	ICAL RT	In Spec
=====	=====	=====	=====
t-Butyl Alcohol-d10	4.172	4.147	Yes
Fluorobenzene	7.671	7.665	Yes
Chlorobenzene-d5	11.140	11.152	Yes
1,4-Dichlorobenzene-d4	13.011	13.030	Yes

A "No" indicates the retention time is greater than 10 seconds from the referenced ICAL standard.

Area Summary

File ID:  
=====

Internal Standard Name	in13c01.d	ICAL Area	Low Limit	High Limit	In Spec
=====	=====	=====	=====	=====	=====
t-Butyl Alcohol-d10	181647	201611	100806	403222	Yes
Fluorobenzene	2129997	2046779	1023390	4093558	Yes
Chlorobenzene-d5	1704905	1618210	809105	3236420	Yes
1,4-Dichlorobenzene-d4	991105	902335	451168	1804670	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

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report generated on 11/13/2018 at 09:25

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7A  
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_      SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930      Calibration Date: 11/13/18      Time: 08:55  
 Lab File ID: in13c01.d      Init. Calib. Date(s): 07/09/18      07/09/18  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF10	ACTUAL CONC.	TRUE CONC.	% DRIFT
# Dichlorodifluoromethane	0.6104	0.6268	10.27	10	3 #
# Chloromethane	0.4456	0.3597	8.07	10	-19 #
# Vinyl Chloride	0.4302	0.3592	8.35	10	-17 #
1,3-Butadiene	0.2862	0.4490	15.69	10	57  <-
# Bromomethane	0.4051	0.3147	7.77	10	-22 #<-
# Chloroethane	0.2505	0.2010	8.02	10	-20 #
Dichlorofluoromethane	0.6584	0.6361	9.66	10	-3
# Trichlorofluoromethane	0.7355	0.7475	10.16	10	2 #
Ethyl ether	0.2435	0.2437	10.01	10	0
Freon 123a	0.3722	0.3890	10.45	10	5
Acrolein	1.9646	2.1833	555.66	500	11
# 1,1-Dichloroethene	0.2537	0.2502	9.86	10	-1 #
# Freon 113	0.2945	0.3184	10.81	10	8 #
# Acetone	2.9218	3.6413	124.63	100	25 #<-
Methyl Iodide	0.5208	0.4905	9.42	10	-6
# Carbon Disulfide	0.7526	0.7198	9.56	10	-4 #
Allyl Chloride	0.5451	0.4370	8.02	10	-20
# Methyl Acetate	6.6331	7.5576	11.39	10	14 #
# Methylene Chloride	0.2873	0.2780	9.68	10	-3 #
t-Butyl Alcohol	1.2928	1.3928	215.47	200	8
Acrylonitrile	3.1841	3.8439	60.36	50	21  <-
# trans-1,2-Dichloroethene	0.2879	0.2786	9.68	10	-3 #
# Methyl Tertiary Butyl Ether	0.7856	0.6896	8.78	10	-12 #
n-Hexane	0.4741	0.4442	9.37	10	-6
# 1,1-Dichloroethane	0.5689	0.5489	9.65	10	-4 #
di-Isopropyl Ether	1.0276	0.8840	8.60	10	-14
2-Chloro-1,3-Butadiene	0.5386	0.4945	9.18	10	-8
Ethyl t-butyl ether	0.9604	0.7555	7.87	10	-21  <-
# cis-1,2-Dichloroethene	0.3288	0.3243	9.87	10	-1 #
2,2-Dichloropropane	0.5166	0.4717	9.13	10	-9
# 2-Butanone	4.8458	5.4334	112.13	100	12 #
Propionitrile	1.1958	1.5857	265.20	200	33  <-
Methacrylonitrile	4.0758	4.9992	122.65	100	23  <-
Bromochloromethane	0.1438	0.1523	10.59	10	6
Tetrahydrofuran	1.2515	1.5055	120.29	100	20
# Chloroform	0.5726	0.5652	9.87	10	-1 #

# Compounds with required minimum RRF.  
 All compounds must meet a maximum % Drift of 20.

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories

Contract: \_\_\_\_\_

Lab Code: LANCAS

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: \_\_\_\_\_

Instrument ID: HP19930

Calibration Date: 11/13/18

Time: 08:55

Lab File ID: in13c01.d

Init. Calib. Date(s): 07/09/18

07/09/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF10	ACTUAL CONC.	TRUE CONC.	% DRIFT
# 1,1,1-Trichloroethane	0.5503	0.5259	9.56	10	-4 #
# Cyclohexane	0.5810	0.5462	9.40	10	-6 #
# Cyclohexane(2)	0.4563	0.4665	10.22	10	2 #
# Cyclohexane(3)	0.1722	0.1685	9.79	10	-2 #
1,1-Dichloropropene	0.4345	0.4271	9.83	10	-2 #
# Carbon Tetrachloride	0.4820	0.4961	10.29	10	3 #
Isobutyl Alcohol	0.3914	0.5392	688.73	500	38  <-
# Benzene	1.2147	1.2215	10.06	10	1 #
# 1,2-Dichloroethane	0.4097	0.3840	9.37	10	-6 #
# 1,2-Dichloroethane(2)	0.0283	0.0303	10.69	10	7 #<-
t-Amyl methyl ether	0.8377	0.7294	8.71	10	-13 #
n-Heptane	0.5196	0.5067	9.75	10	-2 #
n-Butanol	0.2919	0.4156	1423.79	1000	42  <-
# Trichloroethene	0.3329	0.3322	9.98	10	0 #
# Methylcyclohexane	0.6022	0.6000	9.96	10	0 #
# 1,2-Dichloropropane	0.3045	0.3082	10.12	10	1 #
Methyl Methacrylate	7.3922	8.9632	12.13	10	21  <-
Dibromomethane	0.1530	0.1579	10.32	10	3 #
1,4-Dioxane	0.0660	0.1047	793.53	500	59  <-
1,4-Dioxane(2)	0.0477	0.0743	778.25	500	56  <-
# Bromodichloromethane	0.4109	0.3990	9.71	10	-3 #
2-Nitropropane	3.3186	3.5380	106.61	100	7 #
# cis-1,3-Dichloropropene	0.4662	0.4400	9.44	10	-6 #
# 4-Methyl-2-Pentanone	11.8600	13.4179	113.14	100	13 #
# Toluene	0.9837	0.9754	9.92	10	-1 #
# trans-1,3-Dichloropropene	0.4916	0.4845	9.85	10	-1 #
Ethyl Methacrylate	0.4255	0.4177	9.82	10	-2 #
# 1,1,2-Trichloroethane	0.2711	0.2822	10.41	10	4 #
# Tetrachloroethene	0.5074	0.4835	9.53	10	-5 #
1,3-Dichloropropane	0.4711	0.4992	10.60	10	6 #
# 2-Hexanone	8.5002	9.8519	115.90	100	16 #
# Dibromochloromethane	0.3514	0.3601	10.25	10	2 #
# 1,2-Dibromoethane	0.2600	0.2733	10.51	10	5 #
# Chlorobenzene	1.0744	1.1366	10.58	10	6 #
1,1,1,2-Tetrachloroethane	0.4086	0.4325	10.58	10	6 #
# Ethylbenzene	1.9503	2.0211	10.36	10	4 #

# Compounds with required minimum RRF.  
All compounds must meet a maximum % Drift of 20.

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_

Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Instrument ID: HP19930 Calibration Date: 11/13/18 Time: 08:55

Lab File ID: in13c01.d Init. Calib. Date(s): 07/09/18 07/09/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF10	ACTUAL CONC.	TRUE CONC.	% DRIFT
# m+p-Xylene	0.7602	0.7910	20.81	20	4 #
# o-Xylene	0.7594	0.7479	9.85	10	-2 #
# Styrene	1.1426	1.2086	10.58	10	6 #
# Bromoform	0.2136	0.2043	9.56	10	-4 #
# Isopropylbenzene	1.9789	2.0309	10.26	10	3 #
# 1,1,2,2-Tetrachloroethane	0.6131	0.6357	10.37	10	4 #
Bromobenzene	0.8999	0.8859	9.84	10	-2
trans-1,4-Dichloro-2-butene	3.9000	4.2749	109.61	100	10
1,2,3-Trichloropropane	0.1783	0.1969	11.04	10	10
n-Propylbenzene	4.1056	4.2608	10.38	10	4
2-Chlorotoluene	0.8205	0.8433	10.28	10	3
1,3,5-Trimethylbenzene	2.9446	3.1192	10.59	10	6
4-Chlorotoluene	0.8304	0.8527	10.27	10	3
tert-Butylbenzene	0.6337	0.6519	10.29	10	3
Pentachloroethane	0.5532	0.5801	10.49	10	5
1,2,4-Trimethylbenzene	2.9748	3.1789	10.69	10	7
sec-Butylbenzene	3.7857	4.0540	10.71	10	7
# 1,3-Dichlorobenzene	1.7011	1.7366	10.21	10	2 #
p-Isopropyltoluene	3.3419	3.5879	10.74	10	7
# 1,4-Dichlorobenzene	1.7399	1.7360	9.98	10	0 #
1,2,3-Trimethylbenzene	1.3550	1.3873	10.24	10	2
Benzyl Chloride	0.2298	0.2846	12.38	10	24 <-
n-Butylbenzene	1.5316	1.7287	11.29	10	13
# 1,2-Dichlorobenzene	1.5771	1.6122	10.22	10	2 #
# 1,2-Dibromo-3-chloropropane	1.9321	2.3670	12.25	10	23 #<-
1,3,5-Trichlorobenzene	1.2342	1.2591	10.20	10	2
# 1,2,4-Trichlorobenzene	1.0639	1.0433	9.81	10	-2 #
Hexachlorobutadiene	0.4512	0.4817	10.68	10	7
Naphthalene	1.9241	2.0311	10.56	10	6
1,2,3-Trichlorobenzene	0.9082	0.9458	10.41	10	4
Dibromofluoromethane	0.2610	0.2615	10.02	10	0
Dibromofluoromethane (2)	0.2678	0.2675	9.99	10	0
1,2-Dichloroethane-d4	0.0496	0.0531	10.72	10	7
1,2-Dichloroethane-d4 (2)	0.2935	0.2959	10.08	10	1
1,2-Dichloroethane-d4 (3)	0.0318	0.0336	10.56	10	6

# Compounds with required minimum RRF.  
All compounds must meet a maximum % Drift of 20.



## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930 Calibration Date: 11/13/18 Time: 08:55  
 Lab File ID: in13c01.d Init. Calib. Date(s): 07/09/18 07/09/18  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF10	ACTUAL CONC.	TRUE CONC.	% DRIFT
Toluene-d8	1.2492	1.2556	10.05	10	1
Toluene-d8(2)	0.8062	0.7991	9.91	10	-1
4-Bromofluorobenzene	0.4917	0.4821	9.81	10	-2
4-Bromofluorobenzene(2)	0.4460	0.4250	9.53	10	-5

Average %Drift 9

# Compounds with required minimum RRF.  
 All compounds must meet a maximum % Drift of 20.

Lancaster Laboratories, Inc.  
 Shift Ending Continuing Calibration Check Report

Instrument ID: HP19930.i Injection Date and Time: 13-NOV-2018 19:13  
 Client ID: SECC010 Initial Calibration Date(s): 09-JUL-2018 11-SEP-2018  
 Lab Sample ID: SECC010 Initial Calibration Time(s): 12:45 21:27  
 Sublist used: 25789-SM.sub Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Dichlorodifluoromethane	0.61043	0.60207	0.01	-1.4	50.0
Chloromethane	0.44564	0.35653	0.01	-20.0	50.0
Vinyl Chloride	0.43024	0.34974	0.01	-18.7	50.0
Bromomethane	0.40507	0.30681	0.01	-24.3	50.0
Chloroethane	0.25048	0.19833	0.01	-20.8	50.0
Trichlorofluoromethane	0.73552	0.72014	0.01	-2.1	50.0
1,1-Dichloroethene	0.25366	0.24626	0.01	-2.9	50.0
Freon 113	0.29452	0.30723	0.01	4.3	50.0
Acetone	2.92176	3.57242	0.01	22.3	50.0
Carbon Disulfide	0.75261	0.68821	0.01	-8.6	50.0
Methyl Acetate	6.63313	6.92871	0.01	4.5	50.0
Methylene Chloride	0.28725	0.27358	0.01	-4.8	50.0
trans-1,2-Dichloroethene	0.28790	0.27102	0.01	-5.9	50.0
Methyl Tertiary Butyl Ether	0.78562	0.68361	0.01	-13.0	50.0
1,1-Dichloroethane	0.56893	0.53481	0.01	-6.0	50.0
cis-1,2-Dichloroethene	0.32875	0.31527	0.01	-4.1	50.0
2-Butanone	4.84577	5.21974	0.01	7.7	50.0
Chloroform	0.57262	0.54989	0.01	-4.0	50.0
1,1,1-Trichloroethane	0.55032	0.51264	0.01	-6.8	50.0
Cyclohexane	0.58098	0.53037	0.01	-8.7	50.0
Carbon Tetrachloride	0.48201	0.48235	0.01	0.1	50.0
Benzene	1.21466	1.19225	0.01	-1.8	50.0
1,2-Dichloroethane	0.40966	0.36993	0.01	-9.7	50.0
Trichloroethene	0.33294	0.32445	0.01	-2.5	50.0
Methylcyclohexane	0.60217	0.57025	0.01	-5.3	50.0
1,2-Dichloropropane	0.30445	0.29888	0.01	-1.8	50.0
Bromodichloromethane	0.41091	0.38497	0.01	-6.3	50.0
cis-1,3-Dichloropropene	0.46624	0.41960	0.01	-10.0	50.0
4-Methyl-2-Pentanone	11.86008	12.67014	0.01	6.8	50.0
Toluene	0.98366	0.95949	0.01	-2.5	50.0
trans-1,3-Dichloropropene	0.49162	0.46679	0.01	-5.0	50.0
1,1,2-Trichloroethane	0.27109	0.27413	0.01	1.1	50.0
Tetrachloroethene	0.50737	0.46387	0.01	-8.6	50.0
2-Hexanone	8.50025	9.30612	0.01	9.5	50.0
Dibromochloromethane	0.35135	0.34476	0.01	-1.9	50.0
1,2-Dibromoethane	0.26000	0.26458	0.01	1.8	50.0
Chlorobenzene	1.07436	1.10625	0.01	3.0	50.0
Ethylbenzene	1.95030	1.97323	0.01	1.2	50.0
m+p-Xylene	0.76016	0.77051	0.01	1.4	50.0
o-Xylene	0.75937	0.73550	0.01	-3.1	50.0
Xylene (Total)	0.75990	0.75884	0.01	-0.1	50.0
Styrene	1.14257	1.18236	0.01	3.5	50.0
Bromoform	0.21362	0.19278	0.01	-9.8	50.0
Isopropylbenzene	1.97891	1.99387	0.01	0.8	50.0
1,1,2,2-Tetrachloroethane	0.61310	0.60812	0.01	-0.8	50.0
1,3-Dichlorobenzene	1.70110	1.68233	0.01	-1.1	50.0
1,4-Dichlorobenzene	1.73988	1.68503	0.01	-3.2	50.0
1,2-Dichlorobenzene	1.57709	1.55967	0.01	-1.1	50.0

Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d  
 Report Date: 11/18/2018 10:34

Lancaster Laboratories, Inc.  
 Shift Ending Continuing Calibration Check Report

Instrument ID: HP19930.i    Injection Date and Time: 13-NOV-2018 19:13  
 Client ID: SECC010        Initial Calibration Date(s): 09-JUL-2018 11-SEP-2018  
 Lab Sample ID: SECC010    Initial Calibration Time(s): 12:45 21:27  
 Sublist used: 25789-SM.sub Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
1,2-Dibromo-3-chloropropane	1.93211	2.20998	0.01	14.4	50.0
1,2,4-Trichlorobenzene	1.06395	1.16548	0.01	9.5	50.0
Surrogate Standards	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Dibromofluoromethane	0.26102	0.26076	0.01	-0.1	20.5
1,2-Dichloroethane-d4	0.04957	0.05257	0.01	6.1	20.5
Toluene-d8	1.24920	1.26209	0.01	1.0	20.5
4-Bromofluorobenzene	0.49169	0.48152	0.01	-2.1	20.5

Lancaster Laboratories  
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

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/chem2/HP19930.i/18sep11b.b/is11i57.d
/chem2/HP19930.i/18sep11b.b/is11i56.d
/chem2/HP19930.i/18sep11b.b/is11i55.d
/chem2/HP19930.i/18sep11b.b/is11i54.d
/chem2/HP19930.i/18sep11b.b/is11i53.d
/chem2/HP19930.i/18sep11b.b/is11i52.d
/chem2/HP19930.i/18sep11b.b/is11i51.d

```

File /chem2/HP19930.i/18sep11b.b/is11i52.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP19930.i/18nov13a.b/in13c02.d

RT Summary

File ID:  
=====

Internal Standard Name =====	in13c02.d =====	ICAL RT =====	In Spec =====
t-Butyl Alcohol-d10	4.172	4.159	Yes
Fluorobenzene	7.677	7.671	Yes
Chlorobenzene-d5	11.140	11.146	Yes
1,4-Dichlorobenzene-d4	13.017	13.018	Yes

A "No" indicates the retention time is greater than 10 seconds from the referenced ICAL standard.

Area Summary

File ID:  
=====

Internal Standard Name =====	in13c02.d =====	ICAL Area =====	Low Limit =====	High Limit =====	In Spec =====
t-Butyl Alcohol-d10	196527	179853	89926	359706	Yes
Fluorobenzene	2322351	2307634	1153817	4615268	Yes
Chlorobenzene-d5	1816062	1914470	957235	3828940	Yes
1,4-Dichlorobenzene-d4	999733	1012720	506360	2025440	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: \_\_\_\_\_

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report generated on 11/13/2018 at 09:47

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7A  
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_      SDG No.: \_\_\_\_\_  
 Instrument ID: HP19930      Calibration Date: 11/13/18      Time: 09:16  
 Lab File ID: in13c02.d      Init. Calib. Date(s): 09/11/18      09/11/18  
 Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF10	ACTUAL CONC.	TRUE CONC.	% DRIFT
Acetonitrile	1.3659	1.3875	406.31	400	2
Vinyl Acetate	0.2339	0.3724	11.44	10	14
Methyl Acrylate	0.1201	0.1670	50.29	50	1
1-Chlorobutane	0.4616	0.5594	10.11	10	1
Chloroacetonitrile	0.0110	0.0109	472.46	500	-6
2-Chloroethyl vinyl ether	0.0632	0.1226	13.17	10	32
cis-1,4-Dichloro-2-butene	3.0724	4.1645	19.37	20	-3
Cyclohexanone	0.3794	0.5292	455.81	500	-9
Hexachloroethane	0.5641	0.6385	11.32	10	13

Average %Drift      9

# Compounds with required minimum RRF.  
 All compounds must meet a maximum % Drift of 20.

Data File: /chem2/HP19930.i/18nov13a.b/in13c04.d  
Report Date: 11/13/2018 19:54

Lancaster Laboratories, Inc.  
Shift Ending Continuing Calibration Check Report

Instrument ID: HP19930.i    Injection Date and Time: 13-NOV-2018 19:34  
Client ID: SECD010        Initial Calibration Date(s): 09-JUL-2018 11-SEP-2018  
Lab Sample ID: SECD010    Initial Calibration Time(s): 12:45 21:27  
Sublist used: 25789SM.sub    Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Cyclohexanone	500.000	461.325	0.01	-7.7	50.0
Surrogate Standards	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Dibromofluoromethane	0.26102	0.26937	0.01	3.2	20.5
1,2-Dichloroethane-d4	0.04957	0.05450	0.01	9.9	20.5
Toluene-d8	1.24920	1.31718	0.01	5.4	20.5
4-Bromofluorobenzene	0.49169	0.51112	0.01	4.0	20.5

8A  
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_  
 Lab File ID (Standard): in13c01.d      Date Analyzed: 11/13/18  
 Instrument ID: HP19930      Time Analyzed: 08:55  
 Matrix: (soil/water) WATER      Level: (low/med) LOW      Column: (pack/cap) CAP

	IS1 (TBA)	RT #	IS2 (FBZ)	RT #	IS3 (CBZ)	RT #	IS4 (DCB)	RT #	
	AREA #		AREA #		AREA #		AREA #		
12 HOUR STD	181647	4.172	2129997	7.671	1704905	11.140	991105	13.012	
UPPER LIMIT	363294	4.672	4259994	8.171	3409810	11.640	1982210	13.512	
LOWER LIMIT	90824	3.672	1064998	7.171	852452	10.640	495552	12.512	
LAB SAMPLE ID									
01	LCSI42	181821	4.160	2143858	7.671	1670585	11.140	978511	13.018
02	LCSI44	181821	4.160	2143858	7.671	1670585	11.140	978511	13.018
03	LCDI42	191531	4.165	2205293	7.665	1706282	11.140	995613	13.017
04	LCDI44	191531	4.165	2205293	7.665	1706282	11.140	995613	13.017
05	LCSI43	179539	4.165	2126236	7.671	1625946	11.140	879691	13.017
06	LCSI45	179539	4.165	2126236	7.671	1625946	11.140	879691	13.017
07	LCDI43	179001	4.159	2077619	7.671	1599487	11.140	852556	13.017
08	LCDI45	179001	4.159	2077619	7.671	1599487	11.140	852556	13.017
09	MDLI42 - MD	160140	4.178	1988066	7.677	1525353	11.146	851686	13.017
10	MDLI44 - MD	160140	4.178	1988066	7.677	1525353	11.146	851686	13.017
11	VBLKI42	154716	4.172	1893659	7.671	1438908	11.140	791523	13.017
12	VBLKI44	154716	4.172	1893659	7.671	1438908	11.140	791523	13.017
13	9881308	139527	4.166	1742518	7.671	1353404	11.146	724852	13.018
14	9881309	107058	4.196	2306496	7.671	1831040	11.140	1100800	13.017
15	9881310	110952	4.190	2400274	7.671	1882705	11.140	1125194	13.017
16	9881313	158187	4.172	1908338	7.671	1472123	11.140	802406	13.018
17	9866560	143814	4.178	1846158	7.677	1436642	11.146	782311	13.018
18	9866561	148192	4.178	1816098	7.677	1447242	11.146	764881	13.017
19	9866593	145949	4.166	1817492	7.671	1410577	11.146	759729	13.017
20	9881105DL	137697	4.172	1760112	7.671	1354871	11.146	735274	13.017
21	9881107DL	139901	4.160	1789254	7.671	1369651	11.146	738213	13.018
22	9894003	135965	4.172	1732499	7.677	1388831	11.146	856643	13.017

IS1 (TBA)=t-Butyl Alcohol-d10  
 IS2 (FBZ)=Fluorobenzene  
 IS3 (CBZ)=Chlorobenzene-d5  
 IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%  
 of internal standard area.  
 LOWER LIMIT = - 50%  
 of internal standard area.

# Column used to flag values outside QC limits with an asterisk  
 \* Values outside of QC limits.  
 page 1 of 2

FORM VIII VOA



8A  
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
 Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_  
 Lab File ID (Standard): in13c01.d      Date Analyzed: 11/13/18  
 Instrument ID: HP19930      Time Analyzed: 08:55  
 Matrix: (soil/water) WATER      Level: (low/med) LOW      Column: (pack/cap) CAP

	IS1 (TBA) AREA #	RT #	IS2 (FBZ) AREA #	RT #	IS3 (CBZ) AREA #	RT #	IS4 (DCB) AREA #	RT #
12 HOUR STD	181647	4.172	2129997	7.671	1704905	11.140	991105	13.012
UPPER LIMIT	363294	4.672	4259994	8.171	3409810	11.640	1982210	13.512
LOWER LIMIT	90824	3.672	1064998	7.171	852452	10.640	495552	12.512
LAB SAMPLE ID								
23 9894002	143296	4.166	1799017	7.671	1448803	11.140	959836	13.018
24 9894002DL	150131	4.178	1820437	7.671	1441701	11.146	850233	13.018
25 9894004	144321	4.159	1782237	7.671	1381651	11.146	923679	13.017
26 9894005	144075	4.190	1767611	7.677	1384107	11.146	862842	13.017
27 SECC010	179864	4.172	2089675	7.671	1663029	11.140	976244	13.018
28 SECD010	168617	4.172	2042085	7.677	1605437	11.140	885811	13.017

IS1 (TBA)=t-Butyl Alcohol-d10  
 IS2 (FBZ)=Fluorobenzene  
 IS3 (CBZ)=Chlorobenzene-d5  
 IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%  
 of internal standard area.  
 LOWER LIMIT = - 50%  
 of internal standard area.

# Column used to flag values outside QC limits with an asterisk  
 \* Values outside of QC limits.  
 page 2 of 2

FORM VIII VOA

# **Sample Data**

## **Volatiles by GC/MS**

15T-1

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

9881308

Data file: /chem2/HP19930.i/18nov13a.b/in13s02.d Injection date and time: 13-NOV-2018 13:33  
 Data file Sample Info. Line: 15T-1;9881308;1;0;;TID15;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 15:21 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: 038A Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

**Analysis Comments: 9367; 9274**

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.166( 0.006)	423	65	139527 ( -23)	50.00	
63) Fluorobenzene	7.671( 0.000)	998	96	1742518 ( -18)	10.00	
97) Chlorobenzene-d5	11.146(-0.006)	1568	117	1353404 ( -21)	10.00	
133) 1,4-Dichlorobenzene-d4	13.018(-0.006)	1875	152	724852 ( -27)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.781(-0.001)	113	499895	10.991	110%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.238( 0.000)	102	97915	11.337	113%		81 - 118
82) Toluene-d8	(3)	9.689( 0.000)	98	1708343	10.105	101%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.146( 0.000)	95	603331	9.066	91%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)			Not Detected					0.05	0.5
2) Chloromethane	(2)			Not Detected					0.06	0.5
5) Vinyl Chloride	(2)			Not Detected					0.1	0.5
7) Bromomethane	(2)			Not Detected					0.07	0.5
8) Chloroethane	(2)			Not Detected					0.07	0.5
10) Trichlorofluoromethane	(2)			Not Detected					0.05	0.5
15) 1,1-Dichloroethene	(2)			Not Detected					0.06	0.5
16) Freon 113	(2)			Not Detected					0.06	0.5
14) Acetone	(1)			Not Detected					0.9	5
18) Carbon Disulfide	(2)			Not Detected					0.06	1
21) Methyl Acetate	(1)			Not Detected					0.1	1
23) Methylene Chloride	(2)	4.154(-0.000)	84	3694	0.074	0.07		J	0.07	0.5
31) trans-1,2-Dichloroethene	(2)			Not Detected					0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.05	0.5
33) 1,1-Dichloroethane	(2)			Not Detected					0.07	0.5
39) cis-1,2-Dichloroethene	(2)			Not Detected					0.05	0.5
38) 2-Butanone	(1)			Not Detected					0.6	5
49) Chloroform	(2)			Not Detected					0.09	0.5
51) 1,1,1-Trichloroethane	(2)			Not Detected					0.06	0.5
52) Cyclohexane	(2)			Not Detected					0.05	0.5
54) Carbon Tetrachloride	(2)			Not Detected					0.07	0.5
58) Benzene	(2)			Not Detected					0.05	0.5
59) 1,2-Dichloroethane	(2)			Not Detected					0.05	0.5
67) Trichloroethene	(2)			Not Detected					0.06	0.5
69) Methylcyclohexane	(2)			Not Detected					0.05	0.5
70) 1,2-Dichloropropane	(2)			Not Detected					0.06	0.5
74) Bromodichloromethane	(2)			Not Detected					0.05	0.5
80) cis-1,3-Dichloropropene	(2)			Not Detected					0.05	0.5
81) 4-Methyl-2-Pentanone	(1)			Not Detected					0.7	5
83) Toluene	(3)			Not Detected					0.07	0.5

15T-1

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

9881308

Data file: /chem2/HP19930.i/18nov13a.b/in13s02.d Injection date and time: 13-NOV-2018 13:33  
 Data file Sample Info. Line: 15T-1;9881308;1;0;;TID15;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 15:21 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: 038A Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

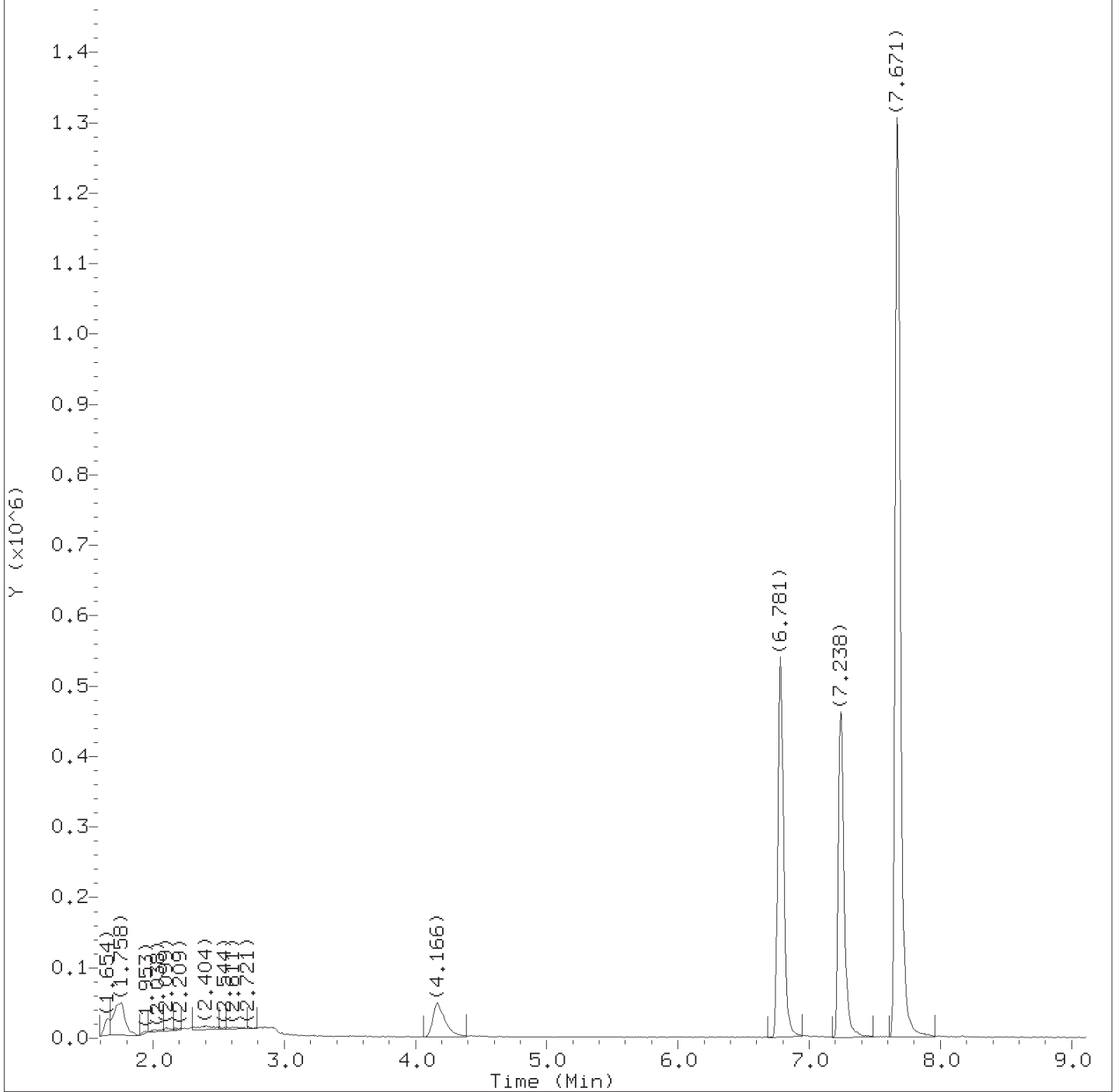
Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
										Limit	LOQ
84) trans-1,3-Dichloropropene	(3)				Not Detected					0.06	0.5
88) 1,1,2-Trichloroethane	(3)				Not Detected					0.06	0.5
89) Tetrachloroethene	(3)				Not Detected					0.06	0.5
91) 2-Hexanone	(1)				Not Detected					0.6	5
93) Dibromochloromethane	(3)				Not Detected					0.07	0.5
95) 1,2-Dibromoethane	(3)				Not Detected					0.06	0.5
98) Chlorobenzene	(3)				Not Detected					0.06	0.5
100) Ethylbenzene	(3)				Not Detected					0.06	0.5
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.1	0.5
106) Styrene	(3)				Not Detected					0.05	0.5
107) Bromoform	(3)				Not Detected					0.3	1
108) Isopropylbenzene	(3)				Not Detected					0.05	0.5
112) Cyclohexanone	(1)				Not Detected					2	25
113) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.07	0.5
131) 1,3-Dichlorobenzene	(4)				Not Detected					0.06	0.5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.07	0.5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)				Not Detected					0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)				Not Detected					0.06	0.5

Total number of targets = 51

Digitally signed by Jennifer K. Howe on 11/13/2018 at 15:21. Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s02.d  
Injection date and time: 13-NOV-2018 13:33

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789

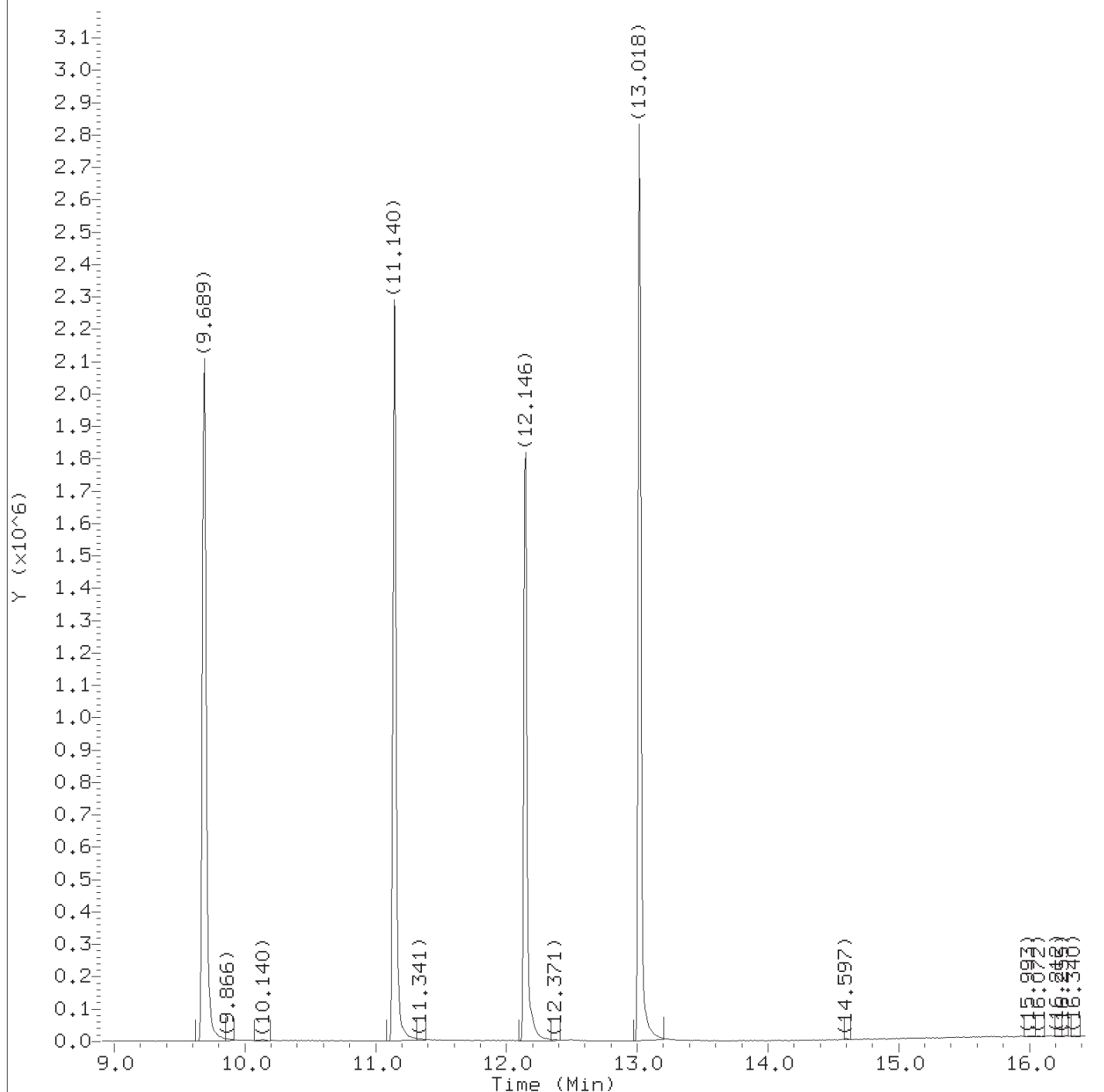
Date, time and analyst ID of latest file update: 13-Nov-2018 15:21 jkh09052

Sample Name: 15T-1

Lab Sample ID: 9881308

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 15:21.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s02.d  
Injection date and time: 13-NOV-2018 13:33

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789

Date, time and analyst ID of latest file update: 13-Nov-2018 15:21 jkh09052

Sample Name: 15T-1

Lab Sample ID: 9881308

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 15:21.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s02.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 13:33      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 15:21 jkh09052

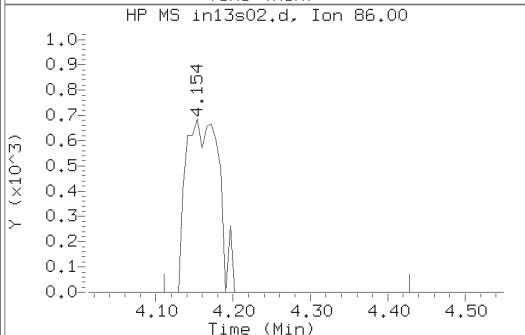
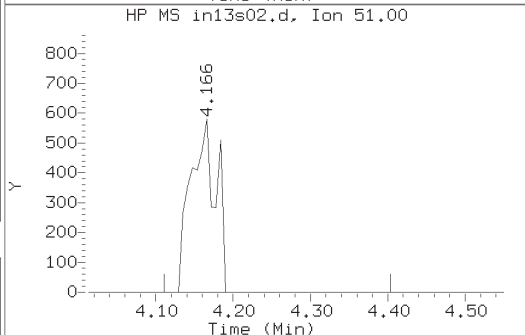
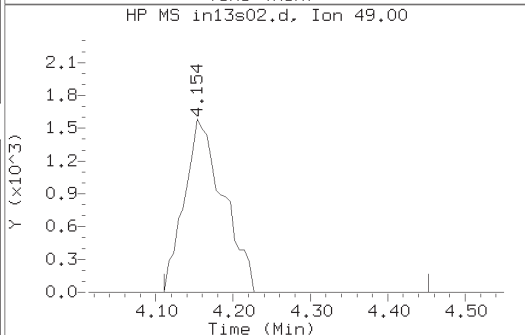
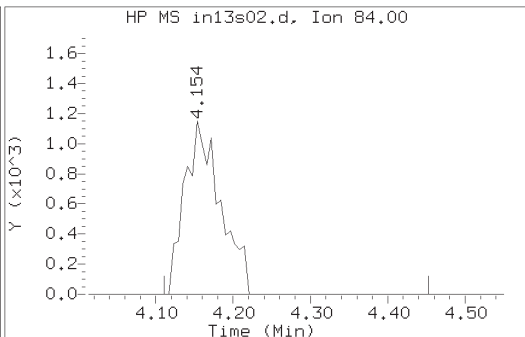
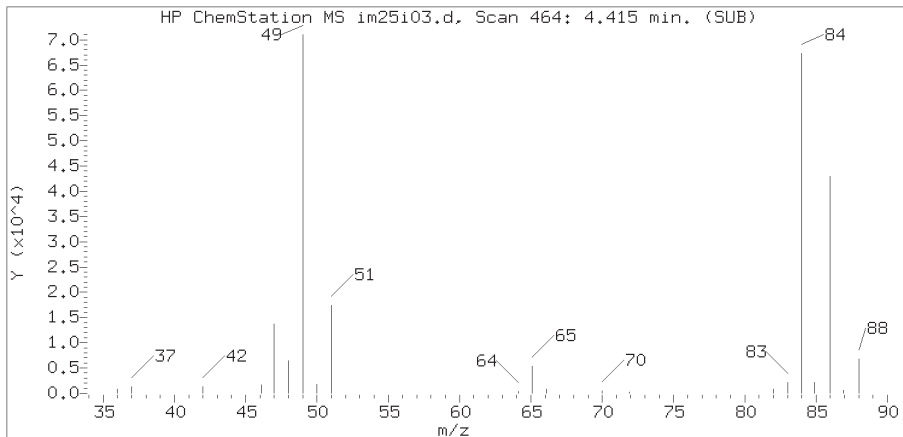
Sample Name: 15T-1      Lab Sample ID: 9881308

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
23) Methylene Chloride	(2)	4.154	84	3694	0.074
26) *t-Butyl Alcohol-d10	(1)	4.166	65	139527	50.000
50) \$Dibromofluoromethane	(2)	6.781	113	499895	10.991
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	97915	11.337
63) *Fluorobenzene	(2)	7.671	96	1742518	10.000
82) \$Toluene-d8	(3)	9.689	98	1708343	10.105
97) *Chlorobenzene-d5	(3)	11.146	117	1353404	10.000
111) \$4-Bromofluorobenzene	(3)	12.146	95	603331	9.066
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	724852	10.000

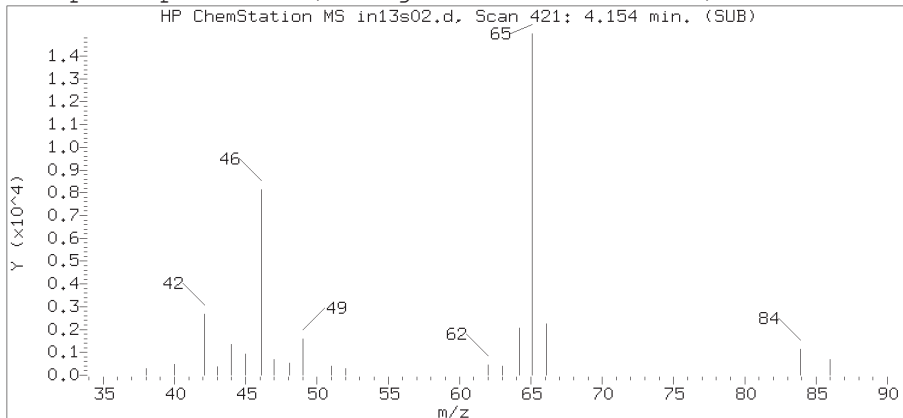
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

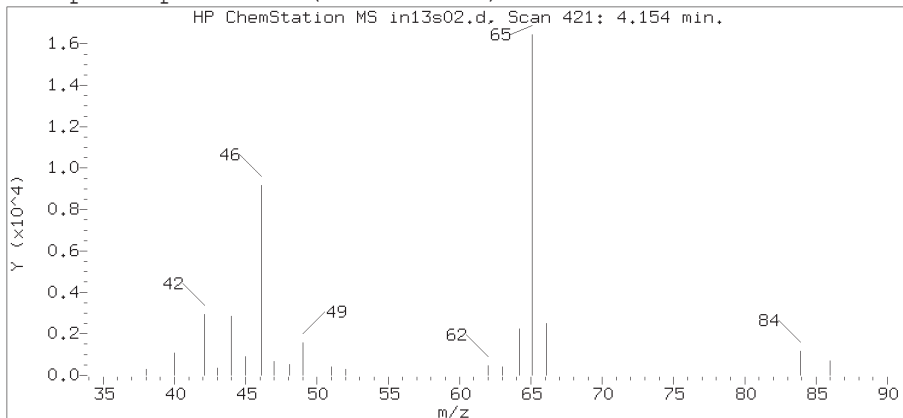
Reference Standard Spectrum for Methylene Chloride



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s02.d  
 Injection date and time: 13-NOV-2018 13:33

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 15:21 jkh09052

Sample Name: 15T-1

Lab Sample ID: 9881308

Compound Number : 23  
 Compound Name : Methylene Chloride  
 Scan Number : 421  
 Retention Time (minutes): 4.154  
 Relative Retention Time :-0.00000  
 Quant Ion : 84.00  
 Area (flag) : 3694  
 On-Column Amount (ng) : 0.0738



15T-2

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

9881309

Data file: /chem2/HP19930.i/18nov13a.b/in13s03.d Injection date and time: 13-NOV-2018 13:54  
 Data file Sample Info. Line: 15T-2;9881309;1;0;;TID15;DOD25;;in13b01; Instrument ID: HP19930.i Batch: T183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: 038A Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

**Analysis Comments: 9274 9367 9179**

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.196(-0.024)	428	65	107058 ( -41)	50.00	
63) Fluorobenzene	7.671( 0.000)	998	96	2306496 ( 8)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1831040 ( 7)	10.00	
133) 1,4-Dichlorobenzene-d4	13.017(-0.006)	1875	152	1100800 ( 11)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.781(-0.001)	113	630737	10.476	105%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.244(-0.001)	102	123951	10.842	108%		81 - 118
82) Toluene-d8	(3)	9.689(-0.001)	98	2243663	9.809	98%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.140( 0.000)	95	953197	10.587	106%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)			Not Detected					0.05	0.5
2) Chloromethane	(2)	2.105( 0.001)	50	11469M	0.112	0.11		J	0.06	0.5
5) Vinyl Chloride	(2)			Not Detected					0.1	0.5
7) Bromomethane	(2)			Not Detected					0.07	0.5
8) Chloroethane	(2)			Not Detected					0.07	0.5
10) Trichlorofluoromethane	(2)			Not Detected					0.05	0.5
15) 1,1-Dichloroethene	(2)			Not Detected					0.06	0.5
16) Freon 113	(2)			Not Detected					0.06	0.5
14) Acetone	(1)	3.592(-0.012)	43	23196	3.708	3.71		J	0.9	5
18) Carbon Disulfide	(2)			Not Detected					0.06	1
21) Methyl Acetate	(1)			Not Detected					0.1	1
23) Methylene Chloride	(2)			Not Detected					0.07	0.5
31) trans-1,2-Dichloroethene	(2)			Not Detected					0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.05	0.5
33) 1,1-Dichloroethane	(2)			Not Detected					0.07	0.5
39) cis-1,2-Dichloroethene	(2)	6.086(-0.001)	96	7163	0.094	0.09		J	0.05	0.5
38) 2-Butanone	(1)			Not Detected					0.6	5
49) Chloroform	(2)			Not Detected					0.09	0.5
51) 1,1,1-Trichloroethane	(2)			Not Detected					0.06	0.5
52) Cyclohexane	(2)	6.890(-0.000)	56	10006	0.075	0.07		J	0.05	0.5
54) Carbon Tetrachloride	(2)			Not Detected					0.07	0.5
58) Benzene	(2)	7.281(-0.002)	78	37490	0.134	0.13		J	0.05	0.5
59) 1,2-Dichloroethane	(2)			Not Detected					0.05	0.5
67) Trichloroethene	(2)			Not Detected					0.06	0.5
69) Methylcyclohexane	(2)	8.463(-0.000)	83	11118	0.080	0.08		J	0.05	0.5
70) 1,2-Dichloropropane	(2)			Not Detected					0.06	0.5
74) Bromodichloromethane	(2)			Not Detected					0.05	0.5
80) cis-1,3-Dichloropropene	(2)			Not Detected					0.05	0.5
81) 4-Methyl-2-Pentanone	(1)			Not Detected					0.7	5
83) Toluene	(3)	9.768(-0.001)	92	32713	0.182	0.18		J	0.07	0.5

M = Compound was manually integrated.

15T-2

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

9881309

Data file: /chem2/HP19930.i/18nov13a.b/in13s03.d Injection date and time: 13-NOV-2018 13:54  
 Data file Sample Info. Line: 15T-2;9881309;1;0;;TID15;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: 038A Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

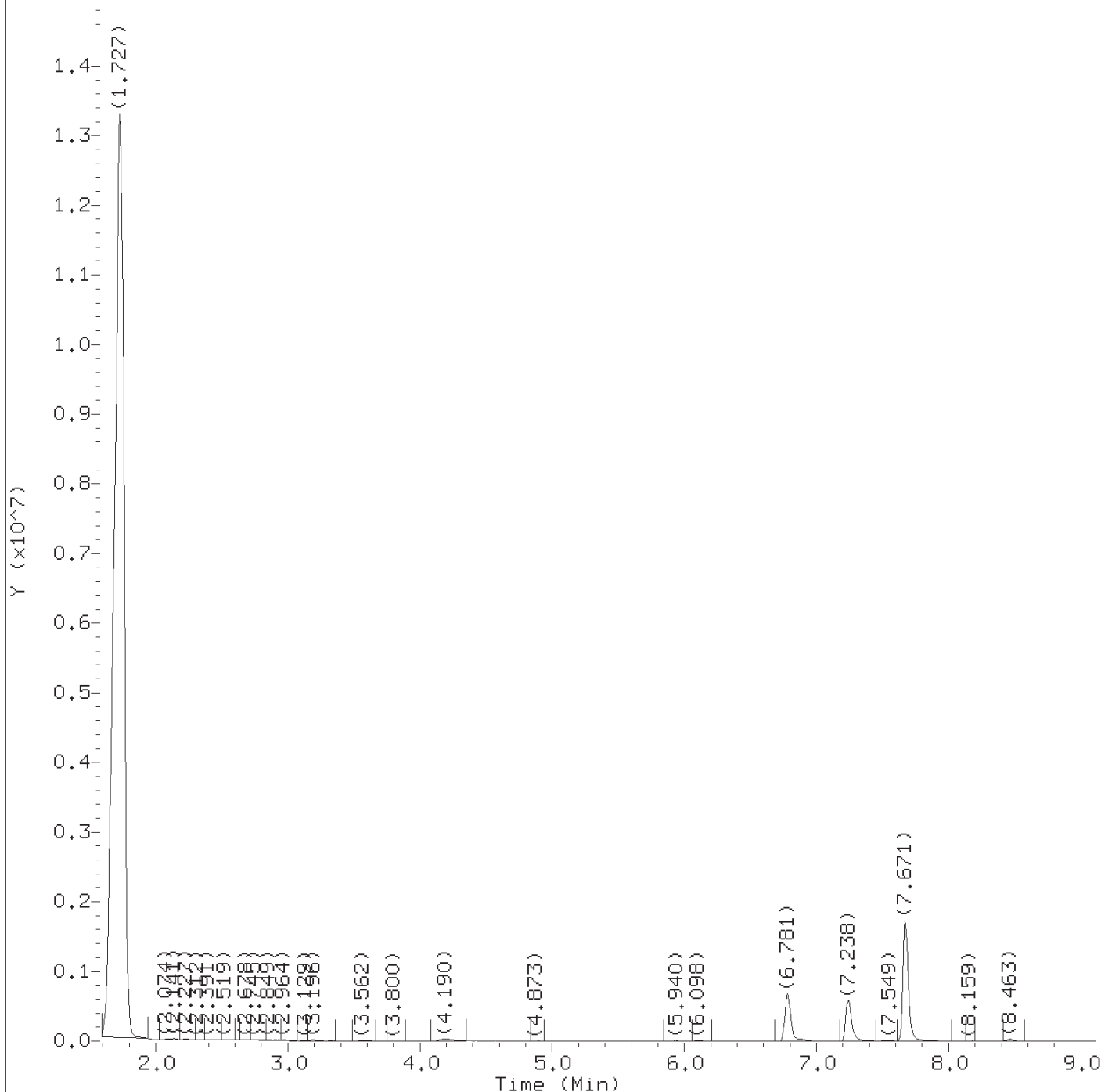
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
									Limit	LOQ
84) trans-1,3-Dichloropropene	(3)			Not Detected					0.06	0.5
88) 1,1,2-Trichloroethane	(3)			Not Detected					0.06	0.5
89) Tetrachloroethene	(3)			Not Detected					0.06	0.5
91) 2-Hexanone	(1)			Not Detected					0.6	5
93) Dibromochloromethane	(3)			Not Detected					0.07	0.5
95) 1,2-Dibromoethane	(3)			Not Detected					0.06	0.5
98) Chlorobenzene	(3)	11.170 (-0.000)	112	317939	1.616	1.62			0.06	0.5
100) Ethylbenzene	(3)			Not Detected					0.06	0.5
101) m+p-Xylene	(3)			Not Detected					0.1	0.5
104) o-Xylene	(3)	11.707 (-0.001)	106	7130M	0.051	0.05		J	0.05	0.5
105) Xylene (Total)	(3)		106	7130	0.051	0.05		J	0.1	0.5
106) Styrene	(3)			Not Detected					0.05	0.5
107) Bromoform	(3)			Not Detected					0.3	1
108) Isopropylbenzene	(3)			Not Detected					0.05	0.5
112) Cyclohexanone	(1)			Not Detected					2	25
113) 1,1,2,2-Tetrachloroethane	(4)			Not Detected					0.07	0.5
131) 1,3-Dichlorobenzene	(4)			Not Detected					0.06	0.5
134) 1,4-Dichlorobenzene	(4)	13.036 ( 0.000)	146	34442	0.180	0.18		J	0.07	0.5
139) 1,2-Dichlorobenzene	(4)	13.298 (-0.000)	146	25241	0.145	0.15		J	0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)			Not Detected					0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)			Not Detected					0.06	0.5

M = Compound was manually integrated.

Total number of targets = 51

Digitally signed by Jennifer K. Howe on 11/16/2018 at 13:52. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16. PARALLAX ID: kel01973



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789

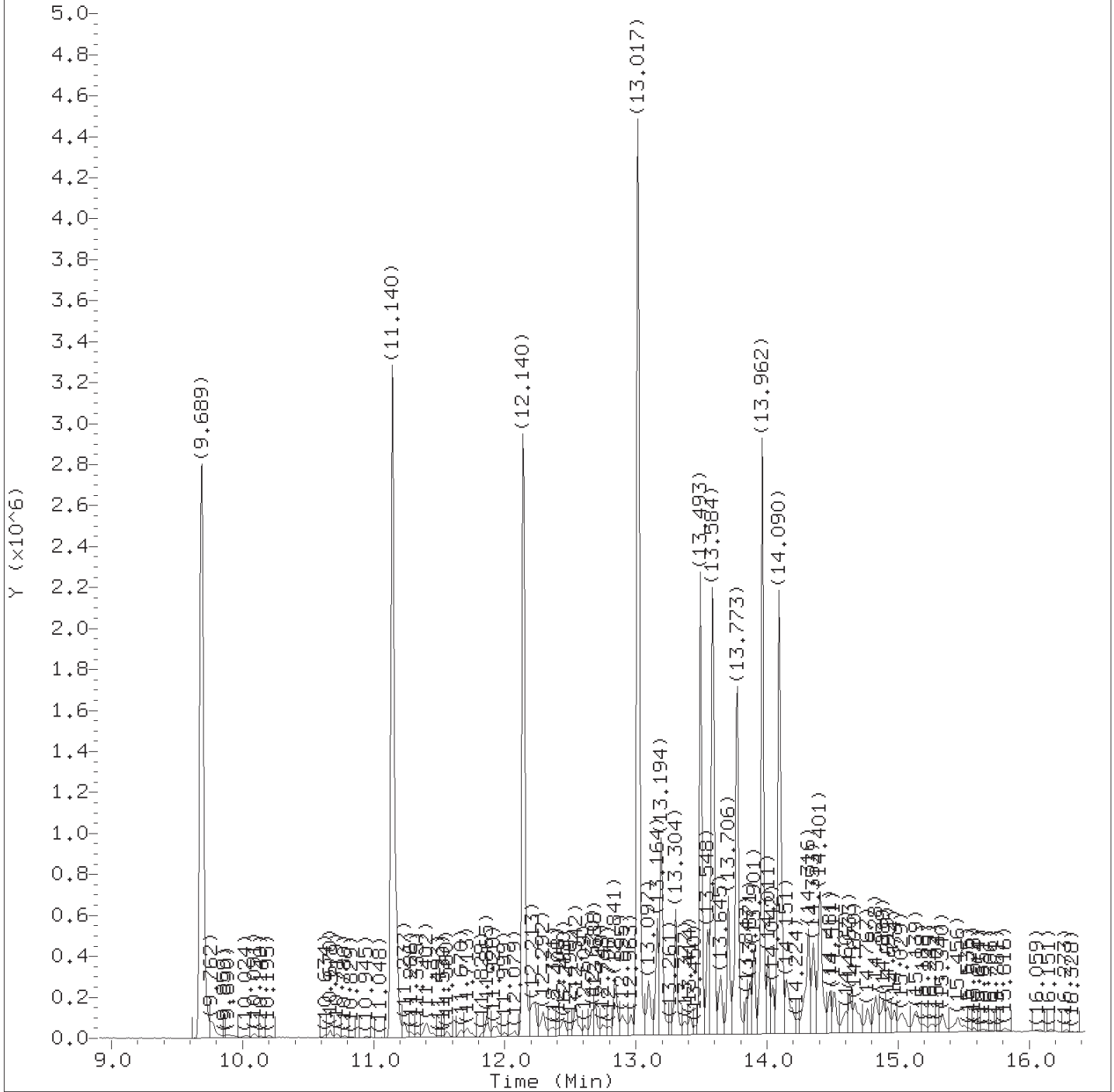
Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

Lab Sample ID: 9881309

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:52.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789

Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

Lab Sample ID: 9881309

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:52.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 13:54 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

Lab Sample ID: 9881309

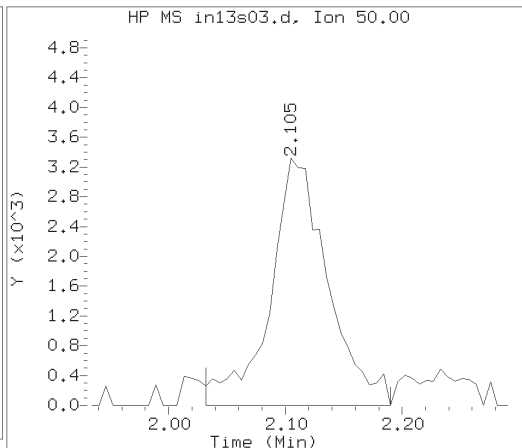
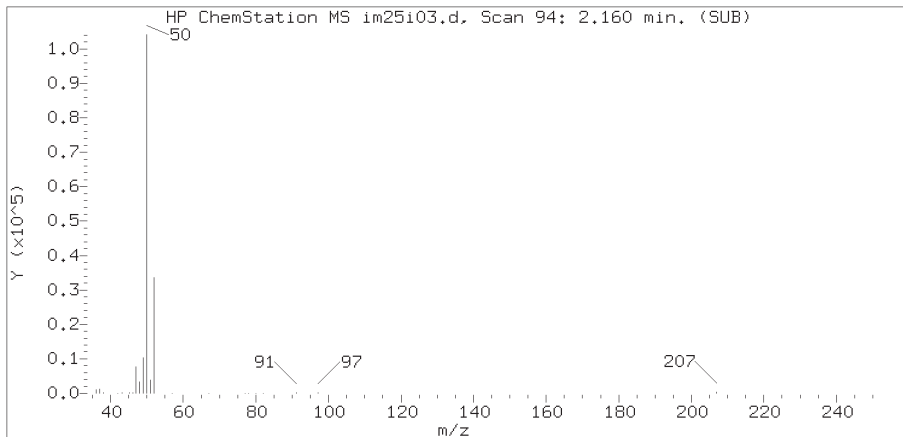
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Chloromethane	(2)	2.105	50	11469M	0.112
14) Acetone	(1)	3.592	43	23196	3.708
26) *t-Butyl Alcohol-d10	(1)	4.196	65	107058	50.000
39) cis-1,2-Dichloroethene	(2)	6.086	96	7163	0.094
50) \$Dibromofluoromethane	(2)	6.781	113	630737	10.476
52) Cyclohexane	(2)	6.891	56	10006	0.075
57) \$1,2-Dichloroethane-d4	(2)	7.244	102	123951	10.842
58) Benzene	(2)	7.281	78	37490	0.134
63) *Fluorobenzene	(2)	7.671	96	2306496	10.000
69) Methylcyclohexane	(2)	8.463	83	11118	0.080
82) \$Toluene-d8	(3)	9.689	98	2243663	9.809
83) Toluene	(3)	9.768	92	32713	0.182
97) *Chlorobenzene-d5	(3)	11.140	117	1831040	10.000
98) Chlorobenzene	(3)	11.170	112	317939	1.616
104) o-Xylene	(3)	11.707	106	7130M	0.051
105) Xylene (Total)	(3)		106	7130	0.051
111) \$4-Bromofluorobenzene	(3)	12.140	95	953197	10.587
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	1100800	10.000
134) 1,4-Dichlorobenzene	(4)	13.036	146	34442	0.180
139) 1,2-Dichlorobenzene	(4)	13.298	146	25241	0.145

M = Compound was manually integrated.

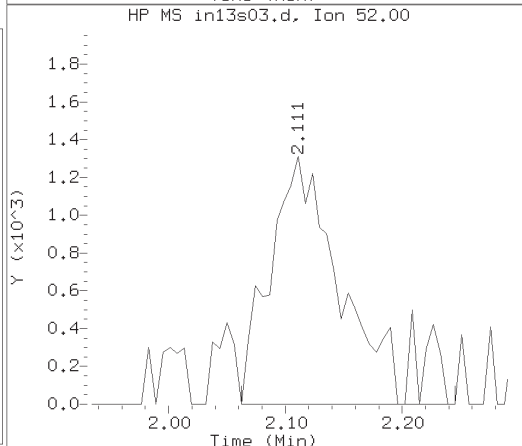
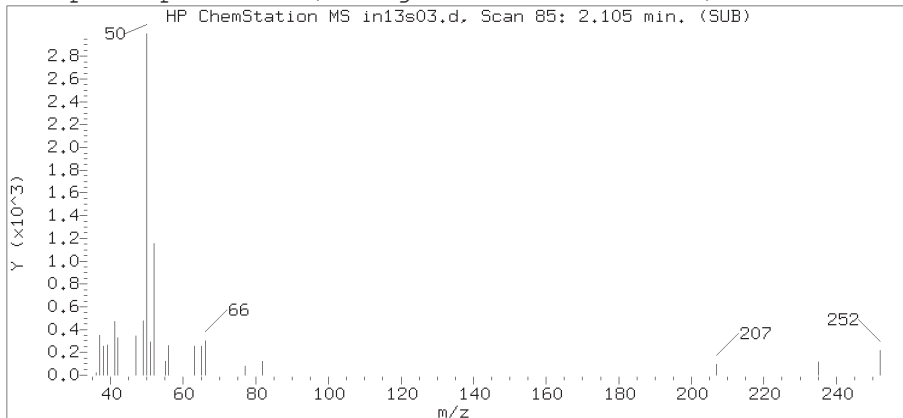
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

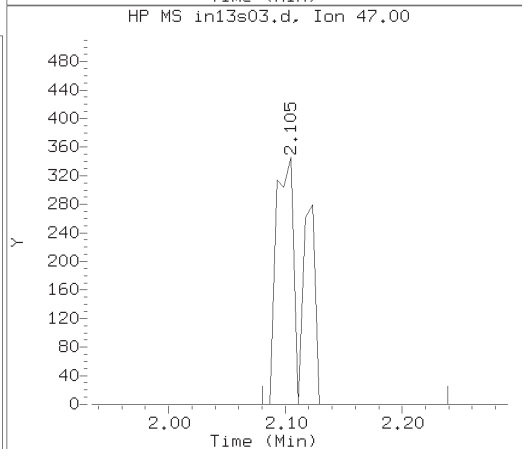
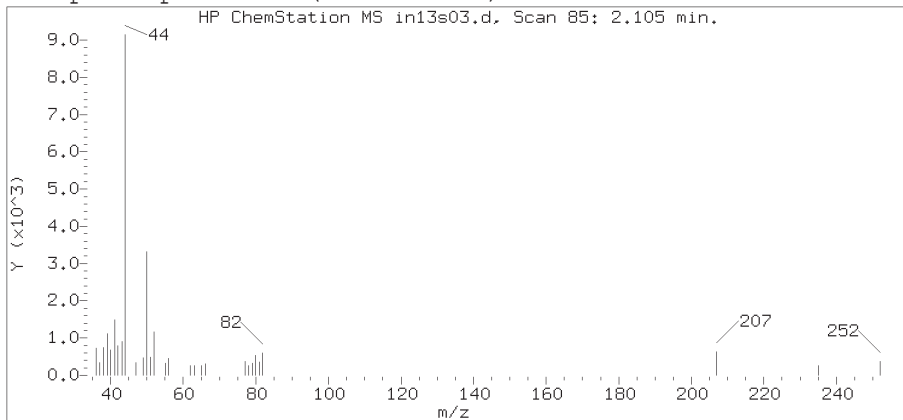
Reference Standard Spectrum for Chloromethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

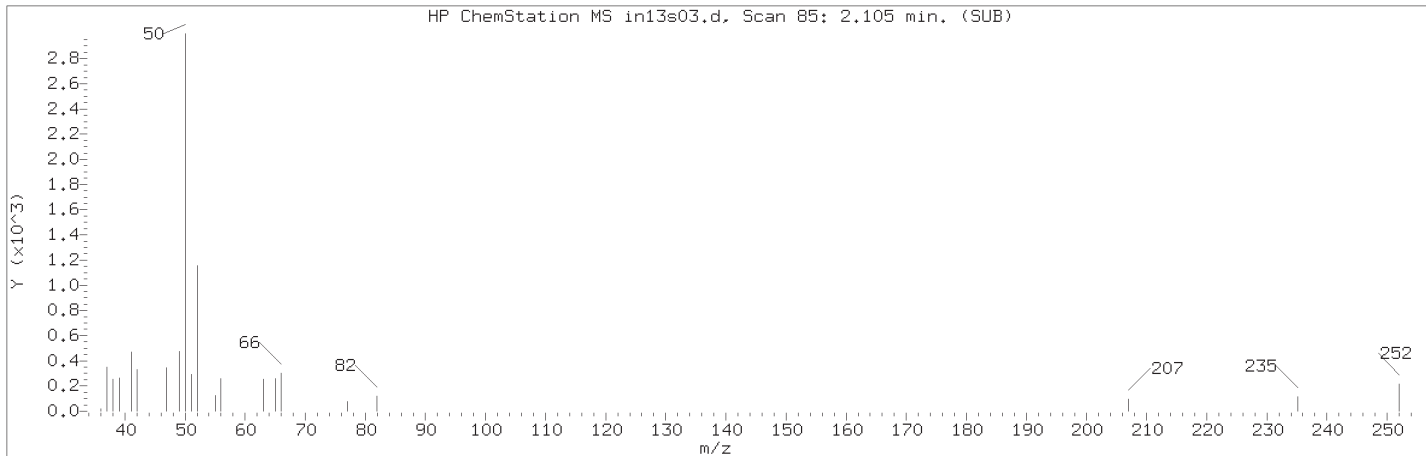
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

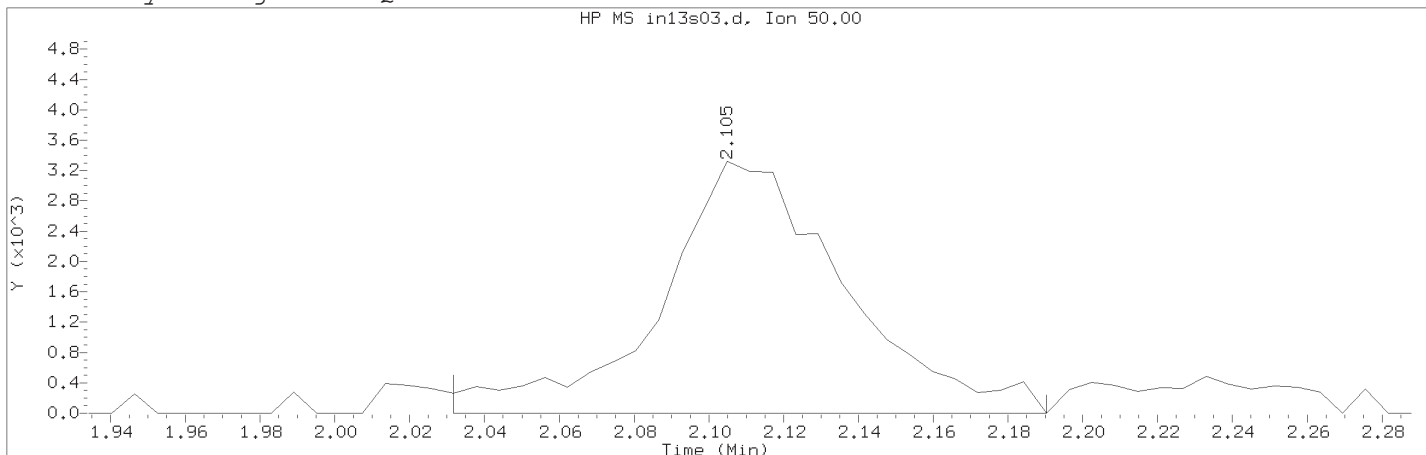
Lab Sample ID: 9881309

Compound Number : 2  
 Compound Name : Chloromethane  
 Scan Number : 85  
 Retention Time (minutes): 2.105  
 Relative Retention Time : 0.00161  
 Quant Ion : 50.00  
 Area (flag) : 11469M  
 On-Column Amount (ng) : 0.1116

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 13:54                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 25789  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2    Lab Sample ID: 9881309

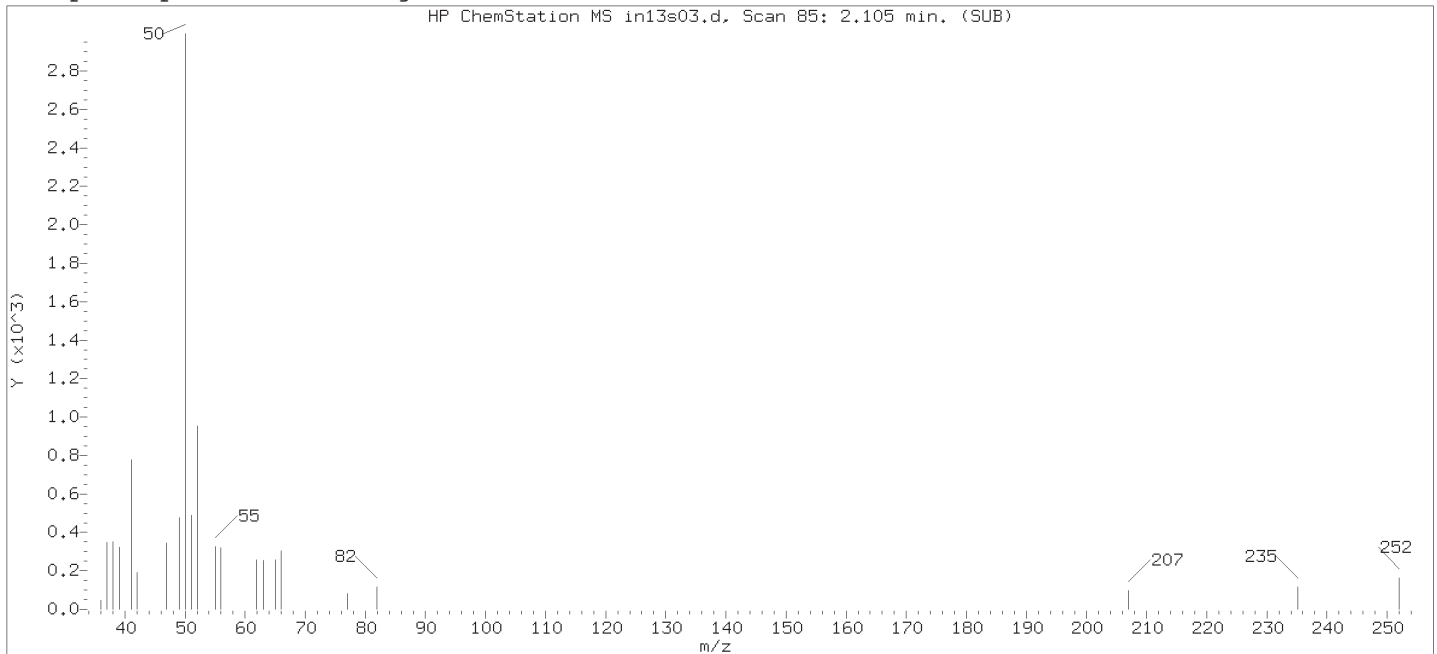
Compound Number                      : 2  
Compound Name                         : Chloromethane  
Scan Number                            : 85  
Retention Time (minutes): 2.105  
Quant Ion                                : 50.00  
Area (flag)                             : 11469M  
On-Column Amount (ng)                : 0.1116  
Integration start scan                 : 72                      Integration stop scan: 98  
Y at integration start                 : 0                       Y at integration end: 0

Reason for manual integration: improper integration

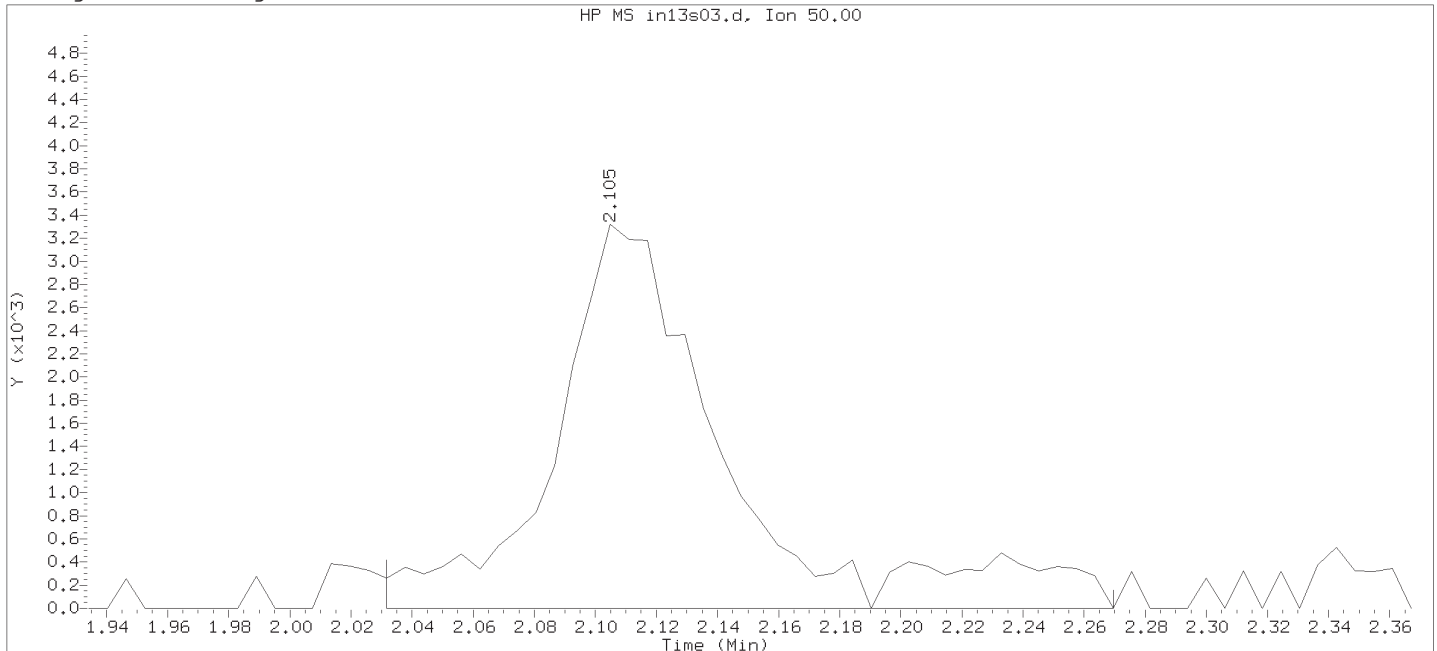
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:52.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 13:54      Analyst ID: JKH09052

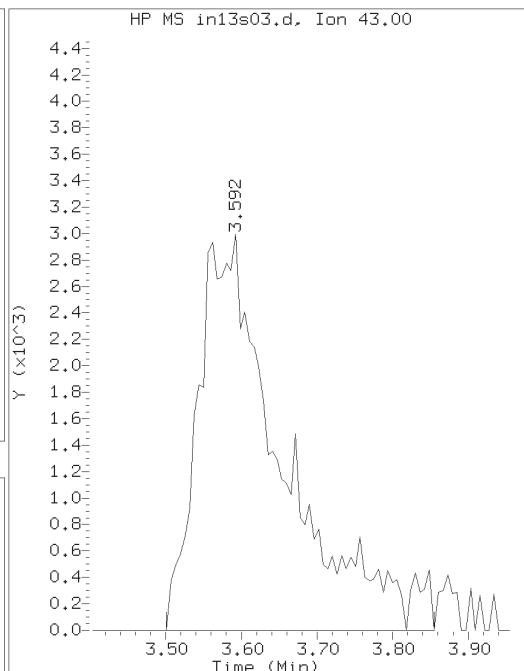
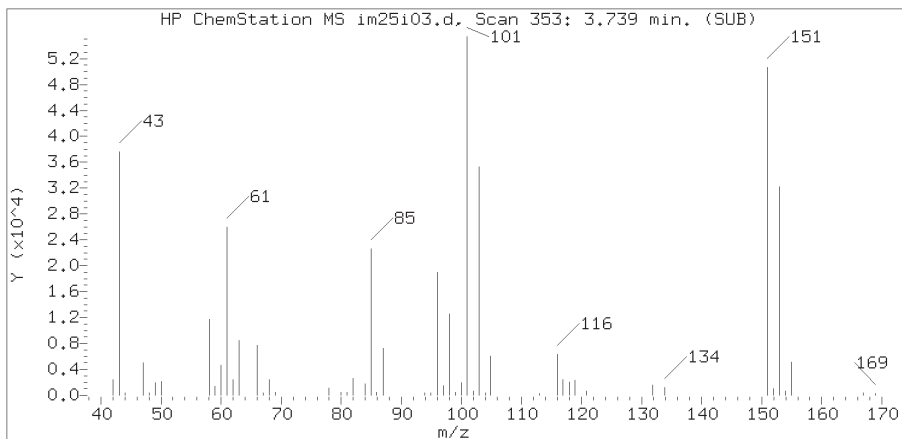
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 14:12 Automation

Sample Name: 15T-2      Lab Sample ID: 9881309

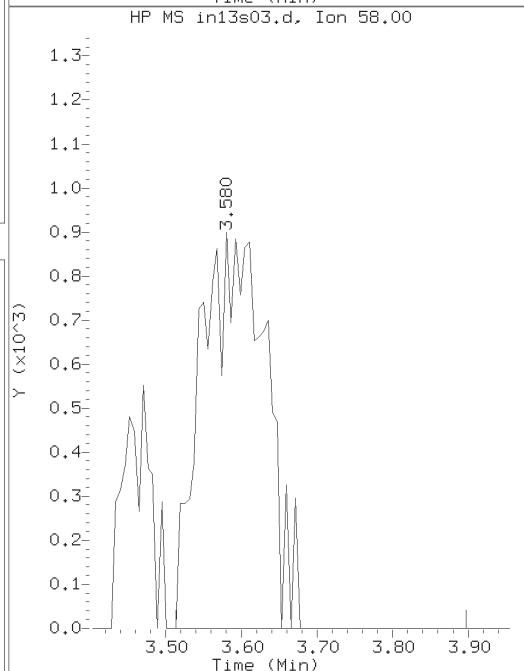
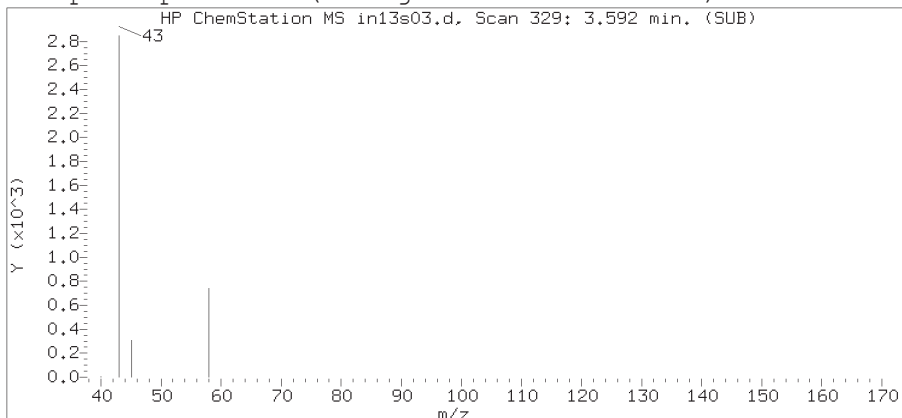
Compound Number : 2  
 Compound Name : Chloromethane  
 Scan Number : 85  
 Retention Time (minutes): 2.105  
 Quant Ion : 50.00  
 Area : 12956  
 On-column Amount (ng) : 0.1260  
 Integration start scan : 72      Integration stop scan: 111  
 Y at integration start : 0      Y at integration end: 0



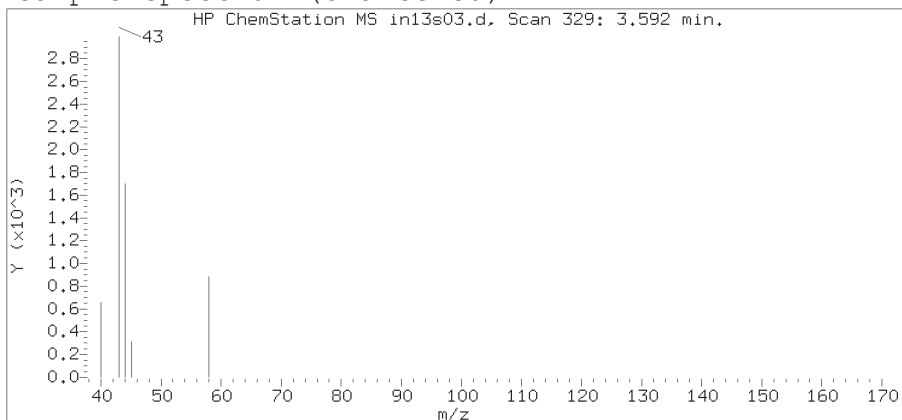
Reference Standard Spectrum for Acetone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

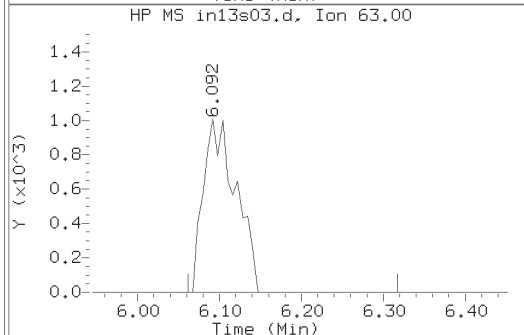
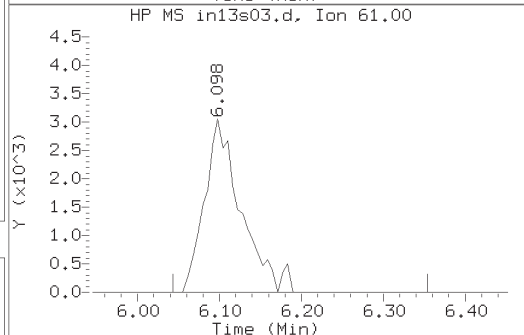
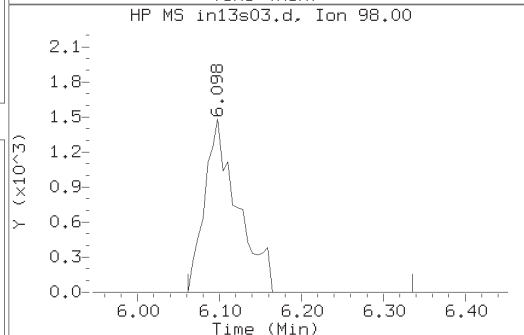
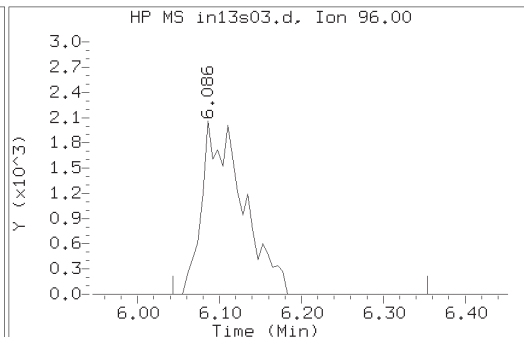
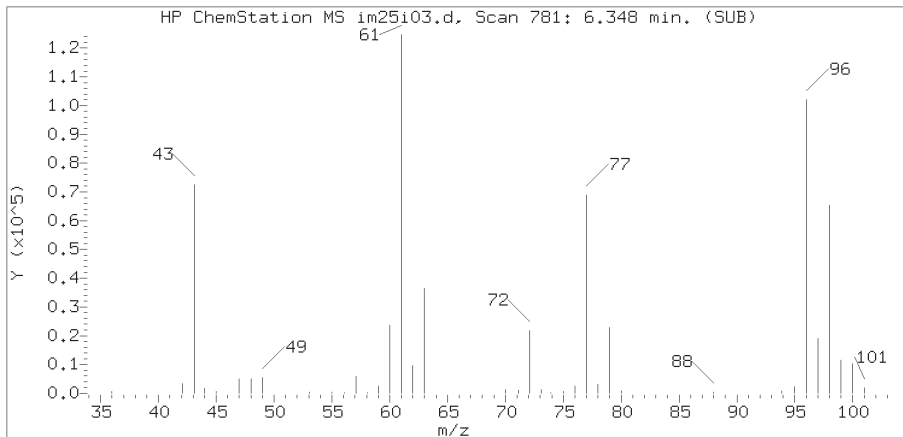
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

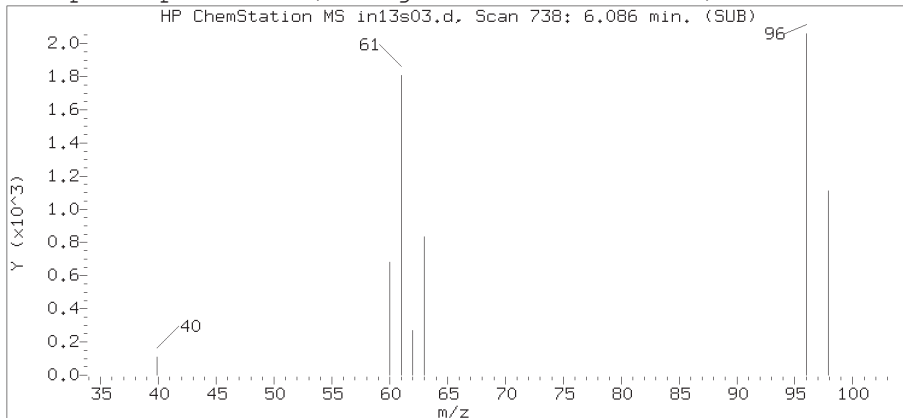
Lab Sample ID: 9881309

Compound Number : 14  
 Compound Name : Acetone  
 Scan Number : 329  
 Retention Time (minutes): 3.592  
 Relative Retention Time :-0.01253  
 Quant Ion : 43.00  
 Area (flag) : 23196  
 On-Column Amount (ng) : 3.7078

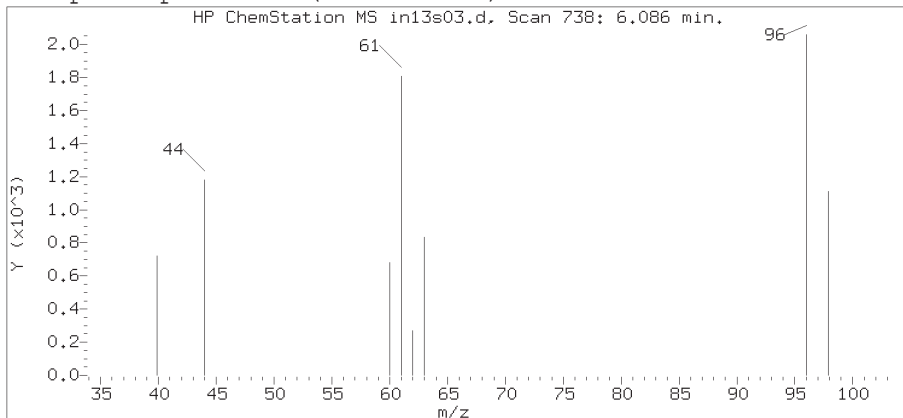
Reference Standard Spectrum for cis-1,2-Dichloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

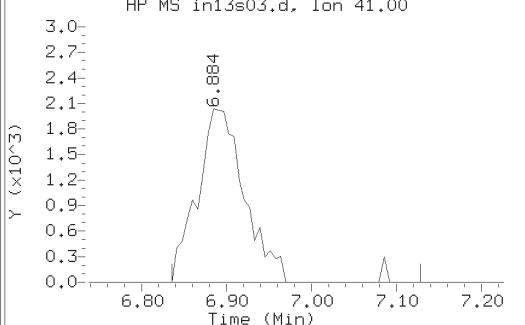
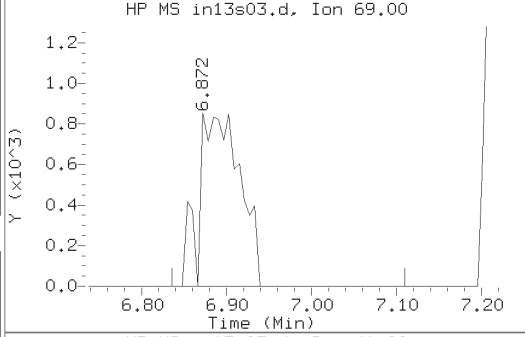
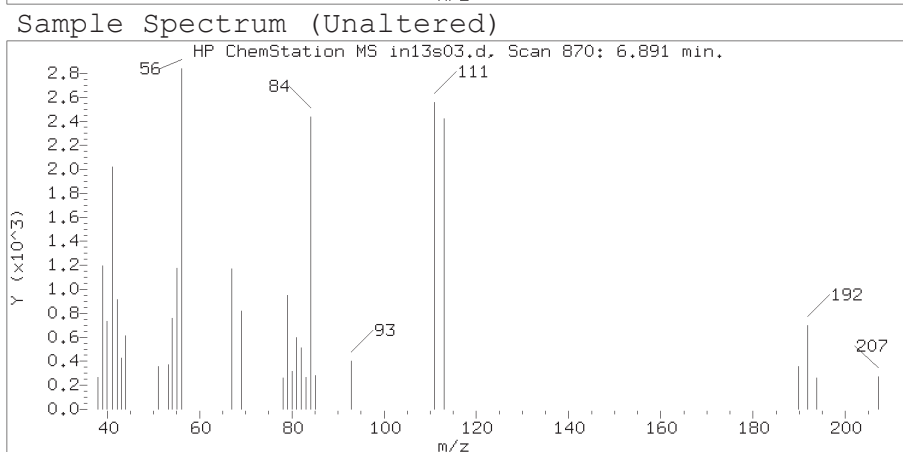
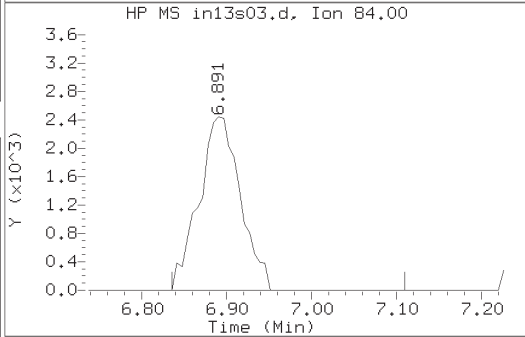
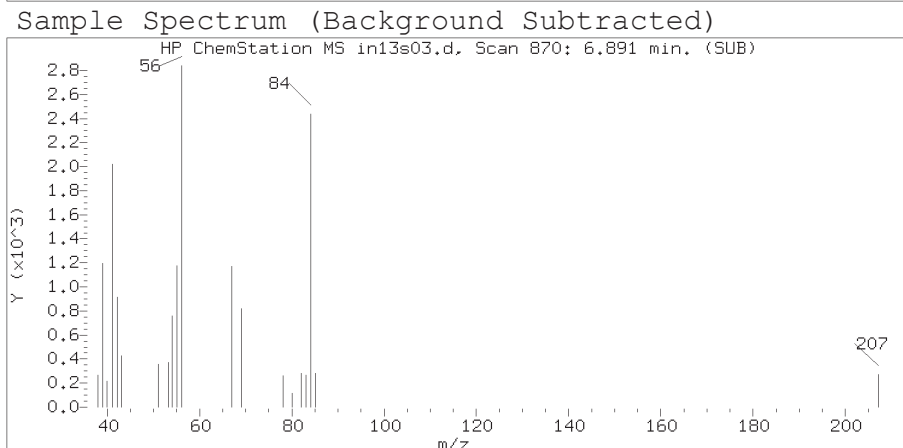
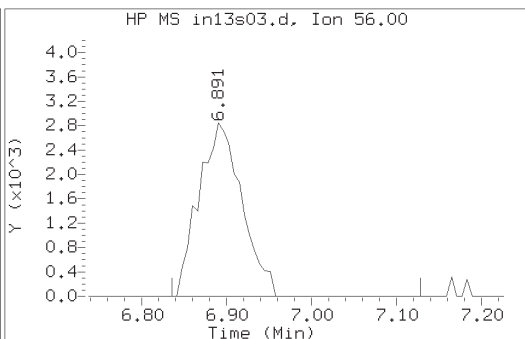
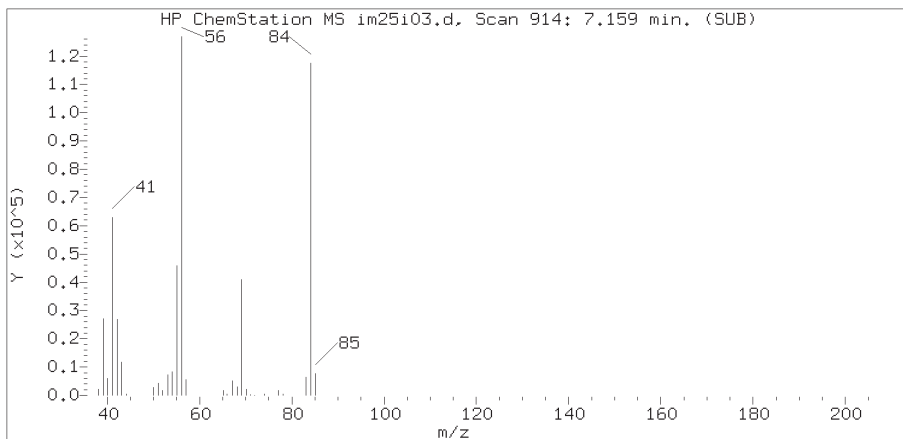
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 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

Lab Sample ID: 9881309

Compound Number : 39  
 Compound Name : cis-1,2-Dichloroethene  
 Scan Number : 738  
 Retention Time (minutes): 6.086  
 Relative Retention Time :-0.00159  
 Quant Ion : 96.00  
 Area (flag) : 7163  
 On-Column Amount (ng) : 0.0945

Reference Standard Spectrum for Cyclohexane



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

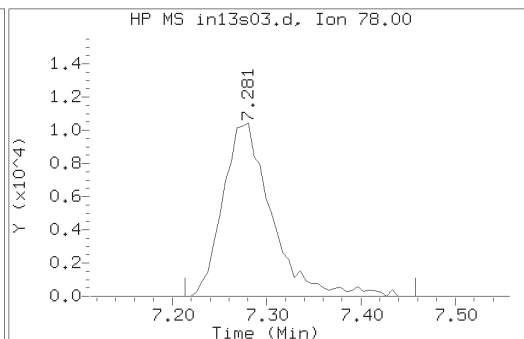
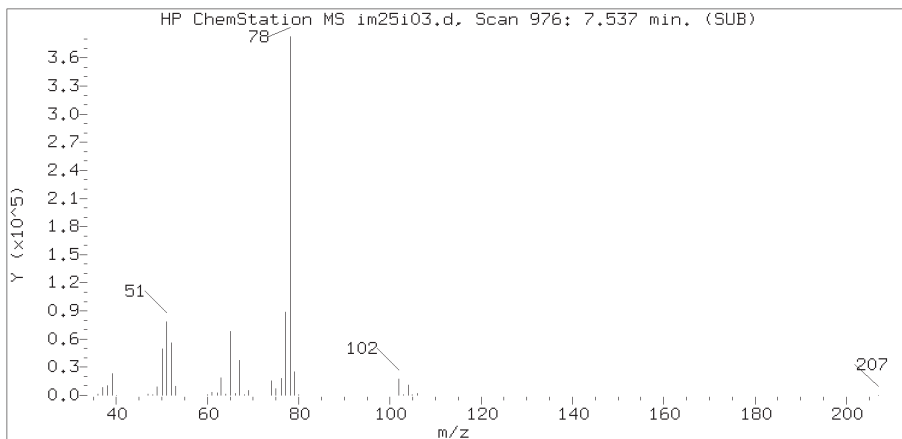
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

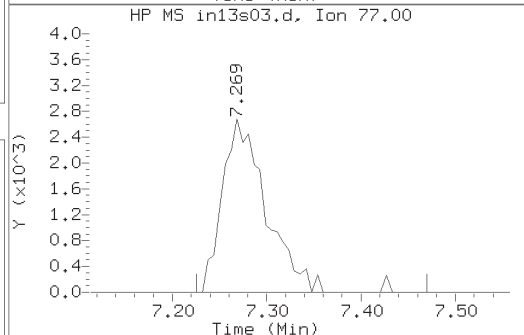
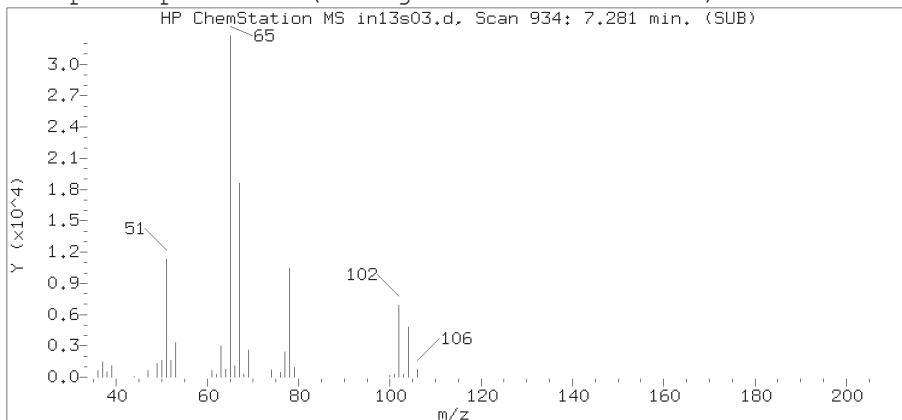
Lab Sample ID: 9881309

Compound Number : 52  
 Compound Name : Cyclohexane  
 Scan Number : 870  
 Retention Time (minutes): 6.891  
 Relative Retention Time :-0.00079  
 Quant Ion : 56.00  
 Area (flag) : 10006  
 On-Column Amount (ng) : 0.0747

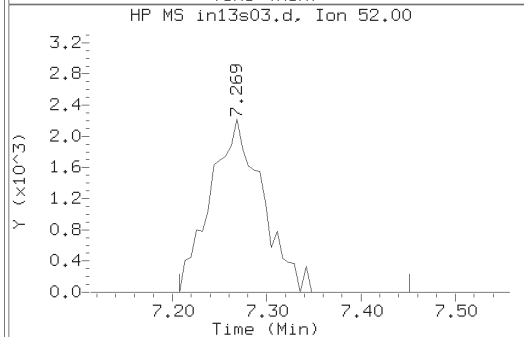
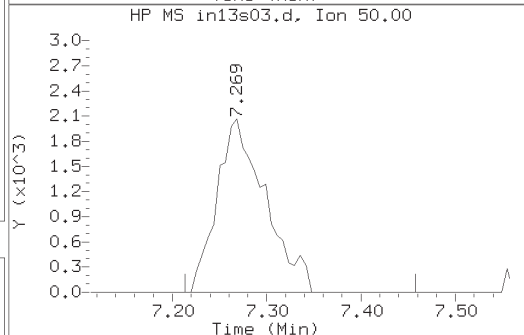
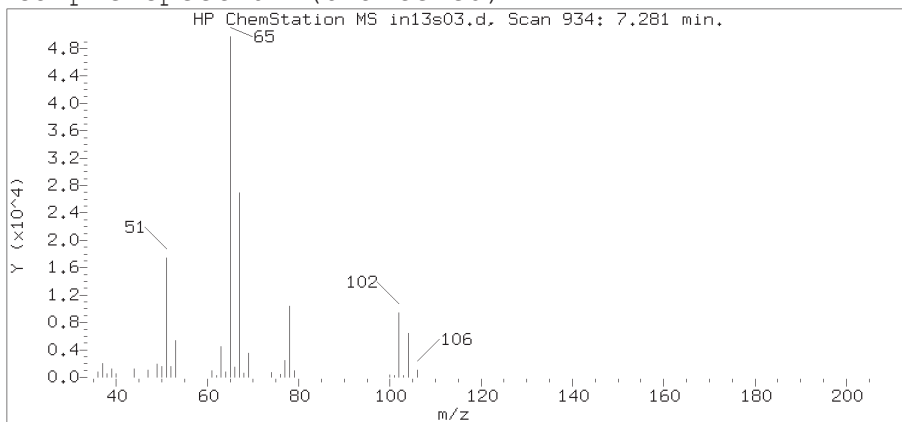
Reference Standard Spectrum for Benzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

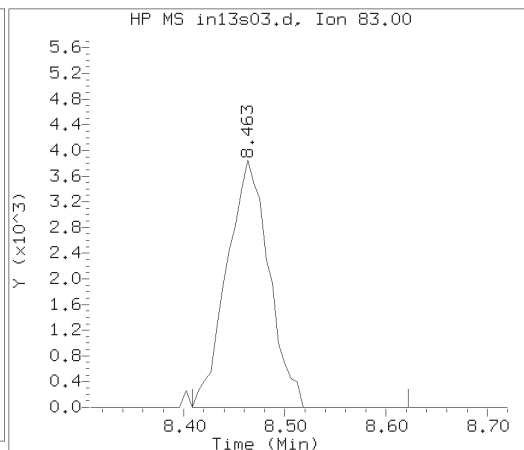
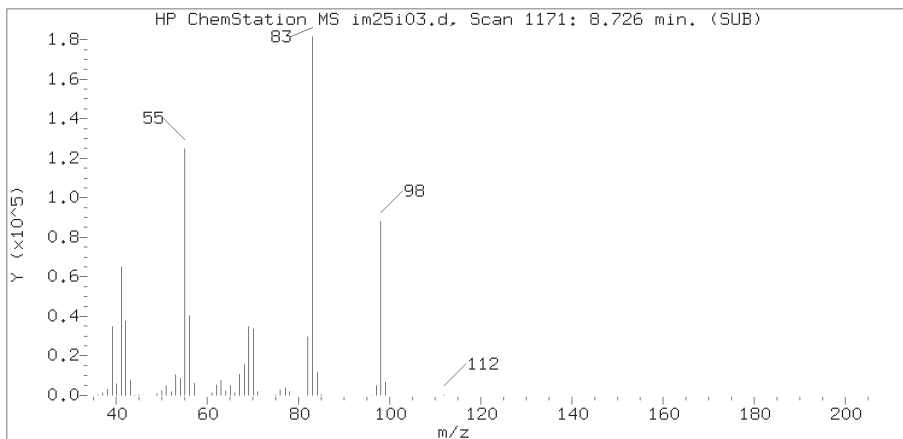
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 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

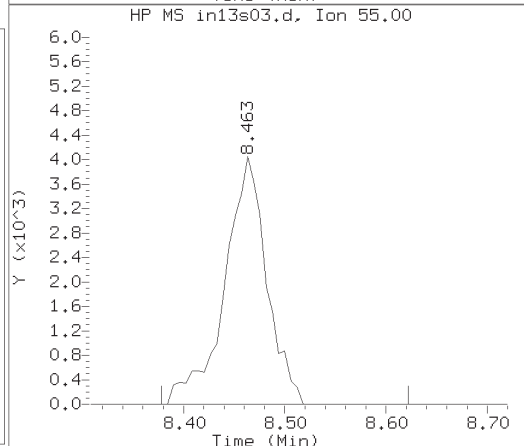
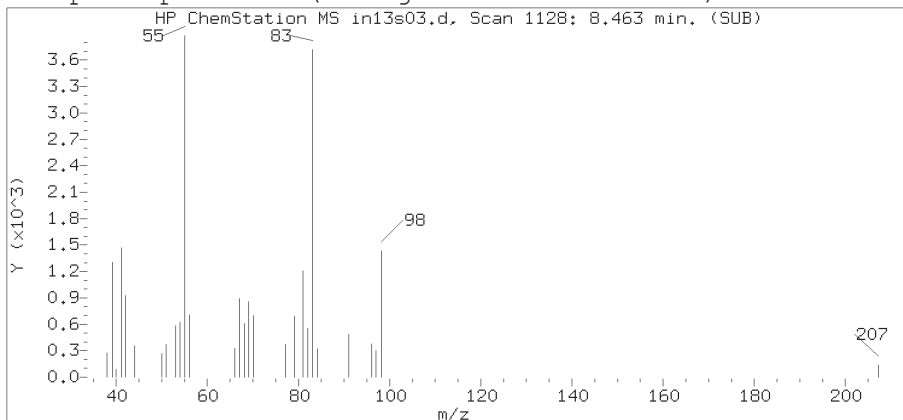
Lab Sample ID: 9881309

Compound Number : 58  
 Compound Name : Benzene  
 Scan Number : 934  
 Retention Time (minutes): 7.281  
 Relative Retention Time :-0.00238  
 Quant Ion : 78.00  
 Area (flag) : 37490  
 On-Column Amount (ng) : 0.1338

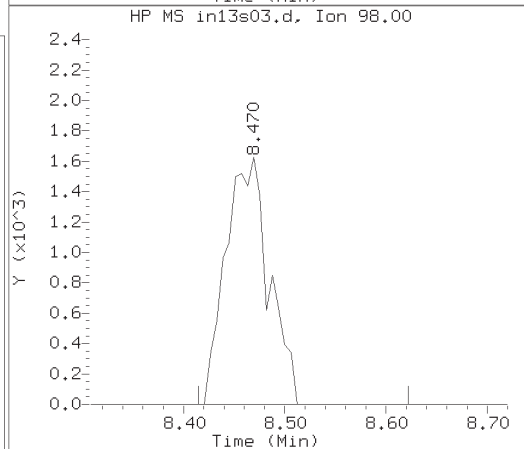
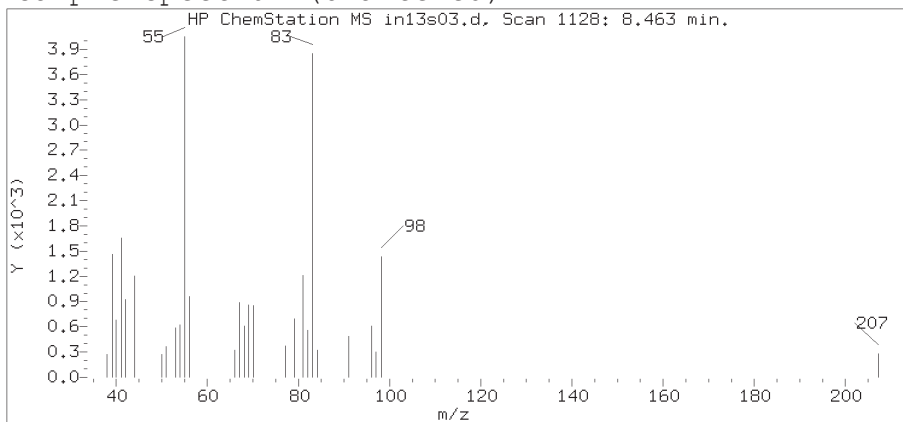
Reference Standard Spectrum for Methylcyclohexane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

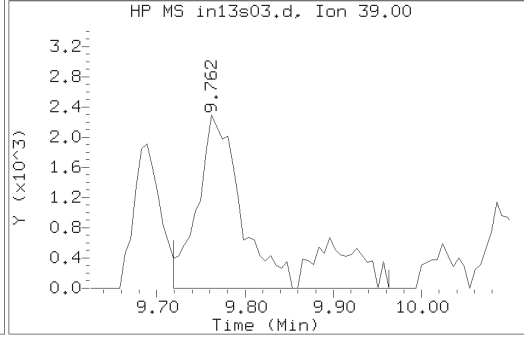
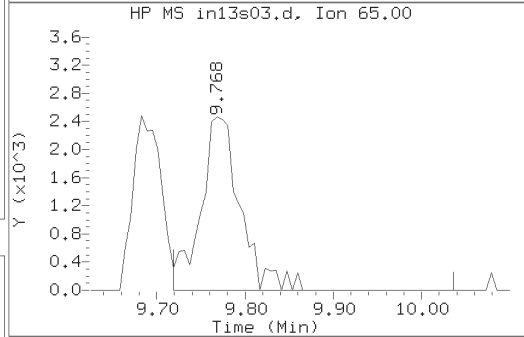
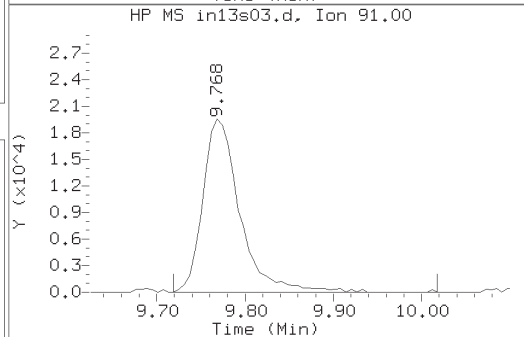
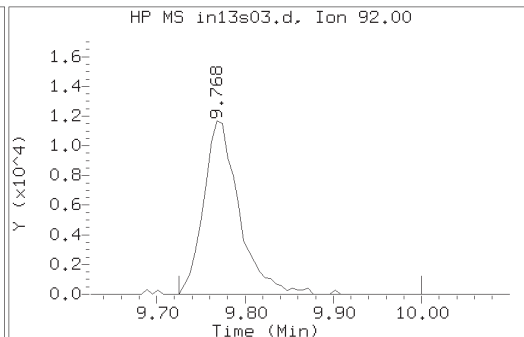
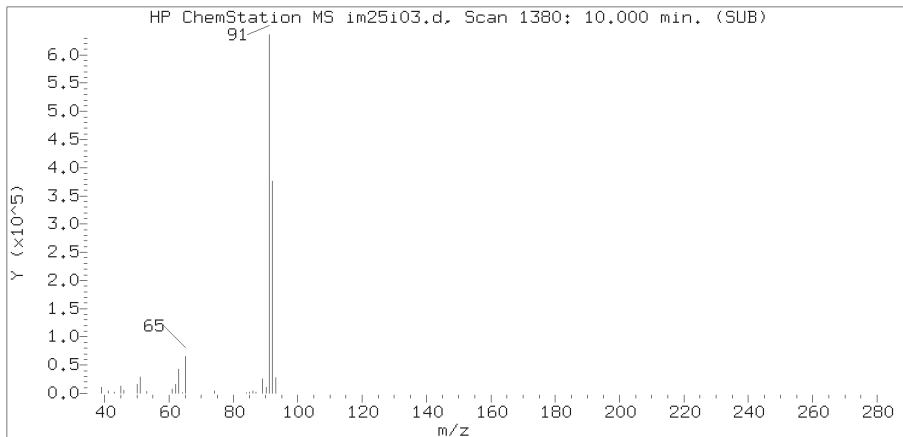
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

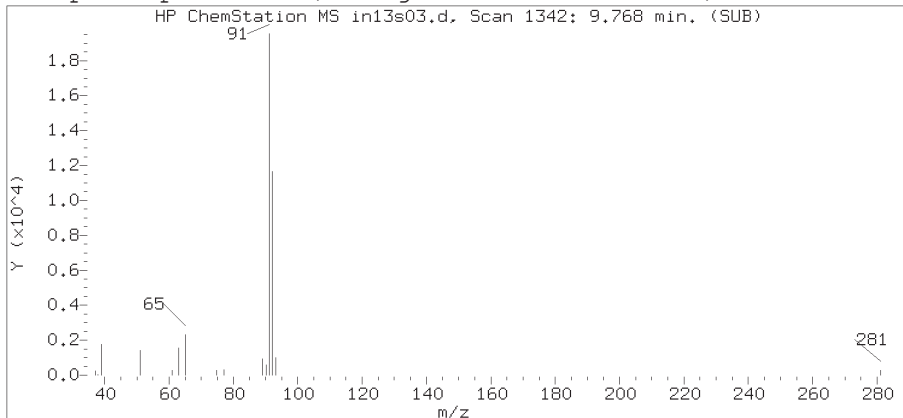
Lab Sample ID: 9881309

Compound Number : 69  
 Compound Name : Methylcyclohexane  
 Scan Number : 1128  
 Retention Time (minutes): 8.463  
 Relative Retention Time :-0.00080  
 Quant Ion : 83.00  
 Area (flag) : 11118  
 On-Column Amount (ng) : 0.0800

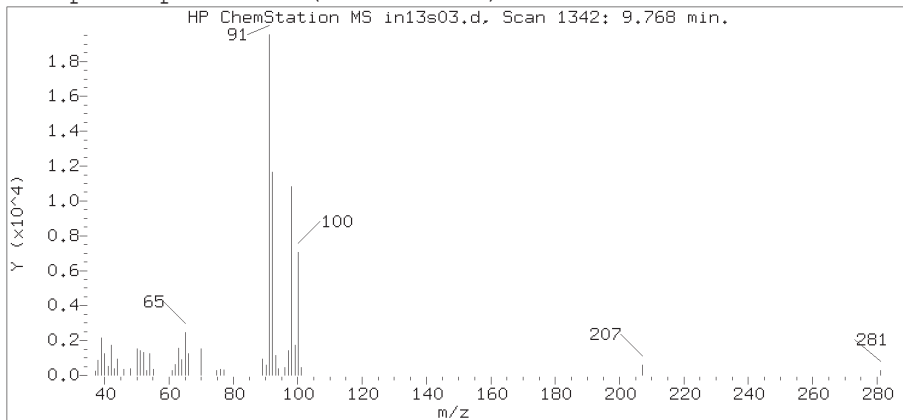
Reference Standard Spectrum for Toluene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

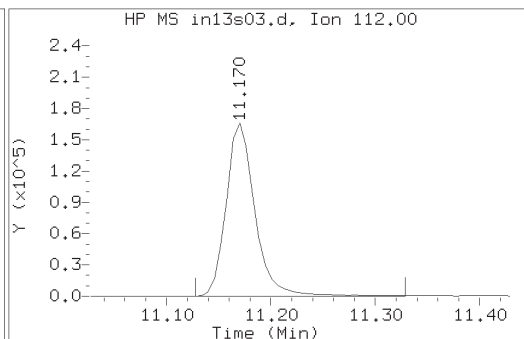
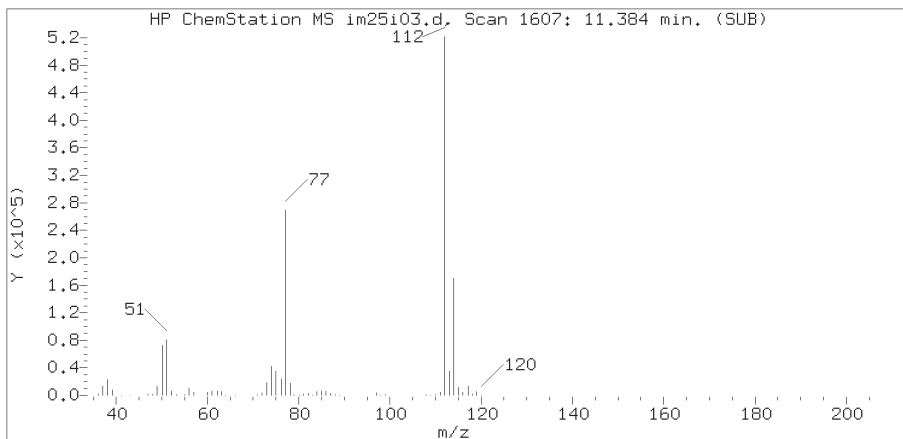
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 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

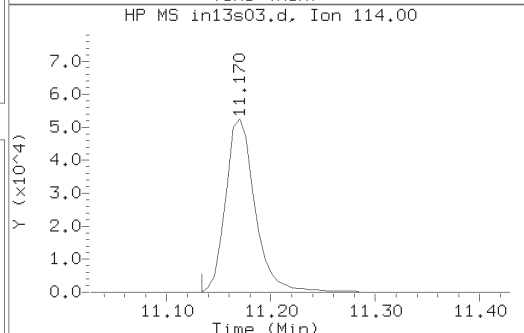
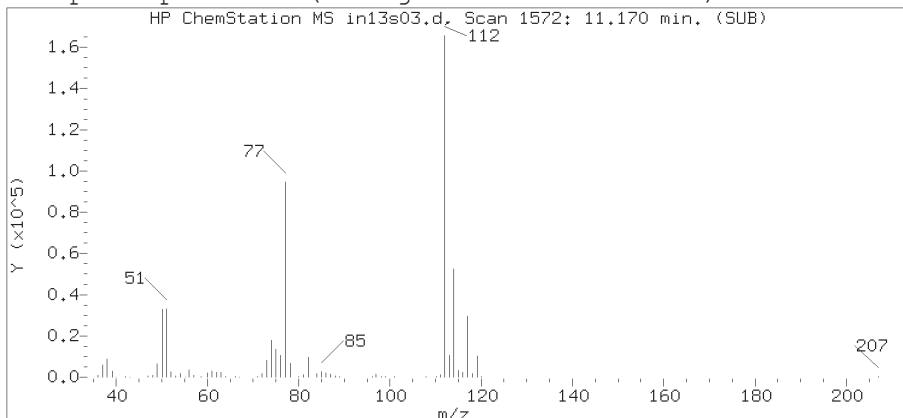
Lab Sample ID: 9881309

Compound Number : 83  
 Compound Name : Toluene  
 Scan Number : 1342  
 Retention Time (minutes): 9.768  
 Relative Retention Time :-0.00109  
 Quant Ion : 92.00  
 Area (flag) : 32713  
 On-Column Amount (ng) : 0.1816

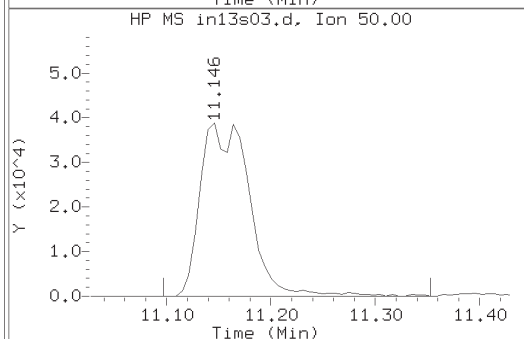
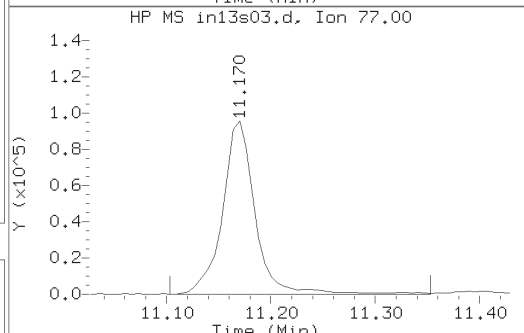
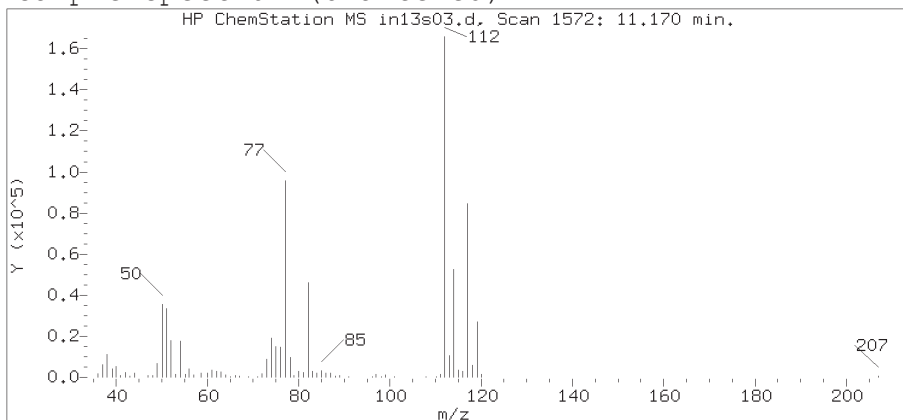
Reference Standard Spectrum for Chlorobenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

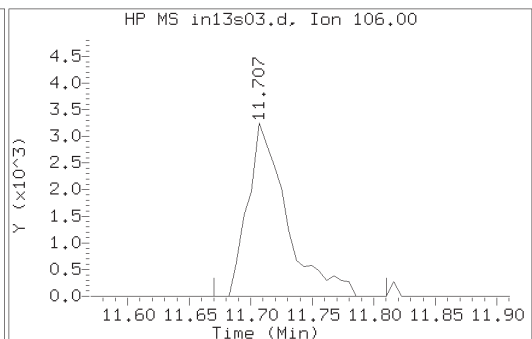
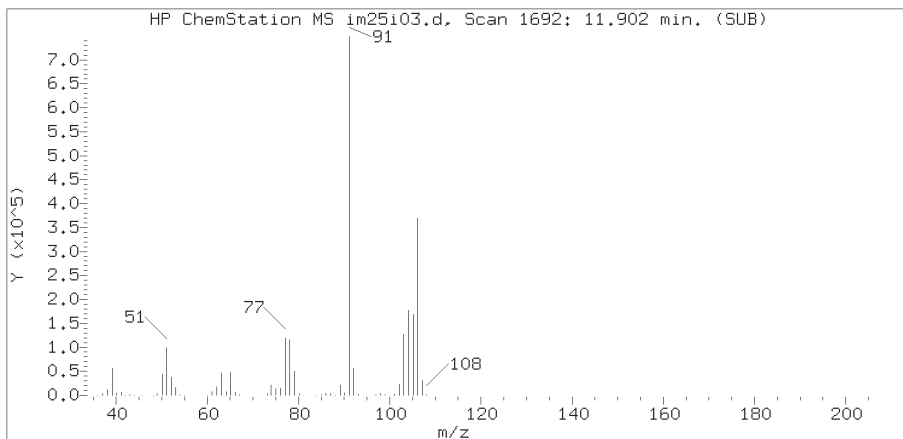
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

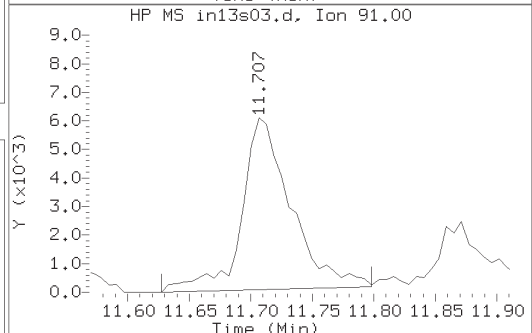
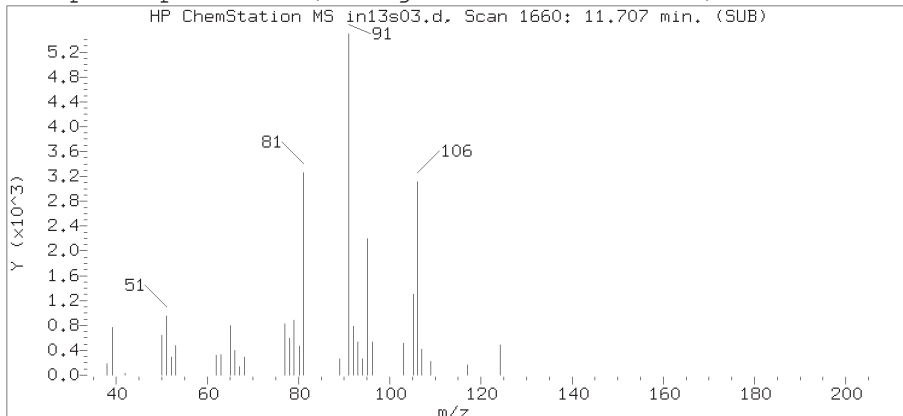
Lab Sample ID: 9881309

Compound Number : 98  
 Compound Name : Chlorobenzene  
 Scan Number : 1572  
 Retention Time (minutes): 11.170  
 Relative Retention Time :-0.00055  
 Quant Ion : 112.00  
 Area (flag) : 317939  
 On-Column Amount (ng) : 1.6162

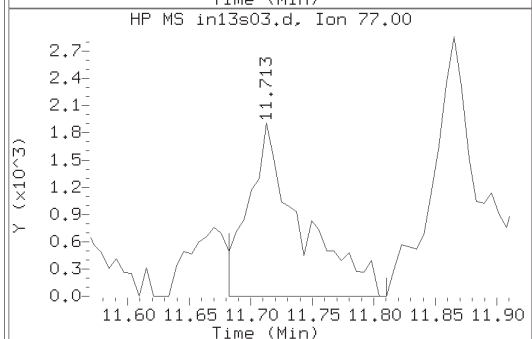
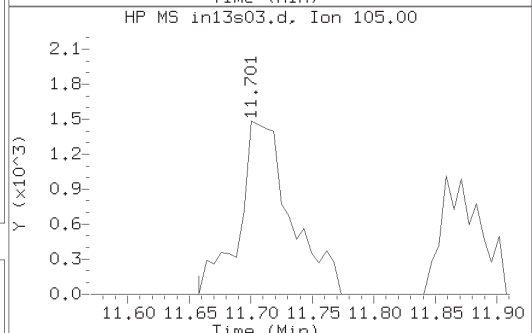
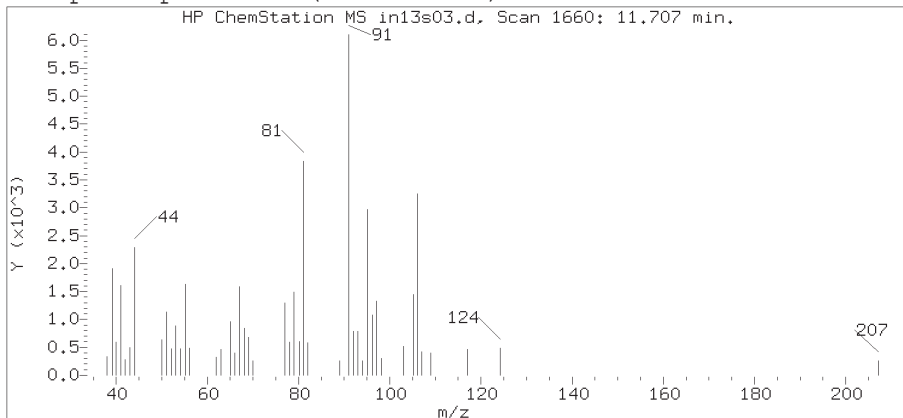
Reference Standard Spectrum for o-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

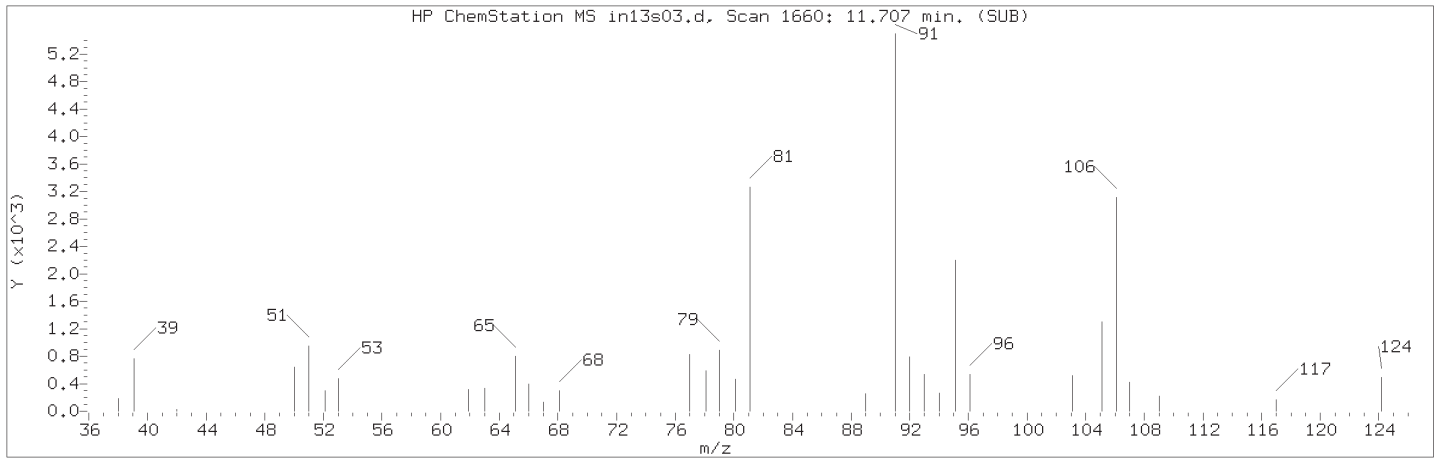
Sample Name: 15T-2

Lab Sample ID: 9881309

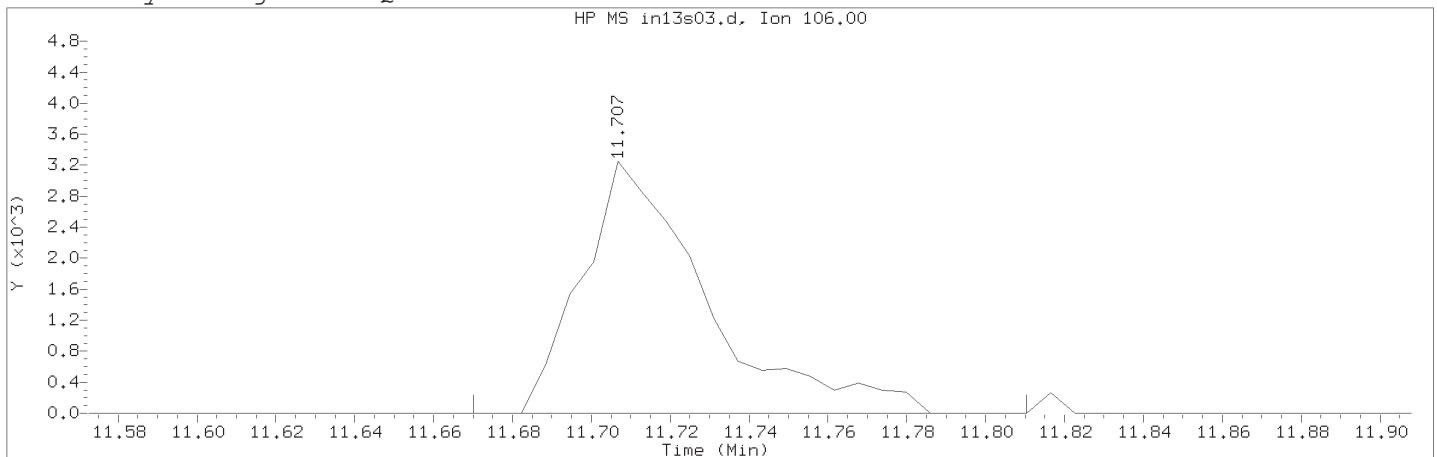
Compound Number : 104  
 Compound Name : o-Xylene  
 Scan Number : 1660  
 Retention Time (minutes): 11.707  
 Relative Retention Time :-0.00164  
 Quant Ion : 106.00  
 Area (flag) : 7130M  
 On-Column Amount (ng) : 0.0513



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 13:54                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 25789  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2    Lab Sample ID: 9881309

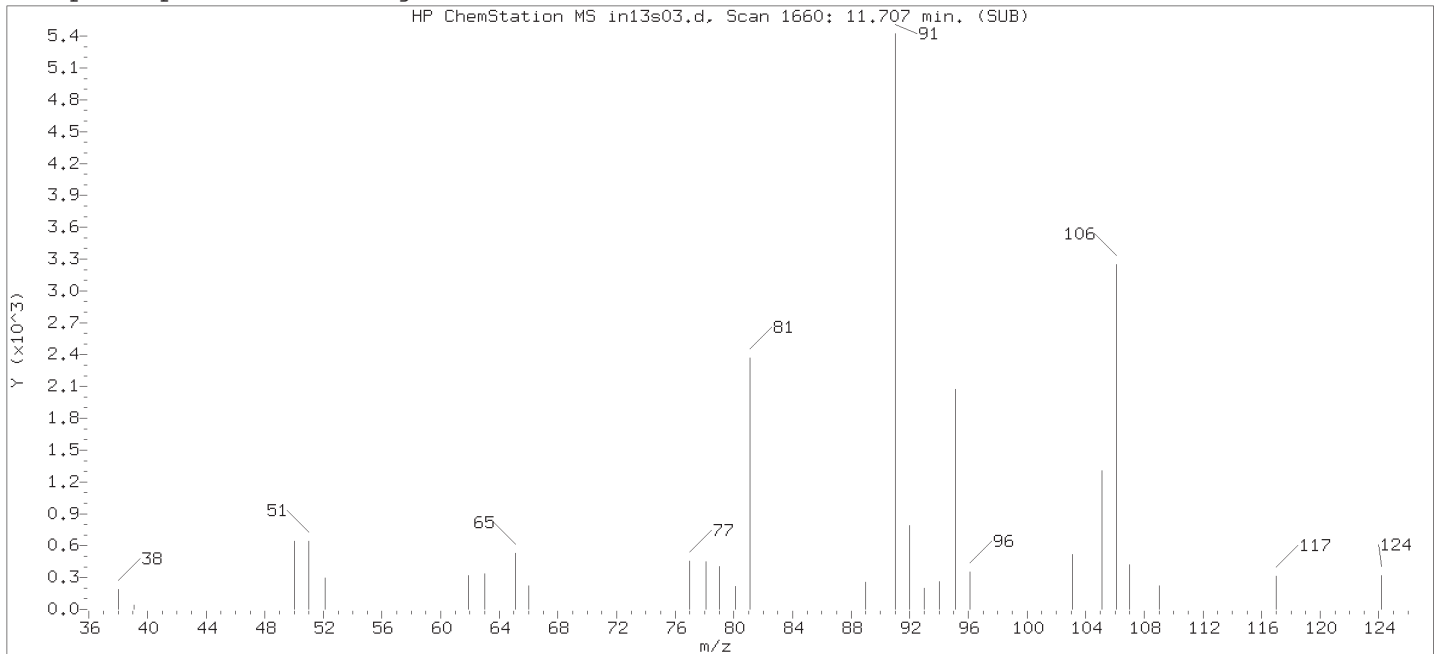
Compound Number                      : 104  
Compound Name                         : o-Xylene  
Scan Number                            : 1660  
Retention Time (minutes): 11.707  
Quant Ion                                : 106.00  
Area (flag)                             : 7130M  
On-Column Amount (ng)                : 0.0513  
Integration start scan                 : 1653                      Integration stop scan: 1676  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

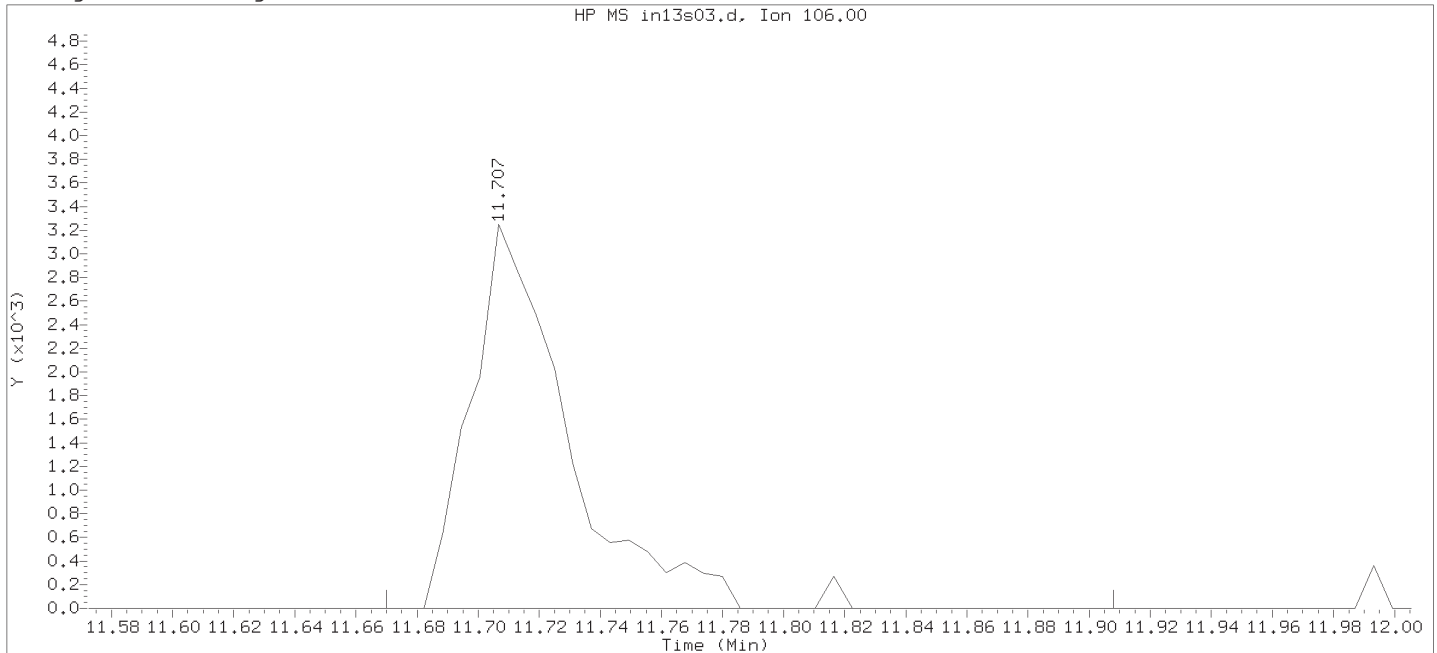
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:52.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

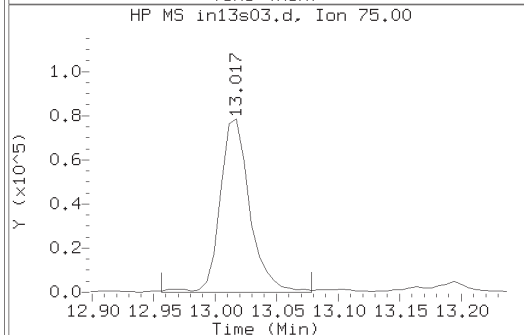
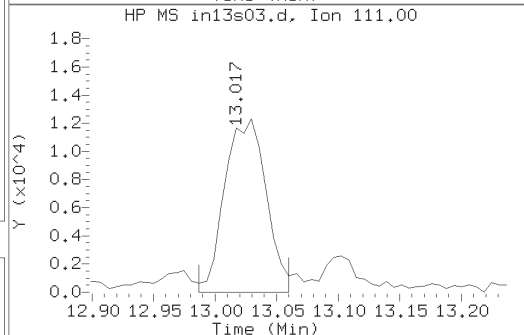
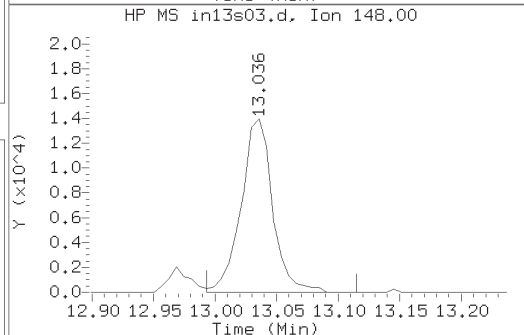
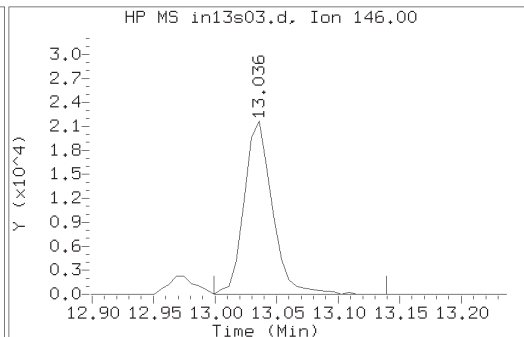
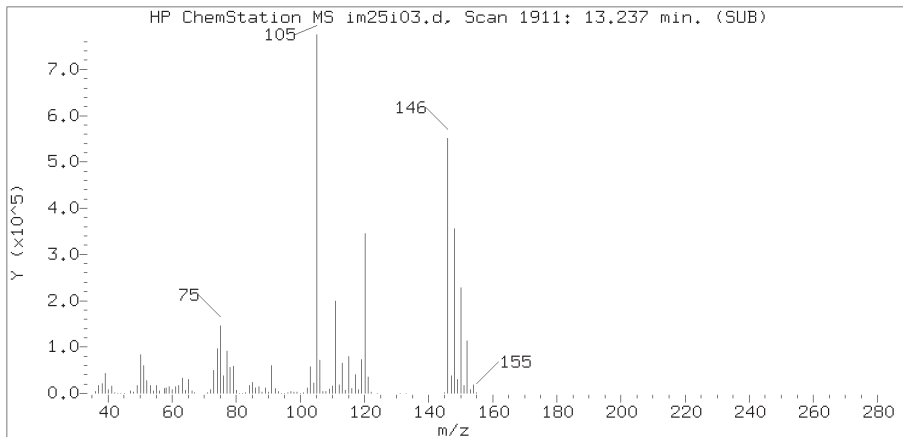
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 14:12 Automation

Sample Name: 15T-2

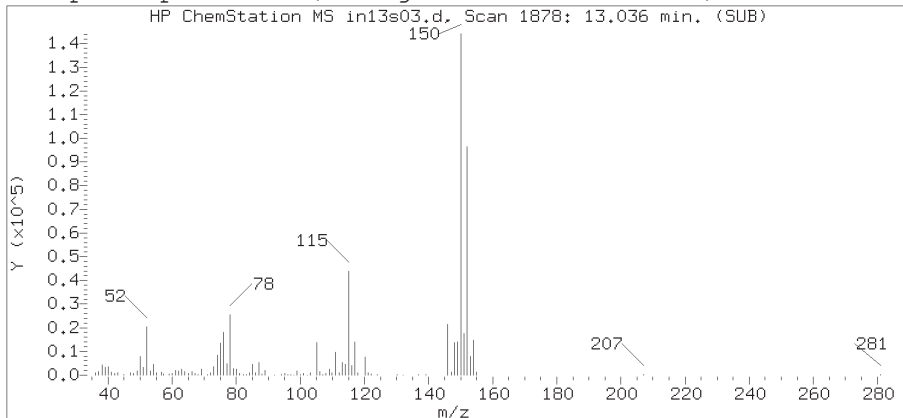
Lab Sample ID: 9881309

Compound Number : 104  
 Compound Name : o-Xylene  
 Scan Number : 1660  
 Retention Time (minutes): 11.707  
 Quant Ion : 106.00  
 Area : 7228  
 On-column Amount (ng) : 0.0520  
 Integration start scan : 1653 Integration stop scan: 1692  
 Y at integration start : 0 Y at integration end: 0

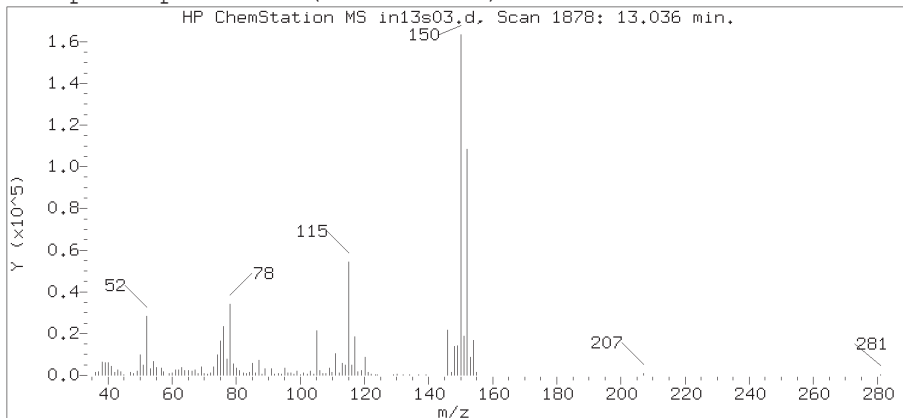
Reference Standard Spectrum for 1,4-Dichlorobenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
Analyst ID: JKH09052

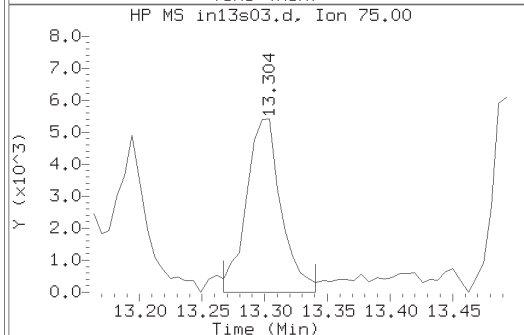
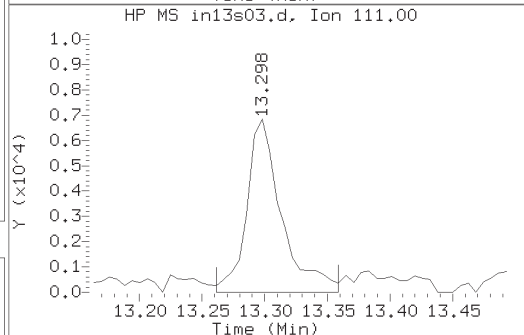
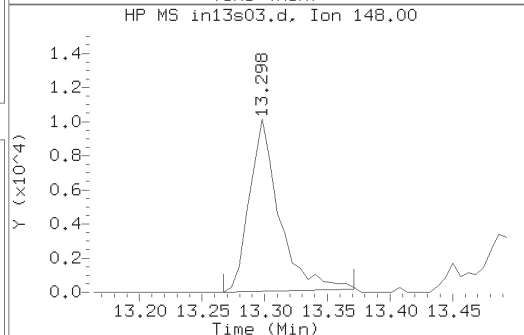
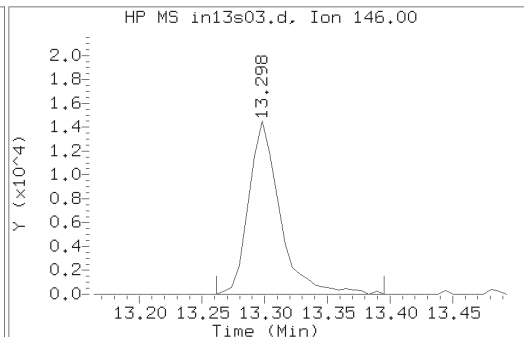
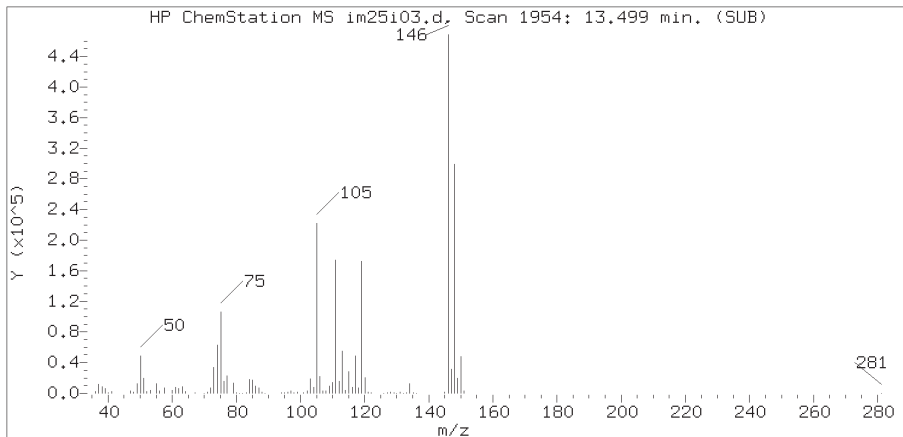
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

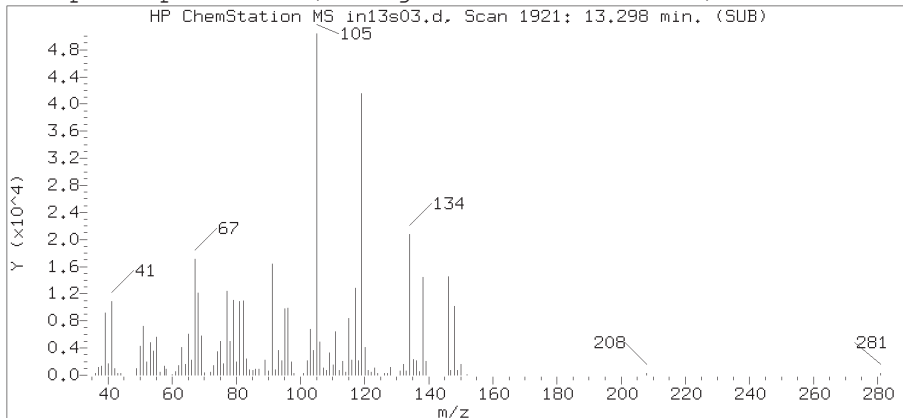
Lab Sample ID: 9881309

Compound Number : 134  
Compound Name : 1,4-Dichlorobenzene  
Scan Number : 1878  
Retention Time (minutes): 13.036  
Relative Retention Time : 0.00000  
Quant Ion : 146.00  
Area (flag) : 34442  
On-Column Amount (ng) : 0.1798

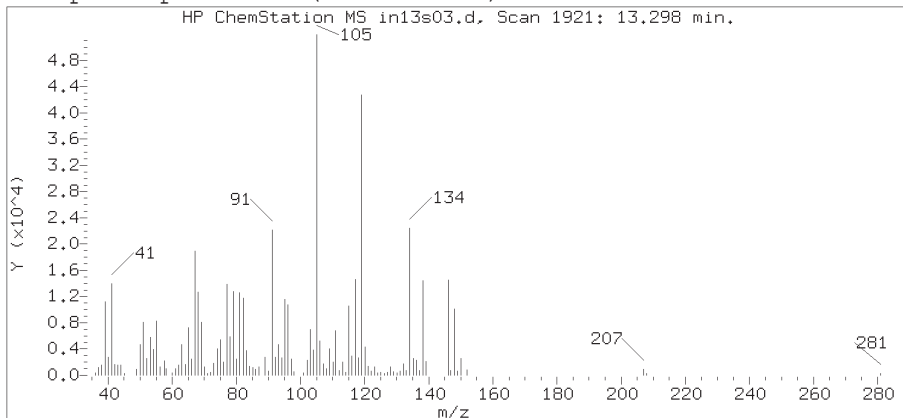
Reference Standard Spectrum for 1,2-Dichlorobenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s03.d  
 Injection date and time: 13-NOV-2018 13:54

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:16 jgc14951

Sample Name: 15T-2

Lab Sample ID: 9881309

Compound Number : 139  
 Compound Name : 1,2-Dichlorobenzene  
 Scan Number : 1921  
 Retention Time (minutes): 13.298  
 Relative Retention Time :-0.00046  
 Quant Ion : 146.00  
 Area (flag) : 25241  
 On-Column Amount (ng) : 0.1454

15T-3

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

9881310

Data file: /chem2/HP19930.i/18nov13a.b/in13s04.d Injection date and time: 13-NOV-2018 14:16  
 Data file Sample Info. Line: 15T-3;9881310;1;0;;TID15;DOD25;;in13b01; Instrument ID: HP19930.i Batch: T183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: 038A Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

**Analysis Comments: 9274 9367 9179**

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.190(-0.018)	427	65	110952 ( -39)	50.00	
63) Fluorobenzene	7.671( 0.000)	998	96	2400274 ( 13)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1882705 ( 10)	10.00	
133) 1,4-Dichlorobenzene-d4	13.017(-0.006)	1875	152	1125194 ( 14)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.781(-0.001)	113	653840	10.436	104%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.238( 0.000)	102	128781	10.825	108%		81 - 118
82) Toluene-d8	(3)	9.683( 0.000)	98	2330881	9.911	99%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.139( 0.000)	95	968237	10.459	105%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)			Not Detected					0.05	0.5
2) Chloromethane	(2)	2.111( 0.000)	50	11555	0.108	0.11		J	0.06	0.5
5) Vinyl Chloride	(2)			Not Detected					0.1	0.5
7) Bromomethane	(2)			Not Detected					0.07	0.5
8) Chloroethane	(2)			Not Detected					0.07	0.5
10) Trichlorofluoromethane	(2)			Not Detected					0.05	0.5
15) 1,1-Dichloroethene	(2)			Not Detected					0.06	0.5
16) Freon 113	(2)			Not Detected					0.06	0.5
14) Acetone	(1)	3.562(-0.006)	43	21960	3.387	3.39		J	0.9	5
18) Carbon Disulfide	(2)			Not Detected					0.06	1
21) Methyl Acetate	(1)			Not Detected					0.1	1
23) Methylene Chloride	(2)			Not Detected					0.07	0.5
31) trans-1,2-Dichloroethene	(2)			Not Detected					0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.05	0.5
33) 1,1-Dichloroethane	(2)			Not Detected					0.07	0.5
39) cis-1,2-Dichloroethene	(2)	6.104(-0.003)	96	7302	0.093	0.09		J	0.05	0.5
38) 2-Butanone	(1)			Not Detected					0.6	5
49) Chloroform	(2)			Not Detected					0.09	0.5
51) 1,1,1-Trichloroethane	(2)			Not Detected					0.06	0.5
52) Cyclohexane	(2)	6.890(-0.000)	56	10407	0.075	0.07		J	0.05	0.5
54) Carbon Tetrachloride	(2)			Not Detected					0.07	0.5
58) Benzene	(2)	7.268(-0.000)	78	39287	0.135	0.13		J	0.05	0.5
59) 1,2-Dichloroethane	(2)			Not Detected					0.05	0.5
67) Trichloroethene	(2)			Not Detected					0.06	0.5
69) Methylcyclohexane	(2)	8.469(-0.001)	83	11349	0.079	0.08		J	0.05	0.5
70) 1,2-Dichloropropane	(2)			Not Detected					0.06	0.5
74) Bromodichloromethane	(2)			Not Detected					0.05	0.5
80) cis-1,3-Dichloropropene	(2)			Not Detected					0.05	0.5
81) 4-Methyl-2-Pentanone	(1)			Not Detected					0.7	5
83) Toluene	(3)	9.768(-0.001)	92	35692	0.193	0.19		J	0.07	0.5

15T-3

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles 9881310

Data file: /chem2/HP19930.i/18nov13a.b/in13s04.d Injection date and time: 13-NOV-2018 14:16  
 Data file Sample Info. Line: 15T-3;9881310;1;0;;TID15;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: 038A Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

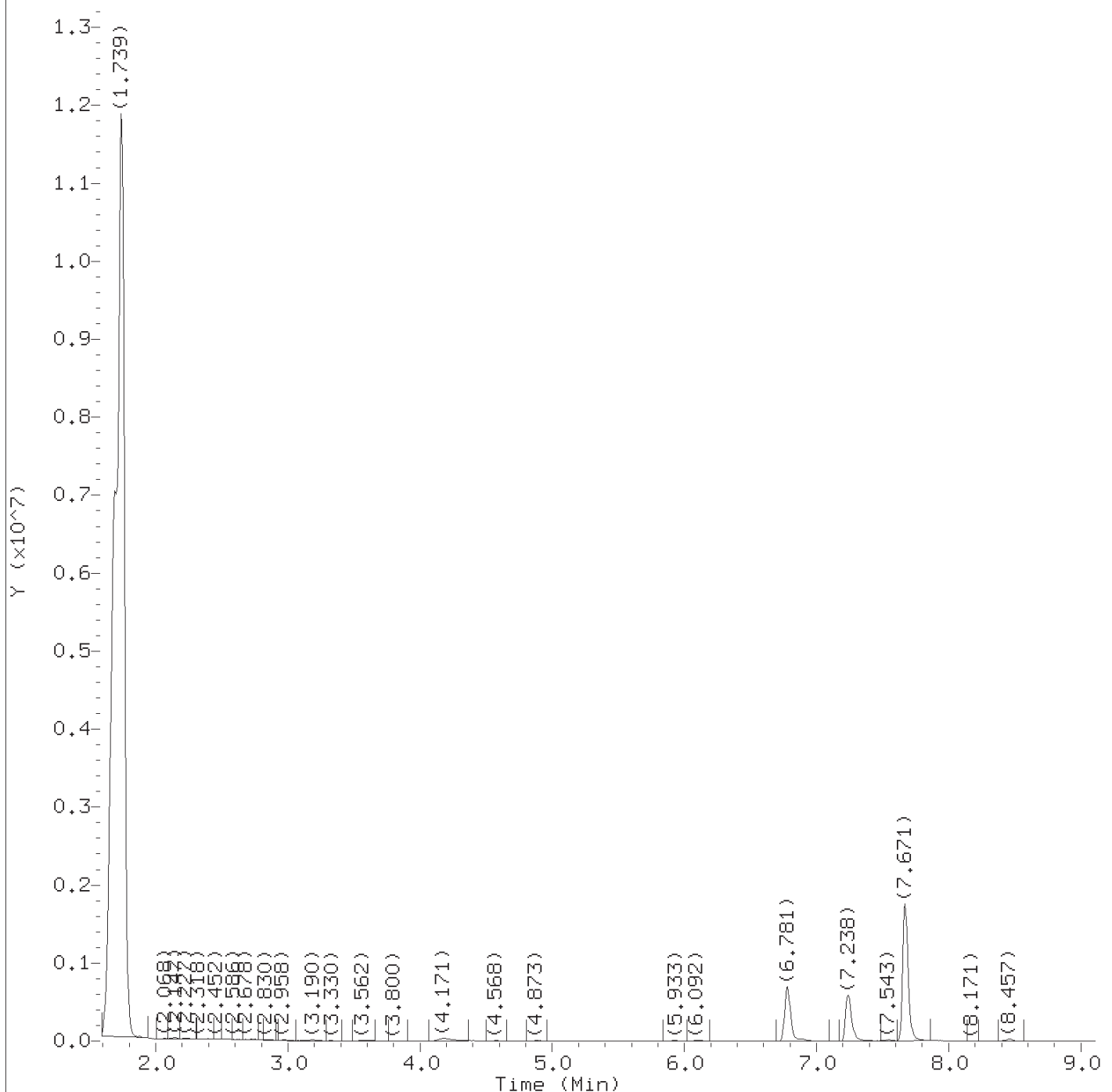
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
									Limit	LOQ
84) trans-1,3-Dichloropropene	(3)			Not Detected					0.06	0.5
88) 1,1,2-Trichloroethane	(3)			Not Detected					0.06	0.5
89) Tetrachloroethene	(3)			Not Detected					0.06	0.5
91) 2-Hexanone	(1)			Not Detected					0.6	5
93) Dibromochloromethane	(3)			Not Detected					0.07	0.5
95) 1,2-Dibromoethane	(3)			Not Detected					0.06	0.5
98) Chlorobenzene	(3)	11.170 (-0.000)	112	326708	1.615	1.62			0.06	0.5
100) Ethylbenzene	(3)			Not Detected					0.06	0.5
101) m+p-Xylene	(3)			Not Detected					0.1	0.5
104) o-Xylene	(3)	11.706 (-0.001)	106	7367M	0.052	0.05		J	0.05	0.5
105) Xylene (Total)	(3)		106	7367	0.052	0.05		J	0.1	0.5
106) Styrene	(3)			Not Detected					0.05	0.5
107) Bromoform	(3)			Not Detected					0.3	1
108) Isopropylbenzene	(3)			Not Detected					0.05	0.5
112) Cyclohexanone	(1)			Not Detected					2	25
113) 1,1,2,2-Tetrachloroethane	(4)			Not Detected					0.07	0.5
131) 1,3-Dichlorobenzene	(4)			Not Detected					0.06	0.5
134) 1,4-Dichlorobenzene	(4)	13.036 ( 0.000)	146	35909	0.183	0.18		J	0.07	0.5
139) 1,2-Dichlorobenzene	(4)	13.298 (-0.000)	146	25741	0.145	0.15		J	0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)			Not Detected					0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)			Not Detected					0.06	0.5

M = Compound was manually integrated.

Total number of targets = 51

Digitally signed by Jennifer K. Howe on 11/16/2018 at 13:53. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16. PARALLAX ID: kel01973



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789

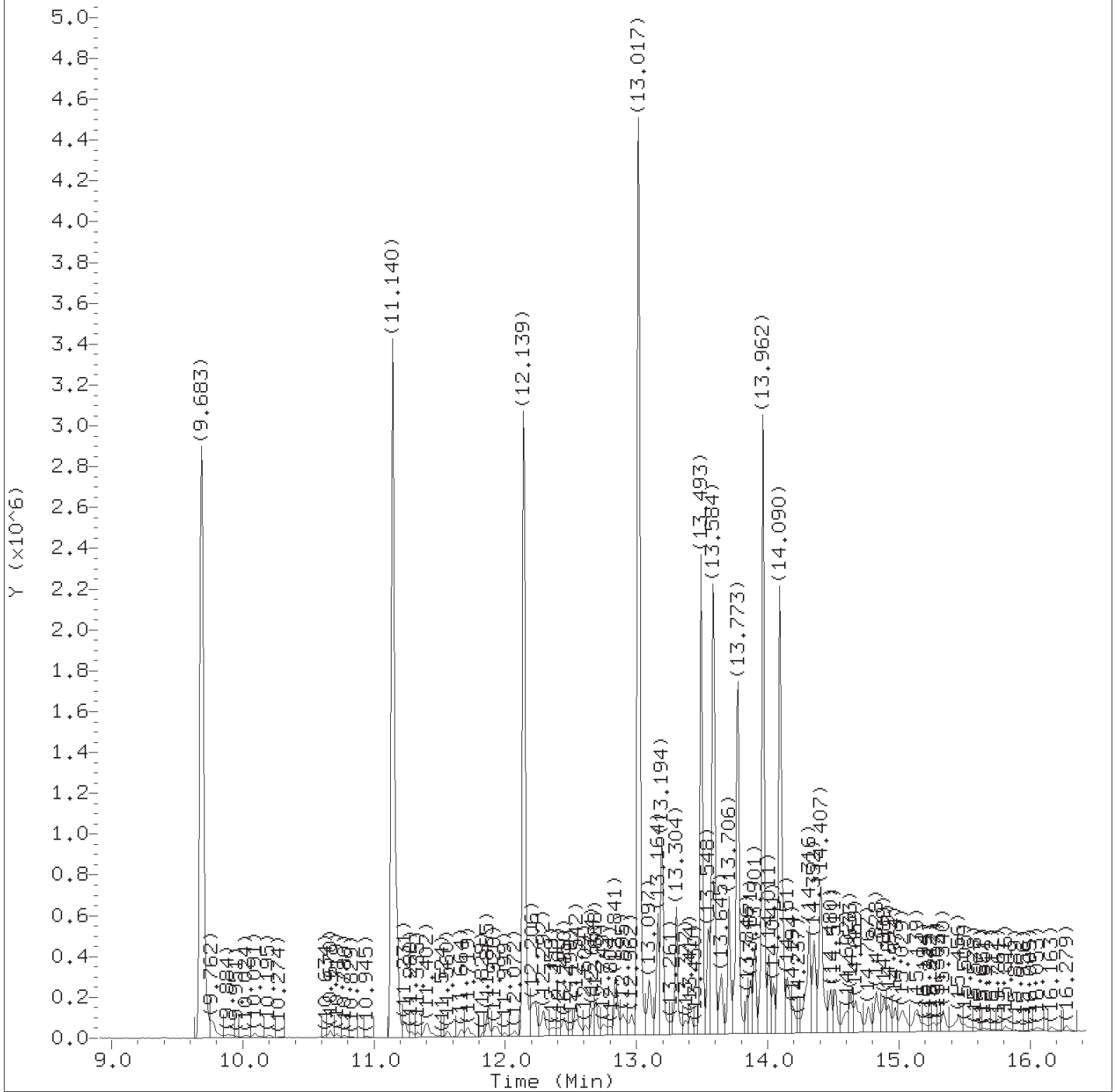
Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

Lab Sample ID: 9881310

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:53.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789

Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

Lab Sample ID: 9881310

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:53.

Target 3.5 esignature user ID: jkh09052



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sublist used: 25789

Sample Name: 15T-3

Lab Sample ID: 9881310

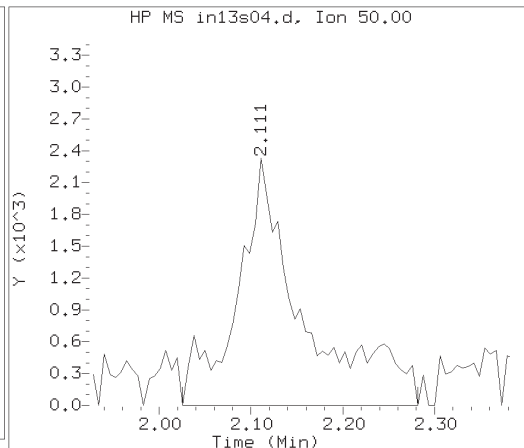
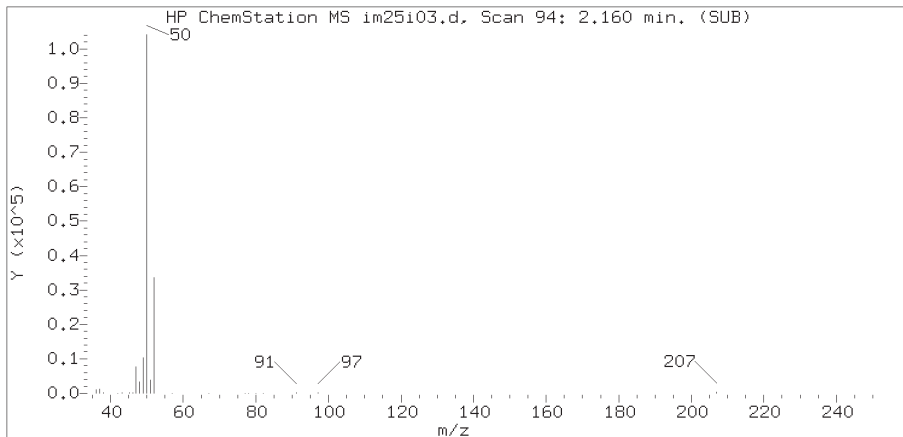
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Chloromethane	(2)	2.111	50	11555	0.108
14) Acetone	(1)	3.562	43	21960	3.387
26) *t-Butyl Alcohol-d10	(1)	4.190	65	110952	50.000
39) cis-1,2-Dichloroethene	(2)	6.104	96	7302	0.093
50) \$Dibromofluoromethane	(2)	6.781	113	653840	10.436
52) Cyclohexane	(2)	6.890	56	10407	0.075
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	128781	10.825
58) Benzene	(2)	7.268	78	39287	0.135
63) *Fluorobenzene	(2)	7.671	96	2400274	10.000
69) Methylcyclohexane	(2)	8.469	83	11349	0.079
82) \$Toluene-d8	(3)	9.683	98	2330881	9.911
83) Toluene	(3)	9.768	92	35692	0.193
97) *Chlorobenzene-d5	(3)	11.140	117	1882705	10.000
98) Chlorobenzene	(3)	11.170	112	326708	1.615
104) o-Xylene	(3)	11.707	106	7367M	0.052
105) Xylene (Total)	(3)		106	7367	0.052
111) \$4-Bromofluorobenzene	(3)	12.139	95	968237	10.459
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	1125194	10.000
134) 1,4-Dichlorobenzene	(4)	13.036	146	35909	0.183
139) 1,2-Dichlorobenzene	(4)	13.298	146	25741	0.145

M = Compound was manually integrated.

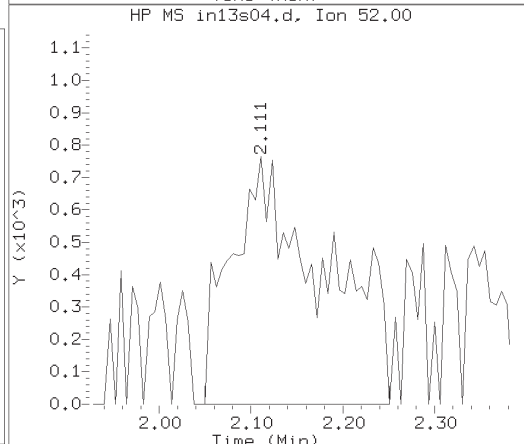
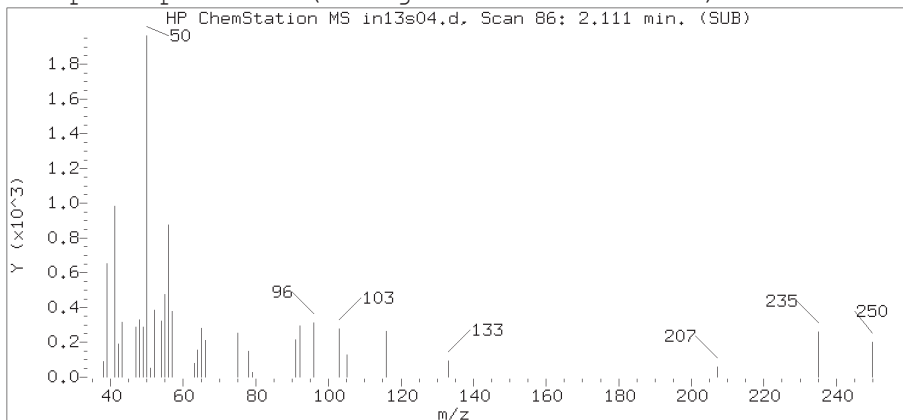
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

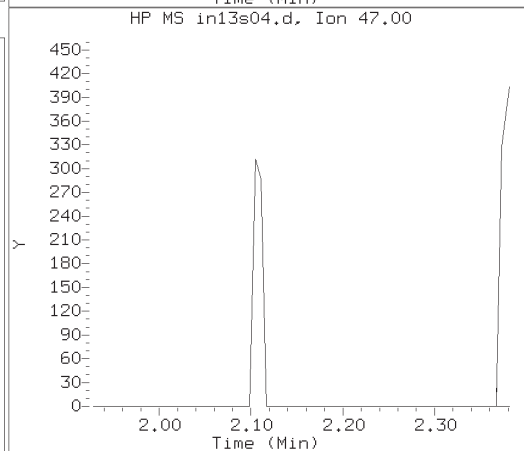
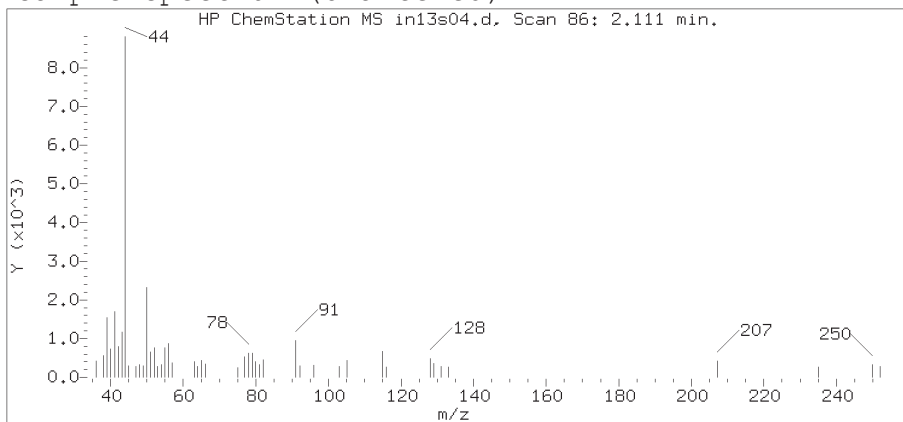
Reference Standard Spectrum for Chloromethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

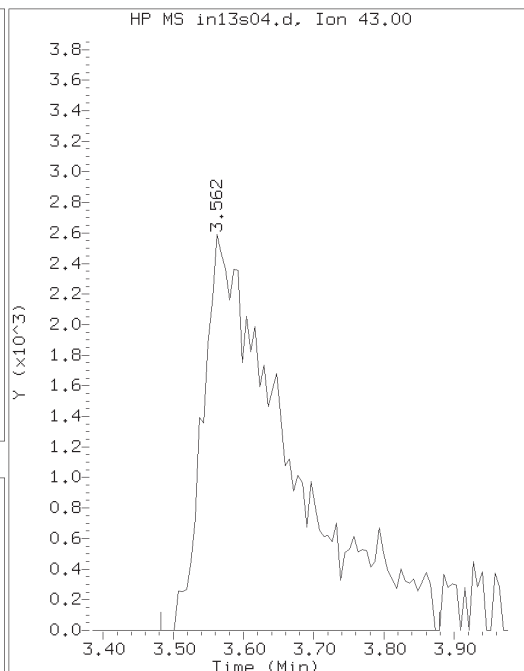
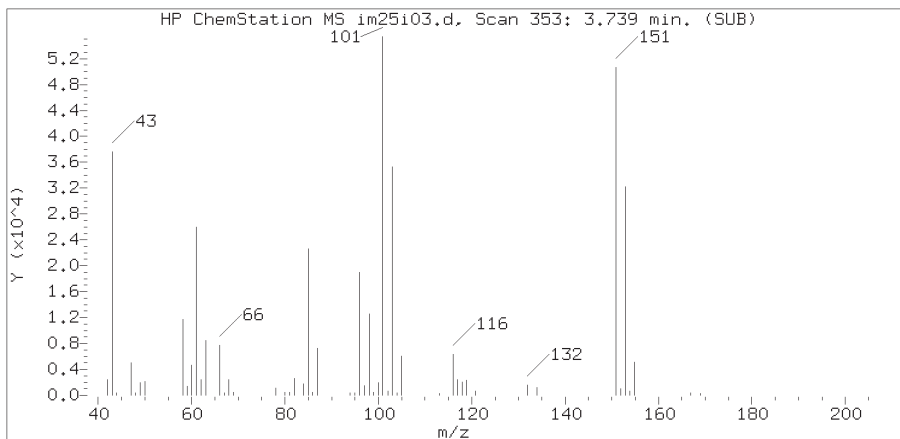
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 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

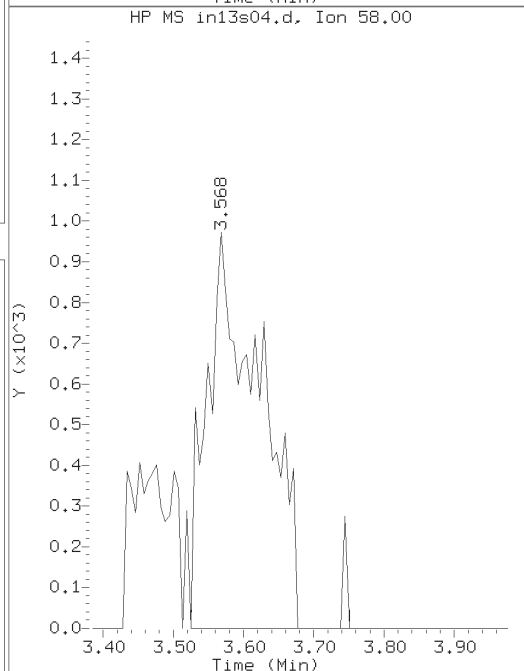
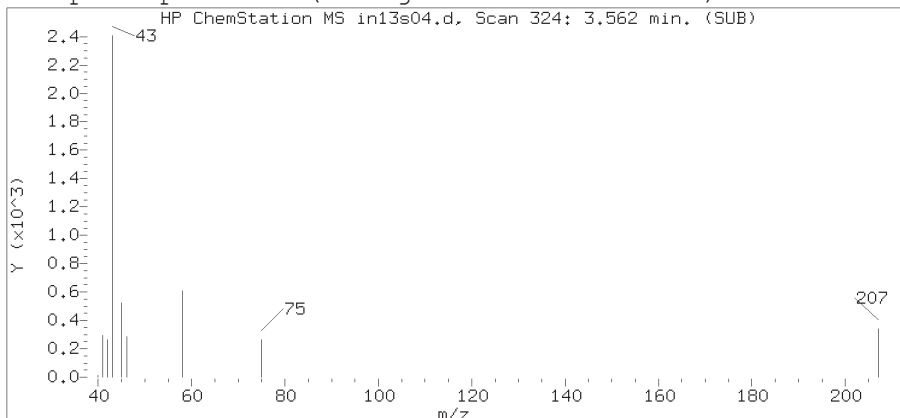
Lab Sample ID: 9881310

Compound Number : 2  
 Compound Name : Chloromethane  
 Scan Number : 86  
 Retention Time (minutes): 2.111  
 Relative Retention Time : 0.00082  
 Quant Ion : 50.00  
 Area (flag) : 11555  
 On-Column Amount (ng) : 0.1080

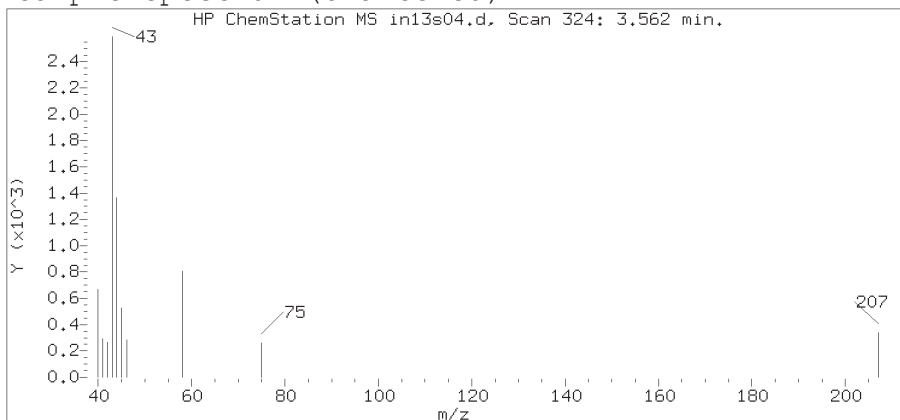
Reference Standard Spectrum for Acetone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

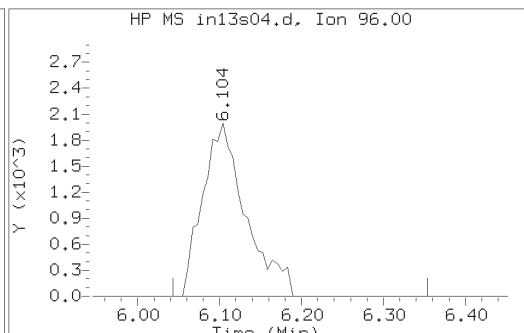
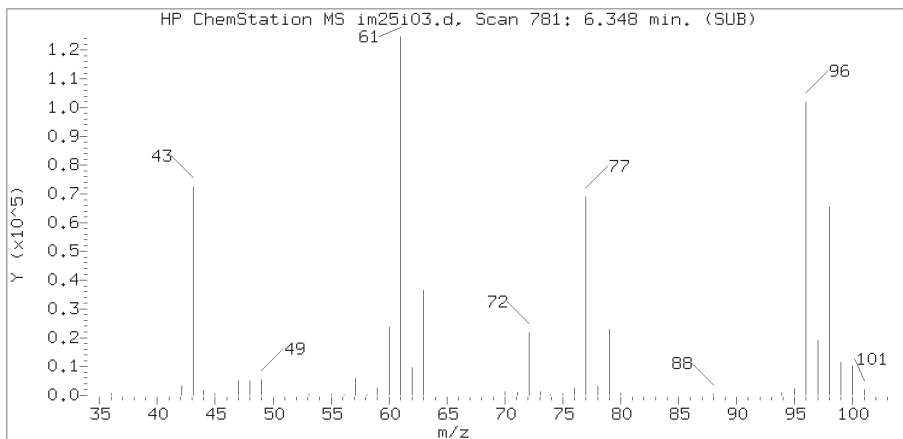
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 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

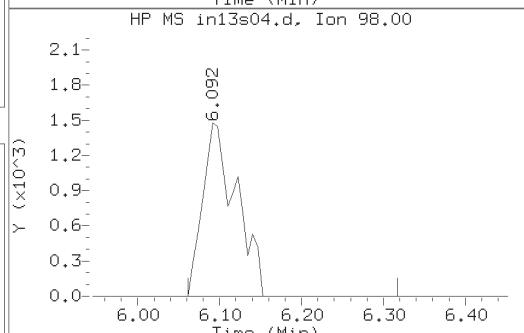
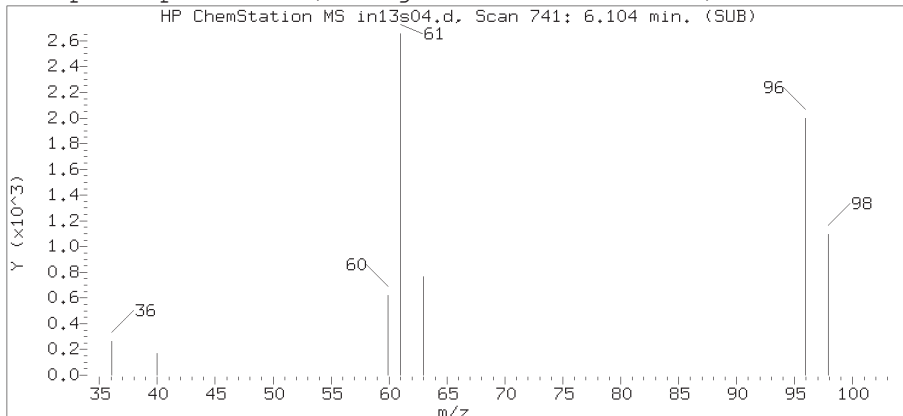
Lab Sample ID: 9881310

Compound Number : 14  
 Compound Name : Acetone  
 Scan Number : 324  
 Retention Time (minutes): 3.562  
 Relative Retention Time :-0.00649  
 Quant Ion : 43.00  
 Area (flag) : 21960  
 On-Column Amount (ng) : 3.3871

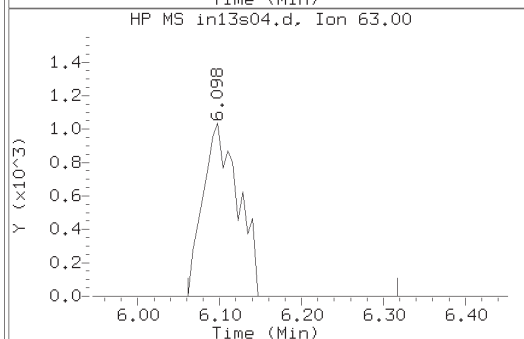
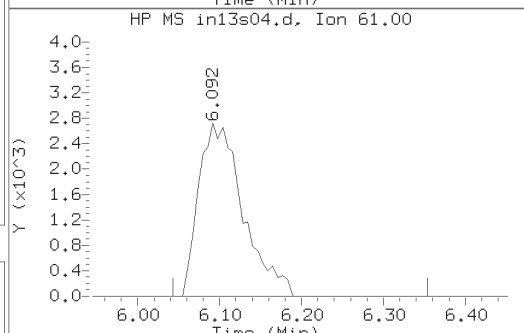
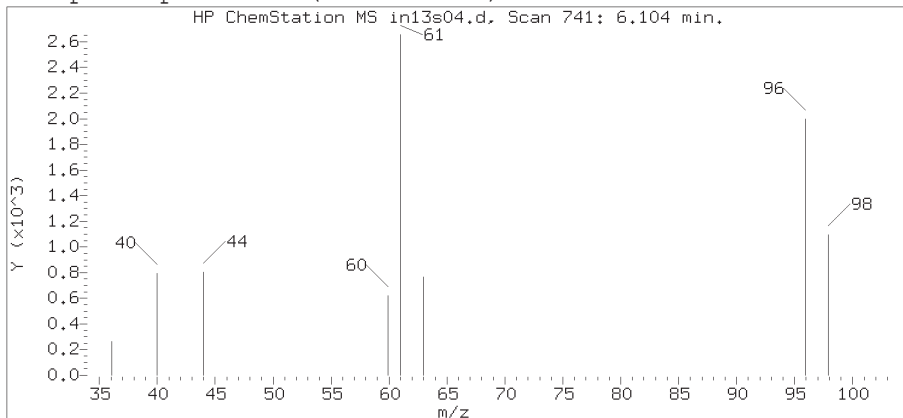
Reference Standard Spectrum for cis-1,2-Dichloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
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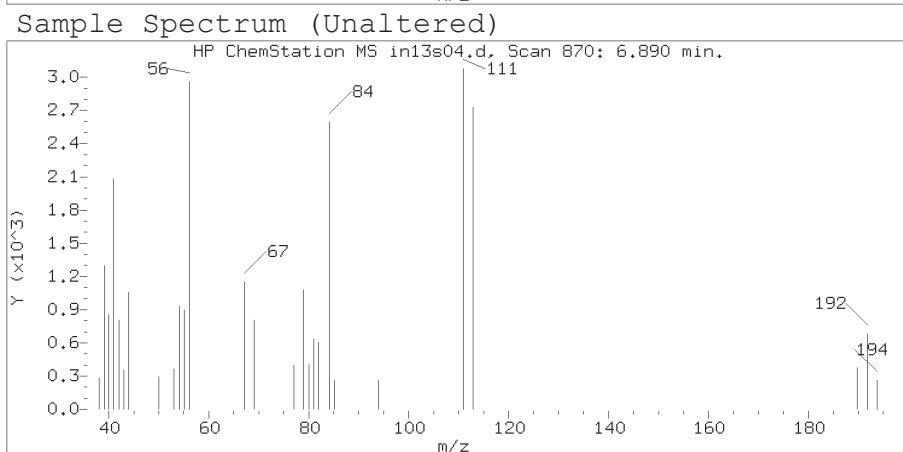
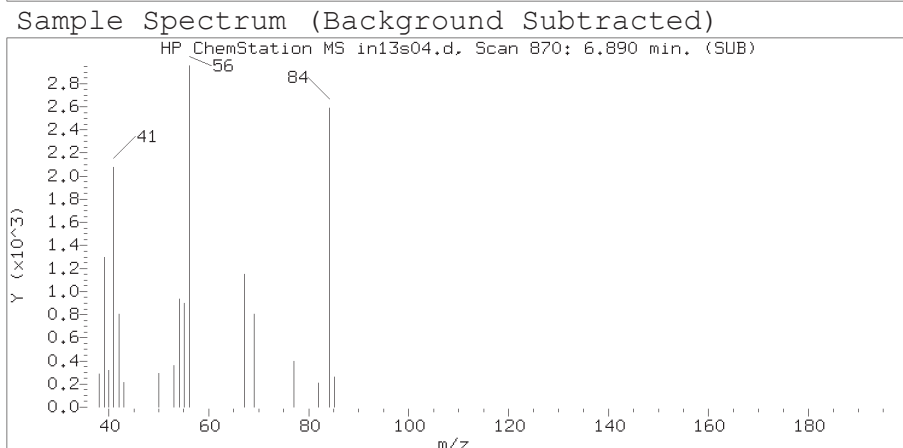
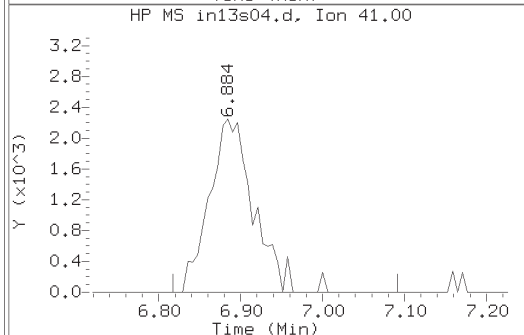
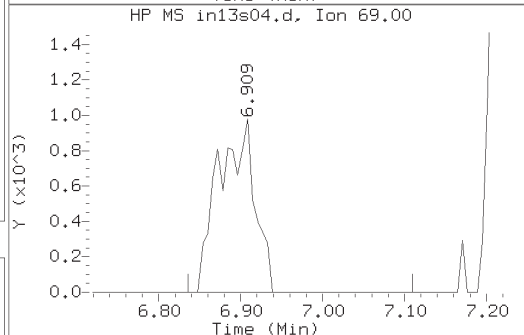
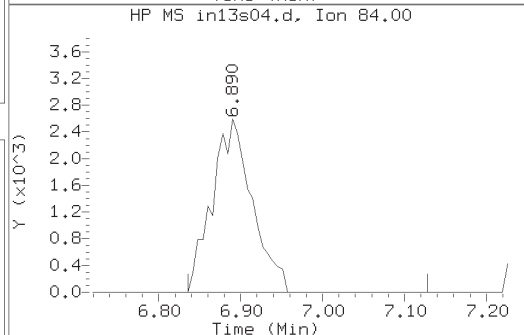
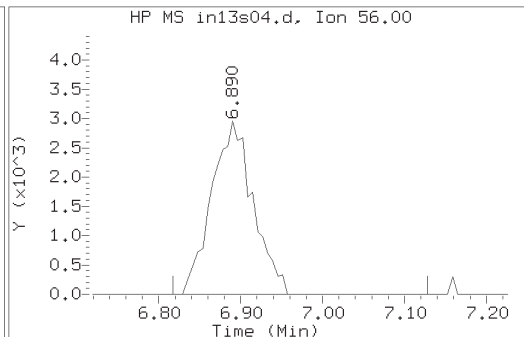
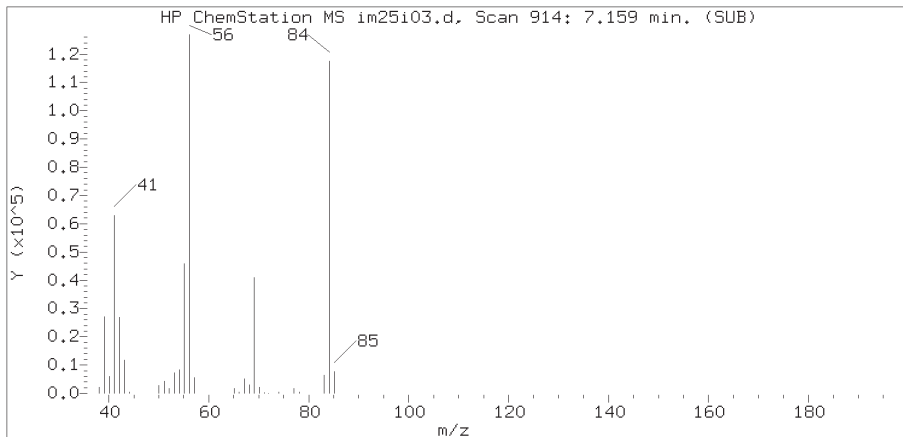
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 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

Lab Sample ID: 9881310

Compound Number : 39  
 Compound Name : cis-1,2-Dichloroethene  
 Scan Number : 741  
 Retention Time (minutes): 6.104  
 Relative Retention Time :-0.00397  
 Quant Ion : 96.00  
 Area (flag) : 7302  
 On-Column Amount (ng) : 0.0925

Reference Standard Spectrum for Cyclohexane



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

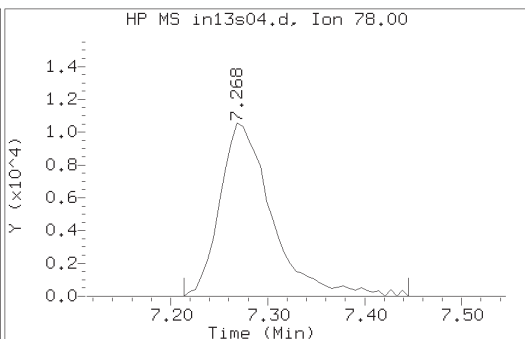
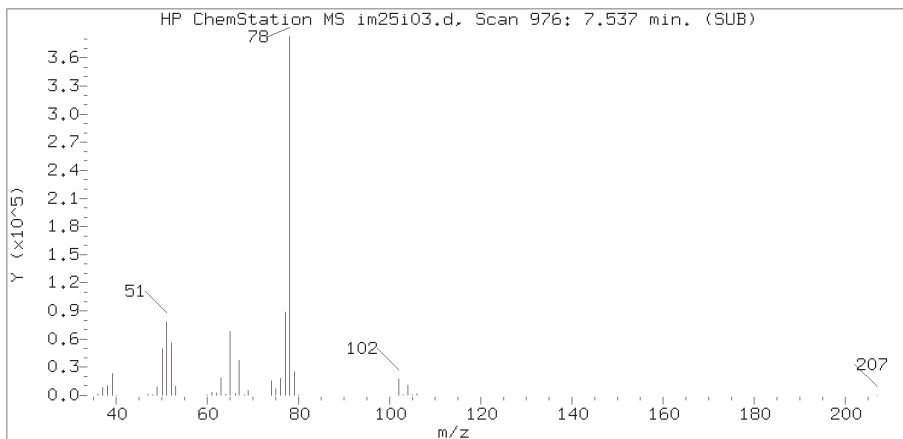
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Sample Name: 15T-3

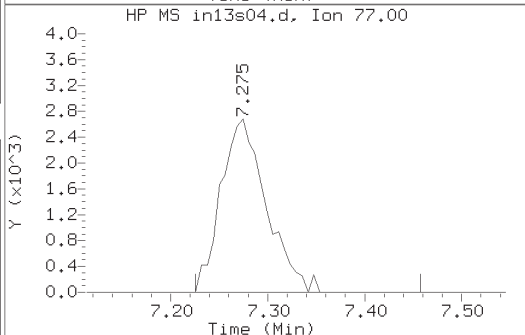
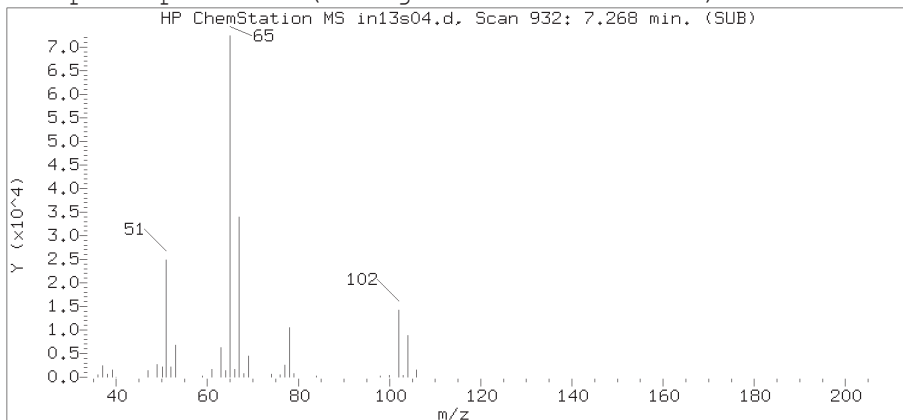
Lab Sample ID: 9881310

Compound Number : 52  
 Compound Name : Cyclohexane  
 Scan Number : 870  
 Retention Time (minutes): 6.890  
 Relative Retention Time :-0.00079  
 Quant Ion : 56.00  
 Area (flag) : 10407  
 On-Column Amount (ng) : 0.0746

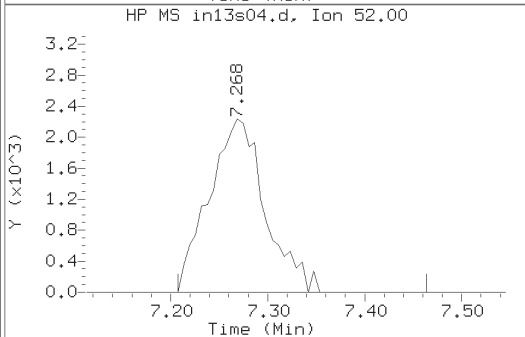
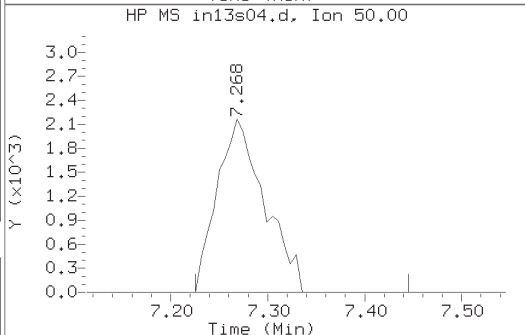
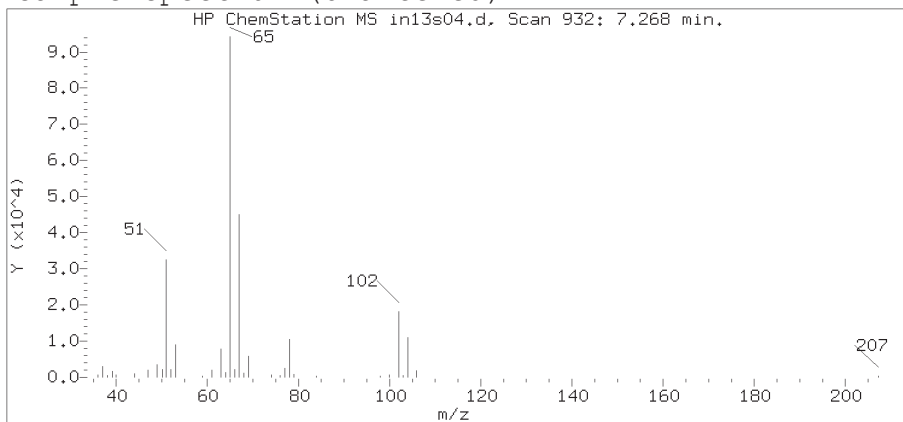
Reference Standard Spectrum for Benzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

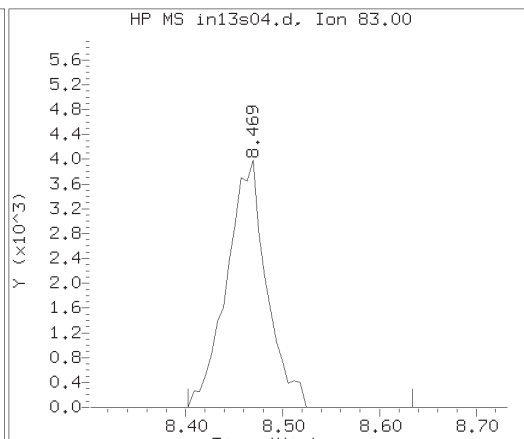
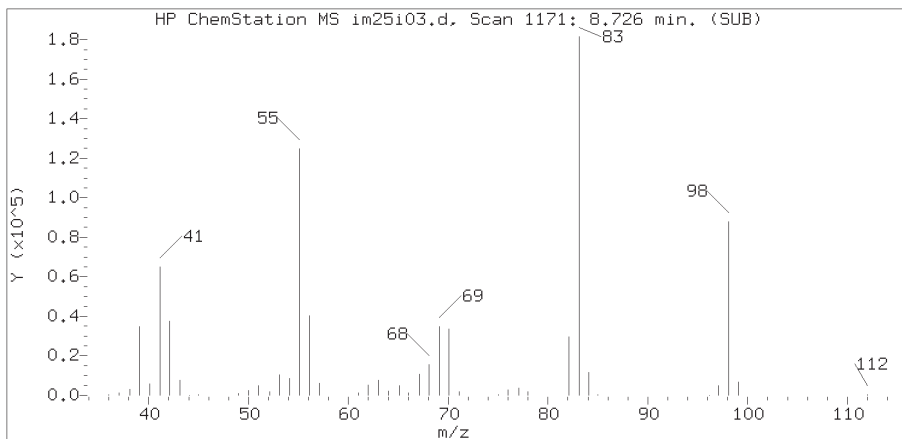
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 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

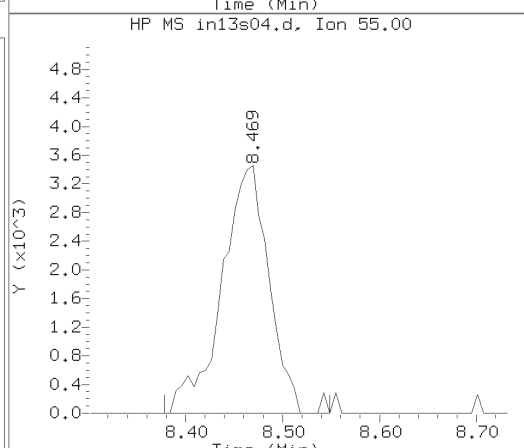
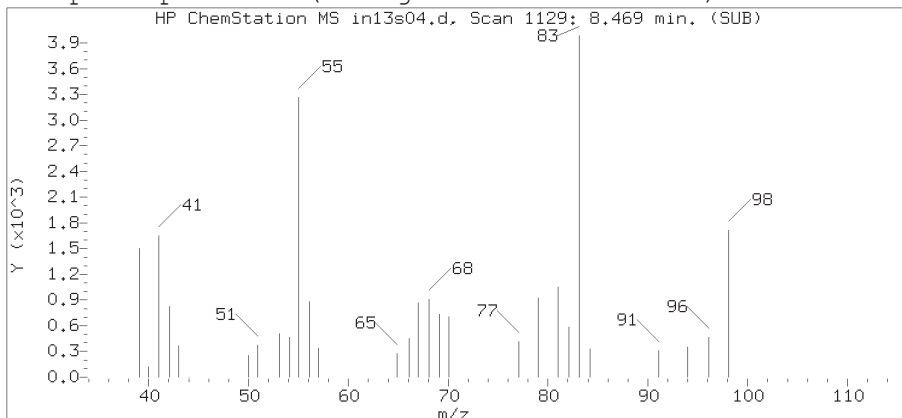
Lab Sample ID: 9881310

Compound Number : 58  
 Compound Name : Benzene  
 Scan Number : 932  
 Retention Time (minutes): 7.268  
 Relative Retention Time :-0.00079  
 Quant Ion : 78.00  
 Area (flag) : 39287  
 On-Column Amount (ng) : 0.1348

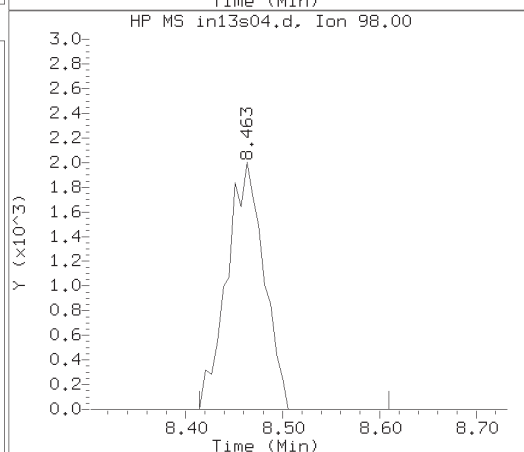
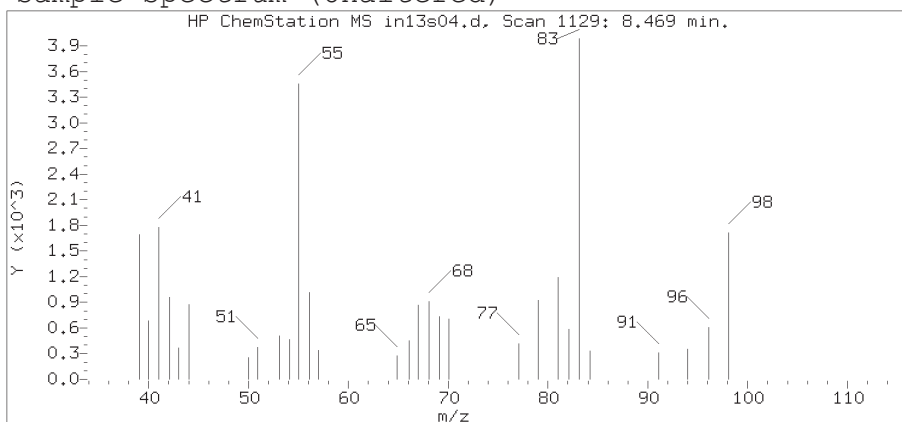
Reference Standard Spectrum for Methylcyclohexane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

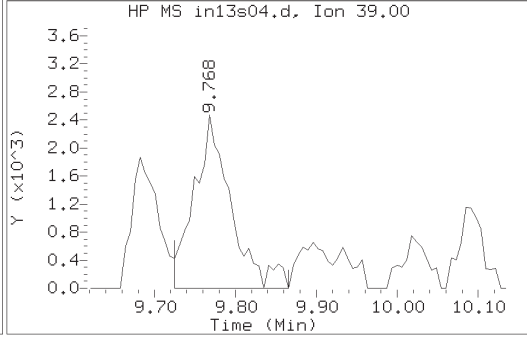
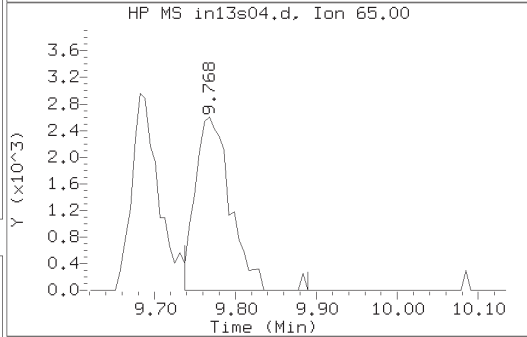
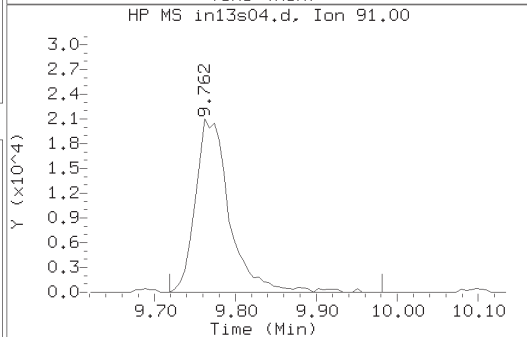
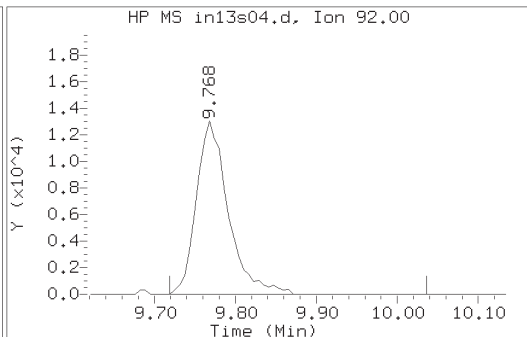
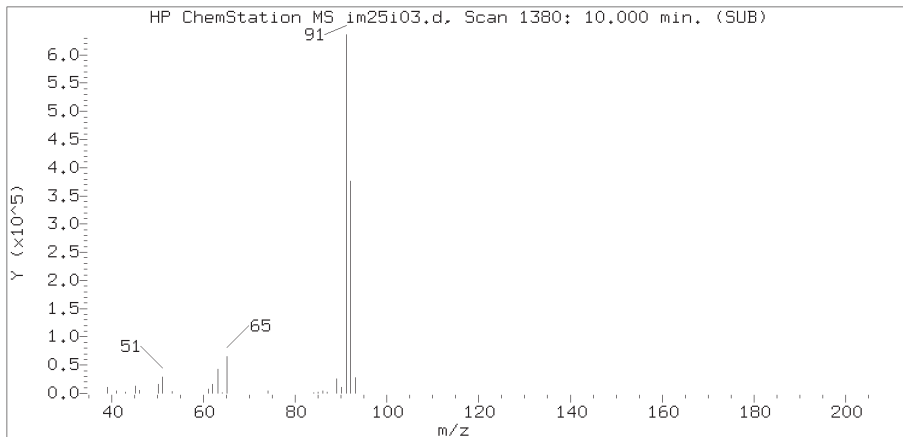
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 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

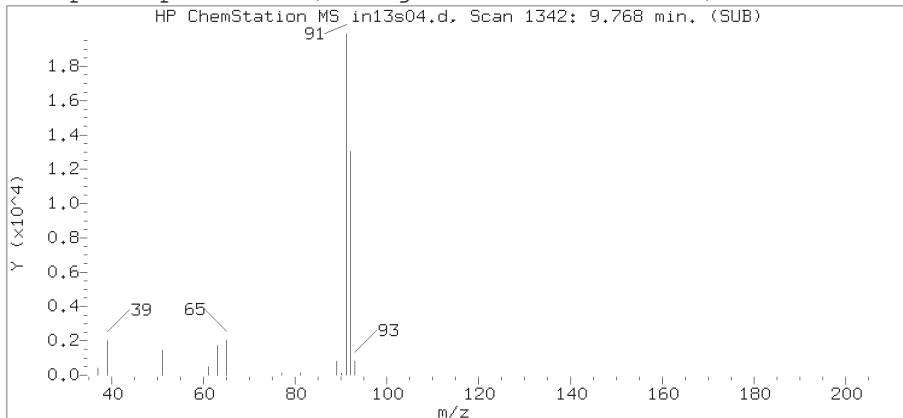
Lab Sample ID: 9881310

Compound Number : 69  
 Compound Name : Methylcyclohexane  
 Scan Number : 1129  
 Retention Time (minutes): 8.469  
 Relative Retention Time :-0.00159  
 Quant Ion : 83.00  
 Area (flag) : 11349  
 On-Column Amount (ng) : 0.0785

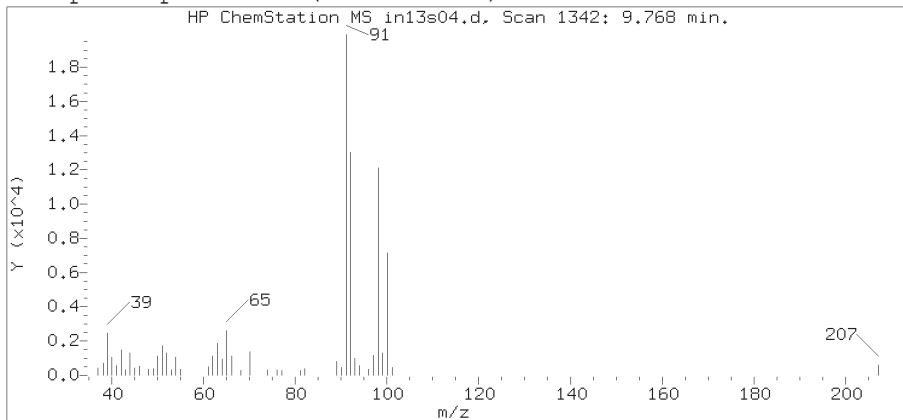
Reference Standard Spectrum for Toluene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

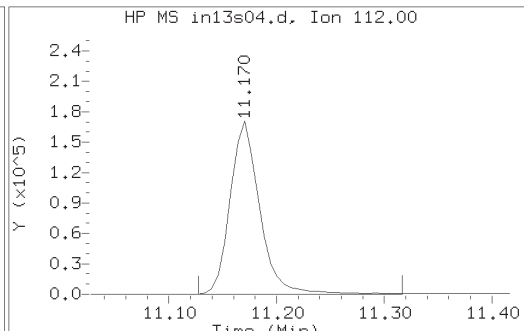
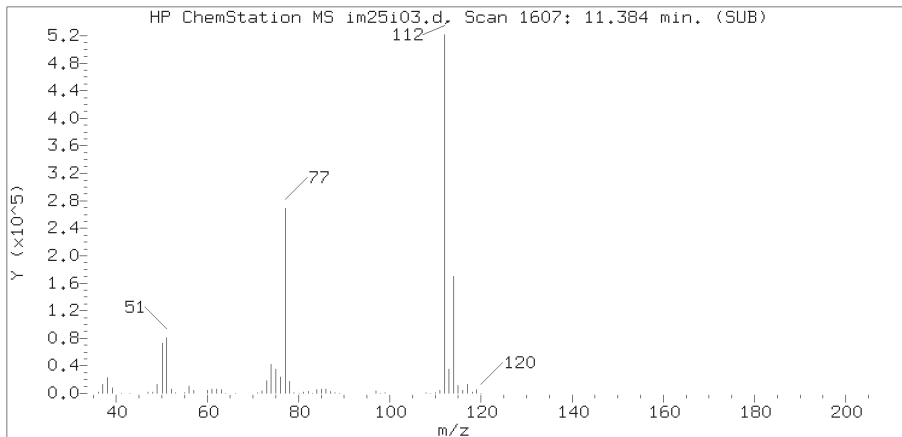
Sample Name: 15T-3

Lab Sample ID: 9881310

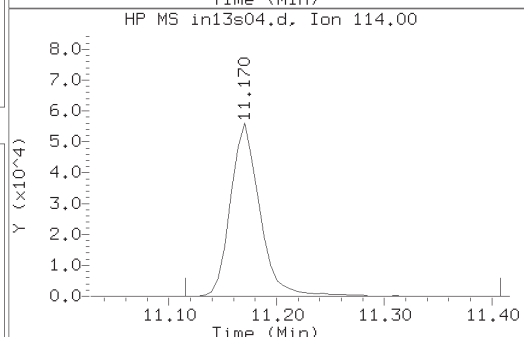
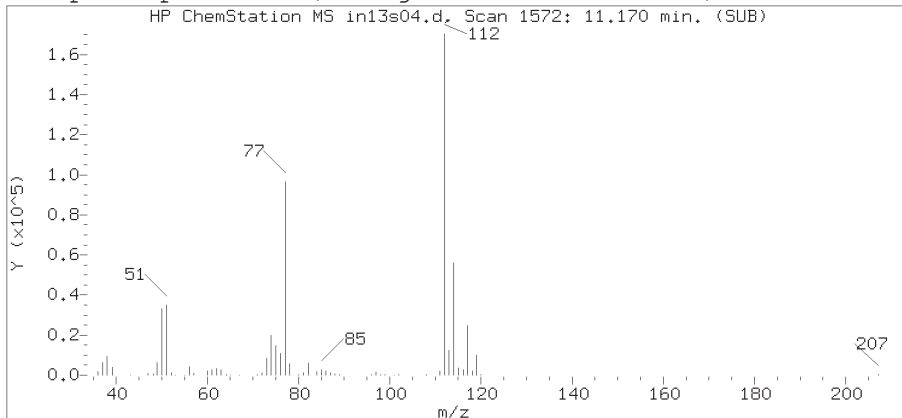
Compound Number : 83  
 Compound Name : Toluene  
 Scan Number : 1342  
 Retention Time (minutes): 9.768  
 Relative Retention Time :-0.00109  
 Quant Ion : 92.00  
 Area (flag) : 35692  
 On-Column Amount (ng) : 0.1927



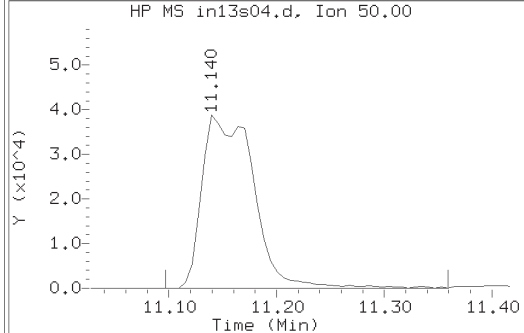
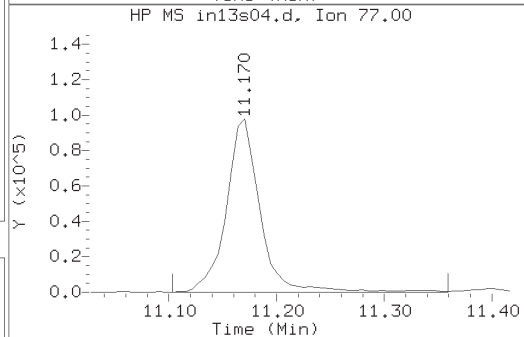
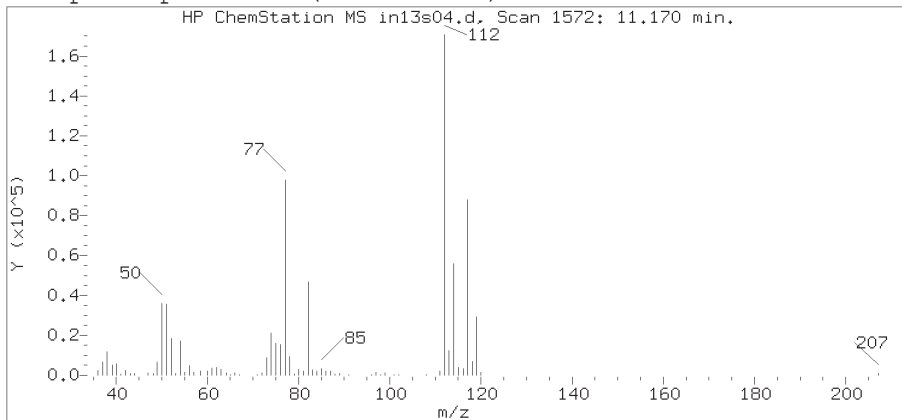
Reference Standard Spectrum for Chlorobenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
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Instrument ID: HP19930.i  
 Analyst ID: JKH09052

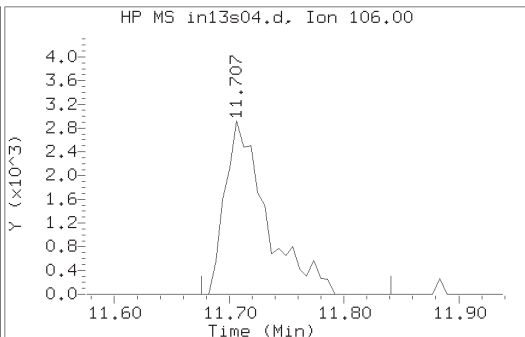
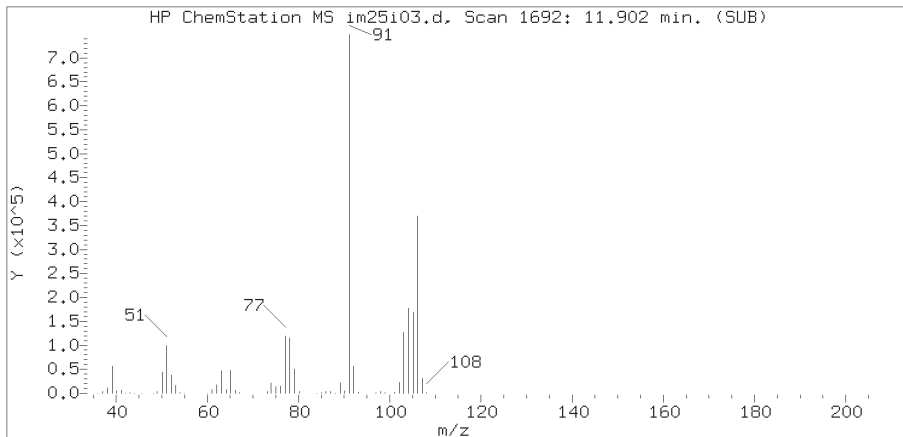
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 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

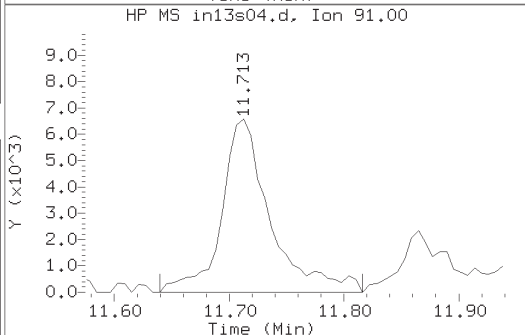
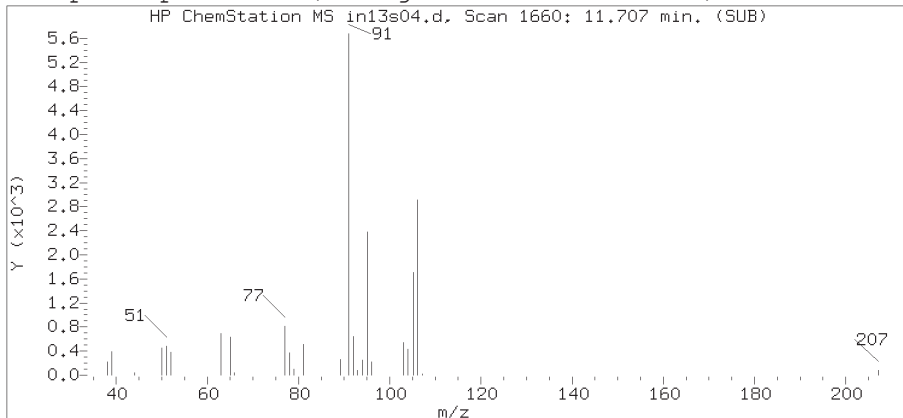
Lab Sample ID: 9881310

Compound Number : 98  
 Compound Name : Chlorobenzene  
 Scan Number : 1572  
 Retention Time (minutes): 11.170  
 Relative Retention Time :-0.00055  
 Quant Ion : 112.00  
 Area (flag) : 326708  
 On-Column Amount (ng) : 1.6152

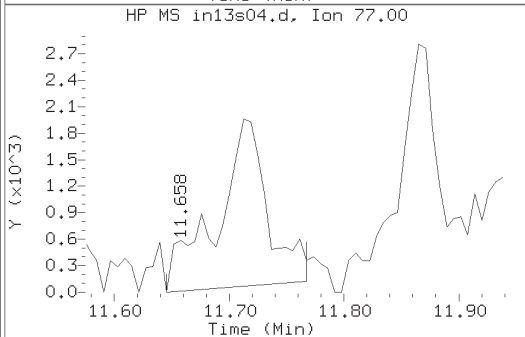
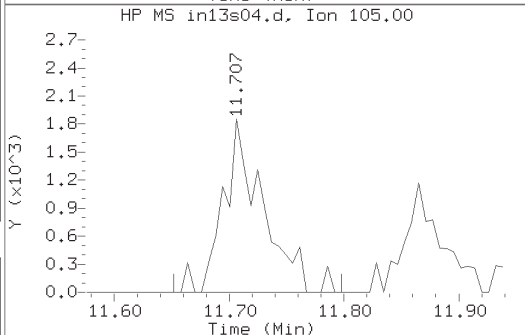
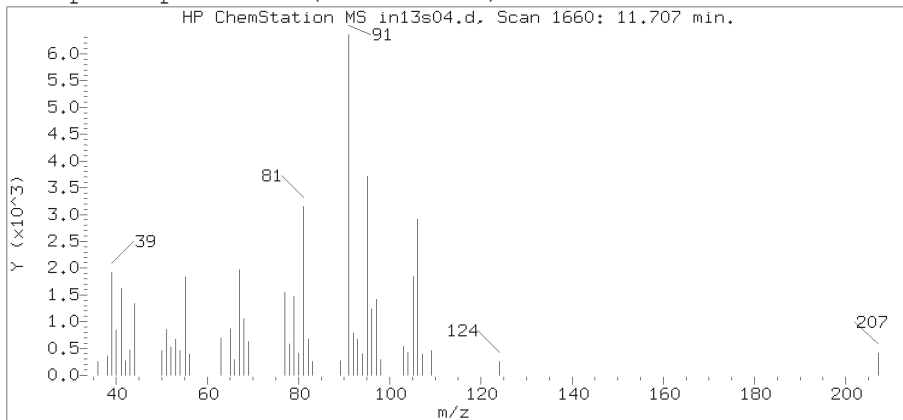
Reference Standard Spectrum for o-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

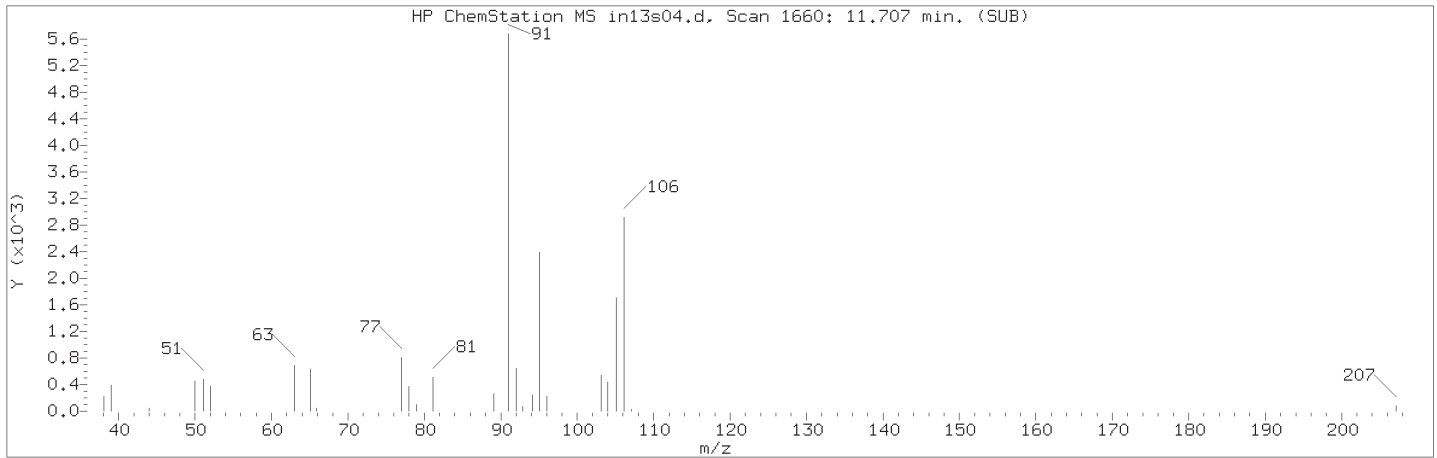
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 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

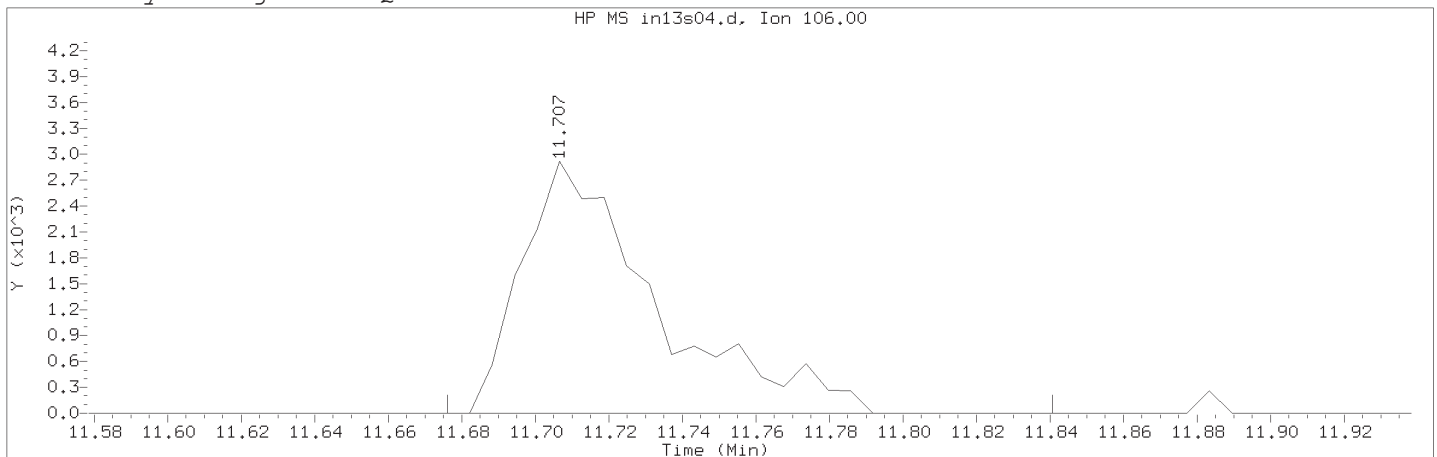
Lab Sample ID: 9881310

Compound Number : 104  
 Compound Name : o-Xylene  
 Scan Number : 1660  
 Retention Time (minutes): 11.707  
 Relative Retention Time :-0.00164  
 Quant Ion : 106.00  
 Area (flag) : 7367M  
 On-Column Amount (ng) : 0.0515

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 14:16                              Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                  Sublist used: 25789  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3    Lab Sample ID: 9881310

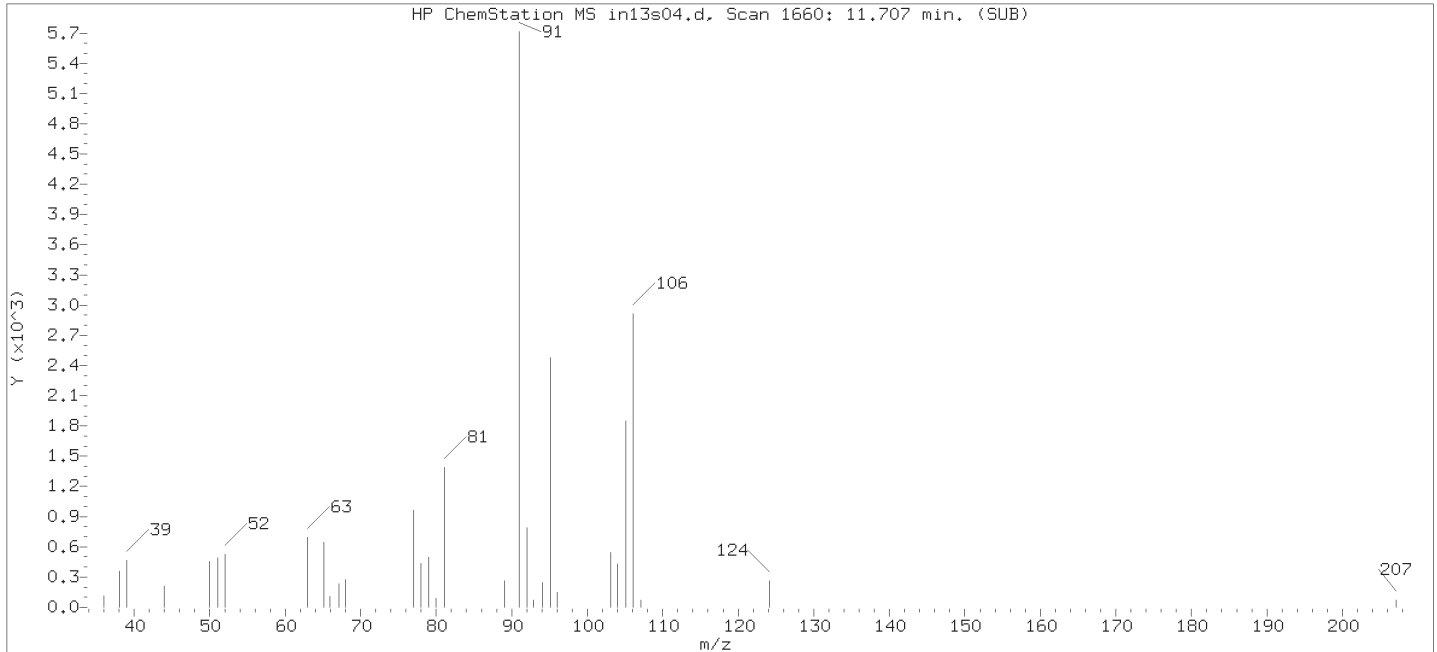
Compound Number    : 104  
Compound Name     : o-Xylene  
Scan Number    : 1660  
Retention Time (minutes): 11.707  
Quant Ion     : 106.00  
Area (flag)    : 7367M  
On-Column Amount (ng)    : 0.0515  
Integration start scan     : 1654    Integration stop scan: 1681  
Y at integration start    : 0    Y at integration end: 0

Reason for manual integration: improper integration

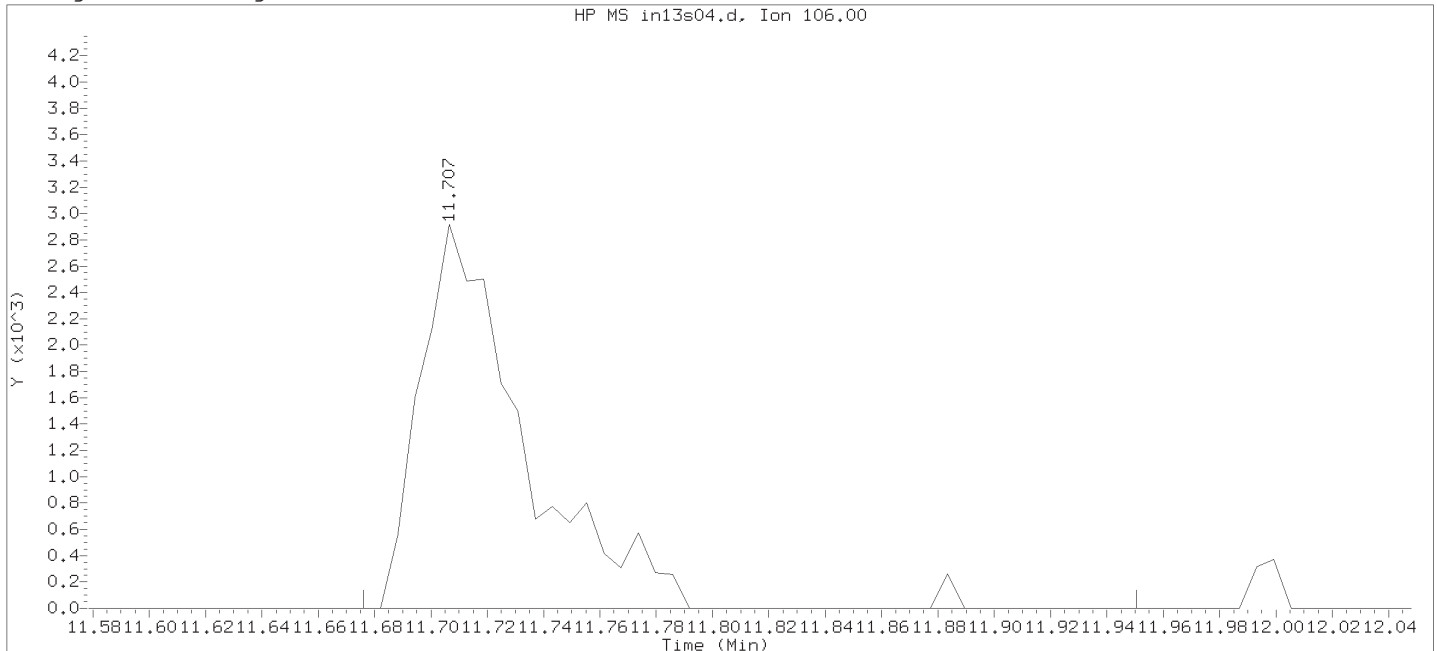
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:53.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
Analyst ID: JKH09052

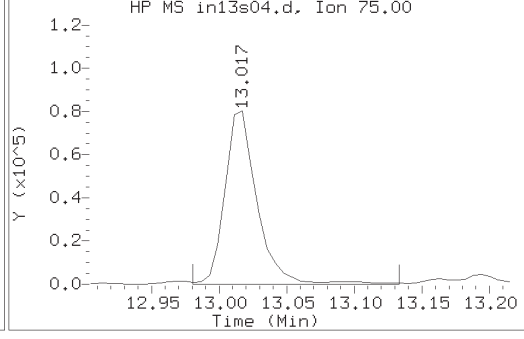
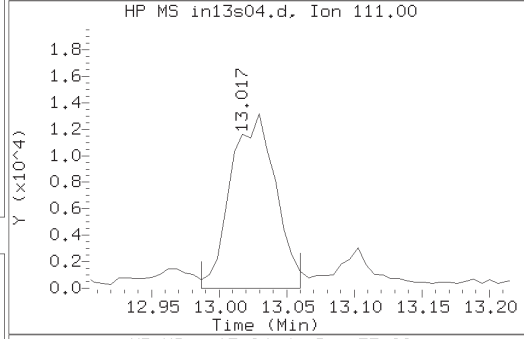
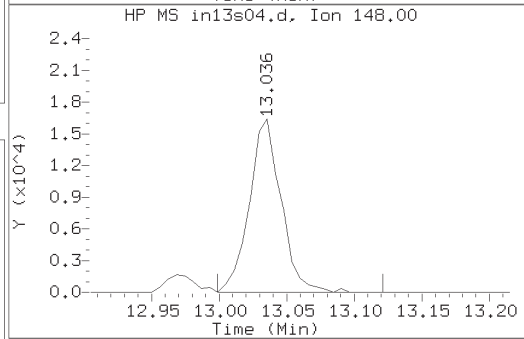
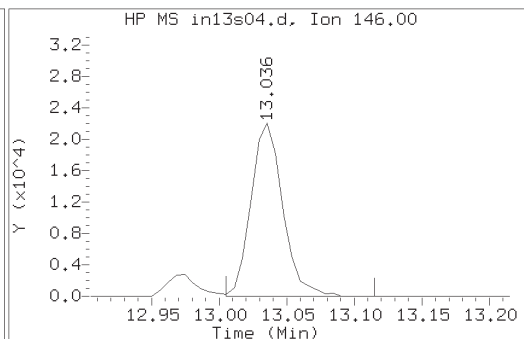
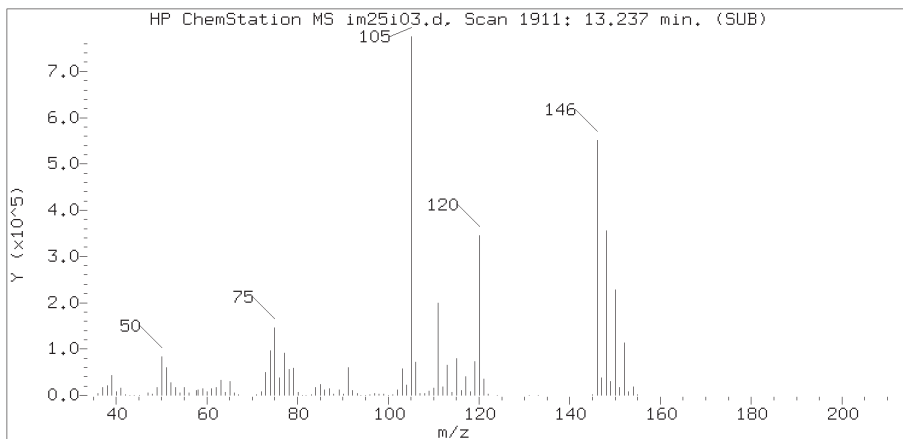
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 13-Nov-2018 14:34 Automation

Sample Name: 15T-3

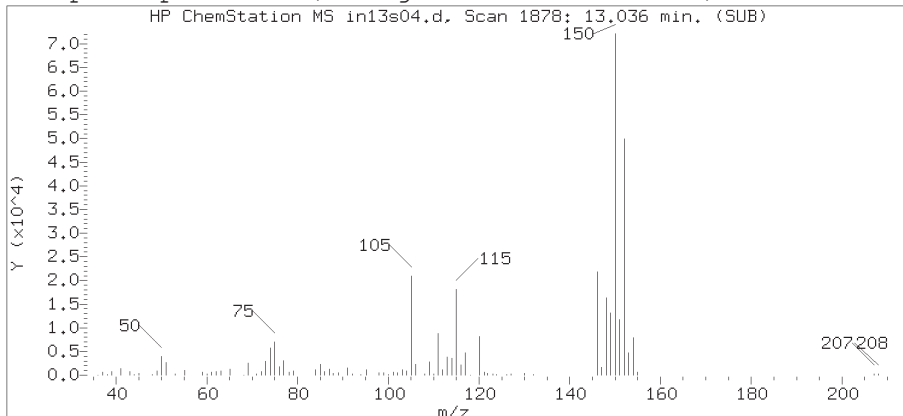
Lab Sample ID: 9881310

Compound Number : 104  
Compound Name : o-Xylene  
Scan Number : 1660  
Retention Time (minutes): 11.707  
Quant Ion : 106.00  
Area : 7463  
On-column Amount (ng) : 0.0522  
Integration start scan : 1654 Integration stop scan: 1699  
Y at integration start : 0 Y at integration end: 0

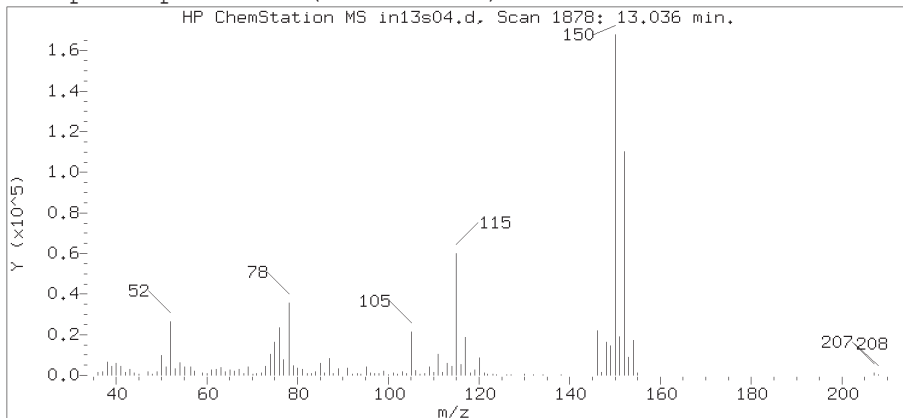
Reference Standard Spectrum for 1,4-Dichlorobenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

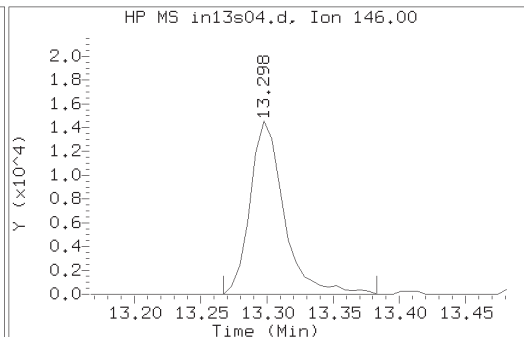
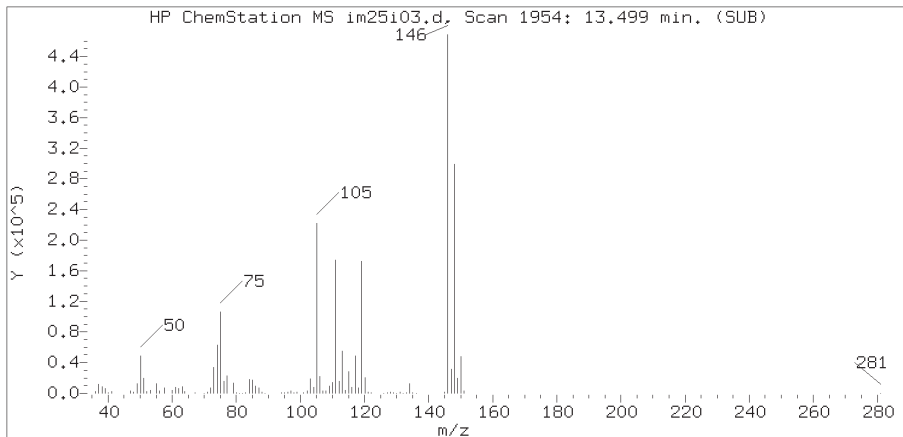
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

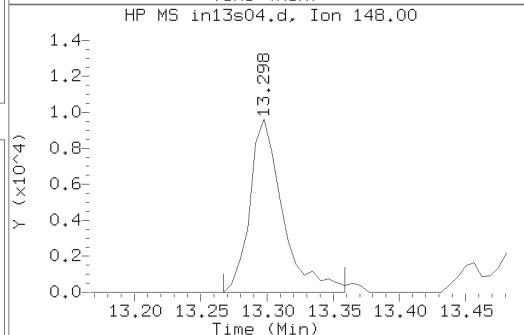
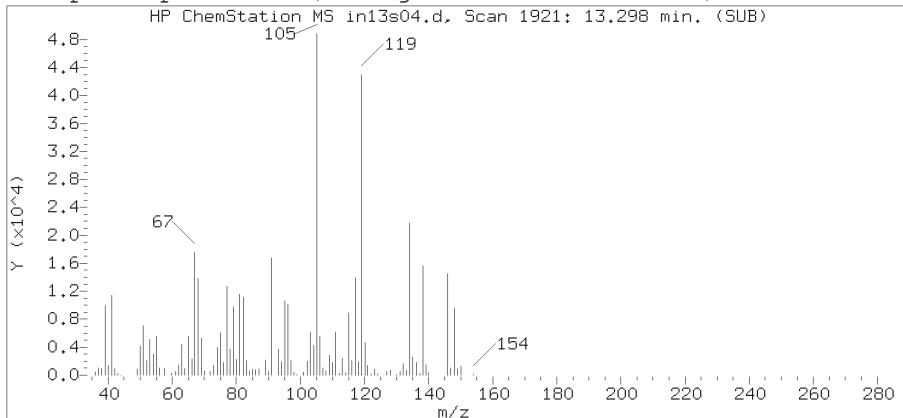
Lab Sample ID: 9881310

Compound Number : 134  
 Compound Name : 1,4-Dichlorobenzene  
 Scan Number : 1878  
 Retention Time (minutes): 13.036  
 Relative Retention Time : 0.00000  
 Quant Ion : 146.00  
 Area (flag) : 35909  
 On-Column Amount (ng) : 0.1834

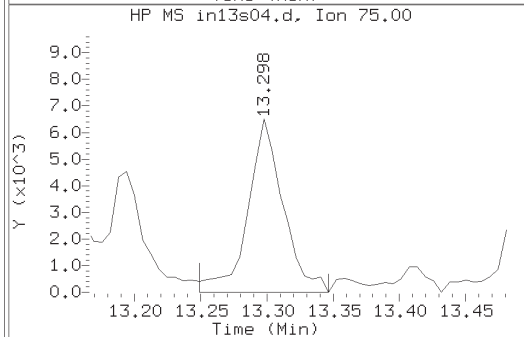
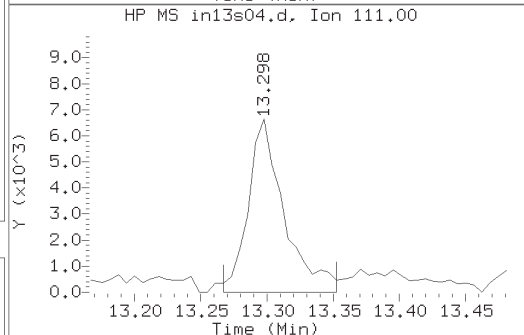
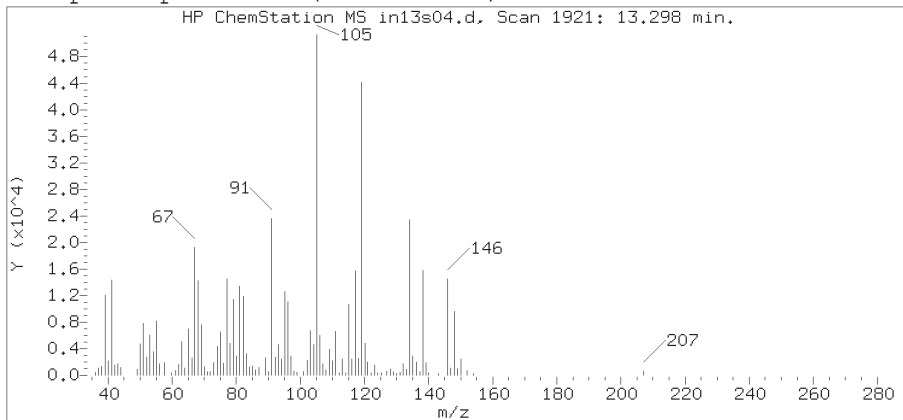
Reference Standard Spectrum for 1,2-Dichlorobenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s04.d  
 Injection date and time: 13-NOV-2018 14:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:18 jgc14951

Sample Name: 15T-3

Lab Sample ID: 9881310

Compound Number : 139  
 Compound Name : 1,2-Dichlorobenzene  
 Scan Number : 1921  
 Retention Time (minutes): 13.298  
 Relative Retention Time :-0.00046  
 Quant Ion : 146.00  
 Area (flag) : 25741  
 On-Column Amount (ng) : 0.1451

15T-6

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

9881313

Data file: /chem2/HP19930.i/18nov13a.b/in13s05.d Injection date and time: 13-NOV-2018 14:37  
 Data file Sample Info. Line: 15T-6;9881313;1;0;;TID15;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: 038A Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

**Analysis Comments: 9274 9367 9179**

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.172( 0.000)	424	65	158187 ( -13)	50.00	
63) Fluorobenzene	7.671( 0.000)	998	96	1908338 ( -10)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1472123 ( -14)	10.00	
133) 1,4-Dichlorobenzene-d4	13.018(-0.006)	1875	152	802406 ( -19)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.781(-0.001)	113	535281	10.746	107%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.238( 0.000)	102	104703	11.069	111%		81 - 118
82) Toluene-d8	(3)	9.689(-0.001)	98	1862501	10.128	101%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.146(-0.001)	95	668305	9.233	92%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)			Not Detected					0.05	0.5
2) Chloromethane	(2)	2.099( 0.002)	50	17745M	0.209	0.21		J	0.06	0.5
5) Vinyl Chloride	(2)			Not Detected					0.1	0.5
7) Bromomethane	(2)			Not Detected					0.07	0.5
8) Chloroethane	(2)			Not Detected					0.07	0.5
10) Trichlorofluoromethane	(2)			Not Detected					0.05	0.5
15) 1,1-Dichloroethene	(2)			Not Detected					0.06	0.5
16) Freon 113	(2)			Not Detected					0.06	0.5
14) Acetone	(1)	3.568(-0.011)	43	20442	2.211	2.21		J	0.9	5
18) Carbon Disulfide	(2)			Not Detected					0.06	1
21) Methyl Acetate	(1)			Not Detected					0.1	1
23) Methylene Chloride	(2)			Not Detected					0.07	0.5
31) trans-1,2-Dichloroethene	(2)			Not Detected					0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.05	0.5
33) 1,1-Dichloroethane	(2)			Not Detected					0.07	0.5
39) cis-1,2-Dichloroethene	(2)			Not Detected					0.05	0.5
38) 2-Butanone	(1)			Not Detected					0.6	5
49) Chloroform	(2)			Not Detected					0.09	0.5
51) 1,1,1-Trichloroethane	(2)			Not Detected					0.06	0.5
52) Cyclohexane	(2)			Not Detected					0.05	0.5
54) Carbon Tetrachloride	(2)			Not Detected					0.07	0.5
58) Benzene	(2)			Not Detected					0.05	0.5
59) 1,2-Dichloroethane	(2)			Not Detected					0.05	0.5
67) Trichloroethene	(2)			Not Detected					0.06	0.5
69) Methylcyclohexane	(2)			Not Detected					0.05	0.5
70) 1,2-Dichloropropane	(2)			Not Detected					0.06	0.5
74) Bromodichloromethane	(2)			Not Detected					0.05	0.5
80) cis-1,3-Dichloropropene	(2)			Not Detected					0.05	0.5
81) 4-Methyl-2-Pentanone	(1)			Not Detected					0.7	5
83) Toluene	(3)			Not Detected					0.07	0.5

M = Compound was manually integrated.

15T-6

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

9881313

Data file: /chem2/HP19930.i/18nov13a.b/in13s05.d Injection date and time: 13-NOV-2018 14:37  
 Data file Sample Info. Line: 15T-6;9881313;1;0;;TID15;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: 038A Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

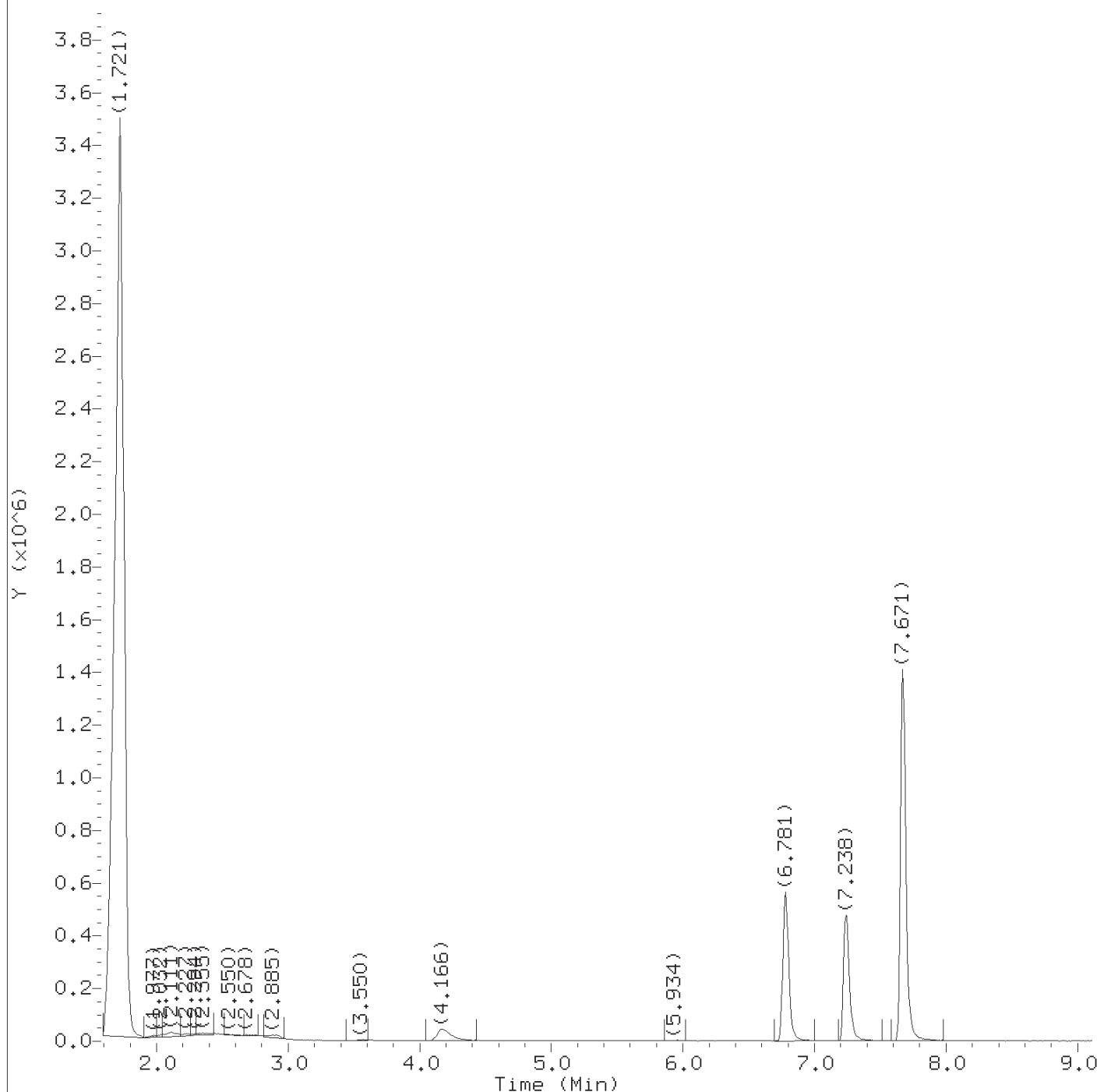
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
										Limit	LOQ
=====											
84) trans-1,3-Dichloropropene	(3)				Not Detected					0.06	0.5
88) 1,1,2-Trichloroethane	(3)				Not Detected					0.06	0.5
89) Tetrachloroethene	(3)				Not Detected					0.06	0.5
91) 2-Hexanone	(1)				Not Detected					0.6	5
93) Dibromochloromethane	(3)				Not Detected					0.07	0.5
95) 1,2-Dibromoethane	(3)				Not Detected					0.06	0.5
98) Chlorobenzene	(3)				Not Detected					0.06	0.5
100) Ethylbenzene	(3)				Not Detected					0.06	0.5
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.1	0.5
106) Styrene	(3)				Not Detected					0.05	0.5
107) Bromoform	(3)				Not Detected					0.3	1
108) Isopropylbenzene	(3)				Not Detected					0.05	0.5
112) Cyclohexanone	(1)				Not Detected					2	25
113) 1,1,1,2-Tetrachloroethane	(4)				Not Detected					0.07	0.5
131) 1,3-Dichlorobenzene	(4)				Not Detected					0.06	0.5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.07	0.5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)				Not Detected					0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)				Not Detected					0.06	0.5

Total number of targets = 51

Digitally signed by Jennifer K. Howe on 11/16/2018 at 13:54. Target 3.5 esignature user ID: jkh09052





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s05.d  
Injection date and time: 13-NOV-2018 14:37

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789

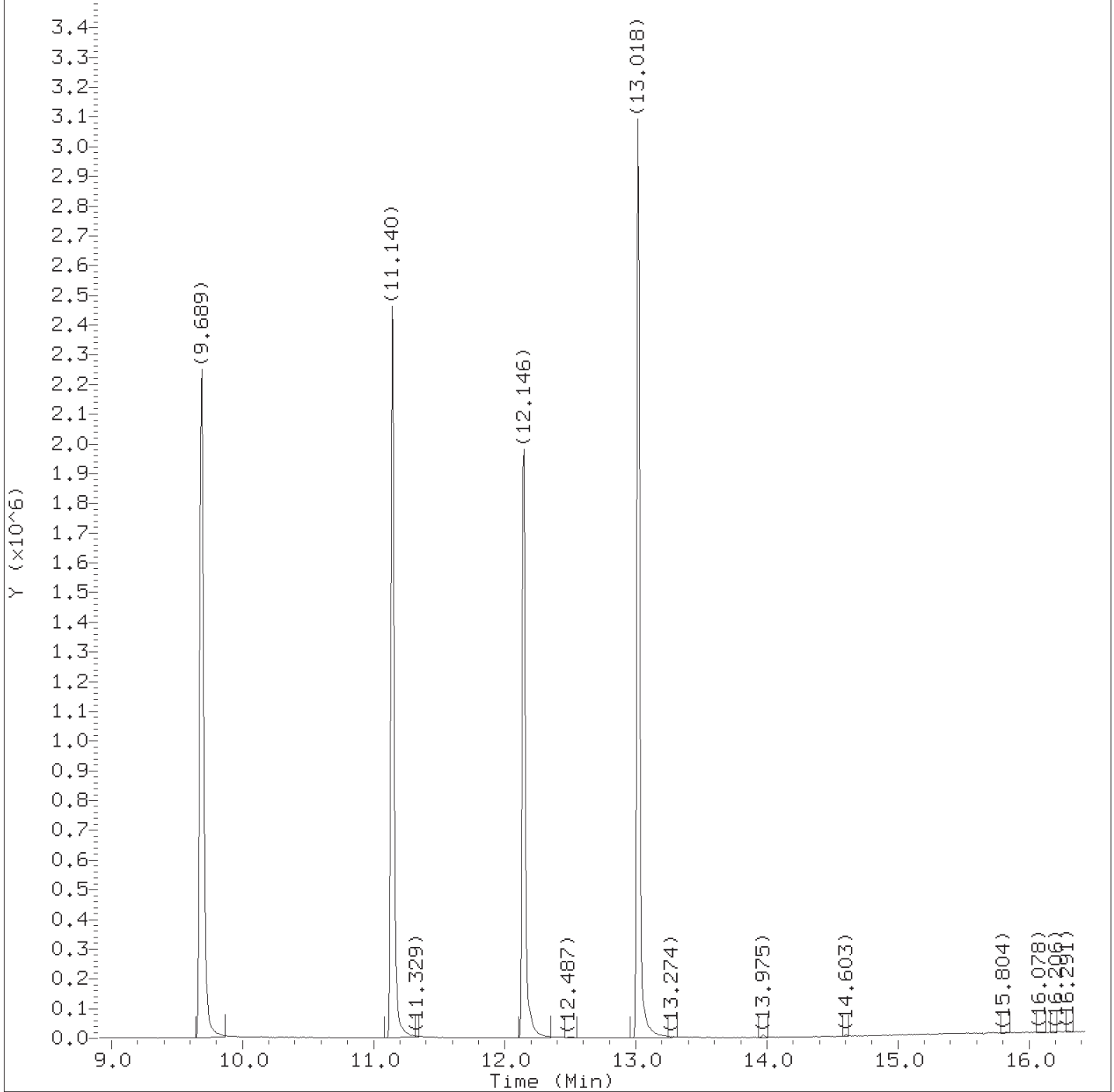
Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: 15T-6

Lab Sample ID: 9881313

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:54.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s05.d  
Injection date and time: 13-NOV-2018 14:37

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789

Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: 15T-6

Lab Sample ID: 9881313

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:54.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13s05.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 14:37      Analyst ID: JKH09052

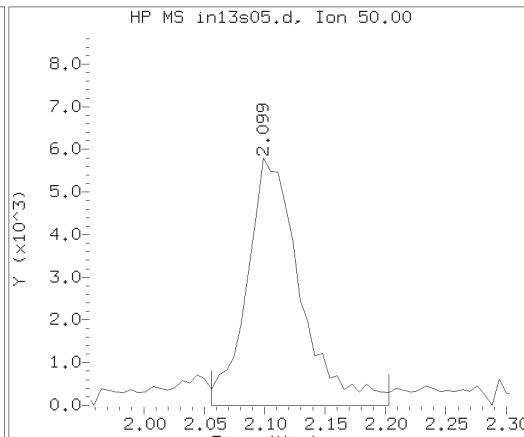
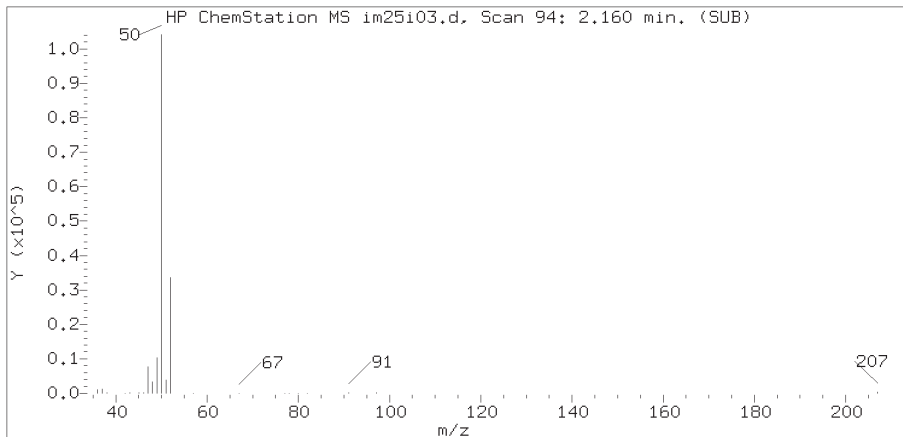
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: 15T-6      Lab Sample ID: 9881313

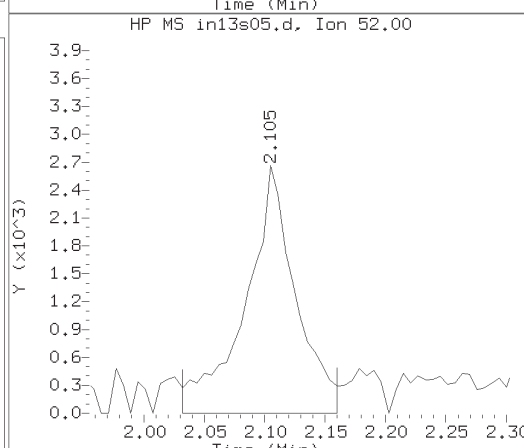
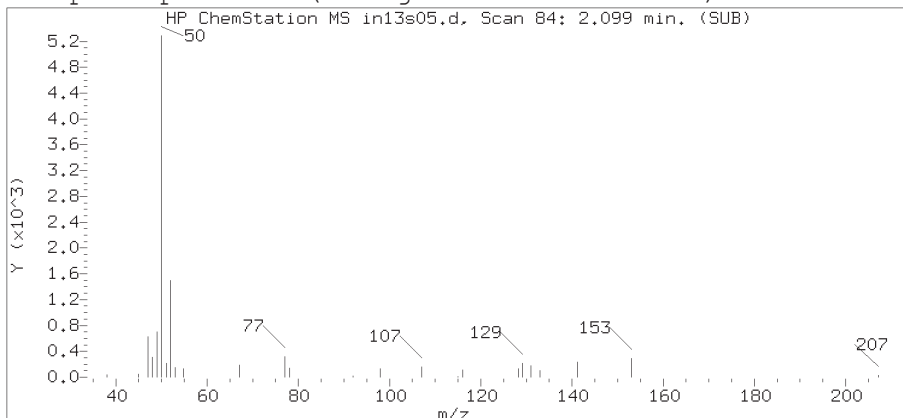
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Chloromethane	(2)	2.099	50	17745M	0.209
14) Acetone	(1)	3.568	43	20442	2.211
26) *t-Butyl Alcohol-d10	(1)	4.172	65	158187	50.000
50) \$Dibromofluoromethane	(2)	6.781	113	535281	10.746
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	104703	11.069
63) *Fluorobenzene	(2)	7.671	96	1908338	10.000
82) \$Toluene-d8	(3)	9.689	98	1862501	10.128
97) *Chlorobenzene-d5	(3)	11.140	117	1472123	10.000
111) \$4-Bromofluorobenzene	(3)	12.146	95	668305	9.233
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	802406	10.000

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

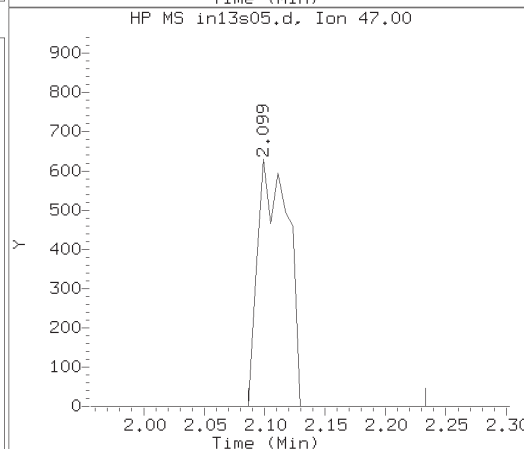
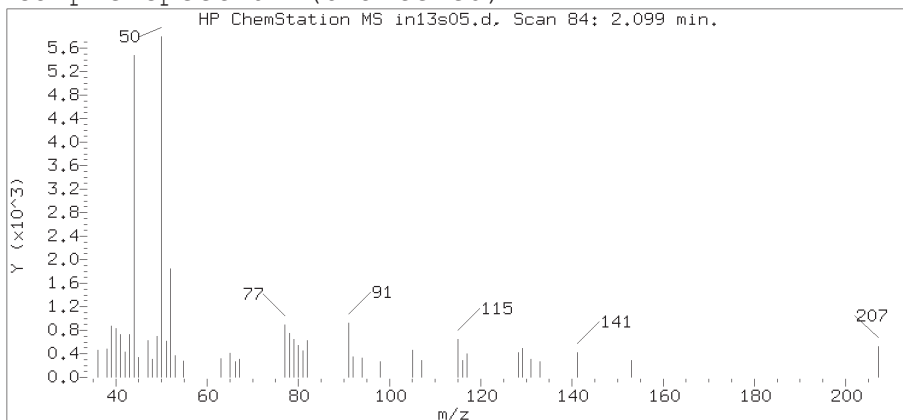
Reference Standard Spectrum for Chloromethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s05.d  
 Injection date and time: 13-NOV-2018 14:37

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

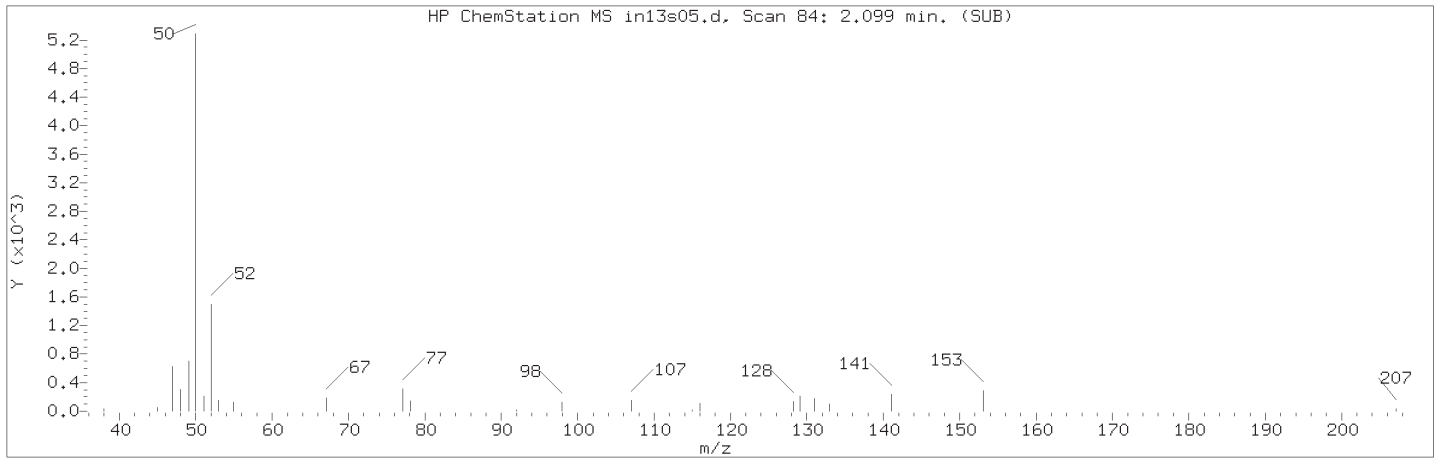
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: 15T-6

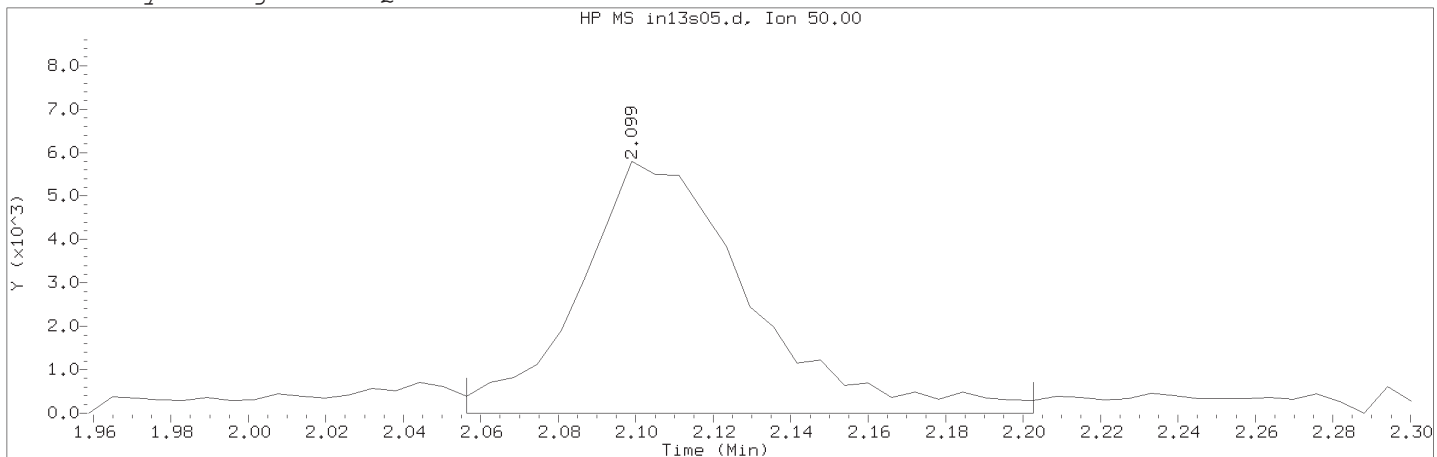
Lab Sample ID: 9881313

Compound Number : 2  
 Compound Name : Chloromethane  
 Scan Number : 84  
 Retention Time (minutes): 2.099  
 Relative Retention Time : 0.00238  
 Quant Ion : 50.00  
 Area (flag) : 17745M  
 On-Column Amount (ng) : 0.2087

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13s05.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 14:37                              Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                  Sublist used: 25789  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: 15T-6    Lab Sample ID: 9881313

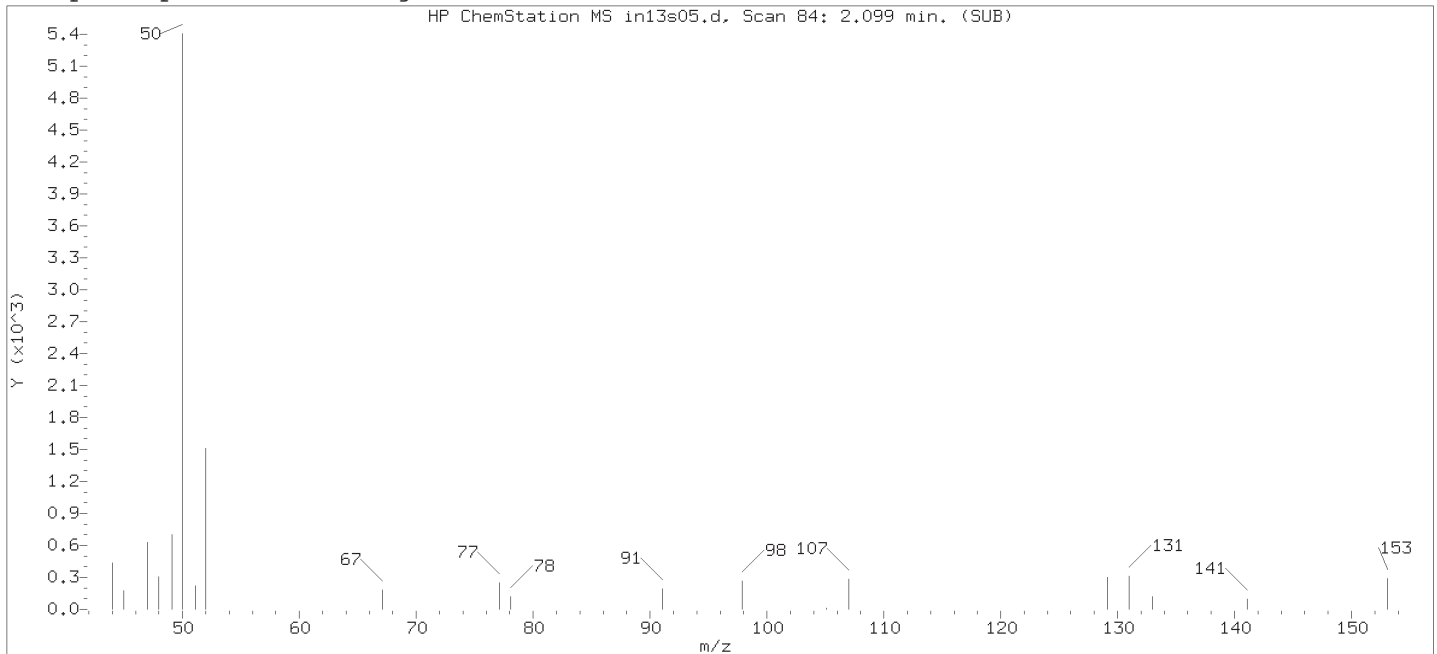
Compound Number    : 2  
Compound Name     : Chloromethane  
Scan Number     : 84  
Retention Time (minutes): 2.099  
Quant Ion     : 50.00  
Area (flag)    : 17745M  
On-Column Amount (ng)    : 0.2087  
Integration start scan     : 76    Integration stop scan: 100  
Y at integration start     : 0    Y at integration end: 0

Reason for manual integration: improper integration

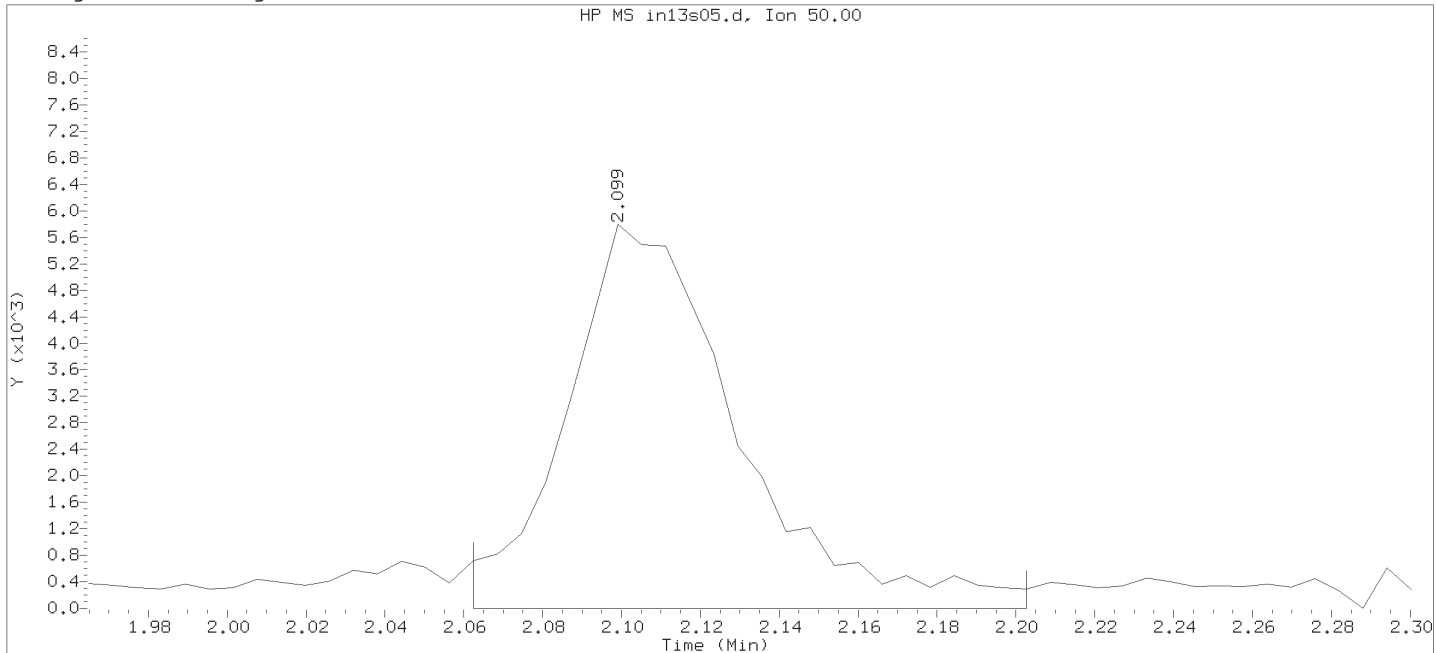
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:54.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



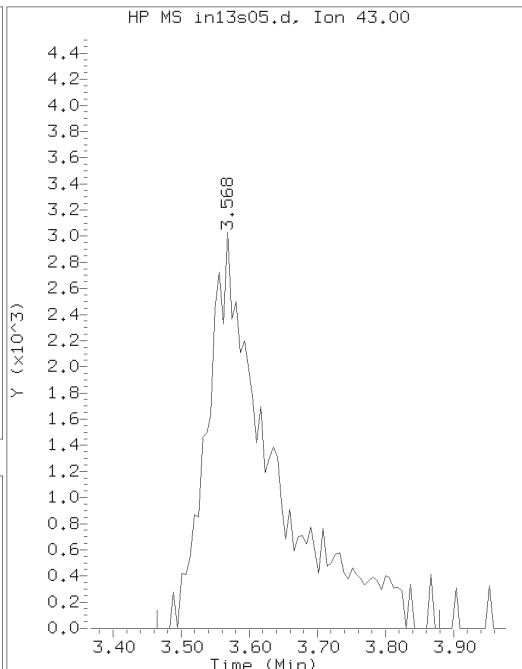
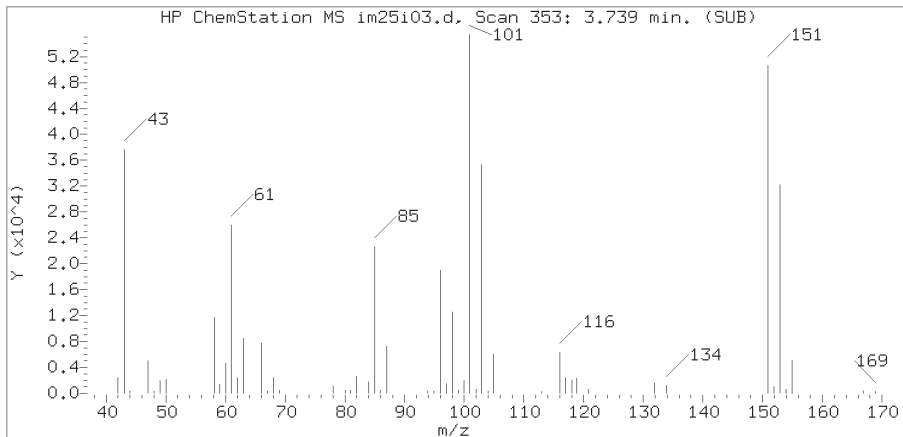
Data File: /chem2/HP19930.i/18nov13a.b/in13s05.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 14:37      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 14:55 Automation

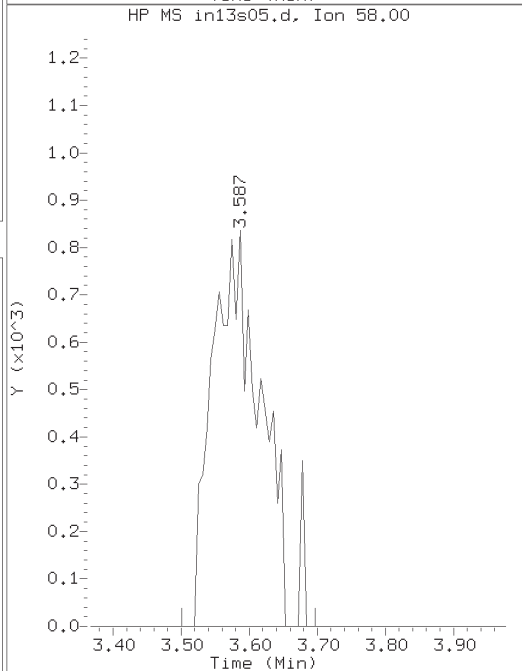
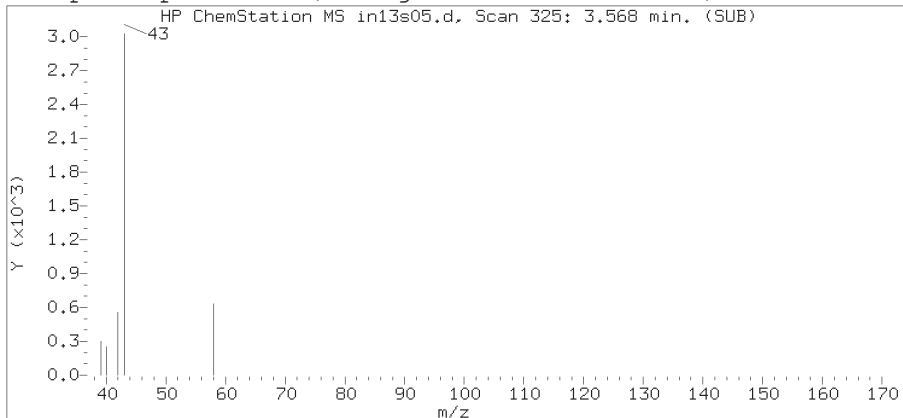
Sample Name: 15T-6      Lab Sample ID: 9881313

Compound Number : 2  
 Compound Name : Chloromethane  
 Scan Number : 84  
 Retention Time (minutes): 2.099  
 Quant Ion : 50.00  
 Area : 17420  
 On-column Amount (ng) : 0.2048  
 Integration start scan : 77      Integration stop scan: 100  
 Y at integration start : 0      Y at integration end: 0

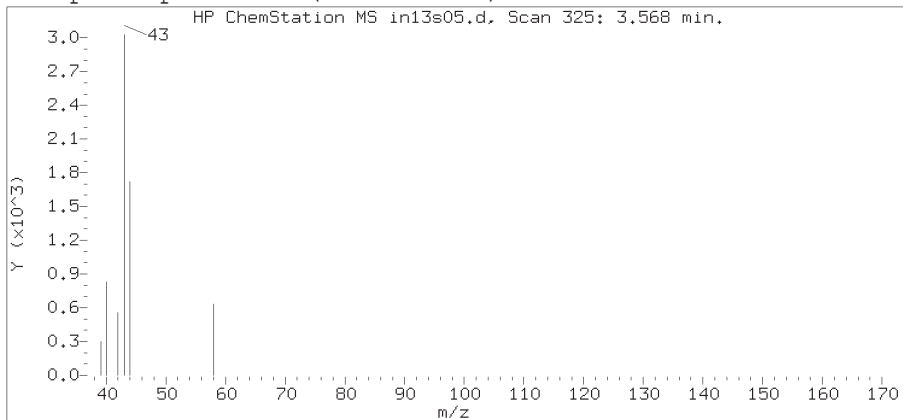
Reference Standard Spectrum for Acetone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem2/HP19930.i/18nov13a.b/in13s05.d  
 Injection date and time: 13-NOV-2018 14:37

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: 15T-6

Lab Sample ID: 9881313

Compound Number : 14  
 Compound Name : Acetone  
 Scan Number : 325  
 Retention Time (minutes): 3.568  
 Relative Retention Time :-0.01169  
 Quant Ion : 43.00  
 Area (flag) : 20442  
 On-Column Amount (ng) : 2.2115

Digitally signed by Jennifer K. Howe on 11/16/2018 at 13:54.

Target 3.5 esignature user ID: jkh09052  
 TID15 Page 175 of 3058

**Standards Data**

**Volatiles by GC/MS**



Lancaster Laboratories  
 Volatiles  
 Runlog for Agilent GC/MS System HP19930 \*\*HP #31\*\*

Data Directory Path is - D:\DATA\18JUL09i\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
JKH09052	IL09T01.D	50NGBFB	07/09/2018	11:54	I181063AB	
JKH09052	IL09T02.D	50NGBFB	07/09/2018	12:15	I181063AB	
jkh09052	IL09X01.D	blk	07/09/2018	12:23		
jkh09052	IL09I01.D	VSTD025	07/09/2018	12:45		
jkh09052	IL09I02.D	VSTD010	07/09/2018	13:06		
jkh09052	IL09I03.D	VSTD005	07/09/2018	13:27		
jkh09052	IL09I04.D	VSTD002	07/09/2018	13:49		
jkh09052	IL09I05.D	VSTD001	07/09/2018	14:10		
jkh09052	IL09I06.D	VSTD0.5	07/09/2018	14:31		
jkh09052	IL09I07.D	VSTD0.2	07/09/2018	14:52		
jkh09052	IL09M01.D	MDL0.1	07/09/2018	15:14		
jkh09052	IL09V01.D	LCSILG	07/09/2018	15:35		

Lancaster Laboratories  
 Volatiles  
 Runlog for Agilent GC/MS System HP19930 \*\*HP #31\*\*

Data Directory Path is - D:\DATA\18SEP11B\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
DVV10203	IS11T51.D	50NGBFB	09/11/2018	18:24		
DVV10203	IS11T52.D	50NGBFB	09/11/2018	18:35		
DVV10203	IS11X10.D	blk	09/11/2018	18:59		
DVV10203	IS11I51.D	VSTD025	09/11/2018	19:20		
DVV10203	IS11I52.D	VSTD010	09/11/2018	19:41		
DVV10203	IS11I53.D	VSTD005	09/11/2018	20:02		
DVV10203	IS11I54.D	VSTD002	09/11/2018	20:24		
DVV10203	IS11I55.D	VSTD001	09/11/2018	20:45		
DVV10203	IS11I56.D	VSTD0.5	09/11/2018	21:06		
DVV10203	IS11I57.D	VSTD0.2	09/11/2018	21:27		
DVV10203	IS11M01.D	MDL0.1	09/11/2018	21:49		
DVV10203	IS11V51.D	LCSISM	09/11/2018	22:11		
DVV10203	IS11X11.D	blk	09/11/2018	23:57		
DVV10203	IS11M51.D	MDL0.1	09/12/2018	00:18		

Lancaster Laboratories  
 Volatiles  
 Runlog for Agilent GC/MS System HP19930 \*\*HP #31\*\*

Data Directory Path is - D:\DATA\18NOV13A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jkh09052	IN13T01.D	50NGBFB	11/13/2018	08:19		
JKH09052	IN13X00.D	VBLKI42	11/13/2018	08:34	I183171AA	
JKH09052	IN13C01.D	VSTD010	11/13/2018	08:55	I183171AA	
JKH09052	IN13C02.D	VSTD010	11/13/2018	09:16	I183171AA	
JKH09052	IN13L01.D	LCSI42	11/13/2018	09:38	I183171AA	
JKH09052	IN13L02.D	LCDI42	11/13/2018	09:59	I183171AA	
JKH09052	IN13L03.D	LCSI43	11/13/2018	10:21	I183171AA	
JKH09052	IN13L04.D	LCDI43	11/13/2018	10:42	I183171AA	
JKH09052	IN13M01.D	MDLI42	11/13/2018	11:03	I183171AA	
JKH09052	IN13B01.D	VBLKI42	11/13/2018	11:25	I183171AA	
JKH09052	IN13D01.D	DOD1	11/13/2018	11:46	I183172AA	
JKH09052	IN13D02.D	DOD1	11/13/2018	12:07	I183172AA	
JKH09052	IN13D03.D	DOD1	11/13/2018	12:28	I183172AA	
JKH09052	IN13D04.D	DOD1	11/13/2018	12:50	I183172AA	
JKH09052	IN13D05.D	DOD1	11/13/2018	13:11	I183172AA	
JKH09052	IN13S02.D	9881308	11/13/2018	13:33	I183171AA	
JKH09052	IN13S03.D	9881309	11/13/2018	13:54	I183171AA	
JKH09052	IN13S04.D	9881310	11/13/2018	14:16	I183171AA	
JKH09052	IN13S05.D	9881313	11/13/2018	14:37	I183171AA	
JKH09052	IN13S35.D	9866560	11/13/2018	14:58	I183172AA	
JKH09052	IN13S36.D	9866561	11/13/2018	15:20	I183172AA	
JKH09052	IN13S37.D	9866593	11/13/2018	15:41	I183172AA	
JKH09052	IN13S38.D	9872304	11/13/2018	16:02	I183172AA	
JKH09052	IN13S39.D	9878541	11/13/2018	16:23	I183172AA	
JKH09052	IN13S40.D	9881105DL	11/13/2018	16:45	I183172AA	10
JKH09052	IN13S41.D	9881107DL	11/13/2018	17:06	I183172AA	20
JKH09052	IN13S43.D	9894003	11/13/2018	17:27	I183172AA	
JKH09052	IN13S42.D	9894002	11/13/2018	17:48	I183172AA	
JKH09052	IN13S46.D	9894002DL	11/13/2018	18:09	I183172AA	10
JKH09052	IN13S44.D	9894004	11/13/2018	18:31	I183172AA	10
JKH09052	IN13S45.D	9894005	11/13/2018	18:52	I183172AA	50
JKH09052	IN13C03.D	SECC010	11/13/2018	19:13	I183171AA	
JKH09052	IN13C04.D	SECD010	11/13/2018	19:34	I183171AA	

Date : 09-JUL-2018 12:15

Client ID: BFB Feb 13 2018

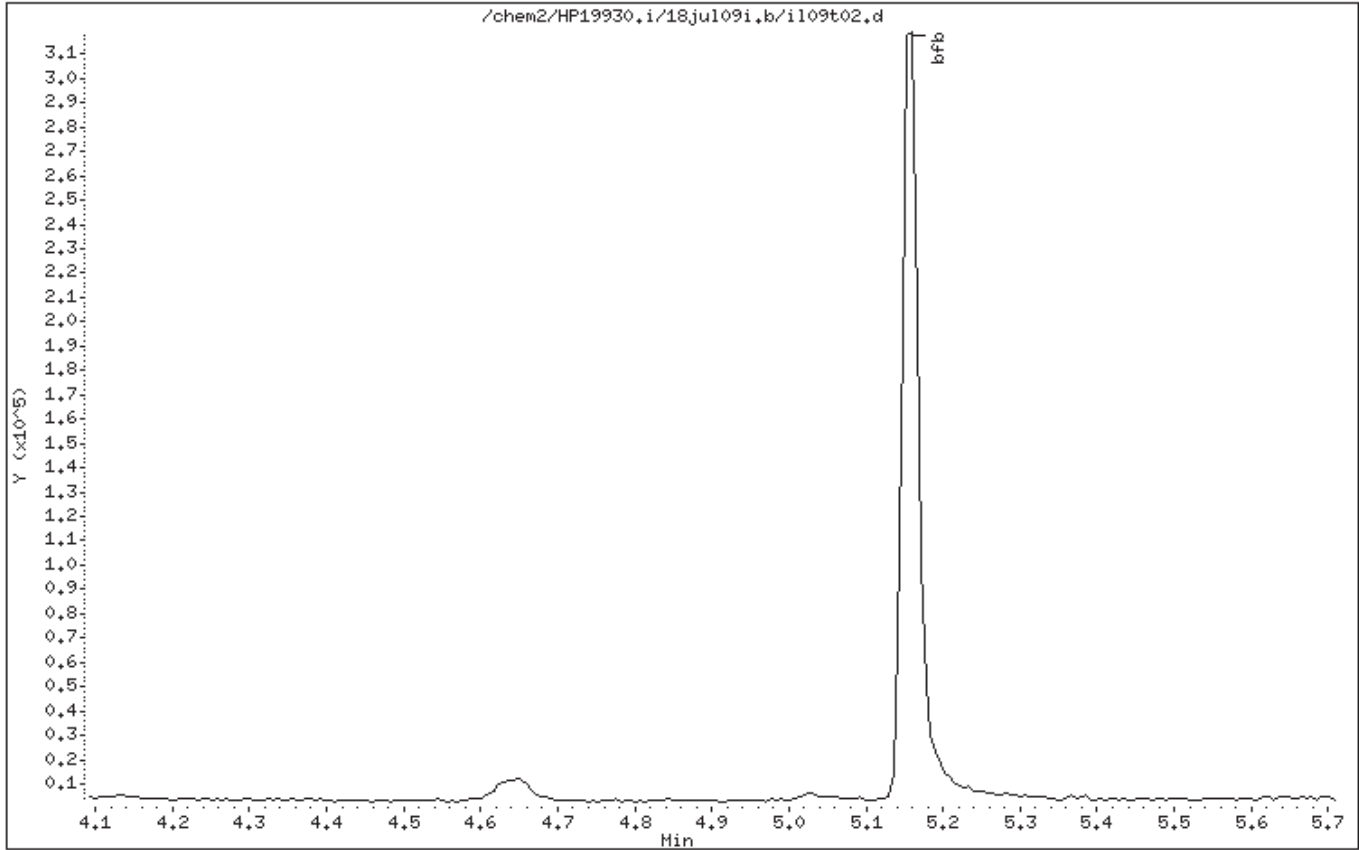
Instrument: HP19930.i

Sample Info: BFB Feb 13 2018;50NGBFB;1;3;++++;

Operator: JKH09052

Column phase: Rxi-624Sil MS

Column diameter: 0,25



Digitally signed by Jennifer K. Howe on 07/10/2018 at 13:08.  
Target 3.5 esignature user ID: jkh09052

Date : 09-JUL-2018 12:15

Client ID: BFB Feb 13 2018

Instrument: HP19930.i

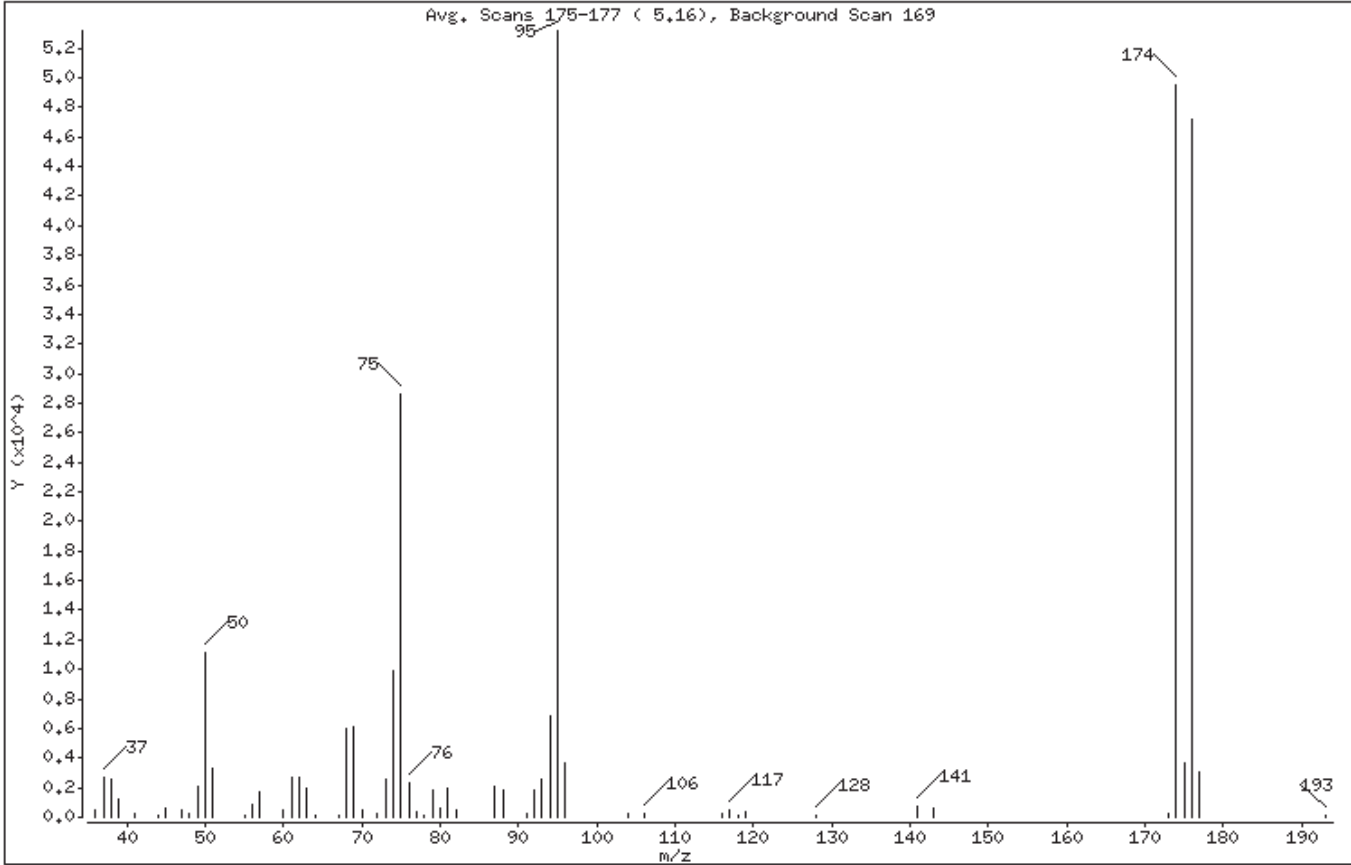
Sample Info: BFB Feb 13 2018;50NGBFB;1;3;++++;

Operator: JKH09052

Column phase: Rxi-624Sil MS

Column diameter: 0,25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	15,00 - 40,00% of mass 95	21,00
75	30,00 - 60,00% of mass 95	53,91
96	5,00 - 9,00% of mass 95	6,86
173	Less than 2,00% of mass 174	0,49 ( 0,53)
174	50,00 - 100,00% of mass 95	93,14
175	5,00 - 9,00% of mass 174	6,81 ( 7,32)
176	95,00 - 101,00% of mass 174	88,76 ( 95,30)
177	5,00 - 9,00% of mass 176	5,65 ( 6,37)

Digitally signed by Jennifer K. Howe on 07/10/2018 at 13:08.  
Target 3.5 esignature user ID: jkh09052

Date : 09-JUL-2018 12:15

Client ID: BFB Feb 13 2018

Instrument: HP19930.i

Sample Info: BFB Feb 13 2018;50NGBFB;1;3;++++;

Operator: JKH09052

Column phase: Rxi-624Sil MS

Column diameter: 0,25

Data File: i109t02.d

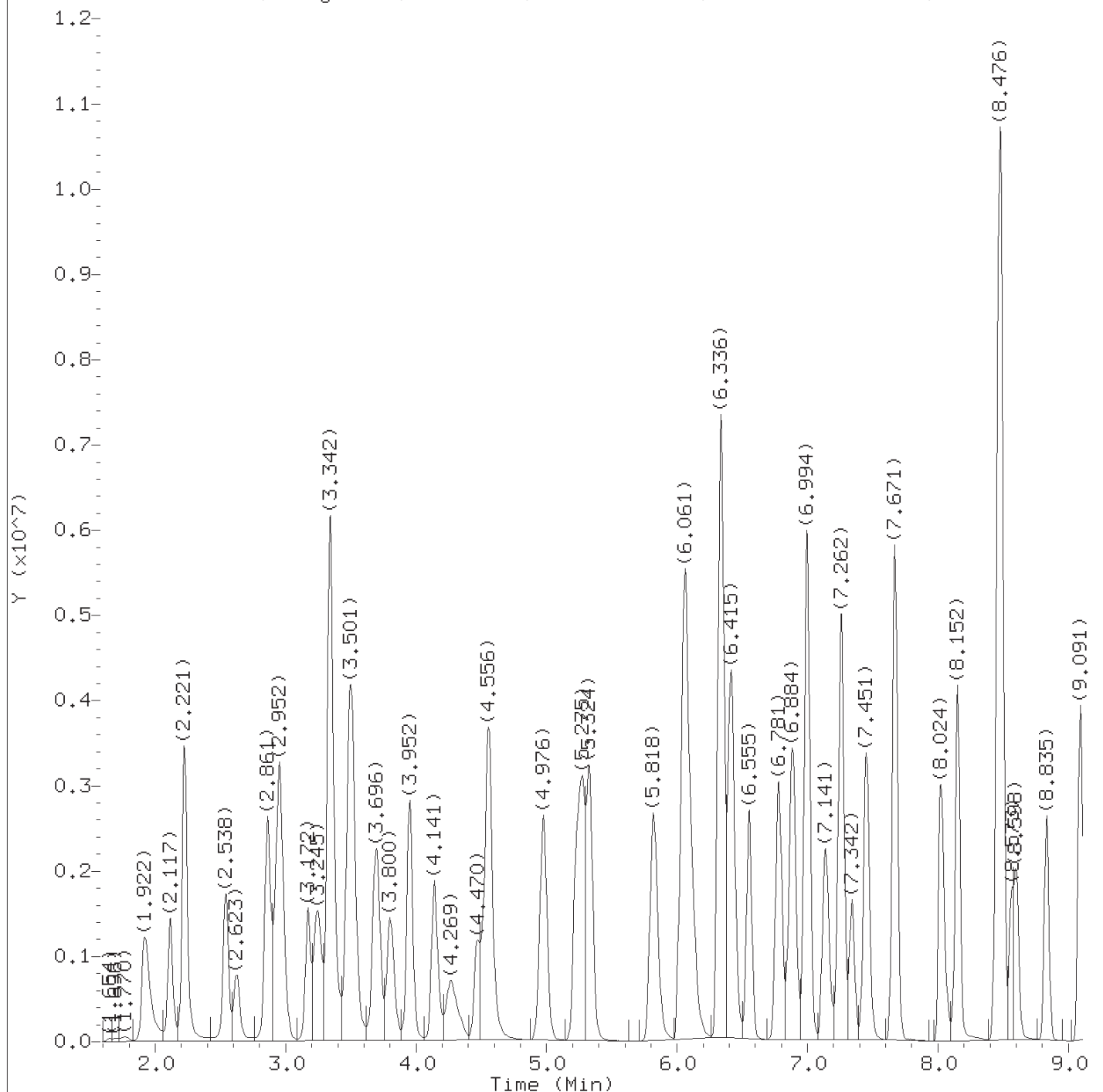
Spectrum: Avg. Scans 175-177 ( 5.16), Background Scan 169

Location of Maximum: 95,00

Number of points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36,00	525	60,00	461	78,00	103	116,00	200
37,00	2696	61,00	2695	79,00	1826	117,00	483
38,00	2542	62,00	2711	80,00	561	118,00	172
39,00	1184	63,00	1926	81,00	1933	119,00	387
41,00	223	64,00	99	82,00	514	128,00	99
44,00	114	67,00	88	87,00	2067	141,00	707
45,00	638	68,00	5943	88,00	1797	143,00	668
47,00	543	69,00	6103	91,00	204	173,00	262
48,00	221	70,00	440	92,00	1848	174,00	49528
49,00	2098	72,00	233	93,00	2571	175,00	3623
50,00	11168	73,00	2556	94,00	6804	176,00	47200
51,00	3333	74,00	9920	95,00	53176	177,00	3005
55,00	109	75,00	28664	96,00	3648	193,00	90
56,00	876	76,00	2306	104,00	184		
57,00	1712	77,00	411	106,00	219		

Digitally signed by Jennifer K. Howe on 07/10/2018 at 13:08.  
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d  
Injection date and time: 09-JUL-2018 12:45

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

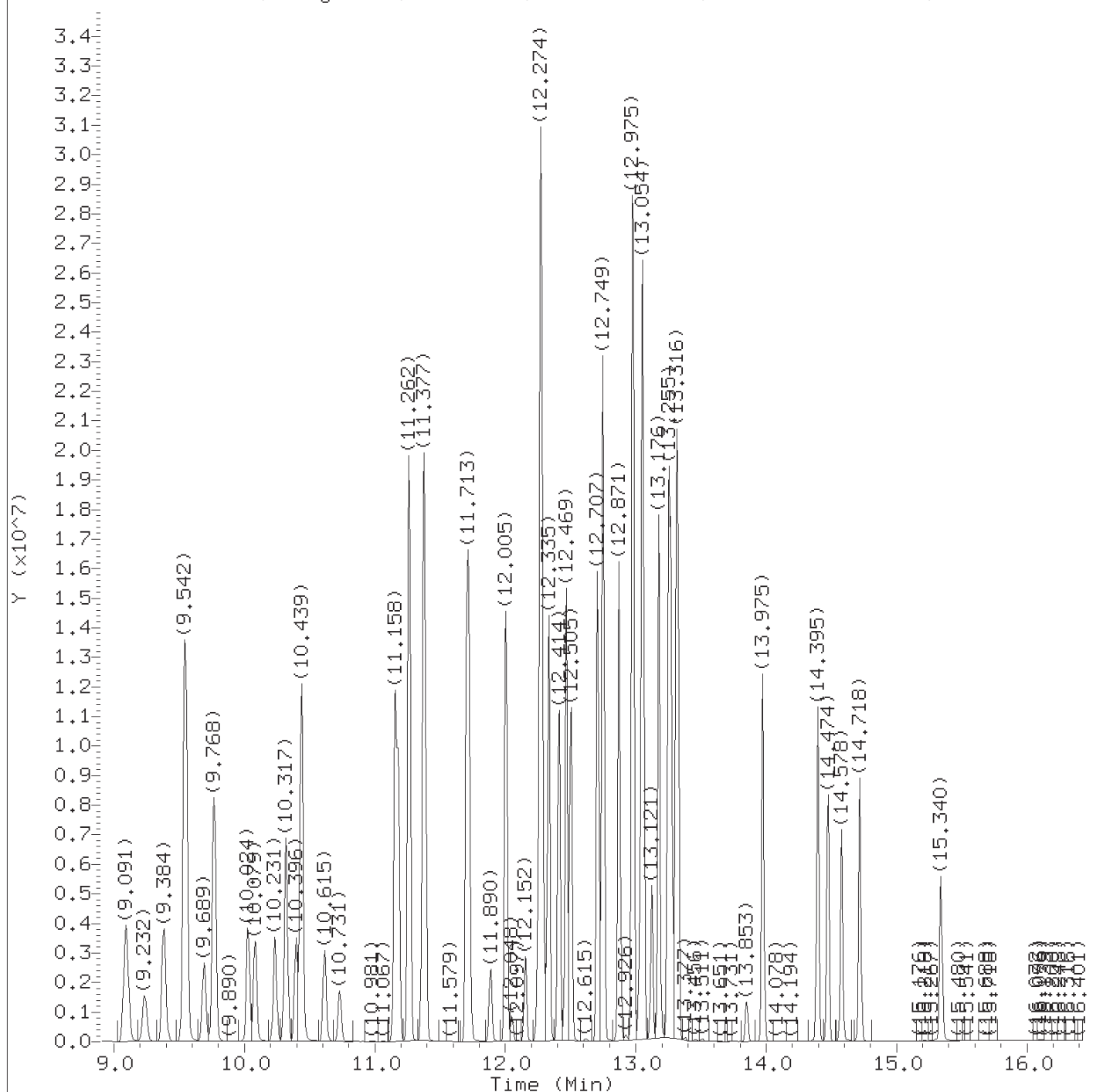
Sublist used: 8260W25

Sample Name: VSTD025

Lab Sample ID: VSTD025

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i01.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 12:45 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.922	85	3294508	25.489
2) Chloromethane	(2)	2.117	50	2241178	23.752
6) 1,3-Butadiene	(2)	2.221	39	1494707M	24.666
5) Vinyl Chloride	(2)	2.233	62	2181926	23.951
7) Bromomethane	(2)	2.538	94	1896961	22.117
8) Chloroethane	(2)	2.623	64	1184116	22.327
9) Dichlorofluoromethane	(2)	2.861	67	3054785	21.912
10) Trichlorofluoromethane	(2)	2.934	101	3857791	24.771
11) Ethyl ether	(2)	3.172	59	1266863	24.573
12) Freon 123a	(2)	3.245	67	1912358	24.265
13) Acrolein	(1)	3.342	56	9870502	1140.203
15) 1,1-Dichloroethene	(2)	3.483	96	1350520	25.145
14) Acetone	(1)	3.507	43	2804304M	217.823
16) Freon 113	(2)	3.513	101	1624302	26.047
17) Methyl Iodide	(2)	3.684	142	2819368	25.567
18) Carbon Disulfide	(2)	3.800	76	3991622	25.048
21) Methyl Acetate	(1)	3.928	43	759211	25.976
22) Allyl Chloride	(2)	3.952	41	2781399	24.100
23) Methylene Chloride	(2)	4.141	84	1452252	23.877
26)*t-Butyl Alcohol-d10	(1)	4.147	65	220317	50.000
28) t-Butyl Alcohol	(1)	4.269	59	2575844	452.164
29) Acrylonitrile	(1)	4.464	53	1729733	123.287
30) Methyl Tertiary Butyl Ether	(2)	4.543	73	4030259	24.228
31) trans-1,2-Dichloroethene	(2)	4.562	96	1505393	24.695
32) n-Hexane	(2)	4.976	57	2500918	24.913
33) 1,1-Dichloroethane	(2)	5.226	63	2891066M	23.999
34) di-Isopropyl Ether	(2)	5.275	45	5263085	24.188
35) 2-Chloro-1,3-Butadiene	(2)	5.330	53	2832507	24.838
37) Ethyl t-butyl ether	(2)	5.818	59	4891315	24.053
38) 2-Butanone	(1)	6.037	43	5073423	237.608
39) cis-1,2-Dichloroethene	(2)	6.061	96	1725318	24.786
41) 2,2-Dichloropropane	(2)	6.080	77	2721662	24.881
40) 1,2-Dichloroethene (Total)	(2)		96	3230711	49.481
42) Propionitrile	(1)	6.122	54	2514323	477.166
45) Methacrylonitrile	(1)	6.336	67	4279572	238.292
47) Bromochloromethane	(2)	6.409	128	770562	25.299
48) Tetrahydrofuran	(1)	6.427	71	1292390	234.357
49) Chloroform	(2)	6.555	83	2962907	24.437

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i01.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 12:45 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.775	113	549829	9.948
50) \$Dibromofluoromethane	(2)	6.775	111	565667	9.976
51) 1,1,1-Trichloroethane	(2)	6.781	97	2901077	24.897
52) Cyclohexane	(2)	6.884	56	2932798	23.841
52) Cyclohexane	(2)	6.884	84	2375343	24.588
52) Cyclohexane	(2)	6.884	69	889287	24.395
54) Carbon Tetrachloride	(2)	6.994	117	2659869	26.062
55) 1,1-Dichloropropene	(2)	6.994	75	2293938	24.932
56) Isobutyl Alcohol	(1)	7.141	41	2018075	1170.080
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	105776	10.079
57) \$1,2-Dichloroethane-d4	(2)	7.238	65	615178	9.899
57) \$1,2-Dichloroethane-d4	(2)	7.238	104	67261	10.000
58) Benzene	(2)	7.262	78	6235035	24.243
59) 1,2-Dichloroethane	(2)	7.342	62	2051762	23.654
59) 1,2-Dichloroethane	(2)	7.342	98	157304	26.221
60) t-Amyl methyl ether	(2)	7.451	73	4231046	23.853
62) n-Heptane	(2)	7.671	43	2790794	25.368
63) *Fluorobenzene	(2)	7.671	96	2117377	10.000
65) n-Butanol	(1)	8.024	56	3091897	2403.678
67) Trichloroethene	(2)	8.152	95	1774046	25.165
69) Methylcyclohexane	(2)	8.463	83	3205860	25.143
70) 1,2-Dichloropropane	(2)	8.488	63	1575581	24.441
71) Methyl Methacrylate	(1)	8.561	69	843304	25.890
72) 1,4-Dioxane	(1)	8.585	88	276441M	950.969
72) 1,4-Dioxane	(1)	8.579	58	204557M	972.776
73) Dibromomethane	(2)	8.604	93	816950	25.214
74) Bromodichloromethane	(2)	8.835	83	2291419	26.336
76) 2-Nitropropane	(1)	9.091	41	3552144	242.919
80) cis-1,3-Dichloropropene	(2)	9.384	75	2546313	25.793
81) 4-Methyl-2-Pentanone	(1)	9.542	43	11671887	223.345
82) \$Toluene-d8	(3)	9.689	98	2025819	9.257
82) \$Toluene-d8	(3)	9.689	100	1309230	9.269
83) Toluene	(3)	9.768	92	4095506	23.766
84) trans-1,3-Dichloropropene	(3)	10.024	75	2195912	25.496
86) Ethyl Methacrylate	(3)	10.079	69	1837356	24.649
85) 1,3-Dichloropropene (total)	(3)		75	4742225	51.289
88) 1,1,2-Trichloroethane	(3)	10.231	97	1136699	23.935
89) Tetrachloroethene	(3)	10.317	166	2190898	24.648

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i01.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 12:45 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.396	76	1938087	23.481
91) 2-Hexanone	(1)	10.439	43	8245559M	220.146
93) Dibromochloromethane	(3)	10.615	129	1606518	26.100
95) 1,2-Dibromoethane	(3)	10.731	107	1123962	24.675
97) *Chlorobenzene-d5	(3)	11.152	117	1751898	10.000
98) Chlorobenzene	(3)	11.176	112	4569282	24.277
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	1919318	26.812
100) Ethylbenzene	(3)	11.262	91	8142675	23.832
101) m+p-Xylene	(3)	11.377	106	6705056	50.348
104) o-Xylene	(3)	11.707	106	3388347	25.470
106) Styrene	(3)	11.719	104	5212380	26.040
105) Xylene (Total)	(3)		106	10093403	75.818
107) Bromoform	(3)	11.890	173	1065953	28.482
108) Isopropylbenzene	(3)	12.005	105	8446860	24.365
111) \$4-Bromofluorobenzene	(3)	12.152	95	801270	9.302
111) \$4-Bromofluorobenzene	(3)	12.158	174	733382	9.386
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	1506374	25.632
114) Bromobenzene	(4)	12.274	156	2517223	29.183
115) trans-1,4-Dichloro-2-butene	(1)	12.274	53	3852741	224.194
116) 1,2,3-Trichloropropane	(4)	12.298	110	421970	24.685
117) n-Propylbenzene	(4)	12.335	91	9458480	24.034
119) 2-Chlorotoluene	(4)	12.414	126	2028806	25.794
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	7187813	25.465
122) 4-Chlorotoluene	(4)	12.505	126	2069540	25.999
125) tert-Butylbenzene	(4)	12.707	134	1662058	27.360
126) Pentachloroethane	(4)	12.743	167	1591005	30.004
127) 1,2,4-Trimethylbenzene	(4)	12.749	105	7374376	25.861
128) sec-Butylbenzene	(4)	12.871	105	9245018	25.476
131) 1,3-Dichlorobenzene	(4)	12.975	146	4609316	28.267
132) p-Isopropyltoluene	(4)	12.981	119	8564666	26.735
133) *1,4-Dichlorobenzene-d4	(4)	13.036	152	958571	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	4493173	26.941
135) 1,2,3-Trimethylbenzene	(4)	13.054	120	3446619	26.536
136) Benzyl Chloride	(4)	13.121	126	666454	30.247
138) n-Butylbenzene	(4)	13.267	92	4014773	27.346
139) 1,2-Dichlorobenzene	(4)	13.310	146	3985434	26.363
143) 1,2-Dibromo-3-chloropropane	(1)	13.853	155	246109	28.908
144) 1,3,5-Trichlorobenzene	(4)	13.975	180	3412674	28.847

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i01.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025

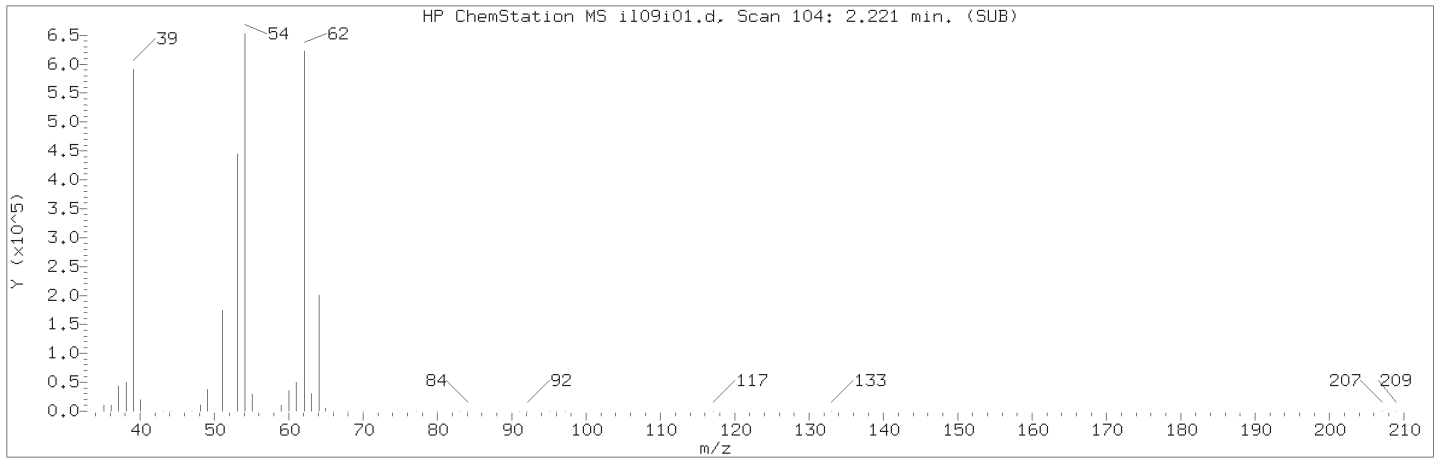
Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,2,4-Trichlorobenzene	(4)	14.395	180	2968873	29.110
146) Hexachlorobutadiene	(4)	14.474	225	1295573	29.958
147) Naphthalene	(4)	14.578	128	4719998	25.591
148) 1,2,3-Trichlorobenzene	(4)	14.718	180	2358263	27.090

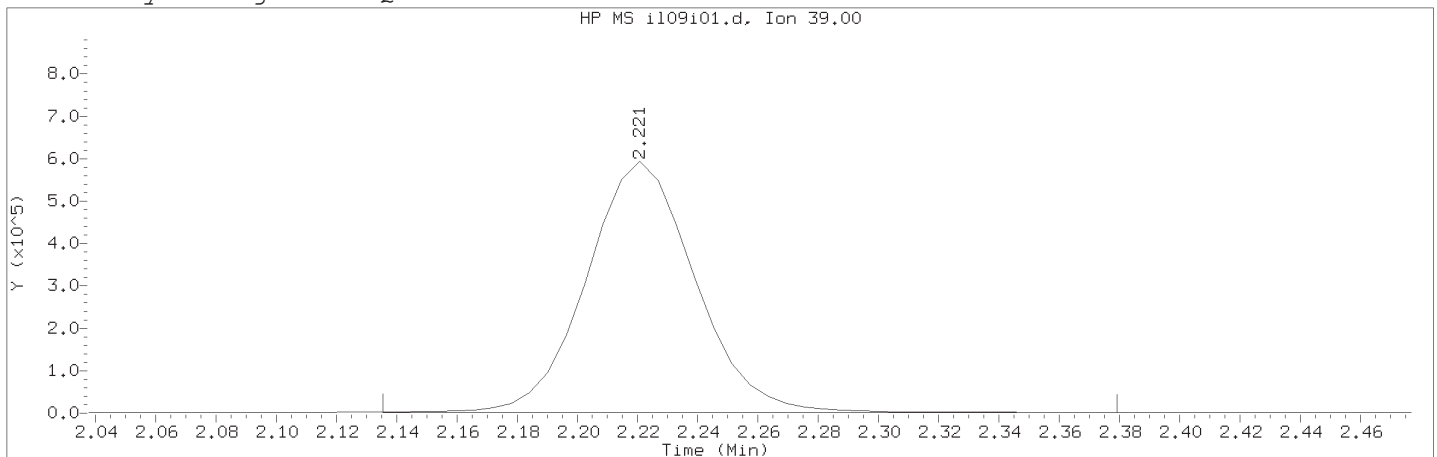
page 4 of 4

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025    Lab Sample ID: VSTD025

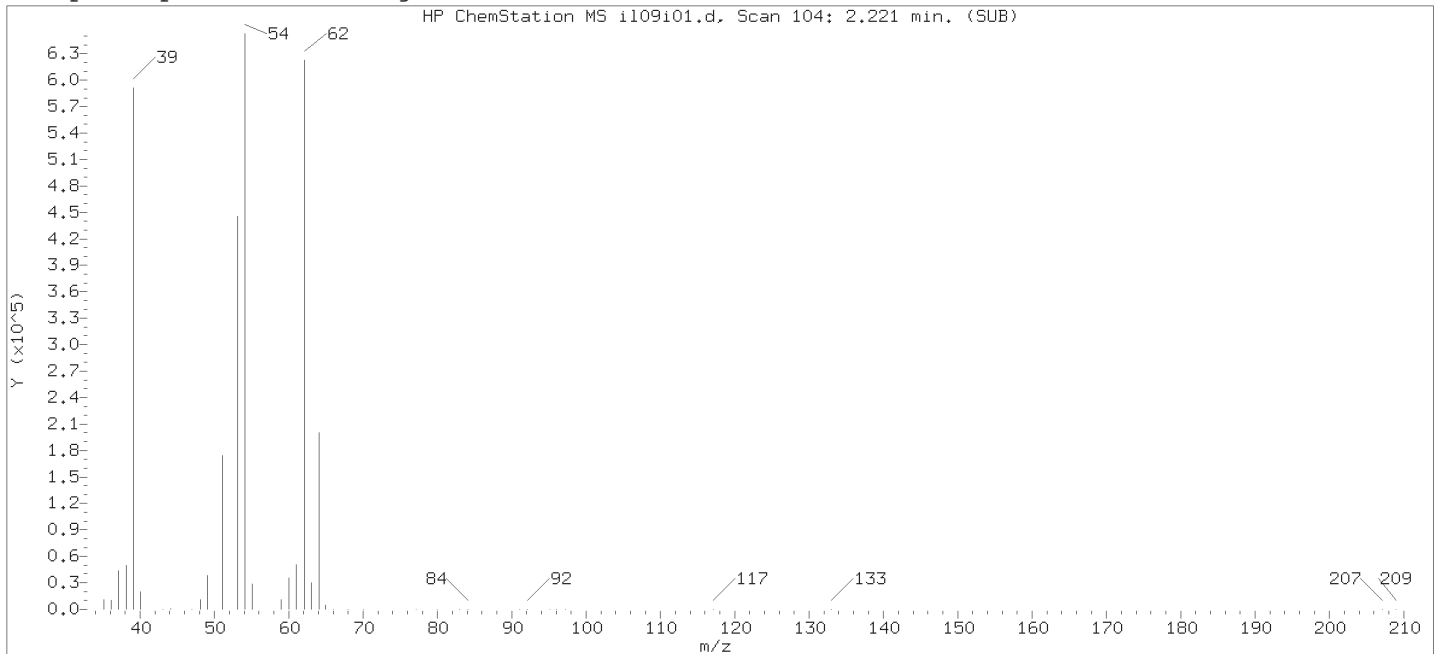
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 104  
Retention Time (minutes): 2.221  
Quant Ion                               : 39.00  
Area (flag)                             : 1494707M  
On-Column Amount (ng)                : 24.6658  
Integration start scan                 : 89                      Integration stop scan: 129  
Y at integration start                 : 799                    Y at integration end: 799

Reason for manual integration: improper integration

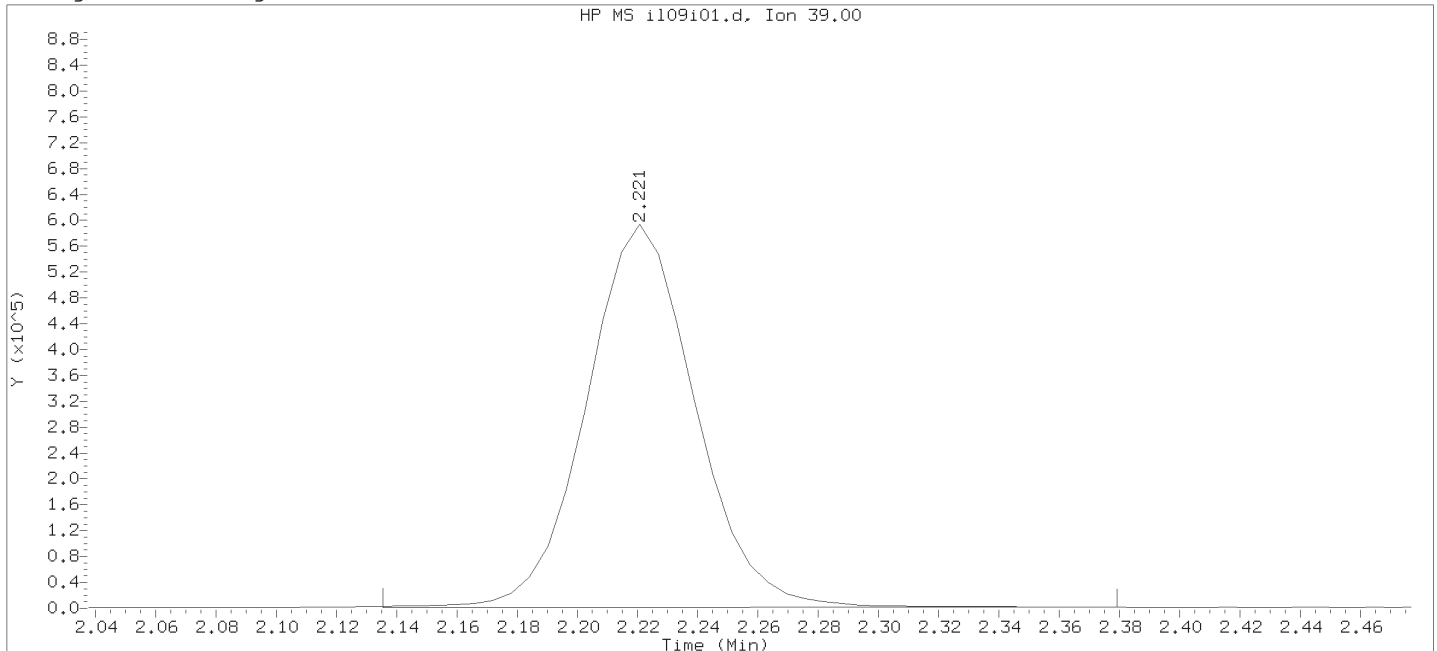
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



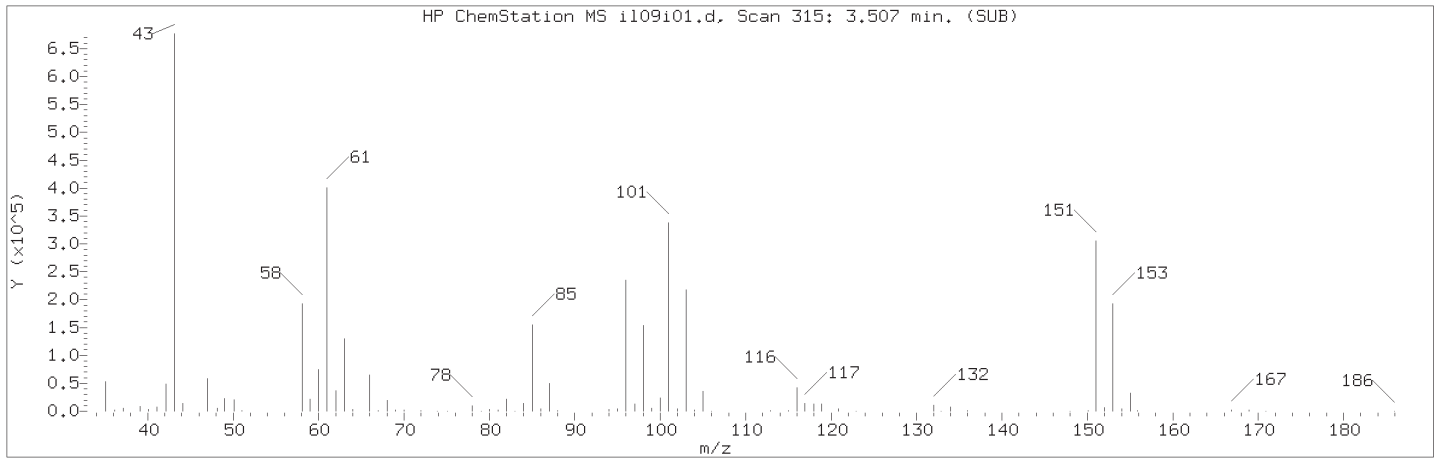
Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 12:45      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:38  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:38 jkh09052

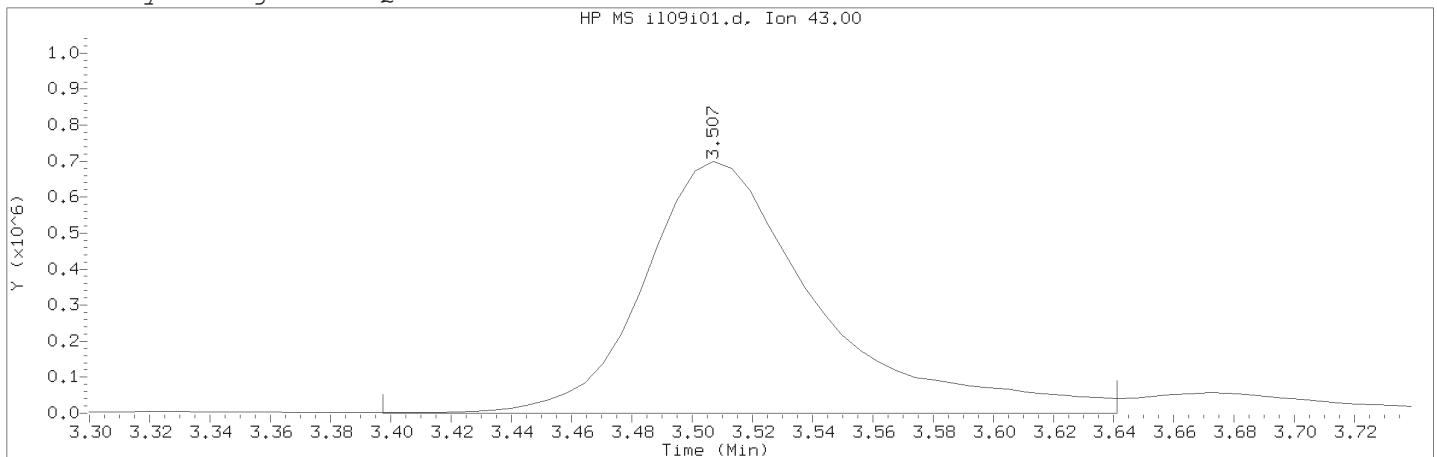
Sample Name: VSTD025      Lab Sample ID: VSTD025

Compound Number : 6  
 Compound Name : 1,3-Butadiene  
 Scan Number : 104  
 Retention Time (minutes): 2.221  
 Quant Ion : 39.00  
 Area : 1487954  
 On-column Amount (ng) : 24.5526  
 Integration start scan : 89      Integration stop scan: 129  
 Y at integration start : 944      Y at integration end: 1504

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025    Lab Sample ID: VSTD025

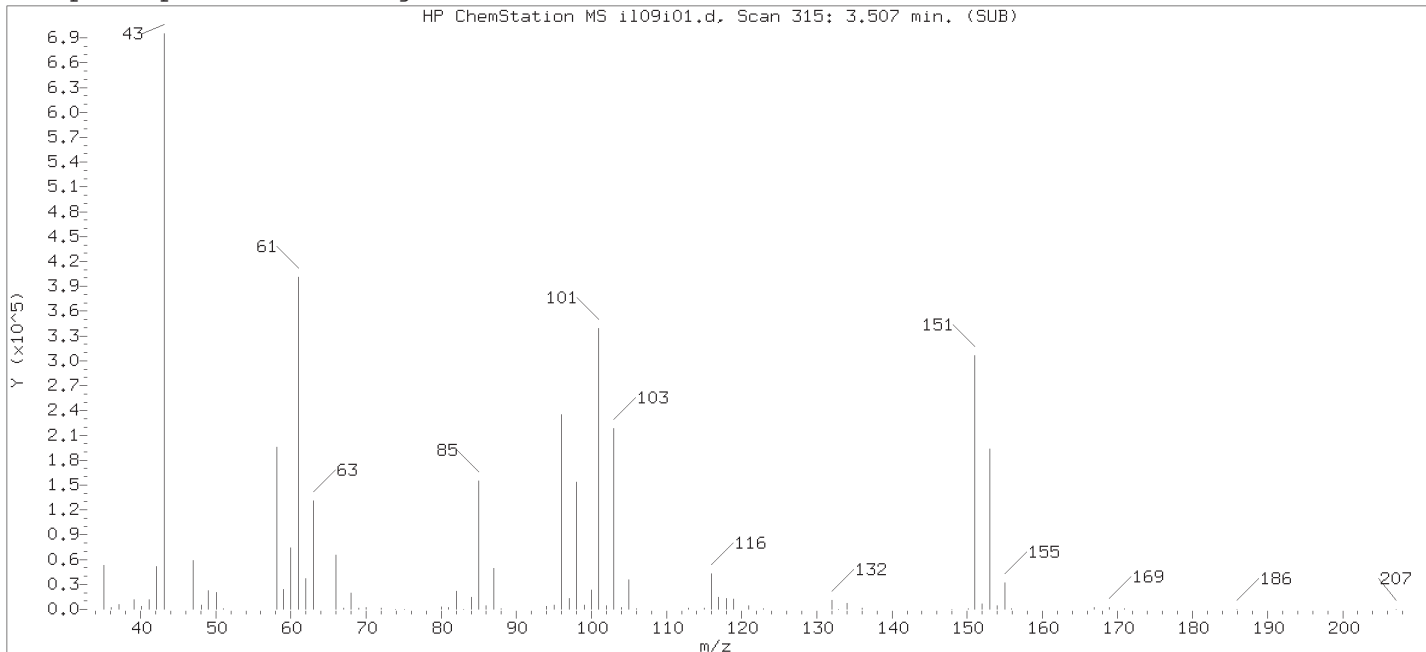
Compound Number                      : 14  
Compound Name                         : Acetone  
Scan Number                            : 315  
Retention Time (minutes): 3.507  
Quant Ion                               : 43.00  
Area (flag)                            : 2804304M  
On-Column Amount (ng)               : 217.8227  
Integration start scan                : 296                      Integration stop scan: 336  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

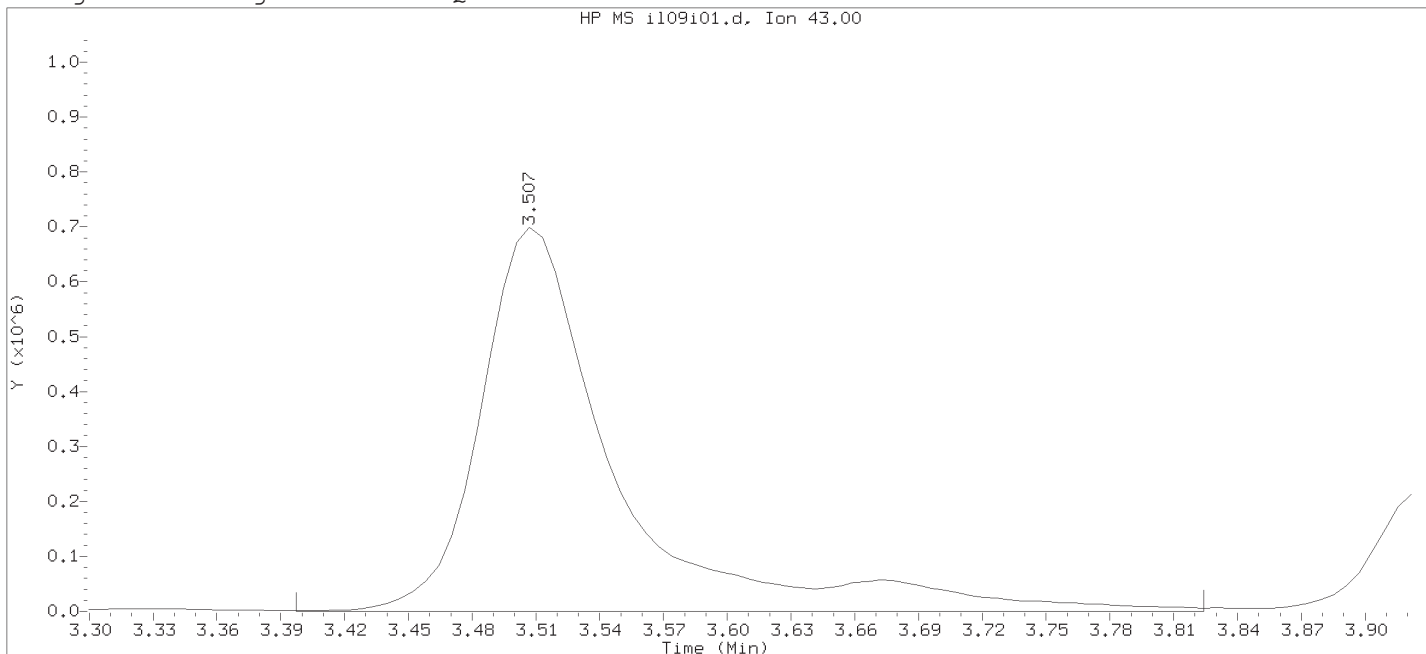
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 12:45      Analyst ID: jkh09052

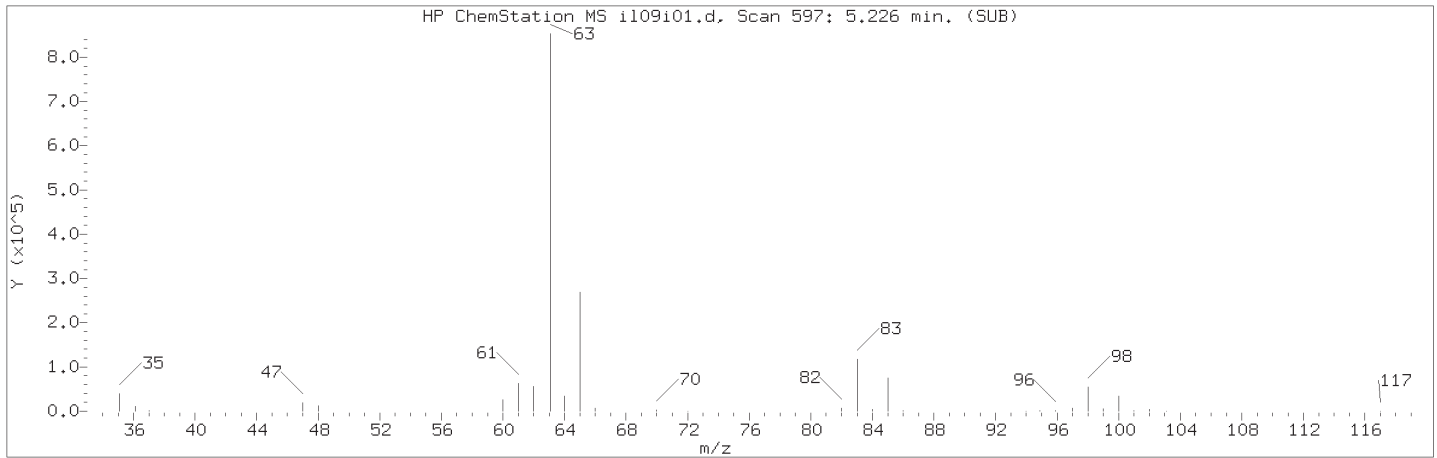
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:38  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:38 jkh09052

Sample Name: VSTD025      Lab Sample ID: VSTD025

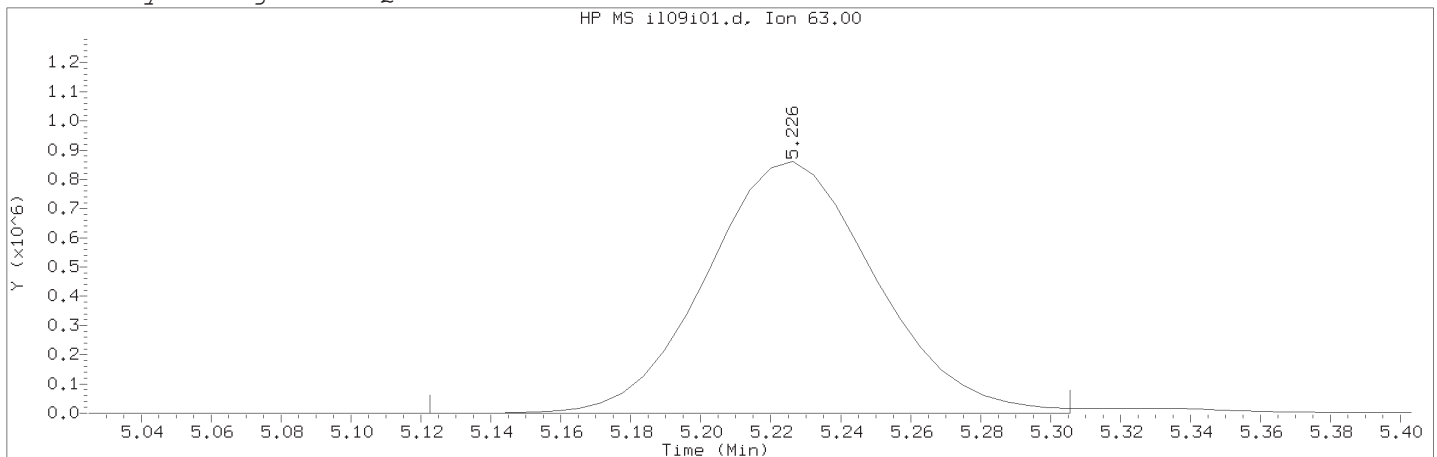
Compound Number : 14  
 Compound Name : Acetone  
 Scan Number : 315  
 Retention Time (minutes): 3.507  
 Quant Ion : 43.00  
 Area : 3095665  
 On-column Amount (ng) : 237.0902  
 Integration start scan : 296      Integration stop scan: 366  
 Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025    Lab Sample ID: VSTD025

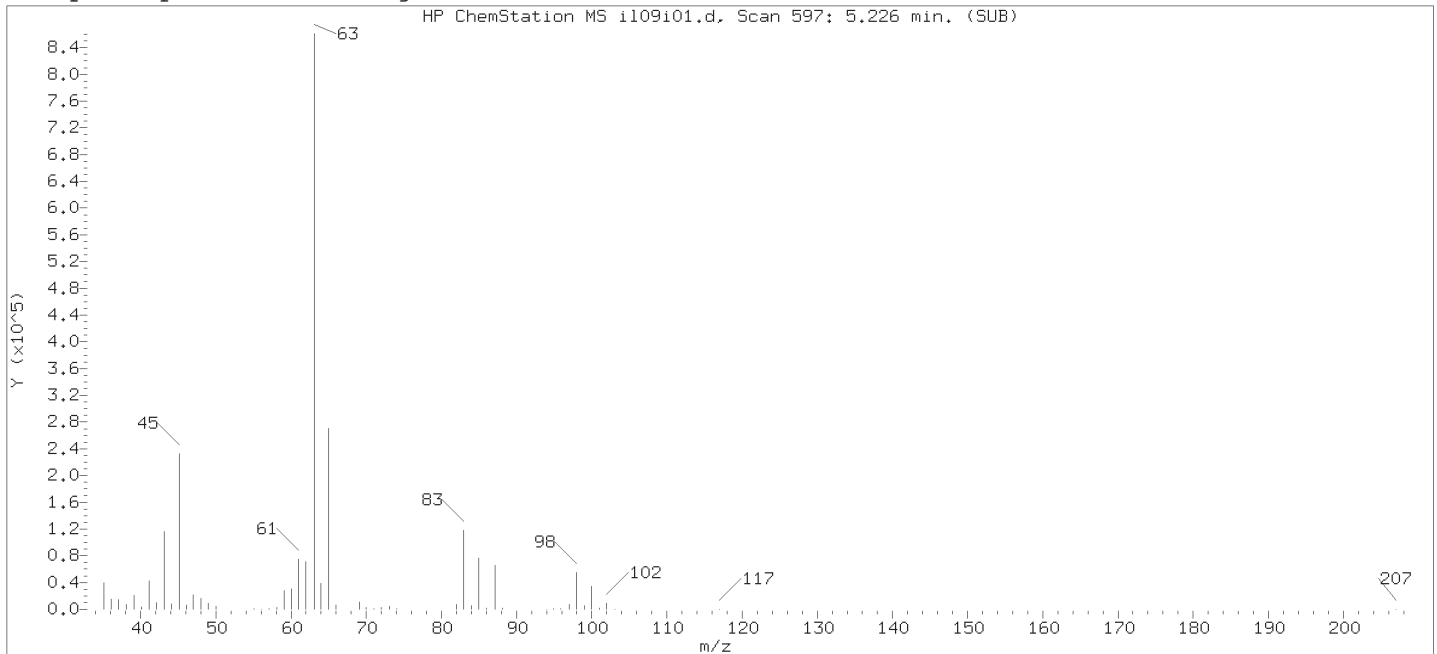
Compound Number                      : 33  
Compound Name                         : 1,1-Dichloroethane  
Scan Number                            : 597  
Retention Time (minutes): 5.226  
Quant Ion                                : 63.00  
Area (flag)                             : 2891066M  
On-Column Amount (ng)                : 23.9994  
Integration start scan                : 579                      Integration stop scan: 609  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

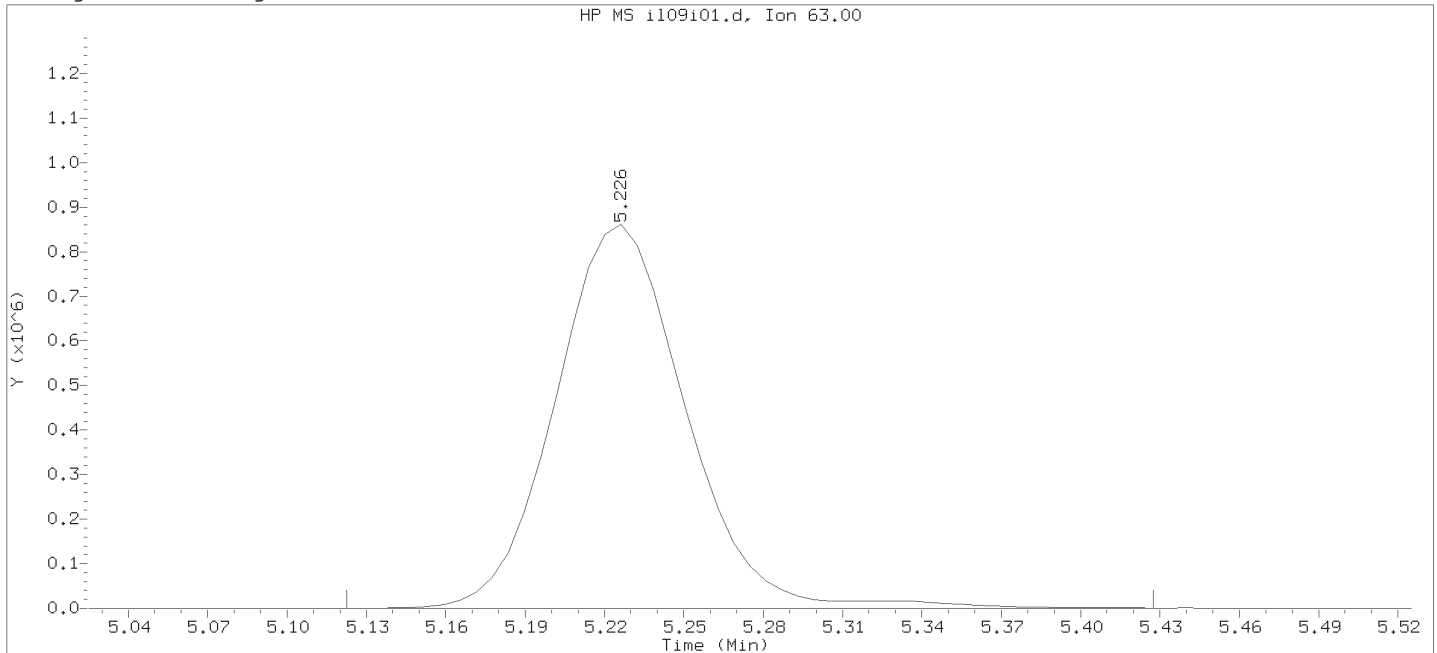
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



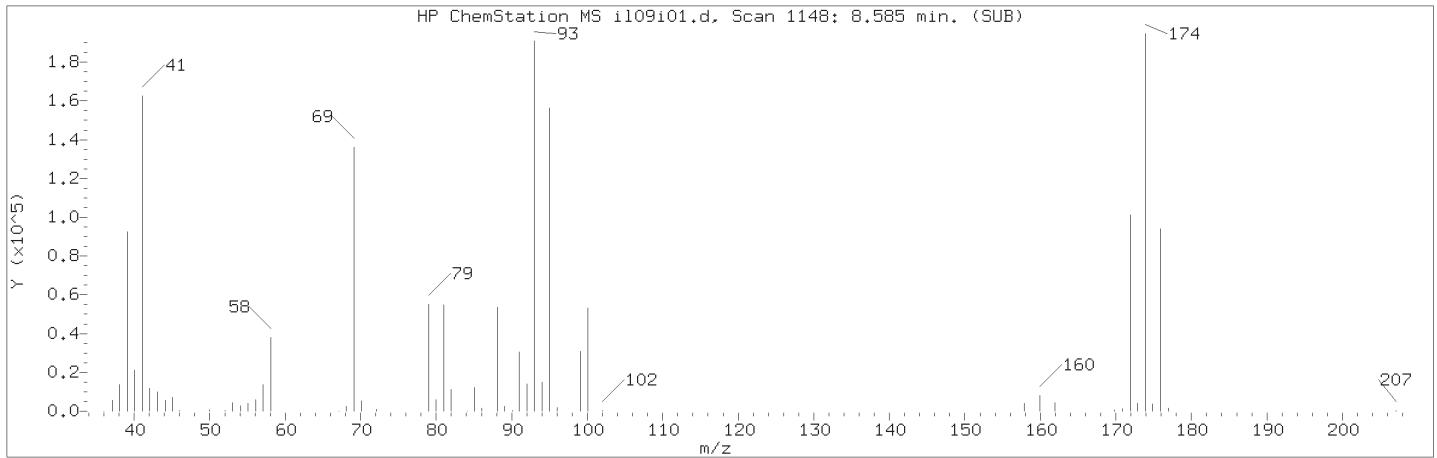
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Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:38  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:38 jkh09052

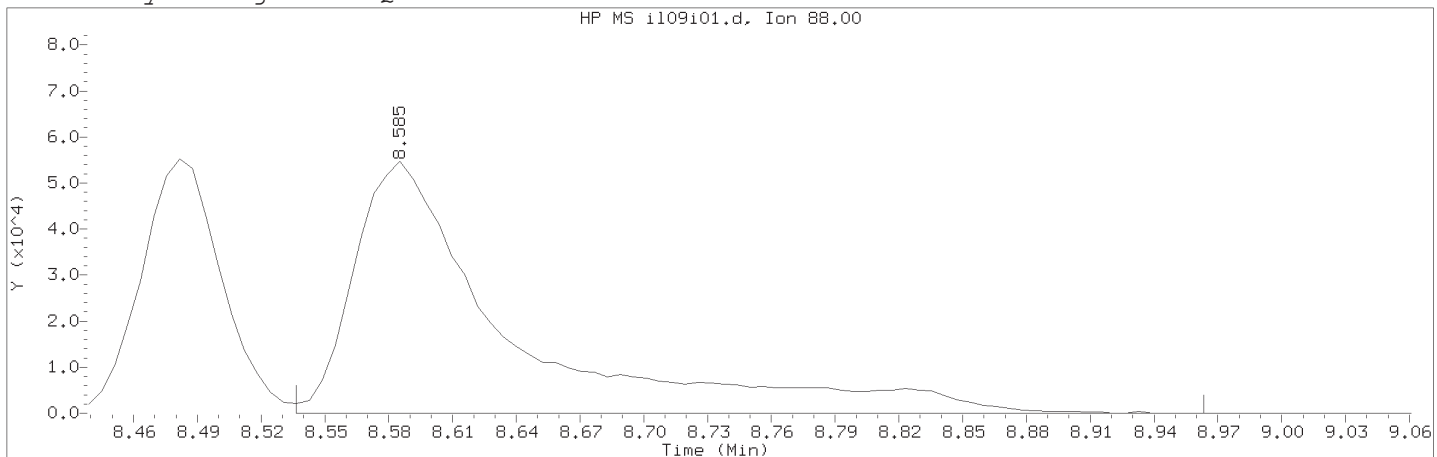
Sample Name: VSTD025      Lab Sample ID: VSTD025

Compound Number : 33  
 Compound Name : 1,1-Dichloroethane  
 Scan Number : 597  
 Retention Time (minutes): 5.226  
 Quant Ion : 63.00  
 Area : 2943516  
 On-column Amount (ng) : 24.3863  
 Integration start scan : 579      Integration stop scan: 629  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025    Lab Sample ID: VSTD025

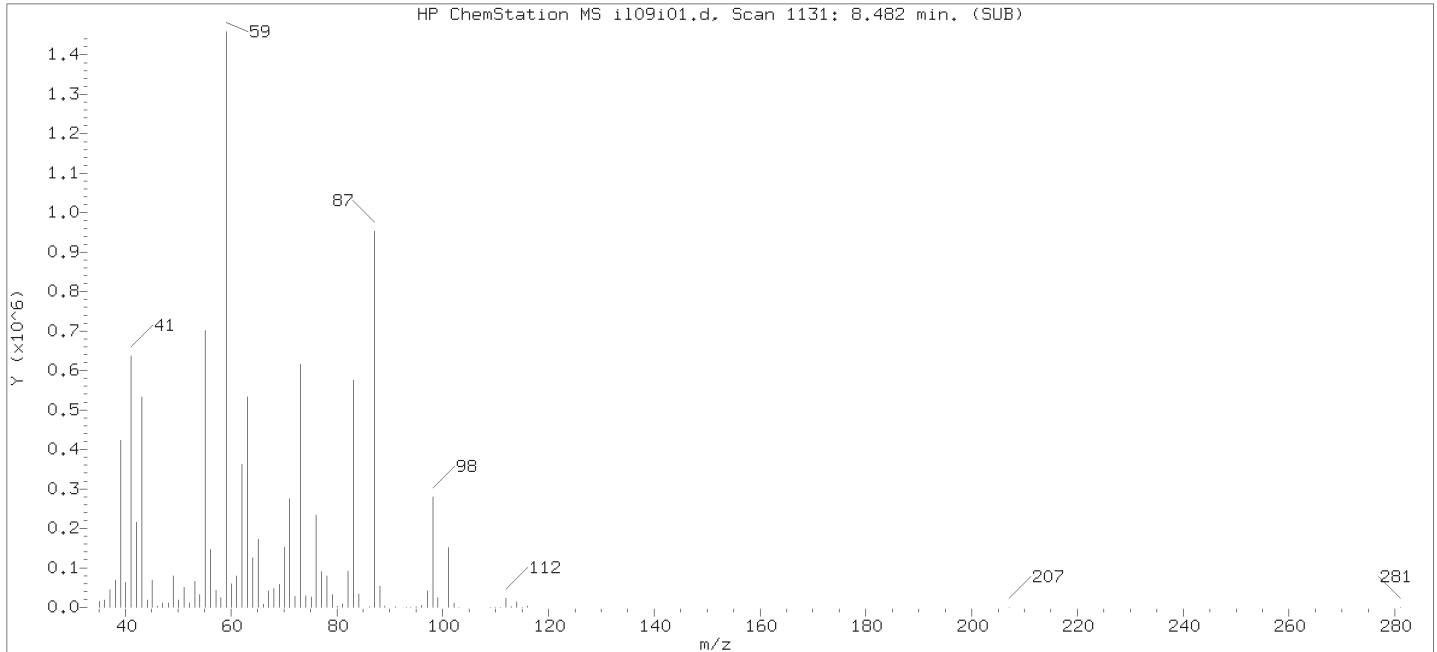
Compound Number    : 72  
Compound Name    : 1,4-Dioxane  
Scan Number    : 1148  
Retention Time (minutes): 8.585  
Quant Ion    : 88.00  
Area (flag)    : 276441M  
On-Column Amount (ng)                                      : 950.9688  
Integration start scan                                      : 1139                      Integration stop scan: 1209  
Y at integration start                                      : 0                              Y at integration end: 0

Reason for manual integration: improper integration

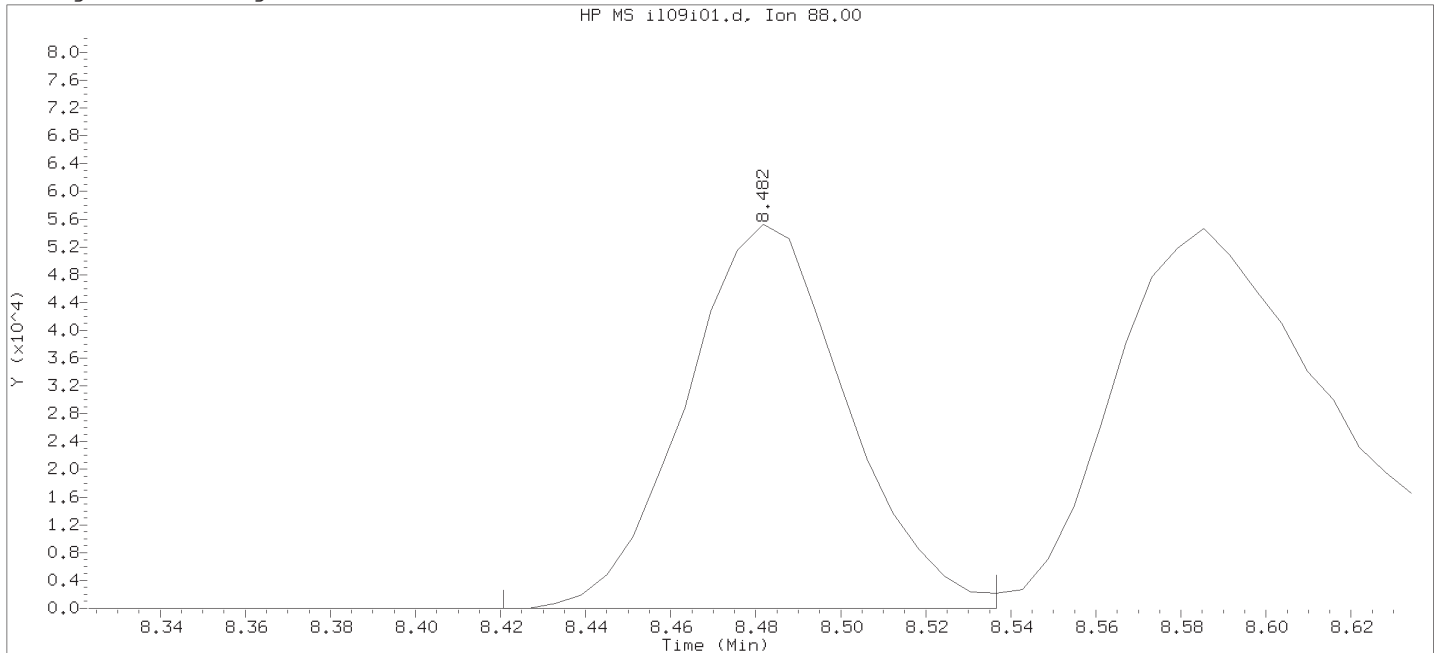
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



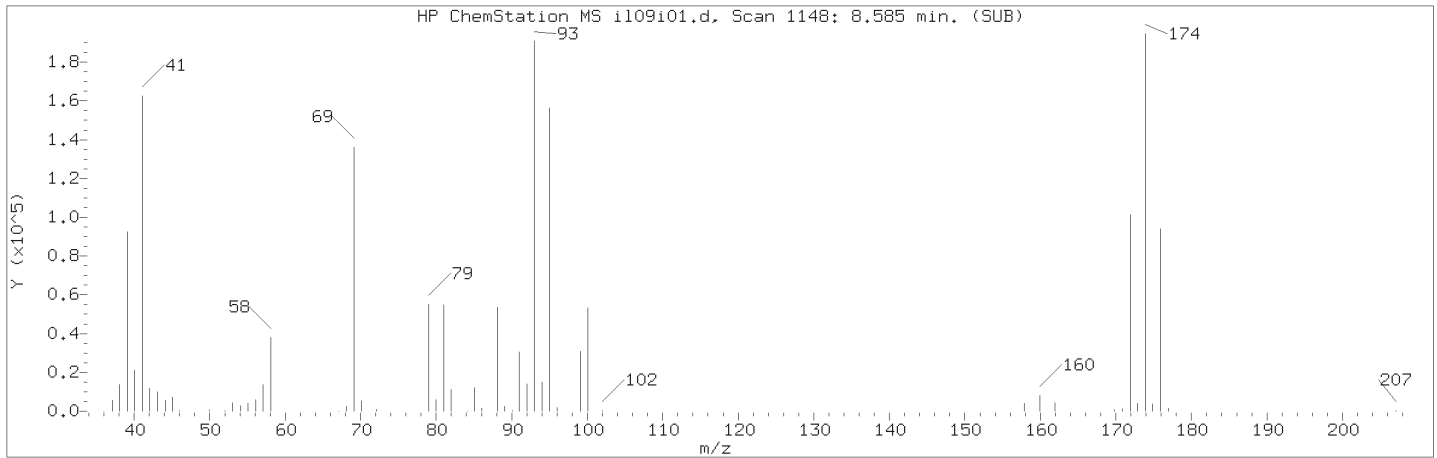
Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:38  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:38 jkh09052

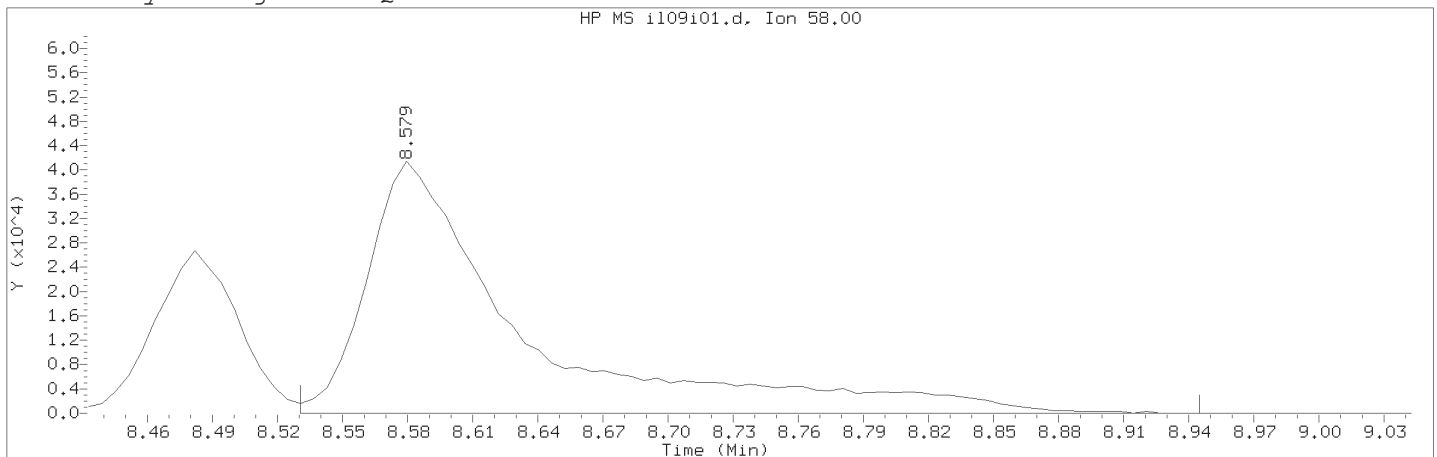
Sample Name: VSTD025      Lab Sample ID: VSTD025

Compound Number : 72  
Compound Name : 1,4-Dioxane  
Scan Number : 1131  
Retention Time (minutes): 8.482  
Quant Ion : 88.00  
Area : 144687  
On-column Amount (ng) : 663.5243  
Integration start scan : 1120      Integration stop scan: 1139  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025    Lab Sample ID: VSTD025

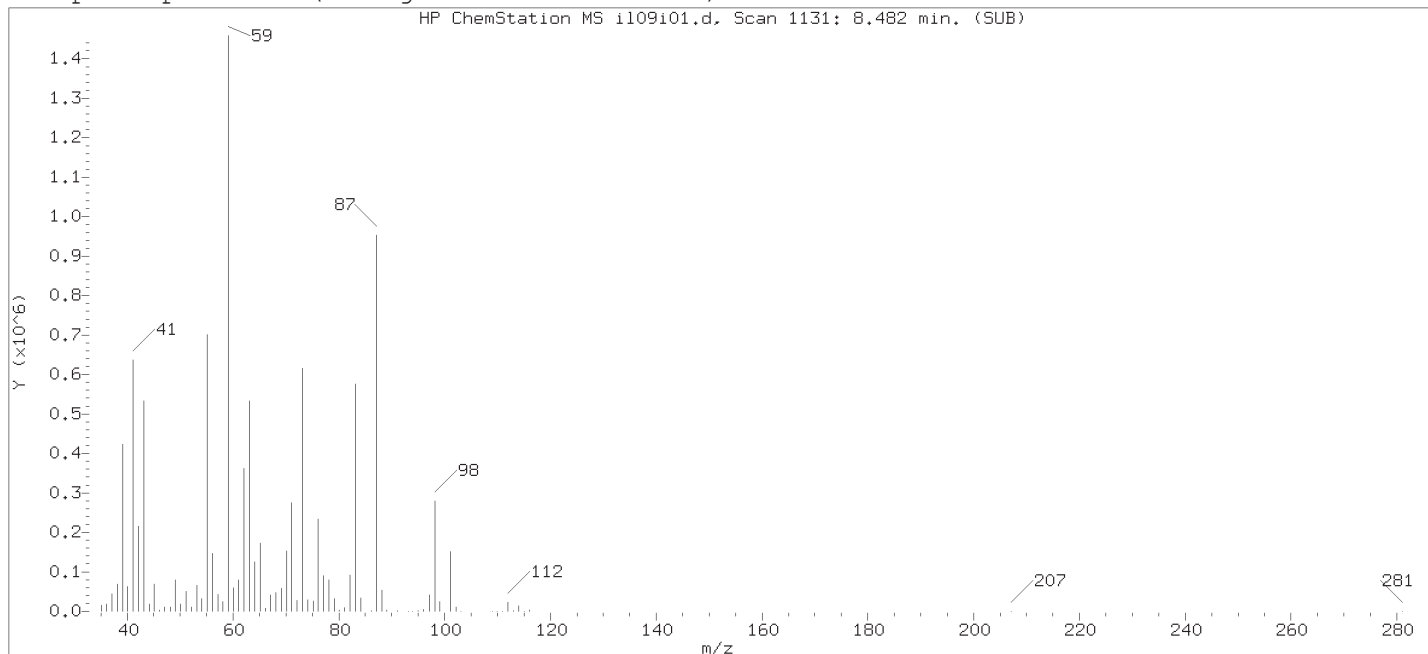
Compound Number                      : 72  
Compound Name                         : 1,4-Dioxane  
Scan Number                            : 1147  
Retention Time (minutes): 8.579  
Quant Ion                                : 58.00  
Area (flag)                             : 204557M  
On-Column Amount (ng)                : 972.7763  
Integration start scan                : 1138                      Integration stop scan: 1206  
Y at integration start                : 0                           Y at integration end: 0

Reason for manual integration: improper integration

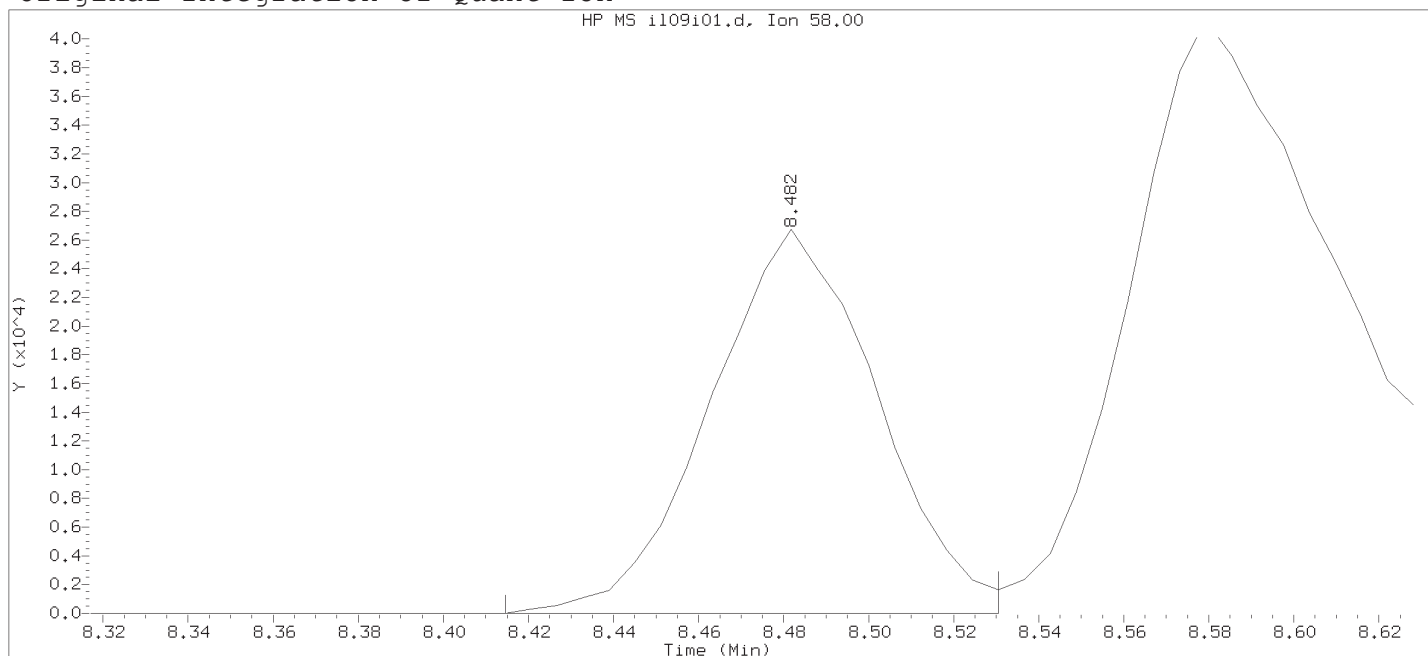
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



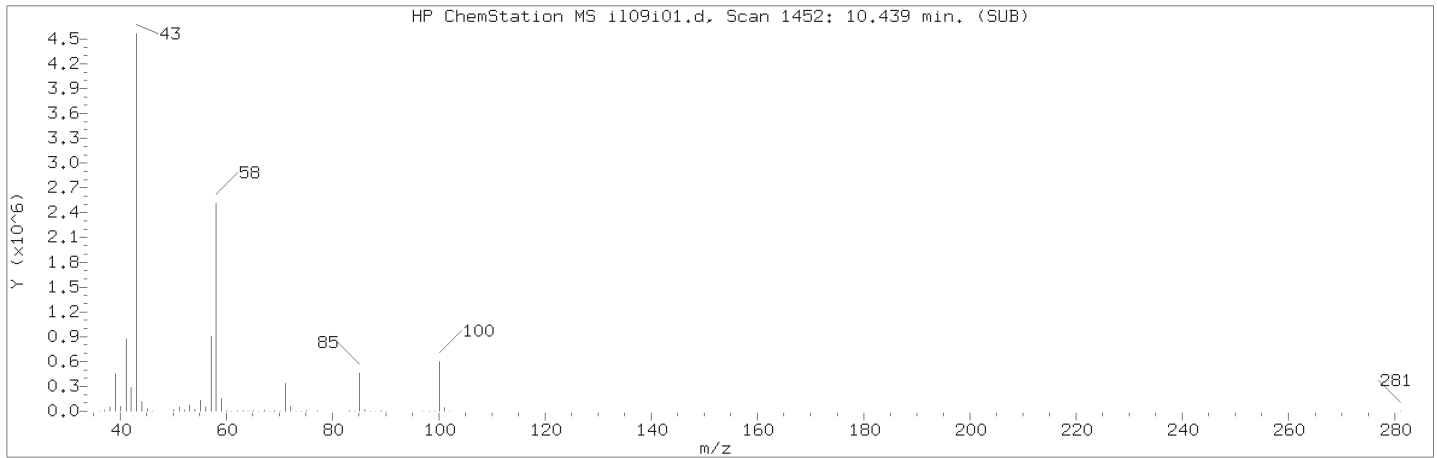
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Injection date and time: 09-JUL-2018 12:45      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:38  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:38 jkh09052

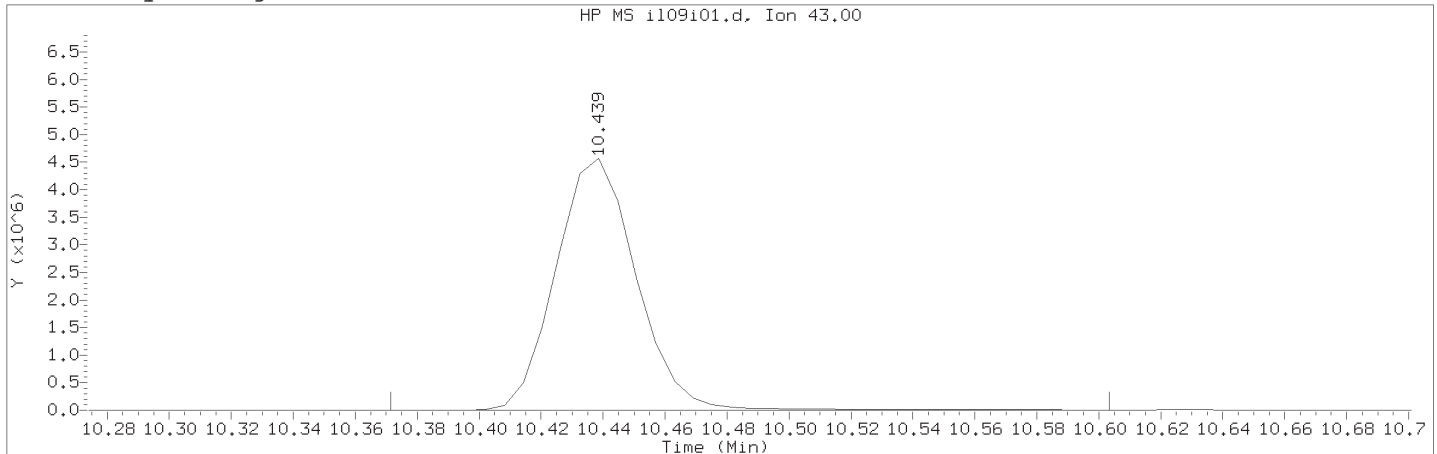
Sample Name: VSTD025      Lab Sample ID: VSTD025

Compound Number : 72  
Compound Name : 1,4-Dioxane  
Scan Number : 1131  
Retention Time (minutes): 8.482  
Quant Ion : 58.00  
Area : 72480  
On-column Amount (ng) : 491.4506  
Integration start scan : 1119      Integration stop scan: 1138  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 12:45                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD025    Lab Sample ID: VSTD025

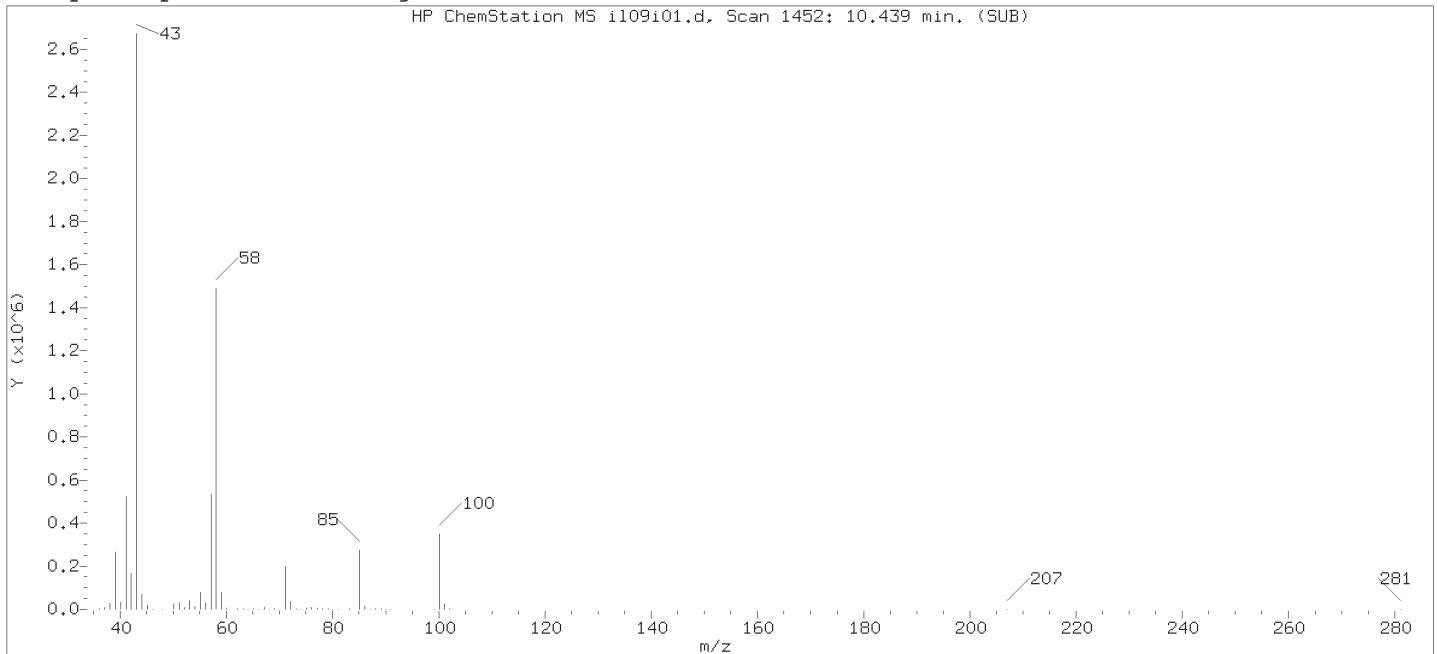
Compound Number                      : 91  
Compound Name                         : 2-Hexanone  
Scan Number                            : 1452  
Retention Time (minutes): 10.439  
Quant Ion                                : 43.00  
Area (flag)                             : 8245559M  
On-Column Amount (ng)                : 220.1459  
Integration start scan                : 1440                      Integration stop scan: 1478  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

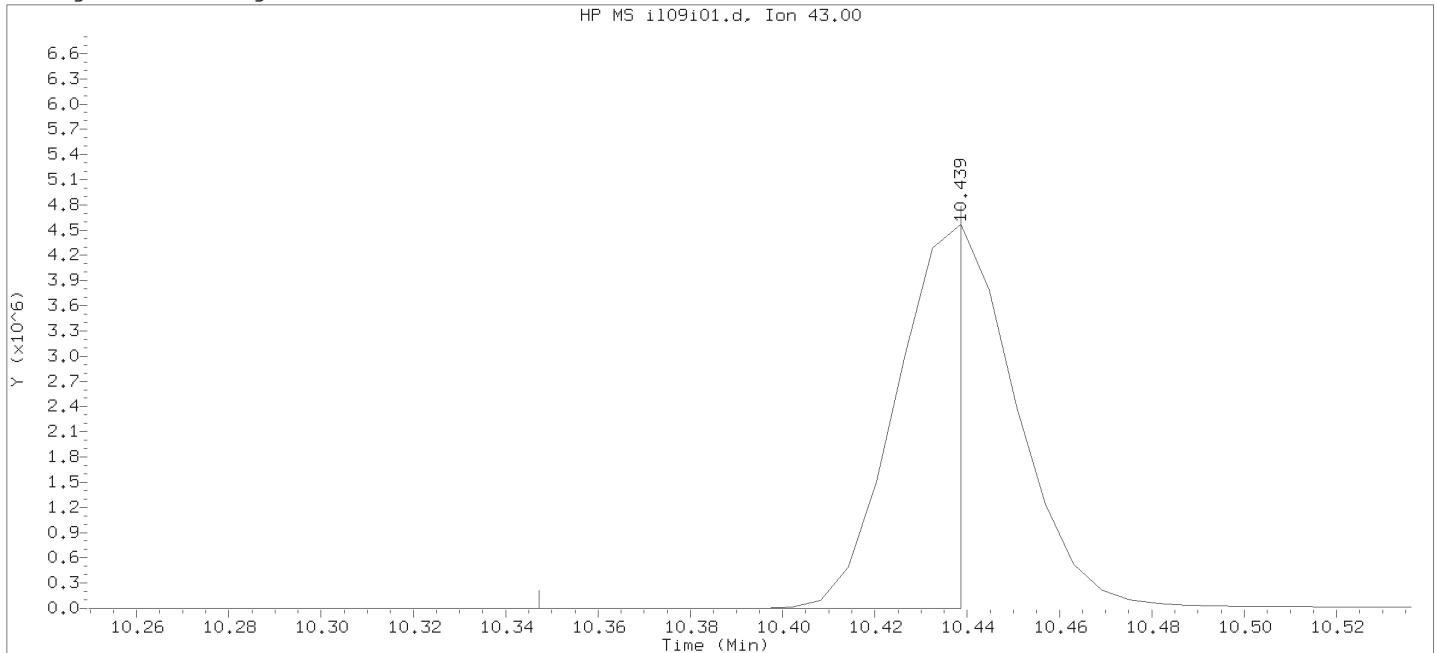
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i01.d  
 Injection date and time: 09-JUL-2018 12:45

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

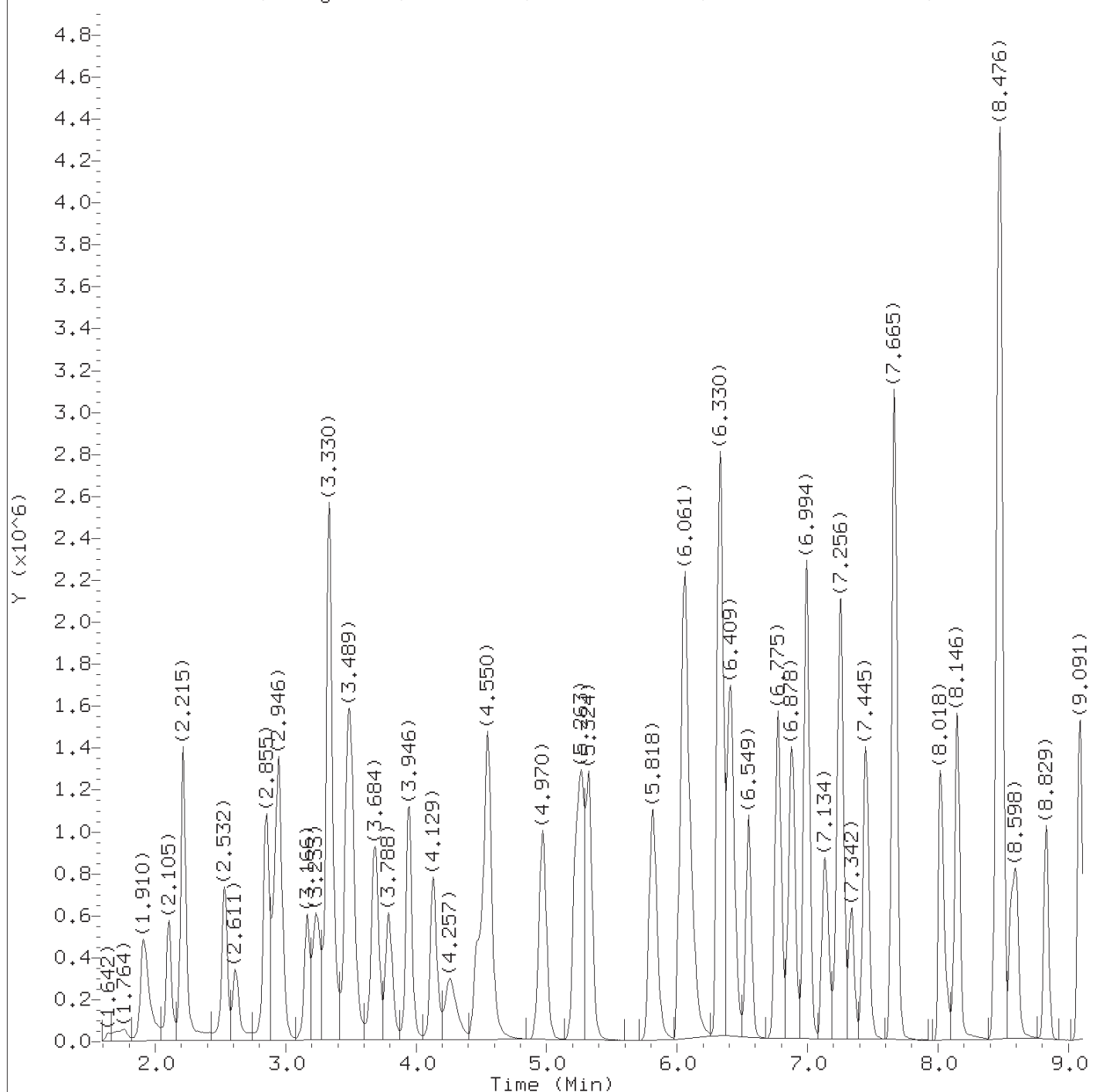
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:38  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:38 jkh09052

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compound Number	: 91	
Compound Name	: 2-Hexanone	
Scan Number	: 1452	
Retention Time (minutes)	: 10.439	
Quant Ion	: 43.00	
Area	: 4272963	
On-column Amount (ng)	: 152.2875	
Integration start scan	: 1436	Integration stop scan: 1451
Y at integration start	: 717	Y at integration end: 717





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d  
Injection date and time: 09-JUL-2018 13:06

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

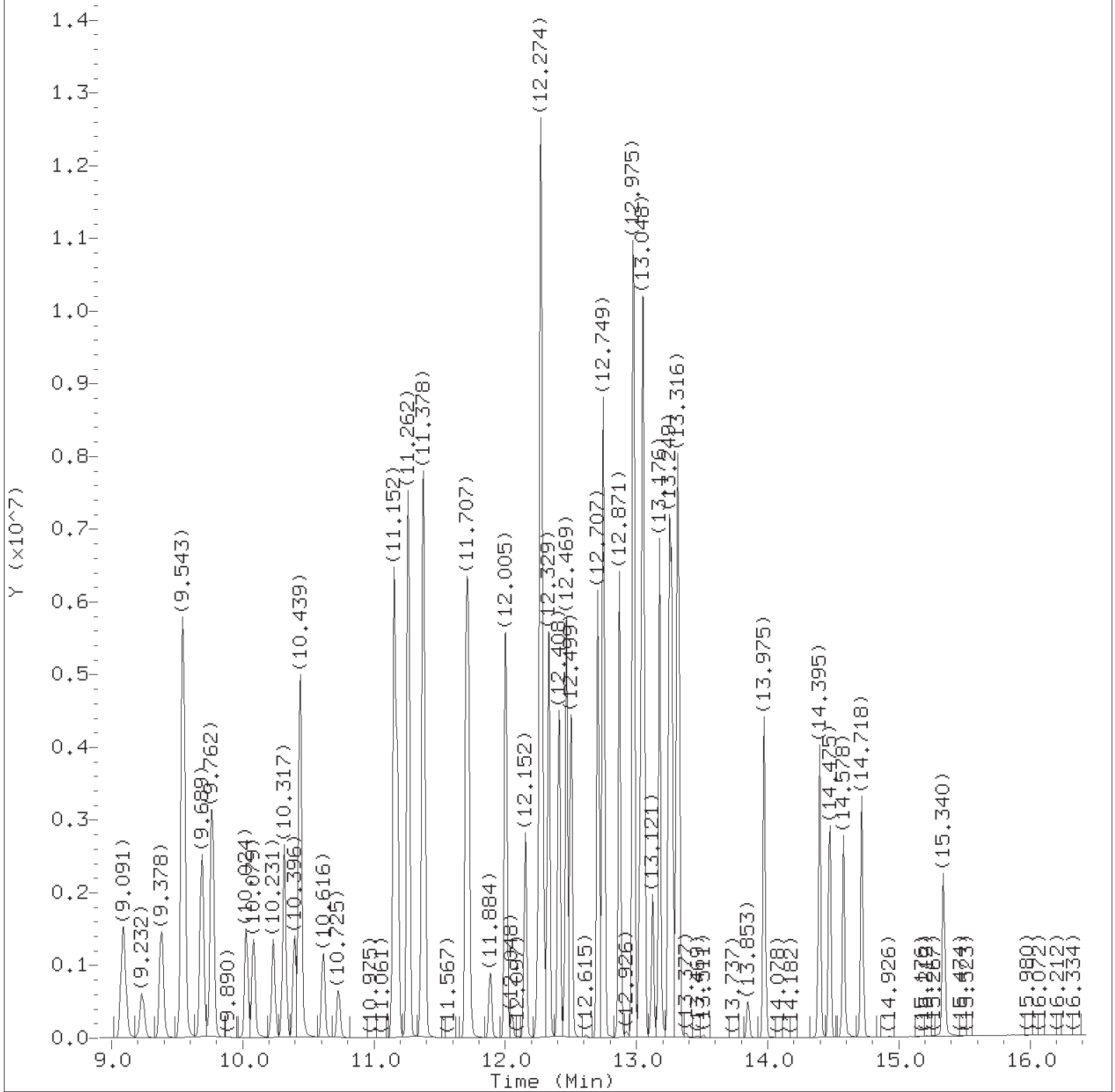
Sublist used: 8260W25

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d  
Injection date and time: 09-JUL-2018 13:06

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i02.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:06 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.910	85	1278726	10.235
2) Chloromethane	(2)	2.105	50	875595	9.600
6) 1,3-Butadiene	(2)	2.209	39	596306M	10.180
5) Vinyl Chloride	(2)	2.221	62	867692	9.853
7) Bromomethane	(2)	2.532	94	764522	9.221
8) Chloroethane	(2)	2.617	64	481810	9.398
9) Dichlorofluoromethane	(2)	2.849	67	1249860	9.275
10) Trichlorofluoromethane	(2)	2.916	101	1527938	10.149
11) Ethyl ether	(2)	3.160	59	513570	10.305
12) Freon 123a	(2)	3.233	67	767208	10.071
13) Acrolein	(1)	3.330	56	4068073	513.530
15) 1,1-Dichloroethene	(2)	3.471	96	536007	10.324
16) Freon 113	(2)	3.501	101	647399	10.740
14) Acetone	(1)	3.501	43	1126349M	95.606
17) Methyl Iodide	(2)	3.678	142	1108798	10.402
18) Carbon Disulfide	(2)	3.788	76	1572323	10.207
21) Methyl Acetate	(1)	3.922	43	282668	10.569
22) Allyl Chloride	(2)	3.946	41	1120507	10.044
23) Methylene Chloride	(2)	4.129	84	588372	10.007
26)*t-Butyl Alcohol-d10	(1)	4.147	65	201611	50.000
28) t-Butyl Alcohol	(1)	4.257	59	1066945	204.669
29) Acrylonitrile	(1)	4.464	53	686047	53.435
30) Methyl Tertiary Butyl Ether	(2)	4.531	73	1659026	10.317
31) trans-1,2-Dichloroethene	(2)	4.550	96	599609	10.176
32) n-Hexane	(2)	4.970	57	996297	10.267
33) 1,1-Dichloroethane	(2)	5.220	63	1195437	10.266
34) di-Isopropyl Ether	(2)	5.269	45	2175051	10.341
35) 2-Chloro-1,3-Butadiene	(2)	5.330	53	1138591	10.328
37) Ethyl t-butyl ether	(2)	5.812	59	2023589	10.294
38) 2-Butanone	(1)	6.031	43	2049389	104.886
39) cis-1,2-Dichloroethene	(2)	6.061	96	685675	10.190
41) 2,2-Dichloropropane	(2)	6.068	77	1094931	10.355
40) 1,2-Dichloroethene (Total)	(2)		96	1285284	20.366
42) Propionitrile	(1)	6.116	54	1012500	209.980
45) Methacrylonitrile	(1)	6.330	67	1717849	104.527
47) Bromochloromethane	(2)	6.403	128	304510	10.343
48) Tetrahydrofuran	(1)	6.421	71	521563	103.353
49) Chloroform	(2)	6.549	83	1196566	10.209

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i02.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:06 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.769	113	536450	10.041
50) \$Dibromofluoromethane	(2)	6.769	111	547179	9.983
51) 1,1,1-Trichloroethane	(2)	6.781	97	1160465	10.303
52) Cyclohexane	(2)	6.878	56	1186764	9.980
52) Cyclohexane	(2)	6.878	84	947504	10.146
52) Cyclohexane	(2)	6.878	69	356047	10.104
54) Carbon Tetrachloride	(2)	6.994	117	1045675	10.599
55) 1,1-Dichloropropene	(2)	6.994	75	916225	10.302
56) Isobutyl Alcohol	(1)	7.134	41	817717	518.102
57) \$1,2-Dichloroethane-d4	(2)	7.226	102	100527	9.909
57) \$1,2-Dichloroethane-d4	(2)	7.232	65	598220	9.959
57) \$1,2-Dichloroethane-d4	(2)	7.238	104	64505	9.921
58) Benzene	(2)	7.256	78	2527291	10.166
59) 1,2-Dichloroethane	(2)	7.342	62	835079	9.959
59) 1,2-Dichloroethane	(2)	7.342	98	63287	10.913
60) t-Amyl methyl ether	(2)	7.445	73	1757202	10.248
62) n-Heptane	(2)	7.665	43	1109149	10.430
63) *Fluorobenzene	(2)	7.665	96	2046779	10.000
65) n-Butanol	(1)	8.018	56	1315430	1117.513
67) Trichloroethene	(2)	8.146	95	704656	10.341
69) Methylcyclohexane	(2)	8.457	83	1239234	10.054
70) 1,2-Dichloropropene	(2)	8.488	63	641961	10.302
71) Methyl Methacrylate	(1)	8.561	69	328997	11.038
72) 1,4-Dioxane	(1)	8.585	88	146583	551.038
72) 1,4-Dioxane	(1)	8.579	58	108430	563.484
73) Dibromomethane	(2)	8.598	93	323748	10.336
74) Bromodichloromethane	(2)	8.829	83	908251	10.799
76) 2-Nitropropane	(1)	9.091	41	1420486	106.155
80) cis-1,3-Dichloropropene	(2)	9.378	75	1011805	10.603
81) 4-Methyl-2-Pentanone	(1)	9.543	43	5062580	105.862
82) \$Toluene-d8	(3)	9.689	98	1984449	9.817
82) \$Toluene-d8	(3)	9.689	100	1281743	9.824
83) Toluene	(3)	9.768	92	1611094	10.121
84) trans-1,3-Dichloropropene	(3)	10.024	75	866346	10.890
86) Ethyl Methacrylate	(3)	10.079	69	726437	10.551
85) 1,3-Dichloropropene (total)	(3)		75	1878151	21.493
88) 1,1,2-Trichloroethane	(3)	10.231	97	451008	10.281
89) Tetrachloroethene	(3)	10.317	166	841367	10.248

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i02.d  
 Injection date and time: 09-JUL-2018 13:06

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.396	76	776952	10.191
91) 2-Hexanone	(1)	10.439	43	3571174M	104.192
93) Dibromochloromethane	(3)	10.616	129	621663	10.934
95) 1,2-Dibromoethane	(3)	10.725	107	441373	10.490
97) *Chlorobenzene-d5	(3)	11.152	117	1618210	10.000
98) Chlorobenzene	(3)	11.176	112	1765612	10.156
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	712964	10.783
100) Ethylbenzene	(3)	11.262	91	3233666	10.246
101) m+p-Xylene	(3)	11.378	106	2557983	20.795
104) o-Xylene	(3)	11.707	106	1282315	10.435
106) Styrene	(3)	11.719	104	2004672	10.842
105) Xylene (Total)	(3)		106	3840298	31.230
107) Bromoform	(3)	11.890	173	397941	11.512
108) Isopropylbenzene	(3)	12.005	105	3340886	10.433
111) \$4-Bromofluorobenzene	(3)	12.152	95	782361	9.833
111) \$4-Bromofluorobenzene	(3)	12.158	174	711853	9.863
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	591246M	10.687
114) Bromobenzene	(4)	12.268	156	878368	10.818
115) trans-1,4-Dichloro-2-butene	(1)	12.274	53	1762219A	112.059
116) 1,2,3-Trichloropropane	(4)	12.298	110	165145	10.263
117) n-Propylbenzene	(4)	12.335	91	3850262	10.393
119) 2-Chlorotoluene	(4)	12.408	126	776206	10.484
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	2805690	10.560
122) 4-Chlorotoluene	(4)	12.505	126	782529	10.443
125) tert-Butylbenzene	(4)	12.707	134	610514	10.676
126) Pentachloroethane	(4)	12.743	167	562875	11.276
127) 1,2,4-Trimethylbenzene	(4)	12.749	105	2864806	10.673
128) sec-Butylbenzene	(4)	12.871	105	3631610	10.631
131) 1,3-Dichlorobenzene	(4)	12.975	146	1657255	10.797
132) p-Isopropyltoluene	(4)	12.981	119	3238021	10.738
133) *1,4-Dichlorobenzene-d4	(4)	13.030	152	902335	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	1632996	10.402
135) 1,2,3-Trimethylbenzene	(4)	13.054	120	1273888	10.419
136) Benzyl Chloride	(4)	13.121	126	249720M	12.040
138) n-Butylbenzene	(4)	13.267	92	1528721	11.062
139) 1,2-Dichlorobenzene	(4)	13.310	146	1488323	10.459
143) 1,2-Dibromo-3-chloropropane	(1)	13.853	155	93238A	11.968
144) 1,3,5-Trichlorobenzene	(4)	13.975	180	1237105	11.109

M = Compound was manually integrated.  
 A = User selected an alternate hit.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray  
 on 07/17/2018 at 16:40.  
 Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i02.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010

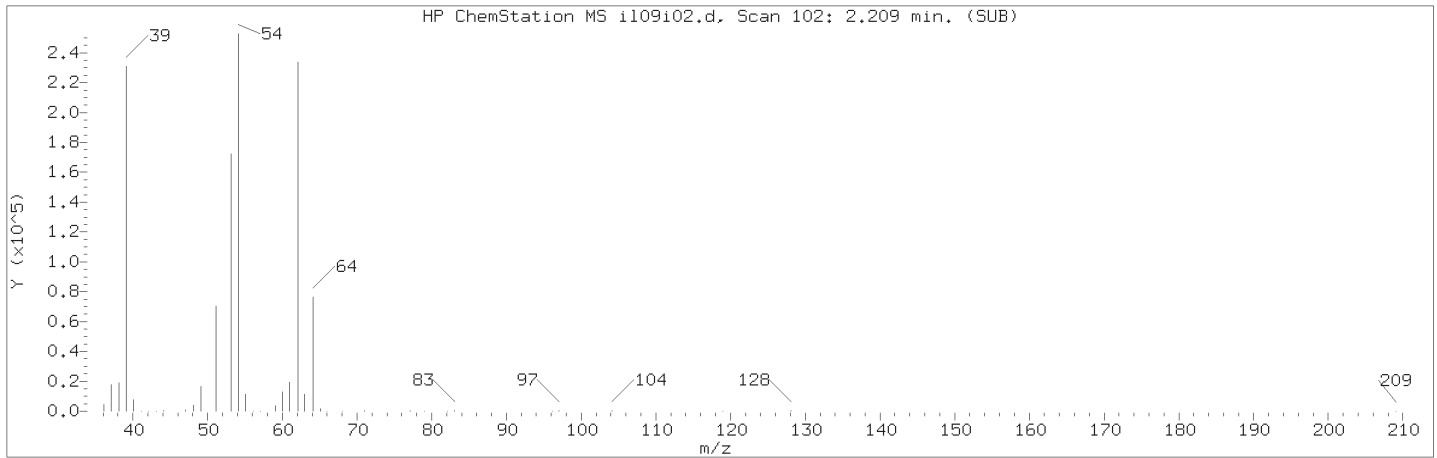
Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,2,4-Trichlorobenzene	(4)	14.395	180	1078643	11.235
146) Hexachlorobutadiene	(4)	14.475	225	464715	11.415
147) Naphthalene	(4)	14.578	128	1890964	10.891
148) 1,2,3-Trichlorobenzene	(4)	14.718	180	896803	10.944

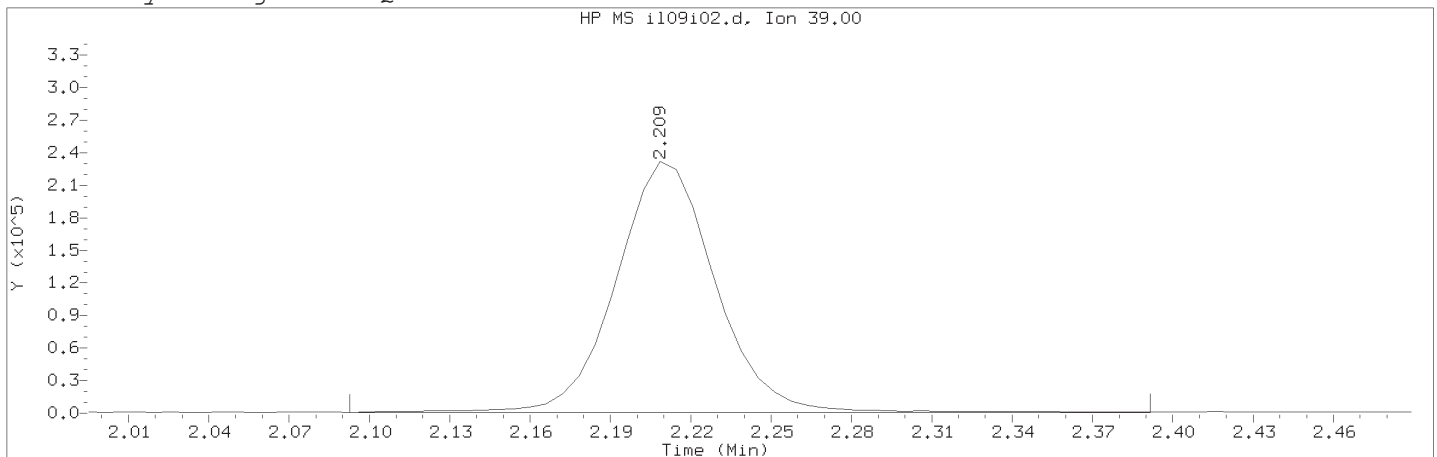
page 4 of 4

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010    Lab Sample ID: VSTD010

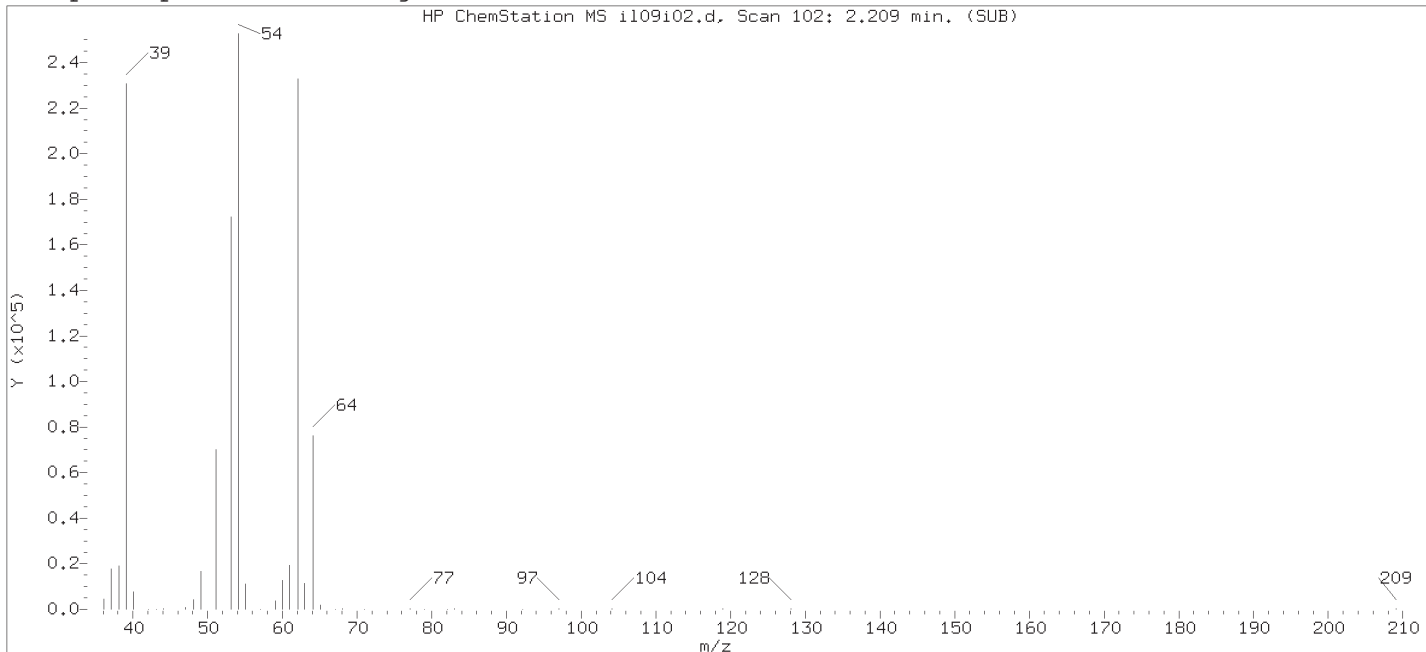
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 102  
Retention Time (minutes): 2.209  
Quant Ion                                : 39.00  
Area (flag)                             : 596306M  
On-Column Amount (ng)                : 10.1797  
Integration start scan                : 82                      Integration stop scan: 131  
Y at integration start                : 780                    Y at integration end: 780

Reason for manual integration: improper integration

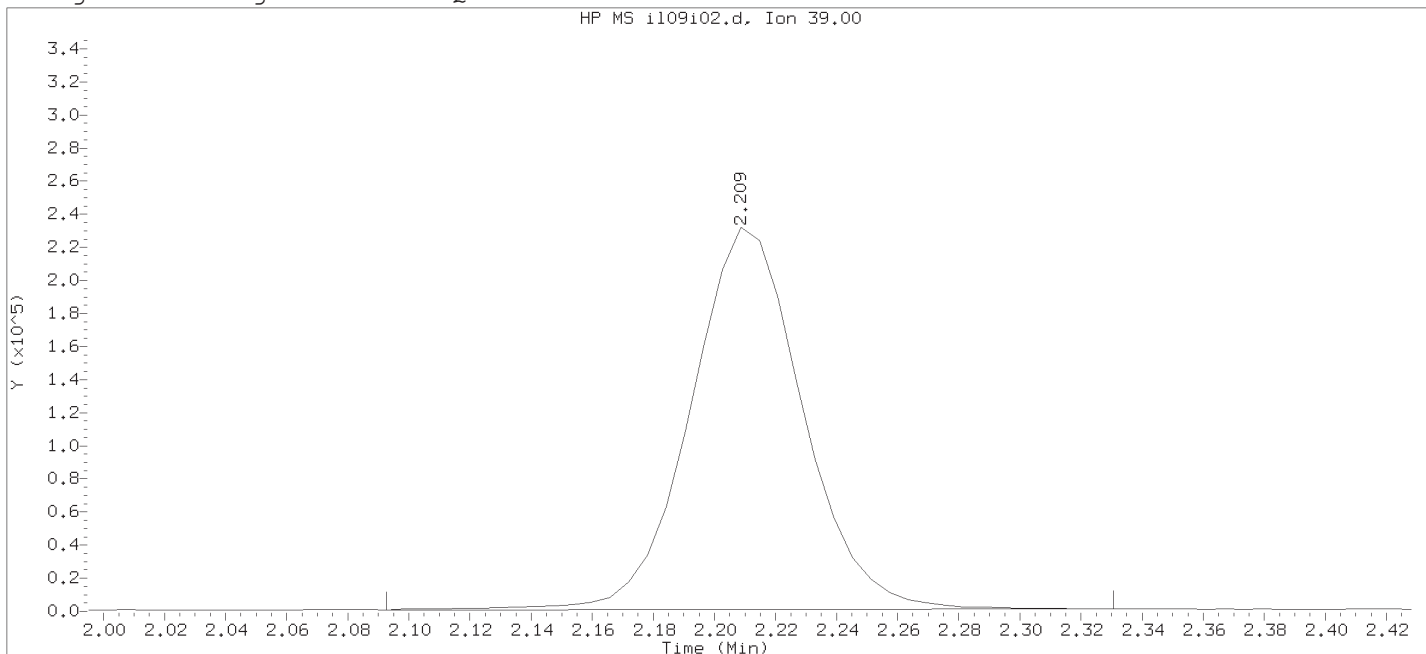
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06      Analyst ID: jkh09052

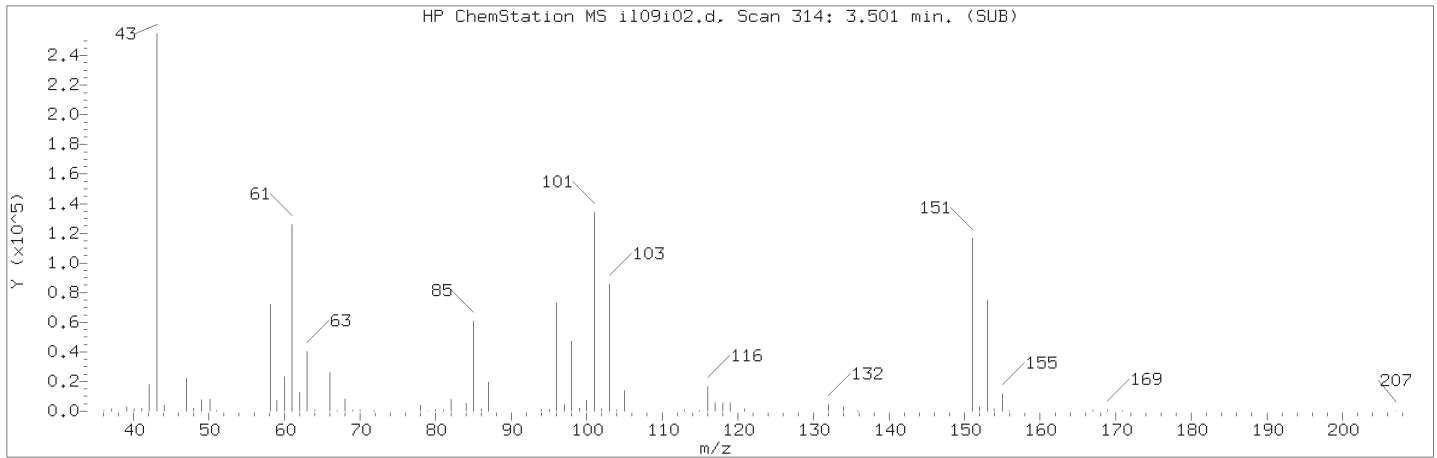
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 09-JUL-2018 13:24  
Date, time and analyst ID of latest file update: 09-Jul-2018 13:24 Automation

Sample Name: VSTD010      Lab Sample ID: VSTD010

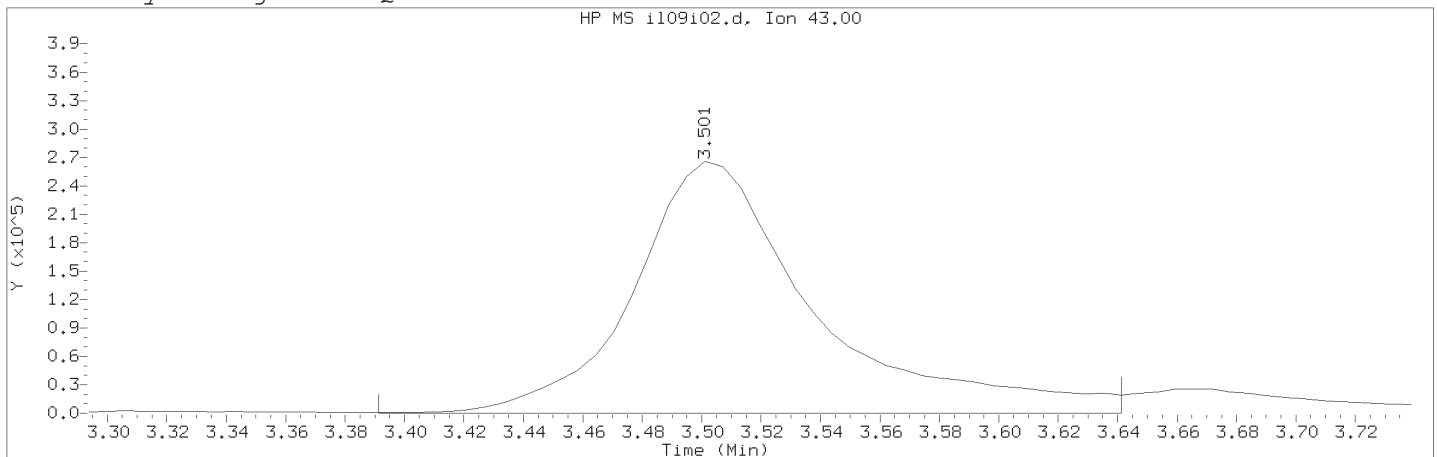
Compound Number : 6  
Compound Name : 1,3-Butadiene  
Scan Number : 102  
Retention Time (minutes): 2.209  
Quant Ion : 39.00  
Area : 588809  
On-column Amount (ng) : 7.7264  
Integration start scan : 82      Integration stop scan: 121  
Y at integration start : 822      Y at integration end: 1495



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010    Lab Sample ID: VSTD010

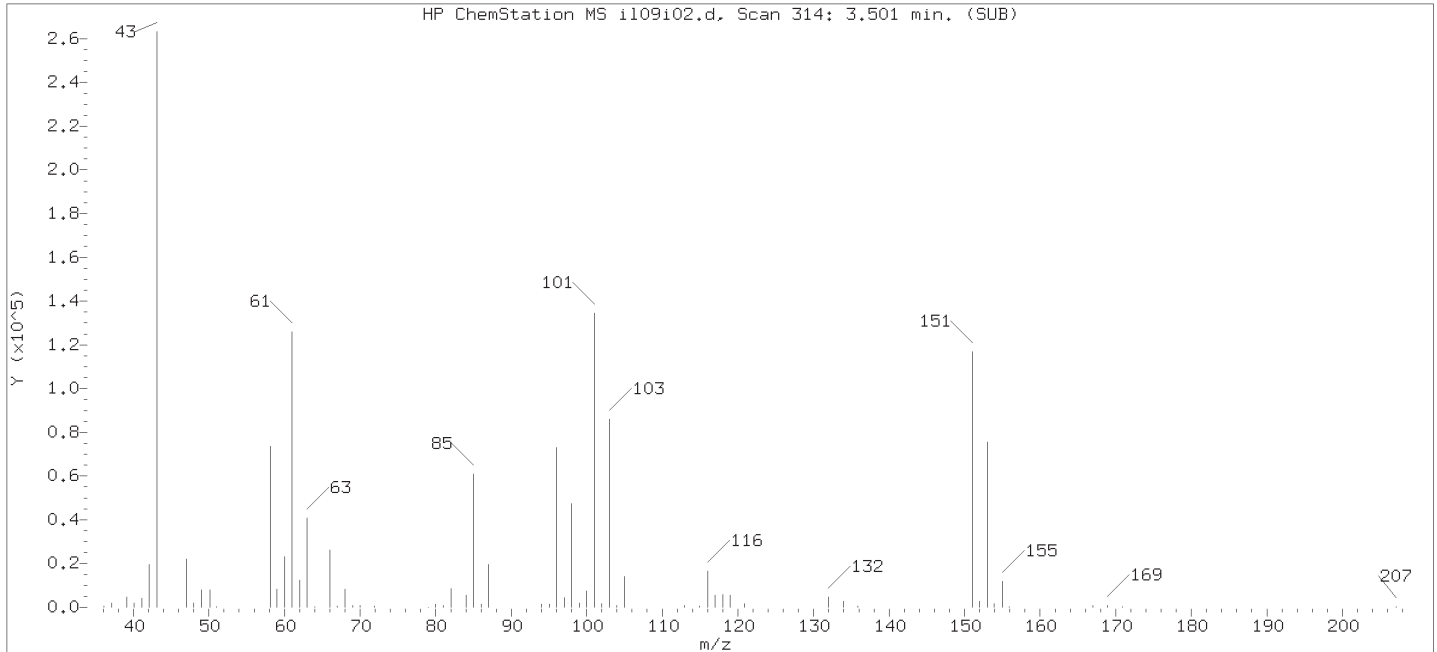
Compound Number                      : 14  
Compound Name                         : Acetone  
Scan Number                            : 314  
Retention Time (minutes): 3.501  
Quant Ion                                : 43.00  
Area (flag)                             : 1126349M  
On-Column Amount (ng)                : 95.6059  
Integration start scan                 : 295                      Integration stop scan: 336  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

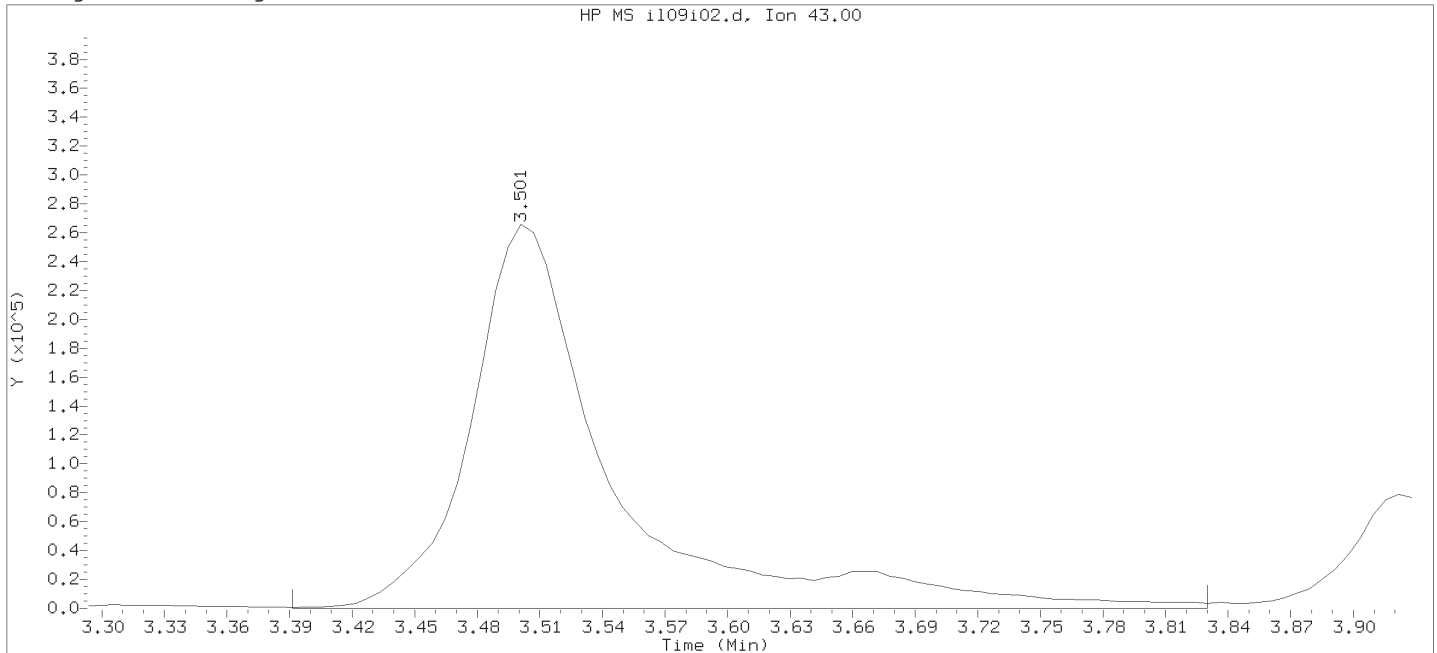
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d  
 Injection date and time: 09-JUL-2018 13:06

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

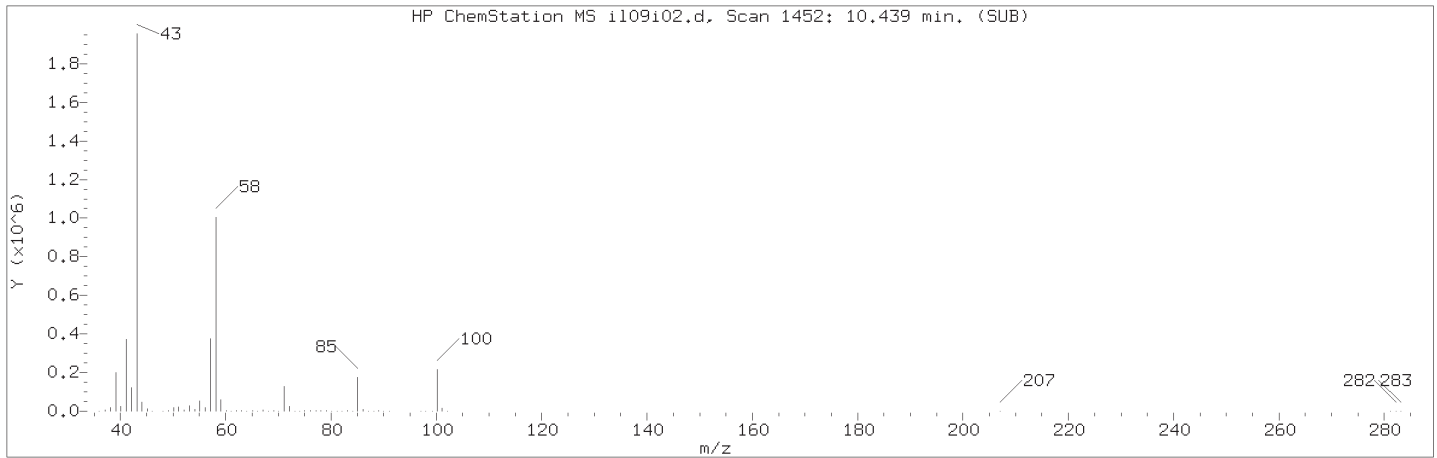
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 Calibration date and time: 09-JUL-2018 13:24  
 Date, time and analyst ID of latest file update: 09-Jul-2018 13:24 Automation

Sample Name: VSTD010

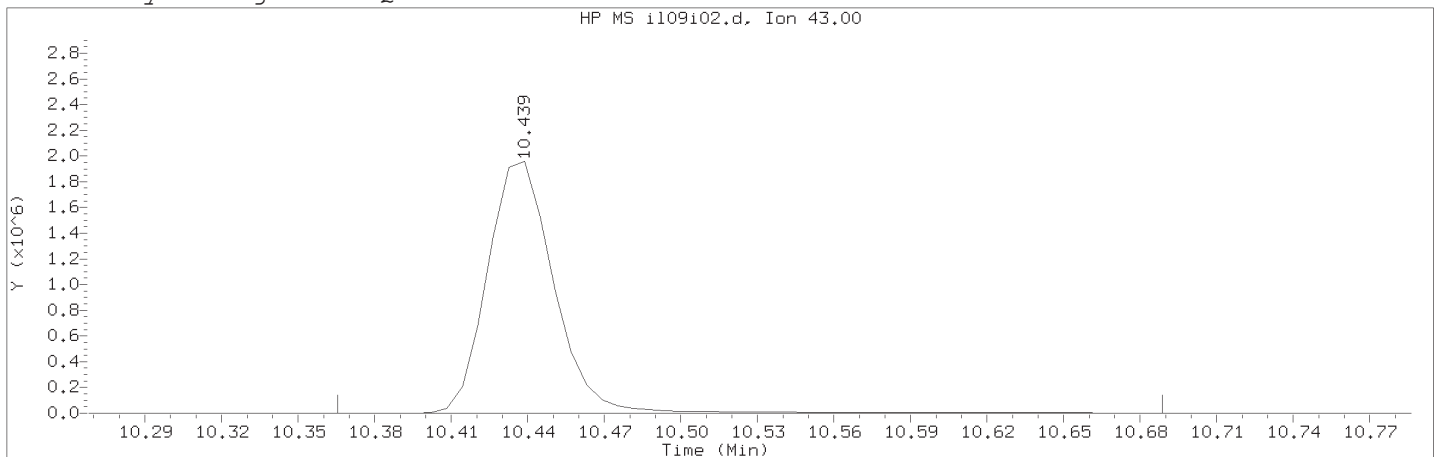
Lab Sample ID: VSTD010

Compound Number	: 14	
Compound Name	: Acetone	
Scan Number	: 314	
Retention Time (minutes)	: 3.501	
Quant Ion	: 43.00	
Area	: 1256530	
On-column Amount (ng)	: 92.4764	
Integration start scan	: 295	Integration stop scan: 367
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010    Lab Sample ID: VSTD010

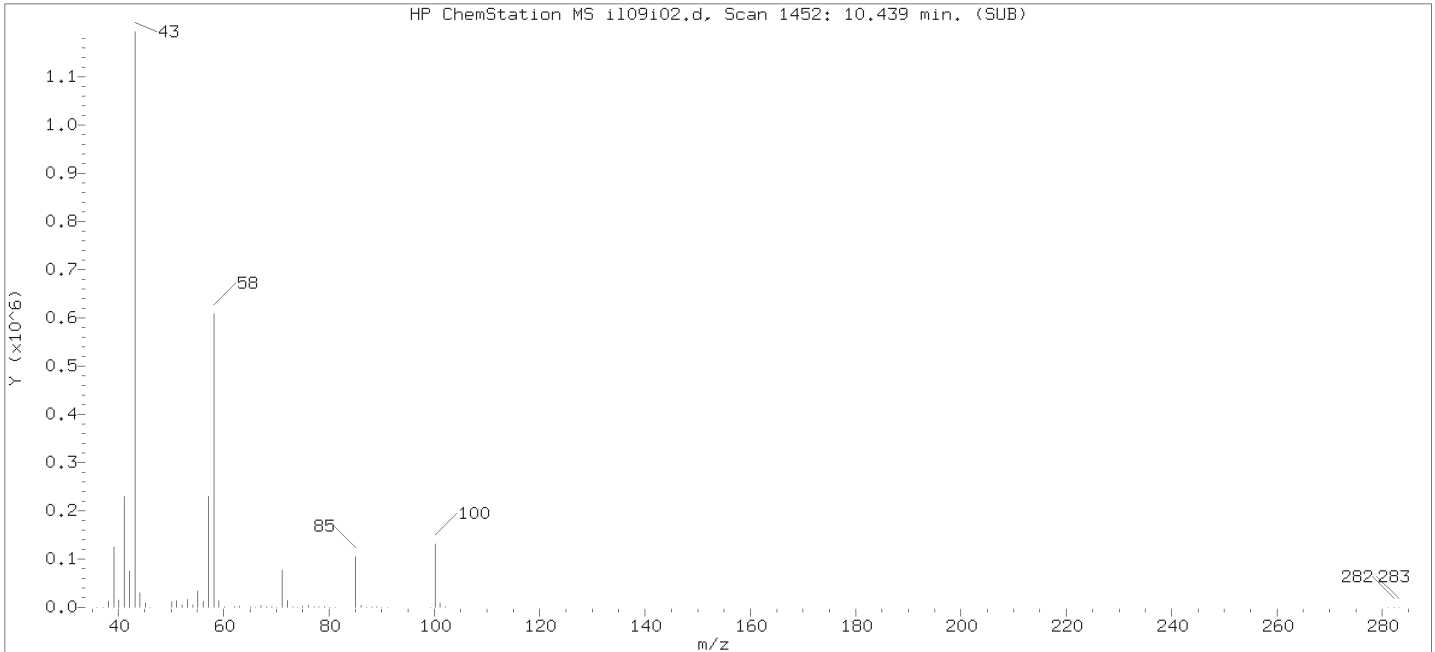
Compound Number                      : 91  
Compound Name                         : 2-Hexanone  
Scan Number                            : 1452  
Retention Time (minutes): 10.439  
Quant Ion                                : 43.00  
Area (flag)                             : 3571174M  
On-Column Amount (ng)                : 104.1922  
Integration start scan                : 1439                      Integration stop scan: 1492  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

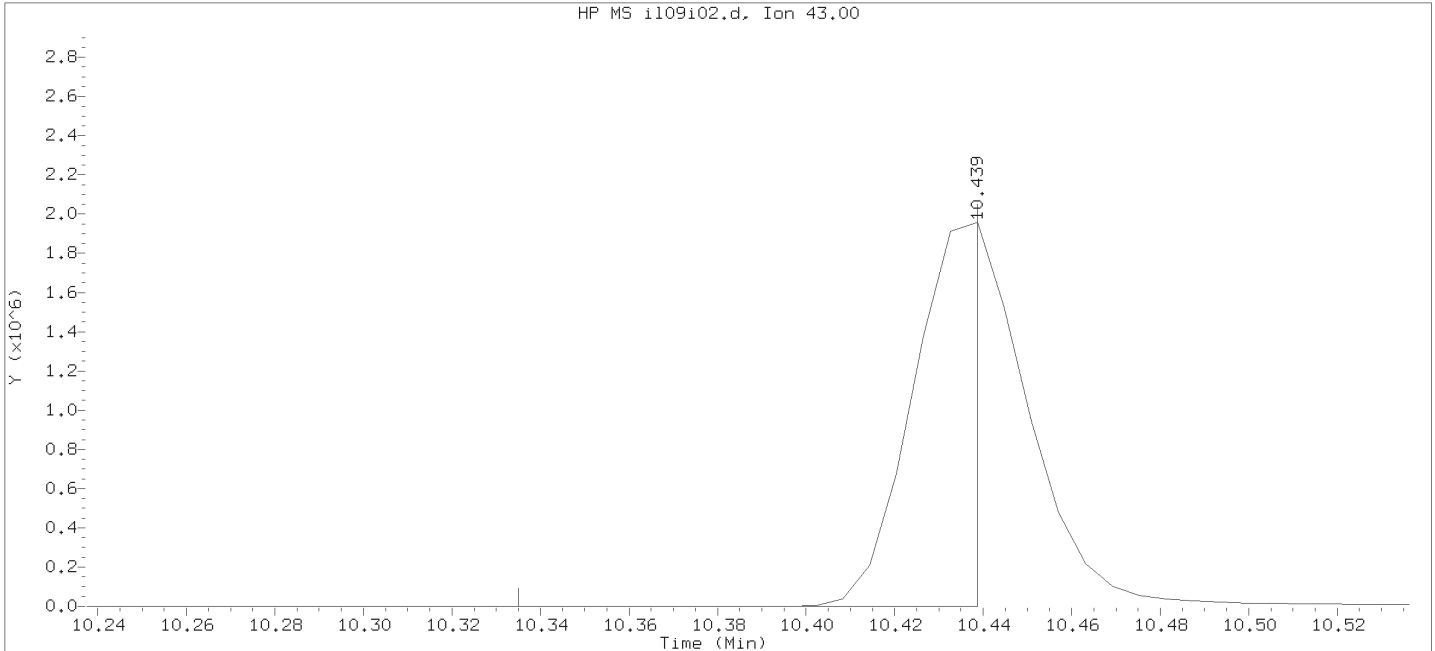
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



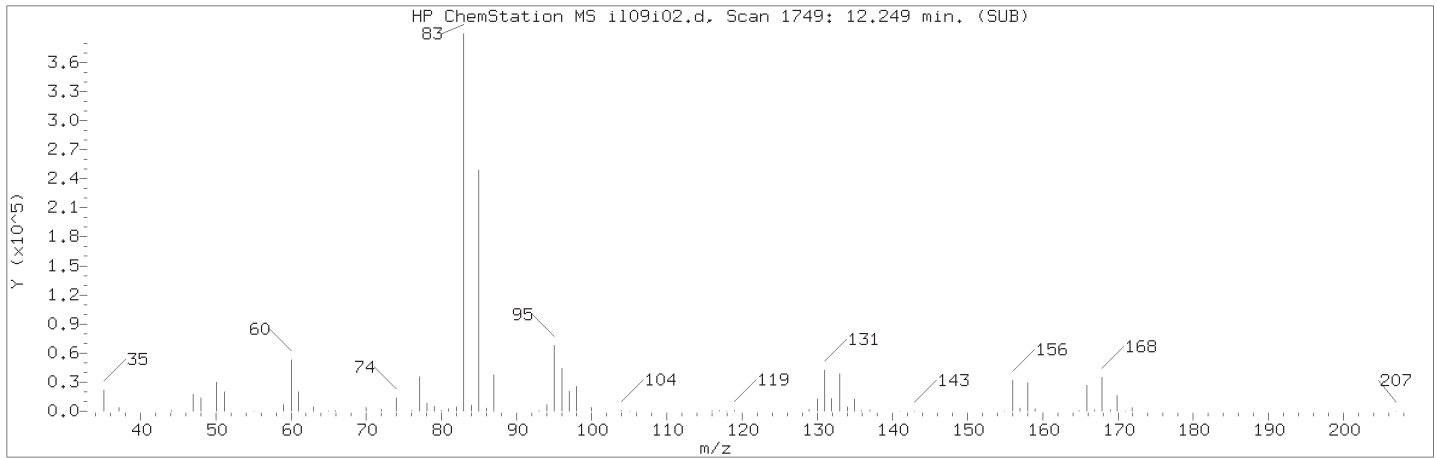
Data File: /chem2/HP19930.i/18jul09i.b/il09i02.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 09-JUL-2018 13:24  
Date, time and analyst ID of latest file update: 09-Jul-2018 13:24 Automation

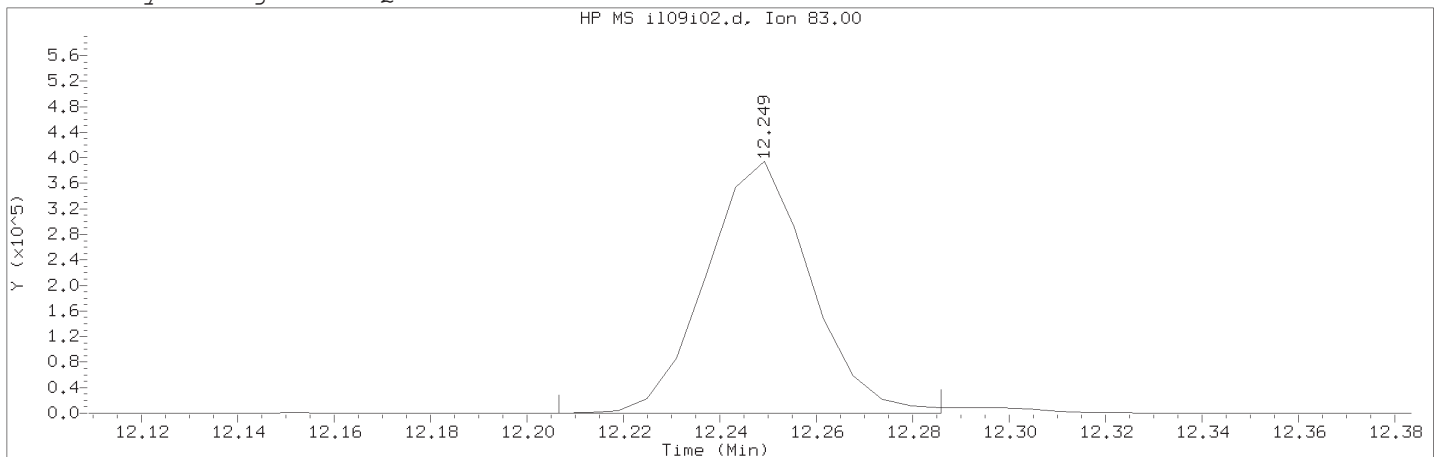
Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 91  
Compound Name : 2-Hexanone  
Scan Number : 1452  
Retention Time (minutes): 10.439  
Quant Ion : 43.00  
Area : 1897112  
On-column Amount (ng) : 56.1891  
Integration start scan : 1434      Integration stop scan: 1451  
Y at integration start : 549      Y at integration end: 549

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010    Lab Sample ID: VSTD010

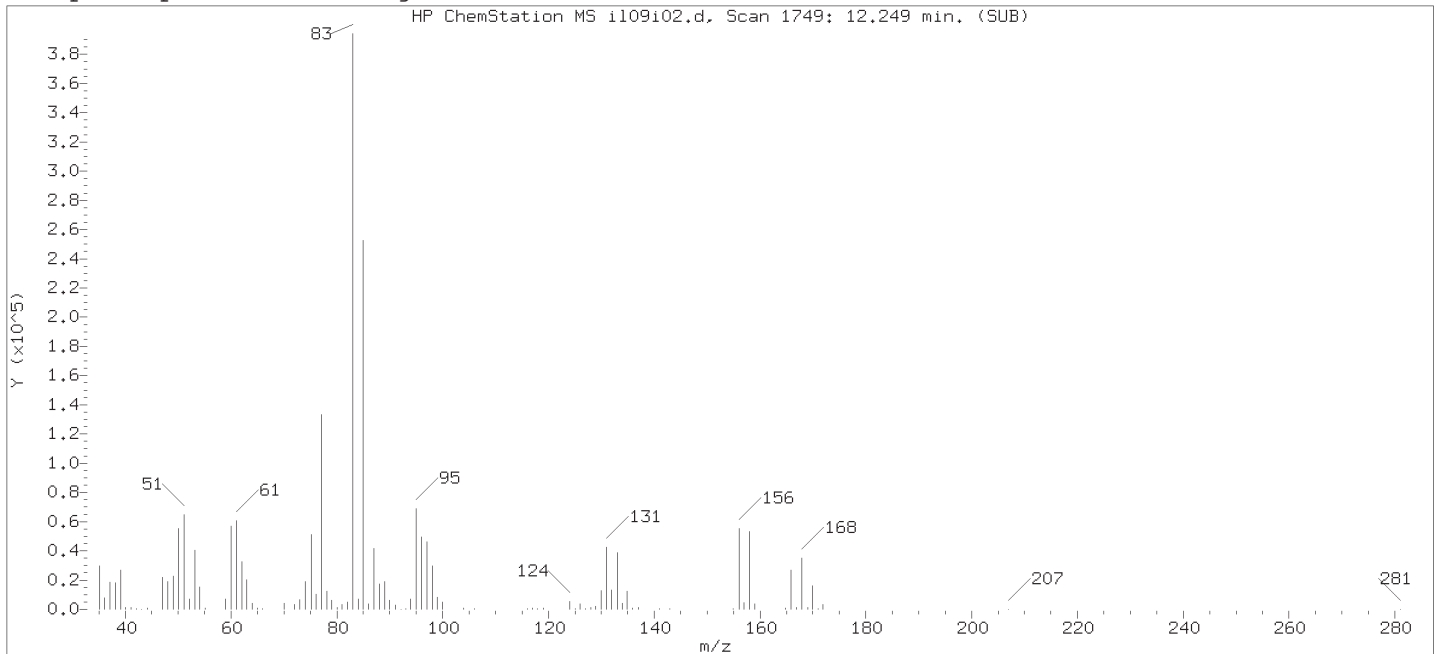
Compound Number                      : 113  
Compound Name                         : 1,1,2,2-Tetrachloroethane  
Scan Number                            : 1749  
Retention Time (minutes): 12.249  
Quant Ion                                : 83.00  
Area (flag)                             : 591246M  
On-Column Amount (ng)                : 10.6873  
Integration start scan                 : 1741                      Integration stop scan: 1754  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

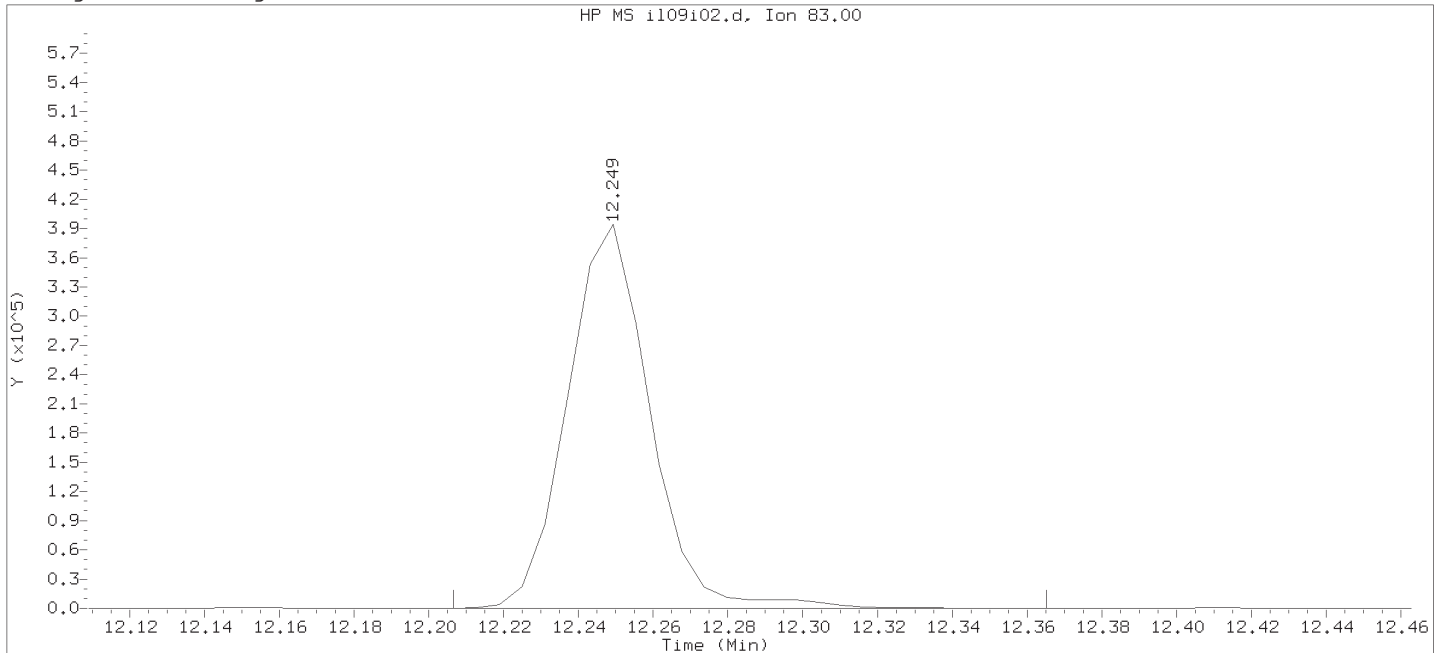
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



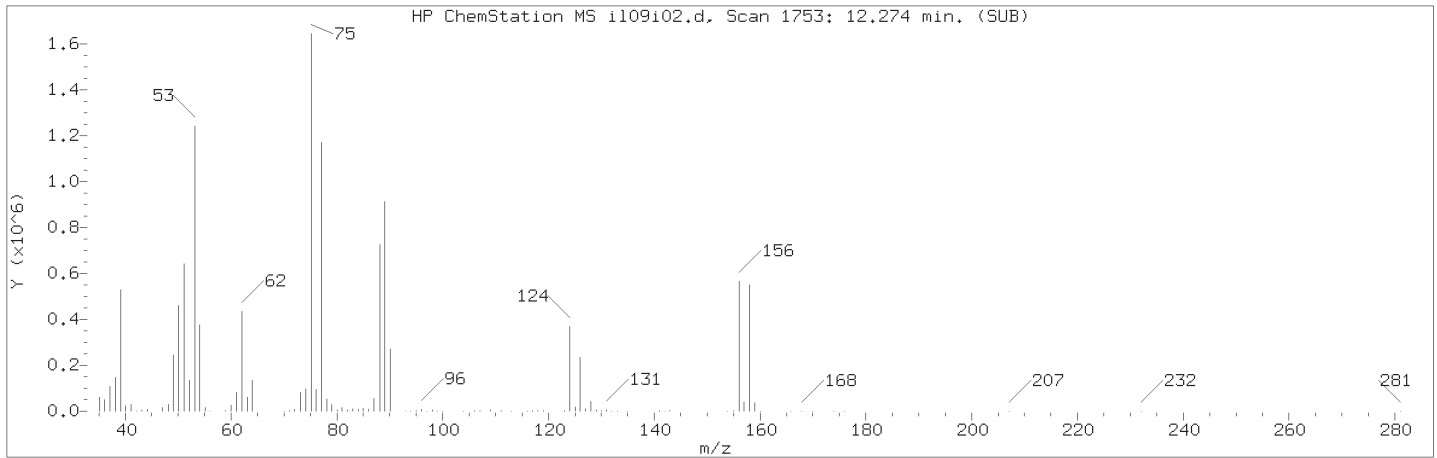
Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:06      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 09-JUL-2018 13:24  
 Date, time and analyst ID of latest file update: 09-Jul-2018 13:24 Automation

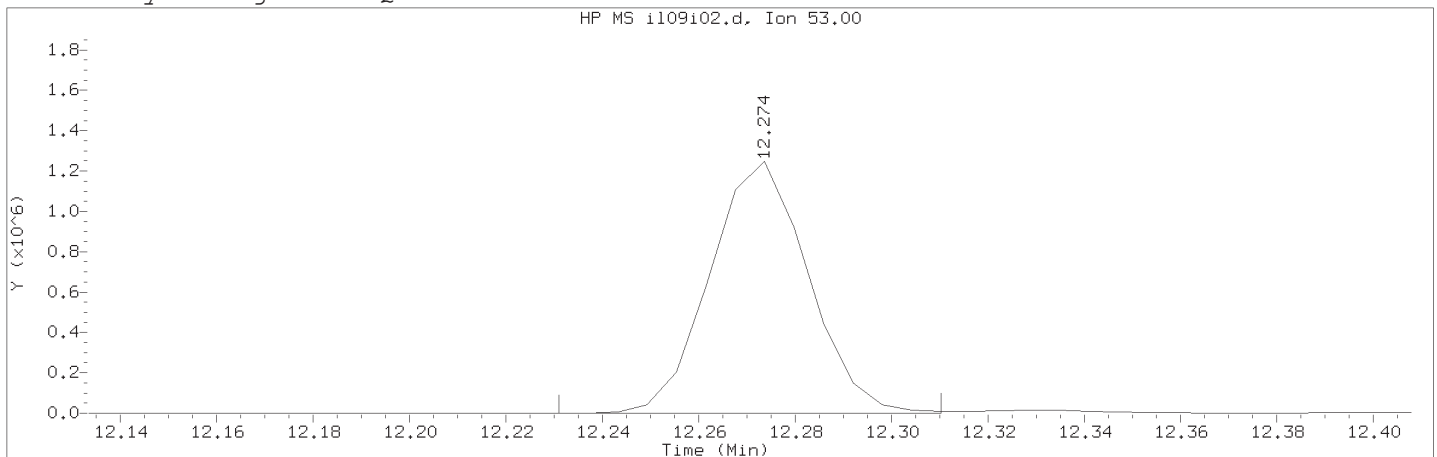
Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 113  
 Compound Name : 1,1,2,2-Tetrachloroethane  
 Scan Number : 1749  
 Retention Time (minutes): 12.249  
 Quant Ion : 83.00  
 Area : 602013  
 On-column Amount (ng) : 9.9243  
 Integration start scan : 1741      Integration stop scan: 1767  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109102.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010                      Lab Sample ID: VSTD010

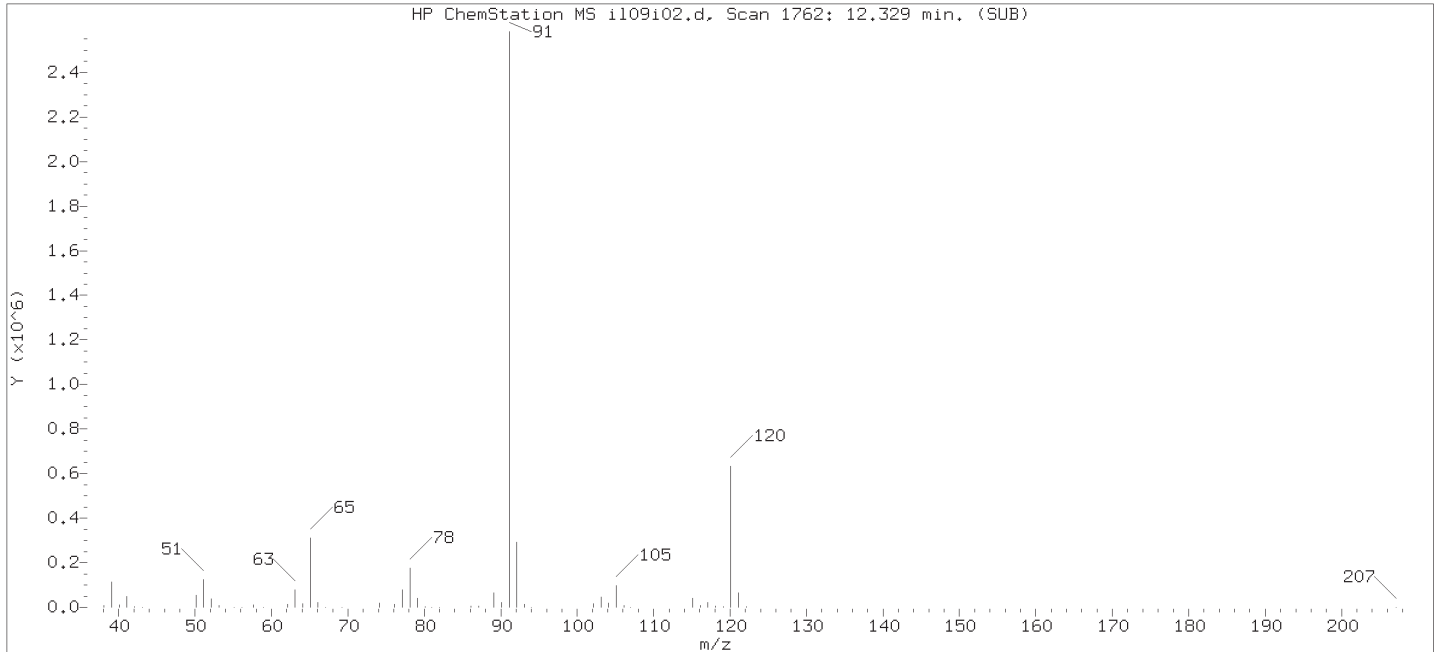
Compound Number                      : 115  
Compound Name                        : trans-1,4-Dichloro-2-butene  
Scan Number                          : 1753  
Retention Time (minutes): 12.274  
Quant Ion                              : 53.00  
Area (flag)                            : 1762219A  
On-Column Amount (ng)               : 112.0592  
Integration start scan                : 1745                      Integration stop scan: 1758  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

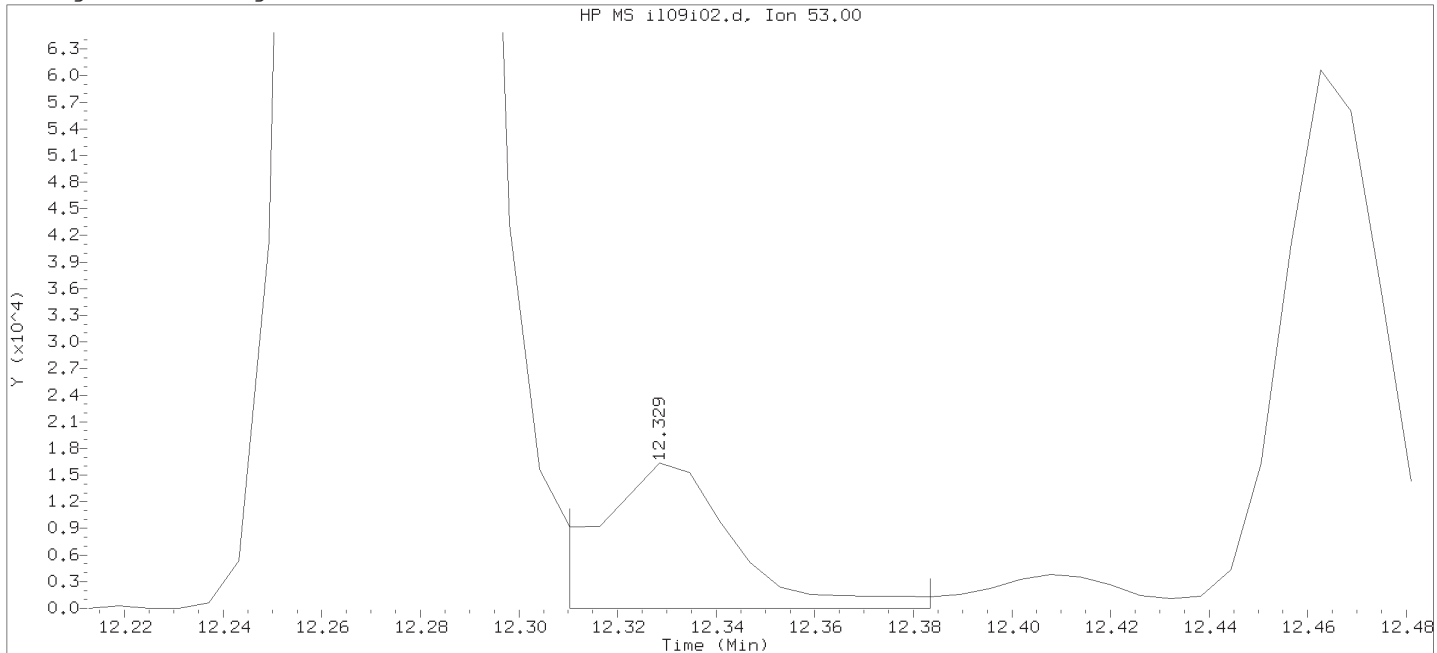
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/il09i02.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06      Analyst ID: jkh09052

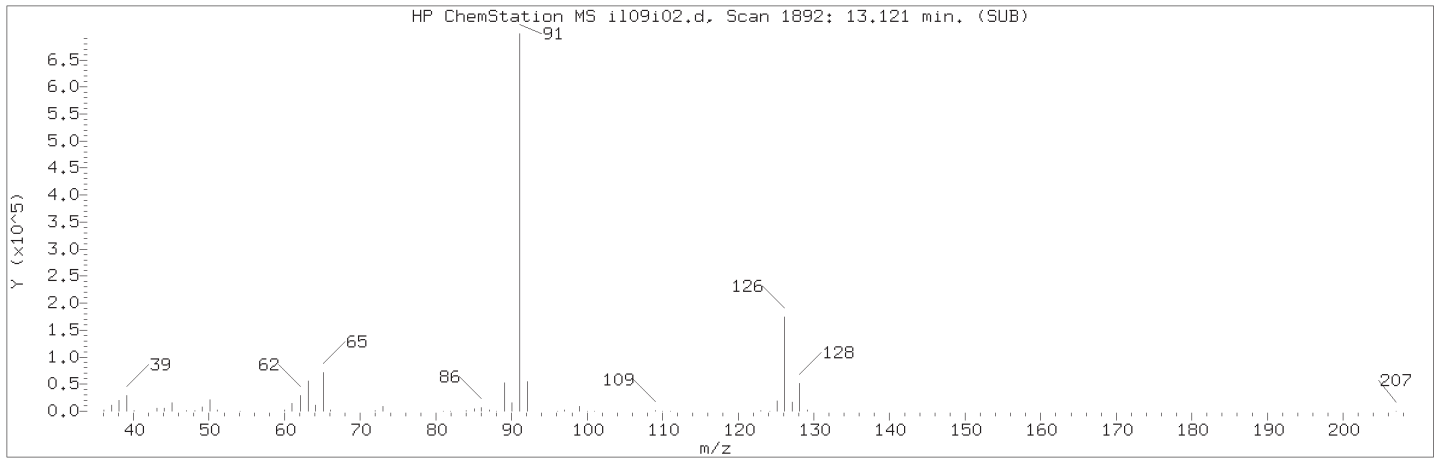
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 09-JUL-2018 13:24  
Date, time and analyst ID of latest file update: 09-Jul-2018 13:24 Automation

Sample Name: VSTD010      Lab Sample ID: VSTD010

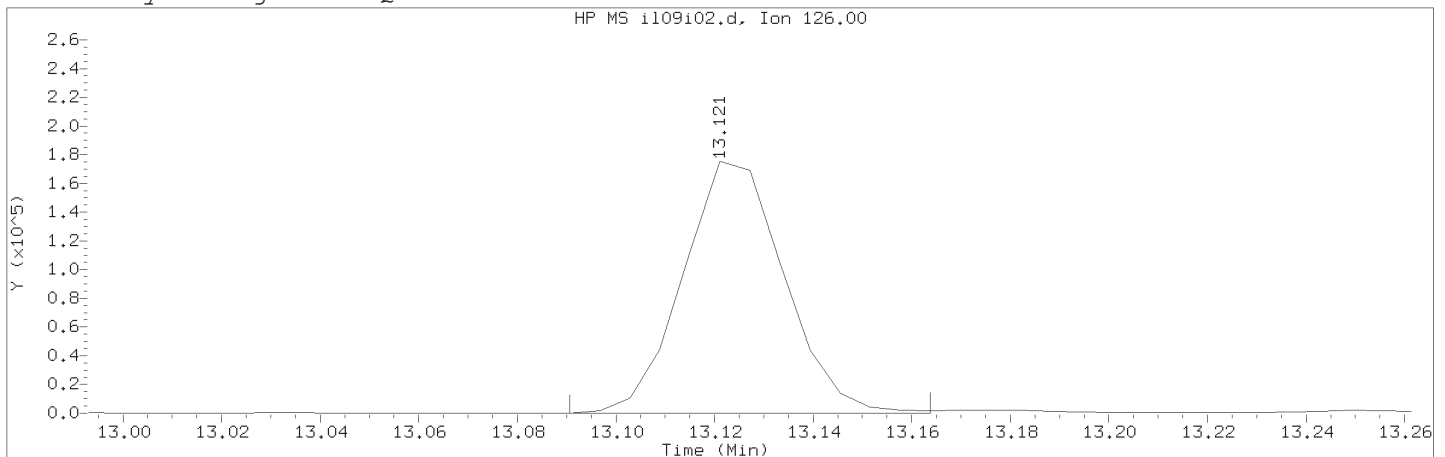
Compound Number : 115  
Compound Name : trans-1,4-Dichloro-2-butene  
Scan Number : 1762  
Retention Time (minutes): 12.329  
Quant Ion : 53.00  
Area : 29972  
On-column Amount (ng) : 3.2614  
Integration start scan : 1758      Integration stop scan: 1770  
Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010    Lab Sample ID: VSTD010

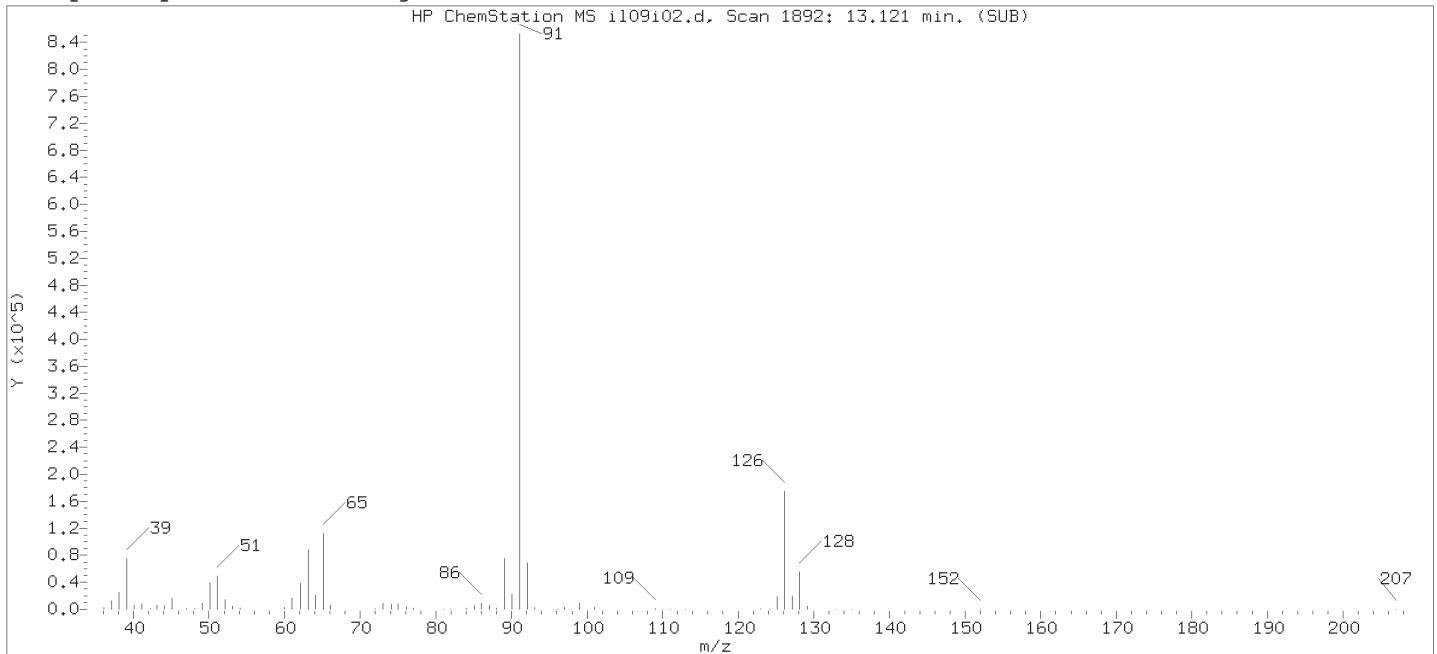
Compound Number                      : 136  
Compound Name                         : Benzyl Chloride  
Scan Number                            : 1892  
Retention Time (minutes): 13.121  
Quant Ion                                : 126.00  
Area (flag)                             : 249720M  
On-Column Amount (ng)                : 12.0400  
Integration start scan                 : 1886                      Integration stop scan: 1898  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

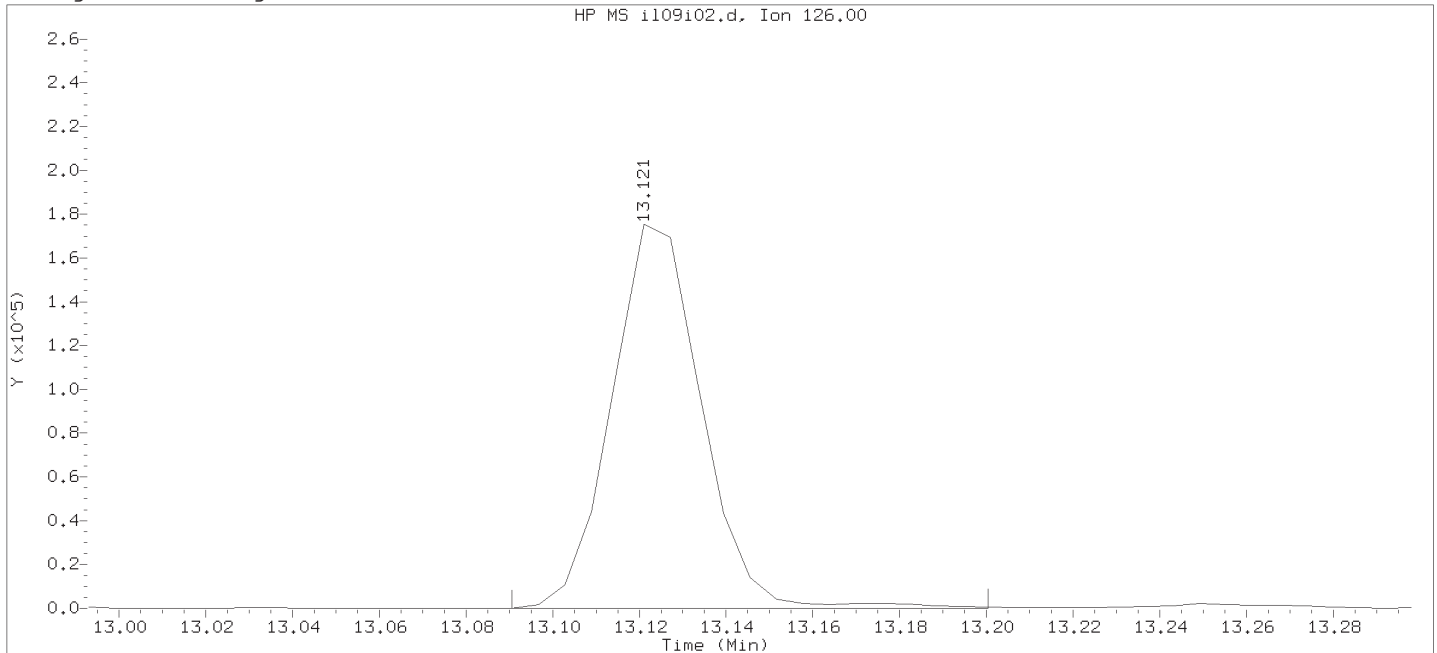
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



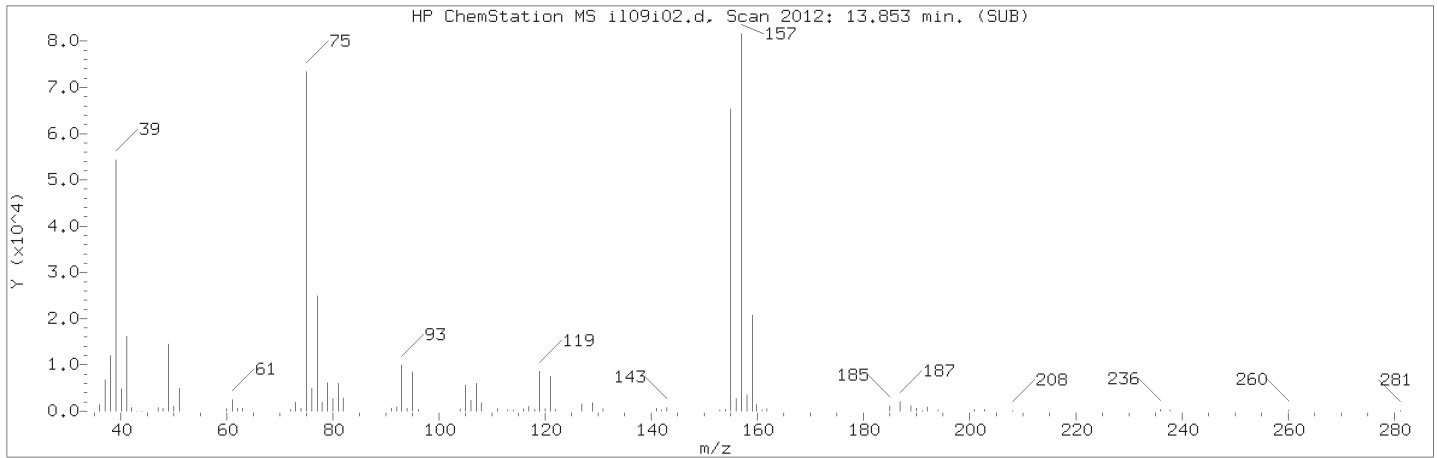
Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 09-JUL-2018 13:24  
Date, time and analyst ID of latest file update: 09-Jul-2018 13:24 Automation

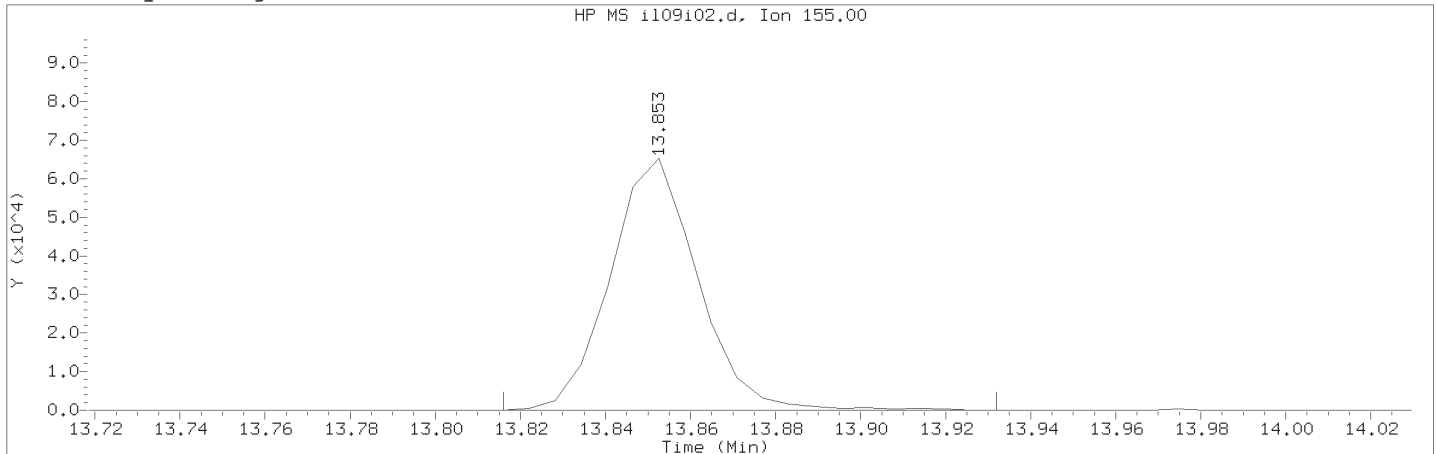
Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 136  
Compound Name : Benzyl Chloride  
Scan Number : 1892  
Retention Time (minutes): 13.121  
Quant Ion : 126.00  
Area : 252795  
On-column Amount (ng) : 10.3811  
Integration start scan : 1886      Integration stop scan: 1904  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:06                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD010    Lab Sample ID: VSTD010

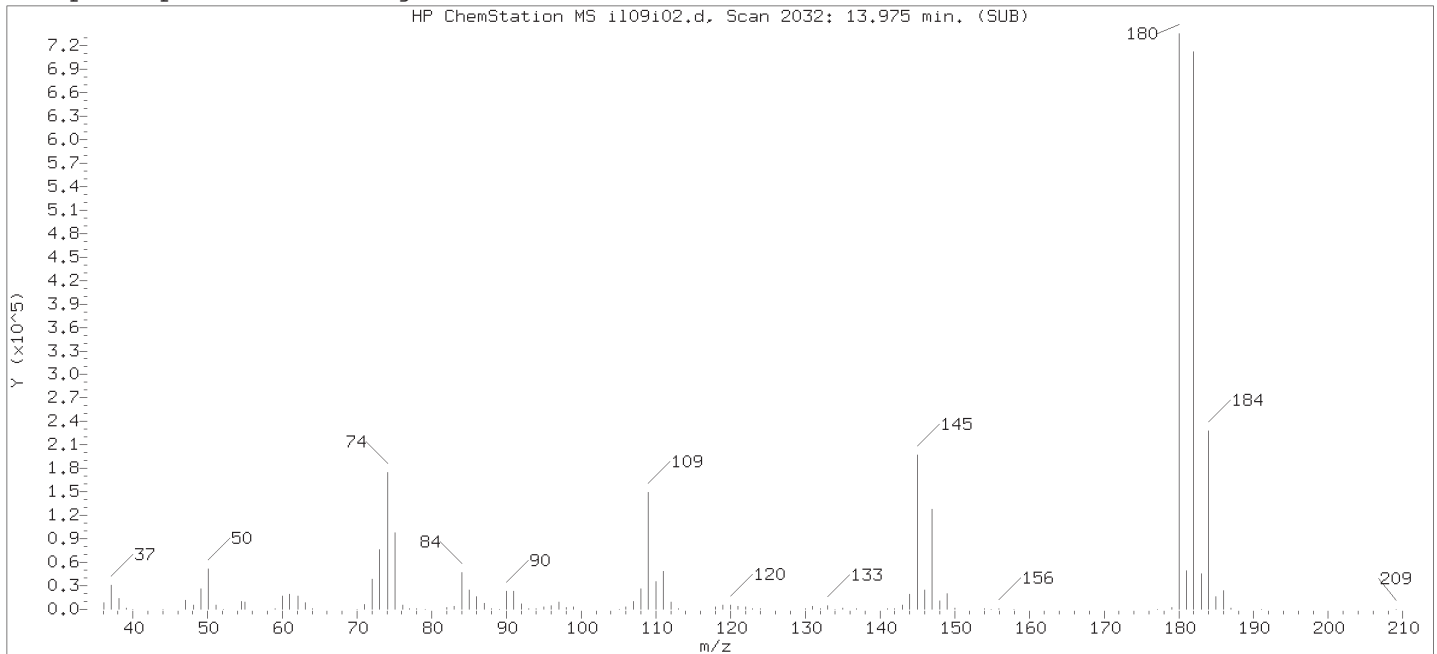
Compound Number                      : 143  
Compound Name                         : 1,2-Dibromo-3-chloropropane  
Scan Number                            : 2012  
Retention Time (minutes): 13.853  
Quant Ion                               : 155.00  
Area (flag)                            : 93238A  
On-Column Amount (ng)               : 11.9679  
Integration start scan                : 2005                      Integration stop scan: 2024  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

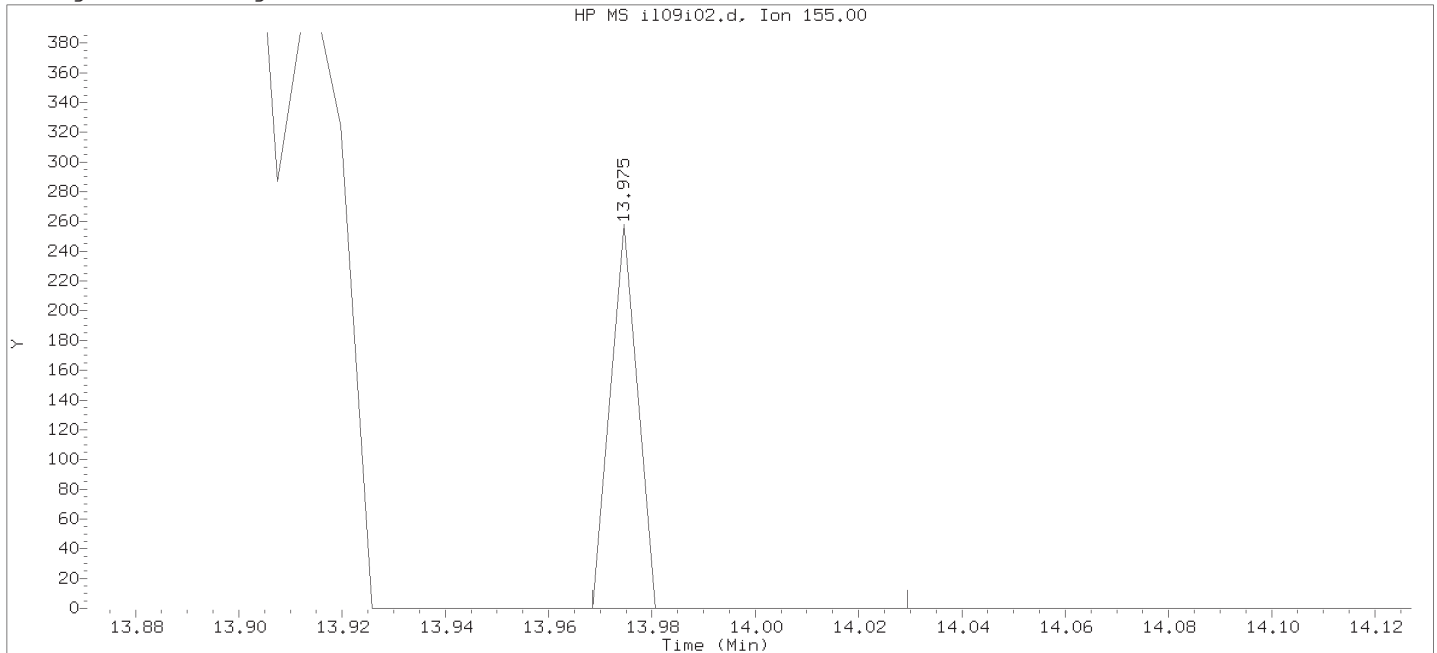
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

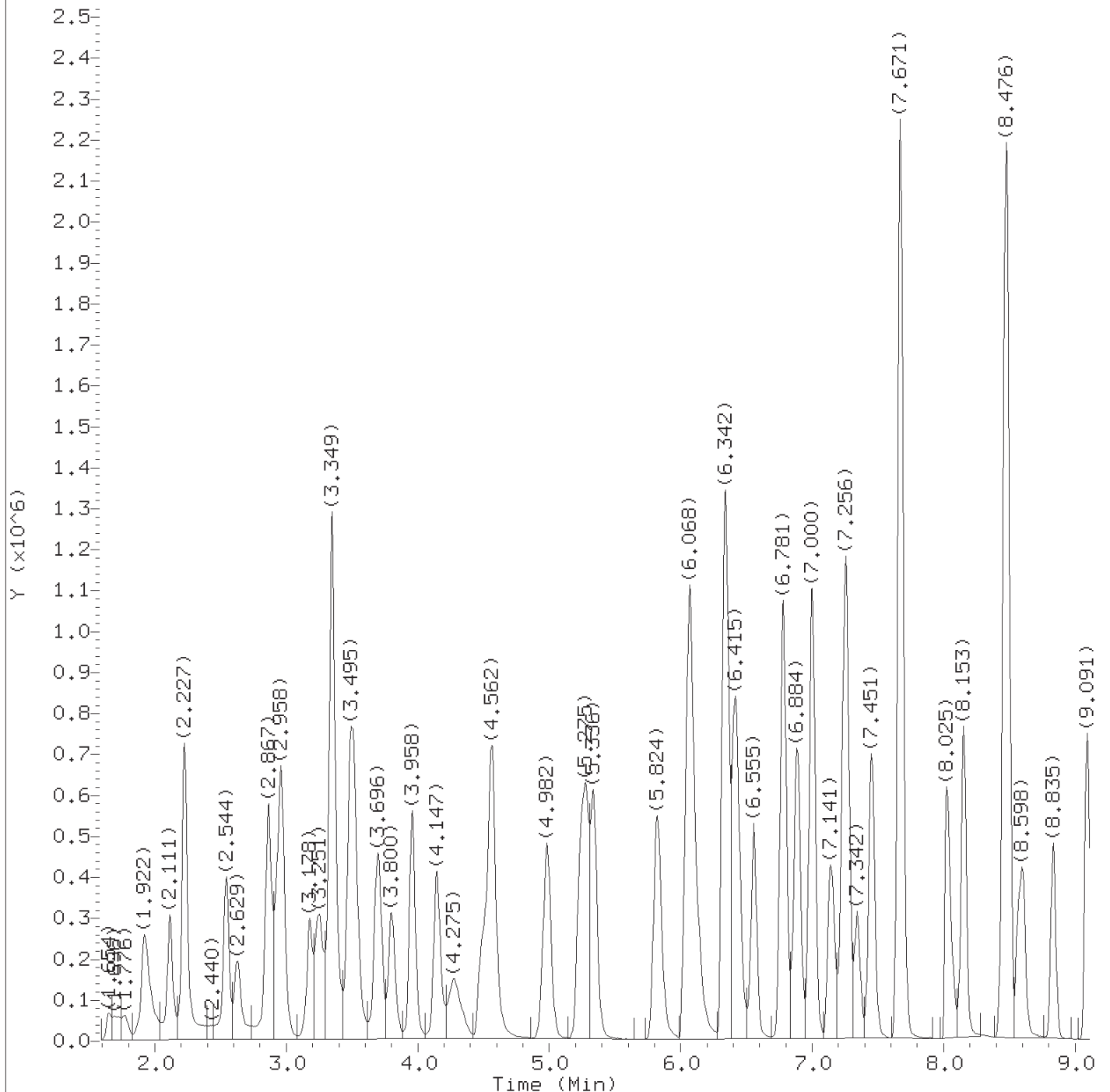


Data File: /chem2/HP19930.i/18jul09i.b/i109i02.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:06      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 09-JUL-2018 13:24  
 Date, time and analyst ID of latest file update: 09-Jul-2018 13:24 Automation

Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 143  
 Compound Name : 1,2-Dibromo-3-chloropropane  
 Scan Number : 2032  
 Retention Time (minutes): 13.975  
 Quant Ion : 155.00  
 Area : 94  
 On-column Amount (ng) : 0.0195  
 Integration start scan : 2030      Integration stop scan: 2040  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d  
Injection date and time: 09-JUL-2018 13:27

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

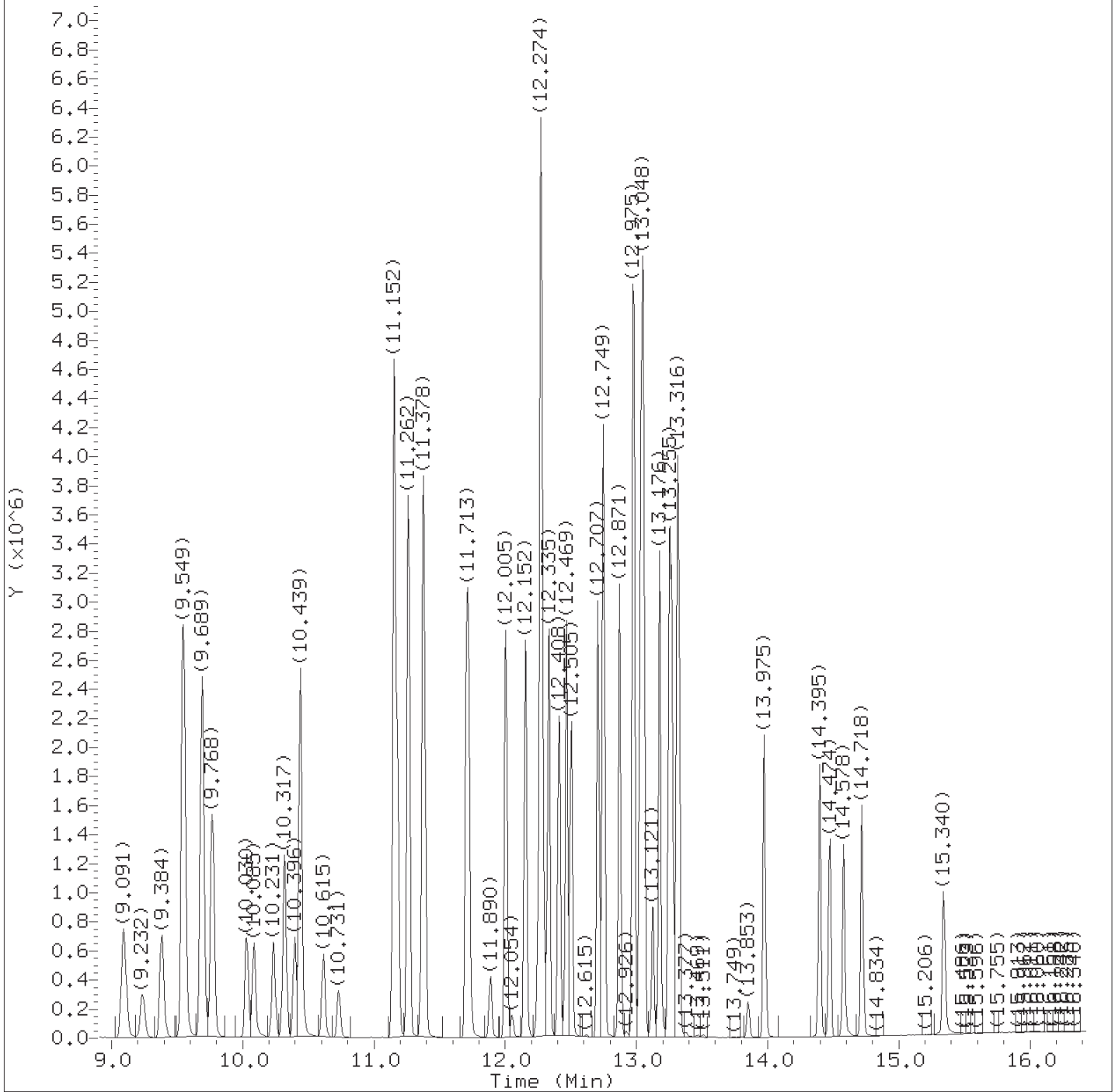
Sublist used: 8260W25

Sample Name: VSTD005

Lab Sample ID: VSTD005

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203  
TID15 Page 222 of 3058

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i03.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:27 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.922	85	644830	5.169
2) Chloromethane	(2)	2.117	50	443577	4.871
6) 1,3-Butadiene	(2)	2.221	39	303980M	5.198
5) Vinyl Chloride	(2)	2.227	62	442938	5.038
7) Bromomethane	(2)	2.544	94	400718	4.841
8) Chloroethane	(2)	2.629	64	253771	4.958
9) Dichlorofluoromethane	(2)	2.861	67	637653	4.739
10) Trichlorofluoromethane	(2)	2.928	101	775127	5.157
11) Ethyl ether	(2)	3.178	59	255357	5.132
12) Freon 123a	(2)	3.251	67	388448	5.107
13) Acrolein	(1)	3.349	56	2045281	251.739
15) 1,1-Dichloroethene	(2)	3.483	96	263886	5.091
16) Freon 113	(2)	3.513	101	321959	5.349
14) Acetone	(1)	3.519	43	579115M	47.929
17) Methyl Iodide	(2)	3.684	142	540858	5.082
18) Carbon Disulfide	(2)	3.800	76	769121	5.001
21) Methyl Acetate	(1)	3.940	43	136500M	4.976
22) Allyl Chloride	(2)	3.958	41	557817	5.008
23) Methylene Chloride	(2)	4.141	84	292946	4.991
26)*t-Butyl Alcohol-d10	(1)	4.159	65	206773	50.000
28) t-Butyl Alcohol	(1)	4.275	59	547951	102.488
29) Acrylonitrile	(1)	4.483	53	342992	26.048
30) Methyl Tertiary Butyl Ether	(2)	4.543	73	827072	5.152
31) trans-1,2-Dichloroethene	(2)	4.568	96	296361	5.037
32) n-Hexane	(2)	4.982	57	498339	5.144
33) 1,1-Dichloroethane	(2)	5.232	63	589694	5.072
34) di-Isopropyl Ether	(2)	5.281	45	1079348	5.140
35) 2-Chloro-1,3-Butadiene	(2)	5.342	53	562269	5.109
37) Ethyl t-butyl ether	(2)	5.824	59	1005822	5.125
38) 2-Butanone	(1)	6.037	43	1017092	50.754
39) cis-1,2-Dichloroethene	(2)	6.068	96	339801	5.058
41) 2,2-Dichloropropane	(2)	6.080	77	541091	5.125
40) 1,2-Dichloroethene (Total)	(2)		96	636162	10.095
42) Propionitrile	(1)	6.135	54	514733	104.084
45) Methacrylonitrile	(1)	6.342	67	854120	50.674
47) Bromochloromethane	(2)	6.409	128	151337	5.148
48) Tetrahydrofuran	(1)	6.433	71	260854	50.401
49) Chloroform	(2)	6.555	83	591735	5.057

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i03.d  
 Injection date and time: 09-JUL-2018 13:27

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.775	113	532551	9.984
50) \$Dibromofluoromethane	(2)	6.775	111	546816	9.992
51) 1,1,1-Trichloroethane	(2)	6.781	97	574021	5.104
52) Cyclohexane	(2)	6.884	56	598300	5.039
52) Cyclohexane	(2)	6.884	84	473837	5.082
52) Cyclohexane	(2)	6.891	69	179137	5.092
54) Carbon Tetrachloride	(2)	7.000	117	513288	5.211
55) 1,1-Dichloropropene	(2)	7.000	75	458294	5.161
56) Isobutyl Alcohol	(1)	7.141	41	408927	252.626
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	100738	9.946
57) \$1,2-Dichloroethane-d4	(2)	7.238	65	593259	9.892
57) \$1,2-Dichloroethane-d4	(2)	7.238	104	64762	9.976
58) Benzene	(2)	7.262	78	1251579	5.042
59) 1,2-Dichloroethane	(2)	7.342	62	414886	4.956
59) 1,2-Dichloroethane	(2)	7.342	98	31120	5.375
60) t-Amyl methyl ether	(2)	7.451	73	878415	5.131
62) n-Heptane	(2)	7.671	43	547305	5.155
63) *Fluorobenzene	(2)	7.671	96	2043535	10.000
65) n-Butanol	(1)	8.025	56	638760	529.107
67) Trichloroethene	(2)	8.153	95	348301	5.119
69) Methylcyclohexane	(2)	8.463	83	639367	5.196
70) 1,2-Dichloropropane	(2)	8.488	63	318617	5.121
71) Methyl Methacrylate	(1)	8.567	69	164316	5.375
72) 1,4-Dioxane	(1)	8.591	88	65184M	238.924
72) 1,4-Dioxane	(1)	8.585	58	48974M	248.152
73) Dibromomethane	(2)	8.604	93	161297	5.158
74) Bromodichloromethane	(2)	8.835	83	438551	5.223
76) 2-Nitropropane	(1)	9.091	41	700646	51.053
80) cis-1,3-Dichloropropene	(2)	9.384	75	494784	5.193
81) 4-Methyl-2-Pentanone	(1)	9.549	43	2600591	53.023
82) \$Toluene-d8	(3)	9.689	98	1983477	9.999
82) \$Toluene-d8	(3)	9.689	100	1277934	9.981
83) Toluene	(3)	9.768	92	788493	5.048
84) trans-1,3-Dichloropropene	(3)	10.030	75	413269	5.294
86) Ethyl Methacrylate	(3)	10.085	69	359231	5.317
85) 1,3-Dichloropropene (total)	(3)		75	908053	10.487
88) 1,1,2-Trichloroethane	(3)	10.231	97	220389	5.120
89) Tetrachloroethene	(3)	10.317	166	413439	5.131

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i03.d  
 Injection date and time: 09-JUL-2018 13:27

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.396	76	384135	5.134
91) 2-Hexanone	(1)	10.439	43	1821980	51.831
93) Dibromochloromethane	(3)	10.615	129	297927	5.340
95) 1,2-Dibromoethane	(3)	10.731	107	215509	5.220
97) *Chlorobenzene-d5	(3)	11.152	117	1588004	10.000
98) Chlorobenzene	(3)	11.182	112	861599	5.050
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	340028	5.240
100) Ethylbenzene	(3)	11.262	91	1588550	5.129
101) m+p-Xylene	(3)	11.378	106	1232182	10.207
104) o-Xylene	(3)	11.707	106	616010	5.108
106) Styrene	(3)	11.725	104	964361	5.315
105) Xylene (Total)	(3)		106	1848192	15.316
107) Bromoform	(3)	11.890	173	186190	5.488
108) Isopropylbenzene	(3)	12.005	105	1632246	5.194
111) \$4-Bromofluorobenzene	(3)	12.152	95	782032	10.016
111) \$4-Bromofluorobenzene	(3)	12.158	174	713712	10.077
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	288553	5.236
114) Bromobenzene	(4)	12.274	156	409885	5.068
115) trans-1,4-Dichloro-2-butene	(1)	12.274	53	900272A	55.819
116) 1,2,3-Trichloropropane	(4)	12.298	110	82975	5.177
117) n-Propylbenzene	(4)	12.335	91	1910679	5.177
119) 2-Chlorotoluene	(4)	12.414	126	378014	5.125
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	1379553	5.212
122) 4-Chlorotoluene	(4)	12.505	126	381772	5.115
125) tert-Butylbenzene	(4)	12.707	134	292201	5.130
126) Pentachloroethane	(4)	12.743	167	269805	5.426
127) 1,2,4-Trimethylbenzene	(4)	12.749	105	1388856	5.194
128) sec-Butylbenzene	(4)	12.871	105	1778663	5.227
131) 1,3-Dichlorobenzene	(4)	12.975	146	781759	5.113
132) p-Isopropyltoluene	(4)	12.981	119	1535864	5.113
133) *1,4-Dichlorobenzene-d4	(4)	13.036	152	898863	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	782499	5.003
135) 1,2,3-Trimethylbenzene	(4)	13.054	120	622574	5.112
136) Benzyl Chloride	(4)	13.127	126	119974	5.807
138) n-Butylbenzene	(4)	13.267	92	734807	5.337
139) 1,2-Dichlorobenzene	(4)	13.310	146	721595	5.090
143) 1,2-Dibromo-3-chloropropane	(1)	13.853	155	43704	5.470
144) 1,3,5-Trichlorobenzene	(4)	13.975	180	584853	5.272

A = User selected an alternate hit.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i03.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005

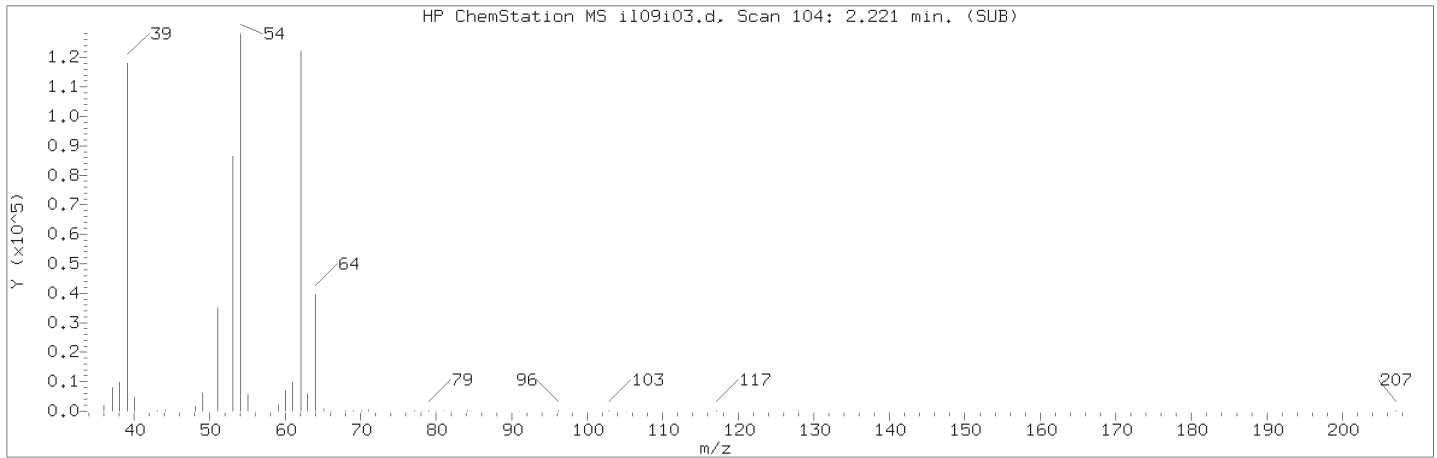
Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,2,4-Trichlorobenzene	(4)	14.395	180	510843	5.342
146) Hexachlorobutadiene	(4)	14.474	225	211762	5.222
147) Naphthalene	(4)	14.578	128	932211	5.390
148) 1,2,3-Trichlorobenzene	(4)	14.718	180	434440	5.322

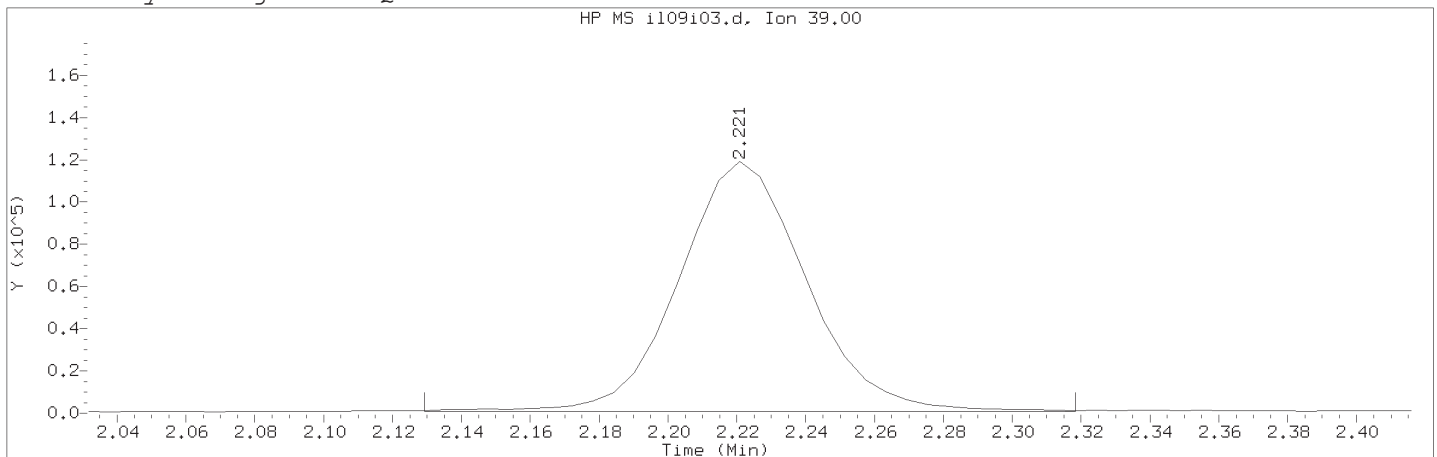
page 4 of 4

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005    Lab Sample ID: VSTD005

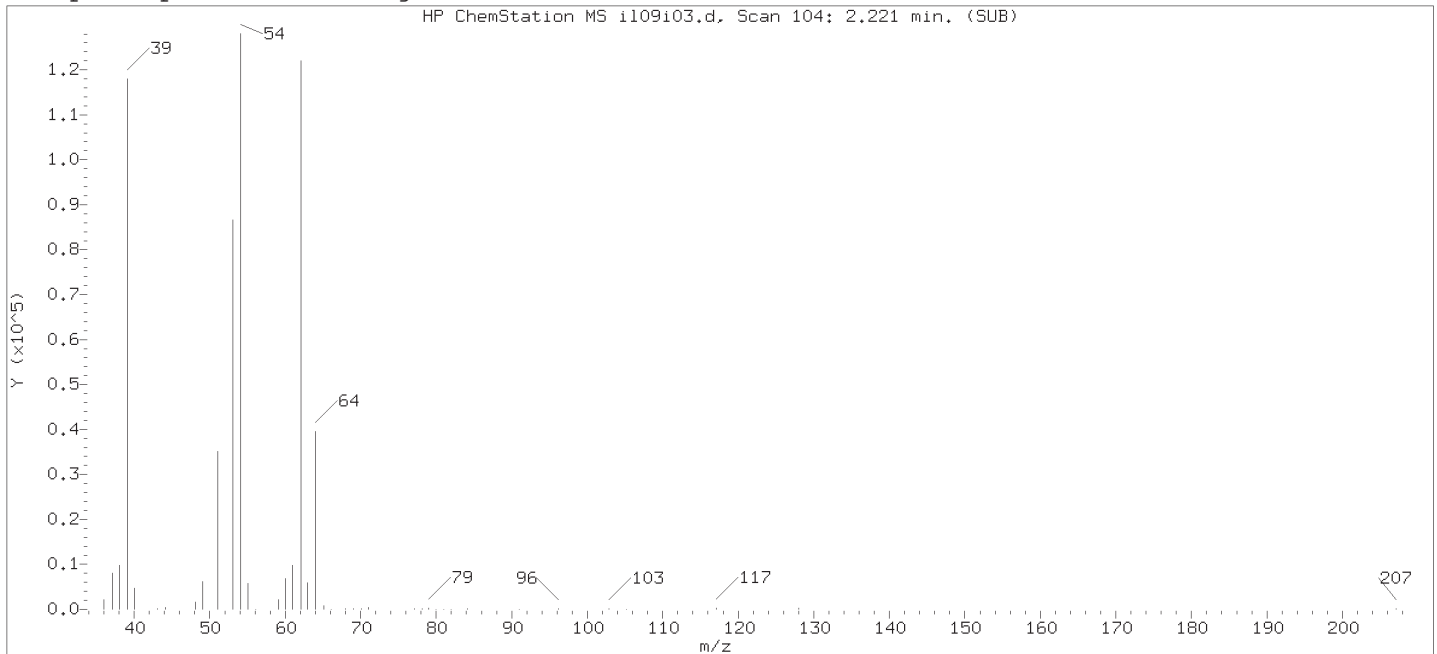
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 104  
Retention Time (minutes): 2.221  
Quant Ion                                : 39.00  
Area (flag)                             : 303980M  
On-Column Amount (ng)                : 5.1976  
Integration start scan                : 88                      Integration stop scan: 119  
Y at integration start                : 800                    Y at integration end: 800

Reason for manual integration: improper integration

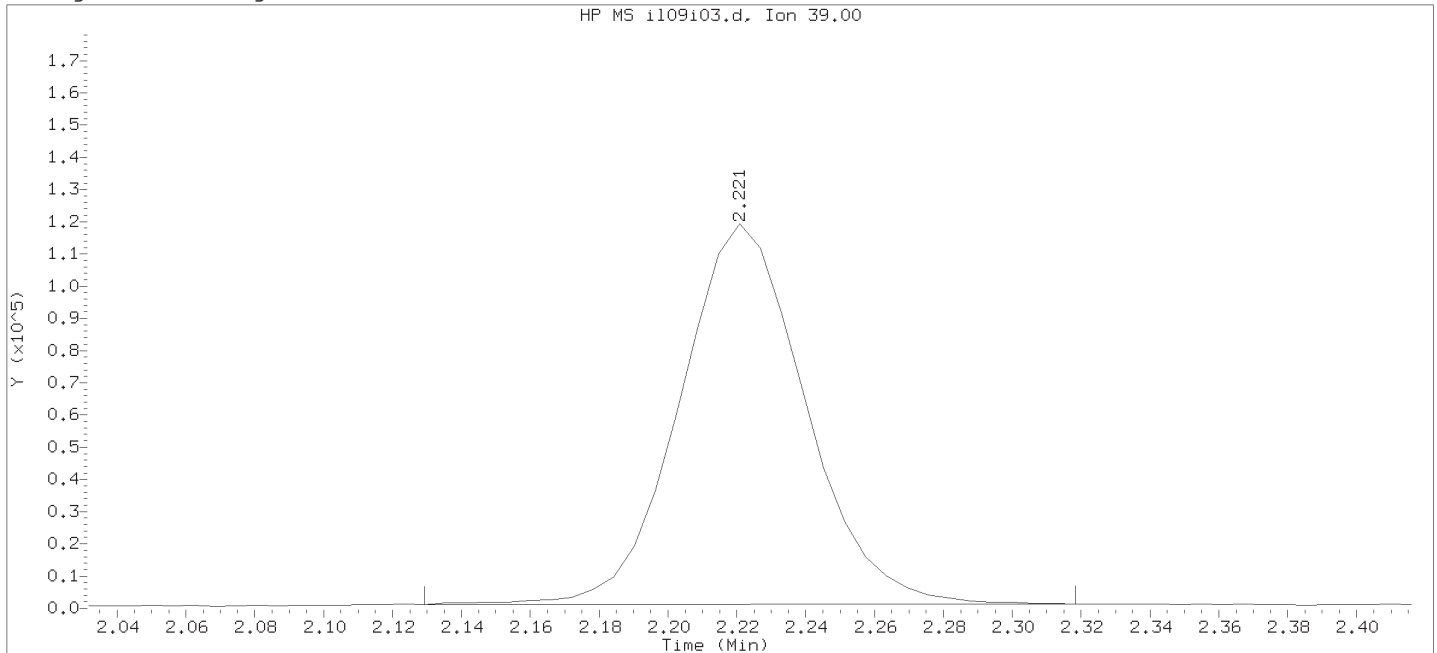
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



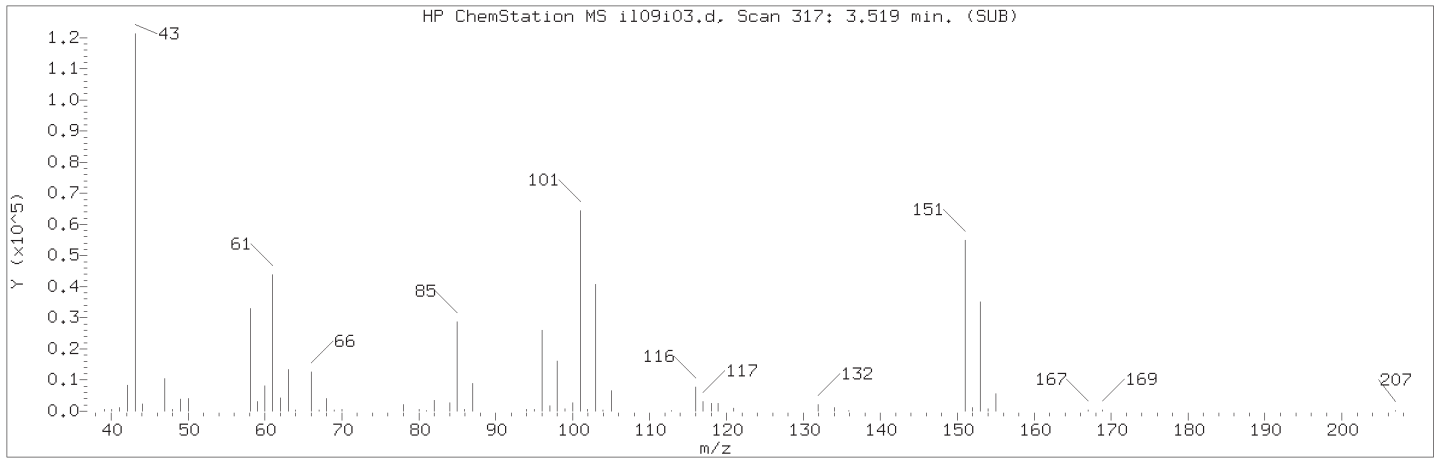
Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:27      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:38  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

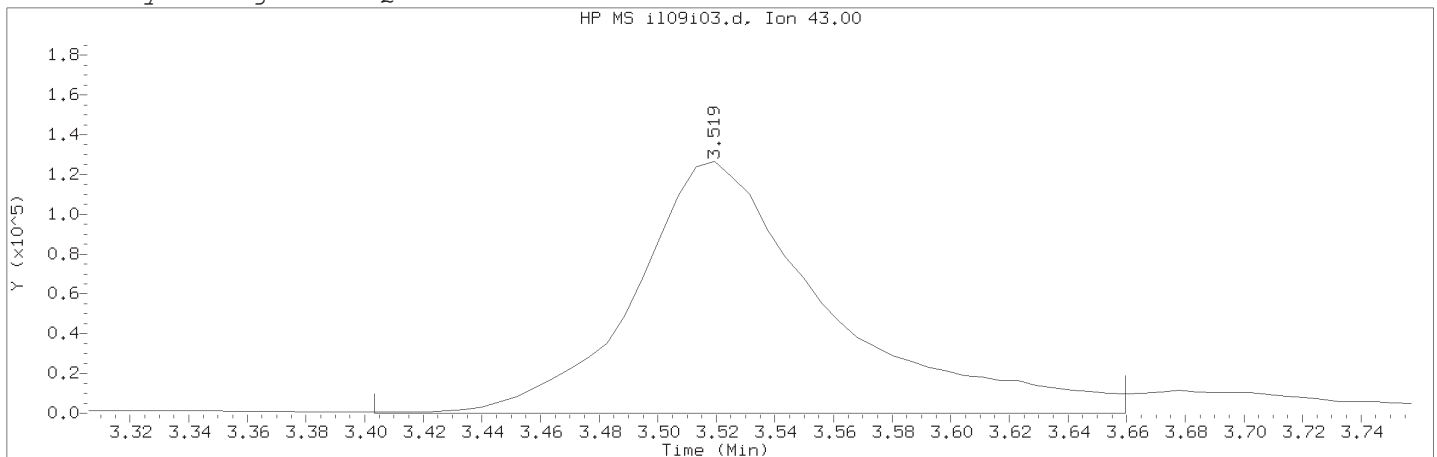
Sample Name: VSTD005      Lab Sample ID: VSTD005

Compound Number : 6  
 Compound Name : 1,3-Butadiene  
 Scan Number : 104  
 Retention Time (minutes): 2.221  
 Quant Ion : 39.00  
 Area : 299235  
 On-column Amount (ng) : 5.0768  
 Integration start scan : 88      Integration stop scan: 119  
 Y at integration start : 1169      Y at integration end: 1241

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005    Lab Sample ID: VSTD005

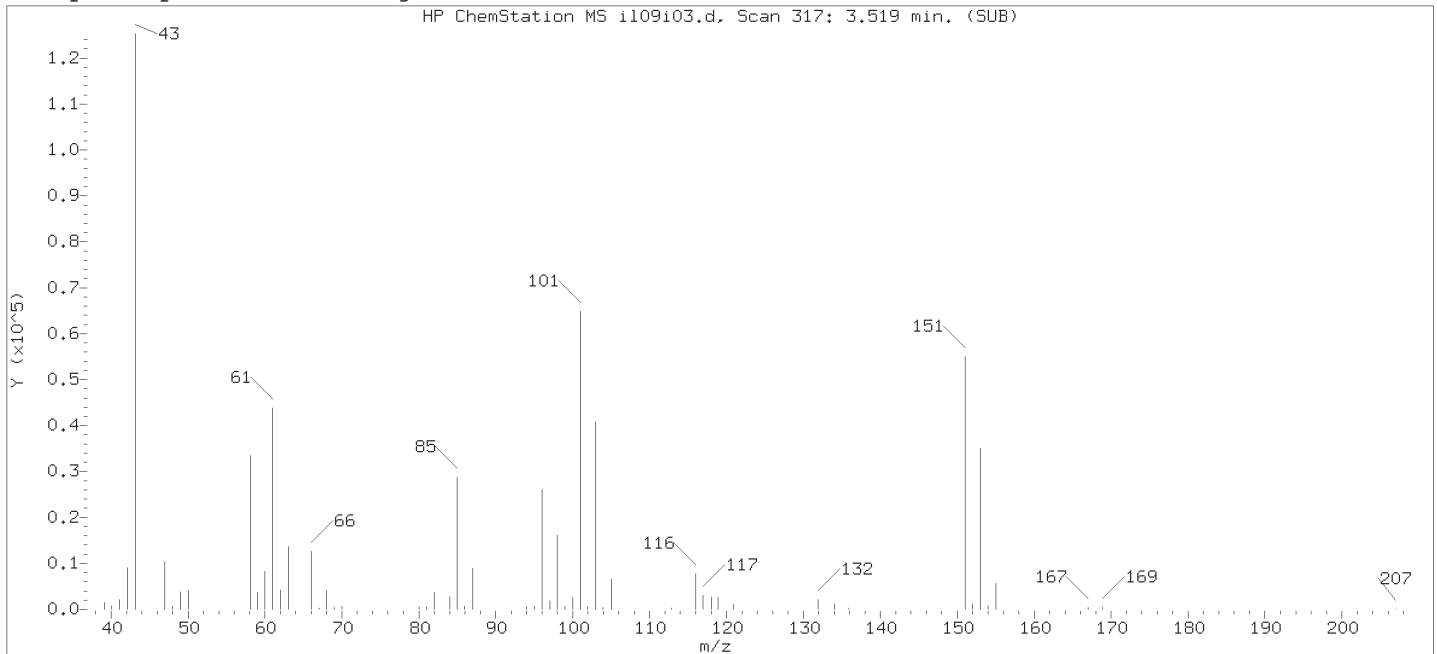
Compound Number                      : 14  
Compound Name                         : Acetone  
Scan Number                            : 317  
Retention Time (minutes): 3.519  
Quant Ion                                : 43.00  
Area (flag)                             : 579115M  
On-Column Amount (ng)                : 47.9289  
Integration start scan                 : 297                      Integration stop scan: 339  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

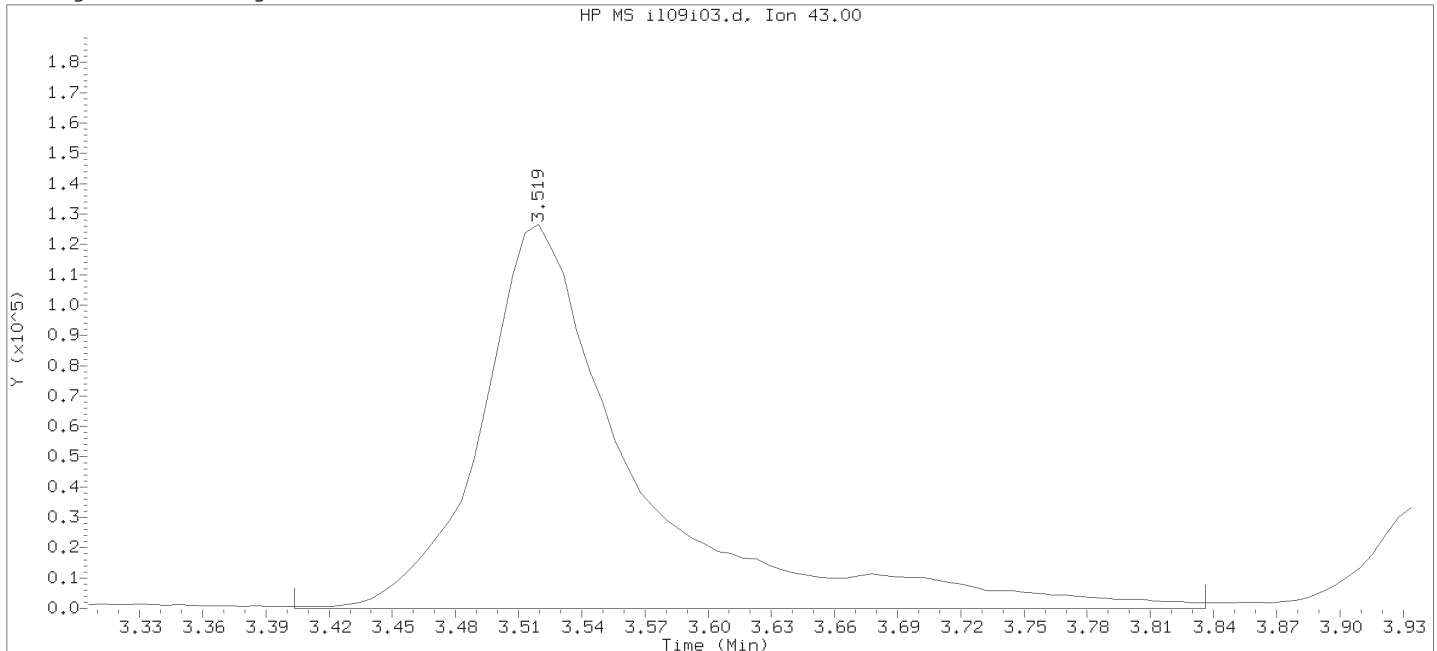
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:27      Analyst ID: jkh09052

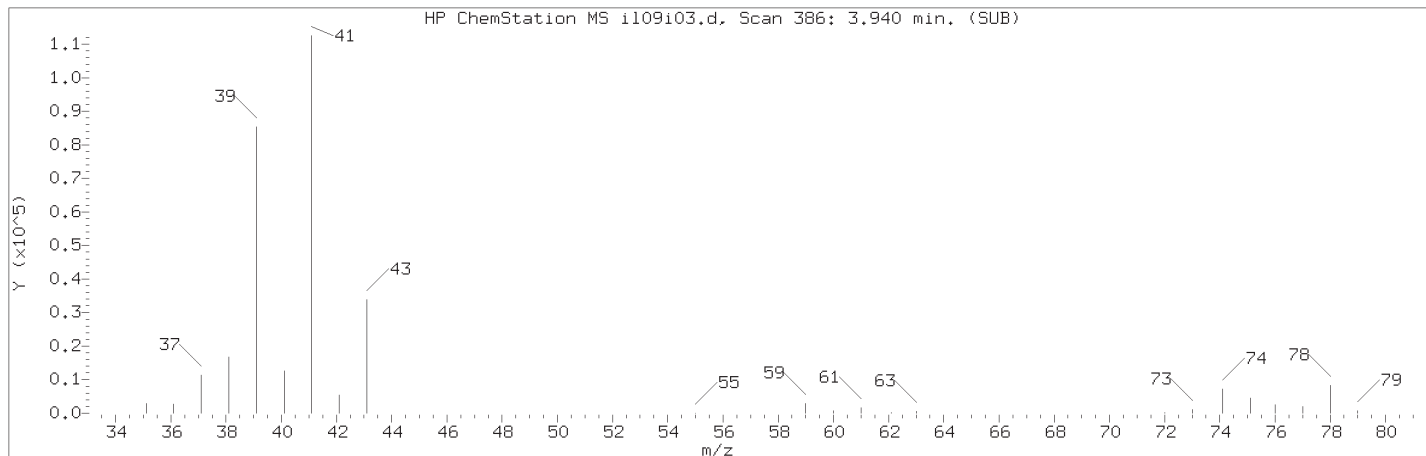
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:38  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD005

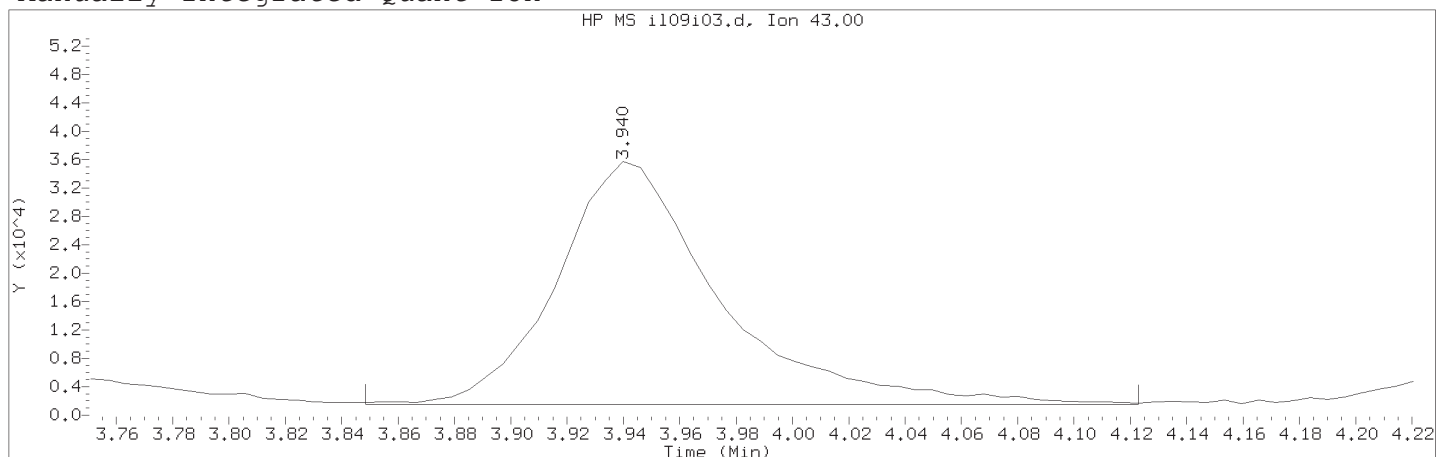
Lab Sample ID: VSTD005

Compound Number : 14  
 Compound Name : Acetone  
 Scan Number : 317  
 Retention Time (minutes): 3.519  
 Quant Ion : 43.00  
 Area : 641874  
 On-column Amount (ng) : 51.5618  
 Integration start scan : 297      Integration stop scan: 368  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:27      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005      Lab Sample ID: VSTD005

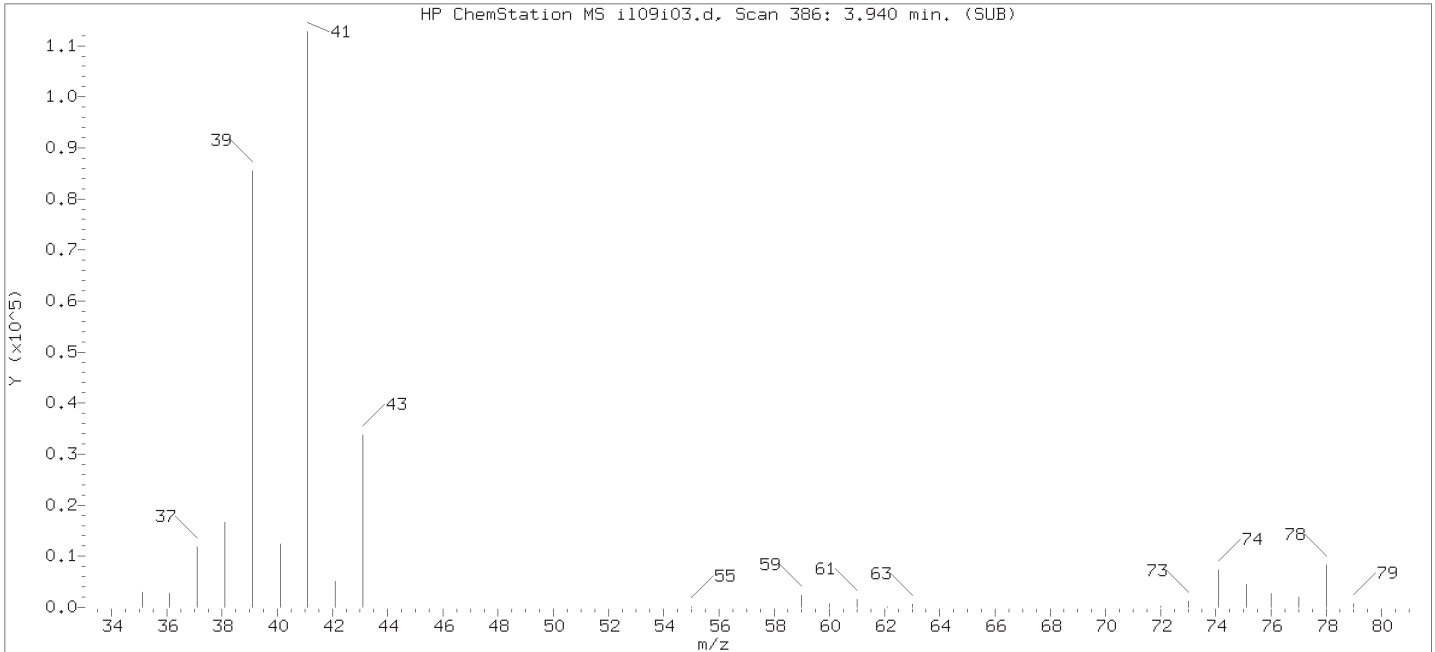
Compound Number : 21  
 Compound Name : Methyl Acetate  
 Scan Number : 386  
 Retention Time (minutes): 3.940  
 Quant Ion : 43.00  
 Area (flag) : 136500M  
 On-Column Amount (ng) : 4.9761  
 Integration start scan : 370      Integration stop scan: 415  
 Y at integration start : 1574      Y at integration end: 1574

Reason for manual integration: improper integration

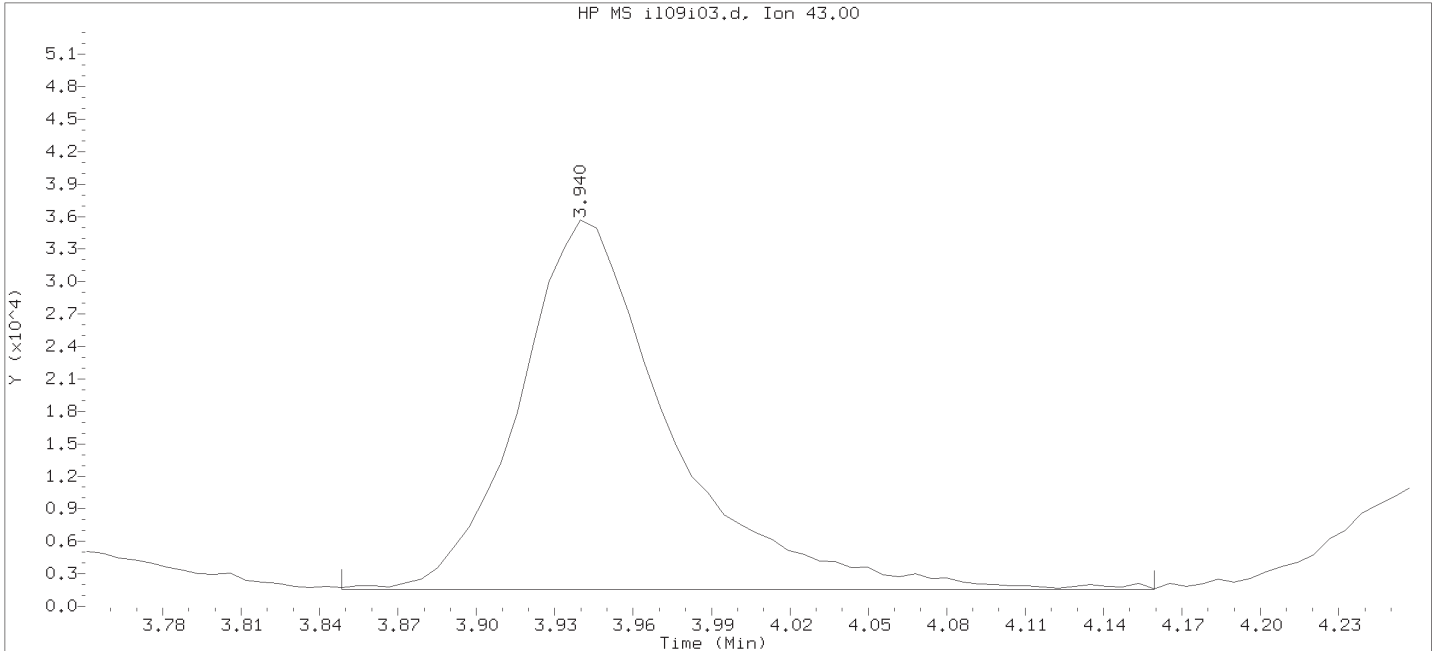
Analyst responsible for change: Digitally signed by Don V. Viray  
 on 07/17/2018 at 16:40.  
 Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
 PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/il09i03.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27      Analyst ID: jkh09052

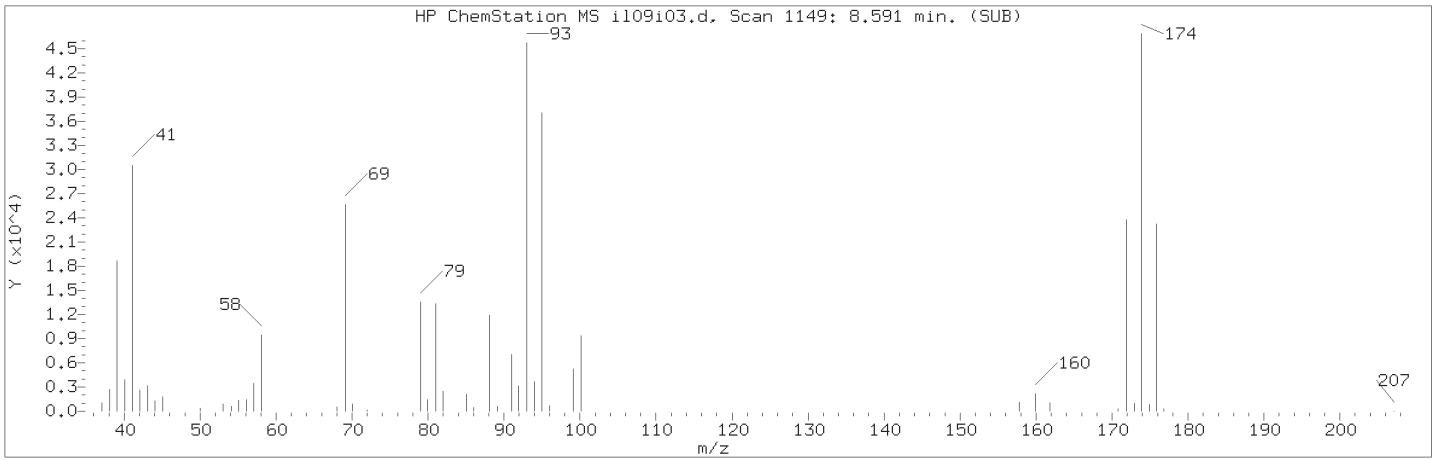
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:38  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD005      Lab Sample ID: VSTD005

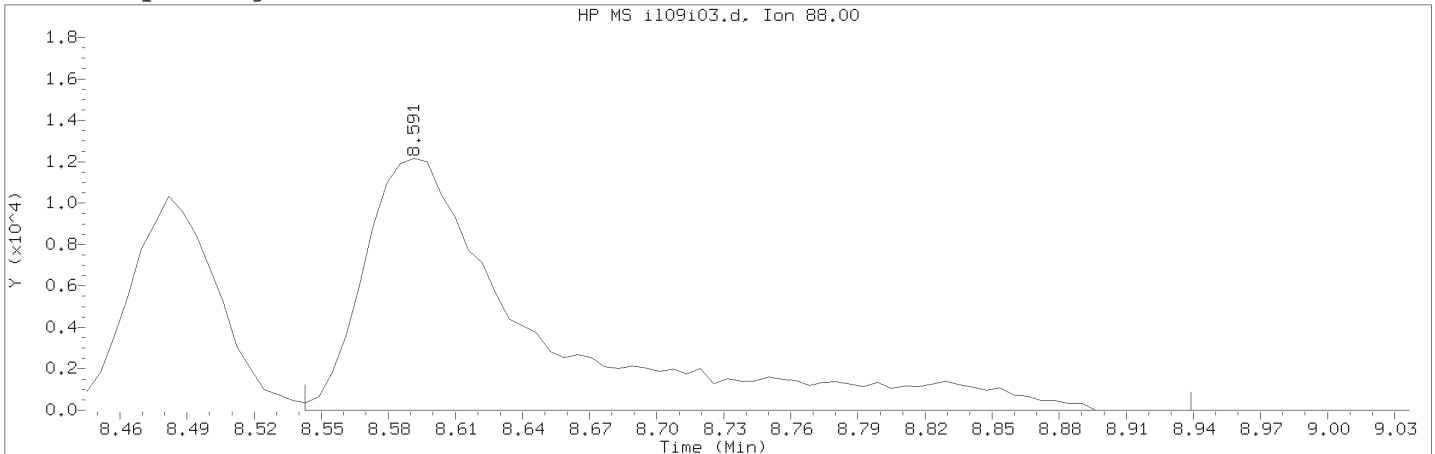
Compound Number : 21  
Compound Name : Methyl Acetate  
Scan Number : 386  
Retention Time (minutes): 3.940  
Quant Ion : 43.00  
Area : 137104  
On-column Amount (ng) : 4.8440  
Integration start scan : 370      Integration stop scan: 421  
Y at integration start : 1574      Y at integration end: 1574



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005    Lab Sample ID: VSTD005

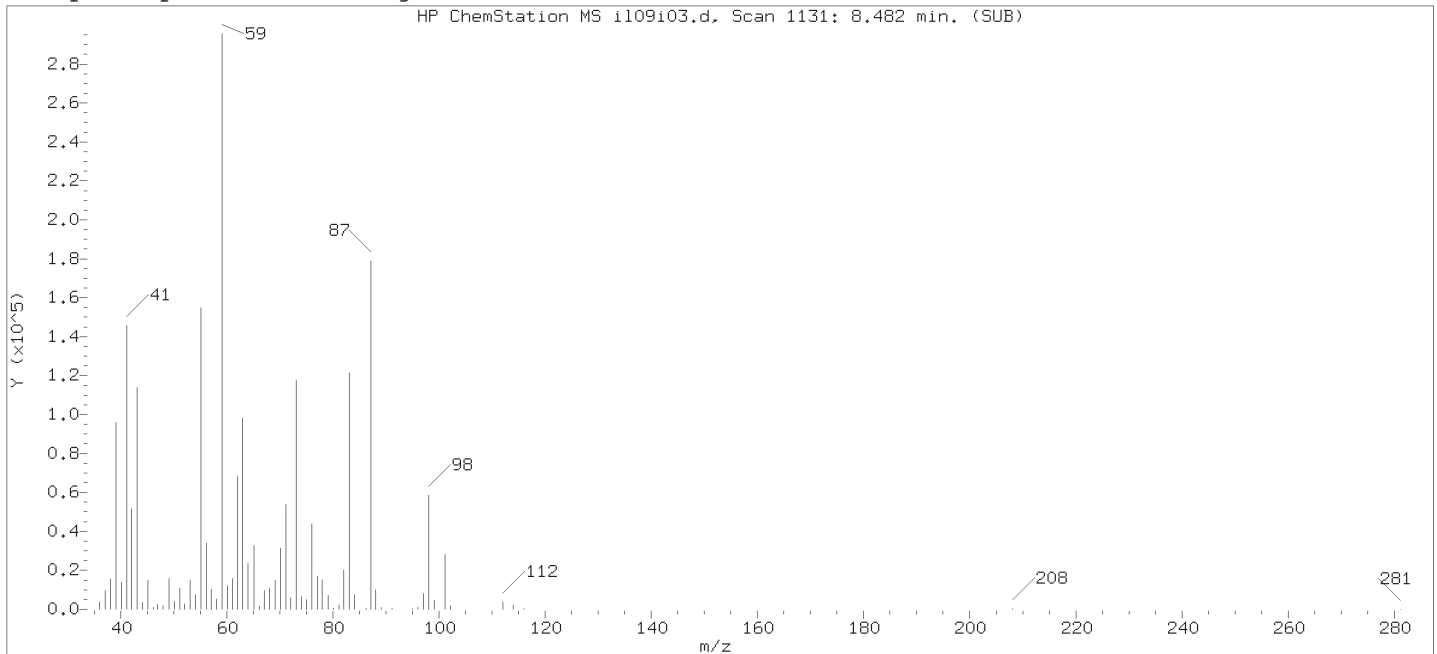
Compound Number                      : 72  
Compound Name                         : 1,4-Dioxane  
Scan Number                            : 1149  
Retention Time (minutes): 8.591  
Quant Ion                               : 88.00  
Area (flag)                             : 65184M  
On-Column Amount (ng)                : 238.9236  
Integration start scan                 : 1140                      Integration stop scan: 1205  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

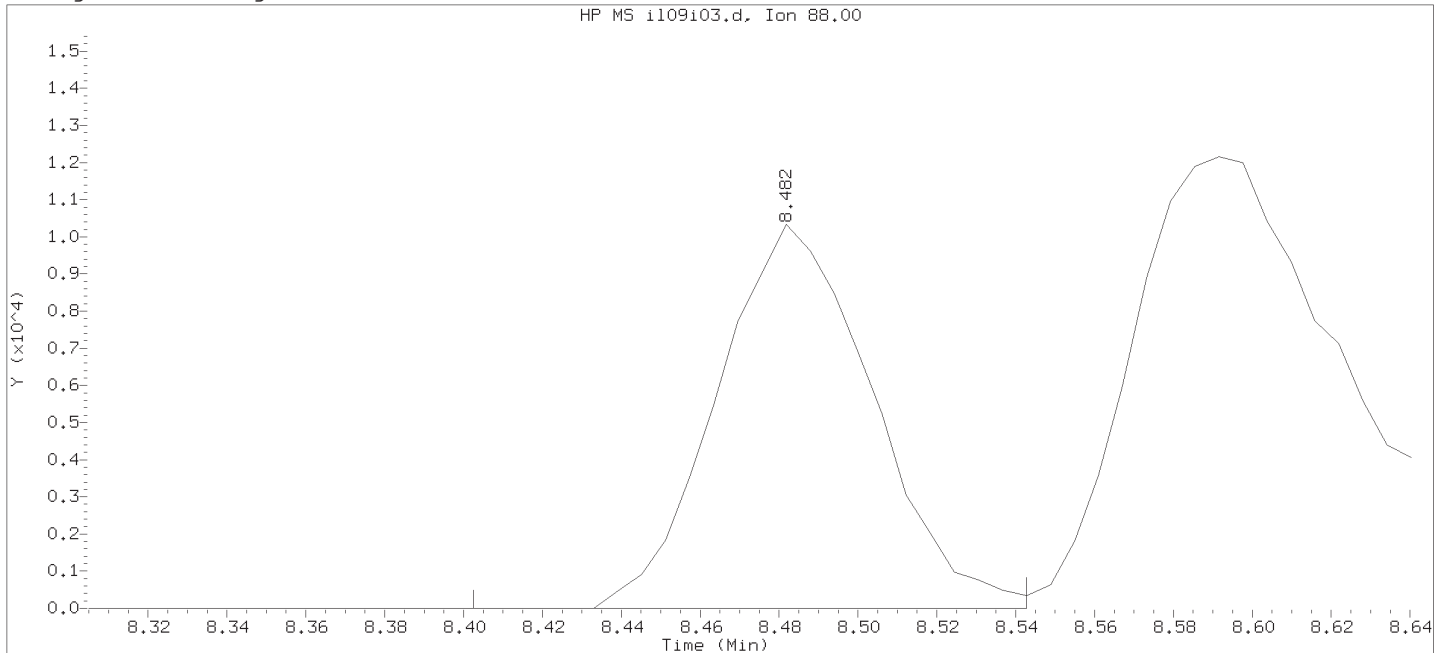
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



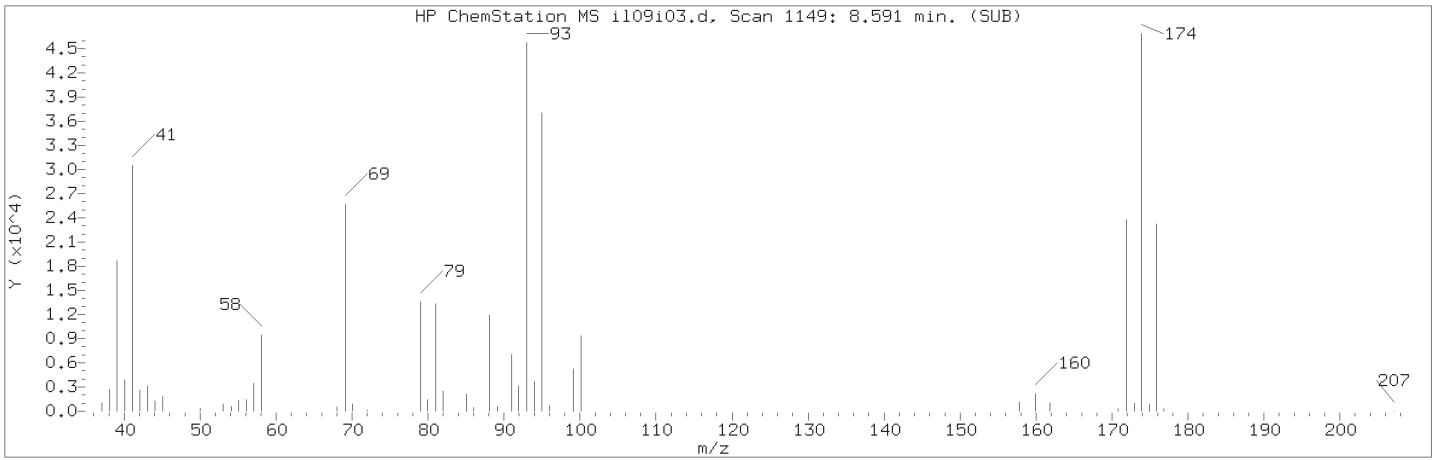
Data File: /chem2/HP19930.i/18jul09i.b/il09i03.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:27      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:38  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

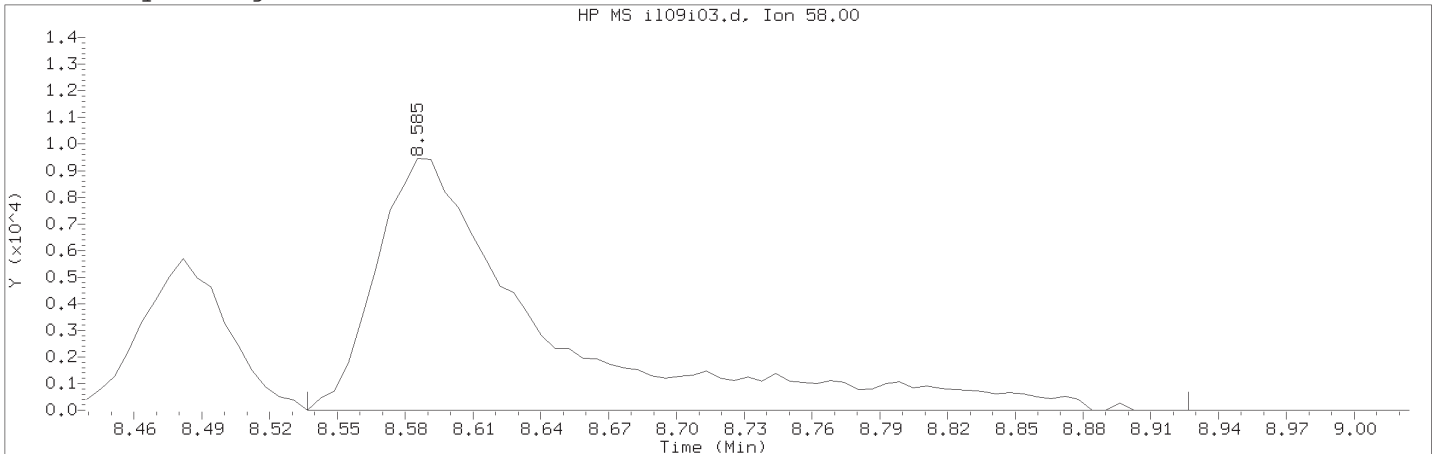
Sample Name: VSTD005      Lab Sample ID: VSTD005

Compound Number : 72  
 Compound Name : 1,4-Dioxane  
 Scan Number : 1131  
 Retention Time (minutes): 8.482  
 Quant Ion : 88.00  
 Area : 28183  
 On-column Amount (ng) : 161.9636  
 Integration start scan : 1117      Integration stop scan: 1140  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005    Lab Sample ID: VSTD005

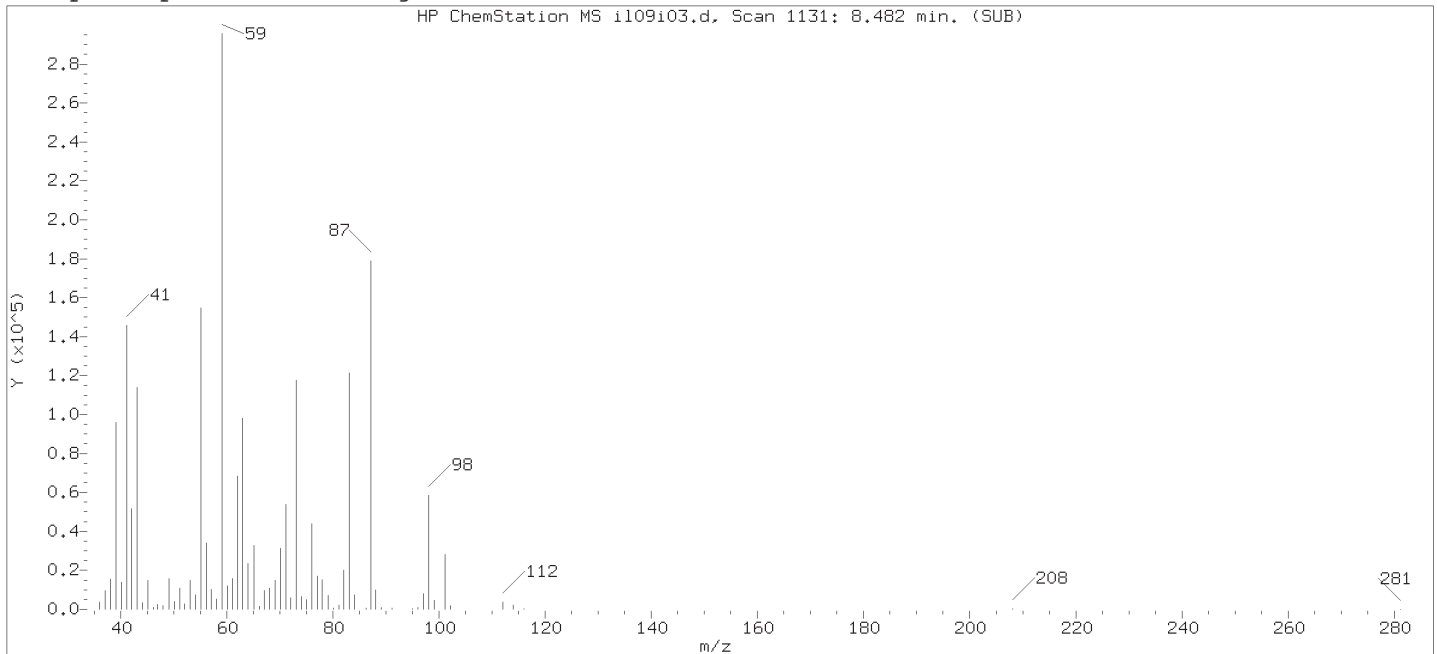
Compound Number                      : 72  
Compound Name                         : 1,4-Dioxane  
Scan Number                            : 1148  
Retention Time (minutes): 8.585  
Quant Ion                                : 58.00  
Area (flag)                             : 48974M  
On-Column Amount (ng)                : 248.1524  
Integration start scan                : 1139                      Integration stop scan: 1203  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

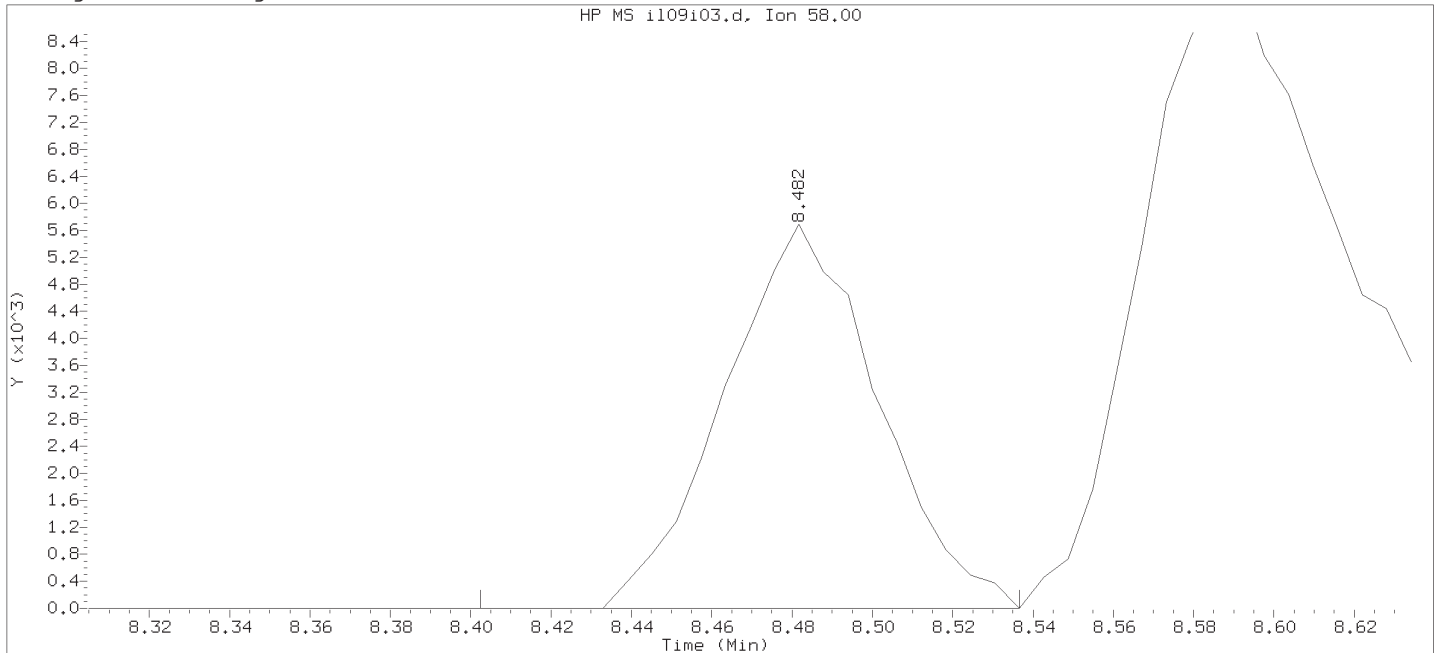
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



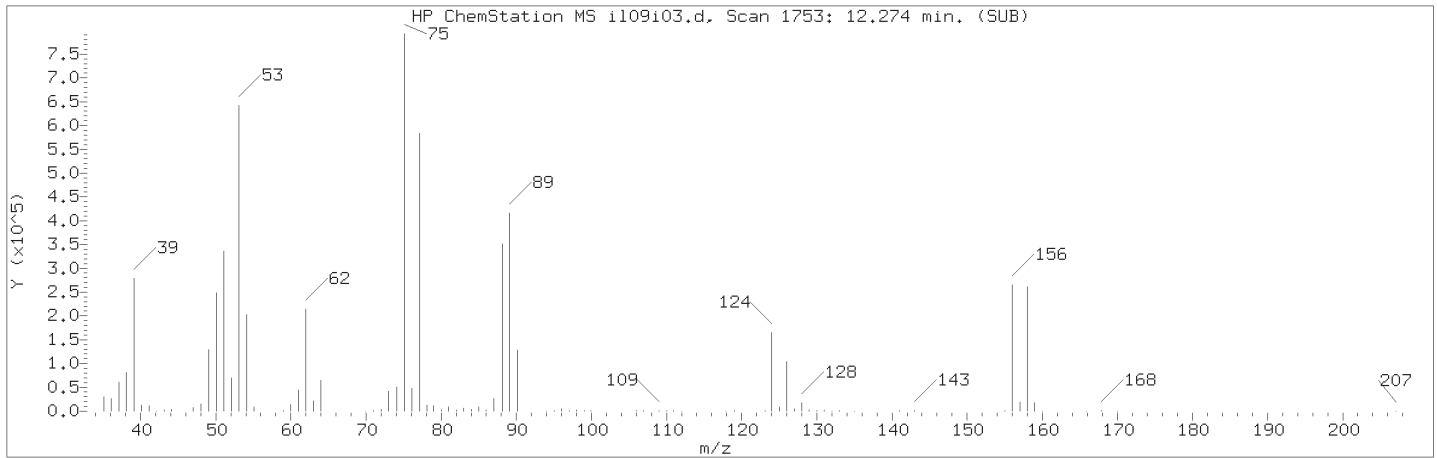
Data File: /chem2/HP19930.i/18jul09i.b/il09i03.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:38  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

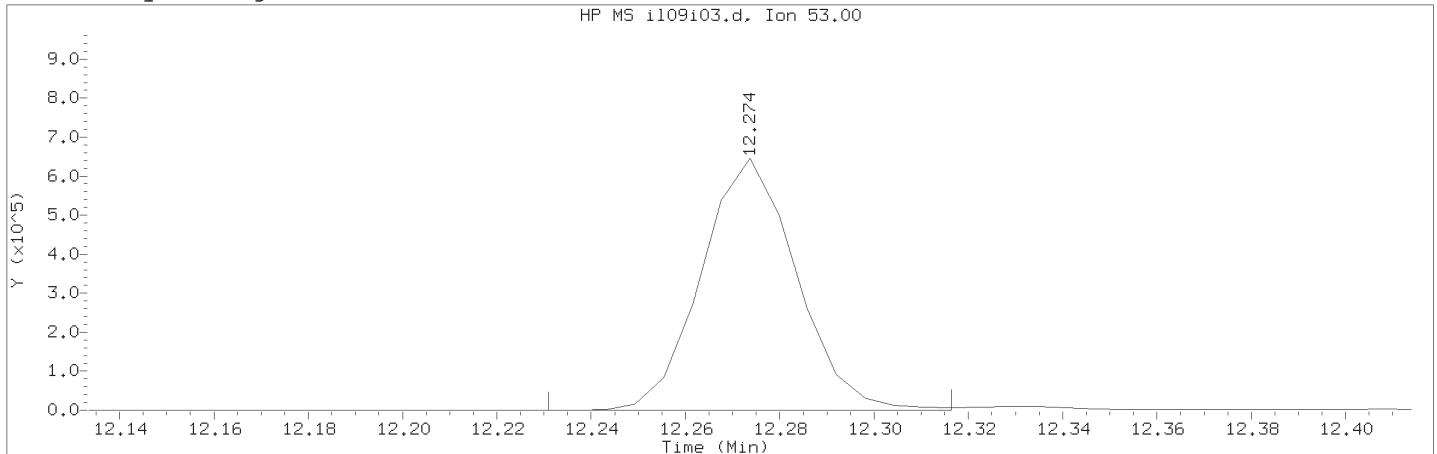
Sample Name: VSTD005      Lab Sample ID: VSTD005

Compound Number : 72  
Compound Name : 1,4-Dioxane  
Scan Number : 1131  
Retention Time (minutes): 8.482  
Quant Ion : 58.00  
Area : 15147  
On-column Amount (ng) : 134.6770  
Integration start scan : 1117      Integration stop scan: 1139  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i03.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:27                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD005    Lab Sample ID: VSTD005

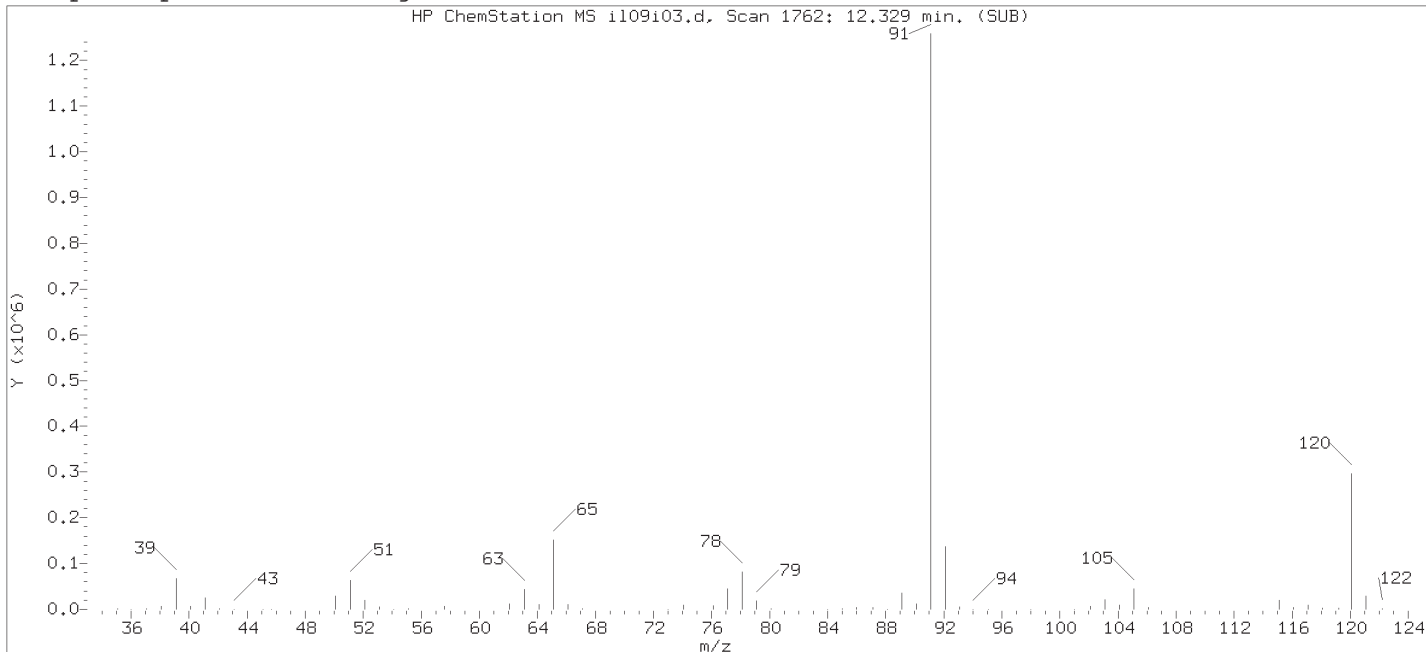
Compound Number                      : 115  
Compound Name                         : trans-1,4-Dichloro-2-butene  
Scan Number                            : 1753  
Retention Time (minutes): 12.274  
Quant Ion                                : 53.00  
Area (flag)                             : 900272A  
On-Column Amount (ng)                : 55.8189  
Integration start scan                 : 1745                      Integration stop scan: 1759  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

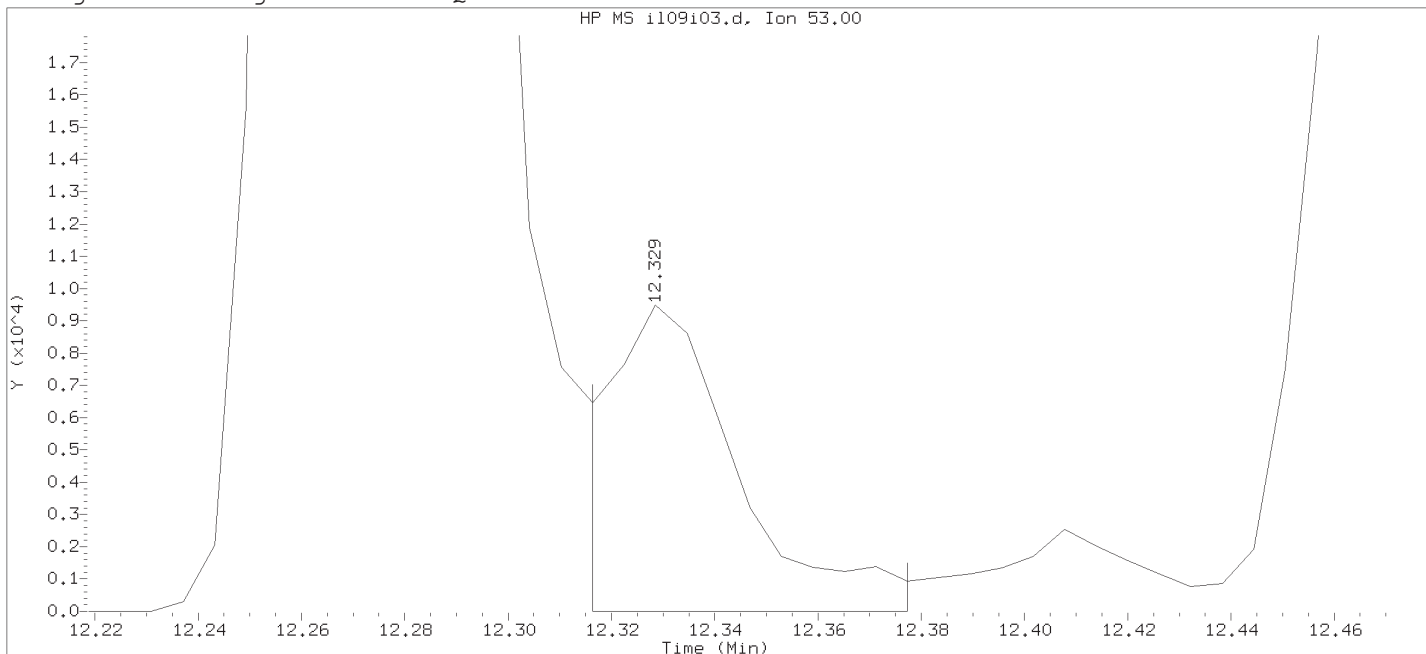
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

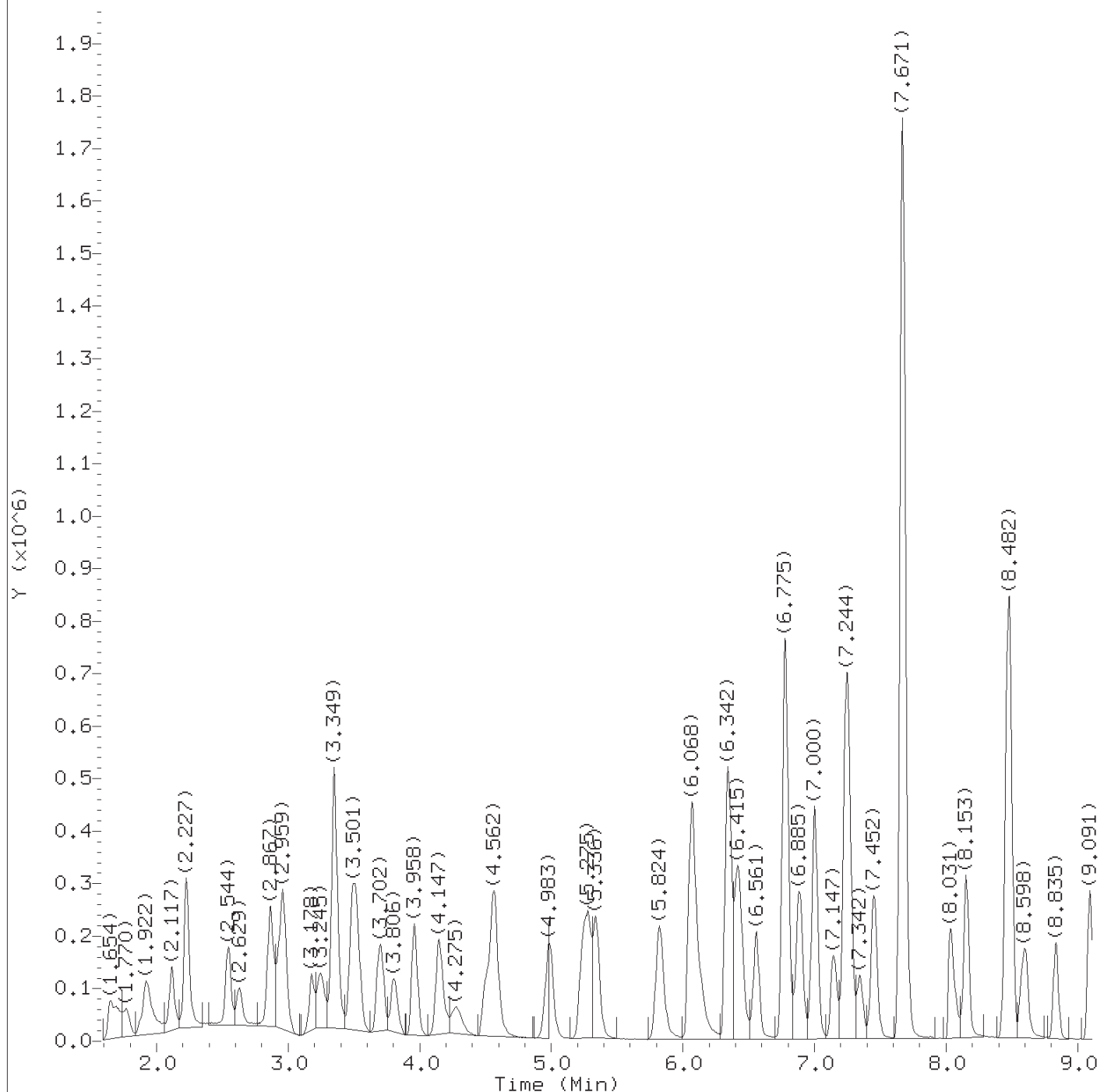


Data File: /chem2/HP19930.i/18jul09i.b/il09i03.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:27      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:38  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD005      Lab Sample ID: VSTD005

Compound Number : 115  
 Compound Name : trans-1,4-Dichloro-2-butene  
 Scan Number : 1762  
 Retention Time (minutes): 12.329  
 Quant Ion : 53.00  
 Area : 16196  
 On-column Amount (ng) : 1.4787  
 Integration start scan : 1759      Integration stop scan: 1769  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d  
Injection date and time: 09-JUL-2018 13:49

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21

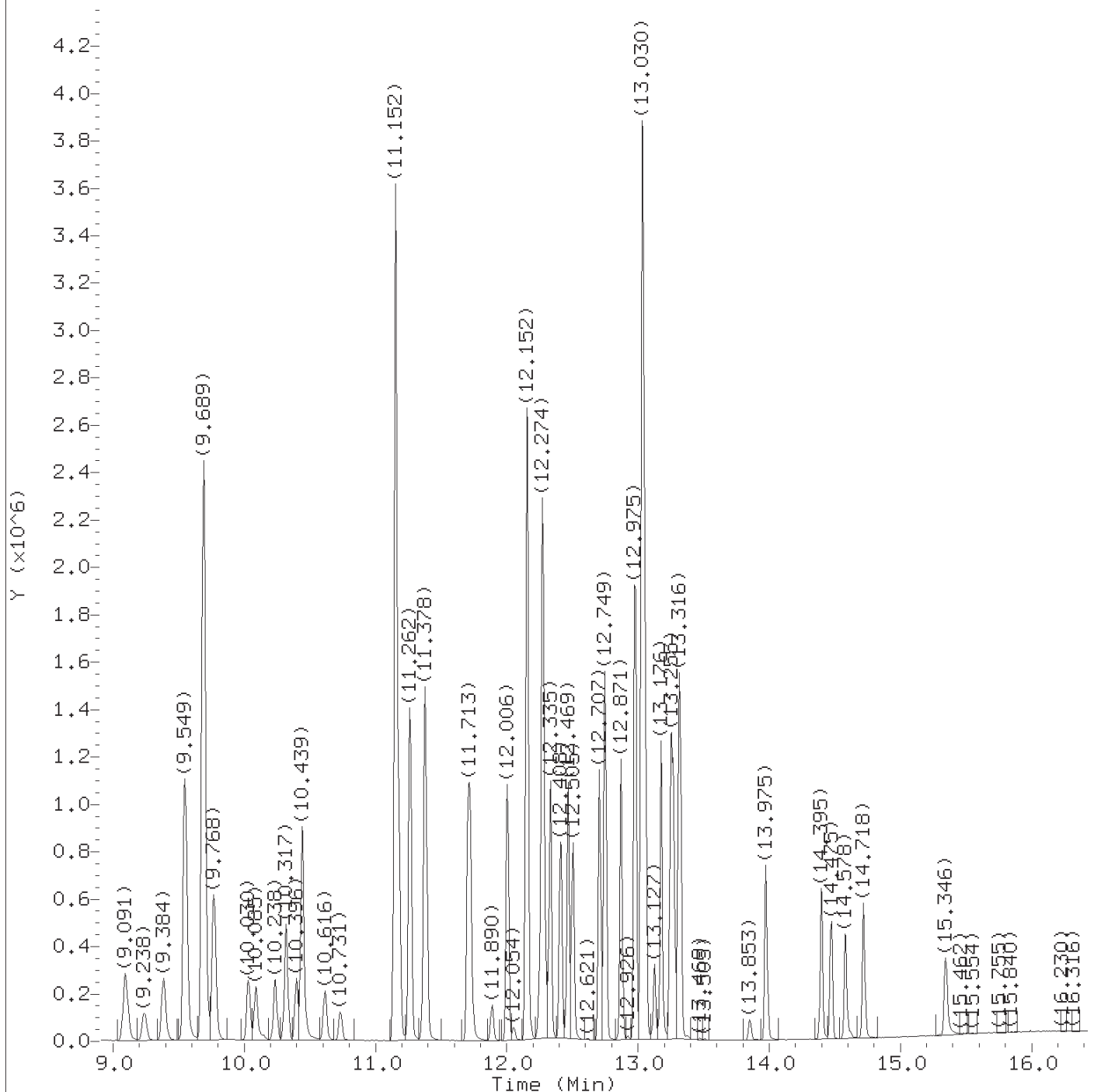
Sublist used: 8260W25  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002

Lab Sample ID: VSTD002

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d  
Injection date and time: 09-JUL-2018 13:49

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: VSTD002

Lab Sample ID: VSTD002

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i04.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:49 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.922	85	259948	2.104
2) Chloromethane	(2)	2.117	50	181493	2.012
6) 1,3-Butadiene	(2)	2.221	39	124248M	2.145
5) Vinyl Chloride	(2)	2.233	62	180516	2.073
7) Bromomethane	(2)	2.544	94	164388	2.005
8) Chloroethane	(2)	2.629	64	103740	2.046
9) Dichlorofluoromethane	(2)	2.867	67	270841M	2.032
10) Trichlorofluoromethane	(2)	2.934	101	315621	2.120
11) Ethyl ether	(2)	3.178	59	102058	2.071
12) Freon 123a	(2)	3.251	67	157260	2.087
13) Acrolein	(1)	3.349	56	797958	102.324
15) 1,1-Dichloroethene	(2)	3.483	96	105111	2.047
16) Freon 113	(2)	3.513	101	128533	2.156
14) Acetone	(1)	3.526	43	224909M	19.393
17) Methyl Iodide	(2)	3.690	142	213625	2.026
18) Carbon Disulfide	(2)	3.806	76	308538	2.025
21) Methyl Acetate	(1)	3.952	43	54677	2.077
22) Allyl Chloride	(2)	3.958	41	220666	2.000
23) Methylene Chloride	(2)	4.147	84	116913	2.011
26)*t-Butyl Alcohol-d10	(1)	4.166	65	198470	50.000
28) t-Butyl Alcohol	(1)	4.275	59	203428	39.641
29) Acrylonitrile	(1)	4.489	53	129241	10.226
30) Methyl Tertiary Butyl Ether	(2)	4.544	73	323483	2.034
31) trans-1,2-Dichloroethene	(2)	4.568	96	117513	2.016
32) n-Hexane	(2)	4.989	57	194117	2.023
33) 1,1-Dichloroethane	(2)	5.232	63	234544	2.037
34) di-Isopropyl Ether	(2)	5.281	45	421368	2.026
35) 2-Chloro-1,3-Butadiene	(2)	5.342	53	222234	2.038
37) Ethyl t-butyl ether	(2)	5.824	59	393469	2.024
38) 2-Butanone	(1)	6.049	43	392504	20.406
39) cis-1,2-Dichloroethene	(2)	6.068	96	134735	2.025
41) 2,2-Dichloropropane	(2)	6.080	77	214395	2.050
40) 1,2-Dichloroethene (Total)	(2)		96	252248	4.041
42) Propionitrile	(1)	6.141	54	193461	40.756
45) Methacrylonitrile	(1)	6.342	67	332750	20.567
47) Bromochloromethane	(2)	6.415	128	60067	2.063
48) Tetrahydrofuran	(1)	6.440	71	101607	20.453
49) Chloroform	(2)	6.561	83	235079	2.028

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i04.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:49 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.775	113	531767	10.064
50) \$Dibromofluoromethane	(2)	6.775	111	543677	10.030
51) 1,1,1-Trichloroethane	(2)	6.787	97	226726	2.035
52) Cyclohexane	(2)	6.885	56	238573	2.029
52) Cyclohexane	(2)	6.885	84	187567	2.031
52) Cyclohexane	(2)	6.891	69	70198	2.014
54) Carbon Tetrachloride	(2)	7.000	117	202830	2.079
55) 1,1-Dichloropropene	(2)	7.000	75	181865	2.068
56) Isobutyl Alcohol	(1)	7.147	41	152858	98.383
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	101031	10.070
57) \$1,2-Dichloroethane-d4	(2)	7.232	65	603712	10.162
57) \$1,2-Dichloroethane-d4	(2)	7.238	104	64689	10.060
58) Benzene	(2)	7.263	78	500083	2.034
59) 1,2-Dichloroethane	(2)	7.348	62	163797	1.975
59) 1,2-Dichloroethane	(2)	7.348	98	12321	2.148
60) t-Amyl methyl ether	(2)	7.452	73	343011	2.023
63) *Fluorobenzene	(2)	7.671	96	2024178	10.000
62) n-Heptane	(2)	7.677	43	212722	2.023
65) n-Butanol	(1)	8.031	56	237277	204.767
67) Trichloroethene	(2)	8.153	95	137462	2.040
69) Methylcyclohexane	(2)	8.457	83	248658	2.040
70) 1,2-Dichloropropane	(2)	8.494	63	124676	2.023
71) Methyl Methacrylate	(1)	8.573	69	62004	2.113
72) 1,4-Dioxane	(1)	8.598	88	30582	116.784
72) 1,4-Dioxane	(1)	8.592	58	22879	120.778
73) Dibromomethane	(2)	8.604	93	62829	2.028
74) Bromodichloromethane	(2)	8.835	83	167407	2.013
76) 2-Nitropropane	(1)	9.091	41	263180	19.979
80) cis-1,3-Dichloropropene	(2)	9.384	75	186328M	1.974
81) 4-Methyl-2-Pentanone	(1)	9.549	43	988066M	20.988
82) \$Toluene-d8	(3)	9.689	98	1979990	10.190
82) \$Toluene-d8	(3)	9.689	100	1280722	10.213
83) Toluene	(3)	9.768	92	312605	2.043
84) trans-1,3-Dichloropropene	(3)	10.030	75	155999	2.040
86) Ethyl Methacrylate	(3)	10.085	69	134286	2.029
85) 1,3-Dichloropropene (total)	(3)		75	342327	4.014
88) 1,1,2-Trichloroethane	(3)	10.238	97	87427	2.073
89) Tetrachloroethene	(3)	10.317	166	159583	2.022

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i04.d  
 Injection date and time: 09-JUL-2018 13:49

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.396	76	150316	2.051
91) 2-Hexanone	(1)	10.439	43	696132	20.632
93) Dibromochloromethane	(3)	10.616	129	111026	2.032
95) 1,2-Dibromoethane	(3)	10.731	107	82956	2.051
97) *Chlorobenzene-d5	(3)	11.152	117	1555416	10.000
98) Chlorobenzene	(3)	11.183	112	338209	2.024
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	127794	2.011
100) Ethylbenzene	(3)	11.262	91	618728	2.040
101) m+p-Xylene	(3)	11.378	106	480752	4.066
104) o-Xylene	(3)	11.707	106	237128	2.008
106) Styrene	(3)	11.725	104	366709	2.063
105) Xylene (Total)	(3)		106	717880	6.074
107) Bromoform	(3)	11.890	173	66742	2.009
108) Isopropylbenzene	(3)	12.006	105	634417	2.061
111) \$4-Bromofluorobenzene	(3)	12.152	95	776887	10.158
111) \$4-Bromofluorobenzene	(3)	12.158	174	703984	10.147
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	111854M	2.056
114) Bromobenzene	(4)	12.274	156	155935	1.952
115) trans-1,4-Dichloro-2-butene	(1)	12.274	53	331114A	21.389
116) 1,2,3-Trichloropropane	(4)	12.298	110	31656	2.000
117) n-Propylbenzene	(4)	12.335	91	752156	2.064
119) 2-Chlorotoluene	(4)	12.414	126	144923	1.990
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	526319	2.014
122) 4-Chlorotoluene	(4)	12.505	126	147302	1.999
125) tert-Butylbenzene	(4)	12.707	134	112528	2.001
126) Pentachloroethane	(4)	12.743	167	99790	2.032
127) 1,2,4-Trimethylbenzene	(4)	12.749	105	535508	2.028
128) sec-Butylbenzene	(4)	12.871	105	687251	2.045
131) 1,3-Dichlorobenzene	(4)	12.975	146	295077M	1.954
132) p-Isopropyltoluene	(4)	12.981	119	582734	1.965
133) *1,4-Dichlorobenzene-d4	(4)	13.030	152	887530	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	302176M	1.957
135) 1,2,3-Trimethylbenzene	(4)	13.054	120	237940	1.979
136) Benzyl Chloride	(4)	13.127	126	40500M	1.985
138) n-Butylbenzene	(4)	13.268	92	276698	2.036
139) 1,2-Dichlorobenzene	(4)	13.310	146	276349	1.974
143) 1,2-Dibromo-3-chloropropane	(1)	13.853	155	15593	2.033
144) 1,3,5-Trichlorobenzene	(4)	13.975	180	215072	1.964

M = Compound was manually integrated.  
 A = User selected an alternate hit.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray  
 on 07/17/2018 at 16:40.  
 Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i04.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002

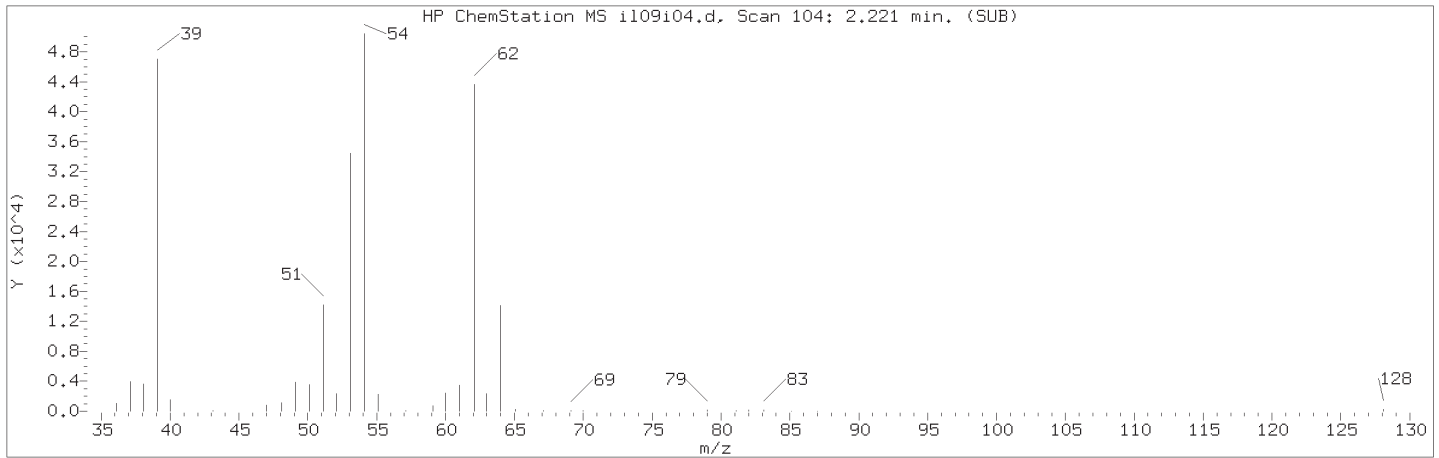
Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,2,4-Trichlorobenzene	(4)	14.401	180	187100	1.981
146) Hexachlorobutadiene	(4)	14.475	225	79235	1.979
147) Naphthalene	(4)	14.584	128	347126	2.033
148) 1,2,3-Trichlorobenzene	(4)	14.718	180	160186	1.987

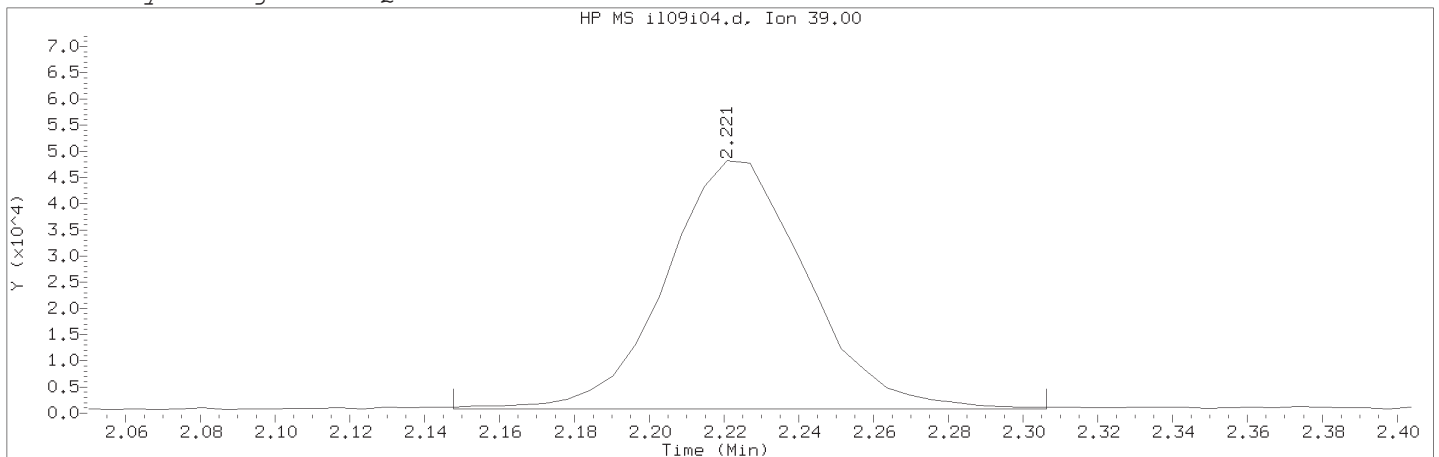
page 4 of 4

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

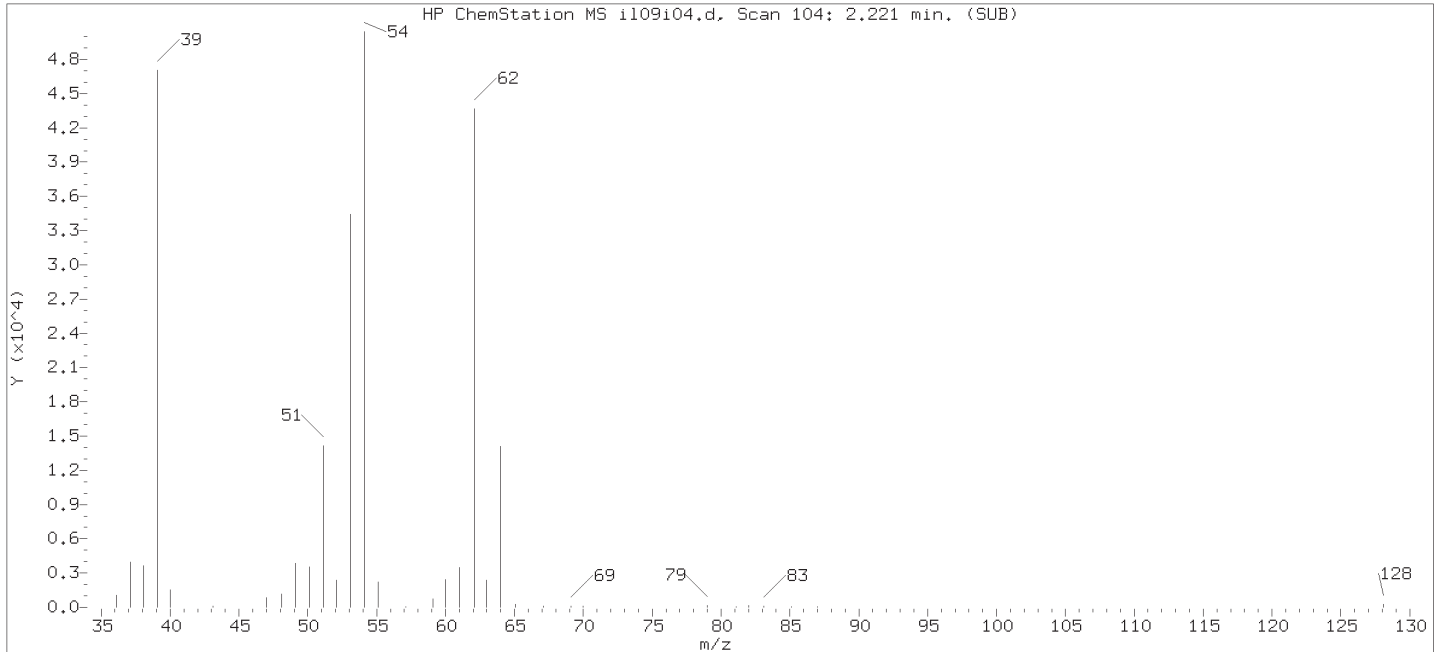
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 104  
Retention Time (minutes): 2.221  
Quant Ion                                : 39.00  
Area (flag)                             : 124248M  
On-Column Amount (ng)                : 2.1448  
Integration start scan                 : 91                      Integration stop scan: 117  
Y at integration start                 : 799                    Y at integration end: 799

Reason for manual integration: improper integration

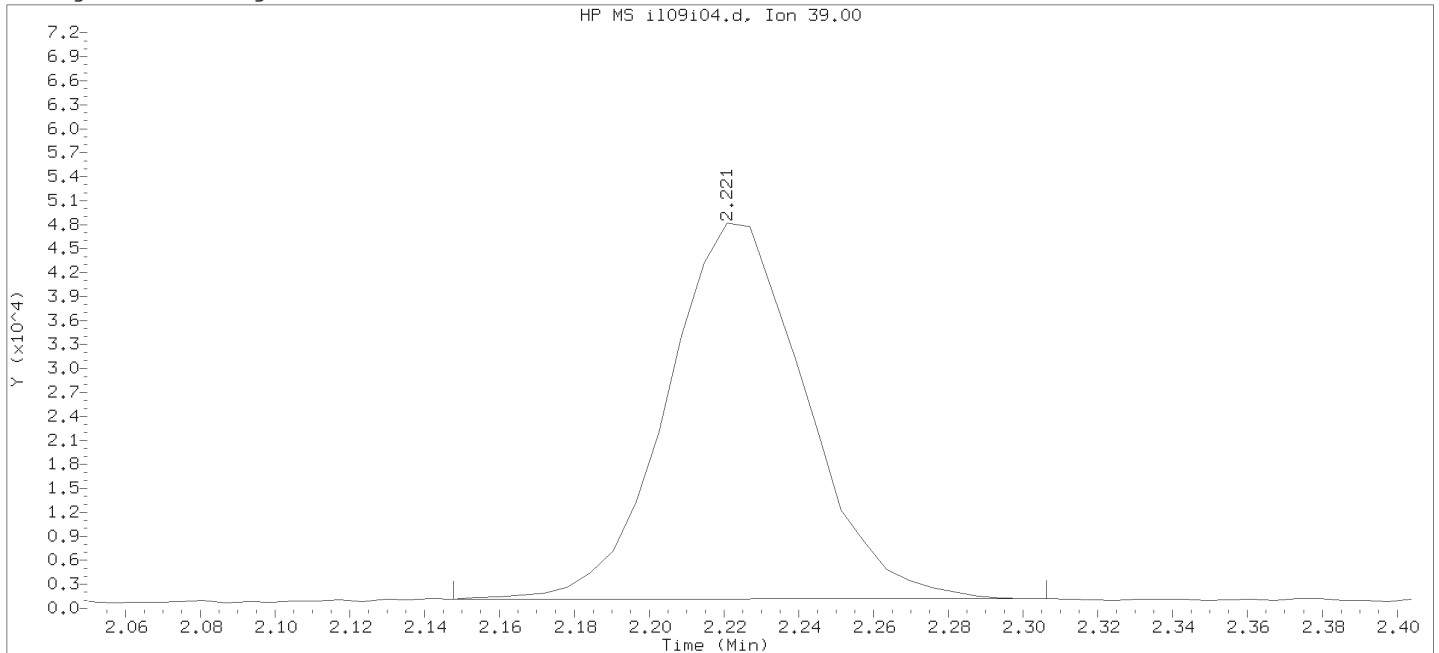
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/il09i04.d  
 Injection date and time: 09-JUL-2018 13:49

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

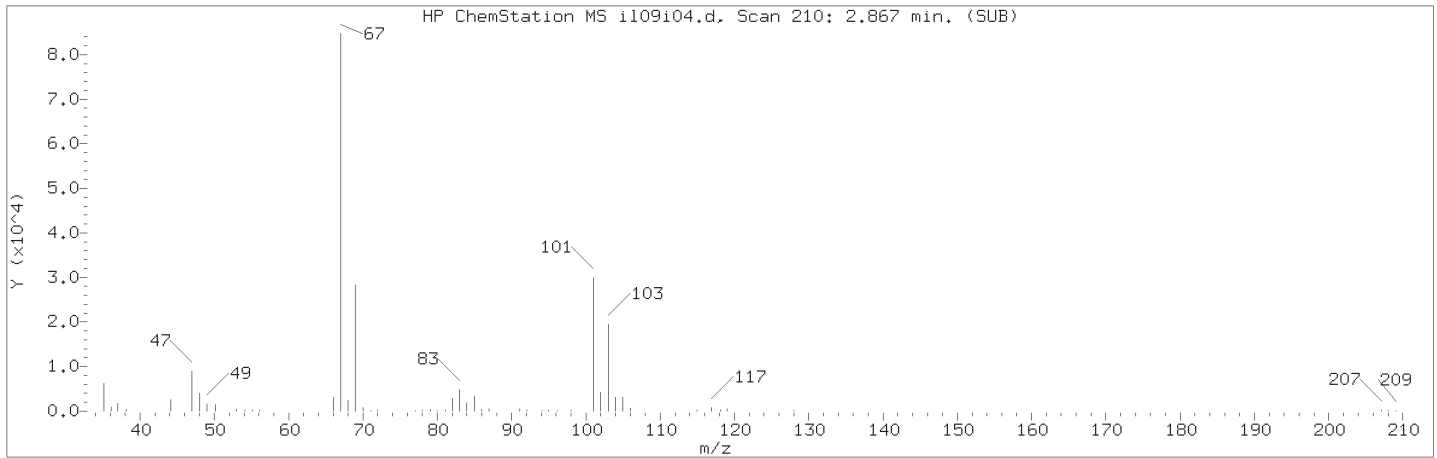
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD002

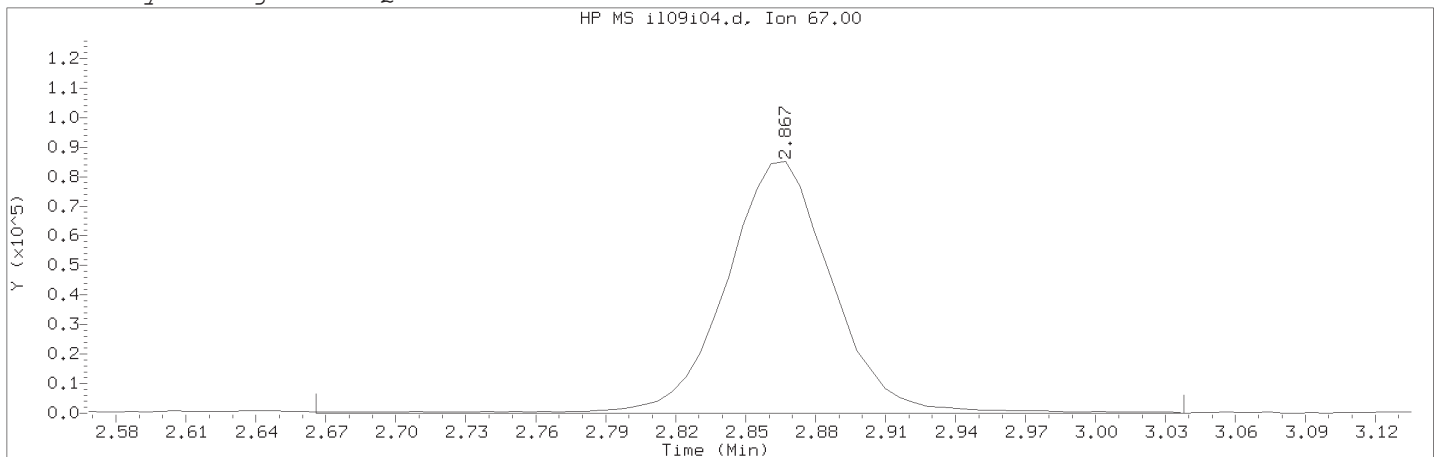
Lab Sample ID: VSTD002

Compound Number	: 6	
Compound Name	: 1,3-Butadiene	
Scan Number	: 104	
Retention Time (minutes)	: 2.221	
Quant Ion	: 39.00	
Area	: 120575	
On-column Amount (ng)	: 2.0485	
Integration start scan	: 91	Integration stop scan: 117
Y at integration start	: 1168	Y at integration end: 1174

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

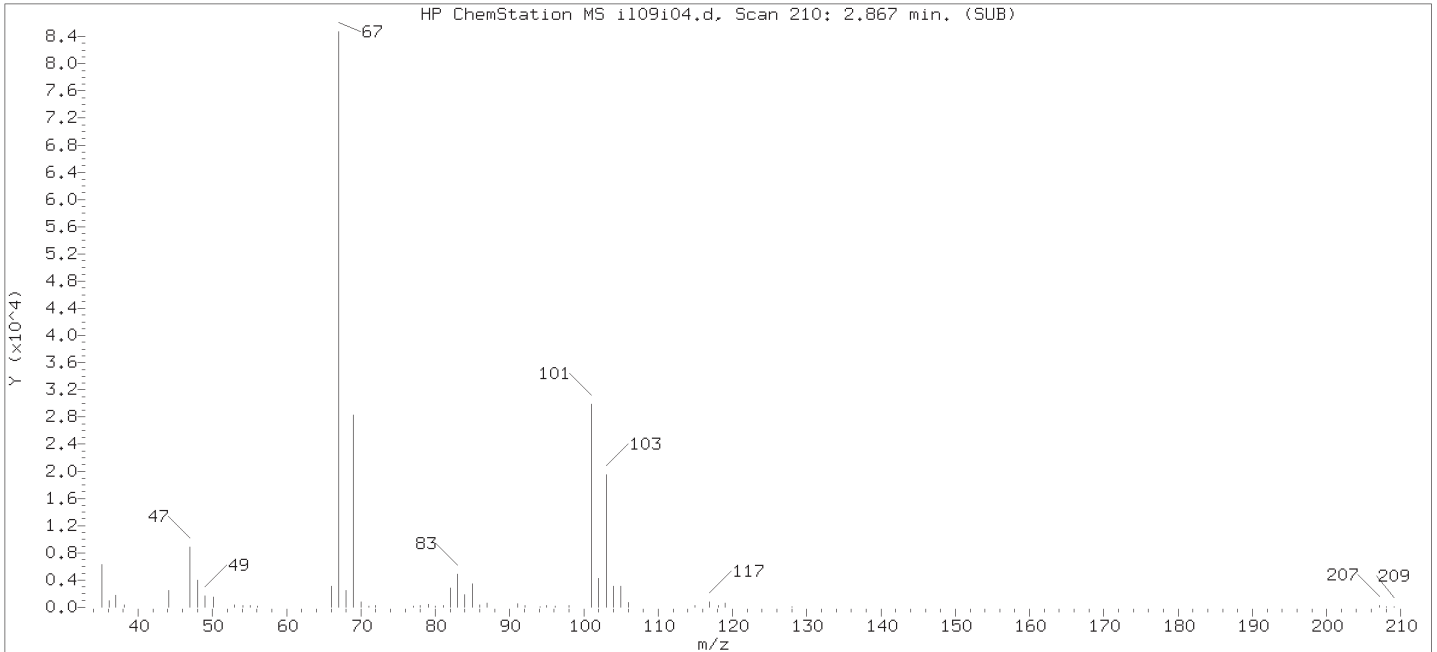
Compound Number                      : 9  
Compound Name                        : Dichlorofluoromethane  
Scan Number                           : 210  
Retention Time (minutes): 2.867  
Quant Ion                              : 67.00  
Area (flag)                            : 270841M  
On-Column Amount (ng)               : 2.0322  
Integration start scan                : 176                      Integration stop scan: 237  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

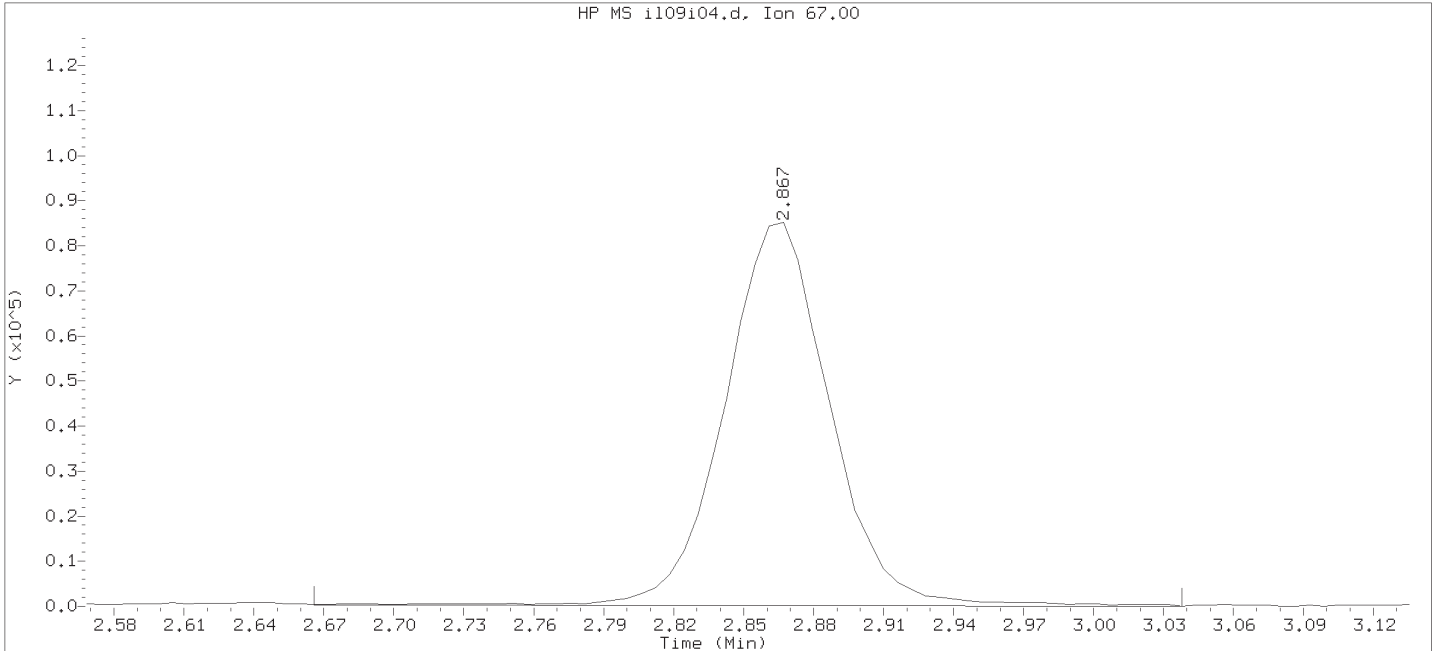
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

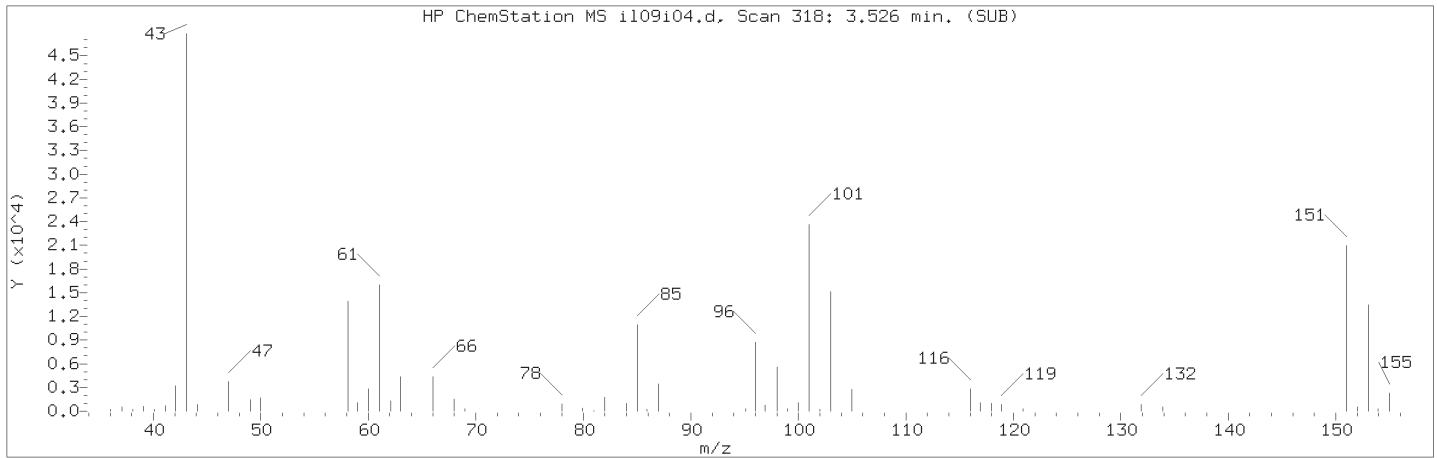
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD002      Lab Sample ID: VSTD002

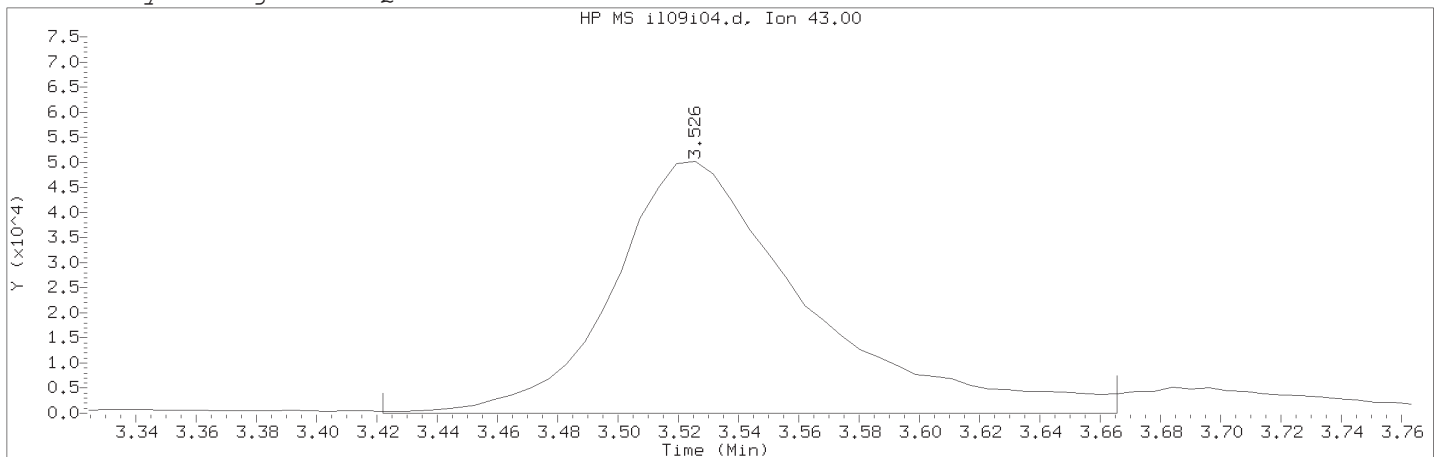
Compound Number : 9  
Compound Name : Dichlorofluoromethane  
Scan Number : 210  
Retention Time (minutes): 2.867  
Quant Ion : 67.00  
Area : 267723  
On-column Amount (ng) : 2.1392  
Integration start scan : 176      Integration stop scan: 237  
Y at integration start : 273      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

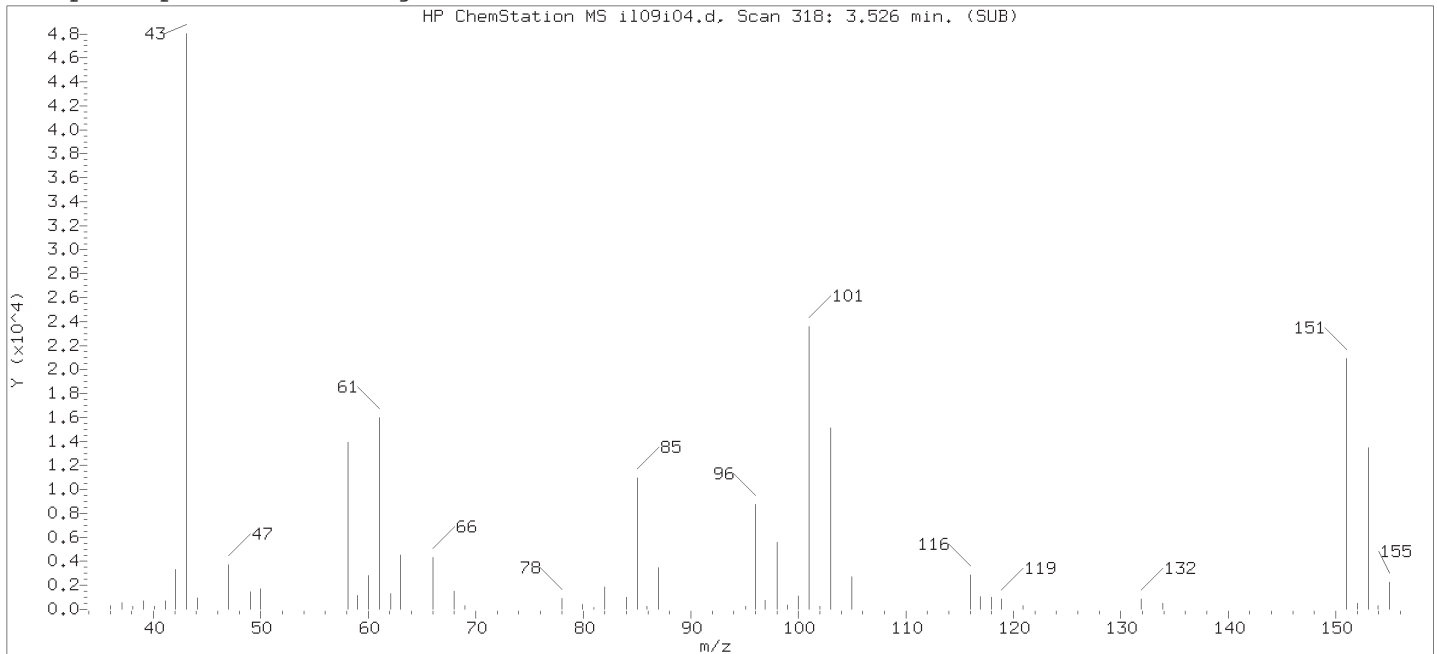
Compound Number                      : 14  
Compound Name                         : Acetone  
Scan Number                            : 318  
Retention Time (minutes): 3.526  
Quant Ion                                : 43.00  
Area (flag)                             : 224909M  
On-Column Amount (ng)                : 19.3927  
Integration start scan                 : 300                      Integration stop scan: 340  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

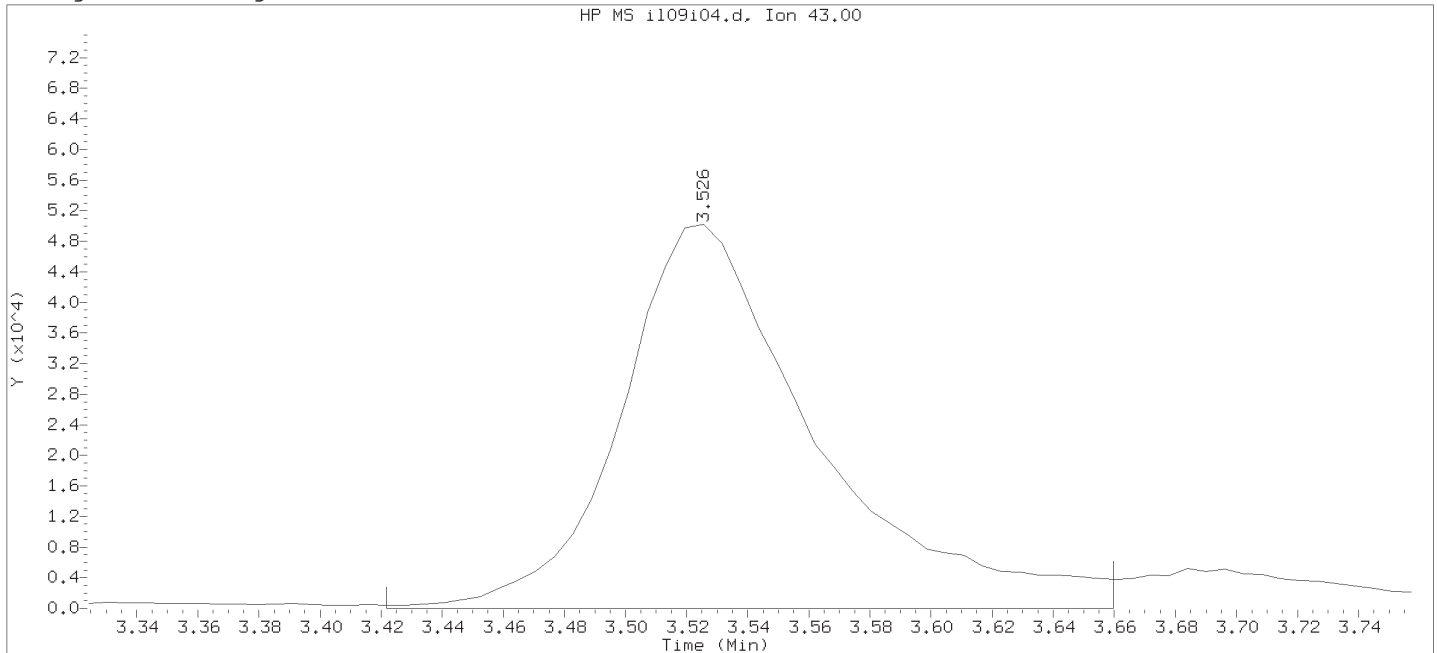
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

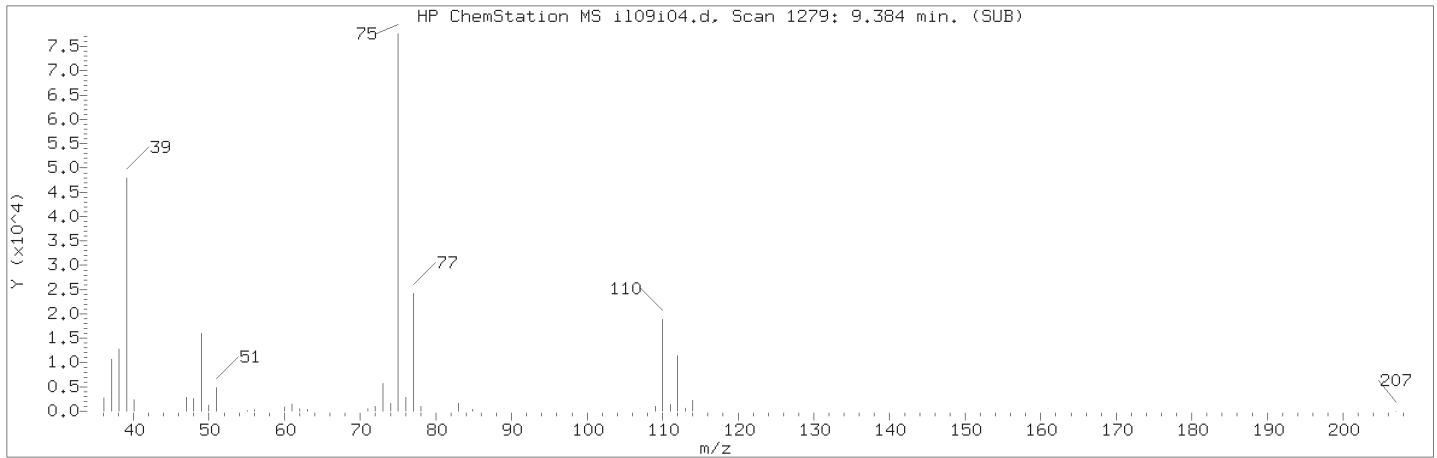
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD002

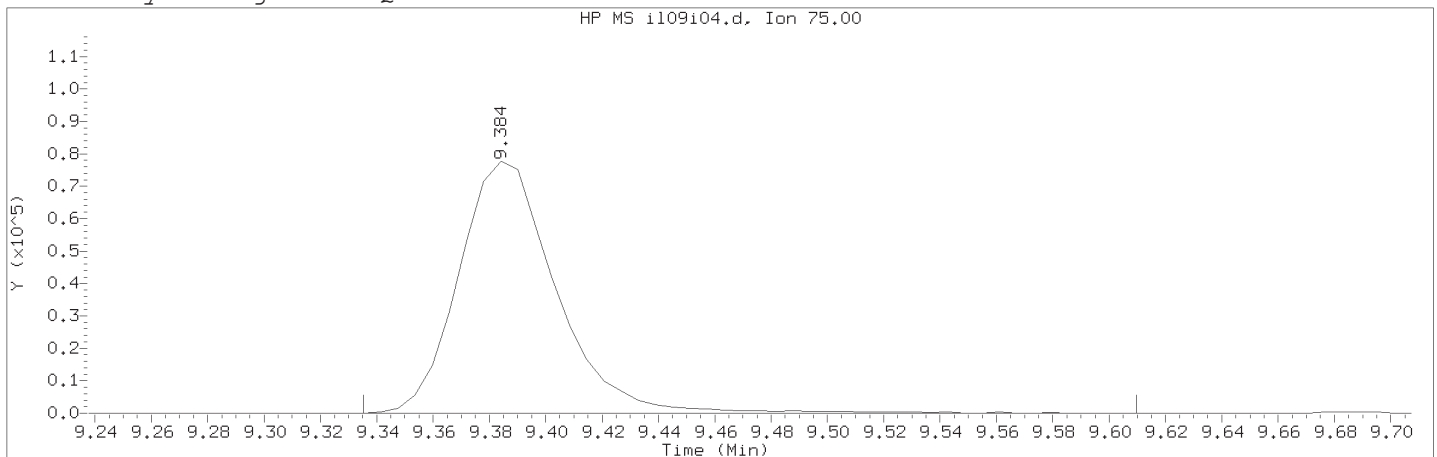
Lab Sample ID: VSTD002

Compound Number : 14  
 Compound Name : Acetone  
 Scan Number : 318  
 Retention Time (minutes): 3.526  
 Quant Ion : 43.00  
 Area : 222729  
 On-column Amount (ng) : 18.9626  
 Integration start scan : 300      Integration stop scan: 339  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

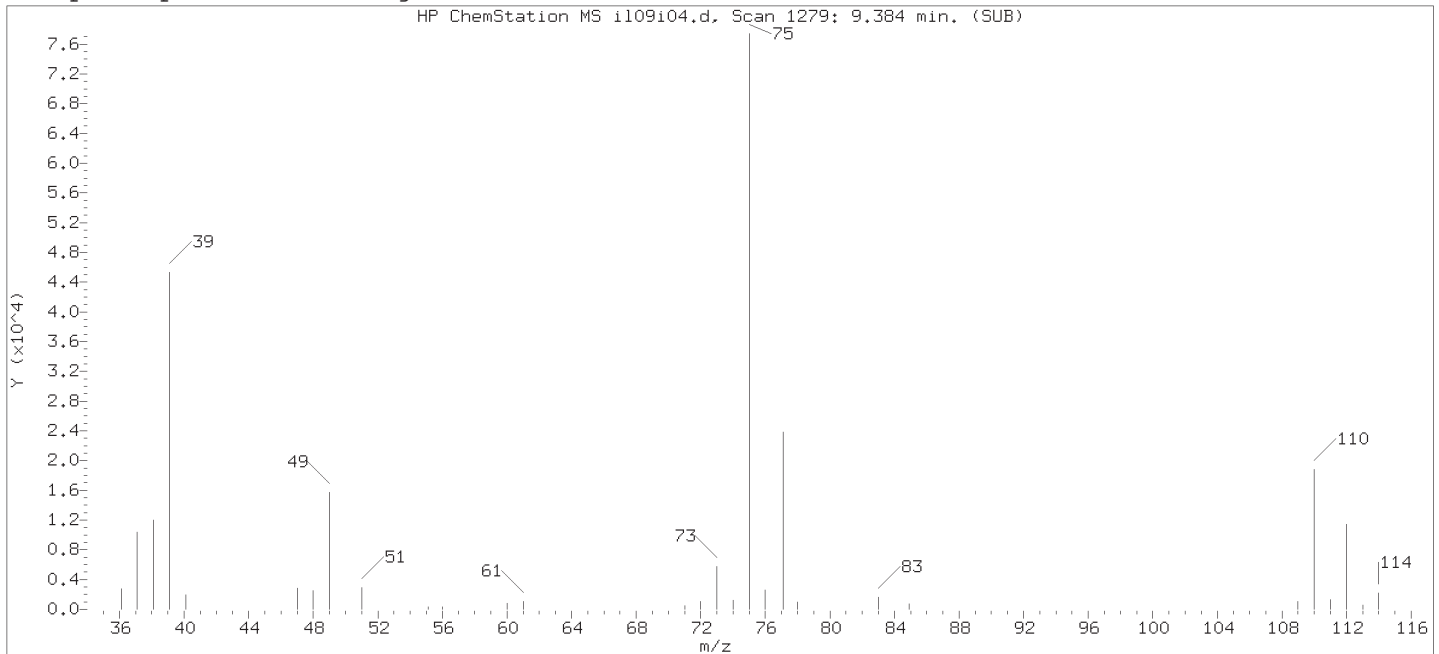
Compound Number    : 80  
Compound Name    : cis-1,3-Dichloropropene  
Scan Number    : 1279  
Retention Time (minutes): 9.384  
Quant Ion    : 75.00  
Area (flag)    : 186328M  
On-Column Amount (ng)                                    : 1.9743  
Integration start scan                                    : 1270                      Integration stop scan: 1315  
Y at integration start                                    : 0                              Y at integration end: 0

Reason for manual integration: improper integration

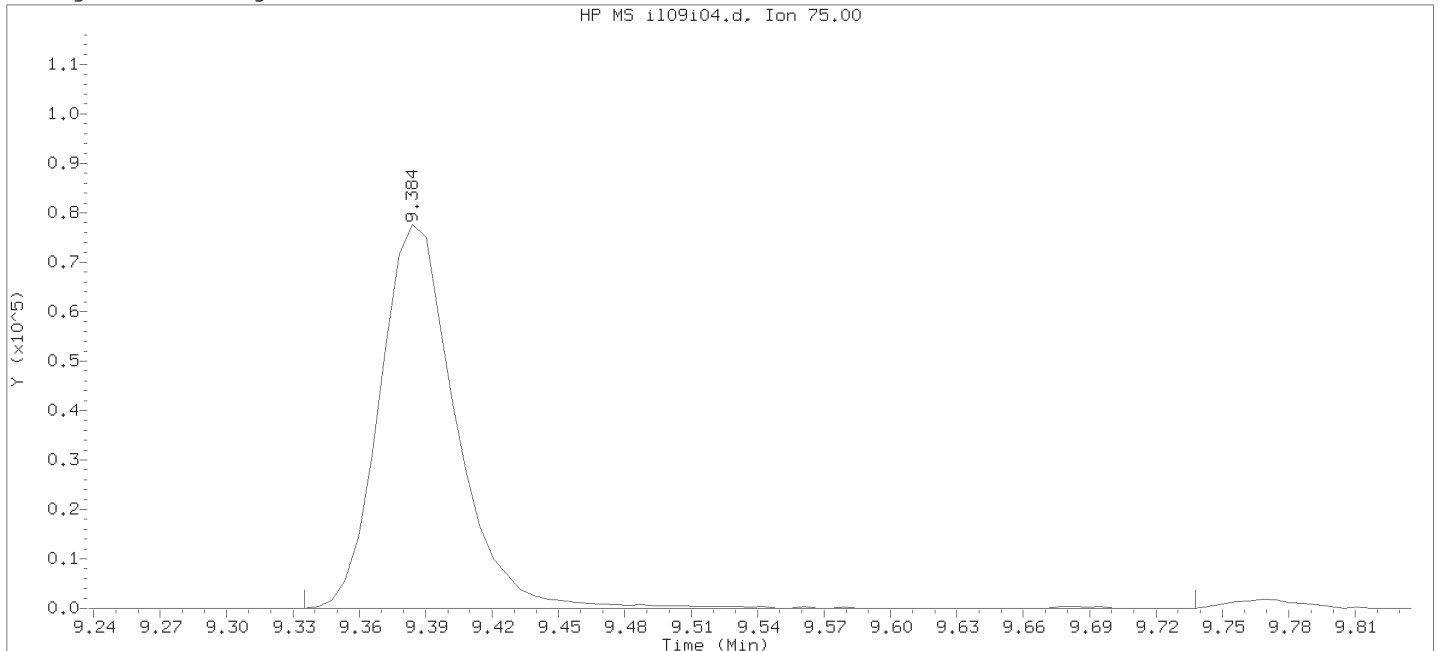
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



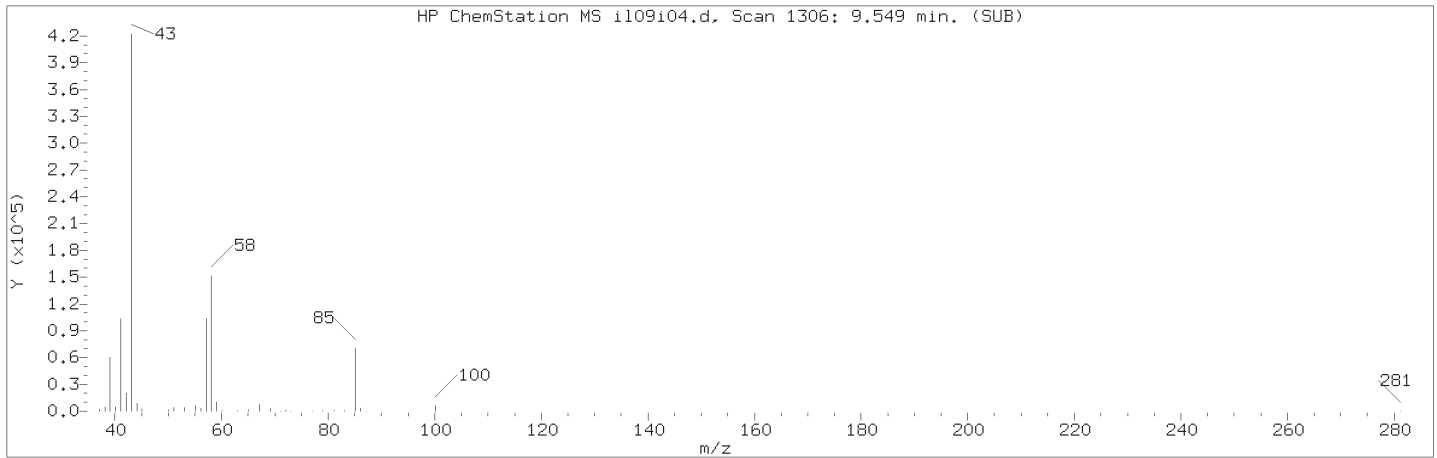
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 Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

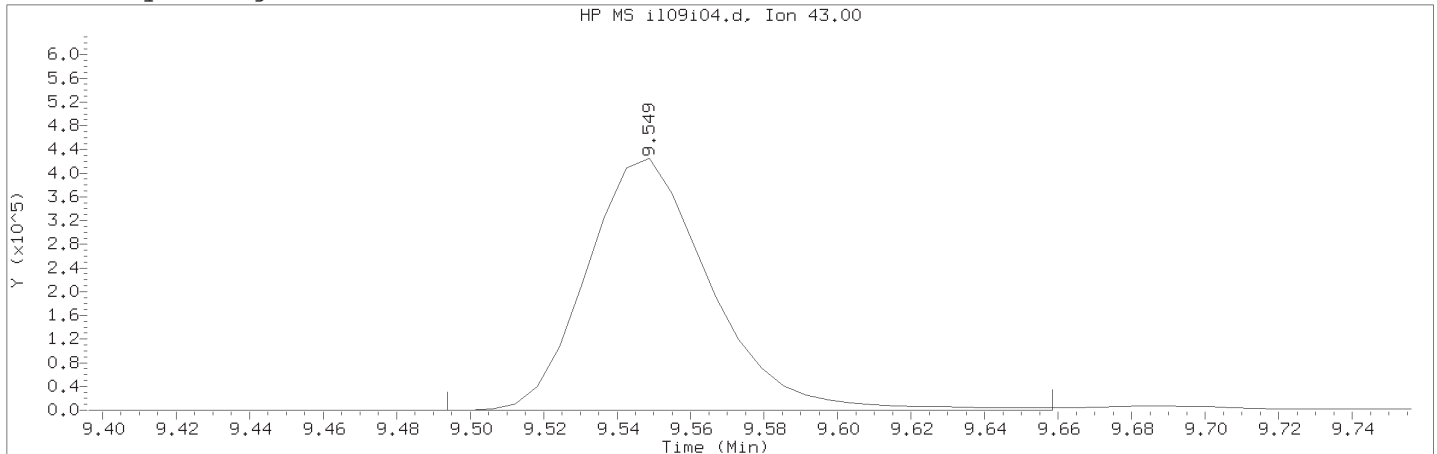
Sample Name: VSTD002      Lab Sample ID: VSTD002

Compound Number : 80  
 Compound Name : cis-1,3-Dichloropropene  
 Scan Number : 1279  
 Retention Time (minutes): 9.384  
 Quant Ion : 75.00  
 Area : 186814  
 On-column Amount (ng) : 1.9217  
 Integration start scan : 1270      Integration stop scan: 1336  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

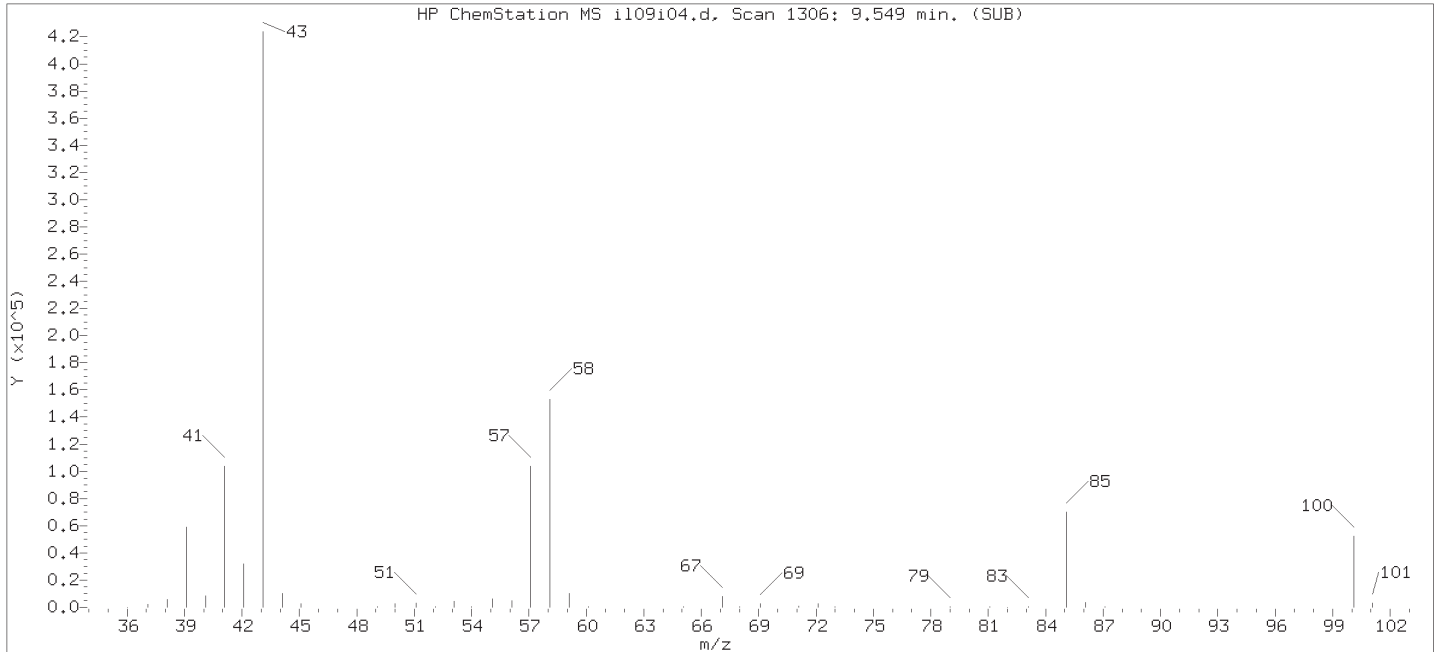
Compound Number                      : 81  
Compound Name                         : 4-Methyl-2-Pentanone  
Scan Number                            : 1306  
Retention Time (minutes): 9.549  
Quant Ion                                : 43.00  
Area (flag)                             : 988066M  
On-Column Amount (ng)                : 20.9881  
Integration start scan                 : 1296                      Integration stop scan: 1323  
Y at integration start                 : 0                         Y at integration end: 60

Reason for manual integration: improper integration

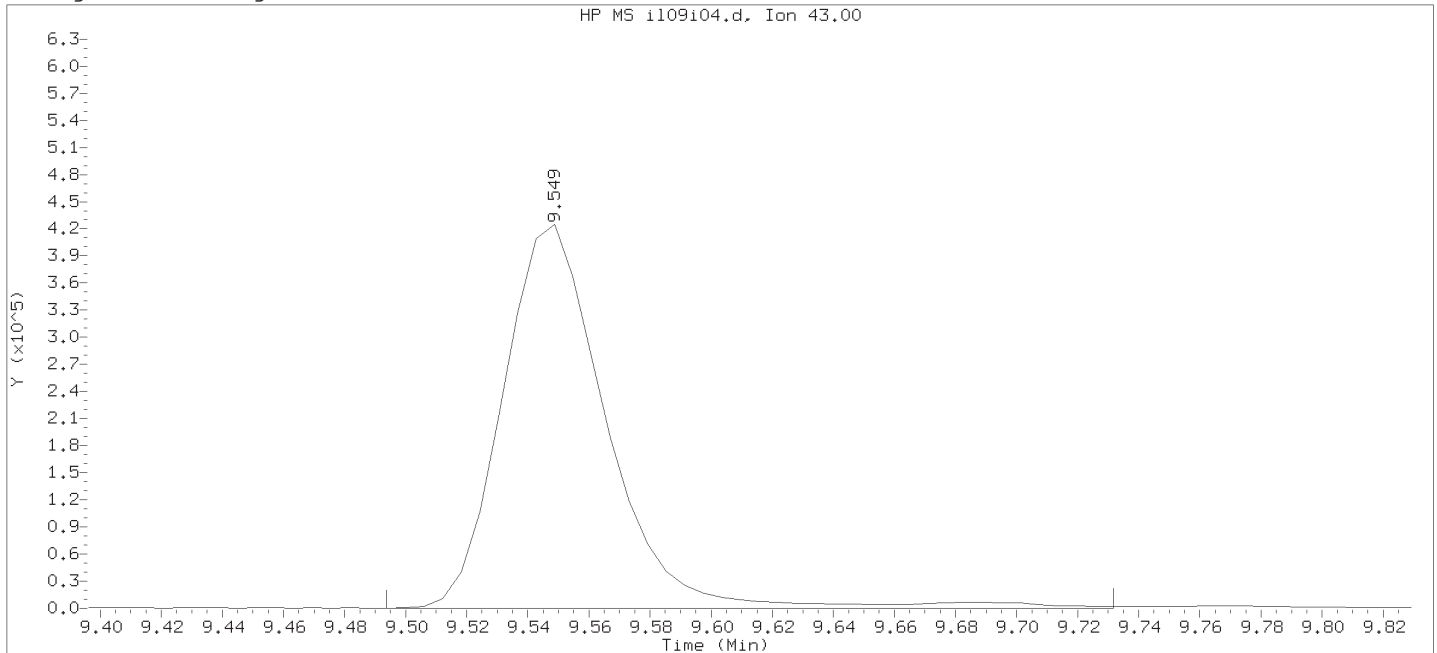
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



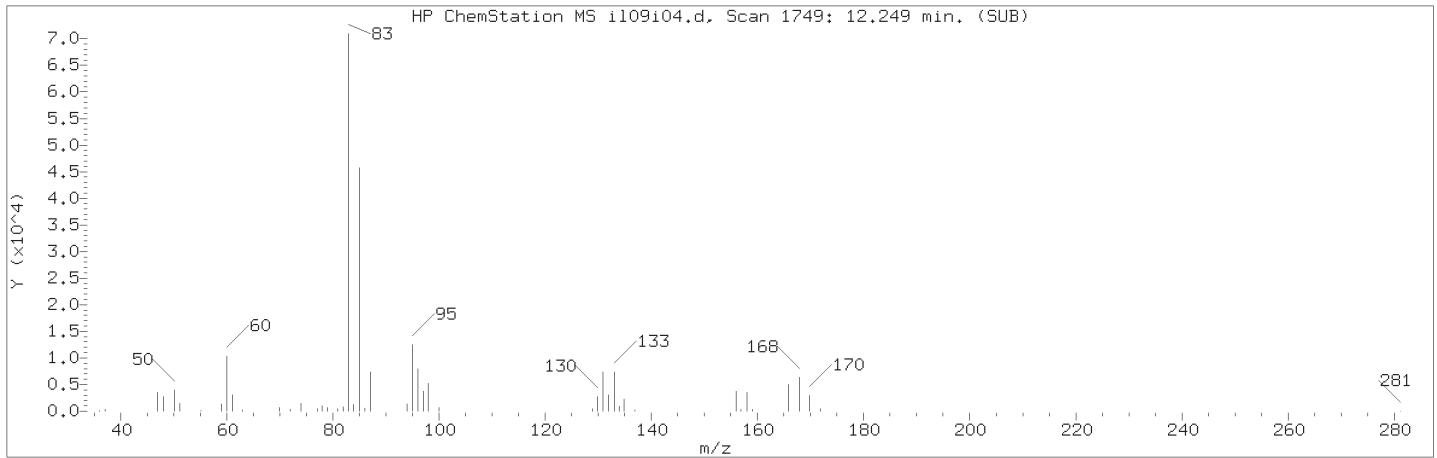
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 Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

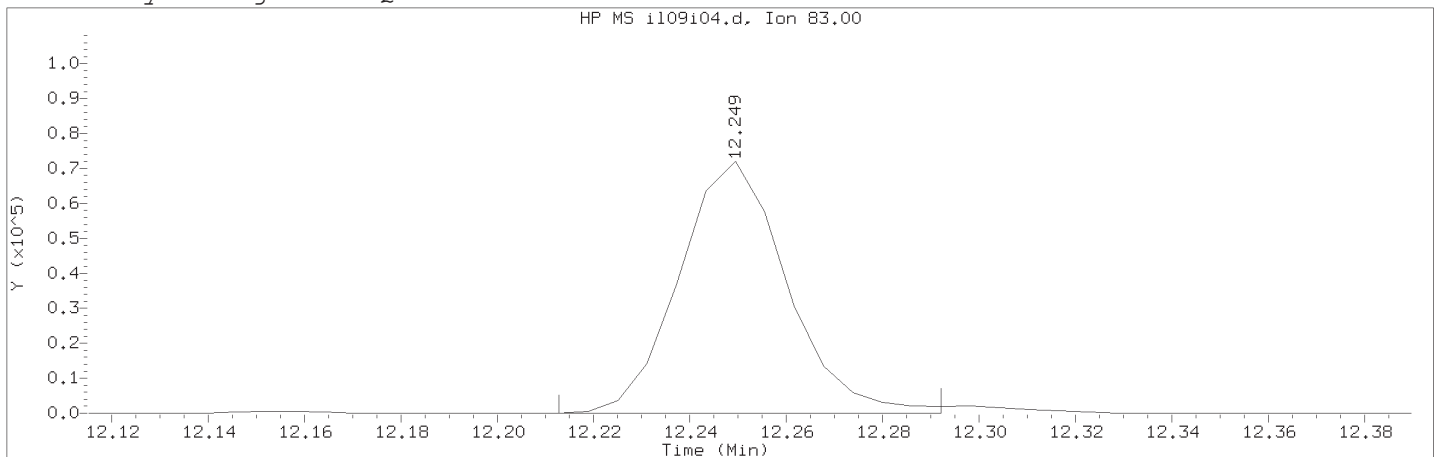
Sample Name: VSTD002      Lab Sample ID: VSTD002

Compound Number : 81  
 Compound Name : 4-Methyl-2-Pentanone  
 Scan Number : 1306  
 Retention Time (minutes): 9.549  
 Quant Ion : 43.00  
 Area : 1007477  
 On-column Amount (ng) : 20.9681  
 Integration start scan : 1296      Integration stop scan: 1335  
 Y at integration start : 0      Y at integration end: 88

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

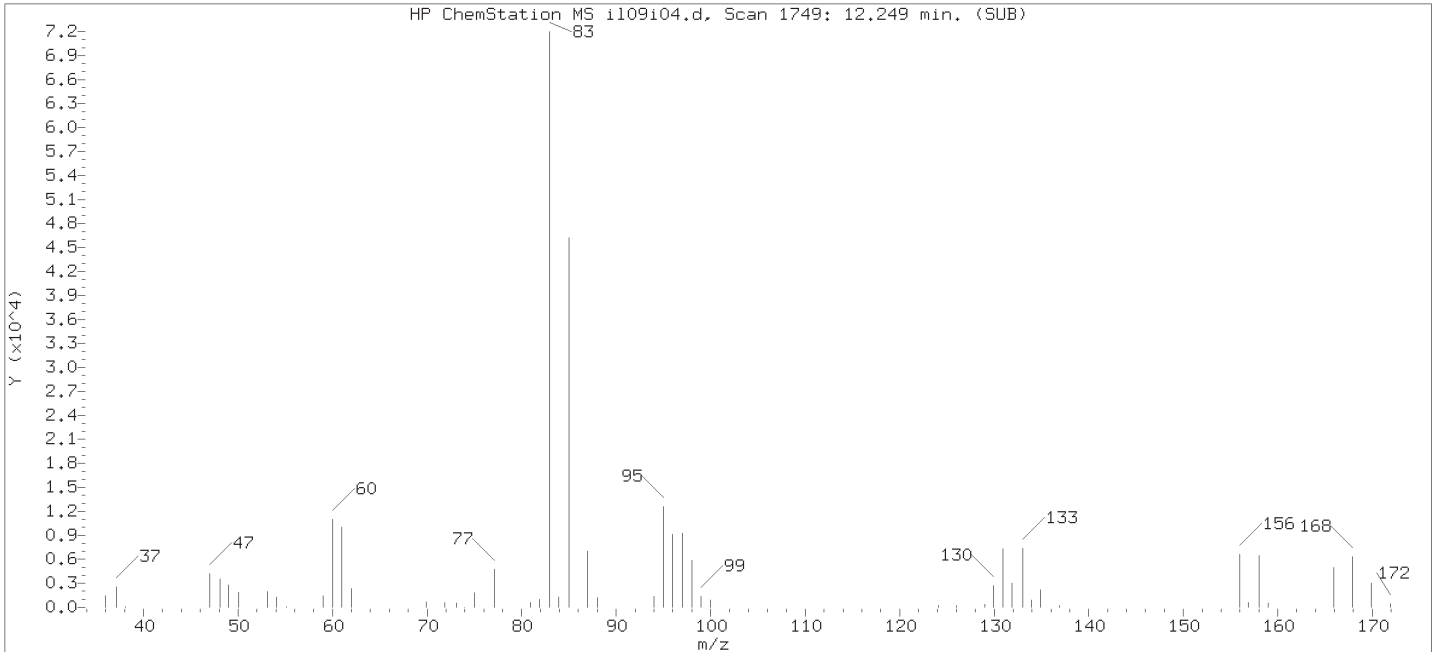
Compound Number                      : 113  
Compound Name                         : 1,1,2,2-Tetrachloroethane  
Scan Number                            : 1749  
Retention Time (minutes): 12.249  
Quant Ion                                : 83.00  
Area (flag)                             : 111854M  
On-Column Amount (ng)                : 2.0556  
Integration start scan                 : 1742                      Integration stop scan: 1755  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

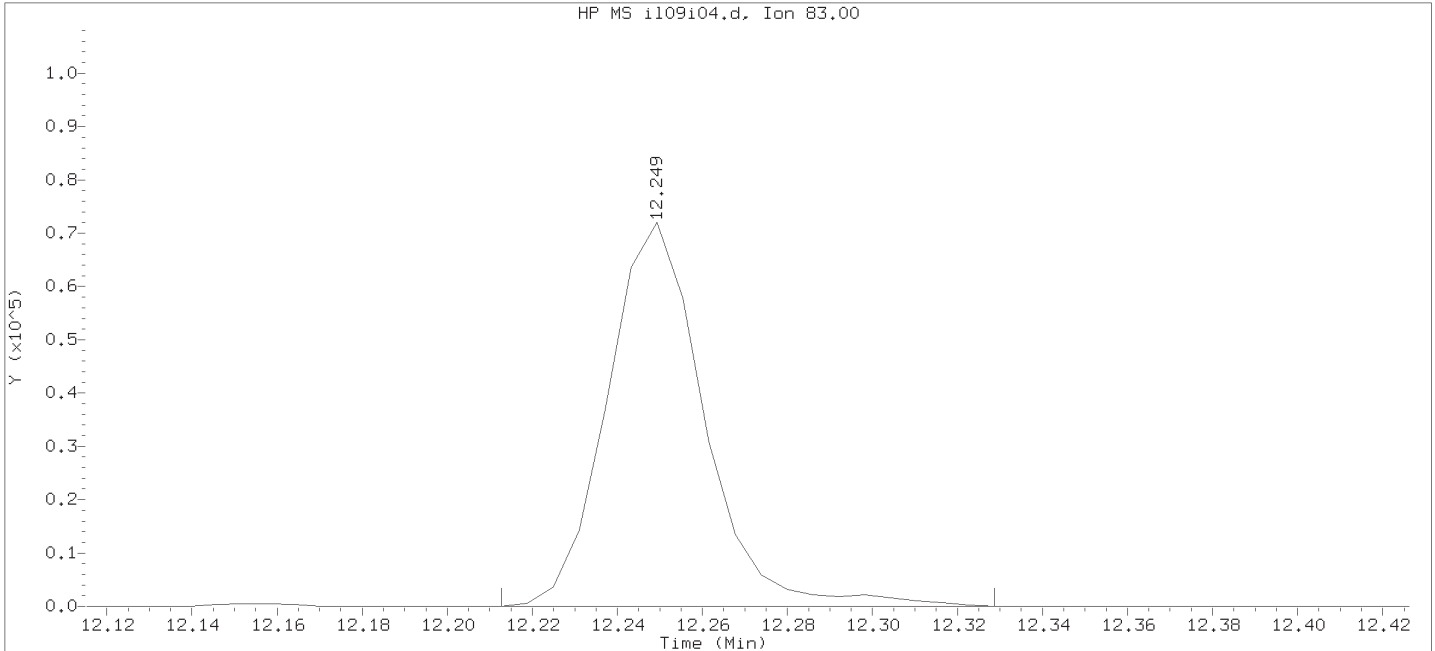
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/il09i04.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

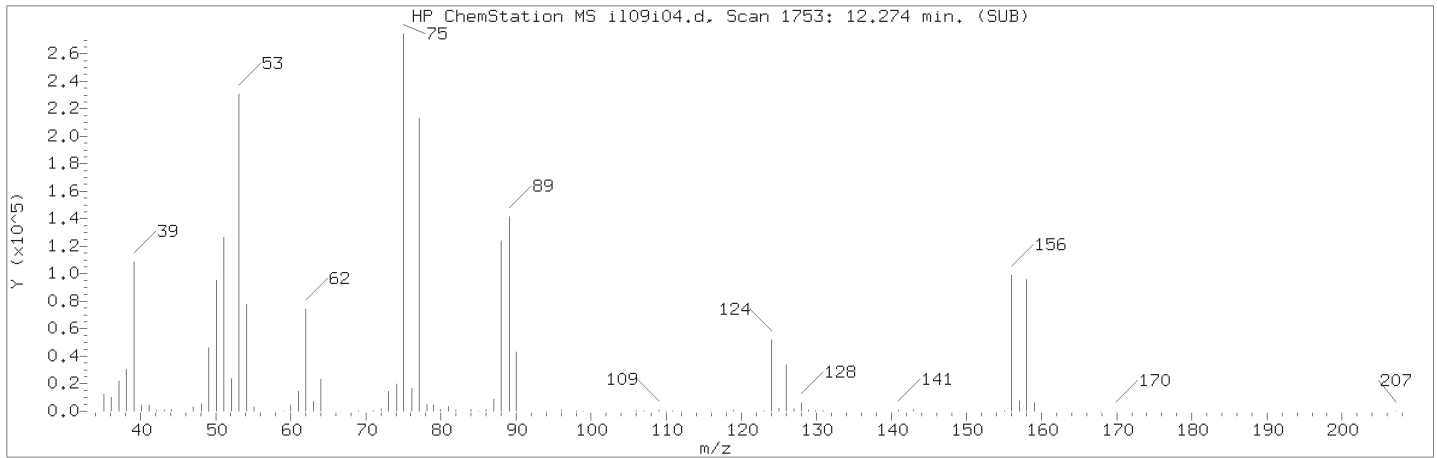
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD002      Lab Sample ID: VSTD002

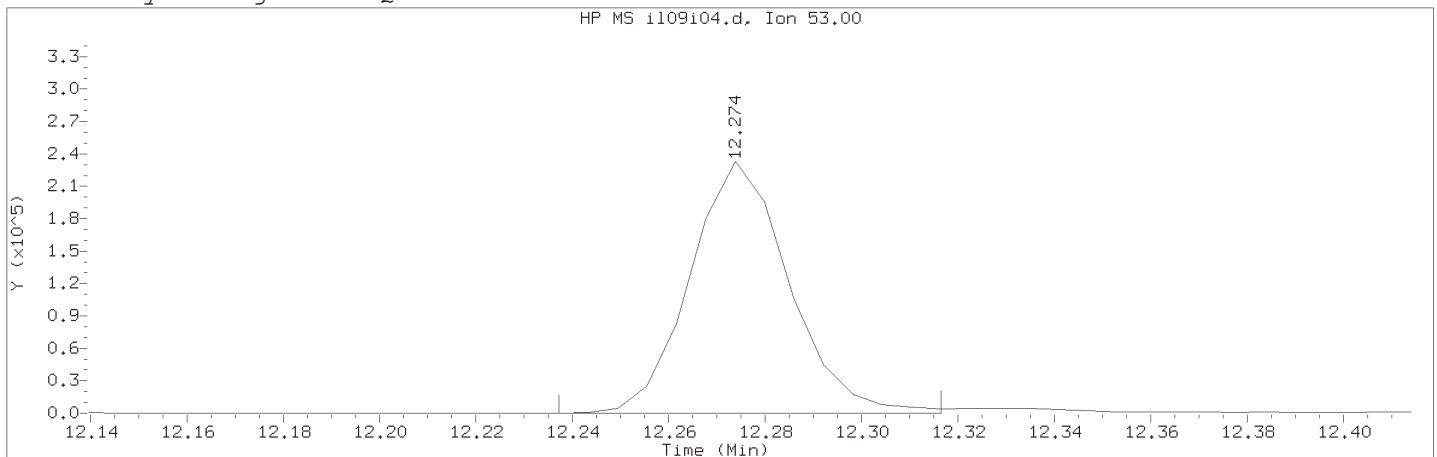
Compound Number : 113  
Compound Name : 1,1,2,2-Tetrachloroethane  
Scan Number : 1749  
Retention Time (minutes): 12.249  
Quant Ion : 83.00  
Area : 113875  
On-column Amount (ng) : 1.9990  
Integration start scan : 1742      Integration stop scan: 1761  
Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

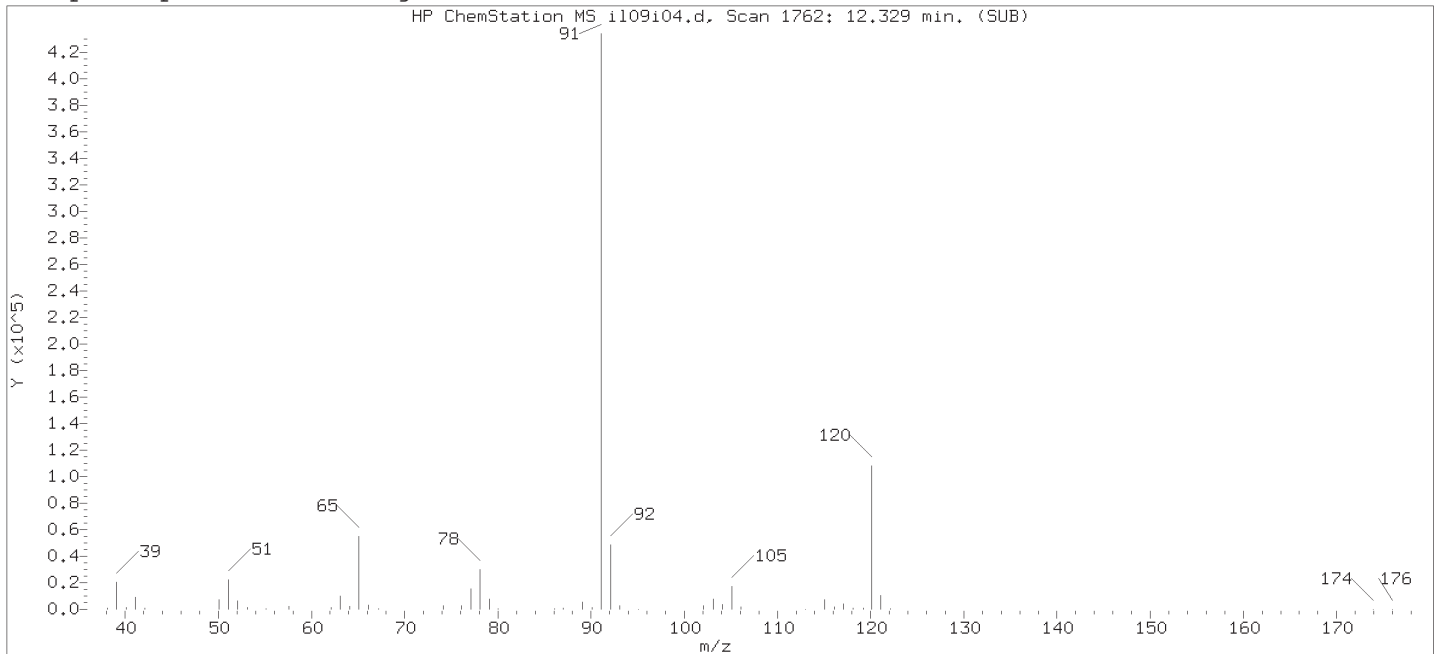
Compound Number                      : 115  
Compound Name                         : trans-1,4-Dichloro-2-butene  
Scan Number                            : 1753  
Retention Time (minutes): 12.274  
Quant Ion                                : 53.00  
Area (flag)                             : 331114A  
On-Column Amount (ng)                : 21.3887  
Integration start scan                : 1746                      Integration stop scan: 1759  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

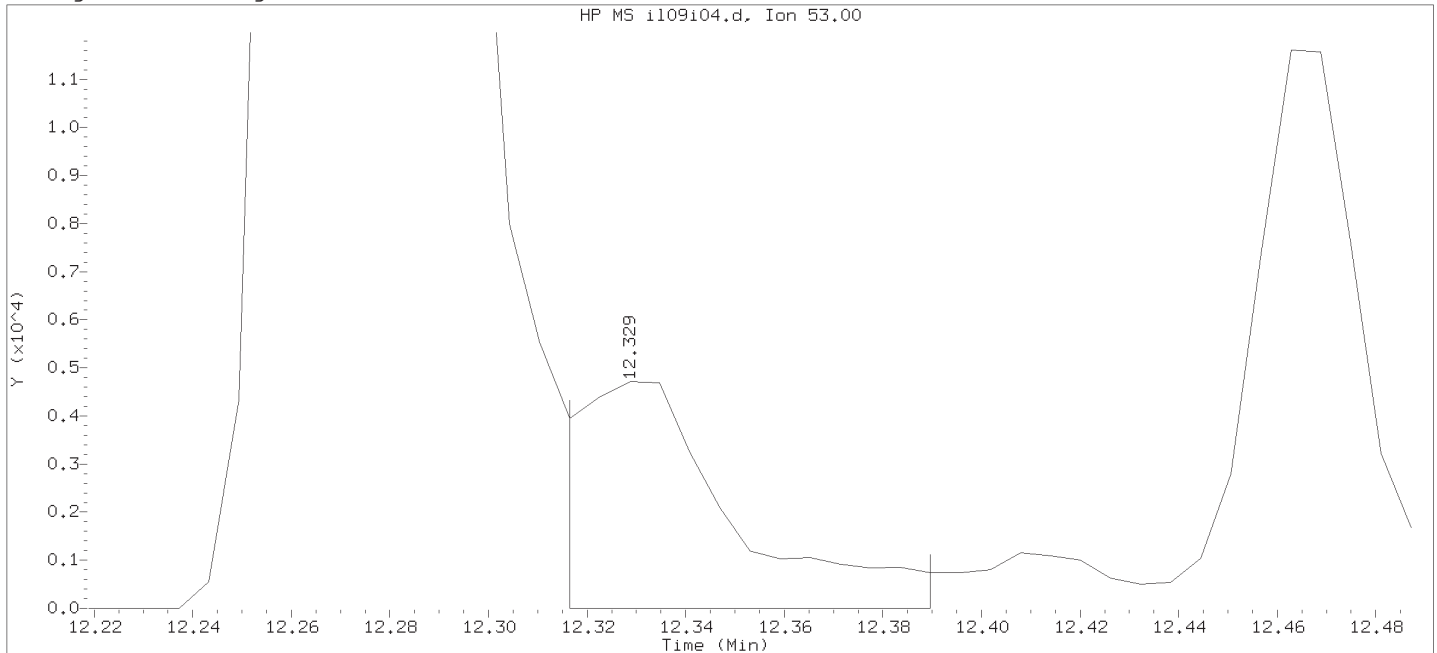
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



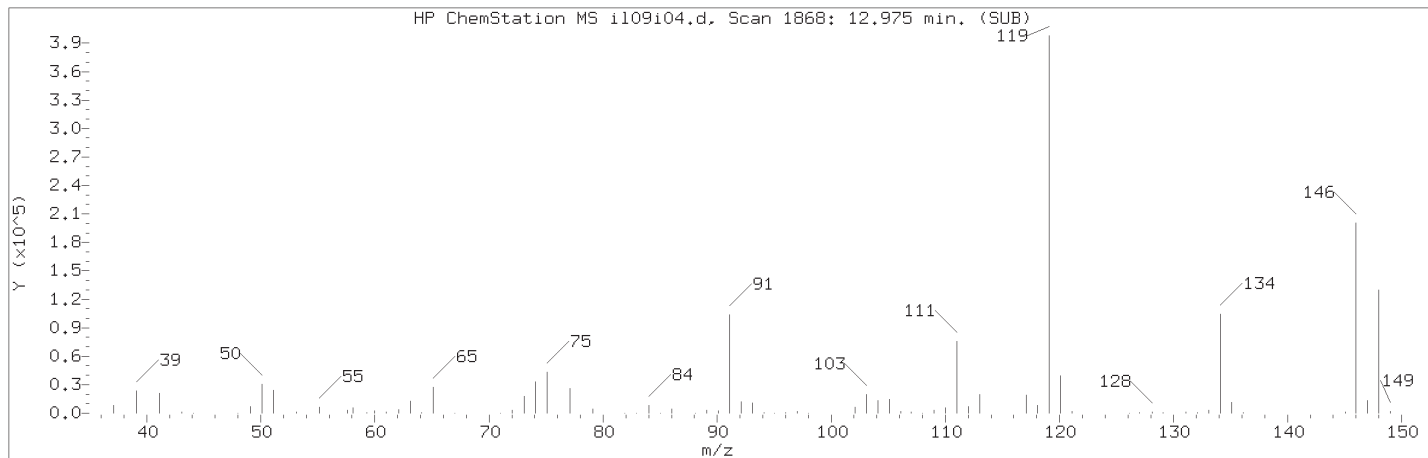
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Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

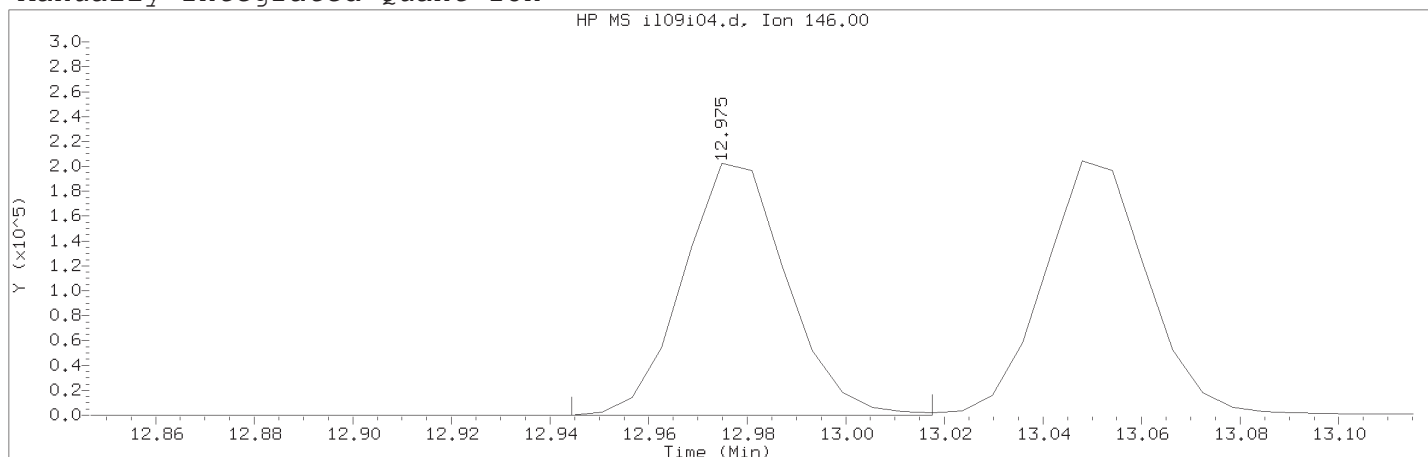
Sample Name: VSTD002      Lab Sample ID: VSTD002

Compound Number : 115  
Compound Name : trans-1,4-Dichloro-2-butene  
Scan Number : 1762  
Retention Time (minutes): 12.329  
Quant Ion : 53.00  
Area : 10005  
On-column Amount (ng) : 1.2490  
Integration start scan : 1759      Integration stop scan: 1771  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

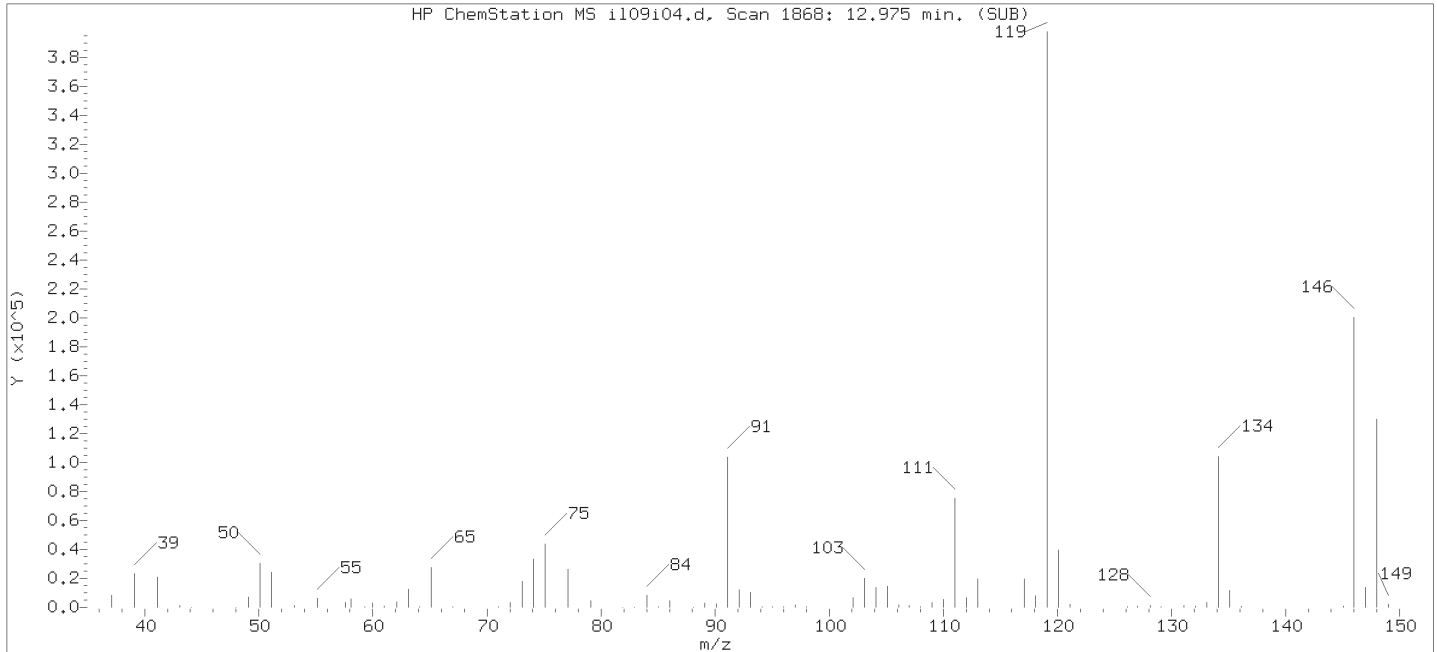
Compound Number                      : 131  
Compound Name                         : 1,3-Dichlorobenzene  
Scan Number                            : 1868  
Retention Time (minutes): 12.975  
Quant Ion                                : 146.00  
Area (flag)                             : 295077M  
On-Column Amount (ng)                : 1.9544  
Integration start scan                : 1862                      Integration stop scan: 1874  
Y at integration start                 : 0                           Y at integration end: 0

Reason for manual integration: improper integration

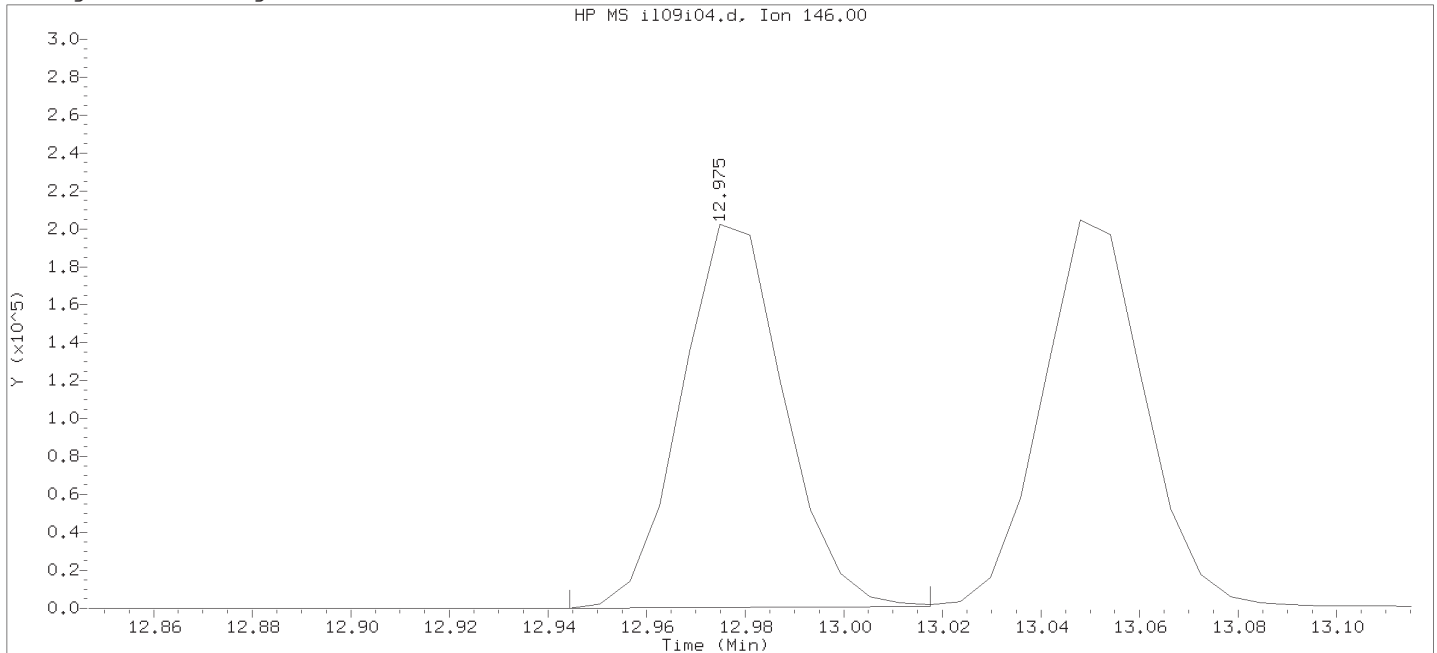
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



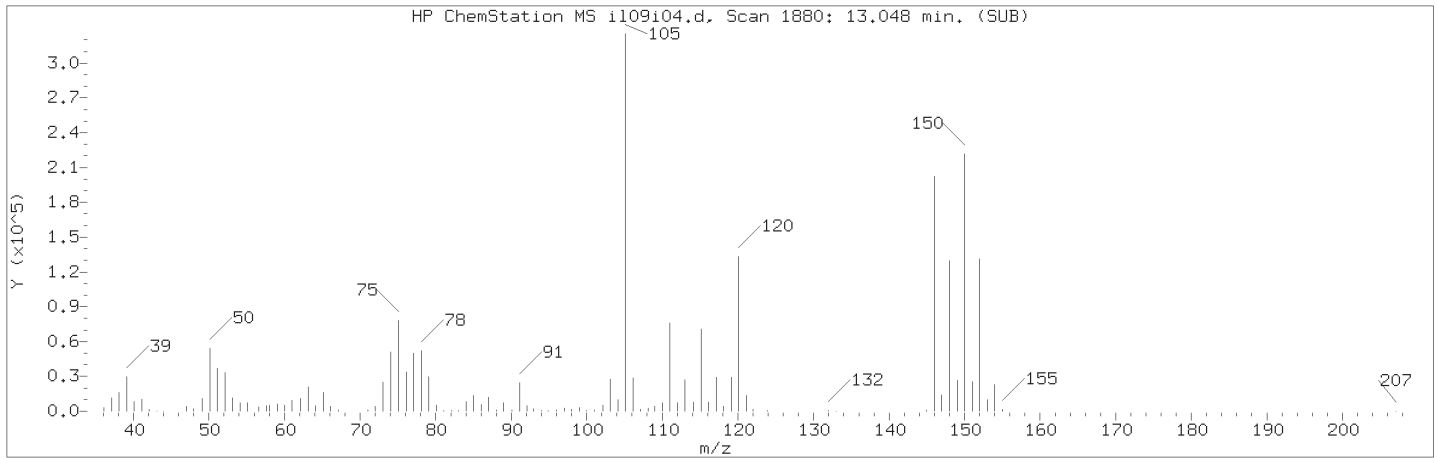
Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

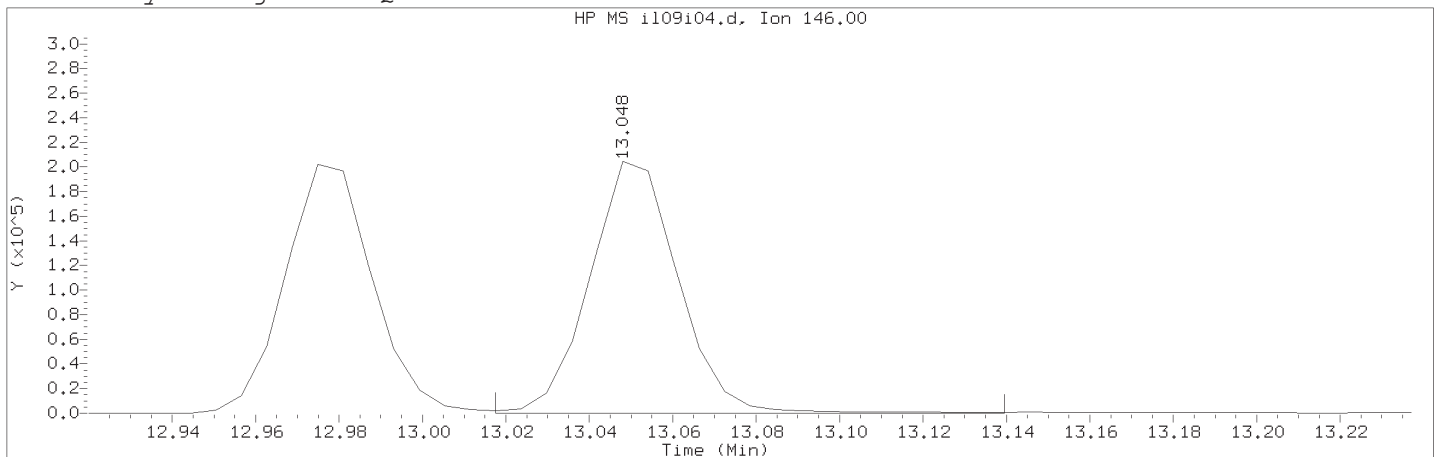
Sample Name: VSTD002      Lab Sample ID: VSTD002

Compound Number : 131  
 Compound Name : 1,3-Dichlorobenzene  
 Scan Number : 1868  
 Retention Time (minutes): 12.975  
 Quant Ion : 146.00  
 Area : 292600  
 On-column Amount (ng) : 1.8449  
 Integration start scan : 1862      Integration stop scan: 1874  
 Y at integration start : 0      Y at integration end: 975

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

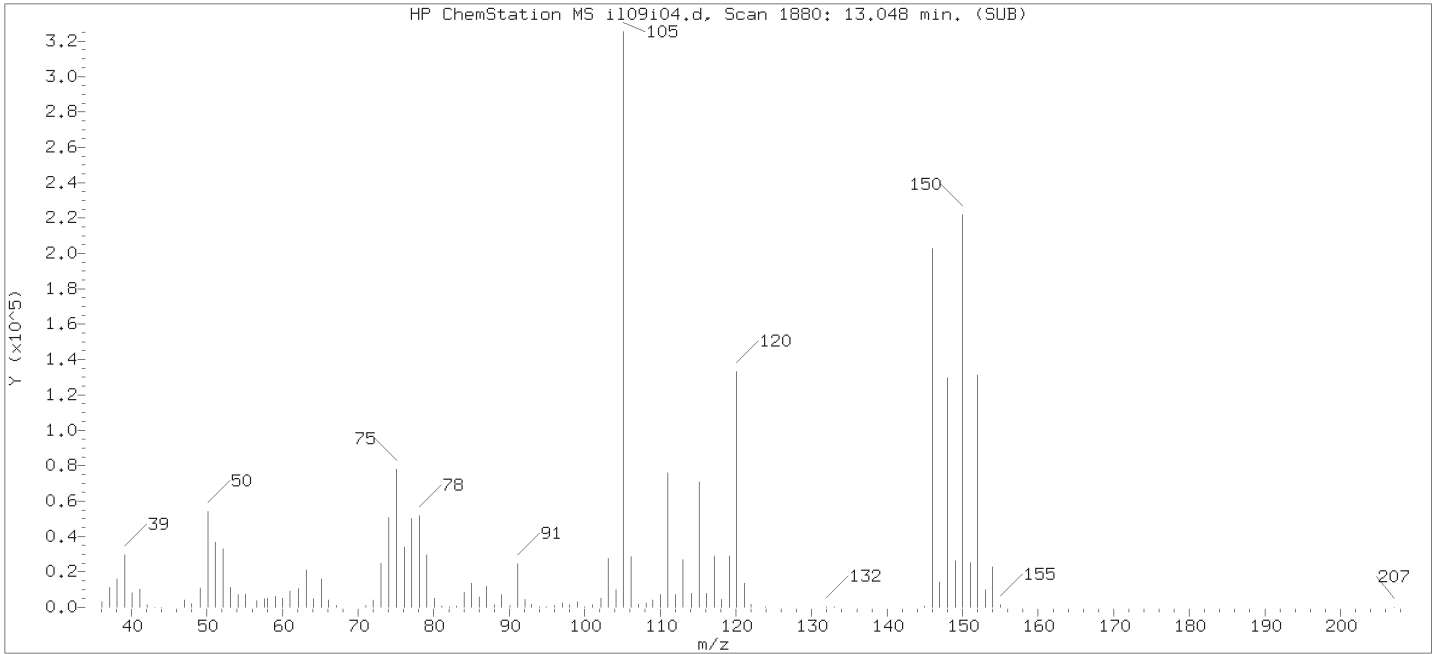
Compound Number                      : 134  
Compound Name                         : 1,4-Dichlorobenzene  
Scan Number                            : 1880  
Retention Time (minutes): 13.048  
Quant Ion                                : 146.00  
Area (flag)                             : 302176M  
On-Column Amount (ng)                : 1.9569  
Integration start scan                 : 1874                      Integration stop scan: 1894  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

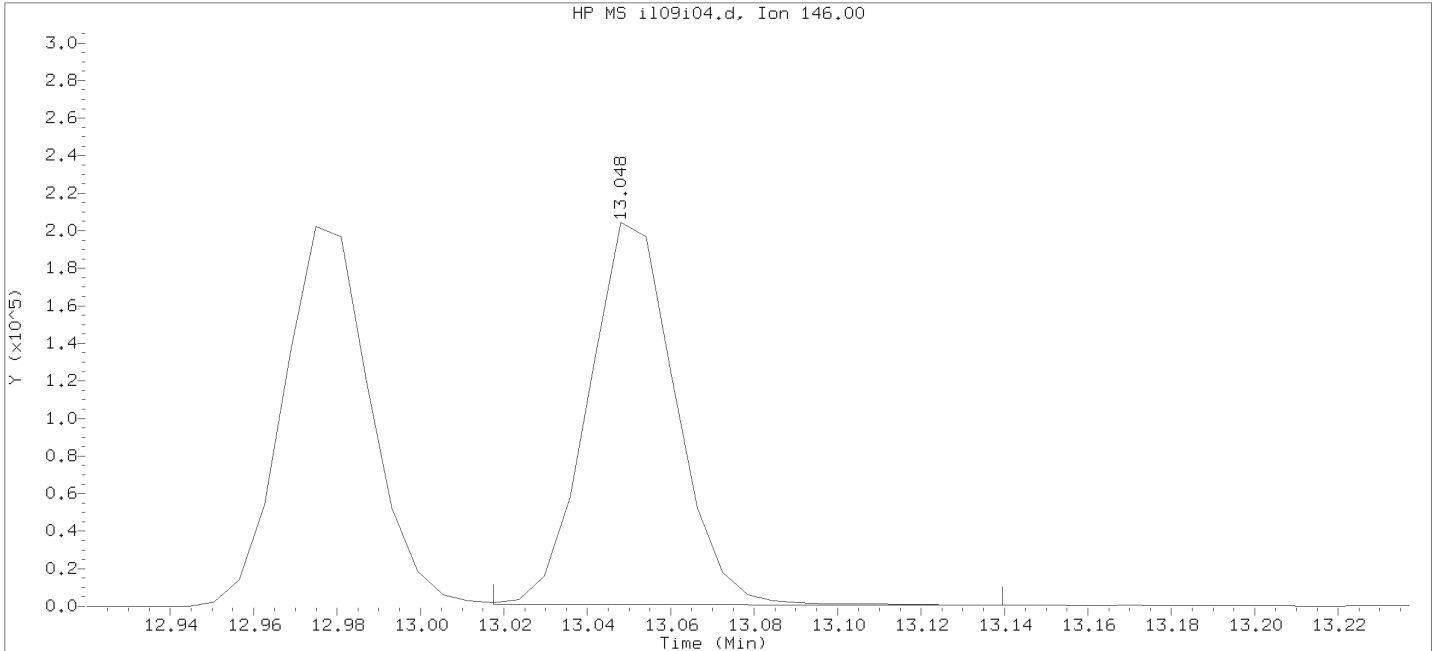
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



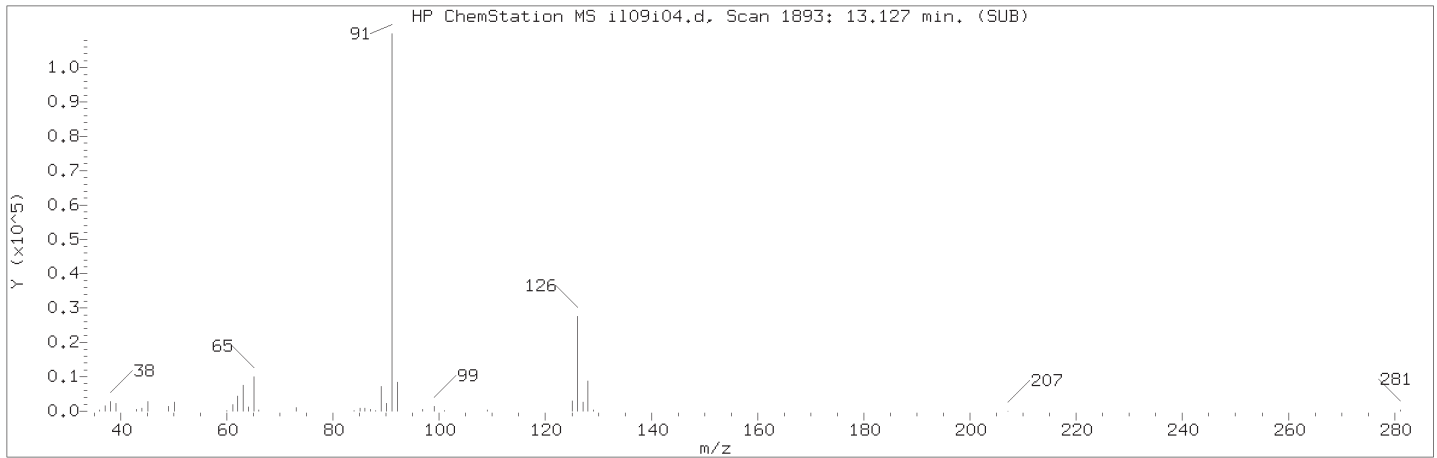
Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

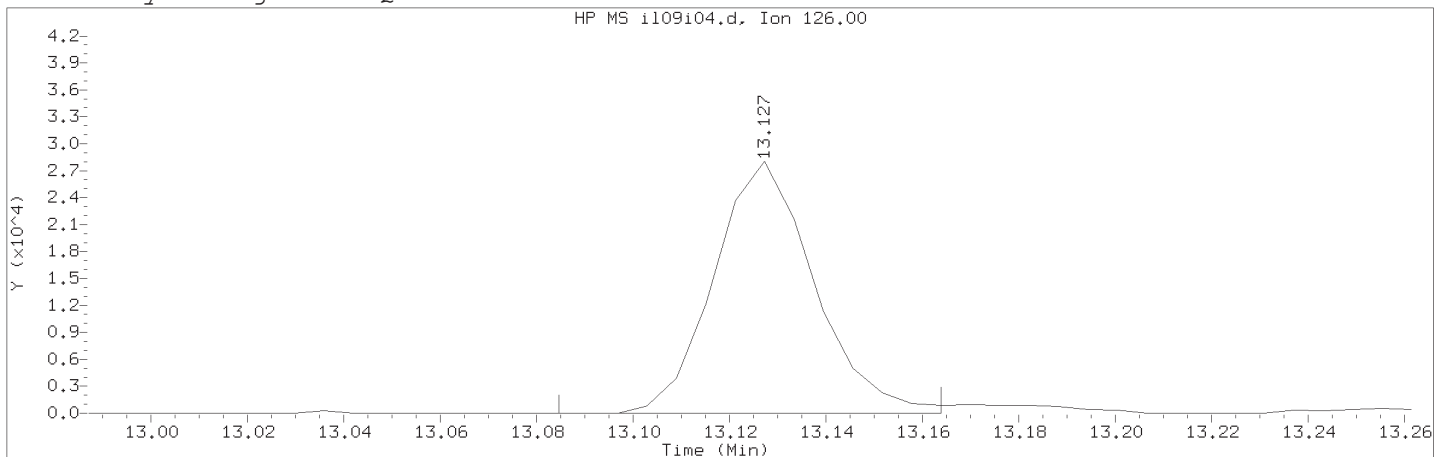
Sample Name: VSTD002      Lab Sample ID: VSTD002

Compound Number : 134  
Compound Name : 1,4-Dichlorobenzene  
Scan Number : 1880  
Retention Time (minutes): 13.048  
Quant Ion : 146.00  
Area : 296270  
On-column Amount (ng) : 1.8820  
Integration start scan : 1874      Integration stop scan: 1894  
Y at integration start : 975      Y at integration end: 521

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD002    Lab Sample ID: VSTD002

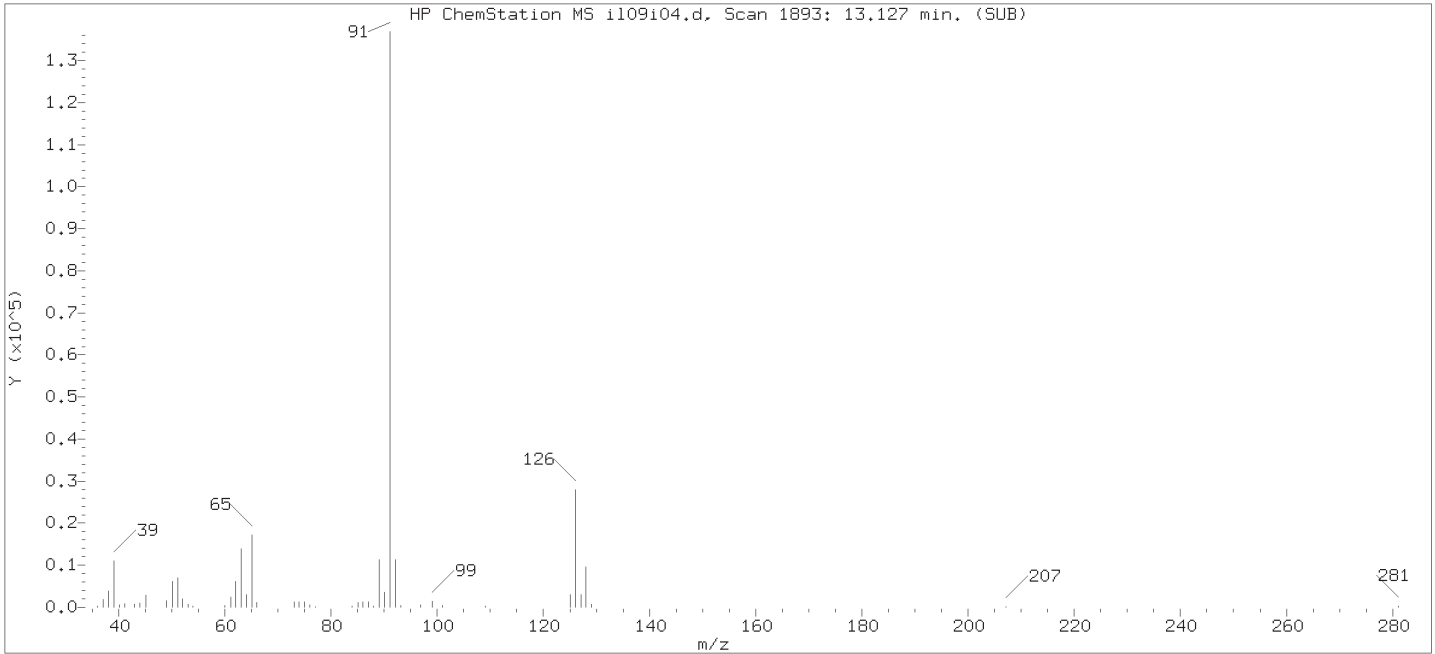
Compound Number                      : 136  
Compound Name                        : Benzyl Chloride  
Scan Number                          : 1893  
Retention Time (minutes): 13.127  
Quant Ion                              : 126.00  
Area (flag)                            : 40500M  
On-Column Amount (ng)               : 1.9852  
Integration start scan                : 1885                      Integration stop scan: 1898  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

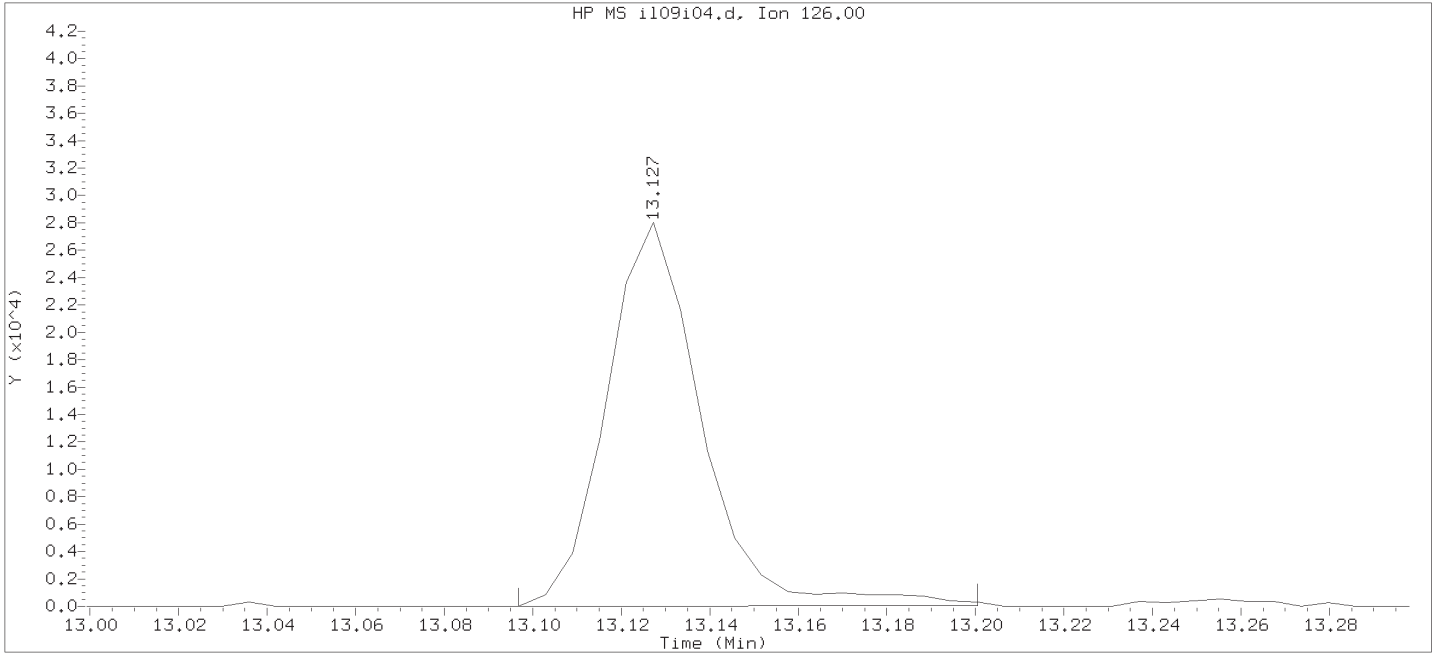
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i04.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 13:49      Analyst ID: jkh09052

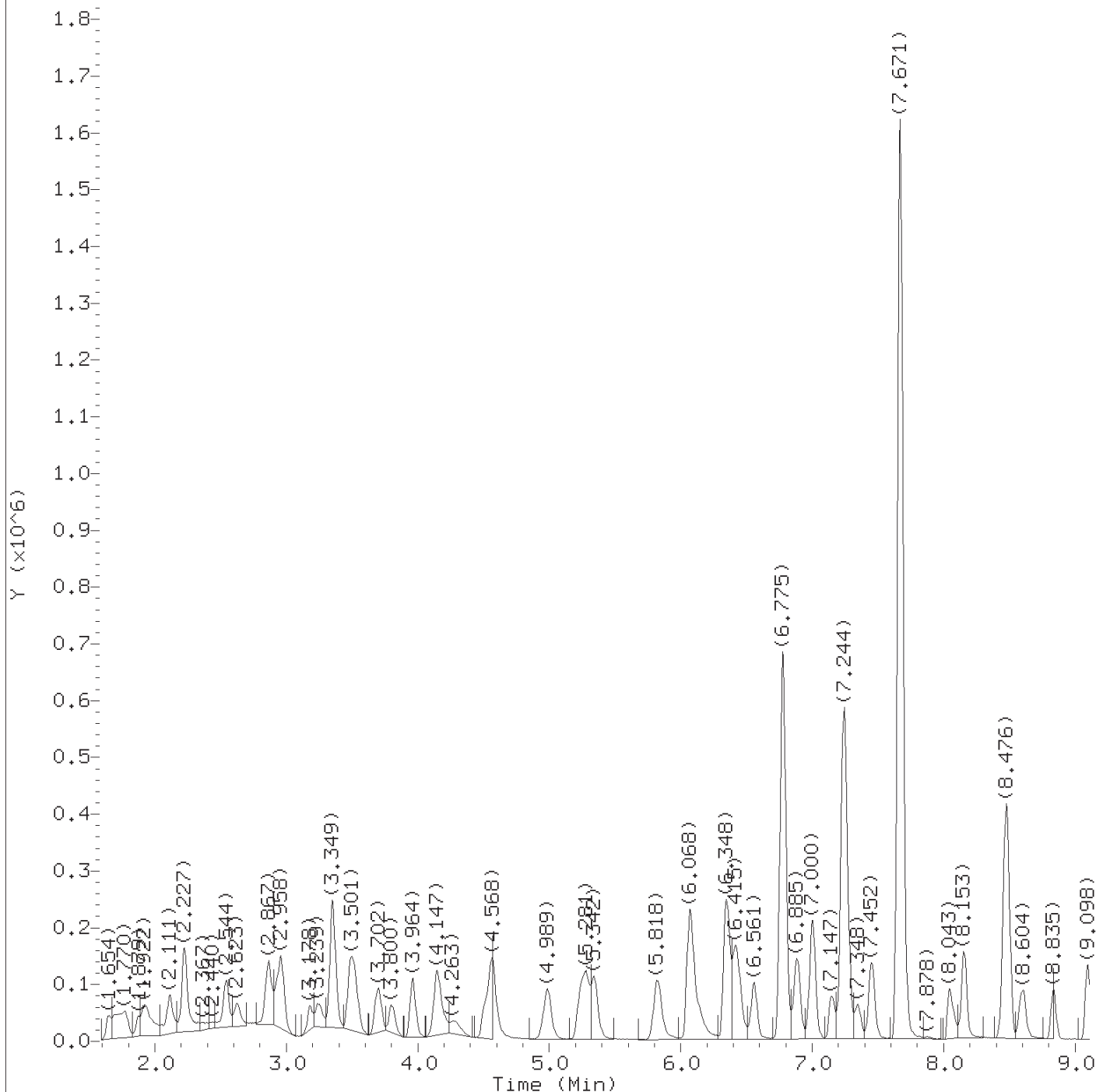
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compound Number : 136  
Compound Name : Benzyl Chloride  
Scan Number : 1893  
Retention Time (minutes): 13.127  
Quant Ion : 126.00  
Area : 41769  
On-column Amount (ng) : 1.7808  
Integration start scan : 1887      Integration stop scan: 1904  
Y at integration start : 0      Y at integration end: 59





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d  
Injection date and time: 09-JUL-2018 14:10

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

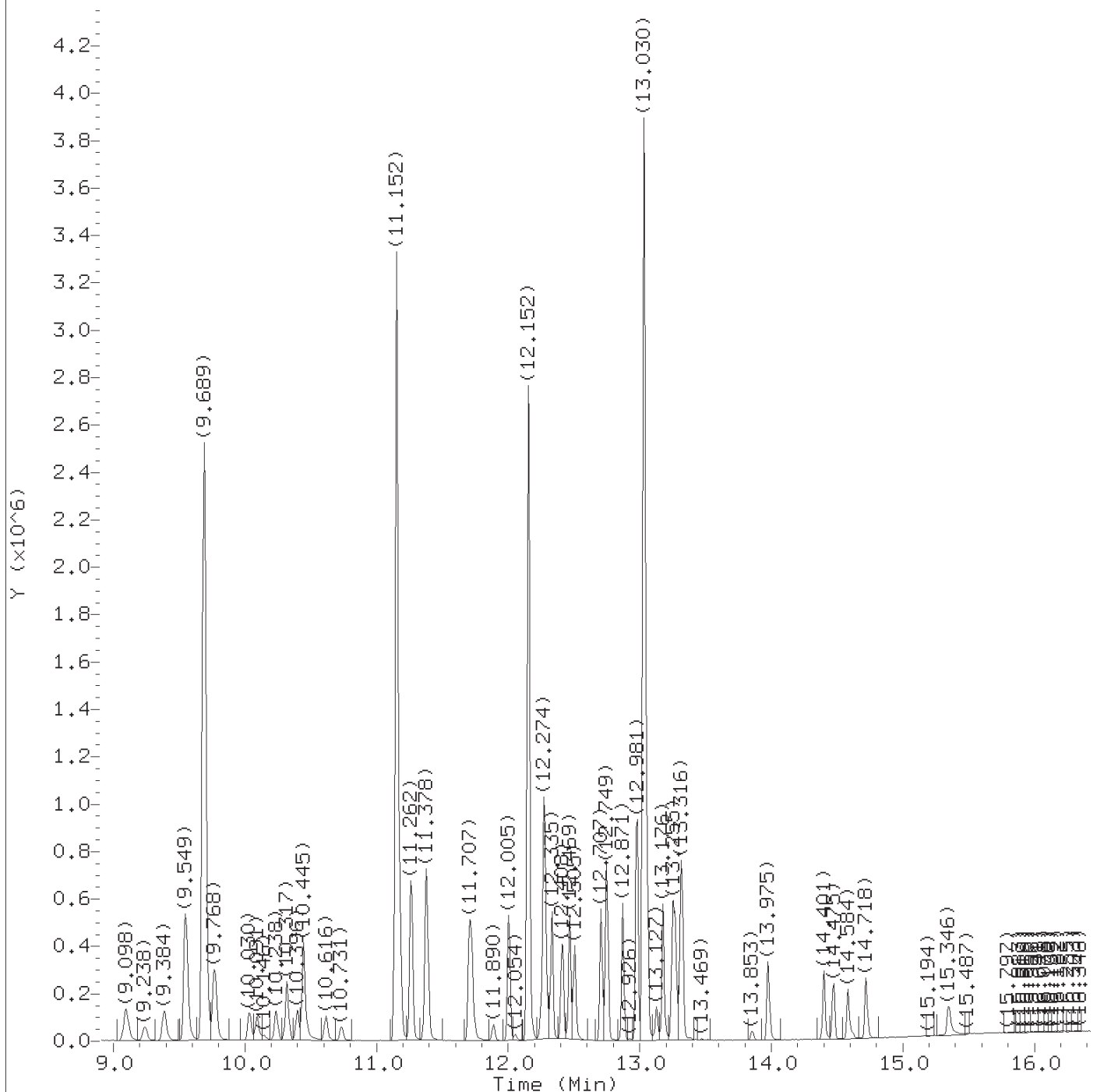
Sublist used: 8260W25

Sample Name: VSTD001

Lab Sample ID: VSTD001

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.

Target 3.5 esignature user ID: dvv10203  
TID15 Page 266 of 3058

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i05.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:10 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001

Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.922	85	129521	1.037
2) Chloromethane	(2)	2.111	50	90201	0.989
6) 1,3-Butadiene	(2)	2.221	39	60019M	1.025
5) Vinyl Chloride	(2)	2.233	62	88371	1.003
7) Bromomethane	(2)	2.544	94	83426	1.006
8) Chloroethane	(2)	2.623	64	51898	1.012
9) Dichlorofluoromethane	(2)	2.867	67	134348M	0.997
10) Trichlorofluoromethane	(2)	2.928	101	153403M	1.019
11) Ethyl ether	(2)	3.178	59	49276	0.989
12) Freon 123a	(2)	3.251	67	77958	1.023
13) Acrolein	(1)	3.349	56	395646	50.813
15) 1,1-Dichloroethene	(2)	3.483	96	52402	1.009
16) Freon 113	(2)	3.513	101	62091	1.030
14) Acetone	(1)	3.525	43	116193M	10.034
17) Methyl Iodide	(2)	3.690	142	105561	0.990
18) Carbon Disulfide	(2)	3.800	76	153917	0.999
21) Methyl Acetate	(1)	3.952	43	27973	1.064
22) Allyl Chloride	(2)	3.964	41	108158	0.969
23) Methylene Chloride	(2)	4.141	84	58493	0.995
26)*t-Butyl Alcohol-d10	(1)	4.153	65	198165	50.000
28) t-Butyl Alcohol	(1)	4.287	59	103995	20.296
29) Acrylonitrile	(1)	4.501	53	64087	5.078
30) Methyl Tertiary Butyl Ether	(2)	4.550	73	160026	0.995
31) trans-1,2-Dichloroethene	(2)	4.568	96	58152	0.987
32) n-Hexane	(2)	4.989	57	93955	0.968
33) 1,1-Dichloroethane	(2)	5.232	63	117530	1.009
34) di-Isopropyl Ether	(2)	5.281	45	210186	0.999
35) 2-Chloro-1,3-Butadiene	(2)	5.342	53	107990	0.980
37) Ethyl t-butyl ether	(2)	5.818	59	195114	0.992
38) 2-Butanone	(1)	6.062	43	193552	10.078
39) cis-1,2-Dichloroethene	(2)	6.074	96	67219	0.999
41) 2,2-Dichloropropane	(2)	6.086	77	105629	0.999
40) 1,2-Dichloroethene (Total)	(2)		96	125371	1.986
42) Propionitrile	(1)	6.153	54	96981	20.462
45) Methacrylonitrile	(1)	6.348	67	163053	10.094
47) Bromochloromethane	(2)	6.415	128	29344	0.997
48) Tetrahydrofuran	(1)	6.440	71	49266	9.932
49) Chloroform	(2)	6.561	83	116567	0.994

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i05.d  
 Injection date and time: 09-JUL-2018 14:10

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: VSTD001

Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.775	113	534388	10.001
50) \$Dibromofluoromethane	(2)	6.775	111	549635	10.027
51) 1,1,1-Trichloroethane	(2)	6.781	97	113017	1.003
52) Cyclohexane	(2)	6.885	56	115542	0.972
52) Cyclohexane	(2)	6.885	84	91346	0.978
52) Cyclohexane	(2)	6.891	69	34778	0.987
54) Carbon Tetrachloride	(2)	7.000	117	96933	0.982
55) 1,1-Dichloropropene	(2)	7.000	75	88907	1.000
56) Isobutyl Alcohol	(1)	7.153	41	76589	49.370
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	102649M	10.117
57) \$1,2-Dichloroethane-d4	(2)	7.238	65	604563	10.063
57) \$1,2-Dichloroethane-d4	(2)	7.238	104	66746	10.264
58) Benzene	(2)	7.263	78	249863	1.005
59) 1,2-Dichloroethane	(2)	7.348	62	82191	0.980
59) 1,2-Dichloroethane	(2)	7.354	98	5983	1.032
60) t-Amyl methyl ether	(2)	7.452	73	170295	0.993
62) n-Heptane	(2)	7.671	43	107984	1.015
63) *Fluorobenzene	(2)	7.671	96	2046981	10.000
65) n-Butanol	(1)	8.043	56	109674	94.793
67) Trichloroethene	(2)	8.159	95	67903	0.996
69) Methylcyclohexane	(2)	8.464	83	119076	0.966
70) 1,2-Dichloropropane	(2)	8.488	63	61611	0.989
71) Methyl Methacrylate	(1)	8.585	69	30098	1.027
72) 1,4-Dioxane	(1)	8.604	88	13369M	51.131
72) 1,4-Dioxane	(1)	8.592	58	9300M	49.170
73) Dibromomethane	(2)	8.610	93	30961	0.988
74) Bromodichloromethane	(2)	8.835	83	81579	0.970
76) 2-Nitropropane	(1)	9.098	41	130011	9.885
80) cis-1,3-Dichloropropene	(2)	9.384	75	91659M	0.960
81) 4-Methyl-2-Pentanone	(1)	9.549	43	479805	10.208
82) \$Toluene-d8	(3)	9.689	98	2001841	10.289
82) \$Toluene-d8	(3)	9.689	100	1288190	10.259
83) Toluene	(3)	9.768	92	155364	1.014
84) trans-1,3-Dichloropropene	(3)	10.030	75	74522	0.973
86) Ethyl Methacrylate	(3)	10.091	69	63968	0.965
85) 1,3-Dichloropropene (total)	(3)		75	166181	1.934
88) 1,1,2-Trichloroethane	(3)	10.238	97	43083	1.020
89) Tetrachloroethene	(3)	10.317	166	78276	0.991

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i05.d  
 Injection date and time: 09-JUL-2018 14:10

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: VSTD001

Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.396	76	73687	1.004
91) 2-Hexanone	(1)	10.445	43	344957	10.239
93) Dibromochloromethane	(3)	10.616	129	52550	0.960
95) 1,2-Dibromoethane	(3)	10.731	107	40584	1.002
97) *Chlorobenzene-d5	(3)	11.152	117	1557507	10.000
98) Chlorobenzene	(3)	11.182	112	167174	0.999
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	61510	0.967
100) Ethylbenzene	(3)	11.262	91	304156	1.001
101) m+p-Xylene	(3)	11.378	106	237014	2.002
104) o-Xylene	(3)	11.707	106	116320	0.983
106) Styrene	(3)	11.725	104	173283	0.974
105) Xylene (Total)	(3)		106	353334	2.985
107) Bromoform	(3)	11.890	173	30293	0.910
108) Isopropylbenzene	(3)	12.005	105	308469	1.001
111) \$4-Bromofluorobenzene	(3)	12.152	95	784154	10.240
111) \$4-Bromofluorobenzene	(3)	12.158	174	706959	10.177
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	53227M	0.978
114) Bromobenzene	(4)	12.274	156	75554	0.946
115) trans-1,4-Dichloro-2-butene	(1)	12.274	53	156945M	10.154
116) 1,2,3-Trichloropropane	(4)	12.298	110	15809	0.999
117) n-Propylbenzene	(4)	12.335	91	368192	1.010
119) 2-Chlorotoluene	(4)	12.414	126	71246	0.978
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	259030	0.991
122) 4-Chlorotoluene	(4)	12.505	126	73305M	0.995
125) tert-Butylbenzene	(4)	12.707	134	54470	0.968
126) Pentachloroethane	(4)	12.743	167	44327	0.903
127) 1,2,4-Trimethylbenzene	(4)	12.749	105	258225	0.978
128) sec-Butylbenzene	(4)	12.871	105	331102	0.985
131) 1,3-Dichlorobenzene	(4)	12.981	146	142712	0.945
132) p-Isopropyltoluene	(4)	12.981	119	279441	0.942
133) *1,4-Dichlorobenzene-d4	(4)	13.030	152	887508	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	148558	0.962
135) 1,2,3-Trimethylbenzene	(4)	13.054	120	115486	0.960
136) Benzyl Chloride	(4)	13.127	126	19310M	0.947
138) n-Butylbenzene	(4)	13.274	92	128211	0.943
139) 1,2-Dichlorobenzene	(4)	13.310	146	134770	0.963
143) 1,2-Dibromo-3-chloropropane	(1)	13.853	155	7325	0.957
144) 1,3,5-Trichlorobenzene	(4)	13.975	180	102884	0.939

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i05.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001

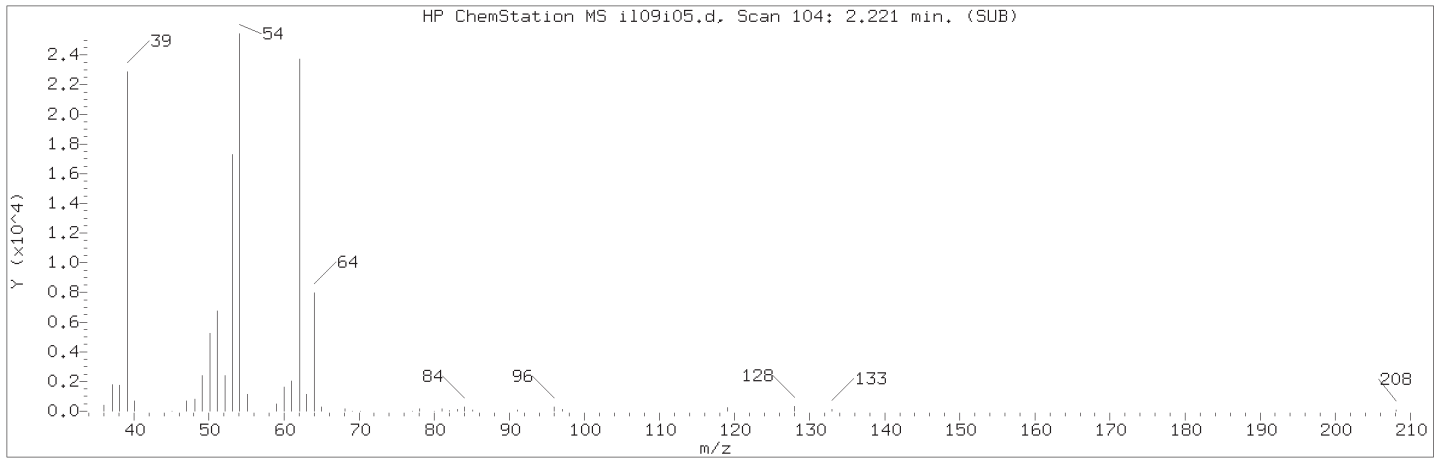
Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,2,4-Trichlorobenzene	(4)	14.401	180	87533	0.927
146) Hexachlorobutadiene	(4)	14.475	225	36914	0.922
147) Naphthalene	(4)	14.584	128	164816	0.965
148) 1,2,3-Trichlorobenzene	(4)	14.718	180	75904	0.942

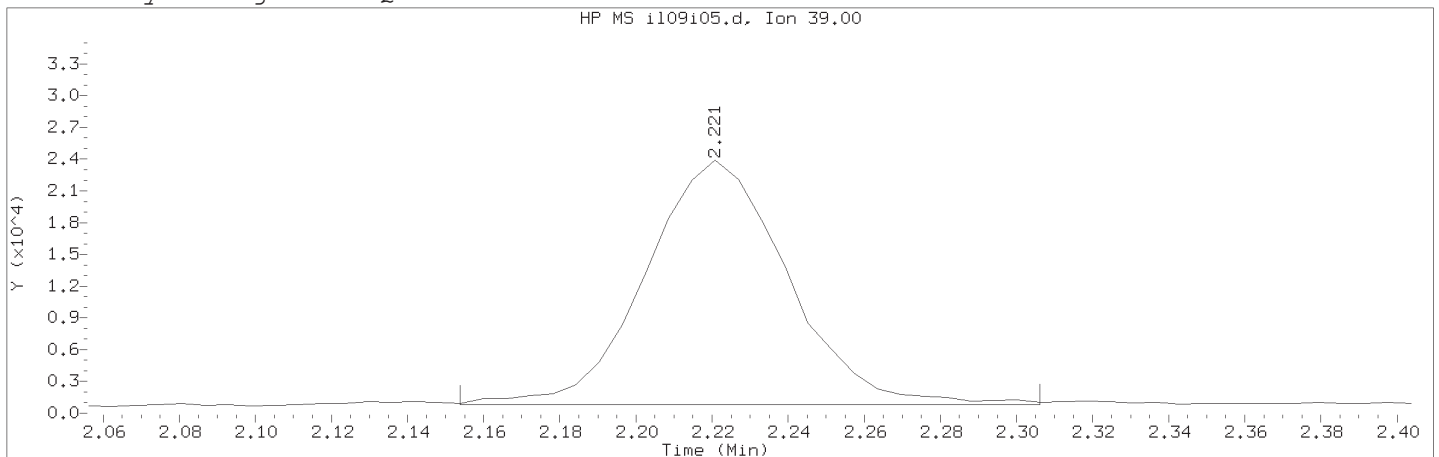
page 4 of 4

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

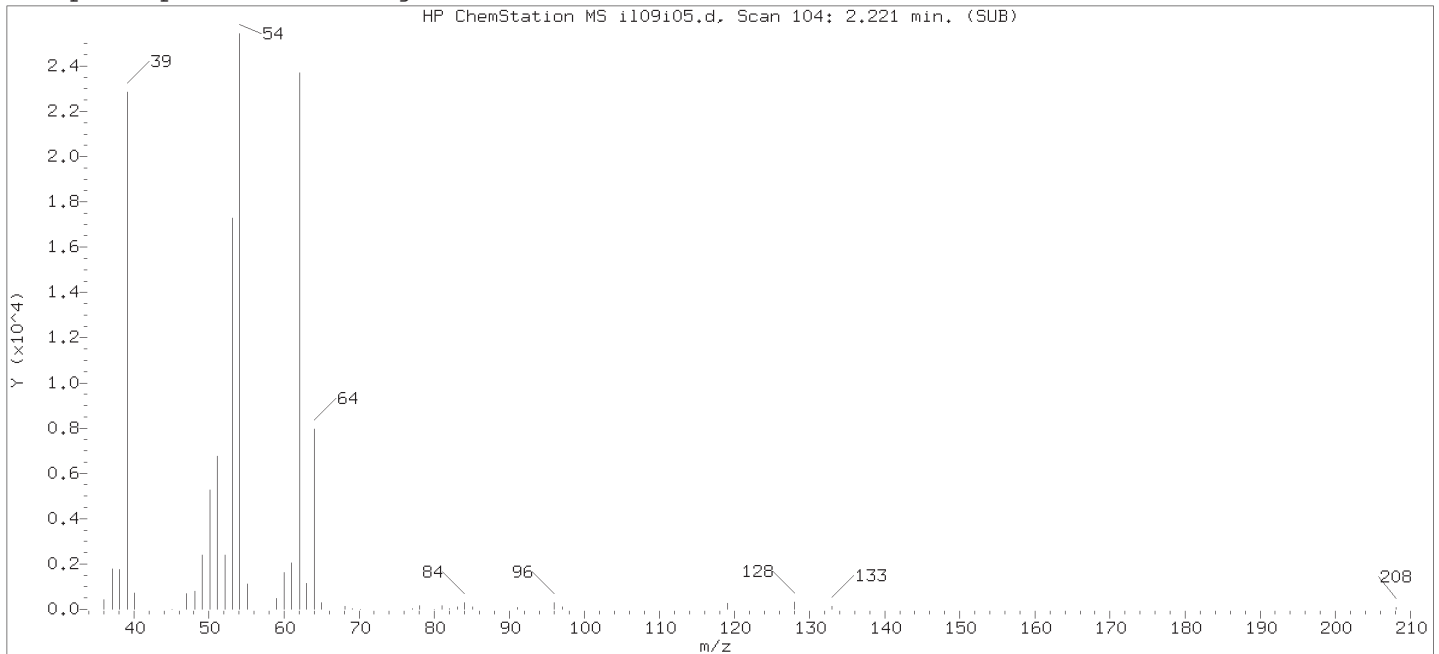
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 104  
Retention Time (minutes): 2.221  
Quant Ion                               : 39.00  
Area (flag)                            : 60019M  
On-Column Amount (ng)               : 1.0245  
Integration start scan                : 92                      Integration stop scan: 117  
Y at integration start                : 800                    Y at integration end: 800

Reason for manual integration: improper integration

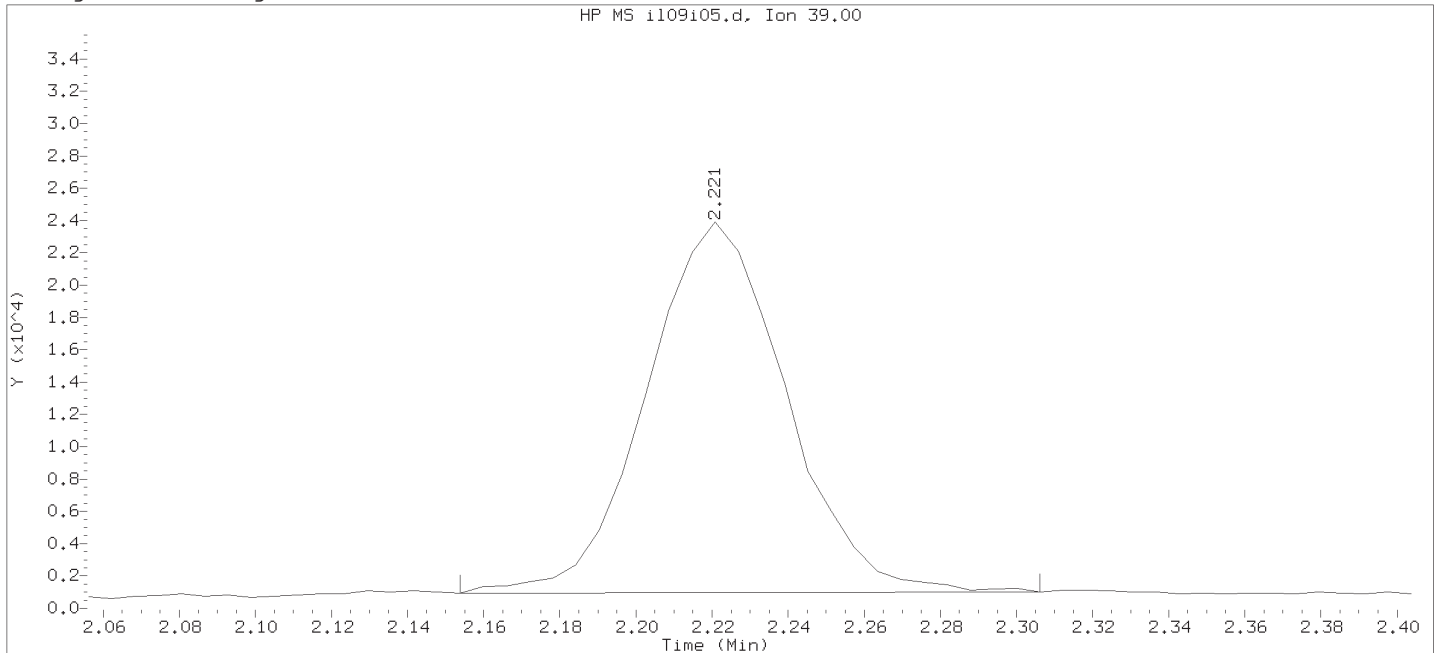
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

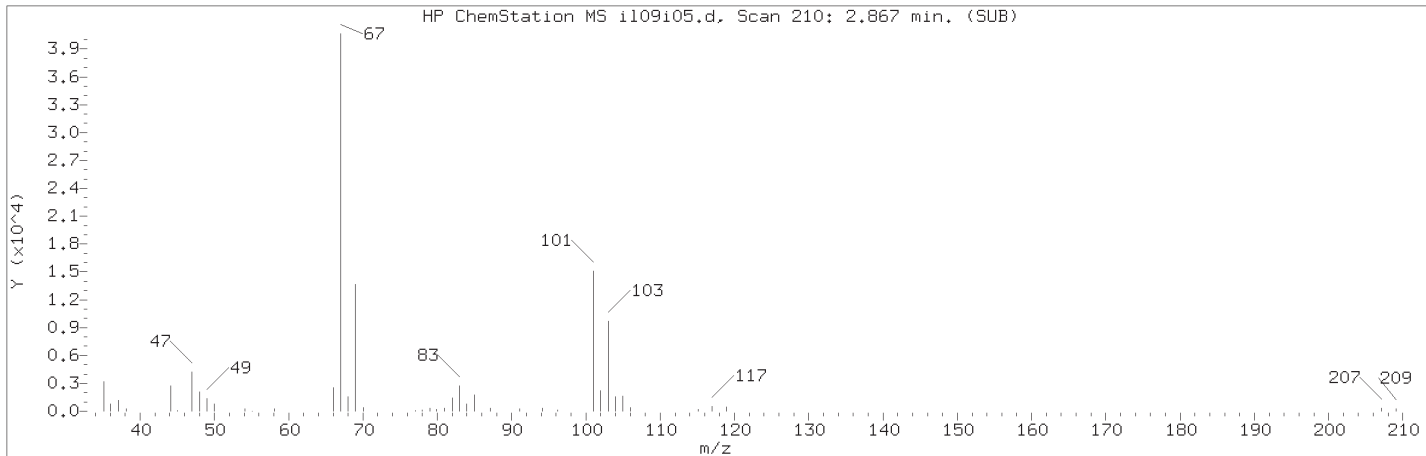
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD001      Lab Sample ID: VSTD001

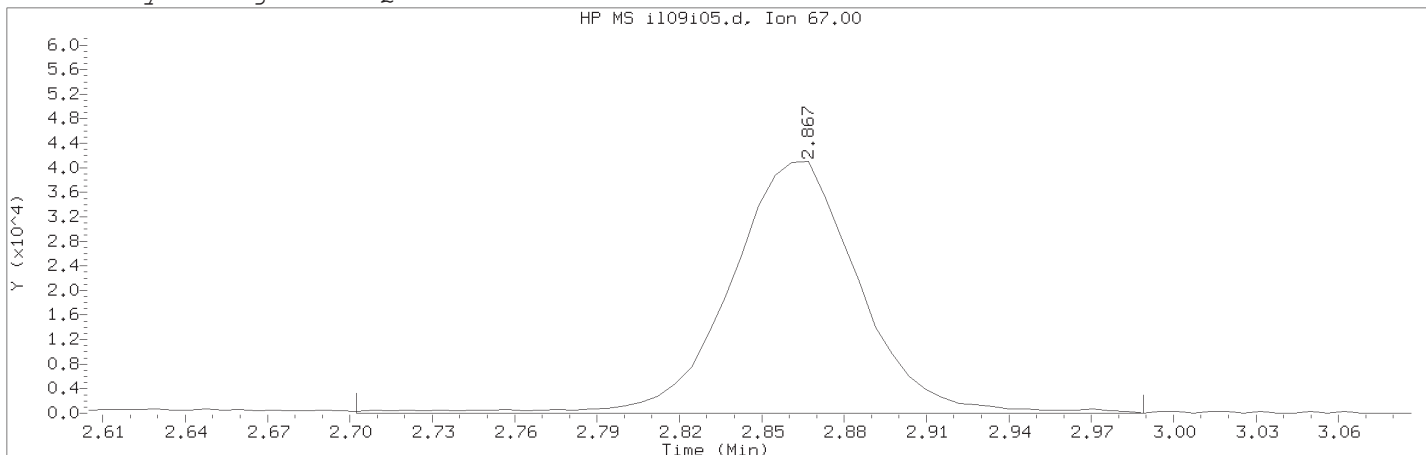
Compound Number : 6  
Compound Name : 1,3-Butadiene  
Scan Number : 104  
Retention Time (minutes): 2.221  
Quant Ion : 39.00  
Area : 58392  
On-column Amount (ng) : 0.9848  
Integration start scan : 92      Integration stop scan: 117  
Y at integration start : 937      Y at integration end: 1005



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

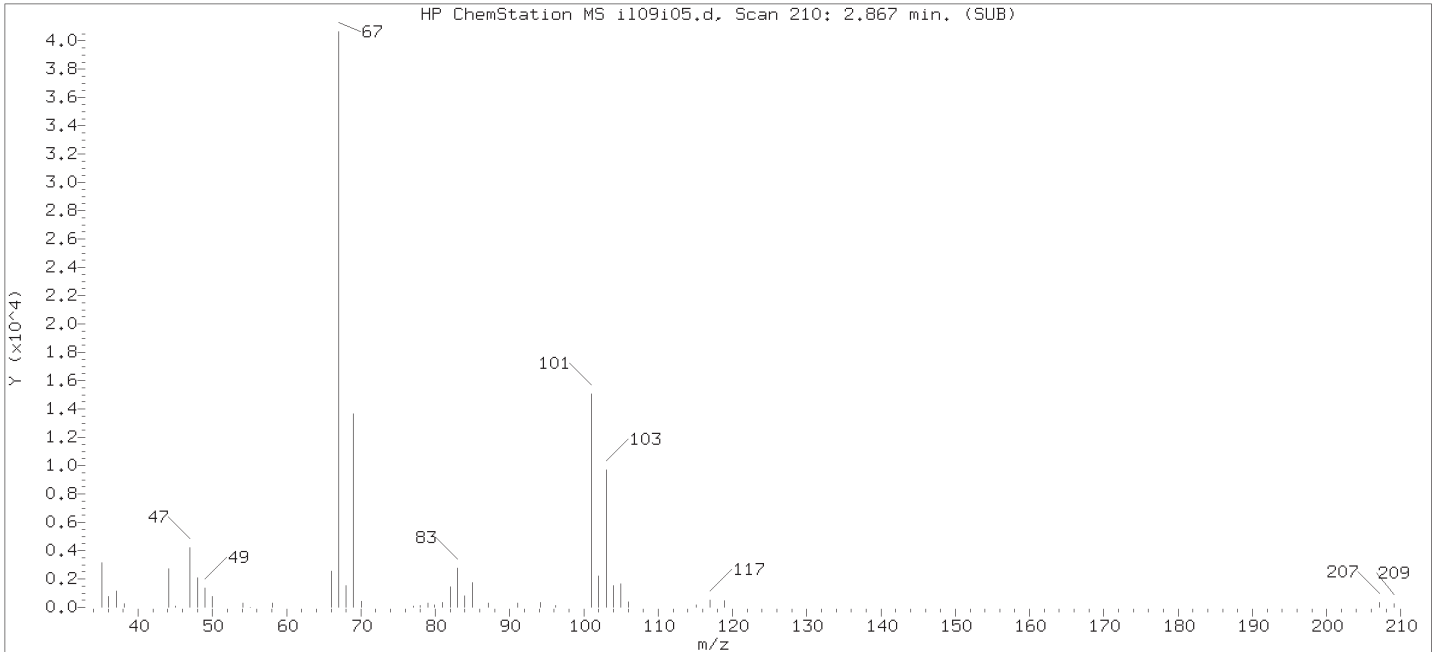
Compound Number                      : 9  
Compound Name                         : Dichlorofluoromethane  
Scan Number                            : 210  
Retention Time (minutes): 2.867  
Quant Ion                                : 67.00  
Area (flag)                             : 134348M  
On-Column Amount (ng)                : 0.9968  
Integration start scan                : 182                      Integration stop scan: 229  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

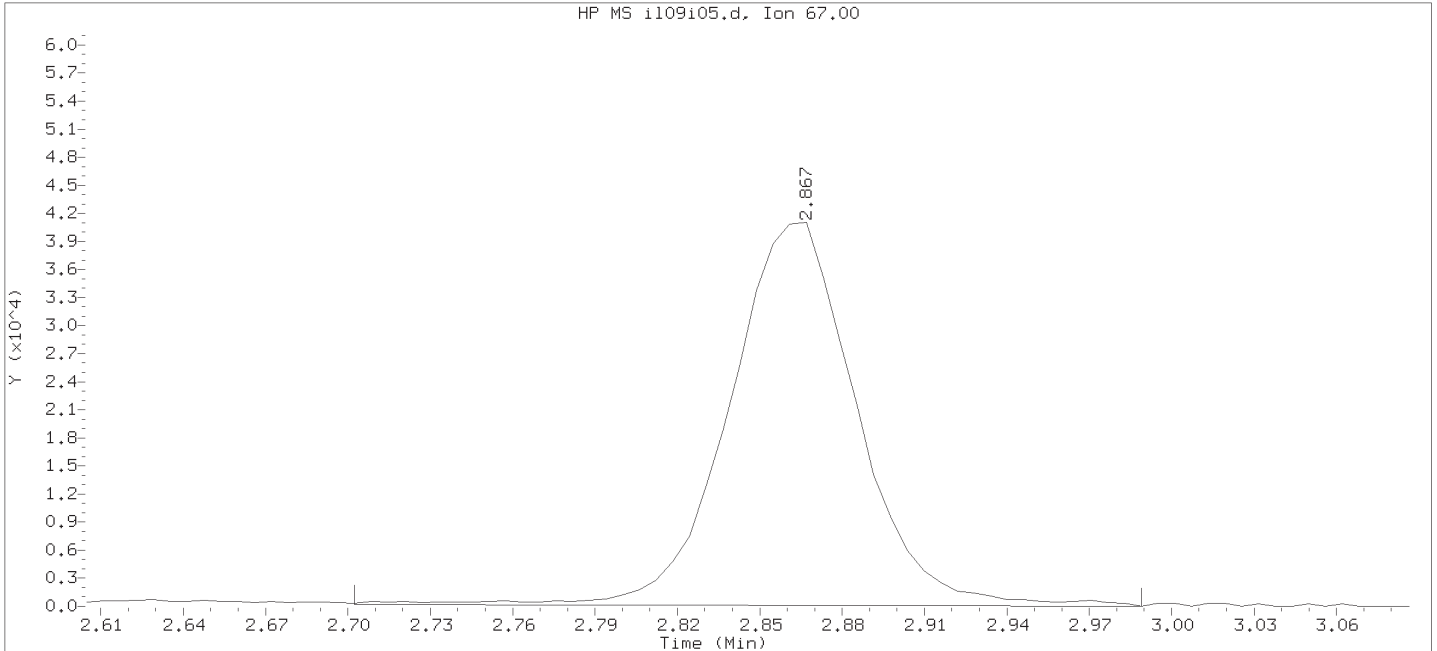
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



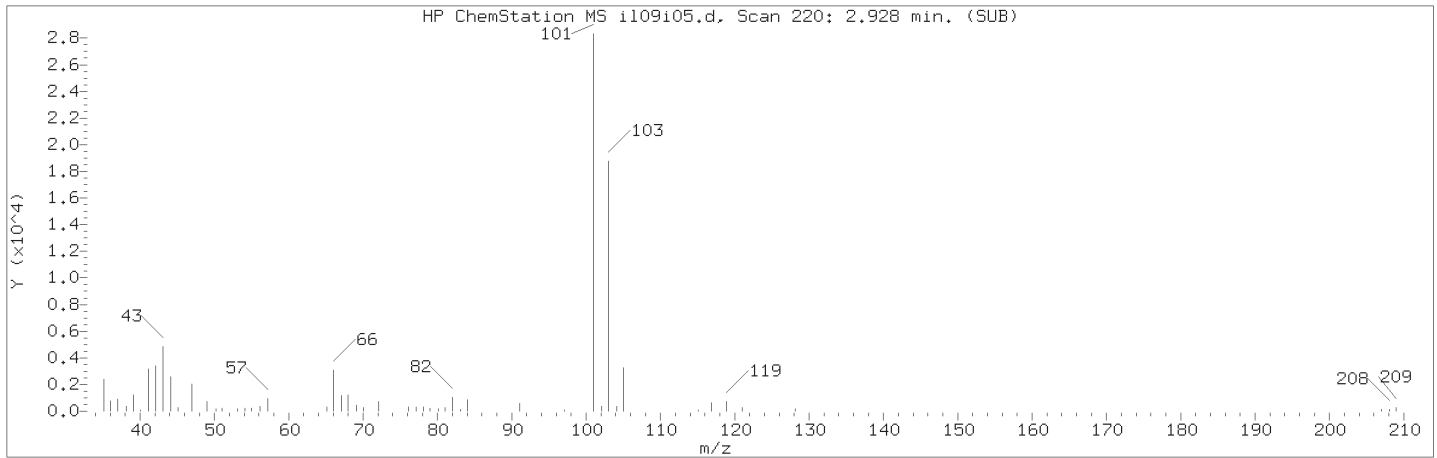
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Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

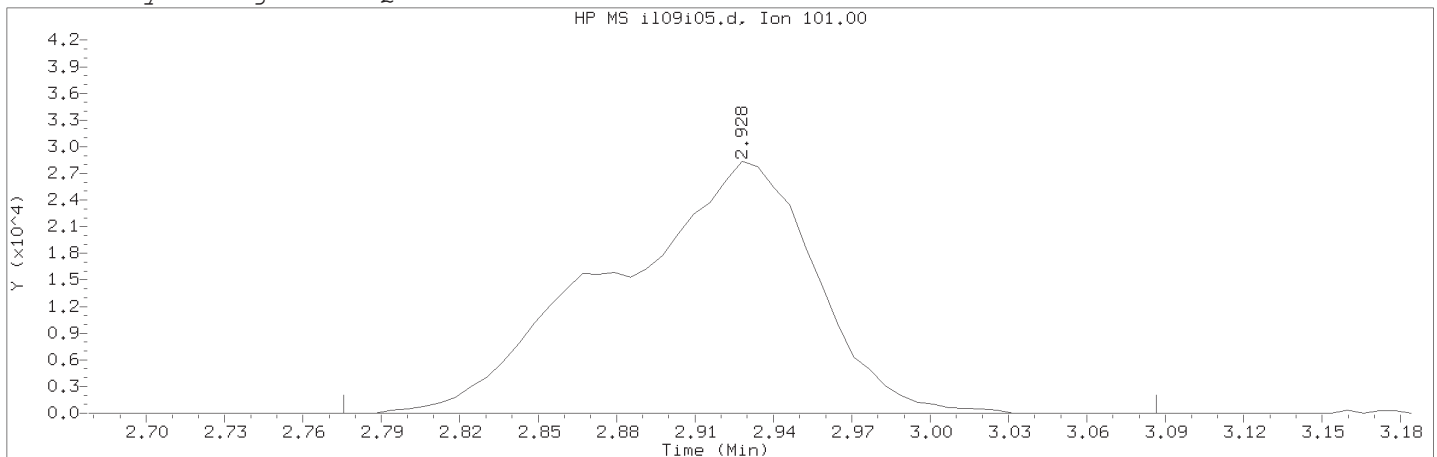
Sample Name: VSTD001    Lab Sample ID: VSTD001

Compound Number                      : 9  
Compound Name                         : Dichlorofluoromethane  
Scan Number                            : 210  
Retention Time (minutes): 2.867  
Quant Ion                                : 67.00  
Area                                      : 132548  
On-column Amount (ng)                : 1.0375  
Integration start scan                : 182                      Integration stop scan: 229  
Y at integration start                : 202                      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

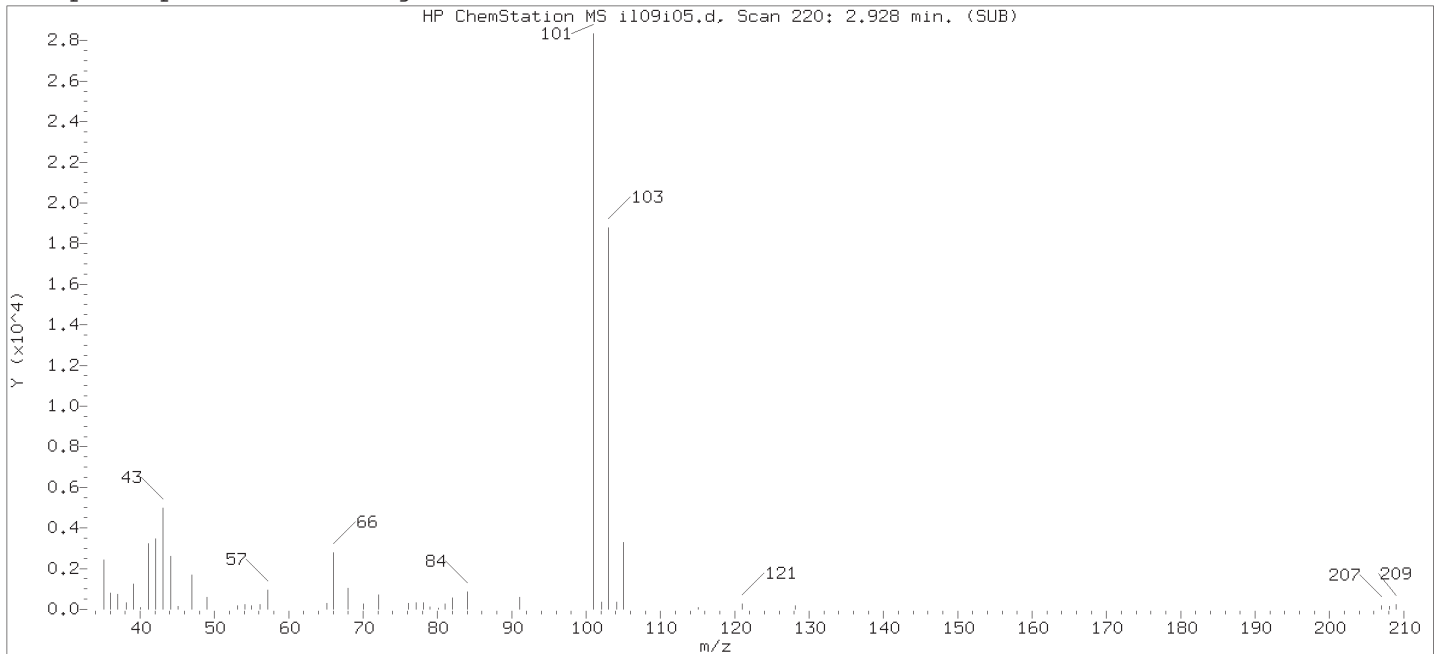
Compound Number                      : 10  
Compound Name                         : Trichlorofluoromethane  
Scan Number                            : 220  
Retention Time (minutes): 2.928  
Quant Ion                                : 101.00  
Area (flag)                             : 153403M  
On-Column Amount (ng)                : 1.0189  
Integration start scan                 : 194                      Integration stop scan: 245  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

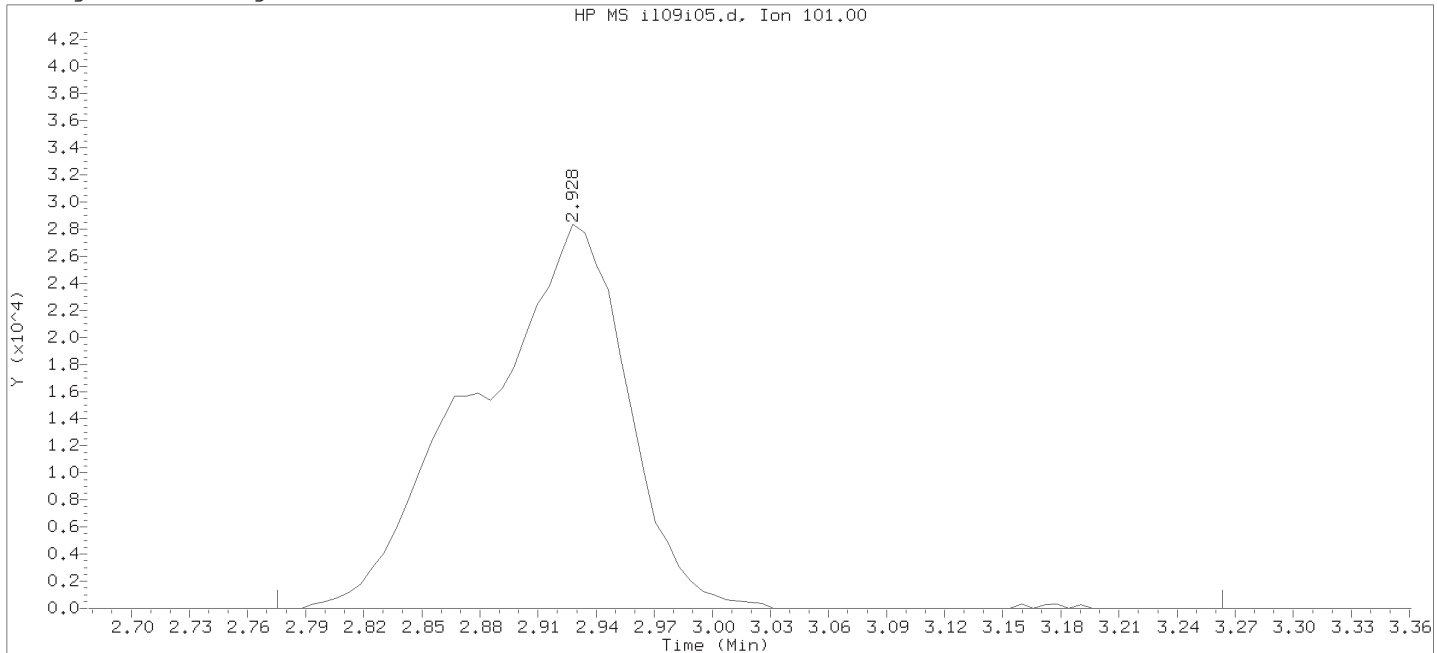
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



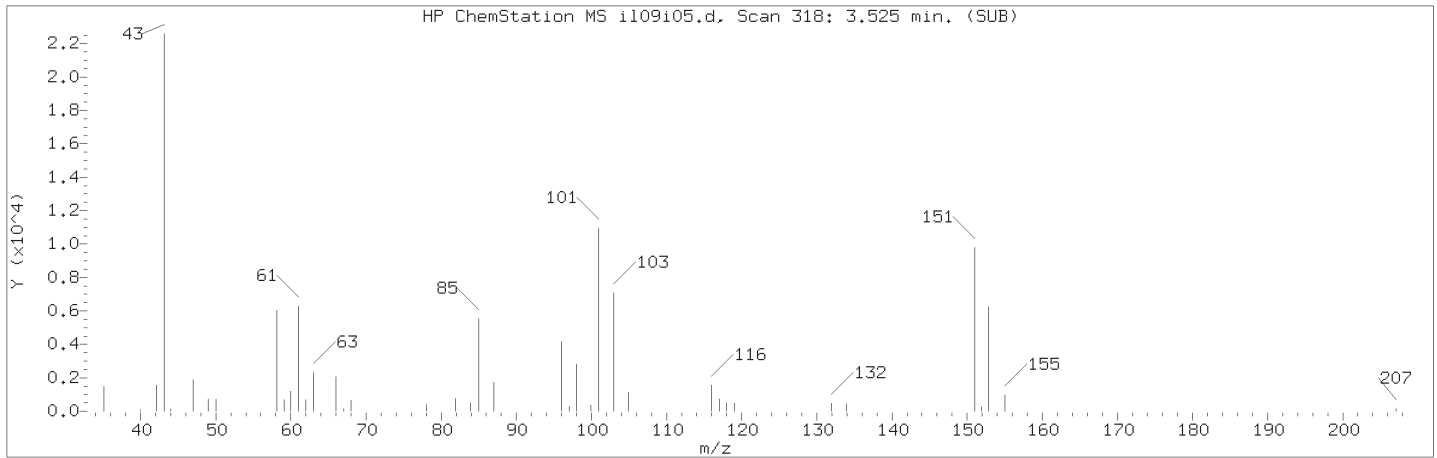
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Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

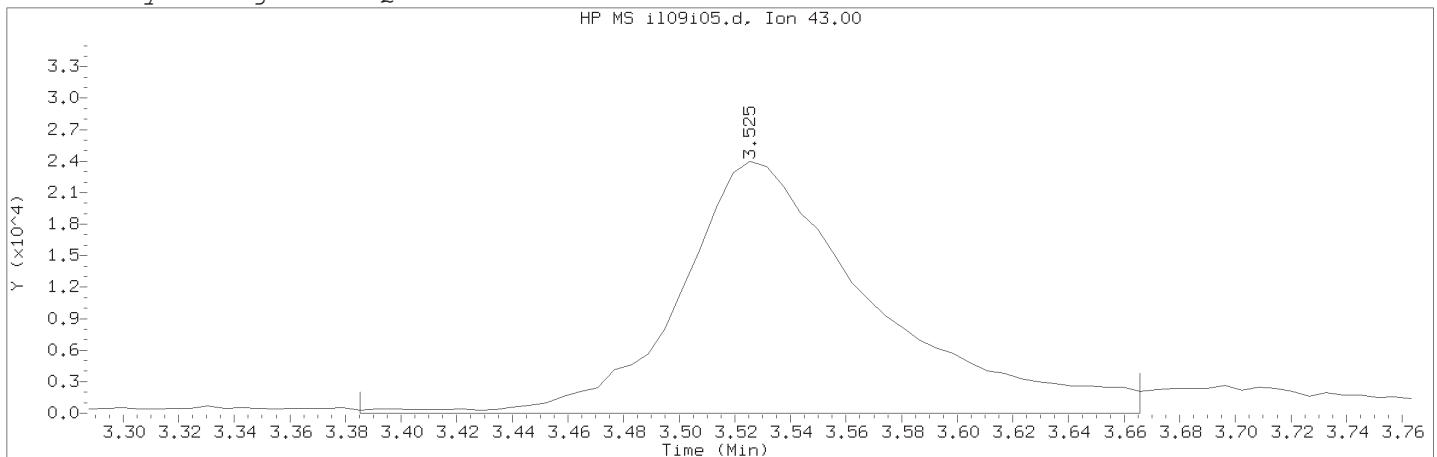
Sample Name: VSTD001      Lab Sample ID: VSTD001

Compound Number : 10  
Compound Name : Trichlorofluoromethane  
Scan Number : 220  
Retention Time (minutes): 2.928  
Quant Ion : 101.00  
Area : 153826  
On-column Amount (ng) : 0.9980  
Integration start scan : 194      Integration stop scan: 274  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

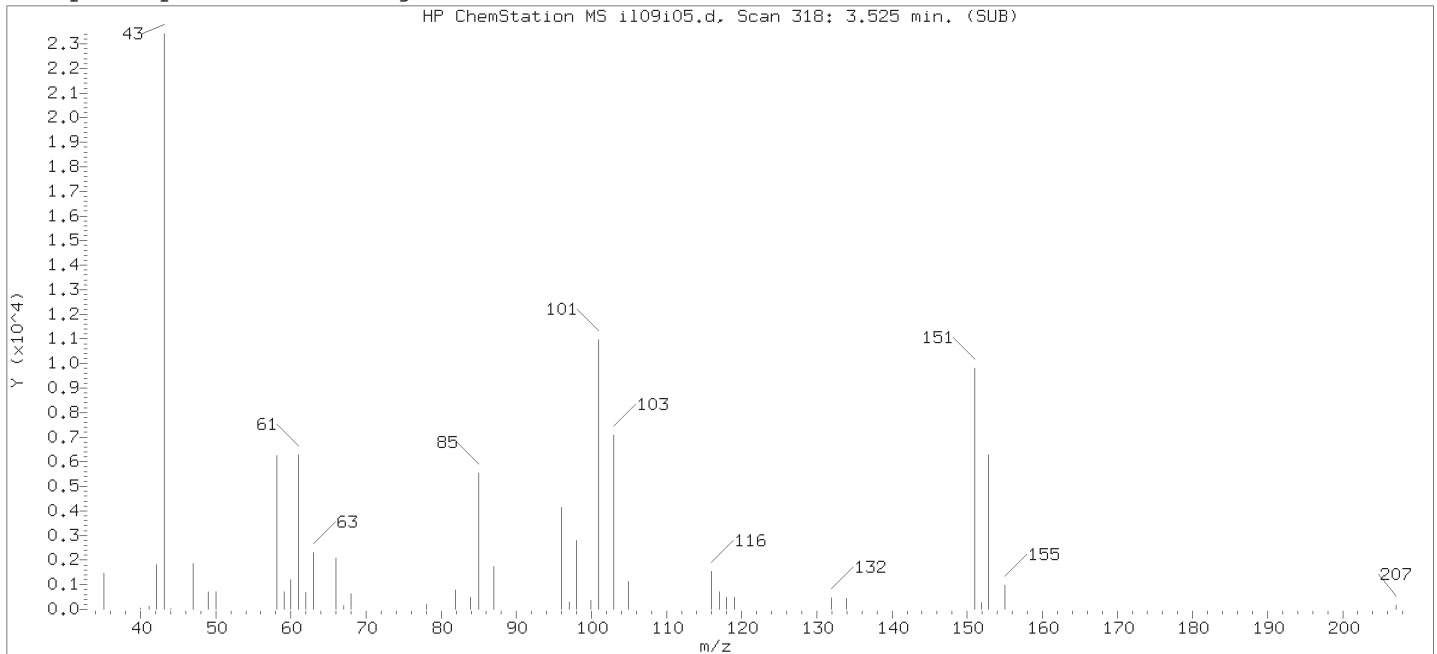
Compound Number                      : 14  
Compound Name                         : Acetone  
Scan Number                            : 318  
Retention Time (minutes): 3.525  
Quant Ion                                : 43.00  
Area (flag)                             : 116193M  
On-Column Amount (ng)                : 10.0341  
Integration start scan                 : 294                      Integration stop scan: 340  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

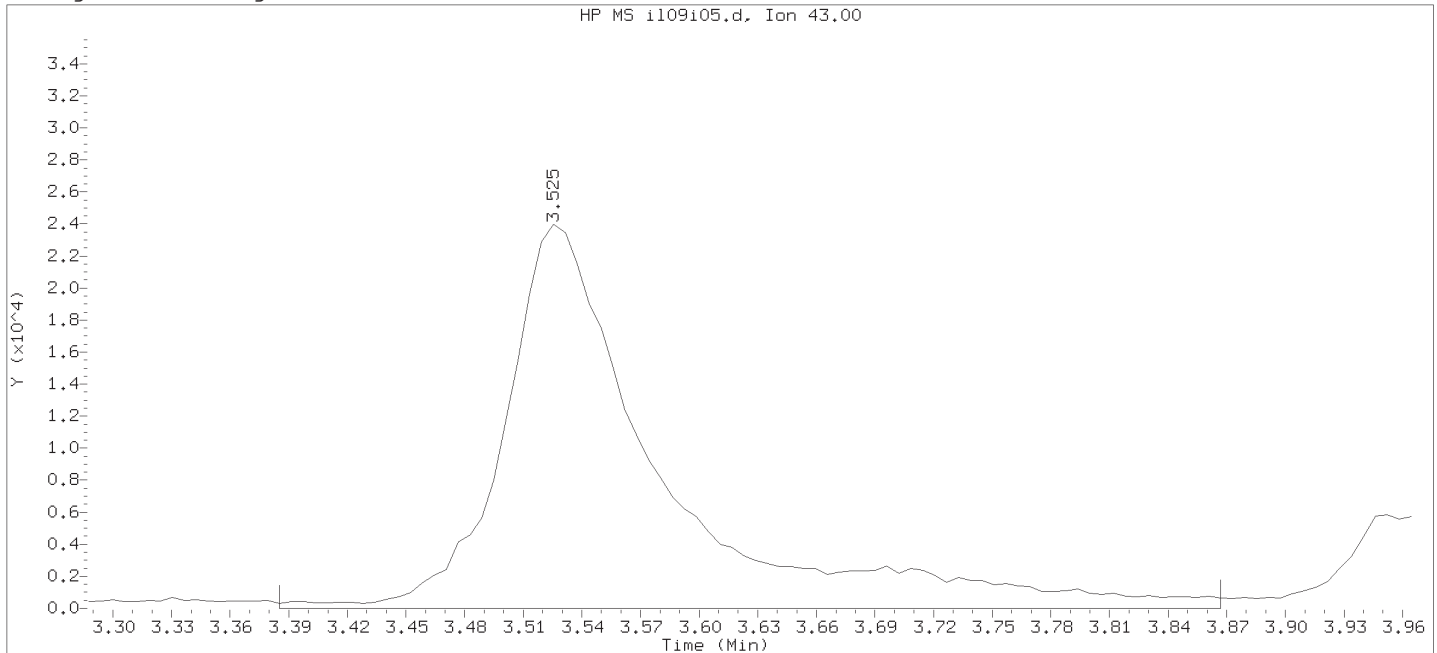
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

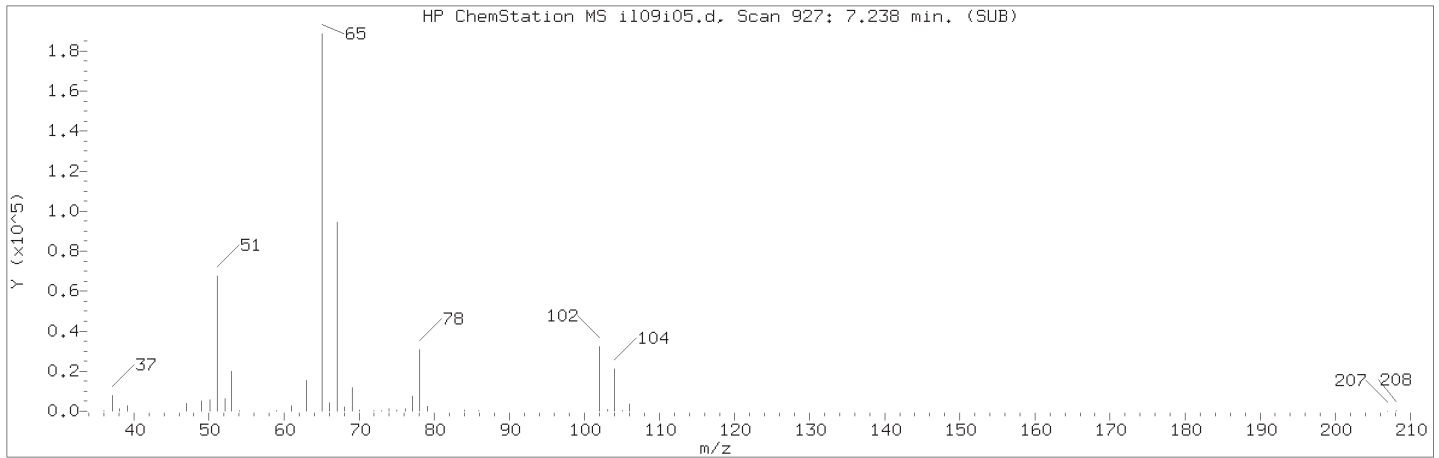
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD001

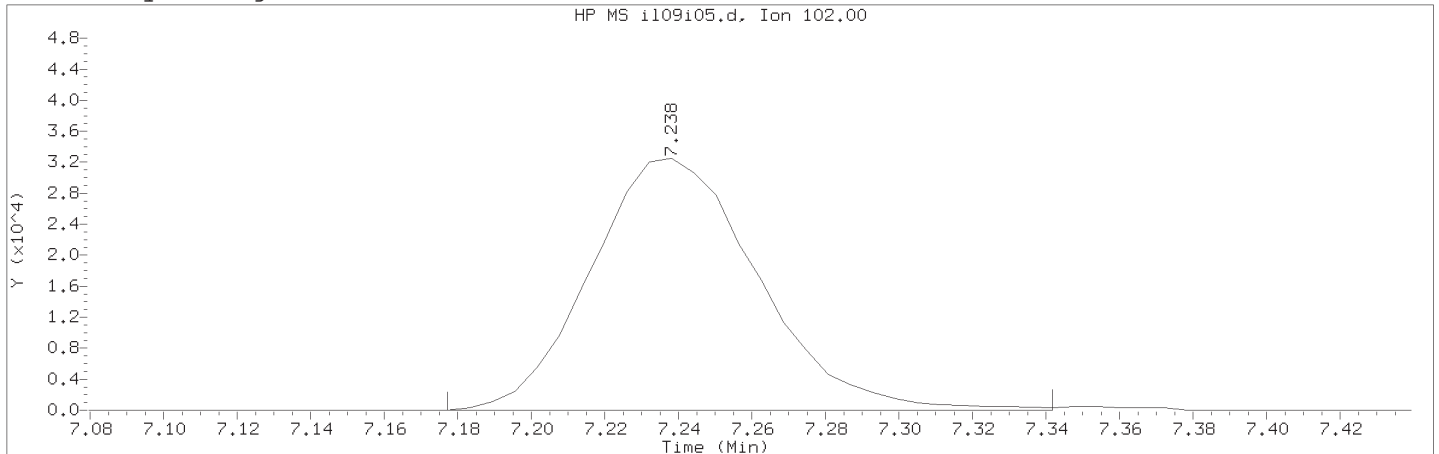
Lab Sample ID: VSTD001

Compound Number	: 14	
Compound Name	: Acetone	
Scan Number	: 318	
Retention Time (minutes)	: 3.525	
Quant Ion	: 43.00	
Area	: 133363	
On-column Amount (ng)	: 11.0681	
Integration start scan	: 294	Integration stop scan: 373
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

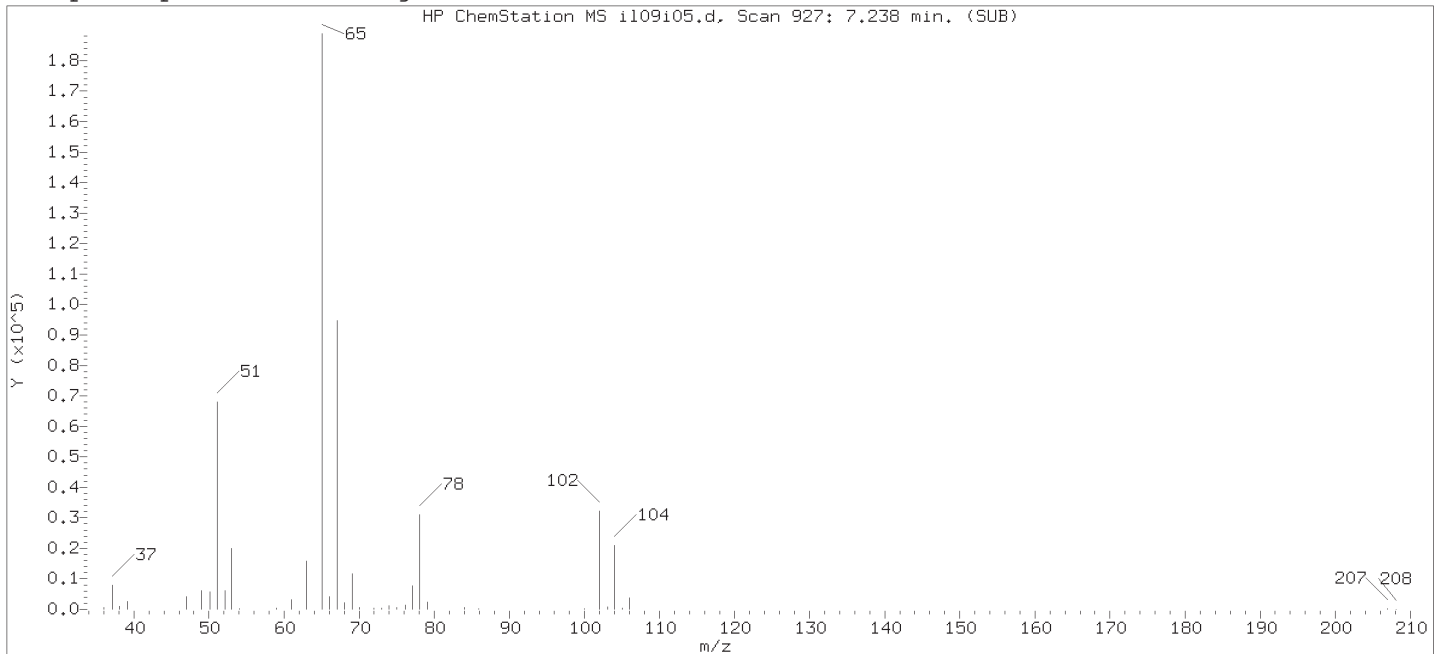
Compound Number                      : 57  
Compound Name                         : 1,2-Dichloroethane-d4  
Scan Number                            : 927  
Retention Time (minutes): 7.238  
Quant Ion                                : 102.00  
Area (flag)                             : 102649M  
On-Column Amount (ng)                : 10.1172  
Integration start scan                 : 916                      Integration stop scan: 943  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

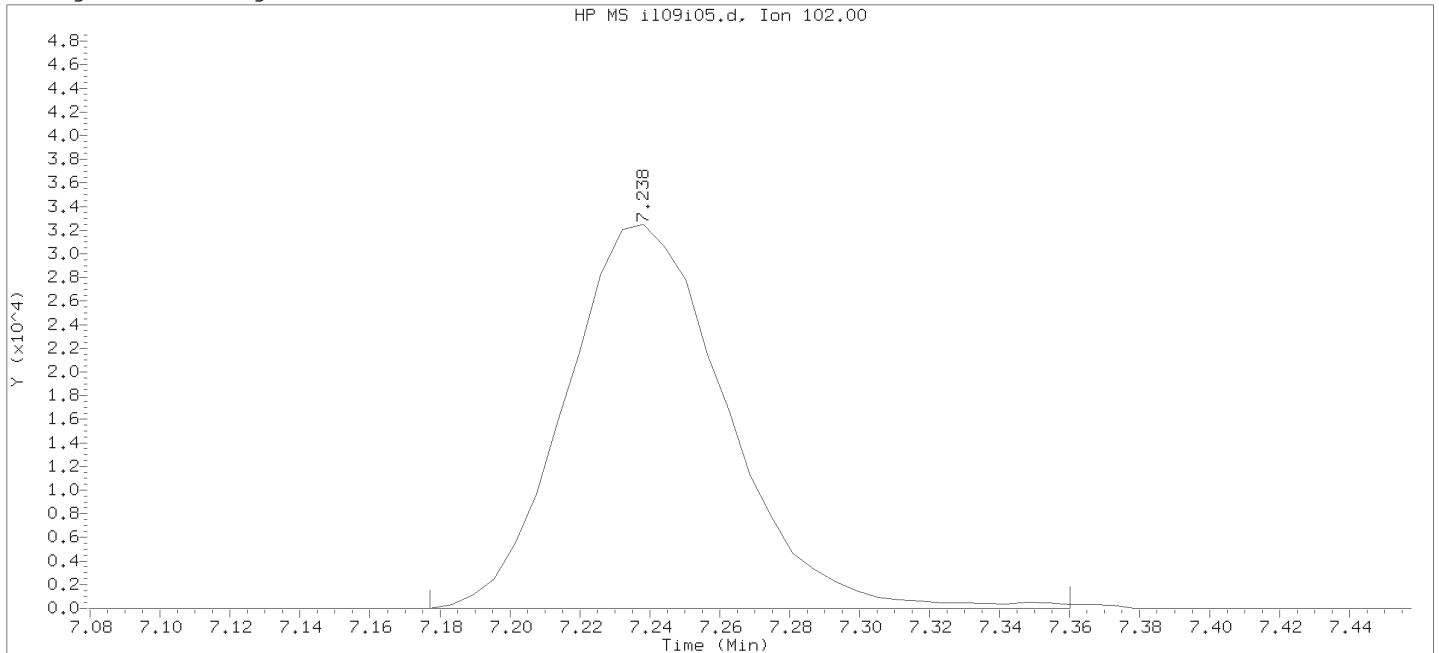
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

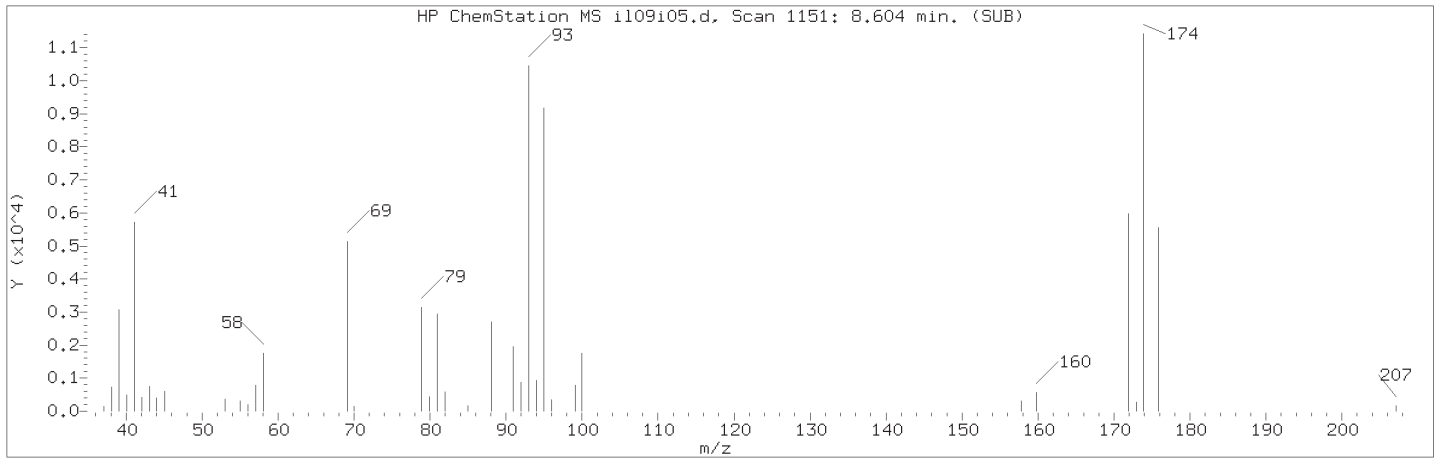
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD001      Lab Sample ID: VSTD001

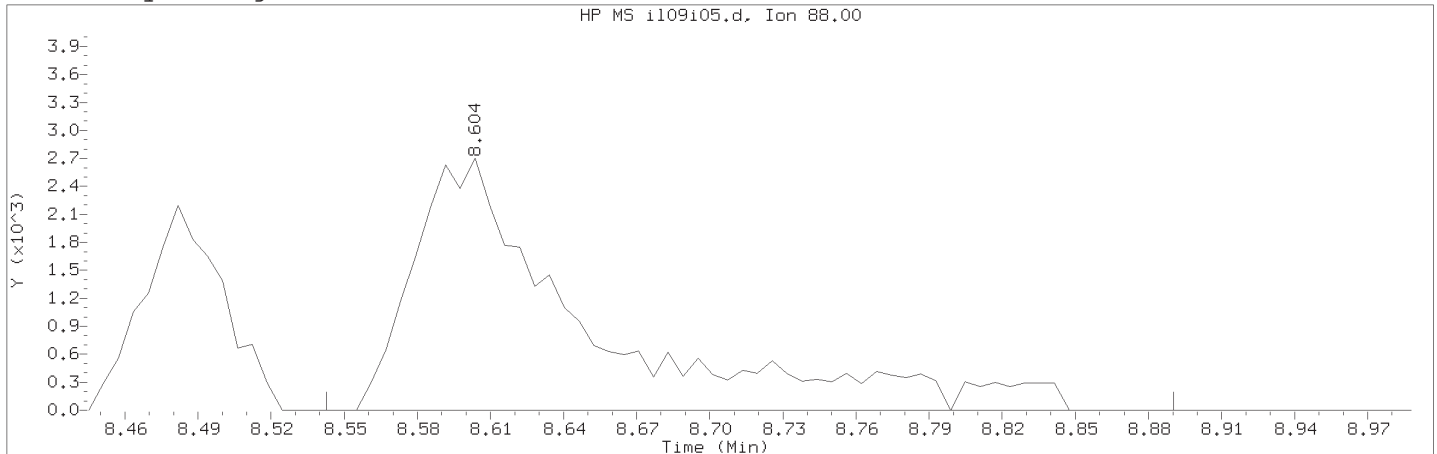
Compound Number : 57  
Compound Name : 1,2-Dichloroethane-d4  
Scan Number : 927  
Retention Time (minutes): 7.238  
Quant Ion : 102.00  
Area : 103051  
On-column Amount (ng) : 10.1244  
Integration start scan : 916      Integration stop scan: 946  
Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001                      Lab Sample ID: VSTD001

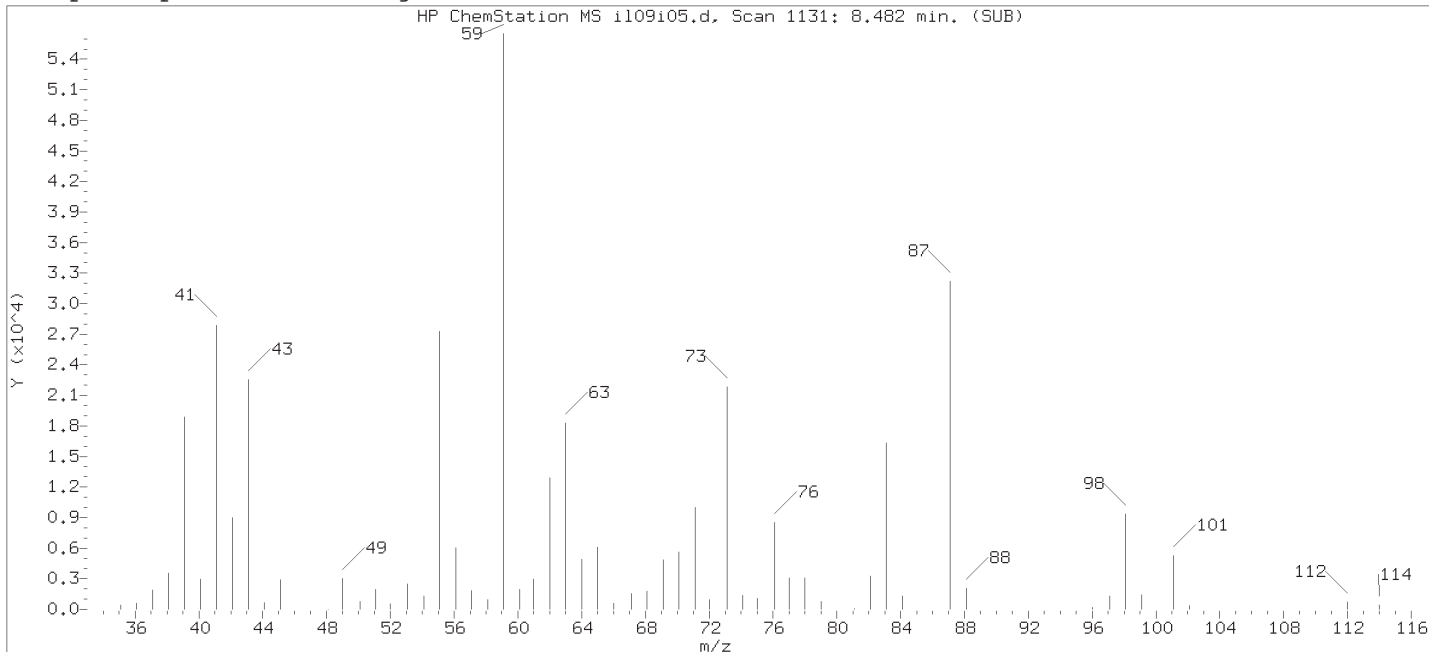
Compound Number                      : 72  
Compound Name                        : 1,4-Dioxane  
Scan Number                           : 1151  
Retention Time (minutes): 8.604  
Quant Ion                              : 88.00  
Area (flag)                            : 13369M  
On-Column Amount (ng)               : 51.1309  
Integration start scan                : 1140                      Integration stop scan: 1197  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

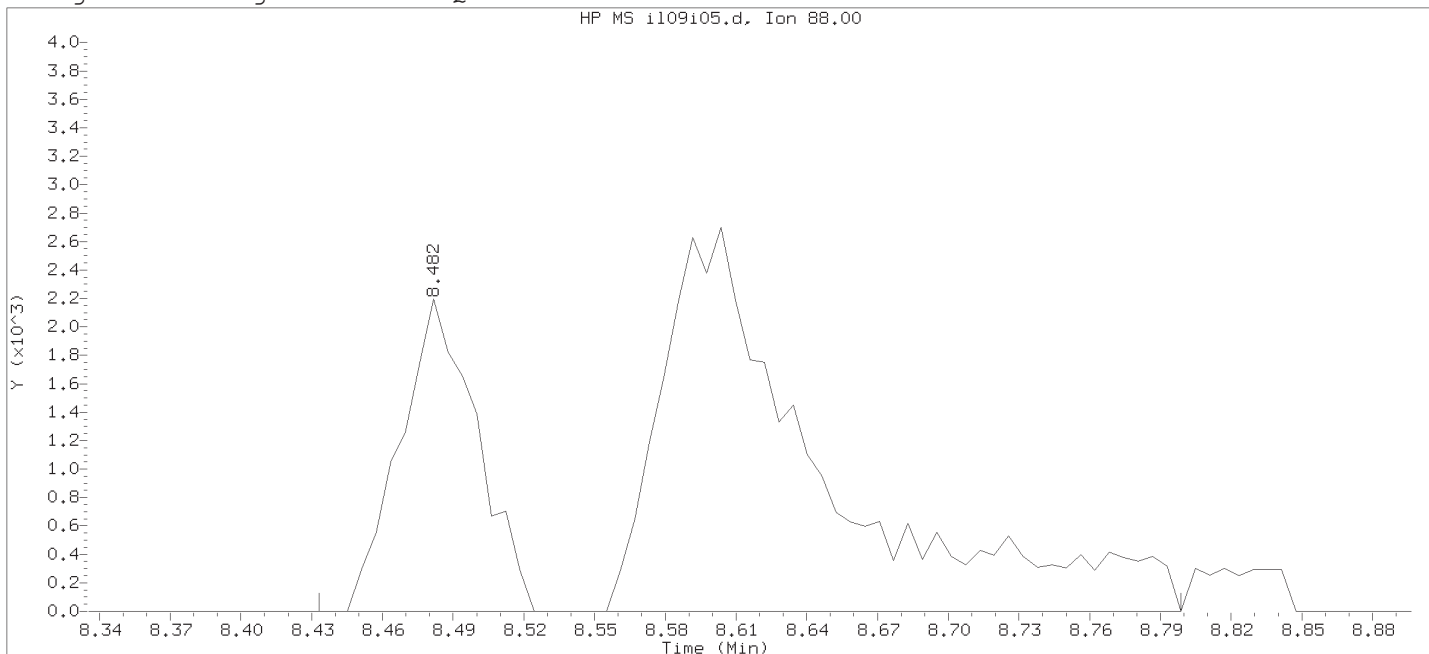
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



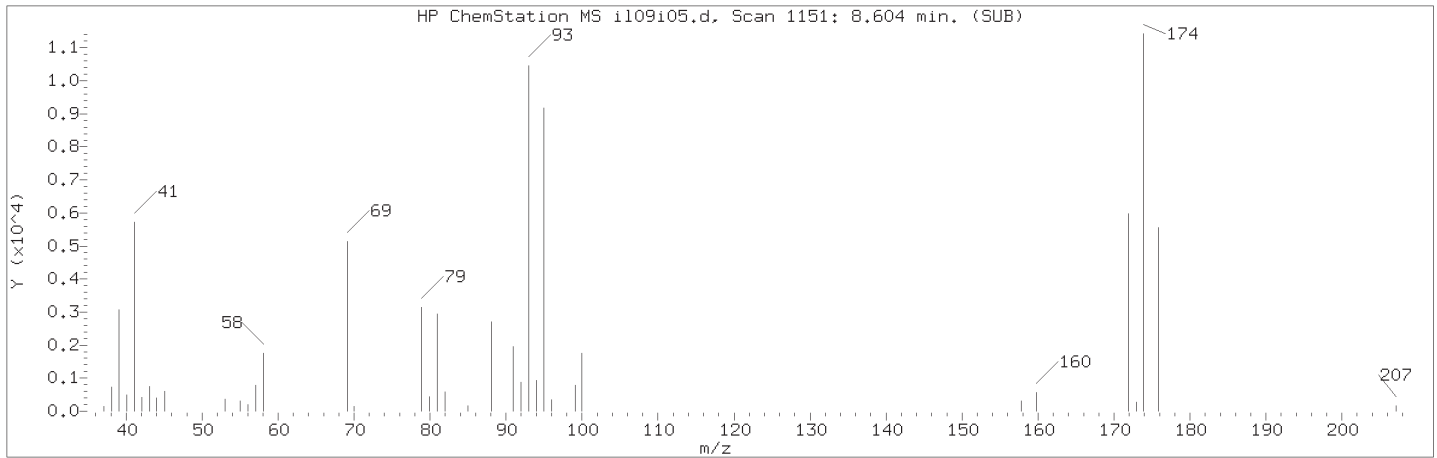
Data File: /chem2/HP19930.i/18jul09i.b/il09i05.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

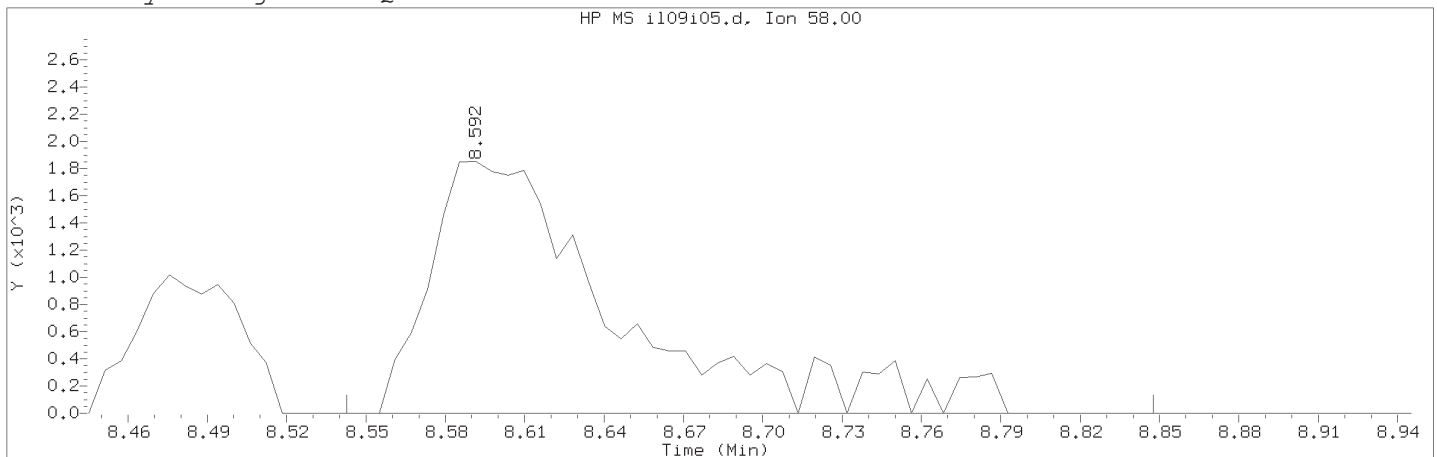
Sample Name: VSTD001      Lab Sample ID: VSTD001

Compound Number : 72  
 Compound Name : 1,4-Dioxane  
 Scan Number : 1131  
 Retention Time (minutes): 8.482  
 Quant Ion : 88.00  
 Area : 17629  
 On-column Amount (ng) : 76.1041  
 Integration start scan : 1122      Integration stop scan: 1182  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001                      Lab Sample ID: VSTD001

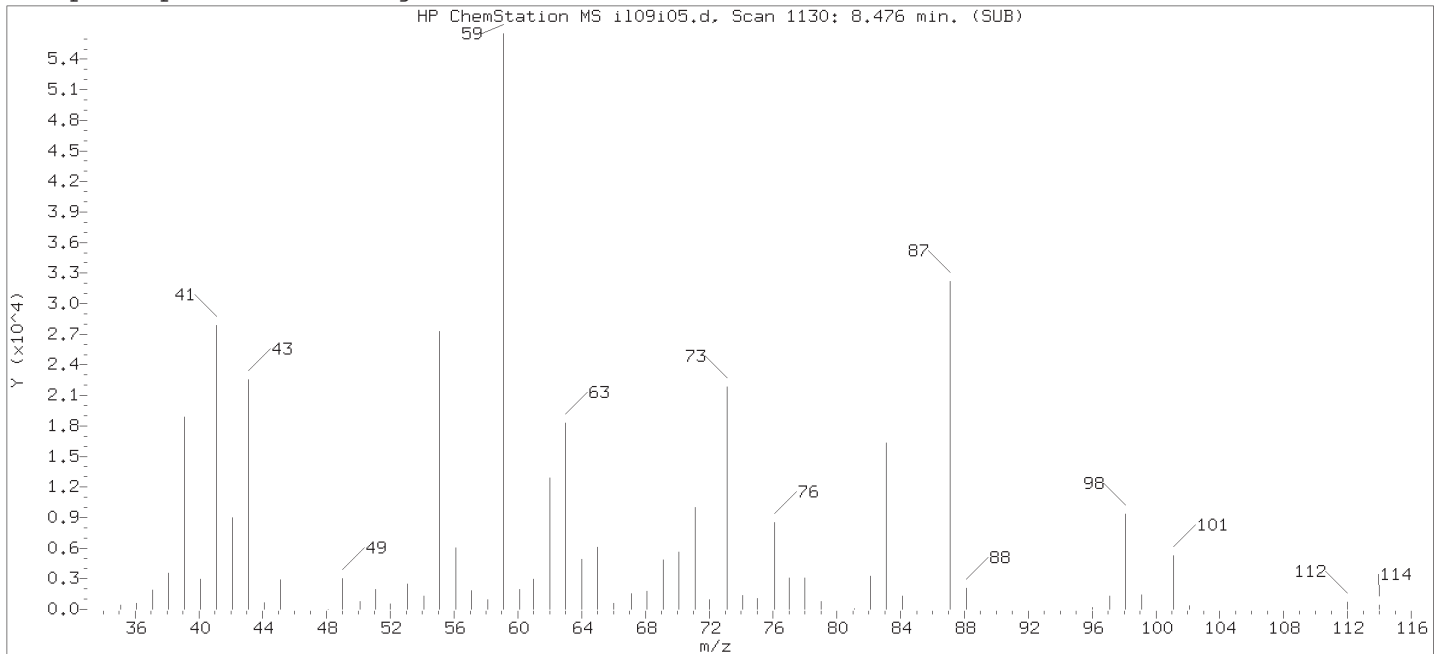
Compound Number                      : 72  
Compound Name                        : 1,4-Dioxane  
Scan Number                           : 1149  
Retention Time (minutes): 8.592  
Quant Ion                              : 58.00  
Area (flag)                            : 9300M  
On-Column Amount (ng)               : 49.1703  
Integration start scan               : 1140                      Integration stop scan: 1190  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

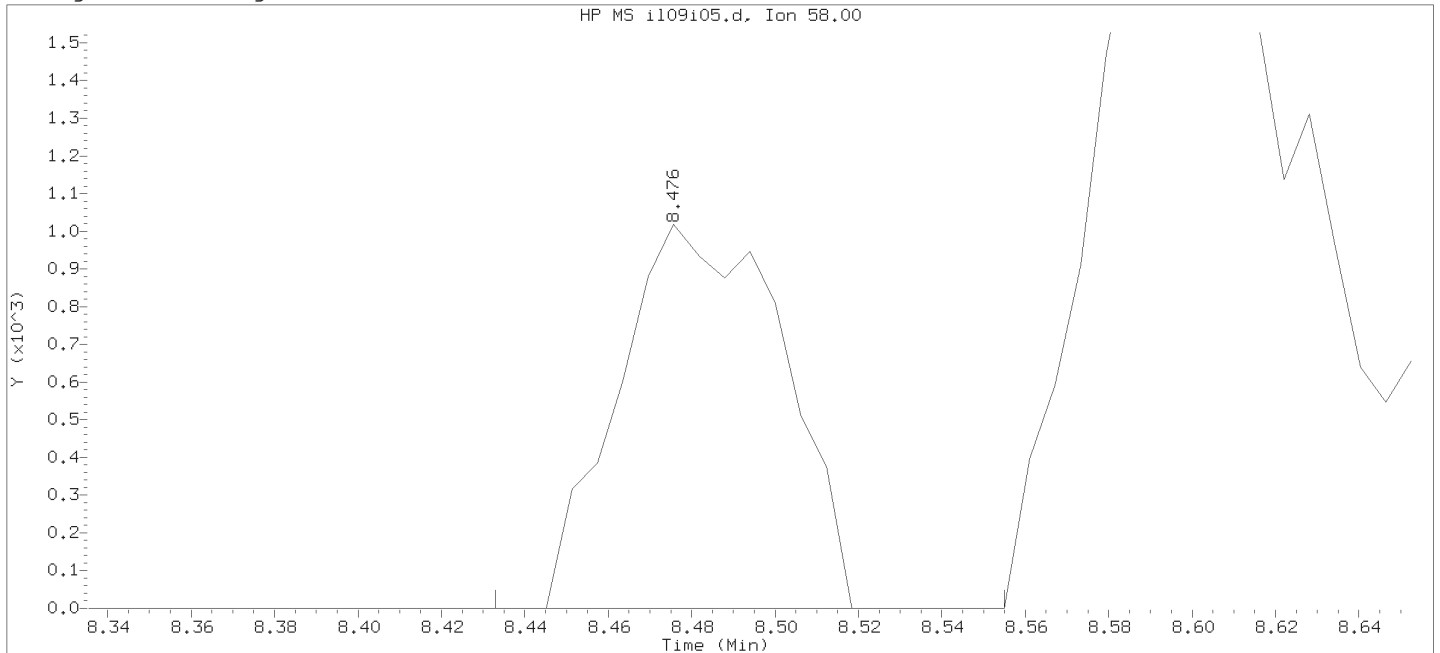
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/il09i05.d  
 Injection date and time: 09-JUL-2018 14:10

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

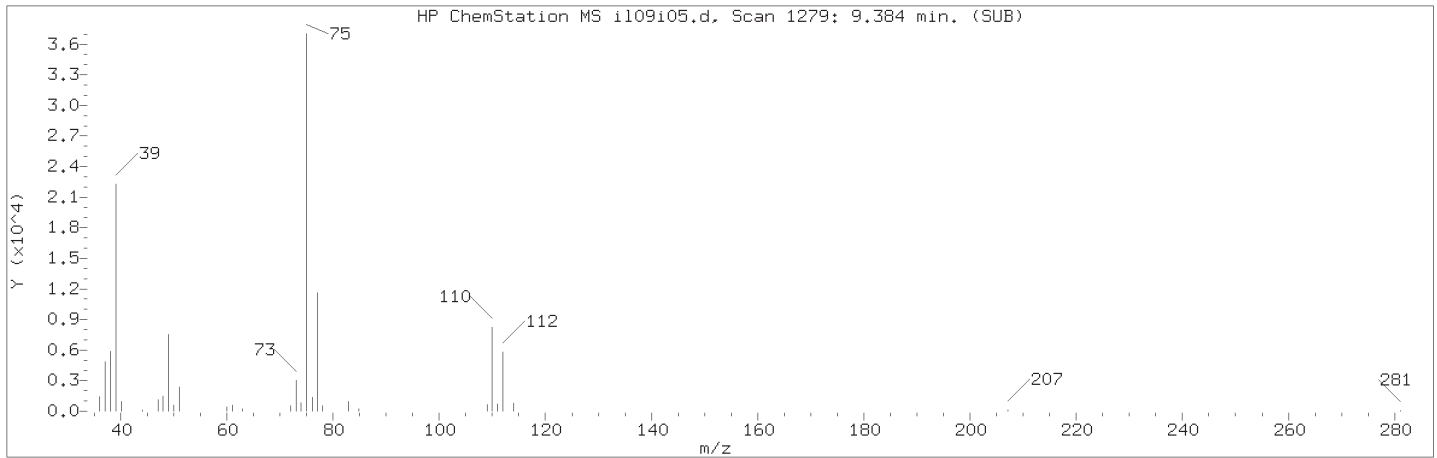
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD001

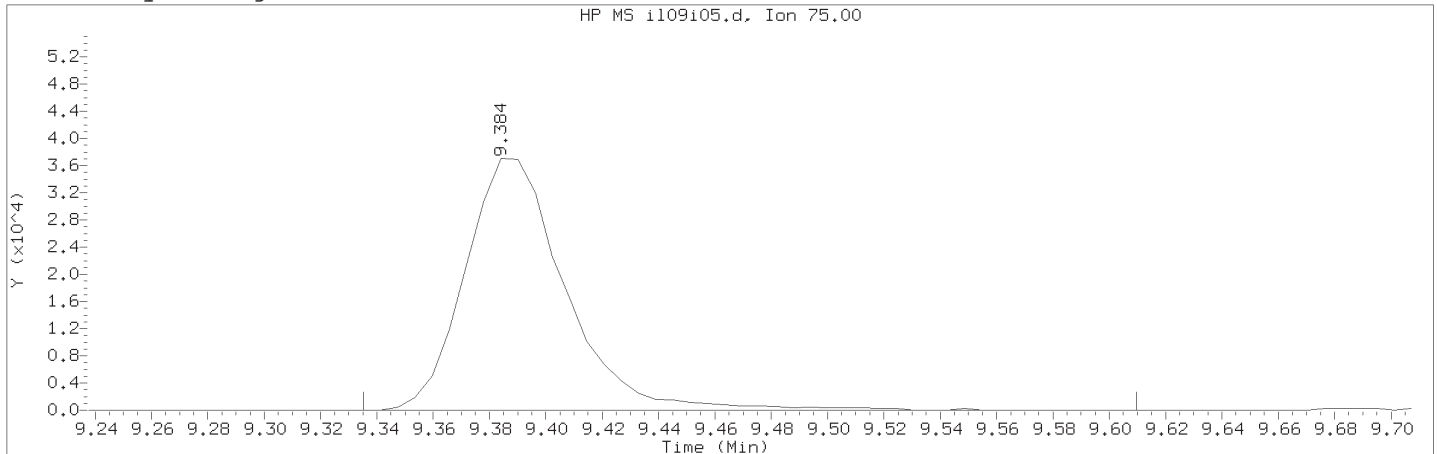
Lab Sample ID: VSTD001

Compound Number : 72  
 Compound Name : 1,4-Dioxane  
 Scan Number : 1130  
 Retention Time (minutes): 8.476  
 Quant Ion : 58.00  
 Area : 2801  
 On-column Amount (ng) : 23.0447  
 Integration start scan : 1122 Integration stop scan: 1142  
 Y at integration start : 0 Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

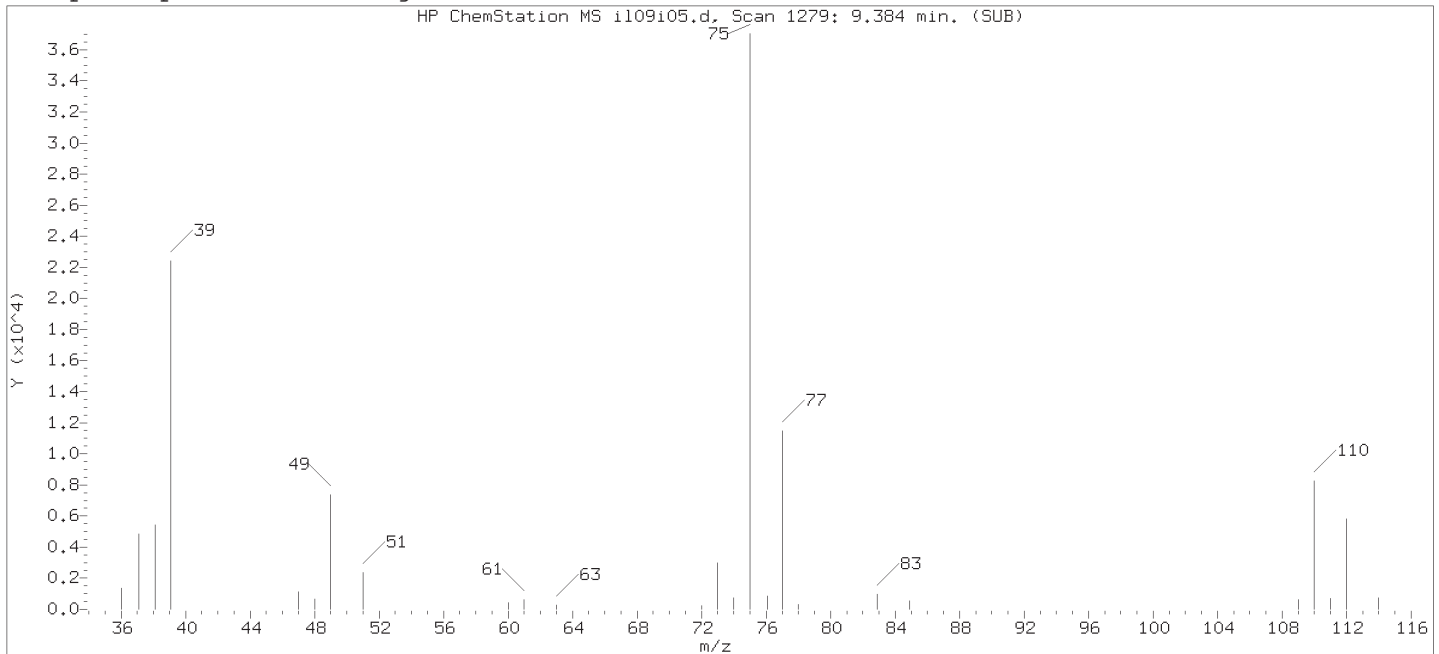
Compound Number                      : 80  
Compound Name                        : cis-1,3-Dichloropropene  
Scan Number                           : 1279  
Retention Time (minutes): 9.384  
Quant Ion                              : 75.00  
Area (flag)                            : 91659M  
On-Column Amount (ng)               : 0.9604  
Integration start scan                : 1270                      Integration stop scan: 1315  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

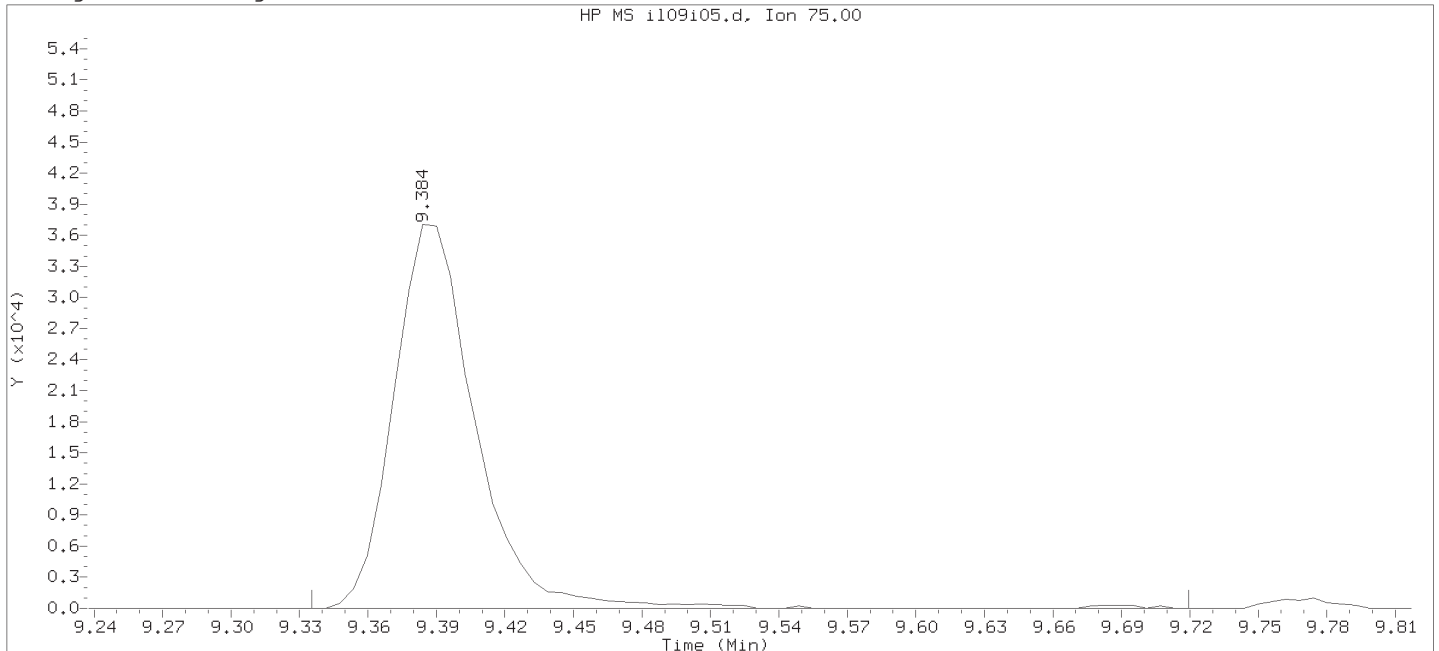
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



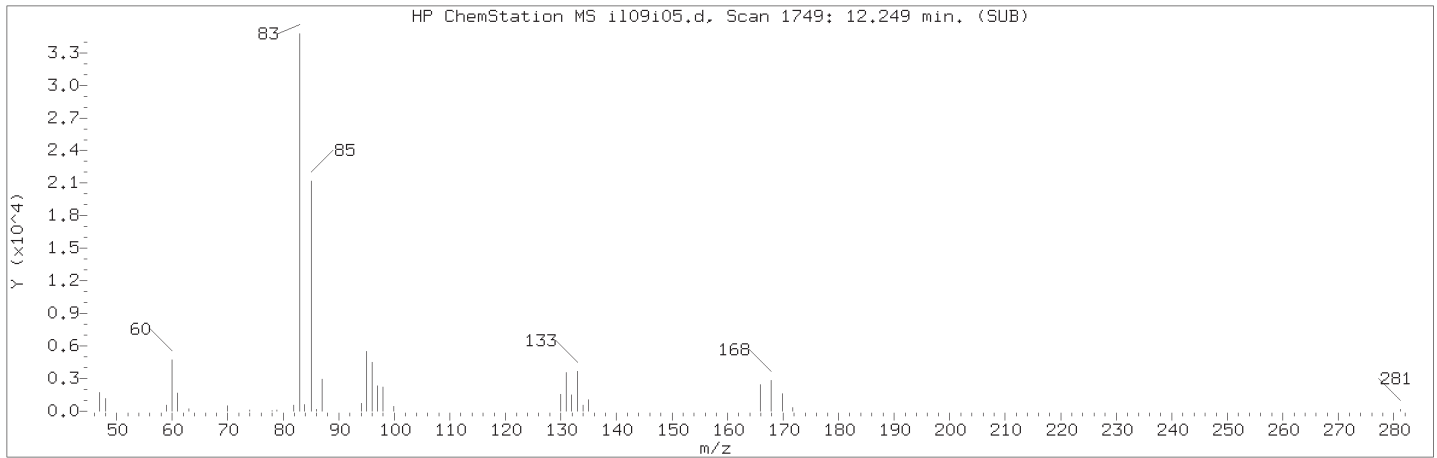
Data File: /chem2/HP19930.i/18jul09i.b/il09i05.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

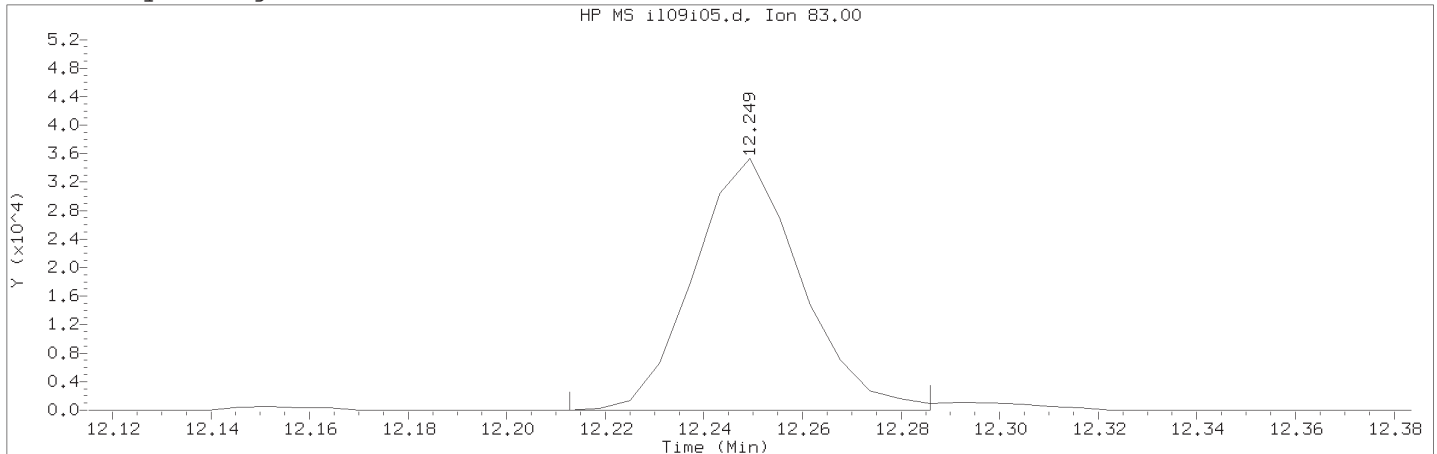
Sample Name: VSTD001      Lab Sample ID: VSTD001

Compound Number : 80  
Compound Name : cis-1,3-Dichloropropene  
Scan Number : 1279  
Retention Time (minutes): 9.384  
Quant Ion : 75.00  
Area : 92173  
On-column Amount (ng) : 0.9494  
Integration start scan : 1270      Integration stop scan: 1333  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

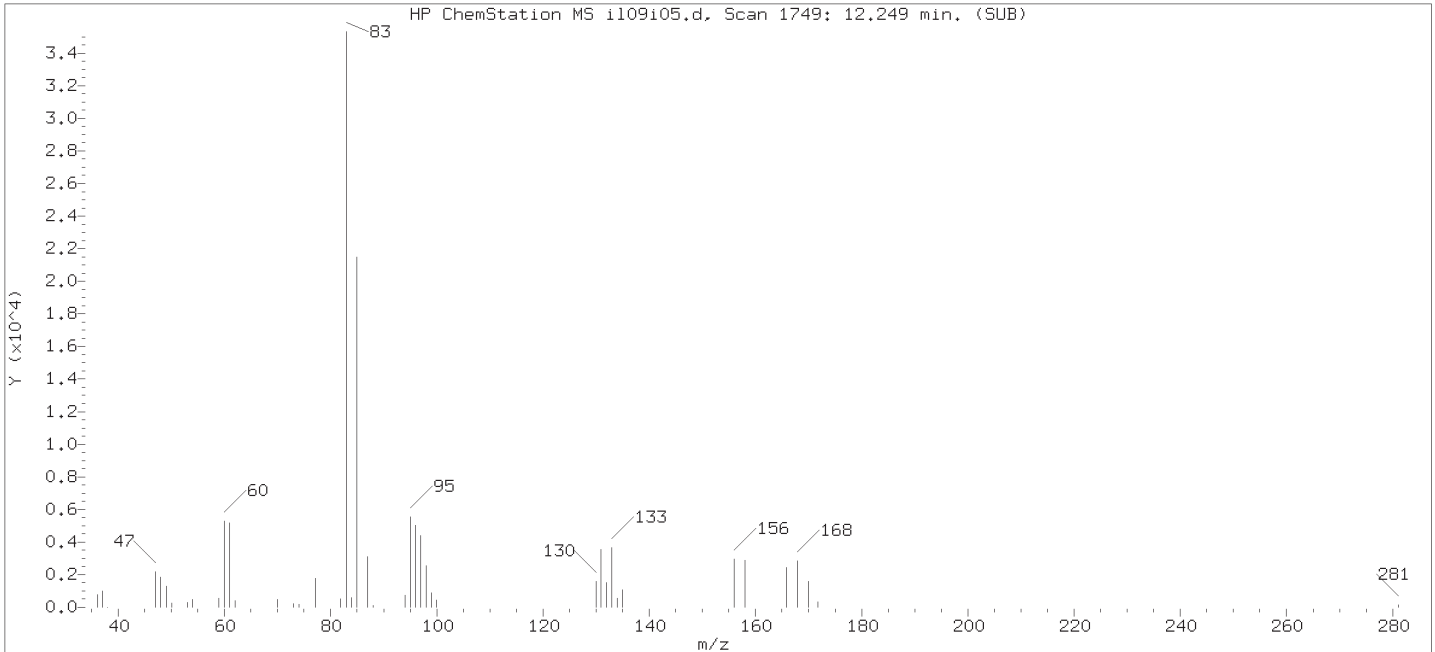
Compound Number                      : 113  
Compound Name                         : 1,1,2,2-Tetrachloroethane  
Scan Number                            : 1749  
Retention Time (minutes): 12.249  
Quant Ion                                : 83.00  
Area (flag)                             : 53227M  
On-Column Amount (ng)                : 0.9782  
Integration start scan                 : 1742                      Integration stop scan: 1754  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

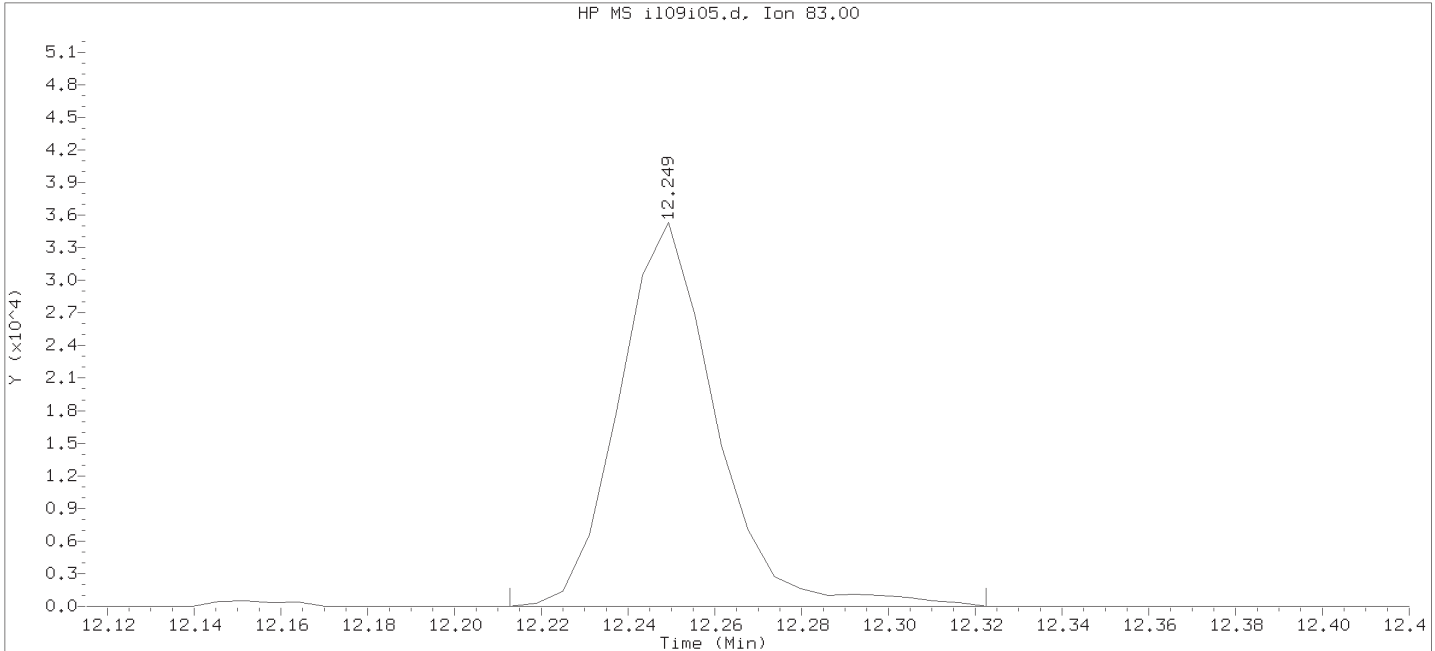
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

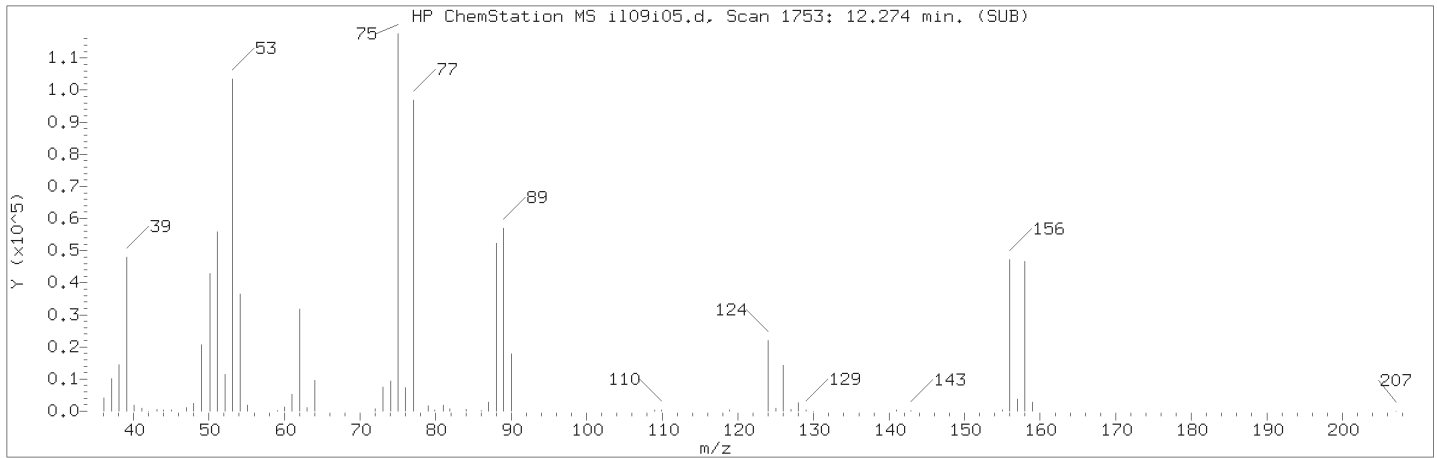
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD001      Lab Sample ID: VSTD001

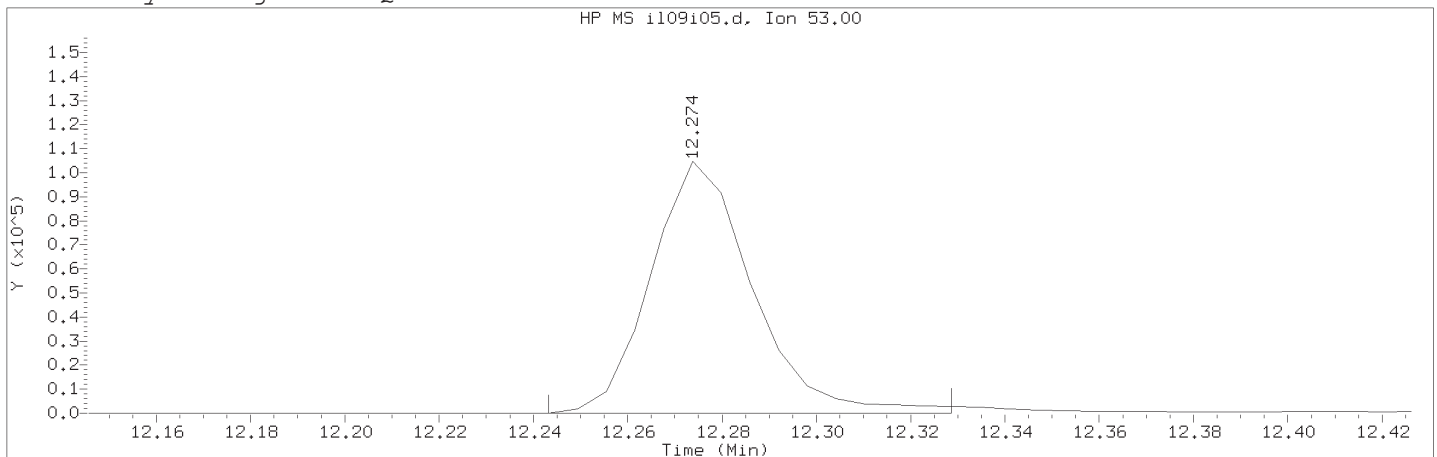
Compound Number : 113  
Compound Name : 1,1,2,2-Tetrachloroethane  
Scan Number : 1749  
Retention Time (minutes): 12.249  
Quant Ion : 83.00  
Area : 54600  
On-column Amount (ng) : 0.9665  
Integration start scan : 1742      Integration stop scan: 1760  
Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

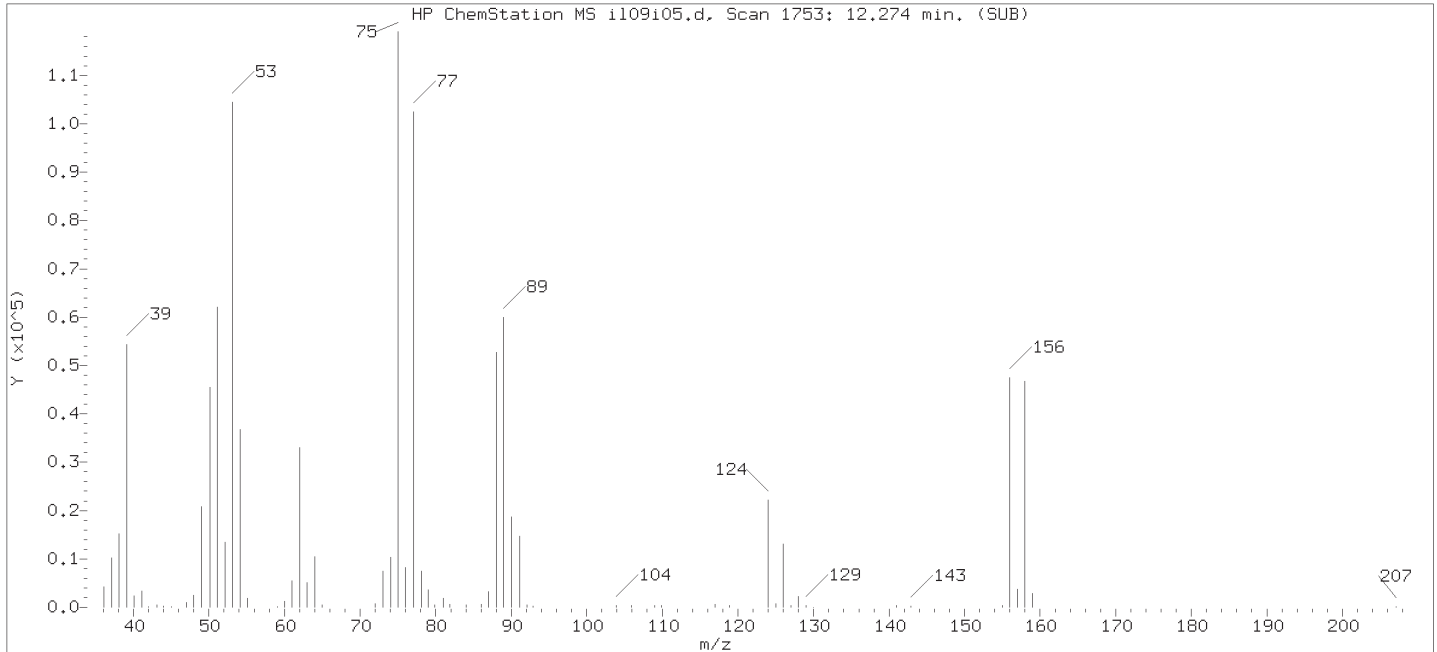
Compound Number                      : 115  
Compound Name                         : trans-1,4-Dichloro-2-butene  
Scan Number                            : 1753  
Retention Time (minutes): 12.274  
Quant Ion                                : 53.00  
Area (flag)                             : 156945M  
On-Column Amount (ng)                : 10.1537  
Integration start scan                 : 1747                      Integration stop scan: 1761  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

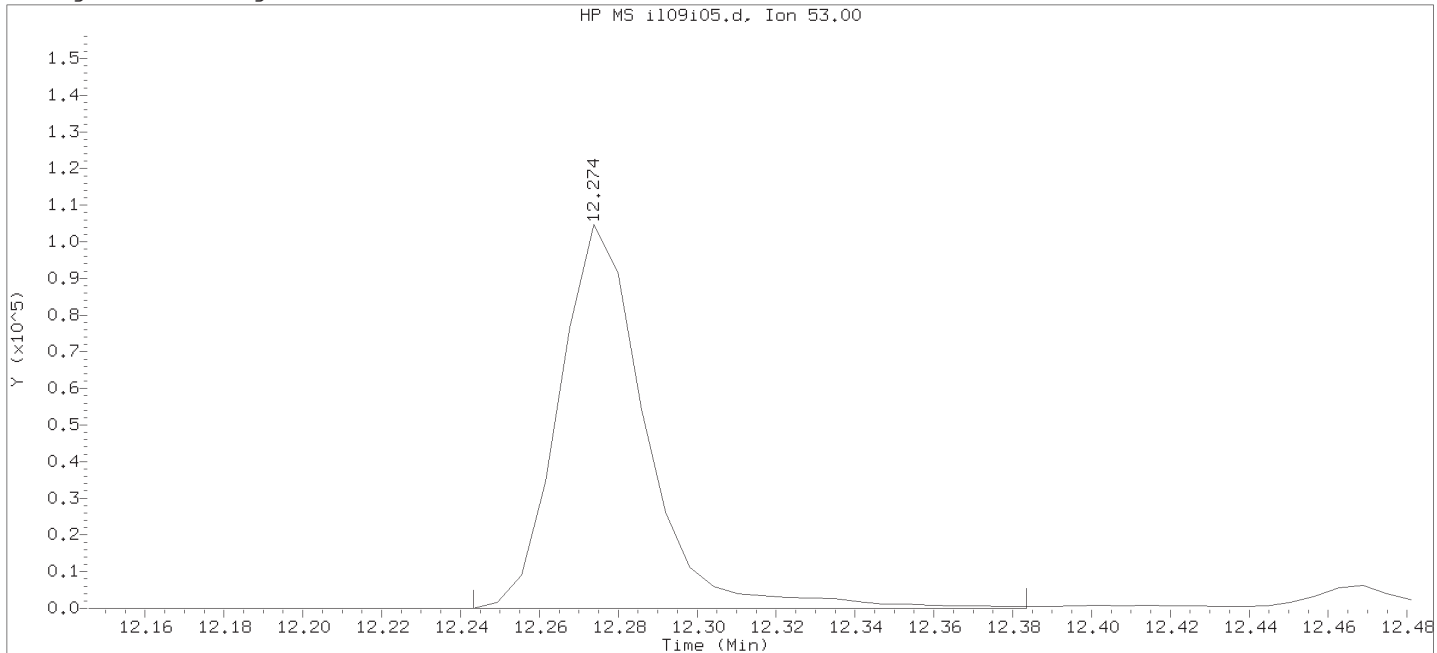
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



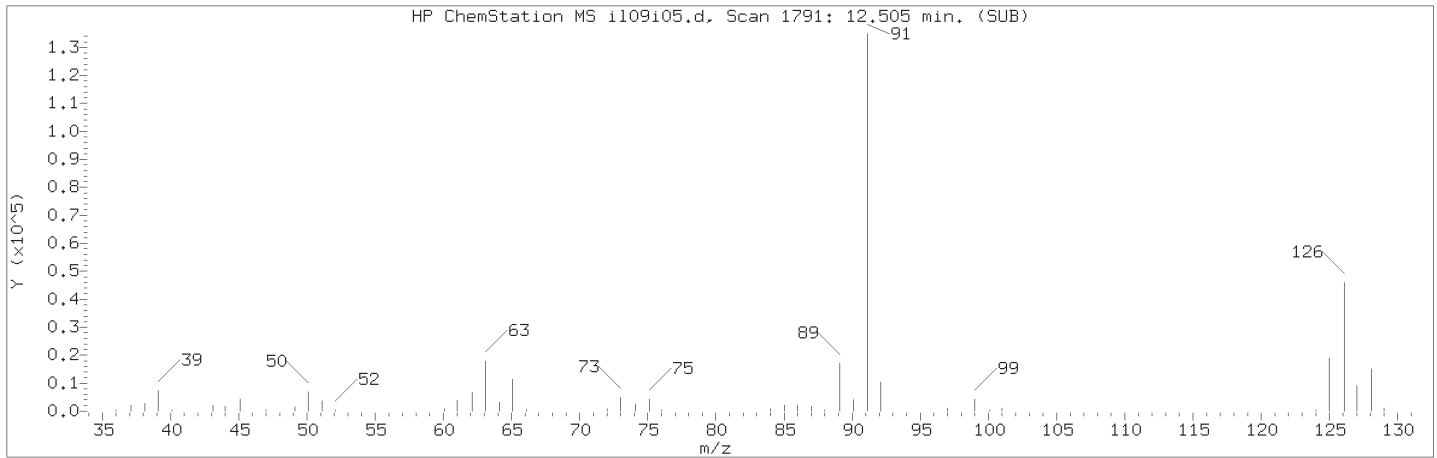
Data File: /chem2/HP19930.i/18jul09i.b/il09i05.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

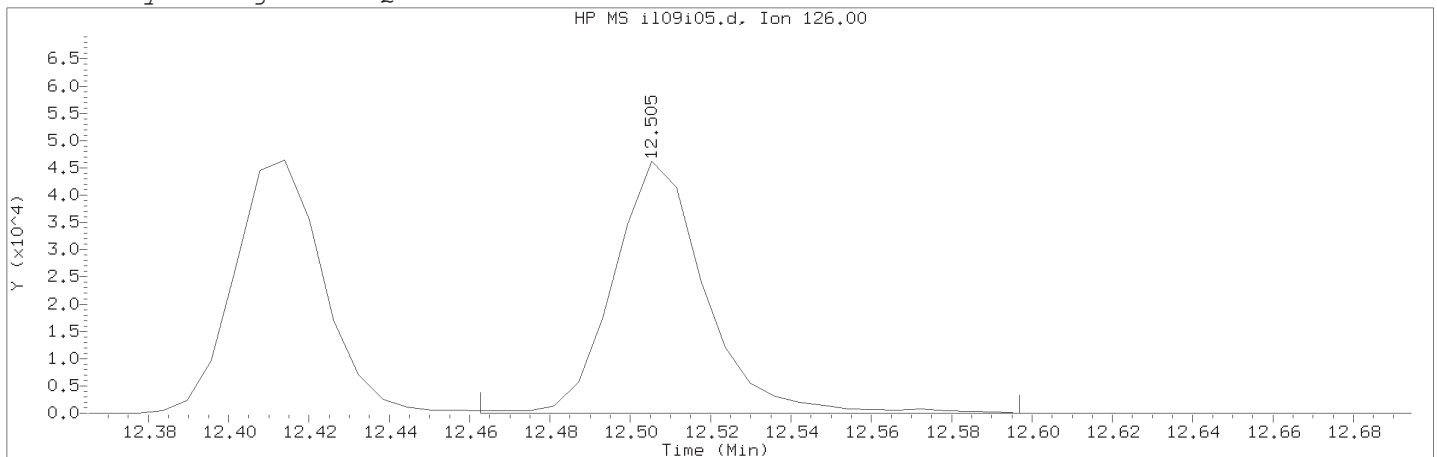
Sample Name: VSTD001      Lab Sample ID: VSTD001

Compound Number      : 115  
Compound Name        : trans-1,4-Dichloro-2-butene  
Scan Number          : 1753  
Retention Time (minutes) : 12.274  
Quant Ion             : 53.00  
Area                  : 160521  
On-column Amount (ng) : 16.7054  
Integration start scan : 1747      Integration stop scan: 1770  
Y at integration start : 0          Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001      Lab Sample ID: VSTD001

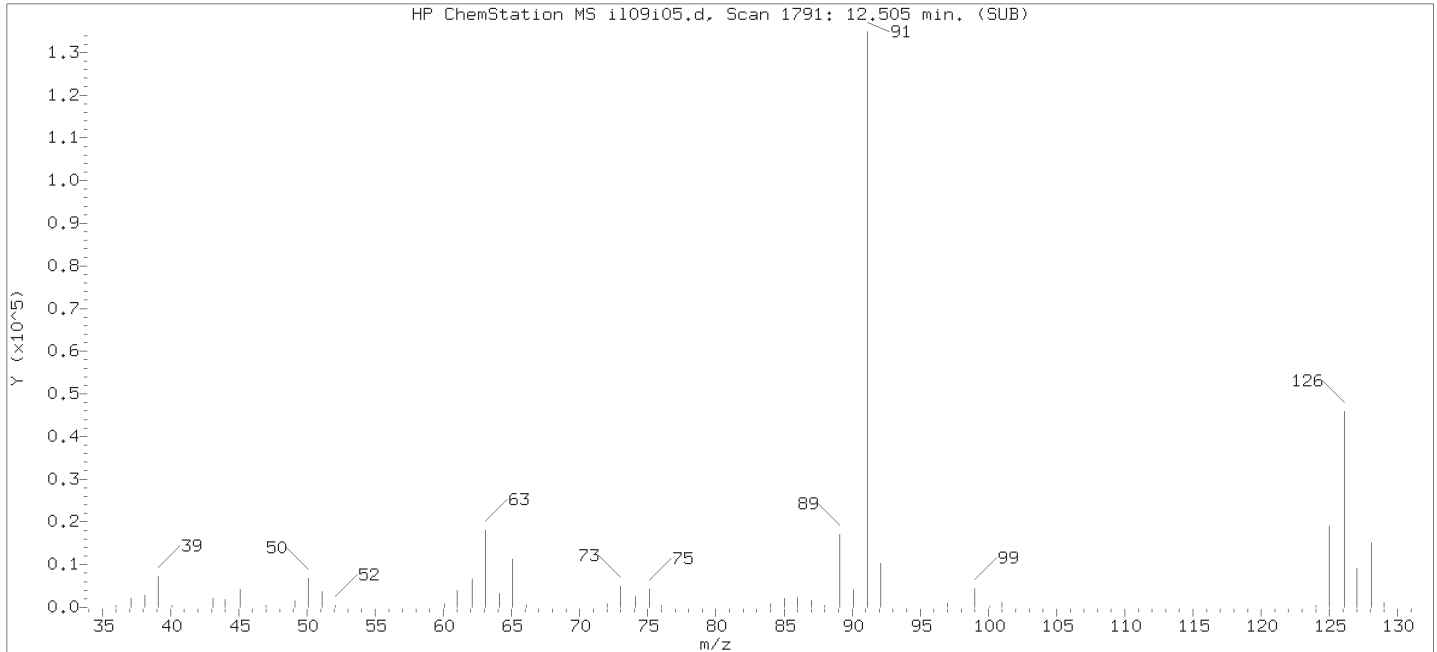
Compound Number : 122  
Compound Name : 4-Chlorotoluene  
Scan Number : 1791  
Retention Time (minutes): 12.505  
Quant Ion : 126.00  
Area (flag) : 73305M  
On-Column Amount (ng) : 0.9946  
Integration start scan : 1783      Integration stop scan: 1805  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

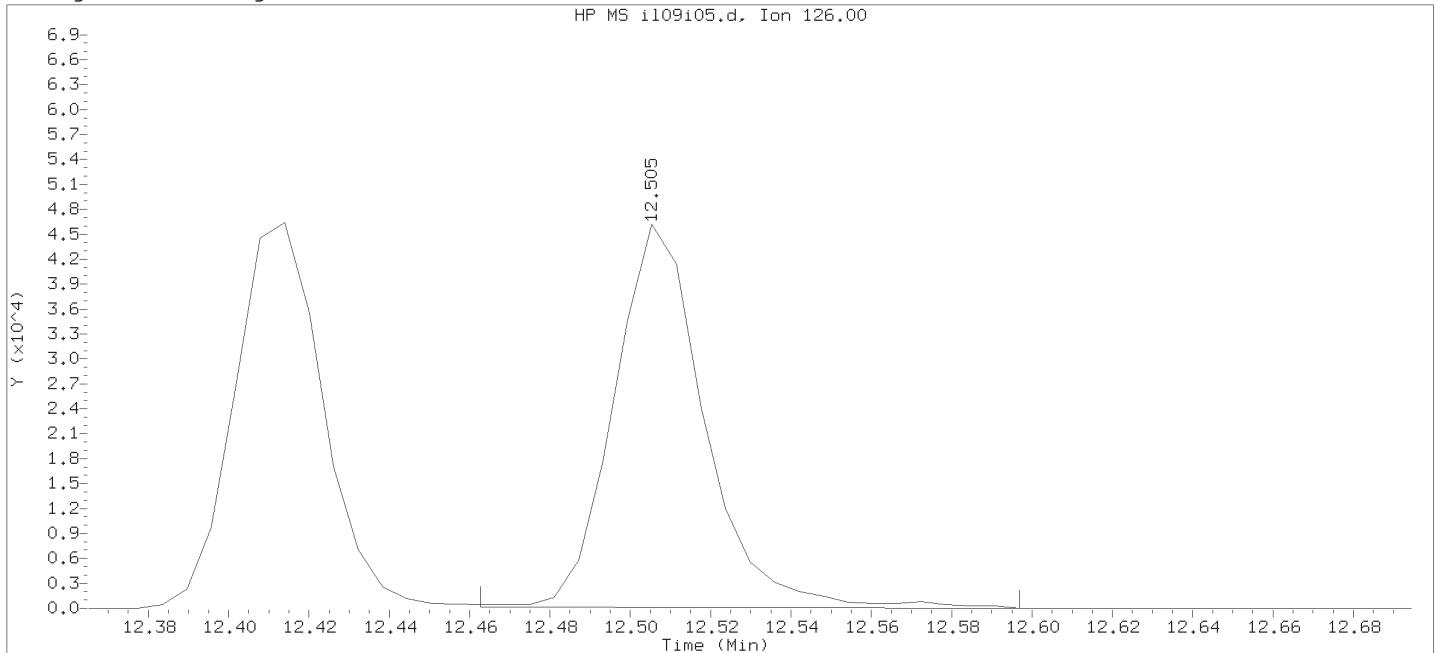
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



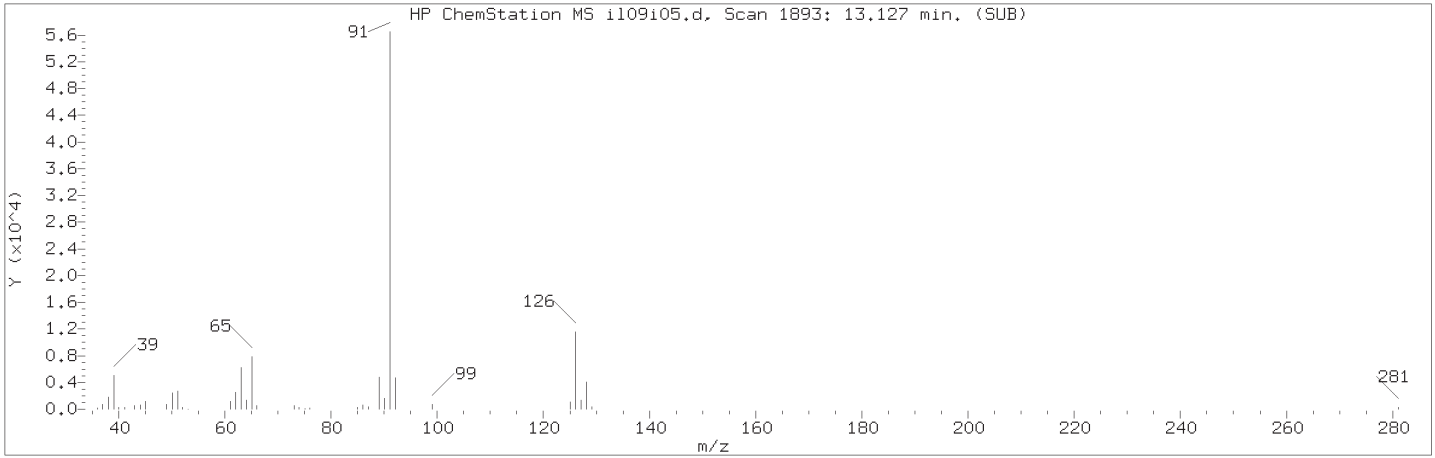
Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

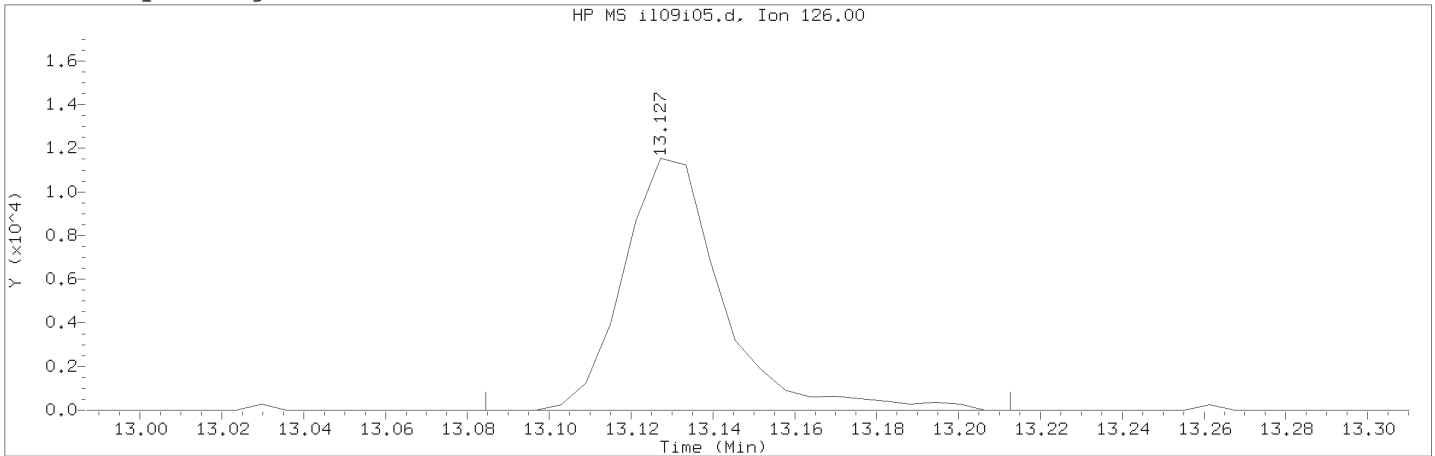
Sample Name: VSTD001      Lab Sample ID: VSTD001

Compound Number : 122  
 Compound Name : 4-Chlorotoluene  
 Scan Number : 1791  
 Retention Time (minutes): 12.505  
 Quant Ion : 126.00  
 Area : 72551  
 On-column Amount (ng) : 0.9668  
 Integration start scan : 1783      Integration stop scan: 1805  
 Y at integration start : 169      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:10                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD001    Lab Sample ID: VSTD001

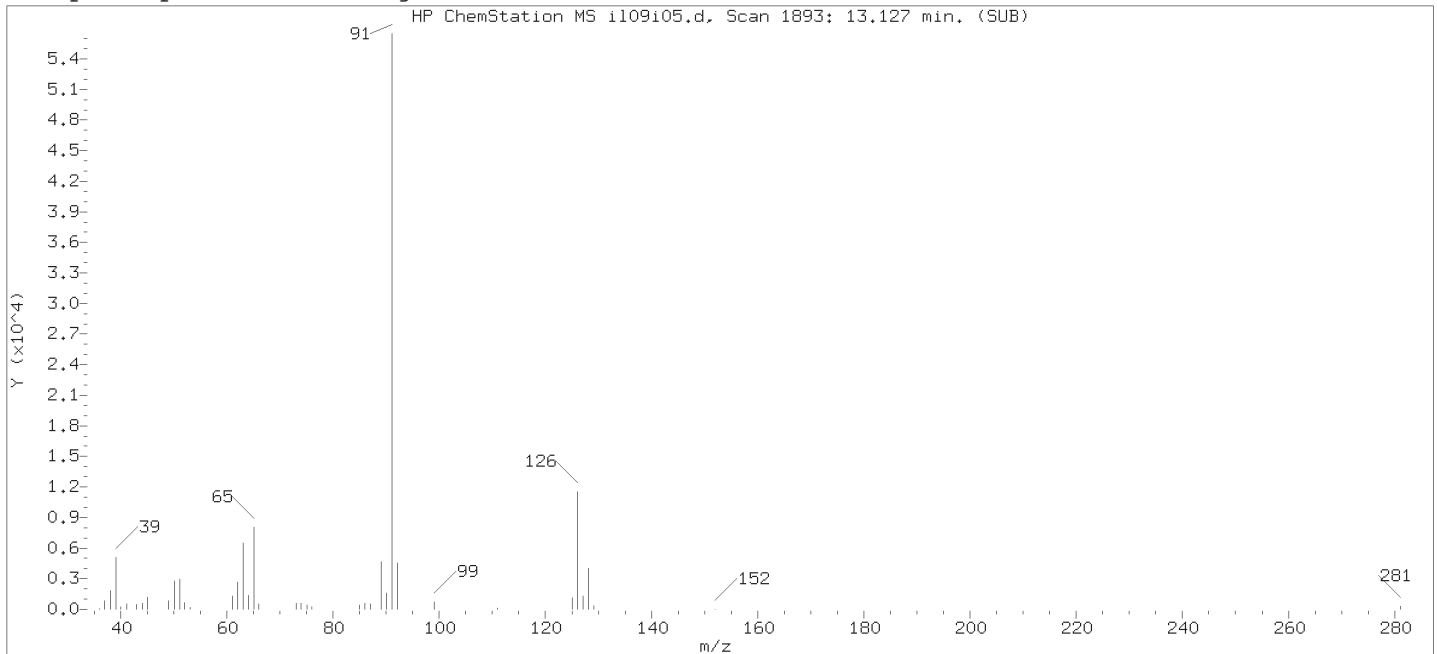
Compound Number                      : 136  
Compound Name                         : Benzyl Chloride  
Scan Number                            : 1893  
Retention Time (minutes): 13.127  
Quant Ion                                : 126.00  
Area (flag)                             : 19310M  
On-Column Amount (ng)                : 0.9466  
Integration start scan                 : 1885                      Integration stop scan: 1906  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

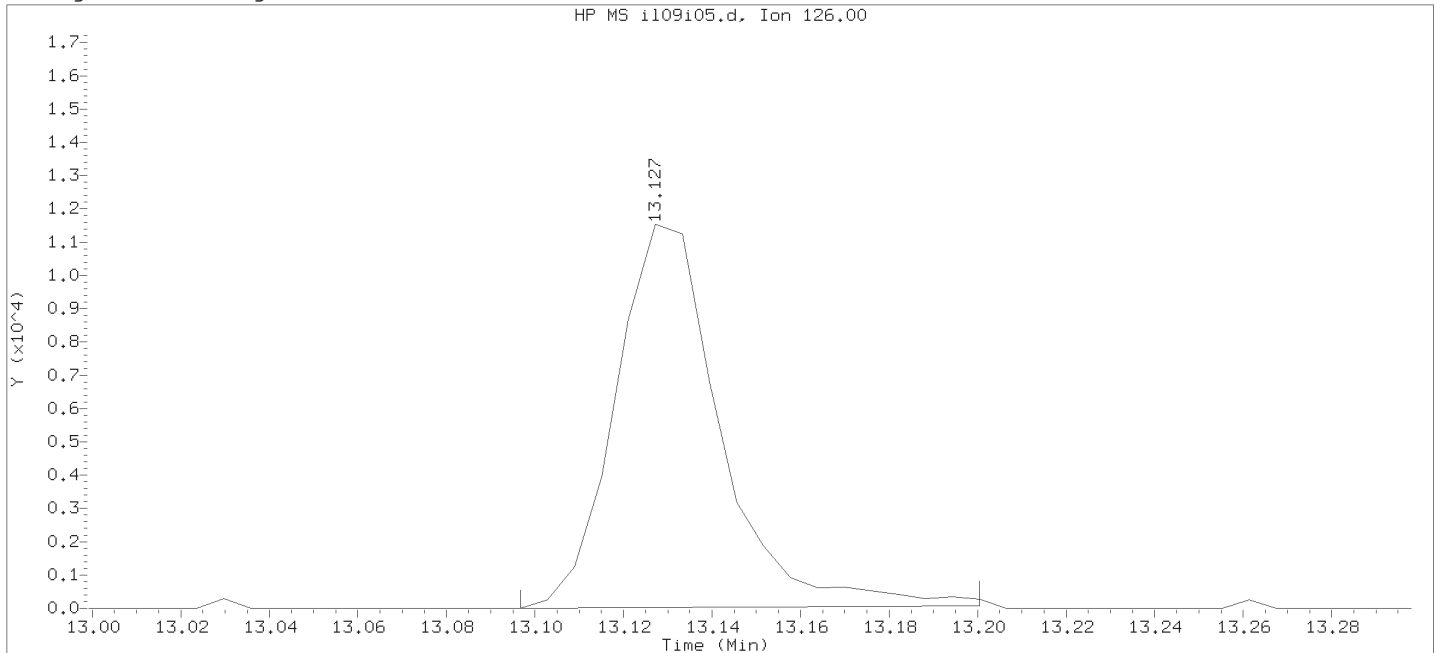
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:40.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

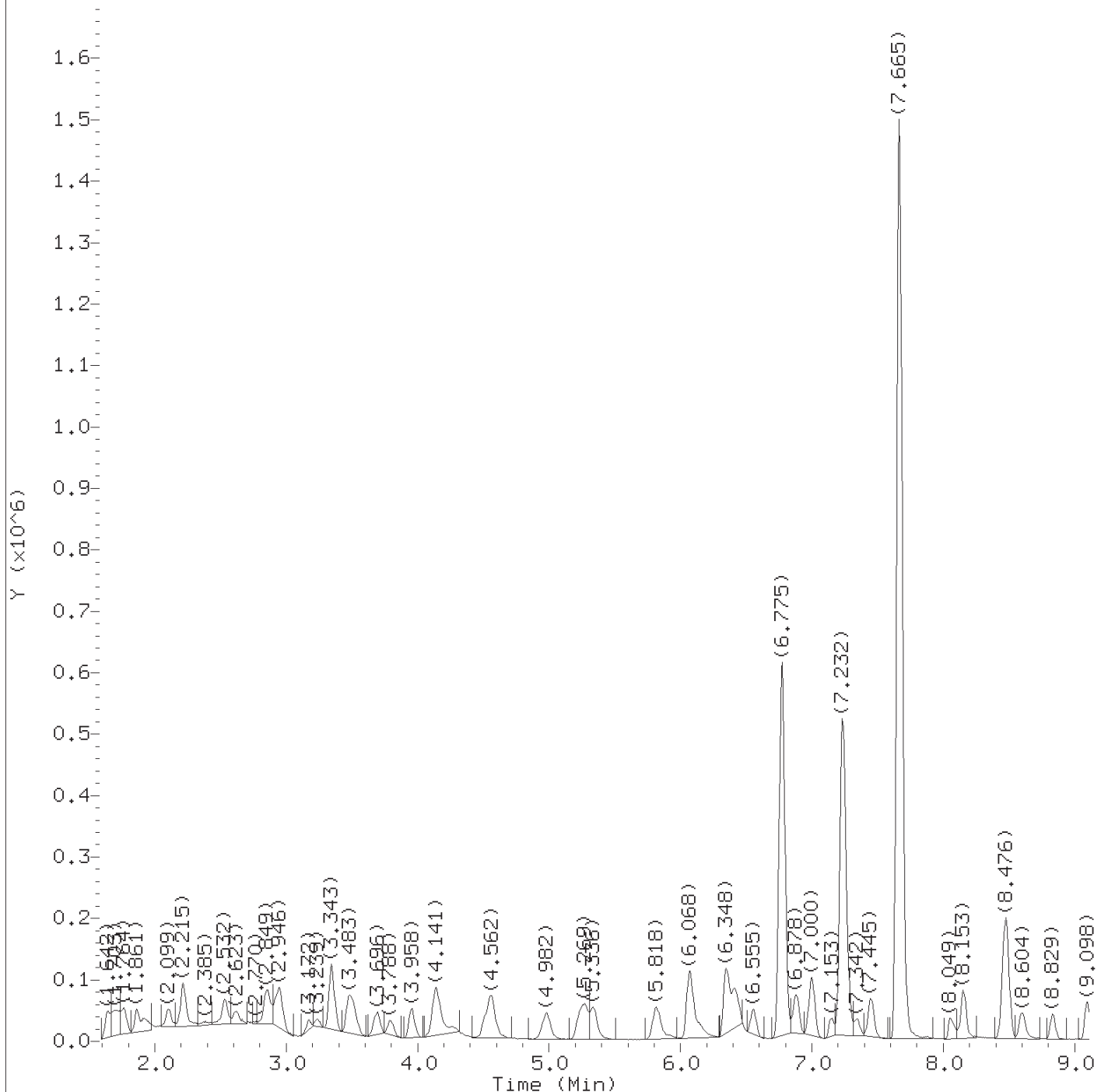


Data File: /chem2/HP19930.i/18jul09i.b/i109i05.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:10      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD001      Lab Sample ID: VSTD001

Compound Number : 136  
 Compound Name : Benzyl Chloride  
 Scan Number : 1893  
 Retention Time (minutes): 13.127  
 Quant Ion : 126.00  
 Area : 19033  
 On-column Amount (ng) : 0.8433  
 Integration start scan : 1887      Integration stop scan: 1904  
 Y at integration start : 0      Y at integration end: 73



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d  
Injection date and time: 09-JUL-2018 14:31

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

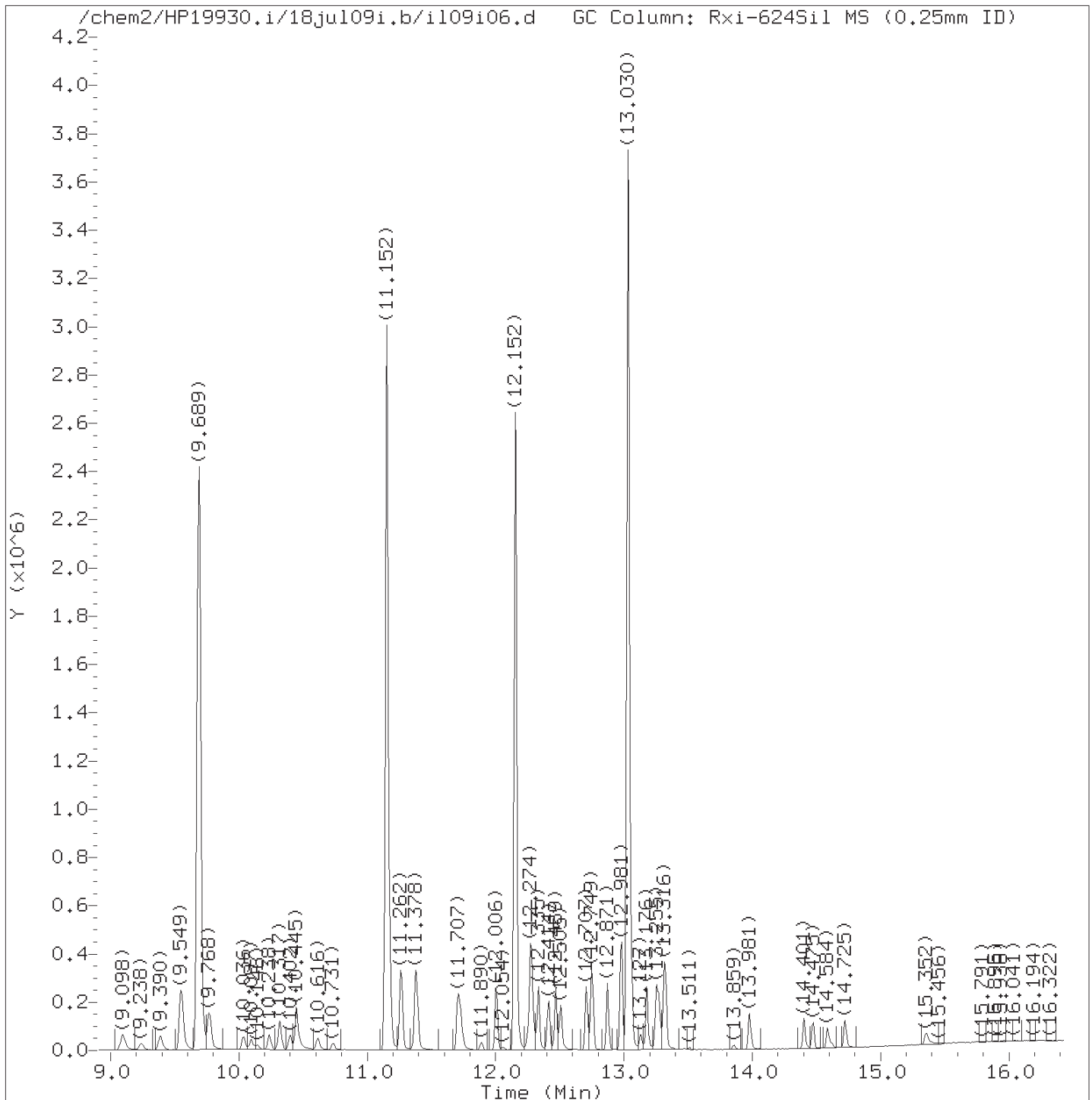
Sublist used: 8260W25

Sample Name: VSTD0.5

Lab Sample ID: VSTD0.5

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203



Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Digitally signed by Don V. Viray  
 on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203  
 TID15 Page 296 of 3058



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5

Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.910	85	63205	0.517
2) Chloromethane	(2)	2.105	50	45078	0.506
6) 1,3-Butadiene	(2)	2.215	39	29794M	0.520
5) Vinyl Chloride	(2)	2.221	62	44551	0.517
7) Bromomethane	(2)	2.532	94	41604	0.513
8) Chloroethane	(2)	2.617	64	25750	0.514
9) Dichlorofluoromethane	(2)	2.849	67	69129M	0.525
10) Trichlorofluoromethane	(2)	2.916	101	76290	0.518
11) Ethyl ether	(2)	3.172	59	24124	0.495
12) Freon 123a	(2)	3.233	67	38857	0.522
13) Acrolein	(1)	3.343	56	196835	25.707
15) 1,1-Dichloroethene	(2)	3.471	96	26243	0.517
16) Freon 113	(2)	3.507	101	30137	0.511
14) Acetone	(1)	3.525	43	60007M	5.270
17) Methyl Iodide	(2)	3.678	142	51573	0.495
18) Carbon Disulfide	(2)	3.794	76	75051	0.498
22) Allyl Chloride	(2)	3.958	41	56492	0.518
21) Methyl Acetate	(1)	3.964	43	12691M	0.491
23) Methylene Chloride	(2)	4.141	84	29848	0.519
26)*t-Butyl Alcohol-d10	(1)	4.147	65	194867	50.000
28) t-Butyl Alcohol	(1)	4.288	59	50975	10.117
29) Acrylonitrile	(1)	4.513	53	29055	2.341
30) Methyl Tertiary Butyl Ether	(2)	4.544	73	78196	0.497
31) trans-1,2-Dichloroethene	(2)	4.562	96	29080	0.505
32) n-Hexane	(2)	4.989	57	45938	0.484
33) 1,1-Dichloroethane	(2)	5.226	63	57130	0.502
34) di-Isopropyl Ether	(2)	5.281	45	102448	0.498
35) 2-Chloro-1,3-Butadiene	(2)	5.342	53	51362	0.477
37) Ethyl t-butyl ether	(2)	5.818	59	96895M	0.504
38) 2-Butanone	(1)	6.068	43	94616	5.010
39) cis-1,2-Dichloroethene	(2)	6.074	96	32571	0.495
41) 2,2-Dichloropropane	(2)	6.080	77	51867	0.502
40) 1,2-Dichloroethene (Total)	(2)		96	61651	1.000
42) Propionitrile	(1)	6.153	54	46570	9.992
45) Methacrylonitrile	(1)	6.348	67	79664	5.015
47) Bromochloromethane	(2)	6.415	128	14175	0.492
48) Tetrahydrofuran	(1)	6.433	71	24531	5.029
49) Chloroform	(2)	6.555	83	57557	0.502

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.775	113	521582	9.986
50) \$Dibromofluoromethane	(2)	6.775	111	534072	9.967
51) 1,1,1-Trichloroethane	(2)	6.781	97	55876	0.507
52) Cyclohexane	(2)	6.885	56	61302	0.527
52) Cyclohexane	(2)	6.878	84	45281	0.496
52) Cyclohexane	(2)	6.878	69	17250	0.501
54) Carbon Tetrachloride	(2)	7.000	117	47645	0.494
55) 1,1-Dichloropropene	(2)	7.006	75	44597	0.513
56) Isobutyl Alcohol	(1)	7.153	41	35826	23.485
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	98196	9.901
57) \$1,2-Dichloroethane-d4	(2)	7.232	65	589718	10.042
57) \$1,2-Dichloroethane-d4	(2)	7.232	104	62745	9.871
58) Benzene	(2)	7.263	78	122587	0.504
59) 1,2-Dichloroethane	(2)	7.348	62	42283	0.516
59) 1,2-Dichloroethane	(2)	7.348	98	2783	0.491
60) t-Amyl methyl ether	(2)	7.452	73	83279	0.497
63) *Fluorobenzene	(2)	7.665	96	2000960	10.000
62) n-Heptane	(2)	7.665	43	54569	0.525
65) n-Butanol	(1)	8.049	56	50688	44.552
67) Trichloroethene	(2)	8.153	95	32747	0.492
69) Methylcyclohexane	(2)	8.464	83	58056	0.482
70) 1,2-Dichloropropane	(2)	8.488	63	30318	0.498
71) Methyl Methacrylate	(1)	8.585	69	13350	0.463
72) 1,4-Dioxane	(1)	8.592	88	6370M	24.775
72) 1,4-Dioxane	(1)	8.598	58	4236M	22.775
73) Dibromomethane	(2)	8.604	93	15144	0.495
74) Bromodichloromethane	(2)	8.835	83	39028	0.475
76) 2-Nitropropane	(1)	9.098	41	64527	4.989
80) cis-1,3-Dichloropropene	(2)	9.384	75	43001	0.461
81) 4-Methyl-2-Pentanone	(1)	9.549	43	231488	5.008
82) \$Toluene-d8	(3)	9.689	98	1941197	10.194
82) \$Toluene-d8	(3)	9.689	100	1252152	10.188
83) Toluene	(3)	9.768	92	76174	0.508
84) trans-1,3-Dichloropropene	(3)	10.036	75	35462	0.473
86) Ethyl Methacrylate	(3)	10.097	69	29701	0.458
85) 1,3-Dichloropropene (total)	(3)		75	78463	0.934
88) 1,1,2-Trichloroethane	(3)	10.238	97	20386	0.493
89) Tetrachloroethene	(3)	10.317	166	39065	0.505

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.396	76	36512	0.508
91) 2-Hexanone	(1)	10.445	43	168123	5.075
93) Dibromochloromethane	(3)	10.616	129	24669	0.461
95) 1,2-Dibromoethane	(3)	10.731	107	19380	0.489
97) *Chlorobenzene-d5	(3)	11.152	117	1524391	10.000
98) Chlorobenzene	(3)	11.176	112	83743	0.511
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	29707	0.477
100) Ethylbenzene	(3)	11.262	91	151020M	0.508
101) m+p-Xylene	(3)	11.384	106	113977	0.984
104) o-Xylene	(3)	11.707	106	57593	0.498
106) Styrene	(3)	11.731	104	82786M	0.475
105) Xylene (Total)	(3)		106	171570	1.481
107) Bromoform	(3)	11.890	173	14335	0.440
108) Isopropylbenzene	(3)	12.006	105	149562	0.496
111) \$4-Bromofluorobenzene	(3)	12.152	95	765342	10.211
111) \$4-Bromofluorobenzene	(3)	12.158	174	694251	10.211
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	24962	0.472
114) Bromobenzene	(4)	12.274	156	36204	0.467
115) trans-1,4-Dichloro-2-butene	(1)	12.274	53	71381M	4.696
116) 1,2,3-Trichloropropane	(4)	12.298	110	7766	0.505
117) n-Propylbenzene	(4)	12.335	91	176626	0.499
119) 2-Chlorotoluene	(4)	12.414	126	34992	0.495
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	123139	0.485
122) 4-Chlorotoluene	(4)	12.512	126	35024	0.489
125) tert-Butylbenzene	(4)	12.707	134	25652	0.469
126) Pentachloroethane	(4)	12.743	167	20987	0.440
127) 1,2,4-Trimethylbenzene	(4)	12.755	105	122472	0.477
128) sec-Butylbenzene	(4)	12.871	105	161031	0.493
131) 1,3-Dichlorobenzene	(4)	12.981	146	69108	0.471
132) p-Isopropyltoluene	(4)	12.981	119	131070	0.455
133) *1,4-Dichlorobenzene-d4	(4)	13.030	152	862203	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	73667	0.491
135) 1,2,3-Trimethylbenzene	(4)	13.054	120	55671M	0.477
136) Benzyl Chloride	(4)	13.133	126	7778M	0.392
138) n-Butylbenzene	(4)	13.274	92	59744M	0.452
139) 1,2-Dichlorobenzene	(4)	13.310	146	66621	0.490
143) 1,2-Dibromo-3-chloropropane	(1)	13.859	155	3201	0.425
144) 1,3,5-Trichlorobenzene	(4)	13.981	180	48186	0.453

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5

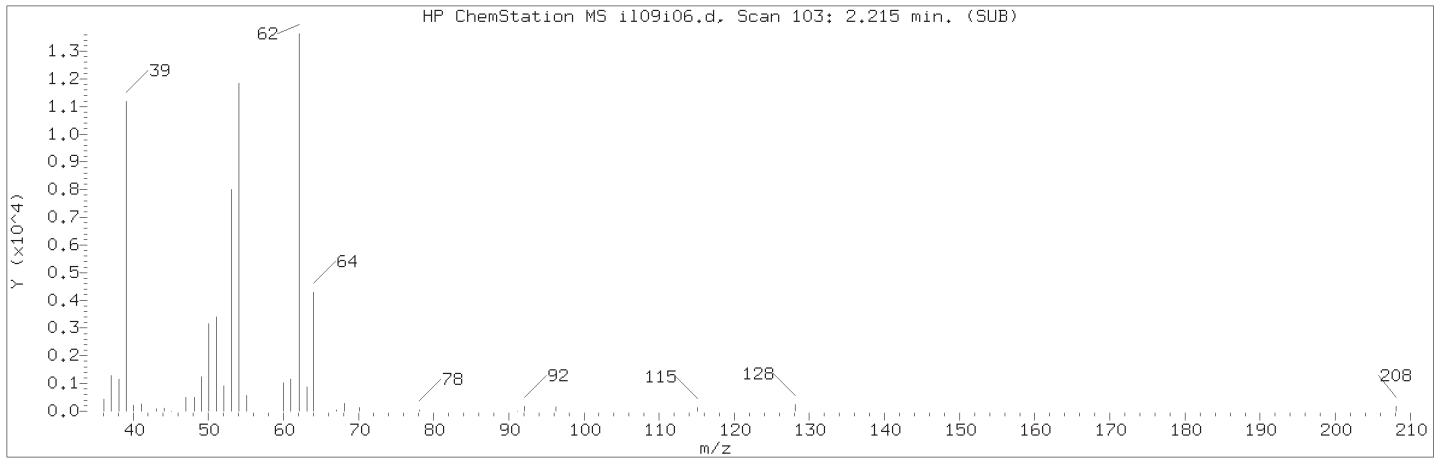
Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,2,4-Trichlorobenzene	(4)	14.401	180	40874	0.446
146) Hexachlorobutadiene	(4)	14.475	225	17168	0.441
147) Naphthalene	(4)	14.584	128	76154	0.459
148) 1,2,3-Trichlorobenzene	(4)	14.725	180	35587	0.454

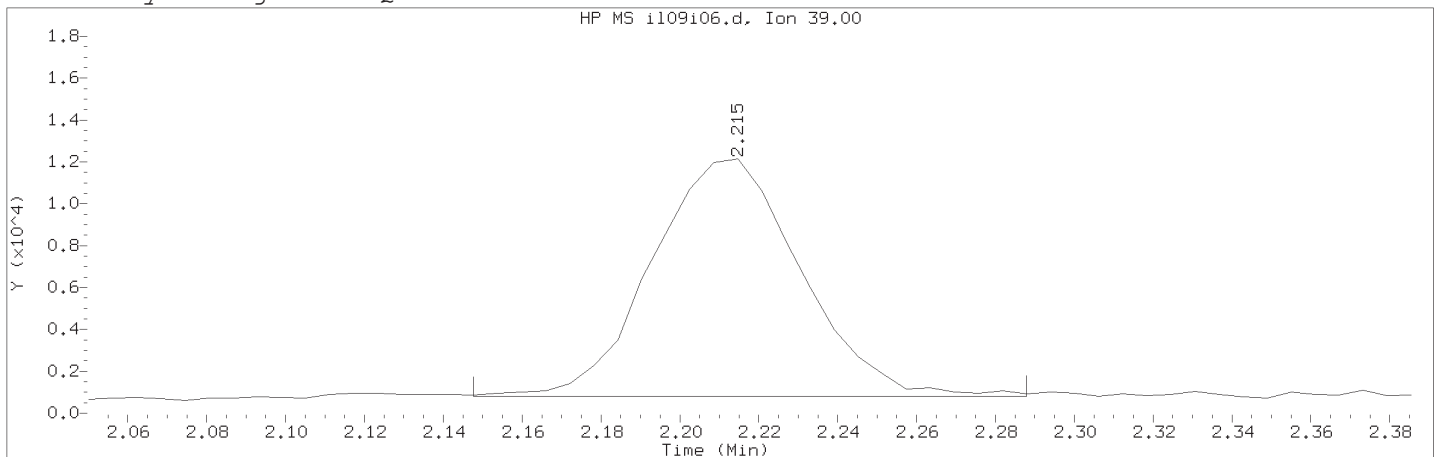
page 4 of 4

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

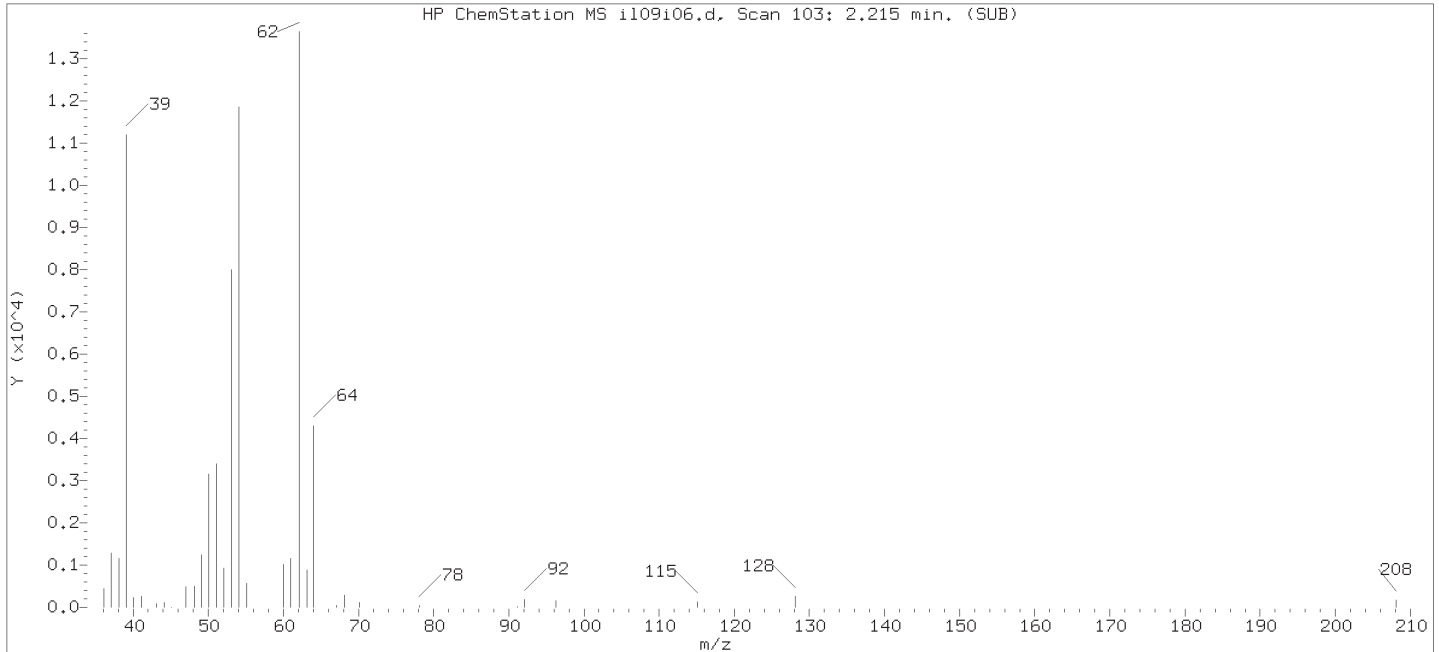
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 103  
Retention Time (minutes): 2.215  
Quant Ion                                : 39.00  
Area (flag)                             : 29794M  
On-Column Amount (ng)                : 0.5203  
Integration start scan                 : 91                      Integration stop scan: 114  
Y at integration start                 : 799                    Y at integration end: 799

Reason for manual integration: improper integration

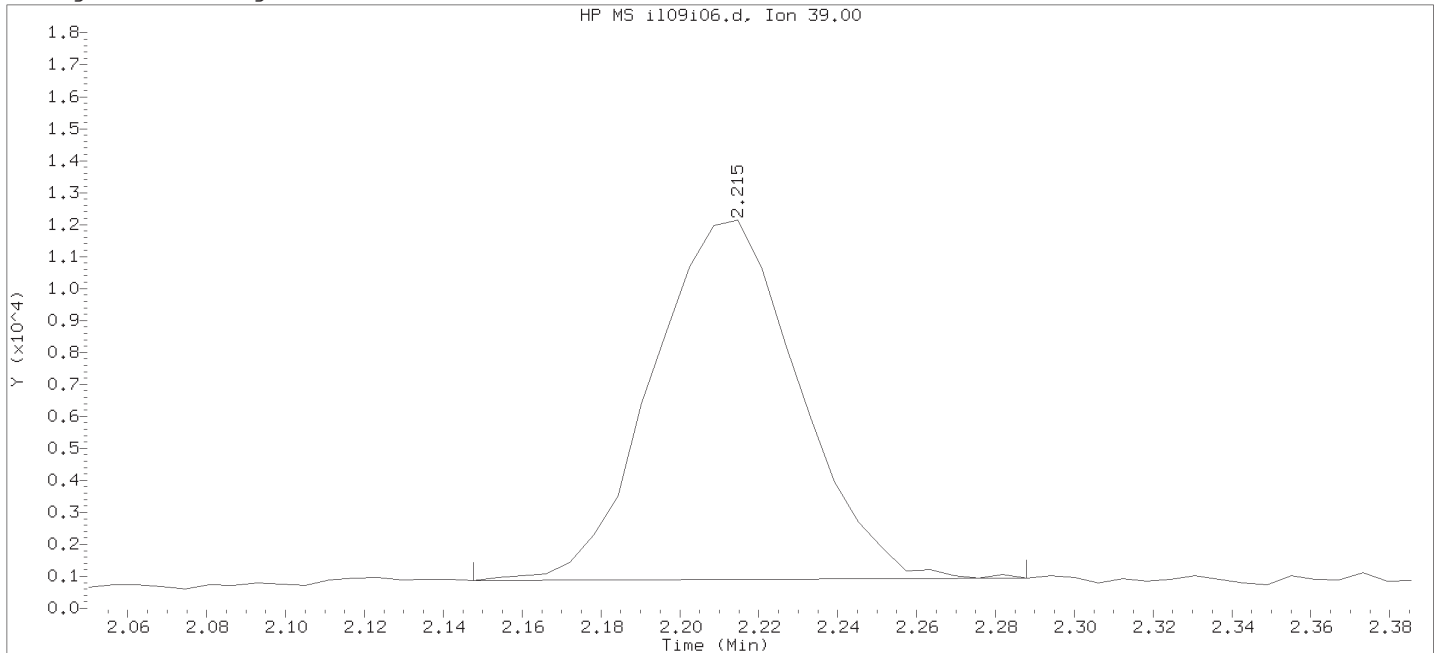
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



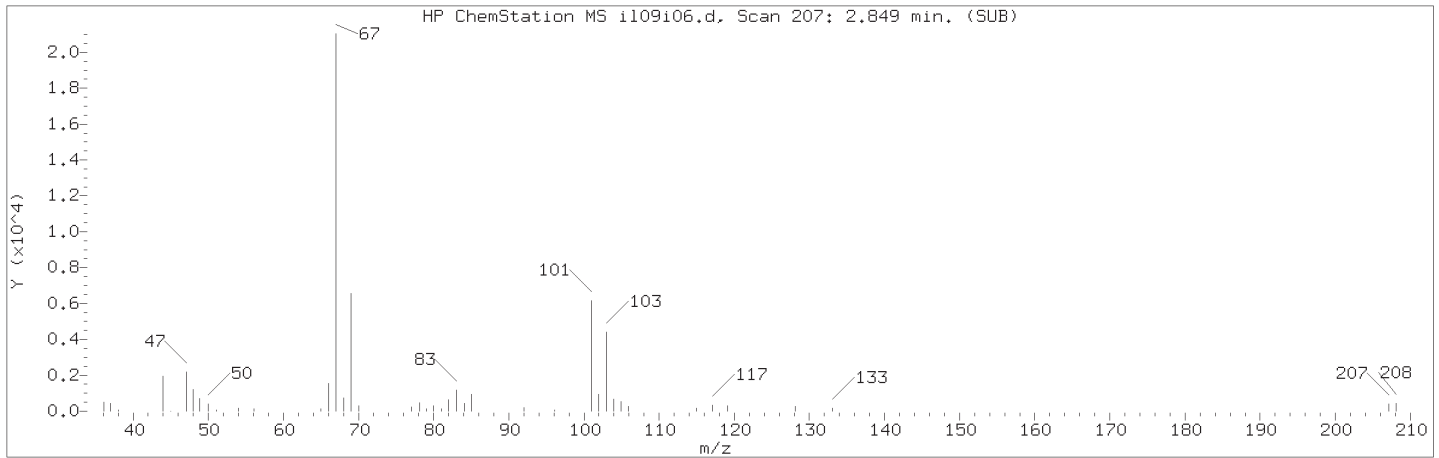
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 Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

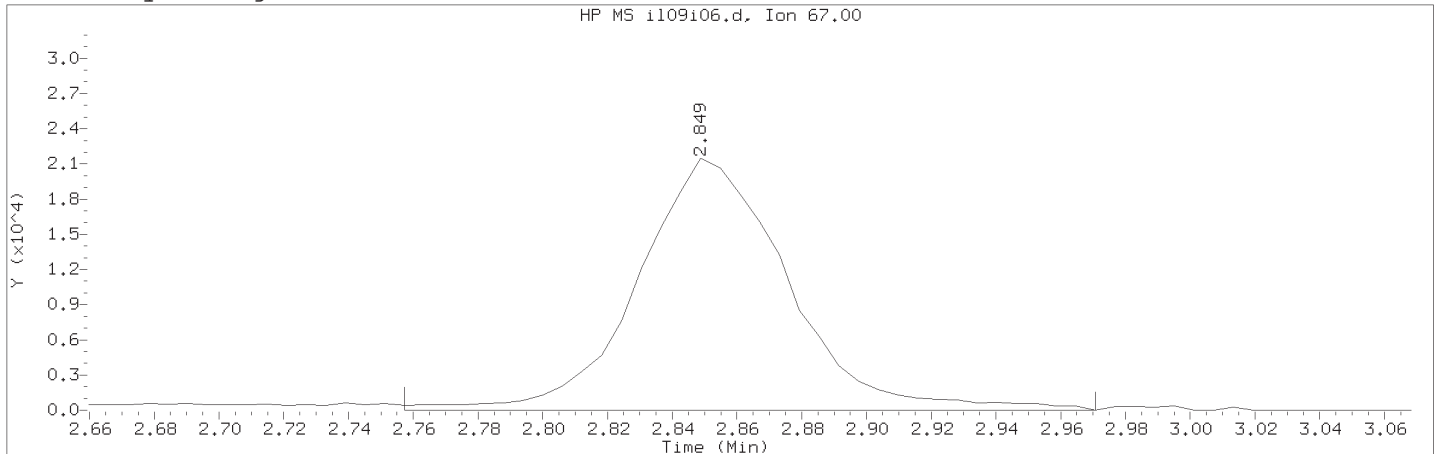
Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 6  
 Compound Name : 1,3-Butadiene  
 Scan Number : 103  
 Retention Time (minutes): 2.215  
 Quant Ion : 39.00  
 Area : 28868  
 On-column Amount (ng) : 0.4984  
 Integration start scan : 91      Integration stop scan: 114  
 Y at integration start : 873      Y at integration end: 936

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

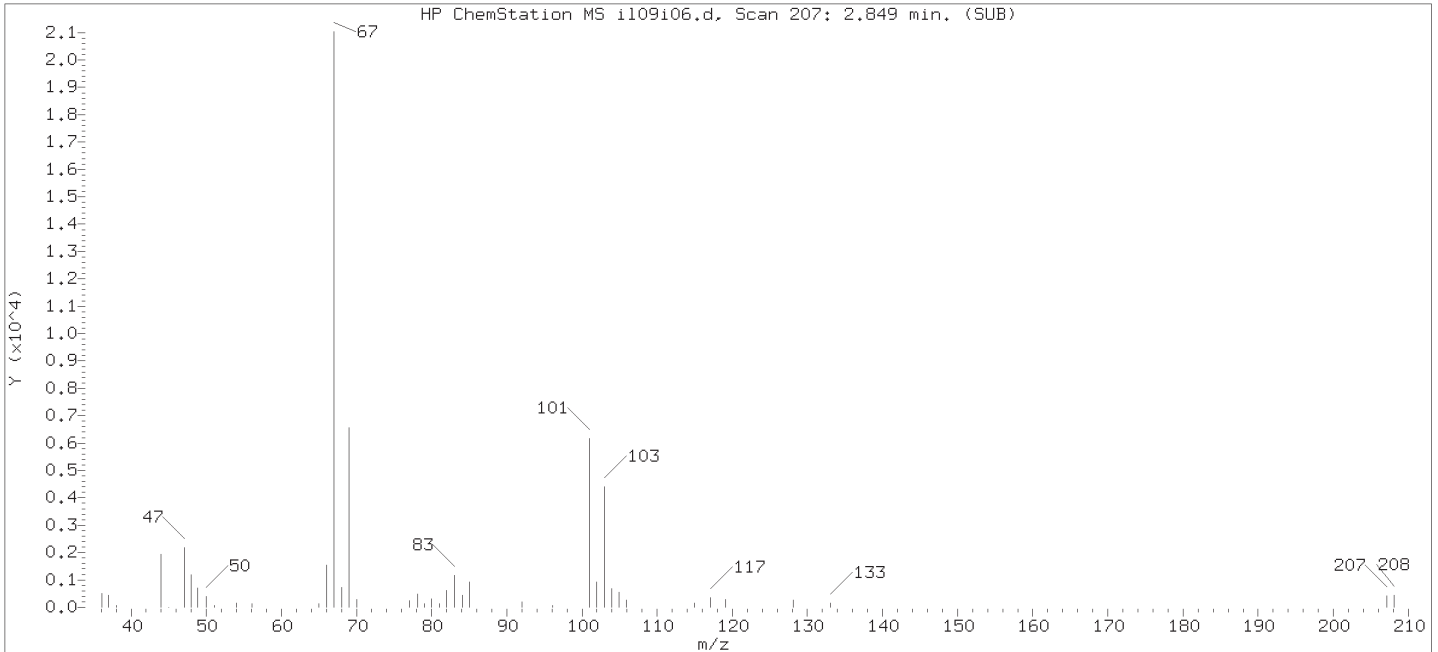
Compound Number                      : 9  
Compound Name                         : Dichlorofluoromethane  
Scan Number                            : 207  
Retention Time (minutes): 2.849  
Quant Ion                                : 67.00  
Area (flag)                             : 69129M  
On-Column Amount (ng)                : 0.5247  
Integration start scan                 : 191                      Integration stop scan: 226  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

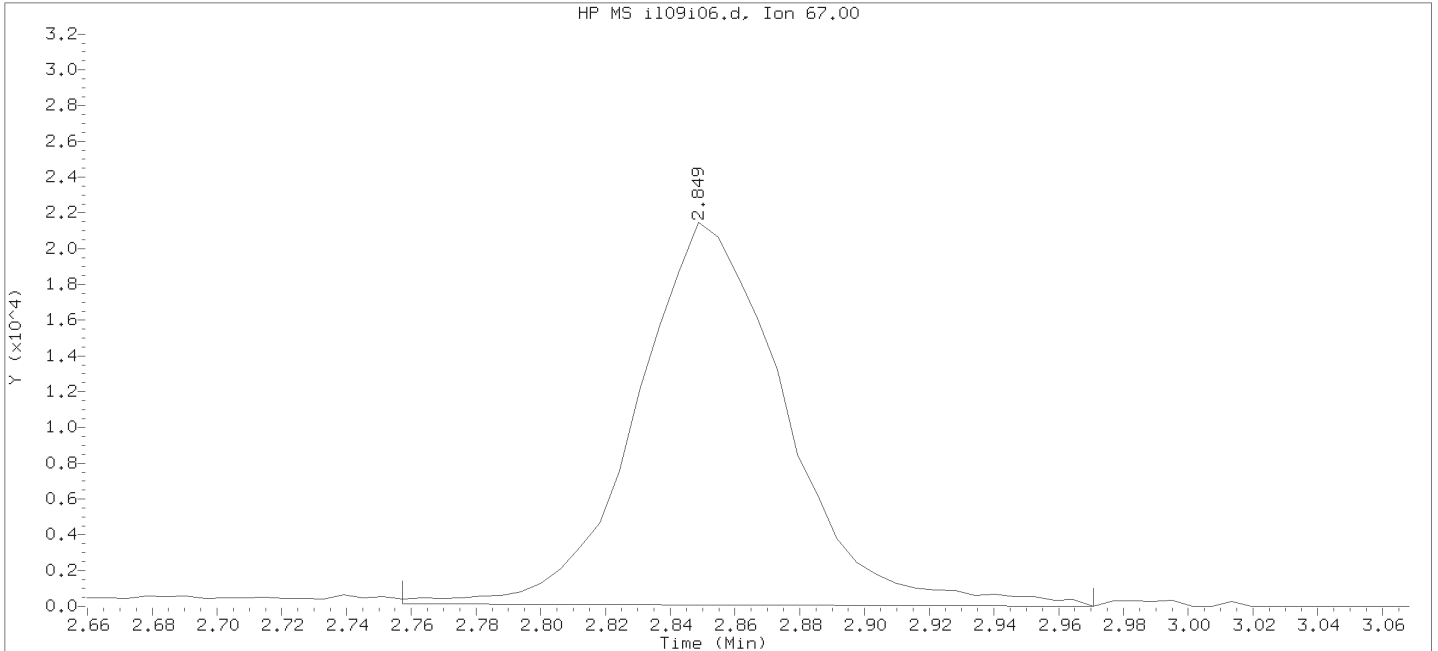
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

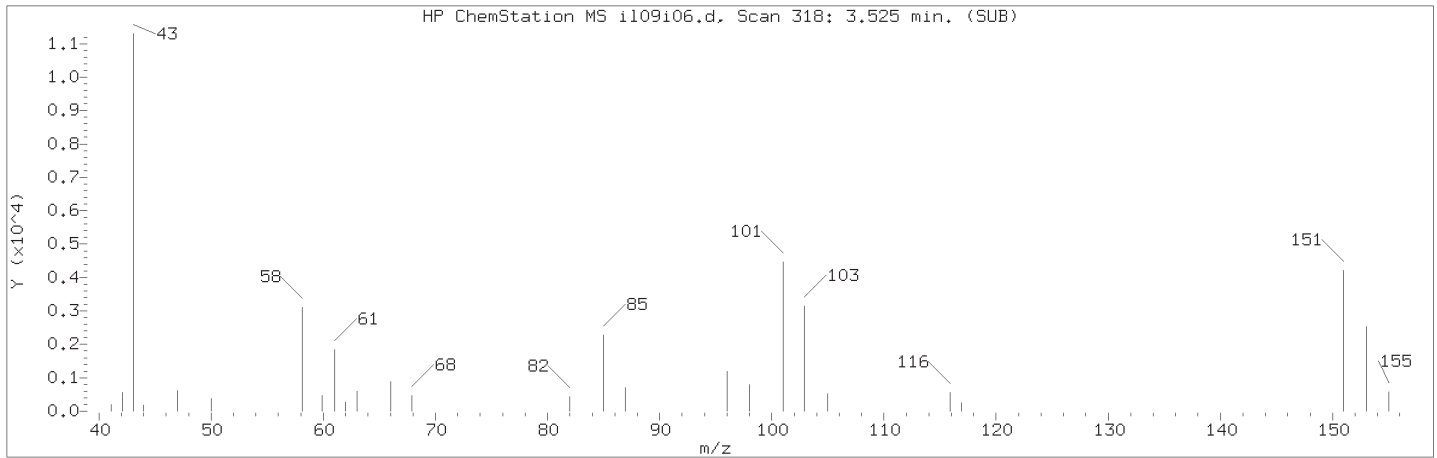
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

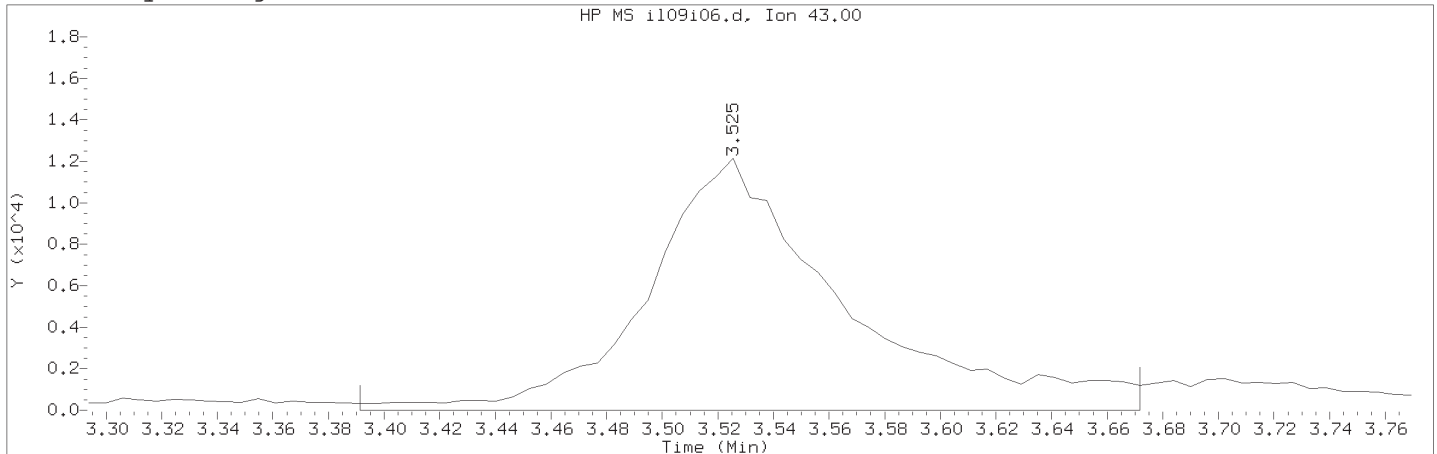
Compound Number                      : 9  
Compound Name                        : Dichlorofluoromethane  
Scan Number                            : 207  
Retention Time (minutes): 2.849  
Quant Ion                                : 67.00  
Area                                      : 68276  
On-column Amount (ng)                : 0.5383  
Integration start scan                : 191                      Integration stop scan: 226  
Y at integration start                : 122                      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

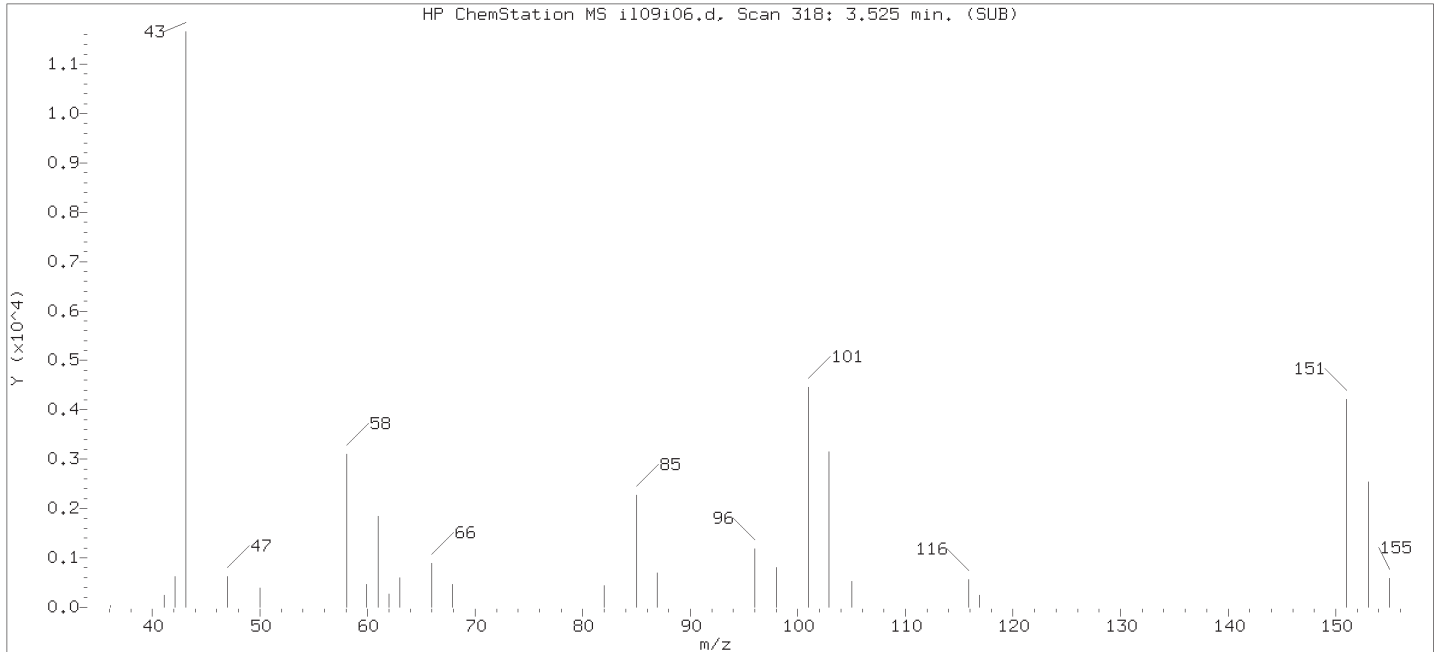
Compound Number                      : 14  
Compound Name                         : Acetone  
Scan Number                            : 318  
Retention Time (minutes): 3.525  
Quant Ion                                : 43.00  
Area (flag)                             : 60007M  
On-Column Amount (ng)                : 5.2697  
Integration start scan                : 295                      Integration stop scan: 341  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

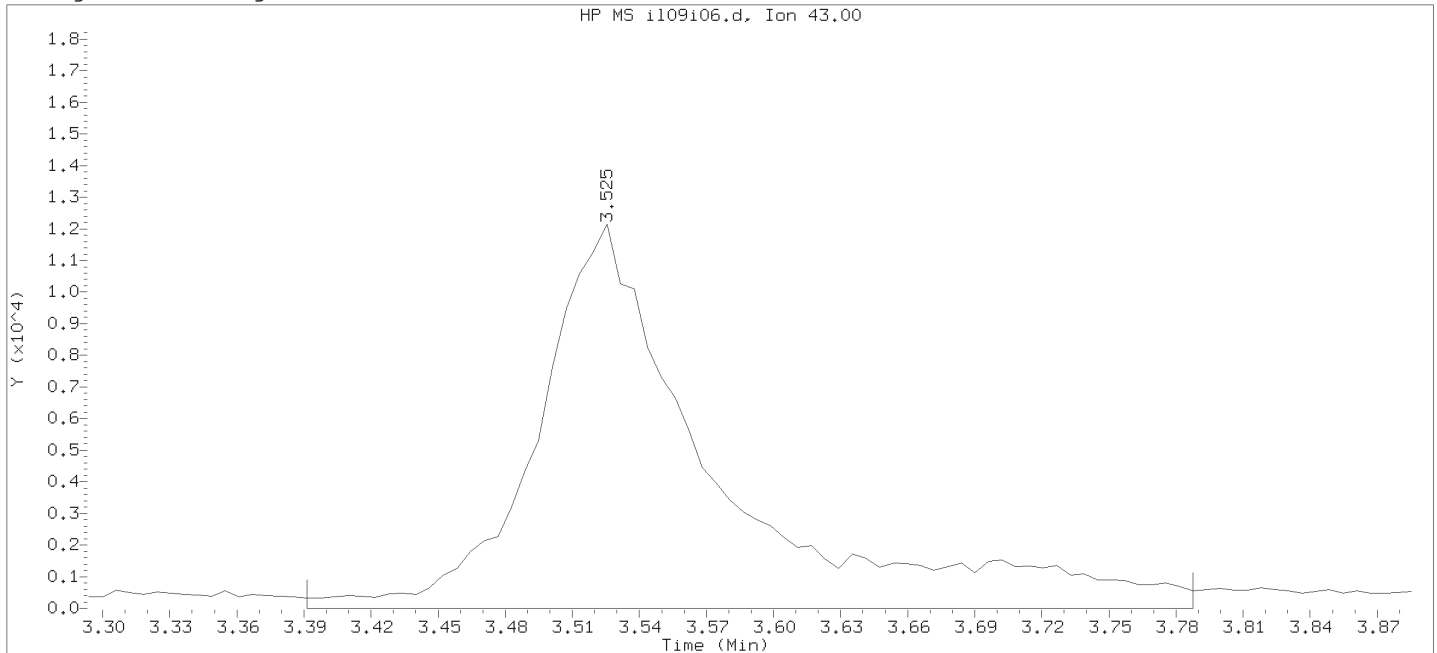
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

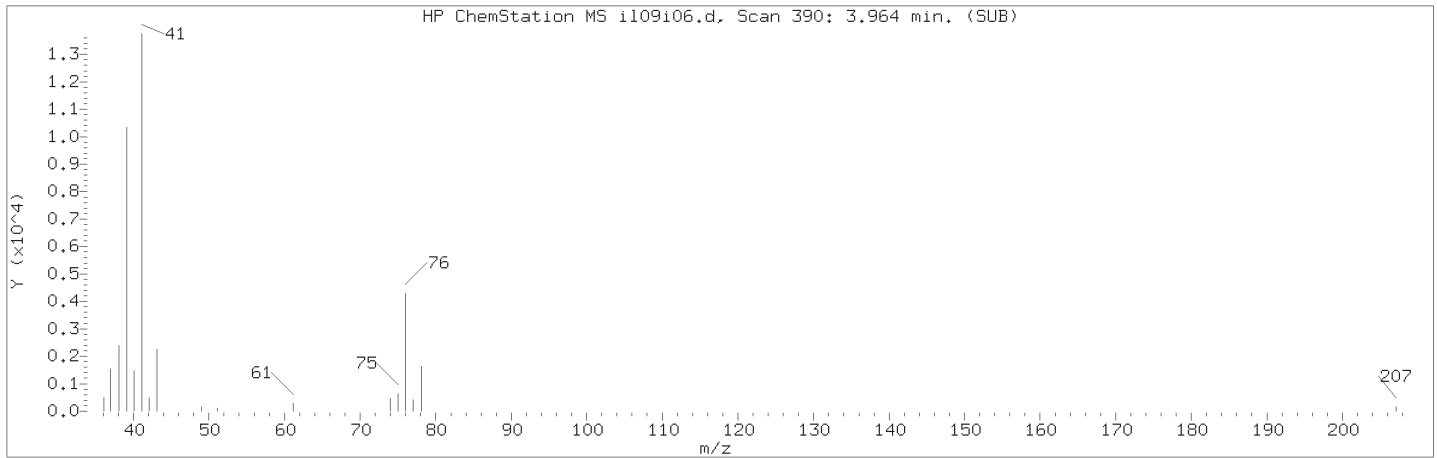
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD0.5

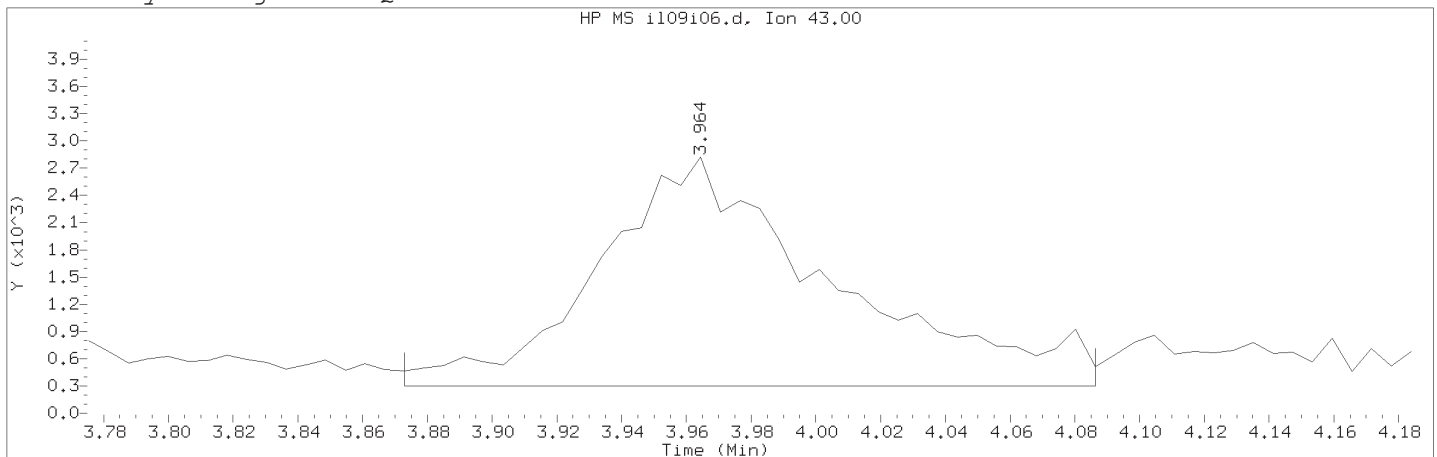
Lab Sample ID: VSTD0.5

Compound Number : 14  
Compound Name : Acetone  
Scan Number : 318  
Retention Time (minutes): 3.525  
Quant Ion : 43.00  
Area : 67343  
On-column Amount (ng) : 5.5569  
Integration start scan : 295      Integration stop scan: 360  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

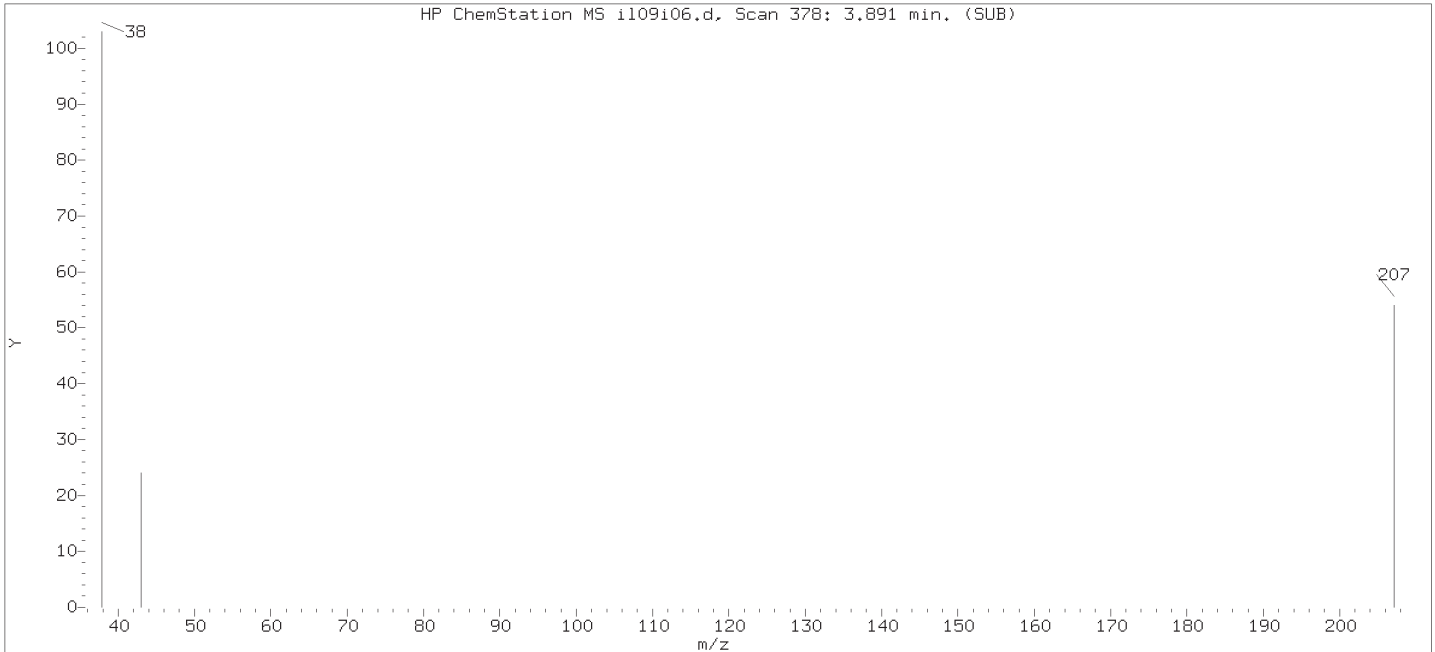
Compound Number                      : 21  
Compound Name                         : Methyl Acetate  
Scan Number                            : 390  
Retention Time (minutes): 3.964  
Quant Ion                                : 43.00  
Area (flag)                             : 12691M  
On-Column Amount (ng)                : 0.4909  
Integration start scan                 : 374                      Integration stop scan: 409  
Y at integration start                 : 299                      Y at integration end: 299

Reason for manual integration: improper integration

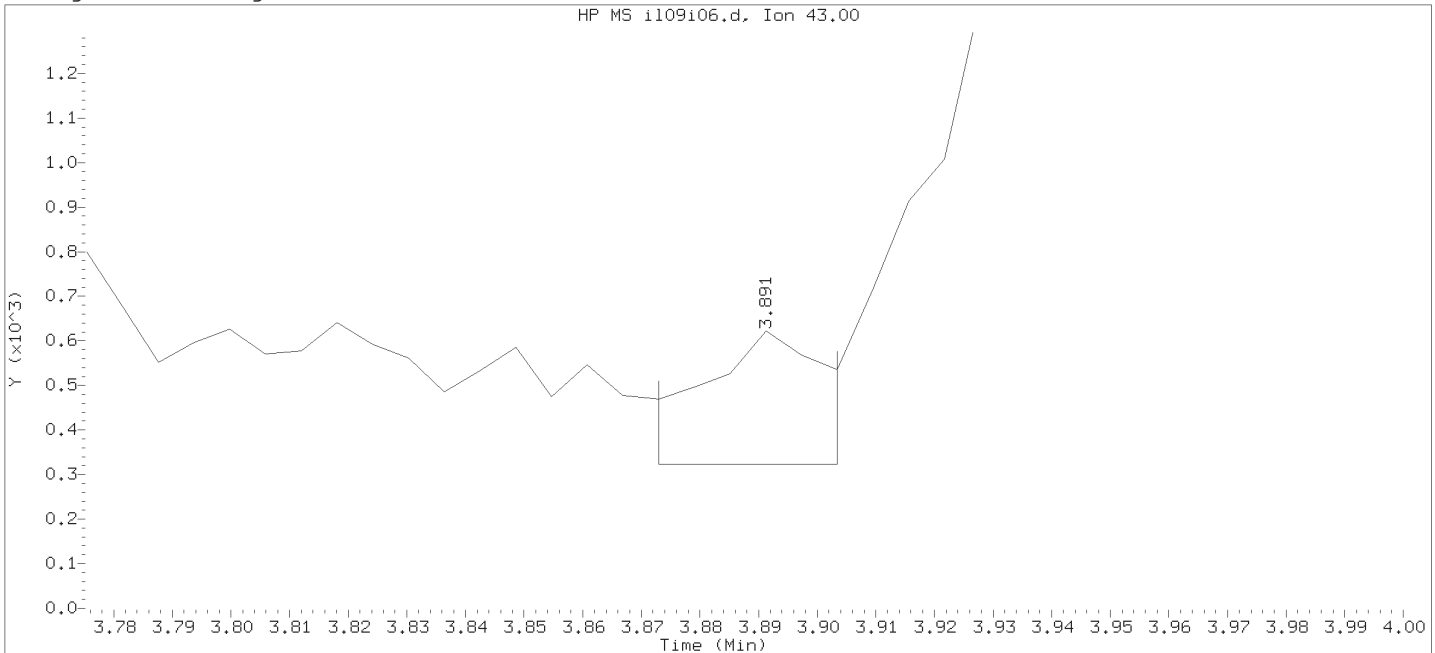
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



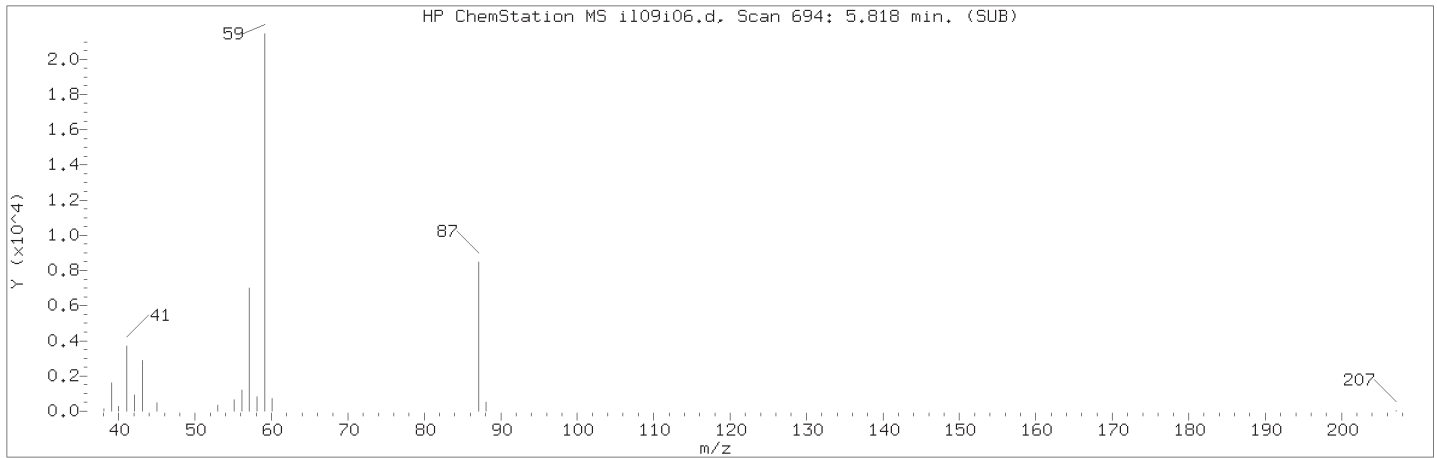
Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

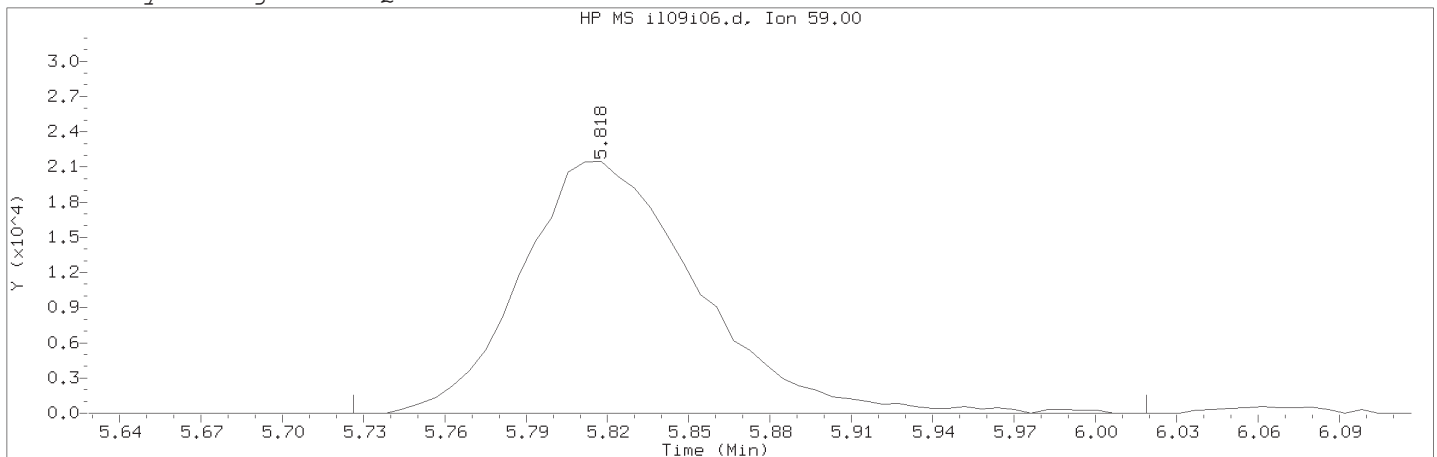
Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 21  
 Compound Name : Methyl Acetate  
 Scan Number : 378  
 Retention Time (minutes): 3.891  
 Quant Ion : 43.00  
 Area : 402  
 On-column Amount (ng) : 0.0179  
 Integration start scan : 374      Integration stop scan: 379  
 Y at integration start : 323      Y at integration end: 323

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

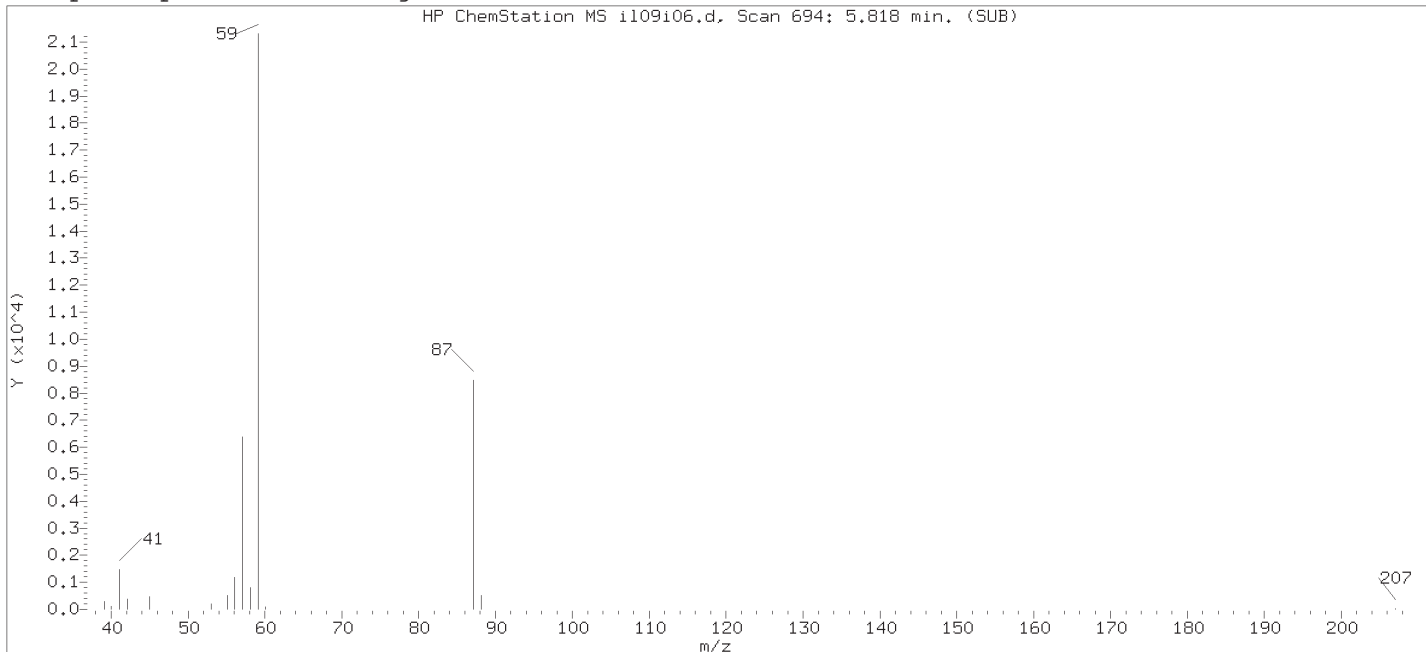
Compound Number : 37  
Compound Name : Ethyl t-butyl ether  
Scan Number : 694  
Retention Time (minutes): 5.818  
Quant Ion : 59.00  
Area (flag) : 96895M  
On-Column Amount (ng) : 0.5042  
Integration start scan : 678      Integration stop scan: 726  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

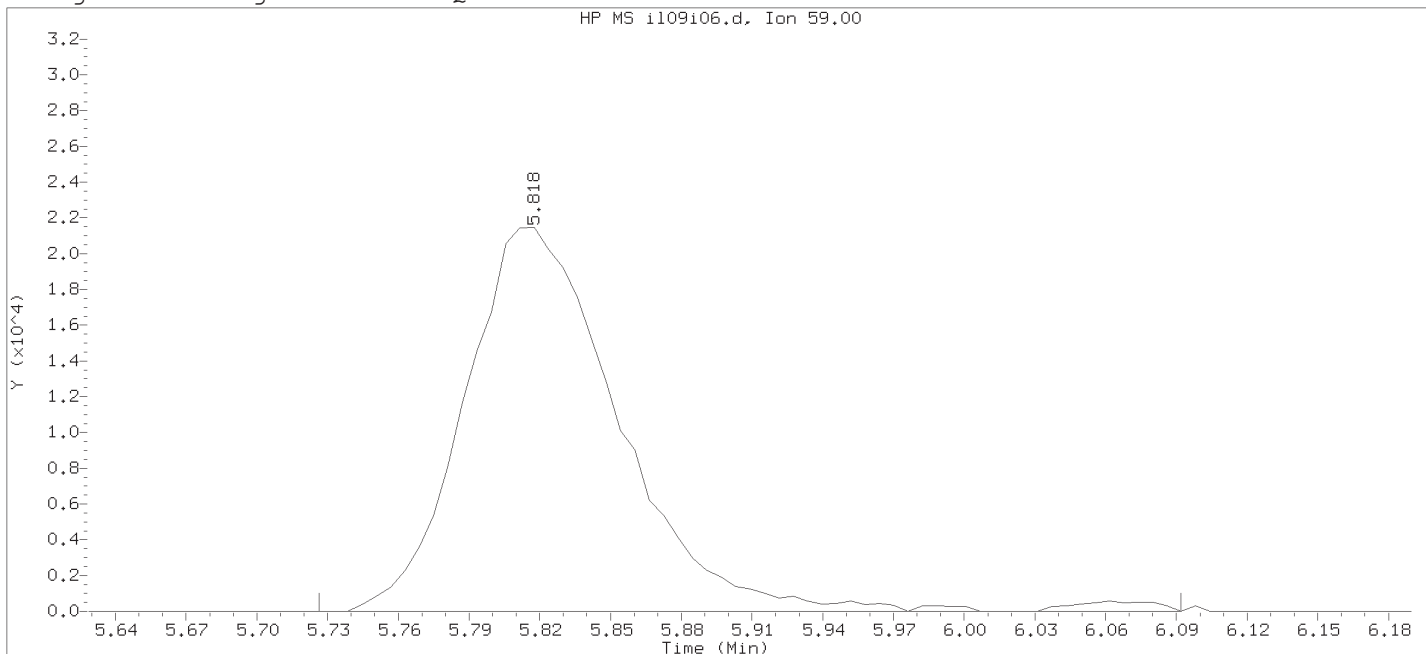
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



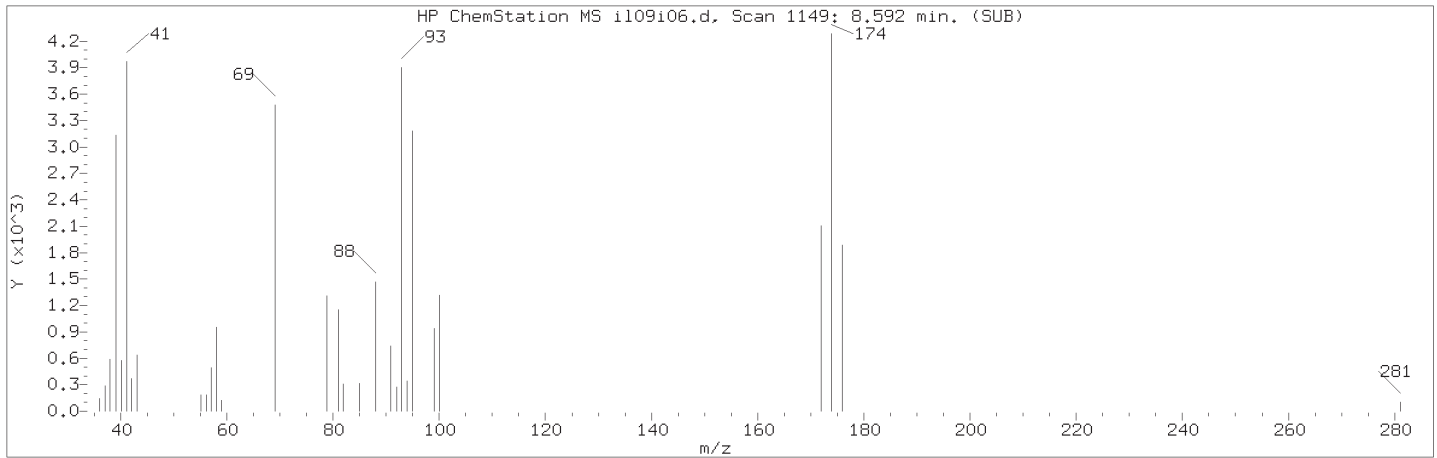
Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

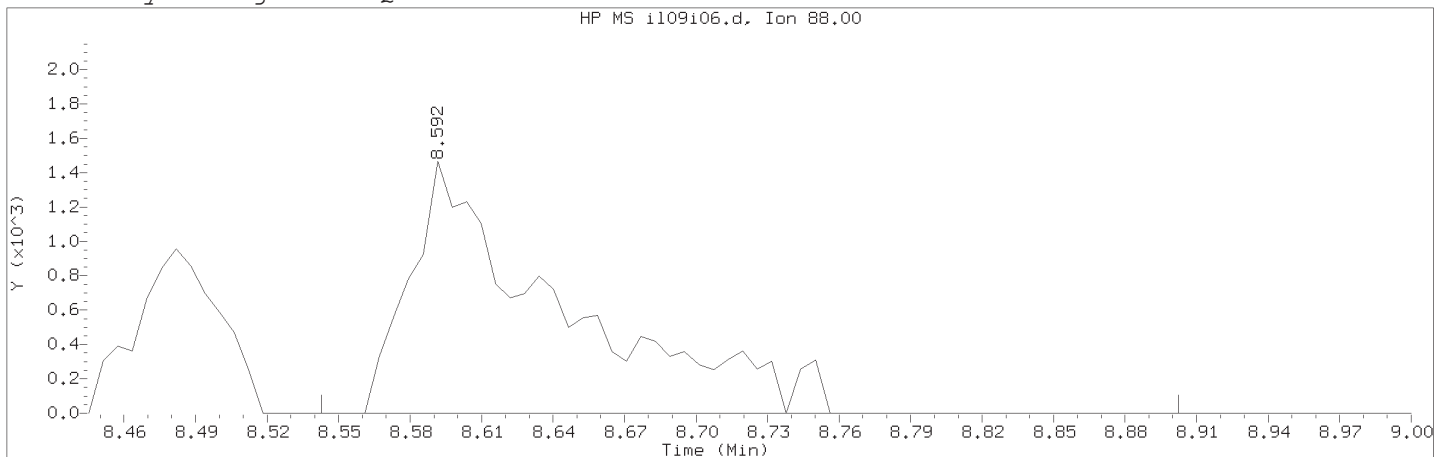
Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 37  
 Compound Name : Ethyl t-butyl ether  
 Scan Number : 694  
 Retention Time (minutes): 5.818  
 Quant Ion : 59.00  
 Area : 98311  
 On-column Amount (ng) : 0.5078  
 Integration start scan : 678      Integration stop scan: 738  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

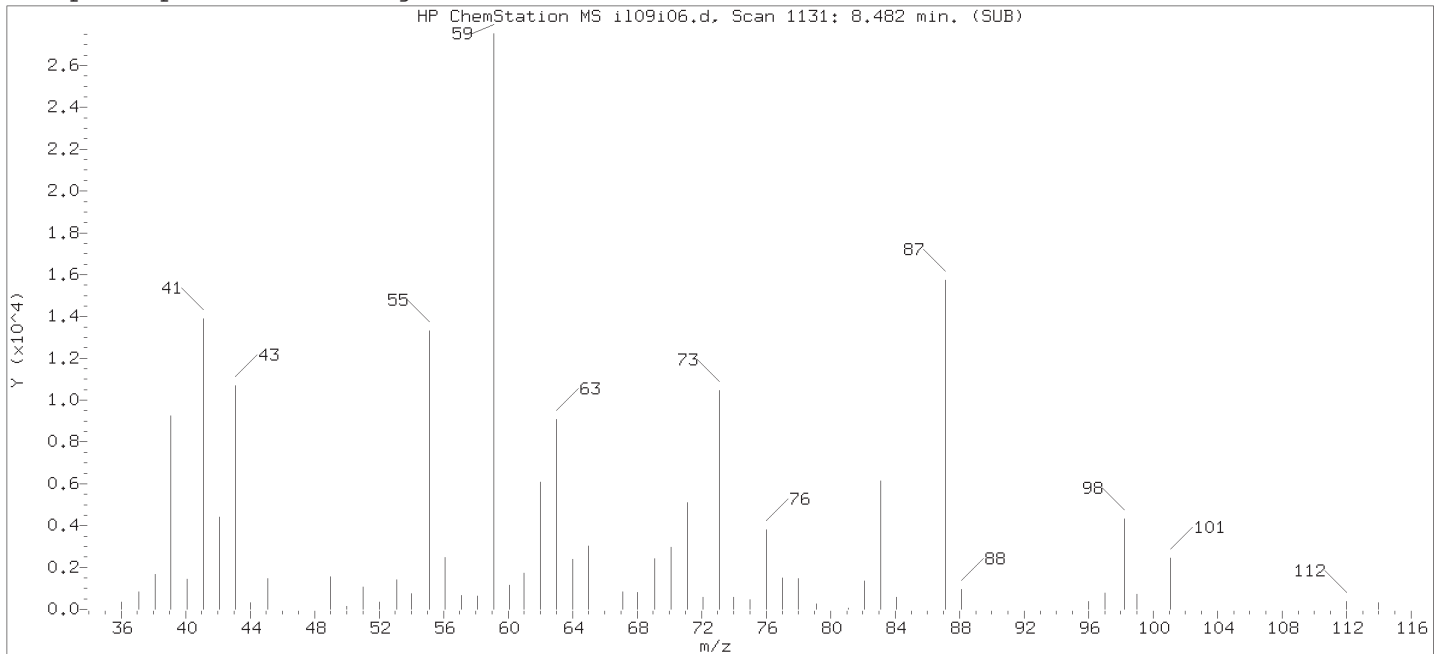
Compound Number                      : 72  
Compound Name                        : 1,4-Dioxane  
Scan Number                            : 1149  
Retention Time (minutes): 8.592  
Quant Ion                                : 88.00  
Area (flag)                             : 6370M  
On-Column Amount (ng)                : 24.7750  
Integration start scan                : 1140                      Integration stop scan: 1199  
Y at integration start                : 0                            Y at integration end: 0

Reason for manual integration: improper integration

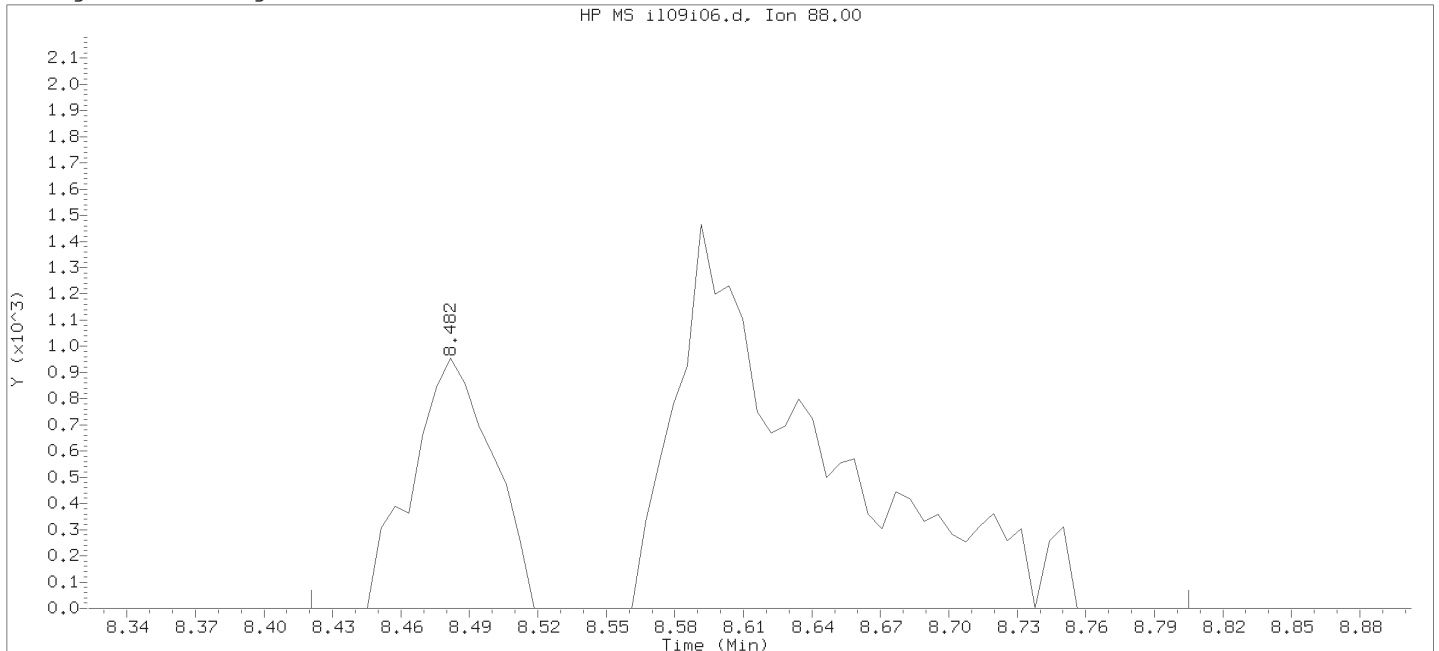
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

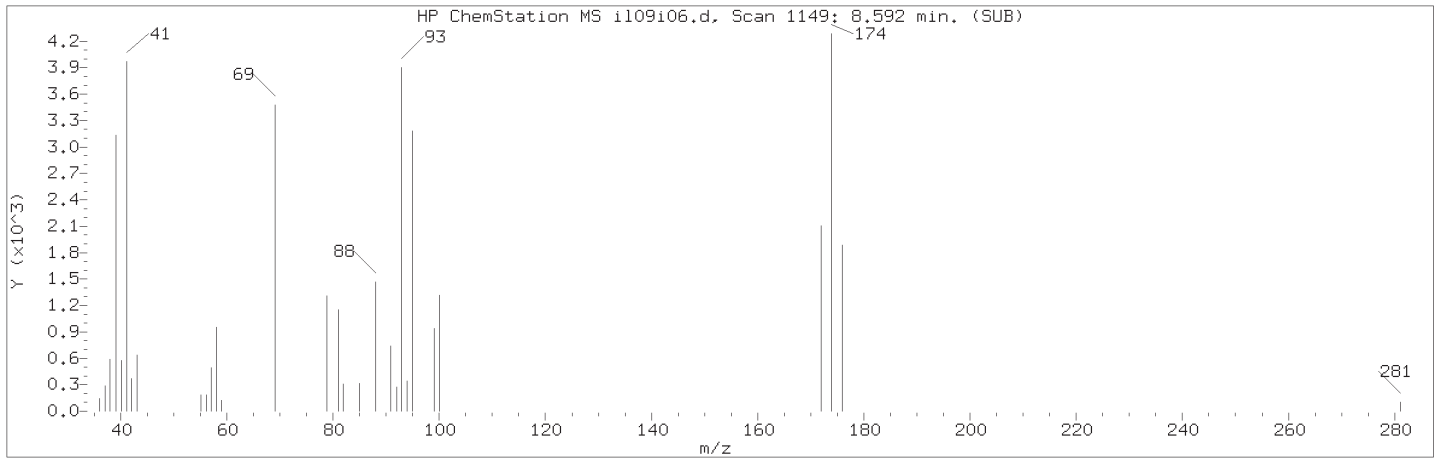
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

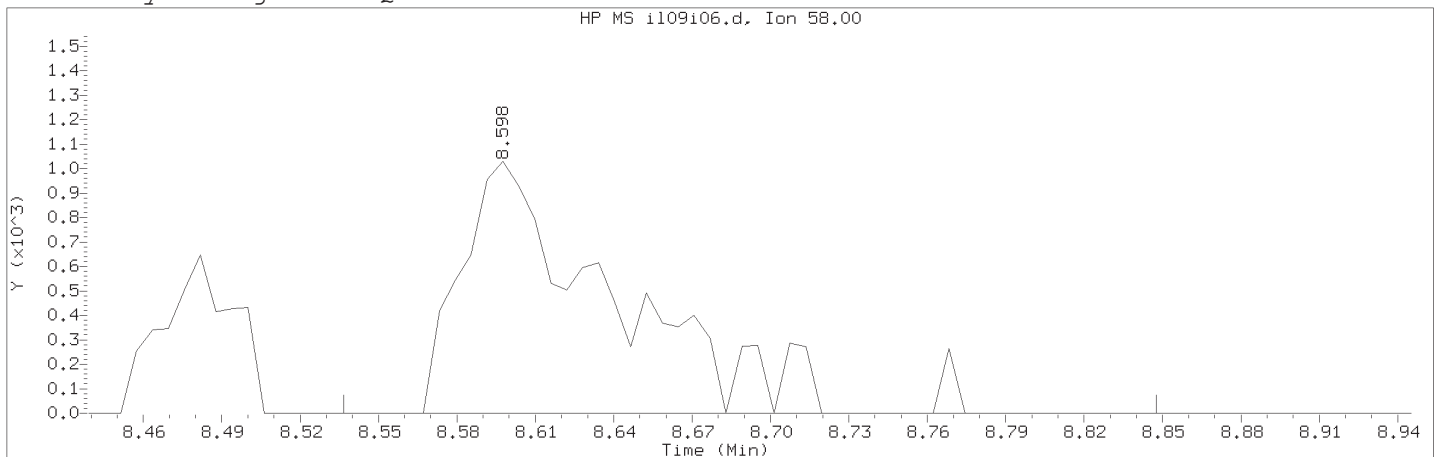
Compound Number : 72  
Compound Name : 1,4-Dioxane  
Scan Number : 1131  
Retention Time (minutes): 8.482  
Quant Ion : 88.00  
Area : 8706  
On-column Amount (ng) : 35.1250  
Integration start scan : 1120      Integration stop scan: 1183  
Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

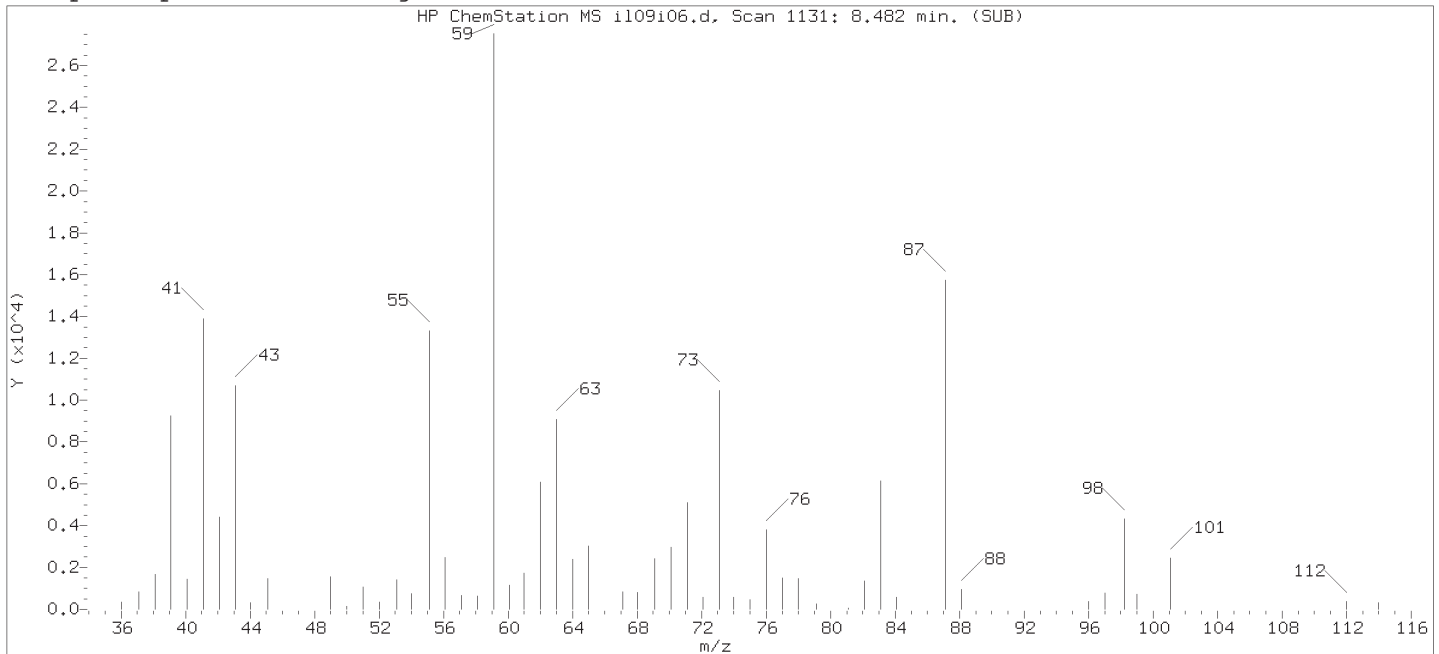
Compound Number                      : 72  
Compound Name                        : 1,4-Dioxane  
Scan Number                           : 1150  
Retention Time (minutes): 8.598  
Quant Ion                               : 58.00  
Area (flag)                            : 4236M  
On-Column Amount (ng)               : 22.7753  
Integration start scan                : 1139                      Integration stop scan: 1190  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

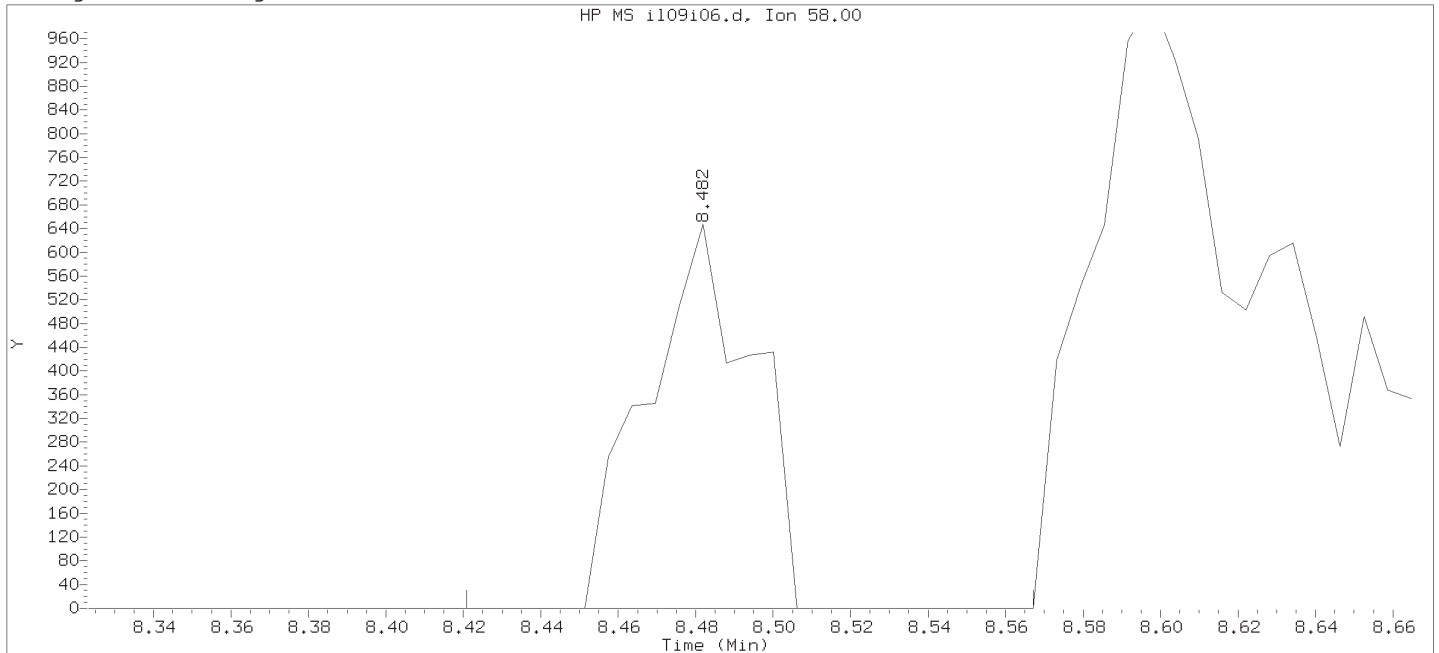
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



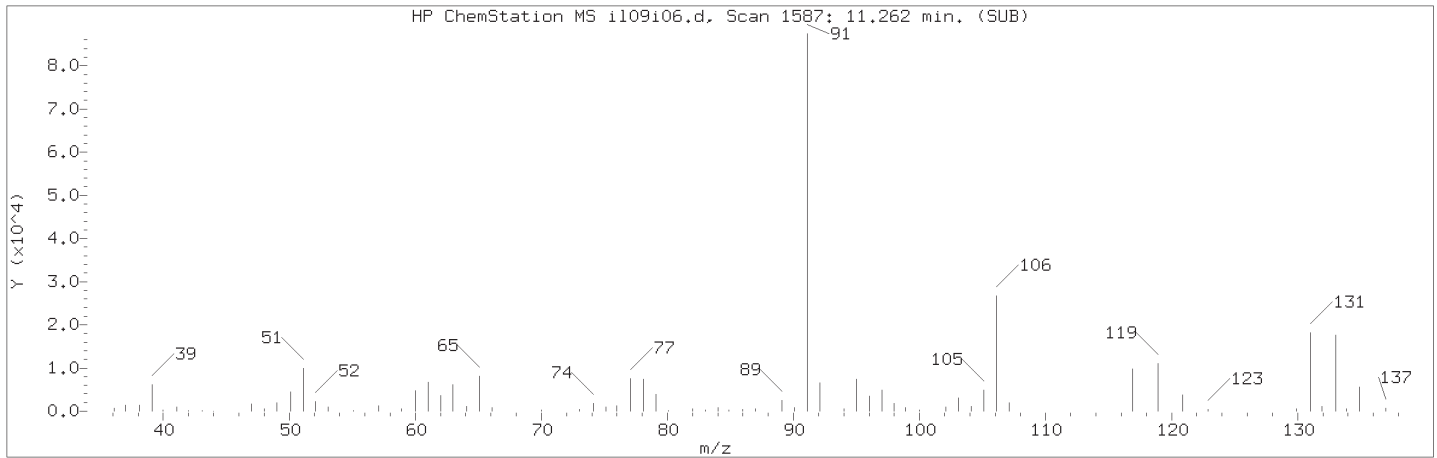
Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

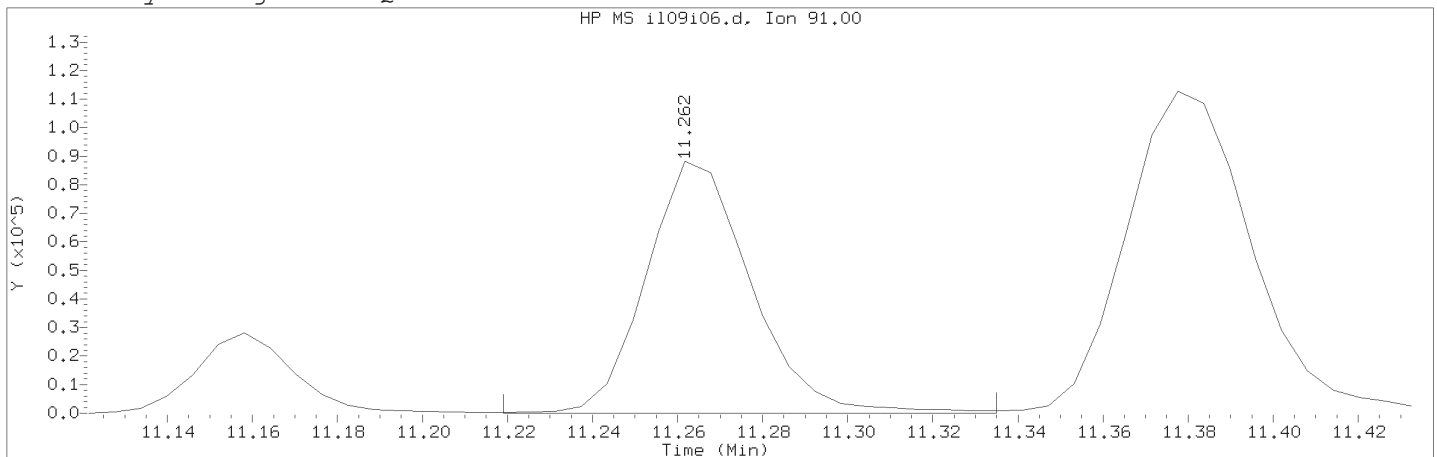
Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 72  
Compound Name : 1,4-Dioxane  
Scan Number : 1131  
Retention Time (minutes): 8.482  
Quant Ion : 58.00  
Area : 1232  
On-column Amount (ng) : 11.4279  
Integration start scan : 1120 Integration stop scan: 1144  
Y at integration start : 0 Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5                      Lab Sample ID: VSTD0.5

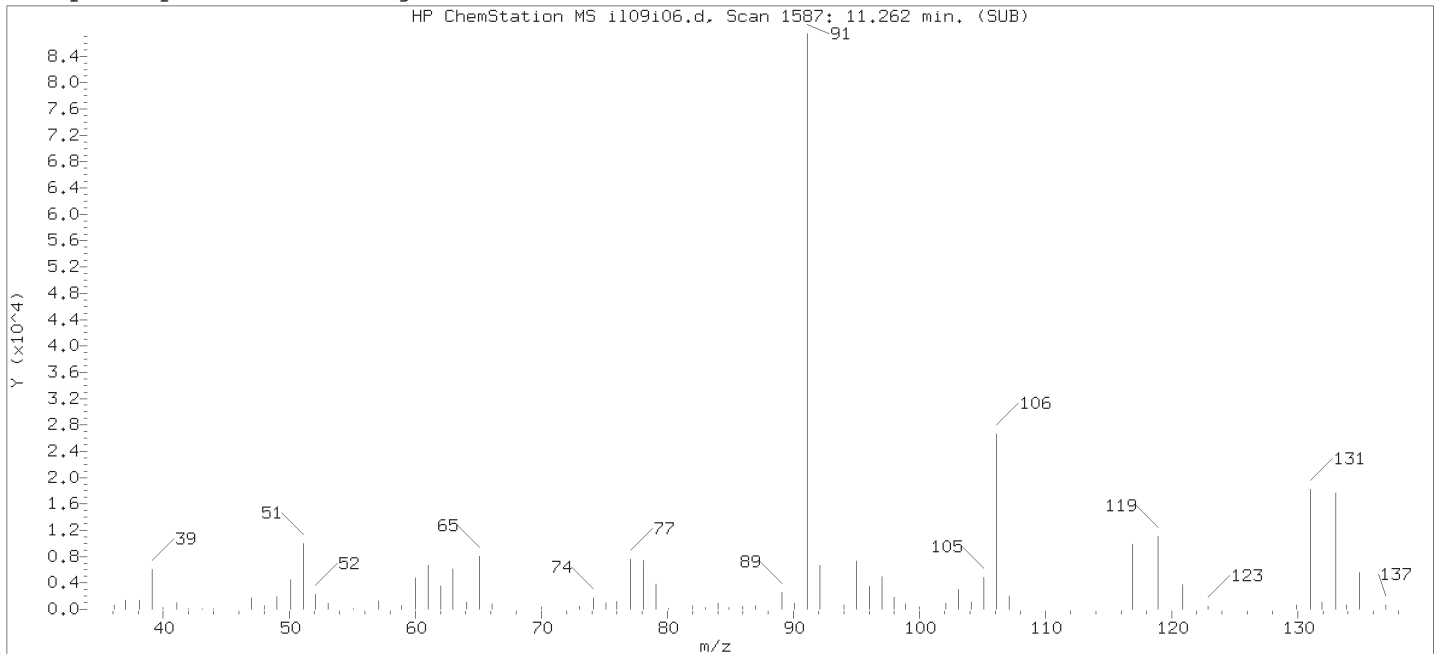
Compound Number                      : 100  
Compound Name                         : Ethylbenzene  
Scan Number                            : 1587  
Retention Time (minutes): 11.262  
Quant Ion                                : 91.00  
Area (flag)                             : 151020M  
On-Column Amount (ng)                : 0.5080  
Integration start scan                 : 1579                      Integration stop scan: 1598  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

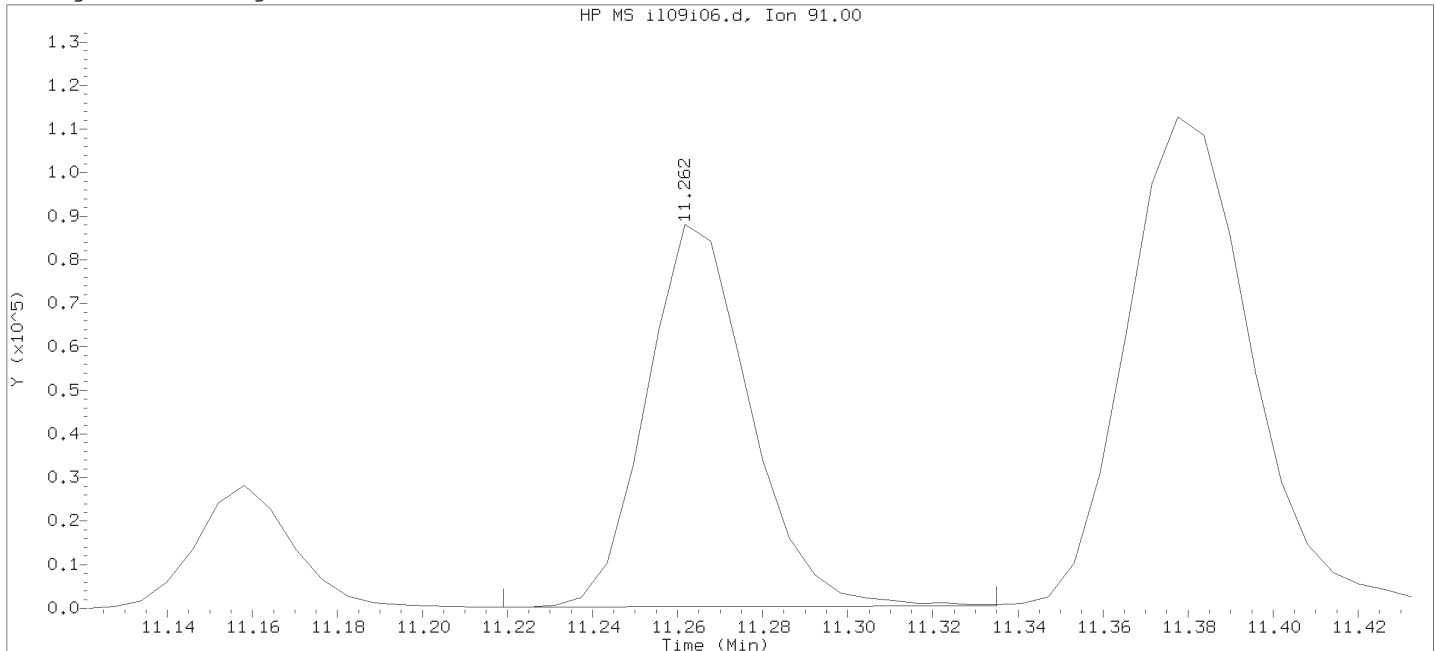
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



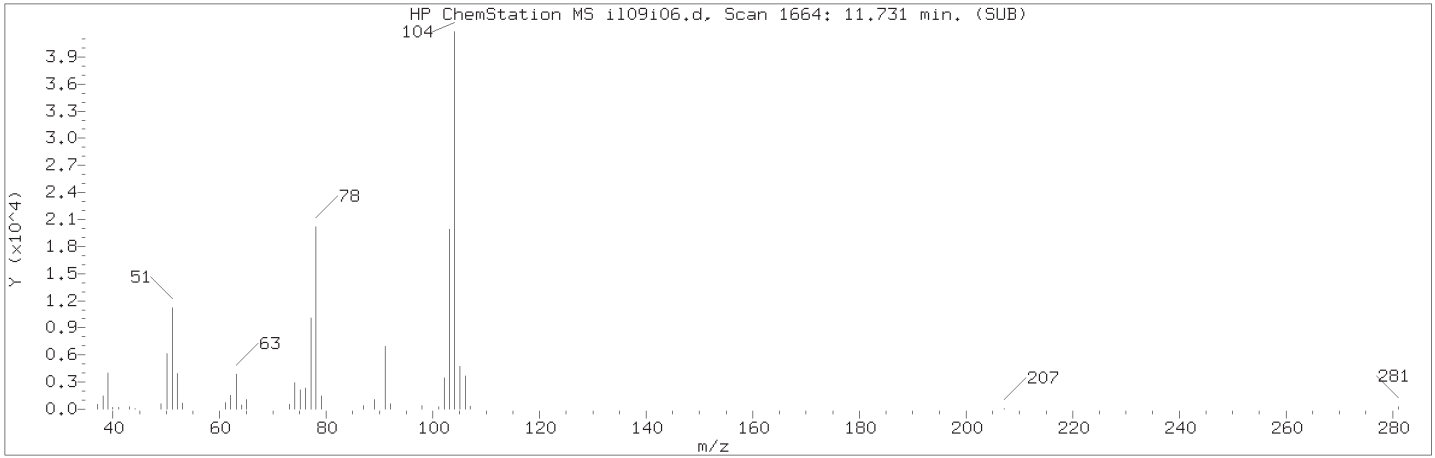
Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

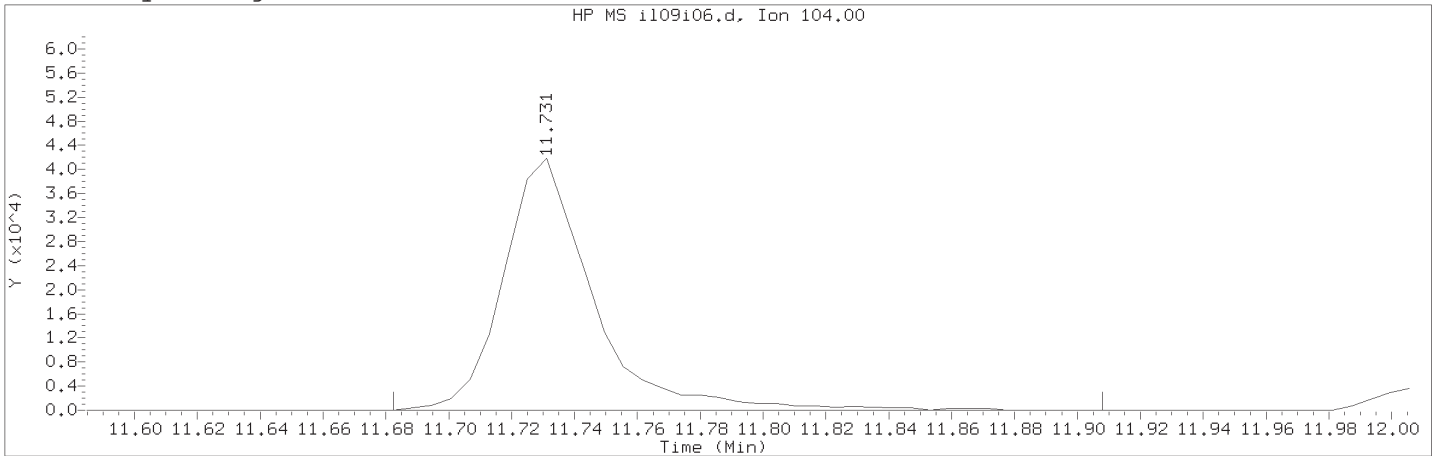
Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 100  
 Compound Name : Ethylbenzene  
 Scan Number : 1587  
 Retention Time (minutes): 11.262  
 Quant Ion : 91.00  
 Area : 147975  
 On-column Amount (ng) : 0.4960  
 Integration start scan : 1579      Integration stop scan: 1598  
 Y at integration start : 292      Y at integration end: 524

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

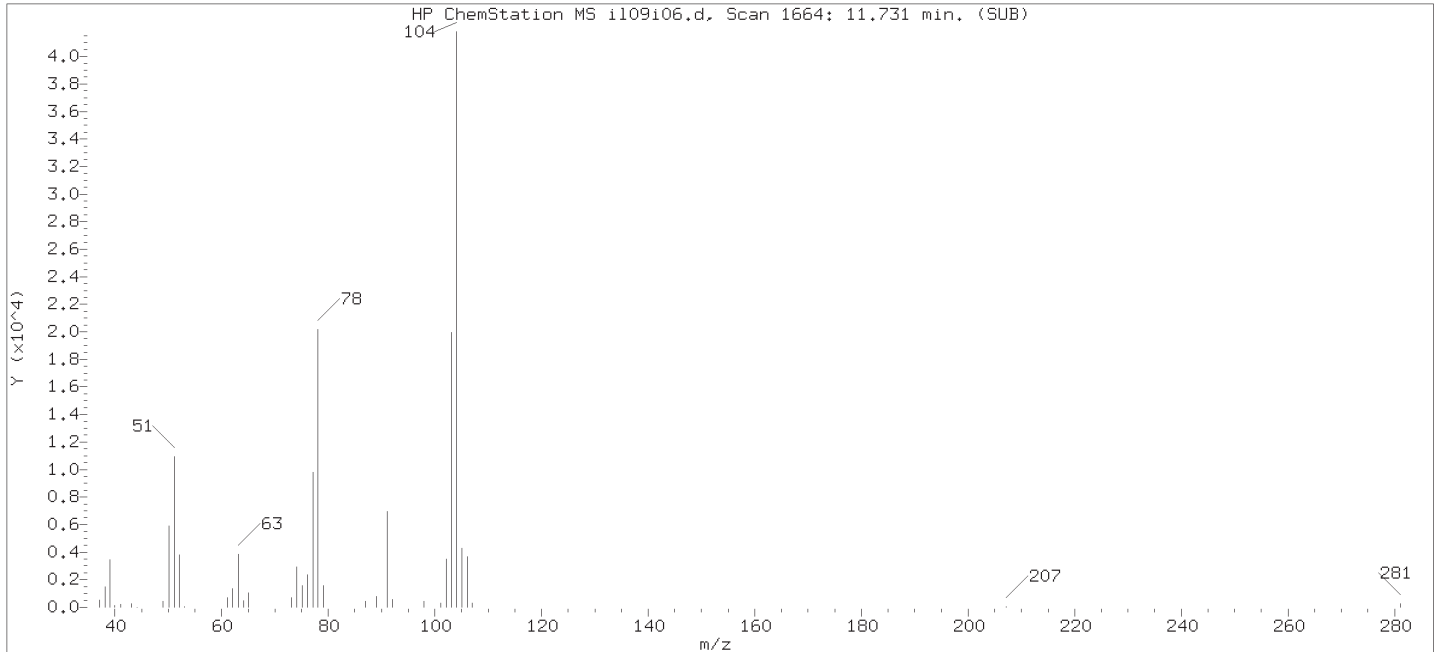
Compound Number                      : 106  
Compound Name                         : Styrene  
Scan Number                            : 1664  
Retention Time (minutes): 11.731  
Quant Ion                                : 104.00  
Area (flag)                             : 82786M  
On-Column Amount (ng)                : 0.4753  
Integration start scan                : 1655                      Integration stop scan: 1692  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

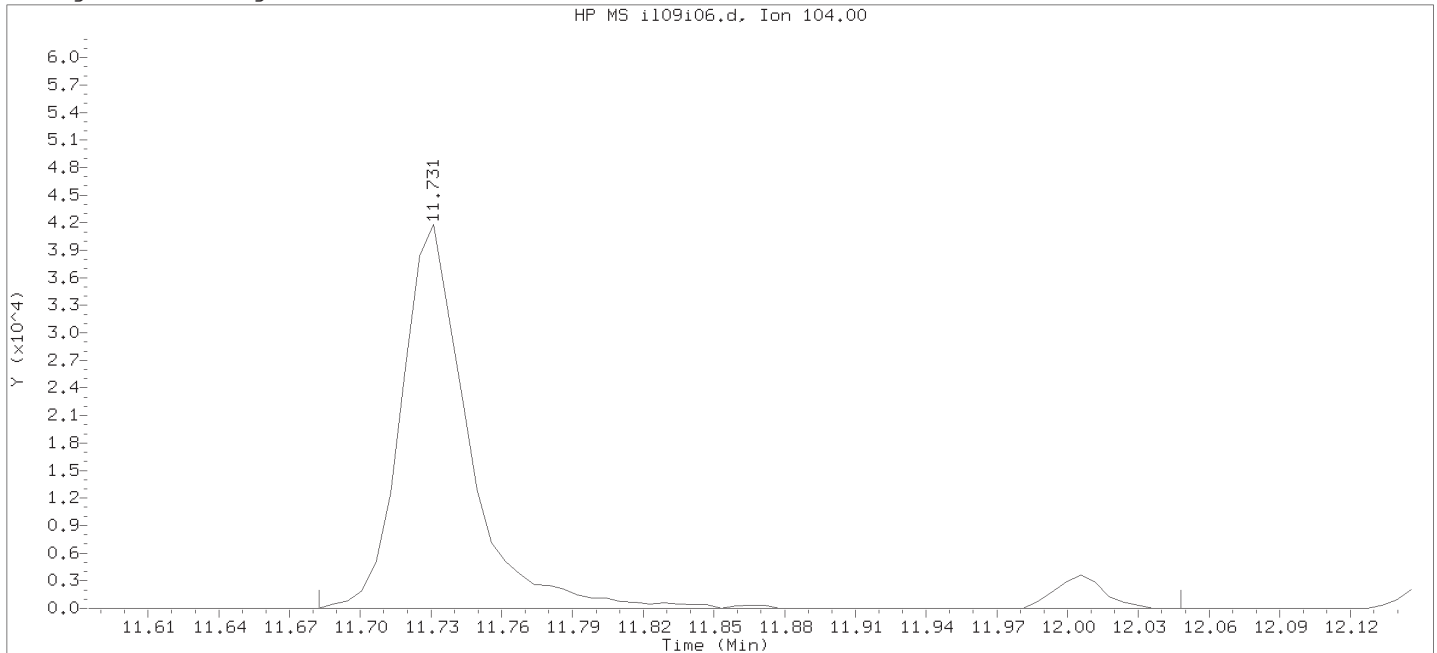
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



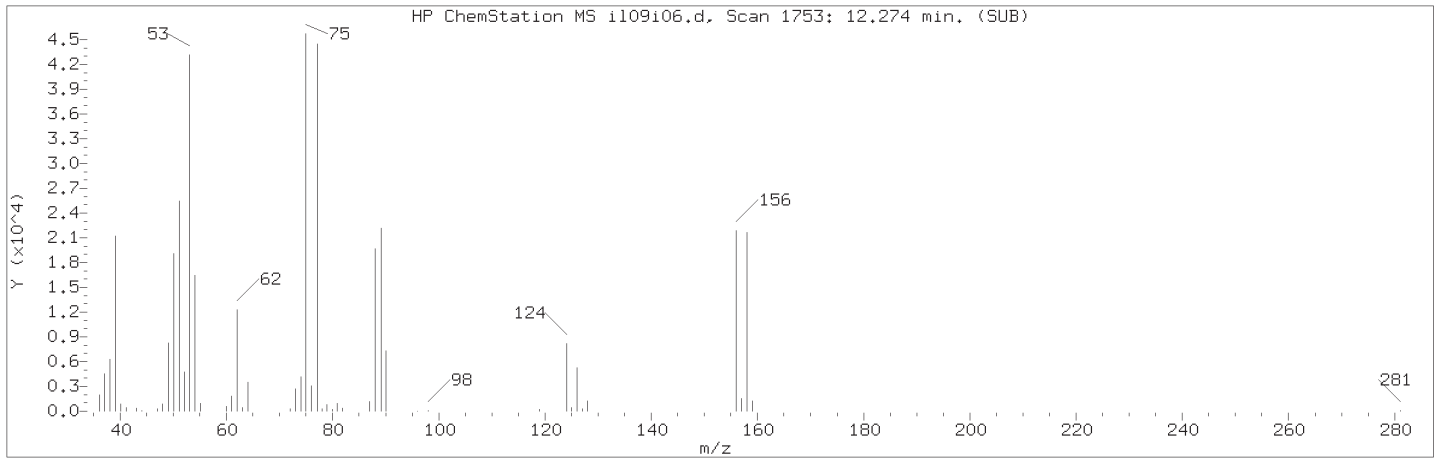
Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

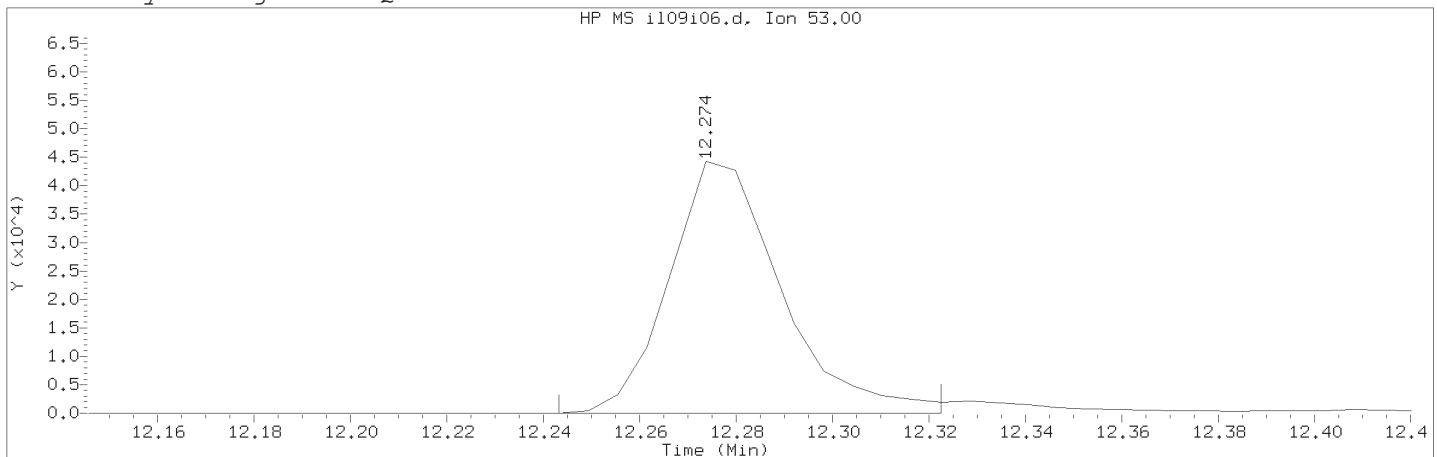
Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 106  
Compound Name : Styrene  
Scan Number : 1664  
Retention Time (minutes): 11.731  
Quant Ion : 104.00  
Area : 87932  
On-column Amount (ng) : 0.4883  
Integration start scan : 1655      Integration stop scan: 1715  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

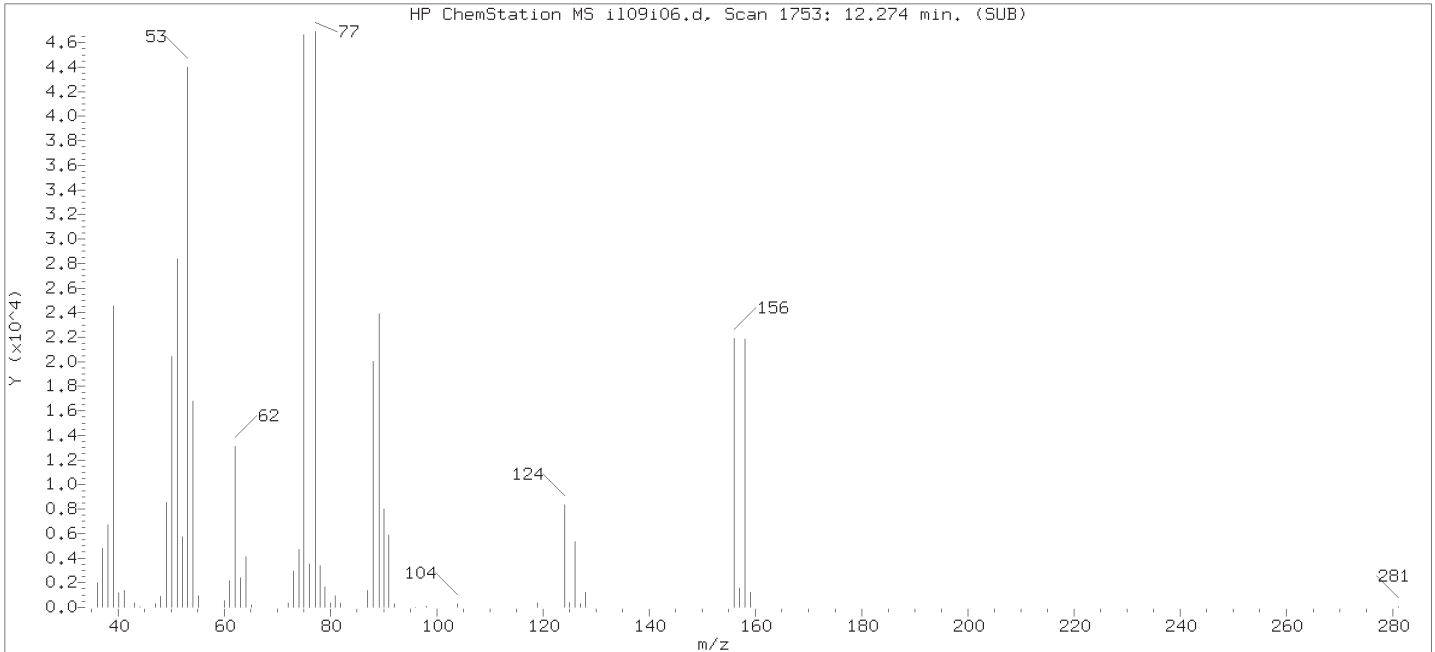
Compound Number                      : 115  
Compound Name                         : trans-1,4-Dichloro-2-butene  
Scan Number                            : 1753  
Retention Time (minutes): 12.274  
Quant Ion                                : 53.00  
Area (flag)                             : 71381M  
On-Column Amount (ng)                : 4.6962  
Integration start scan                 : 1747                      Integration stop scan: 1760  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

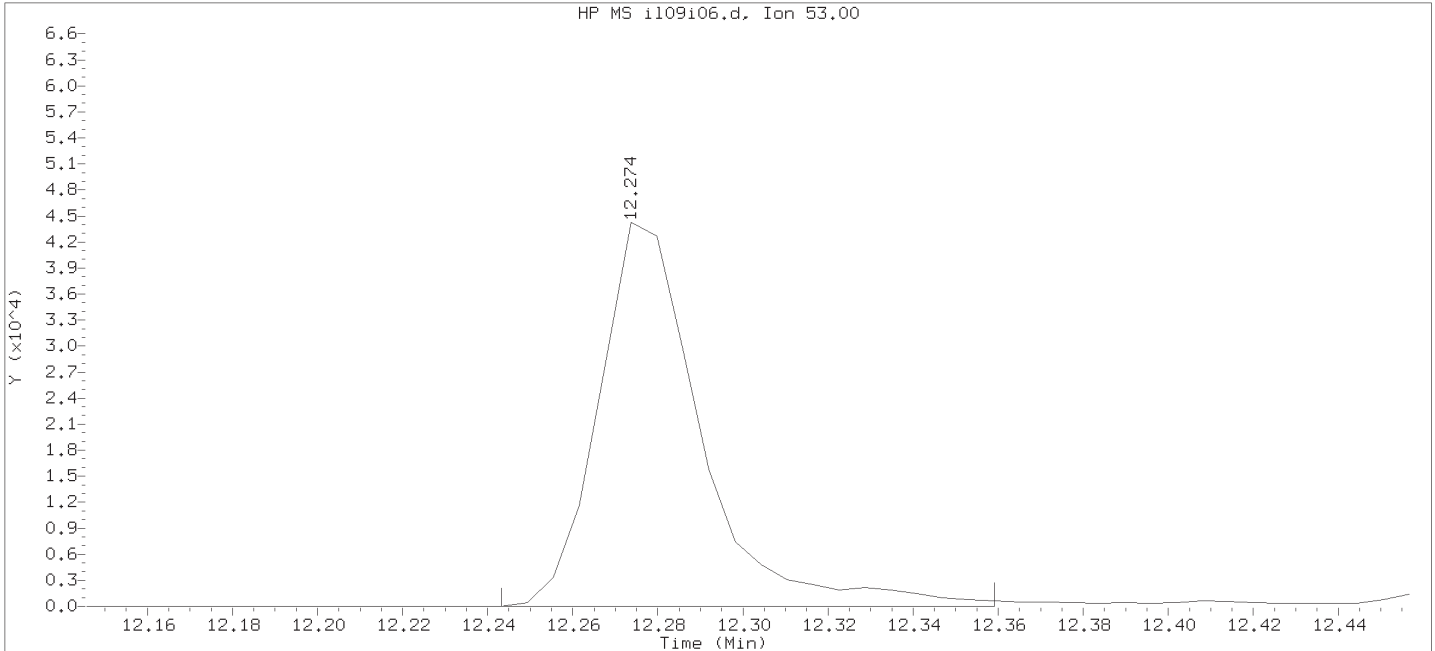
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

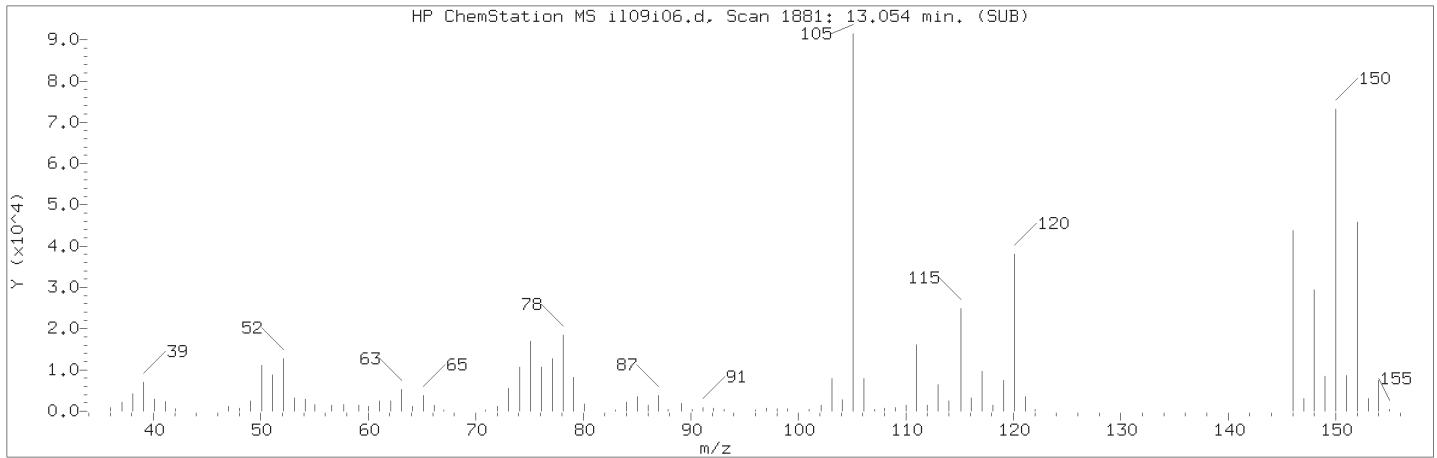
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

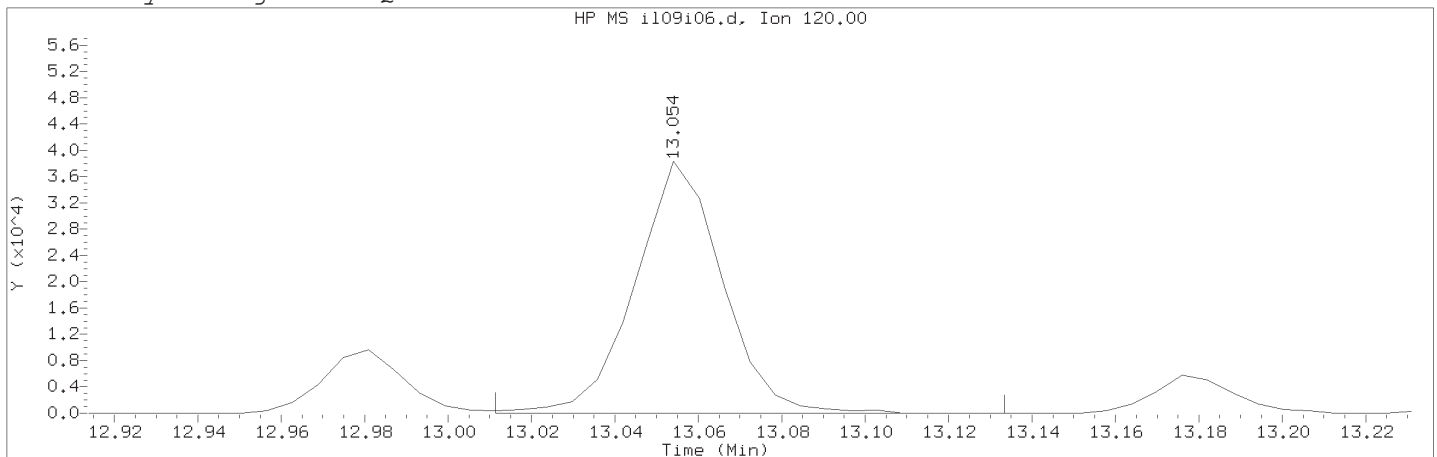
Compound Number : 115  
Compound Name : trans-1,4-Dichloro-2-butene  
Scan Number : 1753  
Retention Time (minutes): 12.274  
Quant Ion : 53.00  
Area : 74135  
On-column Amount (ng) : 7.1660  
Integration start scan : 1747      Integration stop scan: 1766  
Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

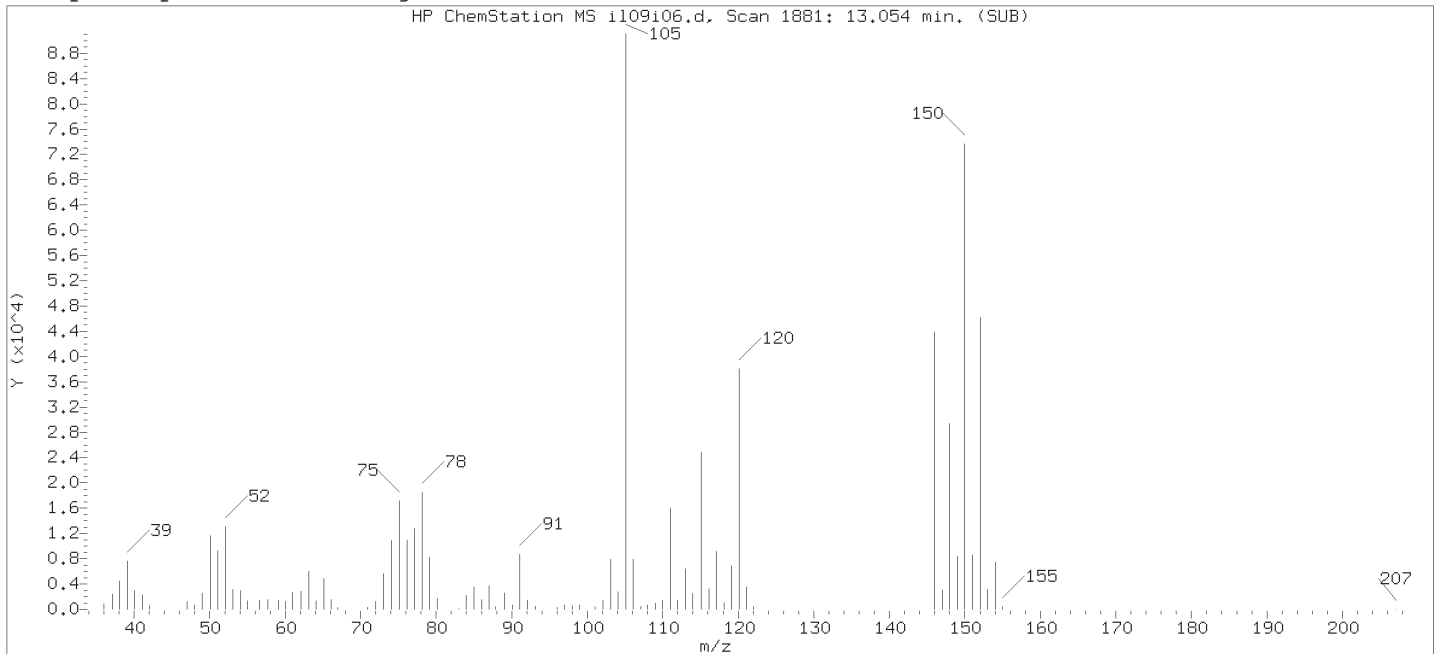
Compound Number                      : 135  
Compound Name                         : 1,2,3-Trimethylbenzene  
Scan Number                            : 1881  
Retention Time (minutes): 13.054  
Quant Ion                                : 120.00  
Area (flag)                             : 55671M  
On-Column Amount (ng)                : 0.4765  
Integration start scan                 : 1873                      Integration stop scan: 1893  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

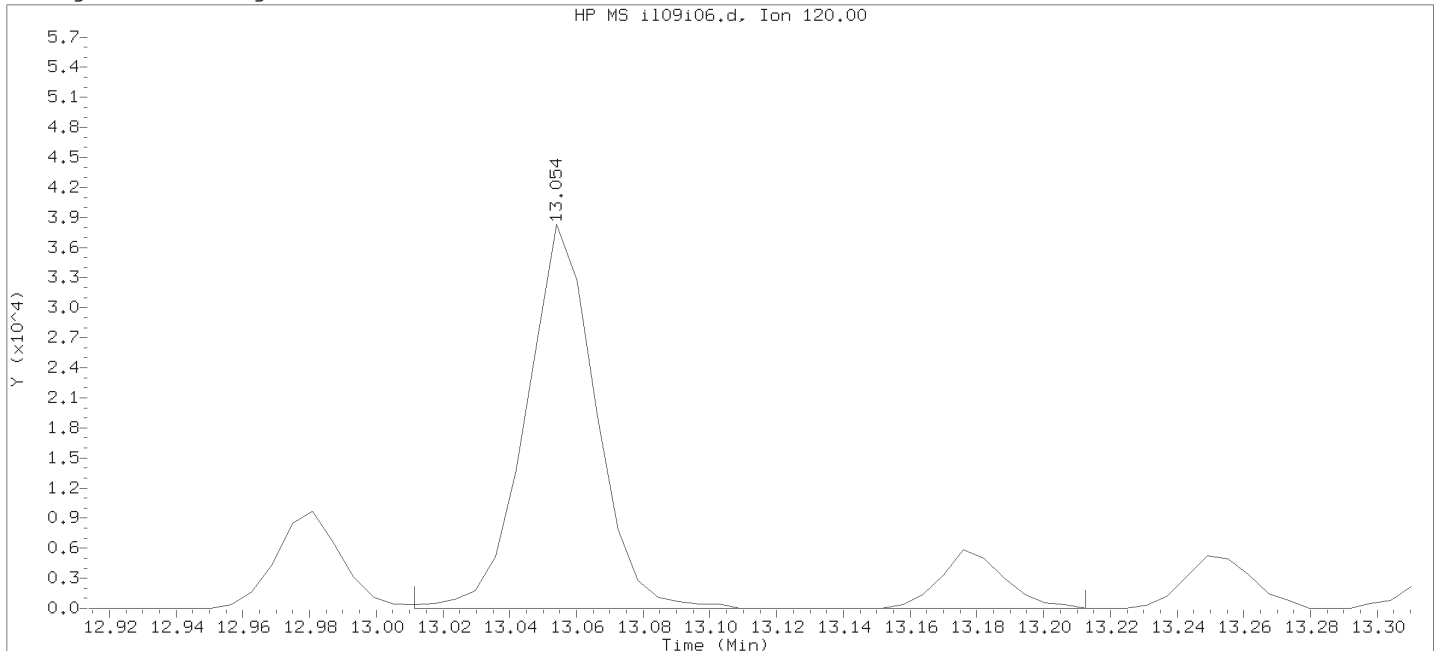
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



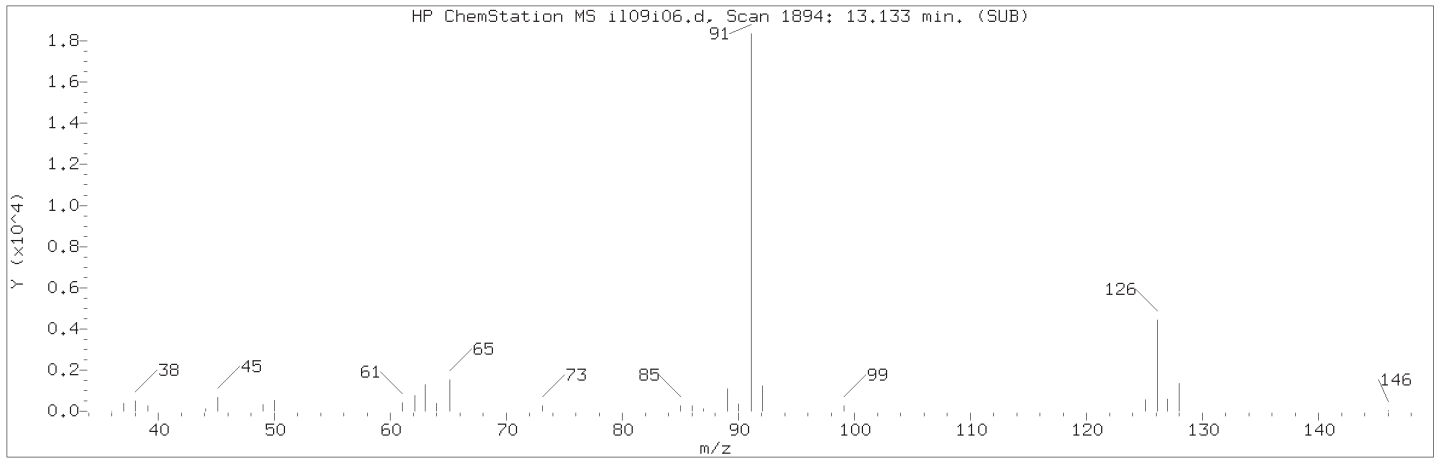
Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

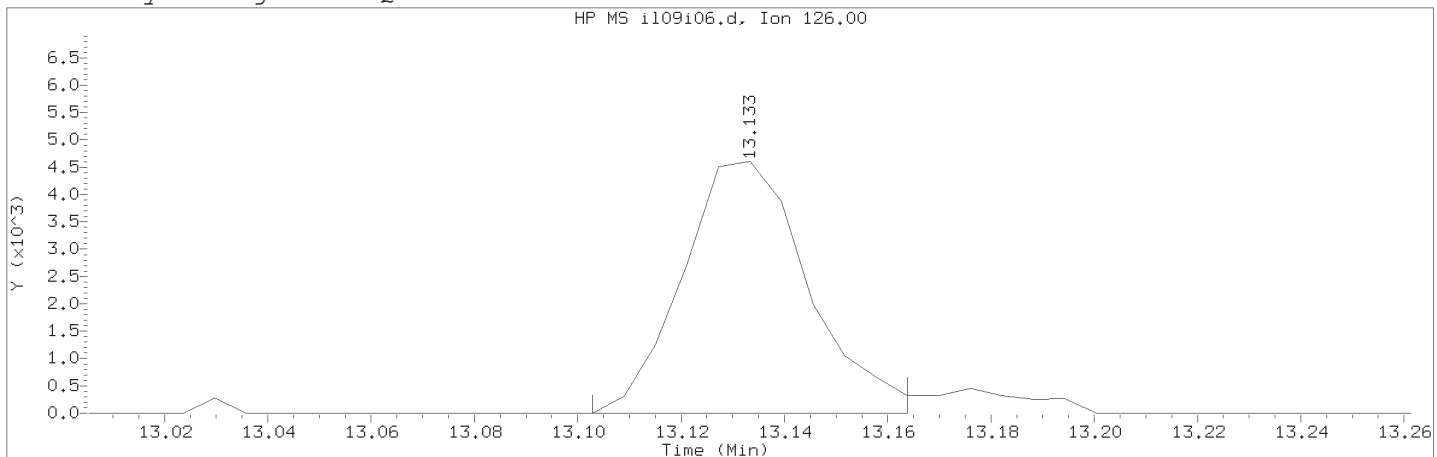
Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 135  
 Compound Name : 1,2,3-Trimethylbenzene  
 Scan Number : 1881  
 Retention Time (minutes): 13.054  
 Quant Ion : 120.00  
 Area : 63343  
 On-column Amount (ng) : 0.5281  
 Integration start scan : 1873      Integration stop scan: 1906  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

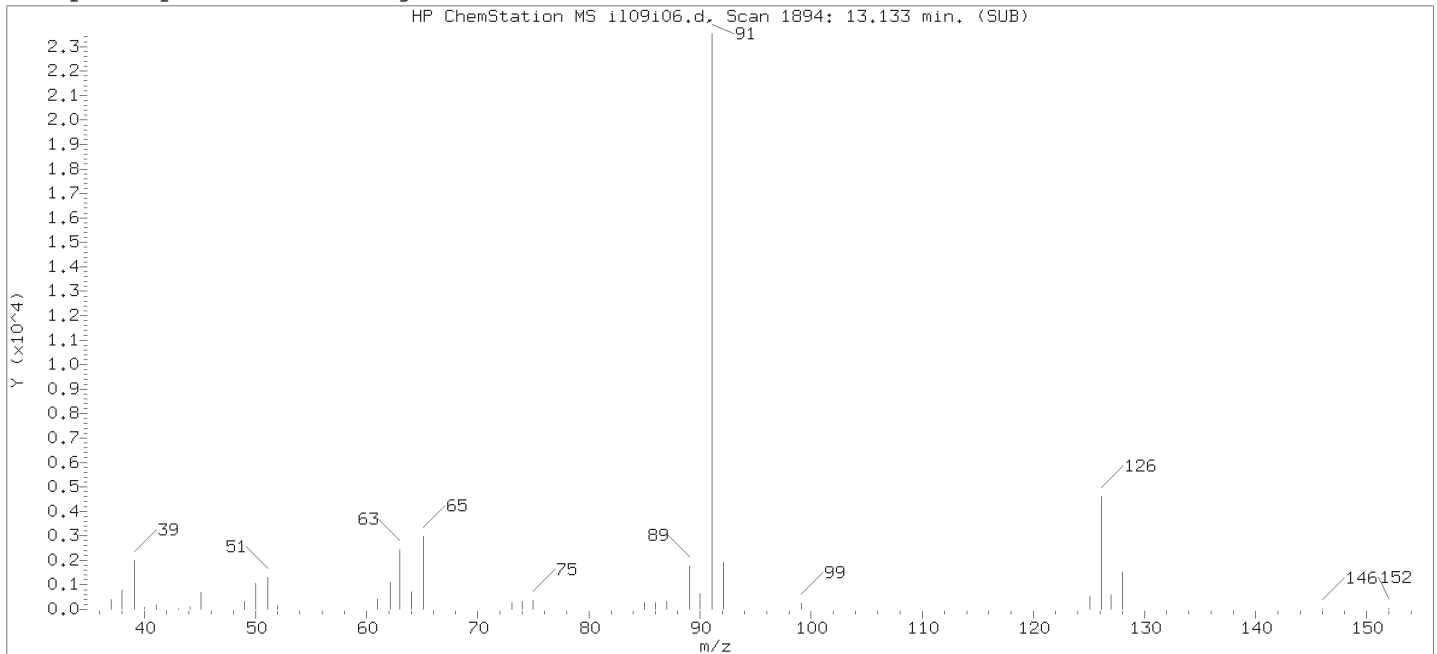
Compound Number                      : 136  
Compound Name                         : Benzyl Chloride  
Scan Number                            : 1894  
Retention Time (minutes): 13.133  
Quant Ion                                : 126.00  
Area (flag)                             : 7778M  
On-Column Amount (ng)                : 0.3925  
Integration start scan                 : 1888                      Integration stop scan: 1898  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

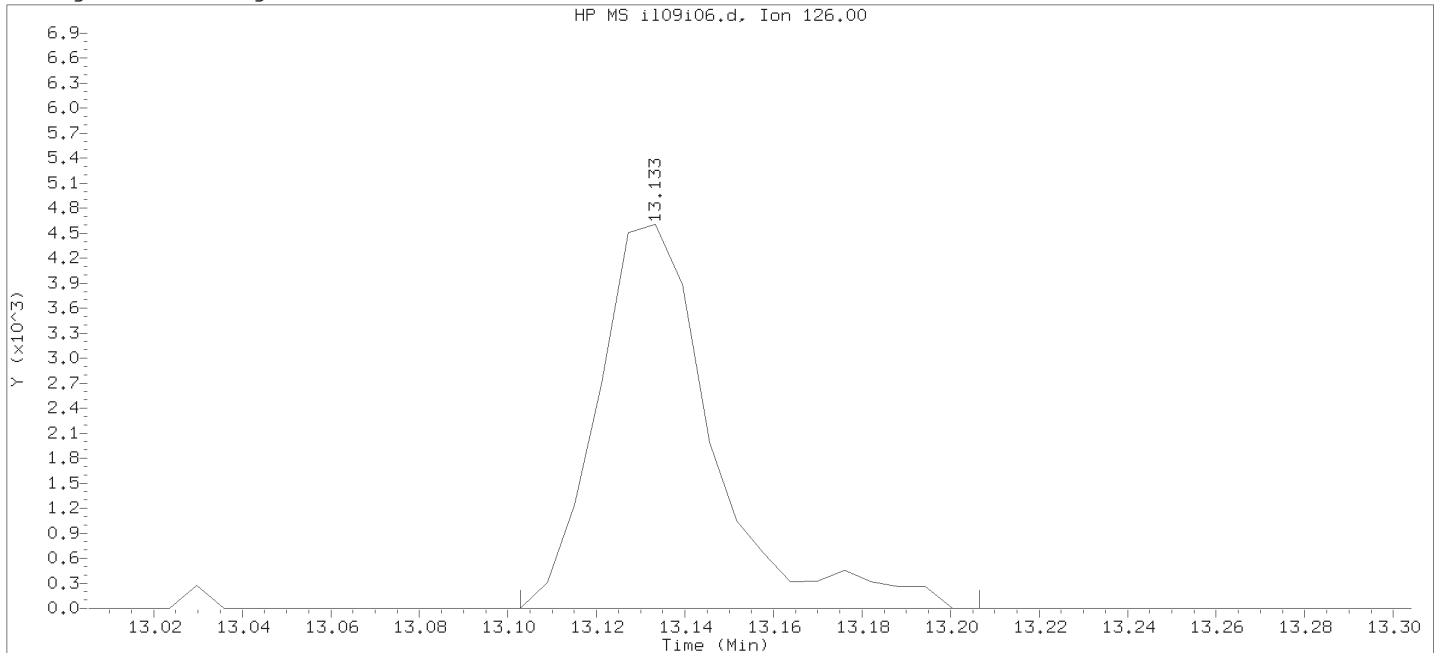
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



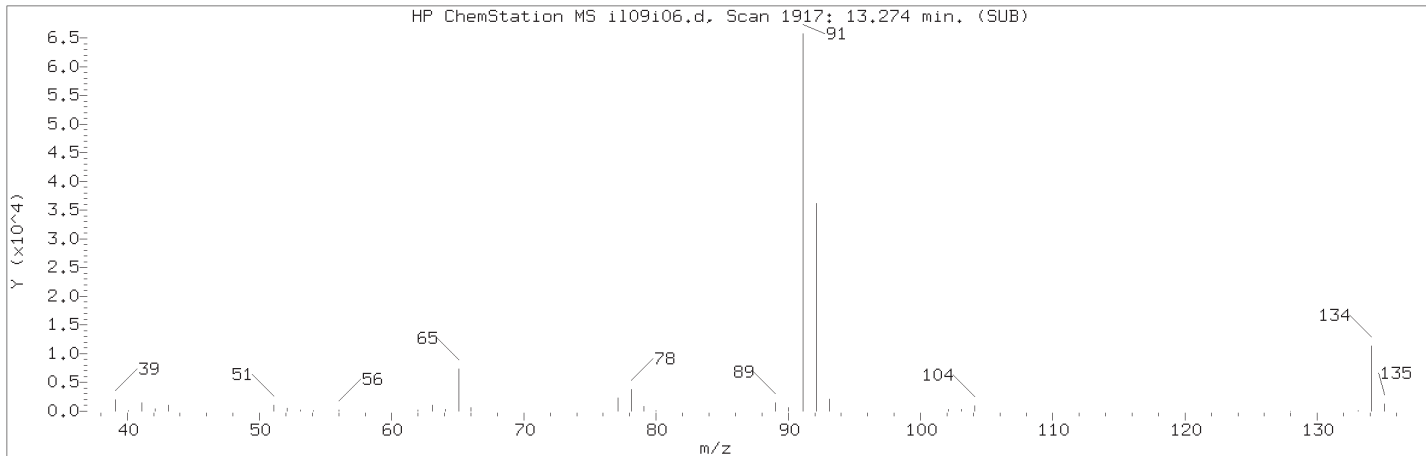
Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:39  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

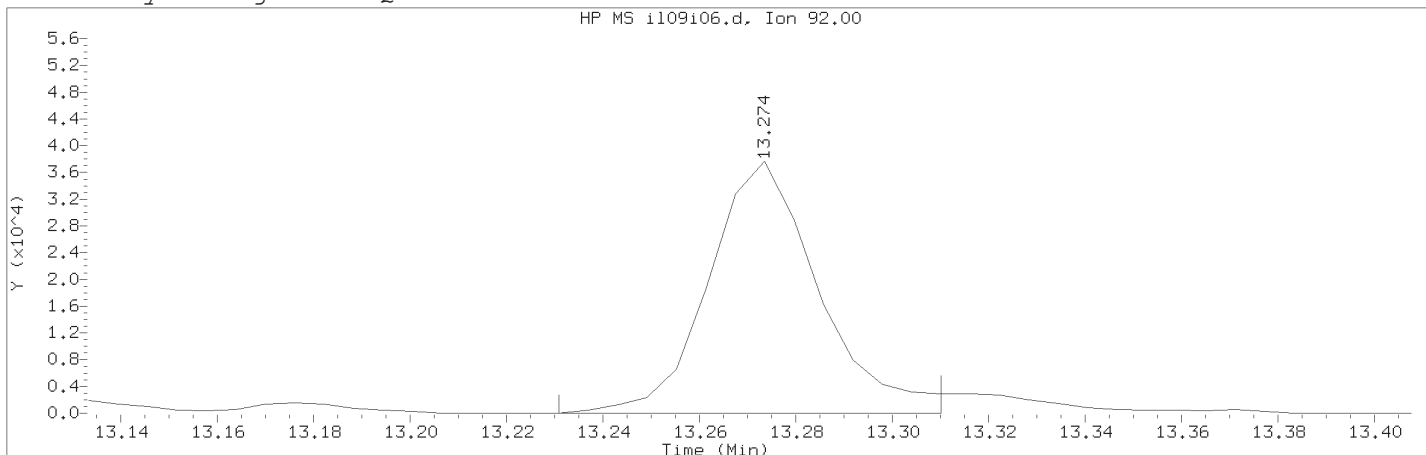
Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 136  
Compound Name : Benzyl Chloride  
Scan Number : 1894  
Retention Time (minutes): 13.133  
Quant Ion : 126.00  
Area : 8368  
On-column Amount (ng) : 0.3973  
Integration start scan : 1888      Integration stop scan: 1905  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i06.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:31                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

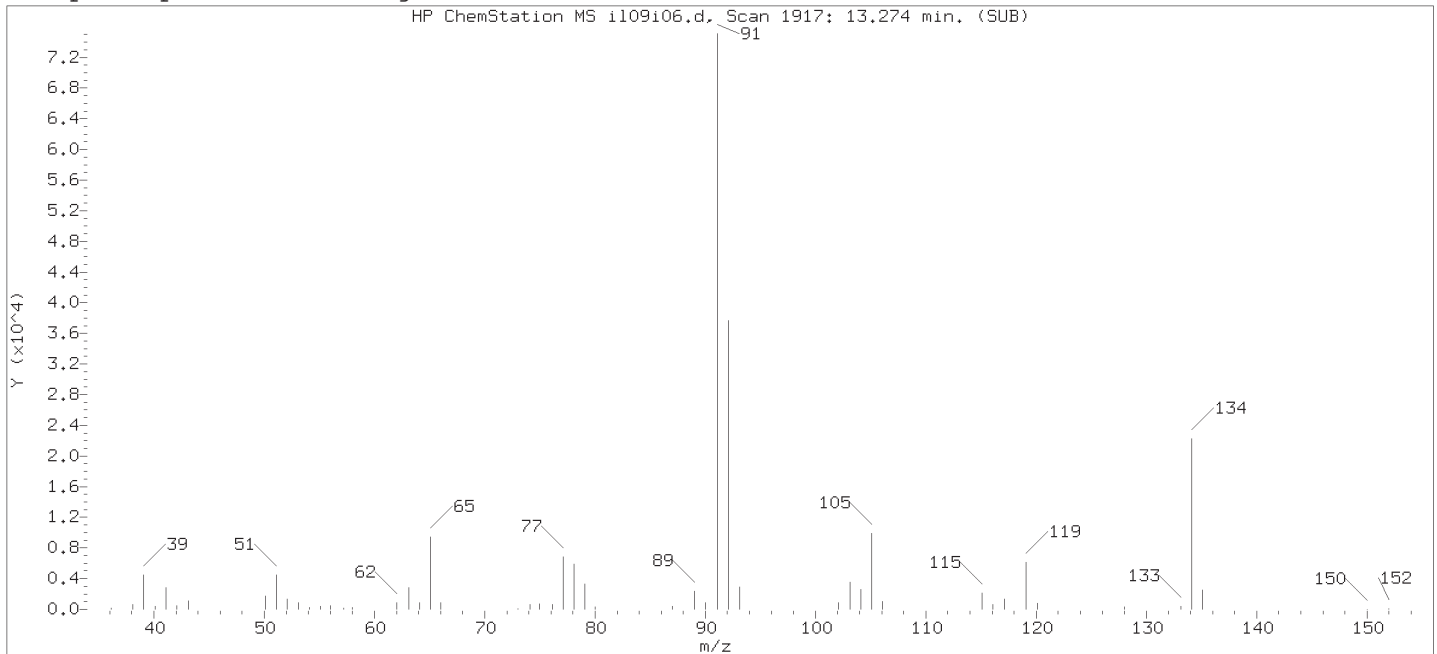
Compound Number                      : 138  
Compound Name                         : n-Butylbenzene  
Scan Number                            : 1917  
Retention Time (minutes): 13.274  
Quant Ion                                : 92.00  
Area (flag)                             : 59744M  
On-Column Amount (ng)                : 0.4524  
Integration start scan                 : 1909                      Integration stop scan: 1922  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

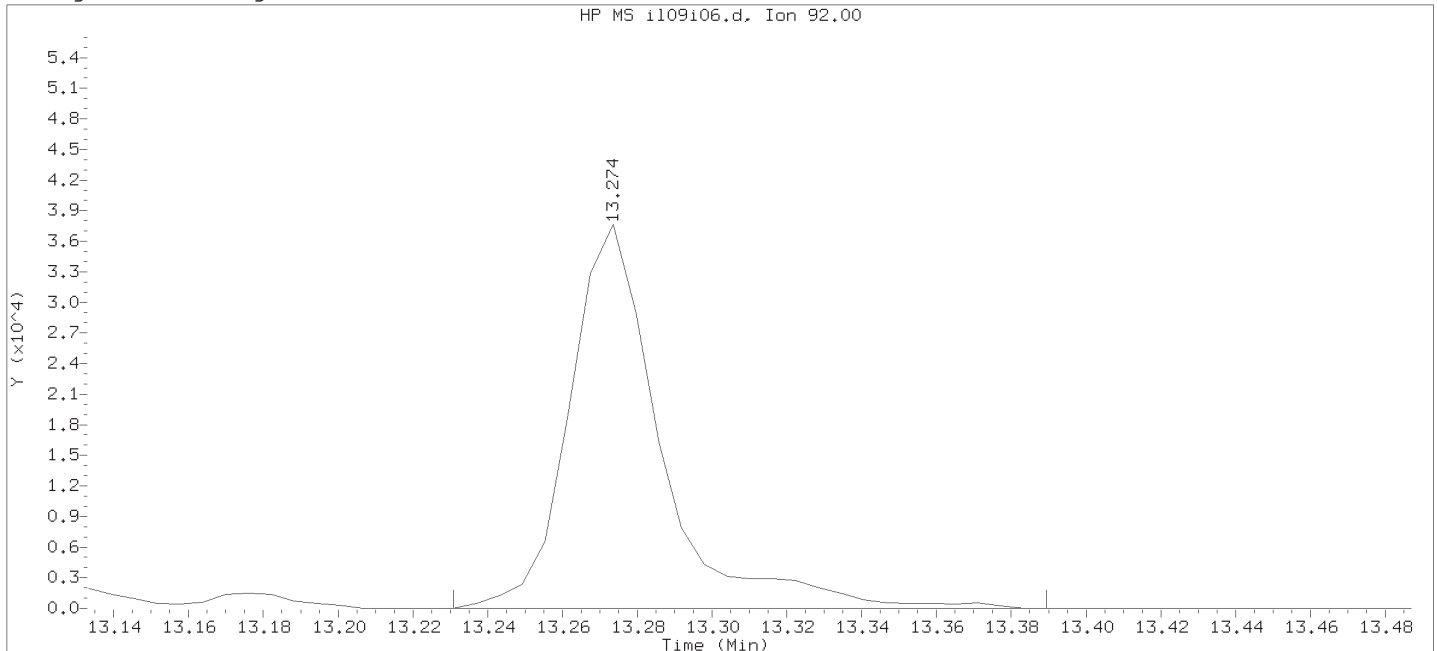
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

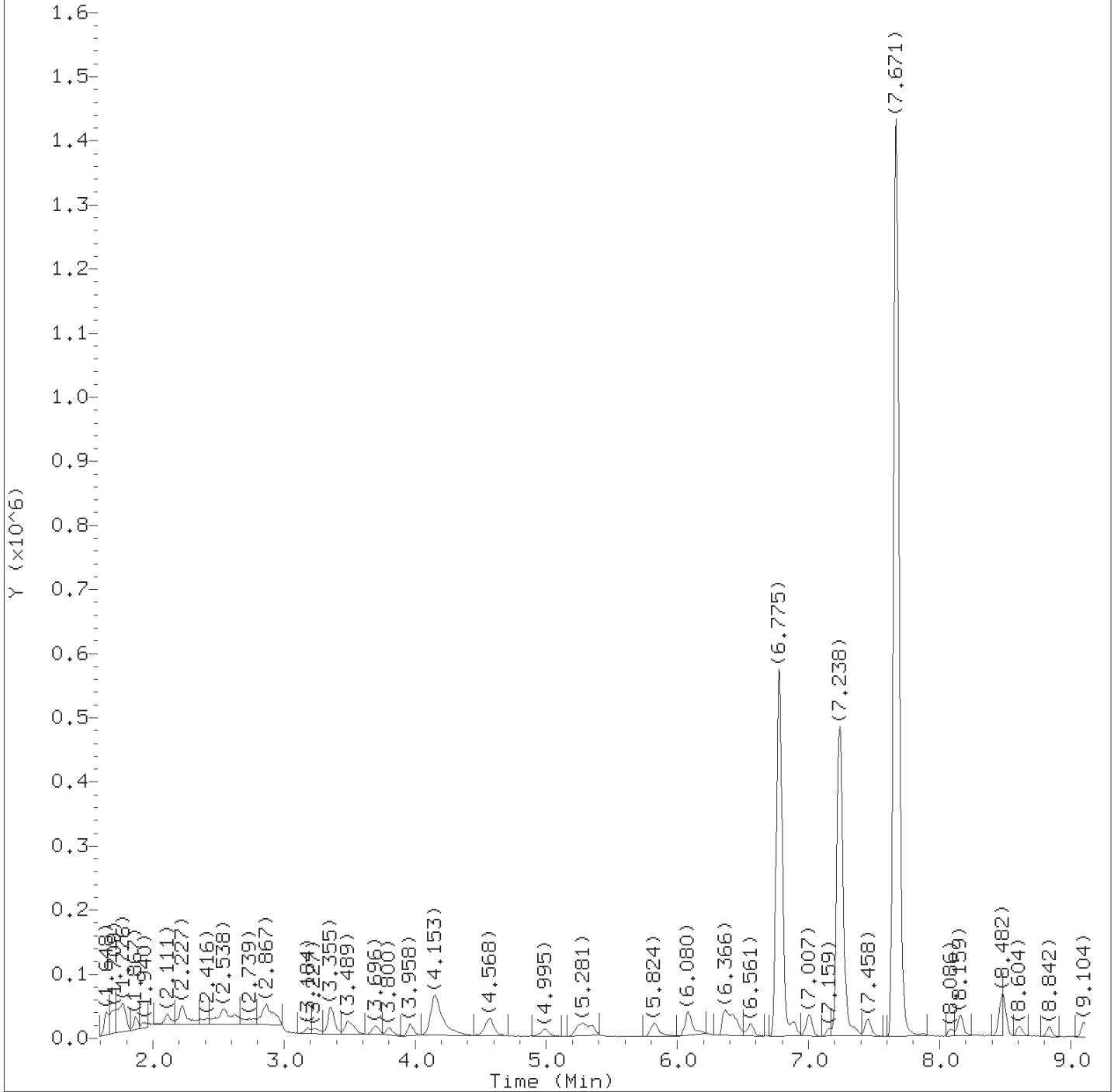


Data File: /chem2/HP19930.i/18jul09i.b/il09i06.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:31      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 138  
 Compound Name : n-Butylbenzene  
 Scan Number : 1917  
 Retention Time (minutes): 13.274  
 Quant Ion : 92.00  
 Area : 64348  
 On-column Amount (ng) : 0.4713  
 Integration start scan : 1909      Integration stop scan: 1935  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d  
Injection date and time: 09-JUL-2018 14:52

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21

Sublist used: 8260W25

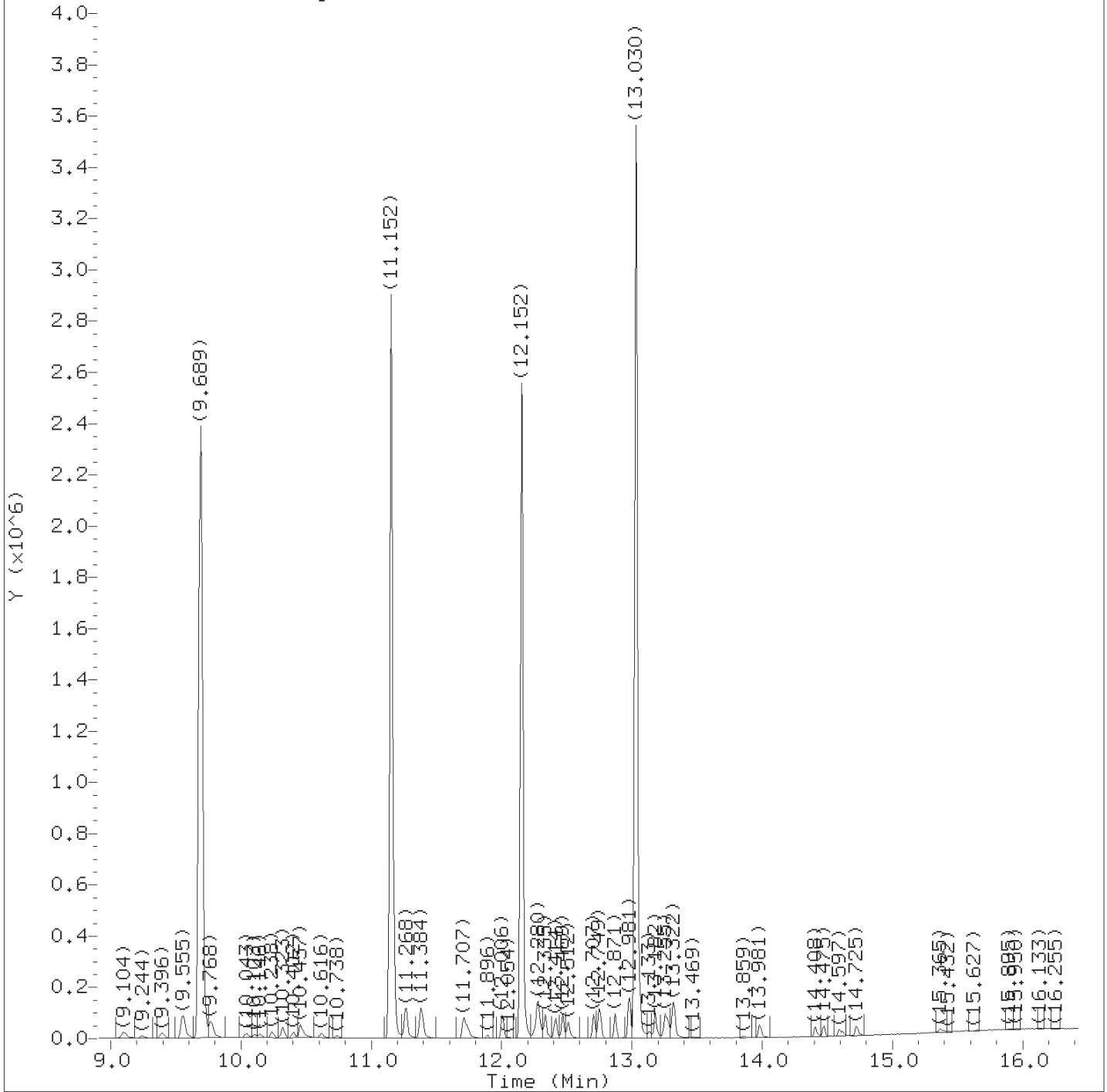
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2

Lab Sample ID: VSTD0.2

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d  
Injection date and time: 09-JUL-2018 14:52

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21

Sublist used: 8260W25

Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2

Lab Sample ID: VSTD0.2

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i07.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2

Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.922	85	19321	0.160
2) Chloromethane	(2)	2.111	50	19575	0.222
6) 1,3-Butadiene	(2)	2.215	39	9270M	0.164
5) Vinyl Chloride	(2)	2.233	62	16588	0.195
7) Bromomethane	(2)	2.544	94	19074	0.238
8) Chloroethane	(2)	2.629	64	11030	0.223
9) Dichlorofluoromethane	(2)	2.855	67	30898M	0.237
10) Trichlorofluoromethane	(2)	2.916	101	24662	0.169
11) Ethyl ether	(2)	3.184	59	9115	0.189
12) Freon 123a	(2)	3.239	67	13120	0.178
13) Acrolein	(1)	3.355	56	77095	9.860
15) 1,1-Dichloroethene	(2)	3.489	96	8803	0.175
16) Freon 113	(2)	3.501	101	7967	0.137
14) Acetone	(1)	3.525	43	27606M	2.374
17) Methyl Iodide	(2)	3.684	142	19119	0.186
18) Carbon Disulfide	(2)	3.800	76	28853	0.194
22) Allyl Chloride	(2)	3.958	41	22106	0.205
21) Methyl Acetate	(1)	3.977	43	4354M	0.165
23) Methylene Chloride	(2)	4.153	84	11451	0.201
26)*t-Butyl Alcohol-d10	(1)	4.153	65	198985	50.000
28) t-Butyl Alcohol	(1)	4.294	59	21197	4.120
29) Acrylonitrile	(1)	4.537	53	11763	0.928
30) Methyl Tertiary Butyl Ether	(2)	4.544	73	29901	0.192
31) trans-1,2-Dichloroethene	(2)	4.574	96	11195	0.197
32) n-Hexane	(2)	4.989	57	11786	0.126
33) 1,1-Dichloroethane	(2)	5.239	63	21791	0.194
34) di-Isopropyl Ether	(2)	5.293	45	39124	0.192
35) 2-Chloro-1,3-Butadiene	(2)	5.348	53	17946	0.168
37) Ethyl t-butyl ether	(2)	5.824	59	36890	0.194
41) 2,2-Dichloropropane	(2)	6.074	77	18742	0.183
39) cis-1,2-Dichloroethene	(2)	6.080	96	12705	0.195
38) 2-Butanone	(1)	6.092	43	36854	1.911
40) 1,2-Dichloroethene (Total)	(2)		96	23900	0.392
42) Propionitrile	(1)	6.184	54	17393	3.655
45) Methacrylonitrile	(1)	6.360	67	30731	1.895
47) Bromochloromethane	(2)	6.415	128	5187	0.182
48) Tetrahydrofuran	(1)	6.440	71	9954	1.999
49) Chloroform	(2)	6.561	83	22141	0.195

M = Compound was manually integrated.

\* = Compound is an internal standard.

Digitally signed by Don V. Viray  
 on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i07.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2

Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.775	113	515194	9.975
50) \$Dibromofluoromethane	(2)	6.775	111	531305	10.026
51) 1,1,1-Trichloroethane	(2)	6.787	97	19976	0.183
52) Cyclohexane	(2)	6.885	56	16158	0.141
52) Cyclohexane	(2)	6.891	84	13012M	0.144
52) Cyclohexane	(2)	6.897	69	5028	0.148
54) Carbon Tetrachloride	(2)	7.007	117	16128	0.169
55) 1,1-Dichloropropene	(2)	7.007	75	15152	0.176
56) Isobutyl Alcohol	(1)	7.159	41	17238	11.066
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	97866	9.978
57) \$1,2-Dichloroethane-d4	(2)	7.238	65	579736	9.983
57) \$1,2-Dichloroethane-d4	(2)	7.238	104	62284	9.908
58) Benzene	(2)	7.269	78	46851	0.195
59) 1,2-Dichloroethane	(2)	7.354	62	17303	0.213
59) 1,2-Dichloroethane	(2)	7.360	98	782	0.139
60) t-Amyl methyl ether	(2)	7.452	73	33042	0.199
63) *Fluorobenzene	(2)	7.671	96	1978744	10.000
62) n-Heptane	(2)	7.671	43	17166	0.167
65) n-Butanol	(1)	8.092	56	19300	16.613
67) Trichloroethene	(2)	8.159	95	12335	0.187
69) Methylcyclohexane	(2)	8.464	83	14844	0.125
70) 1,2-Dichloropropane	(2)	8.494	63	11717	0.194
72) 1,4-Dioxane	(1)	8.604	88	1488M	5.668
72) 1,4-Dioxane	(1)	8.622	58	1037	5.460
71) Methyl Methacrylate	(1)	8.604	69	4560	0.155
73) Dibromomethane	(2)	8.616	93	5659	0.187
74) Bromodichloromethane	(2)	8.842	83	14580	0.179
76) 2-Nitropropane	(1)	9.104	41	25369	1.921
80) cis-1,3-Dichloropropene	(2)	9.396	75	16211	0.176
81) 4-Methyl-2-Pentanone	(1)	9.555	43	86448	1.832
82) \$Toluene-d8	(3)	9.689	98	1924532	10.255
82) \$Toluene-d8	(3)	9.689	100	1243445	10.266
83) Toluene	(3)	9.768	92	28846	0.195
84) trans-1,3-Dichloropropene	(3)	10.043	75	13187	0.179
86) Ethyl Methacrylate	(3)	10.103	69	10720	0.168
85) 1,3-Dichloropropene (total)	(3)		75	29398	0.354
88) 1,1,2-Trichloroethane	(3)	10.238	97	7712	0.189
89) Tetrachloroethene	(3)	10.323	166	14501	0.190

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i07.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2

Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.408	76	13708	0.194
91) 2-Hexanone	(1)	10.457	43	65652	1.941
93) Dibromochloromethane	(3)	10.616	129	9474	0.179
95) 1,2-Dibromoethane	(3)	10.738	107	7143	0.183
97) *Chlorobenzene-d5	(3)	11.152	117	1502345	10.000
98) Chlorobenzene	(3)	11.183	112	31303	0.194
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	10747	0.175
100) Ethylbenzene	(3)	11.268	91	56211	0.192
101) m+p-Xylene	(3)	11.384	106	42553	0.373
104) o-Xylene	(3)	11.707	106	21302	0.187
106) Styrene	(3)	11.737	104	29355	0.171
105) Xylene (Total)	(3)		106	63855	0.559
107) Bromoform	(3)	11.890	173	5242	0.163
108) Isopropylbenzene	(3)	12.006	105	54724M	0.184
111) \$4-Bromofluorobenzene	(3)	12.152	95	756468	10.241
111) \$4-Bromofluorobenzene	(3)	12.158	174	679474	10.140
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	9524	0.182
114) Bromobenzene	(4)	12.274	156	13570	0.176
115) trans-1,4-Dichloro-2-butene	(1)	12.280	53	26144	1.684
116) 1,2,3-Trichloropropane	(4)	12.304	110	2872	0.188
117) n-Propylbenzene	(4)	12.335	91	64829	0.185
119) 2-Chlorotoluene	(4)	12.414	126	13082	0.186
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	46064	0.183
122) 4-Chlorotoluene	(4)	12.518	126	13071	0.184
125) tert-Butylbenzene	(4)	12.707	134	9801M	0.181
126) Pentachloroethane	(4)	12.743	167	7453	0.158
127) 1,2,4-Trimethylbenzene	(4)	12.755	105	46408	0.182
128) sec-Butylbenzene	(4)	12.871	105	56809	0.176
131) 1,3-Dichlorobenzene	(4)	12.981	146	26245	0.180
132) p-Isopropyltoluene	(4)	12.981	119	46335	0.162
133) *1,4-Dichlorobenzene-d4	(4)	13.030	152	855012	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	28529	0.192
135) 1,2,3-Trimethylbenzene	(4)	13.054	120	22514	0.194
136) Benzyl Chloride	(4)	13.139	126	2754	0.140
138) n-Butylbenzene	(4)	13.274	92	22699	0.173
139) 1,2-Dichlorobenzene	(4)	13.316	146	25665	0.190
143) 1,2-Dibromo-3-chloropropane	(1)	13.859	155	1122	0.146
144) 1,3,5-Trichlorobenzene	(4)	13.981	180	18025	0.171

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09i07.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2

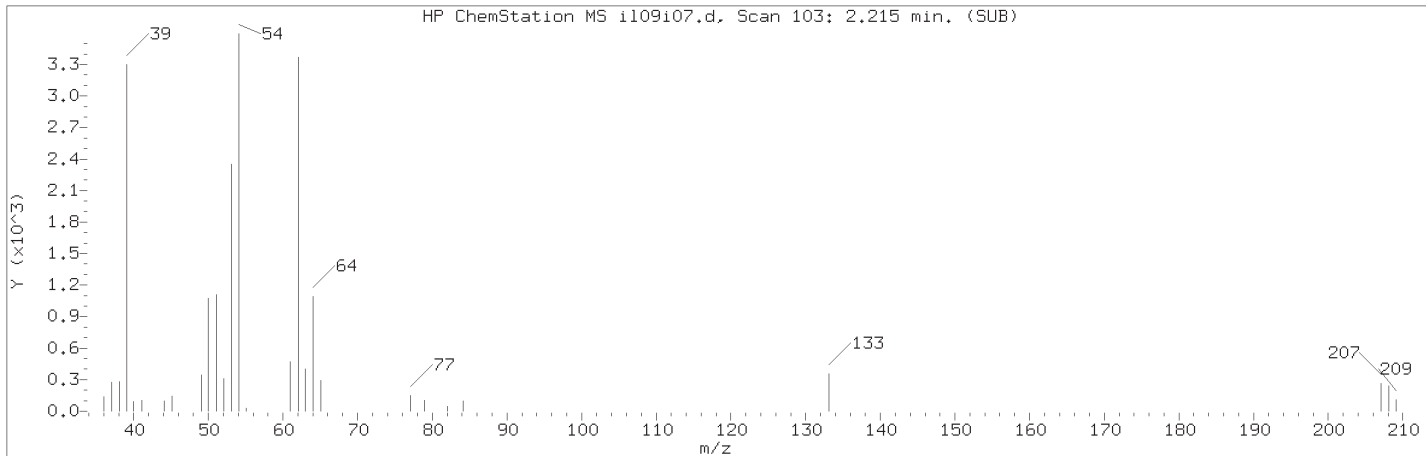
Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,2,4-Trichlorobenzene	(4)	14.408	180	15190	0.167
146) Hexachlorobutadiene	(4)	14.475	225	6340	0.164
147) Naphthalene	(4)	14.597	128	29929	0.182
148) 1,2,3-Trichlorobenzene	(4)	14.725	180	14183	0.183

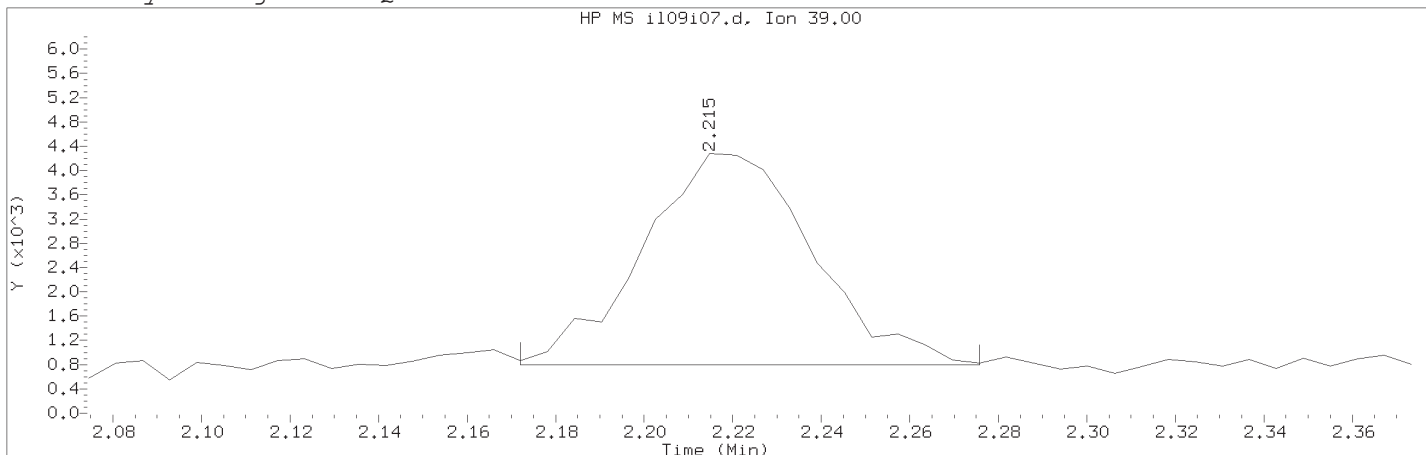
page 4 of 4

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2    Lab Sample ID: VSTD0.2

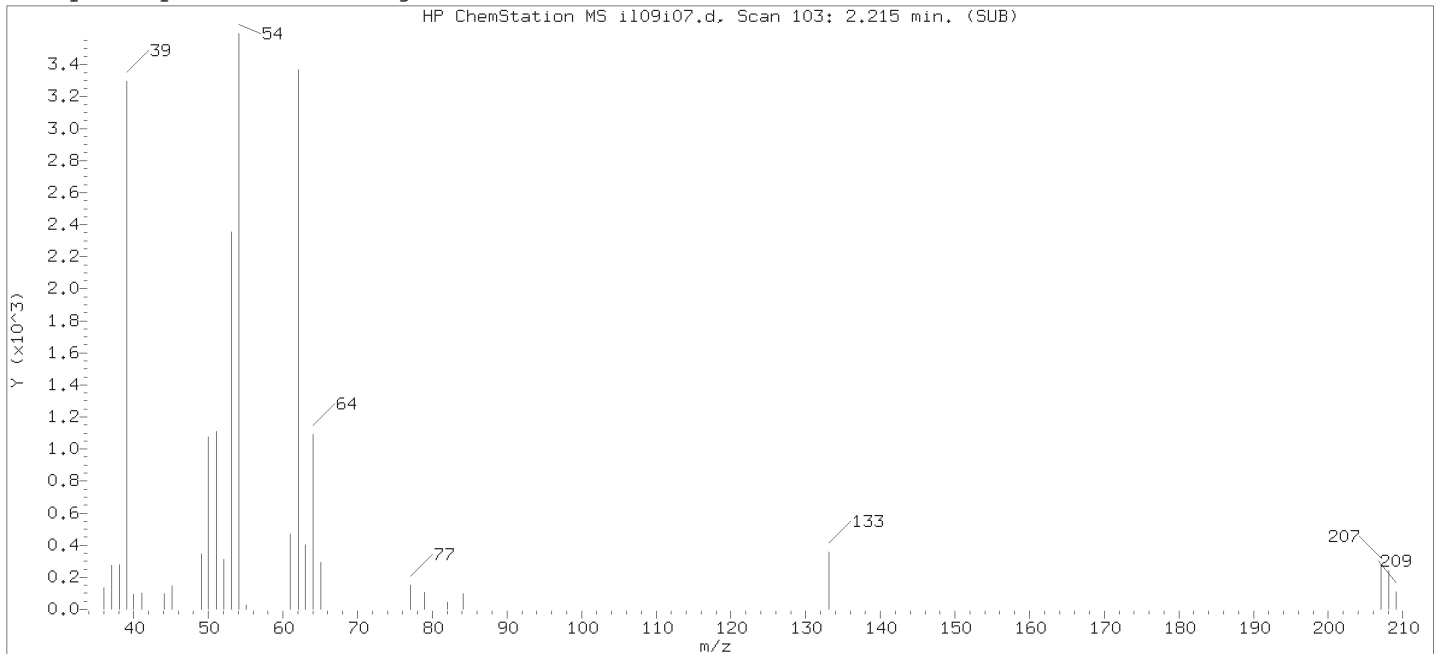
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 103  
Retention Time (minutes): 2.215  
Quant Ion                                : 39.00  
Area (flag)                             : 9270M  
On-Column Amount (ng)                : 0.1637  
Integration start scan                 : 95                      Integration stop scan: 112  
Y at integration start                 : 799                    Y at integration end: 799

Reason for manual integration: improper integration

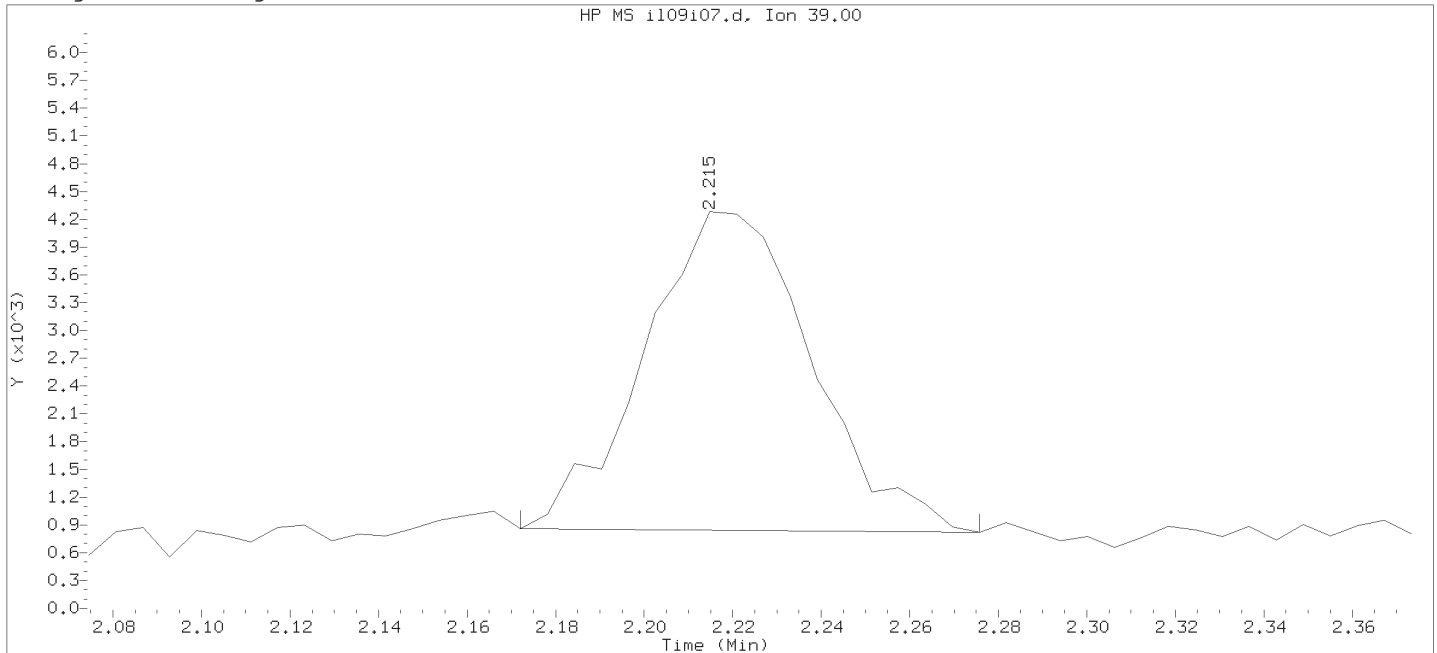
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



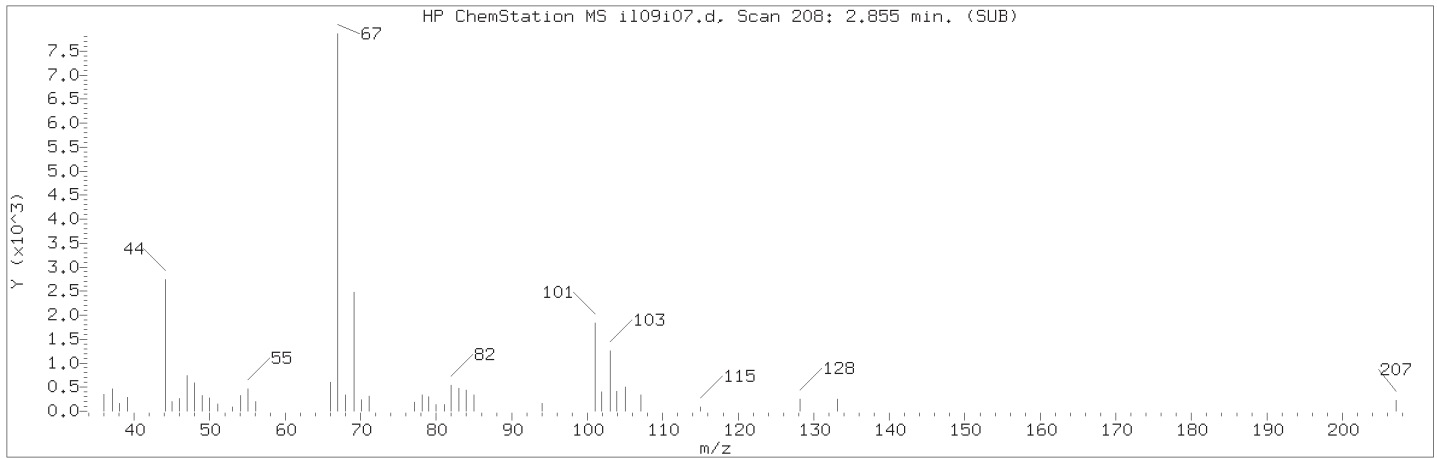
Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

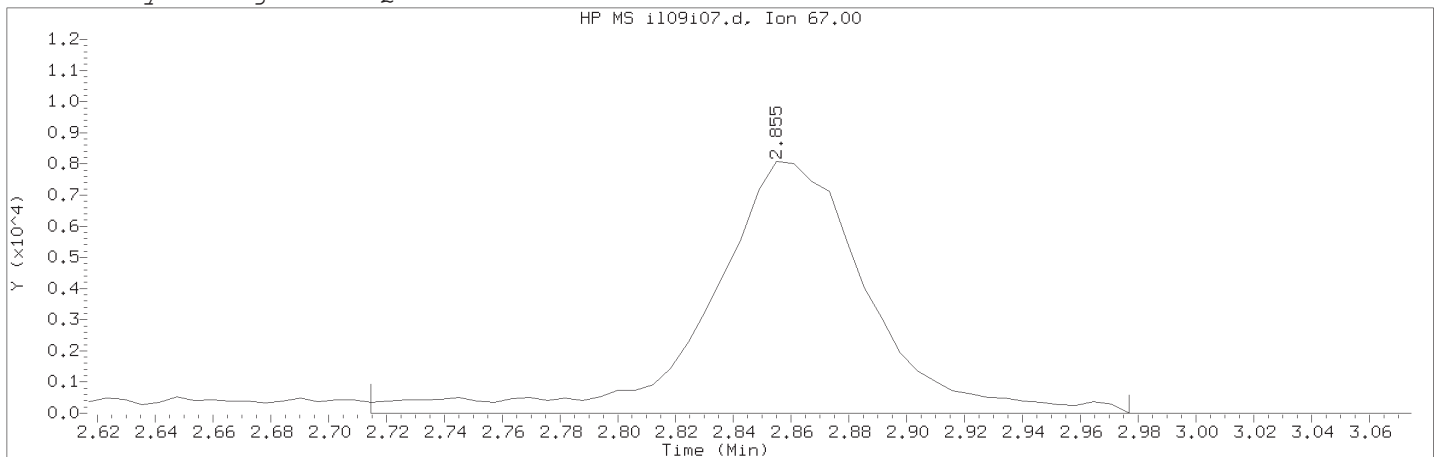
Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

Compound Number : 6  
 Compound Name : 1,3-Butadiene  
 Scan Number : 103  
 Retention Time (minutes): 2.215  
 Quant Ion : 39.00  
 Area : 8987  
 On-column Amount (ng) : 0.1619  
 Integration start scan : 95      Integration stop scan: 112  
 Y at integration start : 862      Y at integration end: 822

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2    Lab Sample ID: VSTD0.2

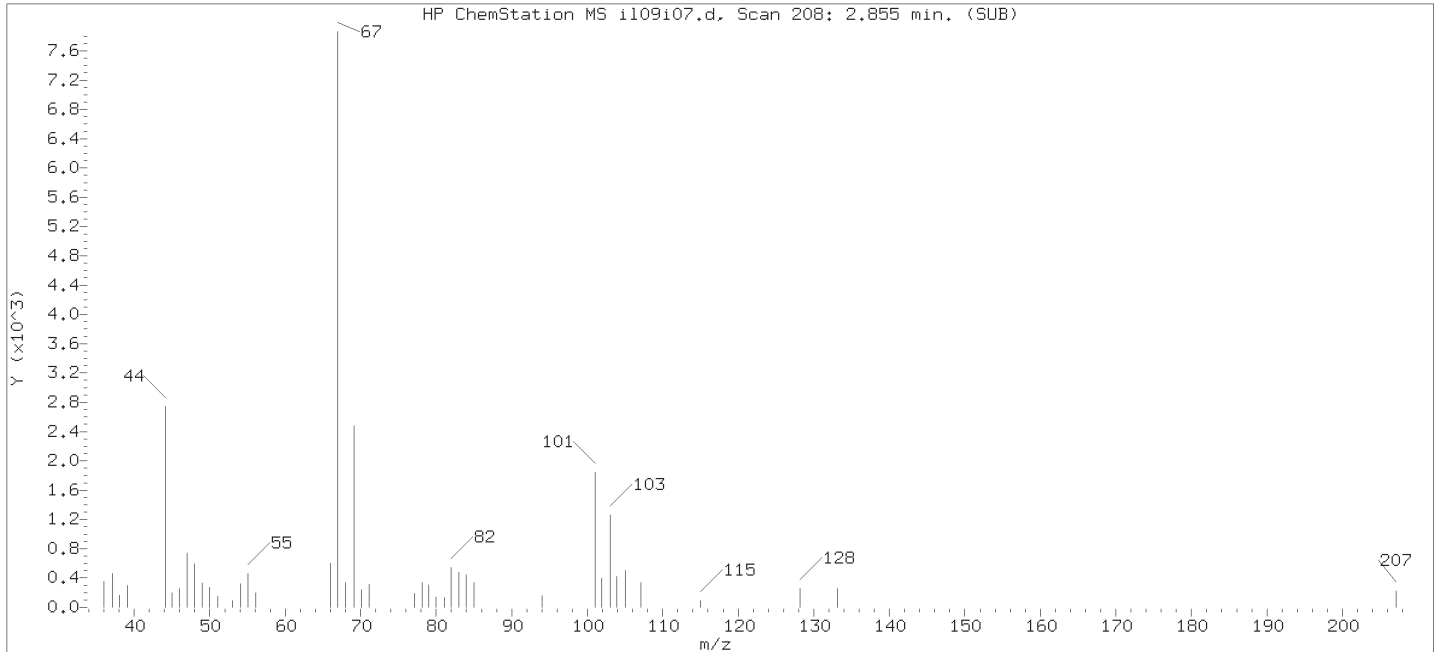
Compound Number                      : 9  
Compound Name                         : Dichlorofluoromethane  
Scan Number                            : 208  
Retention Time (minutes): 2.855  
Quant Ion                                : 67.00  
Area (flag)                             : 30898M  
On-Column Amount (ng)                : 0.2372  
Integration start scan                 : 184                      Integration stop scan: 227  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

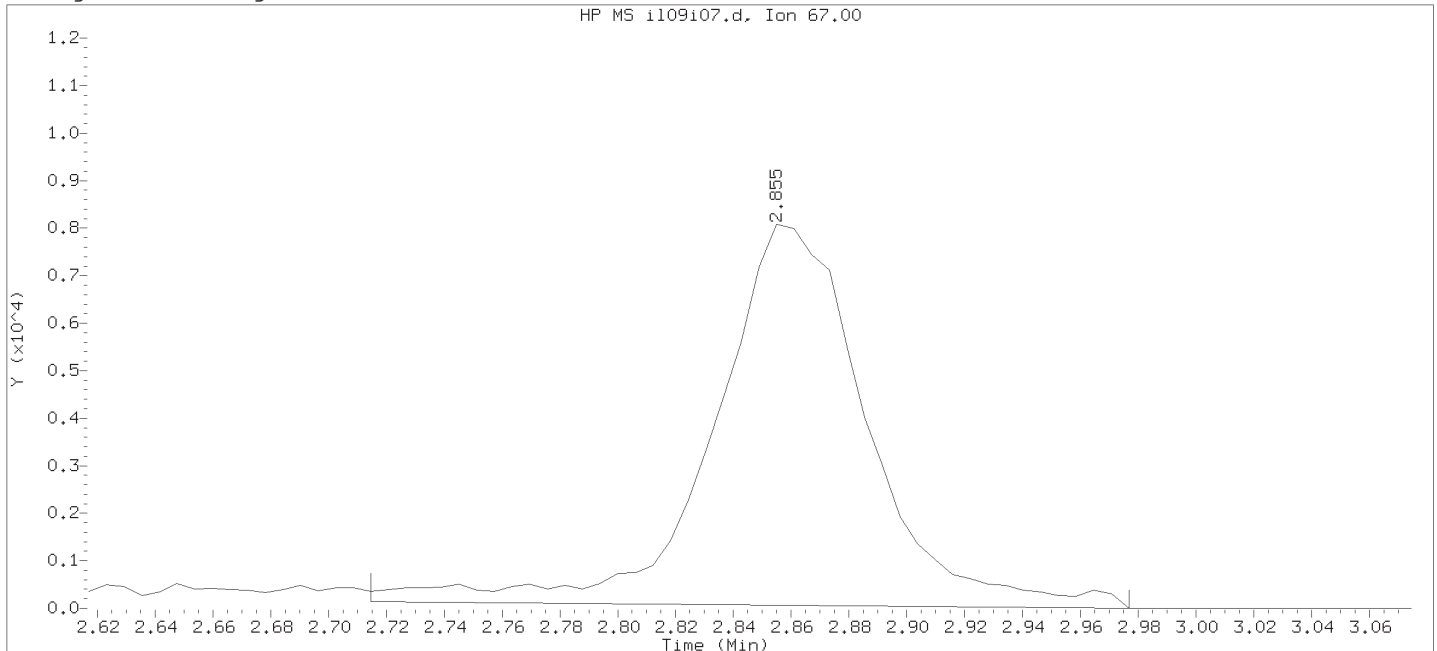
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

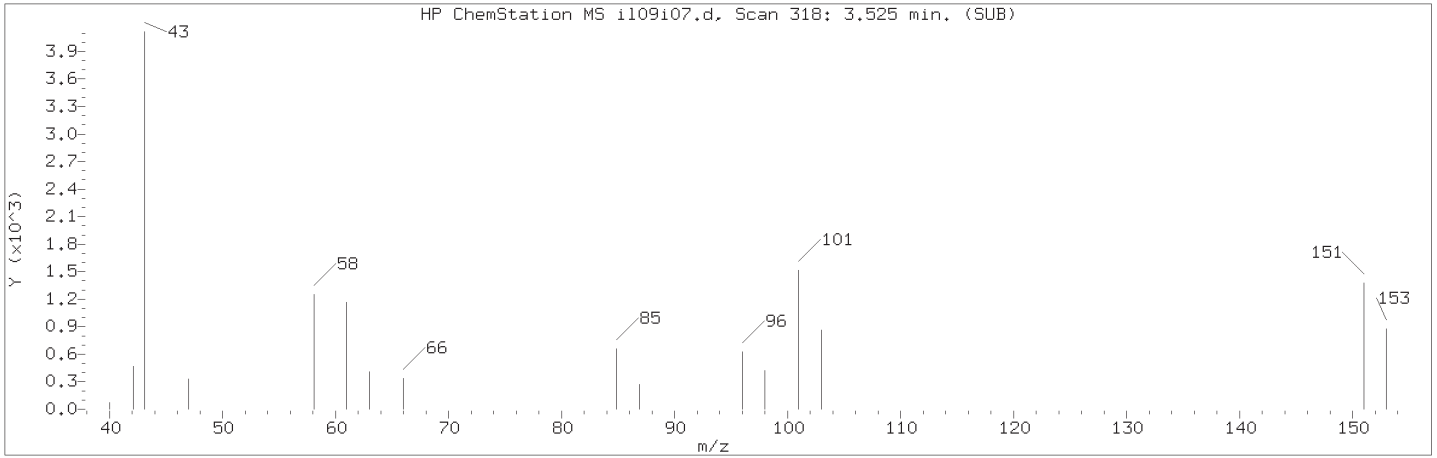
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

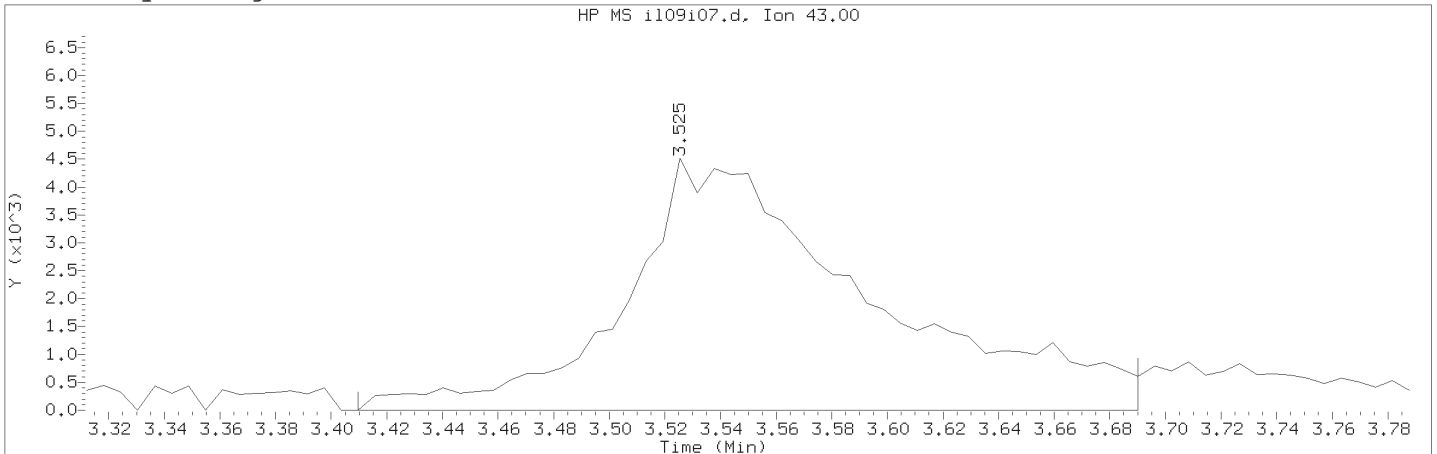
Compound Number : 9  
 Compound Name : Dichlorofluoromethane  
 Scan Number : 208  
 Retention Time (minutes): 2.855  
 Quant Ion : 67.00  
 Area : 29701  
 On-column Amount (ng) : 0.2307  
 Integration start scan : 184      Integration stop scan: 227  
 Y at integration start : 144      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2    Lab Sample ID: VSTD0.2

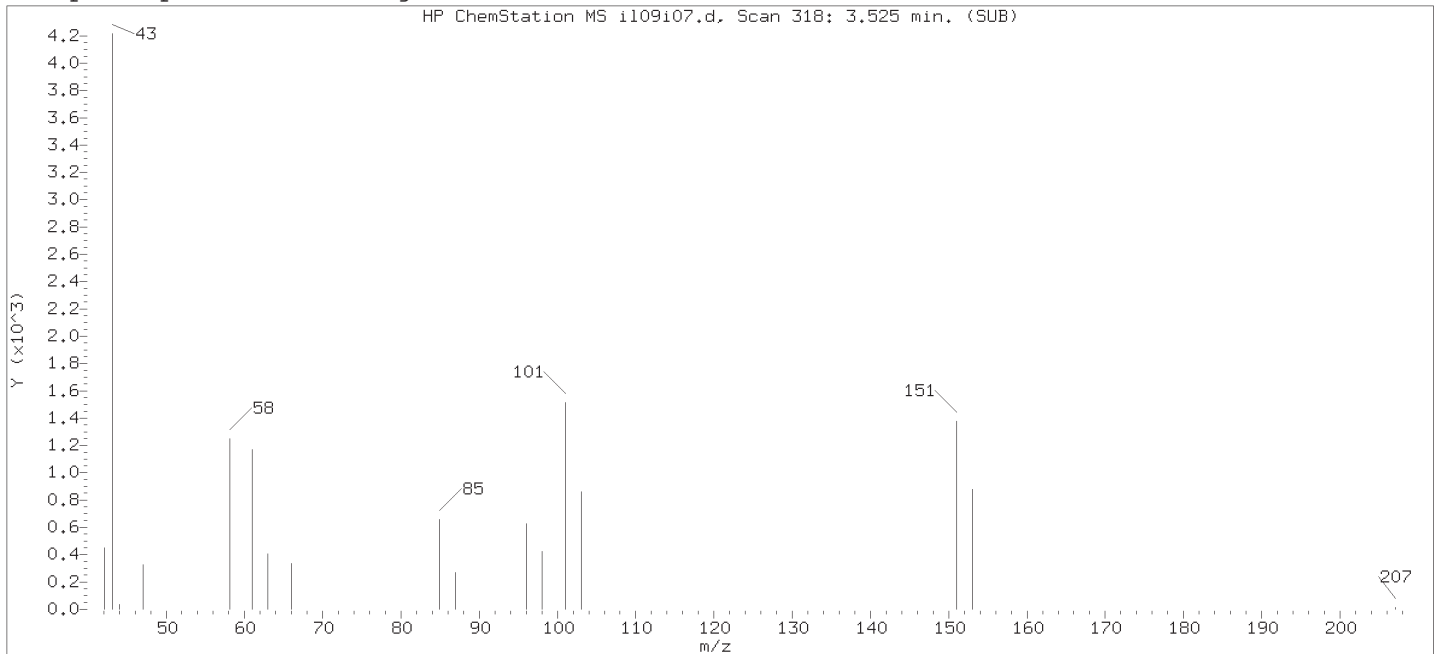
Compound Number                      : 14  
Compound Name                         : Acetone  
Scan Number                            : 318  
Retention Time (minutes): 3.525  
Quant Ion                                : 43.00  
Area (flag)                             : 27606M  
On-Column Amount (ng)                : 2.3742  
Integration start scan                : 298                      Integration stop scan: 344  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

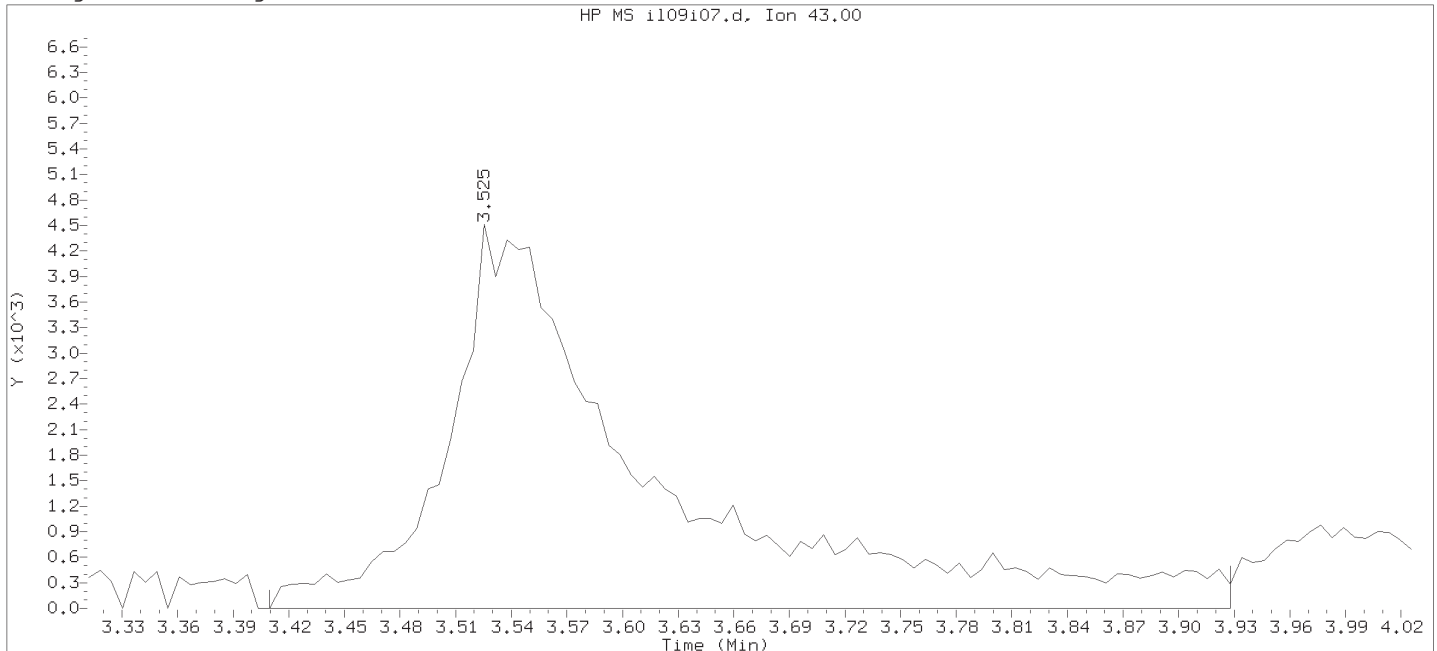
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



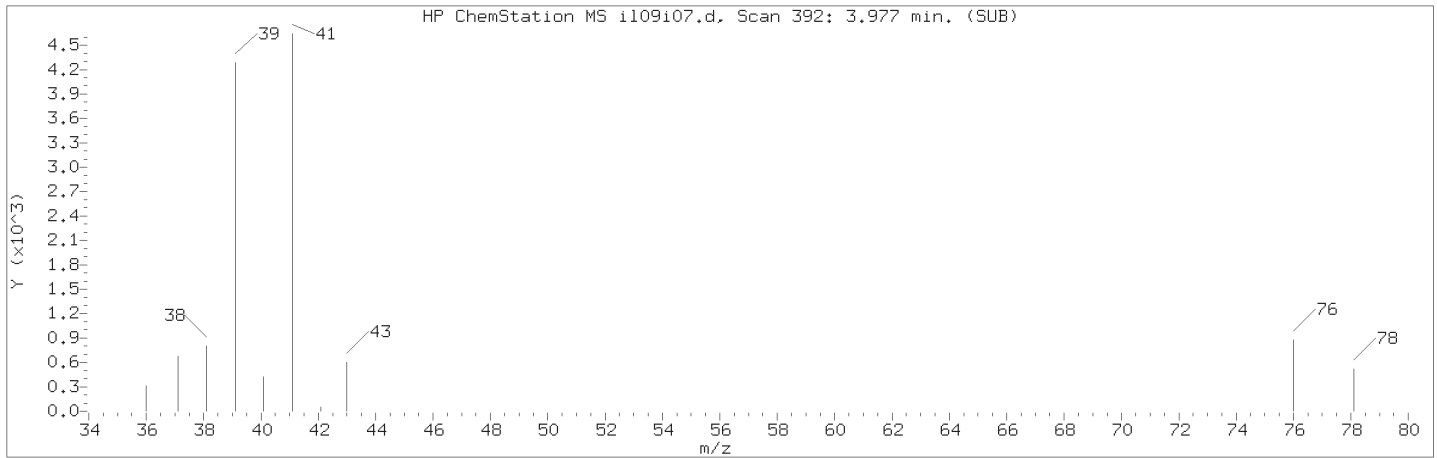
Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

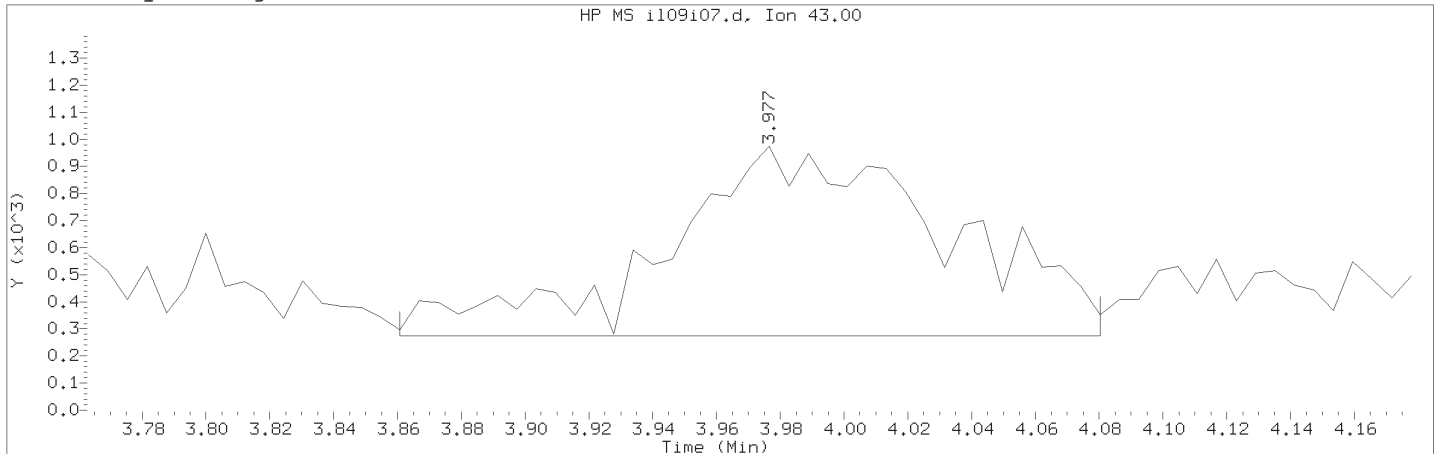
Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

Compound Number : 14  
 Compound Name : Acetone  
 Scan Number : 318  
 Retention Time (minutes): 3.525  
 Quant Ion : 43.00  
 Area : 34599  
 On-column Amount (ng) : 2.6455  
 Integration start scan : 298      Integration stop scan: 383  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

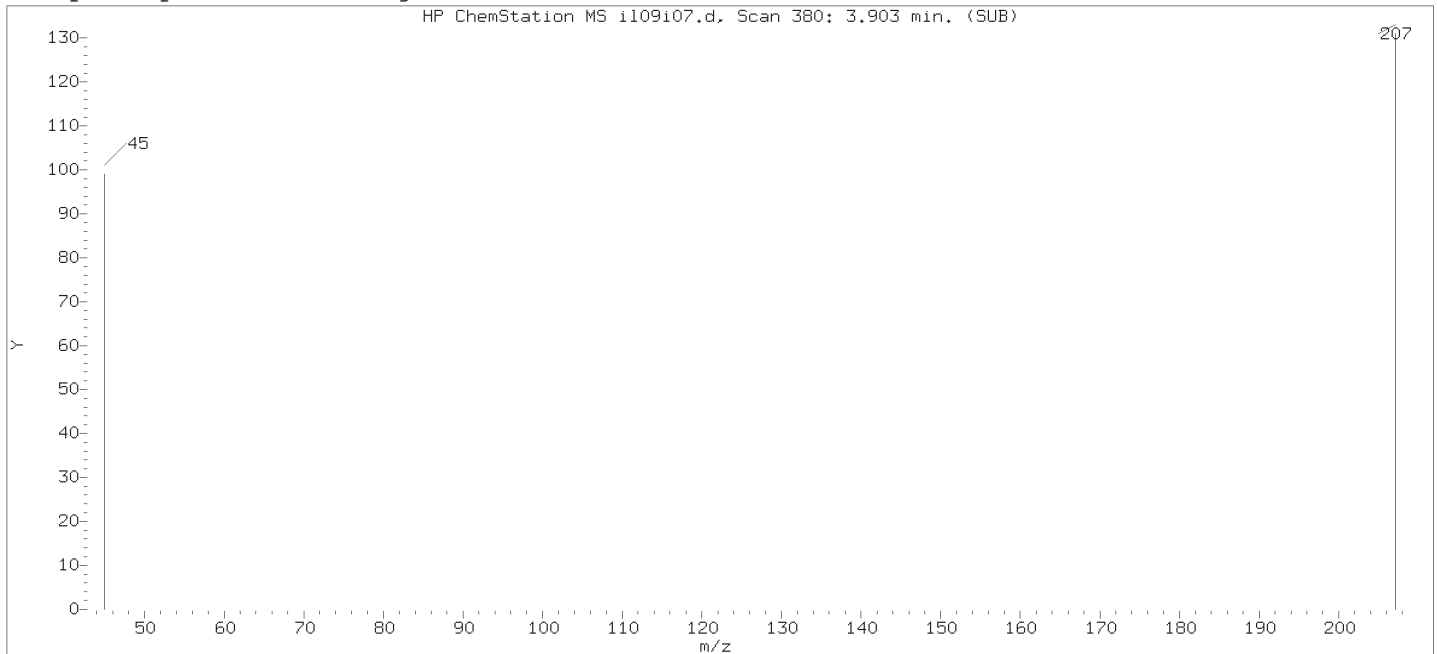
Compound Number : 21  
Compound Name : Methyl Acetate  
Scan Number : 392  
Retention Time (minutes): 3.977  
Quant Ion : 43.00  
Area (flag) : 4354M  
On-Column Amount (ng) : 0.1649  
Integration start scan : 372      Integration stop scan: 408  
Y at integration start : 275      Y at integration end: 275

Reason for manual integration: improper integration

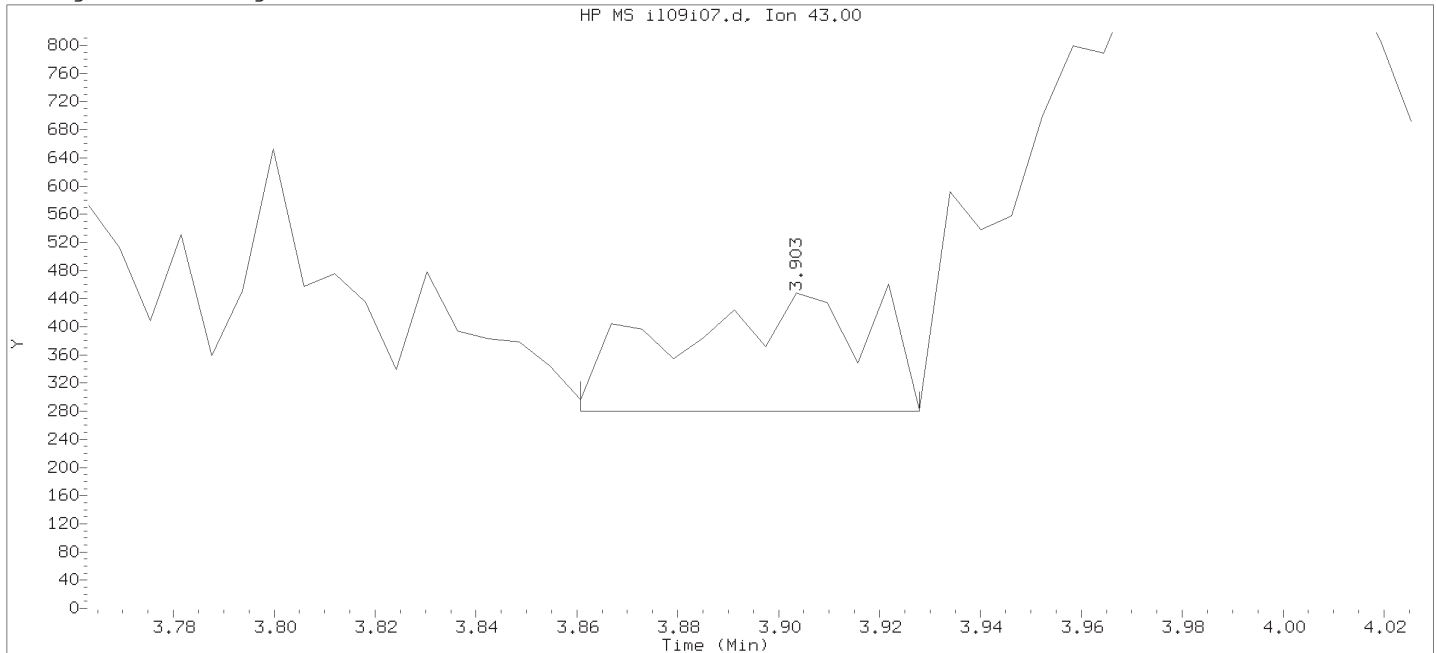
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



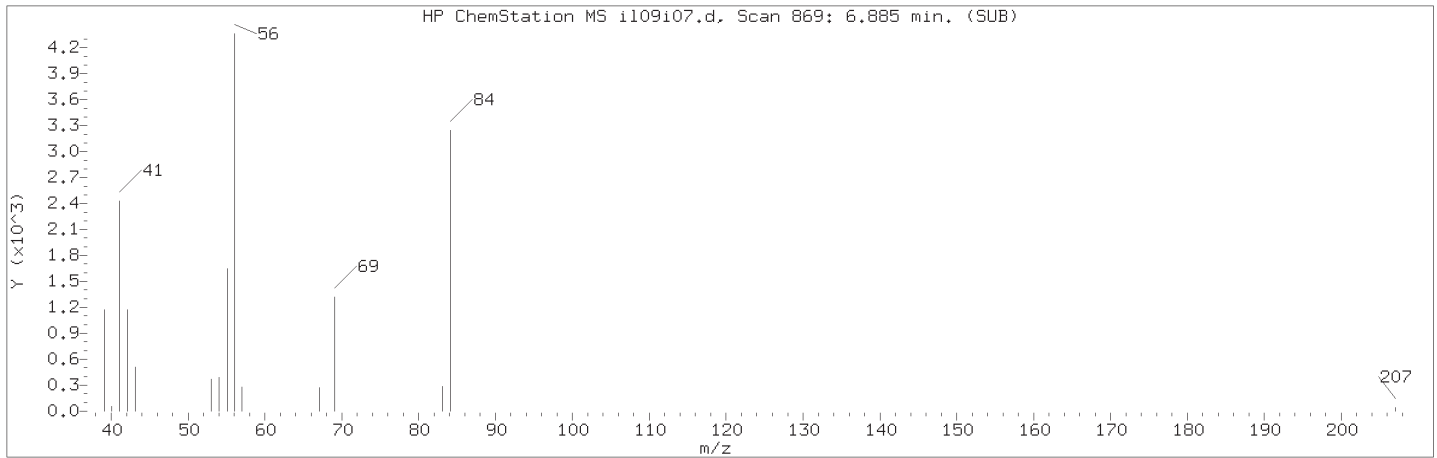
Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

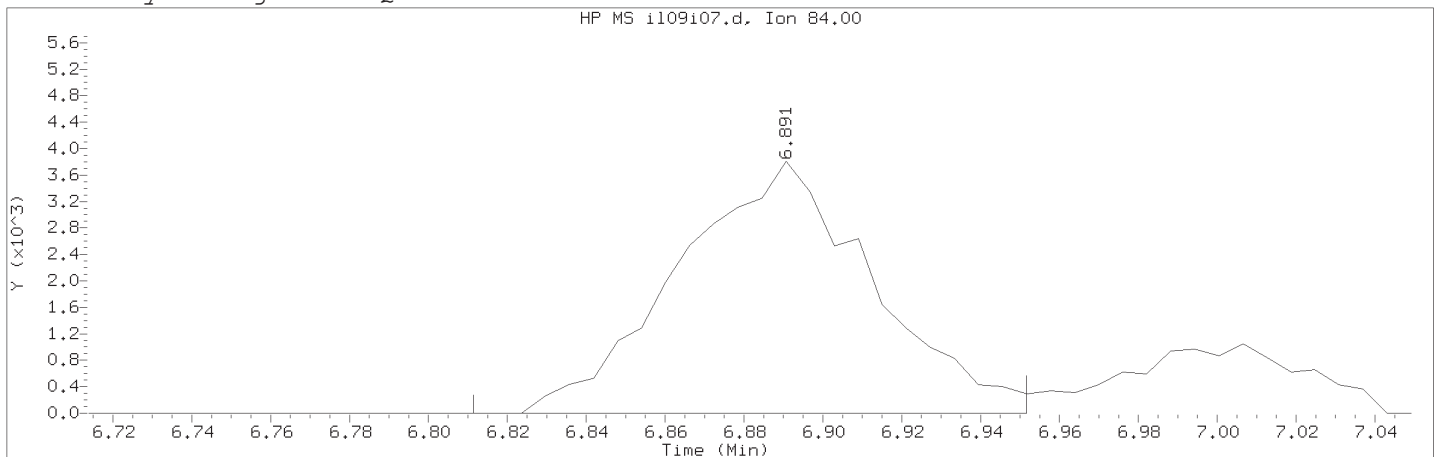
Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

Compound Number : 21  
 Compound Name : Methyl Acetate  
 Scan Number : 380  
 Retention Time (minutes): 3.903  
 Quant Ion : 43.00  
 Area : 452  
 On-column Amount (ng) : 0.0226  
 Integration start scan : 372      Integration stop scan: 383  
 Y at integration start : 280      Y at integration end: 280

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

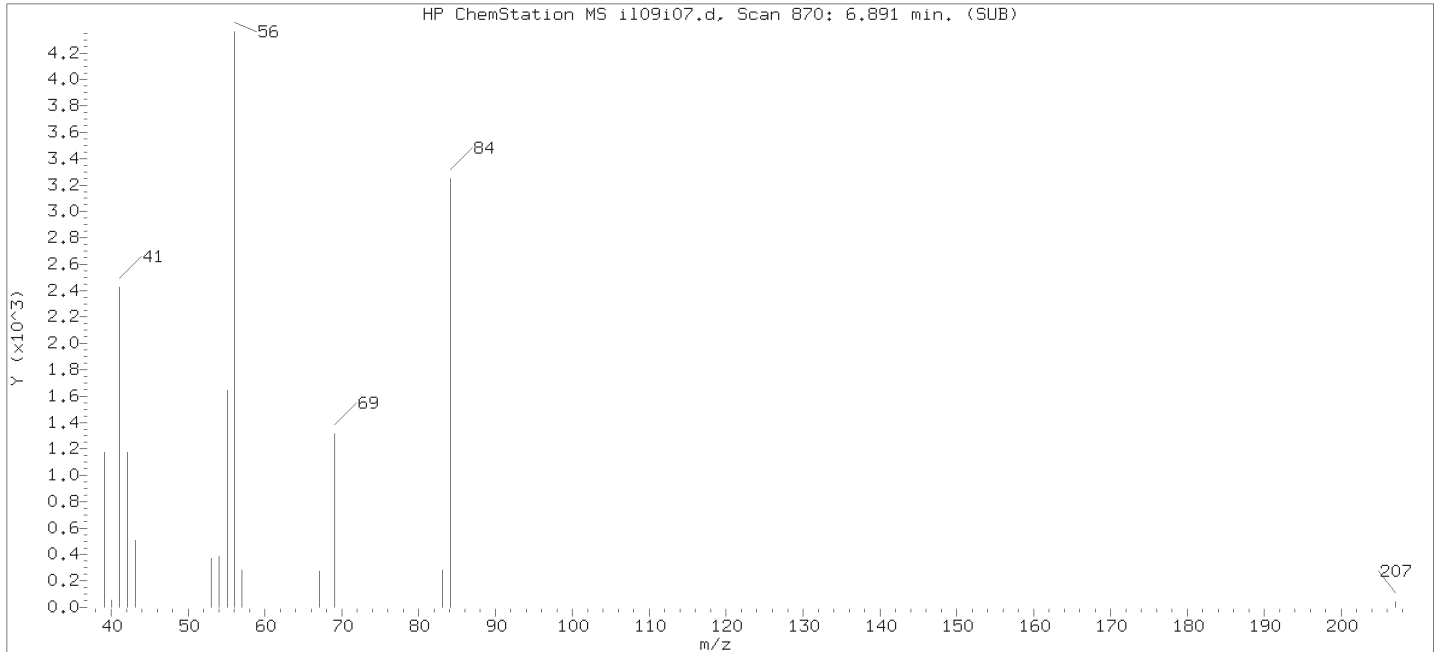
Compound Number : 52  
Compound Name : Cyclohexane  
Scan Number : 870  
Retention Time (minutes): 6.891  
Quant Ion : 84.00  
Area (flag) : 13012M  
On-Column Amount (ng) : 0.1441  
Integration start scan : 856      Integration stop scan: 879  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

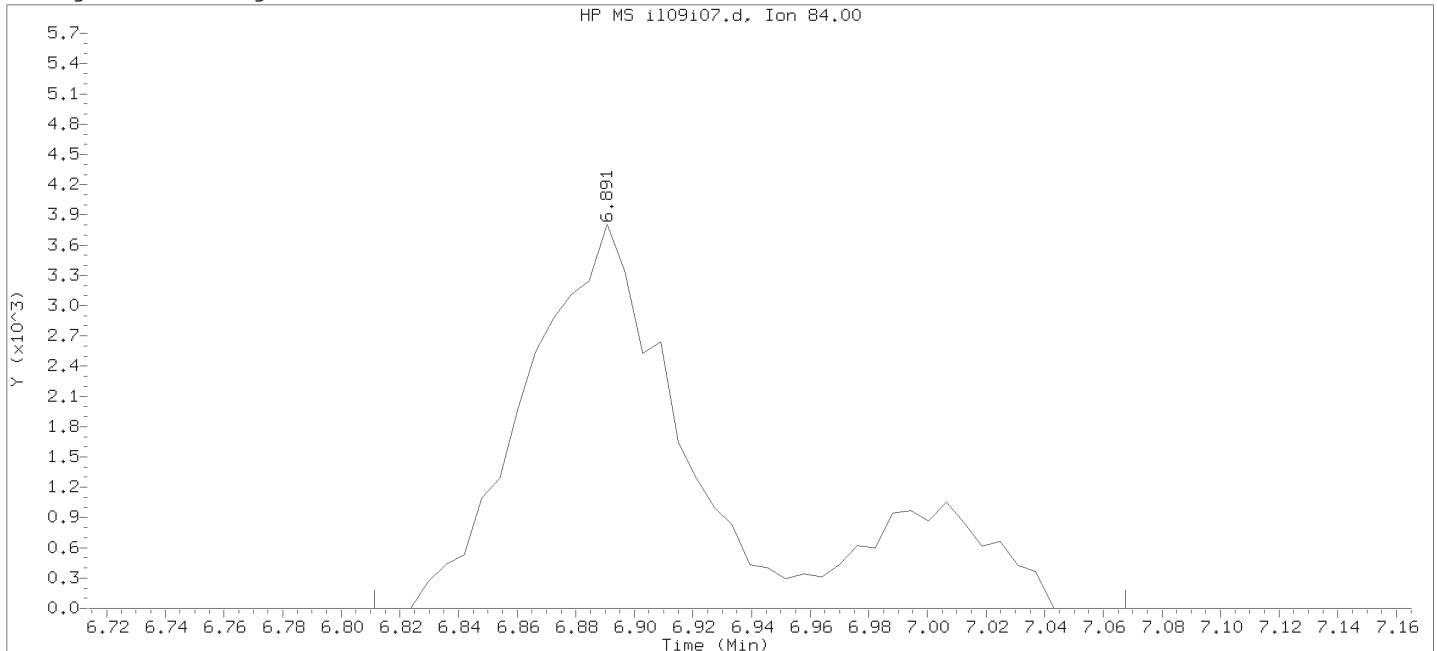
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



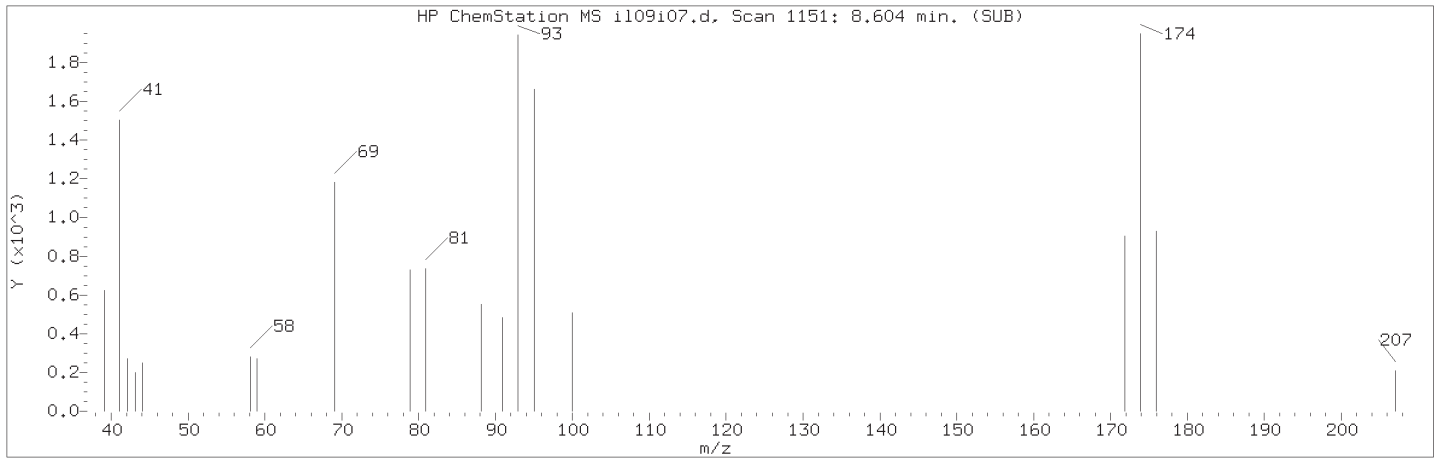
Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

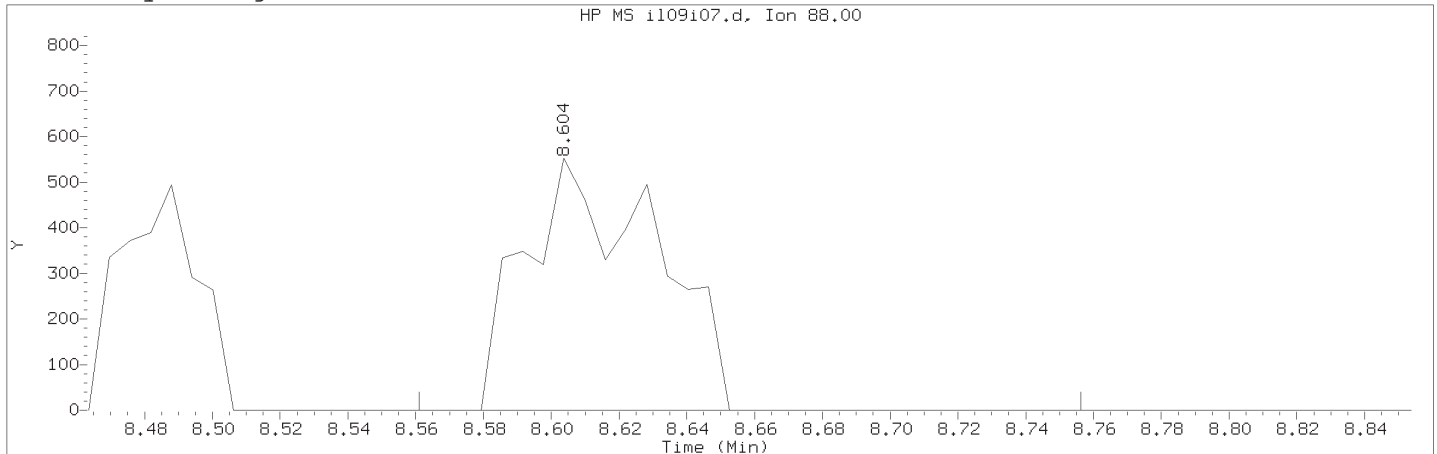
Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

Compound Number : 52  
 Compound Name : Cyclohexane  
 Scan Number : 870  
 Retention Time (minutes): 6.891  
 Quant Ion : 84.00  
 Area : 16322  
 On-column Amount (ng) : 0.1808  
 Integration start scan : 856      Integration stop scan: 898  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

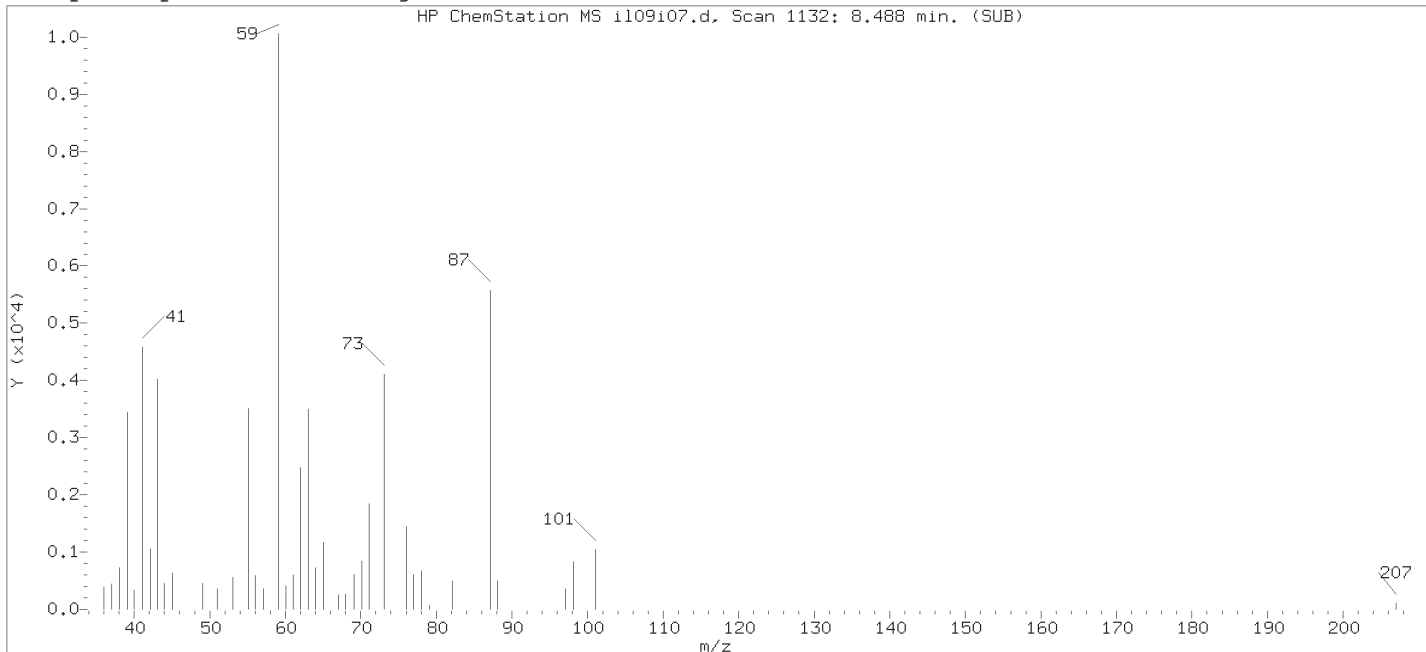
Compound Number      : 72  
Compound Name         : 1,4-Dioxane  
Scan Number           : 1151  
Retention Time (minutes): 8.604  
Quant Ion             : 88.00  
Area (flag)           : 1488M  
On-Column Amount (ng) : 5.6675  
Integration start scan : 1143      Integration stop scan: 1175  
Y at integration start : 0          Y at integration end: 0

Reason for manual integration: improper integration

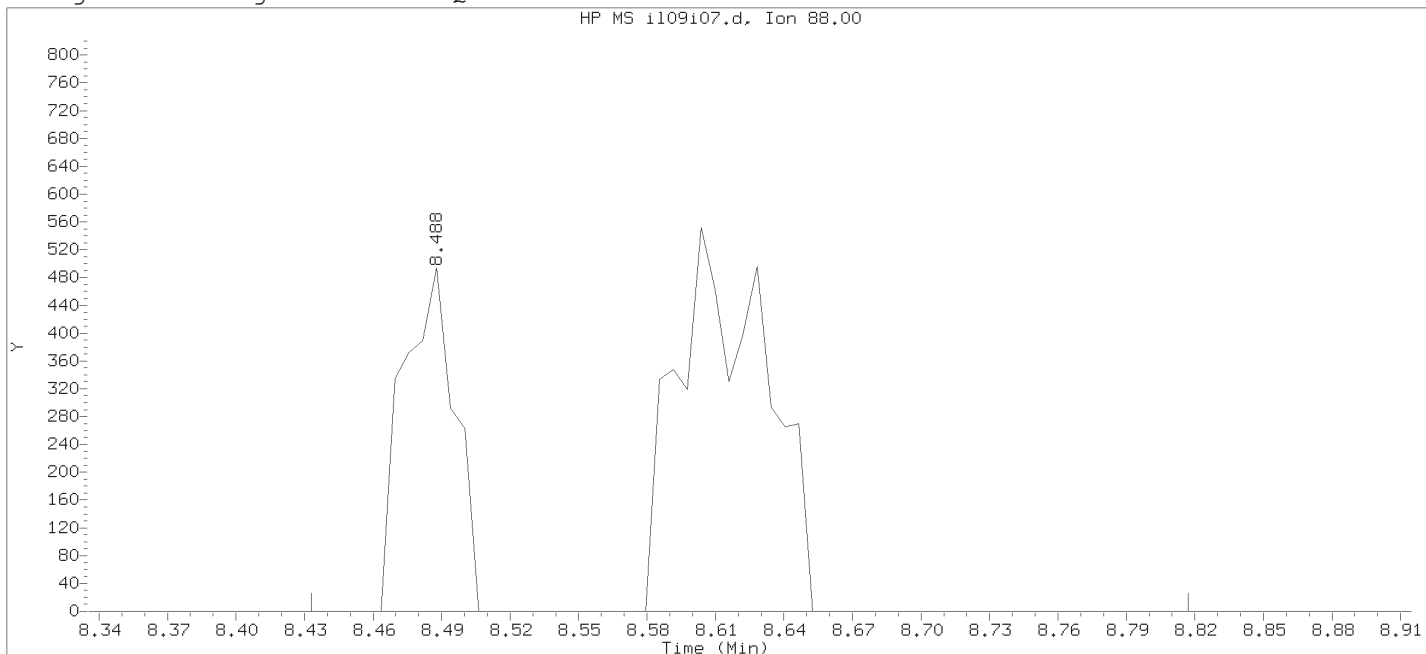
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

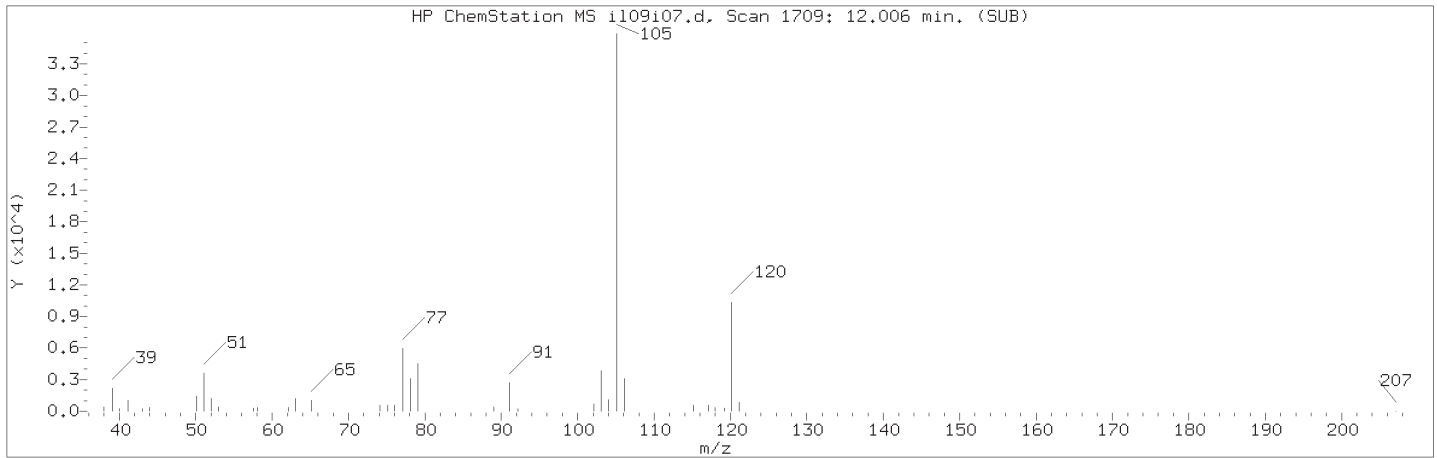
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

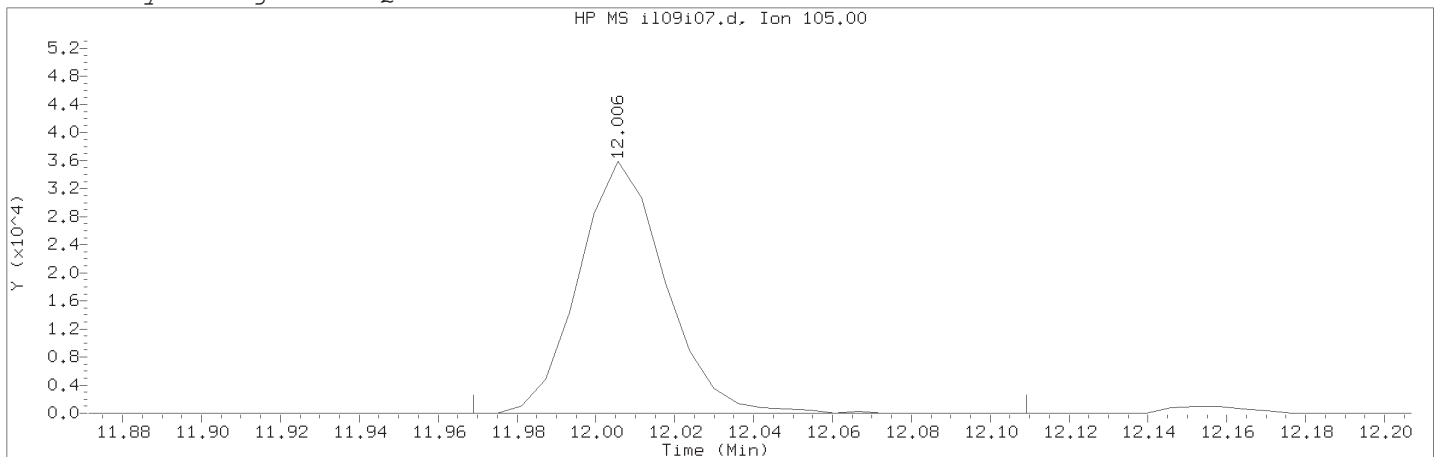
Compound Number : 72  
 Compound Name : 1,4-Dioxane  
 Scan Number : 1132  
 Retention Time (minutes): 8.488  
 Quant Ion : 88.00  
 Area : 2272  
 On-column Amount (ng) : 8.9789  
 Integration start scan : 1122      Integration stop scan: 1185  
 Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2    Lab Sample ID: VSTD0.2

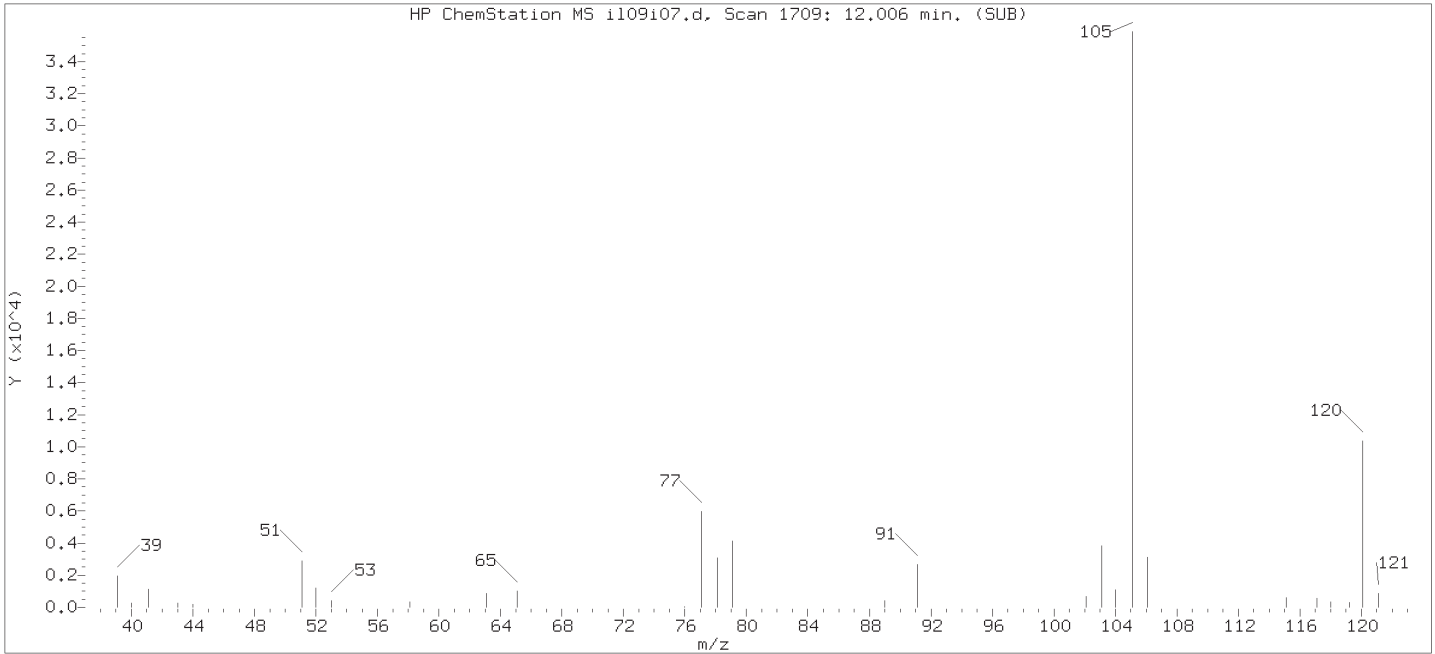
Compound Number                      : 108  
Compound Name                        : Isopropylbenzene  
Scan Number                          : 1709  
Retention Time (minutes): 12.006  
Quant Ion                              : 105.00  
Area (flag)                          : 54724M  
On-Column Amount (ng)               : 0.1841  
Integration start scan               : 1702                      Integration stop scan: 1725  
Y at integration start               : 0                         Y at integration end: 0

Reason for manual integration: improper integration

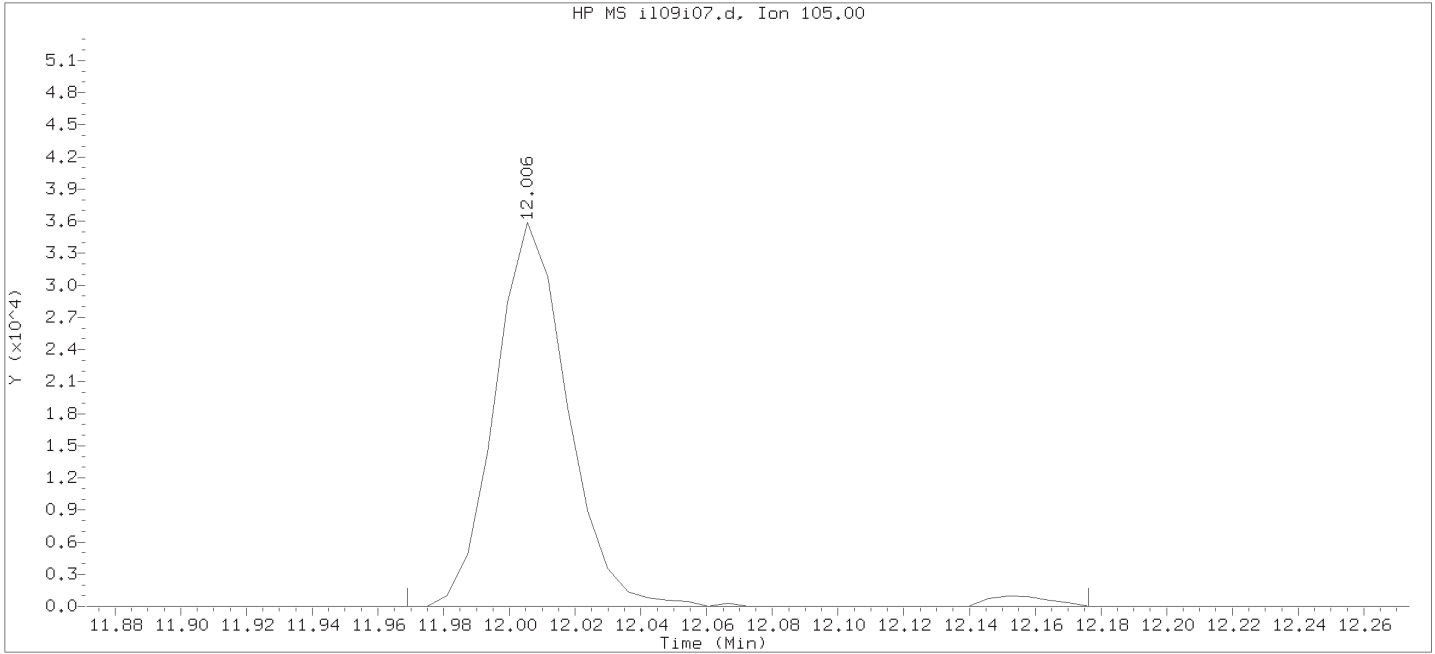
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



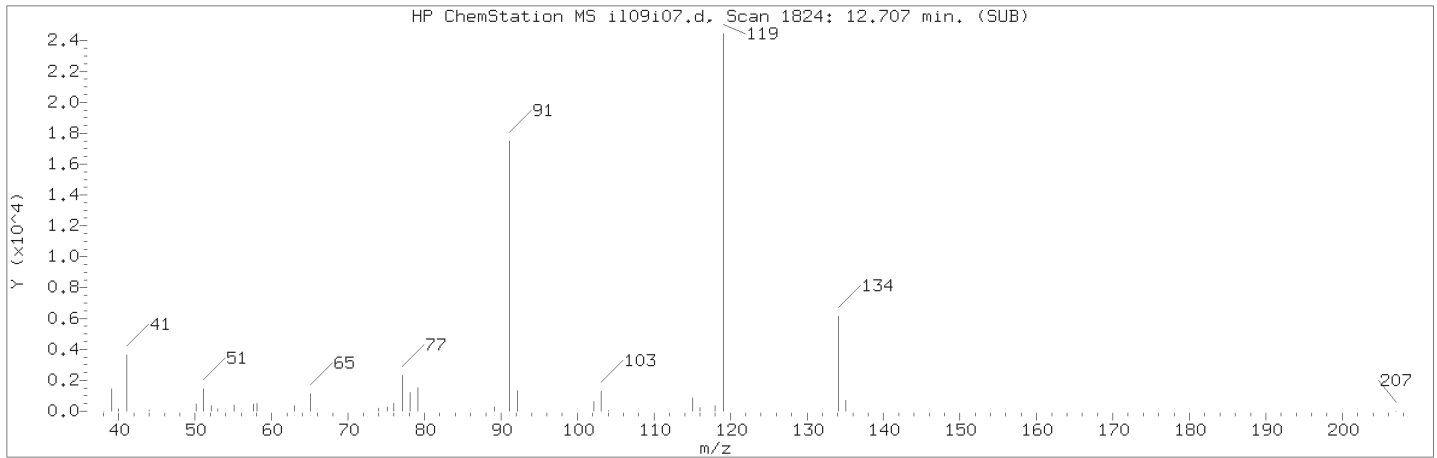
Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

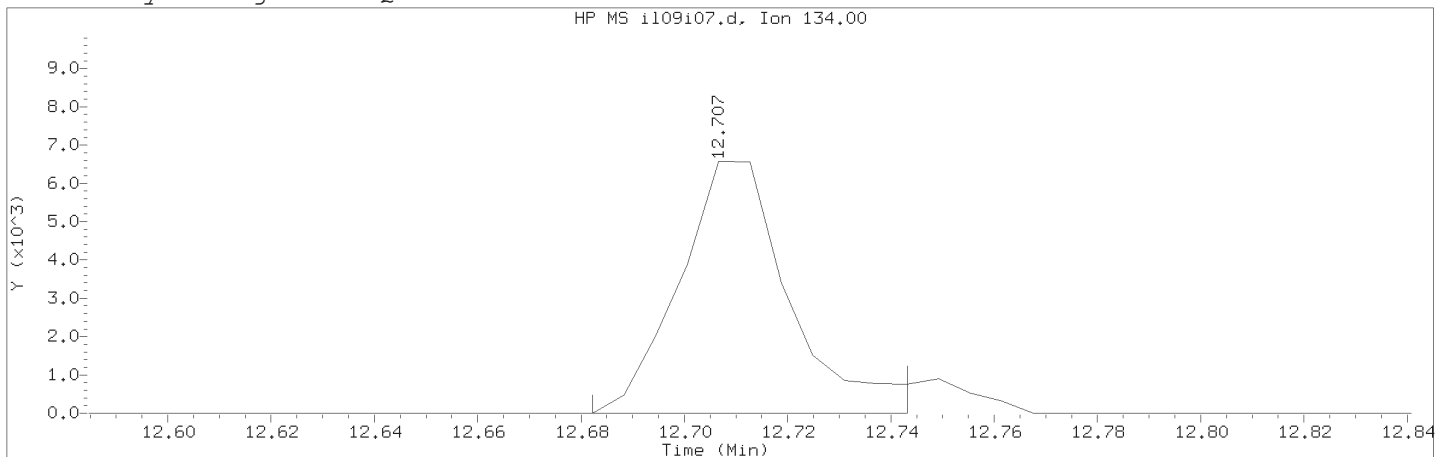
Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

Compound Number : 108  
 Compound Name : Isopropylbenzene  
 Scan Number : 1709  
 Retention Time (minutes): 12.006  
 Quant Ion : 105.00  
 Area : 56020  
 On-column Amount (ng) : 0.1878  
 Integration start scan : 1702      Integration stop scan: 1736  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 14:52                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: VSTD0.2    Lab Sample ID: VSTD0.2

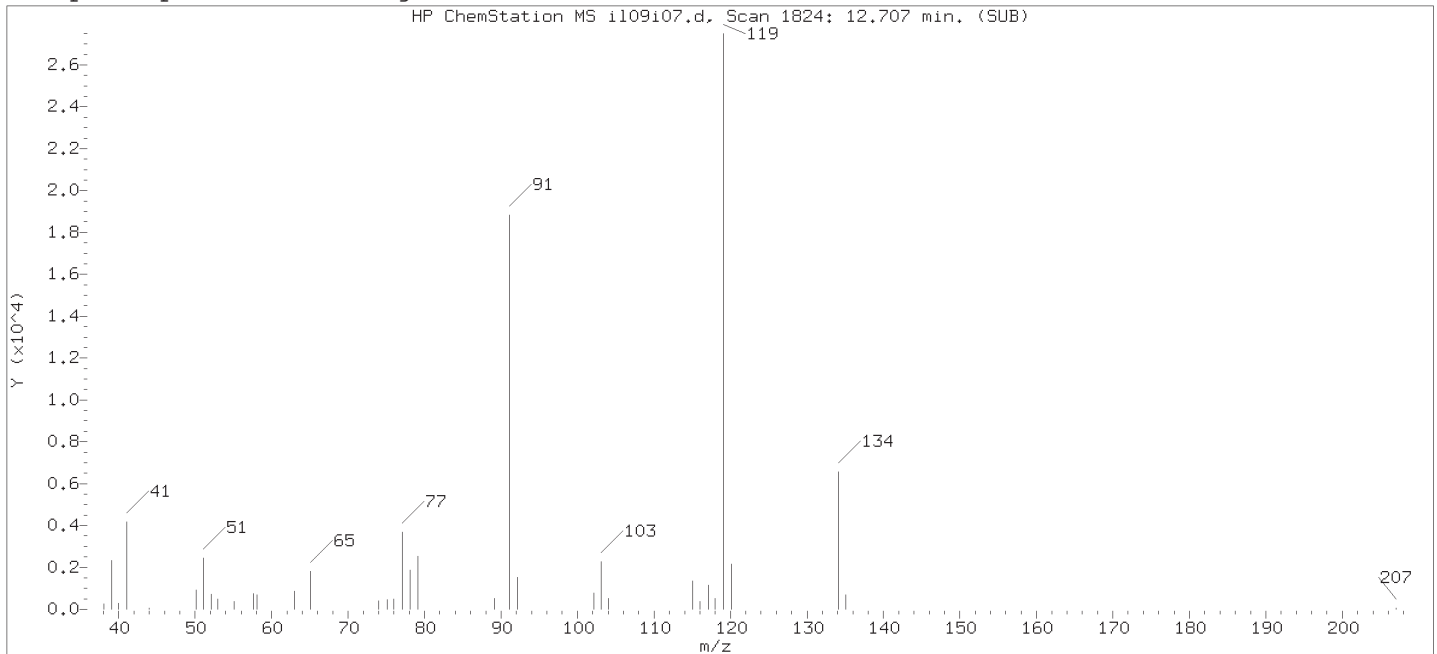
Compound Number                      : 125  
Compound Name                         : tert-Butylbenzene  
Scan Number                            : 1824  
Retention Time (minutes): 12.707  
Quant Ion                                : 134.00  
Area (flag)                             : 9801M  
On-Column Amount (ng)                : 0.1809  
Integration start scan                 : 1819                      Integration stop scan: 1829  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

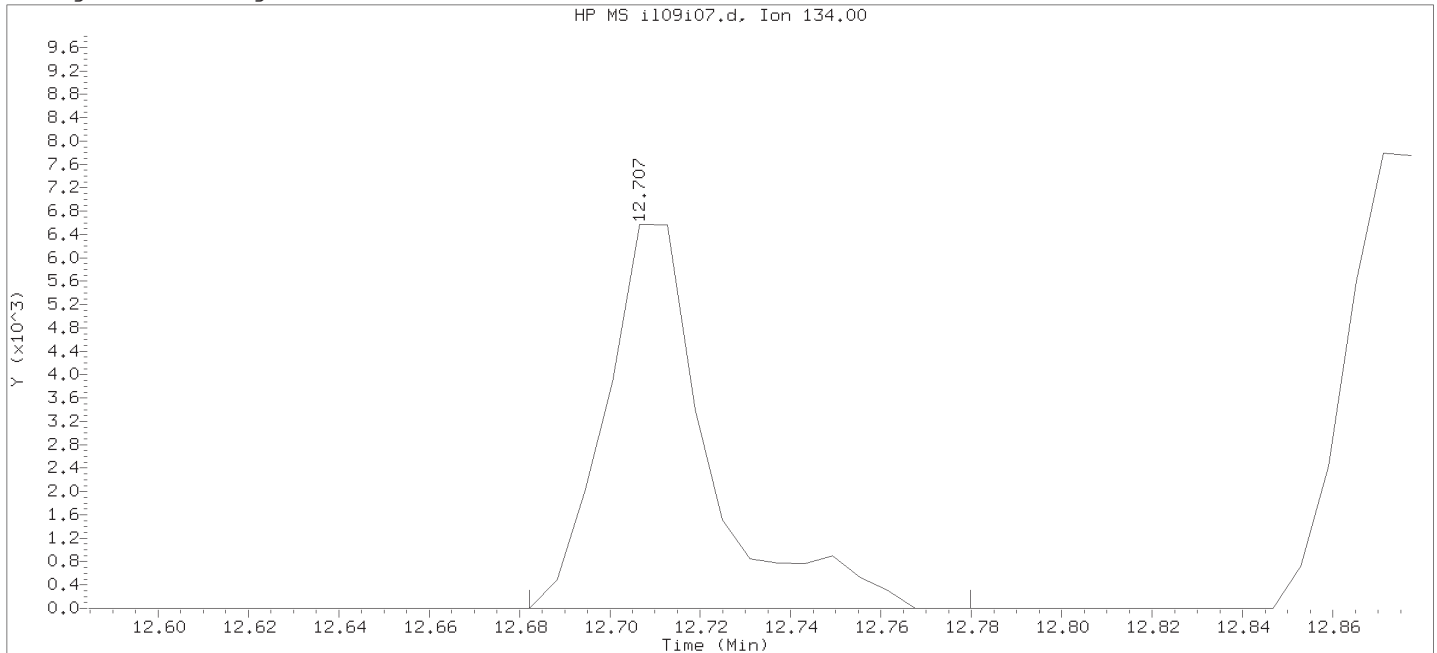
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

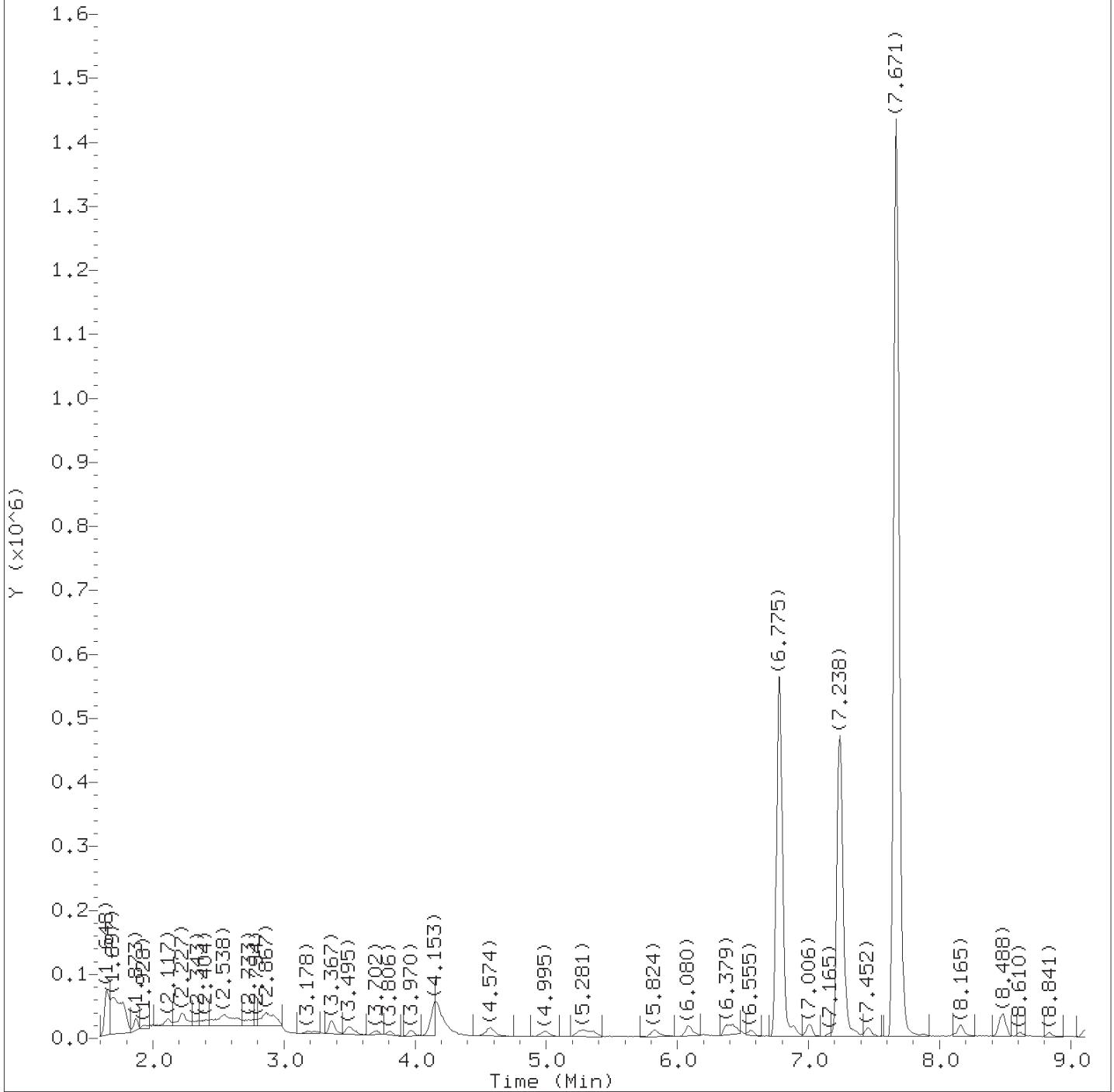


Data File: /chem2/HP19930.i/18jul09i.b/i109i07.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 14:52      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:39  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:39 jkh09052

Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

Compound Number : 125  
 Compound Name : tert-Butylbenzene  
 Scan Number : 1824  
 Retention Time (minutes): 12.707  
 Quant Ion : 134.00  
 Area : 10434  
 On-column Amount (ng) : 0.1910  
 Integration start scan : 1819      Integration stop scan: 1835  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d  
Injection date and time: 09-JUL-2018 15:14

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21

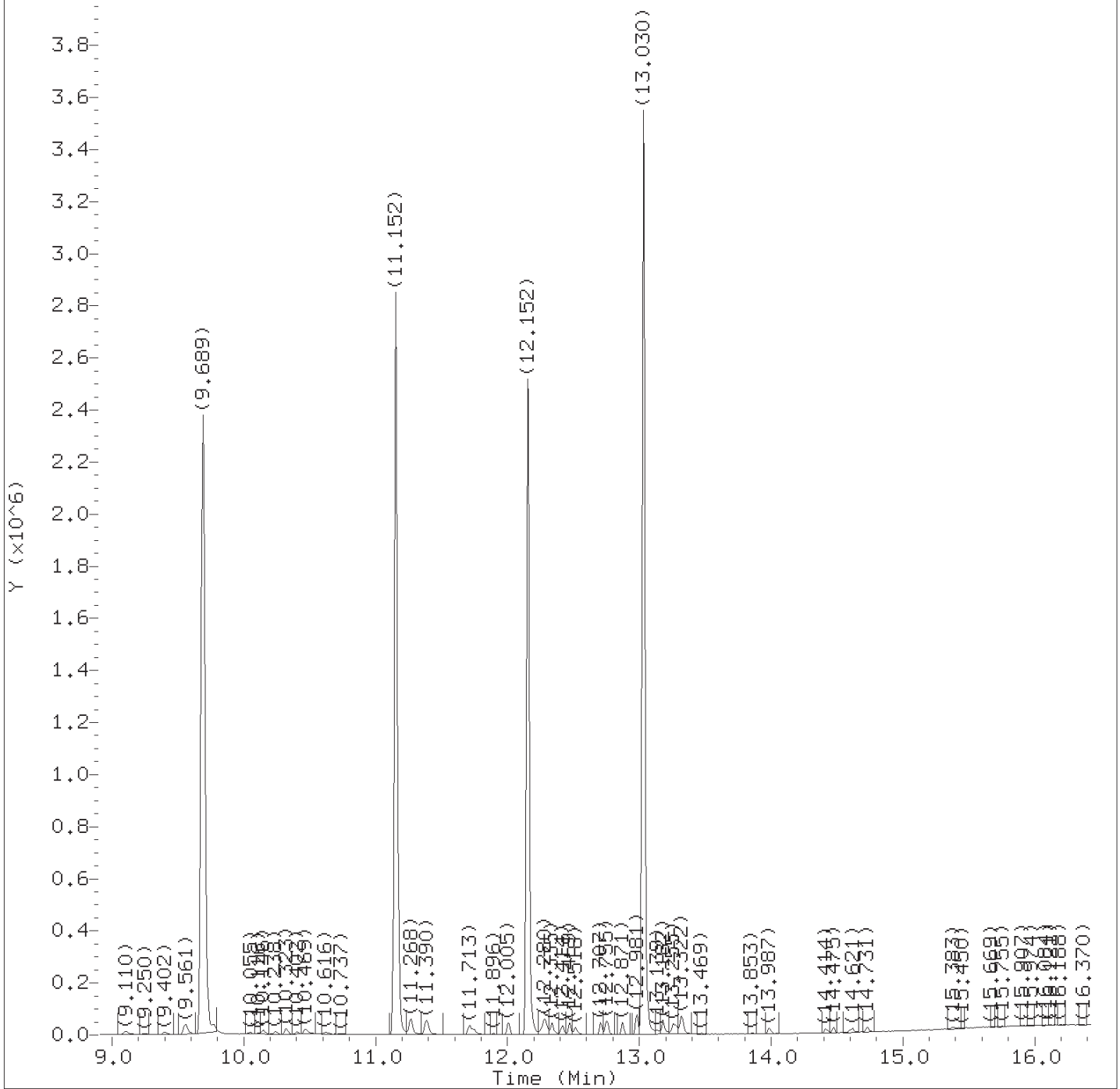
Sublist used: 8260W25  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1

Lab Sample ID: MDL0.1

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d  
Injection date and time: 09-JUL-2018 15:14

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: MDL0.1

Lab Sample ID: MDL0.1

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il109m01.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:14 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1

Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.910	85	12573	0.104
2) Chloromethane	(2)	2.111	50	10454	0.119
6) 1,3-Butadiene	(2)	2.221	39	7165M	0.127
5) Vinyl Chloride	(2)	2.239	62	9760	0.115
7) Bromomethane	(2)	2.544	94	10443	0.130
8) Chloroethane	(2)	2.635	64	5685	0.115
9) Dichlorofluoromethane	(2)	2.861	67	18546M	0.142
10) Trichlorofluoromethane	(2)	2.934	101	15643	0.108
11) Ethyl ether	(2)	3.184	59	4478	0.093
12) Freon 123a	(2)	3.263	67	8073	0.110
13) Acrolein	(1)	3.367	56	38676	5.146
15) 1,1-Dichloroethene	(2)	3.489	96	5550	0.111
16) Freon 113	(2)	3.507	101	5211	0.089
14) Acetone	(1)	3.550	43	17375M	1.554
17) Methyl Iodide	(2)	3.684	142	9841	0.096
18) Carbon Disulfide	(2)	3.806	76	16428	0.110
22) Allyl Chloride	(2)	3.970	41	12676	0.118
21) Methyl Acetate	(1)	3.989	43	4847M	0.191
23) Methylene Chloride	(2)	4.159	84	6635	0.117
26)*t-Butyl Alcohol-d10	(1)	4.166	65	191294	50.000
28) t-Butyl Alcohol	(1)	4.281	59	10418	2.106
30) Methyl Tertiary Butyl Ether	(2)	4.556	73	14349	0.092
31) trans-1,2-Dichloroethene	(2)	4.574	96	5500	0.097
29) Acrylonitrile	(1)	4.586	53	4503	0.370
32) n-Hexane	(2)	4.989	57	8719	0.093
33) 1,1-Dichloroethane	(2)	5.239	63	10839	0.096
34) di-Isopropyl Ether	(2)	5.293	45	19408	0.096
35) 2-Chloro-1,3-Butadiene	(2)	5.354	53	9463	0.089
37) Ethyl t-butyl ether	(2)	5.824	59	17859	0.094
41) 2,2-Dichloropropane	(2)	6.080	77	9970	0.098
39) cis-1,2-Dichloroethene	(2)	6.092	96	6649	0.102
40) 1,2-Dichloroethene (Total)	(2)		96	12149	0.199
38) 2-Butanone	(1)	6.147	43	17869	0.964
42) Propionitrile	(1)	6.214	54	7562	1.653
45) Methacrylonitrile	(1)	6.379	67	13482	0.865
47) Bromochloromethane	(2)	6.415	128	2497	0.088
48) Tetrahydrofuran	(1)	6.458	71	4761	0.994
49) Chloroform	(2)	6.568	83	10899	0.096

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09m01.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:14 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1

Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.781	113	516687	10.012
51) 1,1,1-Trichloroethane	(2)	6.787	97	10612	0.098
52) Cyclohexane	(2)	6.885	56	11614	0.101
54) Carbon Tetrachloride	(2)	7.006	117	9123	0.096
55) 1,1-Dichloropropene	(2)	7.013	75	8756	0.102
56) Isobutyl Alcohol	(1)	7.165	41	10095	6.741
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	97805	9.981
58) Benzene	(2)	7.275	78	24129	0.100
59) 1,2-Dichloroethane	(2)	7.354	62	9366	0.116
60) t-Amyl methyl ether	(2)	7.458	73	16103	0.097
63) *Fluorobenzene	(2)	7.671	96	1977008	10.000
62) n-Heptane	(2)	7.671	43	10875	0.106
65) n-Butanol	(1)	8.116	56	7947	7.115
67) Trichloroethene	(2)	8.159	95	6419	0.098
69) Methylcyclohexane	(2)	8.463	83	10649	0.089
70) 1,2-Dichloropropane	(2)	8.494	63	5637	0.094
71) Methyl Methacrylate	(1)	8.616	69	1655	0.059
73) Dibromomethane	(2)	8.616	93	2754	0.091
74) Bromodichloromethane	(2)	8.841	83	7258	0.089
76) 2-Nitropropane	(1)	9.110	41	14066	1.108
80) cis-1,3-Dichloropropene	(2)	9.390	75	7519	0.082
81) 4-Methyl-2-Pentanone	(1)	9.555	43	40453M	0.892
82) \$Toluene-d8	(3)	9.689	98	1921130	10.214
83) Toluene	(3)	9.774	92	14931	0.101
84) trans-1,3-Dichloropropene	(3)	10.049	75	5952	0.080
86) Ethyl Methacrylate	(3)	10.116	69	4812	0.075
85) 1,3-Dichloropropene (total)	(3)		75	13471	0.162
88) 1,1,2-Trichloroethane	(3)	10.238	97	3663	0.090
89) Tetrachloroethene	(3)	10.323	166	7135	0.093
90) 1,3-Dichloropropane	(3)	10.402	76	6522	0.092
91) 2-Hexanone	(1)	10.469	43	32009	0.984
93) Dibromochloromethane	(3)	10.616	129	4513	0.085
95) 1,2-Dibromoethane	(3)	10.737	107	3444	0.088
97) *Chlorobenzene-d5	(3)	11.152	117	1505640	10.000
98) Chlorobenzene	(3)	11.182	112	15669	0.097
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	5516	0.090
100) Ethylbenzene	(3)	11.268	91	28765	0.098
101) m+p-Xylene	(3)	11.390	106	20830	0.182

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09m01.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:14 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1

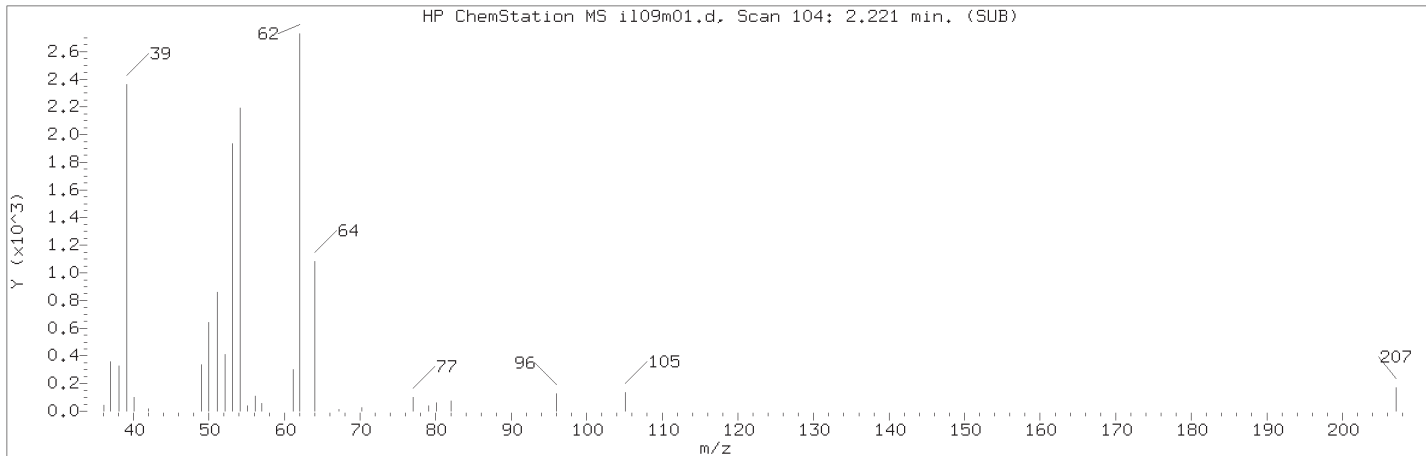
Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
104) o-Xylene	(3)	11.713	106	10171	0.089
106) Styrene	(3)	11.743	104	14164	0.082
105) Xylene (Total)	(3)		106	31001	0.271
107) Bromoform	(3)	11.896	173	2189	0.068
108) Isopropylbenzene	(3)	12.005	105	28112	0.094
111) \$4-Bromofluorobenzene	(3)	12.152	95	755185	10.201
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	4697	0.090
114) Bromobenzene	(4)	12.274	156	6795	0.089
115) trans-1,4-Dichloro-2-butene	(1)	12.286	53	12059	0.808
116) 1,2,3-Trichloropropane	(4)	12.298	110	1249	0.082
117) n-Propylbenzene	(4)	12.341	91	32033	0.092
119) 2-Chlorotoluene	(4)	12.414	126	6357	0.091
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	22404	0.089
122) 4-Chlorotoluene	(4)	12.518	126	6415	0.091
125) tert-Butylbenzene	(4)	12.707	134	4912	0.091
126) Pentachloroethane	(4)	12.743	167	3724	0.079
127) 1,2,4-Trimethylbenzene	(4)	12.761	105	22062	0.087
128) sec-Butylbenzene	(4)	12.871	105	29104	0.090
131) 1,3-Dichlorobenzene	(4)	12.981	146	12693	0.088
132) p-Isopropyltoluene	(4)	12.981	119	23909	0.084
133) *1,4-Dichlorobenzene-d4	(4)	13.030	152	851618	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	15120	0.102
135) 1,2,3-Trimethylbenzene	(4)	13.060	120	11099	0.096
136) Benzyl Chloride	(4)	13.146	126	1045	0.053
138) n-Butylbenzene	(4)	13.280	92	10327	0.079
139) 1,2-Dichlorobenzene	(4)	13.316	146	11546	0.086
143) 1,2-Dibromo-3-chloropropane	(1)	13.865	155	244	0.033
144) 1,3,5-Trichlorobenzene	(4)	13.987	180	9160	0.087
145) 1,2,4-Trichlorobenzene	(4)	14.420	180	7250	0.080
146) Hexachlorobutadiene	(4)	14.475	225	3425	0.089
147) Naphthalene	(4)	14.603	128	14380	0.088
148) 1,2,3-Trichlorobenzene	(4)	14.731	180	6480	0.084

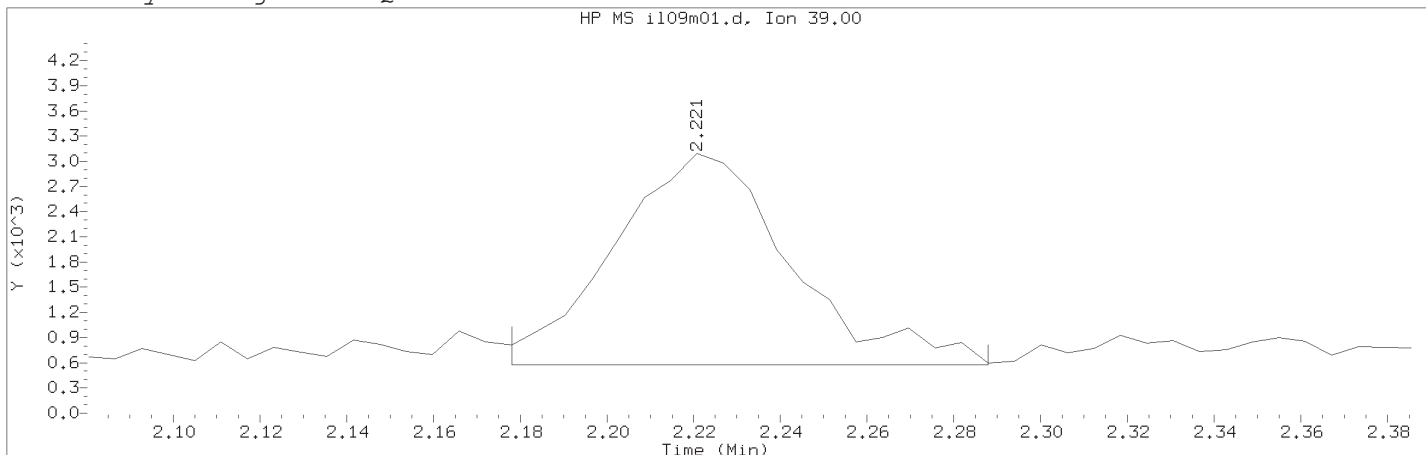
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:14                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1    Lab Sample ID: MDL0.1

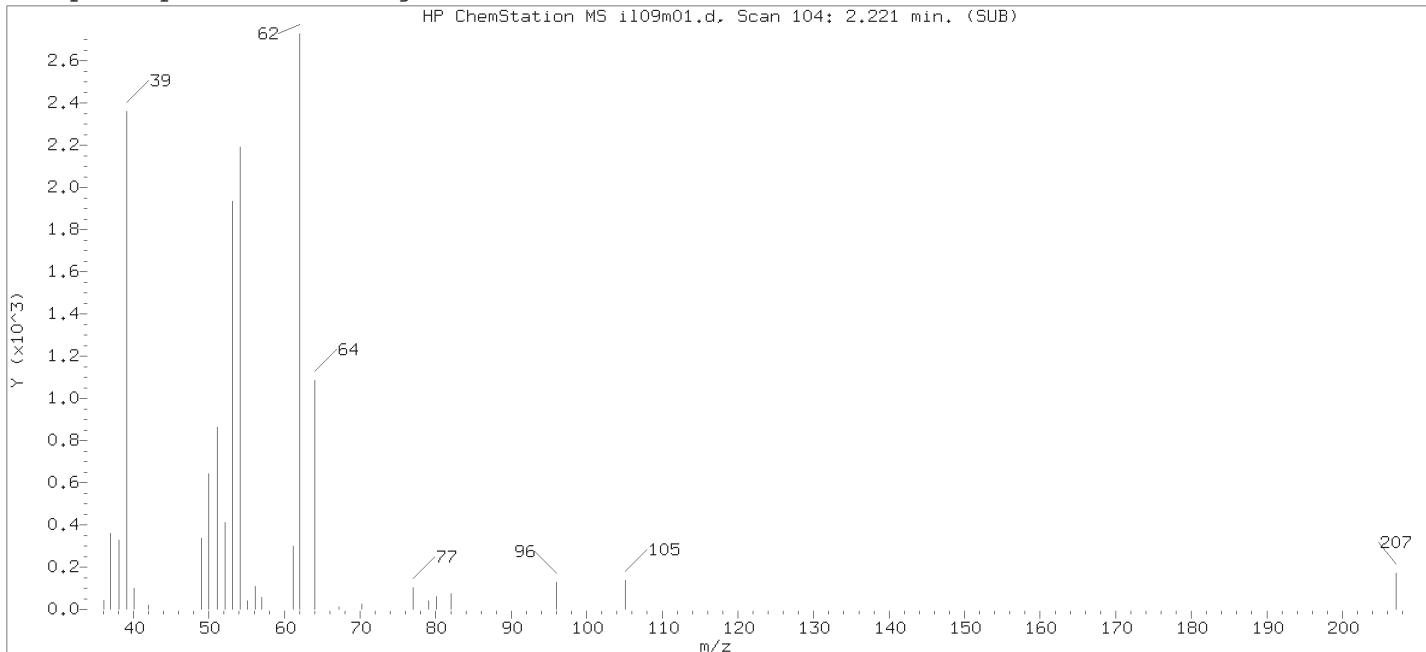
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 104  
Retention Time (minutes): 2.221  
Quant Ion                               : 39.00  
Area (flag)                             : 7165M  
On-Column Amount (ng)                : 0.1266  
Integration start scan                : 96                      Integration stop scan: 114  
Y at integration start                : 575                    Y at integration end: 575

Reason for manual integration: improper integration

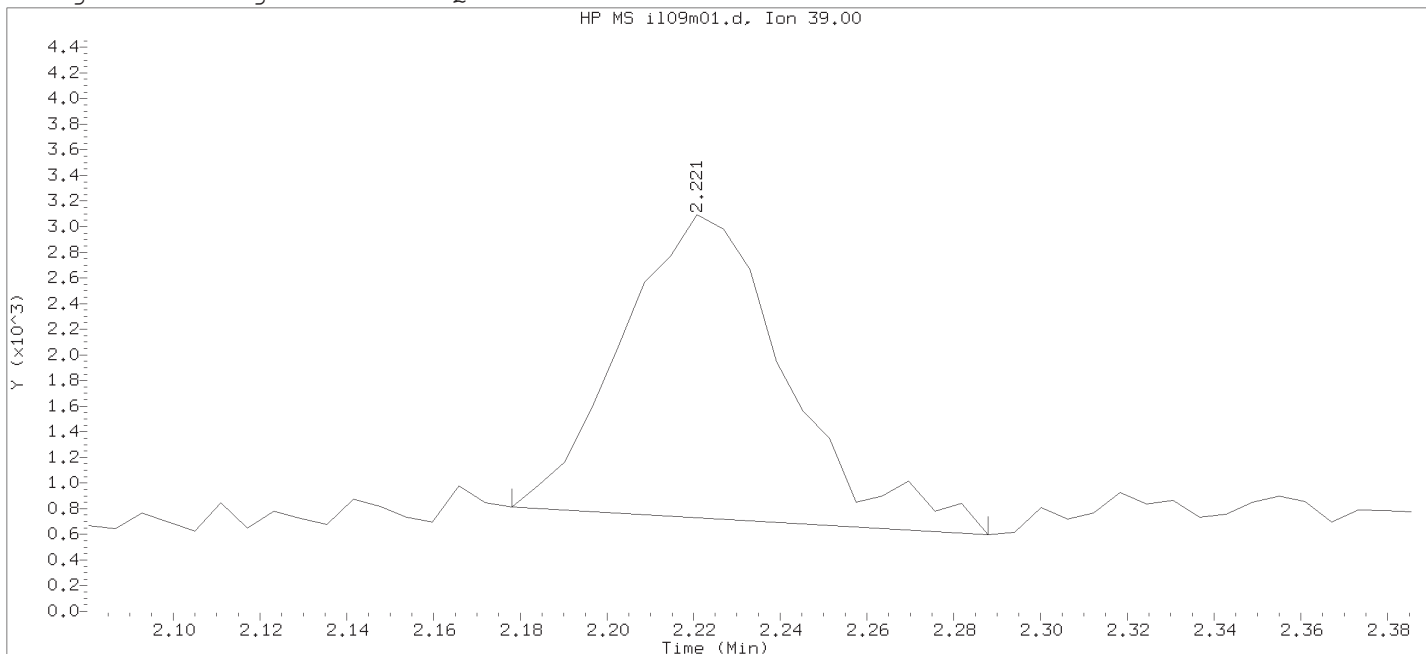
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



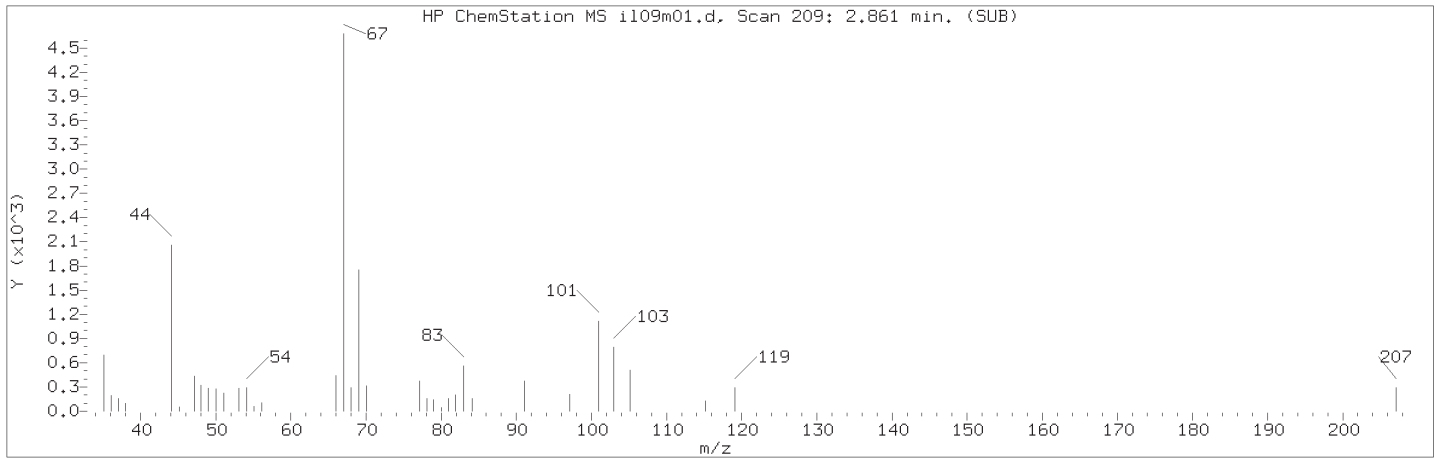
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Injection date and time: 09-JUL-2018 15:14      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:56  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

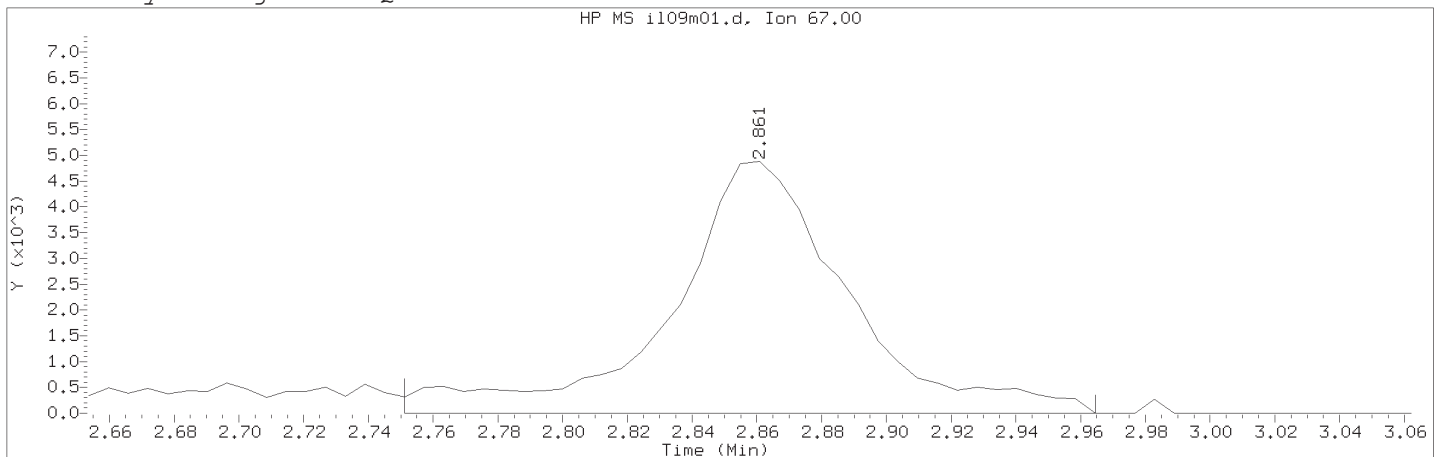
Sample Name: MDL0.1      Lab Sample ID: MDL0.1

Compound Number : 6  
Compound Name : 1,3-Butadiene  
Scan Number : 104  
Retention Time (minutes): 2.221  
Quant Ion : 39.00  
Area : 6268  
On-column Amount (ng) : 0.1108  
Integration start scan : 96      Integration stop scan: 114  
Y at integration start : 812      Y at integration end: 596

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:14                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1    Lab Sample ID: MDL0.1

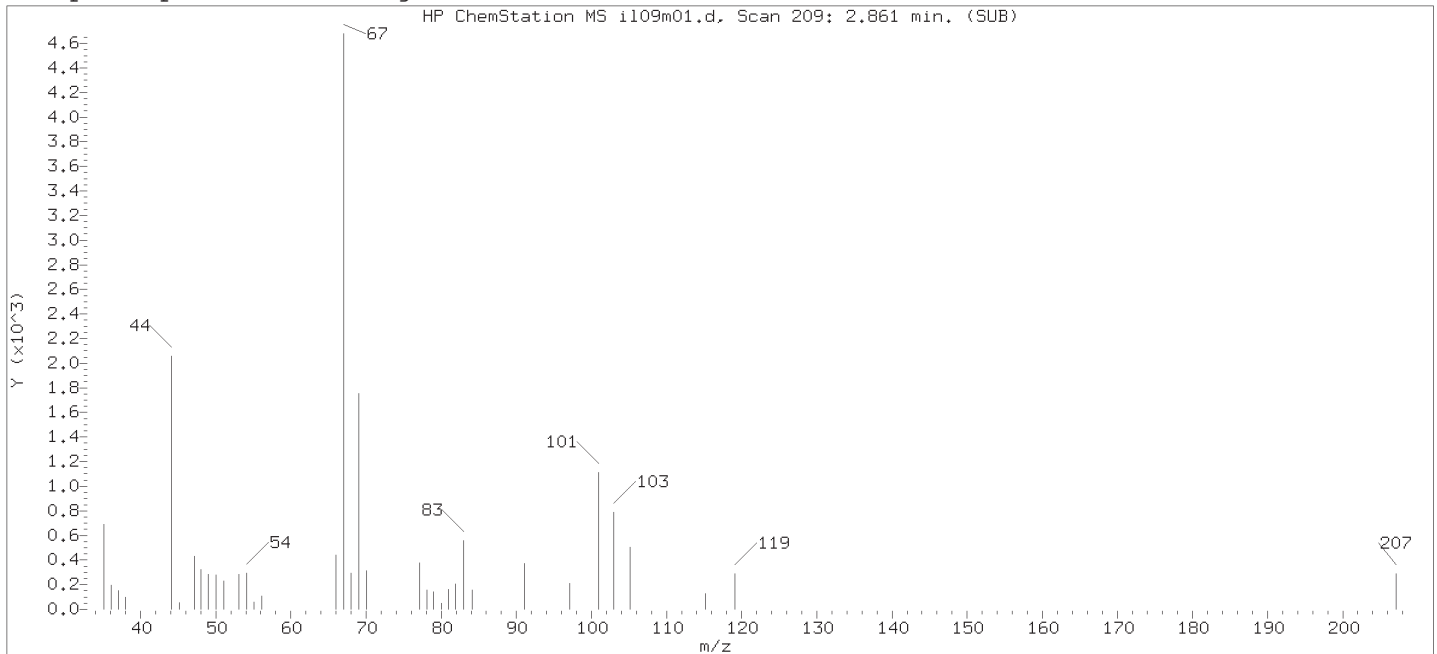
Compound Number                      : 9  
Compound Name                         : Dichlorofluoromethane  
Scan Number                            : 209  
Retention Time (minutes): 2.861  
Quant Ion                                : 67.00  
Area (flag)                             : 18546M  
On-Column Amount (ng)                : 0.1425  
Integration start scan                : 190                      Integration stop scan: 225  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

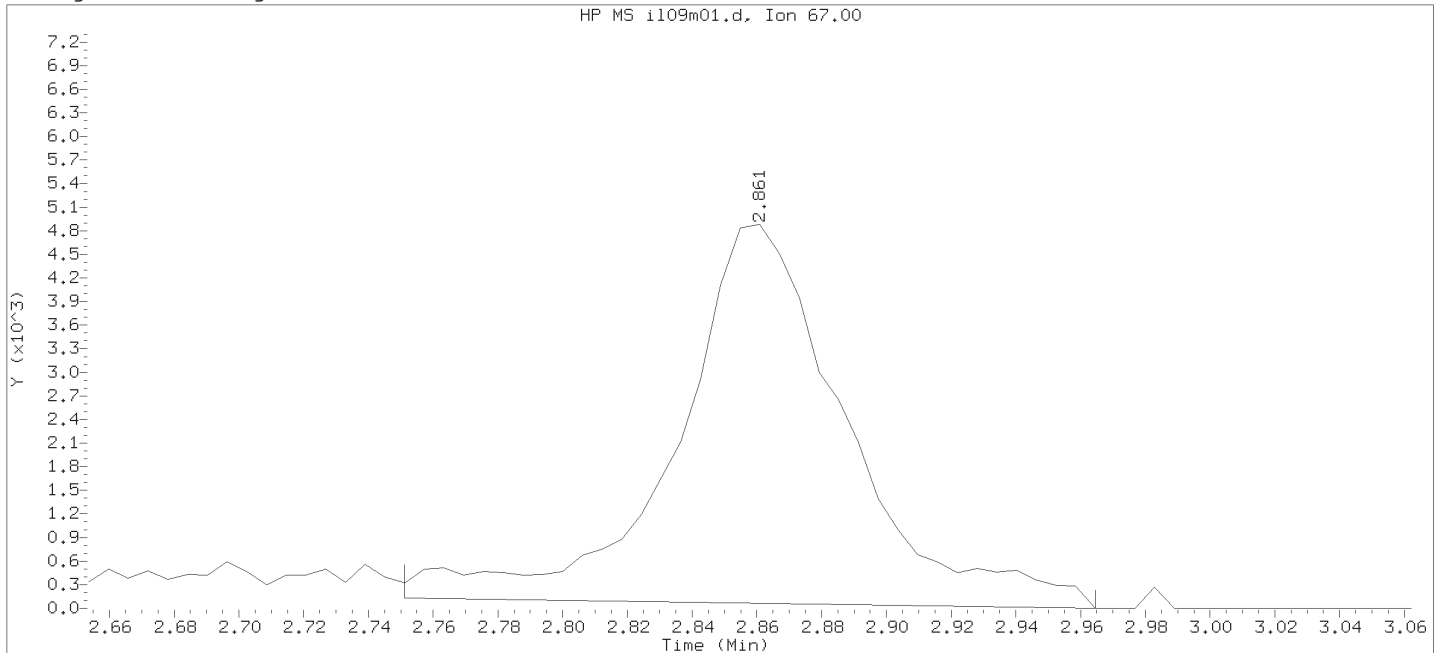
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



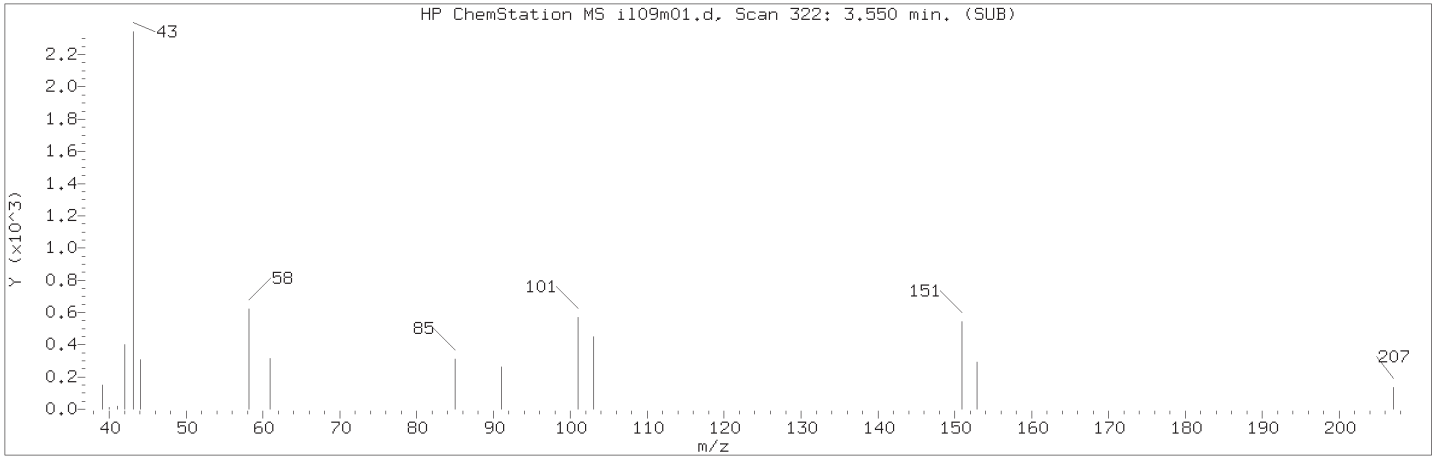
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 Injection date and time: 09-JUL-2018 15:14      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:56  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

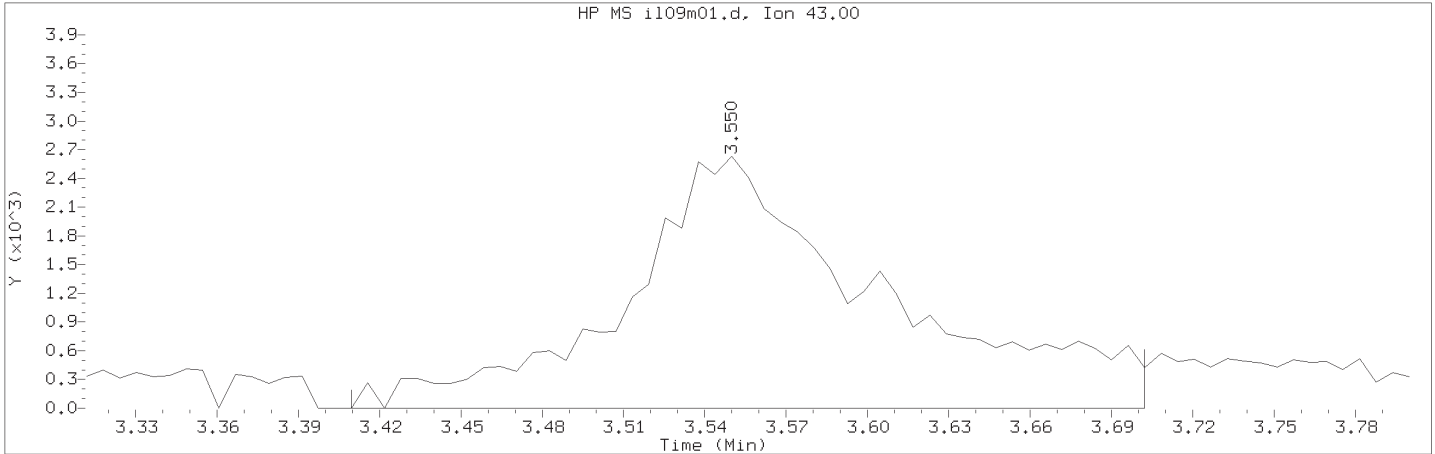
Sample Name: MDL0.1      Lab Sample ID: MDL0.1

Compound Number : 9  
 Compound Name : Dichlorofluoromethane  
 Scan Number : 209  
 Retention Time (minutes): 2.861  
 Quant Ion : 67.00  
 Area : 17674  
 On-column Amount (ng) : 0.1358  
 Integration start scan : 190      Integration stop scan: 225  
 Y at integration start : 127      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:14      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1      Lab Sample ID: MDL0.1

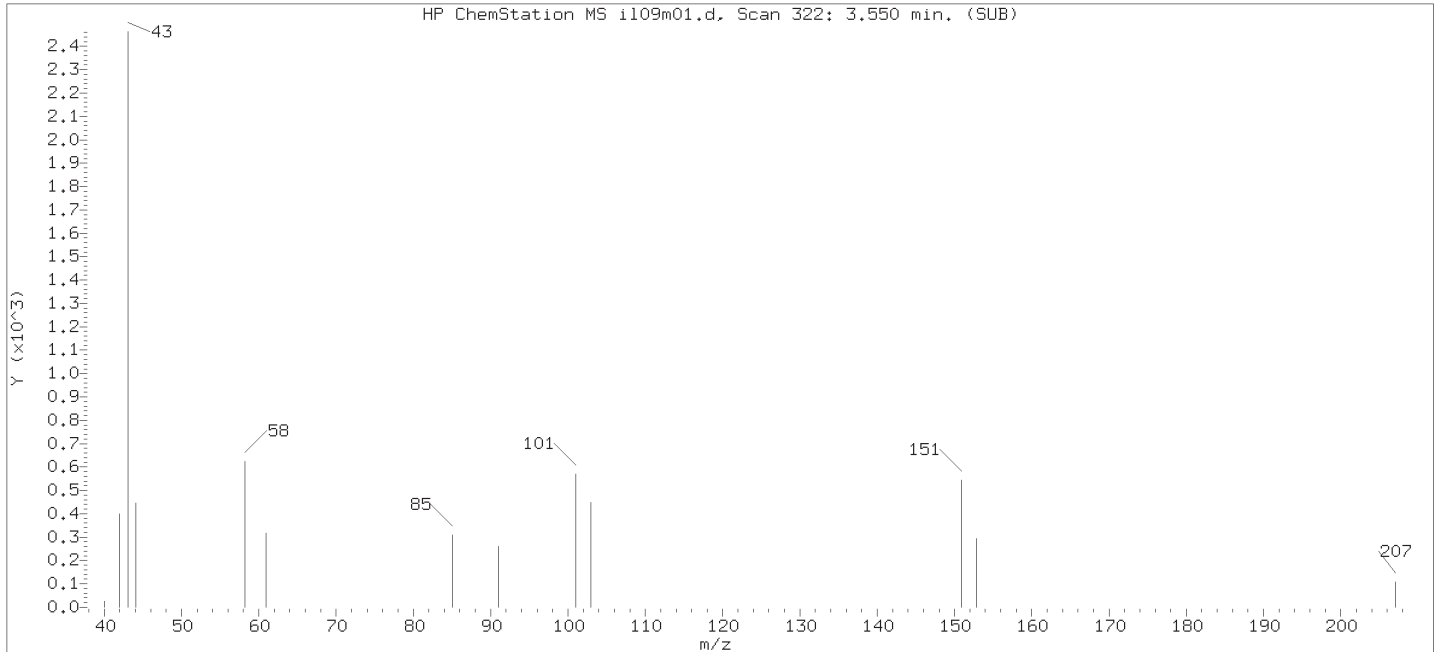
Compound Number : 14  
Compound Name : Acetone  
Scan Number : 322  
Retention Time (minutes): 3.550  
Quant Ion : 43.00  
Area (flag) : 17375M  
On-Column Amount (ng) : 1.5544  
Integration start scan : 298      Integration stop scan: 346  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

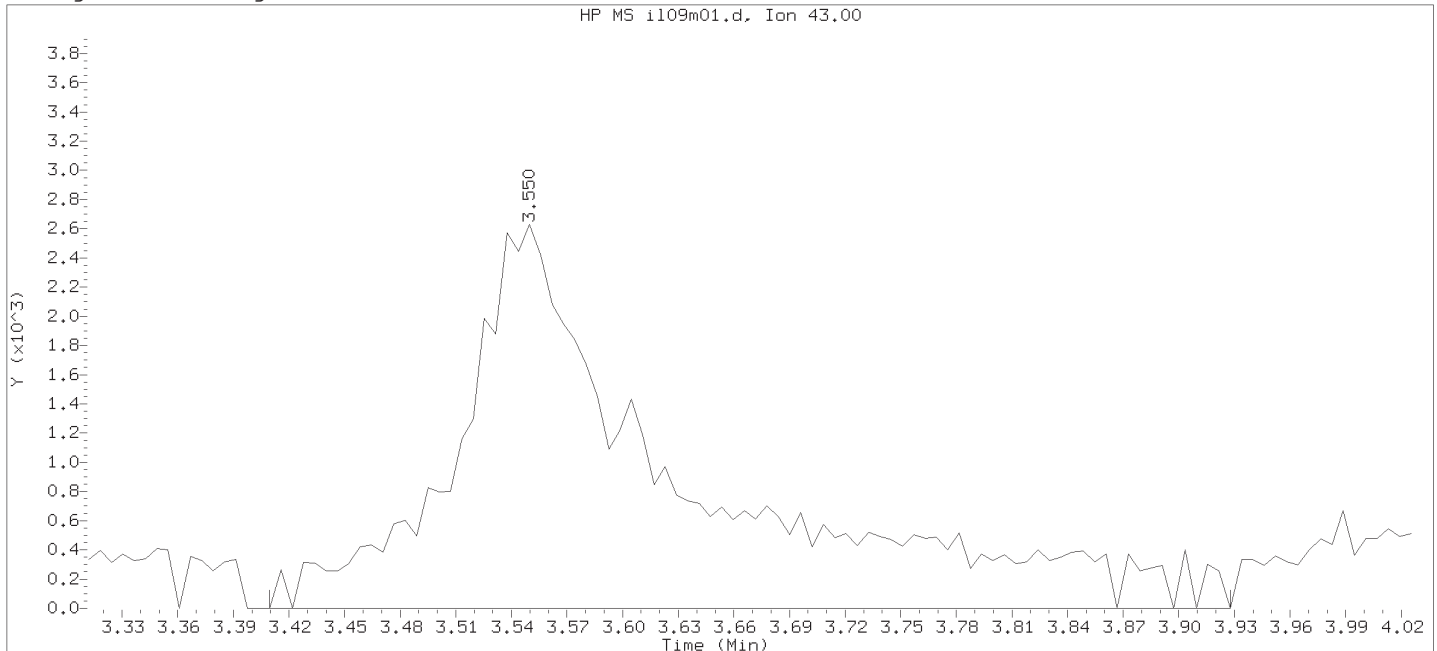
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:14      Analyst ID: jkh09052

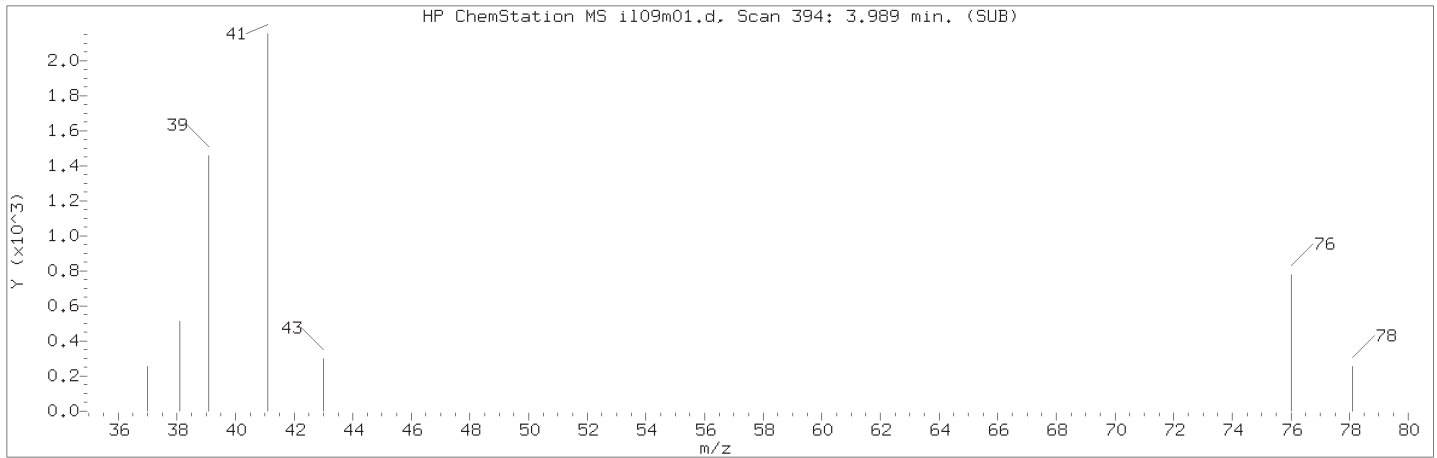
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:56  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

Sample Name: MDL0.1

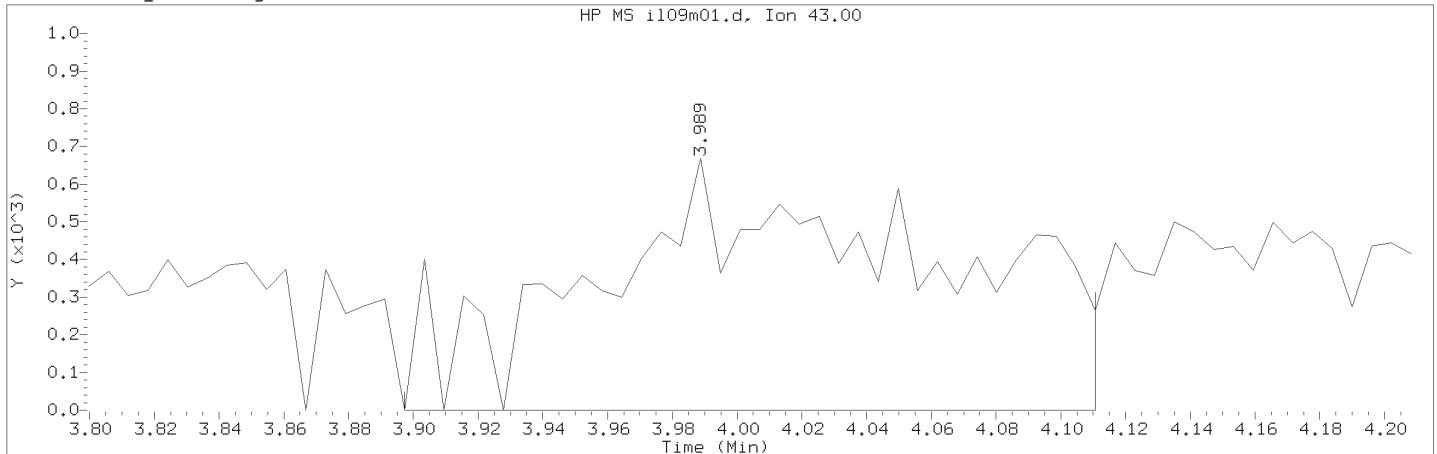
Lab Sample ID: MDL0.1

Compound Number : 14  
Compound Name : Acetone  
Scan Number : 322  
Retention Time (minutes): 3.550  
Quant Ion : 43.00  
Area : 22117  
On-column Amount (ng) : 1.7286  
Integration start scan : 298      Integration stop scan: 383  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:14      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1      Lab Sample ID: MDL0.1

Compound Number : 21  
Compound Name : Methyl Acetate  
Scan Number : 394  
Retention Time (minutes): 3.989  
Quant Ion : 43.00  
Area (flag) : 4847M  
On-Column Amount (ng) : 0.1910  
Integration start scan : 378      Integration stop scan: 413  
Y at integration start : 0      Y at integration end: 0

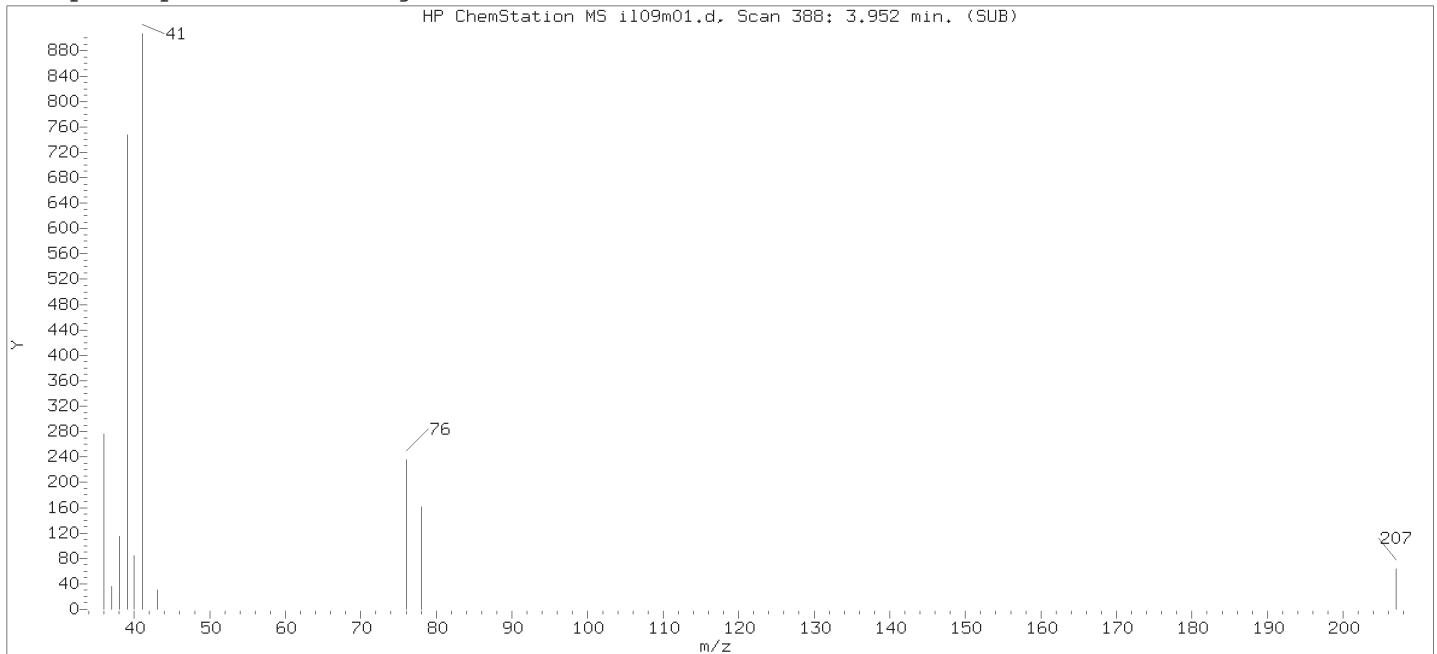
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

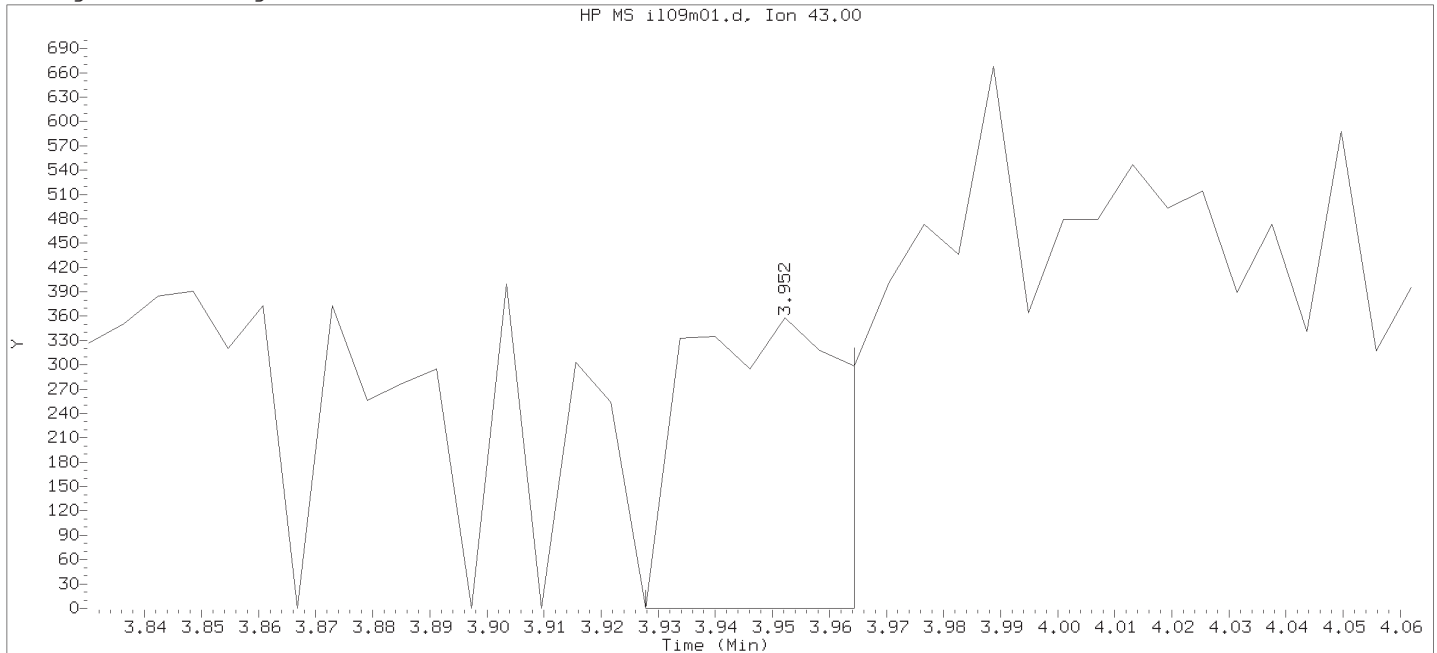
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PARALLAX ID: kek01027



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



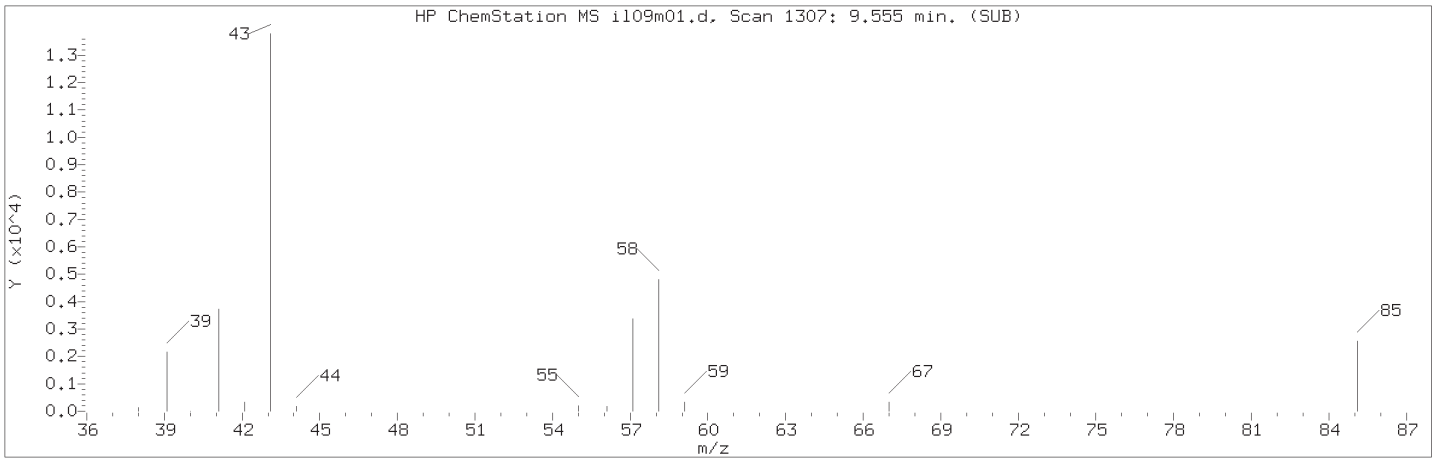
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Injection date and time: 09-JUL-2018 15:14      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:56  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

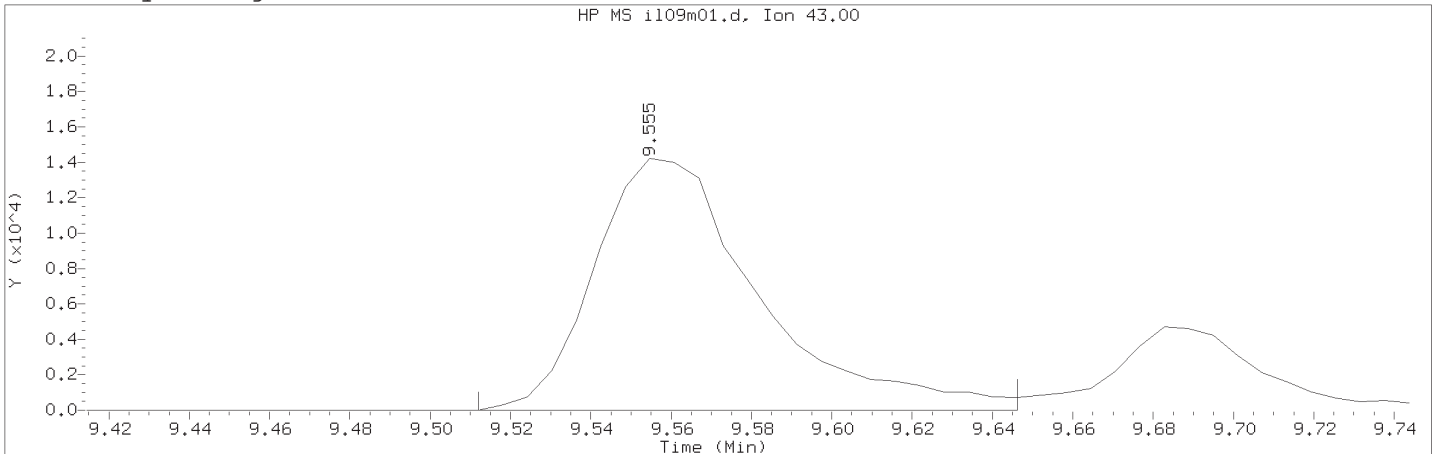
Sample Name: MDL0.1      Lab Sample ID: MDL0.1

Compound Number : 21  
Compound Name : Methyl Acetate  
Scan Number : 388  
Retention Time (minutes): 3.952  
Quant Ion : 43.00  
Area : 654  
On-column Amount (ng) : 0.0258  
Integration start scan : 383      Integration stop scan: 389  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:14                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: MDL0.1    Lab Sample ID: MDL0.1

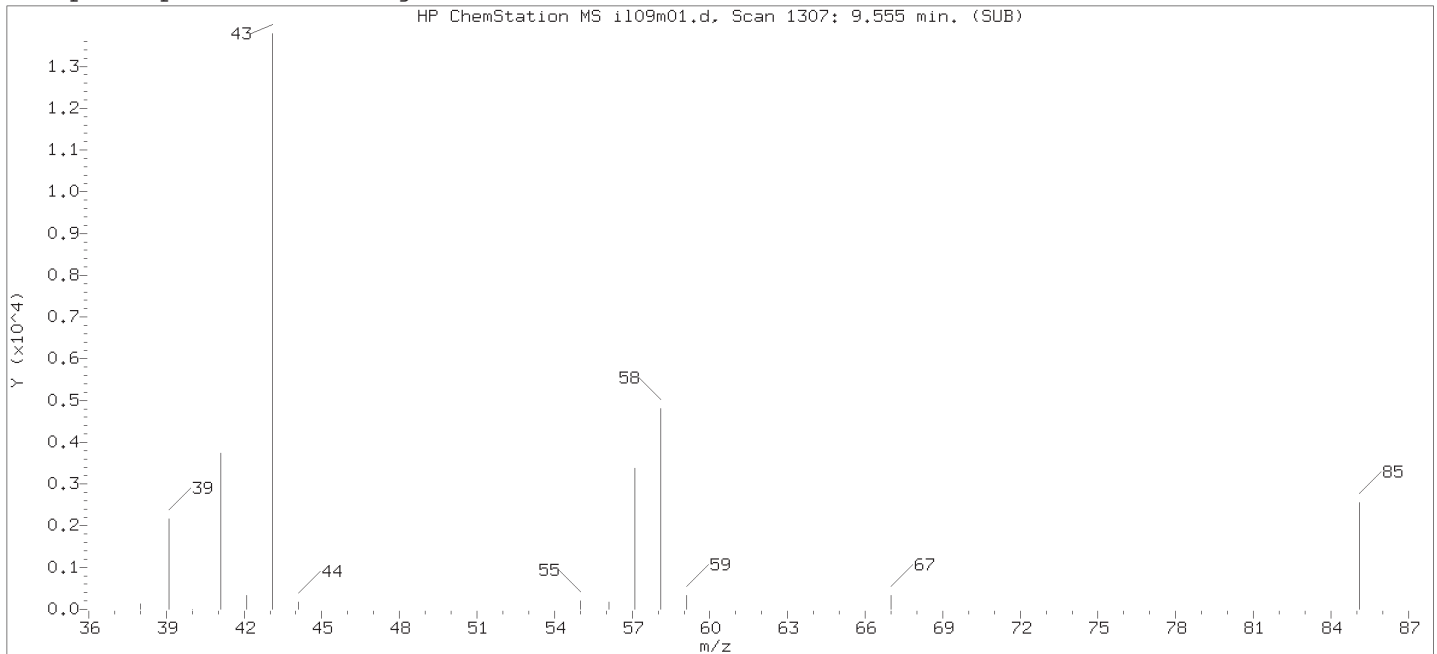
Compound Number                      : 81  
Compound Name                         : 4-Methyl-2-Pentanone  
Scan Number                            : 1307  
Retention Time (minutes): 9.555  
Quant Ion                                : 43.00  
Area (flag)                             : 40453M  
On-Column Amount (ng)                : 0.8915  
Integration start scan                 : 1299                      Integration stop scan: 1321  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

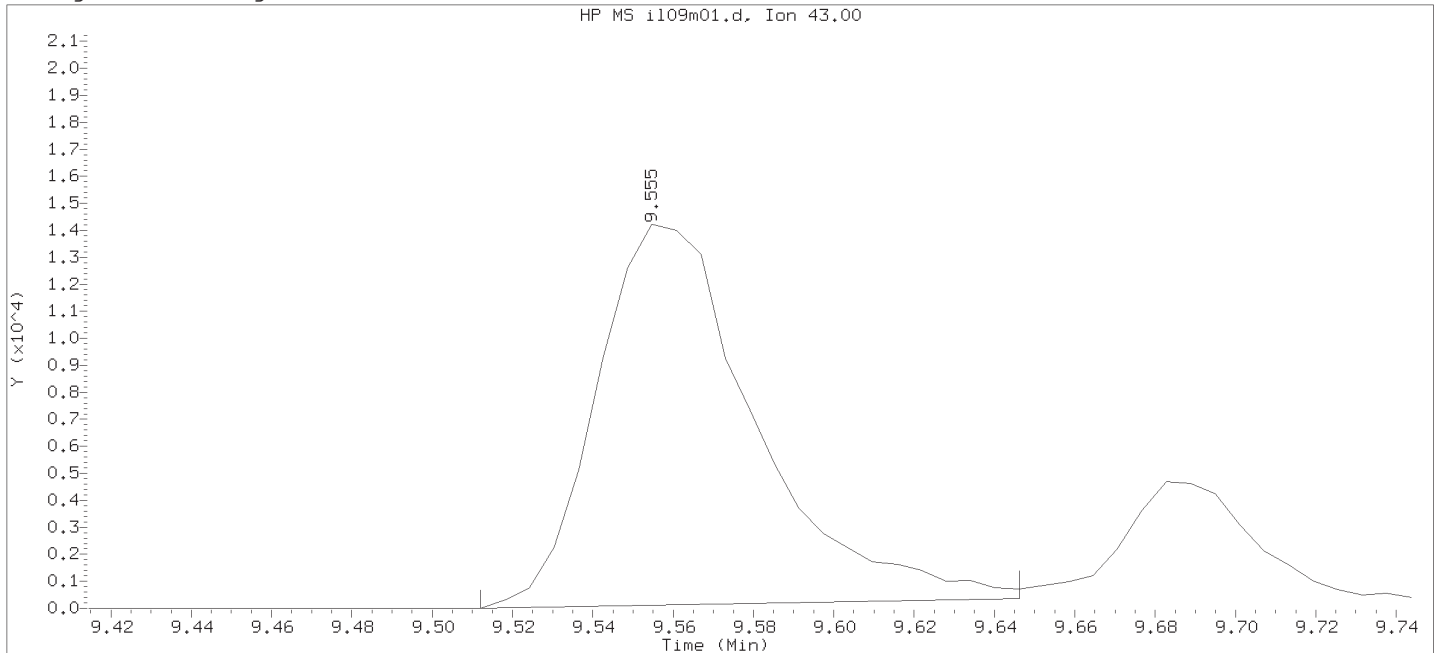
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

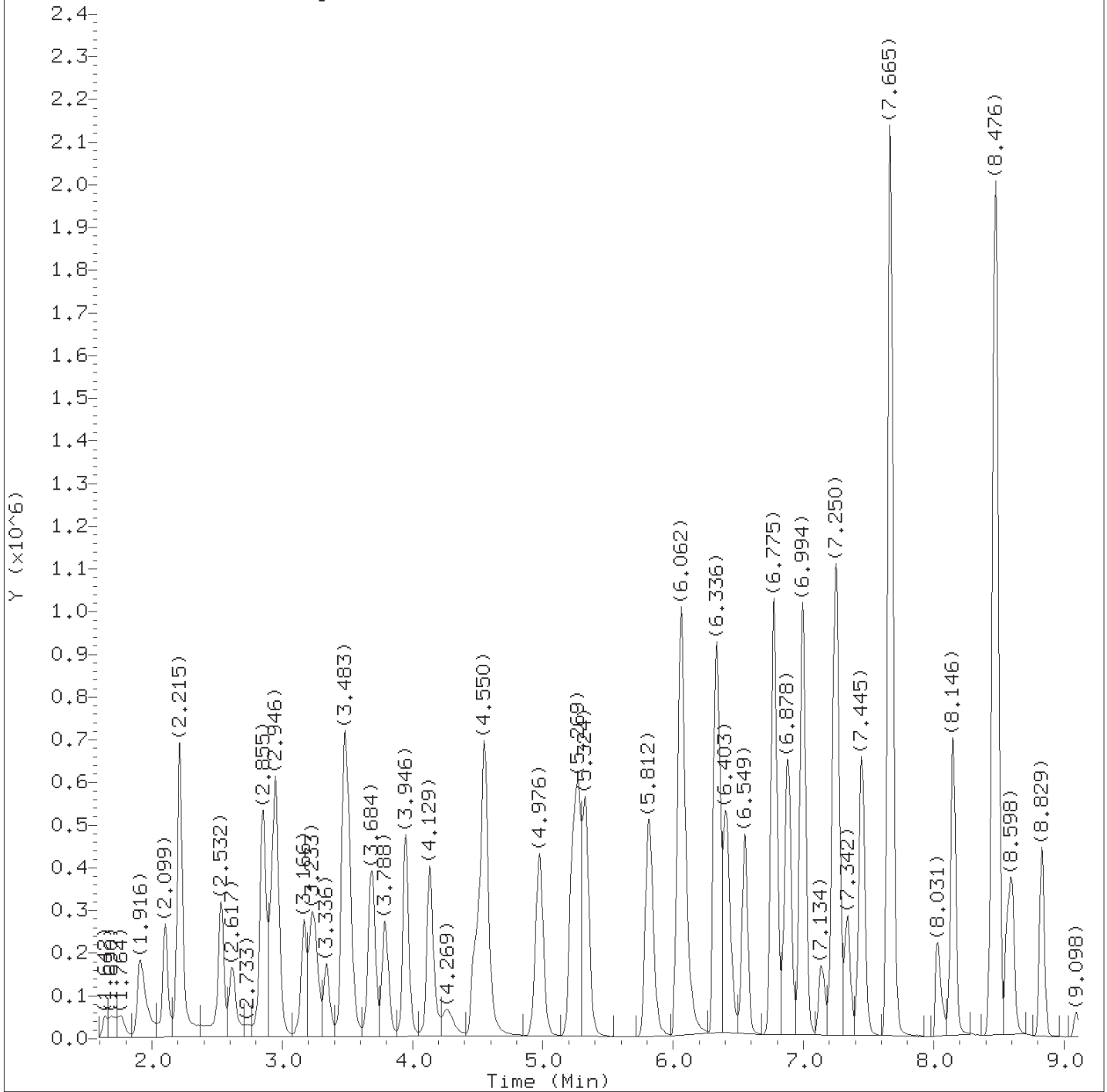


Data File: /chem2/HP19930.i/18jul09i.b/i109m01.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:14      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:56  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

Sample Name: MDL0.1      Lab Sample ID: MDL0.1

Compound Number : 81  
 Compound Name : 4-Methyl-2-Pentanone  
 Scan Number : 1307  
 Retention Time (minutes): 9.555  
 Quant Ion : 43.00  
 Area : 38882  
 On-column Amount (ng) : 0.8569  
 Integration start scan : 1299      Integration stop scan: 1321  
 Y at integration start : 0      Y at integration end: 358



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09v01.d  
Injection date and time: 09-JUL-2018 15:35

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21

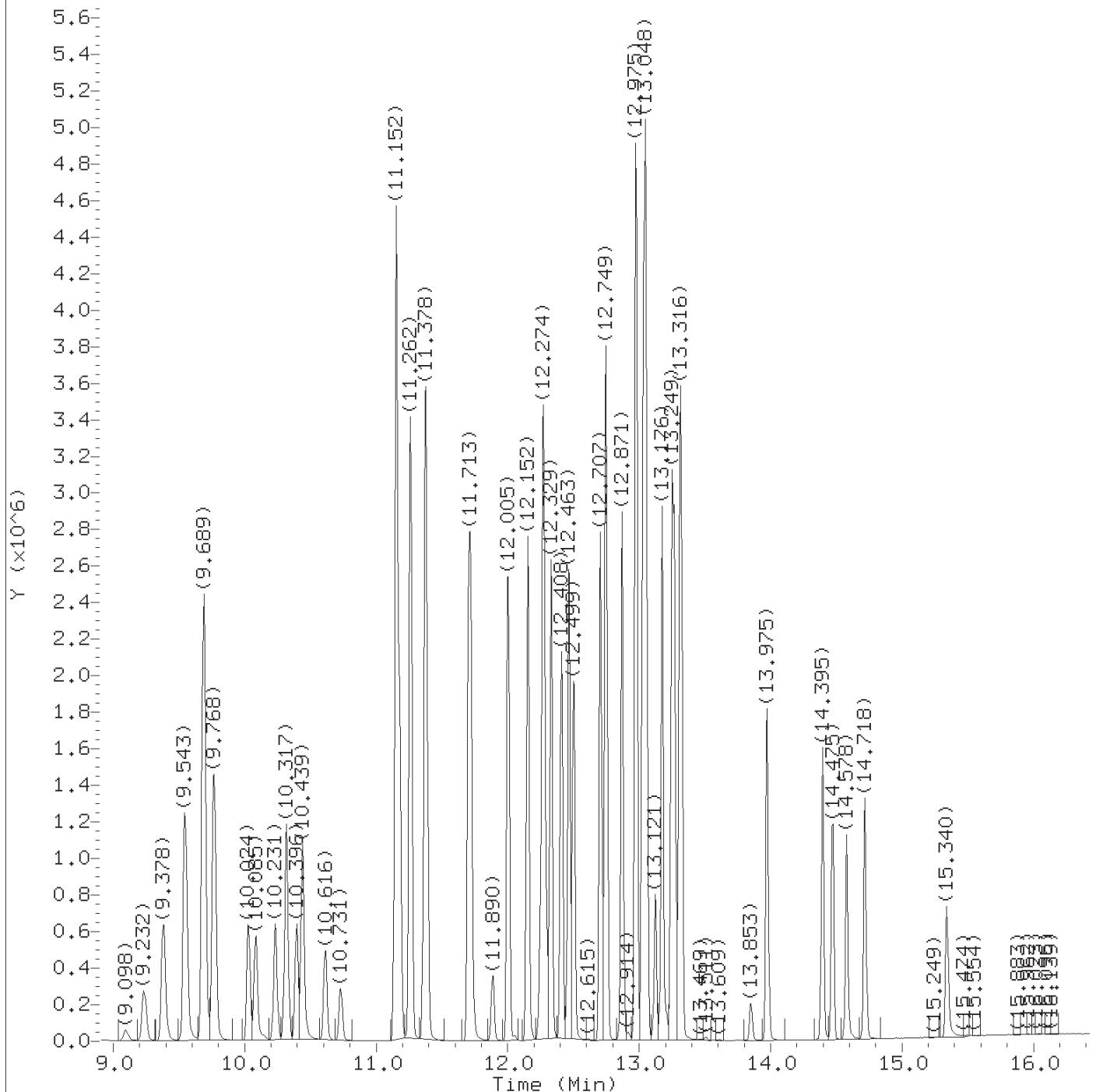
Sublist used: 8260W25  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG

Lab Sample ID: LCSILG

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09v01.d  
Injection date and time: 09-JUL-2018 15:35

Instrument ID: HP19930.i  
Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
Calibration date and time: 17-JUL-2018 16:21

Sublist used: 8260W25

Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG

Lab Sample ID: LCSILG

Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.

Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09v01.d  
 Injection date and time: 09-JUL-2018 15:35

Instrument ID: HP19930.i  
 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sublist used: 8260W25

Sample Name: LCSILG

Lab Sample ID: LCSILG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.910	85	456556	3.750
2) Chloromethane	(2)	2.099	50	382312	4.301
6) 1,3-Butadiene	(2)	2.209	39	296581M	5.196
5) Vinyl Chloride	(2)	2.215	62	391217	4.559
7) Bromomethane	(2)	2.532	94	311834	3.860
8) Chloroethane	(2)	2.617	64	218661	4.377
9) Dichlorofluoromethane	(2)	2.849	67	608488	4.634
10) Trichlorofluoromethane	(2)	2.922	101	647675	4.415
11) Ethyl ether	(2)	3.166	59	233376	4.806
12) Freon 123a	(2)	3.239	67	372040	5.012
13) Acrolein	(1)	3.343	56	269774	39.956
15) 1,1-Dichloroethene	(2)	3.477	96	264430	5.227
16) Freon 113	(2)	3.501	101	297229	5.060
14) Acetone	(1)	3.507	43	363929M	36.244
17) Methyl Iodide	(2)	3.672	142	496076	4.776
18) Carbon Disulfide	(2)	3.788	76	681972	4.543
21) Methyl Acetate	(1)	3.934	43	138150	6.060
22) Allyl Chloride	(2)	3.946	41	465836	4.285
23) Methylene Chloride	(2)	4.135	84	280696	4.899
26)*t-Butyl Alcohol-d10	(1)	4.141	65	171834	50.000
28) t-Butyl Alcohol	(1)	4.269	59	212945	47.927
29) Acrylonitrile	(1)	4.470	53	304416	27.819
30) Methyl Tertiary Butyl Ether	(2)	4.537	73	763553	4.873
31) trans-1,2-Dichloroethene	(2)	4.556	96	286463	4.989
32) n-Hexane	(2)	4.976	57	440316	4.657
33) 1,1-Dichloroethane	(2)	5.220	63	553387	4.877
34) di-Isopropyl Ether	(2)	5.269	45	1024257	4.997
35) 2-Chloro-1,3-Butadiene	(2)	5.336	53	521008	4.850
37) Ethyl t-butyl ether	(2)	5.812	59	930372	4.857
38) 2-Butanone	(1)	6.037	43	678922	40.768
39) cis-1,2-Dichloroethene	(2)	6.062	96	326274	4.976
41) 2,2-Dichloropropane	(2)	6.068	77	507343	4.924
40) 1,2-Dichloroethene (Total)	(2)		96	612737	9.965
42) Propionitrile	(1)	6.135	54	169749	41.304
45) Methacrylonitrile	(1)	6.336	67	591800	42.250
47) Bromochloromethane	(2)	6.403	128	131575	4.586
48) Tetrahydrofuran	(1)	6.427	71	115936	26.955
49) Chloroform	(2)	6.549	83	558852	4.893

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09v01.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:35 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG

Lab Sample ID: LCSILG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.769	113	521421	10.016
51) 1,1,1-Trichloroethane	(2)	6.775	97	540732	4.926
52) Cyclohexane	(2)	6.878	56	544652	4.700
54) Carbon Tetrachloride	(2)	6.994	117	477899	4.971
55) 1,1-Dichloropropene	(2)	6.994	75	419725	4.843
56) Isobutyl Alcohol	(1)	7.134	41	161062	119.732
57) \$1,2-Dichloroethane-d4	(2)	7.232	102	97871	9.900
58) Benzene	(2)	7.263	78	1179887	4.870
59) 1,2-Dichloroethane	(2)	7.342	62	383353M	4.692
60) t-Amyl methyl ether	(2)	7.445	73	822605	4.923
62) n-Heptane	(2)	7.665	43	491333	4.741
63) *Fluorobenzene	(2)	7.665	96	1994484	10.000
65) n-Butanol	(1)	8.031	56	243016	242.228
67) Trichloroethene	(2)	8.153	95	322260	4.853
69) Methylcyclohexane	(2)	8.457	83	521049	4.338
70) 1,2-Dichloropropane	(2)	8.488	63	303706	5.002
71) Methyl Methacrylate	(1)	8.567	69	149207	5.873
72) 1,4-Dioxane	(1)	8.592	88	24396M	107.602
73) Dibromomethane	(2)	8.598	93	150457	4.930
74) Bromodichloromethane	(2)	8.829	83	399980	4.880
76) 2-Nitropropane	(1)	9.098	41	57729	5.062
80) cis-1,3-Dichloropropene	(2)	9.378	75	444093	4.776
81) 4-Methyl-2-Pentanone	(1)	9.543	43	1136815	27.891
82) \$Toluene-d8	(3)	9.689	98	1948870	10.077
83) Toluene	(3)	9.768	92	745502	4.895
84) trans-1,3-Dichloropropene	(3)	10.024	75	372633	4.896
86) Ethyl Methacrylate	(3)	10.085	69	323715	4.914
85) 1,3-Dichloropropene (total)	(3)		75	816726	9.671
88) 1,1,2-Trichloroethane	(3)	10.231	97	210973	5.027
89) Tetrachloroethene	(3)	10.317	166	383121	4.877
90) 1,3-Dichloropropane	(3)	10.396	76	353253	4.843
91) 2-Hexanone	(1)	10.439	43	799338	27.363
93) Dibromochloromethane	(3)	10.616	129	270264	4.968
95) 1,2-Dibromoethane	(3)	10.731	107	200299	4.976
97) *Chlorobenzene-d5	(3)	11.152	117	1548223	10.000
98) Chlorobenzene	(3)	11.176	112	805657	4.844
99) 1,1,1,2-Tetrachloroethane	(3)	11.262	131	314832	4.977
100) Ethylbenzene	(3)	11.262	91	1492194	4.942

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18jul09i.b/il09v01.d Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:35 Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 17-JUL-2018 16:21  
 Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG

Lab Sample ID: LCSILG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
101) m+p-Xylene	(3)	11.378	106	1156428	9.826
104) o-Xylene	(3)	11.707	106	566477	4.818
106) Styrene	(3)	11.719	104	903560	5.108
105) Xylene (Total)	(3)		106	1722905	14.644
107) Bromoform	(3)	11.890	173	160376	4.849
108) Isopropylbenzene	(3)	12.005	105	1537786	5.019
111) \$4-Bromofluorobenzene	(3)	12.152	95	762441	10.016
113) 1,1,2,2-Tetrachloroethane	(4)	12.249	83	259566M	4.819
114) Bromobenzene	(4)	12.268	156	375219	4.746
115) trans-1,4-Dichloro-2-butene	(1)	12.274	53	416172	31.050
116) 1,2,3-Trichloropropane	(4)	12.298	110	77967	4.977
117) n-Propylbenzene	(4)	12.329	91	1798977	4.988
119) 2-Chlorotoluene	(4)	12.408	126	356572	4.946
121) 1,3,5-Trimethylbenzene	(4)	12.469	105	1278767	4.943
122) 4-Chlorotoluene	(4)	12.505	126	350650	4.806
125) tert-Butylbenzene	(4)	12.707	134	274078	4.923
126) Pentachloroethane	(4)	12.743	167	233061	4.796
127) 1,2,4-Trimethylbenzene	(4)	12.749	105	1283567	4.911
128) sec-Butylbenzene	(4)	12.871	105	1652175	4.968
131) 1,3-Dichlorobenzene	(4)	12.975	146	711148	4.759
132) p-Isopropyltoluene	(4)	12.981	119	1439834	4.904
133) *1,4-Dichlorobenzene-d4	(4)	13.030	152	878522	10.000
134) 1,4-Dichlorobenzene	(4)	13.048	146	722194	4.725
135) 1,2,3-Trimethylbenzene	(4)	13.054	120	559536	4.700
136) Benzyl Chloride	(4)	13.127	126	102091	5.056
138) n-Butylbenzene	(4)	13.267	92	670705	4.985
139) 1,2-Dichlorobenzene	(4)	13.304	146	665290	4.802
143) 1,2-Dibromo-3-chloropropane	(1)	13.853	155	38003	5.723
144) 1,3,5-Trichlorobenzene	(4)	13.975	180	522098	4.815
145) 1,2,4-Trichlorobenzene	(4)	14.395	180	440113	4.709
146) Hexachlorobutadiene	(4)	14.475	225	193110	4.872
147) Naphthalene	(4)	14.578	128	791173	4.680
148) 1,2,3-Trichlorobenzene	(4)	14.718	180	370815	4.648

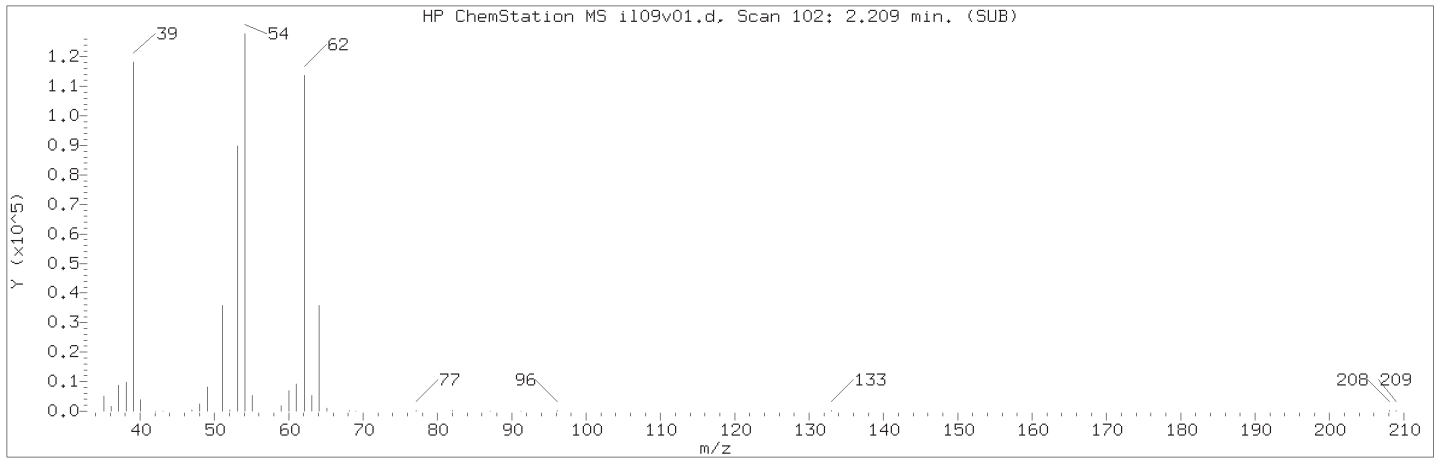
M = Compound was manually integrated.

\* = Compound is an internal standard.

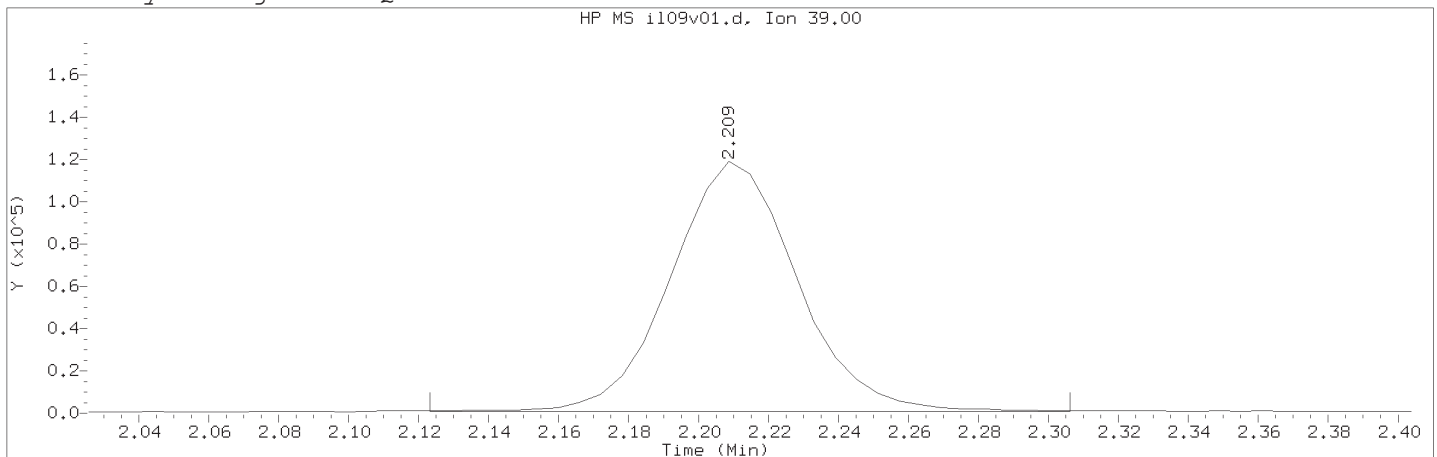
\$ = Compound is a surrogate standard.



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:35                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG    Lab Sample ID: LCSILG

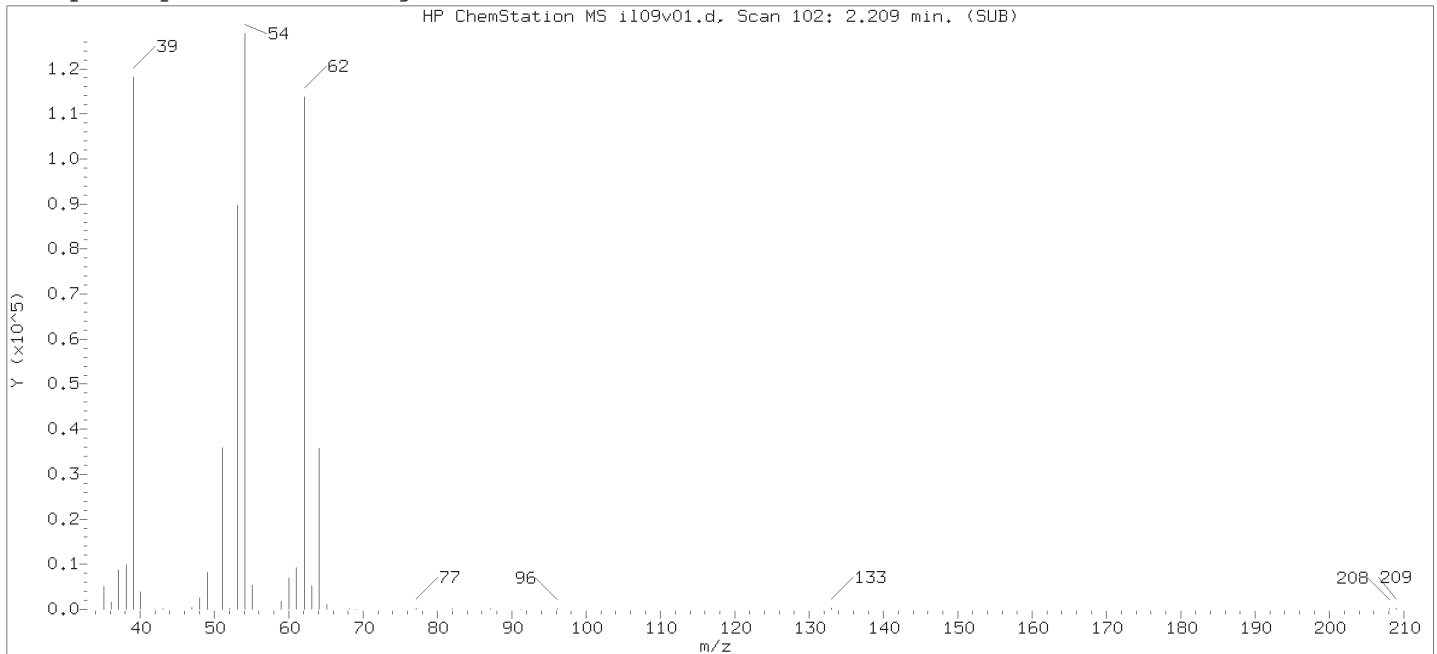
Compound Number                      : 6  
Compound Name                         : 1,3-Butadiene  
Scan Number                            : 102  
Retention Time (minutes): 2.209  
Quant Ion                                : 39.00  
Area (flag)                             : 296581M  
On-Column Amount (ng)                : 5.1958  
Integration start scan                : 87                      Integration stop scan: 117  
Y at integration start                : 800                    Y at integration end: 800

Reason for manual integration: improper integration

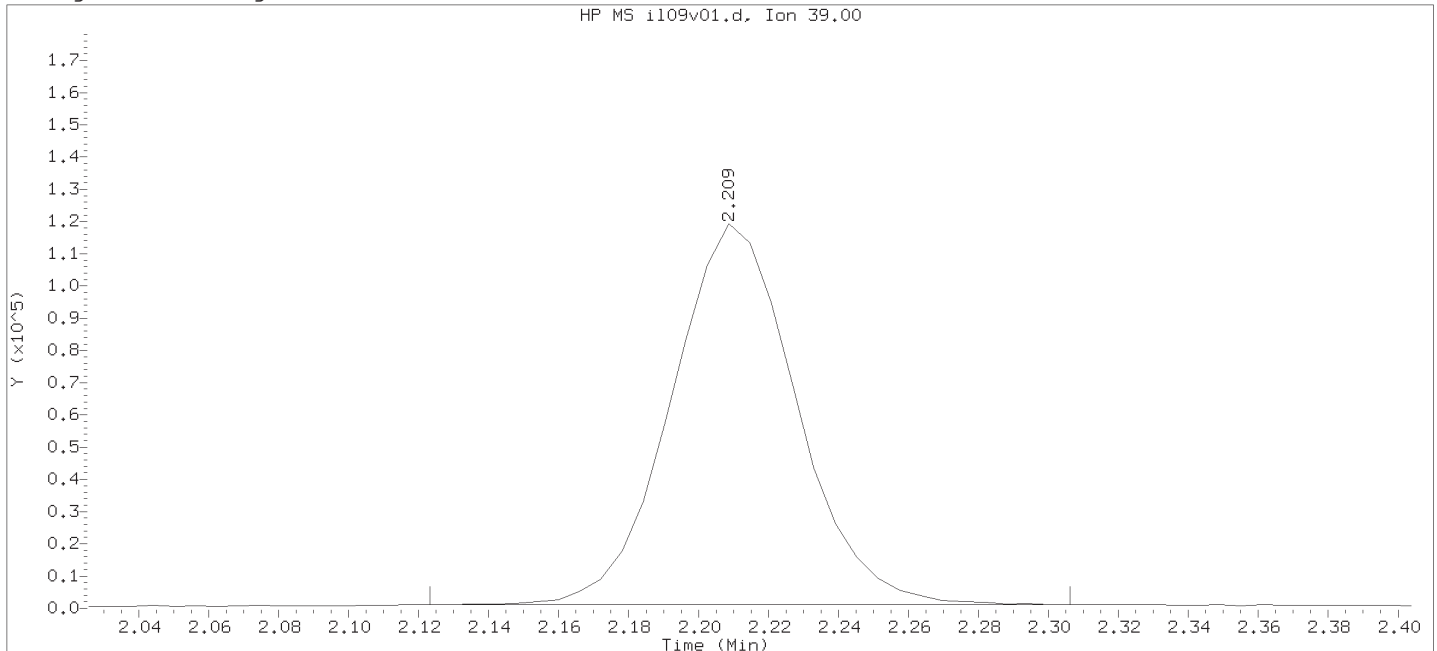
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



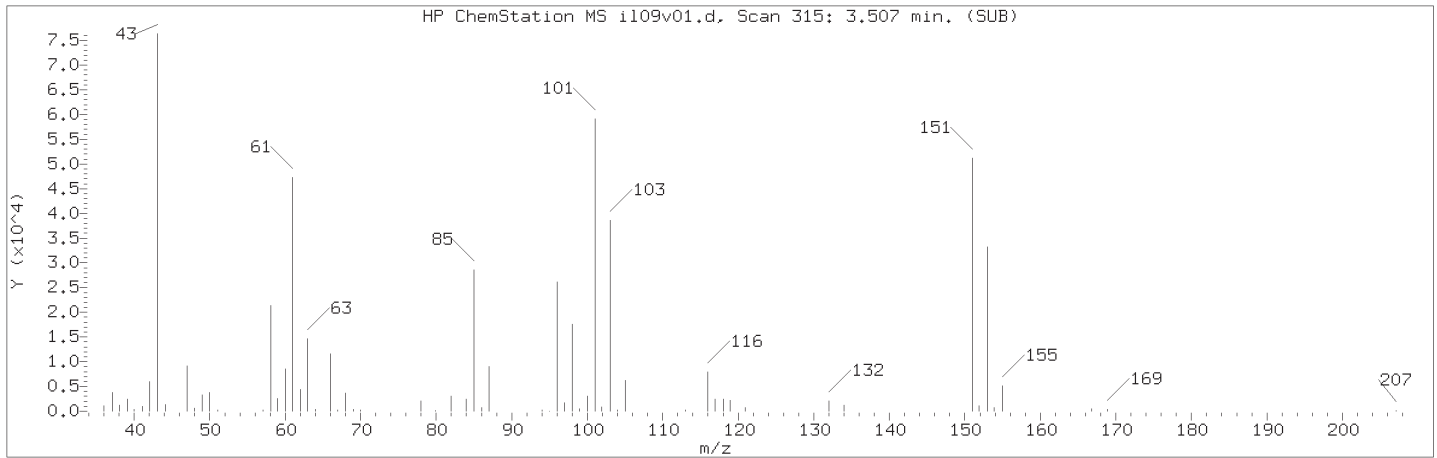
Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:35      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:56  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

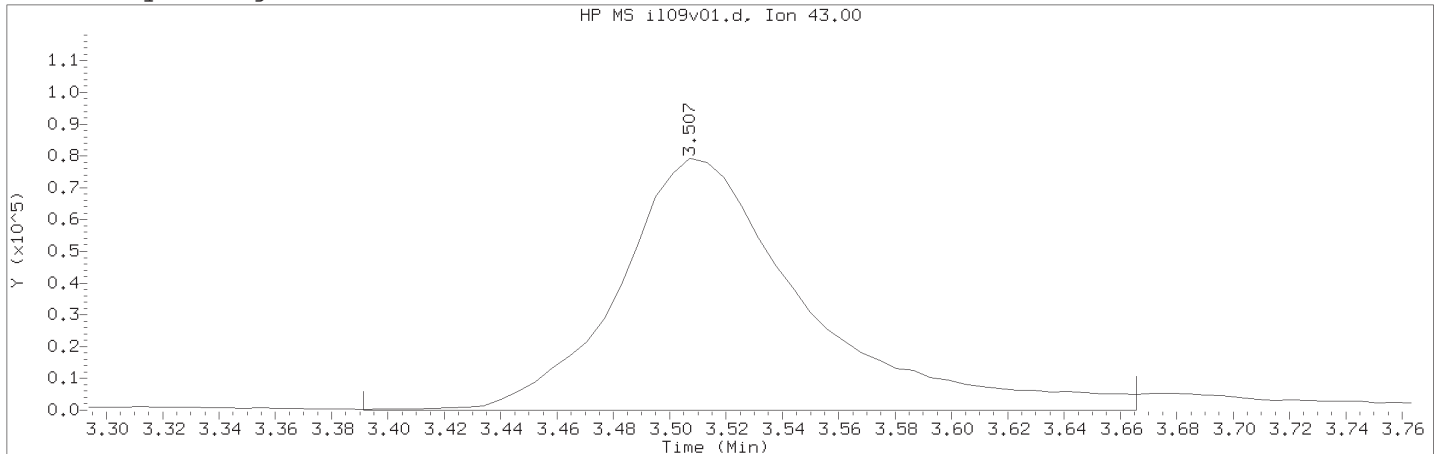
Sample Name: LCSILG      Lab Sample ID: LCSILG

Compound Number : 6  
Compound Name : 1,3-Butadiene  
Scan Number : 102  
Retention Time (minutes): 2.209  
Quant Ion : 39.00  
Area : 293742  
On-column Amount (ng) : 5.1460  
Integration start scan : 87      Integration stop scan: 117  
Y at integration start : 1053      Y at integration end: 1048

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:35      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG      Lab Sample ID: LCSILG

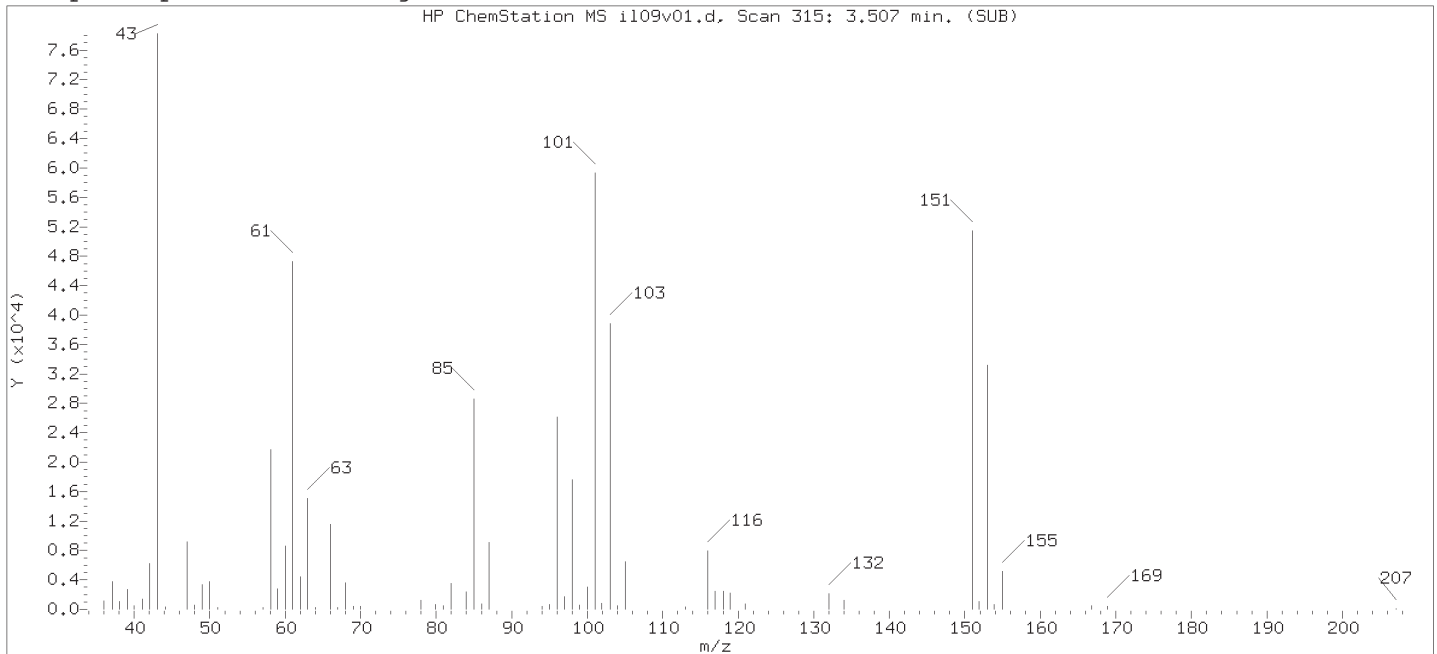
Compound Number : 14  
Compound Name : Acetone  
Scan Number : 315  
Retention Time (minutes): 3.507  
Quant Ion : 43.00  
Area (flag) : 363929M  
On-Column Amount (ng) : 36.2438  
Integration start scan : 295      Integration stop scan: 340  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

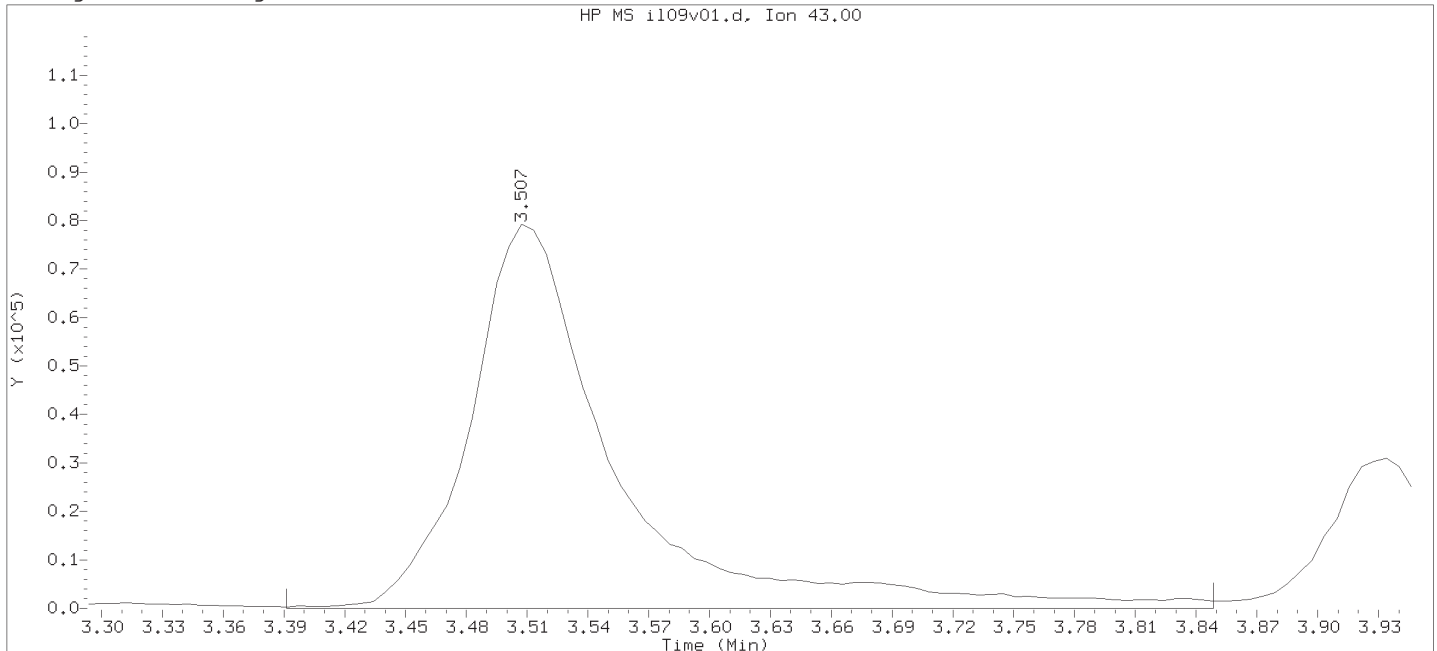
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



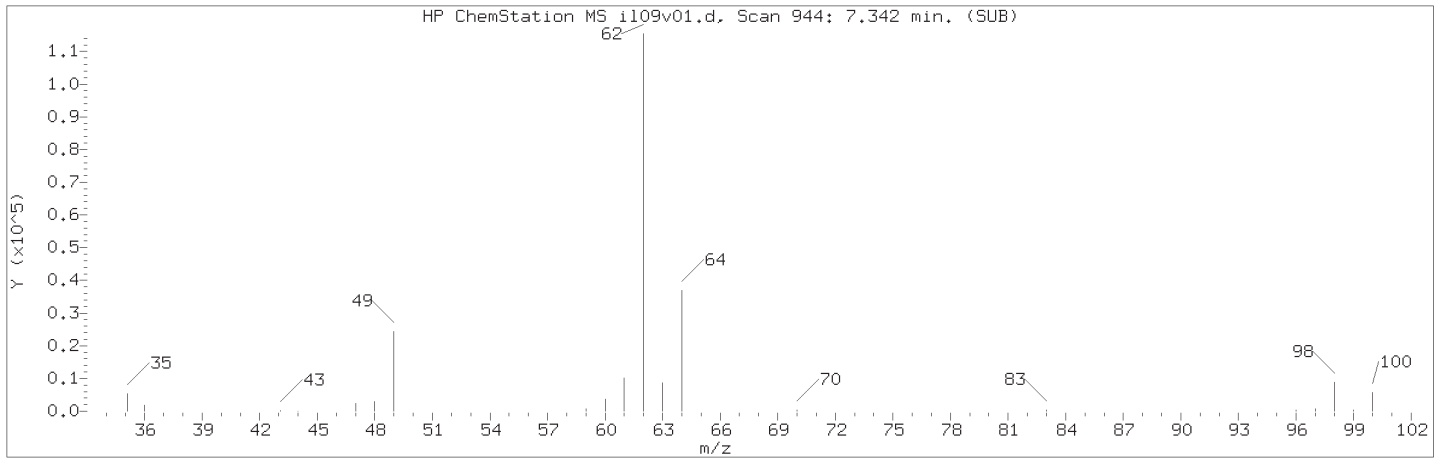
Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:35      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:56  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

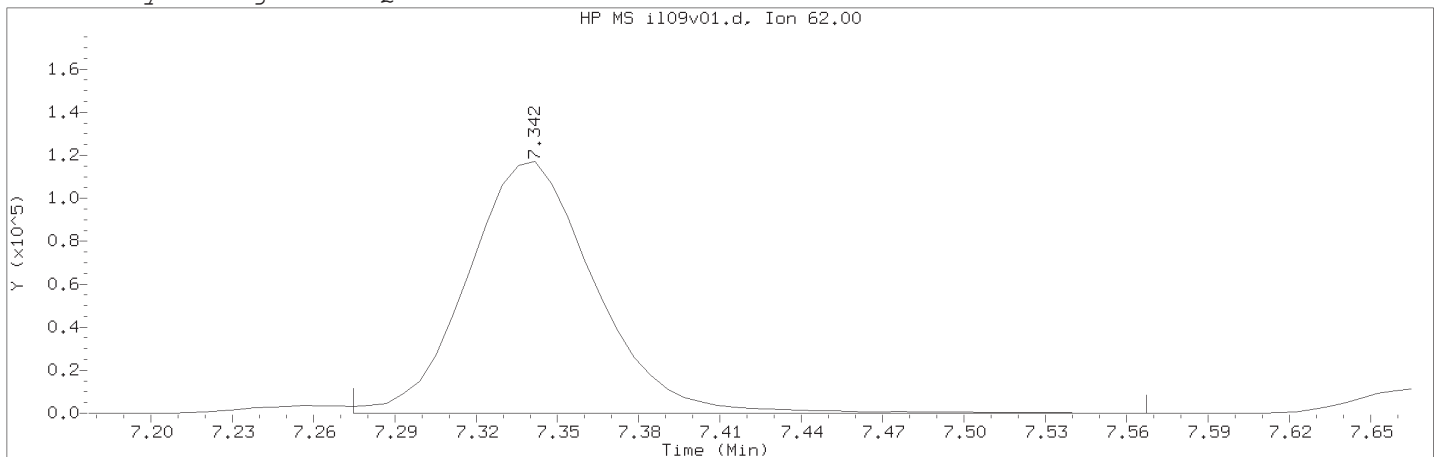
Sample Name: LCSILG      Lab Sample ID: LCSILG

Compound Number : 14  
 Compound Name : Acetone  
 Scan Number : 315  
 Retention Time (minutes): 3.507  
 Quant Ion : 43.00  
 Area : 394235  
 On-column Amount (ng) : 34.3014  
 Integration start scan : 295      Integration stop scan: 370  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:35                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG    Lab Sample ID: LCSILG

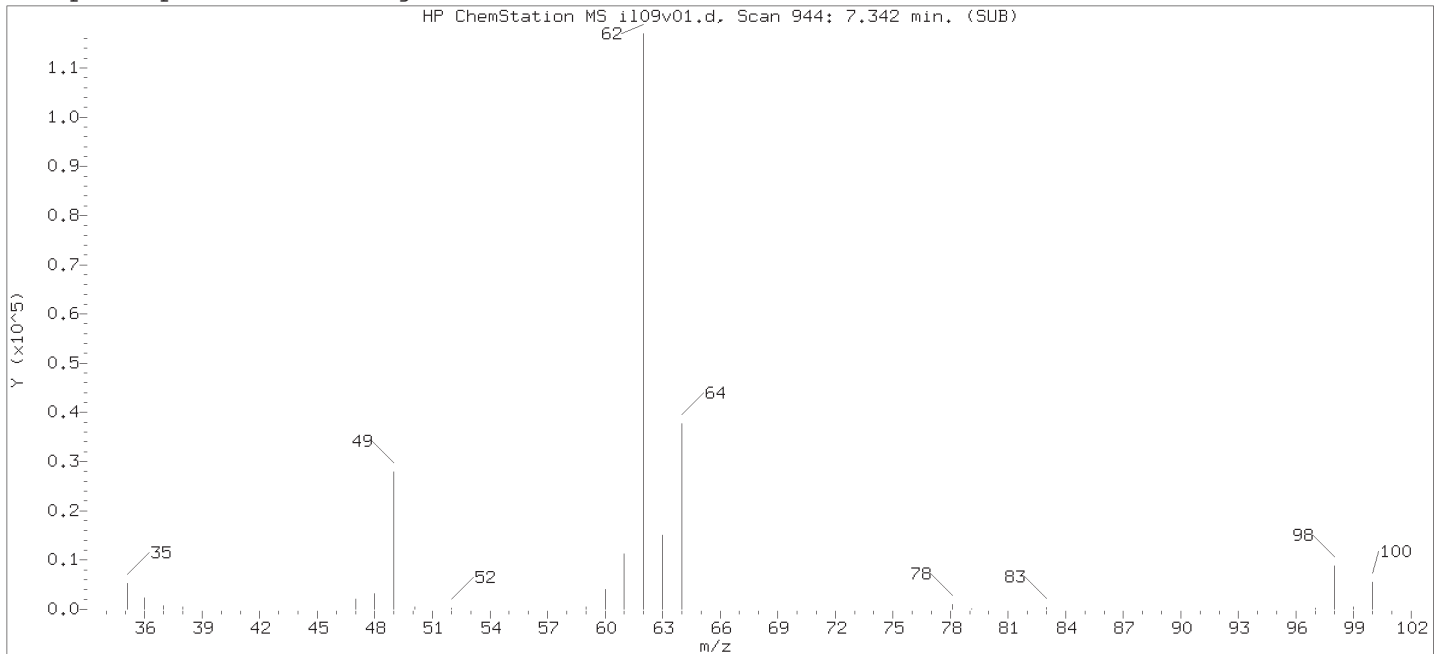
Compound Number                      : 59  
Compound Name                         : 1,2-Dichloroethane  
Scan Number                            : 944  
Retention Time (minutes): 7.342  
Quant Ion                                : 62.00  
Area (flag)                             : 383353M  
On-Column Amount (ng)                : 4.6919  
Integration start scan                : 932                      Integration stop scan: 980  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

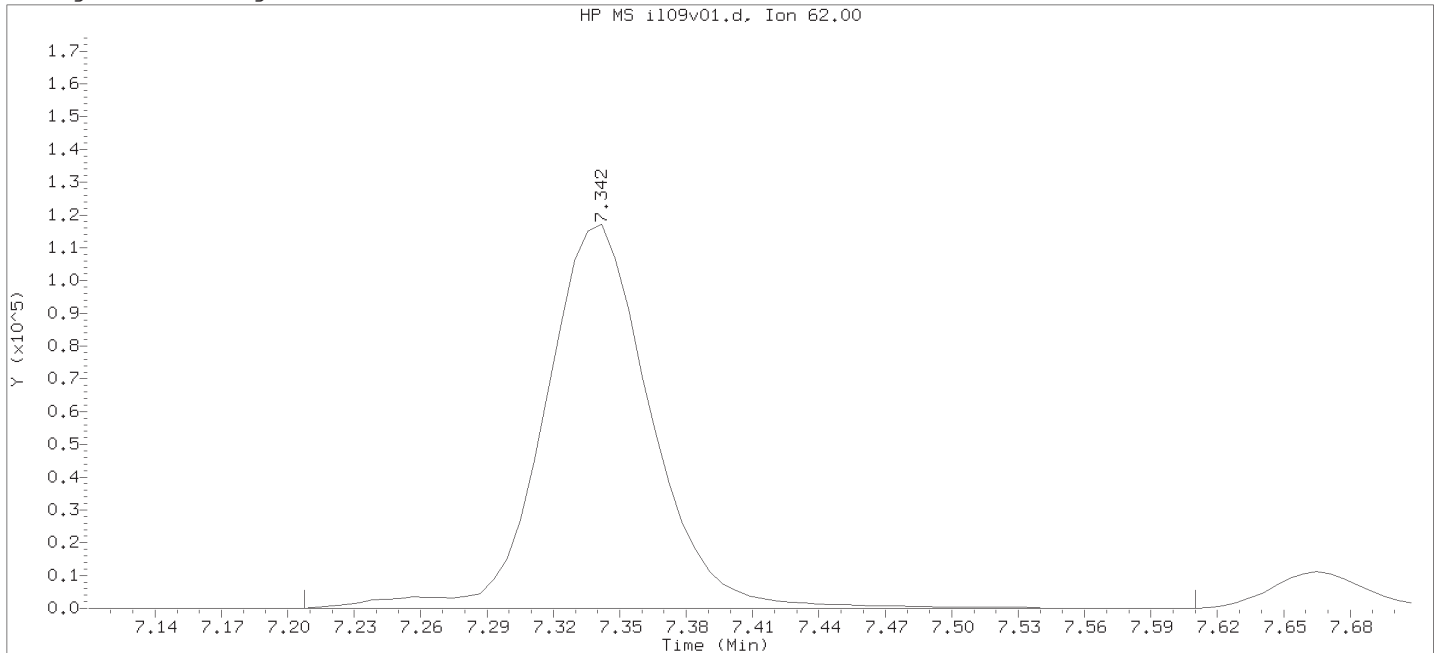
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



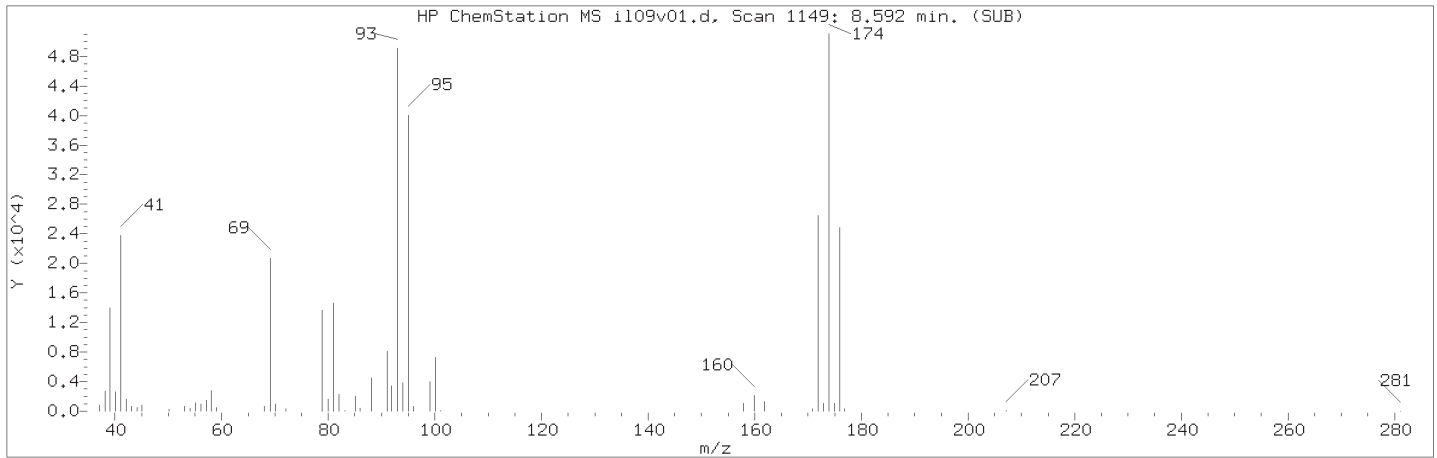
Data File: /chem2/HP19930.i/18jul09i.b/il109v01.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:35      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:56  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

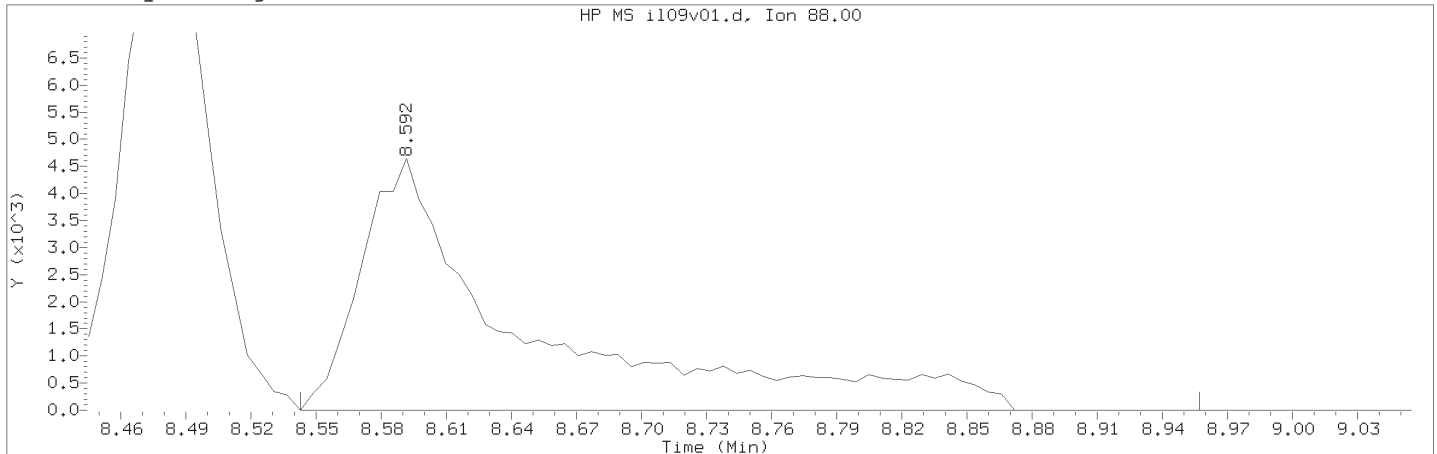
Sample Name: LCSILG      Lab Sample ID: LCSILG

Compound Number : 59  
 Compound Name : 1,2-Dichloroethane  
 Scan Number : 944  
 Retention Time (minutes): 7.342  
 Quant Ion : 62.00  
 Area : 391491  
 On-column Amount (ng) : 4.7915  
 Integration start scan : 921      Integration stop scan: 987  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:35                              Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                  Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG    Lab Sample ID: LCSILG

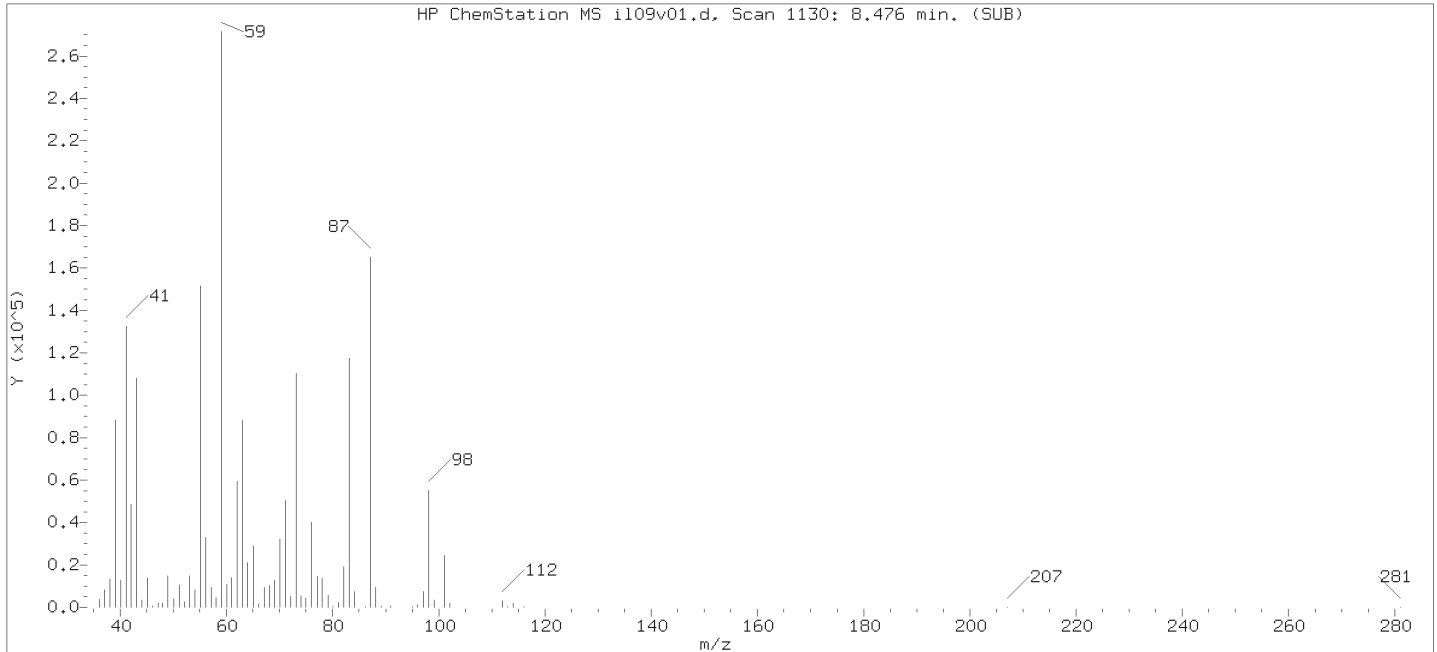
Compound Number    : 72  
Compound Name     : 1,4-Dioxane  
Scan Number    : 1149  
Retention Time (minutes): 8.592  
Quant Ion    : 88.00  
Area (flag)     : 24396M  
On-Column Amount (ng)    : 107.6022  
Integration start scan    : 1140    Integration stop scan: 1208  
Y at integration start     : 0     Y at integration end: 0

Reason for manual integration: improper integration

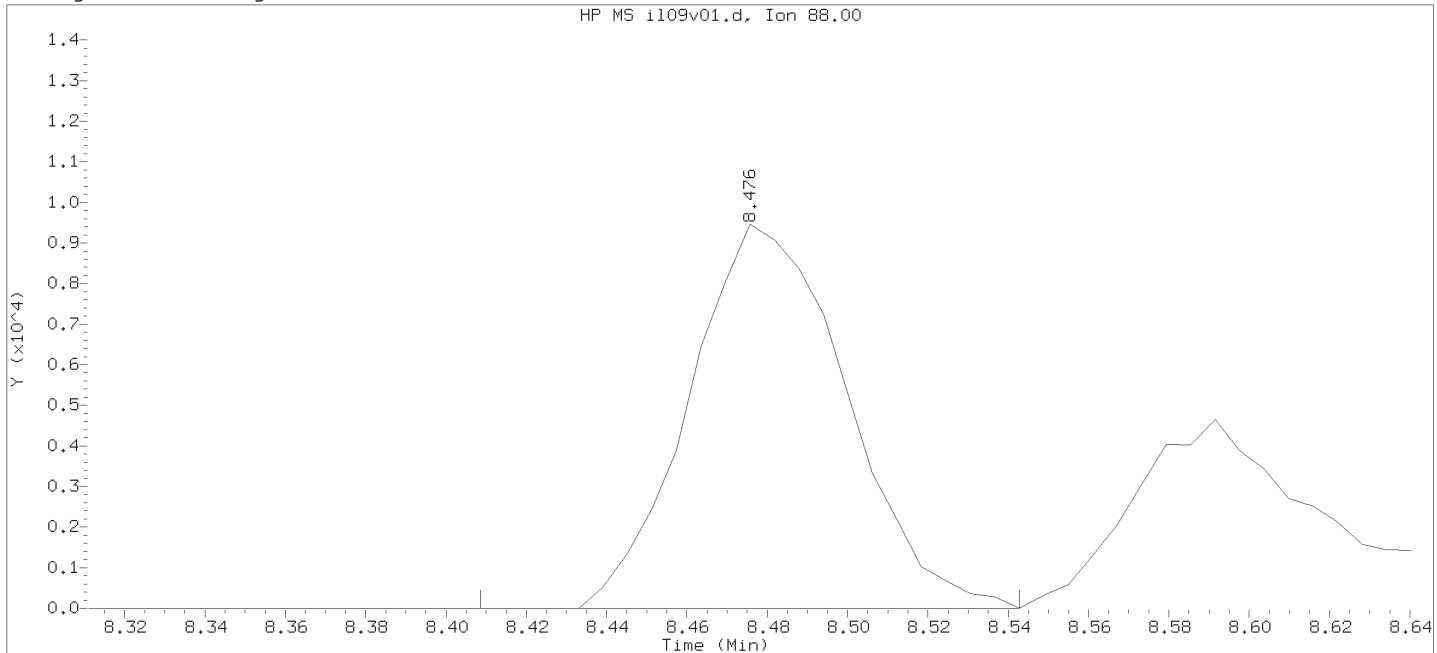
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d      Instrument ID: HP19930.i  
 Injection date and time: 09-JUL-2018 15:35      Analyst ID: jkh09052

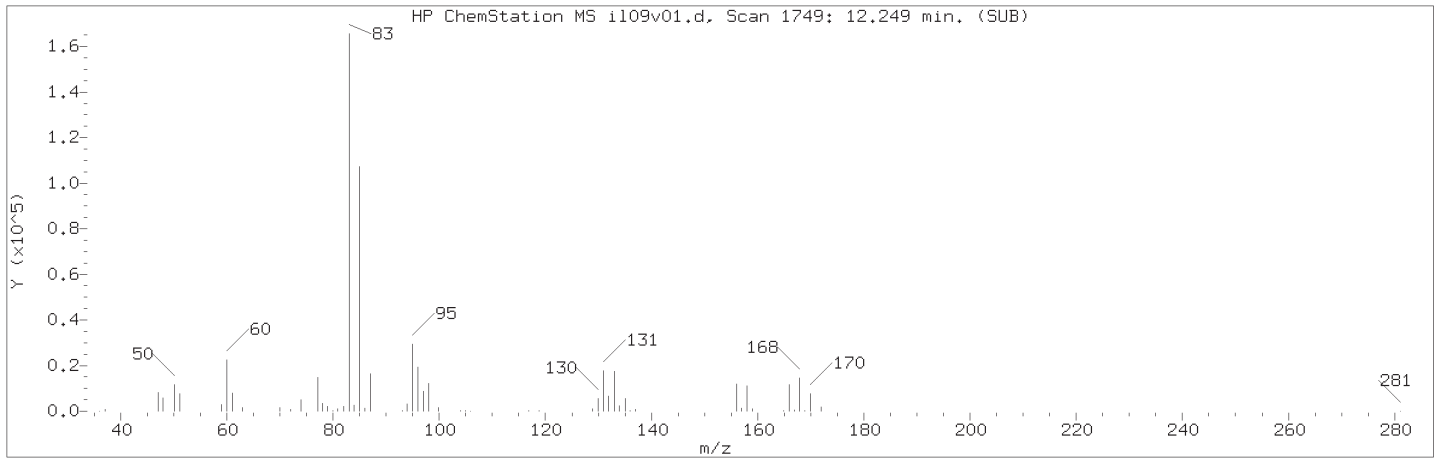
Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 10-JUL-2018 12:56  
 Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

Sample Name: LCSILG      Lab Sample ID: LCSILG

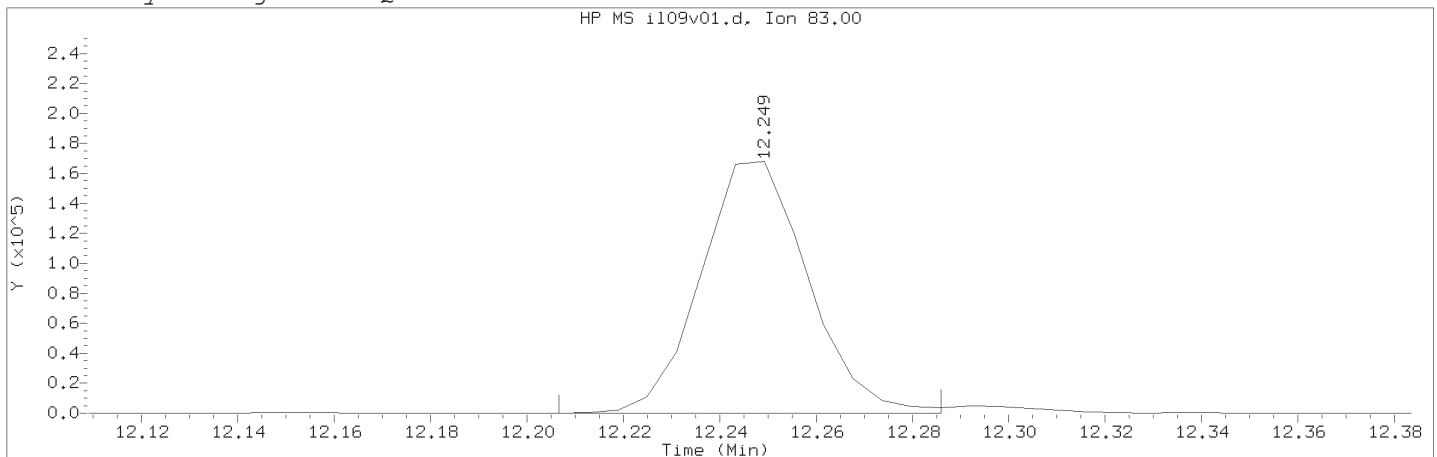
Compound Number : 72  
 Compound Name : 1,4-Dioxane  
 Scan Number : 1130  
 Retention Time (minutes): 8.476  
 Quant Ion : 88.00  
 Area : 25600  
 On-column Amount (ng) : 112.9150  
 Integration start scan : 1118      Integration stop scan: 1140  
 Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:35                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 17-JUL-2018 16:21  
Date, time and analyst ID of latest file update: 17-Jul-2018 16:21 kek01027

Sample Name: LCSILG    Lab Sample ID: LCSILG

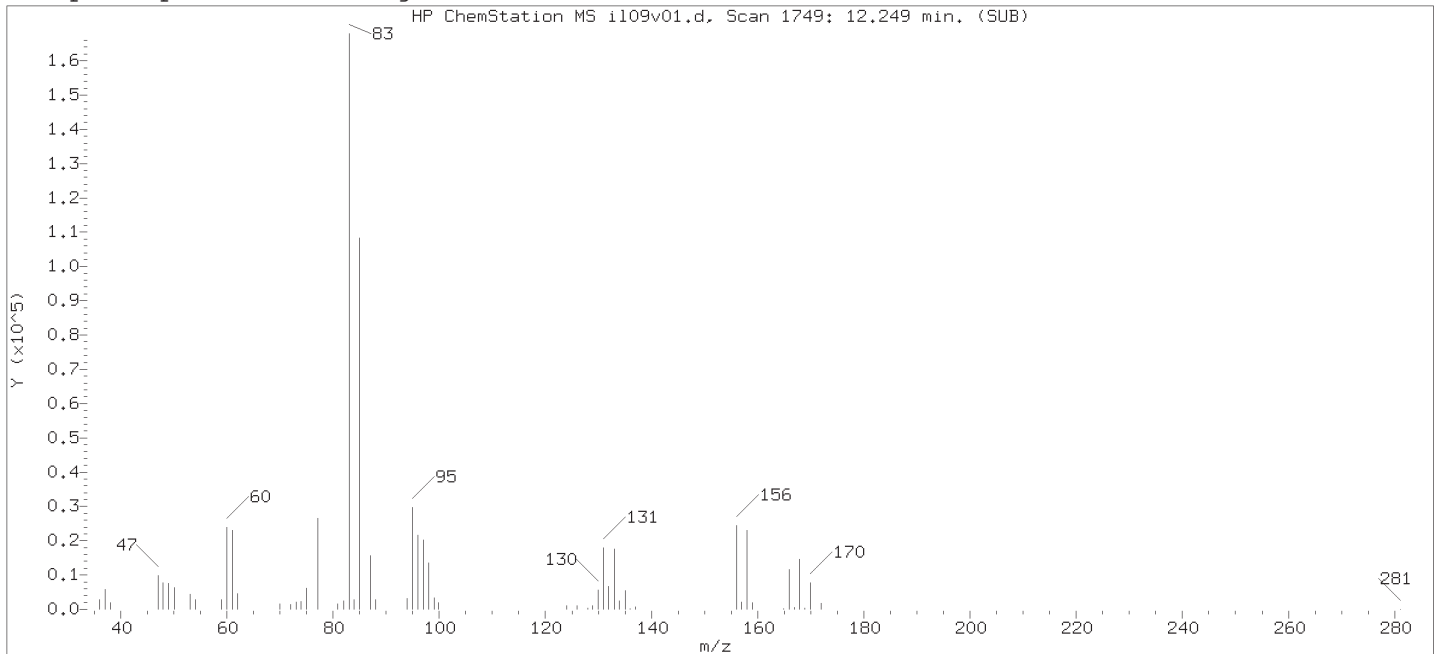
Compound Number                      : 113  
Compound Name                        : 1,1,2,2-Tetrachloroethane  
Scan Number                          : 1749  
Retention Time (minutes): 12.249  
Quant Ion                              : 83.00  
Area (flag)                          : 259566M  
On-Column Amount (ng)               : 4.8190  
Integration start scan               : 1741                      Integration stop scan: 1754  
Y at integration start               : 0                         Y at integration end: 0

Reason for manual integration: improper integration

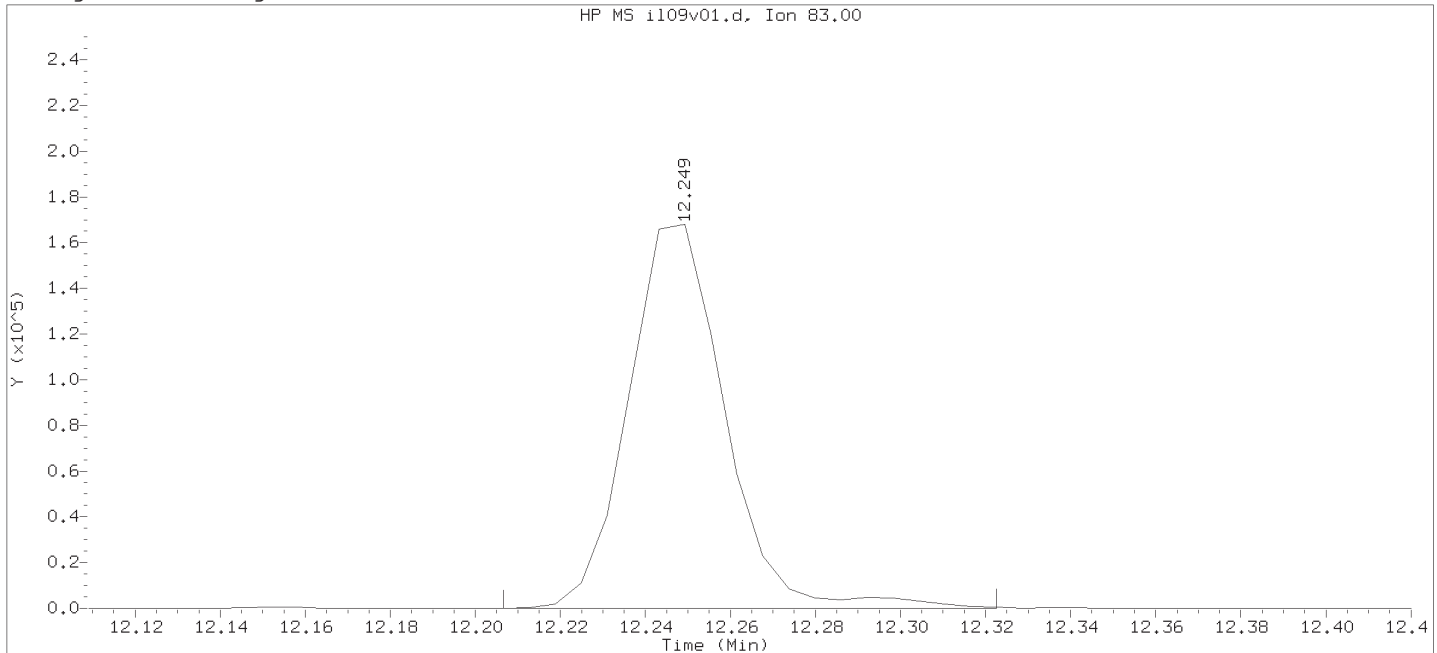
Analyst responsible for change: Digitally signed by Don V. Viray  
on 07/17/2018 at 16:41.  
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 07/17/2018 at 17:54.  
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18jul09i.b/i109v01.d                      Instrument ID: HP19930.i  
Injection date and time: 09-JUL-2018 15:35                      Analyst ID: jkh09052

Method used: /chem2/HP19930.i/18jul09i.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 10-JUL-2018 12:56  
Date, time and analyst ID of latest file update: 10-Jul-2018 12:58 jkh09052

Sample Name: LCSILG    Lab Sample ID: LCSILG

Compound Number                      : 113  
Compound Name                         : 1,1,2,2-Tetrachloroethane  
Scan Number                            : 1749  
Retention Time (minutes)             : 12.249  
Quant Ion                                : 83.00  
Area                                     : 265073  
On-column Amount (ng)                : 4.9213  
Integration start scan                : 1741                      Integration stop scan: 1760  
Y at integration start                : 0                         Y at integration end: 0

Date : 13-NOV-2018 08:19

Client ID: BFB AUG07-18

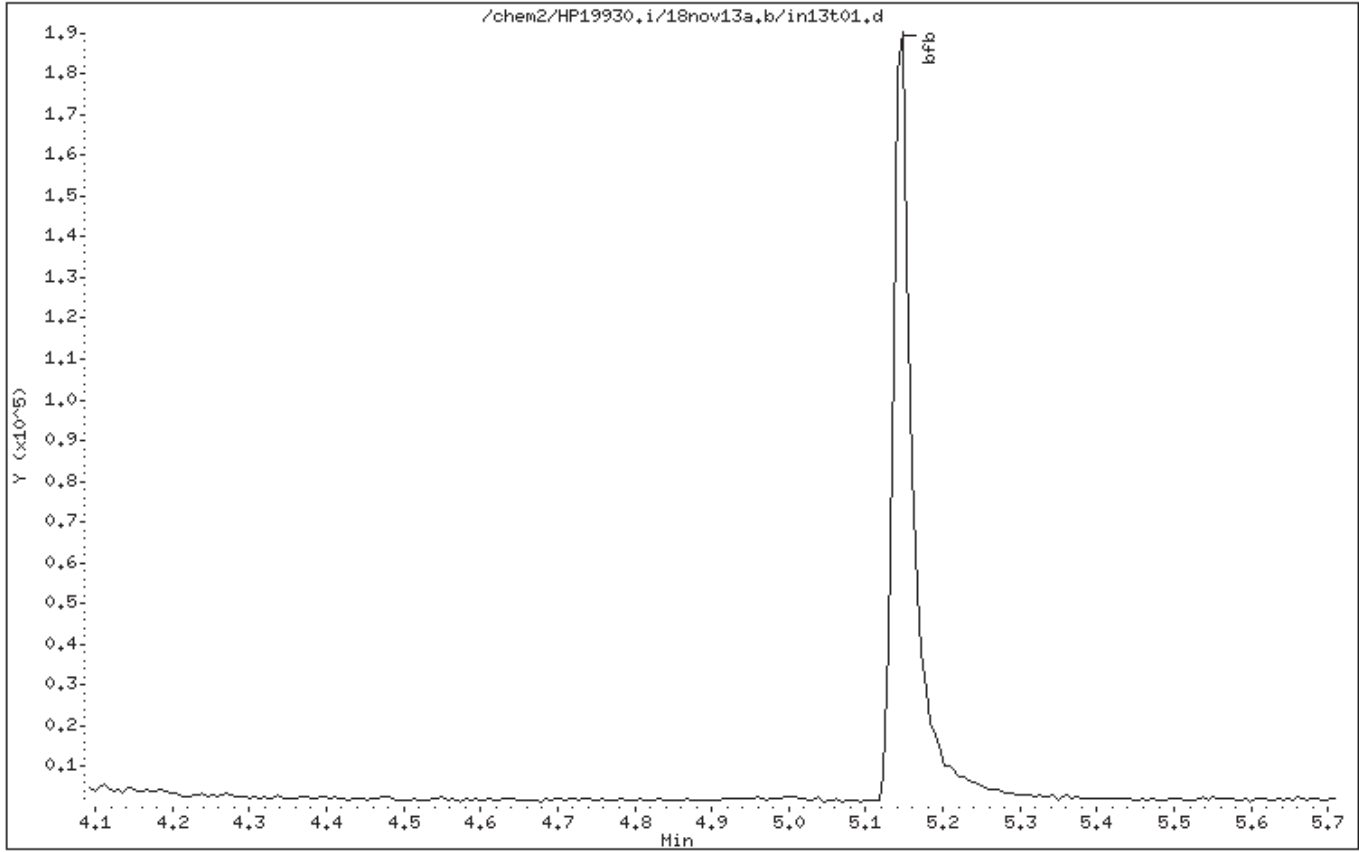
Instrument: HP19930.i

Sample Info: BFB AUG07-18;50NGBFB;1;3;++++

Operator: jkh09052

Column phase: Rxi-624Sil MS

Column diameter: 0,25



Digitally signed by Jennifer K. Howe on 11/13/2018 at 08:25.  
Target 3.5 esignature user ID: jkh09052

Date : 13-NOV-2018 08:19

Client ID: BFB AUG07-18

Instrument: HP19930.i

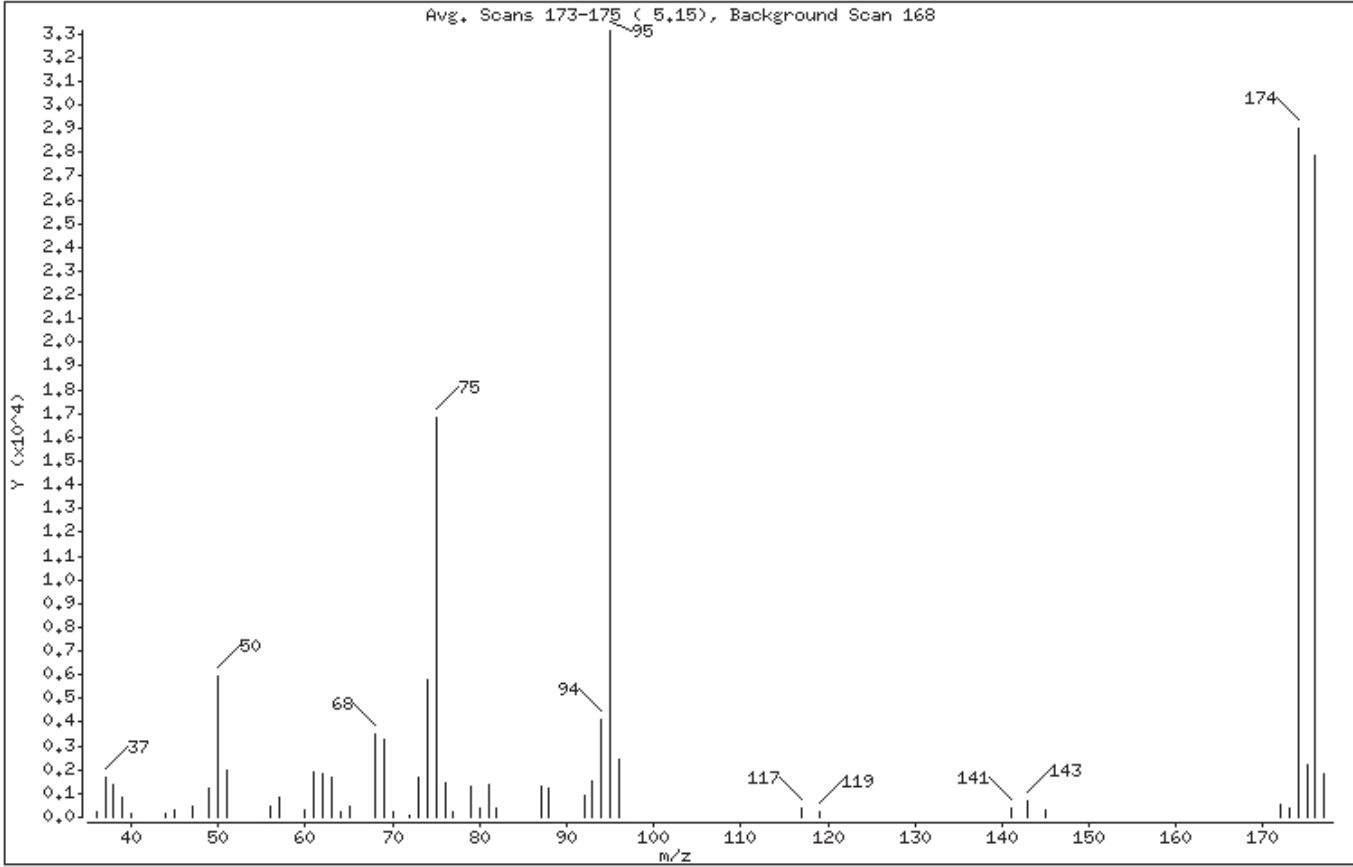
Sample Info: BFB AUG07-18;50NGBFB;1;3;++++;

Operator: jkh09052

Column phase: Rxi-624Sil MS

Column diameter: 0,25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	15,00 - 40,00% of mass 95	17,97
75	30,00 - 60,00% of mass 95	50,83
96	5,00 - 9,00% of mass 95	7,44
173	Less than 2,00% of mass 174	1,15 ( 1,31)
174	50,00 - 100,00% of mass 95	87,56
175	5,00 - 9,00% of mass 174	6,74 ( 7,69)
176	95,00 - 101,00% of mass 174	84,08 ( 96,03)
177	5,00 - 9,00% of mass 176	5,41 ( 6,43)

Digitally signed by Jennifer K. Howe on 11/13/2018 at 08:25.  
 Target 3.5 esignature user ID: jkh09052

Date : 13-NOV-2018 08:19

Client ID: BFB AUG07-18

Instrument: HP19930.i

Sample Info: BFB AUG07-18;50NGBFB;1;3;++++;

Operator: jkh09052

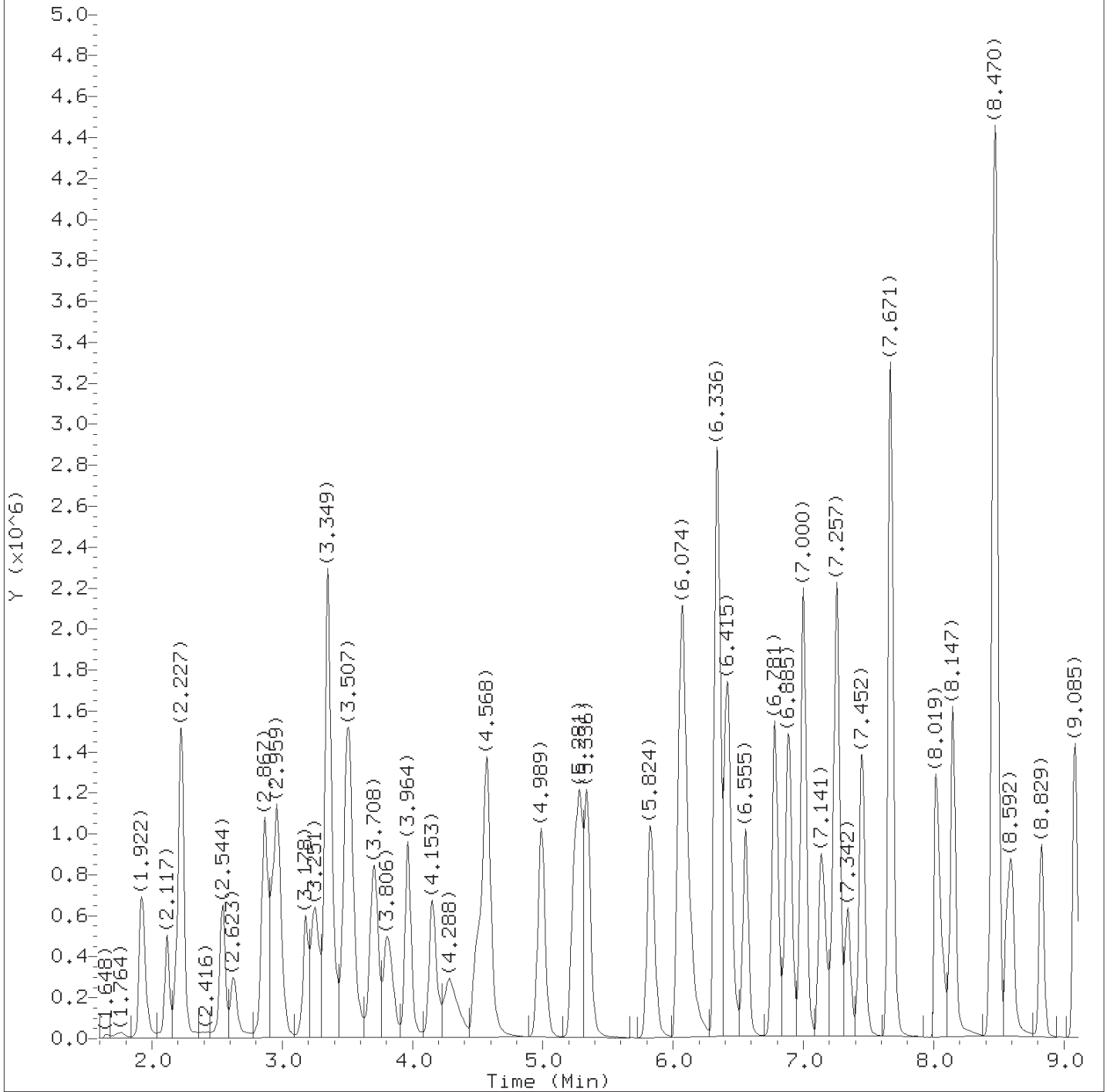
Column phase: Rxi-624Sil MS

Column diameter: 0,25

Data File: in13t01.d  
Spectrum: Avg. Scans 173-175 ( 5,15), Background Scan 168  
Location of Maximum: 95,00  
Number of points: 50

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36,00	260	60,00	299	76,00	1429	117,00	350
37,00	1643	61,00	1893	77,00	224	119,00	208
38,00	1394	62,00	1820	79,00	1281	141,00	373
39,00	839	63,00	1684	80,00	368	143,00	669
40,00	171	64,00	257	81,00	1388	145,00	310
44,00	154	65,00	424	82,00	378	172,00	533
45,00	292	68,00	3473	87,00	1326	173,00	381
47,00	471	69,00	3294	88,00	1187	174,00	29000
49,00	1253	70,00	208	92,00	892	175,00	2231
50,00	5952	72,00	96	93,00	1542	176,00	27848
51,00	1960	73,00	1645	94,00	4079	177,00	1791
56,00	463	74,00	5816	95,00	33120		
57,00	838	75,00	16832	96,00	2465		

Digitally signed by Jennifer K. Howe on 11/13/2018 at 08:25.  
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d  
Injection date and time: 13-NOV-2018 08:55

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 09:13

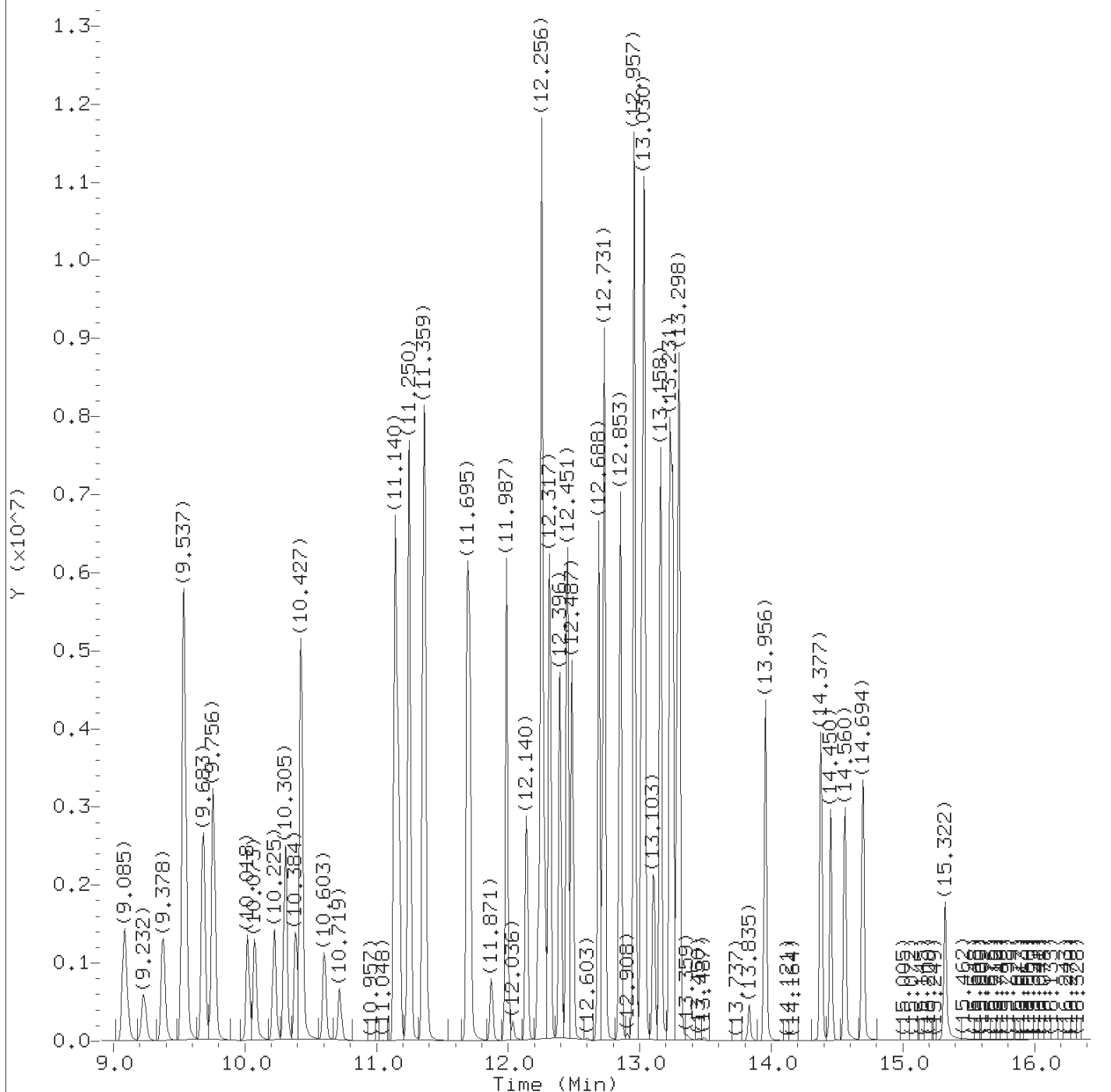
Sublist used: 8260W25  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d  
Injection date and time: 13-NOV-2018 08:55

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 09:13

Sublist used: 8260W25

Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d  
 Injection date and time: 13-NOV-2018 08:55

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
 Calibration date and time: 13-NOV-2018 09:13  
 Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sublist used: 8260W25

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.922	85	1335050	10.268
2) Chloromethane	(2)	2.117	50	766238	8.072
6) 1,3-Butadiene	(2)	2.221	39	956328	15.688
5) Vinyl Chloride	(2)	2.233	62	765065	8.348
7) Bromomethane	(2)	2.544	94	670400	7.770
8) Chloroethane	(2)	2.623	64	428100	8.024
9) Dichlorofluoromethane	(2)	2.867	67	1354926	9.661
10) Trichlorofluoromethane	(2)	2.922	101	1592257	10.163
11) Ethyl ether	(2)	3.178	59	519162	10.010
12) Freon 123a	(2)	3.251	67	828604	10.451
13) Acrolein	(1)	3.349	56	3965968	555.664
15) 1,1-Dichloroethene	(2)	3.495	96	532983	9.864
16) Freon 113	(2)	3.513	101	678111	10.810
14) Acetone	(1)	3.519	43	1322857	124.627
17) Methyl Iodide	(2)	3.690	142	1044744	9.418
18) Carbon Disulfide	(2)	3.806	76	1533141	9.564
21) Methyl Acetate	(1)	3.946	43	274563	11.394
22) Allyl Chloride	(2)	3.964	41	930732	8.017
23) Methylene Chloride	(2)	4.153	84	592090	9.677
26)*t-Butyl Alcohol-d10	(1)	4.172	65	181647	50.000
28) t-Butyl Alcohol	(1)	4.288	59	1012012	215.467
29) Acrylonitrile	(1)	4.489	53	698226	60.361
30) Methyl Tertiary Butyl Ether	(2)	4.556	73	1468832	8.778
31) trans-1,2-Dichloroethene	(2)	4.574	96	593343	9.676
32) n-Hexane	(2)	4.989	57	946093	9.369
33) 1,1-Dichloroethane	(2)	5.239	63	1169132	9.648
34) di-Isopropyl Ether	(2)	5.287	45	1882934	8.602
35) 2-Chloro-1,3-Butadiene	(2)	5.342	53	1053320	9.182
37) Ethyl t-butyl ether	(2)	5.824	59	1609158	7.866
38) 2-Butanone	(1)	6.037	43	1973923	112.127
39) cis-1,2-Dichloroethene	(2)	6.074	96	690863	9.866
41) 2,2-Dichloropropane	(2)	6.080	77	1004717	9.131
40) 1,2-Dichloroethene (Total)	(2)		96	1284206	19.542
42) Propionitrile	(1)	6.129	54	1152160	265.205
45) Methacrylonitrile	(1)	6.336	67	1816164	122.655
47) Bromochloromethane	(2)	6.409	128	324479	10.590
48) Tetrahydrofuran	(1)	6.427	71	546934	120.293
49) Chloroform	(2)	6.555	83	1203947	9.871

\* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe  
 on 11/13/2018 at 09:25.

Target 3.5 esignature user ID: jkh09052



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d  
 Injection date and time: 13-NOV-2018 08:55

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
 Calibration date and time: 13-NOV-2018 09:13  
 Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sublist used: 8260W25

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) \$Dibromofluoromethane	(2)	6.775	113	557041	10.019
50) \$Dibromofluoromethane	(2)	6.775	111	569871	9.991
51) 1,1,1-Trichloroethane	(2)	6.781	97	1120120	9.556
52) Cyclohexane	(2)	6.885	56	1163335	9.401
52) Cyclohexane	(2)	6.885	84	993644	10.224
52) Cyclohexane	(2)	6.885	69	358835	9.785
54) Carbon Tetrachloride	(2)	7.000	117	1056735	10.293
55) 1,1-Dichloropropene	(2)	7.000	75	909802	9.830
56) Isobutyl Alcohol	(1)	7.141	41	979378	688.729
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	113156	10.718
57) \$1,2-Dichloroethane-d4	(2)	7.232	65	630167	10.081
57) \$1,2-Dichloroethane-d4	(2)	7.244	104	71473	10.563
58) Benzene	(2)	7.263	78	2601721	10.056
59) 1,2-Dichloroethane	(2)	7.342	62	818016	9.375
59) 1,2-Dichloroethane	(2)	7.342	98	64492	10.686
60) t-Amyl methyl ether	(2)	7.452	73	1553517	8.706
62) n-Heptane	(2)	7.671	43	1079360	9.753
63) *Fluorobenzene	(2)	7.671	96	2129997	10.000
65) n-Butanol	(1)	8.019	56	1509994	1423.791
67) Trichloroethene	(2)	8.147	95	707532	9.977
69) Methylcyclohexane	(2)	8.458	83	1277962	9.964
70) 1,2-Dichloropropane	(2)	8.482	63	656381	10.122
71) Methyl Methacrylate	(1)	8.561	69	325629	12.125
72) 1,4-Dioxane	(1)	8.586	88	190186M	793.528
72) 1,4-Dioxane	(1)	8.586	58	134927M	778.250
73) Dibromomethane	(2)	8.598	93	336257	10.316
74) Bromodichloromethane	(2)	8.829	83	849807	9.709
76) 2-Nitropropane	(1)	9.085	41	1285332	106.612
80) cis-1,3-Dichloropropene	(2)	9.378	75	937222	9.437
81) 4-Methyl-2-Pentanone	(1)	9.537	43	4874646	113.135
82) \$Toluene-d8	(3)	9.683	98	2140738	10.051
82) \$Toluene-d8	(3)	9.683	100	1362352	9.911
83) Toluene	(3)	9.756	92	1663003	9.916
84) trans-1,3-Dichloropropene	(3)	10.018	75	825980	9.855
86) Ethyl Methacrylate	(3)	10.073	69	712135	9.817
85) 1,3-Dichloropropene (total)	(3)		75	1763202	19.292
88) 1,1,2-Trichloroethane	(3)	10.225	97	481146	10.410
89) Tetrachloroethene	(3)	10.311	166	824363	9.530

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 08:55 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 8260W25  
 Calibration date and time: 13-NOV-2018 09:13  
 Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.384	76	851158	10.596
91) 2-Hexanone	(1)	10.427	43	3579129M	115.901
93) Dibromochloromethane	(3)	10.603	129	613996	10.250
95) 1,2-Dibromoethane	(3)	10.719	107	465998	10.512
97) *Chlorobenzene-d5	(3)	11.140	117	1704905	10.000
98) Chlorobenzene	(3)	11.164	112	1937786	10.579
99) 1,1,1,2-Tetrachloroethane	(3)	11.244	131	737295	10.584
100) Ethylbenzene	(3)	11.250	91	3445817	10.363
101) m+p-Xylene	(3)	11.359	106	2697143	20.811
104) o-Xylene	(3)	11.689	106	1275022	9.848
106) Styrene	(3)	11.707	104	2060485	10.578
105) Xylene (Total)	(3)		106	3972165	30.660
107) Bromoform	(3)	11.871	173	348244	9.562
108) Isopropylbenzene	(3)	11.987	105	3462428	10.263
111) \$4-Bromofluorobenzene	(3)	12.140	95	821950	9.805
111) \$4-Bromofluorobenzene	(3)	12.140	174	724515	9.528
113) 1,1,2,2-Tetrachloroethane	(4)	12.231	83	629999	10.368
115) trans-1,4-Dichloro-2-butene	(1)	12.256	53	1553039A	109.611
114) Bromobenzene	(4)	12.256	156	878006	9.845
116) 1,2,3-Trichloropropane	(4)	12.280	110	195118	11.040
117) n-Propylbenzene	(4)	12.317	91	4222870	10.378
119) 2-Chlorotoluene	(4)	12.396	126	835787	10.277
121) 1,3,5-Trimethylbenzene	(4)	12.451	105	3091412	10.593
122) 4-Chlorotoluene	(4)	12.487	126	845103	10.268
125) tert-Butylbenzene	(4)	12.688	134	646095	10.286
126) Pentachloroethane	(4)	12.725	167	574954	10.487
127) 1,2,4-Trimethylbenzene	(4)	12.731	105	3150602	10.686
128) sec-Butylbenzene	(4)	12.853	105	4017908	10.709
131) 1,3-Dichlorobenzene	(4)	12.957	146	1721182	10.209
132) p-Isopropyltoluene	(4)	12.963	119	3555975	10.736
133) *1,4-Dichlorobenzene-d4	(4)	13.011	152	991105	10.000
134) 1,4-Dichlorobenzene	(4)	13.030	146	1720559	9.978
135) 1,2,3-Trimethylbenzene	(4)	13.036	120	1375007	10.239
136) Benzyl Chloride	(4)	13.109	126	282084M	12.382
138) n-Butylbenzene	(4)	13.249	92	1713280	11.287
139) 1,2-Dichlorobenzene	(4)	13.286	146	1597866	10.223
143) 1,2-Dibromo-3-chloropropane	(1)	13.835	155	85992A	12.251
144) 1,3,5-Trichlorobenzene	(4)	13.956	180	1247868	10.202

M = Compound was manually integrated.  
 A = User selected an alternate hit.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe  
 on 11/13/2018 at 09:25.  
 Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010

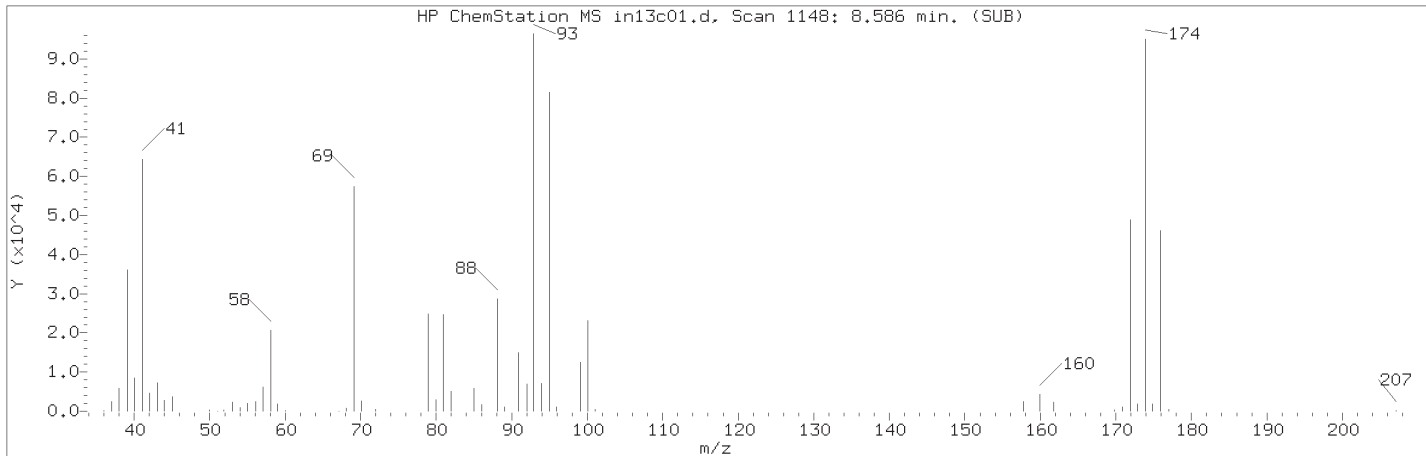
Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,2,4-Trichlorobenzene	(4)	14.377	180	1034056	9.806
146) Hexachlorobutadiene	(4)	14.456	225	477387	10.676
147) Naphthalene	(4)	14.560	128	2013081	10.556
148) 1,2,3-Trichlorobenzene	(4)	14.700	180	937343	10.414

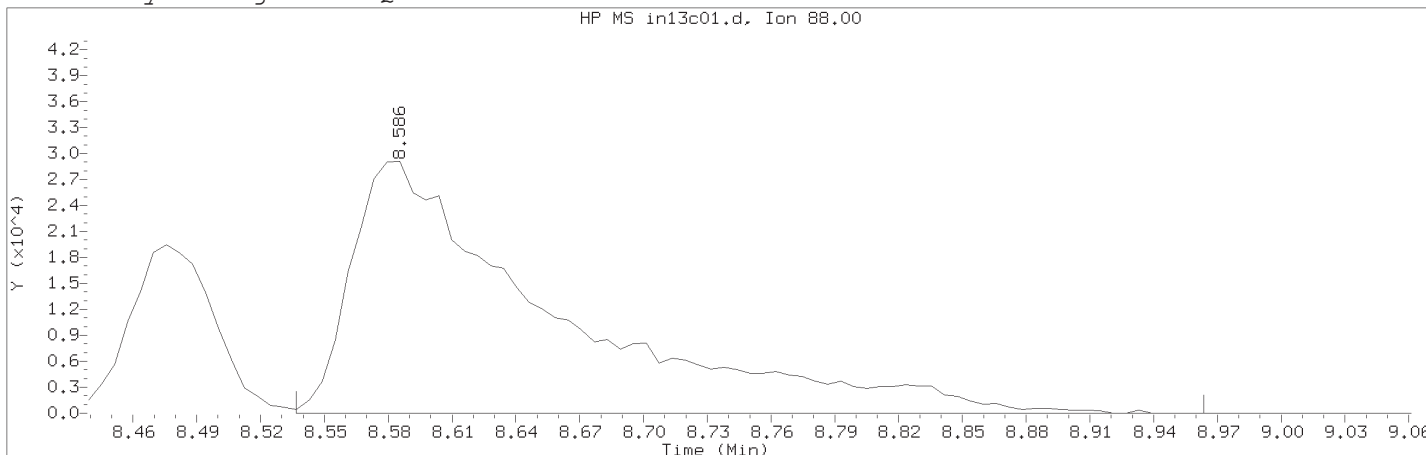
page 4 of 4

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.  
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010    Lab Sample ID: VSTD010

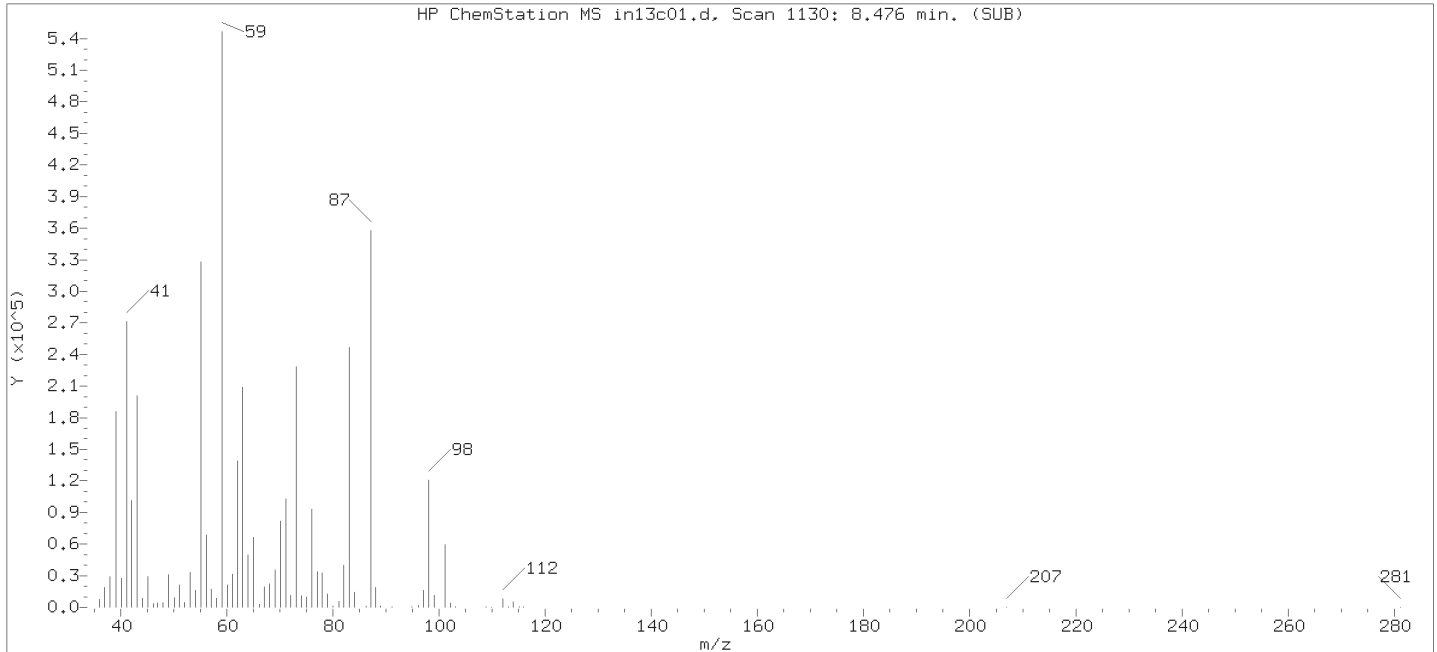
Compound Number    : 72  
Compound Name    : 1,4-Dioxane  
Scan Number    : 1148  
Retention Time (minutes): 8.586  
Quant Ion    : 88.00  
Area (flag)    : 190186M  
On-Column Amount (ng)                                      : 793.5279  
Integration start scan                                       : 1139                      Integration stop scan: 1209  
Y at integration start                                       : 0                              Y at integration end: 0

Reason for manual integration: improper integration

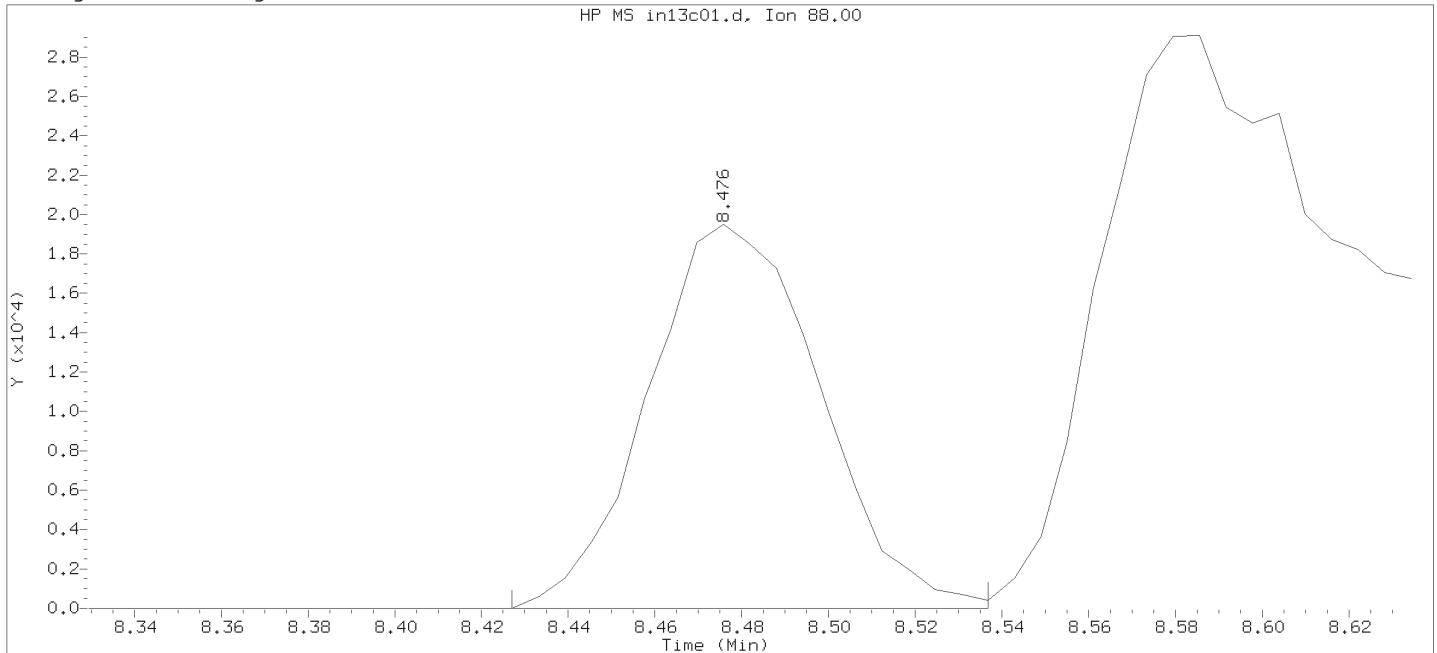
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/14/2018 at 06:09.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



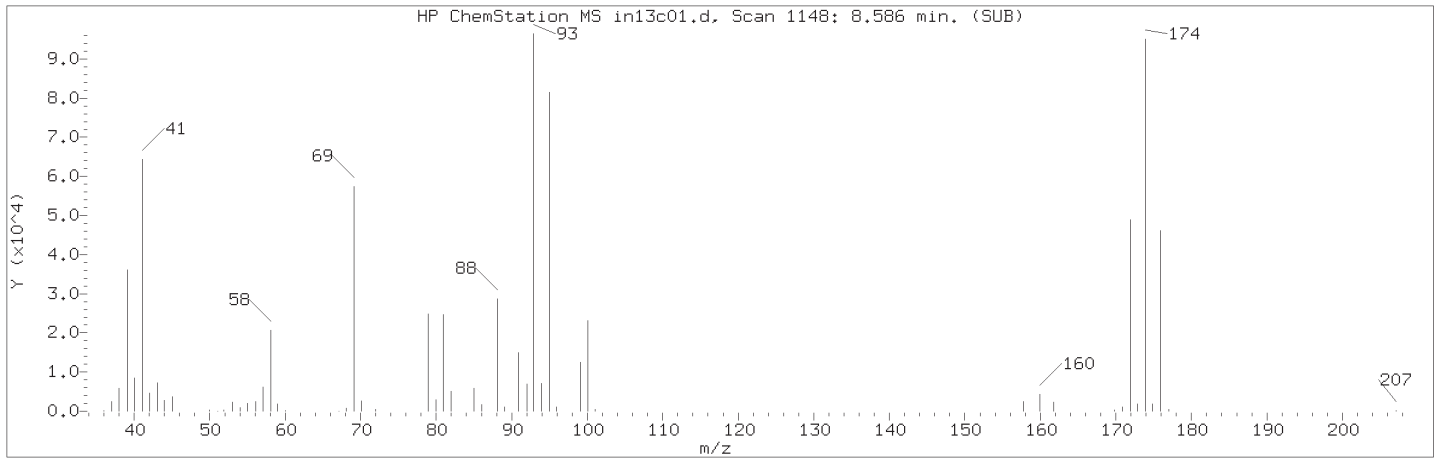
Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:13 Automation

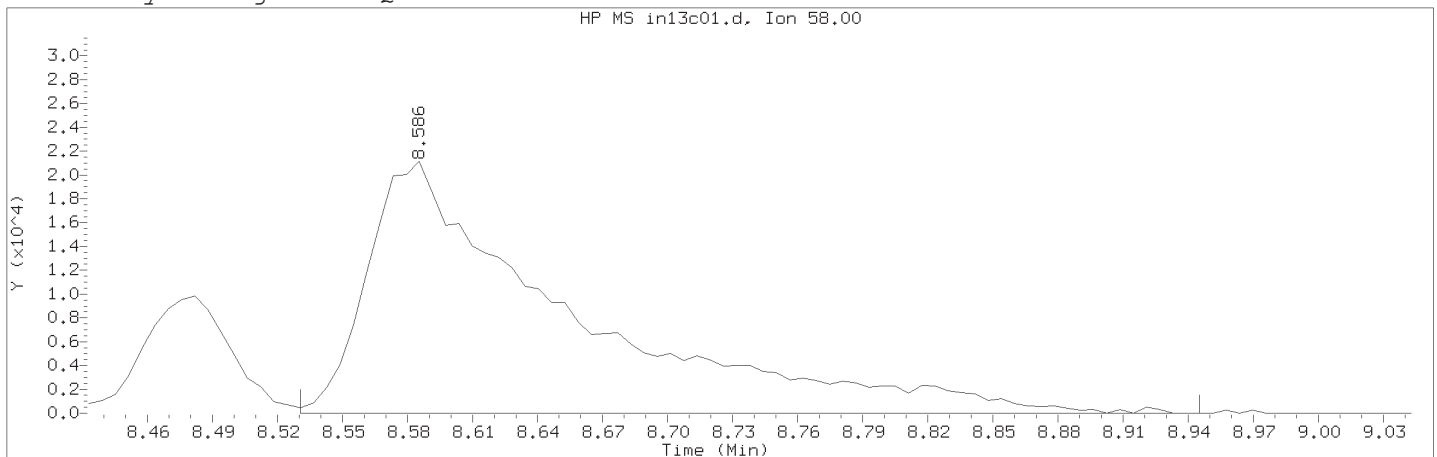
Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 72  
Compound Name : 1,4-Dioxane  
Scan Number : 1130  
Retention Time (minutes): 8.476  
Quant Ion : 88.00  
Area : 53534  
On-column Amount (ng) : 223.3645  
Integration start scan : 1121      Integration stop scan: 1139  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010                      Lab Sample ID: VSTD010

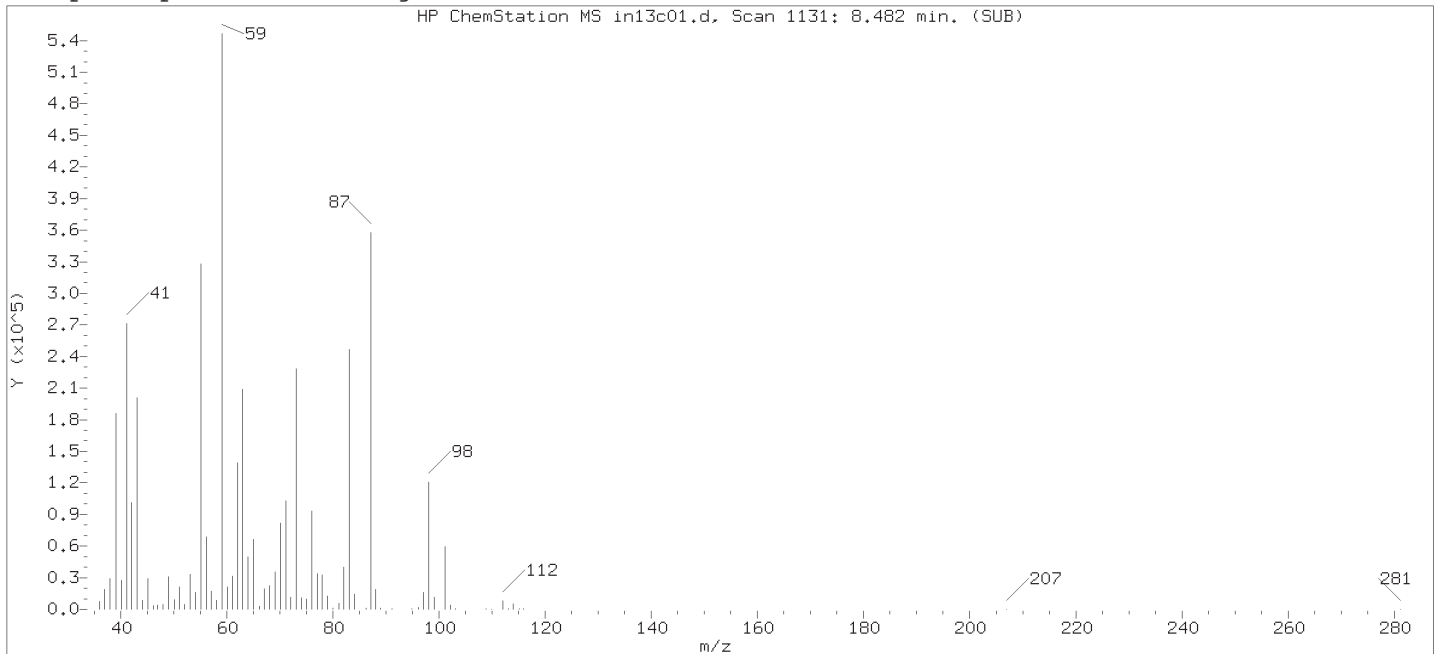
Compound Number                      : 72  
Compound Name                        : 1,4-Dioxane  
Scan Number                          : 1148  
Retention Time (minutes): 8.586  
Quant Ion                              : 58.00  
Area (flag)                            : 134927M  
On-Column Amount (ng)               : 778.2497  
Integration start scan                : 1138                      Integration stop scan: 1206  
Y at integration start                : 0                          Y at integration end: 0

Reason for manual integration: improper integration

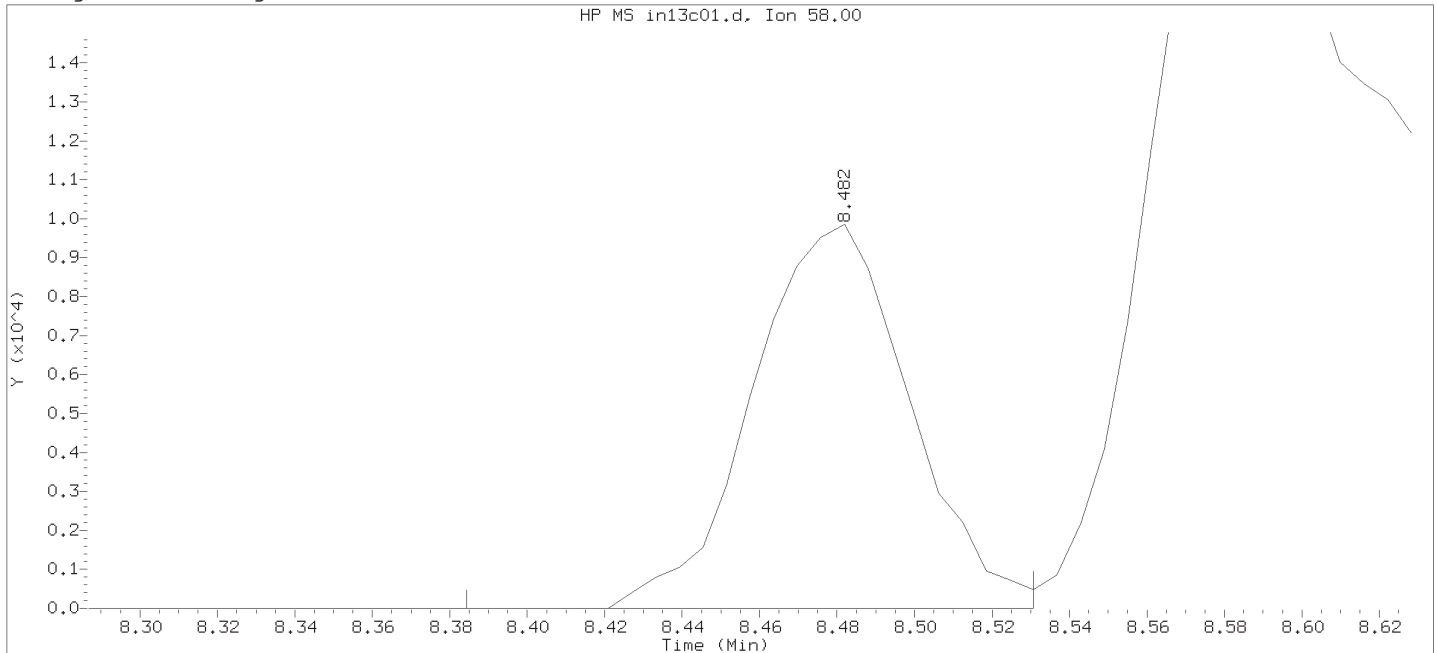
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/14/2018 at 06:09.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



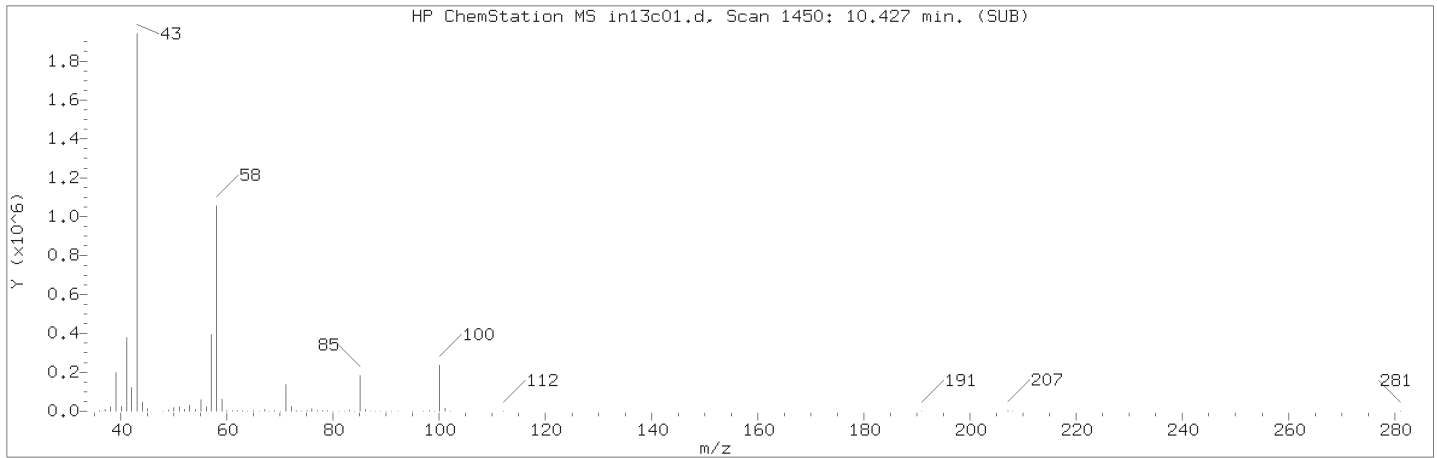
Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 08:55      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 13-NOV-2018 09:13  
 Date, time and analyst ID of latest file update: 13-Nov-2018 09:13 Automation

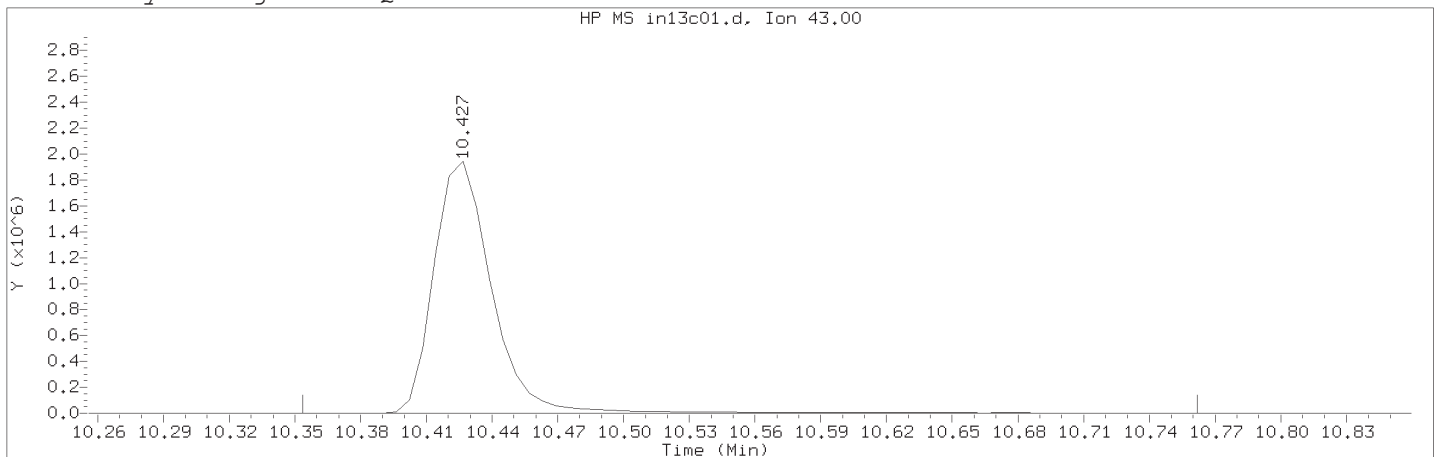
Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 72  
 Compound Name : 1,4-Dioxane  
 Scan Number : 1131  
 Retention Time (minutes): 8.482  
 Quant Ion : 58.00  
 Area : 27647  
 On-column Amount (ng) : 159.4693  
 Integration start scan : 1114      Integration stop scan: 1138  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010                      Lab Sample ID: VSTD010

Compound Number                      : 91  
Compound Name                        : 2-Hexanone  
Scan Number                           : 1450  
Retention Time (minutes): 10.427  
Quant Ion                              : 43.00  
Area (flag)                            : 3579129M  
On-Column Amount (ng)               : 115.9011  
Integration start scan                : 1437                      Integration stop scan: 1504  
Y at integration start                : 0                         Y at integration end: 0

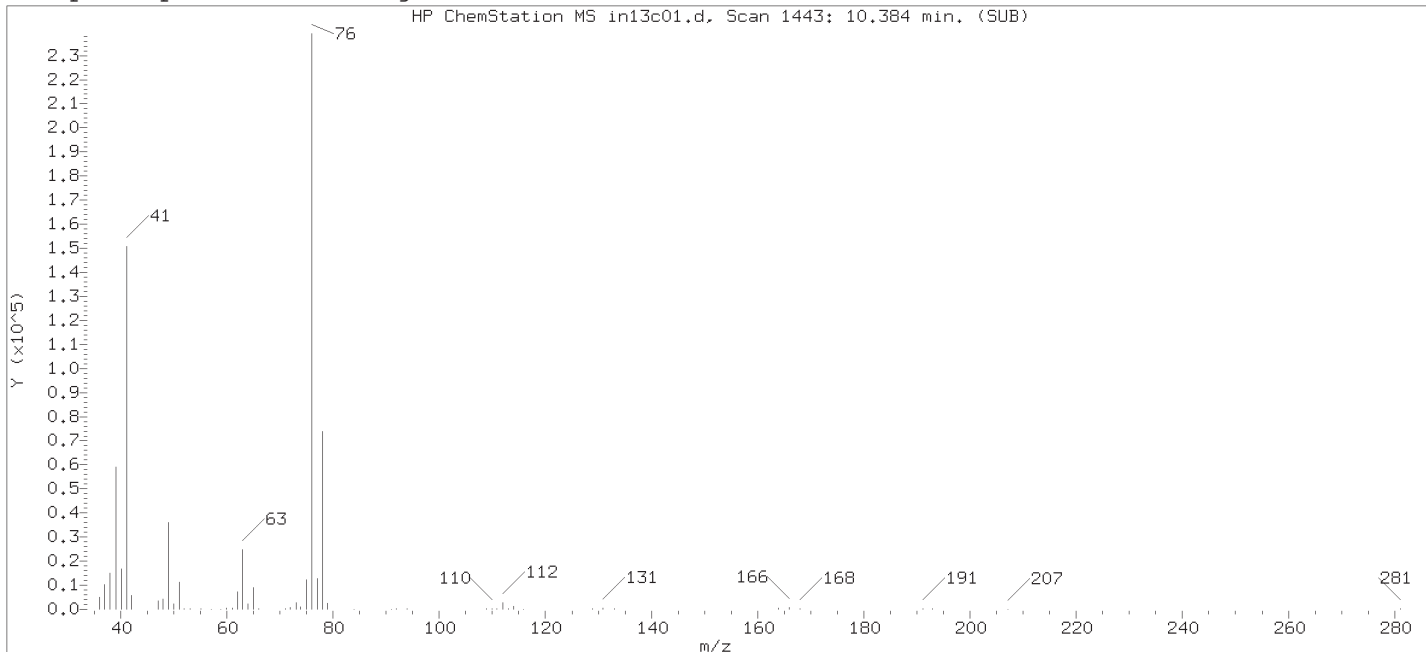
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.  
Target 3.5 esignature user ID: jkh09052

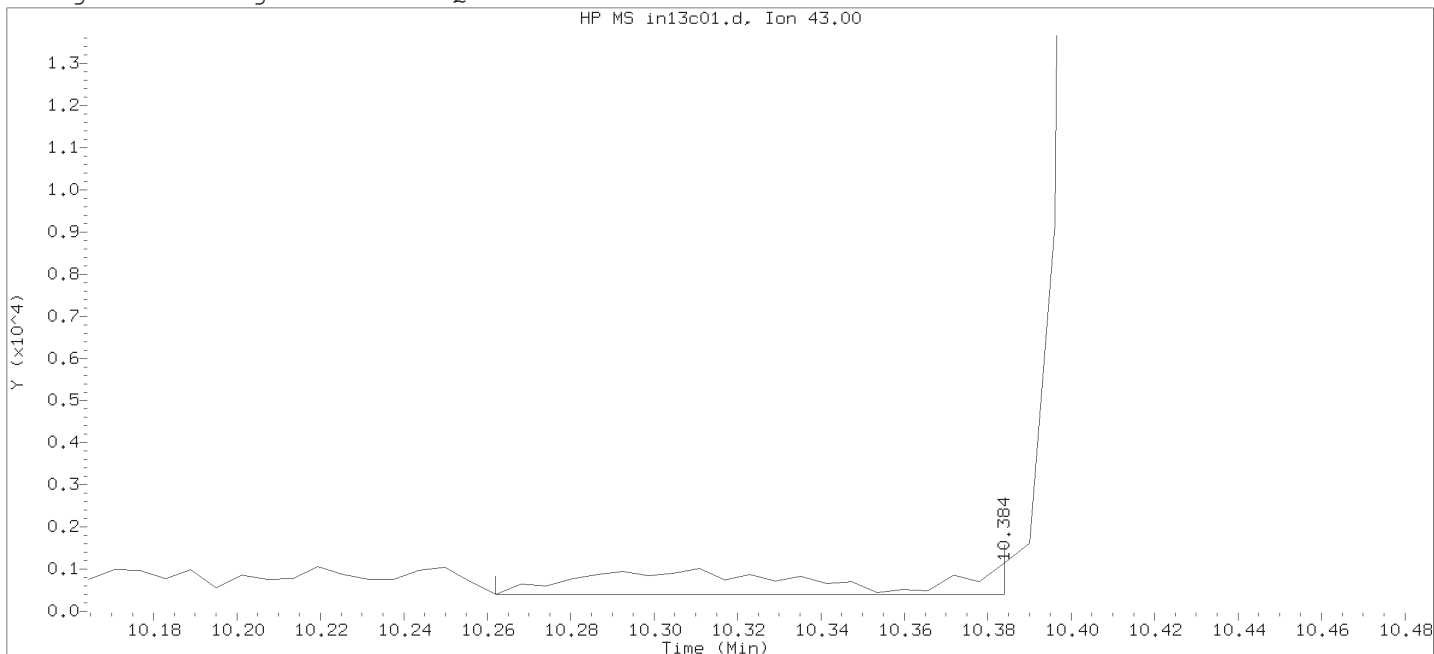
Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/14/2018 at 06:09.  
PARALLAX ID: kel01973



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



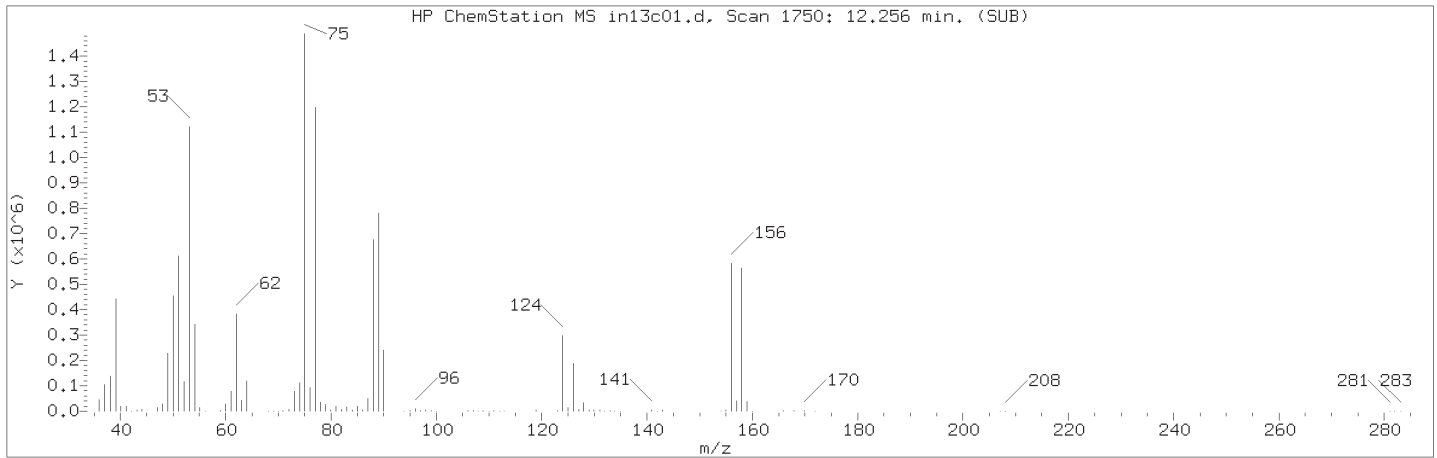
Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:13 Automation

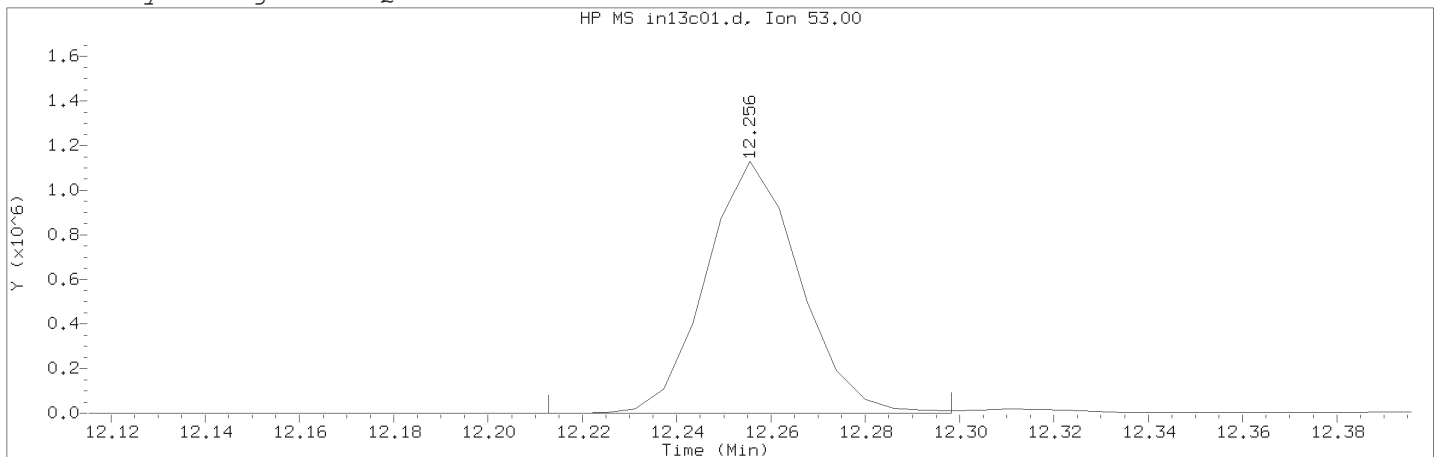
Sample Name: VSTD010    Lab Sample ID: VSTD010

Compound Number                      : 91  
Compound Name                        : 2-Hexanone  
Scan Number                           : 1443  
Retention Time (minutes)           : 10.384  
Quant Ion                               : 43.00  
Area                                    : 2544  
On-column Amount (ng)              : 0.0824  
Integration start scan               : 1422                      Integration stop scan: 1442  
Y at integration start               : 397                        Y at integration end: 397

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010    Lab Sample ID: VSTD010

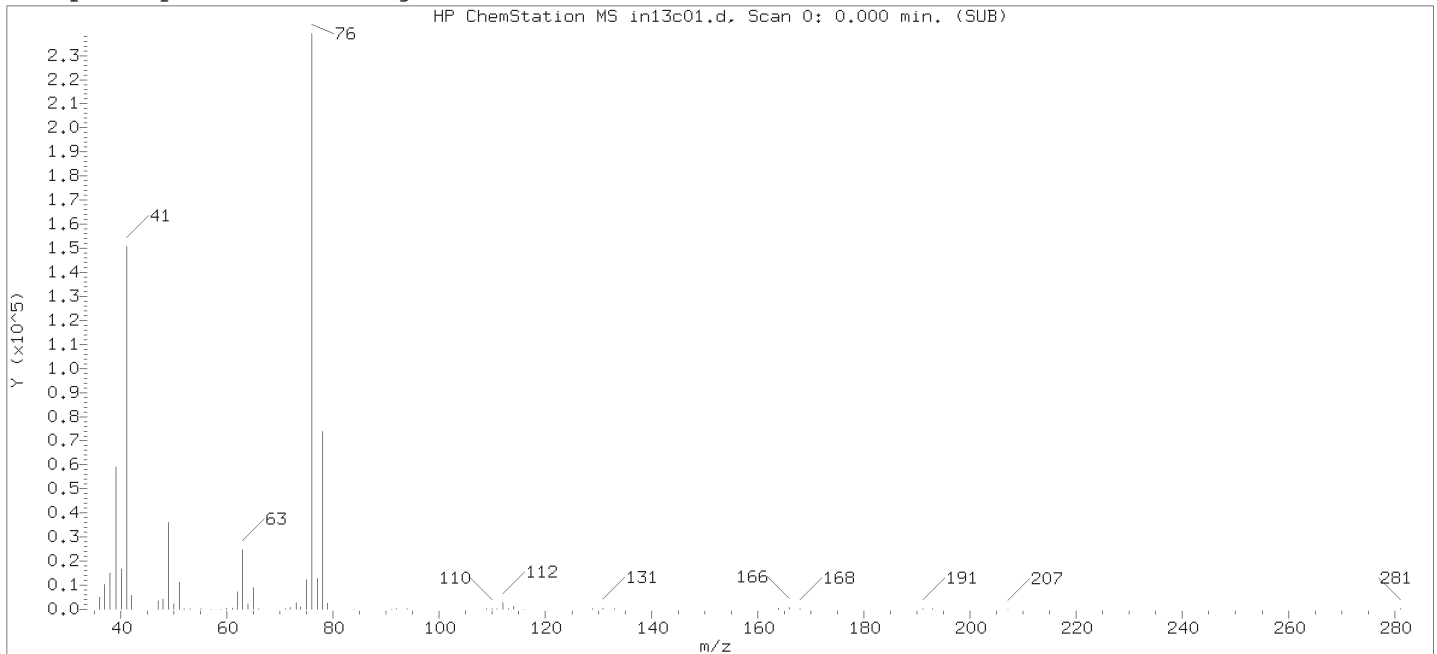
Compound Number                      : 115  
Compound Name                         : trans-1,4-Dichloro-2-butene  
Scan Number                            : 1750  
Retention Time (minutes): 12.256  
Quant Ion                                : 53.00  
Area (flag)                             : 1553039A  
On-Column Amount (ng)                : 109.6114  
Integration start scan                 : 1742                      Integration stop scan: 1756  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

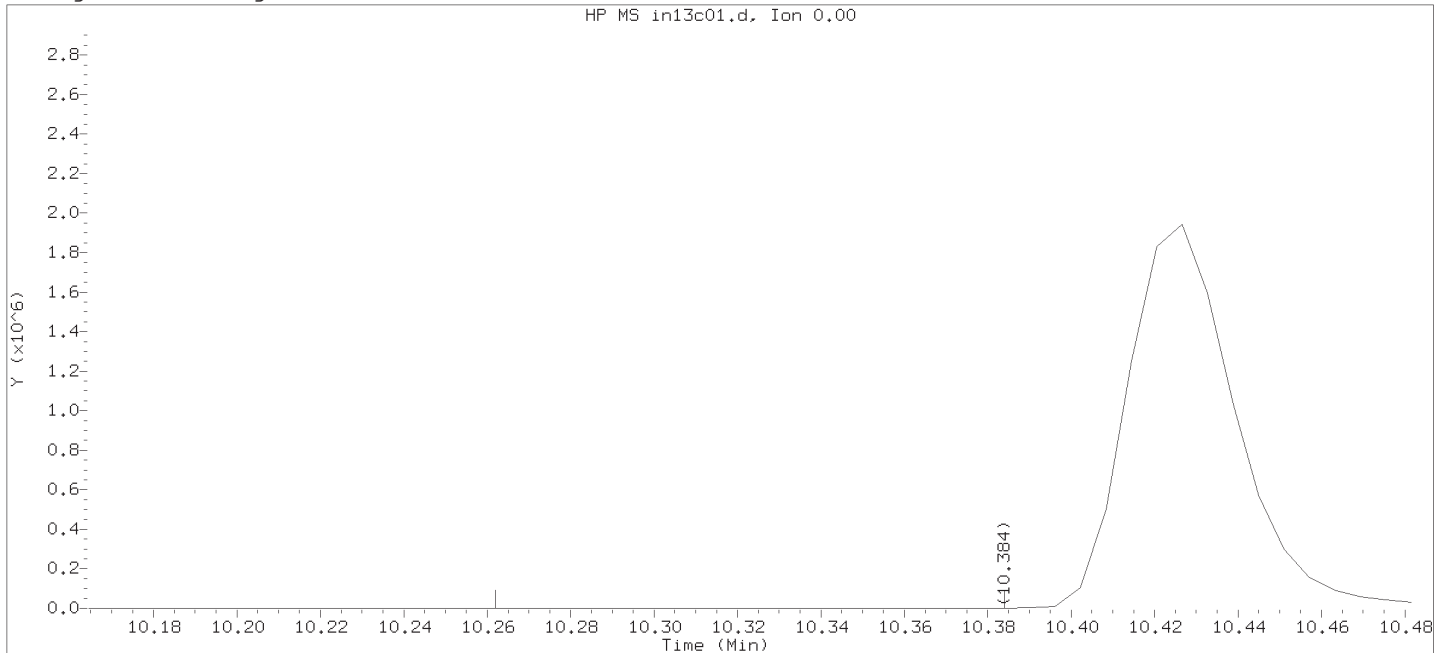
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/14/2018 at 06:09.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



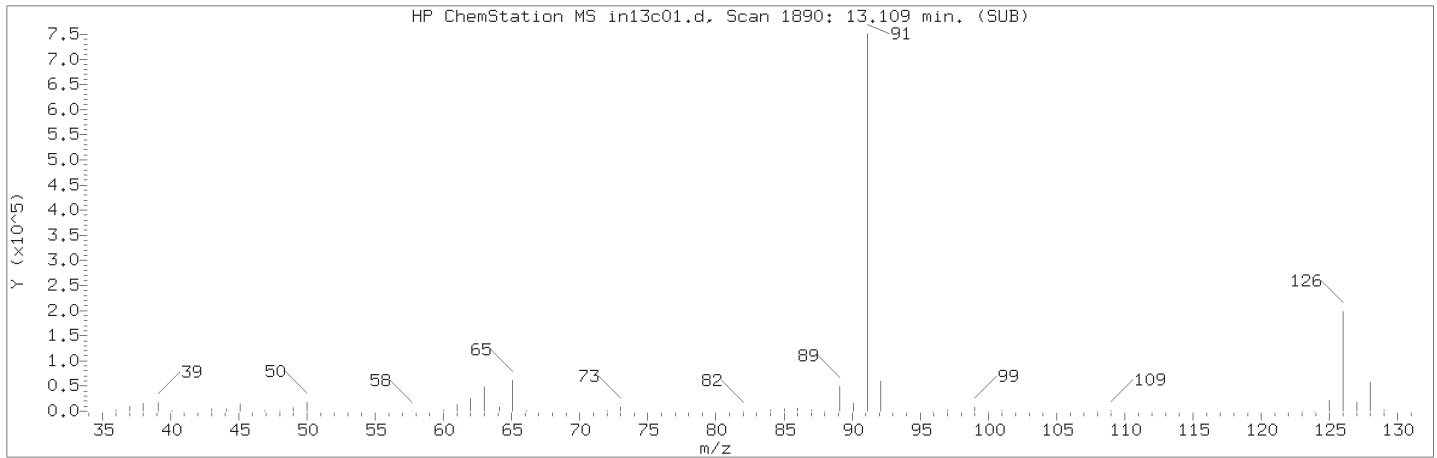
Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 08:55      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 13-NOV-2018 09:13  
 Date, time and analyst ID of latest file update: 13-Nov-2018 09:13 Automation

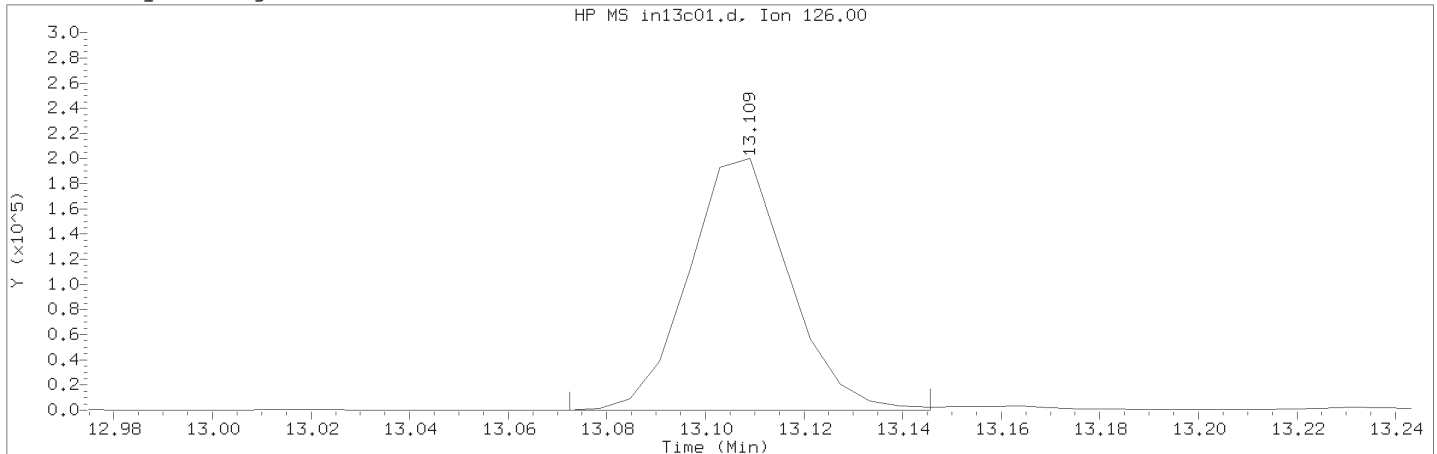
Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 0  
 Compound Name : 2-Hexanone  
 Scan Number : 0  
 Retention Time (minutes): 0.000  
 Quant Ion : 0.00  
 Area : 0  
 On-column Amount (ng) : 0.0000  
 Integration start scan : 0      Integration stop scan: 0  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010      Lab Sample ID: VSTD010

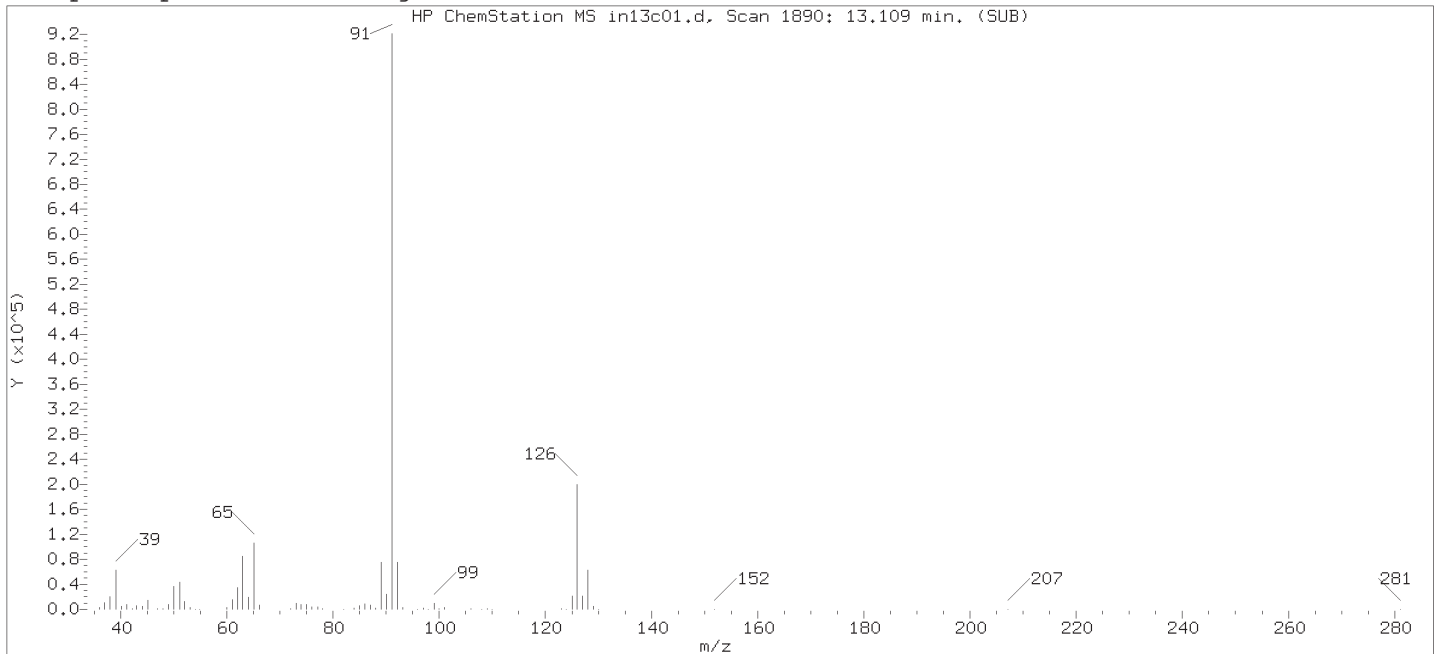
Compound Number : 136  
Compound Name : Benzyl Chloride  
Scan Number : 1890  
Retention Time (minutes): 13.109  
Quant Ion : 126.00  
Area (flag) : 282084M  
On-Column Amount (ng) : 12.3823  
Integration start scan : 1883      Integration stop scan: 1895  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

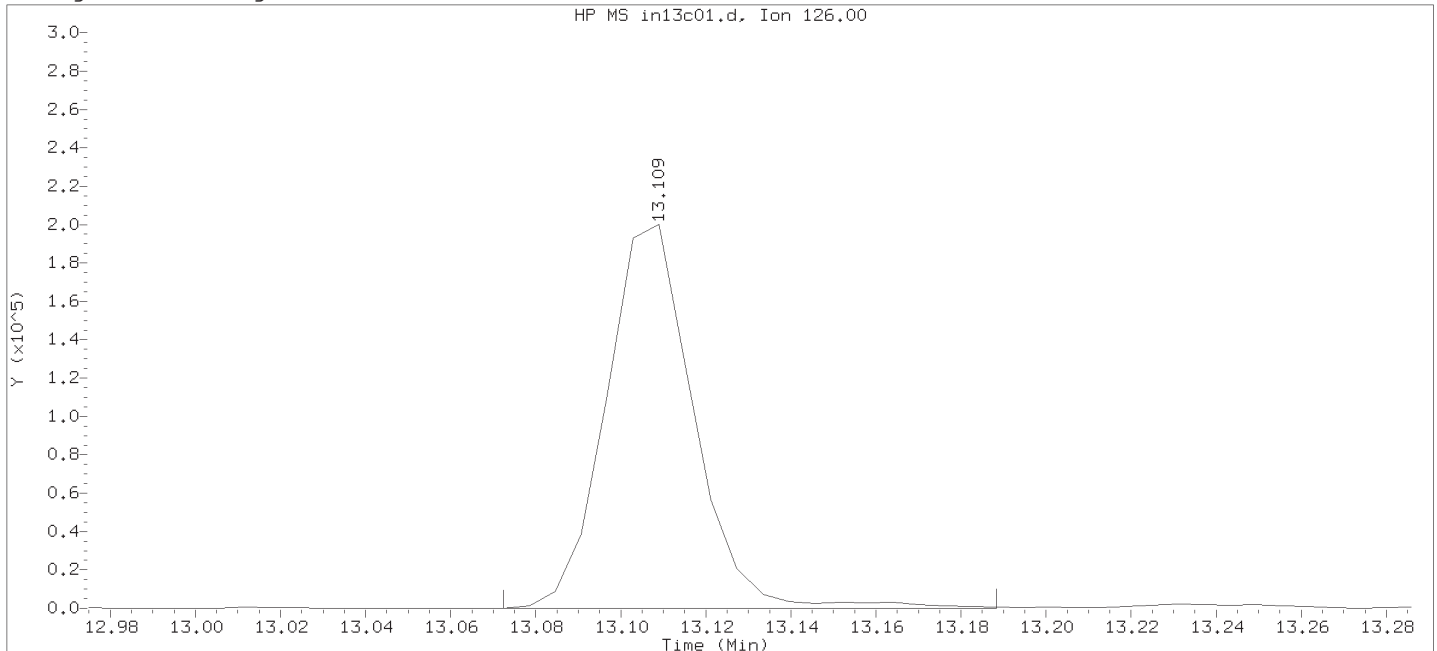
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/14/2018 at 06:09.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



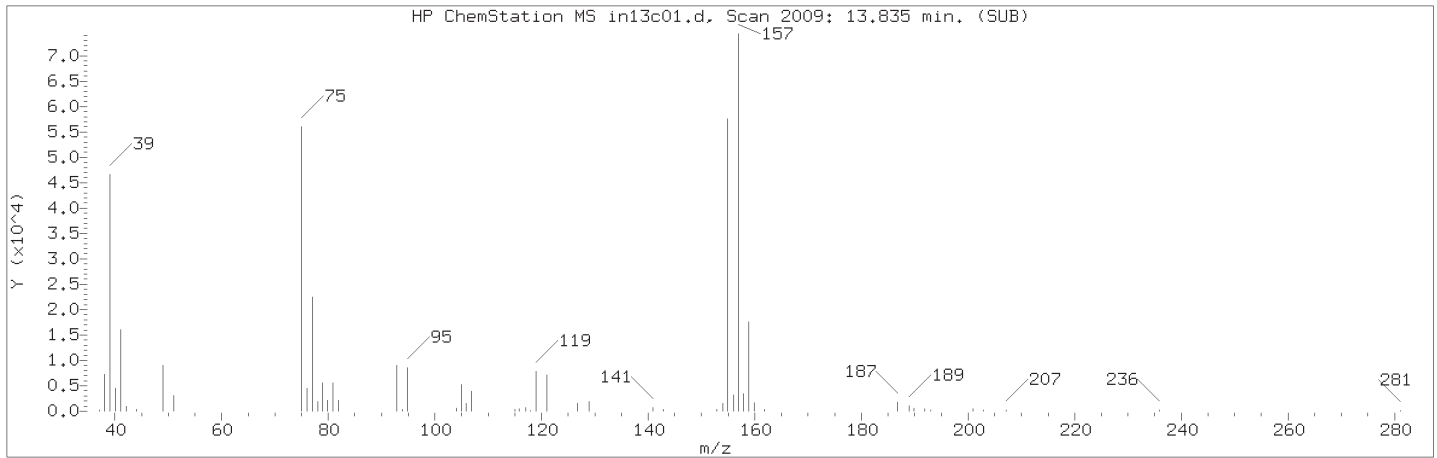
Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 08:55      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 13-NOV-2018 09:13  
 Date, time and analyst ID of latest file update: 13-Nov-2018 09:13 Automation

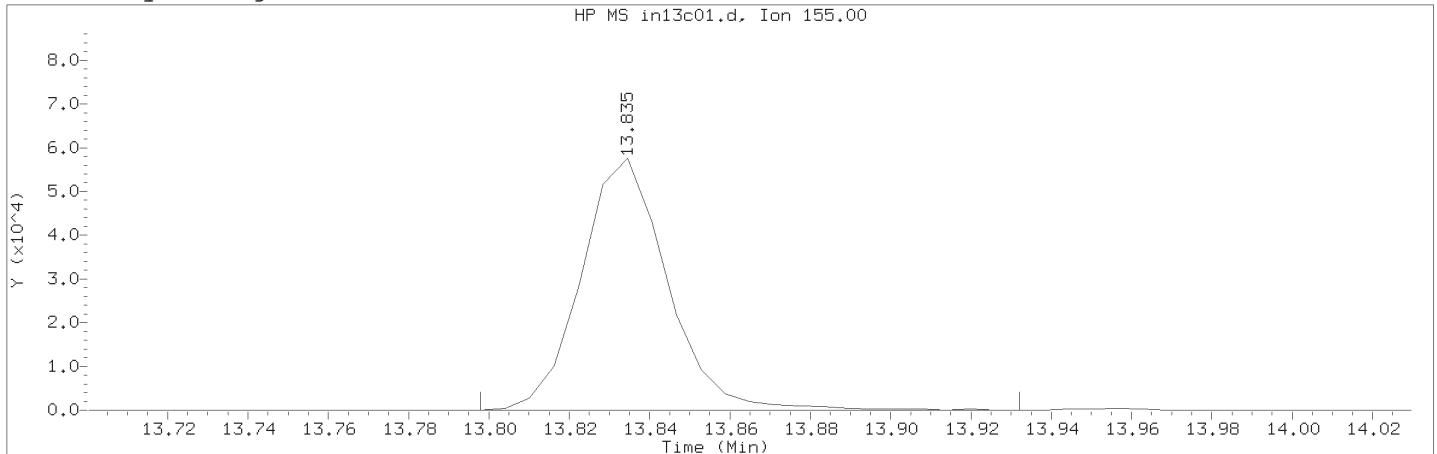
Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 136  
 Compound Name : Benzyl Chloride  
 Scan Number : 1890  
 Retention Time (minutes): 13.109  
 Quant Ion : 126.00  
 Area : 286899  
 On-column Amount (ng) : 12.5936  
 Integration start scan : 1883      Integration stop scan: 1902  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 08:55                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 8260W25  
Calibration date and time: 13-NOV-2018 09:13  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:25 jkh09052

Sample Name: VSTD010    Lab Sample ID: VSTD010

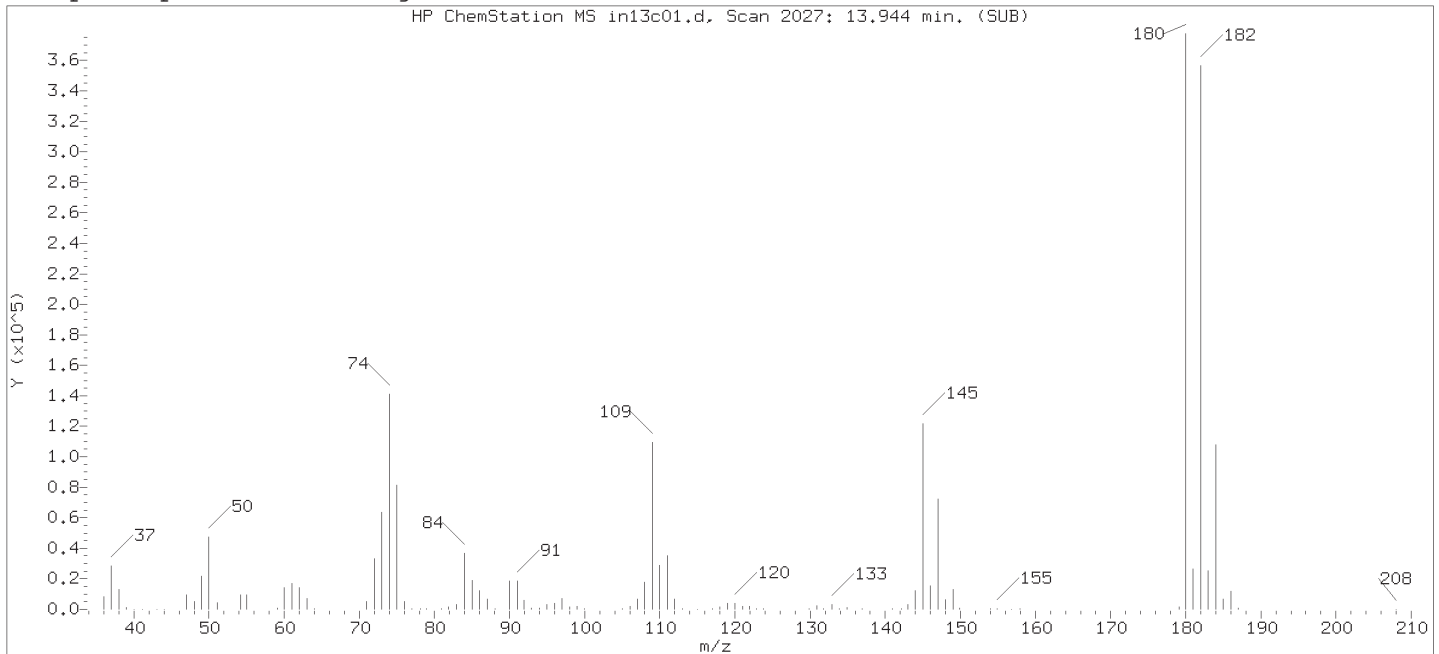
Compound Number                      : 143  
Compound Name                         : 1,2-Dibromo-3-chloropropane  
Scan Number                            : 2009  
Retention Time (minutes): 13.835  
Quant Ion                                : 155.00  
Area (flag)                             : 85992A  
On-Column Amount (ng)                : 12.2509  
Integration start scan                 : 2002                      Integration stop scan: 2024  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

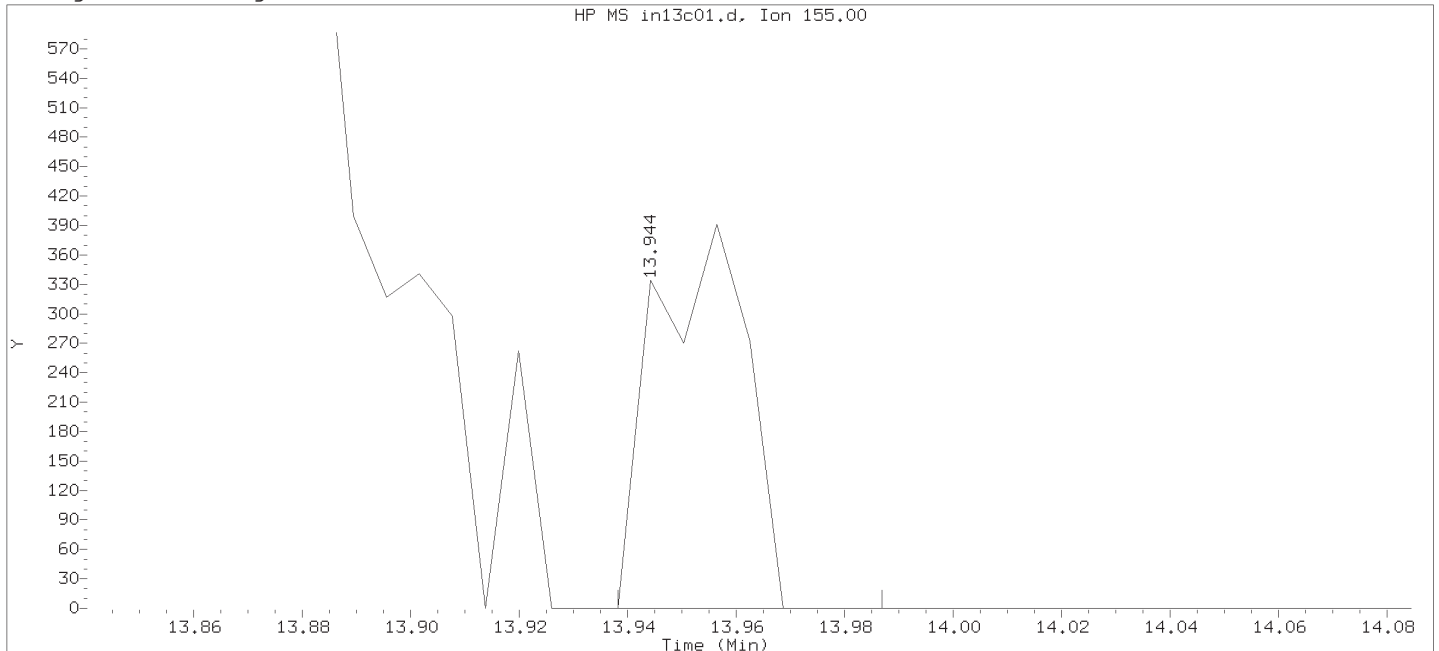
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 09:25.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/14/2018 at 06:09.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c01.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 08:55      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 8260W25  
 Calibration date and time: 13-NOV-2018 09:13  
 Date, time and analyst ID of latest file update: 13-Nov-2018 09:13 Automation

Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 143  
 Compound Name : 1,2-Dibromo-3-chloropropane  
 Scan Number : 2027  
 Retention Time (minutes): 13.944  
 Quant Ion : 155.00  
 Area : 463  
 On-column Amount (ng) : 0.0660  
 Integration start scan : 2025      Integration stop scan: 2033  
 Y at integration start : 0      Y at integration end: 0

SECC010

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

SECC010

Data file: /chem2/HP19930.i/18nov13a.b/in13c03.d Injection date and time: 13-NOV-2018 19:13  
 Data file Sample Info. Line: SECC010;SECC010;1;3;LCS;;DOD25;;IN13B01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.172( 0.000)	424	65	179864M ( -1)	50.00	
63) Fluorobenzene	7.671( 0.000)	998	96	2089675 ( -2)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1663029 ( -2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.018(-0.006)	1875	152	976244 ( -1)	10.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.781(-0.001)	113	544894	9.990	100%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.244(-0.001)	102	109846	10.605	106%		81 - 118
82) Toluene-d8	(3)	9.683( 0.000)	98	2098885	10.103	101%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.140( 0.000)	95	800778	9.793	98%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)	1.916( 0.000)	85	1258128	9.863	9.86			0.05	0.5
2) Chloromethane	(2)	2.111( 0.000)	50	745034	8.000	8.00			0.06	0.5
5) Vinyl Chloride	(2)	2.227( 0.000)	62	730841	8.129	8.13			0.1	0.5
7) Bromomethane	(2)	2.538( 0.000)	94	641129	7.574	7.57			0.07	0.5
8) Chloroethane	(2)	2.623( 0.000)	64	414455	7.918	7.92			0.07	0.5
10) Trichlorofluoromethane	(2)	2.922( 0.000)	101	1504869	9.791	9.79			0.05	0.5
15) 1,1-Dichloroethene	(2)	3.495( 0.000)	96	514606	9.708	9.71			0.06	0.5
16) Freon 113	(2)	3.513( 0.000)	101	642008	10.432	10.43			0.06	0.5
14) Acetone	(1)	3.519( 0.000)	43	1285100	122.269	122.27			0.9	5
18) Carbon Disulfide	(2)	3.812(-0.000)	76	1438140	9.144	9.14			0.06	1
21) Methyl Acetate	(1)	3.946( 0.000)	43	249245	10.446	10.45			0.1	1
23) Methylene Chloride	(2)	4.153( 0.000)	84	571689	9.524	9.52			0.07	0.5
31) trans-1,2-Dichloroethene	(2)	4.580(-0.000)	96	566349	9.414	9.41			0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)	4.556( 0.000)	73	1428518	8.702	8.70			0.05	0.5
33) 1,1-Dichloroethane	(2)	5.238( 0.000)	63	1117585	9.400	9.40			0.07	0.5
39) cis-1,2-Dichloroethene	(2)	6.074( 0.000)	96	658818	9.590	9.59			0.05	0.5
38) 2-Butanone	(1)	6.043(-0.001)	43	1877687	107.717	107.72			0.6	5
49) Chloroform	(2)	6.561(-0.000)	83	1149093	9.603	9.60			0.09	0.5
51) 1,1,1-Trichloroethane	(2)	6.787(-0.000)	97	1071250	9.315	9.32			0.06	0.5
52) Cyclohexane	(2)	6.891(-0.000)	56	1108310	9.129	9.13			0.05	0.5
54) Carbon Tetrachloride	(2)	7.006(-0.000)	117	1007958	10.007	10.01			0.07	0.5
58) Benzene	(2)	7.262( 0.000)	78	2491405	9.815	9.82			0.05	0.5
59) 1,2-Dichloroethane	(2)	7.342( 0.000)	62	773039	9.030	9.03			0.05	0.5
67) Trichloroethene	(2)	8.153(-0.000)	95	678000	9.745	9.75			0.06	0.5
69) Methylcyclohexane	(2)	8.457(-0.000)	83	1191644	9.470	9.47			0.05	0.5
70) 1,2-Dichloropropane	(2)	8.488(-0.000)	63	624565	9.817	9.82			0.06	0.5
74) Bromodichloromethane	(2)	8.829(-0.000)	83	804462	9.369	9.37			0.05	0.5
80) cis-1,3-Dichloropropene	(2)	9.378(-0.000)	75	876824	9.000	9.00			0.05	0.5
81) 4-Methyl-2-Pentanone	(1)	9.536(-0.000)	43	4557803	106.830	106.83			0.7	5
83) Toluene	(3)	9.762(-0.000)	92	1595656	9.754	9.75			0.07	0.5



SECC010

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

SECC010

Data file: /chem2/HP19930.i/18nov13a.b/in13c03.d Injection date and time: 13-NOV-2018 19:13  
 Data file Sample Info. Line: SECC010;SECC010;1;3;LCS;;DOD25;;IN13B01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

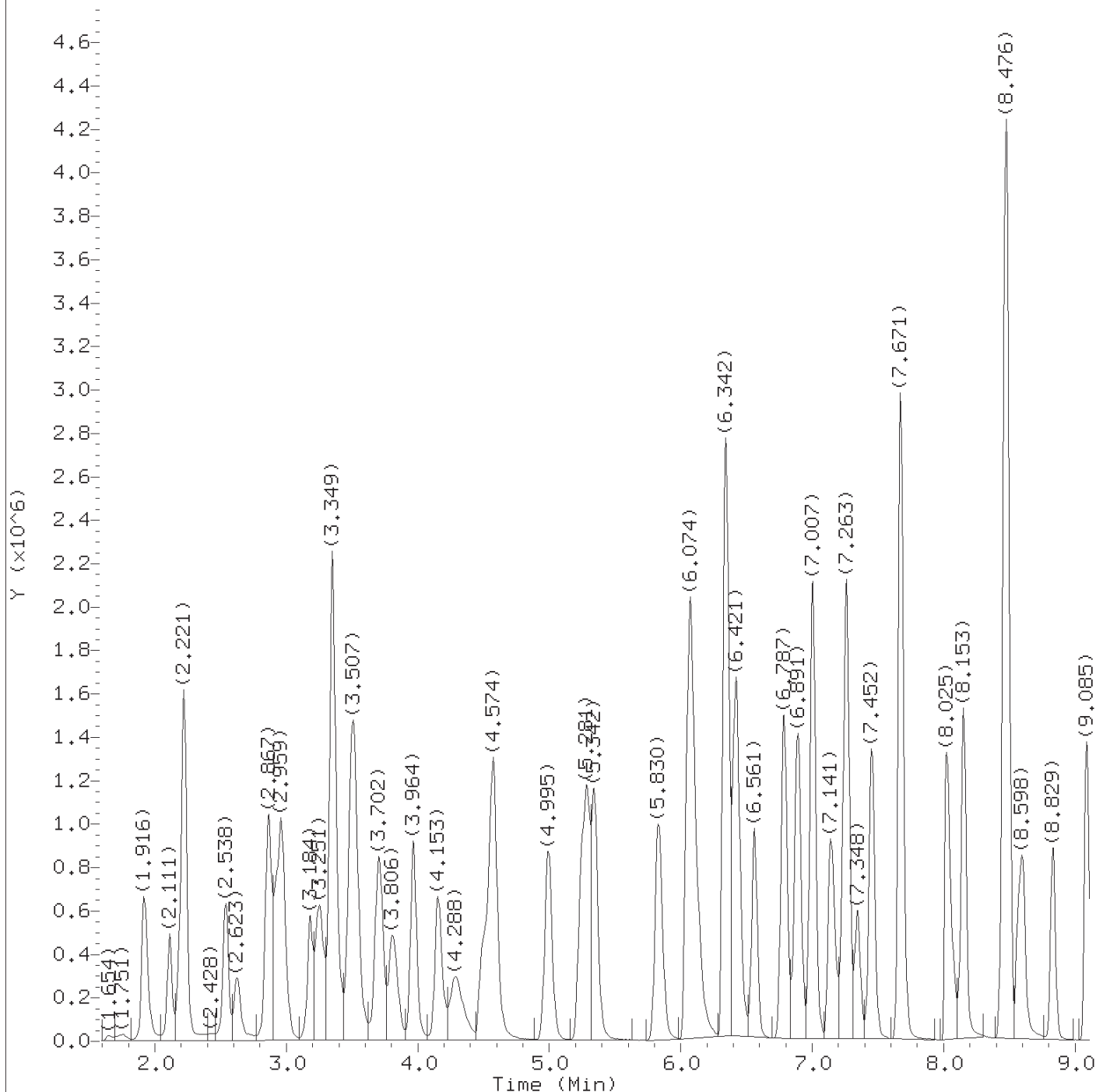
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting	
								Qual.	Limit (in sample)
84) trans-1,3-Dichloropropene	(3)	10.024(-0.000)	75	776289	9.495	9.50		0.06	0.5
88) 1,1,2-Trichloroethane	(3)	10.225( 0.000)	97	455883	10.112	10.11		0.06	0.5
89) Tetrachloroethene	(3)	10.311( 0.000)	166	771435	9.143	9.14		0.06	0.5
91) 2-Hexanone	(1)	10.426(-0.000)	43	3347671	109.480	109.48		0.6	5
93) Dibromochloromethane	(3)	10.603( 0.000)	129	573345	9.812	9.81		0.07	0.5
95) 1,2-Dibromoethane	(3)	10.719( 0.000)	107	440006	10.176	10.18		0.06	0.5
98) Chlorobenzene	(3)	11.170(-0.000)	112	1839718	10.297	10.30		0.06	0.5
100) Ethylbenzene	(3)	11.250(-0.000)	91	3281544	10.118	10.12		0.06	0.5
101) m+p-Xylene	(3)	11.365(-0.000)	106	2562750	20.272	20.27		0.1	0.5
104) o-Xylene	(3)	11.695(-0.000)	106	1223158	9.686	9.69		0.05	0.5
105) Xylene (Total)	(3)		106	3785908	29.958	29.96		0.1	0.5
106) Styrene	(3)	11.707(-0.000)	104	1966292	10.348	10.35		0.05	0.5
107) Bromoform	(3)	11.878(-0.000)	173	320603M	9.024	9.02		0.3	1
108) Isopropylbenzene	(3)	11.987(-0.000)	105	3315865	10.076	10.08		0.05	0.5
113) 1,1,2,2-Tetrachloroethane	(4)	12.231( 0.000)	83	593677	9.919	9.92		0.07	0.5
131) 1,3-Dichlorobenzene	(4)	12.956( 0.000)	146	1642369	9.890	9.89		0.06	0.5
134) 1,4-Dichlorobenzene	(4)	13.036( 0.000)	146	1644998	9.685	9.68		0.07	0.5
139) 1,2-Dichlorobenzene	(4)	13.292( 0.000)	146	1522620	9.890	9.89		0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)	13.834(-0.000)	155	79499	11.438	11.44		0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)	14.377( 0.000)	180	1137795	10.954	10.95		0.06	0.5

M = Compound was manually integrated.

Total number of targets = 50

Digitally signed by Jennifer K. Howe on 11/16/2018 at 13:54. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16. PARALLAX ID: kel01973



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d  
Injection date and time: 13-NOV-2018 19:13

Instrument ID: HP19930.i  
Analyst ID: JKH09052

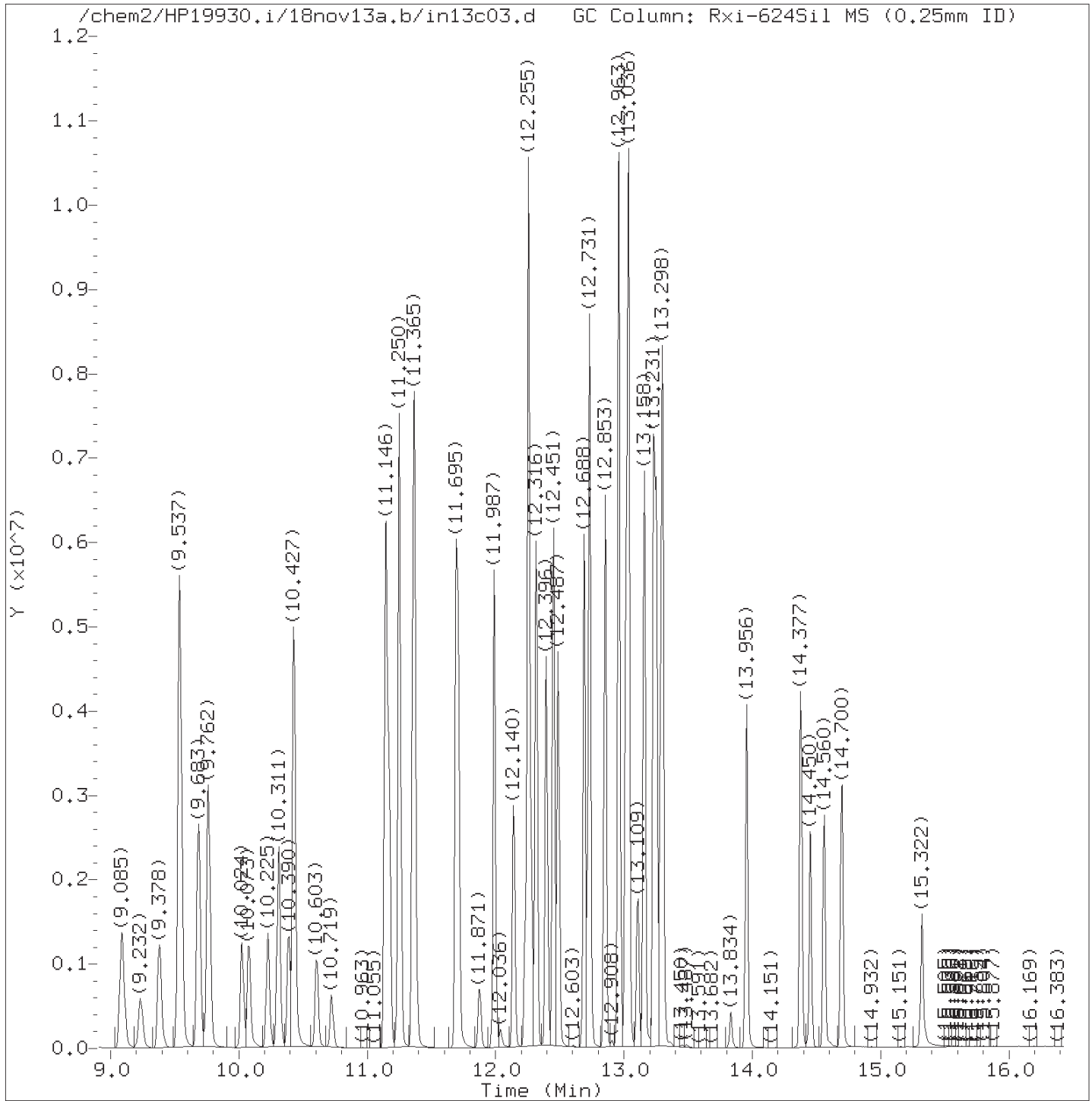
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: SECC010

Lab Sample ID: SECC010

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:54.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d  
 Injection date and time: 13-NOV-2018 19:13

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
 Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789-SM

Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: SECC010

Lab Sample ID: SECC010

Digitally signed by Jennifer K. Howe  
 on 11/16/2018 at 13:54.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d  
 Injection date and time: 13-NOV-2018 19:13

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sublist used: 25789-SM

Sample Name: SECC010

Lab Sample ID: SECC010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.916	85	1258128	9.863
2) Chloromethane	(2)	2.111	50	745034	8.000
5) Vinyl Chloride	(2)	2.227	62	730841	8.129
7) Bromomethane	(2)	2.538	94	641129	7.574
8) Chloroethane	(2)	2.623	64	414455	7.918
10) Trichlorofluoromethane	(2)	2.922	101	1504869	9.791
15) 1,1-Dichloroethene	(2)	3.495	96	514606	9.708
16) Freon 113	(2)	3.513	101	642008	10.432
14) Acetone	(1)	3.519	43	1285100	122.269
18) Carbon Disulfide	(2)	3.812	76	1438140	9.144
21) Methyl Acetate	(1)	3.946	43	249245	10.446
23) Methylene Chloride	(2)	4.153	84	571689	9.524
26)*t-Butyl Alcohol-d10	(1)	4.172	65	179864M	50.000
30) Methyl Tertiary Butyl Ether	(2)	4.556	73	1428518	8.702
31) trans-1,2-Dichloroethene	(2)	4.580	96	566349	9.414
33) 1,1-Dichloroethane	(2)	5.239	63	1117585	9.400
38) 2-Butanone	(1)	6.043	43	1877687	107.717
39) cis-1,2-Dichloroethene	(2)	6.074	96	658818	9.590
49) Chloroform	(2)	6.561	83	1149093	9.603
50)\$Dibromofluoromethane	(2)	6.781	113	544894	9.990
51) 1,1,1-Trichloroethane	(2)	6.787	97	1071250	9.315
52) Cyclohexane	(2)	6.891	56	1108310	9.129
54) Carbon Tetrachloride	(2)	7.007	117	1007958	10.007
57)\$1,2-Dichloroethane-d4	(2)	7.244	102	109846	10.605
58) Benzene	(2)	7.263	78	2491405	9.815
59) 1,2-Dichloroethane	(2)	7.342	62	773039	9.030
63)*Fluorobenzene	(2)	7.671	96	2089675	10.000
67) Trichloroethene	(2)	8.153	95	678000	9.745
69) Methylcyclohexane	(2)	8.457	83	1191644	9.470
70) 1,2-Dichloropropane	(2)	8.488	63	624565	9.817
74) Bromodichloromethane	(2)	8.829	83	804462	9.369
80) cis-1,3-Dichloropropene	(2)	9.378	75	876824	9.000
81) 4-Methyl-2-Pentanone	(1)	9.537	43	4557803	106.830
82)\$Toluene-d8	(3)	9.683	98	2098885	10.103
83) Toluene	(3)	9.762	92	1595656	9.754
84) trans-1,3-Dichloropropene	(3)	10.024	75	776289	9.495
88) 1,1,2-Trichloroethane	(3)	10.225	97	455883	10.112
89) Tetrachloroethene	(3)	10.311	166	771435	9.143

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 19:13 Analyst ID: JKH09052

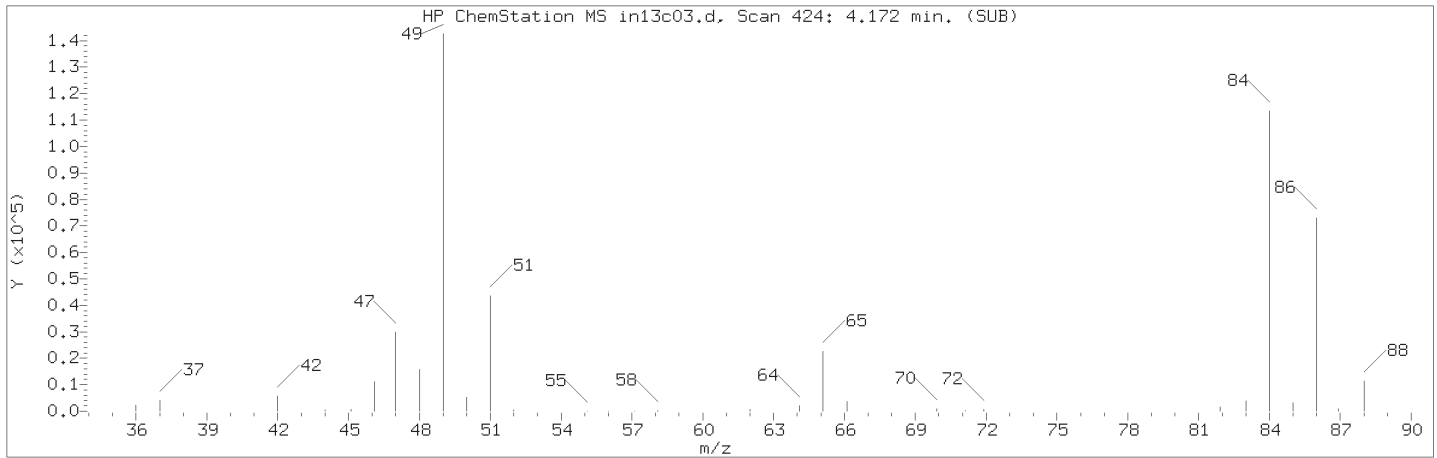
Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: SECC010 Lab Sample ID: SECC010

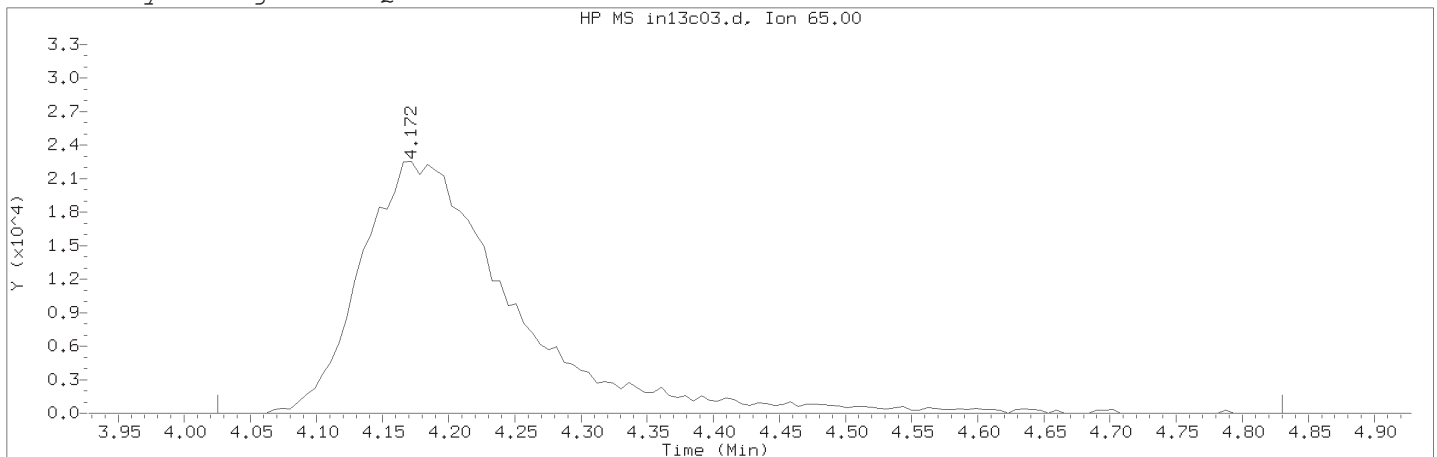
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
91) 2-Hexanone	(1)	10.427	43	3347671	109.480
93) Dibromochloromethane	(3)	10.603	129	573345	9.812
95) 1,2-Dibromoethane	(3)	10.719	107	440006	10.176
97) *Chlorobenzene-d5	(3)	11.140	117	1663029	10.000
98) Chlorobenzene	(3)	11.170	112	1839718	10.297
100) Ethylbenzene	(3)	11.250	91	3281544	10.118
101) m+p-Xylene	(3)	11.365	106	2562750	20.272
104) o-Xylene	(3)	11.695	106	1223158	9.686
106) Styrene	(3)	11.707	104	1966292	10.348
105) Xylene (Total)	(3)		106	3785908	29.958
107) Bromoform	(3)	11.878	173	320603M	9.024
108) Isopropylbenzene	(3)	11.987	105	3315865	10.076
111) \$4-Bromofluorobenzene	(3)	12.140	95	800778	9.793
113) 1,1,2,2-Tetrachloroethane	(4)	12.231	83	593677	9.919
131) 1,3-Dichlorobenzene	(4)	12.957	146	1642369	9.890
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	976244	10.000
134) 1,4-Dichlorobenzene	(4)	13.036	146	1644998	9.685
139) 1,2-Dichlorobenzene	(4)	13.292	146	1522620	9.890
143) 1,2-Dibromo-3-chloropropane	(1)	13.834	155	79499	11.438
145) 1,2,4-Trichlorobenzene	(4)	14.377	180	1137795	10.954

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 19:13                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: SECC010    Lab Sample ID: SECC010

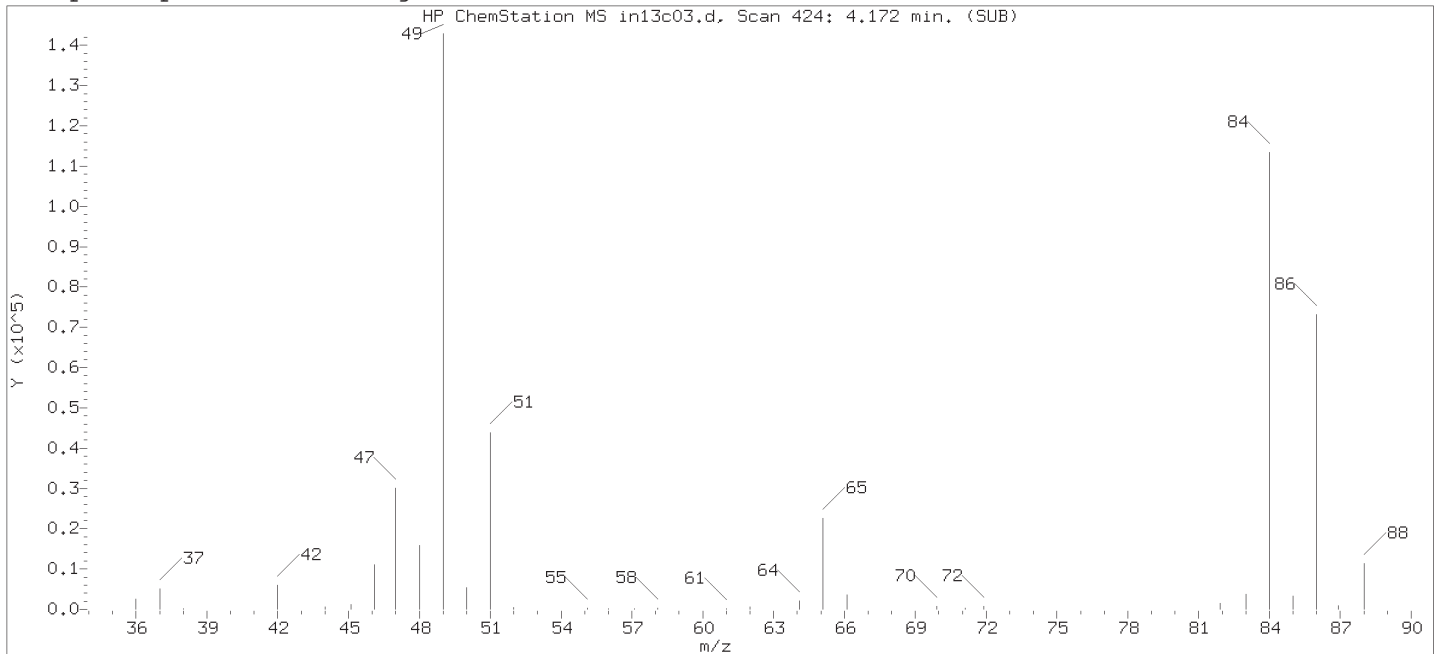
Compound Number                      : 26  
Compound Name                         : t-Butyl Alcohol-d10  
Scan Number                            : 424  
Retention Time (minutes): 4.172  
Quant Ion                                : 65.00  
Area (flag)                             : 179864M  
On-Column Amount (ng)                : 50.0000  
Integration start scan                 : 399                      Integration stop scan: 531  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

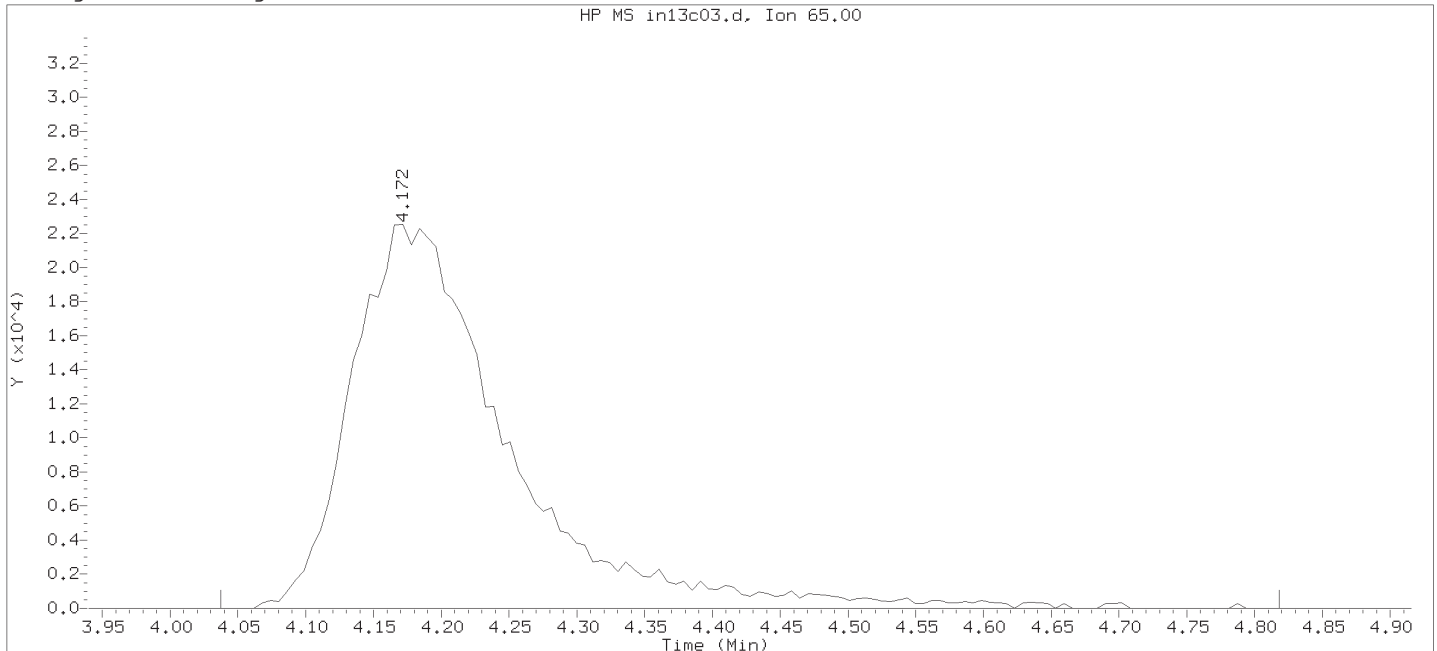
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:54.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



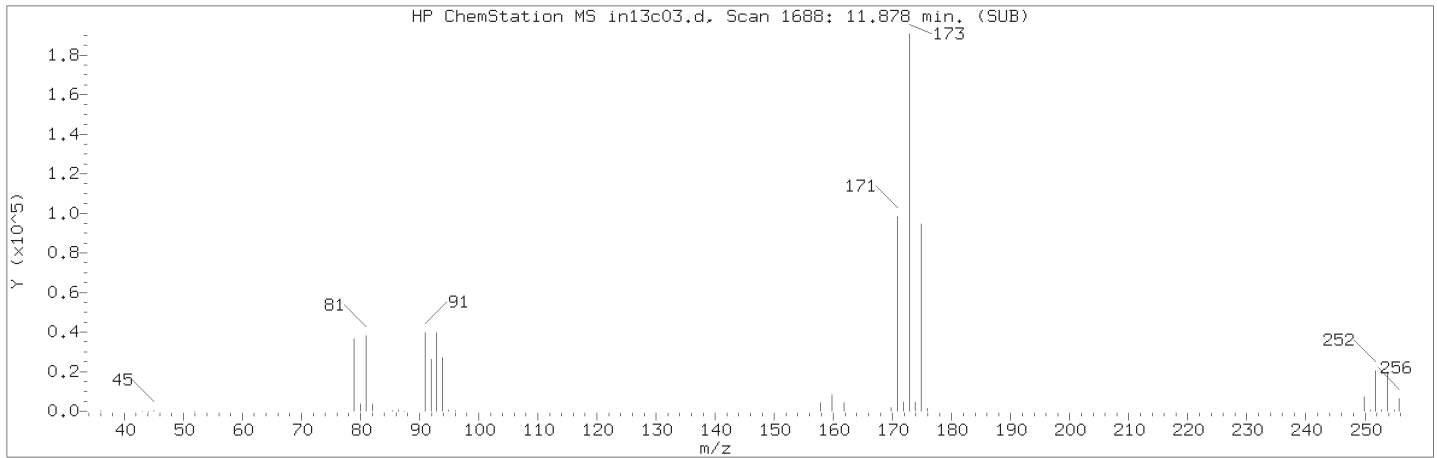
Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 19:13                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 13-Nov-2018 19:31 Automation

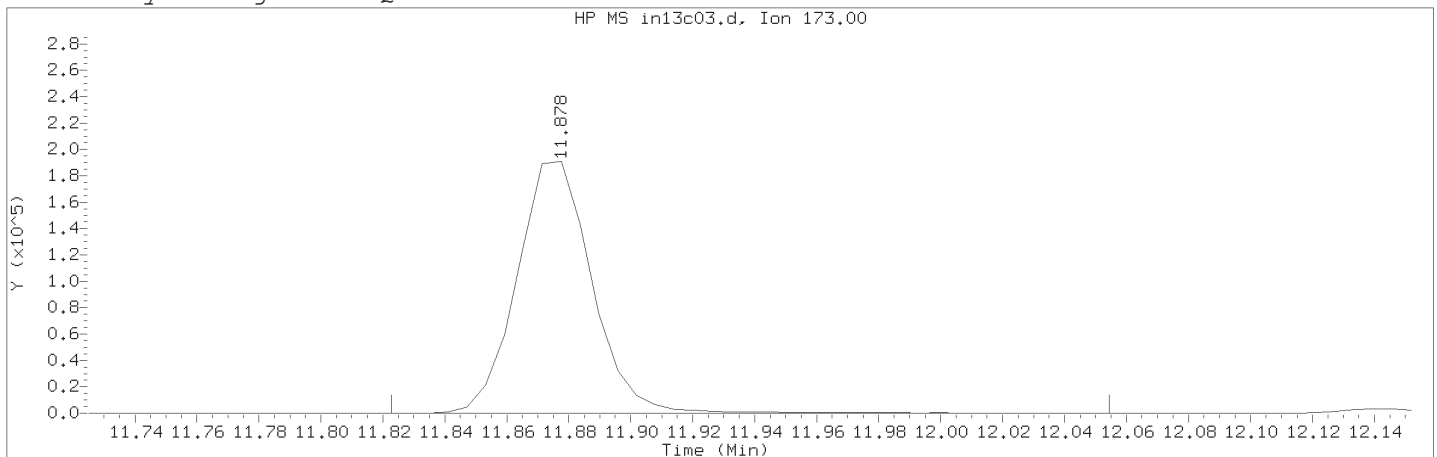
Sample Name: SECC010                      Lab Sample ID: SECC010

Compound Number                      : 26  
Compound Name                        : t-Butyl Alcohol-d10  
Scan Number                           : 424  
Retention Time (minutes): 4.172  
Quant Ion                               : 65.00  
Area                                    : 179863  
On-column Amount (ng)               : 50.0000  
Integration start scan               : 401                      Integration stop scan: 529  
Y at integration start               : 0                        Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 19:13                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 12:00  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:53 jkh09052

Sample Name: SECC010    Lab Sample ID: SECC010

Compound Number                      : 107  
Compound Name                         : Bromoform  
Scan Number                            : 1688  
Retention Time (minutes): 11.878  
Quant Ion                                : 173.00  
Area (flag)                             : 320603M  
On-Column Amount (ng)                : 9.0244  
Integration start scan                 : 1678                      Integration stop scan: 1716  
Y at integration start                 : 0                         Y at integration end: 0

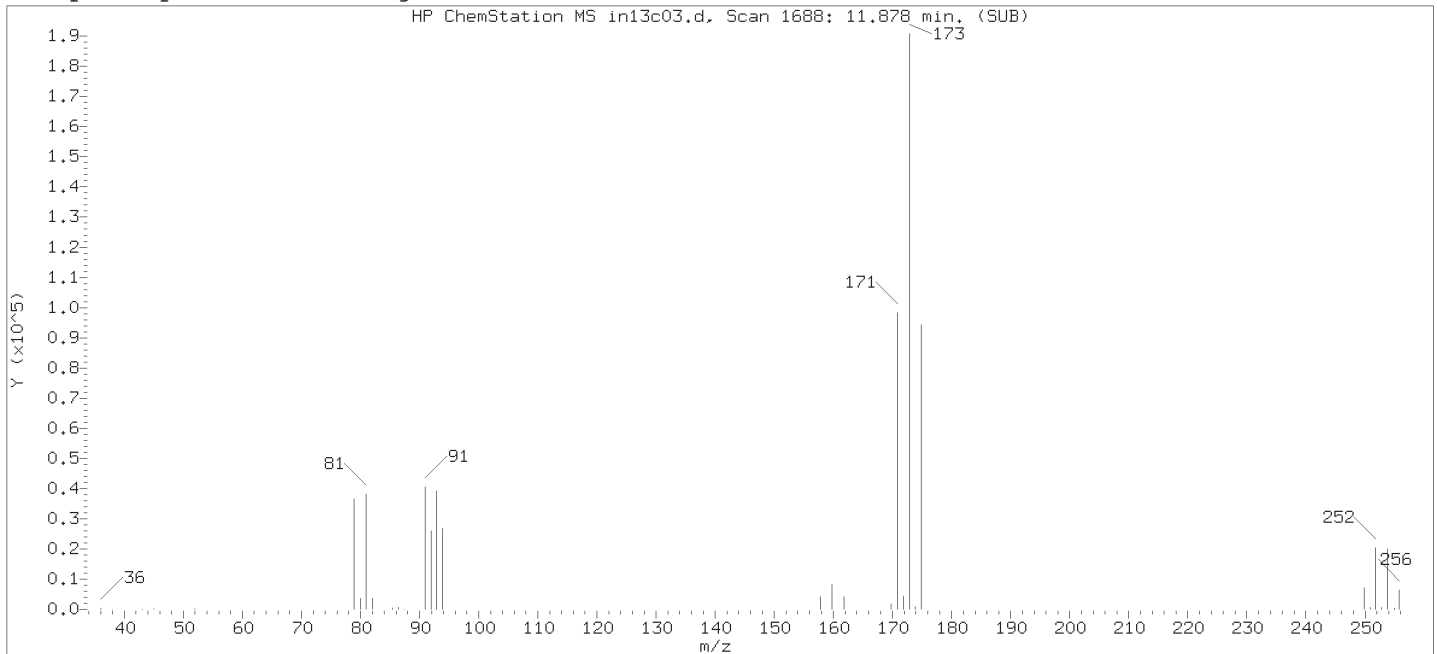
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:54.  
Target 3.5 esignature user ID: jkh09052

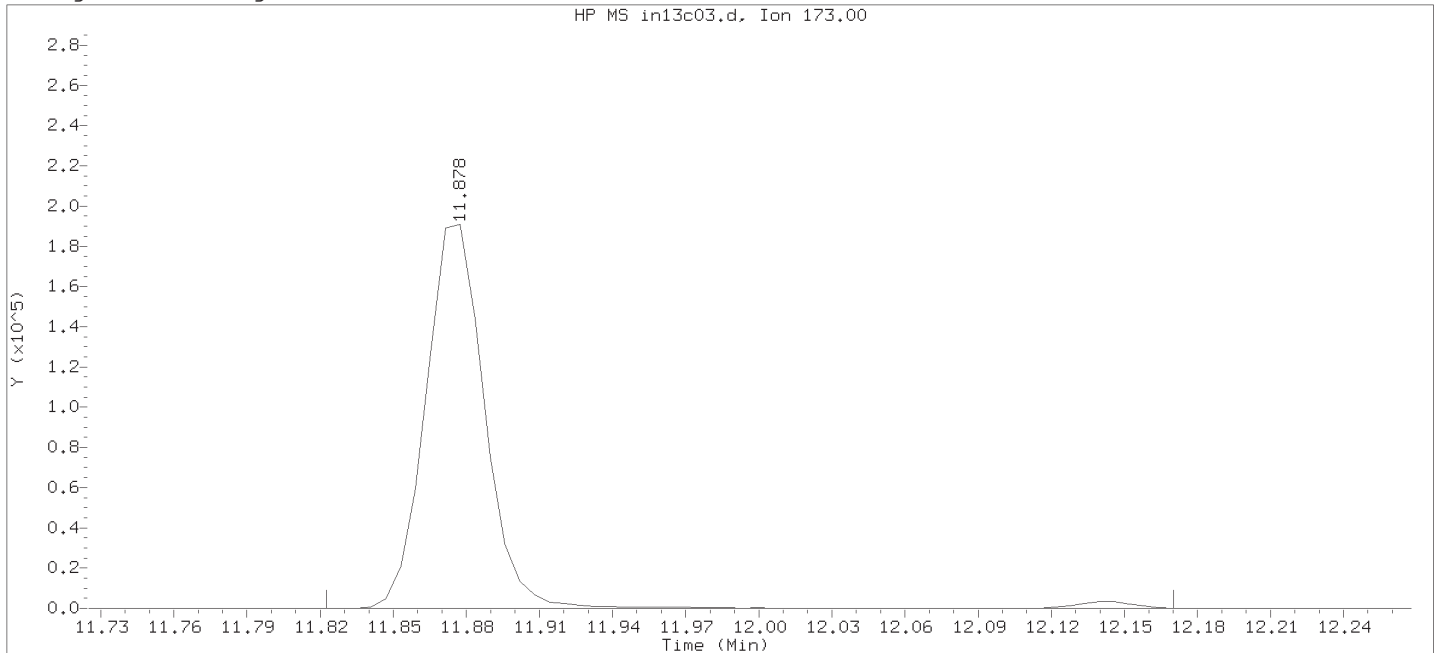
Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:16.  
PARALLAX ID: kel01973



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c03.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 19:13      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 25789-SM  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:31 Automation

Sample Name: SECC010      Lab Sample ID: SECC010

Compound Number : 107  
 Compound Name : Bromoform  
 Scan Number : 1688  
 Retention Time (minutes): 11.878  
 Quant Ion : 173.00  
 Area : 325811  
 On-column Amount (ng) : 9.1710  
 Integration start scan : 1678      Integration stop scan: 1735  
 Y at integration start : 0      Y at integration end: 0

Date : 11-SEP-2018 18:35

Client ID: BFB AUG07-18

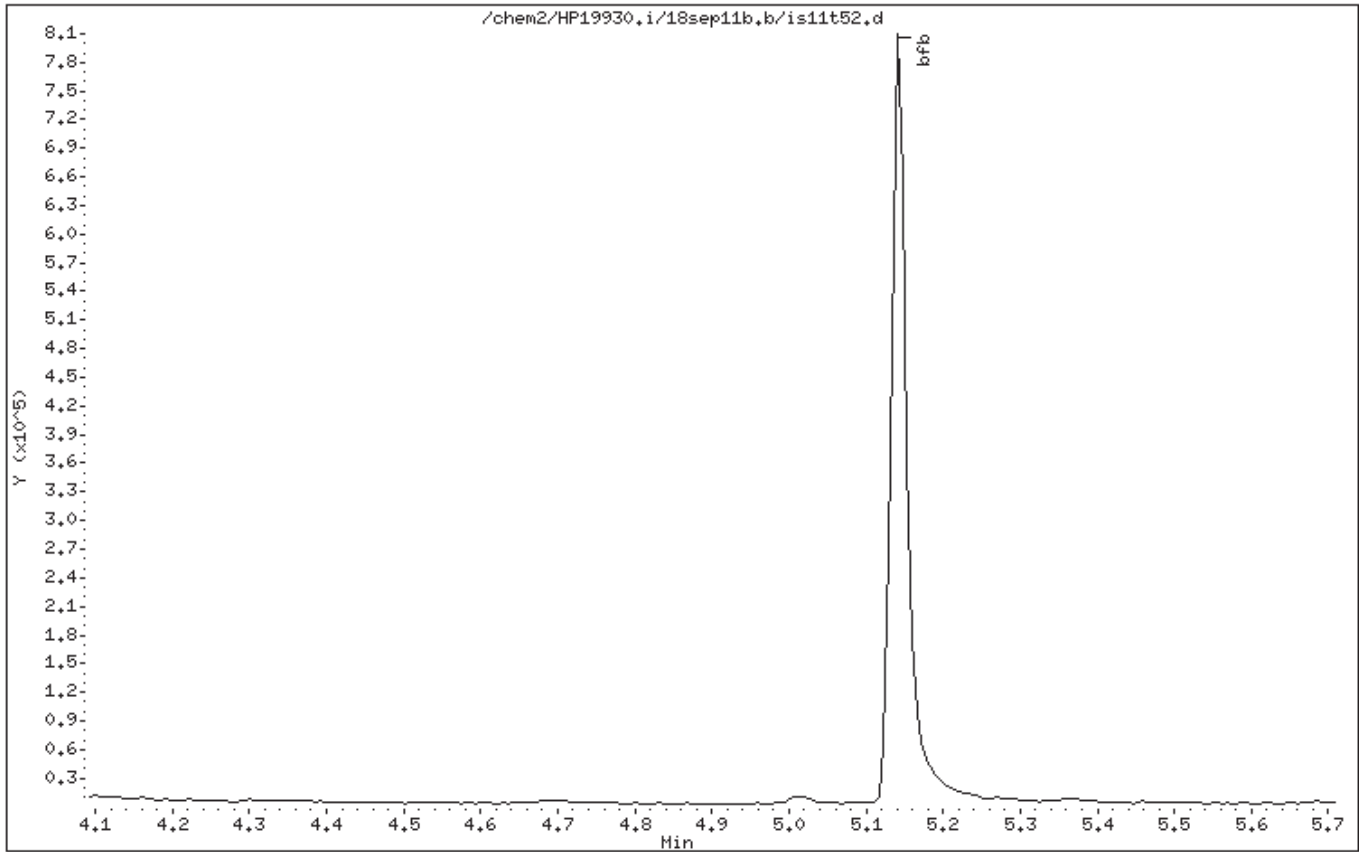
Instrument: HP19930.i

Sample Info: BFB AUG07-18;50NGBFB;1;3;++++;

Operator: DWV10203

Column phase: Rxi-624Sil MS

Column diameter: 0,25



Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:56.  
Target 3.5 esignature user ID: ads01731

Date : 11-SEP-2018 18:35

Client ID: BFB AUG07-18

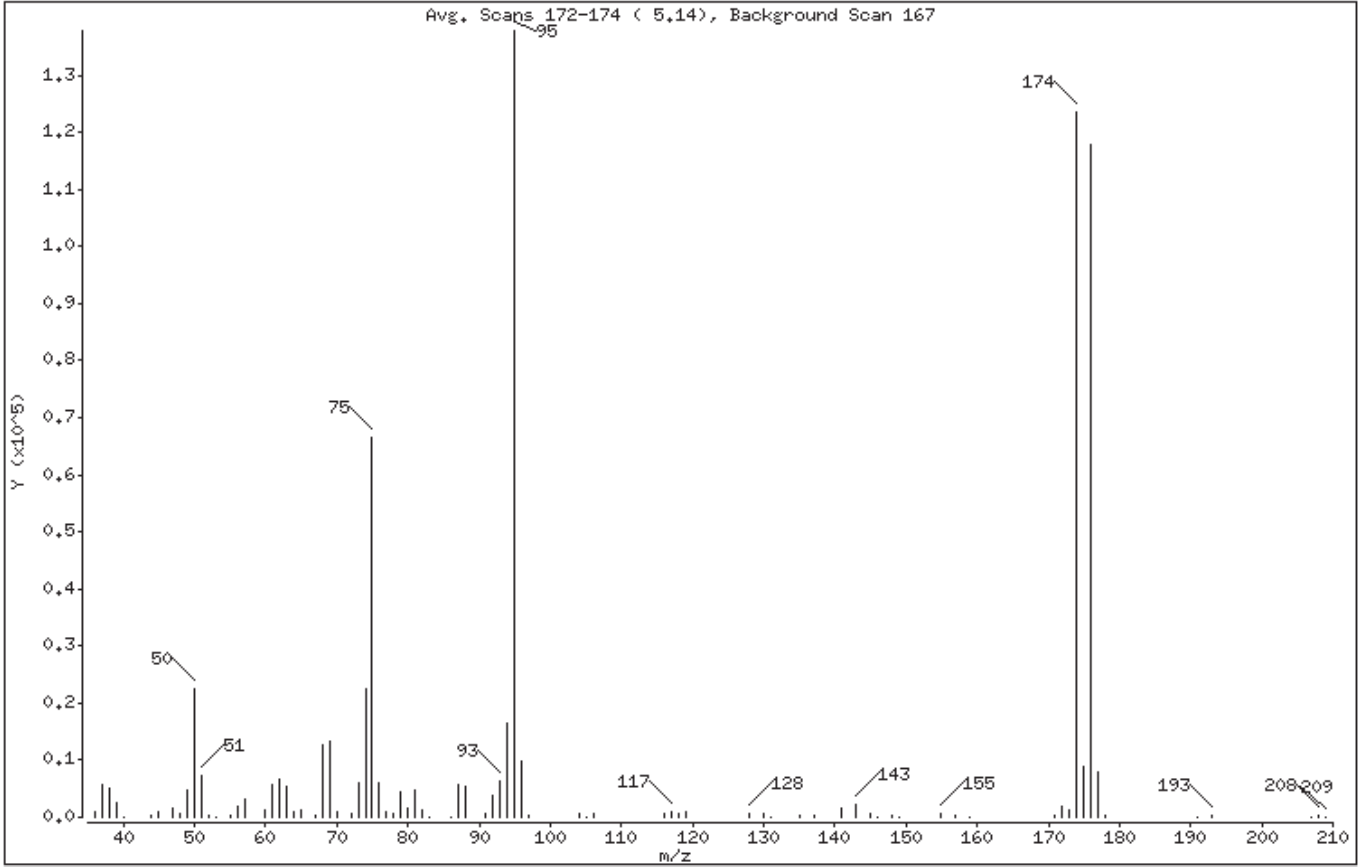
Instrument: HP19930.i

Sample Info: BFB AUG07-18;50NGBFB;1;3;++++;

Operator: DWV10203

Column phase: Rxi-624Sil MS  
1 bfb

Column diameter: 0,25



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	15,00 - 40,00% of mass 95	16,29
75	30,00 - 60,00% of mass 95	48,33
96	5,00 - 9,00% of mass 95	7,05
173	Less than 2,00% of mass 174	0,87 ( 0,97)
174	50,00 - 100,00% of mass 95	89,60
175	5,00 - 9,00% of mass 174	6,45 ( 7,20)
176	95,00 - 101,00% of mass 174	85,55 ( 95,49)
177	5,00 - 9,00% of mass 176	5,71 ( 6,68)

Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:56.  
Target 3.5 esignature user ID: ads01731

Date : 11-SEP-2018 18:35

Client ID: BFB AUG07-18

Instrument: HP19930.i

Sample Info: BFB AUG07-18;50NGBFB;1;3;++++;

Operator: DWV10203

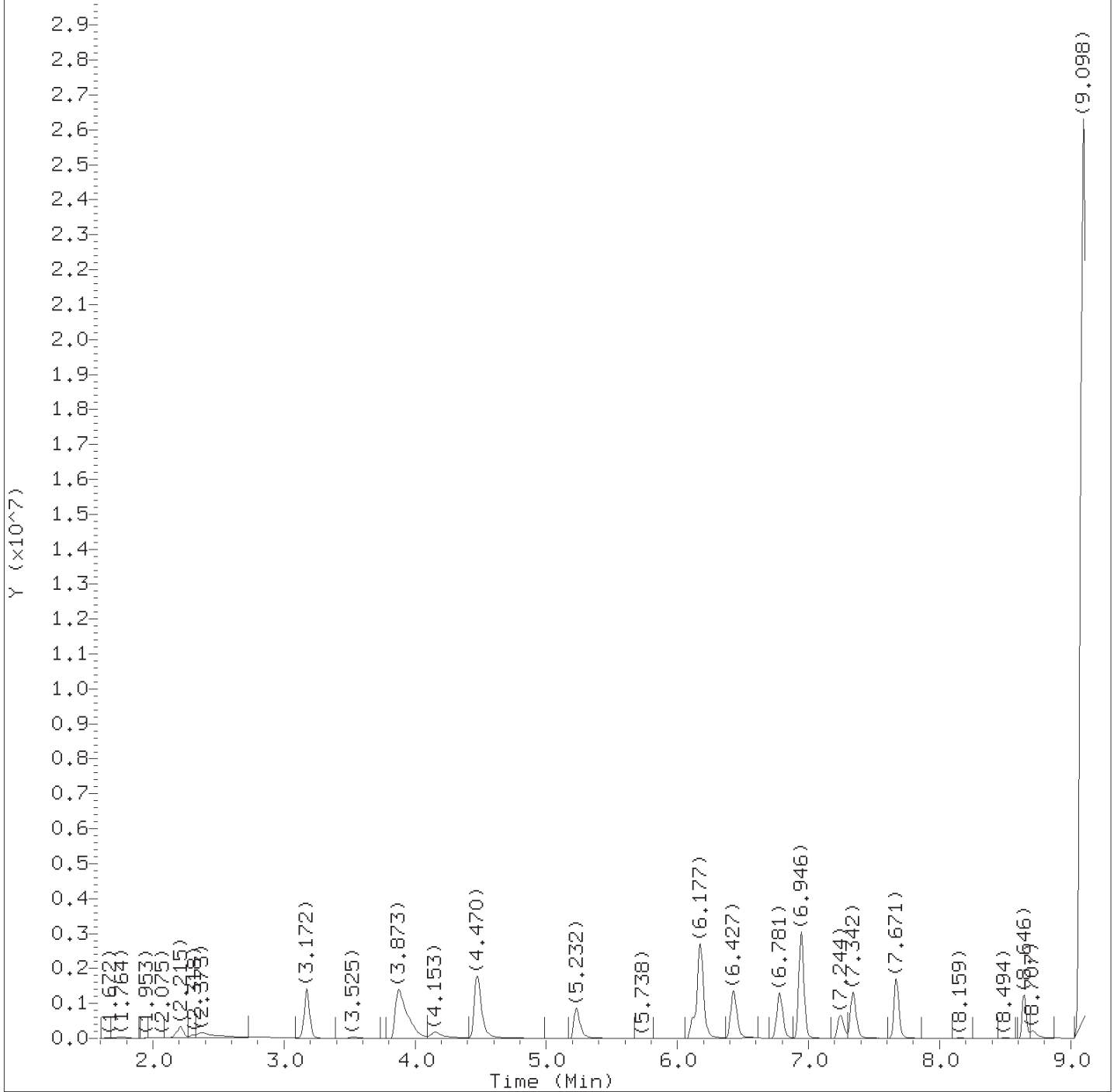
Column phase: Rxi-624Sil MS

Column diameter: 0,25

Data File: is11t52.d  
Spectrum: Avg. Scans 172-174 ( 5,14), Background Scan 167  
Location of Maximum: 95,00  
Number of points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36,00	1056	64,00	836	91,00	639	145,00	600
37,00	5555	65,00	1313	92,00	3857	146,00	90
38,00	5026	67,00	380	93,00	6365	148,00	474
39,00	2418	68,00	12592	94,00	16325	149,00	84
40,00	141	69,00	13243	95,00	137792	155,00	501
44,00	435	70,00	1084	96,00	9722	157,00	242
45,00	1079	72,00	660	97,00	310	159,00	103
47,00	1578	73,00	5861	104,00	673	171,00	317
48,00	720	74,00	22368	105,00	113	172,00	2035
49,00	4834	75,00	66624	106,00	780	173,00	1204
50,00	22456	76,00	5940	116,00	608	174,00	123496
51,00	7179	77,00	1007	117,00	1103	175,00	8890
52,00	324	78,00	580	118,00	668	176,00	117928
53,00	94	79,00	4399	119,00	965	177,00	7877
55,00	226	80,00	1448	128,00	545	178,00	187
56,00	1837	81,00	4755	130,00	516	191,00	83
57,00	3122	82,00	1209	131,00	87	193,00	331
60,00	1160	83,00	88	135,00	272	207,00	18
61,00	5647	86,00	92	137,00	271	208,00	374
62,00	6536	87,00	5756	141,00	1524	209,00	99
63,00	5483	88,00	5319	143,00	2123		

Digitally signed by Angela D. Sneeringer on 11/07/2018 at 12:56.  
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i51.d  
Injection date and time: 11-SEP-2018 19:20

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:09

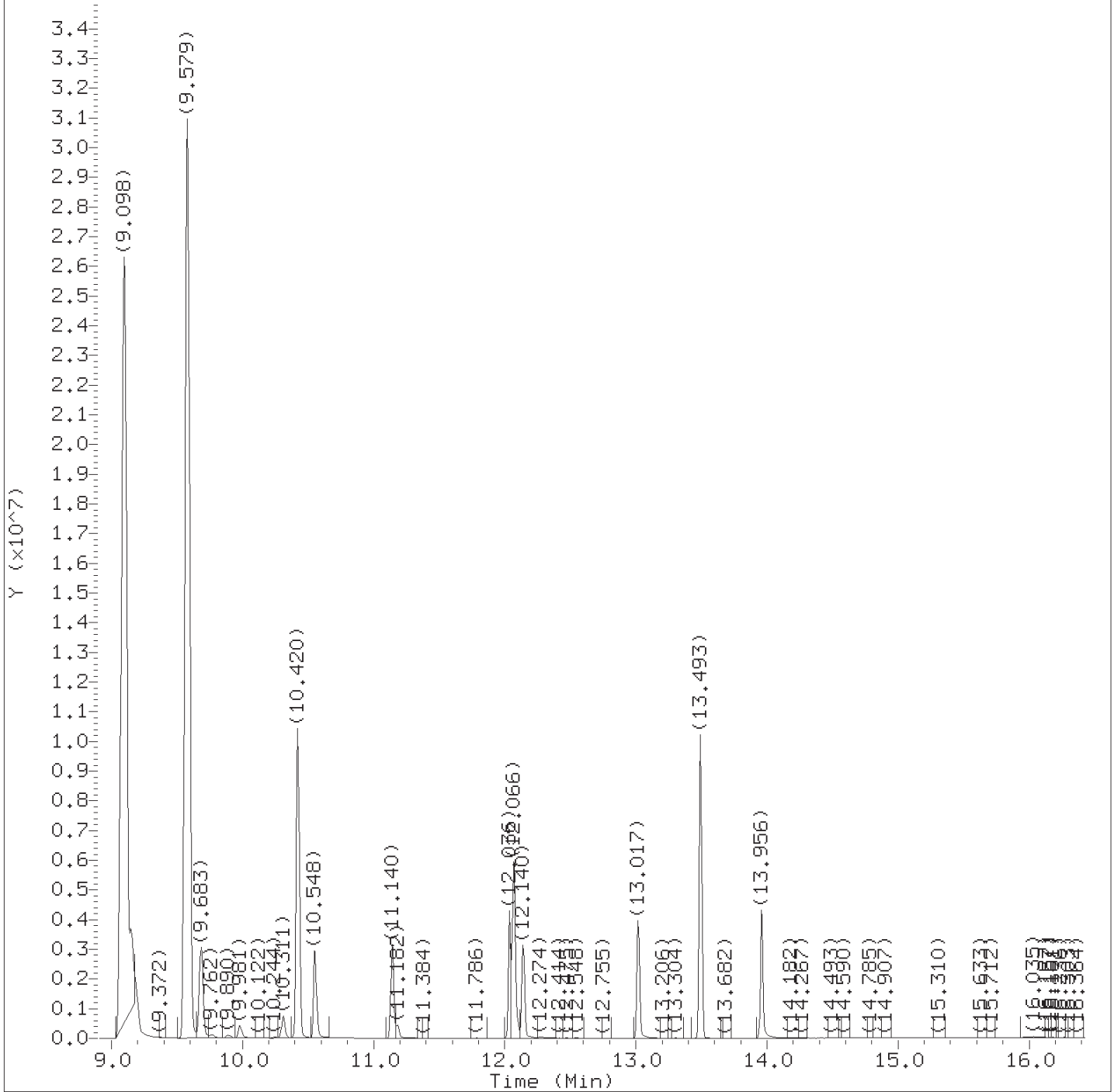
Sublist used: SMICAL-1  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:09 ads01731

Sample Name: VSTD025

Lab Sample ID: VSTD025

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i51.d  
Injection date and time: 11-SEP-2018 19:20

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:09

Sublist used: SMICAL-1  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:09 ads01731

Sample Name: VSTD025

Lab Sample ID: VSTD025

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i51.d Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 19:20 Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
 Calibration date and time: 21-NOV-2018 15:09  
 Date, time and analyst ID of latest file update: 21-Nov-2018 15:09 ads01731

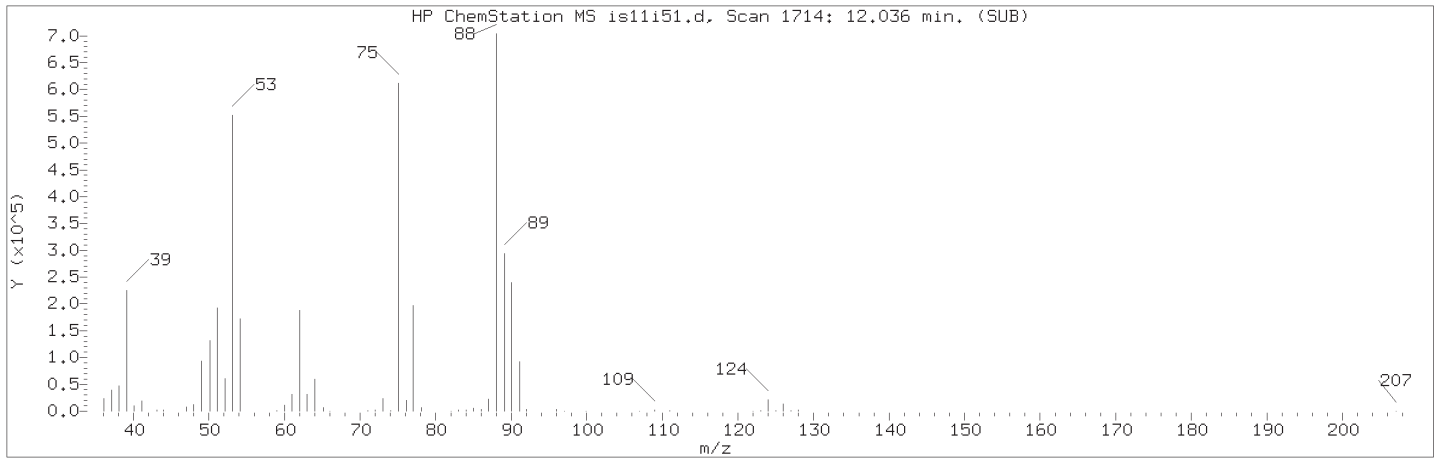
Sample Name: VSTD025

Lab Sample ID: VSTD025

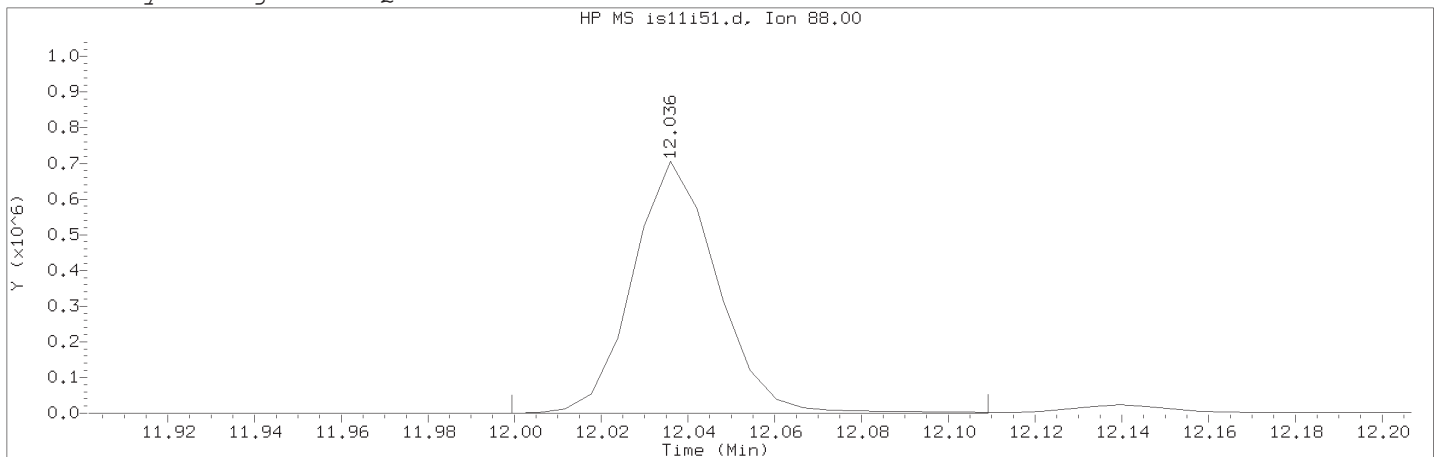
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.873	41	5039728	1051.160
26) *t-Butyl Alcohol-d10	(1)	4.166	65	175499	50.000
36) Vinyl Acetate	(2)	5.232	43	2256430	24.986
43) Methyl Acrylate	(2)	6.177	55	5258811	124.957
53) 1-Chlorobutane	(2)	6.946	56	3383106	25.006
63) *Fluorobenzene	(2)	7.671	96	2231314	10.000
77) Chloroacetonitrile	(2)	9.152	75	3332688	1361.468
78) 2-Chloroethyl vinyl ether	(2)	9.189	63	586757	24.988
97) *Chlorobenzene-d5	(3)	11.140	117	1872333	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.036	88	951466A	49.956
112) Cyclohexanone	(1)	12.066	55	2516819	1249.034
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	994688	10.000
142) Hexachloroethane	(4)	13.493	117	1715279	30.568

A = User selected an alternate hit.  
 \* = Compound is an internal standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i51.d                      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 19:20                      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m                      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:09  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:09 ads01731

Sample Name: VSTD025    Lab Sample ID: VSTD025

Compound Number                      : 109  
Compound Name                         : cis-1,4-Dichloro-2-butene  
Scan Number                            : 1714  
Retention Time (minutes): 12.036  
Quant Ion                                : 88.00  
Area (flag)                             : 951466A  
On-Column Amount (ng)                : 49.9564  
Integration start scan                 : 1707                      Integration stop scan: 1725  
Y at integration start                 : 0                         Y at integration end: 0

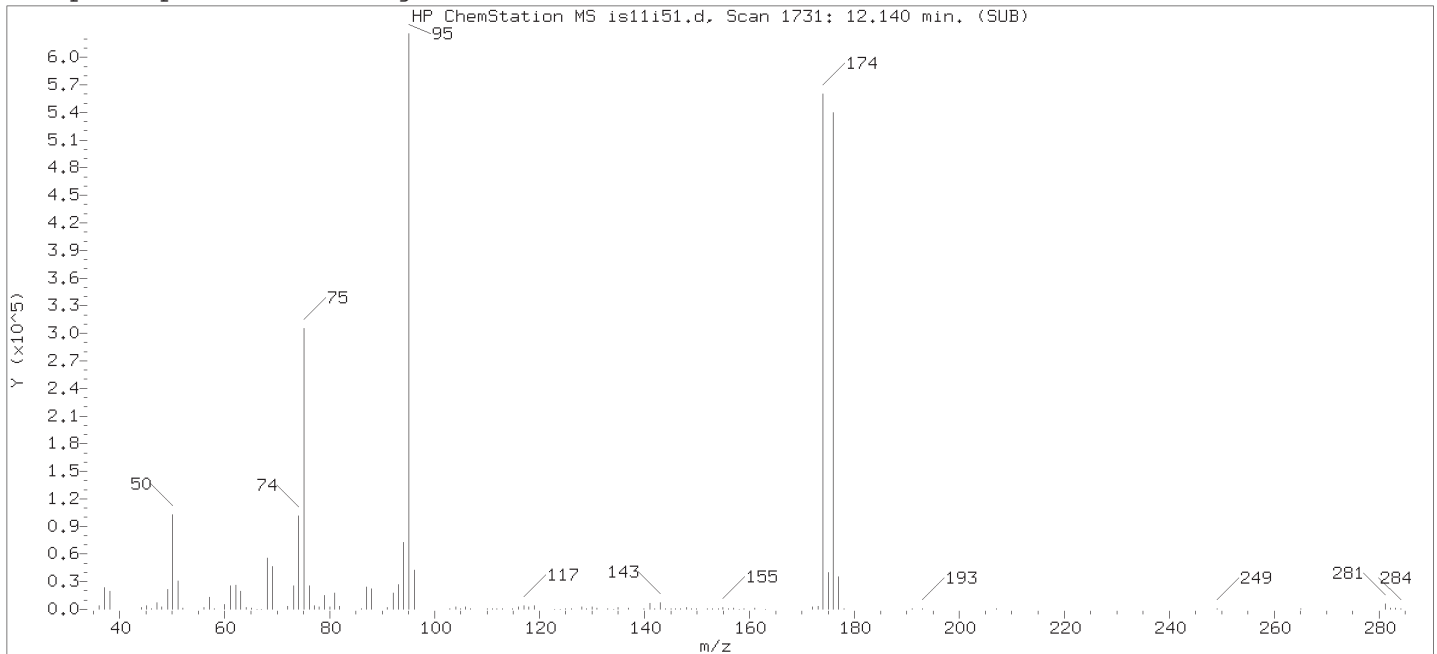
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

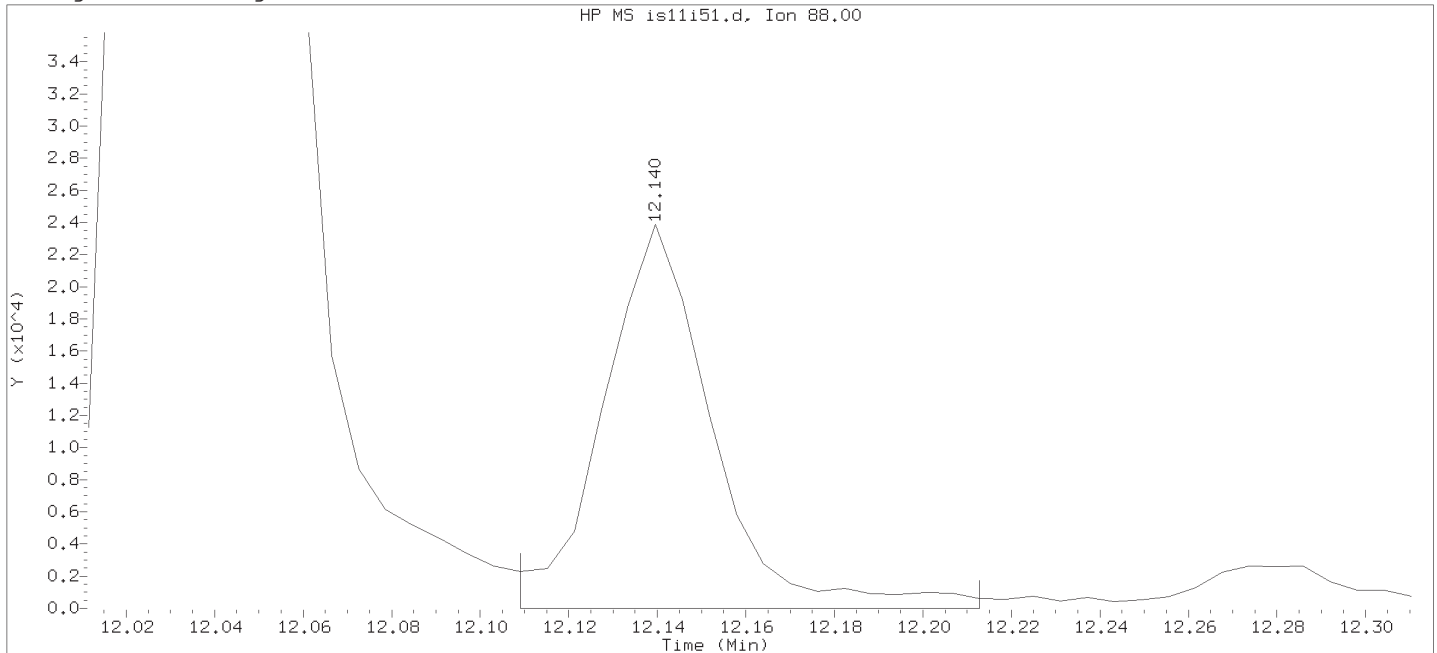
Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

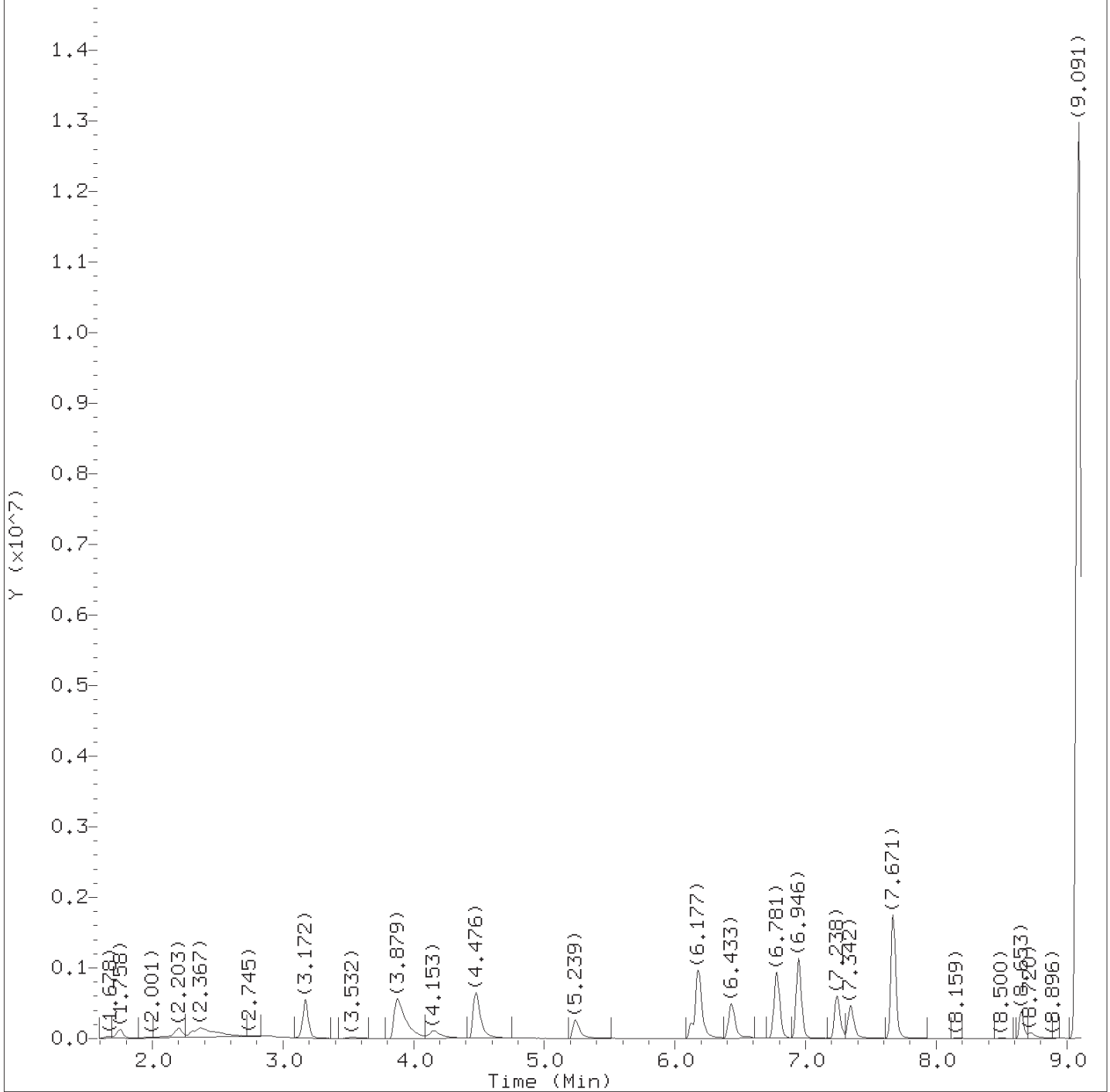


Data File: /chem2/HP19930.i/18sep11b.b/is11i51.d      Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 19:20      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m      Sublist used: SMICAL  
 Calibration date and time: 07-NOV-2018 08:25  
 Date, time and analyst ID of latest file update: 07-Nov-2018 08:25 kas02648

Sample Name: VSTD025      Lab Sample ID: VSTD025

Compound Number : 109  
 Compound Name : cis-1,4-Dichloro-2-butene  
 Scan Number : 1731  
 Retention Time (minutes): 12.140  
 Quant Ion : 88.00  
 Area : 40670  
 On-column Amount (ng) : 50.0000  
 Integration start scan : 1725      Integration stop scan: 1742  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i52.d  
Injection date and time: 11-SEP-2018 19:41

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

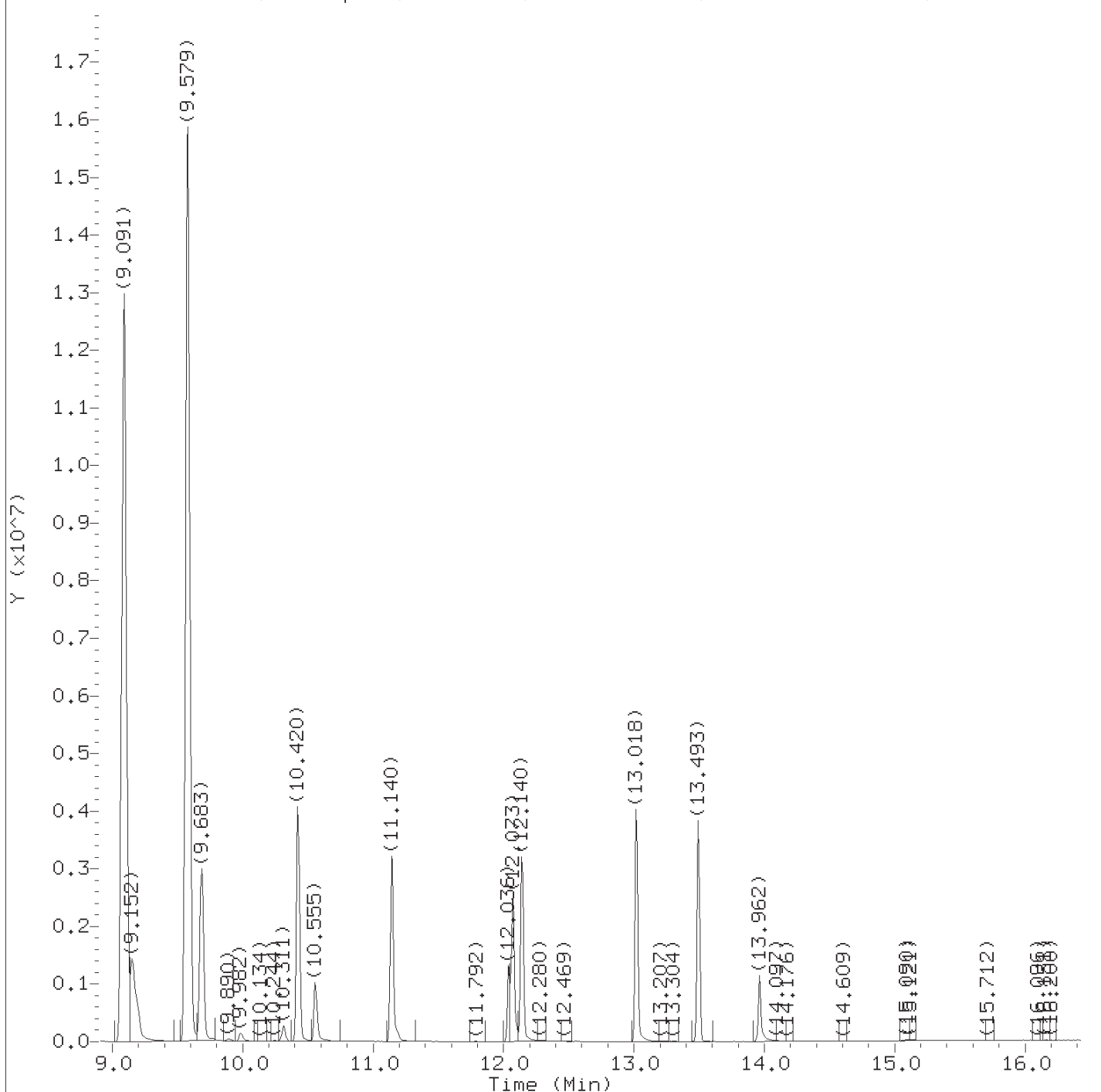
Sublist used: SMICAL-1  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i52.d  
Injection date and time: 11-SEP-2018 19:41

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

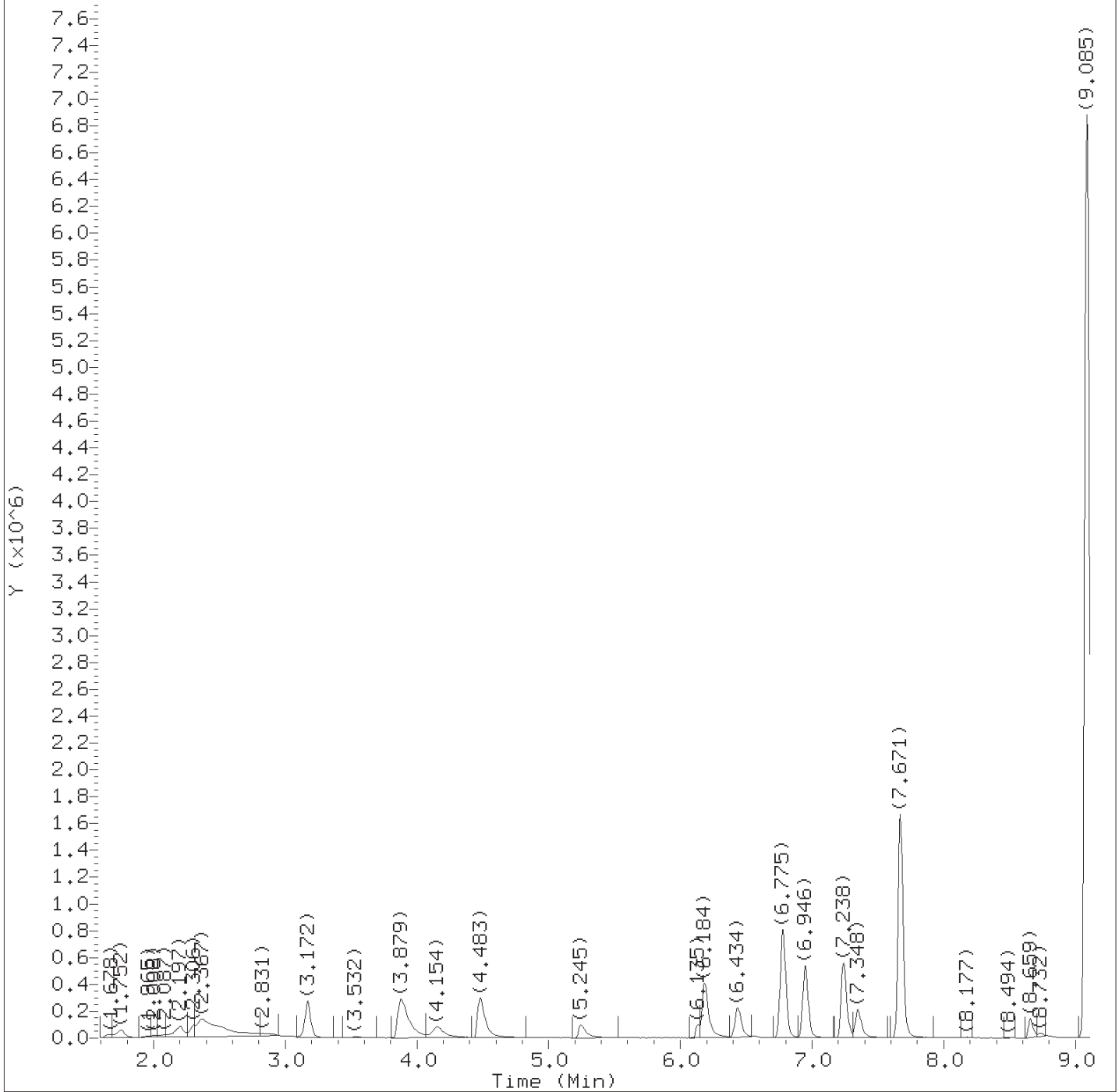
Data File: /chem2/HP19930.i/18sep11b.b/is11i52.d Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 19:41 Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
 Calibration date and time: 21-NOV-2018 15:10  
 Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.879	41	1996224	406.282
26) *t-Butyl Alcohol-d10	(1)	4.159	65	179853	50.000
36) Vinyl Acetate	(2)	5.239	43	751827	10.186
43) Methyl Acrylate	(2)	6.177	55	1932599	50.426
53) 1-Chlorobutane	(2)	6.946	56	1263597	9.914
63) *Fluorobenzene	(2)	7.671	96	2307634	10.000
77) Chloroacetonitrile	(2)	9.152	75	1316884	520.180
78) 2-Chloroethyl vinyl ether	(2)	9.189	63	211023	10.138
97) *Chlorobenzene-d5	(3)	11.146	117	1914470	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.036	88	320609	20.554
112) Cyclohexanone	(1)	12.073	55	1061632	507.091
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	1012720	10.000
142) Hexachloroethane	(4)	13.493	117	631857	11.060

\* = Compound is an internal standard.



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i53.d  
Injection date and time: 11-SEP-2018 20:02

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

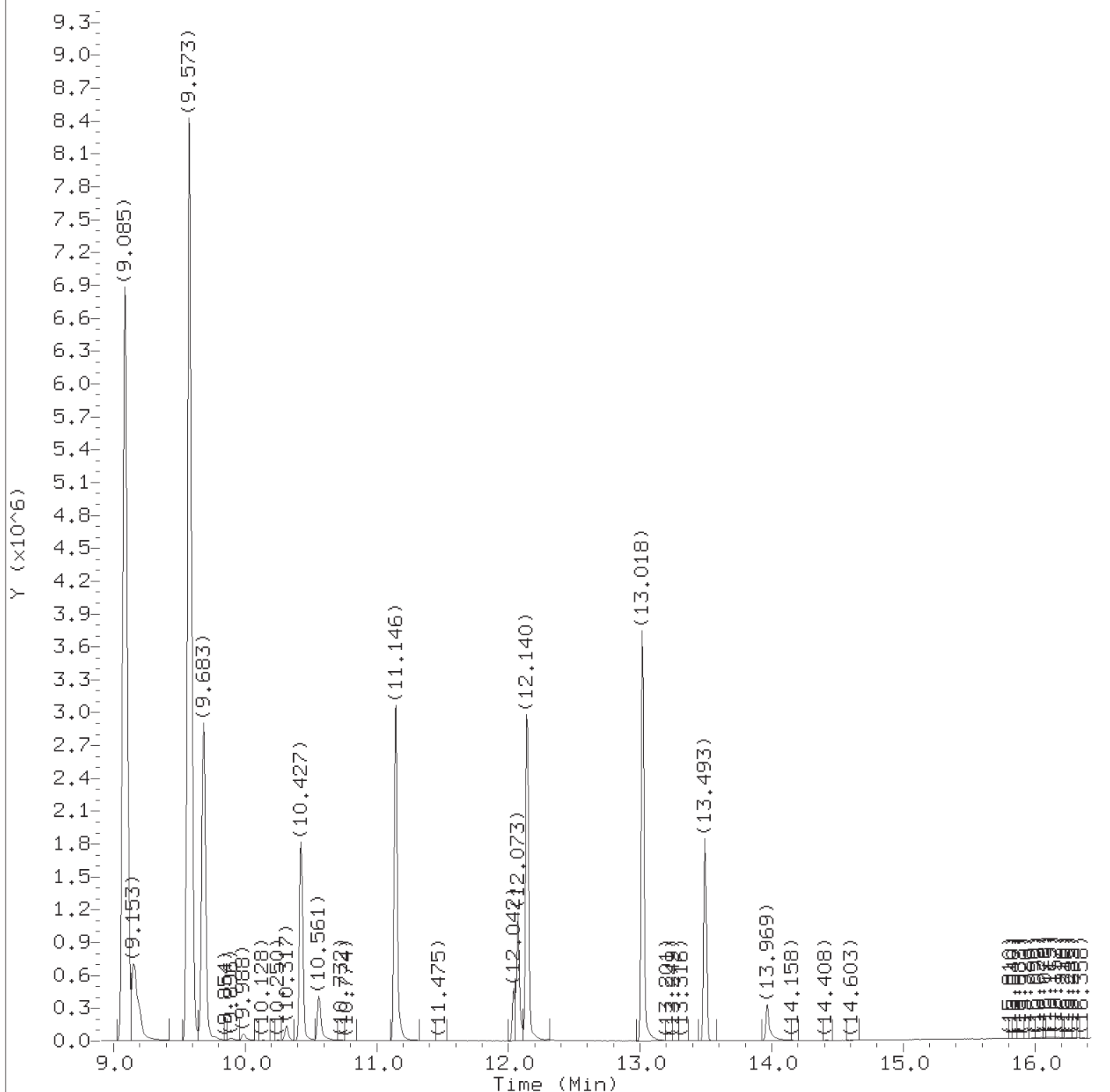
Sublist used: SMICAL-1  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD005

Lab Sample ID: VSTD005

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i53.d  
Injection date and time: 11-SEP-2018 20:02

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

Sublist used: SMICAL-1  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD005

Lab Sample ID: VSTD005

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i53.d Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 20:02 Analyst ID: DVV10203

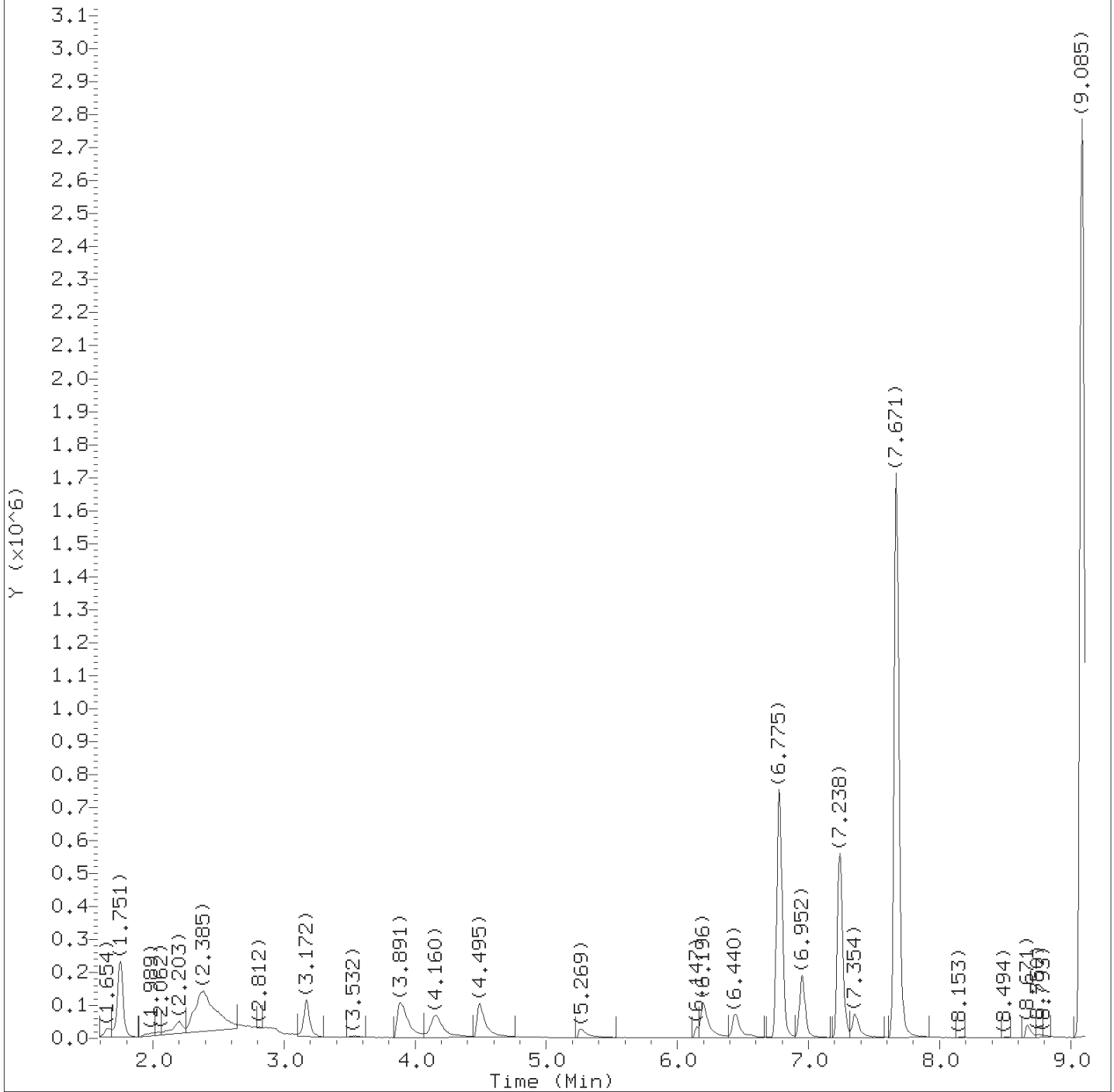
Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
 Calibration date and time: 21-NOV-2018 15:10  
 Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.879	41	972551	209.302
26) *t-Butyl Alcohol-d10	(1)	4.166	65	170089	50.000
36) Vinyl Acetate	(2)	5.245	43	302677	4.734
43) Methyl Acrylate	(2)	6.184	55	844626	24.725
53) 1-Chlorobutane	(2)	6.946	56	607671	5.182
63) *Fluorobenzene	(2)	7.671	96	2203836	10.000
77) Chloroacetonitrile	(2)	9.153	75	652226	269.769
78) 2-Chloroethyl vinyl ether	(2)	9.195	63	88897	4.840
97) *Chlorobenzene-d5	(3)	11.146	117	1834815	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.042	88	119757	9.087
112) Cyclohexanone	(1)	12.073	55	466250	244.898
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	957352	10.000
142) Hexachloroethane	(4)	13.493	117	297518	5.509

\* = Compound is an internal standard.



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i54.d  
Injection date and time: 11-SEP-2018 20:24

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

Sublist used: SMICAL-1

Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

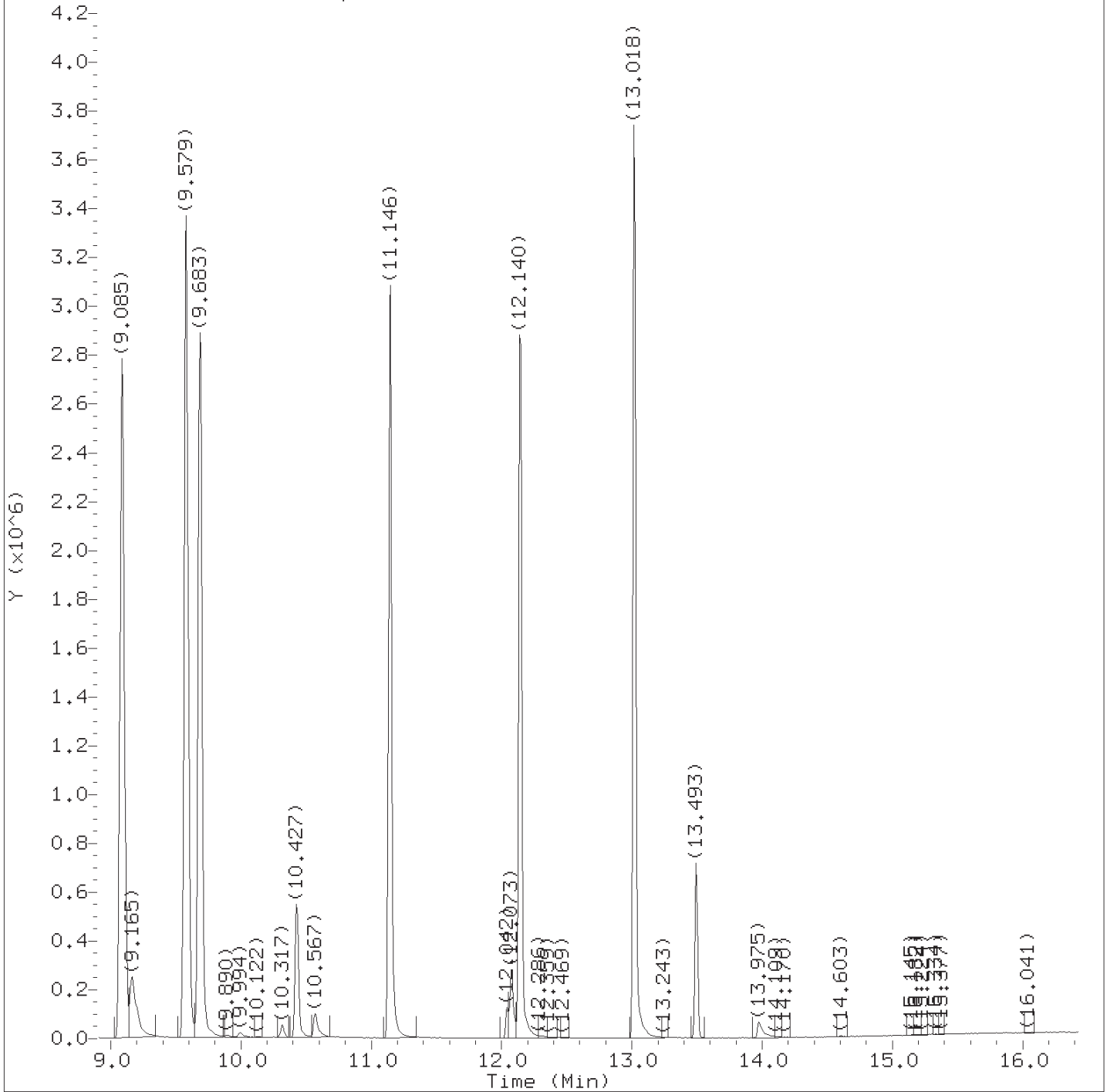
Sample Name: VSTD002

Lab Sample ID: VSTD002

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i54.d  
Injection date and time: 11-SEP-2018 20:24

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

Sublist used: SMICAL-1

Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD002

Lab Sample ID: VSTD002

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i54.d Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 20:24 Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
 Calibration date and time: 21-NOV-2018 15:10  
 Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD002

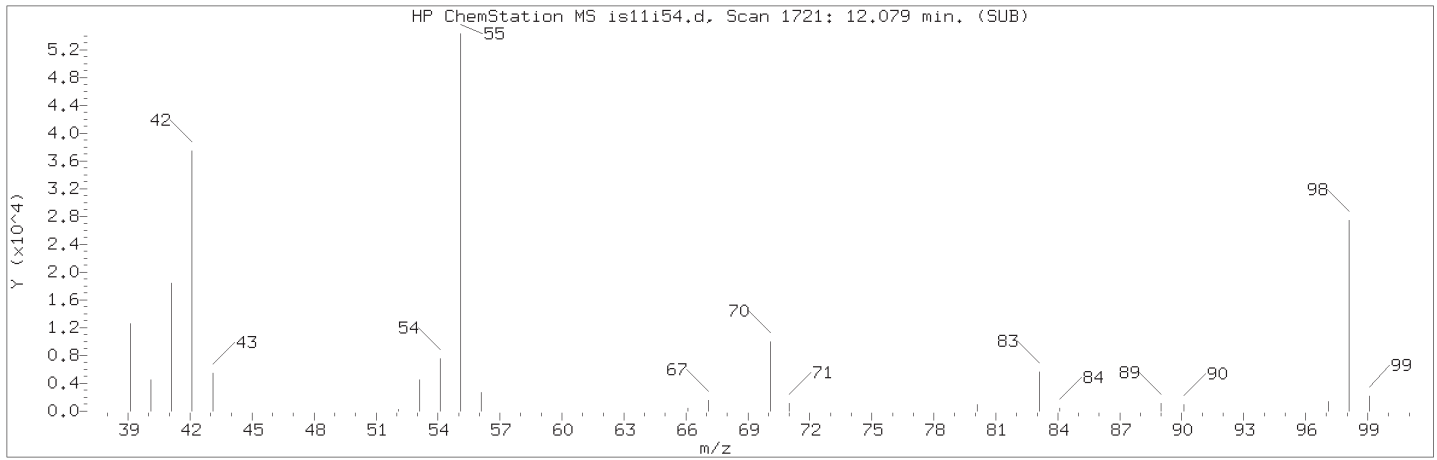
Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.885	41	364982	78.536
26) *t-Butyl Alcohol-d10	(1)	4.160	65	170114	50.000
36) Vinyl Acetate	(2)	5.269	43	92942	1.737
43) Methyl Acrylate	(2)	6.196	55	254011	8.735
53) 1-Chlorobutane	(2)	6.958	56	210611	1.903
63) *Fluorobenzene	(2)	7.671	96	2232564	10.000
77) Chloroacetonitrile	(2)	9.165	75	248933	101.637
78) 2-Chloroethyl vinyl ether	(2)	9.201	63	27150	1.748
97) *Chlorobenzene-d5	(3)	11.146	117	1848452	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.042	88	35126	3.372
112) Cyclohexanone	(1)	12.079	55	119155M	80.227
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	959133	10.000
142) Hexachloroethane	(4)	13.493	117	109888	2.031

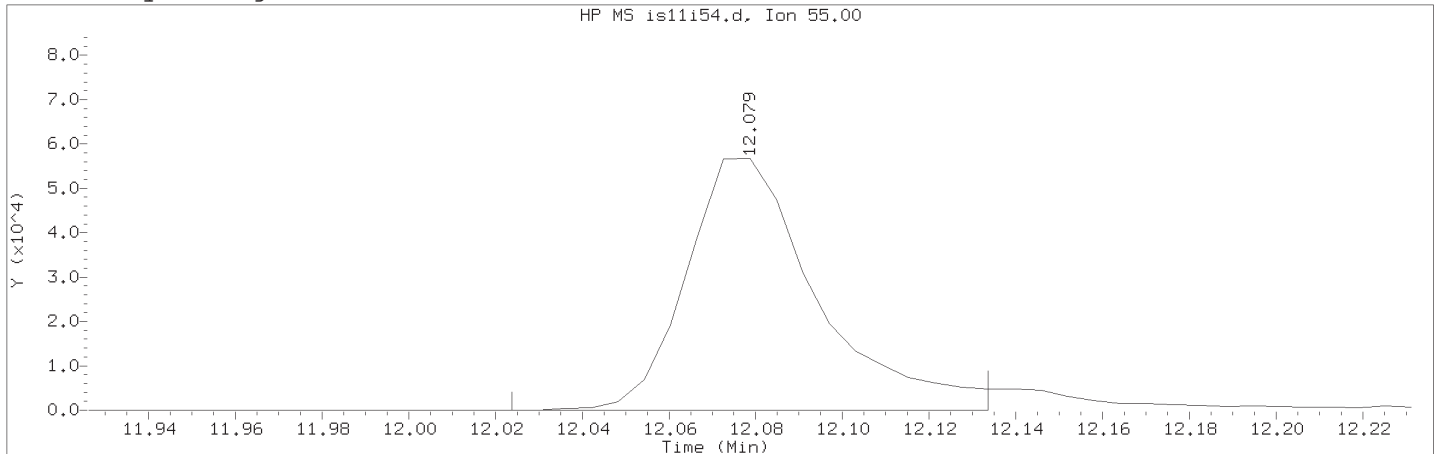
M = Compound was manually integrated.

\* = Compound is an internal standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i54.d      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 20:24      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD002      Lab Sample ID: VSTD002

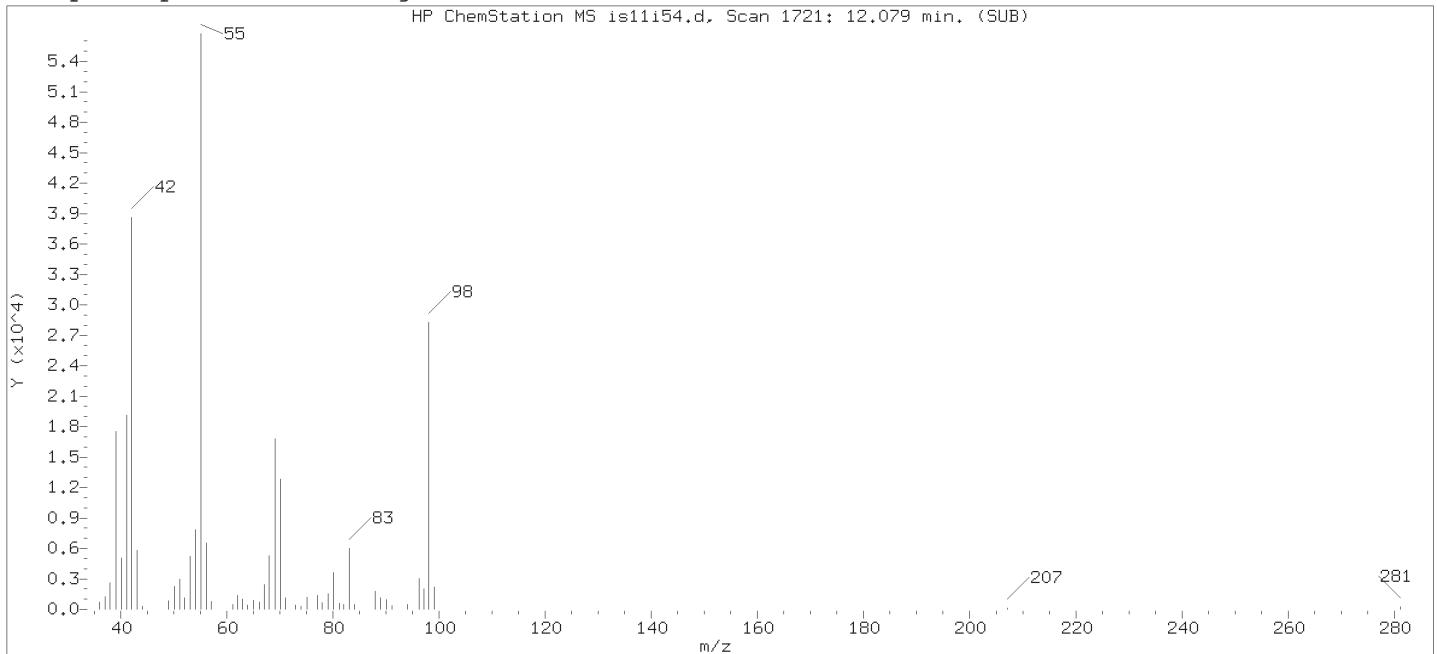
Compound Number : 112  
Compound Name : Cyclohexanone  
Scan Number : 1721  
Retention Time (minutes): 12.079  
Quant Ion : 55.00  
Area (flag) : 119155M  
On-Column Amount (ng) : 80.2270  
Integration start scan : 1711      Integration stop scan: 1729  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

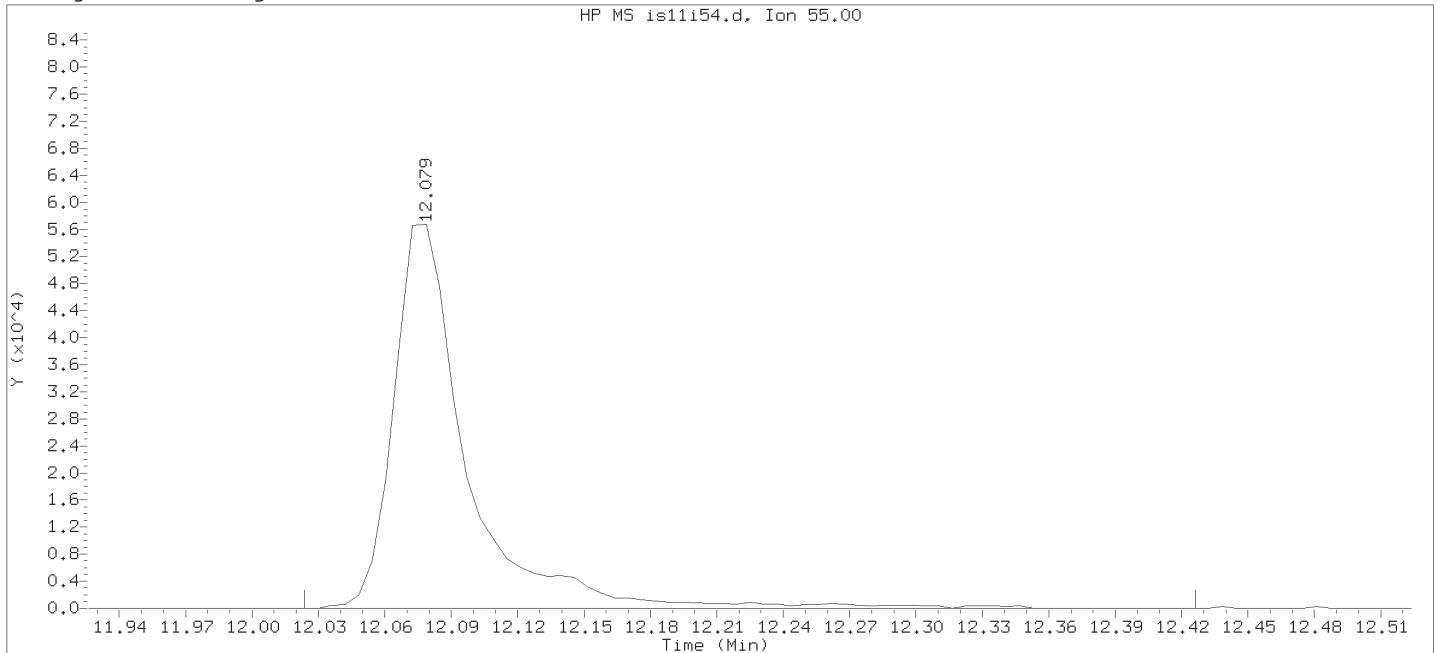
Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

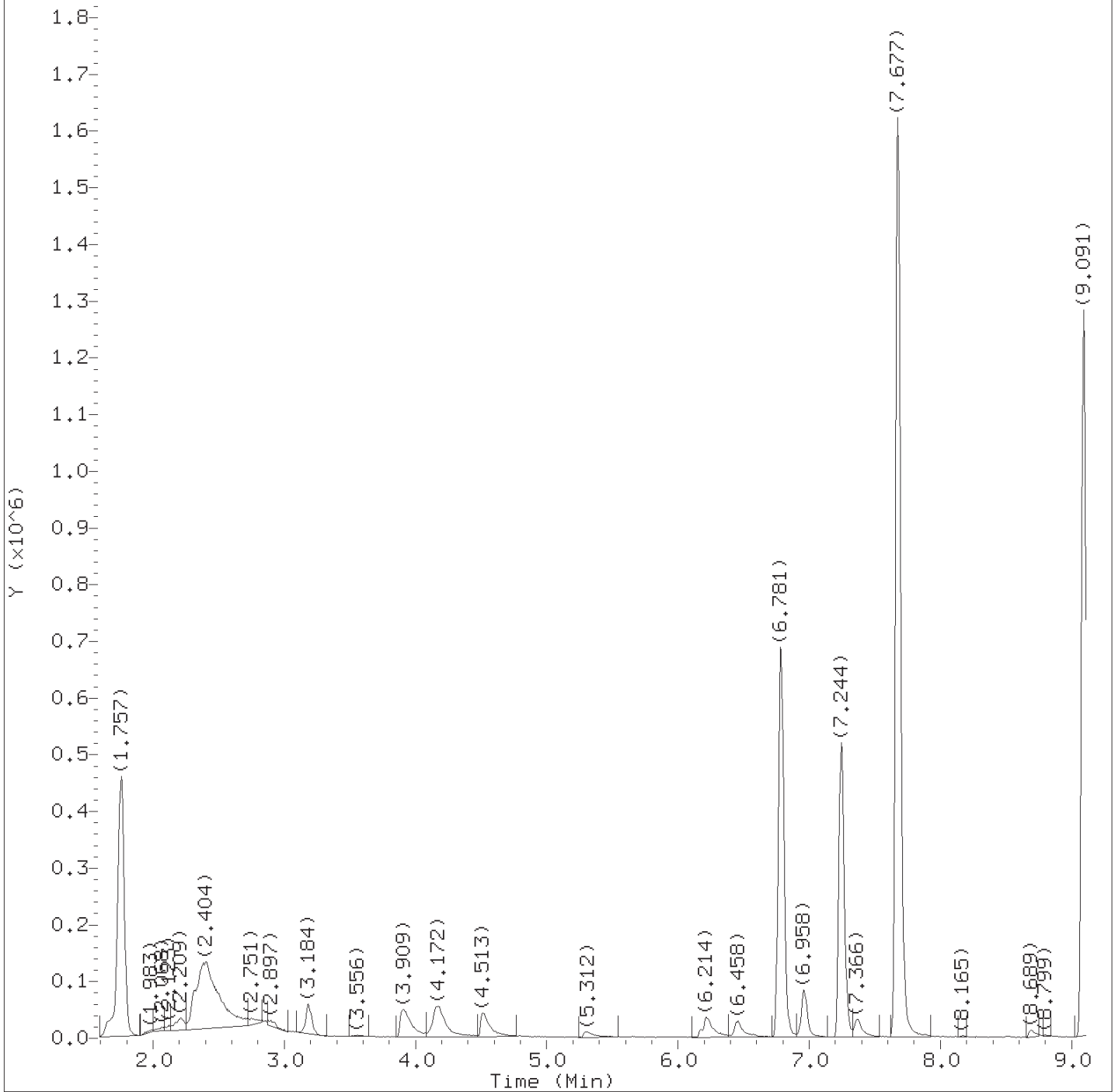


Data File: /chem2/HP19930.i/18sep11b.b/is11i54.d      Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 20:24      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m      Sublist used: SMICAL  
 Calibration date and time: 07-NOV-2018 08:25  
 Date, time and analyst ID of latest file update: 07-Nov-2018 08:25 kas02648

Sample Name: VSTD002      Lab Sample ID: VSTD002

Compound Number : 112  
 Compound Name : Cyclohexanone  
 Scan Number : 1721  
 Retention Time (minutes): 12.079  
 Quant Ion : 55.00  
 Area : 131630  
 On-column Amount (ng) : 73.7264  
 Integration start scan : 1711      Integration stop scan: 1777  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i55.d  
Injection date and time: 11-SEP-2018 20:45

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

Sublist used: SMICAL-1

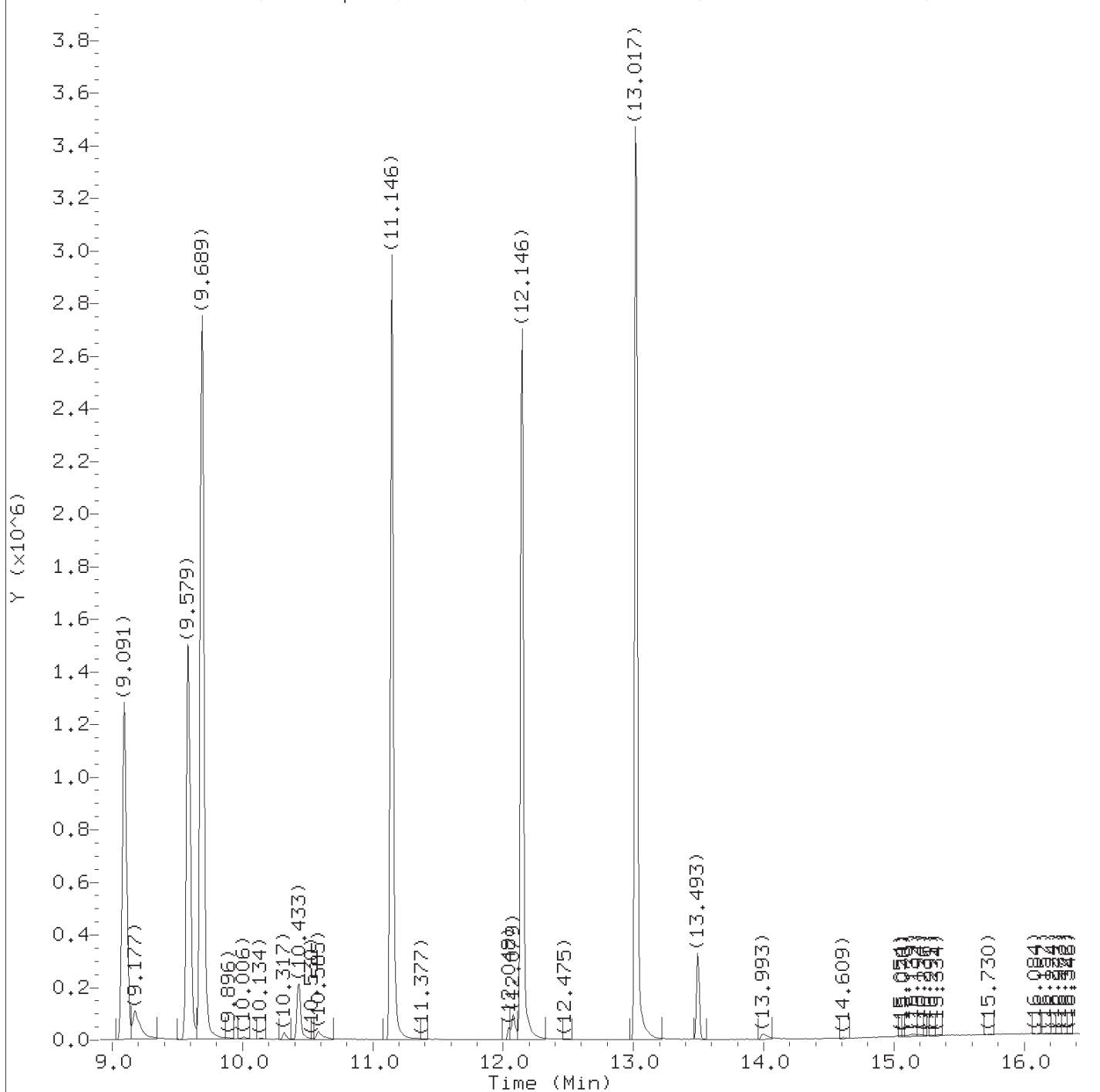
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD001

Lab Sample ID: VSTD001

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i55.d  
Injection date and time: 11-SEP-2018 20:45

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD001

Lab Sample ID: VSTD001

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i55.d  
 Injection date and time: 11-SEP-2018 20:45

Instrument ID: HP19930.i  
 Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
 Calibration date and time: 21-NOV-2018 15:10  
 Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD001

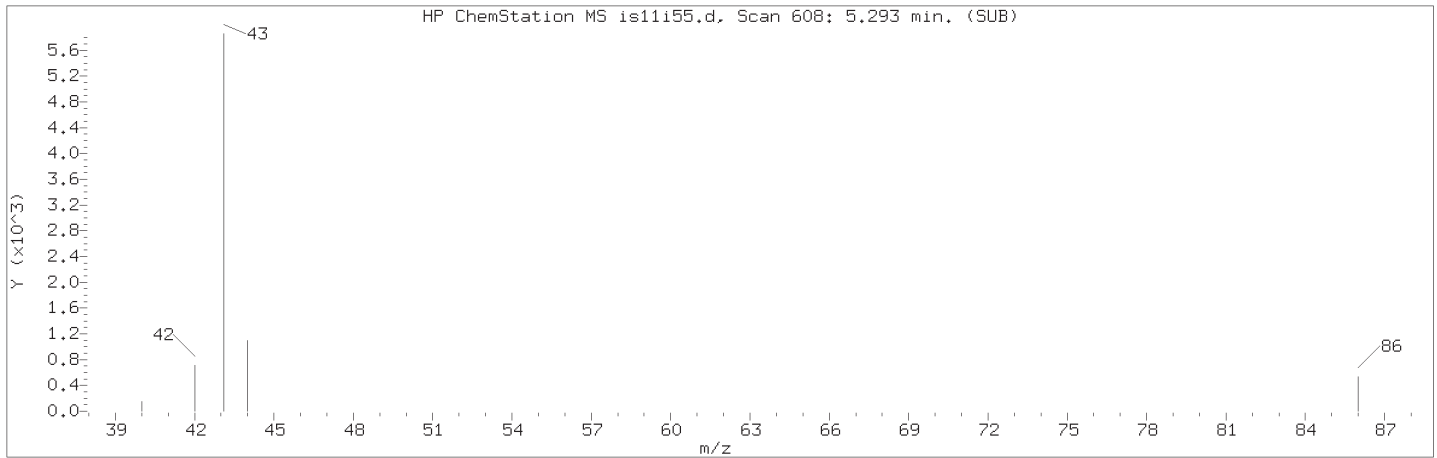
Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.909	41	167454	40.310
26) *t-Butyl Alcohol-d10	(1)	4.178	65	152061	50.000
36) Vinyl Acetate	(2)	5.293	43	38638M	0.976
43) Methyl Acrylate	(2)	6.220	55	96703	4.580
53) 1-Chlorobutane	(2)	6.958	56	89292	0.935
63) *Fluorobenzene	(2)	7.677	96	2137199	10.000
77) Chloroacetonitrile	(2)	9.177	75	112246	47.874
78) 2-Chloroethyl vinyl ether	(2)	9.207	63	11477	0.985
97) *Chlorobenzene-d5	(3)	11.146	117	1771837	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.042	88	13781	2.003
112) Cyclohexanone	(1)	12.079	55	38036M	44.375
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	913411	10.000
142) Hexachloroethane	(4)	13.493	117	52716	1.023

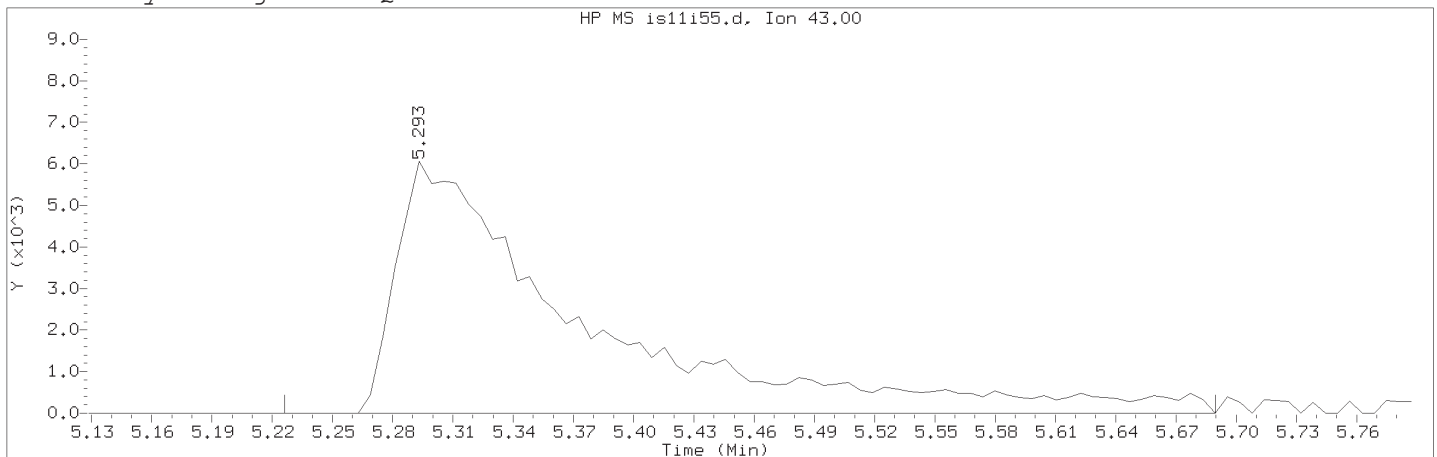
M = Compound was manually integrated.

\* = Compound is an internal standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11155.d                      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 20:45                      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m                      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD001    Lab Sample ID: VSTD001

Compound Number                      : 36  
Compound Name                         : Vinyl Acetate  
Scan Number                            : 608  
Retention Time (minutes): 5.293  
Quant Ion                                : 43.00  
Area (flag)                             : 38638M  
On-Column Amount (ng)                : 0.9760  
Integration start scan                 : 596                      Integration stop scan: 672  
Y at integration start                 : 0                        Y at integration end: 0

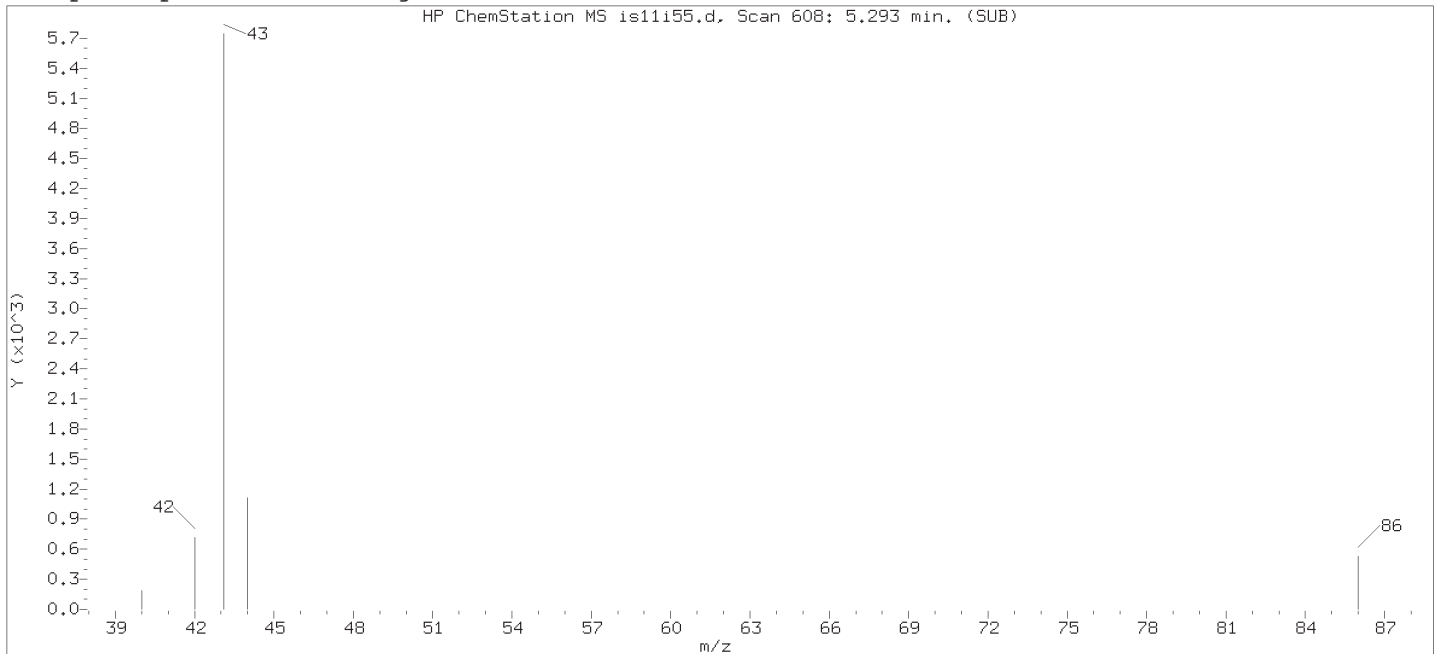
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

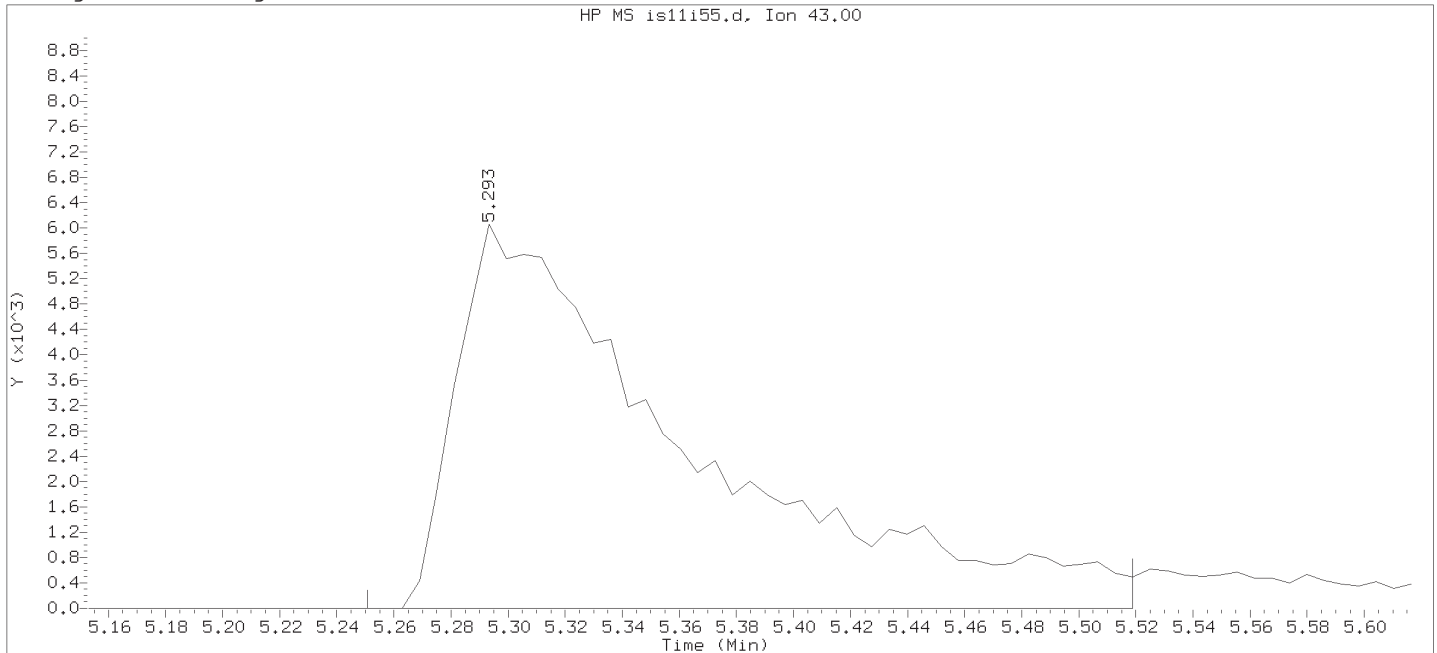
Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i55.d  
 Injection date and time: 11-SEP-2018 20:45

Instrument ID: HP19930.i  
 Analyst ID: DVV10203

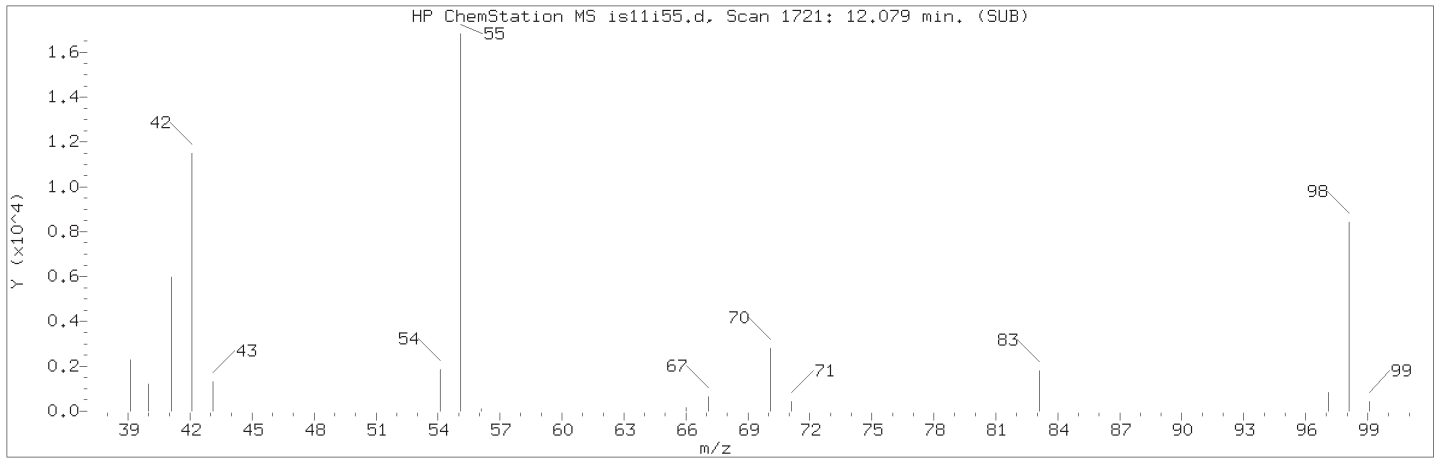
Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL  
 Calibration date and time: 07-NOV-2018 08:25  
 Date, time and analyst ID of latest file update: 07-Nov-2018 08:25 kas02648

Sample Name: VSTD001

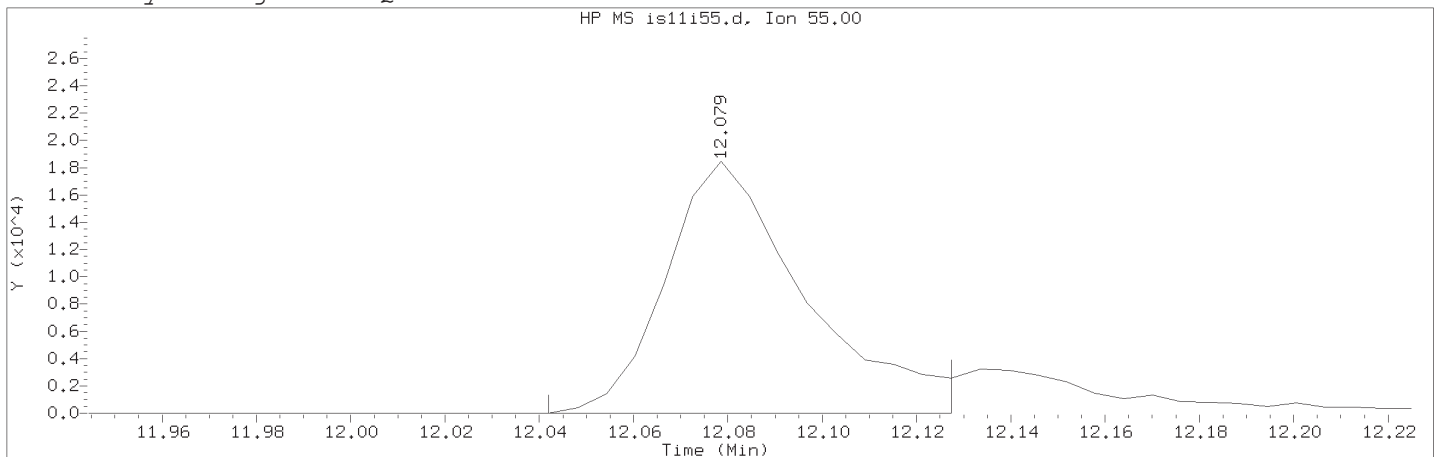
Lab Sample ID: VSTD001

Compound Number	: 36	
Compound Name	: Vinyl Acetate	
Scan Number	: 608	
Retention Time (minutes)	: 5.293	
Quant Ion	: 43.00	
Area	: 34295	
On-column Amount (ng)	: 0.5841	
Integration start scan	: 600	Integration stop scan: 644
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i55.d                      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 20:45                      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m                      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD001    Lab Sample ID: VSTD001

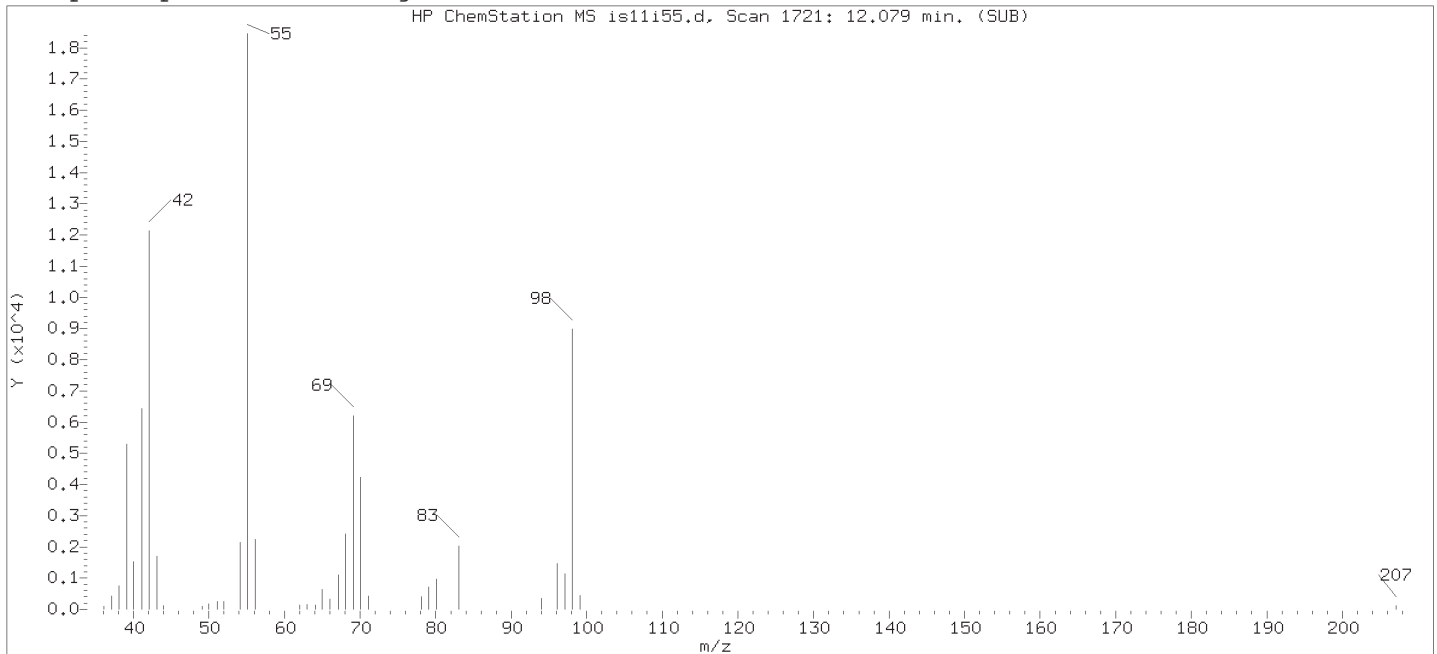
Compound Number                      : 112  
Compound Name                         : Cyclohexanone  
Scan Number                            : 1721  
Retention Time (minutes): 12.079  
Quant Ion                                : 55.00  
Area (flag)                             : 38036M  
On-Column Amount (ng)                : 44.3747  
Integration start scan                : 1714                      Integration stop scan: 1728  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

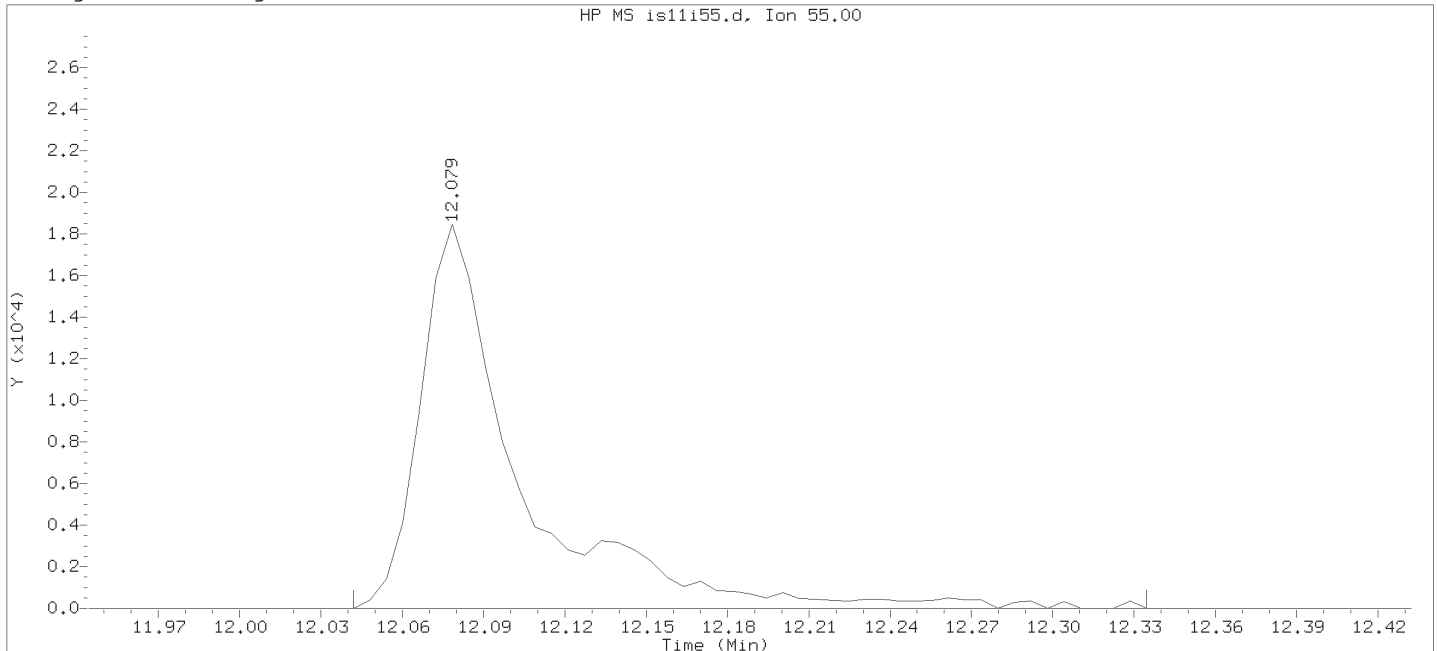
Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

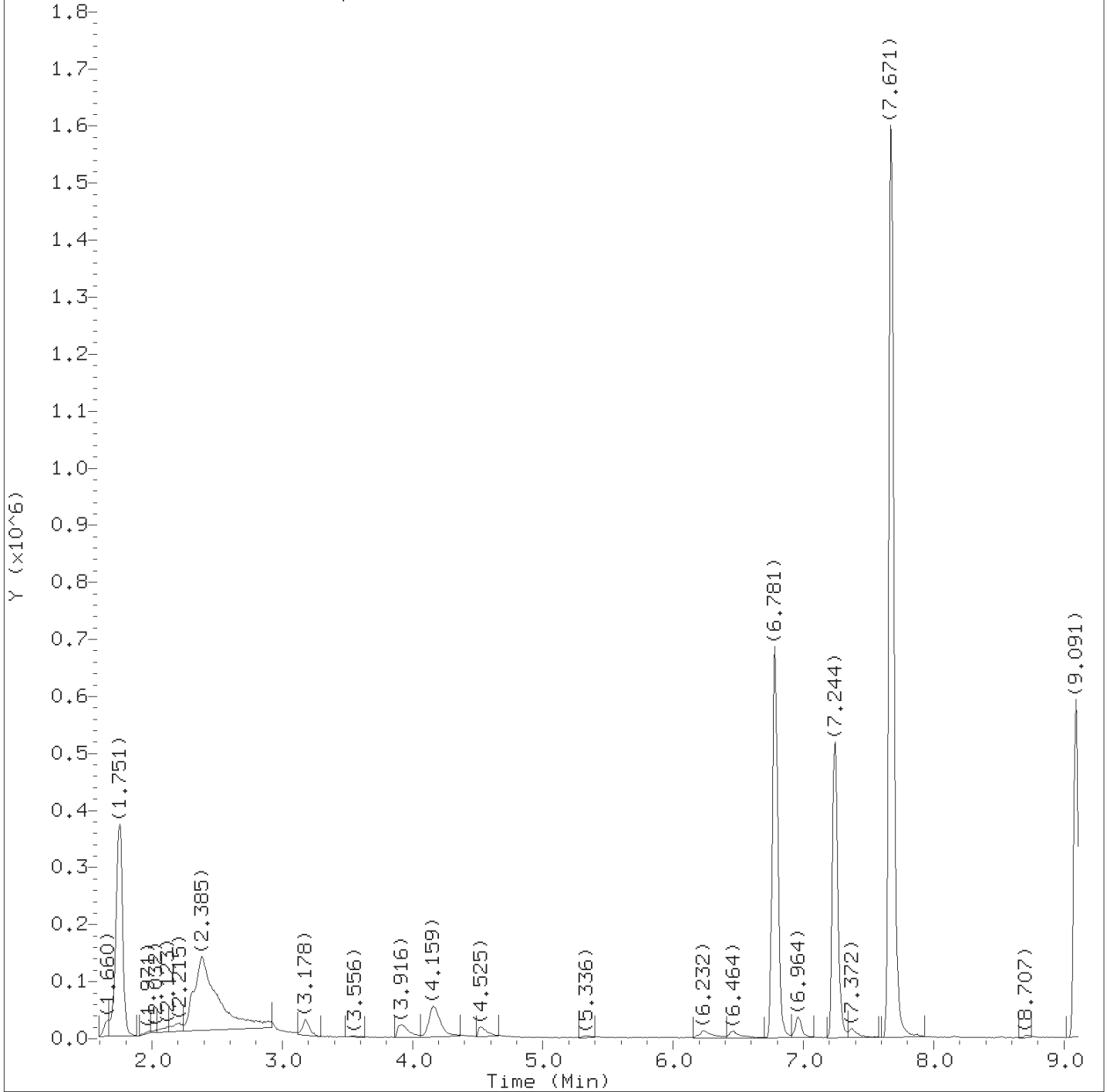


Data File: /chem2/HP19930.i/18sep11b.b/is11i55.d      Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 20:45      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m      Sublist used: SMICAL  
 Calibration date and time: 07-NOV-2018 08:25  
 Date, time and analyst ID of latest file update: 07-Nov-2018 08:25 kas02648

Sample Name: VSTD001      Lab Sample ID: VSTD001

Compound Number : 112  
 Compound Name : Cyclohexanone  
 Scan Number : 1721  
 Retention Time (minutes): 12.079  
 Quant Ion : 55.00  
 Area : 47203  
 On-column Amount (ng) : 32.2085  
 Integration start scan : 1714      Integration stop scan: 1762  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i56.d  
Injection date and time: 11-SEP-2018 21:06

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

Sublist used: SMICAL-1

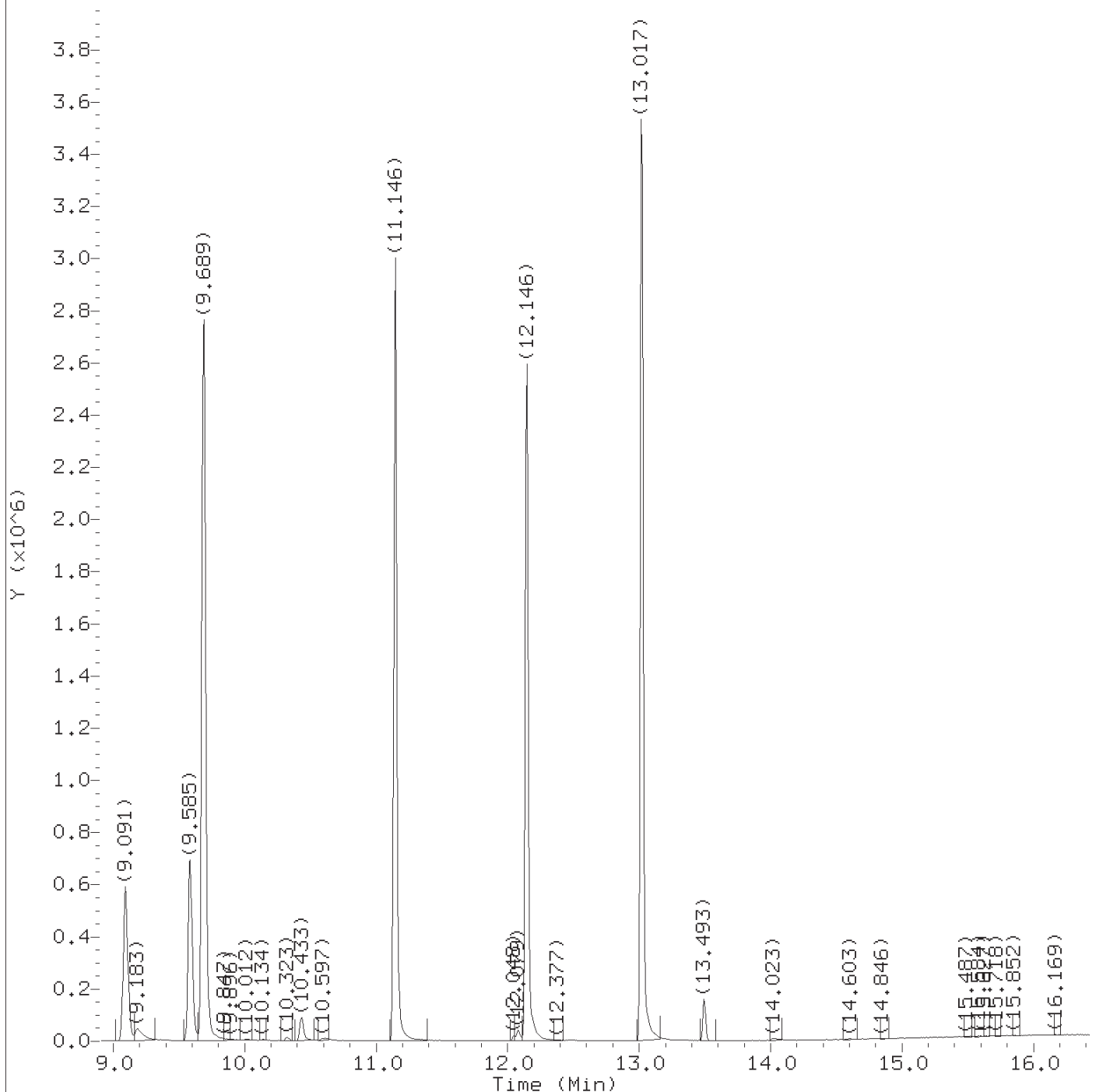
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.5

Lab Sample ID: VSTD0.5

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i56.d  
Injection date and time: 11-SEP-2018 21:06

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.5

Lab Sample ID: VSTD0.5

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i56.d  
 Injection date and time: 11-SEP-2018 21:06

Instrument ID: HP19930.i  
 Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
 Calibration date and time: 21-NOV-2018 15:10  
 Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.5

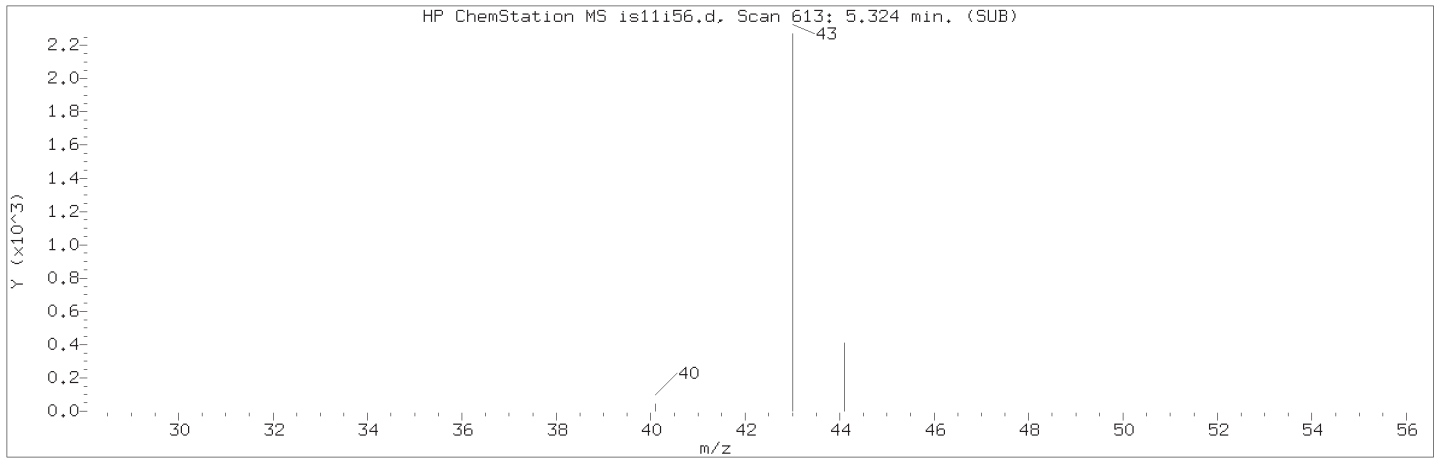
Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.903	41	75813	17.676
26) *t-Butyl Alcohol-d10	(1)	4.172	65	157002	50.000
36) Vinyl Acetate	(2)	5.324	43	16336M	0.637
43) Methyl Acrylate	(2)	6.244	55	38704	2.928
53) 1-Chlorobutane	(2)	6.958	56	39423	0.503
63) *Fluorobenzene	(2)	7.671	96	2131245	10.000
77) Chloroacetonitrile	(2)	9.183	75	55521M	23.746
78) 2-Chloroethyl vinyl ether	(2)	9.232	63	4194	0.599
97) *Chlorobenzene-d5	(3)	11.146	117	1751953	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.048	88	5956	1.375
112) Cyclohexanone	(1)	12.079	55	16059M	32.641
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	929428	10.000
142) Hexachloroethane	(4)	13.493	117	24461	0.467

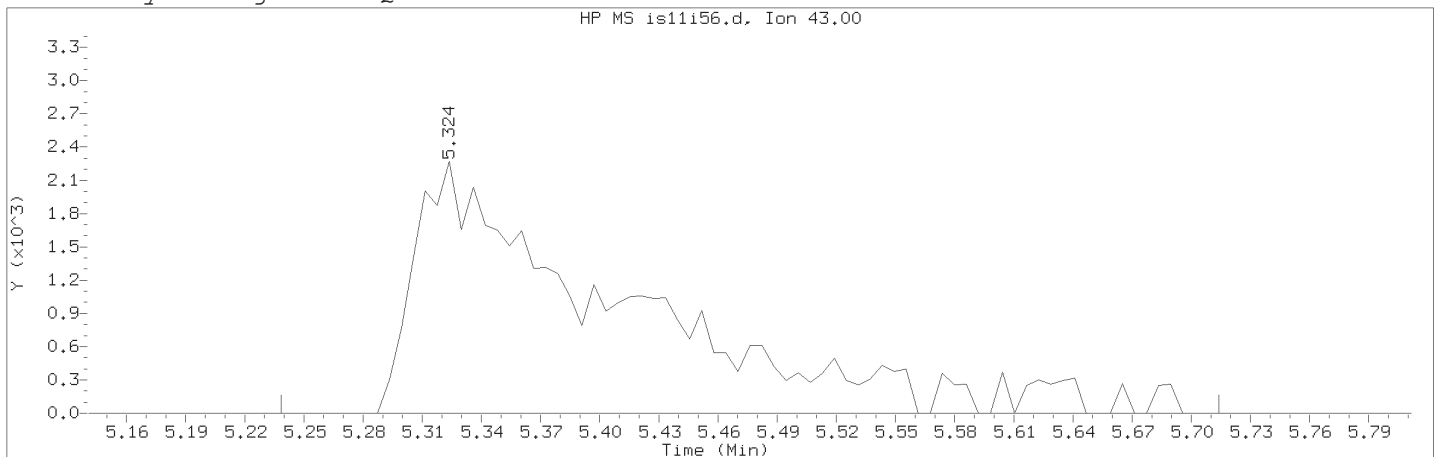
M = Compound was manually integrated.

\* = Compound is an internal standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11156.d                      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 21:06                      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m                      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

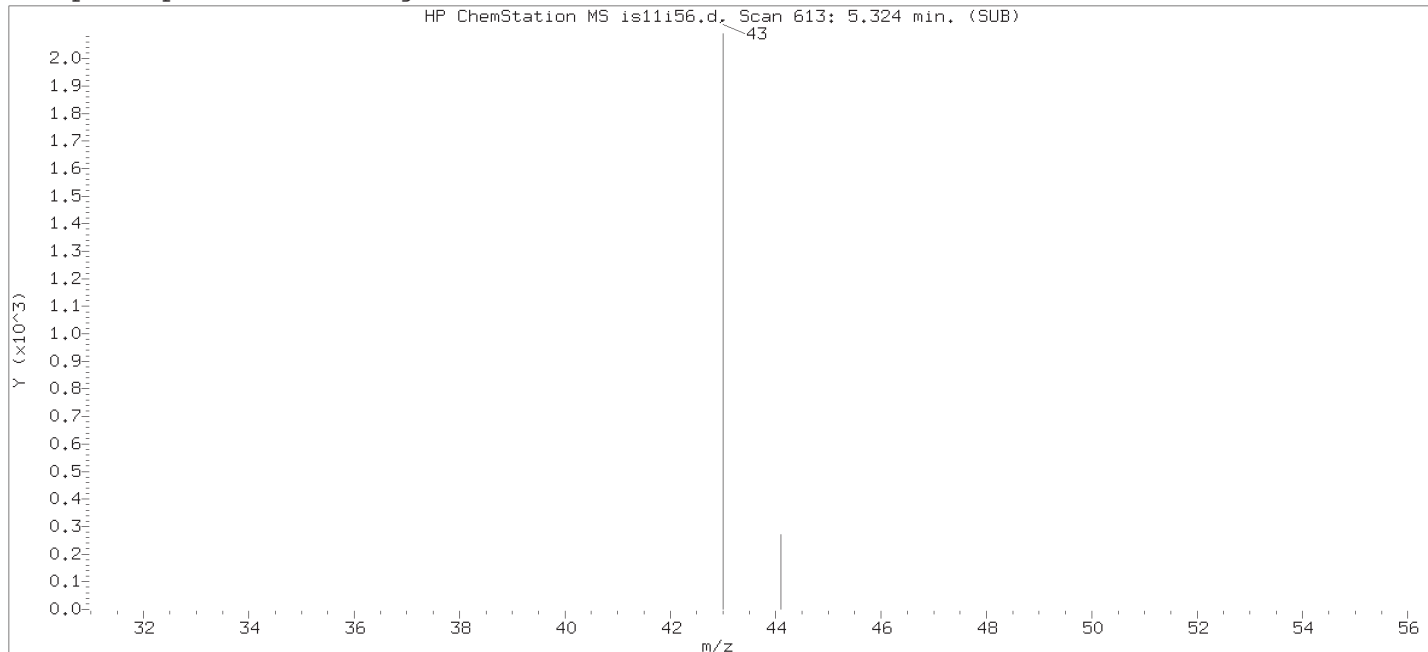
Compound Number                      : 36  
Compound Name                         : Vinyl Acetate  
Scan Number                            : 613  
Retention Time (minutes): 5.324  
Quant Ion                                : 43.00  
Area (flag)                             : 16336M  
On-Column Amount (ng)                : 0.6366  
Integration start scan                : 598                      Integration stop scan: 676  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

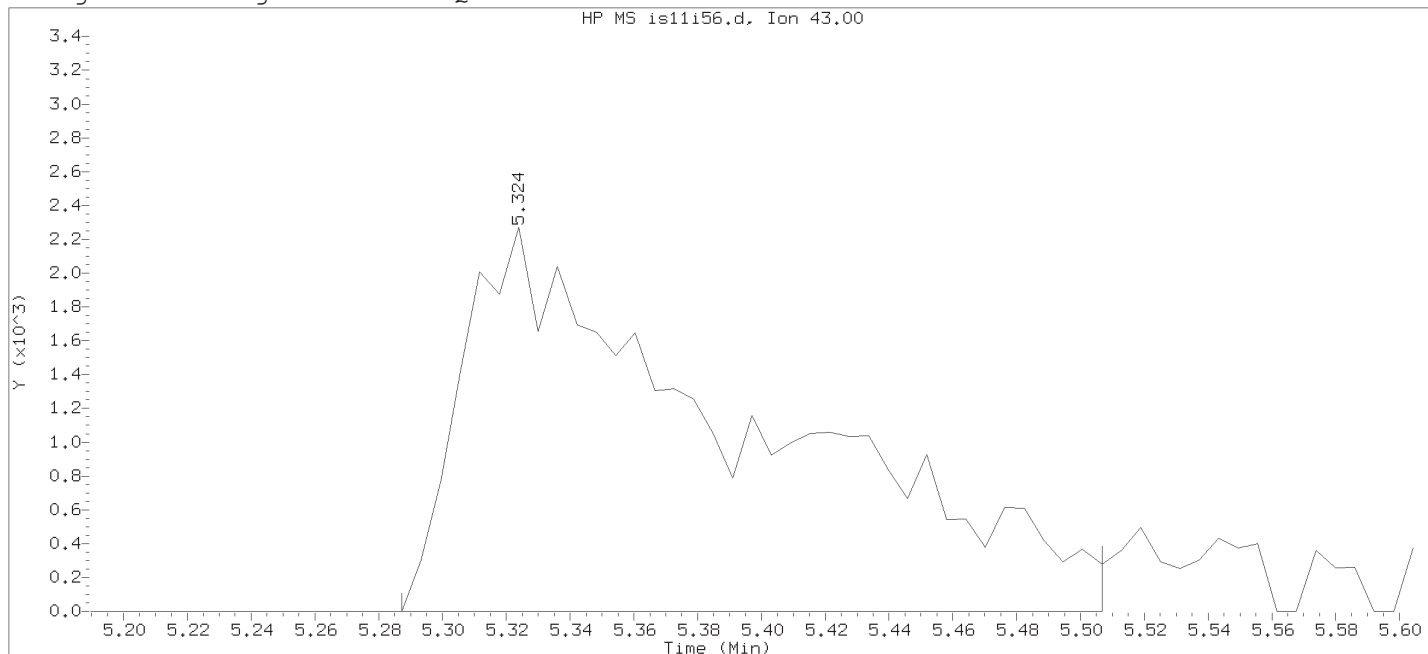
Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i56.d      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 21:06      Analyst ID: DVV10203

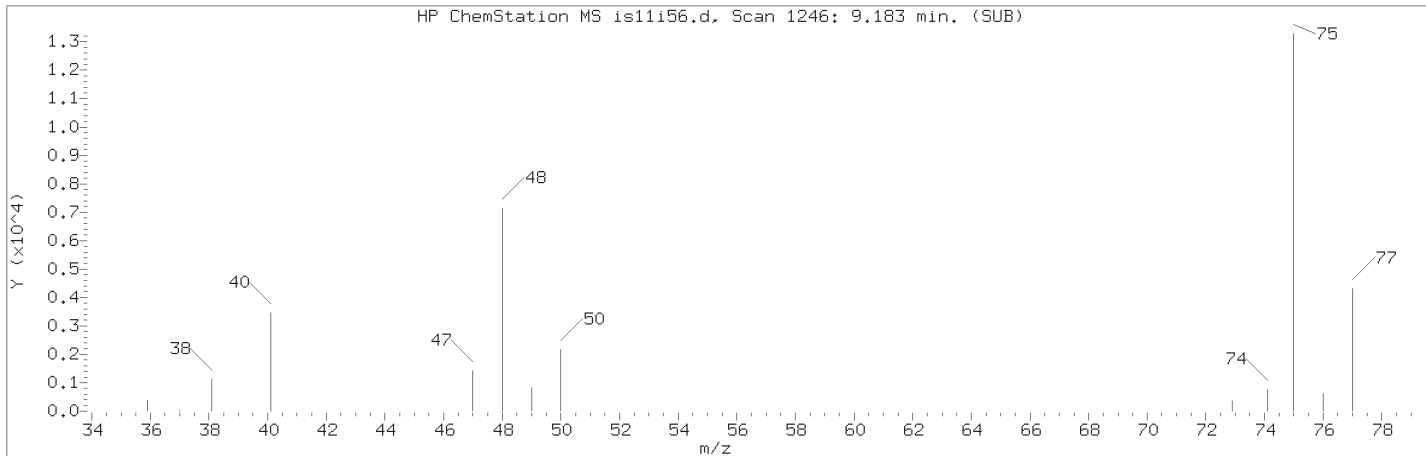
Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m      Sublist used: SMICAL  
Calibration date and time: 07-NOV-2018 08:25  
Date, time and analyst ID of latest file update: 07-Nov-2018 08:26 kas02648

Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

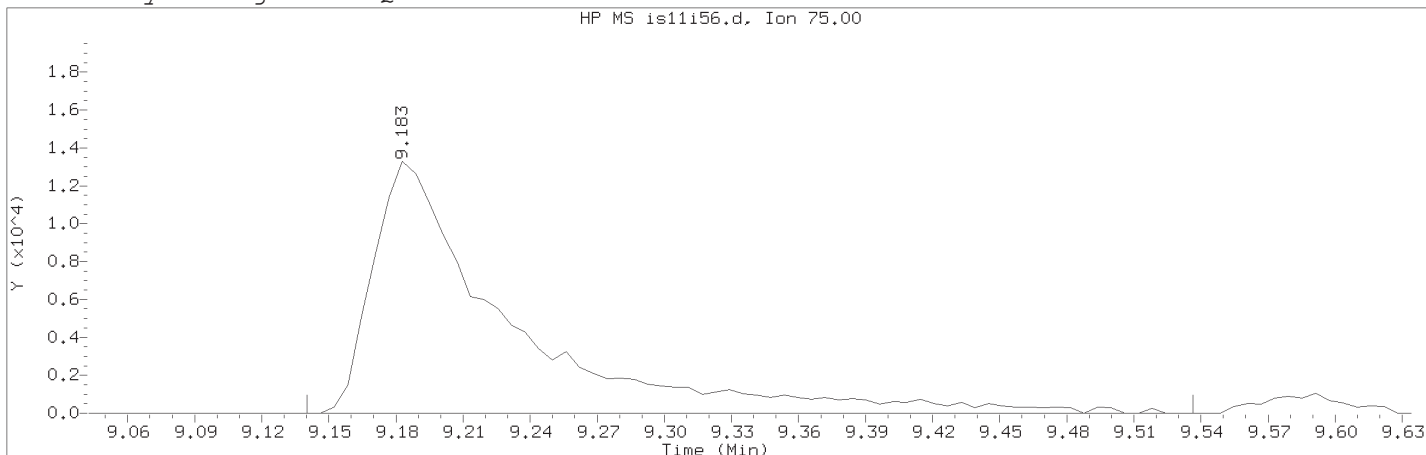
Compound Number : 36  
Compound Name : Vinyl Acetate  
Scan Number : 613  
Retention Time (minutes): 5.324  
Quant Ion : 43.00  
Area : 13958  
On-column Amount (ng) : 0.2612  
Integration start scan : 606      Integration stop scan: 642  
Y at integration start : 0      Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i56.d                      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 21:06                      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m                      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.5                      Lab Sample ID: VSTD0.5

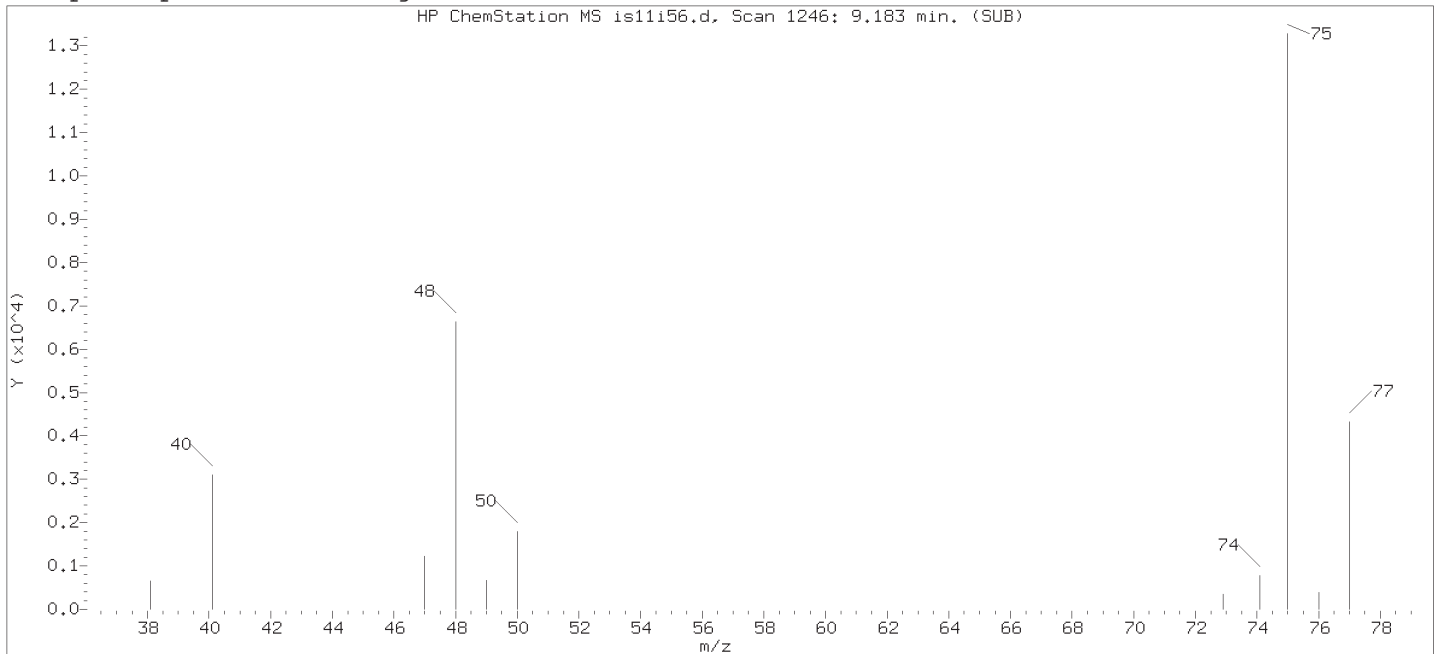
Compound Number                      : 77  
Compound Name                        : Chloroacetonitrile  
Scan Number                            : 1246  
Retention Time (minutes): 9.183  
Quant Ion                                : 75.00  
Area (flag)                             : 55521M  
On-Column Amount (ng)                : 23.7464  
Integration start scan                 : 1238                      Integration stop scan: 1303  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

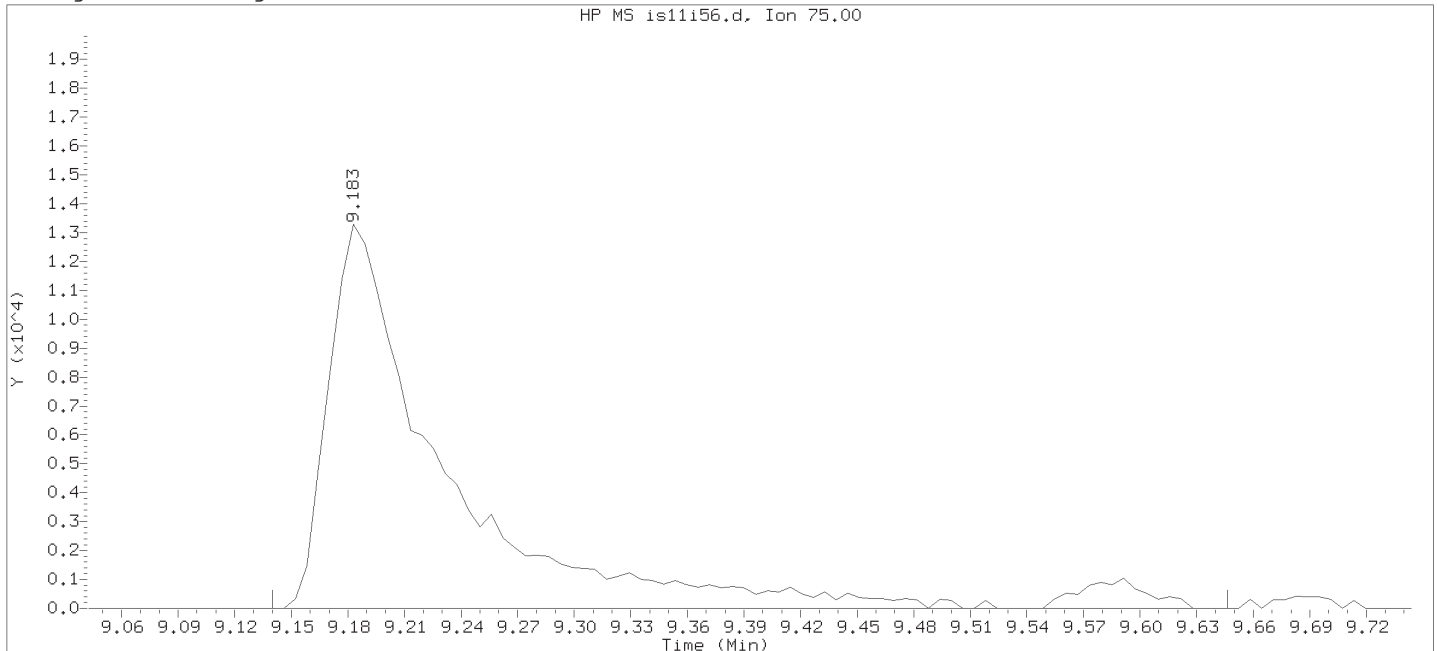
Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i56.d  
 Injection date and time: 11-SEP-2018 21:06

Instrument ID: HP19930.i  
 Analyst ID: DVV10203

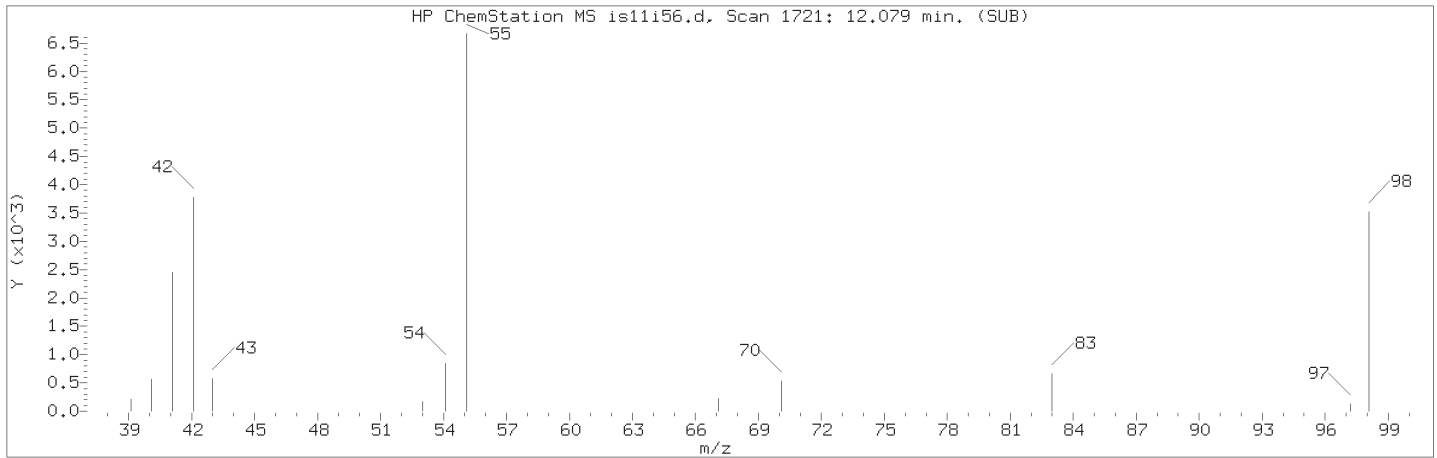
Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL  
 Calibration date and time: 07-NOV-2018 08:25  
 Date, time and analyst ID of latest file update: 07-Nov-2018 08:26 kas02648

Sample Name: VSTD0.5

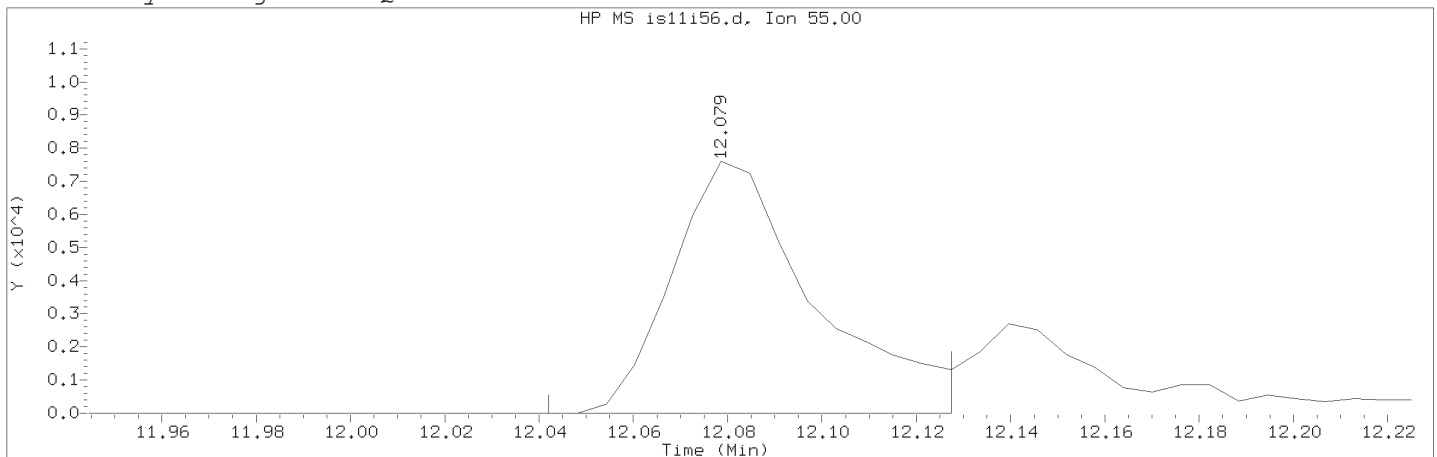
Lab Sample ID: VSTD0.5

Compound Number	: 77	
Compound Name	: Chloroacetonitrile	
Scan Number	: 1246	
Retention Time (minutes)	: 9.183	
Quant Ion	: 75.00	
Area	: 58127	
On-column Amount (ng)	: 24.1491	
Integration start scan	: 1238	Integration stop scan: 1321
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11156.d                      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 21:06                      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m                      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.5    Lab Sample ID: VSTD0.5

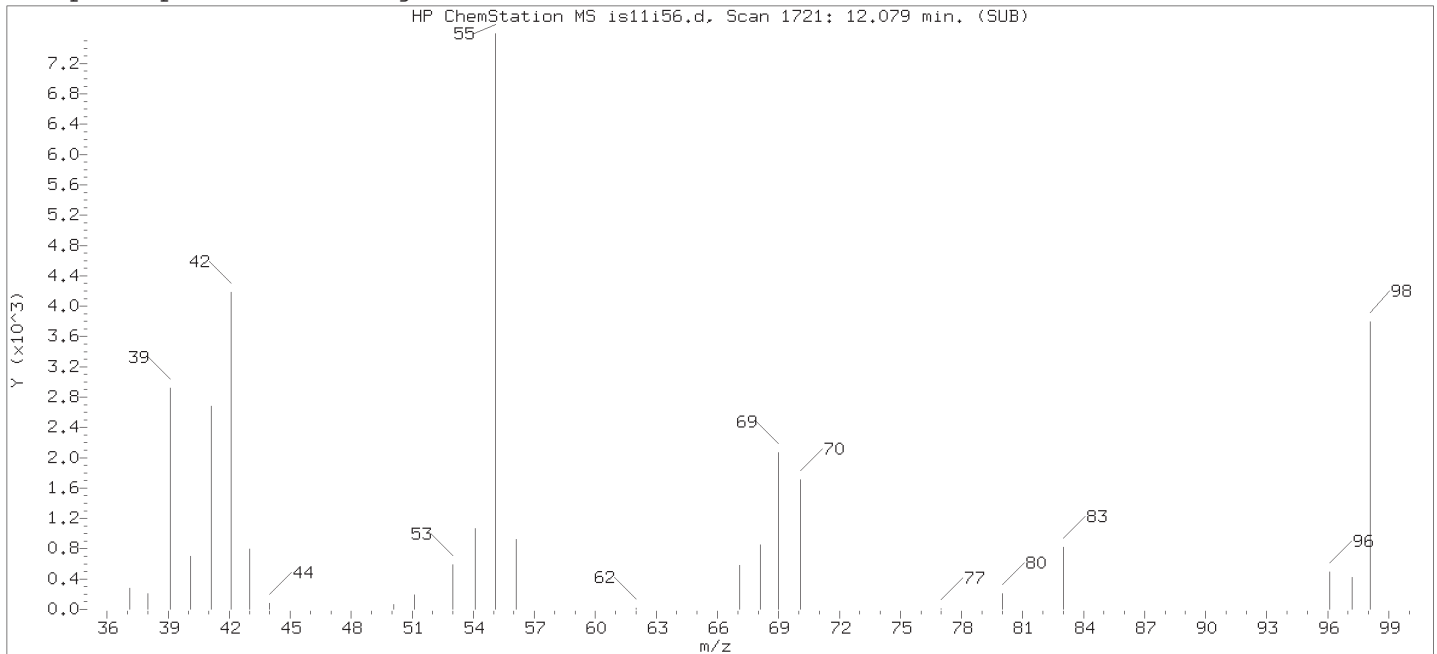
Compound Number                      : 112  
Compound Name                         : Cyclohexanone  
Scan Number                            : 1721  
Retention Time (minutes): 12.079  
Quant Ion                                : 55.00  
Area (flag)                             : 16059M  
On-Column Amount (ng)                : 32.6412  
Integration start scan                 : 1714                      Integration stop scan: 1728  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

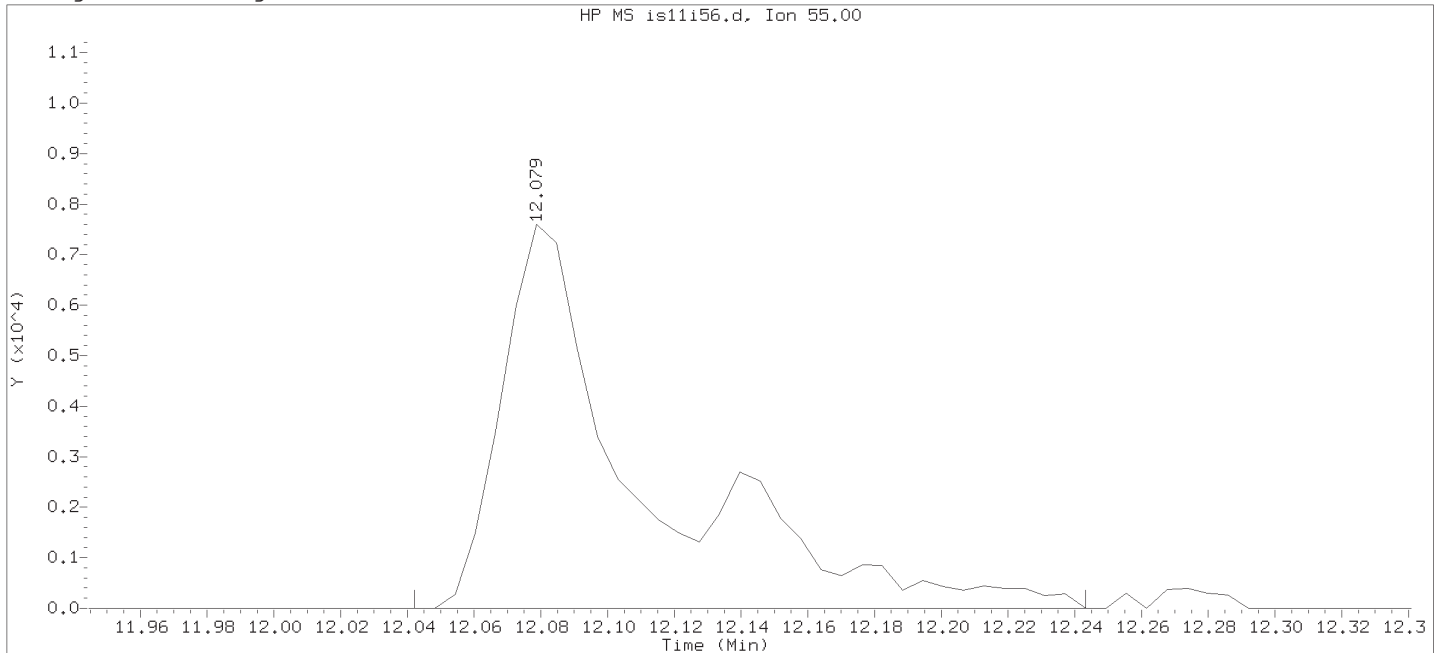
Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

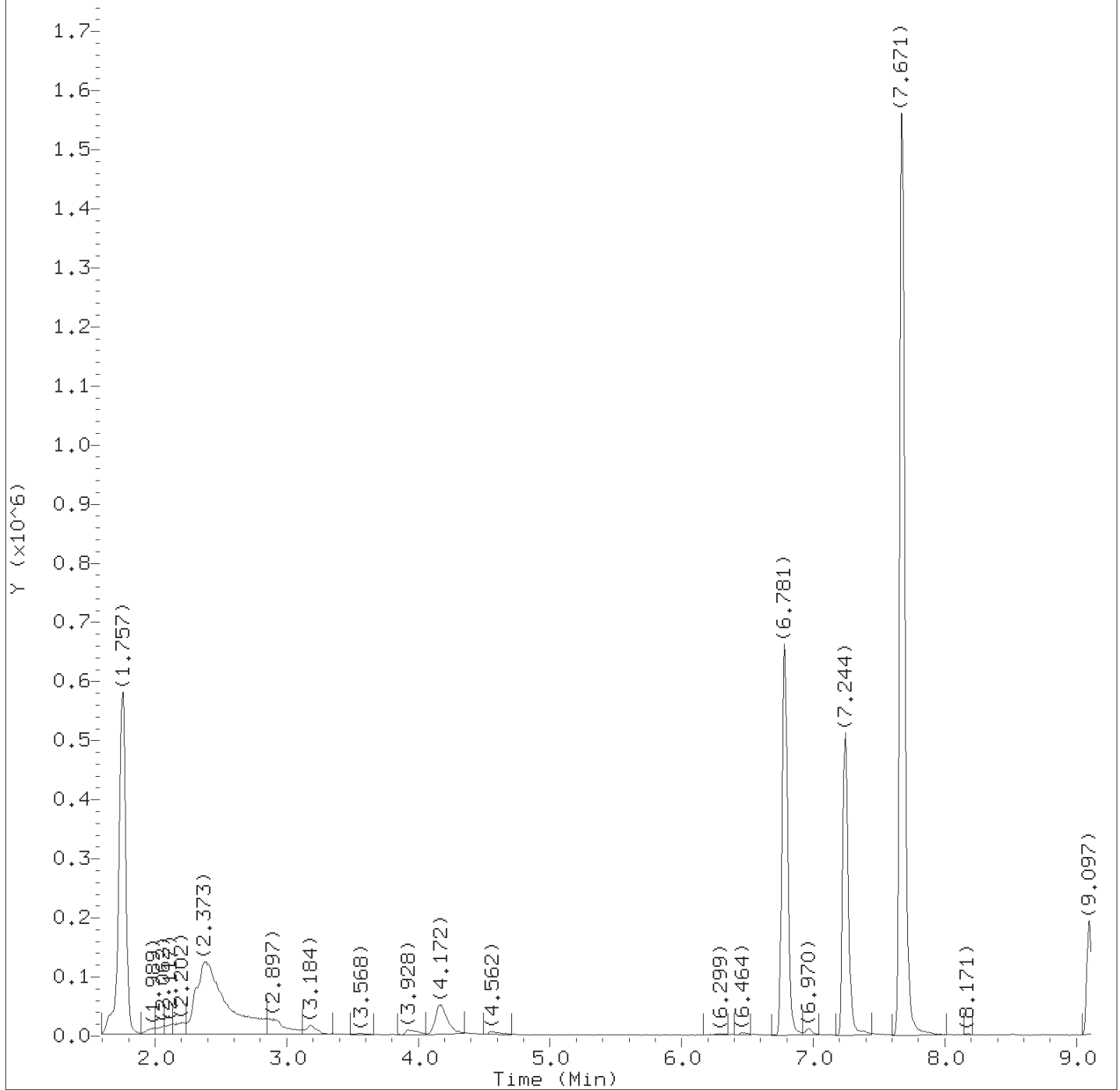


Data File: /chem2/HP19930.i/18sep11b.b/is11i56.d      Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 21:06      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m      Sublist used: SMICAL  
 Calibration date and time: 07-NOV-2018 08:25  
 Date, time and analyst ID of latest file update: 07-Nov-2018 08:26 kas02648

Sample Name: VSTD0.5      Lab Sample ID: VSTD0.5

Compound Number : 112  
 Compound Name : Cyclohexanone  
 Scan Number : 1721  
 Retention Time (minutes): 12.079  
 Quant Ion : 55.00  
 Area : 22205  
 On-column Amount (ng) : 15.7593  
 Integration start scan : 1714      Integration stop scan: 1747  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i57.d  
Injection date and time: 11-SEP-2018 21:27

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

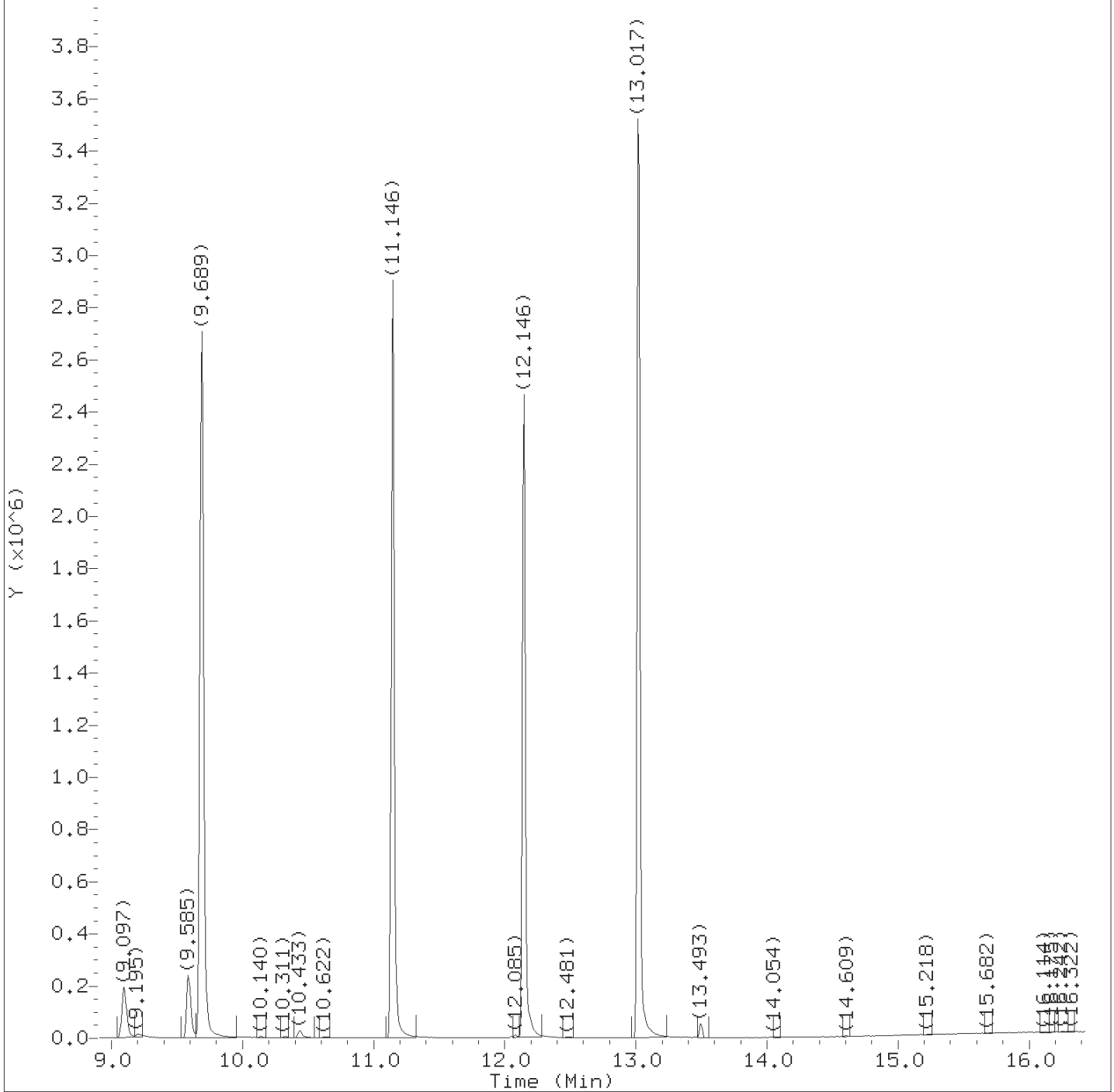
Sublist used: SMICAL-1  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.2

Lab Sample ID: VSTD0.2

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i57.d  
Injection date and time: 11-SEP-2018 21:27

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 21-NOV-2018 15:10

Sublist used: SMICAL-1  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.2

Lab Sample ID: VSTD0.2

Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.

Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11i57.d  
 Injection date and time: 11-SEP-2018 21:27

Instrument ID: HP19930.i  
 Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMICAL-1  
 Calibration date and time: 21-NOV-2018 15:10  
 Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.2

Lab Sample ID: VSTD0.2

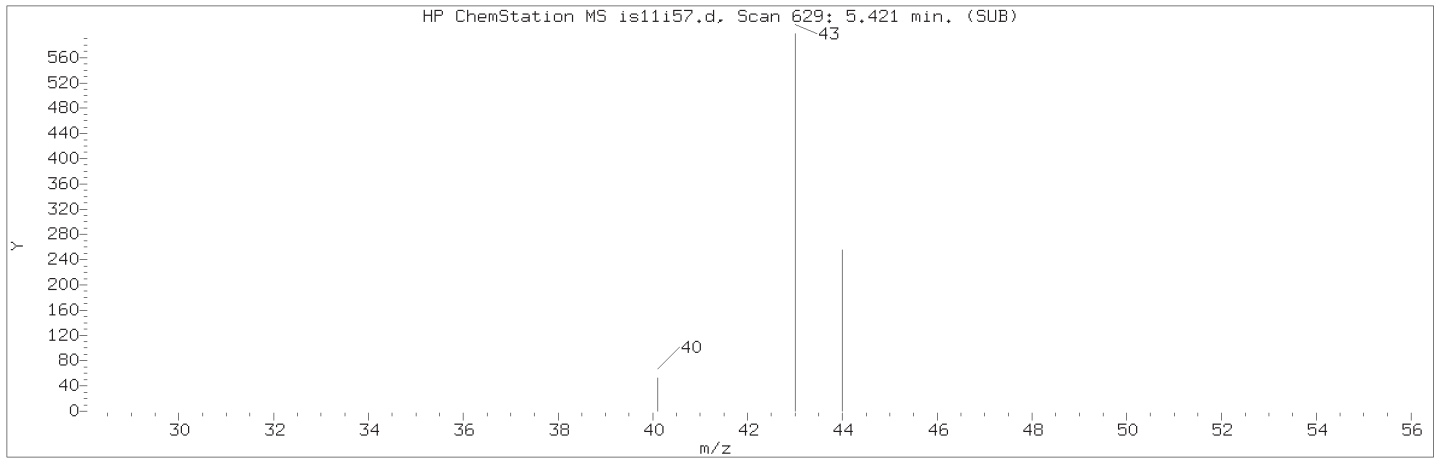
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.922	41	34554	8.107
26) *t-Butyl Alcohol-d10	(1)	4.178	65	156015	50.000
36) Vinyl Acetate	(2)	5.421	43	3755M	0.445
43) Methyl Acrylate	(2)	6.293	55	11347	2.150
53) 1-Chlorobutane	(2)	6.970	56	11108	0.258
63) *Fluorobenzene	(2)	7.677	96	2088157	10.000
77) Chloroacetonitrile	(2)	9.213	75	19877	8.677
78) 2-Chloroethyl vinyl ether	(2)	9.232	63	485	0.402
97) *Chlorobenzene-d5	(3)	11.146	117	1713096	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.048	88	1703	1.053
112) Cyclohexanone	(1)	12.085	55	4332A	26.734
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	930765	10.000
142) Hexachloroethane	(4)	13.499	117	8618	0.164

M = Compound was manually integrated.

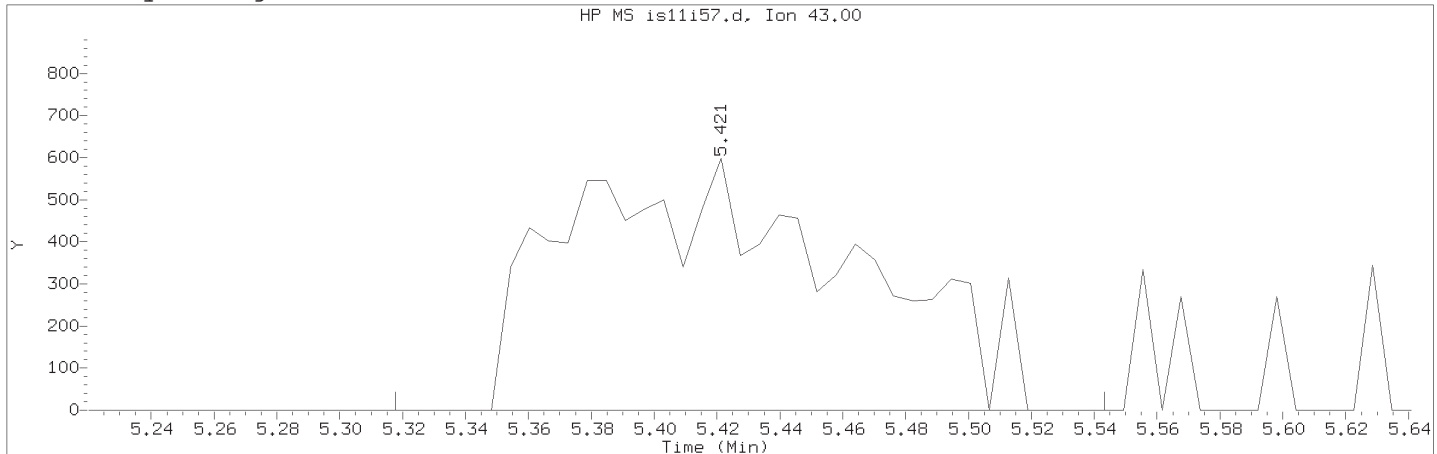
A = User selected an alternate hit.

\* = Compound is an internal standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11157.d                      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 21:27                      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m                      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.2    Lab Sample ID: VSTD0.2

Compound Number                      : 36  
Compound Name                         : Vinyl Acetate  
Scan Number                            : 629  
Retention Time (minutes): 5.421  
Quant Ion                                : 43.00  
Area (flag)                             : 3755M  
On-Column Amount (ng)                : 0.4445  
Integration start scan                : 611                      Integration stop scan: 648  
Y at integration start                : 0                        Y at integration end: 0

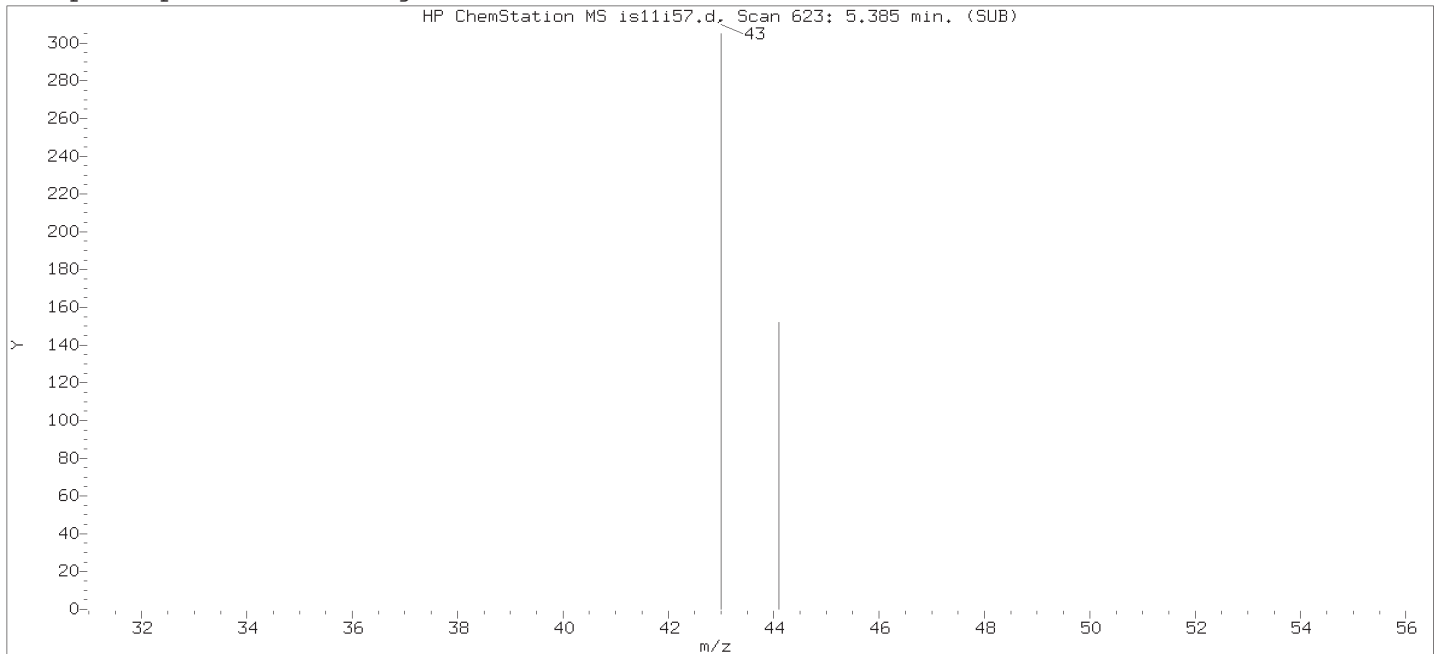
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

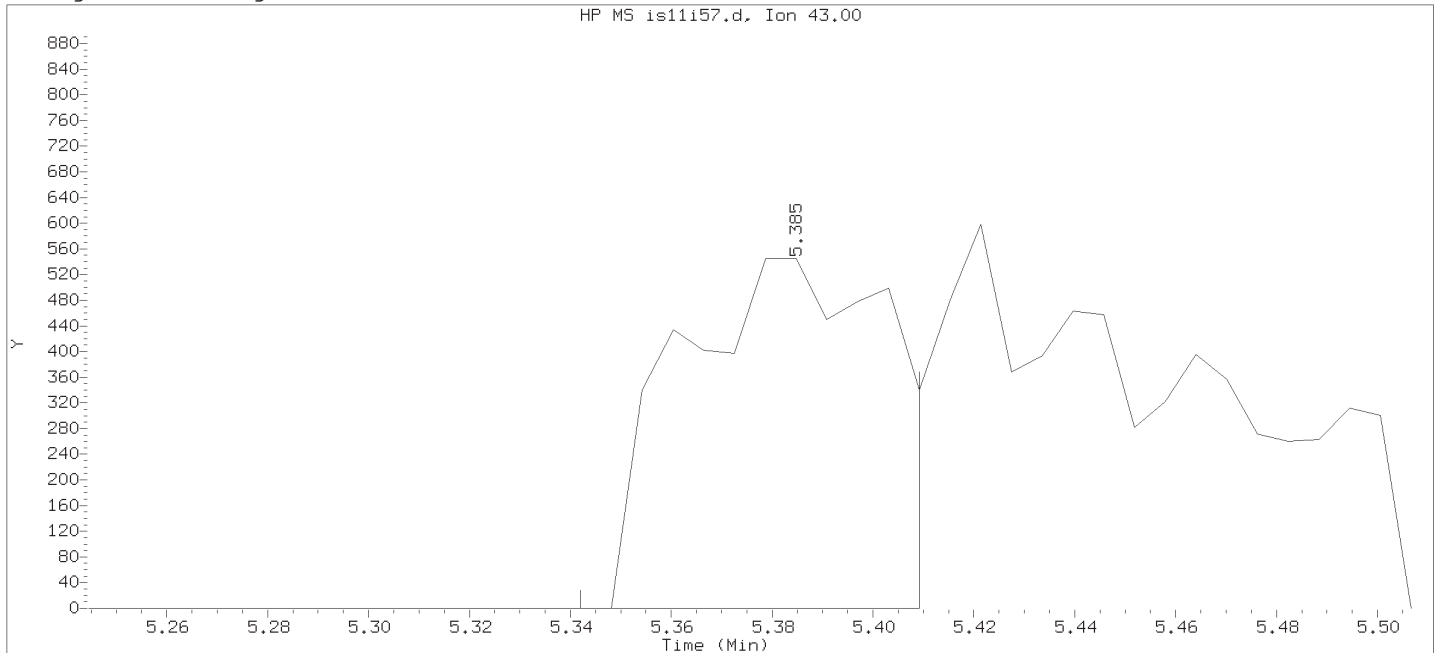
Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i57.d  
 Injection date and time: 11-SEP-2018 21:27

Instrument ID: HP19930.i  
 Analyst ID: DVV10203

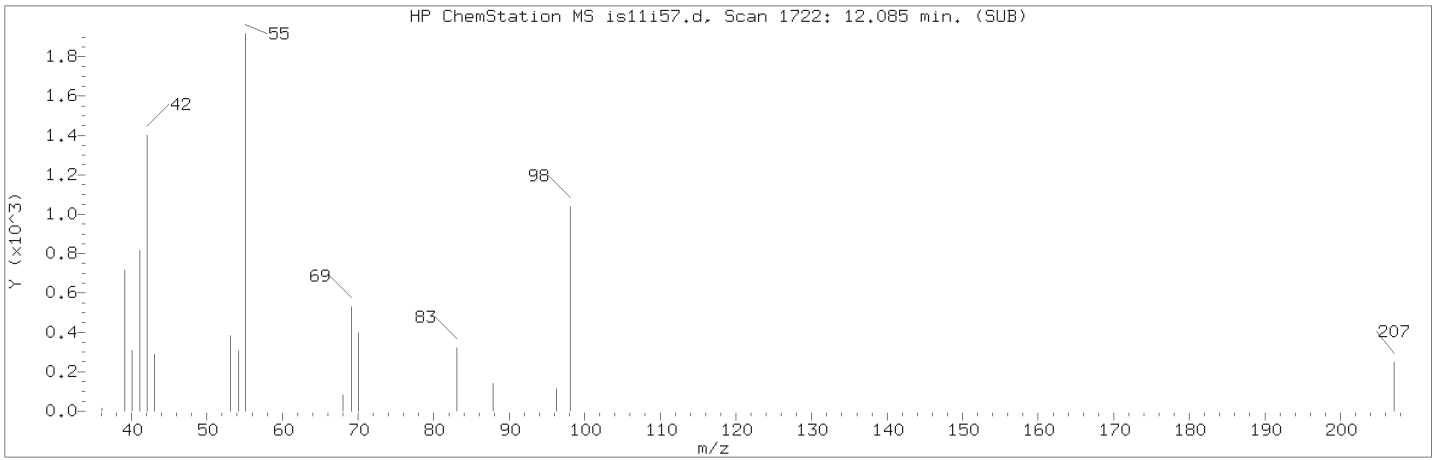
Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m      Sublist used: SMICAL  
 Calibration date and time: 07-NOV-2018 08:26  
 Date, time and analyst ID of latest file update: 07-Nov-2018 08:26 kas02648

Sample Name: VSTD0.2

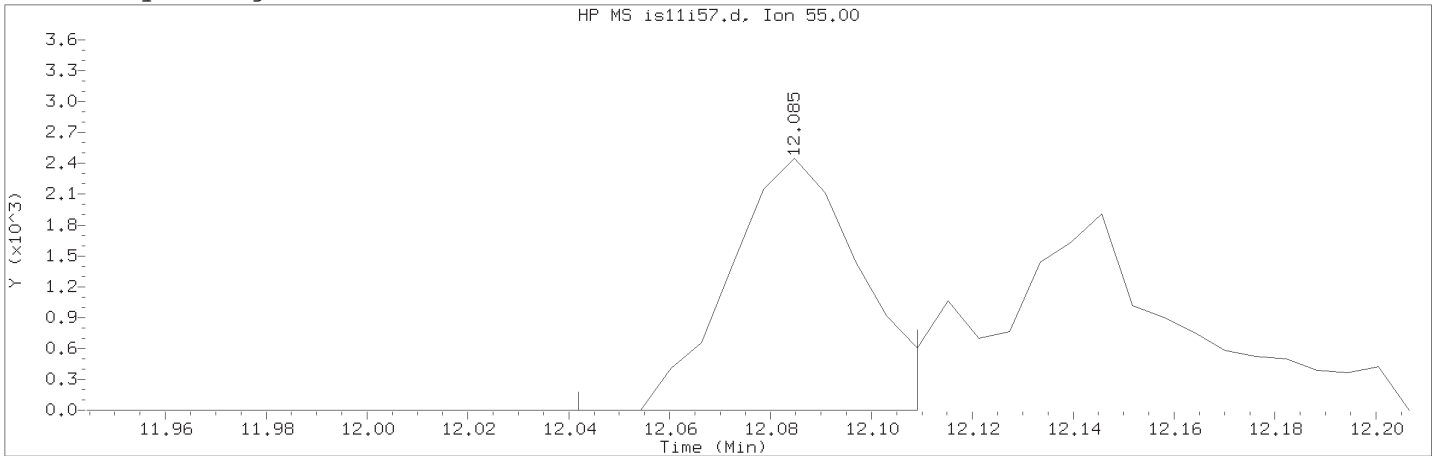
Lab Sample ID: VSTD0.2

Compound Number : 36  
 Compound Name : Vinyl Acetate  
 Scan Number : 623  
 Retention Time (minutes): 5.385  
 Quant Ion : 43.00  
 Area : 1558  
 On-column Amount (ng) : 0.0339  
 Integration start scan : 615      Integration stop scan: 626  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18sep11b.b/is11i57.d                      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 21:27                      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m                      Sublist used: SMICAL-1  
Calibration date and time: 21-NOV-2018 15:10  
Date, time and analyst ID of latest file update: 21-Nov-2018 15:10 ads01731

Sample Name: VSTD0.2    Lab Sample ID: VSTD0.2

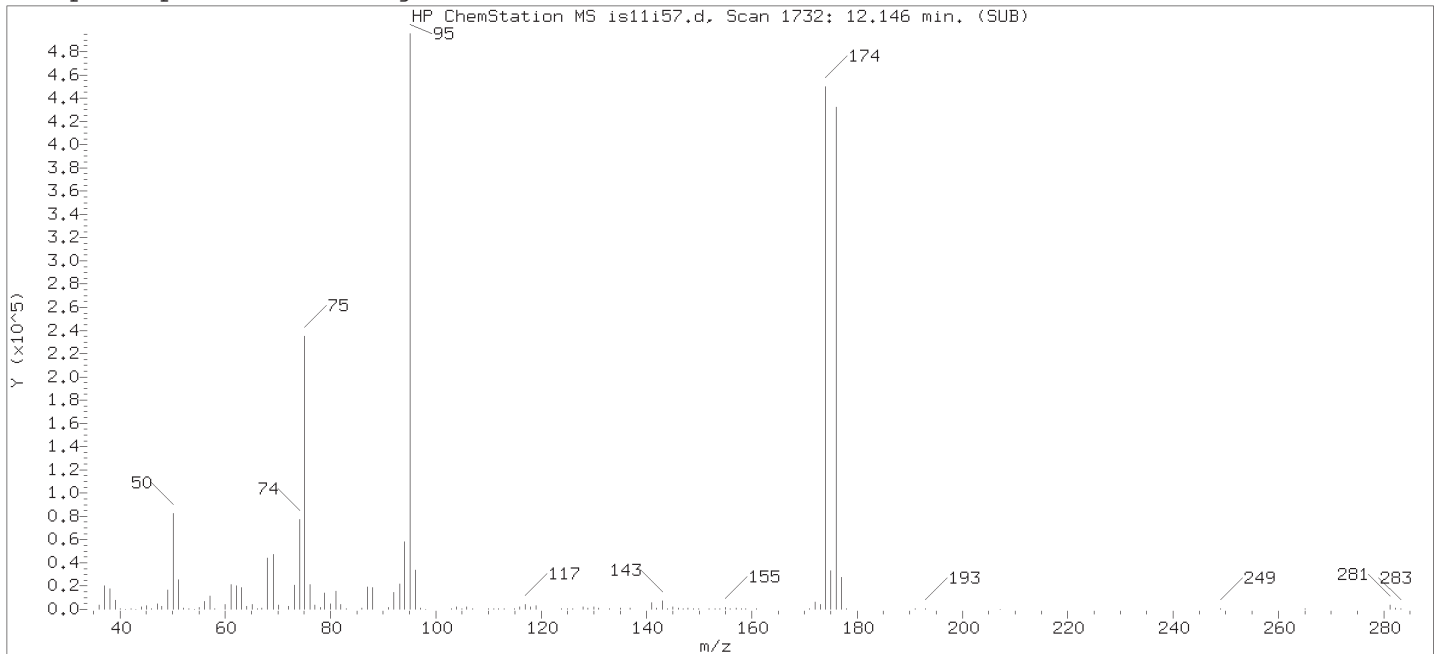
Compound Number                      : 112  
Compound Name                         : Cyclohexanone  
Scan Number                            : 1722  
Retention Time (minutes): 12.085  
Quant Ion                                : 55.00  
Area (flag)                             : 4332A  
On-Column Amount (ng)                : 26.7345  
Integration start scan                : 1714                      Integration stop scan: 1725  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

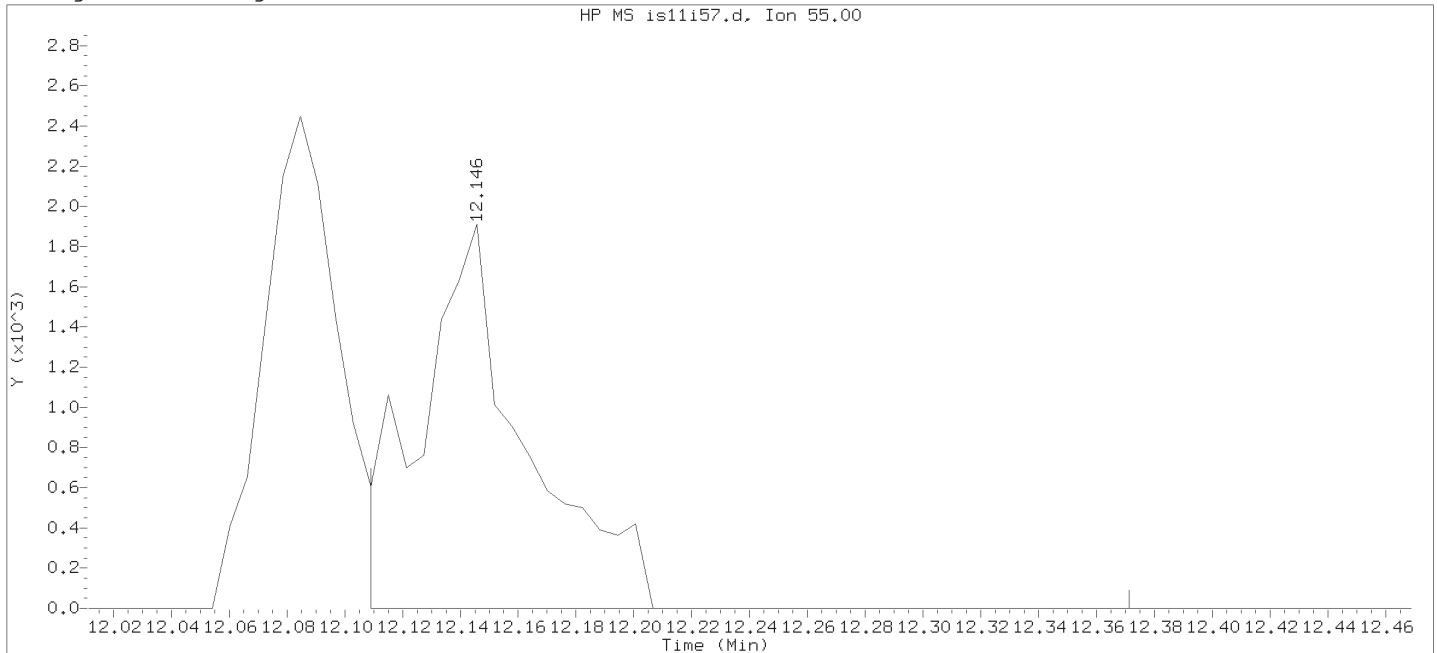
Analyst responsible for change: Digitally signed by Angela D. Sneeringer  
on 11/21/2018 at 15:10.  
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/25/2018 at 09:59.  
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

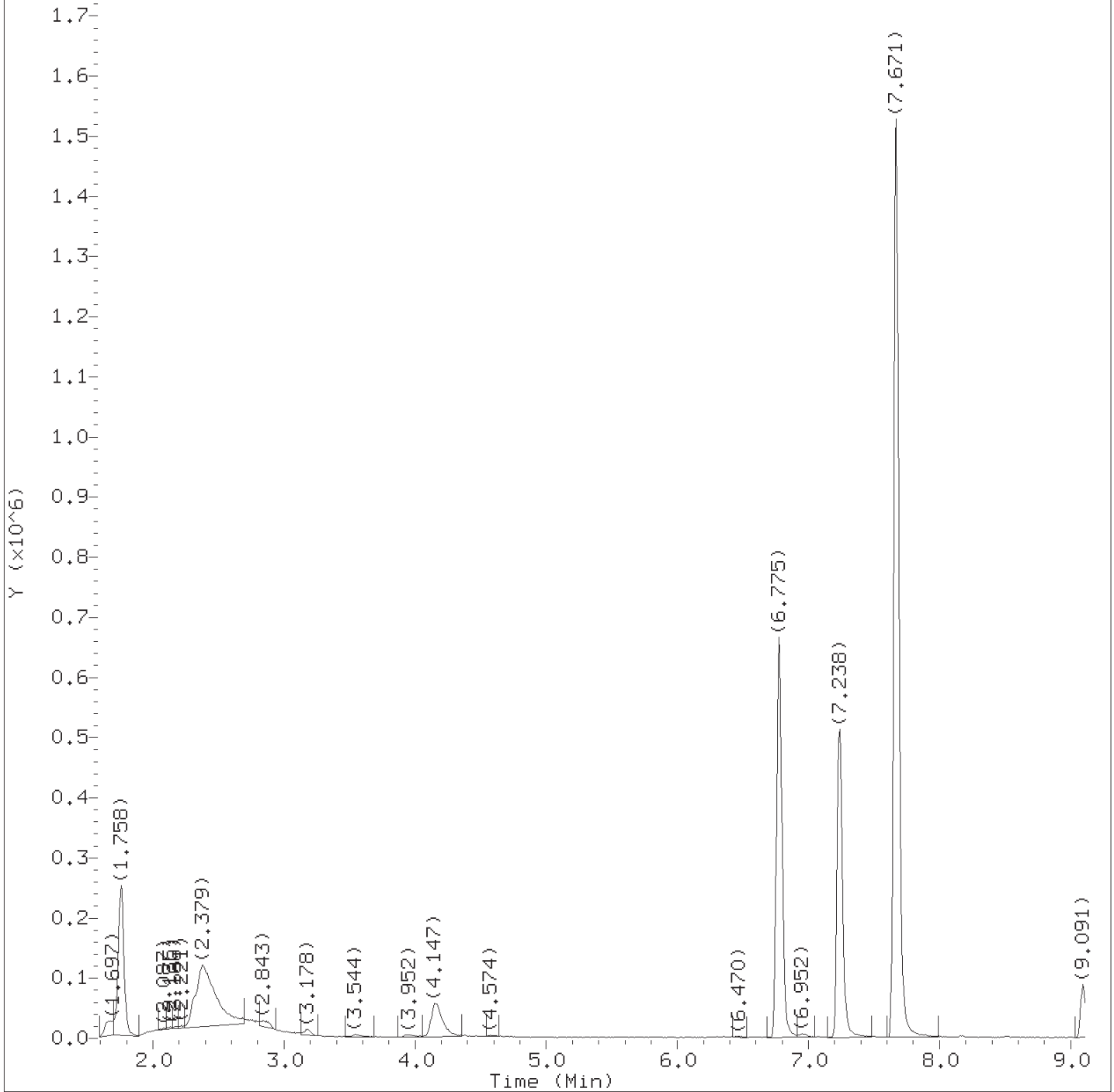


Data File: /chem2/HP19930.i/18sep11b.b/is11i57.d      Instrument ID: HP19930.i  
Injection date and time: 11-SEP-2018 21:27      Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m      Sublist used: SMICAL  
Calibration date and time: 07-NOV-2018 08:26  
Date, time and analyst ID of latest file update: 07-Nov-2018 08:26 kas02648

Sample Name: VSTD0.2      Lab Sample ID: VSTD0.2

Compound Number : 112  
Compound Name : Cyclohexanone  
Scan Number : 1732  
Retention Time (minutes): 12.146  
Quant Ion : 55.00  
Area : 4849  
On-column Amount (ng) : 3.8204  
Integration start scan : 1725      Integration stop scan: 1768  
Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11m51.d  
Injection date and time: 12-SEP-2018 00:18

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 07-NOV-2018 10:11

Sublist used: SMQC-1

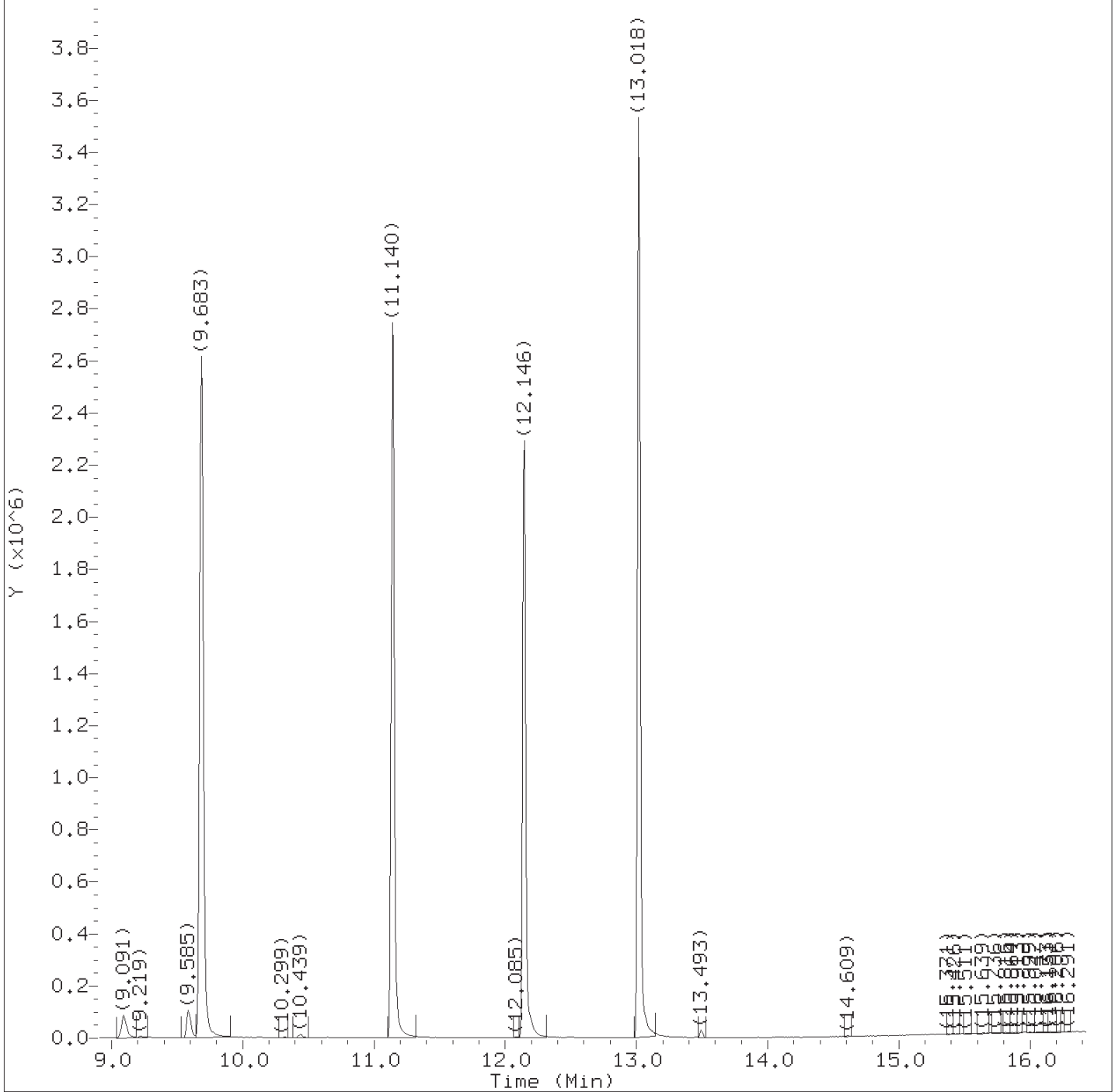
Date, time and analyst ID of latest file update: 07-Nov-2018 12:21 ads01731

Sample Name: MDL0.1

Lab Sample ID: MDL0.1

Digitally signed by Angela D. Sneeringer  
on 11/07/2018 at 12:49.

Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11m51.d  
Injection date and time: 12-SEP-2018 00:18

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 07-NOV-2018 10:11

Sublist used: SMQC-1

Date, time and analyst ID of latest file update: 07-Nov-2018 12:21 ads01731

Sample Name: MDL0.1

Lab Sample ID: MDL0.1

Digitally signed by Angela D. Sneeringer  
on 11/07/2018 at 12:49.

Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11m51.d Instrument ID: HP19930.i  
 Injection date and time: 12-SEP-2018 00:18 Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMQC-1  
 Calibration date and time: 07-NOV-2018 10:11  
 Date, time and analyst ID of latest file update: 07-Nov-2018 12:21 ads01731

Sample Name: MDL0.1

Lab Sample ID: MDL0.1

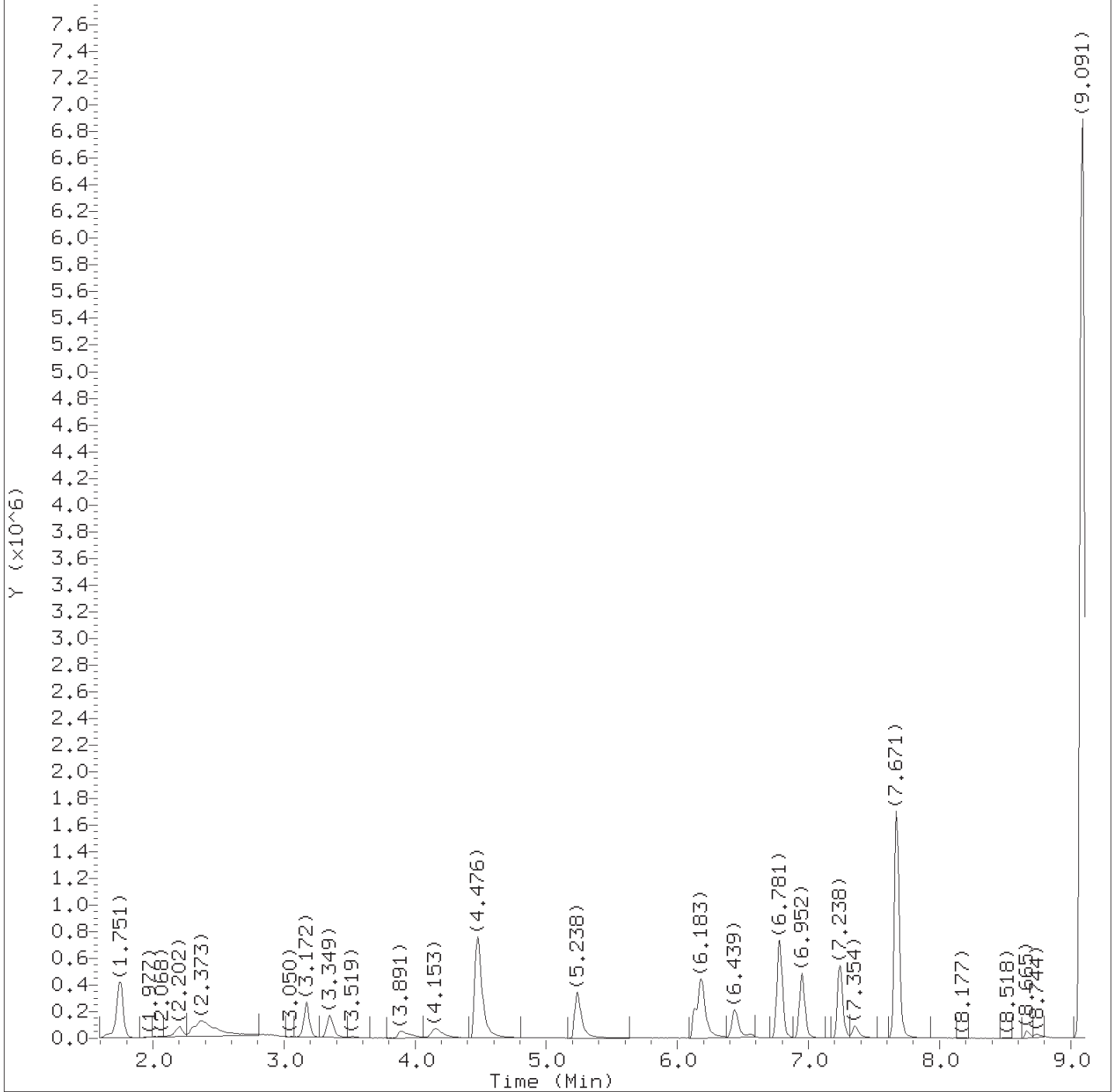
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.928	41	17898	4.243
26) *t-Butyl Alcohol-d10	(1)	4.166	65	154403	50.000
36) Vinyl Acetate	(2)	5.421	43	315	0.391
43) Methyl Acrylate	(2)	6.311	55	4075	1.939
50) \$Dibromofluoromethane	(2)	6.775	113	592946	0.000
53) 1-Chlorobutane	(2)	6.958	56	5407	0.208
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	115249	0.000
63) *Fluorobenzene	(2)	7.671	96	2047544	10.000
77) Chloroacetonitrile	(2)	9.238	75	8160	3.633
78) 2-Chloroethyl vinyl ether	(2)	9.591	63	9753	0.916
82) \$Toluene-d8	(3)	9.683	98	2070175	0.000
97) *Chlorobenzene-d5	(3)	11.140	117	1678908	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.054	88	881	0.990
112) Cyclohexanone	(1)	12.085	55	2129	25.627
111) \$4-Bromofluorobenzene	(3)	12.146	95	731421	0.000
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	913928	10.000
142) Hexachloroethane	(4)	13.493	117	4708	0.091

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

page 1 of 1

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 on 11/07/2018 at 12:49.  
 Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11v51.d  
Injection date and time: 11-SEP-2018 22:11

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 07-NOV-2018 10:11

Sublist used: SMQC-1

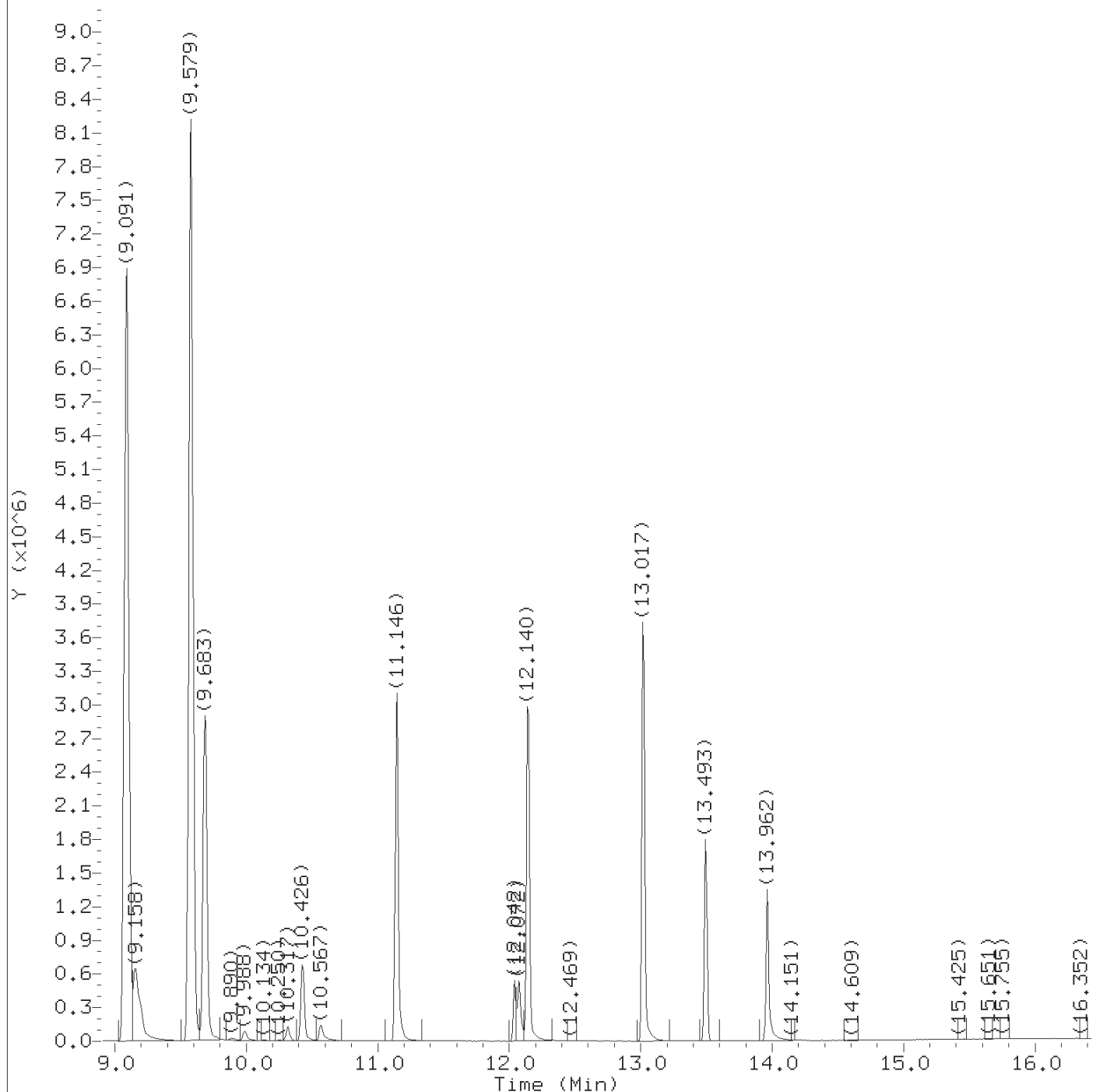
Date, time and analyst ID of latest file update: 07-Nov-2018 12:51 ads01731

Sample Name: LCSISMC

Lab Sample ID: LCSISMC

Digitally signed by Angela D. Sneeringer  
on 11/07/2018 at 12:51.

Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11v51.d  
Injection date and time: 11-SEP-2018 22:11

Instrument ID: HP19930.i  
Analyst ID: DVV10203

Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m  
Calibration date and time: 07-NOV-2018 10:11  
Date, time and analyst ID of latest file update: 07-Nov-2018 12:51 ads01731

Sublist used: SMQC-1

Sample Name: LCSISMC

Lab Sample ID: LCSISMC

Digitally signed by Angela D. Sneeringer  
on 11/07/2018 at 12:51.

Target 3.5 esignature user ID: ads01731



Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18sep11b.b/is11v51.d Instrument ID: HP19930.i  
 Injection date and time: 11-SEP-2018 22:11 Analyst ID: DVV10203

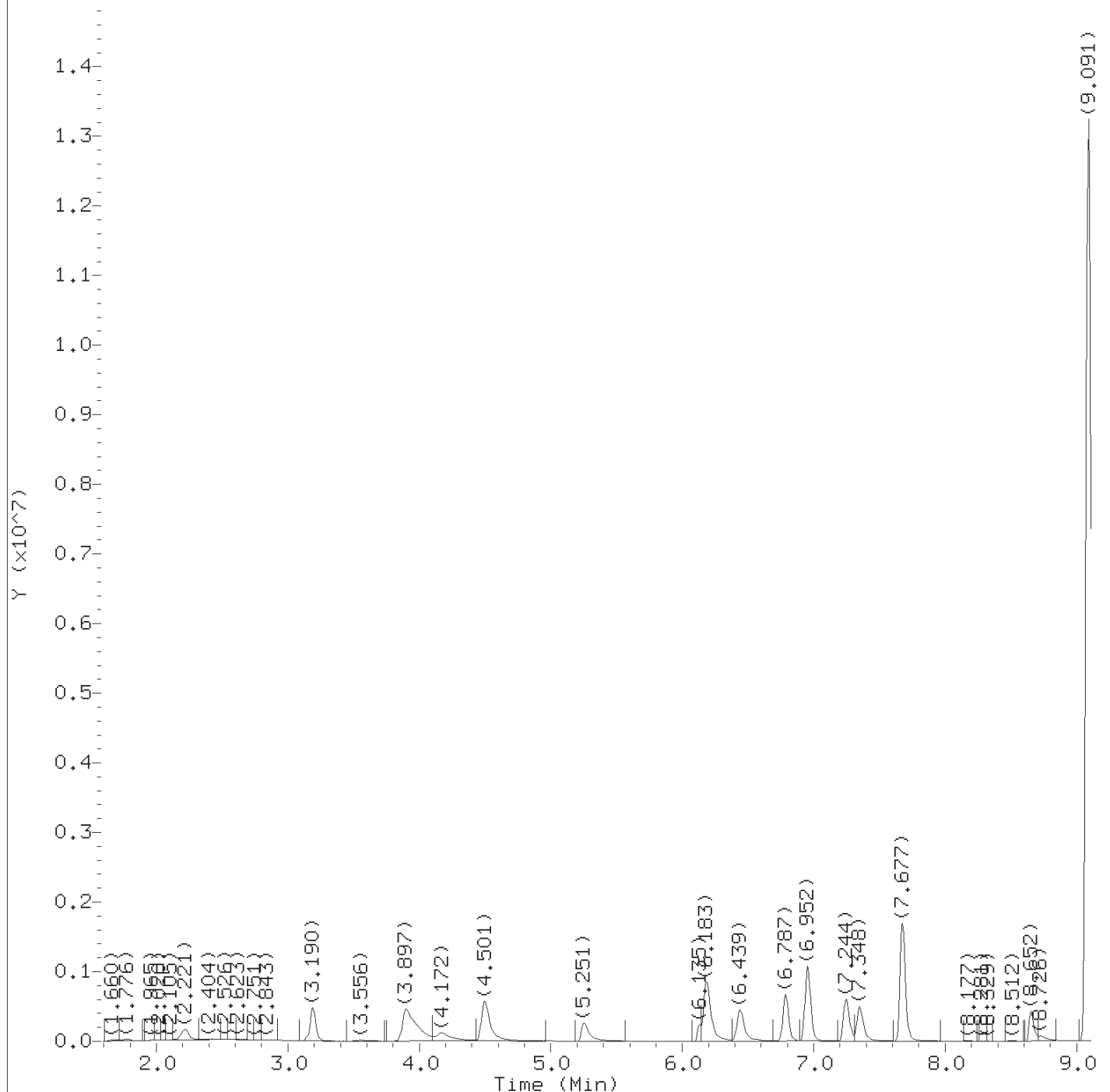
Method used: /chem2/HP19930.i/18sep11b.b/m8260c25.m Sublist used: SMQC-1  
 Calibration date and time: 07-NOV-2018 10:11  
 Date, time and analyst ID of latest file update: 07-Nov-2018 12:51 ads01731

Sample Name: LCSISMC Lab Sample ID: LCSISMC

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.891	41	182174	39.195
26) *t-Butyl Alcohol-d10	(1)	4.153	65	170133	50.000
36) Vinyl Acetate	(2)	5.238	43	954374	12.934
43) Methyl Acrylate	(2)	6.183	55	912403	26.324
50) \$Dibromofluoromethane	(2)	6.775	113	620619	0.000
53) 1-Chlorobutane	(2)	6.952	56	539342	4.593
57) \$1,2-Dichloroethane-d4	(2)	7.244	102	124309	0.000
63) *Fluorobenzene	(2)	7.671	96	2221539	10.000
77) Chloroacetonitrile	(2)	9.158	75	622876	255.577
78) 2-Chloroethyl vinyl ether	(2)	9.195	63	88980	4.810
82) \$Toluene-d8	(3)	9.683	98	2366184	0.000
97) *Chlorobenzene-d5	(3)	11.146	117	1841277	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.042	88	136548	10.186
112) Cyclohexanone	(1)	12.072	55	240054	137.154
111) \$4-Bromofluorobenzene	(3)	12.140	95	949024	0.000
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	963243	10.000
142) Hexachloroethane	(4)	13.493	117	288235	5.304

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c02.d  
Injection date and time: 13-NOV-2018 09:16

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 14-NOV-2018 13:30

Sublist used: SMICAL-1

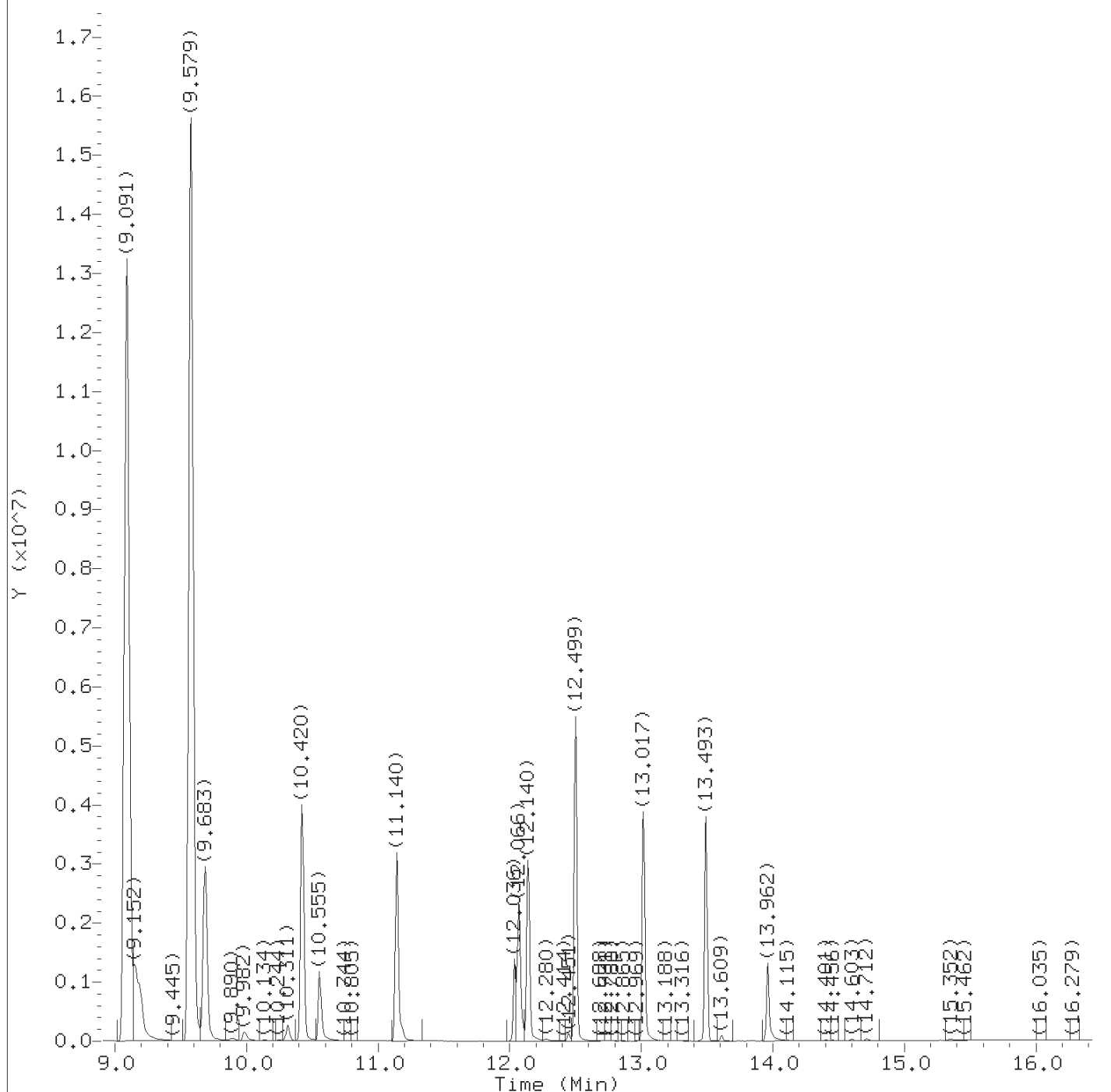
Date, time and analyst ID of latest file update: 14-Nov-2018 13:30 kel01973

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jennifer K. Howe  
on 11/14/2018 at 14:07.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c02.d  
Injection date and time: 13-NOV-2018 09:16

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 14-NOV-2018 13:30  
Date, time and analyst ID of latest file update: 14-Nov-2018 13:30 kel01973

Sublist used: SMICAL-1

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jennifer K. Howe  
on 11/14/2018 at 14:07.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c02.d  
 Injection date and time: 13-NOV-2018 09:16

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: SMICAL-1  
 Calibration date and time: 14-NOV-2018 13:30  
 Date, time and analyst ID of latest file update: 14-Nov-2018 13:30 kel01973

Sample Name: VSTD010

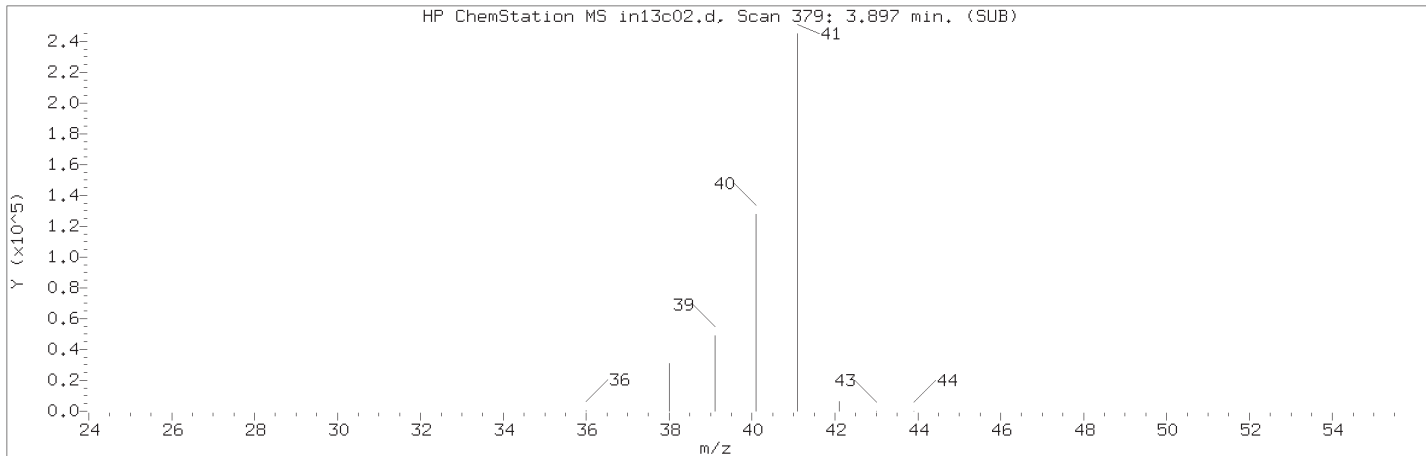
Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
25) Acetonitrile	(1)	3.897	41	2181414M	406.305
26) *t-Butyl Alcohol-d10	(1)	4.172	65	196527	50.000
36) Vinyl Acetate	(2)	5.251	43	864791	11.441
43) Methyl Acrylate	(2)	6.183	55	1939084	50.288
53) 1-Chlorobutane	(2)	6.952	56	1299050	10.114
63) *Fluorobenzene	(2)	7.677	96	2322351	10.000
77) Chloroacetonitrile	(2)	9.152	75	1265441	496.692
78) 2-Chloroethyl vinyl ether	(2)	9.189	63	284655	13.168
97) *Chlorobenzene-d5	(3)	11.140	117	1816062	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.036	88	327377	19.373
112) Cyclohexanone	(1)	12.066	55	1040117	455.808
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	999733	10.000
142) Hexachloroethane	(4)	13.493	117	638352	11.319

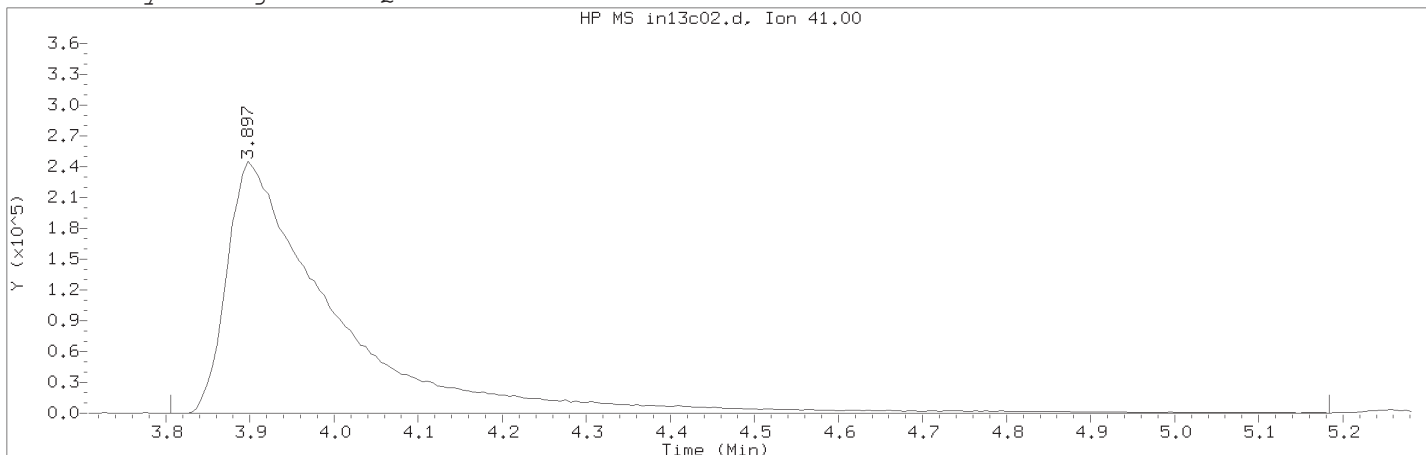
M = Compound was manually integrated.

\* = Compound is an internal standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c02.d      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 09:16      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: SMICAL-1  
Calibration date and time: 14-NOV-2018 13:30  
Date, time and analyst ID of latest file update: 14-Nov-2018 13:30 kel01973

Sample Name: VSTD010      Lab Sample ID: VSTD010

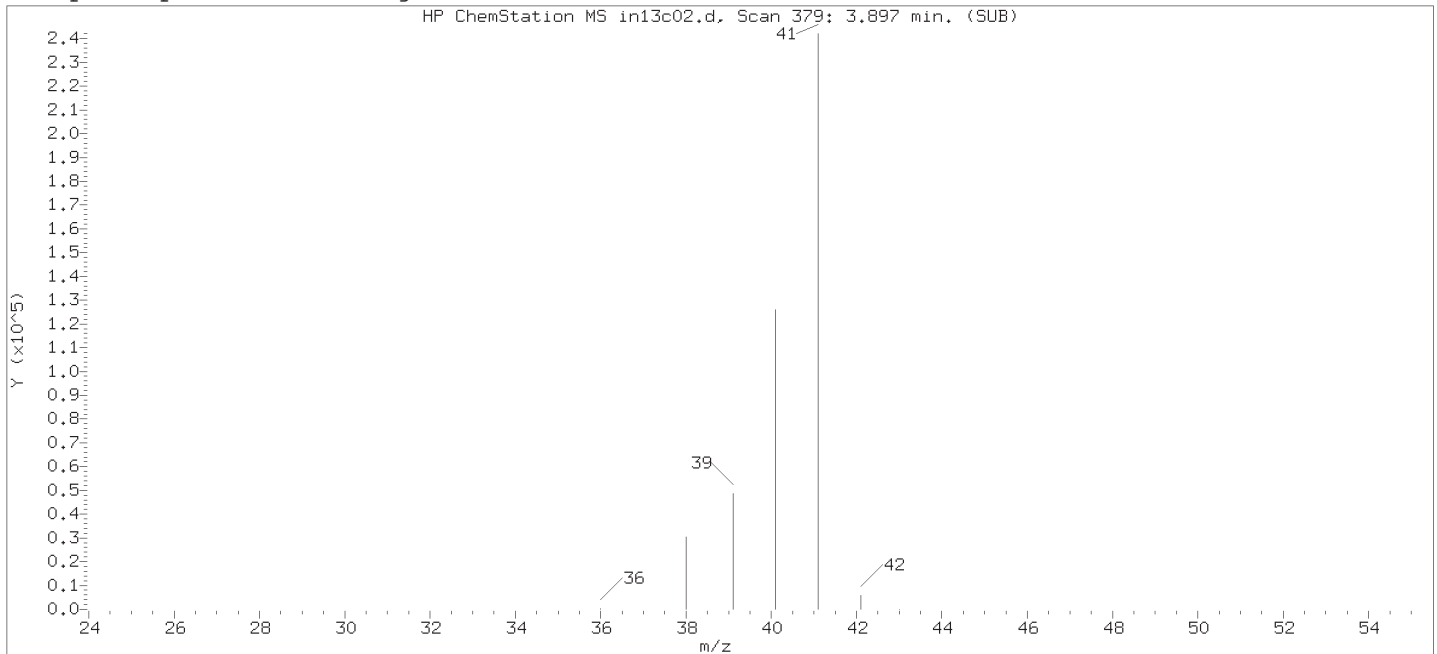
Compound Number : 25  
Compound Name : Acetonitrile  
Scan Number : 379  
Retention Time (minutes): 3.897  
Quant Ion : 41.00  
Area (flag) : 2181414M  
On-Column Amount (ng) : 406.3051  
Integration start scan : 363      Integration stop scan: 589  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

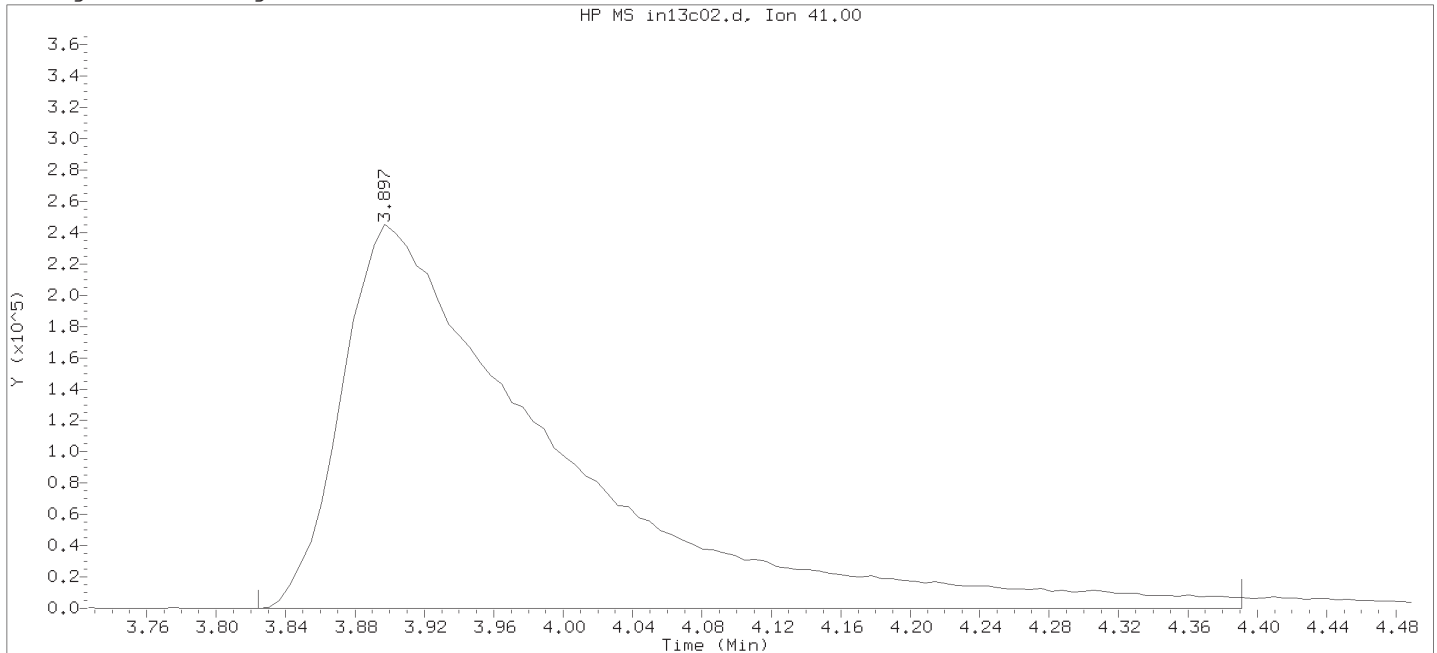
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/14/2018 at 14:07.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/14/2018 at 14:24.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13c02.d      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 09:16      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: SMICAL-1  
Calibration date and time: 13-NOV-2018 09:34  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:34 Automation

Sample Name: VSTD010      Lab Sample ID: VSTD010

Compound Number : 25  
Compound Name : Acetonitrile  
Scan Number : 379  
Retention Time (minutes): 3.897  
Quant Ion : 41.00  
Area : 2075621  
On-column Amount (ng) : 386.5995  
Integration start scan : 366      Integration stop scan: 459  
Y at integration start : 0      Y at integration end: 0

SECD010

Lancaster Laboratories  
 Analysis Summary for GC/MS Volatiles

SECD010

Data file: /chem2/HP19930.i/18nov13a.b/in13c04.d Injection date and time: 13-NOV-2018 19:34  
 Data file Sample Info. Line: SECD010;SECD010;1;3;LCS;;DOD25;;IN13B01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:52 Automation

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 12:00  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.172( 0.000)	424	65	168617 ( -7)	50.00	
63) Fluorobenzene	7.677(-0.006)	999	96	2042085 ( -4)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1605437 ( -6)	10.00	
133) 1,4-Dichlorobenzene-d4	13.017(-0.006)	1875	152	885811 ( -11)	10.00	

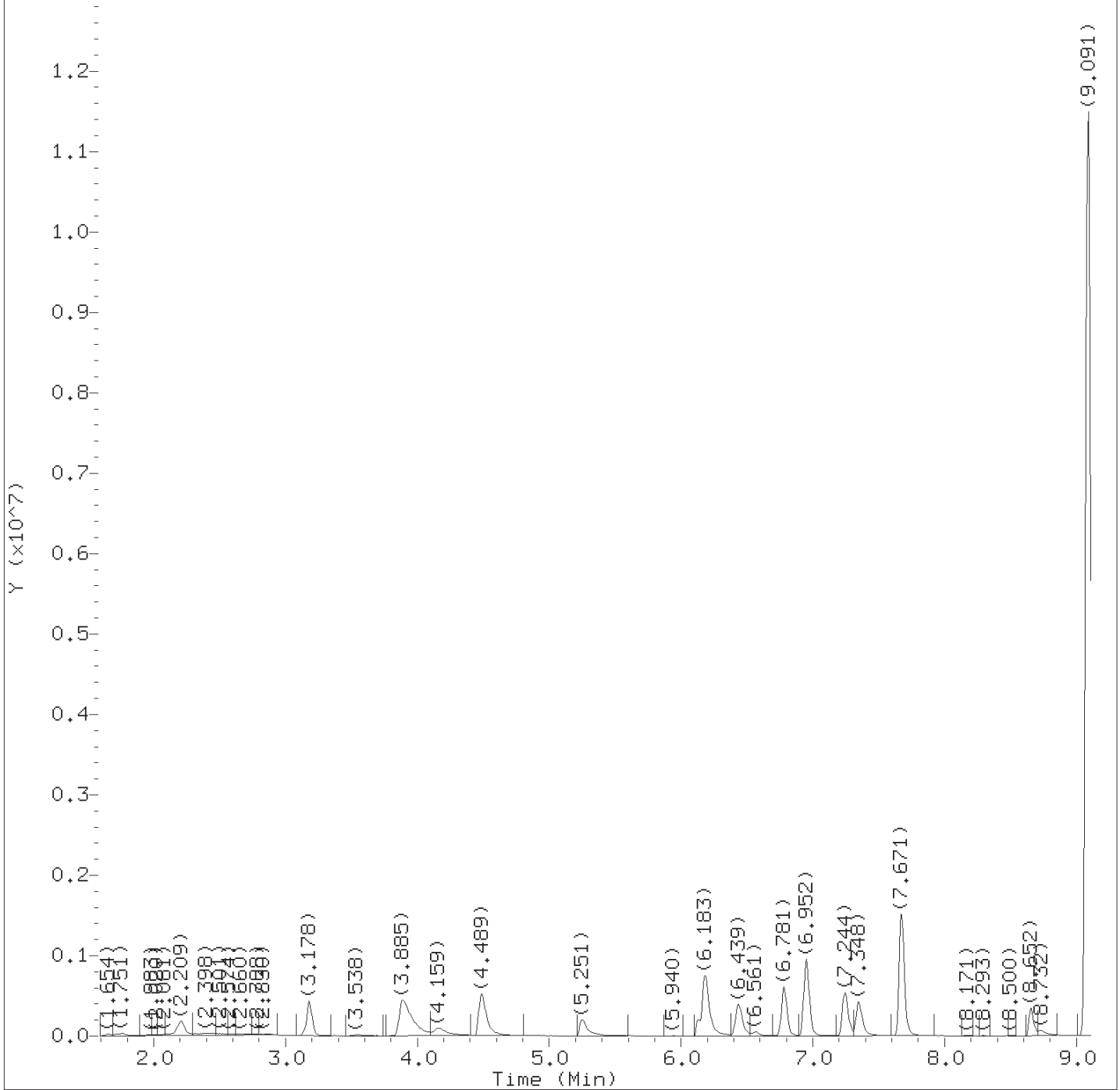
Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.781( 0.000)	113	550069	10.320	103%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.244( 0.000)	102	111288	10.995	110%		81 - 118
82) Toluene-d8	(3)	9.683( 0.000)	98	2114651	10.544	105%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.140( 0.000)	95	820575	10.395	104%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Limit (in sample)	LOQ
112) Cyclohexanone	(1)	12.072(-0.001)	55	903509	461.325	461.33		2	25

Total number of targets = 1

Digitally signed by Joel G. Chachapoya on 11/13/2018 at 20:07. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/15/2018 at 21:37. PARALLAX ID: kel01973



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c04.d  
Injection date and time: 13-NOV-2018 19:34

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789SM

Date, time and analyst ID of latest file update: 13-Nov-2018 19:52 Automation

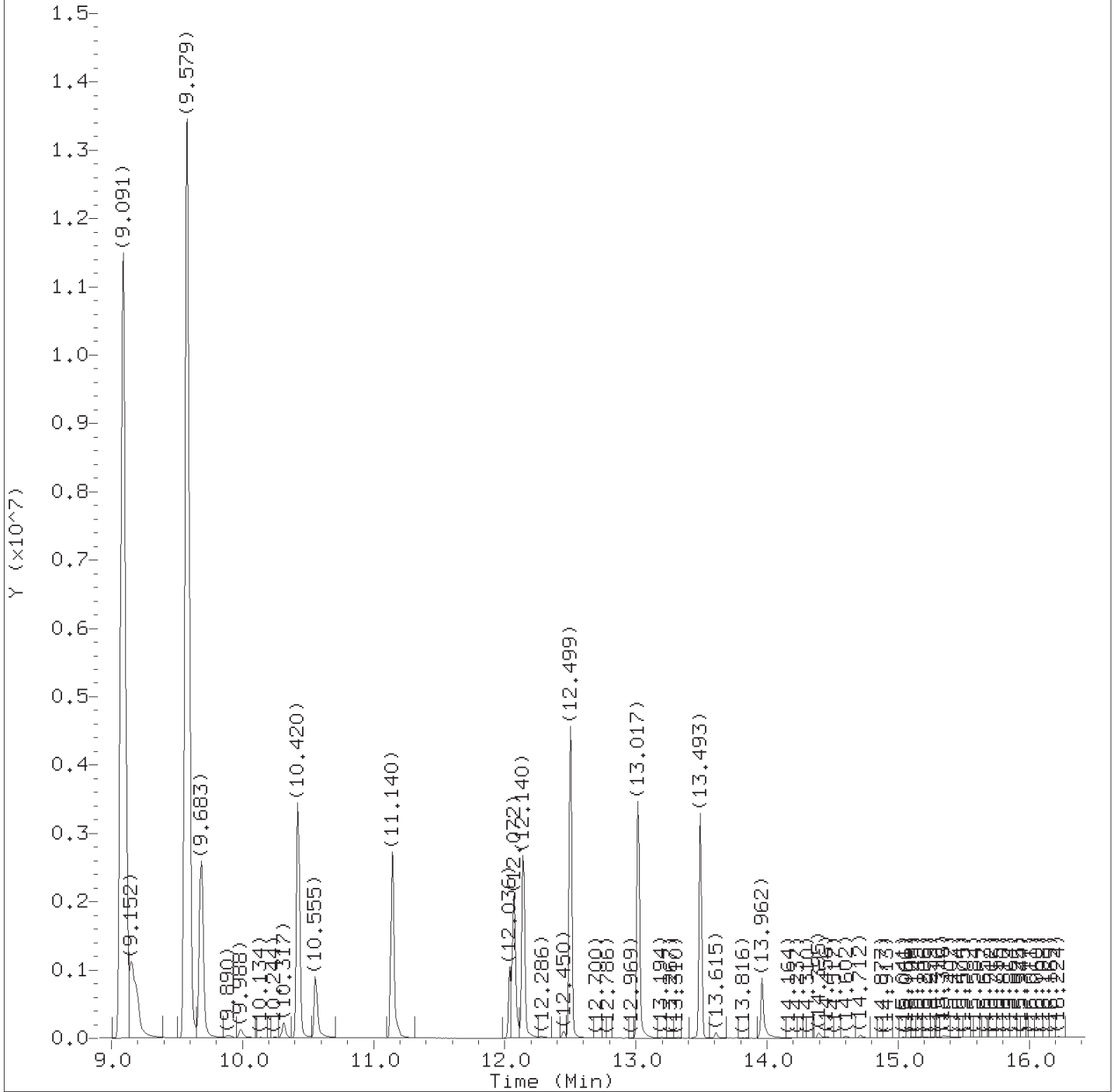
Sample Name: SECD010

Lab Sample ID: SECD010

Digitally signed by Joel G. Chachapoya  
on 11/13/2018 at 20:07.

Target 3.5 esignature user ID: jgc14951





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c04.d  
Injection date and time: 13-NOV-2018 19:34

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 12:00

Sublist used: 25789SM

Date, time and analyst ID of latest file update: 13-Nov-2018 19:52 Automation

Sample Name: SECD010

Lab Sample ID: SECD010

Digitally signed by Joel G. Chachapoya  
on 11/13/2018 at 20:07.

Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13c04.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 19:34 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789SM  
 Calibration date and time: 13-NOV-2018 12:00  
 Date, time and analyst ID of latest file update: 13-Nov-2018 19:52 Automation

Sample Name: SECD010 Lab Sample ID: SECD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26) *t-Butyl Alcohol-d10	(1)	4.172	65	168617	50.000
50) \$Dibromofluoromethane	(2)	6.781	113	550069	10.320
57) \$1,2-Dichloroethane-d4	(2)	7.244	102	111288	10.995
63) *Fluorobenzene	(2)	7.677	96	2042085	10.000
82) \$Toluene-d8	(3)	9.683	98	2114651	10.544
97) *Chlorobenzene-d5	(3)	11.140	117	1605437	10.000
112) Cyclohexanone	(1)	12.072	55	903509	461.325
111) \$4-Bromofluorobenzene	(3)	12.140	95	820575	10.395
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	885811	10.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

**Raw QC Data**

**Volatiles by GC/MS**

VBLKI42

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

VBLKI42

Data file: /chem2/HP19930.i/18nov13a.b/in13b01.d

Injection date and time: 13-NOV-2018 11:25

Data file Sample Info. Line: VBLKI42;VBLKI42;1;3;;;DOD25;;;

Instrument ID: HP19930.i Batch: I183171AA

Date, time and analyst ID of latest file update: 13-Nov-2018 11:51 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789

Calibration date and time (Last Method Edit): 13-NOV-2018 09:48

Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.172( 0.000)	424	65	154716 ( -15)	50.00	
63) Fluorobenzene	7.671( 0.000)	998	96	1893659 ( -11)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1438908 ( -16)	10.00	
133) 1,4-Dichlorobenzene-d4	13.018(-0.006)	1875	152	791523 ( -20)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.781(-0.001)	113	530267	10.728	107%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.238( 0.000)	102	103873	11.067	111%		81 - 118
82) Toluene-d8	(3)	9.689(-0.001)	98	1826788	10.163	102%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.140( 0.000)	95	657317	9.291	93%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)			Not Detected				0.05	0.5
2) Chloromethane	(2)			Not Detected				0.06	0.5
5) Vinyl Chloride	(2)			Not Detected				0.1	0.5
7) Bromomethane	(2)			Not Detected				0.07	0.5
8) Chloroethane	(2)			Not Detected				0.07	0.5
10) Trichlorofluoromethane	(2)			Not Detected				0.05	0.5
15) 1,1-Dichloroethene	(2)			Not Detected				0.06	0.5
16) Freon 113	(2)			Not Detected				0.06	0.5
14) Acetone	(1)			Not Detected				0.9	5
18) Carbon Disulfide	(2)			Not Detected				0.06	1
21) Methyl Acetate	(1)			Not Detected				0.1	1
23) Methylene Chloride	(2)			Not Detected				0.07	0.5
31) trans-1,2-Dichloroethene	(2)			Not Detected				0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)			Not Detected				0.05	0.5
33) 1,1-Dichloroethane	(2)			Not Detected				0.07	0.5
39) cis-1,2-Dichloroethene	(2)			Not Detected				0.05	0.5
38) 2-Butanone	(1)			Not Detected				0.6	5
49) Chloroform	(2)			Not Detected				0.09	0.5
51) 1,1,1-Trichloroethane	(2)			Not Detected				0.06	0.5
52) Cyclohexane	(2)			Not Detected				0.05	0.5
54) Carbon Tetrachloride	(2)			Not Detected				0.07	0.5
58) Benzene	(2)			Not Detected				0.05	0.5
59) 1,2-Dichloroethane	(2)			Not Detected				0.05	0.5
67) Trichloroethene	(2)			Not Detected				0.06	0.5
69) Methylcyclohexane	(2)			Not Detected				0.05	0.5
70) 1,2-Dichloropropane	(2)			Not Detected				0.06	0.5
74) Bromodichloromethane	(2)			Not Detected				0.05	0.5
80) cis-1,3-Dichloropropene	(2)			Not Detected				0.05	0.5
81) 4-Methyl-2-Pentanone	(1)			Not Detected				0.7	5
83) Toluene	(3)			Not Detected				0.07	0.5
84) trans-1,3-Dichloropropene	(3)			Not Detected				0.06	0.5

VBLKI42

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

VBLKI42

Data file: /chem2/HP19930.i/18nov13a.b/in13b01.d

Injection date and time: 13-NOV-2018 11:25

Data file Sample Info. Line: VBLKI42;VBLKI42;1;3;;;DOD25;;;

Instrument ID: HP19930.i Batch: I183171AA

Date, time and analyst ID of latest file update: 13-Nov-2018 11:51 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789

Calibration date and time (Last Method Edit): 13-NOV-2018 09:48

Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

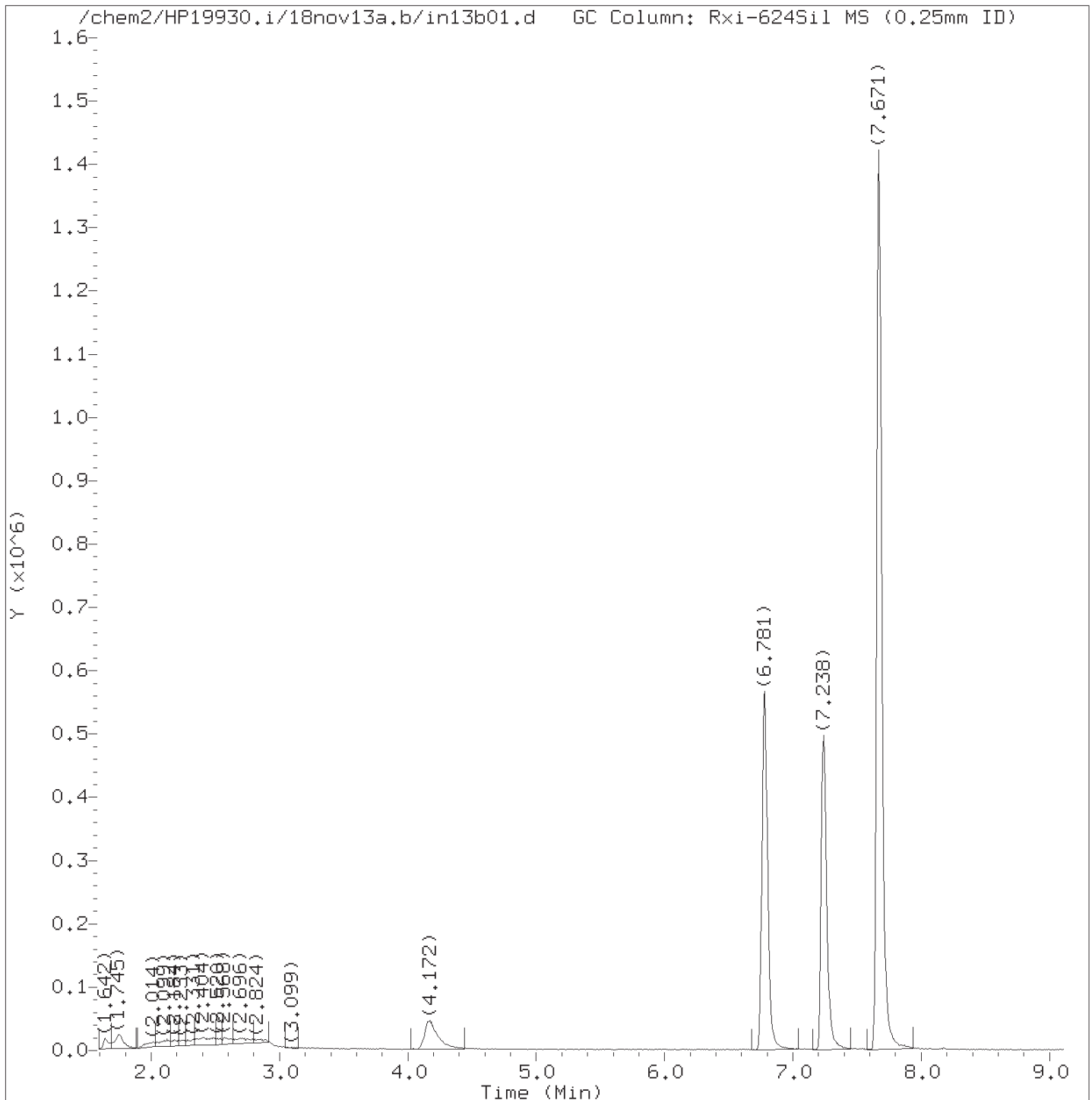
Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
										Limit	LOQ
88) 1,1,2-Trichloroethane	(3)				Not Detected					0.06	0.5
89) Tetrachloroethene	(3)				Not Detected					0.06	0.5
91) 2-Hexanone	(1)				Not Detected					0.6	5
93) Dibromochloromethane	(3)				Not Detected					0.07	0.5
95) 1,2-Dibromoethane	(3)				Not Detected					0.06	0.5
98) Chlorobenzene	(3)				Not Detected					0.06	0.5
100) Ethylbenzene	(3)				Not Detected					0.06	0.5
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.1	0.5
106) Styrene	(3)				Not Detected					0.05	0.5
107) Bromoform	(3)				Not Detected					0.3	1
108) Isopropylbenzene	(3)				Not Detected					0.05	0.5
112) Cyclohexanone	(1)				Not Detected					2	25
113) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.07	0.5
131) 1,3-Dichlorobenzene	(4)				Not Detected					0.06	0.5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.07	0.5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)				Not Detected					0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)				Not Detected					0.06	0.5

Total number of targets = 51

Digitally signed by Jennifer K. Howe on 11/13/2018 at 11:51. Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13b01.d  
 Injection date and time: 13-NOV-2018 11:25

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 13-Nov-2018 11:51 jkh09052

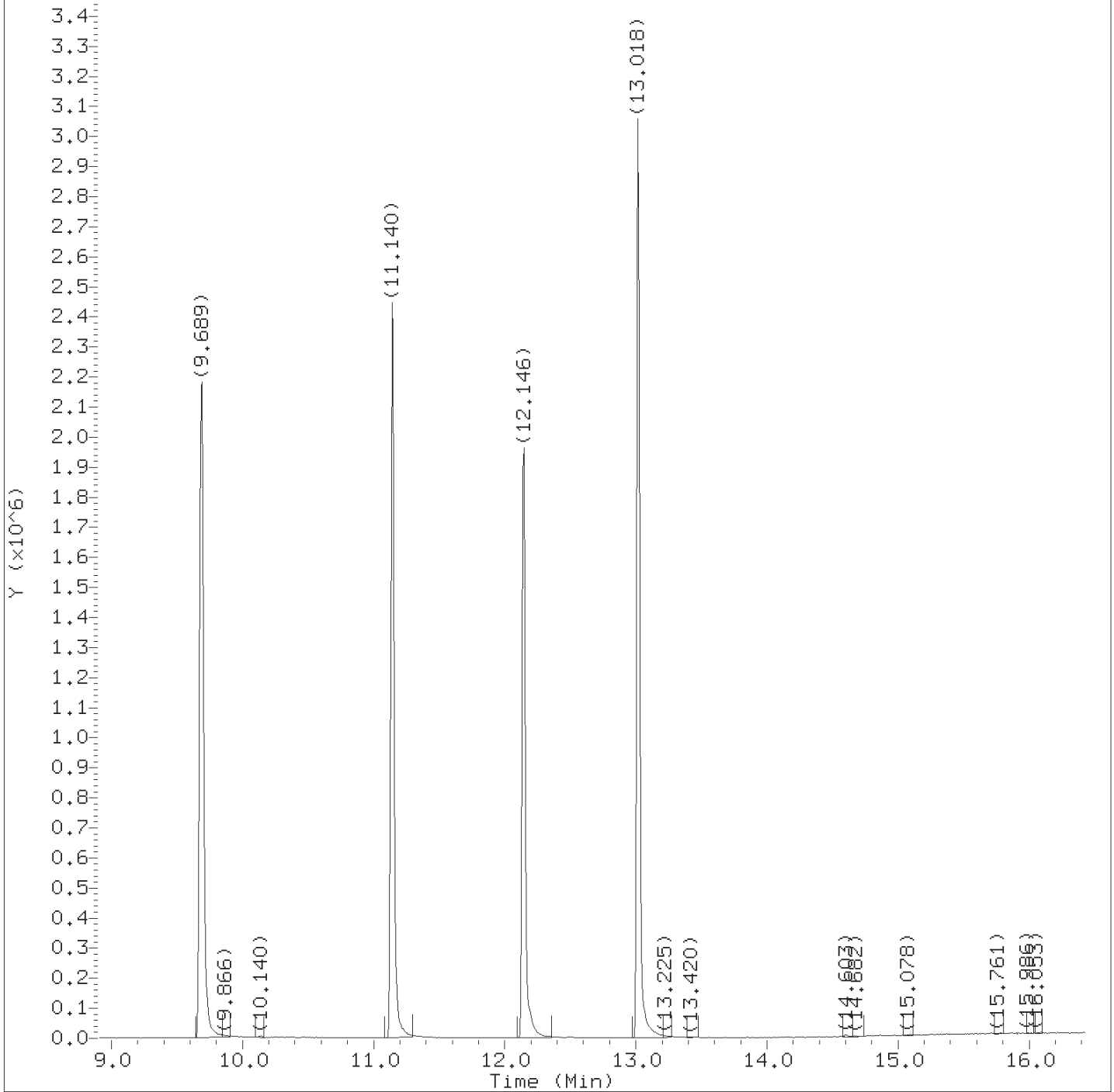
Sublist used: 25789

Sample Name: VBLKI42

Lab Sample ID: VBLKI42

Digitally signed by Jennifer K. Howe  
 on 11/13/2018 at 11:51.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13b01.d  
Injection date and time: 13-NOV-2018 11:25

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 09:48

Sublist used: 25789

Date, time and analyst ID of latest file update: 13-Nov-2018 11:51 jkh09052

Sample Name: VBLKI42

Lab Sample ID: VBLKI42

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 11:51.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13b01.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 11:25 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 13-Nov-2018 11:51 jkh09052

Sample Name: VBLKI42

Lab Sample ID: VBLKI42

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26) *t-Butyl Alcohol-d10	(1)	4.172	65	154716	50.000
50) \$Dibromofluoromethane	(2)	6.781	113	530267	10.728
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	103873	11.067
63) *Fluorobenzene	(2)	7.671	96	1893659	10.000
82) \$Toluene-d8	(3)	9.689	98	1826788	10.163
97) *Chlorobenzene-d5	(3)	11.140	117	1438908	10.000
111) \$4-Bromofluorobenzene	(3)	12.140	95	657317	9.291
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	791523	10.000

\* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.



LCSI43

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

LCSI43

Data file: /chem2/HP19930.i/18nov13a.b/in13103.d Injection date and time: 13-NOV-2018 10:21  
 Data file Sample Info. Line: LCSI43;LCSI43;1;3;LCS;;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 11:52 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 09:48  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.165( 0.006)	423	65	179539 ( -1)	50.00	
63) Fluorobenzene	7.671( 0.000)	998	96	2126236 ( 0)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1625946 ( -5)	10.00	
133) 1,4-Dichlorobenzene-d4	13.017(-0.006)	1875	152	879691 ( -11)	10.00	

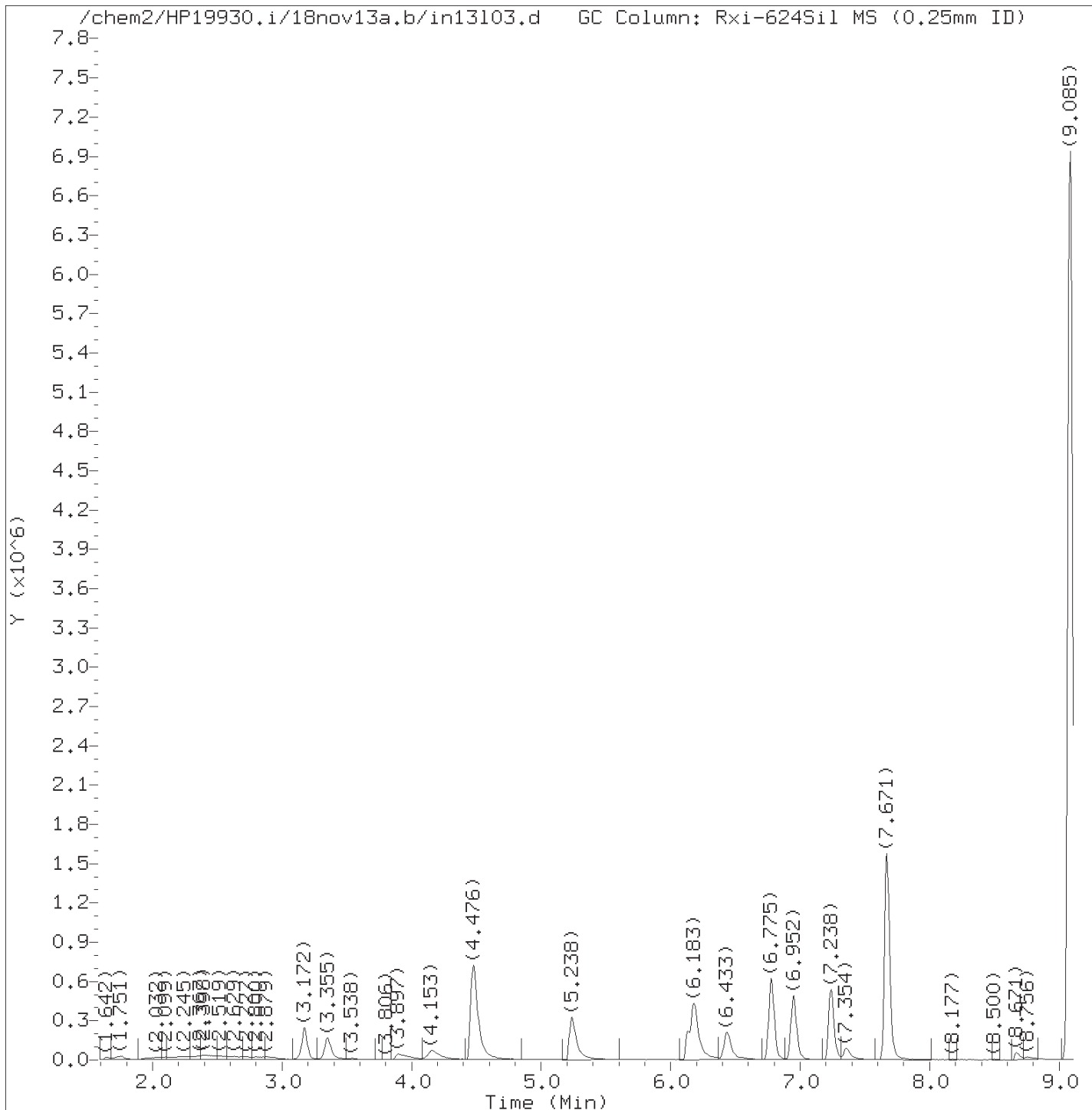
Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.775( 0.000)	113	571469	10.297	103%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.238( 0.000)	102	114900	10.903	109%		81 - 118
82) Toluene-d8	(3)	9.683( 0.000)	98	2207193	10.867	109%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.140( 0.000)	95	829235	10.372	104%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Limit (in sample)	LOQ
112) Cyclohexanone	(1)	12.072(-0.005)	55	140862	86.945	86.94		2	25

Total number of targets = 1

Digitally signed by Jennifer K. Howe on 11/13/2018 at 11:54. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/15/2018 at 21:20. PARALLAX ID: kel01973



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13103.d  
 Injection date and time: 13-NOV-2018 10:21

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
 Calibration date and time: 13-NOV-2018 09:48

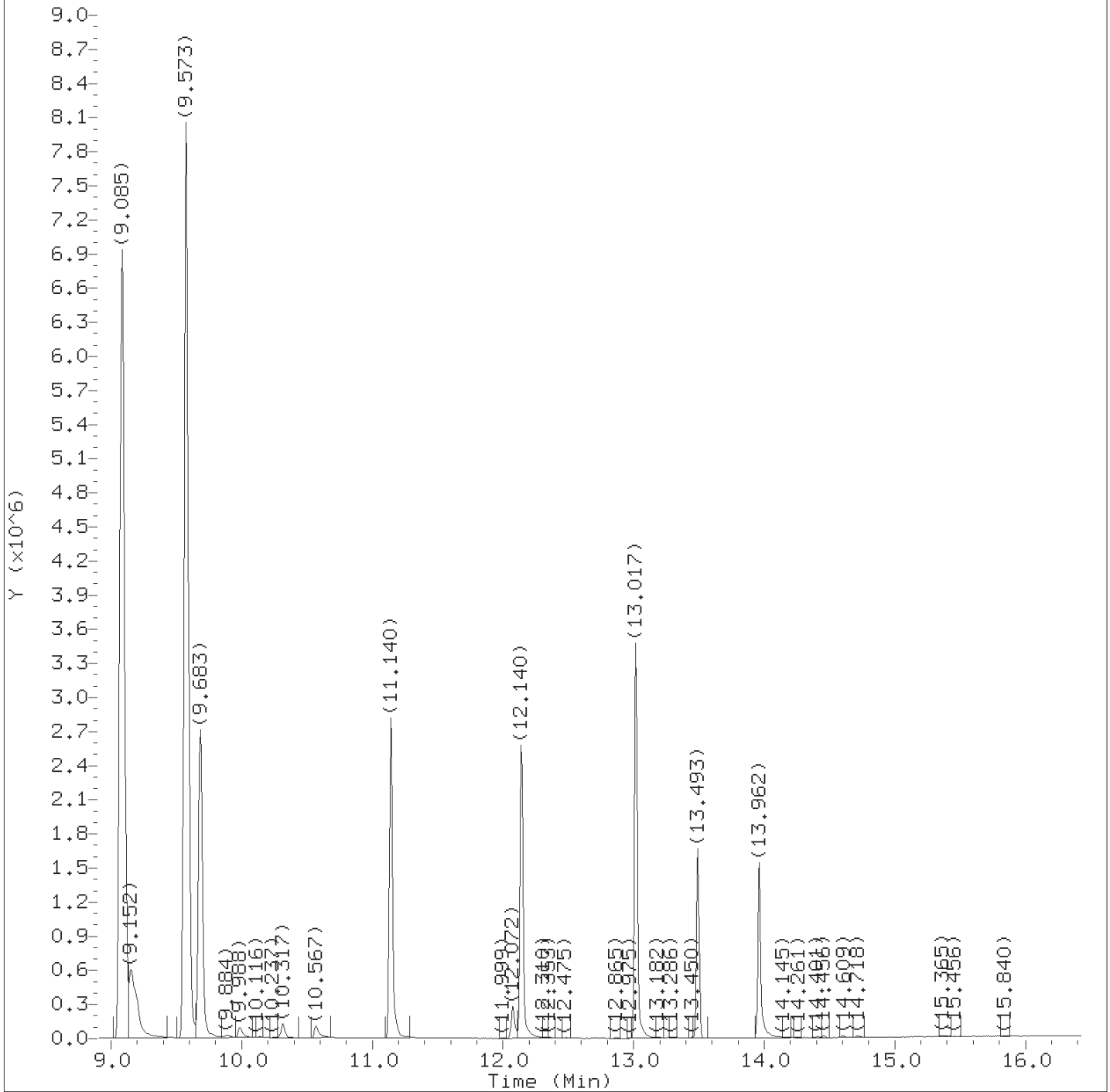
Sublist used: 25789SM  
 Date, time and analyst ID of latest file update: 13-Nov-2018 11:52 jkh09052

Sample Name: LCS143

Lab Sample ID: LCS143

Digitally signed by Jennifer K. Howe  
 on 11/13/2018 at 11:54.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a,b/in13103.d  
Injection date and time: 13-NOV-2018 10:21

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a,b/m8260c25.m  
Calibration date and time: 13-NOV-2018 09:48

Sublist used: 25789SM

Date, time and analyst ID of latest file update: 13-Nov-2018 11:52 jkh09052

Sample Name: LCS143

Lab Sample ID: LCS143

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 11:54.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13103.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 10:21 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789SM  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 13-Nov-2018 11:52 jkh09052

Sample Name: LCS143

Lab Sample ID: LCS143

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26) *t-Butyl Alcohol-d10	(1)	4.165	65	179539	50.000
50) \$Dibromofluoromethane	(2)	6.775	113	571469	10.297
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	114900	10.903
63) *Fluorobenzene	(2)	7.671	96	2126236	10.000
82) \$Toluene-d8	(3)	9.683	98	2207193	10.867
97) *Chlorobenzene-d5	(3)	11.140	117	1625946	10.000
112) Cyclohexanone	(1)	12.072	55	140862	86.945
111) \$4-Bromofluorobenzene	(3)	12.140	95	829235	10.372
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	879691	10.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

LCDI43

Lancaster Laboratories  
 Analysis Summary for GC/MS Volatiles

LCDI43

Data file: /chem2/HP19930.i/18nov13a.b/in13104.d Injection date and time: 13-NOV-2018 10:42  
 Data file Sample Info. Line: LCDI43;LCDI43;1;3;LCSD;;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 13-Nov-2018 11:52 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 09:48  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.159( 0.012)	422	65	179001 ( -1)	50.00	
63) Fluorobenzene	7.671( 0.000)	998	96	2077619 ( -2)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1599487 ( -6)	10.00	
133) 1,4-Dichlorobenzene-d4	13.017(-0.006)	1875	152	852556 ( -14)	10.00	

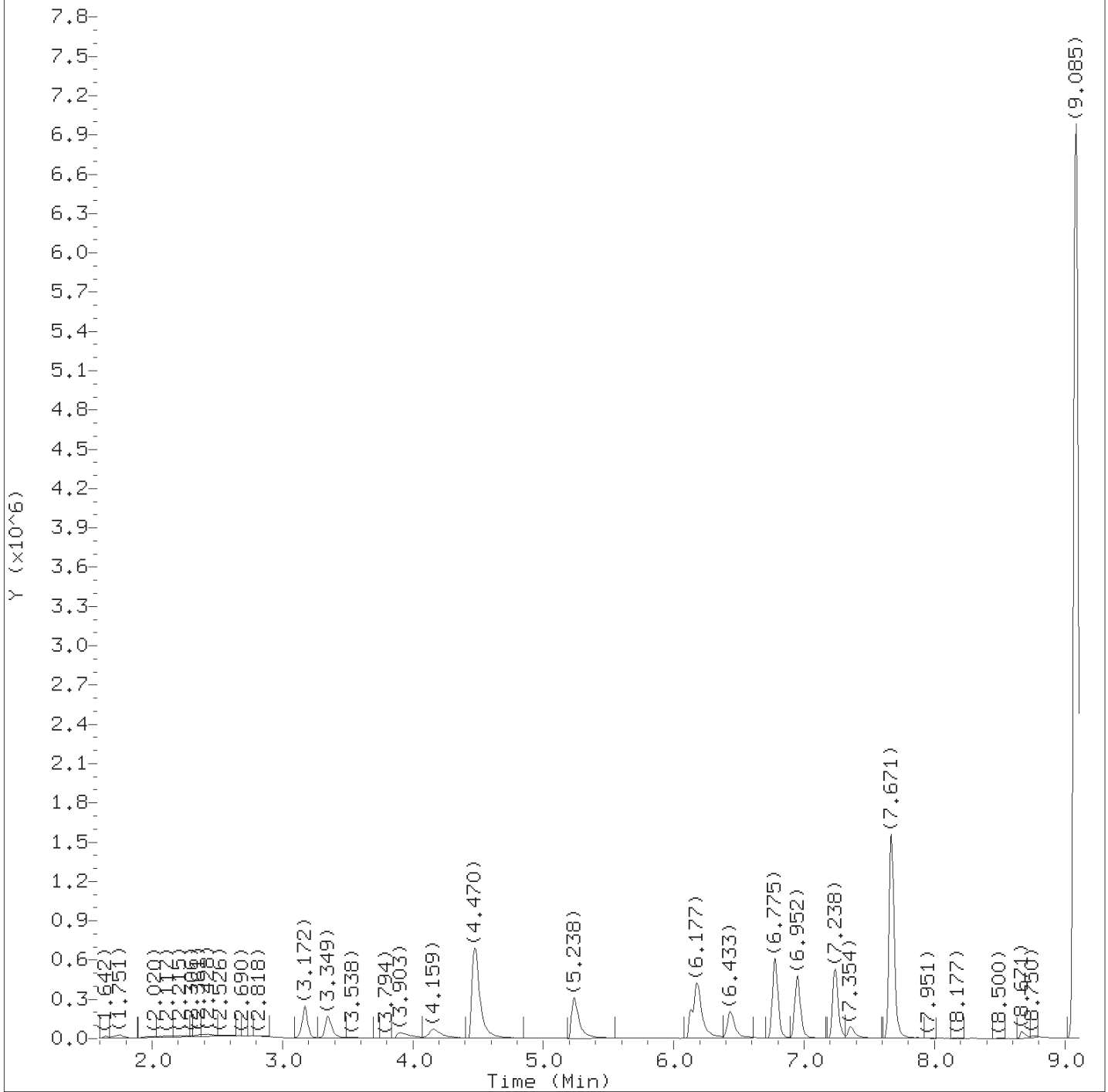
Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.775( 0.000)	113	563785	10.396	104%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.238( 0.000)	102	113193	10.992	110%		81 - 118
82) Toluene-d8	(3)	9.683( 0.000)	98	2169329	10.857	109%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.140( 0.000)	95	813089	10.339	103%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Limit (in sample)	LOQ
112) Cyclohexanone	(1)	12.072(-0.010)	55	142665	87.938	87.94		2	25

Total number of targets = 1

Digitally signed by Jennifer K. Howe on 11/13/2018 at 11:54. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/15/2018 at 21:20. PARALLAX ID: kel01973



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13104.d  
Injection date and time: 13-NOV-2018 10:42

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 09:48

Sublist used: 25789SM

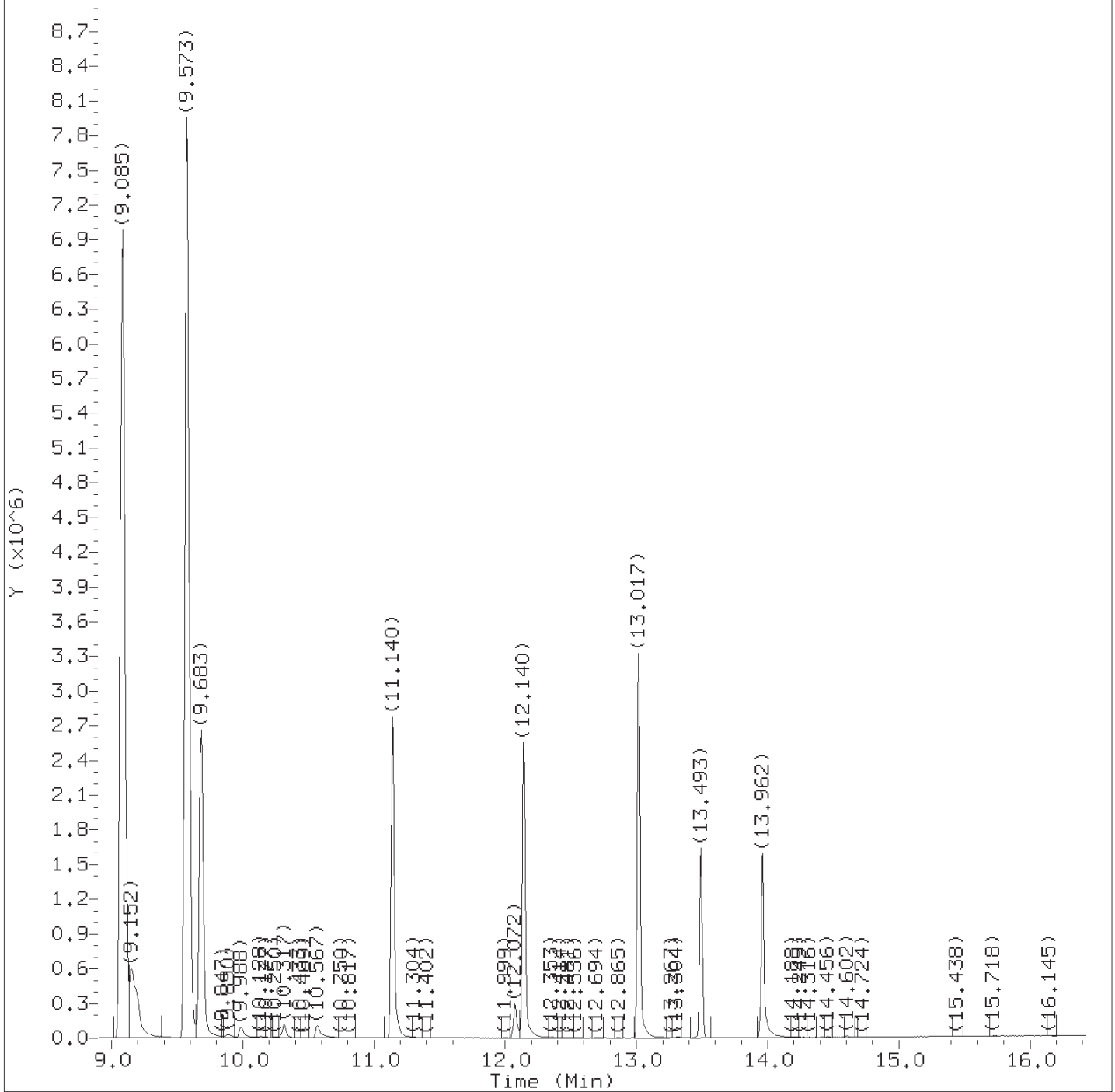
Date, time and analyst ID of latest file update: 13-Nov-2018 11:52 jkh09052

Sample Name: LCDI43

Lab Sample ID: LCDI43

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 11:54.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13104.d  
Injection date and time: 13-NOV-2018 10:42

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m  
Calibration date and time: 13-NOV-2018 09:48

Sublist used: 25789SM

Date, time and analyst ID of latest file update: 13-Nov-2018 11:52 jkh09052

Sample Name: LCDI43

Lab Sample ID: LCDI43

Digitally signed by Jennifer K. Howe  
on 11/13/2018 at 11:54.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13104.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 10:42 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789SM  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 13-Nov-2018 11:52 jkh09052

Sample Name: LCDI43

Lab Sample ID: LCDI43

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26) *t-Butyl Alcohol-d10	(1)	4.159	65	179001	50.000
50) \$Dibromofluoromethane	(2)	6.775	113	563785	10.396
57) \$1,2-Dichloroethane-d4	(2)	7.238	102	113193	10.992
63) *Fluorobenzene	(2)	7.671	96	2077619	10.000
82) \$Toluene-d8	(3)	9.683	98	2169329	10.857
97) *Chlorobenzene-d5	(3)	11.140	117	1599487	10.000
112) Cyclohexanone	(1)	12.072	55	142665	87.938
111) \$4-Bromofluorobenzene	(3)	12.140	95	813089	10.339
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	852556	10.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

page 1 of 1

Digitally signed by Jennifer K. Howe  
 on 11/13/2018 at 11:54.  
 Target 3.5 esignature user ID: jkh09052



Data file: /chem2/HP19930.i/18nov13a.b/in13101.d Injection date and time: 13-NOV-2018 09:38  
 Data file Sample Info. Line: LCSI42;LCSI42;1;3;LCS;;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:48 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 09:48  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.160 ( 0.012)	422	65	181821M ( 0)	50.00	
63) Fluorobenzene	7.671 ( 0.000)	998	96	2143858 ( 1)	10.00	
97) Chlorobenzene-d5	11.140 ( 0.000)	1567	117	1670585 ( -2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.018 (-0.006)	1875	152	978511 ( -1)	10.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.781 (-0.001)	113	553330	9.888	99%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.238 ( 0.000)	102	115188	10.840	108%		81 - 118
82) Toluene-d8	(3)	9.683 ( 0.000)	98	2153725	10.320	103%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.140 ( 0.000)	95	799684	9.735	97%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)	1.916 ( 0.000)	85	507417	3.877	3.88			0.05	0.5
2) Chloromethane	(2)	2.111 ( 0.000)	50	379242	3.970	3.97			0.06	0.5
5) Vinyl Chloride	(2)	2.227 ( 0.000)	62	388243	4.209	4.21			0.1	0.5
7) Bromomethane	(2)	2.538 ( 0.000)	94	301323	3.470	3.47			0.07	0.5
8) Chloroethane	(2)	2.623 ( 0.000)	64	215572	4.014	4.01			0.07	0.5
10) Trichlorofluoromethane	(2)	2.922 ( 0.000)	101	715461	4.537	4.54			0.05	0.5
15) 1,1-Dichloroethene	(2)	3.483 ( 0.001)	96	300824	5.532	5.53			0.06	0.5
16) Freon 113	(2)	3.513 ( 0.000)	101	363826	5.762	5.76			0.06	0.5
14) Acetone	(1)	3.526 (-0.003)	43	466891	43.944	43.94			0.9	5
18) Carbon Disulfide	(2)	3.812 (-0.000)	76	796751	4.938	4.94			0.06	1
21) Methyl Acetate	(1)	3.952 (-0.004)	43	147449	6.113	6.11			0.1	1
23) Methylene Chloride	(2)	4.160 (-0.000)	84	325337	5.283	5.28			0.07	0.5
31) trans-1,2-Dichloroethene	(2)	4.574 ( 0.000)	96	327798	5.311	5.31			0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)	4.556 ( 0.000)	73	710396	4.218	4.22			0.05	0.5
33) 1,1-Dichloroethane	(2)	5.238 ( 0.000)	63	611847	5.016	5.02			0.07	0.5
39) cis-1,2-Dichloroethene	(2)	6.074 ( 0.000)	96	364906	5.177	5.18			0.05	0.5
38) 2-Butanone	(1)	6.049 (-0.007)	43	699335	39.687	39.69			0.6	5
49) Chloroform	(2)	6.561 (-0.000)	83	627585	5.112	5.11			0.09	0.5
51) 1,1,1-Trichloroethane	(2)	6.787 (-0.000)	97	590785	5.007	5.01			0.06	0.5
52) Cyclohexane	(2)	6.891 (-0.000)	56	554206	4.449	4.45			0.05	0.5
54) Carbon Tetrachloride	(2)	7.000 ( 0.000)	117	544376	5.268	5.27			0.07	0.5
58) Benzene	(2)	7.262 ( 0.000)	78	1344403	5.163	5.16			0.05	0.5
59) 1,2-Dichloroethane	(2)	7.348 (-0.000)	62	432193	4.921	4.92			0.05	0.5
67) Trichloroethene	(2)	8.153 (-0.000)	95	364894	5.112	5.11			0.06	0.5
69) Methylcyclohexane	(2)	8.457 (-0.000)	83	591447	4.581	4.58			0.05	0.5
70) 1,2-Dichloropropane	(2)	8.488 (-0.000)	63	345984	5.301	5.30			0.06	0.5
74) Bromodichloromethane	(2)	8.835 (-0.000)	83	429240	4.873	4.87			0.05	0.5
80) cis-1,3-Dichloropropene	(2)	9.384 (-0.000)	75	441648	4.418	4.42			0.05	0.5
81) 4-Methyl-2-Pentanone	(1)	9.543 (-0.008)	43	1110753	25.755	25.75			0.7	5
83) Toluene	(3)	9.762 (-0.000)	92	860168	5.234	5.23			0.07	0.5

Data file: /chem2/HP19930.i/18nov13a.b/in13101.d Injection date and time: 13-NOV-2018 09:38  
 Data file Sample Info. Line: LCSI42;LCSI42;1;3;LCS;;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:48 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 09:48  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

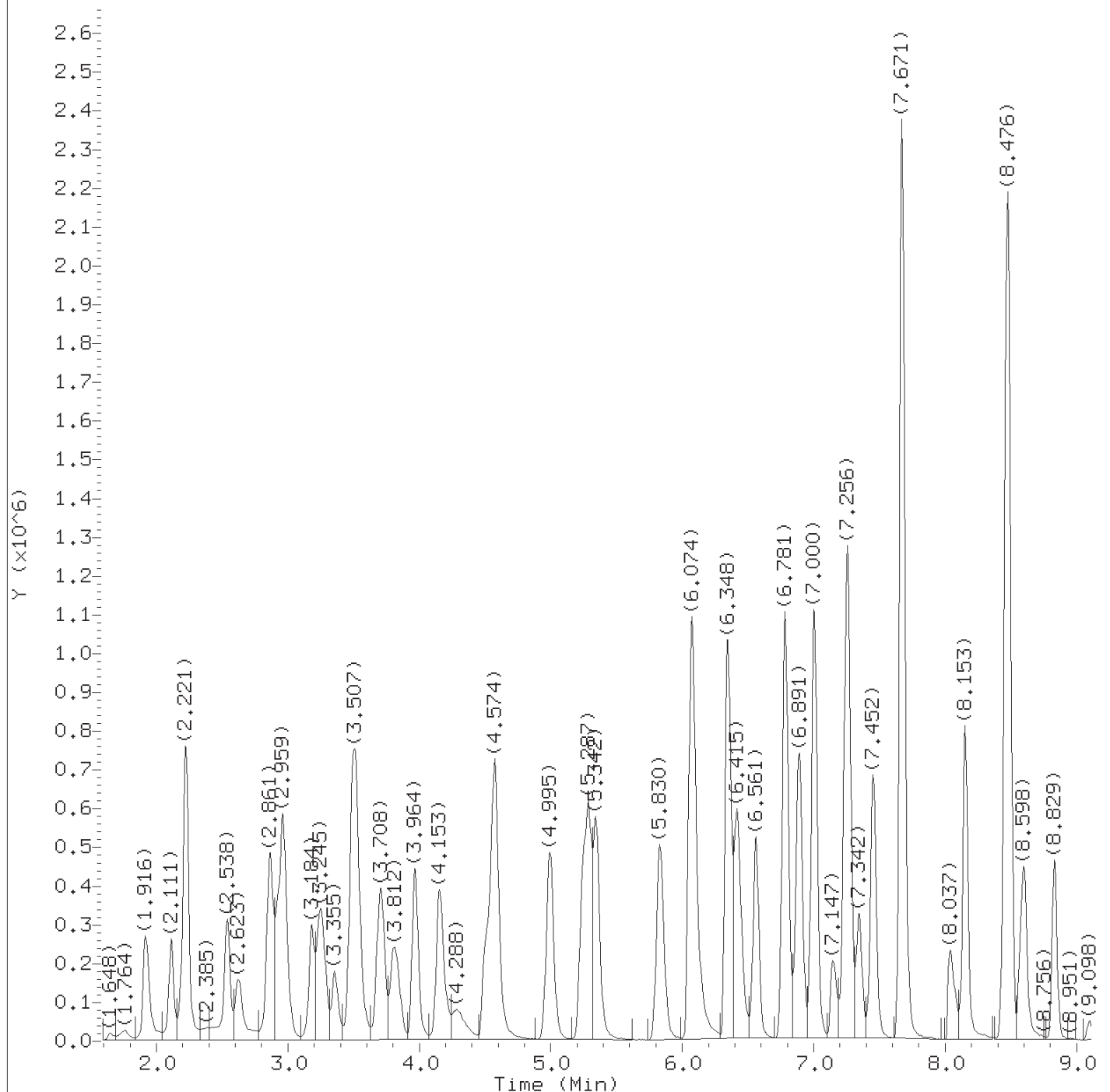
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting	
								Qual.	Limit (in sample)
84) trans-1,3-Dichloropropene	(3)	10.024(-0.000)	75	384610	4.683	4.68		0.06	0.5
88) 1,1,2-Trichloroethane	(3)	10.225( 0.000)	97	252638	5.579	5.58		0.06	0.5
89) Tetrachloroethene	(3)	10.311( 0.000)	166	419857	4.953	4.95		0.06	0.5
91) 2-Hexanone	(1)	10.433(-0.008)	43	816192	26.405	26.41		0.6	5
93) Dibromochloromethane	(3)	10.603( 0.000)	129	298525	5.086	5.09		0.07	0.5
95) 1,2-Dibromoethane	(3)	10.719( 0.000)	107	226556	5.216	5.22		0.06	0.5
98) Chlorobenzene	(3)	11.170(-0.000)	112	982568	5.474	5.47		0.06	0.5
100) Ethylbenzene	(3)	11.250(-0.000)	91	1685185	5.172	5.17		0.06	0.5
101) m+p-Xylene	(3)	11.365(-0.000)	106	1336892	10.527	10.53		0.1	0.5
104) o-Xylene	(3)	11.695(-0.000)	106	614470	4.844	4.84		0.05	0.5
105) Xylene (Total)	(3)		106	1951362	15.371	15.37		0.1	0.5
106) Styrene	(3)	11.713(-0.000)	104	997393	5.225	5.23		0.05	0.5
107) Bromoform	(3)	11.878(-0.000)	173	158681	4.446	4.45		0.3	1
108) Isopropylbenzene	(3)	11.987(-0.000)	105	1687409	5.104	5.10		0.05	0.5
113) 1,1,2,2-Tetrachloroethane	(4)	12.231( 0.000)	83	311447M	5.191	5.19		0.07	0.5
131) 1,3-Dichlorobenzene	(4)	12.963(-0.000)	146	833527	5.008	5.01		0.06	0.5
134) 1,4-Dichlorobenzene	(4)	13.036( 0.000)	146	864547	5.078	5.08		0.07	0.5
139) 1,2-Dichlorobenzene	(4)	13.292( 0.000)	146	782943	5.073	5.07		0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)	13.834(-0.009)	155	38302	5.452	5.45		0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)	14.377( 0.000)	180	450347	4.326	4.33		0.06	0.5

M = Compound was manually integrated.

Total number of targets = 50

Digitally signed by Jennifer K. Howe on 11/16/2018 at 13:51. Target 3.5 esignature user ID: jkh09052

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Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a,b/in13101.d  
Injection date and time: 13-NOV-2018 09:38

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a,b/m8260c25.m  
Calibration date and time: 13-NOV-2018 09:48

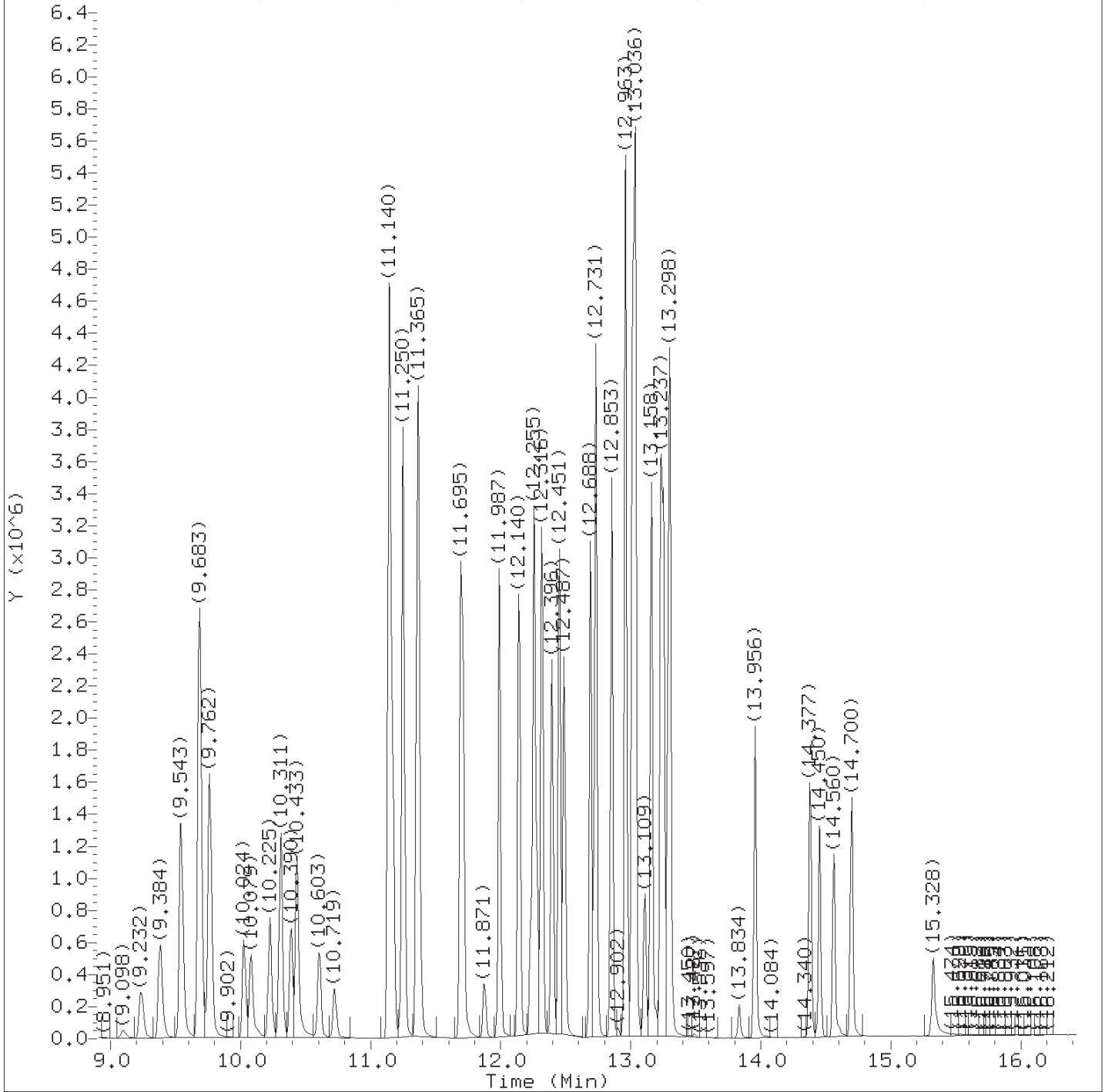
Sublist used: 25789-SM  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:48 jkh09052

Sample Name: LCS142

Lab Sample ID: LCS142

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:51.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13101.d  
Injection date and time: 13-NOV-2018 09:38

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 09:48

Date, time and analyst ID of latest file update: 16-Nov-2018 13:48 jkh09052

Sample Name: LCS142

Lab Sample ID: LCS142

Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:51.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13101.d  
 Injection date and time: 13-NOV-2018 09:38

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:48 jkh09052

Sample Name: LCS142

Lab Sample ID: LCS142

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.916	85	507417	3.877
2) Chloromethane	(2)	2.111	50	379242	3.970
5) Vinyl Chloride	(2)	2.227	62	388243	4.209
7) Bromomethane	(2)	2.538	94	301323	3.470
8) Chloroethane	(2)	2.623	64	215572	4.014
10) Trichlorofluoromethane	(2)	2.922	101	715461	4.537
15) 1,1-Dichloroethene	(2)	3.483	96	300824	5.532
16) Freon 113	(2)	3.513	101	363826	5.762
14) Acetone	(1)	3.526	43	466891	43.944
18) Carbon Disulfide	(2)	3.812	76	796751	4.938
21) Methyl Acetate	(1)	3.952	43	147449	6.113
23) Methylene Chloride	(2)	4.160	84	325337	5.283
26)*t-Butyl Alcohol-d10	(1)	4.160	65	181821M	50.000
30) Methyl Tertiary Butyl Ether	(2)	4.556	73	710396	4.218
31) trans-1,2-Dichloroethene	(2)	4.574	96	327798	5.311
33) 1,1-Dichloroethane	(2)	5.239	63	611847	5.016
38) 2-Butanone	(1)	6.049	43	699335	39.687
39) cis-1,2-Dichloroethene	(2)	6.074	96	364906	5.177
49) Chloroform	(2)	6.561	83	627585	5.112
50)\$Dibromofluoromethane	(2)	6.781	113	553330	9.888
51) 1,1,1-Trichloroethane	(2)	6.787	97	590785	5.007
52) Cyclohexane	(2)	6.891	56	554206	4.449
54) Carbon Tetrachloride	(2)	7.000	117	544376	5.268
57)\$1,2-Dichloroethane-d4	(2)	7.238	102	115188	10.840
58) Benzene	(2)	7.263	78	1344403	5.163
59) 1,2-Dichloroethane	(2)	7.348	62	432193	4.921
63)*Fluorobenzene	(2)	7.671	96	2143858	10.000
67) Trichloroethene	(2)	8.153	95	364894	5.112
69) Methylcyclohexane	(2)	8.457	83	591447	4.581
70) 1,2-Dichloropropane	(2)	8.488	63	345984	5.301
74) Bromodichloromethane	(2)	8.835	83	429240	4.873
80) cis-1,3-Dichloropropene	(2)	9.384	75	441648	4.418
81) 4-Methyl-2-Pentanone	(1)	9.543	43	1110753	25.755
82)\$Toluene-d8	(3)	9.683	98	2153725	10.320
83) Toluene	(3)	9.762	92	860168	5.234
84) trans-1,3-Dichloropropene	(3)	10.024	75	384610	4.683
88) 1,1,2-Trichloroethane	(3)	10.225	97	252638	5.579
89) Tetrachloroethene	(3)	10.311	166	419857	4.953

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13101.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 09:38 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:48 jkh09052

Sample Name: LCS142

Lab Sample ID: LCS142

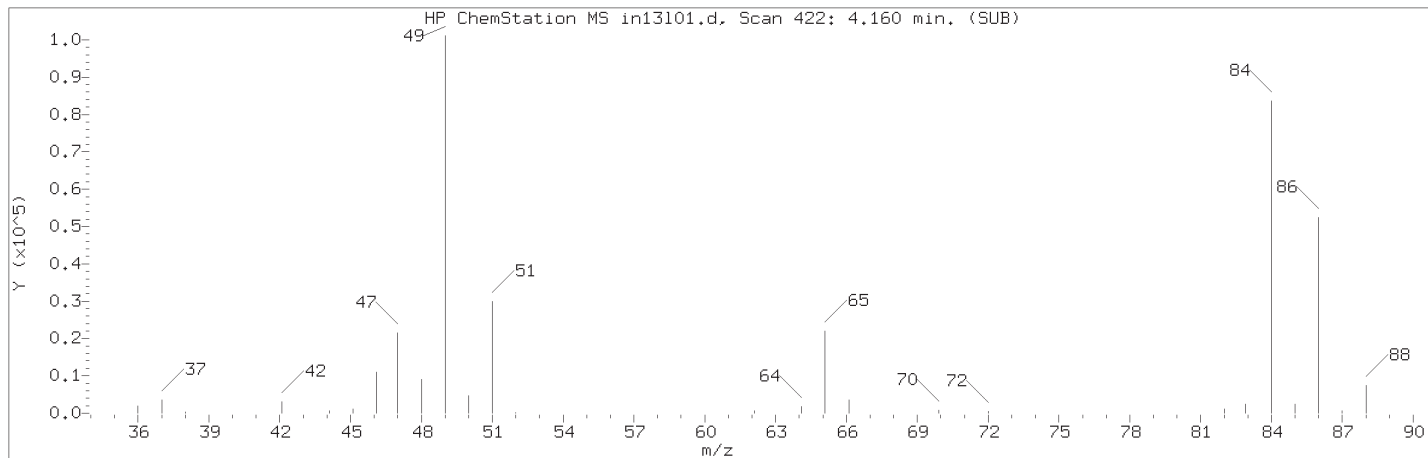
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
91) 2-Hexanone	(1)	10.433	43	816192	26.405
93) Dibromochloromethane	(3)	10.603	129	298525	5.086
95) 1,2-Dibromoethane	(3)	10.719	107	226556	5.216
97) *Chlorobenzene-d5	(3)	11.140	117	1670585	10.000
98) Chlorobenzene	(3)	11.170	112	982568	5.474
100) Ethylbenzene	(3)	11.250	91	1685185	5.172
101) m+p-Xylene	(3)	11.365	106	1336892	10.527
104) o-Xylene	(3)	11.695	106	614470	4.844
106) Styrene	(3)	11.713	104	997393	5.225
105) Xylene (Total)	(3)		106	1951362	15.371
107) Bromoform	(3)	11.878	173	158681	4.446
108) Isopropylbenzene	(3)	11.987	105	1687409	5.104
111) \$4-Bromofluorobenzene	(3)	12.140	95	799684	9.735
113) 1,1,2,2-Tetrachloroethane	(4)	12.231	83	311447M	5.191
131) 1,3-Dichlorobenzene	(4)	12.963	146	833527	5.008
133) *1,4-Dichlorobenzene-d4	(4)	13.018	152	978511	10.000
134) 1,4-Dichlorobenzene	(4)	13.036	146	864547	5.078
139) 1,2-Dichlorobenzene	(4)	13.292	146	782943	5.073
143) 1,2-Dibromo-3-chloropropane	(1)	13.834	155	38302	5.452
145) 1,2,4-Trichlorobenzene	(4)	14.377	180	450347	4.326

M = Compound was manually integrated.

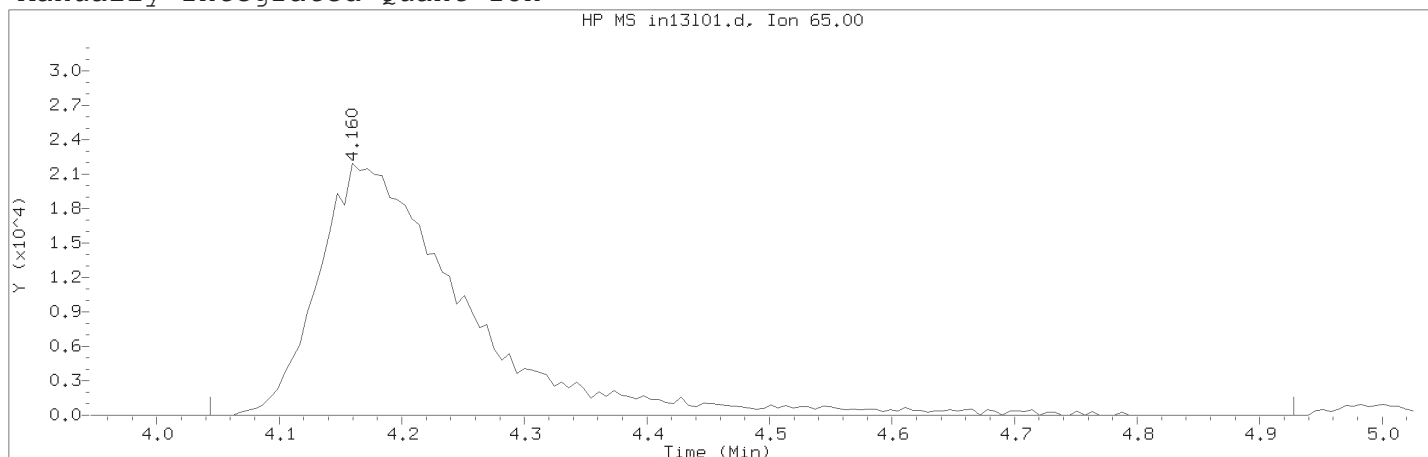
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13101.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 09:38                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 09:48  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:48 jkh09052

Sample Name: LCS142    Lab Sample ID: LCS142

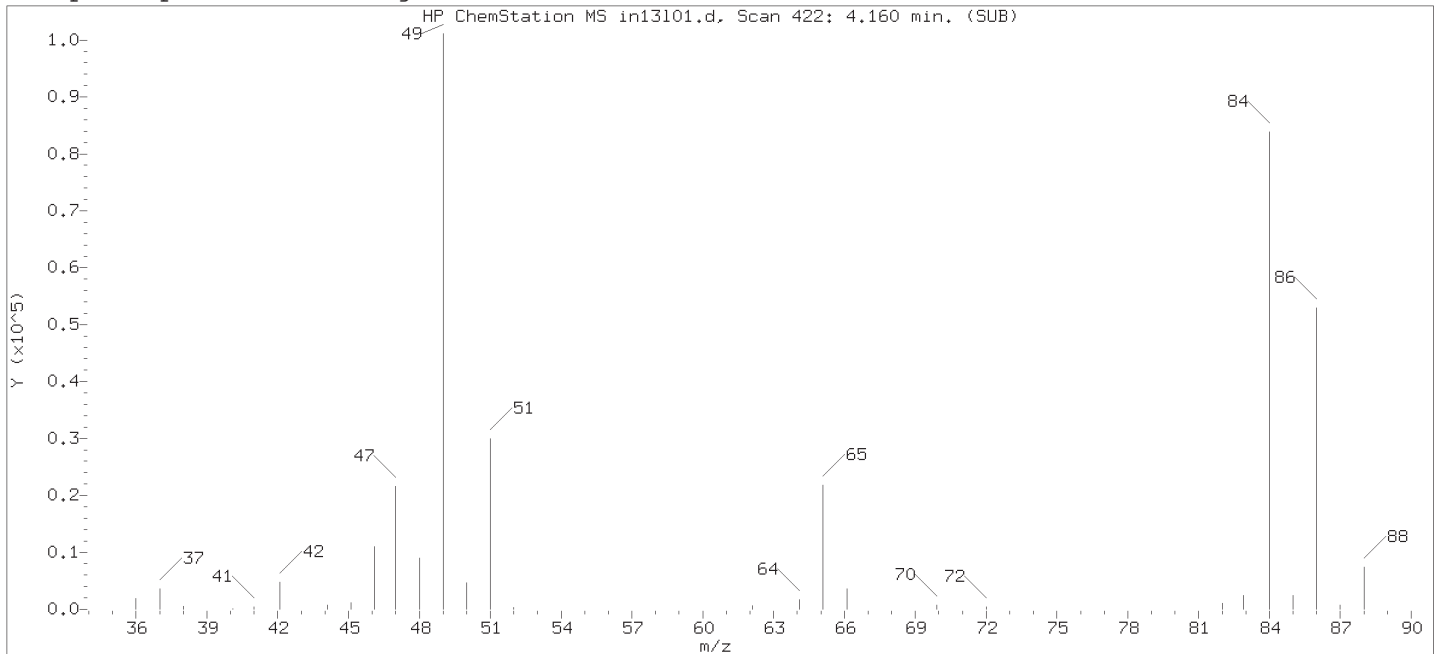
Compound Number                      : 26  
Compound Name                         : t-Butyl Alcohol-d10  
Scan Number                            : 422  
Retention Time (minutes): 4.160  
Quant Ion                                : 65.00  
Area (flag)                             : 181821M  
On-Column Amount (ng)                : 50.0000  
Integration start scan                : 402                      Integration stop scan: 547  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

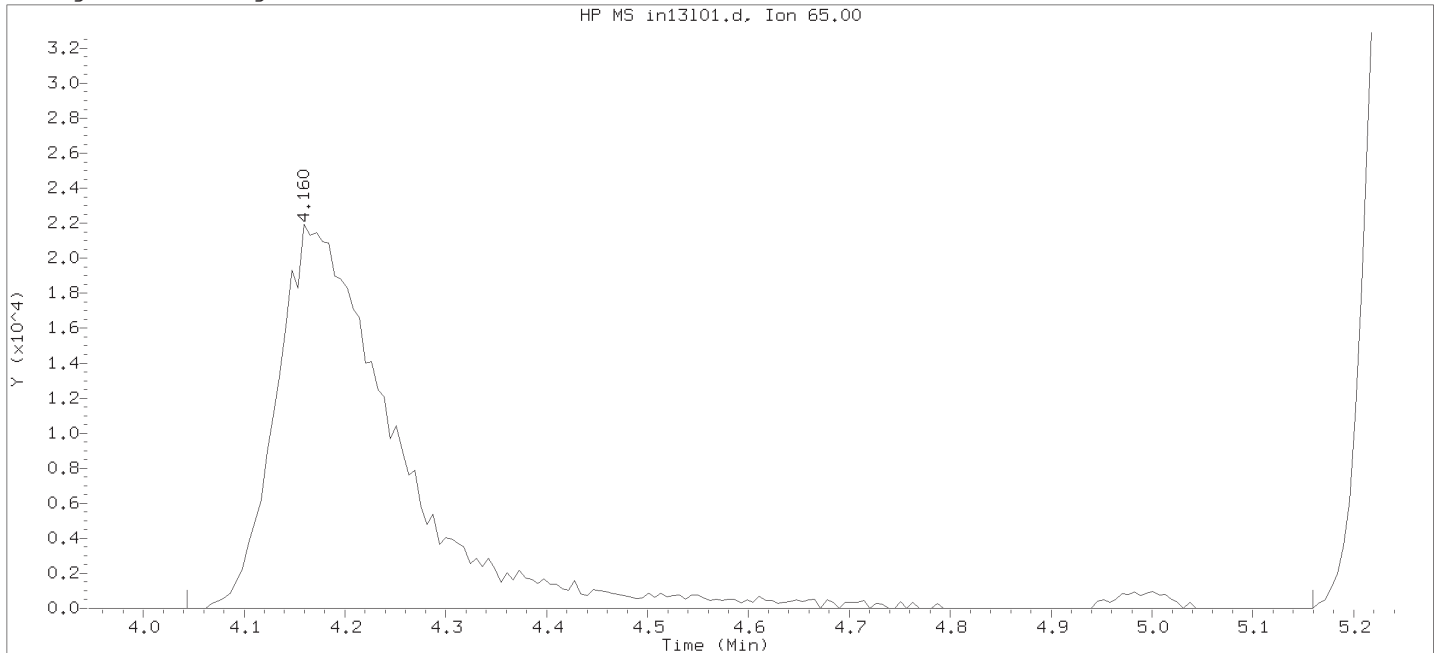
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:51.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:15.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13101.d  
Injection date and time: 13-NOV-2018 09:38

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 09:48  
Date, time and analyst ID of latest file update: 13-Nov-2018 09:56 Automation

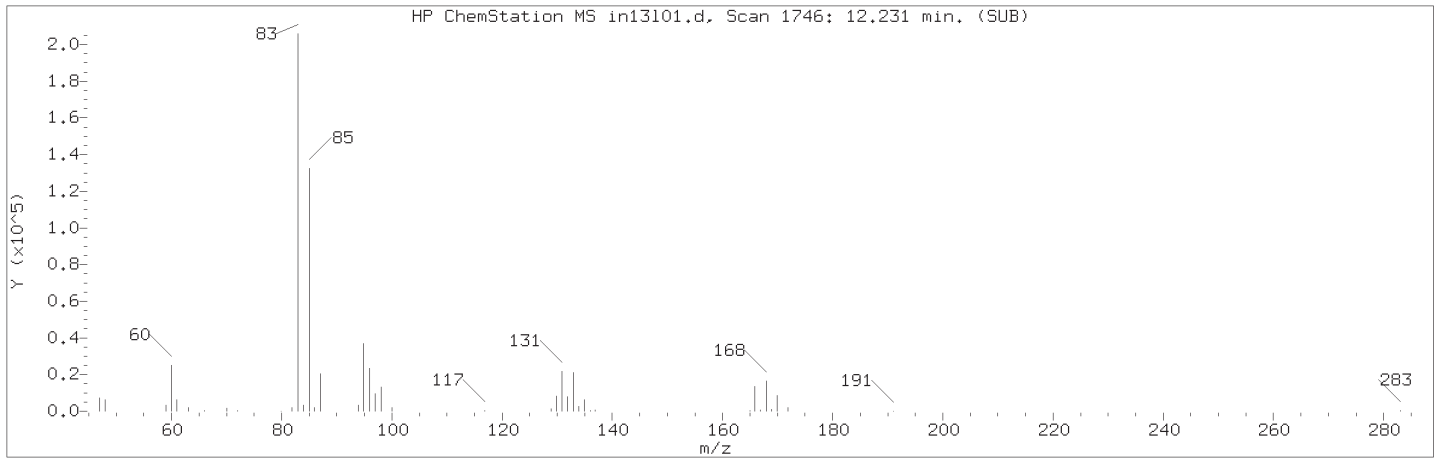
Sample Name: LCS142

Lab Sample ID: LCS142

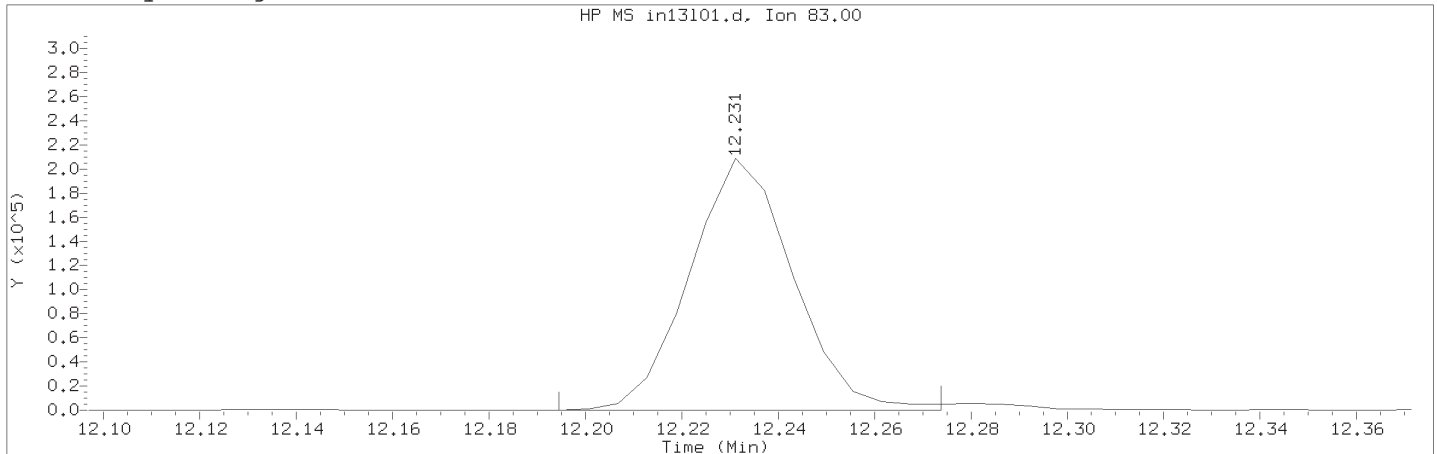
Compound Number : 26  
Compound Name : t-Butyl Alcohol-d10  
Scan Number : 422  
Retention Time (minutes): 4.160  
Quant Ion : 65.00  
Area : 185344  
On-column Amount (ng) : 50.0000  
Integration start scan : 402 Integration stop scan: 585  
Y at integration start : 0 Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13101.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 09:38                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 09:48  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:48 jkh09052

Sample Name: LCS142    Lab Sample ID: LCS142

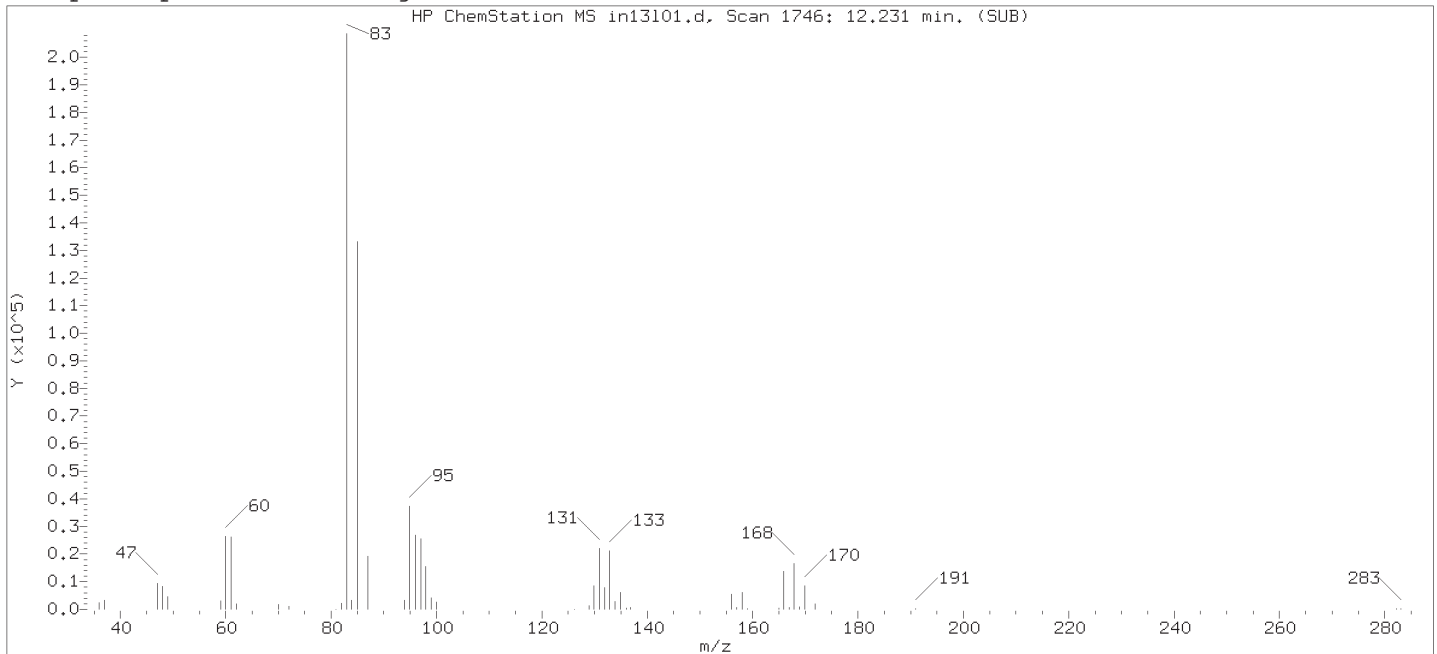
Compound Number                      : 113  
Compound Name                         : 1,1,2,2-Tetrachloroethane  
Scan Number                            : 1746  
Retention Time (minutes): 12.231  
Quant Ion                                : 83.00  
Area (flag)                             : 311447M  
On-Column Amount (ng)                : 5.1914  
Integration start scan                 : 1739                      Integration stop scan: 1752  
Y at integration start                 : 0                         Y at integration end: 0

Reason for manual integration: improper integration

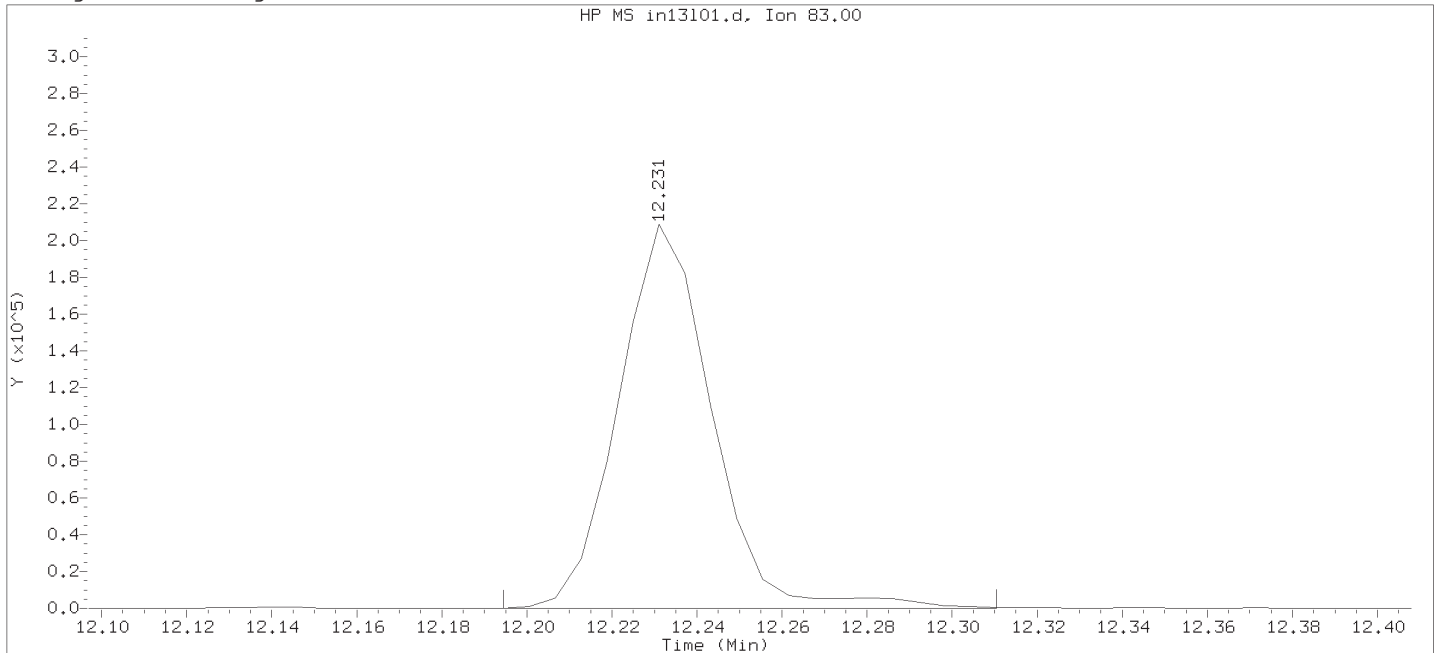
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/16/2018 at 13:51.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/17/2018 at 21:15.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13101.d      Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 09:38      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m      Sublist used: 25789-SM  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 13-Nov-2018 09:56 Automation

Sample Name: LCS142      Lab Sample ID: LCS142

Compound Number : 113  
 Compound Name : 1,1,2,2-Tetrachloroethane  
 Scan Number : 1746  
 Retention Time (minutes): 12.231  
 Quant Ion : 83.00  
 Area : 317229  
 On-column Amount (ng) : 5.2878  
 Integration start scan : 1739      Integration stop scan: 1758  
 Y at integration start : 0      Y at integration end: 88

LCDI42

Lancaster Laboratories  
Analysis Summary for GC/MS Volatiles

LCDI42

Data file: /chem2/HP19930.i/18nov13a.b/in13102.d Injection date and time: 13-NOV-2018 09:59  
 Data file Sample Info. Line: LCDI42;LCDI42;1;3;LCSD;;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:51 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 09:48  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.165( 0.006)	423	65	191531 ( 5)	50.00	
63) Fluorobenzene	7.665( 0.006)	997	96	2205293 ( 4)	10.00	
97) Chlorobenzene-d5	11.140( 0.000)	1567	117	1706282 ( 0)	10.00	
133) 1,4-Dichlorobenzene-d4	13.017(-0.006)	1875	152	995613 ( 0)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.775(-0.001)	113	574959	9.988	100%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.238(-0.001)	102	116032	10.615	106%		81 - 118
82) Toluene-d8	(3)	9.683( 0.000)	98	2200103	10.322	103%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.139( 0.000)	95	819111	9.763	98%		85 - 114

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)	1.910( 0.001)	85	501521	3.726	3.73			0.05	0.5
2) Chloromethane	(2)	2.105( 0.001)	50	377325	3.839	3.84			0.06	0.5
5) Vinyl Chloride	(2)	2.221( 0.001)	62	388876	4.099	4.10			0.1	0.5
7) Bromomethane	(2)	2.532( 0.001)	94	299252	3.350	3.35			0.07	0.5
8) Chloroethane	(2)	2.617( 0.000)	64	213695	3.869	3.87			0.07	0.5
10) Trichlorofluoromethane	(2)	2.916( 0.000)	101	717525	4.424	4.42			0.05	0.5
15) 1,1-Dichloroethene	(2)	3.482( 0.001)	96	303092	5.418	5.42			0.06	0.5
16) Freon 113	(2)	3.507( 0.000)	101	364705	5.615	5.62			0.06	0.5
14) Acetone	(1)	3.519(-0.001)	43	470945	42.078	42.08			0.9	5
18) Carbon Disulfide	(2)	3.806(-0.000)	76	801770	4.831	4.83			0.06	1
21) Methyl Acetate	(1)	3.946(-0.001)	43	144058	5.670	5.67			0.1	1
23) Methylene Chloride	(2)	4.147( 0.000)	84	329631	5.204	5.20			0.07	0.5
31) trans-1,2-Dichloroethene	(2)	4.568( 0.000)	96	332238	5.233	5.23			0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)	4.543( 0.001)	73	747842	4.317	4.32			0.05	0.5
33) 1,1-Dichloroethane	(2)	5.232( 0.000)	63	618517	4.930	4.93			0.07	0.5
39) cis-1,2-Dichloroethene	(2)	6.067( 0.000)	96	374018	5.159	5.16			0.05	0.5
38) 2-Butanone	(1)	6.049(-0.005)	43	707087	38.093	38.09			0.6	5
49) Chloroform	(2)	6.555(-0.000)	83	633223	5.014	5.01			0.09	0.5
51) 1,1,1-Trichloroethane	(2)	6.781(-0.000)	97	591776	4.876	4.88			0.06	0.5
52) Cyclohexane	(2)	6.884(-0.000)	56	559103	4.364	4.36			0.05	0.5
54) Carbon Tetrachloride	(2)	6.994( 0.000)	117	548510	5.160	5.16			0.07	0.5
58) Benzene	(2)	7.262(-0.000)	78	1370467	5.116	5.12			0.05	0.5
59) 1,2-Dichloroethane	(2)	7.342(-0.000)	62	429864	4.758	4.76			0.05	0.5
67) Trichloroethene	(2)	8.146(-0.000)	95	366859	4.997	5.00			0.06	0.5
69) Methylcyclohexane	(2)	8.457(-0.000)	83	609439	4.589	4.59			0.05	0.5
70) 1,2-Dichloropropane	(2)	8.482(-0.000)	63	350616	5.222	5.22			0.06	0.5
74) Bromodichloromethane	(2)	8.829(-0.000)	83	433474	4.784	4.78			0.05	0.5
80) cis-1,3-Dichloropropene	(2)	9.378(-0.000)	75	453685	4.412	4.41			0.05	0.5
81) 4-Methyl-2-Pentanone	(1)	9.536(-0.003)	43	1133099M	24.941	24.94			0.7	5
83) Toluene	(3)	9.762(-0.000)	92	865258	5.155	5.16			0.07	0.5
84) trans-1,3-Dichloropropene	(3)	10.024(-0.000)	75	393035	4.685	4.69			0.06	0.5

M = Compound was manually integrated.

LCDI42

Lancaster Laboratories  
 Analysis Summary for GC/MS Volatiles LCDI42

Data file: /chem2/HP19930.i/18nov13a.b/in13102.d Injection date and time: 13-NOV-2018 09:59  
 Data file Sample Info. Line: LCDI42;LCDI42;1;3;LCSD;;DOD25;;in13b01; Instrument ID: HP19930.i Batch: I183171AA  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:51 jkh09052

Blank Data file reference: /chem2/HP19930.i/18nov13a.b/in13b01.d

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time (Last Method Edit): 13-NOV-2018 09:48  
 Mid Level Daily Calibration Standard Reference: /chem2/HP19930.i/18nov13a.b/in13c01.d

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* (Vt/Vo) VOA Prep Factor: 1.00

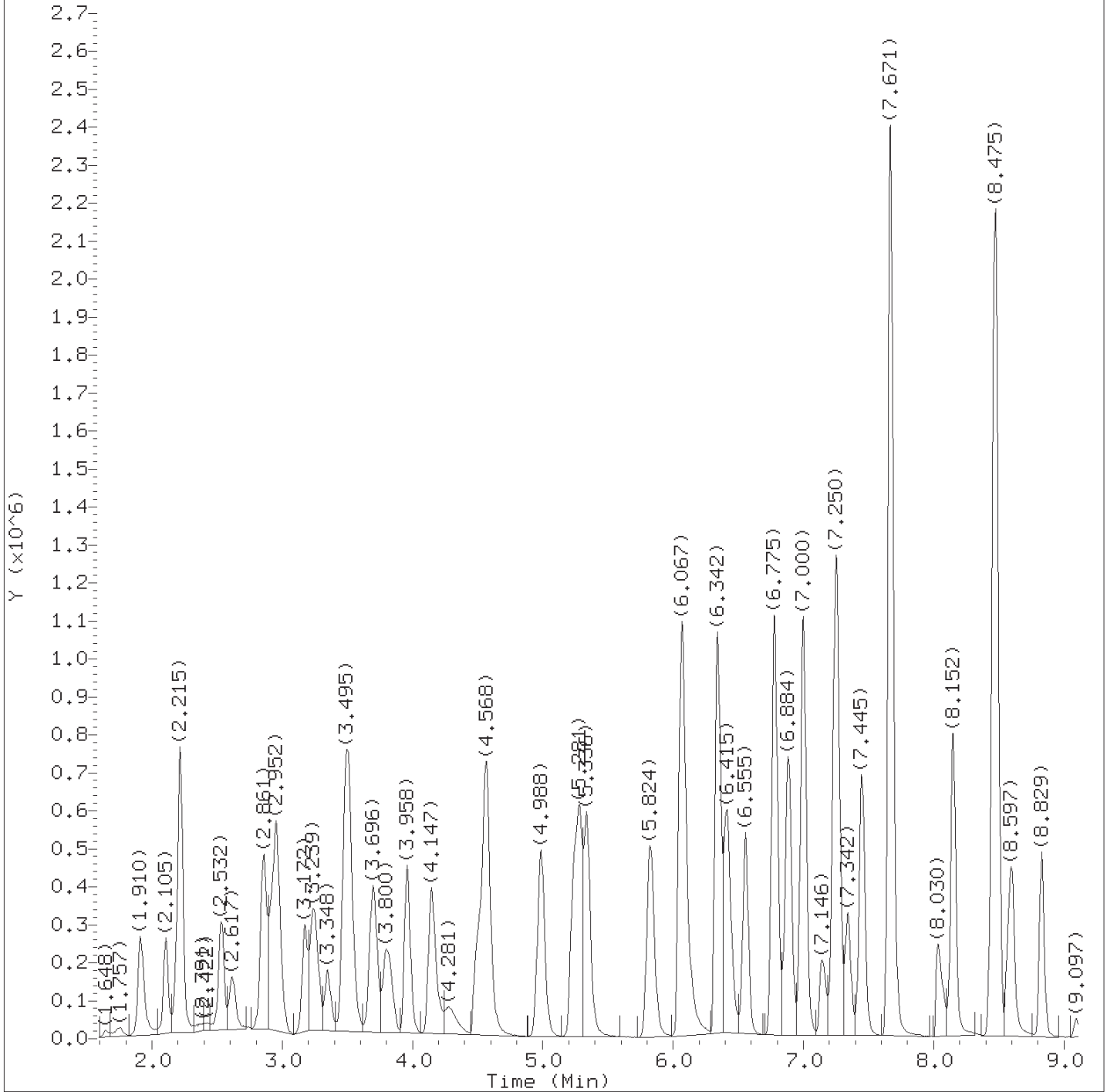
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
									Limit (in sample)	LOQ
88) 1,1,2-Trichloroethane	(3)	10.225 ( 0.000)	97	259254	5.605	5.60		0.06	0.5	
89) Tetrachloroethene	(3)	10.310 ( 0.000)	166	422709	4.883	4.88		0.06	0.5	
91) 2-Hexanone	(1)	10.432 (-0.005)	43	818136	25.126	25.13		0.6	5	
93) Dibromochloromethane	(3)	10.603 (-0.000)	129	300586	5.014	5.01		0.07	0.5	
95) 1,2-Dibromoethane	(3)	10.719 ( 0.000)	107	232762	5.247	5.25		0.06	0.5	
98) Chlorobenzene	(3)	11.170 (-0.000)	112	996419	5.435	5.44		0.06	0.5	
100) Ethylbenzene	(3)	11.249 (-0.000)	91	1710591	5.140	5.14		0.06	0.5	
101) m+p-Xylene	(3)	11.365 (-0.000)	106	1350507	10.412	10.41		0.1	0.5	
104) o-Xylene	(3)	11.694 (-0.000)	106	629360	4.857	4.86		0.05	0.5	
105) Xylene (Total)	(3)		106	1979867	15.269	15.27		0.1	0.5	
106) Styrene	(3)	11.713 (-0.000)	104	1017209	5.218	5.22		0.05	0.5	
107) Bromoform	(3)	11.877 (-0.000)	173	157347	4.317	4.32		0.3	1	
108) Isopropylbenzene	(3)	11.987 (-0.000)	105	1718494	5.089	5.09		0.05	0.5	
113) 1,1,2,2-Tetrachloroethane	(4)	12.231 ( 0.000)	83	312614	5.121	5.12		0.07	0.5	
131) 1,3-Dichlorobenzene	(4)	12.962 (-0.000)	146	835956	4.936	4.94		0.06	0.5	
134) 1,4-Dichlorobenzene	(4)	13.036 ( 0.000)	146	863053	4.982	4.98		0.07	0.5	
139) 1,2-Dichlorobenzene	(4)	13.292 ( 0.000)	146	785015	5.000	5.00		0.06	0.5	
143) 1,2-Dibromo-3-chloropropane	(1)	13.834 (-0.005)	155	40347	5.451	5.45		0.1	0.5	
145) 1,2,4-Trichlorobenzene	(4)	14.377 ( 0.000)	180	467476	4.413	4.41		0.06	0.5	

Total number of targets = 50

Digitally signed by Jennifer K. Howe on 11/19/2018 at 06:03. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/19/2018 at 06:20. PARALLAX ID: kel01973



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a,b/in13102.d  
Injection date and time: 13-NOV-2018 09:59

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a,b/m8260c25.m  
Calibration date and time: 13-NOV-2018 09:48

Sublist used: 25789-SM

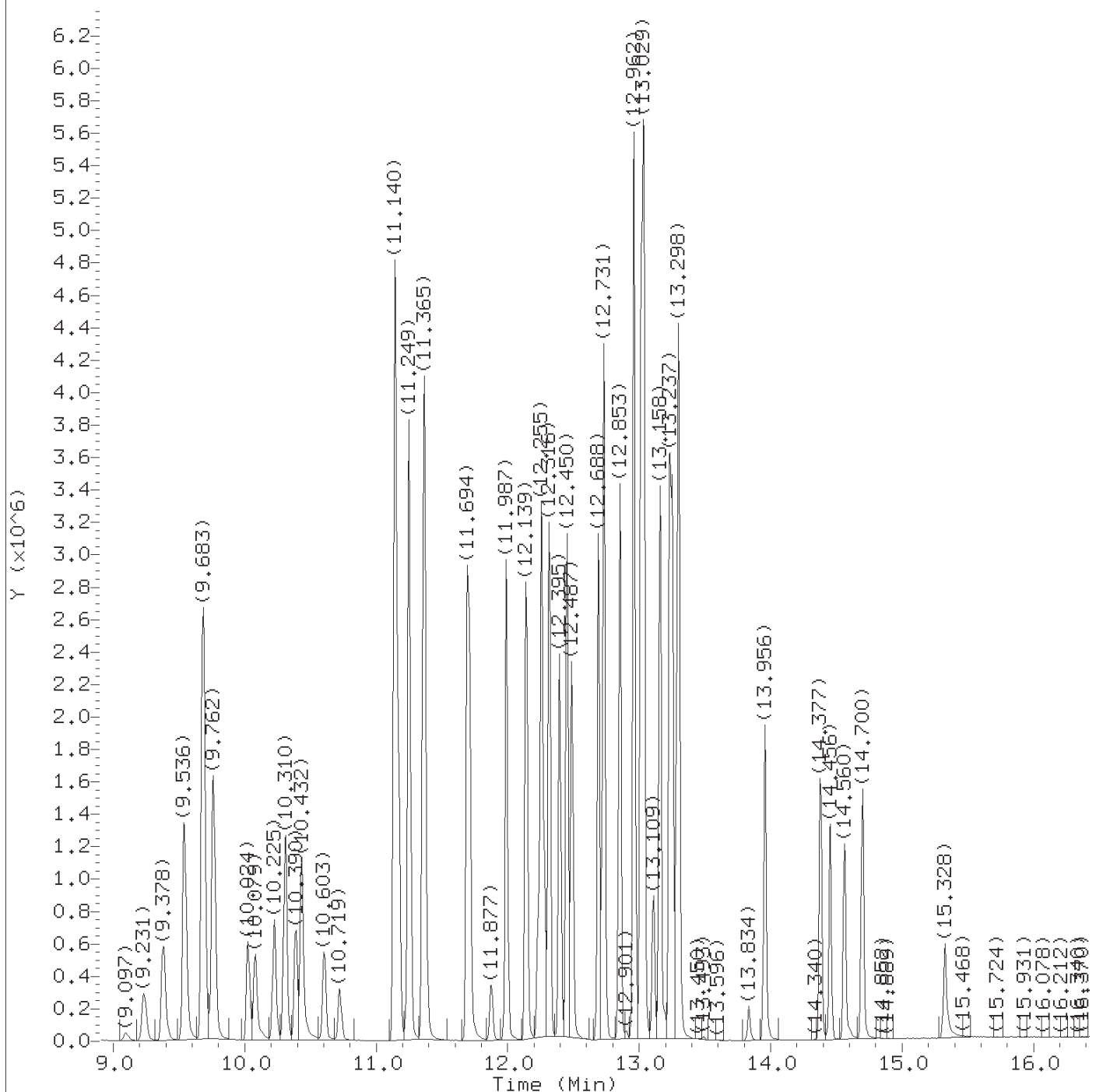
Date, time and analyst ID of latest file update: 16-Nov-2018 13:51 jkh09052

Sample Name: LCDI42

Lab Sample ID: LCDI42

Digitally signed by Jennifer K. Howe  
on 11/19/2018 at 06:03.

Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13102.d  
Injection date and time: 13-NOV-2018 09:59

Instrument ID: HP19930.i  
Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 09:48  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:51 jkh09052

Sample Name: LCDI42

Lab Sample ID: LCDI42

Digitally signed by Jennifer K. Howe  
on 11/19/2018 at 06:03.

Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13102.d  
 Injection date and time: 13-NOV-2018 09:59

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:51 jkh09052

Sample Name: LCDI42

Lab Sample ID: LCDI42

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.910	85	501521	3.726
2) Chloromethane	(2)	2.105	50	377325	3.839
5) Vinyl Chloride	(2)	2.221	62	388876	4.099
7) Bromomethane	(2)	2.532	94	299252	3.350
8) Chloroethane	(2)	2.617	64	213695	3.869
10) Trichlorofluoromethane	(2)	2.916	101	717525	4.424
15) 1,1-Dichloroethene	(2)	3.483	96	303092	5.418
16) Freon 113	(2)	3.507	101	364705	5.615
14) Acetone	(1)	3.519	43	470945	42.078
18) Carbon Disulfide	(2)	3.806	76	801770	4.831
21) Methyl Acetate	(1)	3.946	43	144058	5.670
23) Methylene Chloride	(2)	4.147	84	329631	5.204
26)*t-Butyl Alcohol-d10	(1)	4.165	65	191531	50.000
30) Methyl Tertiary Butyl Ether	(2)	4.543	73	747842	4.317
31) trans-1,2-Dichloroethene	(2)	4.568	96	332238	5.233
33) 1,1-Dichloroethane	(2)	5.232	63	618517	4.930
38) 2-Butanone	(1)	6.049	43	707087	38.093
39) cis-1,2-Dichloroethene	(2)	6.067	96	374018	5.159
49) Chloroform	(2)	6.555	83	633223	5.014
50)\$Dibromofluoromethane	(2)	6.775	113	574959	9.988
51) 1,1,1-Trichloroethane	(2)	6.781	97	591776	4.876
52) Cyclohexane	(2)	6.884	56	559103	4.364
54) Carbon Tetrachloride	(2)	6.994	117	548510	5.160
57)\$1,2-Dichloroethane-d4	(2)	7.238	102	116032	10.615
58) Benzene	(2)	7.262	78	1370467	5.116
59) 1,2-Dichloroethane	(2)	7.342	62	429864	4.758
63)*Fluorobenzene	(2)	7.665	96	2205293	10.000
67) Trichloroethene	(2)	8.146	95	366859	4.997
69) Methylcyclohexane	(2)	8.457	83	609439	4.589
70) 1,2-Dichloropropane	(2)	8.482	63	350616	5.222
74) Bromodichloromethane	(2)	8.829	83	433474	4.784
80) cis-1,3-Dichloropropene	(2)	9.378	75	453685	4.412
81) 4-Methyl-2-Pentanone	(1)	9.536	43	1133099M	24.941
82)\$Toluene-d8	(3)	9.683	98	2200103	10.322
83) Toluene	(3)	9.762	92	865258	5.155
84) trans-1,3-Dichloropropene	(3)	10.024	75	393035	4.685
88) 1,1,2-Trichloroethane	(3)	10.225	97	259254	5.605
89) Tetrachloroethene	(3)	10.310	166	422709	4.883

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/18nov13a.b/in13102.d Instrument ID: HP19930.i  
 Injection date and time: 13-NOV-2018 09:59 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 16-Nov-2018 13:51 jkh09052

Sample Name: LCDI42

Lab Sample ID: LCDI42

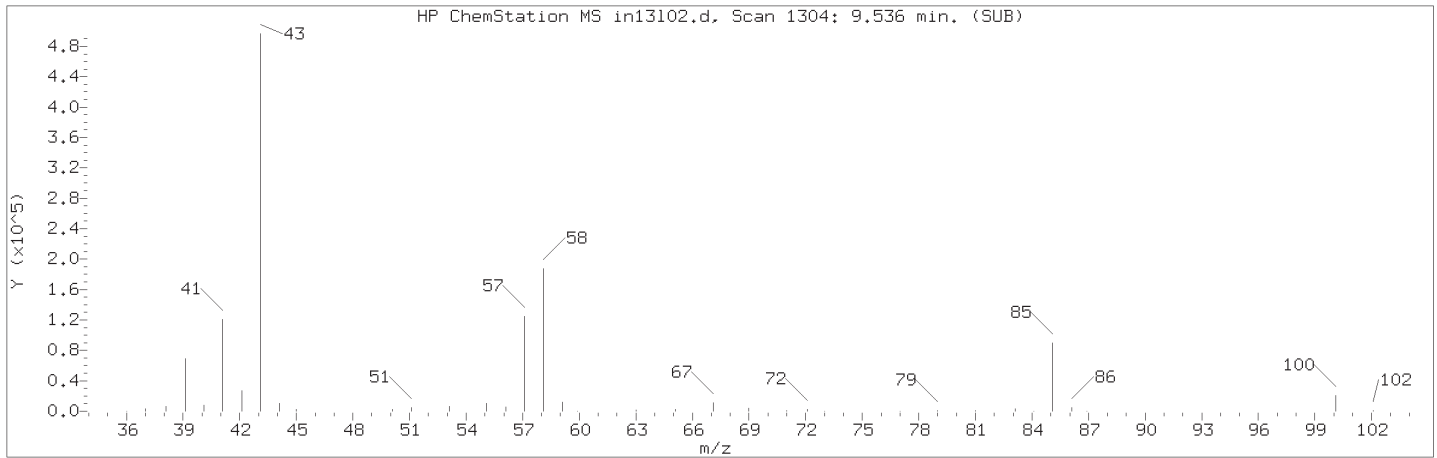
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
91) 2-Hexanone	(1)	10.432	43	818136	25.126
93) Dibromochloromethane	(3)	10.603	129	300586	5.014
95) 1,2-Dibromoethane	(3)	10.719	107	232762	5.247
97) *Chlorobenzene-d5	(3)	11.140	117	1706282	10.000
98) Chlorobenzene	(3)	11.170	112	996419	5.435
100) Ethylbenzene	(3)	11.249	91	1710591	5.140
101) m+p-Xylene	(3)	11.365	106	1350507	10.412
104) o-Xylene	(3)	11.694	106	629360	4.857
106) Styrene	(3)	11.713	104	1017209	5.218
105) Xylene (Total)	(3)		106	1979867	15.269
107) Bromoform	(3)	11.877	173	157347	4.317
108) Isopropylbenzene	(3)	11.987	105	1718494	5.089
111) \$4-Bromofluorobenzene	(3)	12.139	95	819111	9.763
113) 1,1,2,2-Tetrachloroethane	(4)	12.231	83	312614	5.121
131) 1,3-Dichlorobenzene	(4)	12.962	146	835956	4.936
133) *1,4-Dichlorobenzene-d4	(4)	13.017	152	995613	10.000
134) 1,4-Dichlorobenzene	(4)	13.036	146	863053	4.982
139) 1,2-Dichlorobenzene	(4)	13.292	146	785015	5.000
143) 1,2-Dibromo-3-chloropropane	(1)	13.834	155	40347	5.451
145) 1,2,4-Trichlorobenzene	(4)	14.377	180	467476	4.413

\* = Compound is an internal standard.

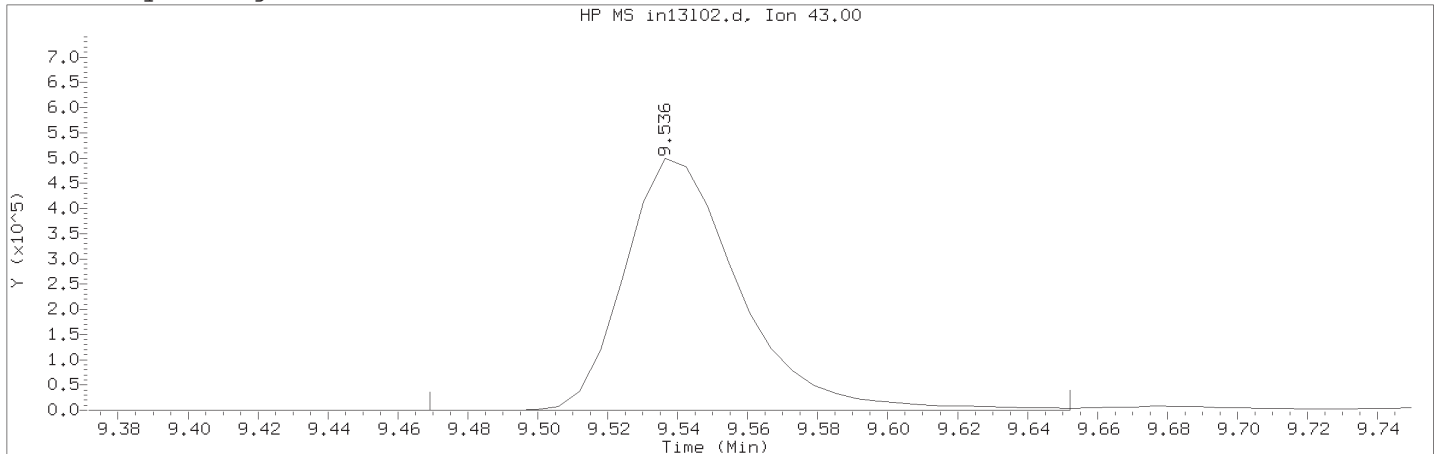
\$ = Compound is a surrogate standard.



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13102.d                      Instrument ID: HP19930.i  
Injection date and time: 13-NOV-2018 09:59                      Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m                      Sublist used: 25789-SM  
Calibration date and time: 13-NOV-2018 09:48  
Date, time and analyst ID of latest file update: 16-Nov-2018 13:51 jkh09052

Sample Name: LCDI42    Lab Sample ID: LCDI42

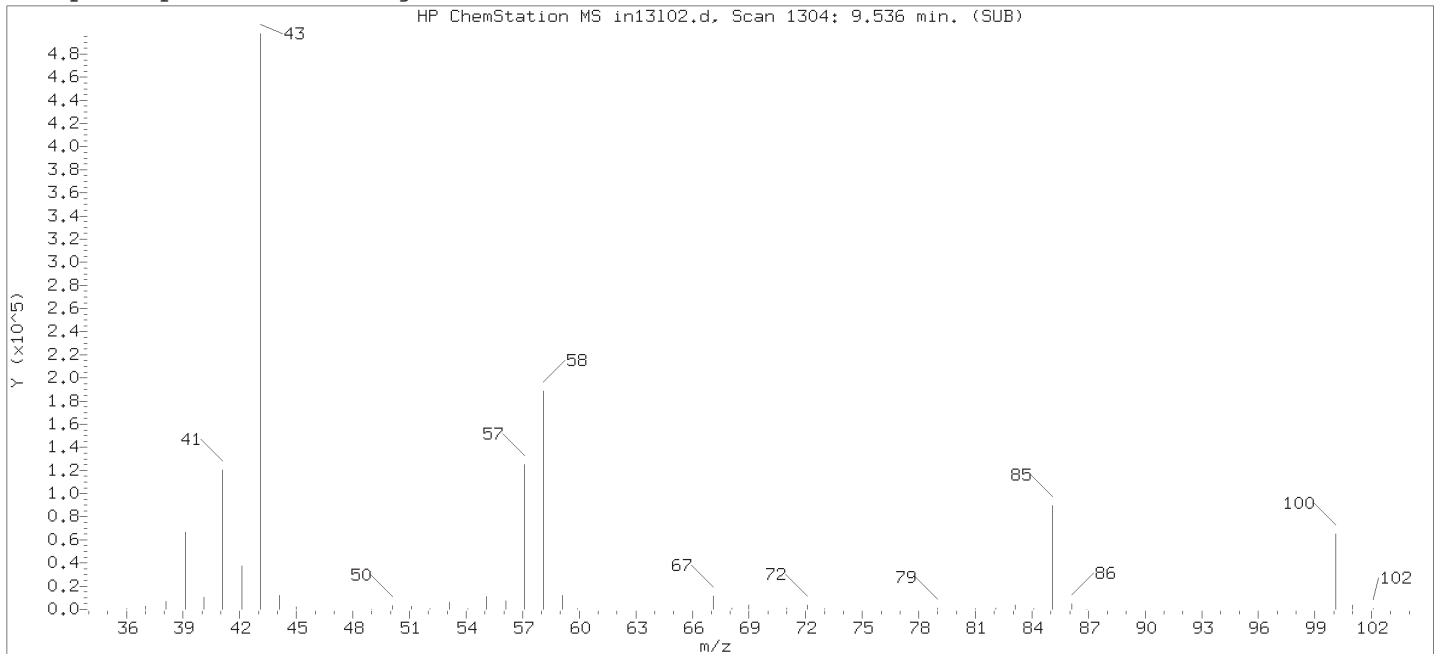
Compound Number                      : 81  
Compound Name                         : 4-Methyl-2-Pentanone  
Scan Number                            : 1304  
Retention Time (minutes): 9.536  
Quant Ion                                : 43.00  
Area (flag)                             : 1133099M  
On-Column Amount (ng)                : 24.9409  
Integration start scan                : 1292                      Integration stop scan: 1322  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

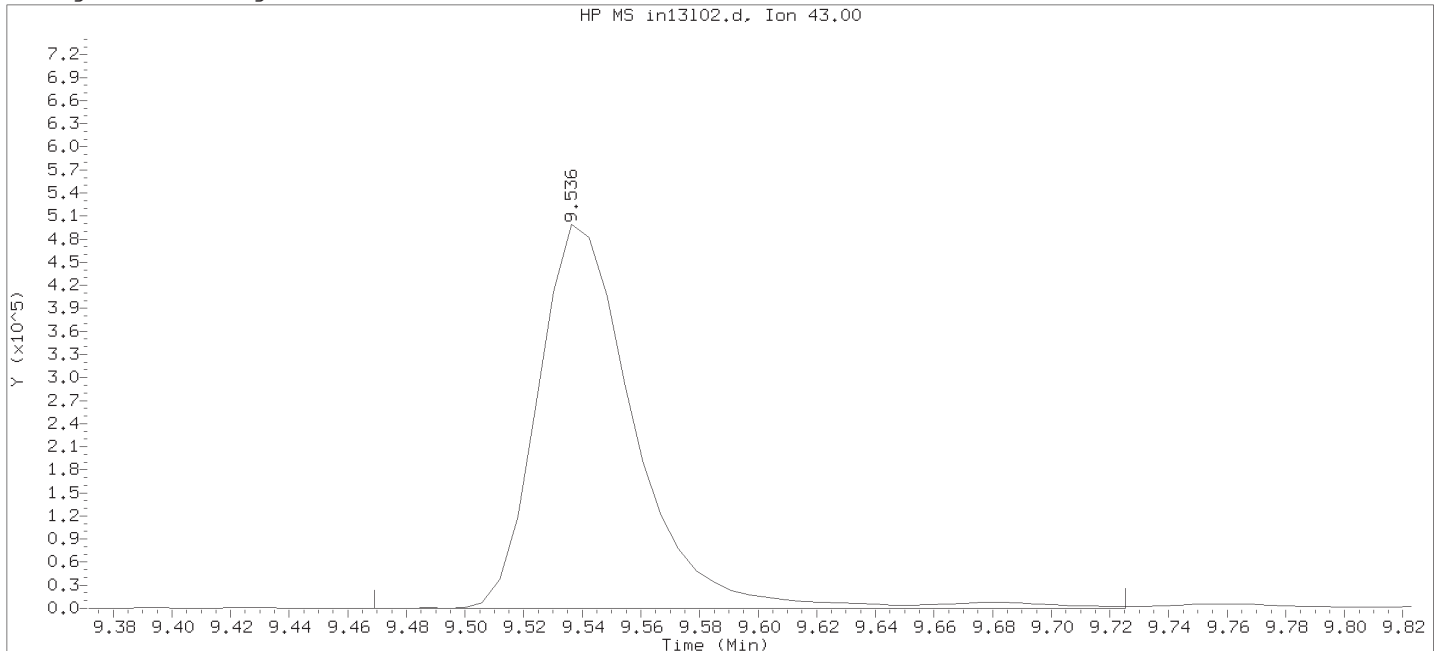
Analyst responsible for change: Digitally signed by Jennifer K. Howe  
on 11/19/2018 at 06:03.  
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Kerri E. Legerlotz on 11/19/2018 at 06:20.  
PARALLAX ID: kel01973

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/18nov13a.b/in13102.d  
 Injection date and time: 13-NOV-2018 09:59

Instrument ID: HP19930.i  
 Analyst ID: JKH09052

Method used: /chem2/HP19930.i/18nov13a.b/m8260c25.m Sublist used: 25789-SM  
 Calibration date and time: 13-NOV-2018 09:48  
 Date, time and analyst ID of latest file update: 13-Nov-2018 10:17 Automation

Sample Name: LCDI42

Lab Sample ID: LCDI42

Compound Number	: 81	
Compound Name	: 4-Methyl-2-Pentanone	
Scan Number	: 1304	
Retention Time (minutes)	: 9.536	
Quant Ion	: 43.00	
Area	: 1152969	
On-column Amount (ng)	: 25.3782	
Integration start scan	: 1292	Integration stop scan: 1334
Y at integration start	: 0	Y at integration end: 192

# **Semivolatiles by GC/MS Data**

# **Case Narrative/Conformance Summary**

## **Semivolatiles by GC/MS**

## Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.  
SDG: TID15

### GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix		DF	Comments
		Liquid	Solid		
9881309	OU2-1-MW008WT	X		1	
9881310	OU2-1-MW008WT-DUP	X		1	Field Duplicate Sample
9881313	OU2-1-MW009WT	X		1	

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below.  
See QC Reference List for Associated Batch QC Samples

#### SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

#### HOLDING TIME:

All holding times were met.

#### PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

#### CALIBRATION/STANDARDIZATION:

(Sample number(s): 9881309-9881310, 9881313: Analysis: 14241)  
The response for a target analyte(s) in the initial calibration verification marginally exceeds the DoD acceptance criteria.  
Due to the marginal nature of the outlier(s), the high response indicating increased sensitivity, and the target analyte(s) not being detected in the sample, the data is reported.

#### QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

##### MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

#### SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

## Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.  
SDG: TID15

### GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

#### Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

# **Quality Control and Calibration Summary Forms**

## **Semivolatiles by GC/MS**

**Quality Control Reference List**  
**GC/MS Semivolatiles**

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

**Fraction: Semivolatiles by GC/MS**

<b>Analysis</b>	<b>Batch Number</b>	<b>Sample Number</b>	<b>Analysis Date</b>
SVOAs 8270D MINI	18310WAI026	SBLKW1310	11/08/2018 00:18
		310WILCS	11/08/2018 00:47
		310WILCSD	11/08/2018 01:16
		9881309	11/08/2018 05:06
		9881310	11/08/2018 05:35
		9881313	11/08/2018 06:03



Fraction: Semivolatiles by GC/MS

18310WAI026 / SBLKWI310 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Pyridine	11/08/18	N.D.	ug/l	2	4	5
Phenol	11/08/18	N.D.	ug/l	0.5	1	2
Aniline	11/08/18	N.D.	ug/l	3	9	10
2-Chlorophenol	11/08/18	N.D.	ug/l	0.5	1	2
1,3-Dichlorobenzene	11/08/18	N.D.	ug/l	0.5	1	2
1,4-Dichlorobenzene	11/08/18	N.D.	ug/l	0.5	1	2
Benzyl alcohol	11/08/18	N.D.	ug/l	10	20	30
1,2-Dichlorobenzene	11/08/18	N.D.	ug/l	0.5	1	2
2-Methylphenol	11/08/18	N.D.	ug/l	0.5	1	2
2,2'-oxybis(1-Chloropropane)	11/08/18	N.D.	ug/l	0.5	1	2
2,4-Dichlorophenol	11/08/18	N.D.	ug/l	0.5	1	2
4-Methylphenol	11/08/18	N.D.	ug/l	0.5	1	2
N-Nitroso-di-n-propylamine	11/08/18	N.D.	ug/l	0.7	2	3
Hexachloroethane	11/08/18	N.D.	ug/l	1	2	5
Nitrobenzene	11/08/18	N.D.	ug/l	0.5	1	2
Isophorone	11/08/18	N.D.	ug/l	0.5	1	2
2-Nitrophenol	11/08/18	N.D.	ug/l	3	9	10
2,4-Dimethylphenol	11/08/18	N.D.	ug/l	3	9	10
bis(2-Chloroethoxy)methane	11/08/18	N.D.	ug/l	0.5	1	2
1,2,4-Trichlorobenzene	11/08/18	N.D.	ug/l	0.5	1	2
4-Chloroaniline	11/08/18	N.D.	ug/l	4	9	10
Hexachlorobutadiene	11/08/18	N.D.	ug/l	0.5	1	2
4-Chloro-3-methylphenol	11/08/18	N.D.	ug/l	0.5	1	2
2-Methylnaphthalene	11/08/18	N.D.	ug/l	0.1	0.2	0.5
Hexachlorocyclopentadiene	11/08/18	N.D.	ug/l	5	10	11
2,4,6-Trichlorophenol	11/08/18	N.D.	ug/l	0.5	1	2
2,4,5-Trichlorophenol	11/08/18	N.D.	ug/l	0.5	1	2
2-Chloronaphthalene	11/08/18	N.D.	ug/l	0.4	0.8	1
2-Nitroaniline	11/08/18	N.D.	ug/l	2	6	7
Dimethylphthalate	11/08/18	N.D.	ug/l	2	4	5
2,6-Dinitrotoluene	11/08/18	N.D.	ug/l	0.5	1	2
3-Nitroaniline	11/08/18	N.D.	ug/l	3	6	7
2,4-Dinitrophenol	11/08/18	N.D.	ug/l	14	28	30
4-Nitrophenol	11/08/18	N.D.	ug/l	10	20	30
2,4-Dinitrotoluene	11/08/18	N.D.	ug/l	1	2	5
Dibenzofuran	11/08/18	N.D.	ug/l	0.5	1	2
Diethylphthalate	11/08/18	N.D.	ug/l	2	4	5
4-Chlorophenyl-phenylether	11/08/18	N.D.	ug/l	0.5	1	2
4-Nitroaniline	11/08/18	N.D.	ug/l	0.9	2	3
4,6-Dinitro-2-methylphenol	11/08/18	N.D.	ug/l	8	20	21
N-Nitrosodiphenylamine	11/08/18	N.D.	ug/l	0.7	2	3
4-Bromophenyl-phenylether	11/08/18	N.D.	ug/l	0.5	1	2
Pentachlorophenol	11/08/18	N.D.	ug/l	1	4	5
Carbazole	11/08/18	N.D.	ug/l	0.5	1	2
3,3'-Dichlorobenzidine	11/08/18	N.D.	ug/l	3	9	10

Fraction: Semivolatiles by GC/MS

18310WAI026 / SBLKWI310 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Di-n-octylphthalate	11/08/18	N.D.	ug/l	5	10	11



Fraction: Semivolatiles by GC/MS

Sample	2,4,6-Tribromophenol		2-Fluorobiphenyl		2-Fluorophenol		Nitrobenzene-d5		Phenol-d6		Terphenyl-d14	
	Spike Added	Limits	% Recovery	Spike Added	Limits	% Recovery	Spike Added	Limits	% Recovery	Spike Added	Limits	% Recovery
SBLKW1310	98	43 - 140	50	44 - 119	45	19 - 119	73	44 - 120	31	10 - 72	96	50 - 134
310WILCS	99	43 - 140	69	44 - 119	53	19 - 119	77	44 - 120	39	10 - 72	92	50 - 134
310WILCSD	101	43 - 140	67	44 - 119	59	19 - 119	77	44 - 120	43	10 - 72	94	50 - 134
9881309	87	43 - 140	76	44 - 119	44	19 - 119	78	44 - 120	30	10 - 72	91	50 - 134
9881310	95	43 - 140	65	44 - 119	58	19 - 119	65	44 - 120	48	10 - 72	72	50 - 134
9881313	94	43 - 140	69	44 - 119	49	19 - 119	64	44 - 120	42	10 - 72	83	50 - 134

SDG: TID15  
Matrix: LIQUID

**GC/MS Semivolatiles**

Fraction: Semivolatiles by GC/MS

LCS: 310WILCS LCSD: 310WILCSD	Batch: 18310WAI026 (Sample number(s): 9881309-9881310, 9881313 )							
	Analyte	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD
Pyridine	50	19.43	20.58	39	41	13-83	6	30
Phenol	50	21.24	24.16	42	48	23-82	13	30
Aniline	50	25.83	28.93	52	58	29-101	11	30
2-Chlorophenol	50	37.1	40.21	74	80	38-117	8	20
1,3-Dichlorobenzene	50	25.74	26.7	51	53	28-110	4	20
1,4-Dichlorobenzene	50	26.66	26.36	53	53	29-112	1	20
Benzyl alcohol	50	42.18	44.33	84	89	31-112	5	20
1,2-Dichlorobenzene	50	27.6	27.76	55	56	32-111	1	20
2-Methylphenol	50	36.24	38.74	72	77	30-117	7	20
2,2'-oxybis(1-Chloropropane)	50	33.49	33.75	67	67	48-118	1	30
2,4-Dichlorophenol	50	42.56	43.12	85	86	47-121	1	20
4-Methylphenol	50	38.39	40.66	77	81	25-120	6	20
N-Nitroso-di-n-propylamine	50	39.44	40.7	79	81	49-119	3	20
Hexachloroethane	50	22.53	22	45	44	21-115	2	20
Nitrobenzene	50	40.44	39.72	81	79	45-121	2	20
Isophorone	50	40.93	41.27	82	83	42-124	1	20
2-Nitrophenol	50	43.48	43.93	87	88	47-123	1	20
2,4-Dimethylphenol	50	34.33	34.01	69	68	31-124	1	20
bis(2-Chloroethoxy)methane	50	41.55	41.98	83	84	48-120	1	20
1,2,4-Trichlorobenzene	50	28.9	27.68	58	55	29-116	4	20
4-Chloroaniline	50	35.12	36.24	70	72	33-117	3	20
Hexachlorobutadiene	50	24.61	23.36	49	47	22-124	5	20
4-Chloro-3-methylphenol	50	43.39	44.01	87	88	52-119	1	20
2-Methylnaphthalene	50	33.12	31.59	66	63	40-121	5	20
Hexachlorocyclopentadiene	100	10.32 J	10.07 J	10	10	10-117	2	30
2,4,6-Trichlorophenol	50	48.39	48.55	97	97	50-125	0	20
2,4,5-Trichlorophenol	50	46.73	45.85	93	92	53-123	2	20
2-Chloronaphthalene	50	32.33	29.85	65	60	40-116	8	20
2-Nitroaniline	50	49.78	48.1	100	96	55-127	3	20
Dimethylphthalate	50	25.02	22.27	50	45	45-127	12	20
2,6-Dinitrotoluene	50	50.37	48.24	101	96	57-124	4	20
3-Nitroaniline	50	42.95	41.21	86	82	41-128	4	20
2,4-Dinitrophenol	100	100.61	101.53	101	102	23-143	1	20
4-Nitrophenol	50	24.79 J	24.6 J	50	49	28-88	1	30
2,4-Dinitrotoluene	50	46.08	45.86	92	92	57-128	0	20
Dibenzofuran	50	37.97	35.24	76	70	53-118	7	20
Diethylphthalate	50	31.54	30.86	63	62	56-125	2	20
4-Chlorophenyl-phenylether	50	32.55	30.85	65	62	53-121	5	20
4-Nitroaniline	50	40.47	39.97	81	80	53-111	1	30
4,6-Dinitro-2-methylphenol	50	46.96	47.22	94	94	44-137	1	20
N-Nitrosodiphenylamine	50	46.3	46.46	93	93	51-123	0	20
4-Bromophenyl-phenylether	50	34.6	33.91	69	68	55-124	2	20

SDG: TID15  
Matrix: LIQUID

**GC/MS Semivolatiles**

Fraction: Semivolatiles by GC/MS

LCS: 310WILCS LCSD: 310WILCSD  Analyte	Batch: <b>18310WA1026</b> (Sample number(s): 9881309-9881310, 9881313 )							
	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
Pentachlorophenol	50	44.52	47.7	89	95	35-138	7	20
Carbazole	50	45.8	47.08	92	94	60-122	3	20
3,3'-Dichlorobenzidine	50	39.29	39.82	79	80	27-129	1	20
Di-n-octylphthalate	50	41.4	42.45	83	85	51-140	3	20

Fraction: Semivolatiles by GC/MS

14241: SVOAs 8270D MINI Analyte Name	Default DL	Default LOD	Default LOQ	Units
Pyridine	2	4	5	ug/l
Phenol	.5	1	2	ug/l
Aniline	3	9	10	ug/l
2-Chlorophenol	.5	1	2	ug/l
1,3-Dichlorobenzene	.5	1	2	ug/l
1,4-Dichlorobenzene	.5	1	2	ug/l
Benzyl alcohol	10	20	30	ug/l
1,2-Dichlorobenzene	.5	1	2	ug/l
2-Methylphenol	.5	1	2	ug/l
2,2'-oxybis(1-Chloropropane)	.5	1	2	ug/l
2,4-Dichlorophenol	.5	1	2	ug/l
4-Methylphenol	.5	1	2	ug/l
N-Nitroso-di-n-propylamine	.7	2	3	ug/l
Hexachloroethane	1	2	5	ug/l
Nitrobenzene	.5	1	2	ug/l
Isophorone	.5	1	2	ug/l
2-Nitrophenol	3	9	10	ug/l
2,4-Dimethylphenol	3	9	10	ug/l
bis(2-Chloroethoxy)methane	.5	1	2	ug/l
1,2,4-Trichlorobenzene	.5	1	2	ug/l
4-Chloroaniline	4	9	10	ug/l
Hexachlorobutadiene	.5	1	2	ug/l
4-Chloro-3-methylphenol	.5	1	2	ug/l
2-Methylnaphthalene	.1	.2	0.5	ug/l
Hexachlorocyclopentadiene	5	10	11	ug/l
2,4,6-Trichlorophenol	.5	1	2	ug/l
2,4,5-Trichlorophenol	.5	1	2	ug/l
2-Chloronaphthalene	.4	.8	1	ug/l
2-Nitroaniline	2	6	7	ug/l
Dimethylphthalate	2	4	5	ug/l
2,6-Dinitrotoluene	.5	1	2	ug/l
3-Nitroaniline	3	6	7	ug/l
2,4-Dinitrophenol	14	28	30	ug/l
4-Nitrophenol	10	20	30	ug/l
2,4-Dinitrotoluene	1	2	5	ug/l
Dibenzofuran	.5	1	2	ug/l
Diethylphthalate	2	4	5	ug/l
4-Chlorophenyl-phenylether	.5	1	2	ug/l
4-Nitroaniline	.9	2	3	ug/l
4,6-Dinitro-2-methylphenol	8	20	21	ug/l
N-Nitrosodiphenylamine	.7	2	3	ug/l
4-Bromophenyl-phenylether	.5	1	2	ug/l
Pentachlorophenol	1	4	5	ug/l
Carbazole	.5	1	2	ug/l
3,3'-Dichlorobenzidine	3	9	10	ug/l
Di-n-octylphthalate	5	10	11	ug/l

Fraction: Semivolatiles by GC/MS

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_

Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_

Lab File ID: lj1740b.d DFTPP Injection Date: 10/29/18

Instrument ID: HP20296 DFTPP Injection Time: 00:09

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	50.5
68	Less than 2.0% of mass 69	0.79 ( 1.36)1
69	Mass 69 relative abundance	57.9
70	Less than 2.0% of mass 69	0.3 ( 0.53)1
127	10.0 - 80.00% of mass 198	46.6
197	Less than 2.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	7.24
275	10.0 - 60.0% of mass 198	20.8
365	Greater than 1.00% of mass 198	2.25
441	Present, and less than mass 443	11.2
442	Greater than 50.00% of mass 198	71.1
443	15.00 - 24.00% of mass 442	14.4 ( 20.3)2

1-Value is % mass 69

2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSTD2648 - SSTD7.5	lj1741.d	10/29/18	00:23
02	RVSTD2648 - SSTD.125	lj1742.d	10/29/18	00:56
03	RVSTD2648 - SSTD30	lj1743.d	10/29/18	01:25
04	RVSTD2648 - SSTD20	lj1744.d	10/29/18	01:53
05	RVSTD2648 - SSTD12.5	lj1745.d	10/29/18	02:22
06	RVSTD2648 - SSTD3.75	lj1746.d	10/29/18	02:51
07	RVSTD2648 - SSTD1.25	lj1747.d	10/29/18	03:20
08	RVSTD2648 - SSTD.25	lj1748.d	10/29/18	03:49
09	RVSTD2648 - SSTD0.125	lj1749.d	10/29/18	04:18
10	PAHMDL2648 - SSTD0.025	lj1750.d	10/29/18	04:47
11	RVICV2628 - SSTD12.5	lj1751.d	10/29/18	05:15



SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_

Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_

Lab File ID: lk0500d.d DFTPP Injection Date: 11/07/18

Instrument ID: HP20296 DFTPP Injection Time: 21:40

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	49.6
68	Less than 2.0% of mass 69	0.94 ( 1.59)1
69	Mass 69 relative abundance	59.1
70	Less than 2.0% of mass 69	0.2 ( 0.34)1
127	10.0 - 80.00% of mass 198	49.9
197	Less than 2.0% of mass 198	0.63
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.67
275	10.0 - 60.0% of mass 198	21.8
365	Greater than 1.00% of mass 198	2.42
441	Present, and less than mass 443	9.52
442	Greater than 50.00% of mass 198	67.5
443	15.00 - 24.00% of mass 442	13.9 ( 20.6)2

1-Value is % mass 69

2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSTD2648 - SSTD7.5	lk0501.d	11/07/18	21:58
02	SBLKWS309	lk0502a.d	11/07/18	23:21
03	309WSLCS	lk0503.d	11/07/18	23:50
04	SBLKWI310	lk0504.d	11/08/18	00:18
05	310WILCS	lk0505.d	11/08/18	00:47
06	310WILCSD	lk0506.d	11/08/18	01:16
07	9879277	lk0509.d	11/08/18	02:42
08	9879278	lk0510.d	11/08/18	03:11
09	9879282	lk0511.d	11/08/18	03:40
10	9879393	lk0512.d	11/08/18	04:08
11	9879406	lk0513.d	11/08/18	04:37
12	9881309	lk0514.d	11/08/18	05:06
13	9881310	lk0515.d	11/08/18	05:35
14	9881313	lk0516.d	11/08/18	06:03
15	RVSTD2648	lk0525.d	11/08/18	06:32

6B  
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP20296 Calibration Date(s): 10/29/18 10/29/18  
 Calibration Times: 00:23 03:49  
 Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(\*) = 30%

LAB FILE ID:RRF0.125 = lj1742.d	RRF0.25 = lj1748.d	RRF1.25 = lj1747.d	RRF3.75 = lj1746.d	RRF7.5 = lj1741.d	RRF12.5 = lj1745.d	RRF20 = lj1744.d	RRF30 = lj1743.d	RRF	%	CAL.
COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	RSD	METHOD
1,4-Dioxane			0.773	0.780	0.716	0.742	0.727	0.751	0.748	3   AVG
N-Nitrosodimethylamine			1.060	1.068	1.115	1.144	1.150	1.208	1.124	5   AVG
Pyridine			1.711	1.907	1.944	1.974	1.929	2.013	1.913	6   AVG
2-Picoline			1.981	2.002	1.956	1.972	2.004	2.067	1.997	2   AVG
N-Nitrosomethylethylamine			0.800	0.785	0.828	0.811	0.842	0.827	0.816	3   AVG
Methyl methanesulfonate			1.073	0.975	1.046	1.055	1.050	1.058	1.043	3   AVG
N-Nitrosodiethylamine	0.510	0.616	0.717	0.757	0.773	0.786	0.774	0.705	15   AVG	
Ethyl methanesulfonate	0.715	0.810	0.816	0.822	0.813	0.817	0.809	0.800	5   AVG	
Benzaldehyde			1.530	1.601	1.574	1.472	1.299	1.121	1.433	13   AVG
Phenol	2.299	2.451	2.426	2.549	2.497	2.485	2.442	2.450	3   AVG	
Aniline	2.614	2.829	2.902	2.979	2.991	2.938	2.902	2.879	4   AVG	
a-methylstyrene			0.139	0.142	0.153	0.161	0.155	0.155	0.151	6   AVG
bis(2-Chloroethyl) ether	1.748	1.848	1.821	1.908	1.903	1.851	1.824	1.843	3   AVG	
2-Chlorophenol	1.232	1.455	1.471	1.496	1.489	1.498	1.460	1.443	7   AVG	
1,3-Dichlorobenzene	1.571	1.617	1.585	1.662	1.665	1.629	1.598	1.618	2   AVG	
1,4-Dichlorobenzene	1.655	1.603	1.614	1.664	1.643	1.622	1.580	1.626	2   AVG	
Benzyl alcohol			0.903	0.934	0.988	1.044	1.030	1.043	0.990	6   AVG
1,2-Dichlorobenzene	1.704	1.521	1.575	1.574	1.595	1.569	1.522	1.580	4   AVG	
Indene			1.754	1.652	1.751	1.756	1.769	1.739	1.737	2   AVG
2-Methylphenol	1.396	1.507	1.509	1.589	1.572	1.529	1.523	1.518	4   AVG	
2,2'-oxybis(1-Chloropropane)	2.227	2.263	2.262	2.424	2.401	2.334	2.362	2.325	3   AVG	
bis(2-Chloroisopropyl) ether	2.227	2.263	2.262	2.424	2.401	2.334	2.362	2.325	3   AVG	
N-Nitrosopyrrolidine	0.677	0.695	0.763	0.819	0.832	0.817	0.823	0.775	8   AVG	
Acetophenone	2.173	2.327	2.381	2.431	2.418	2.316	2.327	2.339	4   AVG	
4-Methylphenol	1.617	1.541	1.573	1.637	1.578	1.572	1.573	1.584	2   AVG	
Total Cresols	1.507	1.524	1.541	1.613	1.575	1.551	1.548	1.551	2   AVG	
N-Nitroso-di-n-propylamine	1.371	1.376	1.390	1.484	1.455	1.410	1.413	1.414	3   AVG	
N-Nitrosomorpholine			1.003	1.027	1.059	1.037	1.029	1.007	1.027	2   AVG
o-Toluidine	2.392	2.609	2.691	2.793	2.719	2.680	2.646	2.647	5   AVG	
Hexachloroethane			0.719	0.759	0.737	0.758	0.736	0.721	0.738	2   AVG
Nitrobenzene	0.492	0.543	0.564	0.576	0.576	0.577	0.576	0.558	6   AVG	
N-Nitrosopiperidine	0.172	0.187	0.191	0.202	0.206	0.205	0.207	0.196	7   AVG	
Isophorone	0.816	0.895	0.955	0.961	0.977	0.990	0.996	0.941	7   AVG	
2-Nitrophenol	0.157	0.166	0.179	0.187	0.197	0.202	0.196	0.183	9   AVG	
2,4-Dimethylphenol	0.400	0.426	0.447	0.472	0.466	0.467	0.460	0.448	6   AVG	
O,O,O-Triethylphosphorothioat			0.181	0.187	0.195	0.193	0.200	0.198	0.192	4   AVG
bis(2-Chloroethoxy)methane	0.567	0.602	0.612	0.605	0.609	0.620	0.588	0.600	3   AVG	
Benzoic acid			0.229	0.275	0.292	0.317	0.317	0.323	0.292	12   AVG
2,4-Dichlorophenol	0.296	0.293	0.332	0.331	0.327	0.336	0.336	0.322	6   AVG	
1,2,4-Trichlorobenzene	0.396	0.357	0.364	0.365	0.374	0.374	0.368	0.371	3   AVG	
Naphthalene	1.097	1.109	1.115	1.129	1.136	1.154	1.148	1.146	1.129	2   AVG
4-Chloroaniline			0.413	0.455	0.457	0.460	0.465	0.471	0.466	4   AVG
2,6-Dichlorophenol	0.298	0.307	0.300	0.320	0.323	0.320	0.320	0.313	3   AVG	
Hexachloropropene			0.219	0.231	0.240	0.249	0.250	0.247	0.239	5   AVG
Hexachlorobutadiene	0.208	0.218	0.223	0.212	0.222	0.224	0.224	0.219	3   AVG	
Quinoline			0.656	0.672	0.672	0.679	0.672	0.682	0.672	1   AVG
Caprolactam			0.076	0.103	0.102	0.107	0.105	0.101	0.099	12   AVG
N-Nitrosodi-n-butylamine			0.322	0.346	0.351	0.356	0.433	0.436	0.374	13   AVG
4-Chloro-3-methylphenol	0.333	0.349	0.392	0.395	0.393	0.408	0.401	0.382	8   AVG	
Safrole			0.278	0.273	0.282	0.289	0.291	0.293	0.284	3   AVG
2-Methylnaphthalene	0.674	0.724	0.702	0.728	0.743	0.735	0.748	0.742	0.725	3   AVG
1-Methylnaphthalene	0.655	0.687	0.666	0.696	0.700	0.703	0.720	0.721	0.693	3   AVG

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C  
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP20296 Calibration Date(s): 10/29/18 10/29/18  
 Calibration Times: 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(\*) = 30%

LAB FILE ID:RRF0.125 = 1j1742.d RRF0.25 = 1j1748.d RRF1.25 = 1j1747.d RRF3.75 = 1j1746.d											
RRF7.5 = 1j1741.d RRF12.5 = 1j1745.d RRF20 = 1j1744.d RRF30 = 1j1743.d											
COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	RRF	% RSD	CAL. METHOD
Hexachlorocyclopentadiene			0.409	0.431	0.447	0.449	0.483	0.452	0.445	6	AVG
1,2,4,5-Tetrachlorobenzene		0.798	0.742	0.760	0.804	0.749	0.789	0.766	0.772	3	AVG
cis-Isosafrole			0.622	0.632	0.654	0.611	0.677	0.639	0.639	4	AVG
2,4,6-Trichlorophenol		0.287	0.400	0.470	0.495	0.488	0.515	0.510	0.452	18	AVG
2,4,5-Trichlorophenol		0.427	0.482	0.508	0.526	0.510	0.537	0.499	0.498	7	AVG
trans-Isosafrole			0.577	0.631	0.644	0.650	0.689	0.663	0.642	6	AVG
Isosafrole			0.585	0.631	0.646	0.643	0.687	0.659	0.642	5	AVG
1,1'-Biphenyl		1.549	1.699	1.770	1.773	1.746	1.767	1.710	1.716	5	AVG
2-Chloronaphthalene		1.557	1.432	1.446	1.528	1.476	1.592	1.649	1.526	5	AVG
1-Chloronaphthalene		1.427	1.295	1.388	1.355	1.325	1.305	1.149	1.320	7	AVG
Diphenyl ether		0.897	0.903	0.956	0.999	0.963	1.011	0.972	0.957	5	AVG
2-Nitroaniline		0.312	0.302	0.376	0.393	0.422	0.439	0.442	0.384	15	AVG
1,4-Naphthoquinone			0.459	0.555	0.593	0.567	0.594	0.580	0.558	9	AVG
1,4-Dinitrobenzene			0.155	0.188	0.204	0.220	0.232	0.229	0.205	14	AVG
Dimethylphthalate			1.583	1.564	1.642	1.574	1.661	1.489	1.585	4	AVG
1,3-Dinitrobenzene			0.164	0.233	0.252	0.241	0.258	0.250	0.233	15	AVG
2,6-Dinitrotoluene		0.211	0.293	0.337	0.338	0.347	0.370	0.354	0.321	17	AVG
Acenaphthylene	1.542	1.730	1.898	1.931	2.030	1.983	2.075	2.030	1.902	10	AVG
3-Nitroaniline			0.311	0.357	0.373	0.365	0.403	0.402	0.368	9	AVG
Acenaphthene	1.552	1.356	1.457	1.441	1.498	1.460	1.516	1.467	1.468	4	AVG
2,4-Dinitrophenol				0.151	0.183	0.189	0.220	0.226	0.194	16	AVG
4-Nitrophenol				0.270	0.282	0.328	0.336	0.327	0.308	10	AVG
Pentachlorobenzene		0.569	0.614	0.632	0.623	0.630	0.634	0.611	0.616	4	AVG
2,4-Dinitrotoluene			0.399	0.439	0.477	0.483	0.497	0.474	0.461	8	AVG
2,4,6-Dinitrotoluenes		0.225	0.346	0.388	0.408	0.415	0.434	0.414	0.375	19	AVG
Dibenzofuran		1.896	1.987	1.986	2.032	1.981	2.066	1.979	1.990	3	AVG
1-Naphthylamine				1.359	1.431	1.397	1.512	1.476	1.435	4	AVG
2,3,4,6-Tetrachlorophenol		0.380	0.345	0.363	0.399	0.412	0.424	0.418	0.391	8	AVG
2-Naphthylamine				1.336	1.439	1.399	1.501	1.464	1.428	4	AVG
Diethylphthalate			1.538	1.515	1.580	1.574	1.600	1.555	1.560	2	AVG
Thionazin			0.277	0.305	0.313	0.313	0.320	0.308	0.306	5	AVG
Fluorene	1.563	1.626	1.539	1.570	1.589	1.529	1.614	1.577	1.576	2	AVG
4-Chlorophenyl-phenylether		0.792	0.816	0.775	0.827	0.809	0.831	0.802	0.807	2	AVG
5-Nitro-o-toluidine		0.254	0.388	0.402	0.437	0.438	0.456	0.433	0.401	17	AVG
4-Nitroaniline		0.211	0.320	0.378	0.397	0.390	0.400	0.373	0.353	19	AVG
4,6-Dinitro-2-methylphenol				0.118	0.125	0.133	0.141	0.141	0.132	8	AVG
N-Nitrosodiphenylamine (1)		0.640	0.606	0.645	0.638	0.636	0.660	0.654	0.640	3	AVG
NDPA as diphenylamine		0.640	0.606	0.645	0.638	0.636	0.660	0.654	0.640	3	AVG
1,2-Diphenylhydrazine		1.079	1.107	1.186	1.157	1.118	1.140	1.137	1.132	3	AVG
Tetraethylthiopyrophosphate			0.151	0.176	0.175	0.167	0.174	0.170	0.169	6	AVG
1,3,5-Trinitrobenzene				0.068	0.075	0.079	0.086	0.090	0.080	11	AVG
Diallate (peak 1)			0.438	0.471	0.463	0.460	0.446	0.454	0.455	3	AVG
Phorate	0.468	0.467	0.573	0.680	0.655	0.656	0.641		0.591	15	AVG
Phenacetin		0.295	0.416	0.483	0.477	0.482	0.481	0.504	0.448	16	AVG
4-Bromophenyl-phenylether		0.215	0.229	0.225	0.215	0.220	0.223	0.234	0.223	3	AVG
Diallate (peak 2)			0.353	0.381	0.393	0.361	0.368	0.380	0.373	4	AVG
Diallate trans/cis			0.424	0.456	0.451	0.443	0.433	0.441	0.441	3	AVG
Hexachlorobenzene	0.222	0.224	0.220	0.236	0.224	0.228	0.227	0.238	0.227	3	AVG
Dimethoate			0.323	0.388	0.375	0.387	0.384	0.393	0.375	7	AVG
Atrazine			0.199	0.222	0.203	0.202	0.197	0.195	0.203	5	AVG
Pentachlorophenol			0.109	0.138	0.143	0.149	0.160	0.166	0.144	14	AVG
4-Aminobiphenyl		0.489	0.511	0.573	0.566	0.592	0.569	0.594	0.556	7	AVG

(1) Cannot be separated from Diphenylamine  
 4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

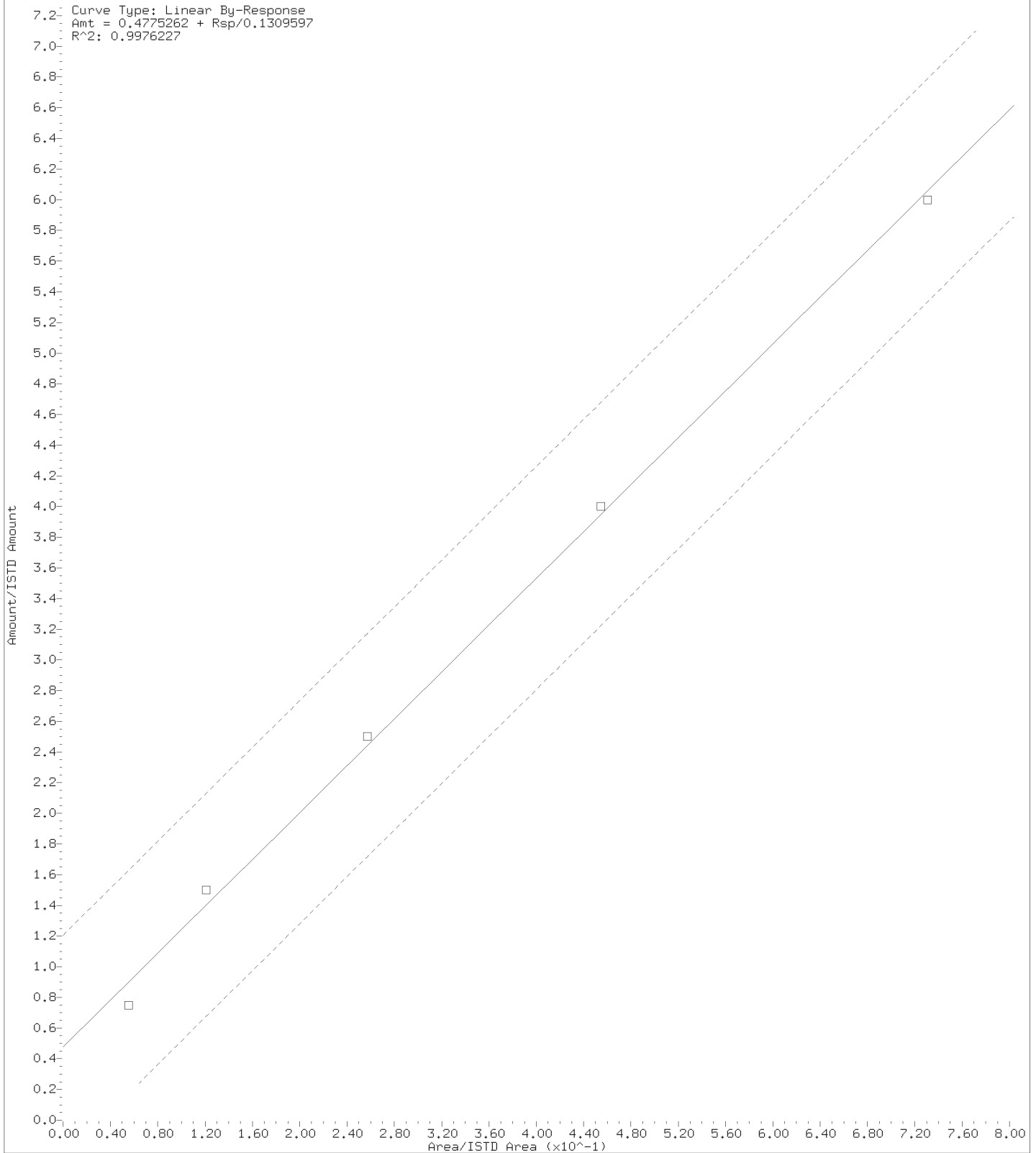
6C  
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP20296 Calibration Date(s): 10/29/18 10/29/18  
 Calibration Times: 00:23 03:49  
 Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(\*) = 30%

LAB FILE ID: RRF0.125 = 1j1742.d	RRF0.25 = 1j1748.d	RRF1.25 = 1j1747.d	RRF3.75 = 1j1746.d	RRF7.5 = 1j1741.d	RRF12.5 = 1j1745.d	RRF20 = 1j1744.d	RRF30 = 1j1743.d	RRF	% RSD	CAL. METHOD	
Pentachloronitrobenzene		0.097	0.113	0.109	0.107	0.110	0.110	0.108	5	AVG	
Pronamide	0.254	0.307	0.360	0.362	0.379	0.380	0.385	0.347	14	AVG	
Dinoseb			0.169	0.185	0.201	0.221	0.224	0.200	12	AVG	
Phenanthrene	1.288	1.063	1.179	1.218	1.173	1.182	1.215	1.258	6	AVG	
Anthracene	1.131	1.052	1.138	1.223	1.196	1.193	1.218	1.242	1.174	5	AVG
Carbazole		0.968	0.975	1.096	1.074	1.076	1.063	1.113	1.052	5	AVG
Methyl parathion			0.218	0.279	0.286	0.296	0.304	0.308	0.282	12	AVG
Di-n-butylphthalate			1.147	1.374	1.372	1.385	1.417	1.470	1.361	8	AVG
Parathion			0.114	0.165	0.182	0.192	0.198	0.213	0.177	20	AVG
4-Nitroquinoline-1-oxide				0.074	0.081	0.103	0.114	0.122	0.099	21	1STDG
Octachlorostyrene			0.074	0.084	0.084	0.082	0.090	0.091	0.084	7	AVG
Isodrin		0.124	0.128	0.147	0.148	0.144	0.146	0.150	0.141	7	AVG
Fluoranthene	1.222	1.184	1.235	1.357	1.329	1.342	1.388	1.439	1.312	7	AVG
Benzidine			0.686	0.793	0.836	0.806	0.839	0.820	0.797	7	AVG
Pyrene	1.252	1.320	1.299	1.335	1.334	1.319	1.344	1.347	1.319	2	AVG
p-Dimethylaminoazobenzene			0.139	0.193	0.212	0.216	0.229	0.231	0.203	17	AVG
Chlorobenzilate			0.336	0.368	0.399	0.404	0.416	0.415	0.390	8	AVG
3,3'-Dimethylbenzidine			0.592	0.720	0.819	0.794	0.836	0.819	0.763	12	AVG
Butylbenzylphthalate			0.460	0.562	0.621	0.613	0.633	0.624	0.586	11	AVG
2-Acetylaminofluorene			0.332	0.439	0.503	0.508	0.550	0.565	0.483	18	AVG
3,3'-Dichlorobenzidine			0.344	0.414	0.448	0.457	0.489	0.495	0.441	13	AVG
4,4'-Methylenebis(2-chloroani			0.191	0.234	0.262	0.254	0.265	0.275	0.247	12	AVG
Benzo(a)anthracene	0.983	1.000	1.130	1.205	1.286	1.297	1.337	1.363	1.200	12	AVG
Chrysene	1.136	1.068	1.134	1.196	1.225	1.206	1.258	1.264	1.186	6	AVG
bis(2-Ethylhexyl)phthalate			0.645	0.801	0.869	0.885	0.932	0.931	0.844	13	AVG
6-Methylchrysene			0.688	0.768	0.807	0.807	0.843	0.885	0.800	8	AVG
Di-n-octylphthalate			1.135	1.518	1.663	1.753	1.770	1.756	1.599	15	AVG
Benzo(b)fluoranthene	1.150	1.201	1.231	1.353	1.331	1.374	1.385	1.392	1.302	7	AVG
7,12-Dimethylbenz[a]anthracen		0.357	0.449	0.543	0.555	0.597	0.615	0.618	0.534	18	AVG
Benzo(k)fluoranthene	1.332	1.208	1.244	1.356	1.303	1.388	1.339	1.328	1.312	5	AVG
Benzo(a)pyrene	0.981	0.889	1.057	1.213	1.249	1.305	1.316	1.300	1.164	14	AVG
3-Methylcholanthrene		0.386	0.452	0.525	0.577	0.584	0.602	0.589	0.531	16	AVG
Dibenz(a,h)acridine			0.783	0.965	0.982	1.020	1.036	1.010	0.966	10	AVG
Dibenz(a,j)acridine			0.904	1.009	1.036	1.071	1.059	1.028	1.018	6	AVG
Indeno(1,2,3-cd)pyrene	0.960	1.068	0.986	1.139	1.156	1.250	1.258	1.216	1.129	10	AVG
Dibenz(a,h)anthracene	1.000	1.085	1.125	1.249	1.220	1.257	1.254	1.210	1.175	8	AVG
Benzo(g,h,i)perylene	1.108	1.068	1.148	1.248	1.257	1.288	1.257	1.201	1.197	7	AVG
Total PAHs	1.144	1.126	1.150	1.215	1.164	1.206	1.165	1.121	1.162	3	AVG
2-Fluorophenol		1.488	1.507	1.539	1.571	1.586	1.570	1.575	1.548	2	AVG
Phenol-d6		1.897	2.083	2.054	2.133	2.181	2.143	2.131	2.089	5	AVG
Nitrobenzene-d5		0.472	0.482	0.535	0.537	0.548	0.545	0.546	0.524	6	AVG
2-Fluorobiphenyl		1.605	1.646	1.650	1.709	1.662	1.735	1.690	1.671	3	AVG
2,4,6-Tribromophenol		0.149	0.173	0.191	0.206	0.207	0.223	0.222	0.196	14	AVG
Terphenyl-d14		0.737	0.763	0.805	0.820	0.806	0.839	0.849	0.803	5	AVG
Average %RSD									7		

+ %RSD is less than or equal to 20%; however, value rounds to 20.

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.  
 Benzidine Levels in the 5,15,30,50,80,120 standards are 15,45,90,150,240,360 ng/ul, respectively.  
 Benzoic acid and 2,4-Dinitrophenol are at 15 ng/ul, 30 ng/ul,40 ng/ul in the 5,15,30 standards.



Digitally signed by Ashley R. Transue on 10/29/2018 at 19:13.  
Target 3.5 esignature user ID: art12405

# Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

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/chem/HP20296.i/18oct28.b/lj1741.d  SSTD7.5
/chem/HP20296.i/18oct28.b/lj1742.d  SSTD0.125
/chem/HP20296.i/18oct28.b/lj1743.d  SSTD30
/chem/HP20296.i/18oct28.b/lj1744.d  SSTD20
/chem/HP20296.i/18oct28.b/lj1745.d  SSTD12.5
/chem/HP20296.i/18oct28.b/lj1746.d  SSTD3.75
/chem/HP20296.i/18oct28.b/lj1747.d  SSTD1.25
/chem/HP20296.i/18oct28.b/lj1748.d  SSTD0.25
    
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## Area Summary

File ID:  
=====

Internal Standard Name	lj1741.d	lj1742.d	lj1743.d	lj1744.d	lj1745.d	lj1746.d	lj1747.d	lj1748.d	Avg. Area	%RSD	In Spec
1,4-Dichlorobenzene-d4	174707	184726	186449	188588	173232	193679	184537	182074	183499	4	Yes
Naphthalene-d8	672447	691705	689757	701835	655608	720165	715804	688999	692040	3	Yes
Acenaphthene-d10	328644	336467	346220	343637	330289	360034	352099	330385	340972	3	Yes
Phenanthrene-d10	678703	660540	677310	707104	666537	688668	703648	644470	678372	3	Yes
Pyrene-d10	704349	666010	741906	743637	694893	742847	731230	667178	711506	5	Yes
Perylene-d12	642558	561301	732007	702921	612320	629203	618576	558380	632158	10	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

## RT Summary

File ID:  
=====

Internal Standard Name	lj1741.d	lj1742.d	lj1743.d	lj1744.d	lj1745.d	lj1746.d	lj1747.d	lj1748.d	Avg. RT
1,4-Dichlorobenzene-d4	6.951	6.951	6.956	6.951	6.951	6.950	6.950	6.951	6.951
Naphthalene-d8	8.935	8.935	8.940	8.935	8.935	8.935	8.935	8.935	8.936
Acenaphthene-d10	11.770	11.764	11.770	11.770	11.764	11.764	11.764	11.764	11.766
Phenanthrene-d10	13.701	13.695	13.701	13.701	13.695	13.695	13.695	13.695	13.697
Pyrene-d10	15.738	15.733	15.744	15.738	15.738	15.733	15.733	15.733	15.736
Perylene-d12	20.322	20.322	20.328	20.322	20.322	20.317	20.322	20.317	20.321

Comments: \_\_\_\_\_

Lancaster Laboratories, Inc.  
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS

LAB CODE: LANCAS

INSTRUMENT: HP20296

Method: SW-846 8270D MINI

File ID: lj1751.d

ICV SAMPLE ID: RVICV2628

BATCH: 18OCT28026

Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,4-Dioxane	12.50	11.13	-11	30	YES
N-Nitrosodimethylamine	12.50	13.81	10	30	YES
Pyridine	12.50	13.36	7	30	YES
2-Picoline	12.50	13.10	5	30	YES
N-Nitrosomethylethylamine	12.50	11.79	-6	30	YES
Methyl methanesulfonate	12.50	12.70	2	30	YES
N-Nitrosodiethylamine	12.50	13.39	7	30	YES
Ethyl methanesulfonate	12.50	12.07	-3	30	YES
Phenol	12.50	13.64	9	30	YES
Aniline	12.50	12.88	3	30	YES
bis(2-Chloroethyl) ether	12.50	13.46	8	30	YES
2-Chlorophenol	12.50	13.97	12	30	YES
1,3-Dichlorobenzene	12.50	13.77	10	30	YES
1,4-Dichlorobenzene	12.50	14.16	13	30	YES
Benzyl alcohol	12.50	15.13	21	30	YES
1,2-Dichlorobenzene	12.50	13.60	9	30	YES
Indene	12.50	19.72	58	30	NO*
2-Methylphenol	12.50	13.51	8	30	YES
2,2'-oxybis(1-Chloropropane	12.50	13.33	7	30	YES
bis(2-Chloroisopropyl) ether	12.50	13.33	7	30	YES
N-Nitrosopyrrolidine	12.50	12.50	0	30	YES
Acetophenone	12.50	14.34	15	30	YES
4-Methylphenol	12.50	13.70	10	30	YES
N-Nitroso-di-n-propylamine	12.50	13.92	11	30	YES
N-Nitrosomorpholine	12.50	12.39	-1	30	YES
o-Toluidine	12.50	13.73	10	30	YES
Total Cresols	25.00	27.21	9	30	YES
Hexachloroethane	12.50	13.31	6	30	YES
Nitrobenzene	12.50	13.30	6	30	YES
N-Nitrosopiperidine	12.50	11.93	-5	30	YES
Isophorone	12.50	14.02	12	30	YES
2-Nitrophenol	12.50	13.79	10	30	YES
2,4-Dimethylphenol	12.50	11.46	-8	30	YES
bis(2-Chloroethoxy)methane	12.50	13.99	12	30	YES
Benzoic acid	25.00	25.87	3	30	YES
O,O,O-Triethylphosphorothio	12.50	12.70	2	30	YES
2,4-Dichlorophenol	12.50	13.56	8	30	YES

NC = Could not calculate

Comments: \_\_\_\_\_ \*Compounds fail High \_\_\_\_\_

Lancaster Laboratories, Inc.  
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS

LAB CODE: LANCAS

INSTRUMENT: HP20296

Method: SW-846 8270D MINI

File ID: lj1751.d

ICV SAMPLE ID: RVICV2628

BATCH: 18OCT28026

Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,2,4-Trichlorobenzene	12.50	13.41	7	30	YES
Naphthalene	12.50	13.33	7	30	YES
4-Chloroaniline	12.50	14.07	13	30	YES
2,6-Dichlorophenol	12.50	12.10	-3	30	YES
Hexachloropropene	12.50	13.18	5	30	YES
Hexachlorobutadiene	12.50	13.66	9	30	YES
Quinoline	12.50	12.38	-1	30	YES
N-Nitrosodi-n-butylamine	12.50	10.77	-14	30	YES
4-Chloro-3-methylphenol	12.50	14.06	13	30	YES
Safrole	12.50	11.90	-5	30	YES
2-Methylnaphthalene	12.50	13.56	9	30	YES
1-Methylnaphthalene	12.50	13.14	5	30	YES
Hexachlorocyclopentadiene	25.00	27.59	10	30	YES
1,2,4,5-Tetrachlorobenzene	12.50	13.67	9	30	YES
cis-Isosafrole	1.50	1.53	2	30	YES
2,4,6-Trichlorophenol	12.50	15.19	21	30	YES
2,4,5-Trichlorophenol	12.50	14.87	19	30	YES
trans-Isosafrole	11.00	11.76	7	30	YES
1,1'-Biphenyl	12.50	14.78	18	30	YES
2-Chloronaphthalene	12.50	13.94	12	30	YES
Isosafrole	12.50	13.29	6	30	YES
1-Chloronaphthalene	12.50	12.19	-2	30	YES
Diphenyl ether	12.50	12.30	-2	30	YES
2-Nitroaniline	12.50	15.42	23	30	YES
1,4-Naphthoquinone	15.63	16.25	4	30	YES
1,4-Dinitrobenzene	12.50	14.62	17	30	YES
Dimethylphthalate	12.50	13.99	12	30	YES
1,3-Dinitrobenzene	12.50	14.30	14	30	YES
2,6-Dinitrotoluene	12.50	15.30	22	30	YES
Acenaphthylene	12.50	16.12	29	30	YES
3-Nitroaniline	12.50	14.31	14	30	YES
Acenaphthene	12.50	13.95	12	30	YES
2,4-Dinitrophenol	25.00	29.49	18	30	YES
4-Nitrophenol	12.50	14.18	13	30	YES
Pentachlorobenzene	12.50	12.48	0	30	YES
2,4-Dinitrotoluene	12.50	14.26	14	30	YES
Dibenzofuran	12.50	14.10	13	30	YES

NC = Could not calculate

Comments: \_\_\_\_\_



Lancaster Laboratories, Inc.  
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS

LAB CODE: LANCAS

INSTRUMENT: HP20296

Method: SW-846 8270D MINI

File ID: lj1751.d

ICV SAMPLE ID: RVICV2628

BATCH: 18OCT28026

Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
2,4,6-Dinitrotoluenes	25.00	29.55	18	30	YES
1-Naphthylamine	25.00	26.20	5	30	YES
2,3,4,6-Tetrachlorophenol	12.50	13.18	5	30	YES
2-Naphthylamine	25.00	26.00	4	30	YES
Diethylphthalate	12.50	13.79	10	30	YES
Thionazin	12.50	13.86	11	30	YES
Fluorene	12.50	13.86	11	30	YES
4-Chlorophenyl-phenylether	12.50	13.53	8	30	YES
5-Nitro-o-toluidine	12.50	13.46	8	30	YES
4-Nitroaniline	12.50	14.70	18	30	YES
4,6-Dinitro-2-methylphenol	12.50	13.54	8	30	YES
N-Nitrosodiphenylamine	12.50	14.24	14	30	YES
NDPA as diphenylamine	12.50	14.24	14	30	YES
1,2-Diphenylhydrazine	12.50	13.78	10	30	YES
Tetraethyldithiopyrophospha	12.50	12.28	-2	30	YES
1,3,5-Trinitrobenzene	12.50	12.37	-1	30	YES
Diallate (peak 1)	9.38	8.48	-10	30	YES
Phorate	12.50	13.66	9	30	YES
Phenacetin	12.50	12.43	-1	30	YES
4-Bromophenyl-phenylether	12.50	12.73	2	30	YES
Diallate (peak 2)	3.13	3.45	10	30	YES
Hexachlorobenzene	12.50	13.30	6	30	YES
Diallate trans/cis	12.50	11.93	-5	30	YES
Dimethoate	12.50	13.32	7	30	YES
Pentachlorophenol	12.50	14.96	20	30	YES
4-Aminobiphenyl	12.50	17.80	42	30	NO*
Pentachloronitrobenzene	12.50	11.71	-6	30	YES
Pronamide	12.50	13.12	5	30	YES
Dinoseb	12.50	11.16	-11	30	YES
Phenanthrene	12.50	13.55	8	30	YES
Anthracene	12.50	13.78	10	30	YES
Carbazole	12.50	14.23	14	30	YES
Methyl parathion	12.50	13.71	10	30	YES
Di-n-butylphthalate	12.50	13.75	10	30	YES
Parathion	12.50	14.12	13	30	YES
4-Nitroquinoline-1-oxide	150.00	176.14	17	30	YES
Isodrin	12.50	12.89	3	30	YES

NC = Could not calculate

Comments: \_\_\_\_\_ \*Compounds Fail High\_\_\_\_\_

Lancaster Laboratories, Inc.  
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS

LAB CODE: LANCAS

INSTRUMENT: HP20296

Method: SW-846 8270D MINI

File ID: lj1751.d

ICV SAMPLE ID: RVICV2628

BATCH: 18OCT28026

Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Fluoranthene	12.50	14.08	13	30	YES
Benzidine	62.50	60.72	-3	30	YES
Pyrene	12.50	14.01	12	30	YES
p-Dimethylaminoazobenzene	12.50	15.62	25	30	YES
Chlorobenzilate	12.50	13.39	7	30	YES
3,3'-Dimethylbenzidine	25.00	28.89	16	30	YES
Butylbenzylphthalate	12.50	15.34	23	30	YES
2-Acetylaminofluorene	12.50	13.93	11	30	YES
3,3'-Dichlorobenzidine	12.50	13.62	9	30	YES
Benzo(a)anthracene	12.50	15.23	22	30	YES
Chrysene	12.50	14.95	20	30	YES
4,4'-Methylenebis(2-chloroa	12.50	13.61	9	30	YES
bis(2-Ethylhexyl)phthalate	12.50	14.78	18	30	YES
6-Methylchrysene	12.50	13.25	6	30	YES
Di-n-octylphthalate	12.50	14.24	14	30	YES
Benzo(b)fluoranthene	12.50	14.17	13	30	YES
7,12-Dimethylbenz[a]anthrac	12.50	15.20	22	30	YES
Benzo(k)fluoranthene	12.50	13.67	9	30	YES
Benzo(a)pyrene	12.50	14.48	16	30	YES
3-Methylcholanthrene	12.50	14.31	14	30	YES
Dibenz(a,h)acridine	12.50	12.01	-4	30	YES
Dibenz(a,j)acridine	12.50	12.19	-2	30	YES
Indeno(1,2,3-cd)pyrene	12.50	13.68	9	30	YES
Dibenz(a,h)anthracene	12.50	14.15	13	30	YES
Benzo(g,h,i)perylene	12.50	13.36	7	30	YES
Total PAHs	225.00	253.08	12	30	YES

NC = Could not calculate

Comments: \_\_\_\_\_

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP20296 Calibration Date: 11/07/18 Time: 21:58  
 Lab File ID: lk0501.d Init. Calib. Date(s): 10/29/18 10/29/18  
 Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050

Max %Drift for CCC(\*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.748	0.707	7.090	7.5	-6
N-Nitrosodimethylamine	1.124	1.069	7.130	7.5	-5
Pyridine	1.913	1.753	6.870	7.5	-8
2-Picoline	1.997	1.859	6.980	7.5	-7
N-Nitrosomethylethylamine	0.816	0.749	6.890	7.5	-8
Methyl methanesulfonate	1.043	0.991	7.120	7.5	-5
N-Nitrosodiethylamine	0.705	0.697	7.420	7.5	-1
Ethyl methanesulfonate	0.800	0.753	7.060	7.5	-6
Benzaldehyde	1.433	1.433	7.500	7.5	0
Phenol	2.450	2.349	7.190	7.5	-4
Aniline	2.879	2.764	7.200	7.5	-4
a-methylstyrene	0.151	0.139	6.910	7.5	-8
bis(2-Chloroethyl) ether	1.843	1.700	6.920	7.5	-8
2-Chlorophenol	1.443	1.400	7.270	7.5	-3
1,3-Dichlorobenzene	1.618	1.593	7.380	7.5	-2
1,4-Dichlorobenzene	1.626	1.577	7.280	7.5	-3
Benzyl alcohol	0.990	0.893	6.770	7.5	-10
1,2-Dichlorobenzene	1.580	1.558	7.390	7.5	-1
Indene	1.737	1.607	6.940	7.5	-7
2-Methylphenol	1.518	1.448	7.160	7.5	-5
2,2'-oxybis(1-Chloropropane)	2.325	2.141	6.910	7.5	-8
bis(2-Chloroisopropyl) ether	2.325	2.141	6.910	7.5	-8
N-Nitrosopyrrolidine	0.775	0.778	7.530	7.5	0
Acetophenone	2.339	2.168	6.950	7.5	-7
4-Methylphenol	1.584	1.612	7.630	7.5	2
Total Cresols	1.551	1.530	14.780	15.0	-1
N-Nitroso-di-n-propylamine	1.414	1.331	7.060	7.5	-6
N-Nitrosomorpholine	1.027	0.960	7.010	7.5	-7
o-Toluidine	2.647	2.516	7.130	7.5	-5
Hexachloroethane	0.738	0.681	6.920	7.5	-8
Nitrobenzene	0.558	0.575	7.730	7.5	3
N-Nitrosopiperidine	0.196	0.199	7.640	7.5	2
Isophorone	0.941	0.909	7.240	7.5	-3
2-Nitrophenol	0.183	0.190	7.790	7.5	4
2,4-Dimethylphenol	0.448	0.457	7.640	7.5	2
O,O,O-Triethylphosphorothioate	0.192	0.206	8.030	7.5	7

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## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP20296 Calibration Date: 11/07/18 Time: 21:58  
 Lab File ID: lk0501.d Init. Calib. Date(s): 10/29/18 10/29/18  
 Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050

Max %Drift for CCC(\*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
bis(2-Chloroethoxy)methane	0.600	0.603	7.540	7.5	1
Benzoic acid	0.292	0.248	8.480	10.0	-15
2,4-Dichlorophenol	0.322	0.337	7.850	7.5	5
1,2,4-Trichlorobenzene	0.371	0.385	7.780	7.5	4
Naphthalene	1.129	1.140	7.570	7.5	1
4-Chloroaniline	0.455	0.457	7.530	7.5	0
2,6-Dichlorophenol	0.313	0.324	7.780	7.5	4
Hexachloropropene	0.239	0.262	8.210	7.5	9
Hexachlorobutadiene	0.219	0.218	7.490	7.5	0
Quinoline	0.672	0.657	7.330	7.5	-2
Caprolactam	0.099	0.101	7.650	7.5	2
N-Nitrosodi-n-butylamine	0.374	0.332	6.670	7.5	-11
4-Chloro-3-methylphenol	0.382	0.382	7.500	7.5	0
Safrole	0.284	0.287	7.570	7.5	1
2-Methylnaphthalene	0.725	0.738	7.640	7.5	2
1-Methylnaphthalene	0.693	0.709	7.670	7.5	2
Hexachlorocyclopentadiene	0.445	0.451	7.610	7.5	1
1,2,4,5-Tetrachlorobenzene	0.772	0.799	7.760	7.5	3
cis-Isosafrole	0.639	0.591	1.180	1.3	-8
2,4,6-Trichlorophenol	0.452	0.503	8.340	7.5	11
2,4,5-Trichlorophenol	0.498	0.513	7.730	7.5	3
trans-Isosafrole	0.642	0.615	5.960	6.2	-4
Isosafrole	0.642	0.611	7.130	7.5	-5
1,1'-Biphenyl	1.716	1.724	7.530	7.5	0
2-Chloronaphthalene	1.526	1.505	7.400	7.5	-1
1-Chloronaphthalene	1.320	1.332	7.560	7.5	1
Diphenyl ether	0.957	0.981	7.690	7.5	2
2-Nitroaniline	0.384	0.423	8.280	7.5	10
1,4-Naphthoquinone	0.558	0.491	6.600	7.5	-12
1,4-Dinitrobenzene	0.205	0.225	8.250	7.5	10
Dimethylphthalate	1.585	1.554	7.350	7.5	-2
1,3-Dinitrobenzene	0.233	0.235	7.560	7.5	1
2,6-Dinitrotoluene	0.321	0.329	7.680	7.5	2
Acenaphthylene	1.902	1.937	7.640	7.5	2
3-Nitroaniline	0.368	0.368	7.490	7.5	0
Acenaphthene	1.468	1.444	7.370	7.5	-2

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7C cont  
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP20296 Calibration Date: 11/07/18 Time: 21:58  
 Lab File ID: lk0501.d Init. Calib. Date(s): 10/29/18 10/29/18  
 Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(\*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
2,4-Dinitrophenol	0.194	0.188	9.680	10.0	-3
4-Nitrophenol	0.308	0.299	7.260	7.5	-3
Pentachlorobenzene	0.616	0.636	7.740	7.5	3
2,4-Dinitrotoluene	0.461	0.457	7.430	7.5	-1
2,4,2,6-Dinitrotoluenes	0.375	0.393	15.100	15.0	1
Dibenzofuran	1.990	2.015	7.600	7.5	1
1-Naphthylamine	1.435	1.371	7.170	7.5	-4
2,3,4,6-Tetrachlorophenol	0.391	0.401	7.680	7.5	2
2-Naphthylamine	1.428	1.406	7.380	7.5	-2
Diethylphthalate	1.560	1.496	7.190	7.5	-4
Thionazin	0.306	0.310	7.600	7.5	1
Fluorene	1.576	1.568	7.460	7.5	0
4-Chlorophenyl-phenylether	0.807	0.834	7.750	7.5	3
5-Nitro-o-toluidine	0.401	0.415	7.760	7.5	3
4-Nitroaniline	0.353	0.378	8.050	7.5	7
4,6-Dinitro-2-methylphenol	0.132	0.133	7.580	7.5	1
N-Nitrosodiphenylamine (1)	0.640	0.644	7.550	7.5	1
NDPA as diphenylamine	0.640	0.644	7.550	7.5	1
1,2-Diphenylhydrazine	1.132	1.064	7.050	7.5	-6
Tetraethyldithiopyrophosphate	0.169	0.168	7.450	7.5	-1
1,3,5-Trinitrobenzene	0.080	0.080	7.530	7.5	0
Diallate (peak 1)	0.455	0.436	5.970	6.2	-4
Phorate	0.591	0.637	8.080	7.5	8
Phenacetin	0.448	0.436	7.300	7.5	-3
4-Bromophenyl-phenylether	0.223	0.228	7.660	7.5	2
Diallate (peak 2)	0.373	0.368	1.260	1.3	-1
Diallate trans/cis	0.441	0.425	7.220	7.5	-4
Hexachlorobenzene	0.227	0.240	7.910	7.5	5
Dimethoate	0.375	0.381	7.630	7.5	2
Atrazine	0.203	0.208	7.670	7.5	2
Pentachlorophenol	0.144	0.143	7.430	7.5	-1
4-Aminobiphenyl	0.556	0.573	7.720	7.5	3
Pentachloronitrobenzene	0.108	0.112	7.810	7.5	4
Pronamide	0.347	0.370	8.010	7.5	7
Dinoseb	0.200	0.199	7.470	7.5	0
Phenanthrene	1.197	1.211	7.590	7.5	1

(1) Cannot be Separated from Diphenylamine

FORM VII SV-1



7C cont  
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_  
Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_      SDG No.: \_\_\_\_\_  
Instrument ID: HP20296      Calibration Date: 11/07/18      Time: 21:58  
Lab File ID: lk0501.d      Init. Calib. Date(s): 10/29/18      10/29/18  
  Init. Calib. Times(s): 00:23      03:49

Min RRF for SPCC(#) = 0.050      Max %Drift for CCC(\*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Phenol-d6	2.089	1.996	14.330	15.0	-4
Nitrobenzene-d5	0.524	0.531	15.220	15.0	1
2-Fluorobiphenyl	1.671	1.694	15.200	15.0	1
2,4,6-Tribromophenol	0.196	0.219	16.790	15.0	12
Terphenyl-d14	0.803	0.839	15.690	15.0	5
Average %Drift:					4

# Continuing Calibration Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

- /chem/HP20296.i/18oct28.b/lj1741.d \*\*
- /chem/HP20296.i/18oct28.b/lj1742.d
- /chem/HP20296.i/18oct28.b/lj1743.d
- /chem/HP20296.i/18oct28.b/lj1744.d
- /chem/HP20296.i/18oct28.b/lj1745.d
- /chem/HP20296.i/18oct28.b/lj1746.d
- /chem/HP20296.i/18oct28.b/lj1747.d
- /chem/HP20296.i/18oct28.b/lj1748.d

\*\* indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

/chem/HP20296.i/18nov07a.b/lk0501.d

### Area Summary

File ID:  
=====

Internal Standard Name	lk0501.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	147222	174707	87354	349414	Yes
Naphthalene-d8	517670	672447	336224	1344894	Yes
Acenaphthene-d10	262195	328644	164322	657288	Yes
Phenanthrene-d10	521127	678703	339352	1357406	Yes
Pyrene-d10	555413	704349	352174	1408698	Yes
Perylene-d12	521205	642558	321279	1285116	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

### RT Summary

File ID:  
=====

Internal Standard Name	lk0501.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.758	6.951	No
Naphthalene-d8	8.748	8.935	No
Acenaphthene-d10	11.593	11.770	No
Phenanthrene-d10	13.524	13.701	No
Pyrene-d10	15.530	15.738	No
Perylene-d12	20.087	20.322	No

A "No" indicates the retention time is greater than 10 seconds from the RT of the referenced standard.

Comments: Unless otherwise documented, the shift in retention time is due to routine injection port maintenance, which involves the removal of a length of the analytical column.



Data File: /chem/HP20296.i/18nov07a.b/lk0525.d  
 Report Date: 11/08/2018 07:21

Lancaster Laboratories, Inc.  
 Shift Ending Continuing Calibration Check Report

Instrument ID: HP20296.i Injection Date and Time: 08-NOV-2018 06:32  
 Client ID: SECC12.5 Initial Calibration Date(s): 29-OCT-2018 ~~06-NOV-2018~~  
 Lab Sample ID: RVSTD2648 Initial Calibration Time(s): 00:23 ~~05:29~~ (3)  
 Sublist used: 25788M.sub Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 29-Oct-2018 03:49  
 K122314  
 11.8.18

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Pyridine	1.91301	1.90448	0.010	0.4	20.0
Phenol	2.44998	2.35165	0.010	4.0	20.0
Aniline	2.87917	2.76038	0.010	4.1	20.0
2-Chlorophenol	1.44304	1.47562	0.010	-2.3	20.0
1,3-Dichlorobenzene	1.61803	1.62466	0.010	-0.4	20.0
1,4-Dichlorobenzene	1.62583	1.63534	0.010	-0.6	20.0
Benzyl alcohol	0.99037	1.00863	0.010	-1.8	20.0
1,2-Dichlorobenzene	1.58004	1.55811	0.010	1.4	20.0
2-Methylphenol	1.51788	1.47168	0.010	3.0	20.0
2,2'-oxybis(1-Chloropropane)	2.32472	2.07161	0.010	10.9	20.0
4-Methylphenol	1.58436	1.65380	0.010	-4.4	20.0
N-Nitroso-di-n-propylamine	1.41416	1.32342	0.010	6.4	20.0
Hexachloroethane	0.73836	0.70500	0.010	4.5	20.0
Nitrobenzene	0.55786	0.54912	0.010	1.6	20.0
Isophorone	0.94142	0.94048	0.010	0.1	20.0
2-Nitrophenol	0.18323	0.20304	0.010	-10.8	20.0
2,4-Dimethylphenol	0.44812	0.46028	0.010	-2.7	20.0
bis(2-Chloroethoxy)methane	0.60020	0.58876	0.010	1.9	20.0
2,4-Dichlorophenol	0.32153	0.34250	0.010	-6.5	20.0
1,2,4-Trichlorobenzene	0.37105	0.38861	0.010	-4.7	20.0
4-Chloroaniline	0.45534	0.46597	0.010	-2.3	20.0
Hexachlorobutadiene	0.21869	0.23767	0.010	-8.7	20.0
4-Chloro-3-methylphenol	0.38164	0.38571	0.010	-1.1	20.0
2-Methylnaphthalene	0.72457	0.75224	0.010	-3.8	20.0
Hexachlorocyclopentadiene	0.44505	0.47676	0.010	-7.1	20.0
2,4,6-Trichlorophenol	0.45196	0.50936	0.010	-12.7	20.0
2,4,5-Trichlorophenol	0.49831	0.52881	0.010	-6.1	20.0
2-Chloronaphthalene	1.52570	1.57609	0.010	-3.3	20.0
2-Nitroaniline	0.38375	0.43599	0.010	-13.6	20.0
Dimethylphthalate	1.58536	1.54985	0.010	2.2	20.0
2,6-Dinitrotoluene	0.32139	0.35688	0.010	-11.0	20.0
3-Nitroaniline	0.36844	0.38020	0.010	-3.2	20.0
2,4-Dinitrophenol	0.19379	0.21016	0.010	-8.4	20.0
4-Nitrophenol	0.30852	0.29236	0.010	5.2	20.0
2,4-Dinitrotoluene	0.46136	0.48312	0.010	-4.7	20.0
Dibenzofuran	1.98970	2.03223	0.010	-2.1	20.0
Diethylphthalate	1.56011	1.46806	0.010	5.9	20.0
4-Chlorophenyl-phenylether	0.80727	0.82349	0.010	-2.0	20.0
4-Nitroaniline	0.35271	0.38975	0.010	-10.5	20.0
4,6-Dinitro-2-methylphenol	0.13156	0.14797	0.010	-12.5	20.0
N-Nitrosodiphenylamine	0.63965	0.62649	0.010	2.1	20.0
4-Bromophenyl-phenylether	0.22297	0.22408	0.010	-0.5	20.0
Pentachlorophenol	0.14401	0.15821	0.010	-9.9	20.0
Carbazole	1.05219	1.05183	0.010	0.0	20.0
3,3'-Dichlorobenzidine	0.44126	0.50897	0.010	-15.3	20.0
Di-n-octylphthalate	1.59926	1.56229	0.010	2.3	20.0
Surrogate Standards	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
2-Fluorophenol	1.54781	1.61946	0.010	-4.6	20.0
Phenol-d6	2.08882	2.06296	0.010	1.2	20.0
Nitrobenzene-d5	0.52348	0.53365	0.010	-1.9	20.0
2-Fluorobiphenyl	1.67109	1.69370	0.010	-1.4	20.0
2,4,6-Tribromophenol	0.19591	0.23138	0.010	-18.1	20.0
Terphenyl-d14	0.80260	0.83378	0.010	-3.9	20.0

8B  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract: \_\_\_\_\_

Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_

Lab File ID (Standard): lk0501.d Date Analyzed: 11/07/18

Instrument ID: HP20296 Time Analyzed: 21:58

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	147222	6.758	517670	8.748	262195	11.593
UPPER LIMIT	294444	7.258	1035340	9.248	524390	12.093
LOWER LIMIT	73611	6.258	258835	8.248	131098	11.093
LLI SAMPLE NO.						
01   SBLKWS309	153206	6.763	560596	8.748	268525	11.593
02   309WSLCS	126346	6.763	460391	8.742	227095	11.588
03   SBLKWI310	136868	6.758	500340	8.742	246155	11.588
04   310WILCS	141803	6.758	506321	8.742	248033	11.588
05   310WILCSD	135890	6.763	511146	8.742	251997	11.588
06   9879277	136382	6.758	473705	8.742	237346	11.588
07   9879278	138516	6.758	495595	8.742	244712	11.588
08   9879282	134397	6.758	505979	8.742	246964	11.588
09   9879393	133584	6.758	494789	8.742	231608	11.588
10   9879406	129833	6.758	492686	8.742	250786	11.583
11   9881309	153329	6.758	549985	8.742	270687	11.588
12   9881310	141610	6.758	540055	8.737	260561	11.583
13   9881313	145917	6.758	538569	8.742	265578	11.588
14   RVSTD2648	157172	6.758	566996	8.742	293527	11.588

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard are and RT values with an asterisk

\* Values outside of QC limits.

8C  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS                      Contract: \_\_\_\_\_  
 Lab Code: LANCAS    Case No.: \_\_\_\_\_    SAS No.: \_\_\_\_\_  
 Lab File ID (Standard): lk0501.d                      Date Analyzed: 11/07/18  
 Instrument ID: HP20296                                      Time Analyzed: 21:58

	IS4 (PHN)		IS5 (PYR)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	521127	13.524	555413	15.530	521205	20.087
UPPER LIMIT	1042254	14.024	1110826	16.030	1042410	20.587
LOWER LIMIT	260564	13.024	277707	15.030	260603	19.587
=====	=====	=====	=====	=====	=====	=====
LLI SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01   SBLKWS309	527932	13.524	519351	15.530	478494	20.087
02   309WSLCS	431608	13.519	459705	15.530	473263	20.082
03   SBLKWI310	480192	13.519	501383	15.524	462205	20.081
04   310WILCS	491415	13.519	529271	15.530	529544	20.081
05   310WILCSD	484136	13.519	524969	15.530	544561	20.087
06   9879277	478658	13.519	489329	15.530	473141	20.081
07   9879278	486616	13.519	508264	15.530	485234	20.081
08   9879282	491651	13.519	526057	15.530	522927	20.081
09   9879393	486070	13.519	509567	15.530	470977	20.081
10   9879406	505947	13.519	513467	15.530	532250	20.082
11   9881309	531096	13.519	545736	15.524	500410	20.081
12   9881310	550021	13.519	542079	15.530	537734	20.082
13   9881313	541690	13.519	556627	15.530	563584	20.081
14   RVSTD2648	595078	13.519	636415	15.530	630777	20.087

IS4 (PHN) = Phenanthrene-d10  
 IS5 (PYR) = Pyrene-d10  
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area  
 AREA LOWER LIMIT = -50% of internal standard area  
 RT UPPER LIMIT = +0.50 minutes of internal standard RT  
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard are and RT values with an asterisk  
 \* Values outside of QC limits.

**Sample Data**

**Semivolatiles by GC/MS**

15T-2

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881309

Data file: /chem/HP20296.i/18nov07a.b/lk0514.d

Injection date and time: 08-NOV-2018 05:06

Data file Sample Info. Line: 15T-2;9881309;1;0;SAMPLE;;DOD26;

Instrument ID: HP20296.i Batch: 18310WAI

Date, time and analyst ID of latest file update: 08-Nov-2018 11:54 knb25316

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M

Calibration date and time (Last Method Edit): 07-NOV-2018 22:34

Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 248 ml

Volume Injected (Vi): 1 ul

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.758( 0.000)	1079	152	153329 ( 4)	5.00	
68) Naphthalene-d8	8.742( 0.006)	1450	136	549985 ( 6)	5.00	
118) Acenaphthene-d10	11.588( 0.006)	1982	164	270687 ( 3)	5.00	
158) Phenanthrene-d10	13.519( 0.006)	2343	188	531096 ( 2)	5.00	
180) Pyrene-d10	15.524( 0.006)	2718	212	545736 ( -2)	5.00	
218) Perylene-d12	20.081( 0.006)	3570	264	500410 ( -4)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.816( 0.001)	112	1051583	22.155	44%		19 - 119
18) Phenol-d6	(1)	6.234( 0.001)	99	969571	15.136	30%		10 - 72
45) Nitrobenzene-d5	(2)	7.614( 0.000)	82	1117778	19.412	78%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.529( 0.000)	172	1716561	18.974	76%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.647( 0.000)	330	463095	43.662	87%		43 - 140
184) Terphenyl-d14	(5)	15.845( 0.000)	244	1989515	22.711	91%		50 - 134

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
6) Pyridine	(1)			Not Detected					0.5
19) Phenol	(1)			Not Detected					0.1
20) Aniline	(1)			Not Detected					0.8
24) 2-Chlorophenol	(1)			Not Detected					0.1
25) 1,3-Dichlorobenzene	(1)			Not Detected					0.1
27) 1,4-Dichlorobenzene	(1)			Not Detected					0.1
28) Benzyl alcohol	(1)			Not Detected					3
29) 1,2-Dichlorobenzene	(1)			Not Detected					0.1
32) 2-Methylphenol	(1)			Not Detected					0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)			Not Detected					0.1
38) 4-Methylphenol	(1)			Not Detected					0.1
39) N-Nitroso-di-n-propylamine	(1)			Not Detected					0.2
44) Hexachloroethane	(1)			Not Detected					0.3
46) Nitrobenzene	(2)			Not Detected					0.1
52) Isophorone	(2)			Not Detected					0.1
53) 2-Nitrophenol	(2)			Not Detected					0.8
55) 2,4-Dimethylphenol	(2)			Not Detected					0.8
57) bis(2-Chloroethoxy)methane	(2)			Not Detected					0.1
62) 2,4-Dichlorophenol	(2)			Not Detected					0.1
65) 1,2,4-Trichlorobenzene	(2)			Not Detected					0.1
70) 4-Chloroaniline	(2)			Not Detected					1
74) Hexachlorobutadiene	(2)			Not Detected					0.1
83) 4-Chloro-3-methylphenol	(2)			Not Detected					0.1
86) 2-Methylnaphthalene	(2)			Not Detected					0.03
88) Hexachlorocyclopentadiene	(3)			Not Detected					1
93) 2,4,6-Trichlorophenol	(3)			Not Detected					0.1
95) 2,4,5-Trichlorophenol	(3)			Not Detected					0.1

15T-2

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881309

Data file: /chem/HP20296.i/18nov07a.b/lk0514.d

Injection date and time: 08-NOV-2018 05:06

Data file Sample Info. Line: 15T-2;9881309;1;0;SAMPLE;;DOD26;

Instrument ID: HP20296.i Batch: 18310WAI

Date, time and analyst ID of latest file update: 08-Nov-2018 11:54 knb25316

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m

Sublist used: 25788M

Calibration date and time (Last Method Edit): 07-NOV-2018 22:34

Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 248 ml

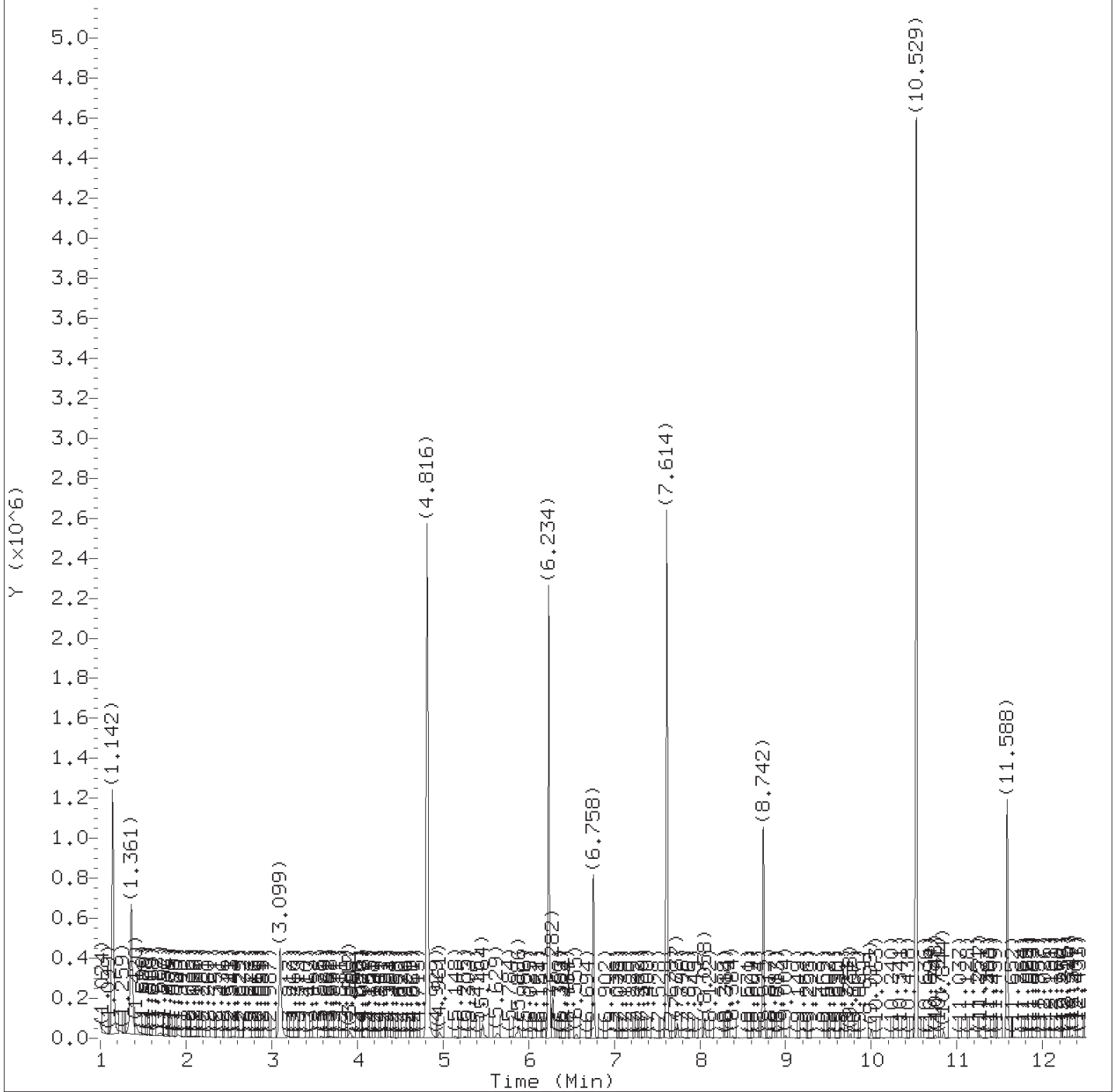
Volume Injected (Vi): 1 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit
									(on-column)
99) 2-Chloronaphthalene	(3)			Not Detected					0.1
104) 2-Nitroaniline	(3)			Not Detected					0.5
110) Dimethylphthalate	(3)			Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
117) 3-Nitroaniline	(3)			Not Detected					0.8
120) 2,4-Dinitrophenol	(3)			Not Detected					4
121) 4-Nitrophenol	(3)			Not Detected					3
123) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
124) Dibenzofuran	(3)			Not Detected					0.1
129) Diethylphthalate	(3)			Not Detected					0.5
132) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.2
135) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
136) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
148) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
154) Pentachlorophenol	(4)			Not Detected					0.3
168) Carbazole	(4)			Not Detected					0.1
198) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
210) Di-n-octylphthalate	(6)			Not Detected					1

Total number of targets = 46

Digitally signed by Kira N. Beck on 11/08/2018 at 11:56. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 11/12/2018 at 13:07. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0514.d  
Injection date and time: 08-NOV-2018 05:06

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

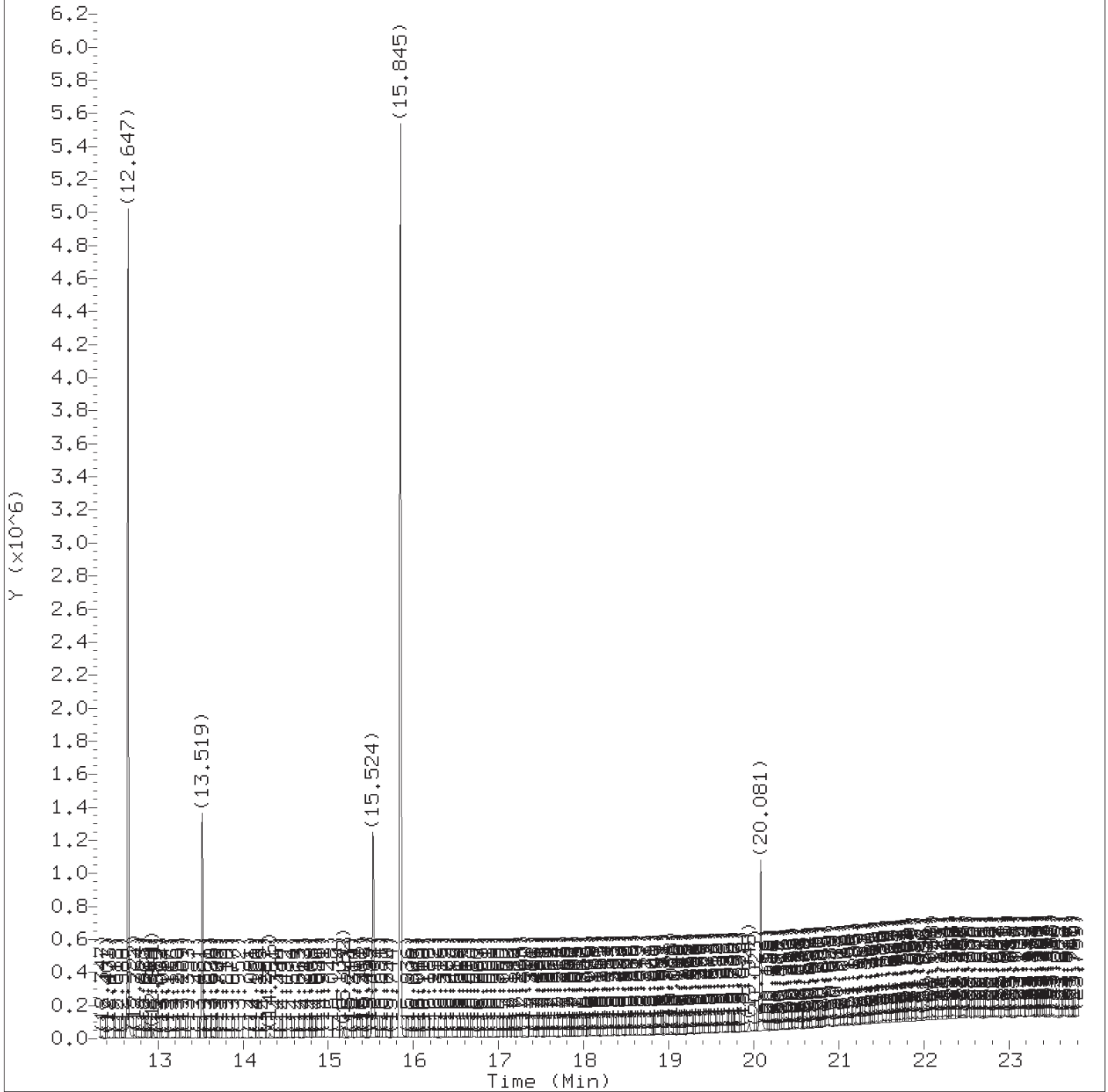
Date, time and analyst ID of latest file update: 08-Nov-2018 11:54 knb25316

Sample Name: 15T-2

Lab Sample ID: 9881309

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:56.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0514.d  
Injection date and time: 08-NOV-2018 05:06

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

Date, time and analyst ID of latest file update: 08-Nov-2018 11:54 knb25316

Sample Name: 15T-2

Lab Sample ID: 9881309

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:56.

Target 3.5 esignature user ID: knb25316



Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0514.d  
 Injection date and time: 08-NOV-2018 05:06

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 11:54 knb25316

Sublist used: 25788M

Sample Name: 15T-2

Lab Sample ID: 9881309

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12) \$2-Fluorophenol	(1)	4.816	112	1051583	22.155
18) \$Phenol-d6	(1)	6.234	99	969571	15.136
26) *1,4-Dichlorobenzene-d4	(1)	6.758	152	153329	5.000
45) \$Nitrobenzene-d5	(2)	7.614	82	1117778	19.412
68) *Naphthalene-d8	(2)	8.742	136	549985	5.000
96) \$2-Fluorobiphenyl	(3)	10.529	172	1716561	18.974
118) *Acenaphthene-d10	(3)	11.588	164	270687	5.000
140) \$2,4,6-Tribromophenol	(3)	12.647	330	463095	43.662
158) *Phenanthrene-d10	(4)	13.519	188	531096	5.000
180) *Pyrene-d10	(5)	15.524	212	545736	5.000
184) \$Terphenyl-d14	(5)	15.845	244	1989515	22.711
218) *Perylene-d12	(6)	20.081	264	500410	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/08/2018 at 11:56.

Target 3.5 esignature user ID: knb25316

15T-3

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881310

Data file: /chem/HP20296.i/18nov07a.b/lk0515.d

Injection date and time: 08-NOV-2018 05:35

Data file Sample Info. Line: 15T-3;9881310;1;0;SAMPLE;;DOD26;

Instrument ID: HP20296.i Batch: 18310WAI

Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M

Calibration date and time (Last Method Edit): 07-NOV-2018 22:34

Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 248 ml

Volume Injected (Vi): 1 ul

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.758( 0.000)	1079	152	141610 ( -4)	5.00	
68) Naphthalene-d8	8.737( 0.011)	1449	136	540055 ( 4)	5.00	
118) Acenaphthene-d10	11.583( 0.011)	1981	164	260561 ( -1)	5.00	
158) Phenanthrene-d10	13.519( 0.005)	2343	188	550021 ( 6)	5.00	
180) Pyrene-d10	15.530( 0.000)	2719	212	542079 ( -2)	5.00	
218) Perylene-d12	20.082( 0.005)	3570	264	537734 ( 3)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.817( 0.001)	112	1262855	28.808	58%		19 - 119
18) Phenol-d6	(1)	6.234( 0.001)	99	1425289	24.092	48%		10 - 72
45) Nitrobenzene-d5	(2)	7.614( 0.000)	82	914904	16.181	65%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.524( 0.000)	172	1411070	16.204	65%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.647(-0.001)	330	483906	47.397	95%		43 - 140
184) Terphenyl-d14	(5)	15.846( 0.000)	244	1565090	17.986	72%		50 - 134

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
6) Pyridine	(1)			Not Detected					0.5
19) Phenol	(1)			Not Detected					0.1
20) Aniline	(1)			Not Detected					0.8
24) 2-Chlorophenol	(1)			Not Detected					0.1
25) 1,3-Dichlorobenzene	(1)			Not Detected					0.1
27) 1,4-Dichlorobenzene	(1)			Not Detected					0.1
28) Benzyl alcohol	(1)			Not Detected					3
29) 1,2-Dichlorobenzene	(1)			Not Detected					0.1
32) 2-Methylphenol	(1)			Not Detected					0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)			Not Detected					0.1
38) 4-Methylphenol	(1)			Not Detected					0.1
39) N-Nitroso-di-n-propylamine	(1)			Not Detected					0.2
44) Hexachloroethane	(1)			Not Detected					0.3
46) Nitrobenzene	(2)			Not Detected					0.1
52) Isophorone	(2)			Not Detected					0.1
53) 2-Nitrophenol	(2)			Not Detected					0.8
55) 2,4-Dimethylphenol	(2)			Not Detected					0.8
57) bis(2-Chloroethoxy)methane	(2)			Not Detected					0.1
62) 2,4-Dichlorophenol	(2)			Not Detected					0.1
65) 1,2,4-Trichlorobenzene	(2)			Not Detected					0.1
70) 4-Chloroaniline	(2)			Not Detected					1
74) Hexachlorobutadiene	(2)			Not Detected					0.1
83) 4-Chloro-3-methylphenol	(2)			Not Detected					0.1
86) 2-Methylnaphthalene	(2)			Not Detected					0.03
88) Hexachlorocyclopentadiene	(3)			Not Detected					1
93) 2,4,6-Trichlorophenol	(3)			Not Detected					0.1
95) 2,4,5-Trichlorophenol	(3)			Not Detected					0.1

15T-3

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles 9881310

Data file: /chem/HP20296.i/18nov07a.b/lk0515.d Injection date and time: 08-NOV-2018 05:35  
 Data file Sample Info. Line: 15T-3;9881310;1;0;SAMPLE;;DOD26; Instrument ID: HP20296.i Batch: 18310WAI  
 Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M  
 Calibration date and time (Last Method Edit): 07-NOV-2018 22:34  
 Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

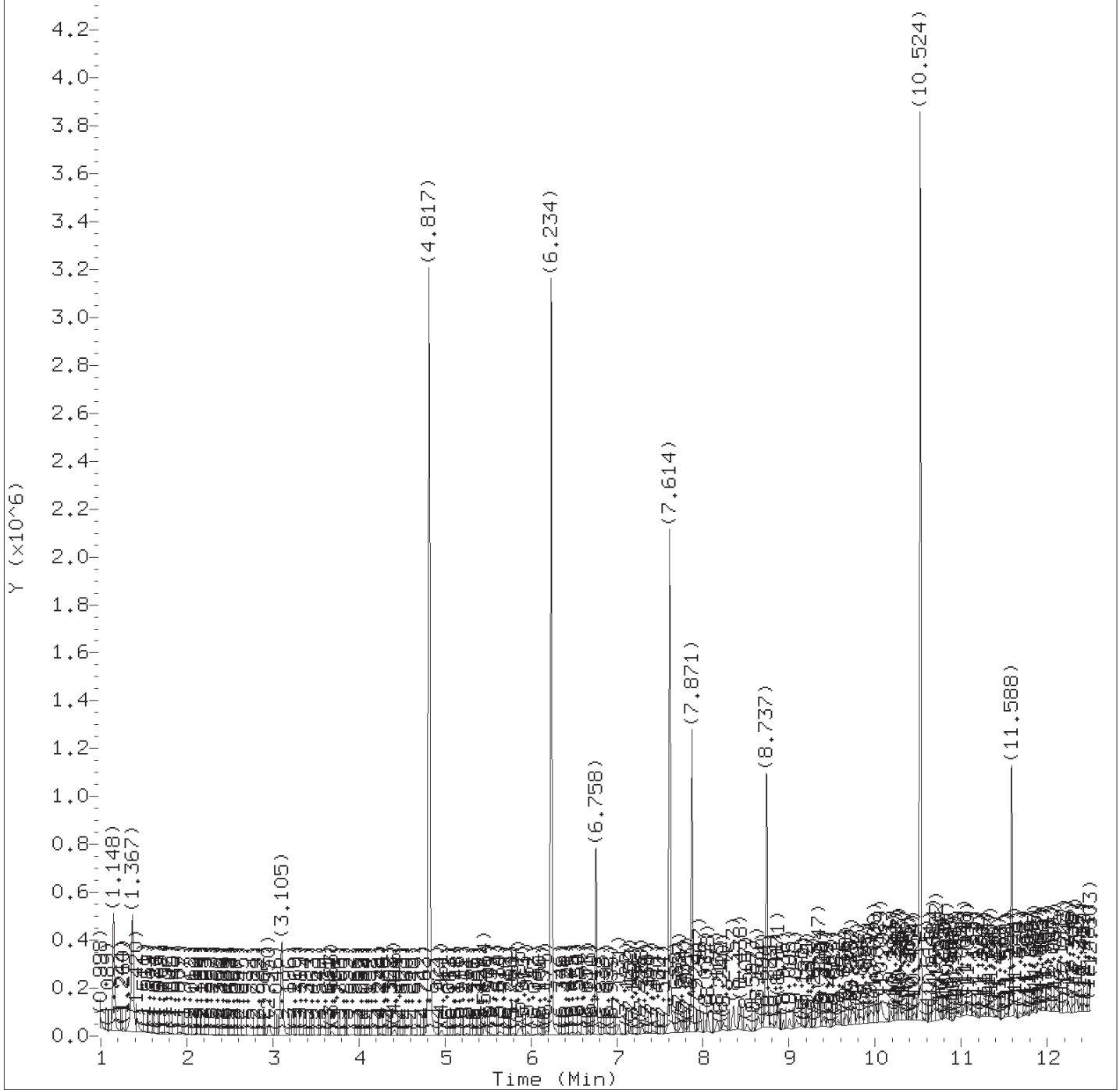
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
 Sample Volume (Vo): 248 ml Volume Injected (Vi): 1 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
99) 2-Chloronaphthalene	(3)			Not Detected					0.1
104) 2-Nitroaniline	(3)			Not Detected					0.5
110) Dimethylphthalate	(3)			Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
117) 3-Nitroaniline	(3)			Not Detected					0.8
120) 2,4-Dinitrophenol	(3)			Not Detected					4
121) 4-Nitrophenol	(3)			Not Detected					3
123) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
124) Dibenzofuran	(3)			Not Detected					0.1
129) Diethylphthalate	(3)			Not Detected					0.5
132) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.2
135) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
136) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
148) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
154) Pentachlorophenol	(4)			Not Detected					0.3
168) Carbazole	(4)			Not Detected					0.1
198) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
210) Di-n-octylphthalate	(6)			Not Detected					1

Total number of targets = 46

Digitally signed by Kira N. Beck on 11/08/2018 at 11:56. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 11/12/2018 at 13:07. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0515.d  
Injection date and time: 08-NOV-2018 05:35

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

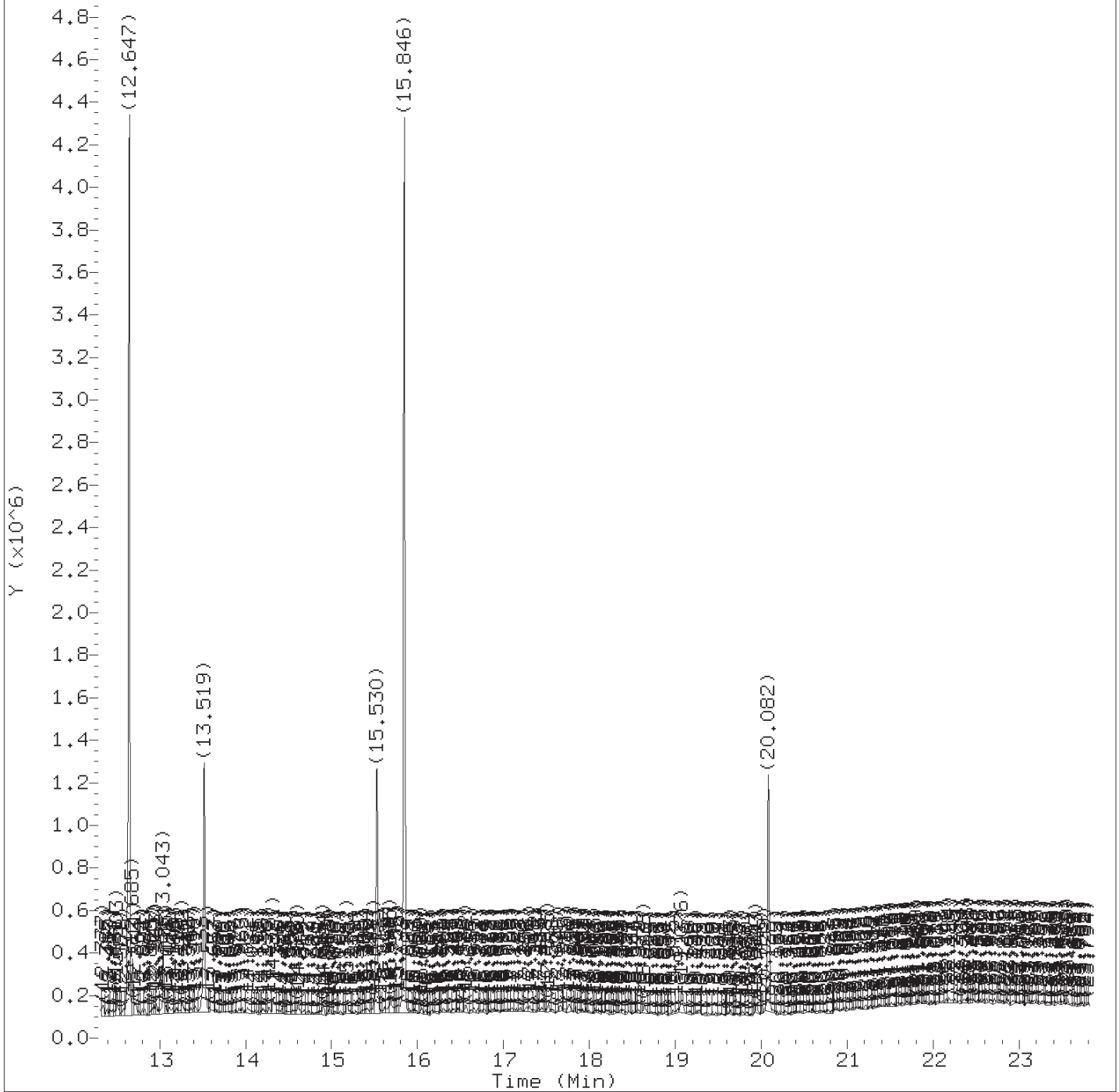
Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Sample Name: 15T-3

Lab Sample ID: 9881310

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:56.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0515.d  
Injection date and time: 08-NOV-2018 05:35

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Sample Name: 15T-3

Lab Sample ID: 9881310

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:56.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0515.d  
 Injection date and time: 08-NOV-2018 05:35

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Sublist used: 25788M

Sample Name: 15T-3

Lab Sample ID: 9881310

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12) \$2-Fluorophenol	(1)	4.817	112	1262855	28.808
18) \$Phenol-d6	(1)	6.234	99	1425289	24.092
26) *1,4-Dichlorobenzene-d4	(1)	6.758	152	141610	5.000
45) \$Nitrobenzene-d5	(2)	7.614	82	914904	16.181
68) *Naphthalene-d8	(2)	8.737	136	540055	5.000
96) \$2-Fluorobiphenyl	(3)	10.524	172	1411070	16.204
118) *Acenaphthene-d10	(3)	11.583	164	260561	5.000
140) \$2,4,6-Tribromophenol	(3)	12.647	330	483906	47.397
158) *Phenanthrene-d10	(4)	13.519	188	550021	5.000
180) *Pyrene-d10	(5)	15.530	212	542079	5.000
184) \$Terphenyl-d14	(5)	15.846	244	1565090	17.986
218) *Perylene-d12	(6)	20.082	264	537734	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/08/2018 at 11:56.

Target 3.5 esignature user ID: knb25316

15T-6

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881313

Data file: /chem/HP20296.i/18nov07a.b/lk0516.d

Injection date and time: 08-NOV-2018 06:03

Data File Sample Info. Line: 15T-6;9881313;1;0;SAMPLE;;DOD26;

Instrument ID: HP20296.i Batch: 18310WAI

Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M

Calibration date and time (Last Method Edit): 07-NOV-2018 22:34

Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 248 ml

Volume Injected (Vi): 1 ul

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.758( 0.000)	1079	152	145917 ( -1)	5.00	
68) Naphthalene-d8	8.742( 0.006)	1450	136	538569 ( 4)	5.00	
118) Acenaphthene-d10	11.588( 0.006)	1982	164	265578 ( 1)	5.00	
158) Phenanthrene-d10	13.519( 0.006)	2343	188	541690 ( 4)	5.00	
180) Pyrene-d10	15.530( 0.000)	2719	212	556627 ( 0)	5.00	
218) Perylene-d12	20.081( 0.006)	3570	264	563584 ( 8)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.816( 0.001)	112	1096240	24.269	49%		19 - 119
18) Phenol-d6	(1)	6.239( 0.000)	99	1293904	21.226	42%		10 - 72
45) Nitrobenzene-d5	(2)	7.614( 0.000)	82	906820	16.082	64%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.523( 0.000)	172	1521576	17.142	69%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.647( 0.000)	330	486997	46.799	94%		43 - 140
184) Terphenyl-d14	(5)	15.845( 0.000)	244	1846171	20.662	83%		50 - 134

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
6) Pyridine	(1)			Not Detected					0.5
19) Phenol	(1)			Not Detected					0.1
20) Aniline	(1)			Not Detected					0.8
24) 2-Chlorophenol	(1)			Not Detected					0.1
25) 1,3-Dichlorobenzene	(1)			Not Detected					0.1
27) 1,4-Dichlorobenzene	(1)			Not Detected					0.1
28) Benzyl alcohol	(1)			Not Detected					3
29) 1,2-Dichlorobenzene	(1)			Not Detected					0.1
32) 2-Methylphenol	(1)			Not Detected					0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)			Not Detected					0.1
38) 4-Methylphenol	(1)			Not Detected					0.1
39) N-Nitroso-di-n-propylamine	(1)			Not Detected					0.2
44) Hexachloroethane	(1)			Not Detected					0.3
46) Nitrobenzene	(2)			Not Detected					0.1
52) Isophorone	(2)			Not Detected					0.1
53) 2-Nitrophenol	(2)			Not Detected					0.8
55) 2,4-Dimethylphenol	(2)			Not Detected					0.8
57) bis(2-Chloroethoxy)methane	(2)			Not Detected					0.1
62) 2,4-Dichlorophenol	(2)			Not Detected					0.1
65) 1,2,4-Trichlorobenzene	(2)			Not Detected					0.1
70) 4-Chloroaniline	(2)			Not Detected					1
74) Hexachlorobutadiene	(2)			Not Detected					0.1
83) 4-Chloro-3-methylphenol	(2)			Not Detected					0.1
86) 2-Methylnaphthalene	(2)			Not Detected					0.03
88) Hexachlorocyclopentadiene	(3)			Not Detected					1
93) 2,4,6-Trichlorophenol	(3)			Not Detected					0.1
95) 2,4,5-Trichlorophenol	(3)			Not Detected					0.1

15T-6

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881313

Data file: /chem/HP20296.i/18nov07a.b/lk0516.d

Injection date and time: 08-NOV-2018 06:03

Data file Sample Info. Line: 15T-6;9881313;1;0;SAMPLE;;DOD26;

Instrument ID: HP20296.i Batch: 18310WAI

Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m

Sublist used: 25788M

Calibration date and time (Last Method Edit): 07-NOV-2018 22:34

Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 248 ml

Volume Injected (Vi): 1 ul

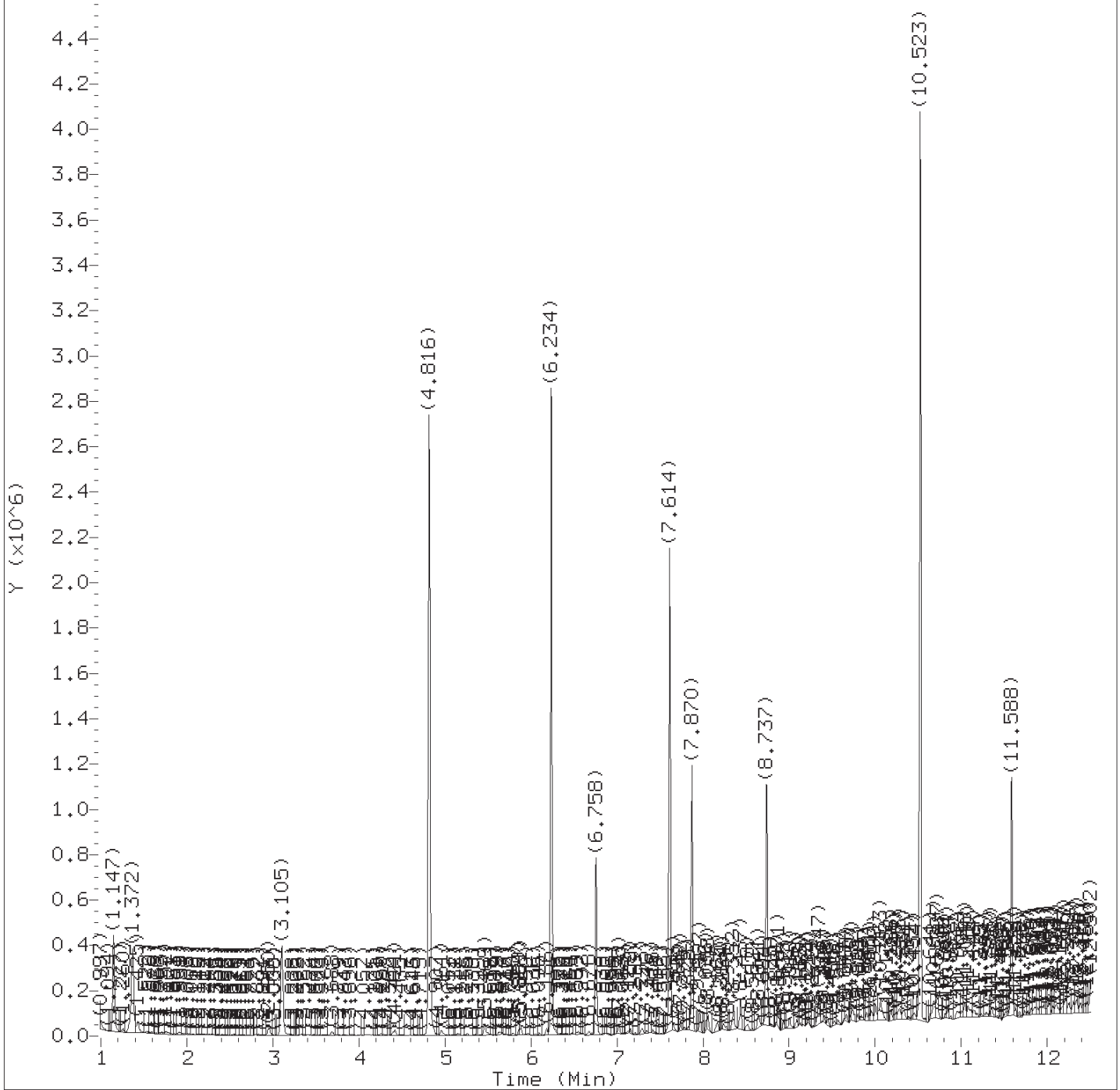
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
99) 2-Chloronaphthalene	(3)			Not Detected					0.1
104) 2-Nitroaniline	(3)			Not Detected					0.5
110) Dimethylphthalate	(3)			Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
117) 3-Nitroaniline	(3)			Not Detected					0.8
120) 2,4-Dinitrophenol	(3)			Not Detected					4
121) 4-Nitrophenol	(3)			Not Detected					3
123) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
124) Dibenzofuran	(3)			Not Detected					0.1
129) Diethylphthalate	(3)			Not Detected					0.5
132) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.2
135) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
136) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
148) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
154) Pentachlorophenol	(4)			Not Detected					0.3
168) Carbazole	(4)			Not Detected					0.1
198) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
210) Di-n-octylphthalate	(6)			Not Detected					1

Total number of targets = 46

Digitally signed by Kira N. Beck on 11/08/2018 at 11:57. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 11/12/2018 at 13:07. PARALLAX ID: reb00745





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0516.d  
Injection date and time: 08-NOV-2018 06:03

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

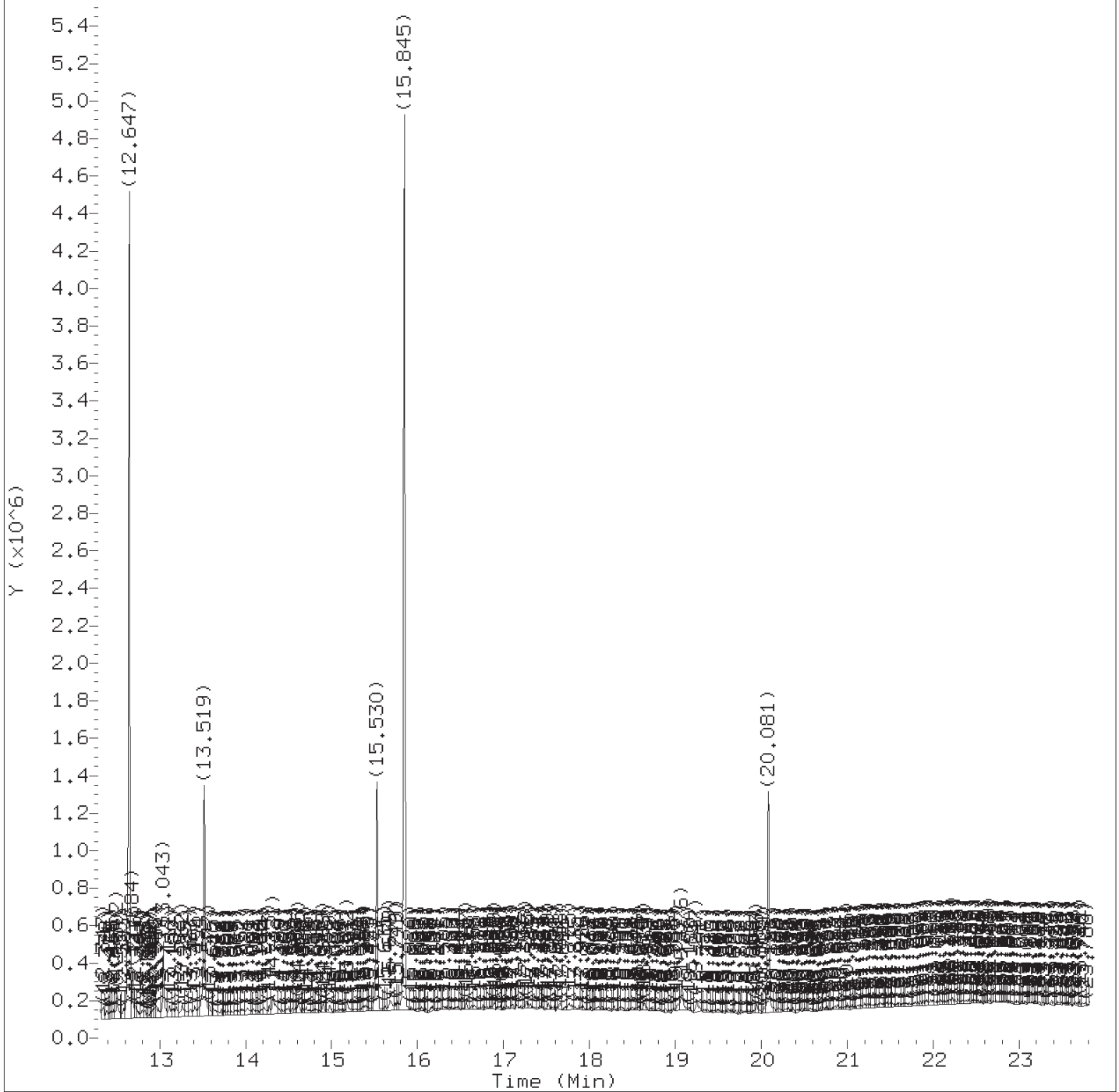
Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Sample Name: 15T-6

Lab Sample ID: 9881313

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:57.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0516.d  
Injection date and time: 08-NOV-2018 06:03

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Sample Name: 15T-6

Lab Sample ID: 9881313

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:57.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0516.d  
 Injection date and time: 08-NOV-2018 06:03

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 11:56 knb25316

Sublist used: 25788M

Sample Name: 15T-6

Lab Sample ID: 9881313

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12) \$2-Fluorophenol	(1)	4.816	112	1096240	24.269
18) \$Phenol-d6	(1)	6.239	99	1293904	21.226
26) *1,4-Dichlorobenzene-d4	(1)	6.758	152	145917	5.000
45) \$Nitrobenzene-d5	(2)	7.614	82	906820	16.082
68) *Naphthalene-d8	(2)	8.742	136	538569	5.000
96) \$2-Fluorobiphenyl	(3)	10.523	172	1521576	17.142
118) *Acenaphthene-d10	(3)	11.588	164	265578	5.000
140) \$2,4,6-Tribromophenol	(3)	12.647	330	486997	46.799
158) *Phenanthrene-d10	(4)	13.519	188	541690	5.000
180) *Pyrene-d10	(5)	15.530	212	556627	5.000
184) \$Terphenyl-d14	(5)	15.845	244	1846171	20.662
218) *Perylene-d12	(6)	20.081	264	563584	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/08/2018 at 11:57.

Target 3.5 esignature user ID: knb25316

**Standards Data**

**Semivolatiles by GC/MS**

Lancaster Laboratories  
Semi-Volatiles  
Runlog for Agilent GC/MS System HP20296 \*\*HP #12\*\*

Data Directory Path is - D:\data\18oct28\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
whs02991	LJ1740b.D	RVDFTPP2388	10/29/2018	00:09		
whs02991	LJ1741.D	RVSTD2648	10/29/2018	00:23		
whs02991	LJ1742.D	RVSTD2648	10/29/2018	00:56		
whs02991	LJ1743.D	RVSTD2648	10/29/2018	01:25		
whs02991	LJ1744.D	RVSTD2648	10/29/2018	01:53		
whs02991	LJ1745.D	RVSTD2648	10/29/2018	02:22		
whs02991	LJ1746.D	RVSTD2648	10/29/2018	02:51		
whs02991	LJ1747.D	RVSTD2648	10/29/2018	03:20		
whs02991	LJ1748.D	RVSTD2648	10/29/2018	03:49		
whs02991	LJ1749.D	RVSTD2648	10/29/2018	04:18		
whs02991	LJ1750.D	PAHMDL2648	10/29/2018	04:47		
whs02991	LJ1751.D	RVICV2628	10/29/2018	05:15		
whs02991	LJ1752.D	RVBASICV2578	10/29/2018	05:44		

Lancaster Laboratories  
Semi-Volatiles  
Runlog for Agilent GC/MS System HP20296 \*\*HP #12\*\*

Data Directory Path is - D:\data\18nov07a\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
art12405	LK0500a.D	RVDFTPP2878	11/07/2018	20:36		
art12405	LK0500b.D	RVDFTPP2878	11/07/2018	20:57		
art12405	LK0500c.D	RVDFTPP2878	11/07/2018	21:24		
art12405	LK0500d.D	RVDFTPP2878	11/07/2018	21:40		
art12405	LK0501.D	RVSTD2648	11/07/2018	21:58		
art12405	LK0502a.D	SBLKWS309	11/07/2018	23:21	18309WAS	
art12405	LK0503.D	309WSLCS	11/07/2018	23:50	18309WAS	
art12405	LK0504.D	SBLKWI310	11/08/2018	00:18	18310WAI	
art12405	LK0505.D	310WILCS	11/08/2018	00:47	18310WAI	
art12405	LK0506.D	310WILCSD	11/08/2018	01:16	18310WAI	
art12405	LK0507.D	310WILCS1	11/08/2018	01:45	18310WAI	
art12405	LK0508.D	310WILCSD1	11/08/2018	02:14	18310WAI	
art12405	LK0509.D	9879277	11/08/2018	02:42	18306WAL	
art12405	LK0510.D	9879278	11/08/2018	03:11	18306WAL	
art12405	LK0511.D	9879282	11/08/2018	03:40	18306WAL	
art12405	LK0512.D	9879393	11/08/2018	04:08	18306WAH	
art12405	LK0513.D	9879406	11/08/2018	04:37	18306WAH	
art12405	LK0514.D	9881309	11/08/2018	05:06	18310WAI	
art12405	LK0515.D	9881310	11/08/2018	05:35	18310WAI	
art12405	LK0516.D	9881313	11/08/2018	06:03	18310WAI	
art12405	LK0525.D	RVSTD2648	11/08/2018	06:32		

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

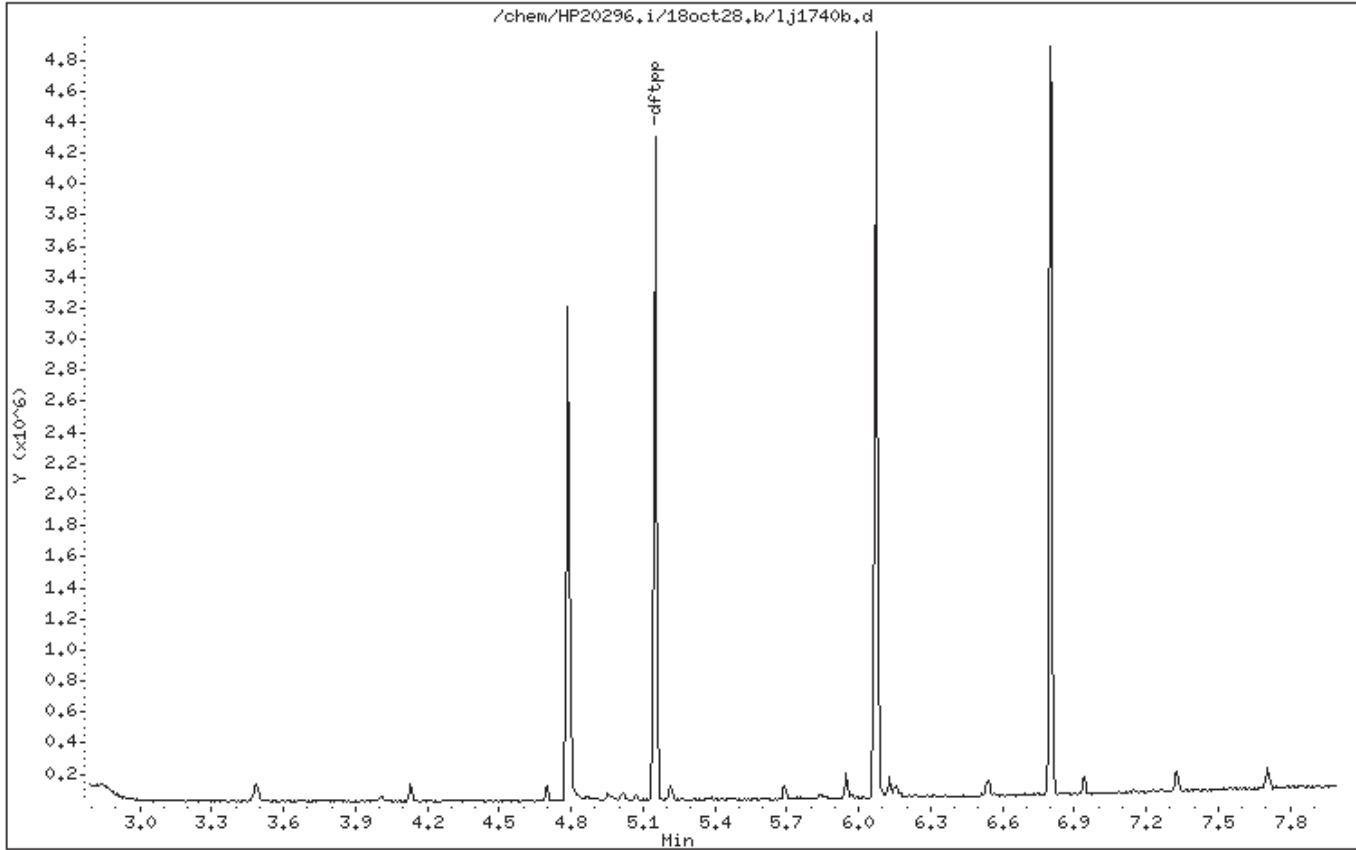
Instrument: HP20296.i

Sample Info: DFTPP12.5;RVIDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 10/30/2018 at 17:14.  
Target 3.5 esignature user ID: art12405

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

Instrument: HP20296.i

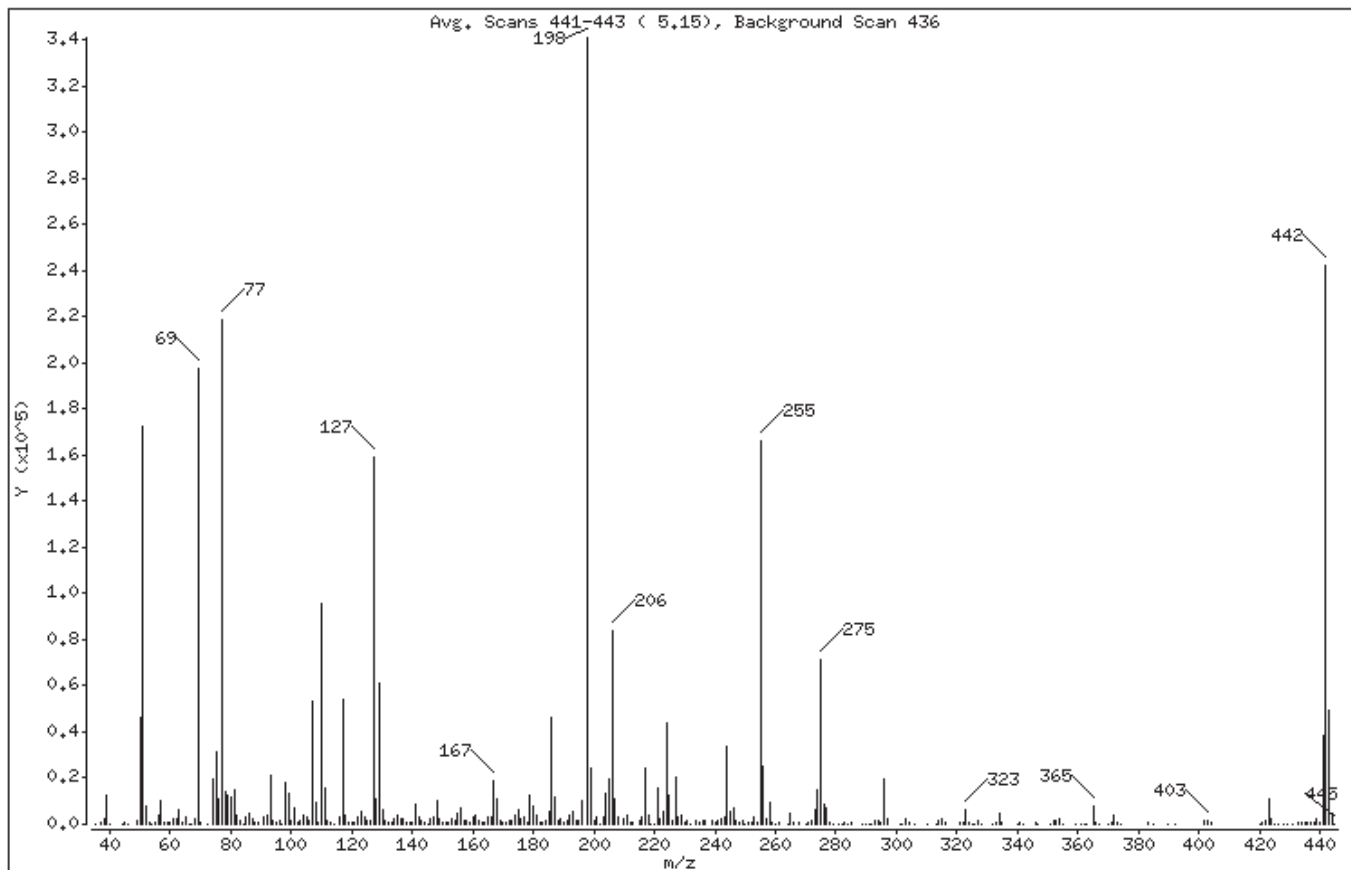
Sample Info: DFTPP12.5;RVIDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	50.48
68	Less than 2.00% of mass 69	0.79 ( 1.36)
69	Mass 69 relative abundance	57.92
70	Less than 2.00% of mass 69	0.30 ( 0.53)
127	10.00 - 80.00% of mass 198	46.57
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.24
275	10.00 - 60.00% of mass 198	20.81
365	Greater than 1.00% of mass 198	2.25
441	0.01 - 24.00% of mass 442	11.24 ( 15.83)
442	50.00 - 99.99% of mass 198	71.05
443	15.00 - 24.00% of mass 442	14.44 ( 20.32)

Digitally signed by Ashley R. Transue on 10/30/2018 at 17:14.  
Target 3.5 esignature user ID: art12405



Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

Instrument: HP20296.i

Sample Info: DFTPP12.5;RVIDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

Column diameter: 0,18

Data File: lj1740b.d  
Spectrum: Avg. Scans 441-443 ( 5,15), Background Scan 436  
Location of Maximum: 198,00  
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35,00	160	124,00	2808	204,00	12945	295,00	629
37,00	769	125,00	1492	205,00	19720	296,00	19840
38,00	2583	126,00	1202	206,00	83728	297,00	2588
39,00	12379	127,00	158784	207,00	10767	301,00	199
40,00	358	128,00	11160	208,00	3248	302,00	102
44,00	38	129,00	61496	210,00	2047	303,00	2053
45,00	726	130,00	6093	211,00	3865	304,00	420
46,00	98	131,00	1301	212,00	729	306,00	109
49,00	1792	132,00	1127	213,00	454	310,00	209
50,00	46392	133,00	603	215,00	1434	313,00	200
51,00	172096	134,00	2079	216,00	2865	314,00	1397
52,00	7947	135,00	3776	217,00	24064	315,00	2619
53,00	619	136,00	2344	218,00	3556	316,00	1099
54,00	98	137,00	2199	219,00	336	321,00	618
55,00	1117	138,00	669	220,00	104	322,00	439
56,00	3979	139,00	668	221,00	15391	323,00	6532
57,00	10481	140,00	1135	222,00	2269	324,00	719
58,00	822	141,00	8723	223,00	5643	325,00	89
59,00	585	142,00	2811	224,00	44008	326,00	120
60,00	591	143,00	1924	225,00	12569	327,00	1411
61,00	2078	144,00	480	226,00	1491	328,00	221
62,00	2120	145,00	383	227,00	20016	332,00	379
63,00	6565	146,00	2256	228,00	3236	333,00	1016
64,00	1154	147,00	3186	229,00	3551	334,00	4615
65,00	3521	148,00	9835	230,00	587	335,00	778
66,00	302	149,00	2616	231,00	1518	340,00	166
67,00	308	150,00	846	232,00	283	341,00	602
68,00	2679	151,00	983	234,00	1560	342,00	249
69,00	197440	152,00	454	235,00	1041	346,00	1028
70,00	1039	153,00	2231	236,00	1416	347,00	255
72,00	138	154,00	1754	237,00	1376	351,00	139
74,00	19528	155,00	4633	239,00	1207	352,00	1748
75,00	31496	156,00	6725	240,00	987	353,00	1334
76,00	11334	157,00	1602	241,00	1267	354,00	2338
77,00	218624	158,00	1716	242,00	2466	355,00	340

Digitally signed by Ashley R. Transue on 10/30/2018 at 17:14.  
Target 3.5 esignature user ID: art12405

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

Column diameter: 0,18

Data File: lj1740b.d  
Spectrum: Avg. Scans 441-443 ( 5,15), Background Scan 436  
Location of Maximum: 198,00  
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78,00	14288	159,00	1059	243,00	3399	359,00	114
79,00	12651	160,00	2780	244,00	33872	361,00	216
80,00	11666	161,00	3566	245,00	5230	362,00	89
81,00	14763	162,00	1195	246,00	7274	363,00	335
82,00	3690	163,00	791	247,00	1447	365,00	7688
83,00	1920	164,00	966	248,00	696	366,00	1015
84,00	372	165,00	3288	249,00	1768	367,00	221
85,00	2903	166,00	2919	250,00	277	370,00	364
86,00	4796	167,00	18464	251,00	530	371,00	961
87,00	2059	168,00	10621	252,00	999	372,00	3534
88,00	780	169,00	1817	253,00	2850	373,00	745
89,00	594	170,00	735	254,00	808	374,00	193
91,00	3365	171,00	915	255,00	166400	383,00	984
92,00	3599	172,00	1198	256,00	24704	385,00	172
93,00	21480	173,00	1939	257,00	2391	390,00	129
94,00	1674	174,00	3919	258,00	9235	392,00	106
95,00	546	175,00	6042	259,00	1001	402,00	1292
96,00	1315	176,00	2456	260,00	276	403,00	1892
97,00	288	177,00	2871	261,00	427	404,00	593
98,00	17872	178,00	987	264,00	187	420,00	188
99,00	13453	179,00	12843	265,00	4689	421,00	1078
100,00	1194	180,00	8037	266,00	1050	422,00	1773
101,00	7366	181,00	4072	268,00	622	423,00	11042
102,00	460	182,00	843	270,00	332	424,00	2685
103,00	1873	183,00	595	271,00	781	425,00	286
104,00	3944	184,00	1355	272,00	1201	426,00	107
105,00	3461	185,00	5337	273,00	6519	428,00	88
106,00	1764	186,00	46600	274,00	14665	429,00	117
107,00	53528	187,00	11731	275,00	70936	431,00	198
108,00	9694	188,00	1435	276,00	8615	433,00	782
109,00	1099	189,00	1994	277,00	6832	434,00	556
110,00	95264	190,00	632	278,00	926	435,00	742
111,00	15320	191,00	1842	279,00	125	436,00	635
112,00	1869	192,00	3879	281,00	71	437,00	877
113,00	673	193,00	5275	282,00	106	438,00	893

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

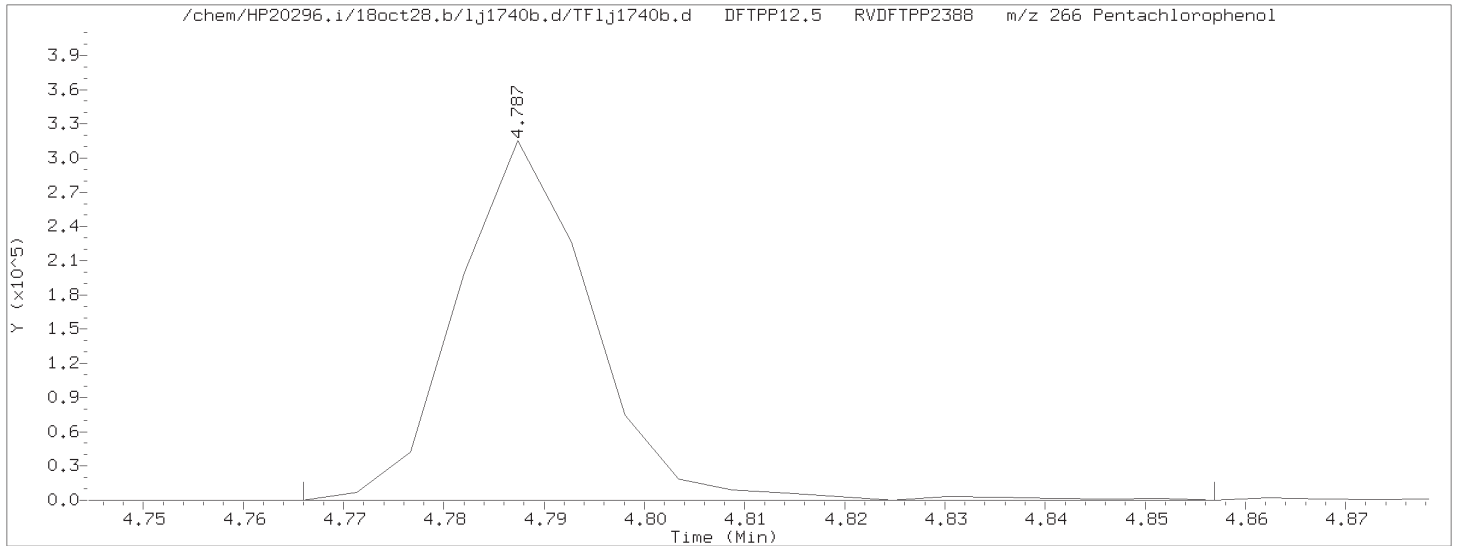
Column diameter: 0.18

Data File: lj1740b.d  
Spectrum: Avg. Scans 441-443 ( 5.15), Background Scan 436  
Location of Maximum: 198.00  
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	99	194.00	1620	283.00	668	439.00	2369
116.00	3166	195.00	1422	284.00	228	440.00	1127
117.00	54096	196.00	10118	285.00	1163	441.00	38336
118.00	3735	198.00	340928	289.00	365	442.00	242240
119.00	667	199.00	24680	290.00	168	443.00	49216
120.00	665	200.00	1646	291.00	268	444.00	4698
121.00	620	201.00	3002	292.00	294	445.00	241
122.00	3422	202.00	269	293.00	1768		
123.00	5231	203.00	3299	294.00	1228		

# Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP20296.i Injection Date: 29-OCT-2018 00:09 Operator: whs02991

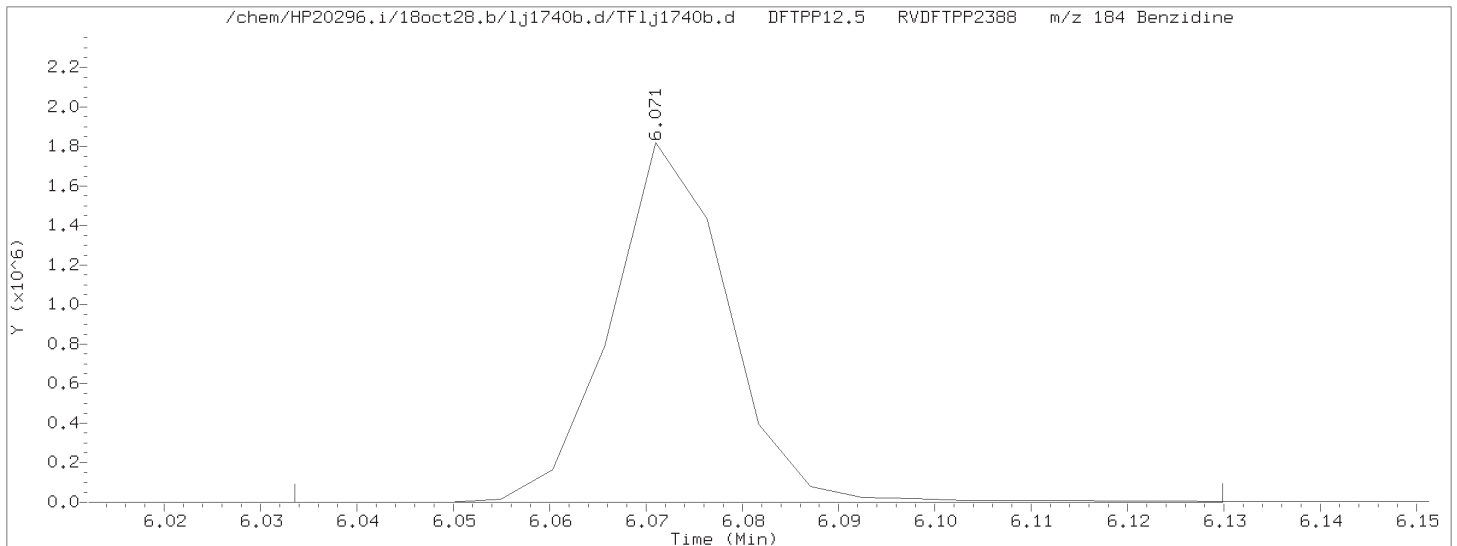


Pentachlorophenol EICP peak height = 315392 EICP peak height at 10% = 31539 Pentachlorophenol EICP area = 292799

Pentachlorophenol EICP peak apex (min.) = 4.787  
RT at 10% of front half of EICP (min.) = 4.775  
RT at 10% of back half of EICP (min.) = 4.802

'Front' peak width (min.) = 0.0123166667  
'Tailing' peak width (min.) = 0.0148000000

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0148000000}{0.0123166667} = 1.202$$



Benzidine EICP peak height = 1820059 EICP peak height at 10% = 182006 Benzidine EICP area = 1535800

Benzidine EICP peak apex (min.) = 6.071  
RT at 10% of front half of EICP (min.) = 6.061  
RT at 10% of back half of EICP (min.) = 6.085

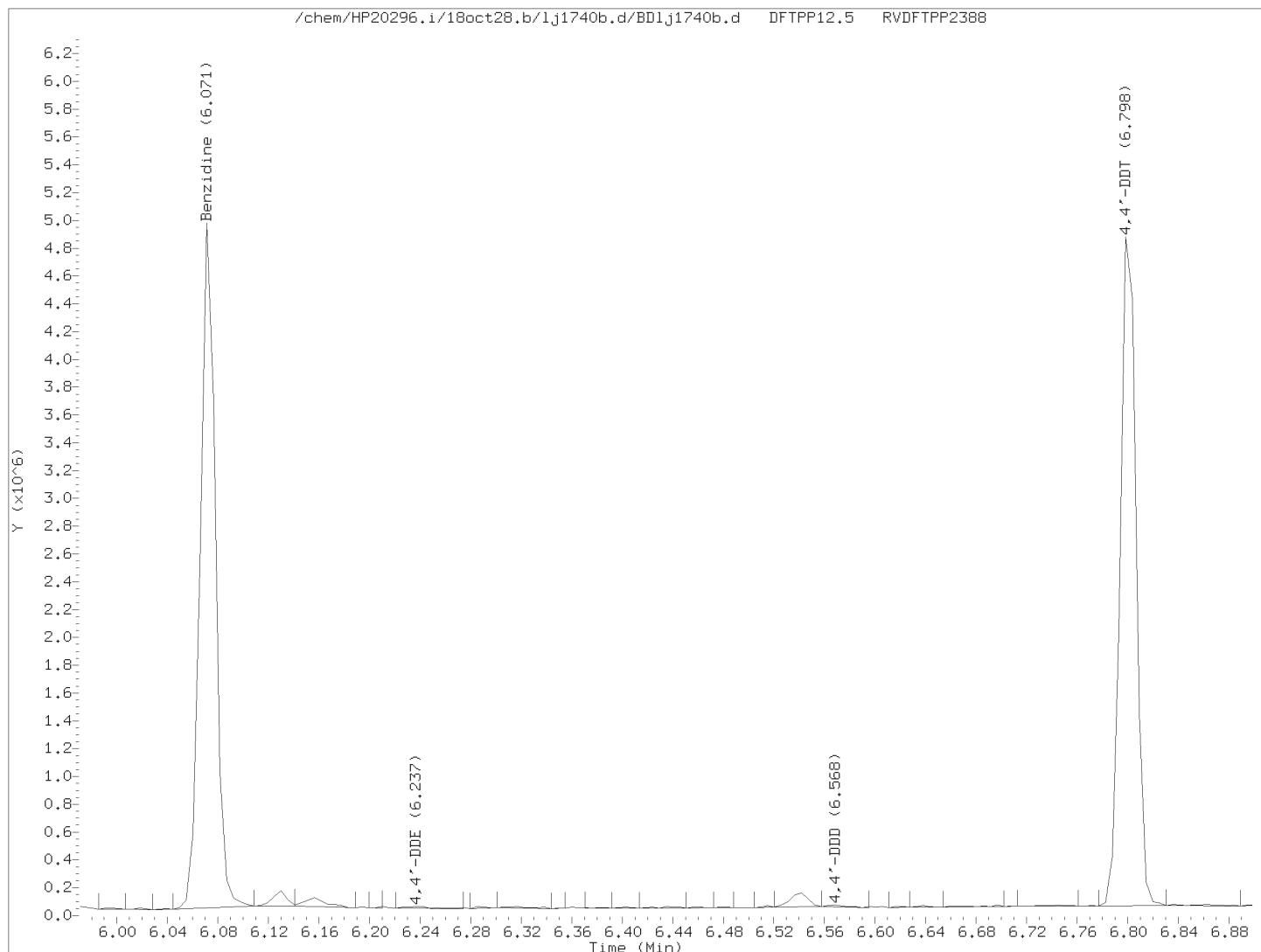
'Front' peak width (min.) = 0.0105166667  
'Tailing' peak width (min.) = 0.0142666667

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0142666667}{0.0105166667} = 1.357$$

page 1 of 2  
printed on 10/29/2018 at 00:23

# Assessment of GC Column Performance and Injection Port Inertness for

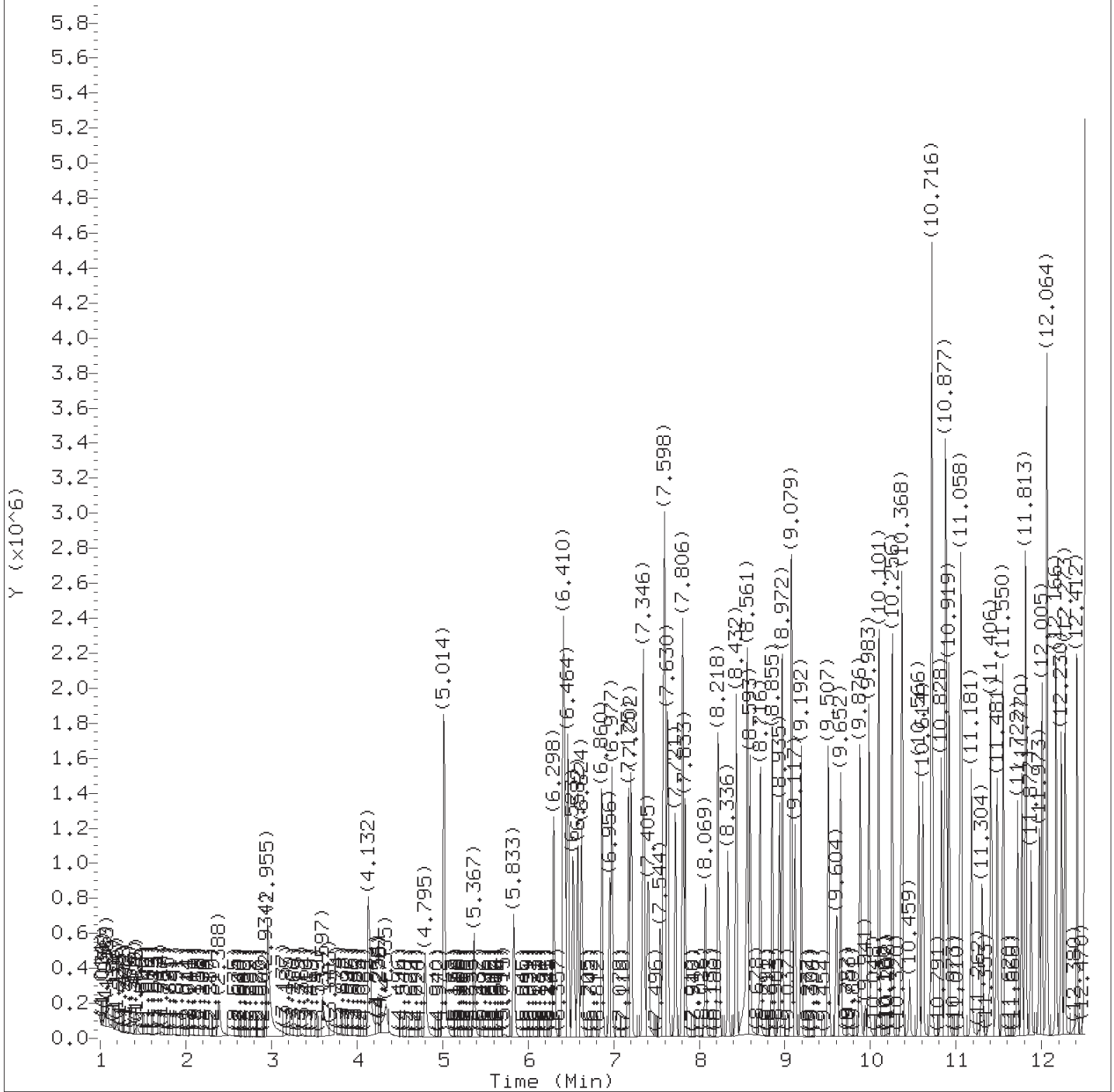
Instrument ID: HP20296.i Injection Date: 29-OCT-2018 00:09 Operator: whs02991



$$\% \text{ 4,4'-DDT breakdown} = \frac{4,4'\text{-DDE TIC area} + 4,4'\text{-DDD TIC area}}{4,4'\text{-DDE TIC area} + 4,4'\text{-DDD TIC area} + 4,4'\text{-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{18519 + 12285}{18519 + 12285 + 4209519} \times 100 = 0.7$$

page 2 of 2  
printed on 10/30/2018 at 17:13



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d  
Injection date and time: 29-OCT-2018 00:23

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

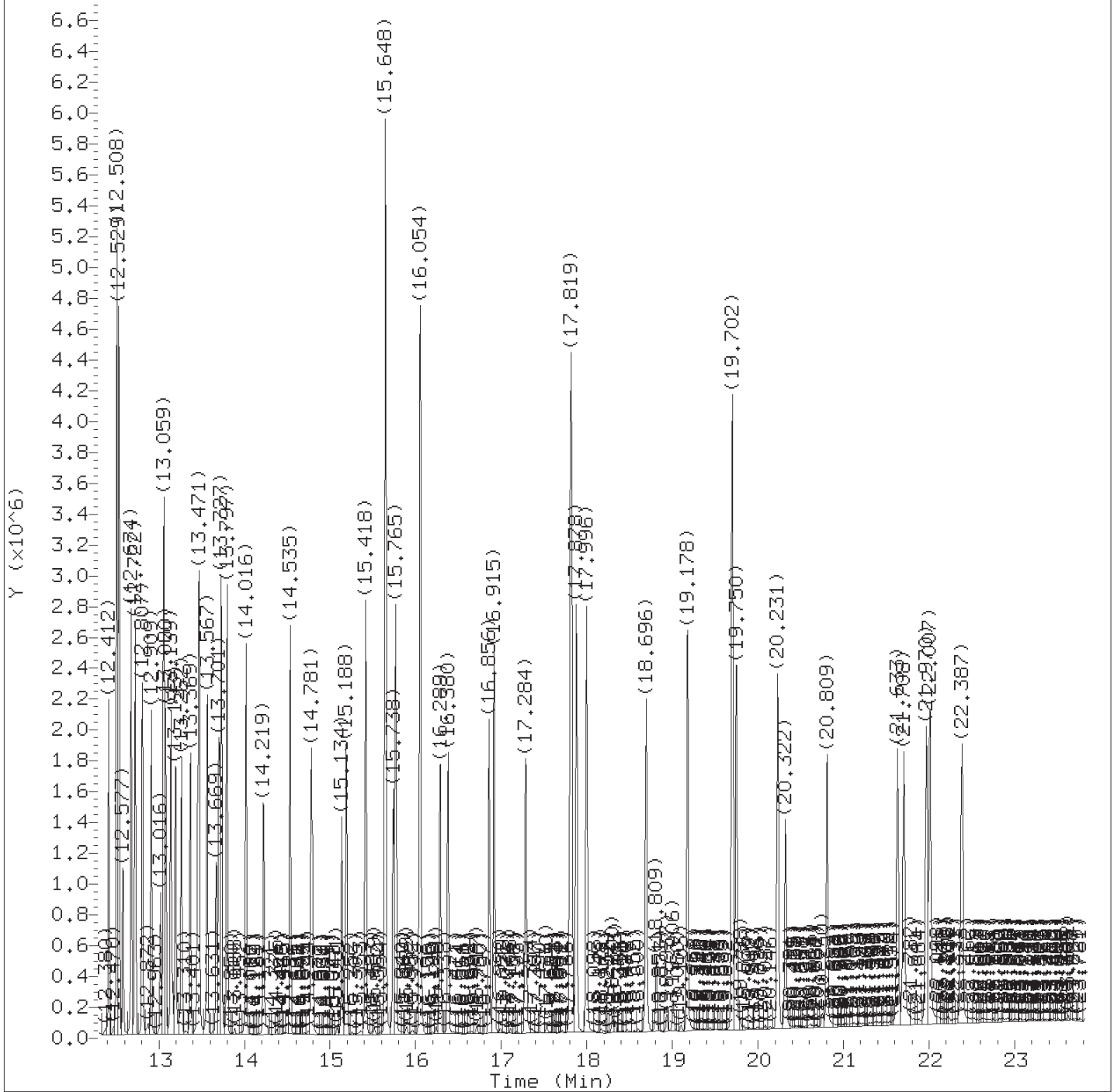
Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d  
Injection date and time: 29-OCT-2018 00:23

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d  
 Injection date and time: 29-OCT-2018 00:23

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.388	88	187521	7.500
5) N-Nitrosodimethylamine	(1)	2.934	74	292206	7.500
6) Pyridine	(1)	2.955	79	509519	7.500
8) 2-Picoline	(1)	4.132	93	512481	7.500
9) N-Nitrosomethylethylamine	(1)	4.346	88	216893	7.500
10) Methyl methanesulfonate	(1)	4.795	80	273991	7.500
12) \$2-Fluorophenol	(1)	5.020	112	823587	15.000
14) N-Nitrosodiethylamine	(1)	5.367	102	198437	7.500
43) Total Cresols	(1)			845219	15.000
16) Ethyl methanesulfonate	(1)	5.833	109	215405	7.500
17) Benzaldehyde	(1)	6.298	77	412505	7.500
18) \$Phenol-d6	(1)	6.410	99	1117901	15.000
19) Phenol	(1)	6.432	94	667896	7.500
20) Aniline	(1)	6.459	93	780551	7.500
21) a-methylstyrene	(1)	6.539	118	40069	7.500
23) bis(2-Chloroethyl) ether	(1)	6.582	93	500042	7.500
24) 2-Chlorophenol	(1)	6.624	128	391957	7.500
25) 1,3-Dichlorobenzene	(1)	6.865	146	435465	7.500
26) *1,4-Dichlorobenzene-d4	(1)	6.951	152	174707	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	436112	7.500
28) Benzyl alcohol	(1)	7.175	108	258975	7.500
29) 1,2-Dichlorobenzene	(1)	7.202	146	412508	7.500
31) Indene	(1)	7.341	115	458829	7.500
32) 2-Methylphenol	(1)	7.352	108	416320	7.500
100) Isosafrole	(3)			318471	7.500
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.405	45	635177	7.500
35) bis(2-Chloroisopropyl) ether	(1)	7.405	45	635177	7.500
36) N-Nitrosopyrrolidine	(1)	7.544	100	214609	7.500
37) Acetophenone	(1)	7.582	105	637015	7.500
39) N-Nitroso-di-n-propylamine	(1)	7.598	70	388810	7.500
38) 4-Methylphenol	(1)	7.598	108	428899	7.500
40) N-Nitrosomorpholine	(1)	7.614	56	277642	7.500
41) o-Toluidine	(1)	7.630	106	732052	7.500
44) Hexachloroethane	(1)	7.721	117	193254	7.500
45) \$Nitrobenzene-d5	(2)	7.806	82	1083798	15.000
46) Nitrobenzene	(2)	7.833	77	581274	7.500
125) 2,4,2,6-Dinitrotoluenes	(3)			401823	15.000
50) N-Nitrosopiperidine	(2)	8.074	114	203270	7.500
52) Isophorone	(2)	8.218	82	969544	7.500
53) 2-Nitrophenol	(2)	8.336	139	188188	7.500

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405



Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d  
 Injection date and time: 29-OCT-2018 00:23

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.432	107	476141	7.500
59) O,O,O-Triethylphosphorothioate	(2)	8.561	198	196654	7.500
58) Benzoic acid	(2)	8.566	105	392743	10.000
57) bis(2-Chloroethoxy)methane	(2)	8.593	93	609863	7.500
62) 2,4-Dichlorophenol	(2)	8.716	162	333420	7.500
151) Diallate trans/cis	(4)			458919	7.500
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	367986	7.500
68) *Naphthalene-d8	(2)	8.935	136	672447	5.000
69) Naphthalene	(2)	8.972	128	1146265	7.500
70) 4-Chloroaniline	(2)	9.074	127	464300	7.500
71) 2,6-Dichlorophenol	(2)	9.079	162	322782	7.500
72) Hexachloropropene	(2)	9.117	213	242252	7.500
74) Hexachlorobutadiene	(2)	9.192	225	213888	7.500
78) Quinoline	(2)	9.507	129	677710	7.500
79) Caprolactam	(2)	9.609	113	103364	7.500
80) N-Nitrosodi-n-butylamine	(2)	9.652	84	353671	7.500
83) 4-Chloro-3-methylphenol	(2)	9.876	107	398489	7.500
85) Safrole	(2)	9.983	162	284085	7.500
86) 2-Methylnaphthalene	(2)	10.101	142	749417	7.500
87) 1-Methylnaphthalene	(2)	10.256	142	706494	7.500
88) Hexachlorocyclopentadiene	(3)	10.363	237	220396	7.500
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.374	216	396512	7.500
91) cis-Isosafrole	(3)	10.459	162	54785	1.275
93) 2,4,6-Trichlorophenol	(3)	10.566	196	243999	7.500
95) 2,4,5-Trichlorophenol	(3)	10.614	196	259156	7.500
96) \$2-Fluorobiphenyl	(3)	10.721	172	1685371	15.000
97) trans-Isosafrole	(3)	10.828	162	263686	6.225
98) 1,1'-Biphenyl	(3)	10.877	154	874019	7.500
99) 2-Chloronaphthalene	(3)	10.887	162	753138	7.500
101) 1-Chloronaphthalene	(3)	10.919	162	667838	7.500
103) Diphenyl ether	(3)	11.058	170	492340	7.500
104) 2-Nitroaniline	(3)	11.064	138	193520	7.500
108) 1,4-Naphthoquinone	(3)	11.181	158	292461	7.500
109) 1,4-Dinitrobenzene	(3)	11.310	168	100747	7.500
110) Dimethylphthalate	(3)	11.406	163	809664	7.500
111) 1,3-Dinitrobenzene	(3)	11.422	168	123988	7.500
113) 2,6-Dinitrotoluene	(3)	11.481	165	166717	7.500
114) Acenaphthylene	(3)	11.550	152	1000608	7.500
117) 3-Nitroaniline	(3)	11.722	138	183809	7.500
118) *Acenaphthene-d10	(3)	11.770	164	328644	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

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 on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d  
 Injection date and time: 29-OCT-2018 00:23

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.813	153	738590	7.500
120) 2,4-Dinitrophenol	(3)	11.877	184	120054	10.000
121) 4-Nitrophenol	(3)	11.978	109	139020	7.500
122) Pentachlorobenzene	(3)	12.005	250	307115	7.500
123) 2,4-Dinitrotoluene	(3)	12.064	165	235106	7.500
124) Dibenzofuran	(3)	12.064	168	1001807	7.500
126) 1-Naphthylamine	(3)	12.166	143	705315	7.500
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	196768	7.500
128) 2-Naphthylamine	(3)	12.273	143	709506	7.500
129) Diethylphthalate	(3)	12.417	149	778653	7.500
130) Thionazin	(3)	12.508	107	154103	7.500
131) Fluorene	(3)	12.508	166	783531	7.500
133) 5-Nitro-o-toluidine	(3)	12.529	152	215656	7.500
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	407480	7.500
134) 4-Nitroaniline	(3)	12.540	138	195725	7.500
135) 4,6-Dinitro-2-methylphenol	(4)	12.583	198	126753	7.500
136) N-Nitrosodiphenylamine	(4)	12.674	169	649790	7.500
137) NDPA as diphenylamine	(4)	12.674	169	649790	7.500
139) 1,2-Diphenylhydrazine	(4)	12.722	77	1178091	7.500
140) \$2,4,6-Tribromophenol	(3)	12.807	330	203388	15.000
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	177913	7.500
144) 1,3,5-Trinitrobenzene	(4)	13.021	213	75897	7.500
145) Diallate (peak 1)	(4)	13.053	86	390897	6.225
146) Phorate	(4)	13.064	75	666573	7.500
147) Phenacetin	(4)	13.080	108	485876	7.500
148) 4-Bromophenyl-phenylether	(4)	13.139	248	218802	7.500
149) Diallate (peak 2)	(4)	13.160	86	68022M	1.275
150) Hexachlorobenzene	(4)	13.198	284	227756	7.500
152) Dimethoate	(4)	13.262	87	382026	7.500
153) Atrazine	(4)	13.369	200	206734	7.500
154) Pentachlorophenol	(4)	13.455	266	145813	7.500
155) 4-Aminobiphenyl	(4)	13.465	169	576524	7.500
156) Pentachloronitrobenzene	(4)	13.471	237	111129	7.500
157) Pronamide	(4)	13.567	173	368534	7.500
158) *Phenanthrene-d10	(4)	13.701	188	678703	5.000
159) Dinoseb	(4)	13.711	211	188799	7.500
160) Phenanthrene	(4)	13.727	178	1194595	7.500
162) Anthracene	(4)	13.797	178	1218074	7.500
168) Carbazole	(4)	14.016	167	1092967	7.500
169) Methyl parathion	(4)	14.225	109	290668	7.500

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

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 on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d  
 Injection date and time: 29-OCT-2018 00:23

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.535	149	1397137	7.500
172) Parathion	(4)	14.776	109	184831	7.500
173) 4-Nitroquinoline-1-oxide	(4)	14.797	190	82082	7.500
227) Total PAHs	(6)			20198266	135.000
174) Octachlorostyrene	(4)	15.139	308	85266	7.500
176) Isodrin	(4)	15.188	193	151145	7.500
178) Fluoranthene	(4)	15.418	202	1353341	7.500
179) Benzidine	(5)	15.648	184	2649030	22.500
180) *Pyrene-d10	(5)	15.738	212	704349	5.000
182) Pyrene	(5)	15.765	202	1409642	7.500
184) \$Terphenyl-d14	(5)	16.054	244	1732226	15.000
187) p-Dimethylaminoazobenzene	(5)	16.289	225	223535	7.500
190) Chlorobenzilate	(5)	16.380	139	421506	7.500
192) 3,3'-Dimethylbenzidine	(5)	16.856	212	865074	7.500
193) Butylbenzylphthalate	(5)	16.915	149	656002	7.500
196) 2-Acetylaminofluorene	(5)	17.284	181	531064	7.500
198) 3,3'-Dichlorobenzidine	(5)	17.803	252	473677	7.500
200) Benzo(a)anthracene	(5)	17.819	228	1358768	7.500
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.824	231	276419	7.500
201) Chrysene	(5)	17.878	228	1294287	7.500
204) bis(2-Ethylhexyl)phthalate	(5)	17.996	149	918226	7.500
208) 6-Methylchrysene	(5)	18.696	242	852251	7.500
210) Di-n-octylphthalate	(6)	19.178	149	1603024	7.500
211) Benzo(b)fluoranthene	(6)	19.696	252	1282462	7.500
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.702	256	535222	7.500
213) Benzo(k)fluoranthene	(6)	19.750	252	1256295	7.500
216) Benzo(a)pyrene	(6)	20.231	252	1204059	7.500
218) *Perylene-d12	(6)	20.322	264	642558	5.000
220) 3-Methylcholanthrene	(6)	20.809	268	555684	7.500
222) Dibenz(a,h)acridine	(6)	21.633	279	946103	7.500
223) Dibenz(a,j)acridine	(6)	21.708	279	999006	7.500
224) Indeno(1,2,3-cd)pyrene	(6)	21.970	276	1113820M	7.500
225) Dibenz(a,h)anthracene	(6)	22.012	278	1176190	7.500
226) Benzo(g,h,i)perylene	(6)	22.387	276	1211828	7.500

M = Compound was manually integrated.

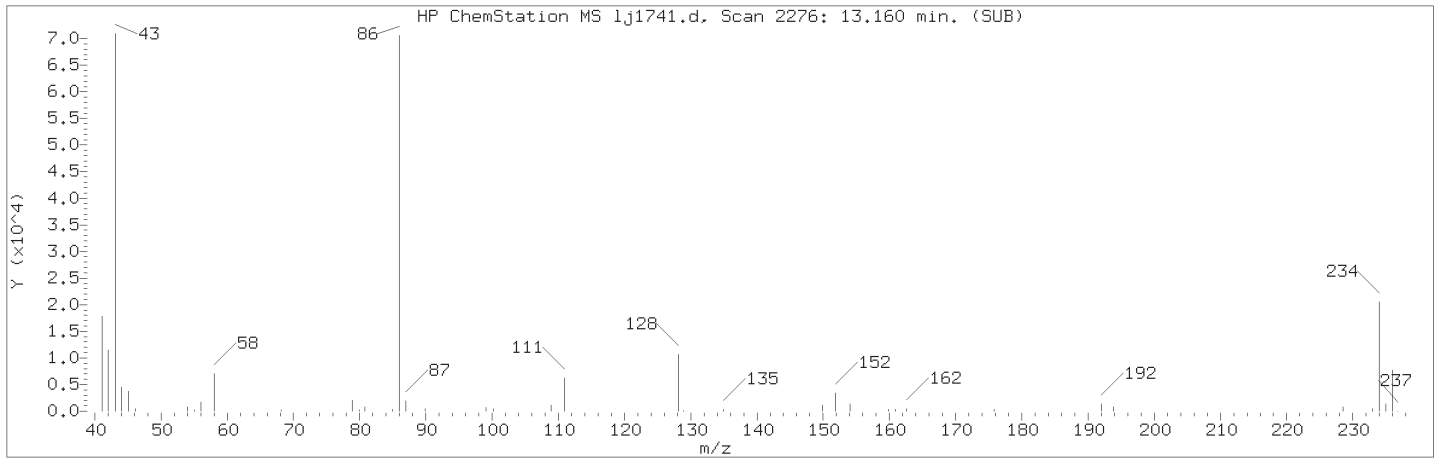
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

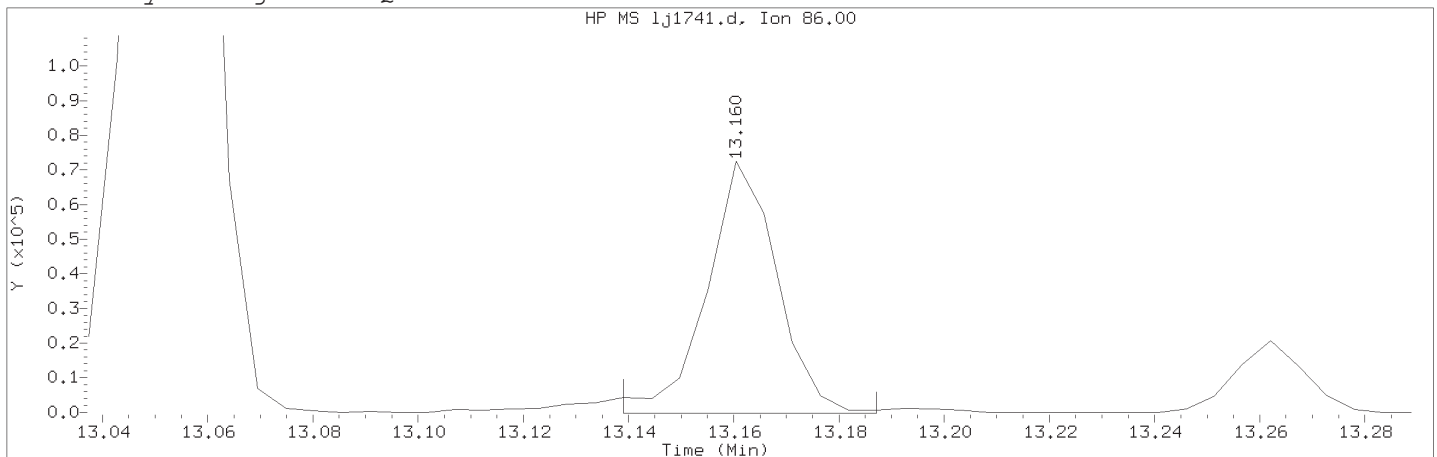
Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1741.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:23                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5    Lab Sample ID: RVSTD2648

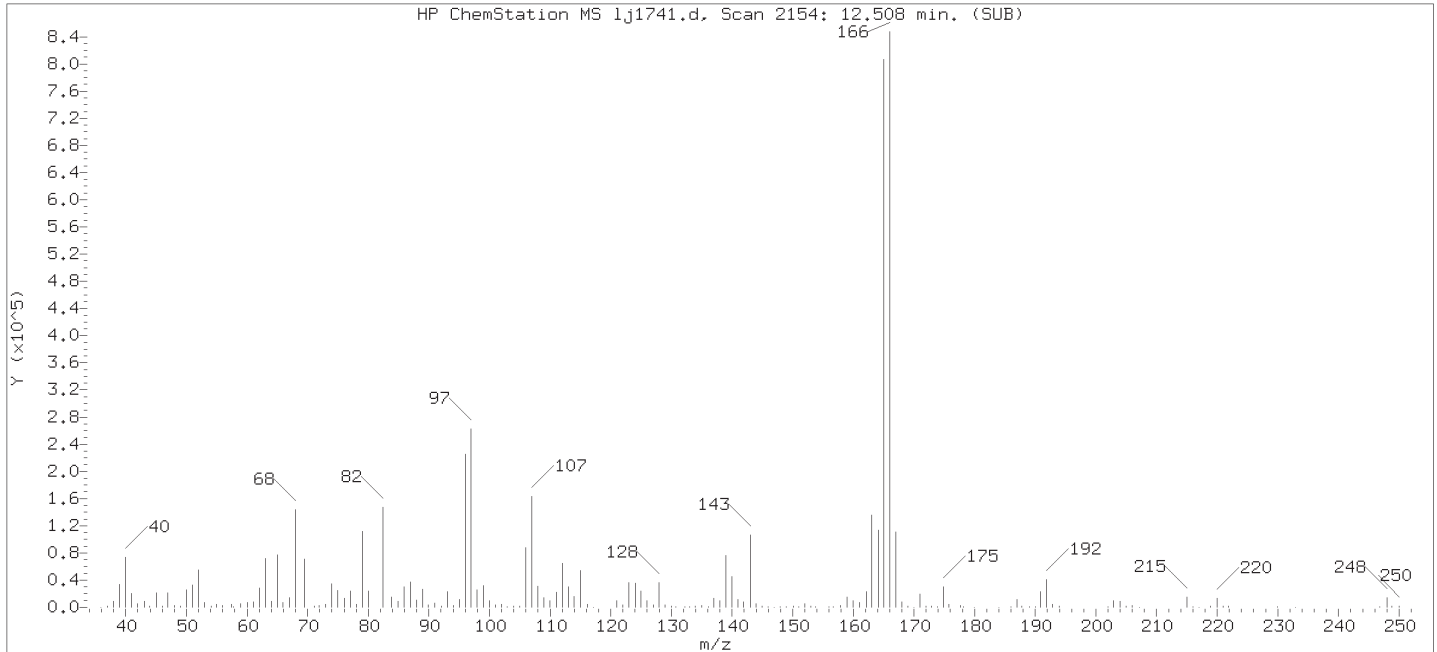
Compound Number                      : 149  
Compound Name                         : Diallylate (peak 2)  
Scan Number                            : 2276  
Retention Time (minutes)             : 13.160  
Quant Ion                                : 86.00  
Area (flag)                             : 68022M  
On-Column Amount (ng/ul)            : 1.2750  
Integration start scan                : 2271                      Integration stop scan: 2280  
Y at integration start                : -230                      Y at integration end: -230

Reason for manual integration: improper integration

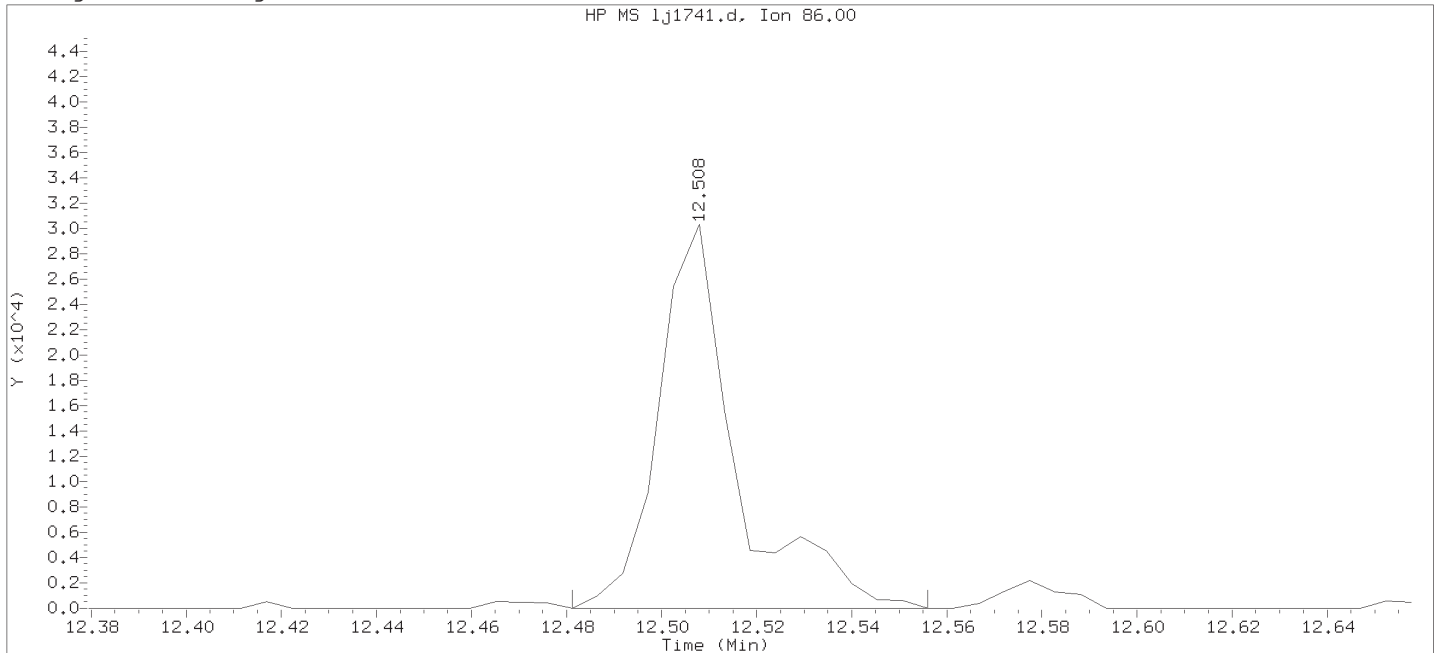
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1741.d  
Injection date and time: 29-OCT-2018 00:23

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all11

Calibration date and time: 29-OCT-2018 00:52

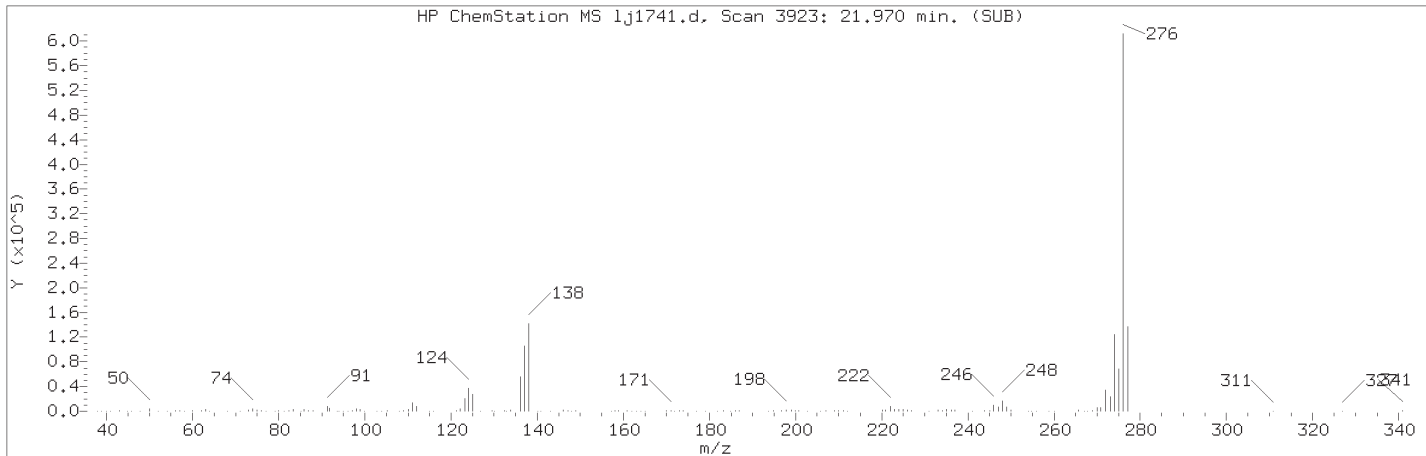
Date, time and analyst ID of latest file update: 29-Oct-2018 00:52 Unknown

Sample Name: SSTD7.5

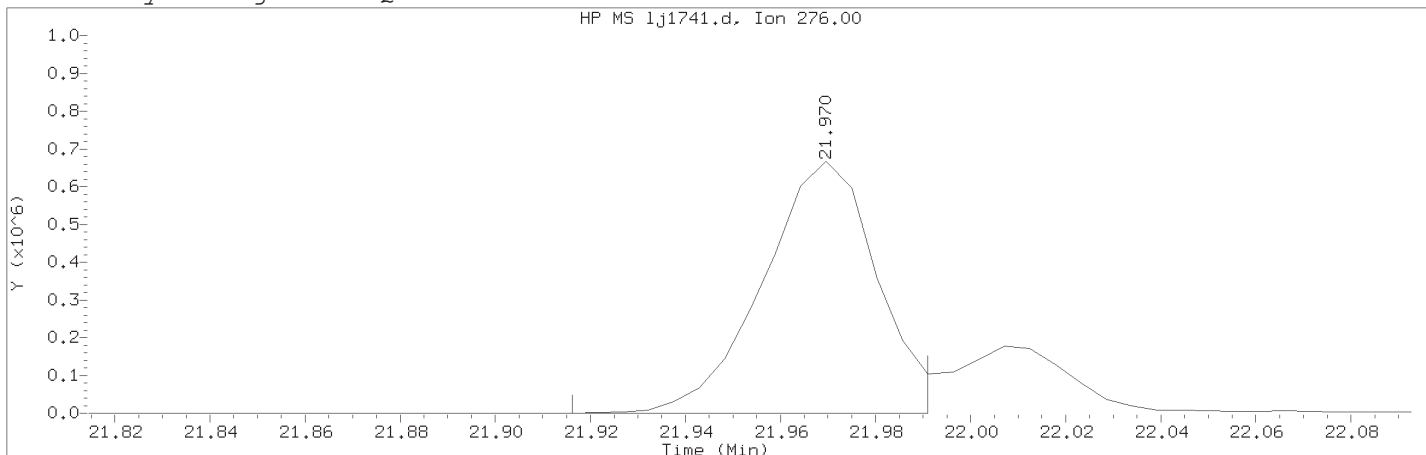
Lab Sample ID: RVSTD2648

Compound Number	: 149	
Compound Name	: Diallate (peak 2)	
Scan Number	: 2154	
Retention Time (minutes)	: 12.508	
Quant Ion	: 86.00	
Area	: 34206	
On-column Amount (ng/ul)	: 353.5652	
Integration start scan	: 2148	Integration stop scan: 2162
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1741.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:23                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5    Lab Sample ID: RVSTD2648

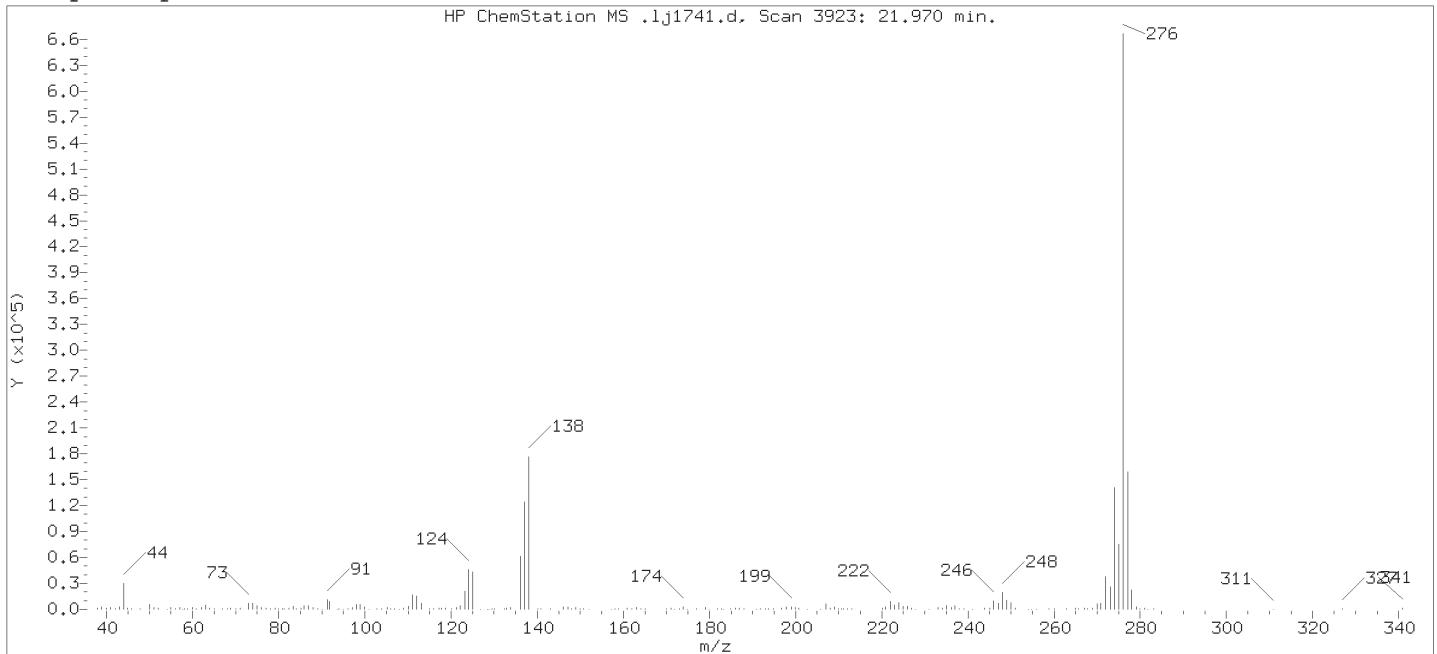
Compound Number                      : 224  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 3923  
Retention Time (minutes)             : 21.970  
Quant Ion                                : 276.00  
Area (flag)                             : 1113820M  
On-Column Amount (ng/ul)            : 7.5000  
Integration start scan                : 3912                      Integration stop scan: 3926  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: missed peak

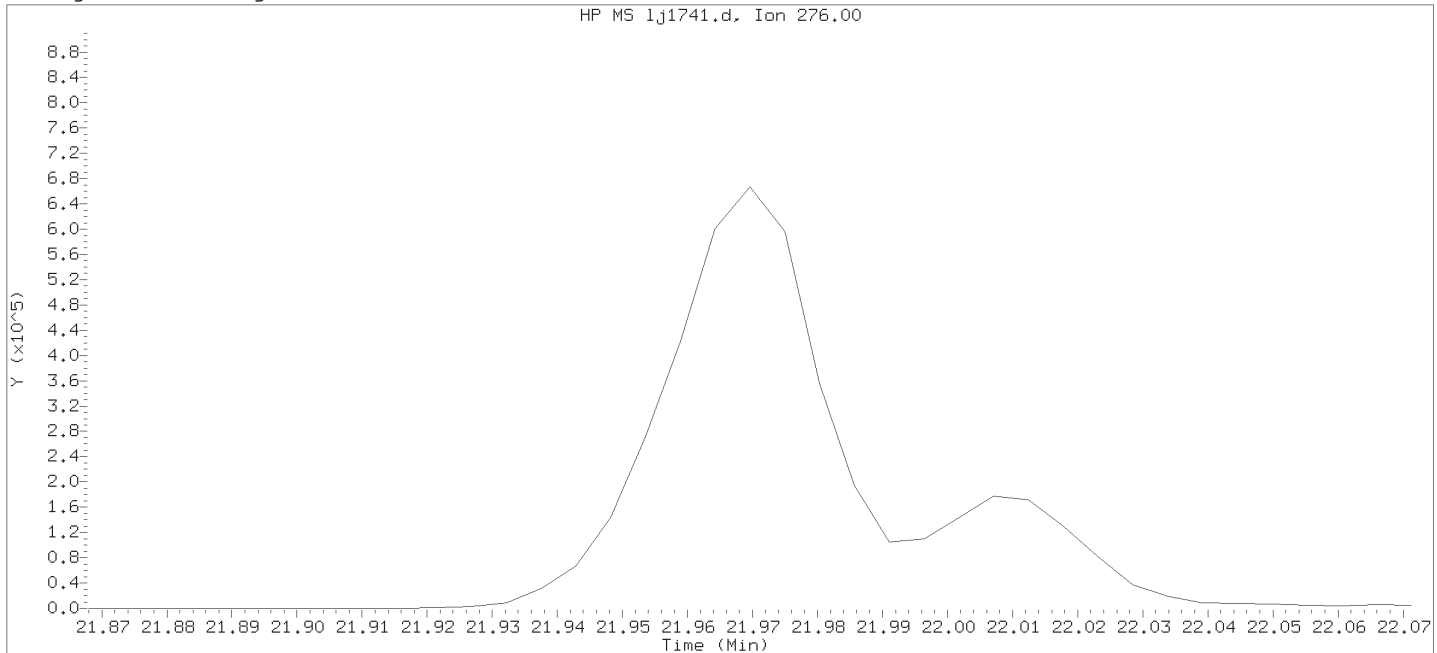
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1741.d  
Injection date and time: 29-OCT-2018 00:23

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 00:52

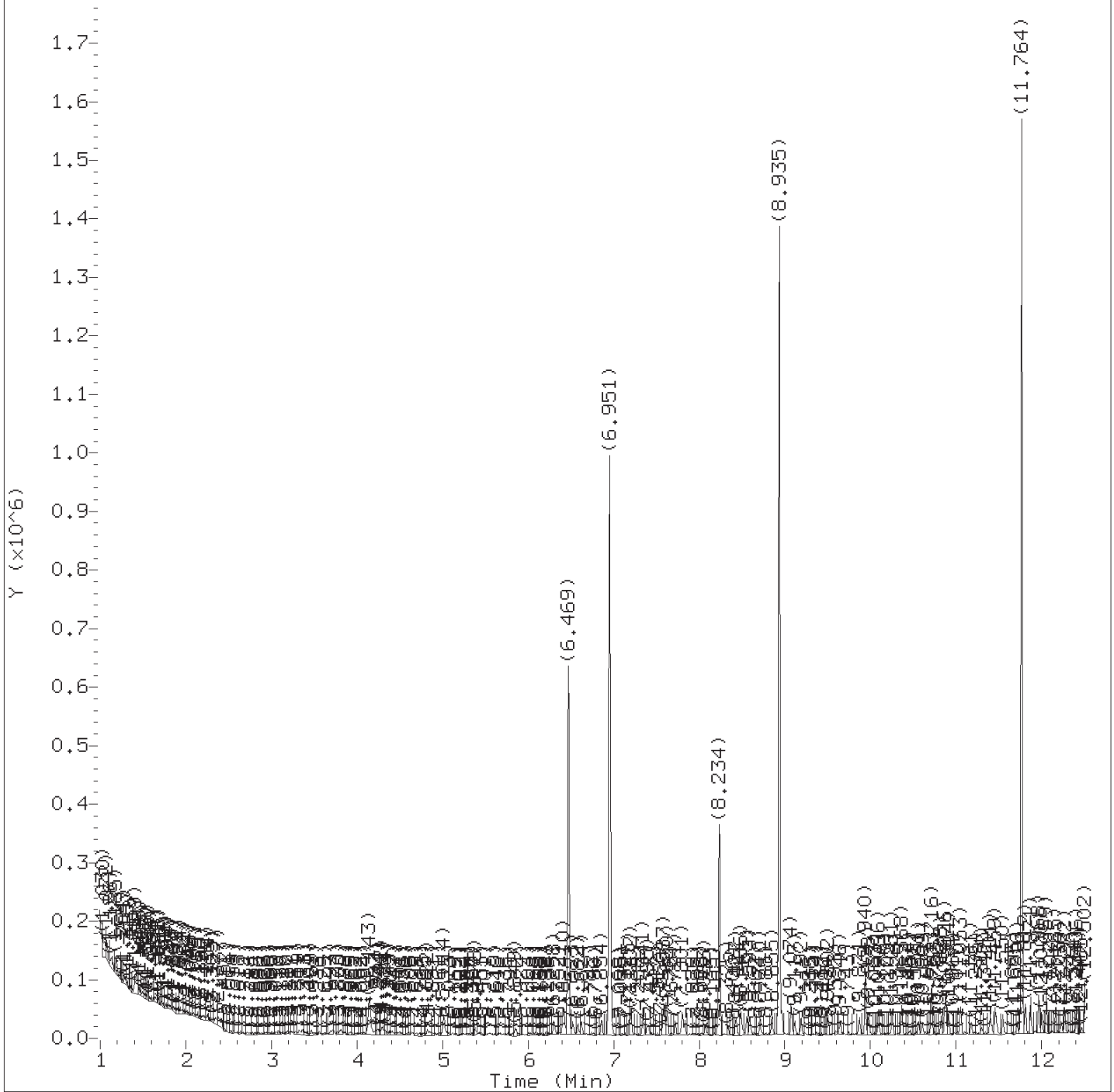
Sublist used: all11

Date, time and analyst ID of latest file update: 29-Oct-2018 00:52 Unknown

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Compound Number : 224  
Compound Name : Indeno(1,2,3-cd)pyrene  
Expected RT (minutes) : 21.970  
Quant Ion : 276.00



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

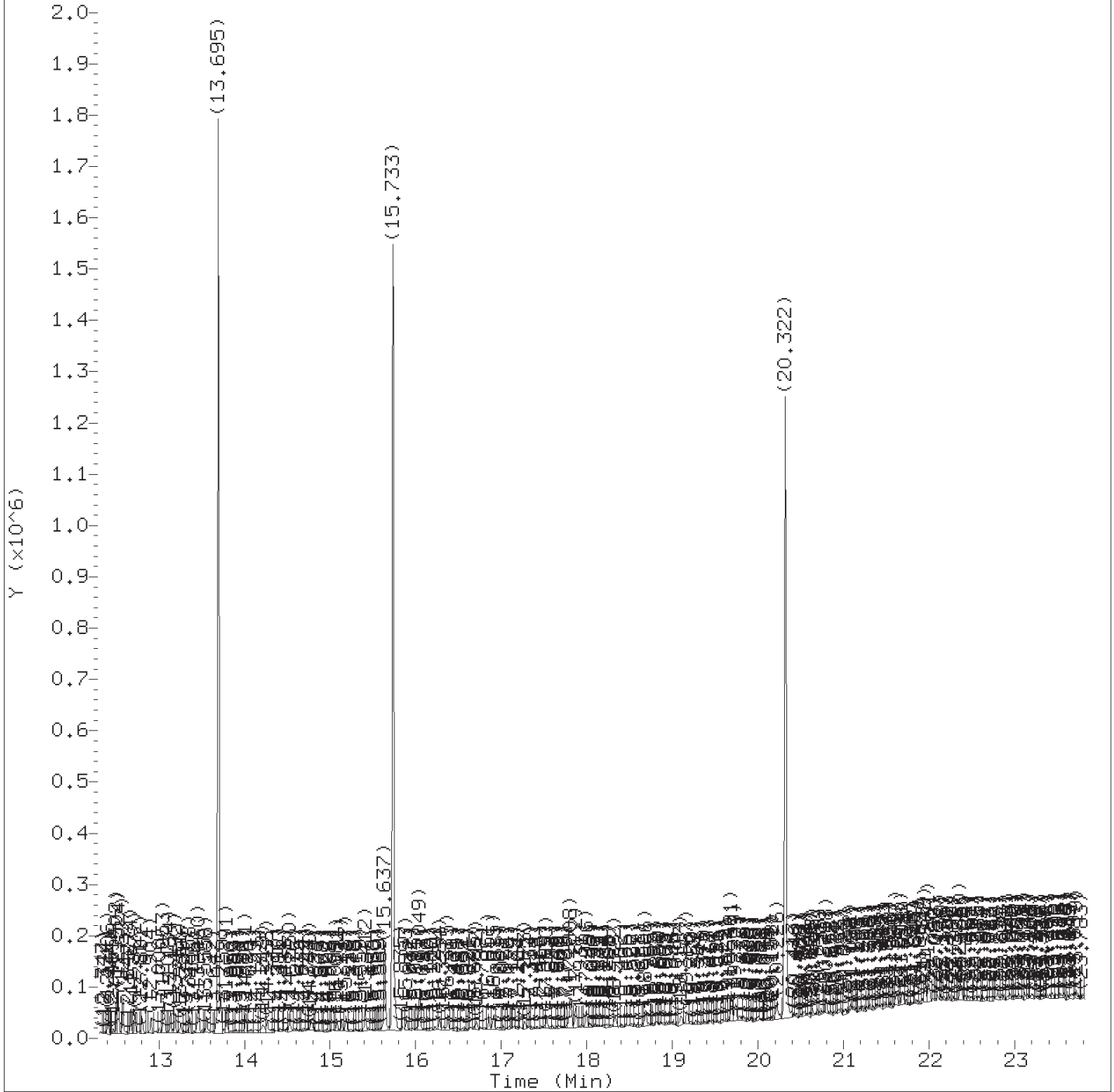
Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41

Sublist used: all1

Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.415	88	6046M	0.229
5) N-Nitrosodimethylamine	(1)	3.105	74	3925M	0.095
6) Pyridine	(1)	3.196	79	2153M	0.030
8) 2-Picoline	(1)	4.239	93	10800M	0.149
9) N-Nitrosomethylethylamine	(1)	4.367	88	3454M	0.113
10) Methyl methanesulfonate	(1)	4.838	80	5410M	0.140
12) \$2-Fluorophenol	(1)	5.009	112	12958	0.223
14) N-Nitrosodiethylamine	(1)	5.378	102	3020M	0.108
43) Total Cresols	(1)			14452	0.242
16) Ethyl methanesulfonate	(1)	5.849	109	2769M	0.091
17) Benzaldehyde	(1)	6.298	77	8290	0.143
18) \$Phenol-d6	(1)	6.410	99	19761	0.251
19) Phenol	(1)	6.426	94	11543	0.123
20) Aniline	(1)	6.464	93	12708	0.115
21) a-methylstyrene	(1)	6.533	118	1066M	0.189
23) bis(2-Chloroethyl) ether	(1)	6.582	93	7681	0.109
24) 2-Chlorophenol	(1)	6.624	128	6955M	0.126
25) 1,3-Dichlorobenzene	(1)	6.854	146	6898	0.112
26) *1,4-Dichlorobenzene-d4	(1)	6.951	152	184726	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	8475M	0.138
28) Benzyl alcohol	(1)	7.181	108	6002	0.164
29) 1,2-Dichlorobenzene	(1)	7.202	146	7119	0.122
31) Indene	(1)	7.336	115	8708	0.135
32) 2-Methylphenol	(1)	7.346	108	6583	0.112
100) Isosafrole	(3)			4007	0.092
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.395	45	9937	0.111
35) bis(2-Chloroisopropyl) ether	(1)	7.395	45	9937	0.111
36) N-Nitrosopyrrolidine	(1)	7.550	100	3064	0.101
37) Acetophenone	(1)	7.576	105	9732	0.108
39) N-Nitroso-di-n-propylamine	(1)	7.587	70	6259	0.114
38) 4-Methylphenol	(1)	7.592	108	7869	0.130
40) N-Nitrosomorpholine	(1)	7.619	56	4569	0.117
41) o-Toluidine	(1)	7.625	106	10990	0.106
44) Hexachloroethane	(1)	7.726	117	2873	0.105
45) \$Nitrobenzene-d5	(2)	7.801	82	15591	0.210
46) Nitrobenzene	(2)	7.828	77	8352	0.105
125) 2,4,2,6-Dinitrotoluenes	(3)			4520	0.166
50) N-Nitrosopiperidine	(2)	8.074	114	3137	0.113
52) Isophorone	(2)	8.218	82	15309	0.115
53) 2-Nitrophenol	(2)	8.331	139	2548	0.099

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.432	107	6781	0.104
58) Benzoic acid	(2)	8.486	105	15488M	0.383
59) O,O,O-Triethylphosphorothioate	(2)	8.555	198	2948	0.109
57) bis(2-Chloroethoxy)methane	(2)	8.593	93	11615	0.139
62) 2,4-Dichlorophenol	(2)	8.700	162	5175	0.113
151) Diallate trans/cis	(4)			6505	0.108
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	6649	0.132
68) *Naphthalene-d8	(2)	8.935	136	691705	5.000
69) Naphthalene	(2)	8.967	128	18976	0.123
70) 4-Chloroaniline	(2)	9.074	127	7594	0.119
71) 2,6-Dichlorophenol	(2)	9.074	162	5554	0.125
72) Hexachloropropene	(2)	9.117	213	4367	0.131
74) Hexachlorobutadiene	(2)	9.186	225	3977	0.136
78) Quinoline	(2)	9.507	129	11342	0.122
79) Caprolactam	(2)	9.620	113	1580M	0.111
80) N-Nitrosodi-n-butylamine	(2)	9.646	84	6676	0.138
83) 4-Chloro-3-methylphenol	(2)	9.876	107	6479	0.119
85) Safrole	(2)	9.978	162	4984	0.128
86) 2-Methylnaphthalene	(2)	10.096	142	11654	0.119
87) 1-Methylnaphthalene	(2)	10.251	142	11323	0.121
88) Hexachlorocyclopentadiene	(3)	10.358	237	2613	0.087
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.368	216	6427	0.119
91) cis-Isosafrole	(3)	10.459	162	445M	0.010
93) 2,4,6-Trichlorophenol	(3)	10.561	196	3656	0.110
95) 2,4,5-Trichlorophenol	(3)	10.609	196	4086	0.115
96) \$2-Fluorobiphenyl	(3)	10.716	172	27796	0.242
97) trans-Isosafrole	(3)	10.828	162	3562	0.082
98) 1,1'-Biphenyl	(3)	10.866	154	14787	0.124
99) 2-Chloronaphthalene	(3)	10.887	162	11865	0.115
101) 1-Chloronaphthalene	(3)	10.914	162	9883	0.108
103) Diphenyl ether	(3)	11.053	170	8213	0.122
104) 2-Nitroaniline	(3)	11.058	138	2224	0.084
108) 1,4-Naphthoquinone	(3)	11.181	158	3935	0.099
109) 1,4-Dinitrobenzene	(3)	11.304	168	1102M	0.080
110) Dimethylphthalate	(3)	11.401	163	12307	0.111
111) 1,3-Dinitrobenzene	(3)	11.422	168	1687M	0.100
113) 2,6-Dinitrotoluene	(3)	11.470	165	1939	0.085
114) Acenaphthylene	(3)	11.550	152	12969	0.108
117) 3-Nitroaniline	(3)	11.711	138	2210	0.088
118) *Acenaphthene-d10	(3)	11.764	164	336467	5.000

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.812	153	13056	0.127
120) 2,4-Dinitrophenol	(3)	11.871	184	4224	0.344
121) 4-Nitrophenol	(3)	11.968	109	6354	0.335
122) Pentachlorobenzene	(3)	12.005	250	4537	0.108
124) Dibenzofuran	(3)	12.059	168	17240	0.126
123) 2,4-Dinitrotoluene	(3)	12.059	165	2581	0.080
126) 1-Naphthylamine	(3)	12.165	143	12953	0.135
127) 2,3,4,6-Tetrachlorophenol	(3)	12.224	232	2597	0.097
128) 2-Naphthylamine	(3)	12.272	143	12217	0.126
129) Diethylphthalate	(3)	12.406	149	13320	0.125
131) Fluorene	(3)	12.502	166	13148	0.124
130) Thionazin	(3)	12.502	107	2126	0.101
134) 4-Nitroaniline	(3)	12.524	138	1737	0.065
133) 5-Nitro-o-toluidine	(3)	12.524	152	2190	0.074
132) 4-Chlorophenyl-phenylether	(3)	12.524	204	6312	0.113
135) 4,6-Dinitro-2-methylphenol	(4)	12.572	198	3879	0.236
136) N-Nitrosodiphenylamine	(4)	12.674	169	10848	0.129
137) NDPA as diphenylamine	(4)	12.674	169	10848	0.129
139) 1,2-Diphenylhydrazine	(4)	12.722	77	16335	0.107
140) \$2,4,6-Tribromophenol	(3)	12.807	330	2868	0.207
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	2360	0.102
144) 1,3,5-Trinitrobenzene	(4)	13.005	213	767M	0.078
145) Diallate (peak 1)	(4)	13.053	86	5987	0.098
146) Phorate	(4)	13.059	75	7721	0.104
147) Phenacetin	(4)	13.064	108	5331	0.085
148) 4-Bromophenyl-phenylether	(4)	13.134	248	3740	0.132
149) Diallate (peak 2)	(4)	13.160	86	518M	0.010
150) Hexachlorobenzene	(4)	13.192	284	3664	0.124
152) Dimethoate	(4)	13.251	87	3891	0.078
153) Atrazine	(4)	13.358	200	3465	0.129
154) Pentachlorophenol	(4)	13.455	266	1412M	0.075
156) Pentachloronitrobenzene	(4)	13.465	237	1038M	0.072
155) 4-Aminobiphenyl	(4)	13.471	169	8595	0.115
157) Pronamide	(4)	13.562	173	3824	0.080
158) *Phenanthrene-d10	(4)	13.695	188	660540	5.000
159) Dinoseb	(4)	13.706	211	529M	0.022
160) Phenanthrene	(4)	13.722	178	21273	0.131
162) Anthracene	(4)	13.791	178	18683	0.122
168) Carbazole	(4)	14.016	167	15492	0.109
169) Methyl parathion	(4)	14.219	109	2601	0.069

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Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

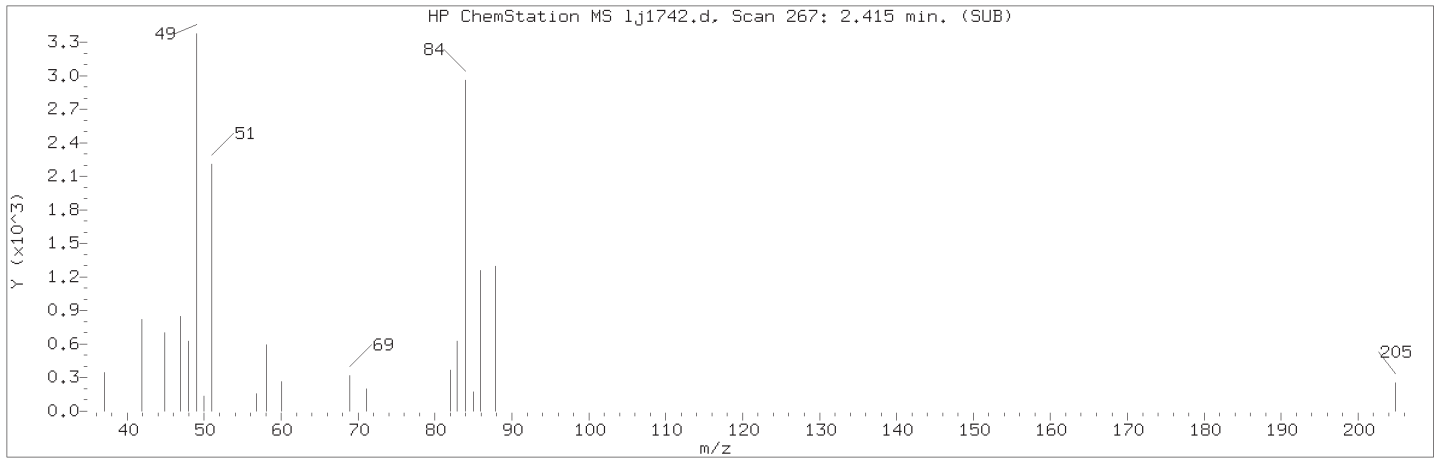
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.530	149	19035	0.105
172) Parathion	(4)	14.781	109	1441M	0.060
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	909M	0.085
227) Total PAHs	(6)			289010	2.139
174) Octachlorostyrene	(4)	15.129	308	1543M	0.139
176) Isodrin	(4)	15.193	193	2959	0.151
178) Fluoranthene	(4)	15.412	202	20172	0.120
179) Benzidine	(5)	15.637	184	77096	0.693
180)*Pyrene-d10	(5)	15.733	212	666010	5.000
182) Pyrene	(5)	15.760	202	20848	0.121
184)\$Terphenyl-d14	(5)	16.043	244	26005	0.238
187) p-Dimethylaminoazobenzene	(5)	16.284	225	2093M	0.074
190) Chlorobenzilate	(5)	16.375	139	5147	0.097
192) 3,3'-Dimethylbenzidine	(5)	16.851	212	9397	0.086
193) Butylbenzylphthalate	(5)	16.910	149	6497	0.079
196) 2-Acetylaminofluorene	(5)	17.279	181	5587	0.083
198) 3,3'-Dichlorobenzidine	(5)	17.798	252	5202	0.087
200) Benzo(a)anthracene	(5)	17.808	228	16361	0.108
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	3131	0.090
201) Chrysene	(5)	17.872	228	18911	0.120
204) bis(2-Ethylhexyl)phthalate	(5)	17.990	149	7555	0.065
208) 6-Methylchrysene	(5)	18.686	242	10619	0.099
210) Di-n-octylphthalate	(6)	19.167	149	11616	0.062
211) Benzo(b)fluoranthene	(6)	19.691	252	16141	0.116
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.696	256	5240	0.084
213) Benzo(k)fluoranthene	(6)	19.739	252	18689	0.126
216) Benzo(a)pyrene	(6)	20.226	252	13764	0.110
218)*Perylene-d12	(6)	20.322	264	561301	5.000
220) 3-Methylcholanthrene	(6)	20.798	268	6186	0.096
222) Dibenz(a,h)acridine	(6)	21.617	279	11153	0.101
223) Dibenz(a,j)acridine	(6)	21.697	279	12898	0.111
224) Indeno(1,2,3-cd)pyrene	(6)	21.948	276	13468M	0.113
225) Dibenz(a,h)anthracene	(6)	21.996	278	14032	0.113
226) Benzo(g,h,i)perylene	(6)	22.365	276	15542	0.117

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

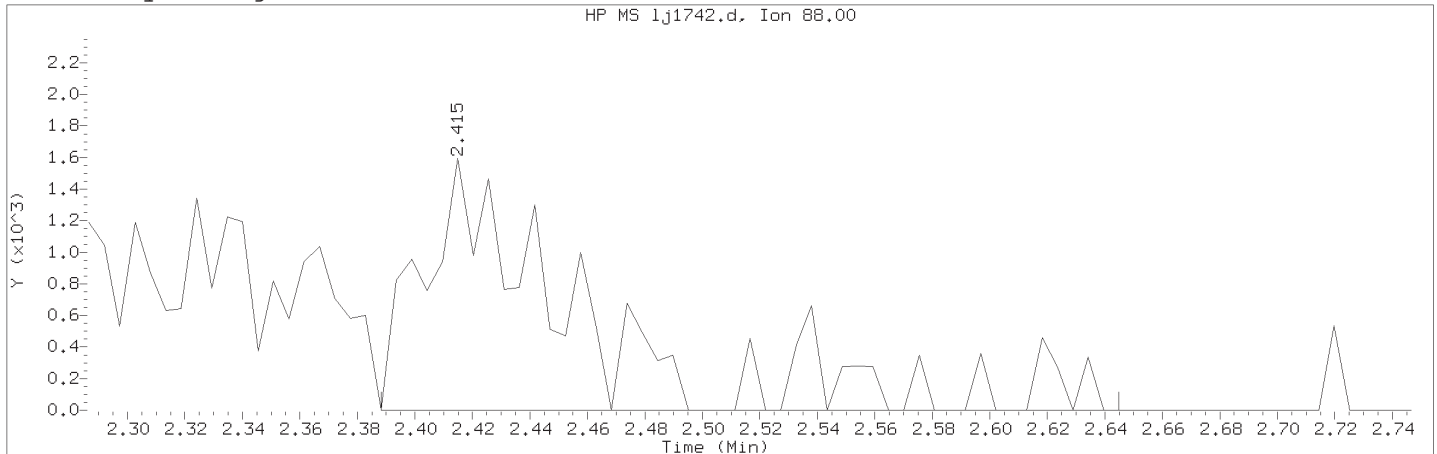
Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:00.

Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

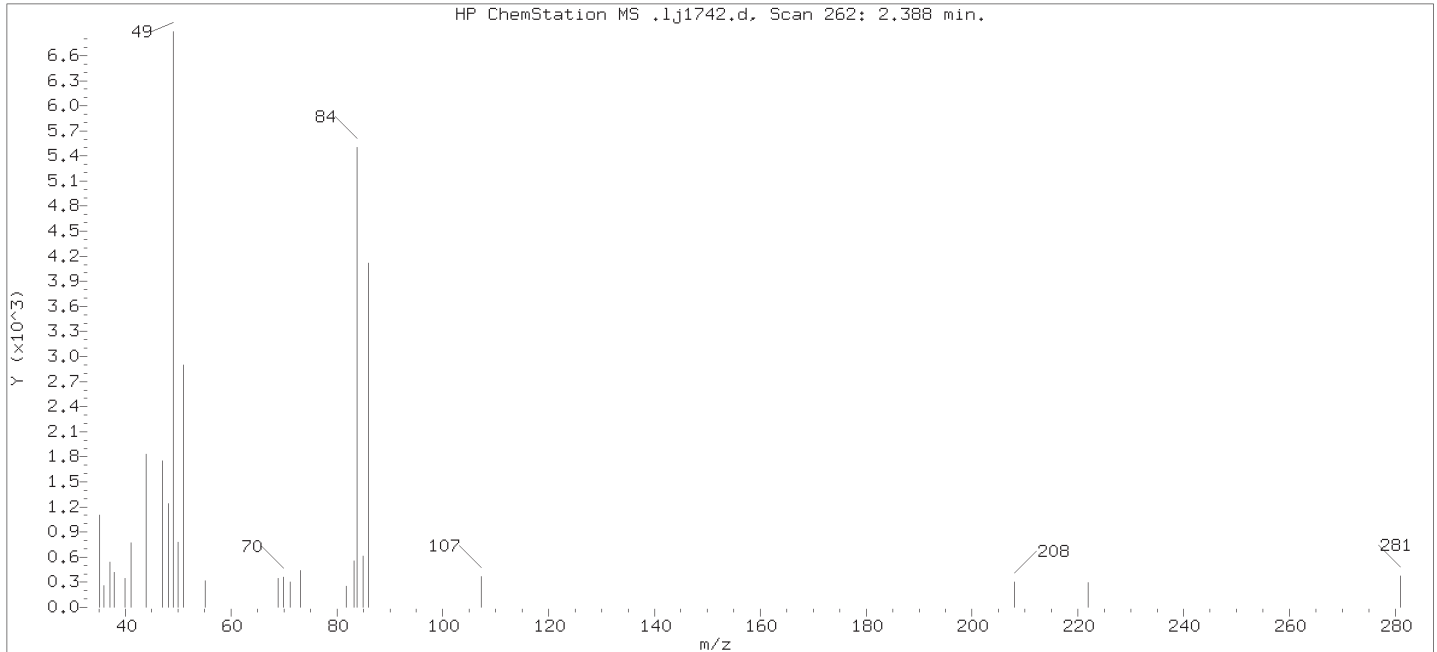
Compound Number    : 1  
Compound Name    : 1,4-Dioxane  
Scan Number    : 267  
Retention Time (minutes)                                   : 2.415  
Quant Ion    : 88.00  
Area (flag)     : 6046M  
On-Column Amount (ng/ul)                                 : 0.2287  
Integration start scan                                      : 261                      Integration stop scan: 309  
Y at integration start                                      : 0                        Y at integration end: 0

Reason for manual integration: missed peak

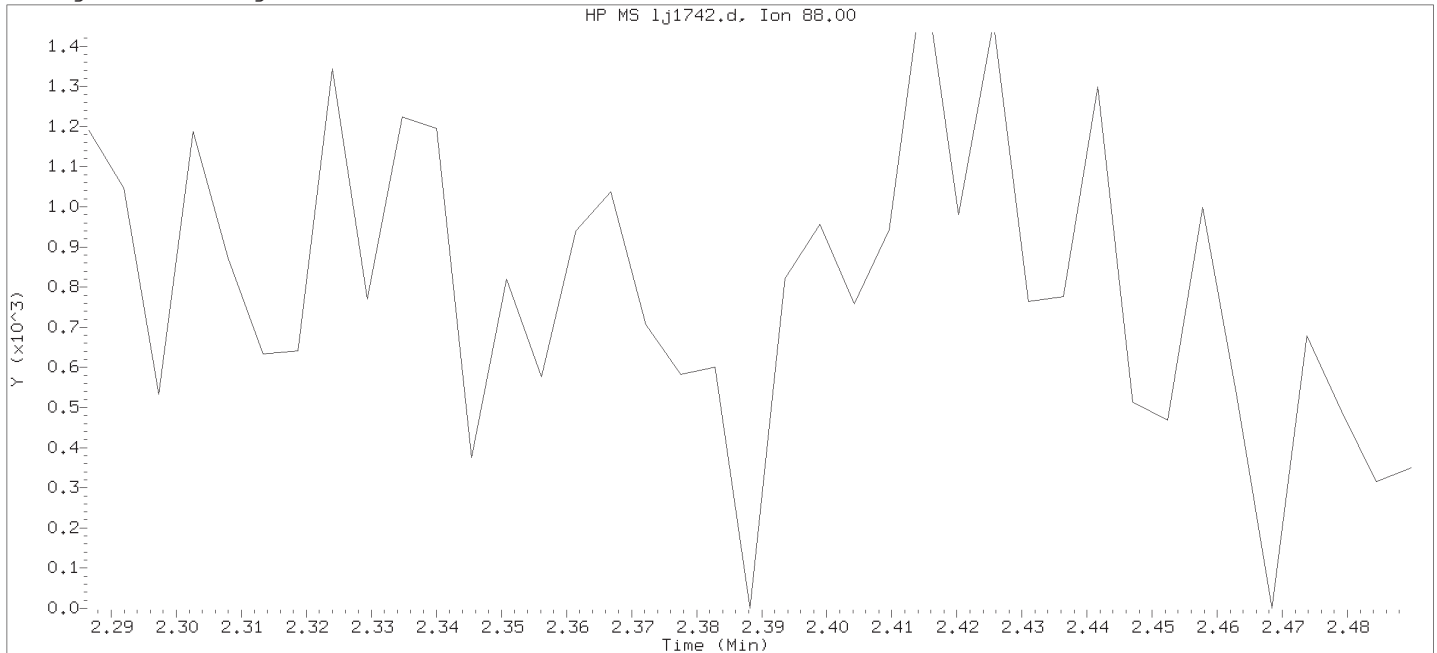
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

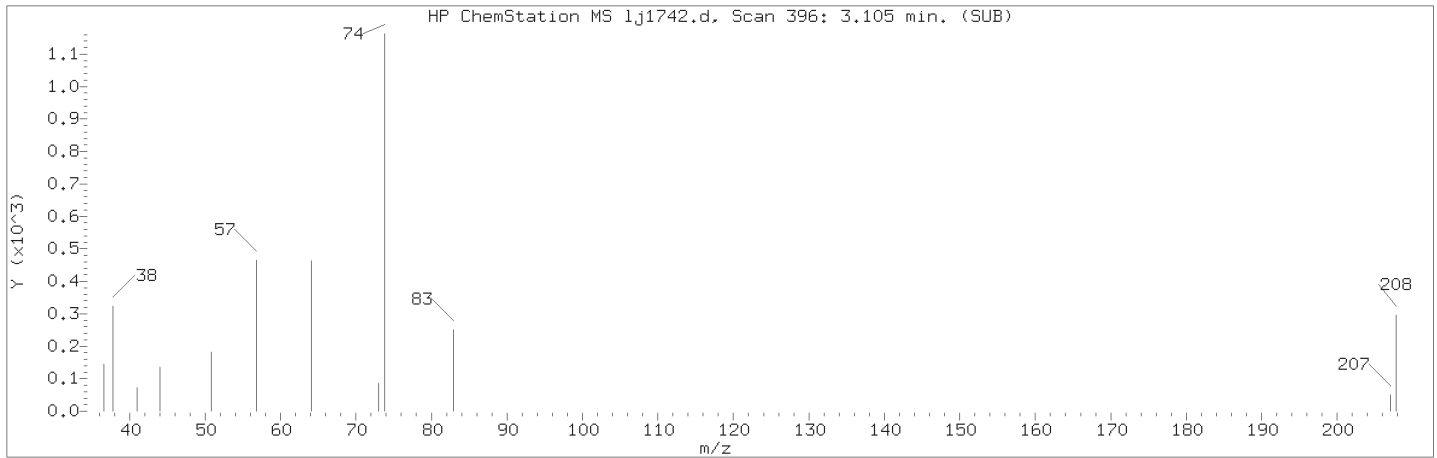
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

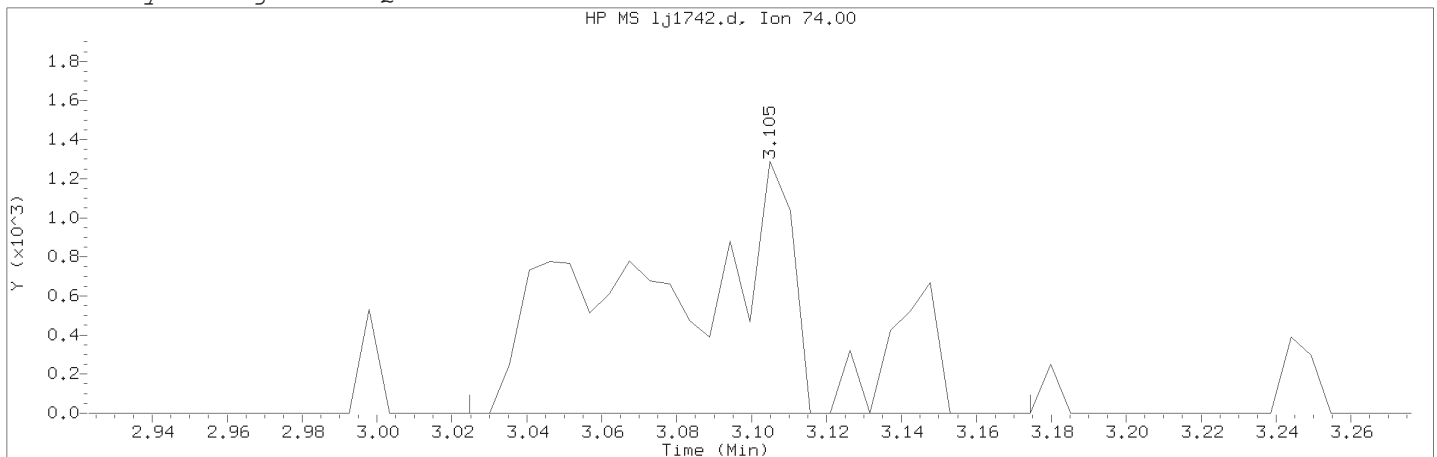
Lab Sample ID: RVSTD2648

Compound Number : 1  
Compound Name : 1,4-Dioxane  
Expected RT (minutes) : 2.388  
Quant Ion : 88.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compound Number : 5  
Compound Name : N-Nitrosodimethylamine  
Scan Number : 396  
Retention Time (minutes) : 3.105  
Quant Ion : 74.00  
Area (flag) : 3925M  
On-Column Amount (ng/ul) : 0.0953  
Integration start scan : 380      Integration stop scan: 408  
Y at integration start : 0      Y at integration end: 0

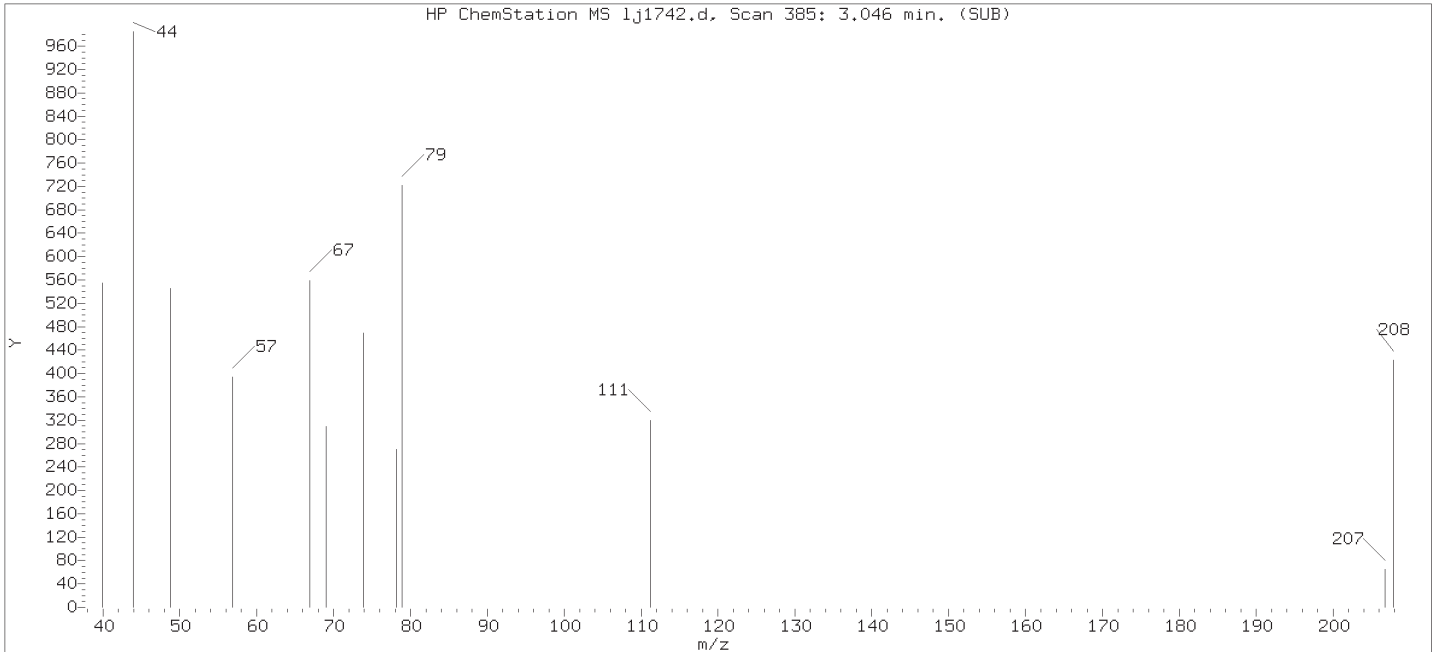
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

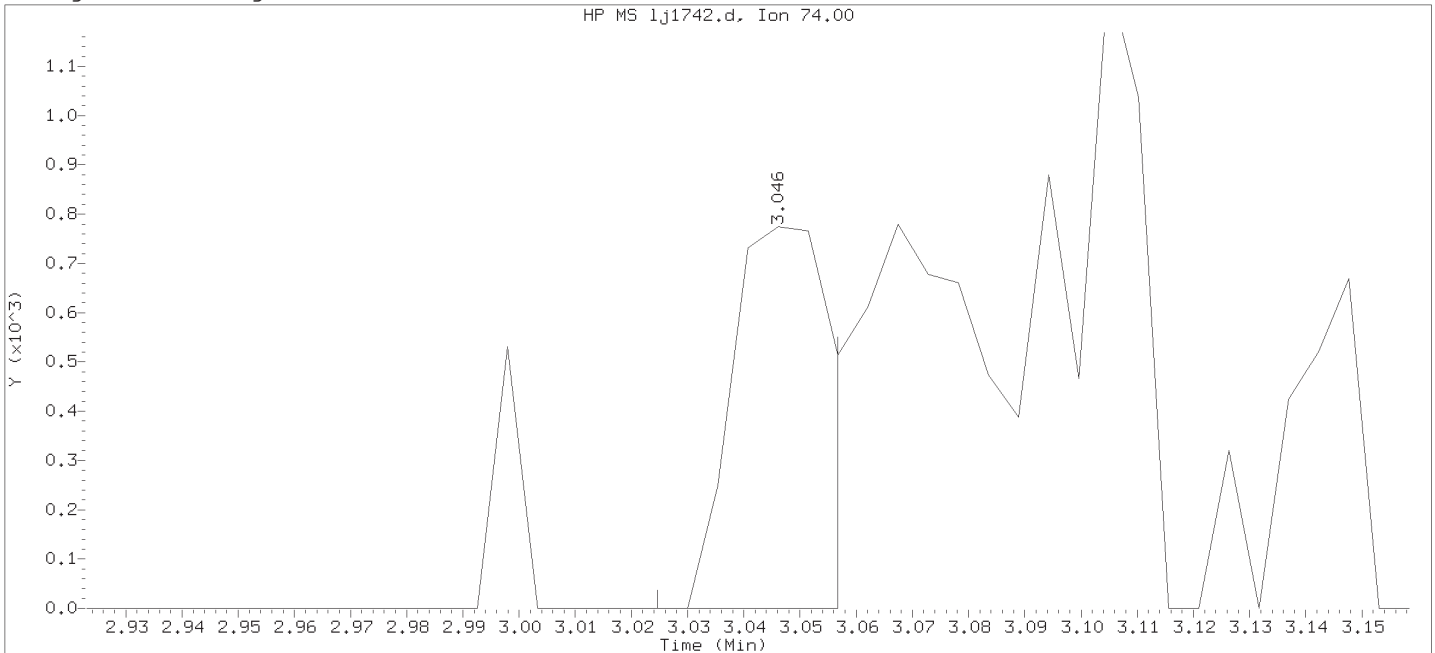
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

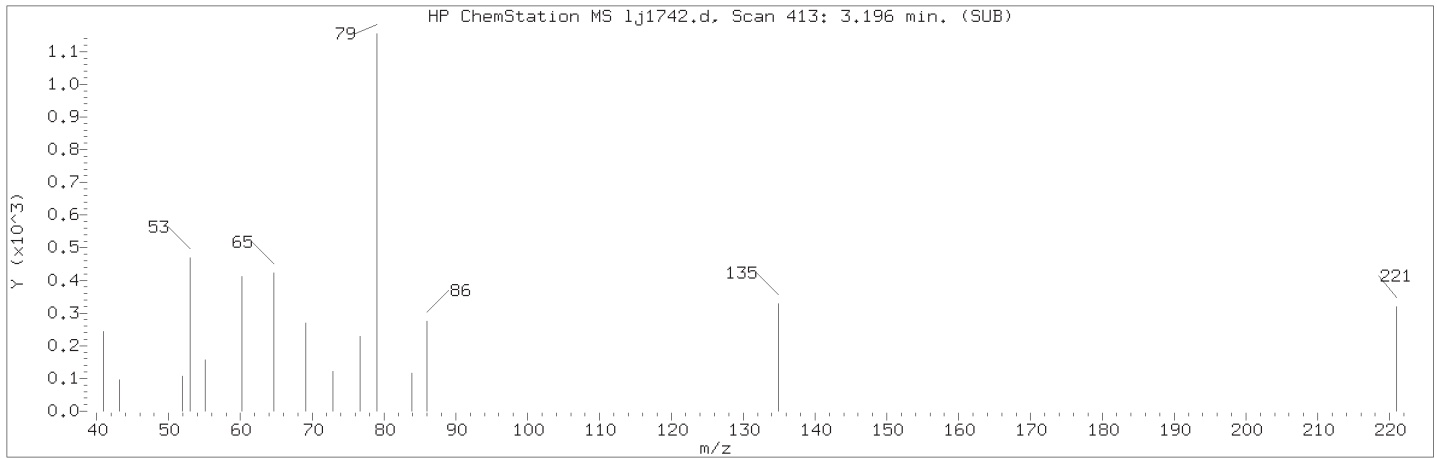
Sublist used: all11

Sample Name: SSTDO.125

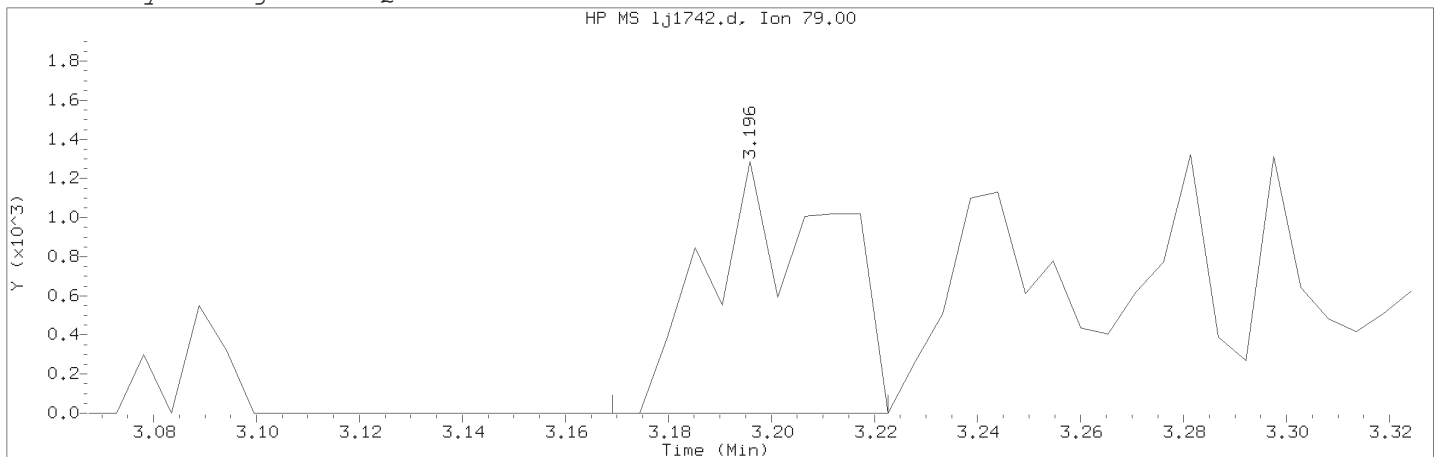
Lab Sample ID: RVSTD2648

Compound Number : 5  
 Compound Name : N-Nitrosodimethylamine  
 Scan Number : 385  
 Retention Time (minutes) : 3.046  
 Quant Ion : 74.00  
 Area : 892  
 On-column Amount (ng/ul) : 0.0221  
 Integration start scan : 380      Integration stop scan: 386  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125                      Lab Sample ID: RVSTD2648

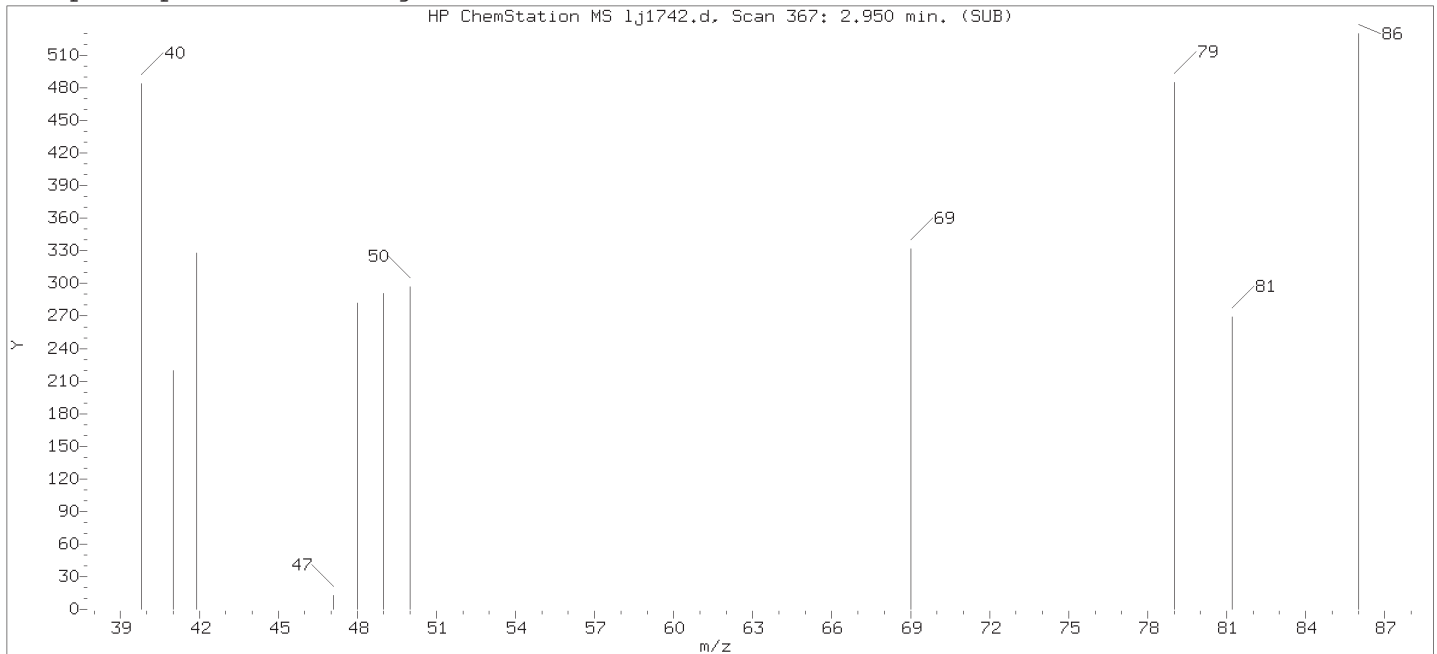
Compound Number                      : 6  
Compound Name                         : Pyridine  
Scan Number                            : 413  
Retention Time (minutes)             : 3.196  
Quant Ion                                : 79.00  
Area (flag)                             : 2153M  
On-Column Amount (ng/ul)            : 0.0300  
Integration start scan                : 407                      Integration stop scan: 417  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

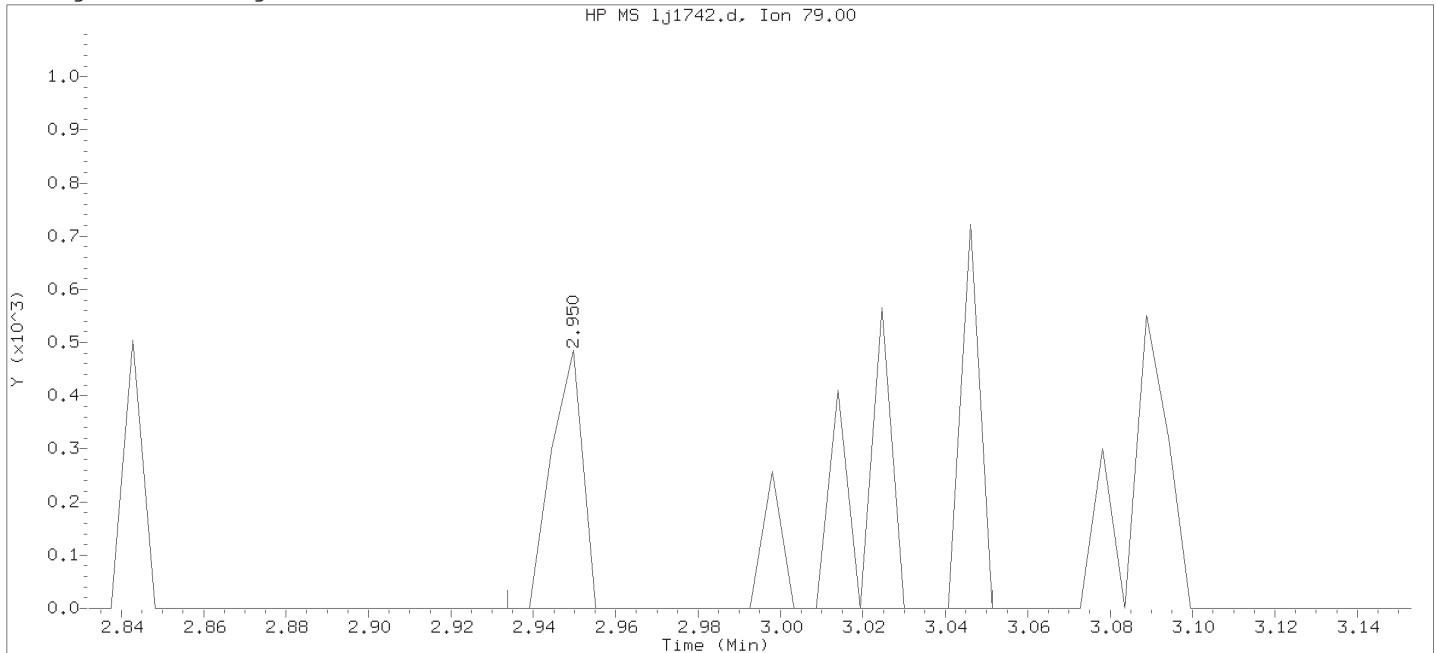
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

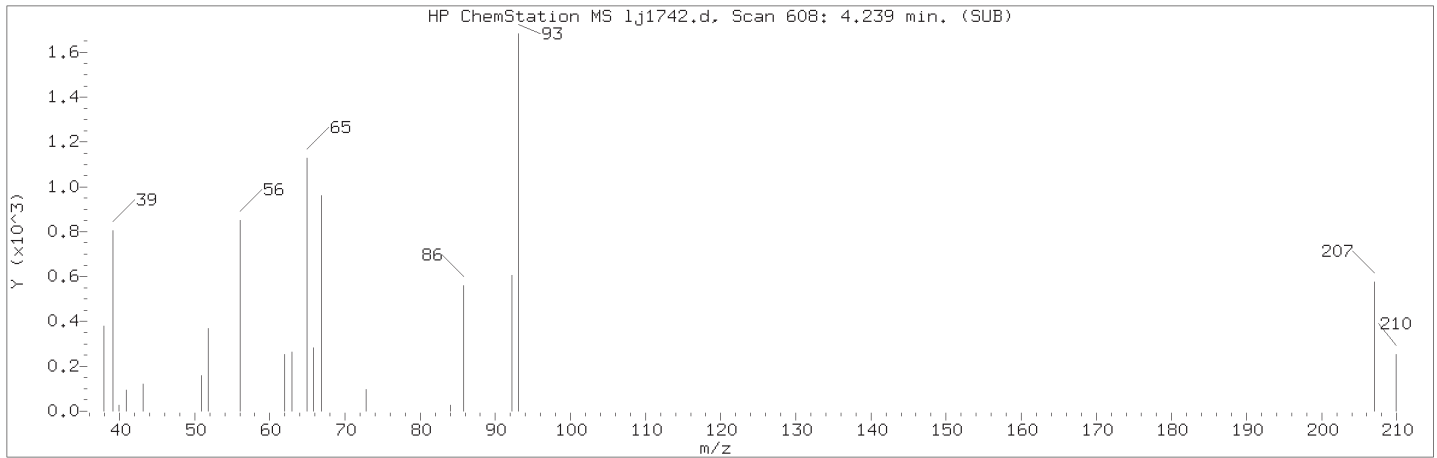
Sublist used: all1

Sample Name: SSTD0.125

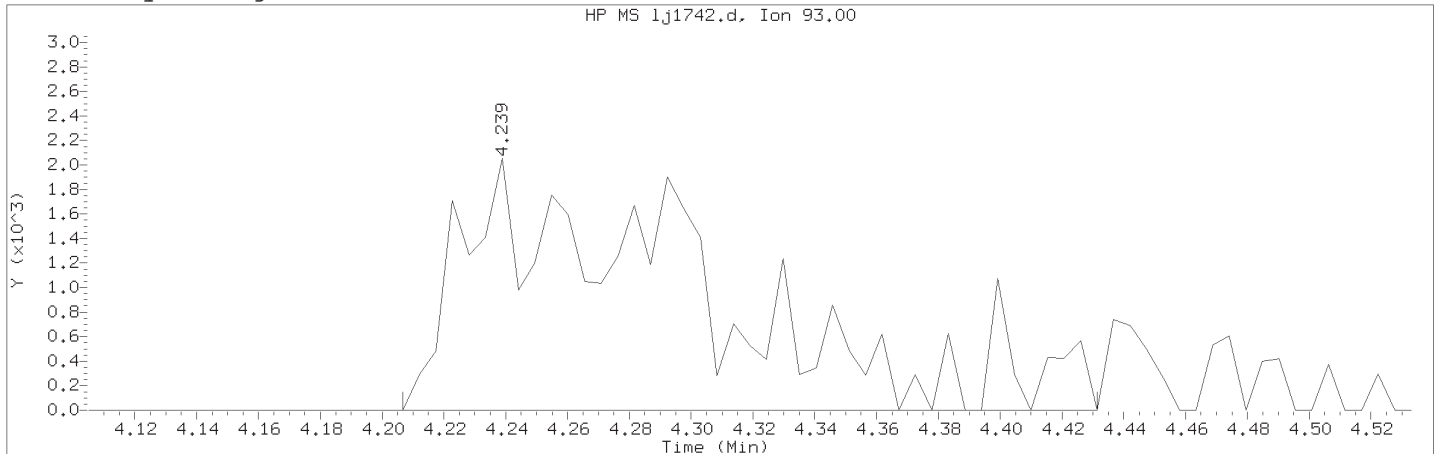
Lab Sample ID: RVSTD2648

Compound Number	: 6	
Compound Name	: Pyridine	
Scan Number	: 367	
Retention Time (minutes)	: 2.950	
Quant Ion	: 79.00	
Area	: 879	
On-column Amount (ng/ul)	: 0.0124	
Integration start scan	: 363	Integration stop scan: 385
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

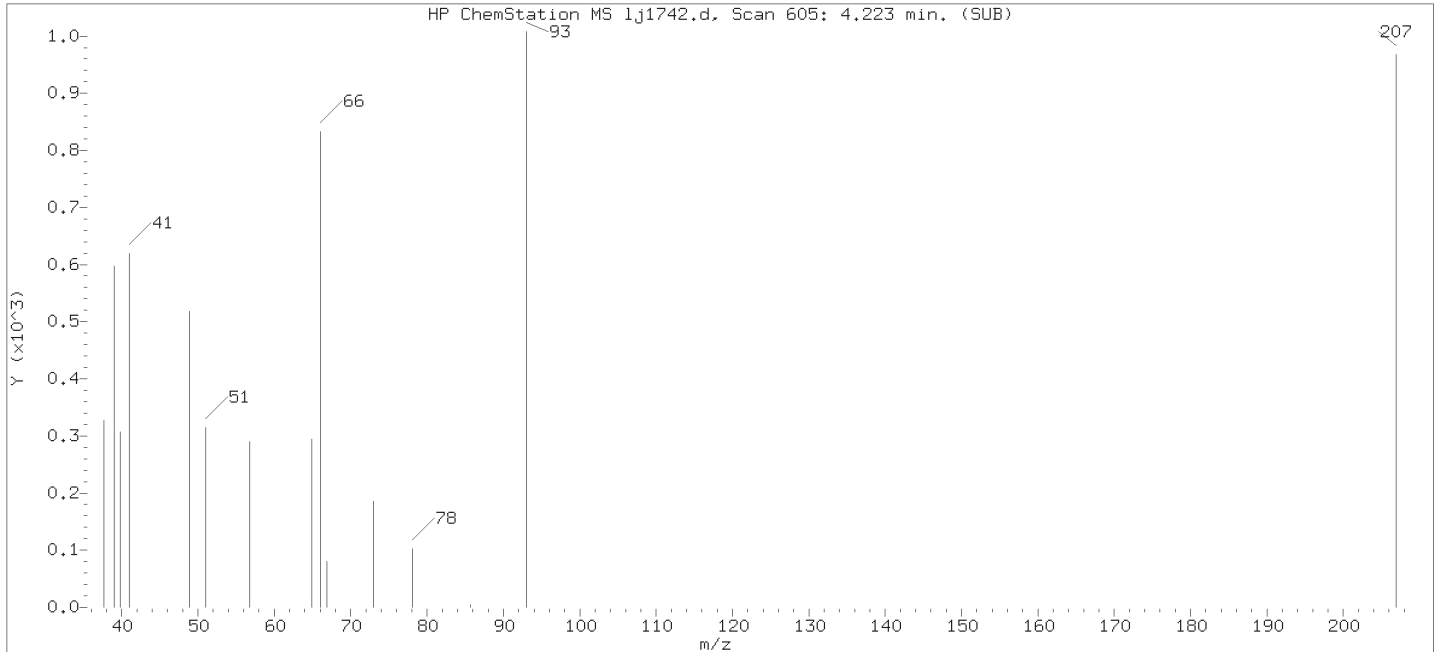
Compound Number    : 8  
Compound Name    : 2-Picoline  
Scan Number     : 608  
Retention Time (minutes)                                 : 4.239  
Quant Ion     : 93.00  
Area (flag)     : 10800M  
On-Column Amount (ng/ul)                                : 0.1495  
Integration start scan                                    : 601                      Integration stop scan: 643  
Y at integration start                                    : 0                        Y at integration end: 0

Reason for manual integration: improper integration

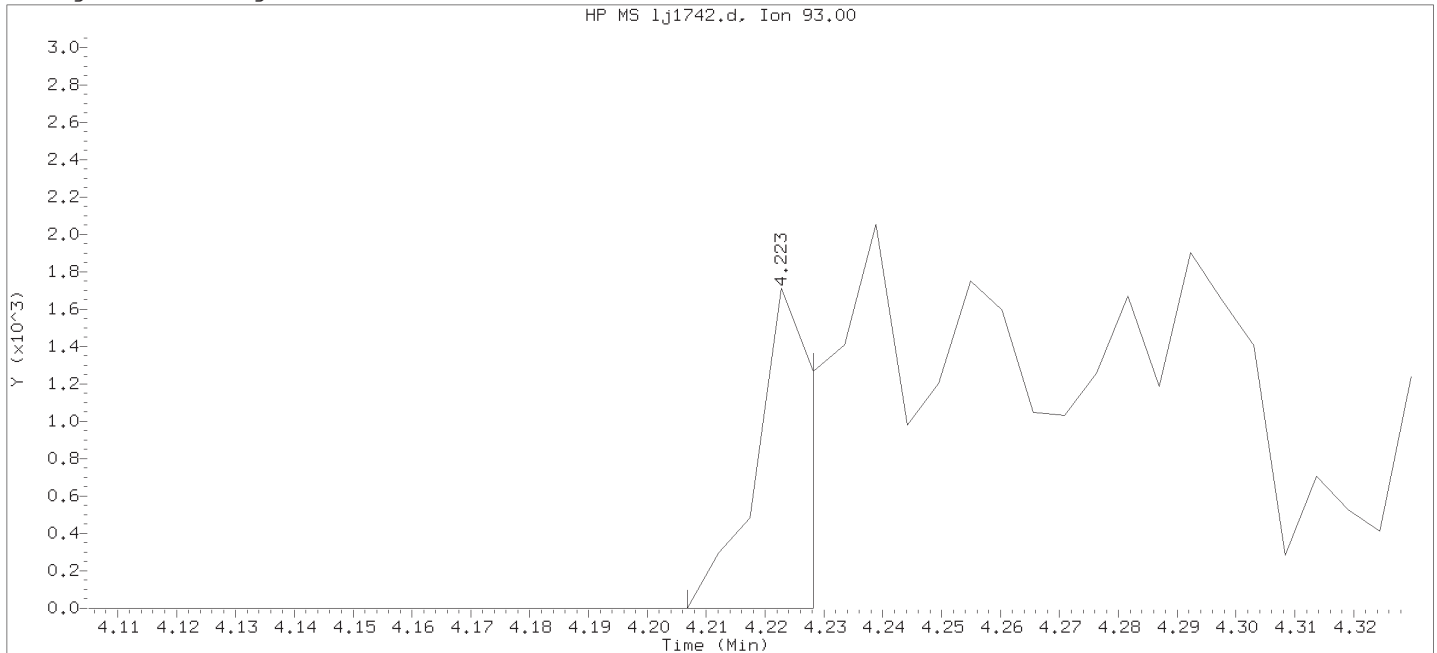
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

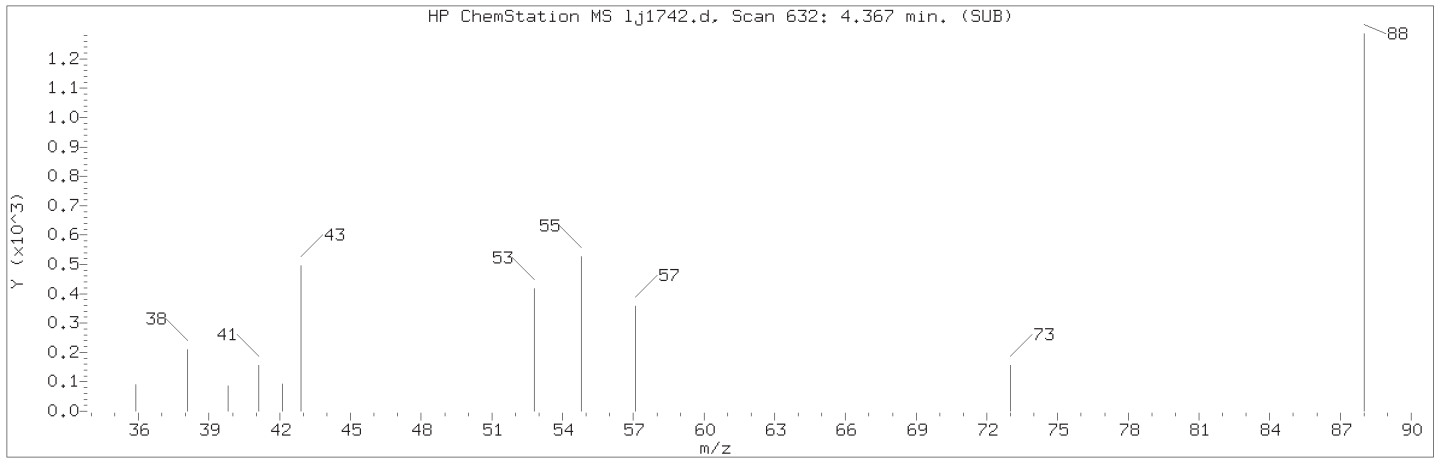
Sublist used: all1

Sample Name: SSTD0.125

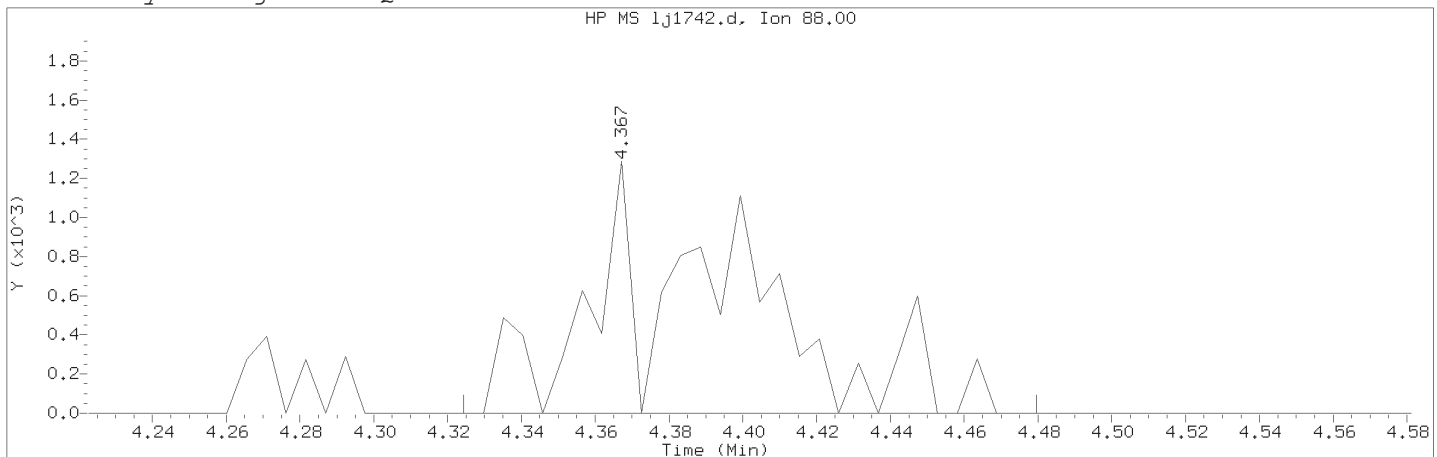
Lab Sample ID: RVSTD2648

Compound Number	: 8	
Compound Name	: 2-Picoline	
Scan Number	: 605	
Retention Time (minutes)	: 4.223	
Quant Ion	: 93.00	
Area	: 1002	
On-column Amount (ng/ul)	: 0.0141	
Integration start scan	: 601	Integration stop scan: 605
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

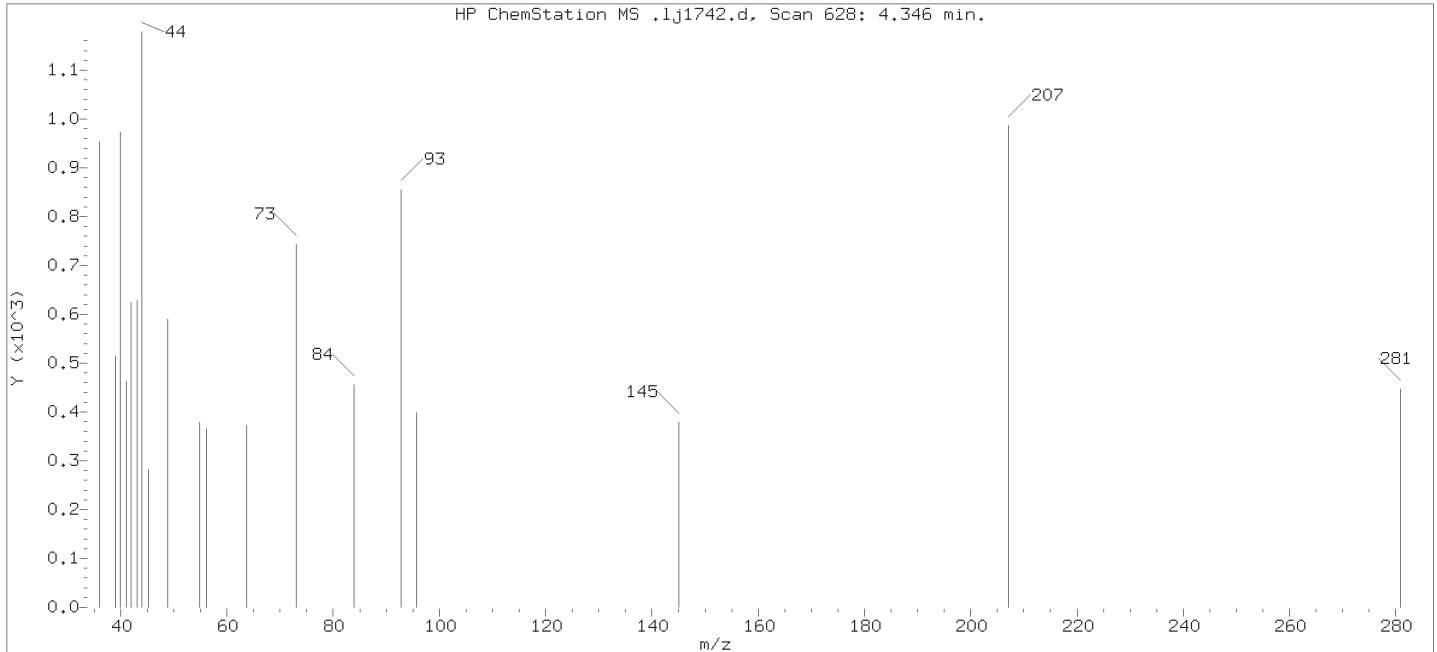
Compound Number    : 9  
Compound Name    : N-Nitrosomethylethylamine  
Scan Number    : 632  
Retention Time (minutes)                                   : 4.367  
Quant Ion    : 88.00  
Area (flag)    : 3454M  
On-Column Amount (ng/ul)                                : 0.1130  
Integration start scan                                    : 623                      Integration stop scan: 652  
Y at integration start                                    : 0                        Y at integration end: 0

Reason for manual integration: missed peak

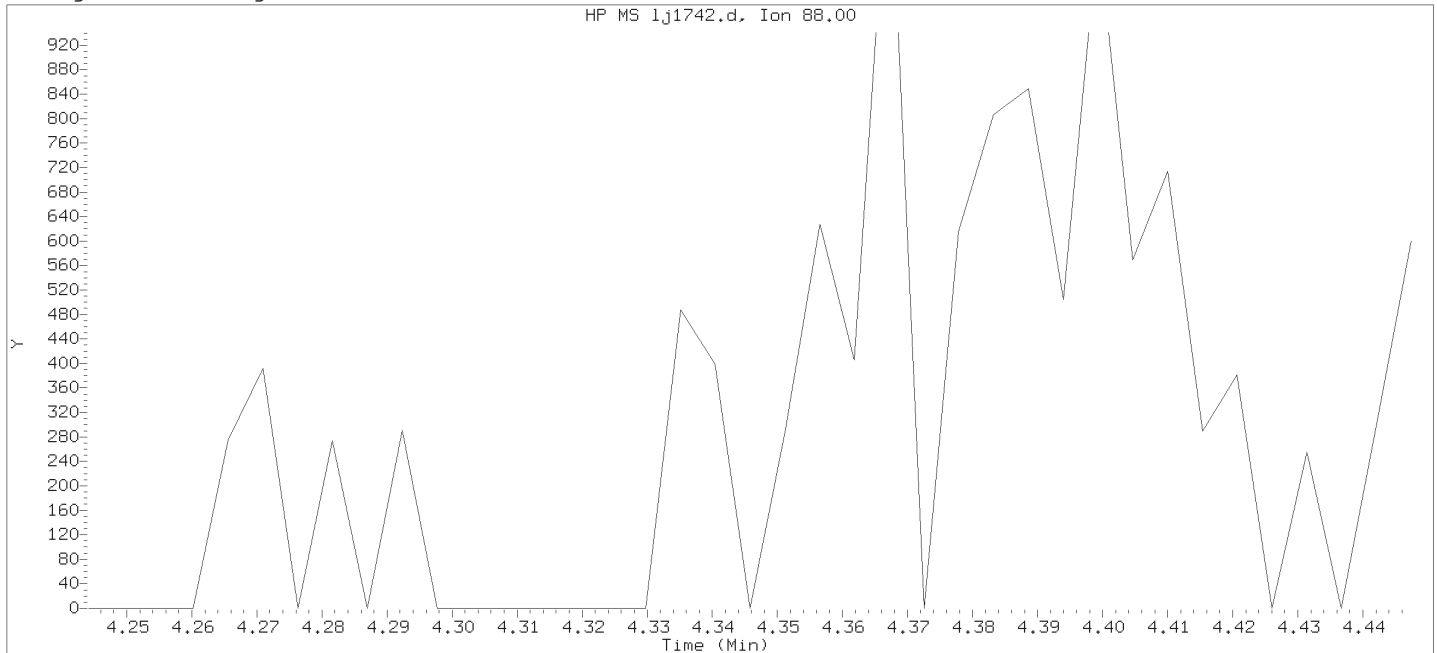
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all1

Calibration date and time: 29-OCT-2018 15:37

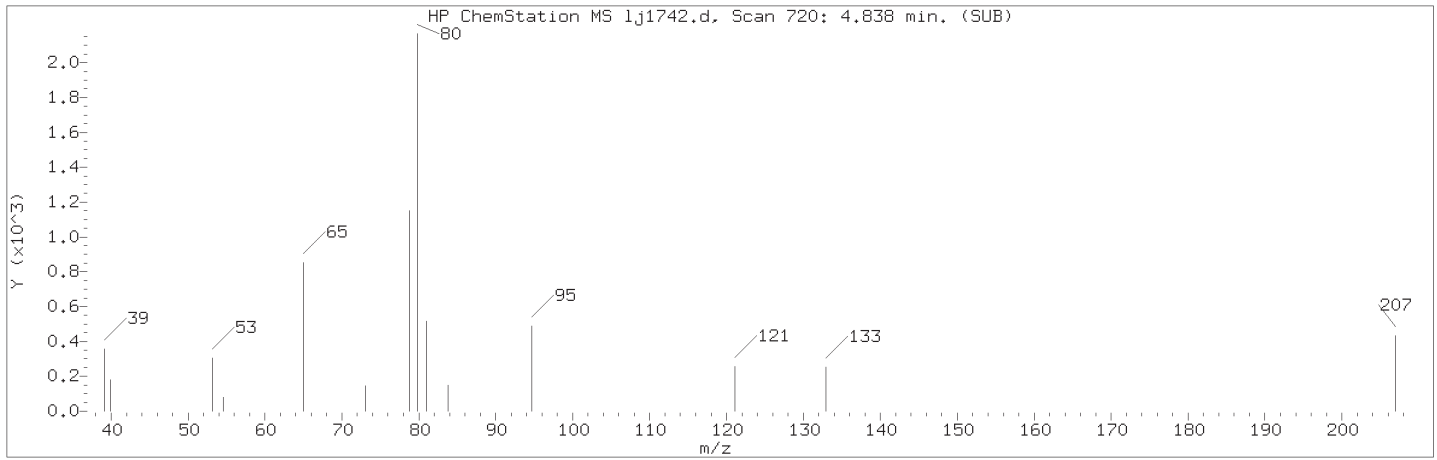
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTDO.125

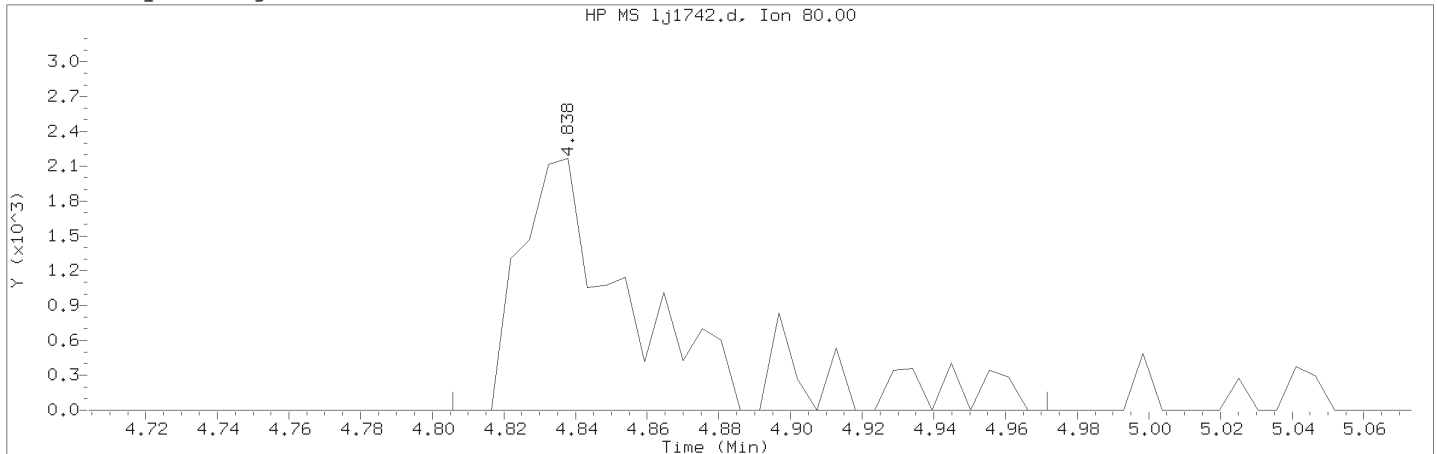
Lab Sample ID: RVSTD2648

Compound Number : 9  
Compound Name : N-Nitrosomethylethylamine  
Expected RT (minutes) : 4.346  
Quant Ion : 88.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compound Number : 10  
Compound Name : Methyl methanesulfonate  
Scan Number : 720  
Retention Time (minutes) : 4.838  
Quant Ion : 80.00  
Area (flag) : 5410M  
On-Column Amount (ng/ul) : 0.1401  
Integration start scan : 713 Integration stop scan: 744  
Y at integration start : 0 Y at integration end: 0

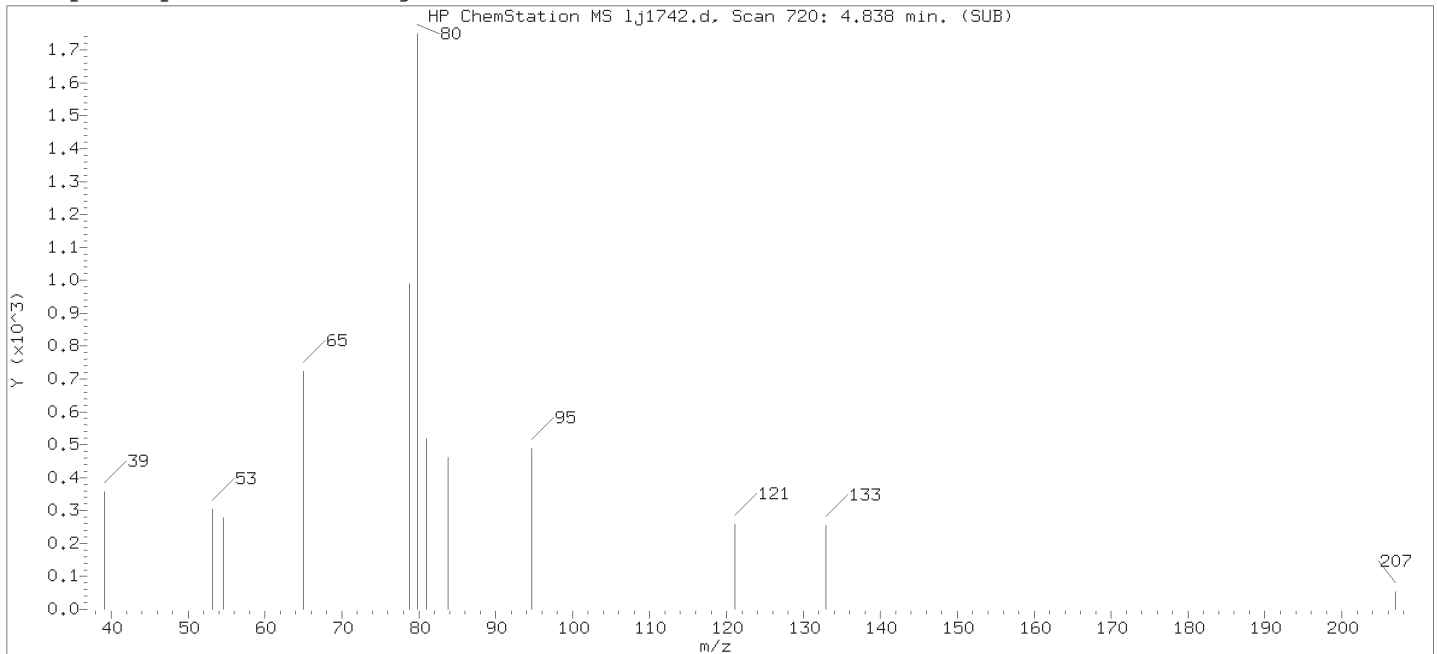
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

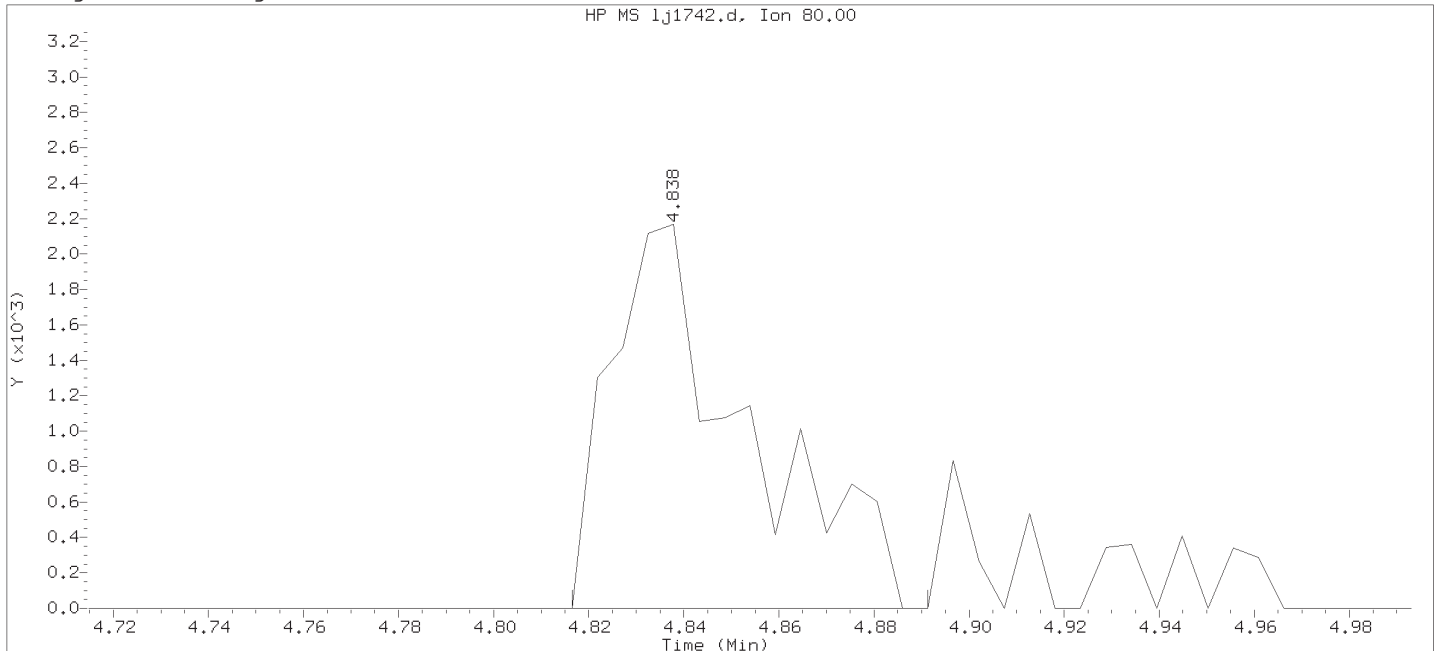
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

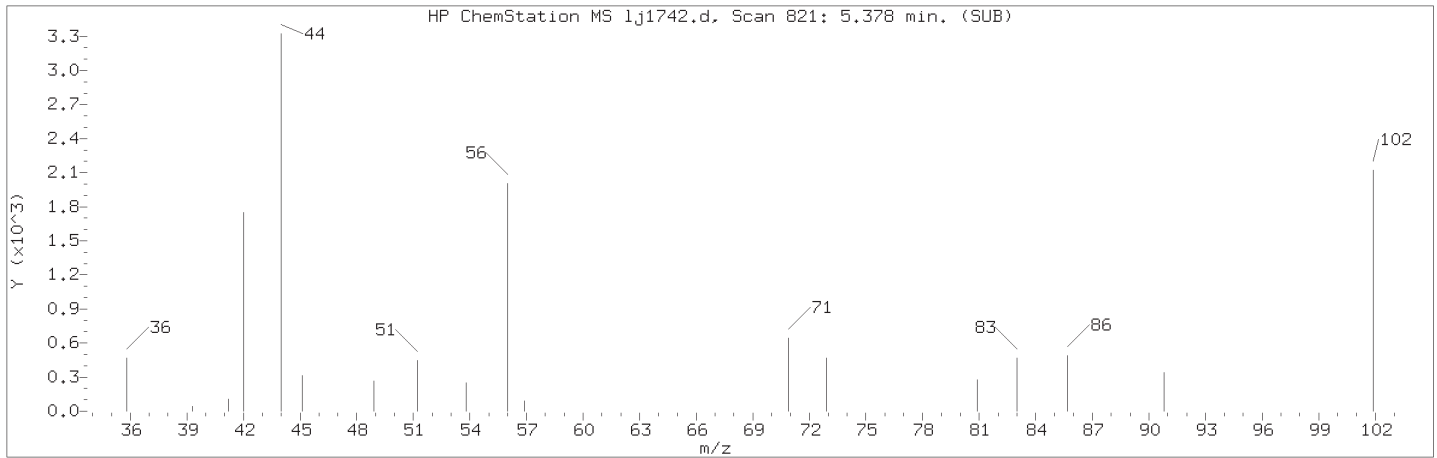
Sublist used: all1

Sample Name: SSTD0.125

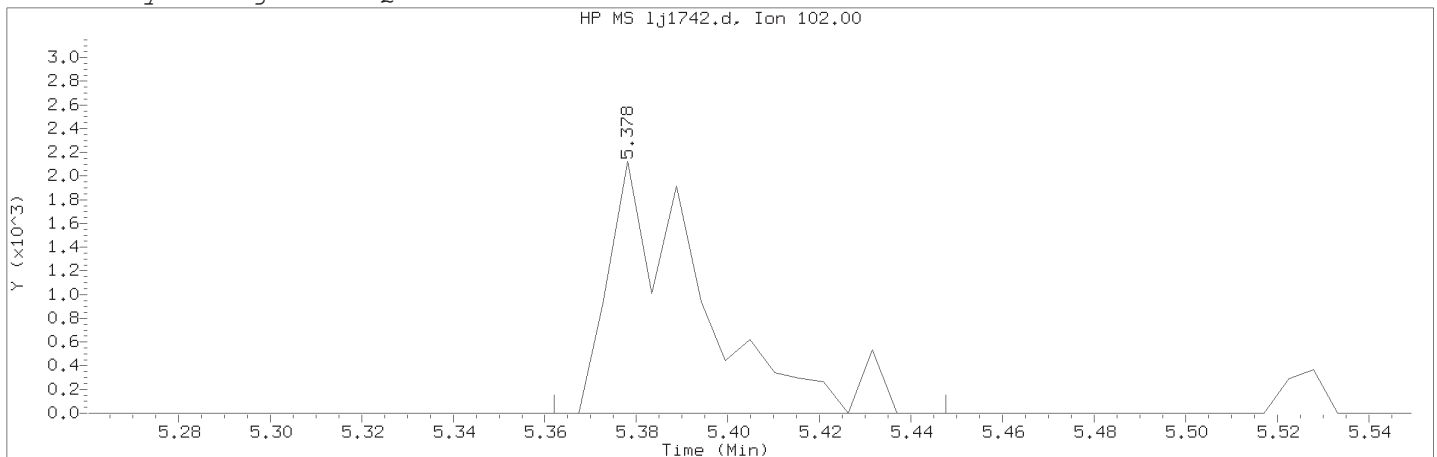
Lab Sample ID: RVSTD2648

Compound Number	: 10	
Compound Name	: Methyl methanesulfonate	
Scan Number	: 720	
Retention Time (minutes)	: 4.838	
Quant Ion	: 80.00	
Area	: 4327	
On-column Amount (ng/ul)	: 0.1151	
Integration start scan	: 715	Integration stop scan: 729
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125                      Lab Sample ID: RVSTD2648

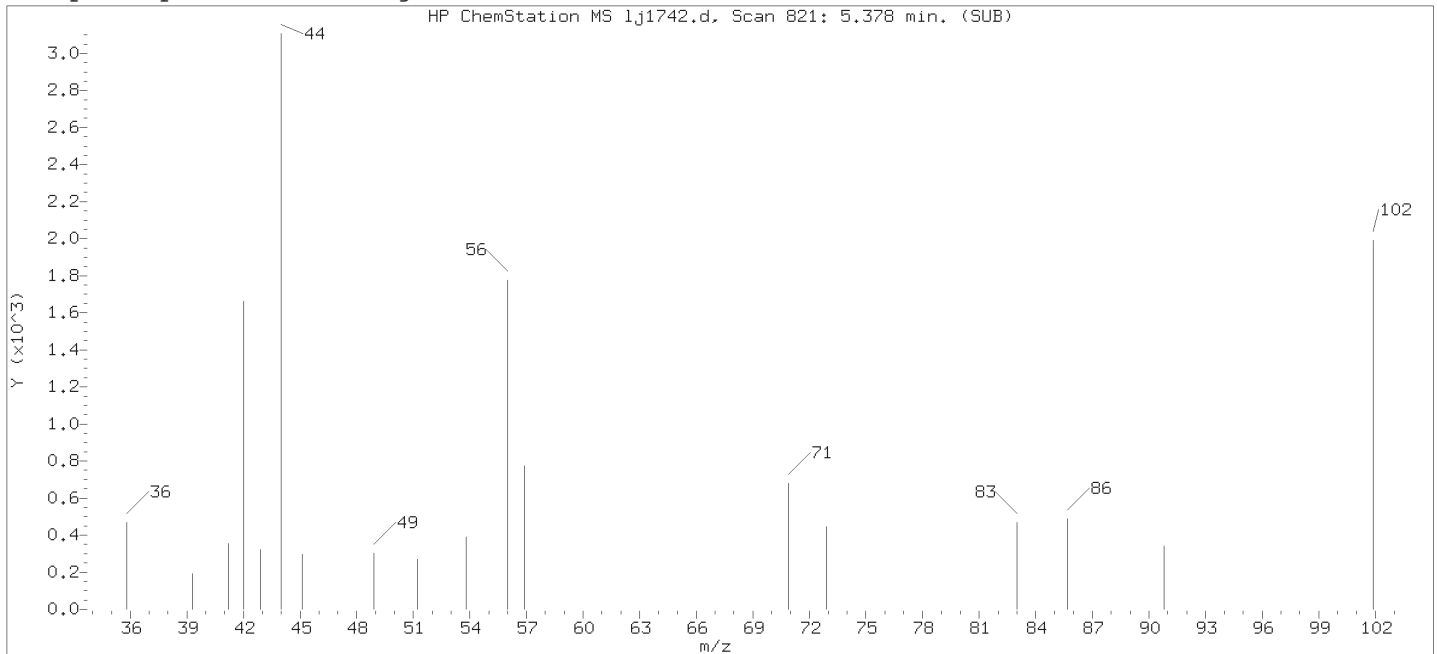
Compound Number                      : 14  
Compound Name                         : N-Nitrosodiethylamine  
Scan Number                            : 821  
Retention Time (minutes)             : 5.378  
Quant Ion                                : 102.00  
Area (flag)                             : 3020M  
On-Column Amount (ng/ul)            : 0.1080  
Integration start scan                : 817                      Integration stop scan: 833  
Y at integration start                : 0                        Y at integration end: 0

Reason for manual integration: improper integration

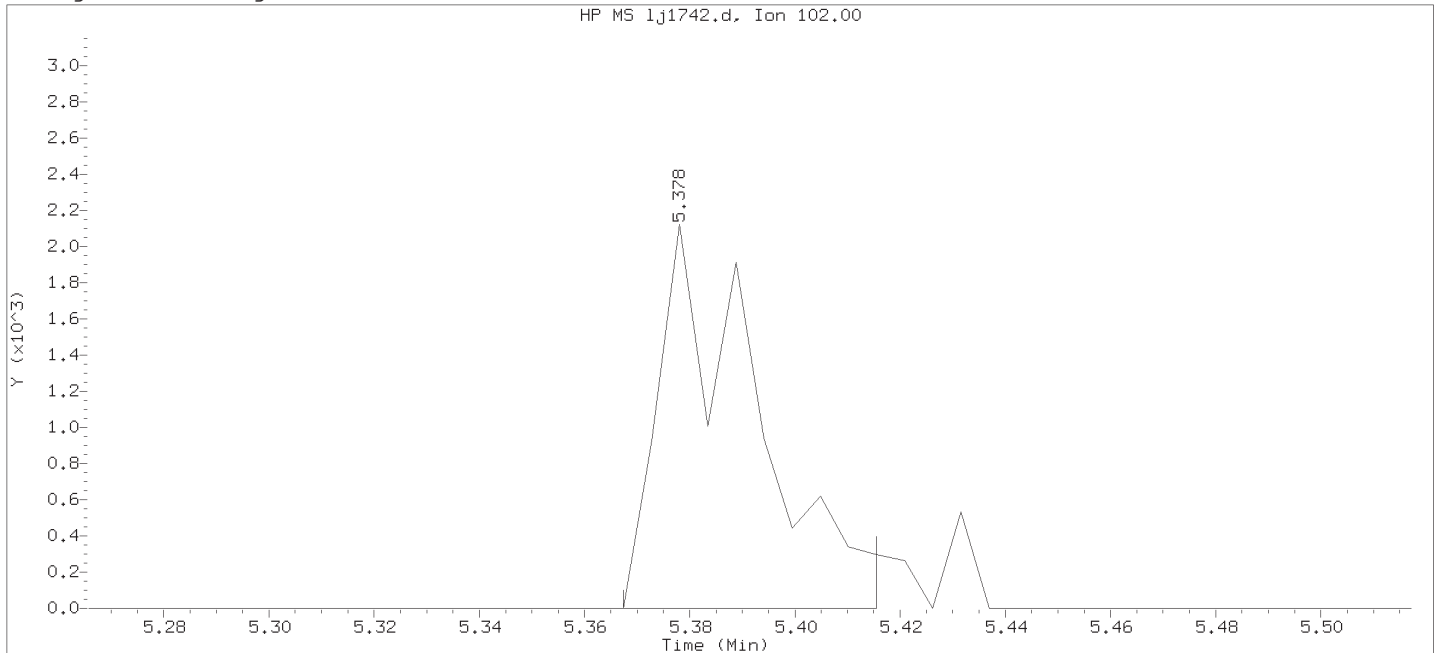
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

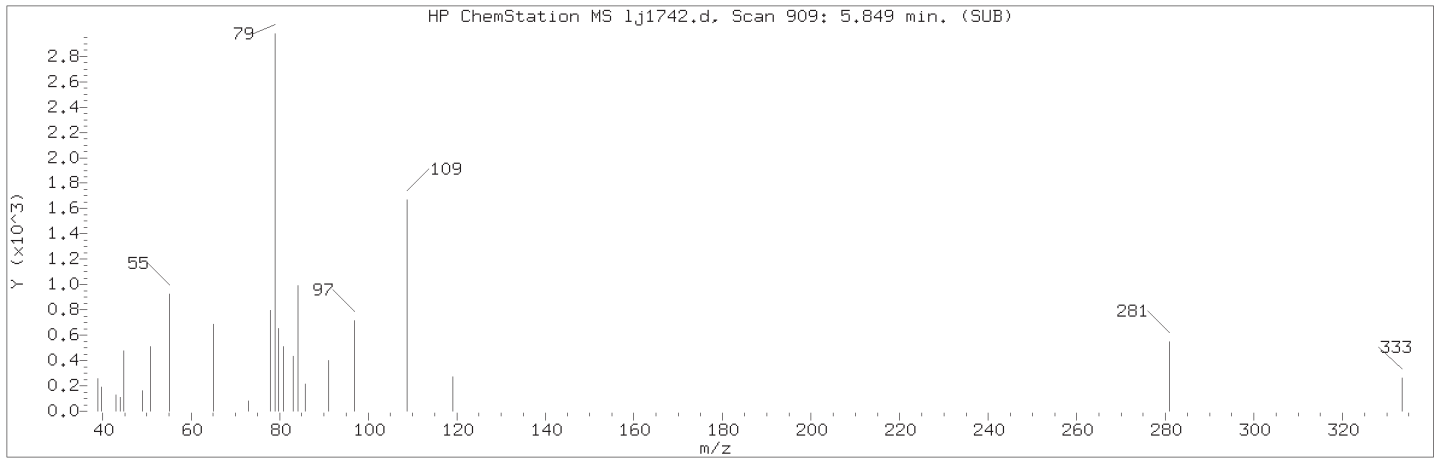
Sublist used: all1

Sample Name: SSTD0.125

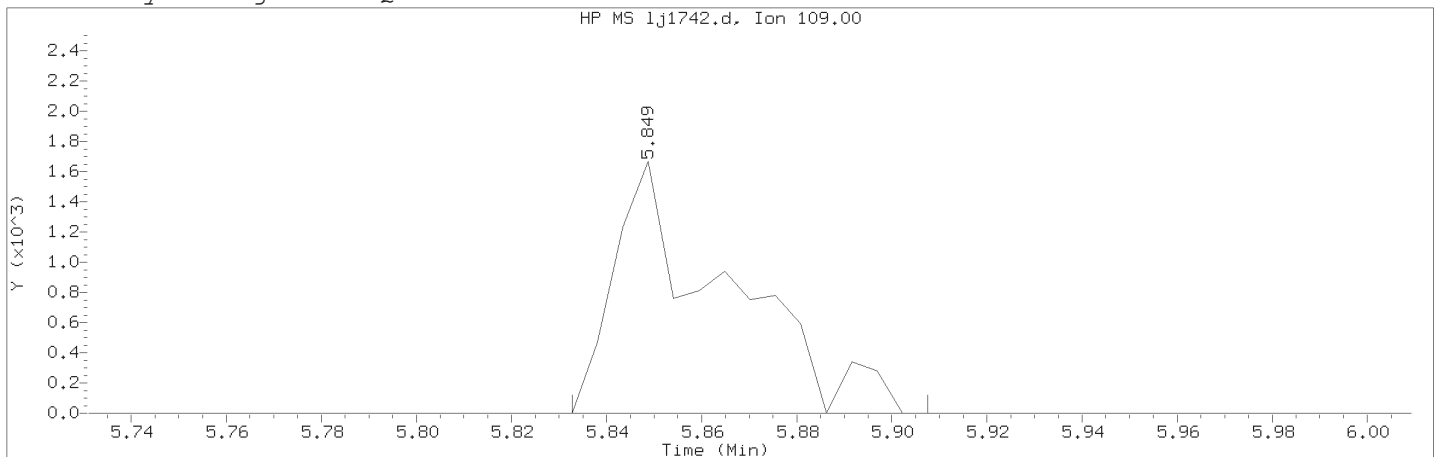
Lab Sample ID: RVSTD2648

Compound Number	: 14	
Compound Name	: N-Nitrosodiethylamine	
Scan Number	: 821	
Retention Time (minutes)	: 5.378	
Quant Ion	: 102.00	
Area	: 2716	
On-column Amount (ng/ul)	: 0.0978	
Integration start scan	: 818	Integration stop scan: 827
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

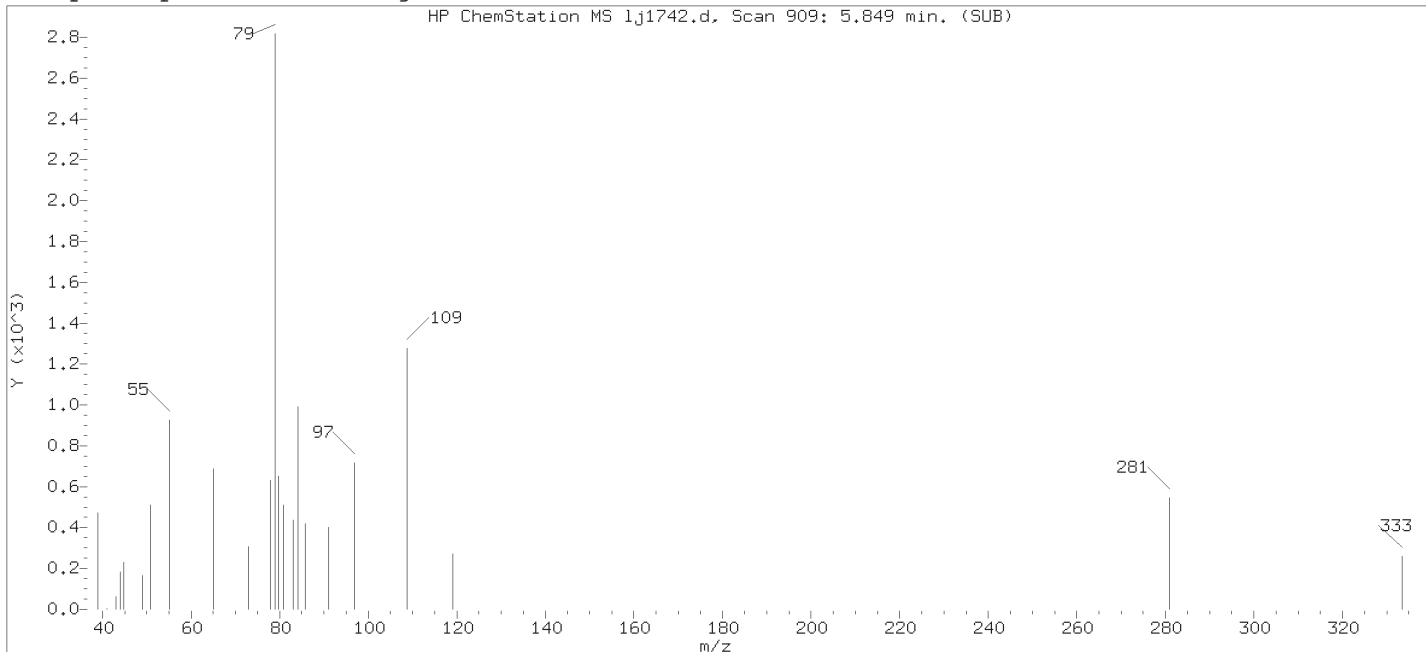
Compound Number    : 16  
Compound Name    : Ethyl methanesulfonate  
Scan Number    : 909  
Retention Time (minutes)                                    : 5.849  
Quant Ion    : 109.00  
Area (flag)     : 2769M  
On-Column Amount (ng/ul)                                 : 0.0912  
Integration start scan                                      : 905                      Integration stop scan: 919  
Y at integration start                                      : 0                        Y at integration end: 0

Reason for manual integration: improper integration

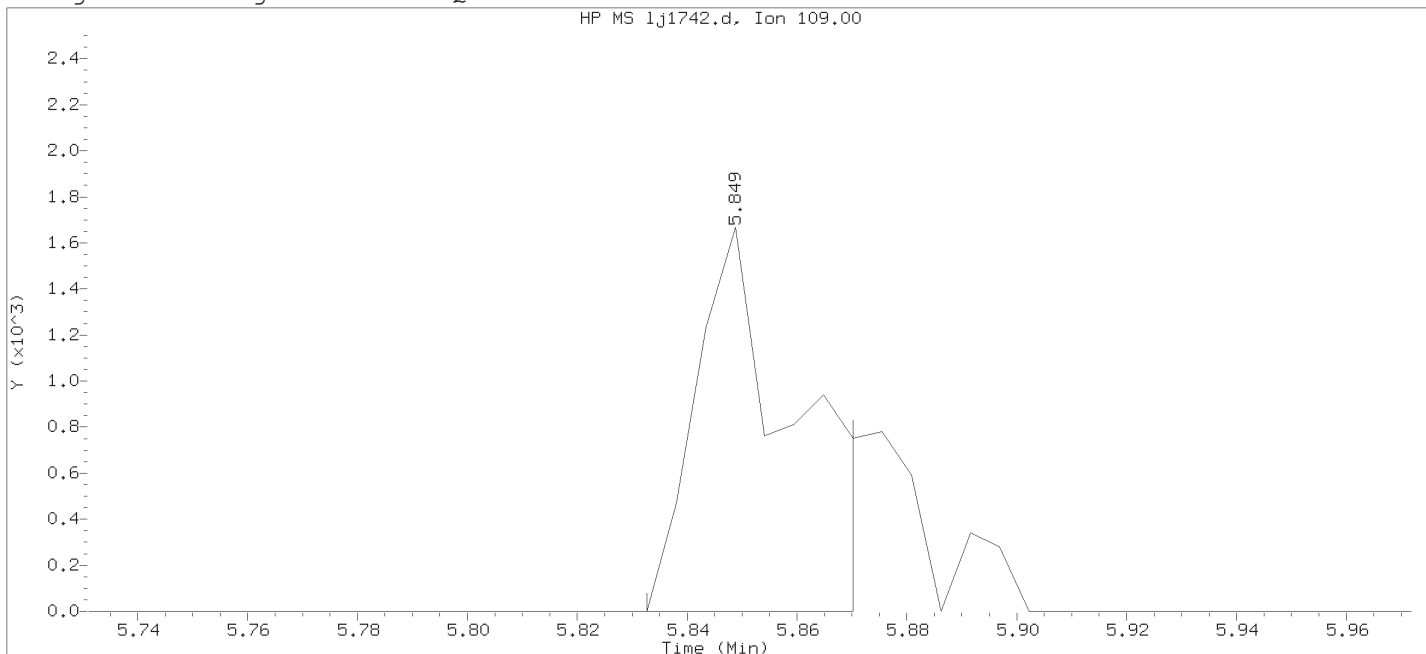
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

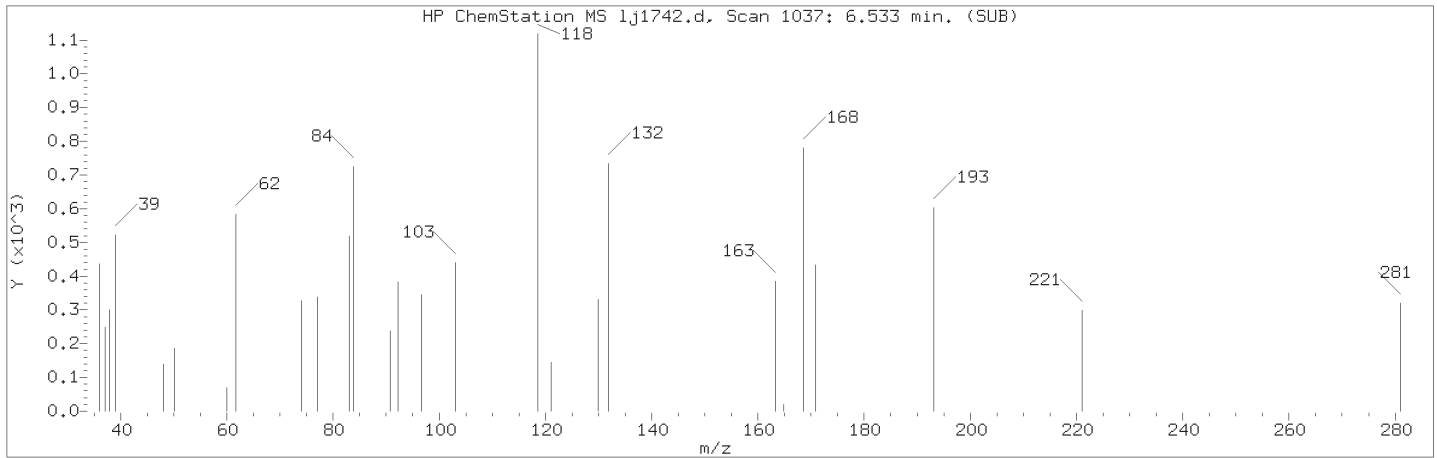
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

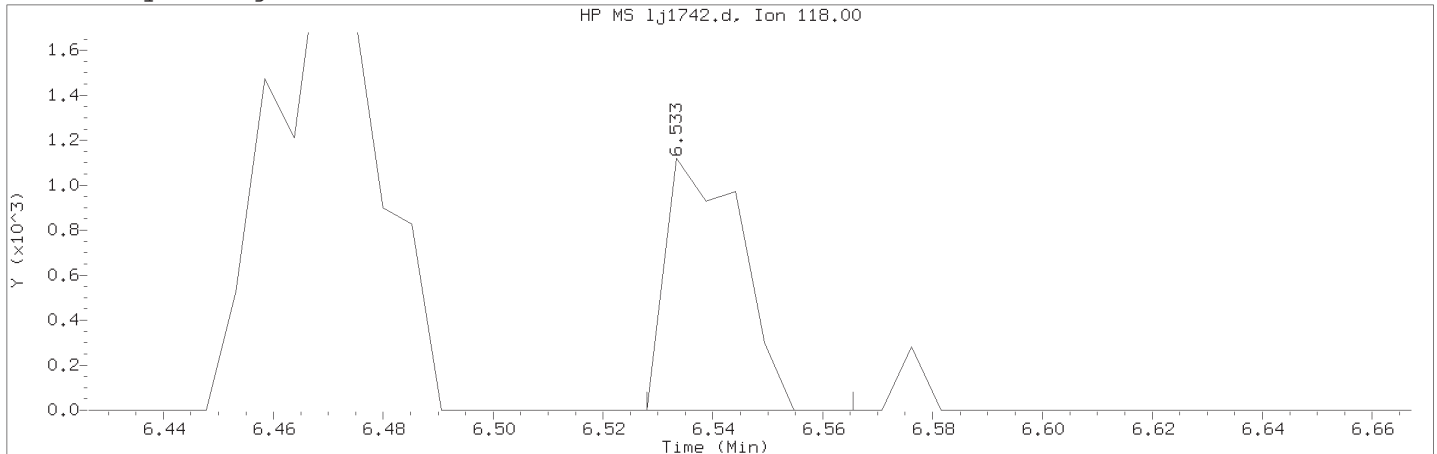
Lab Sample ID: RVSTD2648

Compound Number : 16  
Compound Name : Ethyl methanesulfonate  
Scan Number : 909  
Retention Time (minutes) : 5.849  
Quant Ion : 109.00  
Area : 2008  
On-column Amount (ng/ul) : 0.0695  
Integration start scan : 905      Integration stop scan: 912  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compound Number : 21  
Compound Name : a-methylstyrene  
Scan Number : 1037  
Retention Time (minutes) : 6.533  
Quant Ion : 118.00  
Area (flag) : 1066M  
On-Column Amount (ng/ul) : 0.1887  
Integration start scan : 1035      Integration stop scan: 1042  
Y at integration start : 0      Y at integration end: 0

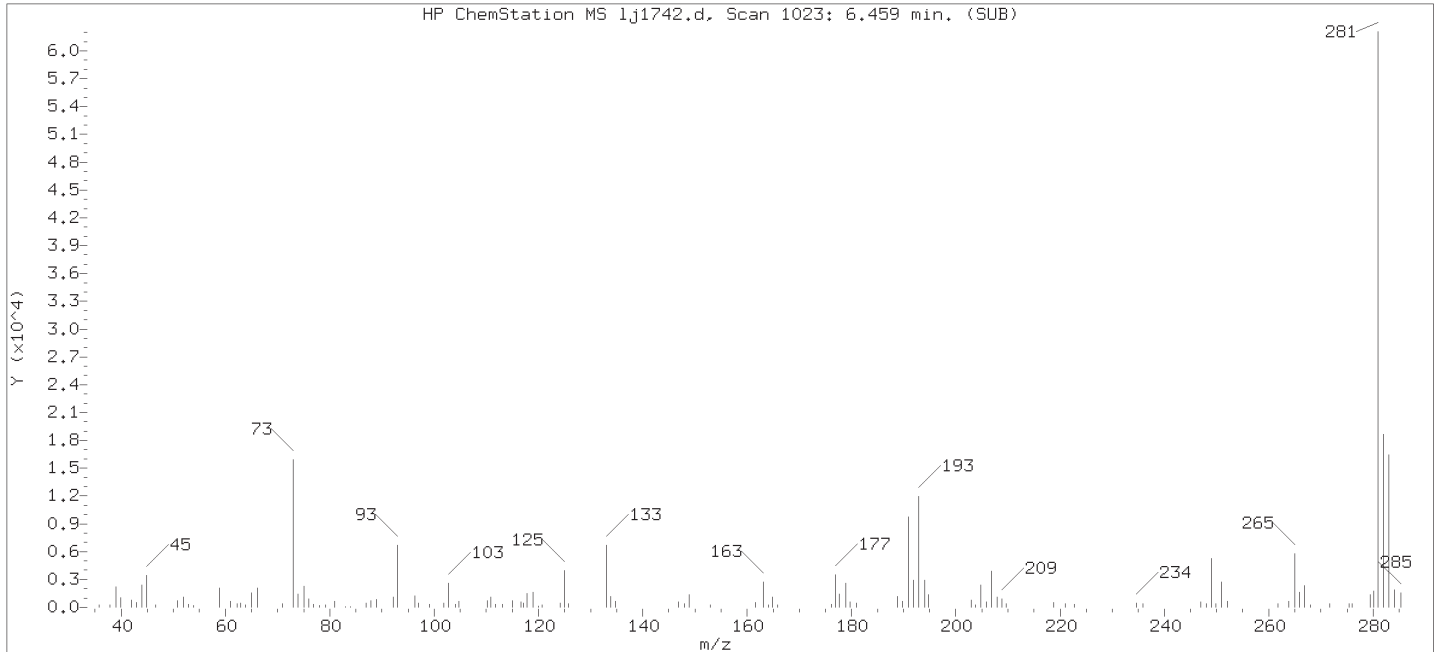
Reason for manual integration: improper integration

Analyst responsible for change:

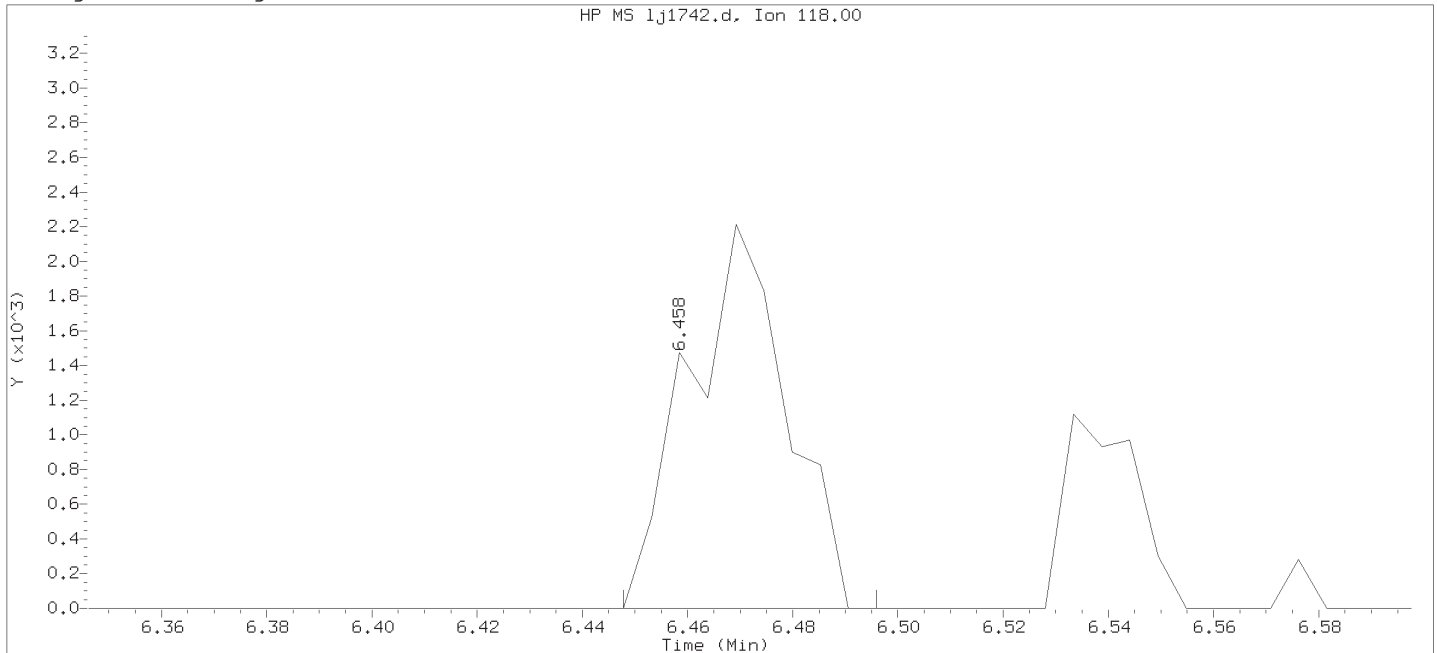
Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

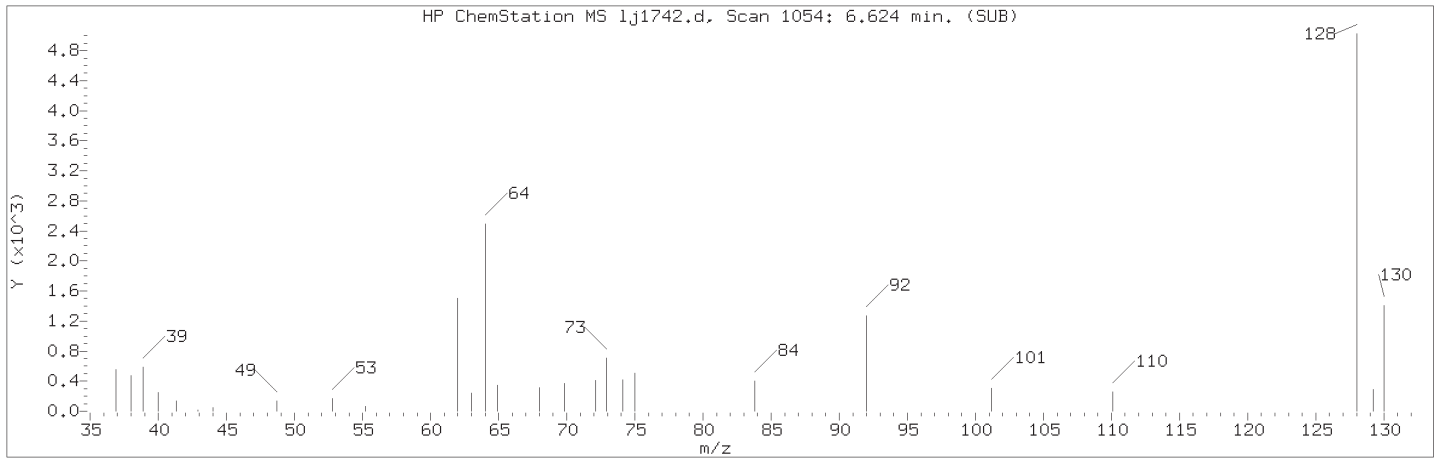
Sublist used: all11

Sample Name: SSTD0.125

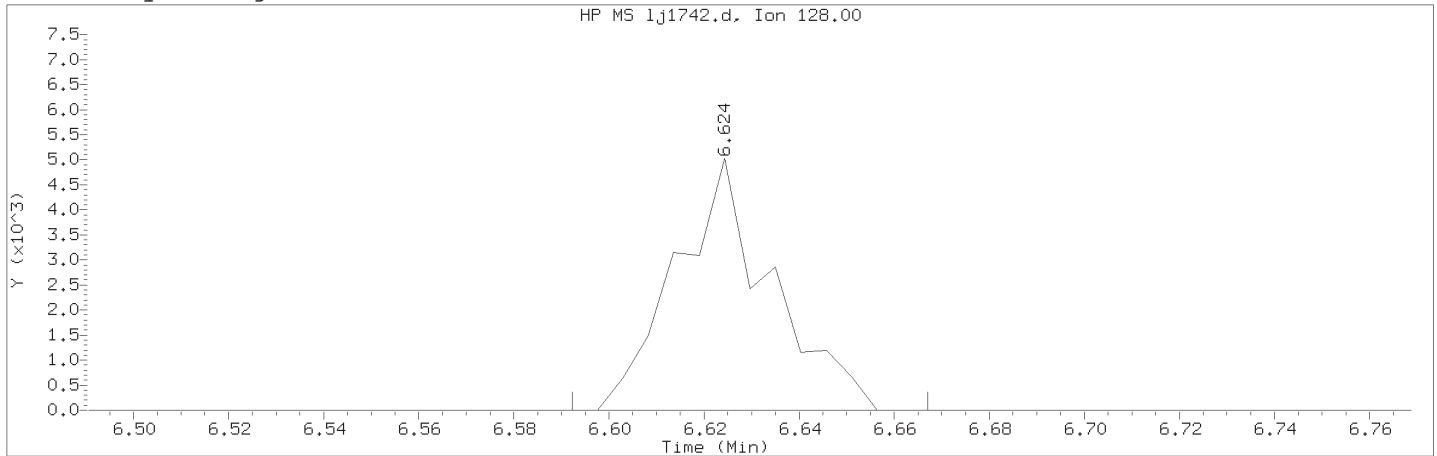
Lab Sample ID: RVSTD2648

Compound Number	: 21	
Compound Name	: a-methylstyrene	
Scan Number	: 1023	
Retention Time (minutes)	: 6.458	
Quant Ion	: 118.00	
Area	: 2883	
On-column Amount (ng/ul)	: 0.5107	
Integration start scan	: 1020	Integration stop scan: 1029
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
 Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125                      Lab Sample ID: RVSTD2648

Compound Number                      : 24  
 Compound Name                      : 2-Chlorophenol  
 Scan Number                      : 1054  
 Retention Time (minutes)           : 6.624  
 Quant Ion                      : 128.00  
 Area (flag)                      : 6955M  
 On-Column Amount (ng/ul)        : 0.1259  
 Integration start scan           : 1047                      Integration stop scan: 1061  
 Y at integration start           : 0                      Y at integration end: 0

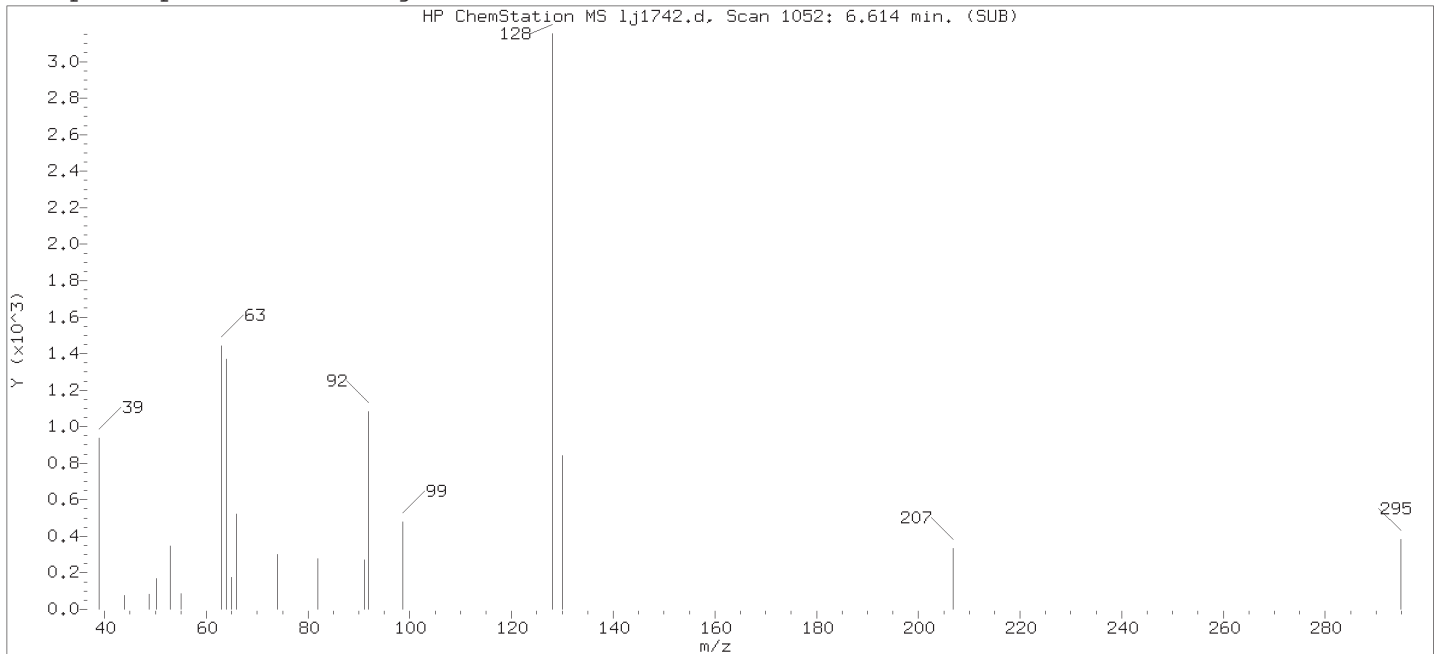
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:00.  
 Target 3.5 esignature user ID: art12405

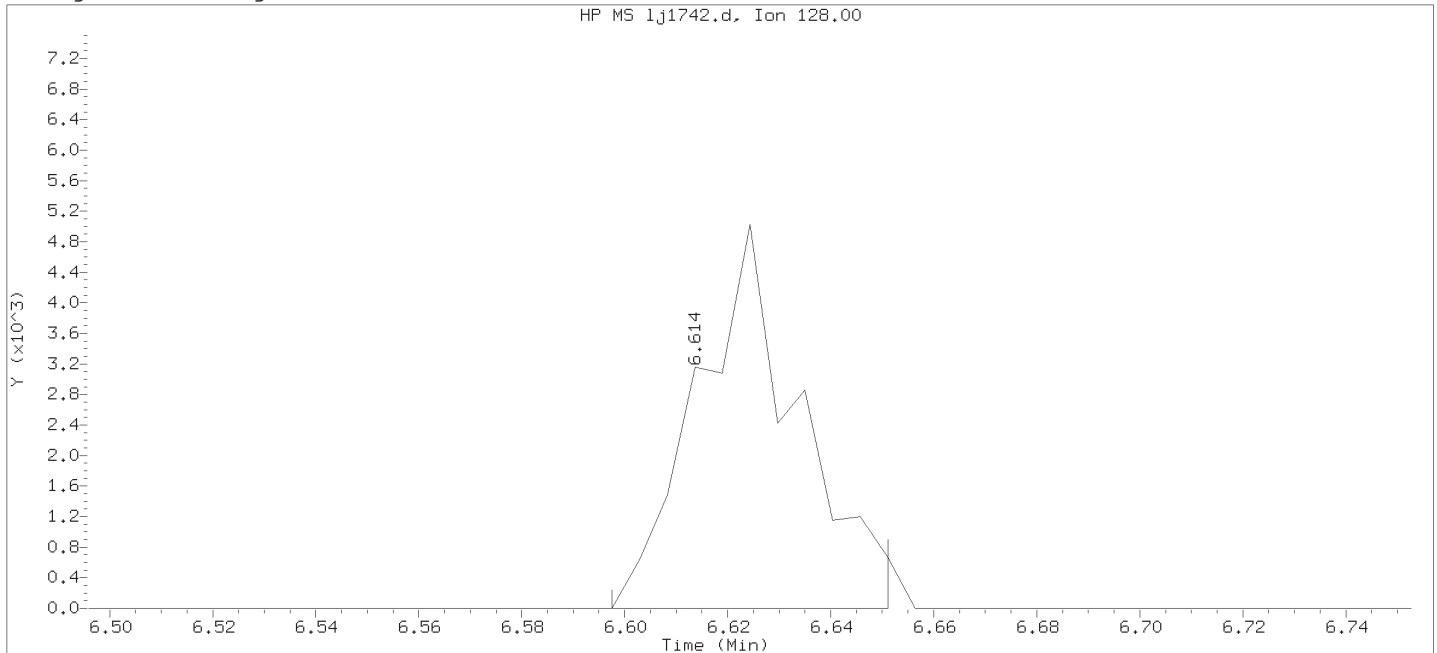
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
 PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

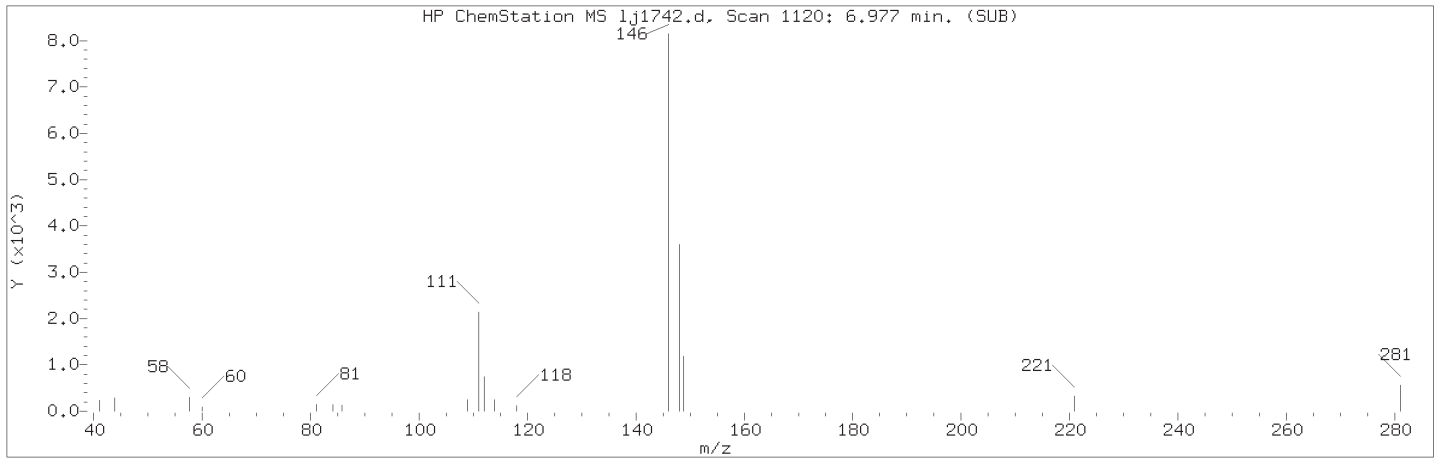
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

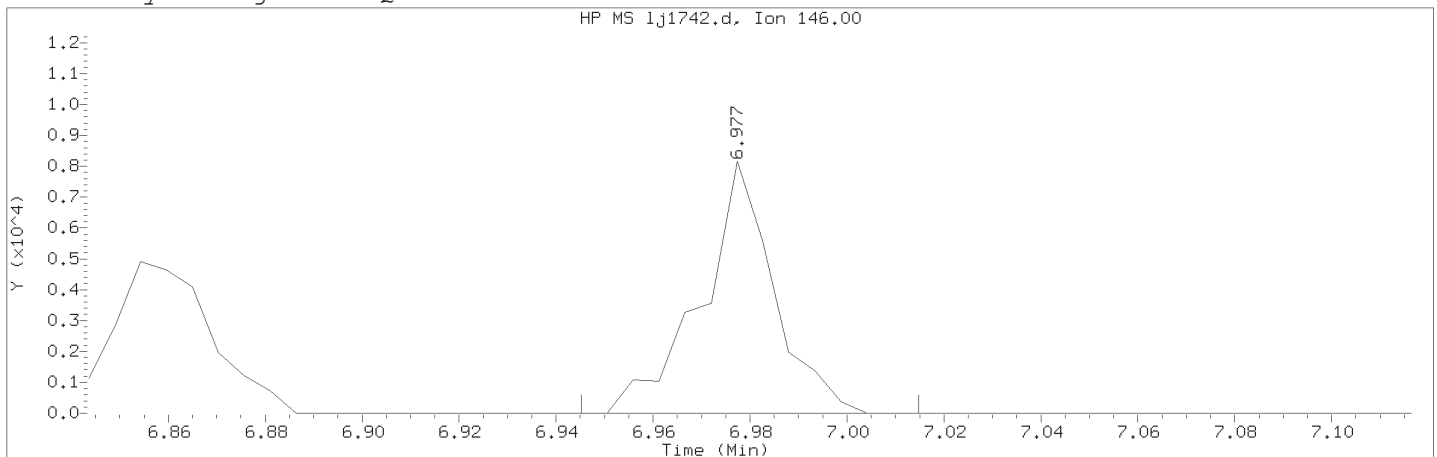
Lab Sample ID: RVSTD2648

Compound Number	: 24	
Compound Name	: 2-Chlorophenol	
Scan Number	: 1052	
Retention Time (minutes)	: 6.614	
Quant Ion	: 128.00	
Area	: 6848	
On-column Amount (ng/ul)	: 0.1267	
Integration start scan	: 1048	Integration stop scan: 1058
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

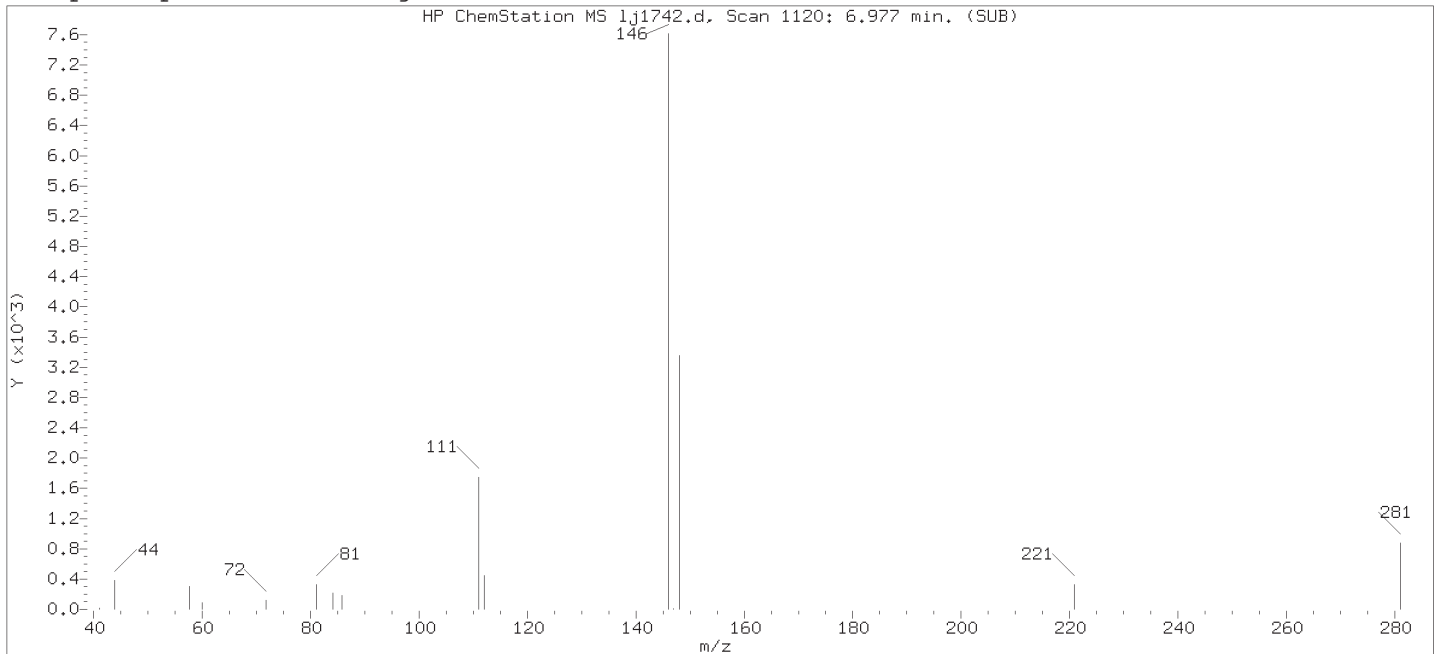
Compound Number    : 27  
Compound Name    : 1,4-Dichlorobenzene  
Scan Number    : 1120  
Retention Time (minutes)                                   : 6.977  
Quant Ion    : 146.00  
Area (flag)     : 8475M  
On-Column Amount (ng/ul)                                : 0.1378  
Integration start scan                                     : 1113                      Integration stop scan: 1126  
Y at integration start                                     : 0                           Y at integration end: 0

Reason for manual integration: improper integration

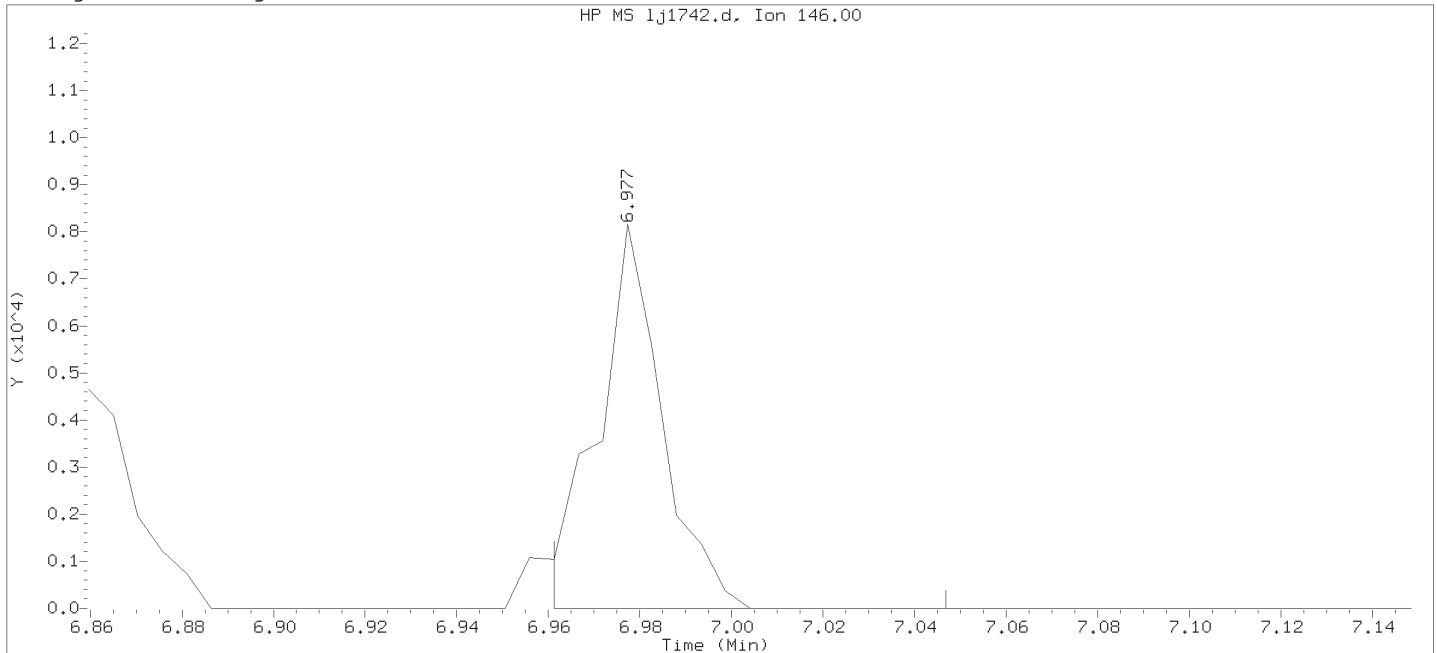
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

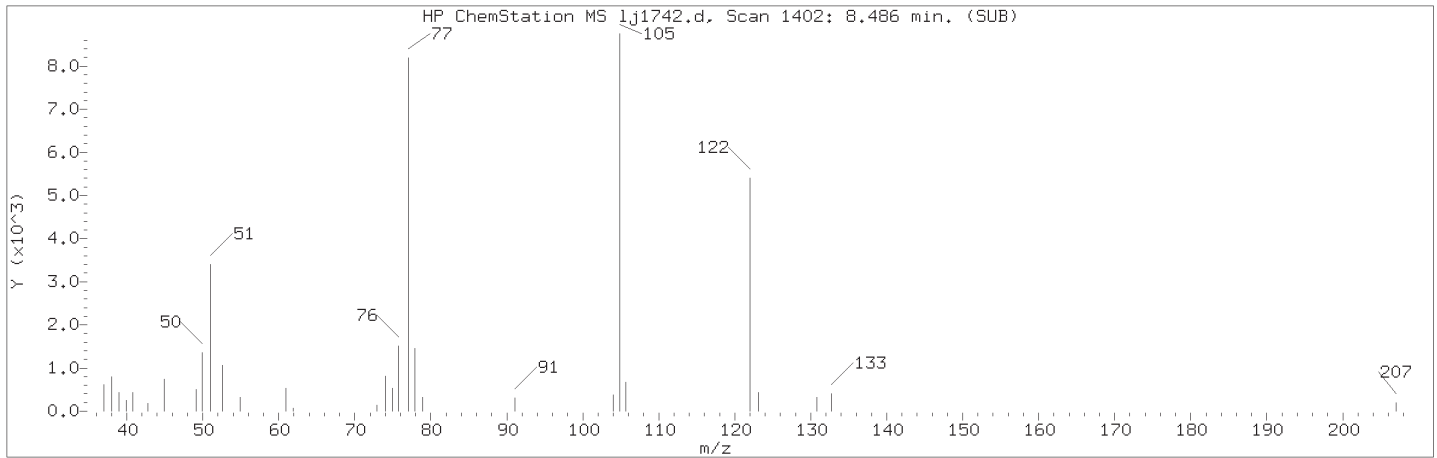
Sublist used: all1

Sample Name: SSTDO.125

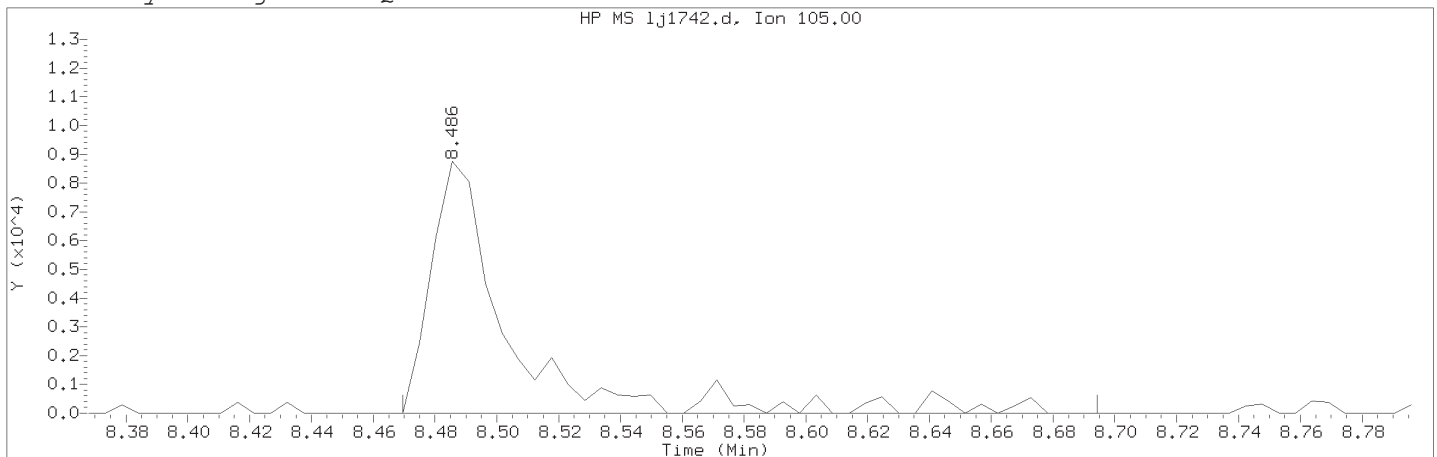
Lab Sample ID: RVSTD2648

Compound Number	: 27	
Compound Name	: 1,4-Dichlorobenzene	
Scan Number	: 1120	
Retention Time (minutes)	: 6.977	
Quant Ion	: 146.00	
Area	: 7962	
On-column Amount (ng/ul)	: 0.1338	
Integration start scan	: 1116	Integration stop scan: 1132
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

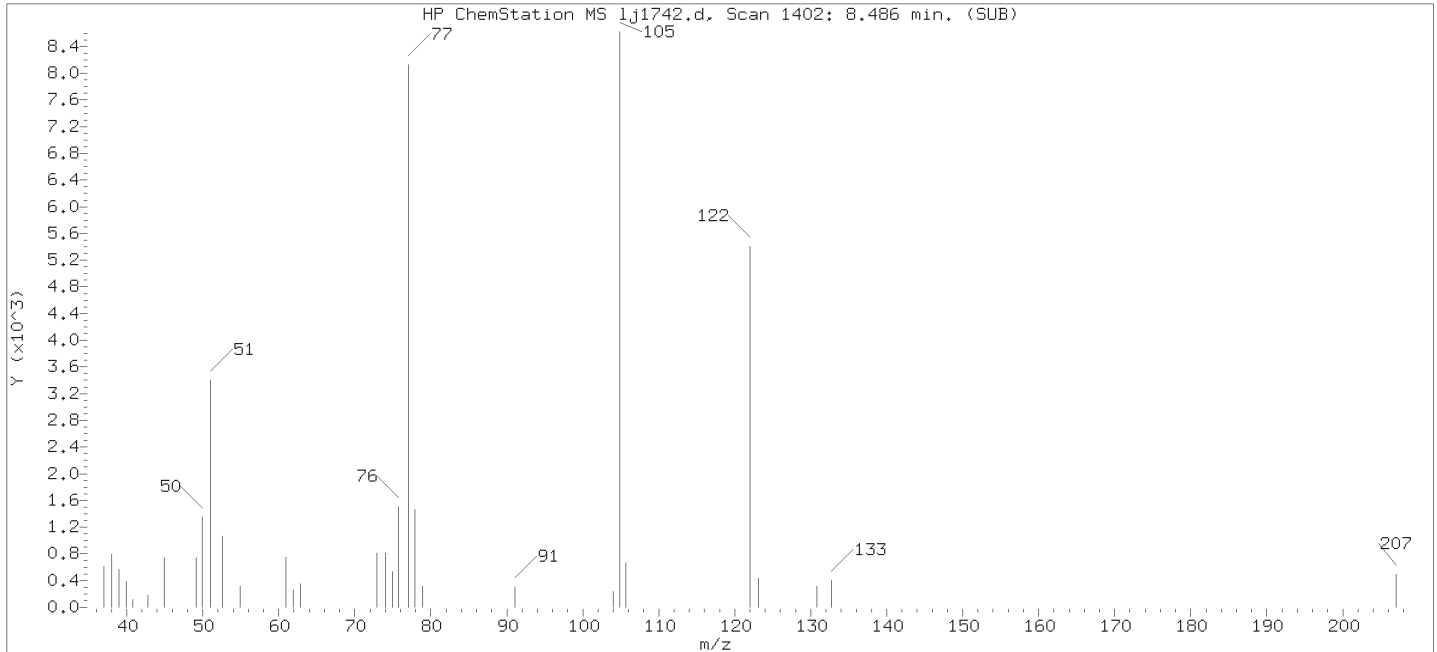
Compound Number    : 58  
Compound Name    : Benzoic acid  
Scan Number    : 1402  
Retention Time (minutes)                                   : 8.486  
Quant Ion    : 105.00  
Area (flag)    : 15488M  
On-Column Amount (ng/ul)                                 : 0.3834  
Integration start scan                                      : 1398                      Integration stop scan: 1440  
Y at integration start                                      : 0                           Y at integration end: 0

Reason for manual integration: improper integration

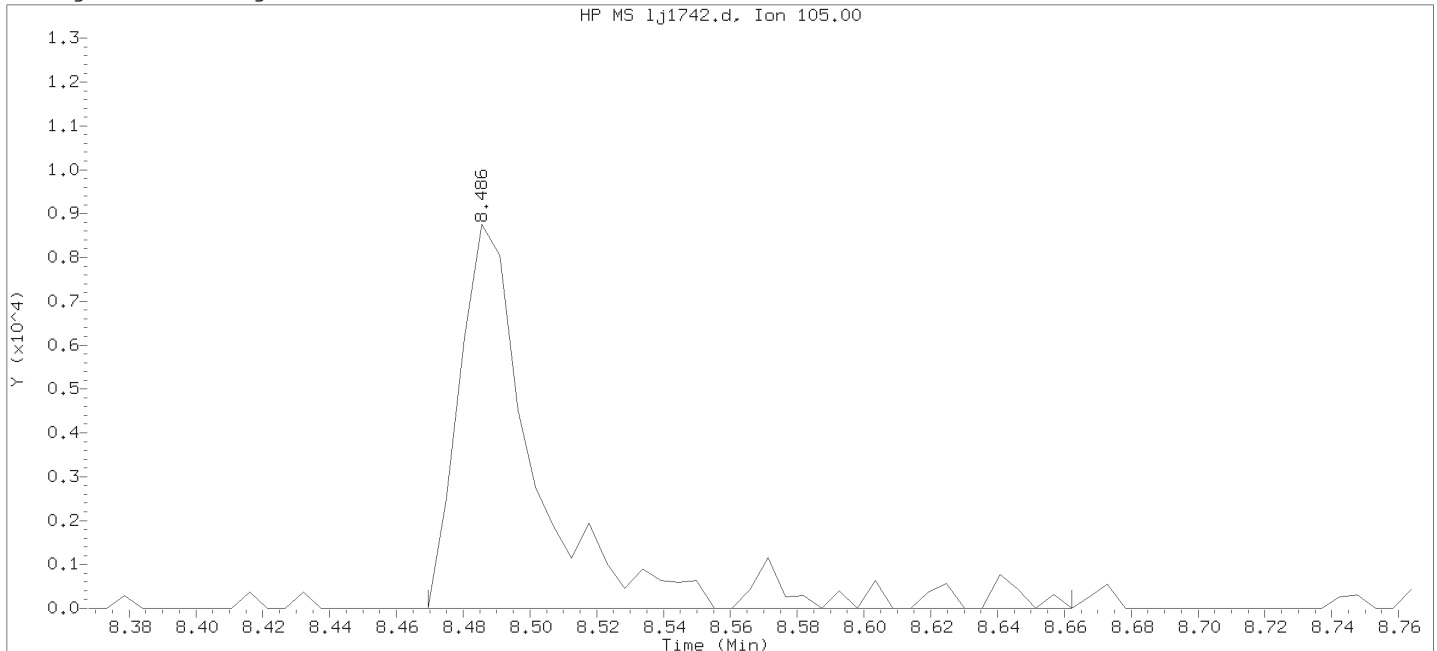
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

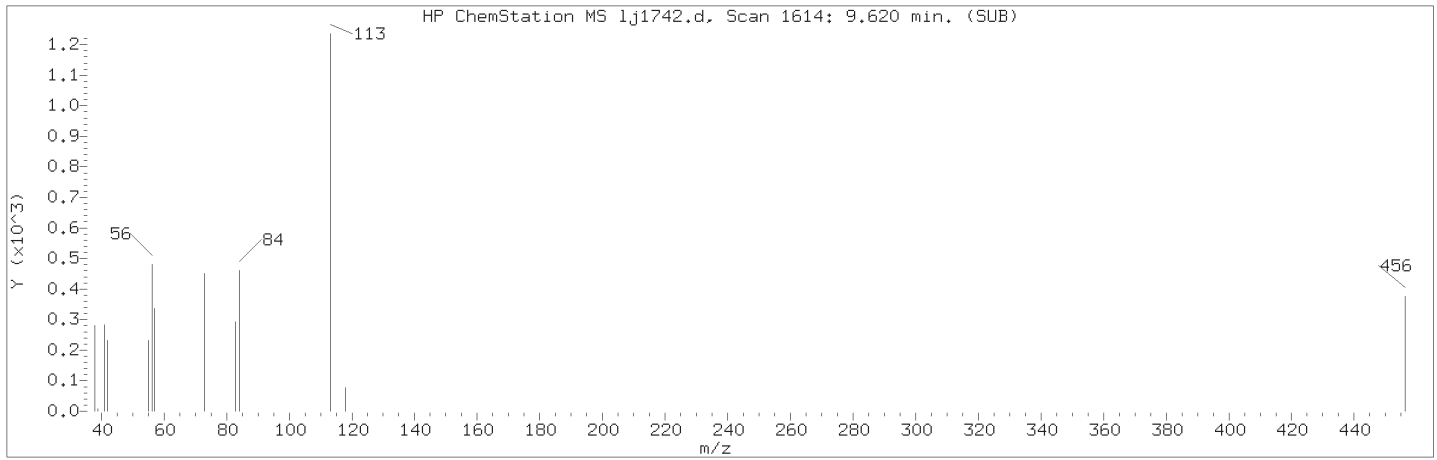
Sublist used: all1

Sample Name: SSTD0.125

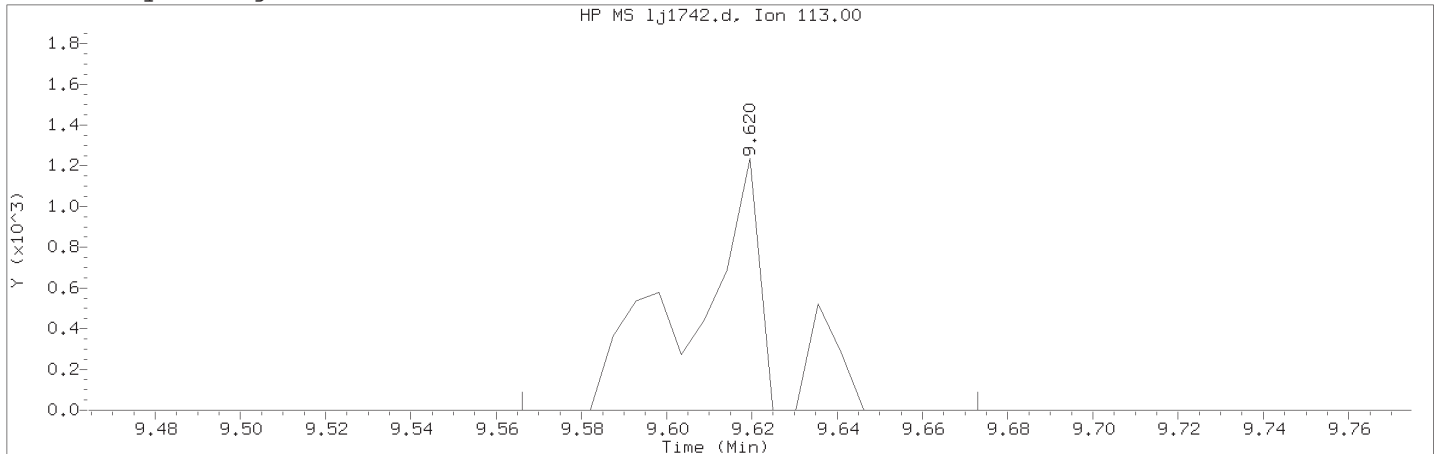
Lab Sample ID: RVSTD2648

Compound Number	: 58	
Compound Name	: Benzoic acid	
Scan Number	: 1402	
Retention Time (minutes)	: 8.486	
Quant Ion	: 105.00	
Area	: 15230	
On-column Amount (ng/ul)	: 0.4039	
Integration start scan	: 1398	Integration stop scan: 1434
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

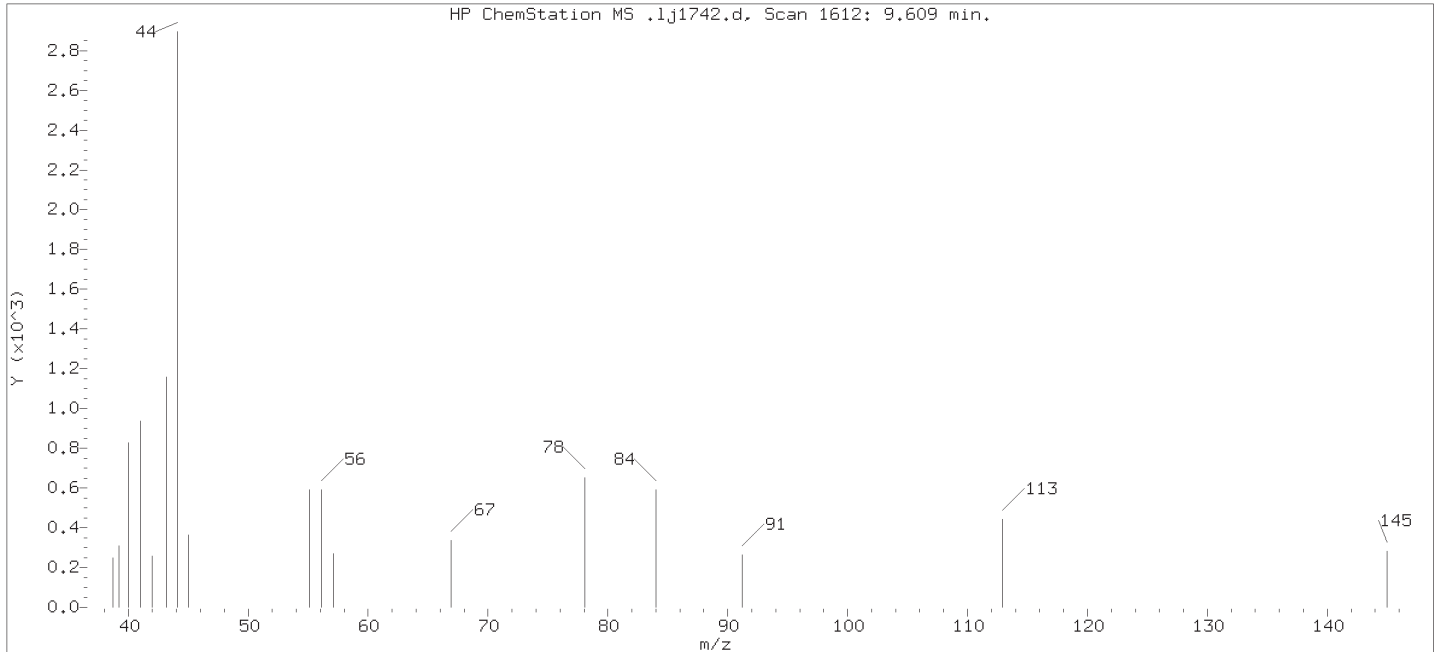
Compound Number    : 79  
Compound Name    : Caprolactam  
Scan Number    : 1614  
Retention Time (minutes)                                   : 9.620  
Quant Ion    : 113.00  
Area (flag)     : 1580M  
On-Column Amount (ng/ul)                                 : 0.1115  
Integration start scan                                      : 1603                      Integration stop scan: 1623  
Y at integration start                                      : 0                              Y at integration end: 0

Reason for manual integration: missed peak

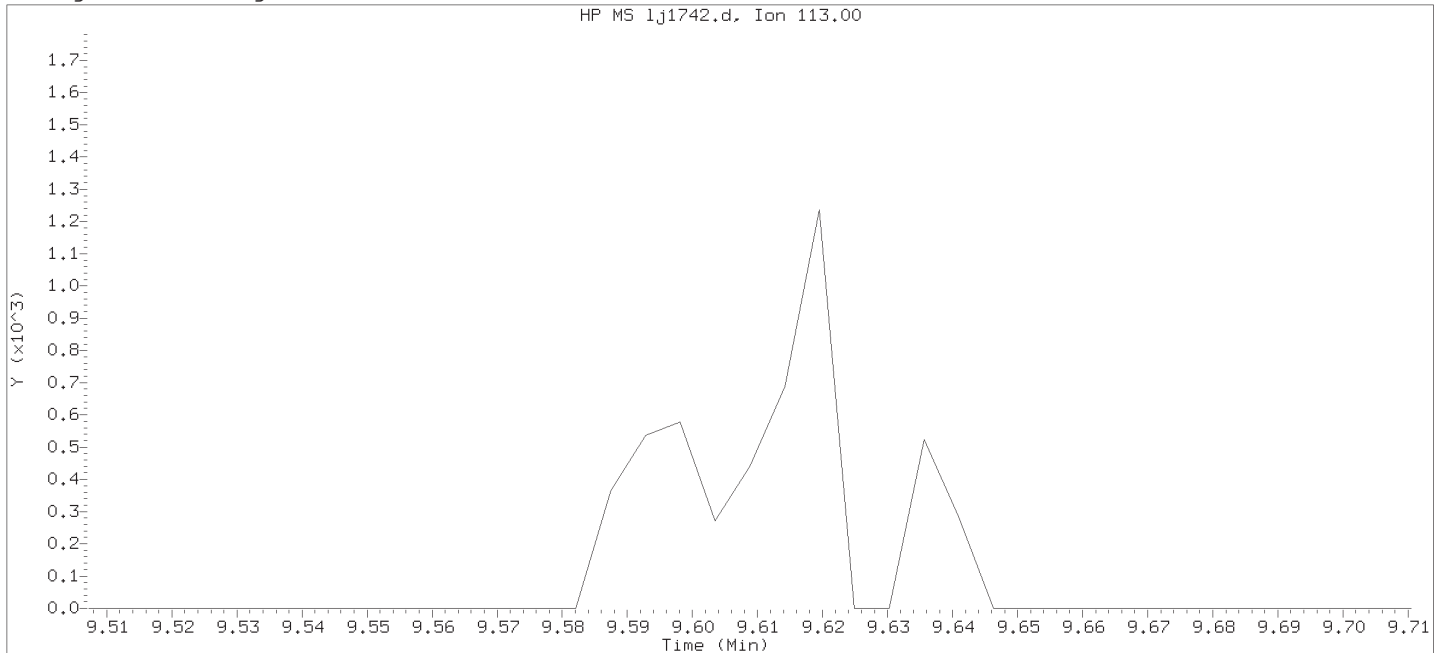
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

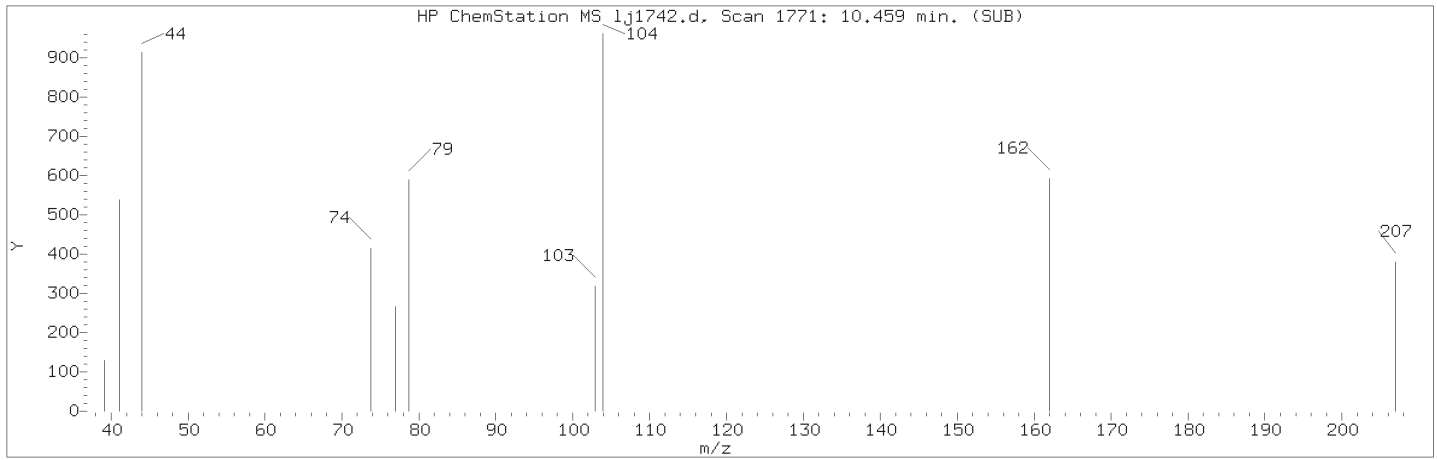
Sublist used: all1

Sample Name: SSTD0.125

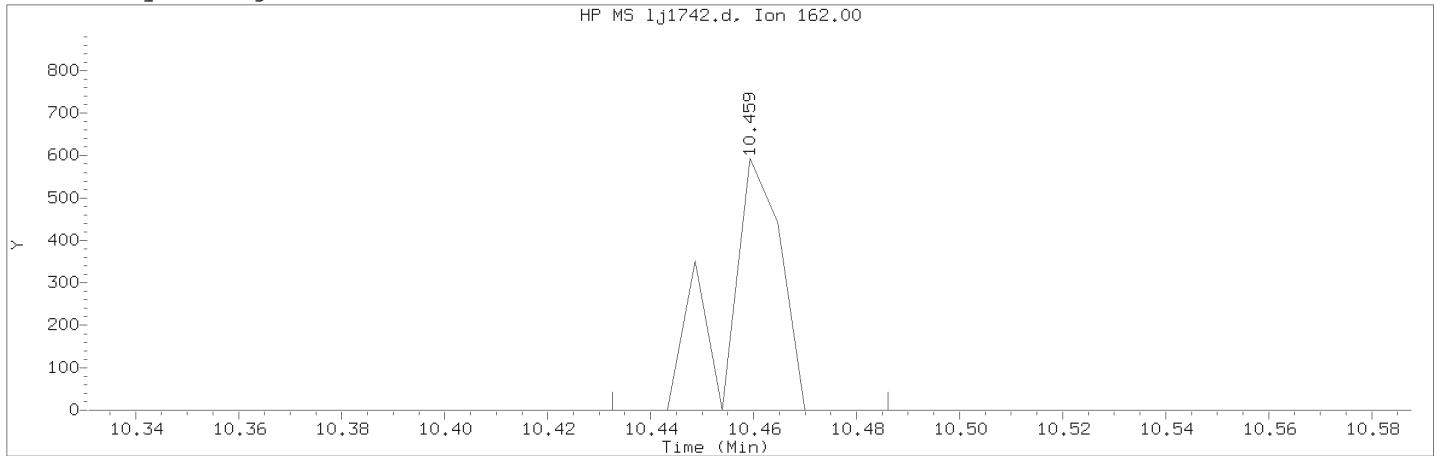
Lab Sample ID: RVSTD2648

Compound Number : 79  
Compound Name : Caprolactam  
Expected RT (minutes) : 9.609  
Quant Ion : 113.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 91  
Compound Name    : cis-Isosafrole  
Scan Number    : 1771  
Retention Time (minutes)                                   : 10.459  
Quant Ion    : 162.00  
Area (flag)    : 445M  
On-Column Amount (ng/ul)                                : 0.0101  
Integration start scan                                    : 1765                      Integration stop scan: 1775  
Y at integration start                                    : 0                              Y at integration end: 0

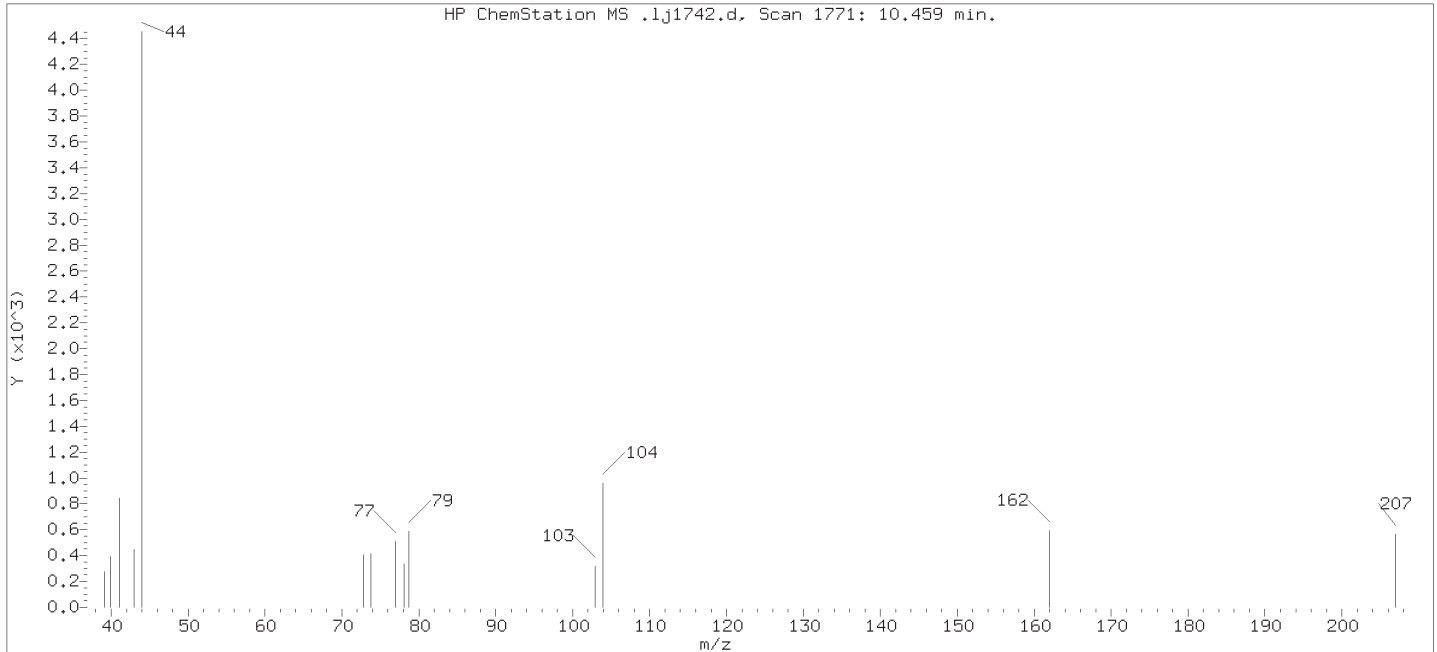
Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

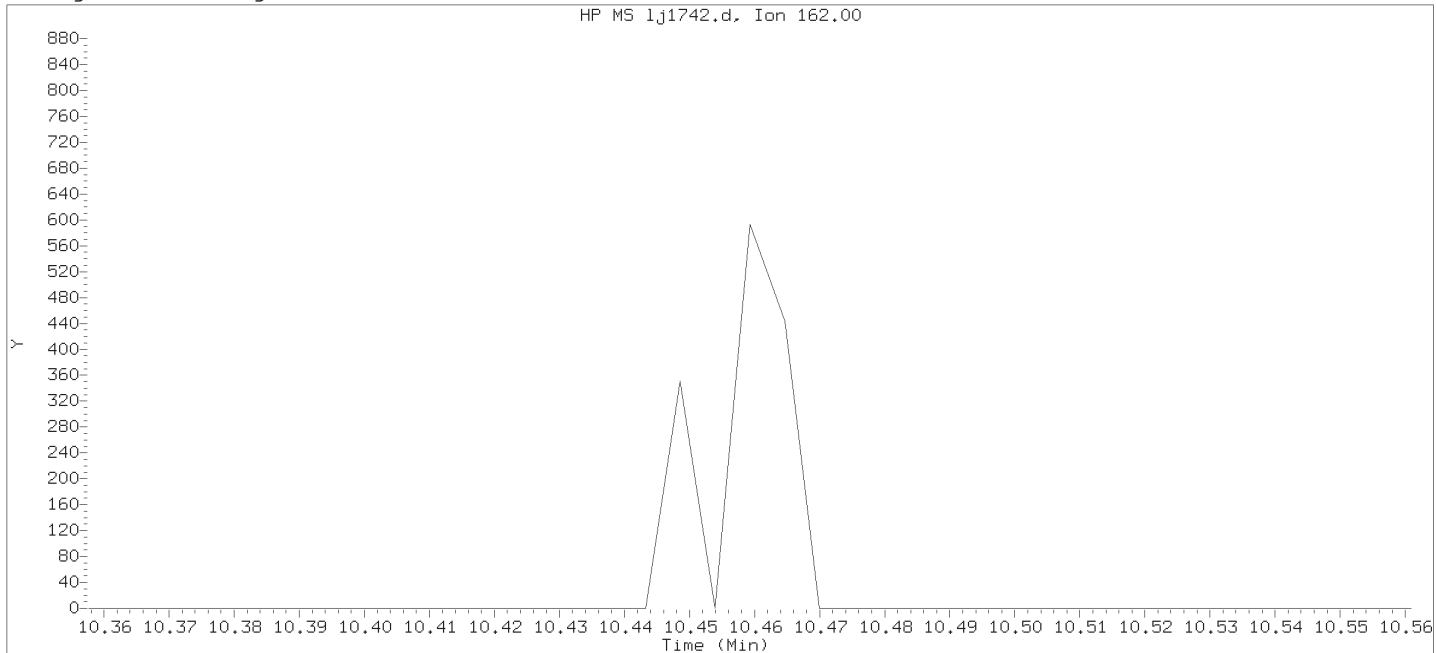
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum



Original Integration of Quant Ion



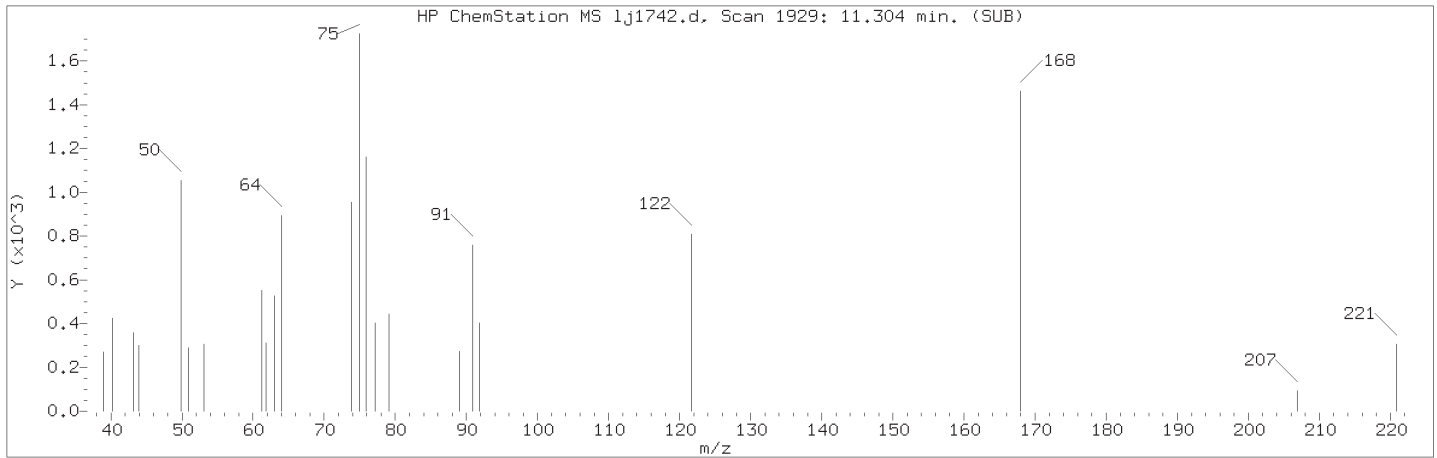
Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

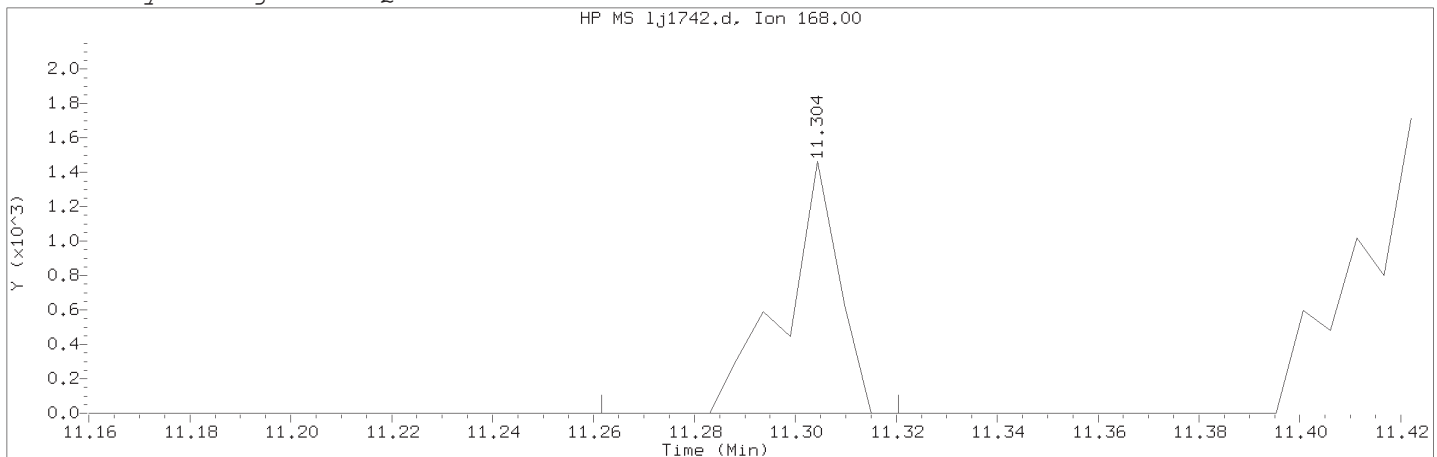
Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 91  
Compound Name    : cis-Isosafrole  
Expected RT (minutes)                                       : 10.459  
Quant Ion    : 162.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125                      Lab Sample ID: RVSTD2648

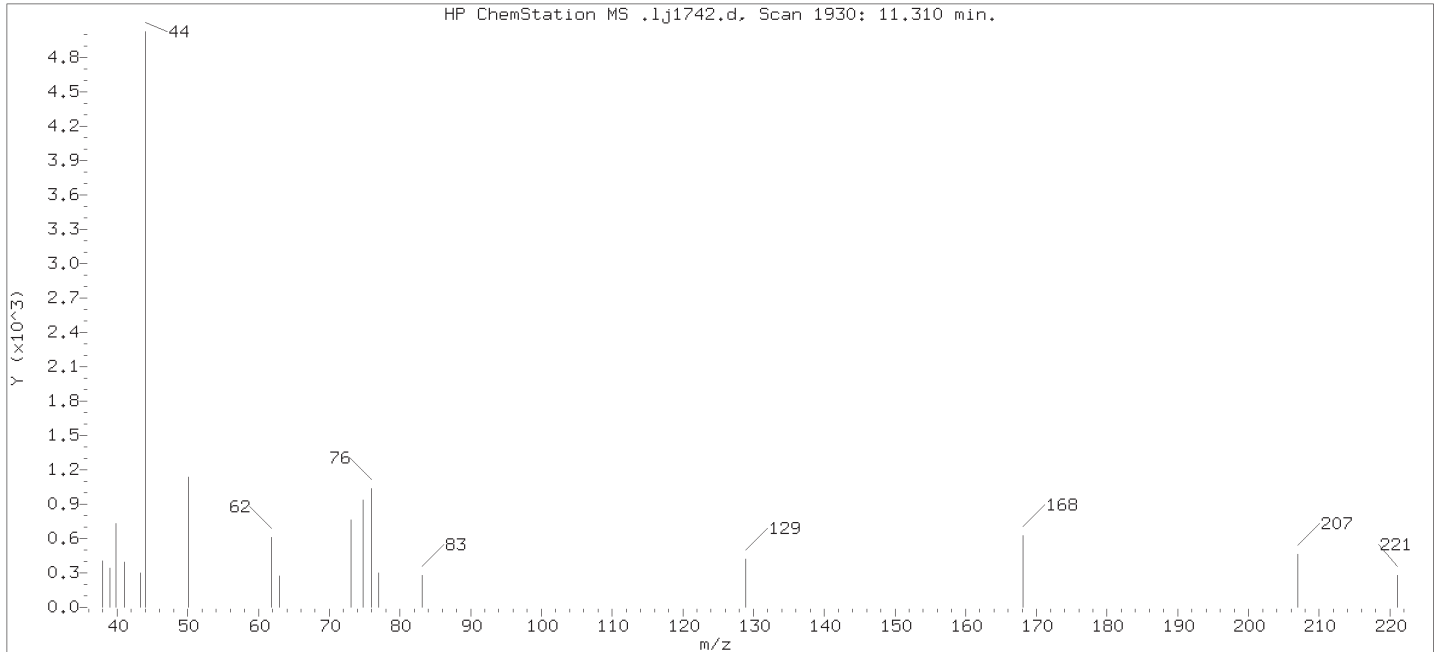
Compound Number                      : 109  
Compound Name                        : 1,4-Dinitrobenzene  
Scan Number                           : 1929  
Retention Time (minutes)            : 11.304  
Quant Ion                              : 168.00  
Area (flag)                            : 1102M  
On-Column Amount (ng/ul)           : 0.0801  
Integration start scan                : 1920                      Integration stop scan: 1931  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: missed peak

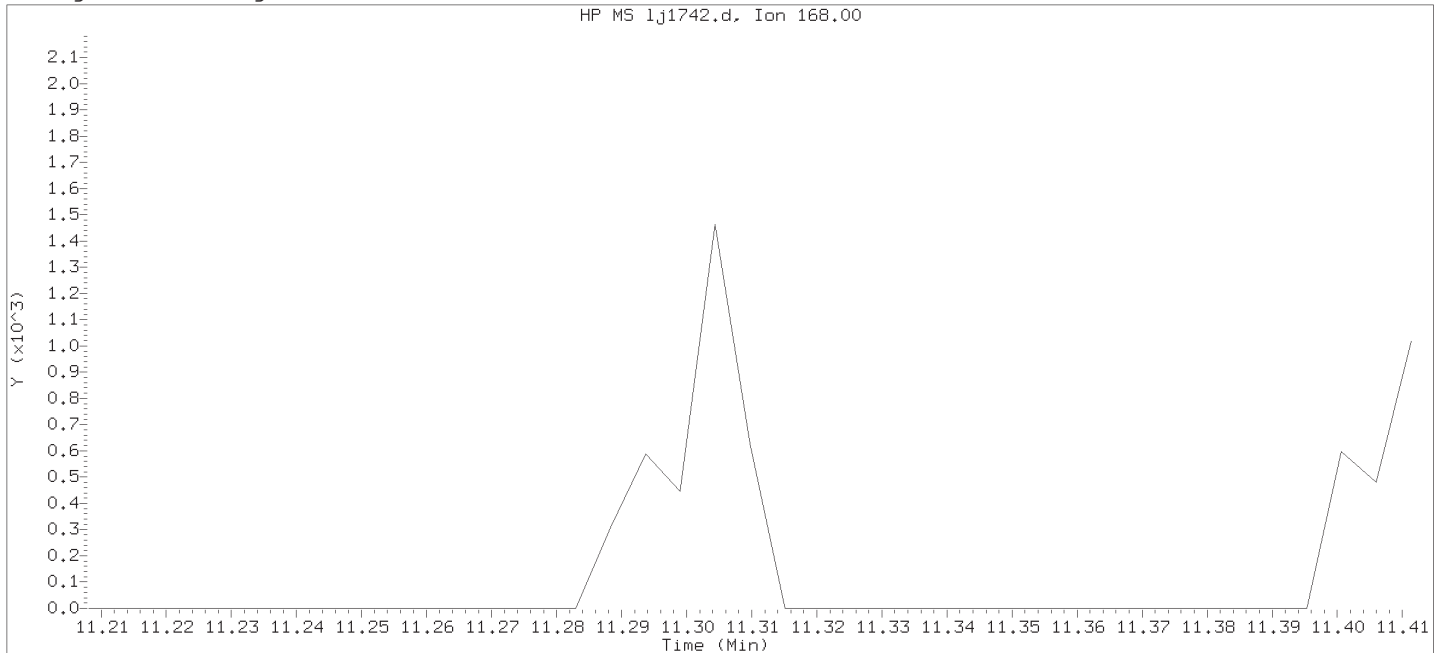
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

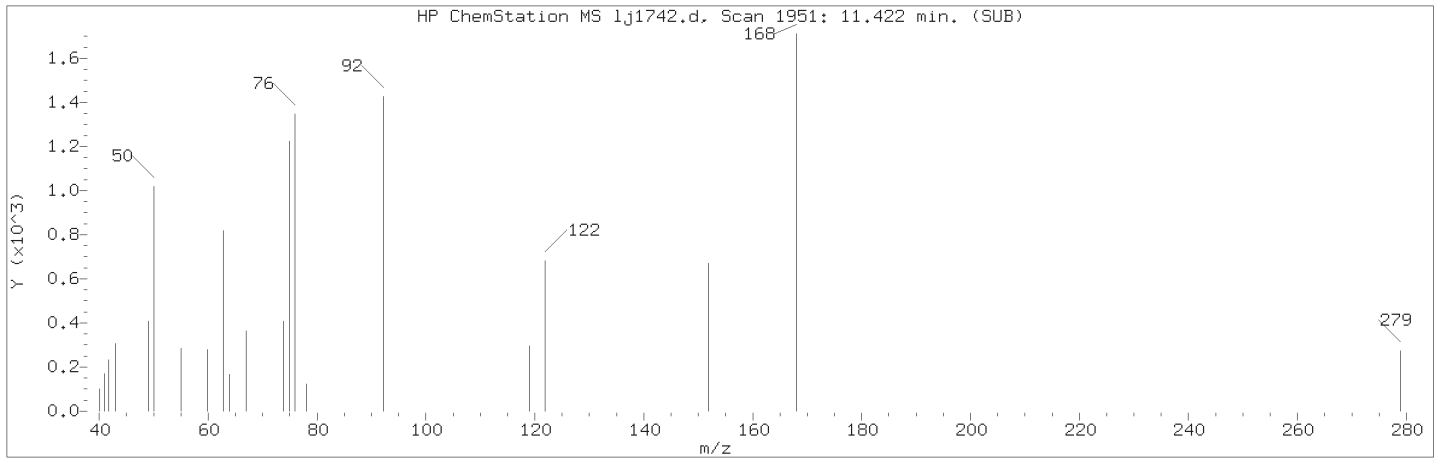
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

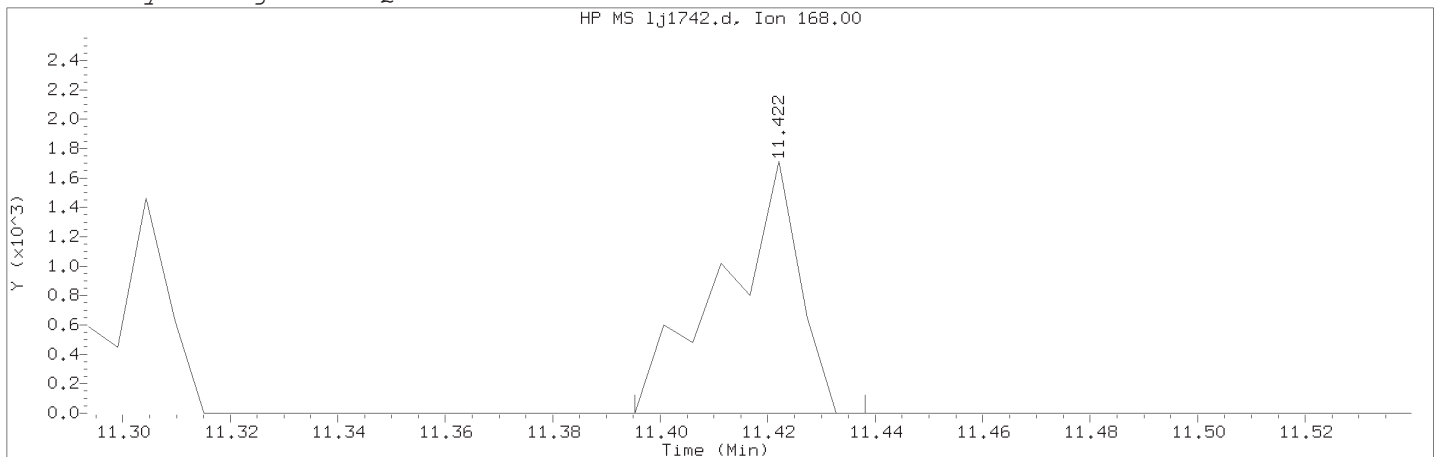
Lab Sample ID: RVSTD2648

Compound Number : 109  
Compound Name : 1,4-Dinitrobenzene  
Expected RT (minutes) : 11.310  
Quant Ion : 168.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

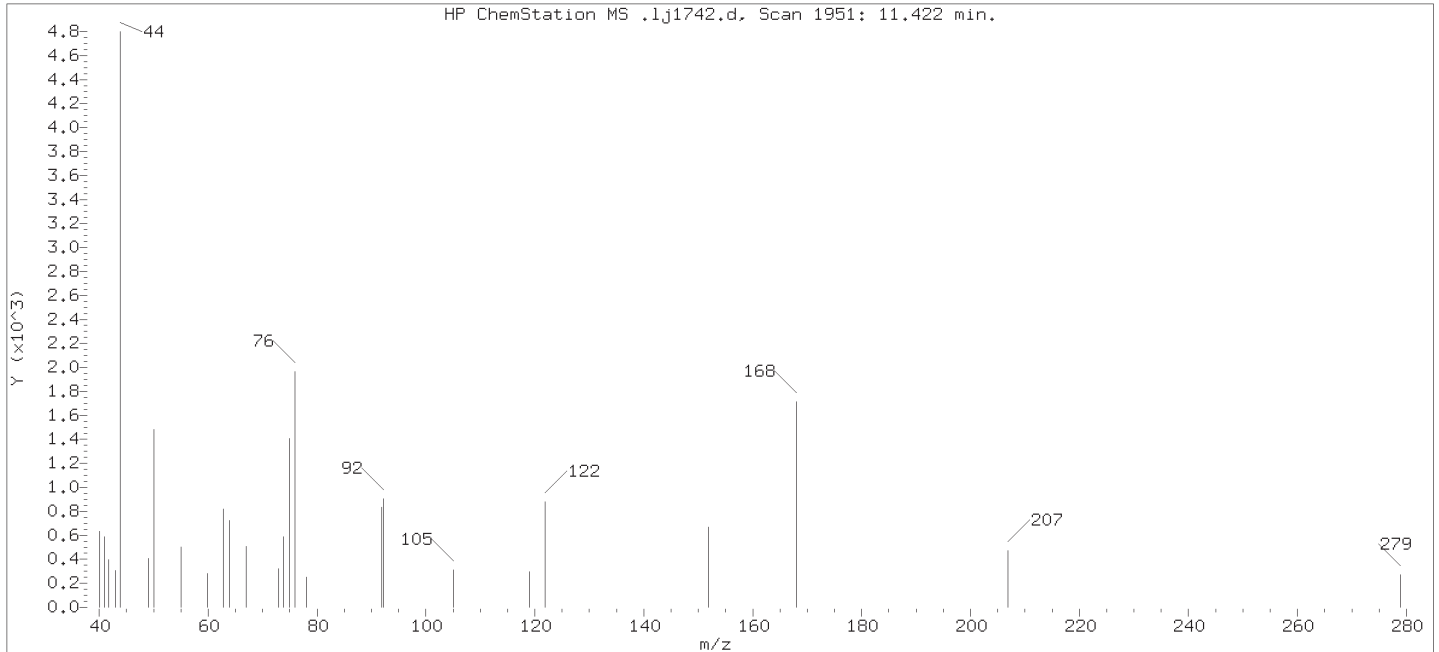
Compound Number    : 111  
Compound Name     : 1,3-Dinitrobenzene  
Scan Number    : 1951  
Retention Time (minutes)                                   : 11.422  
Quant Ion    : 168.00  
Area (flag)     : 1687M  
On-Column Amount (ng/ul)                                 : 0.0997  
Integration start scan                                       : 1945                      Integration stop scan: 1953  
Y at integration start                                       : 0                           Y at integration end: 0

Reason for manual integration: missed peak

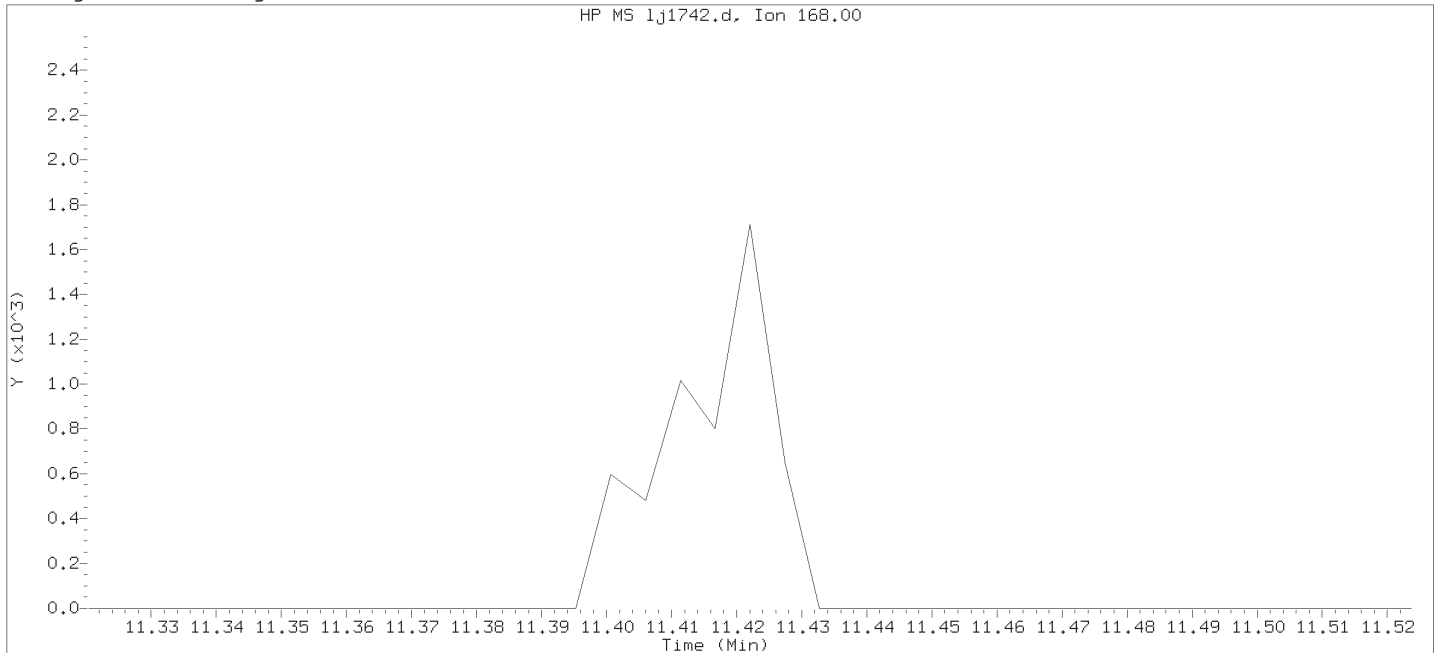
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

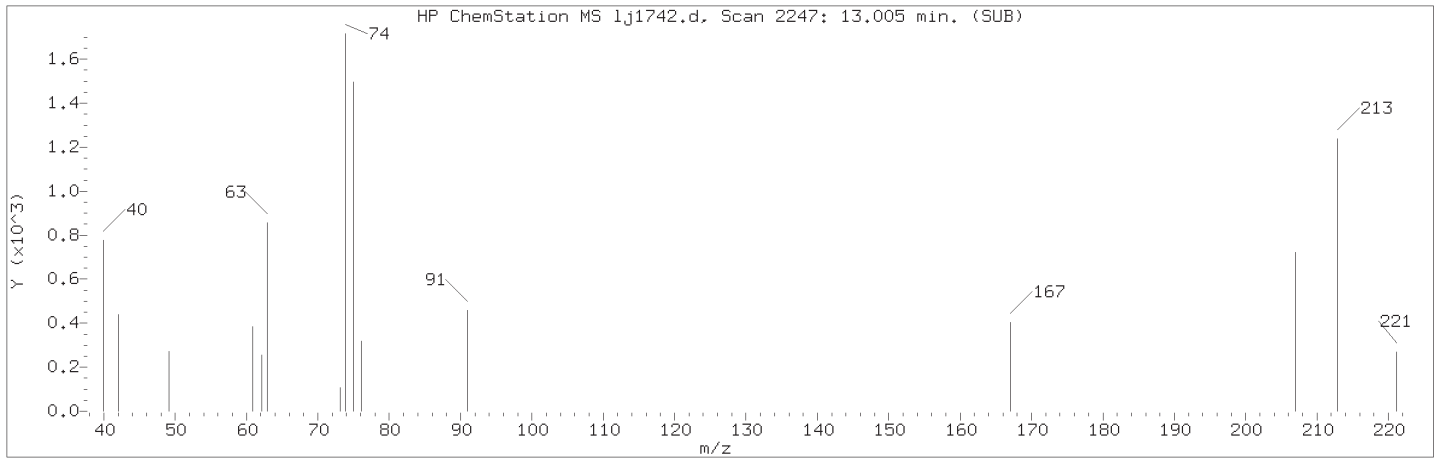
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

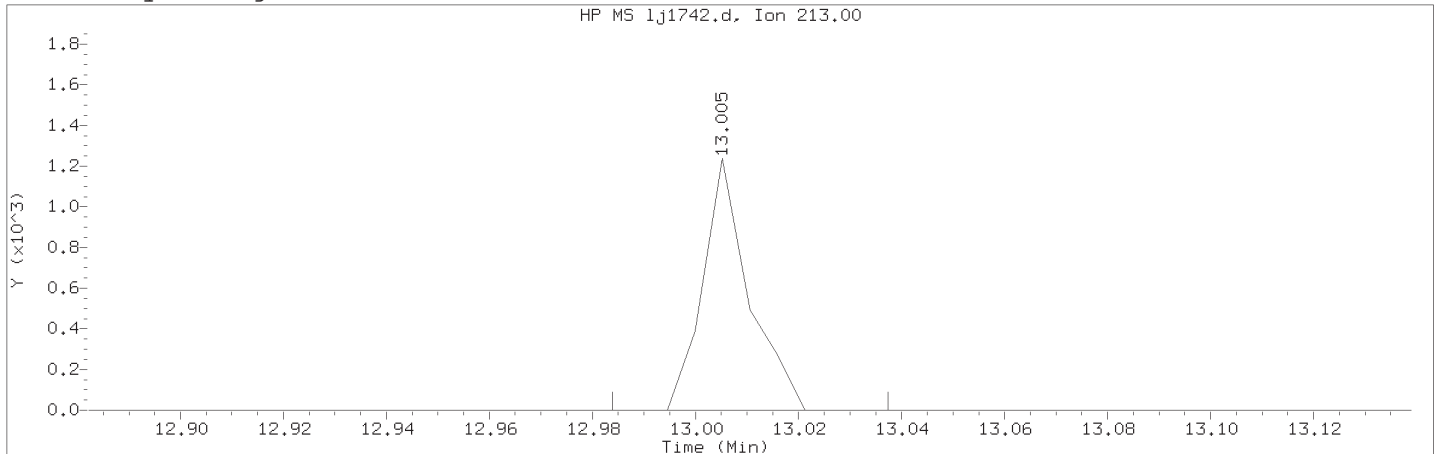
Lab Sample ID: RVSTD2648

Compound Number : 111  
Compound Name : 1,3-Dinitrobenzene  
Expected RT (minutes) : 11.422  
Quant Ion : 168.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

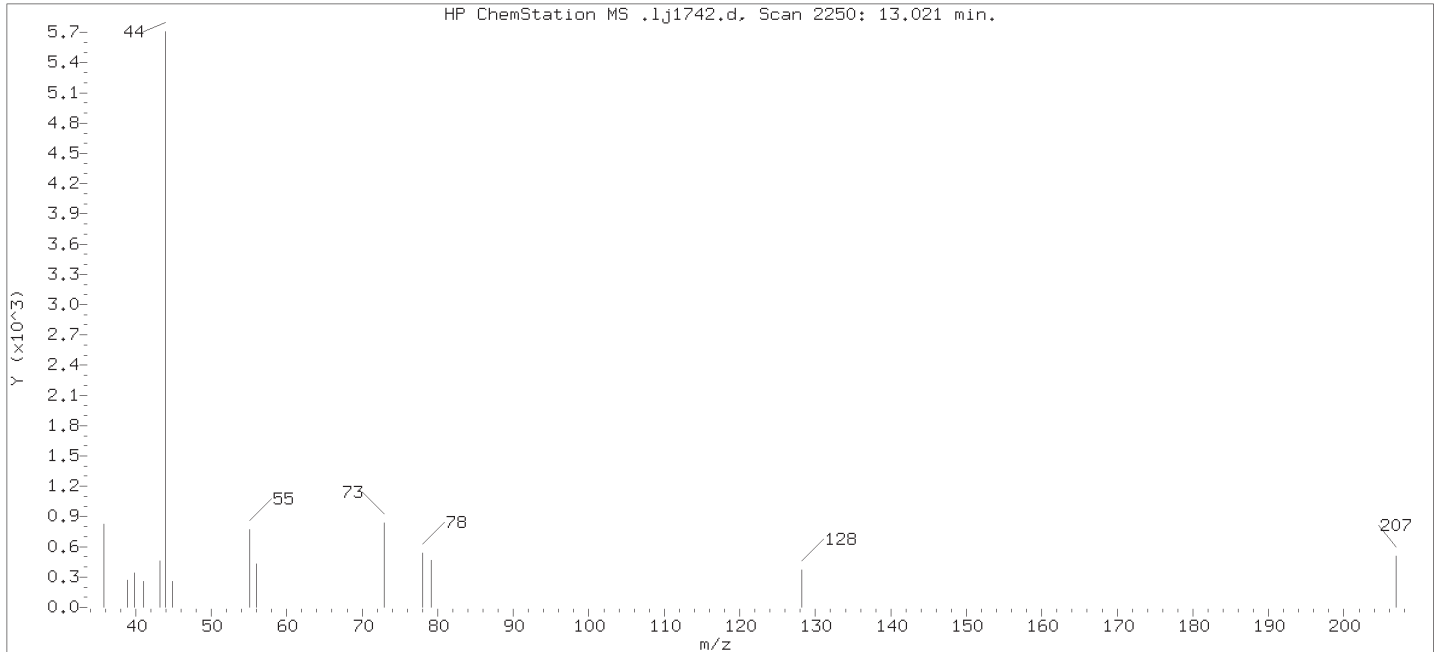
Compound Number    : 144  
Compound Name    : 1,3,5-Trinitrobenzene  
Scan Number    : 2247  
Retention Time (minutes)                                   : 13.005  
Quant Ion    : 213.00  
Area (flag)     : 767M  
On-Column Amount (ng/ul)                                 : 0.0779  
Integration start scan                                      : 2242                      Integration stop scan: 2252  
Y at integration start                                       : 0                              Y at integration end: 0

Reason for manual integration: missed peak

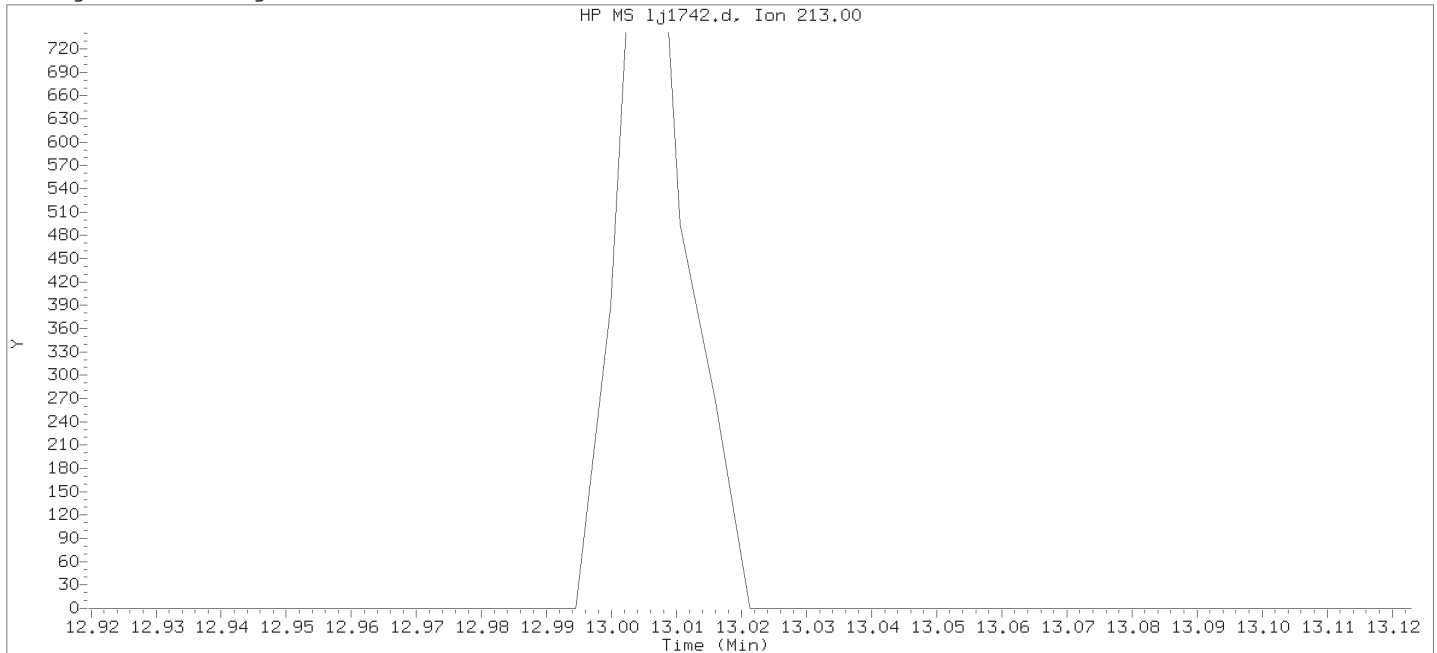
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

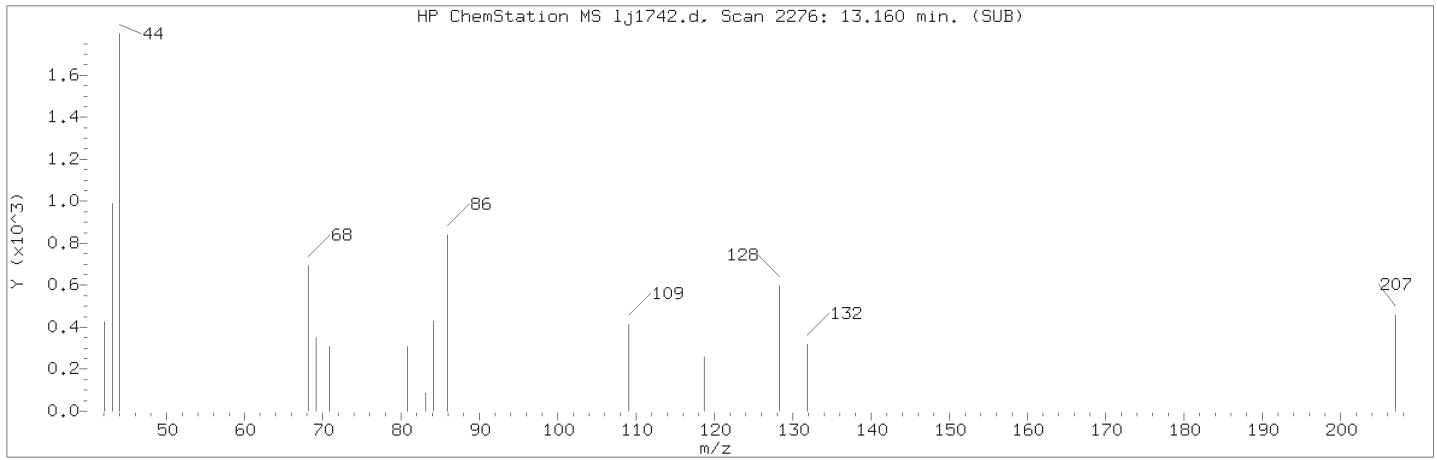
Sublist used: all1

Sample Name: SSTD0.125

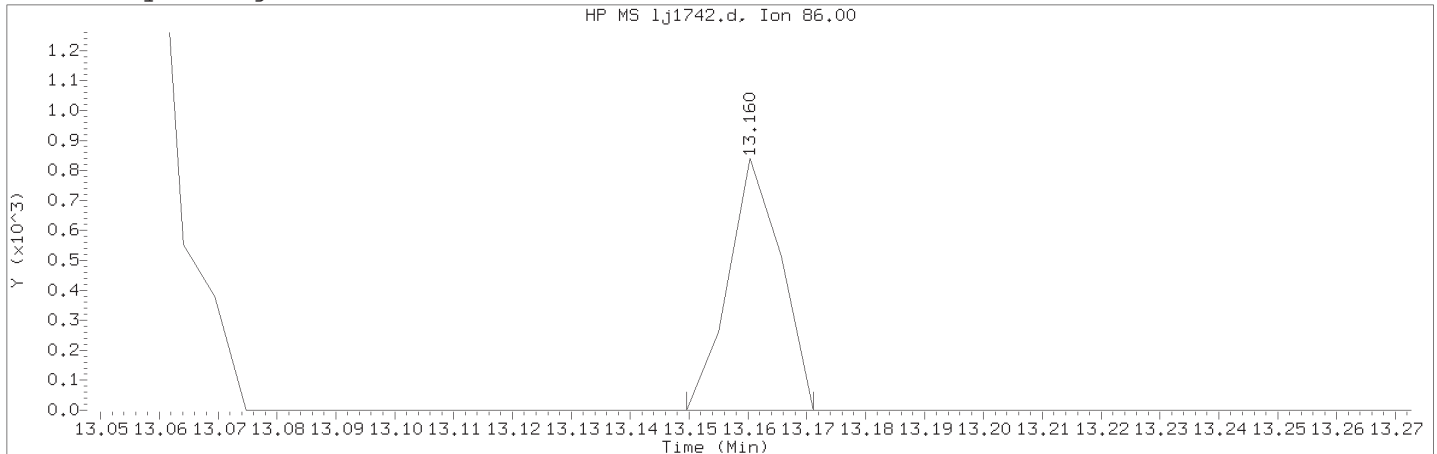
Lab Sample ID: RVSTD2648

Compound Number : 144  
Compound Name : 1,3,5-Trinitrobenzene  
Expected RT (minutes) : 13.021  
Quant Ion : 213.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 149  
Compound Name    : Diallate (peak 2)  
Scan Number    : 2276  
Retention Time (minutes)                                    : 13.160  
Quant Ion    : 86.00  
Area (flag)     : 518M  
On-Column Amount (ng/ul)                                 : 0.0100  
Integration start scan                                       : 2273                      Integration stop scan: 2277  
Y at integration start                                        : 0                            Y at integration end: 0

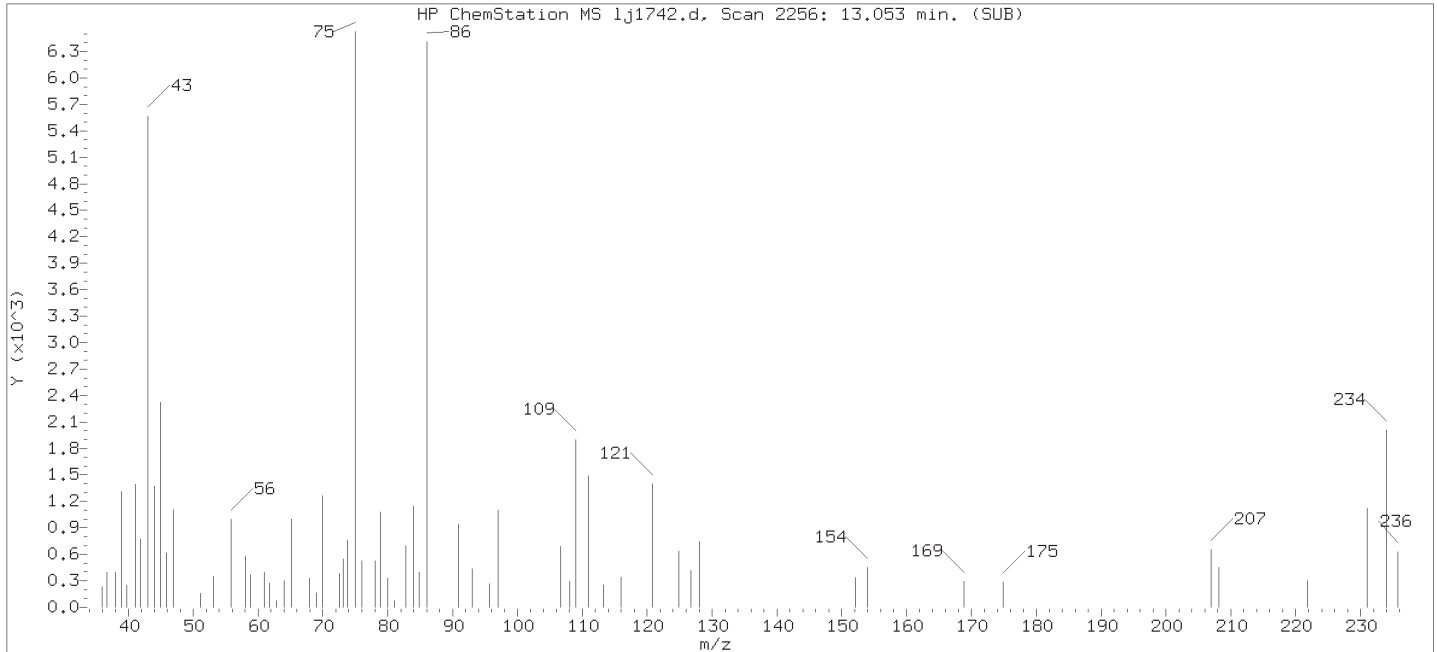
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

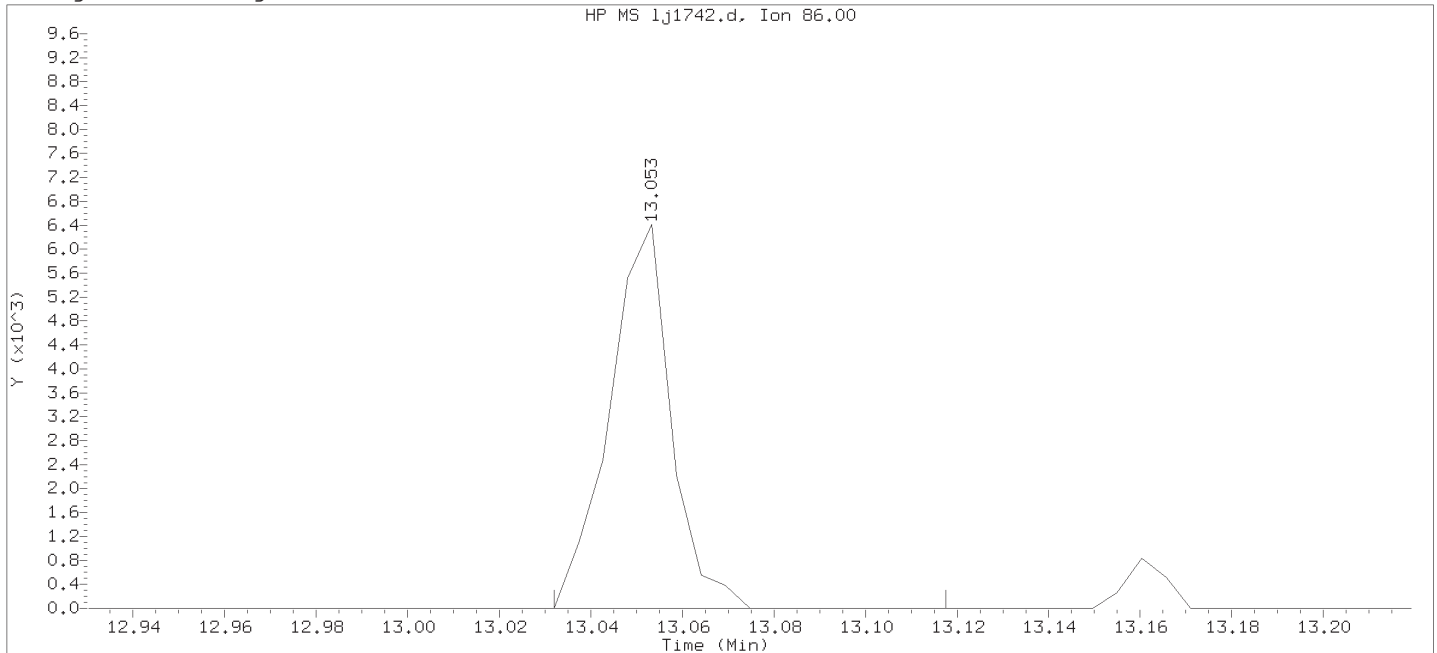
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

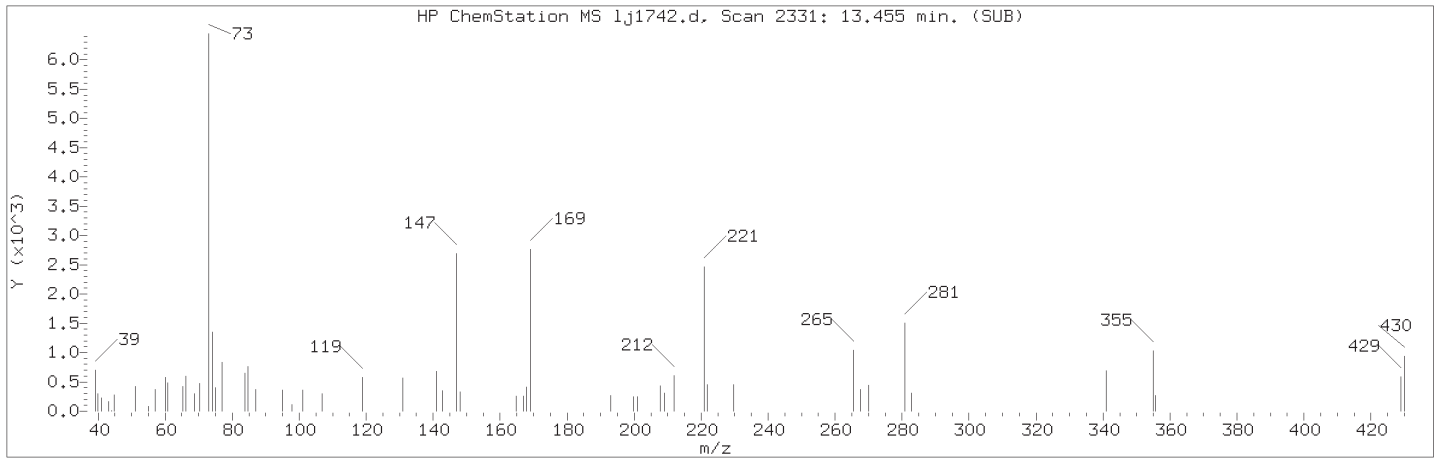
Sublist used: all1

Sample Name: SSTD0.125

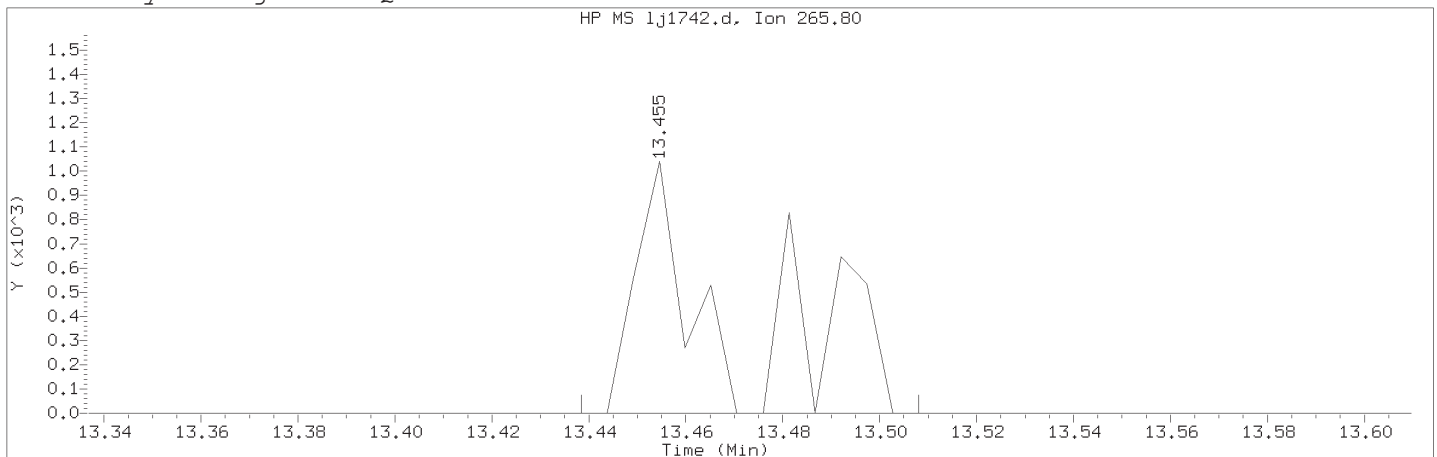
Lab Sample ID: RVSTD2648

Compound Number : 149  
 Compound Name : Diallate (peak 2)  
 Scan Number : 2256  
 Retention Time (minutes) : 13.053  
 Quant Ion : 86.00  
 Area : 5987  
 On-column Amount (ng/ul) : 0.1208  
 Integration start scan : 2251 Integration stop scan: 2267  
 Y at integration start : 0 Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

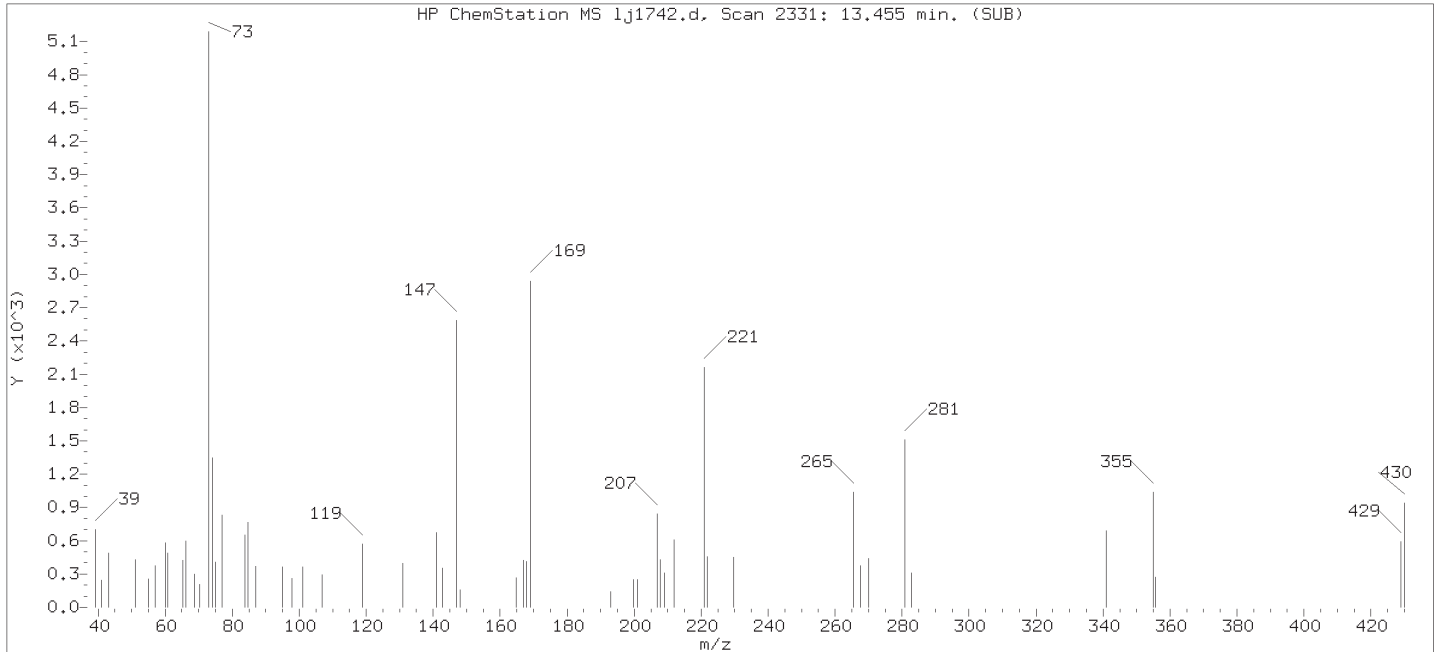
Compound Number    : 154  
Compound Name    : Pentachlorophenol  
Scan Number    : 2331  
Retention Time (minutes)                                   : 13.455  
Quant Ion    : 266.00  
Area (flag)    : 1412M  
On-Column Amount (ng/ul)                                : 0.0746  
Integration start scan                                    : 2327                      Integration stop scan: 2340  
Y at integration start                                    : 0                           Y at integration end: 0

Reason for manual integration: improper integration

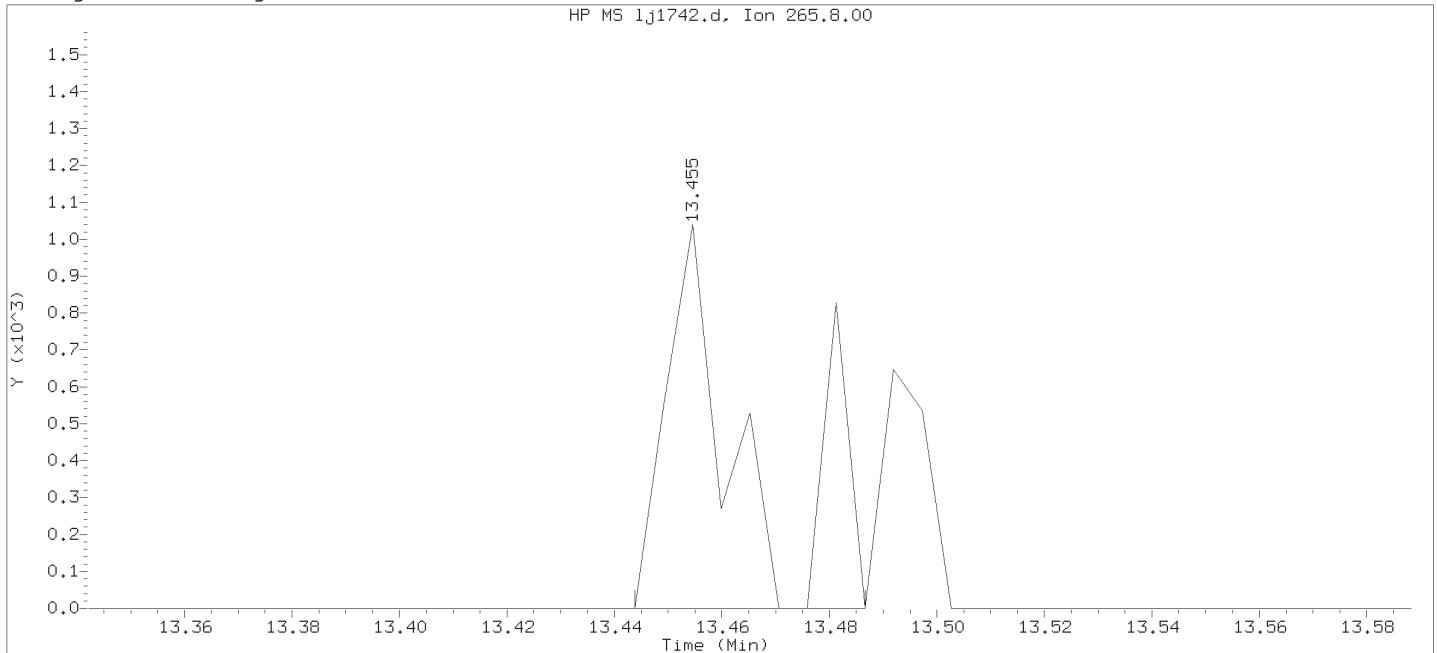
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
 Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all1

Calibration date and time: 29-OCT-2018 15:37

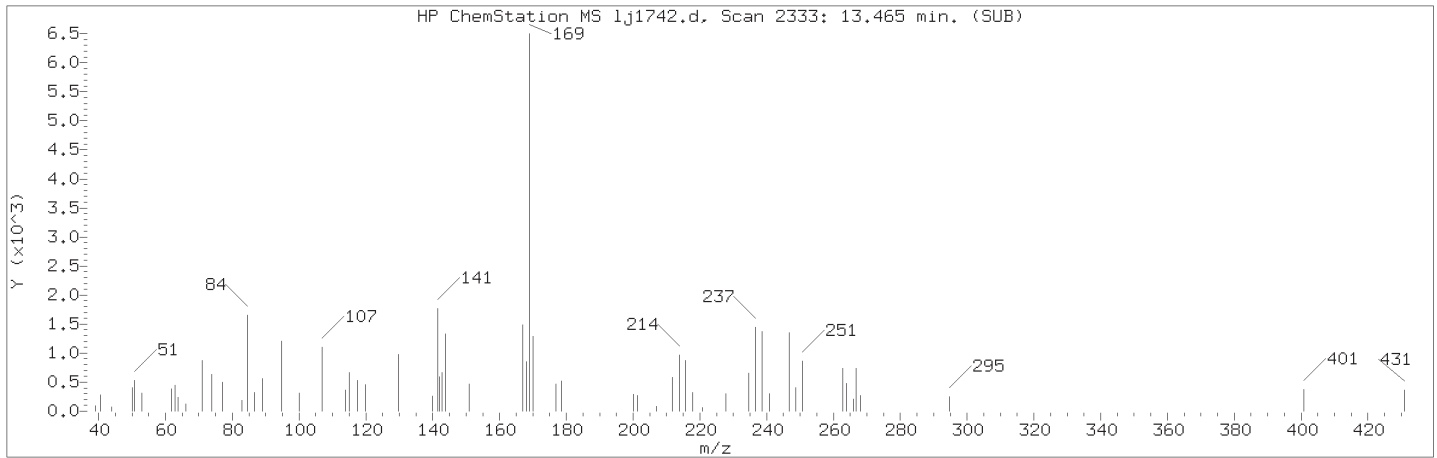
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

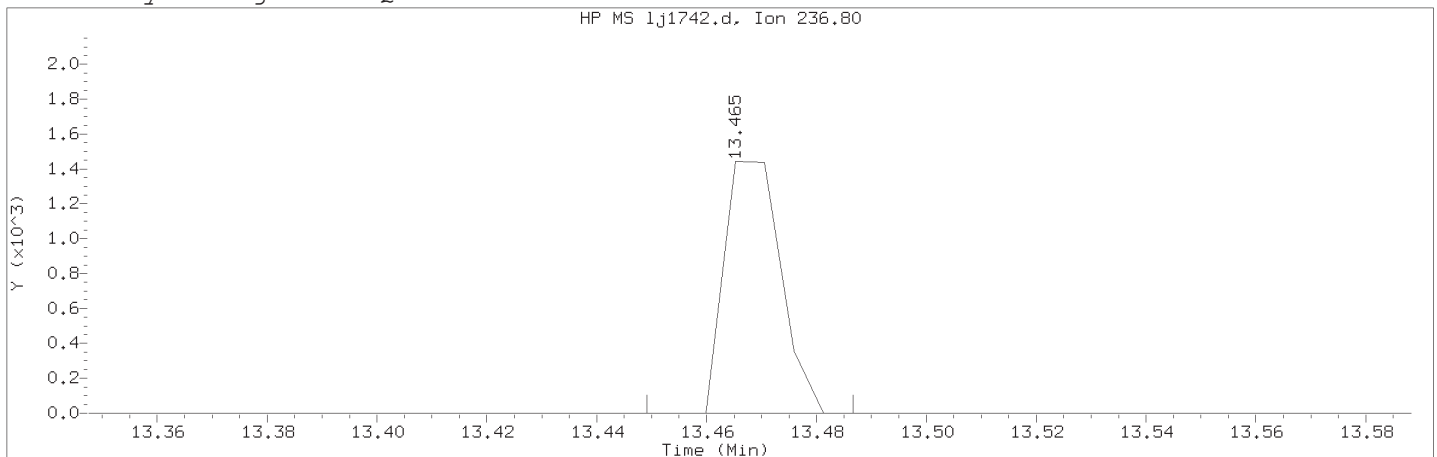
Lab Sample ID: RVSTD2648

Compound Number	: 154	
Compound Name	: Pentachlorophenol	
Scan Number	: 2331	
Retention Time (minutes)	: 13.455	
Quant Ion	: 266.00	
Area	: 1033	
On-column Amount (ng/ul)	: 0.0581	
Integration start scan	: 2328	Integration stop scan: 2336
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

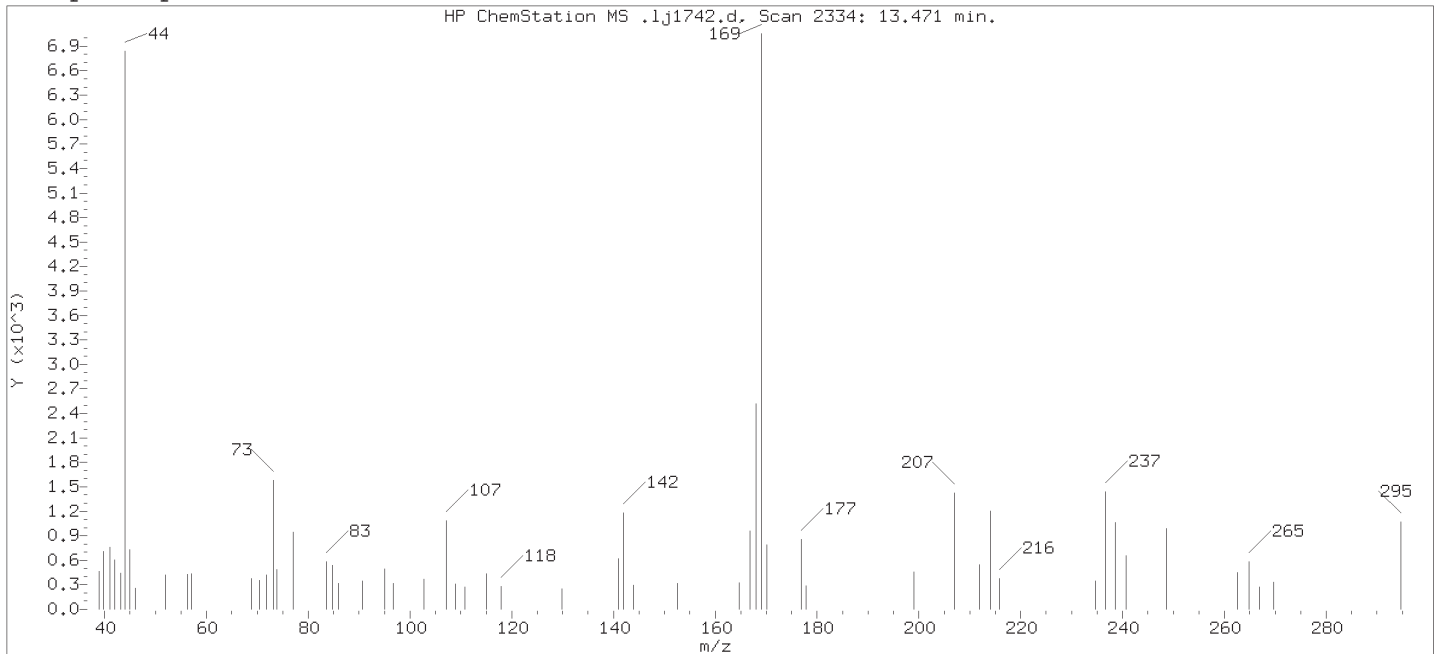
Compound Number    : 156  
Compound Name    : Pentachloronitrobenzene  
Scan Number    : 2333  
Retention Time (minutes)                                   : 13.465  
Quant Ion    : 237.00  
Area (flag)     : 1038M  
On-Column Amount (ng/ul)                                : 0.0720  
Integration start scan                                    : 2329                      Integration stop scan: 2336  
Y at integration start                                    : 0                           Y at integration end: 0

Reason for manual integration: missed peak

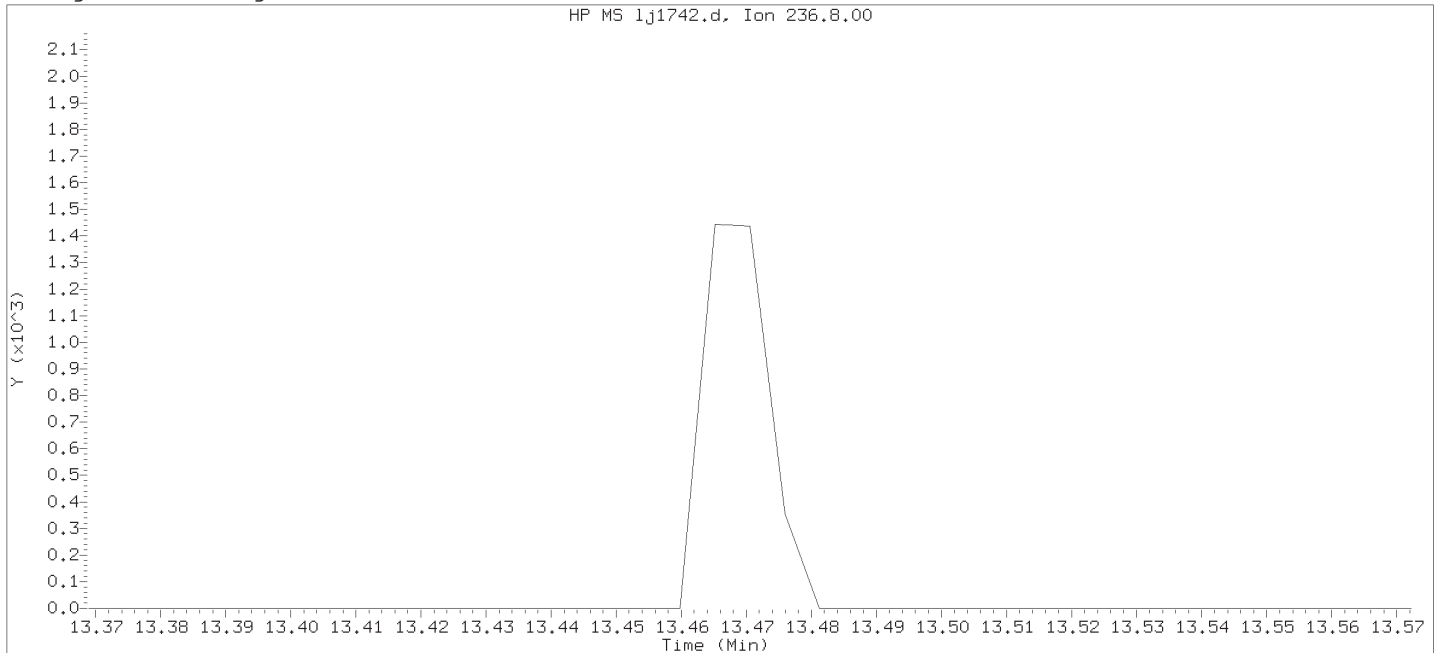
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



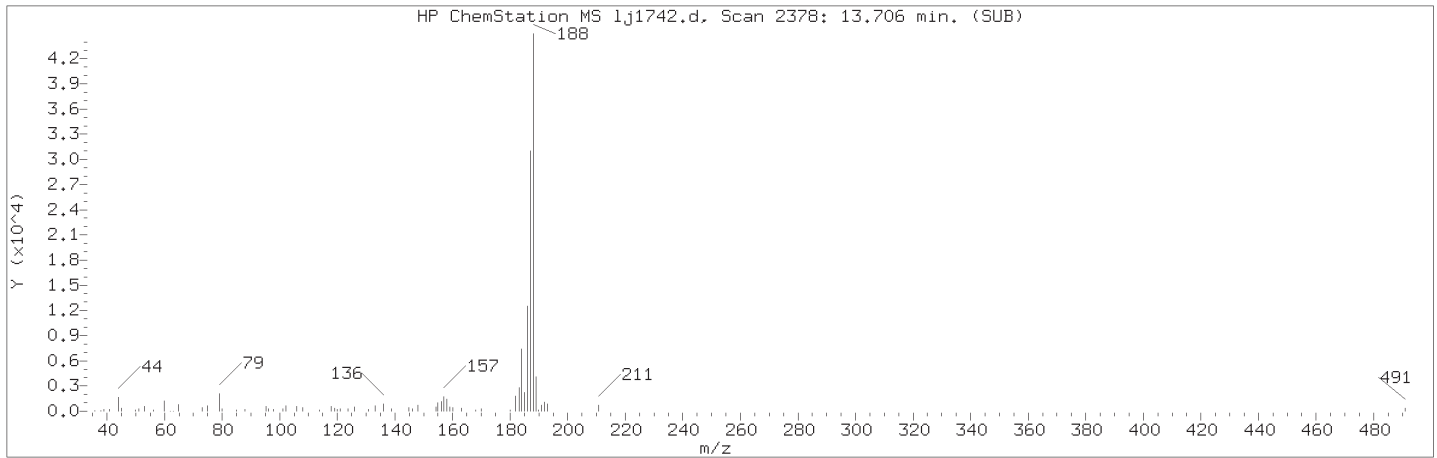
Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

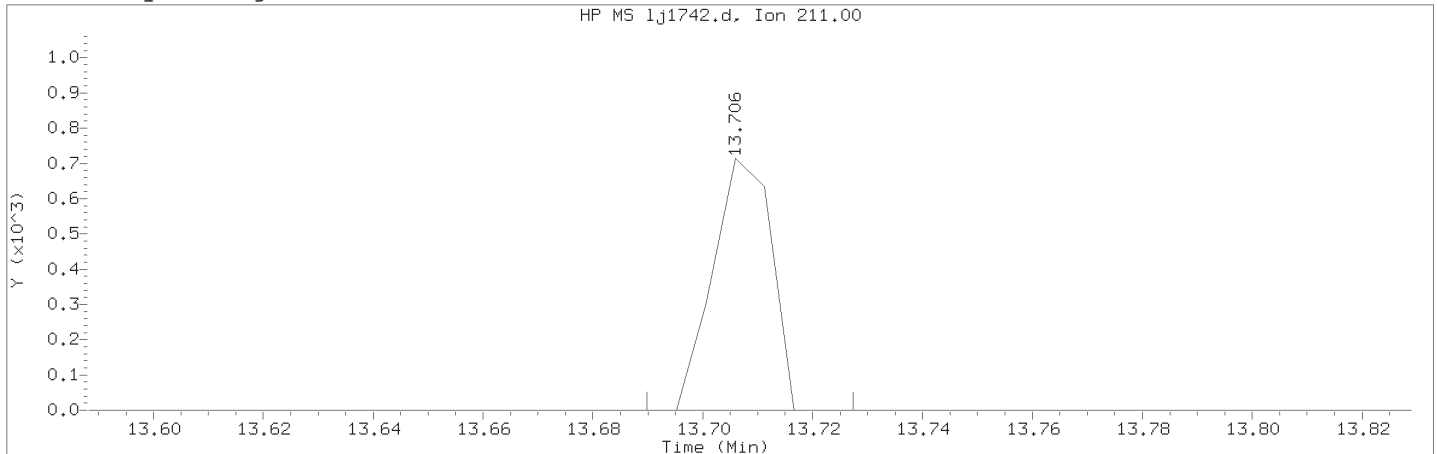
Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number                      : 156  
Compound Name                         : Pentachloronitrobenzene  
Expected RT (minutes)                : 13.471  
Quant Ion                                : 237.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

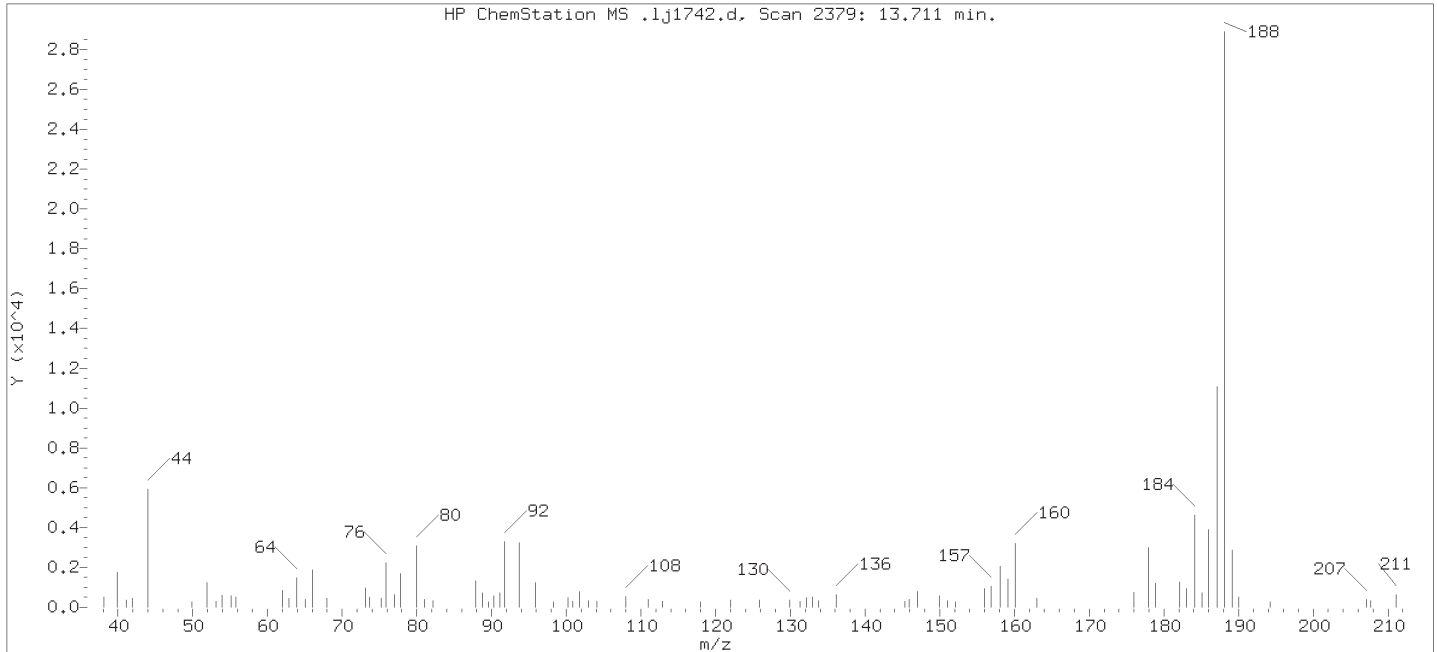
Compound Number                      : 159  
Compound Name                         : Dinoseb  
Scan Number                            : 2378  
Retention Time (minutes)             : 13.706  
Quant Ion                                : 211.00  
Area (flag)                             : 529M  
On-Column Amount (ng/ul)            : 0.0216  
Integration start scan                : 2374                      Integration stop scan: 2381  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: missed peak

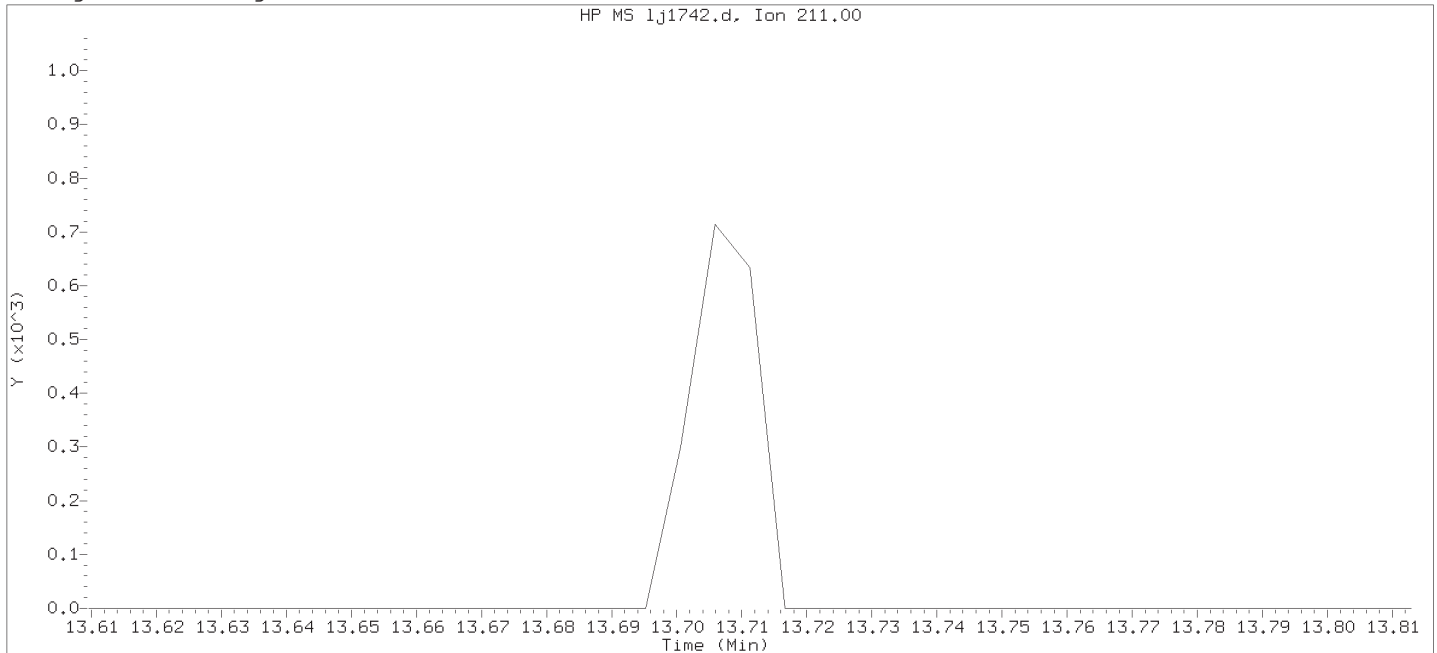
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

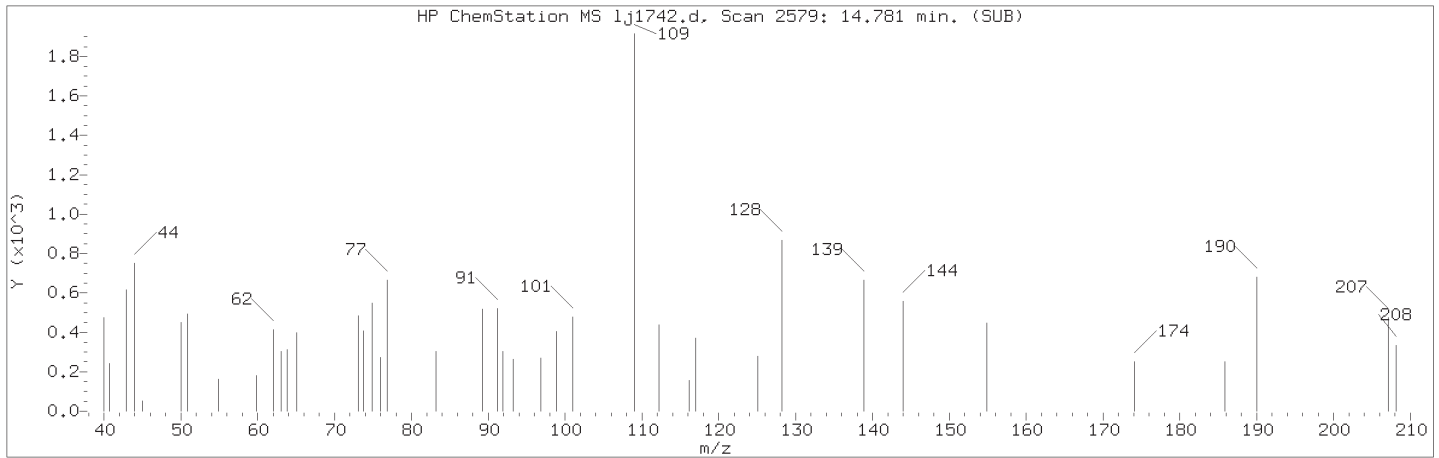
Sublist used: all1

Sample Name: SSTD0.125

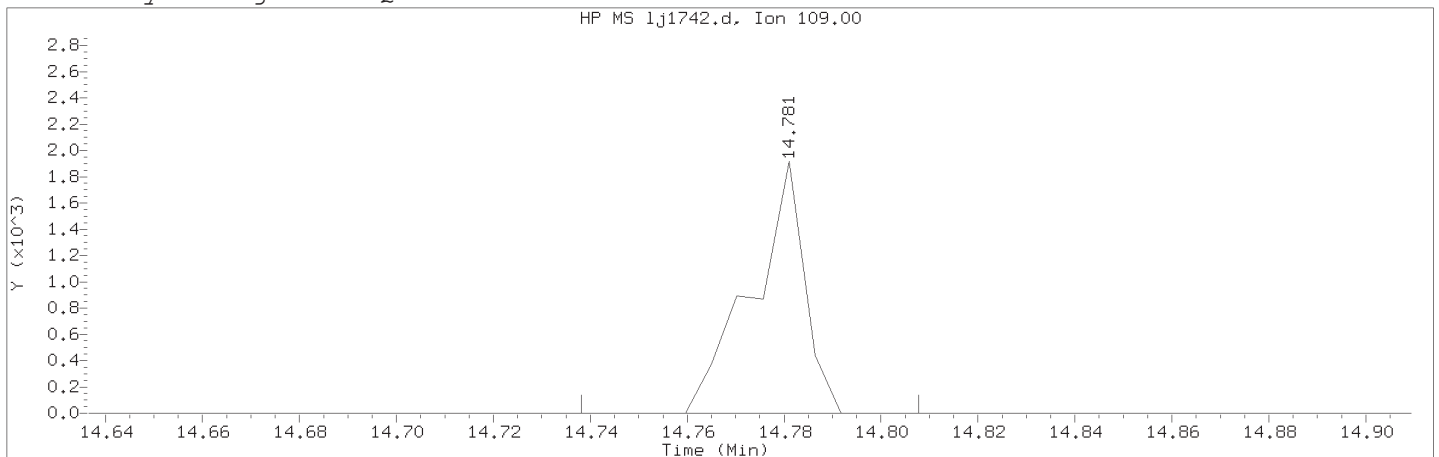
Lab Sample ID: RVSTD2648

Compound Number : 159  
Compound Name : Dinoseb  
Expected RT (minutes) : 13.711  
Quant Ion : 211.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 172  
Compound Name     : Parathion  
Scan Number    : 2579  
Retention Time (minutes)                                   : 14.781  
Quant Ion    : 109.00  
Area (flag)     : 1441M  
On-Column Amount (ng/ul)                                 : 0.0601  
Integration start scan                                       : 2570                      Integration stop scan: 2583  
Y at integration start                                       : 0                            Y at integration end: 0

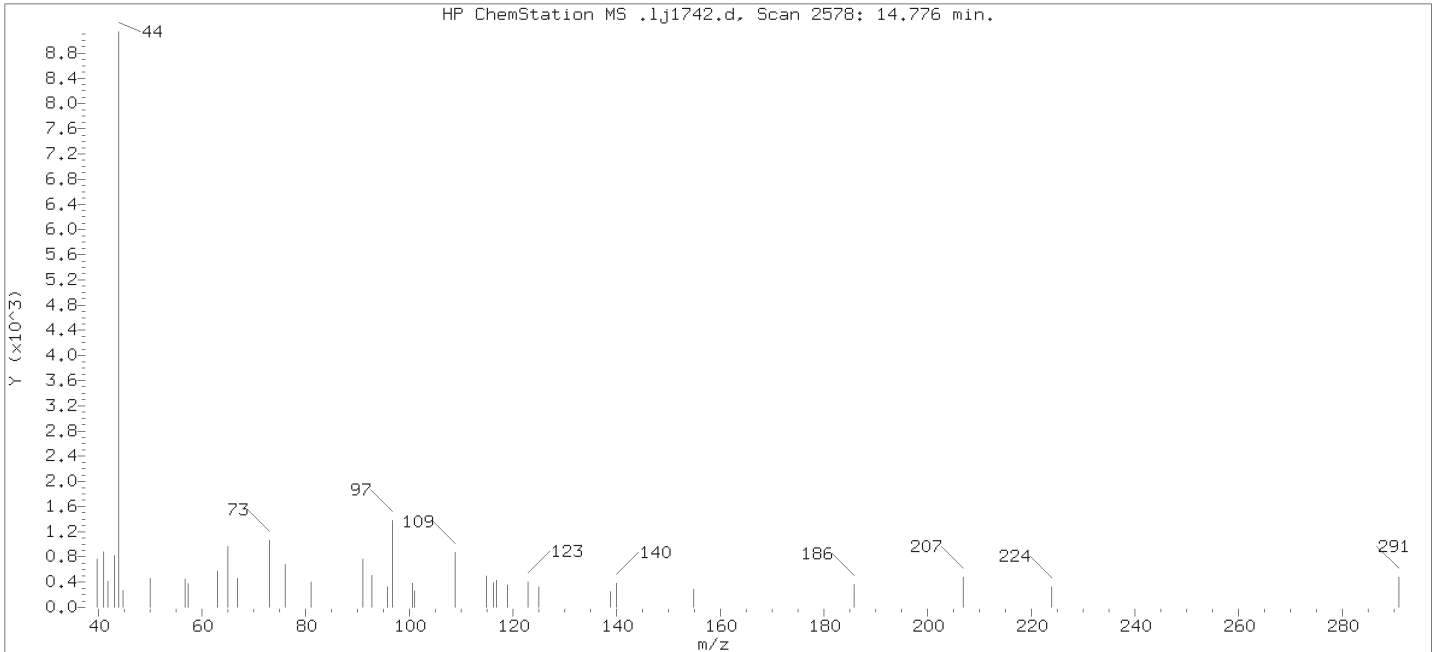
Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

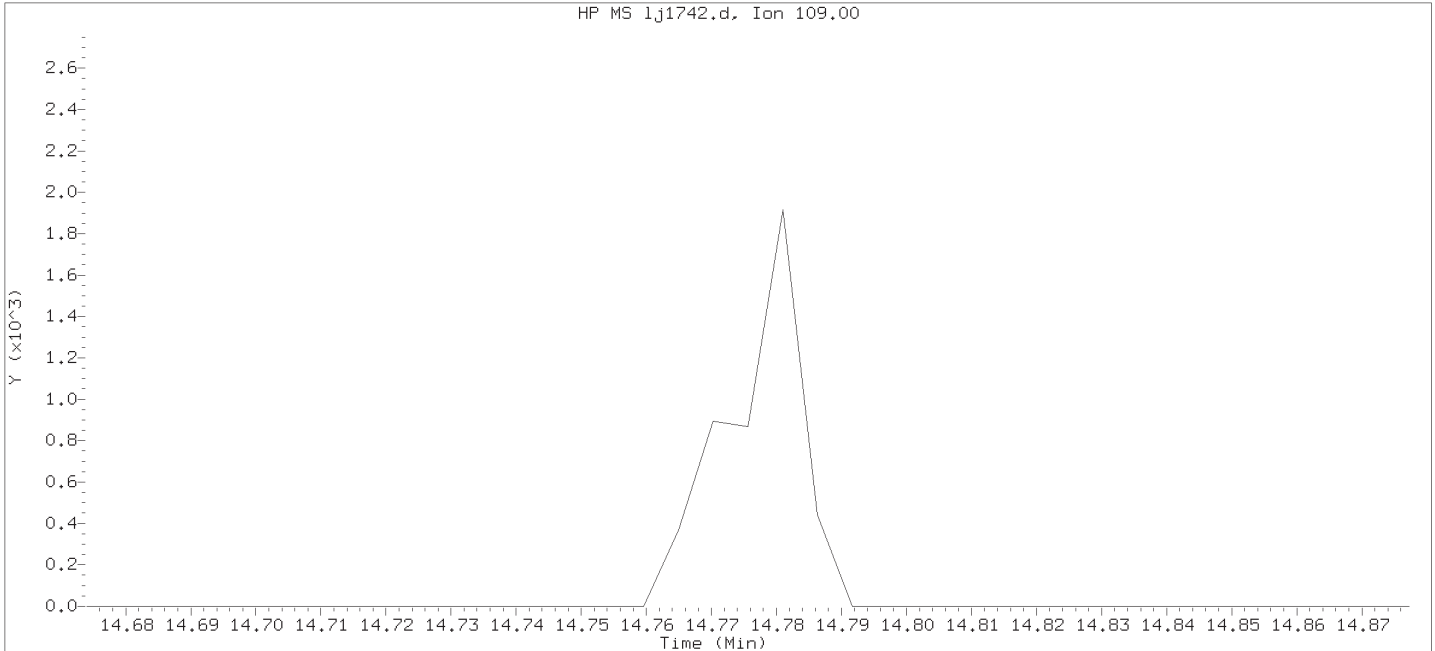
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

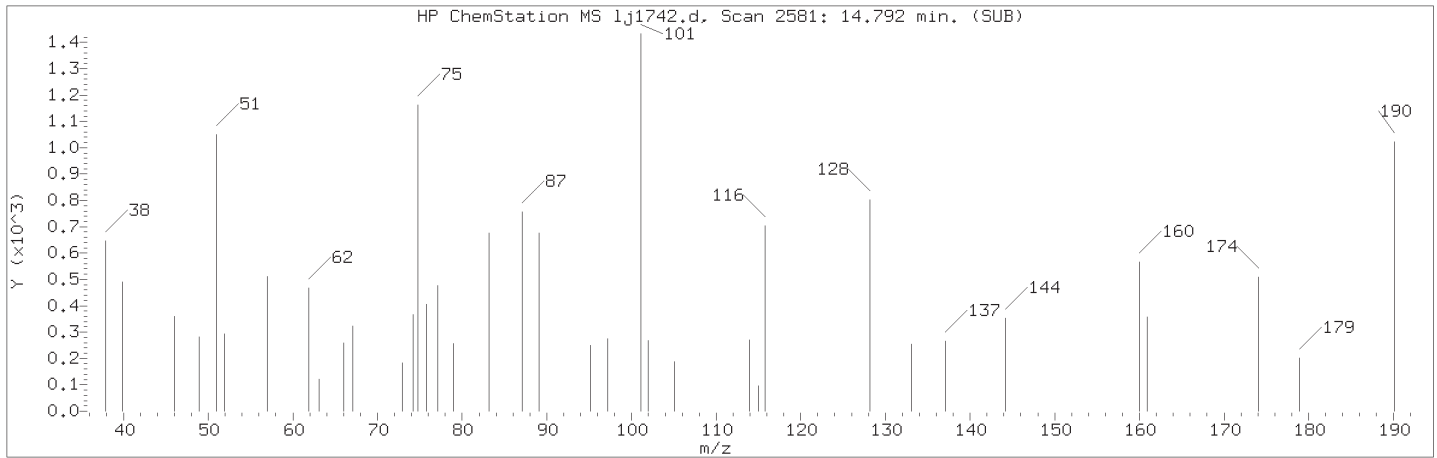
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

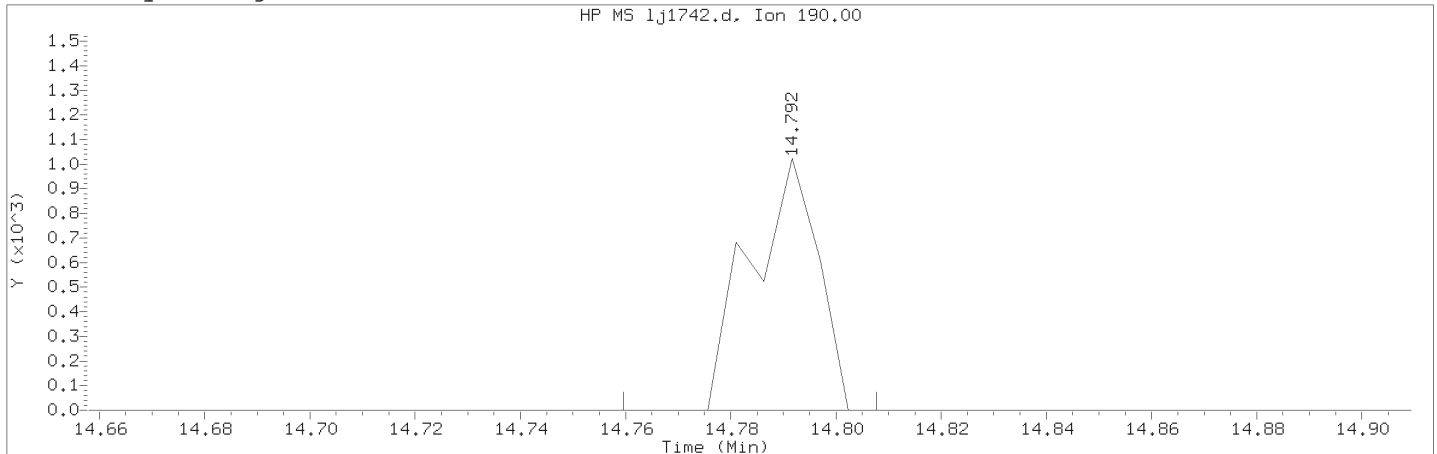
Lab Sample ID: RVSTD2648

Compound Number : 172  
Compound Name : Parathion  
Expected RT (minutes) : 14.776  
Quant Ion : 109.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

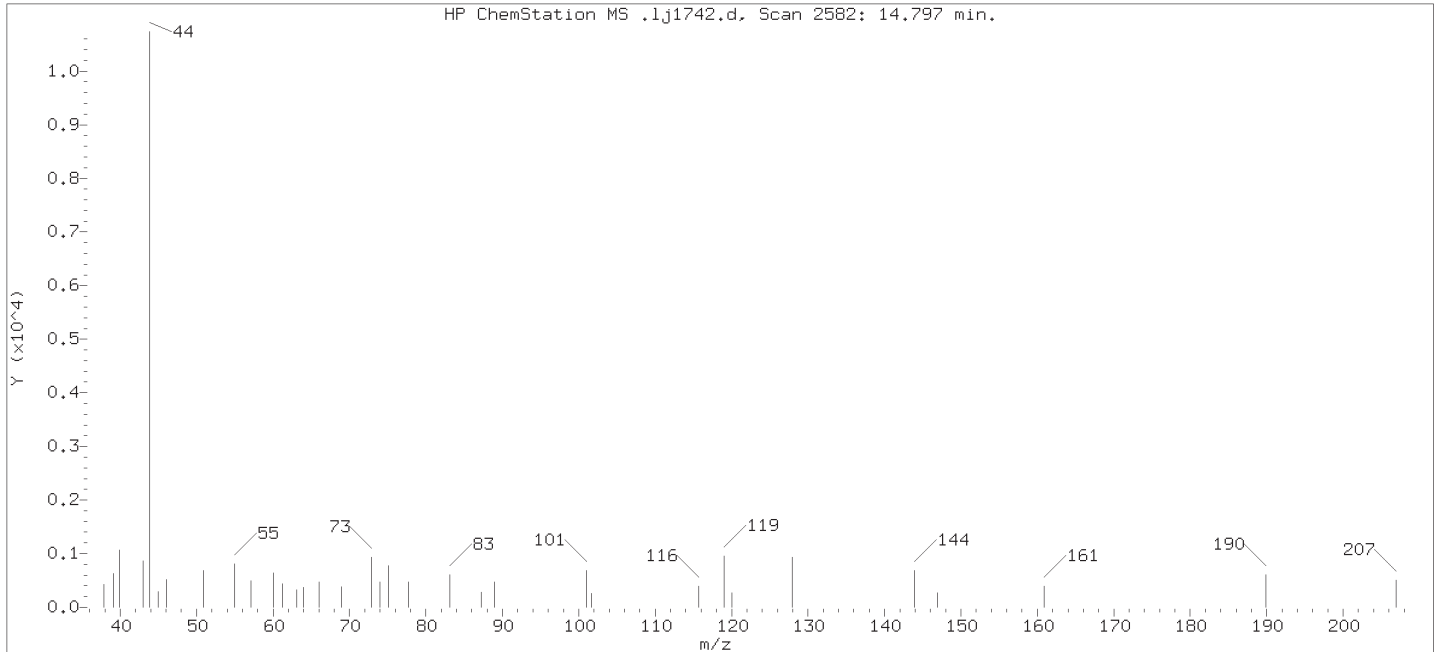
Compound Number    : 173  
Compound Name    : 4-Nitroquinoline-1-oxide  
Scan Number    : 2581  
Retention Time (minutes)                                   : 14.792  
Quant Ion    : 190.00  
Area (flag)    : 909M  
On-Column Amount (ng/ul)                                 : 0.0853  
Integration start scan                                      : 2574                      Integration stop scan: 2583  
Y at integration start                                      : 0                              Y at integration end: 0

Reason for manual integration: missed peak

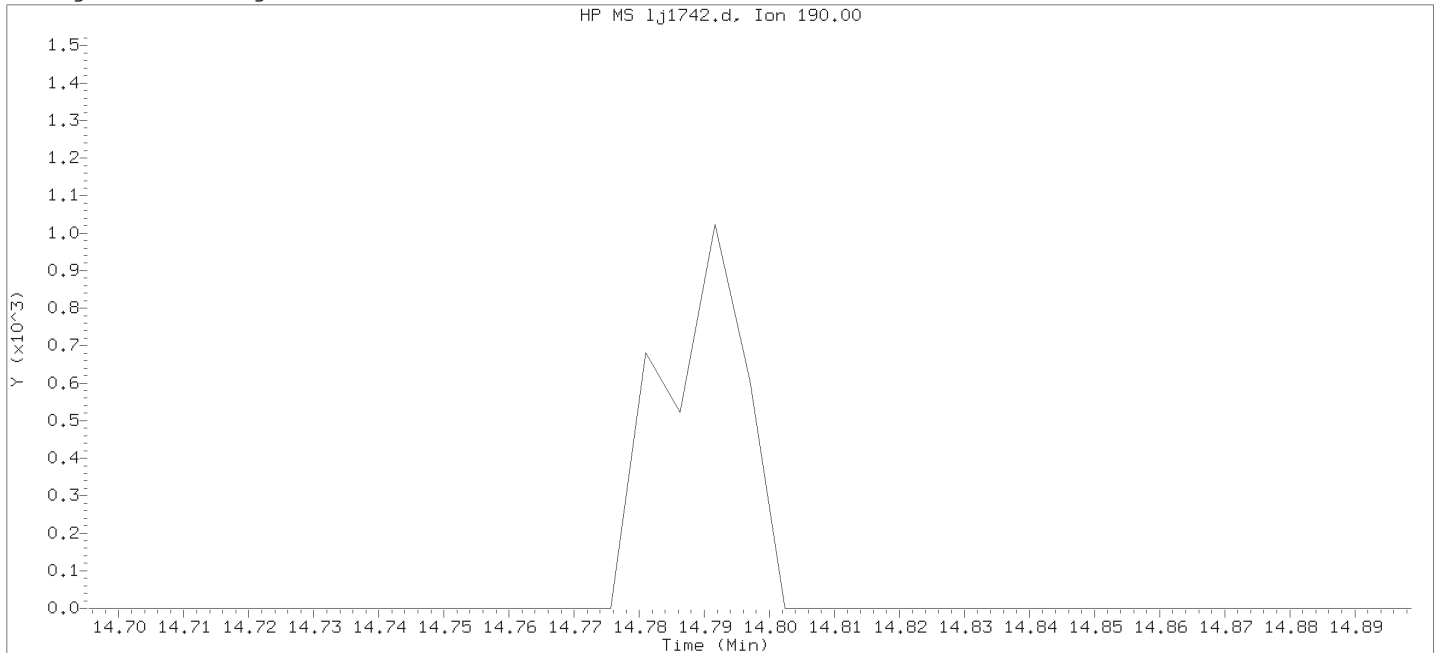
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

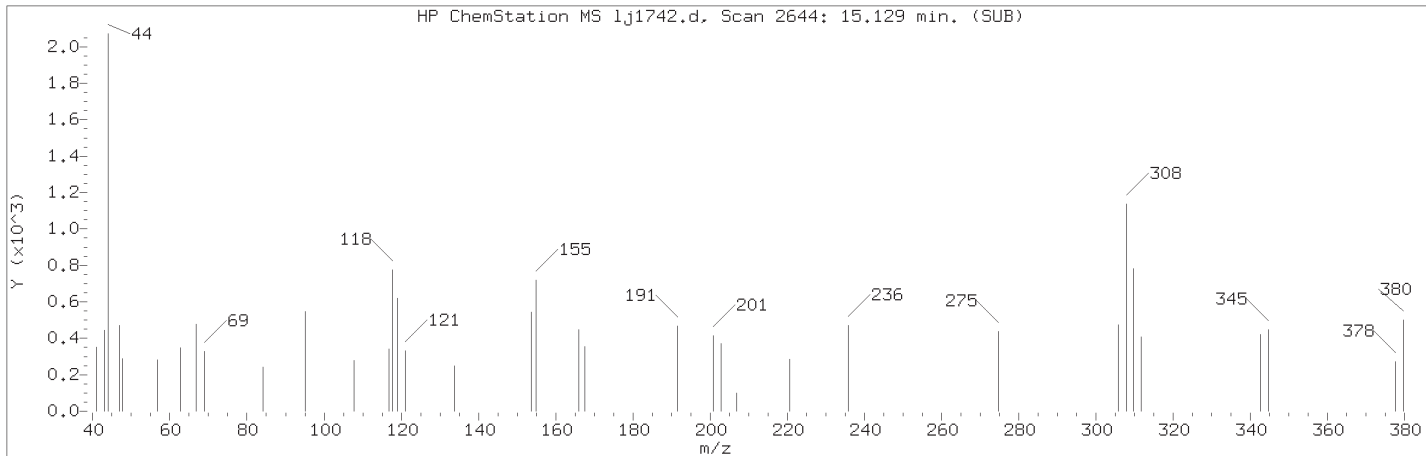
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

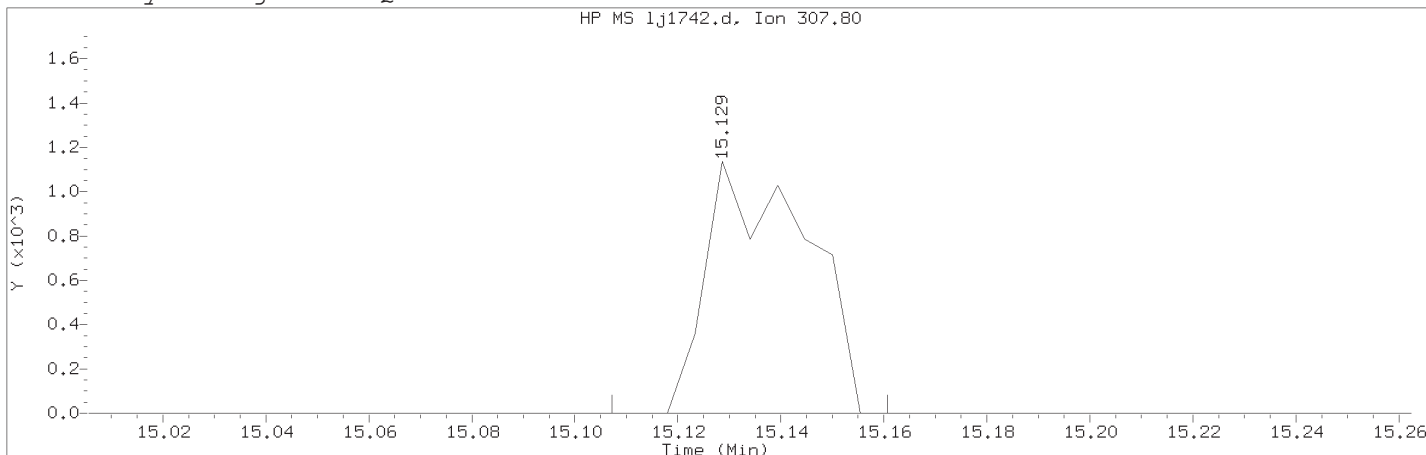
Lab Sample ID: RVSTD2648

Compound Number           : 173  
Compound Name             : 4-Nitroquinoline-1-oxide  
Expected RT (minutes)     : 14.797  
Quant Ion                  : 190.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

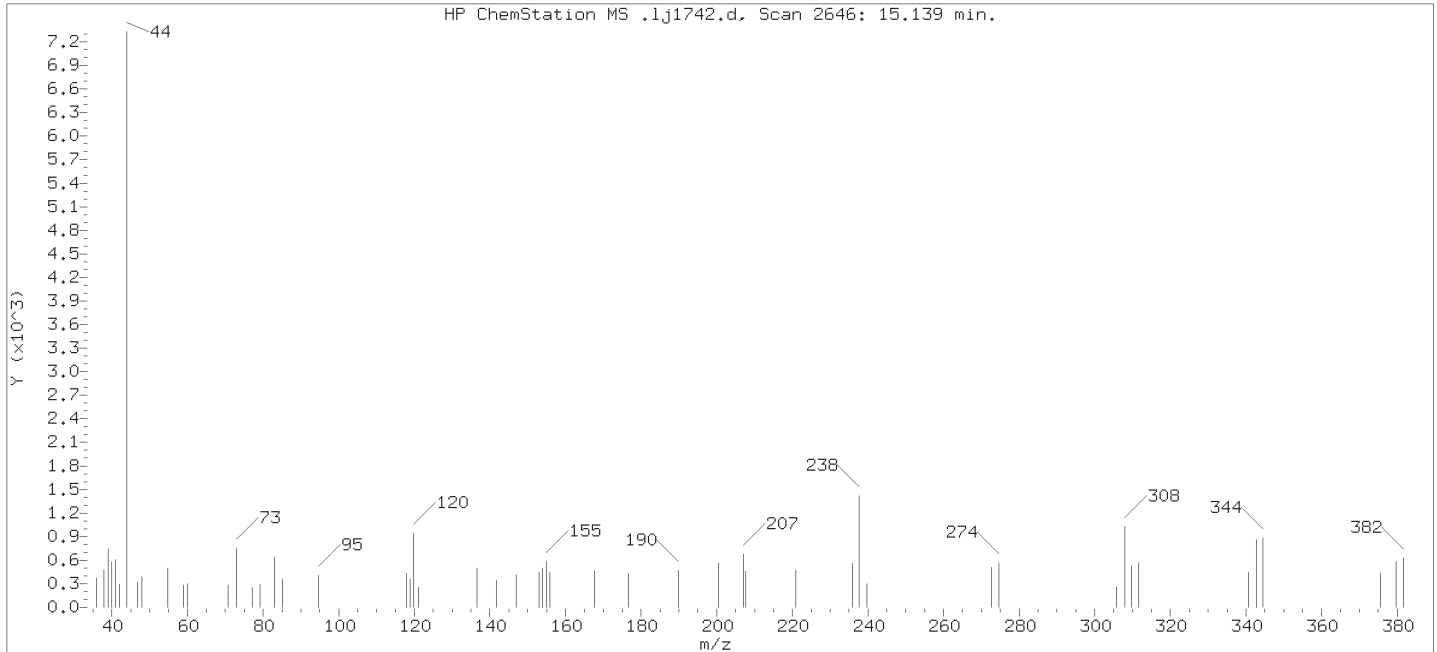
Compound Number    : 174  
Compound Name    : Octachlorostyrene  
Scan Number    : 2644  
Retention Time (minutes)                                    : 15.129  
Quant Ion    : 308.00  
Area (flag)     : 1543M  
On-Column Amount (ng/ul)                                   : 0.1395  
Integration start scan                                        : 2639                      Integration stop scan: 2649  
Y at integration start                                        : 0                            Y at integration end: 0

Reason for manual integration: missed peak

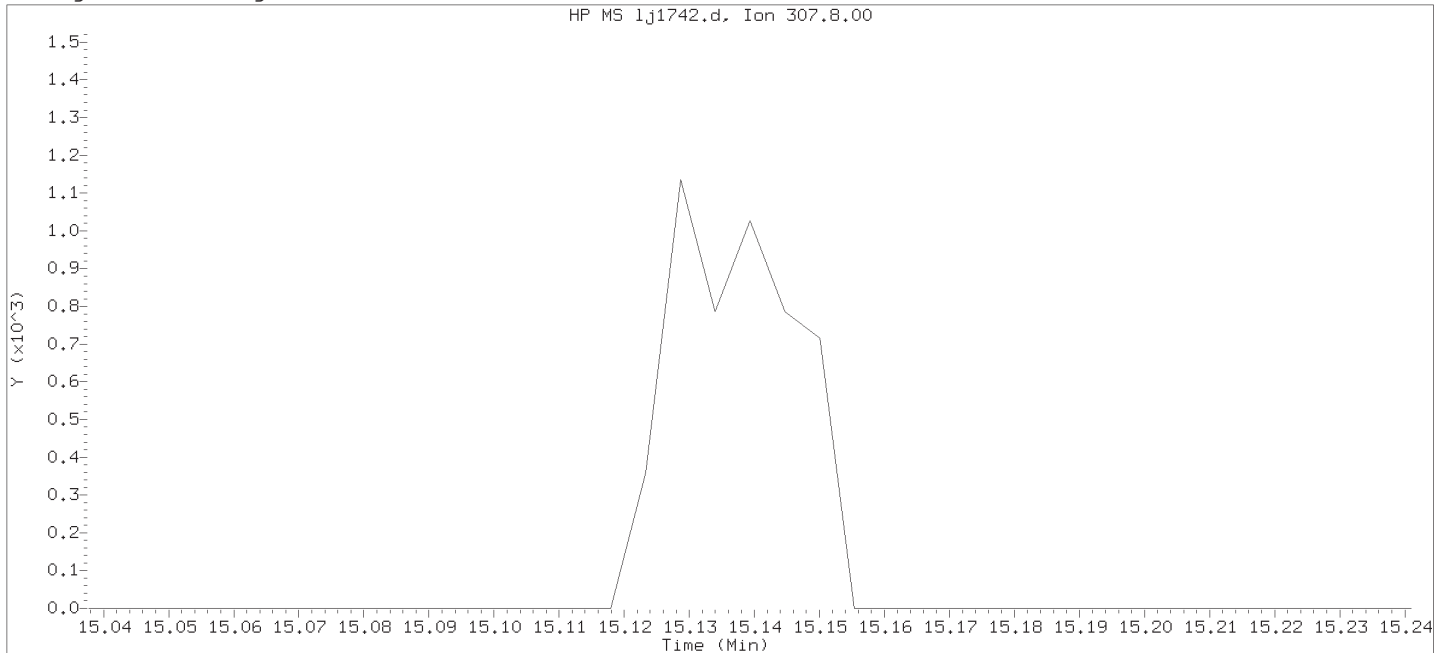
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

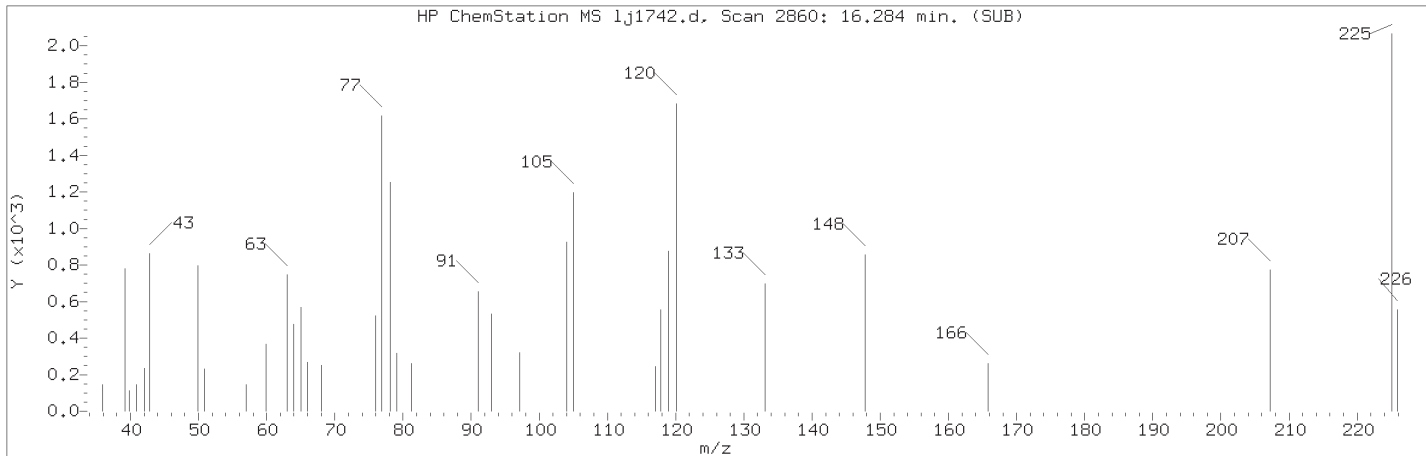
Sublist used: all1

Sample Name: SSTD0.125

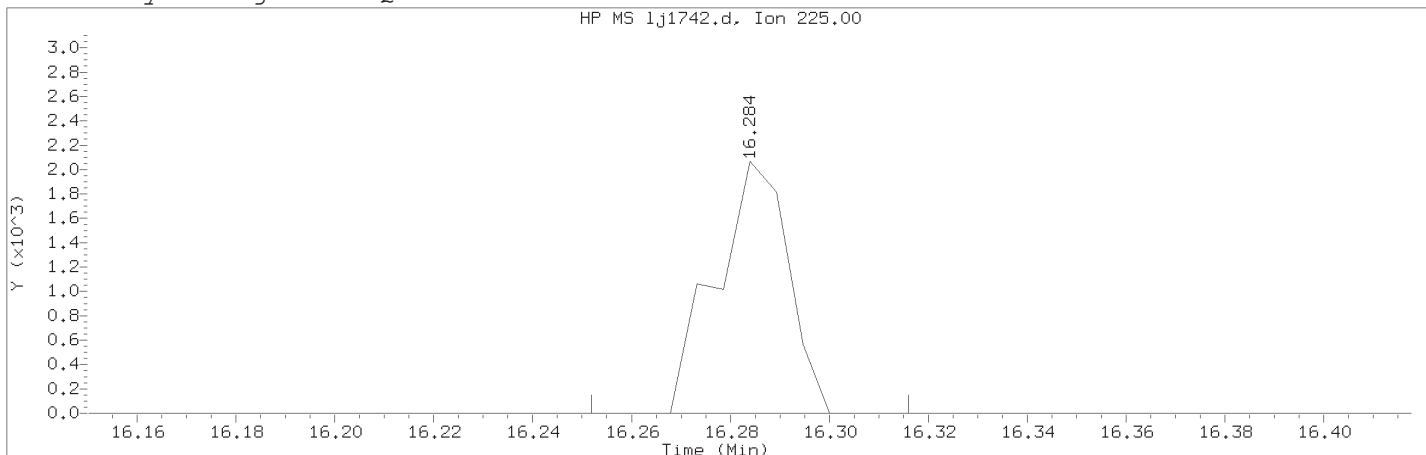
Lab Sample ID: RVSTD2648

Compound Number : 174  
Compound Name : Octachlorostyrene  
Expected RT (minutes) : 15.139  
Quant Ion : 308.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

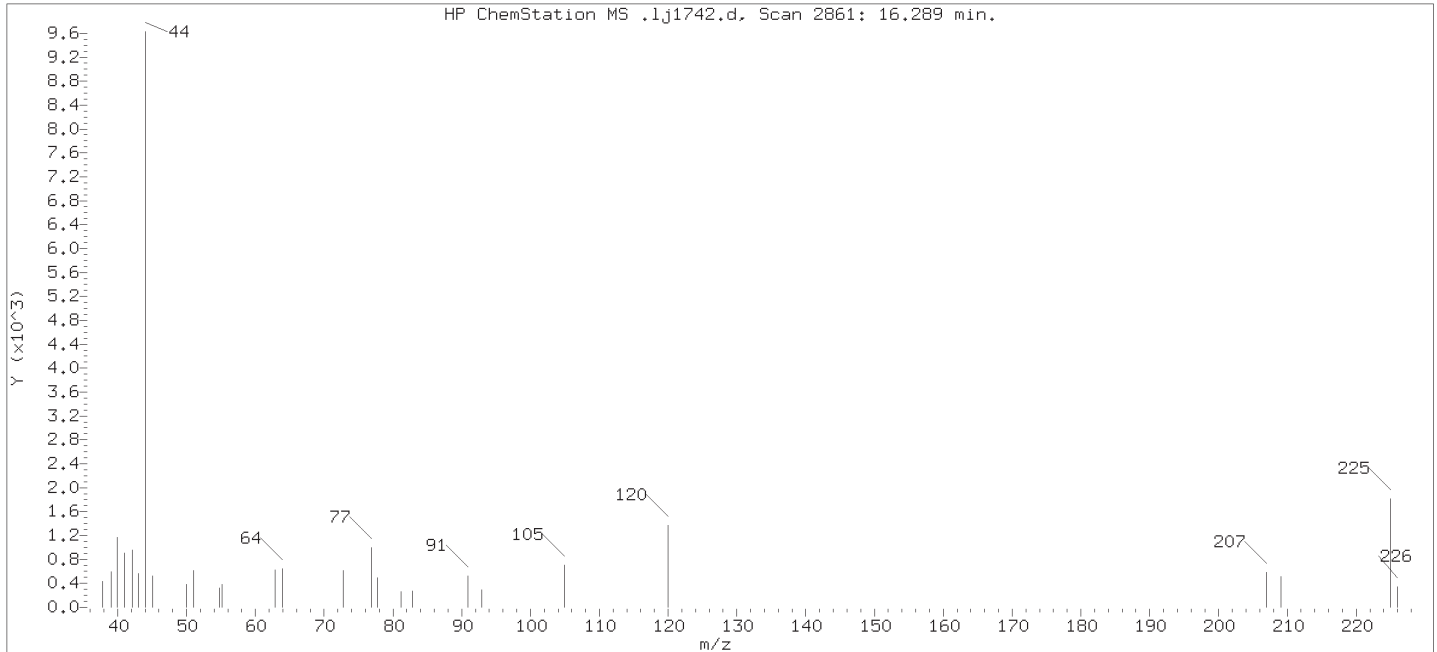
Compound Number    : 187  
Compound Name     : p-Dimethylaminoazobenzene  
Scan Number    : 2860  
Retention Time (minutes)                                   : 16.284  
Quant Ion    : 225.00  
Area (flag)     : 2093M  
On-Column Amount (ng/ul)                                 : 0.0743  
Integration start scan                                       : 2853                      Integration stop scan: 2865  
Y at integration start                                        : 0                              Y at integration end: 0

Reason for manual integration: missed peak

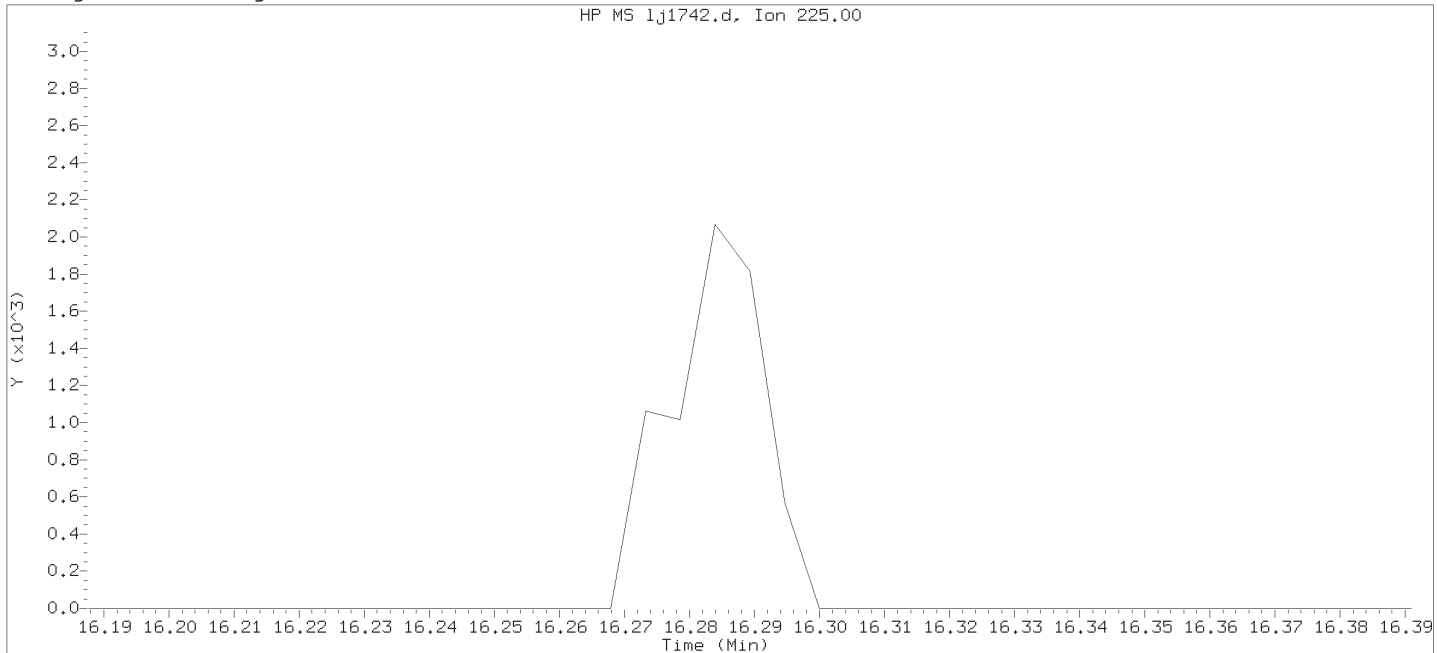
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d  
Injection date and time: 29-OCT-2018 00:56

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

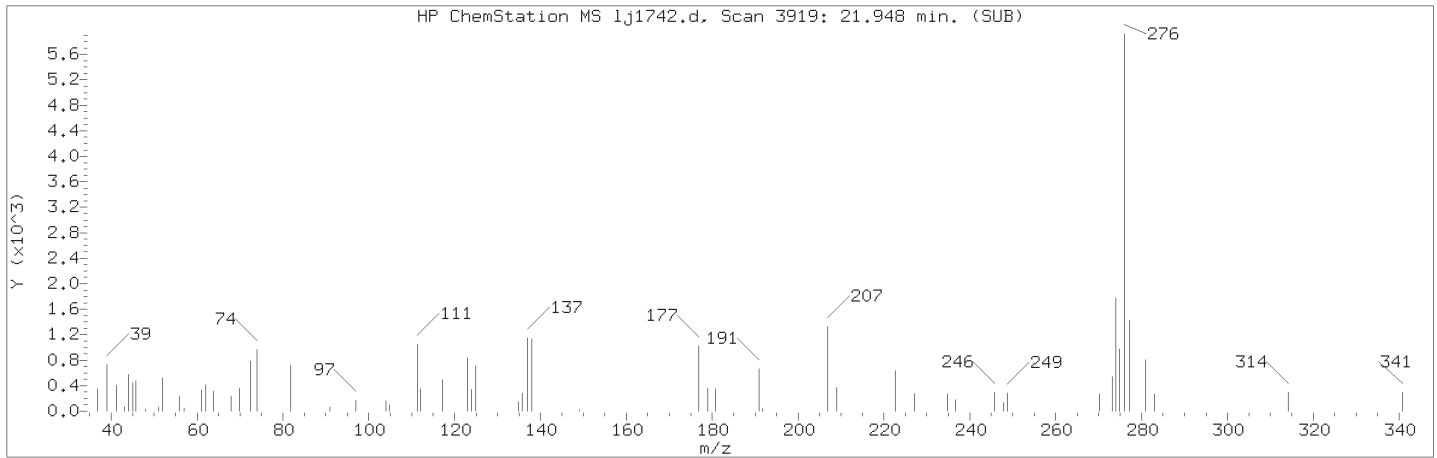
Sublist used: all1

Sample Name: SSTD0.125

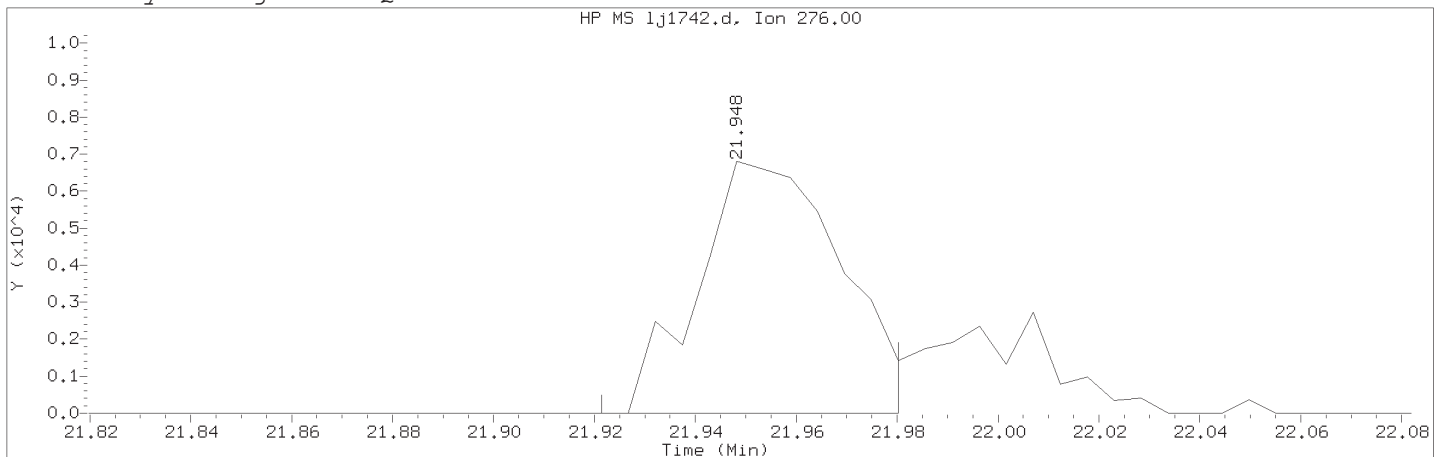
Lab Sample ID: RVSTD2648

Compound Number : 187  
Compound Name : p-Dimethylaminoazobenzene  
Expected RT (minutes) : 16.289  
Quant Ion : 225.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 224  
Compound Name    : Indeno(1,2,3-cd)pyrene  
Scan Number    : 3919  
Retention Time (minutes)                                   : 21.948  
Quant Ion    : 276.00  
Area (flag)    : 13468M  
On-Column Amount (ng/ul)                                 : 0.1134  
Integration start scan                                      : 3913                      Integration stop scan: 3924  
Y at integration start                                       : 0                              Y at integration end: 0

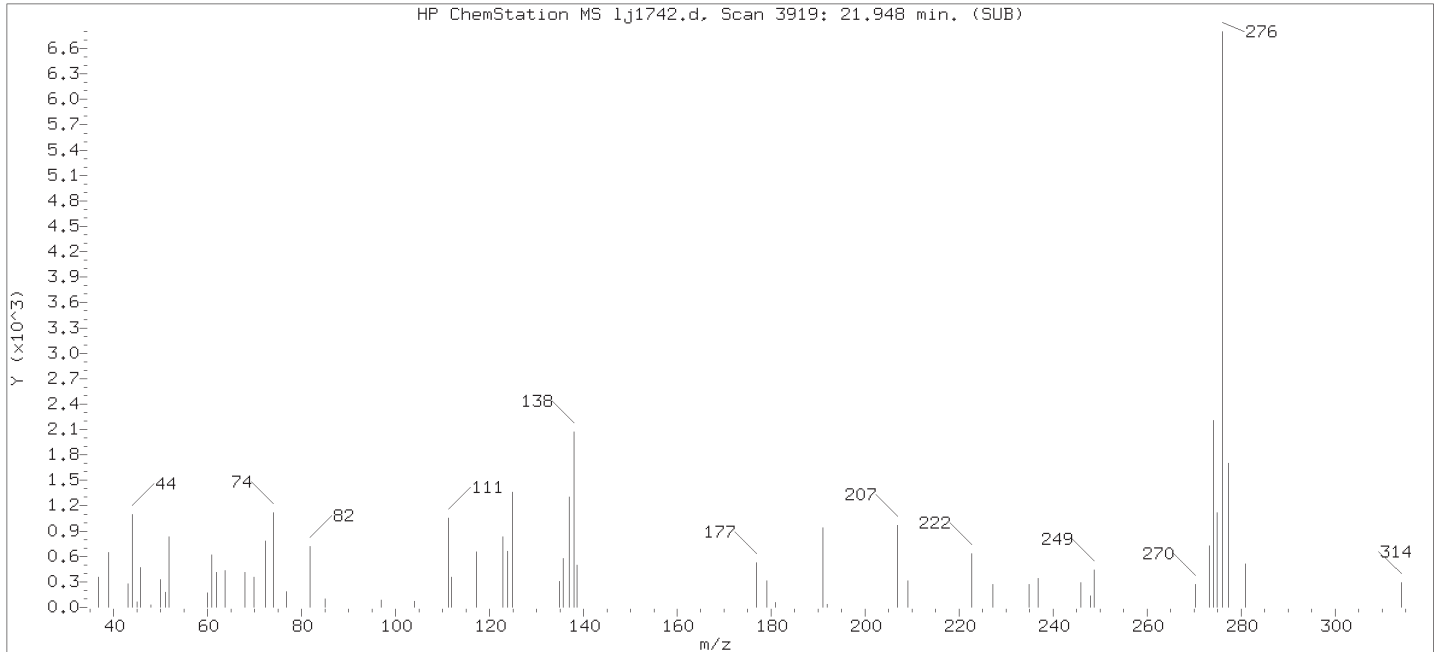
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:00.  
Target 3.5 esignature user ID: art12405

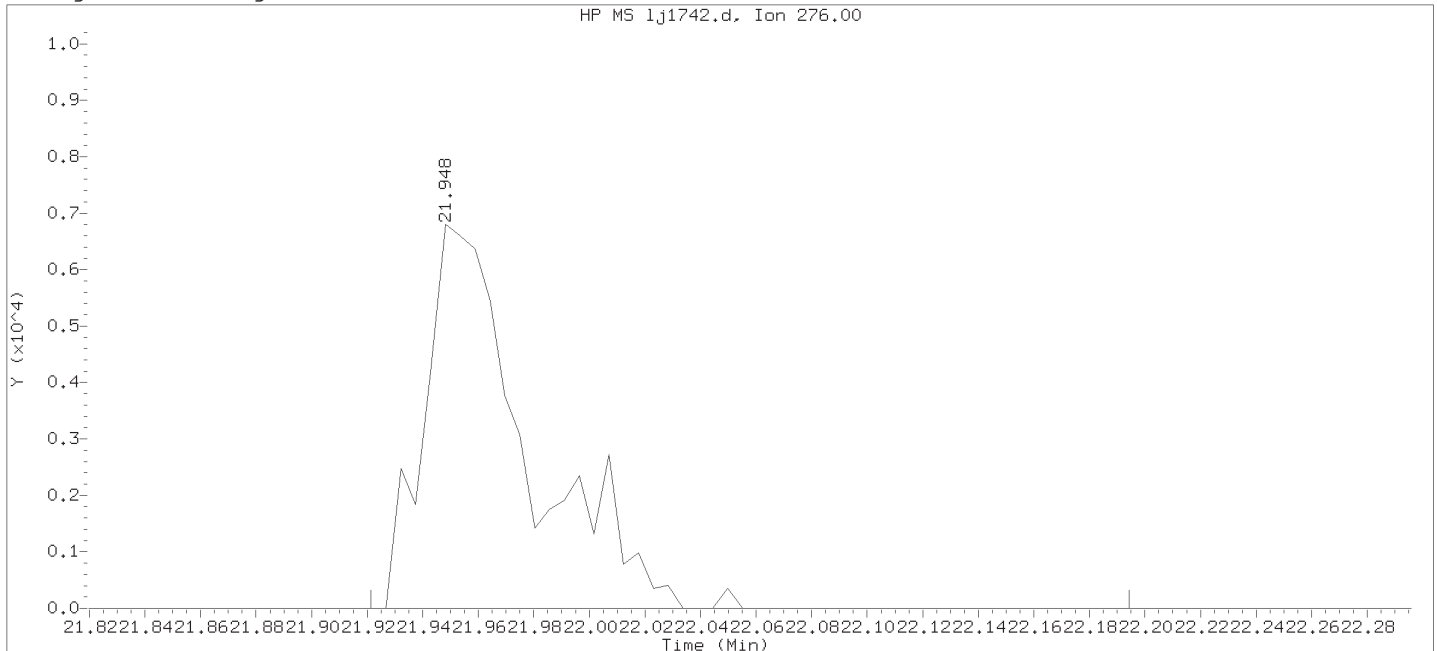
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

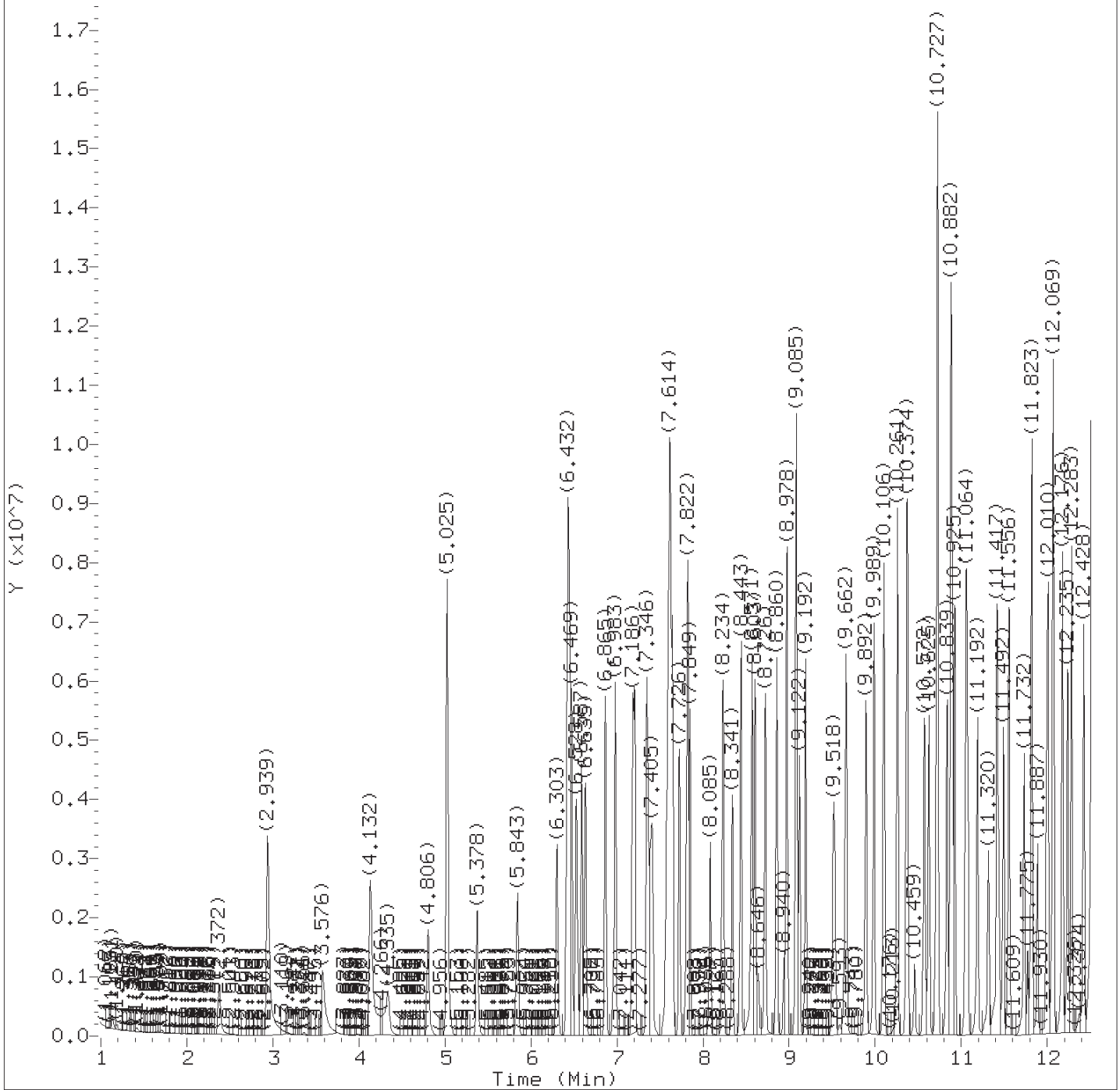


Data File: /chem/HP20296.i/18oct28.b/lj1742.d                      Instrument ID: HP20296.i  
 Injection date and time: 29-OCT-2018 00:56                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125                      Lab Sample ID: RVSTD2648

Compound Number                      : 224  
 Compound Name                      : Indeno(1,2,3-cd)pyrene  
 Scan Number                      : 3919  
 Retention Time (minutes)           : 21.948  
 Quant Ion                      : 276.00  
 Area                      : 17619  
 On-column Amount (ng/ul)           : 0.1462  
 Integration start scan           : 3913                      Integration stop scan: 3964  
 Y at integration start           : 0                      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
Analyst ID: whs02991

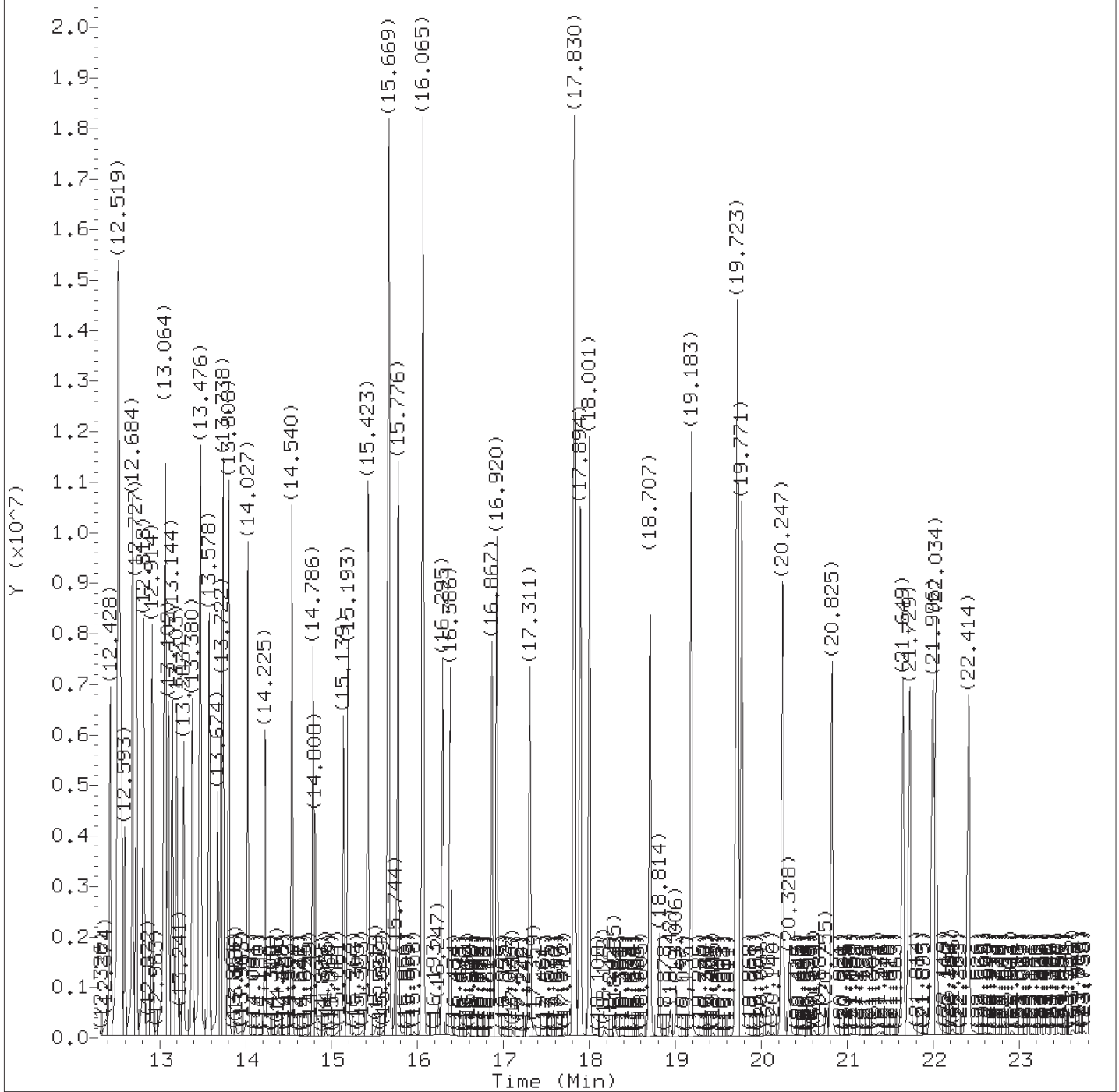
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD30

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD30

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
 Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD30

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.372	88	840180	30.726
5) N-Nitrosodimethylamine	(1)	2.934	74	1351060	31.197
6) Pyridine	(1)	2.945	79	2252407	30.524
8) 2-Picoline	(1)	4.132	93	2311965	30.829
9) N-Nitrosomethylethylamine	(1)	4.340	88	925066	29.987
10) Methyl methanesulfonate	(1)	4.806	80	1183717	30.180
12) \$2-Fluorophenol	(1)	5.025	112	3523450	60.066
14) N-Nitrosodiethylamine	(1)	5.378	102	865546	30.323
43) Total Cresols	(1)			3463259	58.771
16) Ethyl methanesulfonate	(1)	5.843	109	905175	29.764
17) Benzaldehyde	(1)	6.303	77	1254480	24.961
18) \$Phenol-d6	(1)	6.432	99	4767709	59.972
19) Phenol	(1)	6.448	94	2731528	29.357
20) Aniline	(1)	6.469	93	3246949	29.612
21) a-methylstyrene	(1)	6.544	118	173547	30.218
23) bis(2-Chloroethyl) ether	(1)	6.587	93	2040096	29.321
24) 2-Chlorophenol	(1)	6.635	128	1632992	29.635
25) 1,3-Dichlorobenzene	(1)	6.865	146	1787878	29.416
26) *1,4-Dichlorobenzene-d4	(1)	6.956	152	186449	5.000
27) 1,4-Dichlorobenzene	(1)	6.983	146	1767829	29.224
28) Benzyl alcohol	(1)	7.186	108	1167080	30.813
29) 1,2-Dichlorobenzene	(1)	7.207	146	1702983	29.498
31) Indene	(1)	7.346	115	1945957	29.902
32) 2-Methylphenol	(1)	7.362	108	1704096	29.370
100) Isosafrole	(3)			1368722	30.294
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.405	45	2642647	29.614
35) bis(2-Chloroisopropyl) ether	(1)	7.405	45	2642647	29.614
36) N-Nitrosopyrrolidine	(1)	7.571	100	920744	30.075
37) Acetophenone	(1)	7.592	105	2603154	29.345
38) 4-Methylphenol	(1)	7.614	108	1759163	29.401
39) N-Nitroso-di-n-propylamine	(1)	7.625	70	1581179	29.273
40) N-Nitrosomorpholine	(1)	7.635	56	1126566	29.239
41) o-Toluidine	(1)	7.646	106	2960366	29.188
44) Hexachloroethane	(1)	7.726	117	806184	29.654
45) \$Nitrobenzene-d5	(2)	7.822	82	4523184	60.511
46) Nitrobenzene	(2)	7.849	77	2385326	30.002
125) 2,4,2,6-Dinitrotoluenes	(3)			1719481	60.580
50) N-Nitropiperidine	(2)	8.085	114	858122	30.427
52) Isophorone	(2)	8.234	82	4119988	30.526
53) 2-Nitrophenol	(2)	8.341	139	811958	30.754

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
 Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD30

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.443	107	1903214	29.608
59) O,O,O-Triethylphosphorothioate	(2)	8.571	198	818256	30.210
57) bis(2-Chloroethoxy)methane	(2)	8.603	93	2431883	29.572
58) Benzoic acid	(2)	8.646	105	1336058M	31.503
62) 2,4-Dichlorophenol	(2)	8.726	162	1392542	30.267
151) Diallate trans/cis	(4)			1792606	29.669
65) 1,2,4-Trichlorobenzene	(2)	8.860	180	1522462	30.125
68)*Naphthalene-d8	(2)	8.940	136	689757	5.000
69) Naphthalene	(2)	8.978	128	4743330	30.519
70) 4-Chloroaniline	(2)	9.085	127	1930481	30.199
71) 2,6-Dichlorophenol	(2)	9.090	162	1325487	30.013
72) Hexachloropropene	(2)	9.122	213	1020696	30.398
74) Hexachlorobutadiene	(2)	9.192	225	926450	30.813
78) Quinoline	(2)	9.518	129	2820787	30.215
80) N-Nitrosodi-n-butylamine	(2)	9.662	84	1802529	33.240
79) Caprolactam	(2)	9.673	113	417472M	29.764
83) 4-Chloro-3-methylphenol	(2)	9.892	107	1657517	30.205
85) Safrole	(2)	9.989	162	1212330	30.590
86) 2-Methylnaphthalene	(2)	10.106	142	3070535	30.931
87) 1-Methylnaphthalene	(2)	10.261	142	2983802	31.253
88) Hexachlorocyclopentadiene	(3)	10.368	237	938573	30.158
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.379	216	1591545	29.271
91) cis-Isosafrole	(3)	10.459	162	225499	5.040
93) 2,4,6-Trichlorophenol	(3)	10.577	196	1058764	30.439
95) 2,4,5-Trichlorophenol	(3)	10.625	196	1036053	29.210
96)\$2-Fluorobiphenyl	(3)	10.727	172	7020590	59.654
97) trans-Isosafrole	(3)	10.839	162	1143223	25.254
98) 1,1'-Biphenyl	(3)	10.882	154	3551723	29.455
99) 2-Chloronaphthalene	(3)	10.898	162	3426188	31.148
101) 1-Chloronaphthalene	(3)	10.930	162	2386133	27.530
103) Diphenyl ether	(3)	11.058	170	2019026	29.592
104) 2-Nitroaniline	(3)	11.080	138	918009	31.774
108) 1,4-Naphthoquinone	(3)	11.192	158	1204195	29.653
109) 1,4-Dinitrobenzene	(3)	11.320	168	475615	31.702
110) Dimethylphthalate	(3)	11.417	163	3092816	28.529
111) 1,3-Dinitrobenzene	(3)	11.438	168	519183	29.905
113) 2,6-Dinitrotoluene	(3)	11.492	165	734507	30.668
114) Acenaphthylene	(3)	11.561	152	4216787	32.615
117) 3-Nitroaniline	(3)	11.732	138	835799	31.141
118)*Acenaphthene-d10	(3)	11.770	164	346220	5.000

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
 Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD30

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.823	153	3047574	29.228
120) 2,4-Dinitrophenol	(3)	11.887	184	470419	33.212
121) 4-Nitrophenol	(3)	11.994	109	678395	32.197
122) Pentachlorobenzene	(3)	12.010	250	1270270	29.721
124) Dibenzofuran	(3)	12.069	168	4112023	29.606
123) 2,4-Dinitrotoluene	(3)	12.080	165	984974	29.913
126) 1-Naphthylamine	(3)	12.176	143	3066800	30.470
127) 2,3,4,6-Tetrachlorophenol	(3)	12.240	232	867577	30.679
128) 2-Naphthylamine	(3)	12.283	143	3041402	30.257
129) Diethylphthalate	(3)	12.428	149	3229407	29.761
131) Fluorene	(3)	12.513	166	3275579	30.007
130) Thionazin	(3)	12.524	107	639932	29.780
132) 4-Chlorophenyl-phenylether	(3)	12.535	204	1665885	29.546
133) 5-Nitro-o-toluidine	(3)	12.545	152	900294	29.860
134) 4-Nitroaniline	(3)	12.561	138	774795	29.063
135) 4,6-Dinitro-2-methylphenol	(4)	12.599	198	572192	31.843
136) N-Nitrosodiphenylamine	(4)	12.684	169	2656548	30.358
137) NDPA as diphenylamine	(4)	12.684	169	2656548	30.358
139) 1,2-Diphenylhydrazine	(4)	12.727	77	4618778	29.730
140) \$2,4,6-Tribromophenol	(3)	12.818	330	922218	62.197
142) Tetraethyldithiopyrophosphate	(4)	12.914	97	692089	29.613
144) 1,3,5-Trinitrobenzene	(4)	13.043	213	367282	32.879
145) Diallate (peak 1)	(4)	13.059	86	1530356	24.658
146) Phorate	(4)	13.069	75	2620984	34.480
147) Phenacetin	(4)	13.102	108	2048428	30.819
148) 4-Bromophenyl-phenylether	(4)	13.144	248	952420	31.298
149) Diallate (peak 2)	(4)	13.166	86	262250M	5.011
150) Hexachlorobenzene	(4)	13.203	284	966195	31.313
152) Dimethoate	(4)	13.278	87	1595953	30.682
153) Atrazine	(4)	13.380	200	793371	29.409
154) Pentachlorophenol	(4)	13.460	266	673461	32.184
155) 4-Aminobiphenyl	(4)	13.476	169	2415465	30.726
156) Pentachloronitrobenzene	(4)	13.481	237	446957	30.113
157) Pronamide	(4)	13.578	173	1566506	30.942
158) *Phenanthrene-d10	(4)	13.701	188	677310	5.000
159) Dinoseb	(4)	13.717	211	911005	32.836
160) Phenanthrene	(4)	13.738	178	5110416	30.431
162) Anthracene	(4)	13.808	178	5045656	31.306
168) Carbazole	(4)	14.027	167	4522513	30.539
169) Methyl parathion	(4)	14.225	109	1253232	31.155

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

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 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
 Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD30

Lab Sample ID: RVSTD2648

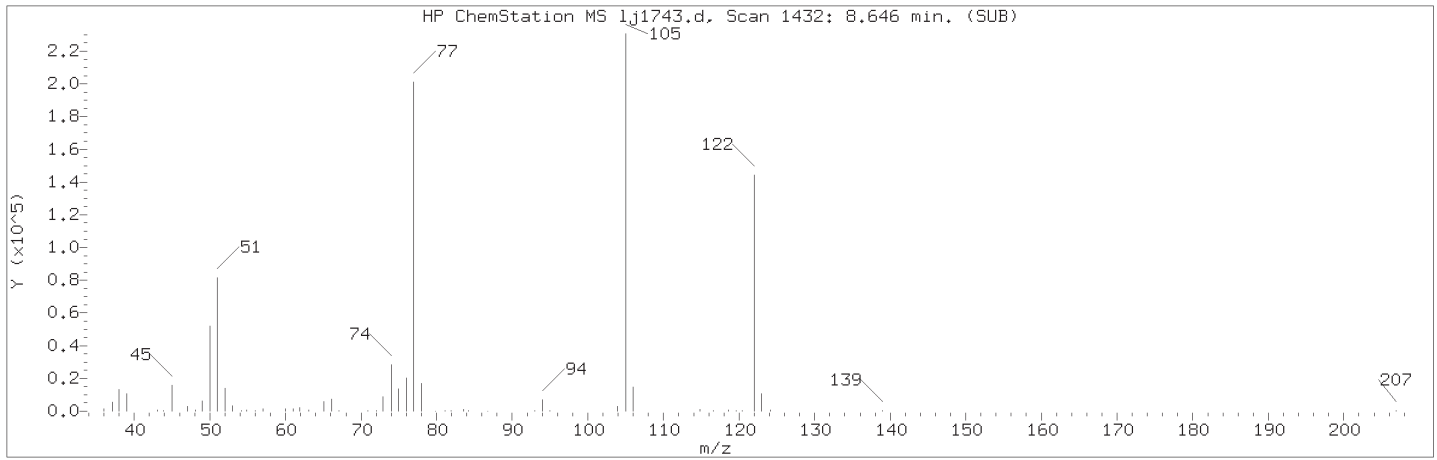
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.540	149	5974889	31.033
172) Parathion	(4)	14.786	109	863673	32.358
173) 4-Nitroquinoline-1-oxide	(4)	14.808	190	494874	36.099
227) Total PAHs	(6)			88614202	565.280
174) Octachlorostyrene	(4)	15.139	308	368219	31.179
176) Isodrin	(4)	15.193	193	607893	30.113
178) Fluoranthene	(4)	15.423	202	5847160	32.457
179) Benzidine	(5)	15.669	184	10947522	89.130
180)*Pyrene-d10	(5)	15.744	212	741906	5.000
182) Pyrene	(5)	15.776	202	5997044	30.824
184)\$Terphenyl-d14	(5)	16.065	244	7558395	61.050
187) p-Dimethylaminoazobenzene	(5)	16.295	225	1027372	31.303
190) Chlorobenzilate	(5)	16.386	139	1849083	30.605
192) 3,3'-Dimethylbenzidine	(5)	16.867	212	3645048	30.001
193) Butylbenzylphthalate	(5)	16.920	149	2779834	30.086
196) 2-Acetylaminofluorene	(5)	17.311	181	2515070	31.752
198) 3,3'-Dichlorobenzidine	(5)	17.814	252	2204065	31.488
200) Benzo(a)anthracene	(5)	17.830	228	6065140	33.770
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.835	231	1222229	30.724
201) Chrysene	(5)	17.899	228	5628094	31.389
204) bis(2-Ethylhexyl)phthalate	(5)	18.001	149	4142845	31.026
208) 6-Methylchrysene	(5)	18.707	242	3937820	31.383
210) Di-n-octylphthalate	(6)	19.183	149	7712829	30.815
211) Benzo(b)fluoranthene	(6)	19.723	252	6112027	32.343
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.723	256	2712912	31.596
213) Benzo(k)fluoranthene	(6)	19.771	252	5832735	30.157
216) Benzo(a)pyrene	(6)	20.247	252	5708231	33.138
218)*Perylene-d12	(6)	20.328	264	732007	5.000
220) 3-Methylcholanthrene	(6)	20.825	268	2588739	30.331
222) Dibenz(a,h)acridine	(6)	21.649	279	4434851	30.424
223) Dibenz(a,j)acridine	(6)	21.729	279	4513018	29.870
224) Indeno(1,2,3-cd)pyrene	(6)	21.996	276	5340507M	32.850
225) Dibenz(a,h)anthracene	(6)	22.034	278	5316439	31.755
226) Benzo(g,h,i)perylene	(6)	22.414	276	5273146	30.306

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

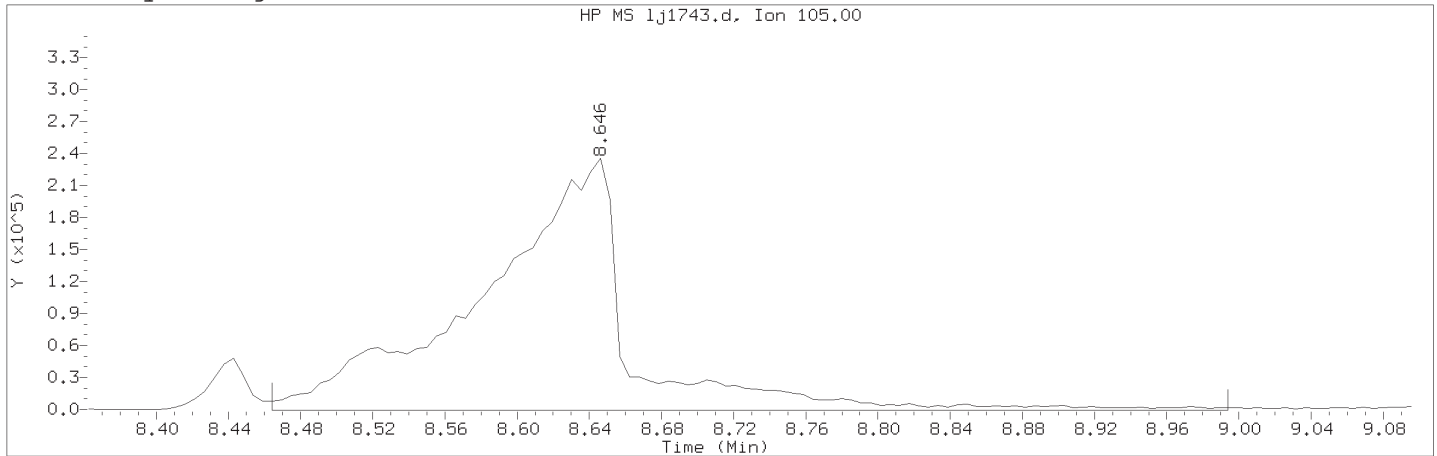
Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 01:25                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30    Lab Sample ID: RVSTD2648

Compound Number    : 58  
Compound Name    : Benzoic acid  
Scan Number    : 1432  
Retention Time (minutes)                                    : 8.646  
Quant Ion    : 105.00  
Area (flag)    : 1336058M  
On-Column Amount (ng/ul)                                 : 31.5032  
Integration start scan                                      : 1397                      Integration stop scan: 1496  
Y at integration start                                      : -627                      Y at integration end: -627

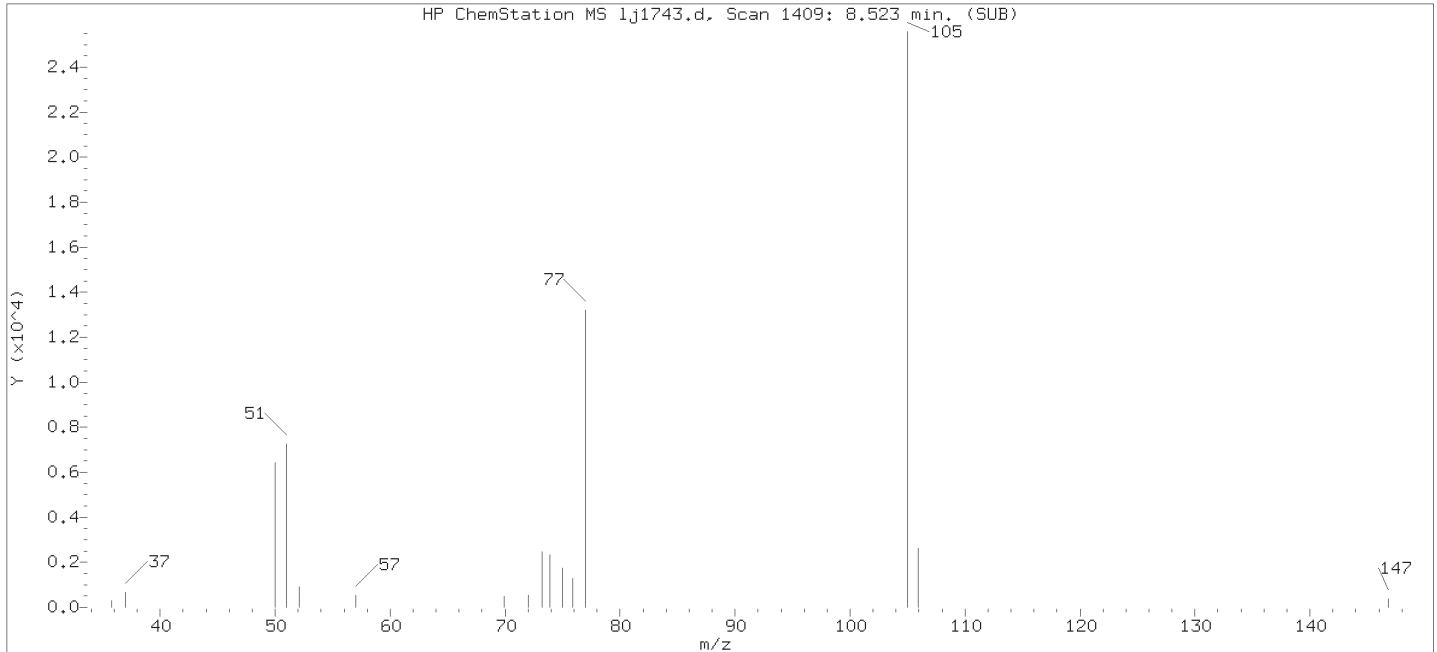
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

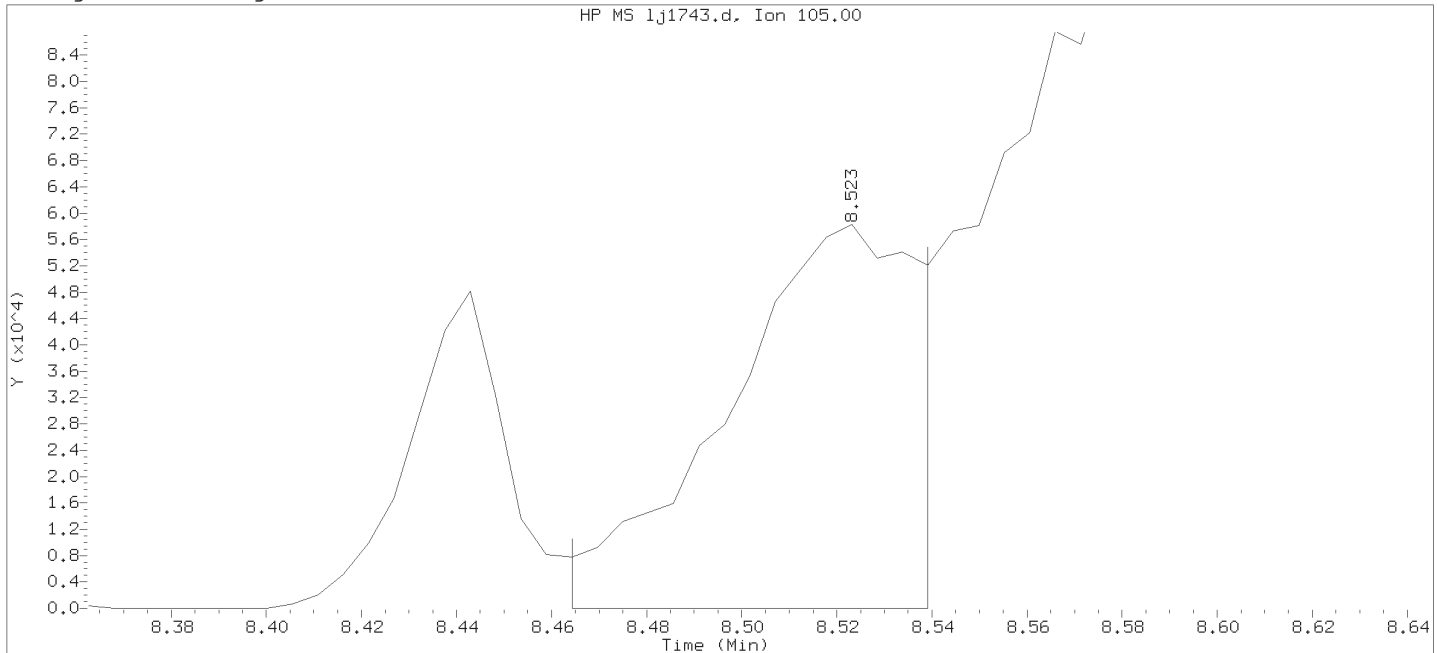
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

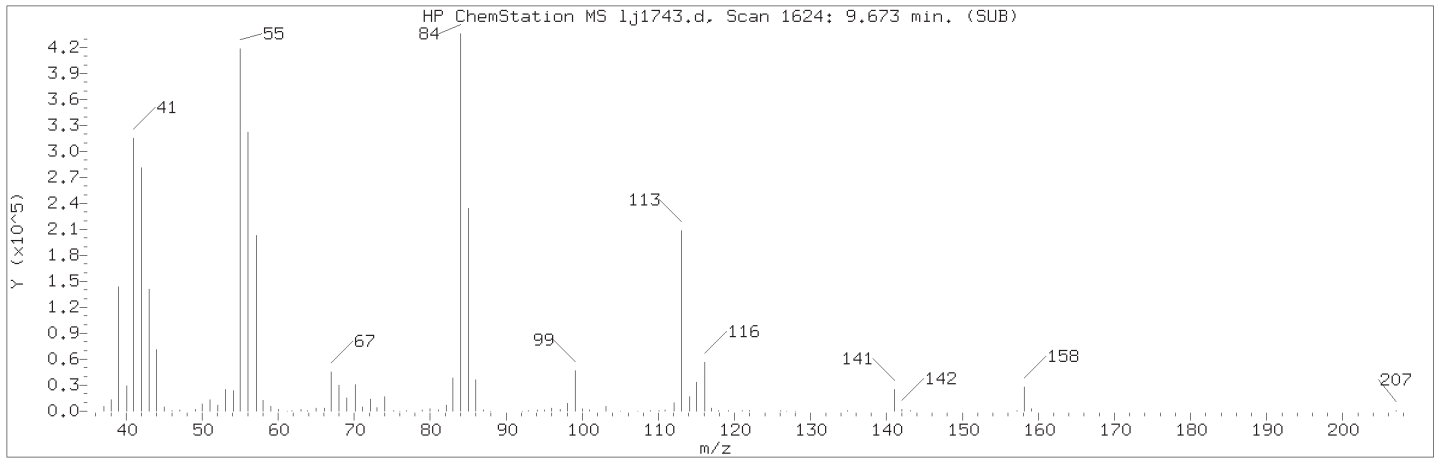
Sublist used: all1

Sample Name: SSTD30

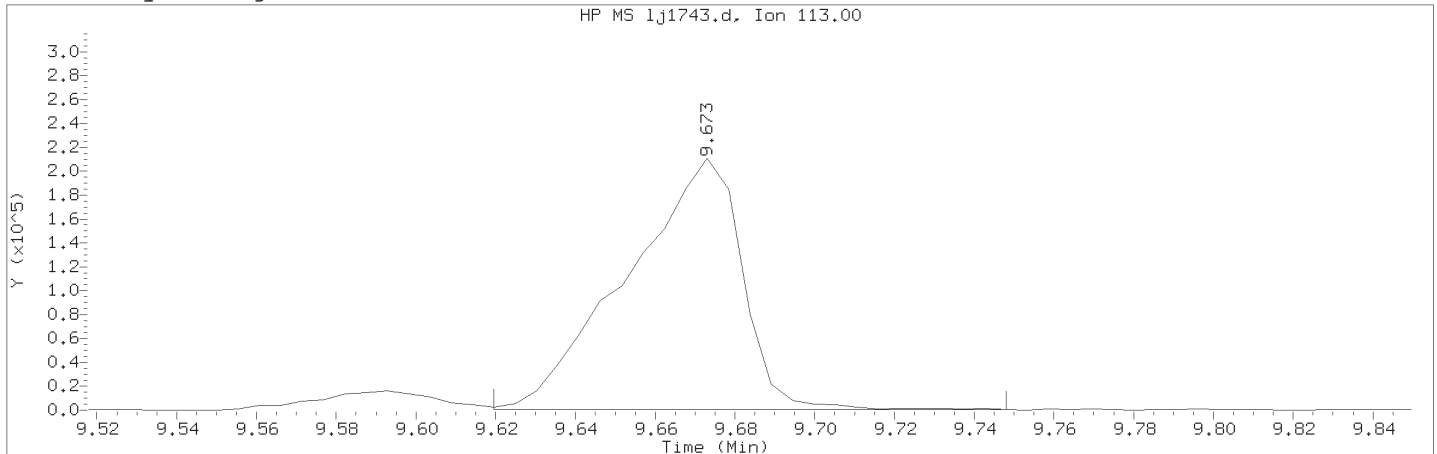
Lab Sample ID: RVSTD2648

Compound Number	: 58	
Compound Name	: Benzoic acid	
Scan Number	: 1409	
Retention Time (minutes)	: 8.523	
Quant Ion	: 105.00	
Area	: 157495	
On-column Amount (ng/ul)	: 5.0013	
Integration start scan	: 1397	Integration stop scan: 1411
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 01:25                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30    Lab Sample ID: RVSTD2648

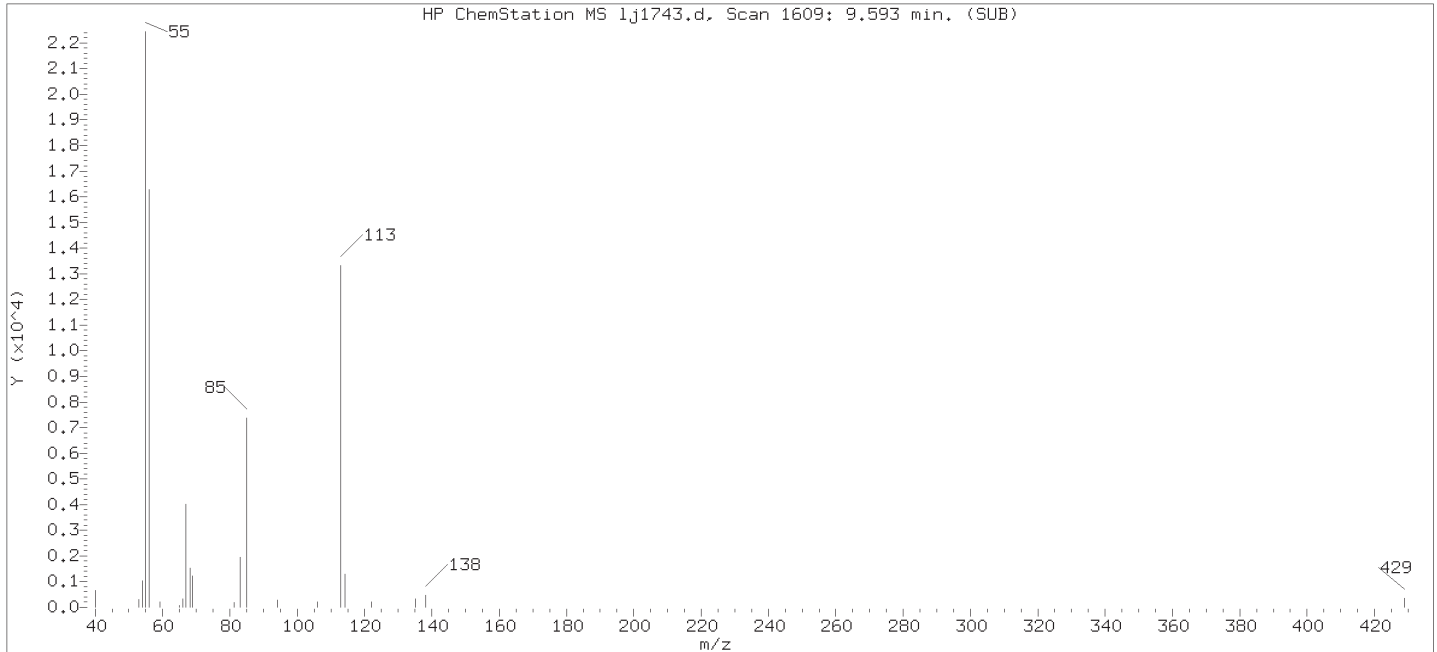
Compound Number                      : 79  
Compound Name                         : Caprolactam  
Scan Number                            : 1624  
Retention Time (minutes)             : 9.673  
Quant Ion                                : 113.00  
Area (flag)                             : 417472M  
On-Column Amount (ng/ul)            : 29.7638  
Integration start scan                : 1613                      Integration stop scan: 1637  
Y at integration start                : 712                       Y at integration end: 712

Reason for manual integration: improper integration

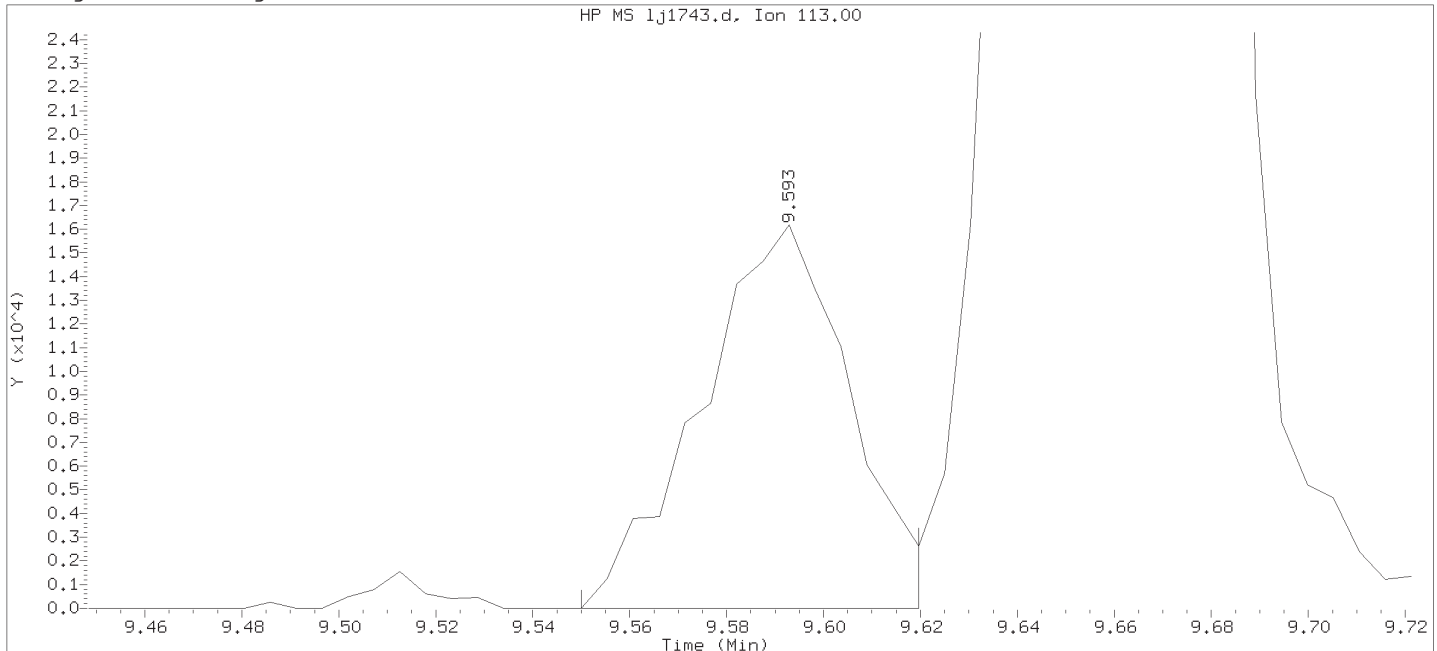
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
 Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
 Analyst ID: whs02991

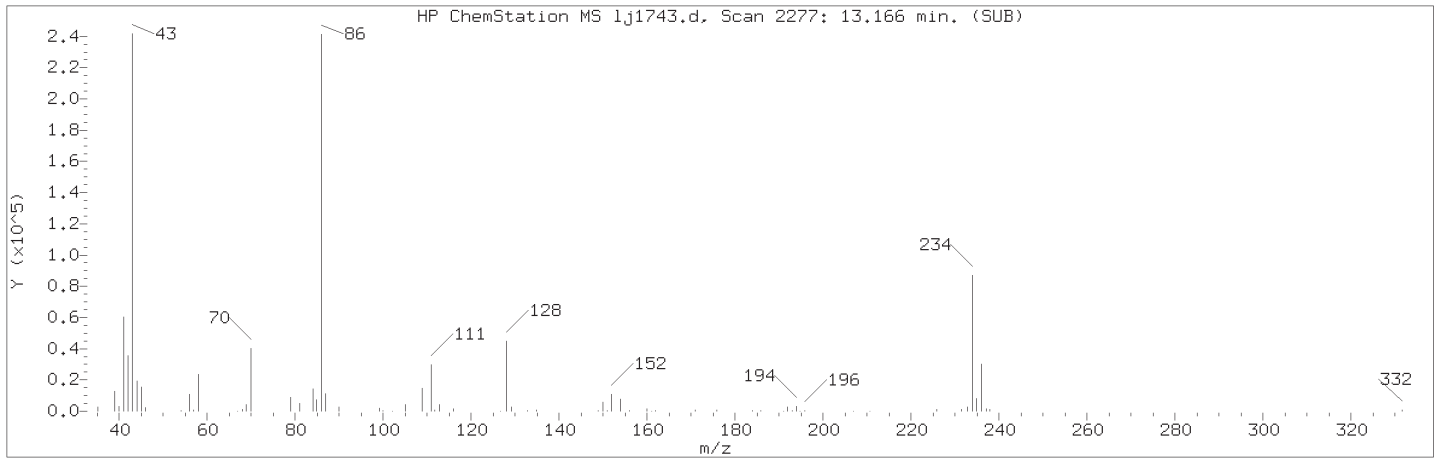
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30

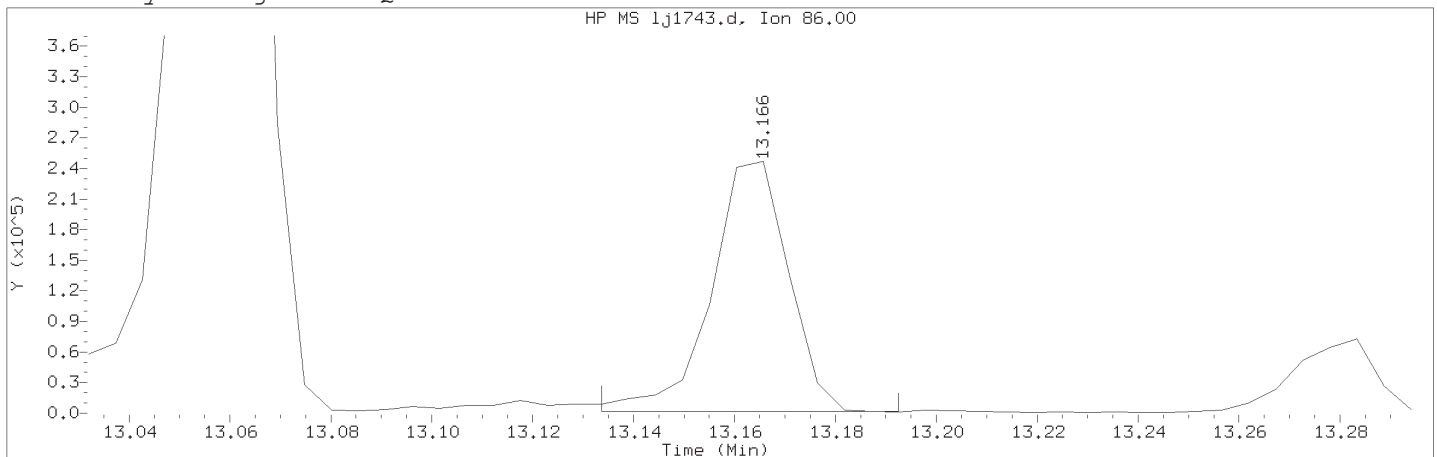
Lab Sample ID: RVSTD2648

Compound Number	: 79	
Compound Name	: Caprolactam	
Scan Number	: 1609	
Retention Time (minutes)	: 9.593	
Quant Ion	: 113.00	
Area	: 34053	
On-column Amount (ng/ul)	: 2.8772	
Integration start scan	: 1600	Integration stop scan: 1613
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD30

Lab Sample ID: RVSTD2648

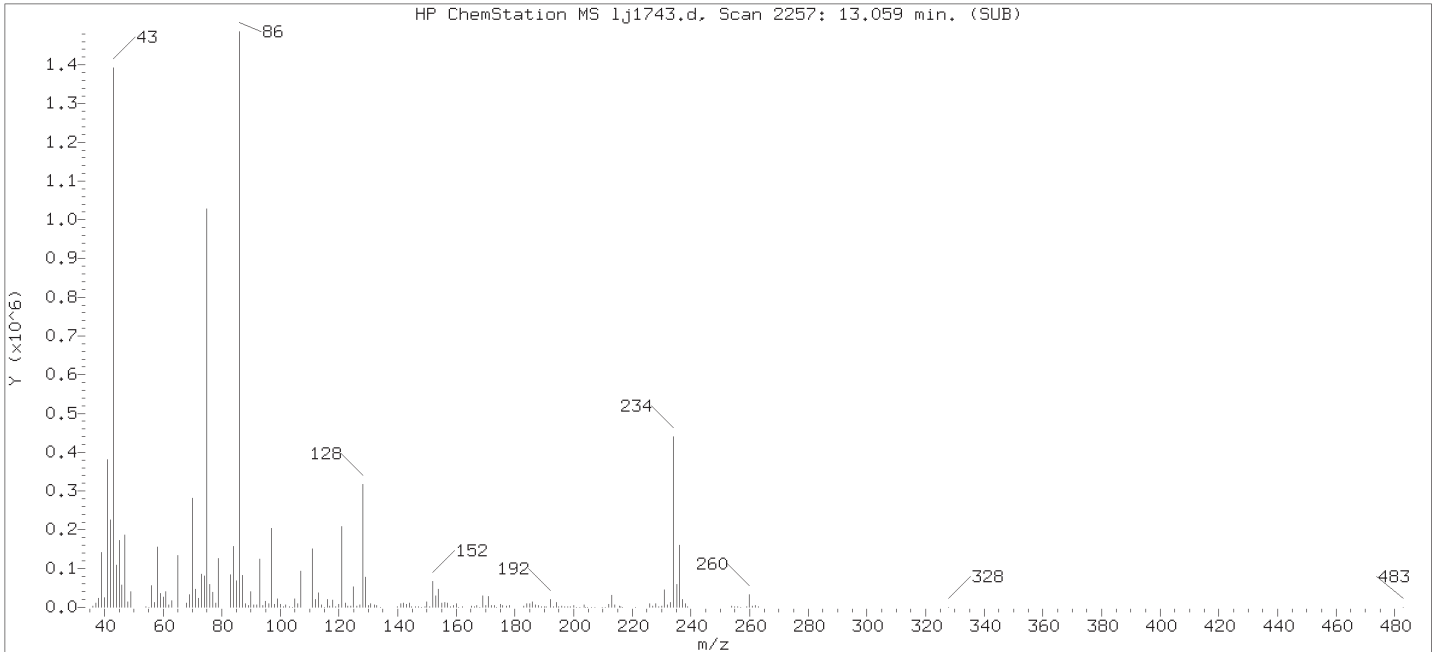
Compound Number : 149  
Compound Name : Diallate (peak 2)  
Scan Number : 2277  
Retention Time (minutes) : 13.166  
Quant Ion : 86.00  
Area (flag) : 262250M  
On-Column Amount (ng/ul) : 5.0113  
Integration start scan : 2270 Integration stop scan: 2281  
Y at integration start : 1580 Y at integration end: 1580

Reason for manual integration: improper integration

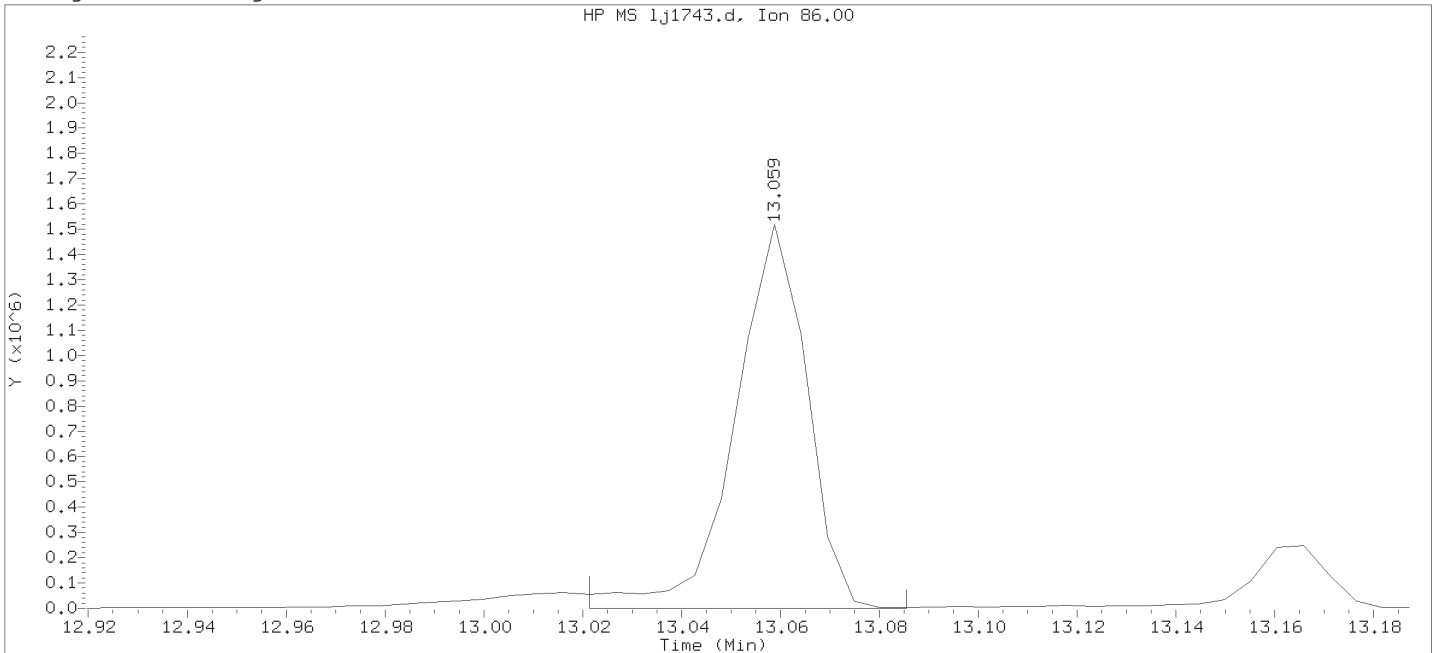
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d  
 Injection date and time: 29-OCT-2018 01:25

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

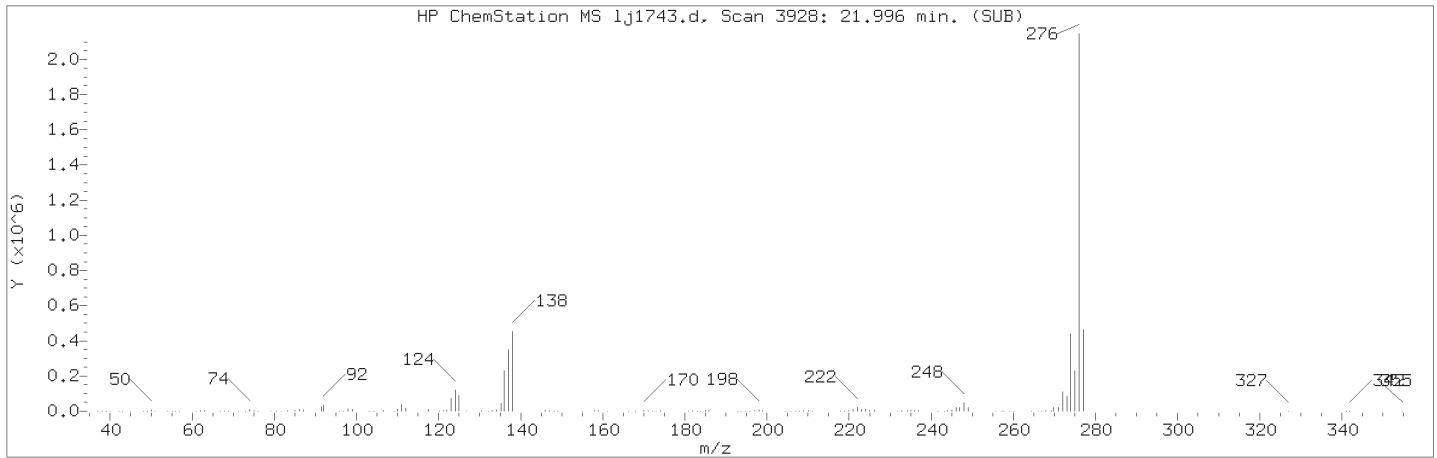
Sublist used: all1

Sample Name: SSTD30

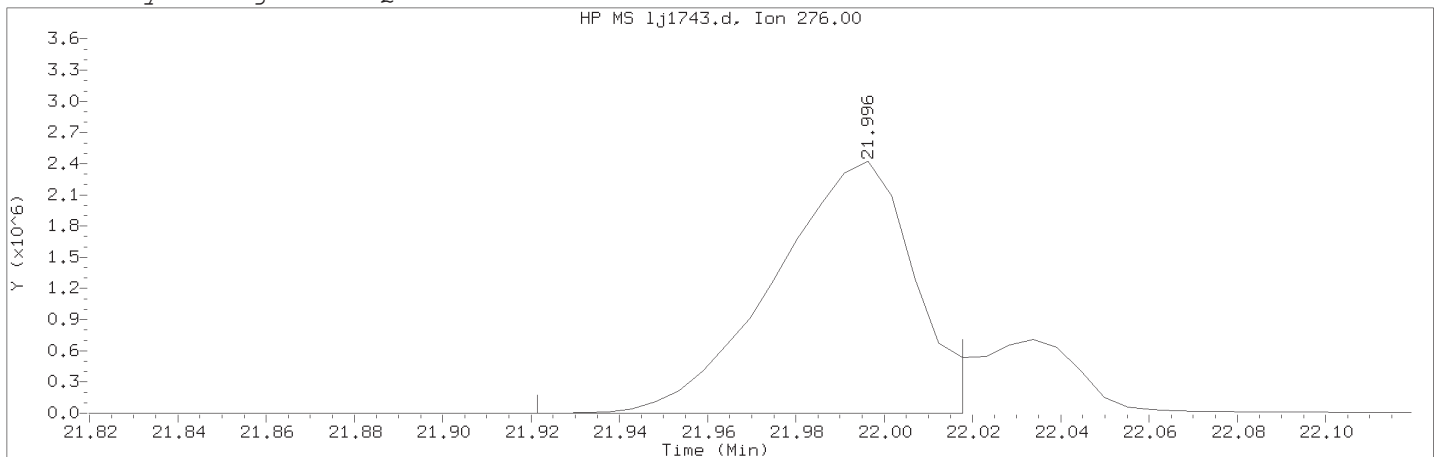
Lab Sample ID: RVSTD2648

Compound Number	: 149	
Compound Name	: Diallate (peak 2)	
Scan Number	: 2257	
Retention Time (minutes)	: 13.059	
Quant Ion	: 86.00	
Area	: 1530356	
On-column Amount (ng/ul)	: 16.4889	
Integration start scan	: 2249	Integration stop scan: 2261
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 01:25                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30    Lab Sample ID: RVSTD2648

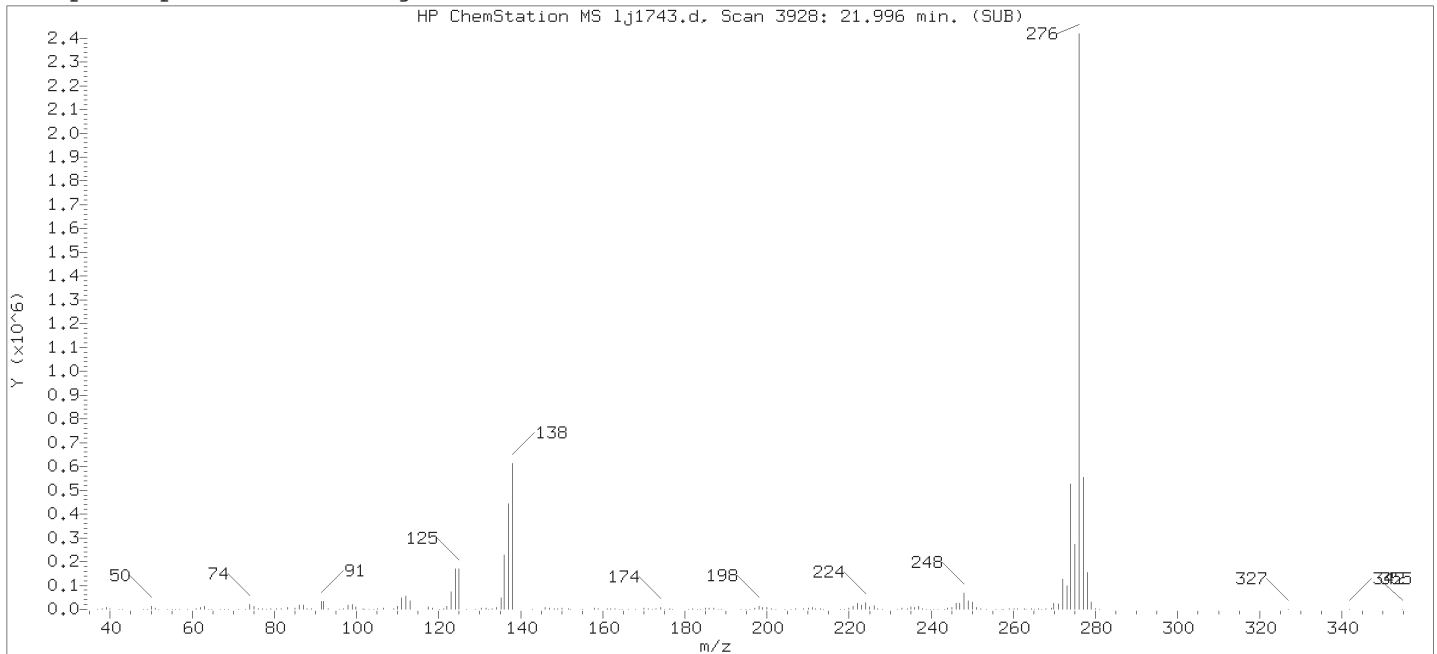
Compound Number    : 224  
Compound Name    : Indeno(1,2,3-cd)pyrene  
Scan Number    : 3928  
Retention Time (minutes)                                    : 21.996  
Quant Ion    : 276.00  
Area (flag)     : 5340507M  
On-Column Amount (ng/ul)                                  : 32.8504  
Integration start scan                                        : 3913                      Integration stop scan: 3931  
Y at integration start                                        : 0                              Y at integration end: 0

Reason for manual integration: improper integration

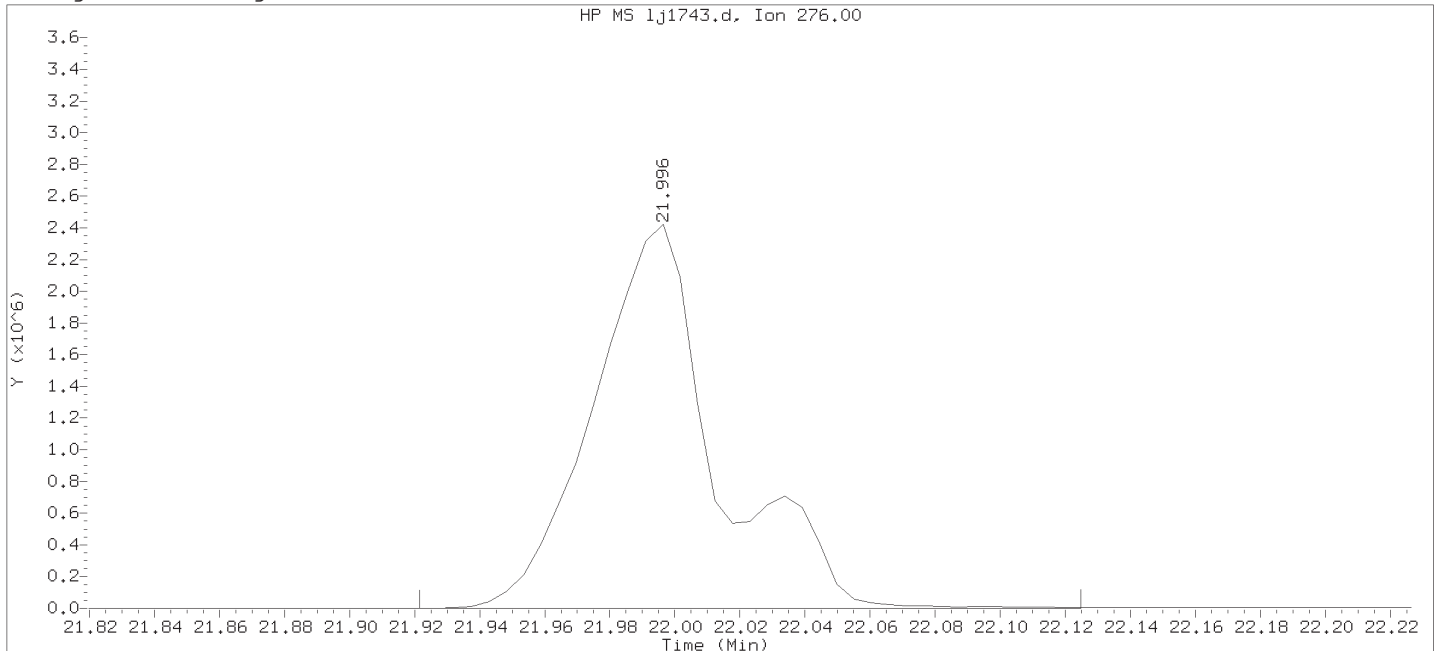
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

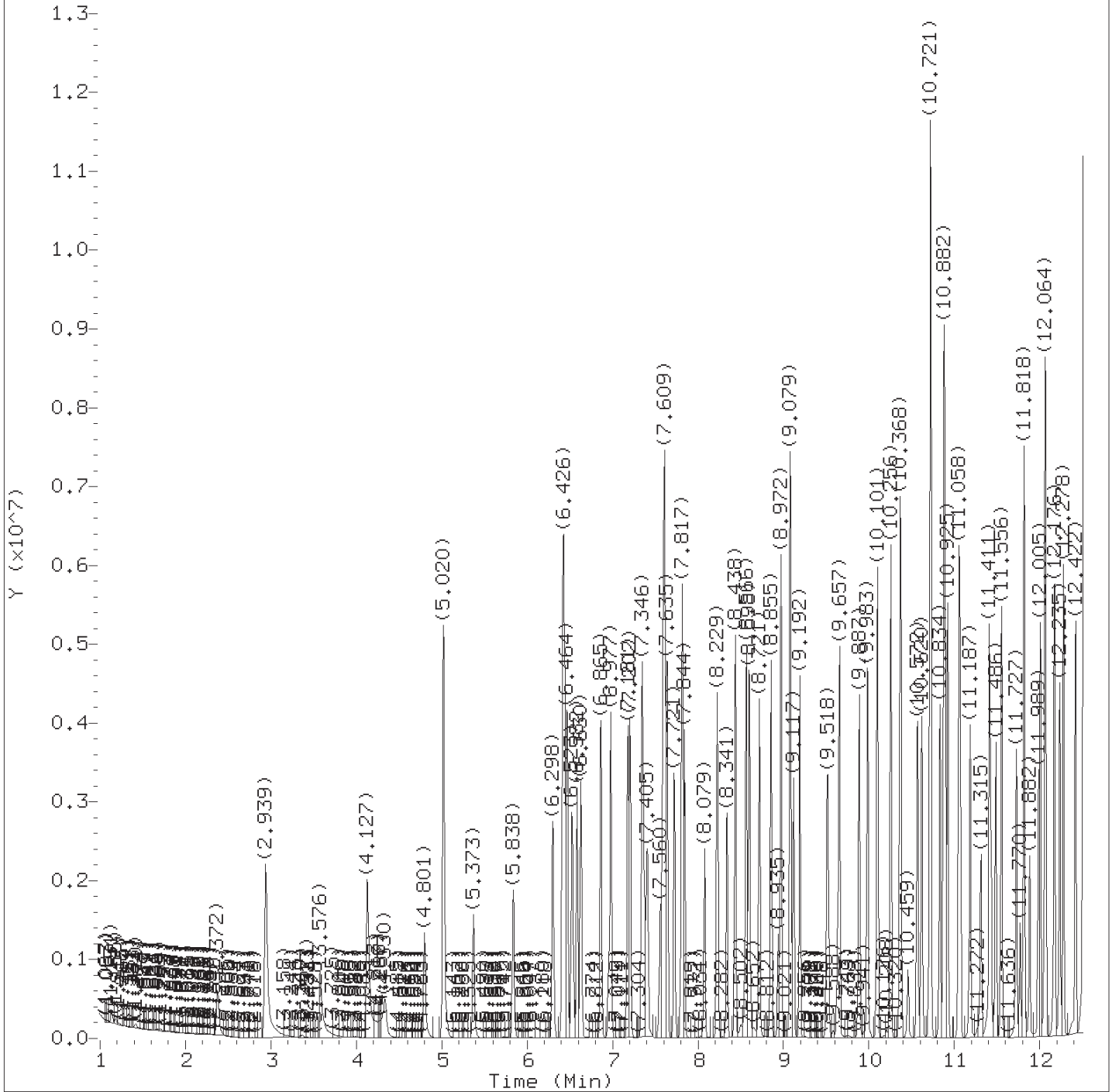


Data File: /chem/HP20296.i/18oct28.b/lj1743.d      Instrument ID: HP20296.i  
 Injection date and time: 29-OCT-2018 01:25      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30      Lab Sample ID: RVSTD2648

Compound Number : 224  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 3928  
 Retention Time (minutes) : 21.996  
 Quant Ion : 276.00  
 Area : 6407161  
 On-column Amount (ng/ul) : 39.1977  
 Integration start scan : 3913      Integration stop scan: 3951  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

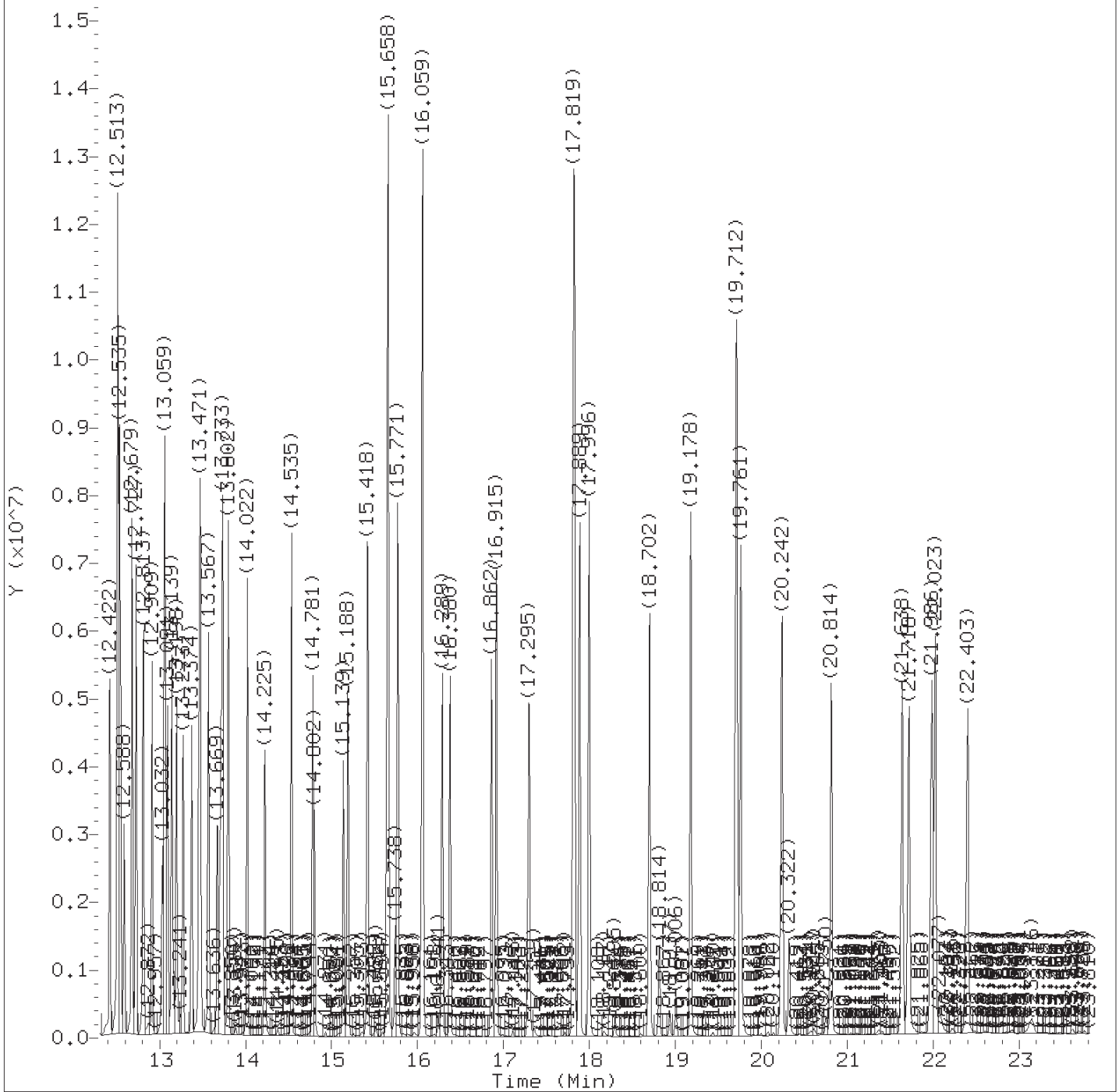
Sample Name: SSTD20

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD20

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
 Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD20

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.372	88	548473M	19.887
5) N-Nitrosodimethylamine	(1)	2.928	74	867741	19.873
6) Pyridine	(1)	2.945	79	1455223	19.662
8) 2-Picoline	(1)	4.127	93	1511960	19.955
9) N-Nitrosomethylethylamine	(1)	4.330	88	635427	20.241
10) Methyl methanesulfonate	(1)	4.801	80	792292	19.981
12) \$2-Fluorophenol	(1)	5.020	112	2368587	39.947
14) N-Nitrosodiethylamine	(1)	5.373	102	593186	20.361
43) Total Cresols	(1)			2339381	39.497
16) Ethyl methanesulfonate	(1)	5.838	109	616445	20.027
17) Benzaldehyde	(1)	6.298	77	979712	19.509
18) \$Phenol-d6	(1)	6.421	99	3233570	40.142
19) Phenol	(1)	6.443	94	1874889	19.948
20) Aniline	(1)	6.464	93	2216180	19.988
21) a-methylstyrene	(1)	6.539	118	117083	20.103
23) bis(2-Chloroethyl) ether	(1)	6.582	93	1396640	19.897
24) 2-Chlorophenol	(1)	6.630	128	1129722	20.179
25) 1,3-Dichlorobenzene	(1)	6.865	146	1229193	19.996
26) *1,4-Dichlorobenzene-d4	(1)	6.951	152	188588	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	1223378	19.996
28) Benzyl alcohol	(1)	7.181	108	776674	20.181
29) 1,2-Dichlorobenzene	(1)	7.202	146	1183950	20.183
31) Indene	(1)	7.341	115	1334610	20.183
32) 2-Methylphenol	(1)	7.357	108	1153548	19.769
100) Isosafrole	(3)			944572	20.697
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.400	45	1760829	19.670
35) bis(2-Chloroisopropyl) ether	(1)	7.400	45	1760829	19.670
36) N-Nitrosopyrrolidine	(1)	7.560	100	616414	19.937
37) Acetophenone	(1)	7.587	105	1747180	19.645
38) 4-Methylphenol	(1)	7.609	108	1185833	19.727
39) N-Nitroso-di-n-propylamine	(1)	7.614	70	1063897	19.645
40) N-Nitrosomorpholine	(1)	7.625	56	775986	19.941
41) o-Toluidine	(1)	7.641	106	2021905	19.805
44) Hexachloroethane	(1)	7.721	117	555066	20.124
45) \$Nitrobenzene-d5	(2)	7.817	82	3061233	40.165
46) Nitrobenzene	(2)	7.844	77	1619153	20.010
125) 2,4,2,6-Dinitrotoluenes	(3)			1192175	41.512
50) N-Nitrosopiperidine	(2)	8.079	114	576902	20.069
52) Isophorone	(2)	8.224	82	2779795	20.161
53) 2-Nitrophenol	(2)	8.341	139	566125	20.703

M = Compound was manually integrated.

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Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
 Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD20

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.438	107	1310101	20.020
59) O,O,O-Triethylphosphorothioate	(2)	8.566	198	560260	20.218
57) bis(2-Chloroethoxy)methane	(2)	8.603	93	1739837	20.522
58) Benzoic acid	(2)	8.614	105	889205M	20.400
62) 2,4-Dichlorophenol	(2)	8.721	162	943497	20.102
151) Diallate trans/cis	(4)			1224090	19.596
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	1049975	20.277
68) *Naphthalene-d8	(2)	8.935	136	701835	5.000
69) Naphthalene	(2)	8.972	128	3221471	20.277
70) 4-Chloroaniline	(2)	9.079	127	1321054	20.206
71) 2,6-Dichlorophenol	(2)	9.085	162	898266	19.993
72) Hexachloropropene	(2)	9.122	213	700789	20.338
74) Hexachlorobutadiene	(2)	9.192	225	629999	20.391
78) Quinoline	(2)	9.518	129	1885601	19.900
79) Caprolactam	(2)	9.652	113	295113M	20.447
80) N-Nitrosodi-n-butylamine	(2)	9.657	84	1216409	21.319
83) 4-Chloro-3-methylphenol	(2)	9.887	107	1146684	20.355
85) Safrole	(2)	9.989	162	818061	20.190
86) 2-Methylnaphthalene	(2)	10.101	142	2099669	20.584
87) 1-Methylnaphthalene	(2)	10.256	142	2021541	20.601
88) Hexachlorocyclopentadiene	(3)	10.363	237	664315	20.980
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.374	216	1084121	20.059
91) cis-Isosafrole	(3)	10.459	162	158103	3.505
93) 2,4,6-Trichlorophenol	(3)	10.572	196	707510	20.327
95) 2,4,5-Trichlorophenol	(3)	10.620	196	737499	20.623
96) \$2-Fluorobiphenyl	(3)	10.721	172	4769605	40.551
97) trans-Isosafrole	(3)	10.834	162	786469	17.192
98) 1,1'-Biphenyl	(3)	10.877	154	2429151	20.197
99) 2-Chloronaphthalene	(3)	10.893	162	2188288	20.029
101) 1-Chloronaphthalene	(3)	10.925	162	1793611	20.559
103) Diphenyl ether	(3)	11.058	170	1389830	20.346
104) 2-Nitroaniline	(3)	11.074	138	603818	20.692
108) 1,4-Naphthoquinone	(3)	11.187	158	816582	20.172
109) 1,4-Dinitrobenzene	(3)	11.315	168	318293	20.896
110) Dimethylphthalate	(3)	11.411	163	2282788	20.794
111) 1,3-Dinitrobenzene	(3)	11.433	168	354554	20.380
113) 2,6-Dinitrotoluene	(3)	11.486	165	508870	20.916
114) Acenaphthylene	(3)	11.556	152	2851889	21.623
117) 3-Nitroaniline	(3)	11.727	138	553839	20.520
118) *Acenaphthene-d10	(3)	11.770	164	343637	5.000

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Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
 Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD20

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.818	153	2083456	20.099
120) 2,4-Dinitrophenol	(3)	11.882	184	301839	20.957
121) 4-Nitrophenol	(3)	11.989	109	461567	21.334
122) Pentachlorobenzene	(3)	12.005	250	871379	20.357
124) Dibenzofuran	(3)	12.064	168	2839631	20.395
123) 2,4-Dinitrotoluene	(3)	12.075	165	683305	20.596
126) 1-Naphthylamine	(3)	12.176	143	2078307	20.529
127) 2,3,4,6-Tetrachlorophenol	(3)	12.235	232	583123	20.510
128) 2-Naphthylamine	(3)	12.278	143	2063721	20.451
129) Diethylphthalate	(3)	12.422	149	2198722	20.275
131) Fluorene	(3)	12.508	166	2218778	20.357
130) Thionazin	(3)	12.513	107	440245	20.423
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	1141621	20.265
133) 5-Nitro-o-toluidine	(3)	12.540	152	626867	20.622
134) 4-Nitroaniline	(3)	12.551	138	549400	20.502
135) 4,6-Dinitro-2-methylphenol	(4)	12.588	198	399982	20.862
136) N-Nitrosodiphenylamine	(4)	12.679	169	1866199	20.283
137) NDPA as diphenylamine	(4)	12.679	169	1866199	20.283
139) 1,2-Diphenylhydrazine	(4)	12.727	77	3224815	19.922
140) \$2,4,6-Tribromophenol	(3)	12.813	330	613125	41.093
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	492782	20.131
144) 1,3,5-Trinitrobenzene	(4)	13.032	213	243421	20.573
145) Diallate (peak 1)	(4)	13.053	86	1047189	16.305
146) Phorate	(4)	13.064	75	1812392	21.807
147) Phenacetin	(4)	13.091	108	1359967	19.731
148) 4-Bromophenyl-phenylether	(4)	13.139	248	629728	19.881
149) Diallate (peak 2)	(4)	13.160	86	176901M	3.290
150) Hexachlorobenzene	(4)	13.198	284	642219	19.952
152) Dimethoate	(4)	13.273	87	1085955	19.999
153) Atrazine	(4)	13.374	200	558209	19.880
154) Pentachlorophenol	(4)	13.455	266	452593	20.473
155) 4-Aminobiphenyl	(4)	13.471	169	1609022	19.735
156) Pentachloronitrobenzene	(4)	13.476	237	310954	20.045
157) Pronamide	(4)	13.567	173	1075070	20.226
158) *Phenanthrene-d10	(4)	13.701	188	707104	5.000
159) Dinoseb	(4)	13.717	211	624140	21.006
160) Phenanthrene	(4)	13.733	178	3436114	19.698
162) Anthracene	(4)	13.802	178	3445234	20.354
168) Carbazole	(4)	14.022	167	3007888	19.634
169) Methyl parathion	(4)	14.225	109	859570	20.310

M = Compound was manually integrated.

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 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
 Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD20

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.535	149	4007893	19.960
172) Parathion	(4)	14.781	109	560488	20.076
173) 4-Nitroquinoline-1-oxide	(4)	14.802	190	321555	21.580
227) Total PAHs	(6)			58977411	373.953
174) Octachlorostyrene	(4)	15.139	308	254324	20.414
176) Isodrin	(4)	15.188	193	411737	19.689
178) Fluoranthene	(4)	15.423	202	3924477	20.643
179) Benzidine	(5)	15.658	184	7489283	60.553
180)*Pyrene-d10	(5)	15.738	212	743637	5.000
182) Pyrene	(5)	15.771	202	3999162	20.378
184)\$Terphenyl-d14	(5)	16.059	244	4989750	40.139
187) p-Dimethylaminoazobenzene	(5)	16.289	225	680295	20.448
190) Chlorobenzilate	(5)	16.380	139	1238149	20.295
192) 3,3'-Dimethylbenzidine	(5)	16.862	212	2485341	20.270
193) Butylbenzylphthalate	(5)	16.915	149	1883048	20.221
196) 2-Acetylaminofluorene	(5)	17.300	181	1636907	20.407
198) 3,3'-Dichlorobenzidine	(5)	17.808	252	1454491	20.482
200) Benzo(a)anthracene	(5)	17.824	228	3978095	21.533
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.830	231	788376	19.847
201) Chrysene	(5)	17.889	228	3740533	20.604
204) bis(2-Ethylhexyl)phthalate	(5)	17.996	149	2771678	20.467
208) 6-Methylchrysene	(5)	18.702	242	2508773	19.965
210) Di-n-octylphthalate	(6)	19.178	149	4975819	20.463
211) Benzo(b)fluoranthene	(6)	19.707	252	3893280	21.071
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.712	256	1729416	20.639
213) Benzo(k)fluoranthene	(6)	19.761	252	3765788	20.206
216) Benzo(a)pyrene	(6)	20.242	252	3700672	21.728
218)*Perylene-d12	(6)	20.322	264	702921	5.000
220) 3-Methylcholanthrene	(6)	20.814	268	1692930	20.433
222) Dibenz(a,h)acridine	(6)	21.638	279	2913086	20.534
223) Dibenz(a,j)acridine	(6)	21.718	279	2978686	20.351
224) Indeno(1,2,3-cd)pyrene	(6)	21.986	276	3537840M	21.932
225) Dibenz(a,h)anthracene	(6)	22.023	278	3525620	21.413
226) Benzo(g,h,i)perylene	(6)	22.403	276	3533792	20.850

M = Compound was manually integrated.

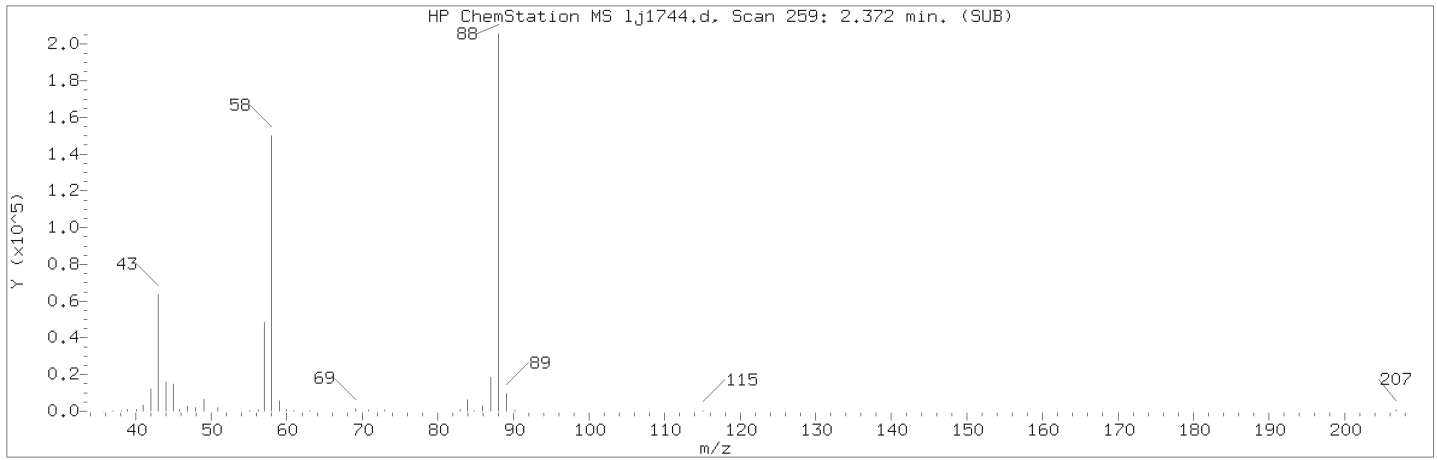
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

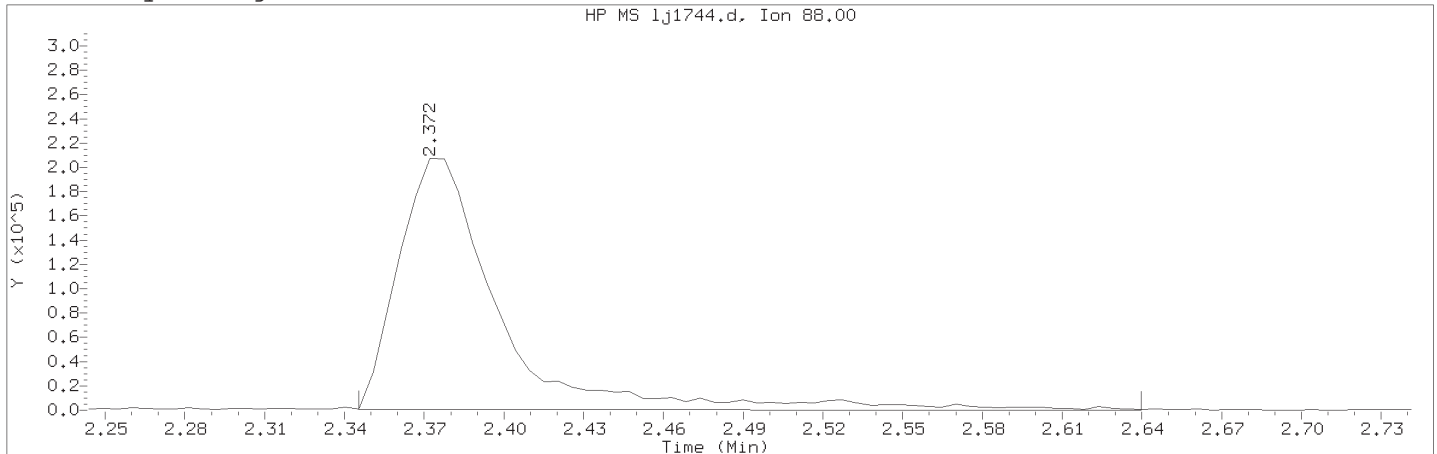
Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 01:53                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20    Lab Sample ID: RVSTD2648

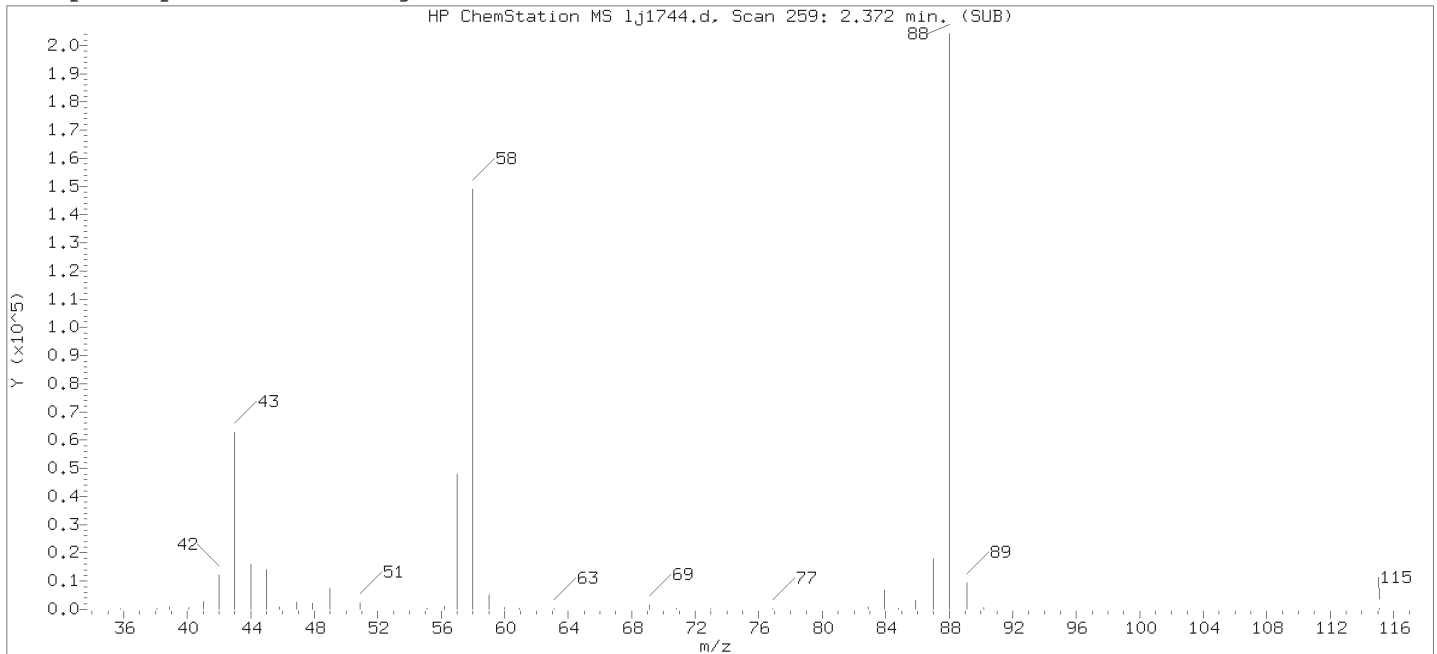
Compound Number    : 1  
Compound Name    : 1,4-Dioxane  
Scan Number    : 259  
Retention Time (minutes)                                   : 2.372  
Quant Ion    : 88.00  
Area (flag)     : 548473M  
On-Column Amount (ng/ul)                                : 19.8866  
Integration start scan                                    : 253                      Integration stop scan: 308  
Y at integration start                                    : 323                      Y at integration end: 138

Reason for manual integration: improper integration

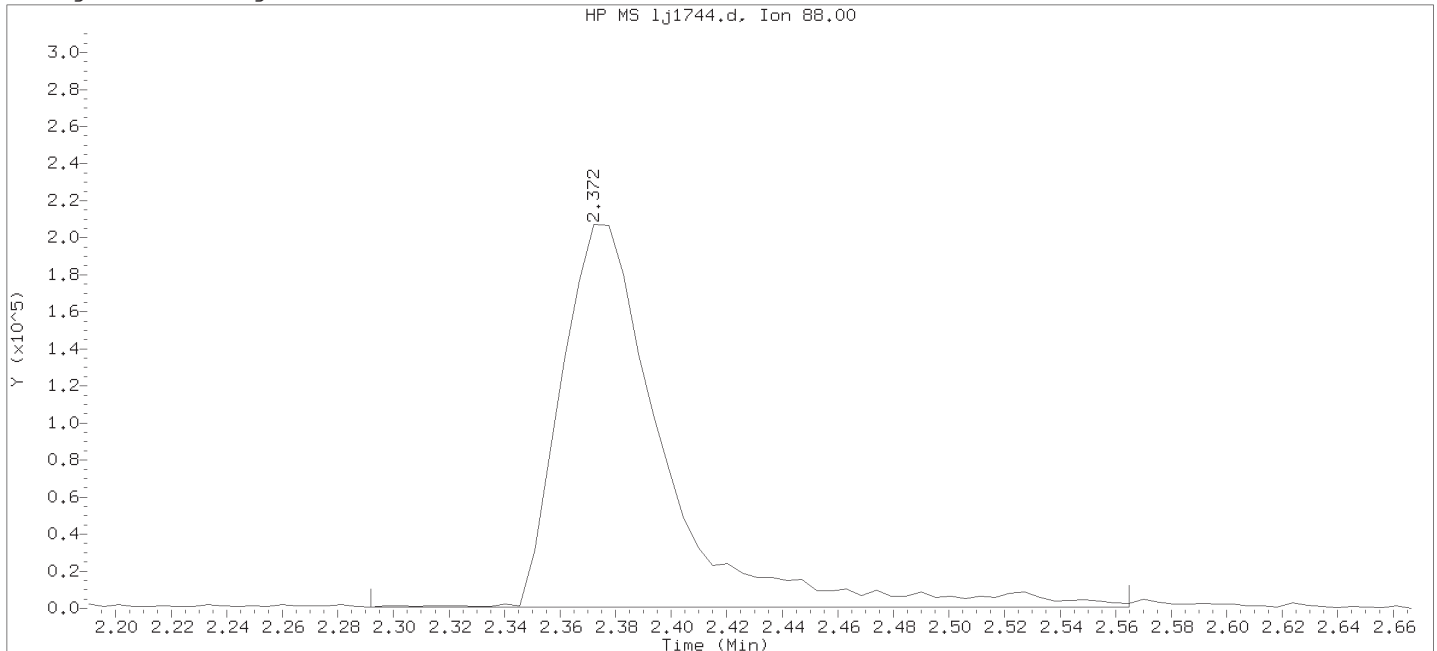
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



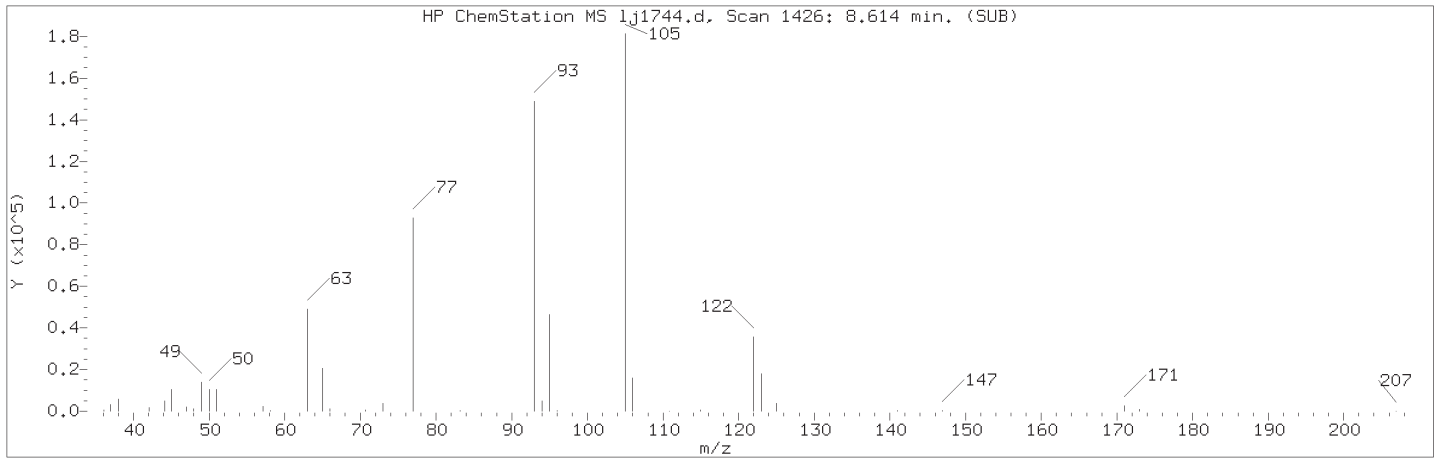
Data File: /chem/HP20296.i/18oct28.b/lj1744.d                      Instrument ID: HP20296.i  
 Injection date and time: 29-OCT-2018 01:53                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

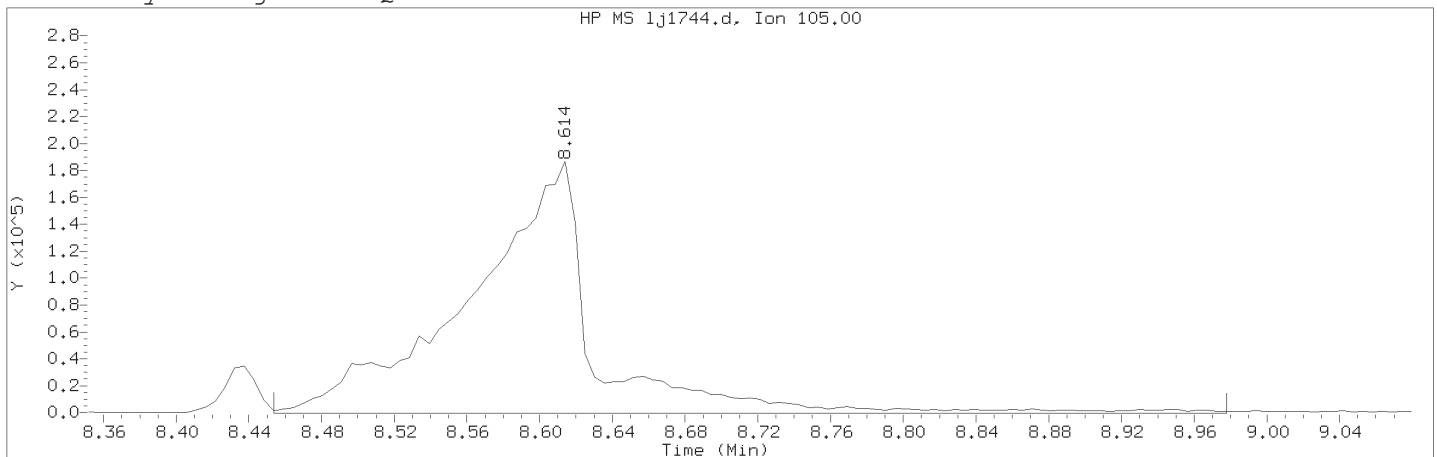
Sample Name: SSTD20    Lab Sample ID: RVSTD2648

Compound Number    : 1  
 Compound Name    : 1,4-Dioxane  
 Scan Number    : 259  
 Retention Time (minutes)                                : 2.372  
 Quant Ion     : 88.00  
 Area    : 535077  
 On-column Amount (ng/ul)                              : 18.9031  
 Integration start scan                                    : 243                      Integration stop scan: 294  
 Y at integration start                                    : 727                      Y at integration end: 727

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 01:53                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20    Lab Sample ID: RVSTD2648

Compound Number    : 58  
Compound Name    : Benzoic acid  
Scan Number    : 1426  
Retention Time (minutes)                                   : 8.614  
Quant Ion    : 105.00  
Area (flag)    : 889205M  
On-Column Amount (ng/ul)                                 : 20.3999  
Integration start scan                                      : 1395                      Integration stop scan: 1493  
Y at integration start                                       : -376                      Y at integration end: -376

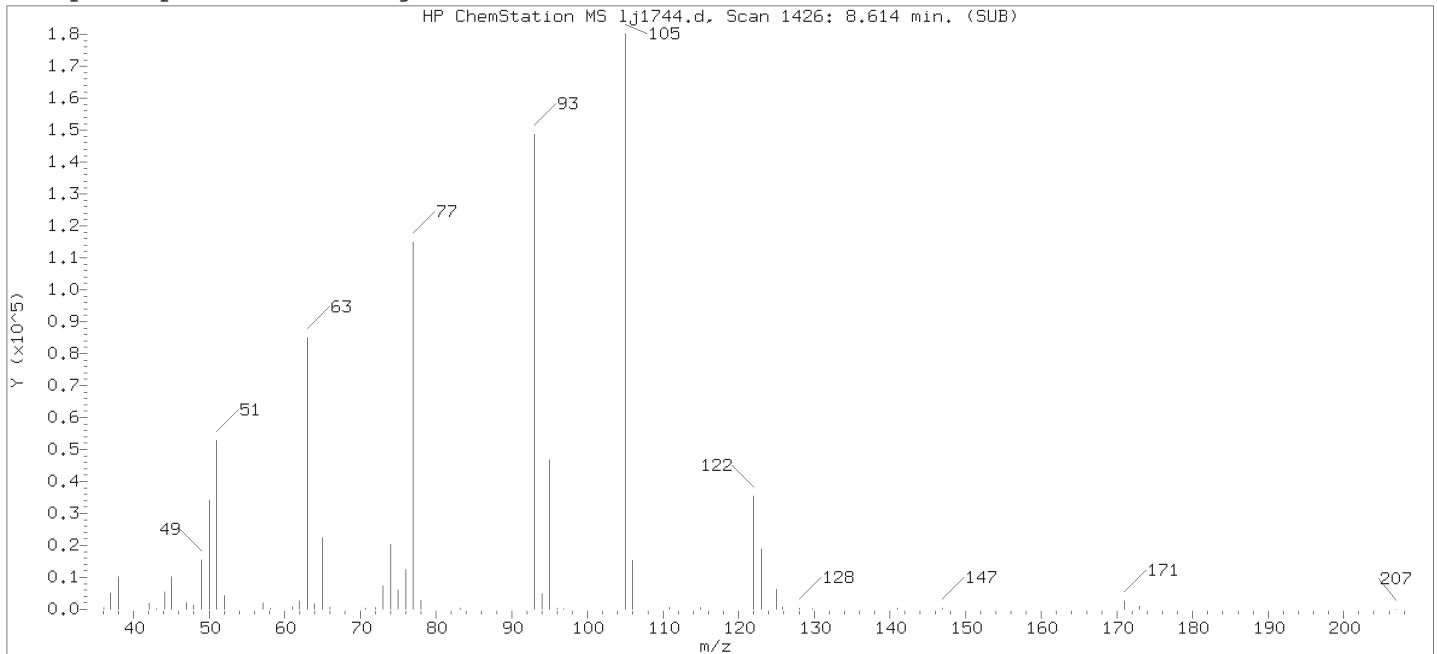
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

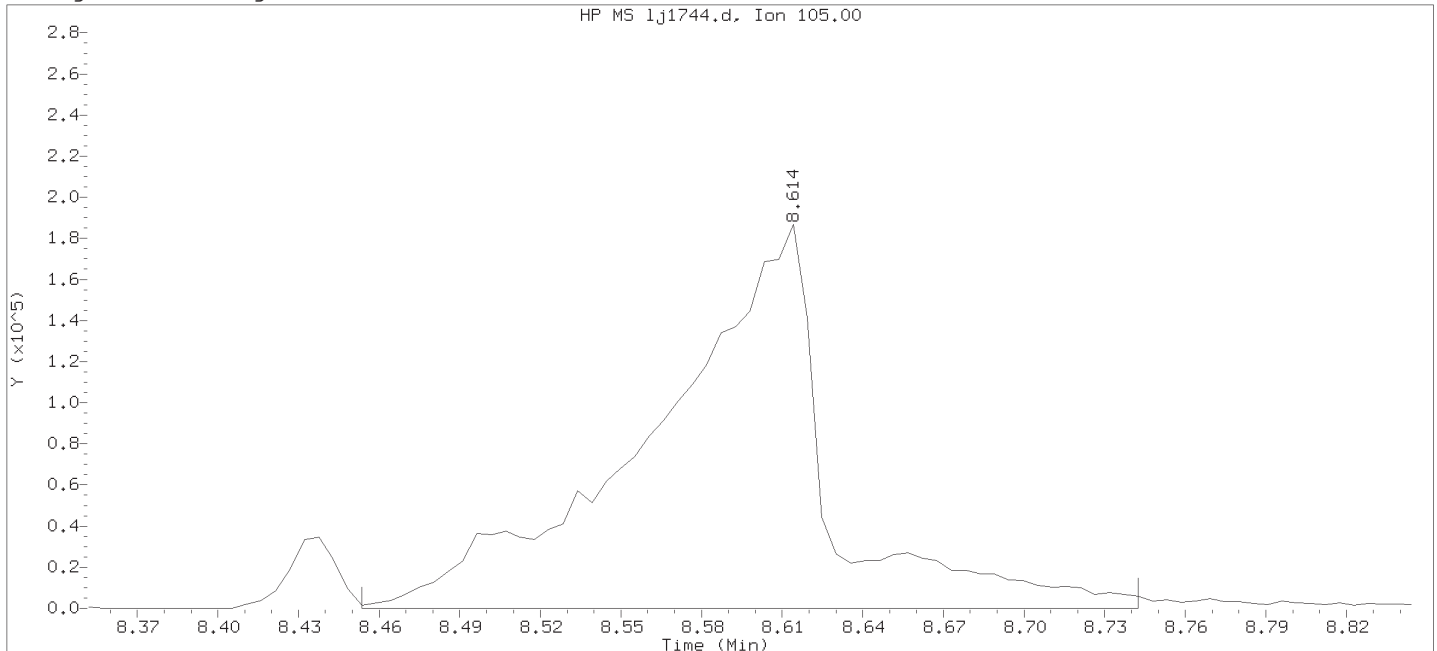
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
Analyst ID: whs02991

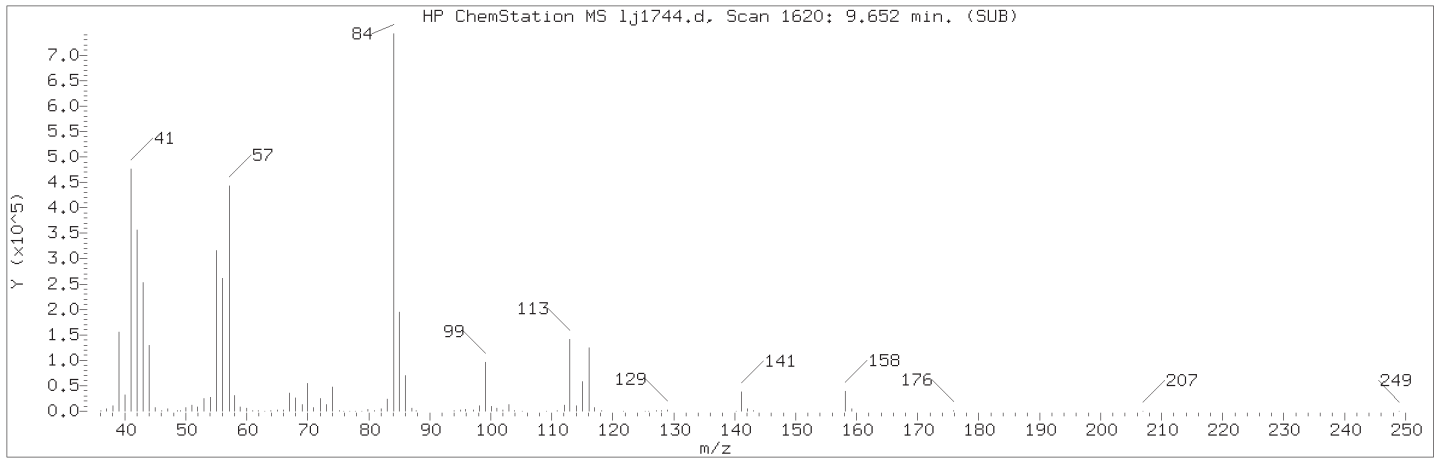
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20

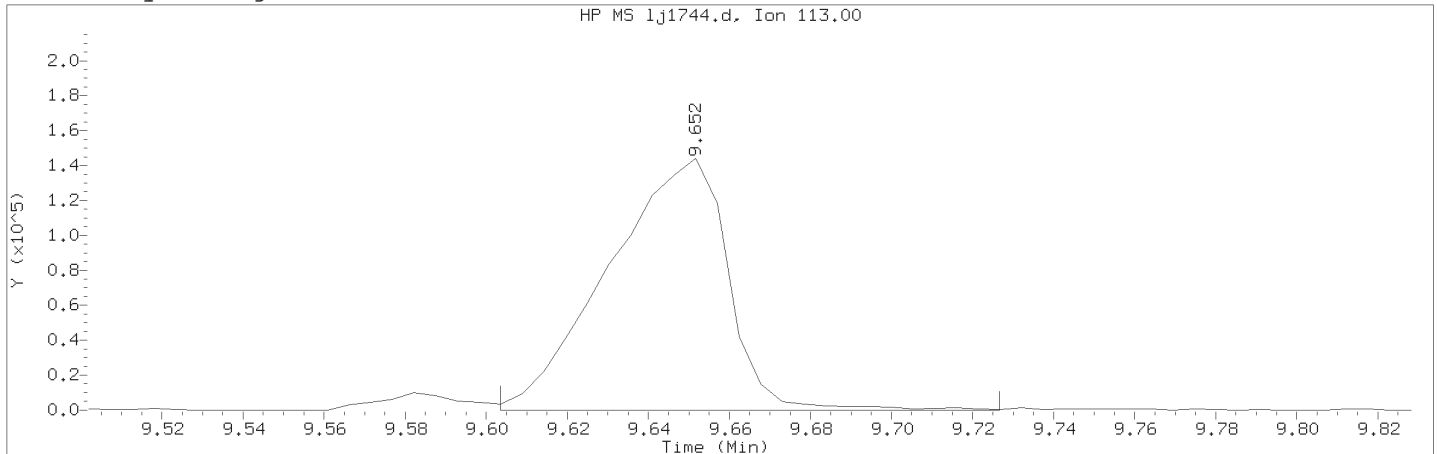
Lab Sample ID: RVSTD2648

Compound Number : 58  
Compound Name : Benzoic acid  
Scan Number : 1426  
Retention Time (minutes) : 8.614  
Quant Ion : 105.00  
Area : 845993  
On-column Amount (ng/ul) : 26.4675  
Integration start scan : 1395      Integration stop scan: 1449  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 01:53                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20    Lab Sample ID: RVSTD2648

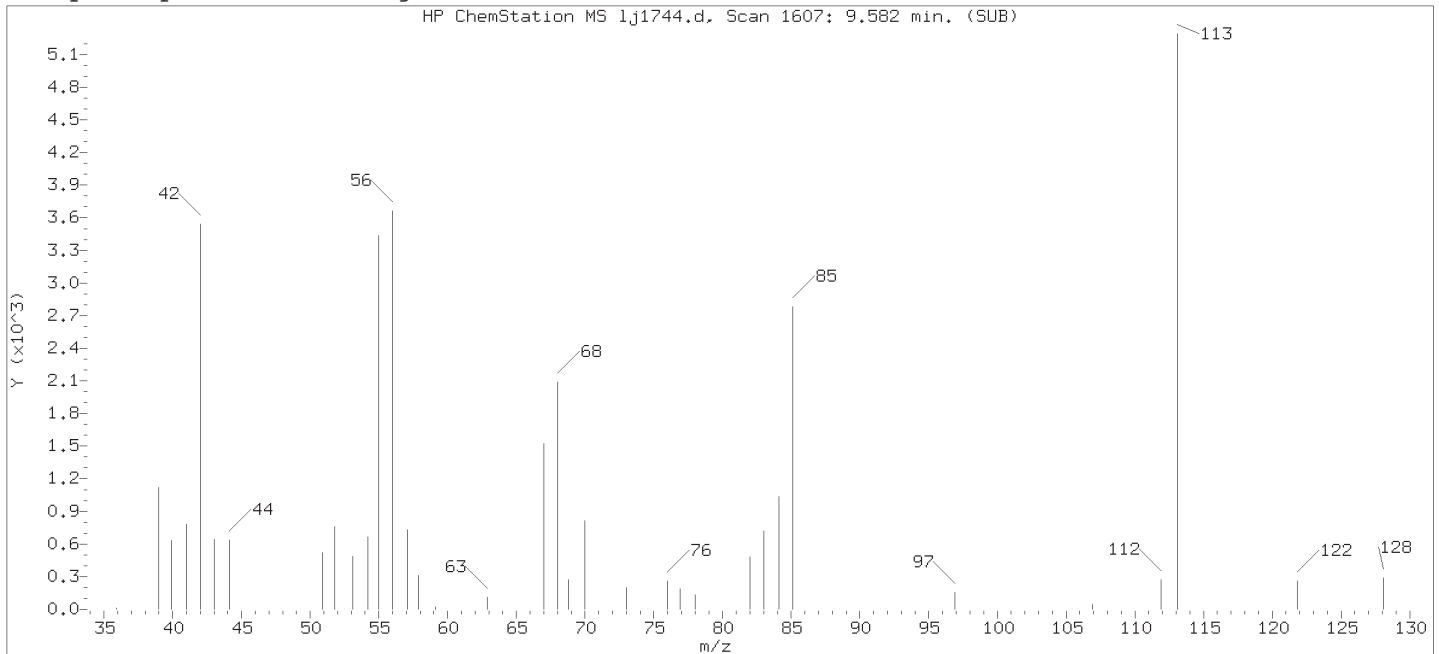
Compound Number    : 79  
Compound Name    : Caprolactam  
Scan Number    : 1620  
Retention Time (minutes)                                   : 9.652  
Quant Ion    : 113.00  
Area (flag)    : 295113M  
On-Column Amount (ng/ul)                                 : 20.4470  
Integration start scan                                      : 1610                      Integration stop scan: 1633  
Y at integration start                                       : -74                        Y at integration end: -74

Reason for manual integration: improper integration

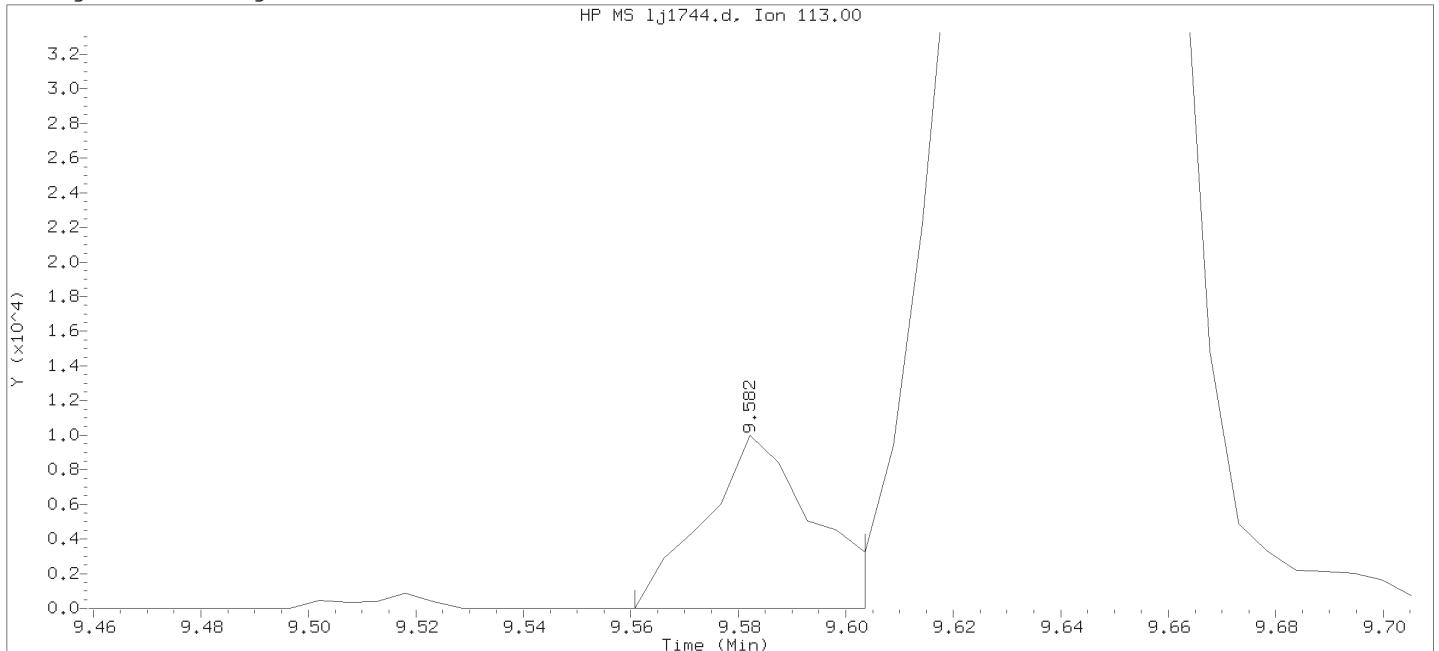
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
 Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
 Analyst ID: whs02991

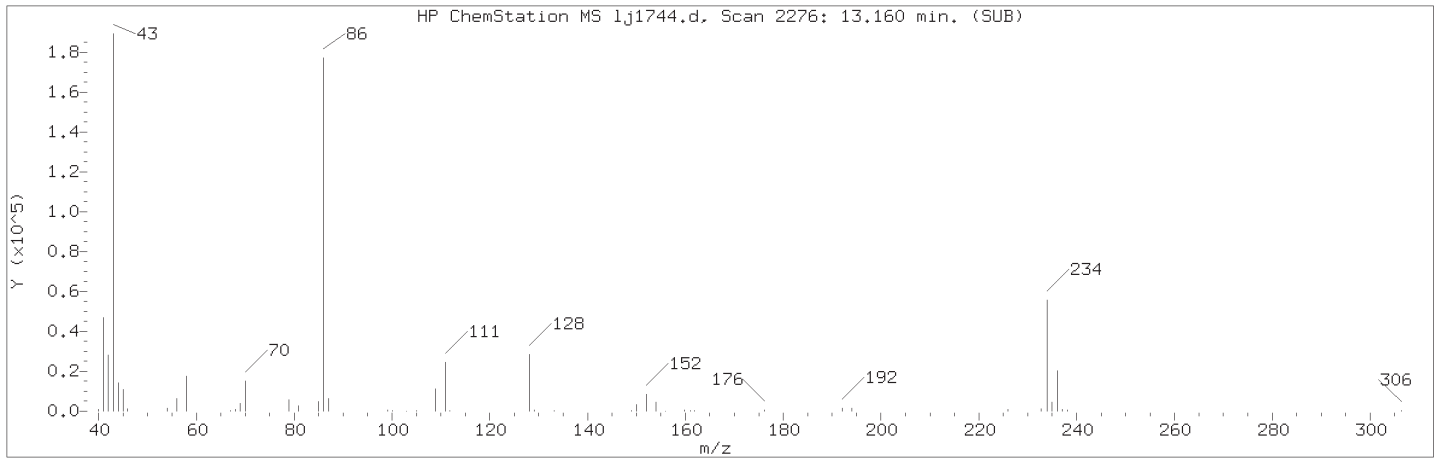
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20

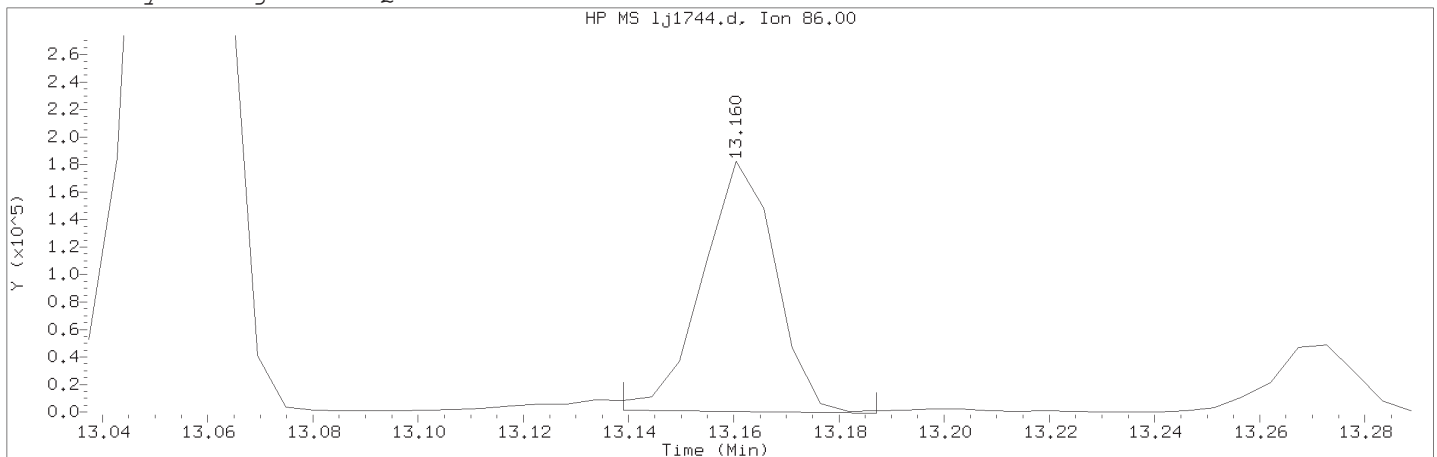
Lab Sample ID: RVSTD2648

Compound Number	: 79	
Compound Name	: Caprolactam	
Scan Number	: 1607	
Retention Time (minutes)	: 9.582	
Quant Ion	: 113.00	
Area	: 13759	
On-column Amount (ng/ul)	: 1.4465	
Integration start scan	: 1602	Integration stop scan: 1610
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD20

Lab Sample ID: RVSTD2648

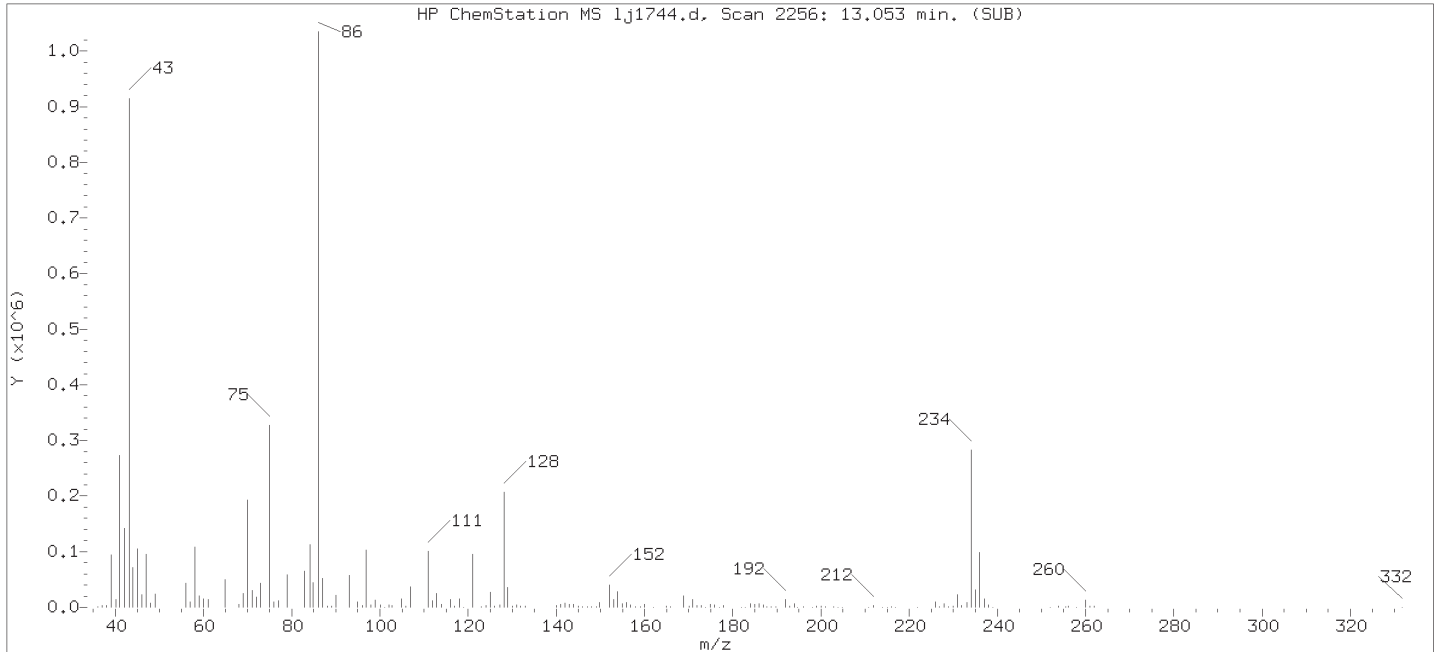
Compound Number : 149  
Compound Name : Diallate (peak 2)  
Scan Number : 2276  
Retention Time (minutes) : 13.160  
Quant Ion : 86.00  
Area (flag) : 176901M  
On-Column Amount (ng/ul) : 3.2902  
Integration start scan : 2271      Integration stop scan: 2280  
Y at integration start : 1232      Y at integration end: -821

Reason for manual integration: improper integration

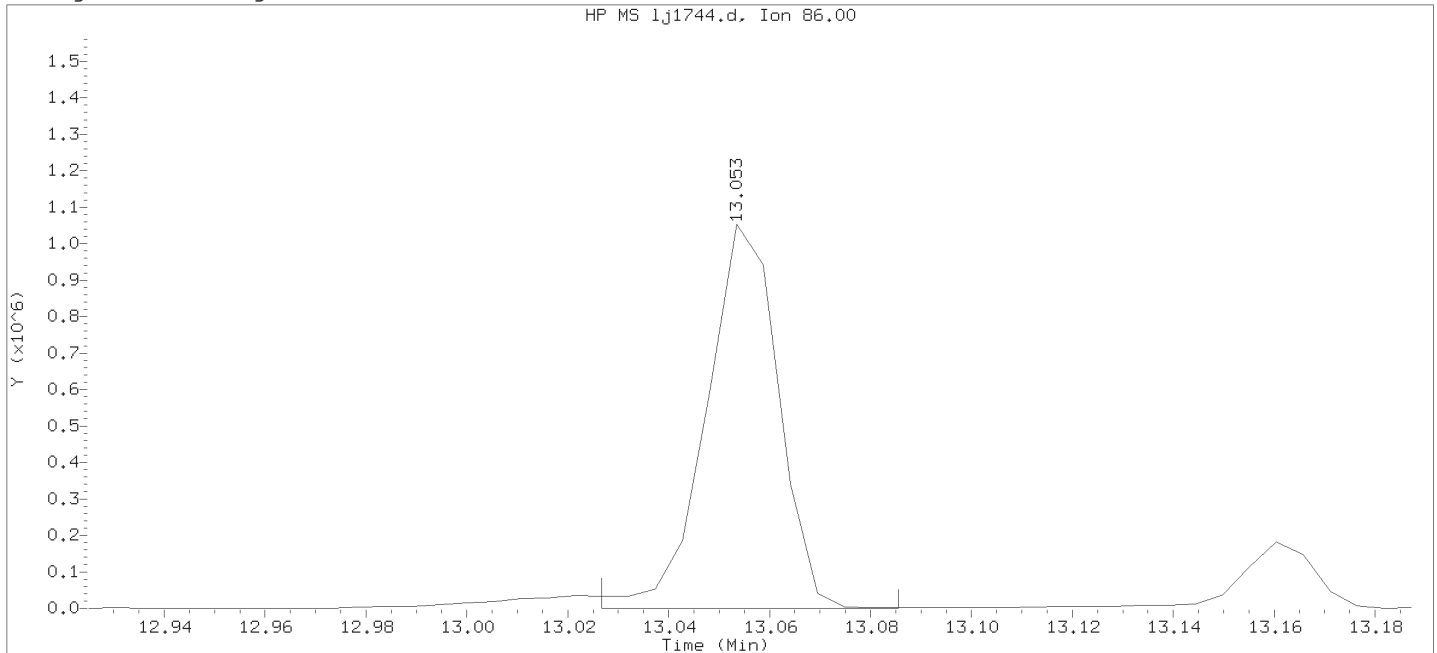
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d  
Injection date and time: 29-OCT-2018 01:53

Instrument ID: HP20296.i  
Analyst ID: whs02991

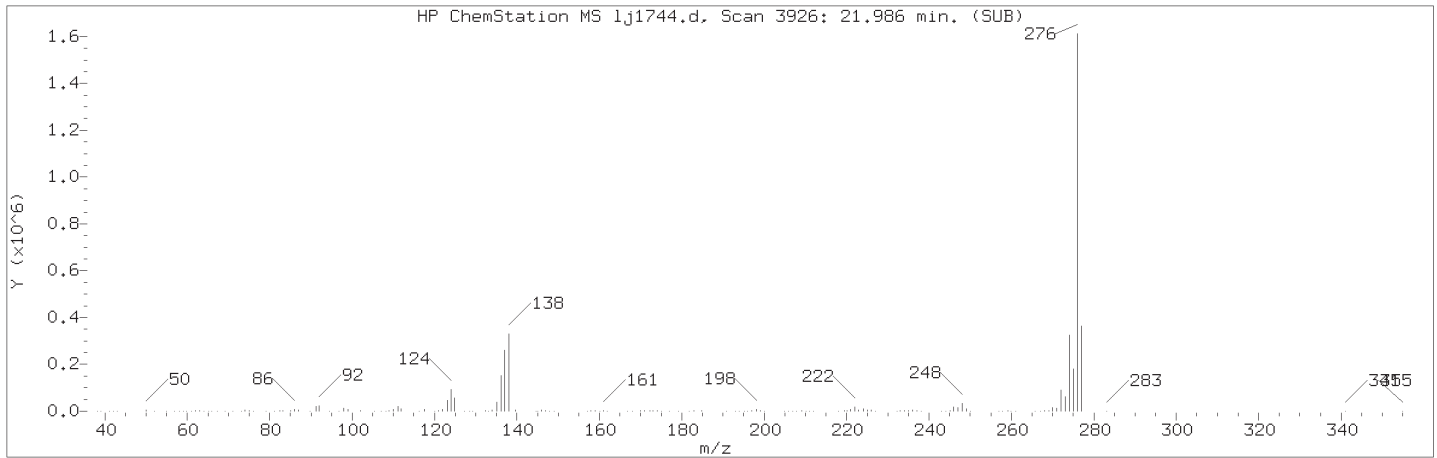
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20

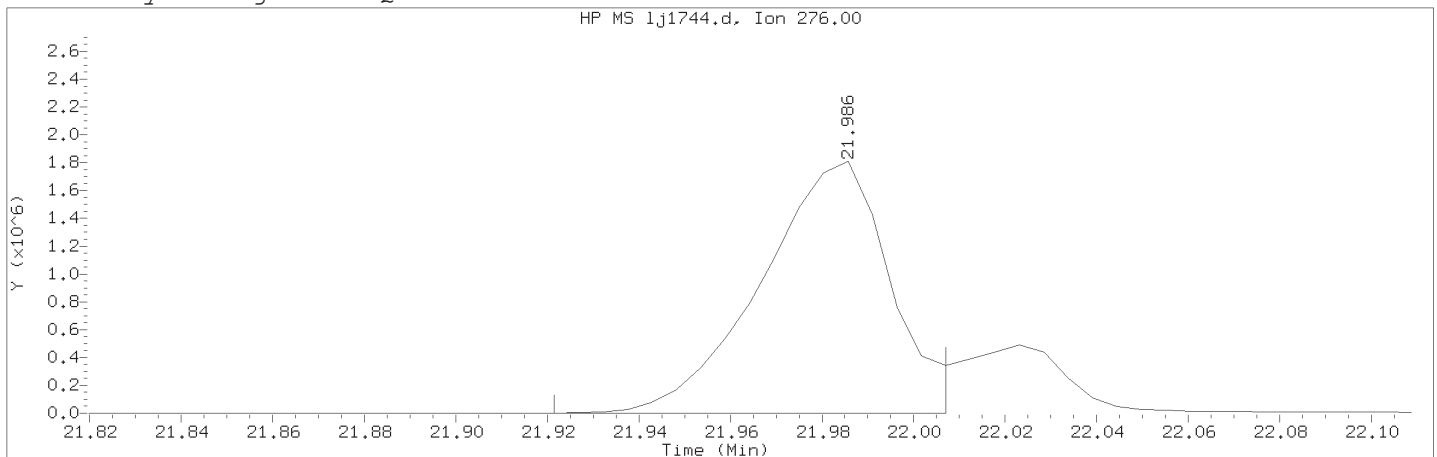
Lab Sample ID: RVSTD2648

Compound Number : 149  
Compound Name : Diallate (peak 2)  
Scan Number : 2256  
Retention Time (minutes) : 13.053  
Quant Ion : 86.00  
Area : 1047189  
On-column Amount (ng/ul) : 7.5001  
Integration start scan : 2250      Integration stop scan: 2261  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 01:53                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20    Lab Sample ID: RVSTD2648

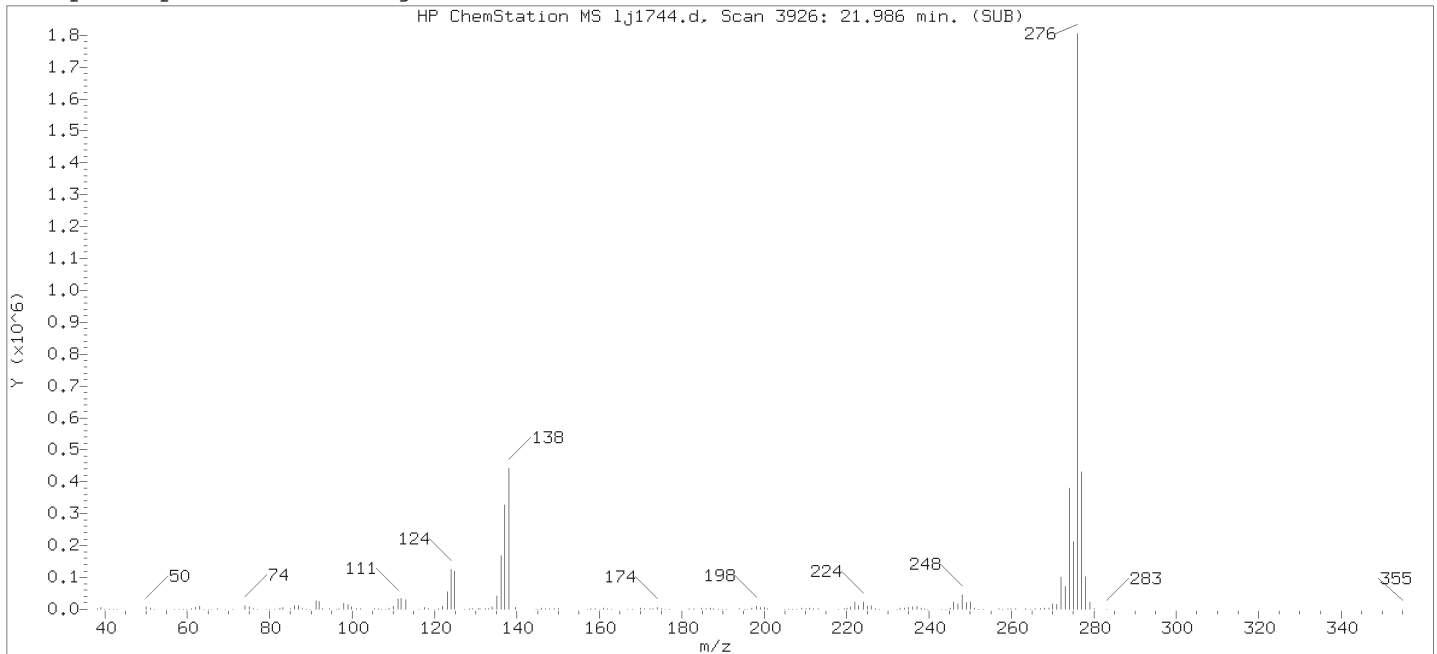
Compound Number                      : 224  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 3926  
Retention Time (minutes)             : 21.986  
Quant Ion                                : 276.00  
Area (flag)                             : 3537840M  
On-Column Amount (ng/ul)            : 21.9325  
Integration start scan                : 3913                      Integration stop scan: 3929  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

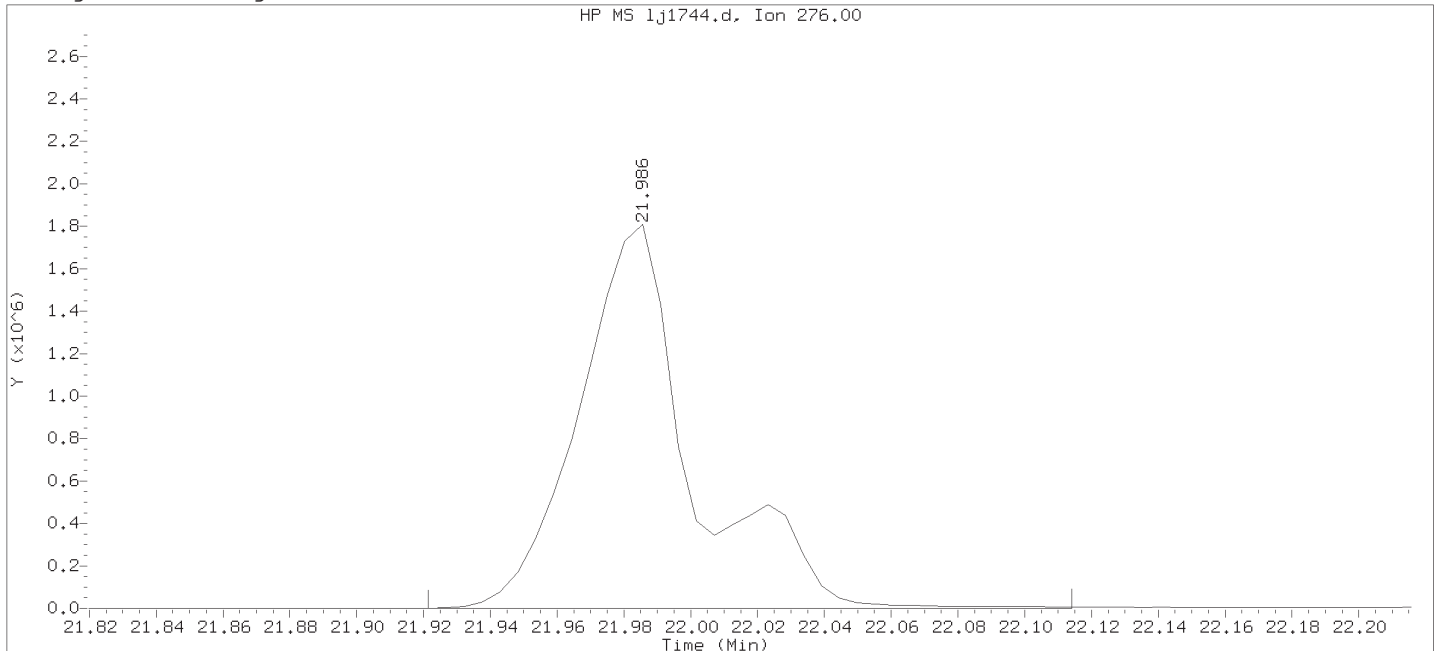
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

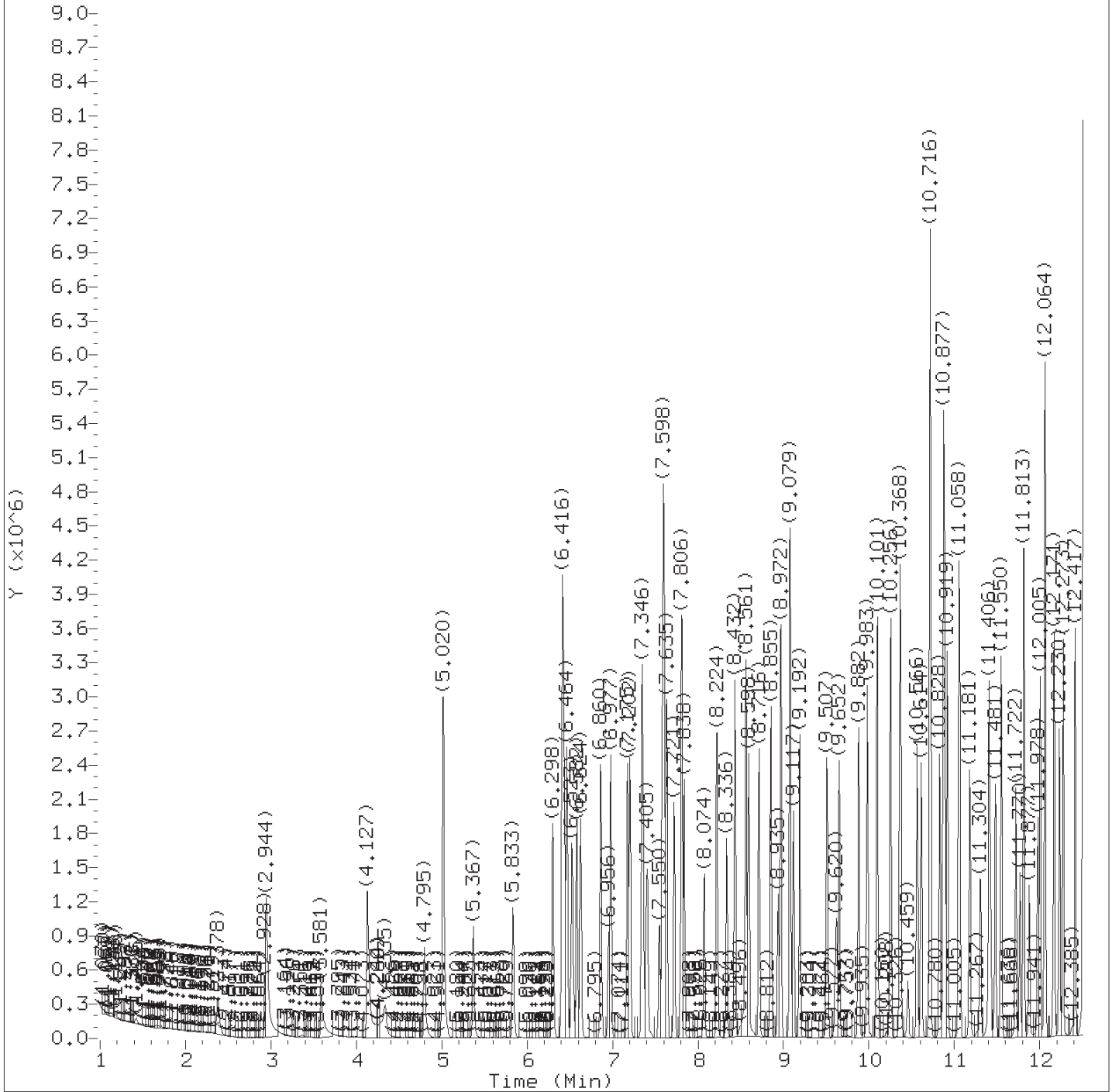


Data File: /chem/HP20296.i/18oct28.b/lj1744.d      Instrument ID: HP20296.i  
 Injection date and time: 29-OCT-2018 01:53      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20      Lab Sample ID: RVSTD2648

Compound Number : 224  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 3926  
 Retention Time (minutes) : 21.986  
 Quant Ion : 276.00  
 Area : 4276282  
 On-column Amount (ng/ul) : 26.1700  
 Integration start scan : 3913      Integration stop scan: 3949  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

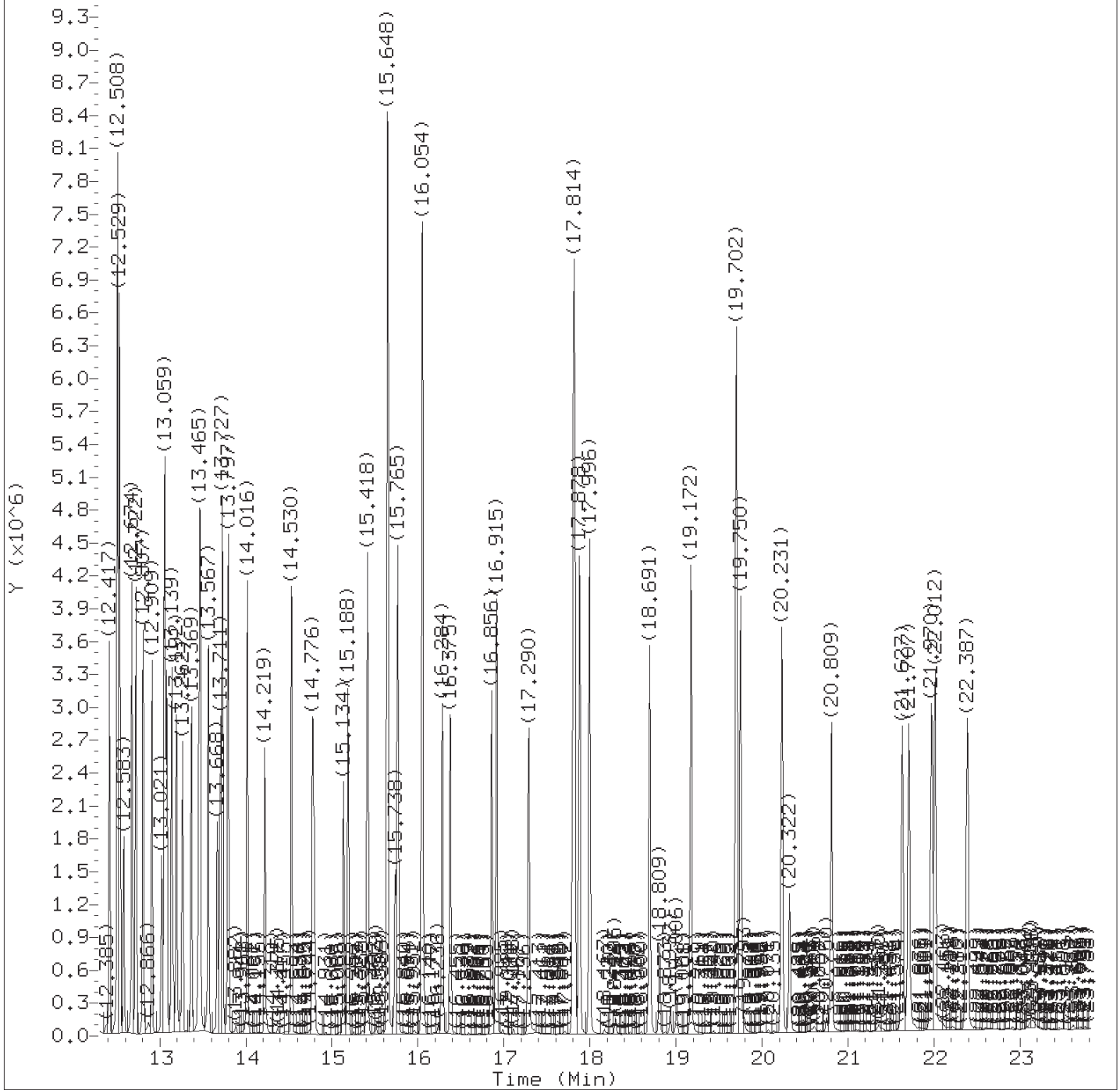
Sublist used: all1

Sample Name: SSTD12.5

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD12.5

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
 Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD12.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.378	88	321162M	12.632
5) N-Nitrosodimethylamine	(1)	2.928	74	495481	12.390
6) Pyridine	(1)	2.950	79	854771	12.555
8) 2-Picoline	(1)	4.132	93	853903	12.326
9) N-Nitrosomethylethylamine	(1)	4.335	88	351280	12.260
10) Methyl methanesulfonate	(1)	4.795	80	457089	12.537
12) \$2-Fluorophenol	(1)	5.020	112	1373587	25.164
14) N-Nitrosodiethylamine	(1)	5.367	102	334877	12.510
43) Total Cresols	(1)			1364155	25.057
16) Ethyl methanesulfonate	(1)	5.833	109	351954	12.461
17) Benzaldehyde	(1)	6.298	77	637480	13.464
18) \$Phenol-d6	(1)	6.416	99	1889497	25.400
19) Phenol	(1)	6.432	94	1081349	12.519
20) Aniline	(1)	6.464	93	1295318	12.663
21) a-methylstyrene	(1)	6.539	118	69798	12.906
23) bis(2-Chloroethyl) ether	(1)	6.582	93	824306	12.712
24) 2-Chlorophenol	(1)	6.624	128	644921	12.530
25) 1,3-Dichlorobenzene	(1)	6.865	146	720957	12.700
26) *1,4-Dichlorobenzene-d4	(1)	6.951	152	173232	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	711342	12.618
28) Benzyl alcohol	(1)	7.175	108	452013	12.713
29) 1,2-Dichlorobenzene	(1)	7.202	146	690679	12.737
31) Indene	(1)	7.341	115	760573	12.516
32) 2-Methylphenol	(1)	7.352	108	680821	12.651
100) Isosafrole	(3)			531245	12.204
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.405	45	1039624	12.607
35) bis(2-Chloroisopropyl) ether	(1)	7.405	45	1039624	12.607
36) N-Nitrosopyrrolidine	(1)	7.550	100	360291	12.639
37) Acetophenone	(1)	7.582	105	1047077	12.736
38) 4-Methylphenol	(1)	7.598	108	683334	12.406
39) N-Nitroso-di-n-propylamine	(1)	7.603	70	630058	12.624
40) N-Nitrosomorpholine	(1)	7.619	56	449253	12.551
41) o-Toluidine	(1)	7.635	106	1177383	12.541
44) Hexachloroethane	(1)	7.721	117	328352	12.841
45) \$Nitrobenzene-d5	(2)	7.806	82	1794769	25.156
46) Nitrobenzene	(2)	7.838	77	943929	12.491
125) 2,4,2,6-Dinitrotoluenes	(3)			685128	24.815
50) N-Nitropiperidine	(2)	8.074	114	338368	12.576
52) Isophorone	(2)	8.224	82	1600823	12.446
53) 2-Nitrophenol	(2)	8.336	139	322230	12.586

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 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
 Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD12.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.432	107	763482	12.492
59) O,O,O-Triethylphosphorothioate	(2)	8.561	198	316674	12.299
58) Benzoic acid	(2)	8.582	105	520132M	12.704
57) bis(2-Chloroethoxy)methane	(2)	8.598	93	997376	12.570
62) 2,4-Dichlorophenol	(2)	8.716	162	535515	12.284
151) Diallate trans/cis	(4)			738166	12.515
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	613802	12.642
68) *Naphthalene-d8	(2)	8.935	136	655608	5.000
69) Naphthalene	(2)	8.972	128	1892176	12.699
70) 4-Chloroaniline	(2)	9.074	127	761567	12.477
71) 2,6-Dichlorophenol	(2)	9.079	162	529318	12.584
72) Hexachloropropene	(2)	9.117	213	408716	12.648
74) Hexachlorobutadiene	(2)	9.192	225	363390	12.568
78) Quinoline	(2)	9.507	129	1113166	12.557
79) Caprolactam	(2)	9.620	113	175420	12.879
80) N-Nitrosodi-n-butylamine	(2)	9.652	84	582837	11.288
83) 4-Chloro-3-methylphenol	(2)	9.882	107	643925	12.301
85) Safrole	(2)	9.983	162	474359	12.525
86) 2-Methylnaphthalene	(2)	10.101	142	1205213	12.619
87) 1-Methylnaphthalene	(2)	10.256	142	1152959	12.562
88) Hexachlorocyclopentadiene	(3)	10.363	237	370364	12.250
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.374	216	618255	12.046
91) cis-Isosafrole	(3)	10.459	162	85779	2.013
93) 2,4,6-Trichlorophenol	(3)	10.566	196	402773	12.151
95) 2,4,5-Trichlorophenol	(3)	10.614	196	421239	12.316
96) \$2-Fluorobiphenyl	(3)	10.721	172	2745062	24.457
97) trans-Isosafrole	(3)	10.828	162	445466	10.191
98) 1,1'-Biphenyl	(3)	10.877	154	1441485	12.477
99) 2-Chloronaphthalene	(3)	10.887	162	1218585	11.816
101) 1-Chloronaphthalene	(3)	10.919	162	1093740	12.903
103) Diphenyl ether	(3)	11.058	170	794959	12.204
104) 2-Nitroaniline	(3)	11.069	138	348760	12.451
108) 1,4-Naphthoquinone	(3)	11.181	158	468140	12.146
109) 1,4-Dinitrobenzene	(3)	11.310	168	181968	12.447
110) Dimethylphthalate	(3)	11.406	163	1299493	12.361
111) 1,3-Dinitrobenzene	(3)	11.422	168	199220	12.055
113) 2,6-Dinitrotoluene	(3)	11.481	165	286675	12.319
114) Acenaphthylene	(3)	11.550	152	1637539	12.832
117) 3-Nitroaniline	(3)	11.722	138	301188	11.821
118) *Acenaphthene-d10	(3)	11.764	164	330289	5.000

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 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
 Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD12.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.818	153	1205470	12.177
120) 2,4-Dinitrophenol	(3)	11.877	184	156239	11.567
121) 4-Nitrophenol	(3)	11.978	109	271133	12.900
122) Pentachlorobenzene	(3)	12.005	250	519926	12.603
124) Dibenzofuran	(3)	12.064	168	1635669	12.291
123) 2,4-Dinitrotoluene	(3)	12.069	165	398453	12.497
126) 1-Naphthylamine	(3)	12.171	143	1153230	12.007
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	339788	12.451
128) 2-Naphthylamine	(3)	12.273	143	1154976	12.051
129) Diethylphthalate	(3)	12.417	149	1299901	12.478
130) Thionazin	(3)	12.508	107	258125	12.469
131) Fluorene	(3)	12.508	166	1262144	12.136
133) 5-Nitro-o-toluidine	(3)	12.529	152	361669	12.409
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	667634	12.372
134) 4-Nitroaniline	(3)	12.540	138	322052	12.503
135) 4,6-Dinitro-2-methylphenol	(4)	12.583	198	220985	12.294
136) N-Nitrosodiphenylamine	(4)	12.679	169	1059063	12.282
137) NDPA as diphenylamine	(4)	12.679	169	1059063	12.282
139) 1,2-Diphenylhydrazine	(4)	12.722	77	1862569	12.279
140) \$2,4,6-Tribromophenol	(3)	12.807	330	341227	24.084
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	277636	12.146
144) 1,3,5-Trinitrobenzene	(4)	13.021	213	132010	11.996
145) Diallate (peak 1)	(4)	13.053	86	635871	10.471
146) Phorate	(4)	13.059	75	1093663	13.564
147) Phenacetin	(4)	13.080	108	802554	12.389
148) 4-Bromophenyl-phenylether	(4)	13.139	248	365896	12.315
149) Diallate (peak 2)	(4)	13.160	86	102295M	2.044
150) Hexachlorobenzene	(4)	13.198	284	379743	12.513
152) Dimethoate	(4)	13.262	87	645283	12.580
153) Atrazine	(4)	13.369	200	337051	12.675
154) Pentachlorophenol	(4)	13.455	266	247536	12.028
155) 4-Aminobiphenyl	(4)	13.465	169	987006	12.755
156) Pentachloronitrobenzene	(4)	13.471	237	178609	12.284
157) Pronamide	(4)	13.567	173	630774	12.567
158) *Phenanthrene-d10	(4)	13.695	188	666537	5.000
159) Dinoseb	(4)	13.711	211	335008	12.092
160) Phenanthrene	(4)	13.727	178	1969376	12.078
162) Anthracene	(4)	13.797	178	1988372	12.470
168) Carbazole	(4)	14.016	167	1793030	12.437
169) Methyl parathion	(4)	14.219	109	492761	12.388

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Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
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Instrument ID: HP20296.i  
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Sublist used: all1

Sample Name: SSTD12.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.530	149	2307624	12.267
172) Parathion	(4)	14.776	109	320006	12.243
173) 4-Nitroquinoline-1-oxide	(4)	14.797	190	171427	12.277
227) Total PAHs	(6)			33224607	228.821
174) Octachlorostyrene	(4)	15.139	308	137056	11.868
176) Isodrin	(4)	15.188	193	239658	12.241
178) Fluoranthene	(4)	15.418	202	2236540	12.484
179) Benzidine	(5)	15.653	184	4201102M	36.631
180)*Pyrene-d10	(5)	15.738	212	694893	5.000
182) Pyrene	(5)	15.765	202	2291438	12.496
184)\$Terphenyl-d14	(5)	16.054	244	2799009	24.315
187) p-Dimethylaminoazobenzene	(5)	16.284	225	375780	12.188
190) Chlorobenzilate	(5)	16.375	139	702405	12.365
192) 3,3'-Dimethylbenzidine	(5)	16.856	212	1379326	12.151
193) Butylbenzylphthalate	(5)	16.915	149	1065474	12.307
196) 2-Acetylaminofluorene	(5)	17.290	181	881978	11.942
198) 3,3'-Dichlorobenzidine	(5)	17.803	252	793992	12.094
200) Benzo(a)anthracene	(5)	17.814	228	2253908	12.941
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	440781	12.025
201) Chrysene	(5)	17.878	228	2095718	12.382
204) bis(2-Ethylhexyl)phthalate	(5)	17.996	149	1537540	12.236
208) 6-Methylchrysene	(5)	18.696	242	1401511	12.072
210) Di-n-octylphthalate	(6)	19.172	149	2683955	12.628
211) Benzo(b)fluoranthene	(6)	19.702	252	2102556	12.947
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.707	256	913557	12.512
213) Benzo(k)fluoranthene	(6)	19.750	252	2124384	12.964
216) Benzo(a)pyrene	(6)	20.231	252	1997549	13.259
218)*Perylene-d12	(6)	20.322	264	612320	5.000
220) 3-Methylcholanthrene	(6)	20.809	268	894016	12.415
222) Dibenz(a,h)acridine	(6)	21.627	279	1562077	12.605
223) Dibenz(a,j)acridine	(6)	21.707	279	1639526	12.767
224) Indeno(1,2,3-cd)pyrene	(6)	21.970	276	1913057M	13.376
225) Dibenz(a,h)anthracene	(6)	22.012	278	1924711	13.225
226) Benzo(g,h,i)perylene	(6)	22.387	276	1971497	13.174

M = Compound was manually integrated.

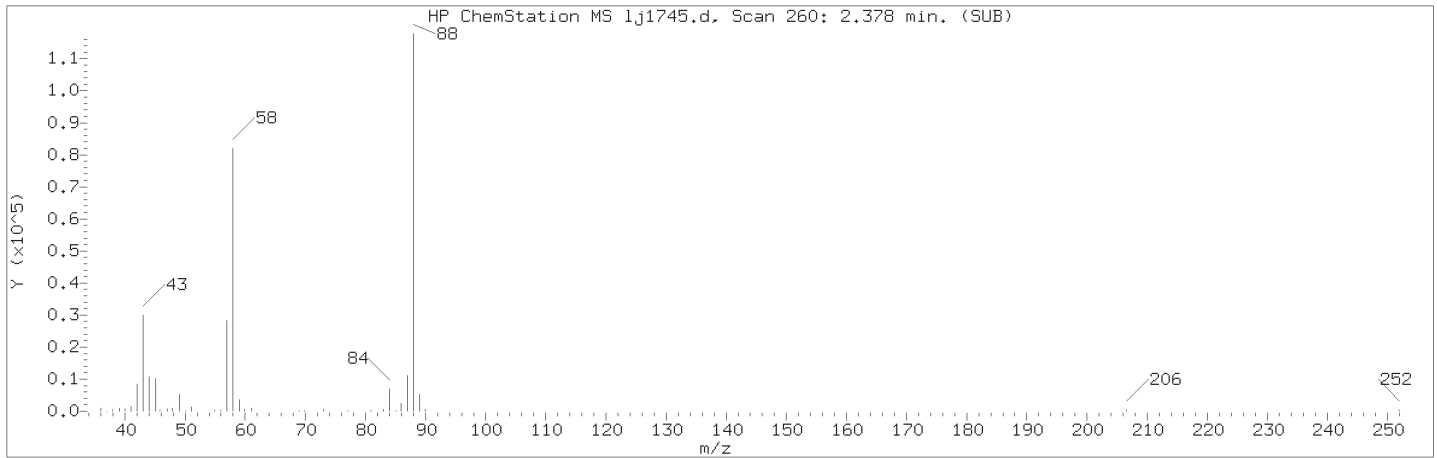
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

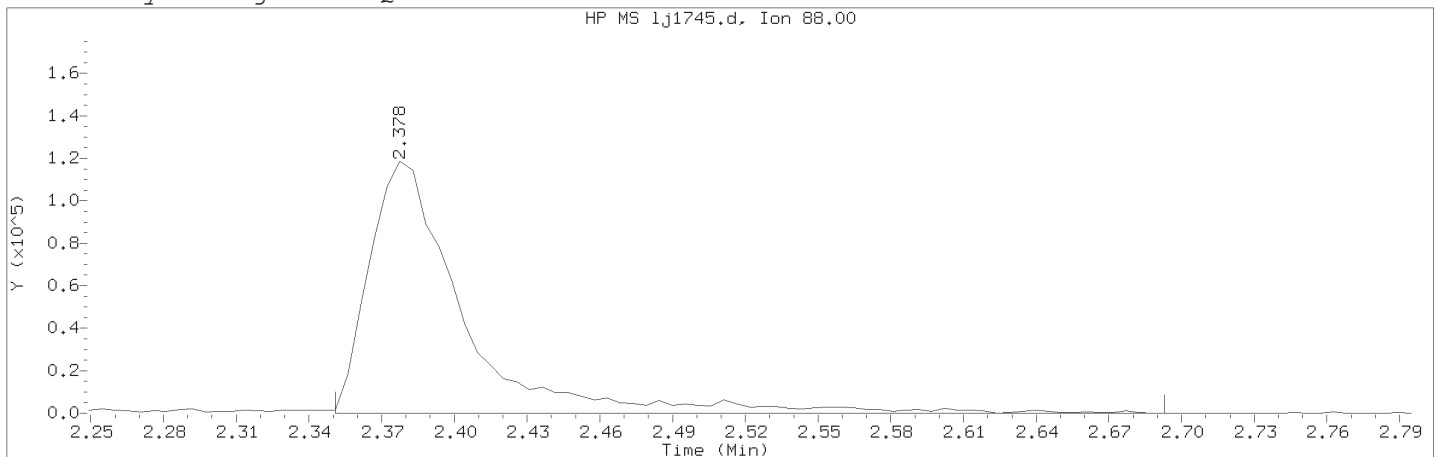
Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:01.

Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD12.5

Lab Sample ID: RVSTD2648

Compound Number : 1  
Compound Name : 1,4-Dioxane  
Scan Number : 260  
Retention Time (minutes) : 2.378  
Quant Ion : 88.00  
Area (flag) : 321162M  
On-Column Amount (ng/ul) : 12.6322  
Integration start scan : 254      Integration stop scan: 318  
Y at integration start : 0      Y at integration end: 0

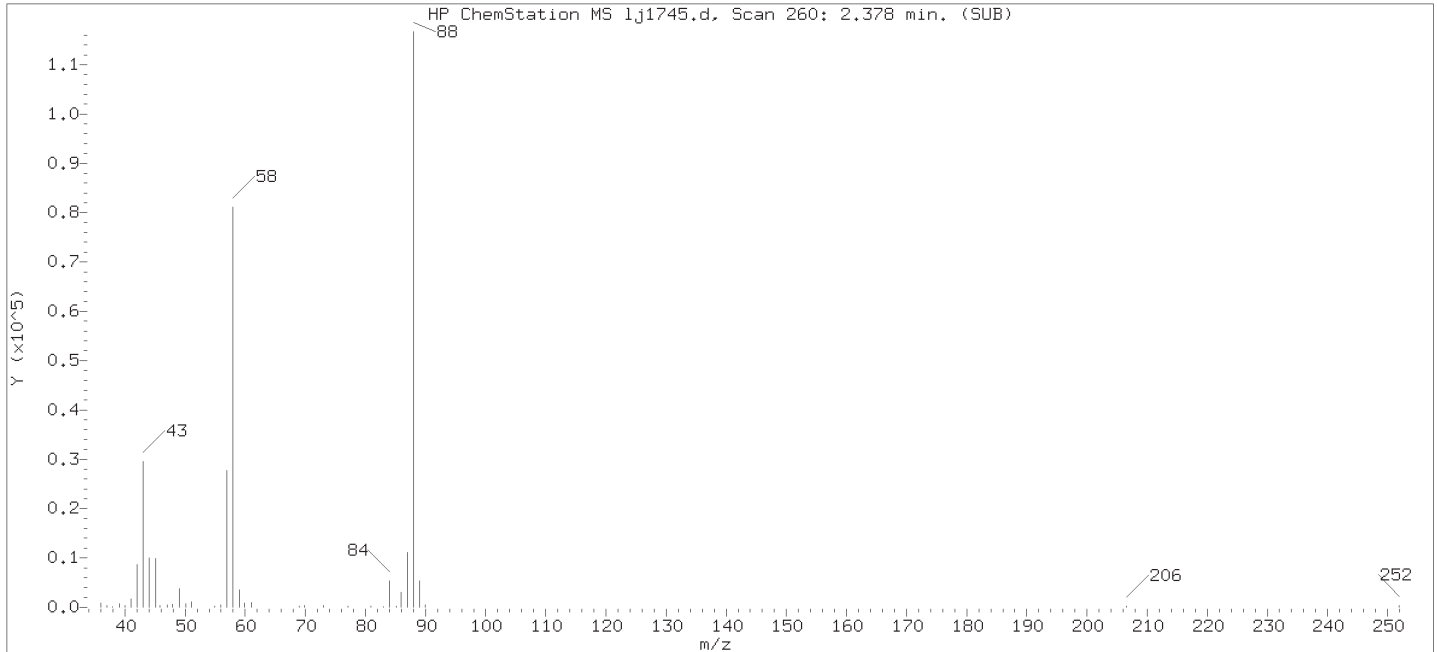
Reason for manual integration: improper integration

Analyst responsible for change:

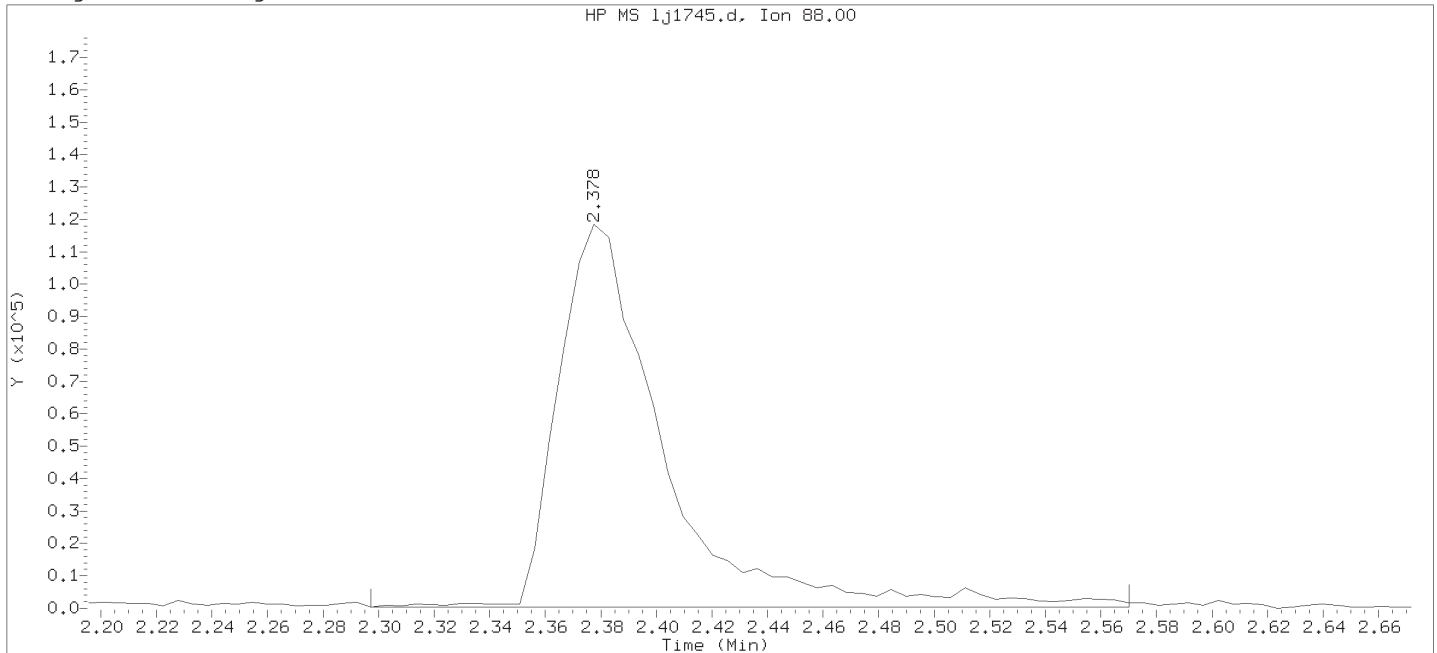
Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

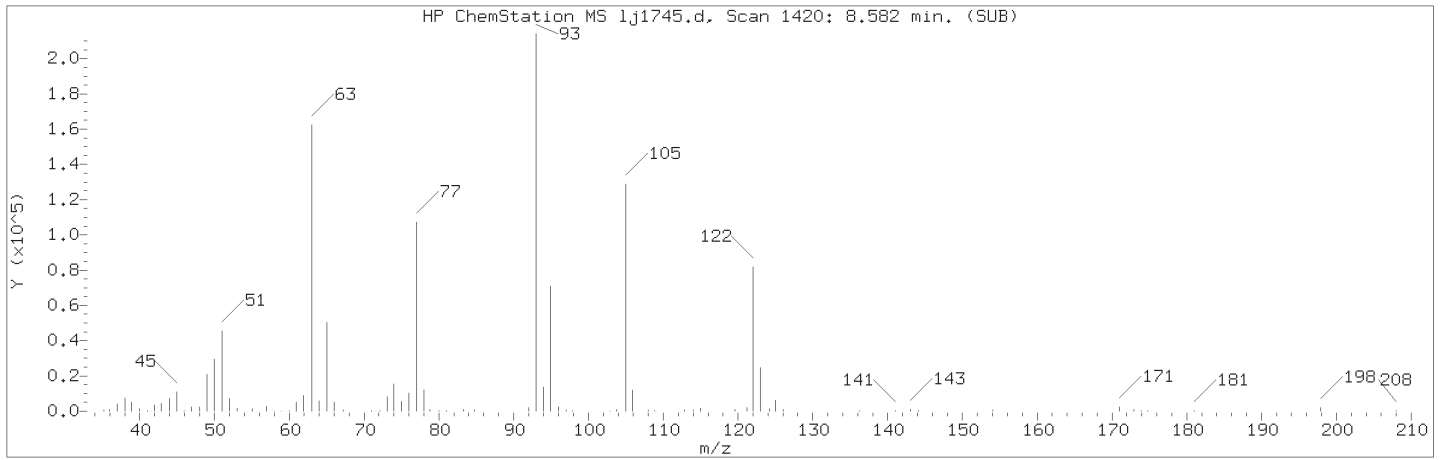
Sublist used: all1

Sample Name: SSTD12.5

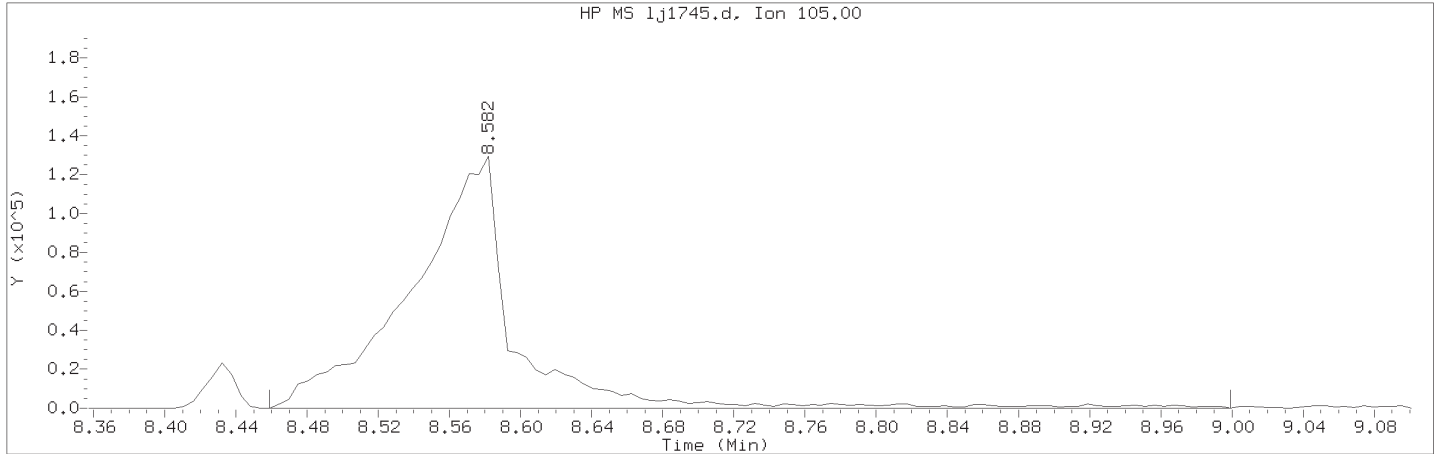
Lab Sample ID: RVSTD2648

Compound Number	: 1	
Compound Name	: 1,4-Dioxane	
Scan Number	: 260	
Retention Time (minutes)	: 2.378	
Quant Ion	: 88.00	
Area	: 311071	
On-column Amount (ng/ul)	: 12.1750	
Integration start scan	: 244	Integration stop scan: 295
Y at integration start	: 433	Y at integration end: 433

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:22                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5    Lab Sample ID: RVSTD2648

Compound Number                      : 58  
Compound Name                         : Benzoic acid  
Scan Number                            : 1420  
Retention Time (minutes)             : 8.582  
Quant Ion                                : 105.00  
Area (flag)                             : 520132M  
On-Column Amount (ng/ul)            : 12.7045  
Integration start scan                : 1396                      Integration stop scan: 1497  
Y at integration start                : -11                       Y at integration end: -37

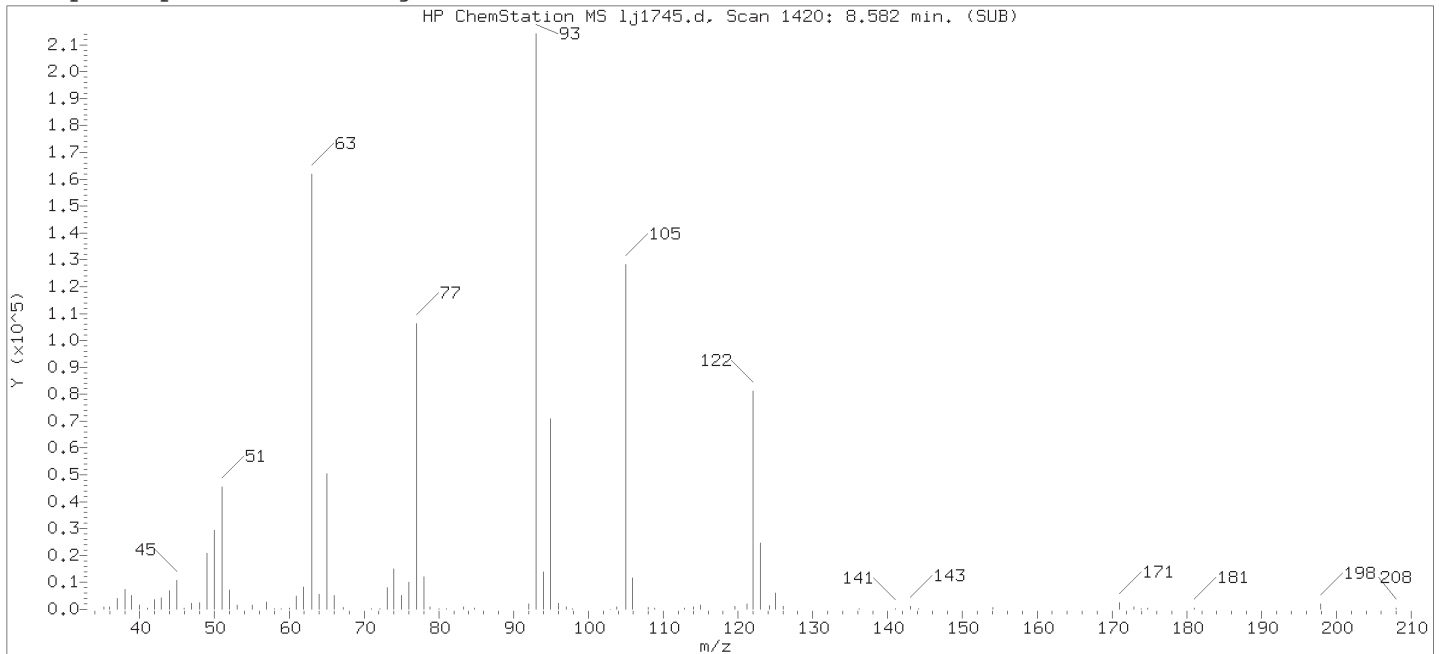
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

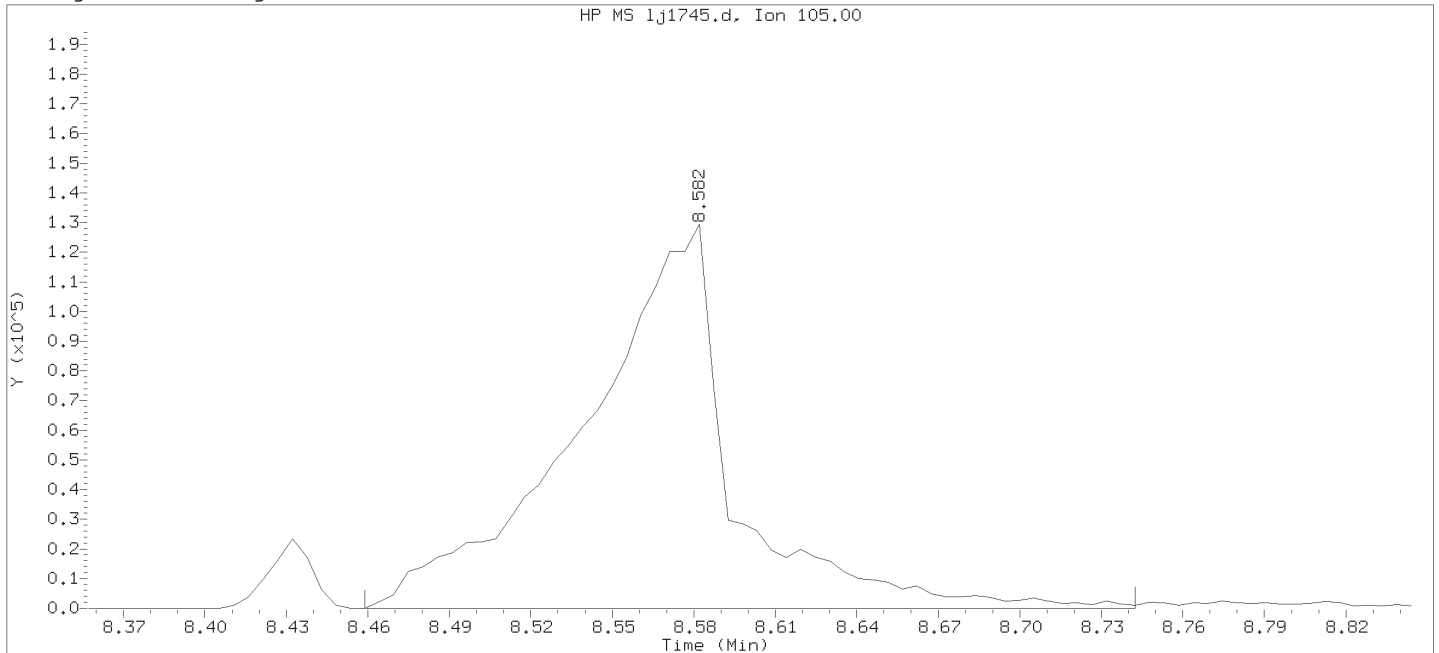
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
 Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

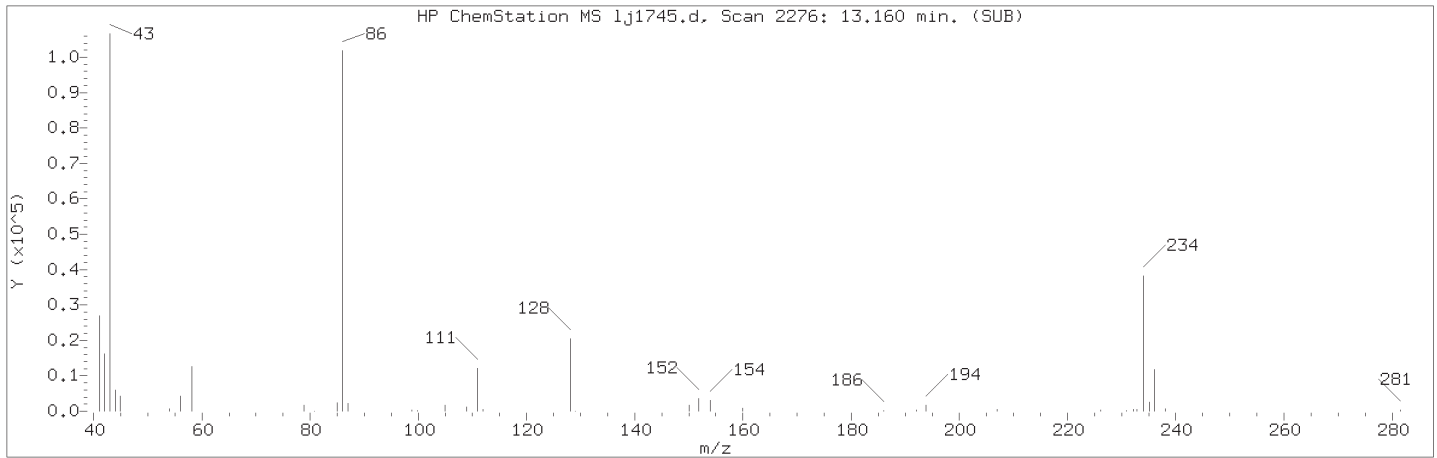
Sample Name: SSTD12.5

Lab Sample ID: RVSTD2648

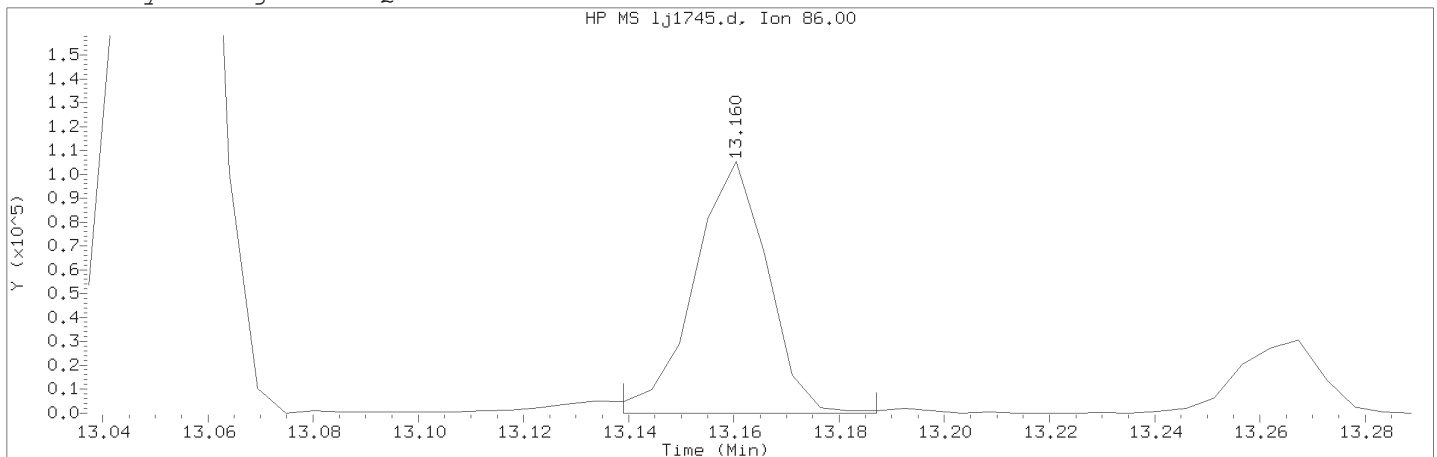
```

Compound Number      : 58
Compound Name       : Benzoic acid
Scan Number         : 1420
Retention Time (minutes) : 8.582
Quant Ion           : 105.00
Area                : 499879
On-column Amount (ng/ul) : 16.4370
Integration start scan : 1396      Integration stop scan: 1449
Y at integration start : 0          Y at integration end: 0
    
```

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:22                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5    Lab Sample ID: RVSTD2648

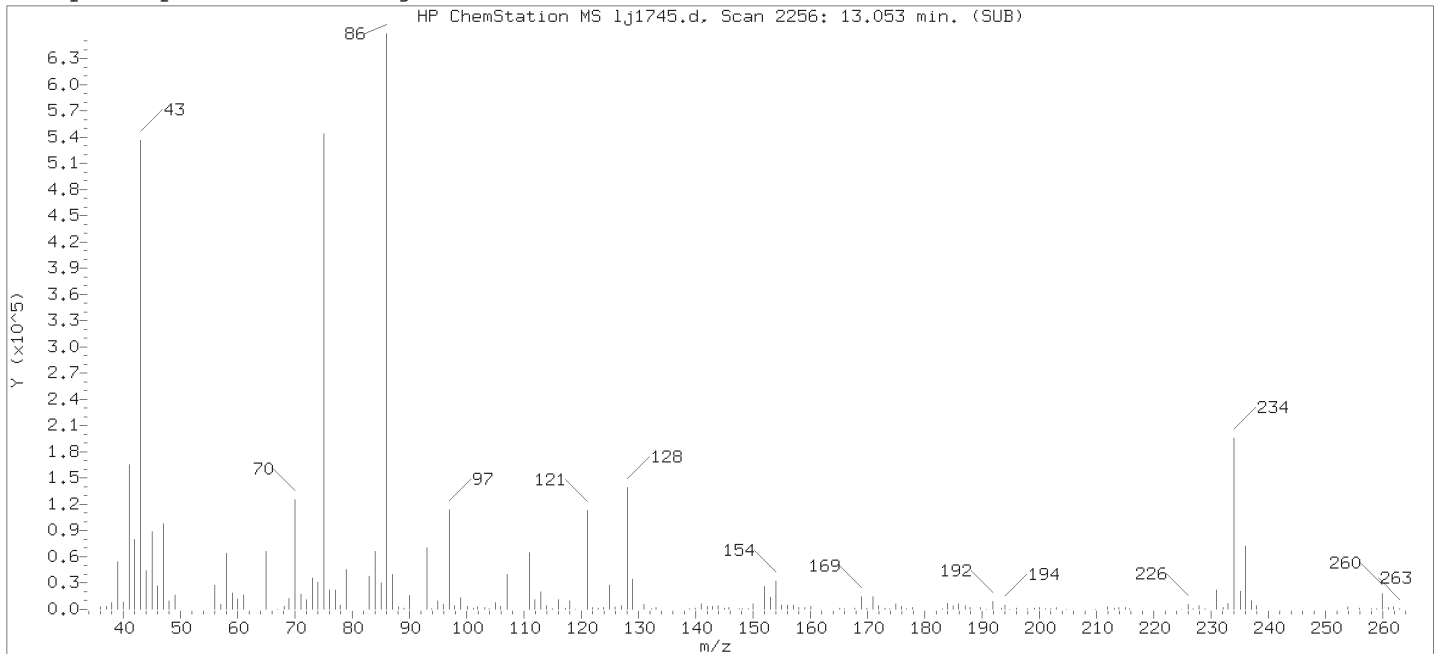
Compound Number    : 149  
Compound Name    : Diallylate (peak 2)  
Scan Number    : 2276  
Retention Time (minutes)                                   : 13.160  
Quant Ion    : 86.00  
Area (flag)    : 102295M  
On-Column Amount (ng/ul)                                : 2.0440  
Integration start scan                                      : 2271                      Integration stop scan: 2280  
Y at integration start                                      : -121                      Y at integration end: -121

Reason for manual integration: improper integration

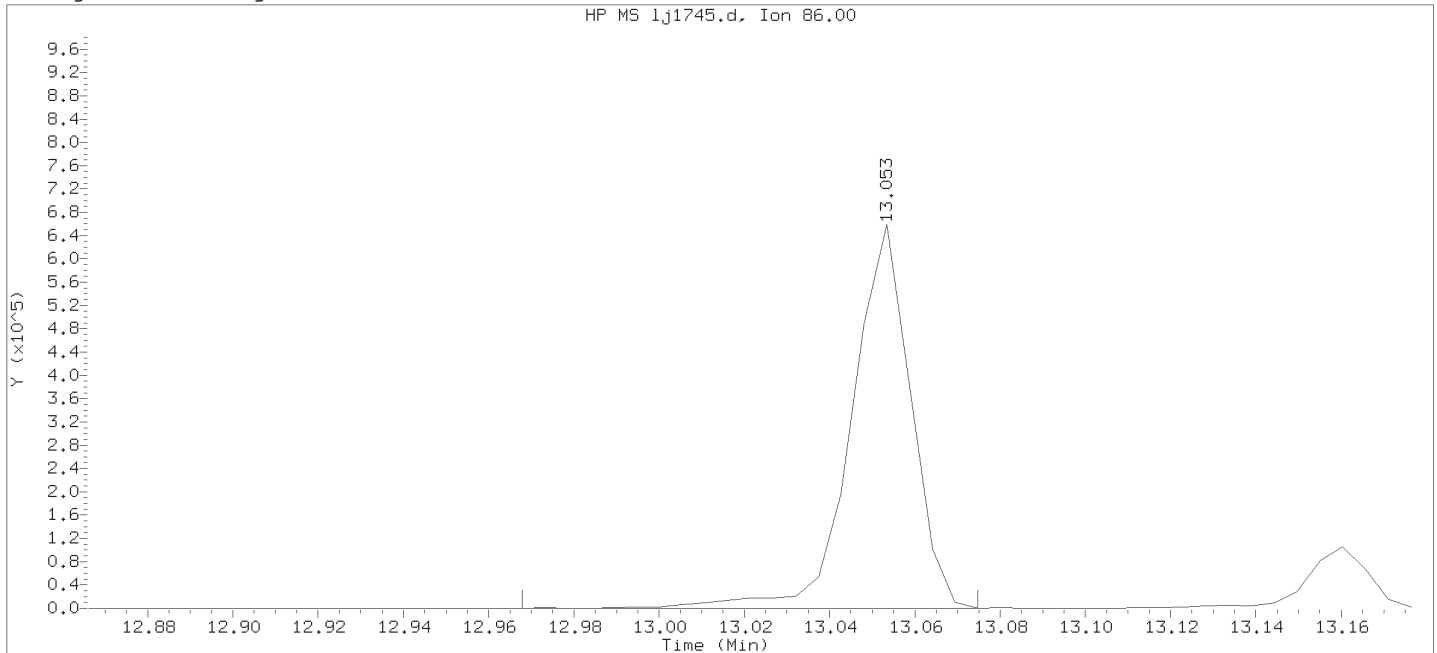
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
 Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
 Analyst ID: whs02991

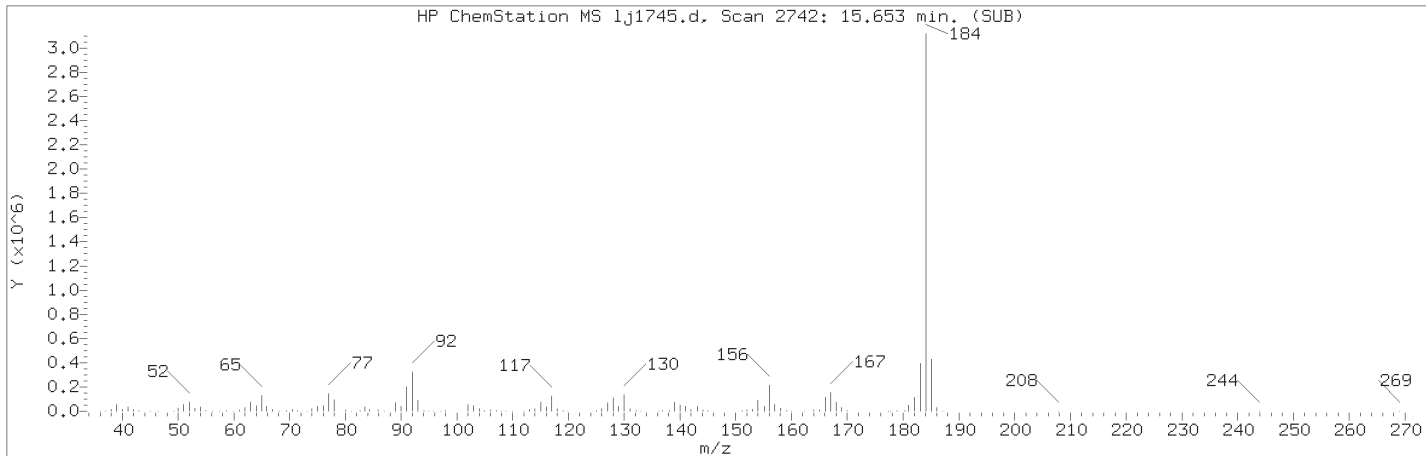
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5

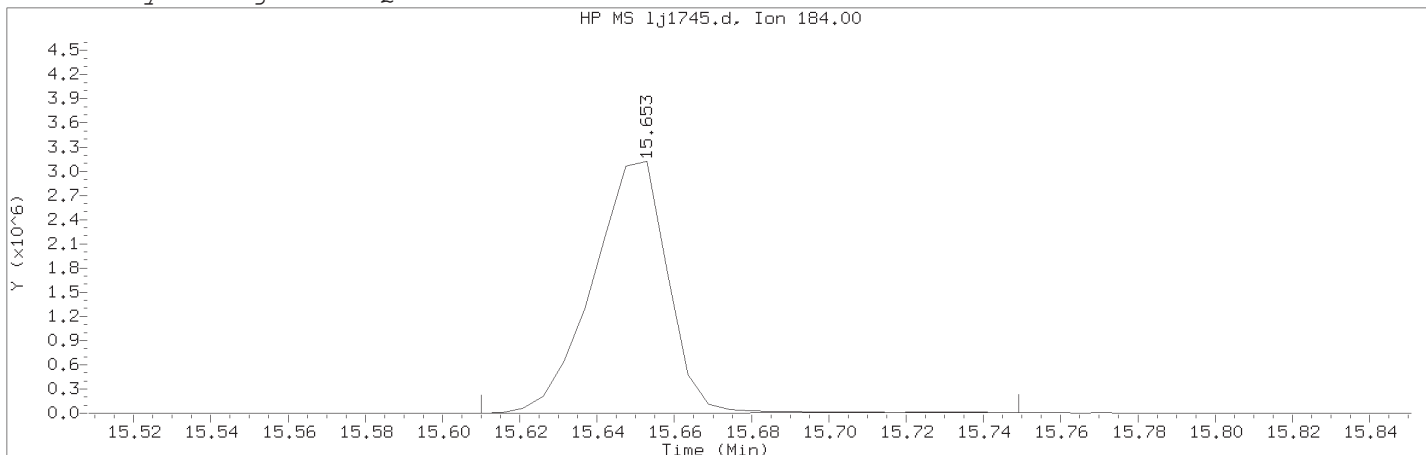
Lab Sample ID: RVSTD2648

Compound Number : 149  
 Compound Name : Diolate (peak 2)  
 Scan Number : 2256  
 Retention Time (minutes) : 13.053  
 Quant Ion : 86.00  
 Area : 635871  
 On-column Amount (ng/ul) : 3.6712  
 Integration start scan : 2239      Integration stop scan: 2259  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:22                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5    Lab Sample ID: RVSTD2648

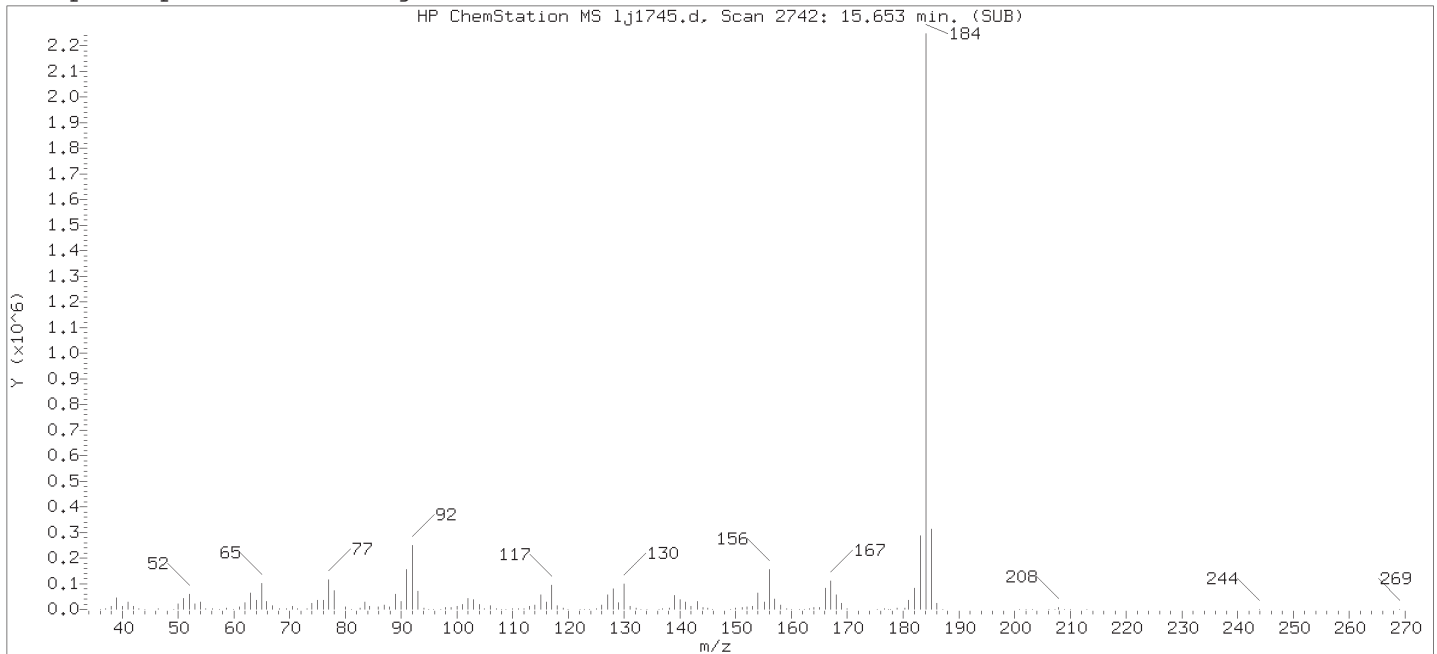
Compound Number                      : 179  
Compound Name                         : Benzidine  
Scan Number                            : 2742  
Retention Time (minutes)             : 15.653  
Quant Ion                                : 184.00  
Area (flag)                             : 4201102M  
On-Column Amount (ng/ul)            : 36.6305  
Integration start scan                : 2733                      Integration stop scan: 2759  
Y at integration start                : 1753                      Y at integration end: 6173

Reason for manual integration: improper integration

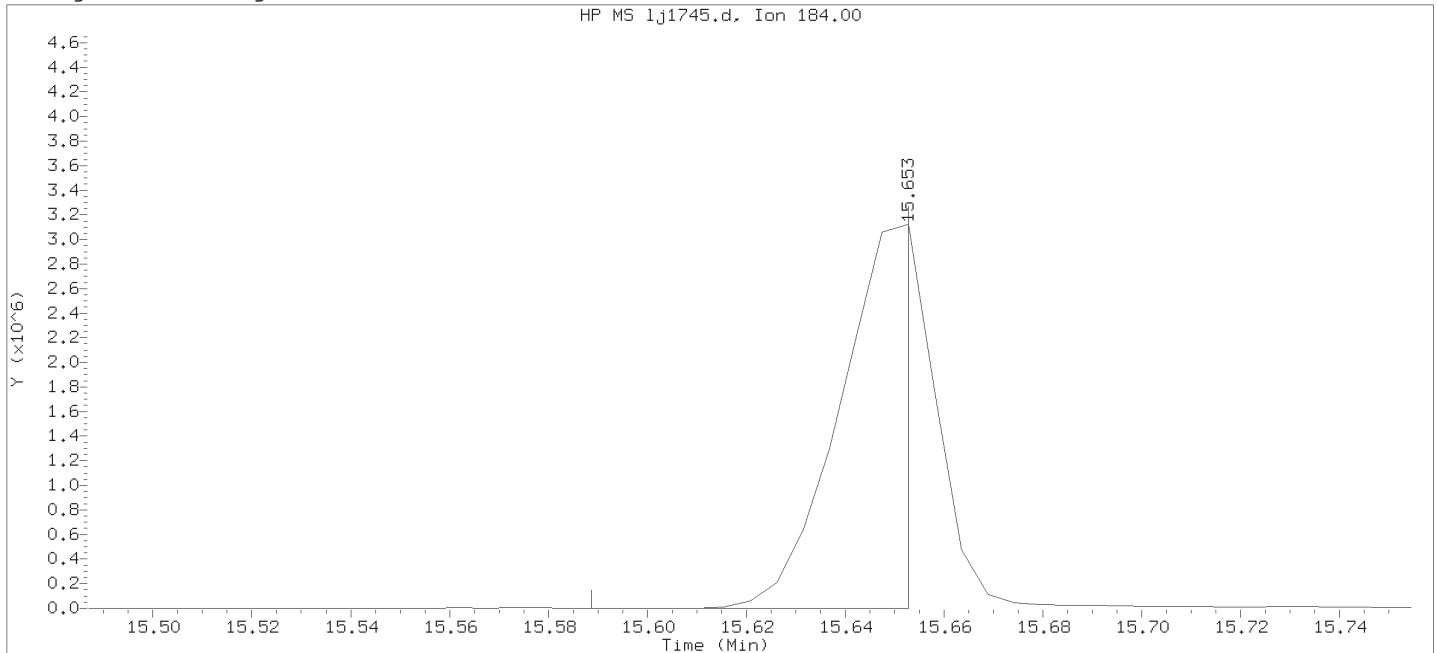
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d  
 Injection date and time: 29-OCT-2018 02:22

Instrument ID: HP20296.i  
 Analyst ID: whs02991

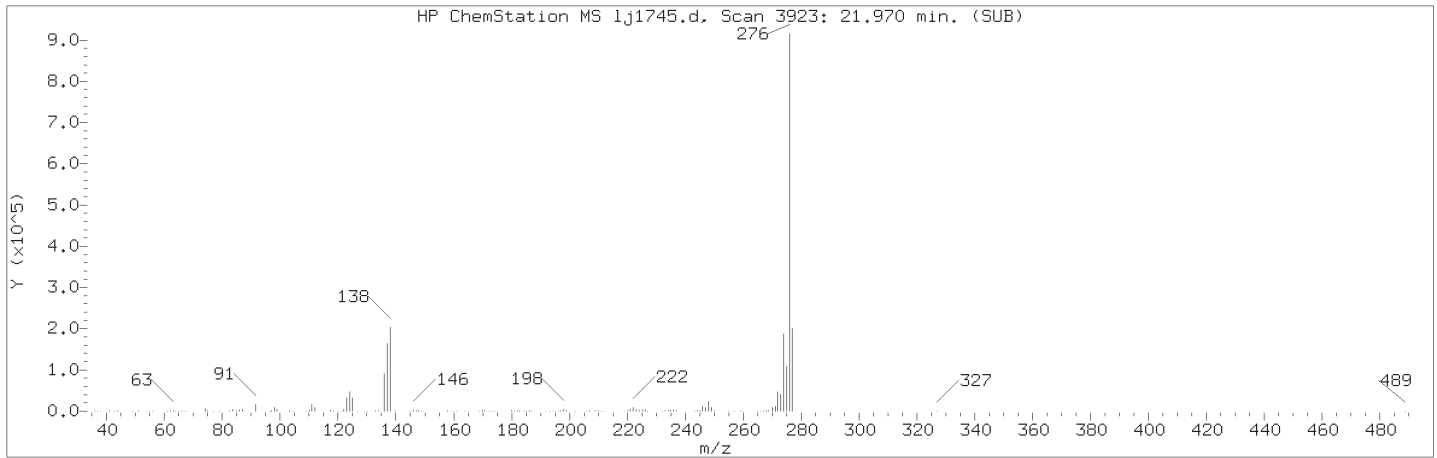
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5

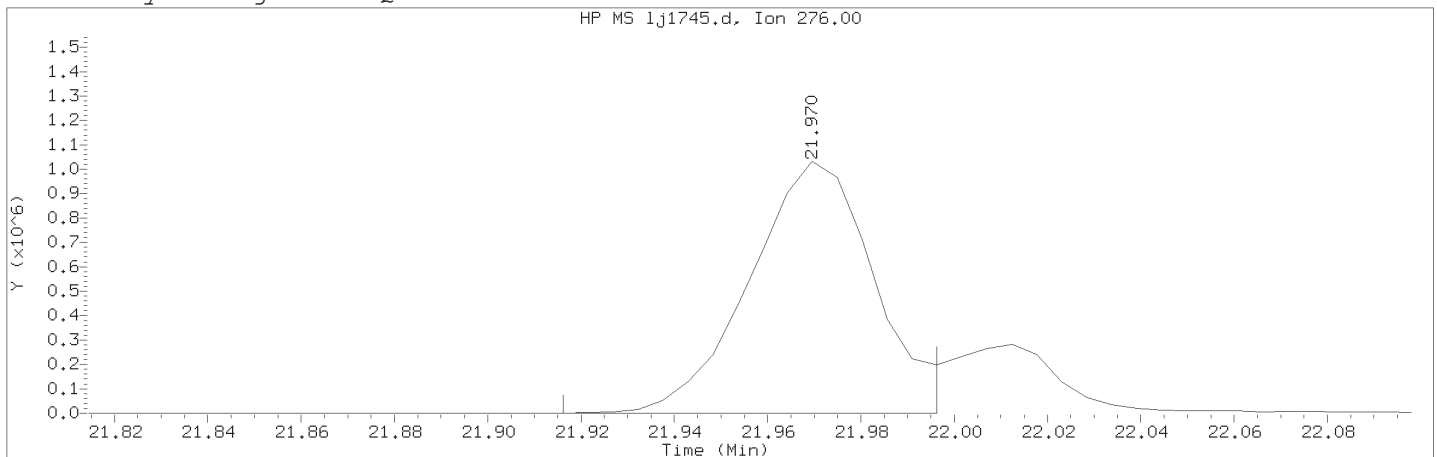
Lab Sample ID: RVSTD2648

Compound Number : 179  
 Compound Name : Benzidine  
 Scan Number : 2742  
 Retention Time (minutes) : 15.653  
 Quant Ion : 184.00  
 Area : 2898529  
 On-column Amount (ng/ul) : 26.0571  
 Integration start scan : 2729      Integration stop scan: 2741  
 Y at integration start : 640      Y at integration end: 640

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:22                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5    Lab Sample ID: RVSTD2648

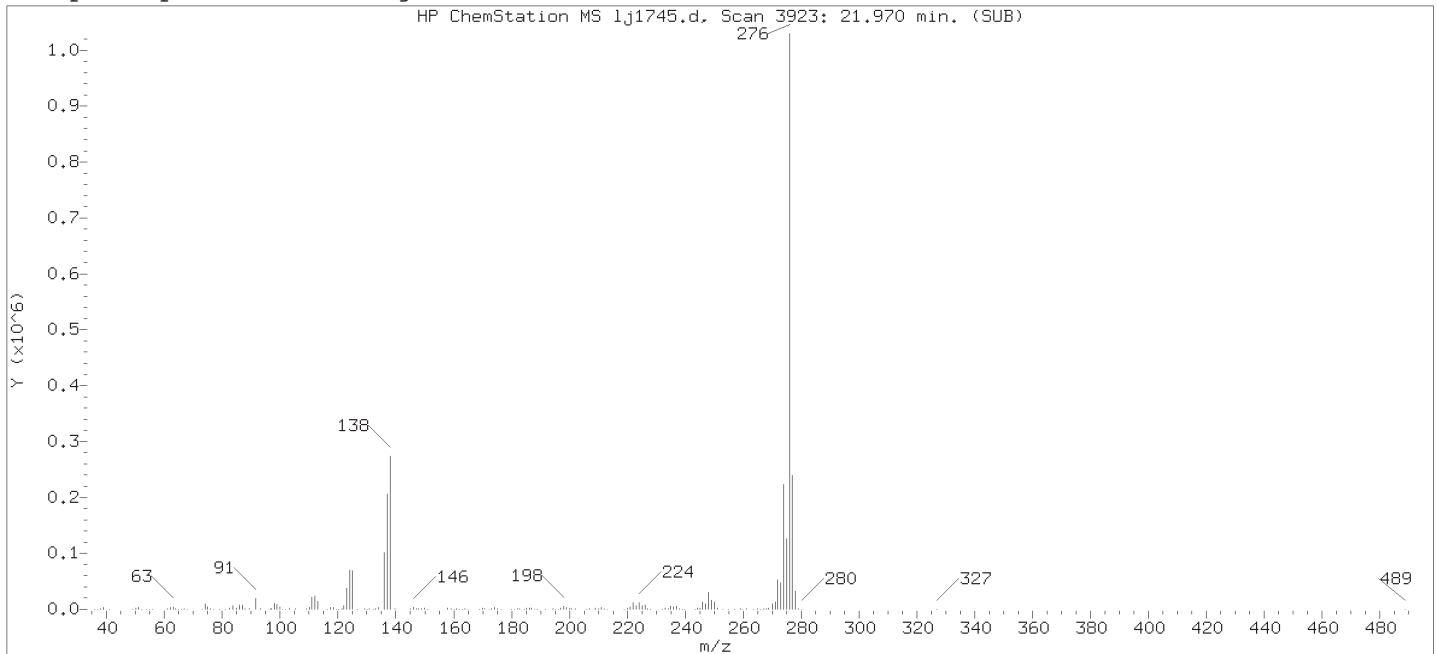
Compound Number                      : 224  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 3923  
Retention Time (minutes)             : 21.970  
Quant Ion                                : 276.00  
Area (flag)                             : 1913057M  
On-Column Amount (ng/ul)            : 13.3761  
Integration start scan                : 3912                      Integration stop scan: 3927  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

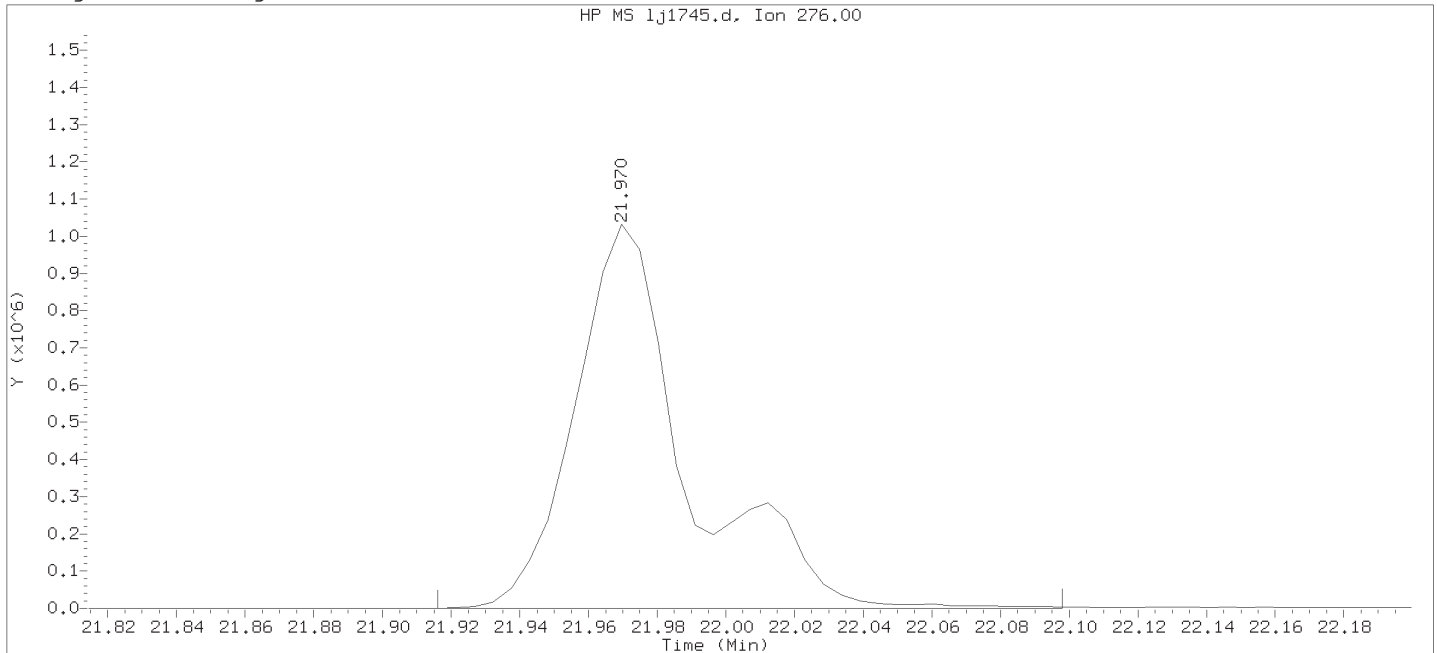
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:01.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

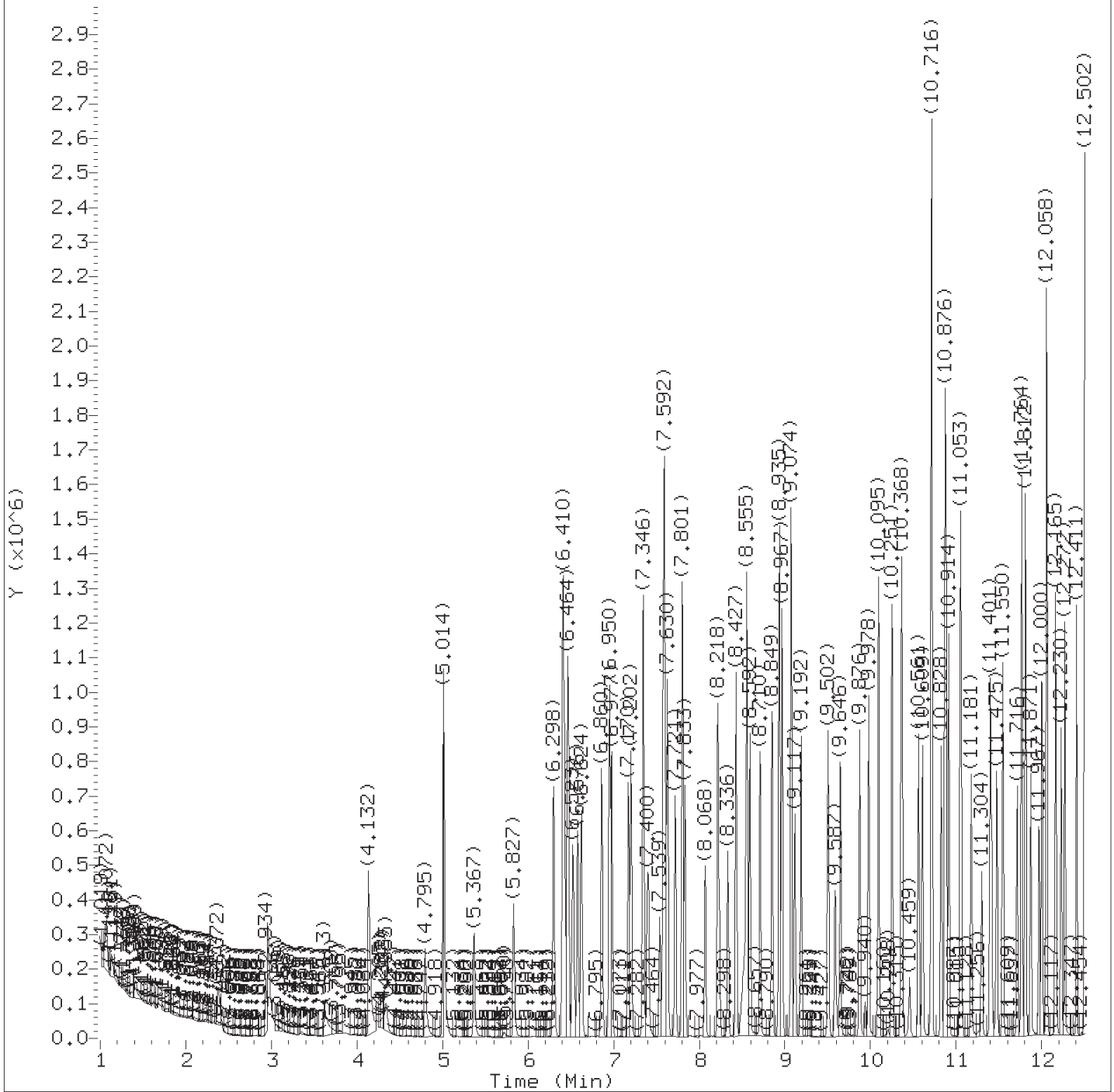


Data File: /chem/HP20296.i/18oct28.b/lj1745.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:22                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5    Lab Sample ID: RVSTD2648

Compound Number                      : 224  
Compound Name                        : Indeno(1,2,3-cd)pyrene  
Scan Number                           : 3923  
Retention Time (minutes)            : 21.970  
Quant Ion                              : 276.00  
Area                                    : 2345681  
On-column Amount (ng/ul)           : 15.7991  
Integration start scan               : 3912                      Integration stop scan: 3946  
Y at integration start               : 0                         Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

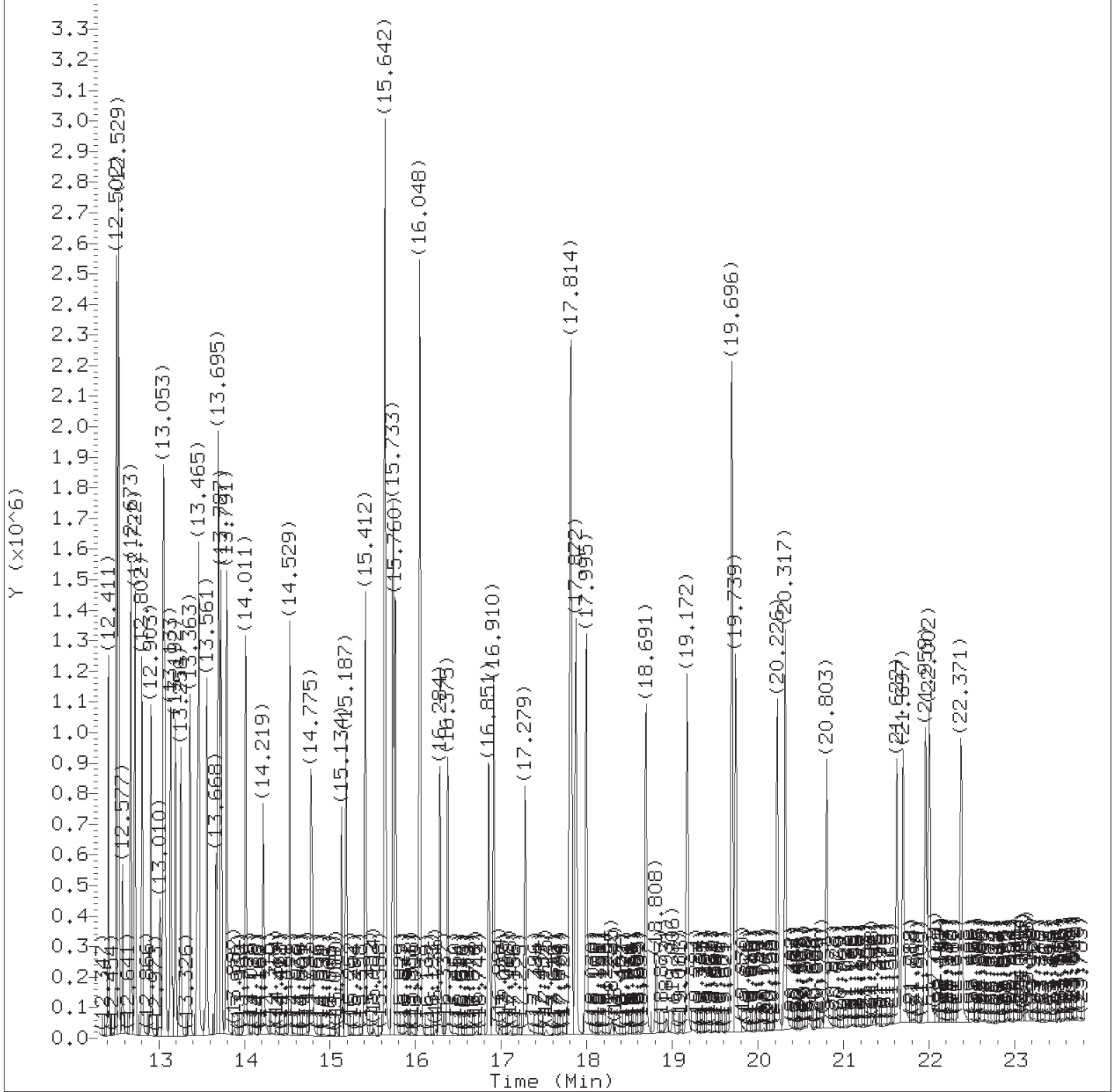
Sample Name: SSTD3.75

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD3.75

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
 Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD3.75

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.377	88	113234	3.935
5) N-Nitrosodimethylamine	(1)	2.934	74	155201M	3.524
6) Pyridine	(1)	2.955	79	276989M	3.661
8) 2-Picoline	(1)	4.132	93	290870M	3.754
9) N-Nitrosomethylethylamine	(1)	4.335	88	114015	3.596
10) Methyl methanesulfonate	(1)	4.795	80	141676	3.527
12) \$2-Fluorophenol	(1)	5.014	112	446971	7.359
14) N-Nitrosodiethylamine	(1)	5.367	102	104200	3.532
43) Total Cresols	(1)			447701	7.382
16) Ethyl methanesulfonate	(1)	5.827	109	118564	3.754
17) Benzaldehyde	(1)	6.298	77	232602	4.248
18) \$Phenol-d6	(1)	6.405	99	596641	7.237
19) Phenol	(1)	6.426	94	352447	3.669
20) Aniline	(1)	6.458	93	421507	3.698
21) a-methylstyrene	(1)	6.539	118	20570	3.466
23) bis(2-Chloroethyl) ether	(1)	6.576	93	264478	3.668
24) 2-Chlorophenol	(1)	6.624	128	213707	3.721
25) 1,3-Dichlorobenzene	(1)	6.860	146	230173	3.651
26) *1,4-Dichlorobenzene-d4	(1)	6.950	152	193679	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	234488	3.726
28) Benzyl alcohol	(1)	7.170	108	135702	3.476
29) 1,2-Dichlorobenzene	(1)	7.202	146	228738	3.768
31) Indene	(1)	7.341	115	240017	3.574
32) 2-Methylphenol	(1)	7.352	108	219152	3.663
100) Isosafrole	(3)			170362	3.622
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.400	45	328638	3.600
35) bis(2-Chloroisopropyl) ether	(1)	7.400	45	328638	3.600
36) N-Nitrosopyrrolidine	(1)	7.539	100	110787	3.528
37) Acetophenone	(1)	7.576	105	345866	3.760
39) N-Nitroso-di-n-propylamine	(1)	7.592	70	201966	3.645
38) 4-Methylphenol	(1)	7.592	108	228549	3.719
40) N-Nitrosomorpholine	(1)	7.608	56	149227	3.733
41) o-Toluidine	(1)	7.630	106	390941	3.730
44) Hexachloroethane	(1)	7.726	117	110285	3.836
45) \$Nitrobenzene-d5	(2)	7.801	82	577685	7.397
46) Nitrobenzene	(2)	7.833	77	304579	3.685
125) 2,4,2,6-Dinitrotoluenes	(3)			209543	7.093
50) N-Nitropiperidine	(2)	8.068	114	102904	3.532
52) Isophorone	(2)	8.218	82	515822	3.670
53) 2-Nitrophenol	(2)	8.336	139	96428	3.489

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
 Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD3.75

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.427	107	241286	3.624
58) Benzoic acid	(2)	8.550	105	296626M	6.759
59) O,O,O-Triethylphosphorothioate	(2)	8.560	198	100929	3.603
57) bis(2-Chloroethoxy)methane	(2)	8.592	93	330757	3.786
62) 2,4-Dichlorophenol	(2)	8.710	162	179420	3.747
151) Diallate trans/cis	(4)			235274	3.840
65) 1,2,4-Trichlorobenzene	(2)	8.849	180	196507	3.697
68) *Naphthalene-d8	(2)	8.935	136	720165	5.000
69) Naphthalene	(2)	8.967	128	609866	3.730
70) 4-Chloroaniline	(2)	9.074	127	247052	3.698
71) 2,6-Dichlorophenol	(2)	9.079	162	161933	3.551
72) Hexachloropropene	(2)	9.117	213	124809	3.560
74) Hexachlorobutadiene	(2)	9.192	225	120711	3.790
78) Quinoline	(2)	9.507	129	362800	3.731
79) Caprolactam	(2)	9.587	113	55773	3.732
80) N-Nitrosodi-n-butylamine	(2)	9.652	84	187147	3.381
83) 4-Chloro-3-methylphenol	(2)	9.876	107	211938	3.698
85) Safrole	(2)	9.978	162	147537	3.585
86) 2-Methylnaphthalene	(2)	10.095	142	393337	3.749
87) 1-Methylnaphthalene	(2)	10.251	142	375837	3.732
88) Hexachlorocyclopentadiene	(3)	10.363	237	116260	3.570
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.368	216	205313	3.685
91) cis-Isosafrole	(3)	10.454	162	29003	0.627
93) 2,4,6-Trichlorophenol	(3)	10.561	196	126848	3.556
95) 2,4,5-Trichlorophenol	(3)	10.609	196	137115	3.692
96) \$2-Fluorobiphenyl	(3)	10.716	172	891031	7.325
97) trans-Isosafrole	(3)	10.828	162	141359	2.995
98) 1,1'-Biphenyl	(3)	10.871	154	478002	3.786
99) 2-Chloronaphthalene	(3)	10.882	162	390360	3.525
101) 1-Chloronaphthalene	(3)	10.914	162	374773	3.991
103) Diphenyl ether	(3)	11.053	170	258183	3.658
104) 2-Nitroaniline	(3)	11.064	138	101523	3.402
108) 1,4-Naphthoquinone	(3)	11.181	158	149827	3.601
109) 1,4-Dinitrobenzene	(3)	11.304	168	50821	3.287
110) Dimethylphthalate	(3)	11.401	163	422237	3.697
111) 1,3-Dinitrobenzene	(3)	11.417	168	63039	3.547
113) 2,6-Dinitrotoluene	(3)	11.475	165	91044	3.620
114) Acenaphthylene	(3)	11.550	152	521313	3.748
117) 3-Nitroaniline	(3)	11.716	138	96425	3.524
118) *Acenaphthene-d10	(3)	11.764	164	360034	5.000

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
 Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD3.75

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.812	153	389106	3.629
120) 2,4-Dinitrophenol	(3)	11.877	184	81577	5.846
121) 4-Nitrophenol	(3)	11.967	109	72873	3.280
122) Pentachlorobenzene	(3)	12.005	250	170648	3.786
124) Dibenzofuran	(3)	12.058	168	536348	3.708
123) 2,4-Dinitrotoluene	(3)	12.064	165	118499	3.472
126) 1-Naphthylamine	(3)	12.165	143	366859	3.551
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	97986	3.376
128) 2-Naphthylamine	(3)	12.272	143	360782	3.509
129) Diethylphthalate	(3)	12.411	149	408994	3.630
130) Thionazin	(3)	12.502	107	82257	3.666
131) Fluorene	(3)	12.508	166	423929	3.741
133) 5-Nitro-o-toluidine	(3)	12.524	152	108482	3.477
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	209369	3.596
134) 4-Nitroaniline	(3)	12.534	138	102049	3.657
135) 4,6-Dinitro-2-methylphenol	(4)	12.577	198	61176	3.376
136) N-Nitrosodiphenylamine	(4)	12.673	169	333174	3.742
137) NDPA as diphenylamine	(4)	12.673	169	333174	3.742
139) 1,2-Diphenylhydrazine	(4)	12.722	77	612505	3.875
140) \$2,4,6-Tribromophenol	(3)	12.802	330	103247	6.834
142) Tetraethyldithiopyrophosphate	(4)	12.903	97	90768	3.824
144) 1,3,5-Trinitrobenzene	(4)	13.016	213	35265	3.213
145) Diallate (peak 1)	(4)	13.048	86	201792	3.195
146) Phorate	(4)	13.059	75	351272	4.114
147) Phenacetin	(4)	13.075	108	249631	3.734
148) 4-Bromophenyl-phenylether	(4)	13.139	248	116331	3.782
149) Diallate (peak 2)	(4)	13.160	86	33482M	0.646
150) Hexachlorobenzene	(4)	13.192	284	122012	3.867
152) Dimethoate	(4)	13.256	87	200166	3.771
153) Atrazine	(4)	13.363	200	114722	4.083
154) Pentachlorophenol	(4)	13.449	266	71075	3.417
155) 4-Aminobiphenyl	(4)	13.465	169	295914	3.711
156) Pentachloronitrobenzene	(4)	13.470	237	58406	3.860
157) Pronamide	(4)	13.561	173	185746	3.614
158) *Phenanthrene-d10	(4)	13.695	188	688668	5.000
159) Dinoseb	(4)	13.706	211	87155	3.164
160) Phenanthrene	(4)	13.727	178	629278	3.738
162) Anthracene	(4)	13.791	178	631635	3.820
168) Carbazole	(4)	14.011	167	566226	3.791
169) Methyl parathion	(4)	14.219	109	143915	3.549

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
 Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD3.75

Lab Sample ID: RVSTD2648

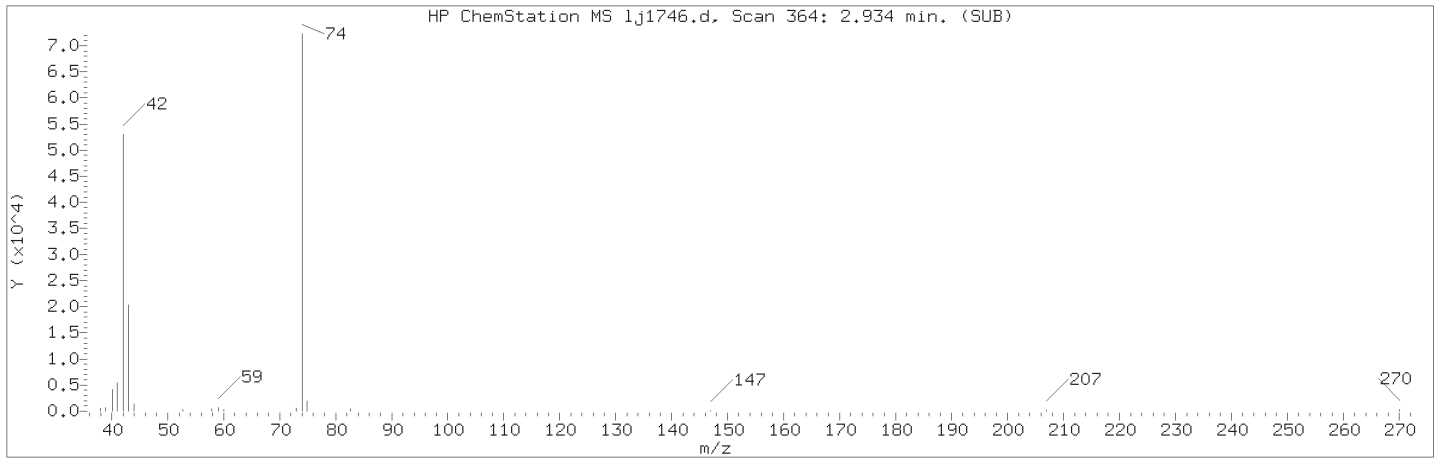
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.529	149	709866	3.671
172) Parathion	(4)	14.775	109	85425	3.265
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	38184	2.812
227) Total PAHs	(6)			10323667	67.486
174) Octachlorostyrene	(4)	15.139	308	43247	3.649
176) Isodrin	(4)	15.187	193	76165	3.762
178) Fluoranthene	(4)	15.412	202	700998	3.781
179) Benzidine	(5)	15.642	184	1325957	10.899
180)*Pyrene-d10	(5)	15.733	212	742847	5.000
182) Pyrene	(5)	15.765	202	744016	3.788
184)\$Terphenyl-d14	(5)	16.048	244	897461	7.334
187) p-Dimethylaminoazobenzene	(5)	16.284	225	107289	3.343
190) Chlorobenzilate	(5)	16.375	139	205033	3.445
192) 3,3'-Dimethylbenzidine	(5)	16.851	212	400910	3.384
193) Butylbenzylphthalate	(5)	16.915	149	313219	3.452
196) 2-Acetylaminofluorene	(5)	17.279	181	244762	3.211
198) 3,3'-Dichlorobenzidine	(5)	17.797	252	230782	3.371
200) Benzo(a)anthracene	(5)	17.814	228	671311	3.629
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	130238	3.401
201) Chrysene	(5)	17.872	228	666554	3.695
204) bis(2-Ethylhexyl)phthalate	(5)	17.995	149	446344	3.400
208) 6-Methylchrysene	(5)	18.691	242	428073	3.505
210) Di-n-octylphthalate	(6)	19.172	149	716307	3.364
211) Benzo(b)fluoranthene	(6)	19.696	252	638645	3.814
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.696	256	256203	3.477
213) Benzo(k)fluoranthene	(6)	19.739	252	639704	3.791
216) Benzo(a)pyrene	(6)	20.226	252	572347	3.706
218)*Perylene-d12	(6)	20.317	264	629203	5.000
220) 3-Methylcholanthrene	(6)	20.803	268	247812	3.422
222) Dibenz(a,h)acridine	(6)	21.622	279	455460	3.610
223) Dibenz(a,j)acridine	(6)	21.697	279	475952	3.635
224) Indeno(1,2,3-cd)pyrene	(6)	21.959	276	537390M	3.672
225) Dibenz(a,h)anthracene	(6)	22.002	278	589323	3.908
226) Benzo(g,h,i)perylene	(6)	22.371	276	589078	3.817

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

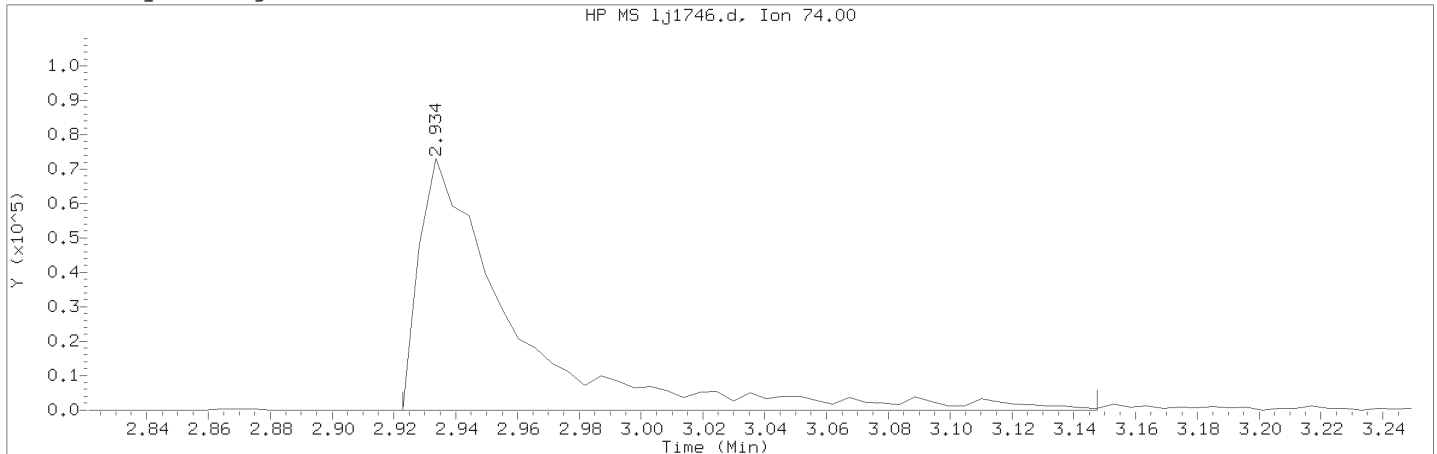
Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405  
 TID15 Page 677 of 3058

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:51                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75    Lab Sample ID: RVSTD2648

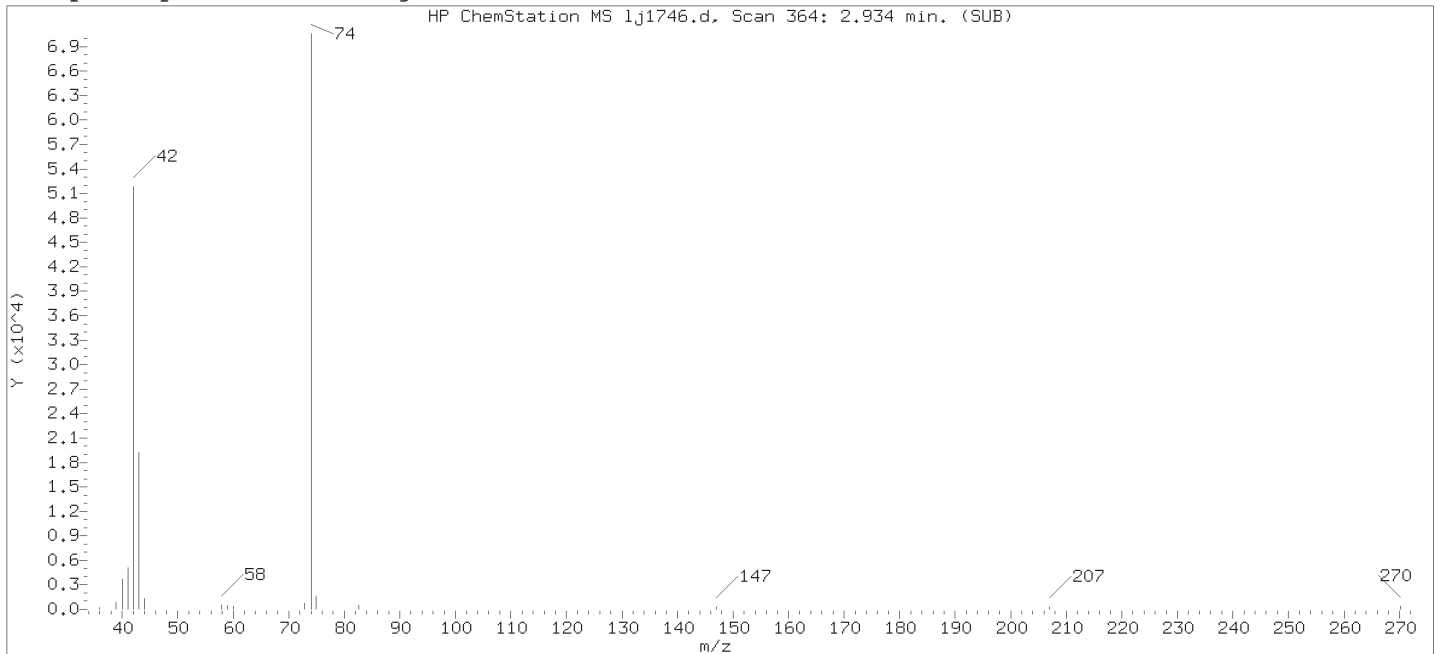
Compound Number    : 5  
Compound Name    : N-Nitrosodimethylamine  
Scan Number    : 364  
Retention Time (minutes)                                   : 2.934  
Quant Ion    : 74.00  
Area (flag)    : 155201M  
On-Column Amount (ng/ul)                                : 3.5235  
Integration start scan                                     : 361                      Integration stop scan: 403  
Y at integration start                                     : -71                      Y at integration end: -71

Reason for manual integration: improper integration

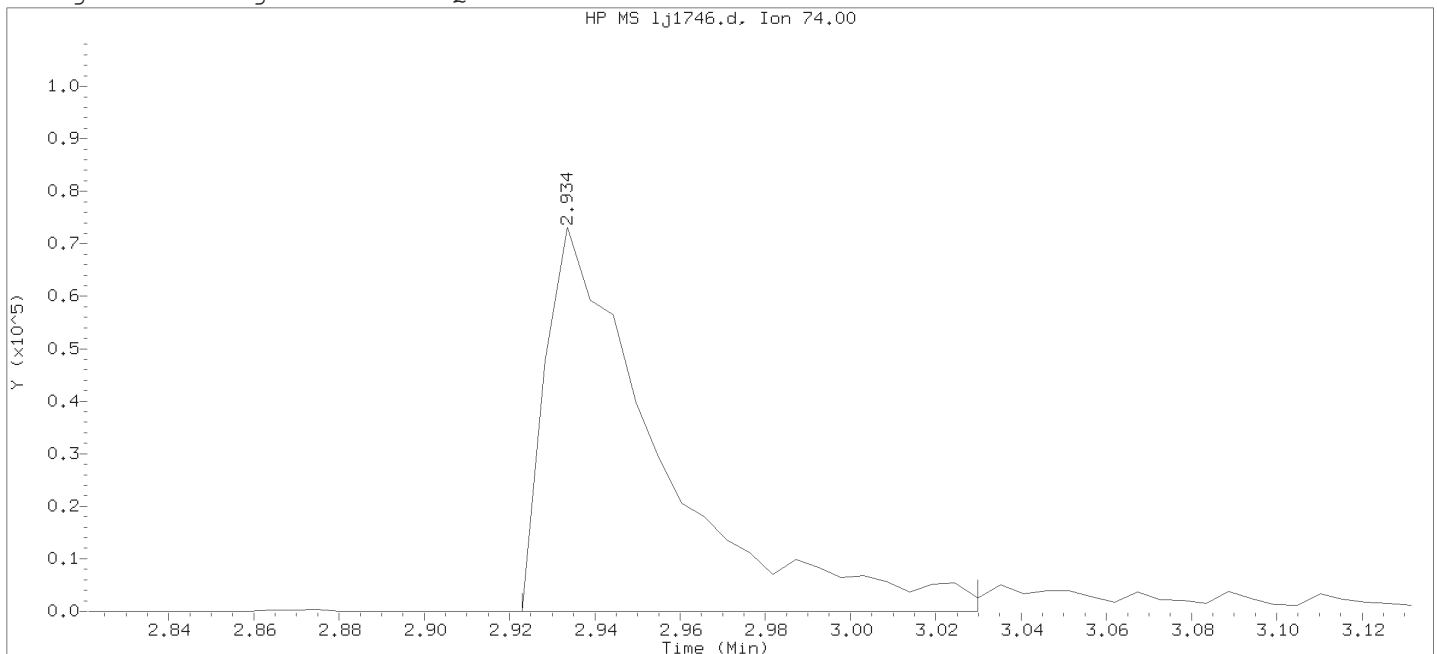
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
 Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
 Analyst ID: whs02991

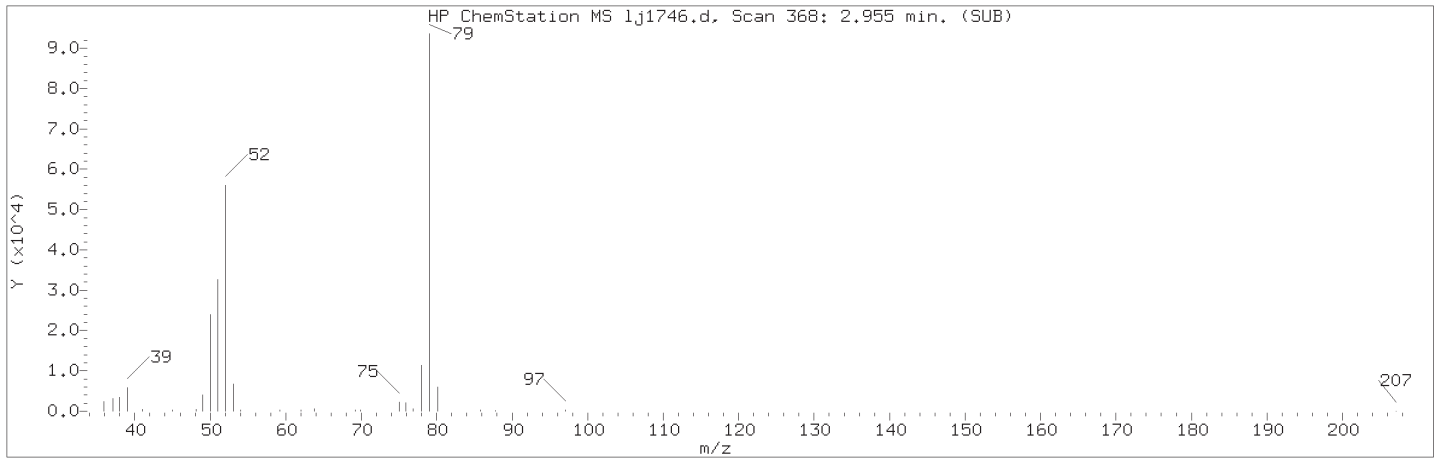
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75

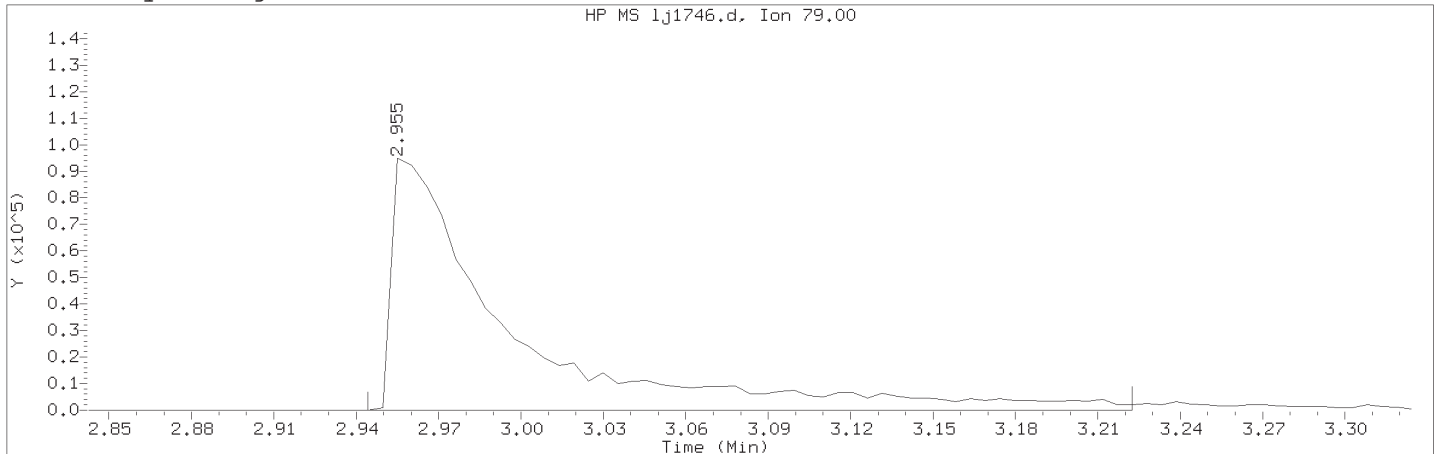
Lab Sample ID: RVSTD2648

Compound Number	: 5	
Compound Name	: N-Nitrosodimethylamine	
Scan Number	: 364	
Retention Time (minutes)	: 2.934	
Quant Ion	: 74.00	
Area	: 137494	
On-column Amount (ng/ul)	: 3.2648	
Integration start scan	: 361	Integration stop scan: 381
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:51                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75    Lab Sample ID: RVSTD2648

Compound Number    : 6  
Compound Name    : Pyridine  
Scan Number    : 368  
Retention Time (minutes)                                    : 2.955  
Quant Ion    : 79.00  
Area (flag)    : 276989M  
On-Column Amount (ng/ul)                                   : 3.6605  
Integration start scan                                       : 365                      Integration stop scan: 417  
Y at integration start                                        : -49                      Y at integration end: -49

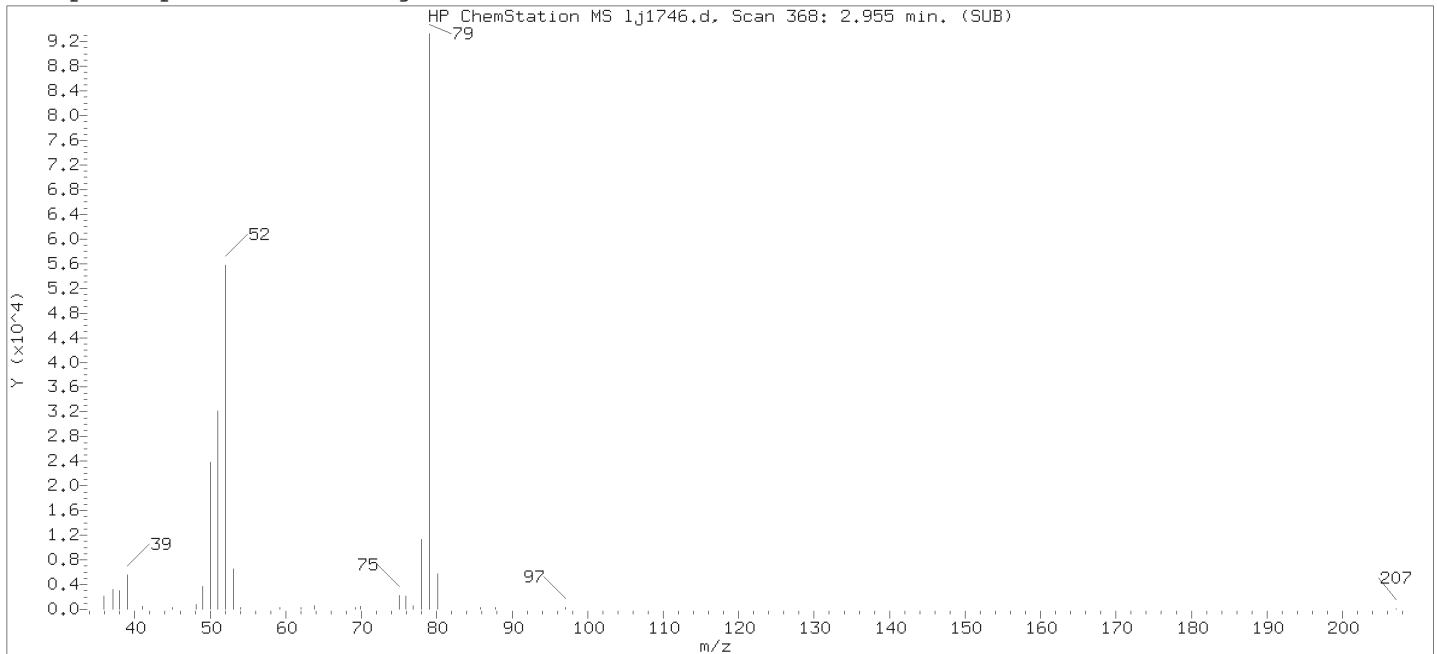
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

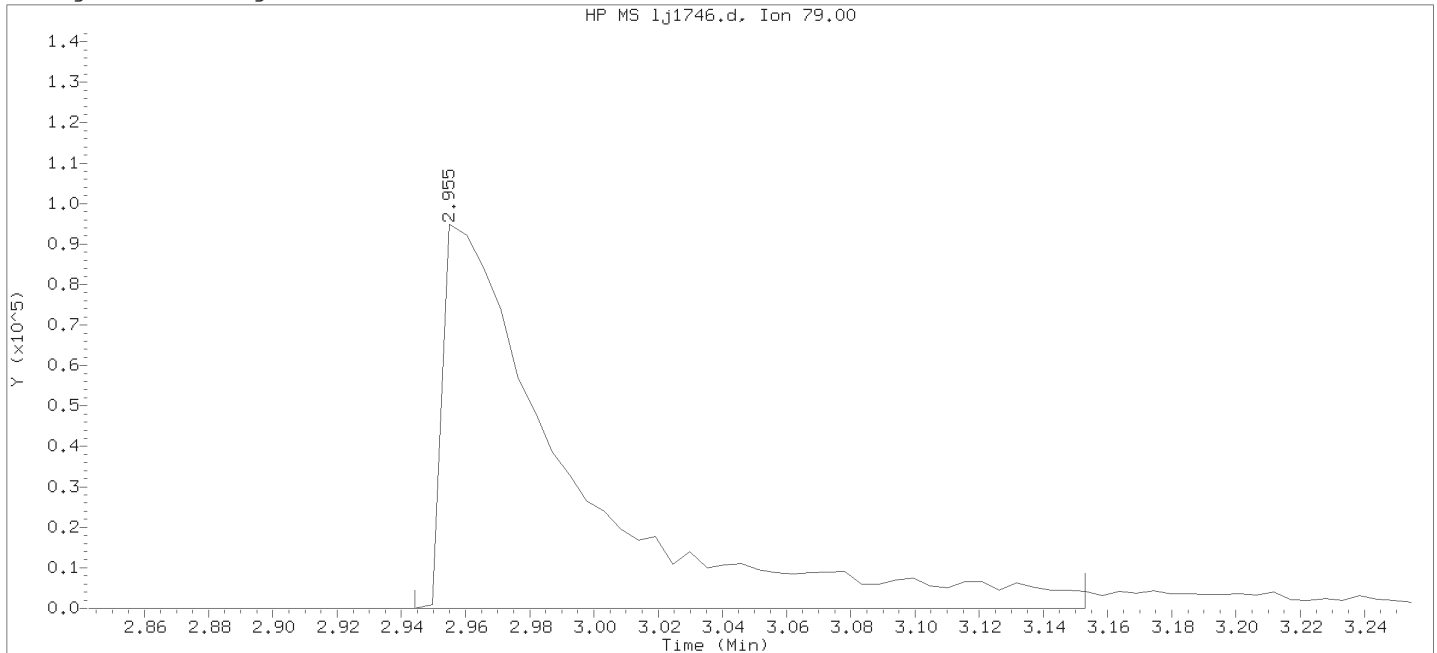
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
 Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

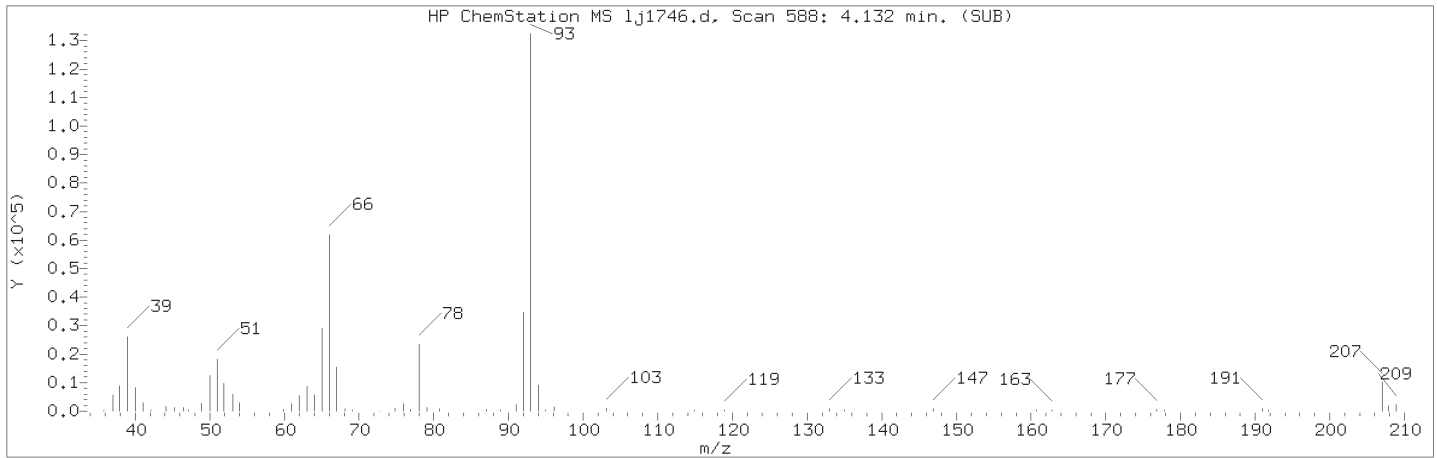
Sample Name: SSTD3.75

Lab Sample ID: RVSTD2648

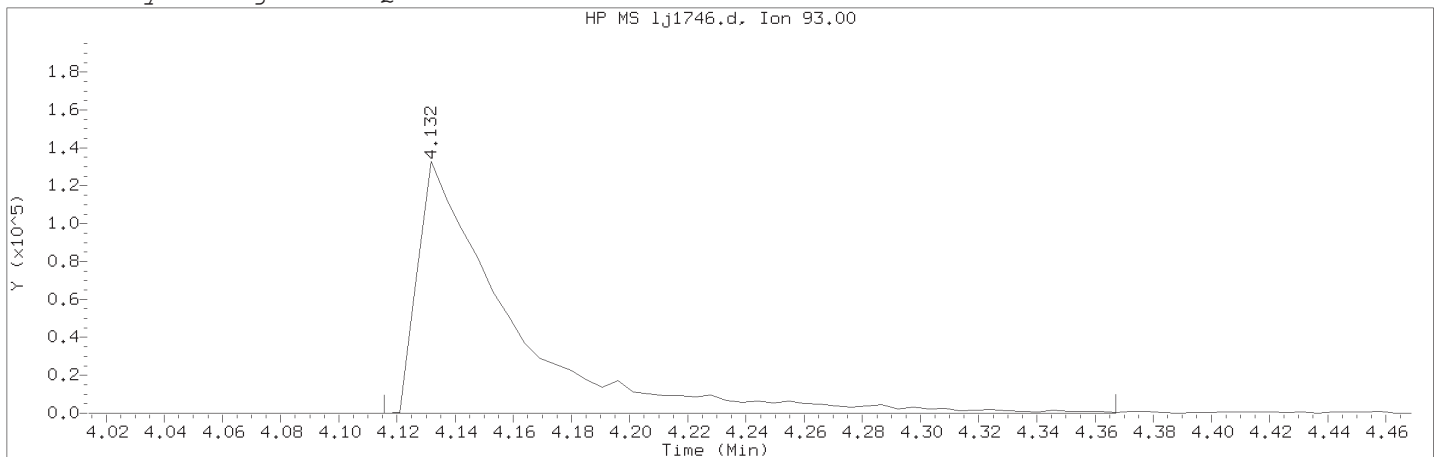
```

Compound Number      : 6
Compound Name       : Pyridine
Scan Number         : 368
Retention Time (minutes) : 2.955
Quant Ion           : 79.00
Area                : 261269
On-column Amount (ng/ul) : 3.5075
Integration start scan : 365      Integration stop scan: 404
Y at integration start  : 0        Y at integration end: 0
    
```

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:51                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75    Lab Sample ID: RVSTD2648

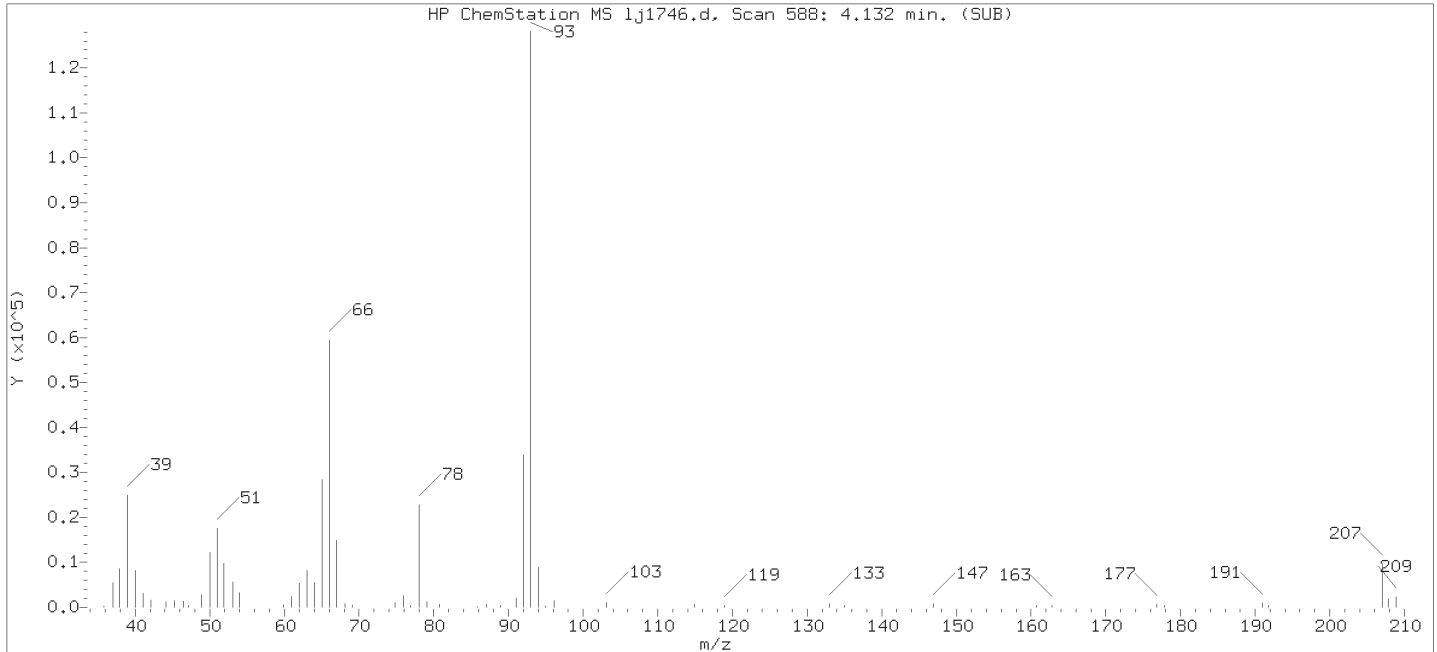
Compound Number    : 8  
Compound Name    : 2-Picoline  
Scan Number    : 588  
Retention Time (minutes)                                   : 4.132  
Quant Ion    : 93.00  
Area (flag)    : 290870M  
On-Column Amount (ng/ul)                                : 3.7543  
Integration start scan                                    : 584                      Integration stop scan: 631  
Y at integration start                                    : 8                        Y at integration end: 8

Reason for manual integration: improper integration

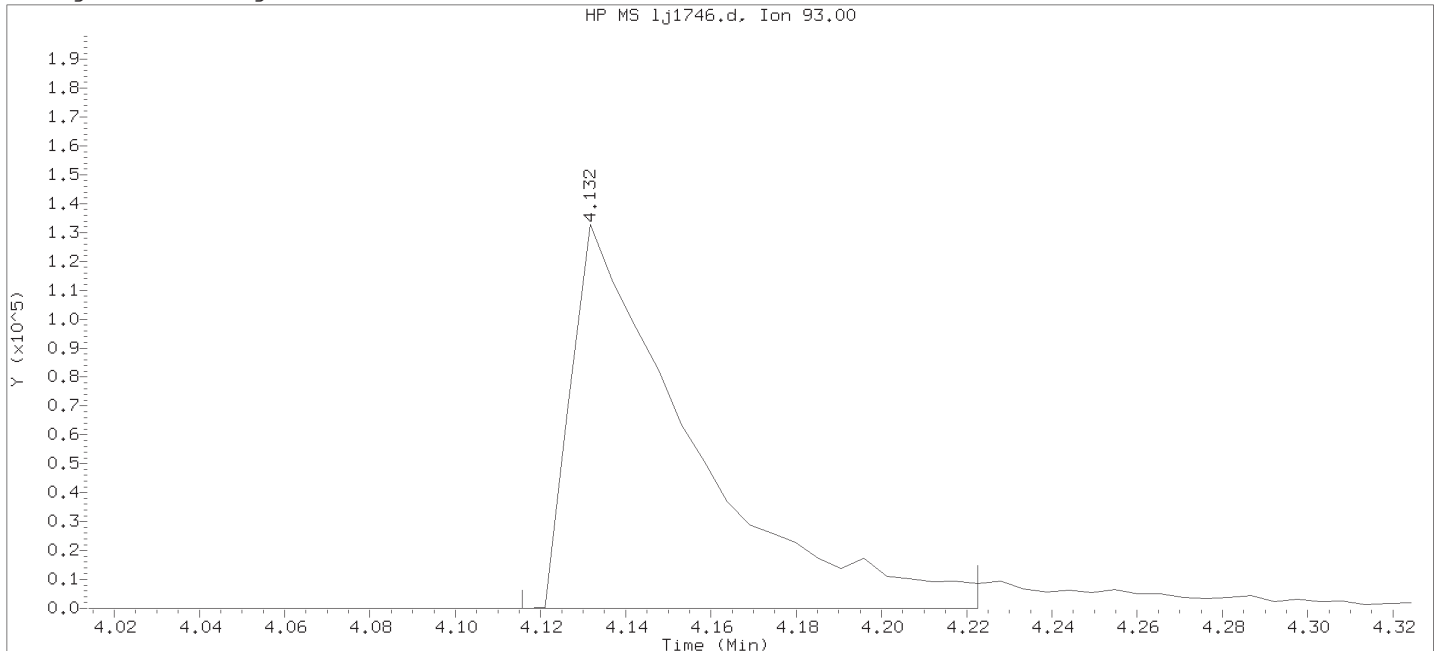
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

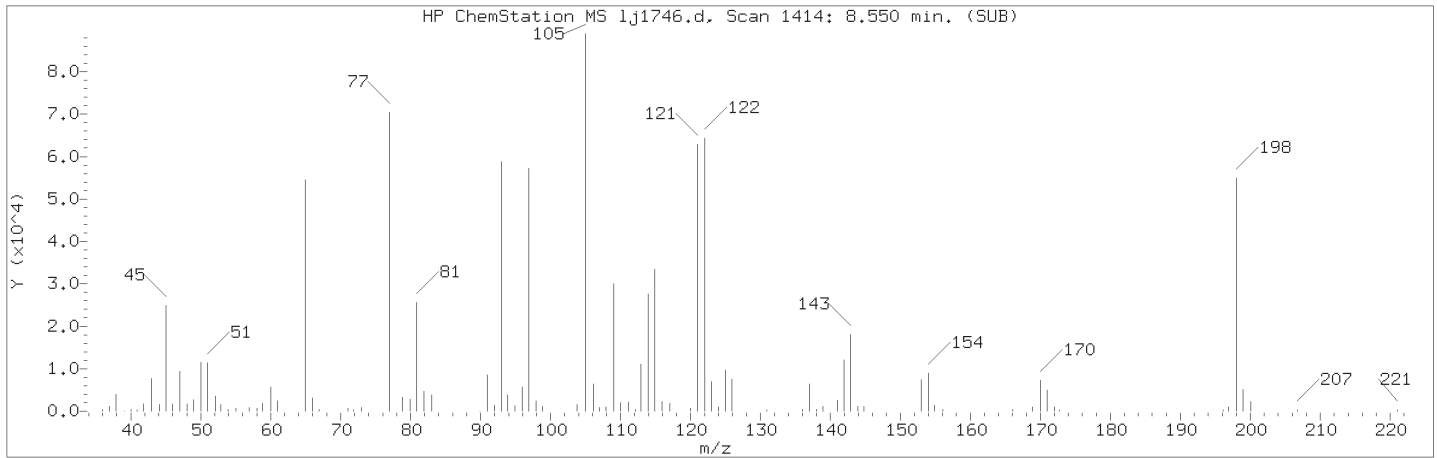
Sublist used: all1

Sample Name: SSTD3.75

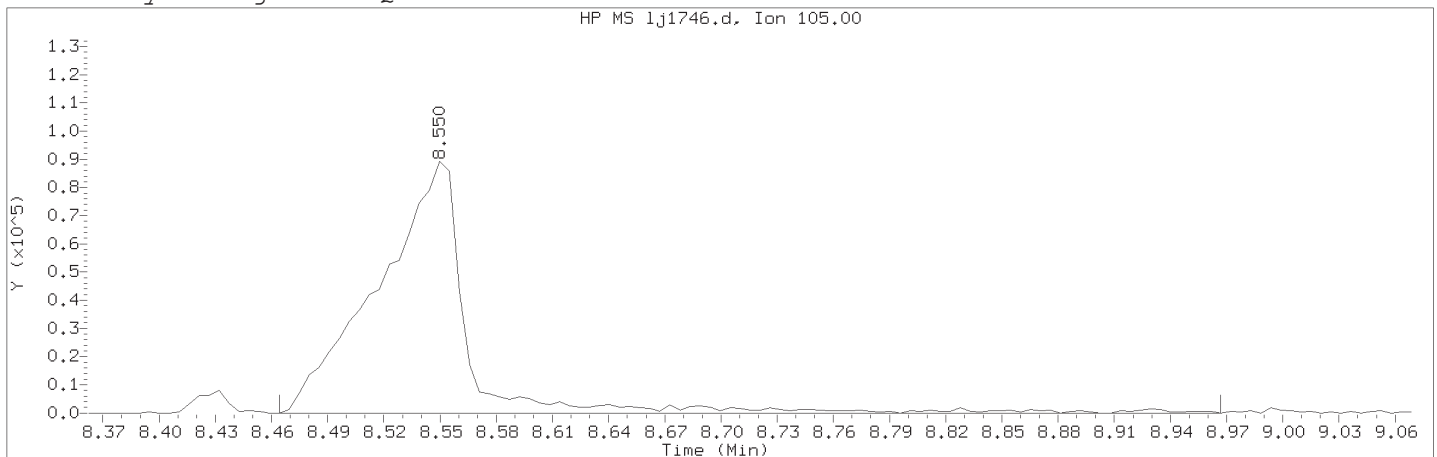
Lab Sample ID: RVSTD2648

Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 588		
Retention Time (minutes)	: 4.132		
Quant Ion	: 93.00		
Area	: 261397		
On-column Amount (ng/ul)	: 3.4597		
Integration start scan	: 584	Integration stop scan:	604
Y at integration start	: 0	Y at integration end:	0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:51                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75    Lab Sample ID: RVSTD2648

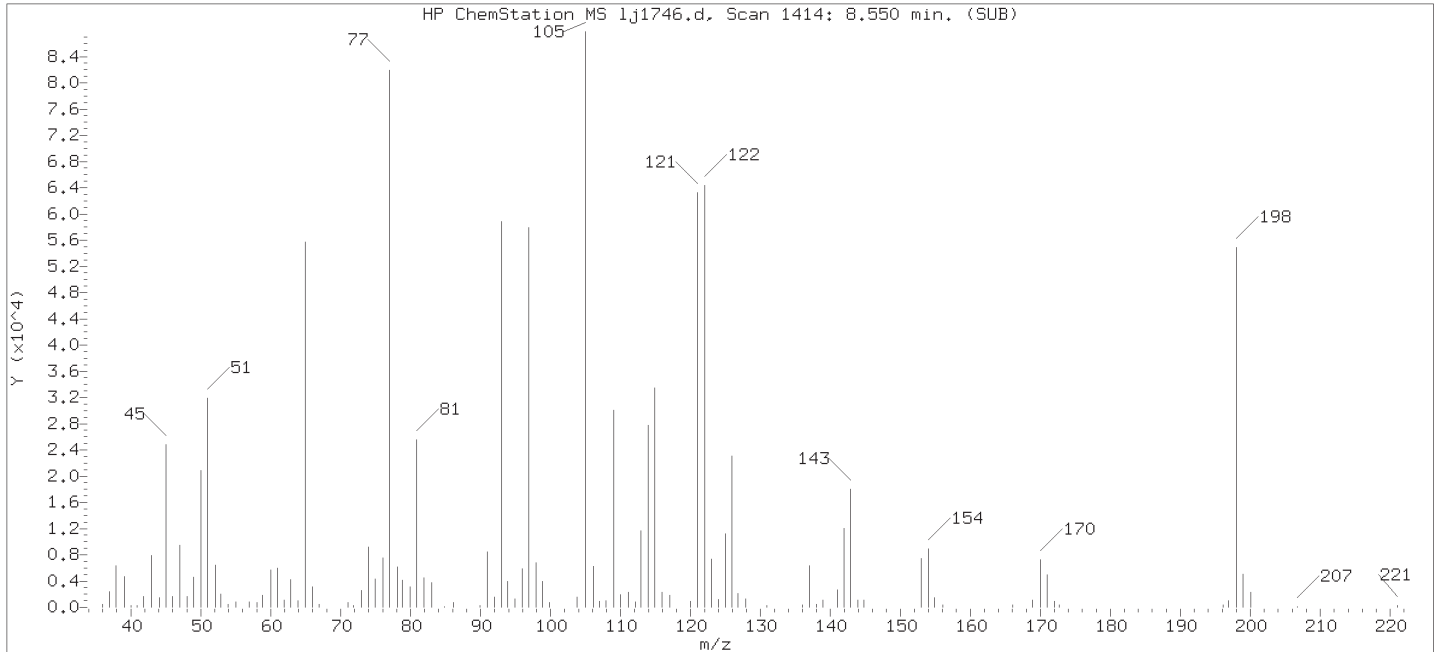
Compound Number    : 58  
Compound Name    : Benzoic acid  
Scan Number    : 1414  
Retention Time (minutes)                                   : 8.550  
Quant Ion     : 105.00  
Area (flag)    : 296626M  
On-Column Amount (ng/ul)                                : 6.7587  
Integration start scan                                     : 1397                      Integration stop scan: 1491  
Y at integration start                                     : -69                        Y at integration end: -69

Reason for manual integration: improper integration

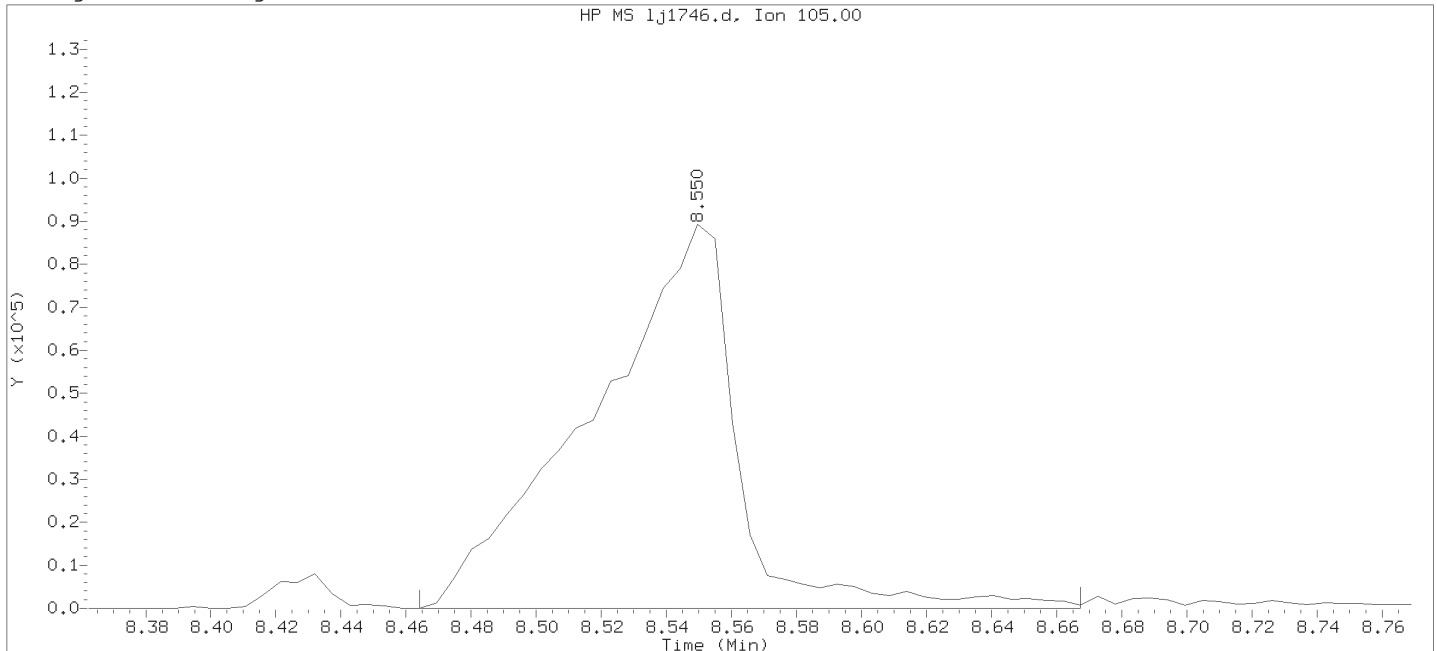
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
 Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

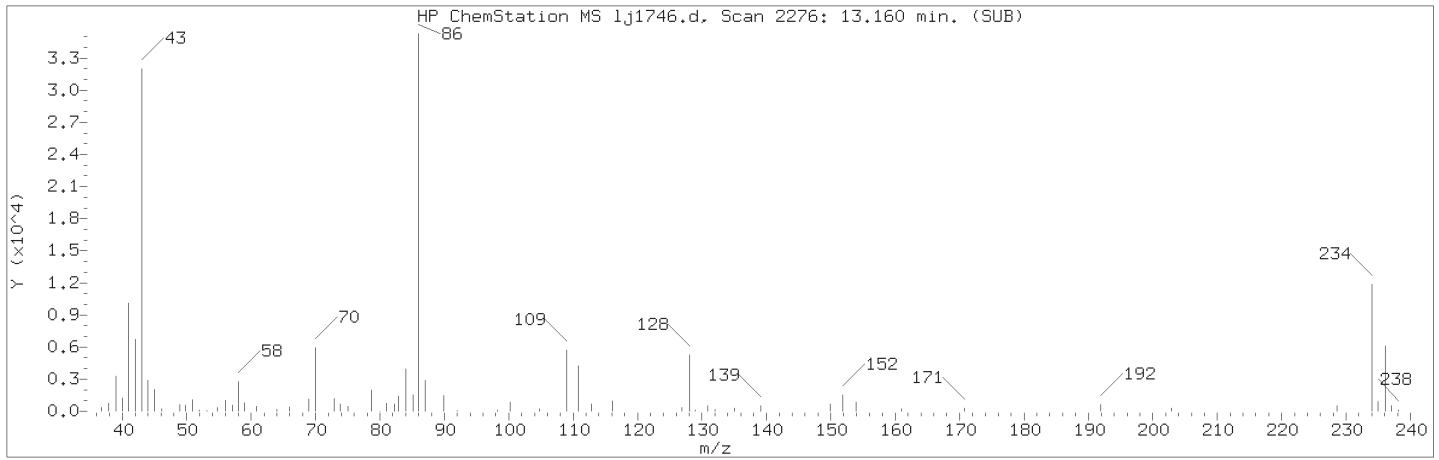
Sublist used: all11

Sample Name: SSTD3.75

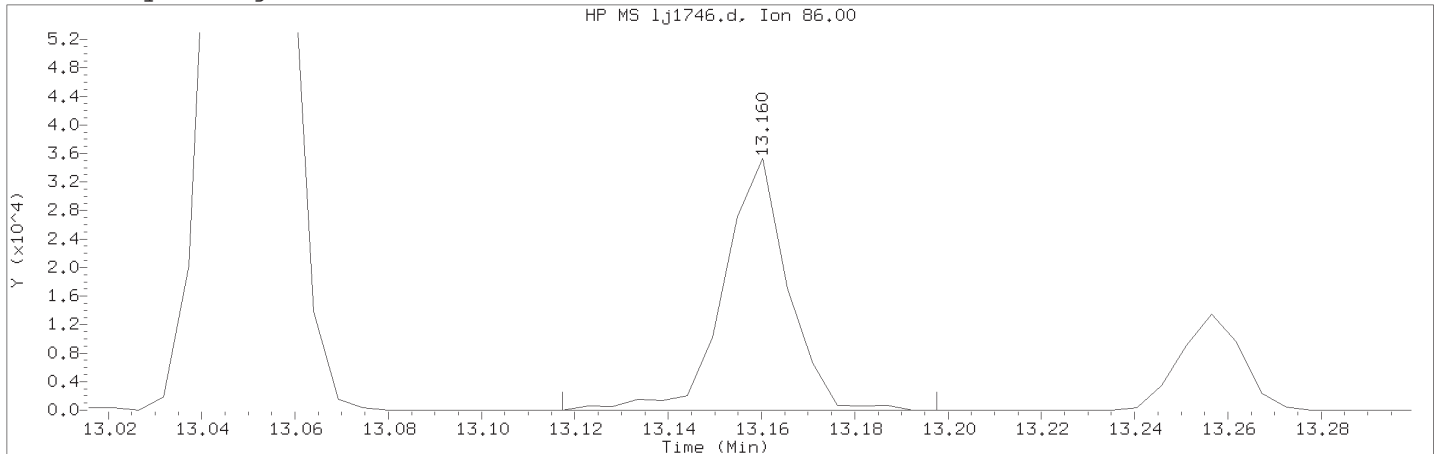
Lab Sample ID: RVSTD2648

Compound Number	: 58	
Compound Name	: Benzoic acid	
Scan Number	: 1414	
Retention Time (minutes)	: 8.550	
Quant Ion	: 105.00	
Area	: 278360	
On-column Amount (ng/ul)	: 8.2455	
Integration start scan	: 1397	Integration stop scan: 1435
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD3.75

Lab Sample ID: RVSTD2648

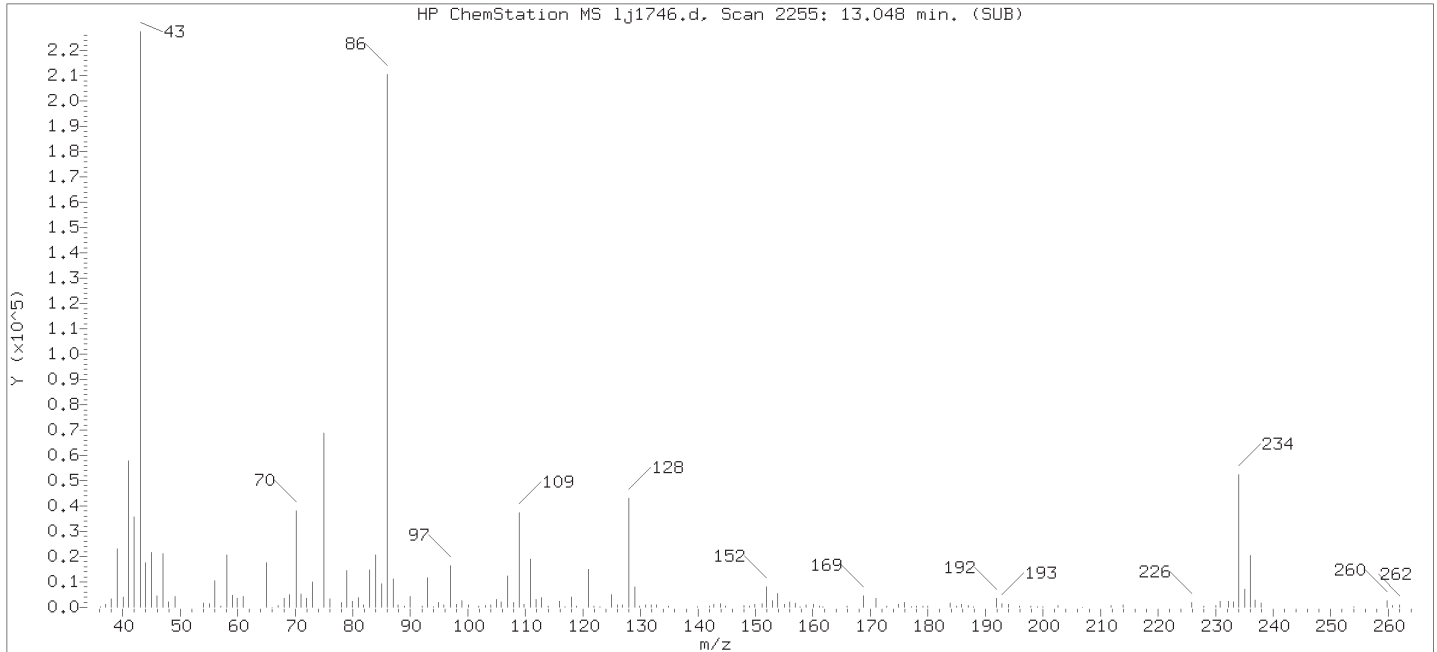
Compound Number : 149  
Compound Name : Diallate (peak 2)  
Scan Number : 2276  
Retention Time (minutes) : 13.160  
Quant Ion : 86.00  
Area (flag) : 33482M  
On-Column Amount (ng/ul) : 0.6455  
Integration start scan : 2267 Integration stop scan: 2282  
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

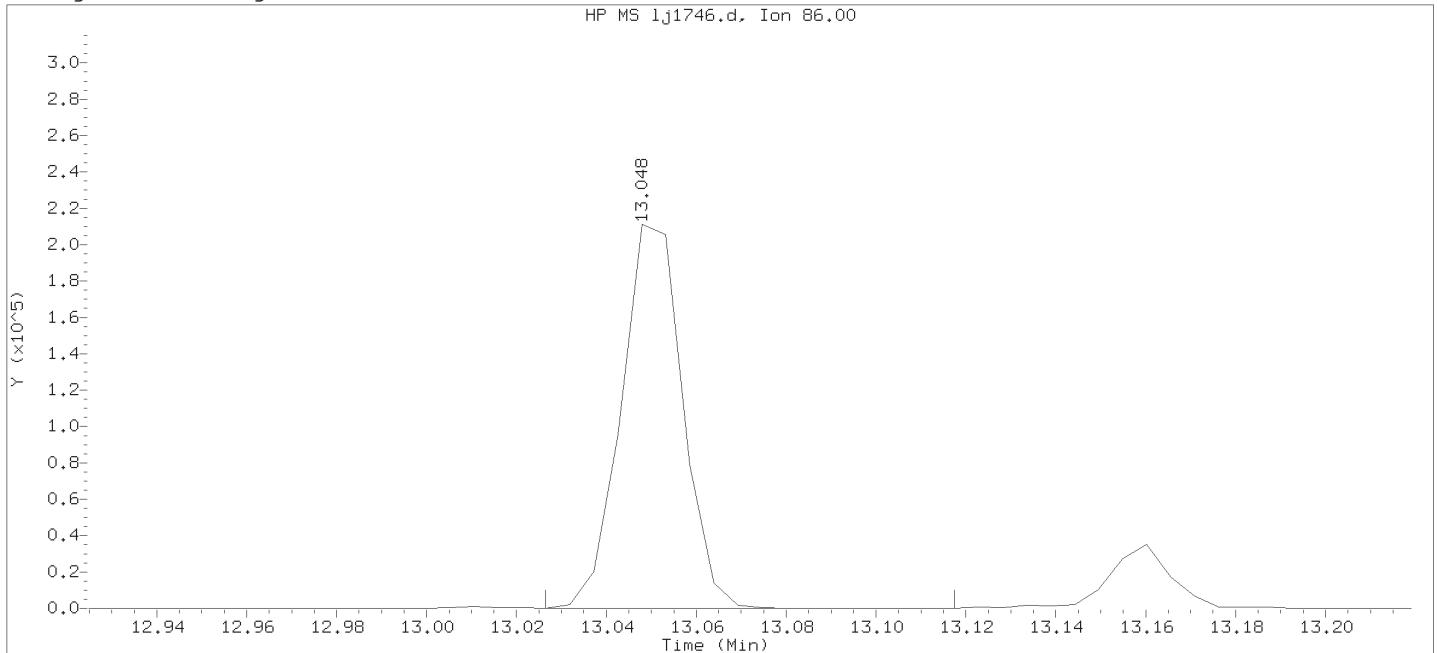
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d  
 Injection date and time: 29-OCT-2018 02:51

Instrument ID: HP20296.i  
 Analyst ID: whs02991

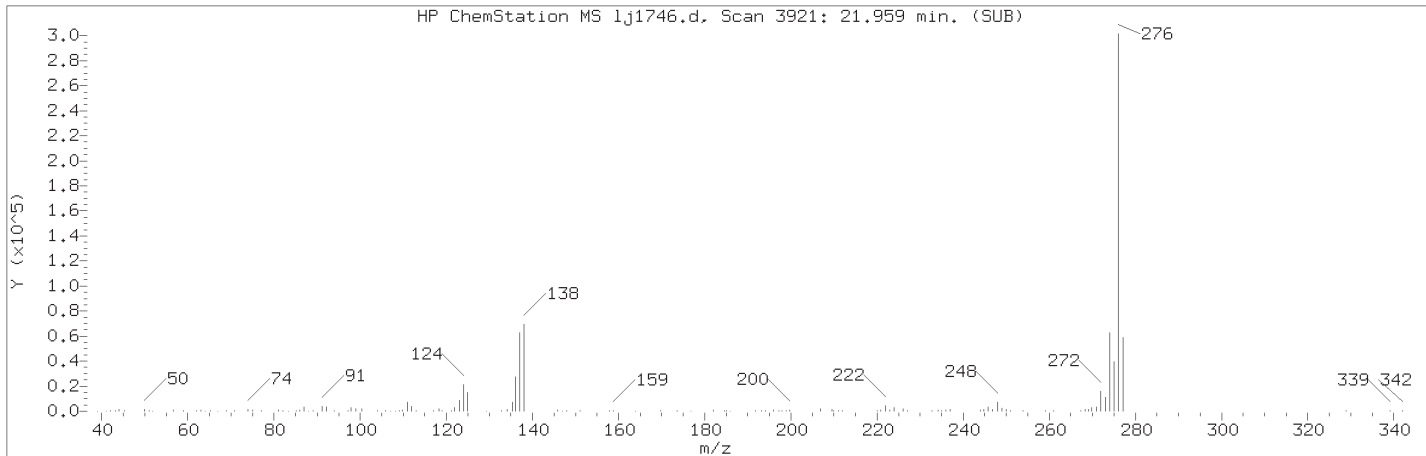
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75

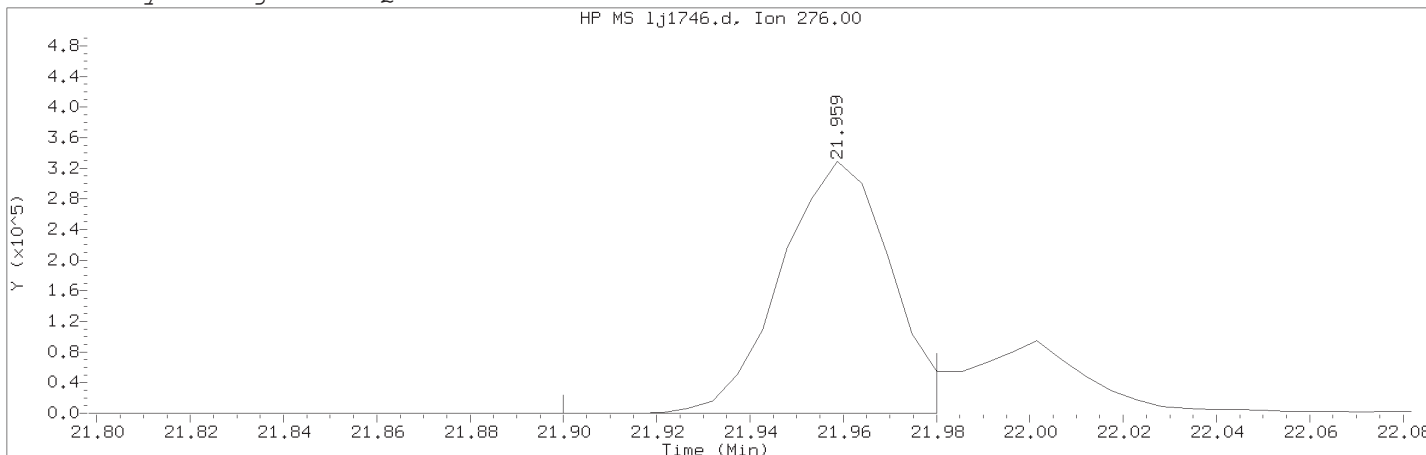
Lab Sample ID: RVSTD2648

Compound Number : 149  
 Compound Name : Diallate (peak 2)  
 Scan Number : 2255  
 Retention Time (minutes) : 13.048  
 Quant Ion : 86.00  
 Area : 201792  
 On-column Amount (ng/ul) : 0.9026  
 Integration start scan : 2250      Integration stop scan: 2267  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 02:51                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75    Lab Sample ID: RVSTD2648

Compound Number                      : 224  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 3921  
Retention Time (minutes)             : 21.959  
Quant Ion                                : 276.00  
Area (flag)                             : 537390M  
On-Column Amount (ng/ul)            : 3.6718  
Integration start scan                : 3909                      Integration stop scan: 3924  
Y at integration start                : 0                         Y at integration end: 0

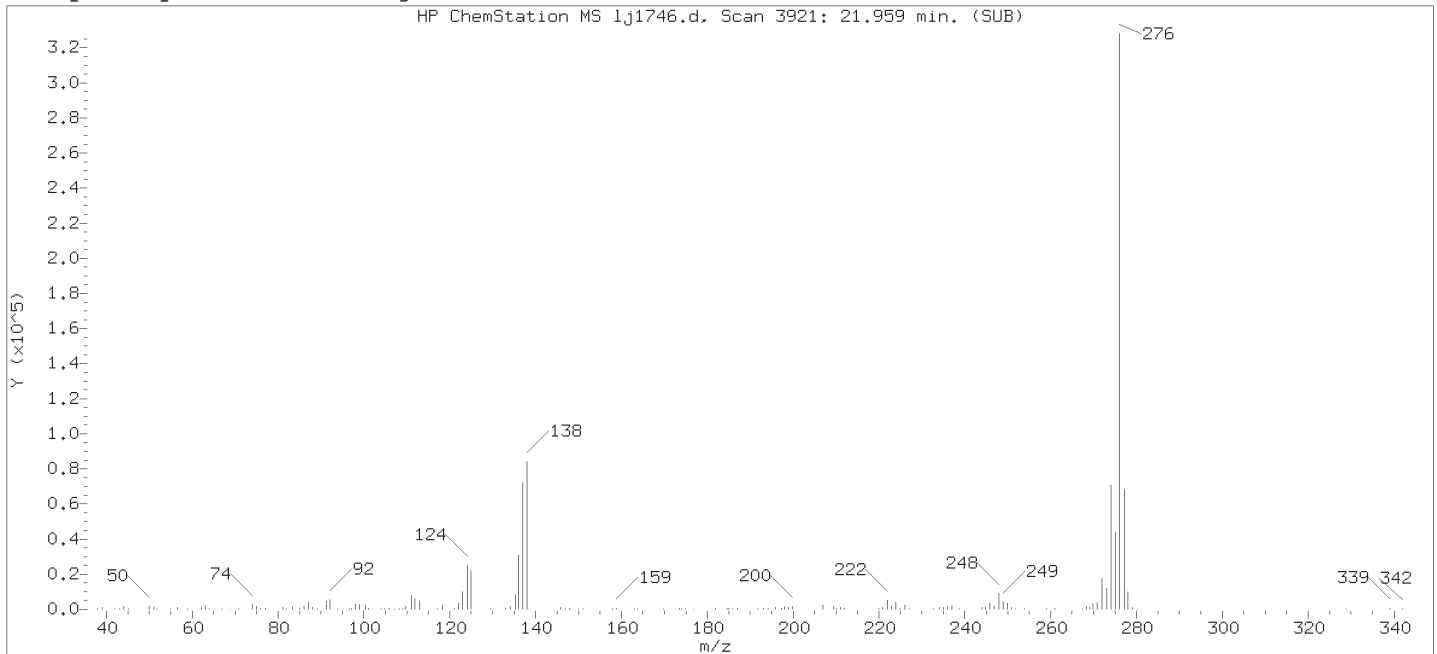
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

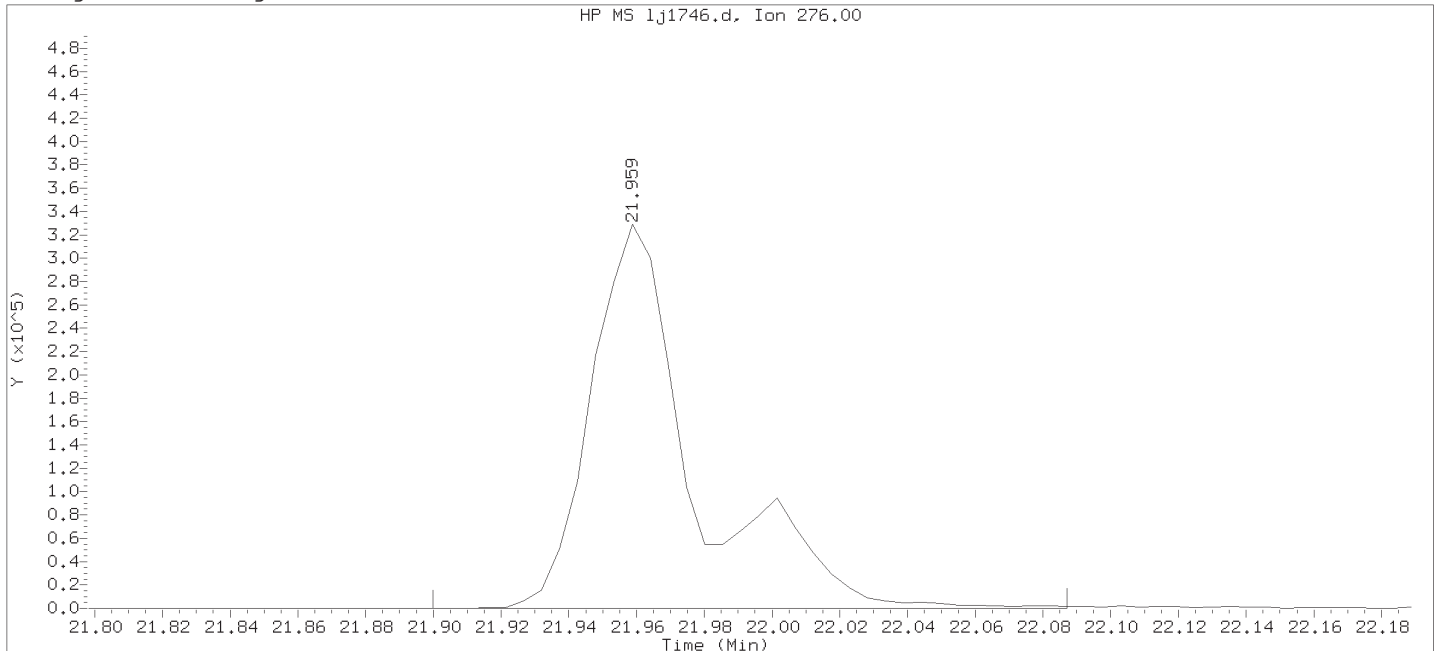
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

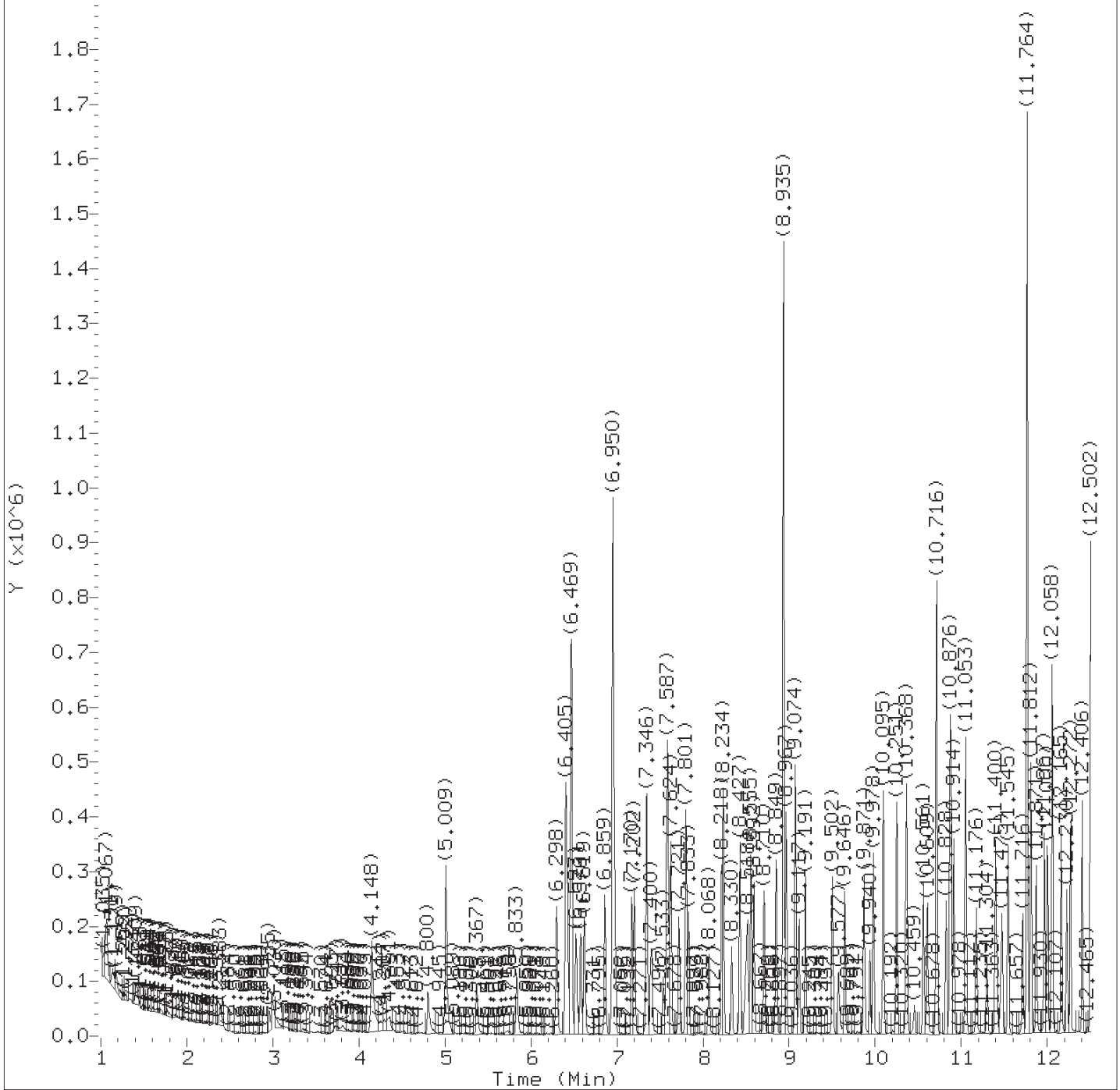


Data File: /chem/HP20296.i/18oct28.b/lj1746.d      Instrument ID: HP20296.i  
 Injection date and time: 29-OCT-2018 02:51      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75      Lab Sample ID: RVSTD2648

Compound Number : 224  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 3921  
 Retention Time (minutes) : 21.959  
 Quant Ion : 276.00  
 Area : 698492  
 On-column Amount (ng/ul) : 4.3721  
 Integration start scan : 3909      Integration stop scan: 3944  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

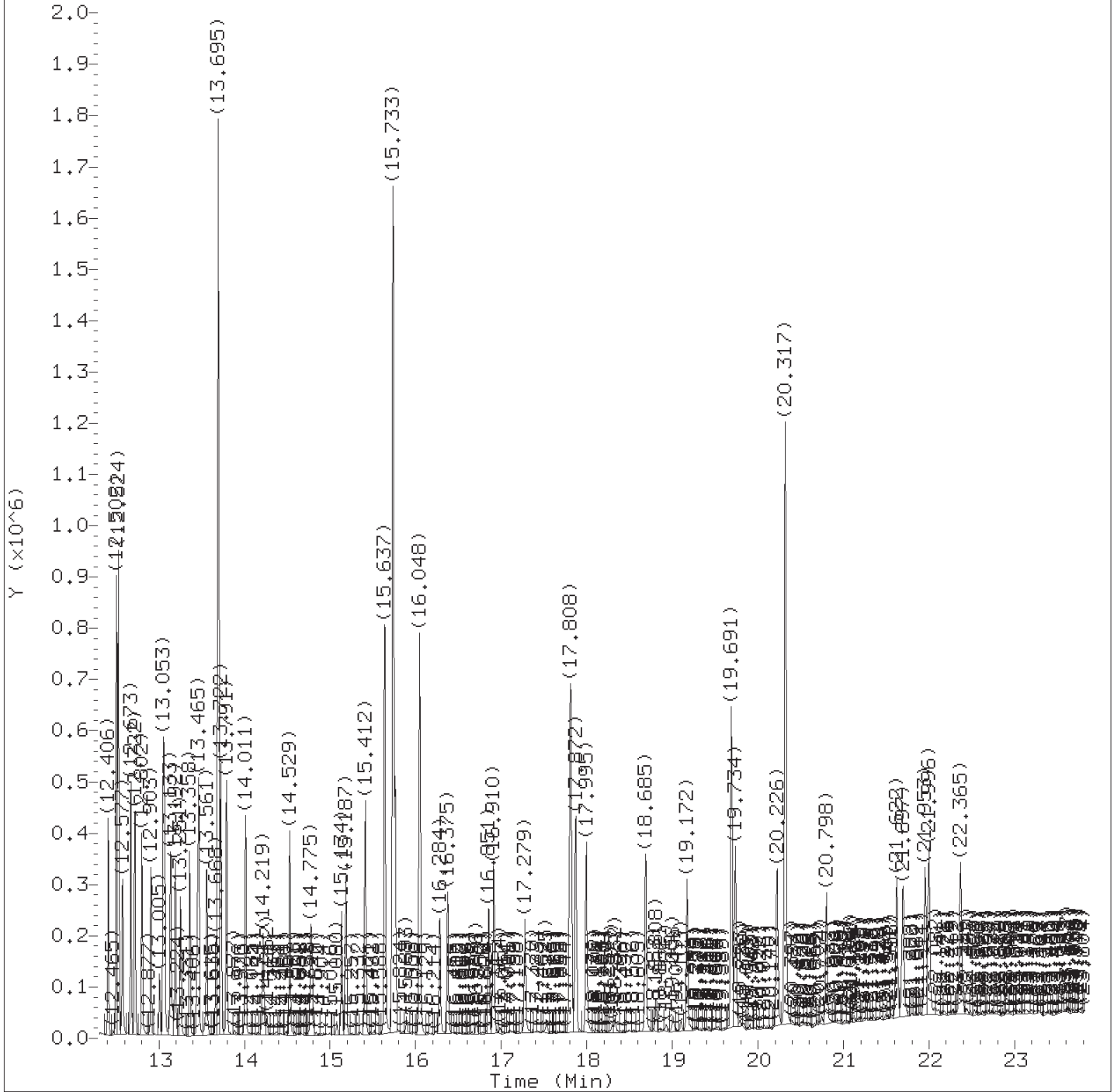
Sublist used: all1

Sample Name: SSTD1.25

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD1.25

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
 Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD1.25

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.383	88	35662M	1.292
5) N-Nitrosodimethylamine	(1)	2.950	74	48925M	1.179
6) Pyridine	(1)	2.987	79	78922	1.118
8) 2-Picoline	(1)	4.153	93	91395M	1.240
9) N-Nitrosomethylethylamine	(1)	4.362	88	36907M	1.226
10) Methyl methanesulfonate	(1)	4.800	80	49485M	1.286
12) \$2-Fluorophenol	(1)	5.009	112	139019	2.418
14) N-Nitrosodiethylamine	(1)	5.373	102	28404	1.044
43) Total Cresols	(1)			140617	2.445
16) Ethyl methanesulfonate	(1)	5.833	109	37359	1.243
17) Benzaldehyde	(1)	6.298	77	70590	1.335
18) \$Phenol-d6	(1)	6.405	99	192176	2.455
19) Phenol	(1)	6.421	94	113097	1.238
20) Aniline	(1)	6.458	93	130520	1.210
21) a-methylstyrene	(1)	6.544	118	6405	1.151
23) bis(2-Chloroethyl) ether	(1)	6.576	93	85246	1.242
24) 2-Chlorophenol	(1)	6.619	128	67145	1.231
25) 1,3-Dichlorobenzene	(1)	6.859	146	74600	1.243
26) *1,4-Dichlorobenzene-d4	(1)	6.950	152	184537	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	73955	1.236
28) Benzyl alcohol	(1)	7.175	108	41669	1.140
29) 1,2-Dichlorobenzene	(1)	7.202	146	70174	1.219
31) Indene	(1)	7.341	115	80915	1.262
32) 2-Methylphenol	(1)	7.346	108	69538	1.225
100) Isosafrole	(3)			51457	1.139
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.394	45	104393	1.208
35) bis(2-Chloroisopropyl) ether	(1)	7.394	45	104393	1.208
36) N-Nitrosopyrrolidine	(1)	7.533	100	32072	1.098
37) Acetophenone	(1)	7.576	105	107340	1.229
38) 4-Methylphenol	(1)	7.587	108	71079	1.220
39) N-Nitroso-di-n-propylamine	(1)	7.592	70	63479	1.210
40) N-Nitrosomorpholine	(1)	7.608	56	46267	1.220
41) o-Toluidine	(1)	7.624	106	120365	1.212
44) Hexachloroethane	(1)	7.721	117	33164	1.217
45) \$Nitrobenzene-d5	(2)	7.801	82	172349	2.262
46) Nitrobenzene	(2)	7.833	77	97253	1.194
125) 2,4,2,6-Dinitrotoluenes	(3)			60843	2.156
50) N-Nitropiperidine	(2)	8.068	114	33380	1.168
52) Isophorone	(2)	8.213	82	160210	1.163
53) 2-Nitrophenol	(2)	8.336	139	29644	1.104

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Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
 Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD1.25

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.427	107	76146	1.166
58) Benzoic acid	(2)	8.518	105	123190M	2.945
59) O,O,O-Triethylphosphorothioate	(2)	8.555	198	32340	1.175
57) bis(2-Chloroethoxy)methane	(2)	8.592	93	107689	1.242
62) 2,4-Dichlorophenol	(2)	8.710	162	52440	1.124
151) Diallate trans/cis	(4)			74586	1.201
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	63840	1.215
68)*Naphthalene-d8	(2)	8.935	136	715804	5.000
69) Naphthalene	(2)	8.967	128	199449	1.230
70) 4-Chloroaniline	(2)	9.074	127	81347	1.229
71) 2,6-Dichlorophenol	(2)	9.079	162	54957	1.219
72) Hexachloropropene	(2)	9.117	213	39138	1.143
74) Hexachlorobutadiene	(2)	9.191	225	38923	1.233
78) Quinoline	(2)	9.502	129	117403	1.220
79) Caprolactam	(2)	9.577	113	13613	0.959
80) N-Nitrosodi-n-butylamine	(2)	9.646	84	57644	1.077
83) 4-Chloro-3-methylphenol	(2)	9.871	107	62538	1.121
85) Safrole	(2)	9.983	162	49727	1.221
86) 2-Methylnaphthalene	(2)	10.095	142	125645	1.211
87) 1-Methylnaphthalene	(2)	10.251	142	119100	1.198
88) Hexachlorocyclopentadiene	(3)	10.357	237	36006	1.149
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.368	216	65280	1.207
91) cis-Isosafrole	(3)	10.459	162	9310	0.207
93) 2,4,6-Trichlorophenol	(3)	10.561	196	35207	1.043
95) 2,4,5-Trichlorophenol	(3)	10.609	196	42435	1.181
96)\$2-Fluorobiphenyl	(3)	10.716	172	289819	2.447
97) trans-Isosafrole	(3)	10.828	162	42147	0.932
98) 1,1'-Biphenyl	(3)	10.871	154	149533	1.217
99) 2-Chloronaphthalene	(3)	10.882	162	126062	1.177
101) 1-Chloronaphthalene	(3)	10.914	162	113972	1.242
103) Diphenyl ether	(3)	11.053	170	79488	1.167
104) 2-Nitroaniline	(3)	11.058	138	26602	0.955
108) 1,4-Naphthoquinone	(3)	11.176	158	40381	1.028
109) 1,4-Dinitrobenzene	(3)	11.304	168	13684	0.949
110) Dimethylphthalate	(3)	11.400	163	139314	1.248
111) 1,3-Dinitrobenzene	(3)	11.417	168	14450	0.881
113) 2,6-Dinitrotoluene	(3)	11.475	165	25756	1.076
114) Acenaphthylene	(3)	11.550	152	167097	1.231
117) 3-Nitroaniline	(3)	11.716	138	27345	1.054
118)*Acenaphthene-d10	(3)	11.764	164	352099	5.000

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Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
 Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD1.25

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.812	153	128228	1.227
120) 2,4-Dinitrophenol	(3)	11.871	184	33728	2.471
121) 4-Nitrophenol	(3)	11.967	109	39807	1.832
122) Pentachlorobenzene	(3)	12.000	250	54084	1.231
123) 2,4-Dinitrotoluene	(3)	12.058	165	35087	1.080
124) Dibenzofuran	(3)	12.058	168	174923	1.239
126) 1-Naphthylamine	(3)	12.165	143	115631	1.144
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	30331	1.095
128) 2-Naphthylamine	(3)	12.272	143	120261	1.196
129) Diethylphthalate	(3)	12.406	149	135385	1.232
130) Thionazin	(3)	12.502	107	24378	1.132
131) Fluorene	(3)	12.502	166	135441	1.226
133) 5-Nitro-o-toluidine	(3)	12.524	152	34191	1.140
132) 4-Chlorophenyl-phenylether	(3)	12.524	204	71821	1.259
134) 4-Nitroaniline	(3)	12.529	138	28174	1.063
135) 4,6-Dinitro-2-methylphenol	(4)	12.577	198	30823	1.665
136) N-Nitrosodiphenylamine	(4)	12.673	169	106530	1.183
137) NDPA as diphenylamine	(4)	12.673	169	106530	1.183
139) 1,2-Diphenylhydrazine	(4)	12.722	77	194701	1.213
140) \$2,4,6-Tribromophenol	(3)	12.802	330	30520	2.127
142) Tetraethyldithiopyrophosphate	(4)	12.903	97	26553	1.118
144) 1,3,5-Trinitrobenzene	(4)	13.005	213	8055	0.718
145) Diallate (peak 1)	(4)	13.048	86	64021	0.999
146) Phorate	(4)	13.059	75	100745	1.170
147) Phenacetin	(4)	13.069	108	73115	1.097
148) 4-Bromophenyl-phenylether	(4)	13.139	248	40297	1.277
149) Diallate (peak 2)	(4)	13.160	86	10565M	0.201
150) Hexachlorobenzene	(4)	13.192	284	38628	1.205
152) Dimethoate	(4)	13.251	87	56765	1.076
153) Atrazine	(4)	13.358	200	34985	1.224
154) Pentachlorophenol	(4)	13.444	266	19167	0.946
155) 4-Aminobiphenyl	(4)	13.465	169	89903	1.125
156) Pentachloronitrobenzene	(4)	13.465	237	17102	1.128
157) Pronamide	(4)	13.561	173	54033	1.060
158) *Phenanthrene-d10	(4)	13.695	188	703648	5.000
159) Dinoseb	(4)	13.706	211	19003	0.675
160) Phenanthrene	(4)	13.722	178	207328	1.211
162) Anthracene	(4)	13.791	178	200223	1.194
168) Carbazole	(4)	14.011	167	171559	1.143
169) Methyl parathion	(4)	14.219	109	38274	0.966

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 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
 Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD1.25

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.529	149	201773	1.053
172) Parathion	(4)	14.770	109	20078	0.805
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	6940	0.500
227) Total PAHs	(6)			3201168	21.335
174) Octachlorostyrene	(4)	15.139	308	13086	1.106
176) Isodrin	(4)	15.187	193	22466	1.110
178) Fluoranthene	(4)	15.412	202	217278	1.161
179) Benzidine	(5)	15.642	184	376104	3.228
180)*Pyrene-d10	(5)	15.733	212	731230	5.000
182) Pyrene	(5)	15.760	202	237519	1.231
184)\$Terphenyl-d14	(5)	16.048	244	278952	2.344
187) p-Dimethylaminoazobenzene	(5)	16.278	225	25456	0.857
190) Chlorobenzilate	(5)	16.375	139	61420	1.077
192) 3,3'-Dimethylbenzidine	(5)	16.856	212	108187	0.969
193) Butylbenzylphthalate	(5)	16.915	149	84141	0.982
196) 2-Acetylaminofluorene	(5)	17.279	181	60612	0.859
198) 3,3'-Dichlorobenzidine	(5)	17.797	252	62851	0.974
200) Benzo(a)anthracene	(5)	17.808	228	206633	1.150
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	34959	0.969
201) Chrysene	(5)	17.872	228	207280	1.178
204) bis(2-Ethylhexyl)phthalate	(5)	17.995	149	117857	0.955
208) 6-Methylchrysene	(5)	18.685	242	125689	1.075
210) Di-n-octylphthalate	(6)	19.172	149	175583	0.887
211) Benzo(b)fluoranthene	(6)	19.691	252	190311	1.169
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.691	256	69501	0.998
213) Benzo(k)fluoranthene	(6)	19.734	252	192358	1.172
216) Benzo(a)pyrene	(6)	20.226	252	163384	1.098
218)*Perylene-d12	(6)	20.322	264	618576	5.000
220) 3-Methylcholanthrene	(6)	20.798	268	69928	1.019
222) Dibenz(a,h)acridine	(6)	21.622	279	121154	1.014
223) Dibenz(a,j)acridine	(6)	21.697	279	139786	1.110
224) Indeno(1,2,3-cd)pyrene	(6)	21.953	276	152452M	1.083
225) Dibenz(a,h)anthracene	(6)	21.996	278	173900	1.183
226) Benzo(g,h,i)perylene	(6)	22.365	276	177542	1.181

M = Compound was manually integrated.

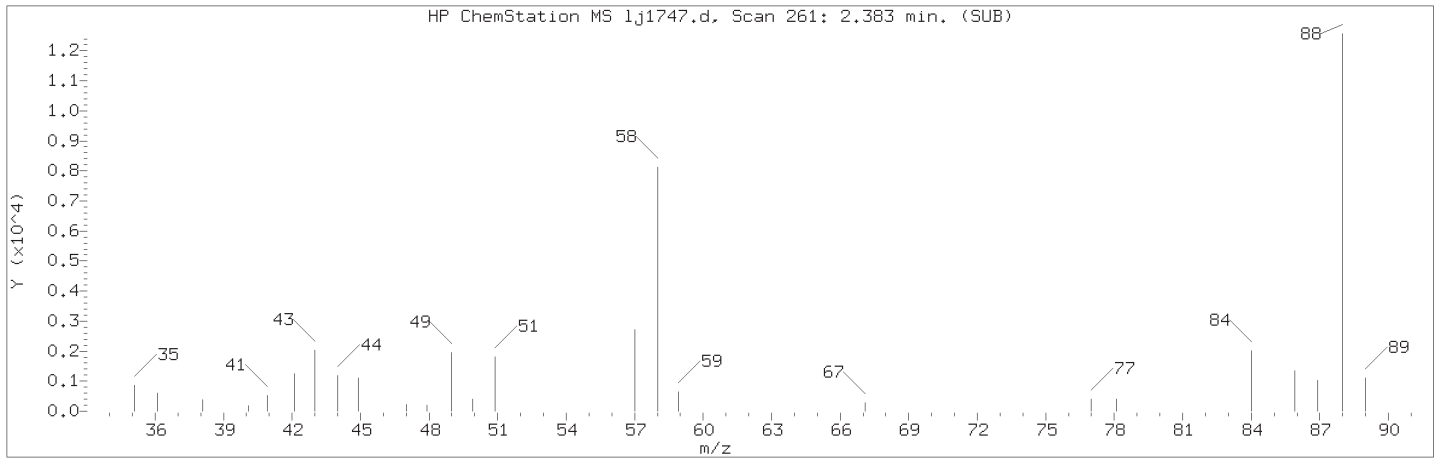
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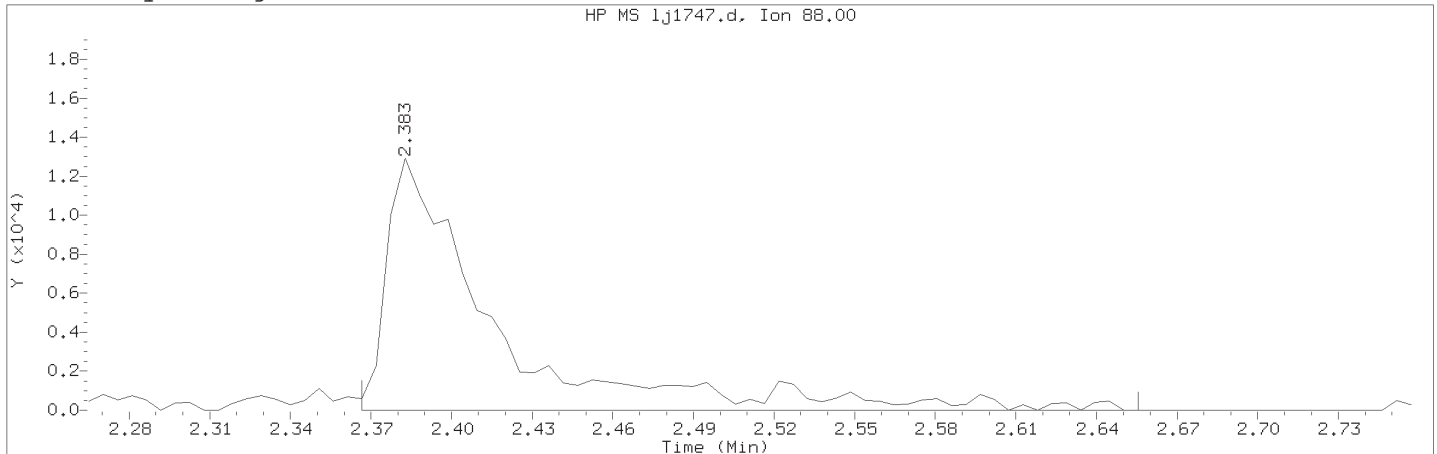
Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

Compound Number    : 1  
Compound Name    : 1,4-Dioxane  
Scan Number    : 261  
Retention Time (minutes)                                   : 2.383  
Quant Ion    : 88.00  
Area (flag)    : 35662M  
On-Column Amount (ng/ul)                                : 1.2918  
Integration start scan                                    : 257                      Integration stop scan: 311  
Y at integration start                                    : 5                        Y at integration end: 5

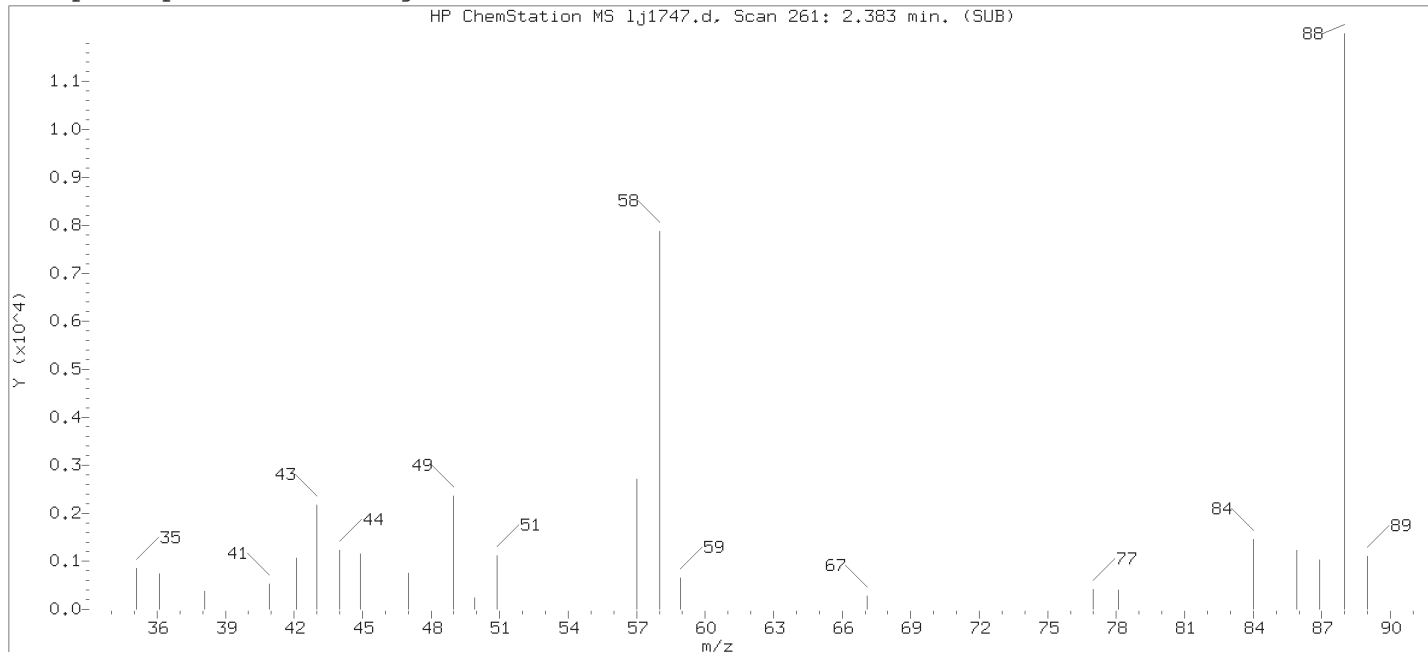
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

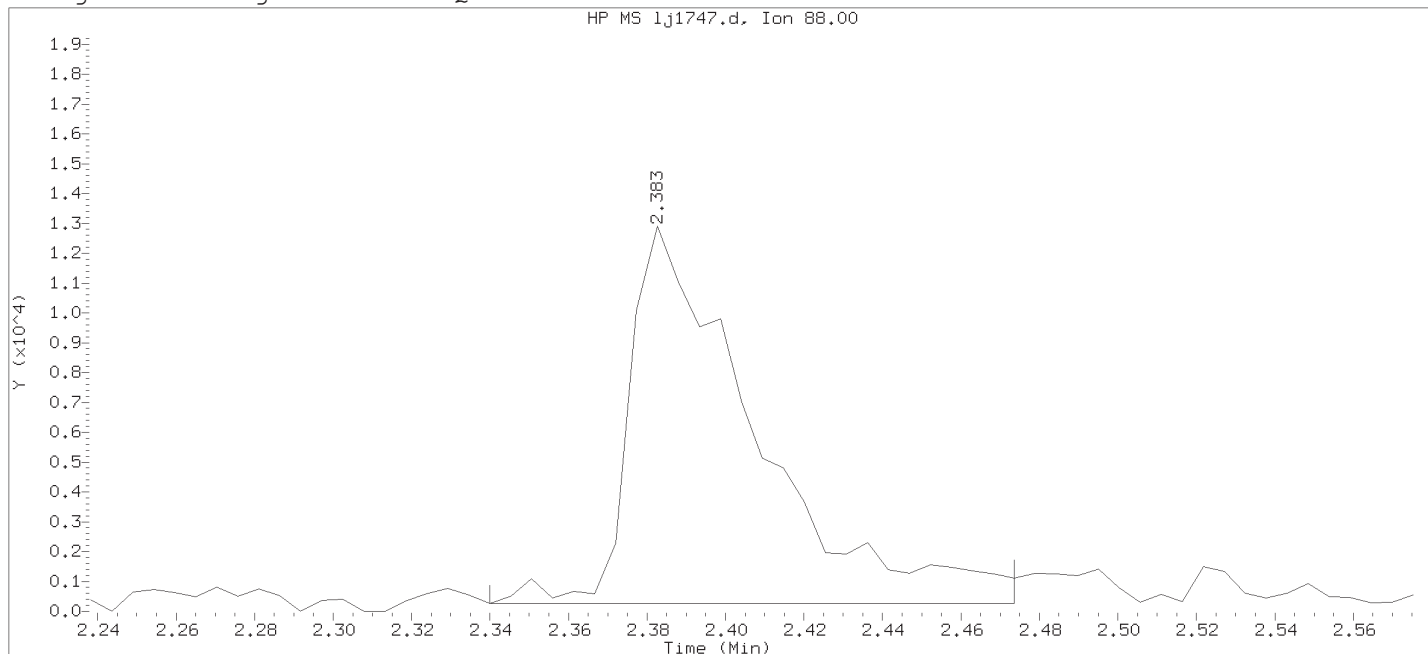
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
Analyst ID: whs02991

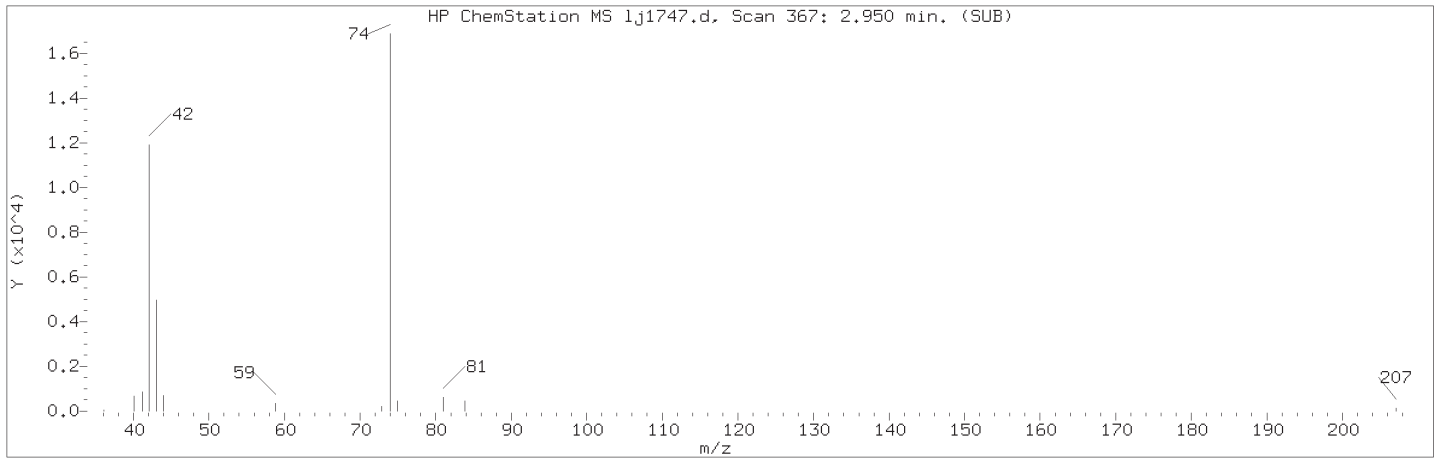
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25

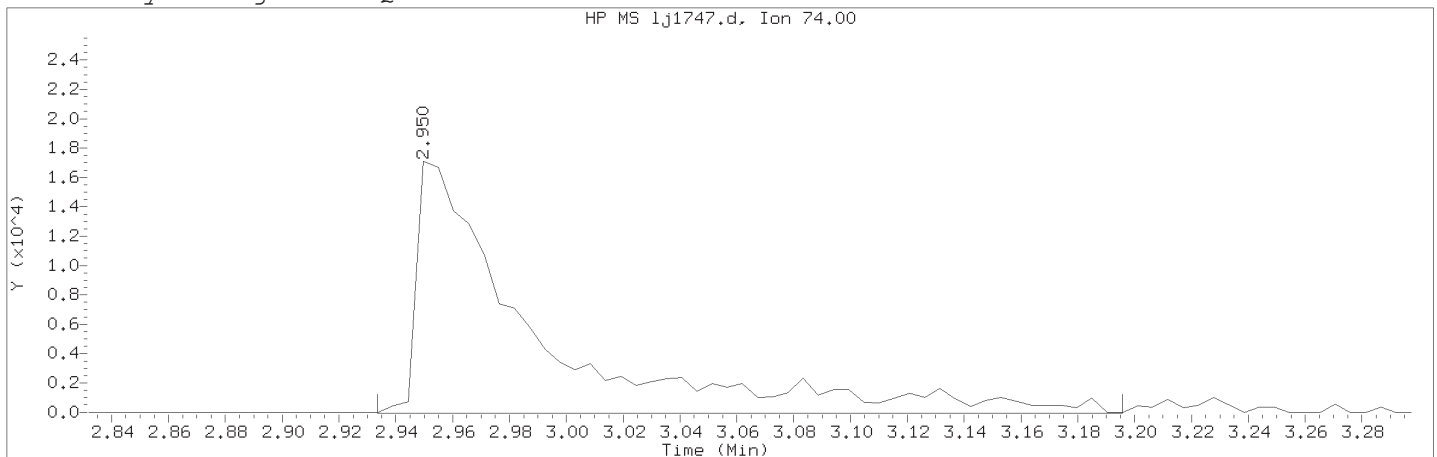
Lab Sample ID: RVSTD2648

Compound Number : 1  
Compound Name : 1,4-Dioxane  
Scan Number : 261  
Retention Time (minutes) : 2.383  
Quant Ion : 88.00  
Area : 28206  
On-column Amount (ng/ul) : 1.0589  
Integration start scan : 252      Integration stop scan: 277  
Y at integration start : 272      Y at integration end: 272

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

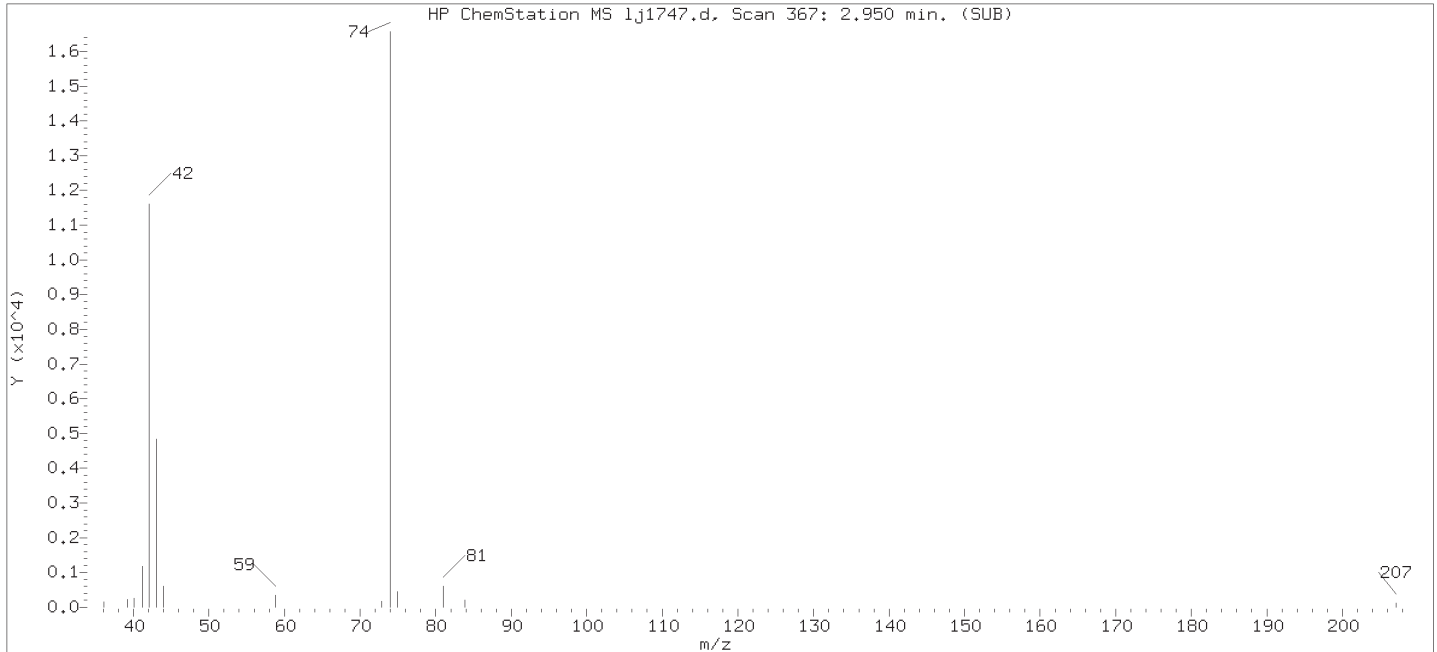
Compound Number    : 5  
Compound Name    : N-Nitrosodimethylamine  
Scan Number    : 367  
Retention Time (minutes)                                   : 2.950  
Quant Ion    : 74.00  
Area (flag)    : 48925M  
On-Column Amount (ng/ul)                                : 1.1790  
Integration start scan                                    : 363                      Integration stop scan: 412  
Y at integration start                                    : -57                      Y at integration end: -57

Reason for manual integration: improper integration

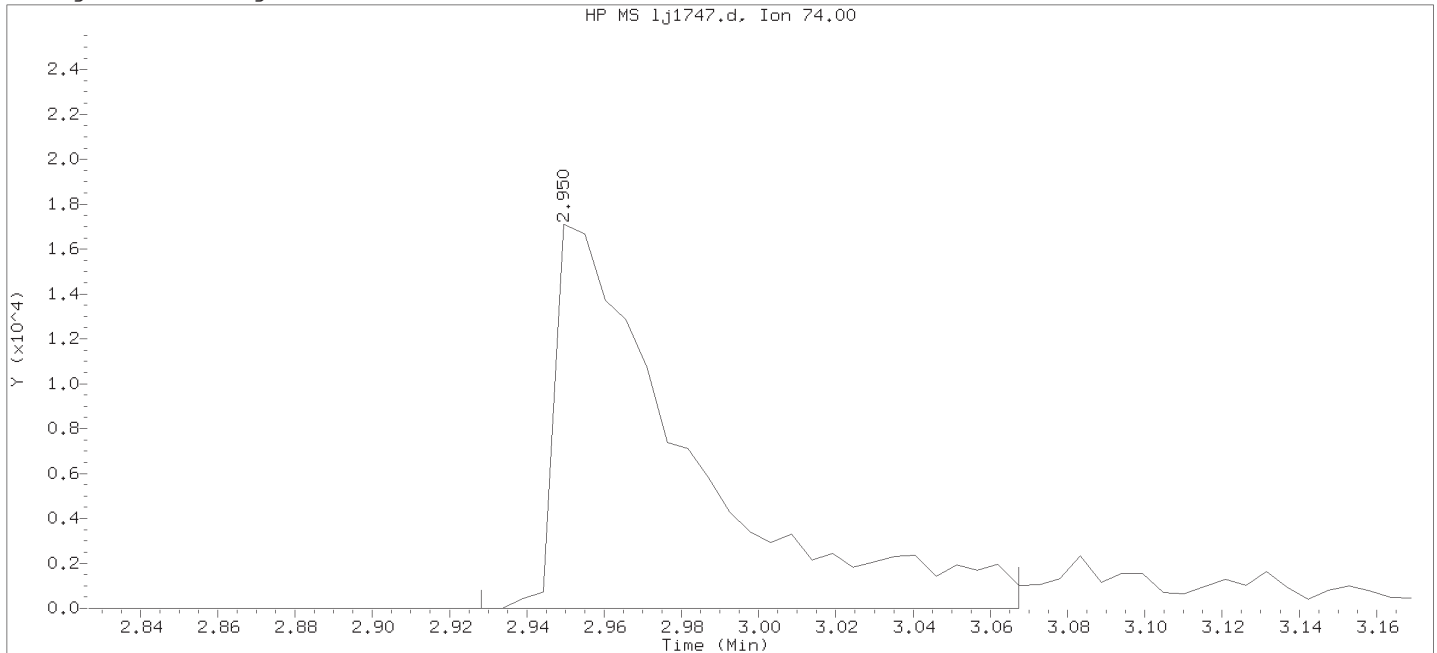
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

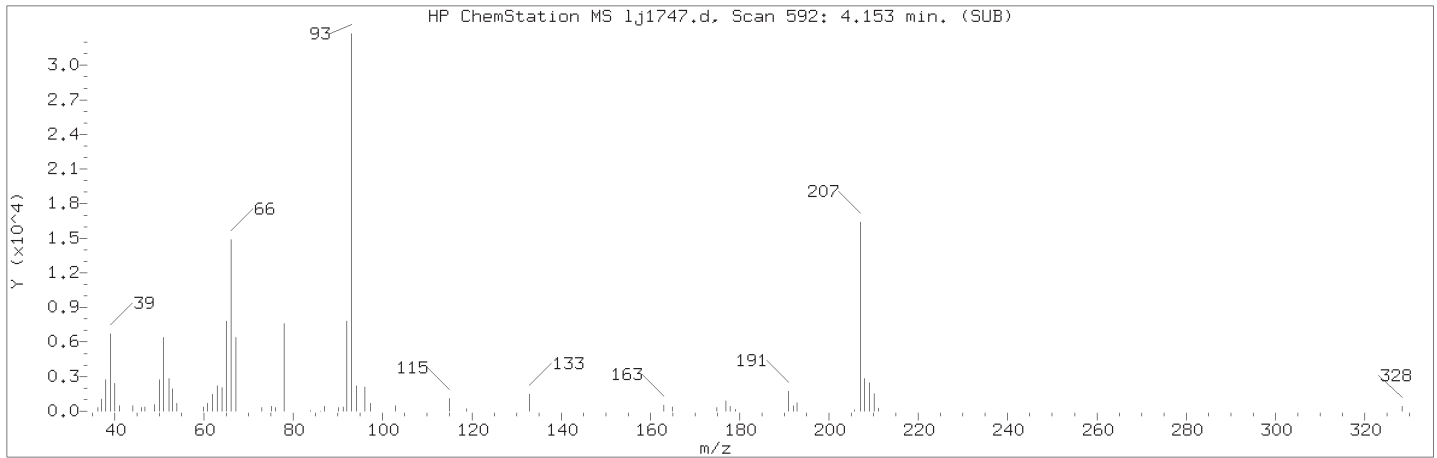
Sublist used: all1

Sample Name: SSTD1.25

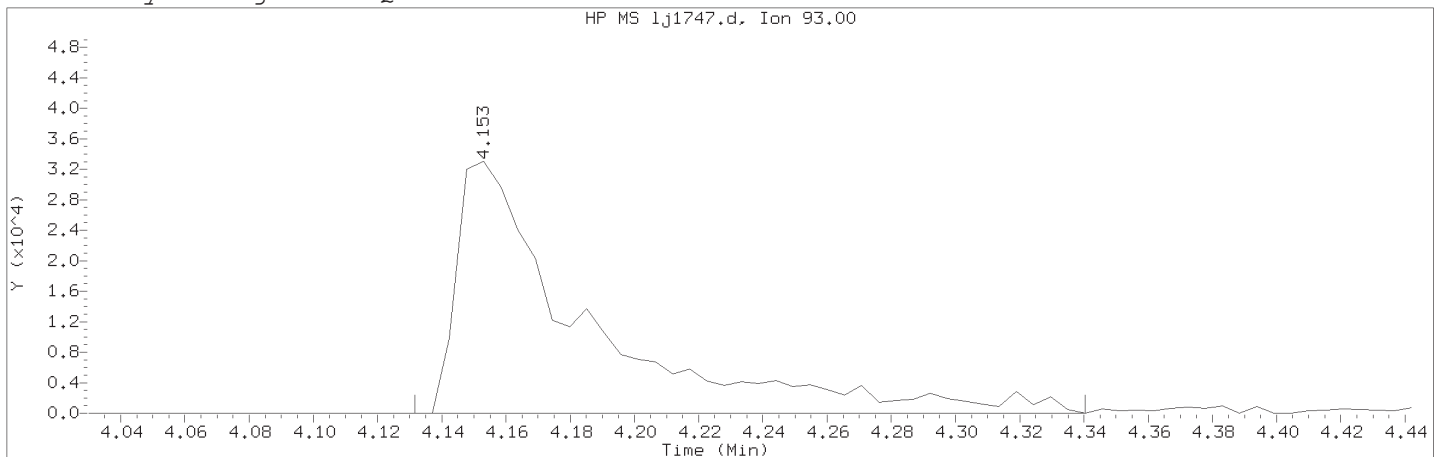
Lab Sample ID: RVSTD2648

Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 367		
Retention Time (minutes)	: 2.950		
Quant Ion	: 74.00		
Area	: 40821		
On-column Amount (ng/ul)	: 1.0312		
Integration start scan	: 362	Integration stop scan:	388
Y at integration start	: 0	Y at integration end:	0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

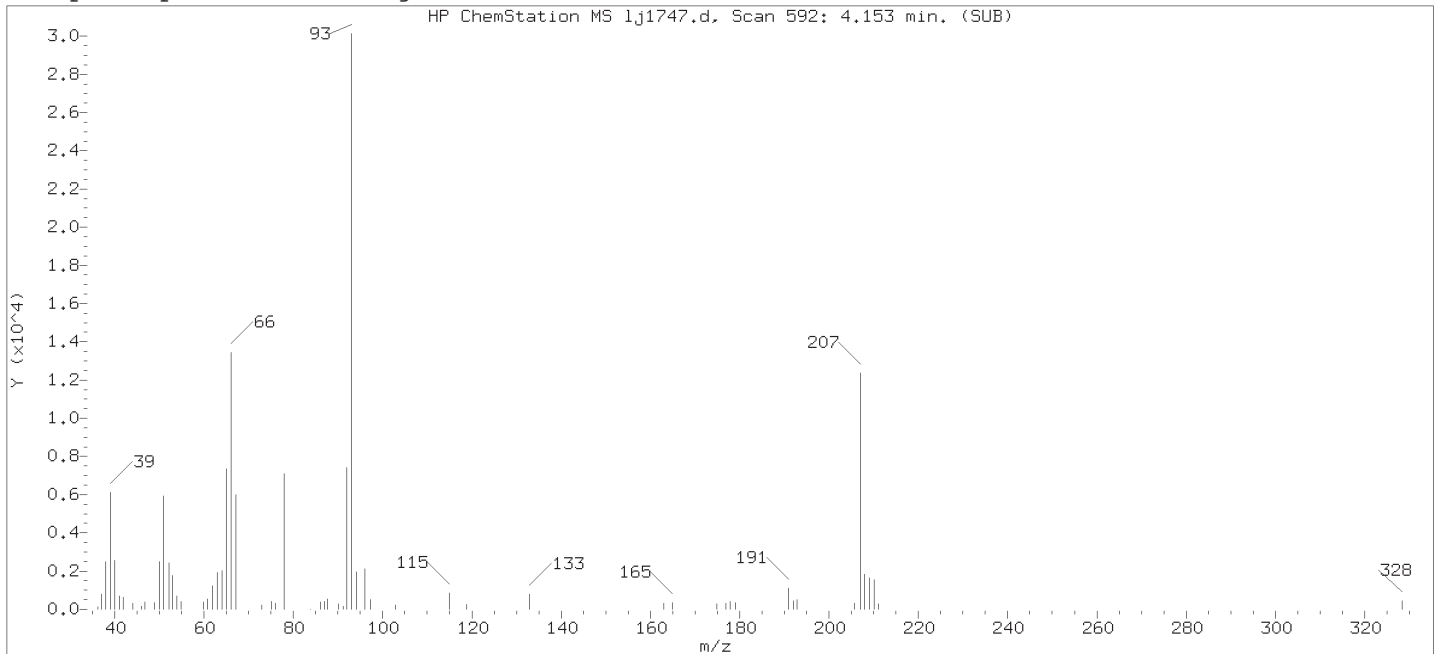
Compound Number    : 8  
Compound Name    : 2-Picoline  
Scan Number    : 592  
Retention Time (minutes)                                   : 4.153  
Quant Ion     : 93.00  
Area (flag)     : 91395M  
On-Column Amount (ng/ul)                                 : 1.2401  
Integration start scan                                     : 587                      Integration stop scan: 626  
Y at integration start                                     : 0                         Y at integration end: 12

Reason for manual integration: improper integration

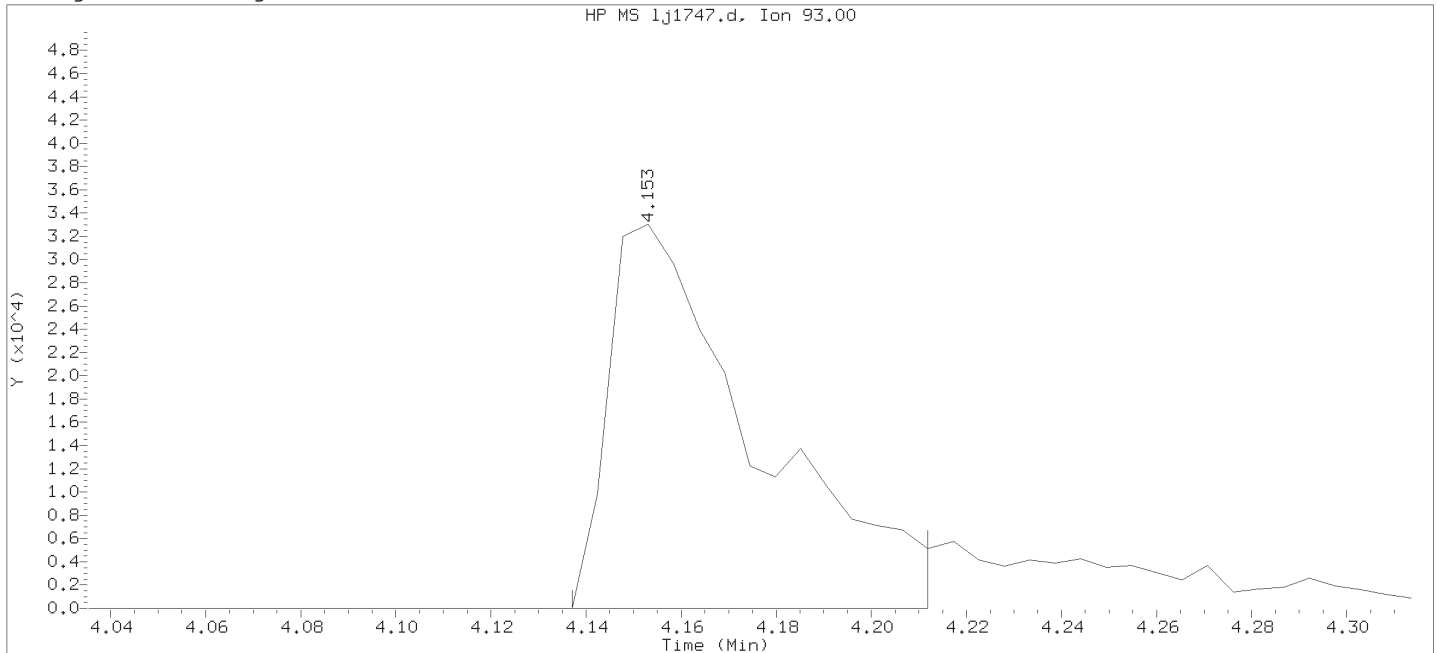
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
Analyst ID: whs02991

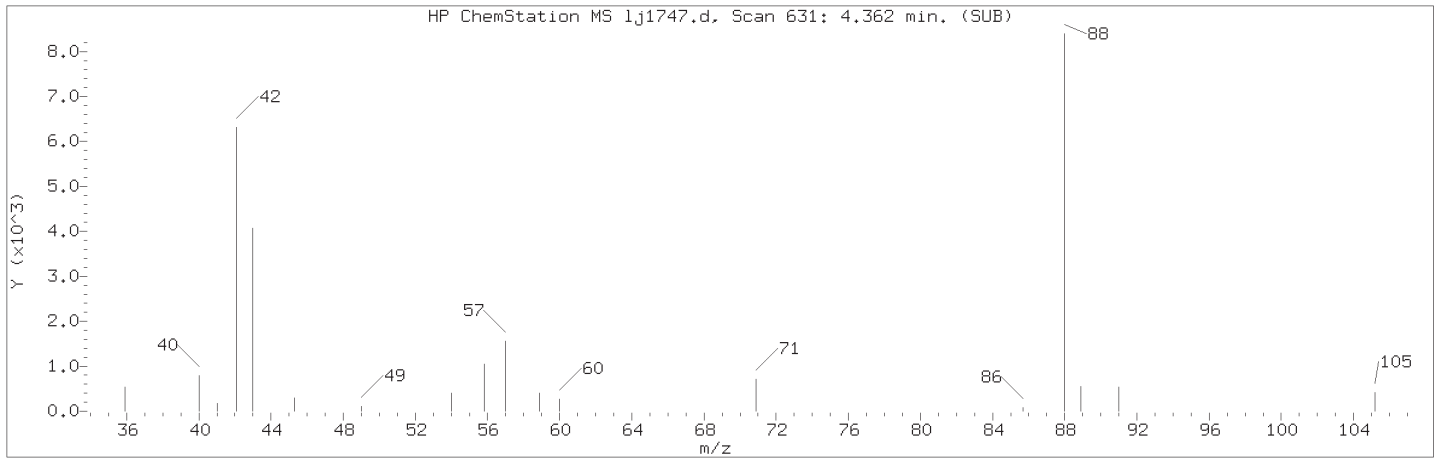
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25

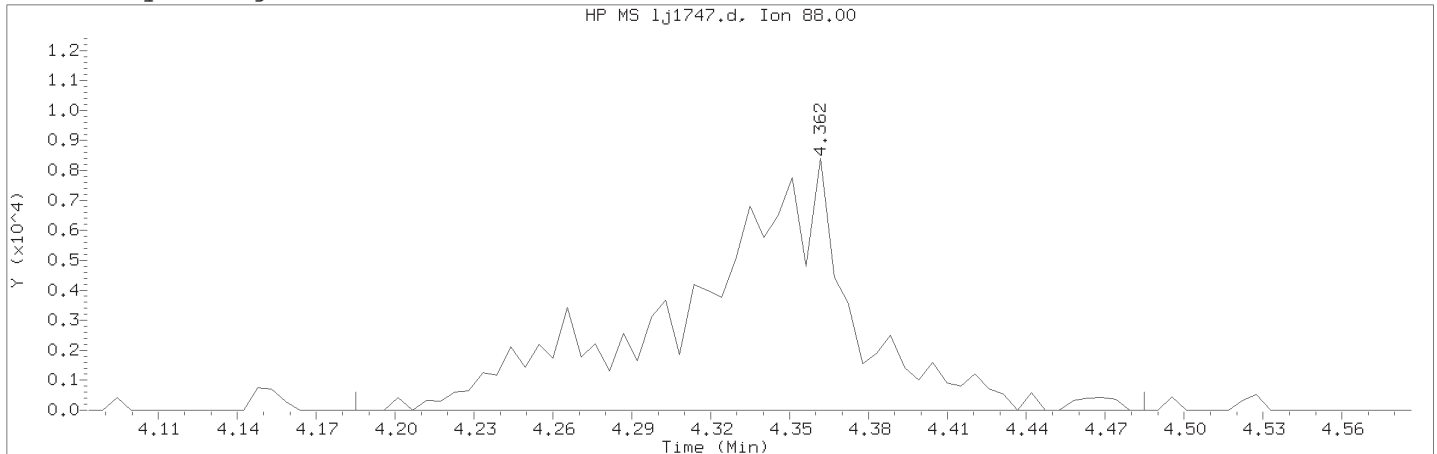
Lab Sample ID: RVSTD2648

Compound Number	: 8	
Compound Name	: 2-Picoline	
Scan Number	: 592	
Retention Time (minutes)	: 4.153	
Quant Ion	: 93.00	
Area	: 70810	
On-column Amount (ng/ul)	: 1.0181	
Integration start scan	: 588	Integration stop scan: 602
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1747.d  
Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD1.25

Lab Sample ID: RVSTD2648

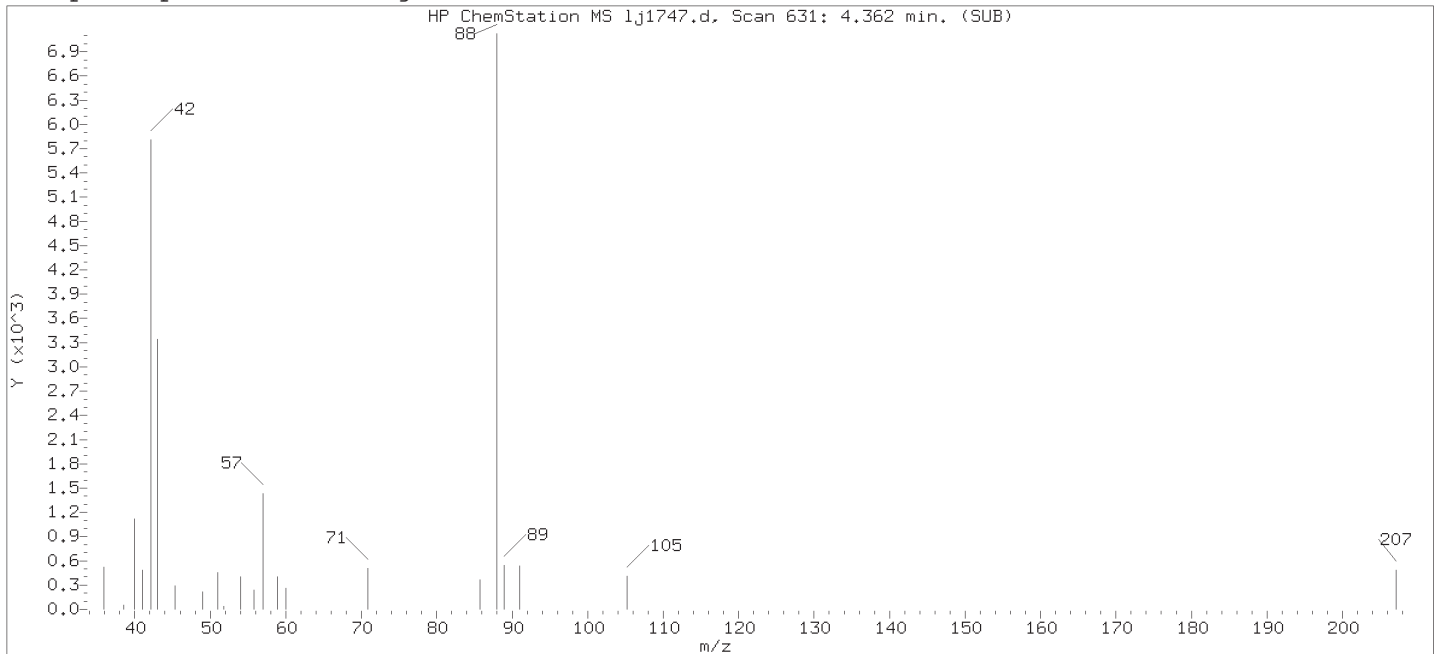
Compound Number : 9  
Compound Name : N-Nitrosomethylethylamine  
Scan Number : 631  
Retention Time (minutes) : 4.362  
Quant Ion : 88.00  
Area (flag) : 36907M  
On-Column Amount (ng/ul) : 1.2262  
Integration start scan : 597      Integration stop scan: 653  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

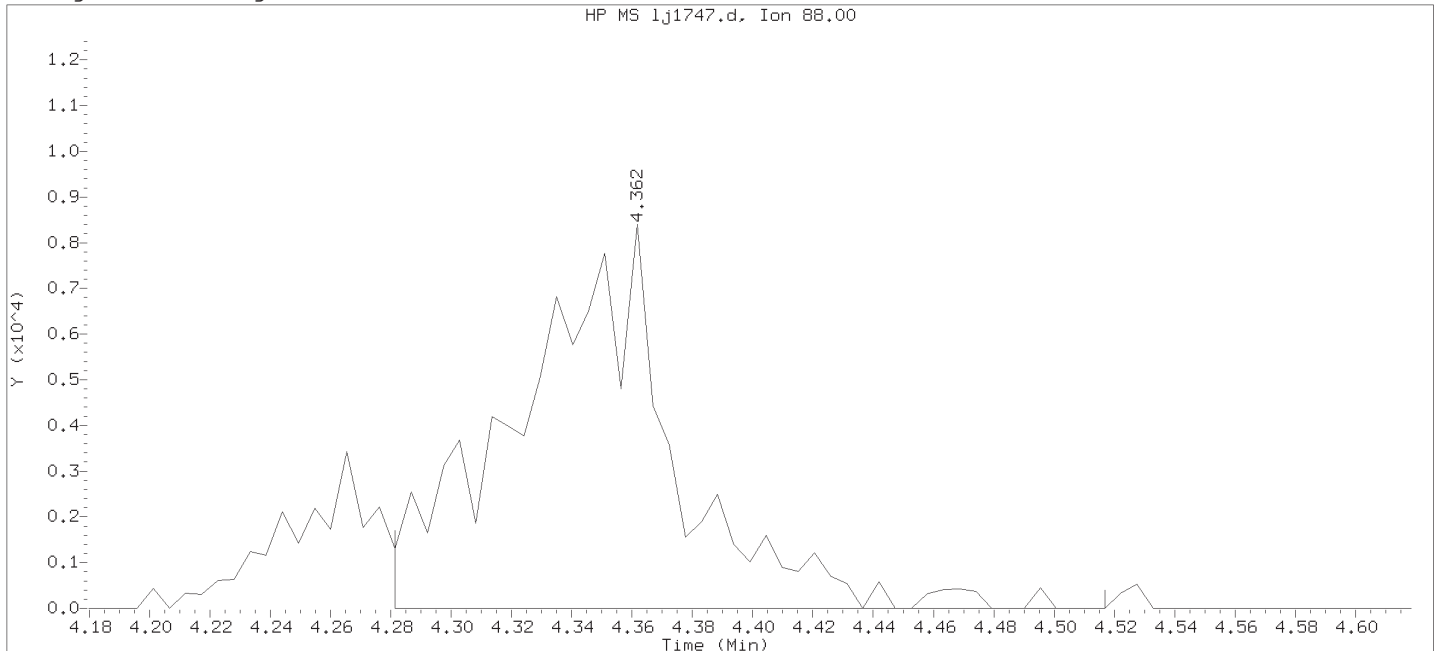
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



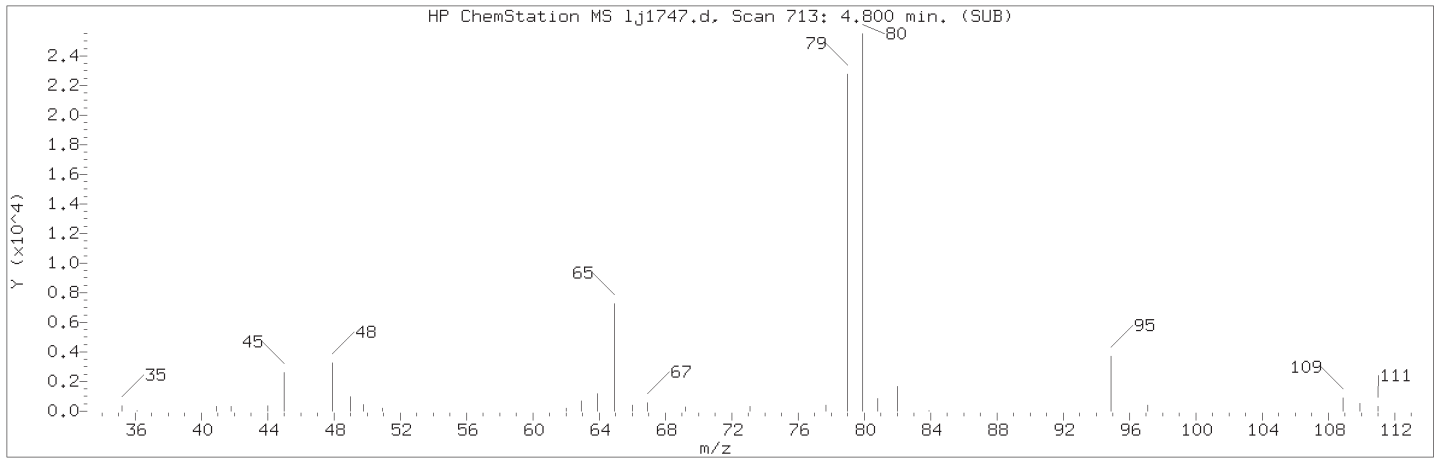
Data File: /chem/HP20296.i/18oct28.b/lj1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

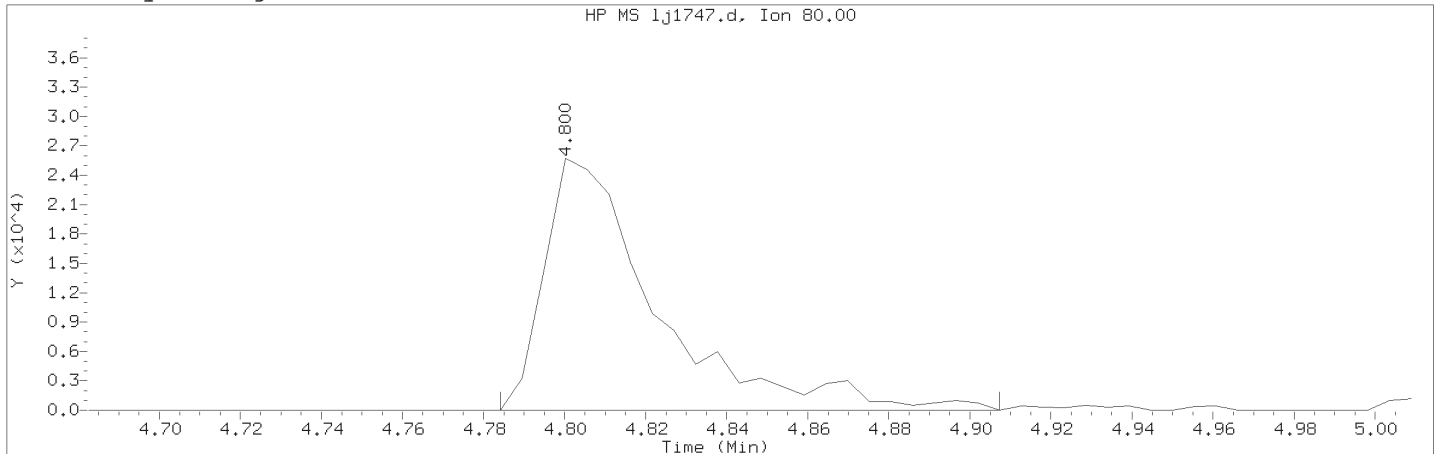
Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

Compound Number    : 9  
Compound Name    : N-Nitrosomethylethylamine  
Scan Number    : 631  
Retention Time (minutes)                                   : 4.362  
Quant Ion    : 88.00  
Area    : 30559  
On-column Amount (ng/ul)                                : 1.0413  
Integration start scan                                    : 615                      Integration stop scan: 659  
Y at integration start                                    : 0                        Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

Compound Number    : 10  
Compound Name    : Methyl methanesulfonate  
Scan Number    : 713  
Retention Time (minutes)                                   : 4.800  
Quant Ion    : 80.00  
Area (flag)    : 49485M  
On-Column Amount (ng/ul)                                : 1.2856  
Integration start scan                                     : 709                      Integration stop scan: 732  
Y at integration start                                     : 0                        Y at integration end: 0

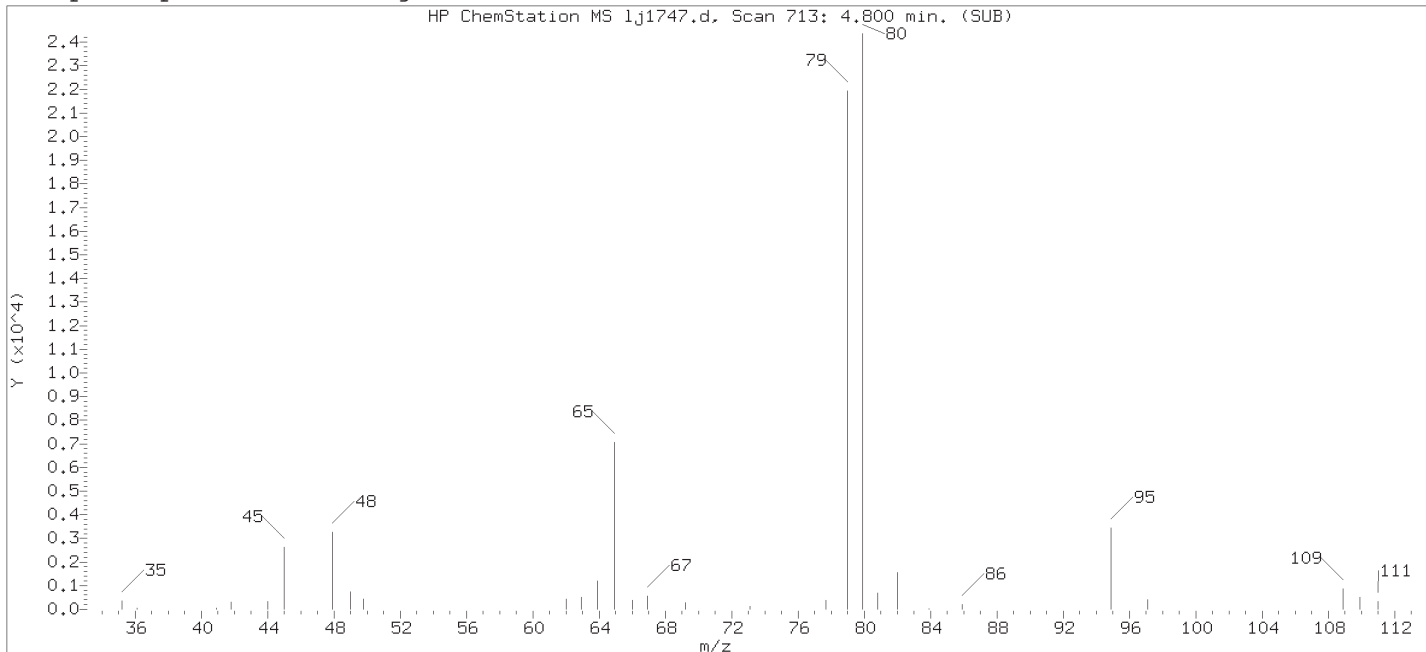
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

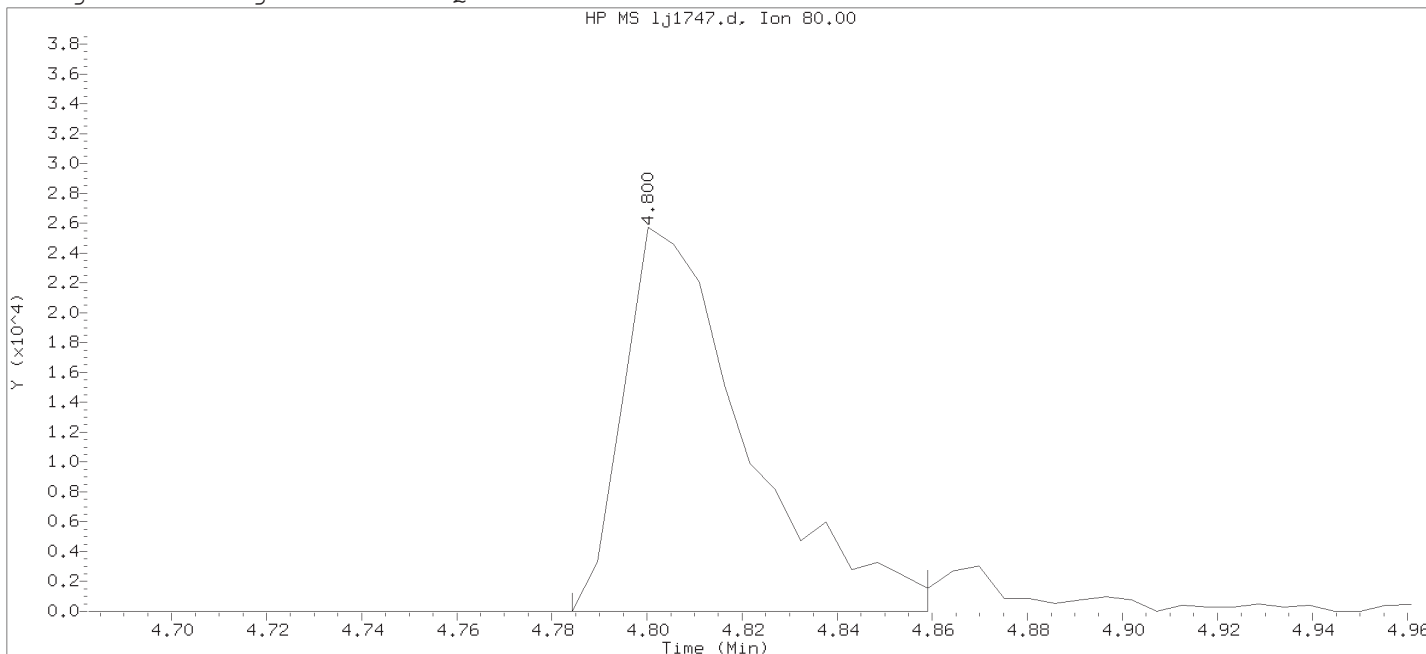
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



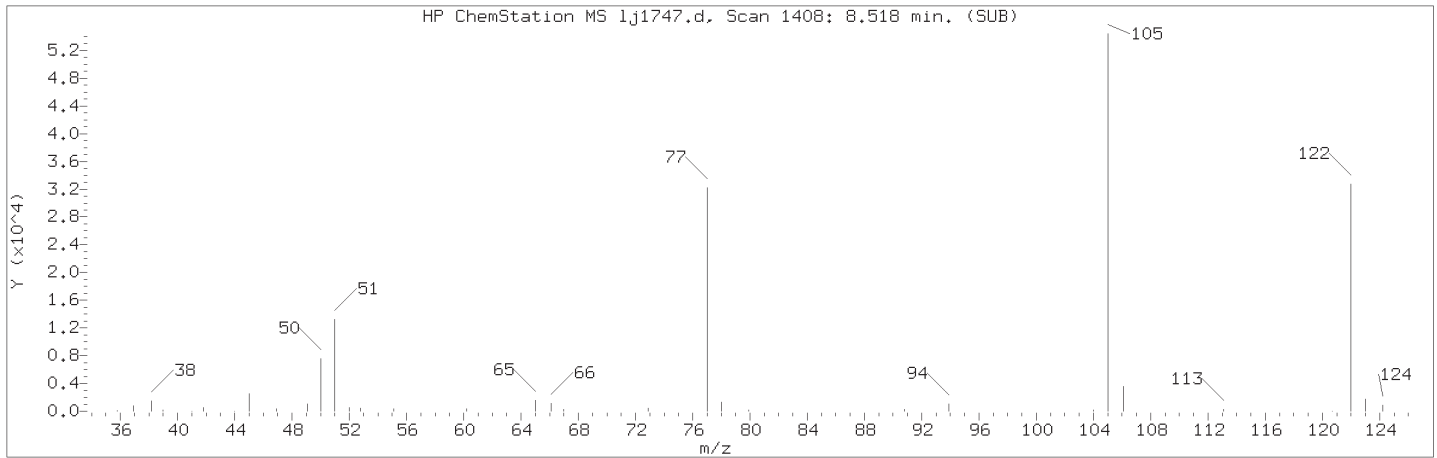
Data File: /chem/HP20296.i/18oct28.b/lj1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

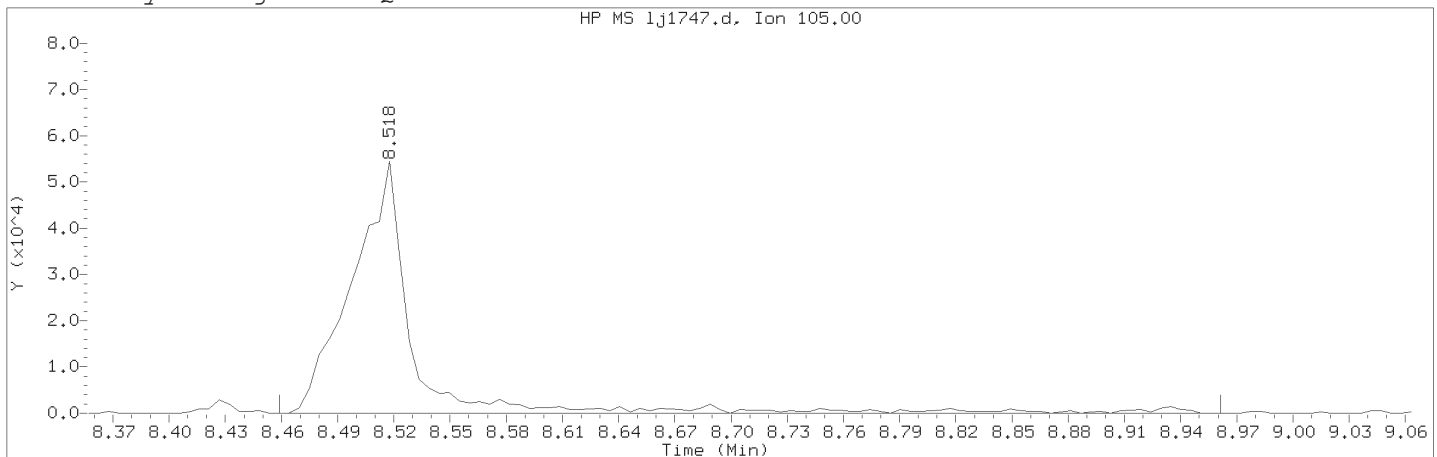
Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

Compound Number    : 10  
Compound Name    : Methyl methanesulfonate  
Scan Number    : 713  
Retention Time (minutes)                                    : 4.800  
Quant Ion    : 80.00  
Area    : 45876  
On-column Amount (ng/ul)                                 : 1.2127  
Integration start scan                                      : 709                      Integration stop scan: 723  
Y at integration start                                       : 0                        Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

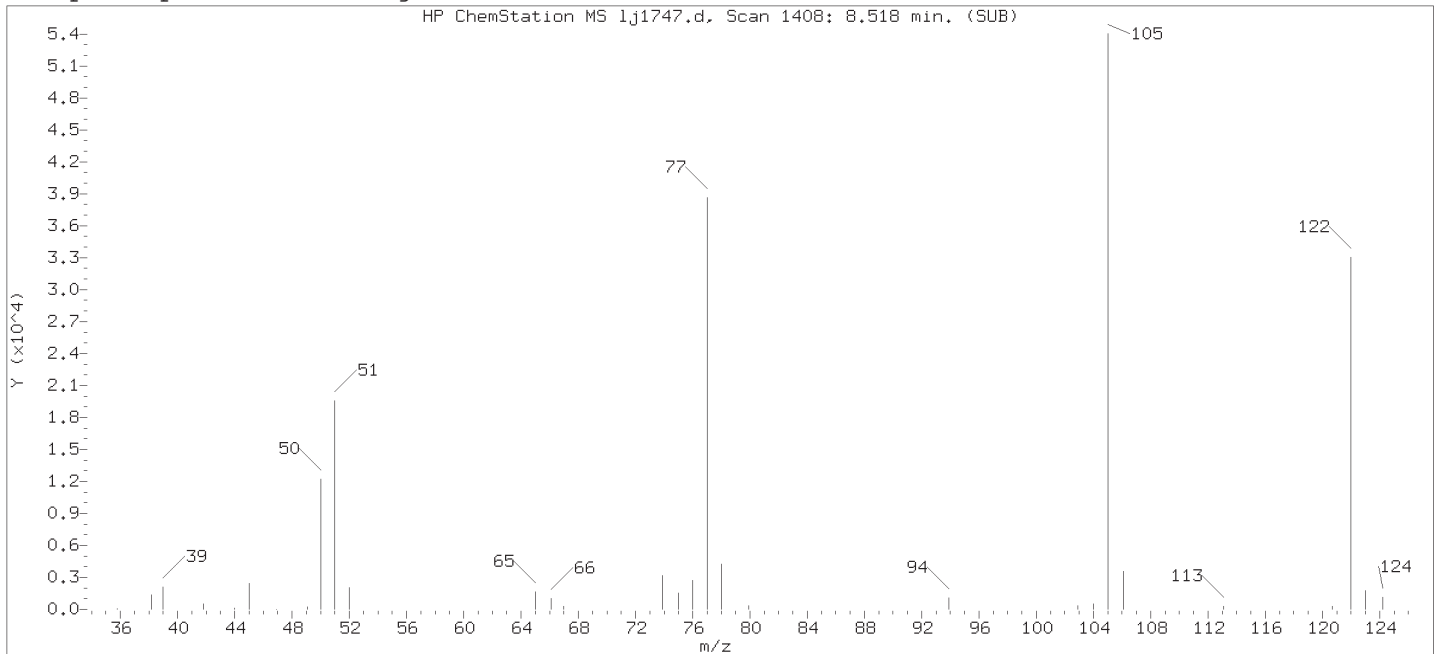
Compound Number    : 58  
Compound Name    : Benzoic acid  
Scan Number    : 1408  
Retention Time (minutes)                                   : 8.518  
Quant Ion    : 105.00  
Area (flag)     : 123190M  
On-Column Amount (ng/ul)                                 : 2.9452  
Integration start scan                                      : 1396                      Integration stop scan: 1490  
Y at integration start                                      : 0                              Y at integration end: 0

Reason for manual integration: improper integration

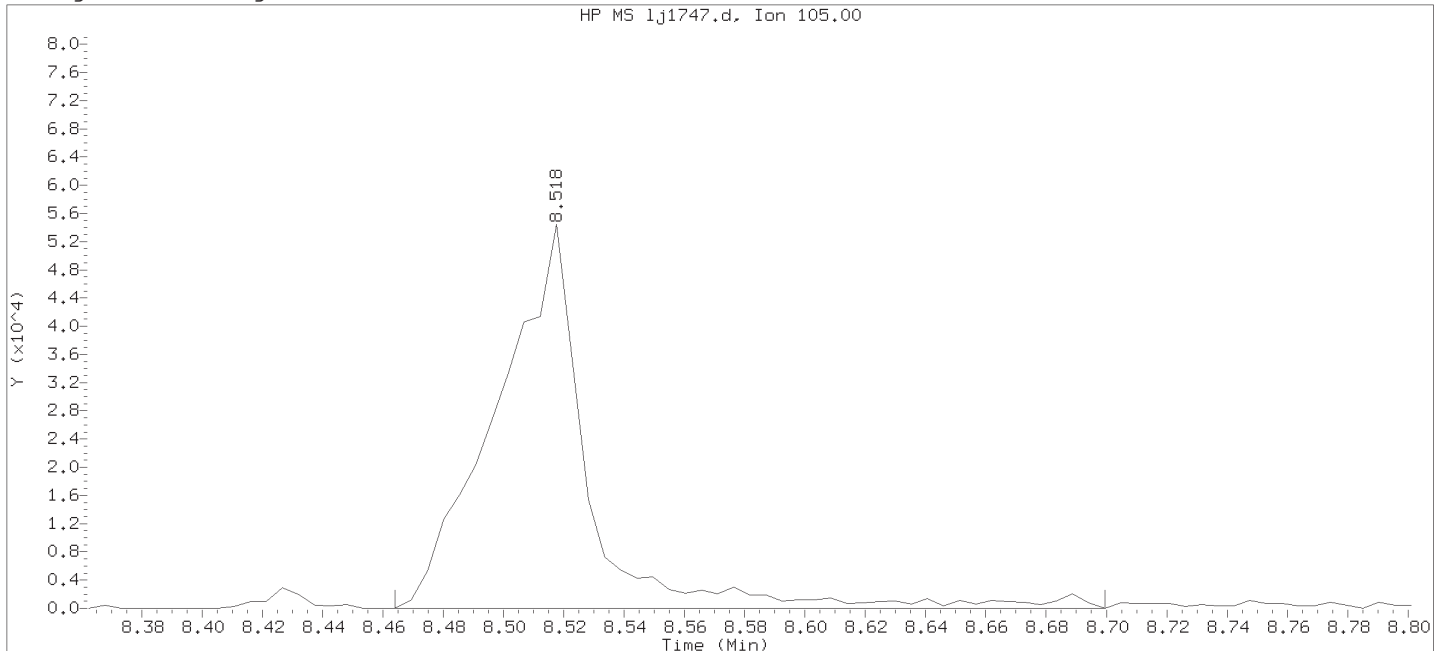
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



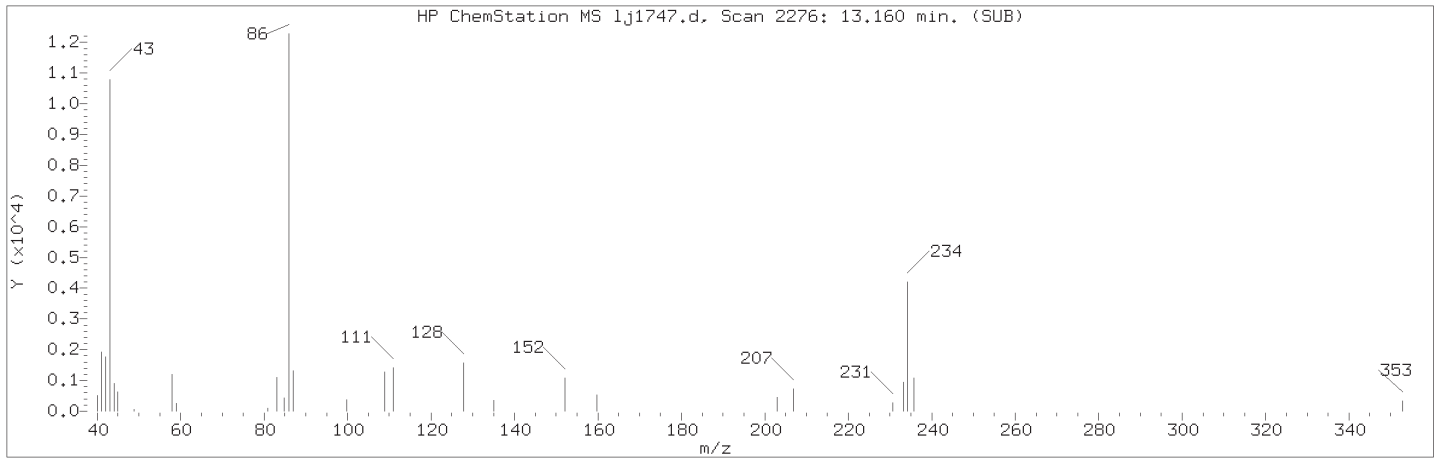
Data File: /chem/HP20296.i/18oct28.b/lj1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

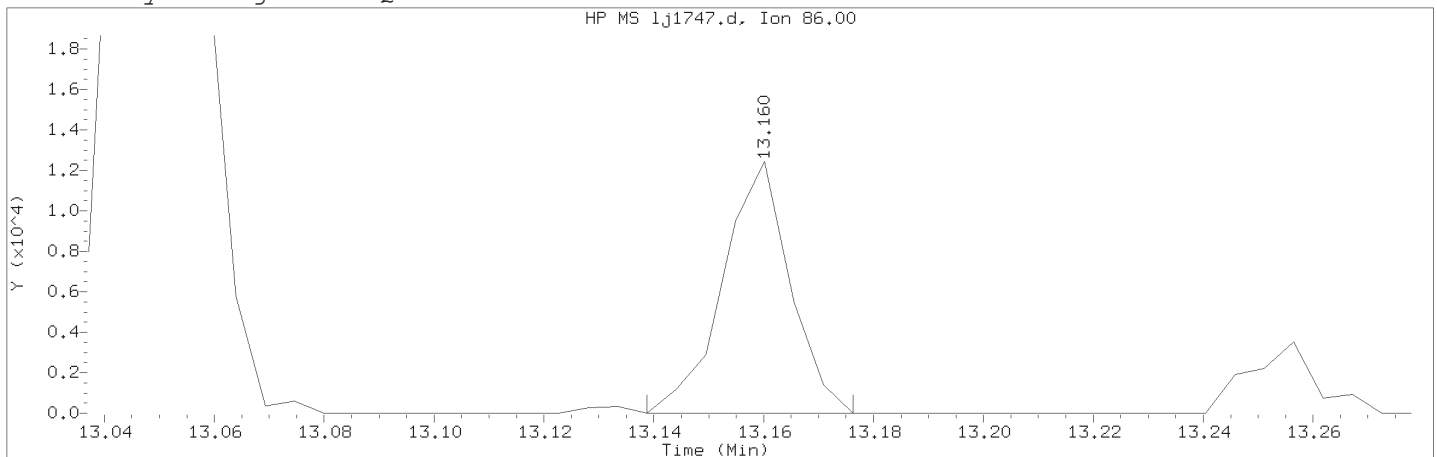
Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

Compound Number    : 58  
Compound Name    : Benzoic acid  
Scan Number    : 1408  
Retention Time (minutes)                                   : 8.518  
Quant Ion    : 105.00  
Area    : 115244  
On-column Amount (ng/ul)                                 : 3.4519  
Integration start scan                                      : 1397                      Integration stop scan: 1441  
Y at integration start                                       : 0                              Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25                      Lab Sample ID: RVSTD2648

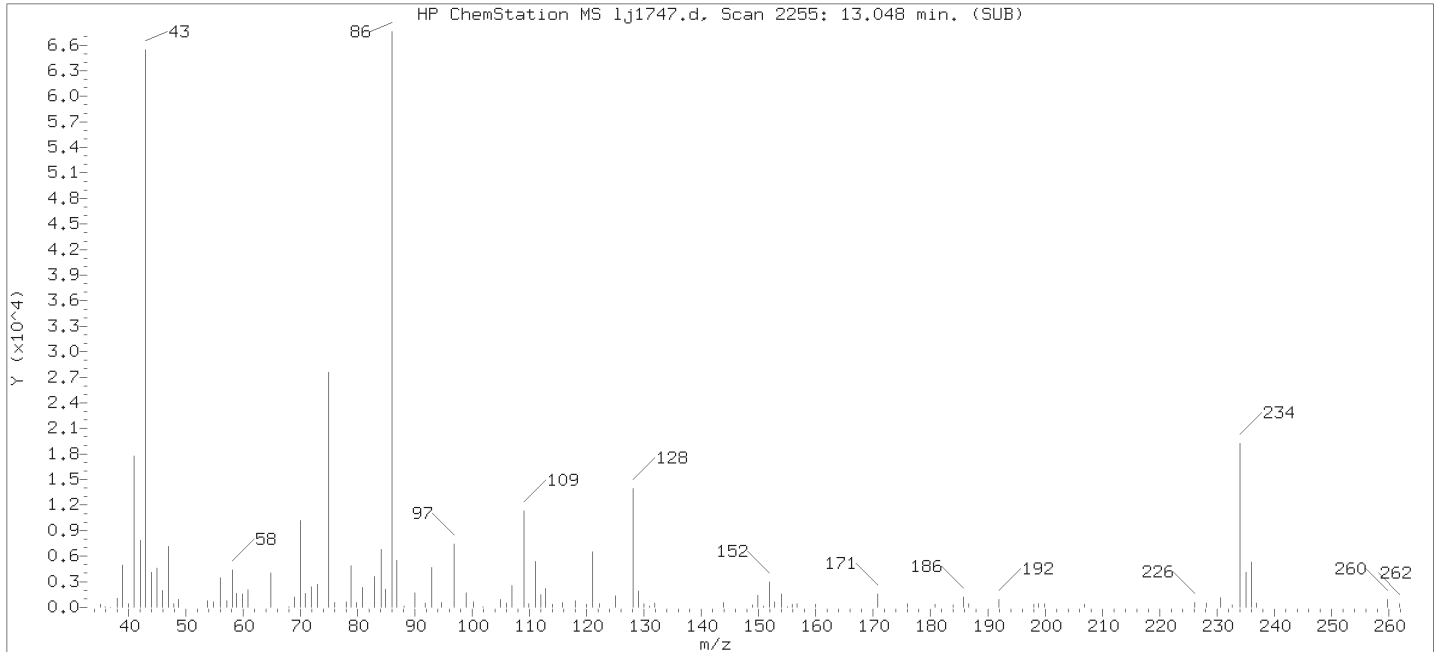
Compound Number                      : 149  
Compound Name                        : Diallylate (peak 2)  
Scan Number                            : 2276  
Retention Time (minutes)            : 13.160  
Quant Ion                                : 86.00  
Area (flag)                             : 10565M  
On-Column Amount (ng/ul)           : 0.2014  
Integration start scan                : 2271                      Integration stop scan: 2278  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

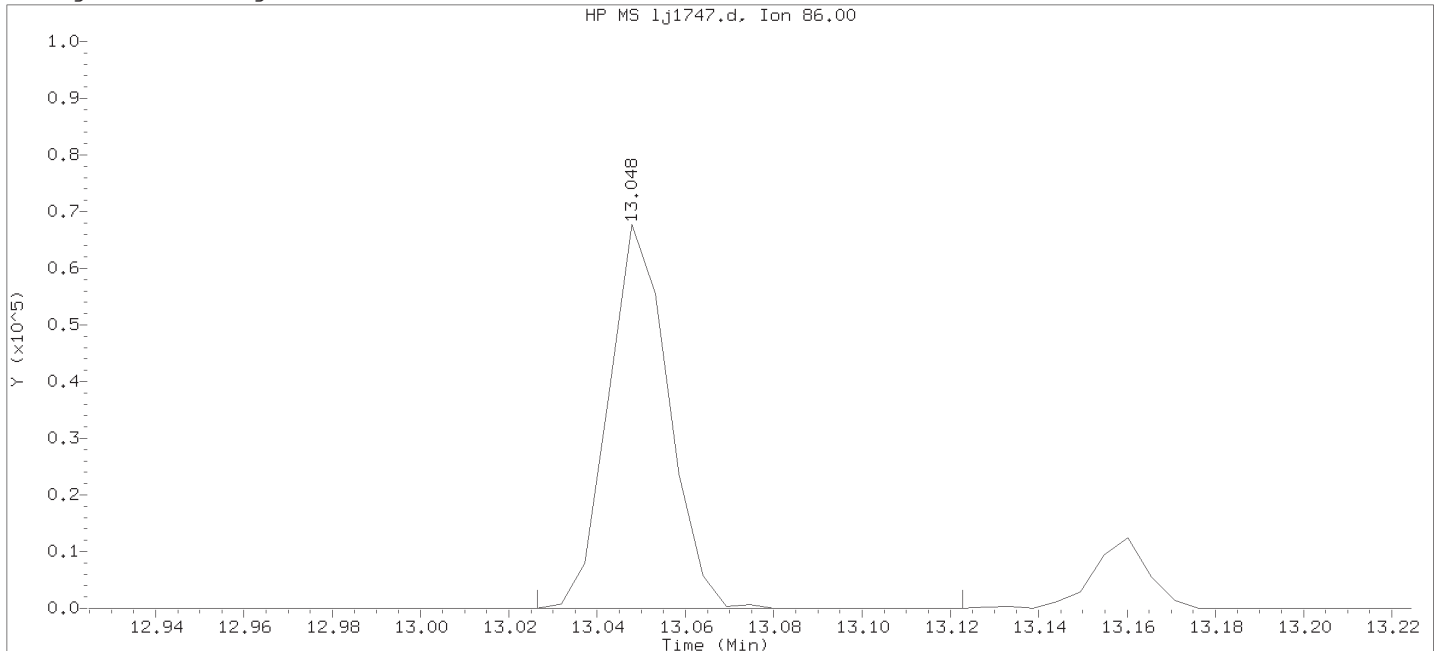
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
 Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
 Analyst ID: whs02991

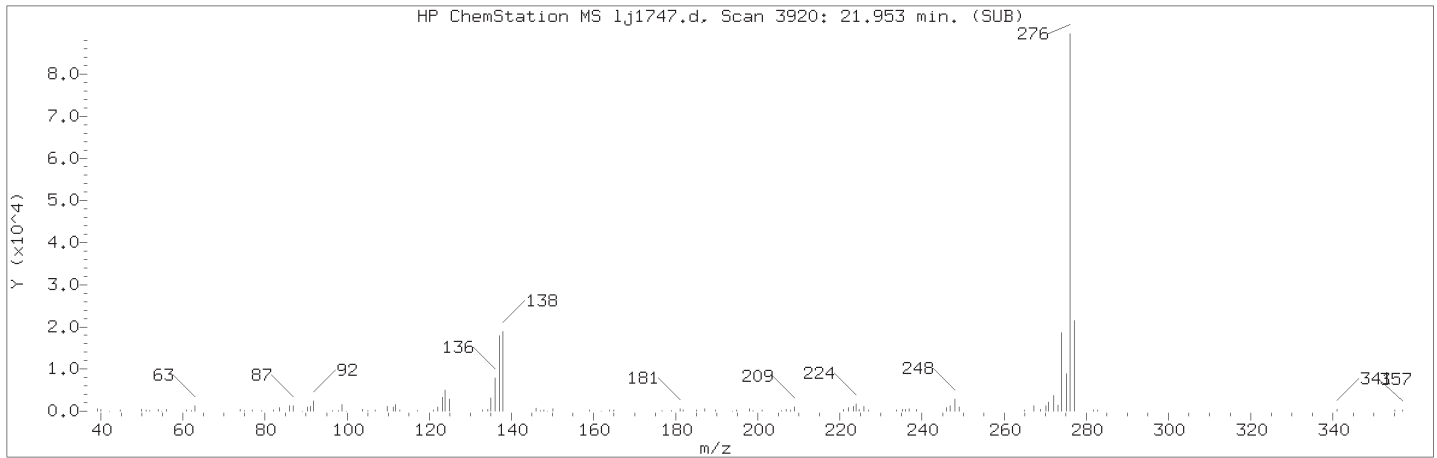
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25

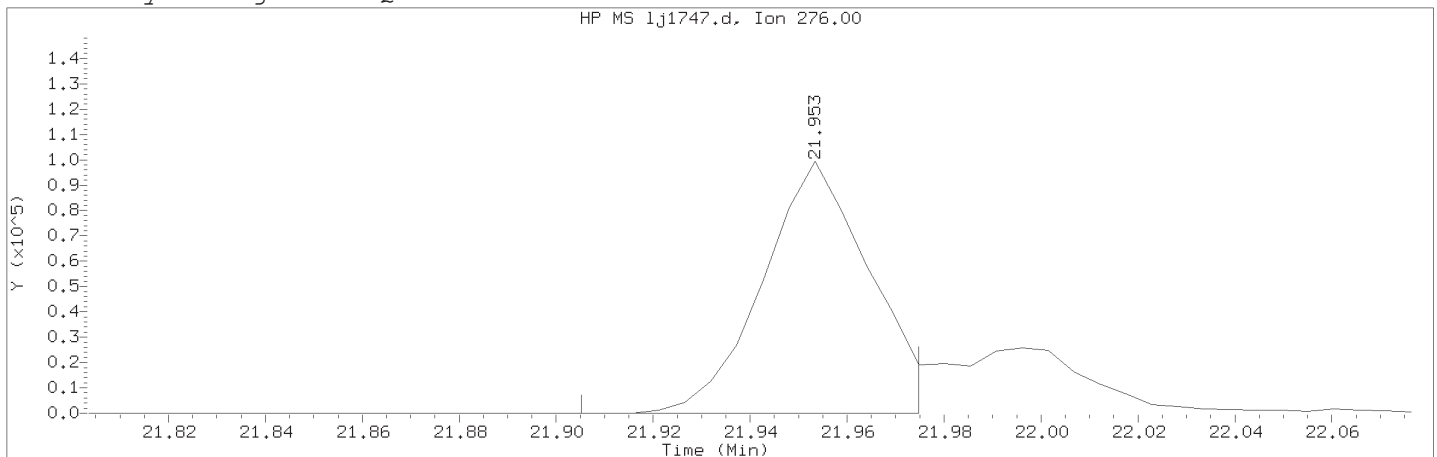
Lab Sample ID: RVSTD2648

Compound Number : 149  
 Compound Name : Diallate (peak 2)  
 Scan Number : 2255  
 Retention Time (minutes) : 13.048  
 Quant Ion : 86.00  
 Area : 64021  
 On-column Amount (ng/ul) : 0.2382  
 Integration start scan : 2250      Integration stop scan: 2268  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:20                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25    Lab Sample ID: RVSTD2648

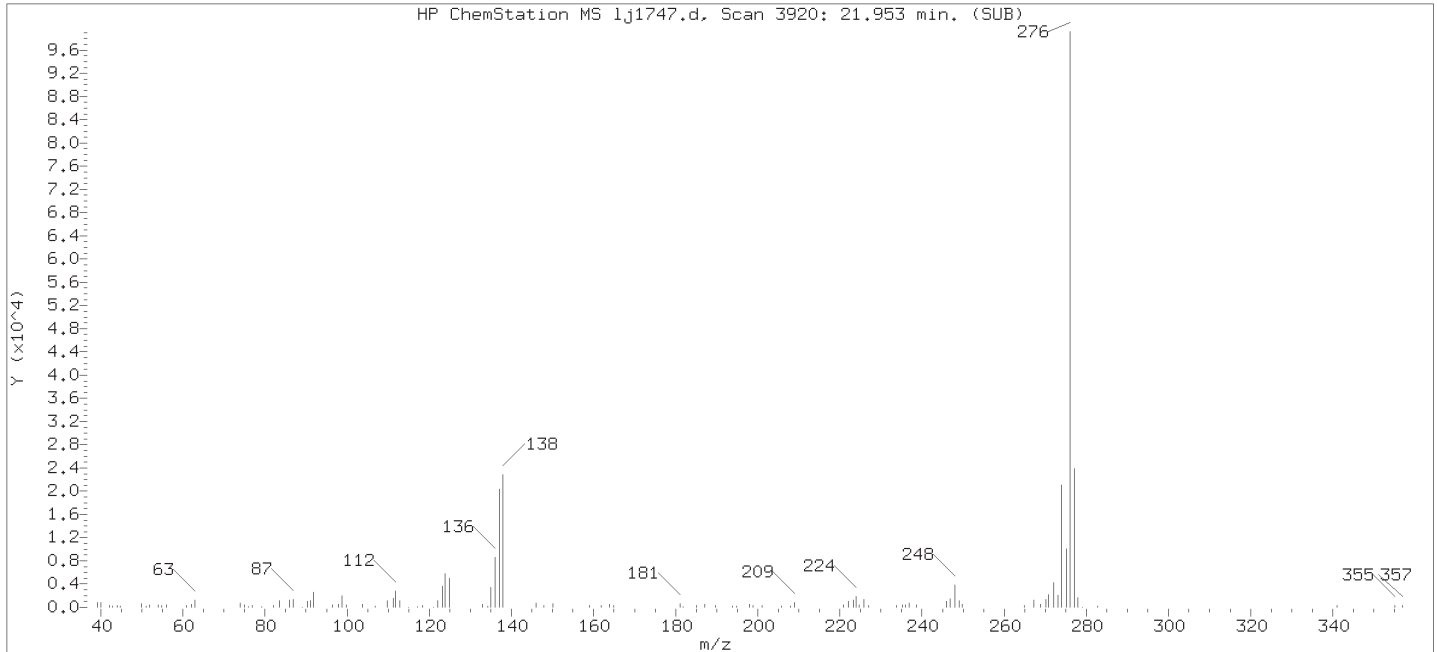
Compound Number                      : 224  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 3920  
Retention Time (minutes)             : 21.953  
Quant Ion                               : 276.00  
Area (flag)                            : 152452M  
On-Column Amount (ng/ul)            : 1.0831  
Integration start scan                : 3910                      Integration stop scan: 3923  
Y at integration start                : 0                         Y at integration end: 0

Reason for manual integration: improper integration

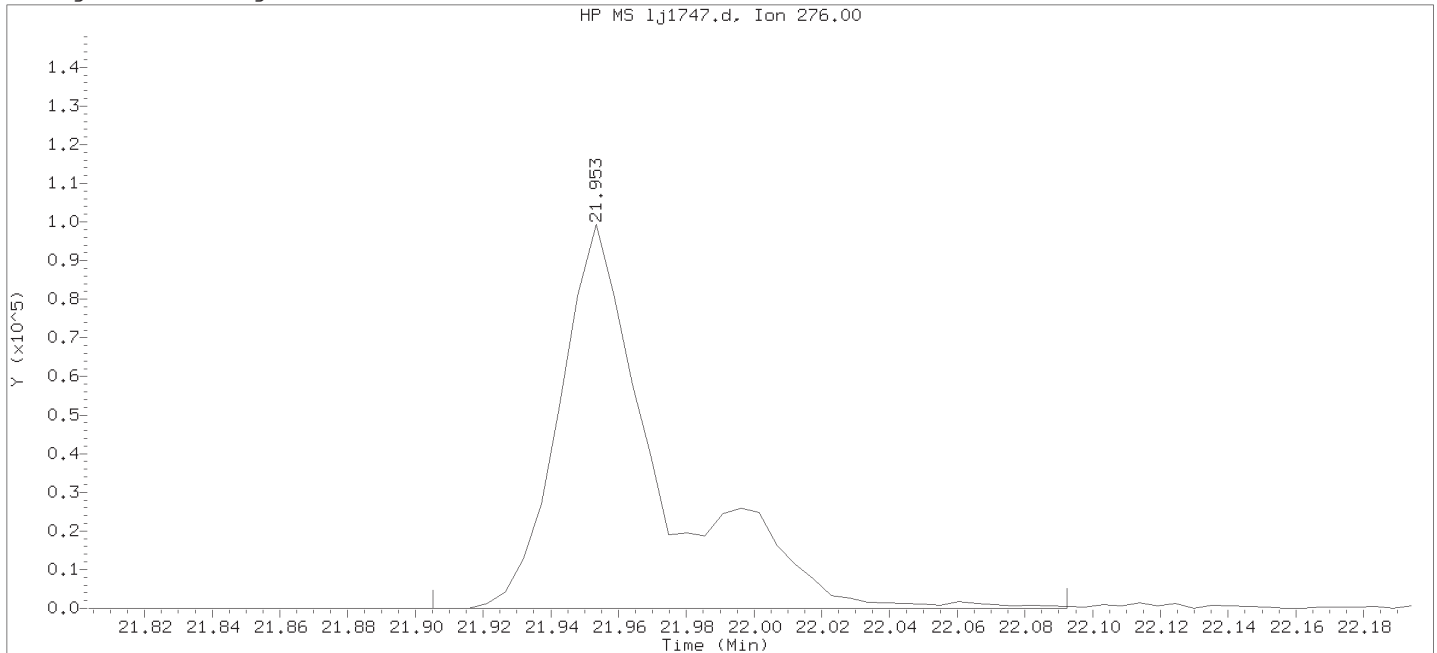
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d  
 Injection date and time: 29-OCT-2018 03:20

Instrument ID: HP20296.i  
 Analyst ID: whs02991

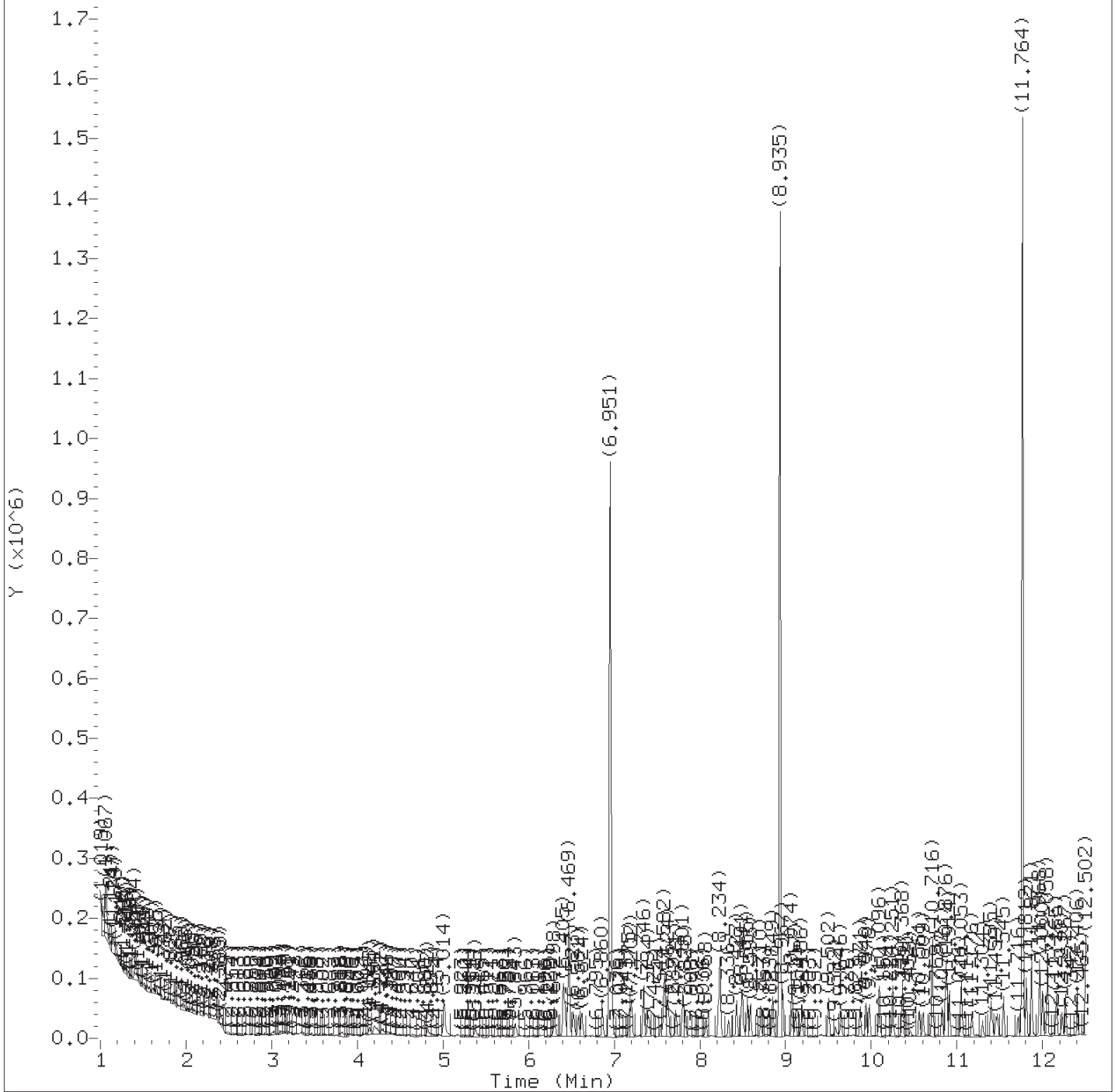
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sublist used: all1

Sample Name: SSTD1.25

Lab Sample ID: RVSTD2648

Compound Number	: 224	
Compound Name	: Indeno(1,2,3-cd)pyrene	
Scan Number	: 3920	
Retention Time (minutes)	: 21.953	
Quant Ion	: 276.00	
Area	: 205945	
On-column Amount (ng/ul)	: 1.2587	
Integration start scan	: 3910	Integration stop scan: 3945
Y at integration start	: 0	Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41

Sublist used: all1

Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

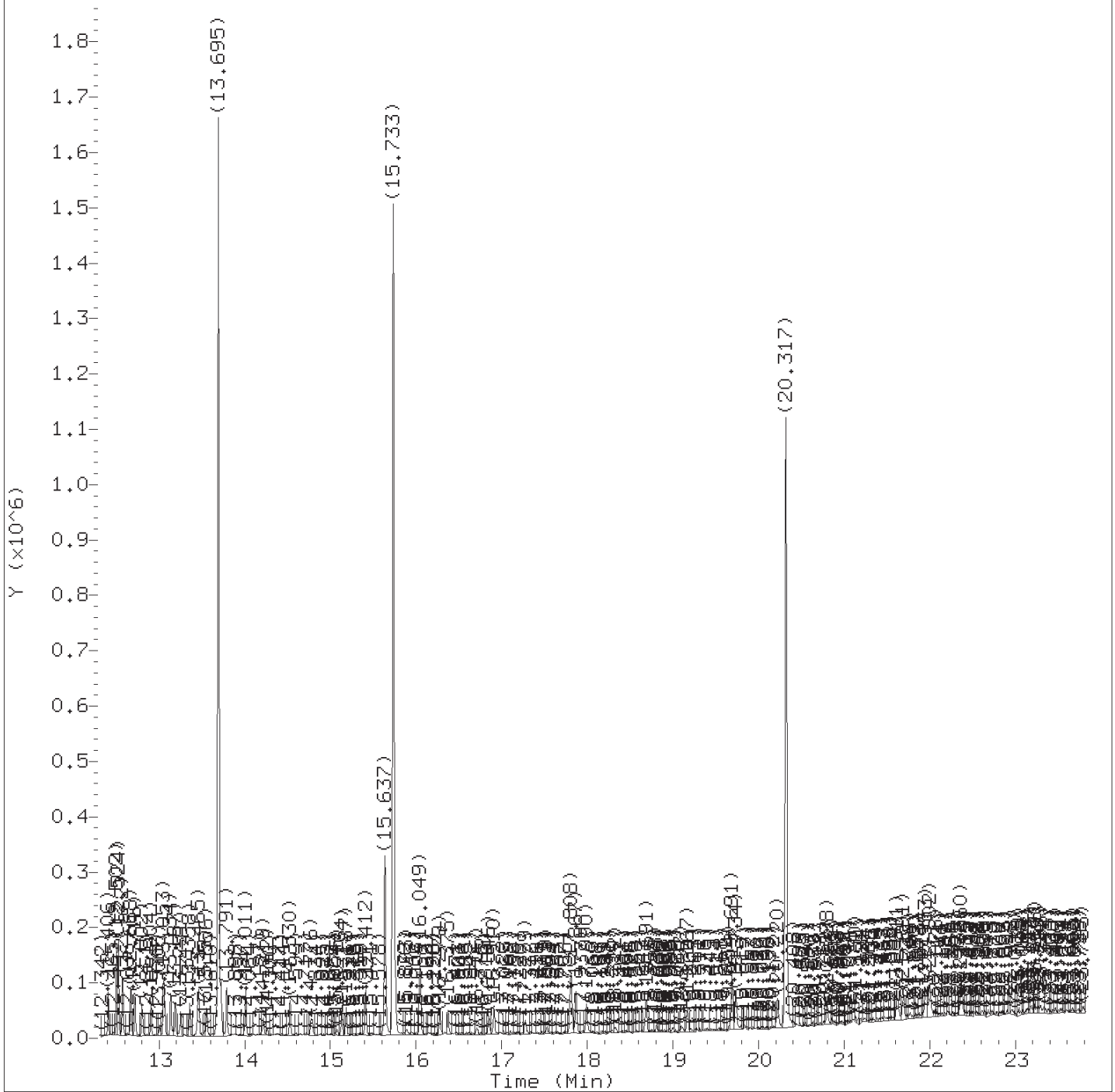
Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.410	88	11035M	0.405
5) N-Nitrosodimethylamine	(1)	3.009	74	8786M	0.215
6) Pyridine	(1)	3.132	79	18321M	0.263
8) 2-Picoline	(1)	4.196	93	17988M	0.247
9) N-Nitrosomethylethylamine	(1)	4.362	88	6960M	0.234
10) Methyl methanesulfonate	(1)	4.827	80	8428M	0.222
12) \$2-Fluorophenol	(1)	5.014	112	27084	0.481
14) N-Nitrosodiethylamine	(1)	5.373	102	4641	0.181
43) Total Cresols	(1)			27434	0.485
16) Ethyl methanesulfonate	(1)	5.843	109	6513	0.223
17) Benzaldehyde	(1)	6.298	77	14704	0.282
18) \$Phenol-d6	(1)	6.405	99	34533	0.454
19) Phenol	(1)	6.426	94	20933	0.235
20) Aniline	(1)	6.464	93	23793	0.227
21) a-methylstyrene	(1)	6.533	118	1295	0.236
23) bis(2-Chloroethyl) ether	(1)	6.581	93	15913	0.237
24) 2-Chlorophenol	(1)	6.619	128	11220	0.214
25) 1,3-Dichlorobenzene	(1)	6.860	146	14298	0.243
26) *1,4-Dichlorobenzene-d4	(1)	6.951	152	182074	5.000
27) 1,4-Dichlorobenzene	(1)	6.972	146	15065	0.254
28) Benzyl alcohol	(1)	7.175	108	8641	0.240
29) 1,2-Dichlorobenzene	(1)	7.202	146	15511	0.270
31) Indene	(1)	7.341	115	15946	0.252
32) 2-Methylphenol	(1)	7.346	108	12709	0.230
100) Isosafrole	(3)			9871	0.233
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.394	45	20274	0.239
35) bis(2-Chloroisopropyl) ether	(1)	7.394	45	20274	0.239
36) N-Nitrosopyrrolidine	(1)	7.539	100	6163	0.218
37) Acetophenone	(1)	7.576	105	19786	0.232
38) 4-Methylphenol	(1)	7.587	108	14725	0.255
39) N-Nitroso-di-n-propylamine	(1)	7.592	70	12477	0.242
40) N-Nitrosomorpholine	(1)	7.614	56	8892	0.238
41) o-Toluidine	(1)	7.624	106	21776	0.226
44) Hexachloroethane	(1)	7.721	117	7430	0.276
45) \$Nitrobenzene-d5	(2)	7.801	82	32494	0.450
46) Nitrobenzene	(2)	7.828	77	16962	0.221
125) 2,4,2,6-Dinitrotoluenes	(3)			7439	0.294
50) N-Nitrosopiperidine	(2)	8.074	114	5910	0.219
52) Isophorone	(2)	8.218	82	28112	0.217
53) 2-Nitrophenol	(2)	8.336	139	5422	0.215

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.427	107	13786	0.223
58) Benzoic acid	(2)	8.491	105	35392M	0.879
59) O,O,O-Triethylphosphorothioate	(2)	8.555	198	5322	0.201
57) bis(2-Chloroethoxy)methane	(2)	8.593	93	19525	0.236
62) 2,4-Dichlorophenol	(2)	8.716	162	10185	0.230
151) Diallate trans/cis	(4)			13478	0.237
65) 1,2,4-Trichlorobenzene	(2)	8.849	180	13628	0.267
68)*Naphthalene-d8	(2)	8.935	136	688999	5.000
69) Naphthalene	(2)	8.967	128	38221	0.246
70) 4-Chloroaniline	(2)	9.074	127	14242	0.227
71) 2,6-Dichlorophenol	(2)	9.079	162	10265	0.238
72) Hexachloropropene	(2)	9.106	213	6250	0.190
74) Hexachlorobutadiene	(2)	9.192	225	7160	0.238
78) Quinoline	(2)	9.502	129	23558	0.254
79) Caprolactam	(2)	9.577	113	3036M	0.222
80) N-Nitrosodi-n-butylamine	(2)	9.646	84	9610	0.186
83) 4-Chloro-3-methylphenol	(2)	9.866	107	11463	0.218
85) Safrole	(2)	9.983	162	8201	0.209
86) 2-Methylnaphthalene	(2)	10.096	142	24946	0.250
87) 1-Methylnaphthalene	(2)	10.251	142	23663	0.248
88) Hexachlorocyclopentadiene	(3)	10.358	237	6444	0.219
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.368	216	13175	0.258
91) cis-Isosafrole	(3)	10.449	162	1908	0.045
93) 2,4,6-Trichlorophenol	(3)	10.561	196	4739	0.159
95) 2,4,5-Trichlorophenol	(3)	10.598	196	7057	0.214
96)\$2-Fluorobiphenyl	(3)	10.716	172	53028	0.480
97) trans-Isosafrole	(3)	10.828	162	7963	0.188
98) 1,1'-Biphenyl	(3)	10.871	154	25592	0.226
99) 2-Chloronaphthalene	(3)	10.882	162	25725	0.255
101) 1-Chloronaphthalene	(3)	10.914	162	23580	0.270
103) Diphenyl ether	(3)	11.053	170	14818	0.234
104) 2-Nitroaniline	(3)	11.058	138	5153	0.203
108) 1,4-Naphthoquinone	(3)	11.176	158	6160	0.167
109) 1,4-Dinitrobenzene	(3)	11.294	168	2323	0.172
110) Dimethylphthalate	(3)	11.395	163	24604	0.235
111) 1,3-Dinitrobenzene	(3)	11.417	168	1806	0.117
113) 2,6-Dinitrotoluene	(3)	11.465	165	3482	0.164
114) Acenaphthylene	(3)	11.545	152	28578	0.227
117) 3-Nitroaniline	(3)	11.716	138	3192	0.141
118)*Acenaphthene-d10	(3)	11.764	164	330385	5.000

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Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.812	153	22405	0.231
120) 2,4-Dinitrophenol	(3)	11.871	184	12157	0.949
121) 4-Nitrophenol	(3)	11.968	109	15573	0.764
122) Pentachlorobenzene	(3)	12.000	250	9404	0.231
123) 2,4-Dinitrotoluene	(3)	12.053	165	3957	0.130
124) Dibenzofuran	(3)	12.058	168	31320	0.238
126) 1-Naphthylamine	(3)	12.165	143	21748	0.229
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	6275	0.243
128) 2-Naphthylamine	(3)	12.267	143	21544	0.228
129) Diethylphthalate	(3)	12.406	149	22855	0.222
130) Thionazin	(3)	12.502	107	4374	0.216
131) Fluorene	(3)	12.502	166	26865	0.258
134) 4-Nitroaniline	(3)	12.524	138	3490	0.150
133) 5-Nitro-o-toluidine	(3)	12.524	152	4201	0.158
132) 4-Chlorophenyl-phenylether	(3)	12.524	204	13083	0.245
135) 4,6-Dinitro-2-methylphenol	(4)	12.577	198	9831	0.580
136) N-Nitrosodiphenylamine	(4)	12.668	169	20609	0.250
137) NDPA as diphenylamine	(4)	12.668	169	20609	0.250
139) 1,2-Diphenylhydrazine	(4)	12.722	77	34785	0.238
140) \$2,4,6-Tribromophenol	(3)	12.802	330	4921	0.380
142) Tetraethyldithiopyrophosphate	(4)	12.904	97	5321	0.245
144) 1,3,5-Trinitrobenzene	(4)	13.005	213	1120	0.109
145) Diallate (peak 1)	(4)	13.048	86	11548	0.197
146) Phorate	(4)	13.059	75	15063	0.198
147) Phenacetin	(4)	13.069	108	9506	0.165
148) 4-Bromophenyl-phenylether	(4)	13.139	248	6927	0.241
149) Diallate (peak 2)	(4)	13.155	86	1930M	0.040
150) Hexachlorobenzene	(4)	13.192	284	7233	0.247
152) Dimethoate	(4)	13.257	87	8340	0.173
153) Atrazine	(4)	13.358	200	6160	0.235
154) Pentachlorophenol	(4)	13.449	266	2785	0.150
155) 4-Aminobiphenyl	(4)	13.465	169	15762	0.220
156) Pentachloronitrobenzene	(4)	13.465	237	1901	0.137
157) Pronamide	(4)	13.556	173	8185	0.183
158) *Phenanthrene-d10	(4)	13.695	188	644470	5.000
159) Dinoseb	(4)	13.711	211	2441	0.095
160) Phenanthrene	(4)	13.722	178	34256	0.222
162) Anthracene	(4)	13.791	178	33893	0.224
168) Carbazole	(4)	14.011	167	31188	0.230
169) Methyl parathion	(4)	14.214	109	5786	0.159

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Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 17:41  
 Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.530	149	31355	0.179
172) Parathion	(4)	14.770	109	2378	0.104
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	1653	0.130
227) Total PAHs	(6)			566031	4.157
174) Octachlorostyrene	(4)	15.134	308	2396	0.221
176) Isodrin	(4)	15.182	193	3999	0.220
178) Fluoranthene	(4)	15.412	202	38145	0.226
179) Benzidine	(5)	15.637	184	147610	1.389
180) *Pyrene-d10	(5)	15.733	212	667178	5.000
182) Pyrene	(5)	15.760	202	44044	0.250
184) \$Terphenyl-d14	(5)	16.049	244	49154	0.459
187) p-Dimethylaminoazobenzene	(5)	16.284	225	3944	0.145
190) Chlorobenzilate	(5)	16.375	139	9573	0.184
192) 3,3'-Dimethylbenzidine	(5)	16.851	212	16009	0.157
193) Butylbenzylphthalate	(5)	16.910	149	11370	0.145
196) 2-Acetylaminofluorene	(5)	17.279	181	7486	0.116
198) 3,3'-Dichlorobenzidine	(5)	17.798	252	9184	0.156
200) Benzo(a)anthracene	(5)	17.808	228	33372	0.208
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	4995	0.152
201) Chrysene	(5)	17.872	228	35624	0.225
204) bis(2-Ethylhexyl)phthalate	(5)	17.990	149	14451	0.128
208) 6-Methylchrysene	(5)	18.691	242	21918	0.205
210) Di-n-octylphthalate	(6)	19.172	149	22598	0.127
211) Benzo(b)fluoranthene	(6)	19.686	252	33538	0.231
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.691	256	9975	0.167
213) Benzo(k)fluoranthene	(6)	19.734	252	33739	0.230
216) Benzo(a)pyrene	(6)	20.220	252	24815	0.191
218) *Perylene-d12	(6)	20.317	264	558380	5.000
220) 3-Methylcholanthrene	(6)	20.798	268	10767	0.182
222) Dibenz(a,h)acridine	(6)	21.622	279	21738	0.201
223) Dibenz(a,j)acridine	(6)	21.691	279	20218	0.178
224) Indeno(1,2,3-cd)pyrene	(6)	21.959	276	29821M	0.237
225) Dibenz(a,h)anthracene	(6)	22.002	278	30301	0.231
226) Benzo(g,h,i)perylene	(6)	22.371	276	29805	0.223

M = Compound was manually integrated.

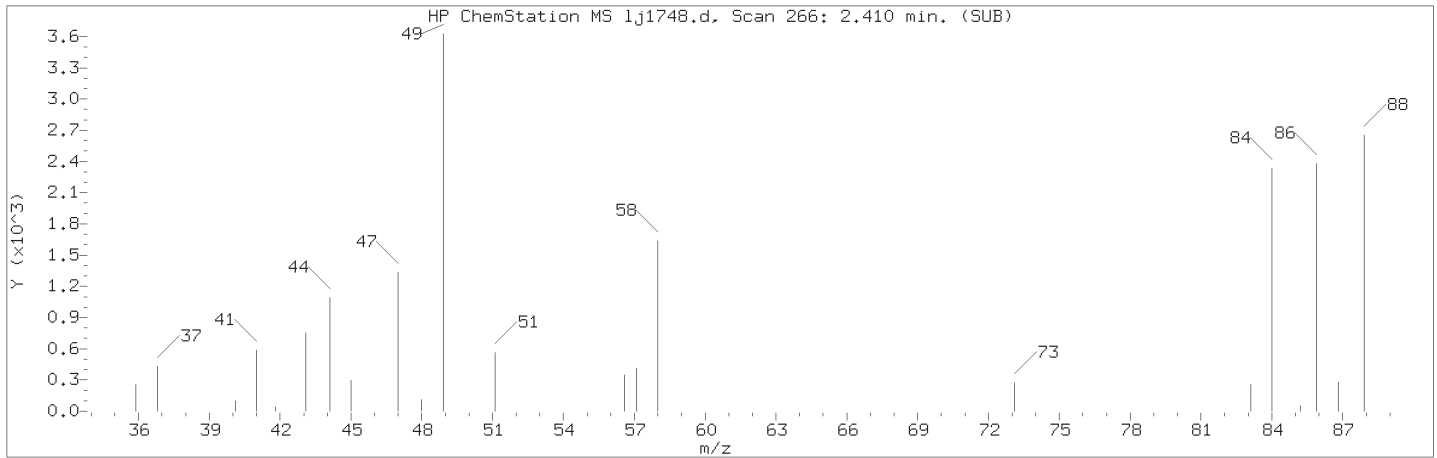
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

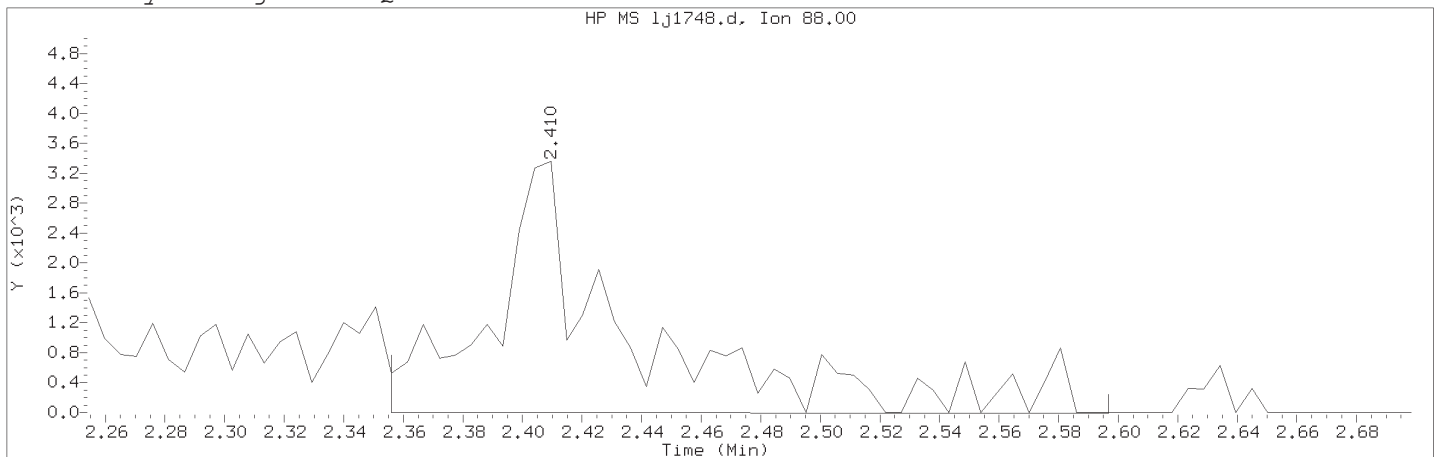
Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:02.

Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:49                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25    Lab Sample ID: RVSTD2648

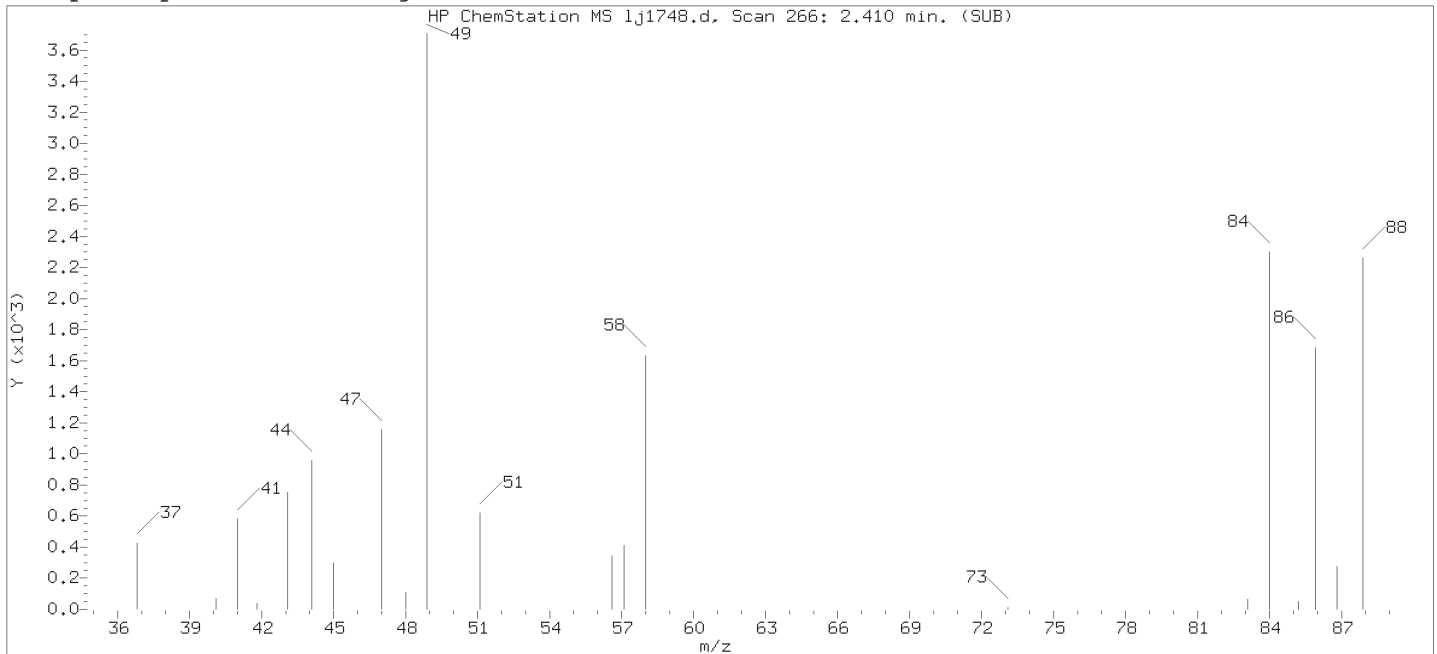
Compound Number    : 1  
Compound Name    : 1,4-Dioxane  
Scan Number    : 266  
Retention Time (minutes)                                   : 2.410  
Quant Ion     : 88.00  
Area (flag)     : 11035M  
On-Column Amount (ng/ul)                                : 0.4051  
Integration start scan                                     : 255                      Integration stop scan: 300  
Y at integration start                                     : 3                         Y at integration end: -8

Reason for manual integration: improper integration

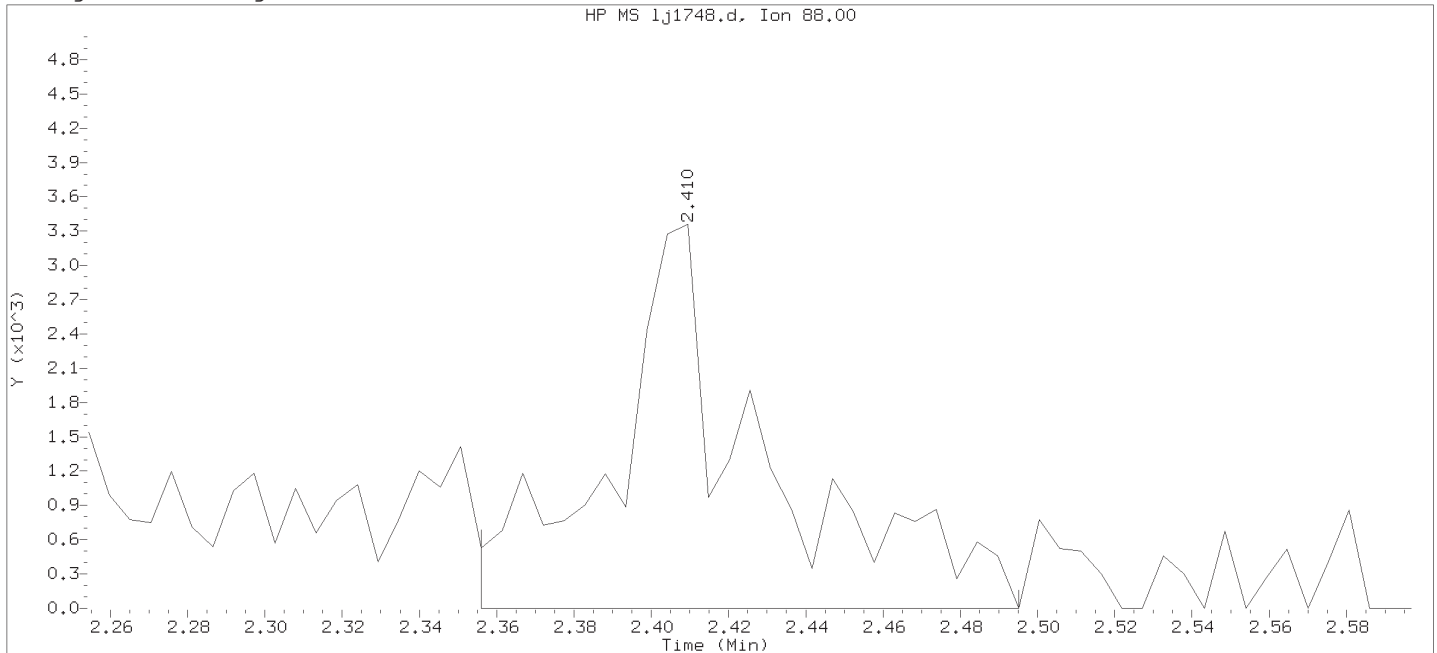
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all11

Calibration date and time: 29-OCT-2018 15:37

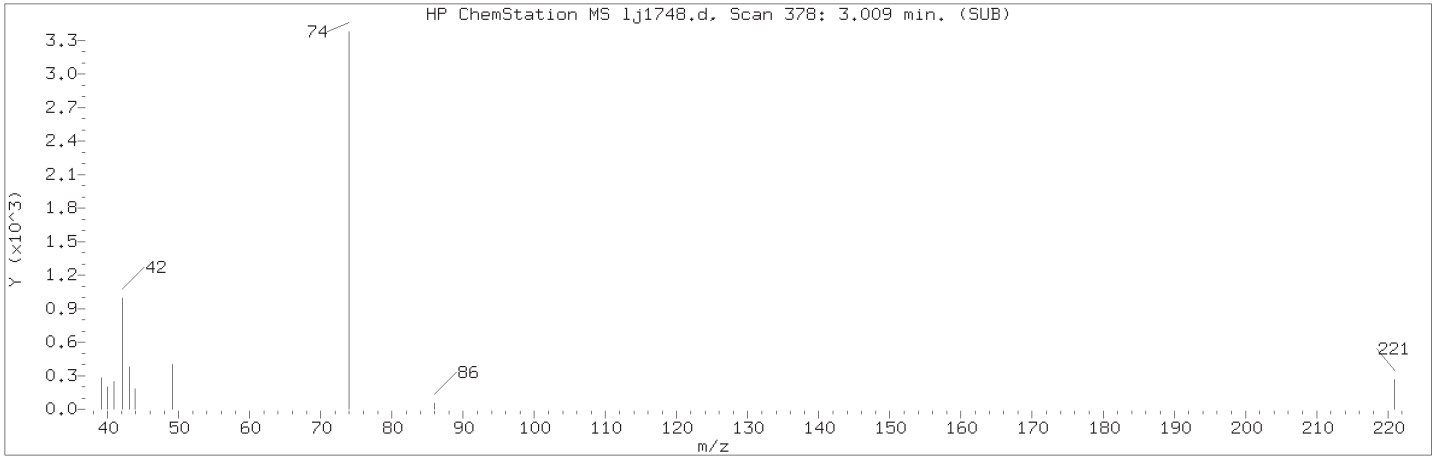
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25

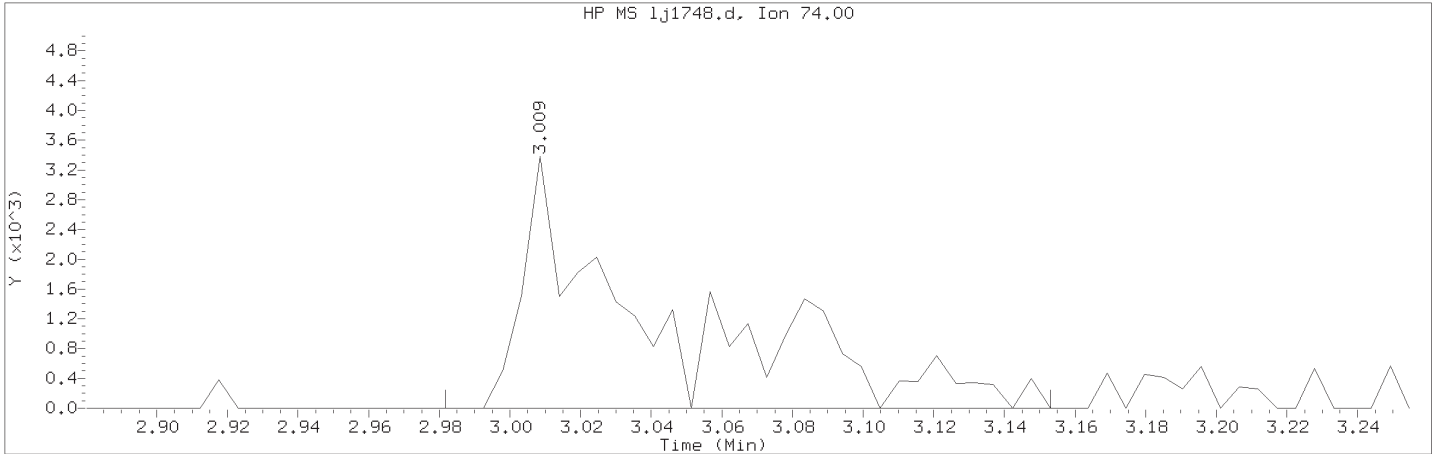
Lab Sample ID: RVSTD2648

Compound Number	: 1	
Compound Name	: 1,4-Dioxane	
Scan Number	: 266	
Retention Time (minutes)	: 2.410	
Quant Ion	: 88.00	
Area	: 9117	
On-column Amount (ng/ul)	: 0.3469	
Integration start scan	: 255	Integration stop scan: 281
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:49                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25    Lab Sample ID: RVSTD2648

Compound Number    : 5  
Compound Name    : N-Nitrosodimethylamine  
Scan Number    : 378  
Retention Time (minutes)                                   : 3.009  
Quant Ion    : 74.00  
Area (flag)    : 8786M  
On-Column Amount (ng/ul)                                 : 0.2146  
Integration start scan                                      : 372                      Integration stop scan: 404  
Y at integration start                                      : 0                        Y at integration end: 0

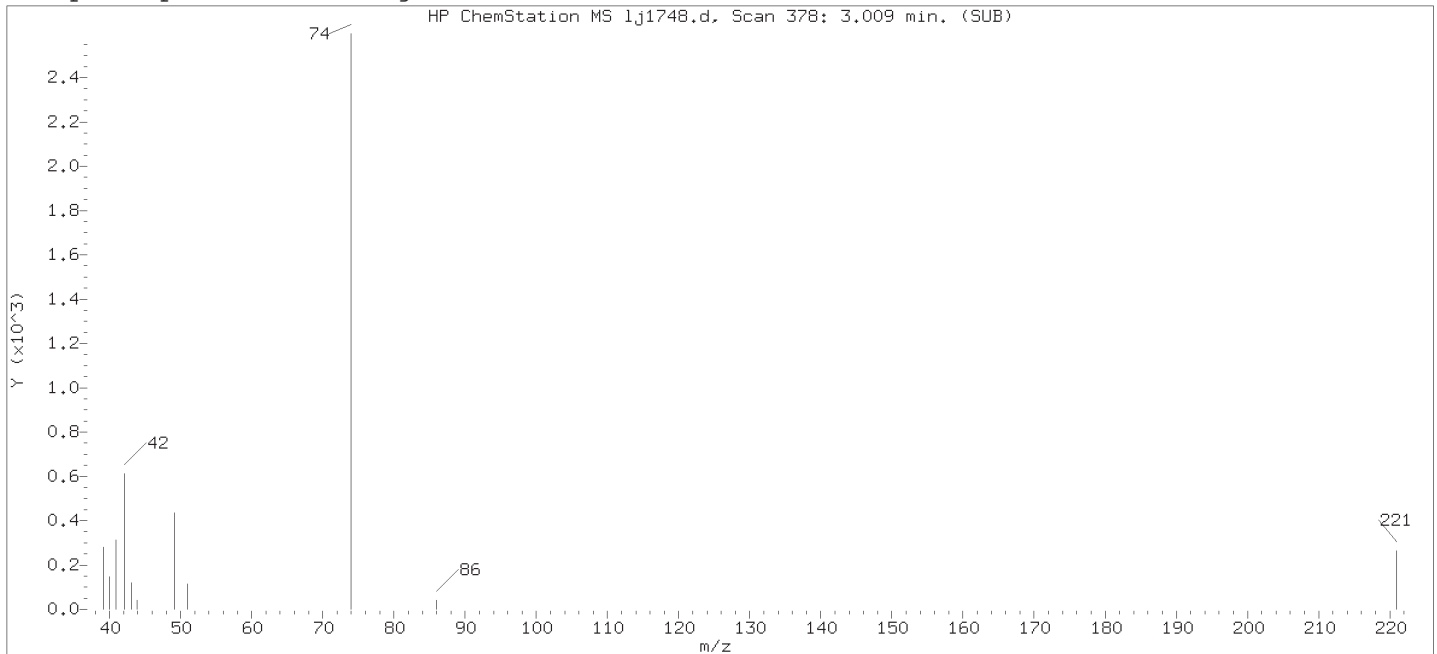
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

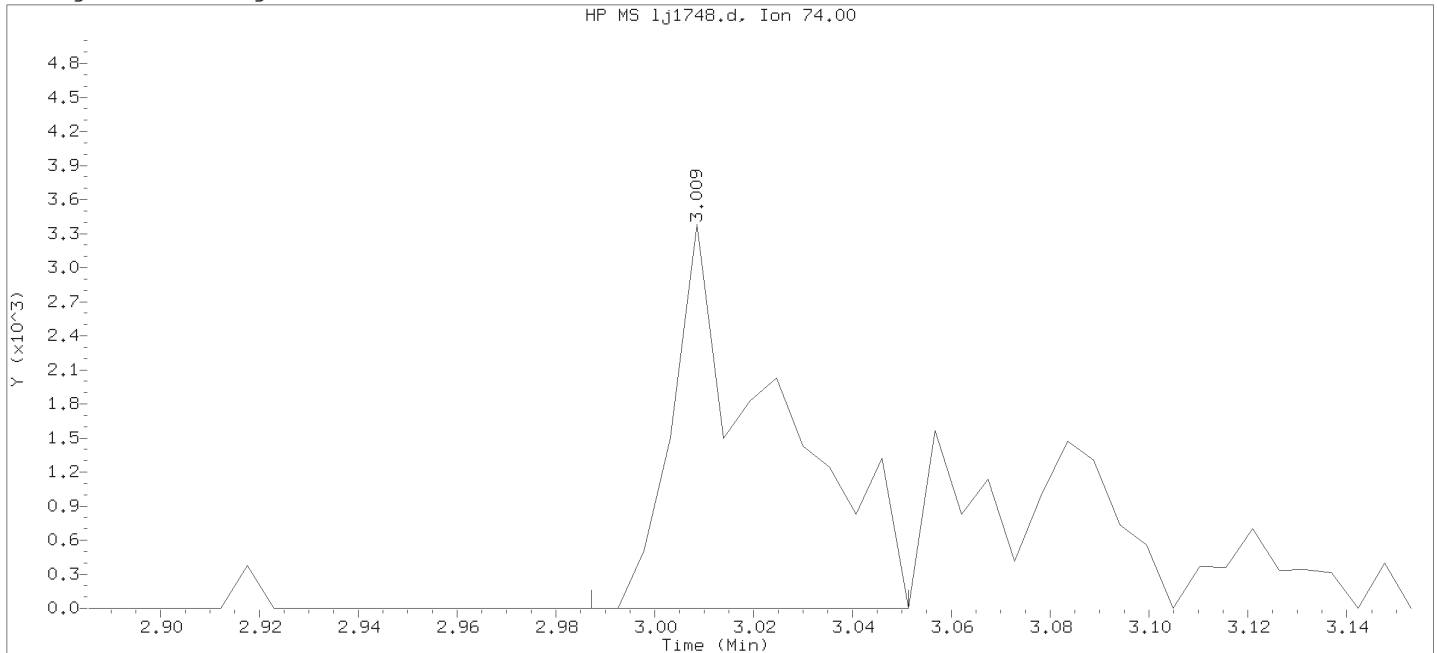
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all1

Calibration date and time: 29-OCT-2018 15:37

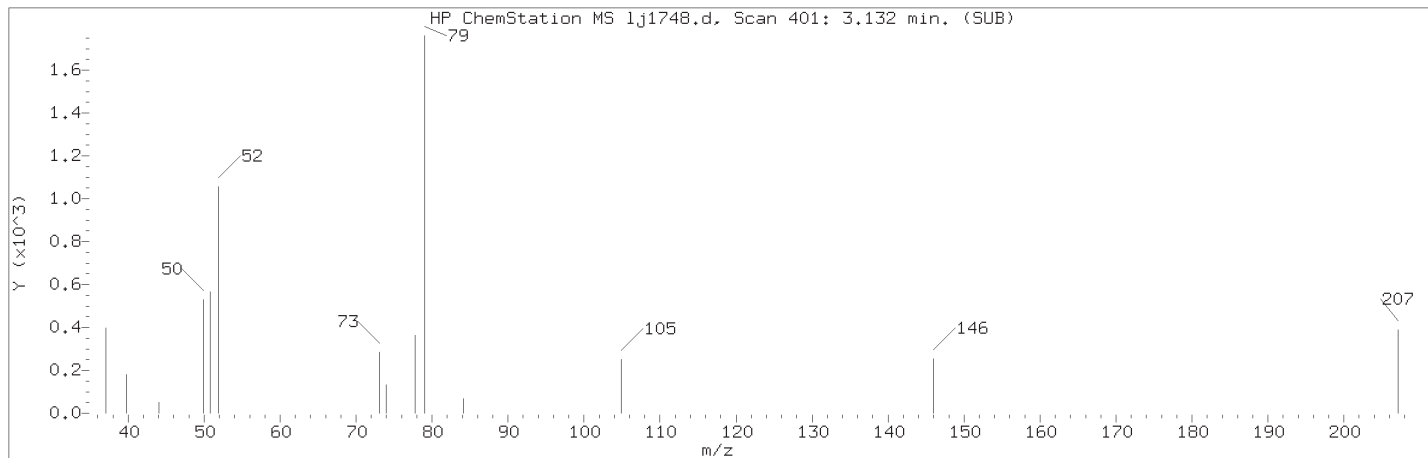
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25

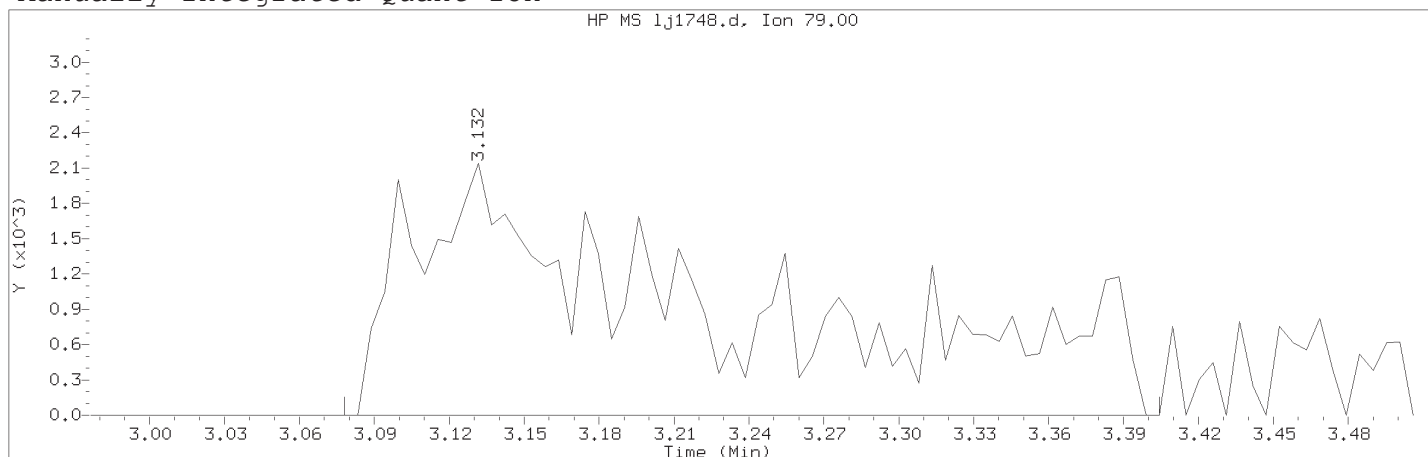
Lab Sample ID: RVSTD2648

Compound Number : 5  
Compound Name : N-Nitrosodimethylamine  
Scan Number : 378  
Retention Time (minutes) : 3.009  
Quant Ion : 74.00  
Area : 4996  
On-column Amount (ng/ul) : 0.1279  
Integration start scan : 373      Integration stop scan: 385  
Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

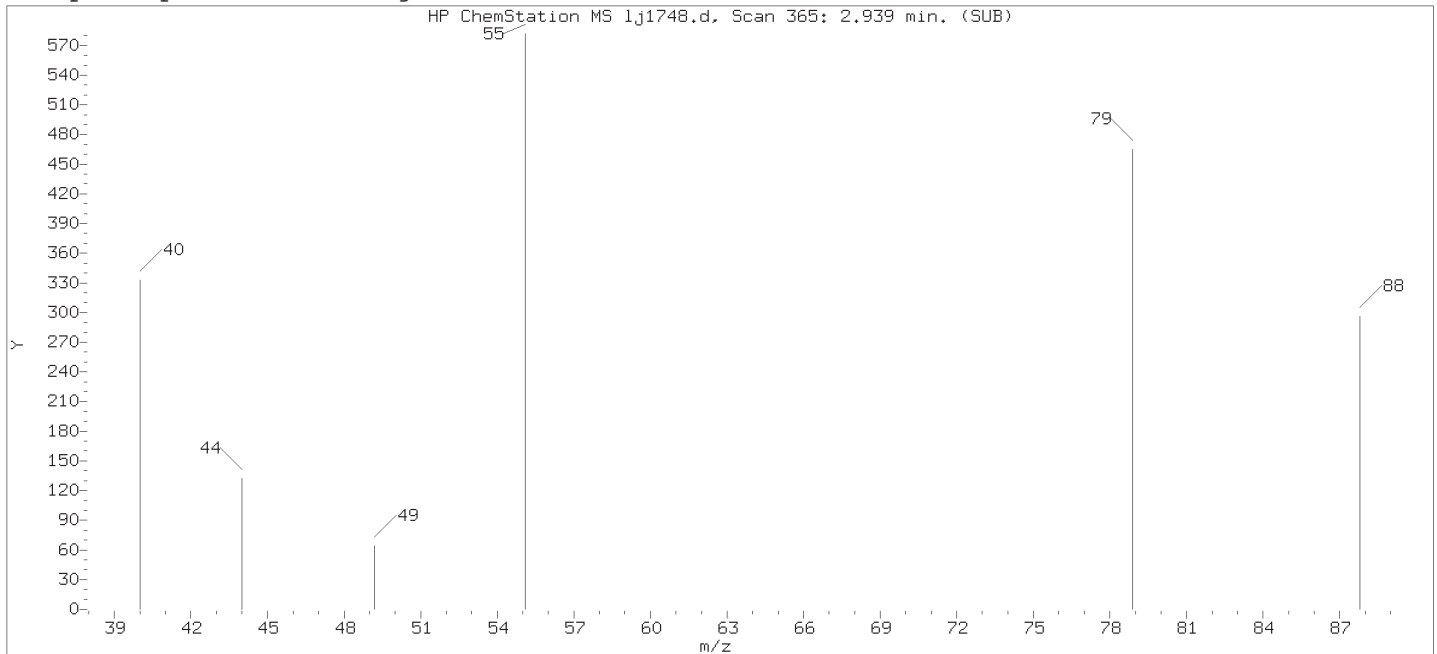
Compound Number : 6  
Compound Name : Pyridine  
Scan Number : 401  
Retention Time (minutes) : 3.132  
Quant Ion : 79.00  
Area (flag) : 18321M  
On-Column Amount (ng/ul) : 0.2630  
Integration start scan : 390      Integration stop scan: 451  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

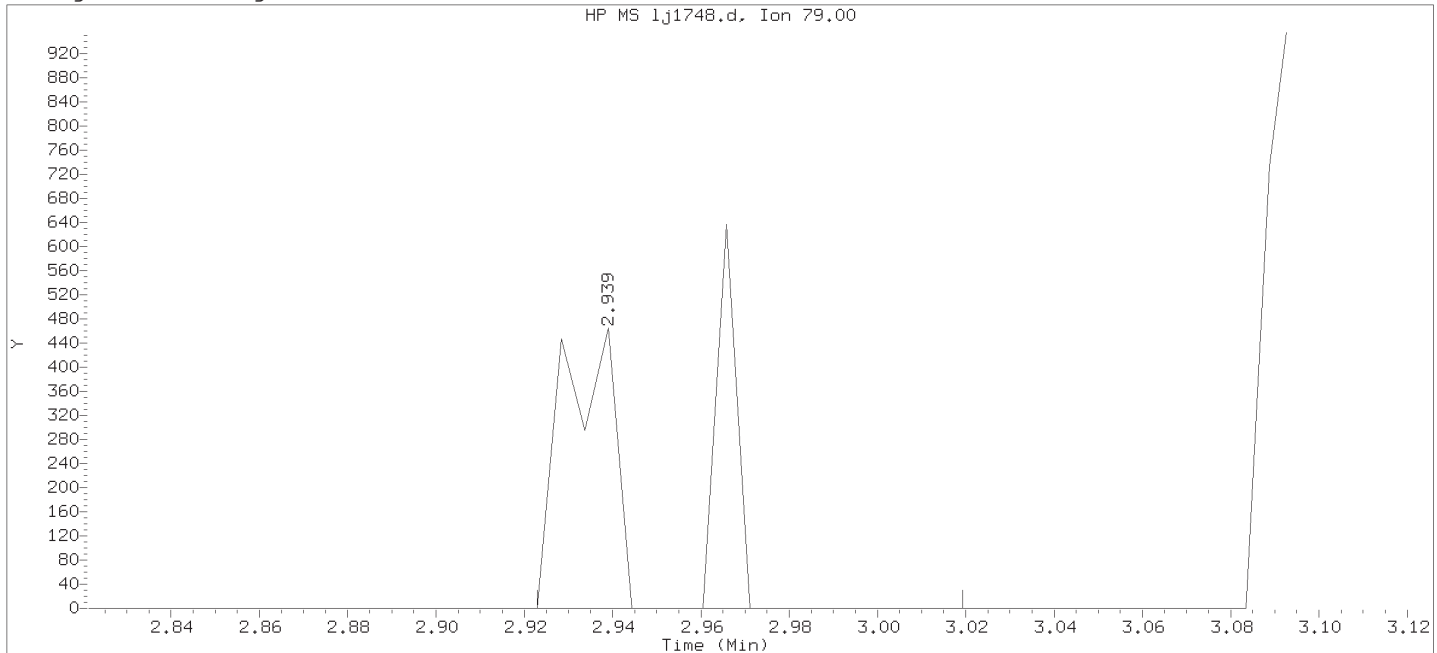
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all1

Calibration date and time: 29-OCT-2018 15:37

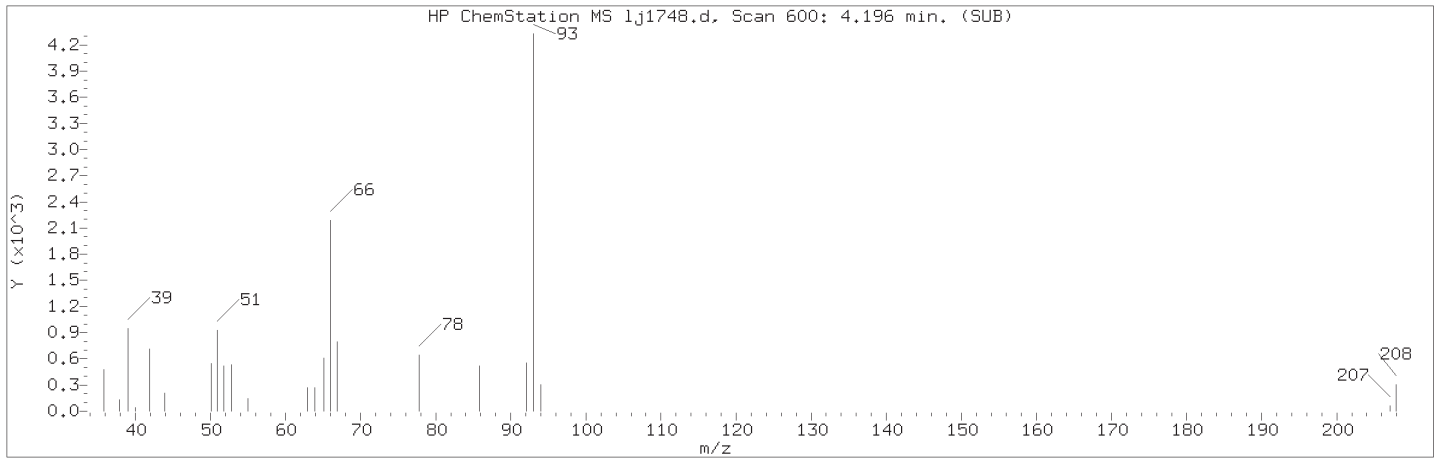
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25

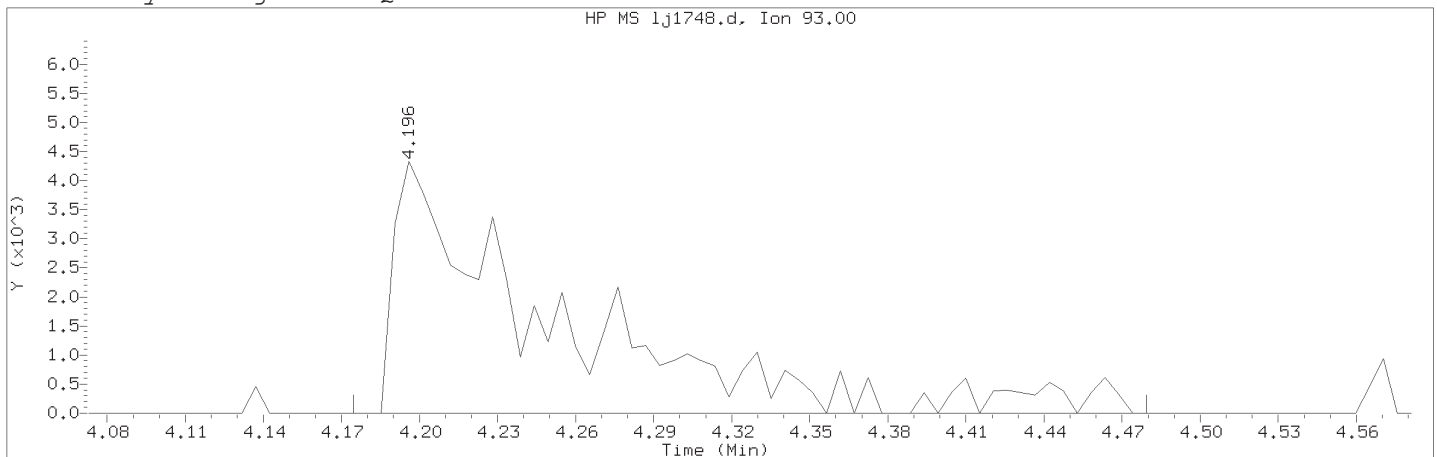
Lab Sample ID: RVSTD2648

Compound Number	: 6	
Compound Name	: Pyridine	
Scan Number	: 365	
Retention Time (minutes)	: 2.939	
Quant Ion	: 79.00	
Area	: 591	
On-column Amount (ng/ul)	: 0.0085	
Integration start scan	: 361	Integration stop scan: 379
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:49                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25    Lab Sample ID: RVSTD2648

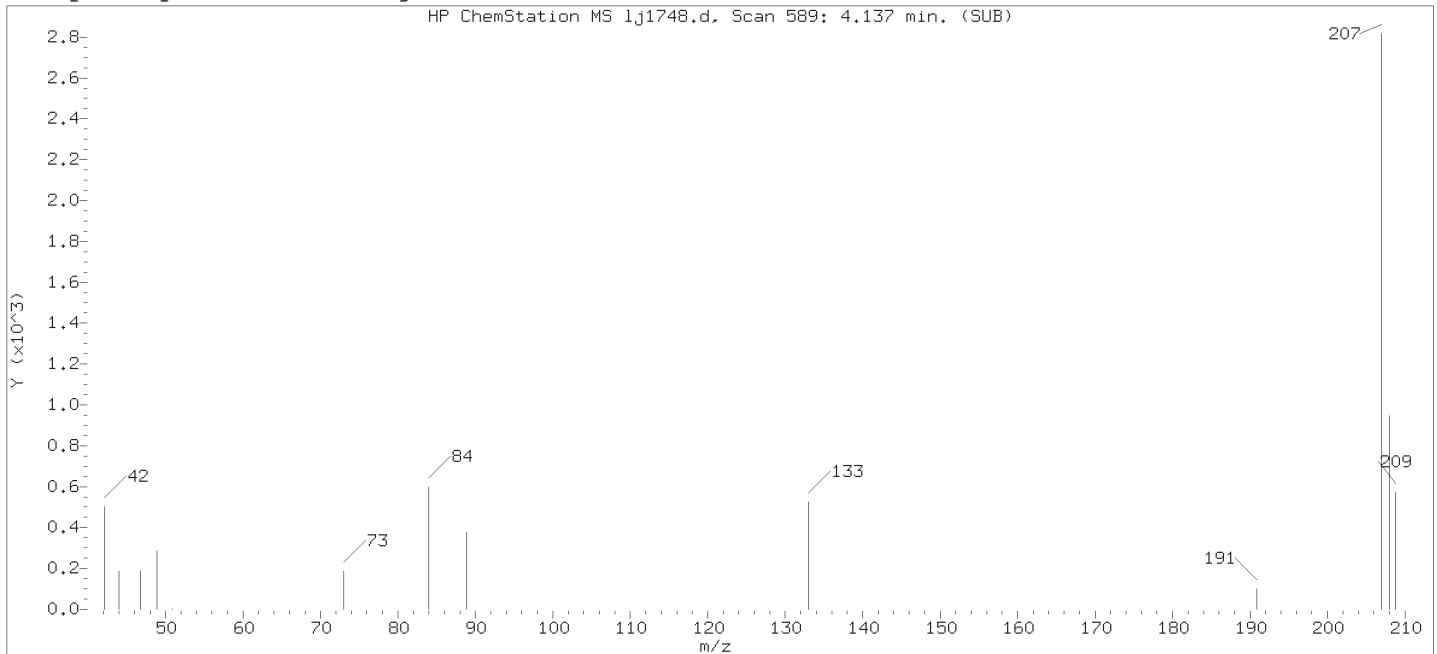
Compound Number    : 8  
Compound Name    : 2-Picoline  
Scan Number    : 600  
Retention Time (minutes)                                   : 4.196  
Quant Ion    : 93.00  
Area (flag)     : 17988M  
On-Column Amount (ng/ul)                                 : 0.2474  
Integration start scan                                     : 595                      Integration stop scan: 652  
Y at integration start                                     : 0                         Y at integration end: 0

Reason for manual integration: improper integration

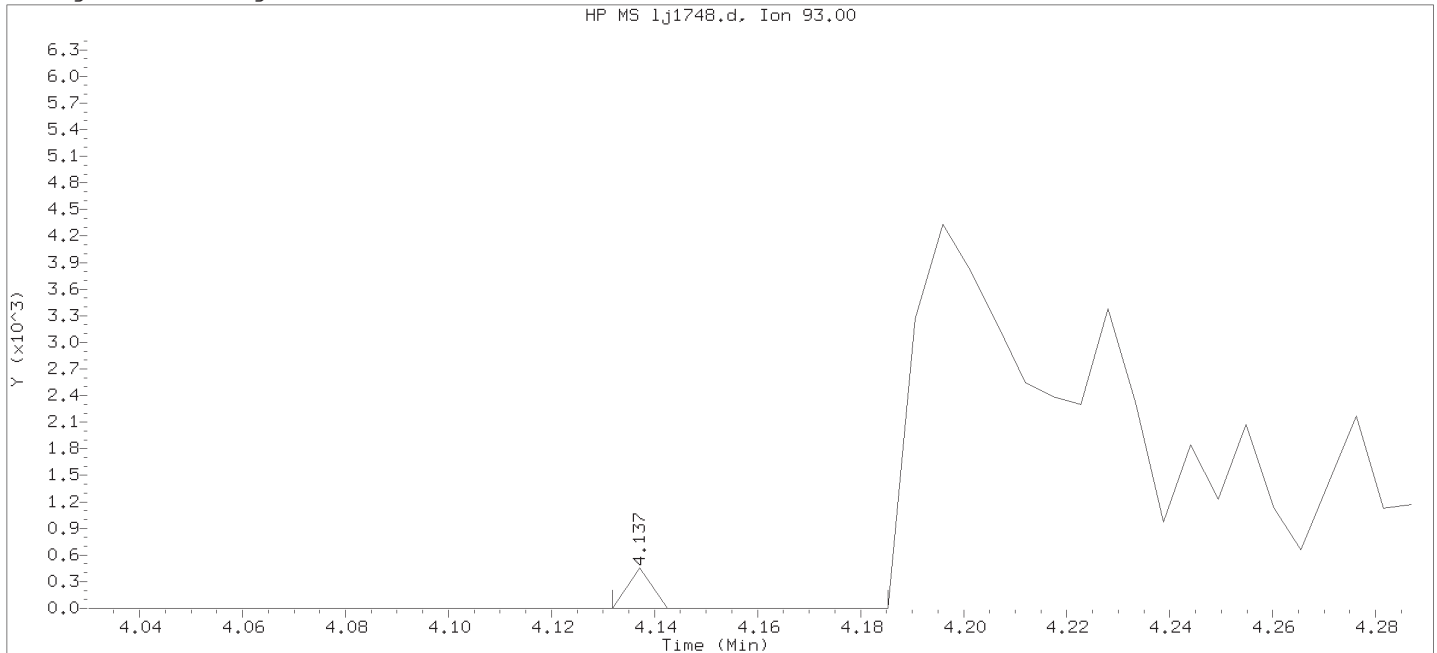
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

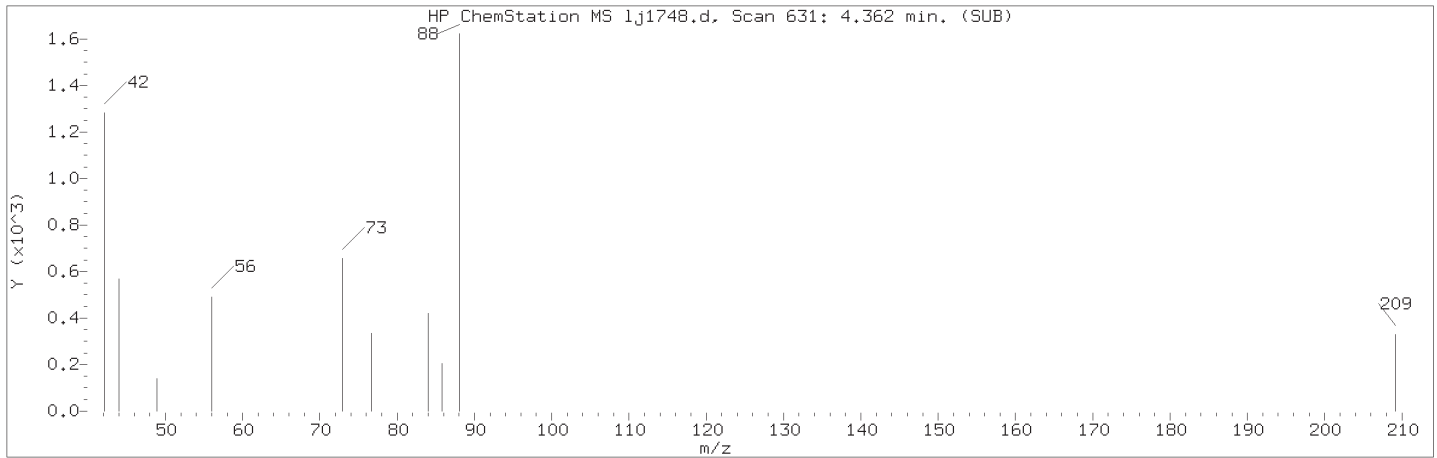
Sublist used: all1

Sample Name: SSTDO.25

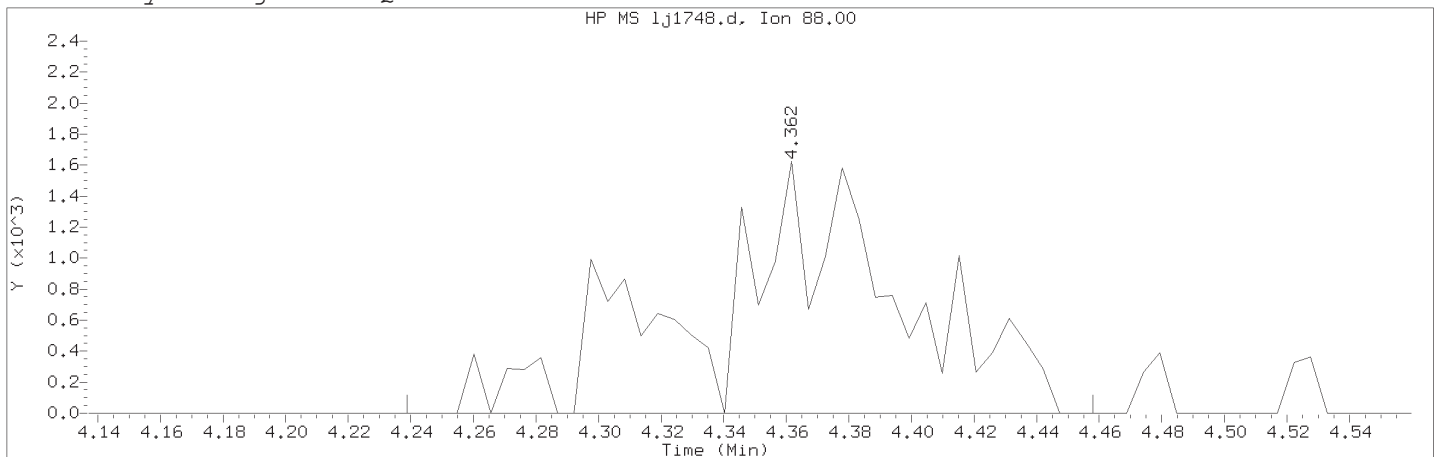
Lab Sample ID: RVSTD2648

Compound Number	: 8	
Compound Name	: 2-Picoline	
Scan Number	: 589	
Retention Time (minutes)	: 4.137	
Quant Ion	: 93.00	
Area	: 147	
On-column Amount (ng/ul)	: 0.0021	
Integration start scan	: 587	Integration stop scan: 597
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1748.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:49                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25    Lab Sample ID: RVSTD2648

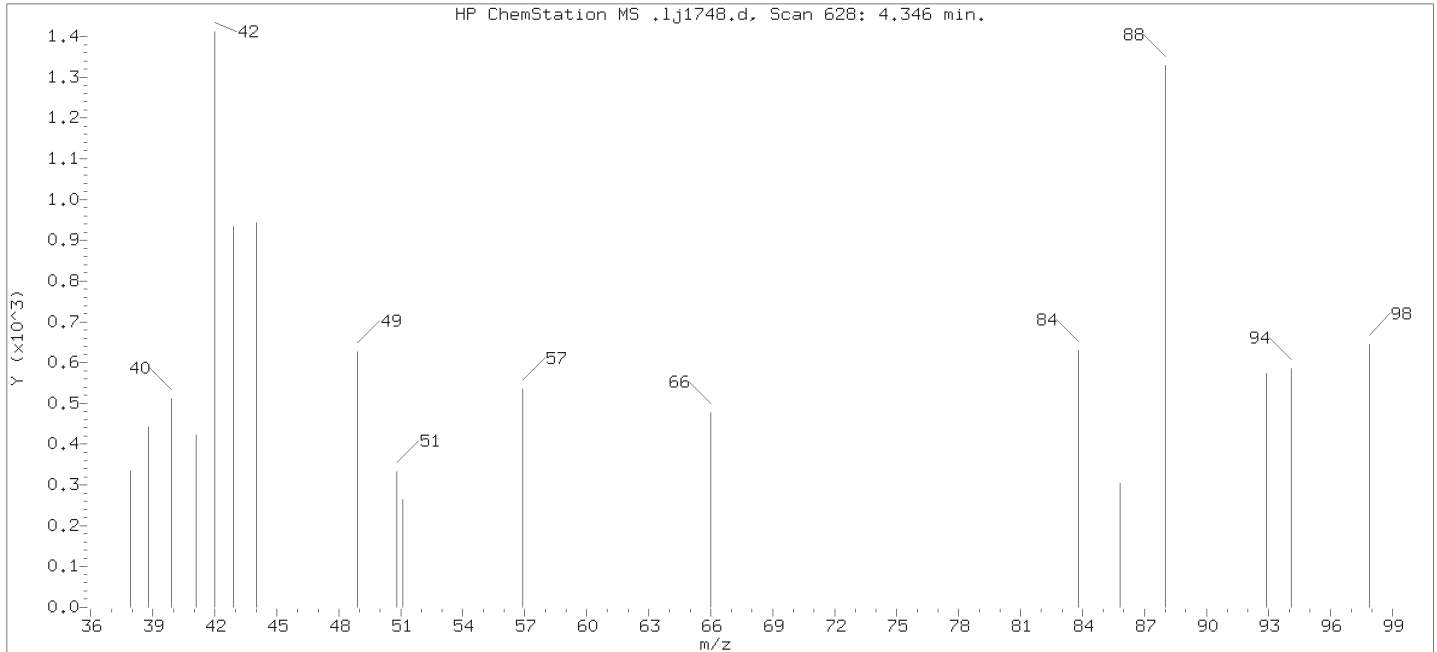
Compound Number    : 9  
Compound Name    : N-Nitrosomethylethylamine  
Scan Number    : 631  
Retention Time (minutes)                                   : 4.362  
Quant Ion    : 88.00  
Area (flag)    : 6960M  
On-Column Amount (ng/ul)                                : 0.2344  
Integration start scan                                     : 607                      Integration stop scan: 648  
Y at integration start                                    : 0                        Y at integration end: 0

Reason for manual integration: missed peak

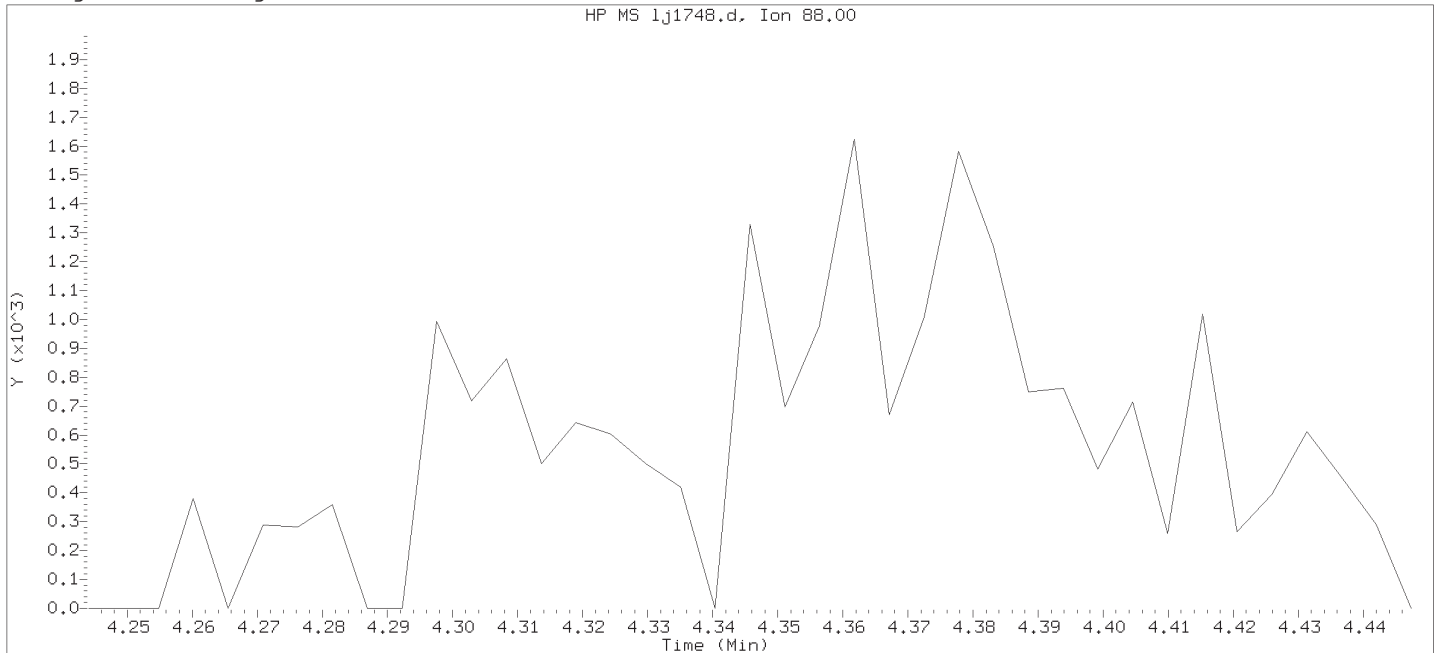
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all11

Calibration date and time: 29-OCT-2018 15:37

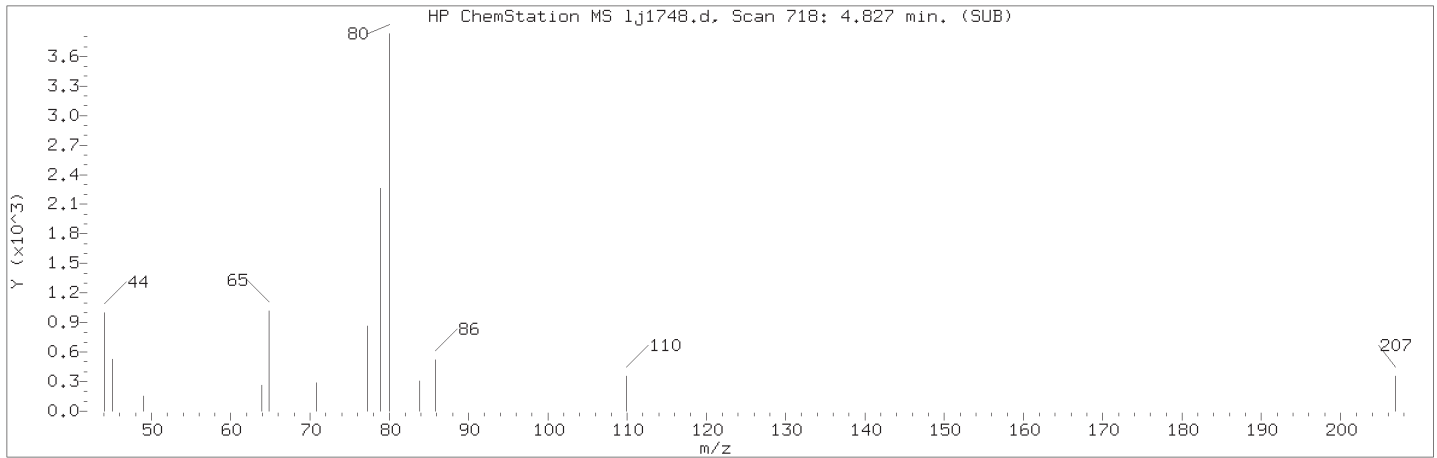
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTDO.25

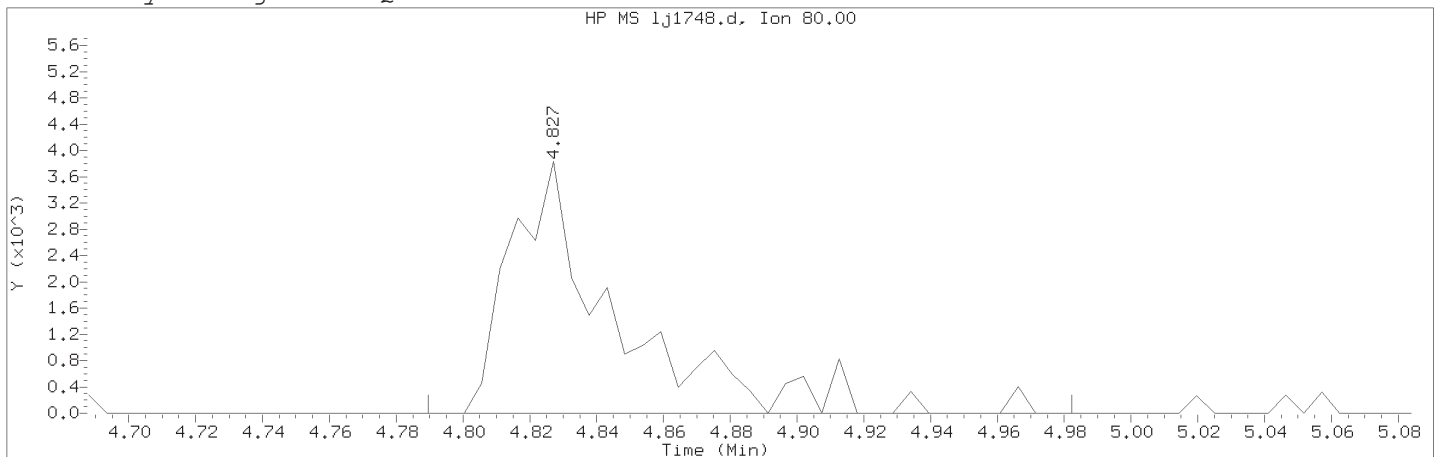
Lab Sample ID: RVSTD2648

Compound Number : 9  
Compound Name : N-Nitrosomethylethylamine  
Expected RT (minutes) : 4.346  
Quant Ion : 88.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

Compound Number : 10  
Compound Name : Methyl methanesulfonate  
Scan Number : 718  
Retention Time (minutes) : 4.827  
Quant Ion : 80.00  
Area (flag) : 8428M  
On-Column Amount (ng/ul) : 0.2219  
Integration start scan : 710      Integration stop scan: 746  
Y at integration start : 0      Y at integration end: 0

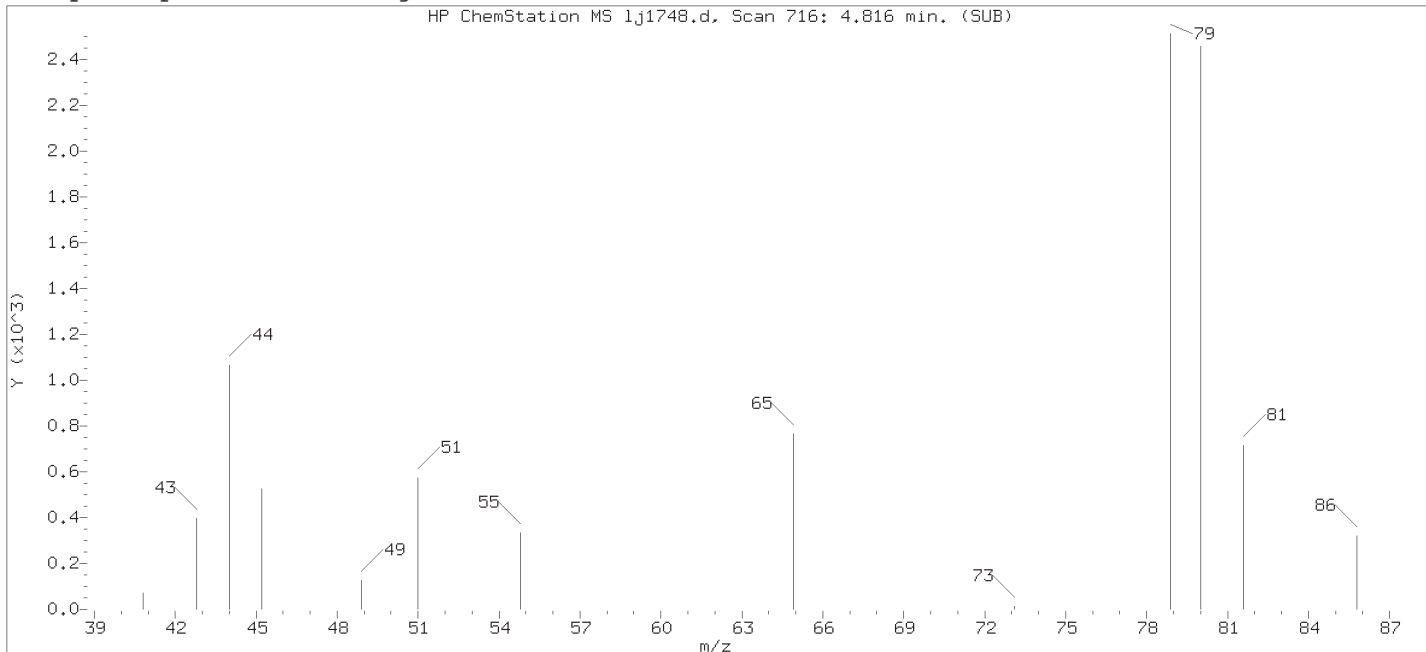
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

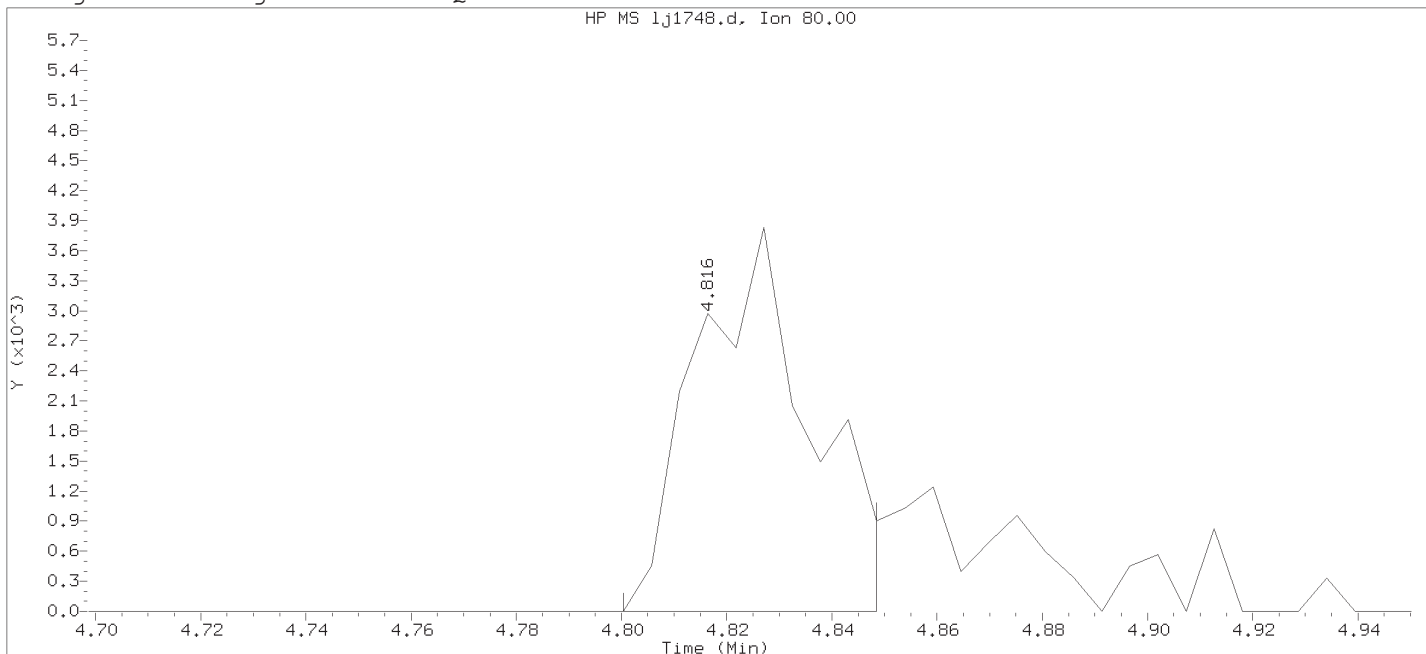
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all1

Calibration date and time: 29-OCT-2018 15:37

Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

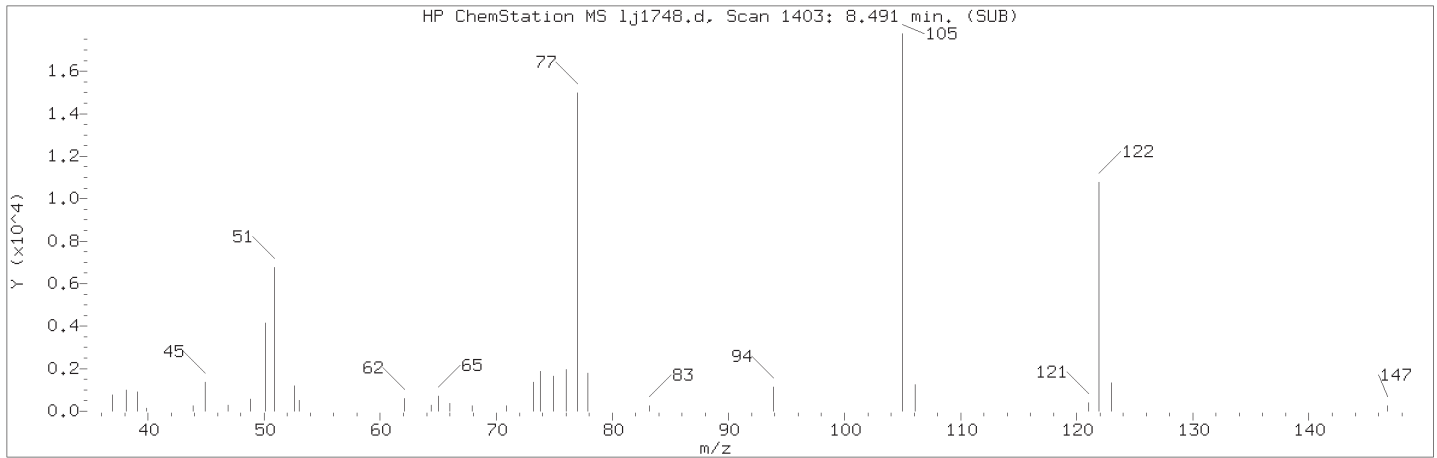
Sample Name: SSTDO.25

Lab Sample ID: RVSTD2648

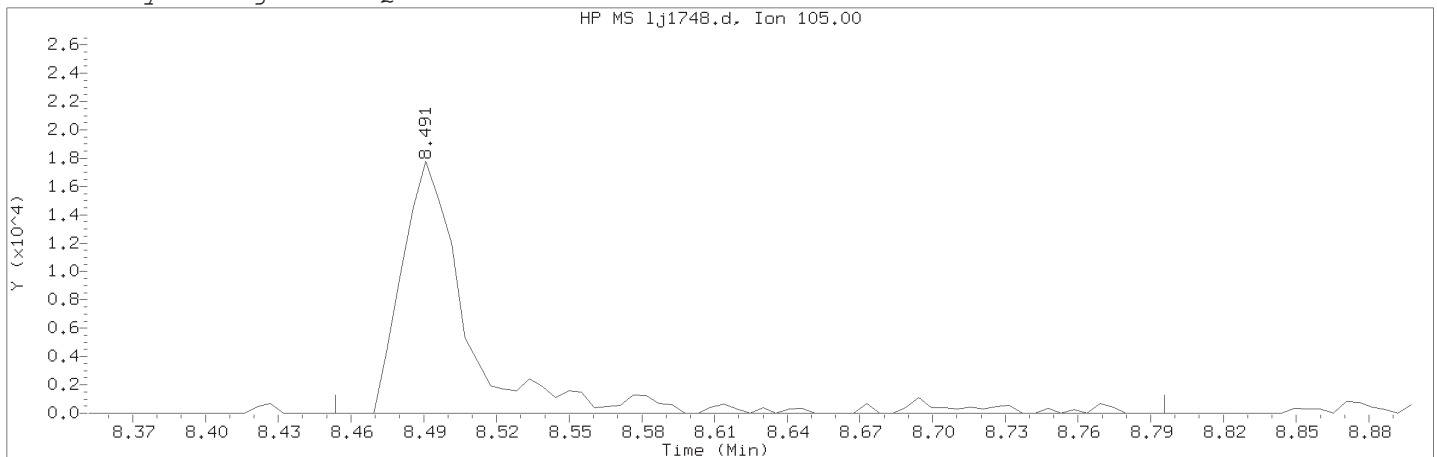
```

Compound Number      : 10
Compound Name       : Methyl methanesulfonate
Scan Number         : 716
Retention Time (minutes) : 4.816
Quant Ion           : 80.00
Area                : 5776
On-column Amount (ng/ul) : 0.1547
Integration start scan : 712      Integration stop scan: 721
Y at integration start  : 0        Y at integration end: 0
    
```

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

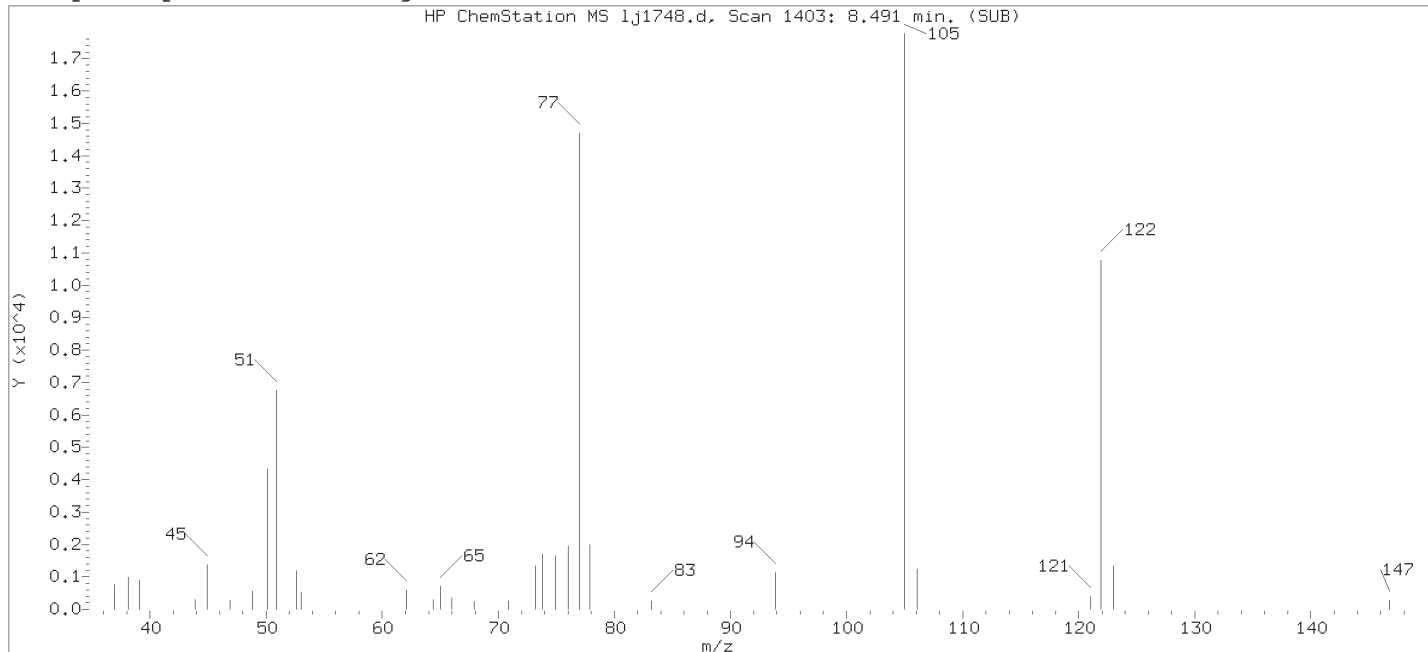
Compound Number : 58  
Compound Name : Benzoic acid  
Scan Number : 1403  
Retention Time (minutes) : 8.491  
Quant Ion : 105.00  
Area (flag) : 35392M  
On-Column Amount (ng/ul) : 0.8791  
Integration start scan : 1395      Integration stop scan: 1459  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

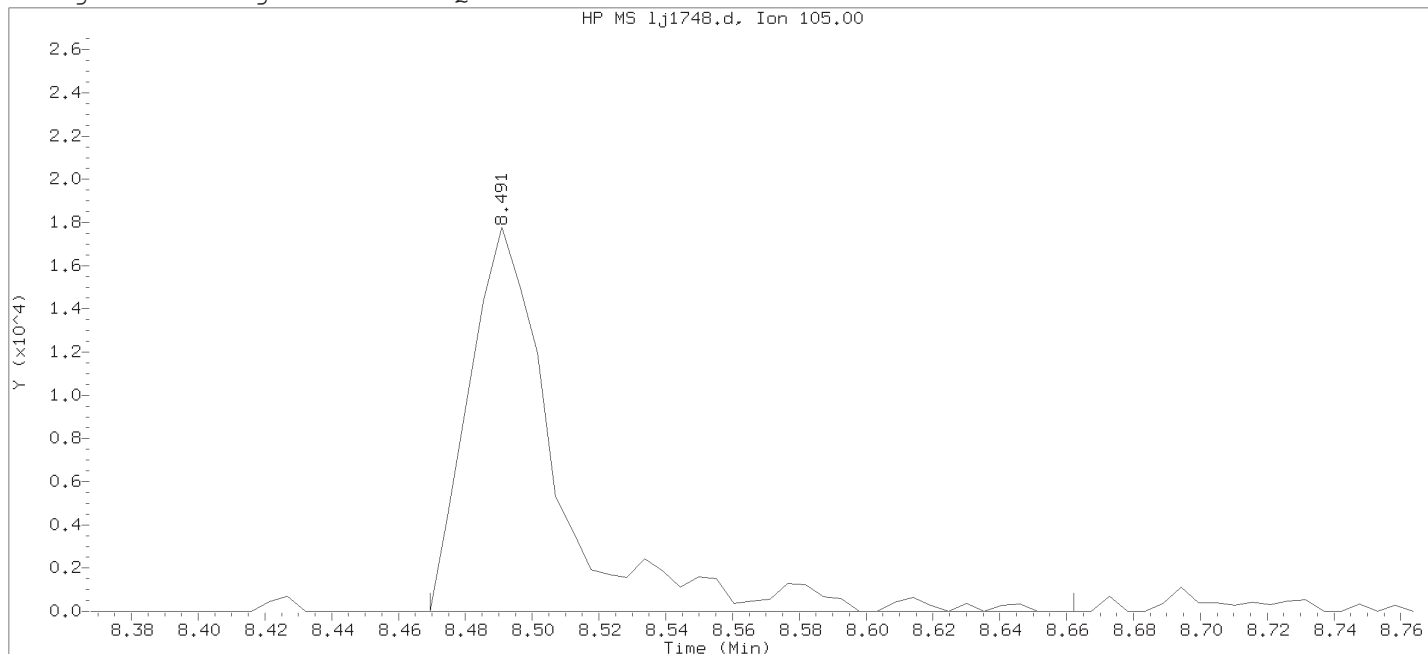
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

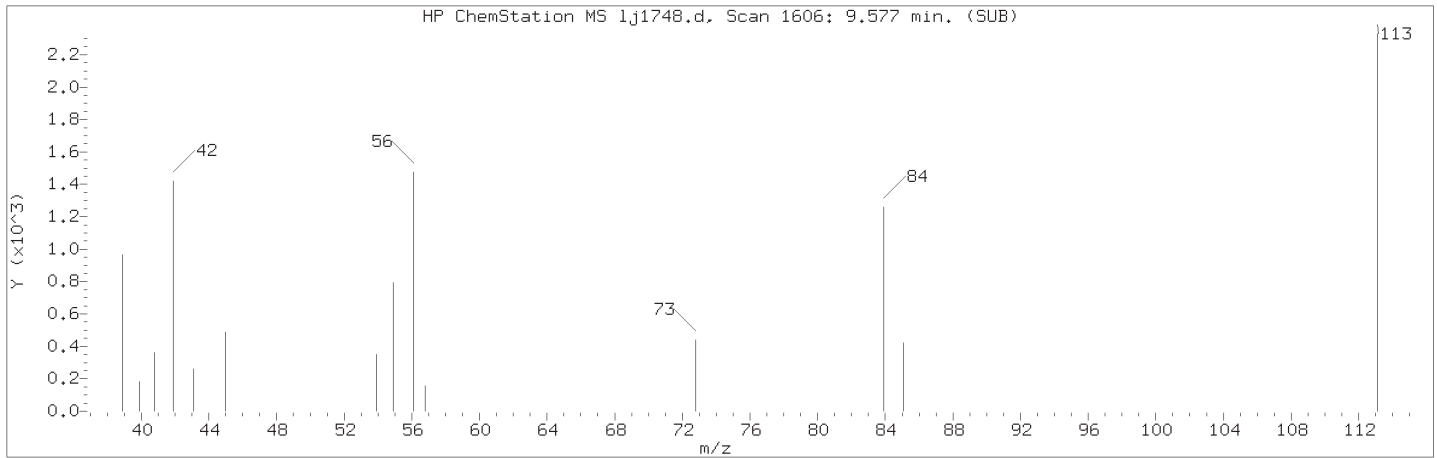
Sublist used: all1

Sample Name: SSTDO.25

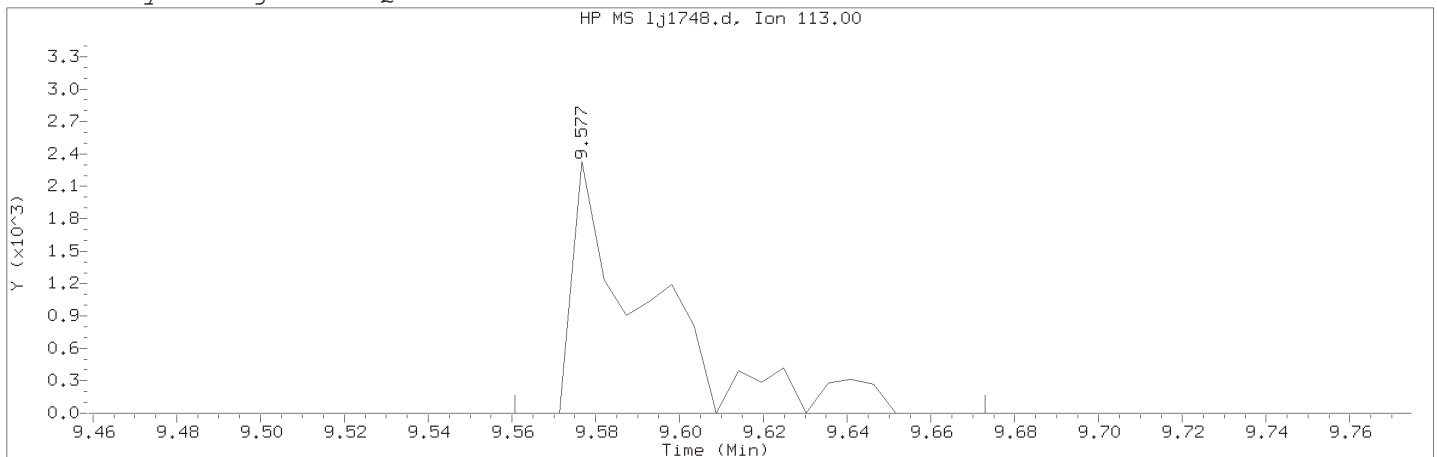
Lab Sample ID: RVSTD2648

Compound Number : 58  
Compound Name : Benzoic acid  
Scan Number : 1403  
Retention Time (minutes) : 8.491  
Quant Ion : 105.00  
Area : 33241  
On-column Amount (ng/ul) : 1.0344  
Integration start scan : 1398 Integration stop scan: 1434  
Y at integration start : 0 Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1748.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:49                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25    Lab Sample ID: RVSTD2648

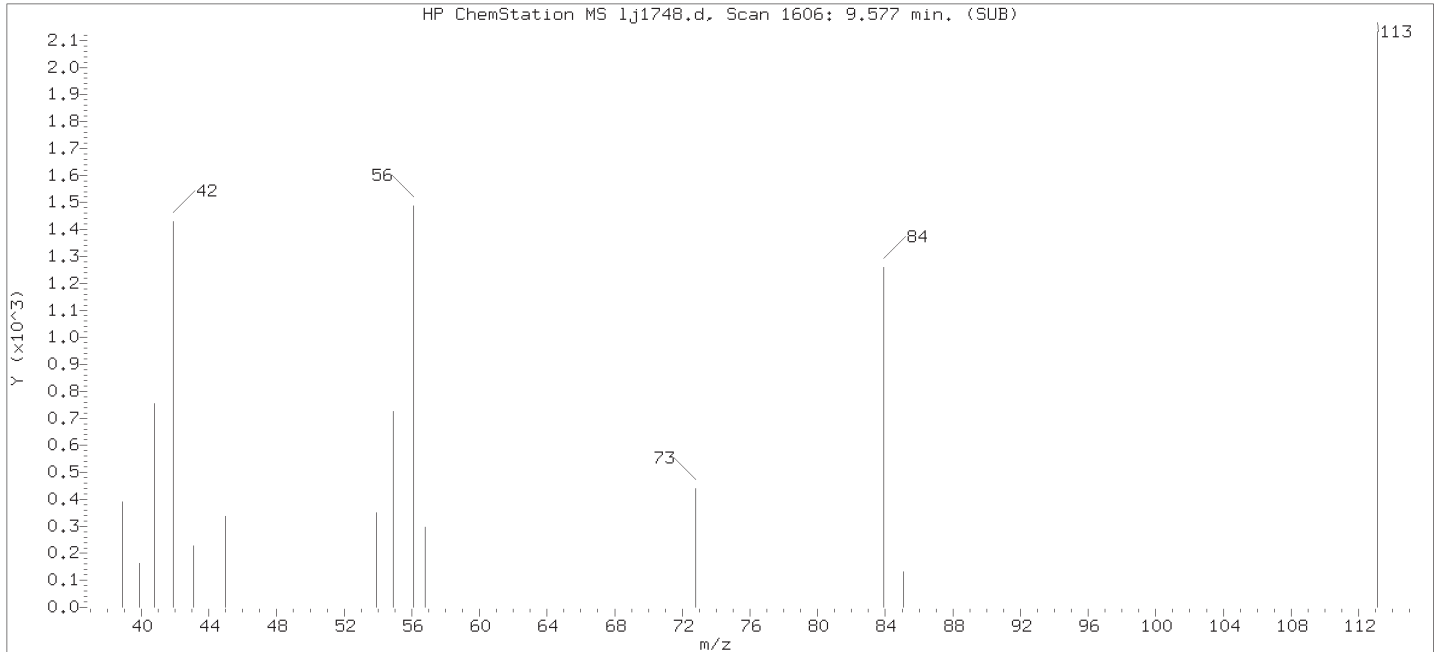
Compound Number    : 79  
Compound Name    : Caprolactam  
Scan Number    : 1606  
Retention Time (minutes)                                    : 9.577  
Quant Ion    : 113.00  
Area (flag)     : 3036M  
On-Column Amount (ng/ul)                                   : 0.2222  
Integration start scan                                        : 1602                      Integration stop scan: 1623  
Y at integration start                                        : 0                            Y at integration end: 0

Reason for manual integration: improper integration

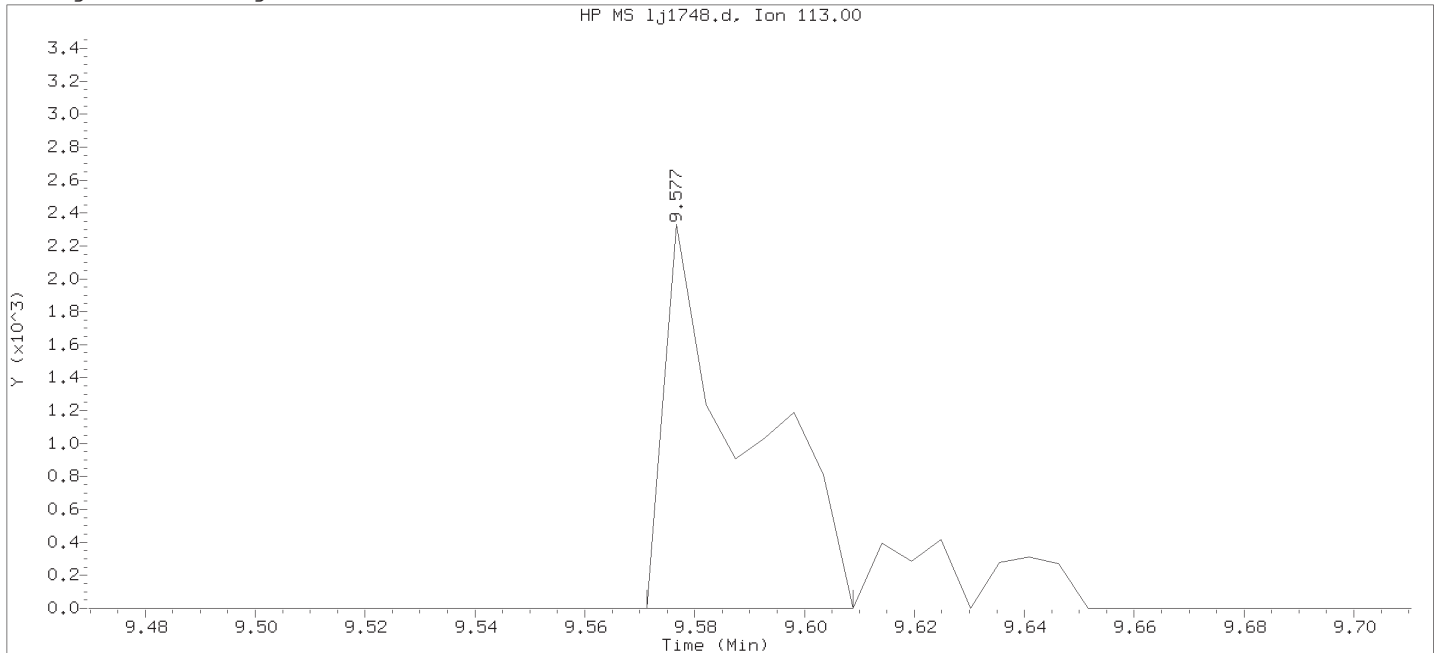
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: all1

Calibration date and time: 29-OCT-2018 15:37

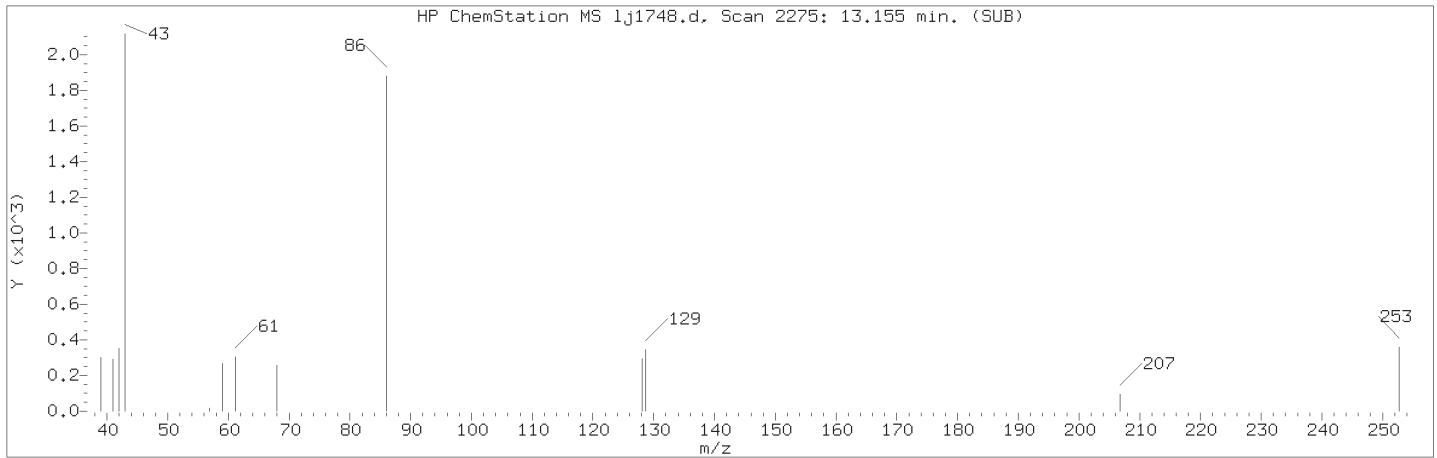
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTDO.25

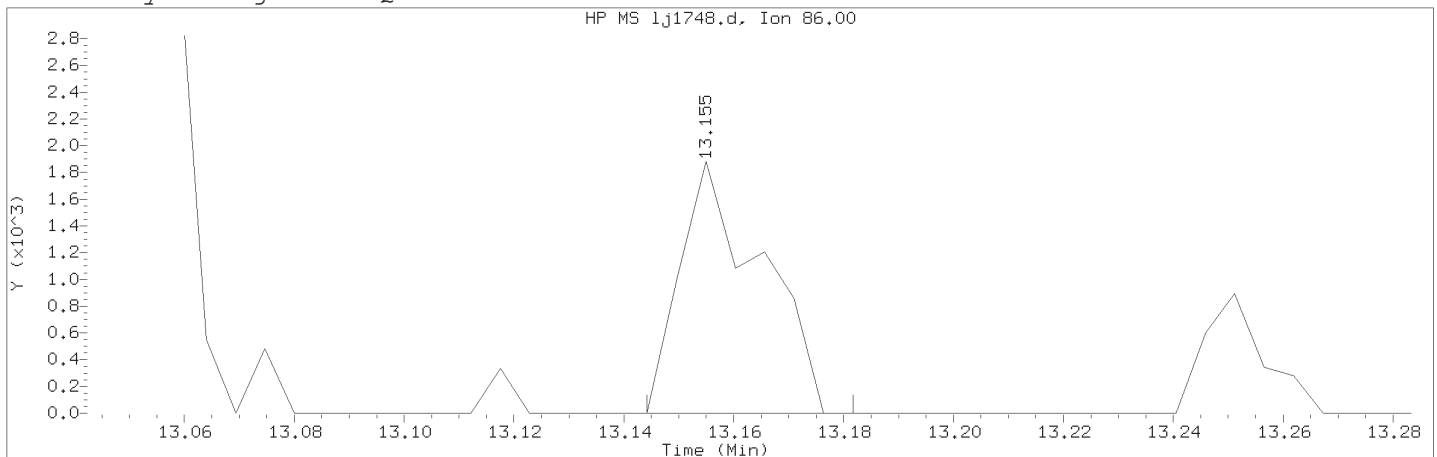
Lab Sample ID: RVSTD2648

Compound Number	: 79	
Compound Name	: Caprolactam	
Scan Number	: 1606	
Retention Time (minutes)	: 9.577	
Quant Ion	: 113.00	
Area	: 2409	
On-column Amount (ng/ul)	: 0.2631	
Integration start scan	: 1604	Integration stop scan: 1611
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sublist used: all1

Sample Name: SSTD0.25

Lab Sample ID: RVSTD2648

Compound Number : 149  
Compound Name : Diallate (peak 2)  
Scan Number : 2275  
Retention Time (minutes) : 13.155  
Quant Ion : 86.00  
Area (flag) : 1930M  
On-Column Amount (ng/ul) : 0.0402  
Integration start scan : 2272 Integration stop scan: 2279  
Y at integration start : 0 Y at integration end: 0

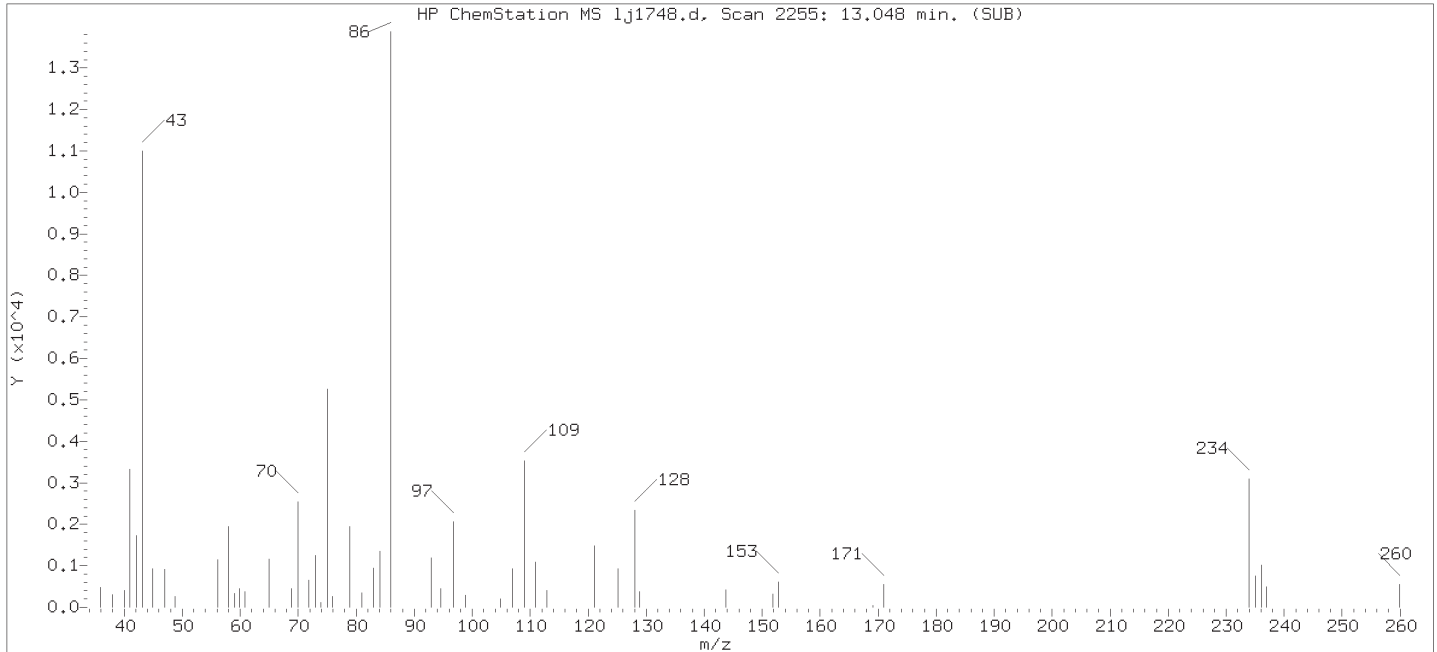
Reason for manual integration: improper integration

Analyst responsible for change:

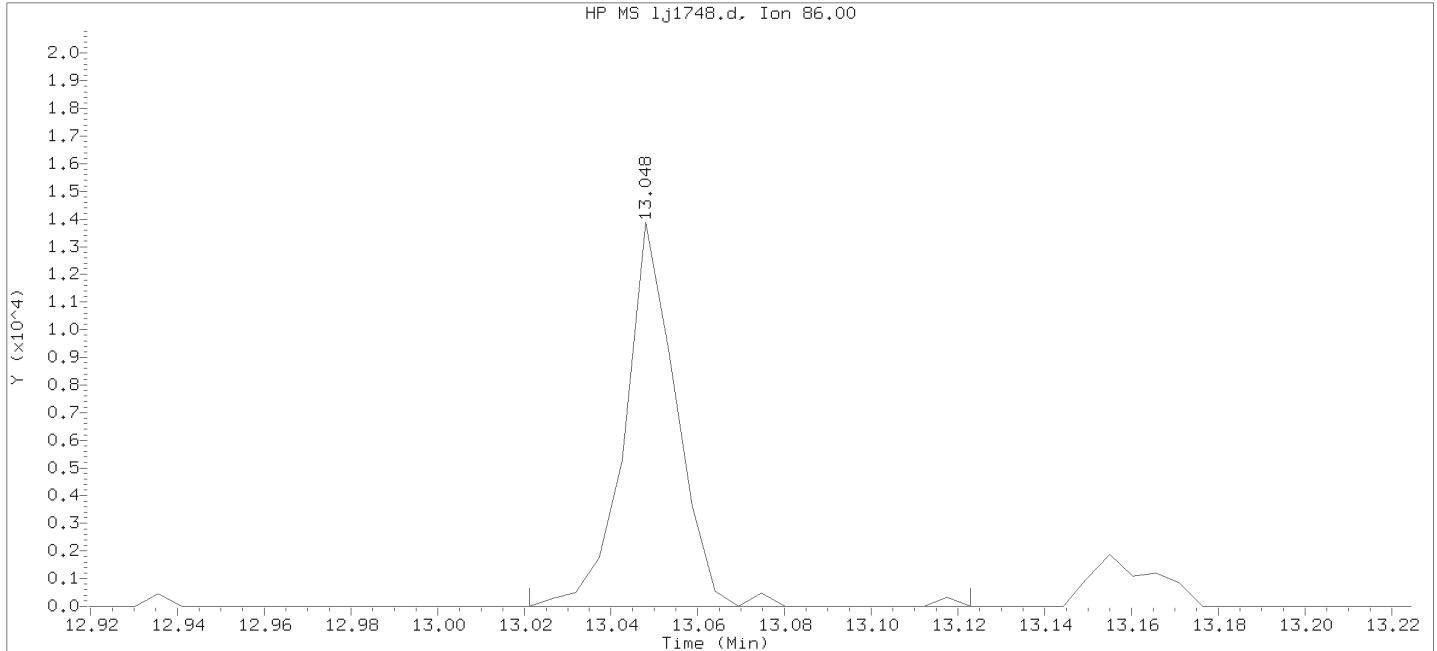
Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

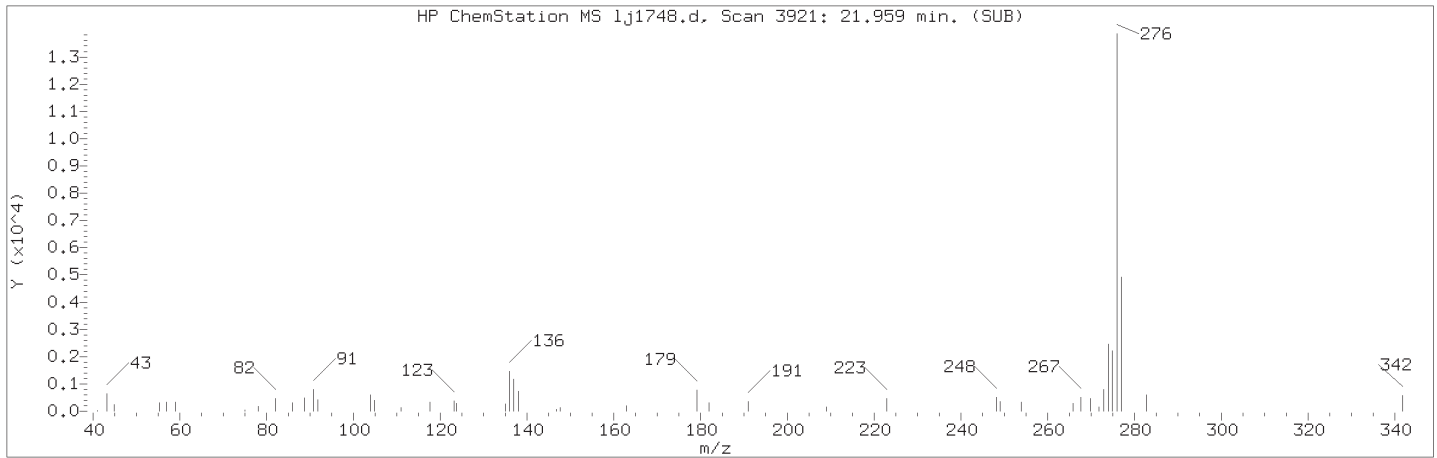
Sublist used: all1

Sample Name: SSTD0.25

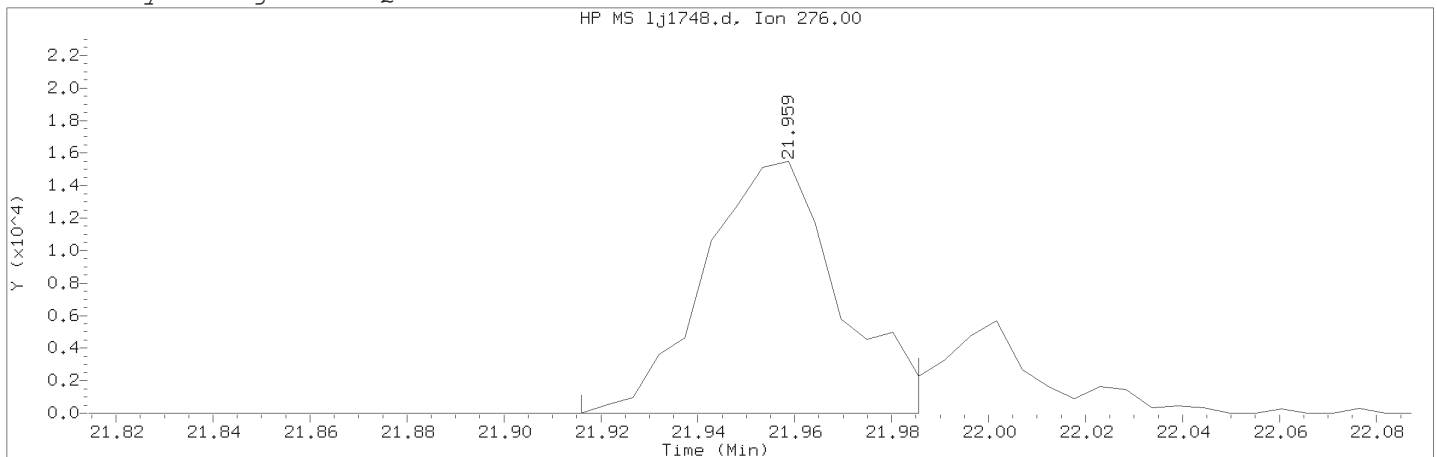
Lab Sample ID: RVSTD2648

Compound Number : 149  
Compound Name : Diallate (peak 2)  
Scan Number : 2255  
Retention Time (minutes) : 13.048  
Quant Ion : 86.00  
Area : 11548  
On-column Amount (ng/ul) : 0.0469  
Integration start scan : 2249 Integration stop scan: 2268  
Y at integration start : 0 Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 03:49                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 29-OCT-2018 17:41  
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25    Lab Sample ID: RVSTD2648

Compound Number                      : 224  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 3921  
Retention Time (minutes)             : 21.959  
Quant Ion                                : 276.00  
Area (flag)                             : 29821M  
On-Column Amount (ng/ul)            : 0.2365  
Integration start scan                : 3912                      Integration stop scan: 3925  
Y at integration start                 : 0                         Y at integration end: 0

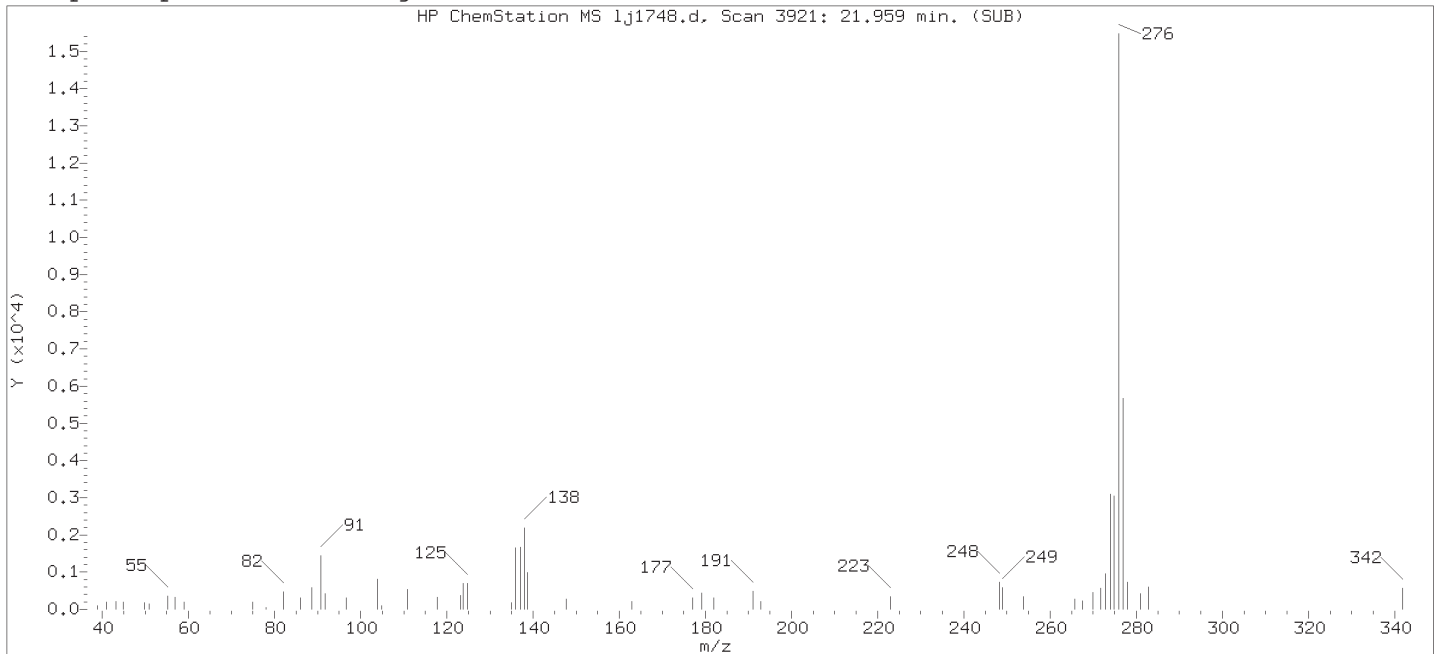
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:02.  
Target 3.5 esignature user ID: art12405

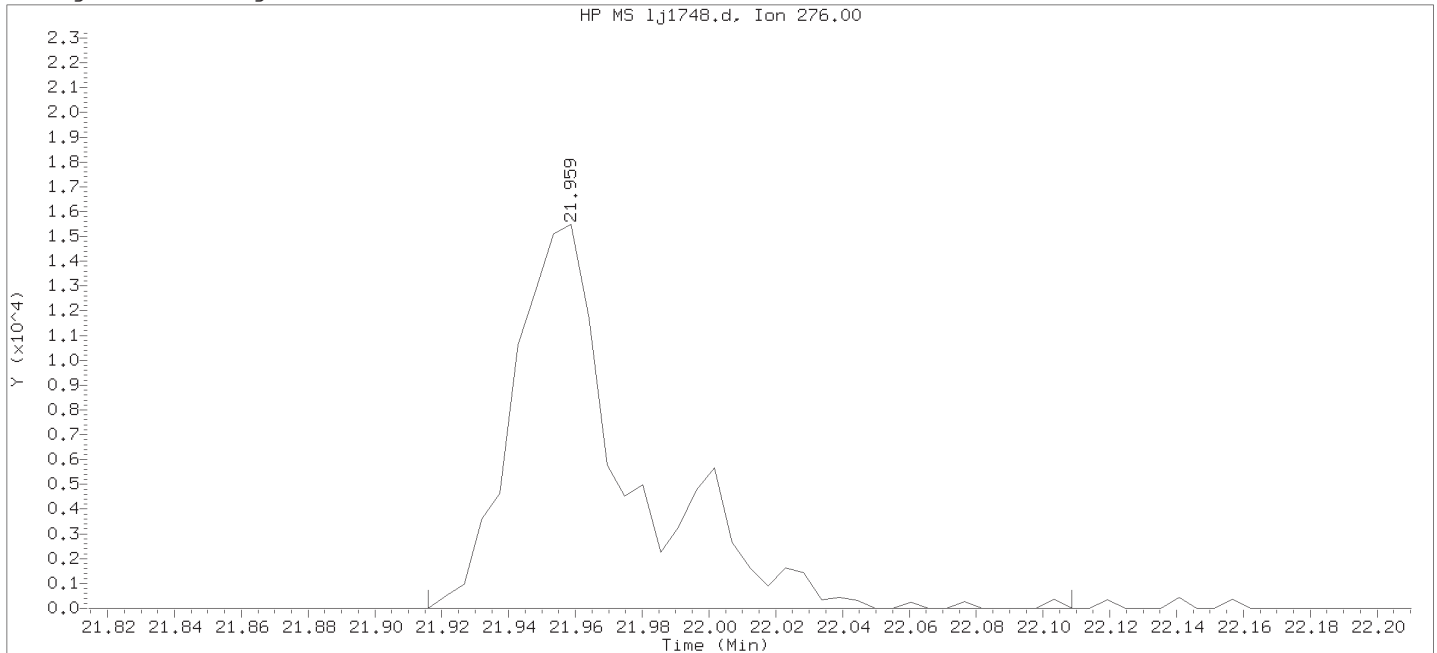
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d  
 Injection date and time: 29-OCT-2018 03:49

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37

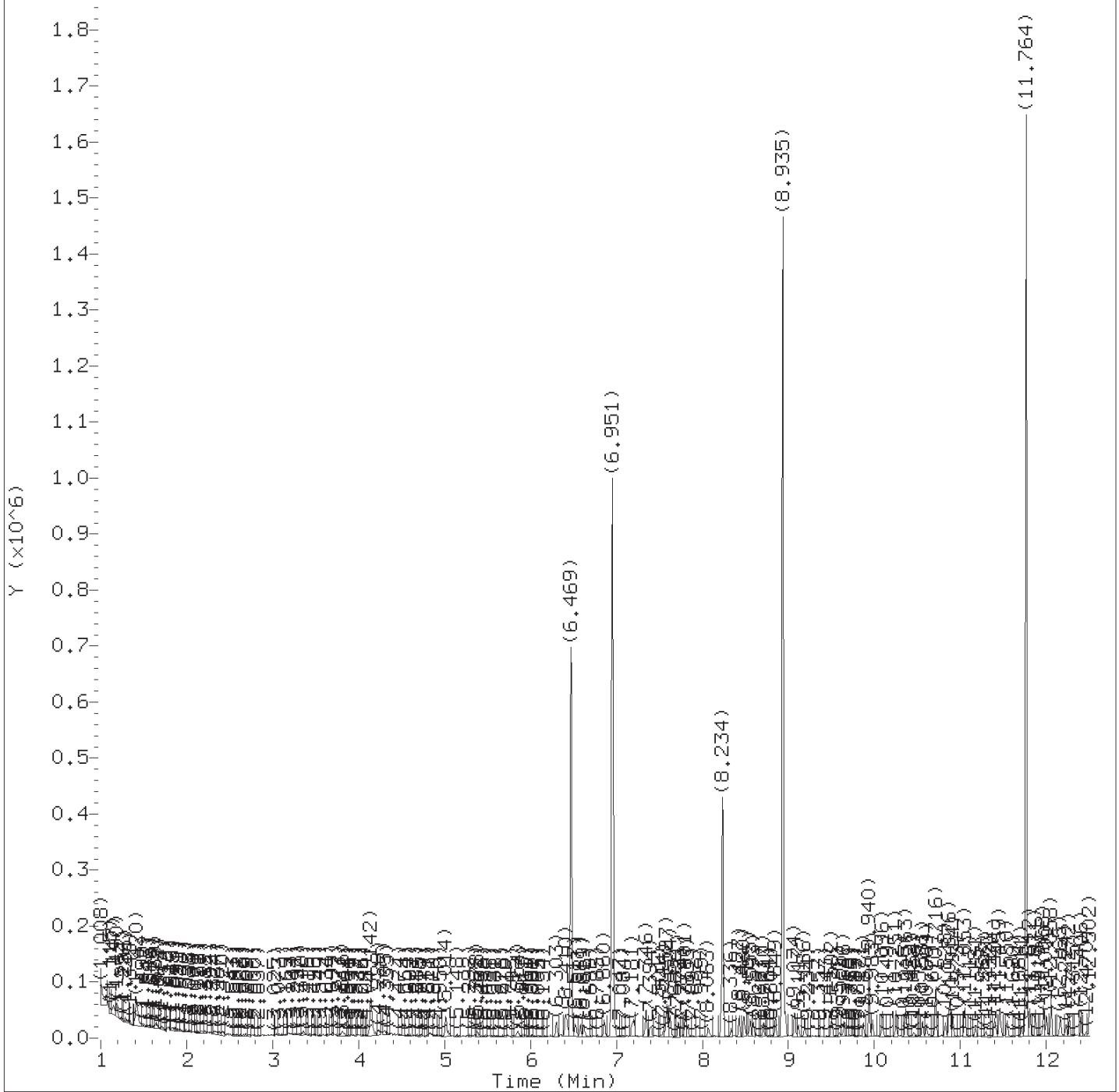
Sublist used: all11

Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTDO.25

Lab Sample ID: RVSTD2648

Compound Number	: 224	
Compound Name	: Indeno(1,2,3-cd)pyrene	
Scan Number	: 3921	
Retention Time (minutes)	: 21.959	
Quant Ion	: 276.00	
Area	: 37508	
On-column Amount (ng/ul)	: 0.2436	
Integration start scan	: 3912	Integration stop scan: 3948
Y at integration start	: 0	Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

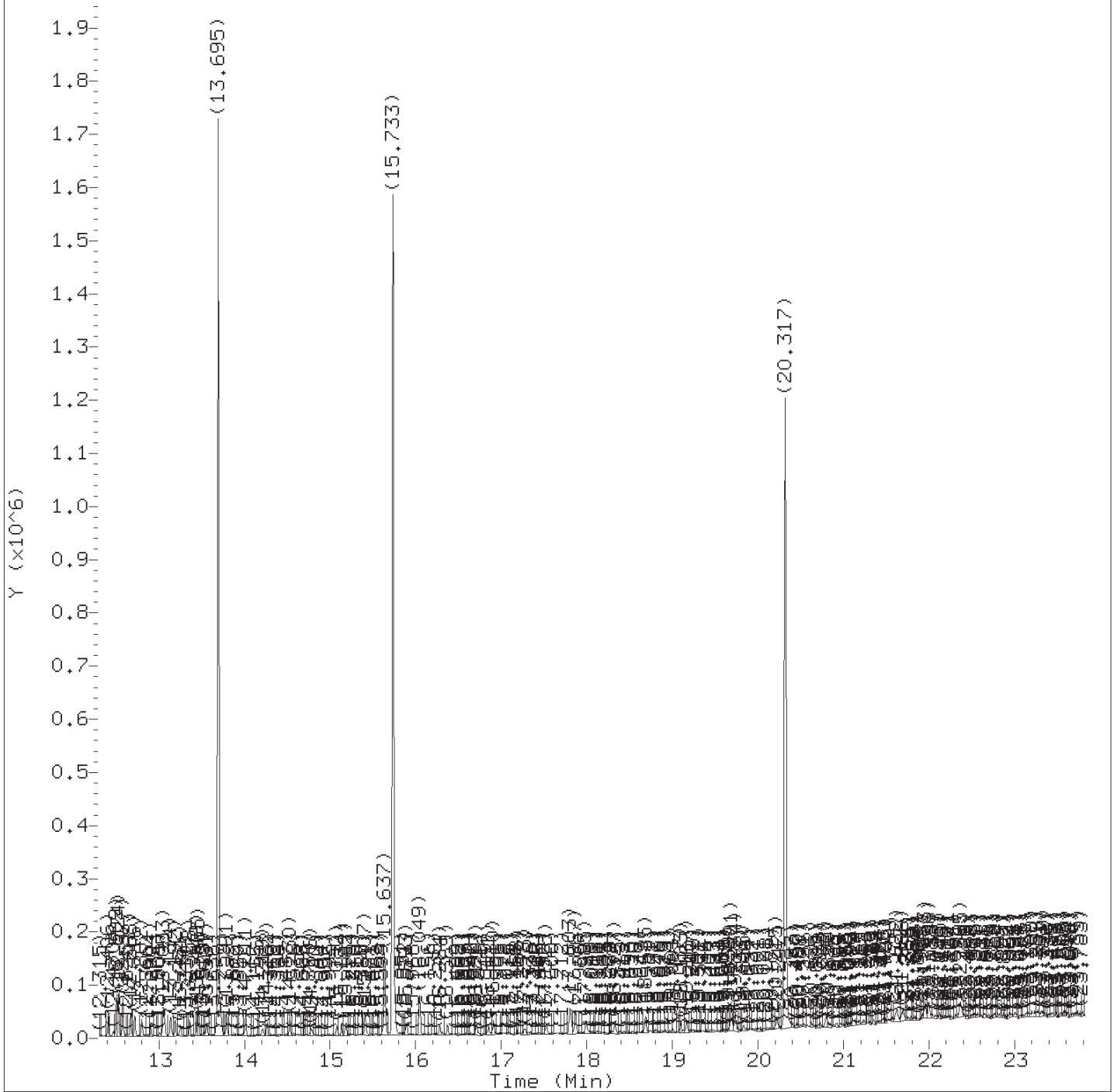
Sublist used: mdlall1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11

Sublist used: mdlall1

Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
 Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sublist used: mdlall1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.420	88	3687M	0.133
5) N-Nitrosodimethylamine	(1)	3.051	74	4751	0.114
6) Pyridine	(1)	3.249	79	7175M	0.101
8) 2-Picoline	(1)	4.233	93	8043M	0.108
9) N-Nitrosomethylethylamine	(1)	4.378	88	3534M	0.117
10) Methyl methanesulfonate	(1)	4.838	80	5681M	0.146
12) \$2-Fluorophenol	(1)	5.020	112	13482	0.234
14) N-Nitrosodiethylamine	(1)	5.383	102	3060	0.117
43) Total Cresols	(1)			14374	0.250
16) Ethyl methanesulfonate	(1)	5.854	109	3413	0.115
17) Benzaldehyde	(1)	6.303	77	7055	0.132
18) \$Phenol-d6	(1)	6.410	99	18331	0.236
19) Phenol	(1)	6.421	94	10363	0.114
20) Aniline	(1)	6.464	93	13884	0.130
21) a-methylstyrene	(1)	6.539	118	991M	0.177
23) bis(2-Chloroethyl) ether	(1)	6.576	93	8163	0.119
24) 2-Chlorophenol	(1)	6.624	128	6472	0.121
25) 1,3-Dichlorobenzene	(1)	6.860	146	8191	0.136
26) *1,4-Dichlorobenzene-d4	(1)	6.951	152	185956	5.000
27) 1,4-Dichlorobenzene	(1)	6.983	146	7501	0.124
28) Benzyl alcohol	(1)	7.181	108	4136	0.112
29) 1,2-Dichlorobenzene	(1)	7.202	146	7319	0.125
31) Indene	(1)	7.336	115	8262	0.128
32) 2-Methylphenol	(1)	7.346	108	8120	0.144
100) Isosafrole	(3)			5052	0.112
35) bis(2-Chloroisopropyl) ether	(1)	7.389	45	11172	0.129
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.389	45	11172	0.129
36) N-Nitrosopyrrolidine	(1)	7.544	100	2842	0.099
37) Acetophenone	(1)	7.576	105	9718	0.112
38) 4-Methylphenol	(1)	7.587	108	6254	0.106
39) N-Nitroso-di-n-propylamine	(1)	7.598	70	5907	0.112
40) N-Nitrosomorpholine	(1)	7.614	56	5362	0.140
41) o-Toluidine	(1)	7.630	106	12155	0.123
44) Hexachloroethane	(1)	7.721	117	3789	0.138
45) \$Nitrobenzene-d5	(2)	7.801	82	17915	0.241
46) Nitrobenzene	(2)	7.828	77	7984	0.101
125) 2,4,2,6-Dinitrotoluenes	(3)			2726	0.104
50) N-Nitropiperidine	(2)	8.068	114	3553	0.128
52) Isophorone	(2)	8.218	82	14789	0.110
53) 2-Nitrophenol	(2)	8.336	139	2705	0.104

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/30/2018 at 13:32.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
 Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sublist used: mdlall1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.427	107	7557	0.119
58) Benzoic acid	(2)	8.480	105	16027M	0.386
59) O,O,O-Triethylphosphorothioate	(2)	8.550	198	2586M	0.095
57) bis(2-Chloroethoxy)methane	(2)	8.587	93	11090	0.130
62) 2,4-Dichlorophenol	(2)	8.716	162	4975	0.109
151) Diallate trans/cis	(4)			6646	0.113
65) 1,2,4-Trichlorobenzene	(2)	8.849	180	7004	0.133
68)*Naphthalene-d8	(2)	8.935	136	710989	5.000
70) 4-Chloroaniline	(2)	9.074	127	6750	0.104
71) 2,6-Dichlorophenol	(2)	9.079	162	5092	0.115
72) Hexachloropropene	(2)	9.117	213	3487	0.102
74) Hexachlorobutadiene	(2)	9.192	225	4230	0.136
78) Quinoline	(2)	9.502	129	9814	0.103
79) Caprolactam	(2)	9.598	113	973	0.069
80) N-Nitrosodi-n-butylamine	(2)	9.646	84	5152	0.097
83) 4-Chloro-3-methylphenol	(2)	9.866	107	5419	0.100
85) Safrole	(2)	9.983	162	4240	0.105
88) Hexachlorocyclopentadiene	(3)	10.363	237	3421	0.110
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.363	216	6311	0.117
91) cis-Isosafrole	(3)	10.459	162	633M	0.014
93) 2,4,6-Trichlorophenol	(3)	10.561	196	2654	0.084
95) 2,4,5-Trichlorophenol	(3)	10.604	196	3958	0.114
96)\$2-Fluorobiphenyl	(3)	10.716	172	28529	0.244
97) trans-Isosafrole	(3)	10.823	162	4419	0.098
98) 1,1'-Biphenyl	(3)	10.871	154	15630	0.130
101) 1-Chloronaphthalene	(3)	10.909	162	10568	0.114
103) Diphenyl ether	(3)	11.053	170	8619	0.129
104) 2-Nitroaniline	(3)	11.058	138	1886	0.070
108) 1,4-Naphthoquinone	(3)	11.171	158	3922	0.100
109) 1,4-Dinitrobenzene	(3)	11.299	168	552M	0.039
110) Dimethylphthalate	(3)	11.401	163	12996	0.117
111) 1,3-Dinitrobenzene	(3)	11.417	168	732	0.045
113) 2,6-Dinitrotoluene	(3)	11.475	165	1423	0.063
117) 3-Nitroaniline	(3)	11.716	138	1857	0.072
118)*Acenaphthene-d10	(3)	11.764	164	349799	5.000
120) 2,4-Dinitrophenol	(3)	11.871	184	4487	0.331
121) 4-Nitrophenol	(3)	11.968	109	6391	0.296
122) Pentachlorobenzene	(3)	12.005	250	3581	0.083
123) 2,4-Dinitrotoluene	(3)	12.058	165	1303	0.040
124) Dibenzofuran	(3)	12.058	168	18369	0.132

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Digitally signed by Kira N. Beck  
 on 10/30/2018 at 13:32.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
 Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sublist used: mdlall1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
126) 1-Naphthylamine	(3)	12.160	143	10026	0.100
127) 2,3,4,6-Tetrachlorophenol	(3)	12.224	232	2185	0.080
128) 2-Naphthylamine	(3)	12.272	143	11497	0.115
129) Diethylphthalate	(3)	12.406	149	14420	0.132
130) Thionazin	(3)	12.508	107	2469	0.115
133) 5-Nitro-o-toluidine	(3)	12.518	152	1394	0.050
132) 4-Chlorophenyl-phenylether	(3)	12.524	204	5707	0.101
134) 4-Nitroaniline	(3)	12.529	138	2271	0.092
135) 4,6-Dinitro-2-methylphenol	(4)	12.572	198	3680	0.210
136) N-Nitrosodiphenylamine	(4)	12.674	169	9547	0.112
137) NDPA as diphenylamine	(4)	12.674	169	9547	0.112
139) 1,2-Diphenylhydrazine	(4)	12.716	77	16724	0.111
140) \$2,4,6-Tribromophenol	(3)	12.802	330	1445	0.105
142) Tetraethyldithiopyrophosphate	(4)	12.898	97	2370	0.105
144) 1,3,5-Trinitrobenzene	(4)	13.000	213	123M	0.012
145) Diallate (peak 1)	(4)	13.048	86	5785	0.095
146) Phorate	(4)	13.059	75	7754	0.098
147) Phenacetin	(4)	13.064	108	5224	0.088
148) 4-Bromophenyl-phenylether	(4)	13.139	248	4095	0.138
149) Diallate (peak 2)	(4)	13.166	86	861M	0.017
152) Dimethoate	(4)	13.251	87	3277	0.066
153) Atrazine	(4)	13.358	200	3259	0.120
154) Pentachlorophenol	(4)	13.444	266	917	0.048
156) Pentachloronitrobenzene	(4)	13.465	237	1677	0.117
155) 4-Aminobiphenyl	(4)	13.465	169	6898	0.093
157) Pronamide	(4)	13.561	173	4365	0.095
158) *Phenanthrene-d10	(4)	13.695	188	665836	5.000
159) Dinoseb	(4)	13.711	211	506M	0.019
168) Carbazole	(4)	14.011	167	15886	0.113
169) Methyl parathion	(4)	14.219	109	1782	0.048
170) Di-n-butylphthalate	(4)	14.530	149	16610	0.092
172) Parathion	(4)	14.770	109	868M	0.037
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	229M	2.401
174) Octachlorostyrene	(4)	15.139	308	1803	0.161
176) Isodrin	(4)	15.187	193	2514	0.134
179) Benzidine	(5)	15.637	184	67306	0.612
180) *Pyrene-d10	(5)	15.733	212	690158	5.000
184) \$Terphenyl-d14	(5)	16.049	244	26750	0.241
187) p-Dimethylaminoazobenzene	(5)	16.289	225	1153	0.041
190) Chlorobenzilate	(5)	16.375	139	4407	0.082

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
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Digitally signed by Kira N. Beck  
 on 10/30/2018 at 13:32.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
 Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sublist used: mdlall1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

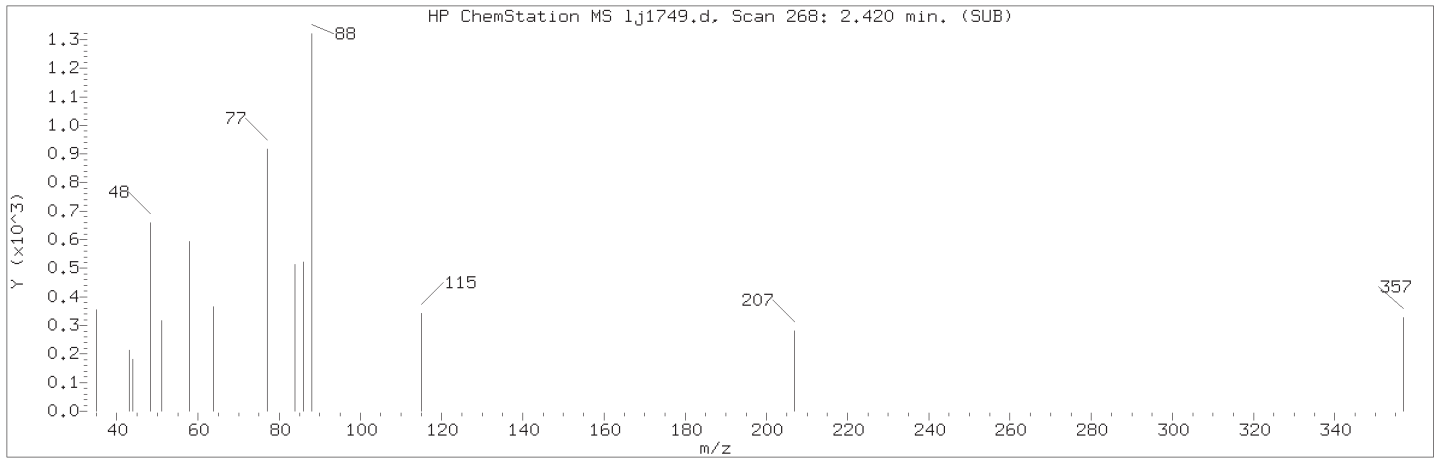
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
192) 3,3'-Dimethylbenzidine	(5)	16.851	212	6898	0.065
193) Butylbenzylphthalate	(5)	16.904	149	5613	0.069
196) 2-Acetylaminofluorene	(5)	17.263	181	4436	0.067
198) 3,3'-Dichlorobenzidine	(5)	17.798	252	3766	0.062
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	2449	0.072
204) bis(2-Ethylhexyl)phthalate	(5)	17.985	149	7866	0.068
208) 6-Methylchrysene	(5)	18.685	242	10696	0.097
210) Di-n-octylphthalate	(6)	19.161	149	9360	0.050
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.691	256	5978	0.096
218)*Perylene-d12	(6)	20.317	264	581399	5.000
220) 3-Methylcholanthrene	(6)	20.803	268	4058	0.066
222) Dibenz(a,h)acridine	(6)	21.622	279	10141	0.090
223) Dibenz(a,j)acridine	(6)	21.691	279	8983	0.076

\* = Compound is an internal standard.

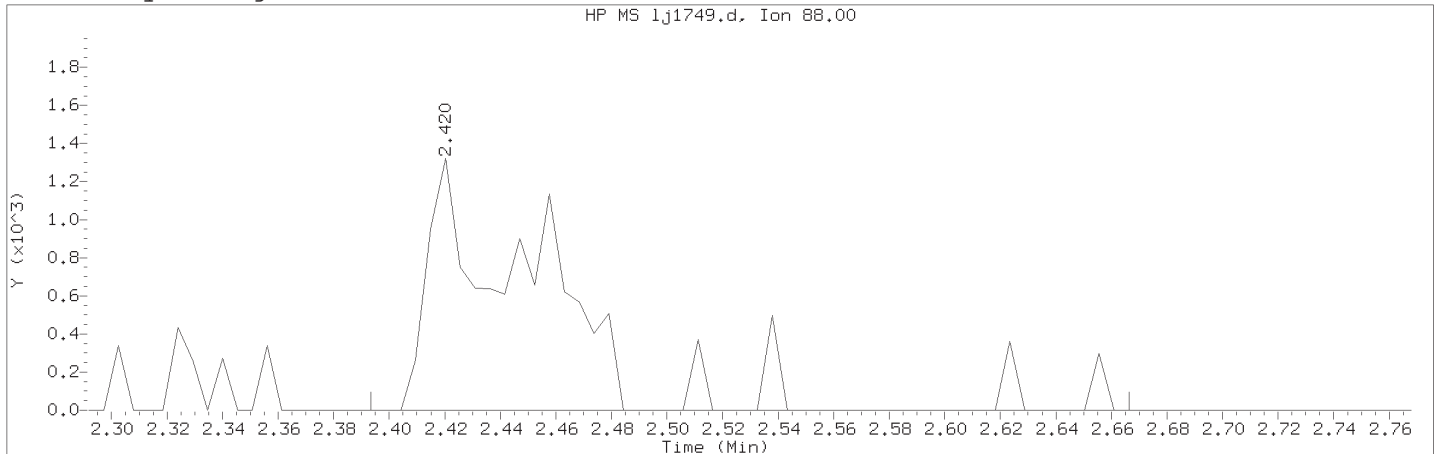
Digitally signed by Kira N. Beck  
 on 10/30/2018 at 13:32.

Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125                      Lab Sample ID: RVSTD2648

Compound Number                      : 1  
Compound Name                        : 1,4-Dioxane  
Scan Number                          : 268  
Retention Time (minutes)            : 2.420  
Quant Ion                             : 88.00  
Area (flag)                          : 3687M  
On-Column Amount (ng/ul)          : 0.1325  
Integration start scan               : 262                      Integration stop scan: 313  
Y at integration start               : 0                        Y at integration end: 0

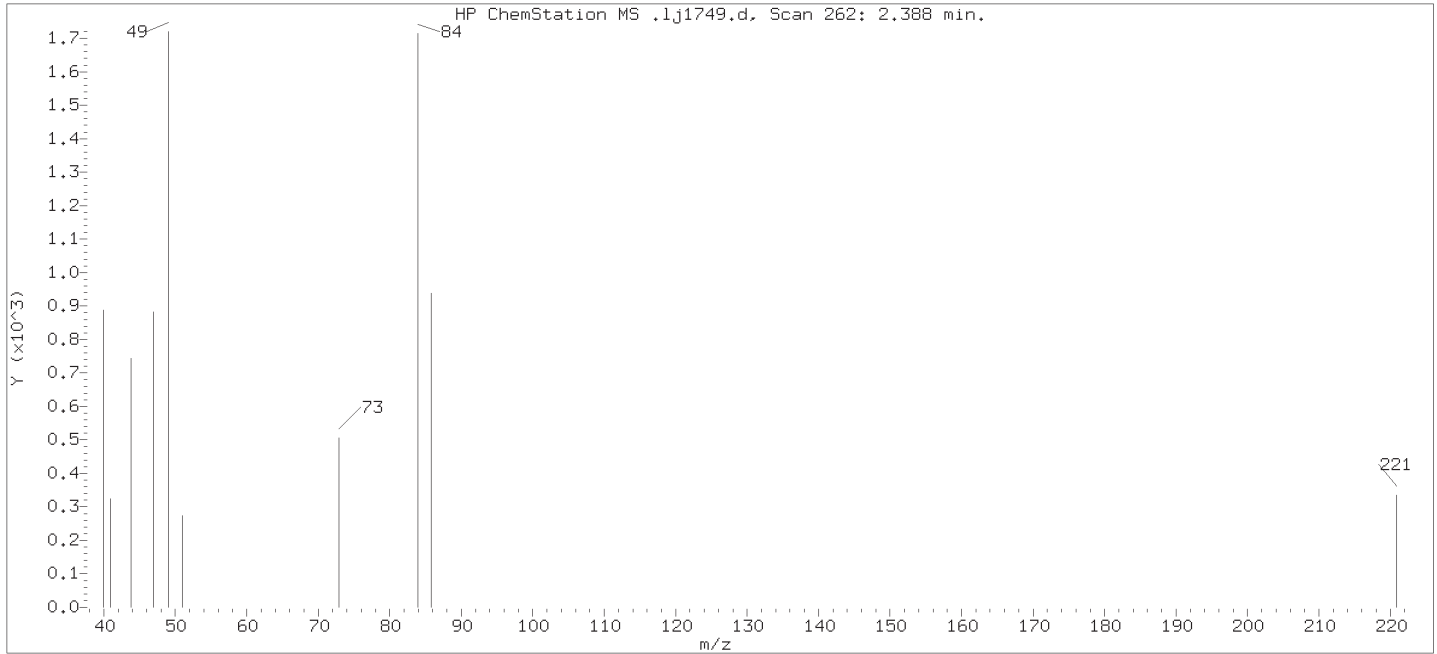
Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

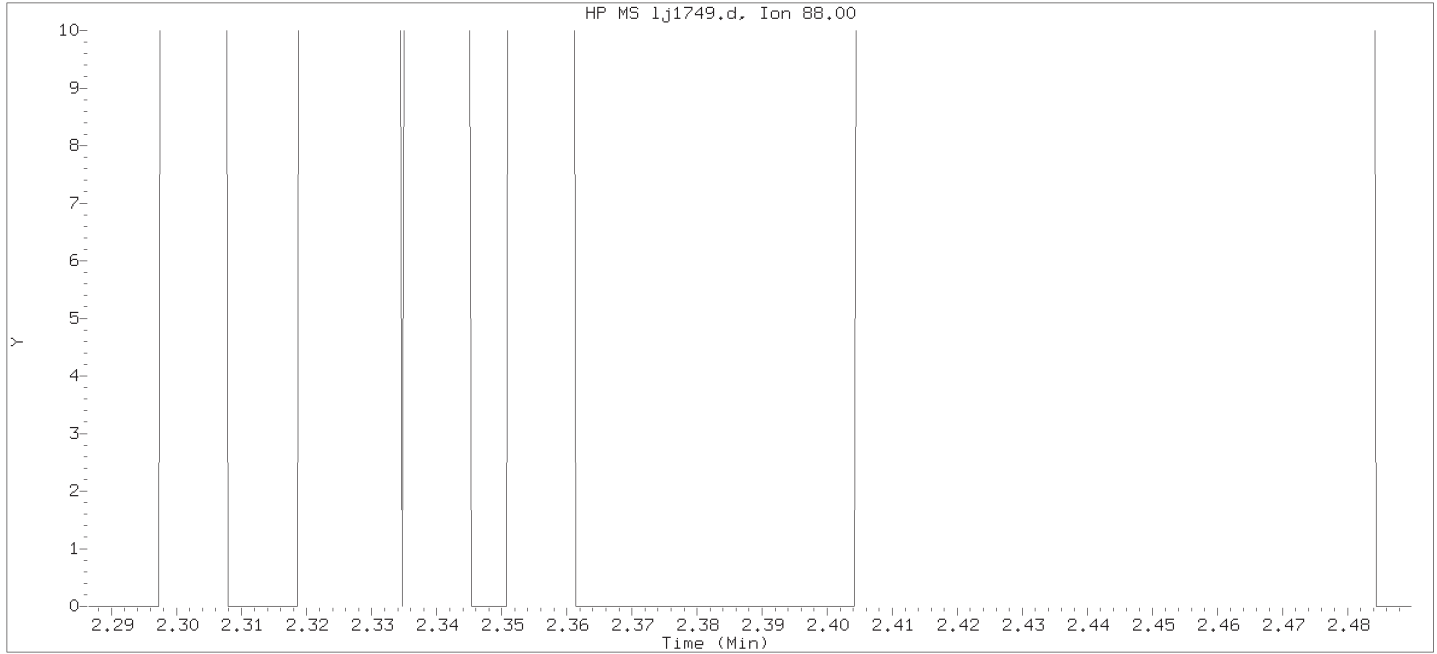
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745



Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

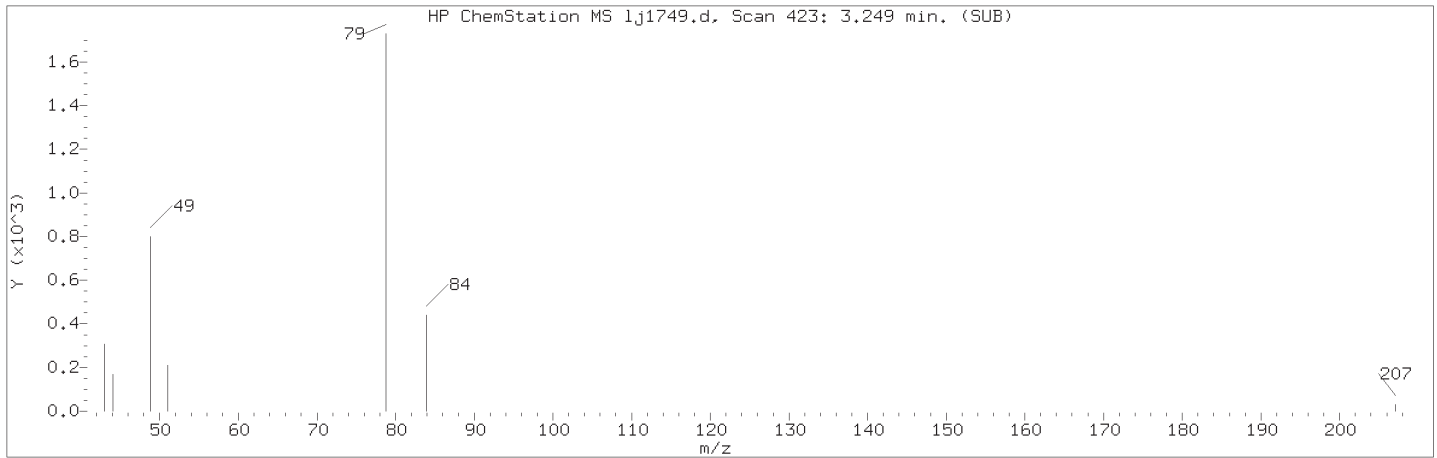
Sublist used: mdlall1

Sample Name: SSTD0.125

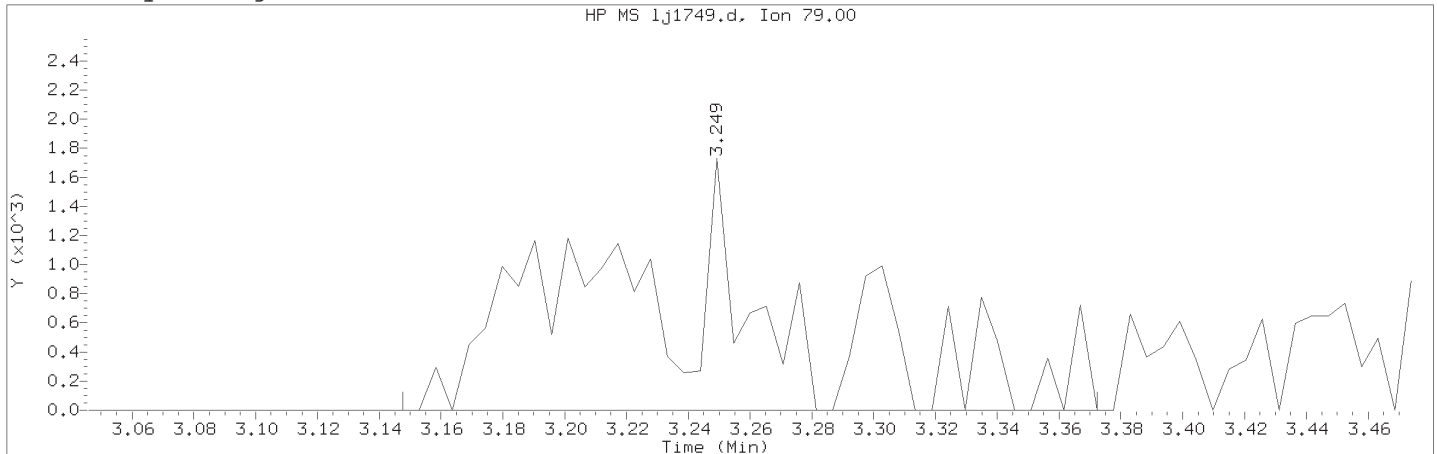
Lab Sample ID: RVSTD2648

Compound Number : 1  
Compound Name : 1,4-Dioxane  
Expected RT (minutes) : 2.388  
Quant Ion : 88.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sublist used: mdlall1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compound Number : 6  
Compound Name : Pyridine  
Scan Number : 423  
Retention Time (minutes) : 3.249  
Quant Ion : 79.00  
Area (flag) : 7175M  
On-Column Amount (ng/ul) : 0.1008  
Integration start scan : 403      Integration stop scan: 445  
Y at integration start : 0      Y at integration end: 0

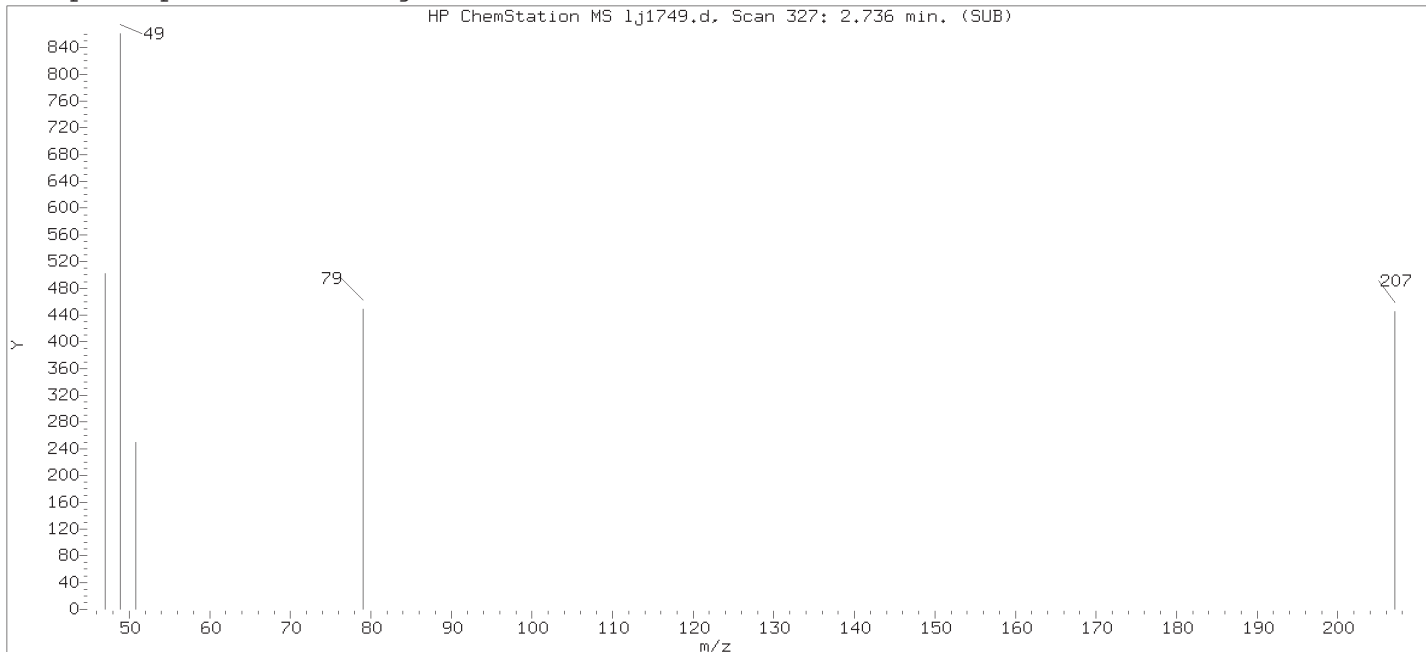
Reason for manual integration: improper integration

Analyst responsible for change:

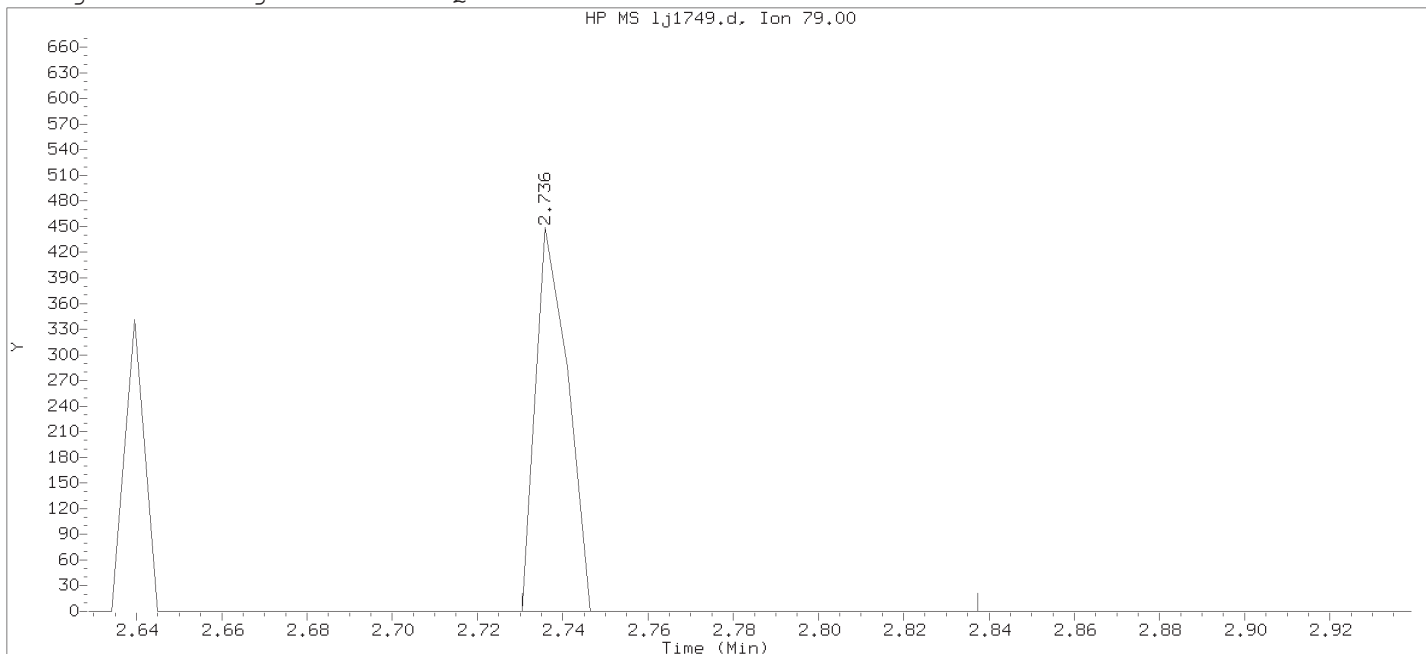
Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



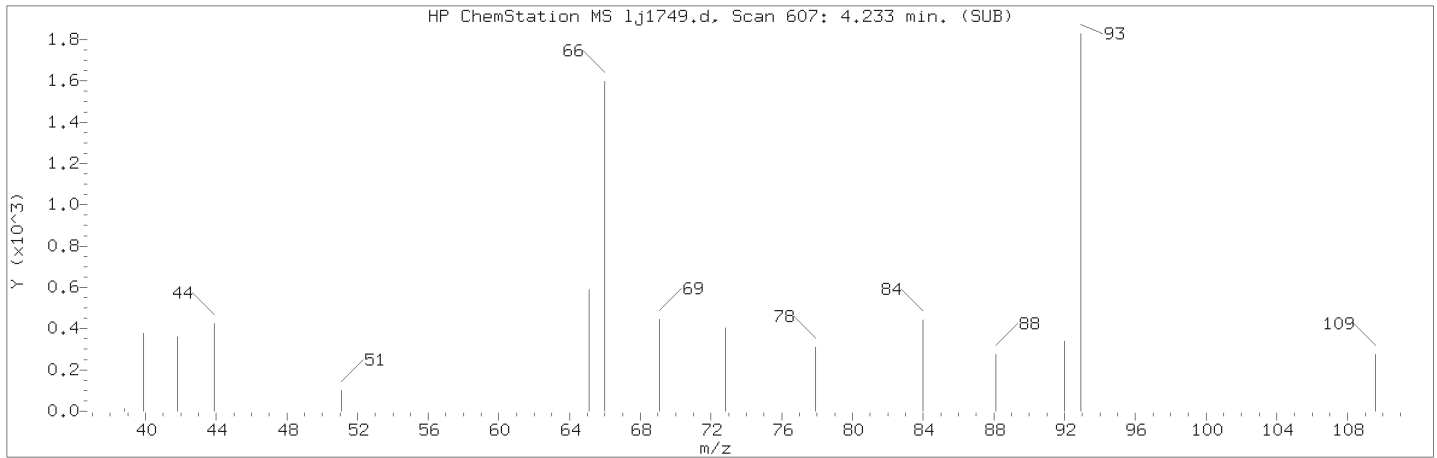
Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

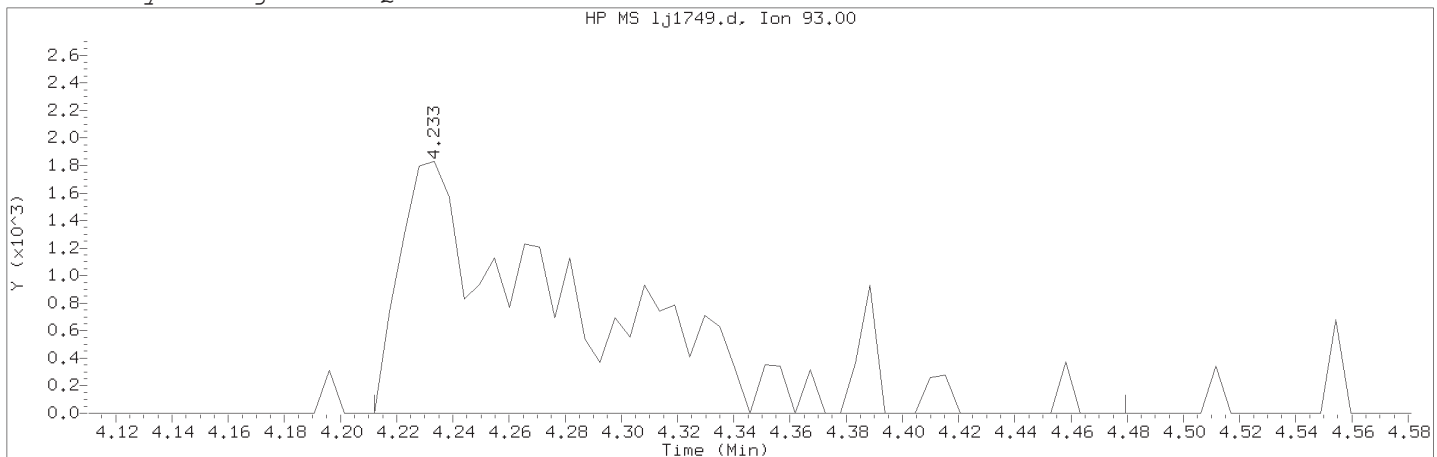
Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 6  
Compound Name    : Pyridine  
Scan Number    : 327  
Retention Time (minutes)                                   : 2.736  
Quant Ion    : 79.00  
Area     : 235  
On-column Amount (ng/ul)                                 : 0.0033  
Integration start scan                                      : 325                      Integration stop scan: 345  
Y at integration start                                       : 0                         Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

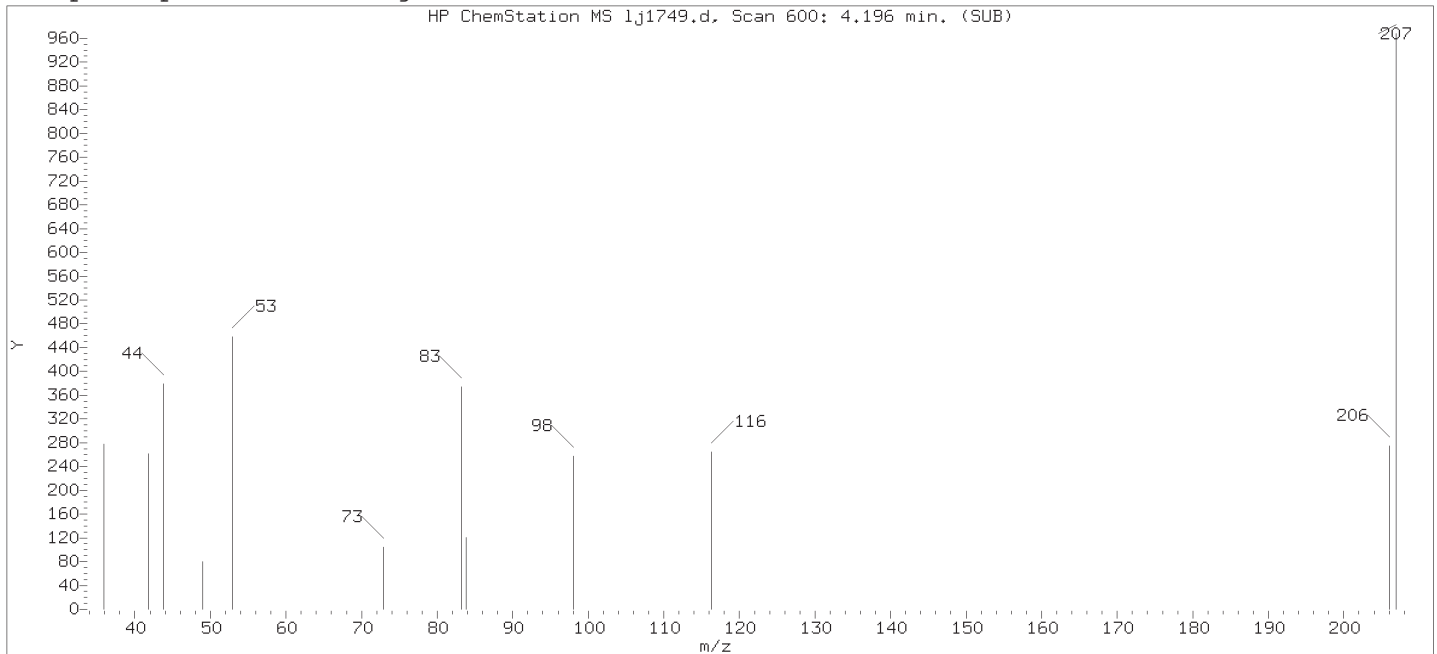
Compound Number    : 8  
Compound Name    : 2-Picoline  
Scan Number    : 607  
Retention Time (minutes)                                   : 4.233  
Quant Ion    : 93.00  
Area (flag)     : 8043M  
On-Column Amount (ng/ul)                                : 0.1083  
Integration start scan                                      : 602                      Integration stop scan: 652  
Y at integration start                                      : 0                        Y at integration end: 0

Reason for manual integration: improper integration

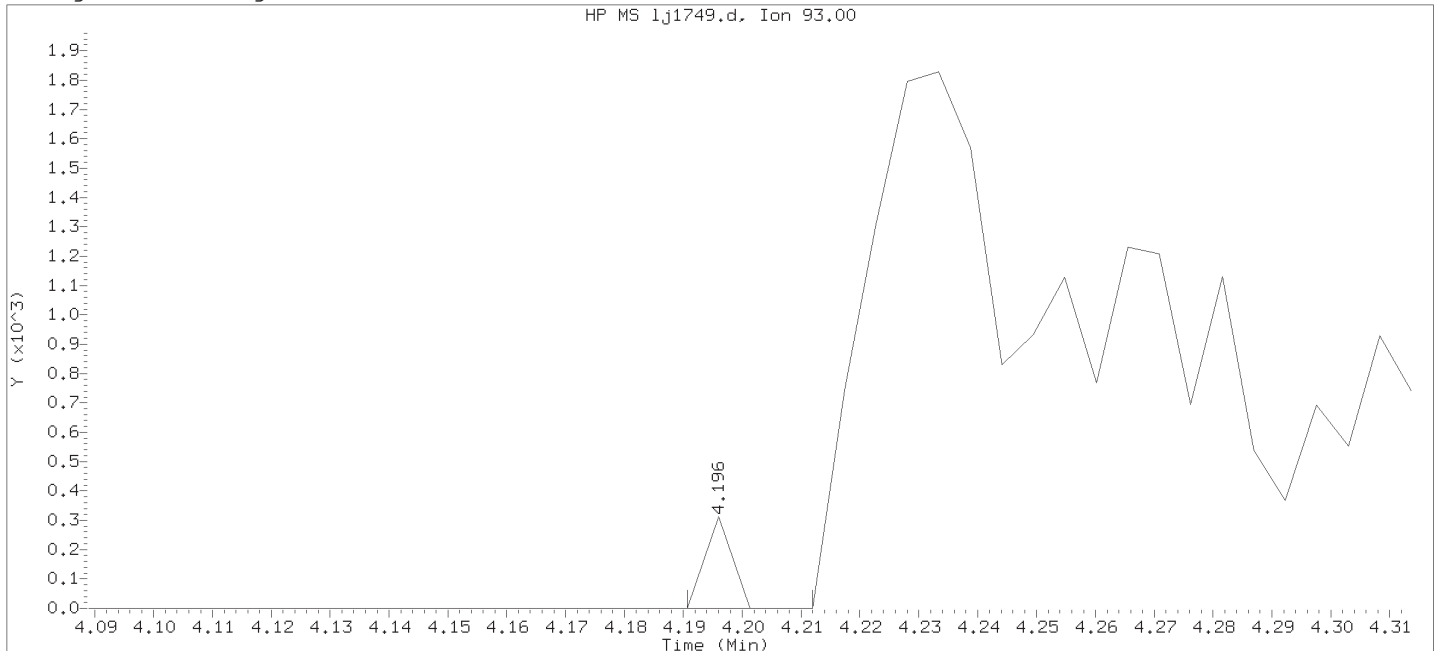
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
 Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: mdlall1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

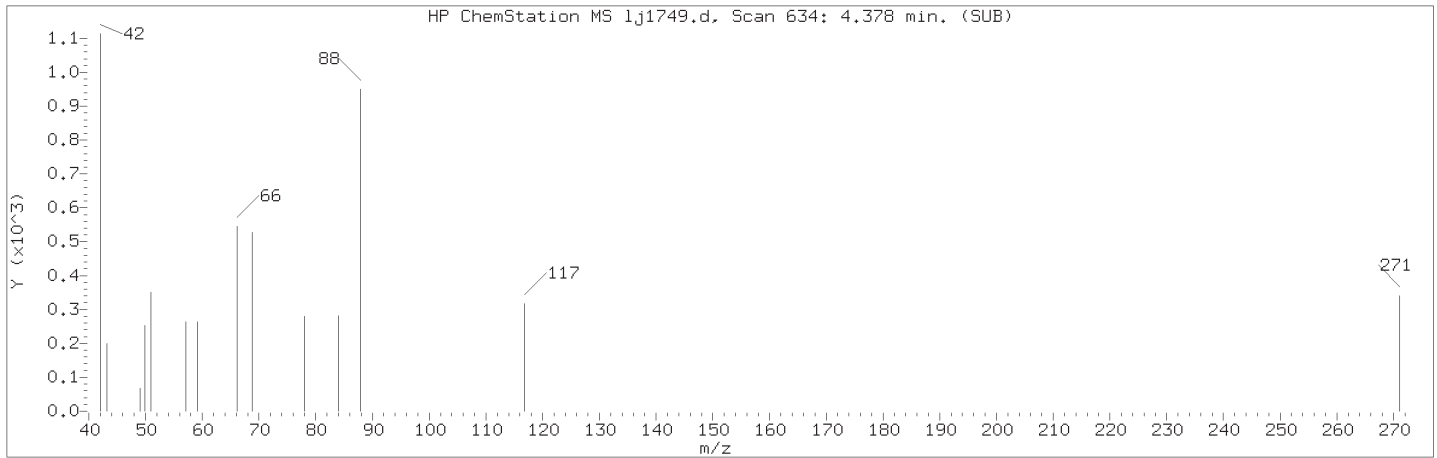
Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

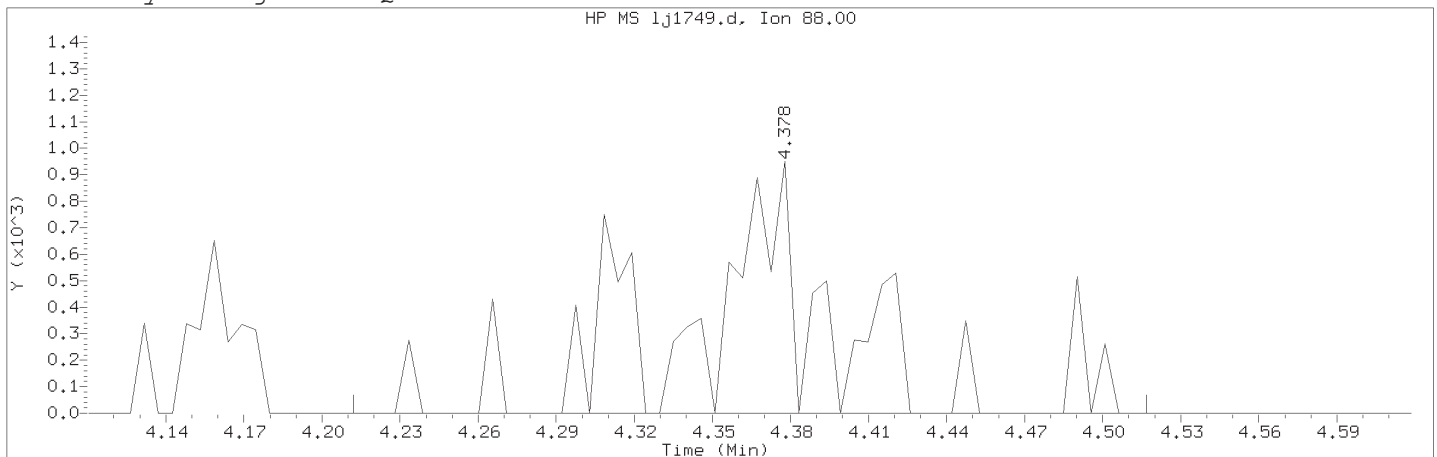
```

Compound Number      : 8
Compound Name       : 2-Picoline
Scan Number         : 600
Retention Time (minutes) : 4.196
Quant Ion           : 93.00
Area                : 100
On-column Amount (ng/ul) : 0.0014
Integration start scan : 598      Integration stop scan: 602
Y at integration start : 0        Y at integration end: 0
    
```

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

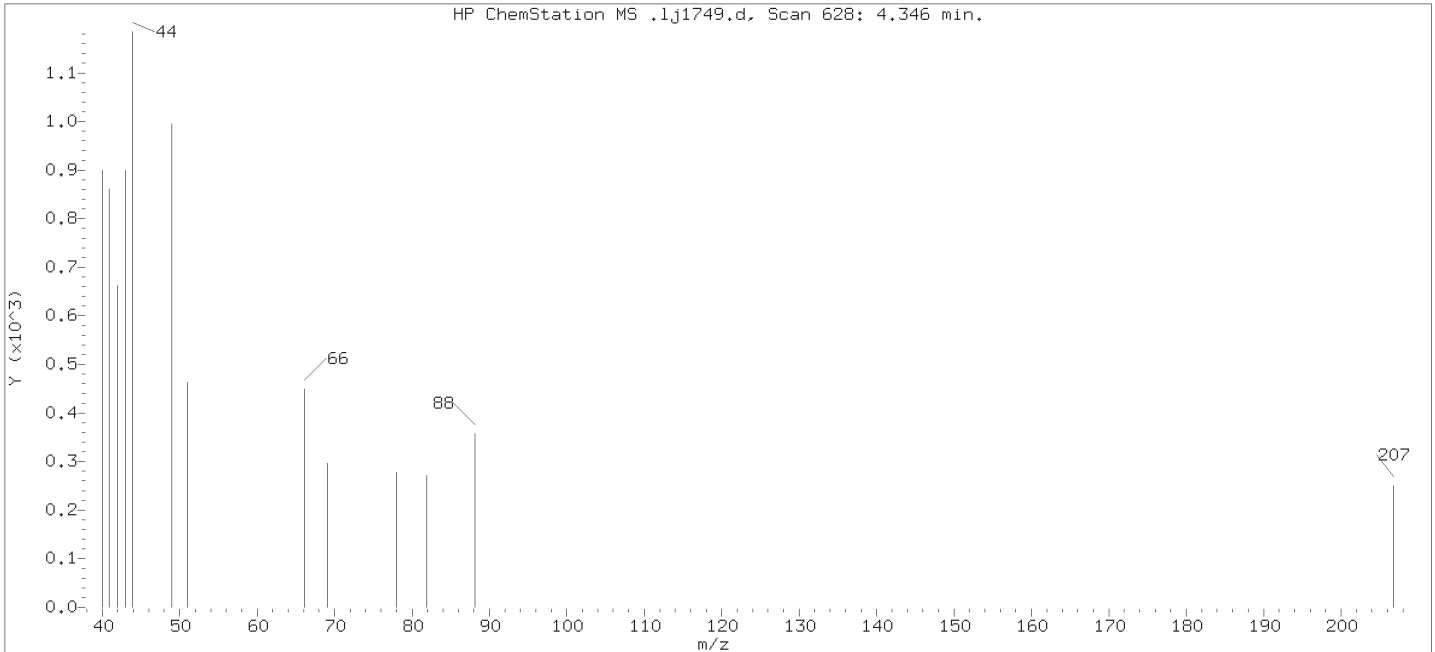
Compound Number    : 9  
Compound Name    : N-Nitrosomethylethylamine  
Scan Number    : 634  
Retention Time (minutes)                                   : 4.378  
Quant Ion    : 88.00  
Area (flag)    : 3534M  
On-Column Amount (ng/ul)                                 : 0.1165  
Integration start scan                                      : 602                      Integration stop scan: 659  
Y at integration start                                      : 0                        Y at integration end: 0

Reason for manual integration: missed peak

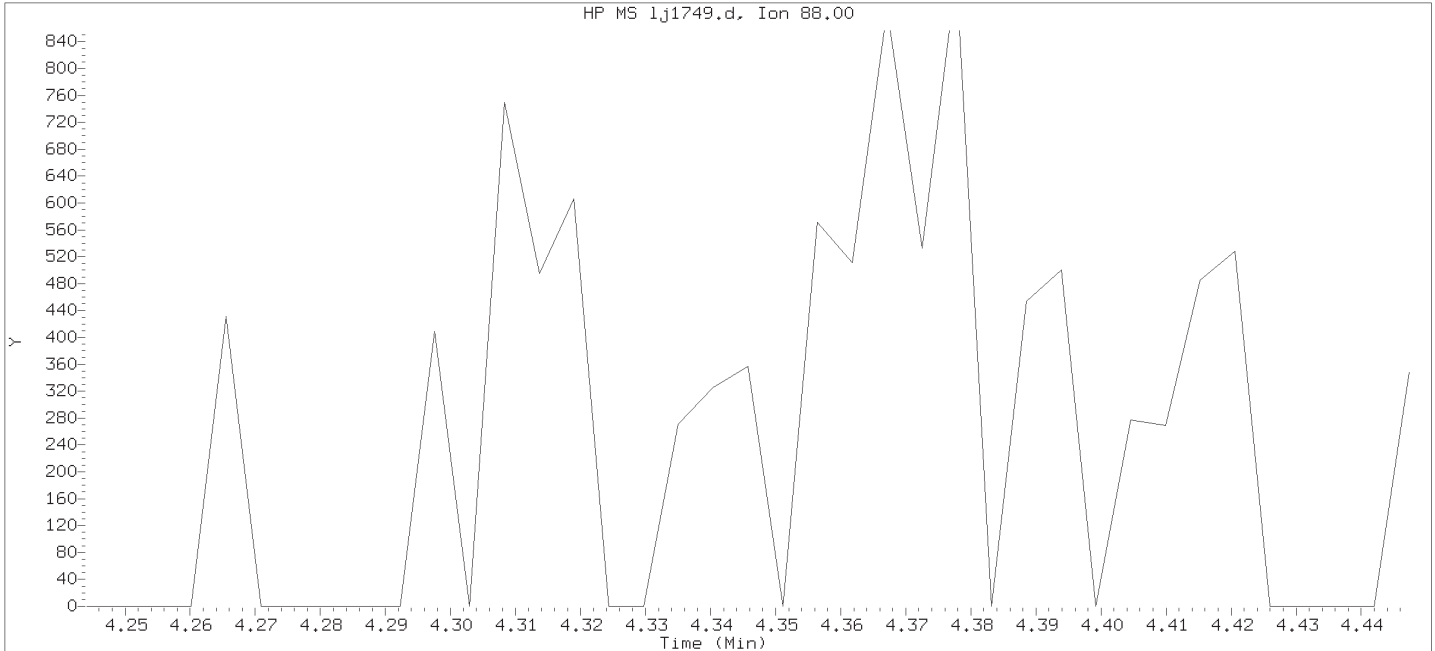
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

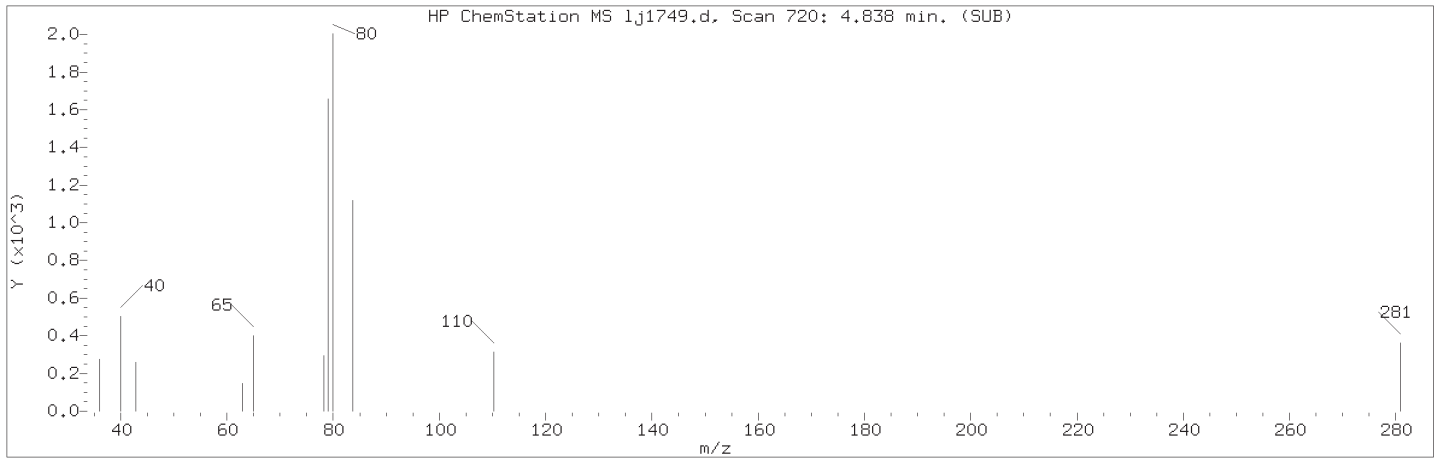
Sublist used: mdlall1

Sample Name: SSTDO.125

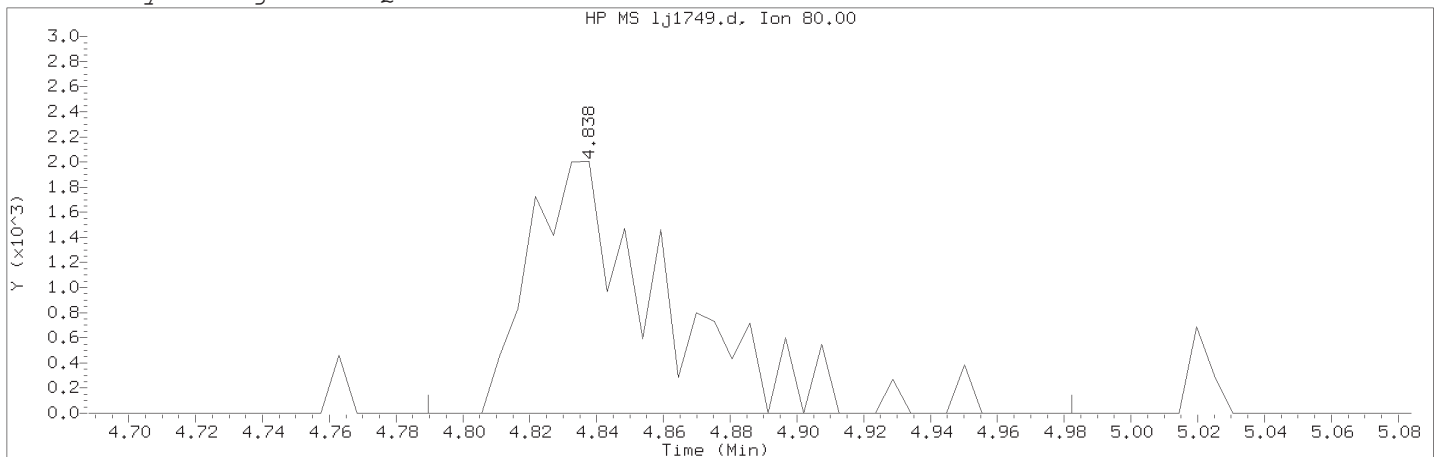
Lab Sample ID: RVSTD2648

Compound Number : 9  
Compound Name : N-Nitrosomethylethylamine  
Expected RT (minutes) : 4.346  
Quant Ion : 88.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sublist used: mdlall1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

Compound Number : 10  
Compound Name : Methyl methanesulfonate  
Scan Number : 720  
Retention Time (minutes) : 4.838  
Quant Ion : 80.00  
Area (flag) : 5681M  
On-Column Amount (ng/ul) : 0.1465  
Integration start scan : 710      Integration stop scan: 746  
Y at integration start : 0      Y at integration end: 0

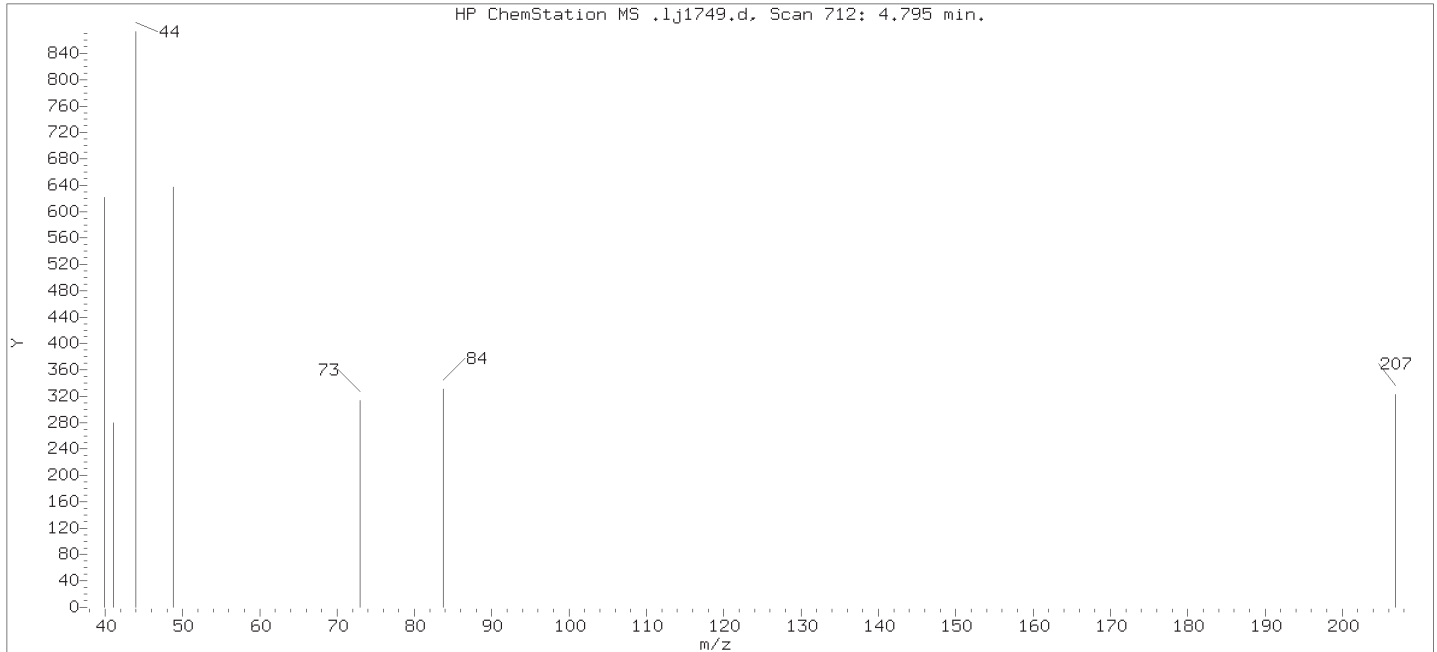
Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

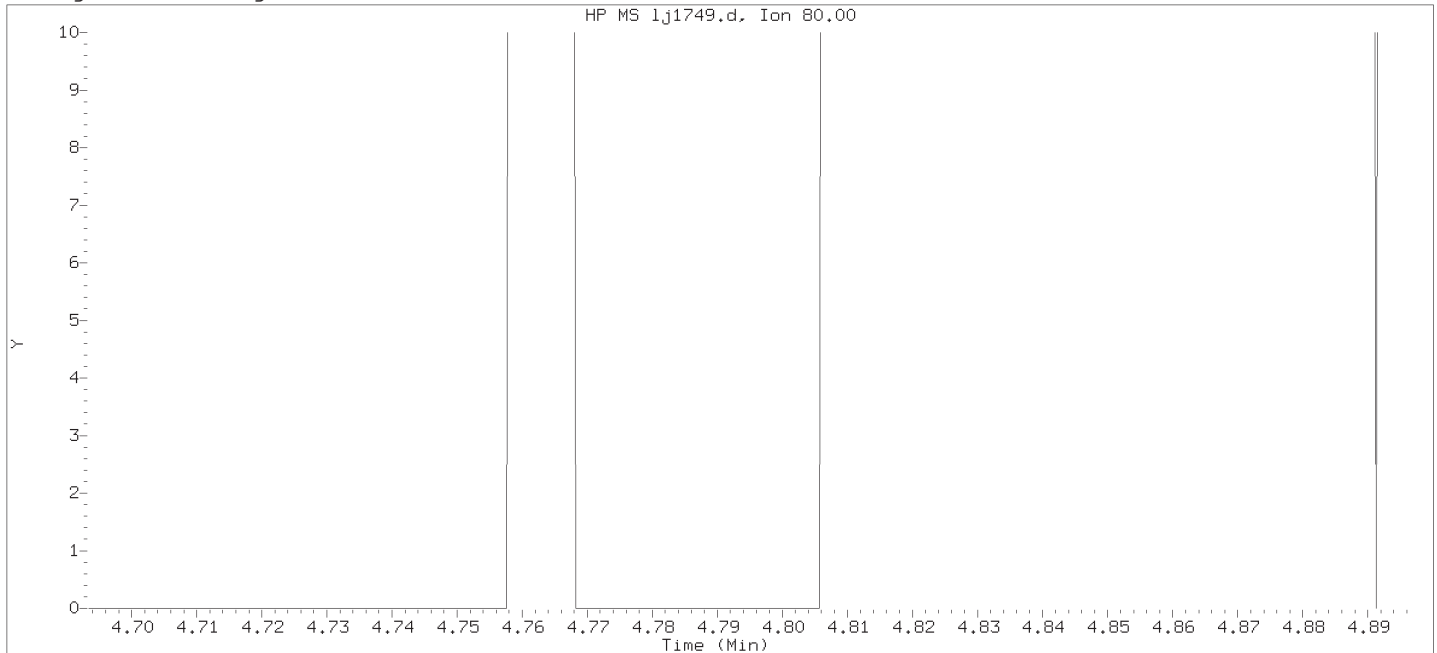
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745



Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

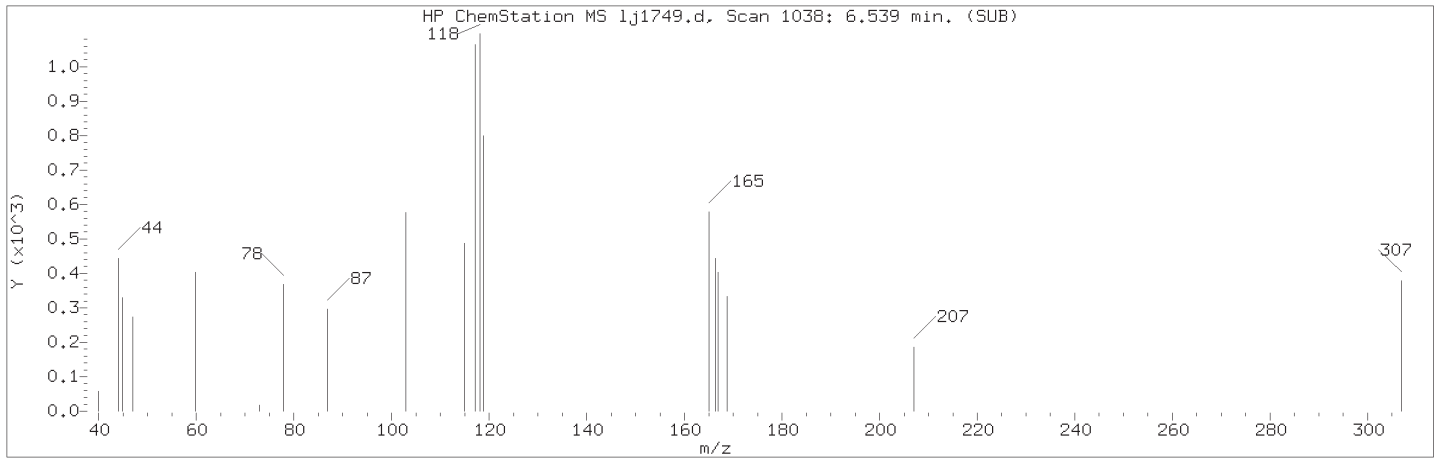
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

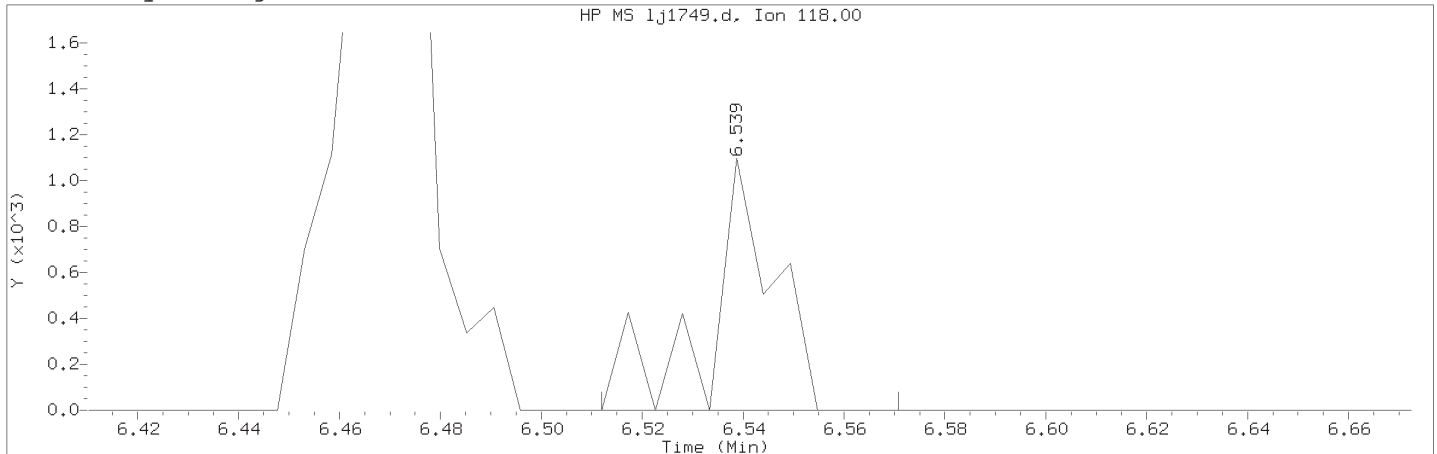
Lab Sample ID: RVSTD2648

Compound Number : 10  
Compound Name : Methyl methanesulfonate  
Expected RT (minutes) : 4.795  
Quant Ion : 80.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/1j1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

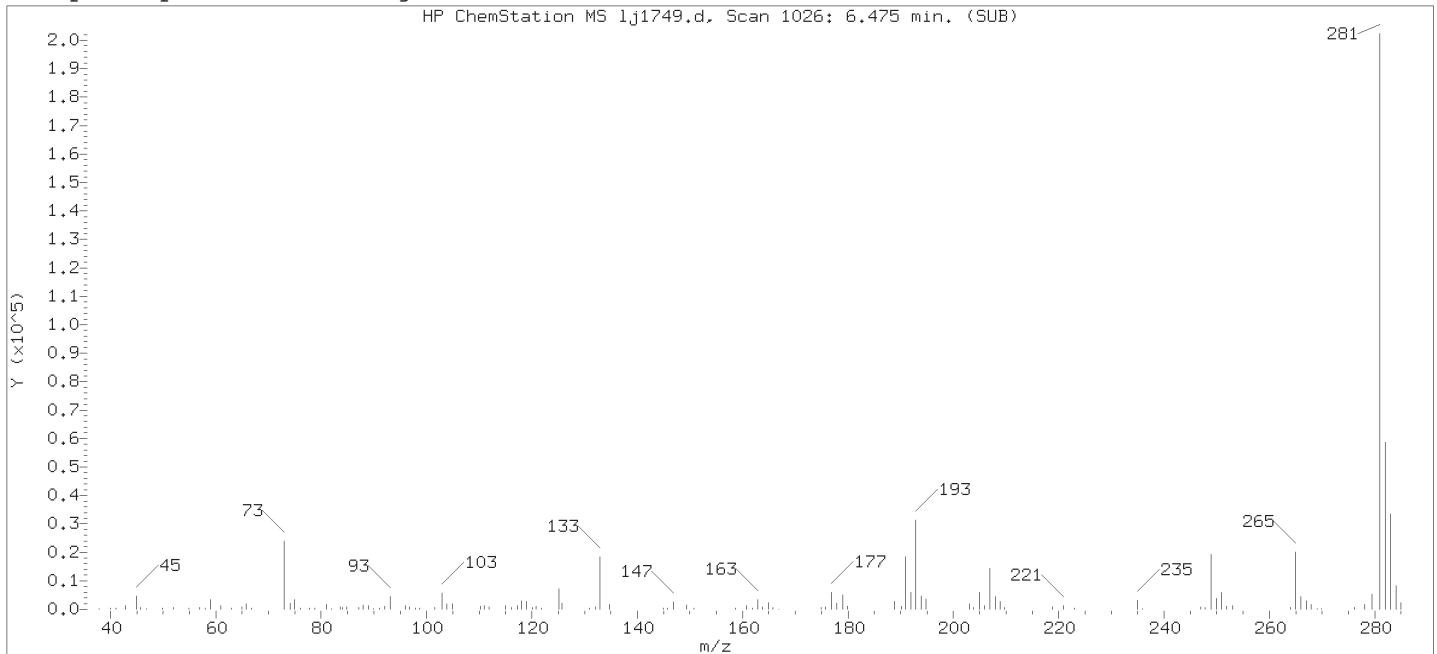
Compound Number    : 21  
Compound Name     : a-methylstyrene  
Scan Number    : 1038  
Retention Time (minutes)                                   : 6.539  
Quant Ion    : 118.00  
Area (flag)     : 991M  
On-Column Amount (ng/ul)                                 : 0.1767  
Integration start scan                                       : 1032                      Integration stop scan: 1043  
Y at integration start                                        : 0                              Y at integration end: 0

Reason for manual integration: improper integration

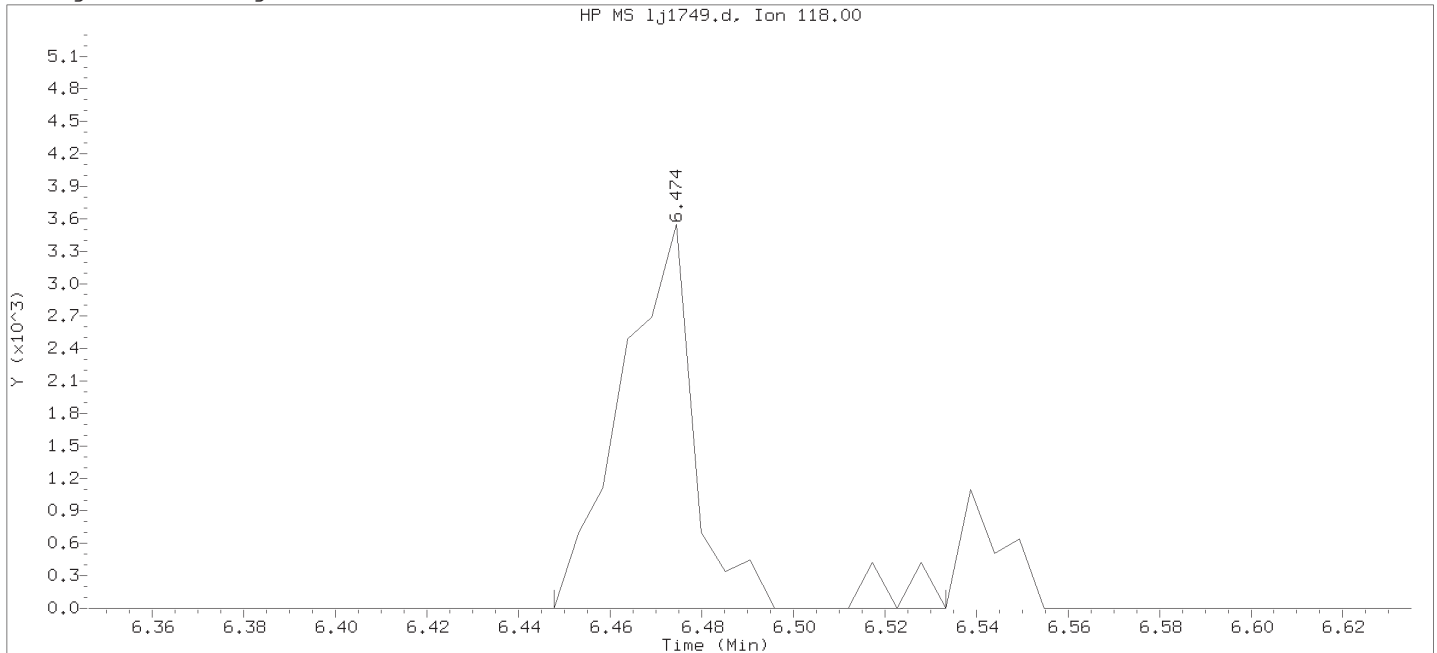
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
 Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
 Analyst ID: whs02991

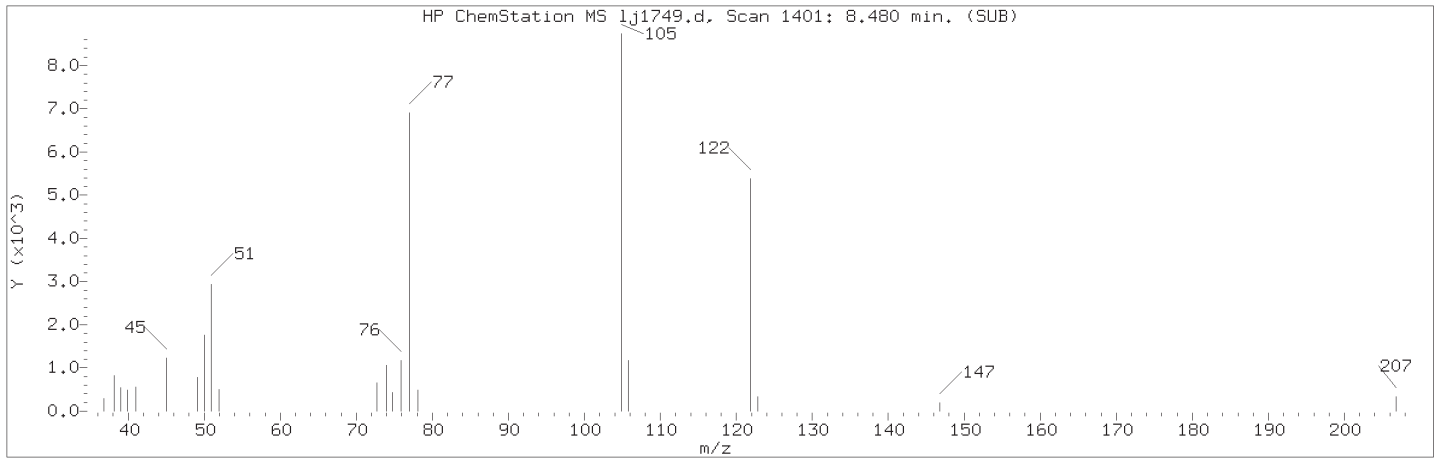
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: mdlall1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125

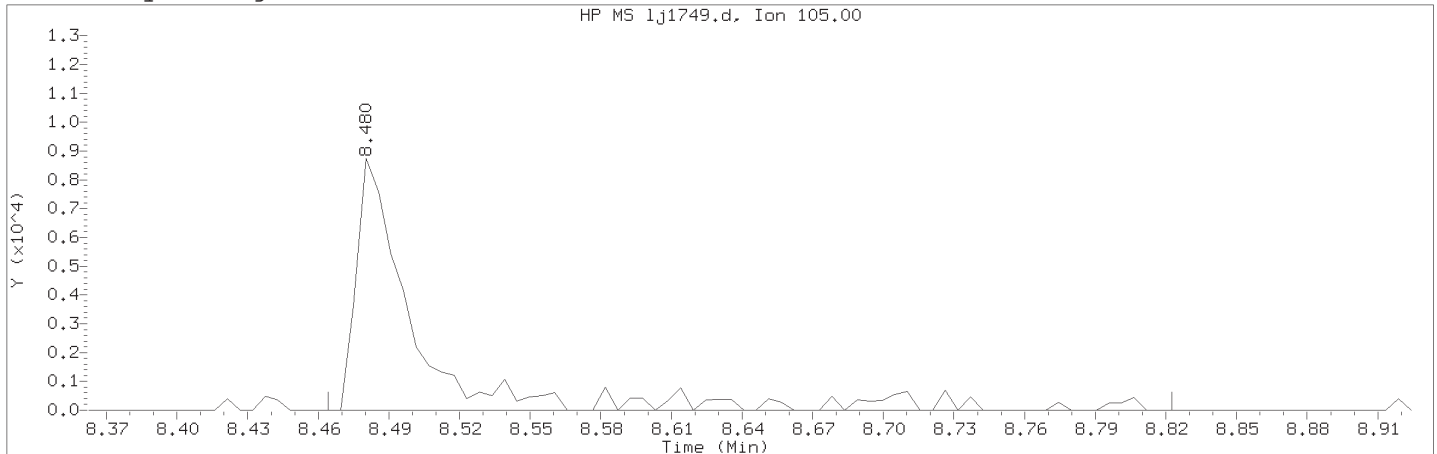
Lab Sample ID: RVSTD2648

Compound Number : 21  
 Compound Name : a-methylstyrene  
 Scan Number : 1026  
 Retention Time (minutes) : 6.474  
 Quant Ion : 118.00  
 Area : 4131  
 On-column Amount (ng/ul) : 0.7330  
 Integration start scan : 1020      Integration stop scan: 1036  
 Y at integration start : 0      Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

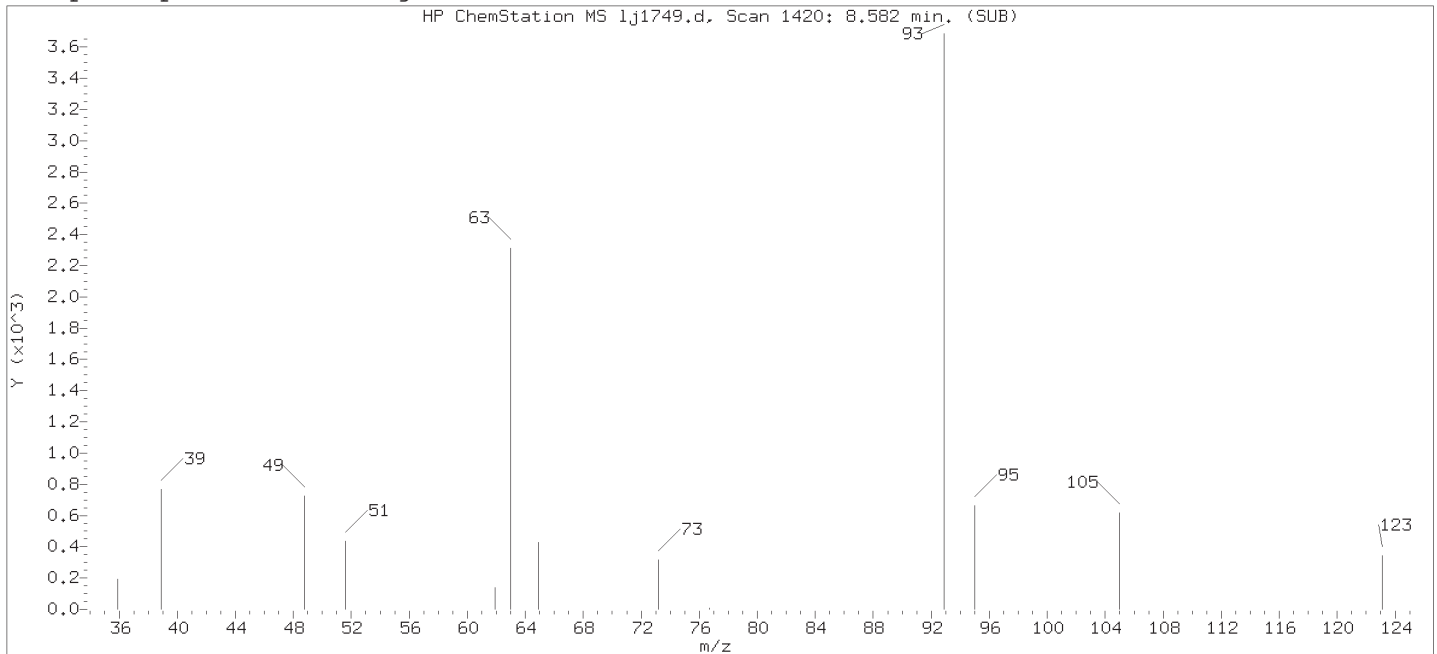
Compound Number    : 58  
Compound Name     : Benzoic acid  
Scan Number    : 1401  
Retention Time (minutes)                                   : 8.480  
Quant Ion    : 105.00  
Area (flag)     : 16027M  
On-Column Amount (ng/ul)                                 : 0.3858  
Integration start scan                                       : 1397                      Integration stop scan: 1464  
Y at integration start                                       : 0                           Y at integration end: 0

Reason for manual integration: improper integration

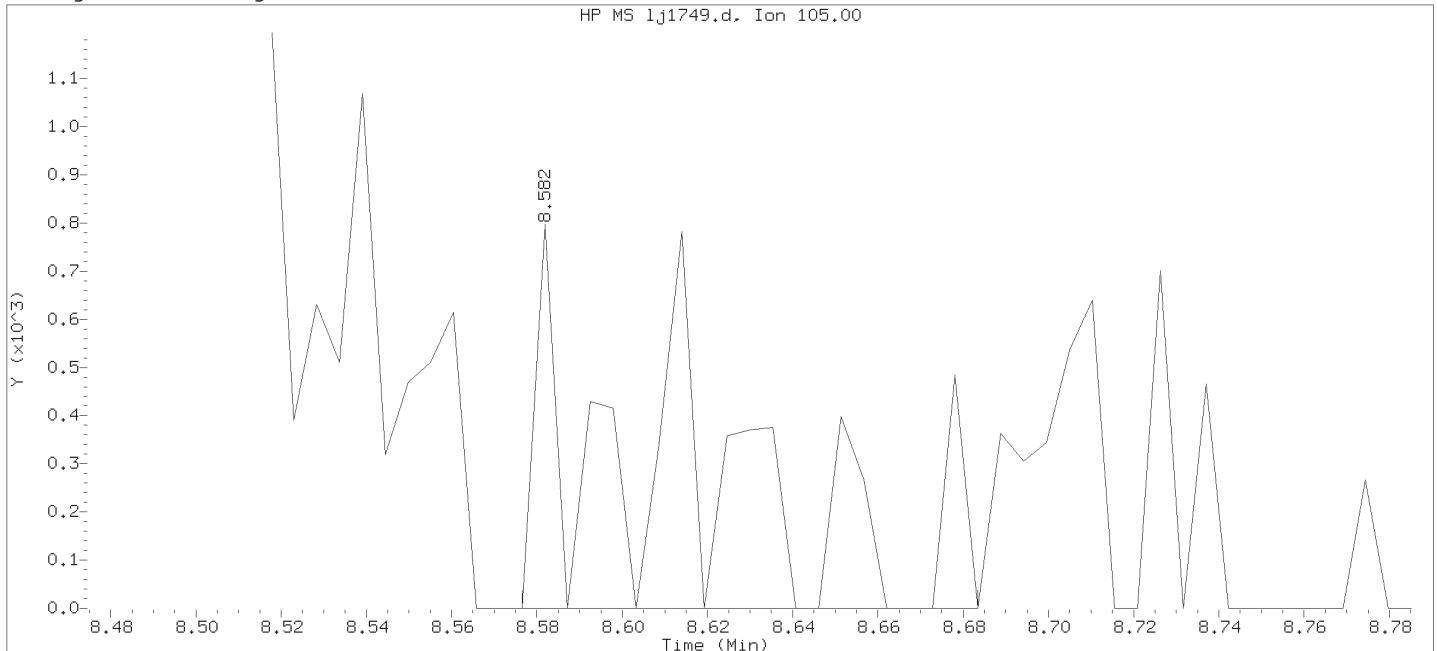
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



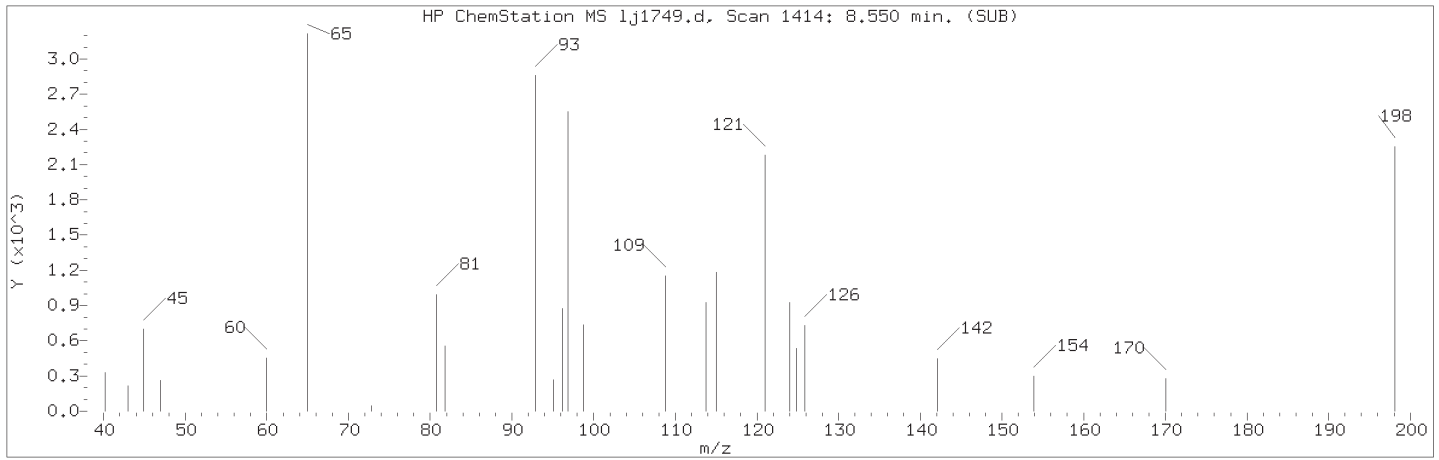
Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

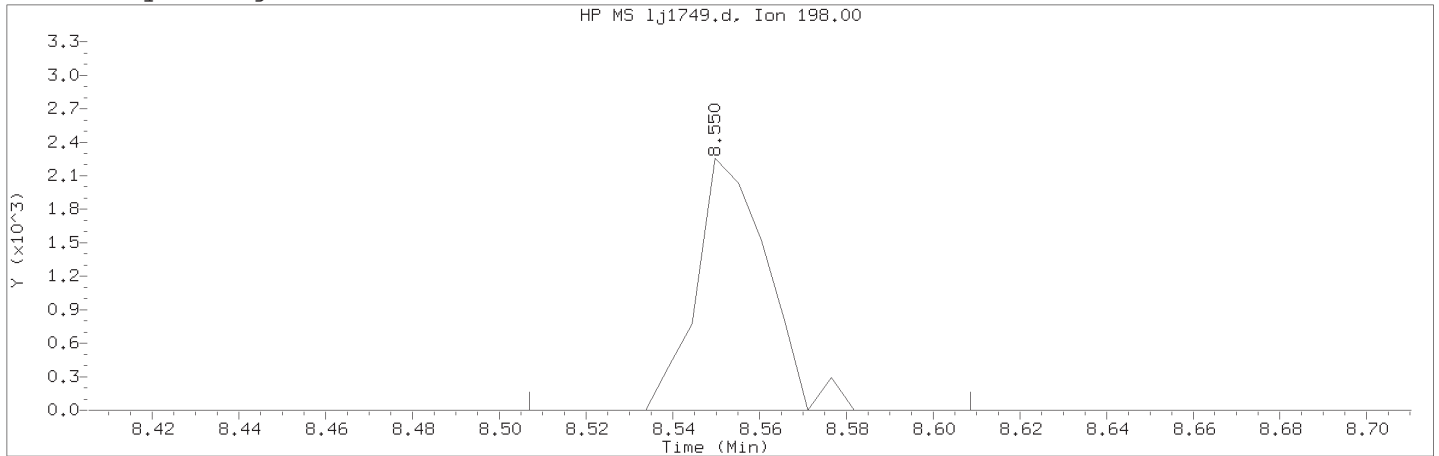
Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 58  
Compound Name    : Benzoic acid  
Scan Number    : 1420  
Retention Time (minutes)                                   : 8.582  
Quant Ion    : 105.00  
Area    : 1610  
On-column Amount (ng/ul)                                 : 0.0486  
Integration start scan                                      : 1418                      Integration stop scan: 1438  
Y at integration start                                       : 0                            Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
 Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

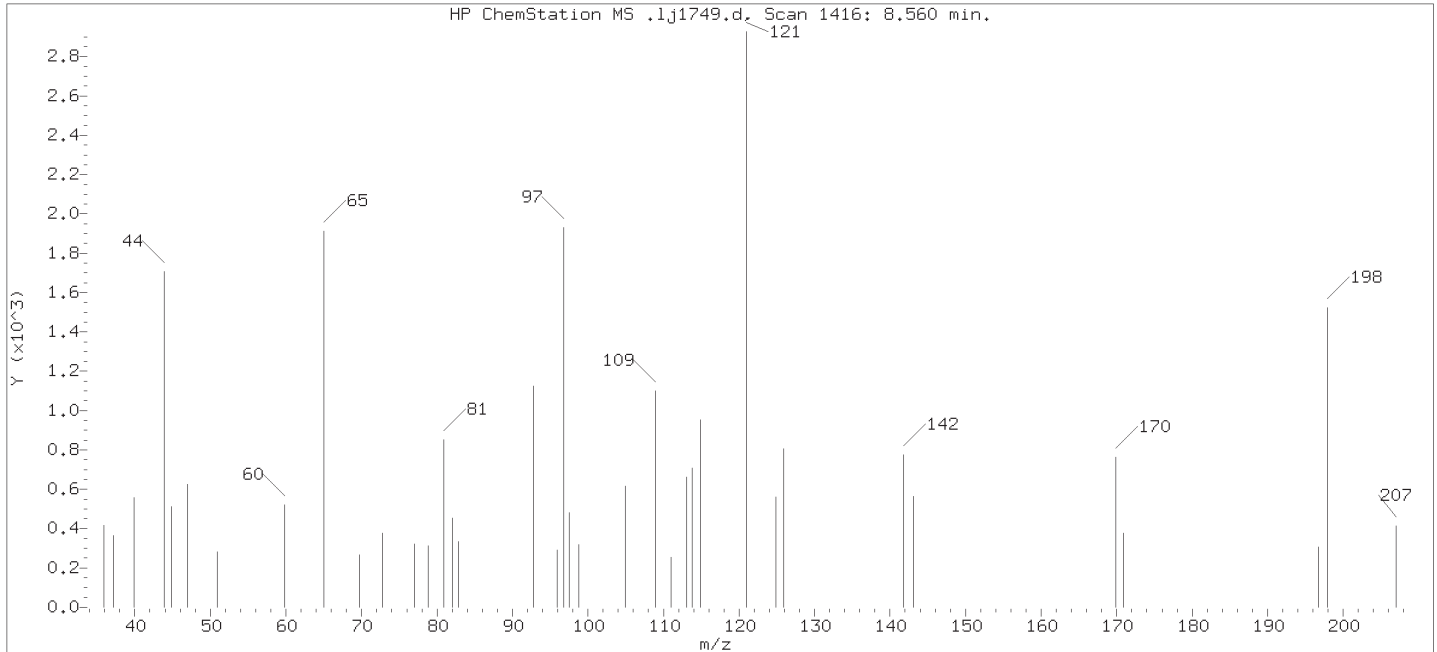
Compound Number    : 59  
 Compound Name    : O,O,O-Triethylphosphorothioate  
 Scan Number    : 1414  
 Retention Time (minutes)                                 : 8.550  
 Quant Ion    : 198.00  
 Area (flag)     : 2586M  
 On-Column Amount (ng/ul)                                : 0.0946  
 Integration start scan                                     : 1405                      Integration stop scan: 1424  
 Y at integration start                                     : 0                            Y at integration end: 0

Reason for manual integration: missed peak

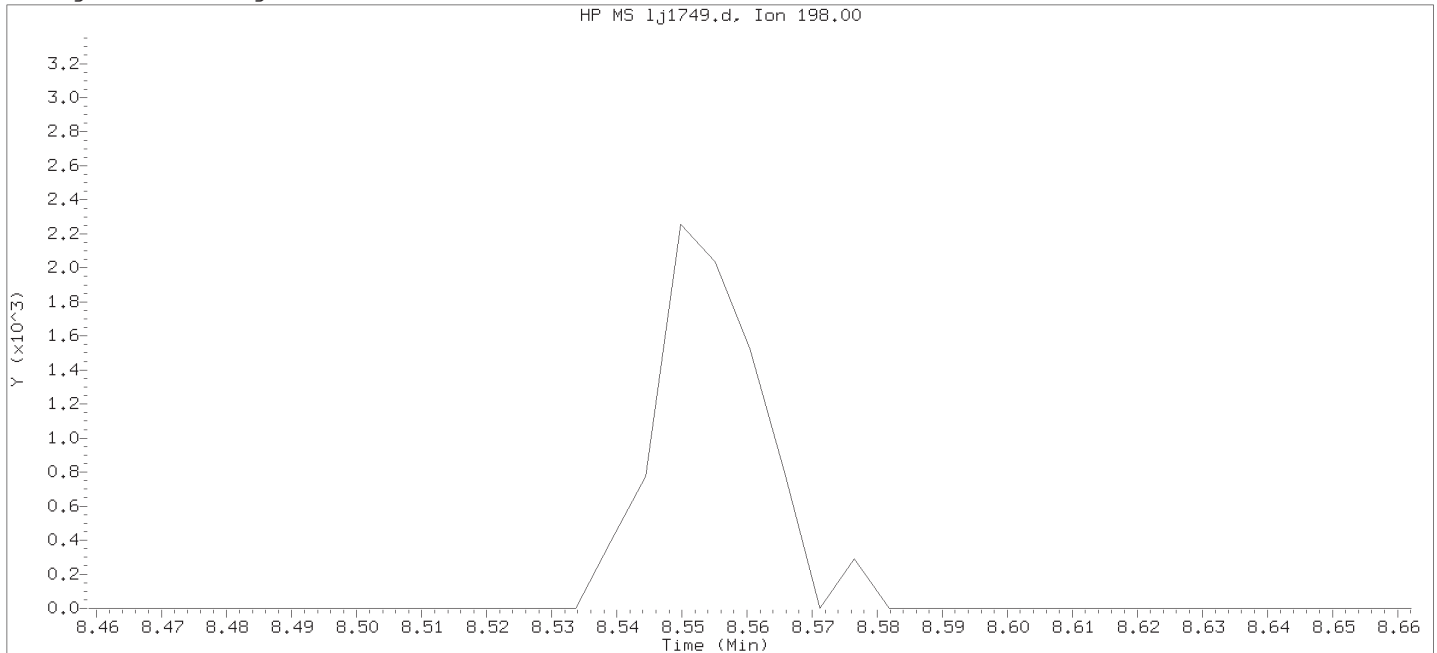
Analyst responsible for change: Digitally signed by Kira N. Beck  
 on 10/30/2018 at 13:32.  
 Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
 PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

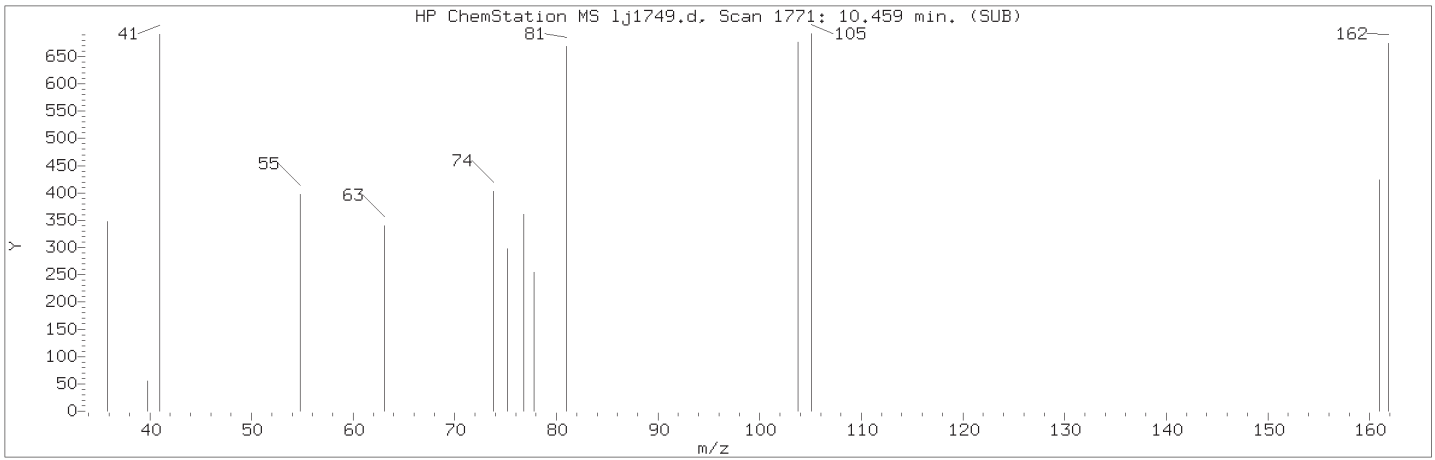
Sublist used: mdlall1

Sample Name: SSTD0.125

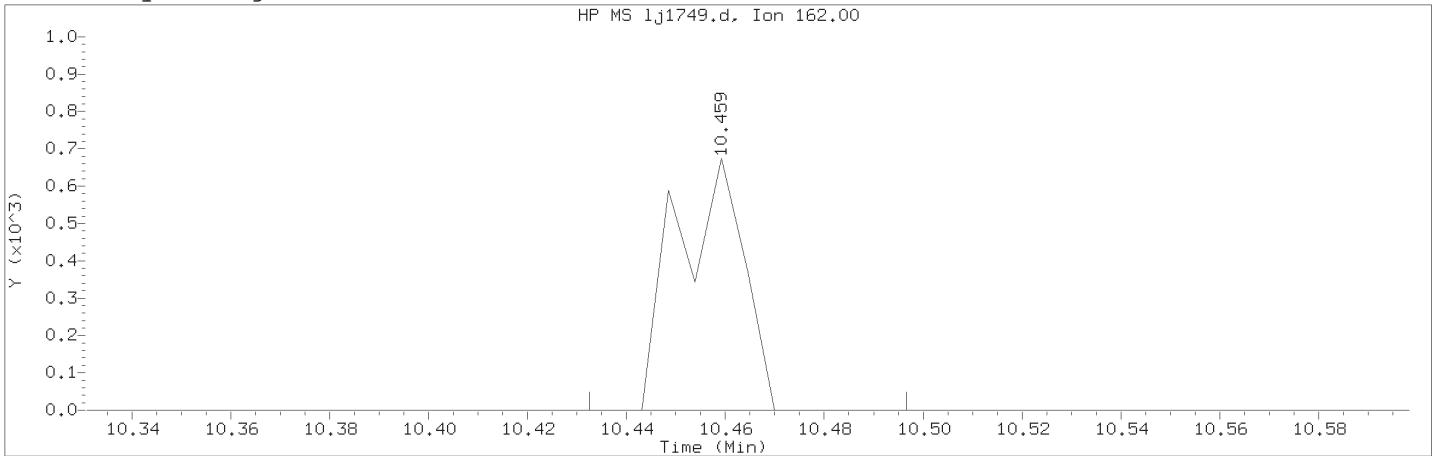
Lab Sample ID: RVSTD2648

Compound Number : 59  
Compound Name : O,O,O-Triethylphosphorothioate  
Expected RT (minutes) : 8.561  
Quant Ion : 198.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 91  
Compound Name     : cis-Isosafrole  
Scan Number    : 1771  
Retention Time (minutes)                                   : 10.459  
Quant Ion    : 162.00  
Area (flag)     : 633M  
On-Column Amount (ng/ul)                                 : 0.0142  
Integration start scan                                       : 1765                      Integration stop scan: 1777  
Y at integration start                                       : 0                              Y at integration end: 0

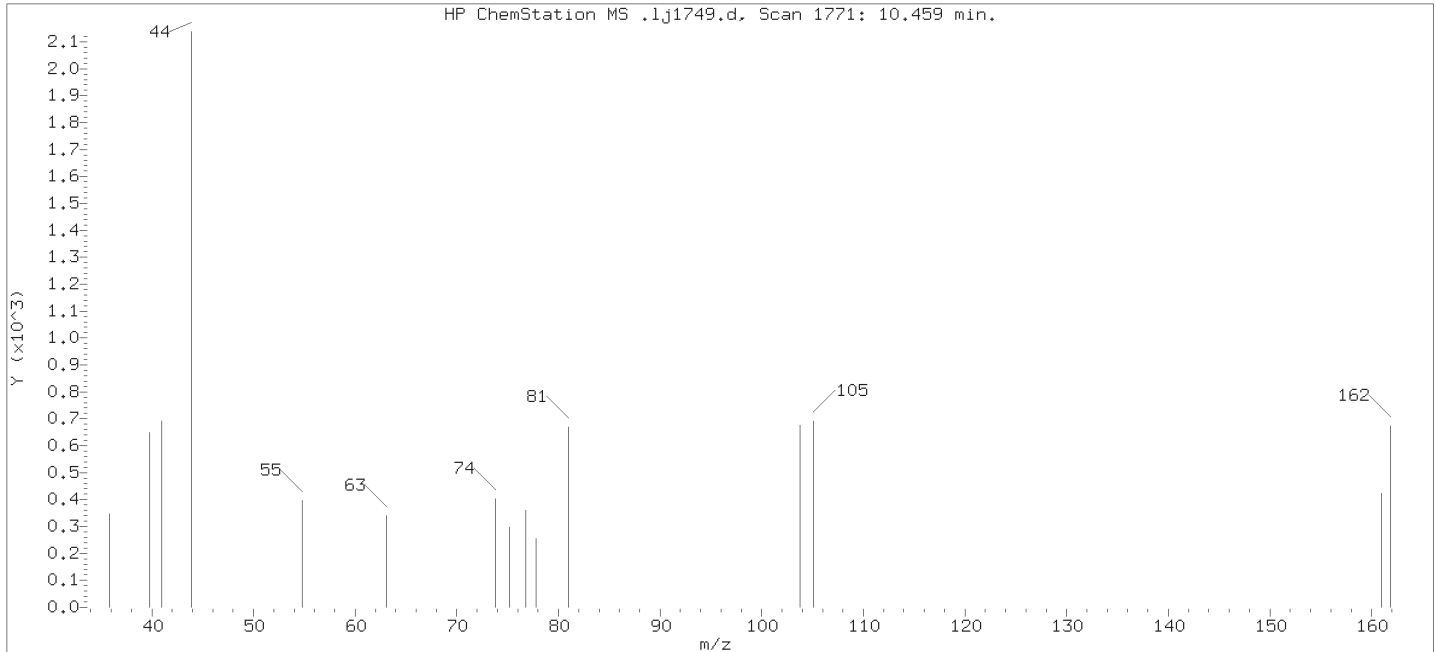
Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

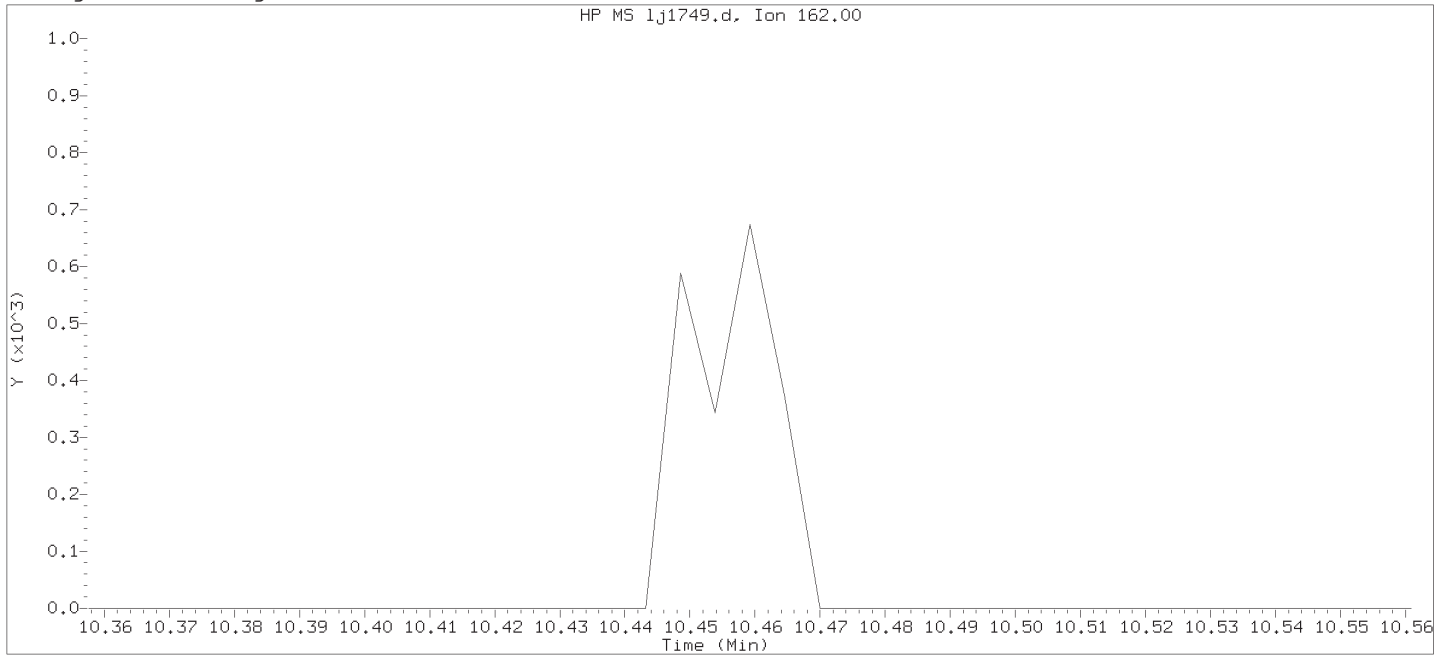
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745



Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

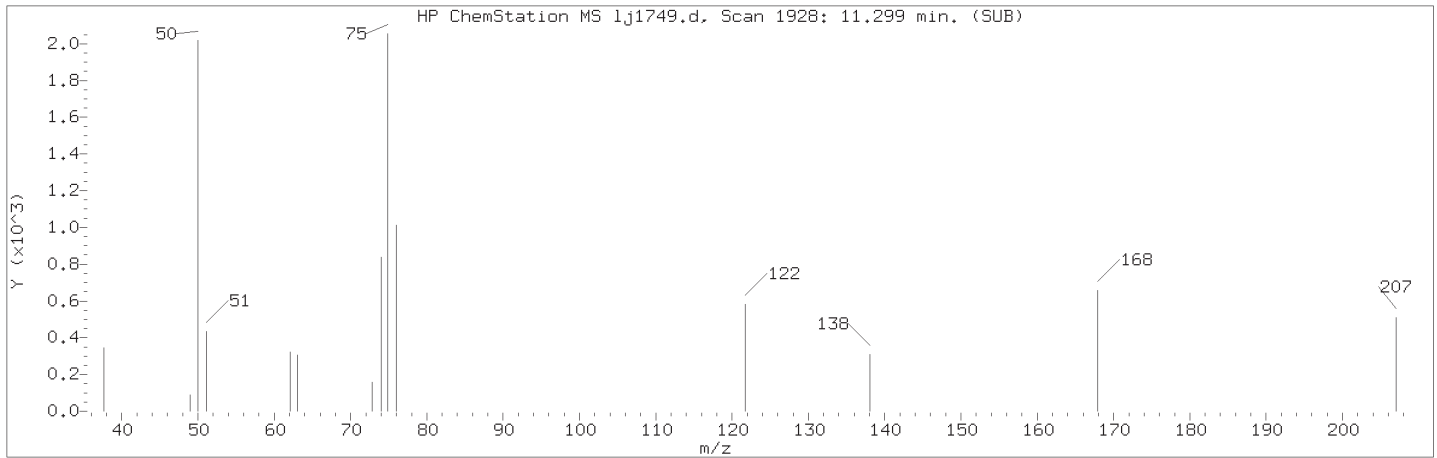
Sublist used: mdlall1

Sample Name: SSTDO.125

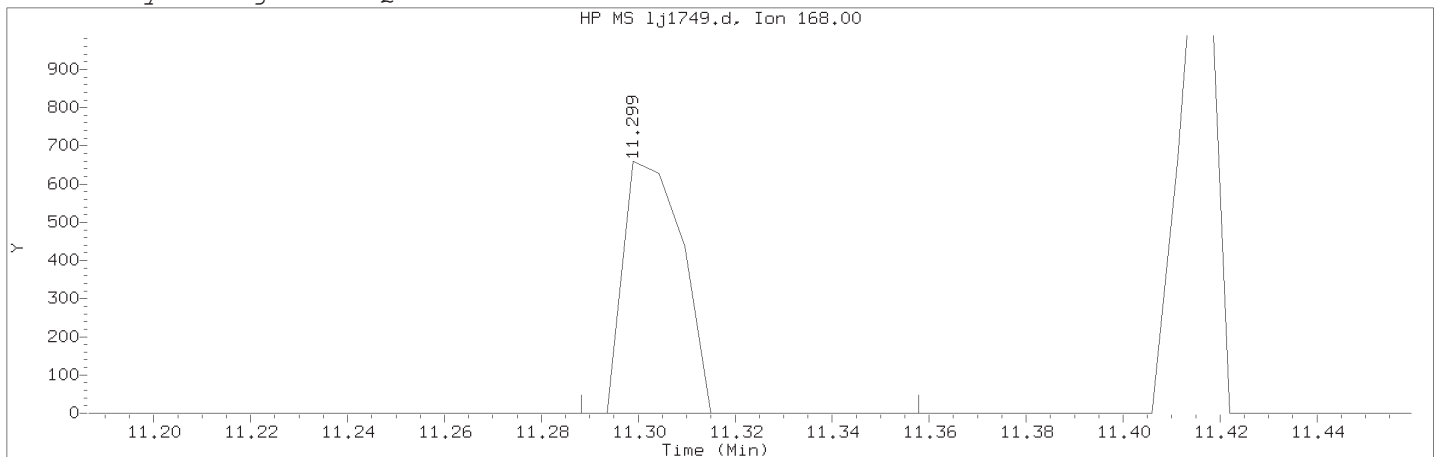
Lab Sample ID: RVSTD2648

Compound Number : 91  
Compound Name : cis-Isosafrole  
Expected RT (minutes) : 10.459  
Quant Ion : 162.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

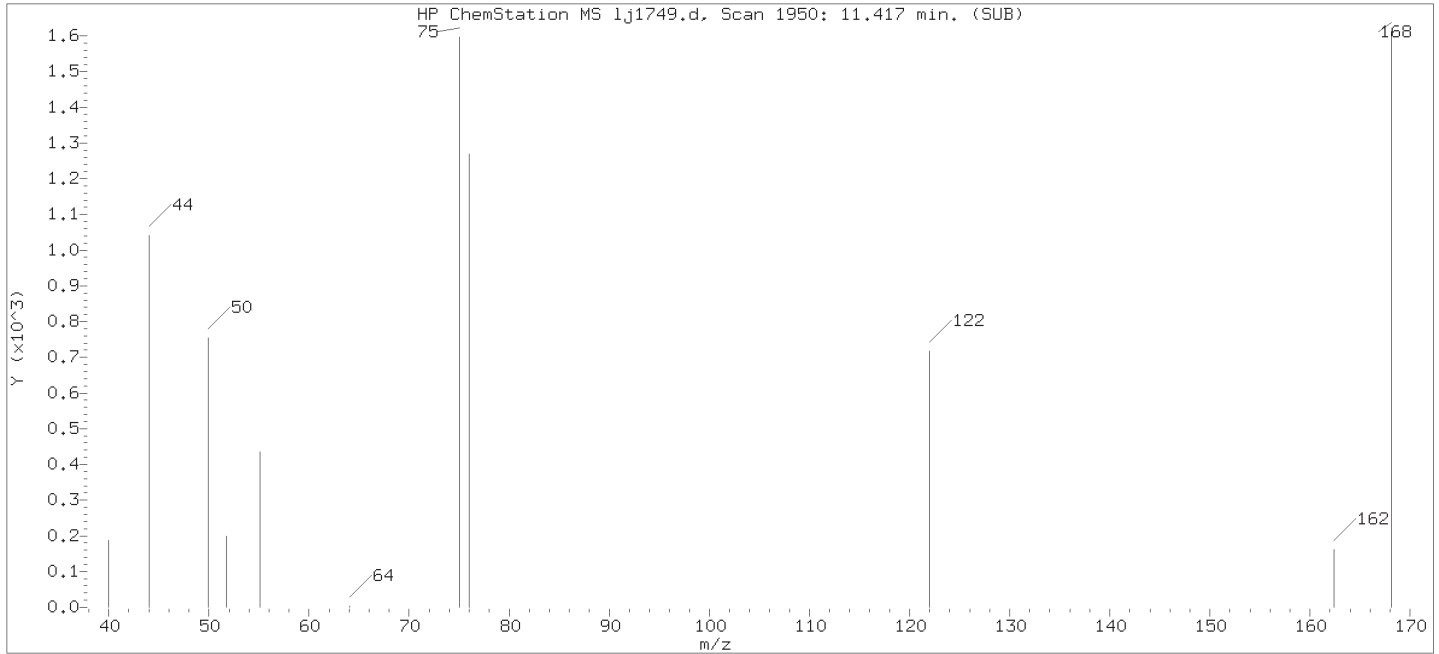
Compound Number    : 109  
Compound Name    : 1,4-Dinitrobenzene  
Scan Number    : 1928  
Retention Time (minutes)                                   : 11.299  
Quant Ion    : 168.00  
Area (flag)    : 552M  
On-Column Amount (ng/ul)                                 : 0.0385  
Integration start scan                                     : 1925                      Integration stop scan: 1938  
Y at integration start                                     : 0                           Y at integration end: 0

Reason for manual integration: improper integration

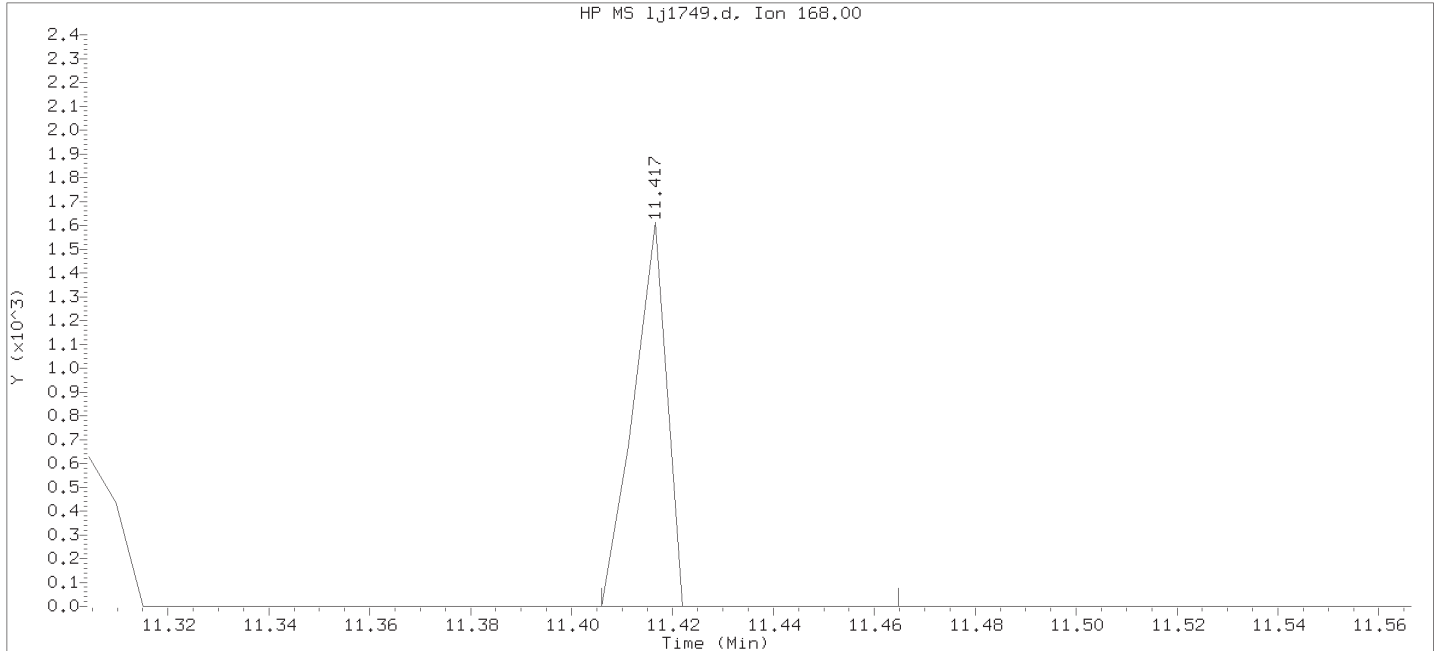
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

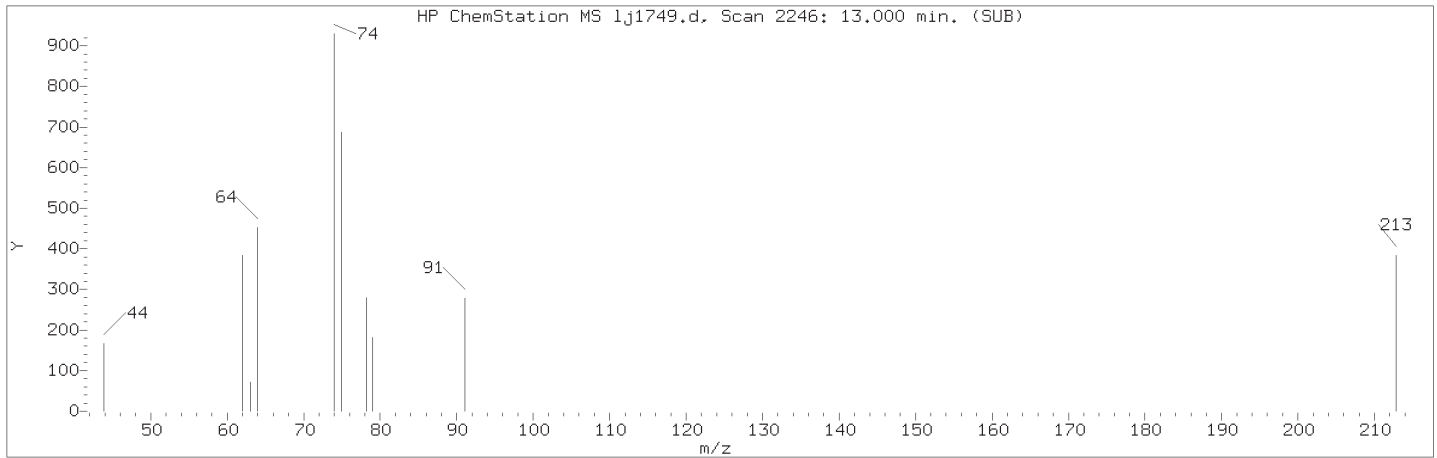
Sublist used: mdlall1

Sample Name: SSTD0.125

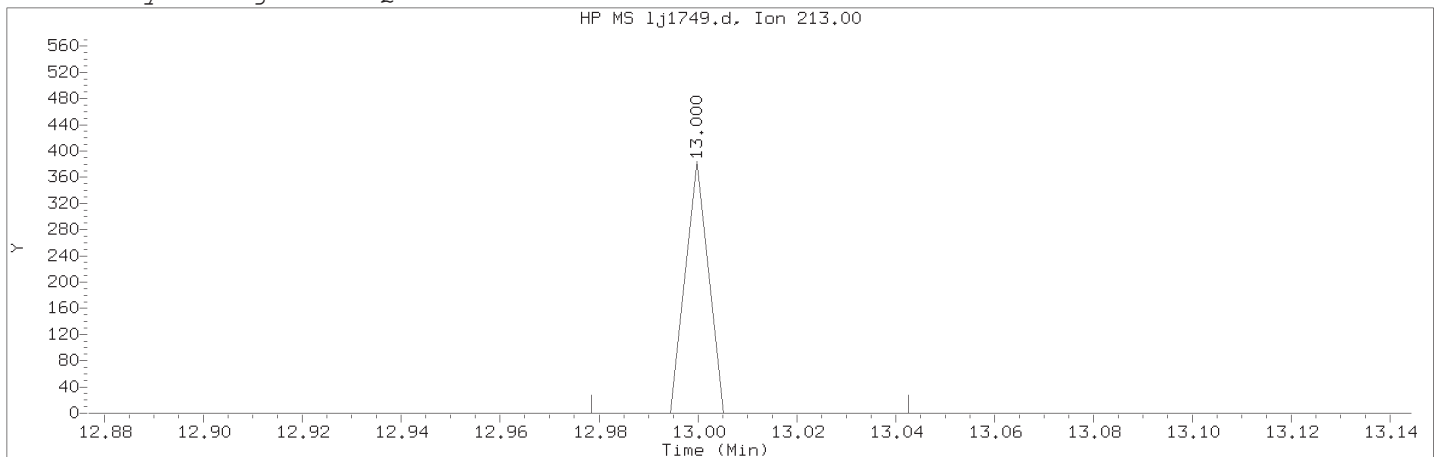
Lab Sample ID: RVSTD2648

Compound Number : 109  
Compound Name : 1,4-Dinitrobenzene  
Scan Number : 1950  
Retention Time (minutes) : 11.417  
Quant Ion : 168.00  
Area : 732  
On-column Amount (ng/ul) : 0.0503  
Integration start scan : 1947 Integration stop scan: 1958  
Y at integration start : 0 Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

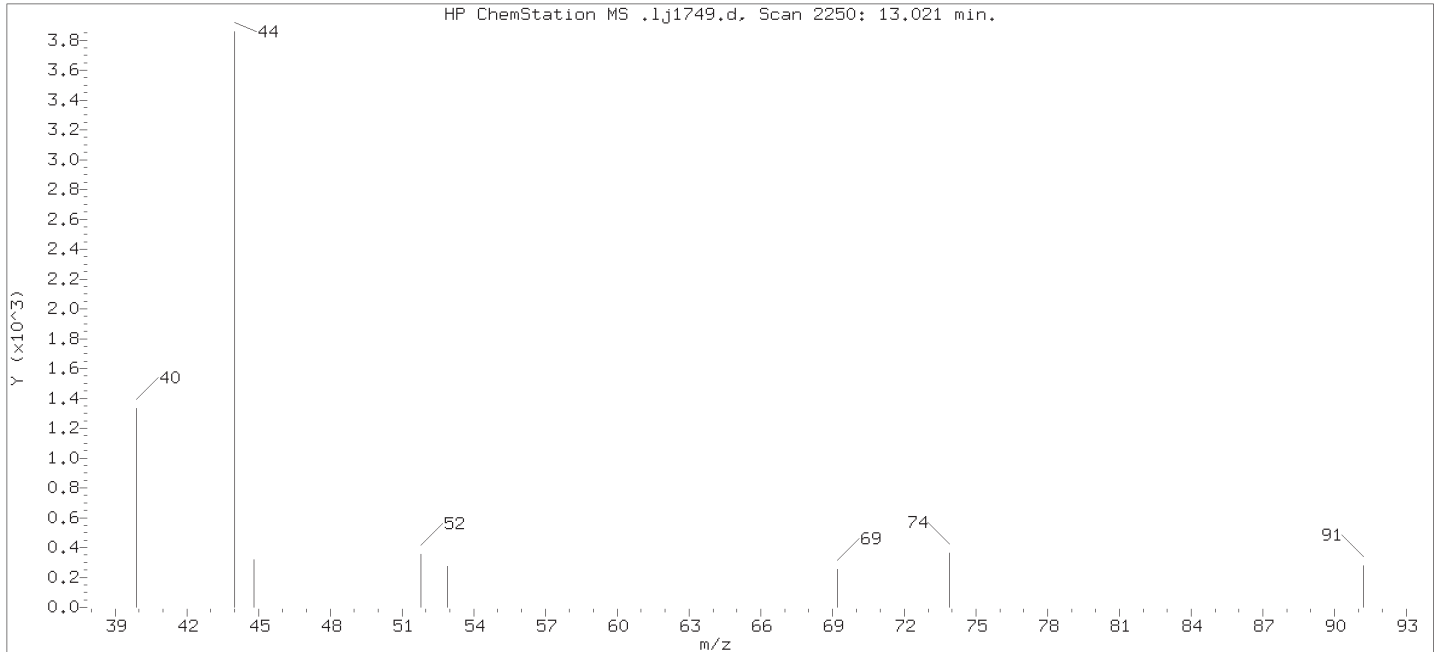
Compound Number    : 144  
Compound Name     : 1,3,5-Trinitrobenzene  
Scan Number    : 2246  
Retention Time (minutes)                                   : 13.000  
Quant Ion    : 213.00  
Area (flag)    : 123M  
On-Column Amount (ng/ul)                                 : 0.0116  
Integration start scan                                     : 2241                      Integration stop scan: 2253  
Y at integration start                                     : 0                              Y at integration end: 0

Reason for manual integration: missed peak

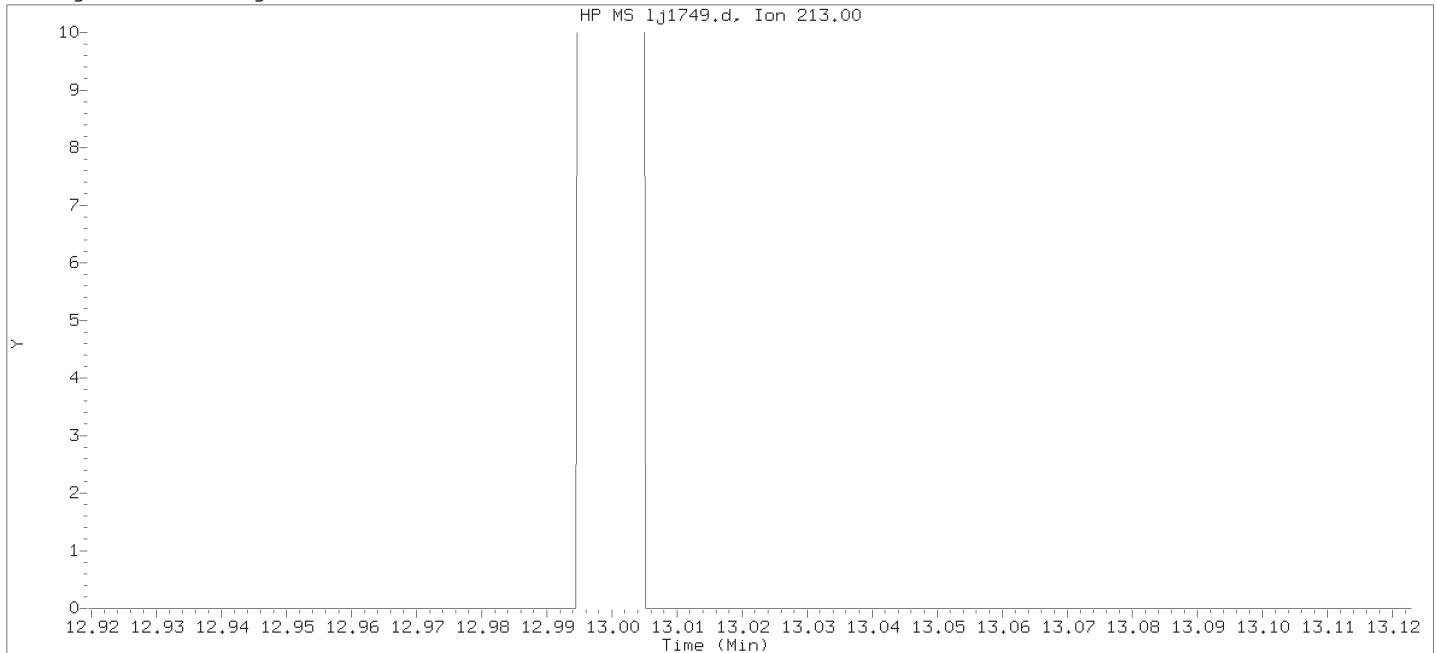
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

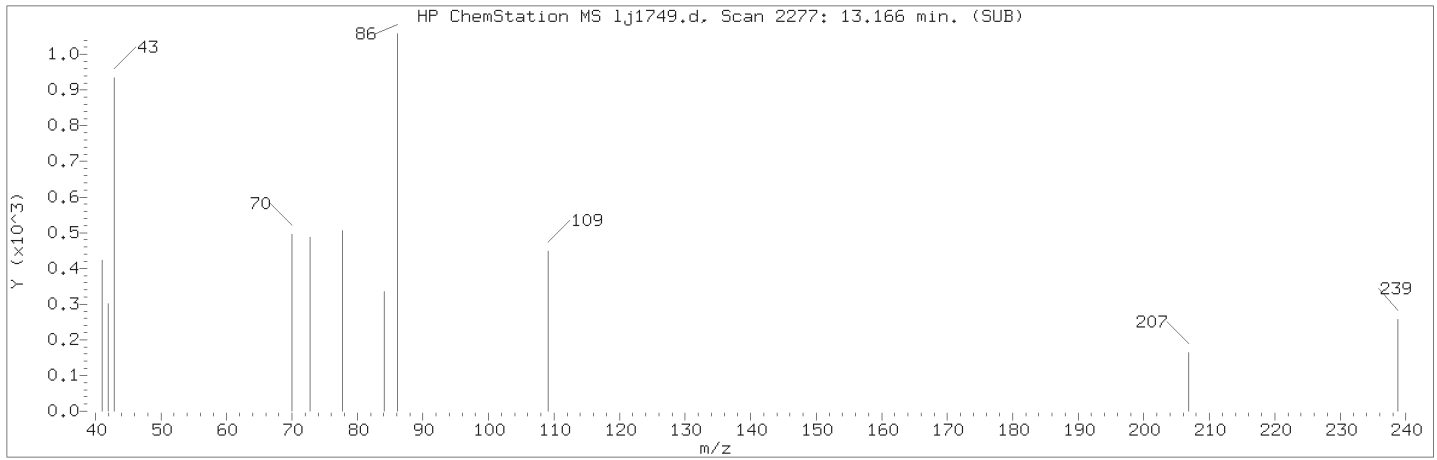
Sublist used: mdlall1

Sample Name: SSTD0.125

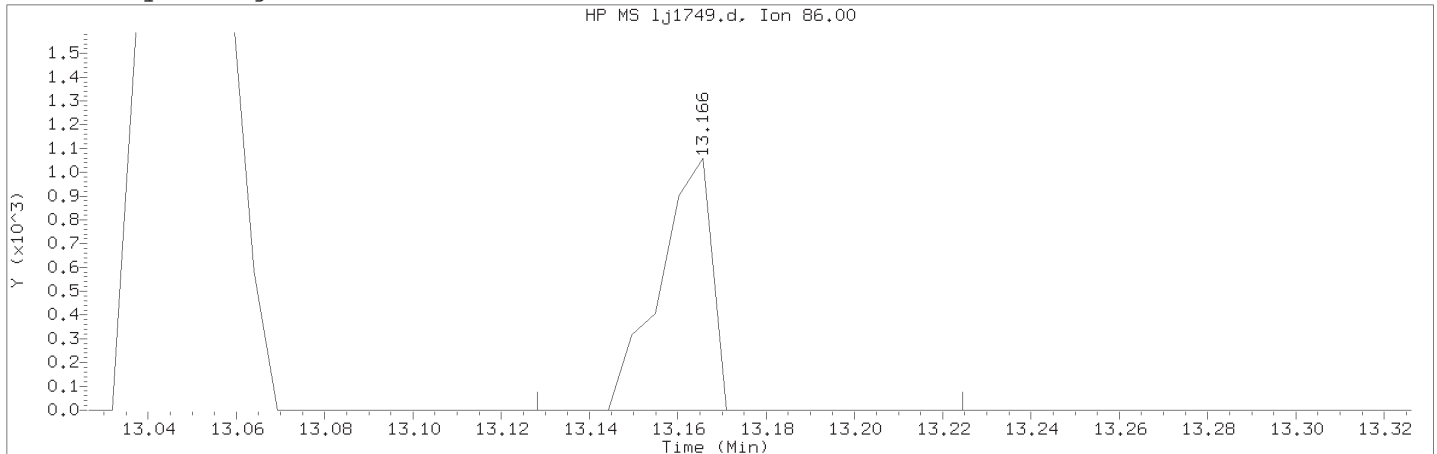
Lab Sample ID: RVSTD2648

Compound Number : 144  
Compound Name : 1,3,5-Trinitrobenzene  
Expected RT (minutes) : 13.021  
Quant Ion : 213.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sublist used: mdlall1

Sample Name: SSTD0.125

Lab Sample ID: RVSTD2648

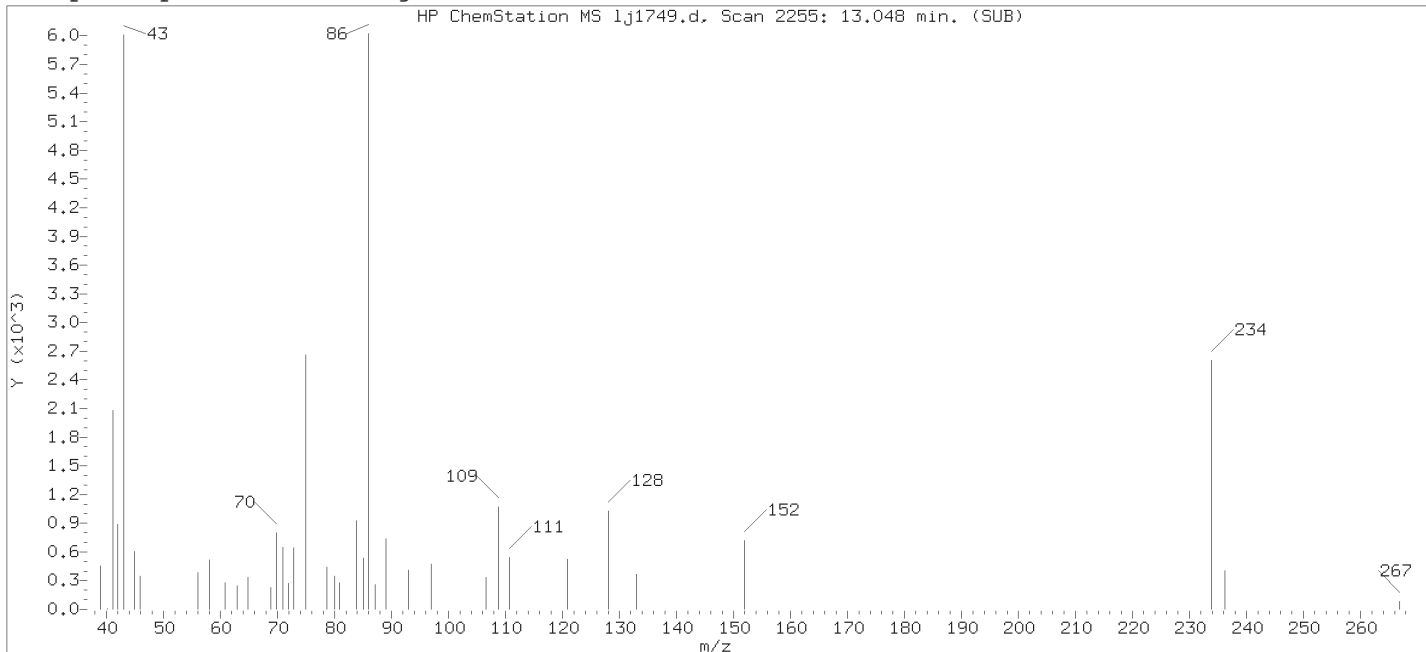
Compound Number : 149  
Compound Name : Diallate (peak 2)  
Scan Number : 2277  
Retention Time (minutes) : 13.166  
Quant Ion : 86.00  
Area (flag) : 861M  
On-Column Amount (ng/ul) : 0.0173  
Integration start scan : 2269 Integration stop scan: 2287  
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

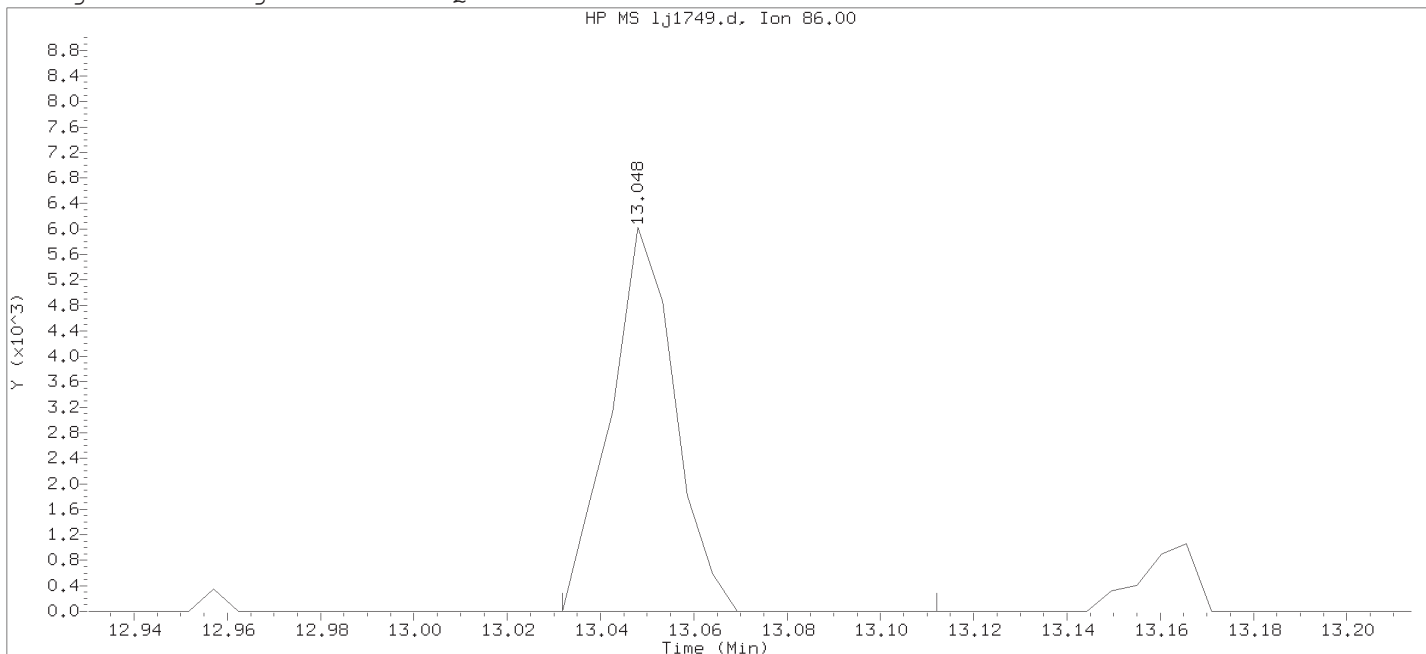
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
 Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

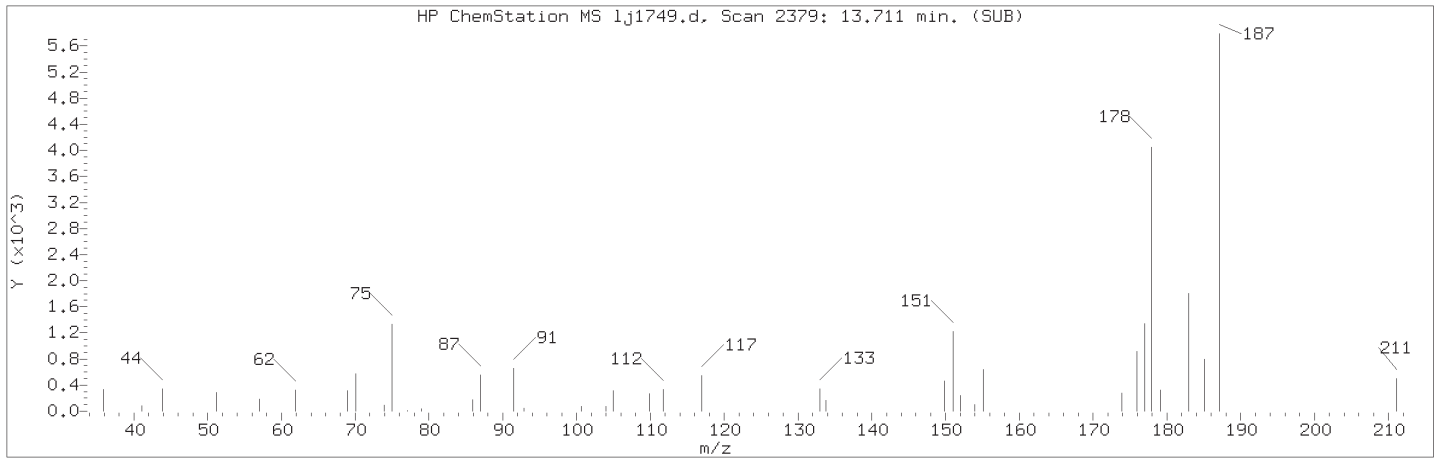
Sublist used: mdlall1

Sample Name: SSTD0.125

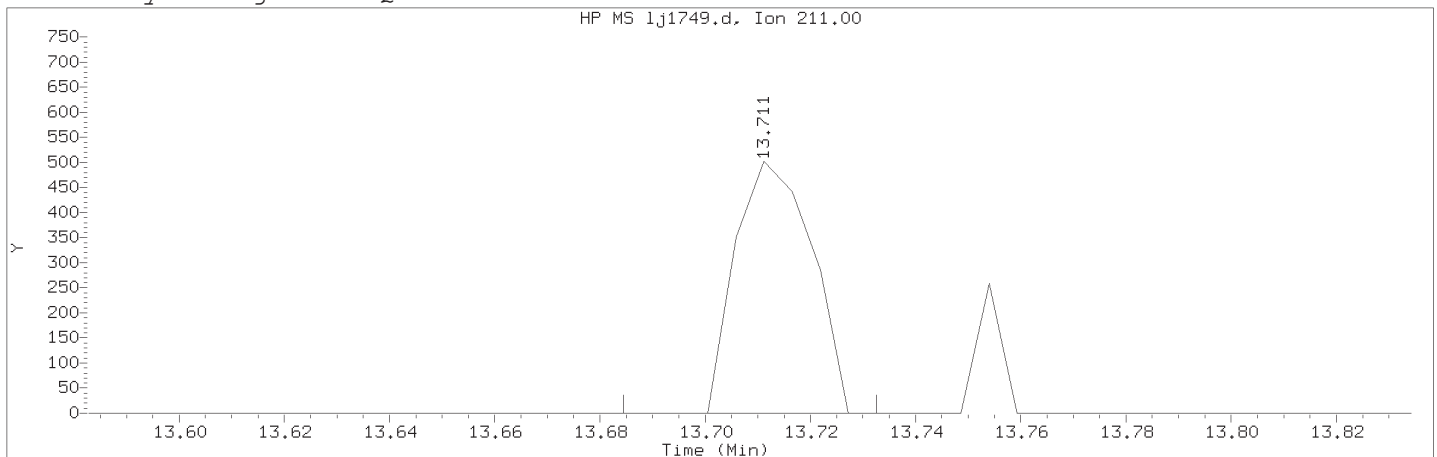
Lab Sample ID: RVSTD2648

Compound Number	: 149	
Compound Name	: Diallate (peak 2)	
Scan Number	: 2255	
Retention Time (minutes)	: 13.048	
Quant Ion	: 86.00	
Area	: 5785	
On-column Amount (ng/ul)	: 0.0228	
Integration start scan	: 2251	Integration stop scan: 2266
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

Compound Number    : 159  
Compound Name    : Dinoseb  
Scan Number    : 2379  
Retention Time (minutes)                                    : 13.711  
Quant Ion    : 211.00  
Area (flag)     : 506M  
On-Column Amount (ng/ul)                                   : 0.0190  
Integration start scan                                        : 2373                      Integration stop scan: 2382  
Y at integration start                                        : 0                            Y at integration end: 0

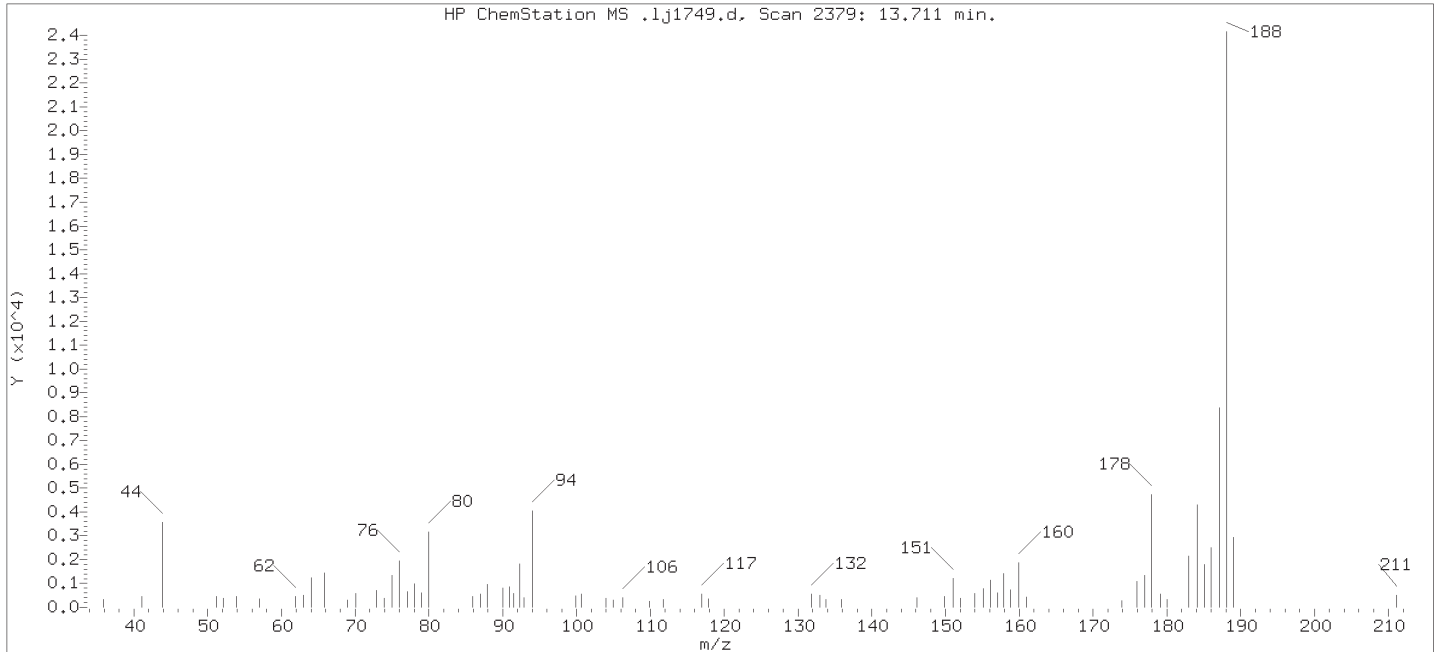
Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

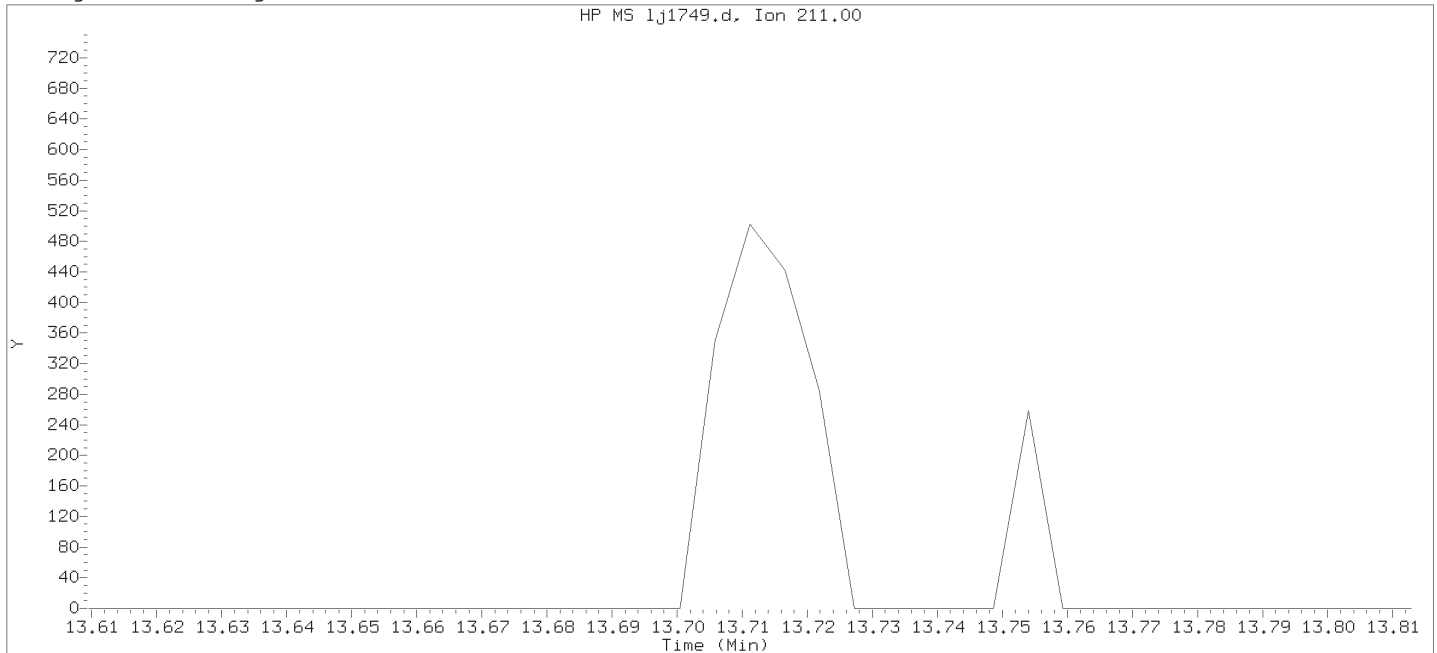
Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745



Sample Spectrum



Original Integration of Quant Ion



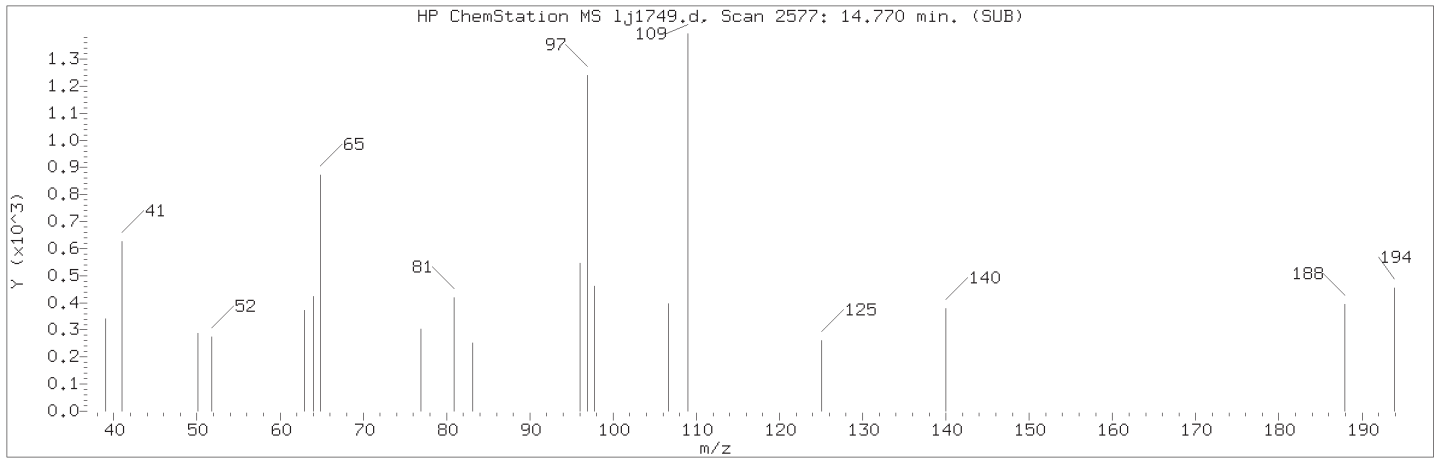
Data File: /chem/HP20296.i/18oct28.b/lj1749.d      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

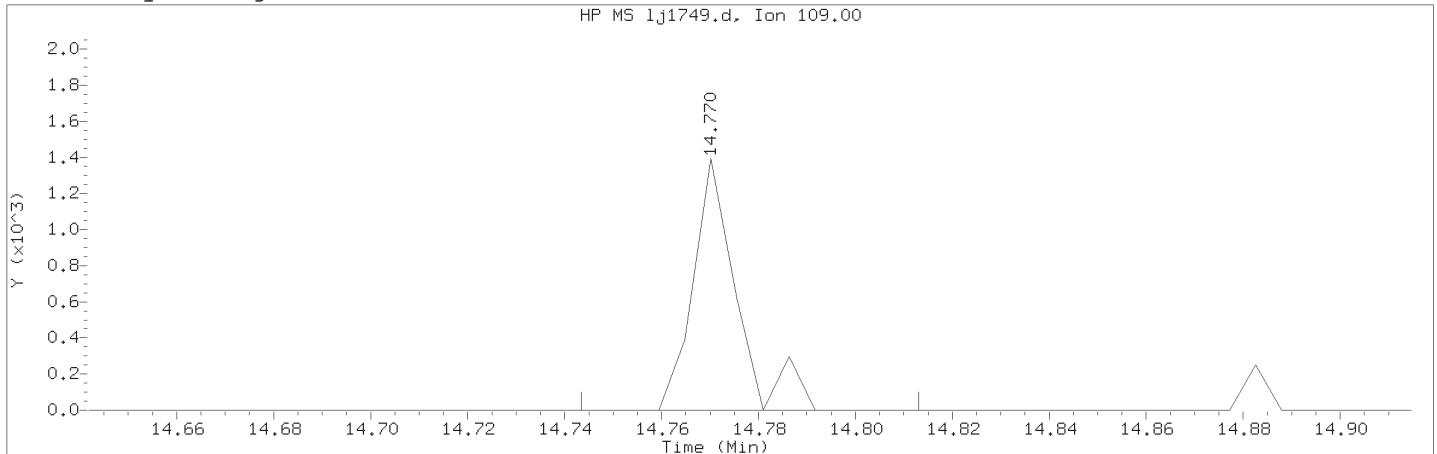
Sample Name: SSTD0.125      Lab Sample ID: RVSTD2648

Compound Number      : 159  
Compound Name         : Dinoseb  
Expected RT (minutes) : 13.711  
Quant Ion              : 211.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

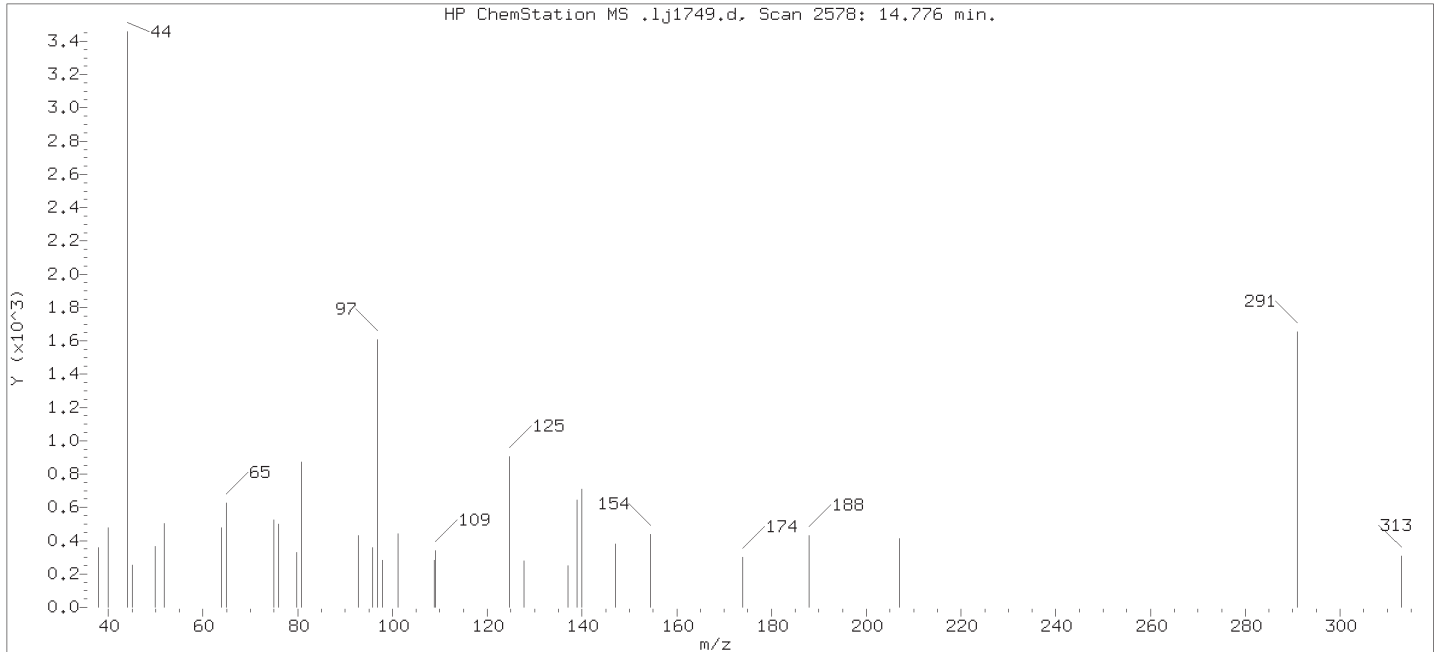
Compound Number    : 172  
Compound Name    : Parathion  
Scan Number    : 2577  
Retention Time (minutes)                                   : 14.770  
Quant Ion    : 109.00  
Area (flag)     : 868M  
On-Column Amount (ng/ul)                                 : 0.0368  
Integration start scan                                      : 2571                      Integration stop scan: 2584  
Y at integration start                                       : 0                              Y at integration end: 0

Reason for manual integration: missed peak

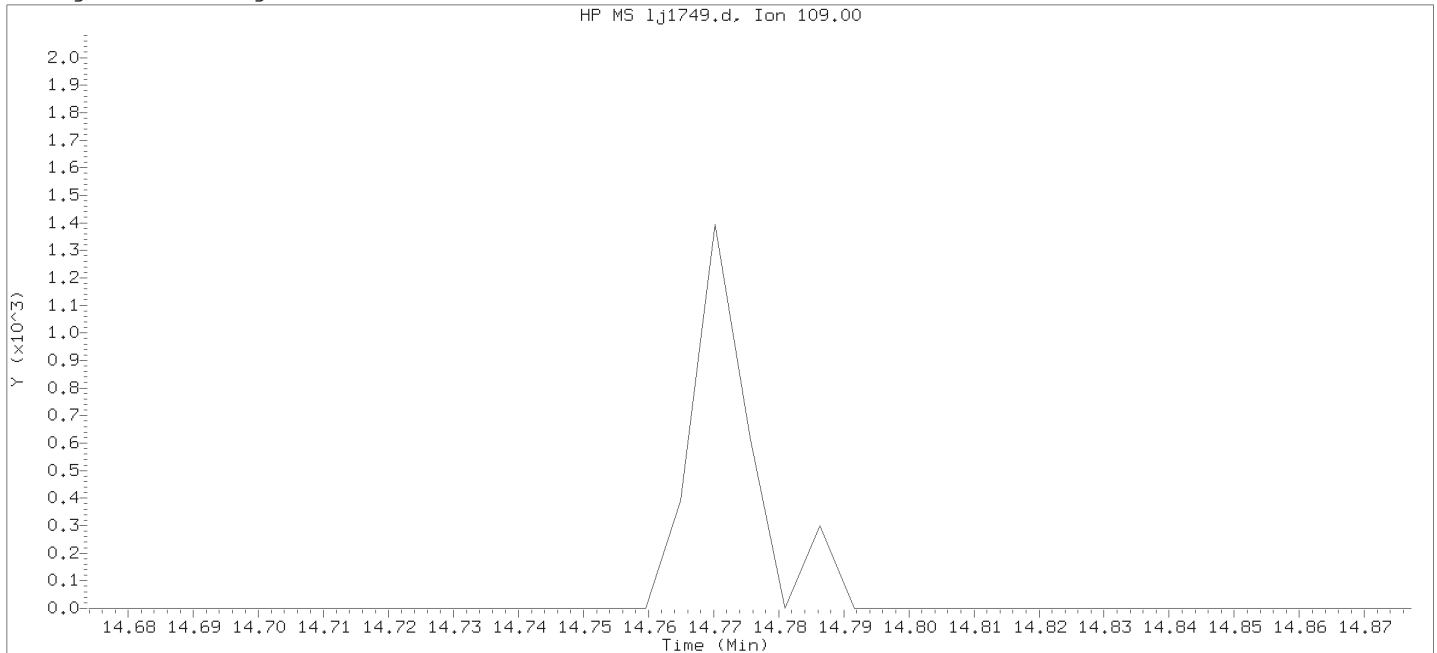
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d  
Injection date and time: 29-OCT-2018 04:18

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

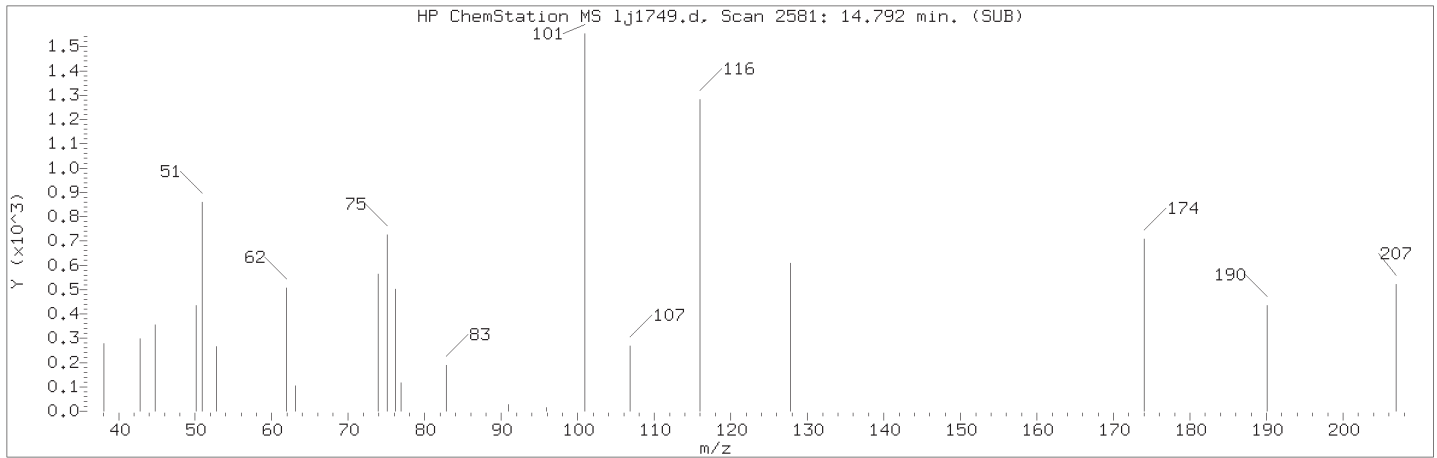
Sublist used: mdlall1

Sample Name: SSTD0.125

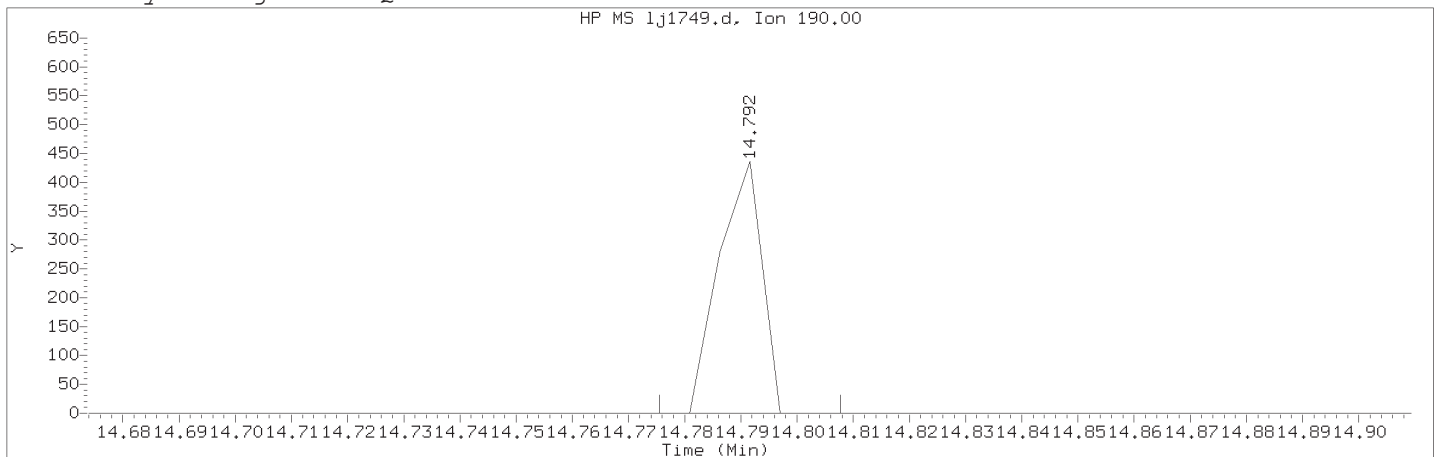
Lab Sample ID: RVSTD2648

Compound Number : 172  
Compound Name : Parathion  
Expected RT (minutes) : 14.776  
Quant Ion : 109.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125    Lab Sample ID: RVSTD2648

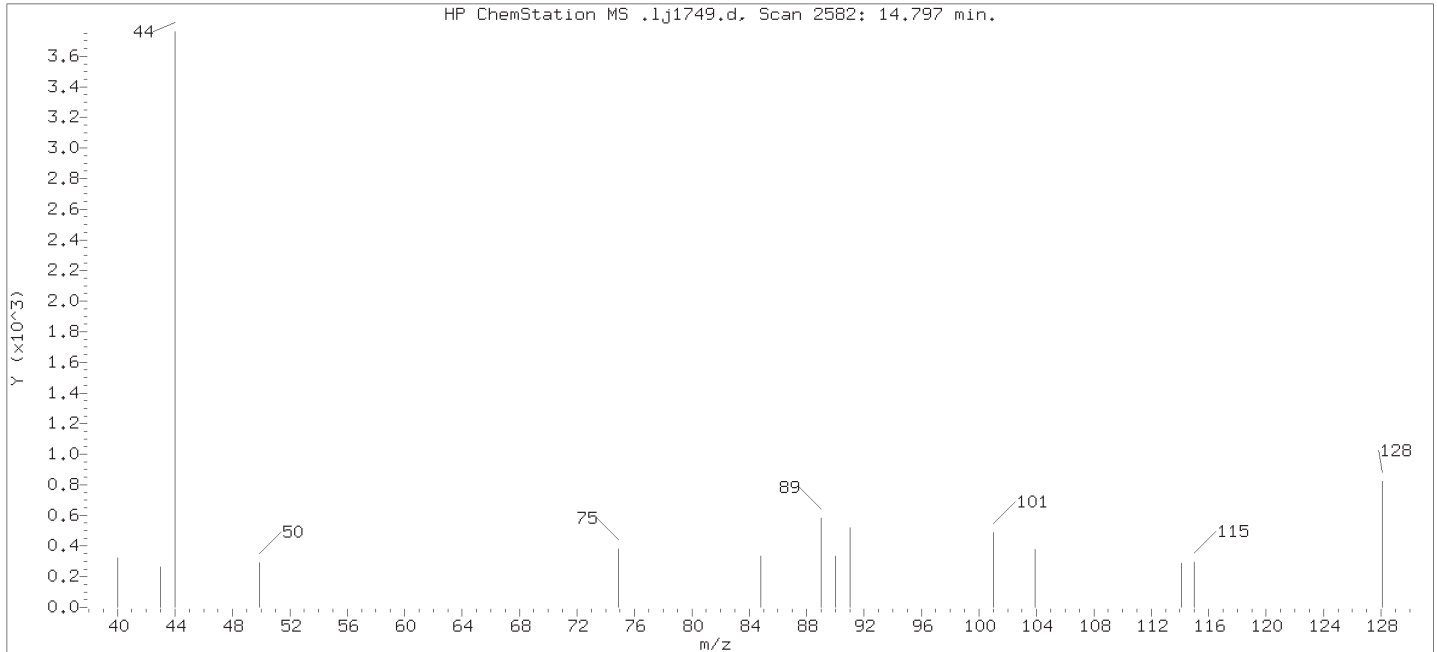
Compound Number    : 173  
Compound Name    : 4-Nitroquinoline-1-oxide  
Scan Number    : 2581  
Retention Time (minutes)                                    : 14.792  
Quant Ion    : 190.00  
Area (flag)     : 229M  
On-Column Amount (ng/ul)                                   : 2.4008  
Integration start scan                                        : 2577                      Integration stop scan: 2583  
Y at integration start                                        : 0                            Y at integration end: 0

Reason for manual integration: missed peak

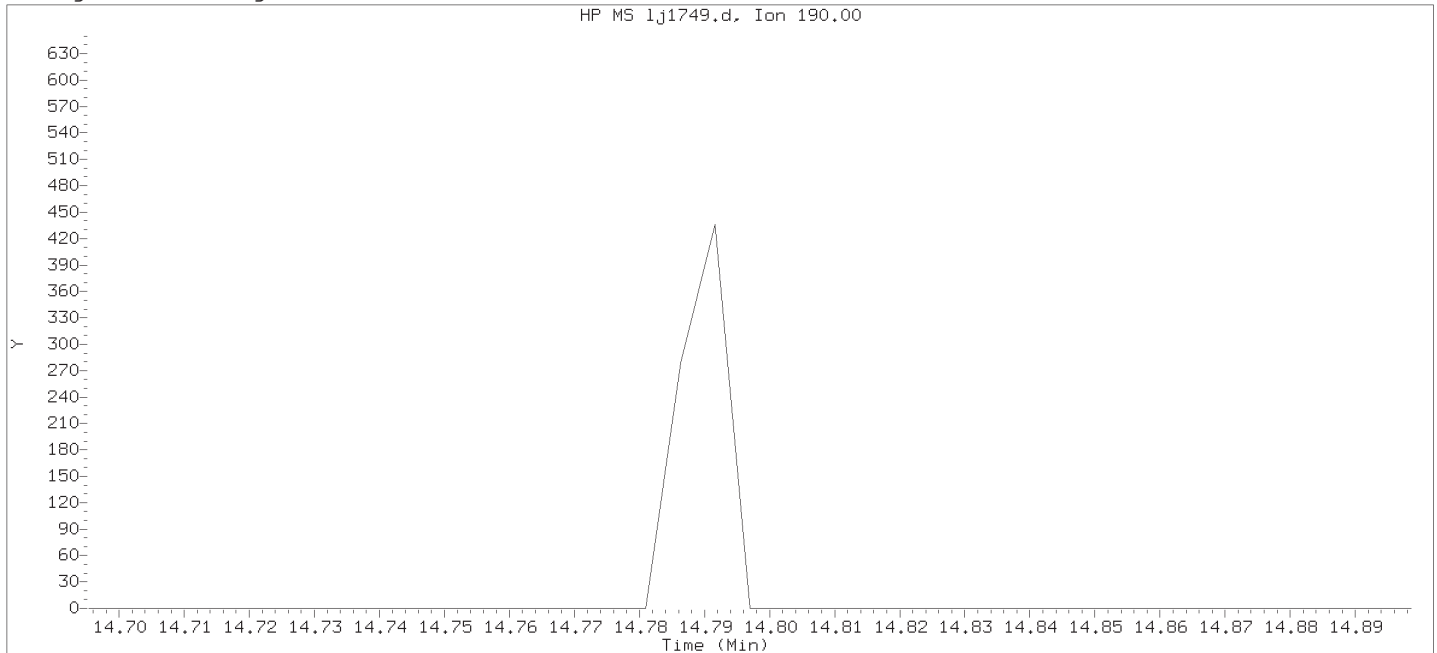
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion

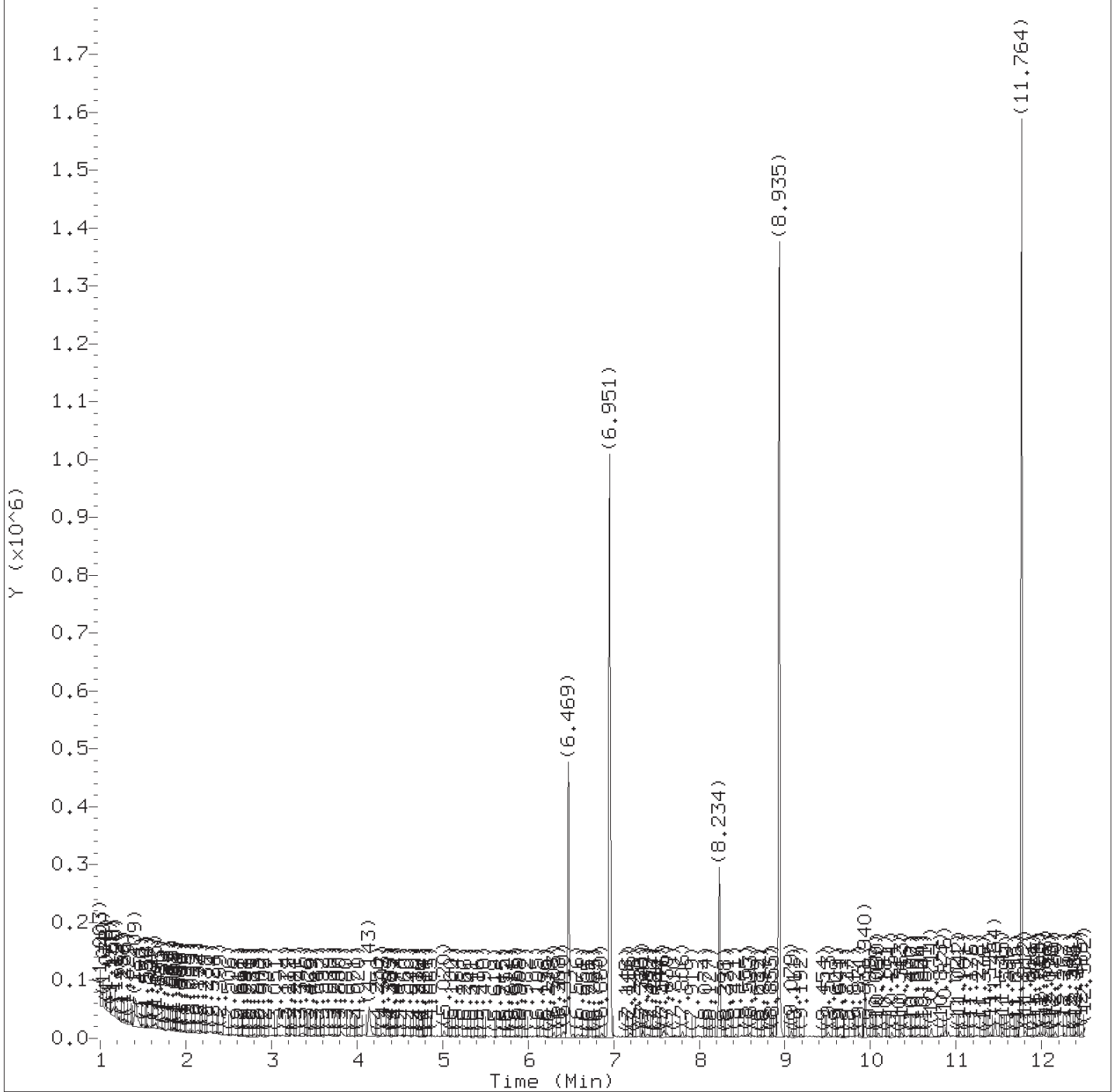


Data File: /chem/HP20296.i/18oct28.b/lj1749.d      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:18      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m      Sublist used: mdlall1  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125      Lab Sample ID: RVSTD2648

Compound Number      : 173  
Compound Name        : 4-Nitroquinoline-1-oxide  
Expected RT (minutes) : 14.797  
Quant Ion             : 190.00



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1750.d  
Injection date and time: 29-OCT-2018 04:47

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11

Sublist used: pahmdl11

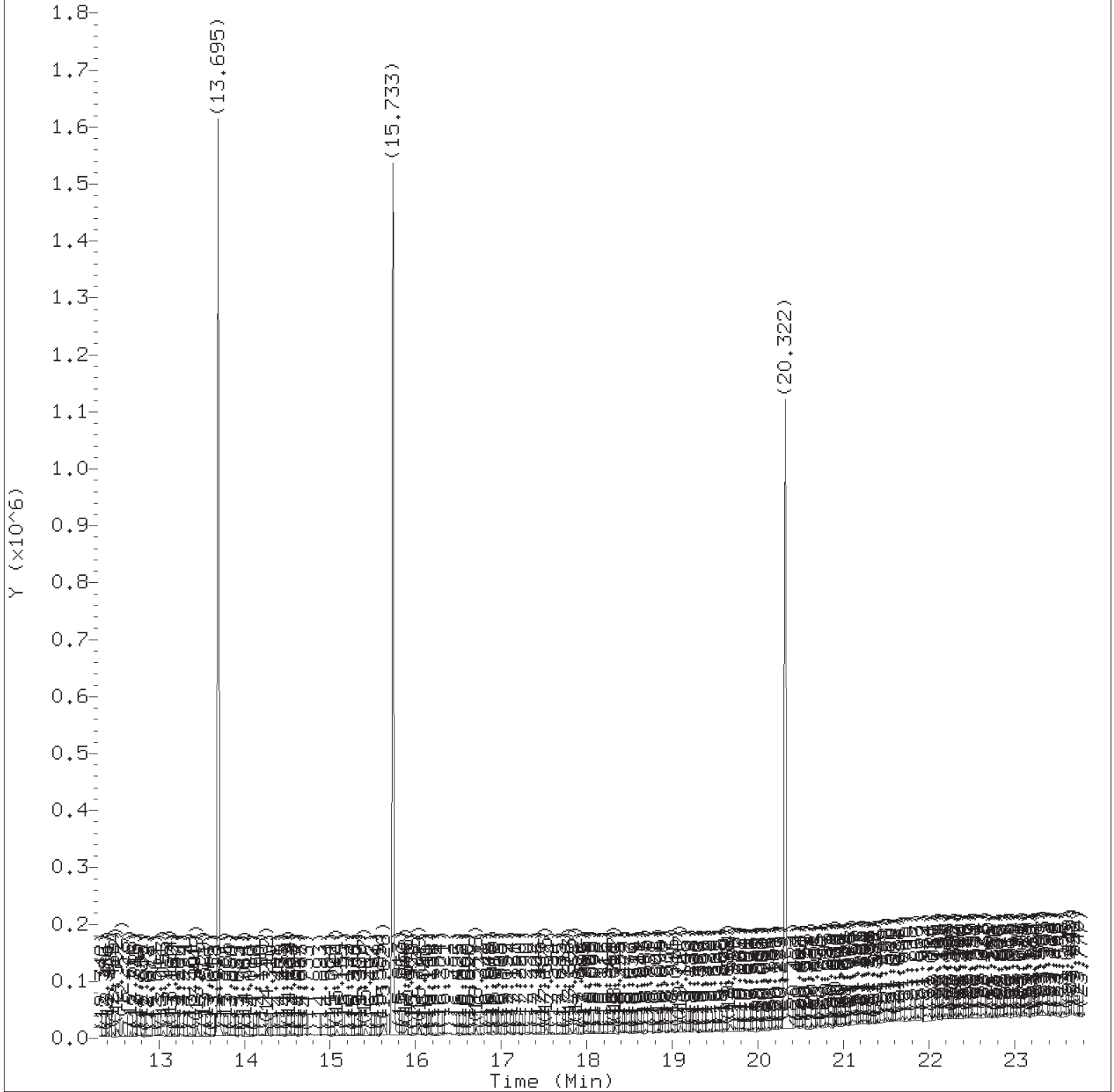
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.025

Lab Sample ID: PAHMDL2648

Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1750.d  
Injection date and time: 29-OCT-2018 04:47

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11

Sublist used: pahmdlall1

Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.025

Lab Sample ID: PAHMDL2648

Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1750.d  
 Injection date and time: 29-OCT-2018 04:47

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sublist used: pahmdlall1

Sample Name: SSTD0.025

Lab Sample ID: PAHMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26) *1,4-Dichlorobenzene-d4	(1)	6.951	152	182280	5.000
45) \$Nitrobenzene-d5	(2)	7.796	82	3307	0.046
68) *Naphthalene-d8	(2)	8.935	136	691536	5.000
69) Naphthalene	(2)	8.967	128	4148	0.027
86) 2-Methylnaphthalene	(2)	10.090	142	2192	0.022
87) 1-Methylnaphthalene	(2)	10.235	142	2374	0.025
96) \$2-Fluorobiphenyl	(3)	10.711	172	5993	0.052
99) 2-Chloronaphthalene	(3)	10.876	162	2814	0.027
114) Acenaphthylene	(3)	11.545	152	4181	0.032
118) *Acenaphthene-d10	(3)	11.764	164	343775	5.000
119) Acenaphthene	(3)	11.818	153	2459	0.024
131) Fluorene	(3)	12.502	166	1959	0.018
150) Hexachlorobenzene	(4)	13.187	284	960	0.032
158) *Phenanthrene-d10	(4)	13.695	188	660807	5.000
160) Phenanthrene	(4)	13.722	178	5187	0.033
162) Anthracene	(4)	13.786	178	3128	0.020
227) Total PAHs	(6)			59160	0.425
178) Fluoranthene	(4)	15.407	202	4172	0.024
180) *Pyrene-d10	(5)	15.733	212	667585	5.000
182) Pyrene	(5)	15.760	202	4988	0.028
184) \$Terphenyl-d14	(5)	16.043	244	5736	0.054
200) Benzo(a)anthracene	(5)	17.808	228	2873	0.018
201) Chrysene	(5)	17.872	228	4101	0.026
211) Benzo(b)fluoranthene	(6)	19.686	252	3538	0.024
213) Benzo(k)fluoranthene	(6)	19.728	252	2551	0.017
216) Benzo(a)pyrene	(6)	20.221	252	2465M	0.019
218) *Perylene-d12	(6)	20.322	264	559237	5.000
224) Indeno(1,2,3-cd)pyrene	(6)	21.959	276	3186	0.025
225) Dibenz(a,h)anthracene	(6)	21.996	278	2687	0.020
226) Benzo(g,h,i)perylene	(6)	22.365	276	2971	0.022

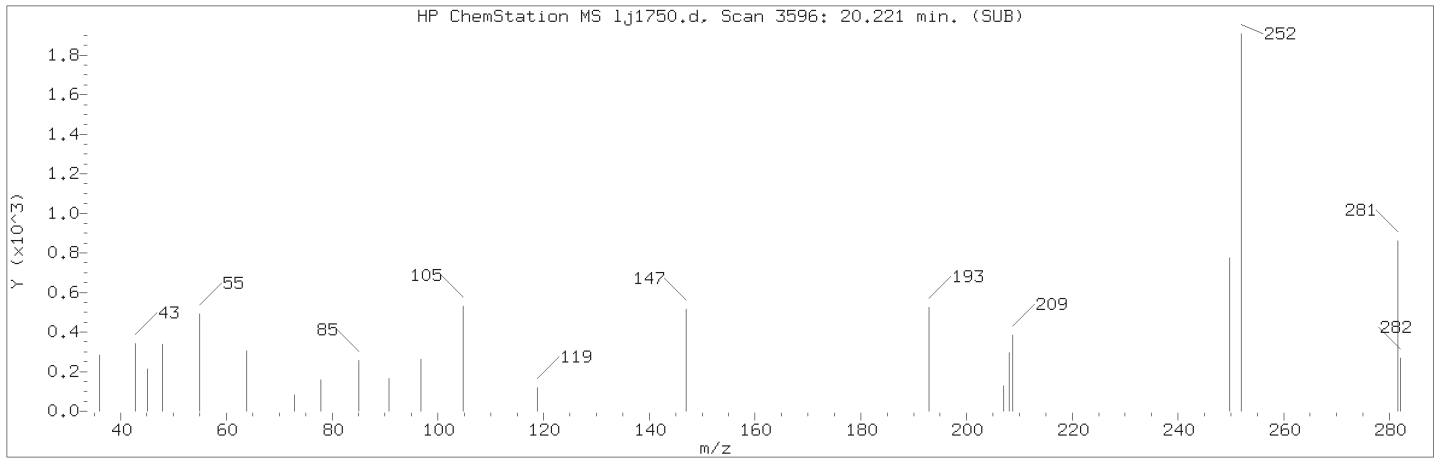
M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/30/2018 at 13:32.

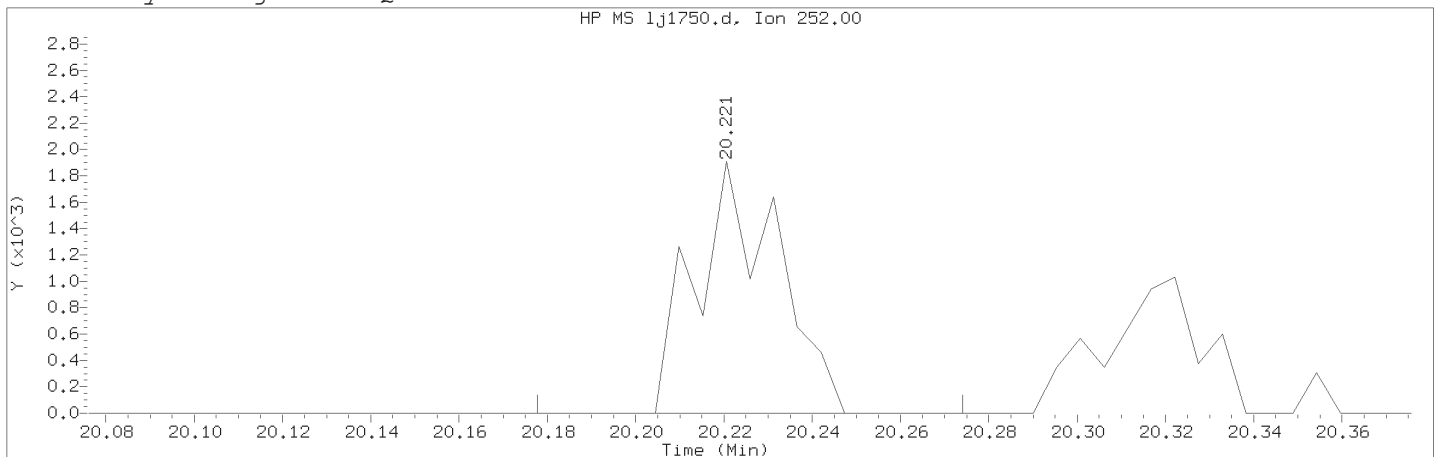
Target 3.5 esignature user ID: knb25316



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1750.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 04:47                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: pahmdlall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.025                      Lab Sample ID: PAHMDL2648

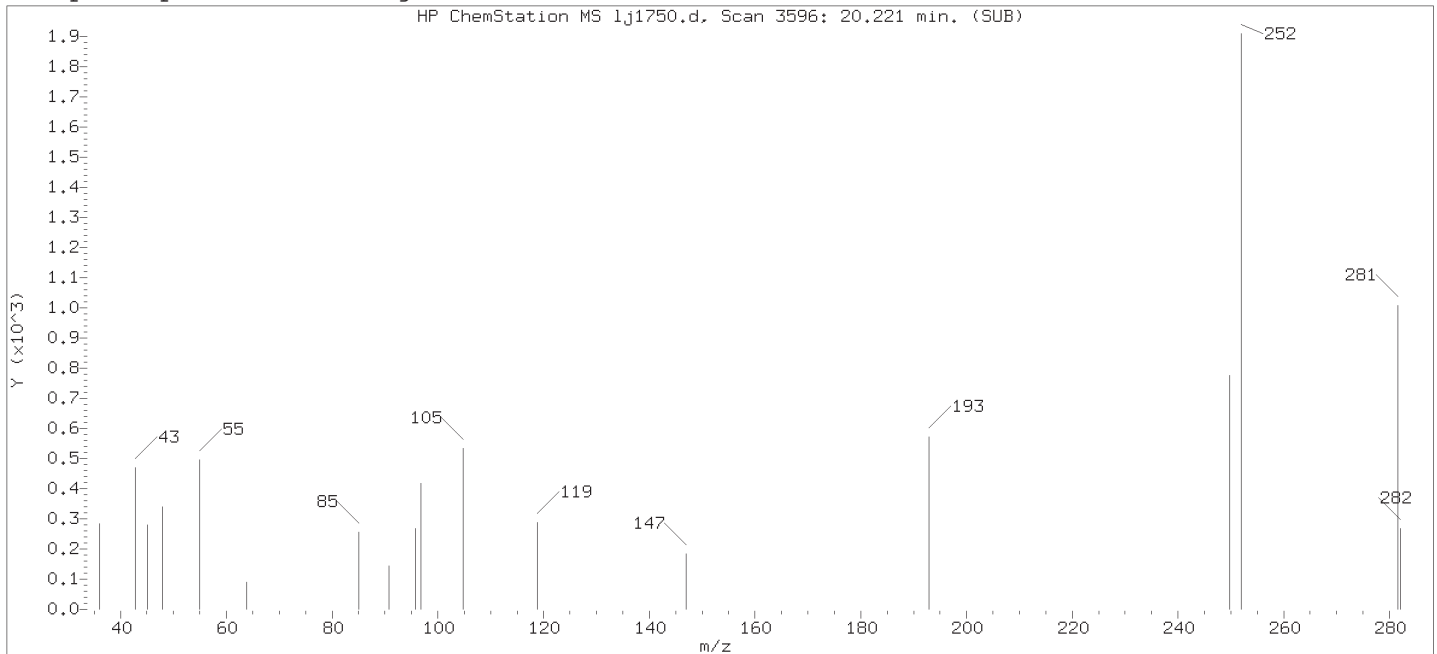
Compound Number                      : 216  
Compound Name                        : Benzo(a)pyrene  
Scan Number                           : 3596  
Retention Time (minutes)            : 20.221  
Quant Ion                              : 252.00  
Area (flag)                            : 2465M  
On-Column Amount (ng/ul)          : 0.0189  
Integration start scan               : 3587                      Integration stop scan: 3605  
Y at integration start                : 0                          Y at integration end: 0

Reason for manual integration: improper integration

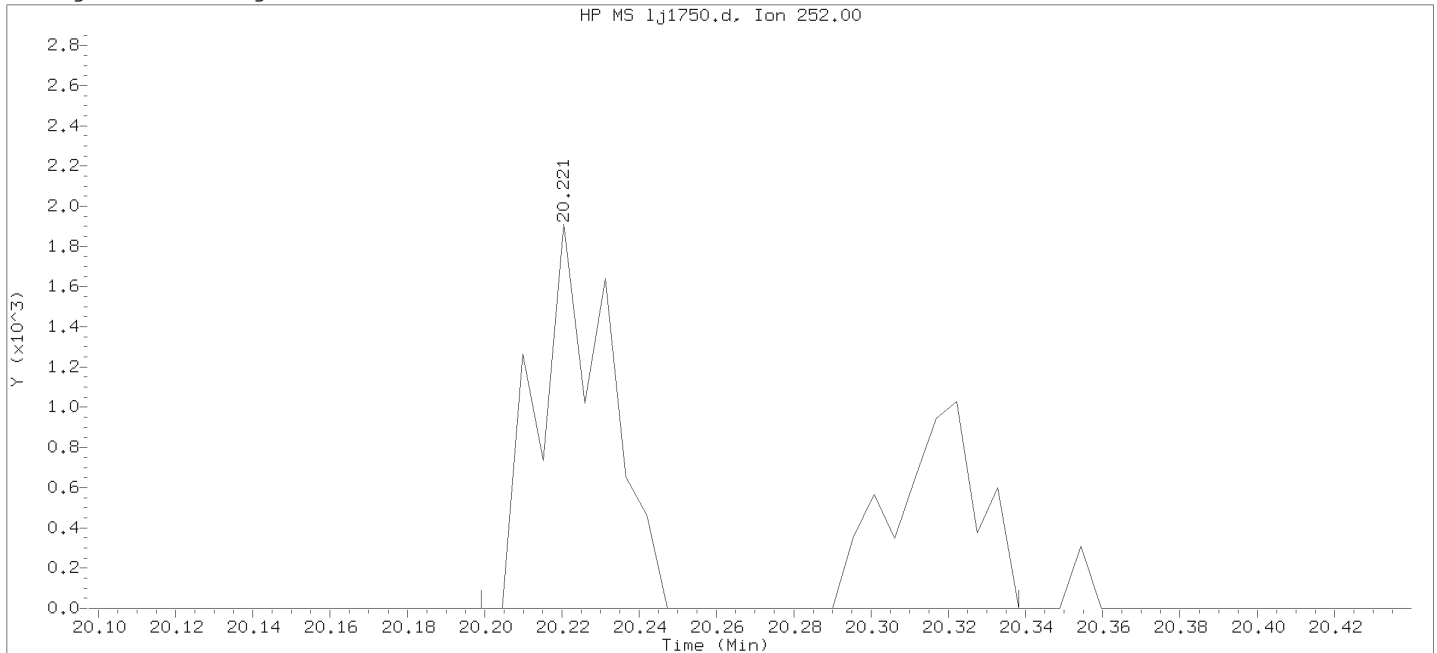
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 13:32.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1750.d  
 Injection date and time: 29-OCT-2018 04:47

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m

Sublist used: pahmdlall1

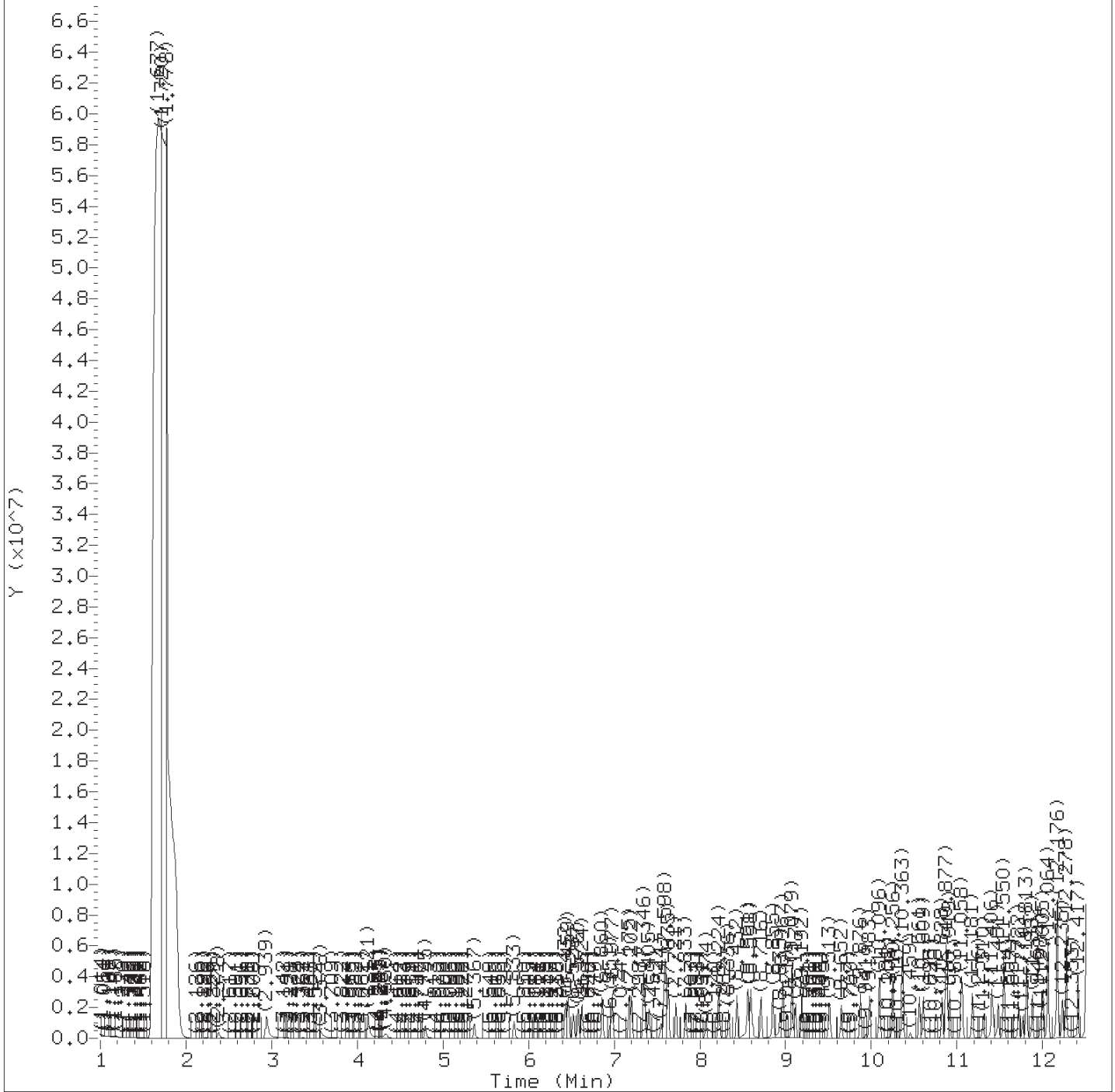
Calibration date and time: 29-OCT-2018 15:37

Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTDO.025

Lab Sample ID: PAHMDL2648

Compound Number	: 216	
Compound Name	: Benzo(a)pyrene	
Scan Number	: 3596	
Retention Time (minutes)	: 20.221	
Quant Ion	: 252.00	
Area	: 4026	
On-column Amount (ng/ul)	: 0.0308	
Integration start scan	: 3591	Integration stop scan: 3617
Y at integration start	: 0	Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

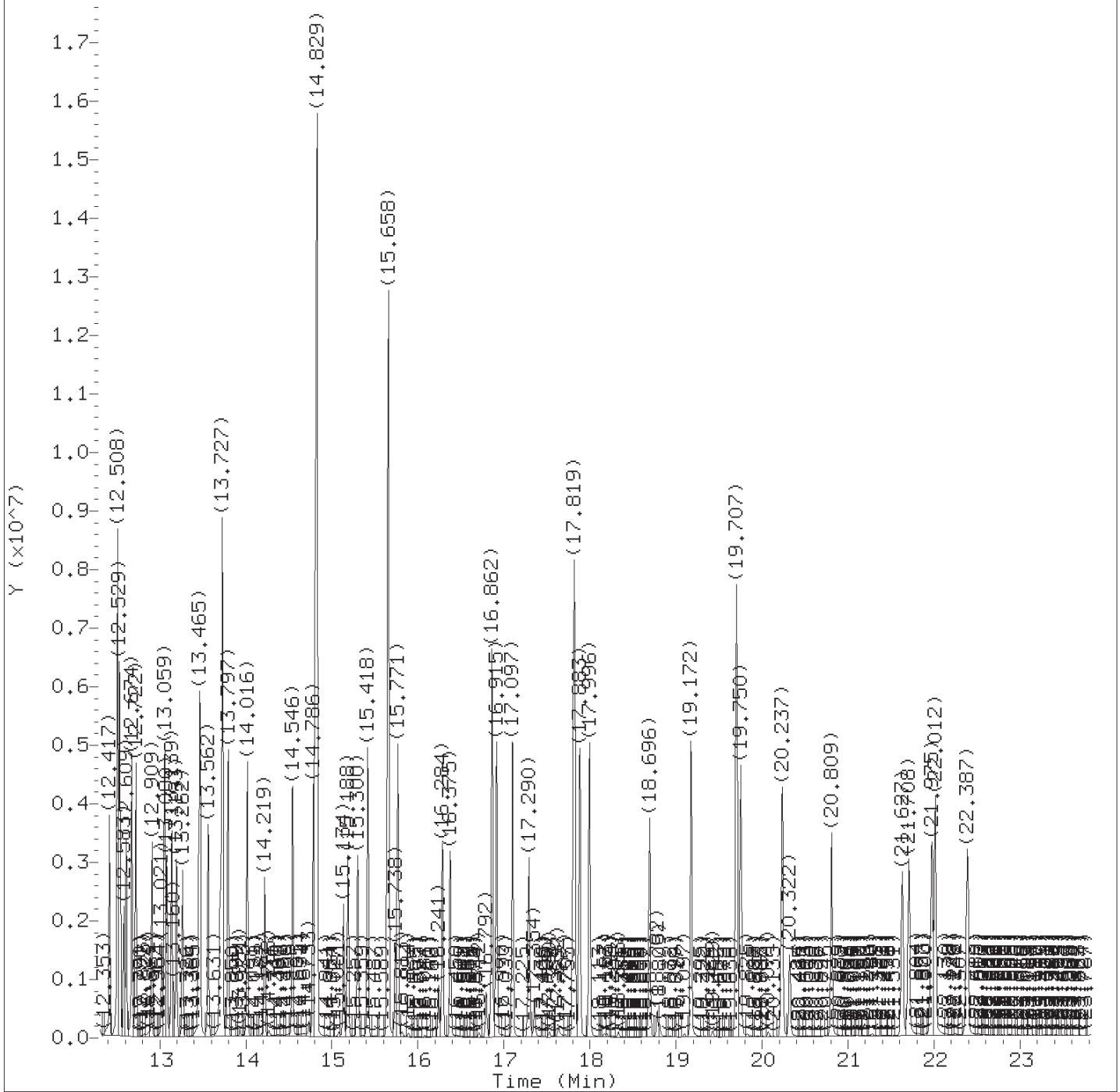
Sublist used: icvall1

Sample Name: SSTD12.5

Lab Sample ID: RVICV2628

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:55.

Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sublist used: icvall1

Sample Name: SSTD12.5

Lab Sample ID: RVICV2628

Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:55.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
 Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sublist used: icvall1

Sample Name: SSTD12.5

Lab Sample ID: RVICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.378	88	293624	11.130
5) N-Nitrosodimethylamine	(1)	2.928	74	547489	13.805
6) Pyridine	(1)	2.945	79	901533	13.361
8) 2-Picoline	(1)	4.121	93	922941	13.103
9) N-Nitrosomethylethylamine	(1)	4.335	88	339171	11.791
10) Methyl methanesulfonate	(1)	4.795	80	467324	12.704
14) N-Nitrosodiethylamine	(1)	5.367	102	332953	13.394
43) Total Cresols	(1)	5.660	100	1489090	27.213
16) Ethyl methanesulfonate	(1)	5.833	109	340677	12.068
19) Phenol	(1)	6.432	94	1178920	13.642
20) Aniline	(1)	6.459	93	1308234	12.882
23) bis(2-Chloroethyl)ether	(1)	6.576	93	875330	13.463
24) 2-Chlorophenol	(1)	6.624	128	711106	13.971
25) 1,3-Dichlorobenzene	(1)	6.860	146	786034	13.773
26) *1,4-Dichlorobenzene-d4	(1)	6.951	152	176361	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	812231	14.164
28) Benzyl alcohol	(1)	7.175	108	528363	15.125
29) 1,2-Dichlorobenzene	(1)	7.202	146	758169	13.604
31) Indene	(1)	7.341	115	1208135	19.719
32) 2-Methylphenol	(1)	7.352	108	723417	13.512
100) Isosafrole	(3)	7.383	162	551235	13.288
35) bis(2-Chloroisopropyl)ether	(1)	7.405	45	1093012	13.330
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.405	45	1093012	13.330
36) N-Nitrosopyrrolidine	(1)	7.544	100	341721	12.499
37) Acetophenone	(1)	7.582	105	1182959	14.339
38) 4-Methylphenol	(1)	7.598	108	765673	13.701
39) N-Nitroso-di-n-propylamine	(1)	7.603	70	694501	13.923
40) N-Nitrosomorpholine	(1)	7.614	56	448951	12.392
41) o-Toluidine	(1)	7.635	106	1281642	13.726
44) Hexachloroethane	(1)	7.721	117	346656	13.311
46) Nitrobenzene	(2)	7.833	77	993978	13.303
125) 2,4,2,6-Dinitrotoluenes	(3)	8.050	165	742653	29.553
50) N-Nitrosopiperidine	(2)	8.074	114	312665	11.933
52) Isophorone	(2)	8.224	82	1767967	14.022
53) 2-Nitrophenol	(2)	8.336	139	338495	13.794
55) 2,4-Dimethylphenol	(2)	8.432	107	687933	11.462
59) O,O,O-Triethylphosphorothioate	(2)	8.561	198	326776	12.696
57) bis(2-Chloroethoxy)methane	(2)	8.598	93	1124702	13.991
58) Benzoic acid	(2)	8.619	105	1012431M	25.873
62) 2,4-Dichlorophenol	(2)	8.716	162	583920	13.560

M = Compound was manually integrated.

\* = Compound is an internal standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:55.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
 Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sublist used: icvall1

Sample Name: SSTD12.5

Lab Sample ID: RVICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
151) Diallate trans/cis	(4)	8.775	86	694091	11.933
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	666652	13.415
68) *Naphthalene-d8	(2)	8.935	136	669662	5.000
69) Naphthalene	(2)	8.967	128	2015877	13.327
70) 4-Chloroaniline	(2)	9.074	127	857974	14.069
71) 2,6-Dichlorophenol	(2)	9.079	162	506725	12.104
72) Hexachloropropene	(2)	9.117	213	422500	13.185
74) Hexachlorobutadiene	(2)	9.192	225	400221	13.664
78) Quinoline	(2)	9.513	129	1114651	12.384
80) N-Nitrosodi-n-butylamine	(2)	9.652	84	539413	10.770
83) 4-Chloro-3-methylphenol	(2)	9.876	107	718920	14.065
85) Safrole	(2)	9.983	162	453117	11.896
86) 2-Methylnaphthalene	(2)	10.096	142	1316352	13.565
87) 1-Methylnaphthalene	(2)	10.256	142	1220065	13.136
88) Hexachlorocyclopentadiene	(3)	10.363	237	793412	27.590
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.374	216	682546	13.674
91) cis-Isosafrole	(3)	10.459	162	63092	1.528
93) 2,4,6-Trichlorophenol	(3)	10.561	196	443497	15.187
95) 2,4,5-Trichlorophenol	(3)	10.609	196	478718	14.868
97) trans-Isosafrole	(3)	10.828	162	488143	11.760
98) 1,1'-Biphenyl	(3)	10.871	154	1639156	14.781
99) 2-Chloronaphthalene	(3)	10.887	162	1374049	13.938
101) 1-Chloronaphthalene	(3)	10.919	162	1040142	12.191
103) Diphenyl ether	(3)	11.053	170	760692	12.299
104) 2-Nitroaniline	(3)	11.069	138	382415	15.423
108) 1,4-Naphthoquinone	(3)	11.181	158	585979	16.255
109) 1,4-Dinitrobenzene	(3)	11.310	168	193530	14.623
110) Dimethylphthalate	(3)	11.406	163	1433198	13.991
111) 1,3-Dinitrobenzene	(3)	11.427	168	215330	14.300
113) 2,6-Dinitrotoluene	(3)	11.481	165	317629	15.295
114) Acenaphthylene	(3)	11.550	152	1981155	16.118
117) 3-Nitroaniline	(3)	11.722	138	340570	14.306
118) *Acenaphthene-d10	(3)	11.770	164	323070	5.000
119) Acenaphthene	(3)	11.813	153	1323881	13.953
120) 2,4-Dinitrophenol	(3)	11.882	184	369328	29.495
121) 4-Nitrophenol	(3)	11.984	109	282696	14.181
122) Pentachlorobenzene	(3)	12.005	250	496841	12.478
124) Dibenzofuran	(3)	12.064	168	1812458	14.098
123) 2,4-Dinitrotoluene	(3)	12.069	165	425024	14.257
126) 1-Naphthylamine	(3)	12.171	143	2428925	26.199

\* = Compound is an internal standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:55.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
 Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sublist used: icvall1

Sample Name: SSTD12.5

Lab Sample ID: RVICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
127) 2,3,4,6-Tetrachlorophenol	(3)	12.235	232	333415	13.184
128) 2-Naphthylamine	(3)	12.278	143	2399151	26.003
129) Diethylphthalate	(3)	12.417	149	1390146	13.790
131) Fluorene	(3)	12.508	166	1411764	13.865
130) Thionazin	(3)	12.508	107	273845	13.857
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	705972	13.535
133) 5-Nitro-o-toluidine	(3)	12.535	152	349146	13.464
134) 4-Nitroaniline	(3)	12.545	138	335013	14.700
135) 4,6-Dinitro-2-methylphenol	(4)	12.583	198	240242	13.543
136) N-Nitrosodiphenylamine	(4)	12.674	169	1228662	14.245
137) NDPA as diphenylamine	(4)	12.674	169	1228662	14.245
139) 1,2-Diphenylhydrazine	(4)	12.722	77	2103464	13.781
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	279389	12.277
144) 1,3,5-Trinitrobenzene	(4)	13.021	213	132930	12.369
145) Diallate (peak 1)	(4)	13.053	86	520633	8.482
146) Phorate	(4)	13.059	75	1088953	13.656
147) Phenacetin	(4)	13.080	108	751058	12.426
148) 4-Bromophenyl-phenylether	(4)	13.139	248	382595	12.725
149) Diallate (peak 2)	(4)	13.160	86	173458M	3.451
150) Hexachlorobenzene	(4)	13.198	284	407766	13.303
152) Dimethoate	(4)	13.262	87	673233	13.317
154) Pentachlorophenol	(4)	13.455	266	290602	14.965
155) 4-Aminobiphenyl	(4)	13.465	169	1335825	17.804
156) Pentachloronitrobenzene	(4)	13.471	237	170207	11.713
157) Pronamide	(4)	13.562	173	613175	13.116
158)*Phenanthrene-d10	(4)	13.695	188	674219	5.000
159) Dinoseb	(4)	13.711	211	301106	11.164
160) Phenanthrene	(4)	13.727	178	2186897	13.549
162) Anthracene	(4)	13.797	178	2182440	13.784
168) Carbazole	(4)	14.016	167	2018398	14.226
169) Methyl parathion	(4)	14.219	109	520548	13.708
170) Di-n-butylphthalate	(4)	14.546	149	2524277	13.755
172) Parathion	(4)	14.781	109	337602	14.121
173) 4-Nitroquinoline-1-oxide	(4)	14.829	190	3068282	176.138
227) Total PAHs	(6)	15.000	100	37977528	253.079
176) Isodrin	(4)	15.188	193	244969	12.888
178) Fluoranthene	(4)	15.418	202	2491292	14.082
179) Benzidine	(5)	15.658	184	6819970	60.723
180)*Pyrene-d10	(5)	15.738	212	704886	5.000
182) Pyrene	(5)	15.771	202	2604448	14.006

M = Compound was manually integrated.

\* = Compound is an internal standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:55.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
 Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 19:11  
 Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sublist used: icvall1

Sample Name: SSTD12.5

Lab Sample ID: RVICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
187) p-Dimethylaminoazobenzene	(5)	16.284	225	447598	15.625
190) Chlorobenzilate	(5)	16.375	139	736114	13.395
192) 3,3'-Dimethylbenzidine	(5)	16.862	212	3107740	28.888
193) Butylbenzylphthalate	(5)	16.915	149	1266997	15.344
196) 2-Acetylaminofluorene	(5)	17.290	181	948061	13.930
198) 3,3'-Dichlorobenzidine	(5)	17.803	252	847055	13.617
200) Benzo(a)anthracene	(5)	17.819	228	2576389	15.227
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.824	231	473371	13.613
201) Chrysene	(5)	17.883	228	2500058	14.954
204) bis(2-Ethylhexyl)phthalate	(5)	17.996	149	1757646	14.776
208) 6-Methylchrysene	(5)	18.696	242	1493751	13.252
210) Di-n-octylphthalate	(6)	19.172	149	3185542	14.243
211) Benzo(b)fluoranthene	(6)	19.702	252	2580835	14.174
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.707	256	1133864	15.198
213) Benzo(k)fluoranthene	(6)	19.750	252	2509313	13.673
216) Benzo(a)pyrene	(6)	20.237	252	2355675M	14.476
218) *Perylene-d12	(6)	20.322	264	699232	5.000
220) 3-Methylcholanthrene	(6)	20.809	268	1062077	14.310
222) Dibenz(a,h)acridine	(6)	21.633	279	1622609	12.010
223) Dibenz(a,j)acridine	(6)	21.708	279	1735055	12.190
224) Indeno(1,2,3-cd)pyrene	(6)	21.975	276	2159768M	13.679
225) Dibenz(a,h)anthracene	(6)	22.012	278	2325143	14.149
226) Benzo(g,h,i)perylene	(6)	22.387	276	2236176	13.361

M = Compound was manually integrated.

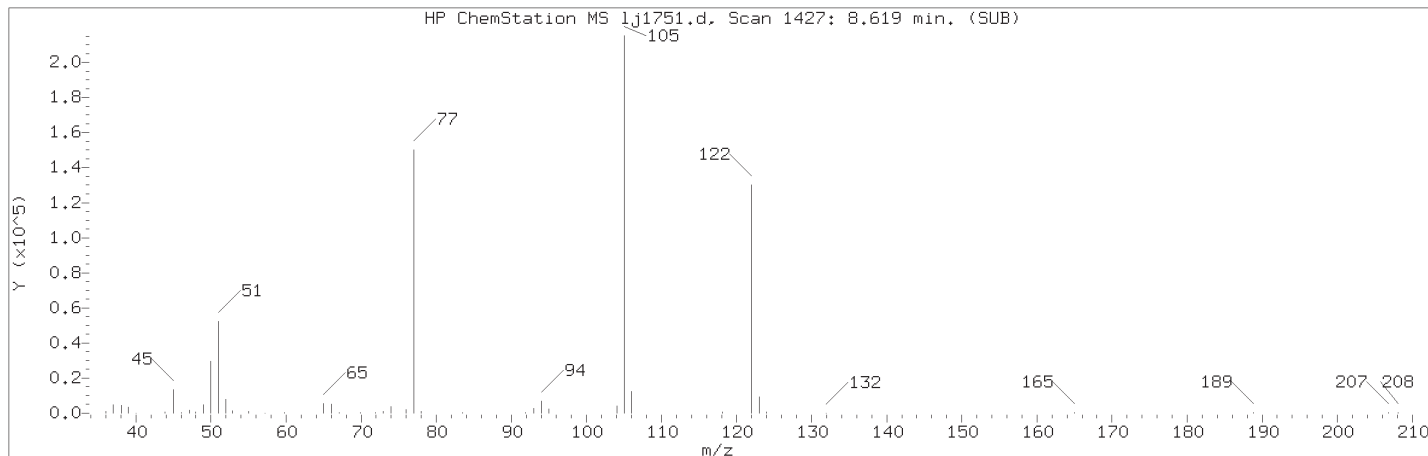
\* = Compound is an internal standard.

Digitally signed by Ashley R. Transue  
 on 10/29/2018 at 19:55.

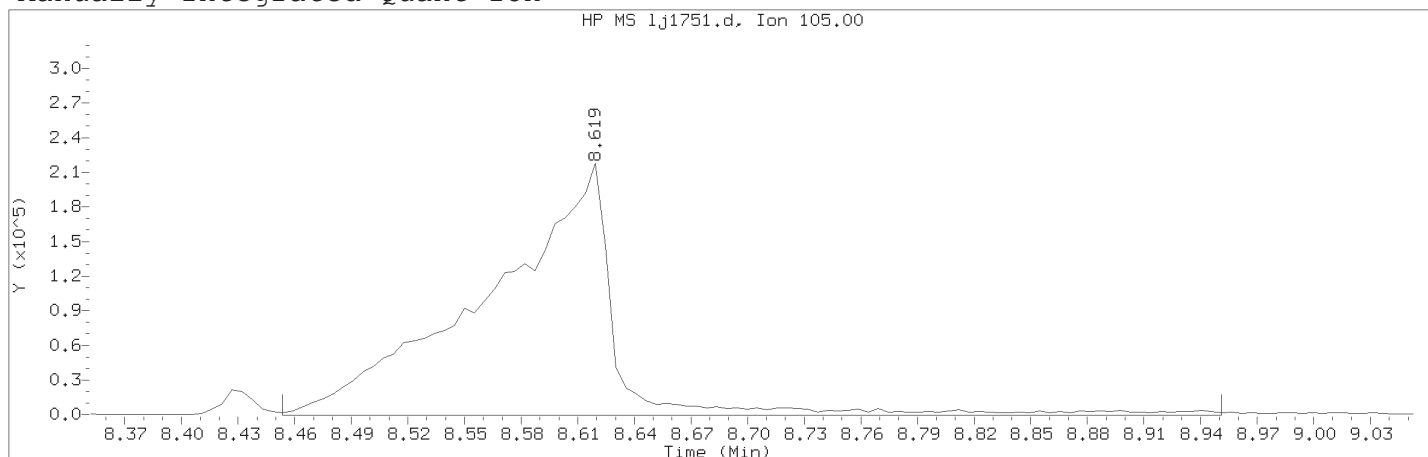
Target 3.5 esignature user ID: art12405



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 05:15                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: icvall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5    Lab Sample ID: RVICV2628

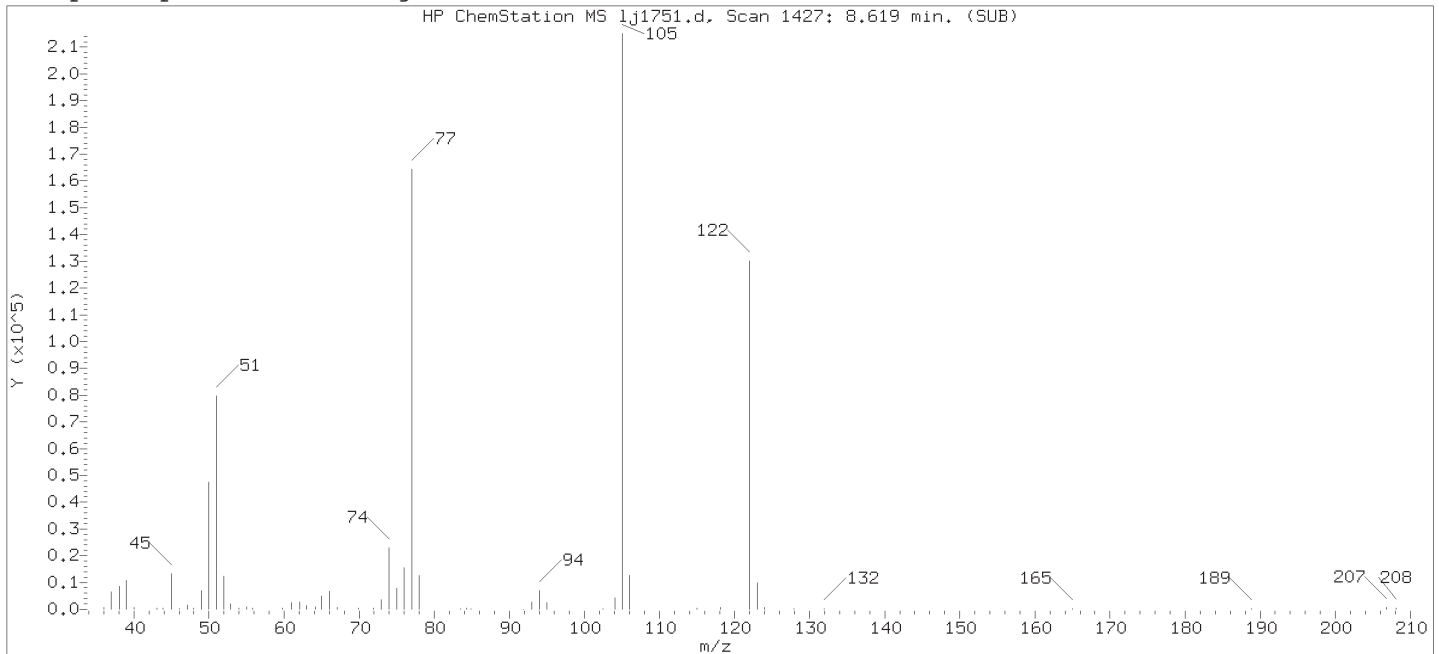
Compound Number                      : 58  
Compound Name                         : Benzoic acid  
Scan Number                            : 1427  
Retention Time (minutes)             : 8.619  
Quant Ion                                : 105.00  
Area (flag)                             : 1012431M  
On-Column Amount (ng/ul)            : 25.8731  
Integration start scan                : 1395                      Integration stop scan: 1488  
Y at integration start                 : -396                      Y at integration end: -396

Reason for manual integration: improper integration

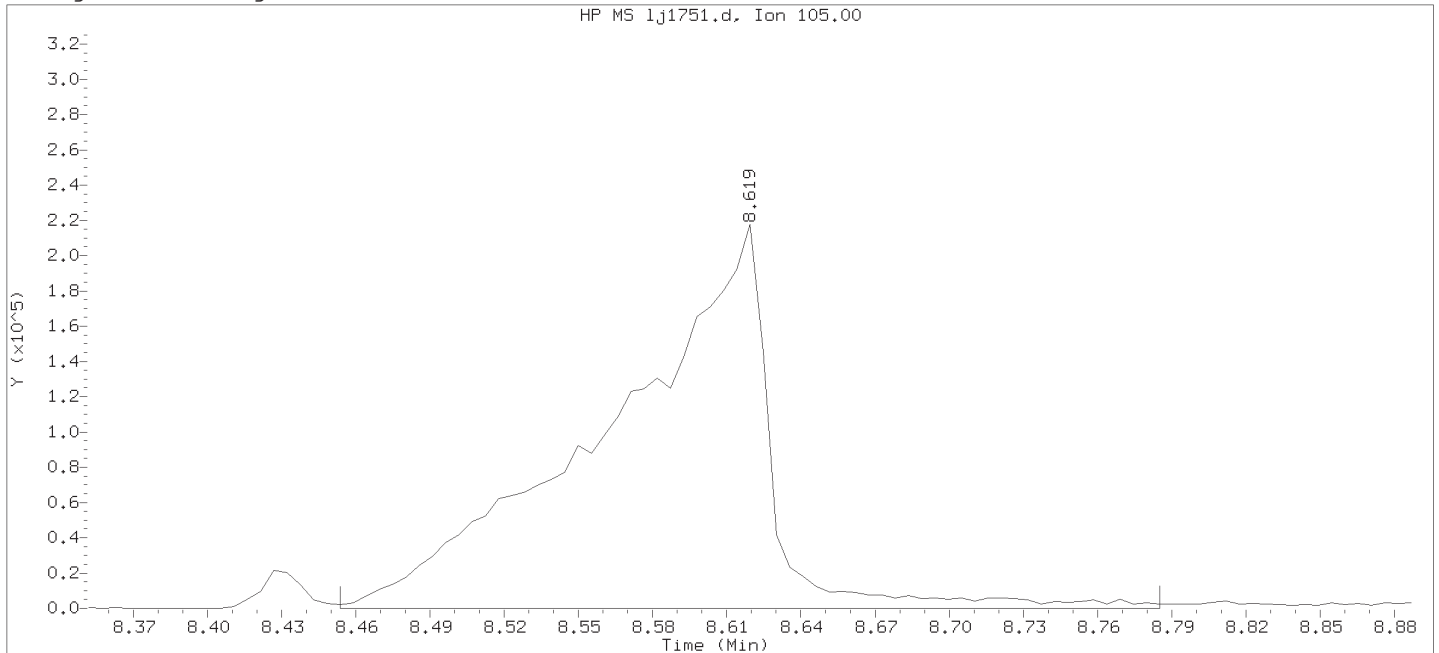
Analyst responsible for change: Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
 Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

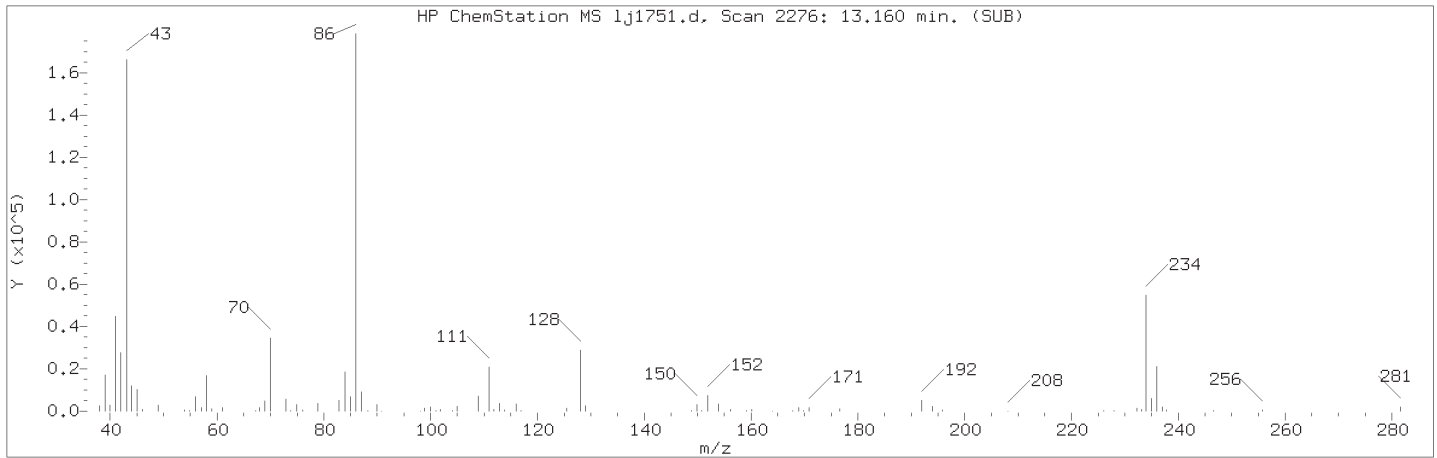
Sublist used: icvall1

Sample Name: SSTD12.5

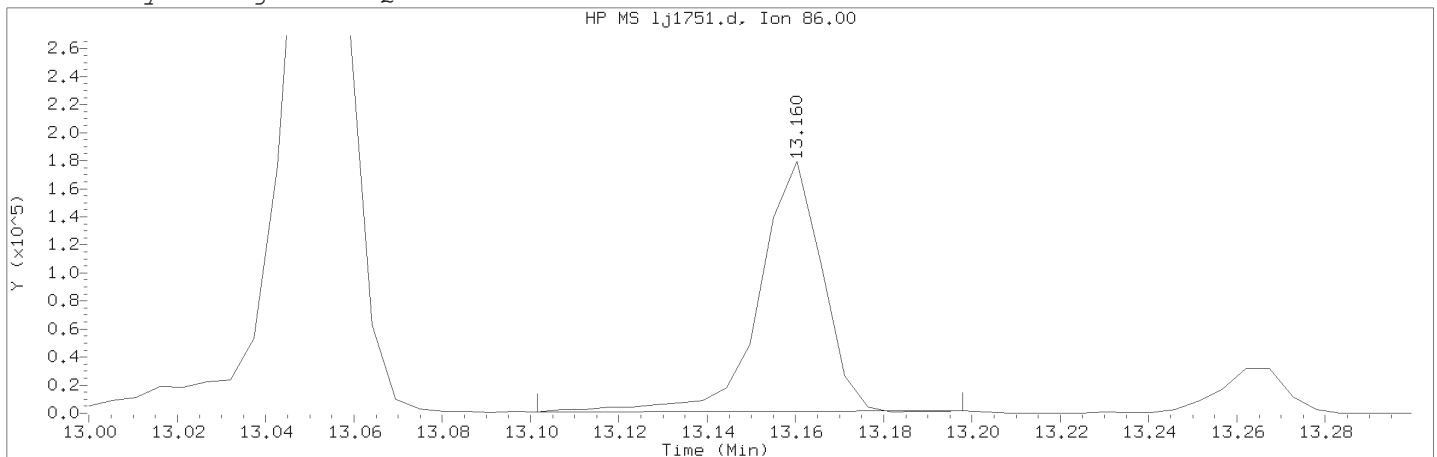
Lab Sample ID: RVICV2628

Compound Number	: 58	
Compound Name	: Benzoic acid	
Scan Number	: 1427	
Retention Time (minutes)	: 8.619	
Quant Ion	: 105.00	
Area	: 974265	
On-column Amount (ng/ul)	: 31.1927	
Integration start scan	: 1395	Integration stop scan: 1457
Y at integration start	: 0	Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 05:15                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: icvall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5    Lab Sample ID: RVICV2628

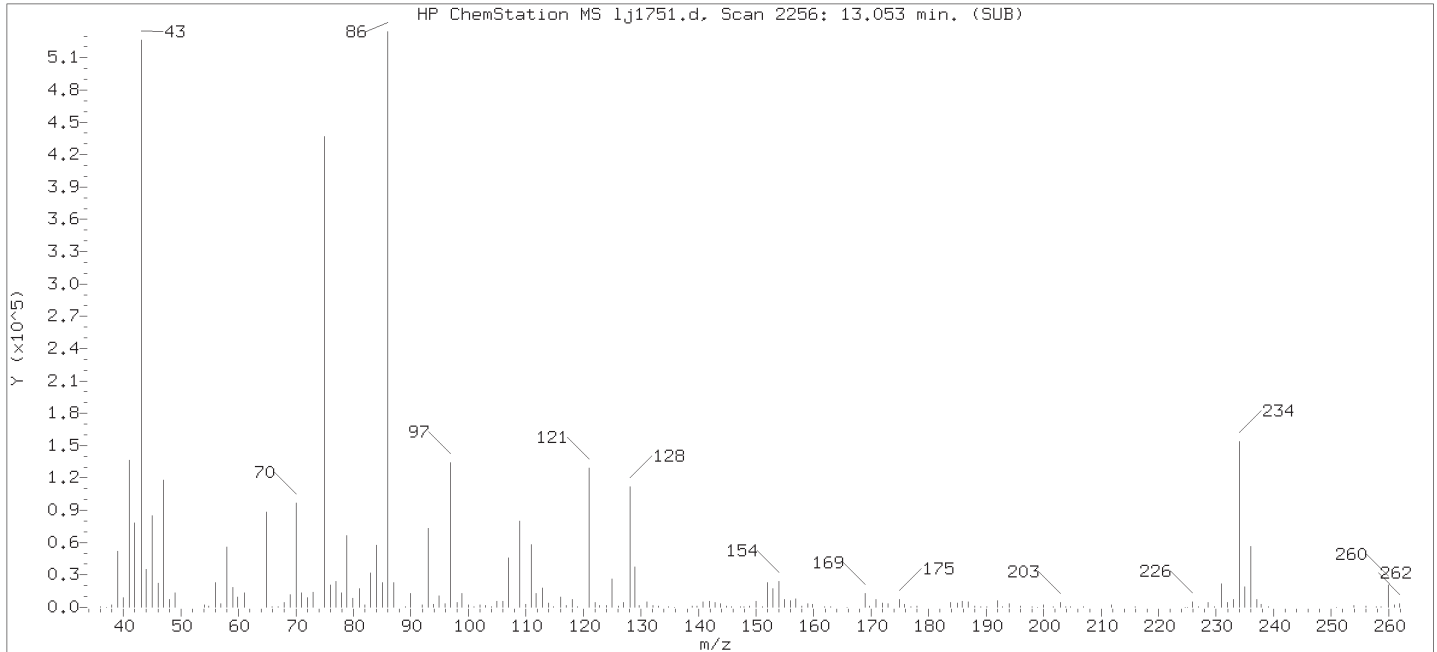
Compound Number                      : 149  
Compound Name                         : Diallylate (peak 2)  
Scan Number                            : 2276  
Retention Time (minutes)             : 13.160  
Quant Ion                               : 86.00  
Area (flag)                            : 173458M  
On-Column Amount (ng/ul)           : 3.4514  
Integration start scan                : 2264                      Integration stop scan: 2282  
Y at integration start                : 1026                      Y at integration end: 1557

Reason for manual integration: improper integration

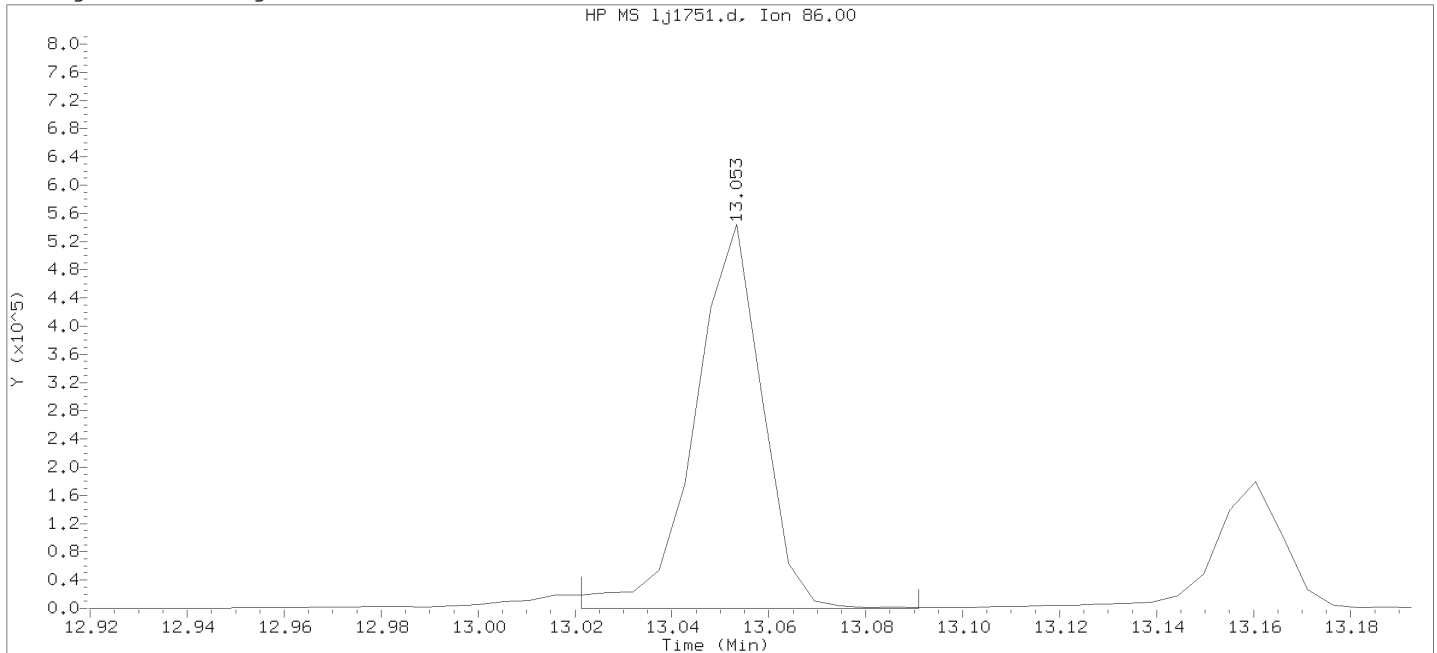
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:55.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

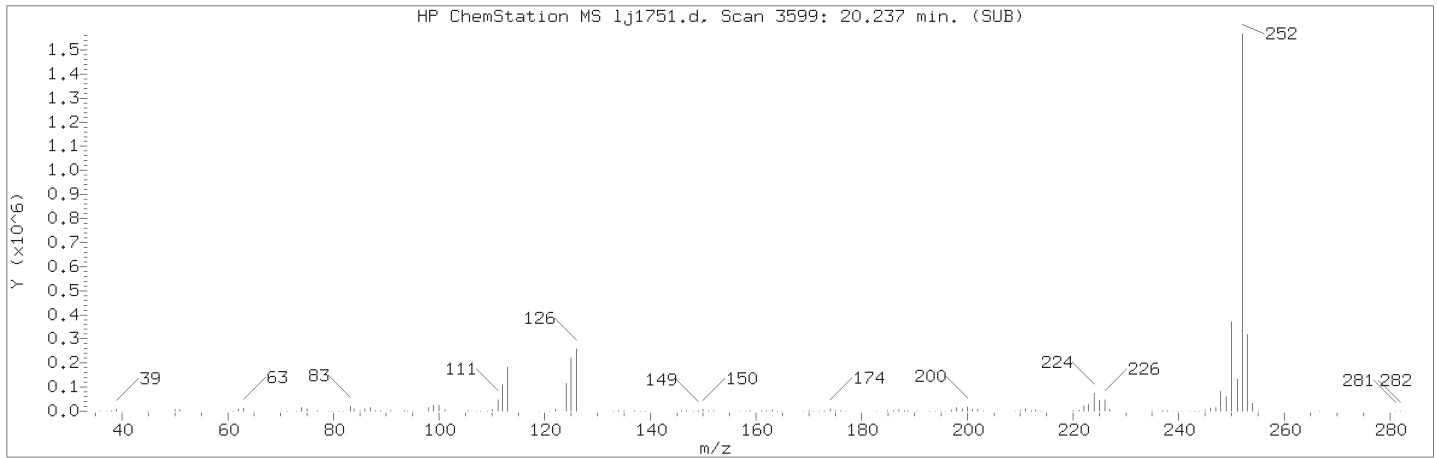
Sublist used: icvall1

Sample Name: SSTD12.5

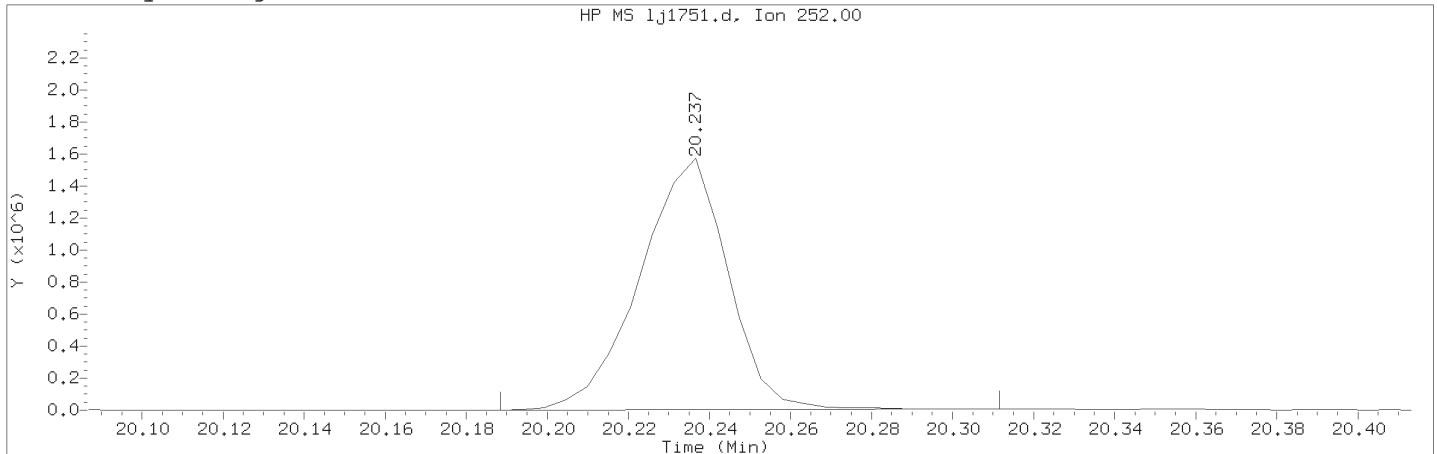
Lab Sample ID: RVICV2628

Compound Number : 149  
Compound Name : Diallate (peak 2)  
Scan Number : 2256  
Retention Time (minutes) : 13.053  
Quant Ion : 86.00  
Area : 520633  
On-column Amount (ng/ul) : 2.0220  
Integration start scan : 2249 Integration stop scan: 2262  
Y at integration start : 0 Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 05:15                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: icvall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5    Lab Sample ID: RVICV2628

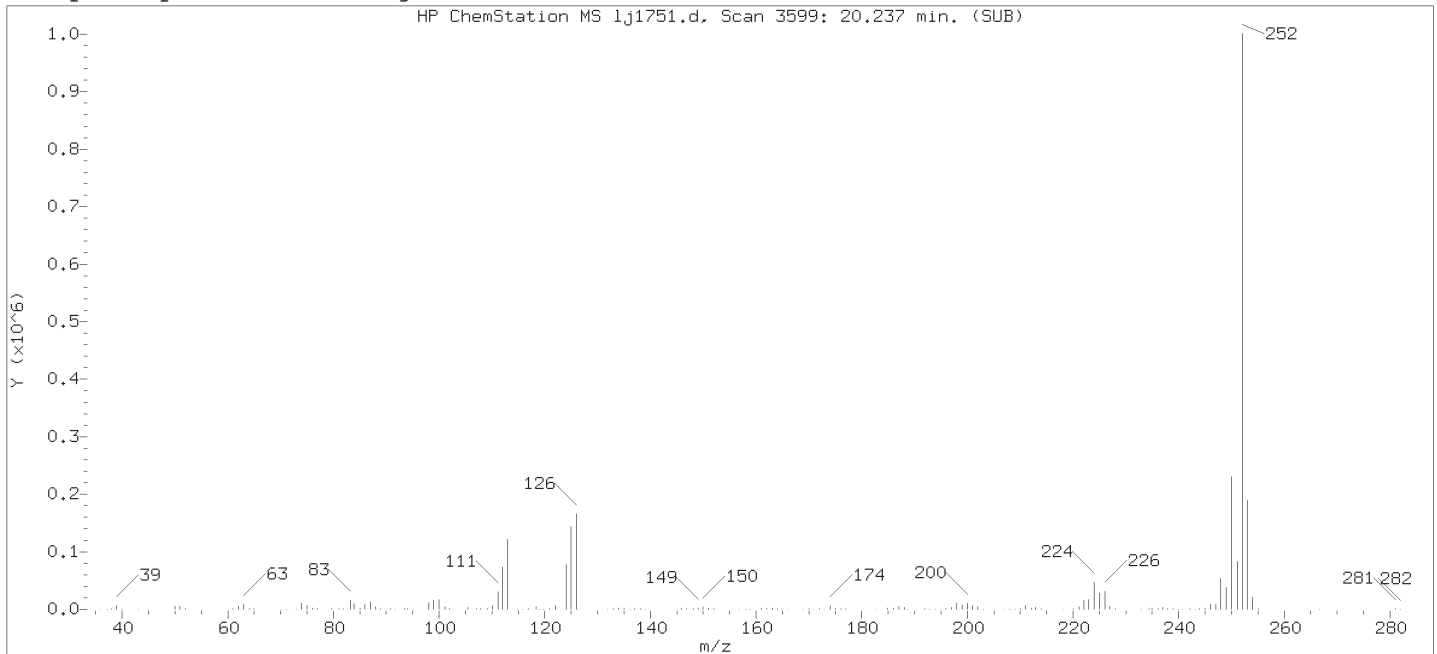
Compound Number                      : 216  
Compound Name                         : Benzo(a)pyrene  
Scan Number                            : 3599  
Retention Time (minutes)             : 20.237  
Quant Ion                                : 252.00  
Area (flag)                             : 2355675M  
On-Column Amount (ng/ul)            : 14.4760  
Integration start scan                : 3589                      Integration stop scan: 3612  
Y at integration start                : 1527                      Y at integration end: 7196

Reason for manual integration: improper integration

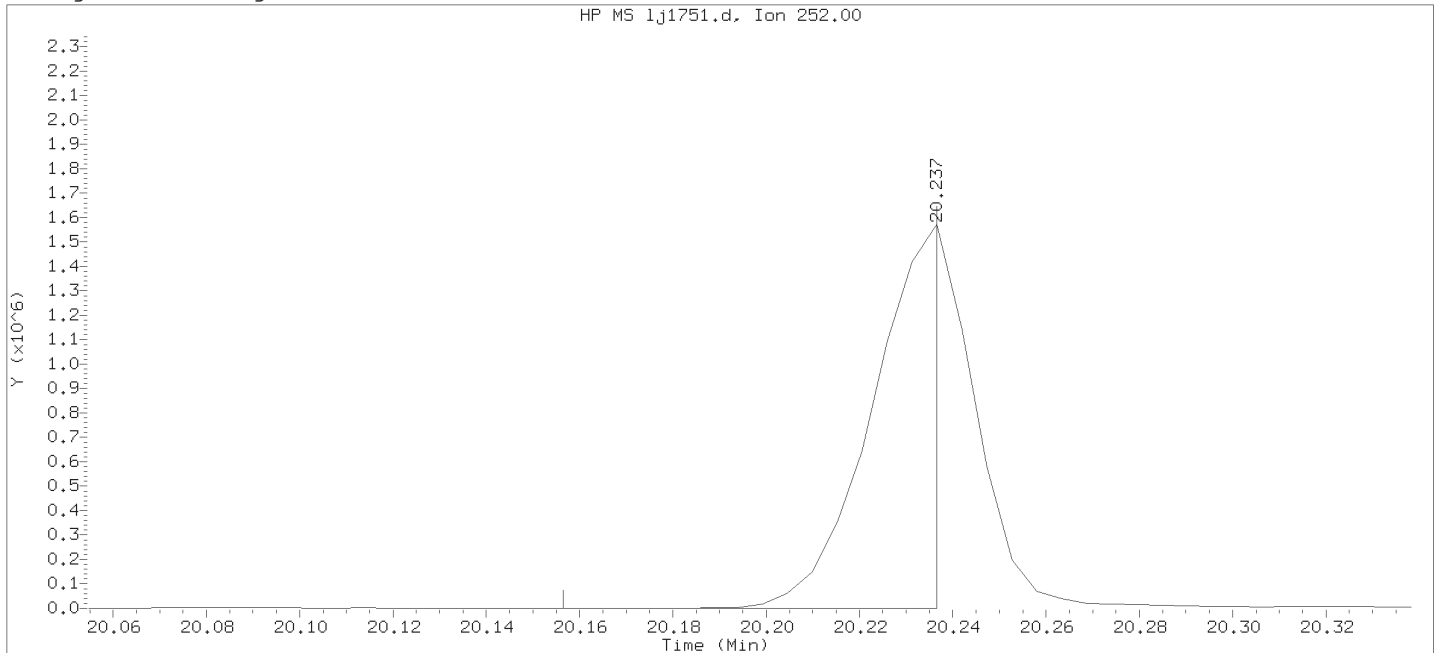
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:55.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



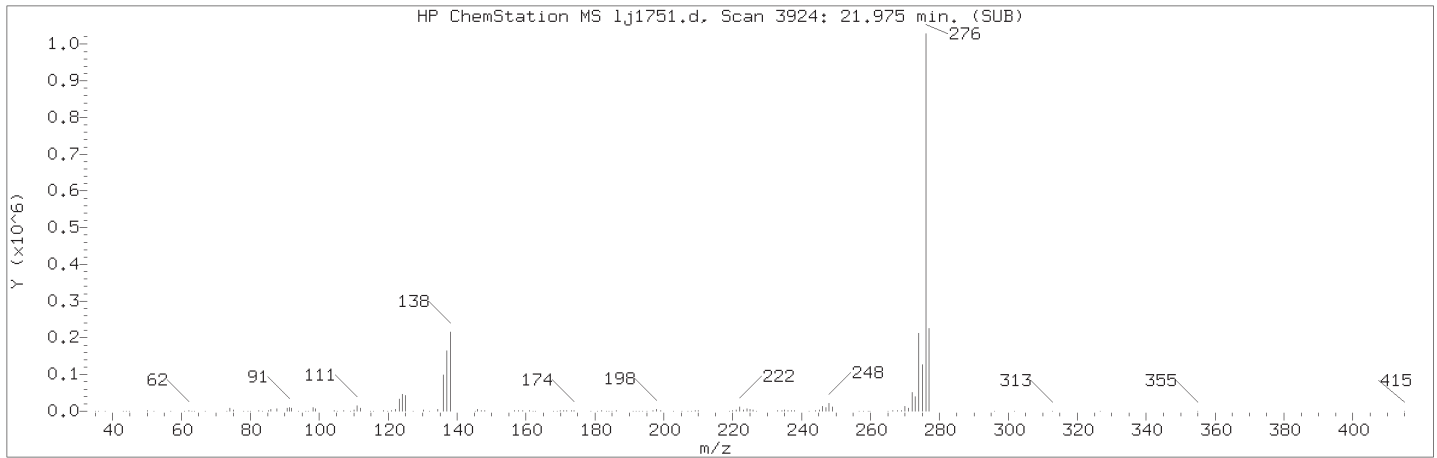
Data File: /chem/HP20296.i/18oct28.b/lj1751.d                      Instrument ID: HP20296.i  
 Injection date and time: 29-OCT-2018 05:15                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: icvall1  
 Calibration date and time: 29-OCT-2018 15:37  
 Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

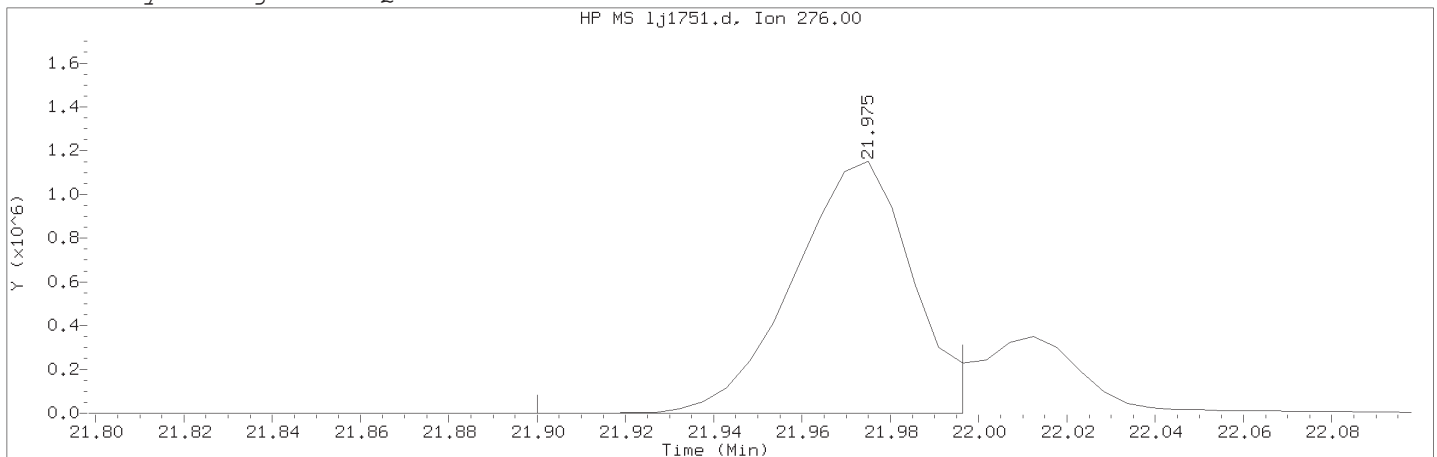
Sample Name: SSTD12.5    Lab Sample ID: RVICV2628

Compound Number                      : 216  
 Compound Name                        : Benzo(a)pyrene  
 Scan Number                            : 3599  
 Retention Time (minutes)            : 20.237  
 Quant Ion                                : 252.00  
 Area                                      : 1454195  
 On-column Amount (ng/ul)           : 8.9073  
 Integration start scan                : 3583                      Integration stop scan: 3598  
 Y at integration start                : 276                        Y at integration end: 276

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d                      Instrument ID: HP20296.i  
Injection date and time: 29-OCT-2018 05:15                      Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m                      Sublist used: icvall1  
Calibration date and time: 29-OCT-2018 19:11  
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5    Lab Sample ID: RVICV2628

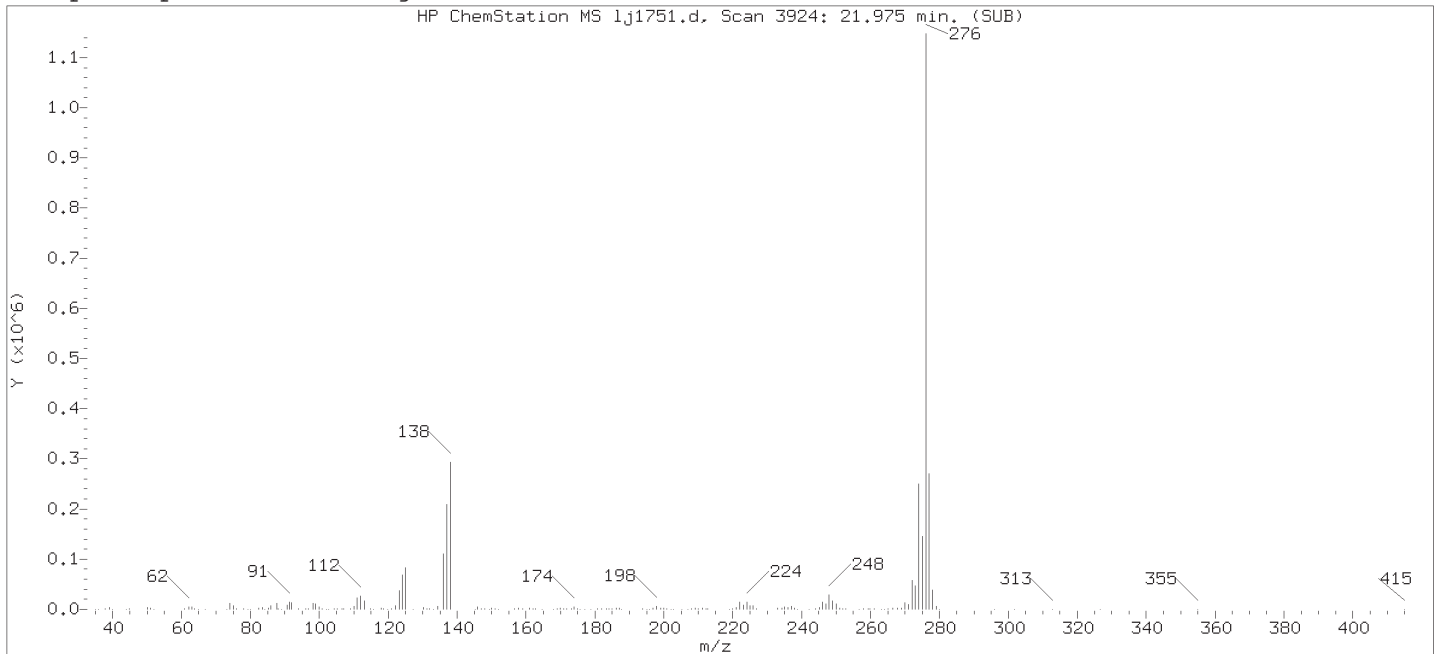
Compound Number    : 224  
Compound Name    : Indeno(1,2,3-cd)pyrene  
Scan Number    : 3924  
Retention Time (minutes)                                    : 21.975  
Quant Ion    : 276.00  
Area (flag)    : 2159768M  
On-Column Amount (ng/ul)                                   : 13.6792  
Integration start scan                                      : 3909                      Integration stop scan: 3927  
Y at integration start                                      : 0                              Y at integration end: 0

Reason for manual integration: improper integration

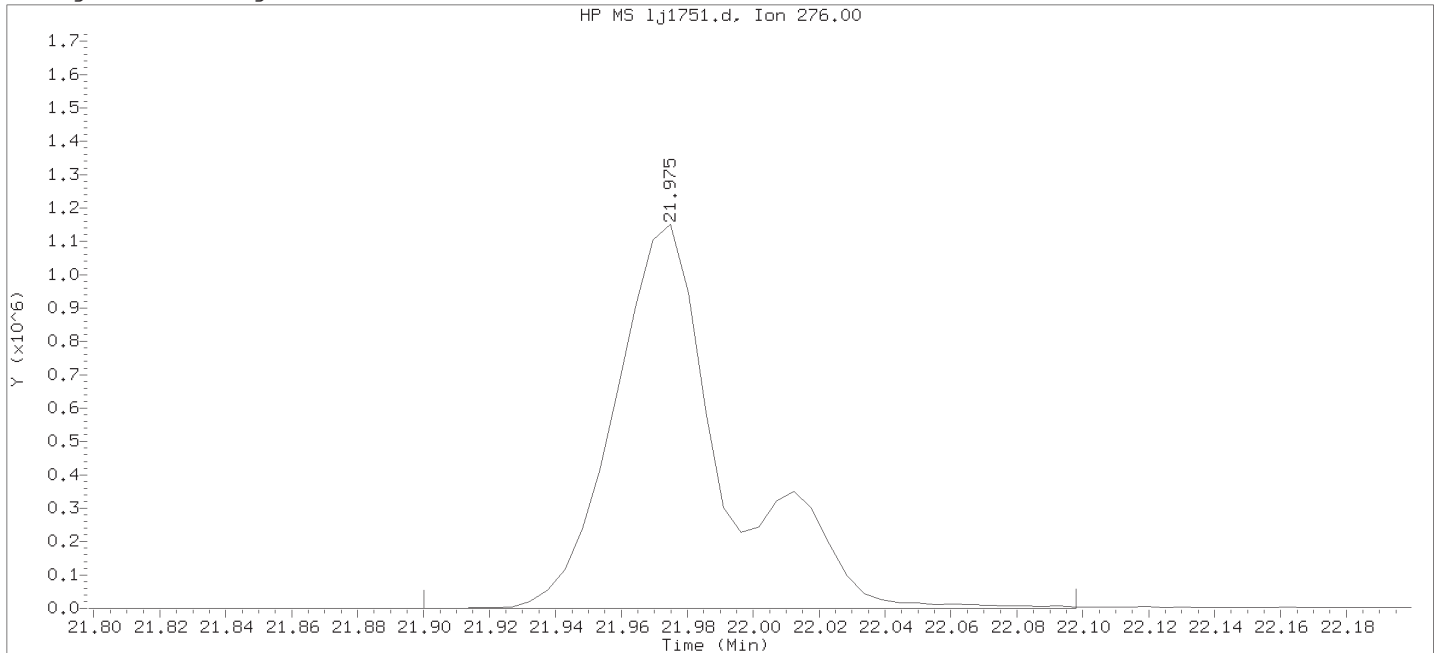
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 10/29/2018 at 19:55.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.  
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d  
Injection date and time: 29-OCT-2018 05:15

Instrument ID: HP20296.i  
Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m  
Calibration date and time: 29-OCT-2018 15:37  
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sublist used: icvall1

Sample Name: SSTD12.5

Lab Sample ID: RVICV2628

Compound Number : 224  
Compound Name : Indeno(1,2,3-cd)pyrene  
Scan Number : 3924  
Retention Time (minutes) : 21.975  
Quant Ion : 276.00  
Area : 2698988  
On-column Amount (ng/ul) : 13.9994  
Integration start scan : 3909 Integration stop scan: 3946  
Y at integration start : 0 Y at integration end: 0



Date : 07-NOV-2018 21:40

Client ID: DFTPP12.5

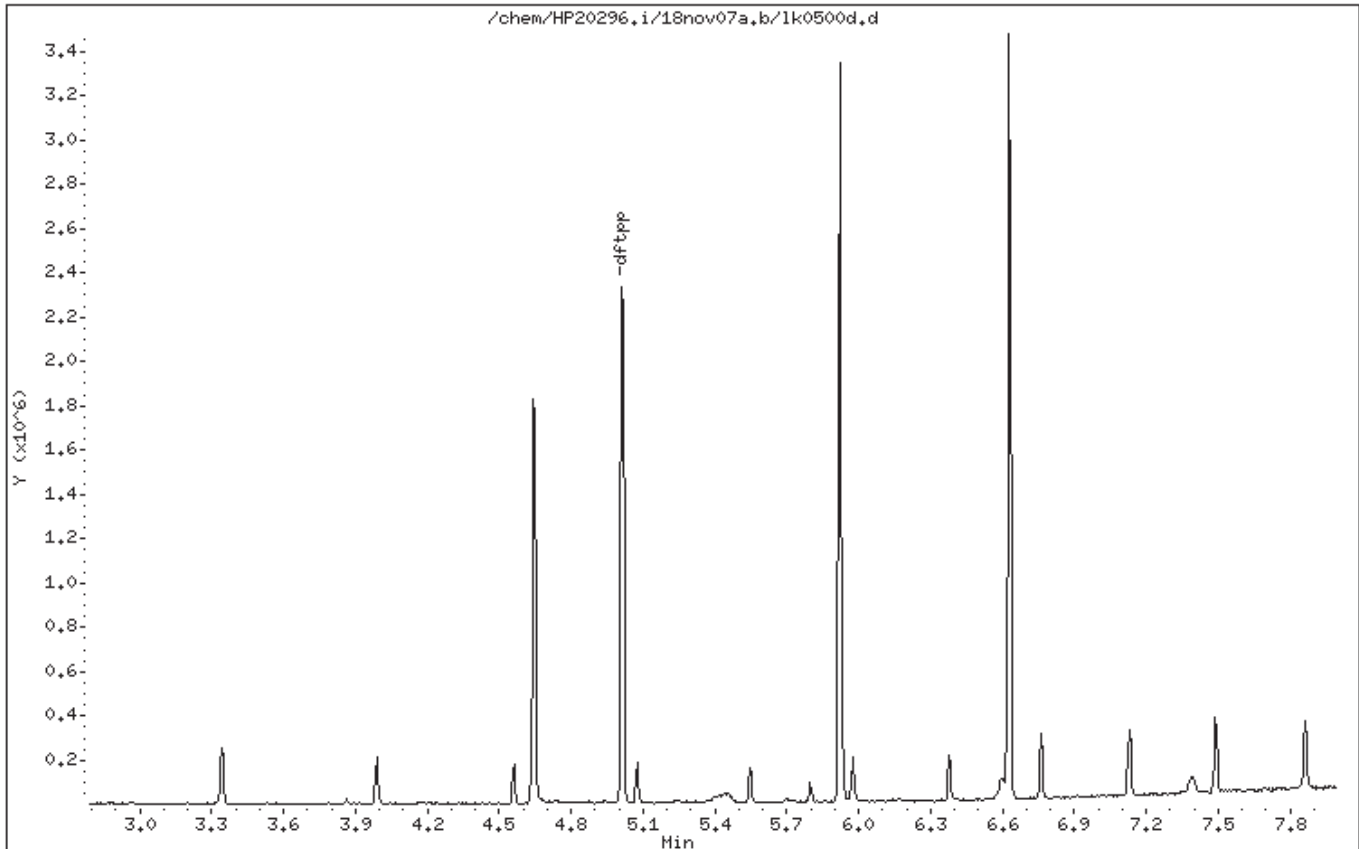
Instrument: HP20296.i

Sample Info: DFTPP12.5;RVIDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 11/07/2018 at 22:35.  
Target 3.5 esignature user ID: art12405

Date : 07-NOV-2018 21:40

Client ID: DFTPP12.5

Instrument: HP20296.i

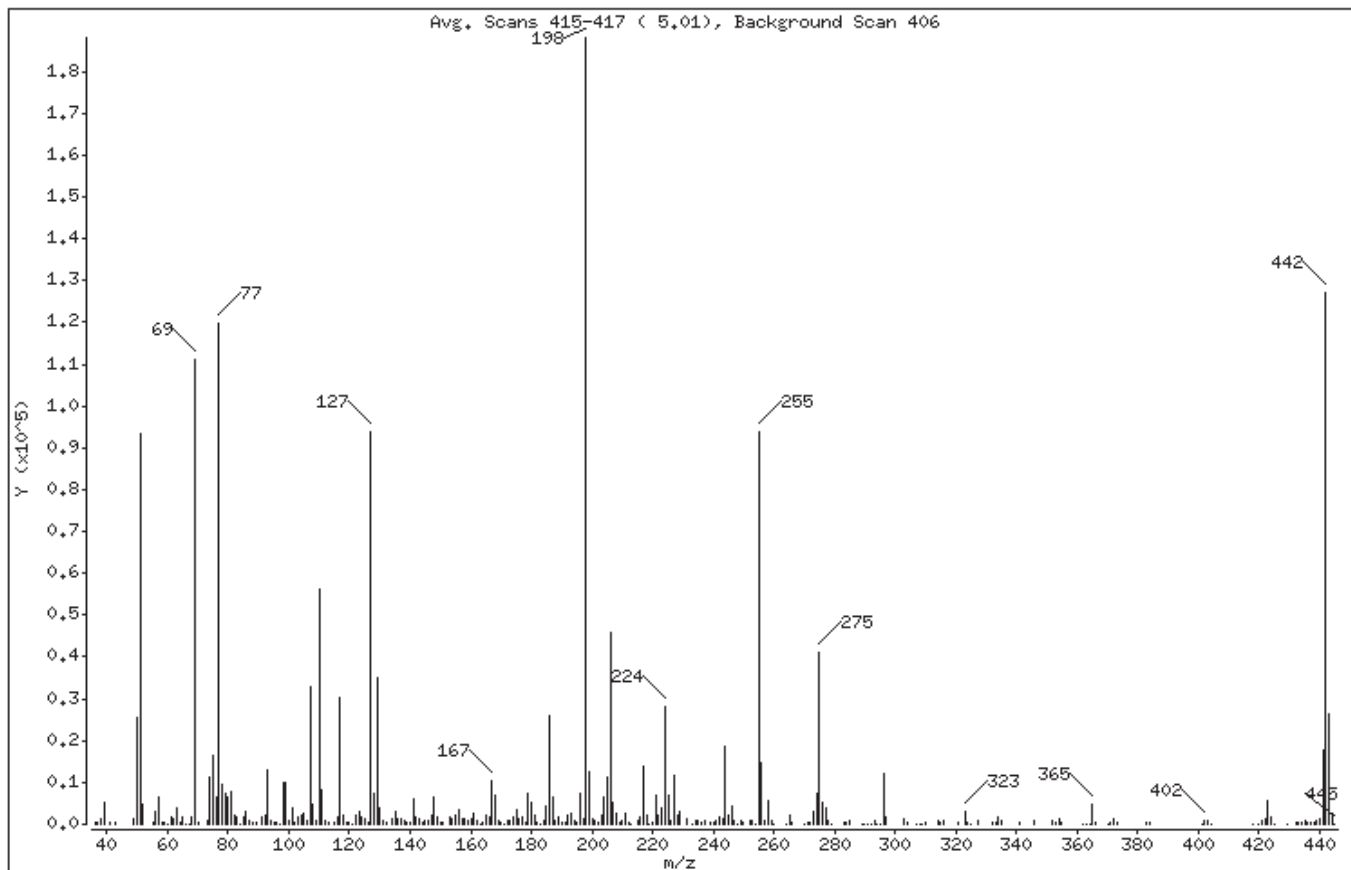
Sample Info: DFTPP12.5;RVIDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	49.57
68	Less than 2.00% of mass 69	0.94 ( 1.59)
69	Mass 69 relative abundance	59.14
70	Less than 2.00% of mass 69	0.20 ( 0.34)
127	10.00 - 80.00% of mass 198	49.93
197	Less than 2.00% of mass 198	0.63
199	5.00 - 9.00% of mass 198	6.67
275	10.00 - 60.00% of mass 198	21.84
365	Greater than 1.00% of mass 198	2.42
441	0.01 - 24.00% of mass 442	9.52 ( 14.10)
442	50.00 - 99.99% of mass 198	67.52
443	15.00 - 24.00% of mass 442	13.93 ( 20.63)

Digitally signed by Ashley R. Transue on 11/07/2018 at 22:35.  
Target 3.5 esignature user ID: art12405

Date : 07-NOV-2018 21:40

Client ID: DFTPP12.5

Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0,18

Data File: lk0500d,d  
Spectrum: Avg. Scans 415-417 ( 5.01), Background Scan 406  
Location of Maximum: 198,00  
Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36,00	570	122,00	2043	197,00	1188	284,00	510
37,00	325	123,00	3050	198,00	188032	285,00	850
38,00	1497	124,00	1813	199,00	12545	289,00	97
39,00	5099	125,00	1381	200,00	1318	290,00	189
41,00	350	126,00	422	201,00	823	291,00	118
43,00	231	127,00	93880	202,00	323	292,00	123
49,00	1155	128,00	7501	203,00	2074	293,00	742
50,00	25464	129,00	34968	204,00	6390	294,00	99
51,00	93208	130,00	3971	205,00	11264	295,00	127
52,00	4679	131,00	719	206,00	45912	296,00	12060
55,00	460	132,00	364	207,00	5008	297,00	1580
56,00	3195	134,00	1465	208,00	2489	303,00	1494
57,00	6468	135,00	2909	209,00	430	304,00	265
58,00	329	136,00	1341	210,00	690	307,00	175
59,00	313	137,00	1423	211,00	2681	308,00	84
60,00	94	138,00	771	212,00	574	309,00	94
61,00	1700	139,00	403	213,00	97	310,00	240
62,00	1405	140,00	275	215,00	826	314,00	981
63,00	3789	141,00	6027	216,00	1681	315,00	609
64,00	370	142,00	1844	217,00	13883	316,00	1059
65,00	1618	143,00	1096	218,00	2287	321,00	562
66,00	84	144,00	268	219,00	89	323,00	3084
67,00	99	145,00	683	220,00	263	324,00	337
68,00	1772	146,00	943	221,00	6722	325,00	190
69,00	111200	147,00	2195	222,00	2164	327,00	669
70,00	376	148,00	6407	223,00	3760	332,00	542
73,00	1029	149,00	1748	224,00	28048	333,00	611
74,00	11136	150,00	279	225,00	6910	334,00	1687
75,00	16416	151,00	540	226,00	937	335,00	661
76,00	6505	153,00	1570	227,00	11573	341,00	280
77,00	119784	154,00	1152	228,00	2092	346,00	785
78,00	9407	155,00	2009	229,00	2842	352,00	1070
79,00	7287	156,00	3471	231,00	1230	353,00	358
80,00	6684	157,00	1098	233,00	216	354,00	1282
81,00	7958	158,00	1194	234,00	713	355,00	358

Date : 07-NOV-2018 21:40

Client ID: DFTPP12.5

Instrument: HP20296.i

Sample Info: DFTPP12.5;RVIDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0,18

Data File: lk0500d,d  
Spectrum: Avg. Scans 415-417 ( 5.01), Background Scan 406  
Location of Maximum: 198,00  
Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82,00	2229	159,00	718	235,00	835	362,00	104
83,00	1857	160,00	1467	236,00	537	363,00	86
84,00	148	161,00	2607	237,00	892	364,00	171
85,00	1632	162,00	883	239,00	553	365,00	4542
86,00	3036	163,00	123	240,00	499	366,00	383
87,00	836	164,00	554	241,00	912	370,00	105
88,00	370	165,00	2040	242,00	1828	371,00	337
89,00	250	166,00	1857	243,00	1457	372,00	1164
91,00	1546	167,00	10518	244,00	18392	373,00	314
92,00	2207	168,00	6923	245,00	2271	383,00	577
93,00	12995	169,00	979	246,00	4324	384,00	257
94,00	951	170,00	227	247,00	784	401,00	92
95,00	491	171,00	208	248,00	116	402,00	1002
96,00	540	172,00	940	249,00	926	403,00	796
97,00	112	173,00	921	250,00	446	404,00	172
98,00	10143	174,00	1680	252,00	1007	418,00	139
99,00	9740	175,00	3449	253,00	721	420,00	95
100,00	803	176,00	1081	254,00	124	421,00	1008
101,00	4028	177,00	1872	255,00	93616	422,00	1288
102,00	520	178,00	347	256,00	14500	423,00	5653
103,00	1593	179,00	7204	257,00	884	424,00	1871
104,00	2356	180,00	4975	258,00	5565	425,00	191
105,00	2485	181,00	2291	259,00	724	429,00	96
106,00	1022	182,00	642	260,00	108	432,00	393
107,00	32912	183,00	94	264,00	202	433,00	410
108,00	4929	184,00	784	265,00	2052	434,00	238
109,00	727	185,00	4220	266,00	473	435,00	993
110,00	56376	186,00	25968	270,00	88	436,00	269
111,00	8137	187,00	6619	271,00	474	437,00	476
112,00	1024	188,00	879	272,00	342	438,00	573
113,00	472	189,00	1755	273,00	2973	439,00	1055
115,00	225	190,00	244	274,00	7340	440,00	1115
116,00	1515	191,00	621	275,00	41056	441,00	17896
117,00	30072	192,00	2230	276,00	5315	442,00	126968
118,00	2227	193,00	2638	277,00	3973	443,00	26184

Date : 07-NOV-2018 21:40

Client ID: DFTPP12,5

Instrument: HP20296,i

Sample Info: DFTPP12,5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

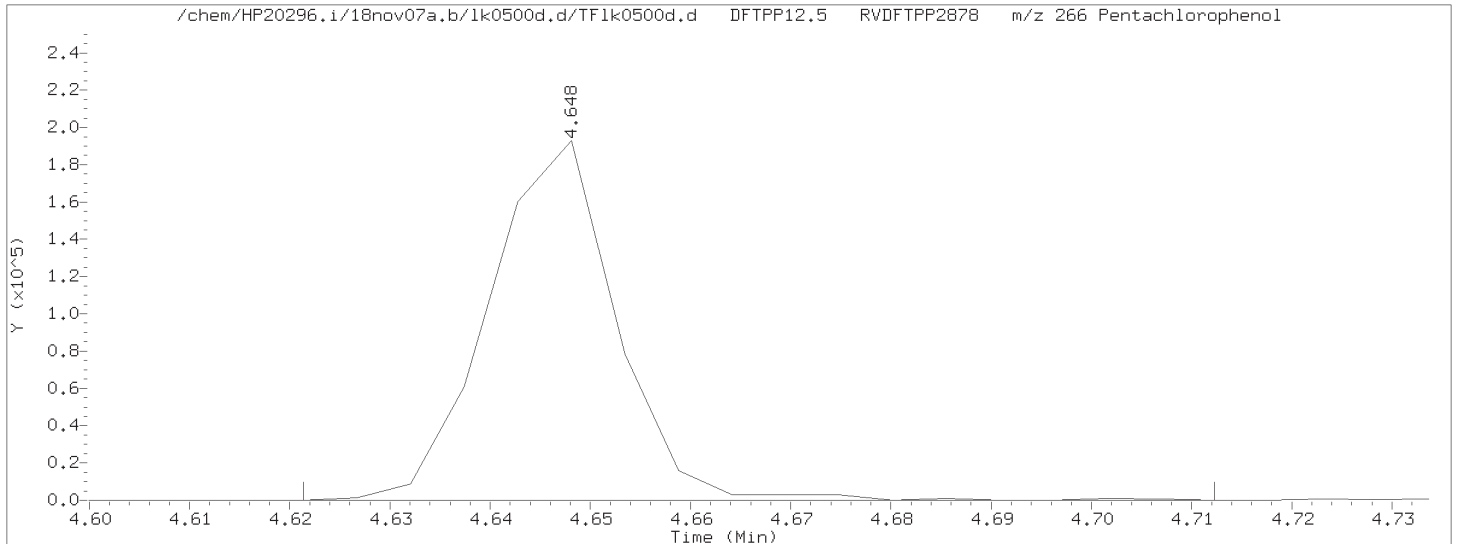
Column diameter: 0,18

Data File: lk0500d,d  
Spectrum: Avg. Scans 415-417 ( 5,01), Background Scan 406  
Location of Maximum: 198,00  
Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119,00	407	194,00	739	278,00	790	444,00	2184
120,00	350	195,00	502	279,00	89	445,00	136
121,00	152	196,00	7550	283,00	351		

# Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP20296.i Injection Date: 07-NOV-2018 21:40 Operator: art12405

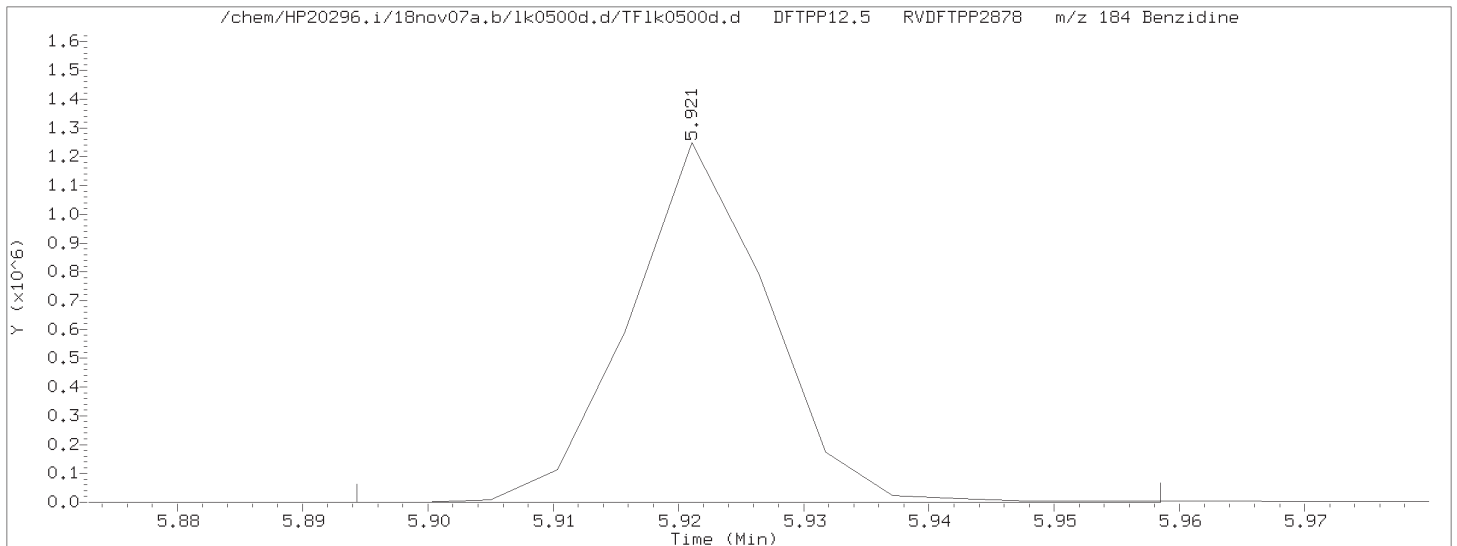


Pentachlorophenol EICP peak height = 192960 EICP peak height at 10% = 19296 Pentachlorophenol EICP area = 170100

Pentachlorophenol EICP peak apex (min.) = 4.648  
RT at 10% of front half of EICP (min.) = 4.633  
RT at 10% of back half of EICP (min.) = 4.658

'Front' peak width (min.) = 0.014966667  
'Tailing' peak width (min.) = 0.010383333

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.010383333}{0.014966667} = 0.694$$



Benzidine EICP peak height = 1249280 EICP peak height at 10% = 124928 Benzidine EICP area = 956166

Benzidine EICP peak apex (min.) = 5.921  
RT at 10% of front half of EICP (min.) = 5.911  
RT at 10% of back half of EICP (min.) = 5.933

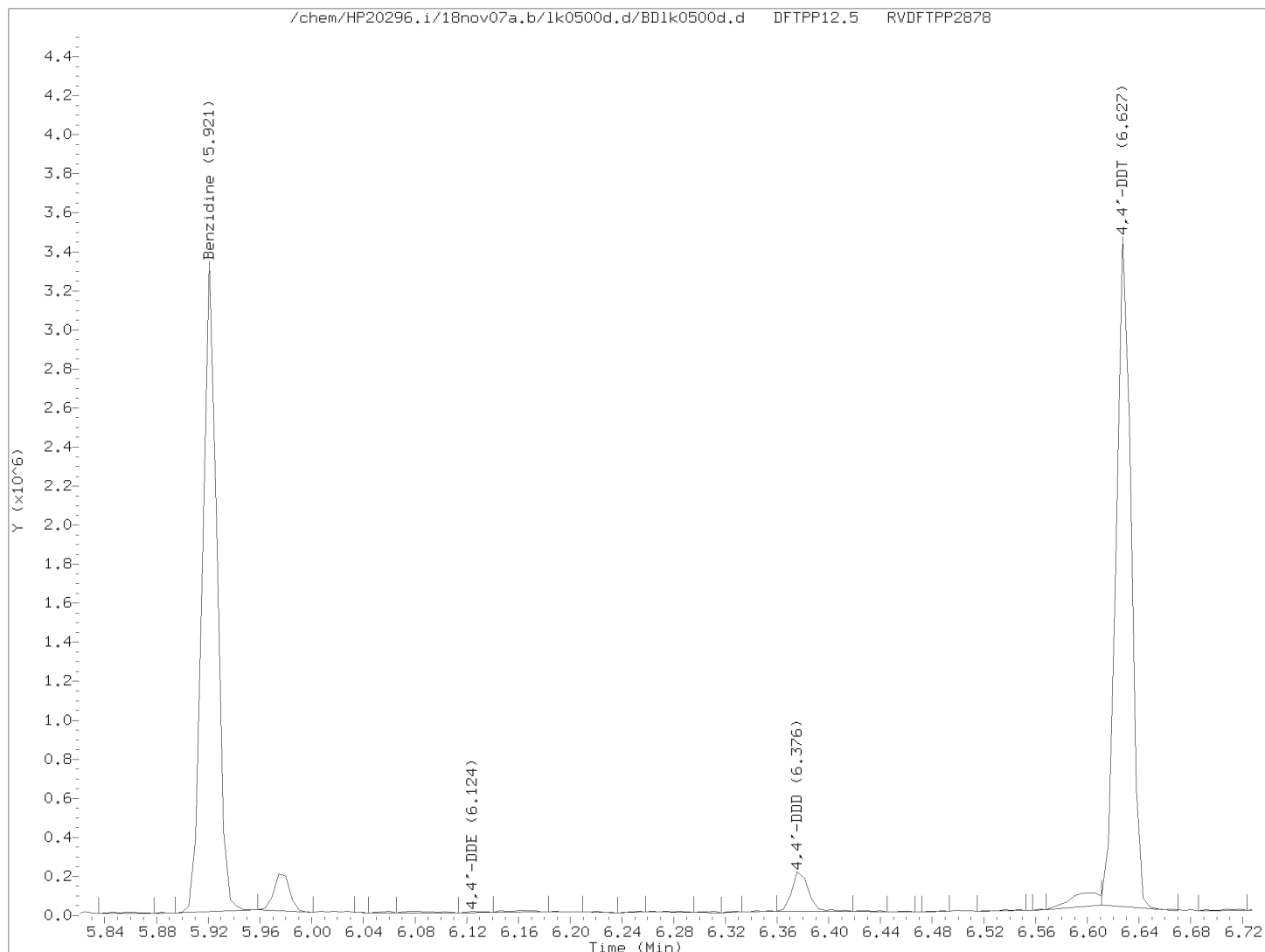
'Front' peak width (min.) = 0.010533333  
'Tailing' peak width (min.) = 0.012400000

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.012400000}{0.010533333} = 1.177$$

page 1 of 2  
printed on 11/07/2018 at 21:54

# Assessment of GC Column Performance and Injection Port Inertness for

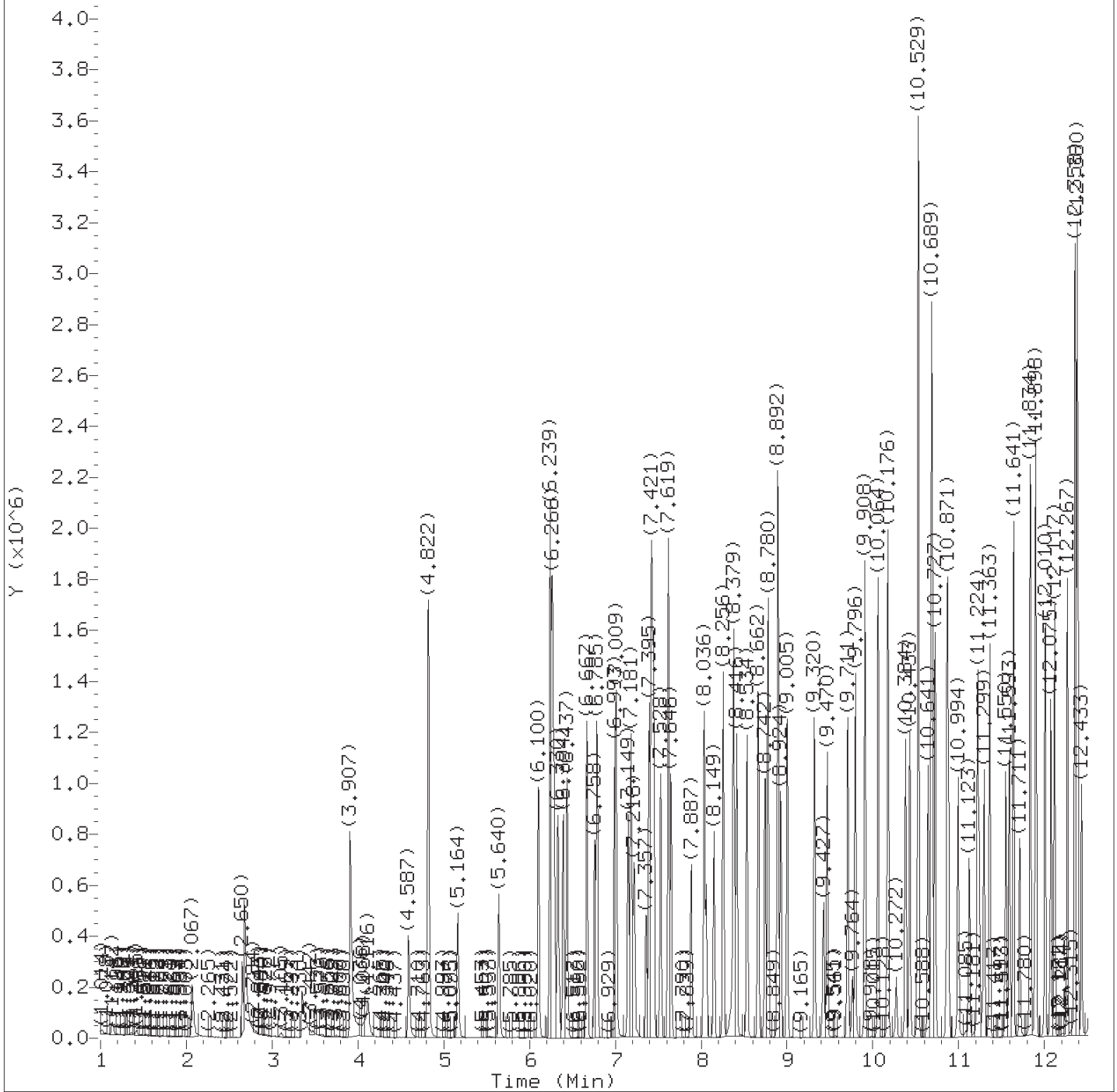
Instrument ID: HP20296.i Injection Date: 07-NOV-2018 21:40 Operator: art12405



$$\% \text{ 4,4'-DDT breakdown} = \frac{4,4'\text{-DDE TIC area} + 4,4'\text{-DDD TIC area}}{4,4'\text{-DDE TIC area} + 4,4'\text{-DDD TIC area} + 4,4'\text{-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{6063 + 181455}{6063 + 181455 + 2741788} \times 100 = 6.4$$

page 2 of 2  
printed on 11/07/2018 at 21:58



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0501.d  
Injection date and time: 07-NOV-2018 21:58

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m

Sublist used: all1

Calibration date and time: 07-NOV-2018 22:34

Date, time and analyst ID of latest file update: 07-Nov-2018 22:34 art12405

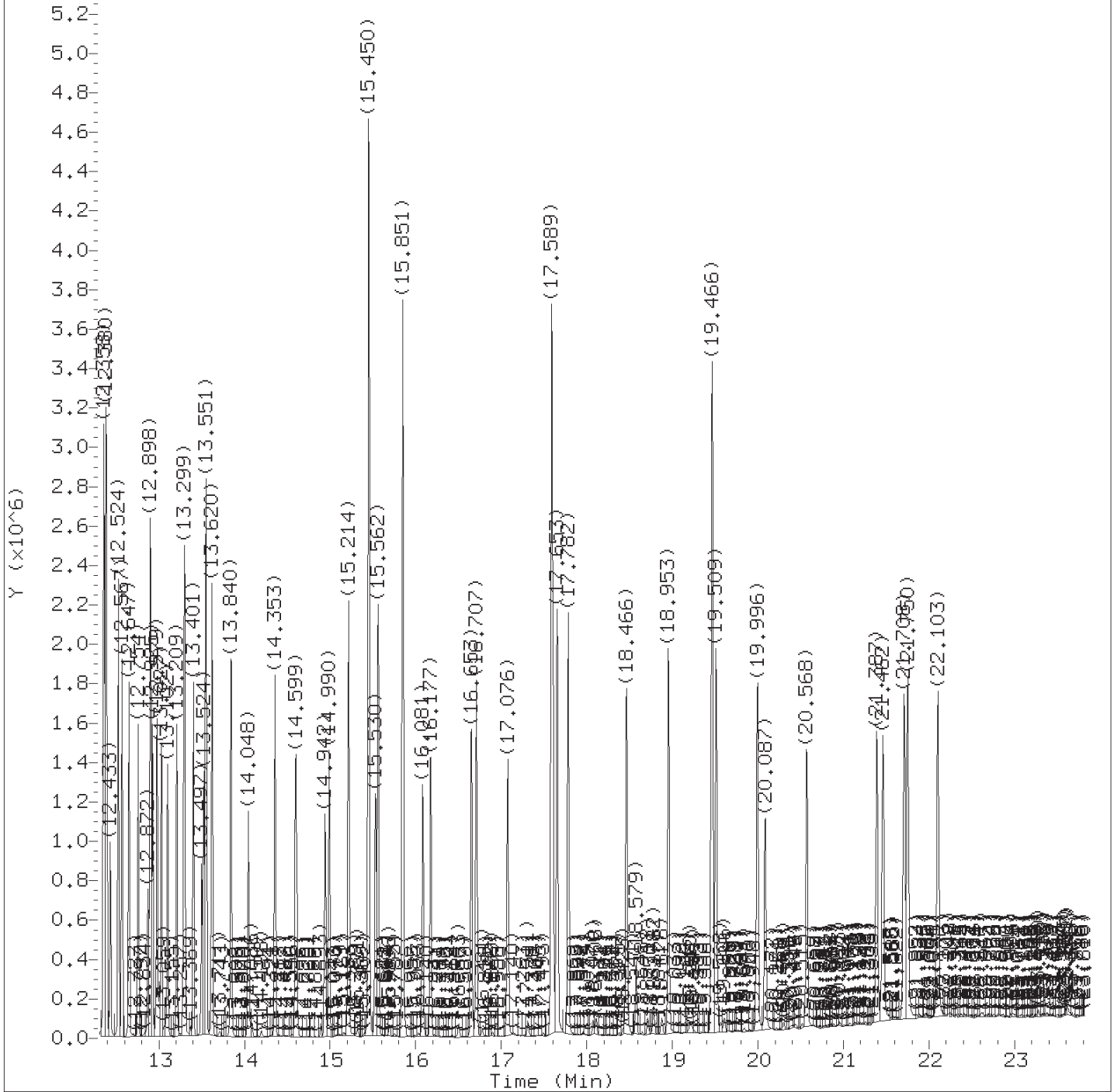
Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 11/07/2018 at 22:35.

Target 3.5 esignature user ID: art12405





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0501.d  
Injection date and time: 07-NOV-2018 21:58

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:34 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue  
on 11/07/2018 at 22:35.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0501.d  
 Injection date and time: 07-NOV-2018 21:58

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:34 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.067	88	156048	7.086
5) N-Nitrosodimethylamine	(1)	2.650	74	236133	7.133
6) Pyridine	(1)	2.677	79	387125	6.873
8) 2-Picoline	(1)	3.907	93	410627	6.984
9) N-Nitrosomethylethylamine	(1)	4.116	88	165355M	6.886
10) Methyl methanesulfonate	(1)	4.587	80	218766	7.124
12) \$2-Fluorophenol	(1)	4.822	112	657397	14.425
14) N-Nitrosodiethylamine	(1)	5.164	102	153944	7.419
16) Ethyl methanesulfonate	(1)	5.640	109	166307	7.057
43) Total Cresols	(1)			675713	14.785
17) Benzaldehyde	(1)	6.100	77	316512	7.502
18) \$Phenol-d6	(1)	6.239	99	881465	14.332
19) Phenol	(1)	6.261	94	518698	7.190
20) Aniline	(1)	6.271	93	610413	7.200
21) a-methylstyrene	(1)	6.346	118	30692	6.912
23) bis(2-Chloroethyl) ether	(1)	6.394	93	375404	6.917
24) 2-Chlorophenol	(1)	6.437	128	309087	7.274
25) 1,3-Dichlorobenzene	(1)	6.667	146	351742	7.383
26) *1,4-Dichlorobenzene-d4	(1)	6.758	152	147222	5.000
27) 1,4-Dichlorobenzene	(1)	6.785	146	348275	7.275
28) Benzyl alcohol	(1)	6.993	108	197307	6.766
29) 1,2-Dichlorobenzene	(1)	7.009	146	343962	7.393
31) Indene	(1)	7.149	115	354981	6.941
32) 2-Methylphenol	(1)	7.181	108	319817	7.156
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.218	45	472739	6.906
35) bis(2-Chloroisopropyl) ether	(1)	7.218	45	472739	6.906
36) N-Nitrosopyrrolidine	(1)	7.357	100	171871	7.531
100) Isosafrole	(3)			240143	7.135
37) Acetophenone	(1)	7.395	105	478722	6.951
39) N-Nitroso-di-n-propylamine	(1)	7.416	70	293863	7.057
38) 4-Methylphenol	(1)	7.427	108	355896	7.629
40) N-Nitrosomorpholine	(1)	7.432	56	212056	7.012
41) o-Toluidine	(1)	7.448	106	555666	7.129
44) Hexachloroethane	(1)	7.528	117	150468	6.921
45) \$Nitrobenzene-d5	(2)	7.619	82	824726	15.217
46) Nitrobenzene	(2)	7.646	77	446437	7.729
50) N-Nitrosopiperidine	(2)	7.887	114	154667	7.636
52) Isophorone	(2)	8.036	82	706106	7.244
125) 2,4,2,6-Dinitrotoluenes	(3)			309050	15.103
53) 2-Nitrophenol	(2)	8.149	139	147839	7.793

M = Compound was manually integrated.

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 11/07/2018 at 22:35.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0501.d  
 Injection date and time: 07-NOV-2018 21:58

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:34 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.256	107	354565	7.642
59) O,O,O-Triethylphosphorothioate	(2)	8.379	198	159858	8.034
58) Benzoic acid	(2)	8.395	105	256365	8.475
57) bis(2-Chloroethoxy)methane	(2)	8.416	93	468422	7.538
62) 2,4-Dichlorophenol	(2)	8.534	162	261434	7.853
65) 1,2,4-Trichlorobenzene	(2)	8.668	180	298864	7.780
68)*Naphthalene-d8	(2)	8.748	136	517670	5.000
151) Diallate trans/cis	(4)			331959	7.225
69) Naphthalene	(2)	8.780	128	885373	7.572
70) 4-Chloroaniline	(2)	8.892	127	354874	7.528
71) 2,6-Dichlorophenol	(2)	8.898	162	251687	7.777
72) Hexachloropropene	(2)	8.924	213	203307	8.207
74) Hexachlorobutadiene	(2)	9.005	225	169519	7.487
78) Quinoline	(2)	9.320	129	510053	7.331
79) Caprolactam	(2)	9.427	113	78483	7.646
80) N-Nitrosodi-n-butylamine	(2)	9.470	84	258134	6.667
83) 4-Chloro-3-methylphenol	(2)	9.711	107	296496	7.504
85) Safrole	(2)	9.796	162	222827	7.567
86) 2-Methylnaphthalene	(2)	9.908	142	572977	7.638
87) 1-Methylnaphthalene	(2)	10.064	142	550578	7.668
88) Hexachlorocyclopentadiene	(3)	10.171	237	177558	7.608
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.181	216	314205	7.756
91) cis-Isosafrole	(3)	10.277	162	39518	1.179
93) 2,4,6-Trichlorophenol	(3)	10.384	196	197647	8.339
95) 2,4,5-Trichlorophenol	(3)	10.433	196	201896	7.726
96)\$2-Fluorobiphenyl	(3)	10.529	172	1332203	15.203
97) trans-Isosafrole	(3)	10.641	162	200625	5.956
98) 1,1'-Biphenyl	(3)	10.684	154	677863	7.532
99) 2-Chloronaphthalene	(3)	10.695	162	591829	7.397
101) 1-Chloronaphthalene	(3)	10.727	162	523743	7.564
103) Diphenyl ether	(3)	10.866	170	385839	7.687
104) 2-Nitroaniline	(3)	10.882	138	166530	8.275
108) 1,4-Naphthoquinone	(3)	10.994	158	192993	6.596
109) 1,4-Dinitrobenzene	(3)	11.123	168	88605	8.250
110) Dimethylphthalate	(3)	11.224	163	611066	7.350
111) 1,3-Dinitrobenzene	(3)	11.240	168	92417	7.562
113) 2,6-Dinitrotoluene	(3)	11.299	165	129377	7.677
114) Acenaphthylene	(3)	11.363	152	761970	7.638
117) 3-Nitroaniline	(3)	11.550	138	144729	7.491
118)*Acenaphthene-d10	(3)	11.593	164	262195	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 11/07/2018 at 22:35.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0501.d  
 Injection date and time: 07-NOV-2018 21:58

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:34 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.641	153	567720	7.373
120) 2,4-Dinitrophenol	(3)	11.711	184	98408	9.684
121) 4-Nitrophenol	(3)	11.834	109	117504	7.263
122) Pentachlorobenzene	(3)	11.839	250	249973	7.735
124) Dibenzofuran	(3)	11.898	168	792513	7.596
123) 2,4-Dinitrotoluene	(3)	11.909	165	179673	7.426
126) 1-Naphthylamine	(3)	12.010	143	539140	7.165
127) 2,3,4,6-Tetrachlorophenol	(3)	12.075	232	157530	7.675
128) 2-Naphthylamine	(3)	12.117	143	552796	7.383
129) Diethylphthalate	(3)	12.267	149	588547	7.194
131) Fluorene	(3)	12.353	166	616862	7.465
130) Thionazin	(3)	12.363	107	121937	7.603
132) 4-Chlorophenyl-phenylether	(3)	12.380	204	328187	7.753
133) 5-Nitro-o-toluidine	(3)	12.385	152	163364	7.762
134) 4-Nitroaniline	(3)	12.390	138	148849	8.048
135) 4,6-Dinitro-2-methylphenol	(4)	12.433	198	103903	7.578
136) N-Nitrosodiphenylamine	(4)	12.524	169	503102	7.546
137) NDPA as diphenylamine	(4)	12.524	169	503102	7.546
139) 1,2-Diphenylhydrazine	(4)	12.567	77	831366	7.047
140) \$2,4,6-Tribromophenol	(3)	12.652	330	172458	16.787
142) Tetraethyldithiopyrophosphate	(4)	12.754	97	131120	7.454
144) 1,3,5-Trinitrobenzene	(4)	12.872	213	62581	7.534
145) Diallate (peak 1)	(4)	12.893	86	283030	5.965
146) Phorate	(4)	12.904	75	497970	8.079
147) Phenacetin	(4)	12.925	108	340950	7.298
148) 4-Bromophenyl-phenylether	(4)	12.979	248	178098	7.664
149) Diallate (peak 2)	(4)	13.000	86	48929	1.260
150) Hexachlorobenzene	(4)	13.032	284	187295	7.905
152) Dimethoate	(4)	13.102	87	298074	7.628
153) Atrazine	(4)	13.209	200	162360	7.668
154) Pentachlorophenol	(4)	13.289	266	111476	7.427
155) 4-Aminobiphenyl	(4)	13.305	169	447638	7.719
156) Pentachloronitrobenzene	(4)	13.305	237	87676	7.806
157) Pronamide	(4)	13.401	173	289575	8.014
158) *Phenanthrene-d10	(4)	13.524	188	521127	5.000
159) Dinoseb	(4)	13.546	211	155767	7.472
160) Phenanthrene	(4)	13.551	178	946429	7.586
162) Anthracene	(4)	13.620	178	949486	7.758
168) Carbazole	(4)	13.845	167	825889	7.531
169) Methyl parathion	(4)	14.043	109	216204	7.366

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 11/07/2018 at 22:35.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0501.d  
 Injection date and time: 07-NOV-2018 21:58

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:34 art12405

Sublist used: all1

Sample Name: SSTD7.5

Lab Sample ID: RVSTD2648

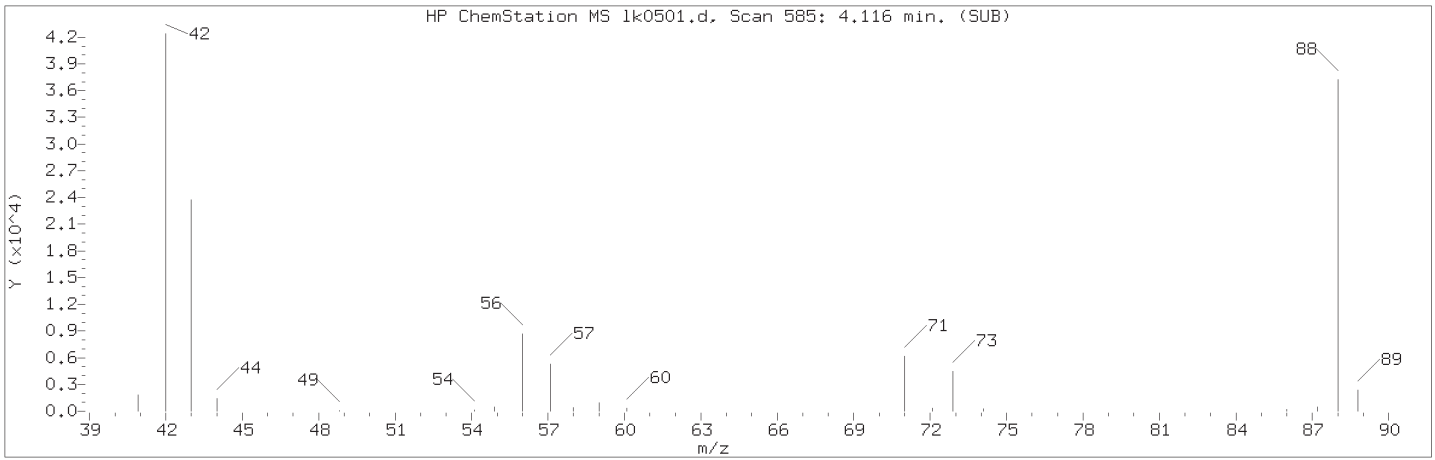
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.353	149	1029553	7.258
172) Parathion	(4)	14.594	109	137076	7.418
173) 4-Nitroquinoline-1-oxide	(4)	14.610	190	70913	6.902
174) Octachlorostyrene	(4)	14.942	308	70176	8.005
176) Isodrin	(4)	14.990	193	116008	7.896
227) Total PAHs	(6)			16205597	140.014
178) Fluoranthene	(4)	15.214	202	1069102	7.819
179) Benzidine	(5)	15.450	184	2138456	24.164
180)*Pyrene-d10	(5)	15.530	212	555413	5.000
182) Pyrene	(5)	15.562	202	1119391	7.640
184)\$Terphenyl-d14	(5)	15.851	244	1398464	15.686
187) p-Dimethylaminoazobenzene	(5)	16.081	225	166260	7.366
190) Chlorobenzilate	(5)	16.172	139	321529	7.425
192) 3,3'-Dimethylbenzidine	(5)	16.653	212	687079	8.106
193) Butylbenzylphthalate	(5)	16.712	149	498211	7.658
196) 2-Acetylaminofluorene	(5)	17.076	181	405396	7.560
198) 3,3'-Dichlorobenzidine	(5)	17.589	252	387472	7.905
200) Benzo(a)anthracene	(5)	17.589	228	1072491	8.044
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.605	231	228786	8.350
201) Chrysene	(5)	17.653	228	1068329	8.110
204) bis(2-Ethylhexyl)phthalate	(5)	17.782	149	696846	7.435
208) 6-Methylchrysene	(5)	18.466	242	689676	7.765
210) Di-n-octylphthalate	(6)	18.953	149	1216608	7.298
211) Benzo(b)fluoranthene	(6)	19.461	252	1067141	7.863
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.466	256	430387	7.739
213) Benzo(k)fluoranthene	(6)	19.509	252	1033149	7.553
216) Benzo(a)pyrene	(6)	19.996	252	981329	8.090
218)*Perylene-d12	(6)	20.087	264	521205	5.000
220) 3-Methylcholanthrene	(6)	20.574	268	431067	7.792
222) Dibenz(a,h)acridine	(6)	21.387	279	776778	7.713
223) Dibenz(a,j)acridine	(6)	21.462	279	809777	7.632
224) Indeno(1,2,3-cd)pyrene	(6)	21.708	276	952710M	8.095
225) Dibenz(a,h)anthracene	(6)	21.750	278	982319	8.019
226) Benzo(g,h,i)perylene	(6)	22.103	276	1008241	8.082

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

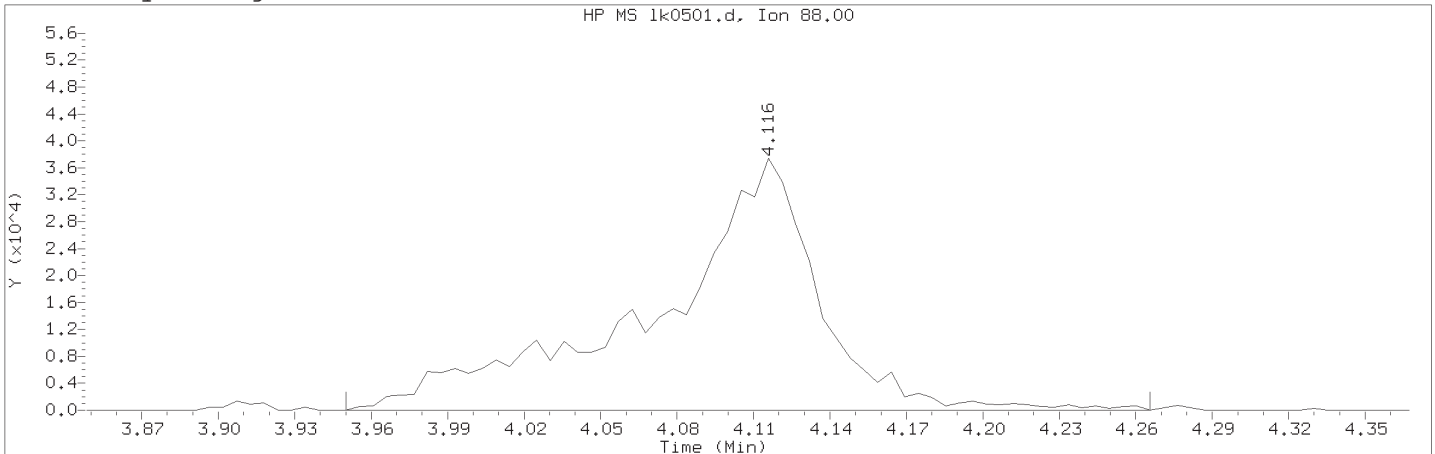
Digitally signed by Ashley R. Transue  
 on 11/07/2018 at 22:35.

Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov07a.b/1k0501.d                      Instrument ID: HP20296.i  
Injection date and time: 07-NOV-2018 21:58                      Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 07-NOV-2018 22:34  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:34 art12405

Sample Name: SSTD7.5    Lab Sample ID: RVSTD2648

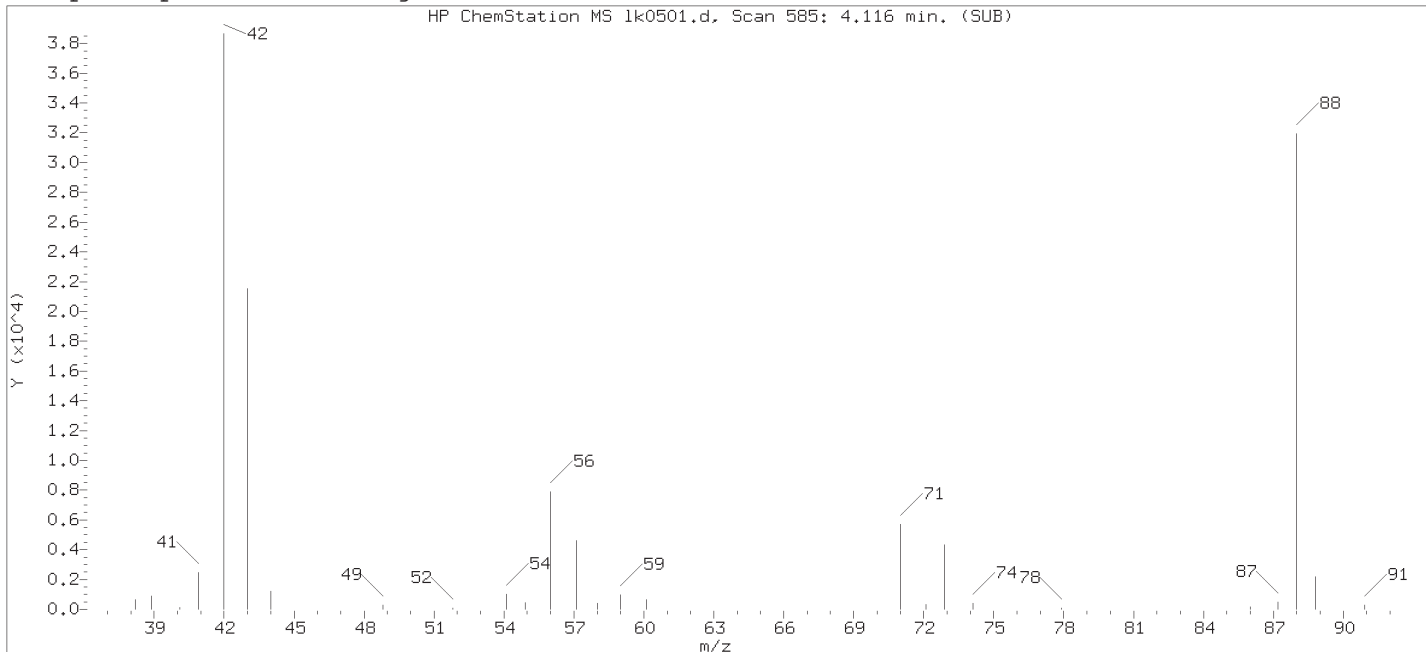
Compound Number    : 9  
Compound Name    : N-Nitrosomethylethylamine  
Scan Number    : 585  
Retention Time (minutes)                                   : 4.116  
Quant Ion    : 88.00  
Area (flag)     : 165355M  
On-Column Amount (ng/ul)                                 : 6.8865  
Integration start scan                                     : 553                      Integration stop scan: 612  
Y at integration start                                     : 0                        Y at integration end: 0

Reason for manual integration: improper integration

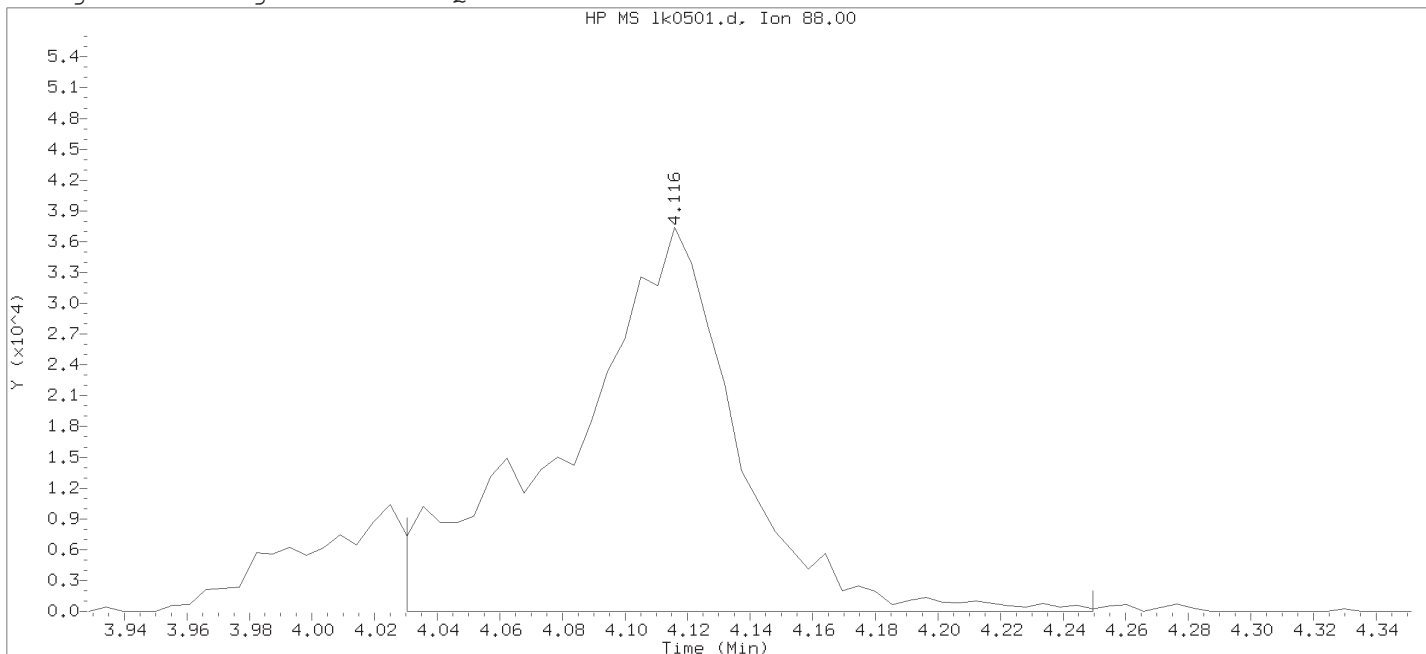
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 11/07/2018 at 22:35.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 10:38.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



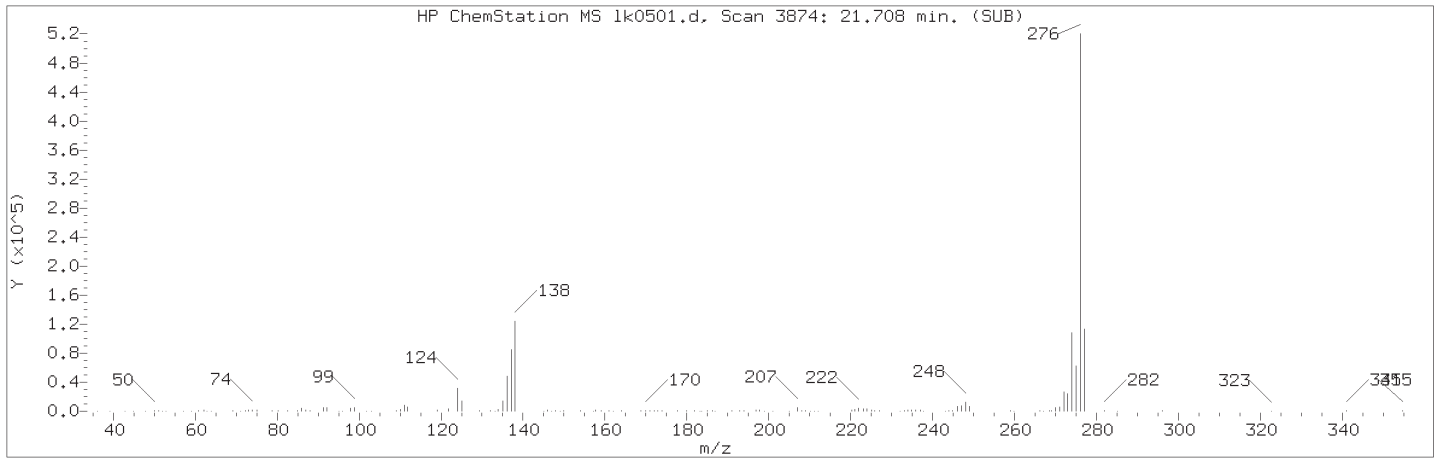
Data File: /chem/HP20296.i/18nov07a.b/lk0501.d                      Instrument ID: HP20296.i  
Injection date and time: 07-NOV-2018 21:58                      Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 07-NOV-2018 22:31  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:31 Unknown

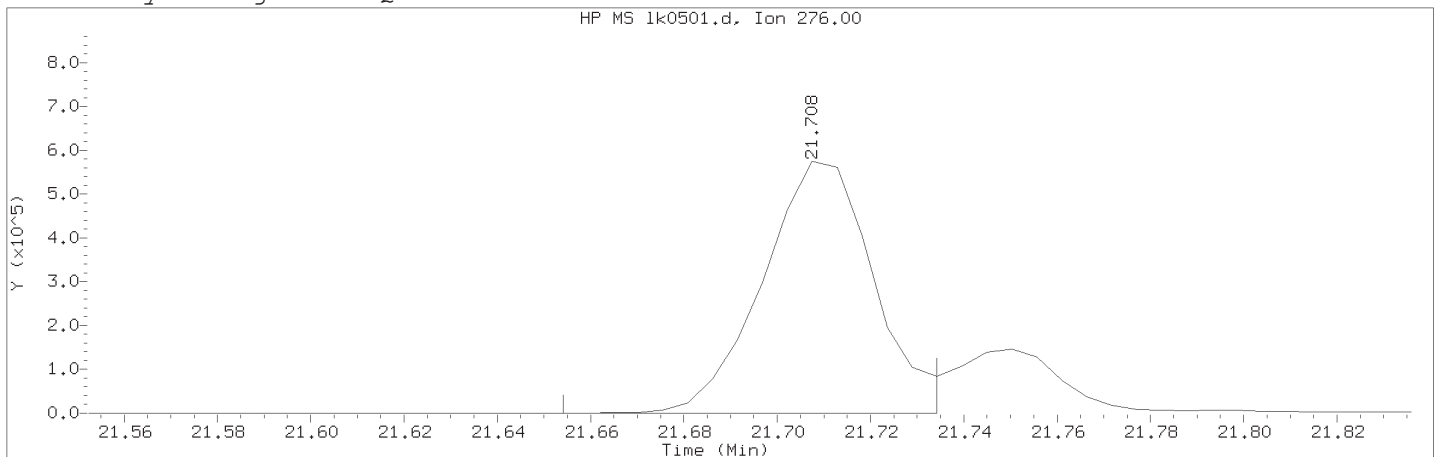
Sample Name: SSTD7.5    Lab Sample ID: RVSTD2648

Compound Number    : 9  
Compound Name    : N-Nitrosomethylethylamine  
Scan Number    : 585  
Retention Time (minutes)                                    : 4.116  
Quant Ion    : 88.00  
Area    : 141292  
On-column Amount (ng/ul)                                 : 5.8844  
Integration start scan                                      : 568                      Integration stop scan: 609  
Y at integration start                                      : 0                        Y at integration end: 0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov07a.b/1k0501.d                      Instrument ID: HP20296.i  
Injection date and time: 07-NOV-2018 21:58                      Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m                      Sublist used: all1  
Calibration date and time: 07-NOV-2018 22:34  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:34 art12405

Sample Name: SSTD7.5    Lab Sample ID: RVSTD2648

Compound Number                      : 224  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 3874  
Retention Time (minutes)             : 21.708  
Quant Ion                               : 276.00  
Area (flag)                             : 952710M  
On-Column Amount (ng/ul)            : 8.0952  
Integration start scan                : 3863                      Integration stop scan: 3878  
Y at integration start                : 0                         Y at integration end: 0

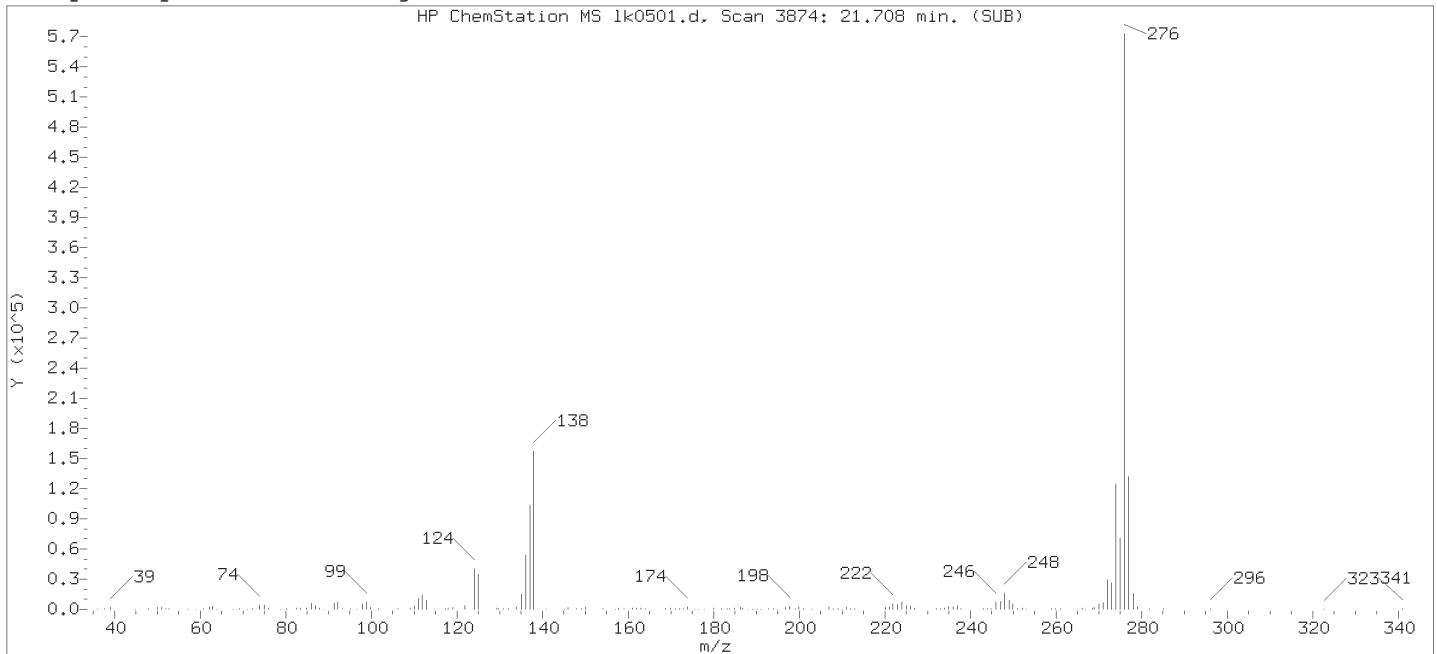
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 11/07/2018 at 22:35.  
Target 3.5 esignature user ID: art12405

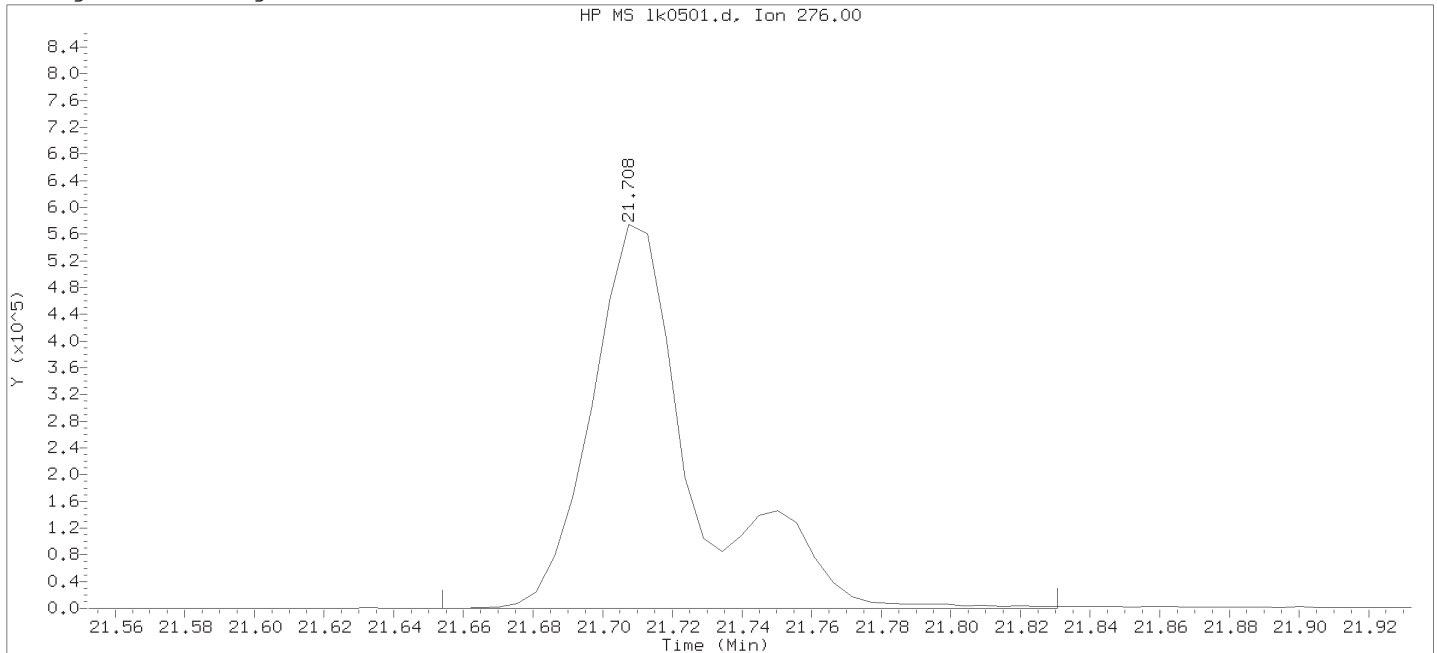
Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 10:38.  
PARALLAX ID: hb01996



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

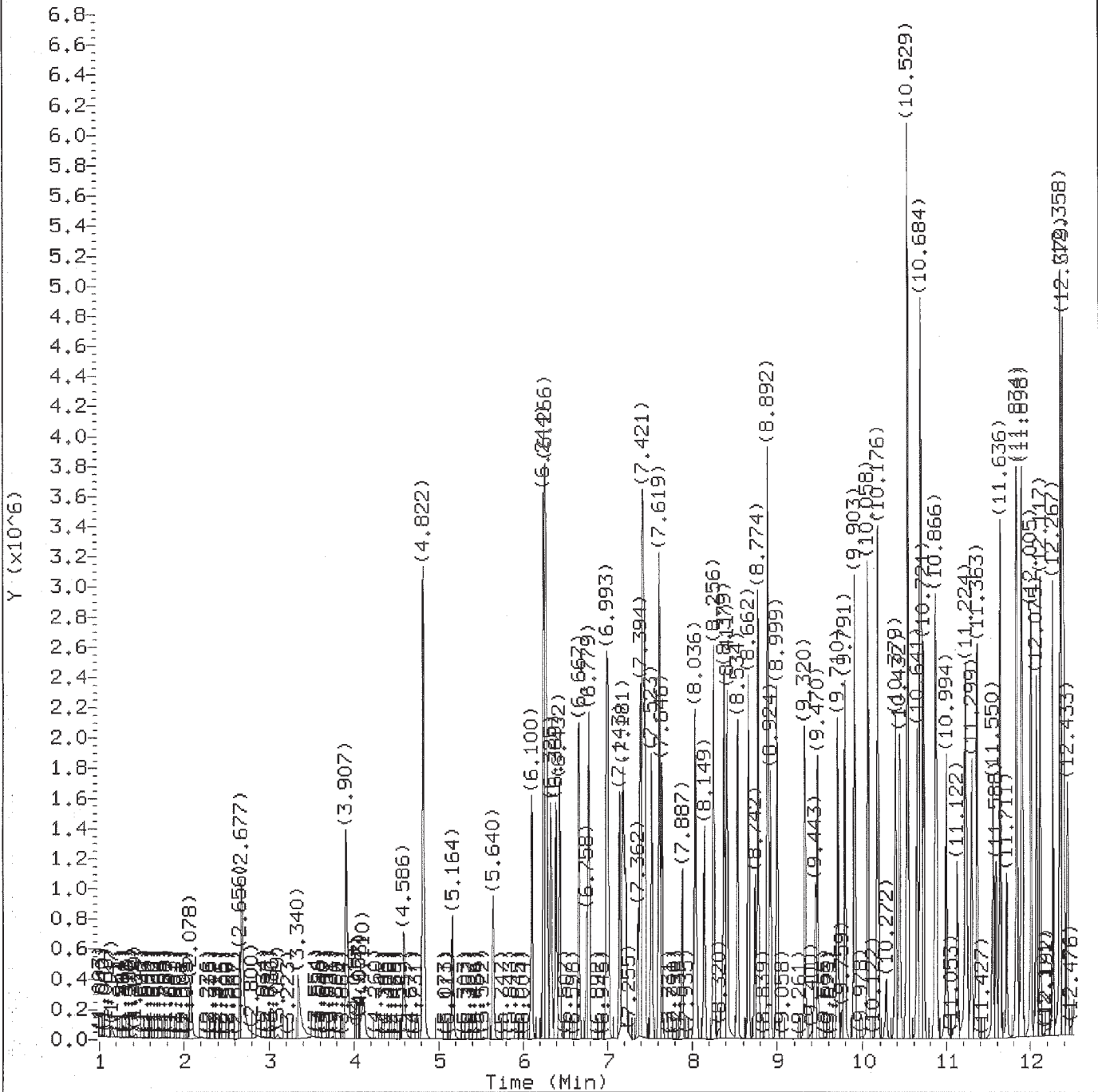


Data File: /chem/HP20296.i/18nov07a.b/lk0501.d      Instrument ID: HP20296.i  
 Injection date and time: 07-NOV-2018 21:58      Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m      Sublist used: all1  
 Calibration date and time: 07-NOV-2018 22:31  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:31 Unknown

Sample Name: SSTD7.5      Lab Sample ID: RVSTD2648

Compound Number : 224  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 3874  
 Retention Time (minutes) : 21.708  
 Quant Ion : 276.00  
 Area : 1178748  
 On-column Amount (ng/ul) : 10.0158  
 Integration start scan : 3863      Integration stop scan: 3896  
 Y at integration start : 0      Y at integration end: 0



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0525.d  
Injection date and time: 08-NOV-2018 06:32

Instrument ID: HP20296.i  
Analyst ID: art12405

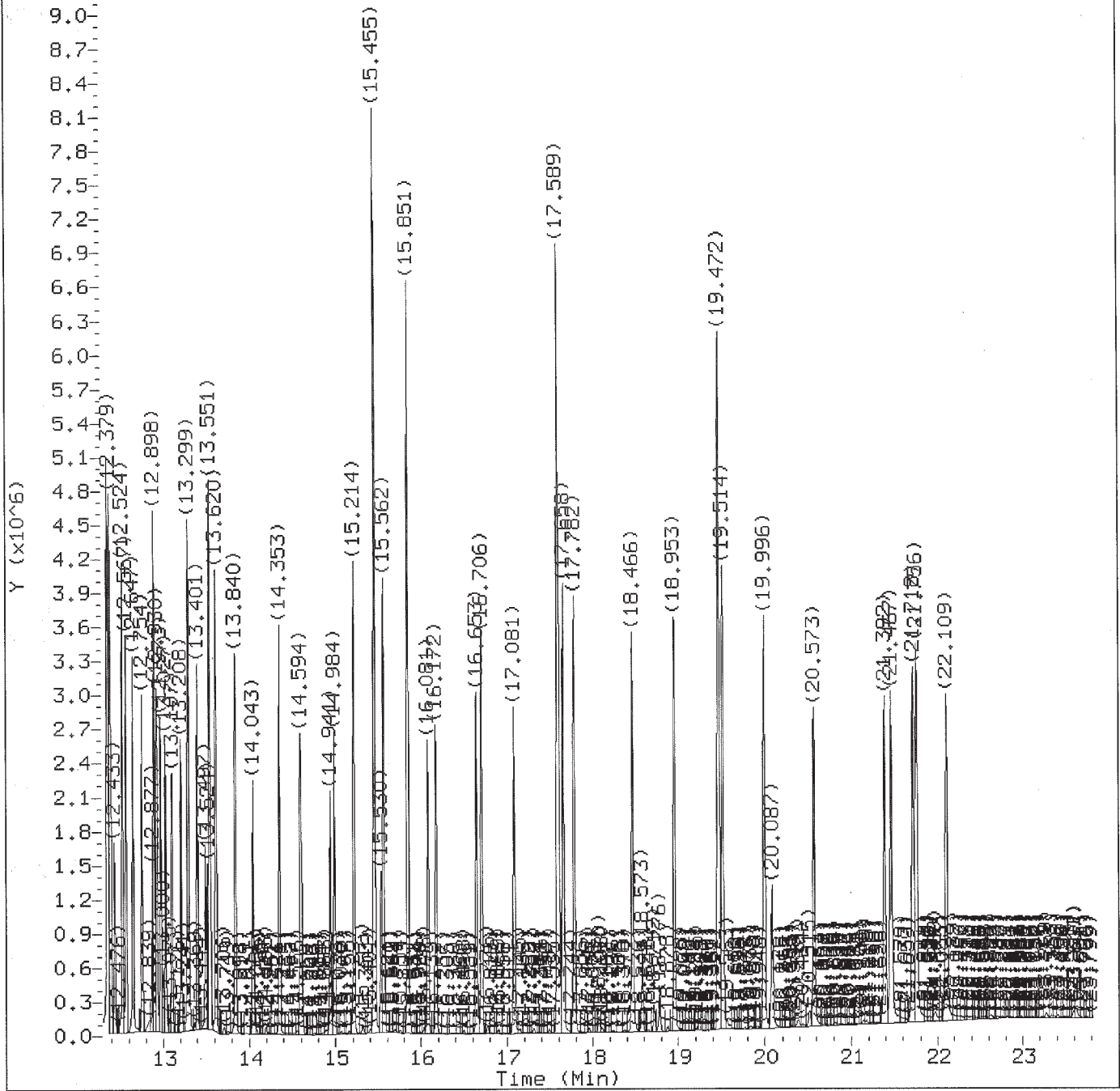
Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34  
Date, time and analyst ID of latest file update: 08-Nov-2018 07:20 knb25316

Sublist used: 25788M

Sample Name: SECC12.5

Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck  
on 11/08/2018 at 07:22.  
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0525.d  
Injection date and time: 08-NOV-2018 06:32

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34  
Date, time and analyst ID of latest file update: 08-Nov-2018 07:20 knb25316

Sublist used: 25788M

Sample Name: SECC12.5

Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck  
on 11/08/2018 at 07:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0525.d  
 Injection date and time: 08-NOV-2018 06:32

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 07:20 knb25316

Sublist used: 25788M

Sample Name: SECC12.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
6) Pyridine	(1)	2.677	79	748327	12.444
12) \$2-Fluorophenol	(1)	4.822	112	1272670	26.157
18) \$Phenol-d6	(1)	6.244	99	1621195	24.690
19) Phenol	(1)	6.261	94	924033	11.998
20) Aniline	(1)	6.266	93	1084637	11.984
24) 2-Chlorophenol	(1)	6.437	128	579814	12.782
25) 1,3-Dichlorobenzene	(1)	6.667	146	638377	12.551
26) *1,4-Dichlorobenzene-d4	(1)	6.758	152	157172	5.000
27) 1,4-Dichlorobenzene	(1)	6.779	146	642573	12.573
28) Benzyl alcohol	(1)	6.988	108	396321	12.731
29) 1,2-Dichlorobenzene	(1)	7.009	146	612227	12.326
32) 2-Methylphenol	(1)	7.181	108	578267	12.120
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.213	45	813998	11.139
39) N-Nitroso-di-n-propylamine	(1)	7.416	70	520012	11.698
38) 4-Methylphenol	(1)	7.427	108	649828	13.048
44) Hexachloroethane	(1)	7.523	117	277016	11.935
45) \$Nitrobenzene-d5	(2)	7.619	82	1512873	25.485
46) Nitrobenzene	(2)	7.646	77	778370	12.304
52) Isophorone	(2)	8.036	82	1333114	12.487
53) 2-Nitrophenol	(2)	8.149	139	287802	13.851
55) 2,4-Dimethylphenol	(2)	8.256	107	652445	12.839
57) bis(2-Chloroethoxy)methane	(2)	8.411	93	834563	12.262
62) 2,4-Dichlorophenol	(2)	8.534	162	485486	13.315
65) 1,2,4-Trichlorobenzene	(2)	8.662	180	550848	13.091
68) *Naphthalene-d8	(2)	8.742	136	566996	5.000
70) 4-Chloroaniline	(2)	8.892	127	660506	12.792
74) Hexachlorobutadiene	(2)	8.999	225	336899	13.585
83) 4-Chloro-3-methylphenol	(2)	9.710	107	546746	12.633
86) 2-Methylnaphthalene	(2)	9.903	142	1066299	12.977
88) Hexachlorocyclopentadiene	(3)	10.170	237	349858	13.391
93) 2,4,6-Trichlorophenol	(3)	10.379	196	373775	14.087
95) 2,4,5-Trichlorophenol	(3)	10.432	196	388050	13.265
96) \$2-Fluorobiphenyl	(3)	10.529	172	2485734	25.338
99) 2-Chloronaphthalene	(3)	10.695	162	1156561	12.913
104) 2-Nitroaniline	(3)	10.882	138	319939	14.202
110) Dimethylphthalate	(3)	11.224	163	1137306	12.220
113) 2,6-Dinitrotoluene	(3)	11.299	165	261882	13.880
117) 3-Nitroaniline	(3)	11.550	138	279001	12.899
118) *Acenaphthene-d10	(3)	11.588	164	293527	5.000
120) 2,4-Dinitrophenol	(3)	11.711	184	154221	13.556

\* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/08/2018 at 07:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0525.d  
 Injection date and time: 08-NOV-2018 06:32

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 07:20 knb25316

Sublist used: 25788M

Sample Name: SECC12.5

Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
121) 4-Nitrophenol	(3)	11.839	109	214540	11.845
124) Dibenzofuran	(3)	11.893	168	1491283	12.767
123) 2,4-Dinitrotoluene	(3)	11.909	165	354520	13.089
129) Diethylphthalate	(3)	12.267	149	1077291	11.762
132) 4-Chlorophenyl-phenylether	(3)	12.374	204	604295	12.751
134) 4-Nitroaniline	(3)	12.395	138	286002	13.812
135) 4,6-Dinitro-2-methylphenol	(4)	12.433	198	220127	14.059
136) N-Nitrosodiphenylamine	(4)	12.524	169	932031	12.243
140) \$2,4,6-Tribromophenol	(3)	12.647	330	339581	29.526
148) 4-Bromophenyl-phenylether	(4)	12.978	248	333365	12.562
154) Pentachlorophenol	(4)	13.289	266	235374	13.733
158) *Phenanthrene-d10	(4)	13.519	188	595078	5.000
168) Carbazole	(4)	13.845	167	1564803	12.496
180) *Pyrene-d10	(5)	15.530	212	636415	5.000
184) \$Terphenyl-d14	(5)	15.851	244	2653150	25.971
198) 3,3'-Dichlorobenzidine	(5)	17.589	252	809789	14.418
210) Di-n-octylphthalate	(6)	18.958	149	2463645	12.211
218) *Perylene-d12	(6)	20.087	264	630777	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/08/2018 at 07:22.

Target 3.5 esignature user ID: knb25316

**Raw QC Data**

**Semivolatiles by GC/MS**

SBLKWI310 Lancaster Laboratories, Inc. Analysis Summary for GC/MS Semivolatiles SBLKWI310

Data file: /chem/HP20296.i/18nov07a.b/lk0504.d Injection date and time: 08-NOV-2018 00:18  
 Data File Sample Info. Line: SBLKWI310;SBLKWI310;1;3;BLANK;;DOD26; Instrument ID: HP20296.i Batch: 18310WAI  
 Date, time and analyst ID of latest file update: 08-Nov-2018 00:47 Unknown

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M  
 Calibration date and time (Last Method Edit): 07-NOV-2018 22:34  
 Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
 Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.758( 0.000)	1079	152	136868 ( -7)	5.00	
68) Naphthalene-d8	8.742( 0.006)	1450	136	500340 ( -3)	5.00	
118) Acenaphthene-d10	11.588( 0.006)	1982	164	246155 ( -6)	5.00	
158) Phenanthrene-d10	13.519( 0.006)	2343	188	480192 ( -8)	5.00	
180) Pyrene-d10	15.524( 0.006)	2718	212	501383 ( -10)	5.00	
218) Perylene-d12	20.081( 0.006)	3570	264	462205 ( -11)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
12) 2-Fluorophenol	(1)	4.816( 0.001)	112	959556	22.647	45%
18) Phenol-d6	(1)	6.234( 0.001)	99	892984	15.617	31%
45) Nitrobenzene-d5	(2)	7.614( 0.000)	82	957274	18.274	73%
96) 2-Fluorobiphenyl	(3)	10.529( 0.000)	172	1028878	12.506	50%
140) 2,4,6-Tribromophenol	(3)	12.647( 0.000)	330	473265	49.068	98%
184) Terphenyl-d14	(5)	15.845( 0.000)	244	1938332	24.084	96%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
6) Pyridine	(1)			Not Detected					0.5
19) Phenol	(1)			Not Detected					0.1
20) Aniline	(1)			Not Detected					0.8
24) 2-Chlorophenol	(1)			Not Detected					0.1
25) 1,3-Dichlorobenzene	(1)			Not Detected					0.1
27) 1,4-Dichlorobenzene	(1)			Not Detected					0.1
28) Benzyl alcohol	(1)			Not Detected					3
29) 1,2-Dichlorobenzene	(1)			Not Detected					0.1
32) 2-Methylphenol	(1)			Not Detected					0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)			Not Detected					0.1
38) 4-Methylphenol	(1)			Not Detected					0.1
39) N-Nitroso-di-n-propylamine	(1)			Not Detected					0.2
44) Hexachloroethane	(1)			Not Detected					0.3
46) Nitrobenzene	(2)			Not Detected					0.1
52) Isophorone	(2)			Not Detected					0.1
53) 2-Nitrophenol	(2)			Not Detected					0.8
55) 2,4-Dimethylphenol	(2)			Not Detected					0.8
57) bis(2-Chloroethoxy)methane	(2)			Not Detected					0.1
62) 2,4-Dichlorophenol	(2)			Not Detected					0.1
65) 1,2,4-Trichlorobenzene	(2)			Not Detected					0.1
70) 4-Chloroaniline	(2)			Not Detected					1
74) Hexachlorobutadiene	(2)			Not Detected					0.1
83) 4-Chloro-3-methylphenol	(2)			Not Detected					0.1
86) 2-Methylnaphthalene	(2)			Not Detected					0.03
88) Hexachlorocyclopentadiene	(3)			Not Detected					1
93) 2,4,6-Trichlorophenol	(3)			Not Detected					0.1
95) 2,4,5-Trichlorophenol	(3)			Not Detected					0.1

SBLKWI310 Analysis Summary for GC/MS Semivolatiles SBLKWI310

Data file: /chem/HP20296.i/18nov07a.b/lk0504.d Injection date and time: 08-NOV-2018 00:18  
 Data file Sample Info. Line: SBLKWI310;SBLKWI310;1;3;BLANK;;DOD26; Instrument ID: HP20296.i Batch: 18310WAI  
 Date, time and analyst ID of latest file update: 08-Nov-2018 00:47 Unknown

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M  
 Calibration date and time (Last Method Edit): 07-NOV-2018 22:34  
 Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
 Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

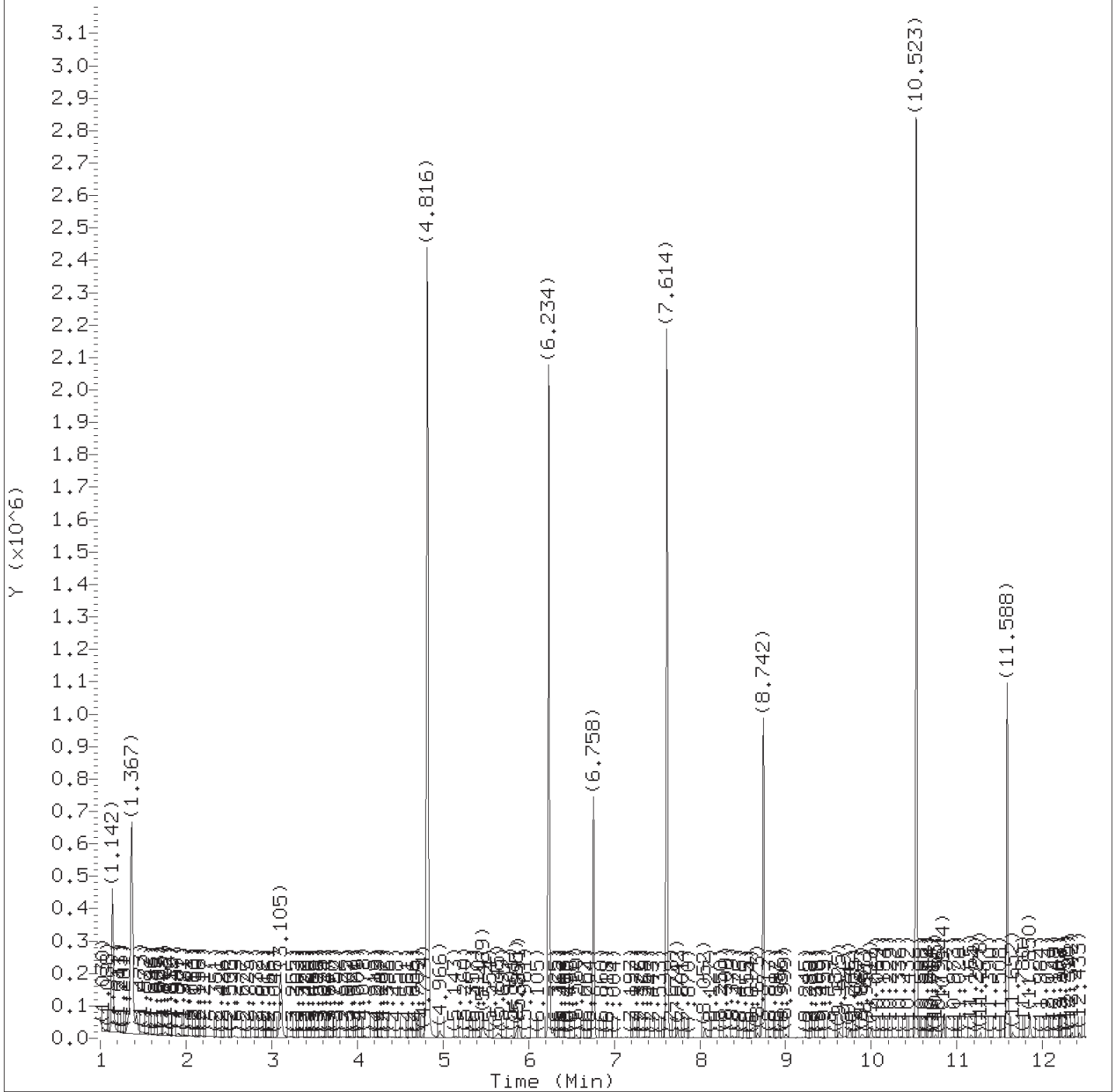
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
99) 2-Chloronaphthalene	(3)			Not Detected					0.1
104) 2-Nitroaniline	(3)			Not Detected					0.5
110) Dimethylphthalate	(3)			Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
117) 3-Nitroaniline	(3)			Not Detected					0.8
120) 2,4-Dinitrophenol	(3)			Not Detected					4
121) 4-Nitrophenol	(3)			Not Detected					3
123) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
124) Dibenzofuran	(3)			Not Detected					0.1
129) Diethylphthalate	(3)			Not Detected					0.5
132) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.2
135) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
136) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
148) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
154) Pentachlorophenol	(4)			Not Detected					0.3
168) Carbazole	(4)			Not Detected					0.1
198) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
210) Di-n-octylphthalate	(6)			Not Detected					1

Total number of targets = 46

Digitally signed by Kira N. Beck on 11/12/2018 at 12:13. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 11/12/2018 at 13:07. PARALLAX ID: reb00745





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0504.d  
Injection date and time: 08-NOV-2018 00:18

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

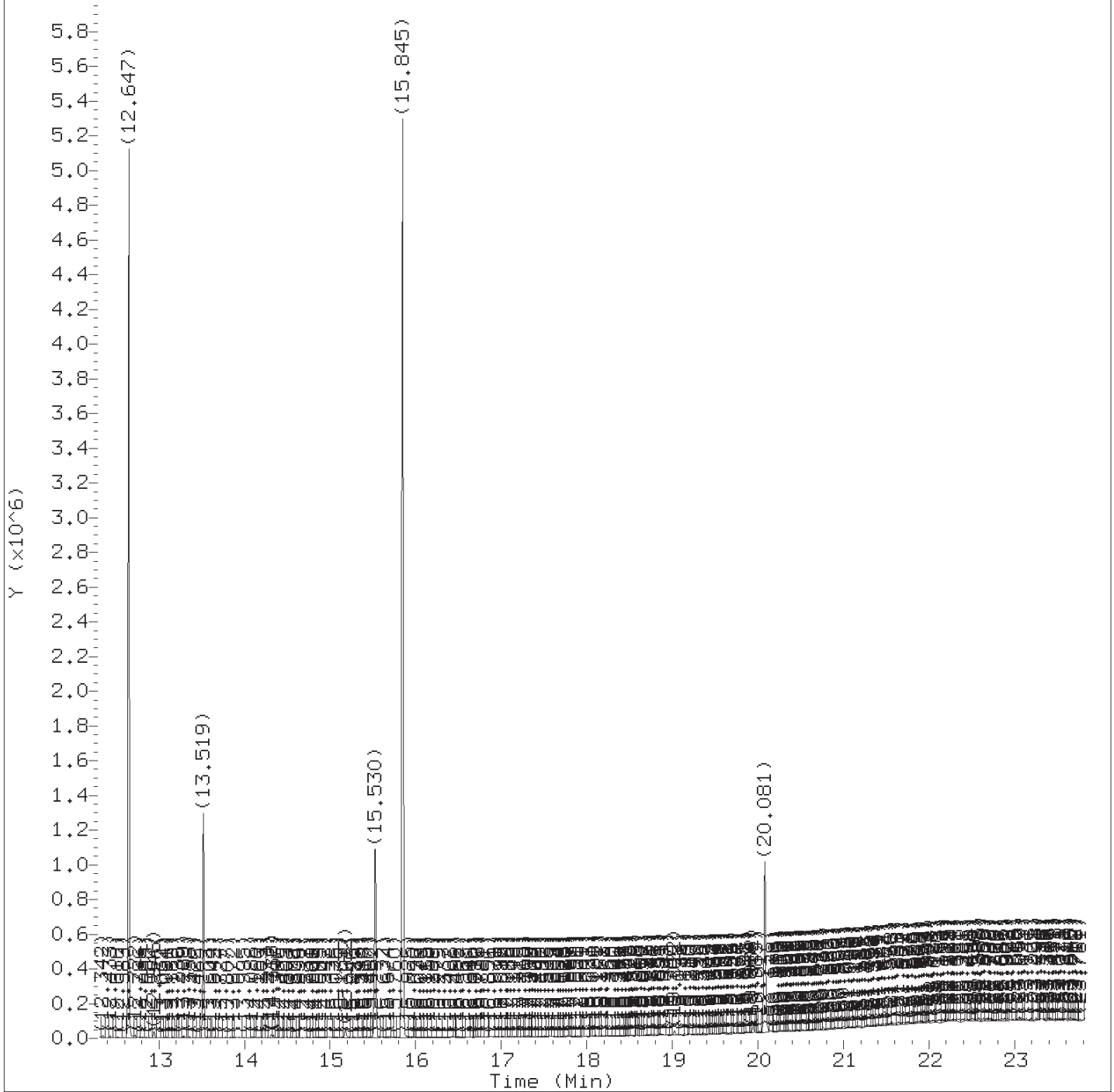
Date, time and analyst ID of latest file update: 08-Nov-2018 00:47 Unknown

Sample Name: SBLKWI310

Lab Sample ID: SBLKWI310

Digitally signed by Kira N. Beck  
on 11/12/2018 at 12:13.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0504.d  
Injection date and time: 08-NOV-2018 00:18

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

Date, time and analyst ID of latest file update: 08-Nov-2018 00:47 Unknown

Sample Name: SBLKWI310

Lab Sample ID: SBLKWI310

Digitally signed by Kira N. Beck  
on 11/12/2018 at 12:13.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0504.d  
 Injection date and time: 08-NOV-2018 00:18

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 00:47 Unknown

Sublist used: 25788M

Sample Name: SBLKWI310

Lab Sample ID: SBLKWI310

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12) \$2-Fluorophenol	(1)	4.816	112	959556	22.647
18) \$Phenol-d6	(1)	6.234	99	892984	15.617
26) *1,4-Dichlorobenzene-d4	(1)	6.758	152	136868	5.000
45) \$Nitrobenzene-d5	(2)	7.614	82	957274	18.274
68) *Naphthalene-d8	(2)	8.742	136	500340	5.000
96) \$2-Fluorobiphenyl	(3)	10.529	172	1028878	12.506
118) *Acenaphthene-d10	(3)	11.588	164	246155	5.000
140) \$2,4,6-Tribromophenol	(3)	12.647	330	473265	49.068
158) *Phenanthrene-d10	(4)	13.519	188	480192	5.000
180) *Pyrene-d10	(5)	15.524	212	501383	5.000
184) \$Terphenyl-d14	(5)	15.845	244	1938332	24.084
218) *Perylene-d12	(6)	20.081	264	462205	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/12/2018 at 12:13.

Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov07a.b/lk0505.d

Injection date and time: 08-NOV-2018 00:47

Data file Sample Info. Line: 310WILCS;310WILCS;1;3;LCS;;DOD26;

Instrument ID: HP20296.i Batch: 18310WAI

Date, time and analyst ID of latest file update: 08-Nov-2018 01:16 Unknown

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M

Calibration date and time (Last Method Edit): 07-NOV-2018 22:34

Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 250 ml

Volume Injected (Vi): 1 ul

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.758( 0.000)	1079	152	141803 ( -4)	5.00	
68) Naphthalene-d8	8.742( 0.005)	1450	136	506321 ( -2)	5.00	
118) Acenaphthene-d10	11.588( 0.005)	1982	164	248033 ( -5)	5.00	
158) Phenanthrene-d10	13.519( 0.005)	2343	188	491415 ( -6)	5.00	
180) Pyrene-d10	15.530( 0.000)	2719	212	529271 ( -5)	5.00	
218) Perylene-d12	20.081( 0.005)	3570	264	529544 ( 2)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
12) 2-Fluorophenol	(1)	4.838(-0.002)	112	1155260	26.318	53%
18) Phenol-d6	(1)	6.239( 0.000)	99	1145002	19.328	39%
45) Nitrobenzene-d5	(2)	7.619(-0.001)	82	1018139	19.207	77%
96) 2-Fluorobiphenyl	(3)	10.529( 0.000)	172	1428560	17.233	69%
140) 2,4,6-Tribromophenol	(3)	12.647( 0.000)	330	481350	49.528	99%
184) Terphenyl-d14	(5)	15.845( 0.000)	244	1958753	23.055	92%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
6) Pyridine	(1)	2.736(-0.008)	79	263499	4.857	19.43			0.5
19) Phenol	(1)	6.260( 0.000)	94	368960	5.310	21.24			0.1
20) Aniline	(1)	6.271(-0.000)	93	527226	6.457	25.83			0.8
24) 2-Chlorophenol	(1)	6.437( 0.000)	128	379593	9.275	37.10			0.1
25) 1,3-Dichlorobenzene	(1)	6.667( 0.000)	146	295348	6.436	25.74			0.1
27) 1,4-Dichlorobenzene	(1)	6.785(-0.000)	146	307292	6.664	26.66			0.1
28) Benzyl alcohol	(1)	6.993(-0.000)	108	296211	10.546	42.18			3
29) 1,2-Dichlorobenzene	(1)	7.009(-0.000)	146	309197	6.900	27.60			0.1
32) 2-Methylphenol	(1)	7.180(-0.000)	108	390053	9.061	36.24			0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.218(-0.000)	45	551923	8.371	33.49			0.1
38) 4-Methylphenol	(1)	7.421( 0.000)	108	431248	9.597	38.39			0.1
39) N-Nitroso-di-n-propylamine	(1)	7.410( 0.000)	70	395403	9.859	39.44			0.2
44) Hexachloroethane	(1)	7.523( 0.000)	117	117944	5.632	22.53			0.3
46) Nitrobenzene	(2)	7.646(-0.000)	77	571066	10.109	40.44			0.1
52) Isophorone	(2)	8.031( 0.000)	82	975394	10.232	40.93			0.1
53) 2-Nitrophenol	(2)	8.149(-0.000)	139	201688	10.870	43.48			0.8
55) 2,4-Dimethylphenol	(2)	8.256(-0.000)	107	389448	8.582	34.33			0.8
57) bis(2-Chloroethoxy)methane	(2)	8.411( 0.000)	93	631346	10.388	41.55			0.1
62) 2,4-Dichlorophenol	(2)	8.534(-0.000)	162	346395	10.639	42.56			0.1
65) 1,2,4-Trichlorobenzene	(2)	8.662( 0.000)	180	271477	7.225	28.90			0.1
70) 4-Chloroaniline	(2)	8.887(-0.000)	127	404870	8.781	35.12			1
74) Hexachlorobutadiene	(2)	8.999(-0.000)	225	136230	6.151	24.61			0.1
83) 4-Chloro-3-methylphenol	(2)	9.705(-0.000)	107	419248	10.848	43.39			0.1
86) 2-Methylnaphthalene	(2)	9.903(-0.000)	142	607547	8.280	33.12			0.03
88) Hexachlorocyclopentadiene	(3)	10.170(-0.000)	237	56945	2.579	10.32		J	1
93) 2,4,6-Trichlorophenol	(3)	10.379( 0.000)	196	271244	12.098	48.39			0.1
95) 2,4,5-Trichlorophenol	(3)	10.427( 0.000)	196	288774	11.682	46.73			0.1

Data file: /chem/HP20296.i/18nov07a.b/lk0505.d

Injection date and time: 08-NOV-2018 00:47

Data file Sample Info. Line: 310WILCS;310WILCS;1;3;LCS;;DOD26;

Instrument ID: HP20296.i Batch: 18310WAI

Date, time and analyst ID of latest file update: 08-Nov-2018 01:16 Unknown

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M

Calibration date and time (Last Method Edit): 07-NOV-2018 22:34

Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

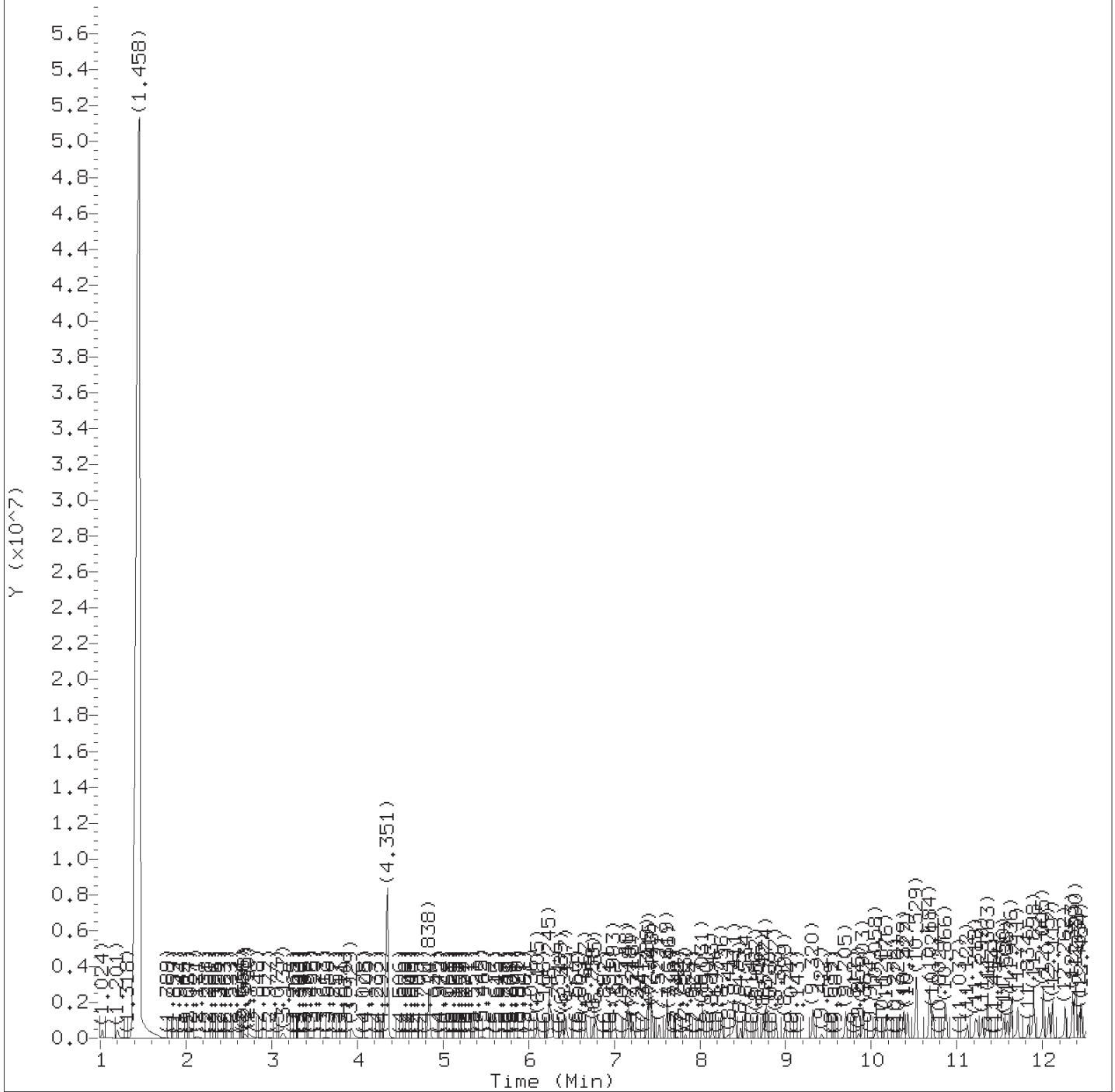
Sample Volume (Vo): 250 ml

Volume Injected (Vi): 1 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
99) 2-Chloronaphthalene	(3)	10.689( 0.000)	162	611815	8.084	32.33			0.1
104) 2-Nitroaniline	(3)	10.876( 0.000)	138	236922	12.446	49.78			0.5
110) Dimethylphthalate	(3)	11.219( 0.000)	163	491954	6.255	25.02			0.5
113) 2,6-Dinitrotoluene	(3)	11.299(-0.000)	165	200755	12.592	50.37			0.1
117) 3-Nitroaniline	(3)	11.550(-0.000)	138	196254	10.738	42.95			0.8
120) 2,4-Dinitrophenol	(3)	11.711(-0.000)	184	241794	25.152	100.61			4
121) 4-Nitrophenol	(3)	11.834(-0.000)	109	94869	6.199	24.79		J	3
123) 2,4-Dinitrotoluene	(3)	11.903(-0.000)	165	263665	11.520	46.08			0.3
124) Dibenzofuran	(3)	11.893(-0.000)	168	936980	9.493	37.97			0.1
129) Diethylphthalate	(3)	12.262(-0.000)	149	610163	7.884	31.54			0.5
132) 4-Chlorophenyl-phenylether	(3)	12.374(-0.000)	204	325905	8.138	32.55			0.1
134) 4-Nitroaniline	(3)	12.390(-0.000)	138	177033	10.118	40.47			0.2
135) 4,6-Dinitro-2-methylphenol	(4)	12.433(-0.000)	198	151791	11.740	46.96			2
136) N-Nitrosodiphenylamine	(4)	12.524(-0.000)	169	727630	11.574	46.30			0.2
148) 4-Bromophenyl-phenylether	(4)	12.973( 0.000)	248	189569	8.651	34.60			0.1
154) Pentachlorophenol	(4)	13.283( 0.000)	266	157532	11.130	44.52			0.3
168) Carbazole	(4)	13.840(-0.000)	167	1184102	11.450	45.80			0.1
198) 3,3'-Dichlorobenzidine	(5)	17.584( 0.000)	252	458805	9.823	39.29			0.8
210) Di-n-octylphthalate	(6)	18.953(-0.000)	149	1752955	10.349	41.40			1

Total number of targets = 46

Digitally signed by Kira N. Beck on 11/08/2018 at 11:54. Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0505.d  
Injection date and time: 08-NOV-2018 00:47

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

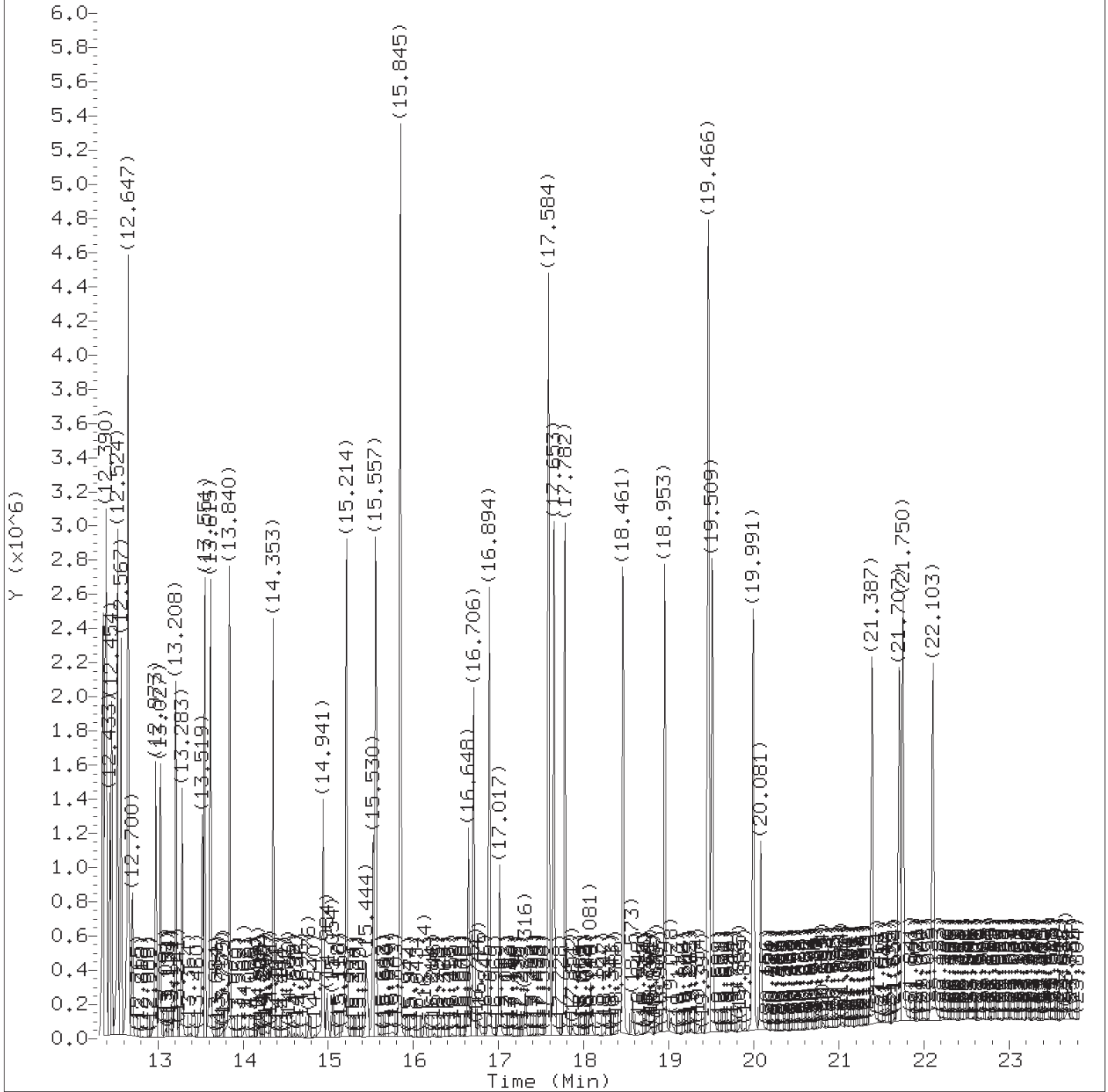
Date, time and analyst ID of latest file update: 08-Nov-2018 01:16 Unknown

Sample Name: 310WILCS

Lab Sample ID: 310WILCS

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:54.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0505.d  
Injection date and time: 08-NOV-2018 00:47

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M  
Date, time and analyst ID of latest file update: 08-Nov-2018 01:16 Unknown

Sample Name: 310WILCS

Lab Sample ID: 310WILCS

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:54.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0505.d  
 Injection date and time: 08-NOV-2018 00:47

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 01:16 Unknown

Sublist used: 25788M

Sample Name: 310WILCS

Lab Sample ID: 310WILCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
6) Pyridine	(1)	2.736	79	263499	4.857
12) \$2-Fluorophenol	(1)	4.838	112	1155260	26.318
18) \$Phenol-d6	(1)	6.239	99	1145002	19.328
19) Phenol	(1)	6.261	94	368960	5.310
20) Aniline	(1)	6.271	93	527226	6.457
24) 2-Chlorophenol	(1)	6.437	128	379593	9.275
25) 1,3-Dichlorobenzene	(1)	6.667	146	295348	6.436
26) *1,4-Dichlorobenzene-d4	(1)	6.758	152	141803	5.000
27) 1,4-Dichlorobenzene	(1)	6.785	146	307292	6.664
28) Benzyl alcohol	(1)	6.993	108	296211	10.546
29) 1,2-Dichlorobenzene	(1)	7.009	146	309197	6.900
32) 2-Methylphenol	(1)	7.181	108	390053	9.061
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.218	45	551923	8.371
39) N-Nitroso-di-n-propylamine	(1)	7.411	70	395403	9.859
38) 4-Methylphenol	(1)	7.421	108	431248	9.597
44) Hexachloroethane	(1)	7.523	117	117944	5.632
45) \$Nitrobenzene-d5	(2)	7.619	82	1018139	19.207
46) Nitrobenzene	(2)	7.646	77	571066	10.109
52) Isophorone	(2)	8.031	82	975394	10.232
53) 2-Nitrophenol	(2)	8.149	139	201688	10.870
55) 2,4-Dimethylphenol	(2)	8.256	107	389448	8.582
57) bis(2-Chloroethoxy)methane	(2)	8.411	93	631346	10.388
62) 2,4-Dichlorophenol	(2)	8.534	162	346395	10.639
65) 1,2,4-Trichlorobenzene	(2)	8.662	180	271477	7.225
68) *Naphthalene-d8	(2)	8.742	136	506321	5.000
70) 4-Chloroaniline	(2)	8.887	127	404870	8.781
74) Hexachlorobutadiene	(2)	8.999	225	136230	6.151
83) 4-Chloro-3-methylphenol	(2)	9.705	107	419248	10.848
86) 2-Methylnaphthalene	(2)	9.903	142	607547	8.280
88) Hexachlorocyclopentadiene	(3)	10.170	237	56945	2.579
93) 2,4,6-Trichlorophenol	(3)	10.379	196	271244	12.098
95) 2,4,5-Trichlorophenol	(3)	10.427	196	288774	11.682
96) \$2-Fluorobiphenyl	(3)	10.529	172	1428560	17.233
99) 2-Chloronaphthalene	(3)	10.689	162	611815	8.084
104) 2-Nitroaniline	(3)	10.876	138	236922	12.446
110) Dimethylphthalate	(3)	11.219	163	491954	6.255
113) 2,6-Dinitrotoluene	(3)	11.299	165	200755	12.592
117) 3-Nitroaniline	(3)	11.550	138	196254	10.738
118) *Acenaphthene-d10	(3)	11.588	164	248033	5.000
120) 2,4-Dinitrophenol	(3)	11.711	184	241794	25.152

\* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

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 on 11/08/2018 at 11:54.

Target 3.5 esignature user ID: knb25316  
 TID15 Page 824 of 3058



Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0505.d  
 Injection date and time: 08-NOV-2018 00:47

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 01:16 Unknown

Sublist used: 25788M

Sample Name: 310WILCS

Lab Sample ID: 310WILCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
121) 4-Nitrophenol	(3)	11.834	109	94869	6.199
124) Dibenzofuran	(3)	11.893	168	936980	9.493
123) 2,4-Dinitrotoluene	(3)	11.903	165	263665	11.520
129) Diethylphthalate	(3)	12.262	149	610163	7.884
132) 4-Chlorophenyl-phenylether	(3)	12.374	204	325905	8.138
134) 4-Nitroaniline	(3)	12.390	138	177033	10.118
135) 4,6-Dinitro-2-methylphenol	(4)	12.433	198	151791	11.740
136) N-Nitrosodiphenylamine	(4)	12.524	169	727630	11.574
140) \$2,4,6-Tribromophenol	(3)	12.647	330	481350	49.528
148) 4-Bromophenyl-phenylether	(4)	12.973	248	189569	8.651
154) Pentachlorophenol	(4)	13.283	266	157532	11.130
158) *Phenanthrene-d10	(4)	13.519	188	491415	5.000
168) Carbazole	(4)	13.840	167	1184102	11.450
180) *Pyrene-d10	(5)	15.530	212	529271	5.000
184) \$Terphenyl-d14	(5)	15.845	244	1958753	23.055
198) 3,3'-Dichlorobenzidine	(5)	17.584	252	458805	9.823
210) Di-n-octylphthalate	(6)	18.953	149	1752955	10.349
218) *Perylene-d12	(6)	20.081	264	529544	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/08/2018 at 11:54.

Target 3.5 esignature user ID: knb25316

310WILCSD Analysis Summary for GC/MS Semivolatiles 310WILCSD

Data file: /chem/HP20296.i/18nov07a.b/lk0506.d Injection date and time: 08-NOV-2018 01:16  
 Data file Sample Info. Line: 310WILCSD;310WILCSD;1;3;LCSD;;DOD26; Instrument ID: HP20296.i Batch: 18310WAI  
 Date, time and analyst ID of latest file update: 08-Nov-2018 01:45 Unknown

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M  
 Calibration date and time (Last Method Edit): 07-NOV-2018 22:34  
 Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
 Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.763(-0.005)	1080	152	135890 ( -8)	5.00	
68) Naphthalene-d8	8.742( 0.005)	1450	136	511146 ( -1)	5.00	
118) Acenaphthene-d10	11.588( 0.005)	1982	164	251997 ( -4)	5.00	
158) Phenanthrene-d10	13.519( 0.005)	2343	188	484136 ( -7)	5.00	
180) Pyrene-d10	15.530( 0.000)	2719	212	524969 ( -5)	5.00	
218) Perylene-d12	20.087( 0.000)	3571	264	544561 ( 4)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
12) 2-Fluorophenol	(1)	4.838(-0.002)	112	1240455	29.488	59%
18) Phenol-d6	(1)	6.245( 0.000)	99	1215233	21.406	43%
45) Nitrobenzene-d5	(2)	7.619(-0.001)	82	1030203	19.251	77%
96) 2-Fluorobiphenyl	(3)	10.529( 0.000)	172	1418186	16.839	67%
140) 2,4,6-Tribromophenol	(3)	12.647( 0.000)	330	500505	50.689	101%
184) Terphenyl-d14	(5)	15.845( 0.000)	244	1989448	23.608	94%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
6) Pyridine	(1)	2.730(-0.007)	79	267434	5.144	20.58			0.5
19) Phenol	(1)	6.261( 0.000)	94	402169	6.040	24.16			0.1
20) Aniline	(1)	6.271( 0.000)	93	565921	7.232	28.93			0.8
24) 2-Chlorophenol	(1)	6.437( 0.000)	128	394241	10.052	40.21			0.1
25) 1,3-Dichlorobenzene	(1)	6.667( 0.000)	146	293508	6.674	26.70			0.1
27) 1,4-Dichlorobenzene	(1)	6.785( 0.000)	146	291188	6.590	26.36			0.1
28) Benzyl alcohol	(1)	6.993( 0.000)	108	298330	11.084	44.33			3
29) 1,2-Dichlorobenzene	(1)	7.010( 0.000)	146	297972	6.939	27.76			0.1
32) 2-Methylphenol	(1)	7.181( 0.000)	108	399489	9.684	38.74			0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.223( 0.000)	45	533026	8.436	33.75			0.1
38) 4-Methylphenol	(1)	7.421( 0.001)	108	437718	10.165	40.66			0.1
39) N-Nitroso-di-n-propylamine	(1)	7.411( 0.001)	70	391032	10.174	40.70			0.2
44) Hexachloroethane	(1)	7.528( 0.000)	117	110357	5.499	22.00			0.3
46) Nitrobenzene	(2)	7.646(-0.000)	77	566333	9.930	39.72			0.1
52) Isophorone	(2)	8.031( 0.000)	82	992921	10.317	41.27			0.1
53) 2-Nitrophenol	(2)	8.149(-0.000)	139	205722	10.983	43.93			0.8
55) 2,4-Dimethylphenol	(2)	8.256(-0.000)	107	389487	8.502	34.01			0.8
57) bis(2-Chloroethoxy)methane	(2)	8.411( 0.000)	93	643892	10.494	41.98			0.1
62) 2,4-Dichlorophenol	(2)	8.534(-0.000)	162	354340	10.780	43.12			0.1
65) 1,2,4-Trichlorobenzene	(2)	8.662( 0.000)	180	262515	6.921	27.68			0.1
70) 4-Chloroaniline	(2)	8.887(-0.000)	127	421729	9.060	36.24			1
74) Hexachlorobutadiene	(2)	8.999(-0.000)	225	130579	5.841	23.36			0.1
83) 4-Chloro-3-methylphenol	(2)	9.705(-0.000)	107	429278	11.003	44.01			0.1
86) 2-Methylnaphthalene	(2)	9.903(-0.000)	142	585077	7.899	31.59			0.03
88) Hexachlorocyclopentadiene	(3)	10.165( 0.000)	237	56464	2.517	10.07		J	1
93) 2,4,6-Trichlorophenol	(3)	10.379( 0.000)	196	276449	12.136	48.55			0.1
95) 2,4,5-Trichlorophenol	(3)	10.427( 0.000)	196	287905	11.464	45.85			0.1

310WILCSD Analysis Summary for GC/MS Semivolatiles 310WILCSD

Data file: /chem/HP20296.i/18nov07a.b/lk0506.d Injection date and time: 08-NOV-2018 01:16  
 Data file Sample Info. Line: 310WILCSD;310WILCSD;1;3;LCSD;;DOD26; Instrument ID: HP20296.i Batch: 18310WAI  
 Date, time and analyst ID of latest file update: 08-Nov-2018 01:45 Unknown

Blank Data file reference: /chem/HP20296.i/18nov07a.b/lk0504.d

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m Sublist used: 25788M  
 Calibration date and time (Last Method Edit): 07-NOV-2018 22:34  
 Mid Level Daily Calibration Standard Reference: /chem/HP20296.i/18nov07a.b/lk0501.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* gpcf\*(Uf \* Vt/(Vo))

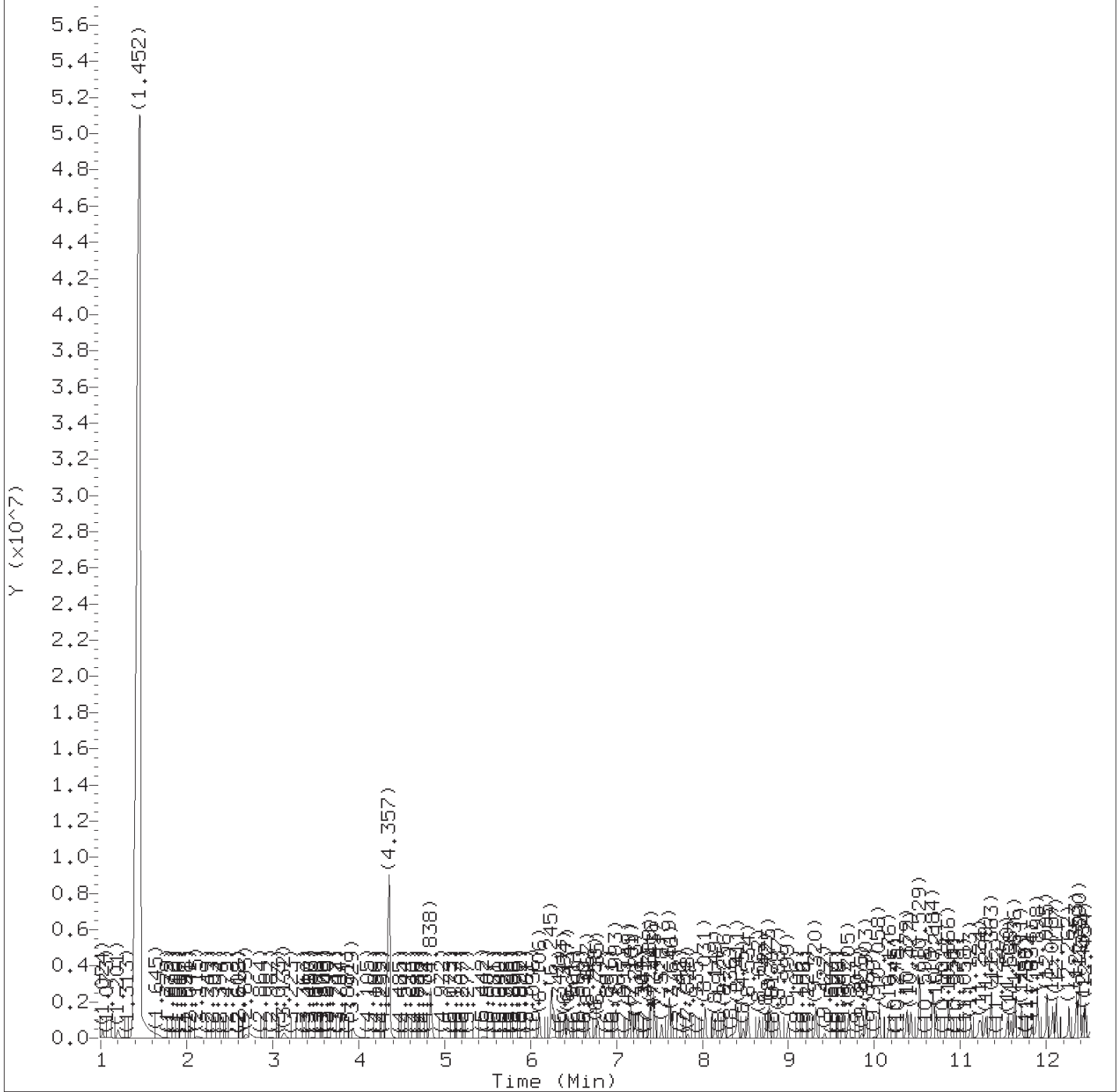
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
 Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
99) 2-Chloronaphthalene	(3)	10.689( 0.000)	162	573753	7.462	29.85			0.1
104) 2-Nitroaniline	(3)	10.882(-0.000)	138	232555	12.024	48.10			0.5
110) Dimethylphthalate	(3)	11.219( 0.000)	163	444944	5.569	22.27			0.5
113) 2,6-Dinitrotoluene	(3)	11.299(-0.000)	165	195340	12.060	48.24			0.1
117) 3-Nitroaniline	(3)	11.550(-0.000)	138	191296	10.302	41.21			0.8
120) 2,4-Dinitrophenol	(3)	11.711(-0.000)	184	247905	25.382	101.53			4
121) 4-Nitrophenol	(3)	11.834(-0.000)	109	95634	6.150	24.60		J	3
123) 2,4-Dinitrotoluene	(3)	11.909(-0.000)	165	266563	11.464	45.86			0.3
124) Dibenzofuran	(3)	11.893(-0.000)	168	883501	8.810	35.24			0.1
129) Diethylphthalate	(3)	12.267(-0.000)	149	606576	7.714	30.86			0.5
132) 4-Chlorophenyl-phenylether	(3)	12.374(-0.000)	204	313806	7.713	30.85			0.1
134) 4-Nitroaniline	(3)	12.390(-0.000)	138	177613	9.991	39.97			0.2
135) 4,6-Dinitro-2-methylphenol	(4)	12.433(-0.000)	198	150362	11.804	47.22			2
136) N-Nitrosodiphenylamine	(4)	12.524(-0.000)	169	719357	11.615	46.46			0.2
148) 4-Bromophenyl-phenylether	(4)	12.973( 0.000)	248	183010	8.477	33.91			0.1
154) Pentachlorophenol	(4)	13.283( 0.000)	266	166284	11.925	47.70			0.3
168) Carbazole	(4)	13.840(-0.000)	167	1199199	11.771	47.08			0.1
198) 3,3'-Dichlorobenzidine	(5)	17.584( 0.000)	252	461255	9.956	39.82			0.8
210) Di-n-octylphthalate	(6)	18.953( 0.000)	149	1848597	10.613	42.45			1

Total number of targets = 46

Digitally signed by Kira N. Beck on 11/08/2018 at 11:54. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 11/12/2018 at 13:07. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/1k0506.d  
Injection date and time: 08-NOV-2018 01:16

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

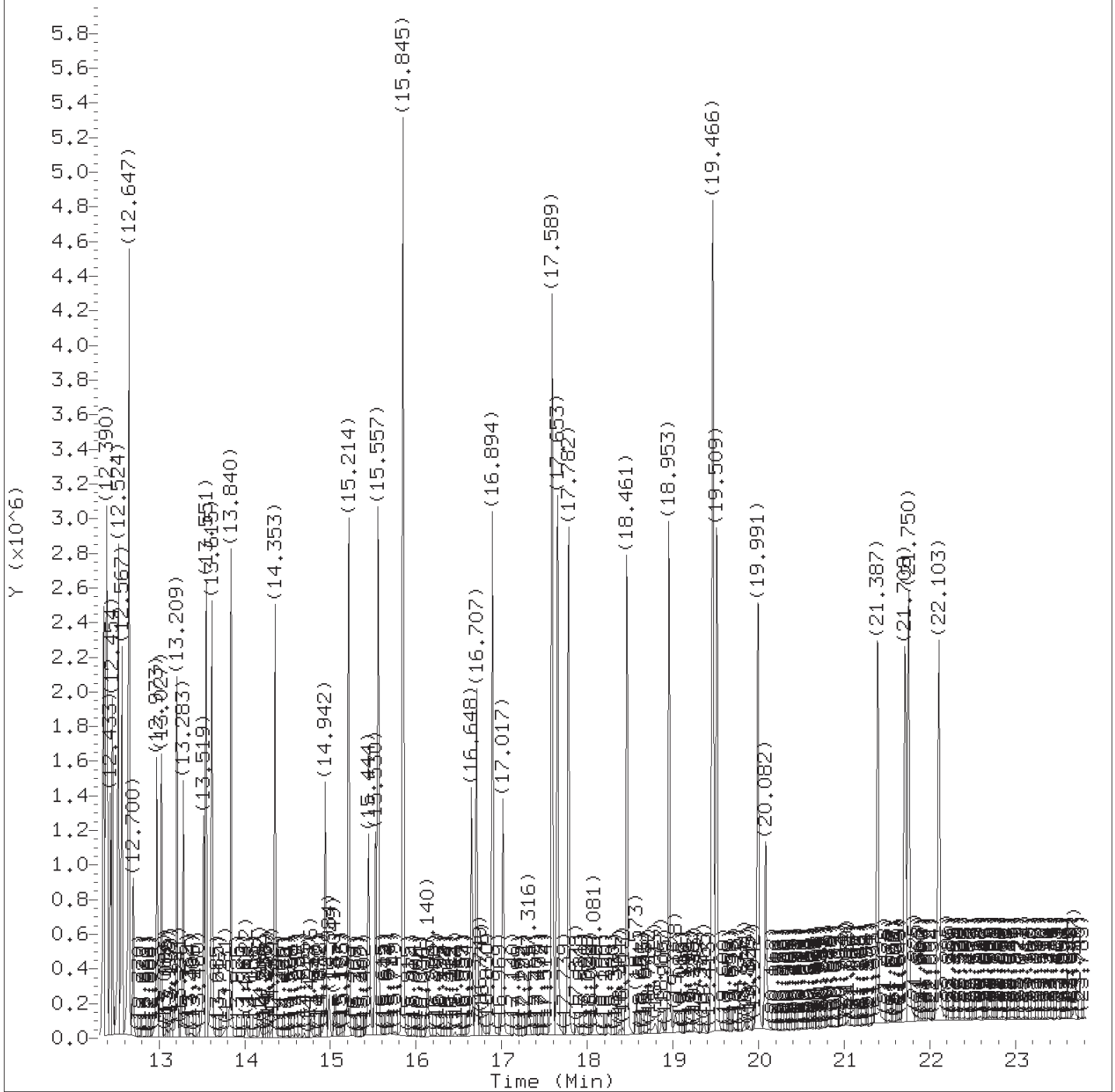
Date, time and analyst ID of latest file update: 08-Nov-2018 01:45 Unknown

Sample Name: 310WILCSD

Lab Sample ID: 310WILCSD

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:54.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0506.d  
Injection date and time: 08-NOV-2018 01:16

Instrument ID: HP20296.i  
Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
Calibration date and time: 07-NOV-2018 22:34

Sublist used: 25788M

Date, time and analyst ID of latest file update: 08-Nov-2018 01:45 Unknown

Sample Name: 310WILCSD

Lab Sample ID: 310WILCSD

Digitally signed by Kira N. Beck  
on 11/08/2018 at 11:54.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0506.d  
 Injection date and time: 08-NOV-2018 01:16

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 01:45 Unknown

Sublist used: 25788M

Sample Name: 310WILCSD

Lab Sample ID: 310WILCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
6) Pyridine	(1)	2.731	79	267434	5.144
12) \$2-Fluorophenol	(1)	4.838	112	1240455	29.488
18) \$Phenol-d6	(1)	6.245	99	1215233	21.406
19) Phenol	(1)	6.261	94	402169	6.040
20) Aniline	(1)	6.271	93	565921	7.232
24) 2-Chlorophenol	(1)	6.437	128	394241	10.052
25) 1,3-Dichlorobenzene	(1)	6.667	146	293508	6.674
26) *1,4-Dichlorobenzene-d4	(1)	6.763	152	135890	5.000
27) 1,4-Dichlorobenzene	(1)	6.785	146	291188	6.590
28) Benzyl alcohol	(1)	6.993	108	298330	11.084
29) 1,2-Dichlorobenzene	(1)	7.010	146	297972	6.939
32) 2-Methylphenol	(1)	7.181	108	399489	9.684
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.223	45	533026	8.436
39) N-Nitroso-di-n-propylamine	(1)	7.411	70	391032	10.174
38) 4-Methylphenol	(1)	7.421	108	437718	10.165
44) Hexachloroethane	(1)	7.528	117	110357	5.499
45) \$Nitrobenzene-d5	(2)	7.619	82	1030203	19.251
46) Nitrobenzene	(2)	7.646	77	566333	9.930
52) Isophorone	(2)	8.031	82	992921	10.317
53) 2-Nitrophenol	(2)	8.149	139	205722	10.983
55) 2,4-Dimethylphenol	(2)	8.256	107	389487	8.502
57) bis(2-Chloroethoxy)methane	(2)	8.411	93	643892	10.494
62) 2,4-Dichlorophenol	(2)	8.534	162	354340	10.780
65) 1,2,4-Trichlorobenzene	(2)	8.662	180	262515	6.921
68) *Naphthalene-d8	(2)	8.742	136	511146	5.000
70) 4-Chloroaniline	(2)	8.887	127	421729	9.060
74) Hexachlorobutadiene	(2)	8.999	225	130579	5.841
83) 4-Chloro-3-methylphenol	(2)	9.705	107	429278	11.003
86) 2-Methylnaphthalene	(2)	9.903	142	585077	7.899
88) Hexachlorocyclopentadiene	(3)	10.165	237	56464	2.517
93) 2,4,6-Trichlorophenol	(3)	10.379	196	276449	12.136
95) 2,4,5-Trichlorophenol	(3)	10.427	196	287905	11.464
96) \$2-Fluorobiphenyl	(3)	10.529	172	1418186	16.839
99) 2-Chloronaphthalene	(3)	10.689	162	573753	7.462
104) 2-Nitroaniline	(3)	10.882	138	232555	12.024
110) Dimethylphthalate	(3)	11.219	163	444944	5.569
113) 2,6-Dinitrotoluene	(3)	11.299	165	195340	12.060
117) 3-Nitroaniline	(3)	11.550	138	191296	10.302
118) *Acenaphthene-d10	(3)	11.588	164	251997	5.000
120) 2,4-Dinitrophenol	(3)	11.711	184	247905	25.382

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/08/2018 at 11:54.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov07a.b/lk0506.d  
 Injection date and time: 08-NOV-2018 01:16

Instrument ID: HP20296.i  
 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov07a.b/rv8270d.m  
 Calibration date and time: 07-NOV-2018 22:34  
 Date, time and analyst ID of latest file update: 08-Nov-2018 01:45 Unknown

Sublist used: 25788M

Sample Name: 310WILCSD

Lab Sample ID: 310WILCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
121) 4-Nitrophenol	(3)	11.834	109	95634	6.150
124) Dibenzofuran	(3)	11.893	168	883501	8.810
123) 2,4-Dinitrotoluene	(3)	11.909	165	266563	11.464
129) Diethylphthalate	(3)	12.267	149	606576	7.714
132) 4-Chlorophenyl-phenylether	(3)	12.374	204	313806	7.713
134) 4-Nitroaniline	(3)	12.390	138	177613	9.991
135) 4,6-Dinitro-2-methylphenol	(4)	12.433	198	150362	11.804
136) N-Nitrosodiphenylamine	(4)	12.524	169	719357	11.615
140) \$2,4,6-Tribromophenol	(3)	12.647	330	500505	50.689
148) 4-Bromophenyl-phenylether	(4)	12.973	248	183010	8.477
154) Pentachlorophenol	(4)	13.283	266	166284	11.925
158) *Phenanthrene-d10	(4)	13.519	188	484136	5.000
168) Carbazole	(4)	13.840	167	1199199	11.771
180) *Pyrene-d10	(5)	15.530	212	524969	5.000
184) \$Terphenyl-d14	(5)	15.845	244	1989448	23.608
198) 3,3'-Dichlorobenzidine	(5)	17.584	252	461255	9.956
210) Di-n-octylphthalate	(6)	18.953	149	1848597	10.613
218) *Perylene-d12	(6)	20.087	264	544561	5.000

\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/08/2018 at 11:54.

Target 3.5 esignature user ID: knb25316

# **Extraction/Distillation/Digestion Logs**

## **Semivolatiles by GC/MS**



Organic Extraction Batchlog

18310WVA1026

Assigned to: 3124 Bradley VanLewen

Reviewed by: AT72405

11/7/18

Start Date: 11/6/18

Start time: 18:00

13536 Mathias OLP  
@kmb215 11/6/18

Tech 1: W013836

Tech 2:

Dept: 26 Prep Analysis: 11010 8270D BNA Extraction

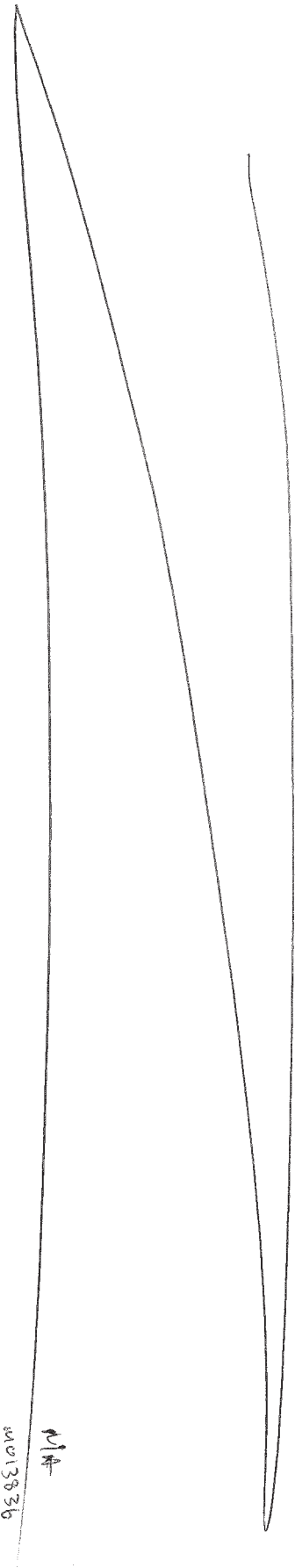
SVOAs 8270D MINI

QC	Sample Code	Amt (µl)	SS/S Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
BLANKA	SBLKWM310	250	SS1830626A	1.0							Tap H <sub>2</sub> O
LCSA	310WILCS	250	SS1830626A		MS1830526C MS1831026A	1.0					Tap H <sub>2</sub> O
LCSAP	310WILCS	250	SS1830626A		MS1830526C	1.0					Tap H <sub>2</sub> O
LCSDA	310WILCSD	250	SS1830626A		MS1830526C MS1831026A	1.0					Tap H <sub>2</sub> O
LCSDAP	310WILCSD	250	SS1830626A		MS1830526C	1.0					Tap H <sub>2</sub> O

Solvent Used	Lot No.
10N NaOH	171151
Methylene Chloride	187001
Sodium Sulfate	18309A
Sulfuric Acid	184517

Spike Solutions: MS1830526C, MS1831026A, MS1830626A  
Witness: N/A  
APPX #1 MINI SPIKE  
MINI SEP. LCS SPIKE #1  
MINI SEP. LCS SPIKE #2  
MINI SEP. BNA SURROGAT

Sample #	Sample Code	Amt (µl)	SS/S Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
19881309	15T-2	248	SS1830626A	1.0	1	✓	✓	153D	yellow	14241	25788	11/13/2018	N
29881310	15T-3	248	SS1830626A	1	1	✓	✓	153D	yellow	14241	25788	11/13/2018	N
39881313	15T-6	248	SS1830626A	1	1	✓	✓	153D	light yellow	14241	25788	11/13/2018	N



N/A  
W013836

Bench#	3	Bench#	2	Bench#	1
Rack ID:		Work Station	fungible	Micro Temp	1100?
Internal Standard	RUISTD248	Balance #	25996	<input type="checkbox"/>	

R-VAP ID	4	90°	C	R-VAP ID		C	R-VAP ID		C
S-bath ID			C	S-bath ID		C	N-Evap		C
							M-vap		C



# **Semivolatiles by GC/MS-SIM Data**

**Case Narrative/Conformance Summary**

**Semivolatiles by GC/MS-SIM**

## Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.  
SDG: TID15

### GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS-SIM

Sample #	Client ID	Matrix		DF	Comments
		Liquid	Solid		
9881309	OU2-1-MW008WT	X		1	
9881310	OU2-1-MW008WT-DUP	X		1	Field Duplicate Sample
9881313	OU2-1-MW009WT	X		1	

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below.  
See QC Reference List for Associated Batch QC Samples

#### SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

#### HOLDING TIME:

All holding times were met.

#### PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

#### CALIBRATION/STANDARDIZATION:

All criteria were met.

#### QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

##### MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

#### SAMPLE ANALYSIS:

(Sample number(s): 9881309-9881310, 9881313: Analysis: 14244)  
Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

## Case Narrative/Conformance Summary

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

### GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS-SIM

No other problems were encountered with the analysis of the samples.

#### Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

# **Quality Control and Calibration Summary Forms**

## **Semivolatiles by GC/MS-SIM**

**Quality Control Reference List**  
**GC/MS Semivolatiles**

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

**Fraction: Semivolatiles by GC/MS-SIM**

<b>Analysis</b>	<b>Batch Number</b>	<b>Sample Number</b>	<b>Analysis Date</b>
SIM SVOAs 8270D MINI	18309WAE026	SBLKWE309	11/07/2018 18:12
		309WELCS	11/07/2018 18:41
		309WELCSD	11/07/2018 19:17
		9881309	11/07/2018 21:44
		9881310	11/07/2018 22:13
		9881313	11/07/2018 22:43

Fraction: Semivolatiles by GC/MS-SIM

18309WAE026 / SBLKWE309 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
1,4-Dioxane	11/07/18	N.D.	ug/l	0.1	0.2	0.3
bis(2-Chloroethyl)ether	11/07/18	N.D.	ug/l	0.02	0.06	0.07
Naphthalene	11/07/18	N.D.	ug/l	0.03	0.06	0.07
Acenaphthylene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Acenaphthene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Fluorene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Phenanthrene	11/07/18	N.D.	ug/l	0.03	0.06	0.07
Anthracene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Di-n-butylphthalate	11/07/18	0.1 J	ug/l	0.05	0.1	1
Fluoranthene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Pyrene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
bis(2-Ethylhexyl)phthalate	11/07/18	0.3 J	ug/l	0.08	0.2	1
Benzo(a)anthracene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Chrysene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Benzo(b)fluoranthene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Benzo(k)fluoranthene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Benzo(a)pyrene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Indeno(1,2,3-cd)pyrene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Dibenz(a,h)anthracene	11/07/18	N.D.	ug/l	0.02	0.06	0.07
Benzo(g,h,i)perylene	11/07/18	N.D.	ug/l	0.01	0.03	0.05
Hexachlorobenzene	11/07/18	N.D.	ug/l	0.01	0.03	0.05



Fraction: Semivolatiles by GC/MS-SIM

18309WAE026 Sample	1-Methylnaphthalene-d10		Benzo(a)pyrene-d12		Fluoranthene-d10	
	Spike Added	1 ug/l	Spike Added	1 ug/l	Spike Added	1 ug/l
	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWE309	82	29 - 112	100	18 - 129	109	38 - 119
309WELCS	79	29 - 112	98	18 - 129	95	38 - 119
309WELCSD	90	29 - 112	94	18 - 129	94	38 - 119
9881309	84	29 - 112	89	18 - 129	111	38 - 119
9881310	89	29 - 112	90	18 - 129	116	38 - 119
9881313	89	29 - 112	48	18 - 129	106	38 - 119

SDG: TID15  
Matrix: LIQUID

**GC/MS Semivolatiles**

Fraction: Semivolatiles by GC/MS-SIM

LCS: 309WELCS LCSD: 309WELCSD  Analyte	Batch: 18309WAE026 (Sample number(s): 9881309-9881310, 9881313 )							
	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
1,4-Dioxane	1.00	0.703	0.645	70	64	10-113	9	30
bis(2-Chloroethyl)ether	1.00	1.06	1.01	106	101	40-116	4	20
Naphthalene	1.00	0.820	0.902	82	90	43-114	9	20
Acenaphthylene	1.00	0.894	0.905	89	91	35-121	1	20
Acenaphthene	1.00	0.927	0.941	93	94	48-114	1	20
Fluorene	1.00	0.865	0.874	87	87	50-118	1	20
Phenanthrene	1.00	1.06	1.08	106	108	53-115	1	20
Anthracene	1.00	0.927	0.894	93	89	53-119	4	20
Di-n-butylphthalate	1.00	1.05	0.988 J	105	99	60-145	6	20
Fluoranthene	1.00	0.968	0.961	97	96	58-120	1	20
Pyrene	1.00	1.05	1.03	105	103	53-121	1	20
bis(2-Ethylhexyl)phthalate	1.00	1.17	1.10	117	110	55-173	6	20
Benzo(a)anthracene	1.00	1.09	1.06	109	106	59-120	3	20
Chrysene	1.00	1.08	1.05	108	105	57-120	4	20
Benzo(b)fluoranthene	1.00	1.21	1.11	121	111	53-126	9	20
Benzo(k)fluoranthene	1.00	1.15	1.11	115	111	54-125	4	20
Benzo(a)pyrene	1.00	1.12	1.05	112	105	53-120	6	20
Indeno(1,2,3-cd)pyrene	1.00	1.19	1.06	119	106	48-130	11	20
Dibenz(a,h)anthracene	1.00	1.13	1.02	113	102	44-131	10	20
Benzo(g,h,i)perylene	1.00	1.12	1.01	112	101	44-128	10	20
Hexachlorobenzene	1.00	0.742	0.885	74	89	46-124	18	20

Fraction: Semivolatiles by GC/MS-SIM

14244: SIM SVOAs 8270D MINI Analyte Name	Default DL	Default LOD	Default LOQ	Units
1,4-Dioxane	.1	.2	0.3	ug/l
bis(2-Chloroethyl)ether	.02	.06	0.07	ug/l
Naphthalene	.03	.06	0.07	ug/l
Acenaphthylene	.01	.03	0.05	ug/l
Acenaphthene	.01	.03	0.05	ug/l
Fluorene	.01	.03	0.05	ug/l
Phenanthrene	.03	.06	0.07	ug/l
Anthracene	.01	.03	0.05	ug/l
Di-n-butylphthalate	.05	.1	1	ug/l
Fluoranthene	.01	.03	0.05	ug/l
Pyrene	.01	.03	0.05	ug/l
bis(2-Ethylhexyl)phthalate	.08	.16	1	ug/l
Benzo(a)anthracene	.01	.03	0.05	ug/l
Chrysene	.01	.03	0.05	ug/l
Benzo(b)fluoranthene	.01	.03	0.05	ug/l
Benzo(k)fluoranthene	.01	.03	0.05	ug/l
Benzo(a)pyrene	.01	.03	0.05	ug/l
Indeno(1,2,3-cd)pyrene	.01	.03	0.05	ug/l
Dibenz(a,h)anthracene	.02	.06	0.07	ug/l
Benzo(g,h,i)perylene	.01	.03	0.05	ug/l
Hexachlorobenzene	.01	.03	0.05	ug/l

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_

Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_

Lab File ID: mj2000.d DFTPP Injection Date: 10/26/18

Instrument ID: HP21585 DFTPP Injection Time: 05:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	41.9
68	Less than 2.0% of mass 69	0.74 ( 1.56)1
69	Mass 69 relative abundance	47.6
70	Less than 2.0% of mass 69	0.27 ( 0.56)1
127	10.0 - 80.00% of mass 198	48.3
197	Less than 2.0% of mass 198	0.83
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.72
275	10.0 - 60.0% of mass 198	24.6
365	Greater than 1.00% of mass 198	2.62
441	Present, and less than mass 443	11.6
442	Greater than 50.00% of mass 198	75.4
443	15.00 - 24.00% of mass 442	14.7 ( 19.5)2

1-Value is % mass 69

2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSIM2768 - SSTD.5	mj2001b.d	10/26/18	07:31
02	RVSIM2768 - SSTD2.5	mj2002.d	10/26/18	08:05
03	RVSIM2768 - SSTD1	mj2003.d	10/26/18	08:35
04	RVSIM2768 - SSTD.1	mj2004.d	10/26/18	09:04
05	RVSIM2768 - SSTD.05	mj2005.d	10/26/18	09:33
06	RVSIM2768 - SSTD.01	mj2006.d	10/26/18	10:02
07	RVSIM2768 - SSTD0.0025	mj2007.d	10/26/18	10:32
08	RVSICV2788 - SSTD0.50	mj2008.d	10/26/18	11:01

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_

Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_

Lab File ID: mk0400.d DFTPP Injection Date: 11/07/18

Instrument ID: HP21585 DFTPP Injection Time: 16:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	44.5
68	Less than 2.0% of mass 69	0.82 ( 1.63)1
69	Mass 69 relative abundance	50.7
70	Less than 2.0% of mass 69	0.28 ( 0.56)1
127	10.0 - 80.00% of mass 198	50.6
197	Less than 2.0% of mass 198	0.83
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.95
275	10.0 - 60.0% of mass 198	23.5
365	Greater than 1.00% of mass 198	2.44
441	Present, and less than mass 443	10.9
442	Greater than 50.00% of mass 198	68.0
443	15.00 - 24.00% of mass 442	13.7 ( 20.2)2

1-Value is % mass 69

2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSIM2768 - SSTD.5	mk0401.d	11/07/18	17:11
02	SBLKWE309	mk0402.d	11/07/18	18:12
03	309WELCS	mk0403.d	11/07/18	18:41
04	309WELCSD	mk0404.d	11/07/18	19:17
05	9880803	mk0405.d	11/07/18	19:46
06	9880805	mk0406.d	11/07/18	20:16
07	9880806	mk0407.d	11/07/18	20:45
08	9880808	mk0408.d	11/07/18	21:15
09	9881309	mk0409.d	11/07/18	21:44
10	9881310	mk0410.d	11/07/18	22:13
11	9881313	mk0411.d	11/07/18	22:43
12	SECC0.5	mk0427.d	11/07/18	23:12
13	9879130	mk0412.d	11/07/18	23:42
14	9881389DL	mk0413.d	11/08/18	00:11
15	9881391	mk0414.d	11/08/18	00:40
16	9881392	mk0415.d	11/08/18	01:10
17	9881395	mk0416.d	11/08/18	01:39
18	9881396	mk0417.d	11/08/18	02:09

5B  
 SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
 DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories      Contract: \_\_\_\_\_

Lab Code: LANCAS      Case No.: \_\_\_\_\_      SAS No.: \_\_\_\_\_

Lab File ID: mk0400.d      DFTPP Injection Date: 11/07/18

Instrument ID: HP21585      DFTPP Injection Time: 16:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	44.5
68	Less than 2.0% of mass 69	0.82 ( 1.63)1
69	Mass 69 relative abundance	50.7
70	Less than 2.0% of mass 69	0.28 ( 0.56)1
127	10.0 - 80.00% of mass 198	50.6
197	Less than 2.0% of mass 198	0.83
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.95
275	10.0 - 60.0% of mass 198	23.5
365	Greater than 1.00% of mass 198	2.44
441	Present, and less than mass 443	10.9
442	Greater than 50.00% of mass 198	68.0
443	15.00 - 24.00% of mass 442	13.7 ( 20.2)2

1-Value is % mass 69

2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19	9881397	mk0418.d	11/08/18	02:38
20	9881832	mk0419.d	11/08/18	03:08
21	9881852	mk0420.d	11/08/18	03:37
22	9881856	mk0421.d	11/08/18	04:06

6B  
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_  
 Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Instrument ID: HP21585 Calibration Date(s): 10/26/18 10/26/18  
 Calibration Times: 07:31 10:02  
 Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(\*) = 30%

LAB FILE ID: RRF0.01 = mj2006.d RRF0.05 = mj2005.d RRF0.1 = mj2004.d  
 RRF0.5 = mj2001b.d RRF1 = mj2003.d RRF2.5 = mj2002.d

COMPOUND	RRF0.01	RRF0.05	RRF0.1	RRF0.5	RRF1	RRF2.5	RRF	RRF	% RSD	CAL. METHOD
1,4-Dioxane		0.697	0.678	0.699	0.687	0.706		0.694	2	AVG
N-Nitrosodimethylamine	0.930	0.943	0.956	1.053	1.048	1.099		1.005	7	AVG
bis(2-Chloroethyl)ether	0.322	0.388	0.400	0.408	0.401	0.376		0.382	8	AVG
Quinoline	0.658	0.683	0.701	0.703	0.694	0.701		0.690	3	AVG
Naphthalene	1.178	1.151	1.152	1.181	1.141	1.095		1.149	3	AVG
2-Methylnaphthalene	0.693	0.699	0.705	0.727	0.721	0.700		0.707	2	AVG
1-Methylnaphthalene	0.678	0.687	0.696	0.723	0.712	0.703		0.700	2	AVG
Acenaphthylene	2.507	2.534	2.521	2.705	2.706	2.818		2.632	5	AVG
Dimethylphthalate	1.944	2.016	1.922	2.025	2.023	1.913		1.974	3	AVG
Acenaphthene	1.660	1.581	1.525	1.609	1.577	1.641		1.599	3	AVG
Dibenzofuran	2.114	1.979	2.101	2.228	2.171	2.229		2.137	4	AVG
Diethylphthalate	1.919	1.975	1.905	2.008	2.008	1.970		1.964	2	AVG
Fluorene	1.772	1.826	1.792	1.923	1.915	1.958		1.864	4	AVG
Hexachlorobenzene	0.279	0.279	0.281	0.283	0.278	0.285		0.281	1	AVG
Phenanthrene	1.307	1.330	1.333	1.343	1.335	1.400		1.341	2	AVG
Anthracene	1.263	1.285	1.298	1.351	1.347	1.357		1.317	3	AVG
Di-n-butylphthalate	1.383	1.445	1.441	1.526	1.542	1.483		1.470	4	AVG
Fluoranthene	1.437	1.448	1.480	1.541	1.533	1.542		1.497	3	AVG
Pyrene	2.260	2.227	2.220	2.304	2.310	2.319		2.273	2	AVG
Butylbenzylphthalate	0.891	0.934	0.919	0.973	1.010	0.959		0.948	4	AVG
bis(2-Ethylhexyl)phthalate	1.305	1.378	1.377	1.456	1.500	1.462		1.413	5	AVG
Benzo(a)anthracene	2.172	1.894	1.886	1.921	1.922	1.963		1.960	5	AVG
Chrysene	2.115	1.964	1.948	1.956	1.956	1.965		1.984	3	AVG
Di-n-octylphthalate	2.406	2.536	2.555	2.685	2.743	2.584		2.585	5	AVG
Benzo(b)fluoranthene	2.063	1.929	1.948	1.966	1.978	1.995		1.980	2	AVG
Benzo(k)fluoranthene	2.012	1.890	1.914	2.031	2.010	2.000		1.976	3	AVG
Benzo(e)pyrene	1.798	1.825	1.856	1.895	1.890	1.896		1.860	2	AVG
Benzo(a)pyrene	1.988	1.840	1.836	1.907	1.900	1.913		1.897	3	AVG
Perylene	2.010	1.891	1.881	1.931	1.922	1.937		1.929	2	AVG
Indeno(1,2,3-cd)pyrene	1.805	1.647	1.654	1.746	1.728	1.767		1.724	4	AVG
Dibenz(a,h)anthracene	1.813	1.719	1.718	1.784	1.747	1.783		1.761	2	AVG
Benzo(g,h,i)perylene	2.131	1.943	1.938	1.995	1.966	1.994		1.995	4	AVG
1-Methylnaphthalene-d10	0.456	0.454	0.457	0.462	0.455	0.446		0.455	1	AVG
Fluoranthene-d10	0.932	0.958	0.971	1.015	1.003	1.004		0.981	3	AVG
Benzo(a)pyrene-d12	0.857	0.882	0.909	0.950	0.954	0.962		0.919	5	AVG

Average %RSD 3

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.  
 Benzidine Levels in the 5,15,30,50,80,120 standards are 15,45,90,150,240,360 ng/ul, respectively.  
 Benzoic acid and 2,4-Dinitrophenol are at 15 ng/ul, 30 ng/ul,40 ng/ul in the 5,15,30 standards.

# Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

```

/chem/HP21585.i/18oct26.b/mj2001b.d  SSTD0.5
/chem/HP21585.i/18oct26.b/mj2002.d  SSTD2.5
/chem/HP21585.i/18oct26.b/mj2003.d  SSTD001
/chem/HP21585.i/18oct26.b/mj2004.d  SSTD0.1
/chem/HP21585.i/18oct26.b/mj2005.d  SSTD0.05
/chem/HP21585.i/18oct26.b/mj2006.d  SSTD0.01
    
```

## Area Summary

File ID:  
=====

Internal Standard Name	mj2001b.d	mj2002.d	mj2003.d	mj2004.d	mj2005.d	mj2006.d	Avg. Area	%RSD	In Spec
1,4-Dichlorobenzene-d4	53139	53598	53854	53454	53330	52565	53323	1	Yes
Naphthalene-d8	152458	162269	153430	147772	150740	149221	152648	3	Yes
Acenaphthene-d10	66371	66824	66884	64924	64400	64827	65705	2	Yes
Phenanthrene-d10	136980	138135	137822	130356	132129	131827	134542	3	Yes
Chrysene-d12	94742	95935	95148	89008	88556	87761	91858	4	Yes
Perylene-d12	90716	95191	91421	85375	84922	84530	88692	5	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

## RT Summary

File ID:  
=====

Internal Standard Name	mj2001b.d	mj2002.d	mj2003.d	mj2004.d	mj2005.d	mj2006.d	Avg. RT
1,4-Dichlorobenzene-d4	6.619	6.619	6.619	6.619	6.619	6.618	6.619
Naphthalene-d8	8.539	8.539	8.539	8.519	8.539	8.539	8.535
Acenaphthene-d10	11.316	11.316	11.316	11.316	11.316	11.316	11.316
Phenanthrene-d10	13.214	13.214	13.214	13.207	13.206	13.206	13.210
Chrysene-d12	17.223	17.230	17.223	17.223	17.223	17.223	17.224
Perylene-d12	19.669	19.677	19.669	19.670	19.669	19.669	19.671

Comments: \_\_\_\_\_



Lancaster Laboratories, Inc.  
Semi Volatile Initial Calibration Verification

```

=====
LAB NAME: LANCASTER LABS           LAB CODE: LANCAS           INSTRUMENT: HP21585
Method: SW-846 8270D (SIM) MINI    File ID:  mj2008.d
ICV SAMPLE ID: RVSICV2788         BATCH: 18OCT26026        Sample Name: SSTD0.50
=====

```

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,4-Dioxane	20.00	.50	0	30	YES
N-Nitrosodimethylamine	20.00	.55	11	30	YES
bis(2-Chloroethyl) ether	20.00	.57	14	30	YES
Naphthalene	20.00	.55	10	30	YES
Quinoline	20.00	.48	-3	30	YES
2-Methylnaphthalene	20.00	.56	11	30	YES
1-Methylnaphthalene	20.00	.52	5	30	YES
Dimethylphthalate	20.00	.53	7	30	YES
Acenaphthylene	20.00	.48	-5	30	YES
Acenaphthene	20.00	.48	-3	30	YES
Dibenzofuran	20.00	.54	8	30	YES
Diethylphthalate	20.00	.53	5	30	YES
Fluorene	20.00	.53	6	30	YES
Hexachlorobenzene	20.00	.53	6	30	YES
Phenanthrene	20.00	.53	6	30	YES
Anthracene	20.00	.55	9	30	YES
Di-n-butylphthalate	20.00	.51	2	30	YES
Fluoranthene	20.00	.54	8	30	YES
Pyrene	20.00	.52	4	30	YES
Butylbenzylphthalate	20.00	.51	2	30	YES
Benzo(a)anthracene	20.00	.53	6	30	YES
Chrysene	20.00	.52	5	30	YES
bis(2-Ethylhexyl)phthalate	20.00	.50	-1	30	YES
Di-n-octylphthalate	20.00	.51	3	30	YES
Benzo(b)fluoranthene	20.00	.57	13	30	YES
Benzo(k)fluoranthene	20.00	.54	8	30	YES
Benzo(a)pyrene	20.00	.54	8	30	YES
Indeno(1,2,3-cd)pyrene	20.00	.57	14	30	YES
Dibenz(a,h)anthracene	20.00	.53	6	30	YES
Benzo(g,h,i)perylene	20.00	.53	7	30	YES

NC = Could not calculate

Comments: \_\_\_\_\_

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract: \_\_\_\_\_

Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Instrument ID: HP21585 Calibration Date: 11/07/18 Time: 17:11

Lab File ID: mk0401.d Init. Calib. Date(s): 10/26/18 10/26/18

Init. Calib. Times(s): 07:31 10:02

Min RRF for SPCC(#) = 0.050

Max %Drift for CCC(\*) = 20%

COMPOUND	RRF	RRF.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.694	0.761	0.550	.5	10
N-Nitrosodimethylamine bis(2-Chloroethyl) ether	1.005	1.094	0.540	.5	9
Quinoline	0.382	0.362	0.470	.5	-5
Naphthalene	0.690	0.587	0.430	.5	-15
2-Methylnaphthalene	1.150	1.031	0.450	.5	-10
1-Methylnaphthalene	0.707	0.663	0.470	.5	-6
Acenaphthylene	0.700	0.659	0.470	.5	-6
Dimethylphthalate	2.632	2.513	0.480	.5	-5
Acenaphthene	1.974	1.891	2.400	2.5	-4
Dibenzofuran	1.599	1.514	0.470	.5	-5
Diethylphthalate	2.137	2.167	0.510	.5	1
Fluorene	1.964	1.963	2.500	2.5	0
Hexachlorobenzene	1.864	1.843	0.490	.5	-1
Phenanthrene	0.281	0.278	0.500	.5	-1
Anthracene	1.341	1.324	0.490	.5	-1
Di-n-butylphthalate	1.317	1.331	0.510	.5	1
Fluoranthene	1.470	1.506	2.560	2.5	2
Pyrene	1.497	1.536	0.510	.5	3
Butylbenzylphthalate	2.273	2.320	0.510	.5	2
bis(2-Ethylhexyl) phthalate	0.948	0.917	2.420	2.5	-3
Benzo(a)anthracene	1.413	1.328	2.350	2.5	-6
Chrysene	1.960	1.901	0.490	.5	-3
Di-n-octylphthalate	1.984	1.962	0.490	.5	-1
Benzo(b)fluoranthene	2.585	2.463	2.380	2.5	-5
Benzo(k)fluoranthene	1.980	1.974	0.500	.5	0
Benzo(e)pyrene	1.976	2.056	0.520	.5	4
Benzo(a)pyrene	1.860	1.901	0.510	.5	2
Perylene	1.897	1.918	0.510	.5	1
Indeno(1,2,3-cd)pyrene	1.929	1.927	0.500	.5	0
Dibenz(a,h)anthracene	1.724	1.689	0.490	.5	-2
Benzo(g,h,i)perylene	1.761	1.765	0.500	.5	0
1-Methylnaphthalene-d10	1.995	1.989	0.500	.5	0
Fluoranthene-d10	0.455	0.424	0.470	.5	-7
Benzo(a)pyrene-d12	0.981	1.020	0.520	.5	4
	0.919	0.947	0.520	.5	3

FORM VII SV-1

page 1 of 1

# Continuing Calibration Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

```

/chem/HP21585.i/18oct26.b/mj2001b.d **
/chem/HP21585.i/18oct26.b/mj2002.d
/chem/HP21585.i/18oct26.b/mj2003.d
/chem/HP21585.i/18oct26.b/mj2004.d
/chem/HP21585.i/18oct26.b/mj2005.d
/chem/HP21585.i/18oct26.b/mj2006.d
  
```

\*\* indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

```

/chem/HP21585.i/18nov07.b/mk0401.d
  
```

## Area Summary

File ID:

=====

Internal Standard Name	mk0401.d	ICAL Area	Low Limit	High Limit	In Spec
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene-d4	62638	53139	26570	106278	Yes
Naphthalene-d8	208073	152458	76229	304916	Yes
Acenaphthene-d10	87886	66371	33186	132742	Yes
Phenanthrene-d10	175925	136980	68490	273960	Yes
Chrysene-d12	119703	94742	47371	189484	Yes
Perylene-d12	111011	90716	45358	181432	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

## RT Summary

File ID:

=====

Internal Standard Name	mk0401.d	ICAL RT	In Spec
=====	=====	=====	=====
1,4-Dichlorobenzene-d4	6.560	6.619	Yes
Naphthalene-d8	8.480	8.539	Yes
Acenaphthene-d10	11.264	11.316	Yes
Phenanthrene-d10	13.175	13.214	Yes
Chrysene-d12	17.146	17.223	Yes
Perylene-d12	19.585	19.669	Yes

A "No" indicates the retention time is greater than 10 seconds from the RT of the referenced standard.

Comments: \_\_\_\_\_

Data File: /chem/HP21585.i/18nov07.b/mk0427.d  
 Report Date: 11/08/2018 04:06

Lancaster Laboratories, Inc.  
 Shift Ending Continuing Calibration Check Report

Instrument ID: HP21585.i      Injection Date and Time: 07-NOV-2018 23:12  
 Client ID: SECC0.5          Initial Calibration Date(s): 26-OCT-2018    26-OCT-2018  
 Lab Sample ID: SECC0.5      Initial Calibration Time(s):    07:31            10:02  
 Sublist used: 25784.sub      Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
1,4-Dioxane	0.69359	0.77466	0.010	-11.7	20.0
bis(2-Chloroethyl) ether	0.38248	0.38466	0.010	-0.6	20.0
Naphthalene	1.14946	1.04211	0.010	9.3	20.0
Acenaphthylene	2.63173	2.48695	0.010	5.5	20.0
Acenaphthene	1.59900	1.52082	0.010	4.9	20.0
Fluorene	1.86421	1.81816	0.010	2.5	20.0
Hexachlorobenzene	0.28072	0.27330	0.010	2.6	20.0
Phenanthrene	1.34136	1.32904	0.010	0.9	20.0
Anthracene	1.31684	1.31838	0.010	-0.1	20.0
Di-n-butylphthalate	1.47014	1.54228	0.010	-4.9	20.0
Fluoranthene	1.49686	1.53104	0.010	-2.3	20.0
Pyrene	2.27340	2.19562	0.010	3.4	20.0
bis(2-Ethylhexyl) phthalate	1.41312	1.33421	0.010	5.6	20.0
Benzo(a) anthracene	1.95976	1.90081	0.010	3.0	20.0
Chrysene	1.98419	1.96261	0.010	1.1	20.0
Benzo(b) fluoranthene	1.97970	1.88293	0.010	4.9	20.0
Benzo(k) fluoranthene	1.97625	2.02301	0.010	-2.4	20.0
Benzo(a) pyrene	1.89716	1.87656	0.010	1.1	20.0
Indeno(1,2,3-cd) pyrene	1.72430	1.61329	0.010	6.4	20.0
Dibenz(a,h) anthracene	1.76065	1.67553	0.010	4.8	20.0
Benzo(g,h,i) perylene	1.99454	1.79244	0.010	10.1	20.0
Surrogate Standards	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
1-Methylnaphthalene-d10	0.45479	0.44240	0.010	2.7	20.0
Fluoranthene-d10	0.98056	1.02376	0.010	-4.4	20.0
Benzo(a) pyrene-d12	0.91911	0.93709	0.010	-2.0	20.0

8B  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract: \_\_\_\_\_

Lab Code: LANCAS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_

Lab File ID (Standard): mk0401.d Date Analyzed: 11/07/18

Instrument ID: HP21585 Time Analyzed: 17:11

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	62638	6.560	208073	8.480	87886	11.264
UPPER LIMIT	125276	7.060	416146	8.980	175772	11.764
LOWER LIMIT	31319	6.060	104037	7.980	43943	10.764
LLI SAMPLE NO.						
01  SBLKWE309	46872	6.560	158787	8.480	65911	11.264
02  309WELCS	47269	6.560	167933	8.480	72691	11.265
03  309WELCSD	45749	6.580	167600	8.480	70426	11.264
04  9880803	49441	6.560	162900	8.480	70536	11.264
05  9880805	51111	6.560	164928	8.480	72067	11.264
06  9880806	48724	6.560	163864	8.480	74144	11.264
07  9880808	49830	6.560	166188	8.480	72100	11.264
08  9881309	49564	6.560	166085	8.480	76762	11.264
09  9881310	49261	6.560	169657	8.480	74199	11.264
10  9881313	47988	6.560	161870	8.480	68277	11.264
11  SECC0.5	60836	6.560	205220	8.480	88818	11.264
12  9879130	47441	6.560	168759	8.480	69288	11.264
13  9881389DL	48918	6.560	165166	8.480	69853	11.264
14  9881391	51312	6.560	183213	8.480	82515	11.264
15  9881392	51811	6.560	172444	8.480	76335	11.264
16  9881395	48424	6.580	174526	8.480	71777	11.264
17  9881396	50690	6.579	170422	8.480	74765	11.264

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard are and RT values with an asterisk

\* Values outside of QC limits.

8C  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS                      Contract:\_\_\_\_\_

Lab Code: LANCAS    Case No.:\_\_\_\_\_    SAS No.:\_\_\_\_\_

Lab File ID (Standard): mk0401.d                      Date Analyzed: 11/07/18

Instrument ID: HP21585                                      Time Analyzed: 17:11

		IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====	=====
12 HOUR STD		175925	13.175	119703	17.146	111011	19.585
UPPER LIMIT		351850	13.675	239406	17.646	222022	20.085
LOWER LIMIT		87963	12.675	59852	16.646	55506	19.085
=====	=====	=====	=====	=====	=====	=====	=====
LLI SAMPLE							
NO.							
=====	=====	=====	=====	=====	=====	=====	=====
01	SBLKWE309	115997	13.175	79524	17.146	76120	19.585
02	309WELCS	141660	13.168	89480	17.147	83173	19.586
03	309WELCSD	138659	13.175	87682	17.146	85624	19.585
04	9880803	113708	13.175	96832	17.146	102420	19.593
05	9880805	111239	13.175	101373	17.146	109269	19.593
06	9880806	108039	13.175	99058	17.154	108738	19.593
07	9880808	119661	13.175	90514	17.146	86940	19.593
08	9881309	110202	13.175	99722	17.154	109621	19.600
09	9881310	111228	13.175	97897	17.154	105671	19.593
10	9881313	123930	13.175	88688	17.146	95323	19.585
11	SECC0.5	176368	13.175	127073	17.146	132115	19.593
12	9879130	132826	13.175	90706	17.146	95584	19.593
13	9881389DL	135520	13.175	92050	17.146	96399	19.585
14	9881391	115910	13.175	107093	17.154	114409	19.593
15	9881392	143962	13.175	100218	17.146	109360	19.593
16	9881395	111952	13.175	97060	17.146	107726	19.593
17	9881396	115343	13.175	100070	17.146	107278	19.593

IS4 (PHN) = Phenanthrene-d10  
 IS5 (CRY) = Chrysene-d12  
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area  
 AREA LOWER LIMIT = -50% of internal standard area  
 RT UPPER LIMIT = +0.50 minutes of internal standard RT  
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard are and RT values with an asterisk  
 \* Values outside of QC limits.

8C  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS                      Contract: \_\_\_\_\_  
 Lab Code: LANCAS    Case No.: \_\_\_\_\_    SAS No.: \_\_\_\_\_  
 Lab File ID (Standard): mk0401.d                      Date Analyzed: 11/07/18  
 Instrument ID: HP21585                                      Time Analyzed: 17:11

		IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====	=====
12 HOUR STD		62638	6.560	208073	8.480	87886	11.264
UPPER LIMIT		125276	7.060	416146	8.980	175772	11.764
LOWER LIMIT		31319	6.060	104037	7.980	43943	10.764
=====	=====	=====	=====	=====	=====	=====	=====
LLI SAMPLE							
NO.							
=====	=====	=====	=====	=====	=====	=====	=====
18	9881397	49223	6.580	181852	8.480	74125	11.264
19	9881832	49063	6.560	165843	8.480	70050	11.264
20	9881852	40866	6.560	142662	8.480	59505	11.265
21	9881856	43616	6.521	146869	8.480	64871	11.277

IS1 (DCB) = 1,4-Dichlorobenzene-d4  
 IS2 (NPT) = Naphthalene-d8  
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area  
 AREA LOWER LIMIT = -50% of internal standard area  
 RT UPPER LIMIT = +0.50 minutes of internal standard RT  
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard are and RT values with an asterisk  
 \* Values outside of QC limits.

8C  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS                      Contract: \_\_\_\_\_  
 Lab Code: LANCAS    Case No.: \_\_\_\_\_    SAS No.: \_\_\_\_\_  
 Lab File ID (Standard): mk0401.d                      Date Analyzed: 11/07/18  
 Instrument ID: HP21585                                      Time Analyzed: 17:11

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12 HOUR STD	175925	13.175	119703	17.146	111011	19.585	
UPPER LIMIT	351850	13.675	239406	17.646	222022	20.085	
LOWER LIMIT	87963	12.675	59852	16.646	55506	19.085	
LLI SAMPLE NO.							
18	9881397	117188	13.175	101893	17.146	110079	19.593
19	9881832	124910	13.175	93560	17.146	101910	19.585
20	9881852	116353	13.176	80549	17.147	84842	19.586
21	9881856	113618	13.183	100567	17.162	103124	19.601

IS4 (PHN) = Phenanthrene-d10  
 IS5 (CRY) = Chrysene-d12  
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area  
 AREA LOWER LIMIT = -50% of internal standard area  
 RT UPPER LIMIT = +0.50 minutes of internal standard RT  
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard are and RT values with an asterisk  
 \* Values outside of QC limits.



# **Sample Data**

## **Semivolatiles by GC/MS-SIM**

15T-2

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881309

Data file: /chem/HP21585.i/18nov07.b/mk0409.d

Injection date and time: 07-NOV-2018 21:44

Data file Sample Info. Line: 15T-2;9881309;1;0;SAMPLE;;DOD26;

Instrument ID: HP21585.i Batch: 18309WAE

Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784

Calibration date and time (Last Method Edit): 09-NOV-2018 11:59

Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 249 ml

Volume Injected (Vi): 2 ul

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
5) 1,4-Dichlorobenzene-d4	6.560( 0.000)	474	152	49564 ( -21)	0.25	
6) Naphthalene-d8	8.480( 0.000)	572	136	166085 ( -20)	0.25	
14) Acenaphthene-d10	11.264( 0.000)	767	164	76762M ( -13)	0.25	
20) Phenanthrene-d10	13.175( 0.000)	987	188	110202 ( -37)	0.25	
29) Chrysene-d12	17.154(-0.008)	1550	240	99722 ( -17)	0.25	
38) Perylene-d12	19.600(-0.015)	1869	264	109621 ( -1)	0.25	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
10) 1-Methylnaphthalene-d10	(2)	9.702( 0.000)	152	63680M	0.211	84%		29 - 112
24) Fluoranthene-d10	(4)	14.788( 0.000)	212	120217	0.278	111%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.470( 0.000)	264	89717	0.223	89%		18 - 129

M = Surrogate Standard was manually integrated.

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
1) 1,4-Dioxane	(1)	2.780(-0.001)	88	10127M	0.074	0.30			0.01
4) bis(2-Chloroethyl)ether	(2)			Not Detected					0.005
7) Naphthalene	(2)	8.499(-0.000)	128	26855M	0.035	0.14			0.008
13) Acenaphthylene	(3)	11.045(-0.001)	152	2492M	0.003	0.01			0.003
15) Acenaphthene	(3)	11.316( 0.000)	154	67388M	0.137	0.55			0.003
18) Fluorene	(3)	12.043(-0.000)	166	58163M	0.102	0.41			0.003
19) Hexachlorobenzene	(4)			Not Detected					0.003
21) Phenanthrene	(4)	13.198( 0.000)	178	90843	0.154	0.62			0.008
22) Anthracene	(4)	13.269(-0.000)	178	13855	0.024	0.10			0.003
23) Di-n-butylphthalate	(4)	13.995( 0.000)	149	107046	0.165	0.66			0.05
25) Fluoranthene	(4)	14.813( 0.000)	202	17699	0.027	0.11			0.003
26) Pyrene	(5)	15.146( 0.000)	202	17989	0.020	0.08			0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.322( 0.001)	149	184605M	0.328	1.32	0.304	B	0.02
28) Benzo(a)anthracene	(5)	17.131( 0.000)	228	3499	0.004	0.02			0.003
30) Chrysene	(5)	17.192( 0.000)	228	4934	0.006	0.03			0.003
33) Benzo(b)fluoranthene	(6)	18.979( 0.000)	252	2409	0.003	0.01			0.003
34) Benzo(k)fluoranthene	(6)			Not Detected					0.003
37) Benzo(a)pyrene	(6)			Not Detected					0.003
39) Indeno(1,2,3-cd)pyrene	(6)			Not Detected					0.003
40) Dibenz(a,h)anthracene	(6)			Not Detected					0.005
41) Benzo(g,h,i)perylene	(6)			Not Detected					0.003

M = Compound was manually integrated. B = Compound detected in referenced method blank.

15T-2

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881309

Data file: /chem/HP21585.i/18nov07.b/mk0409.d

Injection date and time: 07-NOV-2018 21:44

Data file Sample Info. Line: 15T-2;9881309;1;0;SAMPLE;;DOD26;

Instrument ID: HP21585.i Batch: 18309WAE

Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784

Calibration date and time (Last Method Edit): 09-NOV-2018 11:59

Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 249 ml

Volume Injected (Vi): 2 ul

---

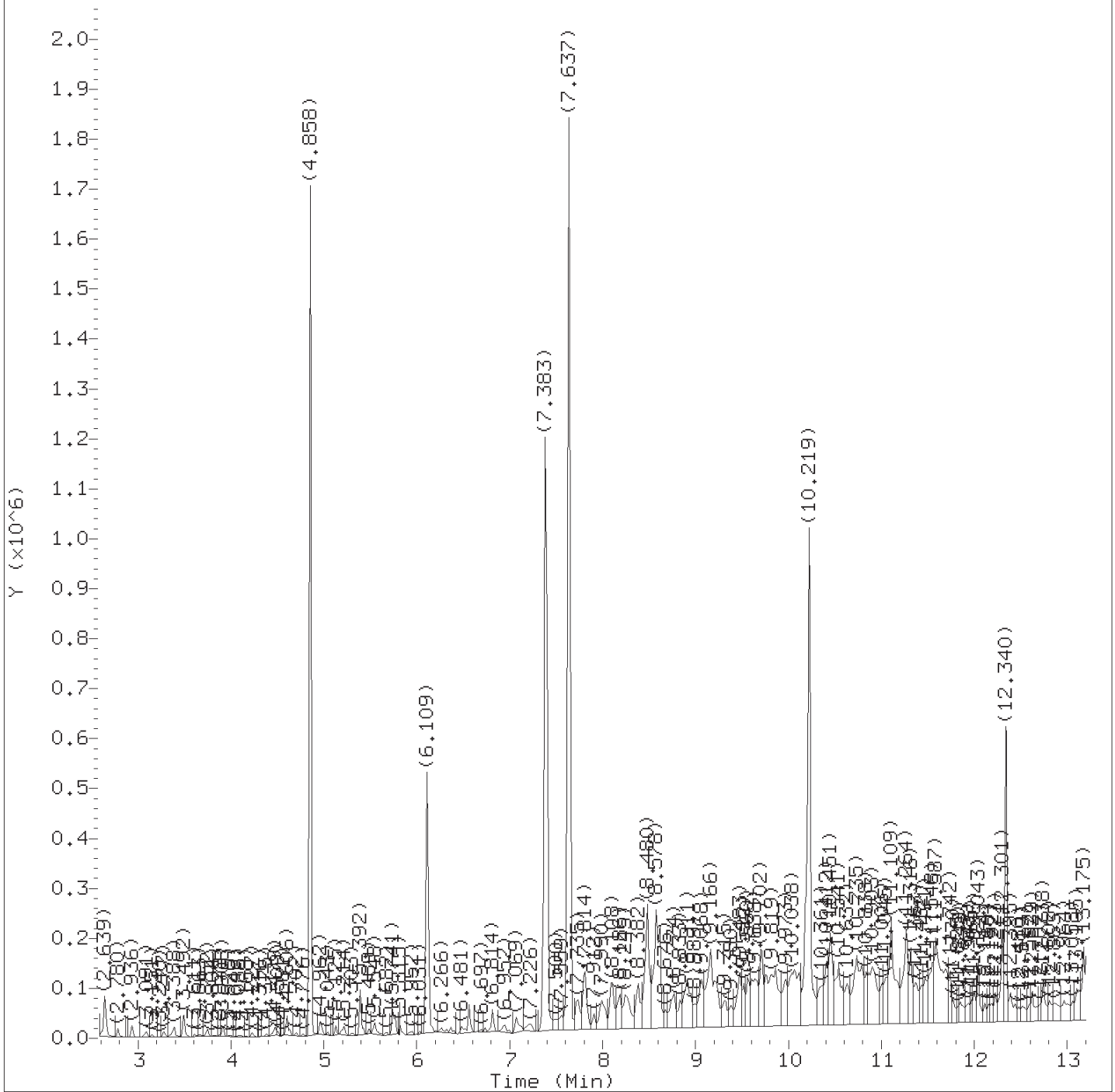
THIS SPACE  
WAS LEFT  
BLANK INTENTIONALLY

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Total number of targets = 21

Digitally signed by Kira N. Beck on 11/09/2018 at 12:00. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 09-NOV-2018 11:59

Sublist used: 25784

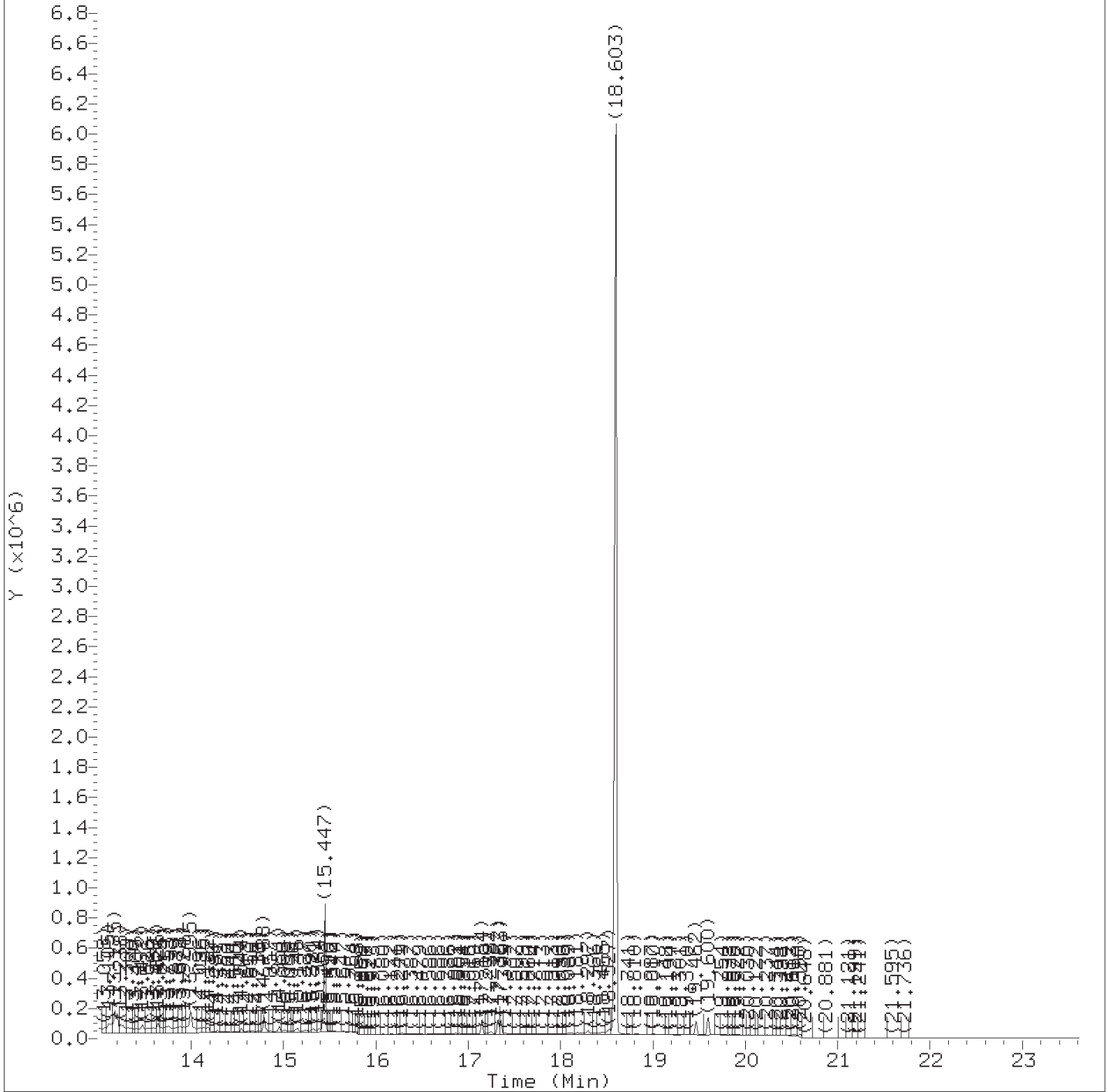
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

Lab Sample ID: 9881309

Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

Lab Sample ID: 9881309

Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

Lab Sample ID: 9881309

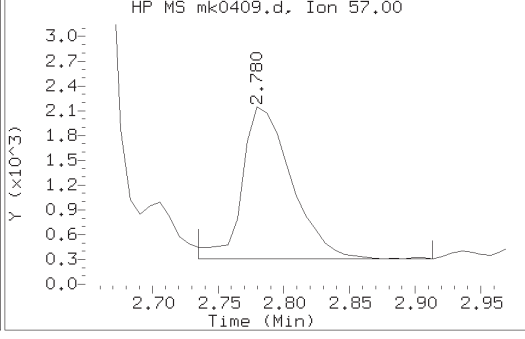
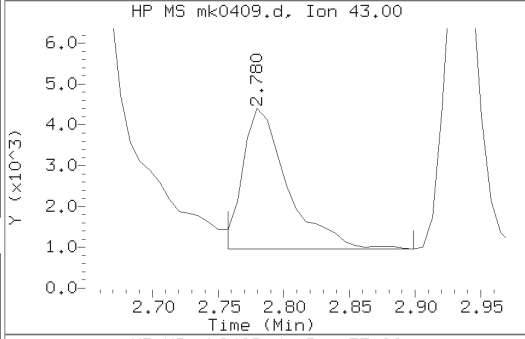
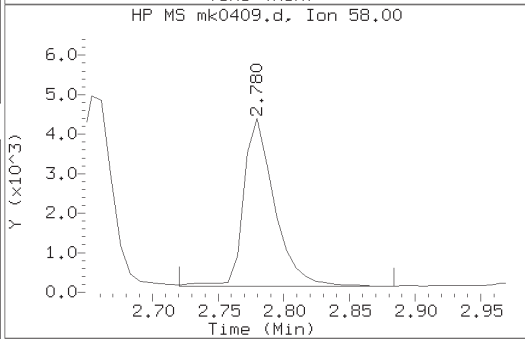
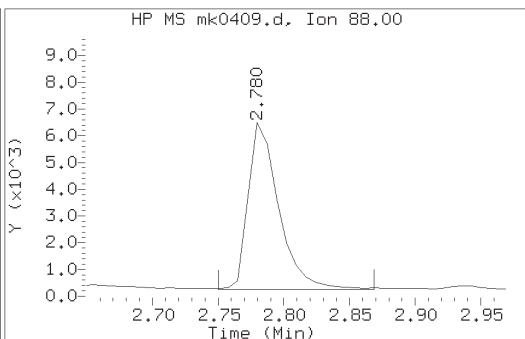
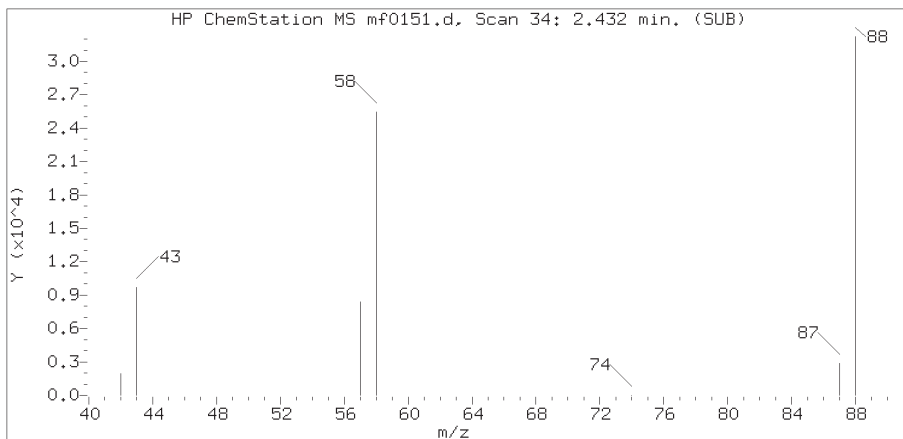
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.780	88	10127M	0.074
5)*1,4-Dichlorobenzene-d4	(1)	6.560	152	49564	0.250
6)*Naphthalene-d8	(2)	8.480	136	166085	0.250
7) Naphthalene	(2)	8.499	128	26855M	0.035
10)\$1-Methylnaphthalene-d10	(2)	9.702	152	63680M	0.211
13) Acenaphthylene	(3)	11.045	152	2492M	0.003
14)*Acenaphthene-d10	(3)	11.264	164	76762M	0.250
15) Acenaphthene	(3)	11.316	154	67388M	0.137
18) Fluorene	(3)	12.043	166	58163M	0.102
20)*Phenanthrene-d10	(4)	13.175	188	110202	0.250
21) Phenanthrene	(4)	13.199	178	90843	0.154
22) Anthracene	(4)	13.269	178	13855	0.024
23) Di-n-butylphthalate	(4)	13.995	149	107046	0.165
24)\$Fluoranthene-d10	(4)	14.788	212	120217	0.278
25) Fluoranthene	(4)	14.813	202	17699	0.027
26) Pyrene	(5)	15.146	202	17989	0.020
28) Benzo(a)anthracene	(5)	17.131	228	3499	0.004
29)*Chrysene-d12	(5)	17.154	240	99722	0.250
30) Chrysene	(5)	17.192	228	4934	0.006
31) bis(2-Ethylhexyl)phthalate	(5)	17.322	149	184605M	0.328
33) Benzo(b)fluoranthene	(6)	18.979	252	2409	0.003
36)\$Benzo(a)pyrene-d12	(6)	19.470	264	89717	0.223
38)*Perylene-d12	(6)	19.600	264	109621	0.250

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

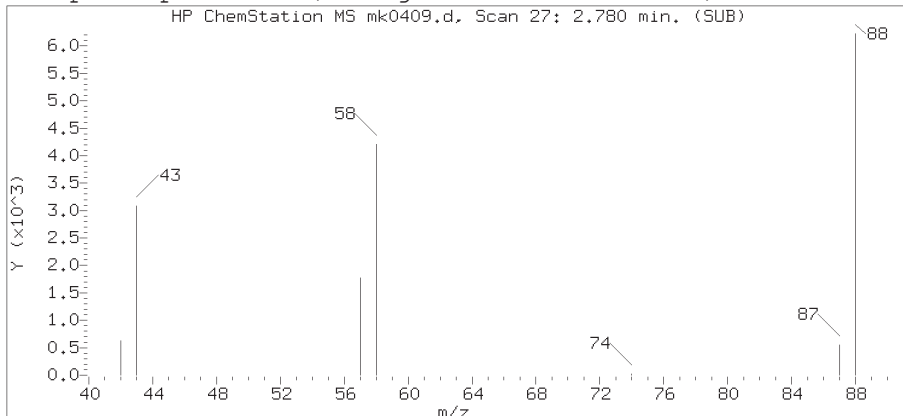
Digitally signed by Kira N. Beck  
 on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316  
 TID15 Page 862 of 3058

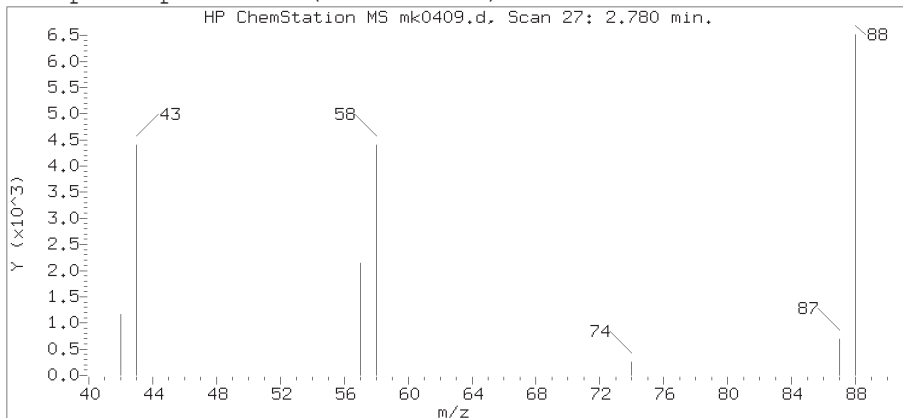
Reference Standard Spectrum for 1,4-Dioxane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

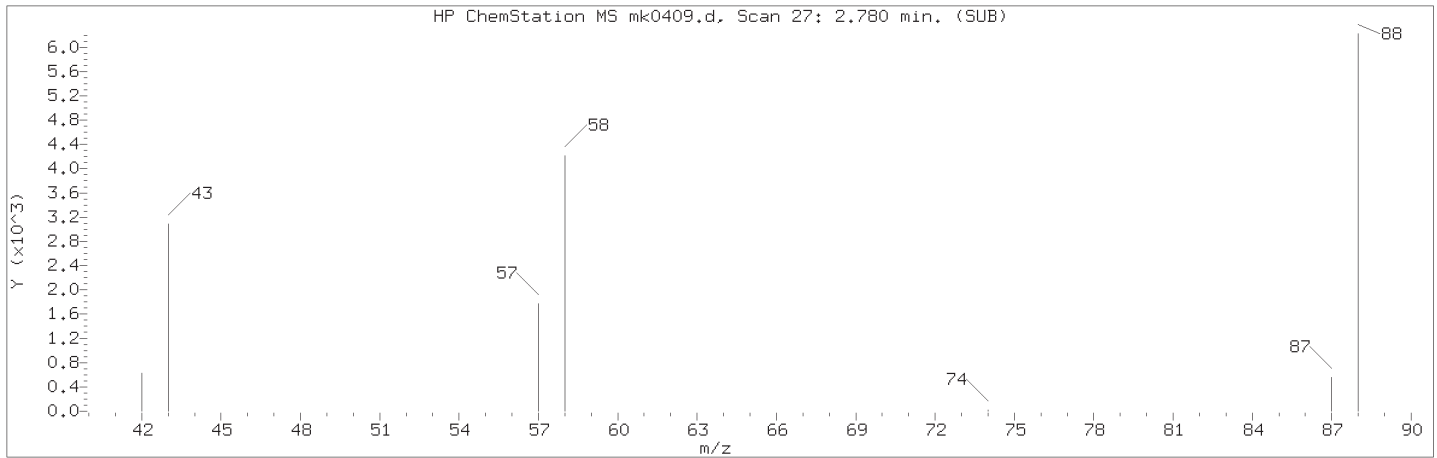
Lab Sample ID: 9881309

Compound Number : 1  
 Compound Name : 1,4-Dioxane  
 Scan Number : 27  
 Retention Time (minutes) : 2.780  
 Relative Retention Time : -0.00113  
 Quant Ion : 88.00  
 Area (flag) : 10127M  
 On-column Amount (ng/ul) : 0.0736

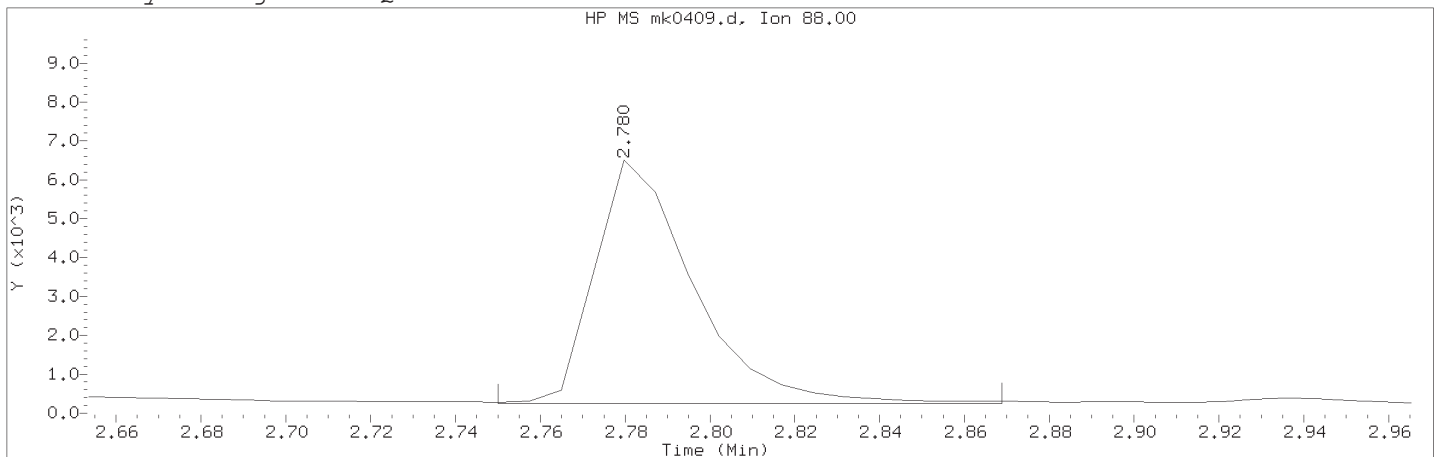
Digitally signed by Kira N. Beck on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316  
 TID15 Page 863 of 3058

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 21:44                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2    Lab Sample ID: 9881309

Compound Number                      : 1  
Compound Name                        : 1,4-Dioxane  
Scan Number                          : 27  
Retention Time (minutes)            : 2.780  
Quant Ion                              : 88.00  
Area (flag)                          : 10127M  
On-column Amount (ng/ul)           : 0.0736  
Integration start scan               : 22                      Integration stop scan: 38  
Y at integration start               : 248                    Y at integration end: 248

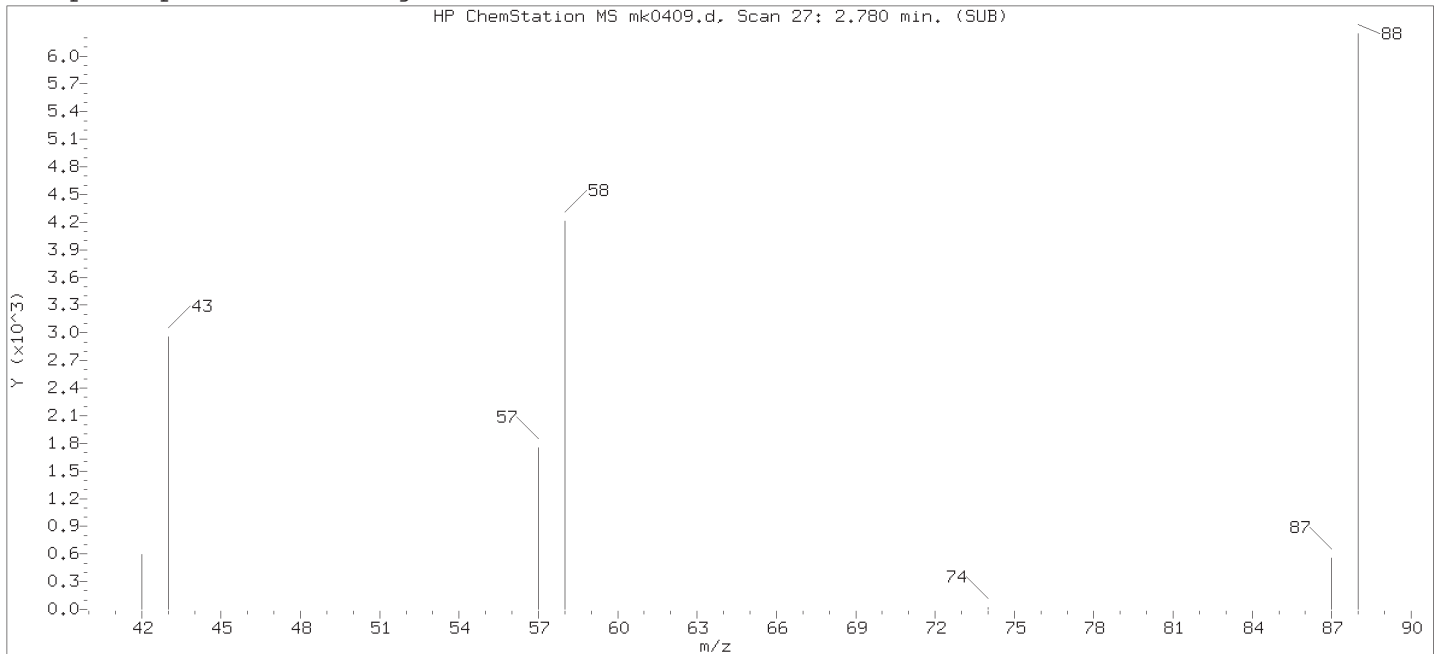
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

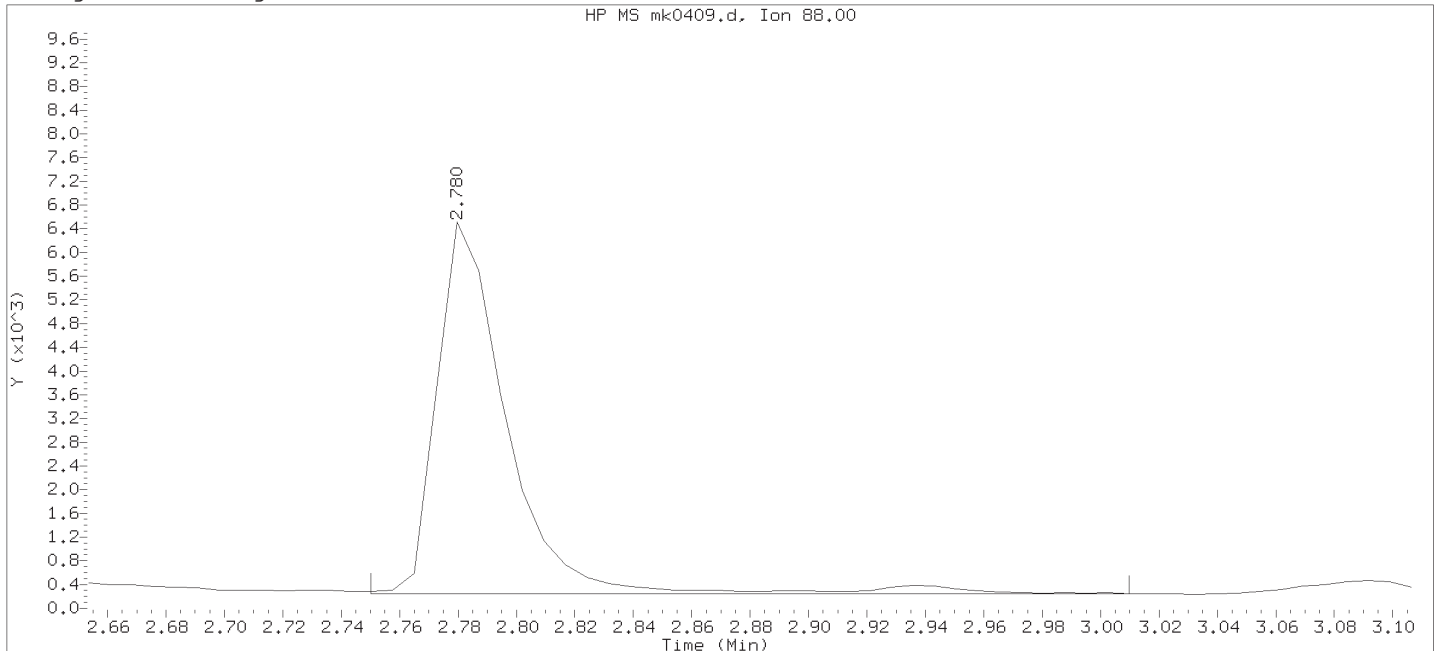
Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

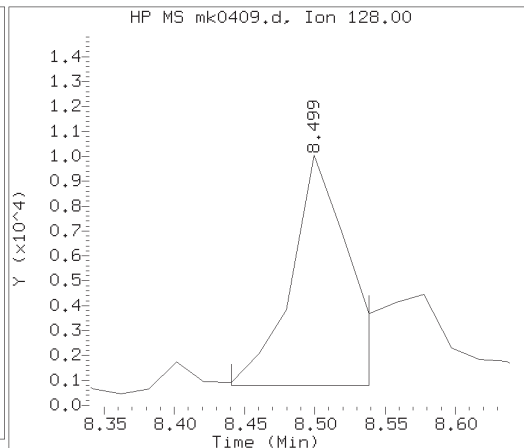
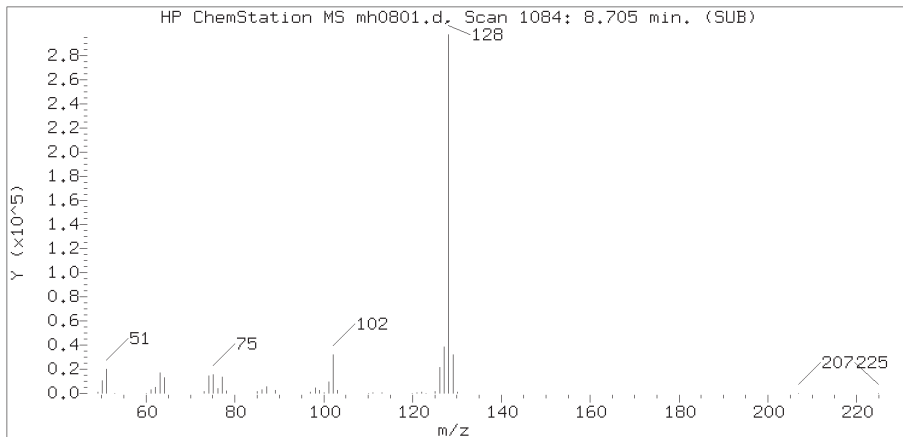
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:14 Unknown

Sample Name: 15T-2

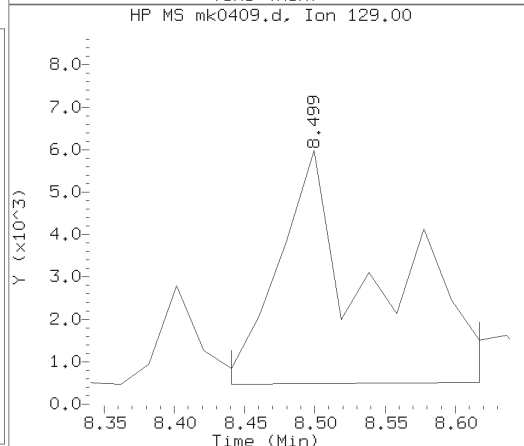
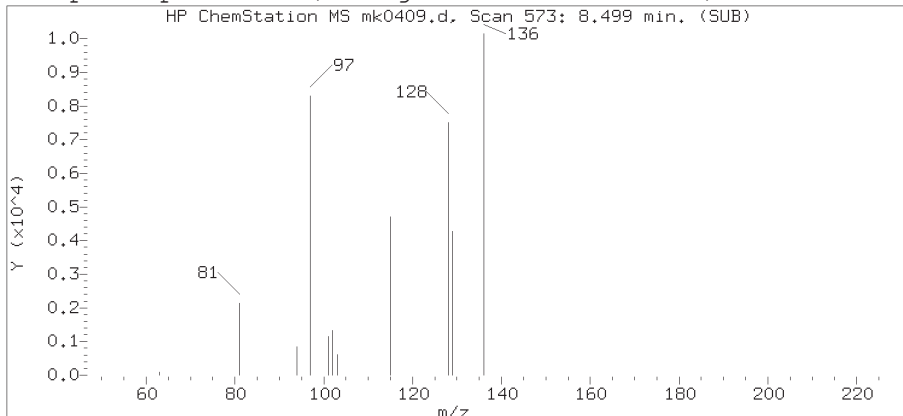
Lab Sample ID: 9881309

Compound Number	: 1	
Compound Name	: 1,4-Dioxane	
Scan Number	: 27	
Retention Time (minutes)	: 2.780	
Quant Ion	: 88.00	
Area	: 10498	
On-column Amount (ng/ul)	: 0.0763	
Integration start scan	: 22	Integration stop scan: 57
Y at integration start	: 248	Y at integration end: 248

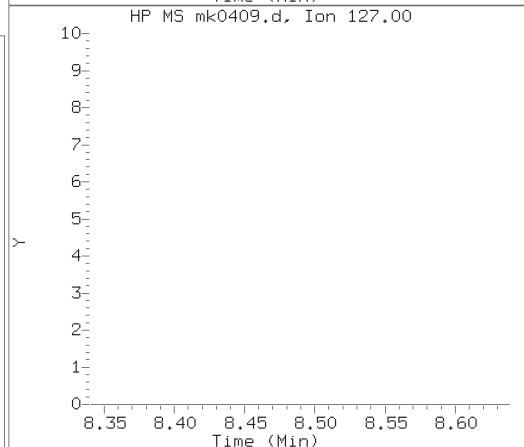
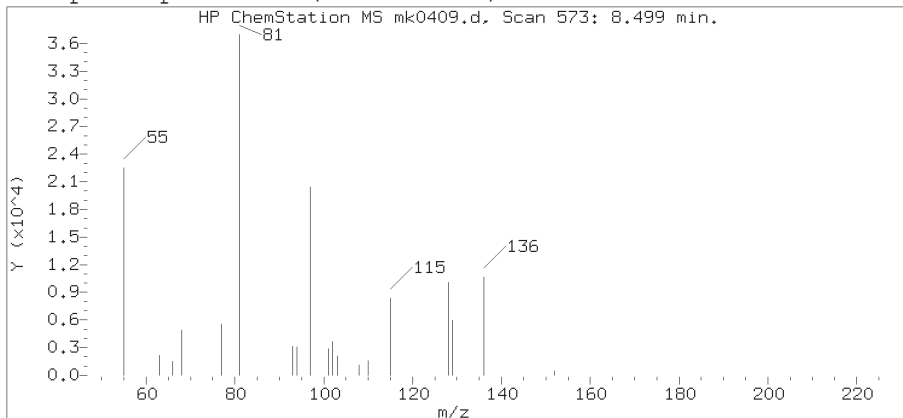
Reference Standard Spectrum for Naphthalene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

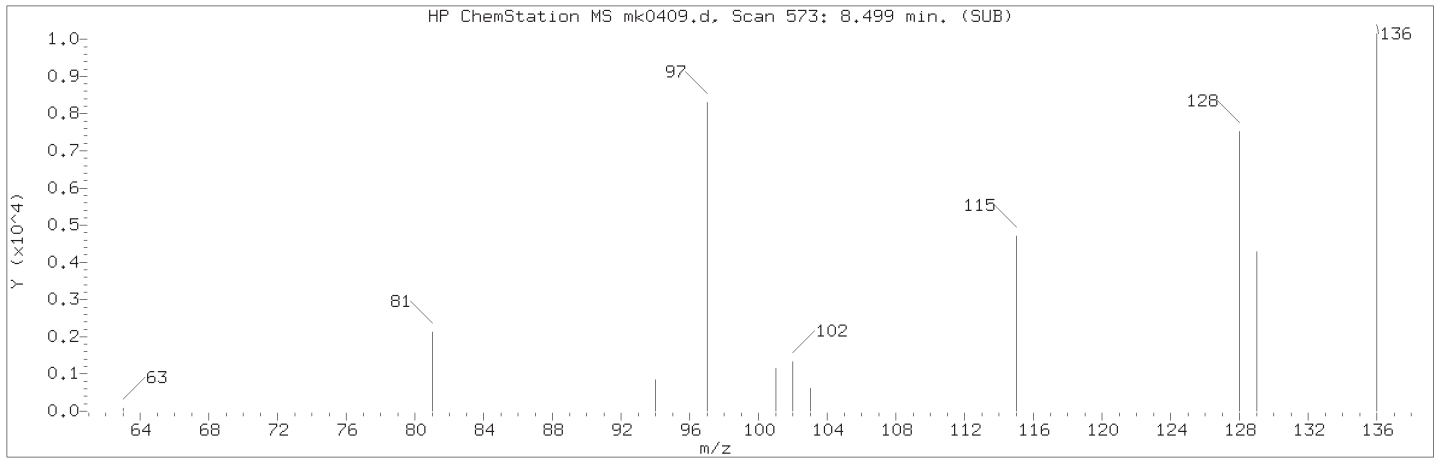
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

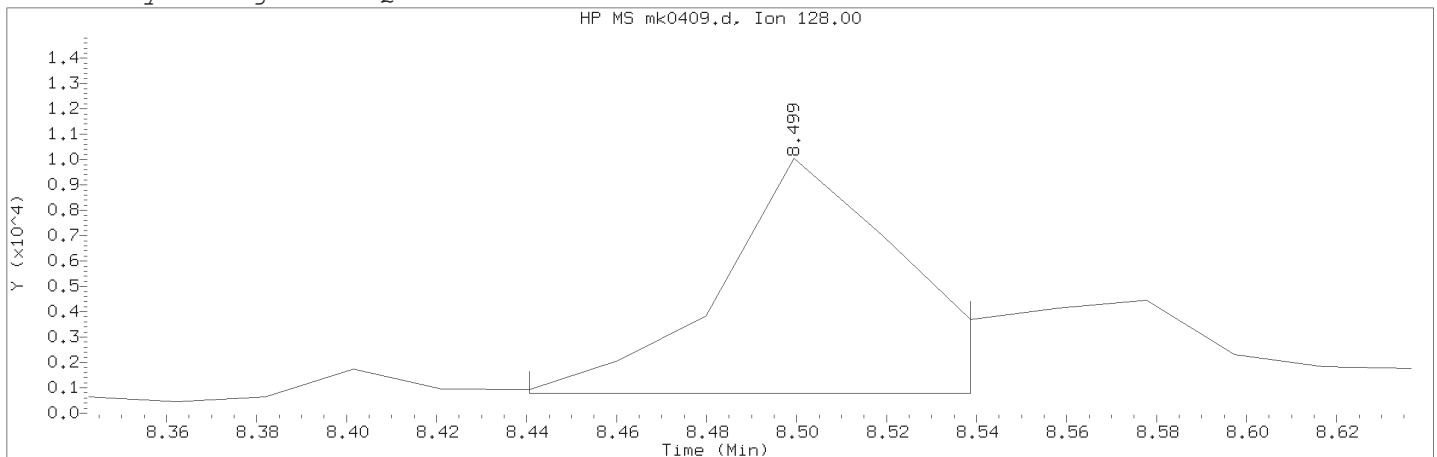
Lab Sample ID: 9881309

Compound Number : 7  
 Compound Name : Naphthalene  
 Scan Number : 573  
 Retention Time (minutes) : 8.499  
 Relative Retention Time :-0.00000  
 Quant Ion : 128.00  
 Area (flag) : 26855M  
 On-column Amount (ng/ul) : 0.0352

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

Lab Sample ID: 9881309

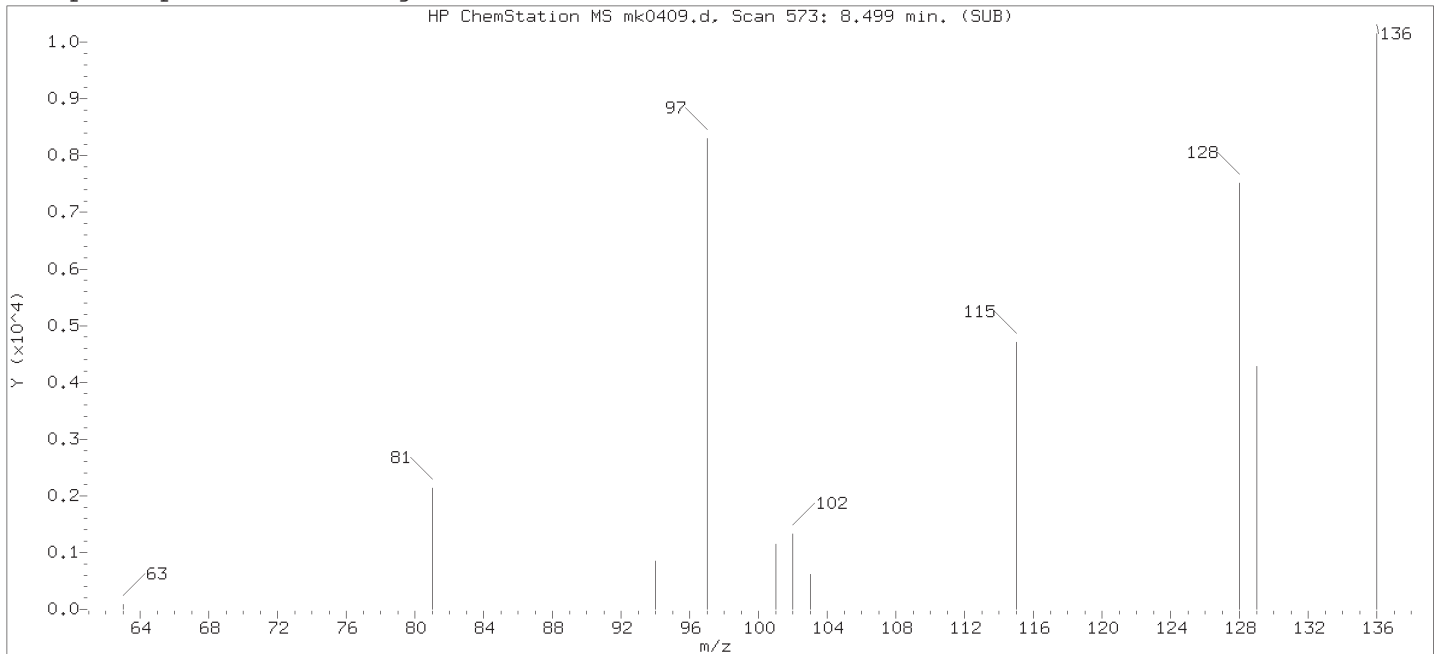
Compound Number : 7  
Compound Name : Naphthalene  
Scan Number : 573  
Retention Time (minutes) : 8.499  
Quant Ion : 128.00  
Area (flag) : 26855M  
On-column Amount (ng/ul) : 0.0352  
Integration start scan : 569 Integration stop scan: 574  
Y at integration start : 792 Y at integration end: 792

Reason for manual integration: improper integration

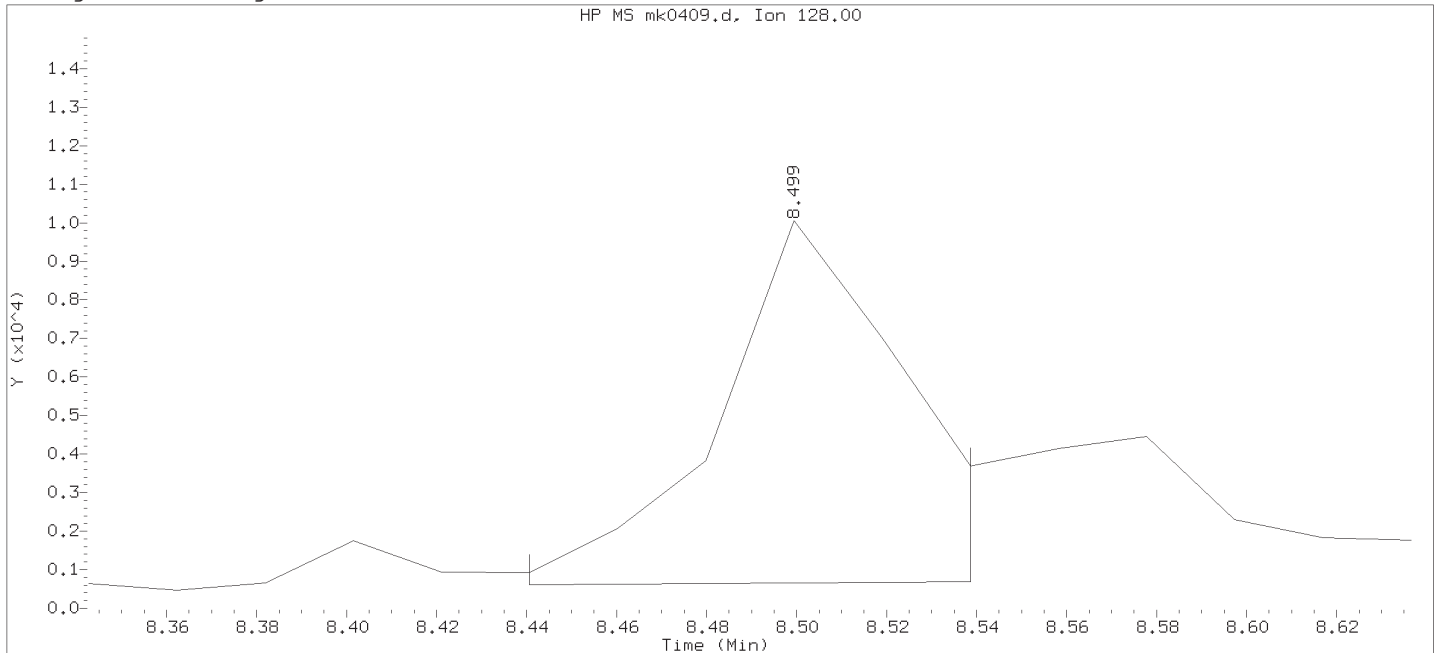
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

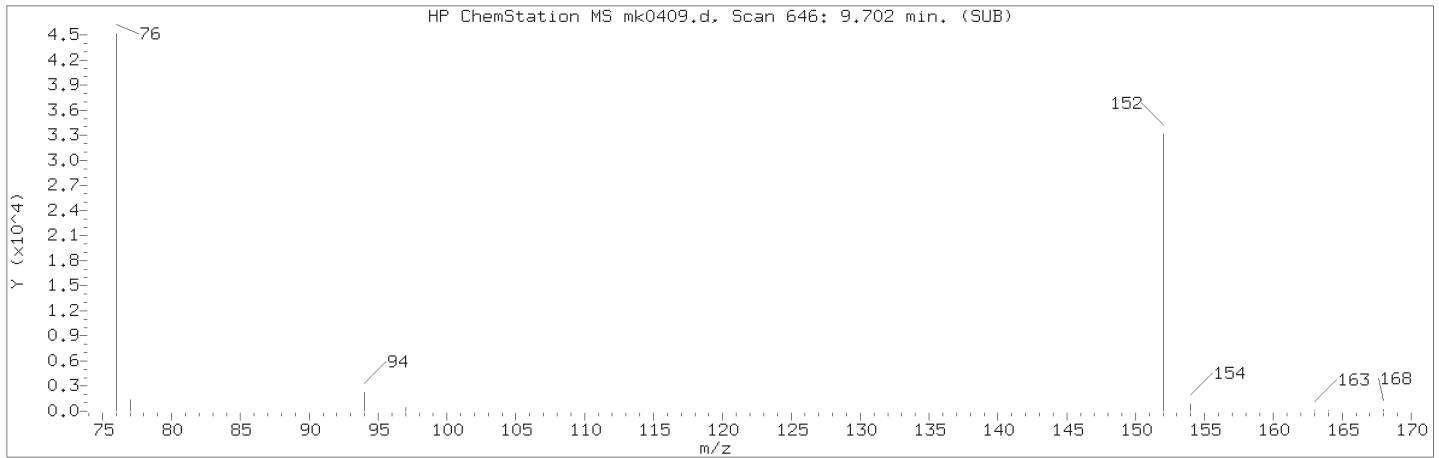
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:14 Unknown

Sample Name: 15T-2

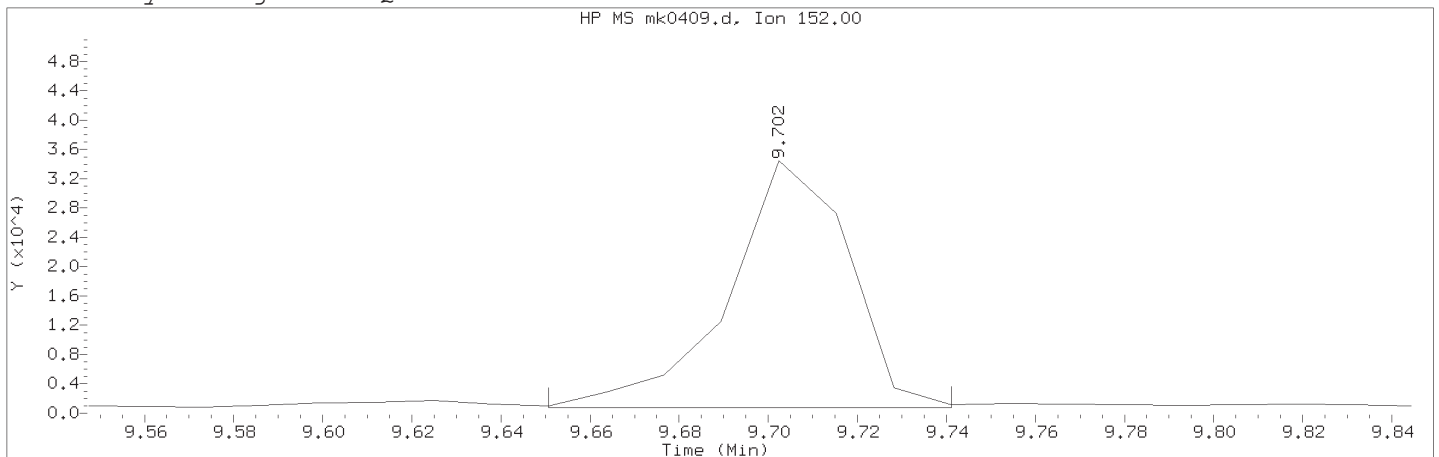
Lab Sample ID: 9881309

Compound Number	: 7		
Compound Name	: Naphthalene		
Scan Number	: 573		
Retention Time (minutes)	: 8.499		
Quant Ion	: 128.00		
Area	: 25911		
On-column Amount (ng/ul)	: 0.0339		
Integration start scan	: 569	Integration stop scan:	574
Y at integration start	: 604	Y at integration end:	695

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 21:44                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2    Lab Sample ID: 9881309

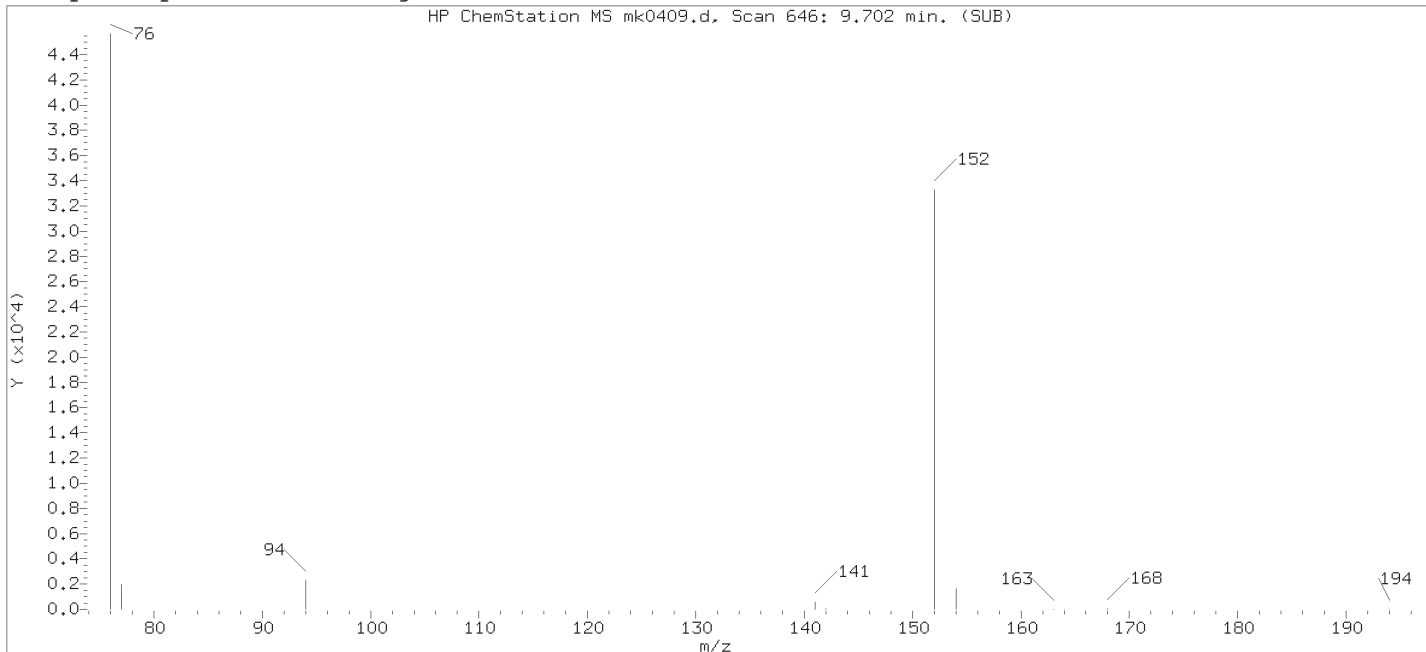
Compound Number                      : 10  
Compound Name                         : 1-Methylnaphthalene-d10  
Scan Number                            : 646  
Retention Time (minutes)             : 9.702  
Quant Ion                                : 152.00  
Area (flag)                             : 63680M  
On-column Amount (ng/ul)            : 0.2108  
Integration start scan                : 641                      Integration stop scan: 648  
Y at integration start                : 707                      Y at integration end: 707

Reason for manual integration: improper integration

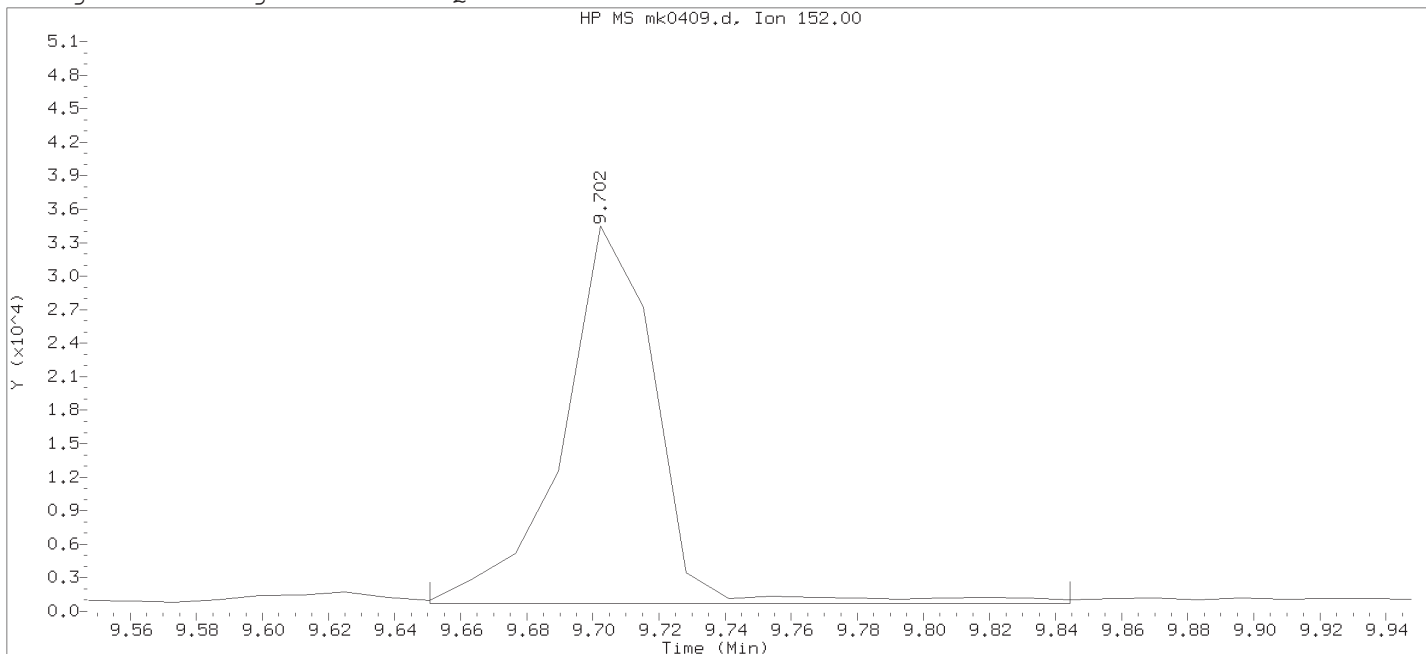
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
Analyst ID: ceb05247

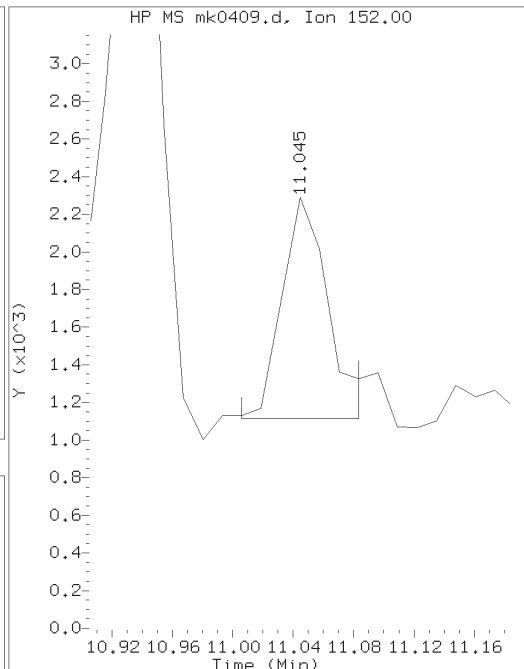
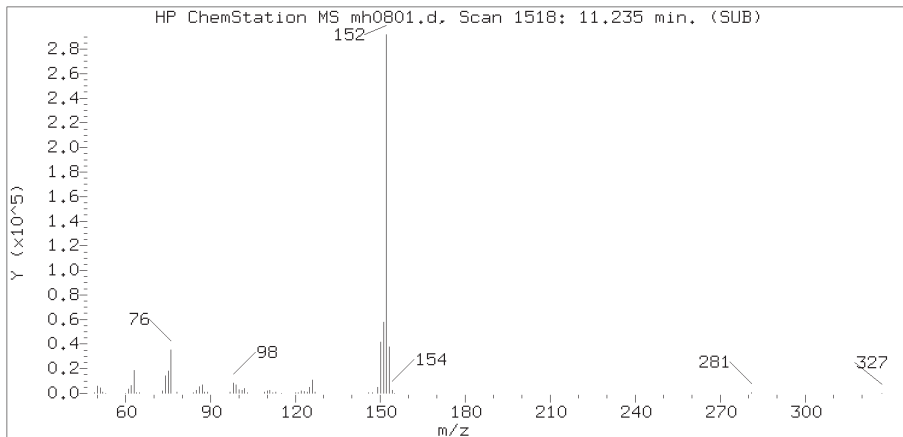
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:14 Unknown

Sample Name: 15T-2

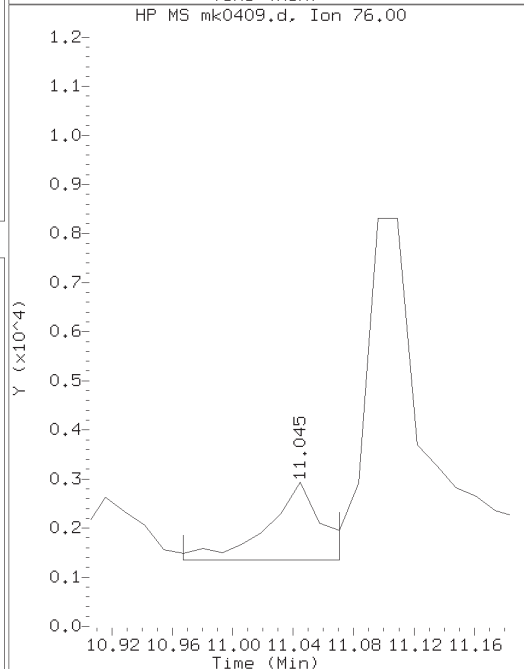
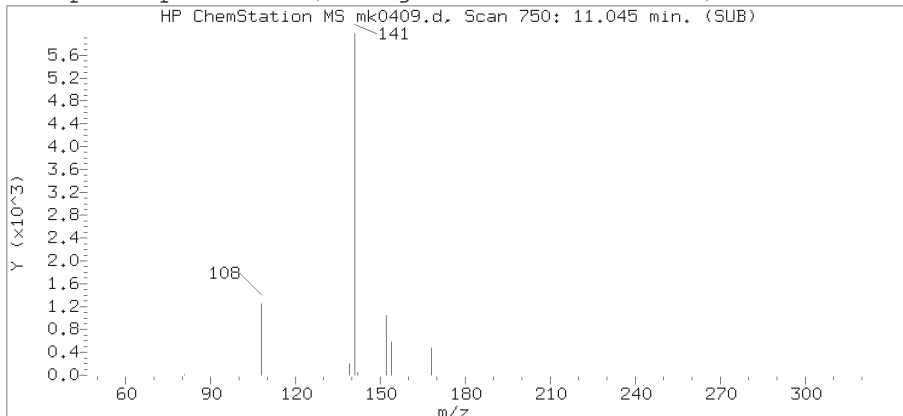
Lab Sample ID: 9881309

Compound Number : 10  
Compound Name : 1-Methylnaphthalene-d10  
Scan Number : 646  
Retention Time (minutes) : 9.702  
Quant Ion : 152.00  
Area : 66420  
On-column Amount (ng/ul) : 0.2198  
Integration start scan : 641 Integration stop scan: 656  
Y at integration start : 707 Y at integration end: 707

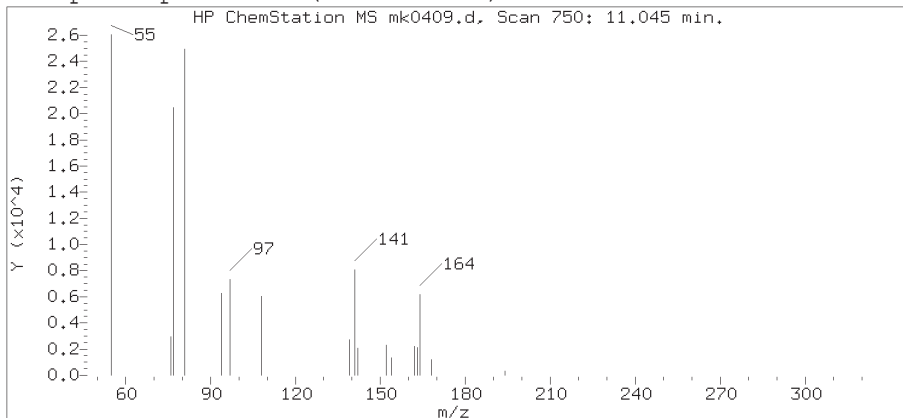
Reference Standard Spectrum for Acenaphthylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

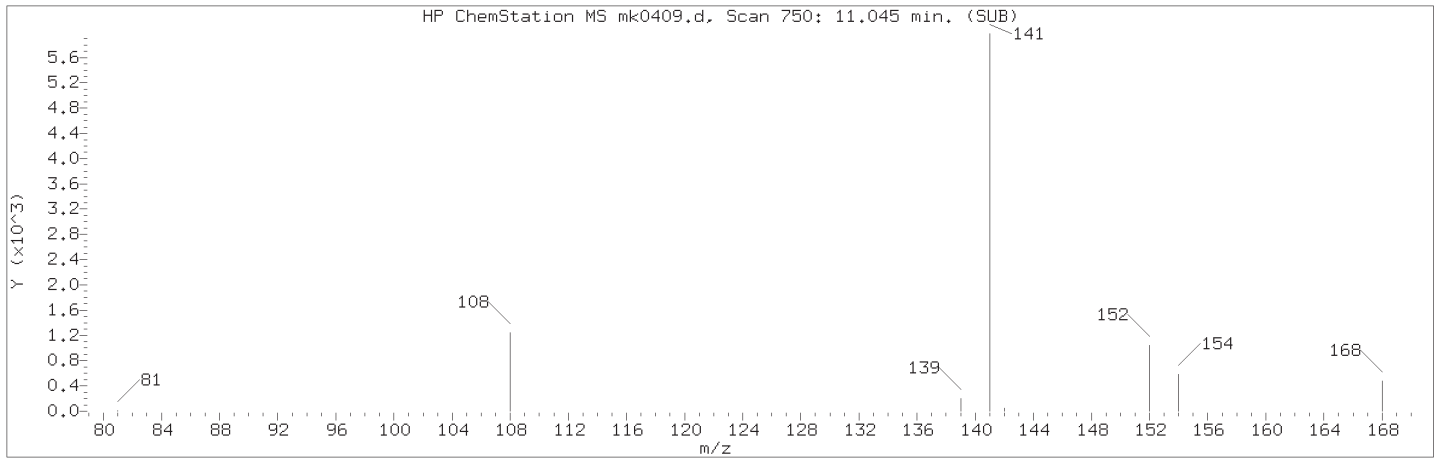
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

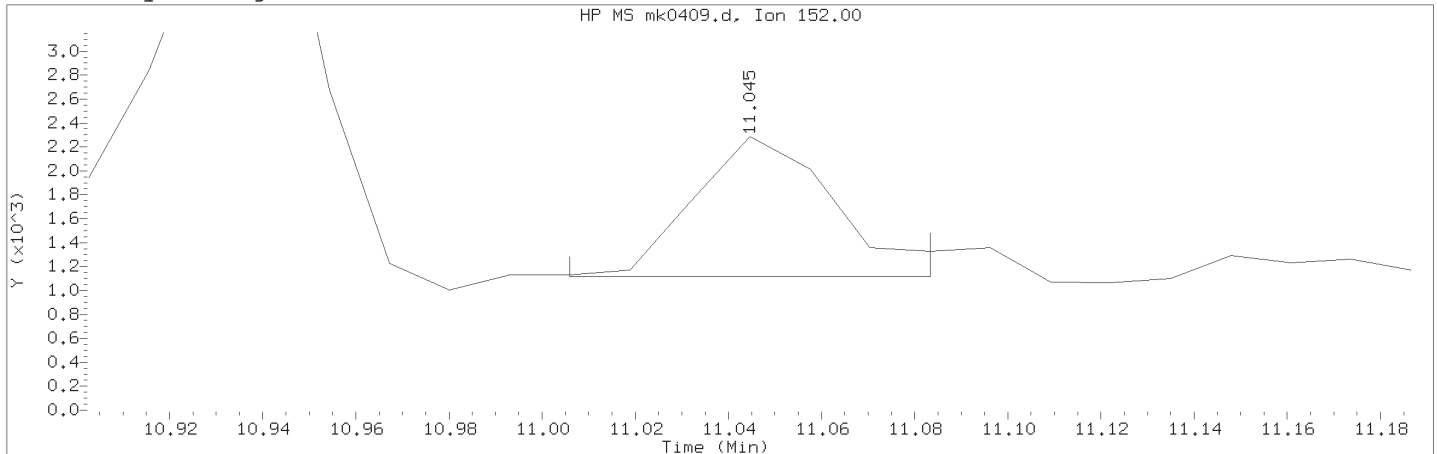
Lab Sample ID: 9881309

Compound Number : 13  
 Compound Name : Acenaphthylene  
 Scan Number : 750  
 Retention Time (minutes) : 11.045  
 Relative Retention Time : -0.00115  
 Quant Ion : 152.00  
 Area (flag) : 2492M  
 On-column Amount (ng/ul) : 0.0031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 21:44                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2    Lab Sample ID: 9881309

Compound Number                      : 13  
Compound Name                         : Acenaphthylene  
Scan Number                            : 750  
Retention Time (minutes)             : 11.045  
Quant Ion                                : 152.00  
Area (flag)                             : 2492M  
On-column Amount (ng/ul)            : 0.0031  
Integration start scan                : 746                      Integration stop scan: 752  
Y at integration start                : 1115                    Y at integration end: 1115

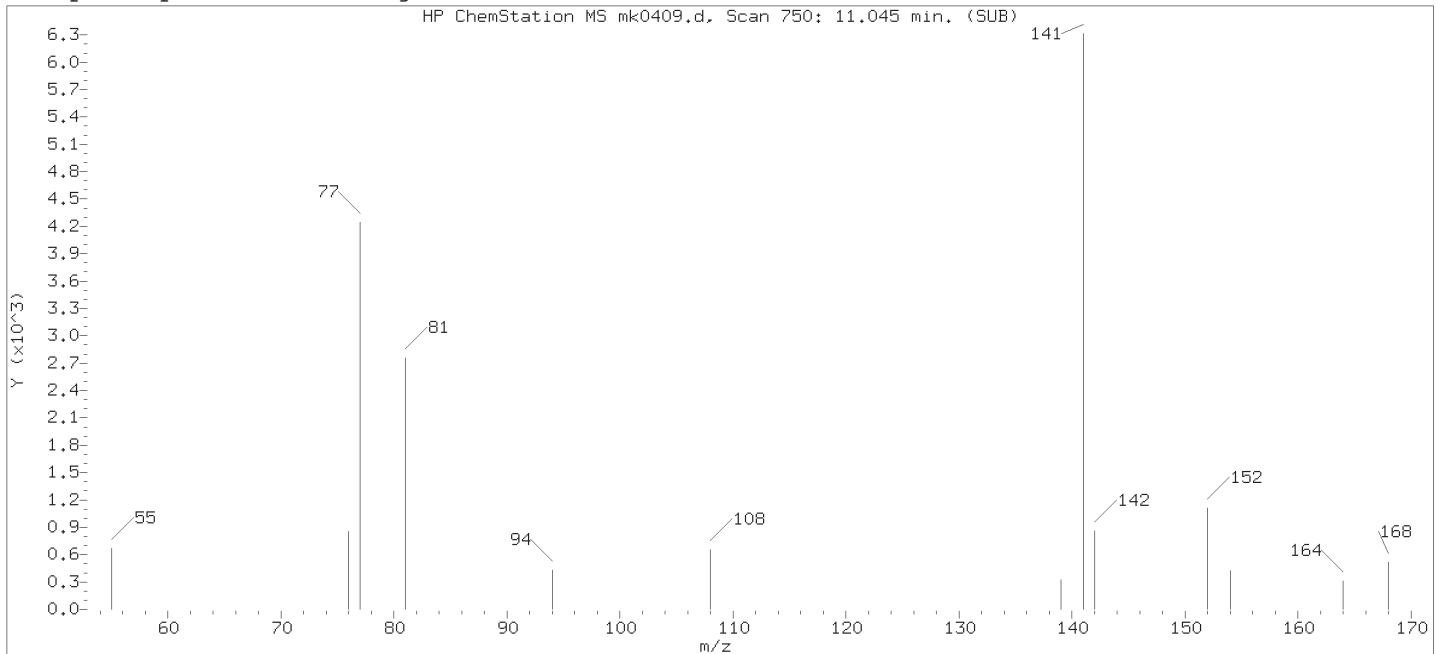
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

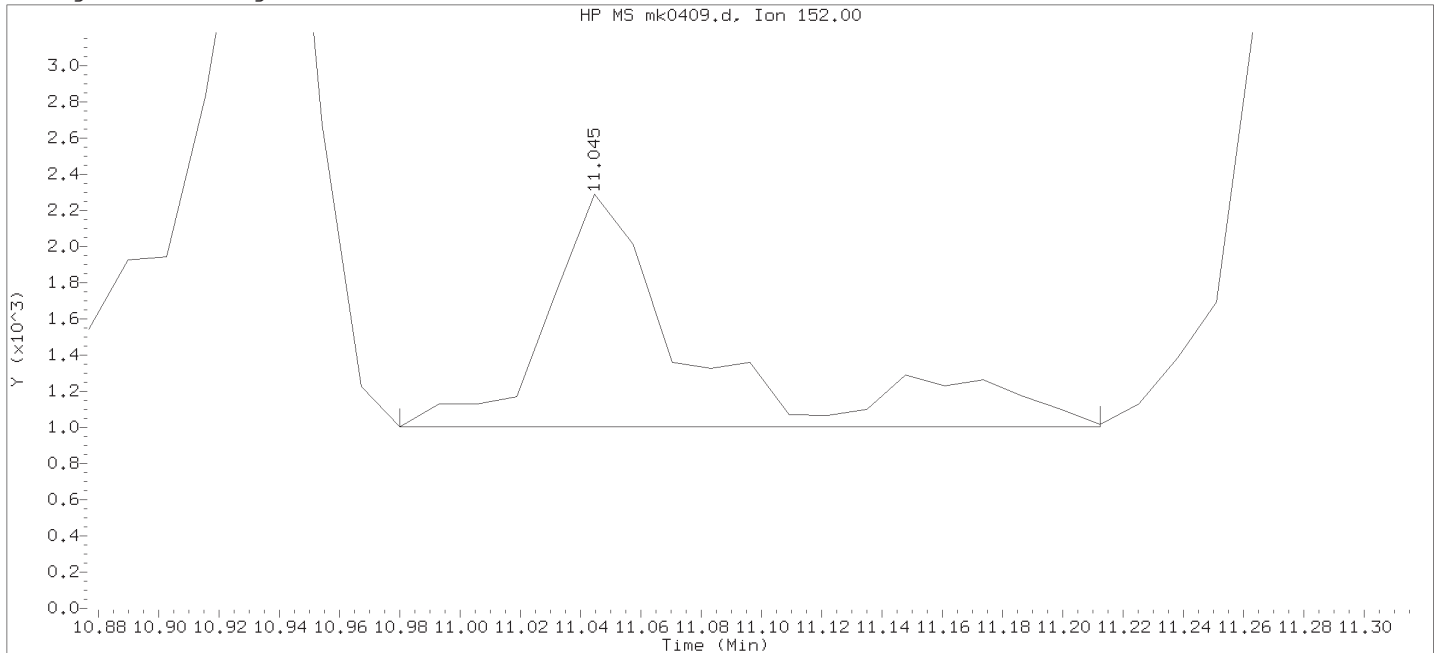
Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

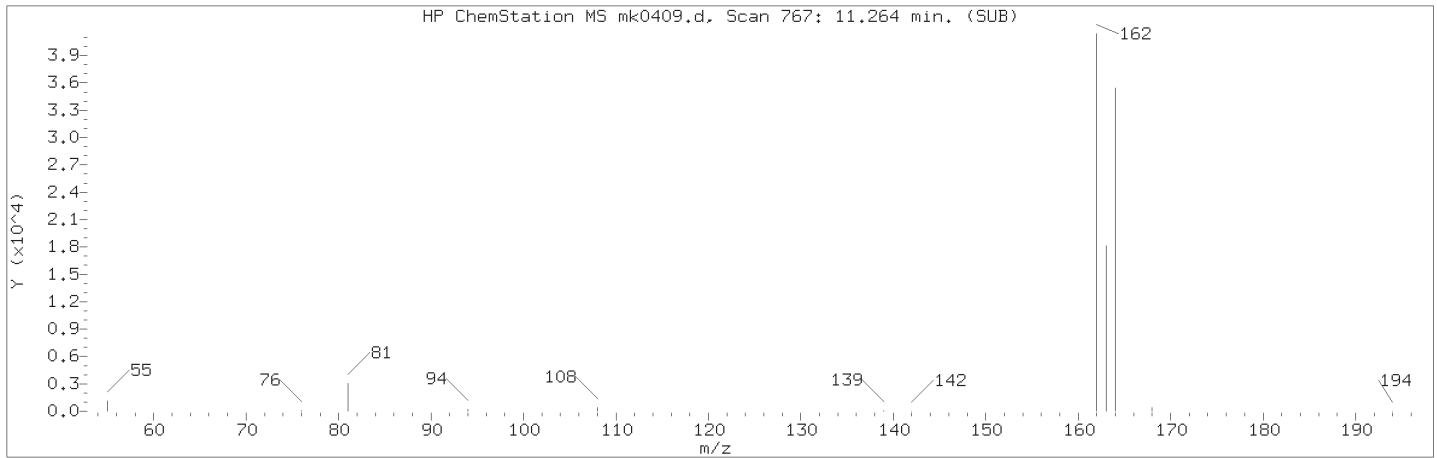
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:14 Unknown

Sample Name: 15T-2

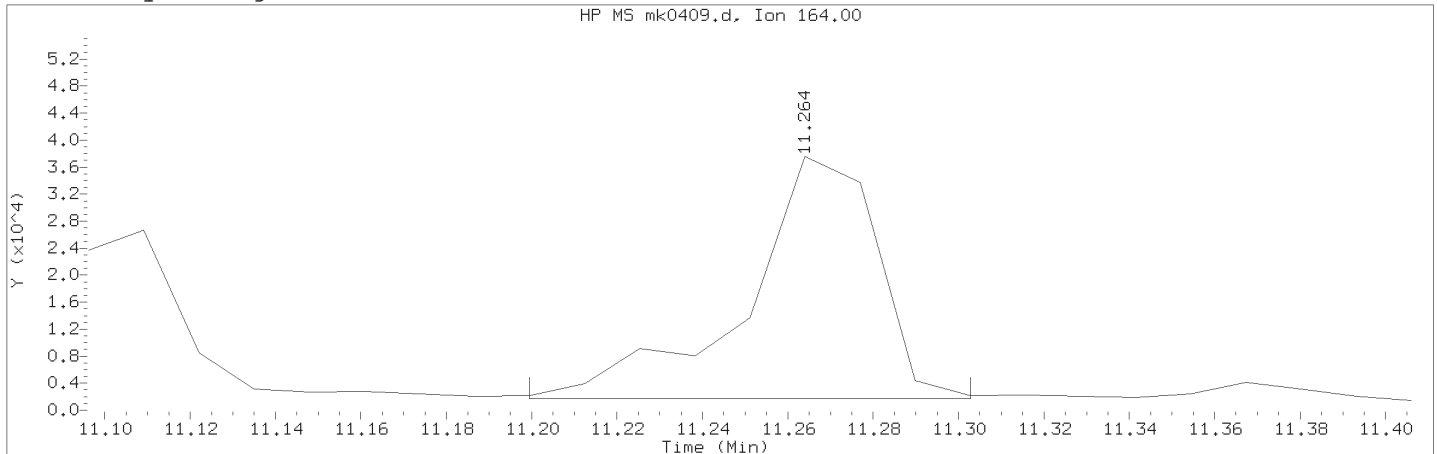
Lab Sample ID: 9881309

Compound Number : 13  
 Compound Name : Acenaphthylene  
 Scan Number : 750  
 Retention Time (minutes) : 11.045  
 Quant Ion : 152.00  
 Area : 4474  
 On-column Amount (ng/ul) : 0.1108  
 Integration start scan : 744 Integration stop scan: 762  
 Y at integration start : 1002 Y at integration end: 1002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 21:44                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2    Lab Sample ID: 9881309

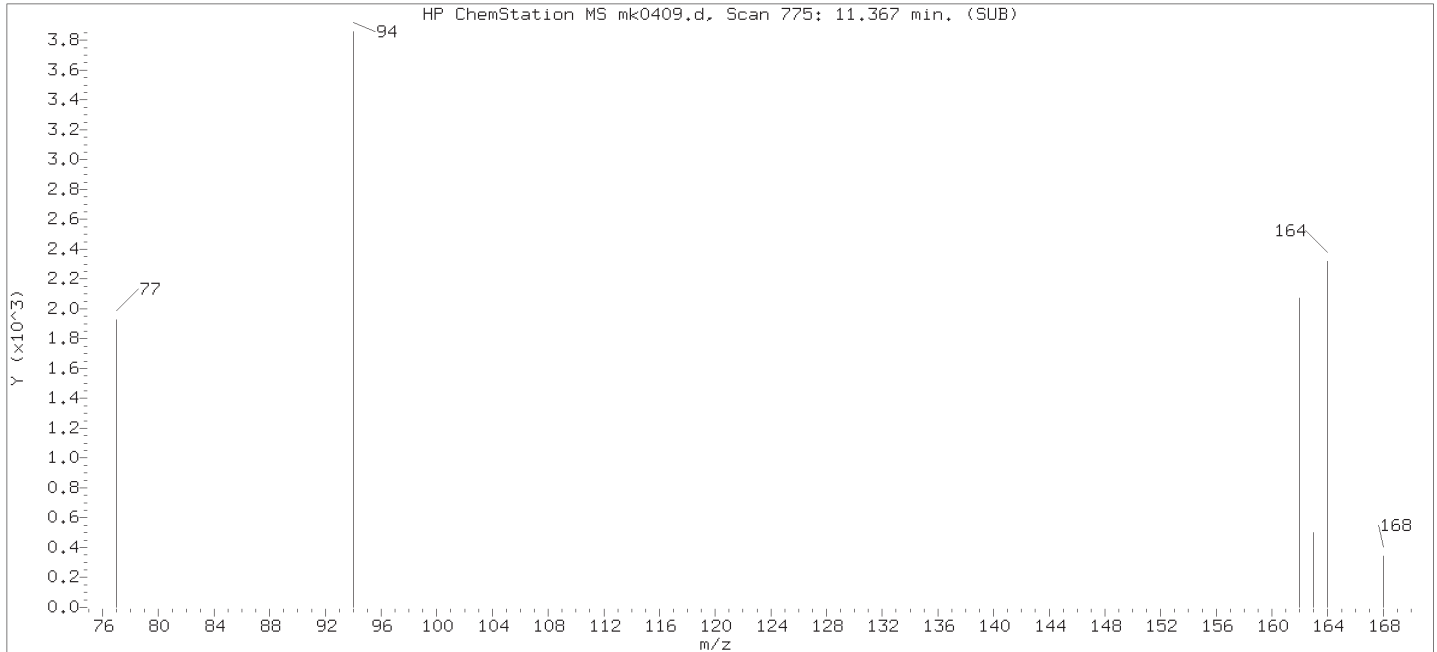
Compound Number                      : 14  
Compound Name                         : Acenaphthene-d10  
Scan Number                            : 767  
Retention Time (minutes)             : 11.264  
Quant Ion                                : 164.00  
Area (flag)                             : 76762M  
On-column Amount (ng/ul)            : 0.2500  
Integration start scan                : 761                      Integration stop scan: 769  
Y at integration start                : 1738                    Y at integration end: 1738

Reason for manual integration: improper integration

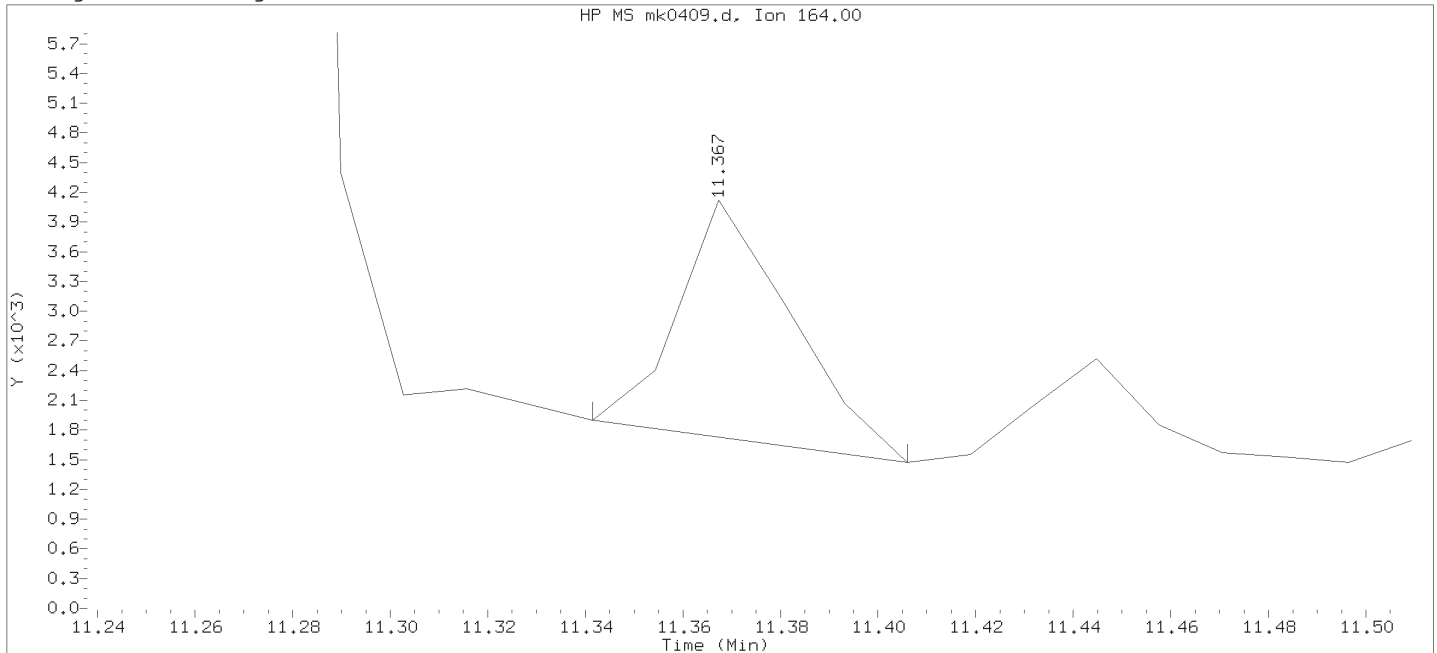
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

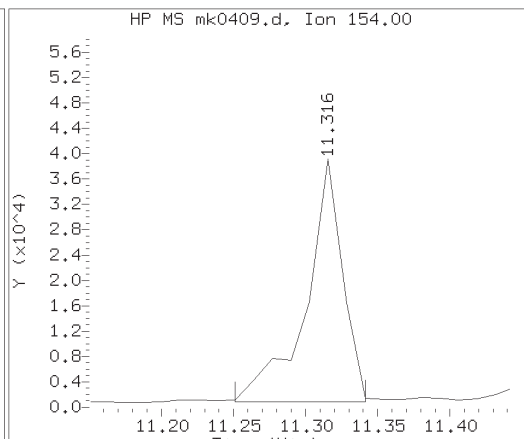
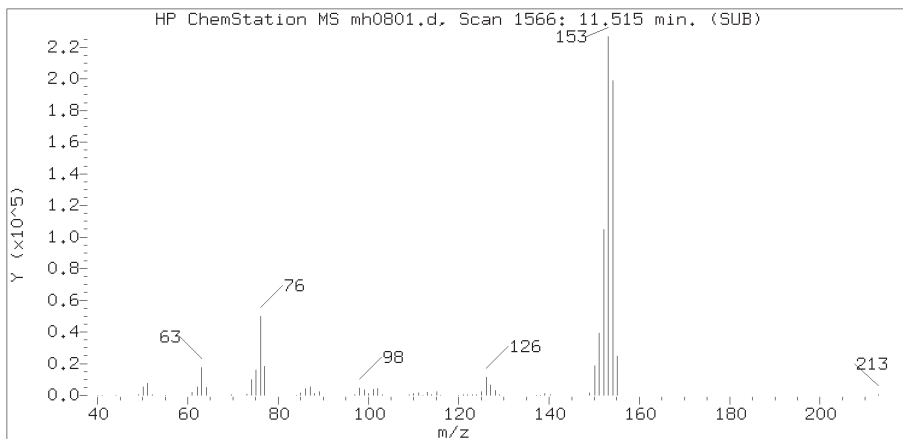
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:14 Unknown

Sample Name: 15T-2

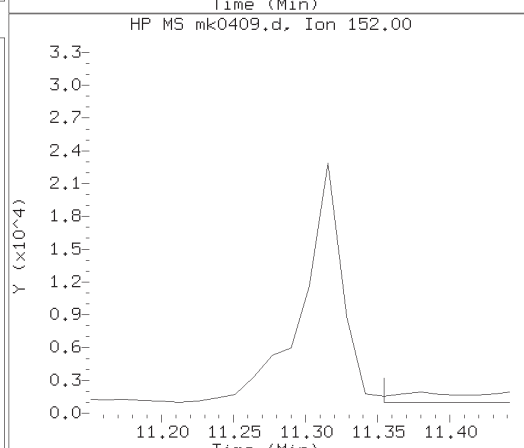
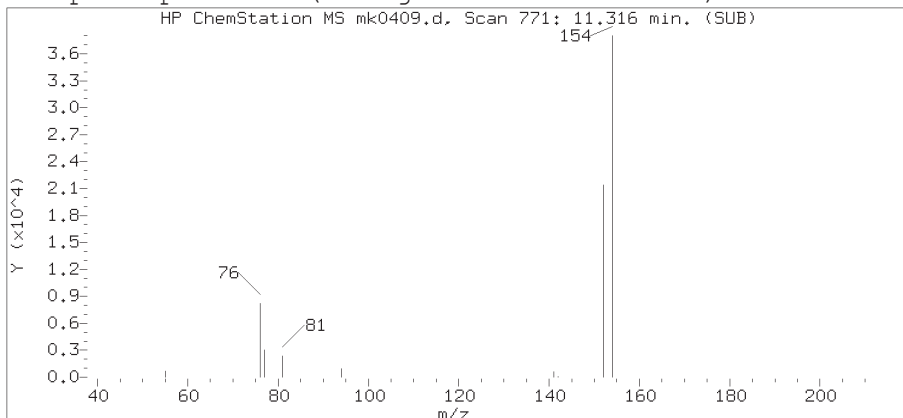
Lab Sample ID: 9881309

Compound Number : 14  
 Compound Name : Acenaphthene-d10  
 Scan Number : 775  
 Retention Time (minutes) : 11.367  
 Quant Ion : 164.00  
 Area : 3836  
 On-column Amount (ng/ul) : 0.2500  
 Integration start scan : 772 Integration stop scan: 777  
 Y at integration start : 1899 Y at integration end: 1473

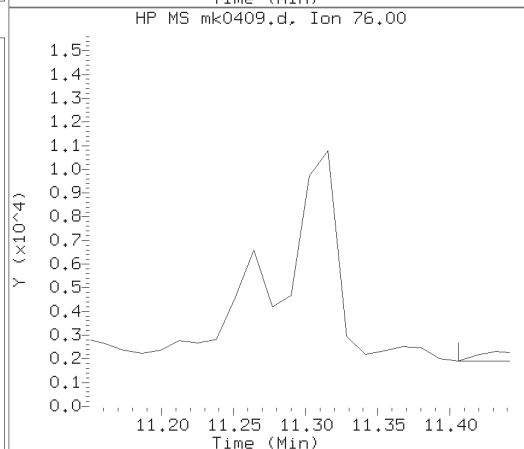
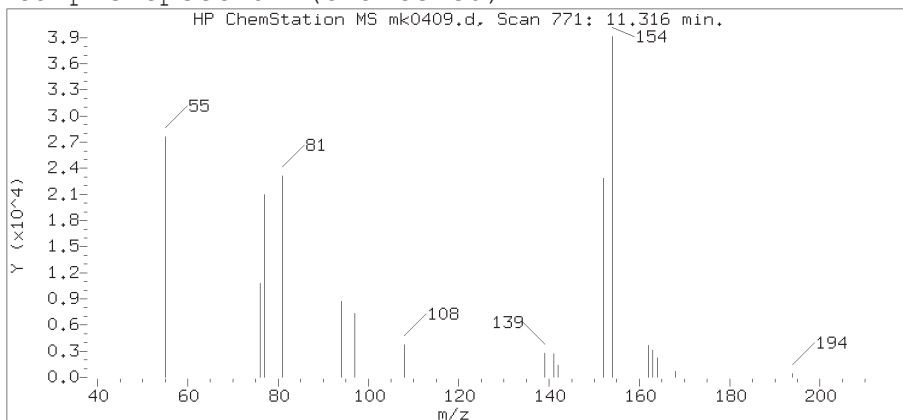
Reference Standard Spectrum for Acenaphthene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

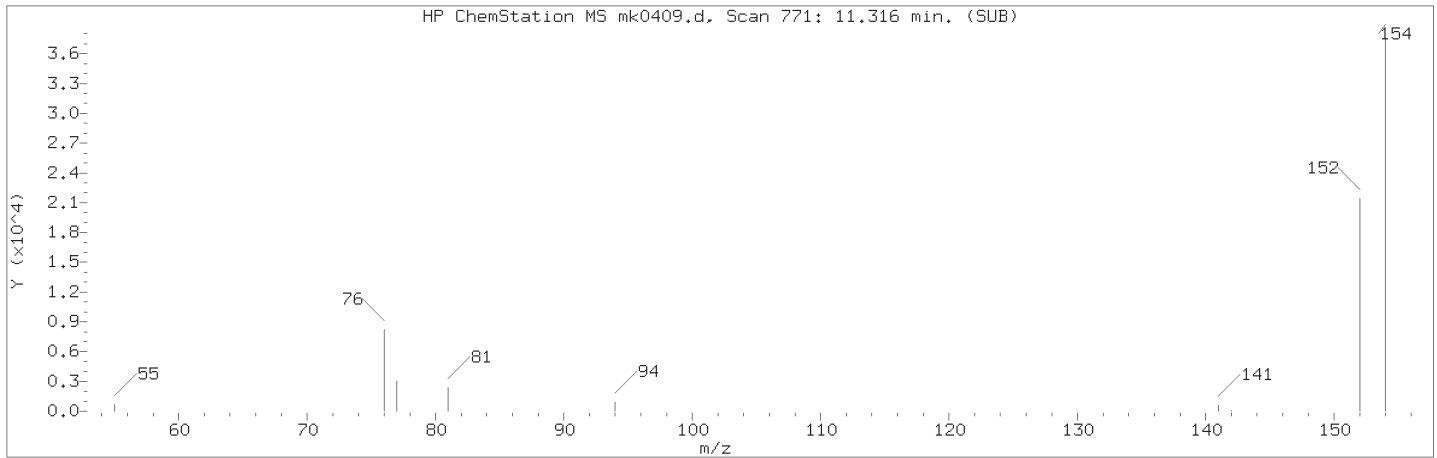
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

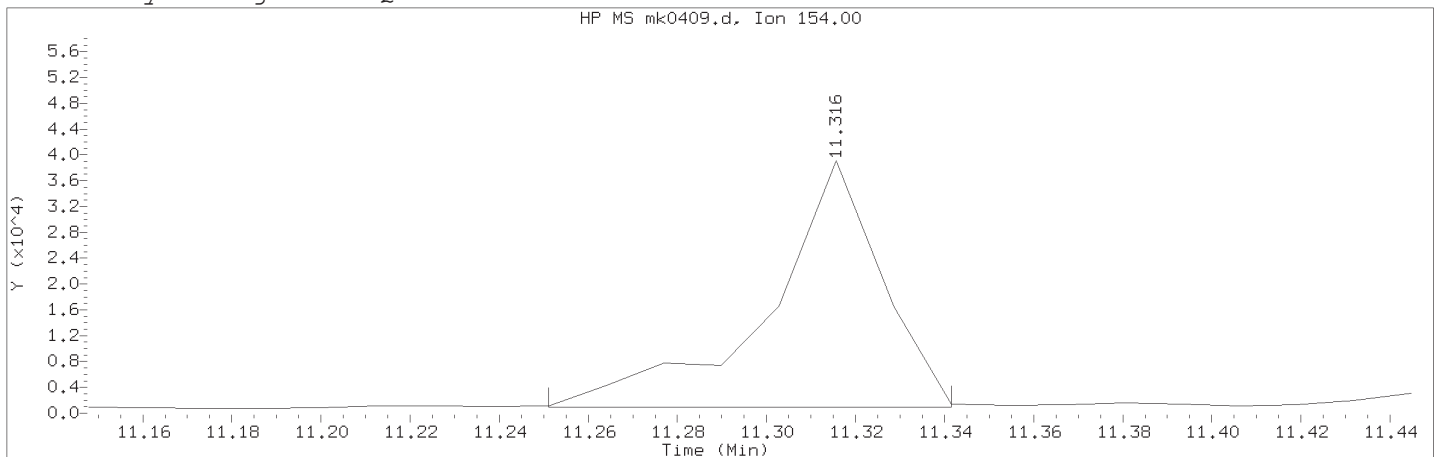
Lab Sample ID: 9881309

Compound Number : 15  
 Compound Name : Acenaphthene  
 Scan Number : 771  
 Retention Time (minutes) : 11.316  
 Relative Retention Time : 0.00000  
 Quant Ion : 154.00  
 Area (flag) : 67388M  
 On-column Amount (ng/ul) : 0.1373

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 21:44                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2    Lab Sample ID: 9881309

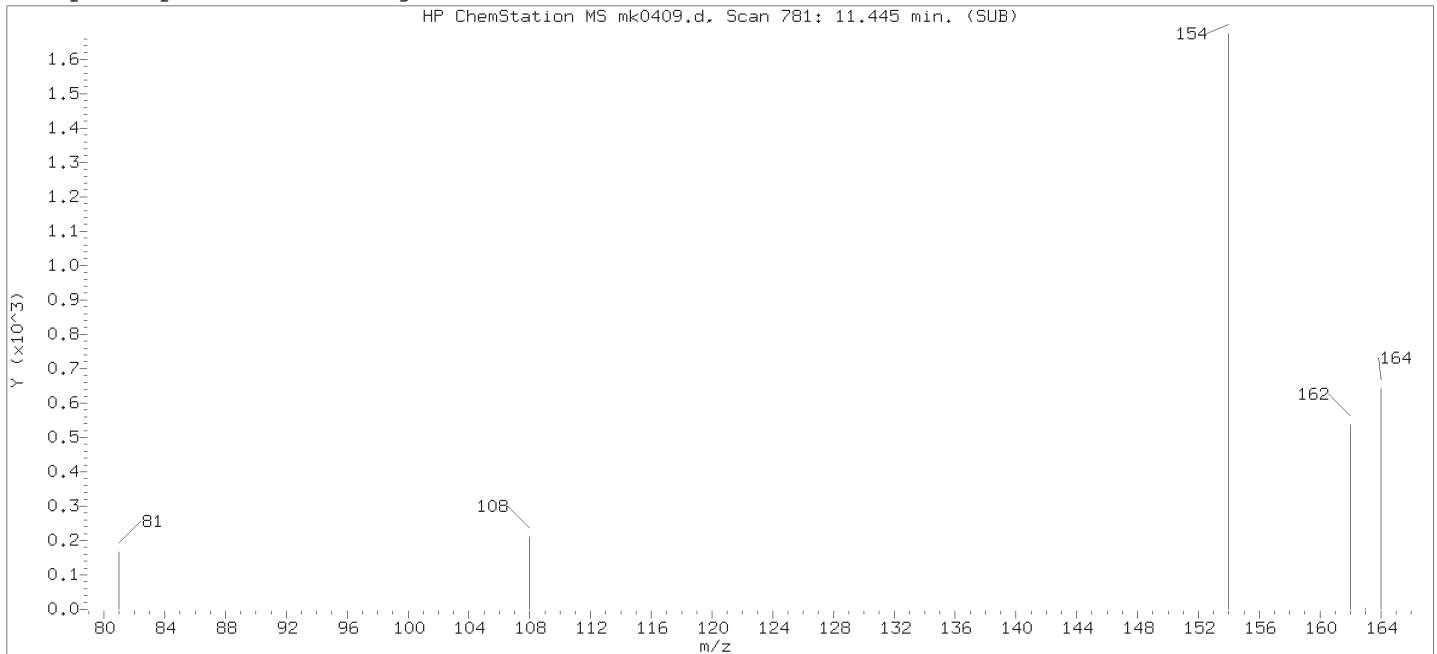
Compound Number                      : 15  
Compound Name                         : Acenaphthene  
Scan Number                            : 771  
Retention Time (minutes)             : 11.316  
Quant Ion                                : 154.00  
Area (flag)                             : 67388M  
On-column Amount (ng/ul)            : 0.1373  
Integration start scan                : 765                      Integration stop scan: 772  
Y at integration start                : 890                      Y at integration end: 890

Reason for manual integration: improper integration

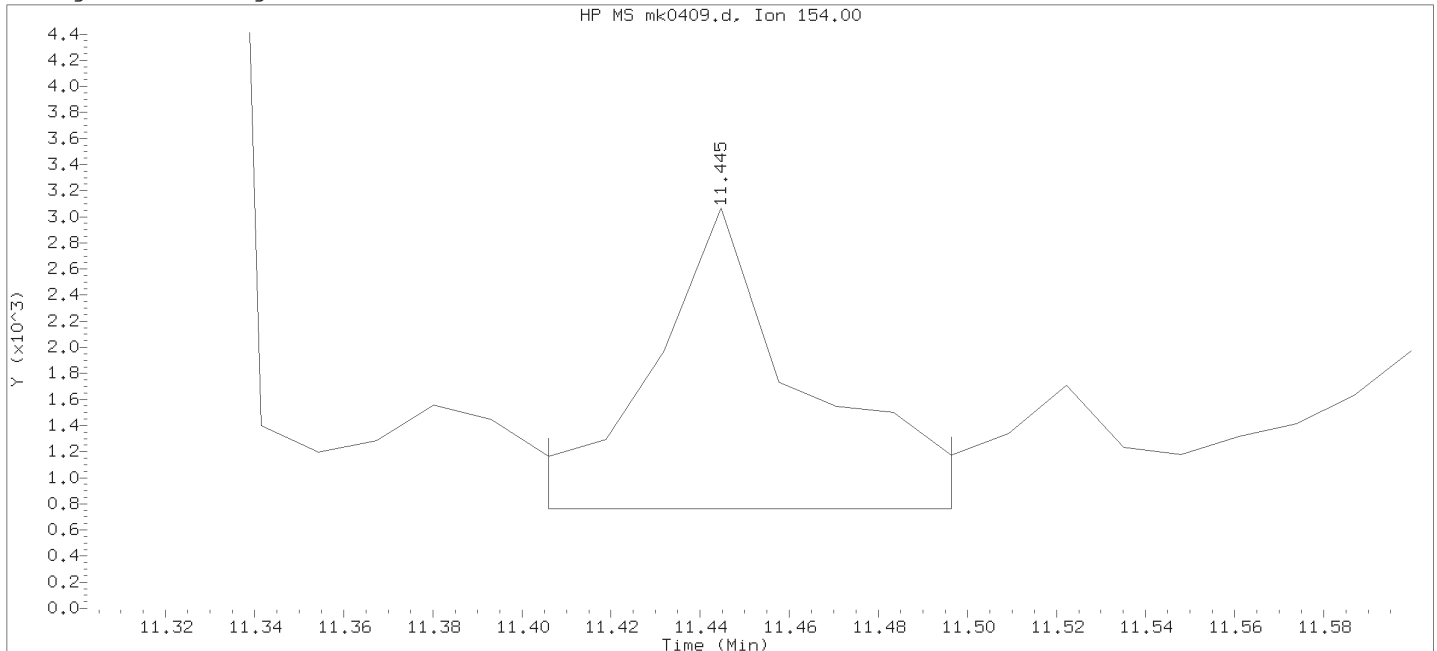
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

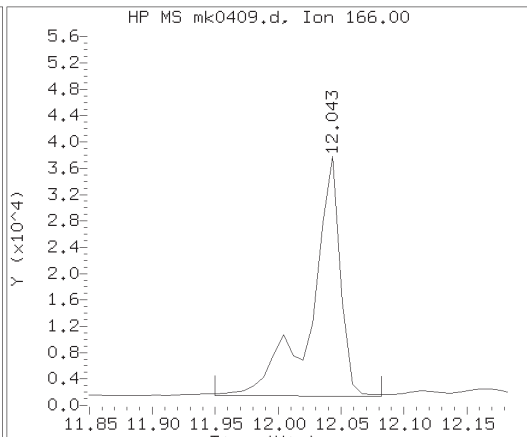
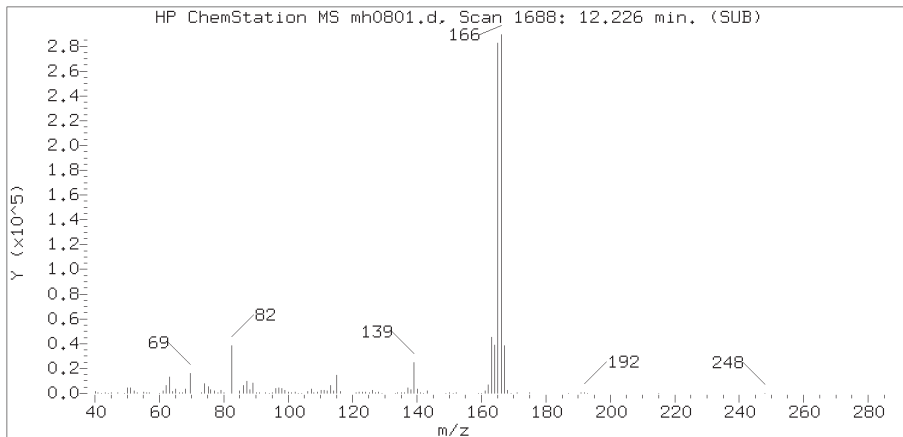
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:14 Unknown

Sample Name: 15T-2

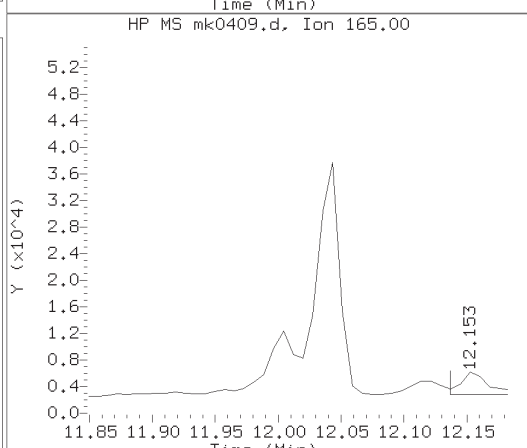
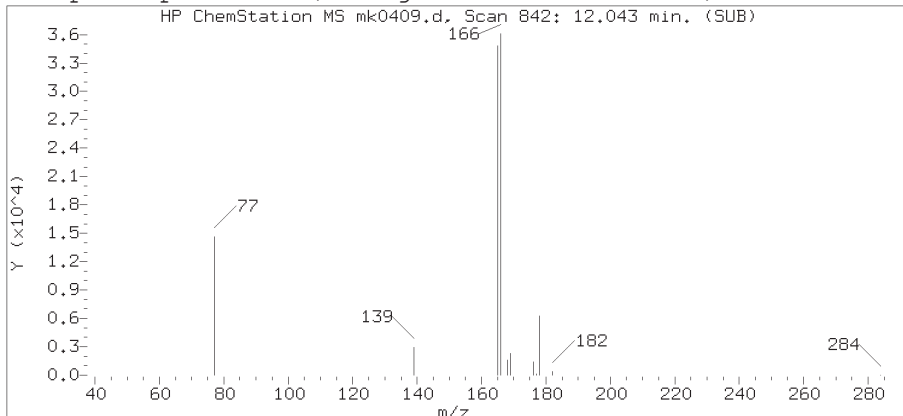
Lab Sample ID: 9881309

Compound Number : 15  
 Compound Name : Acenaphthene  
 Scan Number : 781  
 Retention Time (minutes) : 11.445  
 Quant Ion : 154.00  
 Area : 5386  
 On-column Amount (ng/ul) : 0.2195  
 Integration start scan : 777 Integration stop scan: 784  
 Y at integration start : 761 Y at integration end: 761

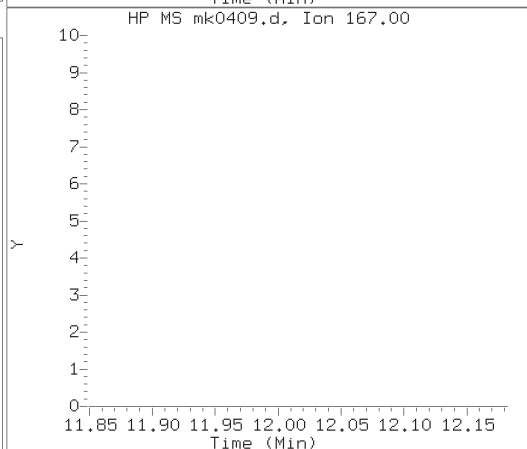
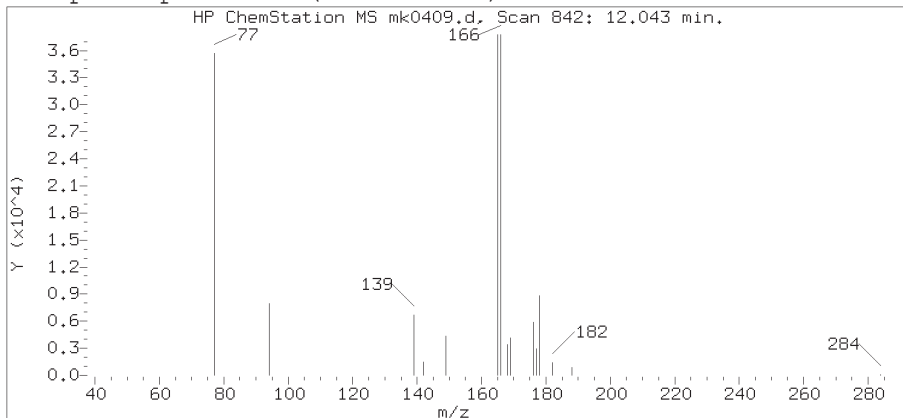
Reference Standard Spectrum for Fluorene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

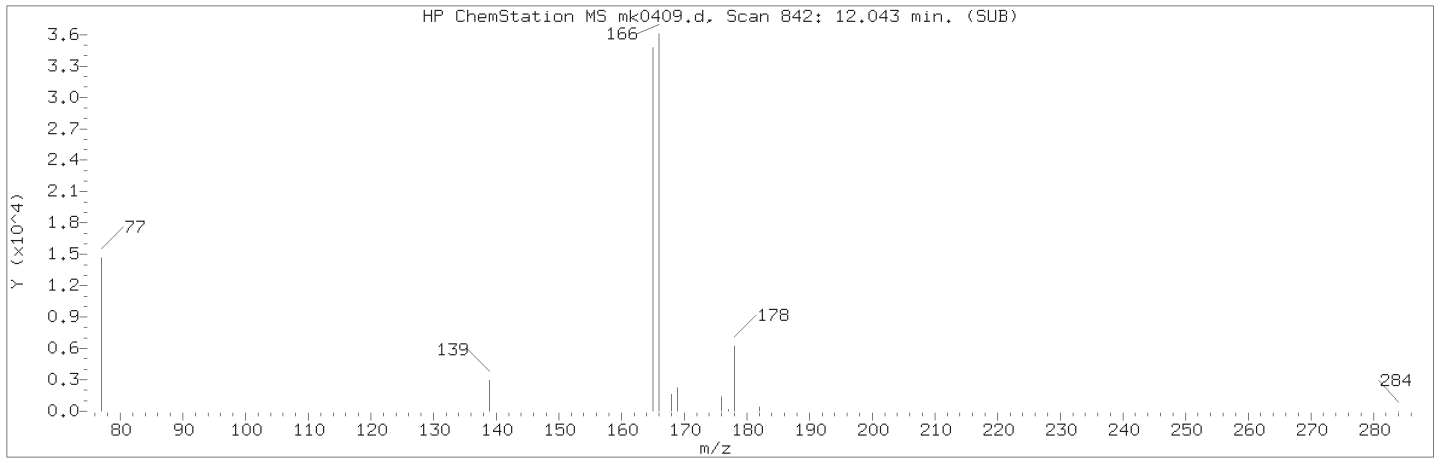
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

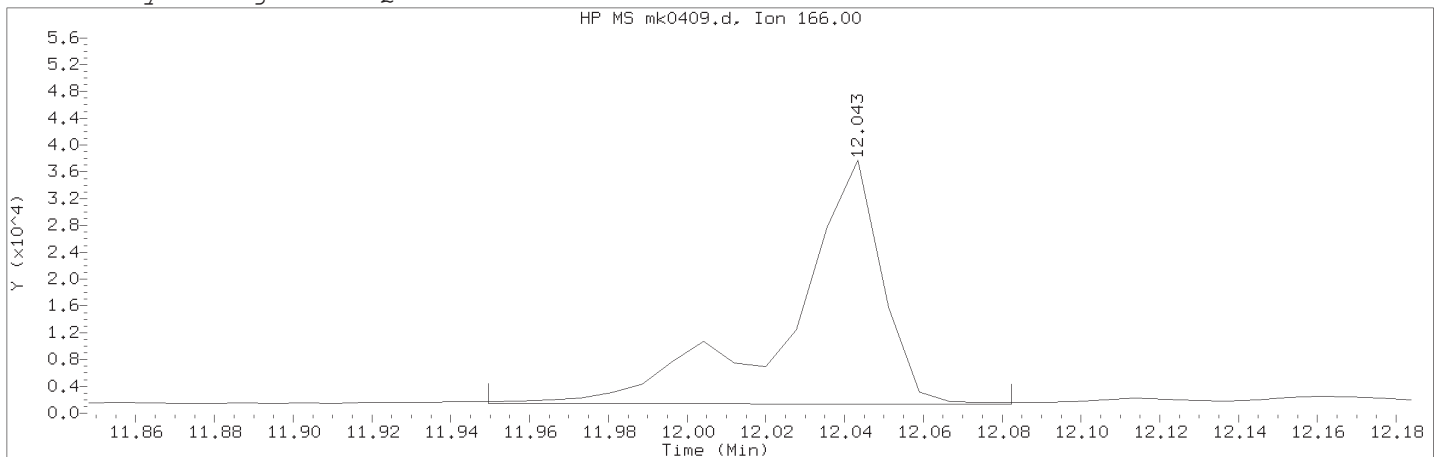
Lab Sample ID: 9881309

Compound Number : 18  
 Compound Name : Fluorene  
 Scan Number : 842  
 Retention Time (minutes) : 12.043  
 Relative Retention Time : -0.00000  
 Quant Ion : 166.00  
 Area (flag) : 58163M  
 On-column Amount (ng/ul) : 0.1016

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 21:44                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2    Lab Sample ID: 9881309

Compound Number    : 18  
Compound Name     : Fluorene  
Scan Number     : 842  
Retention Time (minutes)     : 12.043  
Quant Ion     : 166.00  
Area (flag)    : 58163M  
On-column Amount (ng/ul)    : 0.1016  
Integration start scan    : 829    Integration stop scan: 846  
Y at integration start     : 1455    Y at integration end: 1392

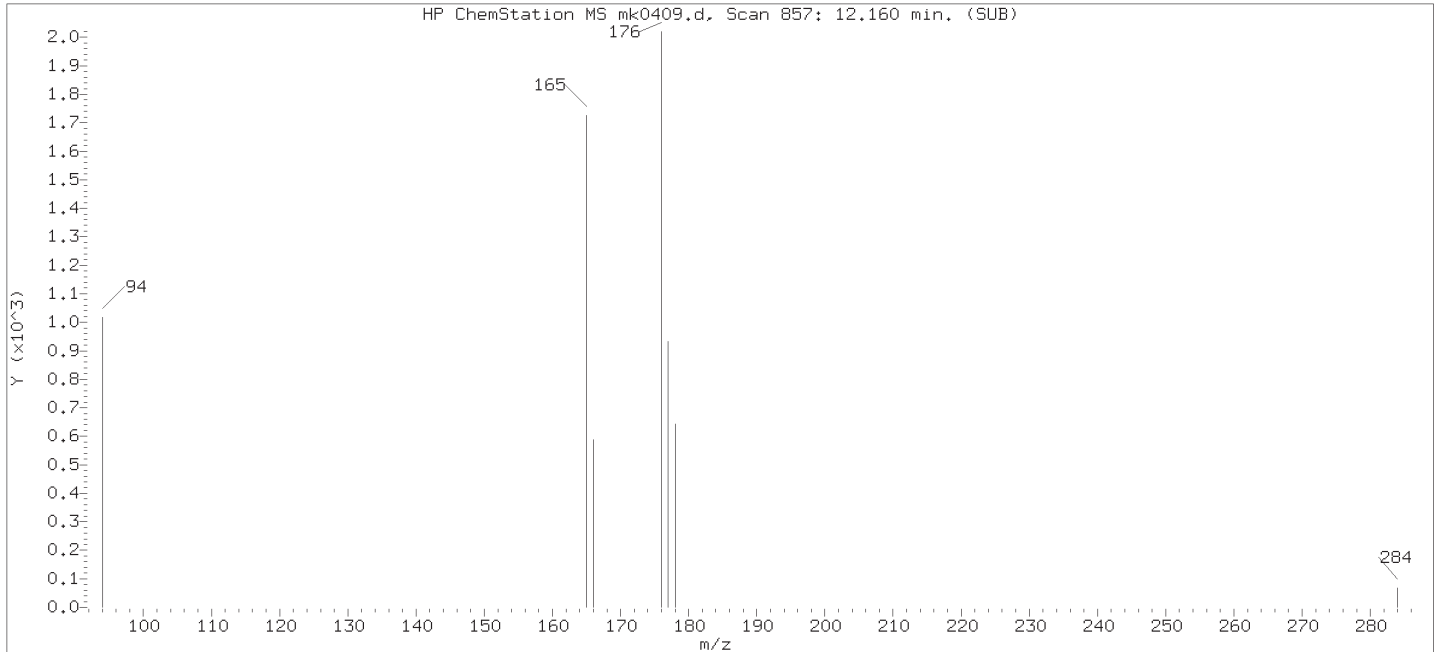
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

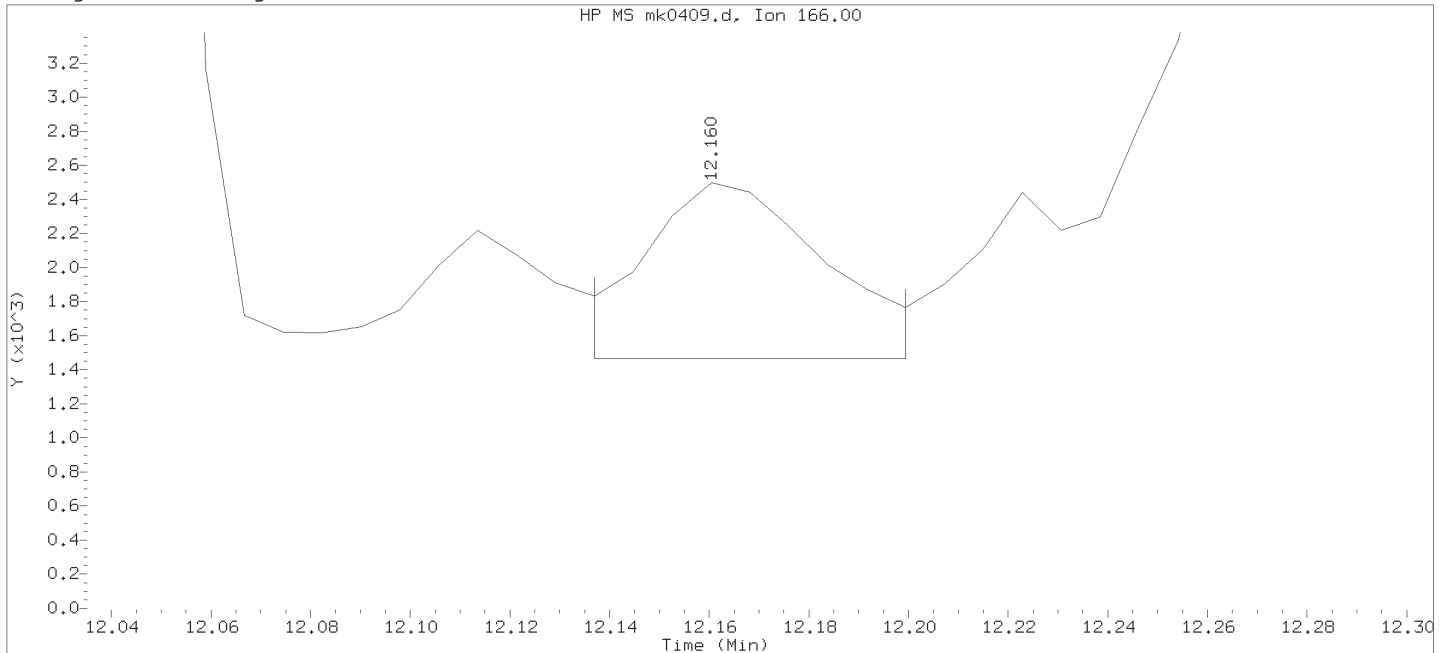
Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
Analyst ID: ceb05247

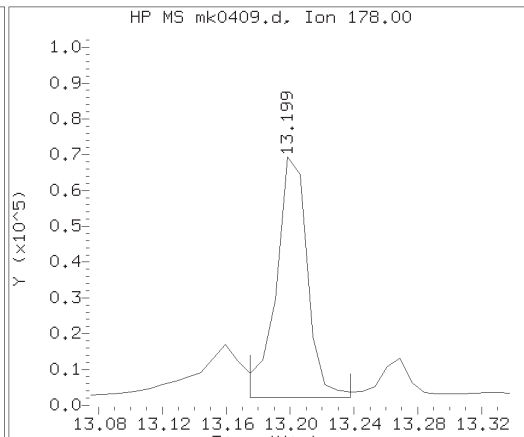
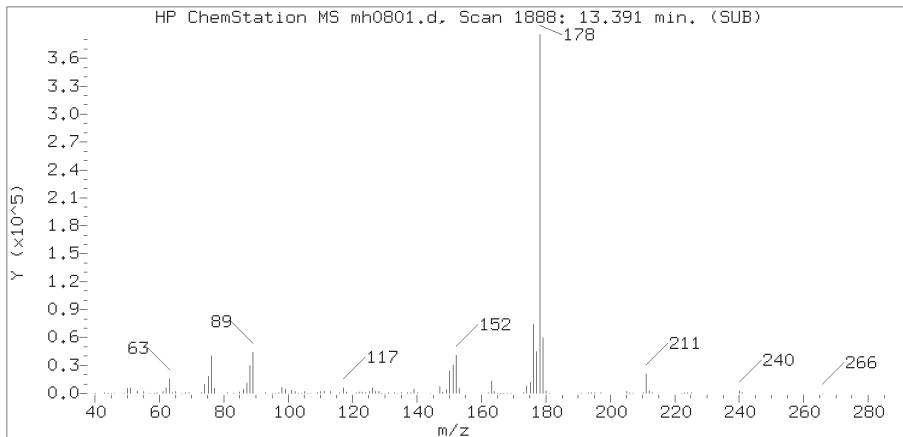
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Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:14 Unknown

Sample Name: 15T-2

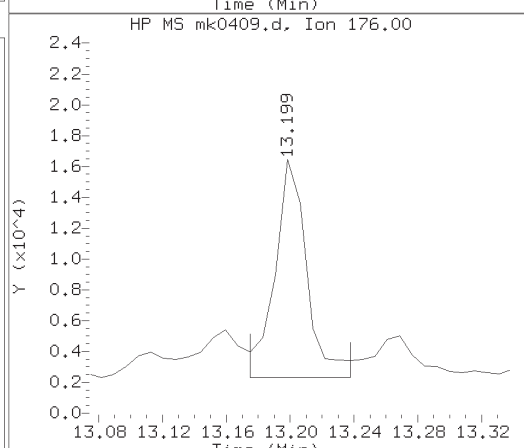
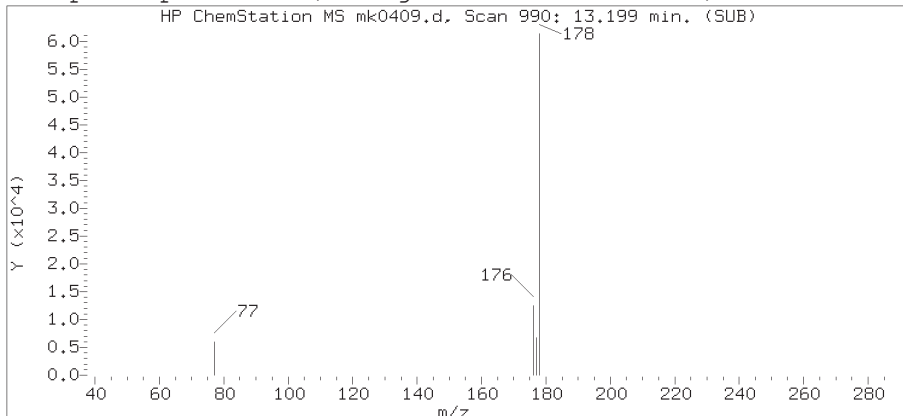
Lab Sample ID: 9881309

Compound Number : 18  
Compound Name : Fluorene  
Scan Number : 857  
Retention Time (minutes) : 12.160  
Quant Ion : 166.00  
Area : 2541  
On-column Amount (ng/ul) : 0.0888  
Integration start scan : 853 Integration stop scan: 861  
Y at integration start : 1465 Y at integration end: 1465

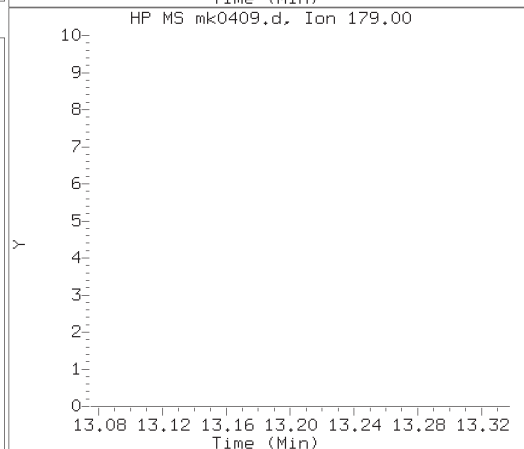
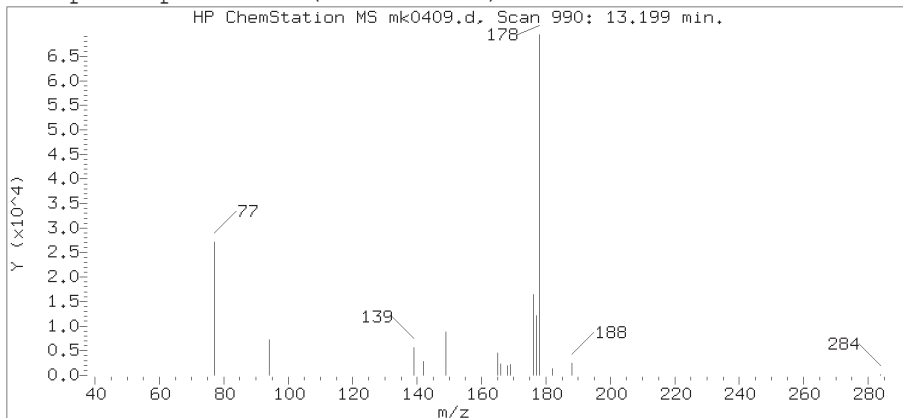
Reference Standard Spectrum for Phenanthrene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

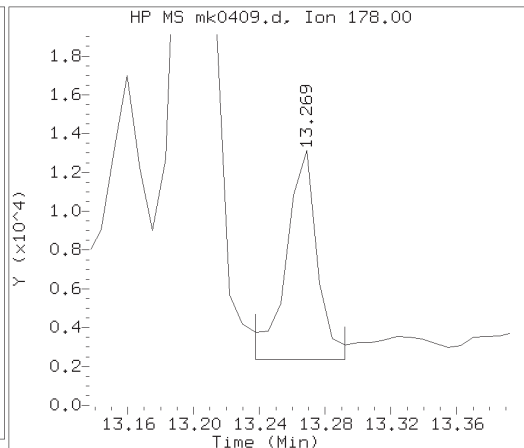
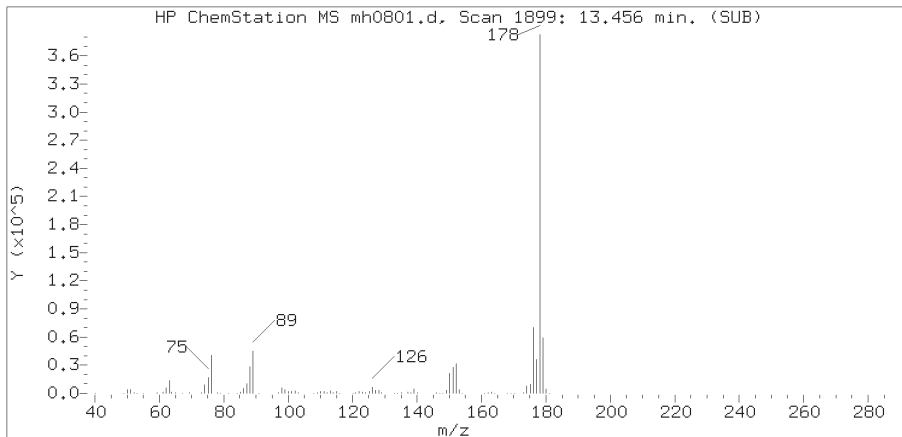
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

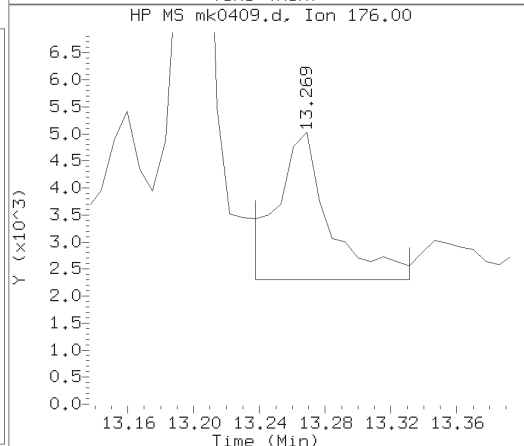
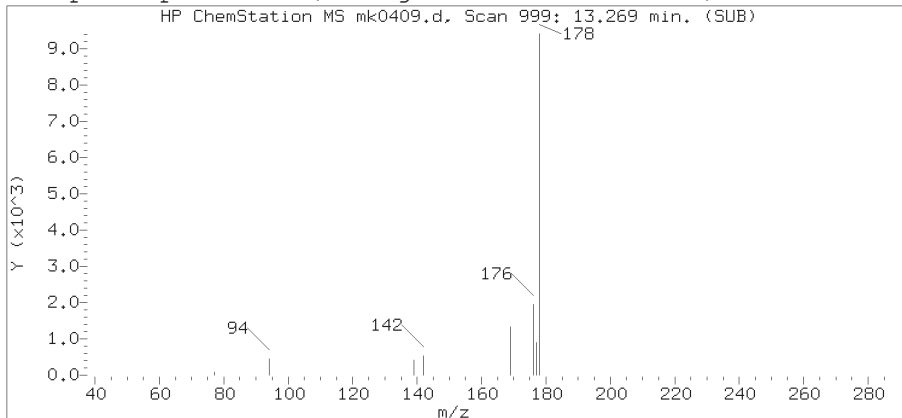
Lab Sample ID: 9881309

Compound Number : 21  
 Compound Name : Phenanthrene  
 Scan Number : 990  
 Retention Time (minutes) : 13.199  
 Relative Retention Time : 0.00000  
 Quant Ion : 178.00  
 Area (flag) : 90843  
 On-column Amount (ng/ul) : 0.1536

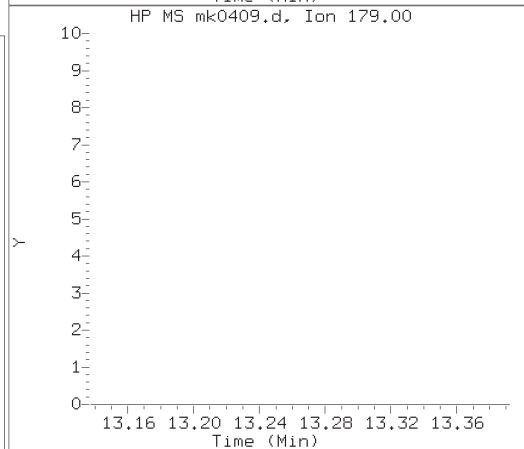
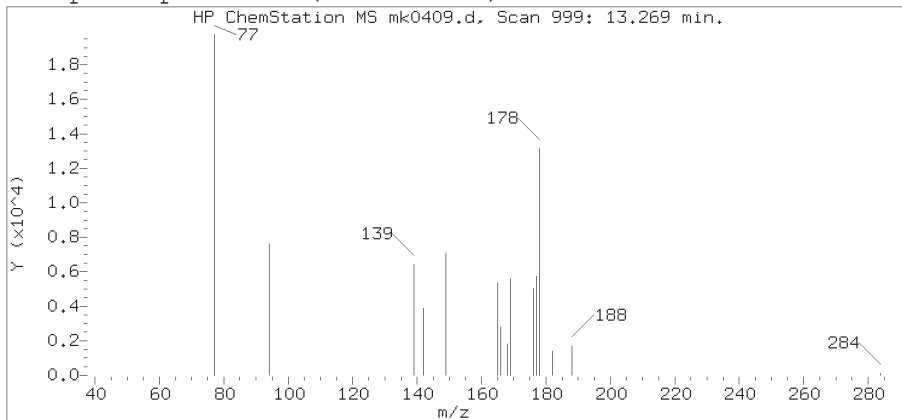
Reference Standard Spectrum for Anthracene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

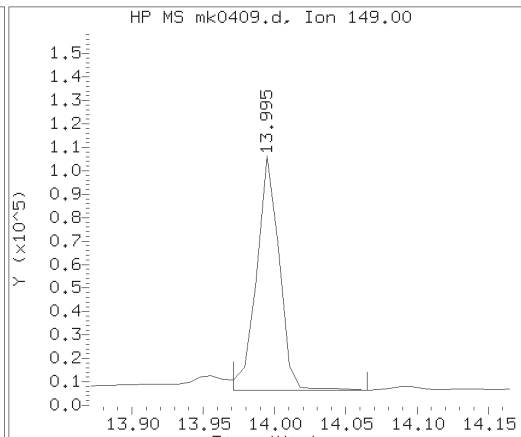
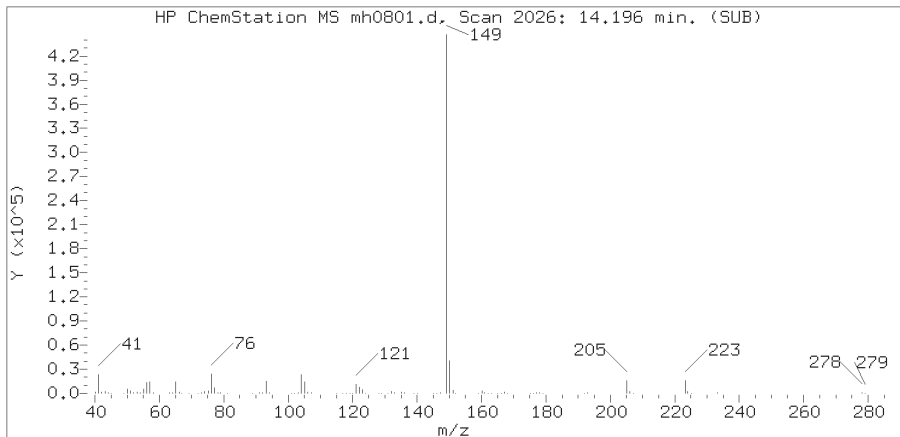
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

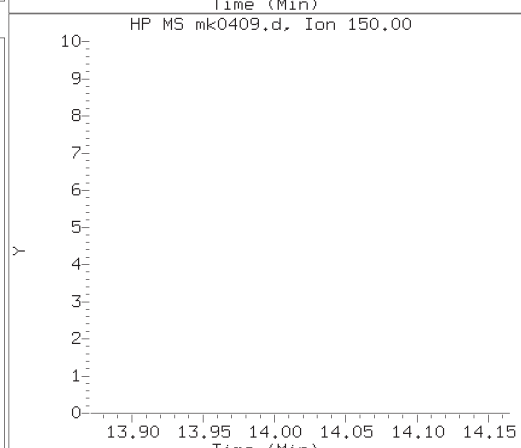
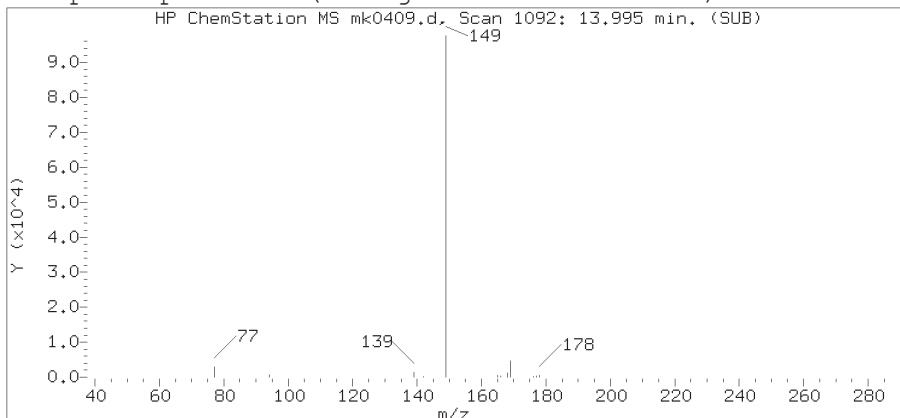
Lab Sample ID: 9881309

Compound Number : 22  
 Compound Name : Anthracene  
 Scan Number : 999  
 Retention Time (minutes) : 13.269  
 Relative Retention Time :-0.00059  
 Quant Ion : 178.00  
 Area (flag) : 13855  
 On-column Amount (ng/ul) : 0.0239

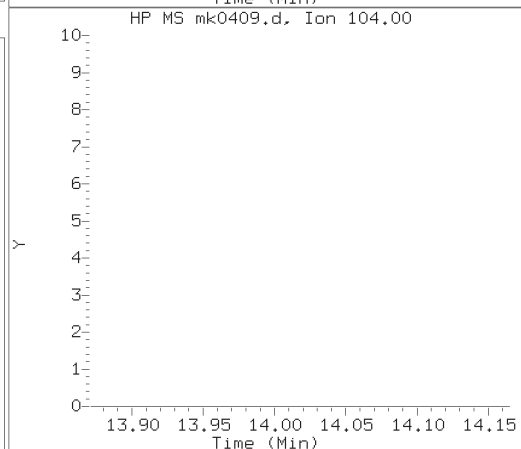
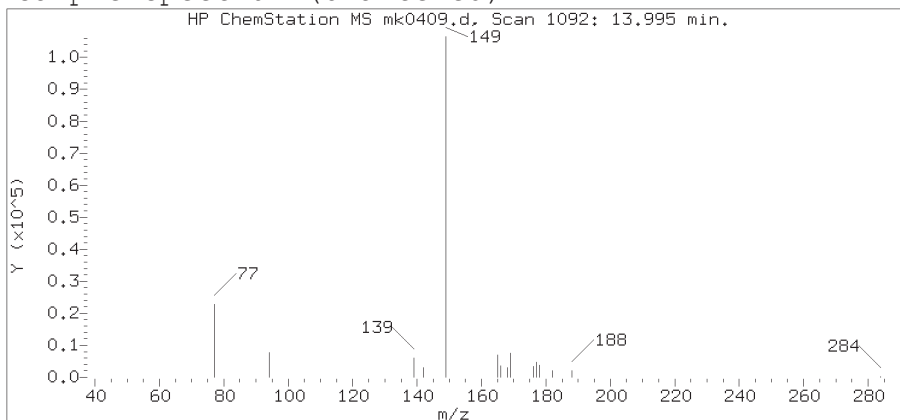
Reference Standard Spectrum for Di-n-butylphthalate



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

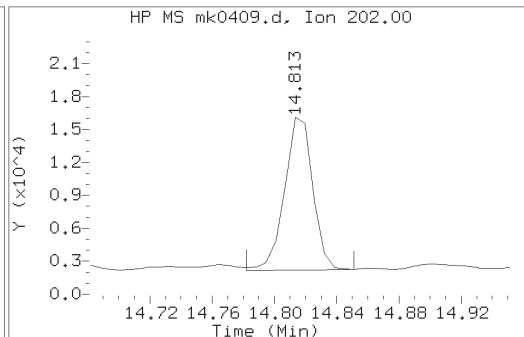
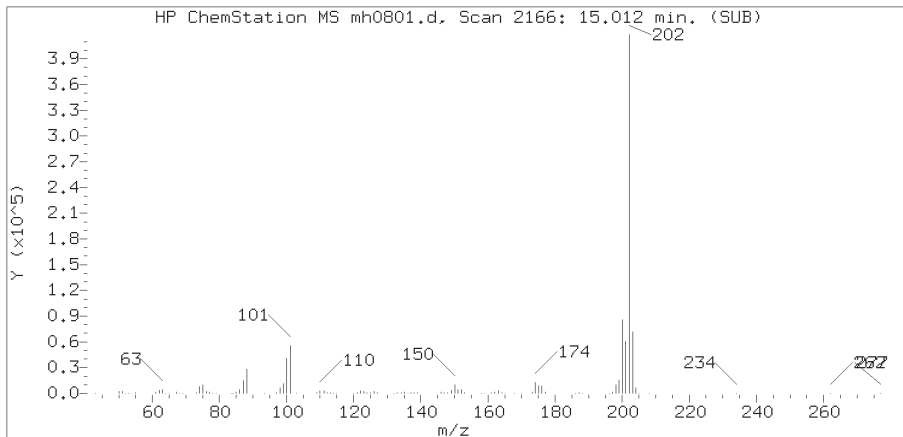
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

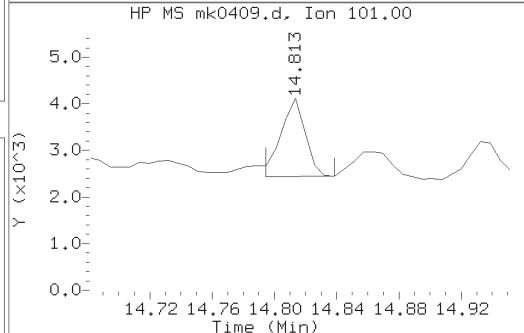
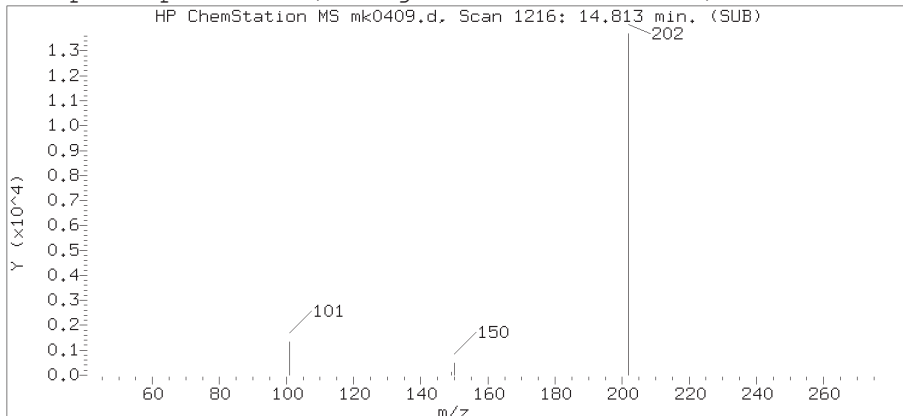
Lab Sample ID: 9881309

Compound Number : 23  
 Compound Name : Di-n-butylphthalate  
 Scan Number : 1092  
 Retention Time (minutes) : 13.995  
 Relative Retention Time : 0.00000  
 Quant Ion : 149.00  
 Area (flag) : 107046  
 On-column Amount (ng/ul) : 0.1652

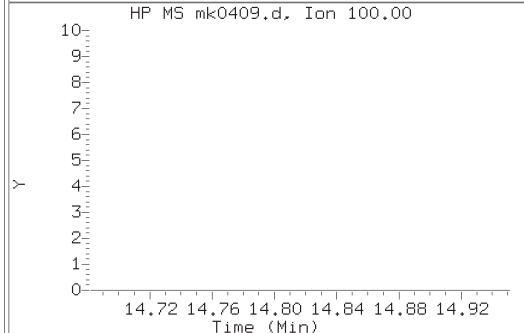
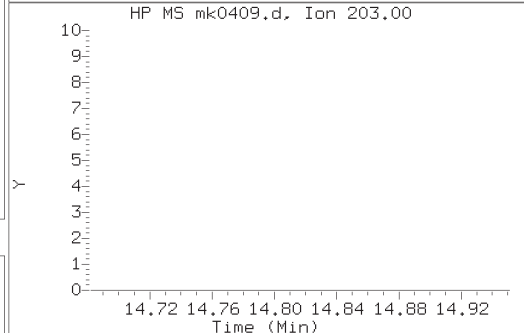
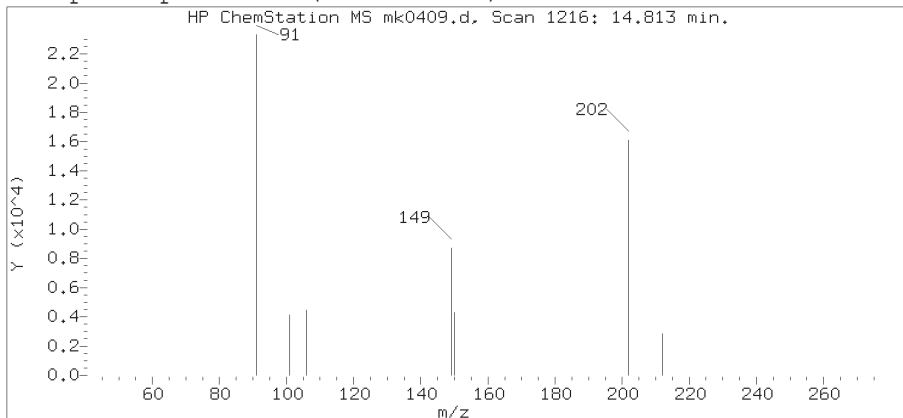
Reference Standard Spectrum for Fluoranthene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

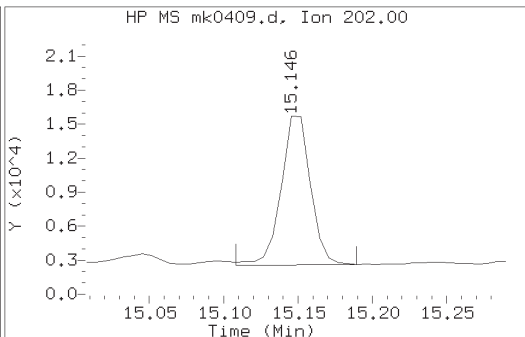
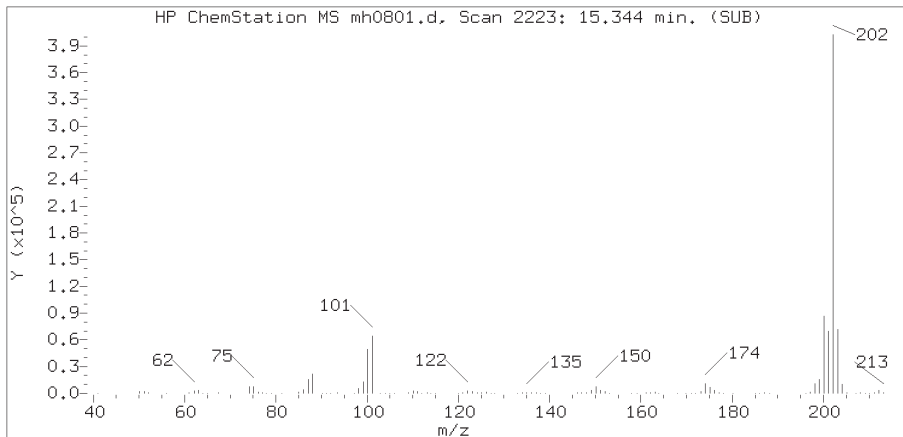
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

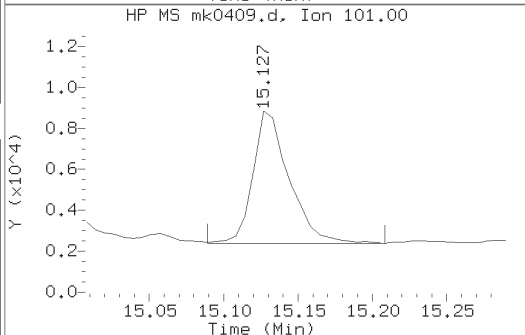
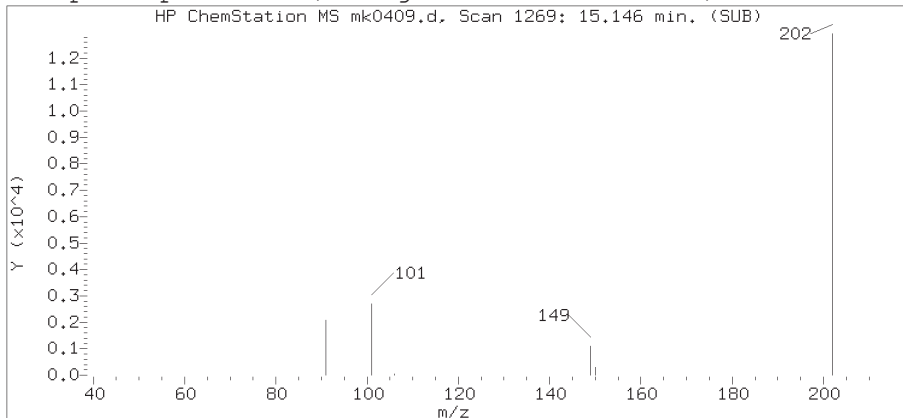
Lab Sample ID: 9881309

Compound Number : 25  
 Compound Name : Fluoranthene  
 Scan Number : 1216  
 Retention Time (minutes) : 14.813  
 Relative Retention Time : 0.00000  
 Quant Ion : 202.00  
 Area (flag) : 17699  
 On-column Amount (ng/ul) : 0.0268

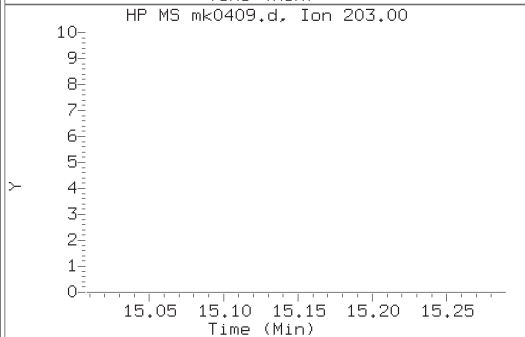
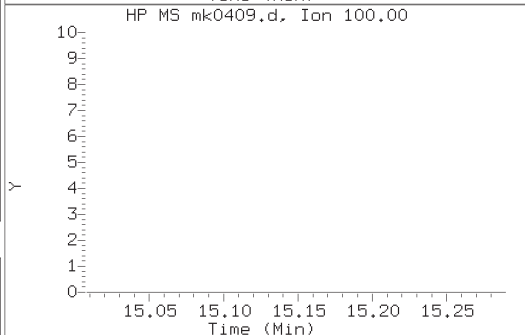
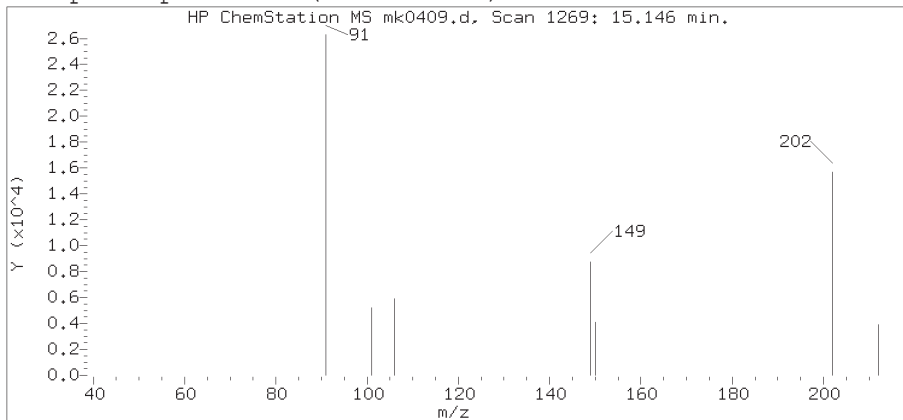
Reference Standard Spectrum for Pyrene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

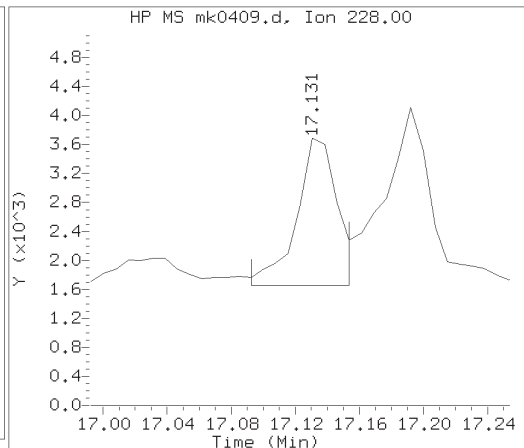
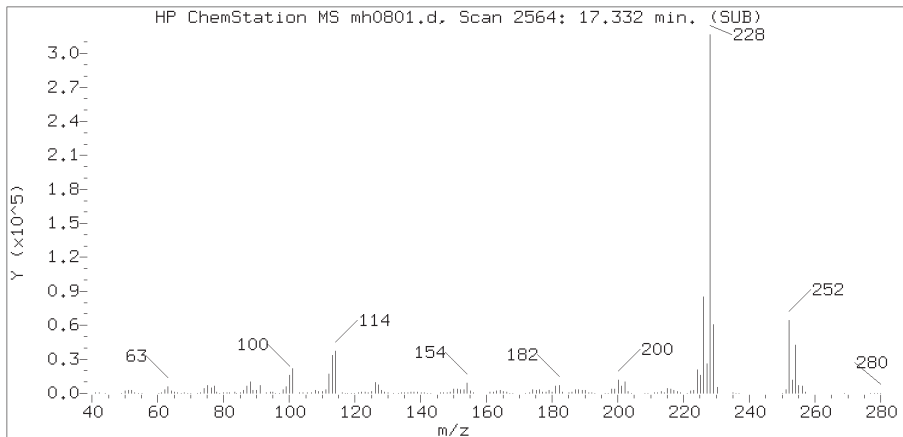
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

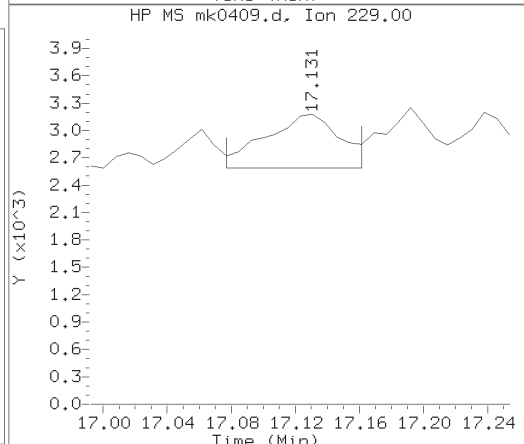
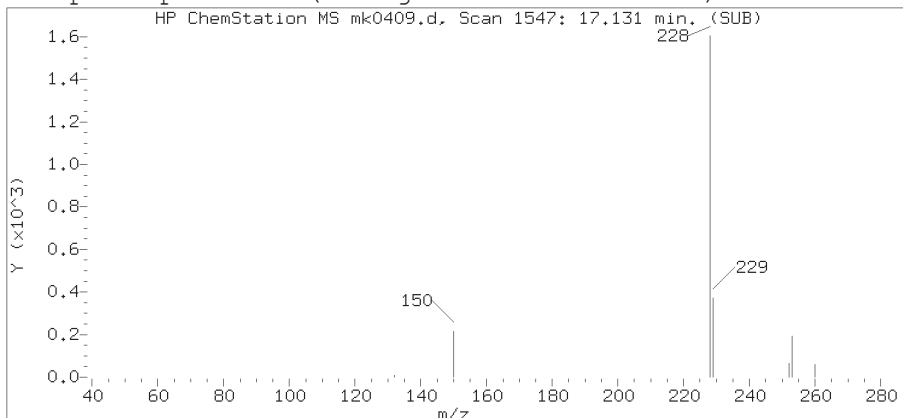
Lab Sample ID: 9881309

Compound Number : 26  
 Compound Name : Pyrene  
 Scan Number : 1269  
 Retention Time (minutes) : 15.146  
 Relative Retention Time : 0.00039  
 Quant Ion : 202.00  
 Area (flag) : 17989  
 On-column Amount (ng/ul) : 0.0198

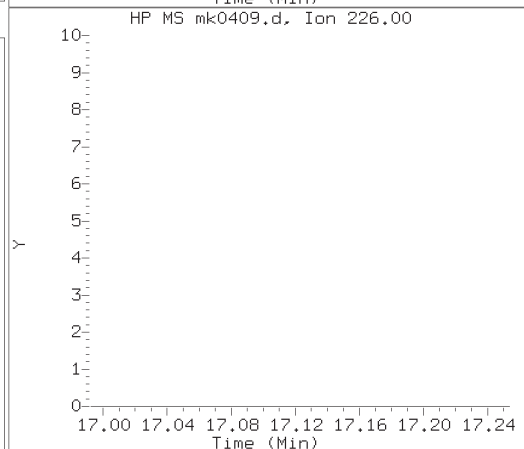
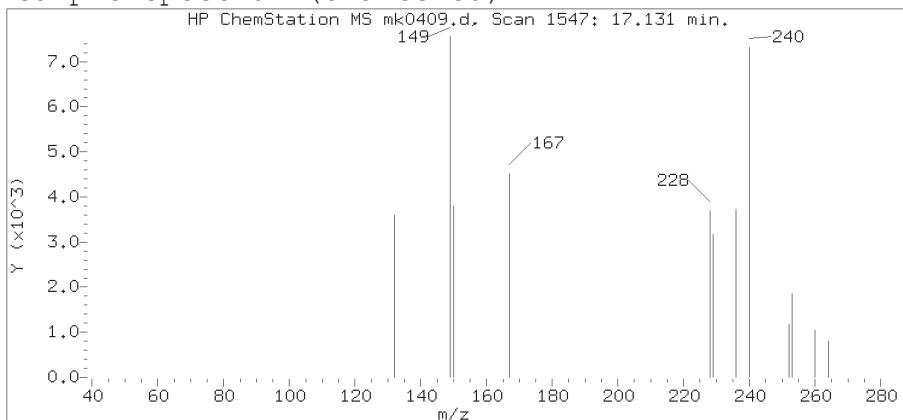
Reference Standard Spectrum for Benzo(a)anthracene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

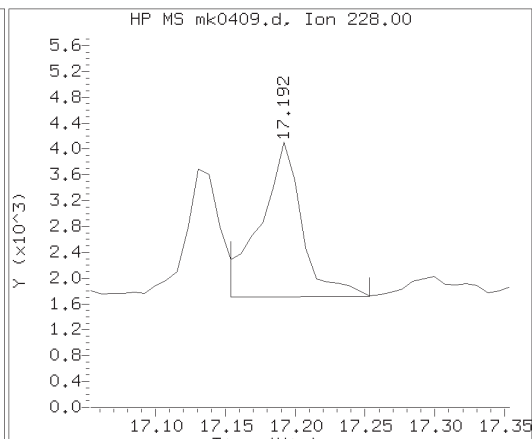
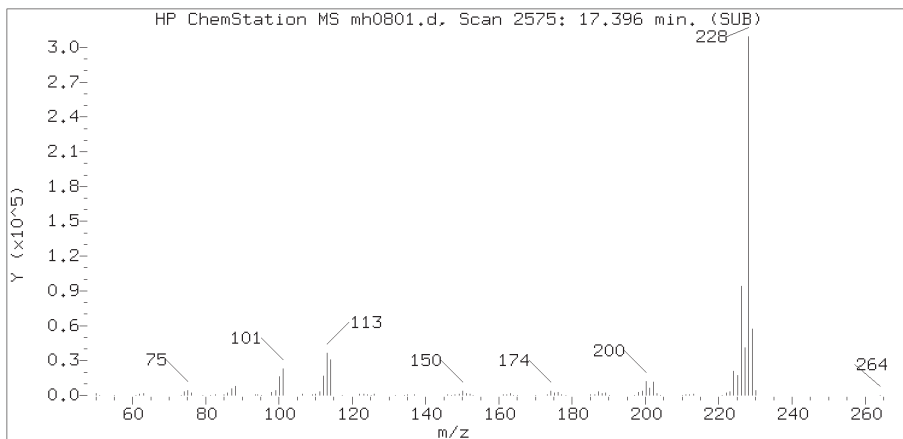
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
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 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

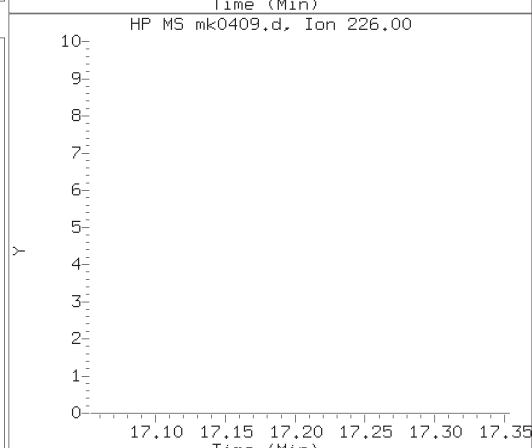
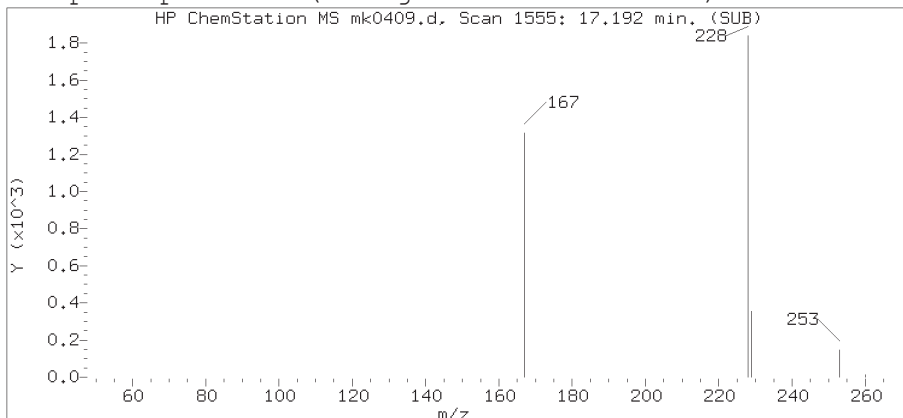
Lab Sample ID: 9881309

Compound Number : 28  
 Compound Name : Benzo(a)anthracene  
 Scan Number : 1547  
 Retention Time (minutes) : 17.131  
 Relative Retention Time : 0.00045  
 Quant Ion : 228.00  
 Area (flag) : 3499  
 On-column Amount (ng/ul) : 0.0045

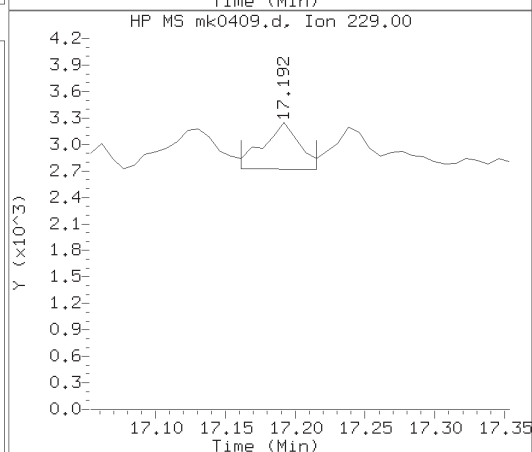
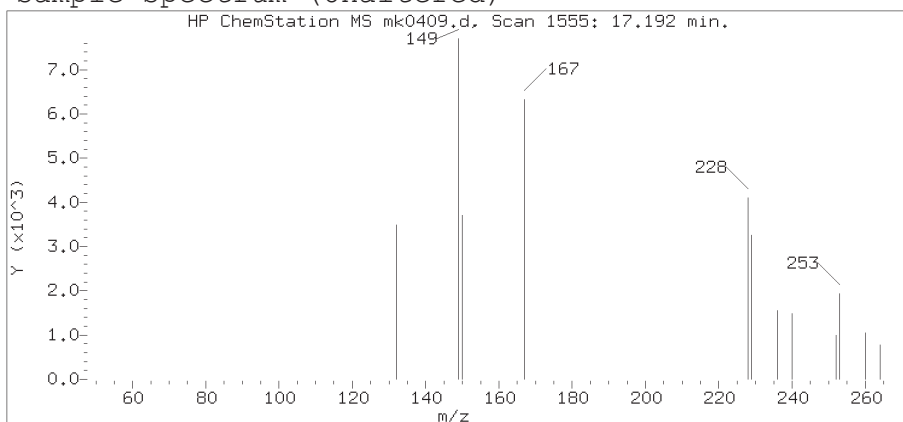
Reference Standard Spectrum for Chrysene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

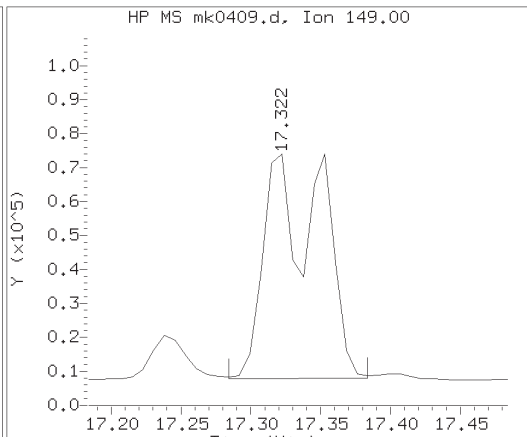
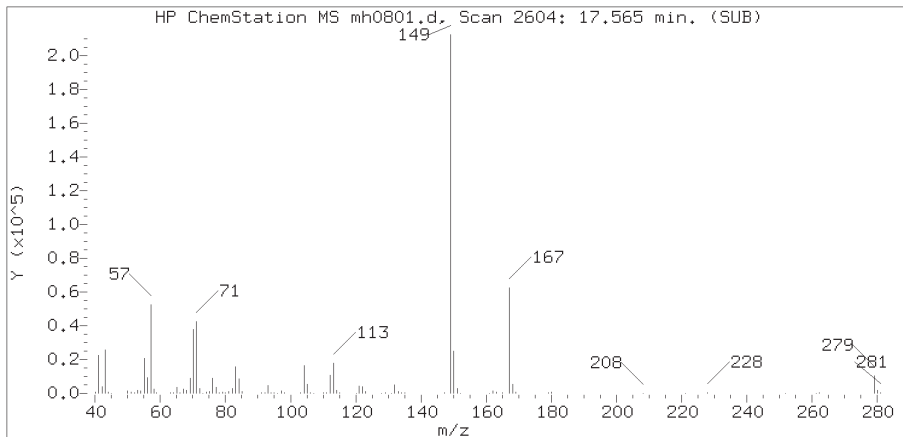
Sample Name: 15T-2

Lab Sample ID: 9881309

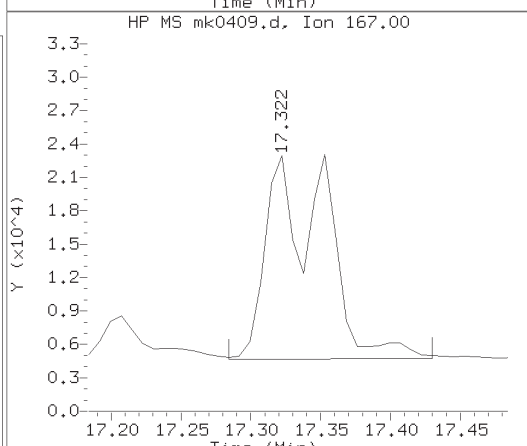
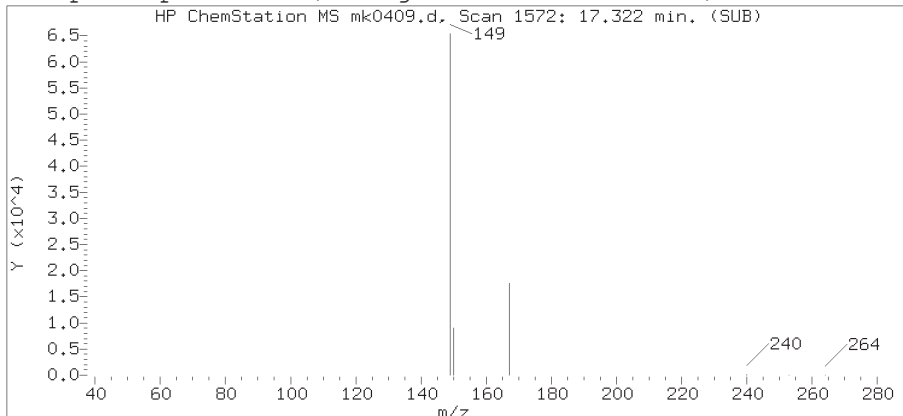
Compound Number : 30  
 Compound Name : Chrysene  
 Scan Number : 1555  
 Retention Time (minutes) : 17.192  
 Relative Retention Time : 0.00000  
 Quant Ion : 228.00  
 Area (flag) : 4934  
 On-column Amount (ng/ul) : 0.0062



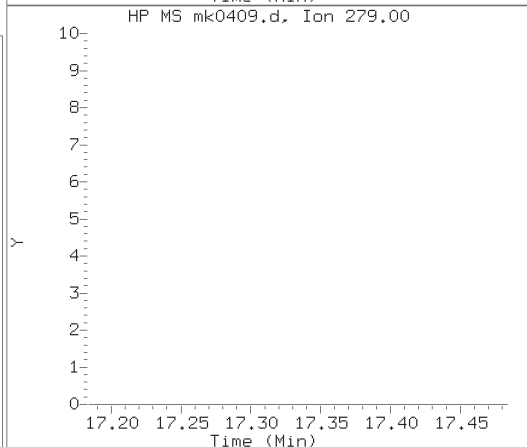
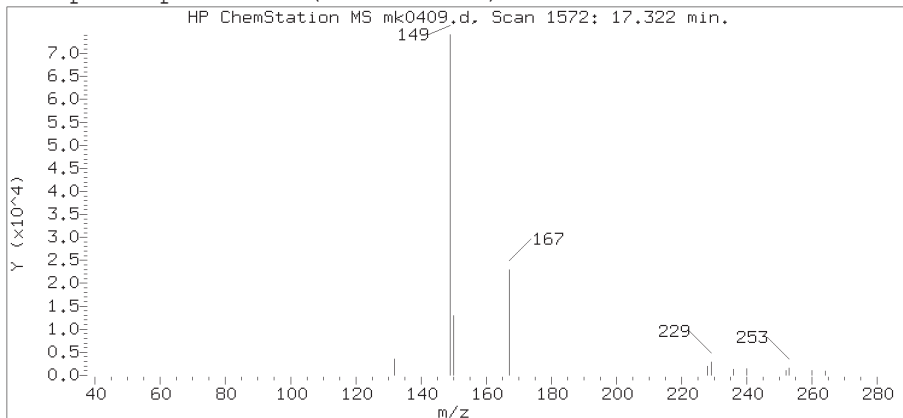
Reference Standard Spectrum for bis(2-Ethylhexyl)phthalate



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

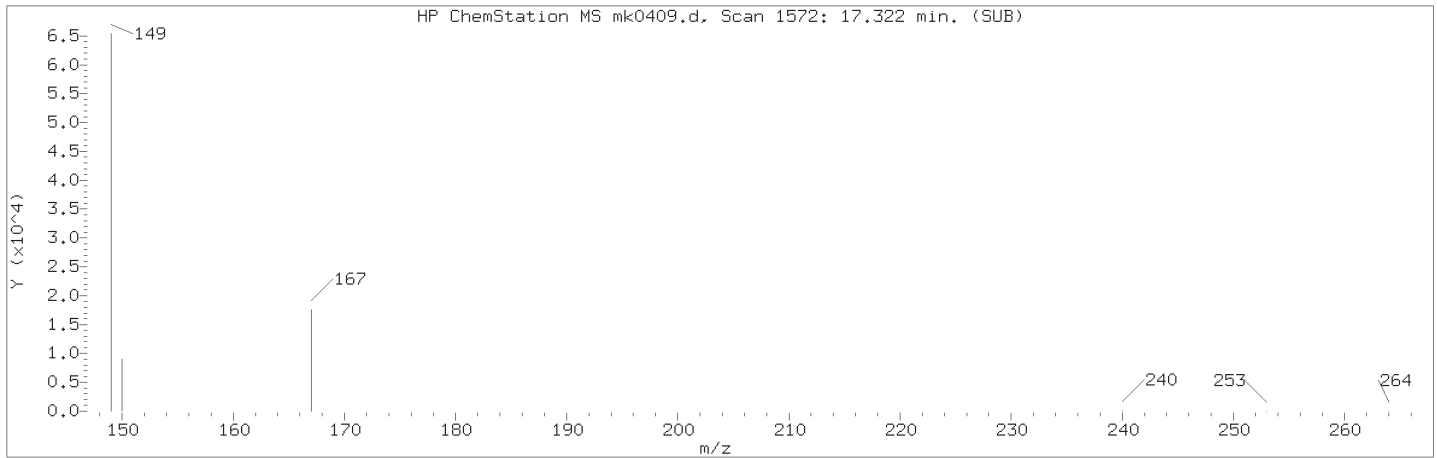
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
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 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

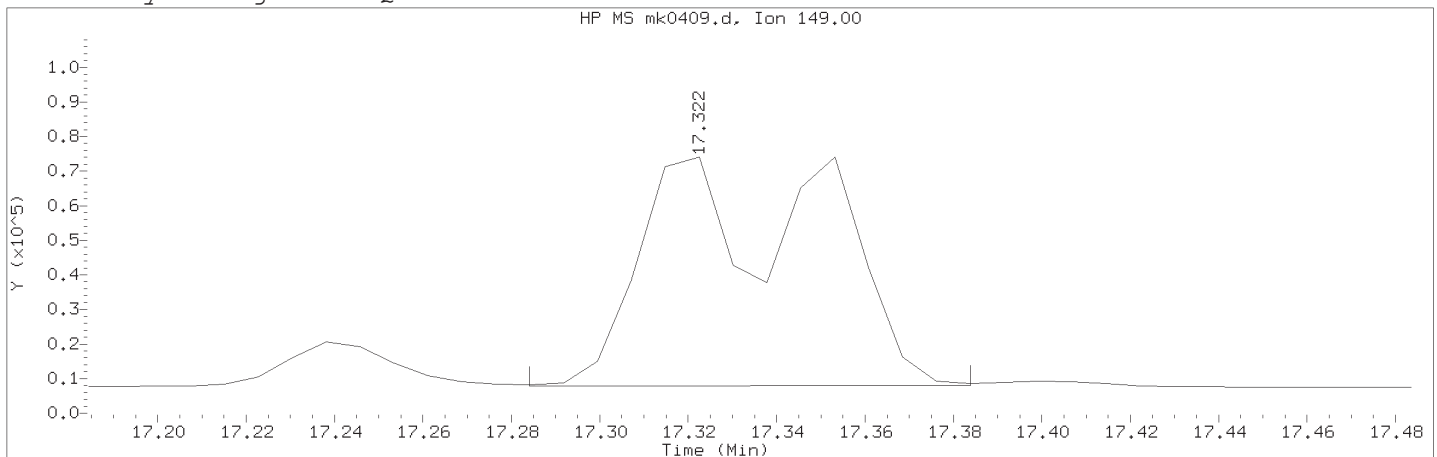
Lab Sample ID: 9881309

Compound Number : 31  
 Compound Name : bis(2-Ethylhexyl)phthalate  
 Scan Number : 1572  
 Retention Time (minutes) : 17.322  
 Relative Retention Time : 0.00179  
 Quant Ion : 149.00  
 Area (flag) : 184605M  
 On-column Amount (ng/ul) : 0.3275

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 21:44                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2    Lab Sample ID: 9881309

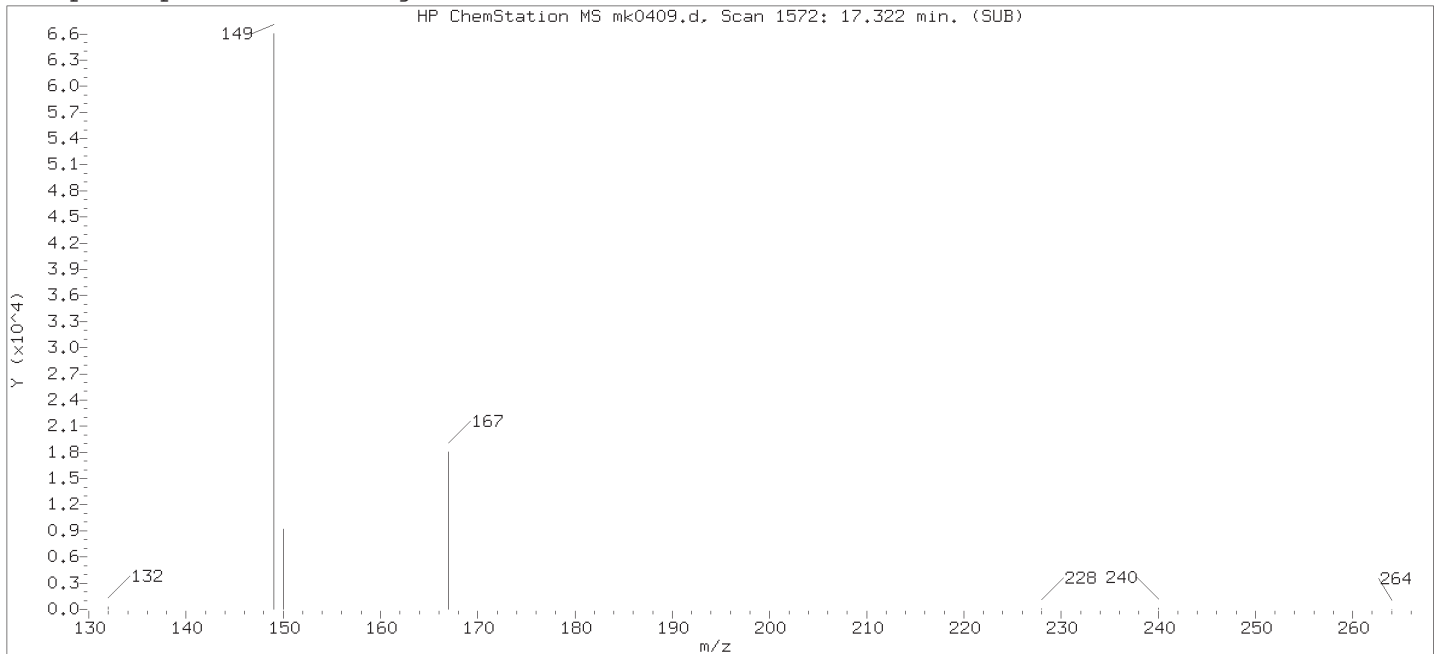
Compound Number                      : 31  
Compound Name                         : bis(2-Ethylhexyl)phthalate  
Scan Number                            : 1572  
Retention Time (minutes)             : 17.322  
Quant Ion                                : 149.00  
Area (flag)                             : 184605M  
On-column Amount (ng/ul)             : 0.3275  
Integration start scan                 : 1566                      Integration stop scan: 1579  
Y at integration start                 : 7811                      Y at integration end: 7996

Reason for manual integration: improper integration

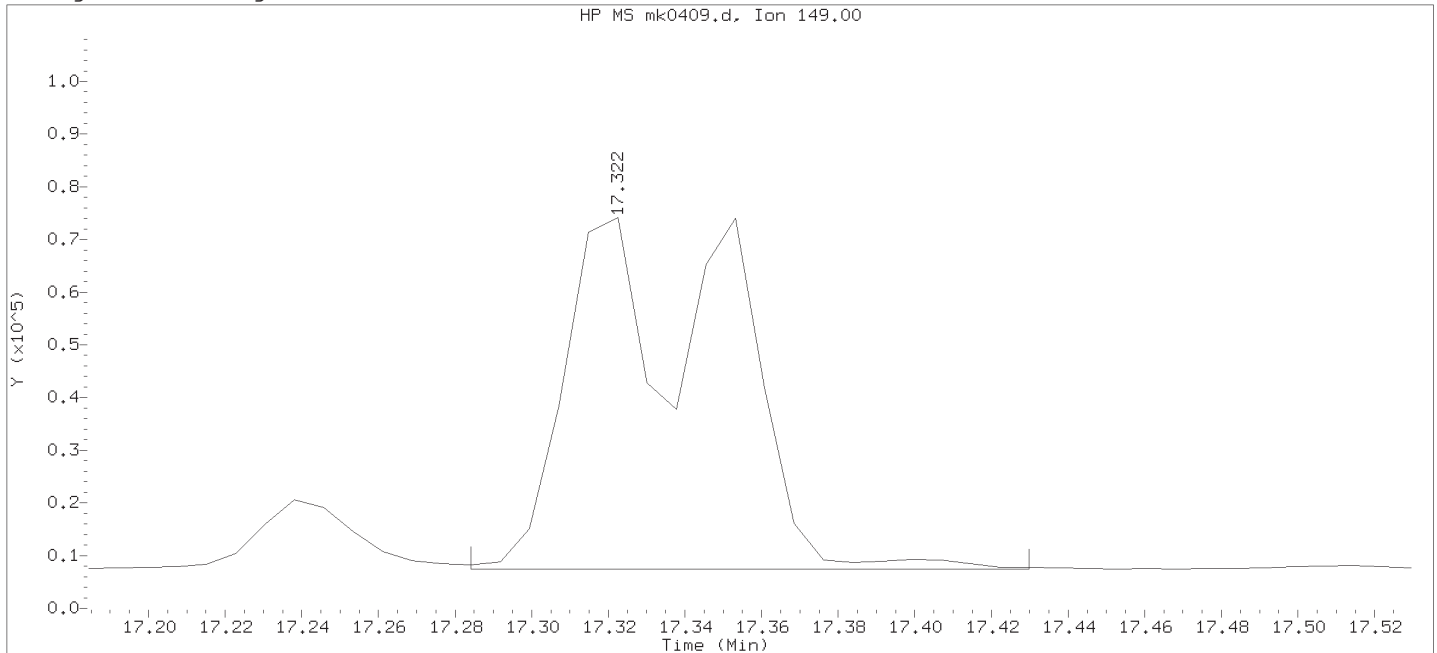
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

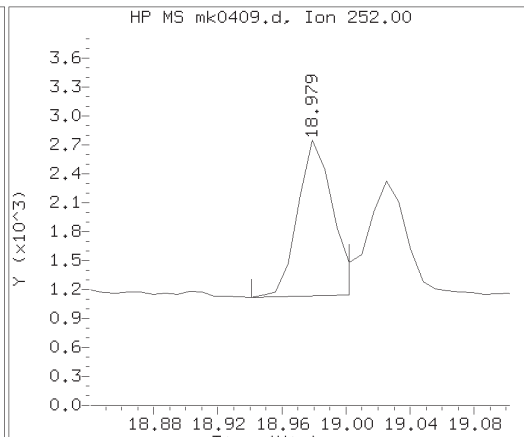
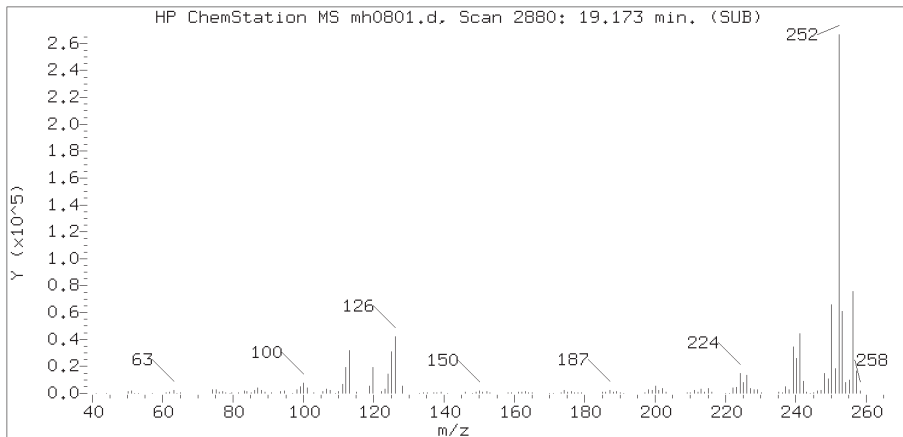
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 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:14 Unknown

Sample Name: 15T-2

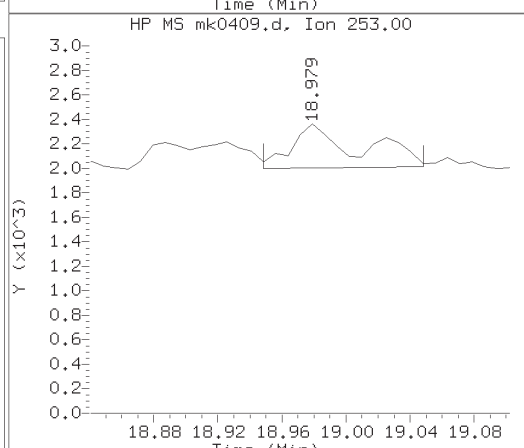
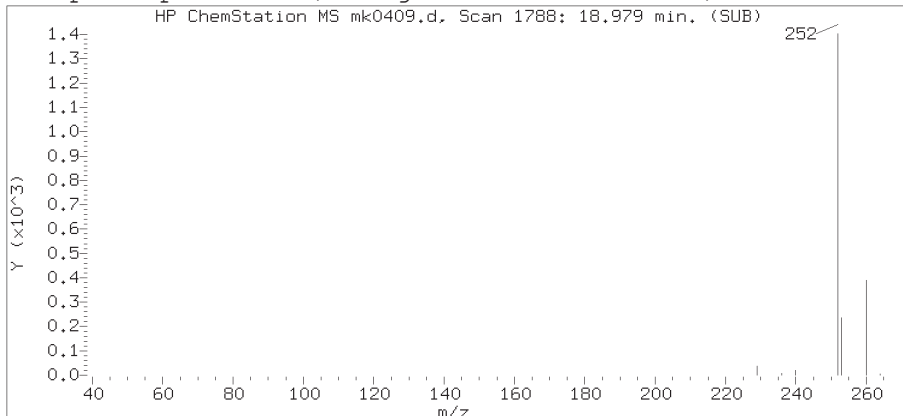
Lab Sample ID: 9881309

Compound Number : 31  
 Compound Name : bis(2-Ethylhexyl)phthalate  
 Scan Number : 1572  
 Retention Time (minutes) : 17.322  
 Quant Ion : 149.00  
 Area : 190117  
 On-column Amount (ng/ul) : 0.3373  
 Integration start scan : 1566 Integration stop scan: 1585  
 Y at integration start : 7455 Y at integration end: 7494

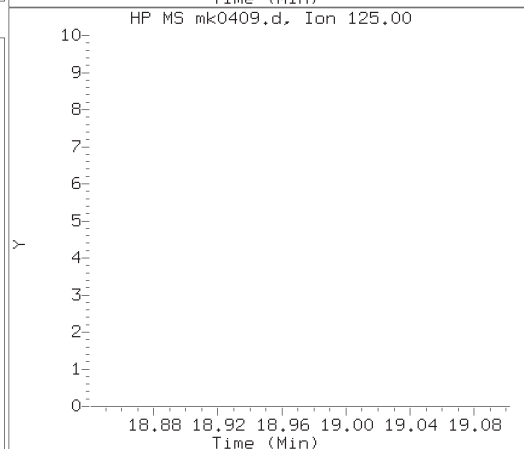
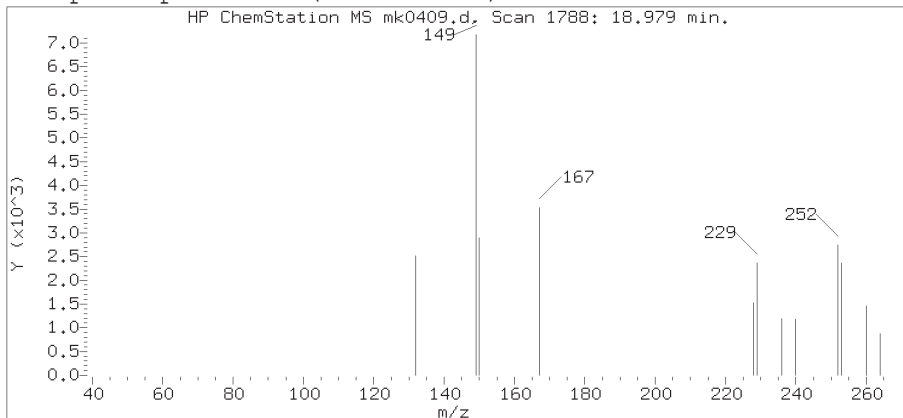
Reference Standard Spectrum for Benzo(b)fluoranthene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0409.d  
 Injection date and time: 07-NOV-2018 21:44

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-2

Lab Sample ID: 9881309

Compound Number : 33  
 Compound Name : Benzo(b)fluoranthene  
 Scan Number : 1788  
 Retention Time (minutes) : 18.979  
 Relative Retention Time : 0.00037  
 Quant Ion : 252.00  
 Area (flag) : 2409  
 On-column Amount (ng/ul) : 0.0028

15T-3

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881310

Data file: /chem/HP21585.i/18nov07.b/mk0410.d

Injection date and time: 07-NOV-2018 22:13

Data file Sample Info. Line: 15T-3;9881310;1;0;SAMPLE;;DOD26;

Instrument ID: HP21585.i Batch: 18309WAE

Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784

Calibration date and time (Last Method Edit): 09-NOV-2018 11:59

Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 244 ml

Volume Injected (Vi): 2 ul

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
5) 1,4-Dichlorobenzene-d4	6.560( 0.000)	474	152	49261 ( -21)	0.25	
6) Naphthalene-d8	8.480( 0.000)	572	136	169657 ( -18)	0.25	
14) Acenaphthene-d10	11.264( 0.000)	767	164	74199M ( -16)	0.25	
20) Phenanthrene-d10	13.175( 0.000)	987	188	111228 ( -37)	0.25	
29) Chrysene-d12	17.154(-0.008)	1550	240	97897 ( -18)	0.25	
38) Perylene-d12	19.593(-0.008)	1868	264	105671 ( -5)	0.25	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
10) 1-Methylnaphthalene-d10	(2)	9.703( 0.000)	152	69011M	0.224	89%		29 - 112
24) Fluoranthene-d10	(4)	14.789( 0.000)	212	126057	0.289	116%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.463( 0.000)	264	87611	0.226	90%		18 - 129

M = Surrogate Standard was manually integrated.

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
1) 1,4-Dioxane	(1)	2.780(-0.001)	88	9917M	0.073	0.30			0.01
4) bis(2-Chloroethyl)ether	(2)			Not Detected					0.005
7) Naphthalene	(2)	8.500( 0.000)	128	27170M	0.035	0.14			0.008
13) Acenaphthylene	(3)	11.045(-0.001)	152	2214M	0.003	0.01			0.003
15) Acenaphthene	(3)	11.316( 0.000)	154	66310M	0.140	0.57			0.003
18) Fluorene	(3)	12.044( 0.000)	166	42061	0.076	0.31			0.003
19) Hexachlorobenzene	(4)			Not Detected					0.003
21) Phenanthrene	(4)	13.199( 0.000)	178	84186	0.141	0.58			0.008
22) Anthracene	(4)	13.269(-0.000)	178	12121	0.021	0.08			0.003
23) Di-n-butylphthalate	(4)	13.995( 0.000)	149	102468	0.157	0.64			0.05
25) Fluoranthene	(4)	14.814( 0.000)	202	15707	0.024	0.10			0.003
26) Pyrene	(5)	15.146( 0.000)	202	15848	0.018	0.07			0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.323( 0.001)	149	124433M	0.225	0.92	0.304	B	0.02
28) Benzo(a)anthracene	(5)			Not Detected					0.003
30) Chrysene	(5)	17.192( 0.000)	228	2520M	0.003	0.01			0.003
33) Benzo(b)fluoranthene	(6)			Not Detected					0.003
34) Benzo(k)fluoranthene	(6)			Not Detected					0.003
37) Benzo(a)pyrene	(6)			Not Detected					0.003
39) Indeno(1,2,3-cd)pyrene	(6)			Not Detected					0.003
40) Dibenz(a,h)anthracene	(6)			Not Detected					0.005
41) Benzo(g,h,i)perylene	(6)			Not Detected					0.003

M = Compound was manually integrated. B = Compound detected in referenced method blank.

15T-3

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881310

Data file: /chem/HP21585.i/18nov07.b/mk0410.d Injection date and time: 07-NOV-2018 22:13  
Data file Sample Info. Line: 15T-3;9881310;1;0;SAMPLE;;DOD26; Instrument ID: HP21585.i Batch: 18309WAE  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time (Last Method Edit): 09-NOV-2018 11:59  
Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
Sample Volume (Vo): 244 ml Volume Injected (Vi): 2 ul

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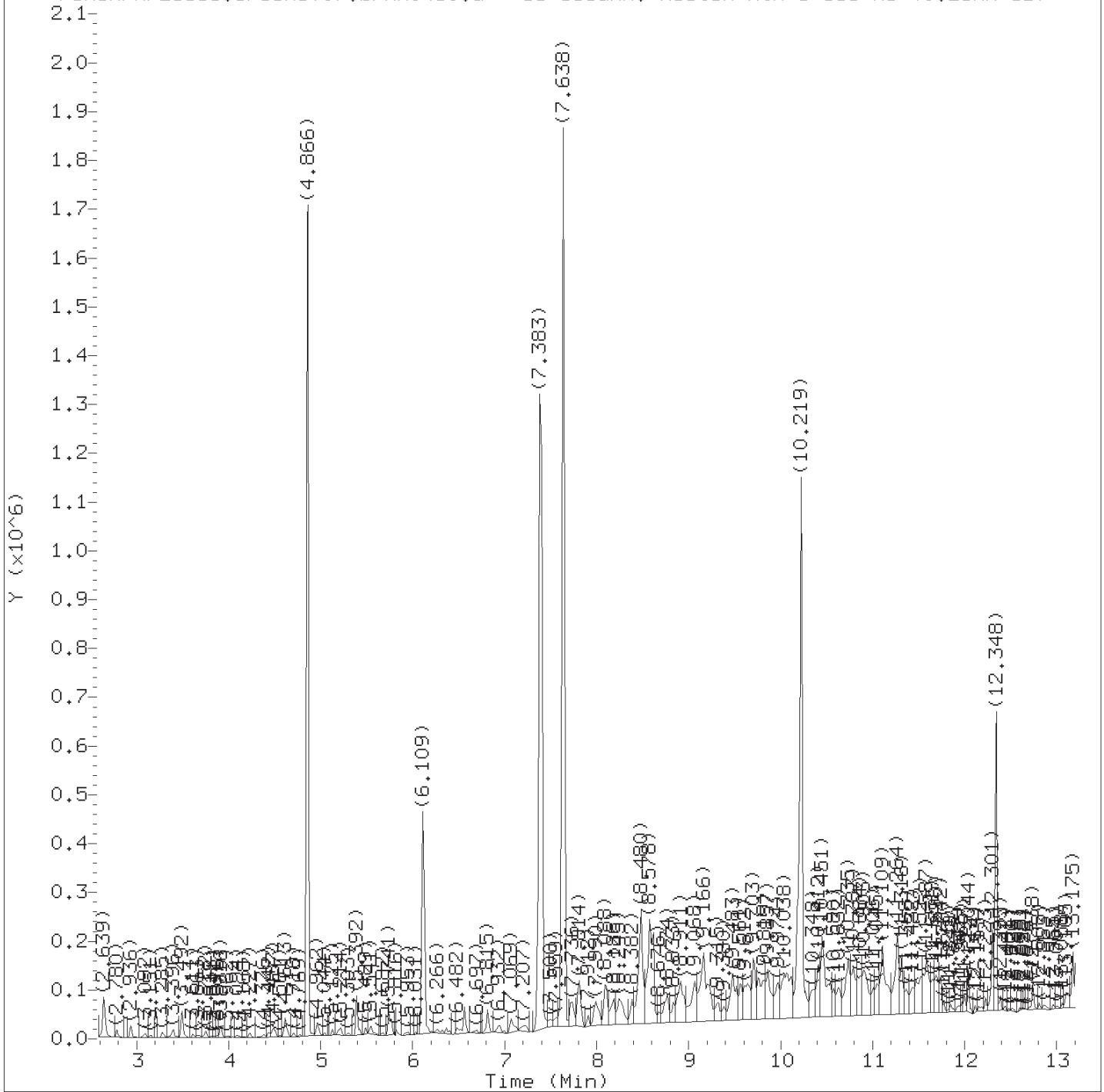
THIS SPACE  
WAS LEFT  
BLANK INTENTIONALLY

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Total number of targets = 21

Digitally signed by Kira N. Beck on 11/09/2018 at 12:00. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

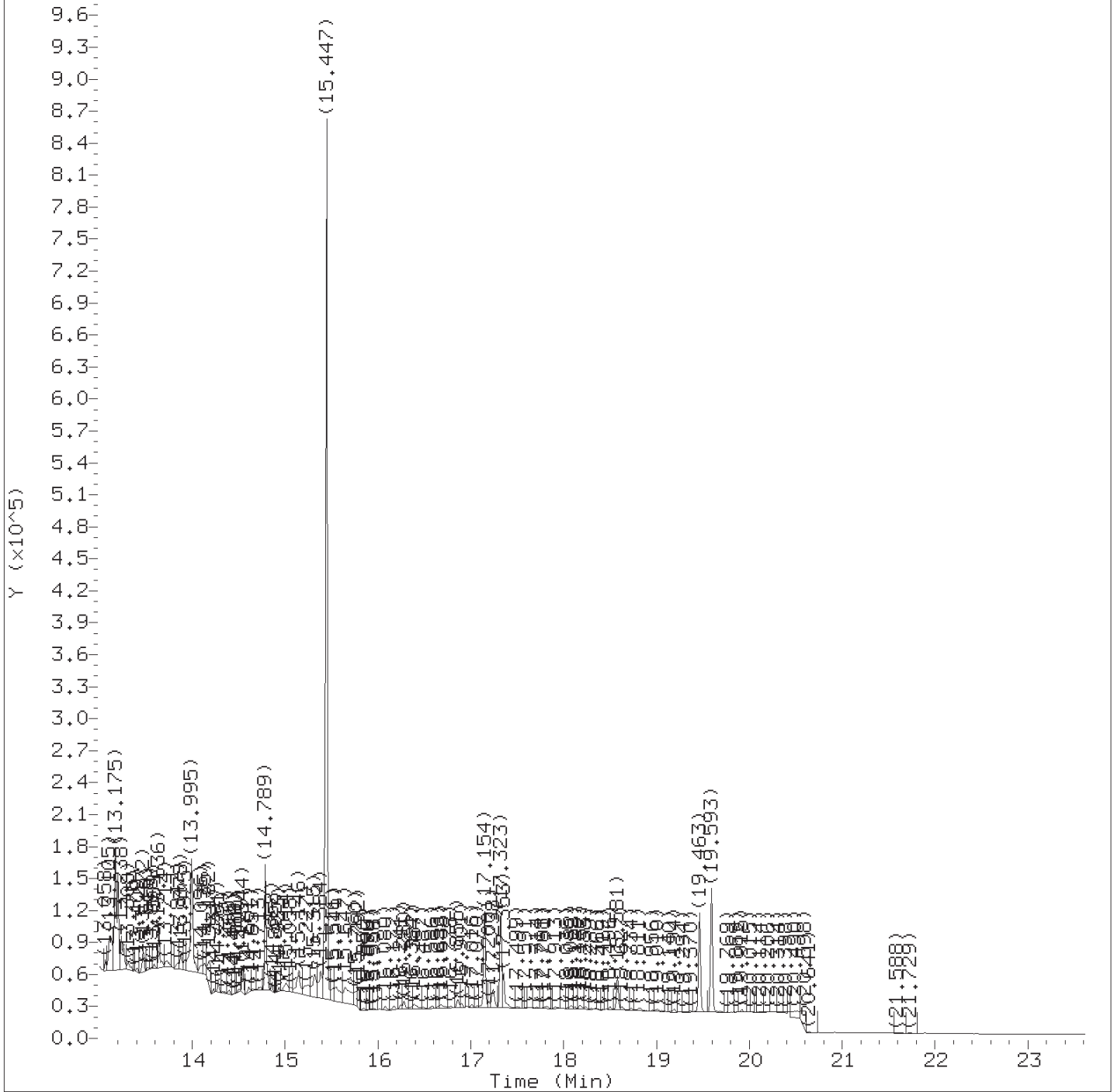
Sublist used: 25784

Sample Name: 15T-3

Lab Sample ID: 9881310

Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 09-NOV-2018 11:59

Sublist used: 25784

Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

Lab Sample ID: 9881310

Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316



Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

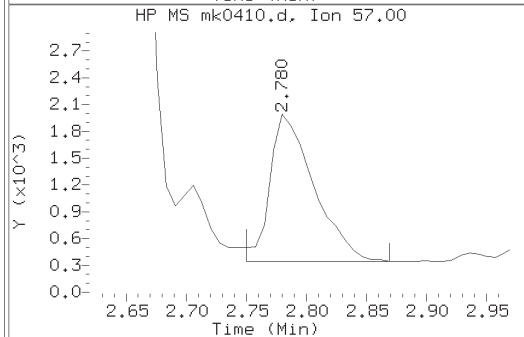
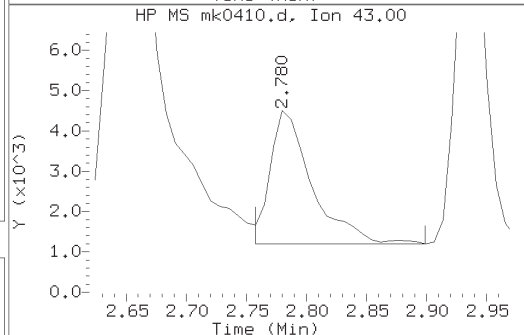
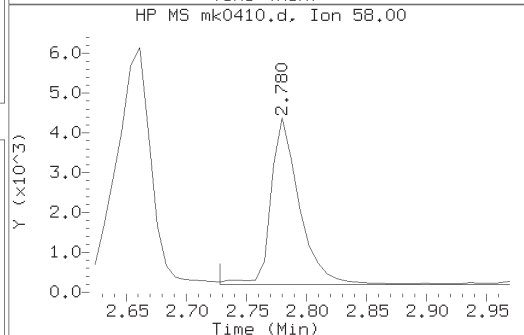
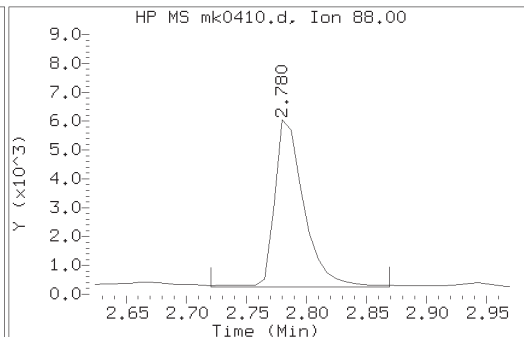
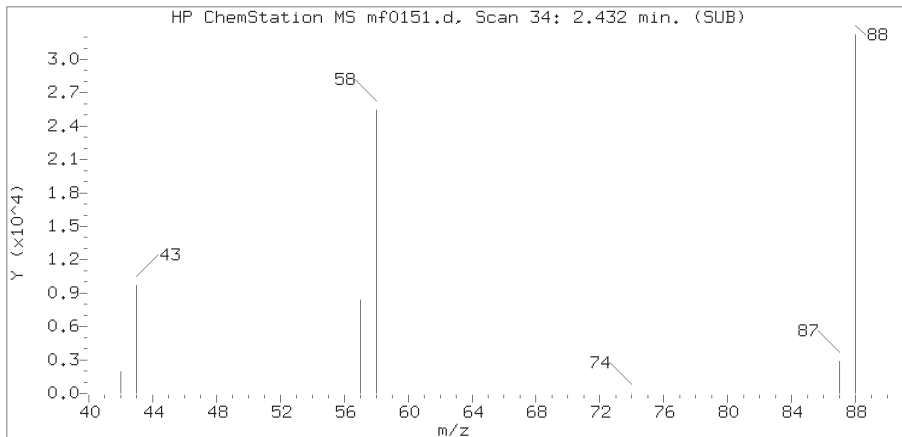
Sample Name: 15T-3

Lab Sample ID: 9881310

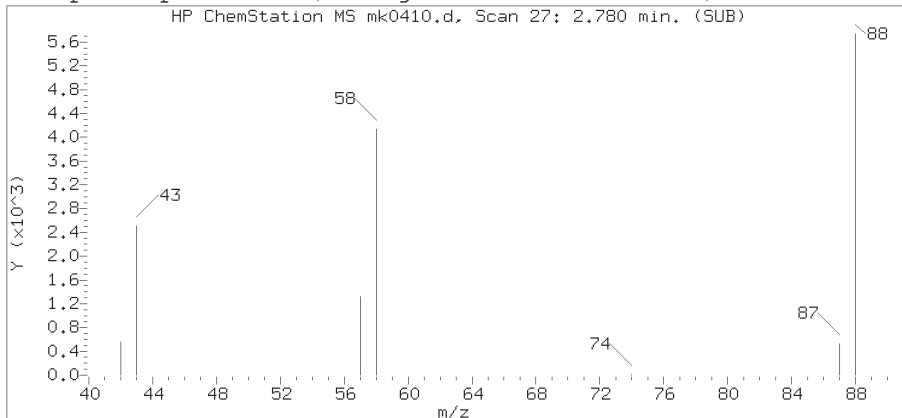
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.780	88	9917M	0.073
5)*1,4-Dichlorobenzene-d4	(1)	6.560	152	49261	0.250
6)*Naphthalene-d8	(2)	8.480	136	169657	0.250
7) Naphthalene	(2)	8.500	128	27170M	0.035
10)\$1-Methylnaphthalene-d10	(2)	9.703	152	69011M	0.224
13) Acenaphthylene	(3)	11.045	152	2214M	0.003
14)*Acenaphthene-d10	(3)	11.264	164	74199M	0.250
15) Acenaphthene	(3)	11.316	154	66310M	0.140
18) Fluorene	(3)	12.044	166	42061	0.076
20)*Phenanthrene-d10	(4)	13.175	188	111228	0.250
21) Phenanthrene	(4)	13.199	178	84186	0.141
22) Anthracene	(4)	13.269	178	12121	0.021
23) Di-n-butylphthalate	(4)	13.995	149	102468	0.157
24)\$Fluoranthene-d10	(4)	14.789	212	126057	0.289
25) Fluoranthene	(4)	14.814	202	15707	0.024
26) Pyrene	(5)	15.146	202	15848	0.018
29)*Chrysene-d12	(5)	17.154	240	97897	0.250
30) Chrysene	(5)	17.192	228	2520M	0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.323	149	124433M	0.225
36)\$Benzo(a)pyrene-d12	(6)	19.463	264	87611	0.226
38)*Perylene-d12	(6)	19.593	264	105671	0.250

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

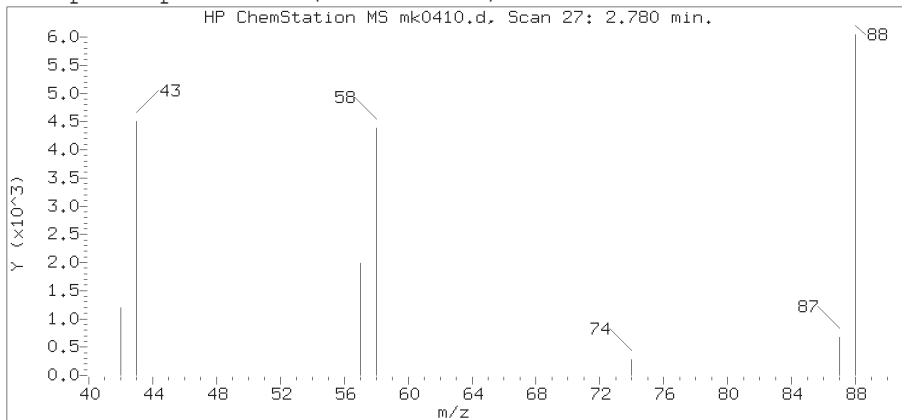
Reference Standard Spectrum for 1,4-Dioxane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

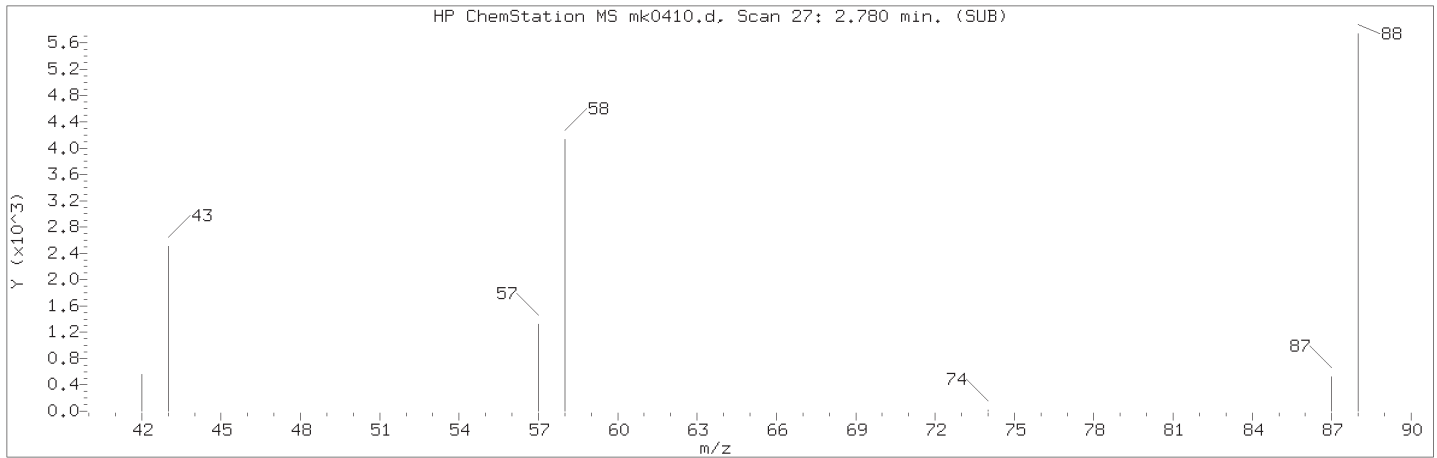
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

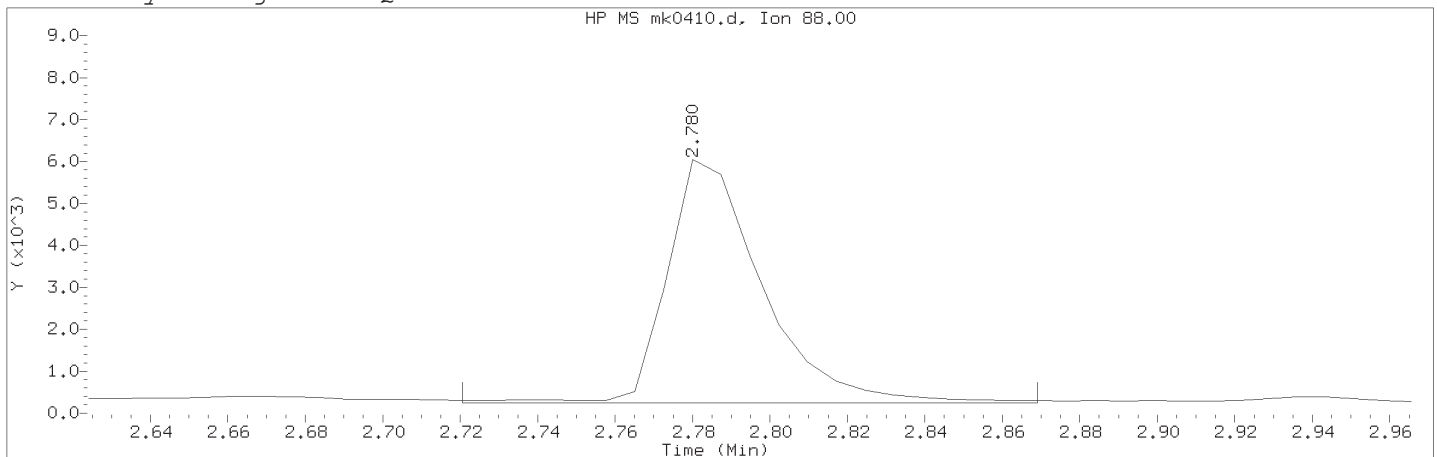
Lab Sample ID: 9881310

Compound Number : 1  
 Compound Name : 1,4-Dioxane  
 Scan Number : 27  
 Retention Time (minutes) : 2.780  
 Relative Retention Time : -0.00116  
 Quant Ion : 88.00  
 Area (flag) : 9917M  
 On-column Amount (ng/ul) : 0.0726

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3    Lab Sample ID: 9881310

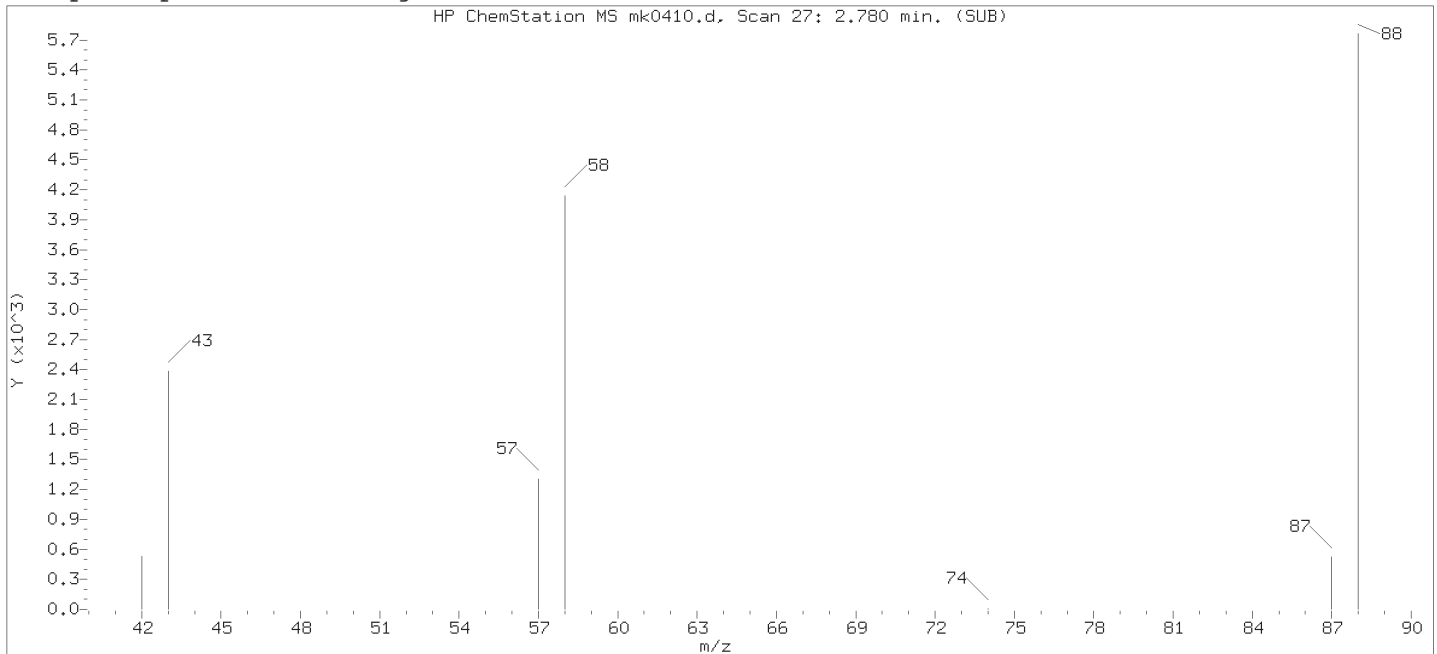
Compound Number    : 1  
Compound Name     : 1,4-Dioxane  
Scan Number     : 27  
Retention Time (minutes)     : 2.780  
Quant Ion     : 88.00  
Area (flag)    : 9917M  
On-column Amount (ng/ul)     : 0.0726  
Integration start scan     : 18    Integration stop scan: 38  
Y at integration start     : 249    Y at integration end: 249

Reason for manual integration: improper integration

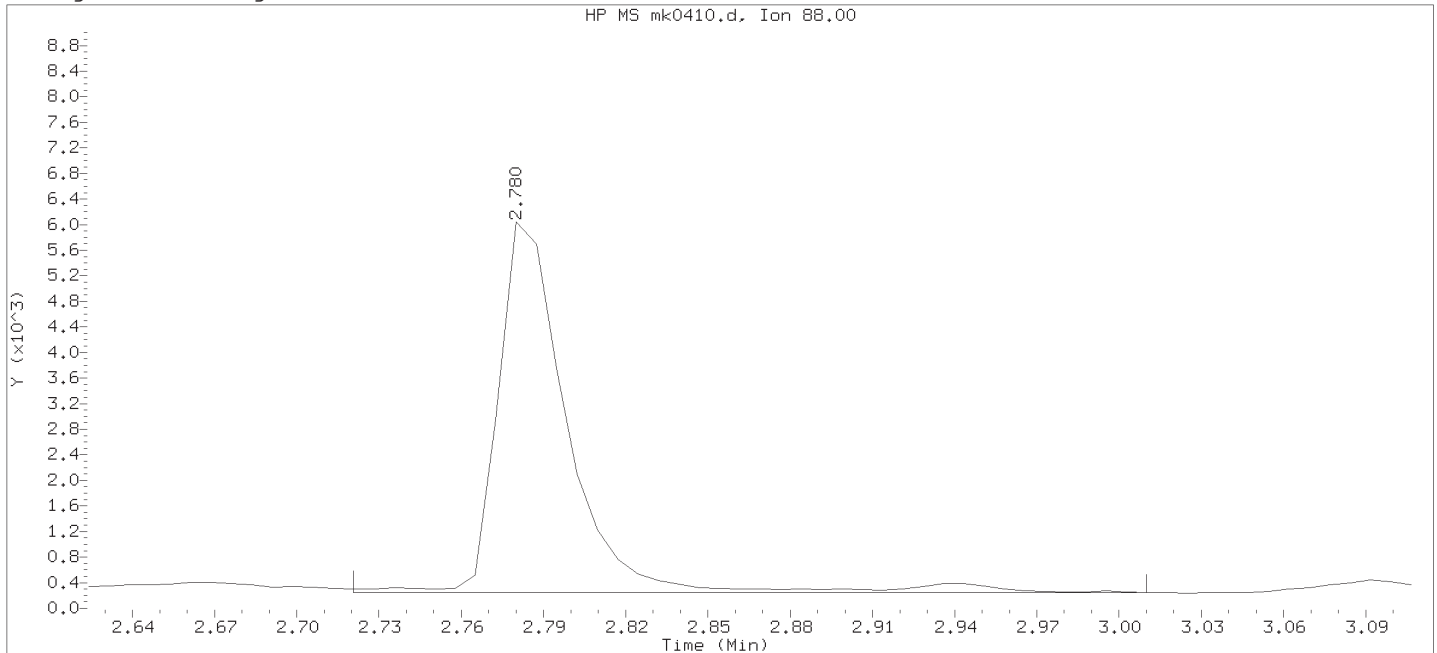
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

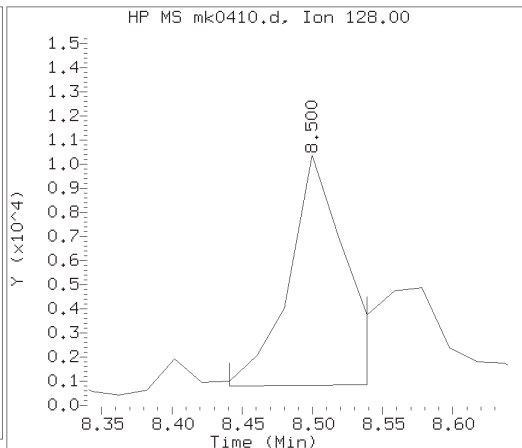
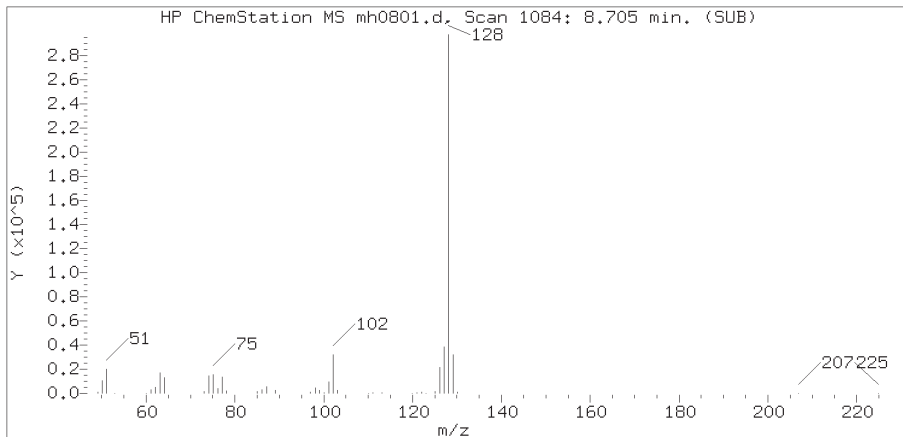
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:43 Unknown

Sample Name: 15T-3

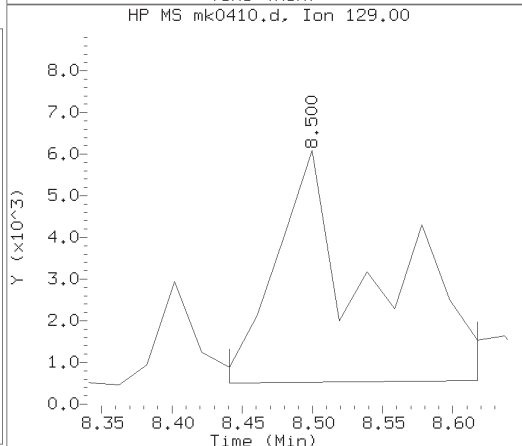
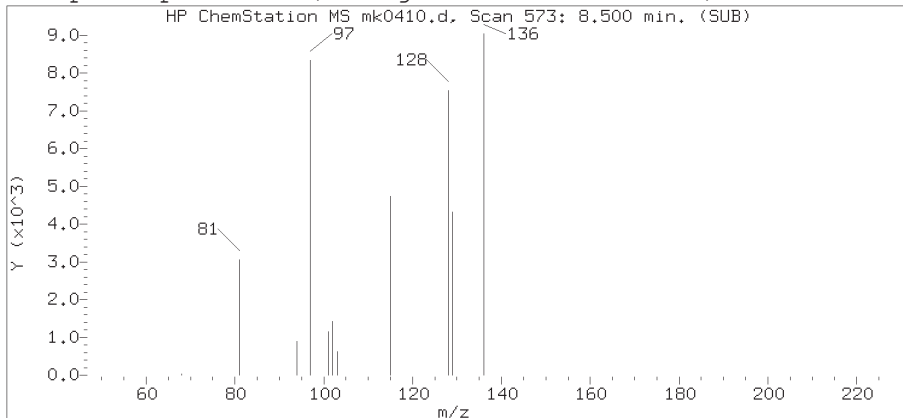
Lab Sample ID: 9881310

Compound Number	: 1	
Compound Name	: 1,4-Dioxane	
Scan Number	: 27	
Retention Time (minutes)	: 2.780	
Quant Ion	: 88.00	
Area	: 10312	
On-column Amount (ng/ul)	: 0.0755	
Integration start scan	: 18	Integration stop scan: 57
Y at integration start	: 249	Y at integration end: 249

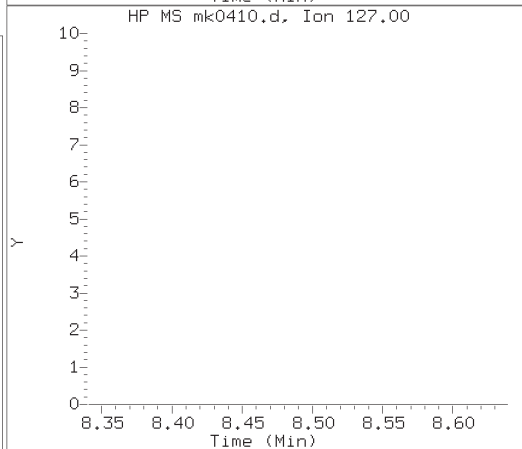
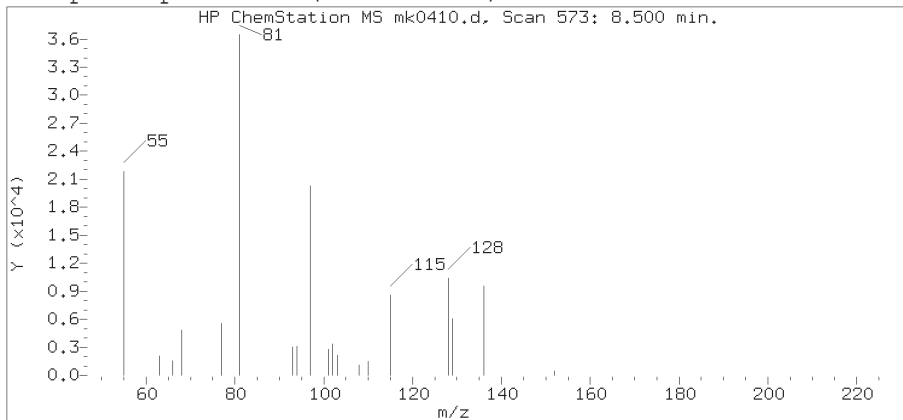
Reference Standard Spectrum for Naphthalene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

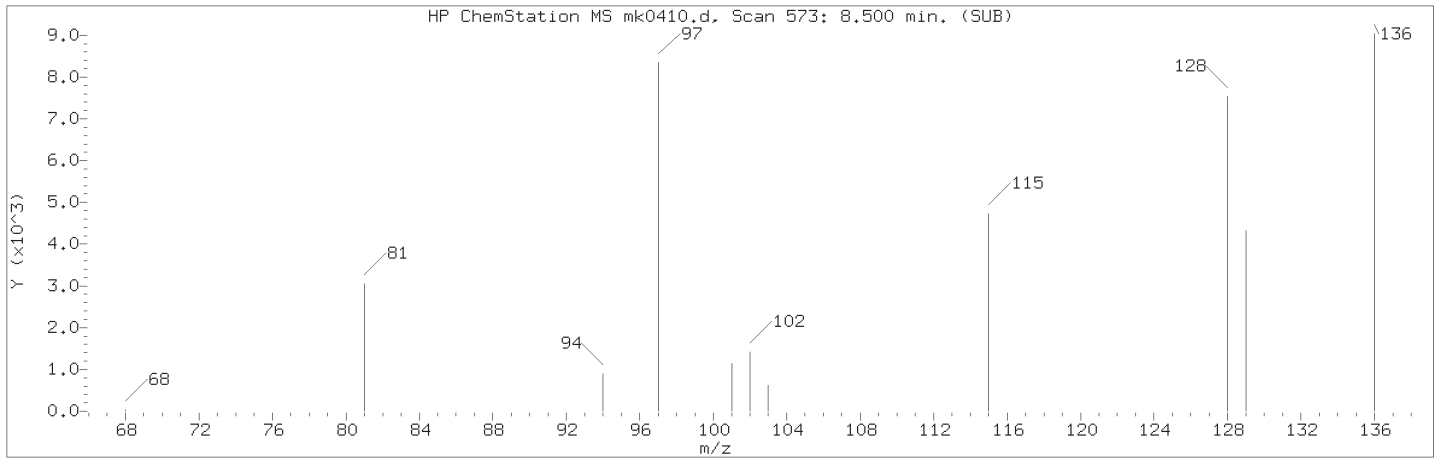
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

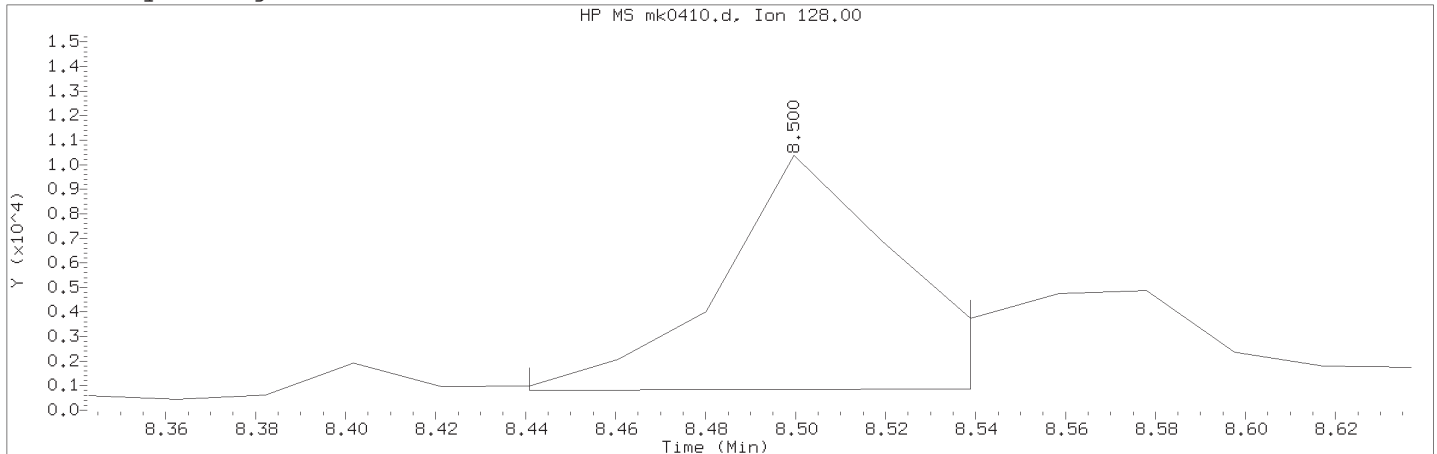
Lab Sample ID: 9881310

Compound Number : 7  
 Compound Name : Naphthalene  
 Scan Number : 573  
 Retention Time (minutes) : 8.500  
 Relative Retention Time : 0.00000  
 Quant Ion : 128.00  
 Area (flag) : 27170M  
 On-column Amount (ng/ul) : 0.0348

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3    Lab Sample ID: 9881310

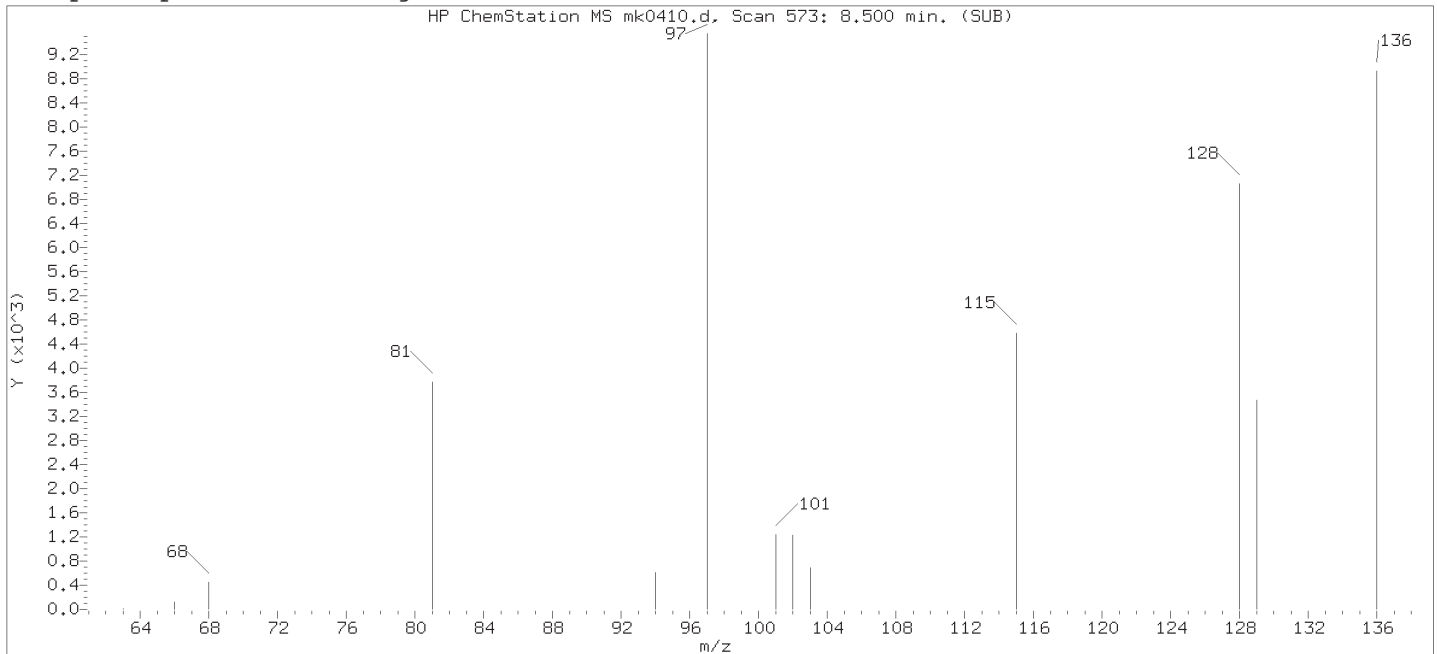
Compound Number                      : 7  
Compound Name                         : Naphthalene  
Scan Number                            : 573  
Retention Time (minutes)             : 8.500  
Quant Ion                                : 128.00  
Area (flag)                             : 27170M  
On-column Amount (ng/ul)            : 0.0348  
Integration start scan                : 569                      Integration stop scan: 574  
Y at integration start                : 809                      Y at integration end: 853

Reason for manual integration: improper integration

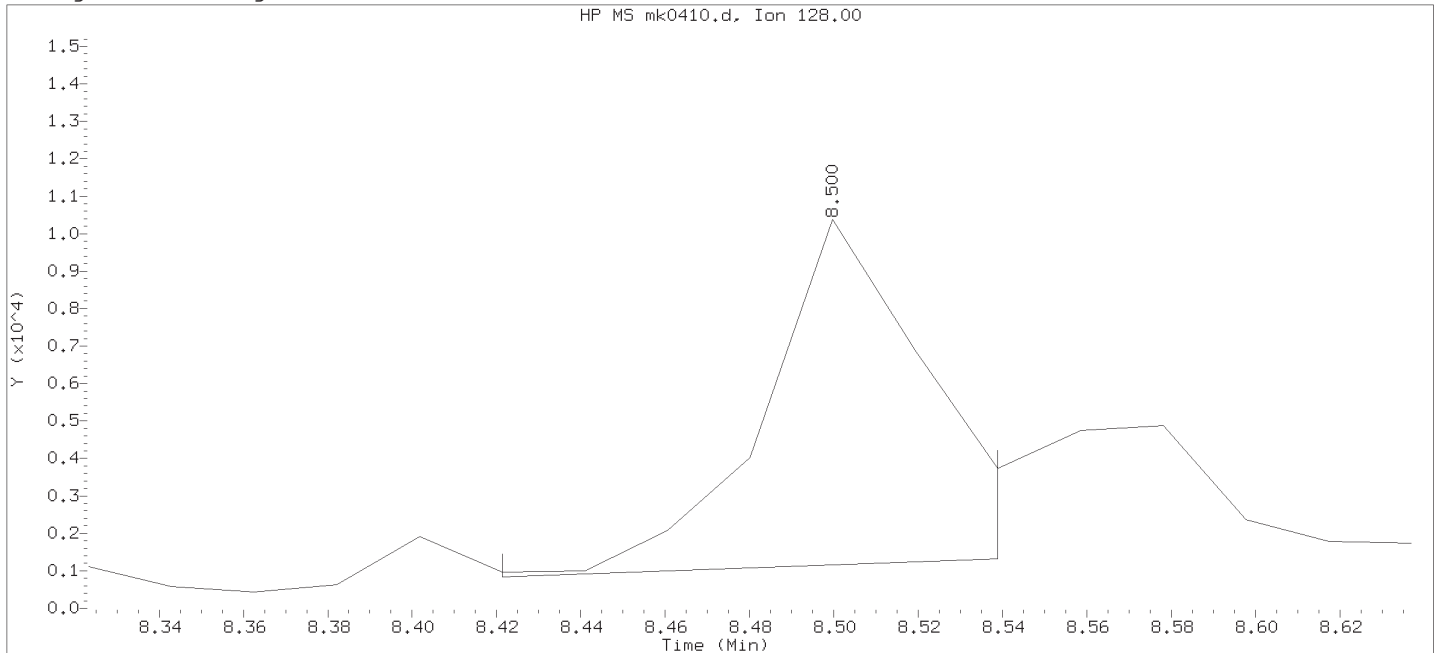
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

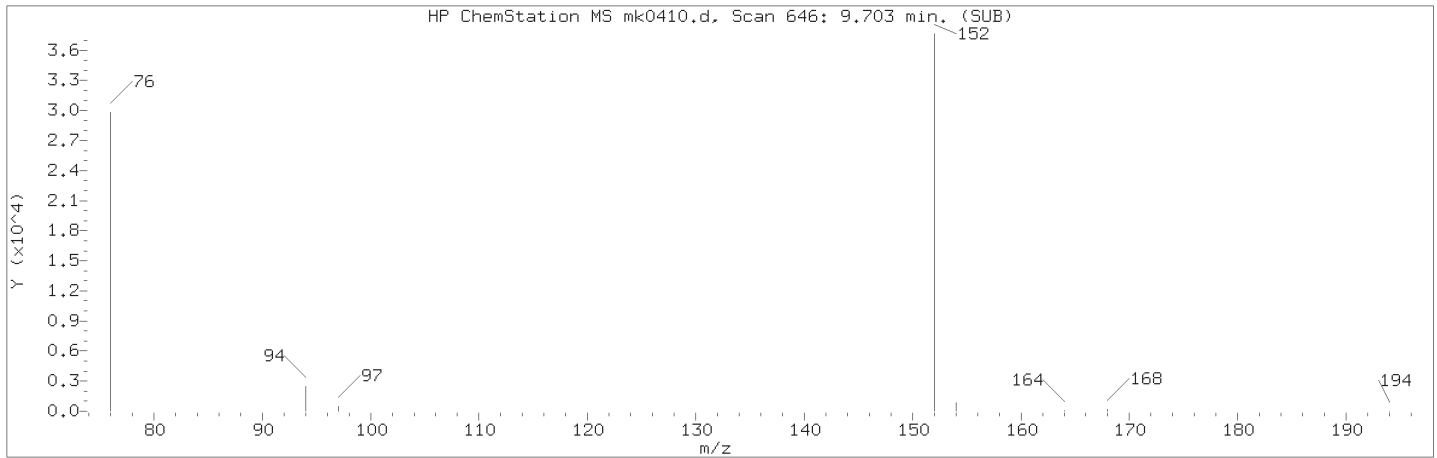
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:43 Unknown

Sample Name: 15T-3

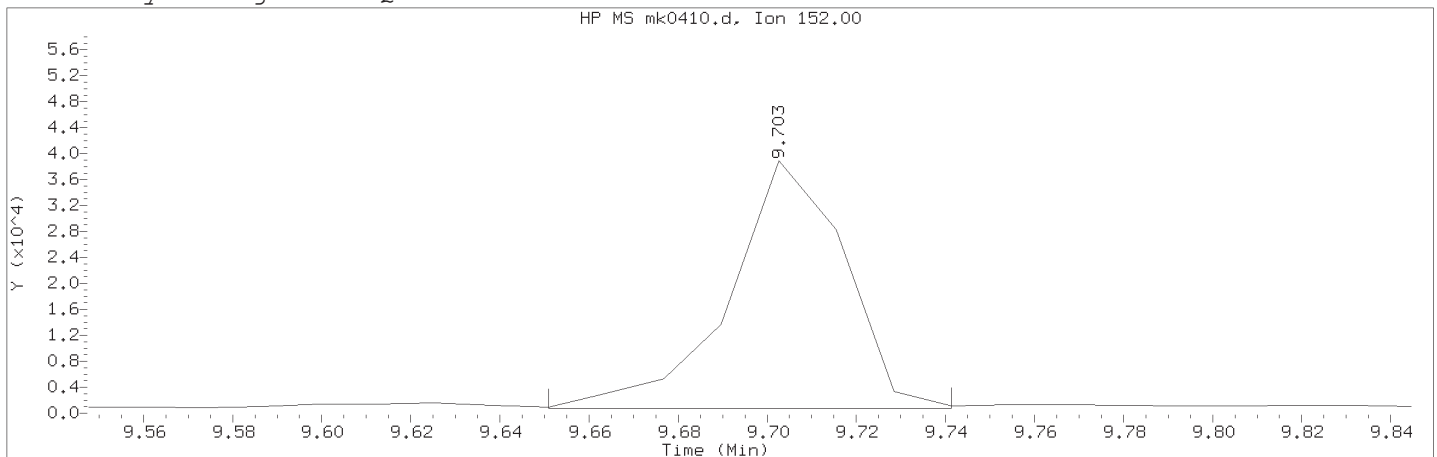
Lab Sample ID: 9881310

Compound Number : 7  
 Compound Name : Naphthalene  
 Scan Number : 573  
 Retention Time (minutes) : 8.500  
 Quant Ion : 128.00  
 Area : 23742  
 On-column Amount (ng/ul) : 0.0304  
 Integration start scan : 568 Integration stop scan: 574  
 Y at integration start : 844 Y at integration end: 1327

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3    Lab Sample ID: 9881310

Compound Number                      : 10  
Compound Name                         : 1-Methylnaphthalene-d10  
Scan Number                            : 646  
Retention Time (minutes)             : 9.703  
Quant Ion                                : 152.00  
Area (flag)                             : 69011M  
On-column Amount (ng/ul)            : 0.2236  
Integration start scan                : 641                      Integration stop scan: 648  
Y at integration start                : 711                      Y at integration end: 711

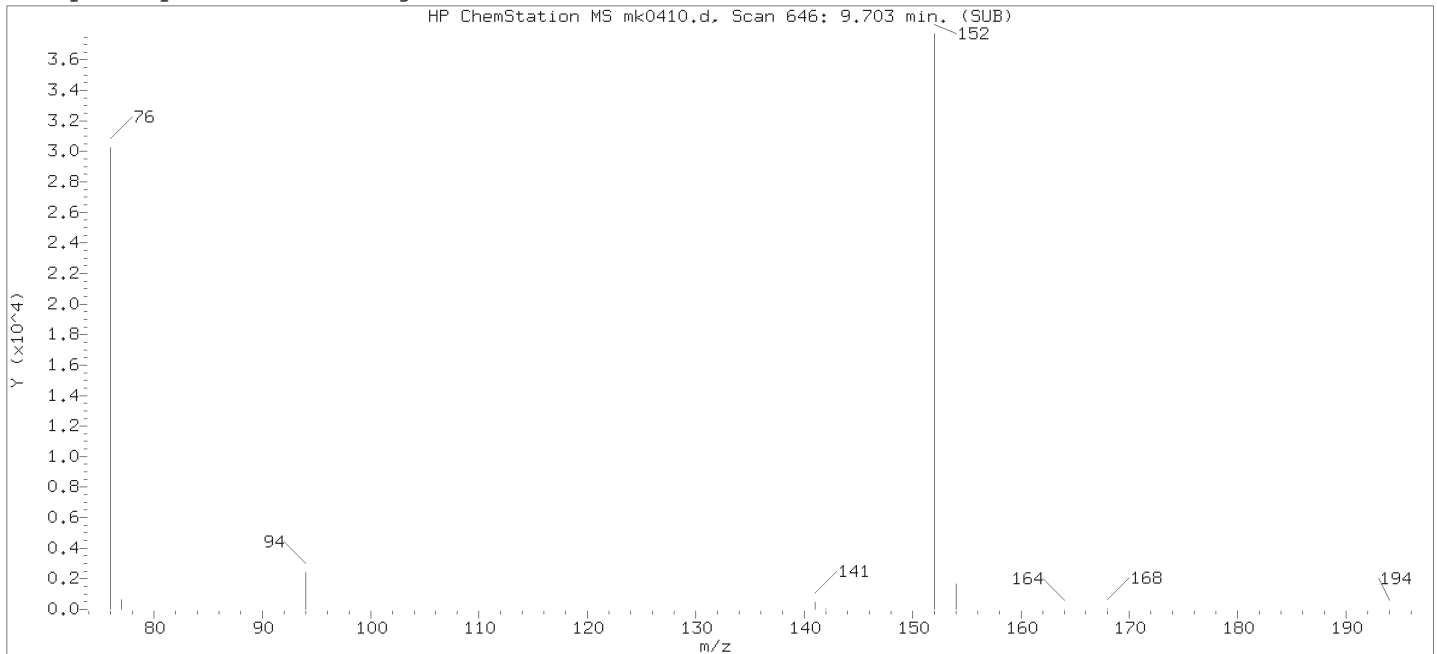
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

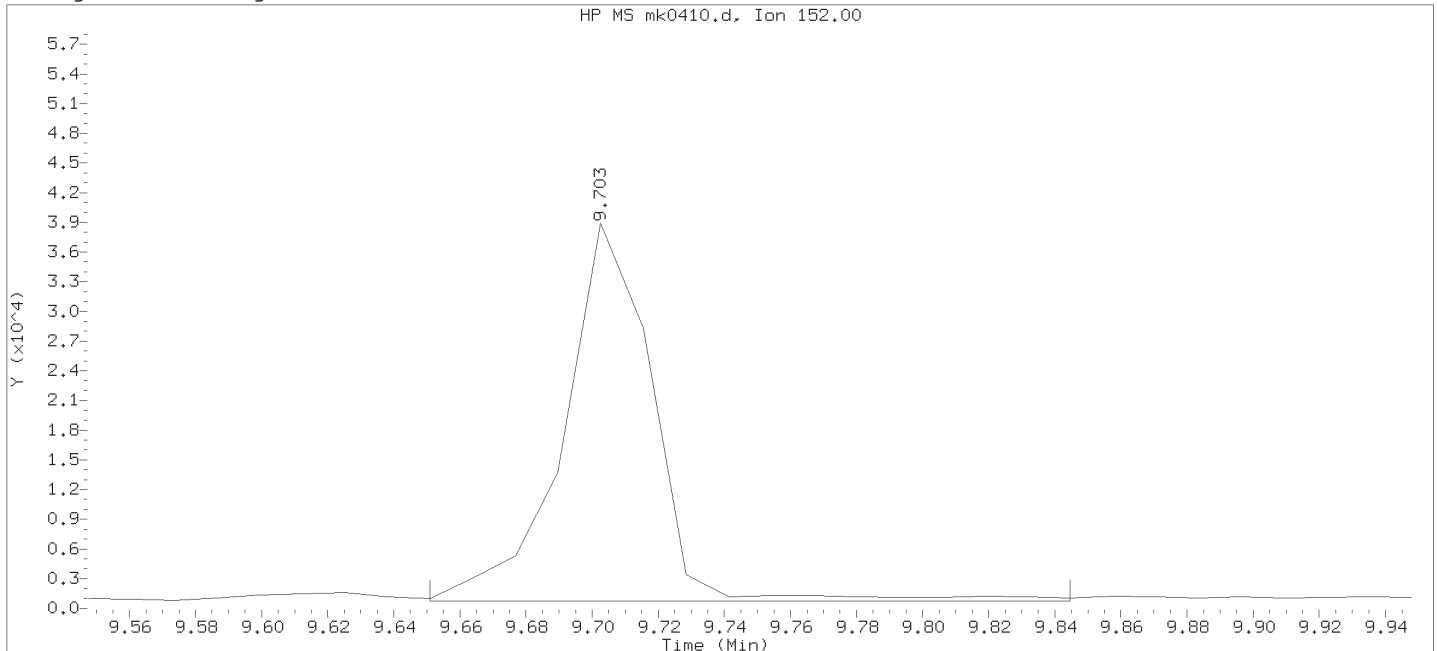
Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

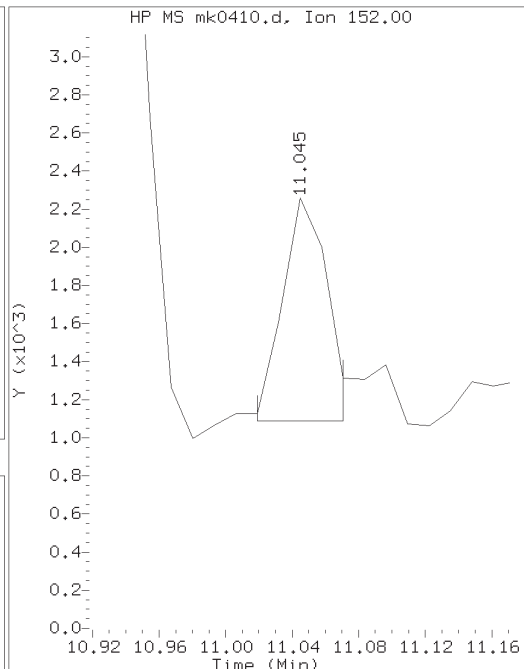
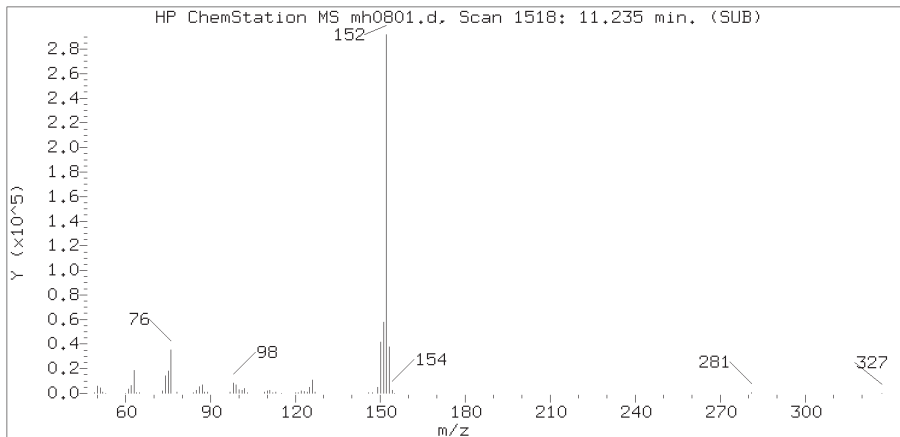
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:43 Unknown

Sample Name: 15T-3

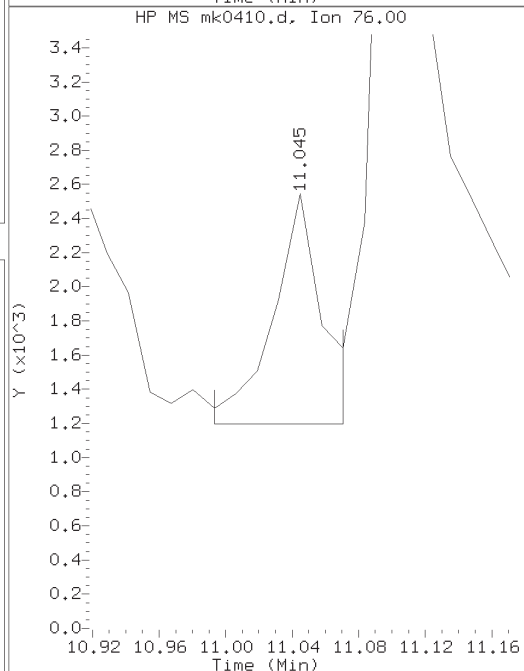
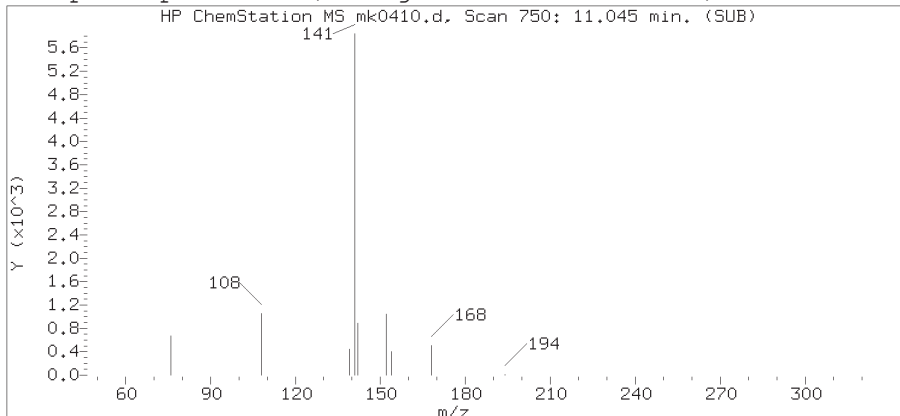
Lab Sample ID: 9881310

Compound Number	: 10	
Compound Name	: 1-Methylnaphthalene-d10	
Scan Number	: 646	
Retention Time (minutes)	: 9.703	
Quant Ion	: 152.00	
Area	: 71620	
On-column Amount (ng/ul)	: 0.2321	
Integration start scan	: 641	Integration stop scan: 656
Y at integration start	: 711	Y at integration end: 711

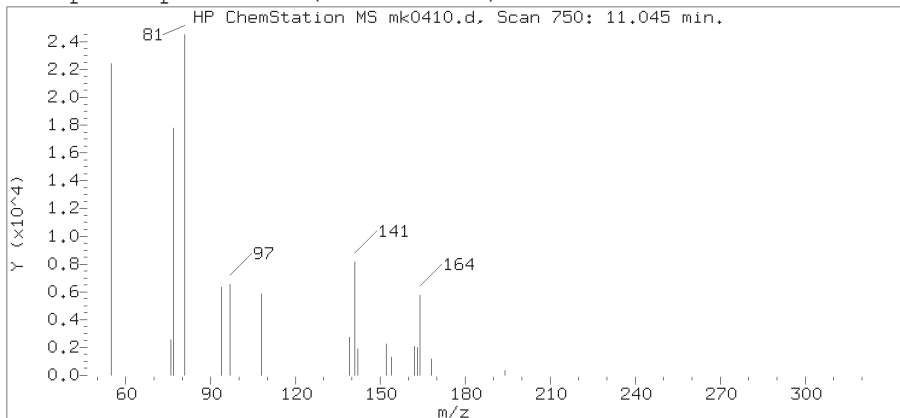
Reference Standard Spectrum for Acenaphthylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

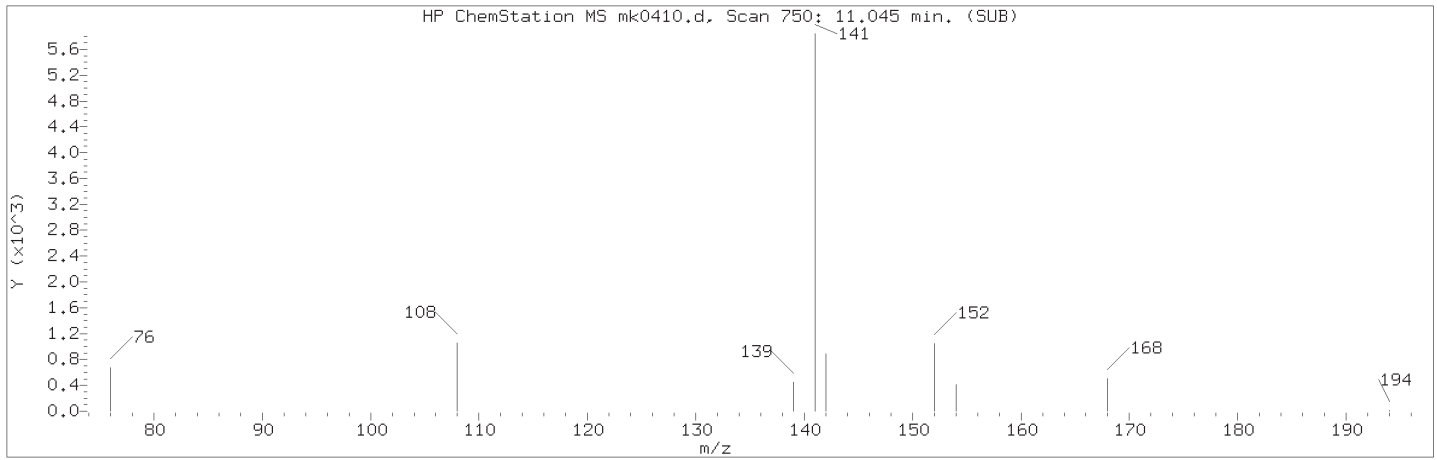
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

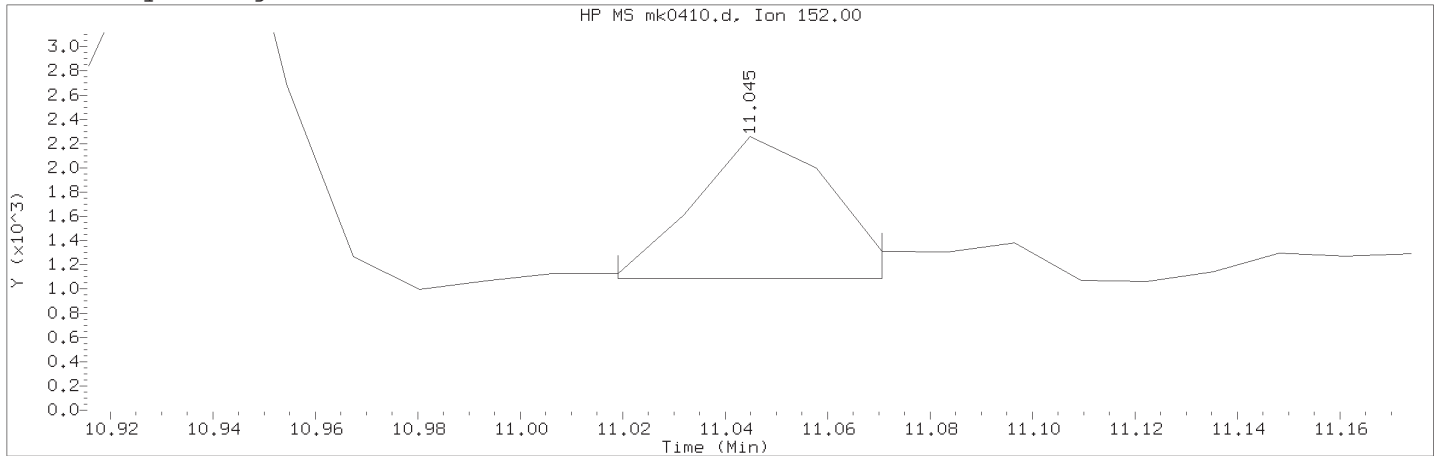
Lab Sample ID: 9881310

Compound Number : 13  
 Compound Name : Acenaphthylene  
 Scan Number : 750  
 Retention Time (minutes) : 11.045  
 Relative Retention Time :-0.00115  
 Quant Ion : 152.00  
 Area (flag) : 2214M  
 On-column Amount (ng/ul) : 0.0028

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3    Lab Sample ID: 9881310

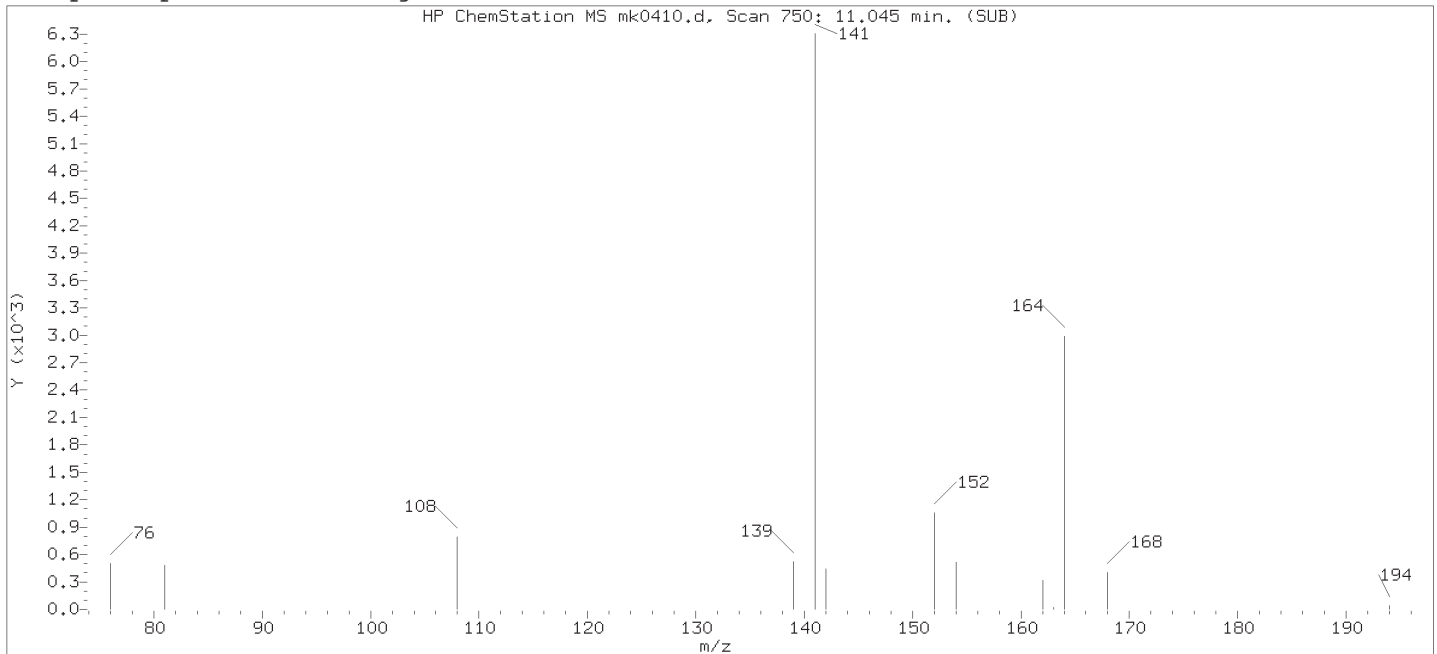
Compound Number                      : 13  
Compound Name                         : Acenaphthylene  
Scan Number                            : 750  
Retention Time (minutes)             : 11.045  
Quant Ion                                : 152.00  
Area (flag)                             : 2214M  
On-column Amount (ng/ul)            : 0.0028  
Integration start scan                : 747                      Integration stop scan: 751  
Y at integration start                : 1089                    Y at integration end: 1089

Reason for manual integration: improper integration

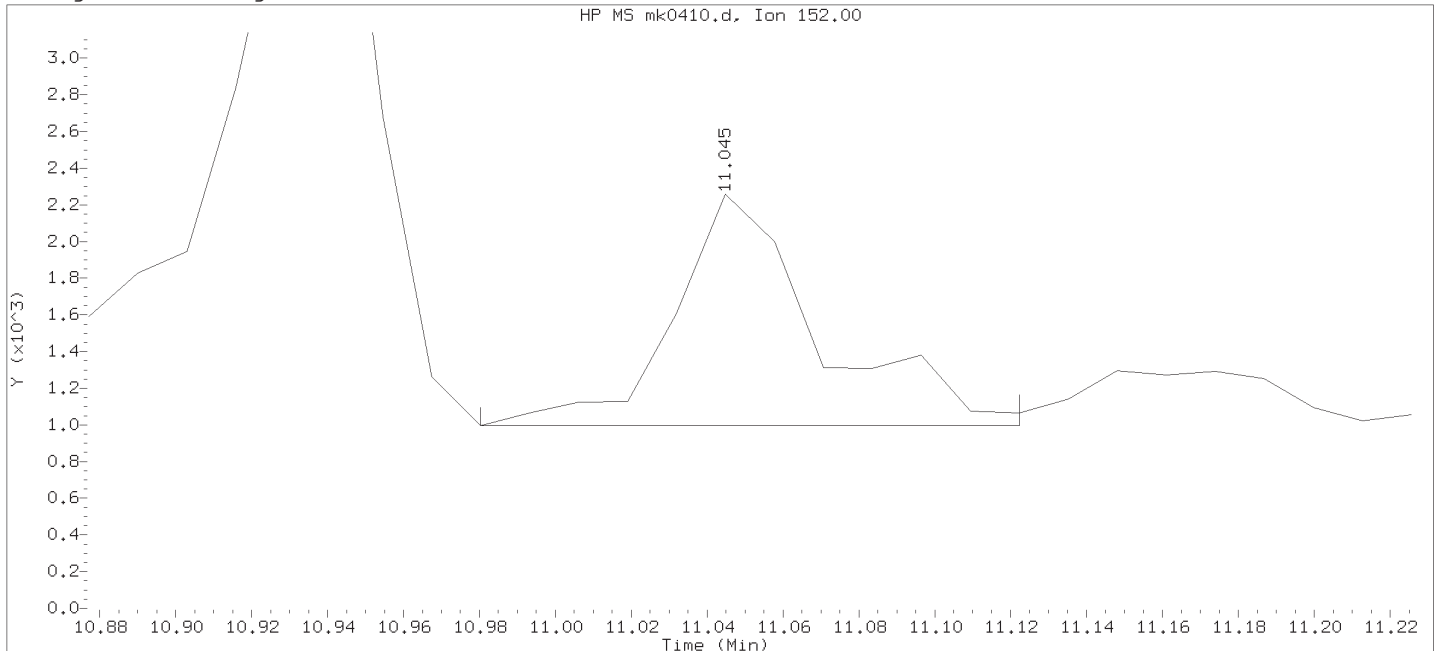
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
Analyst ID: ceb05247

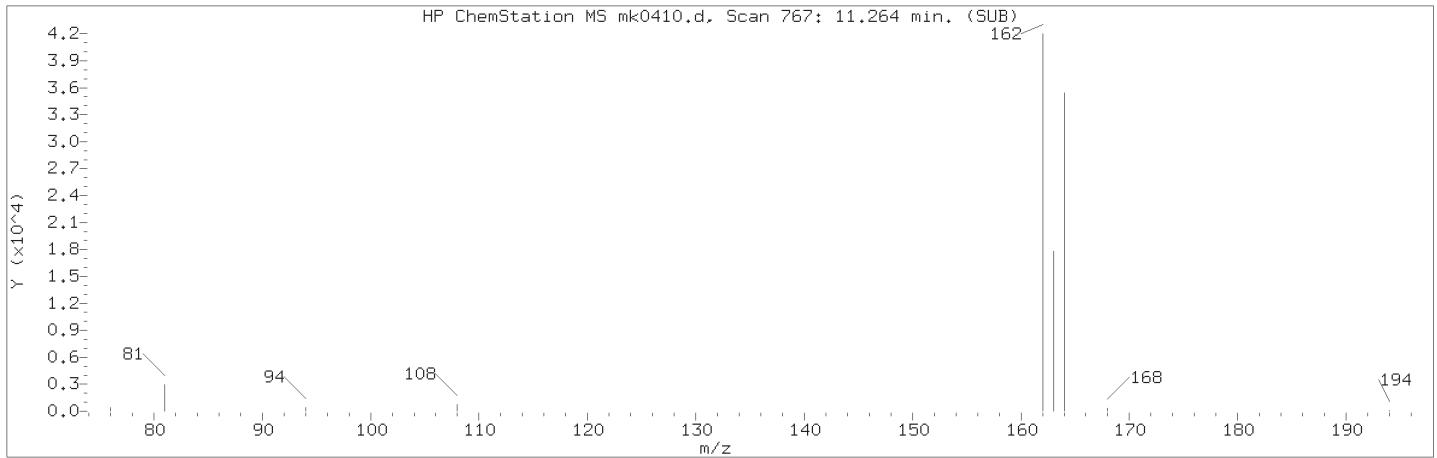
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:43 Unknown

Sample Name: 15T-3

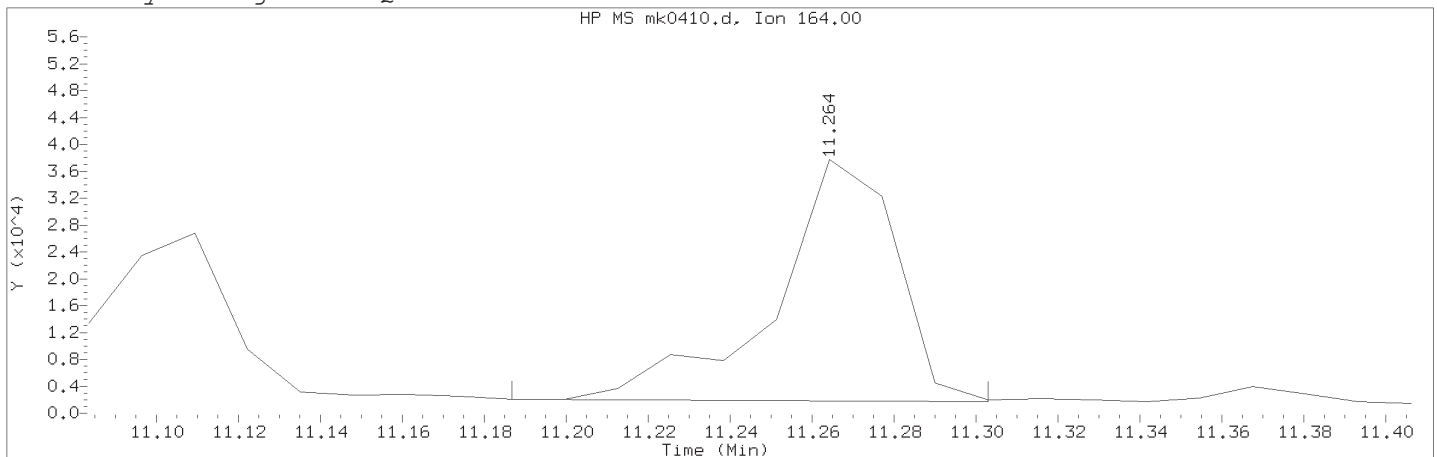
Lab Sample ID: 9881310

Compound Number : 13  
Compound Name : Acenaphthylene  
Scan Number : 750  
Retention Time (minutes) : 11.045  
Quant Ion : 152.00  
Area : 3354  
On-column Amount (ng/ul) : 0.0041  
Integration start scan : 744 Integration stop scan: 755  
Y at integration start : 996 Y at integration end: 996

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3    Lab Sample ID: 9881310

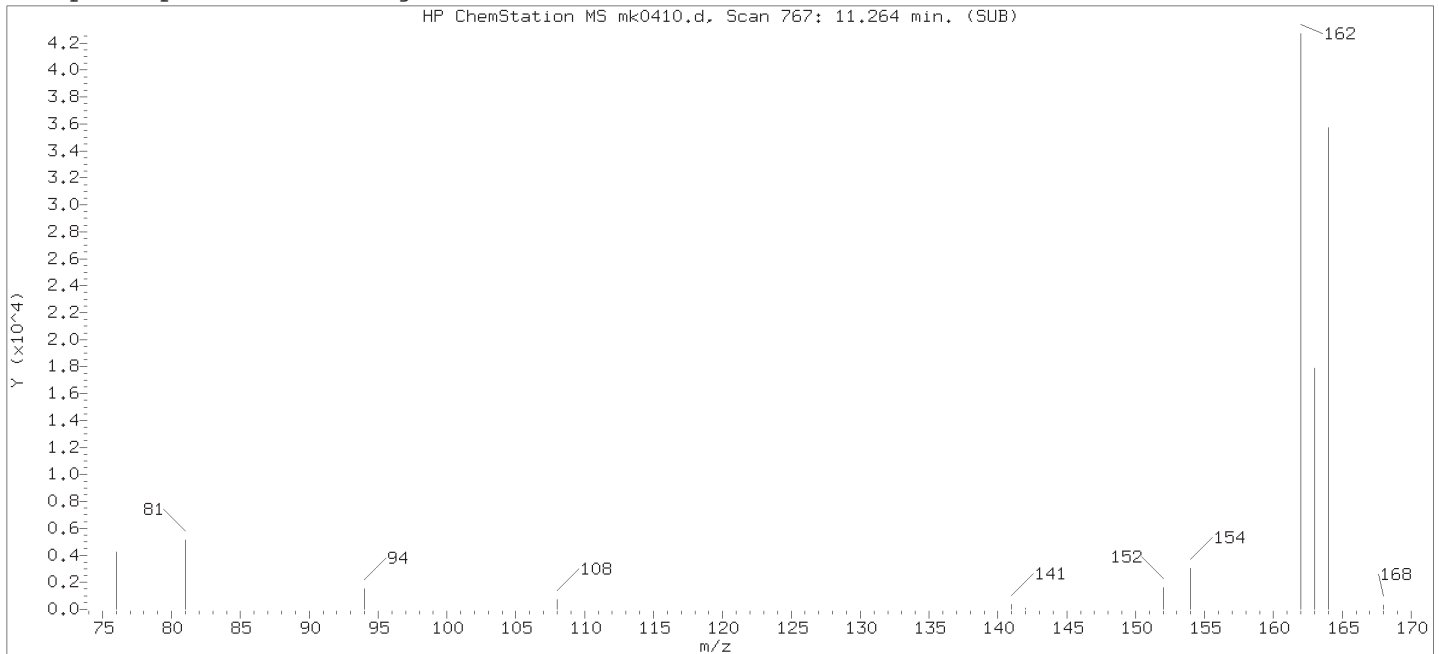
Compound Number                      : 14  
Compound Name                         : Acenaphthene-d10  
Scan Number                            : 767  
Retention Time (minutes)             : 11.264  
Quant Ion                                : 164.00  
Area (flag)                             : 74199M  
On-column Amount (ng/ul)            : 0.2500  
Integration start scan                : 760                      Integration stop scan: 769  
Y at integration start                : 2067                    Y at integration end: 1728

Reason for manual integration: improper integration

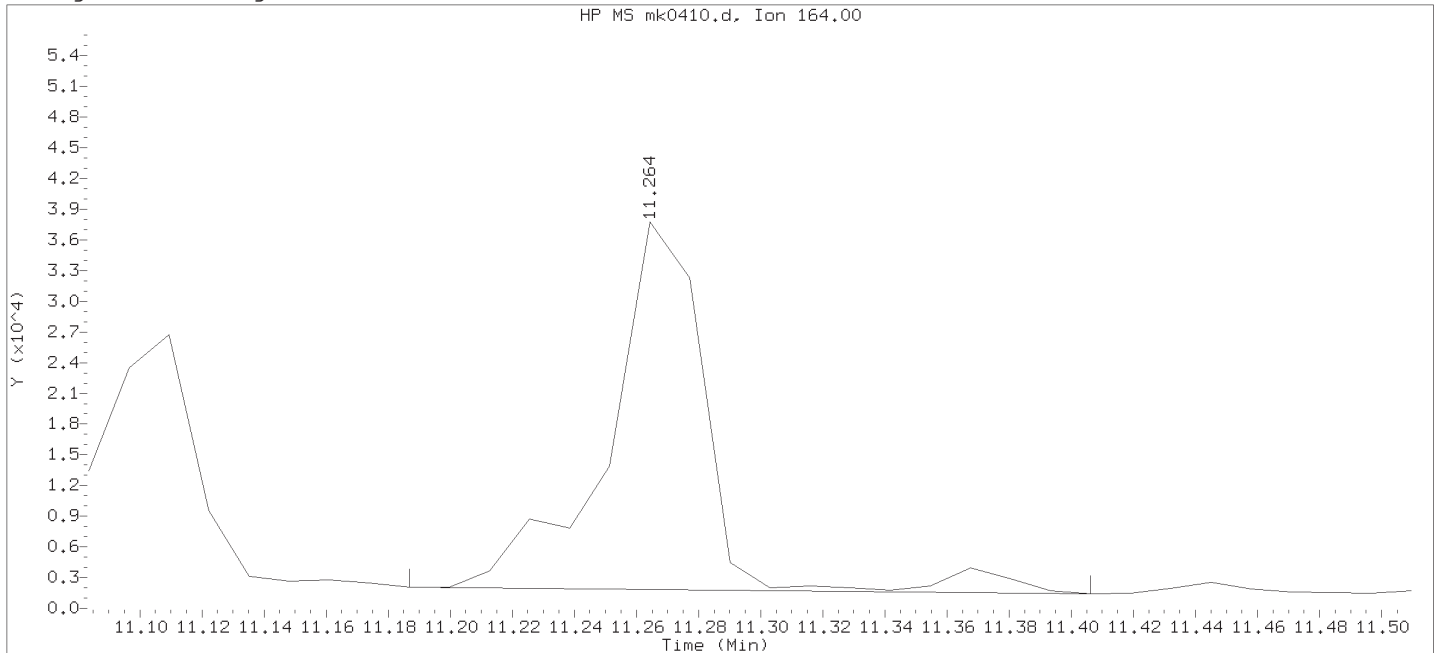
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

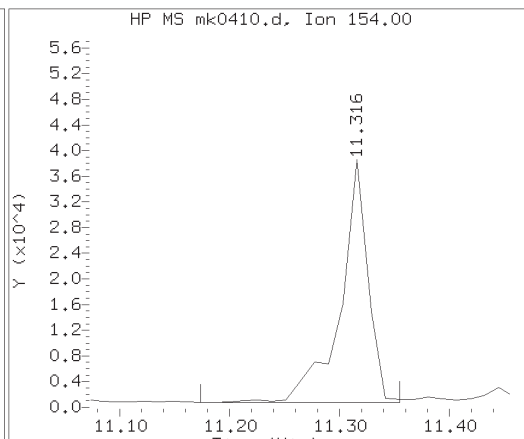
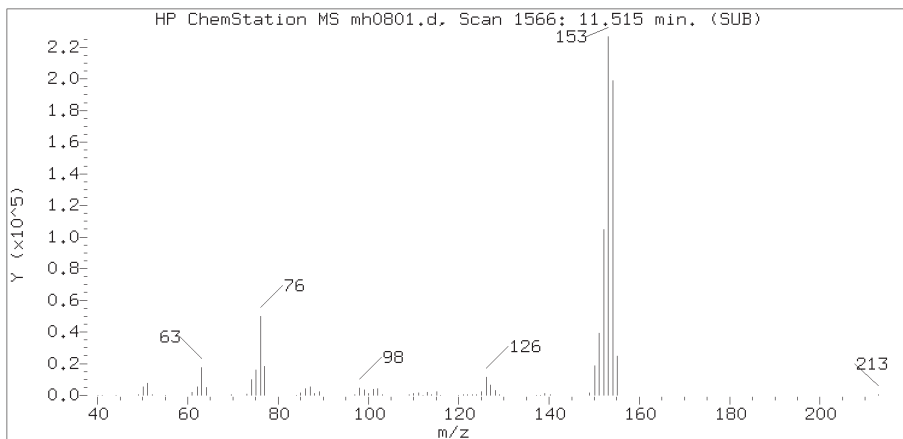
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 22:43 Unknown

Sample Name: 15T-3

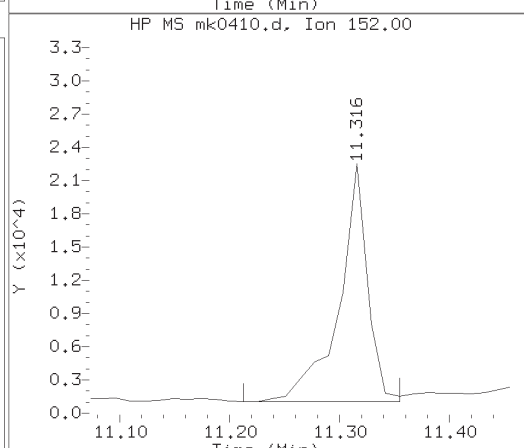
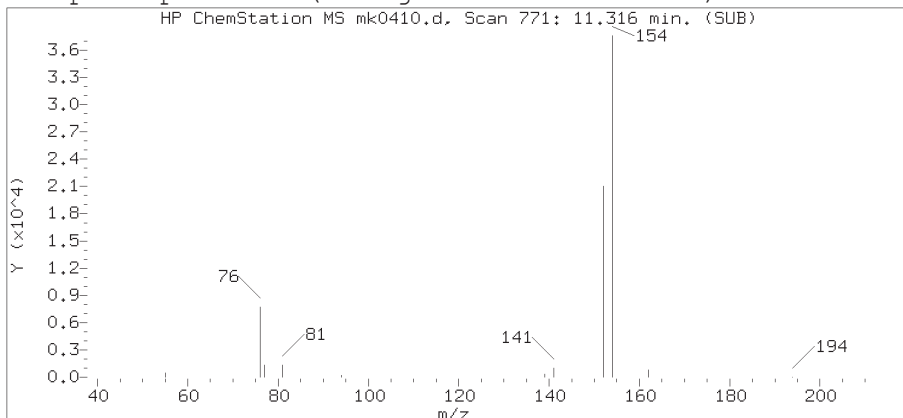
Lab Sample ID: 9881310

Compound Number : 14  
 Compound Name : Acenaphthene-d10  
 Scan Number : 767  
 Retention Time (minutes) : 11.264  
 Quant Ion : 164.00  
 Area : 78164  
 On-column Amount (ng/ul) : 0.2500  
 Integration start scan : 760 Integration stop scan: 777  
 Y at integration start : 2067 Y at integration end: 1425

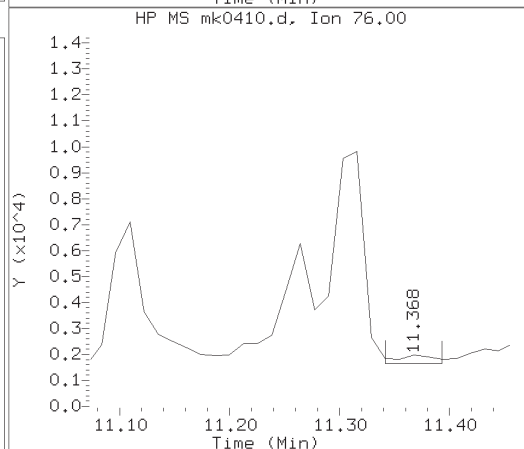
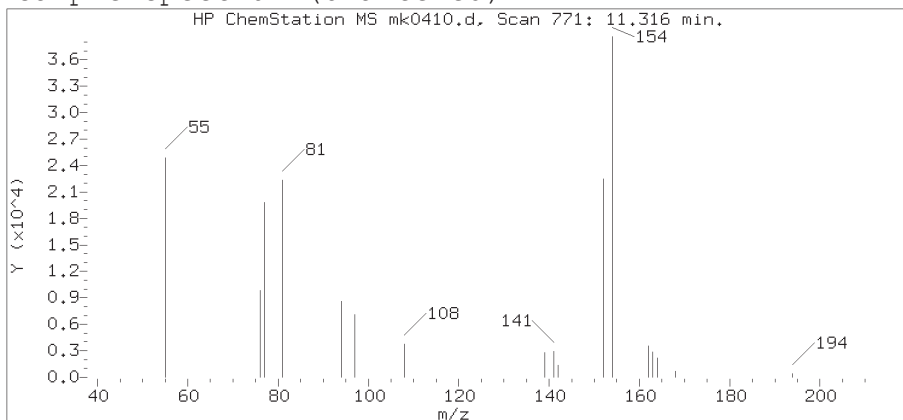
Reference Standard Spectrum for Acenaphthene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

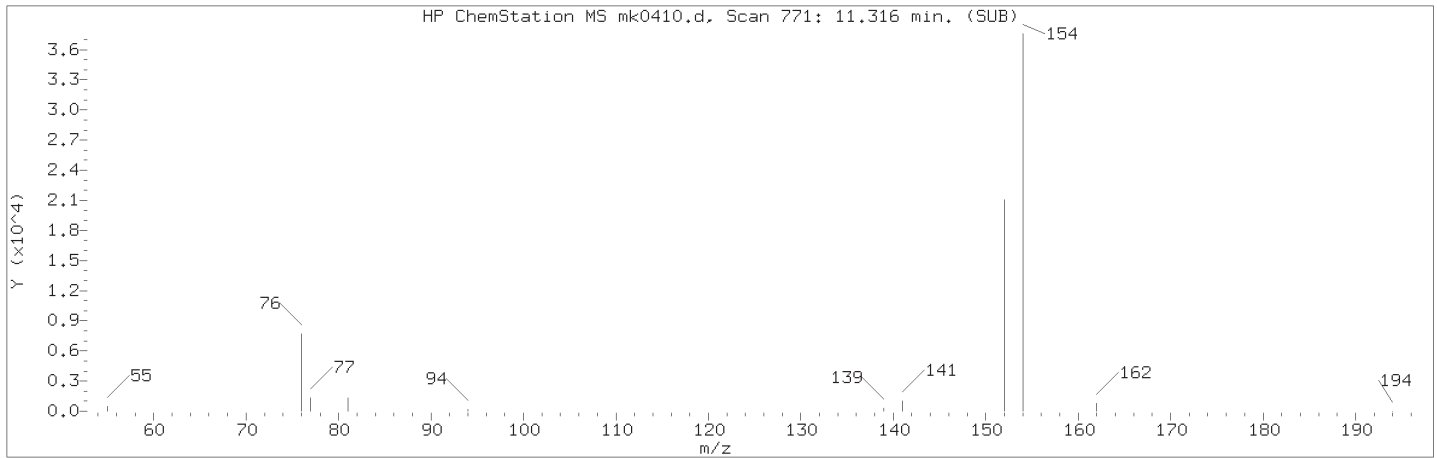
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

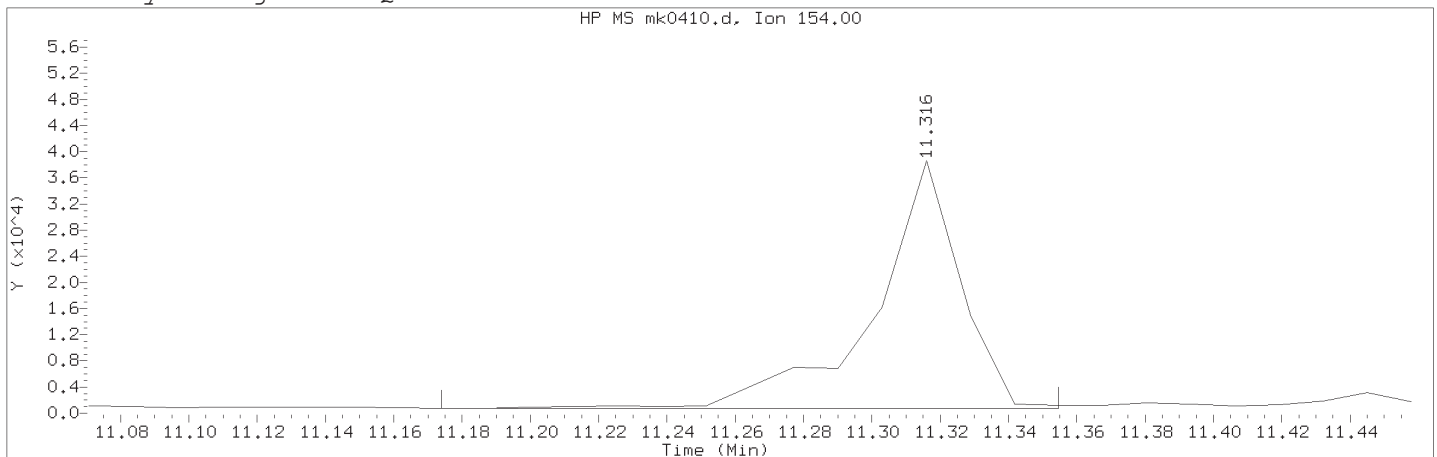
Lab Sample ID: 9881310

Compound Number : 15  
 Compound Name : Acenaphthene  
 Scan Number : 771  
 Retention Time (minutes) : 11.316  
 Relative Retention Time : 0.00000  
 Quant Ion : 154.00  
 Area (flag) : 66310M  
 On-column Amount (ng/ul) : 0.1397

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3    Lab Sample ID: 9881310

Compound Number                      : 15  
Compound Name                         : Acenaphthene  
Scan Number                            : 771  
Retention Time (minutes)             : 11.316  
Quant Ion                                : 154.00  
Area (flag)                            : 66310M  
On-column Amount (ng/ul)            : 0.1397  
Integration start scan                : 759                      Integration stop scan: 773  
Y at integration start                : 750                      Y at integration end: 750

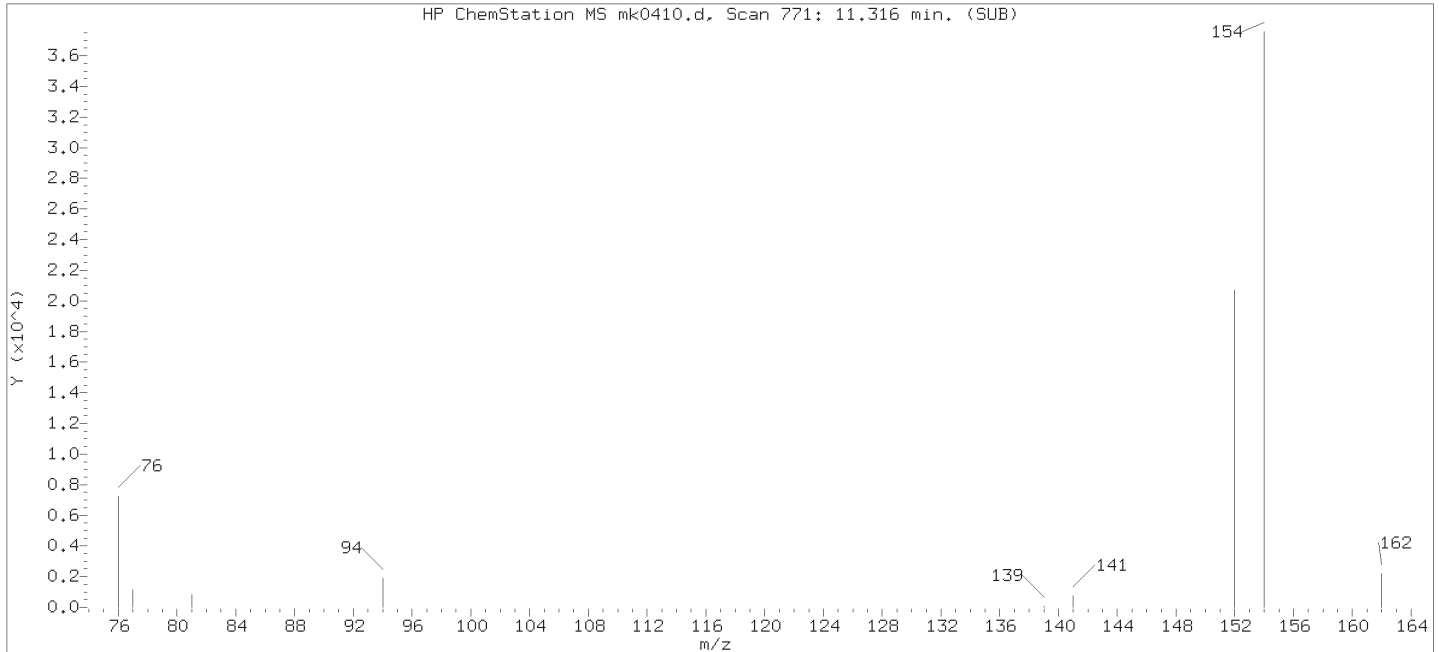
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

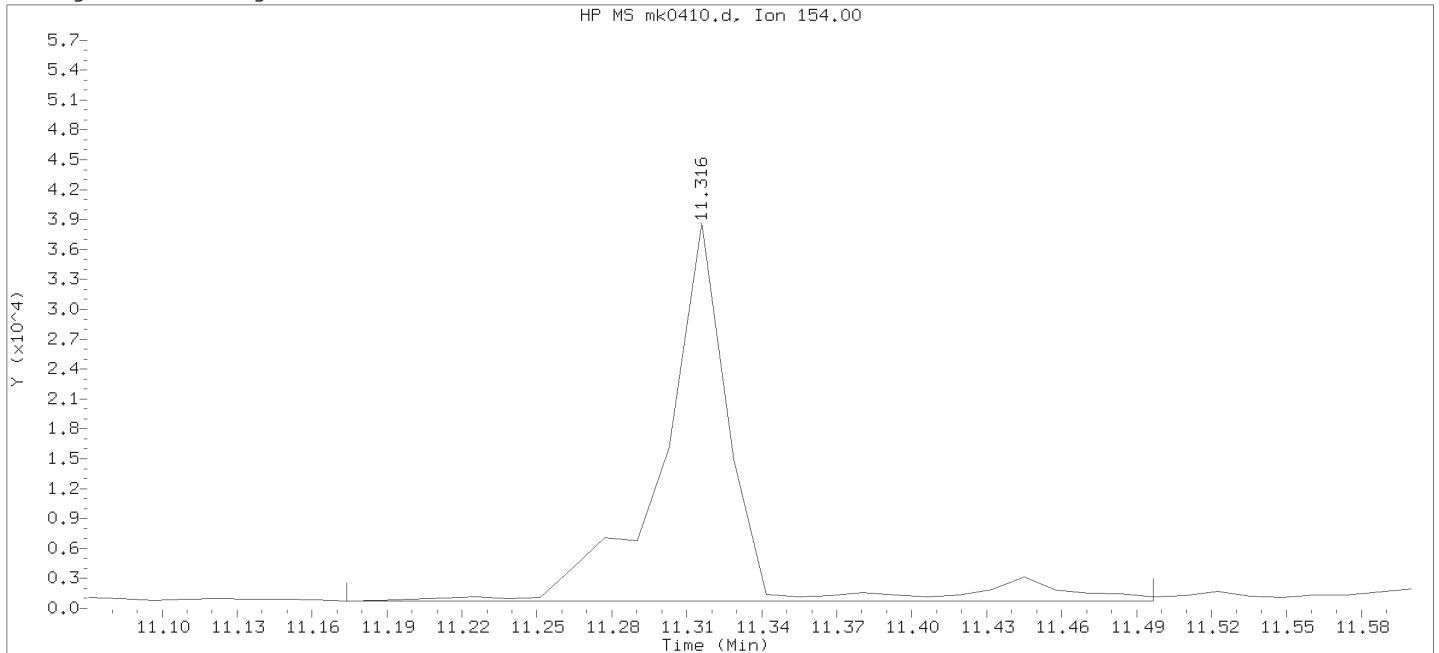
Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
Analyst ID: ceb05247

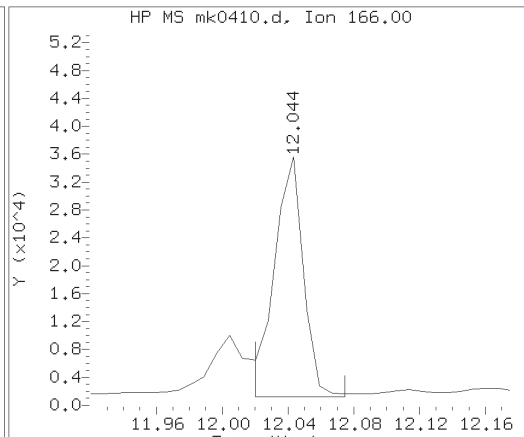
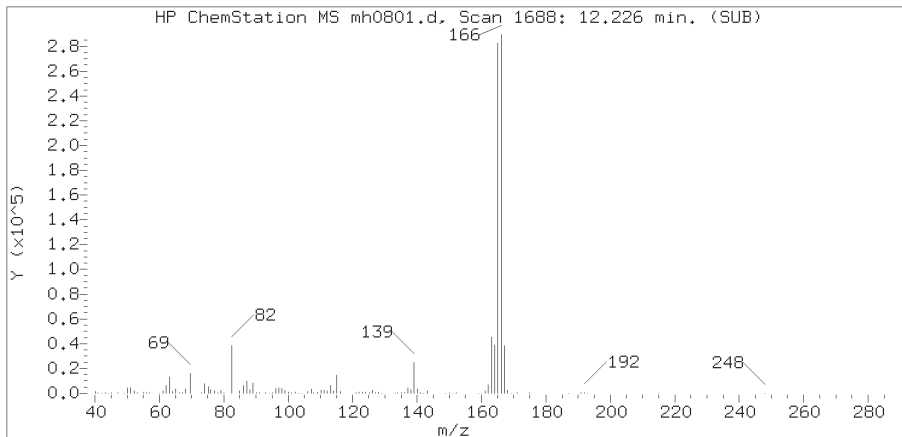
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Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:43 Unknown

Sample Name: 15T-3

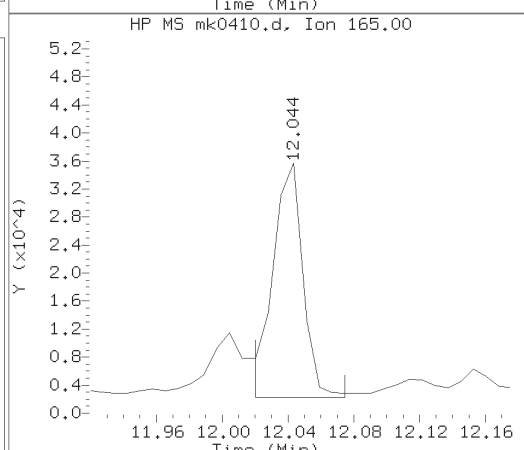
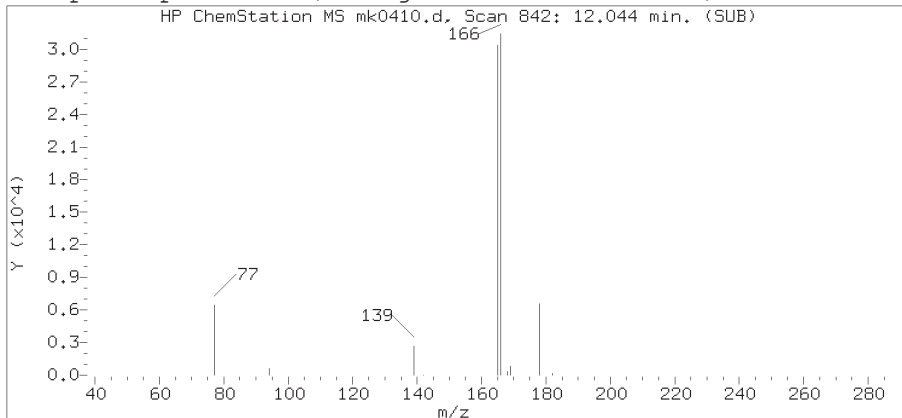
Lab Sample ID: 9881310

Compound Number : 15  
Compound Name : Acenaphthene  
Scan Number : 771  
Retention Time (minutes) : 11.316  
Quant Ion : 154.00  
Area : 73332  
On-column Amount (ng/ul) : 0.1467  
Integration start scan : 759 Integration stop scan: 784  
Y at integration start : 750 Y at integration end: 750

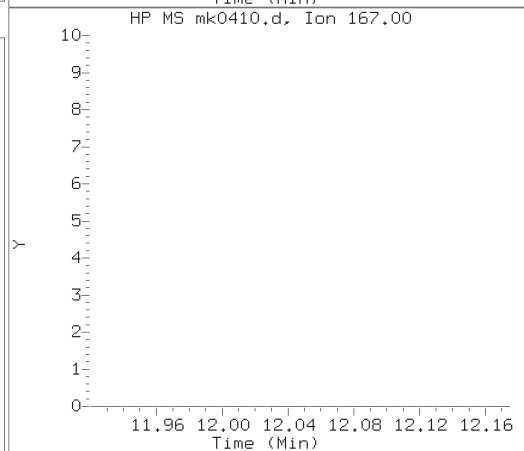
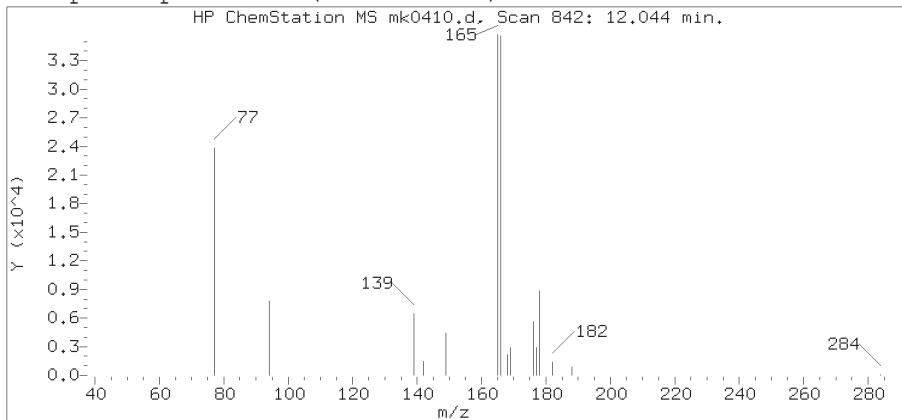
Reference Standard Spectrum for Fluorene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

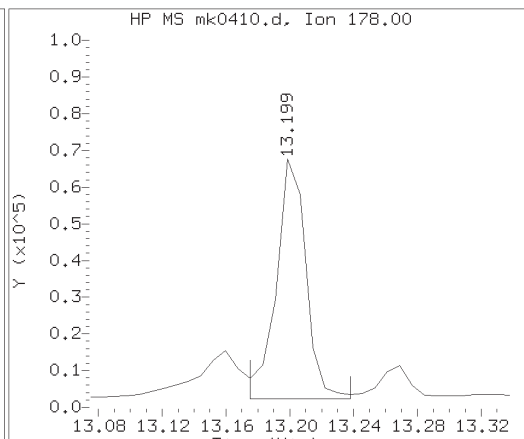
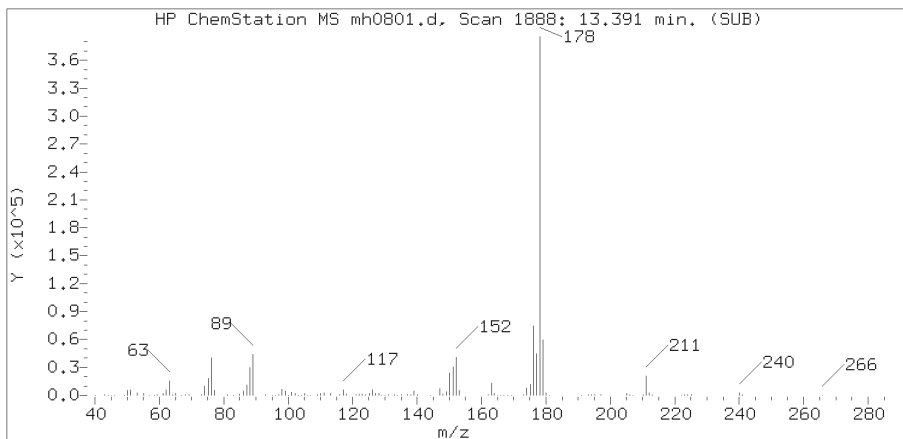
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

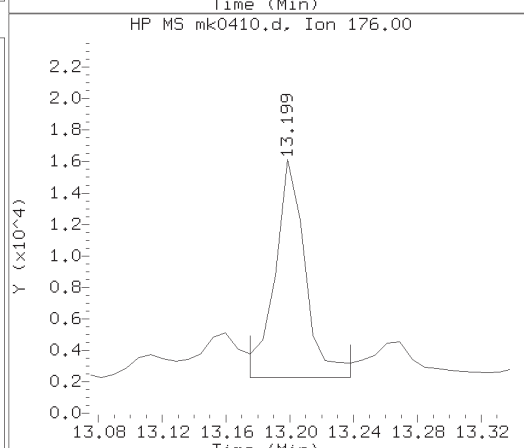
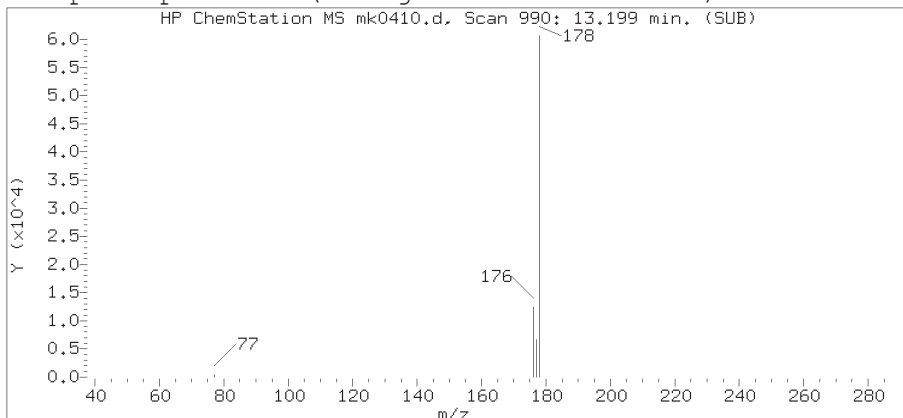
Lab Sample ID: 9881310

Compound Number : 18  
 Compound Name : Fluorene  
 Scan Number : 842  
 Retention Time (minutes) : 12.044  
 Relative Retention Time : 0.00000  
 Quant Ion : 166.00  
 Area (flag) : 42061  
 On-column Amount (ng/ul) : 0.0760

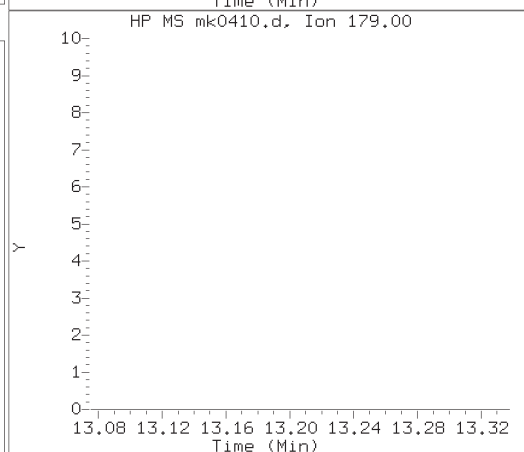
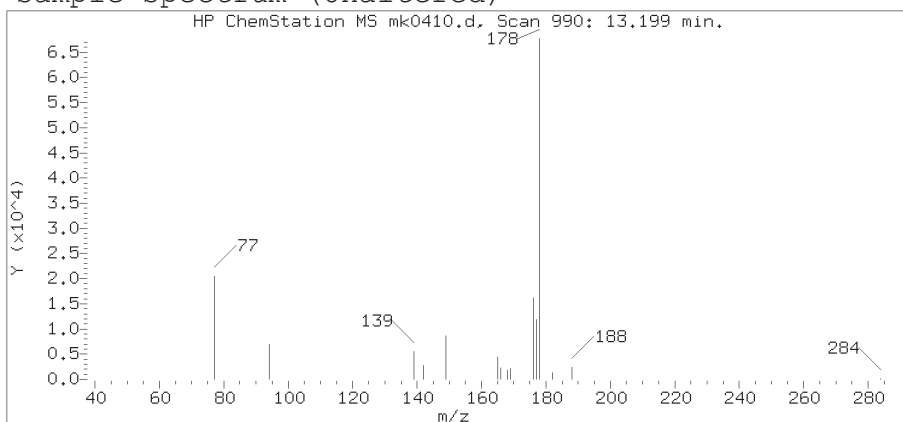
Reference Standard Spectrum for Phenanthrene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

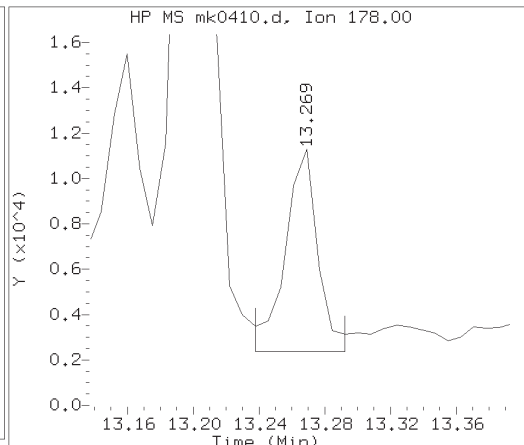
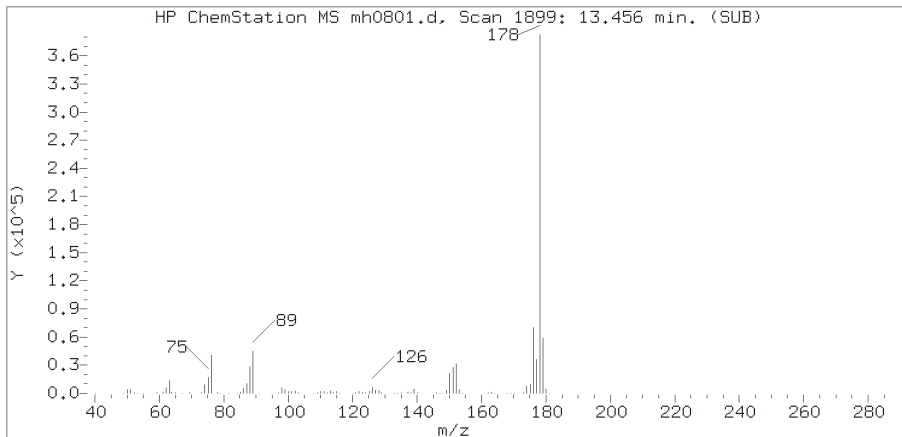
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

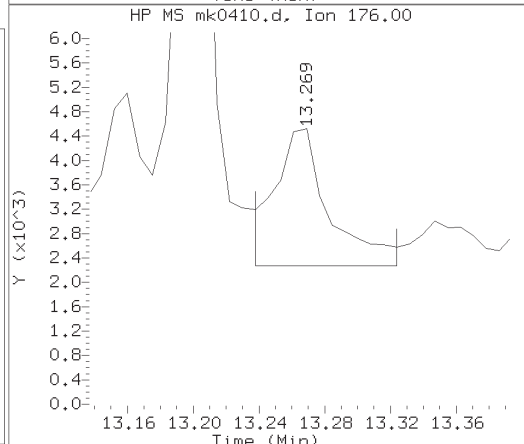
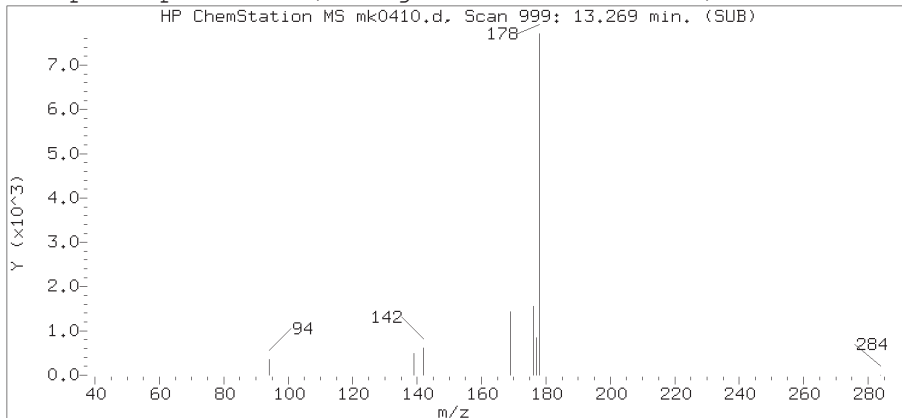
Lab Sample ID: 9881310

Compound Number : 21  
 Compound Name : Phenanthrene  
 Scan Number : 990  
 Retention Time (minutes) : 13.199  
 Relative Retention Time : 0.00000  
 Quant Ion : 178.00  
 Area (flag) : 84186  
 On-column Amount (ng/ul) : 0.1411

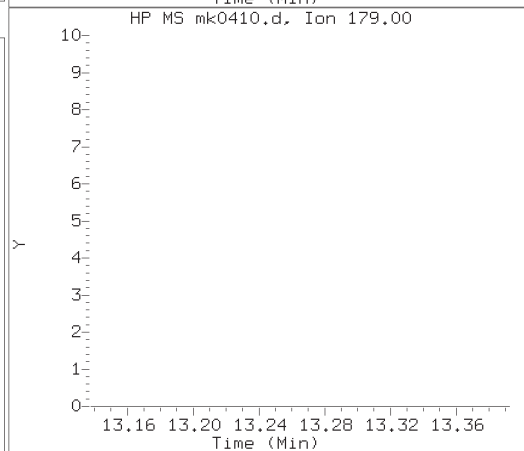
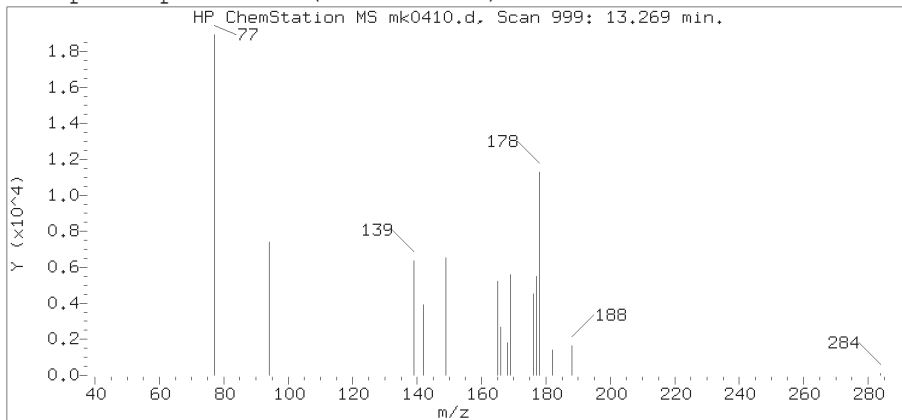
Reference Standard Spectrum for Anthracene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

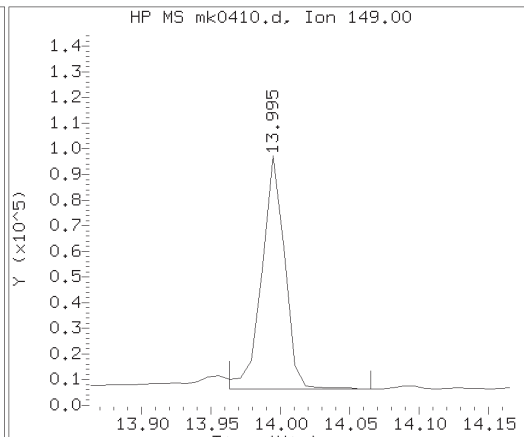
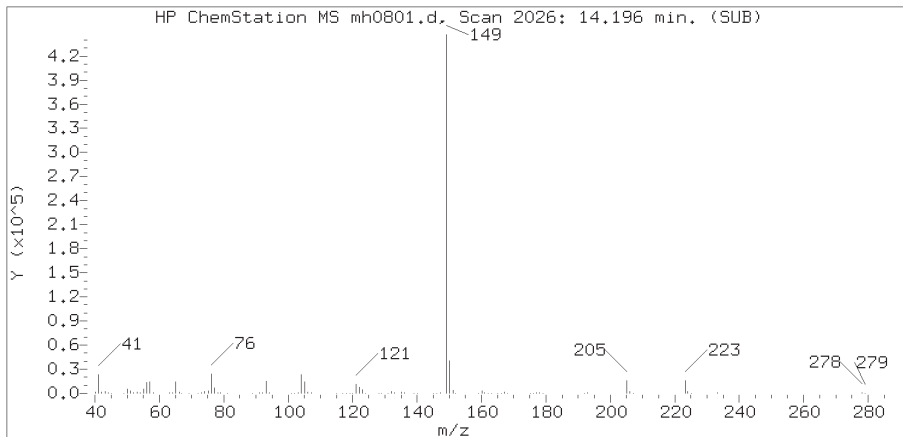
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

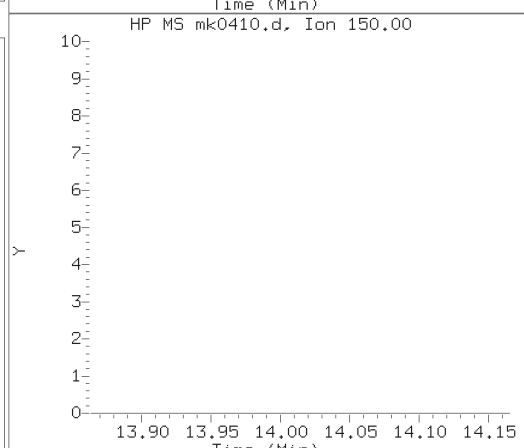
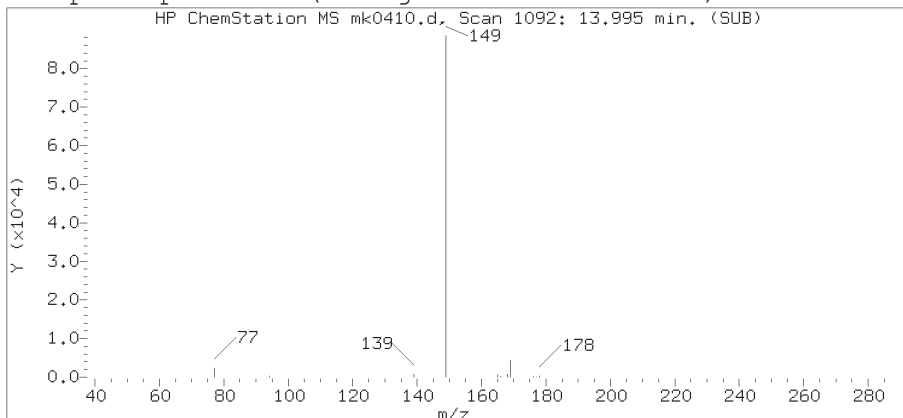
Lab Sample ID: 9881310

Compound Number : 22  
 Compound Name : Anthracene  
 Scan Number : 999  
 Retention Time (minutes) : 13.269  
 Relative Retention Time :-0.00059  
 Quant Ion : 178.00  
 Area (flag) : 12121  
 On-column Amount (ng/ul) : 0.0207

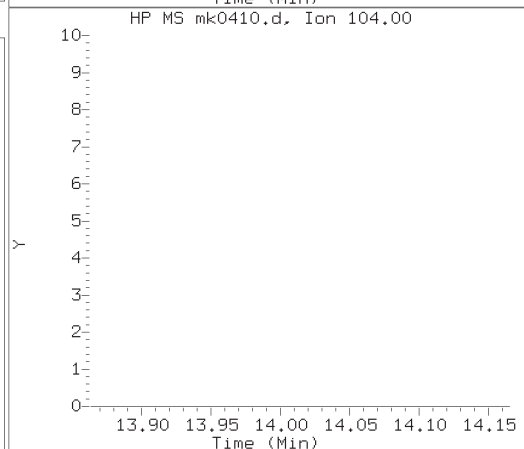
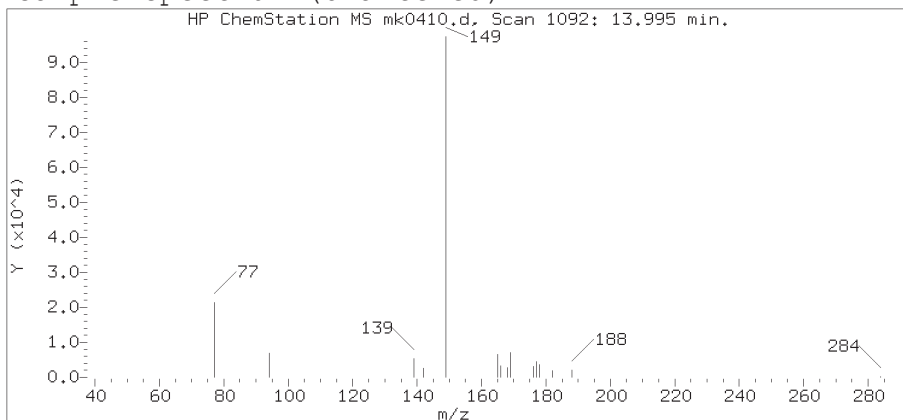
Reference Standard Spectrum for Di-n-butylphthalate



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

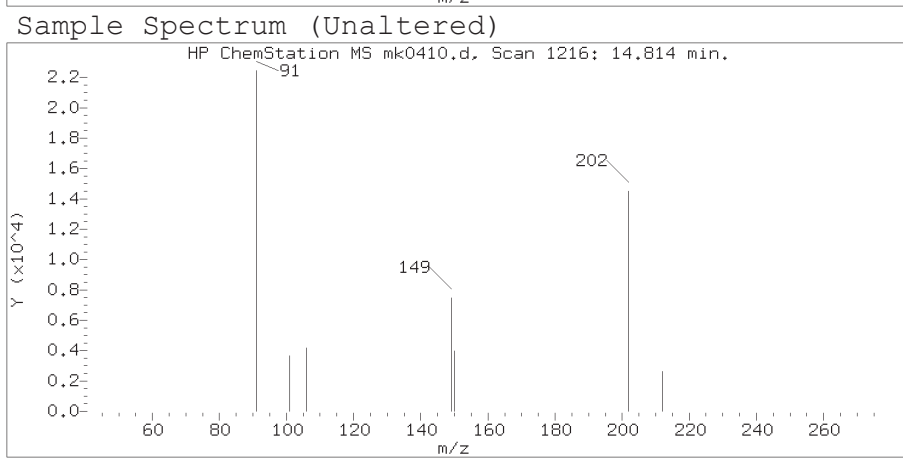
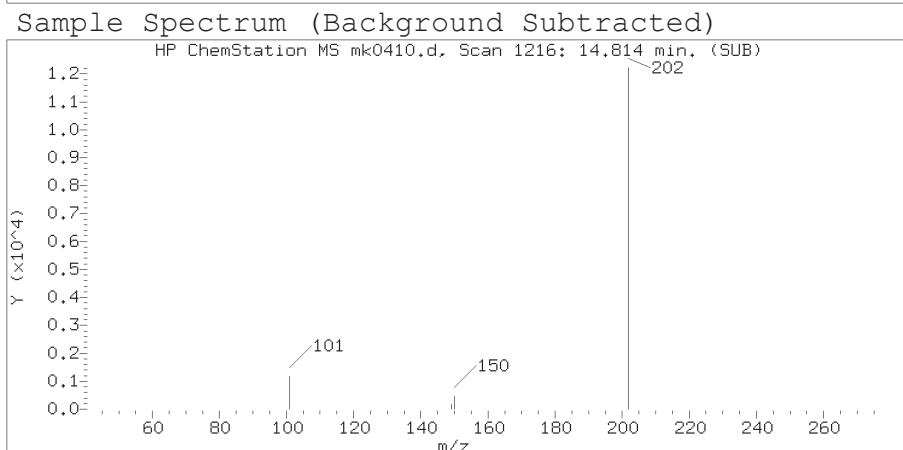
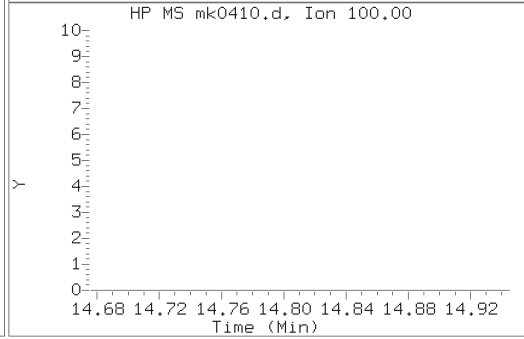
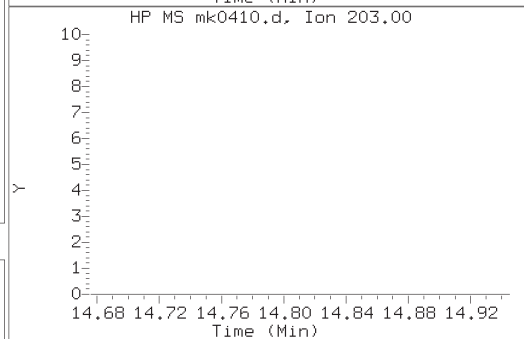
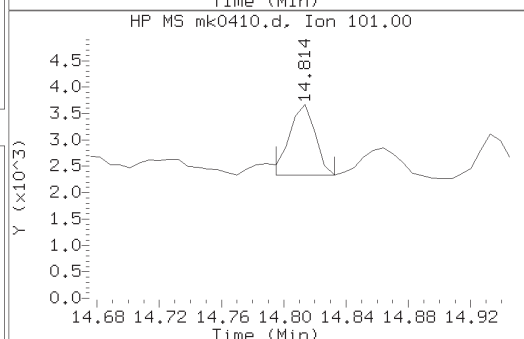
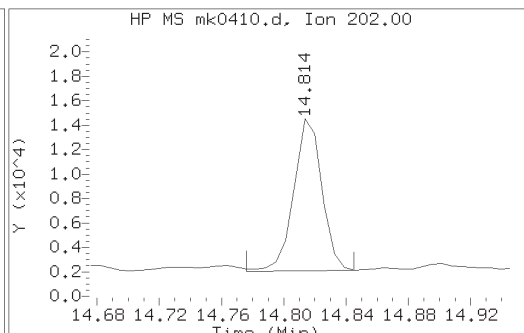
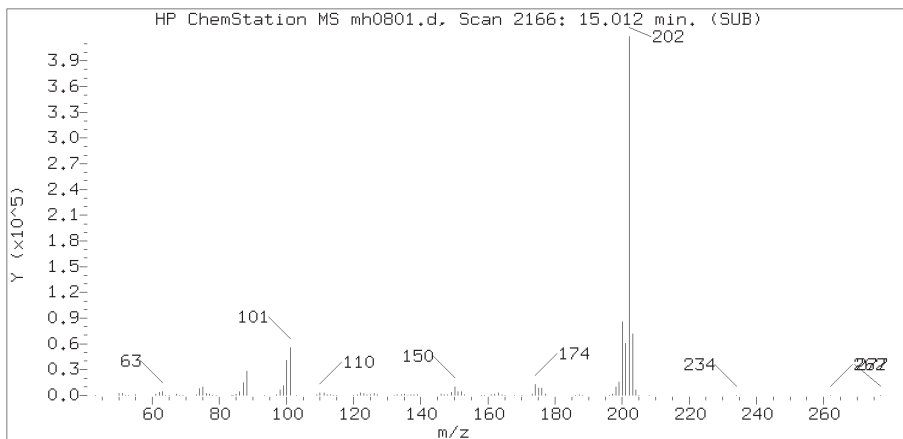
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

Lab Sample ID: 9881310

Compound Number : 23  
 Compound Name : Di-n-butylphthalate  
 Scan Number : 1092  
 Retention Time (minutes) : 13.995  
 Relative Retention Time : 0.00000  
 Quant Ion : 149.00  
 Area (flag) : 102468  
 On-column Amount (ng/ul) : 0.1567

Reference Standard Spectrum for Fluoranthene



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

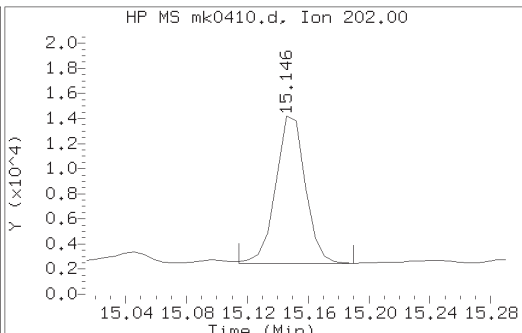
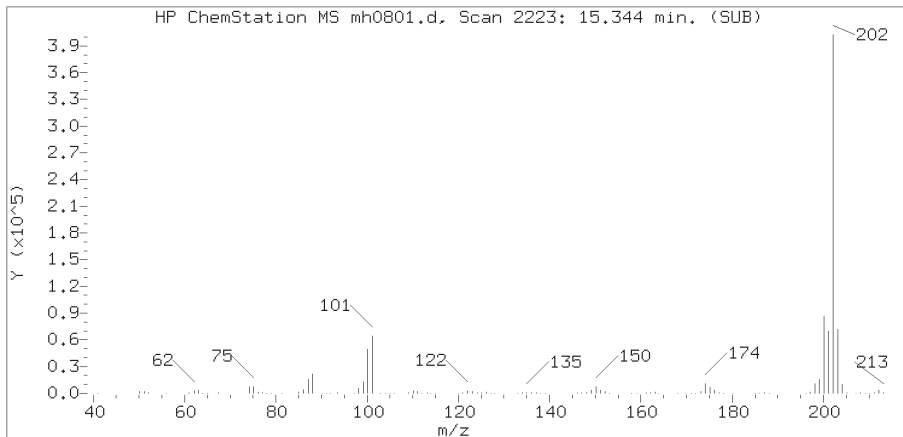
Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

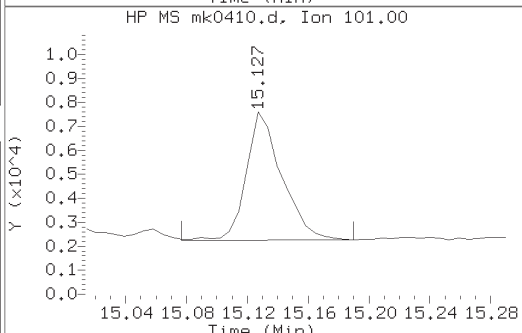
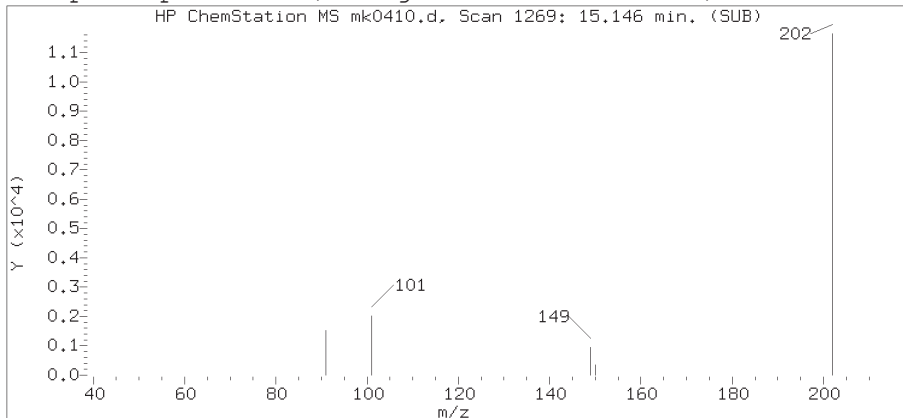
Sample Name: 15T-3 Lab Sample ID: 9881310

Compound Number : 25  
 Compound Name : Fluoranthene  
 Scan Number : 1216  
 Retention Time (minutes) : 14.814  
 Relative Retention Time : 0.00000  
 Quant Ion : 202.00  
 Area (flag) : 15707  
 On-column Amount (ng/ul) : 0.0236

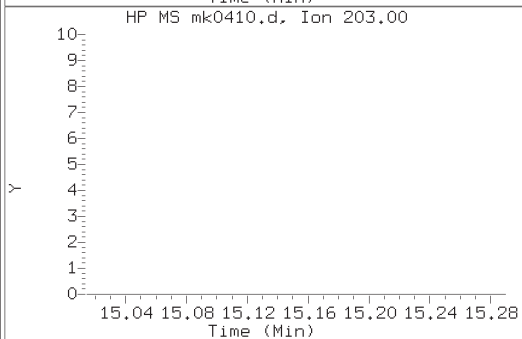
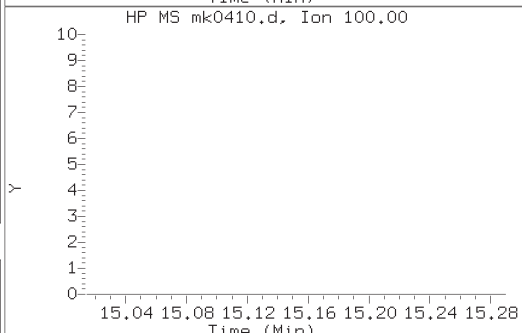
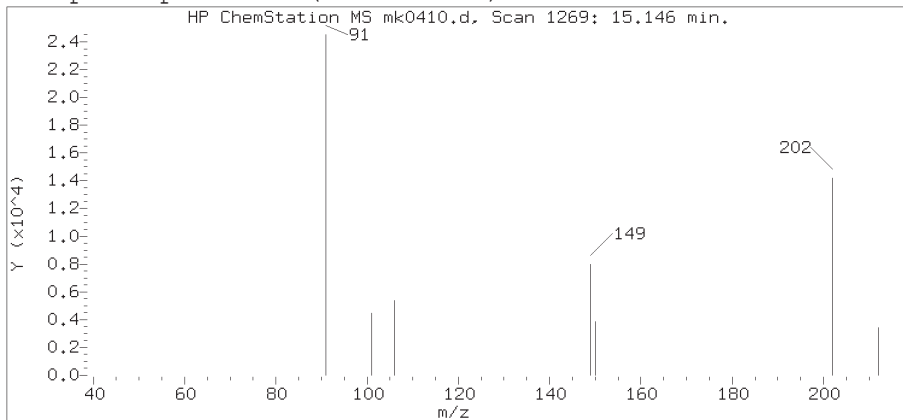
Reference Standard Spectrum for Pyrene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

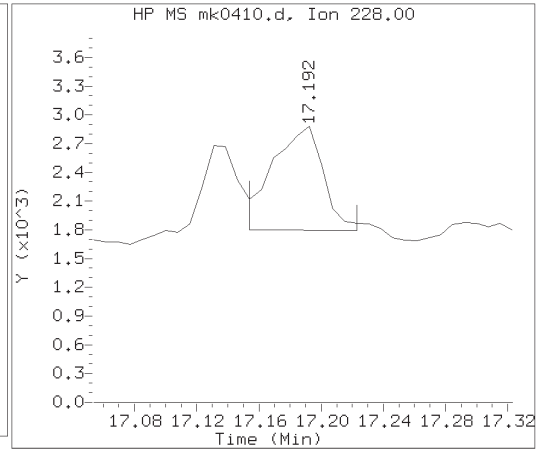
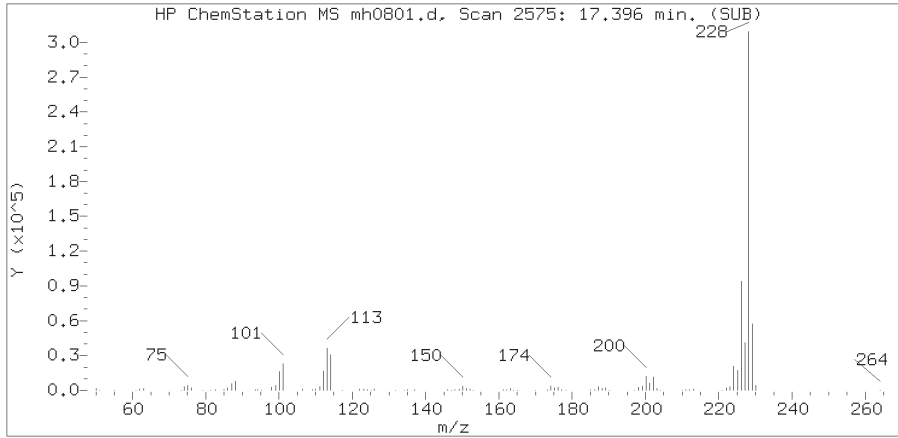
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

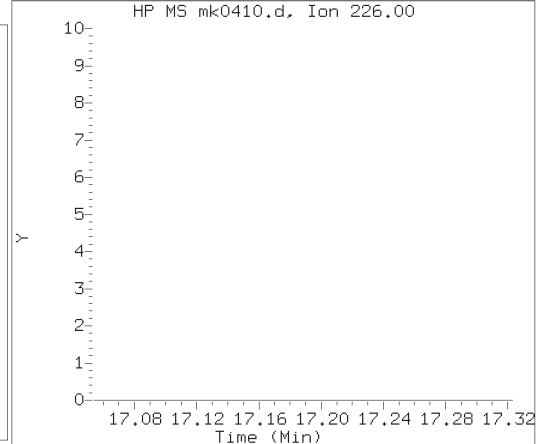
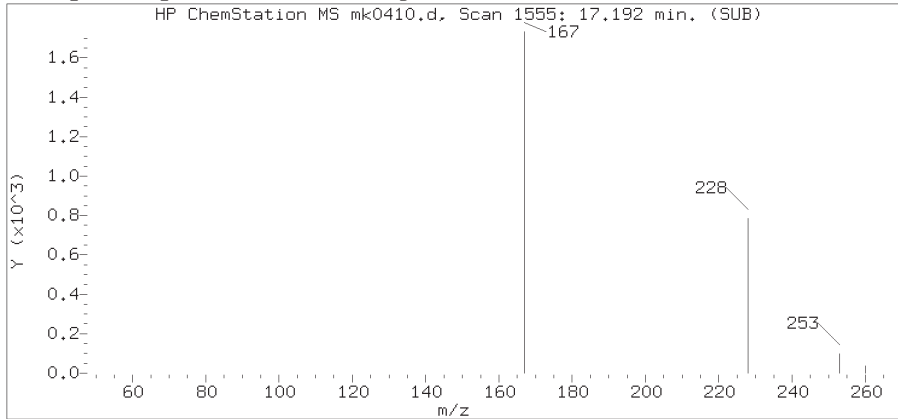
Lab Sample ID: 9881310

Compound Number : 26  
 Compound Name : Pyrene  
 Scan Number : 1269  
 Retention Time (minutes) : 15.146  
 Relative Retention Time : 0.00039  
 Quant Ion : 202.00  
 Area (flag) : 15848  
 On-column Amount (ng/ul) : 0.0178

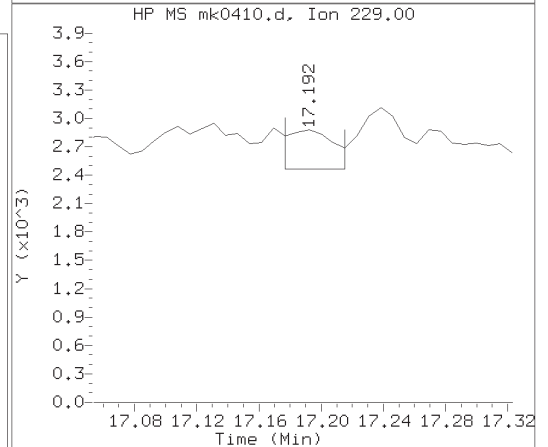
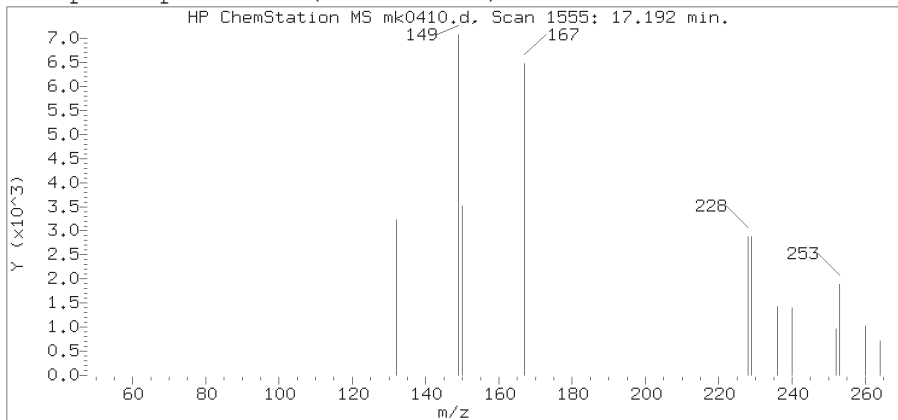
Reference Standard Spectrum for Chrysene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

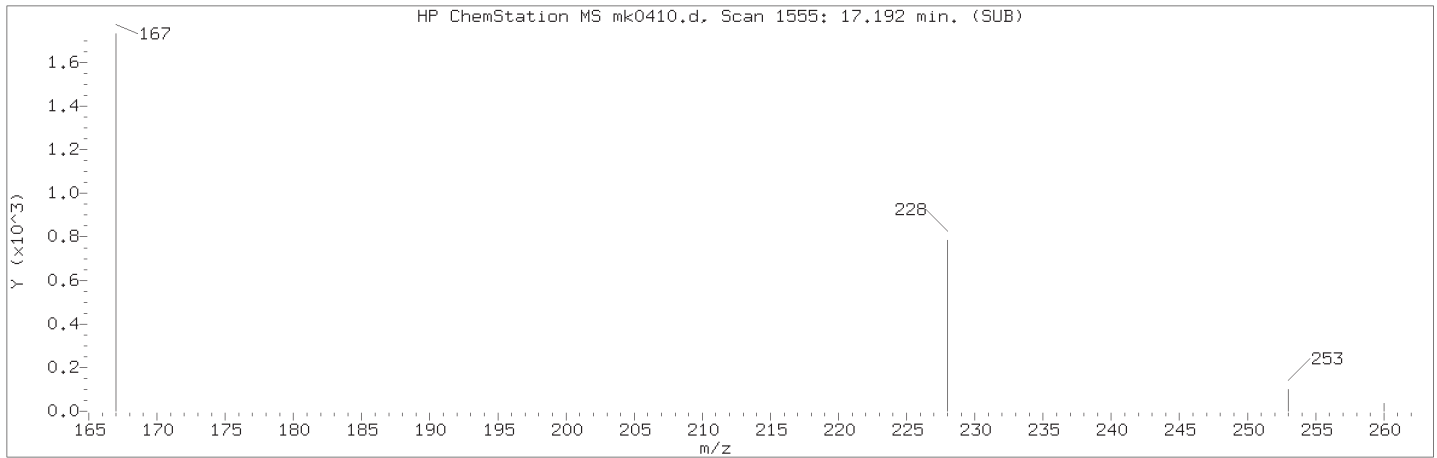
Sample Name: 15T-3

Lab Sample ID: 9881310

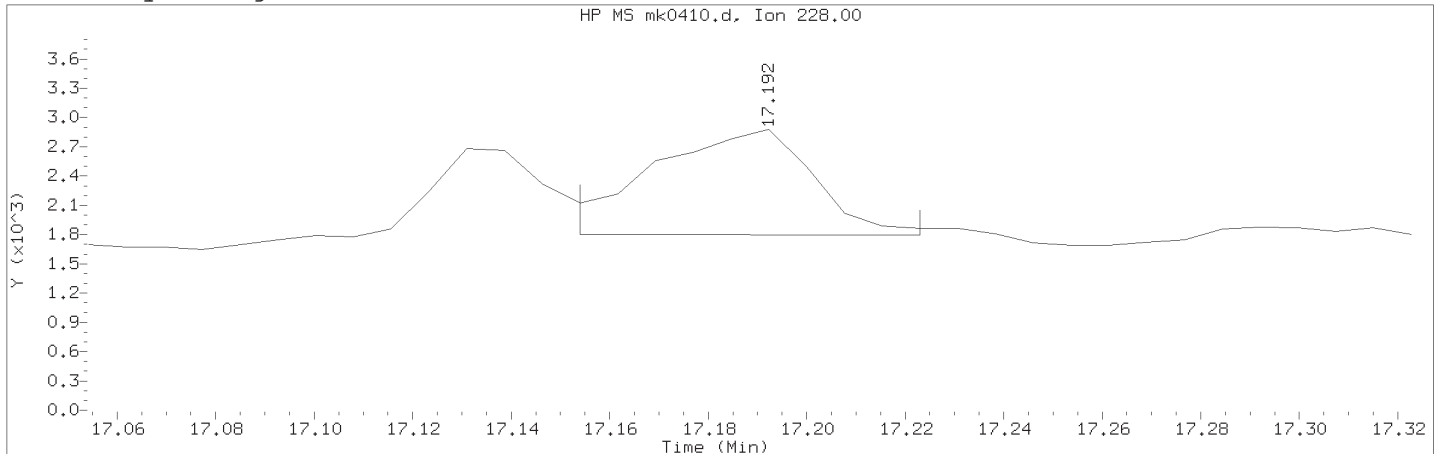
Compound Number : 30  
 Compound Name : Chrysene  
 Scan Number : 1555  
 Retention Time (minutes) : 17.192  
 Relative Retention Time : 0.00000  
 Quant Ion : 228.00  
 Area (flag) : 2520M  
 On-column Amount (ng/ul) : 0.0032



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3    Lab Sample ID: 9881310

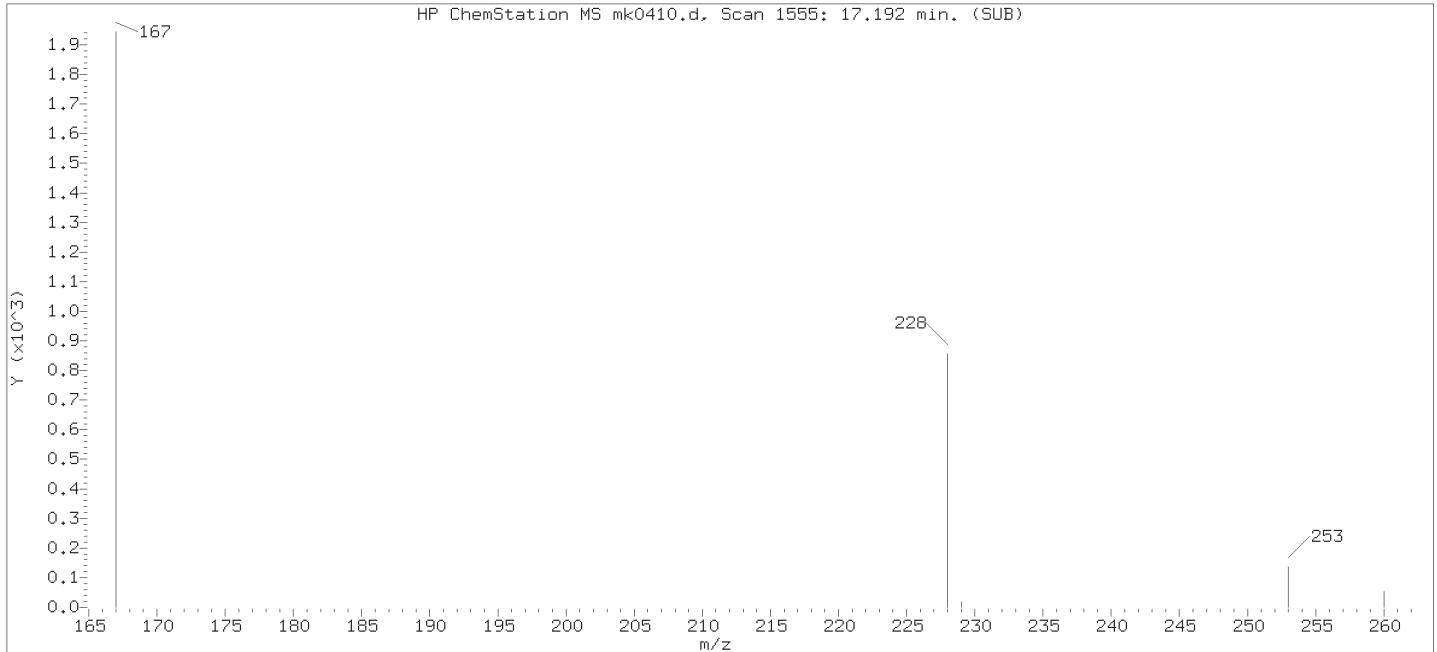
Compound Number                      : 30  
Compound Name                         : Chrysene  
Scan Number                            : 1555  
Retention Time (minutes)             : 17.192  
Quant Ion                               : 228.00  
Area (flag)                            : 2520M  
On-column Amount (ng/ul)            : 0.0032  
Integration start scan                : 1549                      Integration stop scan: 1558  
Y at integration start                : 1802                      Y at integration end: 1796

Reason for manual integration: improper integration

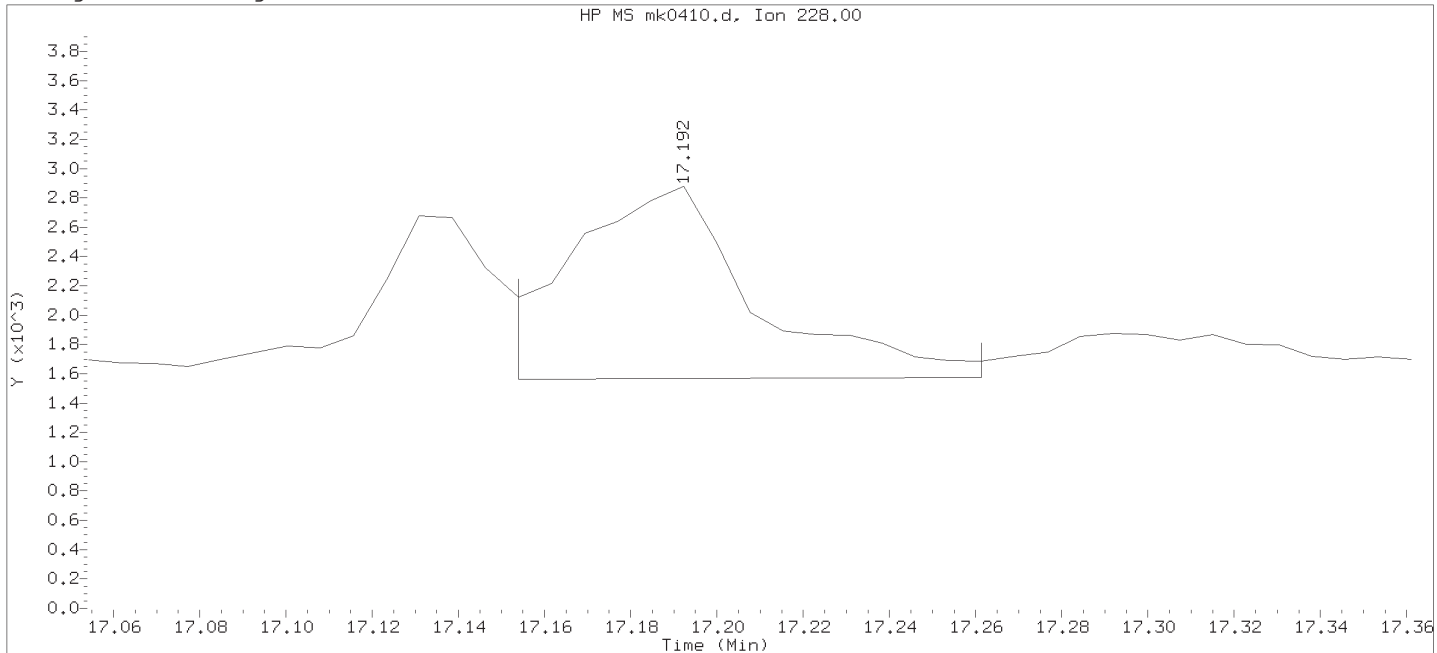
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



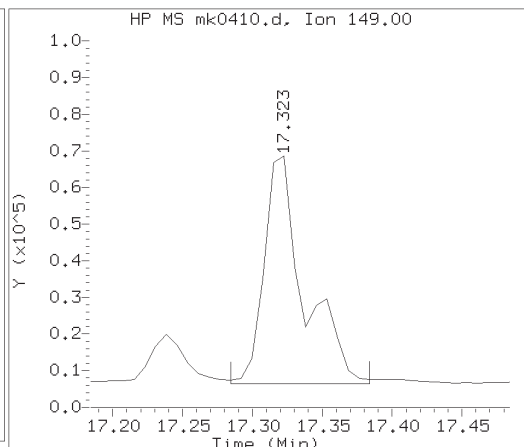
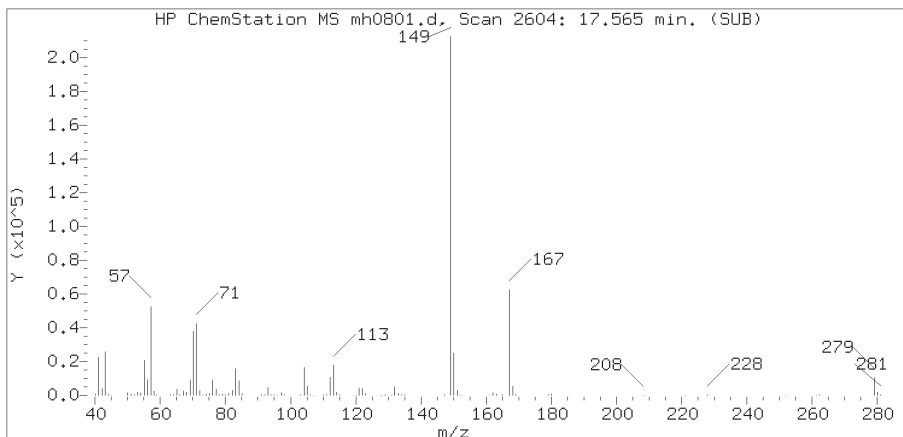
Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m      Sublist used: 25784  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:43 Unknown

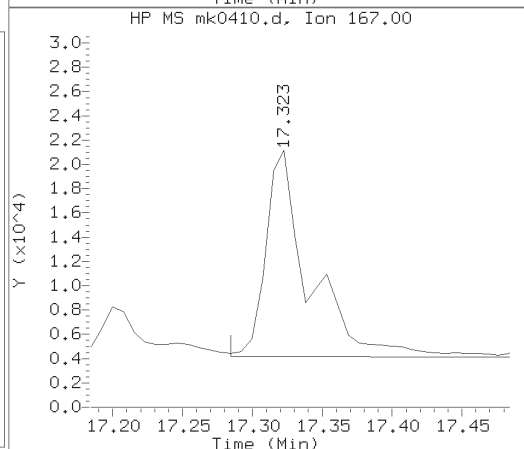
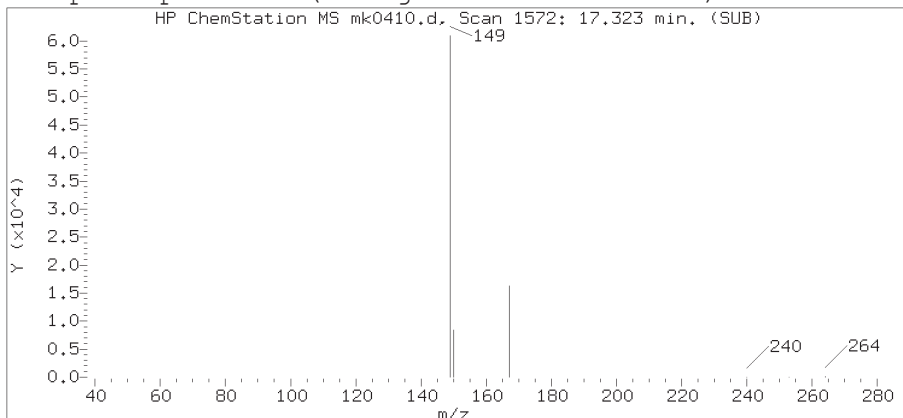
Sample Name: 15T-3    Lab Sample ID: 9881310

Compound Number                      : 30  
Compound Name                         : Chrysene  
Scan Number                            : 1555  
Retention Time (minutes)            : 17.192  
Quant Ion                                : 228.00  
Area                                     : 3845  
On-column Amount (ng/ul)           : 0.0049  
Integration start scan                : 1549                      Integration stop scan: 1563  
Y at integration start                : 1562                      Y at integration end: 1577

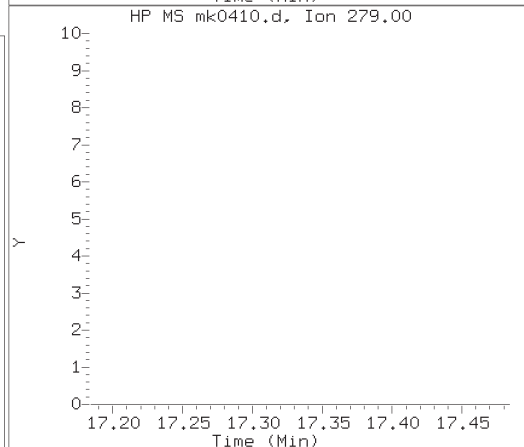
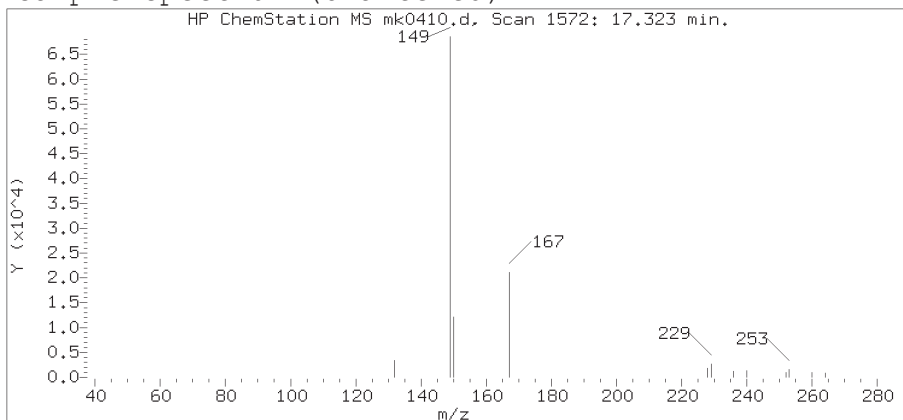
Reference Standard Spectrum for bis(2-Ethylhexyl)phthalate



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
 Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

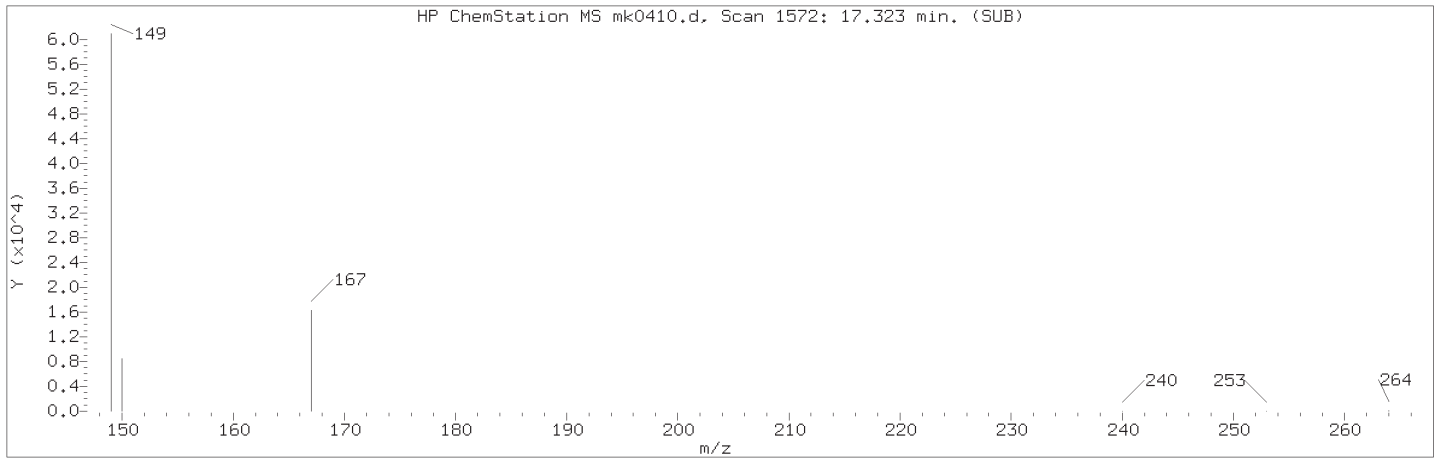
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3

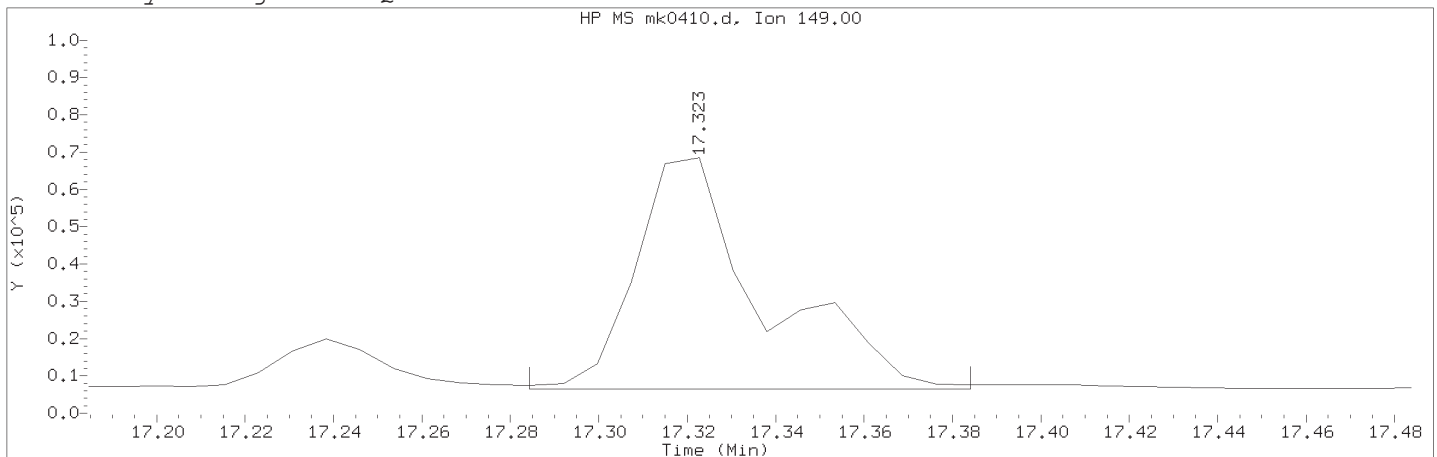
Lab Sample ID: 9881310

Compound Number : 31  
 Compound Name : bis(2-Ethylhexyl)phthalate  
 Scan Number : 1572  
 Retention Time (minutes) : 17.323  
 Relative Retention Time : 0.00179  
 Quant Ion : 149.00  
 Area (flag) : 124433M  
 On-column Amount (ng/ul) : 0.2249

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 22:13                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-3    Lab Sample ID: 9881310

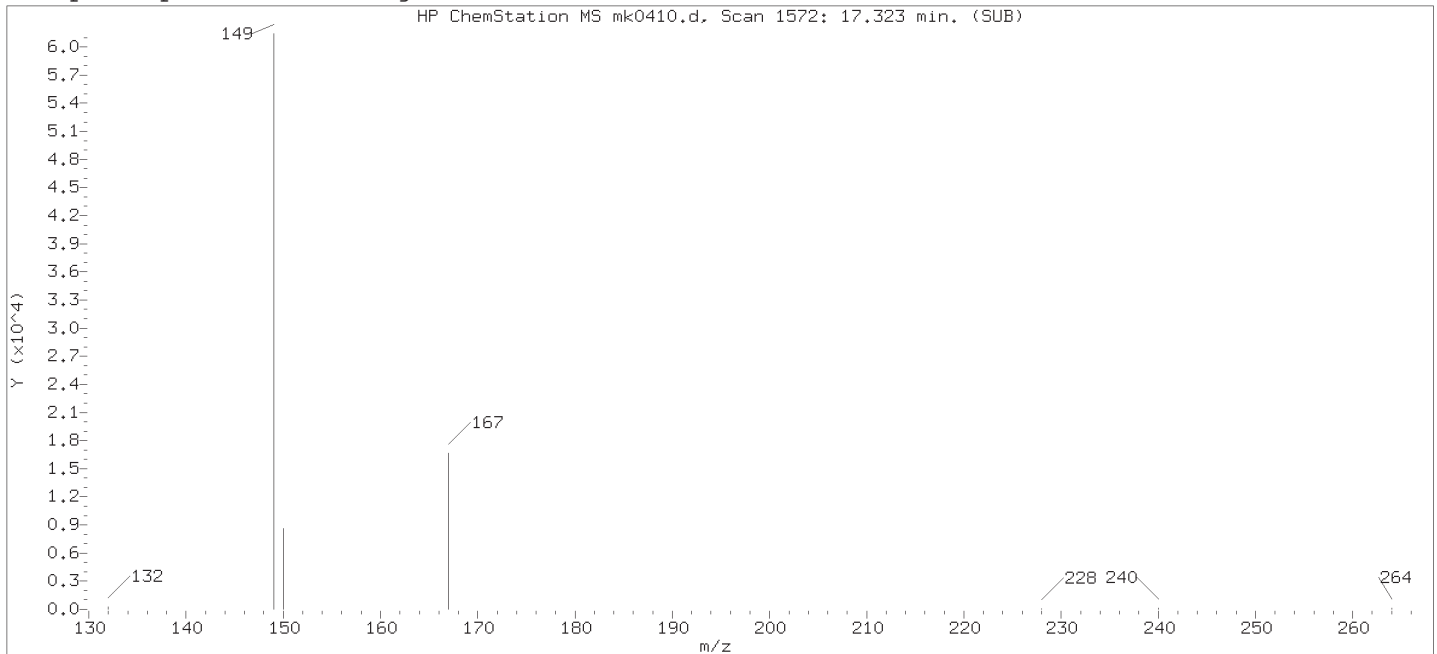
Compound Number                      : 31  
Compound Name                         : bis(2-Ethylhexyl)phthalate  
Scan Number                            : 1572  
Retention Time (minutes)             : 17.323  
Quant Ion                                : 149.00  
Area (flag)                             : 124433M  
On-column Amount (ng/ul)            : 0.2249  
Integration start scan                : 1566                      Integration stop scan: 1579  
Y at integration start                : 6474                      Y at integration end: 6474

Reason for manual integration: improper integration

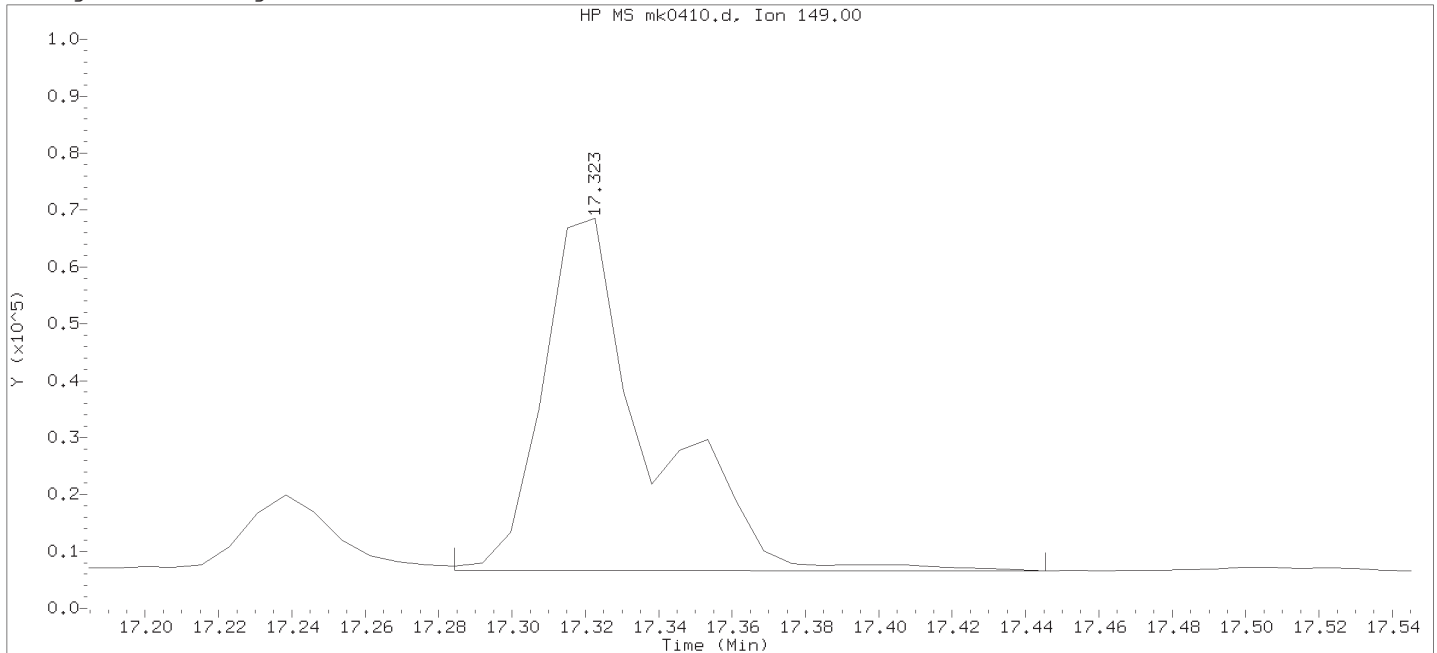
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0410.d  
Injection date and time: 07-NOV-2018 22:13

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 22:43 Unknown

Sample Name: 15T-3

Lab Sample ID: 9881310

Compound Number : 31  
Compound Name : bis(2-Ethylhexyl)phthalate  
Scan Number : 1572  
Retention Time (minutes) : 17.323  
Quant Ion : 149.00  
Area : 125235  
On-column Amount (ng/ul) : 0.2263  
Integration start scan : 1566 Integration stop scan: 1587  
Y at integration start : 6708 Y at integration end: 6577

15T-6

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881313

Data file: /chem/HP21585.i/18nov07.b/mk0411.d

Injection date and time: 07-NOV-2018 22:43

Data file Sample Info. Line: 15T-6;9881313;1;0;SAMPLE;;DOD26;

Instrument ID: HP21585.i Batch: 18309WAE

Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784

Calibration date and time (Last Method Edit): 09-NOV-2018 11:59

Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 238 ml

Volume Injected (Vi): 2 ul

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
5) 1,4-Dichlorobenzene-d4	6.560( 0.000)	474	152	47988 ( -23)	0.25	
6) Naphthalene-d8	8.480( 0.000)	572	136	161870 ( -22)	0.25	
14) Acenaphthene-d10	11.264( 0.000)	767	164	68277 ( -22)	0.25	
20) Phenanthrene-d10	13.175( 0.000)	987	188	123930 ( -30)	0.25	
29) Chrysene-d12	17.146( 0.000)	1549	240	88688 ( -26)	0.25	
38) Perylene-d12	19.585( 0.000)	1867	264	95323 ( -14)	0.25	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
10) 1-Methylnaphthalene-d10	(2)	9.703( 0.000)	152	65454	0.222	89%		29 - 112
24) Fluoranthene-d10	(4)	14.789( 0.000)	212	128862	0.265	106%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.462( 0.000)	264	41661	0.119	48%		18 - 129

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
1) 1,4-Dioxane	(1)	2.787(-0.002)	88	1463	0.011	0.05			0.01
4) bis(2-Chloroethyl)ether	(2)			Not Detected					0.005
7) Naphthalene	(2)			Not Detected					0.008
13) Acenaphthylene	(3)			Not Detected					0.003
15) Acenaphthene	(3)			Not Detected					0.003
18) Fluorene	(3)			Not Detected					0.003
19) Hexachlorobenzene	(4)			Not Detected					0.003
21) Phenanthrene	(4)			Not Detected					0.008
22) Anthracene	(4)			Not Detected					0.003
23) Di-n-butylphthalate	(4)			Not Detected					0.05
25) Fluoranthene	(4)			Not Detected					0.003
26) Pyrene	(5)			Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.346(-0.000)	149	64152	0.128	0.54	0.304	B	0.02
28) Benzo(a)anthracene	(5)			Not Detected					0.003
30) Chrysene	(5)			Not Detected					0.003
33) Benzo(b)fluoranthene	(6)			Not Detected					0.003
34) Benzo(k)fluoranthene	(6)			Not Detected					0.003
37) Benzo(a)pyrene	(6)			Not Detected					0.003
39) Indeno(1,2,3-cd)pyrene	(6)			Not Detected					0.003
40) Dibenz(a,h)anthracene	(6)			Not Detected					0.005
41) Benzo(g,h,i)perylene	(6)			Not Detected					0.003

B = Compound detected in referenced method blank.

15T-6

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

9881313

Data file: /chem/HP21585.i/18nov07.b/mk0411.d Injection date and time: 07-NOV-2018 22:43  
Data file Sample Info. Line: 15T-6;9881313;1;0;SAMPLE;;DOD26; Instrument ID: HP21585.i Batch: 18309WAE  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time (Last Method Edit): 09-NOV-2018 11:59  
Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
Sample Volume (Vo): 238 ml Volume Injected (Vi): 2 ul

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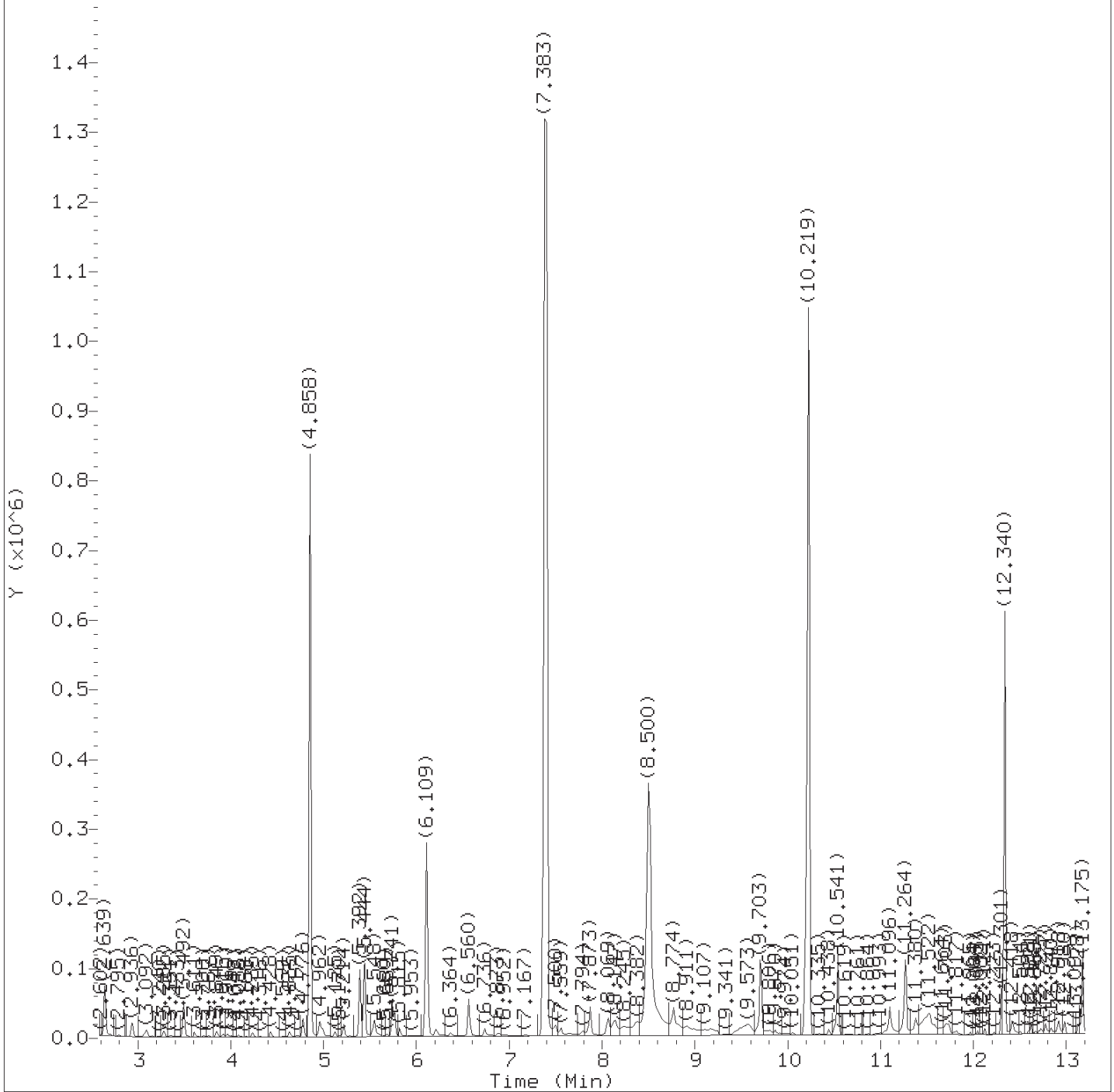
THIS SPACE  
WAS LEFT  
BLANK INTENTIONALLY

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Total number of targets = 21

Digitally signed by Kira N. Beck on 11/09/2018 at 12:00. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 12:24. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0411.d  
Injection date and time: 07-NOV-2018 22:43

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sublist used: 25784

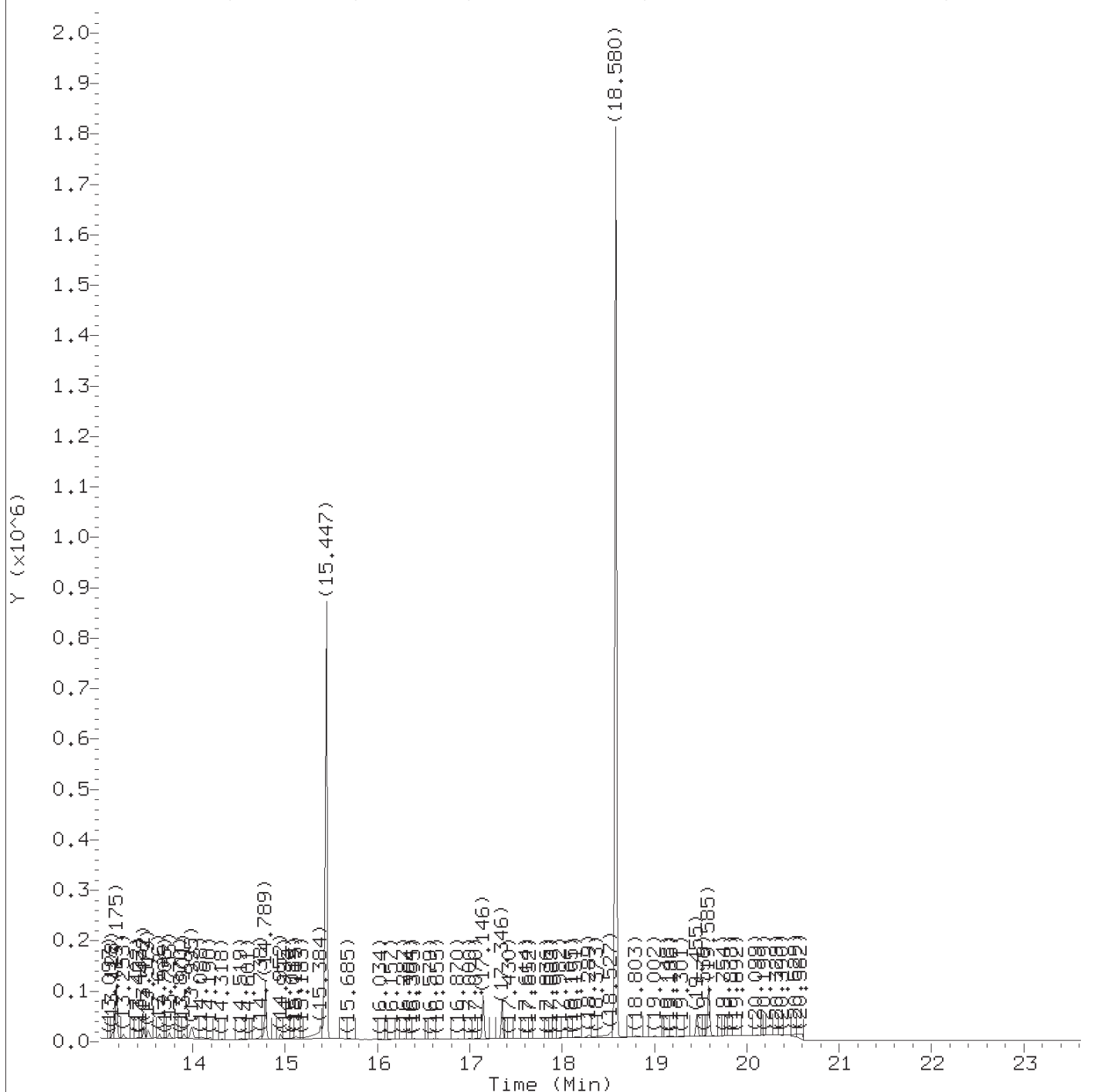
Sample Name: 15T-6

Lab Sample ID: 9881313

Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0411.d  
Injection date and time: 07-NOV-2018 22:43

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time: 09-NOV-2018 11:59  
Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-6

Lab Sample ID: 9881313

Digitally signed by Kira N. Beck  
on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0411.d  
 Injection date and time: 07-NOV-2018 22:43

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-6

Lab Sample ID: 9881313

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.787	88	1463	0.011
5) *1,4-Dichlorobenzene-d4	(1)	6.560	152	47988	0.250
6) *Naphthalene-d8	(2)	8.480	136	161870	0.250
10) \$1-Methylnaphthalene-d10	(2)	9.703	152	65454	0.222
14) *Acenaphthene-d10	(3)	11.264	164	68277	0.250
20) *Phenanthrene-d10	(4)	13.175	188	123930	0.250
24) \$Fluoranthene-d10	(4)	14.789	212	128862	0.265
29) *Chrysene-d12	(5)	17.146	240	88688	0.250
31) bis(2-Ethylhexyl)phthalate	(5)	17.346	149	64152	0.128
36) \$Benzo(a)pyrene-d12	(6)	19.462	264	41661	0.119
38) *Perylene-d12	(6)	19.585	264	95323	0.250

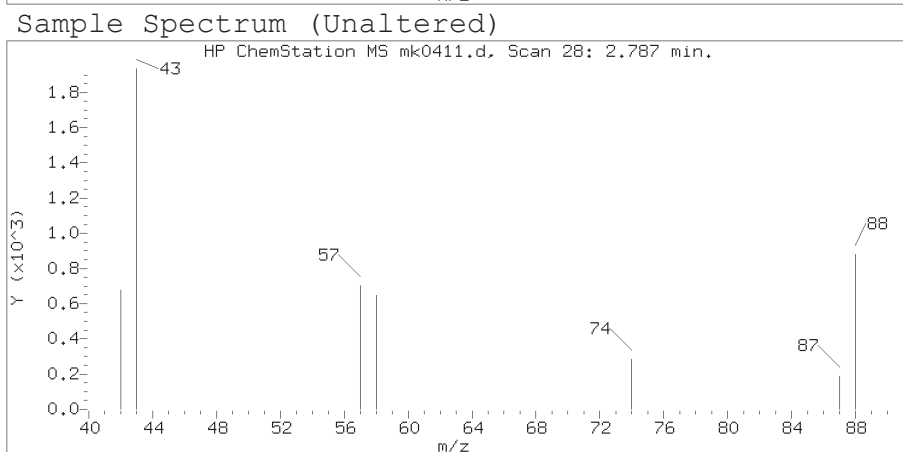
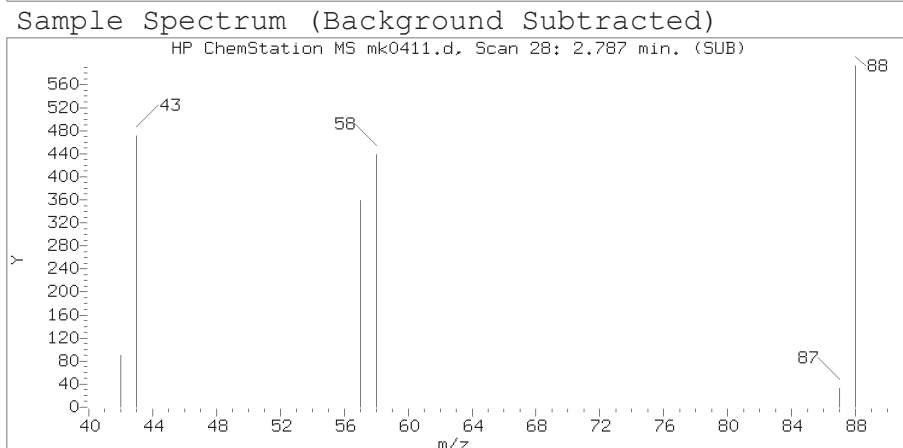
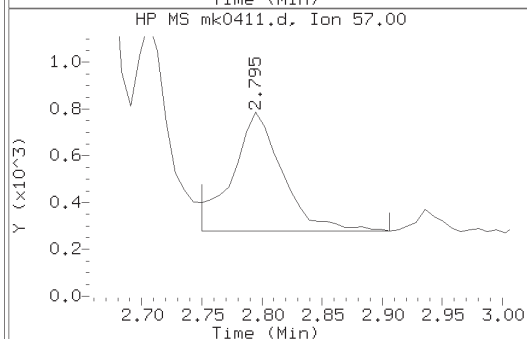
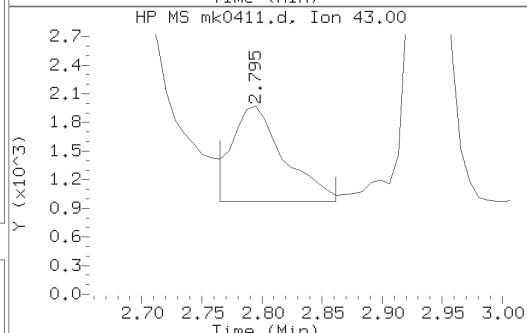
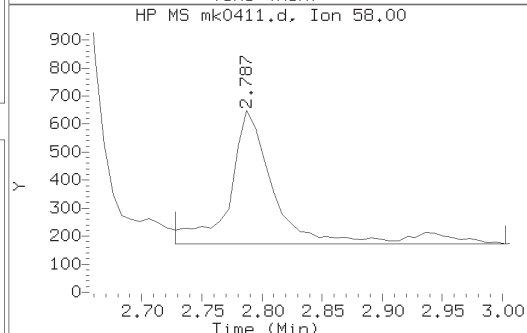
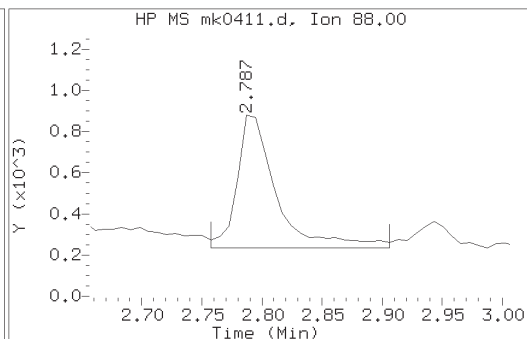
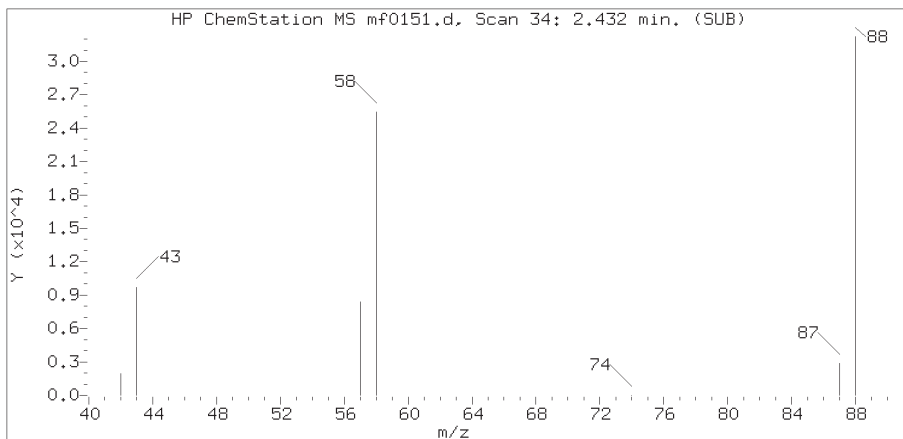
\* = Compound is an internal standard.

\$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 11/09/2018 at 12:00.

Target 3.5 esignature user ID: knb25316

Reference Standard Spectrum for 1,4-Dioxane



Data File: /chem/HP21585.i/18nov07.b/mk0411.d  
 Injection date and time: 07-NOV-2018 22:43

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

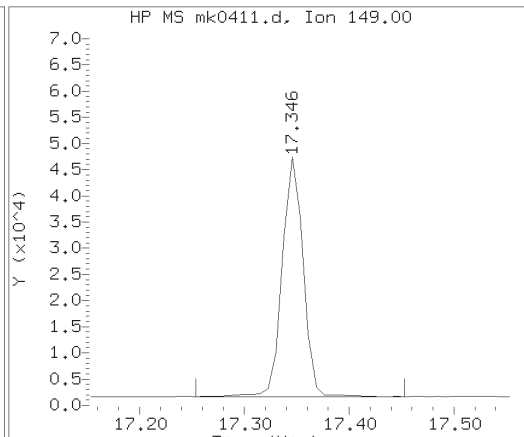
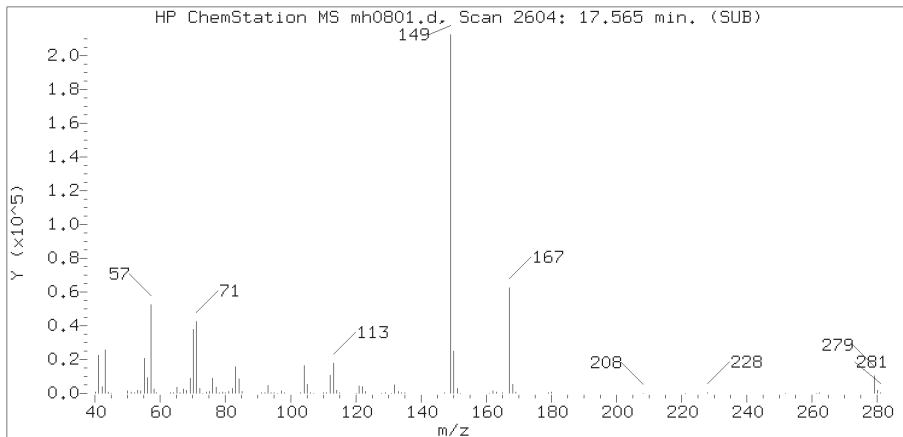
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-6

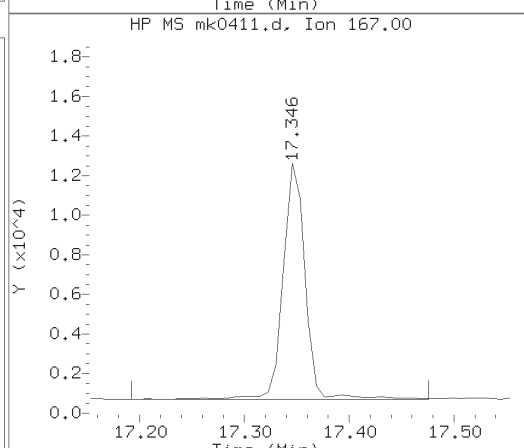
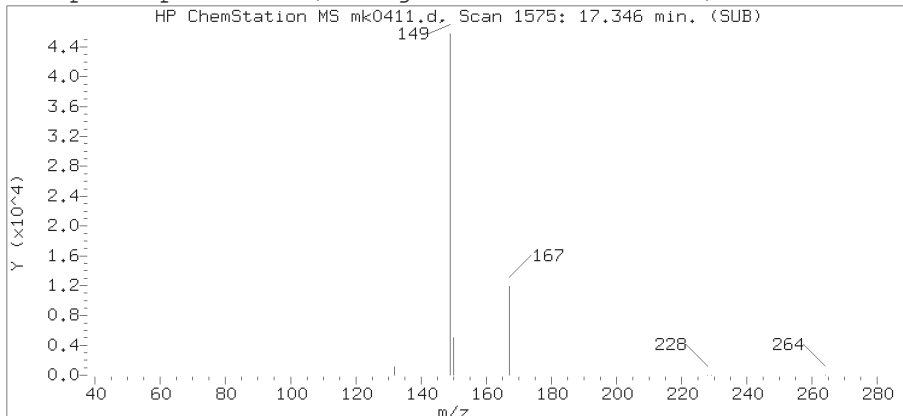
Lab Sample ID: 9881313

Compound Number : 1  
 Compound Name : 1,4-Dioxane  
 Scan Number : 28  
 Retention Time (minutes) : 2.787  
 Relative Retention Time : -0.00228  
 Quant Ion : 88.00  
 Area (flag) : 1463  
 On-column Amount (ng/ul) : 0.0110

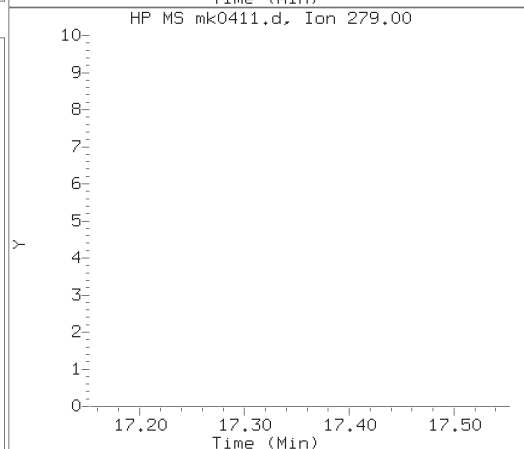
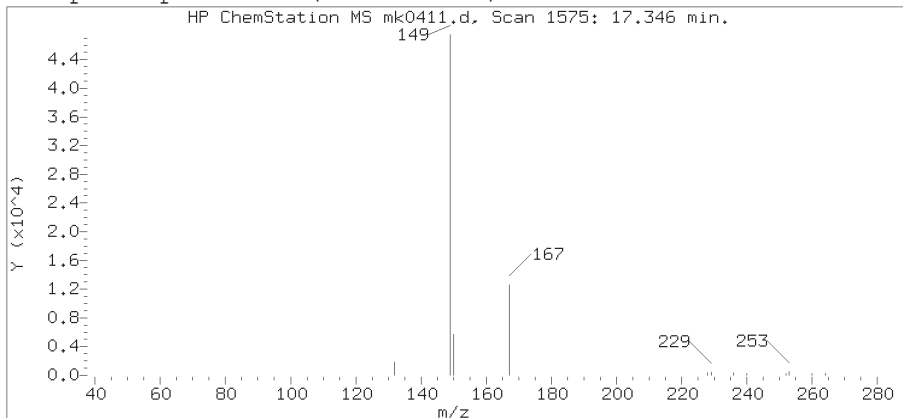
Reference Standard Spectrum for bis(2-Ethylhexyl)phthalate



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0411.d  
 Injection date and time: 07-NOV-2018 22:43

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 09-NOV-2018 11:59  
 Date, time and analyst ID of latest file update: 09-Nov-2018 11:59 knb25316

Sample Name: 15T-6

Lab Sample ID: 9881313

Compound Number : 31  
 Compound Name : bis(2-Ethylhexyl)phthalate  
 Scan Number : 1575  
 Retention Time (minutes) : 17.346  
 Relative Retention Time :-0.00000  
 Quant Ion : 149.00  
 Area (flag) : 64152  
 On-column Amount (ng/ul) : 0.1280

**Standards Data**

**Semivolatiles by GC/MS-SIM**

Lancaster Laboratories  
Semi-Volatiles  
Runlog for Agilent GC/MS System HP21585 \*\*HP #13\*\*

Data Directory Path is - D:\data\18oct26\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
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ceb05247	MJ2001a.D	RVSIM2768	10/26/2018	06:59		
ceb05247	MJ2001b.D	RVSIM2768	10/26/2018	07:31		
ceb05247	MJ2002.D	RVSIM2768	10/26/2018	08:05		
ceb05247	MJ2003.D	RVSIM2768	10/26/2018	08:35		
ceb05247	MJ2004.D	RVSIM2768	10/26/2018	09:04		
ceb05247	MJ2005.D	RVSIM2768	10/26/2018	09:33		
ceb05247	MJ2006.D	RVSIM2768	10/26/2018	10:02		
ceb05247	MJ2007.D	RVSIM2768	10/26/2018	10:32		
ceb05247	MJ2008.D	RVSICV2788	10/26/2018	11:01		

Lancaster Laboratories  
Semi-Volatiles  
Runlog for Agilent GC/MS System HP21585 \*\*HP #13\*\*

Data Directory Path is - D:\data\18nov07\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
ceb05247	MK0400.D	RVDFTPP2878	11/07/2018	16:55		
ceb05247	MK0401.D	RVSIM2768	11/07/2018	17:11		
ceb05247	MK0402.D	SBLKWE309	11/07/2018	18:12	18309WAE	
ceb05247	MK0403.D	309WELCS	11/07/2018	18:41	18309WAE	
ceb05247	MK0404.D	309WELCSD	11/07/2018	19:17	18309WAE	
ceb05247	MK0405.D	9880803	11/07/2018	19:46	18309WAE	
ceb05247	MK0406.D	9880805	11/07/2018	20:16	18309WAE	
ceb05247	MK0407.D	9880806	11/07/2018	20:45	18309WAE	
ceb05247	MK0408.D	9880808	11/07/2018	21:15	18309WAE	
ceb05247	MK0409.D	9881309	11/07/2018	21:44	18309WAE	
ceb05247	MK0410.D	9881310	11/07/2018	22:13	18309WAE	
ceb05247	MK0411.D	9881313	11/07/2018	22:43	18309WAE	
ceb05247	MK0427.D	SECC0.5	11/07/2018	23:12		
ceb05247	MK0412.D	9879130	11/07/2018	23:42	18306WAB	100
ceb05247	MK0413.D	9881389DL	11/08/2018	00:11	18309WAO	10
ceb05247	MK0414.D	9881391	11/08/2018	00:40	18309WAO	
ceb05247	MK0415.D	9881392	11/08/2018	01:10	18309WAO	
ceb05247	MK0416.D	9881395	11/08/2018	01:39	18309WAO	
ceb05247	MK0417.D	9881396	11/08/2018	02:09	18309WAO	
ceb05247	MK0418.D	9881397	11/08/2018	02:38	18309WAO	
ceb05247	MK0419.D	9881832	11/08/2018	03:08	18309WAO	

Date : 26-OCT-2018 05:46

Client ID: DFTPP12,5

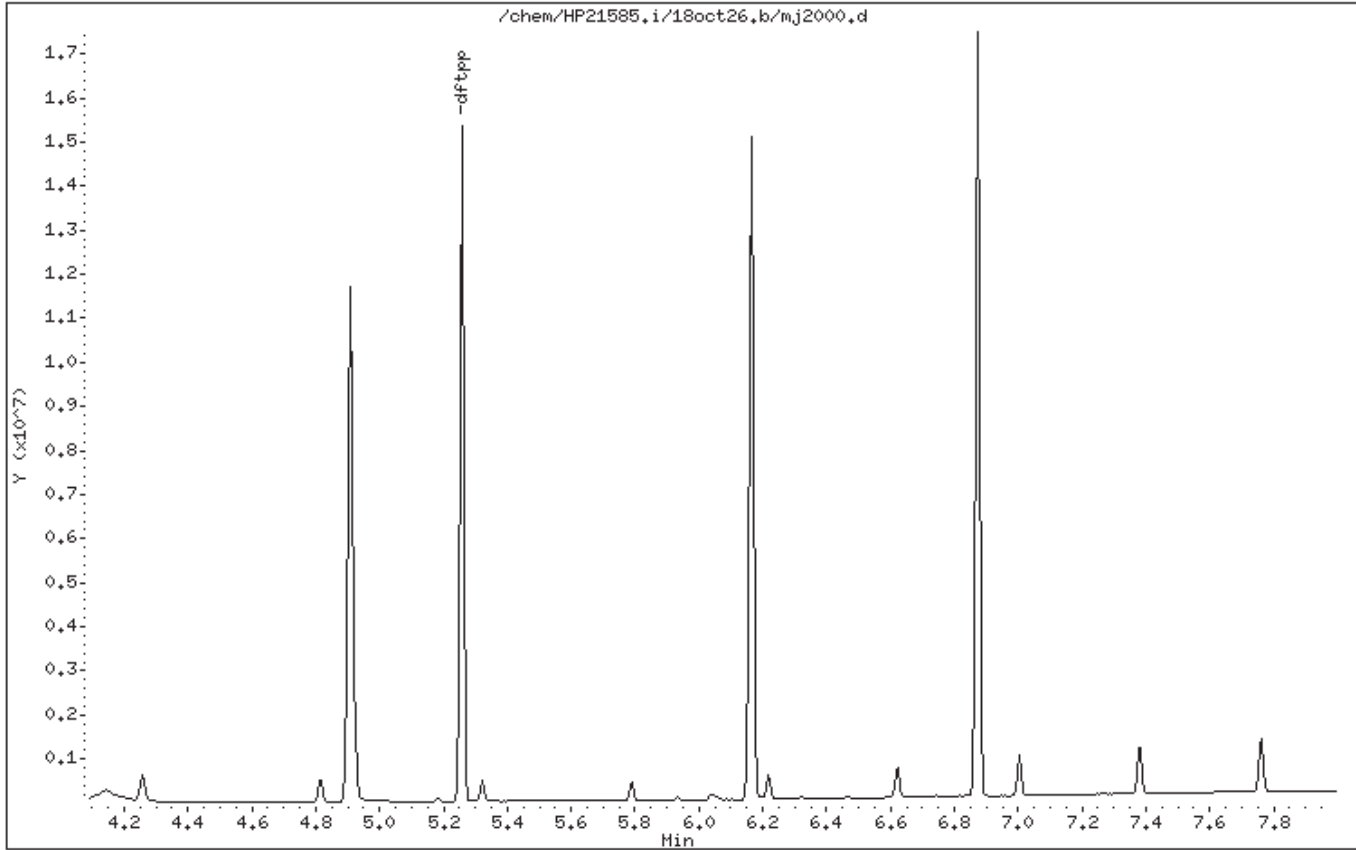
Instrument: HP21585,i

Sample Info: DFTPP12,5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0,18



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Target 3.5 esignature user ID: knb25316



Date : 26-OCT-2018 05:46

Client ID: DFTPP12.5

Instrument: HP21585.i

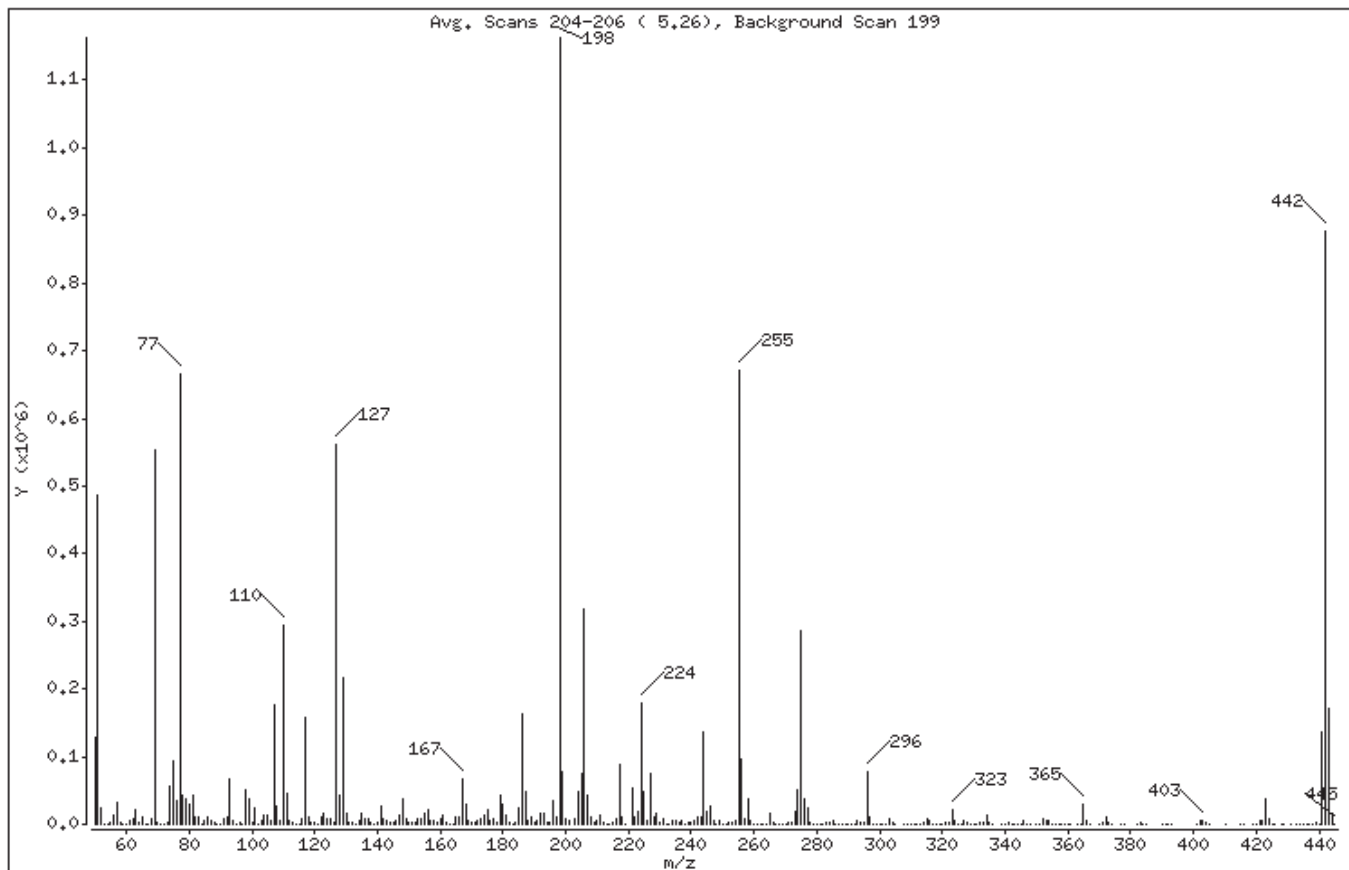
Sample Info: DFTPP12.5;RVIDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	41.88
68	Less than 2.00% of mass 69	0.74 ( 1.56)
69	Mass 69 relative abundance	47.61
70	Less than 2.00% of mass 69	0.27 ( 0.56)
127	10.00 - 80.00% of mass 198	48.34
197	Less than 2.00% of mass 198	0.83
199	5.00 - 9.00% of mass 198	6.72
275	10.00 - 60.00% of mass 198	24.60
365	Greater than 1.00% of mass 198	2.62
441	0.01 - 24.00% of mass 442	11.61 ( 15.40)
442	50.00 - 99.99% of mass 198	75.41
443	15.00 - 24.00% of mass 442	14.74 ( 19.54)

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Date : 26-OCT-2018 05:46

Client ID: DFTPP12.5

Instrument: HP21585.i

Sample Info: DFTPP12.5;RVIDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0,18

Data File: mj2000.d  
Spectrum: Avg. Scans 204-206 ( 5.26), Background Scan 199  
Location of Maximum: 198,00  
Number of points: 357

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50,00	127272	140,00	2583	232,00	958	324,00	4027
51,00	487104	141,00	26640	233,00	1333	325,00	547
52,00	24136	142,00	8858	234,00	4861	326,00	525
53,00	790	143,00	5764	235,00	5132	327,00	4408
54,00	88	144,00	1985	236,00	3893	328,00	2378
55,00	2446	145,00	1460	237,00	5868	329,00	552
56,00	13575	146,00	5245	238,00	963	330,00	232
57,00	32368	147,00	14072	239,00	2743	331,00	158
58,00	1676	148,00	38568	240,00	2015	332,00	1934
59,00	349	149,00	7129	241,00	4287	333,00	2478
60,00	359	150,00	1844	242,00	10535	334,00	13603
61,00	5863	151,00	3613	243,00	10225	335,00	3415
62,00	6725	152,00	1738	244,00	135104	336,00	525
63,00	20800	153,00	8606	245,00	18400	339,00	465
64,00	3009	154,00	6771	246,00	26192	340,00	379
65,00	10153	155,00	15731	247,00	5195	341,00	2411
66,00	914	156,00	22528	248,00	1281	342,00	613
67,00	513	157,00	4348	249,00	4624	343,00	51
68,00	8656	158,00	4883	250,00	1002	344,00	53
69,00	553728	159,00	3970	251,00	1280	345,00	57
70,00	3105	160,00	9154	252,00	1401	346,00	4727
71,00	207	161,00	13350	253,00	3675	347,00	899
72,00	331	162,00	3796	254,00	5804	348,00	136
73,00	3411	163,00	1061	255,00	669888	350,00	337
74,00	57392	164,00	1267	256,00	97416	351,00	619
75,00	92312	165,00	10182	257,00	7531	352,00	6719
76,00	33696	166,00	9370	258,00	37584	353,00	4374
77,00	664768	167,00	65624	259,00	6097	354,00	6404
78,00	42056	168,00	30504	260,00	1115	355,00	945
79,00	37440	169,00	4849	261,00	1110	356,00	232
80,00	30120	170,00	1487	262,00	146	357,00	173
81,00	43000	171,00	2796	263,00	459	358,00	145
82,00	10795	172,00	5048	264,00	995	359,00	374
83,00	9603	173,00	6902	265,00	15456	360,00	56
84,00	815	174,00	12571	266,00	1844	361,00	231

Date : 26-OCT-2018 05:46

Client ID: DFTPP12.5

Instrument: HP21585.i

Sample Info: DFTPP12.5;RVIDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0,18

Data File: mj2000.d  
Spectrum: Avg. Scans 204-206 ( 5.26), Background Scan 199  
Location of Maximum: 198,00  
Number of points: 357

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85,00	6678	175,00	22312	267,00	364	363,00	159
86,00	11256	176,00	6267	268,00	110	364,00	227
87,00	5069	177,00	9109	269,00	288	365,00	30416
88,00	2017	178,00	3810	270,00	758	366,00	4533
89,00	882	179,00	43256	271,00	1624	367,00	364
90,00	221	180,00	30048	272,00	1767	370,00	765
91,00	8217	181,00	14501	273,00	20040	371,00	1521
92,00	9391	182,00	2605	274,00	51336	372,00	10863
93,00	65496	183,00	1284	275,00	286080	373,00	2556
94,00	4895	184,00	3593	276,00	37296	374,00	296
95,00	1043	185,00	22880	277,00	22944	377,00	256
96,00	2838	186,00	162944	278,00	3958	378,00	63
97,00	1222	187,00	48352	279,00	842	382,00	69
98,00	50456	188,00	4698	280,00	93	383,00	2687
99,00	37472	189,00	9474	281,00	81	384,00	1044
100,00	3297	190,00	1608	282,00	370	385,00	229
101,00	23424	191,00	4726	283,00	2353	390,00	1181
102,00	1264	192,00	15237	284,00	2000	391,00	1017
103,00	6202	193,00	16279	285,00	4079	392,00	699
104,00	12814	194,00	3846	286,00	781	393,00	100
105,00	12206	195,00	1990	287,00	123	401,00	824
106,00	4142	196,00	34056	288,00	374	402,00	4117
107,00	176128	197,00	9611	289,00	1144	403,00	5847
108,00	26504	198,00	1162752	290,00	778	404,00	2162
109,00	4537	199,00	78192	291,00	545	405,00	344
110,00	293568	200,00	6688	292,00	1229	410,00	203
111,00	45592	201,00	4671	293,00	5651	415,00	315
112,00	6020	203,00	8642	294,00	1594	416,00	66
113,00	1948	204,00	47072	295,00	1936	419,00	53
114,00	396	205,00	75968	296,00	77600	420,00	88
115,00	356	206,00	318016	297,00	10046	421,00	4800
116,00	8951	207,00	41528	298,00	791	422,00	5144
117,00	158784	208,00	10105	299,00	255	423,00	36488
118,00	11318	209,00	3306	300,00	55	424,00	7277
119,00	1577	210,00	4982	301,00	1039	425,00	1015

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Target 3.5 esignature user ID: knb25316

Date : 26-OCT-2018 05:46

Client ID: DFTPP12,5

Instrument: HP21585.i

Sample Info: DFTPP12,5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

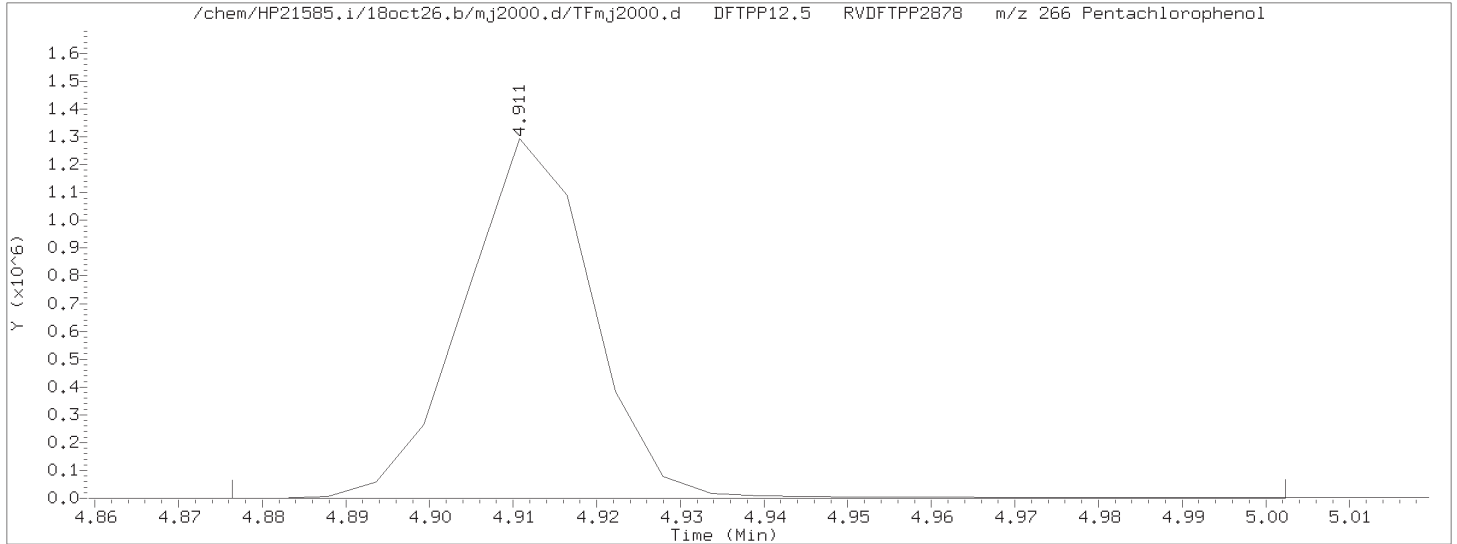
Column diameter: 0,18

Data File: mj2000.d  
Spectrum: Avg. Scans 204-206 ( 5.26), Background Scan 199  
Location of Maximum: 198,00  
Number of points: 357

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120,00	1922	211,00	12608	302,00	1291	426,00	50
121,00	697	212,00	1944	303,00	8515	428,00	50
122,00	9493	213,00	947	304,00	2043	429,00	88
123,00	16456	214,00	470	305,00	152	431,00	190
124,00	7452	215,00	3914	308,00	1127	433,00	132
125,00	7386	216,00	6763	309,00	722	434,00	532
126,00	3246	217,00	88152	310,00	1048	435,00	470
127,00	562304	218,00	10494	311,00	172	436,00	795
128,00	42672	219,00	1069	312,00	353	437,00	453
129,00	215296	221,00	52992	313,00	682	438,00	1230
130,00	17328	222,00	11255	314,00	3795	439,00	1542
131,00	3388	223,00	19656	315,00	8389	440,00	506
132,00	1957	224,00	179328	316,00	4882	441,00	135040
133,00	639	225,00	46800	317,00	688	442,00	877056
134,00	5421	226,00	4990	318,00	71	443,00	171392
135,00	16928	227,00	76024	319,00	227	444,00	15440
136,00	6930	228,00	10318	320,00	246	445,00	855
137,00	9061	229,00	15565	321,00	2472		
138,00	2071	230,00	2246	322,00	1340		
139,00	1101	231,00	6801	323,00	22424		

# Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP21585.i Injection Date: 26-OCT-2018 05:46 Operator: ceb05247

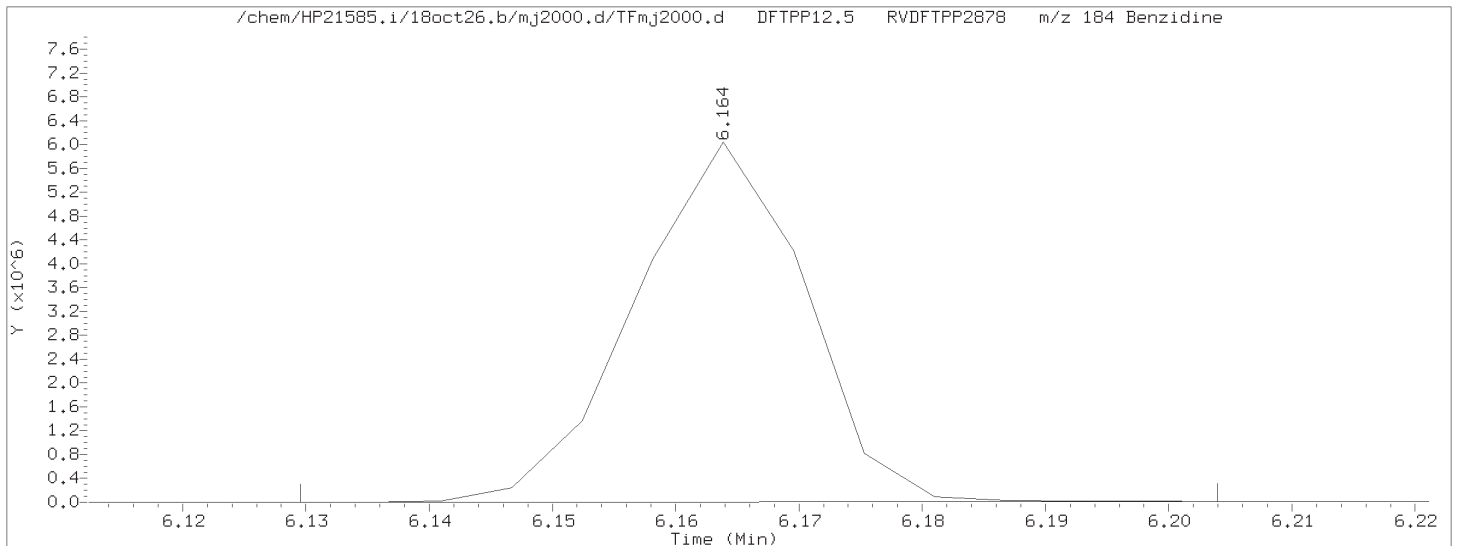


Pentachlorophenol EICP peak height = 1294173 EICP peak height at 10% = 129417 Pentachlorophenol EICP area = 1377464

Pentachlorophenol EICP peak apex (min.) = 4.911  
 RT at 10% of front half of EICP (min.) = 4.896  
 RT at 10% of back half of EICP (min.) = 4.927

'Front' peak width (min.) = 0.015166667  
 'Tailing' peak width (min.) = 0.016200000

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.016200000}{0.015166667} = 1.068$$



Benzidine EICP peak height = 6034458 EICP peak height at 10% = 603446 Benzidine EICP area = 5795344

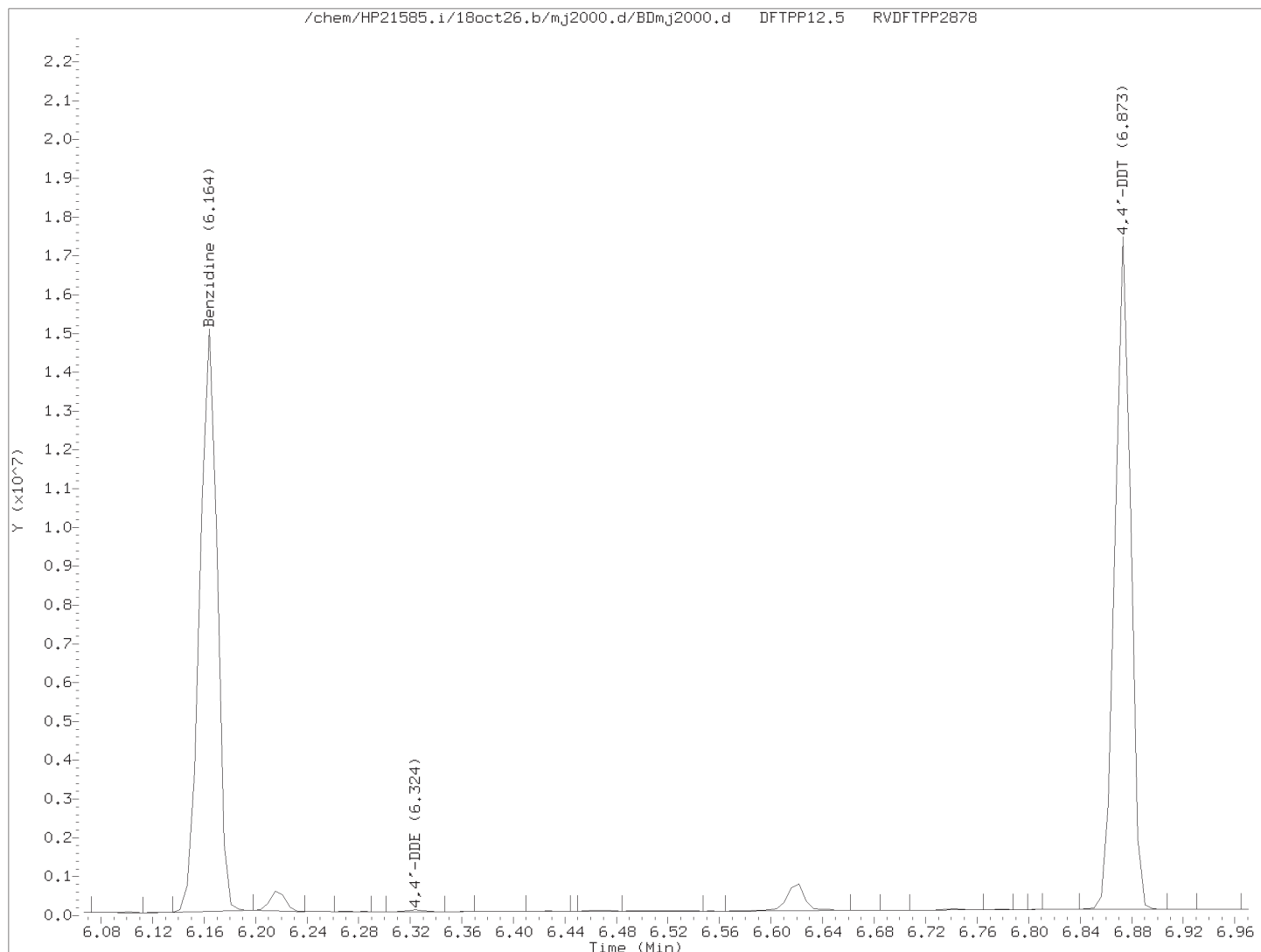
Benzidine EICP peak apex (min.) = 6.164  
 RT at 10% of front half of EICP (min.) = 6.149  
 RT at 10% of back half of EICP (min.) = 6.177

'Front' peak width (min.) = 0.015300000  
 'Tailing' peak width (min.) = 0.013083333

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.013083333}{0.015300000} = 0.855$$

# Assessment of GC Column Performance and Injection Port Inertness for

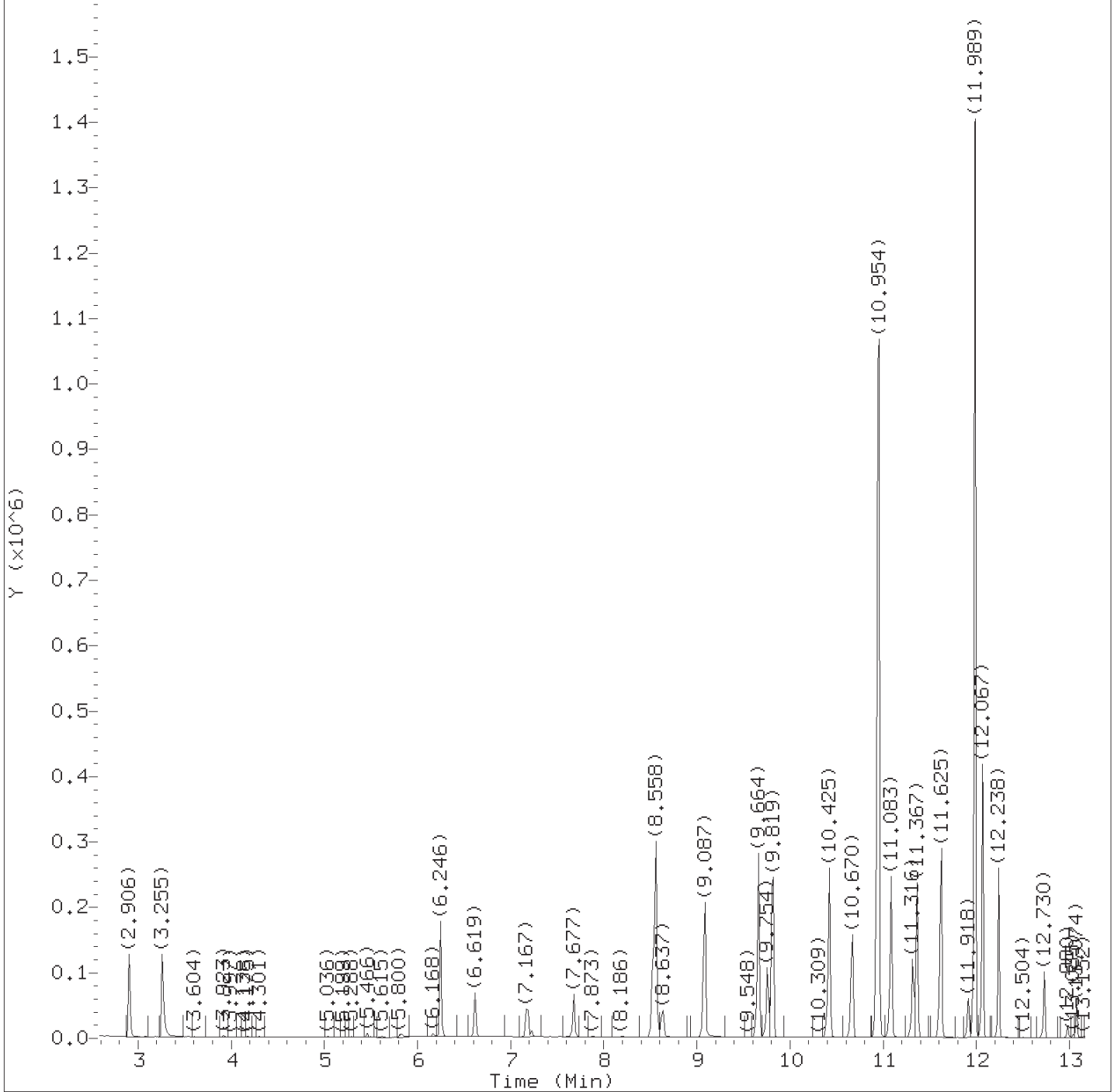
Instrument ID: HP21585.i Injection Date: 26-OCT-2018 05:46 Operator: ceb05247



$$\% \text{ 4,4'-DDT breakdown} = \frac{4,4'\text{-DDE TIC area} + 4,4'\text{-DDD TIC area}}{4,4'\text{-DDE TIC area} + 4,4'\text{-DDD TIC area} + 4,4'\text{-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{39863 + 7205}{39863 + 7205 + 14989508} \times 100 = 0.3$$

page 2 of 2  
printed on 10/26/2018 at 06:01



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2001b.d  
Injection date and time: 26-OCT-2018 07:31

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m  
Calibration date and time: 27-OCT-2018 17:17

Sublist used: all1

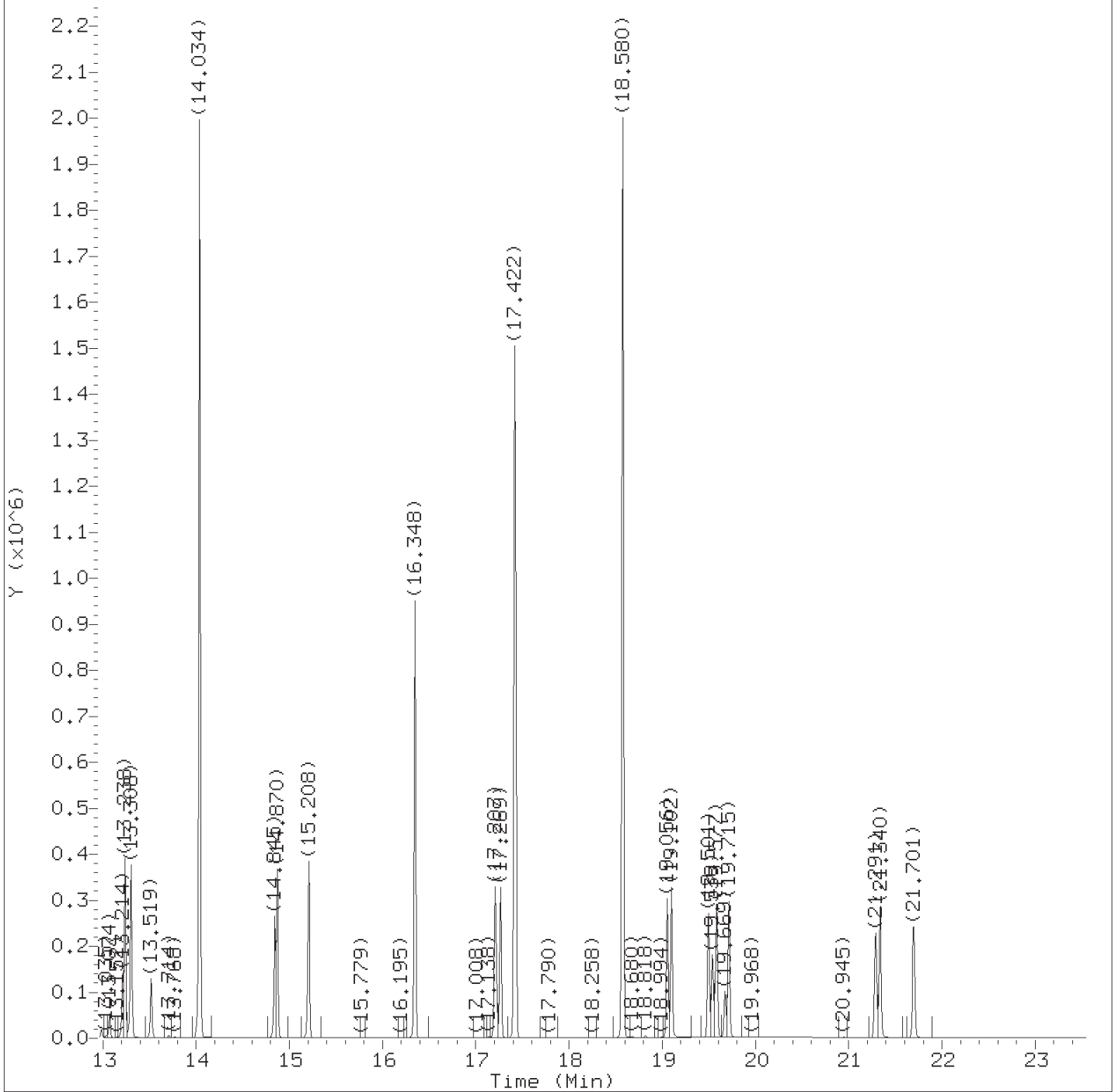
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2001b.d  
Injection date and time: 26-OCT-2018 07:31

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m  
Calibration date and time: 27-OCT-2018 17:17

Sublist used: all1

Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2001b.d  
 Injection date and time: 26-OCT-2018 07:31

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 27-OCT-2018 17:17  
 Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.906	88	74340	0.500
2) N-Nitrosodimethylamine	(1)	3.255	74	111937	0.500
4) bis(2-Chloroethyl) ether	(2)	6.246	93	124417	0.500
5) *1,4-Dichlorobenzene-d4	(1)	6.619	152	53139	0.250
6) *Naphthalene-d8	(2)	8.539	136	152458	0.250
7) Naphthalene	(2)	8.558	128	360131	0.500
8) Quinoline	(2)	9.087	129	214443	0.500
9) 2-Methylnaphthalene	(2)	9.664	142	221759	0.500
10) \$1-Methylnaphthalene-d10	(2)	9.754	152	140720	0.500
11) 1-Methylnaphthalene	(2)	9.819	142	220512	0.500
12) Dimethylphthalate	(3)	10.954	163	1344002	2.500
13) Acenaphthylene	(3)	11.083	152	359012	0.500
14) *Acenaphthene-d10	(3)	11.316	164	66371	0.250
15) Acenaphthene	(3)	11.367	154	213637	0.500
16) Dibenzofuran	(3)	11.625	168	295701	0.500
17) Diethylphthalate	(3)	11.981	149	1333007	2.500
18) Fluorene	(3)	12.067	166	255239	0.500
19) Hexachlorobenzene	(4)	12.738	284	77448	0.500
20) *Phenanthrene-d10	(4)	13.214	188	136980	0.250
21) Phenanthrene	(4)	13.238	178	367993	0.500
22) Anthracene	(4)	13.308	178	370045	0.500
23) Di-n-butylphthalate	(4)	14.034	149	2090672	2.500
24) \$Fluoranthene-d10	(4)	14.845	212	278193	0.500
25) Fluoranthene	(4)	14.870	202	422256	0.500
26) Pyrene	(5)	15.208	202	436497	0.500
27) Butylbenzylphthalate	(5)	16.348	149	921828	2.500
28) Benzo(a)anthracene	(5)	17.207	228	364031	0.500
29) *Chrysene-d12	(5)	17.223	240	94742	0.250
30) Chrysene	(5)	17.269	228	370719	0.500
31) bis(2-Ethylhexyl)phthalate	(5)	17.422	149	1379040	2.500
32) Di-n-octylphthalate	(6)	18.580	149	2436022	2.500
33) Benzo(b)fluoranthene	(6)	19.056	252	356662	0.500
34) Benzo(k)fluoranthene	(6)	19.102	252	368461	0.500
35) Benzo(e)pyrene	(6)	19.501	252	343767	0.500
36) \$Benzo(a)pyrene-d12	(6)	19.547	264	172445	0.500
37) Benzo(a)pyrene	(6)	19.577	252	345906	0.500
38) *Perylene-d12	(6)	19.669	264	90716	0.250
45) Perylene	(6)	19.715	252	350335	0.500
39) Indeno(1,2,3-cd)pyrene	(6)	21.291	276	316754M	0.500
40) Dibenz(a,h)anthracene	(6)	21.340	278	323670	0.500

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2001b.d  
Injection date and time: 26-OCT-2018 07:31

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

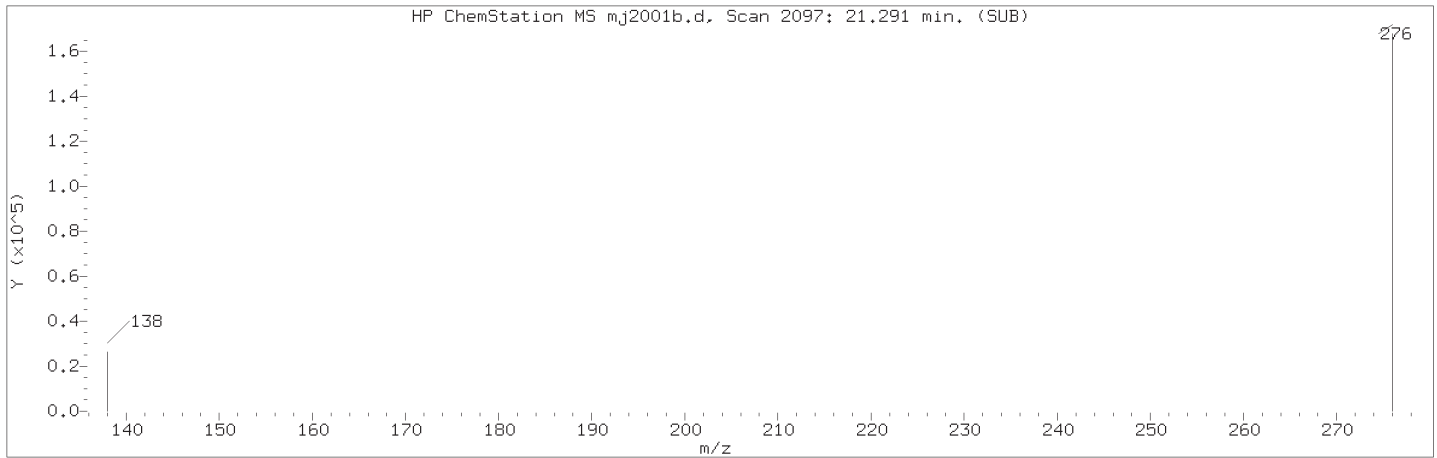
Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

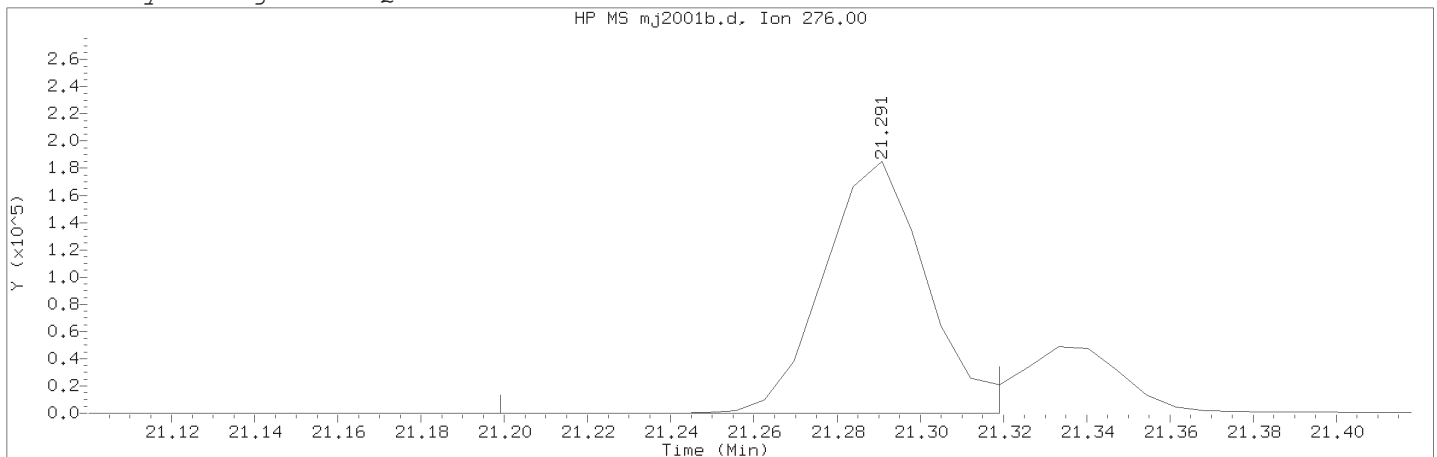
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
===== 41) Benzo(g,h,i)perylene	(6)	21.701	276	362005	0.500

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2001b.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 07:31                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m                      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.5    Lab Sample ID: RVSIM2768

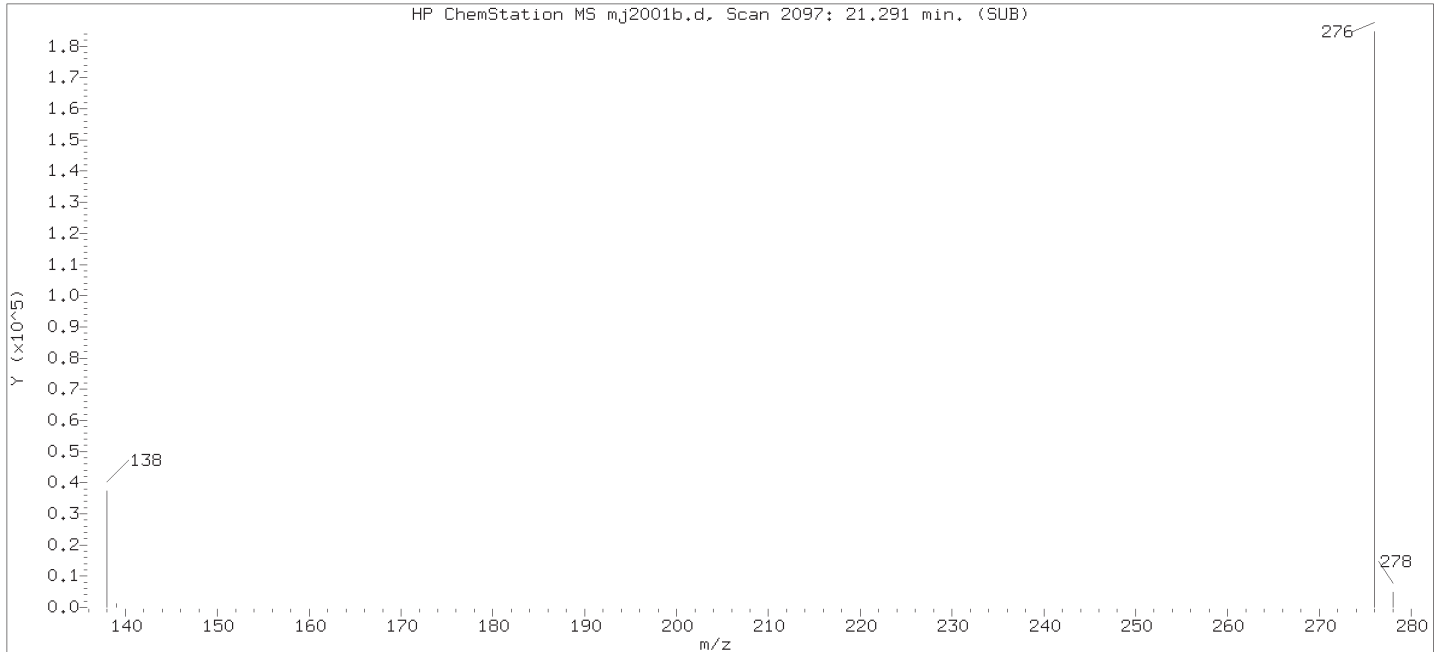
Compound Number                      : 39  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 2097  
Retention Time (minutes)             : 21.291  
Quant Ion                                : 276.00  
Area (flag)                             : 316754M  
On-Column Amount (ng/ul)            : 0.5000  
Integration start scan                : 2083                      Integration stop scan: 2100  
Y at integration start                : 94                        Y at integration end: 94

Reason for manual integration: improper integration

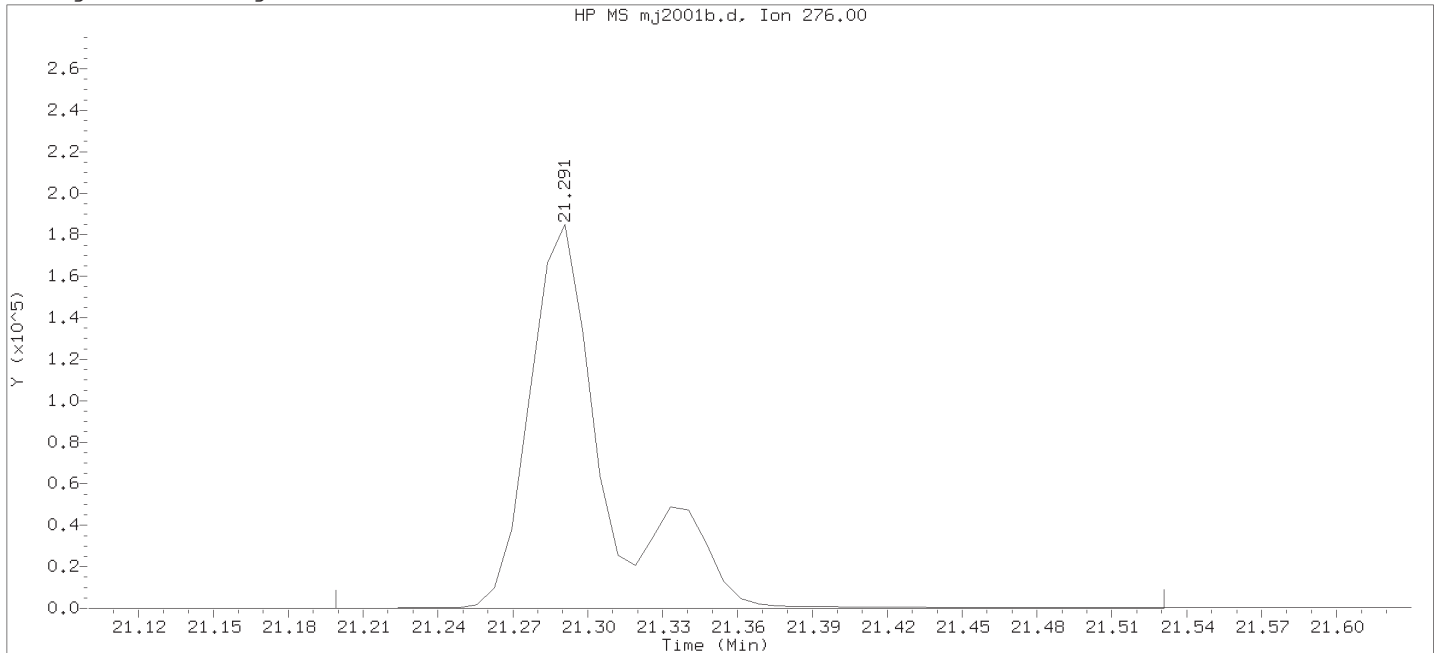
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2001b.d  
Injection date and time: 26-OCT-2018 07:31

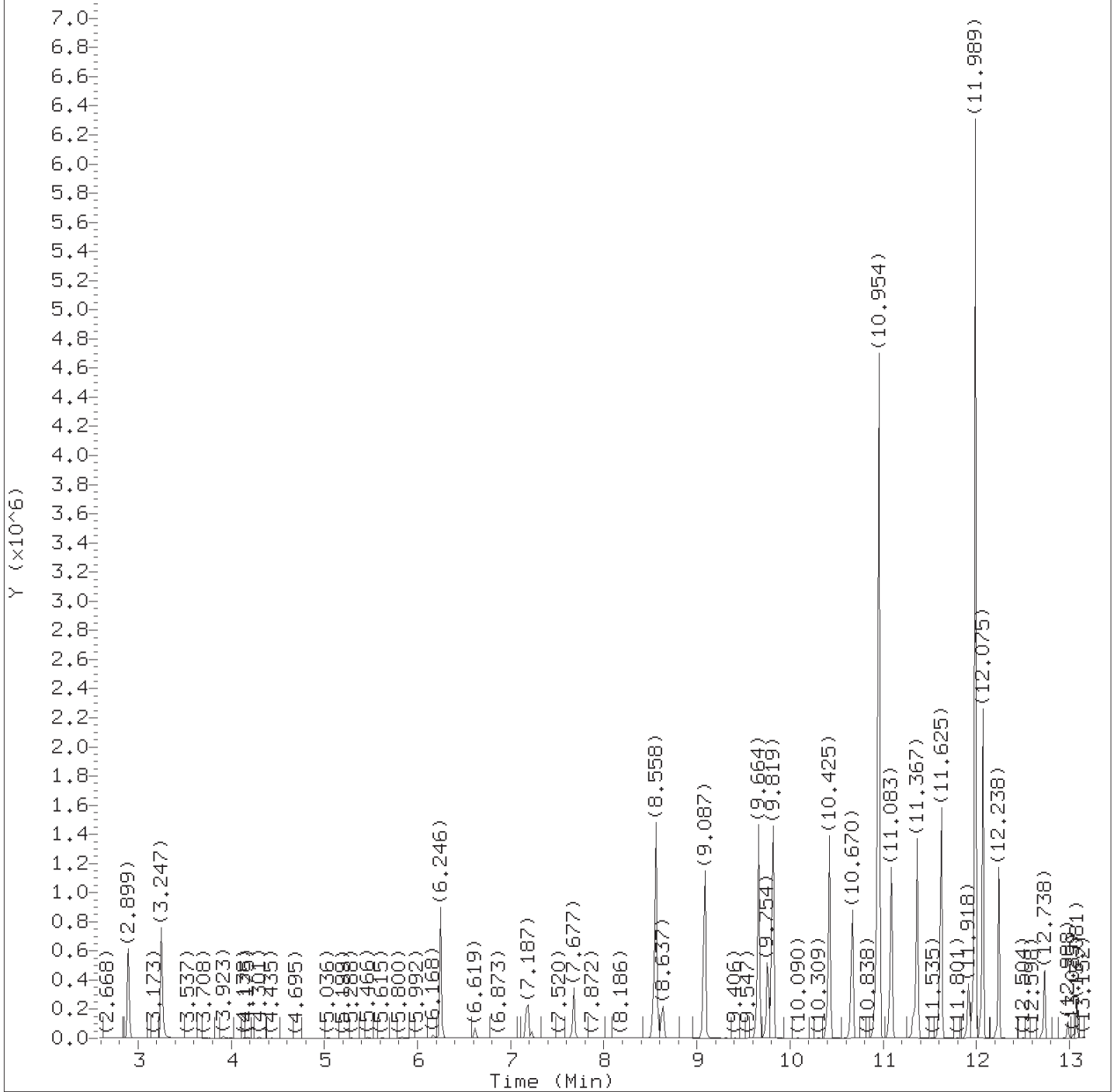
Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 08:06  
Date, time and analyst ID of latest file update: 26-Oct-2018 08:06 jmg00346

Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

Compound Number	: 39	
Compound Name	: Indeno(1,2,3-cd)pyrene	
Scan Number	: 2097	
Retention Time (minutes)	: 21.291	
Quant Ion	: 276.00	
Area	: 397234	
On-column Amount (ng/ul)	: 0.5000	
Integration start scan	: 2083	Integration stop scan: 2130
Y at integration start	: 94	Y at integration end: 94



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2002.d  
Injection date and time: 26-OCT-2018 08:05

Instrument ID: HP21585.i  
Analyst ID: ceb05247

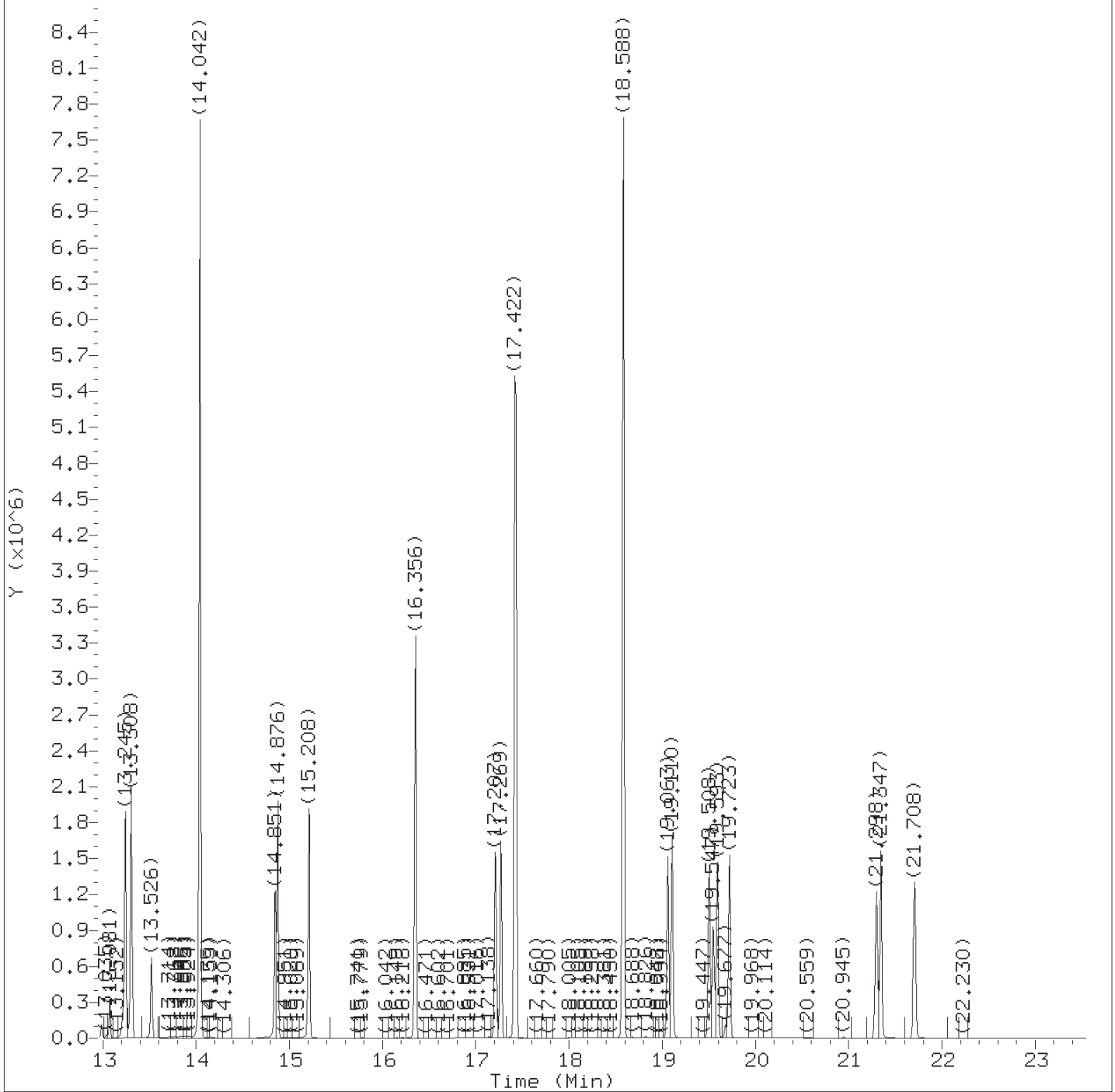
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD2.5

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2002.d  
Injection date and time: 26-OCT-2018 08:05

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD2.5

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2002.d  
 Injection date and time: 26-OCT-2018 08:05

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 27-OCT-2018 17:17  
 Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD2.5

Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.899	88	378484	2.512
2) N-Nitrosodimethylamine	(1)	3.247	74	589133	2.553
4) bis(2-Chloroethyl) ether	(2)	6.246	93	610102	2.398
5) *1,4-Dichlorobenzene-d4	(1)	6.619	152	53598	0.250
6) *Naphthalene-d8	(2)	8.539	136	162269	0.250
7) Naphthalene	(2)	8.558	128	1776668	2.405
8) Quinoline	(2)	9.087	129	1137228	2.496
9) 2-Methylnaphthalene	(2)	9.664	142	1136260	2.453
10) \$1-Methylnaphthalene-d10	(2)	9.754	152	722984	2.456
11) 1-Methylnaphthalene	(2)	9.819	142	1140299	2.464
12) Dimethylphthalate	(3)	10.954	163	5114582	9.717
13) Acenaphthylene	(3)	11.083	152	1883391	2.552
14) *Acenaphthene-d10	(3)	11.316	164	66824	0.250
15) Acenaphthene	(3)	11.367	154	1096252	2.524
16) Dibenzofuran	(3)	11.625	168	1489563	2.501
17) Diethylphthalate	(3)	11.989	149	5265373	9.903
18) Fluorene	(3)	12.075	166	1308498	2.523
19) Hexachlorobenzene	(4)	12.738	284	394190	2.512
20) *Phenanthrene-d10	(4)	13.214	188	138135	0.250
21) Phenanthrene	(4)	13.245	178	1934462	2.552
22) Anthracene	(4)	13.308	178	1874512	2.506
23) Di-n-butylphthalate	(4)	14.042	149	8194704	9.857
24) \$Fluoranthene-d10	(4)	14.851	212	1387323	2.486
25) Fluoranthene	(4)	14.876	202	2130641	2.501
26) Pyrene	(5)	15.208	202	2225130	2.509
27) Butylbenzylphthalate	(5)	16.356	149	3680842	9.929
28) Benzo(a)anthracene	(5)	17.207	228	1883505	2.527
29) *Chrysene-d12	(5)	17.230	240	95935	0.250
30) Chrysene	(5)	17.269	228	1885157	2.505
31) bis(2-Ethylhexyl)phthalate	(5)	17.422	149	5610662	10.022
32) Di-n-octylphthalate	(6)	18.588	149	9837635	9.807
33) Benzo(b)fluoranthene	(6)	19.063	252	1899228	2.519
34) Benzo(k)fluoranthene	(6)	19.110	252	1904244	2.481
35) Benzo(e)pyrene	(6)	19.508	252	1805256	2.501
36) \$Benzo(a)pyrene-d12	(6)	19.554	264	915786	2.515
37) Benzo(a)pyrene	(6)	19.593	252	1820653	2.504
38) *Perylene-d12	(6)	19.677	264	95191	0.250
45) Perylene	(6)	19.723	252	1843802	2.504
39) Indeno(1,2,3-cd)pyrene	(6)	21.298	276	1681739M	2.515
40) Dibenz(a,h)anthracene	(6)	21.347	278	1697466	2.499

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2002.d  
Injection date and time: 26-OCT-2018 08:05

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD2.5

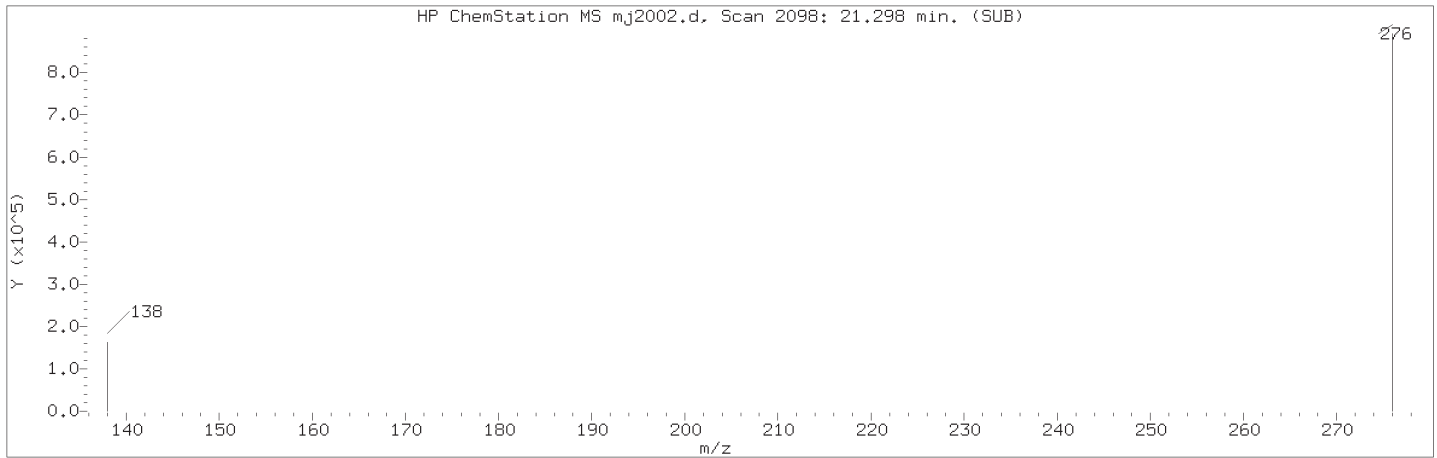
Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
===== 41) Benzo(g,h,i)perylene	(6)	21.708	276	1898487	2.499

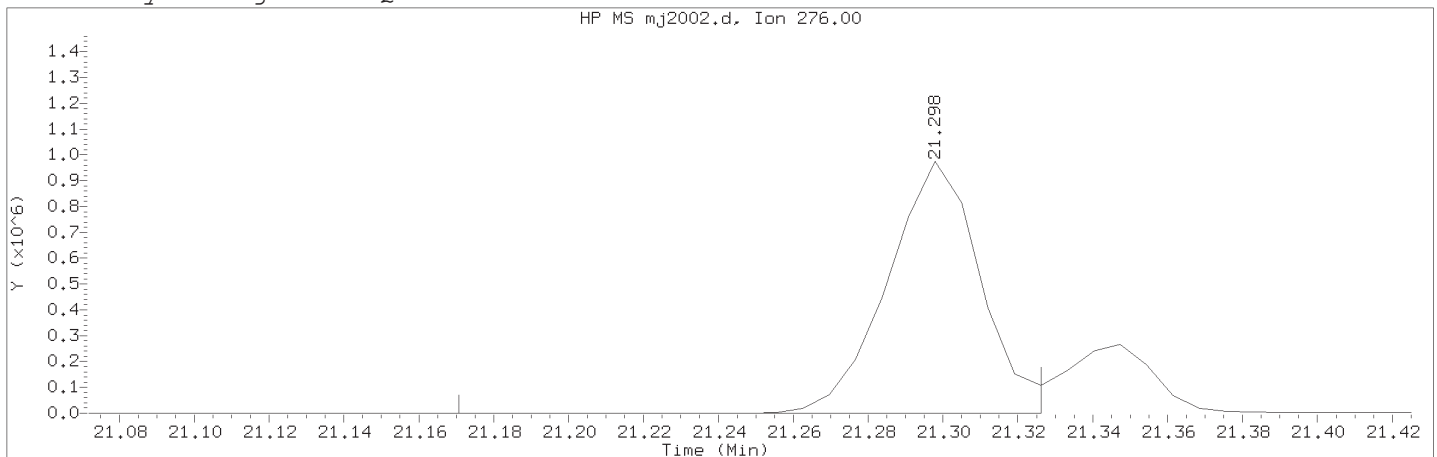
Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2002.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 08:05                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD2.5    Lab Sample ID: RVSIM2768

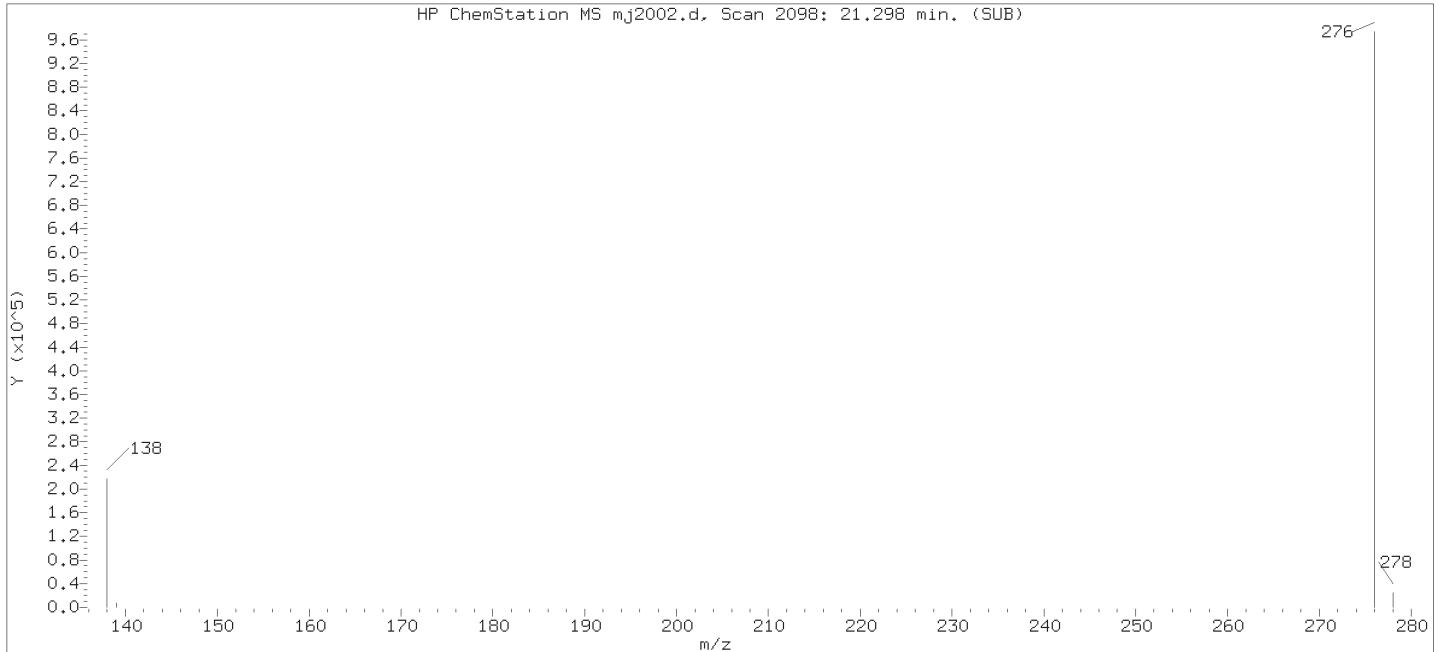
Compound Number                      : 39  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 2098  
Retention Time (minutes)            : 21.298  
Quant Ion                                : 276.00  
Area (flag)                             : 1681739M  
On-Column Amount (ng/ul)           : 2.5148  
Integration start scan                : 2079                      Integration stop scan: 2101  
Y at integration start                : 159                       Y at integration end: 159

Reason for manual integration: improper integration

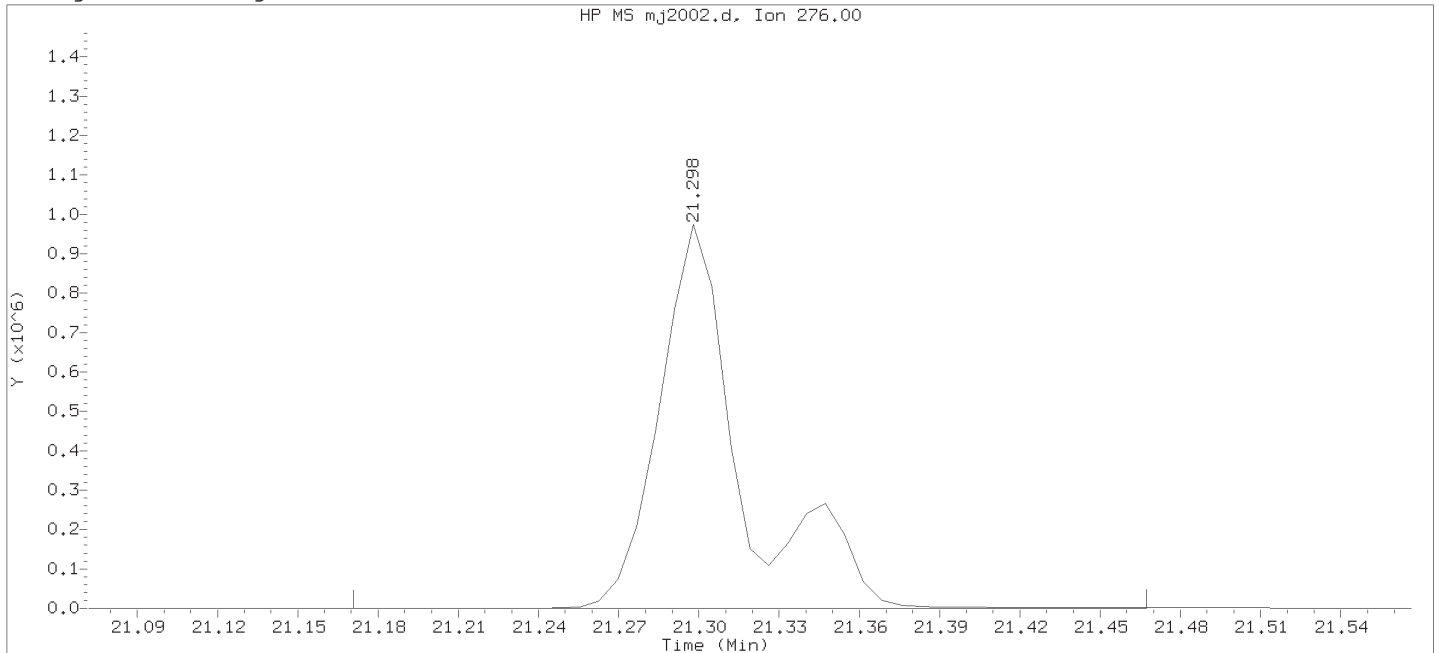
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2002.d  
 Injection date and time: 26-OCT-2018 08:05

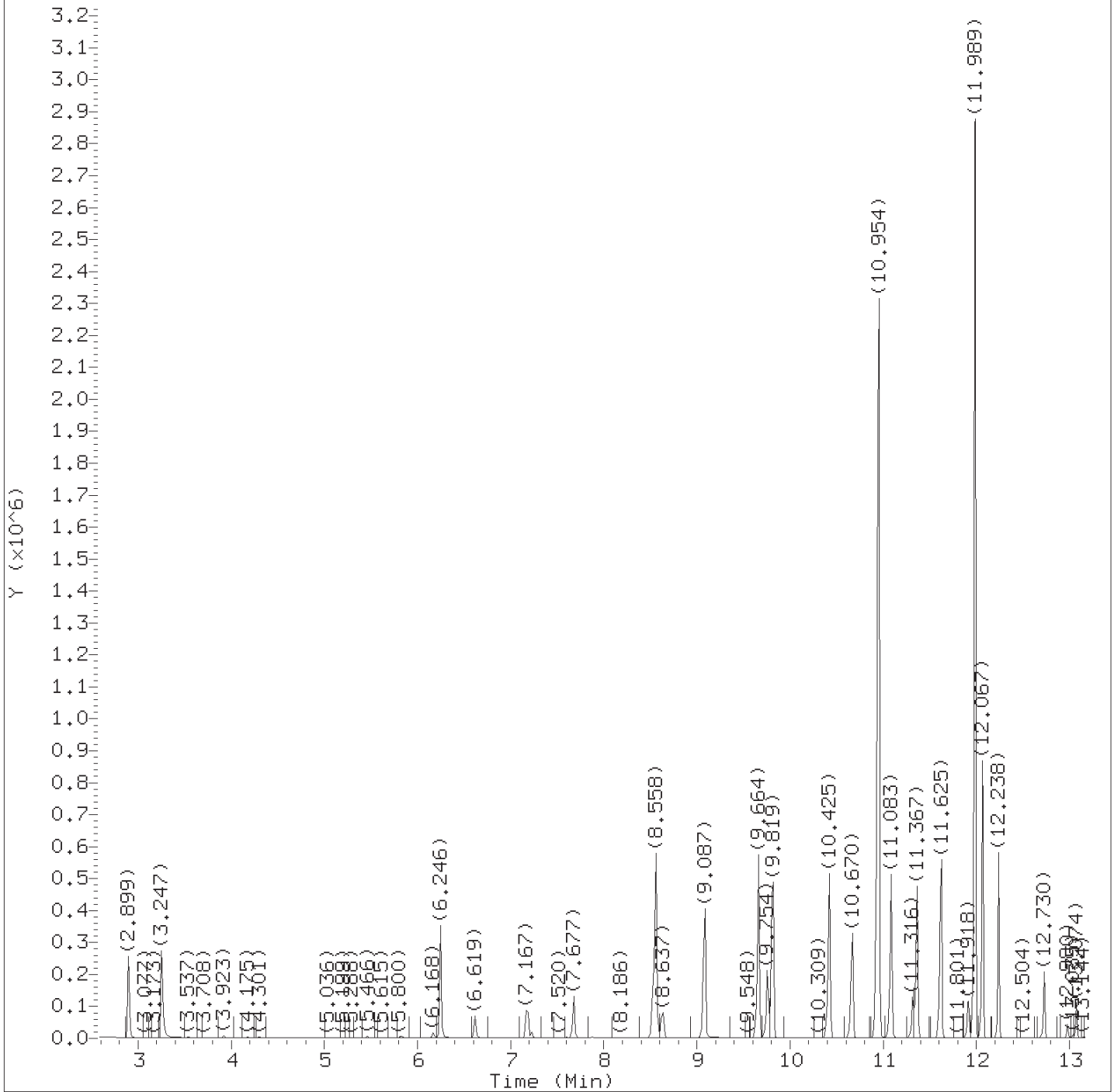
Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 08:34  
 Date, time and analyst ID of latest file update: 26-Oct-2018 08:34 Unknown

Sample Name: SSTD2.5

Lab Sample ID: RVSIM2768

Compound Number : 39  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 2098  
 Retention Time (minutes) : 21.298  
 Quant Ion : 276.00  
 Area : 2095911  
 On-column Amount (ng/ul) : 3.1529  
 Integration start scan : 2079 Integration stop scan: 2121  
 Y at integration start : 159 Y at integration end: 159



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2003.d  
Injection date and time: 26-OCT-2018 08:35

Instrument ID: HP21585.i  
Analyst ID: ceb05247

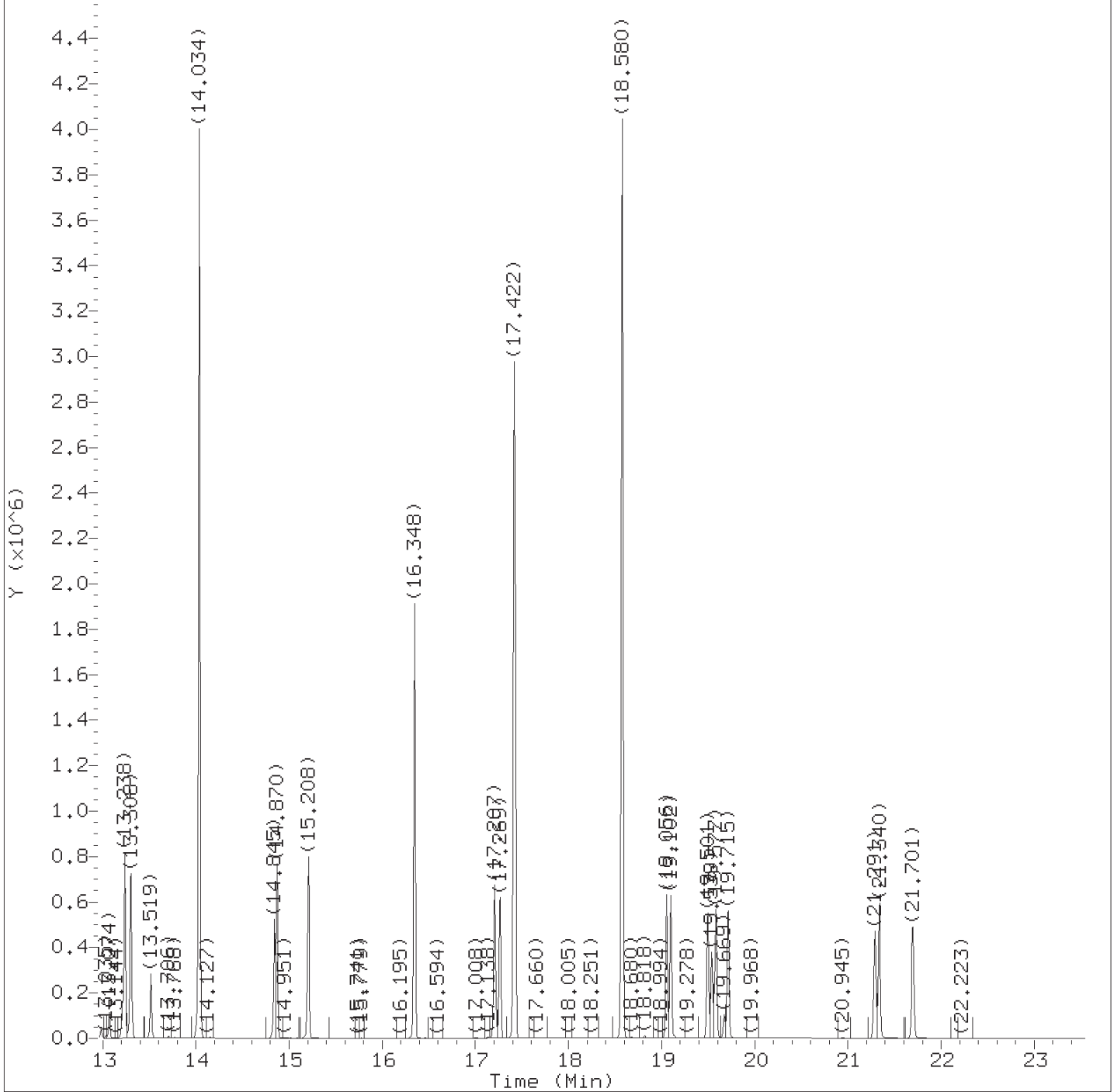
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD001

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2003.d  
Injection date and time: 26-OCT-2018 08:35

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD001

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2003.d  
 Injection date and time: 26-OCT-2018 08:35

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 27-OCT-2018 17:17  
 Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD001

Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.899	88	148040	0.985
2) N-Nitrosodimethylamine	(1)	3.247	74	225666	0.982
4) bis(2-Chloroethyl) ether	(2)	6.246	93	246158	1.015
5) *1,4-Dichlorobenzene-d4	(1)	6.619	152	53854	0.250
6) *Naphthalene-d8	(2)	8.539	136	153430	0.250
7) Naphthalene	(2)	8.558	128	699975	1.001
8) Quinoline	(2)	9.087	129	425622	0.992
9) 2-Methylnaphthalene	(2)	9.664	142	442255	1.006
10) \$1-Methylnaphthalene-d10	(2)	9.754	152	279029	1.002
11) 1-Methylnaphthalene	(2)	9.819	142	437166	0.999
12) Dimethylphthalate	(3)	10.954	163	2706064	5.090
13) Acenaphthylene	(3)	11.083	152	723868	0.986
14) *Acenaphthene-d10	(3)	11.316	164	66884	0.250
15) Acenaphthene	(3)	11.367	154	421991	0.980
16) Dibenzofuran	(3)	11.625	168	580805	0.983
17) Diethylphthalate	(3)	11.981	149	2685757	5.031
18) Fluorene	(3)	12.067	166	512354	0.991
19) Hexachlorobenzene	(4)	12.730	284	153147	0.985
20) *Phenanthrene-d10	(4)	13.214	188	137822	0.250
21) Phenanthrene	(4)	13.238	178	735982	0.982
22) Anthracene	(4)	13.308	178	742802	0.997
23) Di-n-butylphthalate	(4)	14.034	149	4251276	5.083
24) \$Fluoranthene-d10	(4)	14.845	212	553093	0.996
25) Fluoranthene	(4)	14.870	202	844919	0.996
26) Pyrene	(5)	15.208	202	879325	1.000
27) Butylbenzylphthalate	(5)	16.348	149	1922759	5.151
28) Benzo(a)anthracene	(5)	17.207	228	731408	0.993
29) *Chrysene-d12	(5)	17.223	240	95148	0.250
30) Chrysene	(5)	17.269	228	744436	0.998
31) bis(2-Ethylhexyl)phthalate	(5)	17.422	149	2855246	5.094
32) Di-n-octylphthalate	(6)	18.580	149	5015050	5.135
33) Benzo(b)fluoranthene	(6)	19.056	252	723442	0.999
34) Benzo(k)fluoranthene	(6)	19.102	252	735105	0.998
35) Benzo(e)pyrene	(6)	19.501	252	691241	0.998
36) \$Benzo(a)pyrene-d12	(6)	19.539	264	348725	0.998
37) Benzo(a)pyrene	(6)	19.577	252	694875	0.997
38) *Perylene-d12	(6)	19.669	264	91421	0.250
45) Perylene	(6)	19.715	252	702707	0.996
39) Indeno(1,2,3-cd)pyrene	(6)	21.291	276	631955M	0.989
40) Dibenz(a,h)anthracene	(6)	21.340	278	638857	0.986

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2003.d  
Injection date and time: 26-OCT-2018 08:35

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

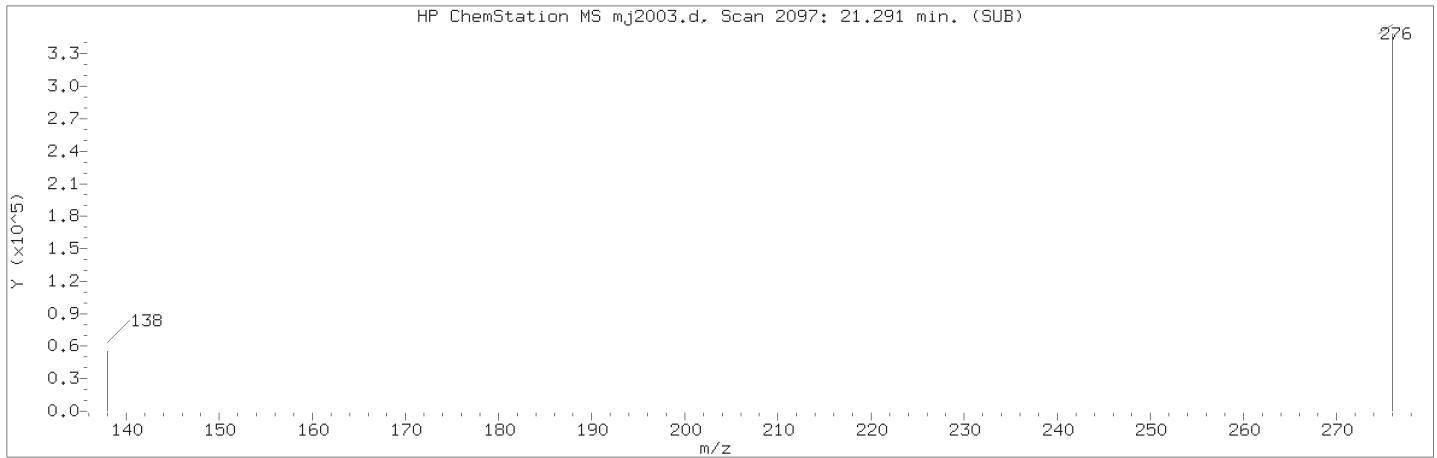
Sample Name: SSTD001

Lab Sample ID: RVSIM2768

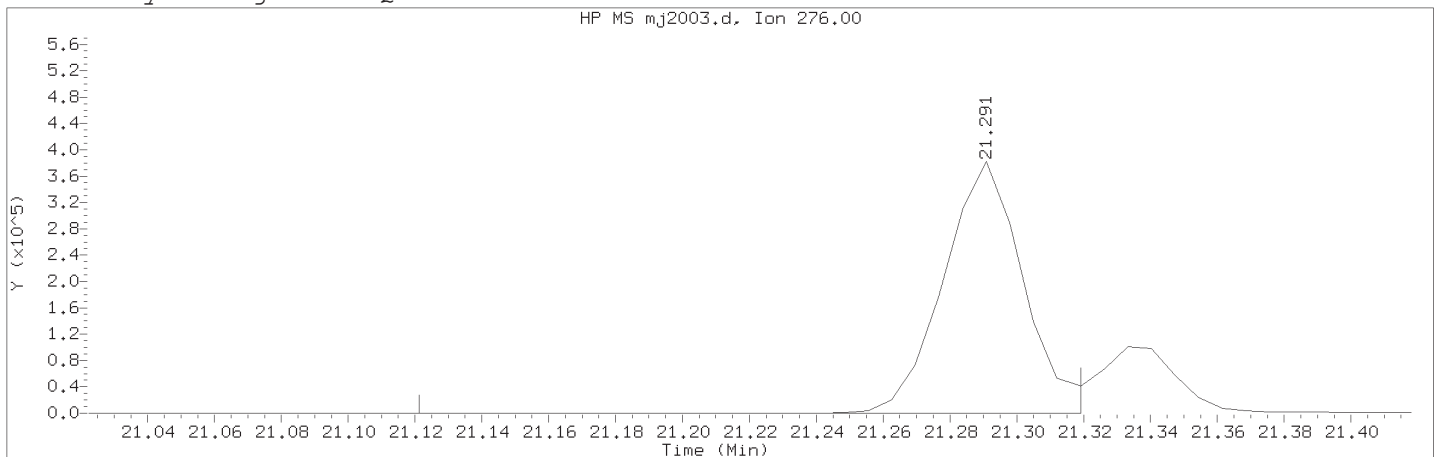
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
===== 41) Benzo(g,h,i)perylene	(6)	21.701	276	719086	0.990

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2003.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 08:35                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD001    Lab Sample ID: RVSIM2768

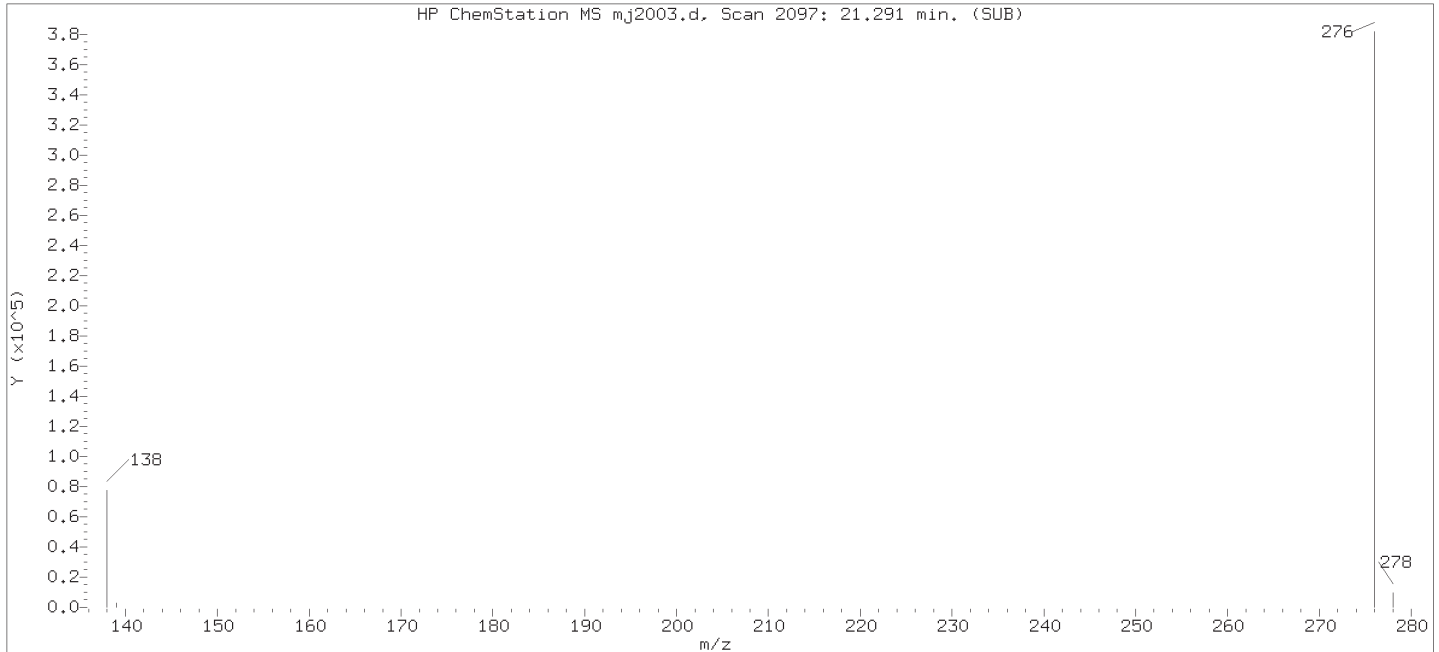
Compound Number    : 39  
Compound Name    : Indeno(1,2,3-cd)pyrene  
Scan Number    : 2097  
Retention Time (minutes)                                   : 21.291  
Quant Ion    : 276.00  
Area (flag)    : 631955M  
On-Column Amount (ng/ul)                                : 0.9893  
Integration start scan                                      : 2072                      Integration stop scan: 2100  
Y at integration start                                      : 95                        Y at integration end: 95

Reason for manual integration: improper integration

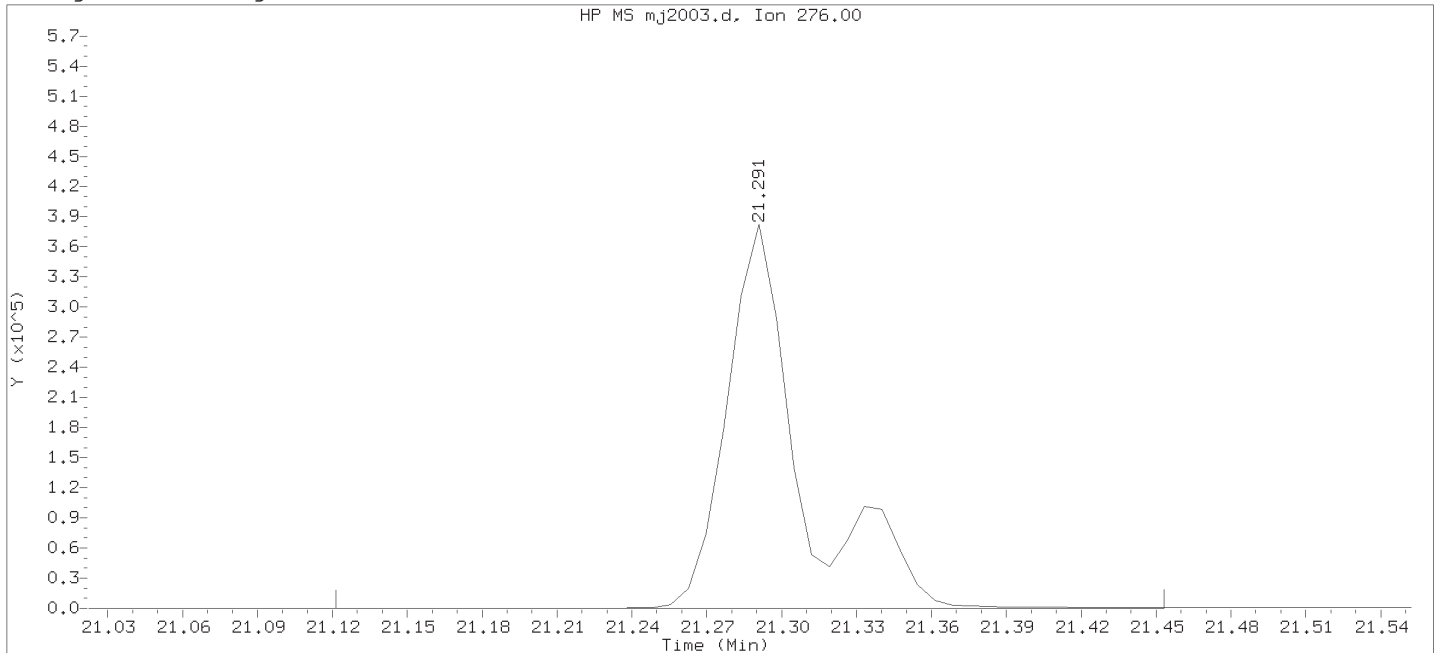
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2003.d  
 Injection date and time: 26-OCT-2018 08:35

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

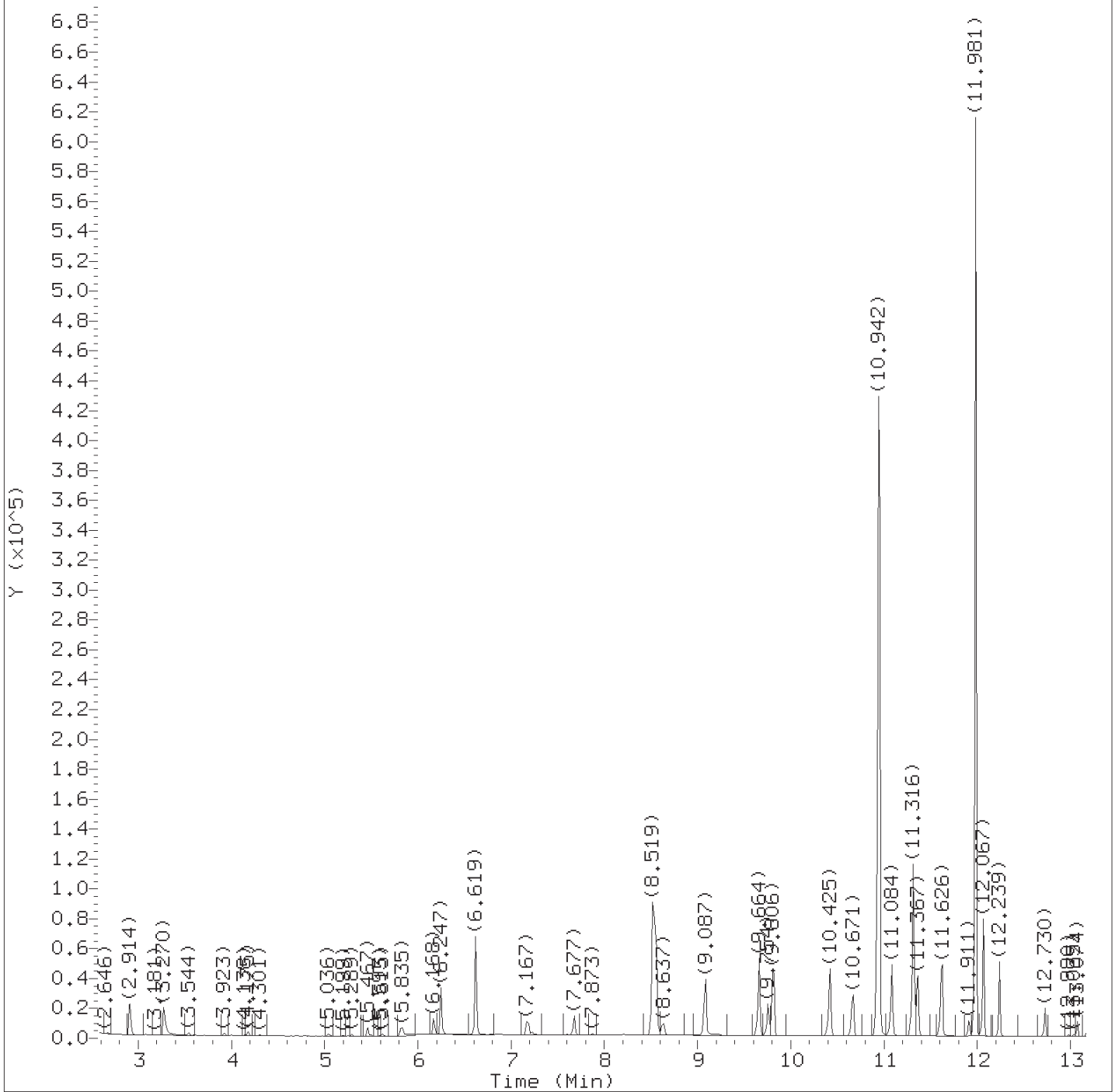
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 09:03  
 Date, time and analyst ID of latest file update: 26-Oct-2018 09:03 Unknown

Sample Name: SSTD001

Lab Sample ID: RVSIM2768

Compound Number : 39  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 2097  
 Retention Time (minutes) : 21.291  
 Quant Ion : 276.00  
 Area : 788664  
 On-column Amount (ng/ul) : 1.2353  
 Integration start scan : 2072 Integration stop scan: 2119  
 Y at integration start : 95 Y at integration end: 95





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2004.d  
Injection date and time: 26-OCT-2018 09:04

Instrument ID: HP21585.i  
Analyst ID: ceb05247

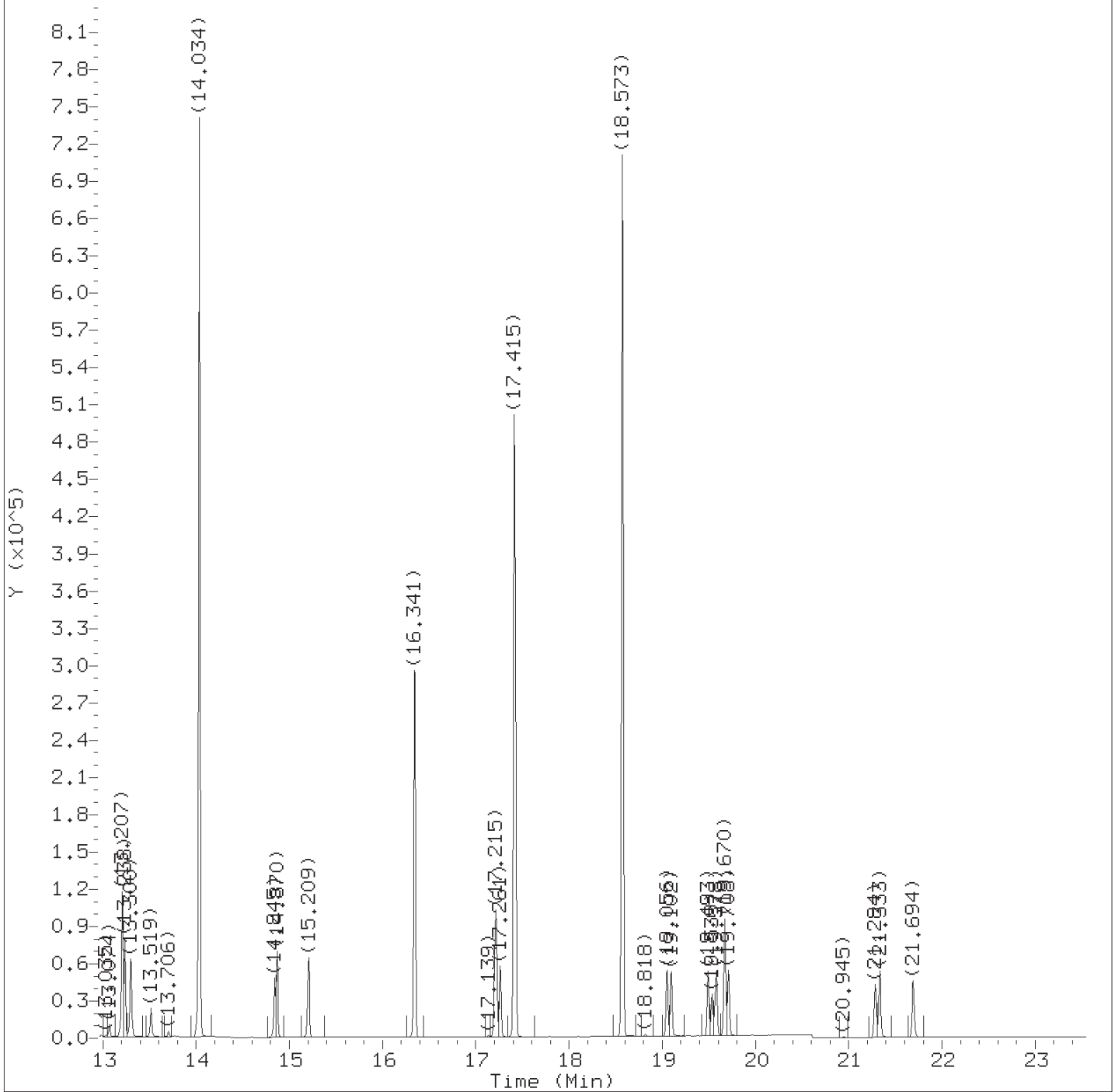
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.1

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2004.d  
Injection date and time: 26-OCT-2018 09:04

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.1

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2004.d  
 Injection date and time: 26-OCT-2018 09:04

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 27-OCT-2018 17:17  
 Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.1

Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.914	88	14503	0.098
2) N-Nitrosodimethylamine	(1)	3.270	74	20432	0.092
4) bis(2-Chloroethyl) ether	(2)	6.247	93	23641	0.101
5) *1,4-Dichlorobenzene-d4	(1)	6.619	152	53454	0.250
6) *Naphthalene-d8	(2)	8.519	136	147772	0.250
7) Naphthalene	(2)	8.558	128	68077	0.101
8) Quinoline	(2)	9.087	129	41437	0.100
9) 2-Methylnaphthalene	(2)	9.664	142	41649	0.099
10) \$1-Methylnaphthalene-d10	(2)	9.754	152	27008	0.100
11) 1-Methylnaphthalene	(2)	9.819	142	41161	0.098
12) Dimethylphthalate	(3)	10.954	163	499068	0.975
13) Acenaphthylene	(3)	11.084	152	65459	0.094
14) *Acenaphthene-d10	(3)	11.316	164	64924	0.250
15) Acenaphthene	(3)	11.367	154	39615	0.096
16) Dibenzofuran	(3)	11.626	168	54556	0.096
17) Diethylphthalate	(3)	11.981	149	494695	0.966
18) Fluorene	(3)	12.067	166	46528	0.094
19) Hexachlorobenzene	(4)	12.730	284	14629	0.100
20) *Phenanthrene-d10	(4)	13.207	188	130356	0.250
21) Phenanthrene	(4)	13.238	178	69484	0.099
22) Anthracene	(4)	13.300	178	67677	0.097
23) Di-n-butylphthalate	(4)	14.034	149	751276	0.962
24) \$Fluoranthene-d10	(4)	14.845	212	50610	0.097
25) Fluoranthene	(4)	14.870	202	77148	0.097
26) Pyrene	(5)	15.209	202	79052	0.097
27) Butylbenzylphthalate	(5)	16.341	149	327172	0.952
28) Benzo(a)anthracene	(5)	17.208	228	67151	0.098
29) *Chrysene-d12	(5)	17.223	240	89008	0.250
30) Chrysene	(5)	17.261	228	69359	0.100
31) bis(2-Ethylhexyl)phthalate	(5)	17.415	149	490345	0.951
32) Di-n-octylphthalate	(6)	18.573	149	872363	0.967
33) Benzo(b)fluoranthene	(6)	19.056	252	66515	0.099
34) Benzo(k)fluoranthene	(6)	19.102	252	65364	0.096
35) Benzo(e)pyrene	(6)	19.493	252	63380	0.098
36) \$Benzo(a)pyrene-d12	(6)	19.539	264	31046	0.096
37) Benzo(a)pyrene	(6)	19.578	252	62689	0.097
38) *Perylene-d12	(6)	19.670	264	85375	0.250
45) Perylene	(6)	19.708	252	64253	0.098
39) Indeno(1,2,3-cd)pyrene	(6)	21.284	276	56469M	0.096
40) Dibenz(a,h)anthracene	(6)	21.333	278	58674	0.098

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2004.d  
Injection date and time: 26-OCT-2018 09:04

Instrument ID: HP21585.i  
Analyst ID: ceb05247

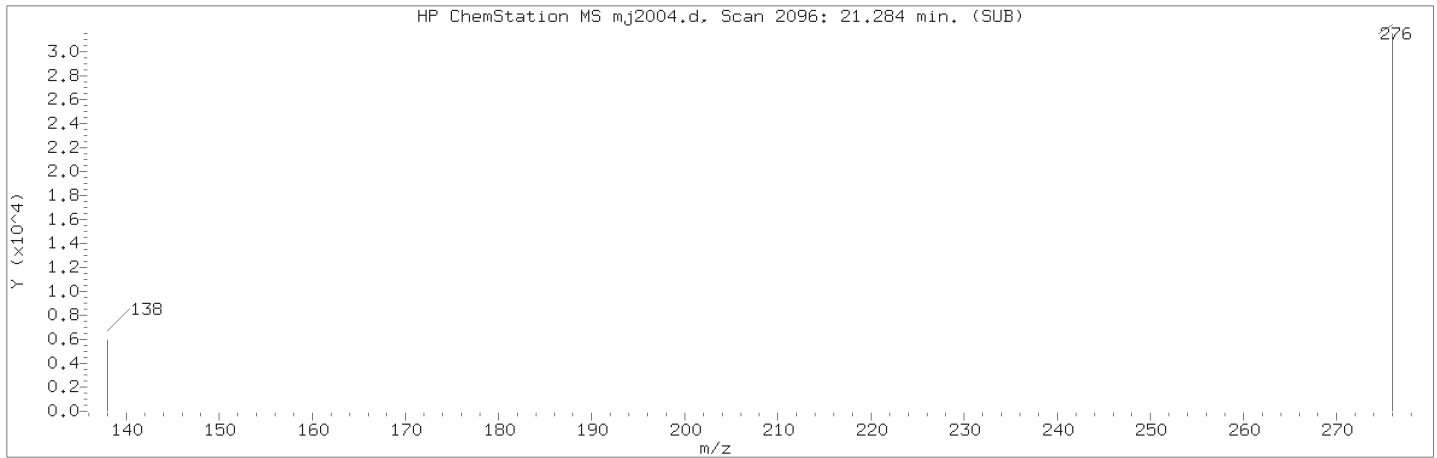
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.1

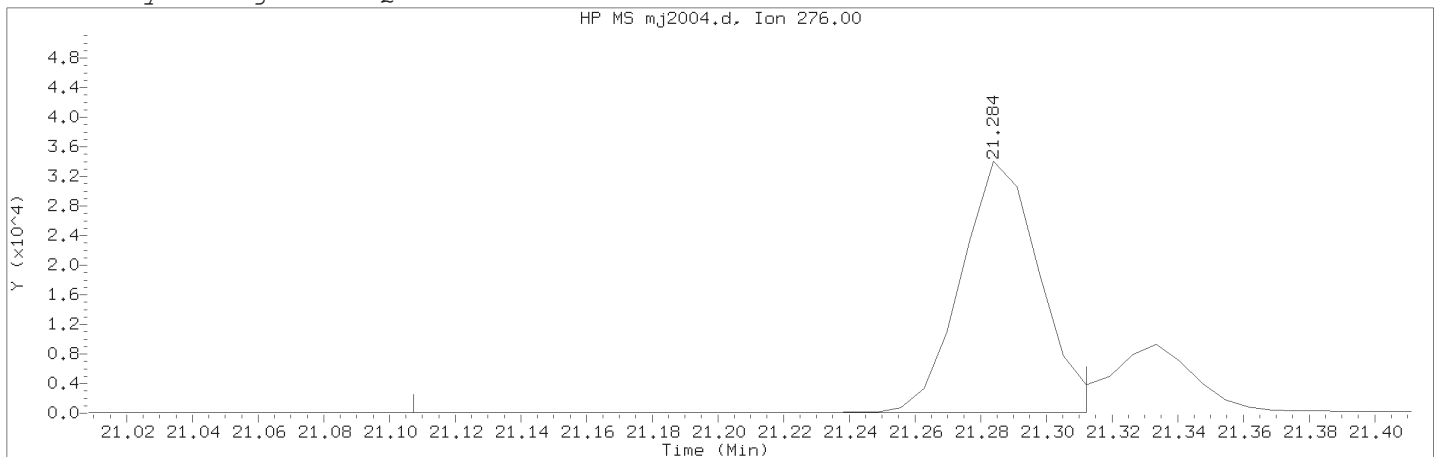
Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
===== 41) Benzo(g,h,i)perylene	(6)	21.694	276	66179	0.098

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2004.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 09:04                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.1    Lab Sample ID: RVSIM2768

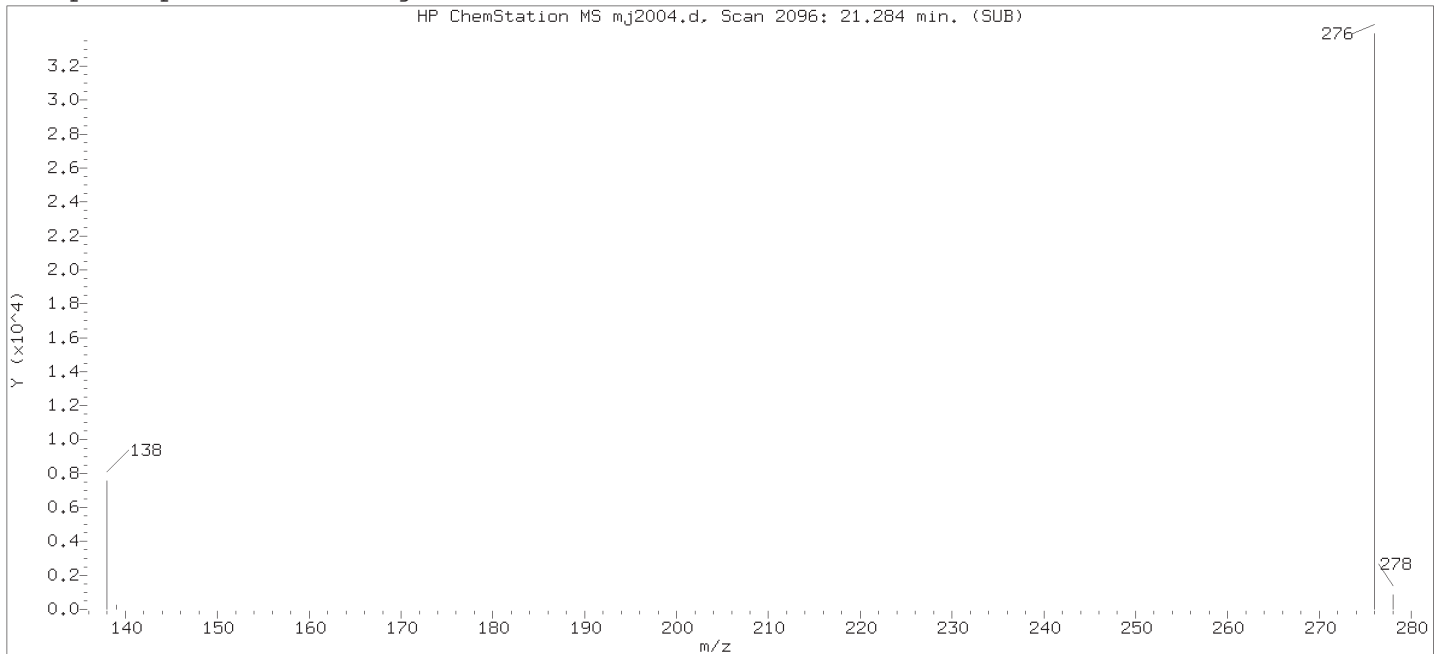
Compound Number    : 39  
Compound Name    : Indeno(1,2,3-cd)pyrene  
Scan Number    : 2096  
Retention Time (minutes)                                    : 21.284  
Quant Ion    : 276.00  
Area (flag)    : 56469M  
On-Column Amount (ng/ul)                                   : 0.0959  
Integration start scan                                       : 2070                      Integration stop scan: 2099  
Y at integration start                                        : 88                        Y at integration end: 88

Reason for manual integration: improper integration

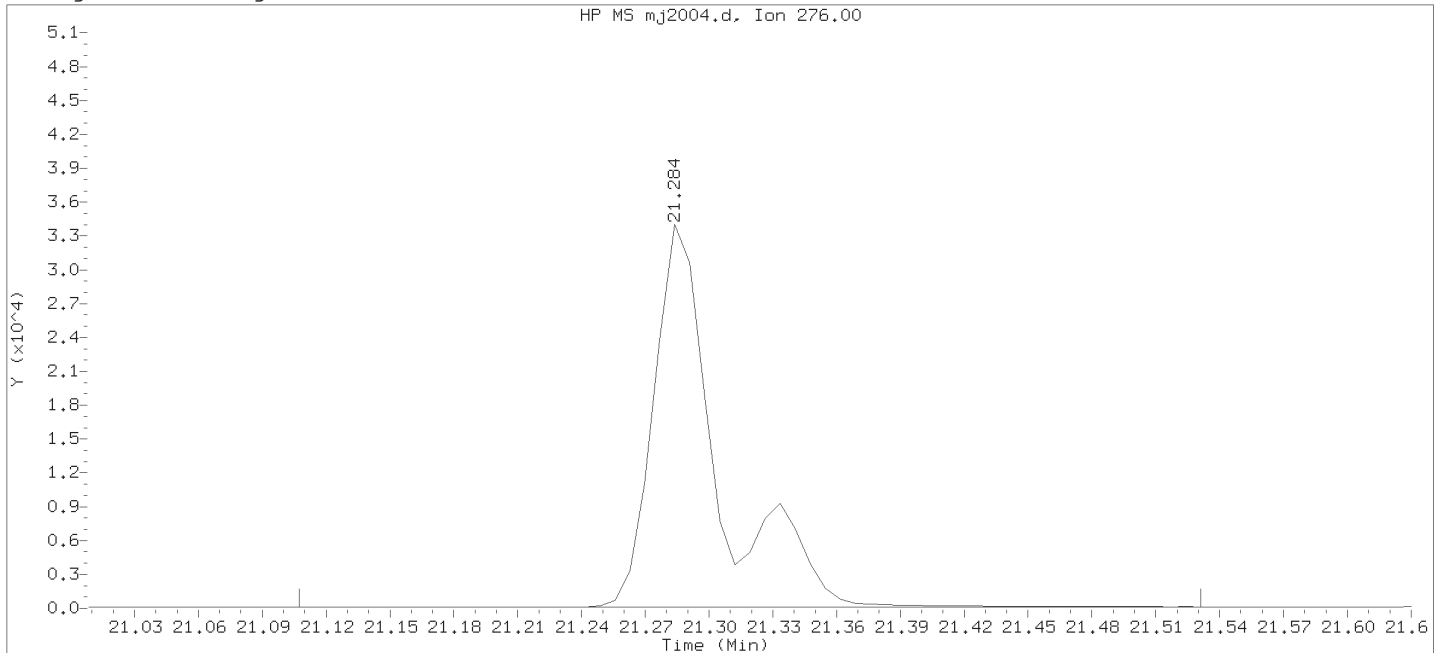
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2004.d  
Injection date and time: 26-OCT-2018 09:04

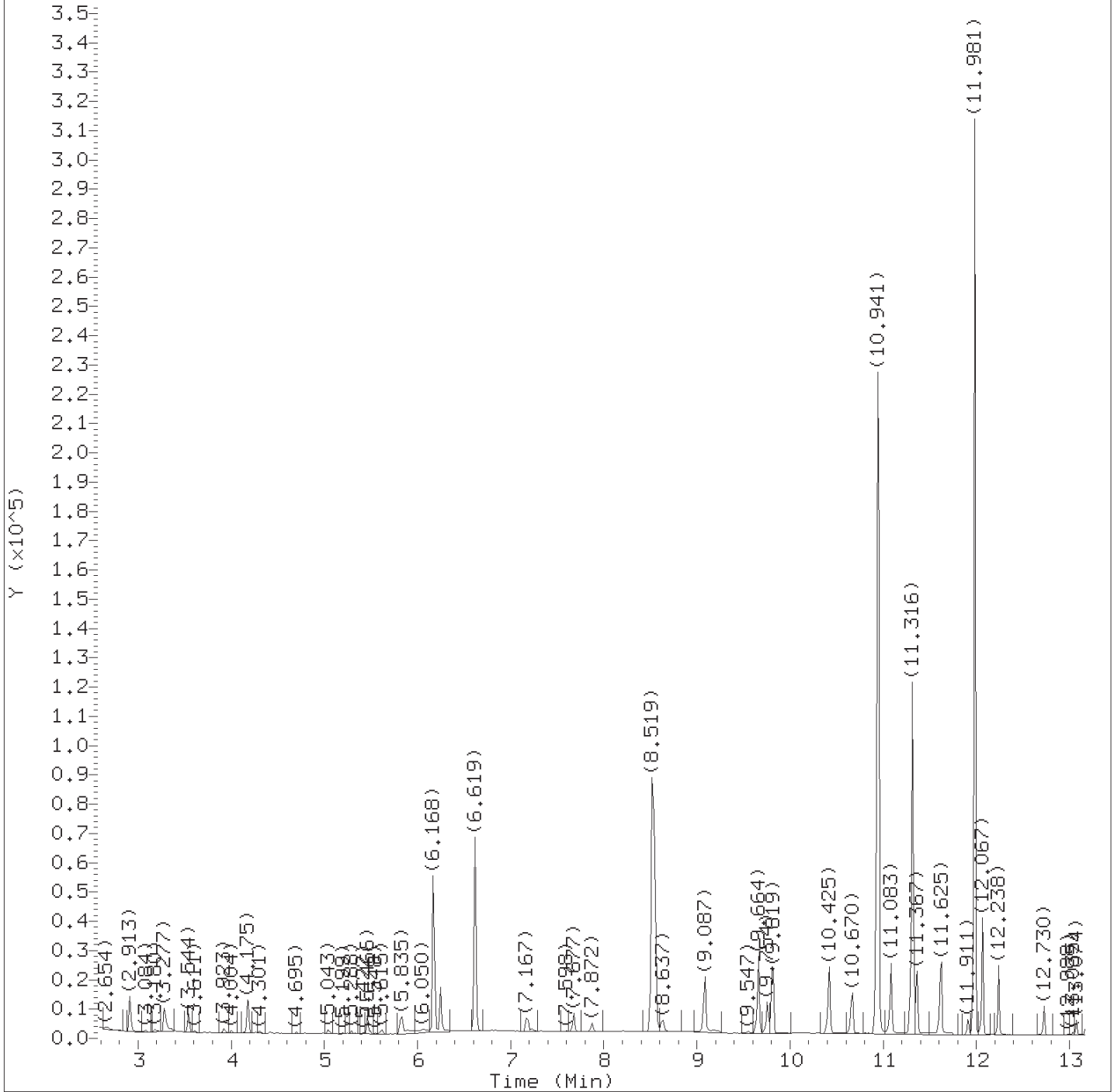
Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 09:32  
Date, time and analyst ID of latest file update: 26-Oct-2018 09:32 Unknown

Sample Name: SSTD0.1

Lab Sample ID: RVSIM2768

Compound Number : 39  
Compound Name : Indeno(1,2,3-cd)pyrene  
Scan Number : 2096  
Retention Time (minutes) : 21.284  
Quant Ion : 276.00  
Area : 72488  
On-column Amount (ng/ul) : 0.1216  
Integration start scan : 2070 Integration stop scan: 2130  
Y at integration start : 88 Y at integration end: 88



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2005.d  
Injection date and time: 26-OCT-2018 09:33

Instrument ID: HP21585.i  
Analyst ID: ceb05247

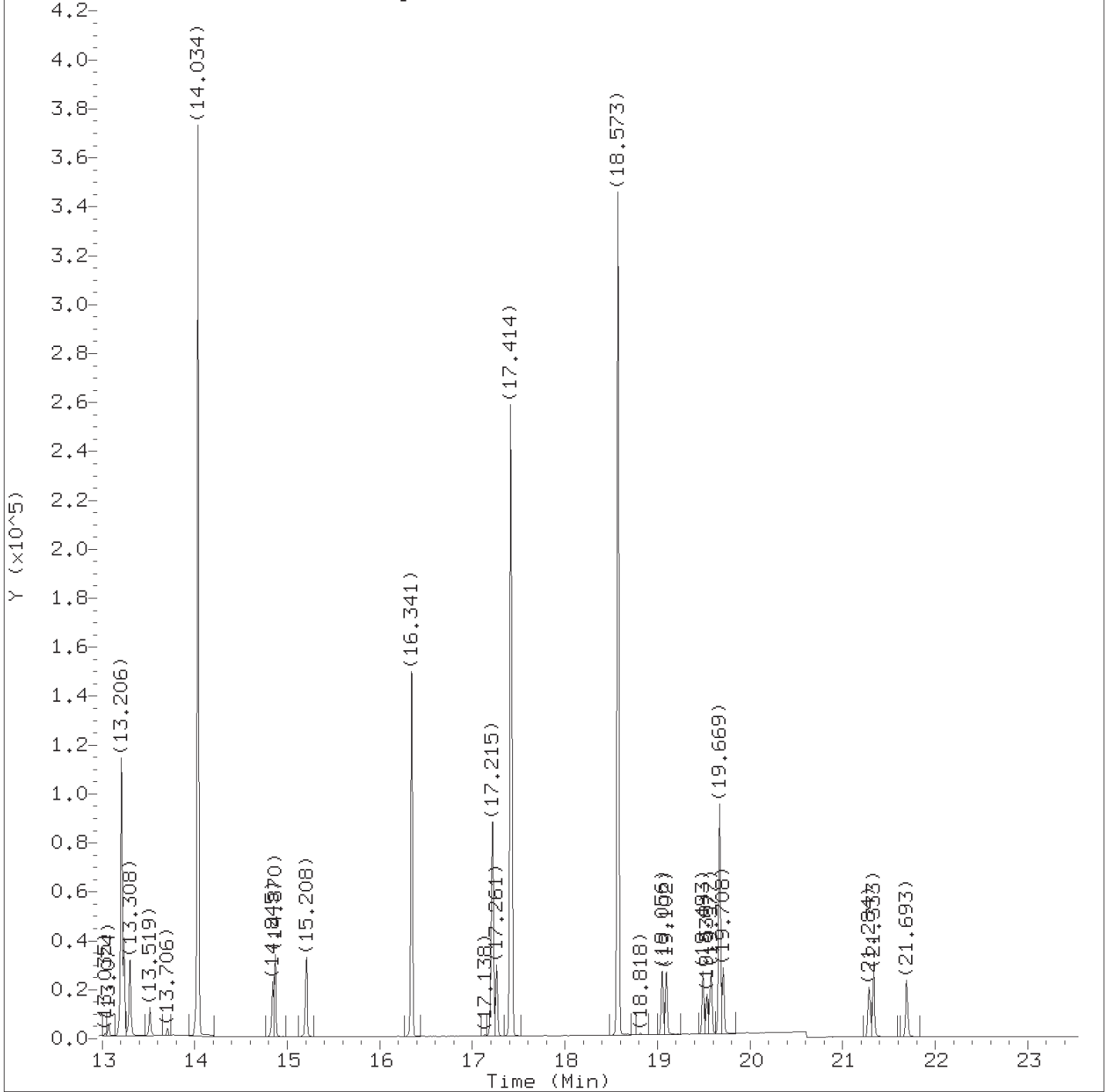
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.05

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2005.d  
Injection date and time: 26-OCT-2018 09:33

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.05

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2005.d  
 Injection date and time: 26-OCT-2018 09:33

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 27-OCT-2018 17:17  
 Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.05

Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.913	88	7432	0.050
2) N-Nitrosodimethylamine	(1)	3.277	74	10055	0.046
4) bis(2-Chloroethyl) ether	(2)	6.246	93	11706	0.049
5) *1,4-Dichlorobenzene-d4	(1)	6.619	152	53330	0.250
6) *Naphthalene-d8	(2)	8.539	136	150740	0.250
7) Naphthalene	(2)	8.558	128	34693	0.050
8) Quinoline	(2)	9.087	129	20580	0.049
9) 2-Methylnaphthalene	(2)	9.664	142	21076	0.049
10) \$1-Methylnaphthalene-d10	(2)	9.754	152	13680	0.050
11) 1-Methylnaphthalene	(2)	9.819	142	20716	0.049
12) Dimethylphthalate	(3)	10.941	163	259683	0.509
13) Acenaphthylene	(3)	11.083	152	32643	0.048
14) *Acenaphthene-d10	(3)	11.316	164	64400	0.250
15) Acenaphthene	(3)	11.367	154	20365	0.050
16) Dibenzofuran	(3)	11.625	168	25493M	0.046
17) Diethylphthalate	(3)	11.981	149	254425	0.501
18) Fluorene	(3)	12.067	166	23513	0.048
19) Hexachlorobenzene	(4)	12.730	284	7361	0.050
20) *Phenanthrene-d10	(4)	13.206	188	132129	0.250
21) Phenanthrene	(4)	13.238	178	35134	0.049
22) Anthracene	(4)	13.308	178	33946	0.048
23) Di-n-butylphthalate	(4)	14.034	149	381949	0.486
24) \$Fluoranthene-d10	(4)	14.845	212	25316	0.048
25) Fluoranthene	(4)	14.870	202	38262	0.048
26) Pyrene	(5)	15.208	202	39434	0.049
27) Butylbenzylphthalate	(5)	16.341	149	165480	0.487
28) Benzo(a)anthracene	(5)	17.200	228	33547	0.049
29) *Chrysene-d12	(5)	17.223	240	88556	0.250
30) Chrysene	(5)	17.261	228	34787	0.050
31) bis(2-Ethylhexyl)phthalate	(5)	17.414	149	244051	0.480
32) Di-n-octylphthalate	(6)	18.573	149	430773	0.484
33) Benzo(b)fluoranthene	(6)	19.056	252	32756	0.049
34) Benzo(k)fluoranthene	(6)	19.102	252	32095	0.048
35) Benzo(e)pyrene	(6)	19.493	252	30989	0.049
36) \$Benzo(a)pyrene-d12	(6)	19.539	264	14981	0.047
37) Benzo(a)pyrene	(6)	19.577	252	31254	0.049
38) *Perylene-d12	(6)	19.669	264	84922	0.250
45) Perylene	(6)	19.708	252	32115	0.049
39) Indeno(1,2,3-cd)pyrene	(6)	21.284	276	27971M	0.048
40) Dibenz(a,h)anthracene	(6)	21.333	278	29189	0.049

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2005.d  
Injection date and time: 26-OCT-2018 09:33

Instrument ID: HP21585.i  
Analyst ID: ceb05247

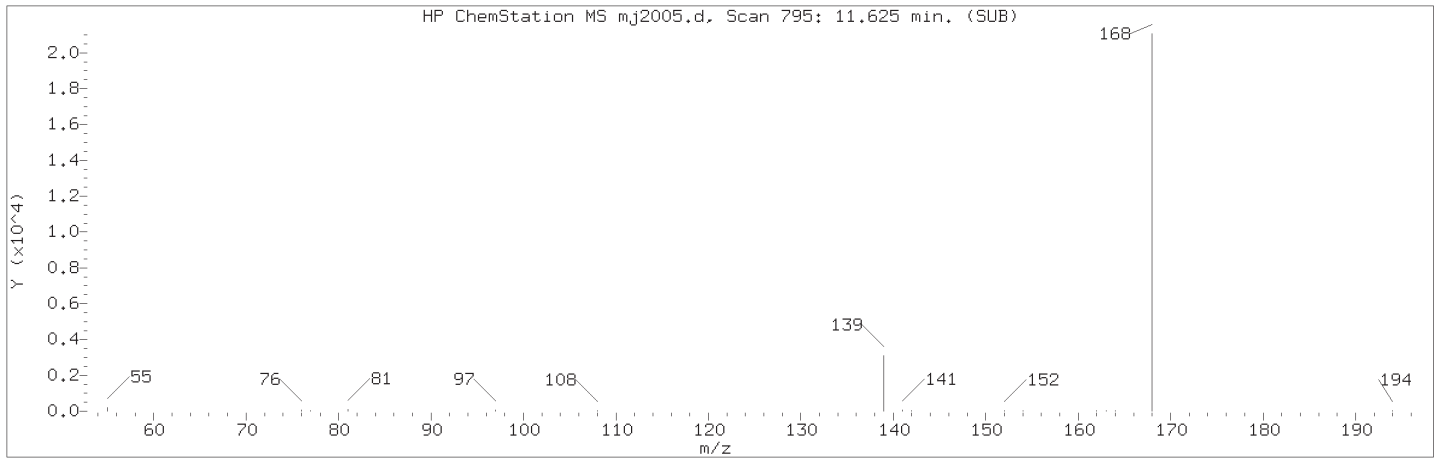
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.05

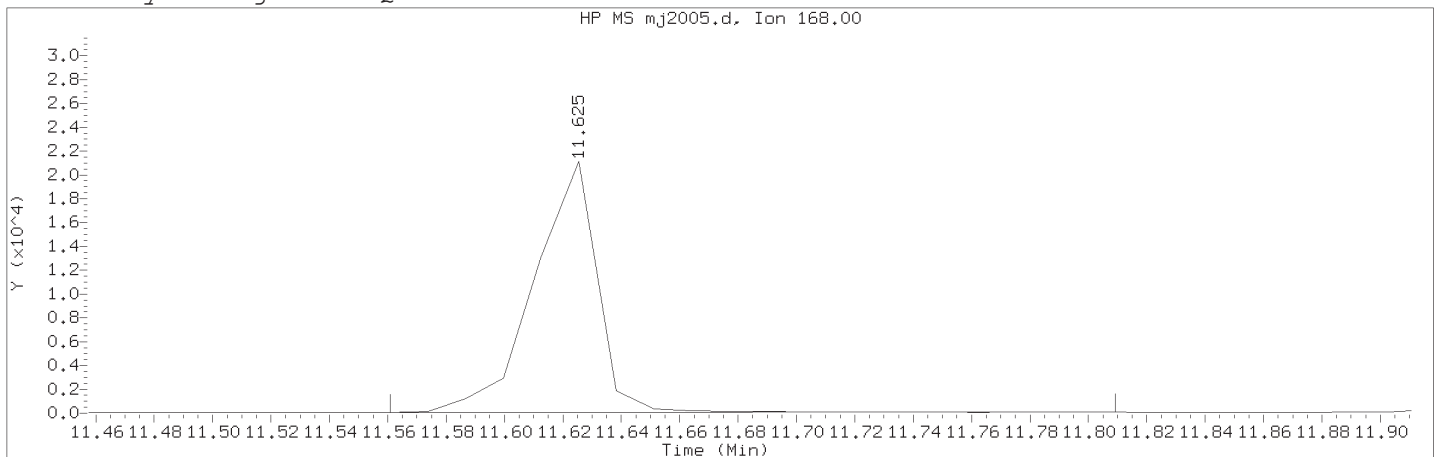
Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
===== 41) Benzo(g,h,i)perylene	(6)	21.693	276	32995	0.049

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2005.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 09:33                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.05    Lab Sample ID: RVSIM2768

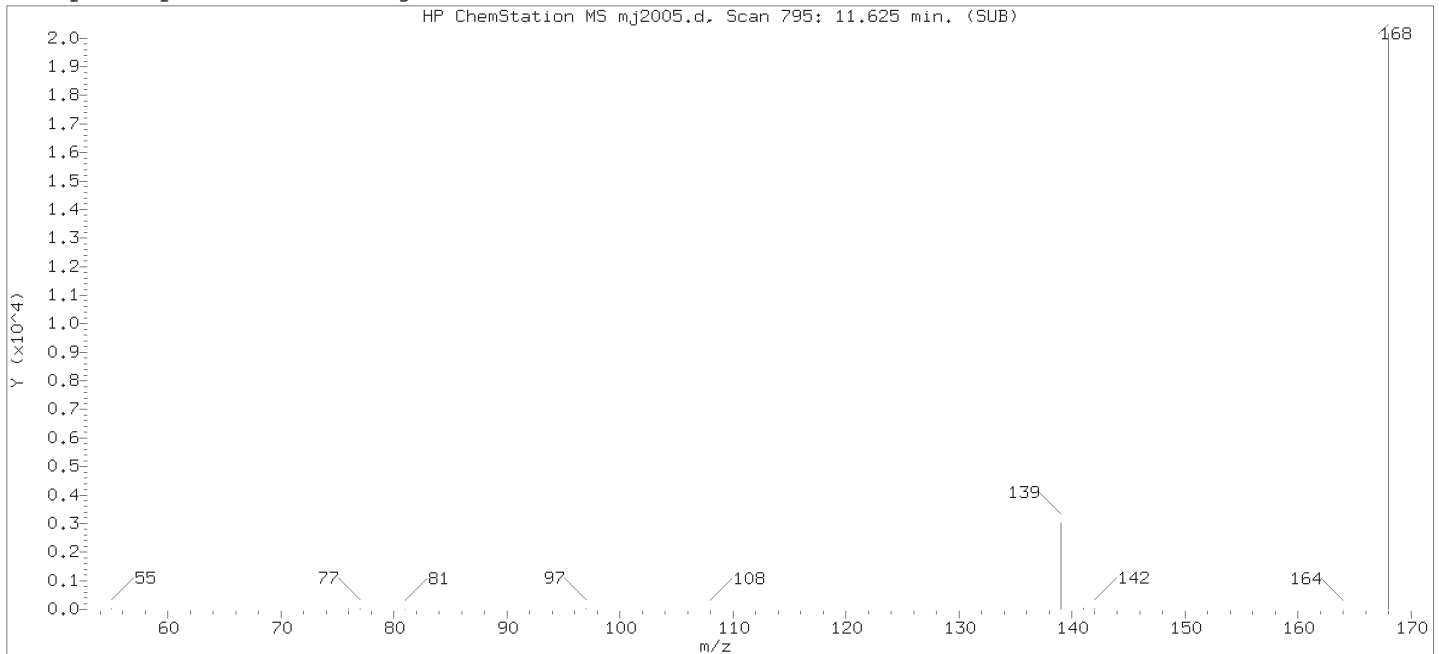
Compound Number    : 16  
Compound Name     : Dibenzofuran  
Scan Number    : 795  
Retention Time (minutes)                                   : 11.625  
Quant Ion    : 168.00  
Area (flag)    : 25493M  
On-Column Amount (ng/ul)                                 : 0.0462  
Integration start scan                                      : 789                      Integration stop scan: 811  
Y at integration start                                      : 53                        Y at integration end: 83

Reason for manual integration: improper integration

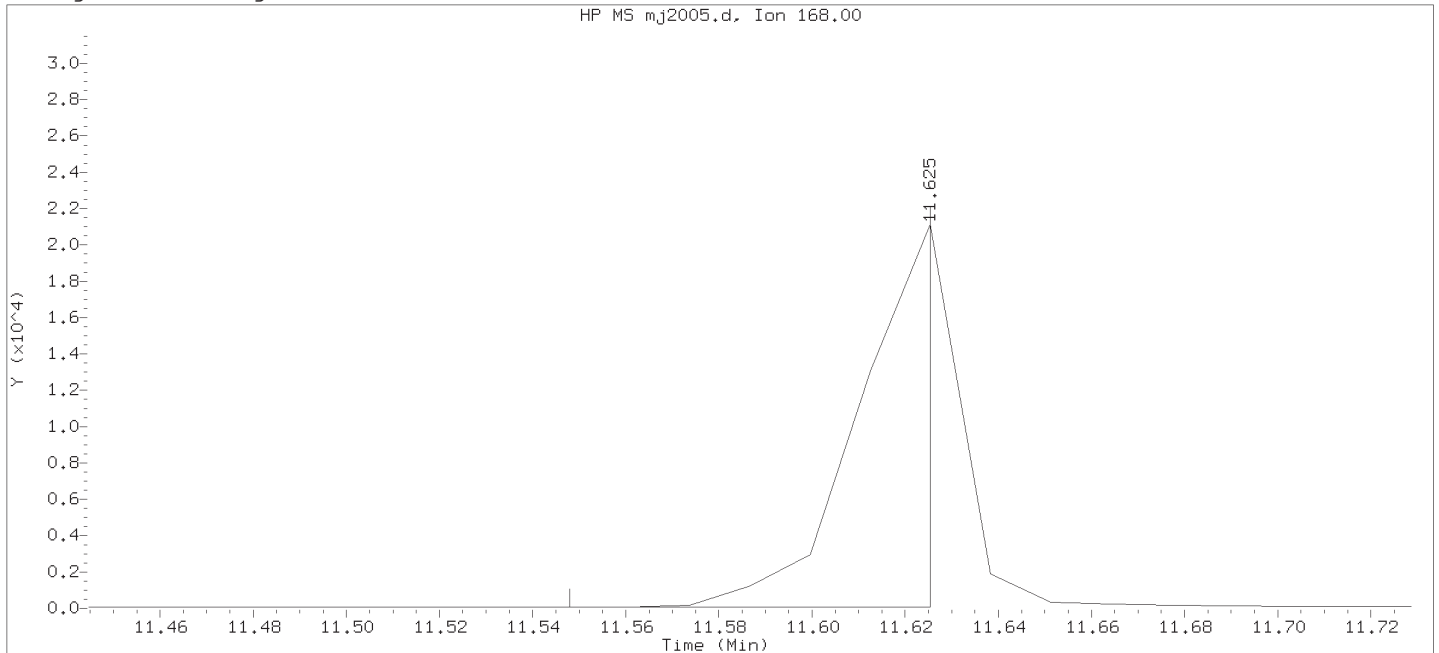
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2005.d  
 Injection date and time: 26-OCT-2018 09:33

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

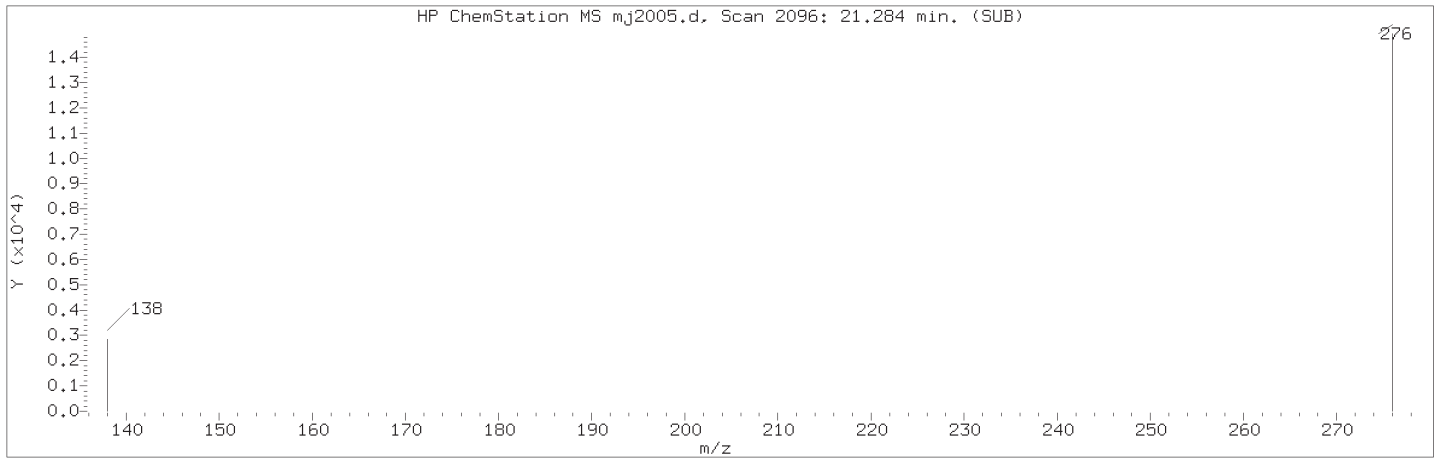
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 10:02  
 Date, time and analyst ID of latest file update: 26-Oct-2018 10:02 Unknown

Sample Name: SSTDO.05

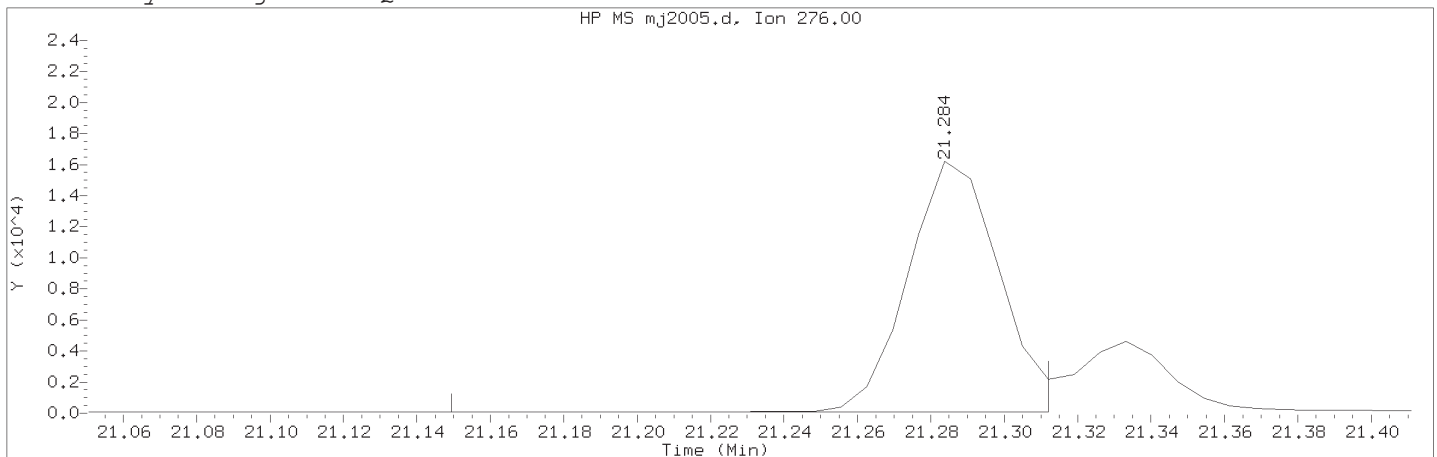
Lab Sample ID: RVSIM2768

Compound Number	: 16	
Compound Name	: Dibenzofuran	
Scan Number	: 795	
Retention Time (minutes)	: 11.625	
Quant Ion	: 168.00	
Area	: 18566	
On-column Amount (ng/ul)	: 0.0324	
Integration start scan	: 788	Integration stop scan: 794
Y at integration start	: 55	Y at integration end: 55

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2005.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 09:33                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.05    Lab Sample ID: RVSIM2768

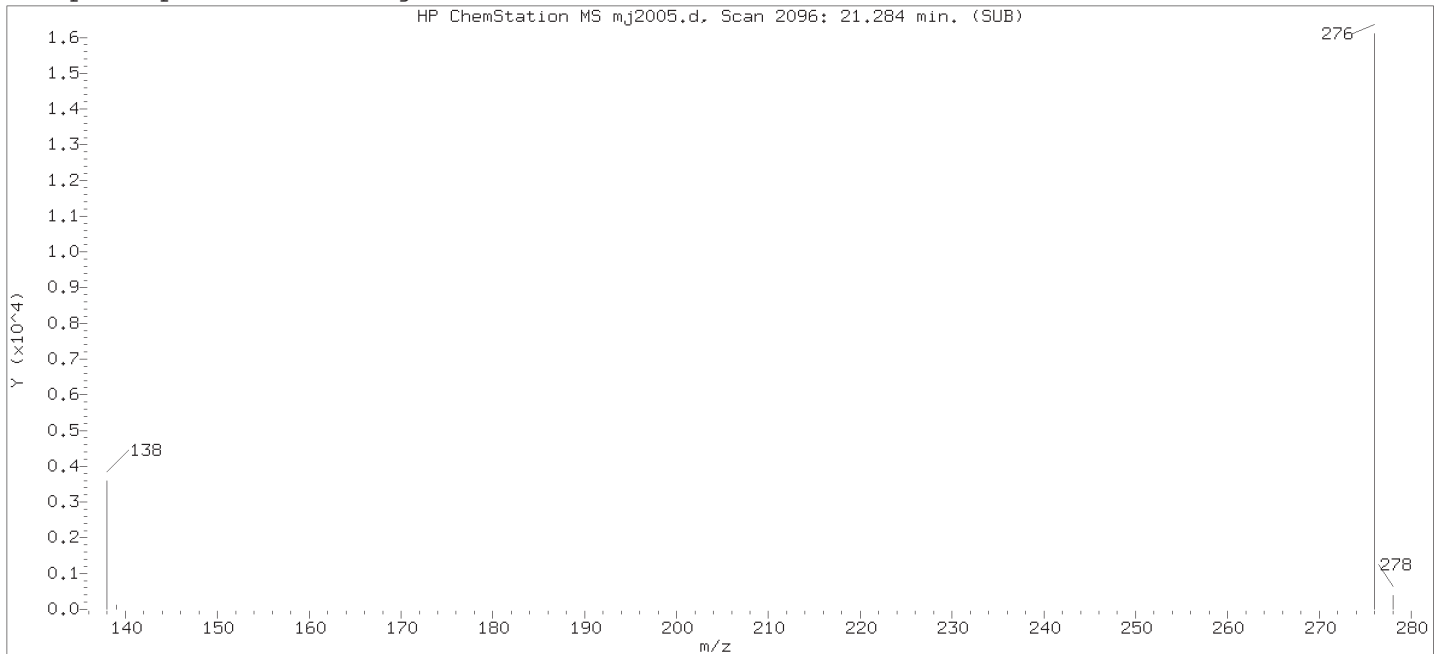
Compound Number    : 39  
Compound Name    : Indeno(1,2,3-cd)pyrene  
Scan Number    : 2096  
Retention Time (minutes)                                   : 21.284  
Quant Ion    : 276.00  
Area (flag)    : 27971M  
On-Column Amount (ng/ul)                                 : 0.0482  
Integration start scan                                       : 2076                      Integration stop scan: 2099  
Y at integration start                                       : 85                         Y at integration end: 85

Reason for manual integration: improper integration

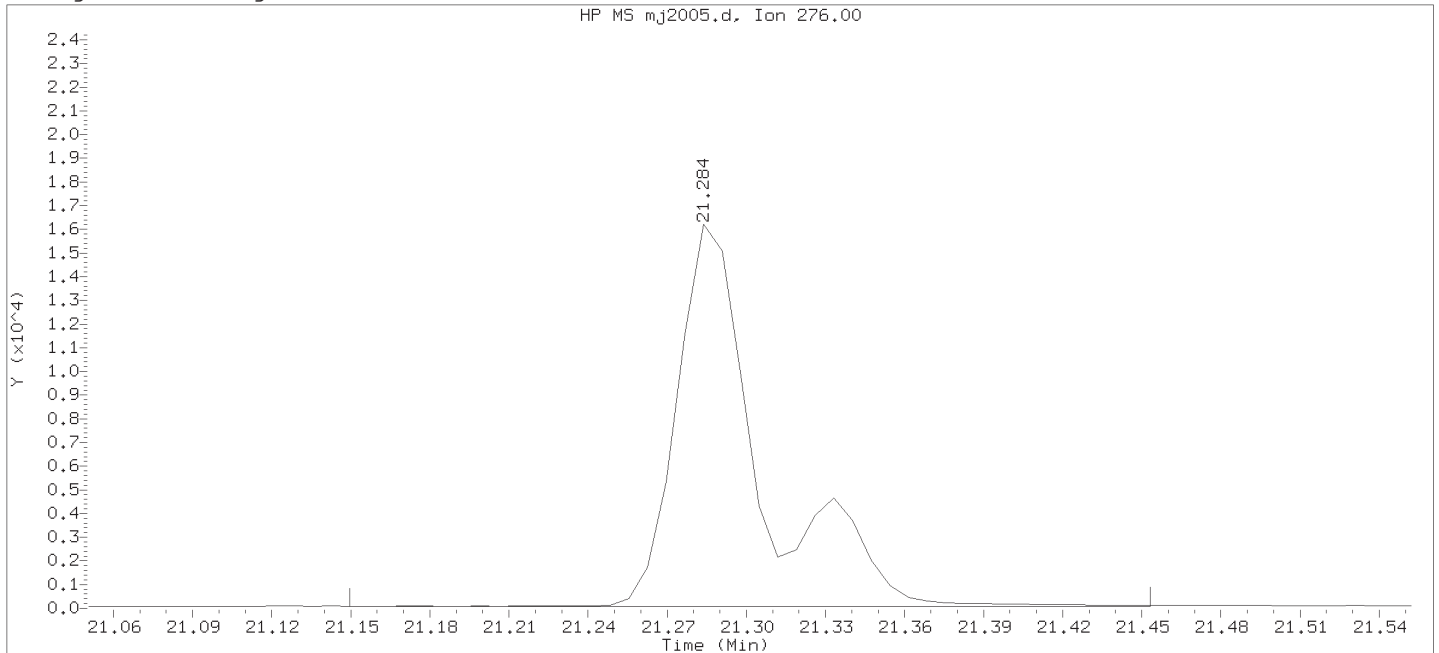
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2005.d  
 Injection date and time: 26-OCT-2018 09:33

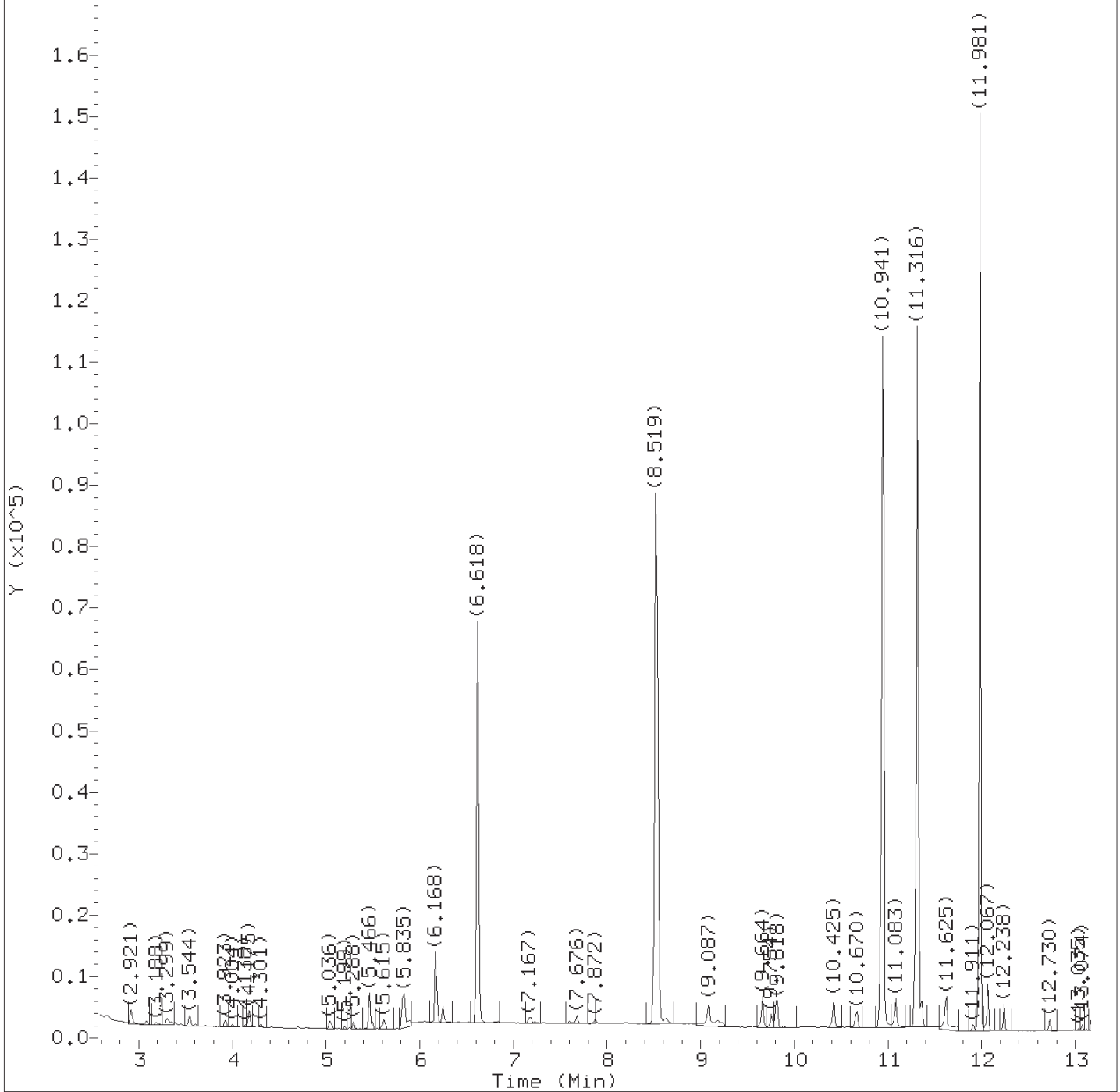
Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 10:02  
 Date, time and analyst ID of latest file update: 26-Oct-2018 10:02 Unknown

Sample Name: SSTD0.05

Lab Sample ID: RVSIM2768

Compound Number : 39  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 2096  
 Retention Time (minutes) : 21.284  
 Quant Ion : 276.00  
 Area : 35920  
 On-column Amount (ng/ul) : 0.0606  
 Integration start scan : 2076 Integration stop scan: 2119  
 Y at integration start : 85 Y at integration end: 85



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2006.d  
Injection date and time: 26-OCT-2018 10:02

Instrument ID: HP21585.i  
Analyst ID: ceb05247

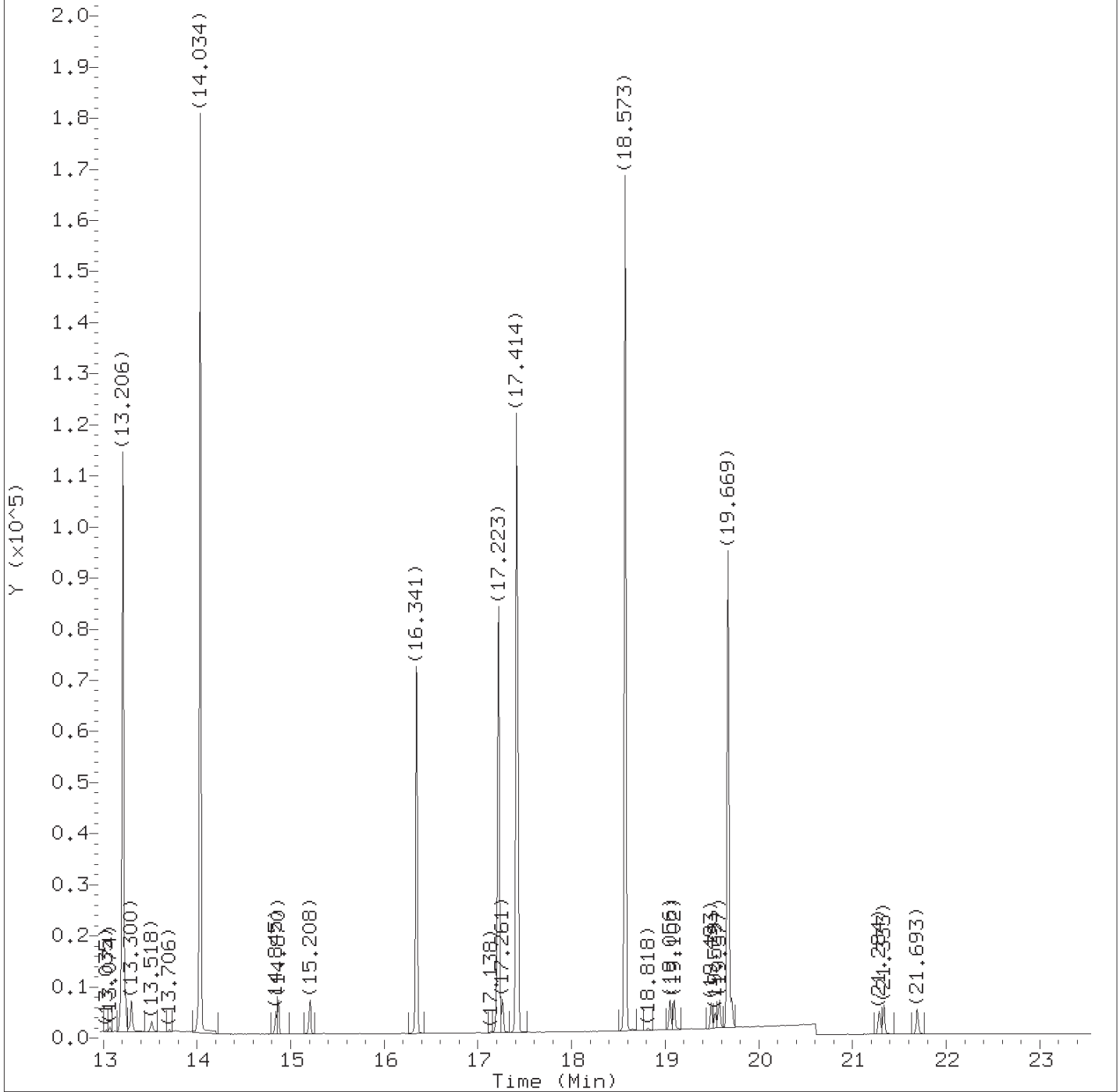
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.01

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2006.d  
Injection date and time: 26-OCT-2018 10:02

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.01

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2006.d  
 Injection date and time: 26-OCT-2018 10:02

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 27-OCT-2018 17:17  
 Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.01

Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.921	88	1562M	0.011
2) N-Nitrosodimethylamine	(1)	3.299	74	1956	0.009
4) bis(2-Chloroethyl) ether	(2)	6.246	93	1919M	0.008
5) *1,4-Dichlorobenzene-d4	(1)	6.618	152	52565	0.250
6) *Naphthalene-d8	(2)	8.539	136	149221	0.250
7) Naphthalene	(2)	8.558	128	7030	0.010
8) Quinoline	(2)	9.087	129	3926M	0.010
9) 2-Methylnaphthalene	(2)	9.664	142	4136	0.010
10) \$1-Methylnaphthalene-d10	(2)	9.754	152	2724	0.010
11) 1-Methylnaphthalene	(2)	9.818	142	4046	0.010
12) Dimethylphthalate	(3)	10.941	163	126023	0.246
13) Acenaphthylene	(3)	11.083	152	6500	0.010
14) *Acenaphthene-d10	(3)	11.316	164	64827	0.250
15) Acenaphthene	(3)	11.367	154	4305	0.010
16) Dibenzofuran	(3)	11.625	168	5482	0.010
17) Diethylphthalate	(3)	11.981	149	124407	0.244
18) Fluorene	(3)	12.067	166	4595	0.010
19) Hexachlorobenzene	(4)	12.730	284	1473	0.010
20) *Phenanthrene-d10	(4)	13.206	188	131827	0.250
21) Phenanthrene	(4)	13.237	178	6894	0.010
22) Anthracene	(4)	13.300	178	6662	0.010
23) Di-n-butylphthalate	(4)	14.034	149	182316	0.235
24) \$Fluoranthene-d10	(4)	14.845	212	4913	0.010
25) Fluoranthene	(4)	14.870	202	7579	0.010
26) Pyrene	(5)	15.208	202	7934	0.010
27) Butylbenzylphthalate	(5)	16.341	149	78162	0.235
28) Benzo(a)anthracene	(5)	17.200	228	7625	0.011
29) *Chrysene-d12	(5)	17.223	240	87761	0.250
30) Chrysene	(5)	17.261	228	7426	0.011
31) bis(2-Ethylhexyl)phthalate	(5)	17.414	149	114568	0.231
32) Di-n-octylphthalate	(6)	18.573	149	203368	0.233
33) Benzo(b)fluoranthene	(6)	19.056	252	6974	0.010
34) Benzo(k)fluoranthene	(6)	19.102	252	6804	0.010
35) Benzo(e)pyrene	(6)	19.493	252	6081	0.010
36) \$Benzo(a)pyrene-d12	(6)	19.539	264	2899	0.009
37) Benzo(a)pyrene	(6)	19.577	252	6721	0.010
38) *Perylene-d12	(6)	19.669	264	84530	0.250
45) Perylene	(6)	19.708	252	6796	0.010
39) Indeno(1,2,3-cd)pyrene	(6)	21.284	276	6102M	0.010
40) Dibenz(a,h)anthracene	(6)	21.333	278	6130	0.010

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2006.d  
Injection date and time: 26-OCT-2018 10:02

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

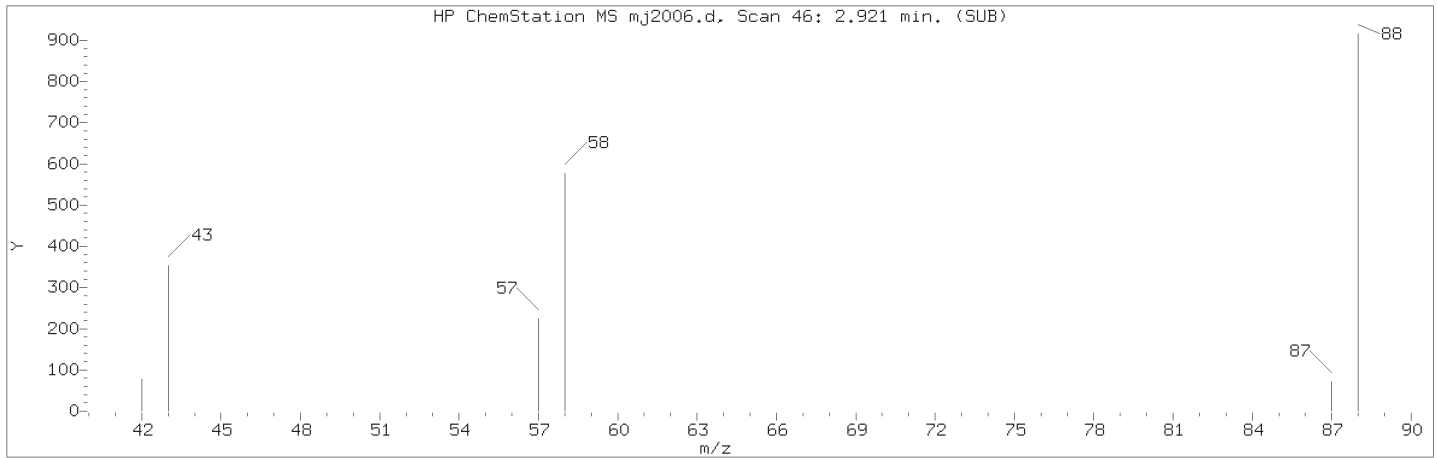
Sample Name: SSTD0.01

Lab Sample ID: RVSIM2768

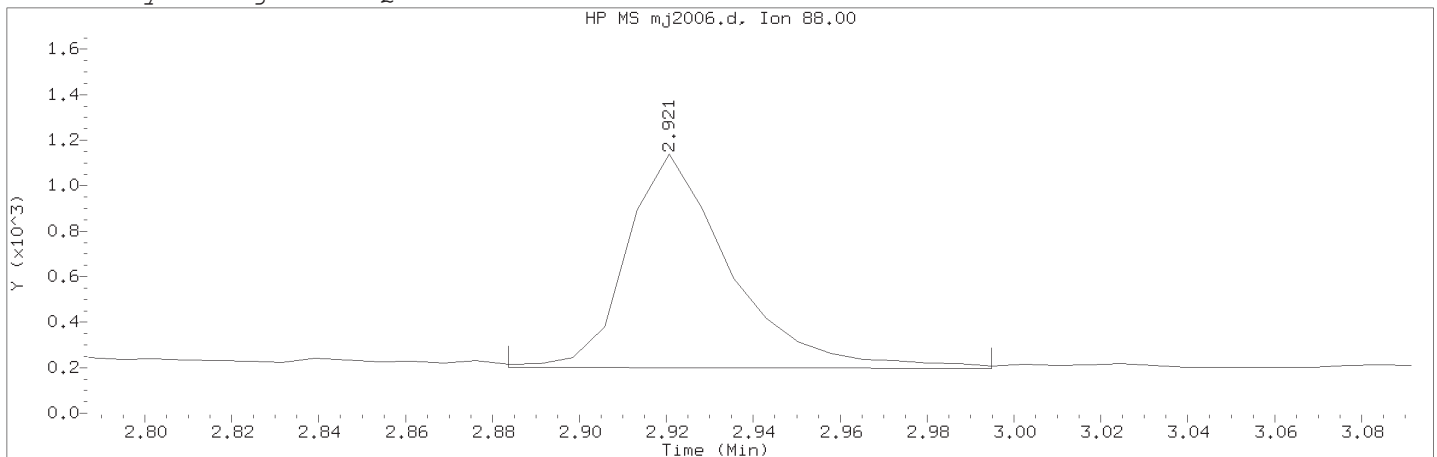
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
===== 41) Benzo(g,h,i)perylene	(6)	21.693	276	7204	0.011

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2006.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:02                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.01    Lab Sample ID: RVSIM2768

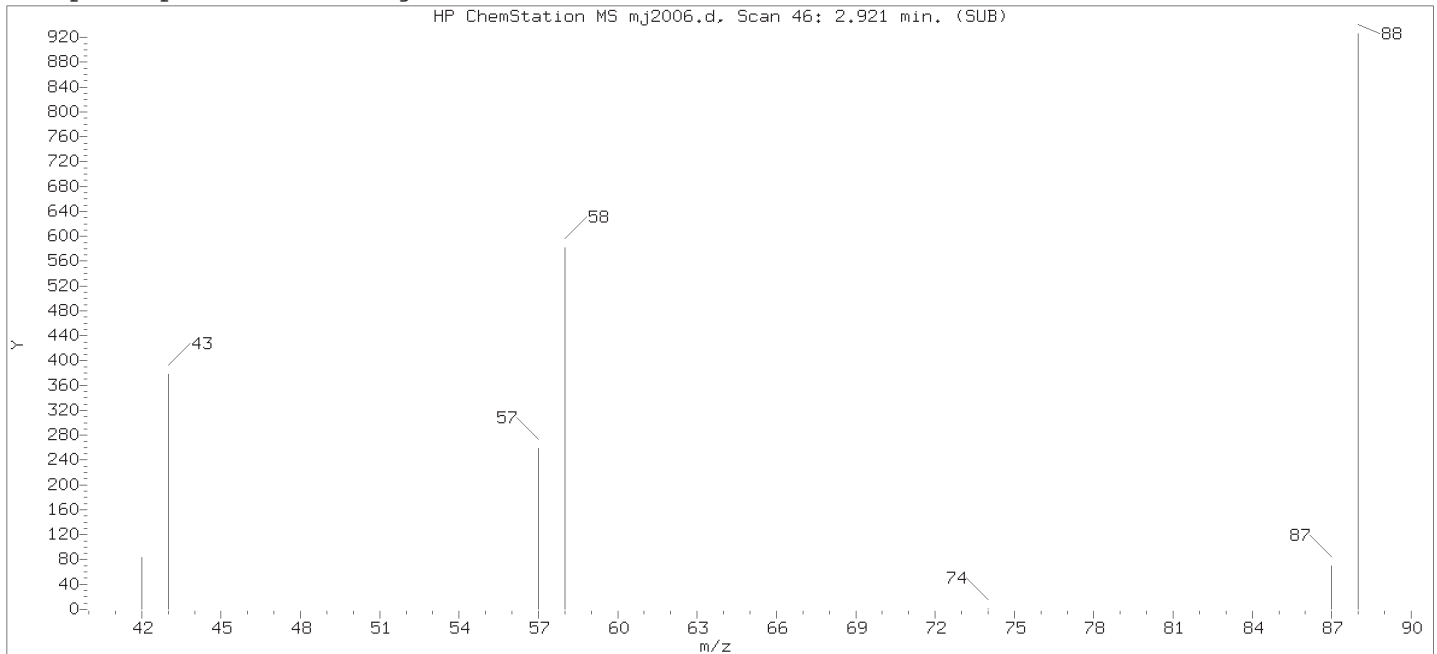
Compound Number    : 1  
Compound Name    : 1,4-Dioxane  
Scan Number    : 46  
Retention Time (minutes)                                   : 2.921  
Quant Ion     : 88.00  
Area (flag)     : 1562M  
On-Column Amount (ng/ul)                                 : 0.0107  
Integration start scan                                     : 40                      Integration stop scan: 55  
Y at integration start                                     : 201                    Y at integration end: 196

Reason for manual integration: improper integration

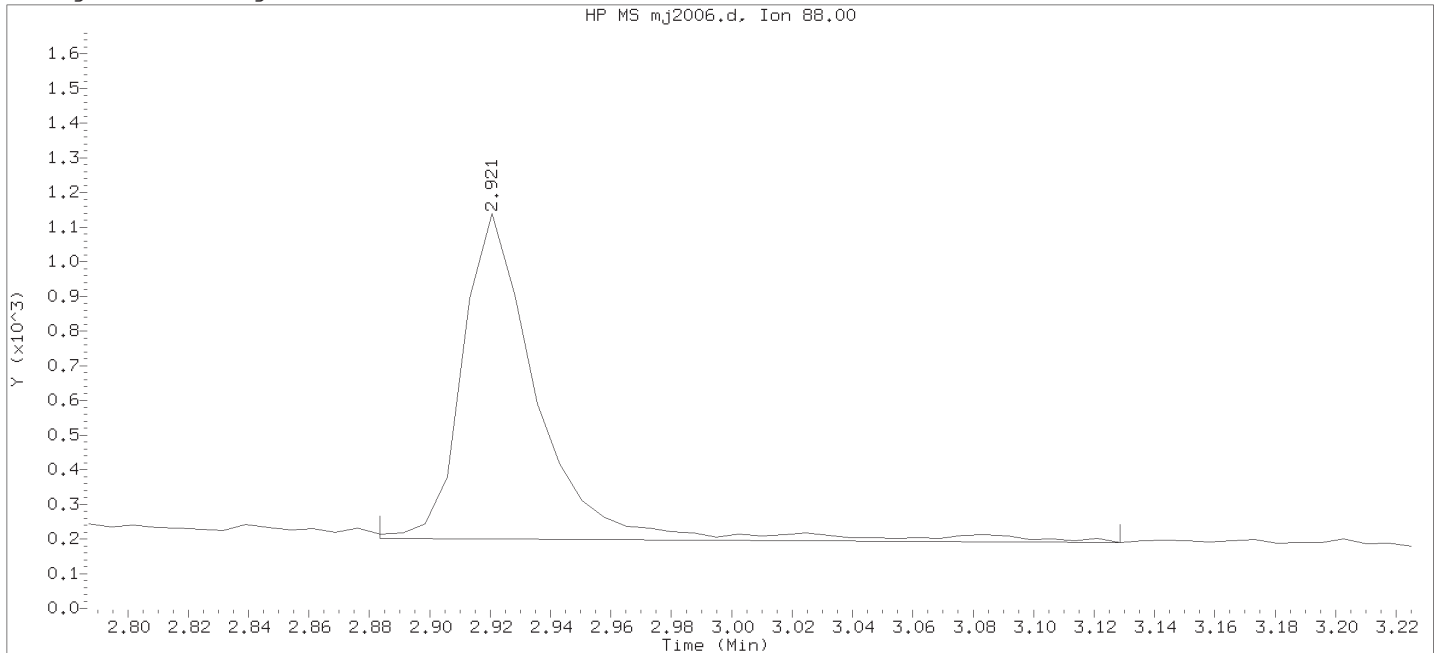
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2006.d  
Injection date and time: 26-OCT-2018 10:02

Instrument ID: HP21585.i  
Analyst ID: ceb05247

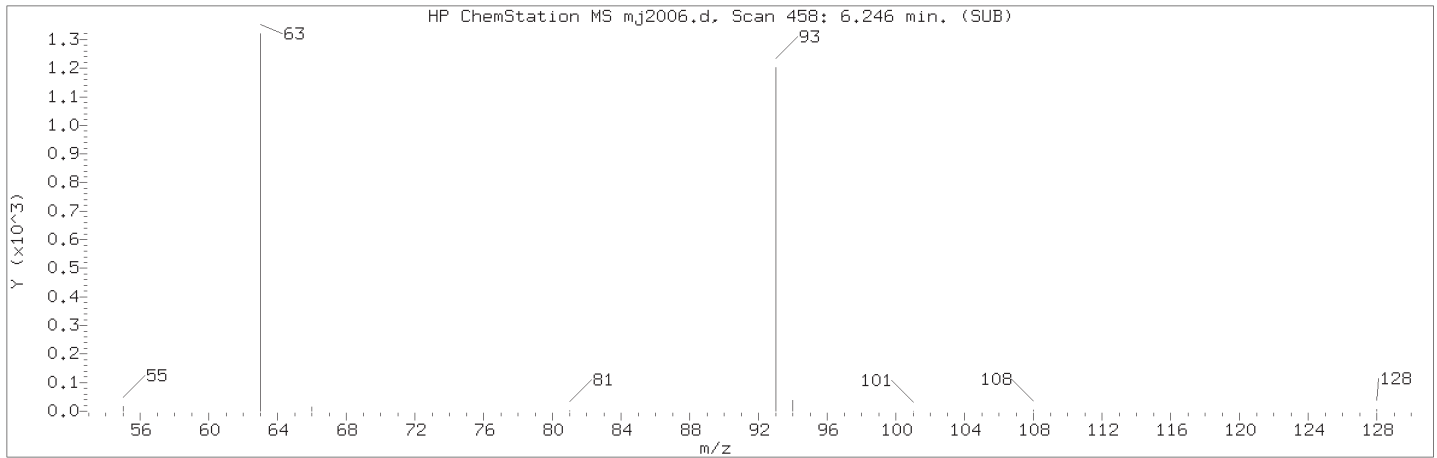
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 10:31 Unknown

Sample Name: SSTD0.01

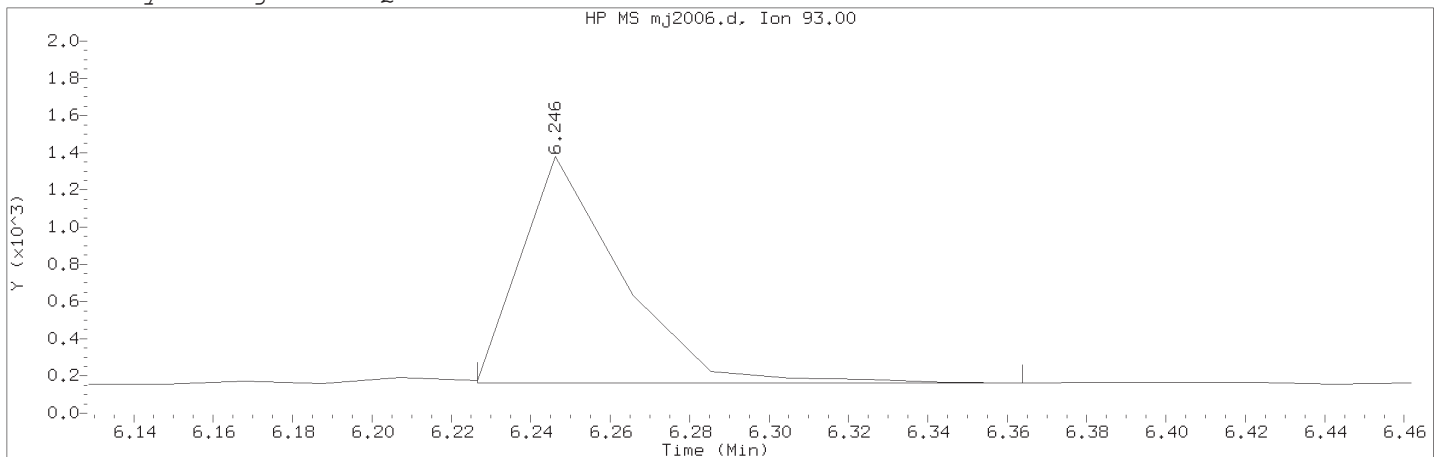
Lab Sample ID: RVSIM2768

Compound Number : 1  
Compound Name : 1,4-Dioxane  
Scan Number : 46  
Retention Time (minutes) : 2.921  
Quant Ion : 88.00  
Area : 1665  
On-column Amount (ng/ul) : 0.0113  
Integration start scan : 40 Integration stop scan: 73  
Y at integration start : 201 Y at integration end: 189

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2006.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:02                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.01    Lab Sample ID: RVSIM2768

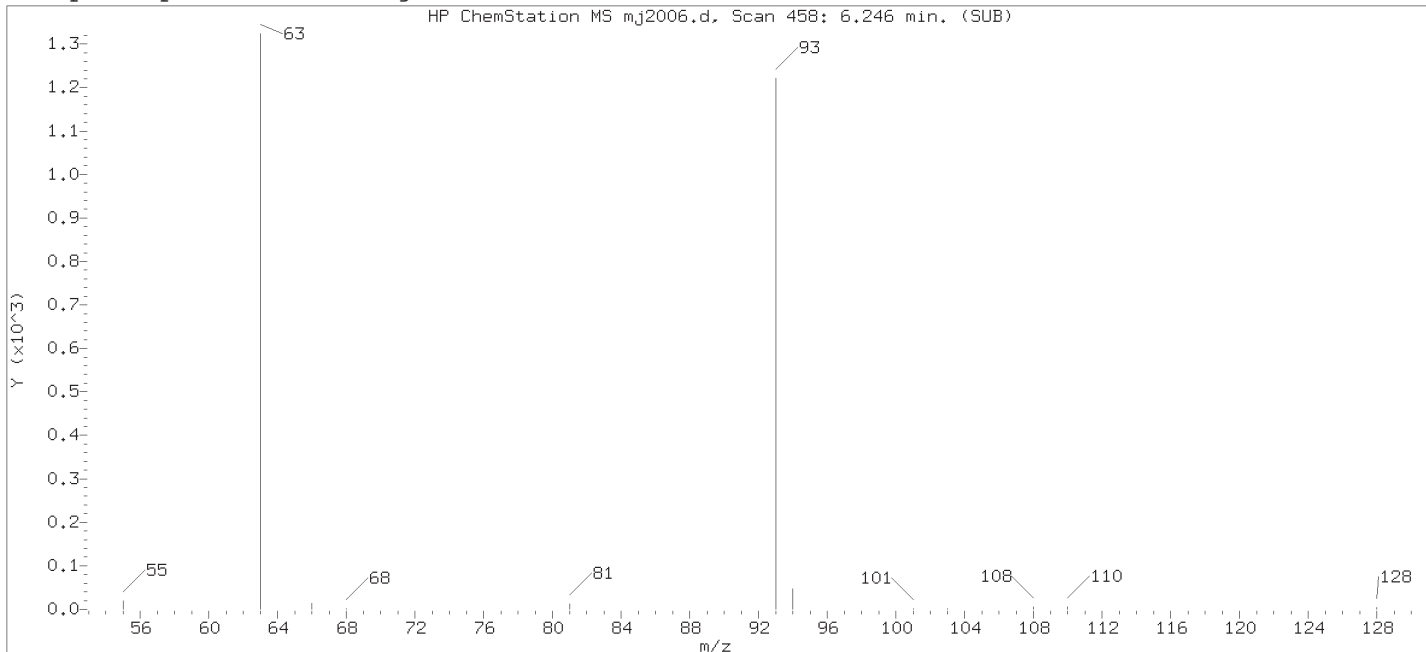
Compound Number    : 4  
Compound Name     : bis(2-Chloroethyl)ether  
Scan Number    : 458  
Retention Time (minutes)                                   : 6.246  
Quant Ion    : 93.00  
Area (flag)     : 1919M  
On-Column Amount (ng/ul)                                 : 0.0084  
Integration start scan                                      : 456                      Integration stop scan: 463  
Y at integration start                                      : 162                      Y at integration end: 162

Reason for manual integration: improper integration

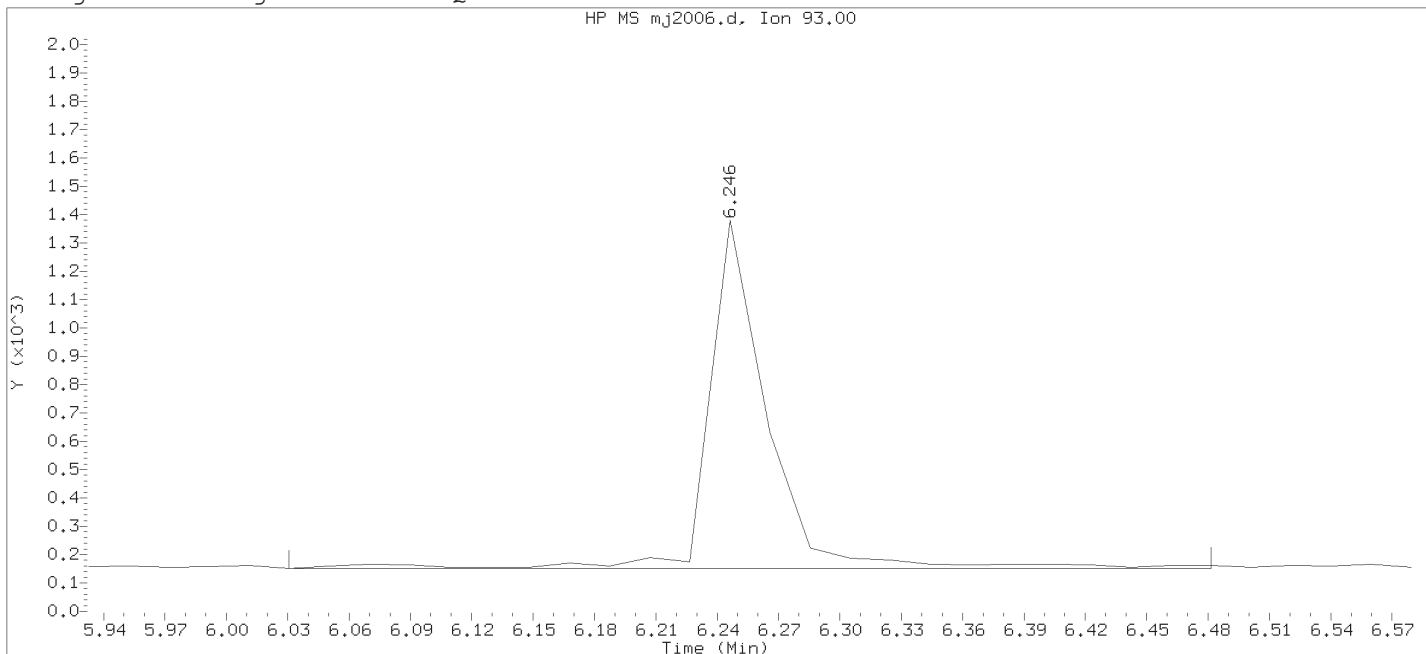
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2006.d  
Injection date and time: 26-OCT-2018 10:02

Instrument ID: HP21585.i  
Analyst ID: ceb05247

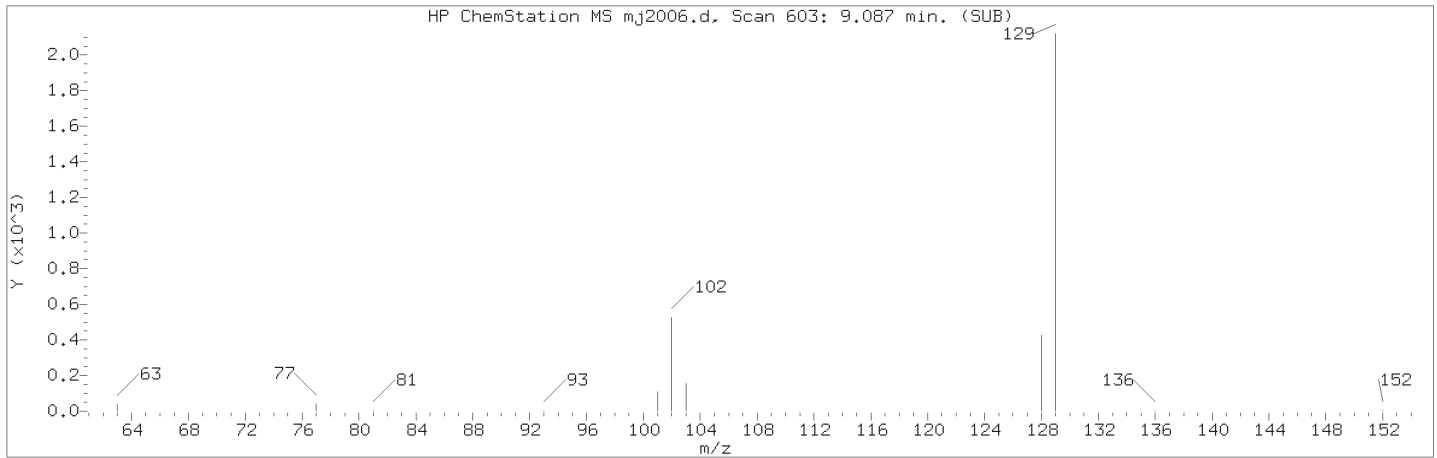
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 10:31 Unknown

Sample Name: SSTD0.01

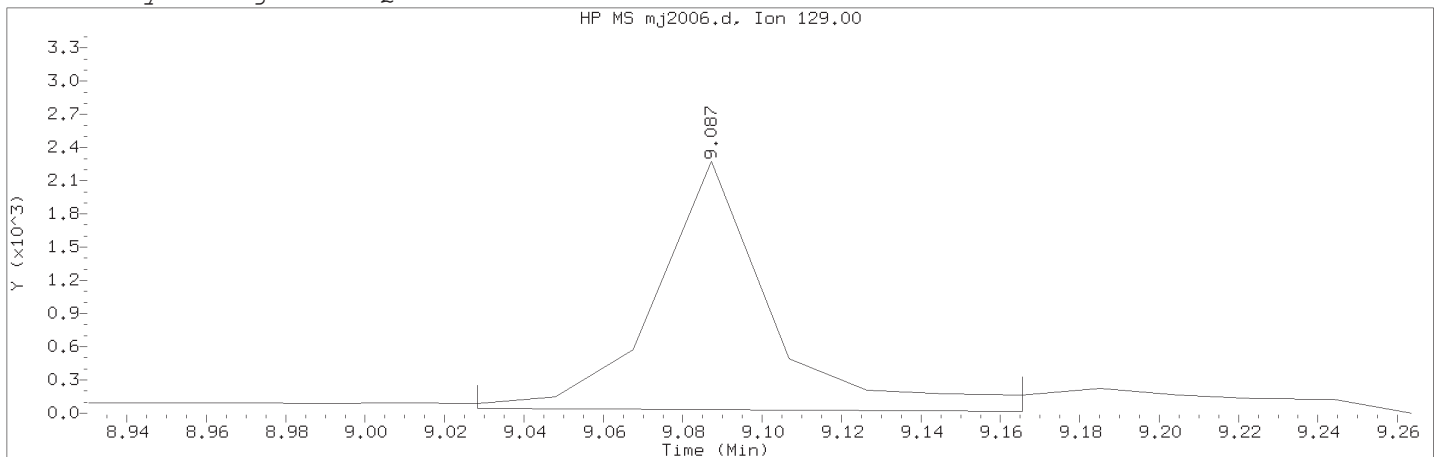
Lab Sample ID: RVSIM2768

Compound Number : 4  
Compound Name : bis(2-Chloroethyl)ether  
Scan Number : 458  
Retention Time (minutes) : 6.246  
Quant Ion : 93.00  
Area : 2423  
On-column Amount (ng/ul) : 0.0099  
Integration start scan : 446 Integration stop scan: 469  
Y at integration start : 152 Y at integration end: 152

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2006.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:02                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.01    Lab Sample ID: RVSIM2768

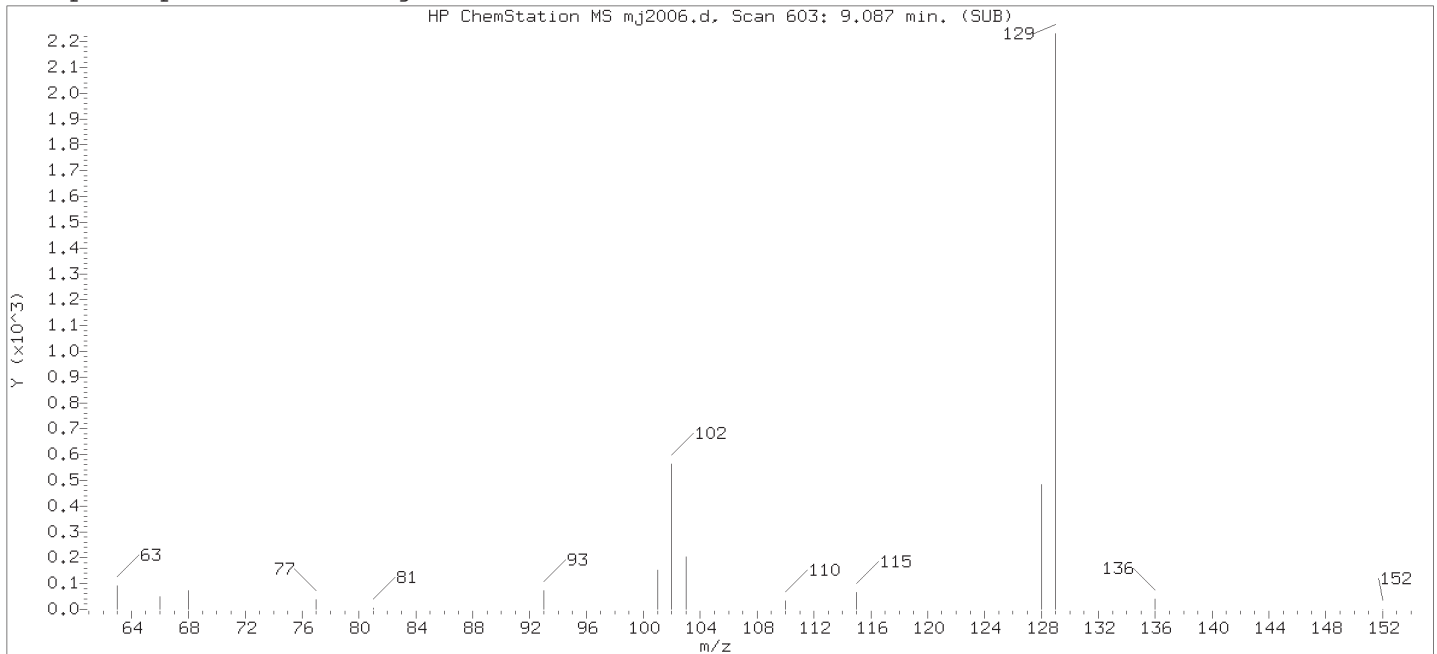
Compound Number    : 8  
Compound Name     : Quinoline  
Scan Number    : 603  
Retention Time (minutes)                                   : 9.087  
Quant Ion    : 129.00  
Area (flag)     : 3926M  
On-Column Amount (ng/ul)                                 : 0.0095  
Integration start scan                                       : 599                      Integration stop scan: 606  
Y at integration start                                       : 44                        Y at integration end: 19

Reason for manual integration: improper integration

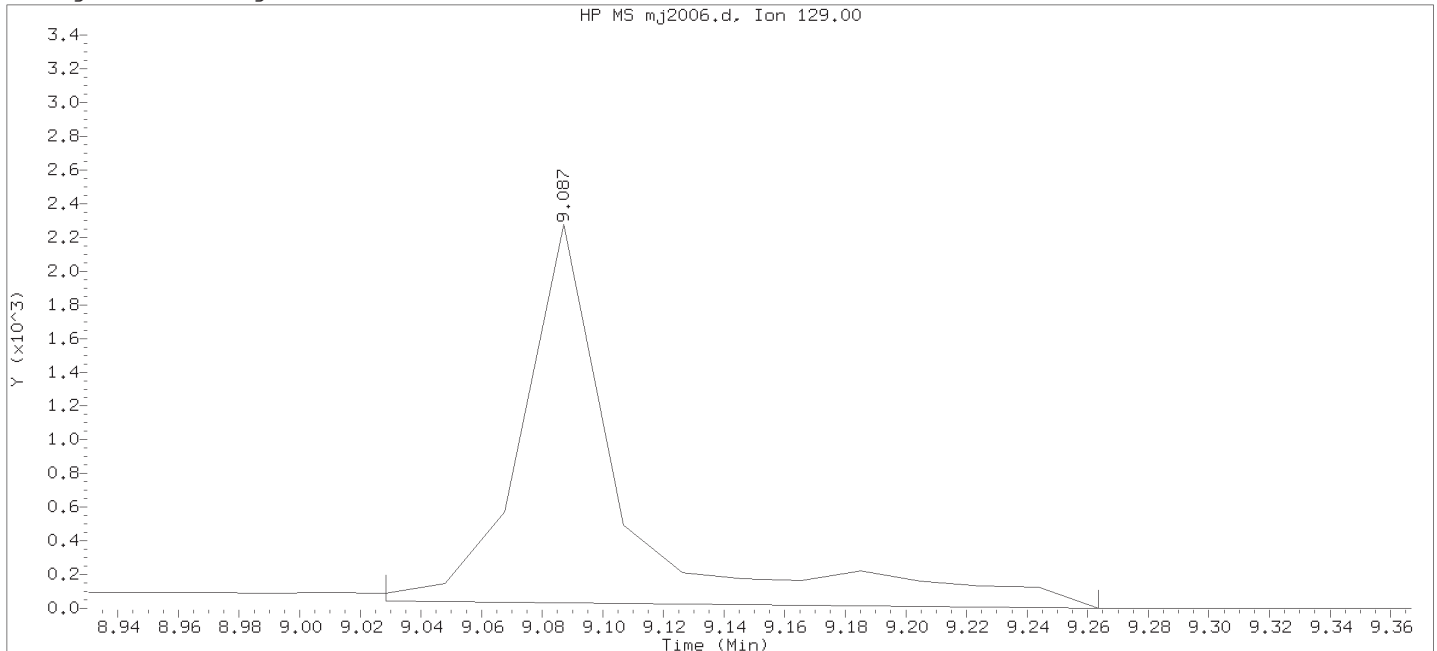
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2006.d  
 Injection date and time: 26-OCT-2018 10:02

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 10:31  
 Date, time and analyst ID of latest file update: 26-Oct-2018 10:31 Unknown

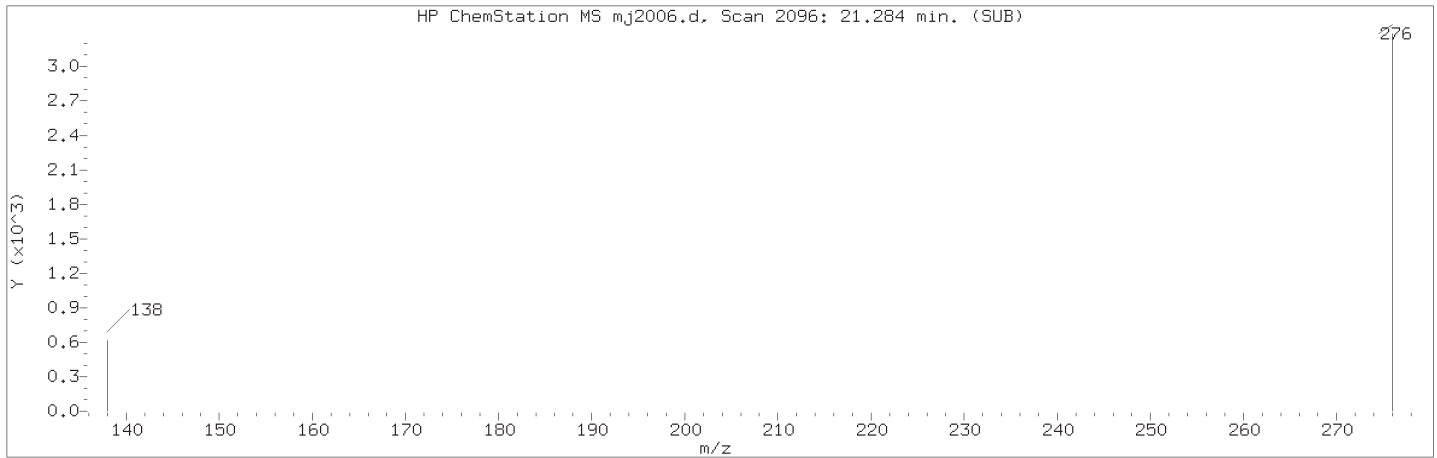
Sample Name: SSTD0.01

Lab Sample ID: RVSIM2768

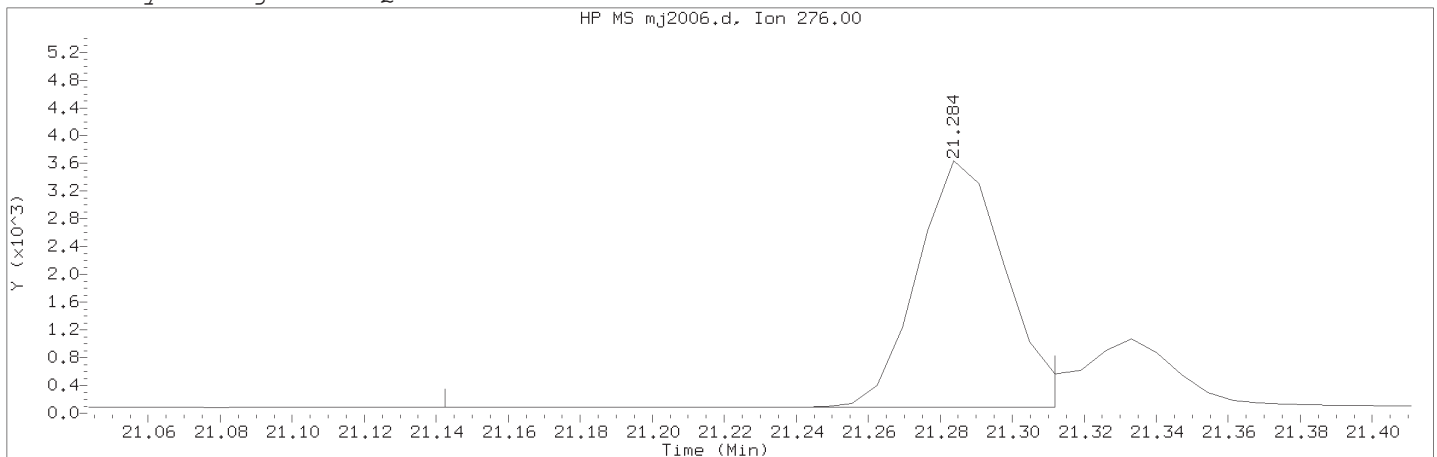
Compound Number	: 8	
Compound Name	: Quinoline	
Scan Number	: 603	
Retention Time (minutes)	: 9.087	
Quant Ion	: 129.00	
Area	: 4863	
On-column Amount (ng/ul)	: 0.0116	
Integration start scan	: 599	Integration stop scan: 611
Y at integration start	: 44	Y at integration end: 0



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2006.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:02                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.01    Lab Sample ID: RVSIM2768

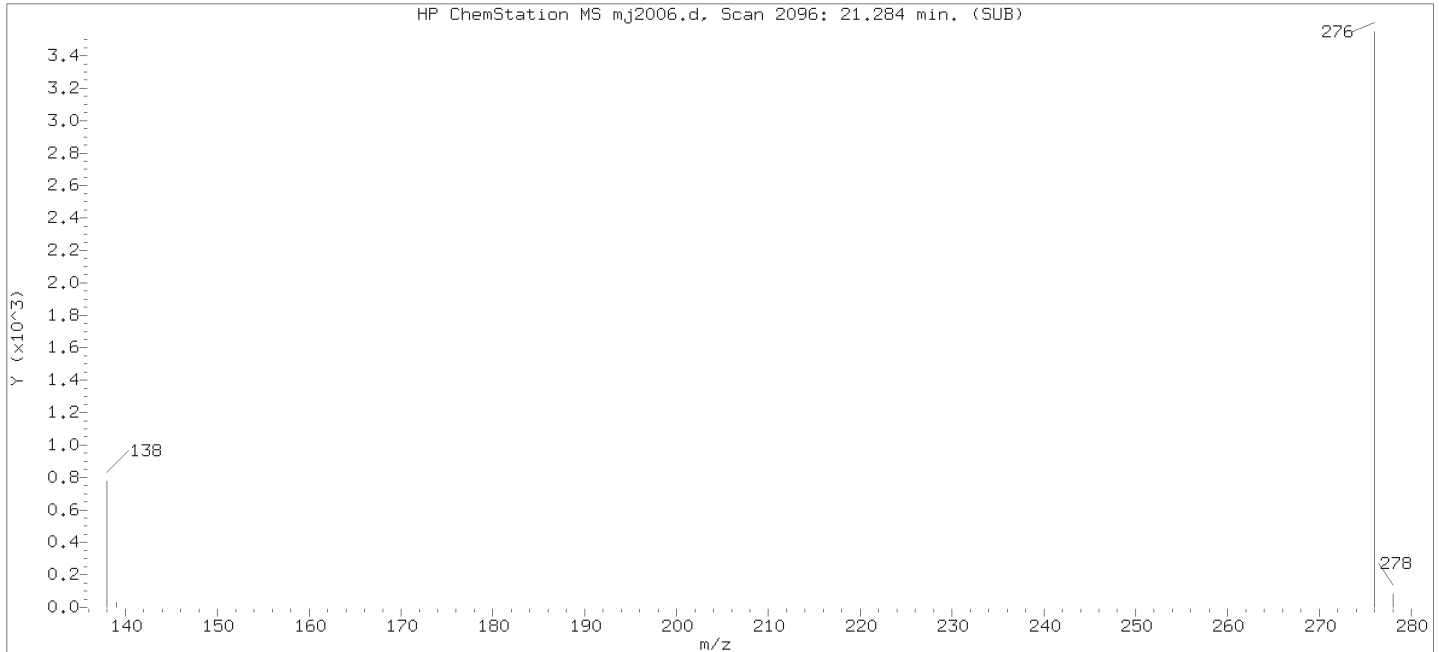
Compound Number    : 39  
Compound Name    : Indeno(1,2,3-cd)pyrene  
Scan Number    : 2096  
Retention Time (minutes)                                   : 21.284  
Quant Ion    : 276.00  
Area (flag)    : 6102M  
On-Column Amount (ng/ul)                                 : 0.0105  
Integration start scan                                      : 2075                      Integration stop scan: 2099  
Y at integration start                                       : 84                         Y at integration end: 84

Reason for manual integration: improper integration

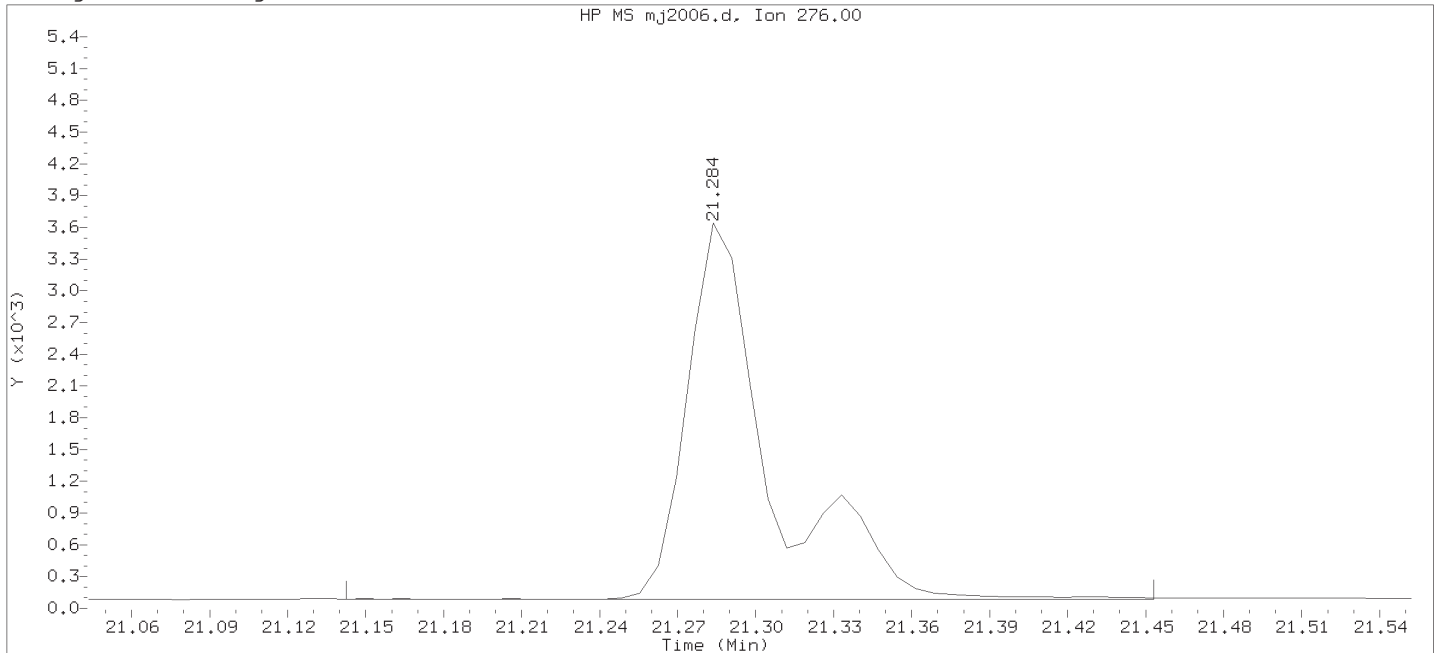
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2006.d  
 Injection date and time: 26-OCT-2018 10:02

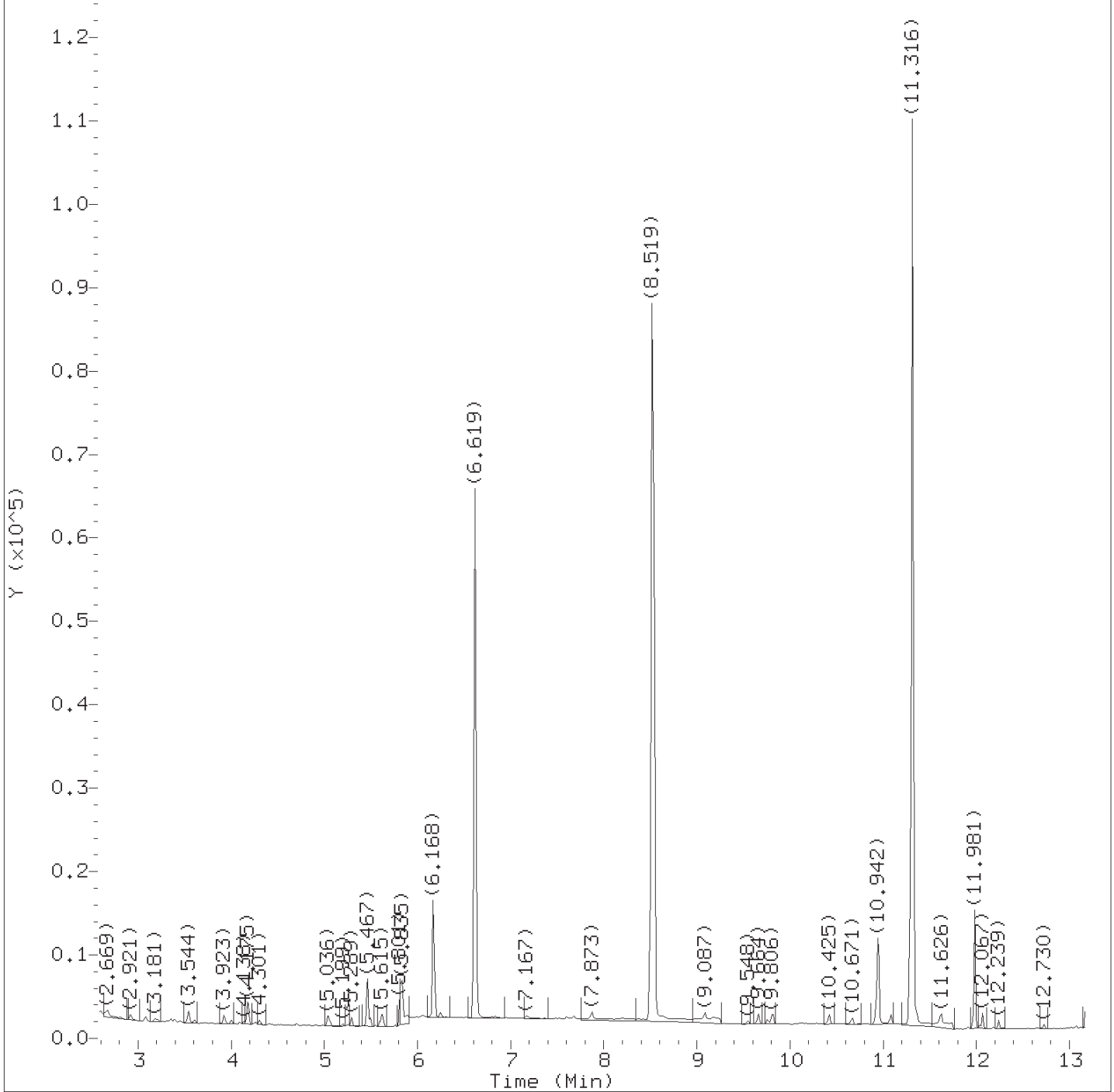
Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 10:31  
 Date, time and analyst ID of latest file update: 26-Oct-2018 10:31 Unknown

Sample Name: SSTD0.01

Lab Sample ID: RVSIM2768

Compound Number : 39  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 2096  
 Retention Time (minutes) : 21.284  
 Quant Ion : 276.00  
 Area : 7907  
 On-column Amount (ng/ul) : 0.0134  
 Integration start scan : 2075 Integration stop scan: 2119  
 Y at integration start : 84 Y at integration end: 84



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

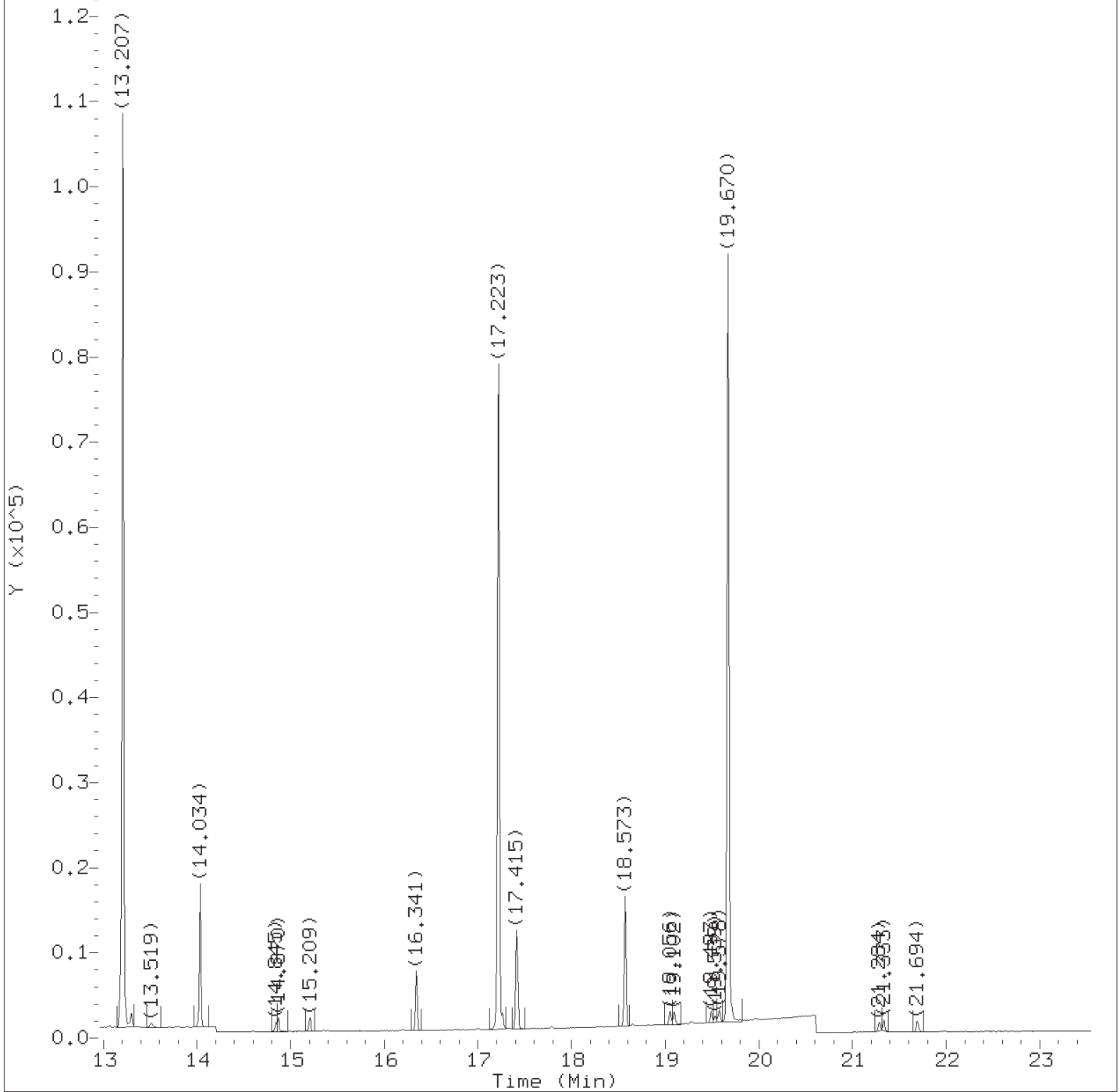
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025

Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
 Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 27-OCT-2018 17:17  
 Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025

Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.921	88	398M	0.003
2) N-Nitrosodimethylamine	(1)	3.314	74	479	0.002
4) bis(2-Chloroethyl) ether	(2)	6.247	93	704	0.003
5) *1,4-Dichlorobenzene-d4	(1)	6.619	152	51250	0.250
6) *Naphthalene-d8	(2)	8.519	136	145342	0.250
7) Naphthalene	(2)	8.558	128	1842	0.003
8) Quinoline	(2)	9.087	129	806M	0.002
9) 2-Methylnaphthalene	(2)	9.664	142	1062	0.003
10) \$1-Methylnaphthalene-d10	(2)	9.754	152	707M	0.003
11) 1-Methylnaphthalene	(2)	9.819	142	1067	0.003
12) Dimethylphthalate	(3)	10.942	163	12567	0.026
13) Acenaphthylene	(3)	11.084	152	1642M	0.003
14) *Acenaphthene-d10	(3)	11.316	164	62310	0.250
15) Acenaphthene	(3)	11.367	154	966M	0.002
16) Dibenzofuran	(3)	11.626	168	1299M	0.002
17) Diethylphthalate	(3)	11.981	149	12965	0.026
18) Fluorene	(3)	12.067	166	1250M	0.003
19) Hexachlorobenzene	(4)	12.730	284	405M	0.003
20) *Phenanthrene-d10	(4)	13.207	188	128259	0.250
21) Phenanthrene	(4)	13.238	178	1859	0.003
22) Anthracene	(4)	13.308	178	1804	0.003
23) Di-n-butylphthalate	(4)	14.034	149	18137	0.024
24) \$Fluoranthene-d10	(4)	14.845	212	1228	0.002
25) Fluoranthene	(4)	14.870	202	1970	0.003
26) Pyrene	(5)	15.209	202	2070	0.003
27) Butylbenzylphthalate	(5)	16.341	149	7680	0.024
28) Benzo(a)anthracene	(5)	17.200	228	2268	0.003
29) *Chrysene-d12	(5)	17.223	240	84757	0.250
30) Chrysene	(5)	17.261	228	1992M	0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.415	149	11869M	0.025
32) Di-n-octylphthalate	(6)	18.573	149	18941	0.022
33) Benzo(b)fluoranthene	(6)	19.056	252	1838	0.003
34) Benzo(k)fluoranthene	(6)	19.102	252	1779	0.003
35) Benzo(e)pyrene	(6)	19.493	252	1605	0.003
36) \$Benzo(a)pyrene-d12	(6)	19.539	264	732	0.002
37) Benzo(a)pyrene	(6)	19.578	252	1783	0.003
38) *Perylene-d12	(6)	19.670	264	81434	0.250
45) Perylene	(6)	19.708	252	1598M	0.003
39) Indeno(1,2,3-cd)pyrene	(6)	21.284	276	1565M	0.003
40) Dibenz(a,h)anthracene	(6)	21.333	278	1543M	0.003

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck  
 on 10/27/2018 at 18:22.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

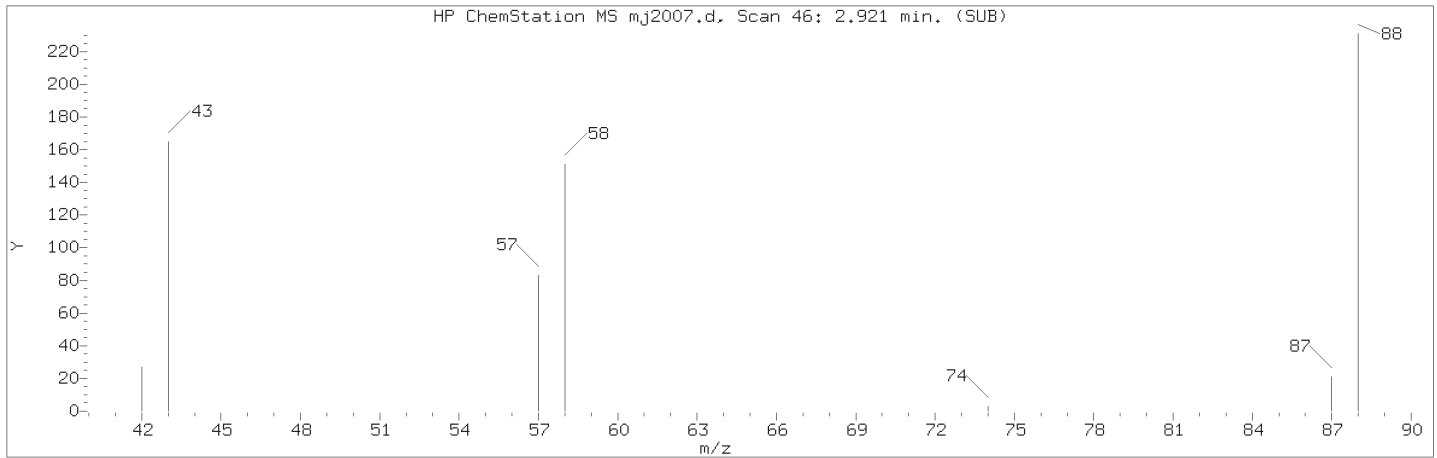
Sample Name: SSTD0.0025

Lab Sample ID: RVSIM2768

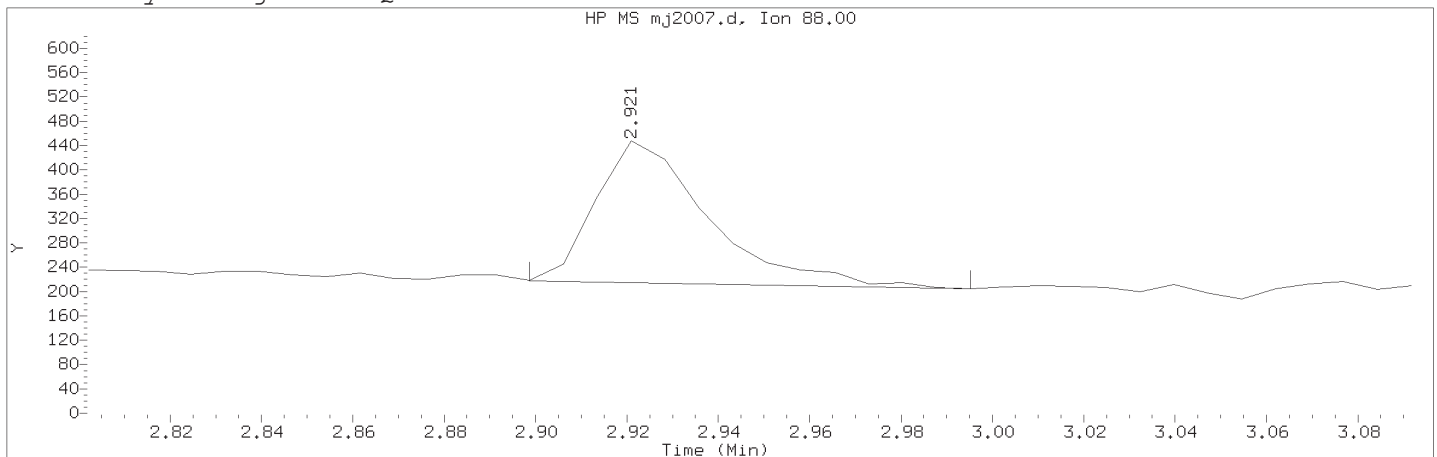
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
===== 41) Benzo(g,h,i)perylene	(6)	21.694	276	1858	0.003

Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                      Lab Sample ID: RVSIM2768

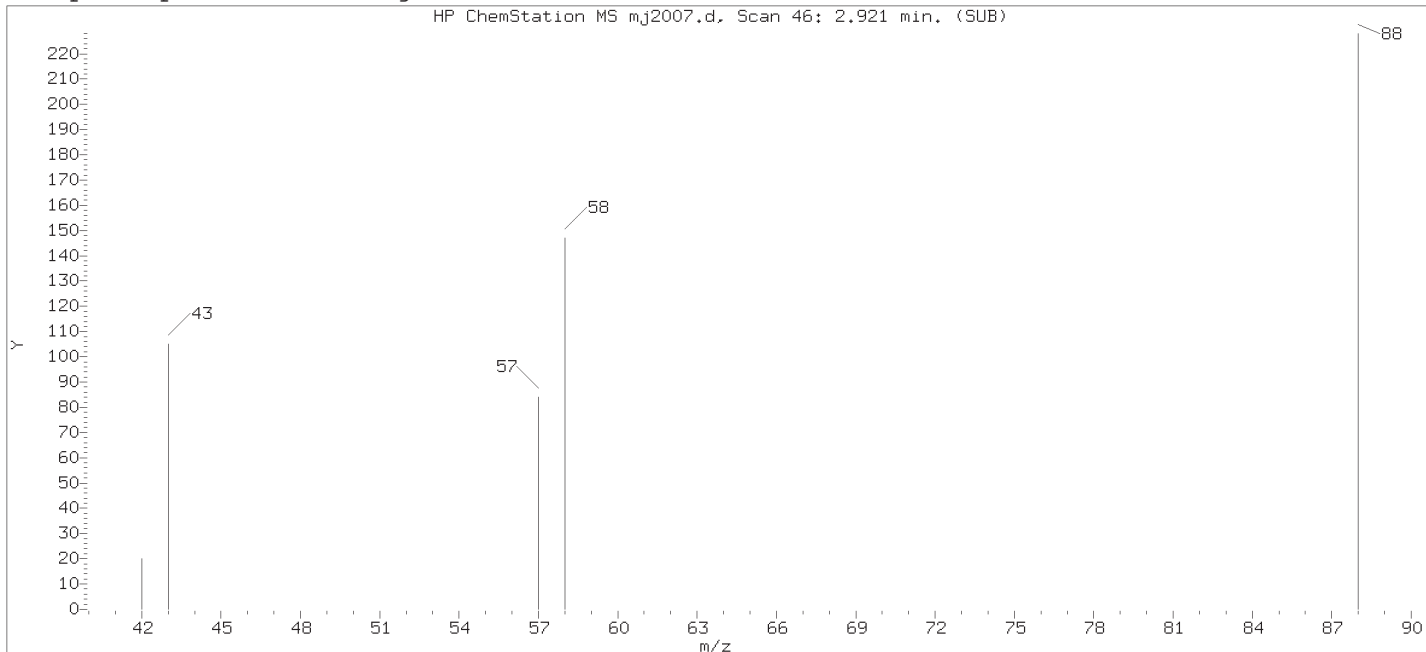
Compound Number                      : 1  
Compound Name                         : 1,4-Dioxane  
Scan Number                            : 46  
Retention Time (minutes)             : 2.921  
Quant Ion                                : 88.00  
Area (flag)                             : 398M  
On-Column Amount (ng/ul)            : 0.0028  
Integration start scan                : 42                      Integration stop scan: 55  
Y at integration start                : 218                    Y at integration end: 205

Reason for manual integration: improper integration

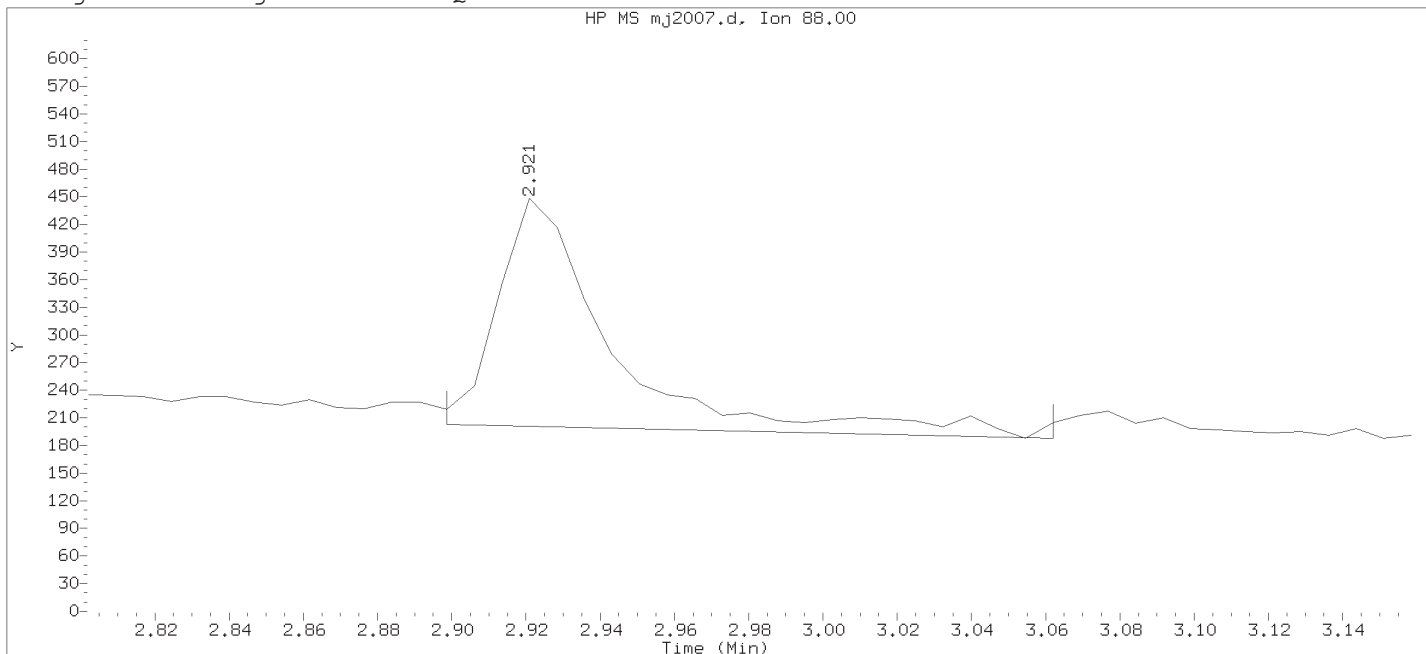
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

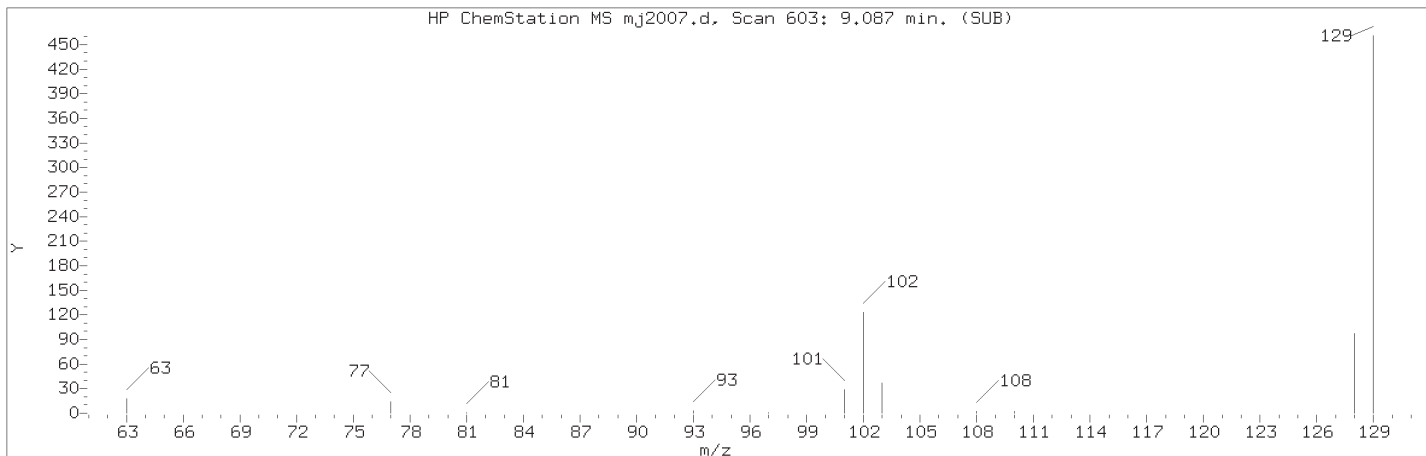
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025                      Lab Sample ID: RVSIM2768

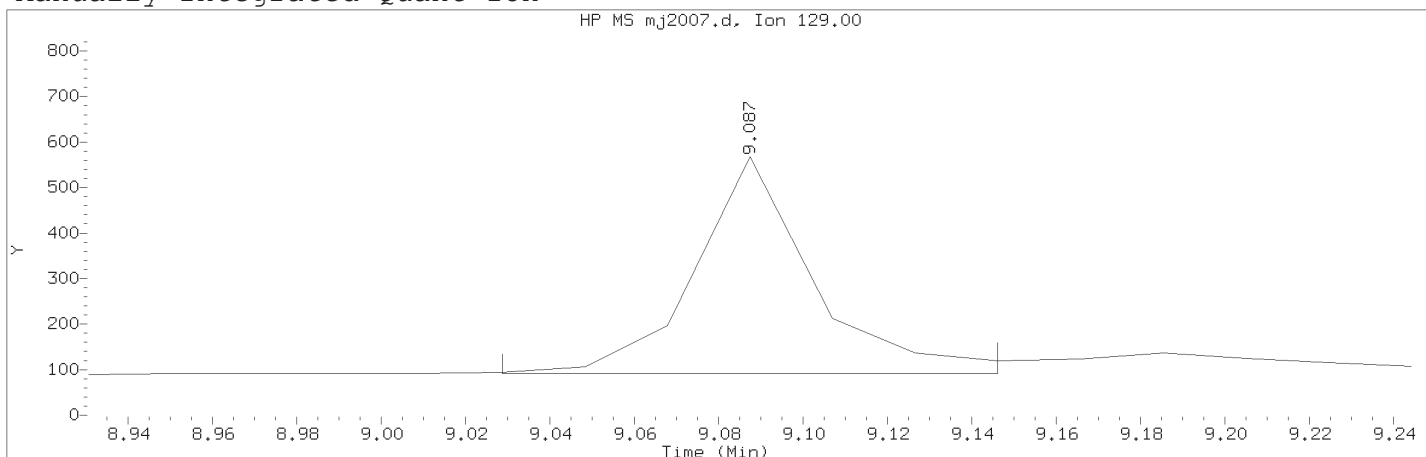
Compound Number                      : 1  
Compound Name                        : 1,4-Dioxane  
Scan Number                            : 46  
Retention Time (minutes)            : 2.921  
Quant Ion                                : 88.00  
Area                                      : 525  
On-column Amount (ng/ul)            : 0.0037  
Integration start scan                : 42                      Integration stop scan: 64  
Y at integration start                : 203                    Y at integration end: 188



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m              Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025    Lab Sample ID: RVSIM2768

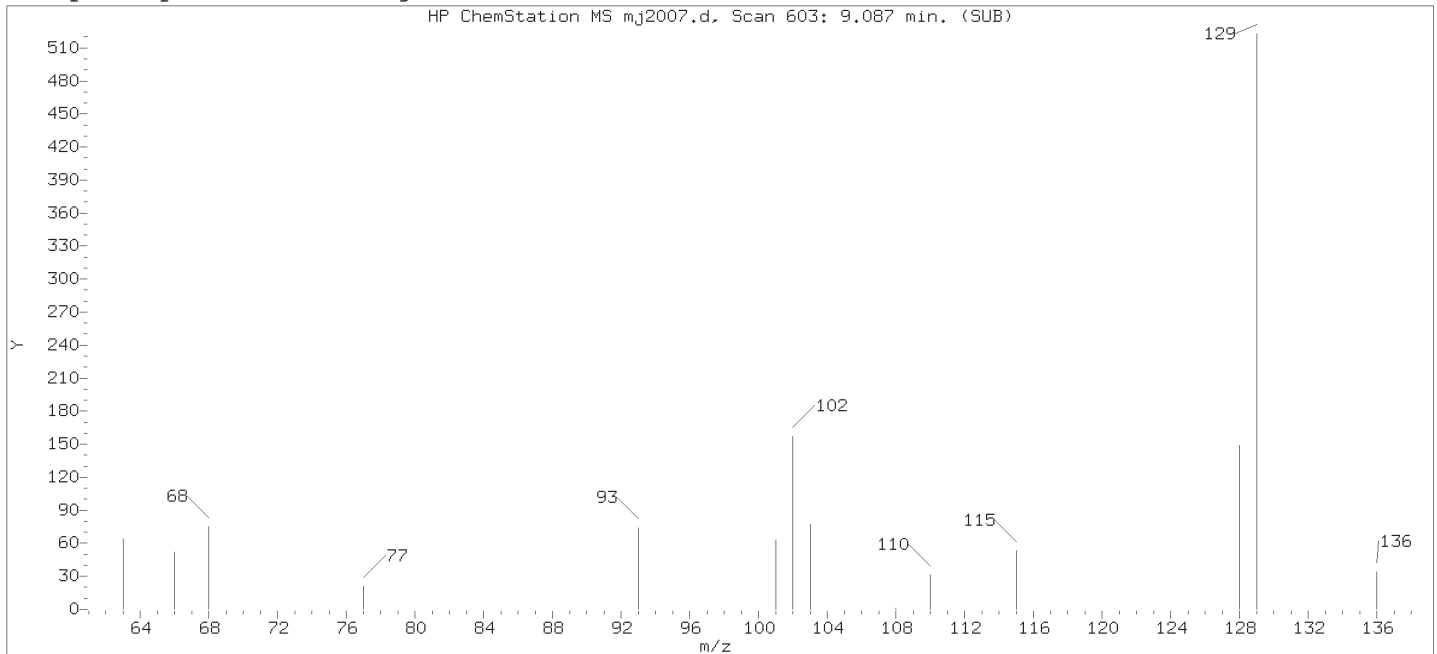
Compound Number    : 8  
Compound Name    : Quinoline  
Scan Number    : 603  
Retention Time (minutes)                                   : 9.087  
Quant Ion    : 129.00  
Area (flag)    : 806M  
On-Column Amount (ng/ul)                                 : 0.0020  
Integration start scan                                     : 599                      Integration stop scan: 605  
Y at integration start                                     : 91                        Y at integration end: 91

Reason for manual integration: improper integration

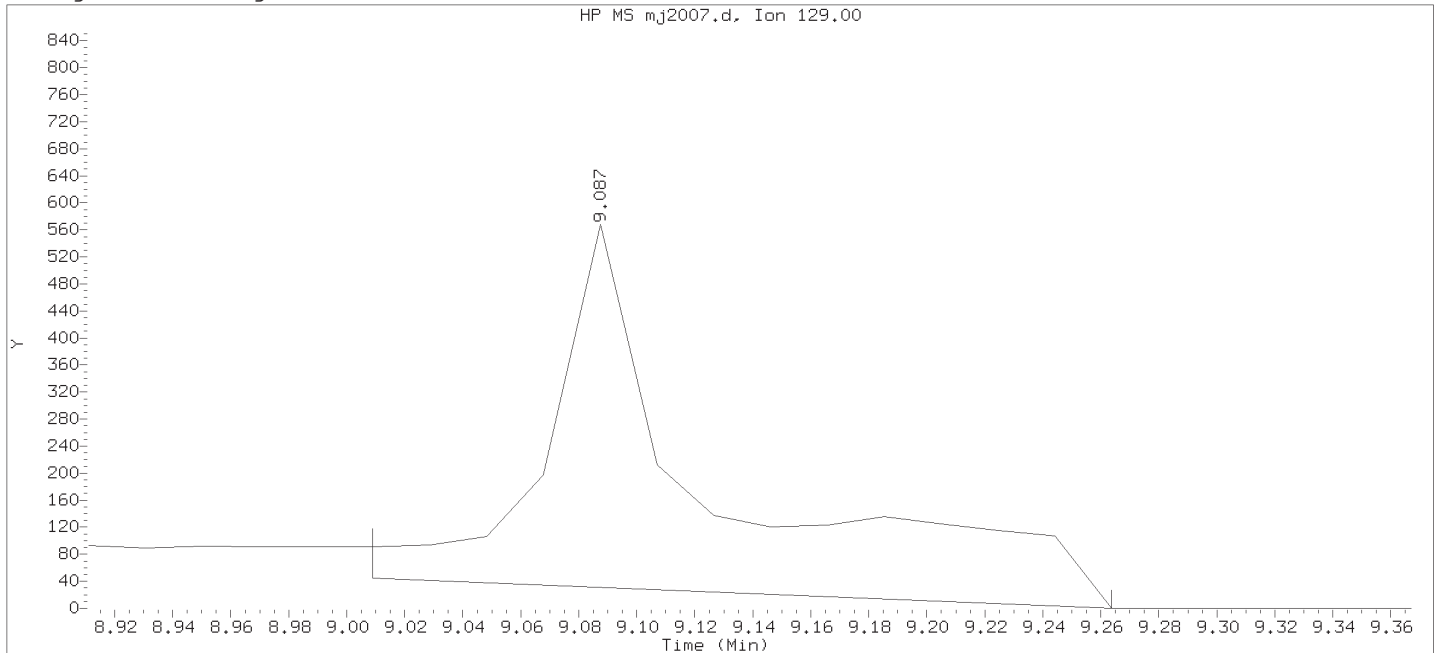
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
 Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

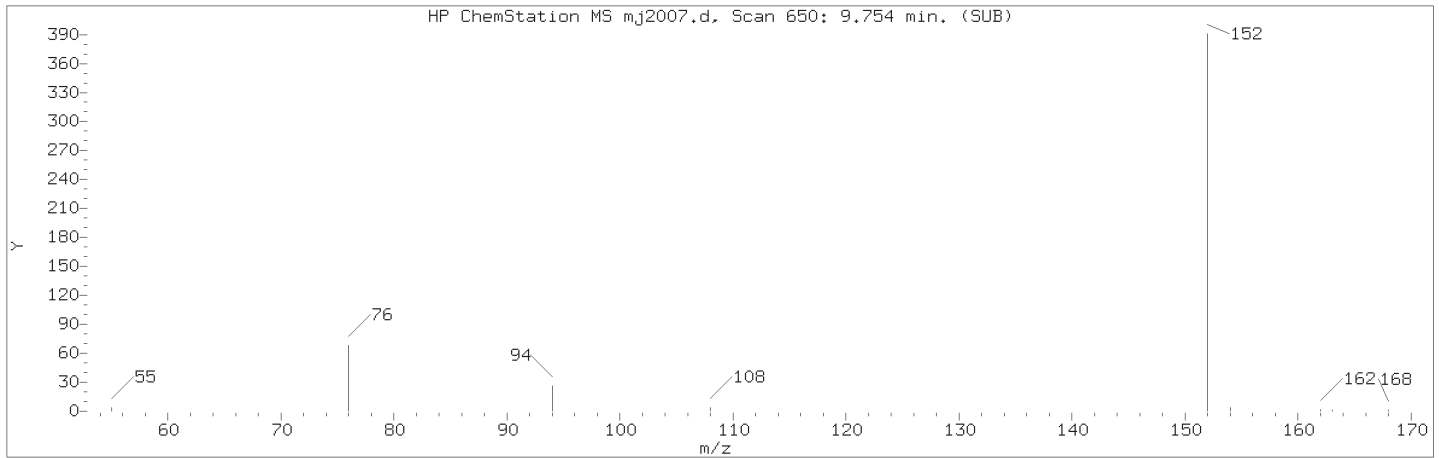
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 10:31  
 Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTDO.0025

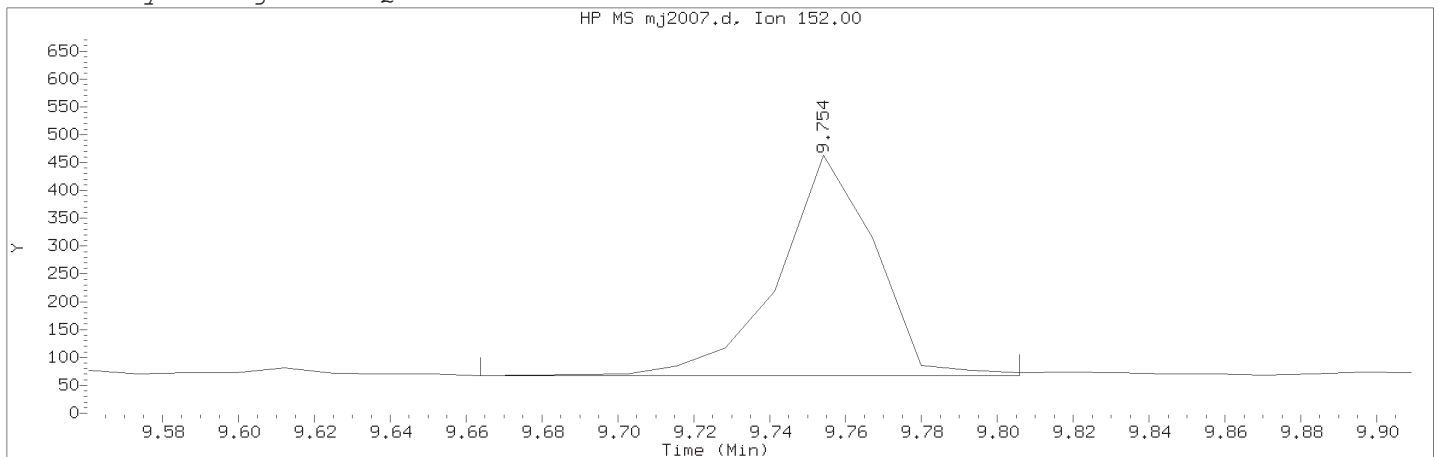
Lab Sample ID: RVSIM2768

Compound Number	: 8		
Compound Name	: Quinoline		
Scan Number	: 603		
Retention Time (minutes)	: 9.087		
Quant Ion	: 129.00		
Area	: 2001		
On-column Amount (ng/ul)	: 0.0049		
Integration start scan	: 598	Integration stop scan:	611
Y at integration start	: 45	Y at integration end:	0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                      Lab Sample ID: RVSIM2768

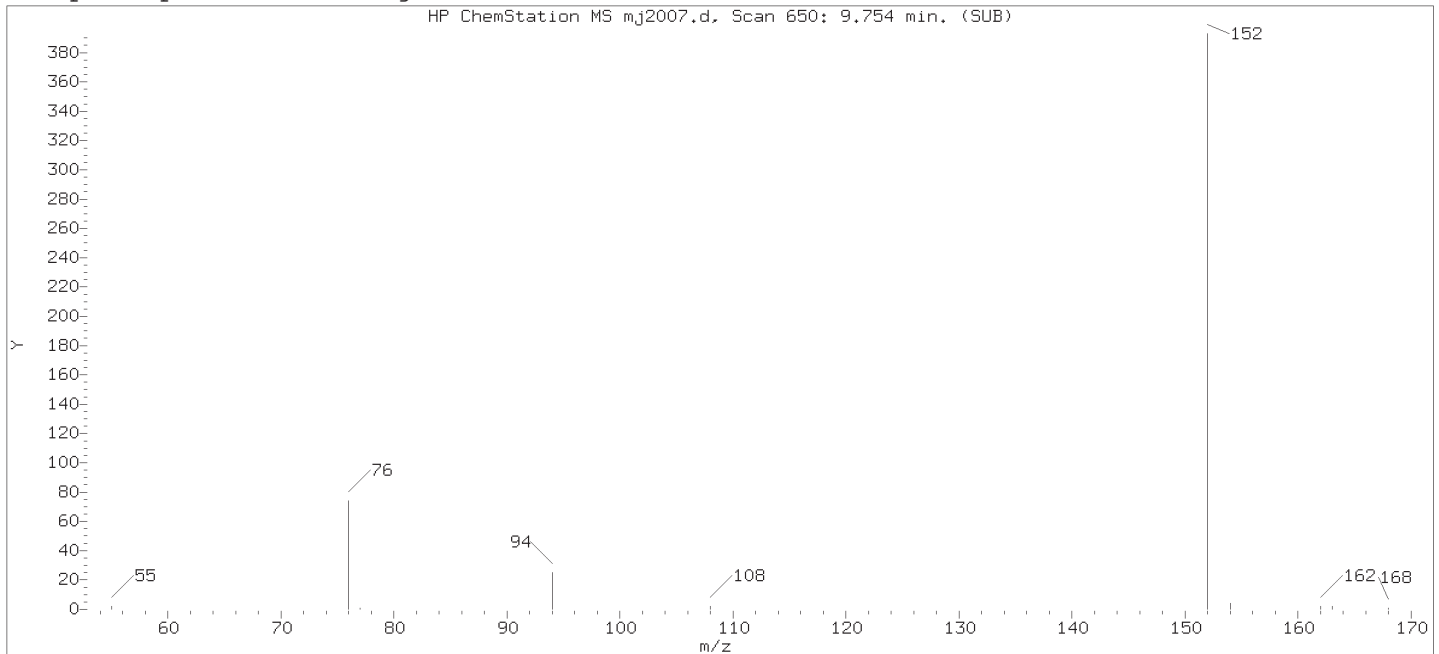
Compound Number                      : 10  
Compound Name                         : 1-Methylnaphthalene-d10  
Scan Number                            : 650  
Retention Time (minutes)             : 9.754  
Quant Ion                               : 152.00  
Area (flag)                            : 707M  
On-Column Amount (ng/ul)            : 0.0027  
Integration start scan                : 642                      Integration stop scan: 653  
Y at integration start                : 67                       Y at integration end: 67

Reason for manual integration: improper integration

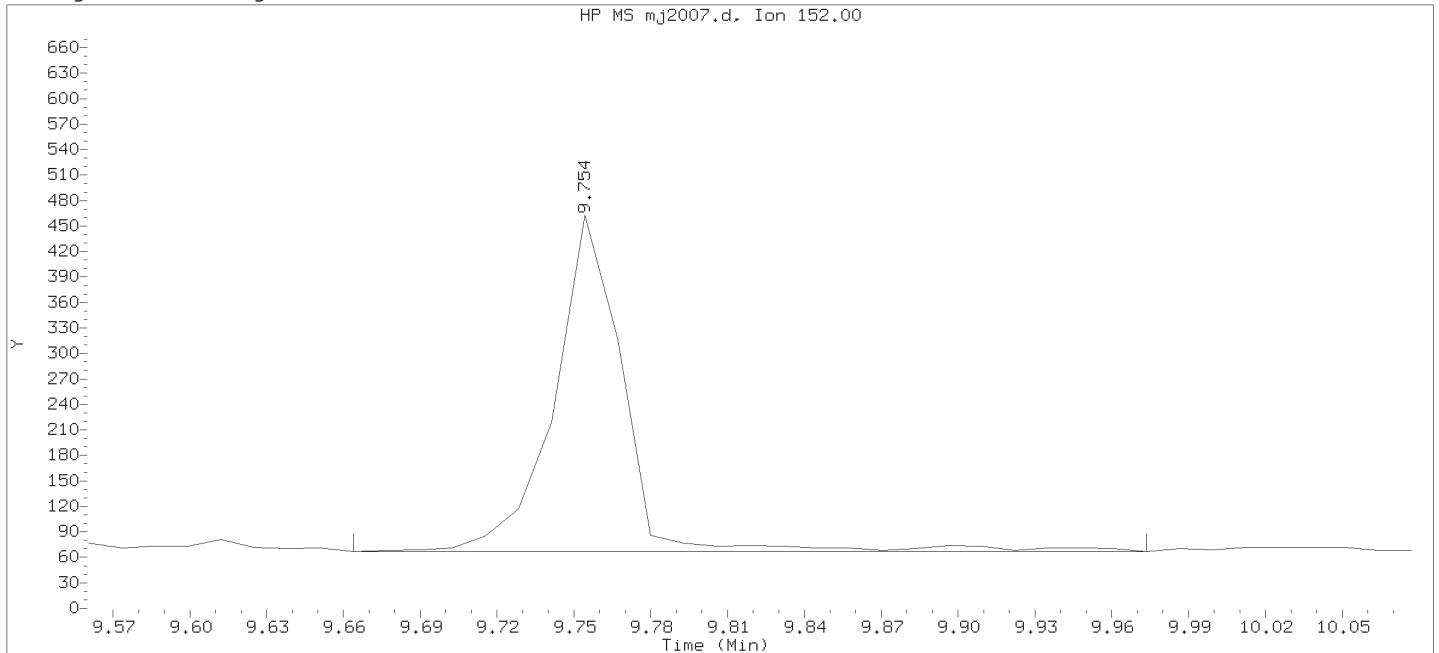
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

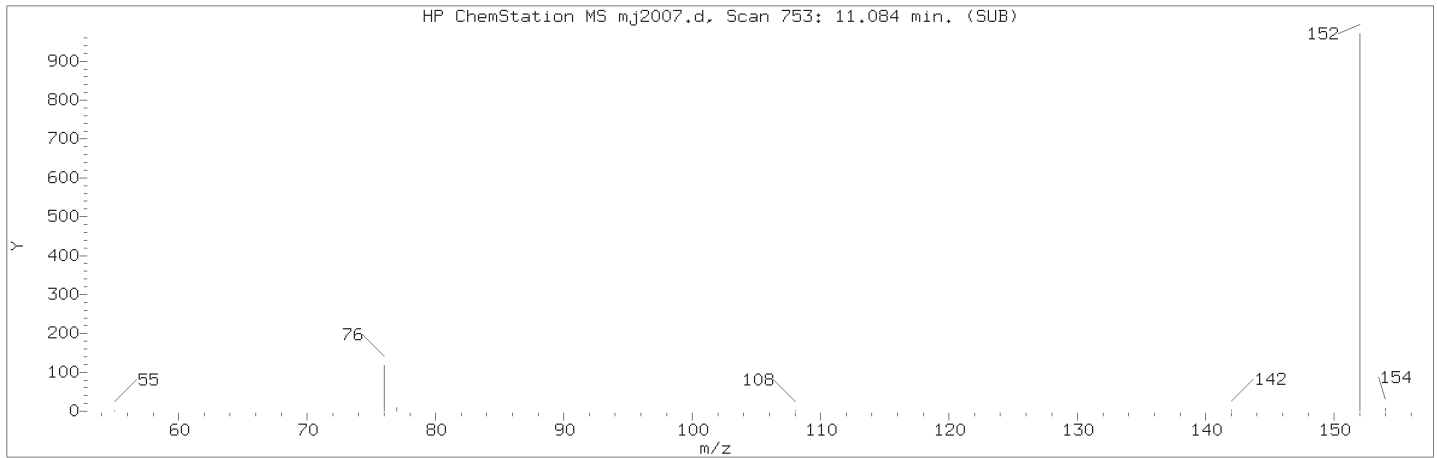
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTDO.0025

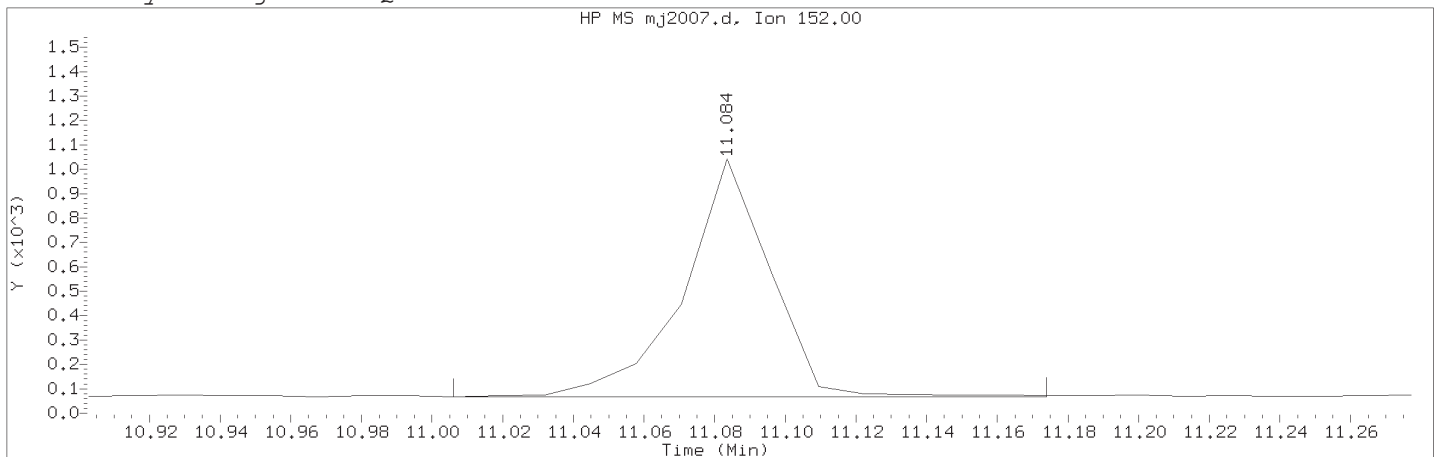
Lab Sample ID: RVSIM2768

Compound Number	: 10	
Compound Name	: 1-Methylnaphthalene-d10	
Scan Number	: 650	
Retention Time (minutes)	: 9.754	
Quant Ion	: 152.00	
Area	: 741	
On-column Amount (ng/ul)	: 0.0028	
Integration start scan	: 642	Integration stop scan: 666
Y at integration start	: 67	Y at integration end: 67

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m                      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                      Lab Sample ID: RVSIM2768

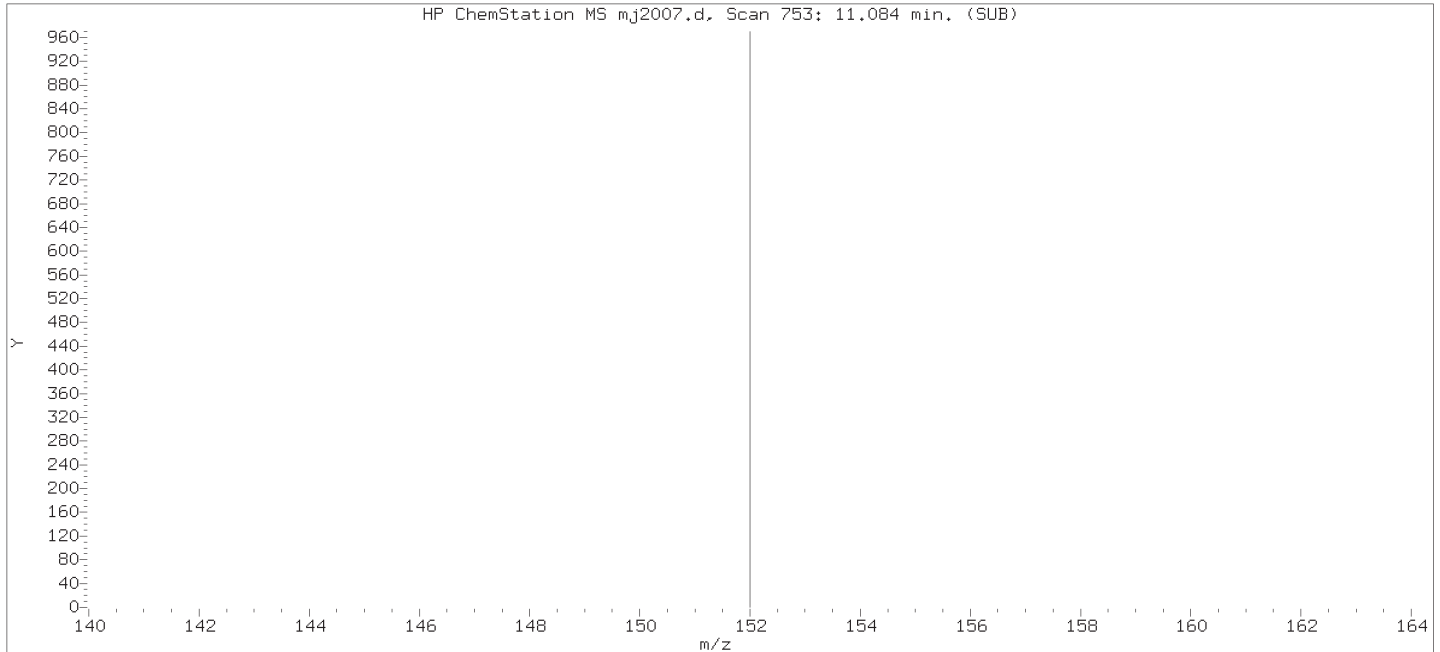
Compound Number                      : 13  
Compound Name                         : Acenaphthylene  
Scan Number                            : 753  
Retention Time (minutes)             : 11.084  
Quant Ion                               : 152.00  
Area (flag)                            : 1642M  
On-Column Amount (ng/ul)           : 0.0025  
Integration start scan                : 746                      Integration stop scan: 759  
Y at integration start                : 68                       Y at integration end: 68

Reason for manual integration: improper integration

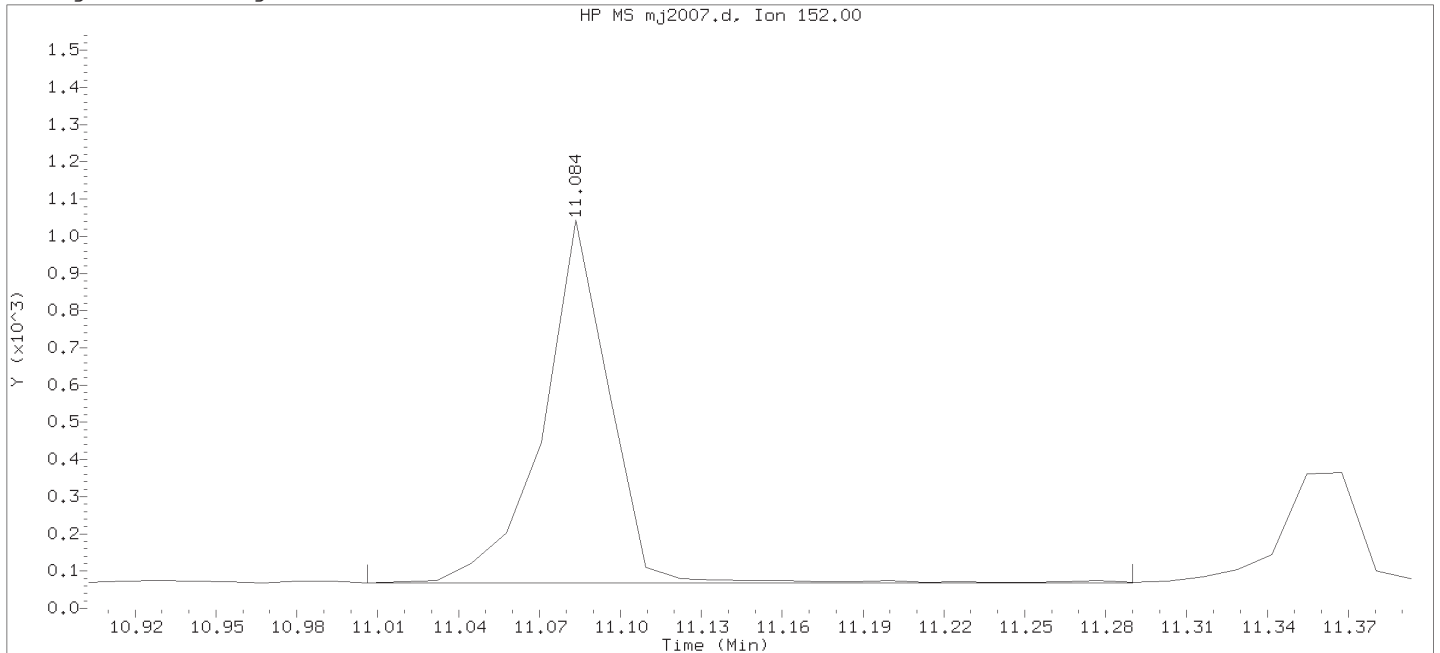
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

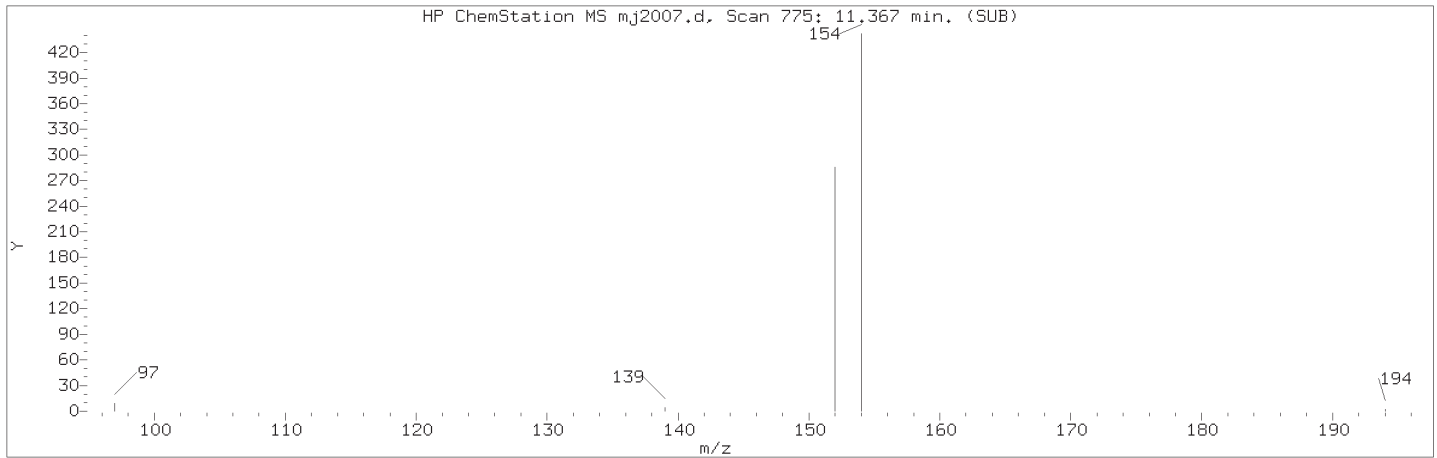
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025

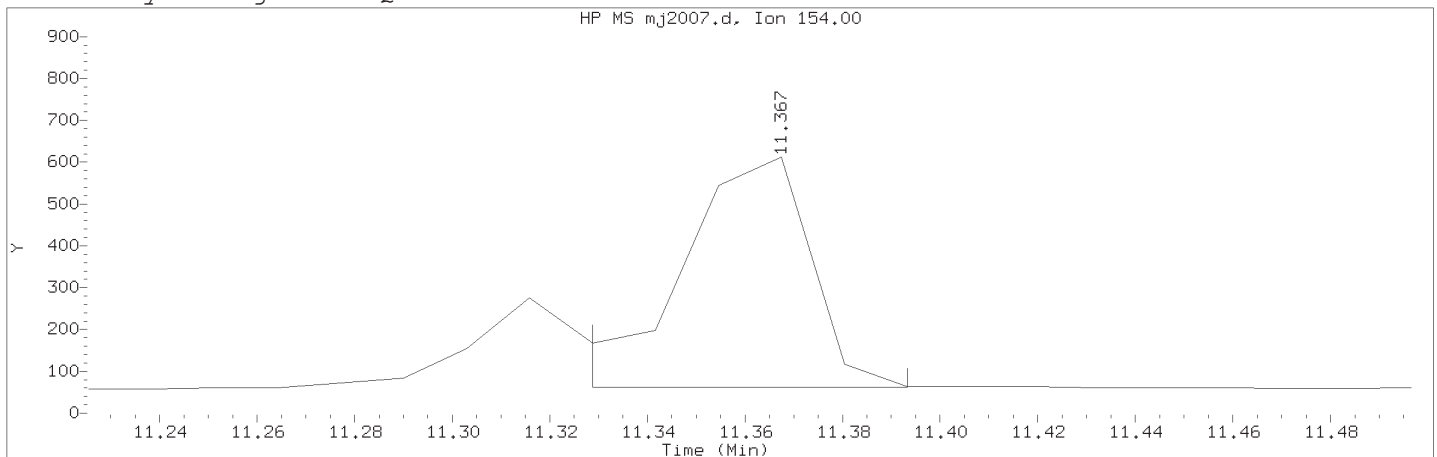
Lab Sample ID: RVSIM2768

Compound Number : 13  
Compound Name : Acenaphthylene  
Scan Number : 753  
Retention Time (minutes) : 11.084  
Quant Ion : 152.00  
Area : 1663  
On-column Amount (ng/ul) : 0.0025  
Integration start scan : 746 Integration stop scan: 768  
Y at integration start : 68 Y at integration end: 68

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                                      Lab Sample ID: RVSIM2768

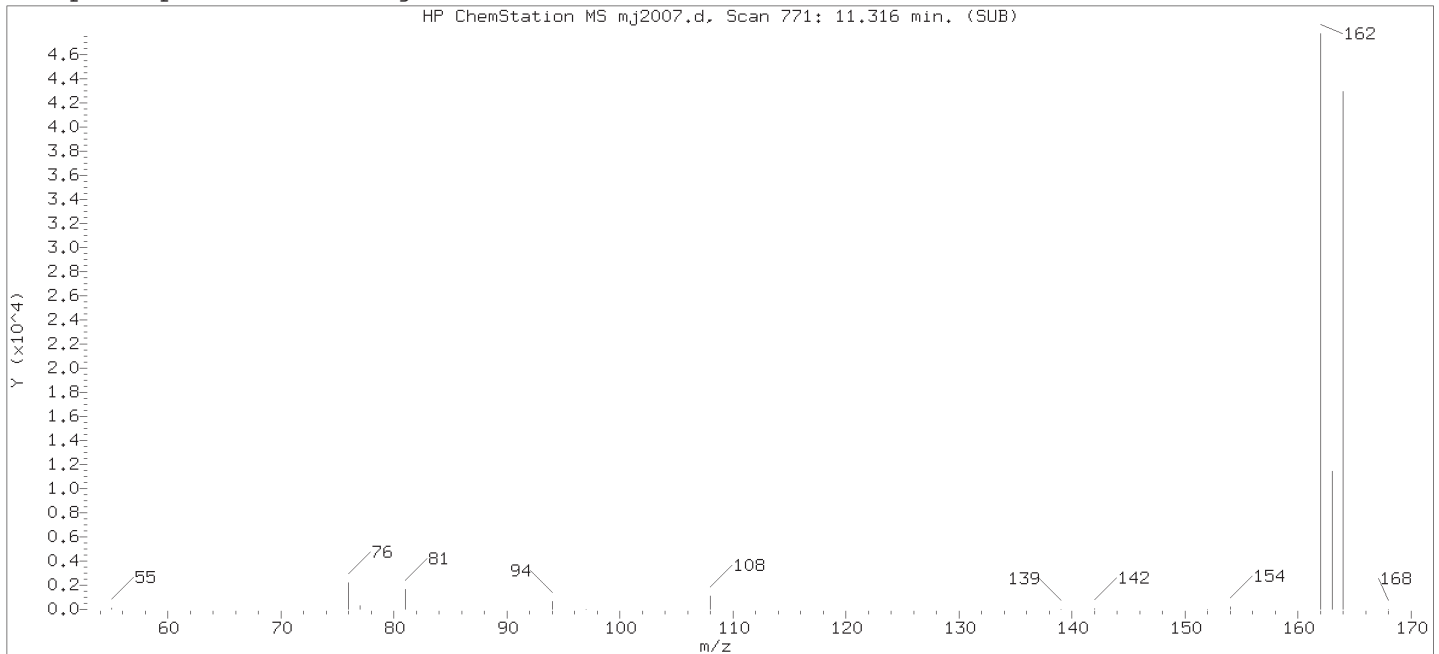
Compound Number                                      : 15  
Compound Name                                        : Acenaphthene  
Scan Number    : 775  
Retention Time (minutes)                         : 11.367  
Quant Ion     : 154.00  
Area (flag)    : 966M  
On-Column Amount (ng/ul)                        : 0.0024  
Integration start scan                             : 771                      Integration stop scan: 776  
Y at integration start                            : 62                        Y at integration end: 62

Reason for manual integration: improper integration

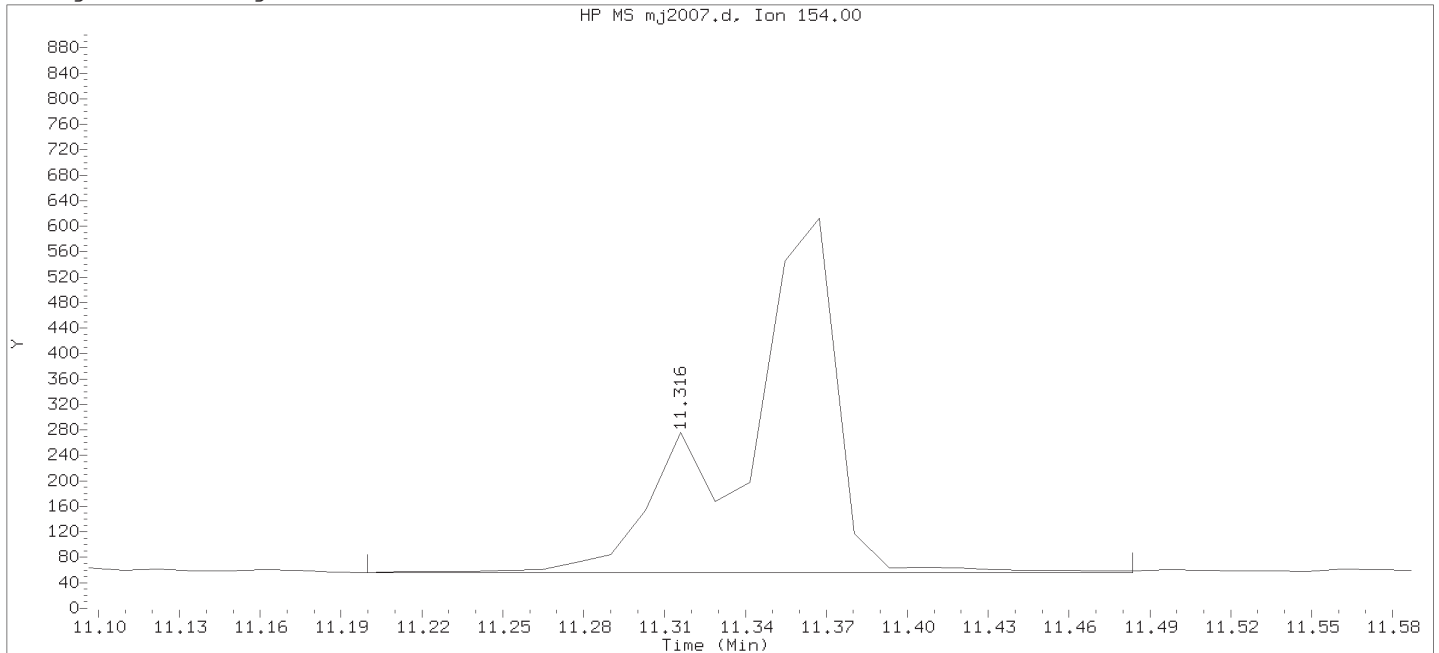
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
 Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 10:31  
 Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

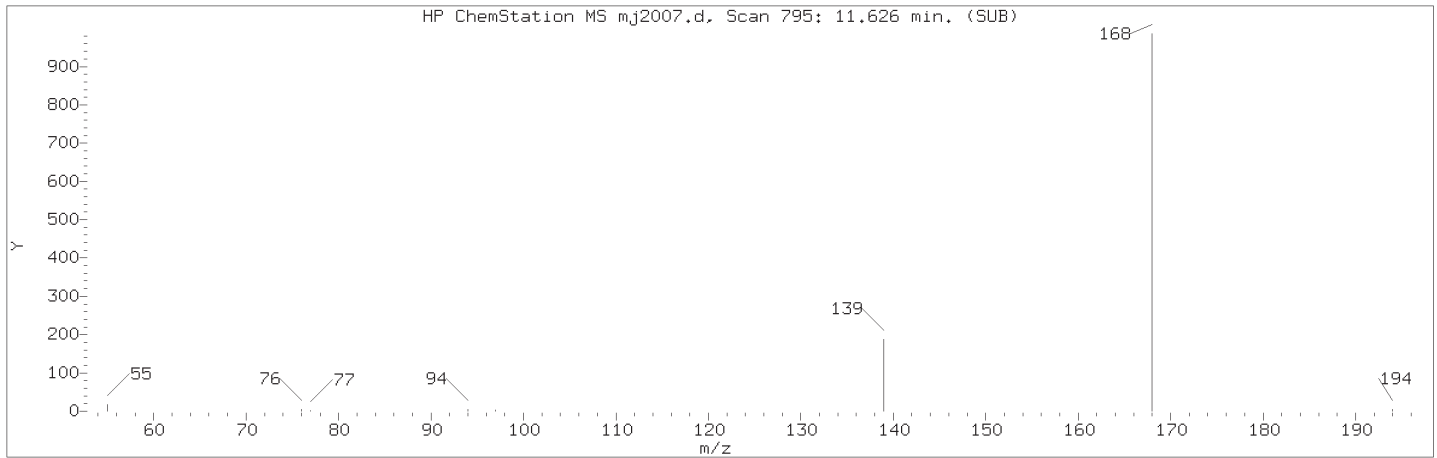
Sample Name: SSTDO.0025

Lab Sample ID: RVSIM2768

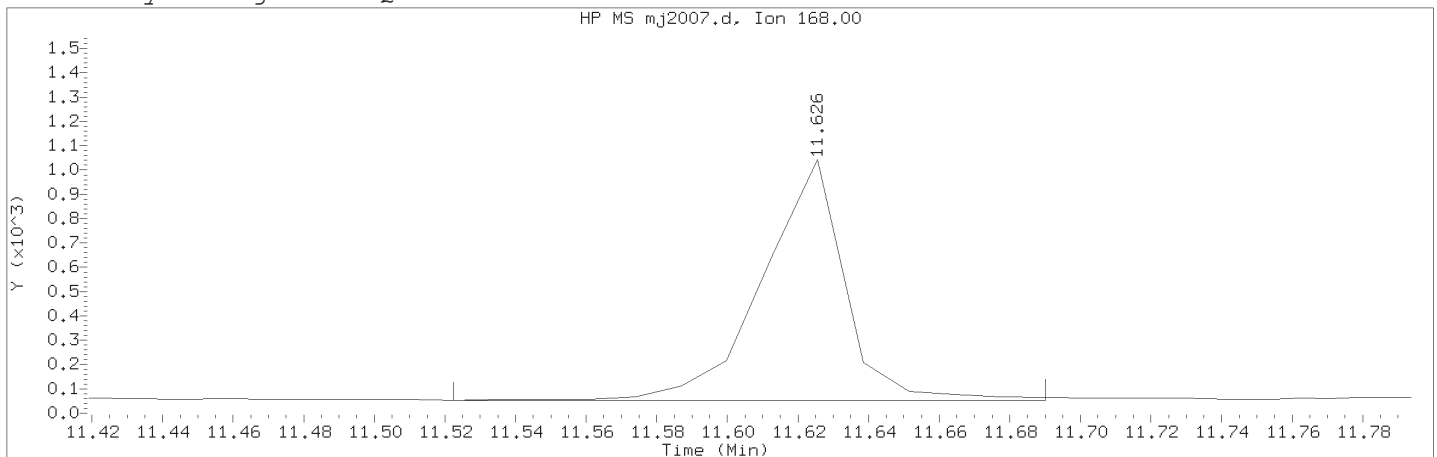
Compound Number	: 15	
Compound Name	: Acenaphthene	
Scan Number	: 771	
Retention Time (minutes)	: 11.316	
Quant Ion	: 154.00	
Area	: 1375	
On-column Amount (ng/ul)	: 0.0034	
Integration start scan	: 761	Integration stop scan: 783
Y at integration start	: 56	Y at integration end: 56



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                                      Lab Sample ID: RVSIM2768

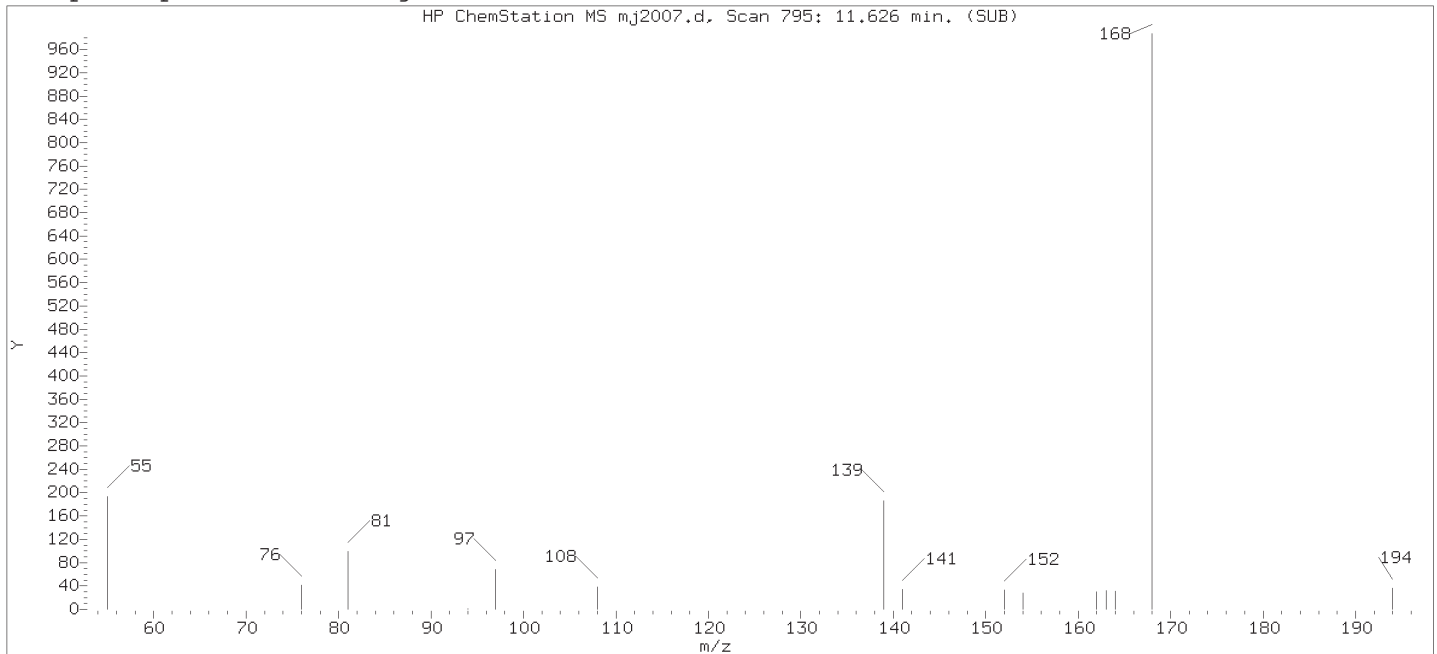
Compound Number                      : 16  
Compound Name                         : Dibenzofuran  
Scan Number                            : 795  
Retention Time (minutes)            : 11.626  
Quant Ion                                : 168.00  
Area (flag)                             : 1299M  
On-Column Amount (ng/ul)           : 0.0024  
Integration start scan                : 786                      Integration stop scan: 799  
Y at integration start                : 53                        Y at integration end: 53

Reason for manual integration: improper integration

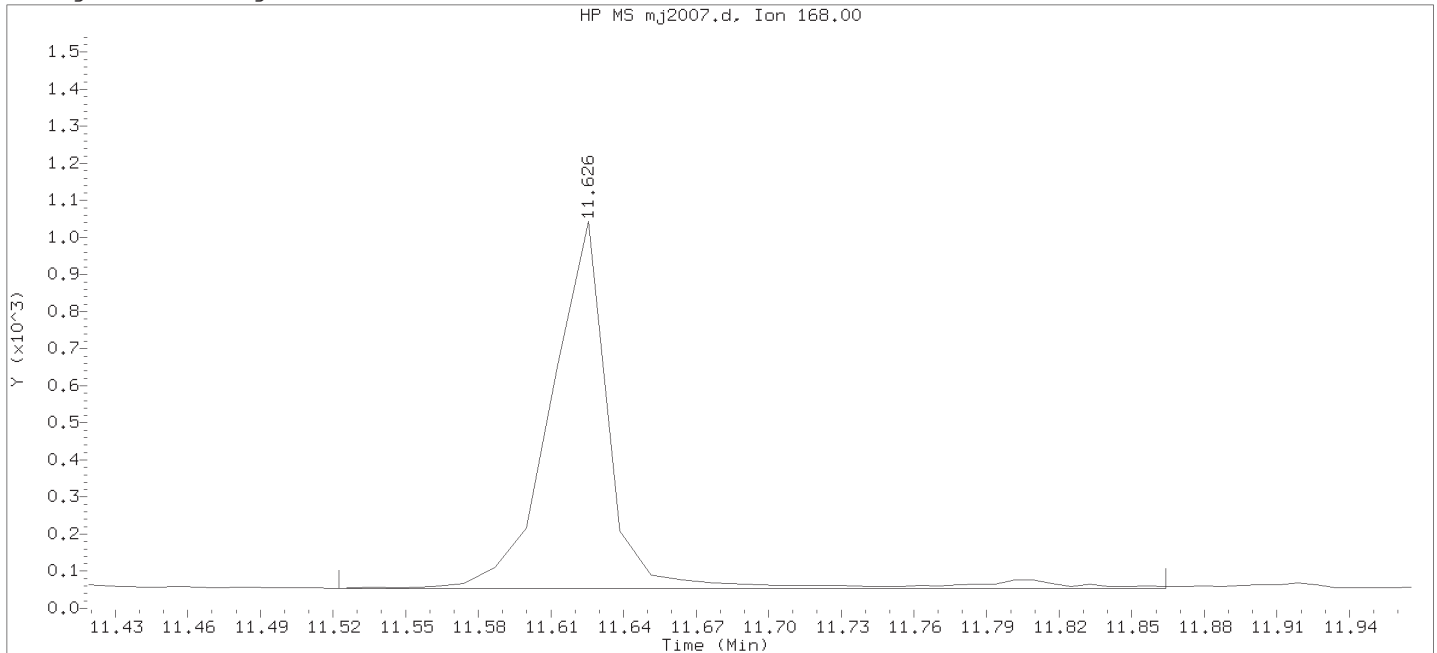
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

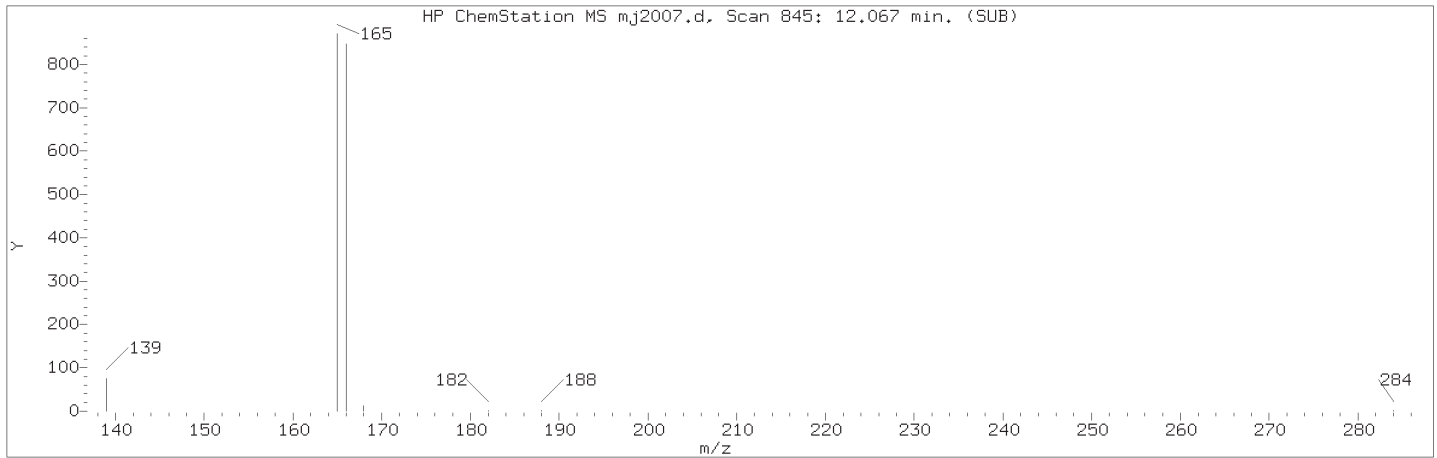
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTDO.0025

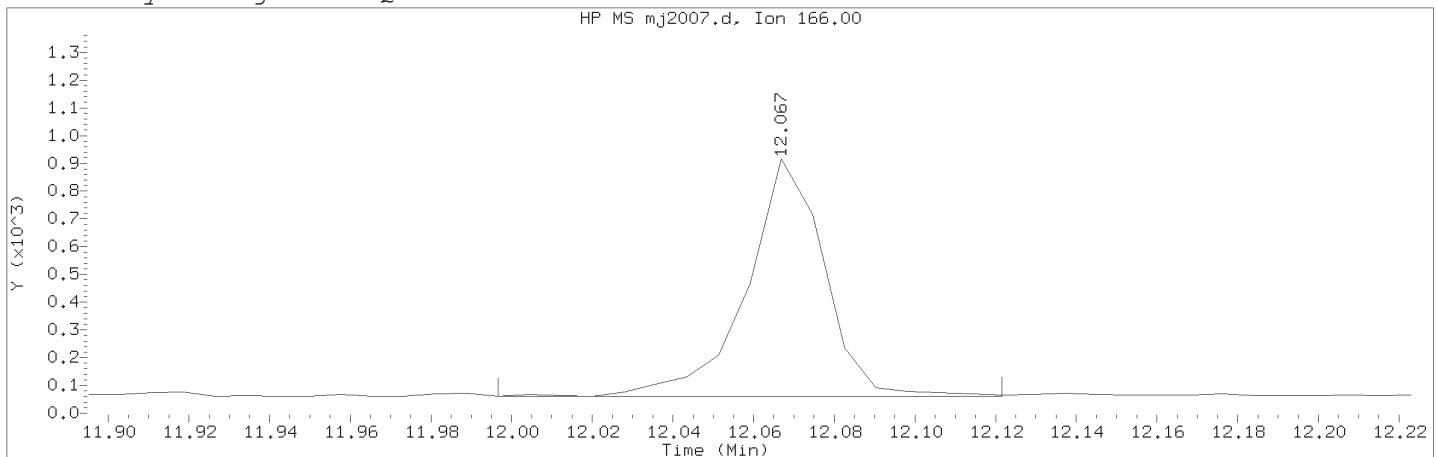
Lab Sample ID: RVSIM2768

Compound Number	: 16	
Compound Name	: Dibenzofuran	
Scan Number	: 795	
Retention Time (minutes)	: 11.626	
Quant Ion	: 168.00	
Area	: 1512	
On-column Amount (ng/ul)	: 0.0027	
Integration start scan	: 786	Integration stop scan: 818
Y at integration start	: 53	Y at integration end: 53

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                                      Lab Sample ID: RVSIM2768

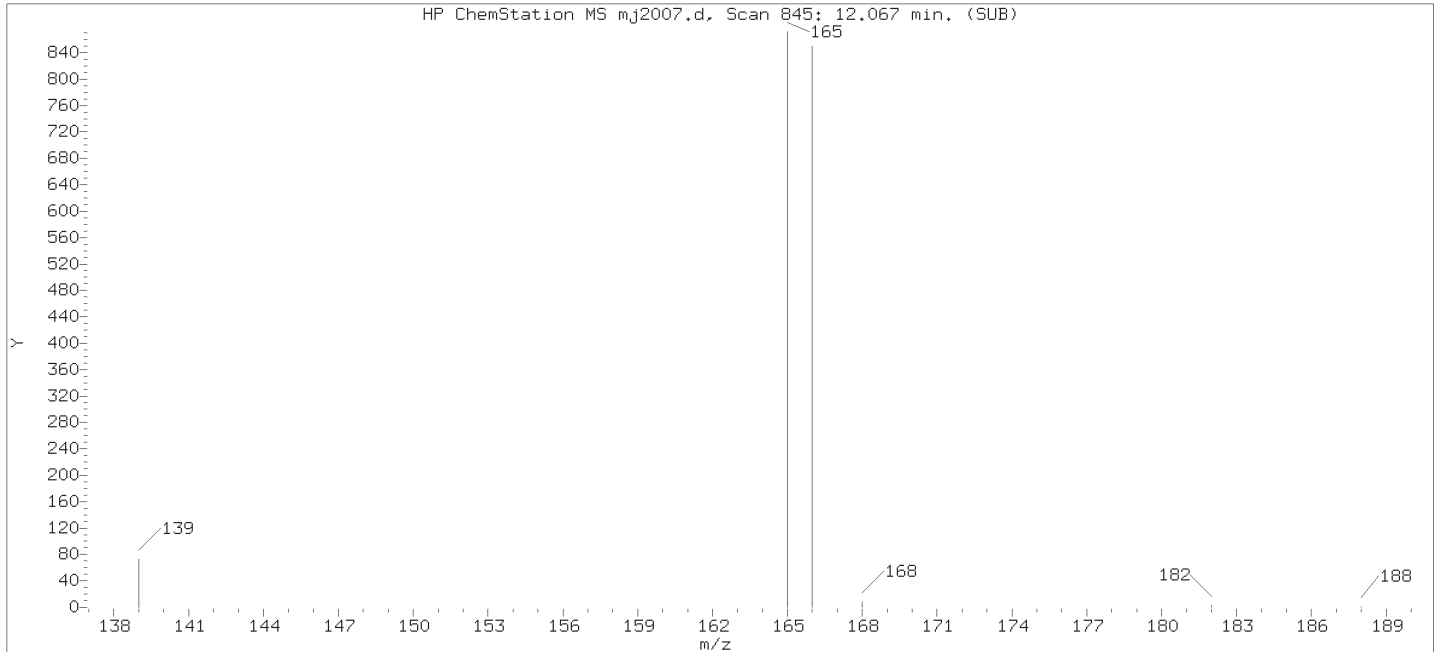
Compound Number                                      : 18  
Compound Name                                        : Fluorene  
Scan Number    : 845  
Retention Time (minutes)                          : 12.067  
Quant Ion     : 166.00  
Area (flag)    : 1250M  
On-Column Amount (ng/ul)                        : 0.0027  
Integration start scan                             : 835                      Integration stop scan: 851  
Y at integration start                             : 60                        Y at integration end: 60

Reason for manual integration: improper integration

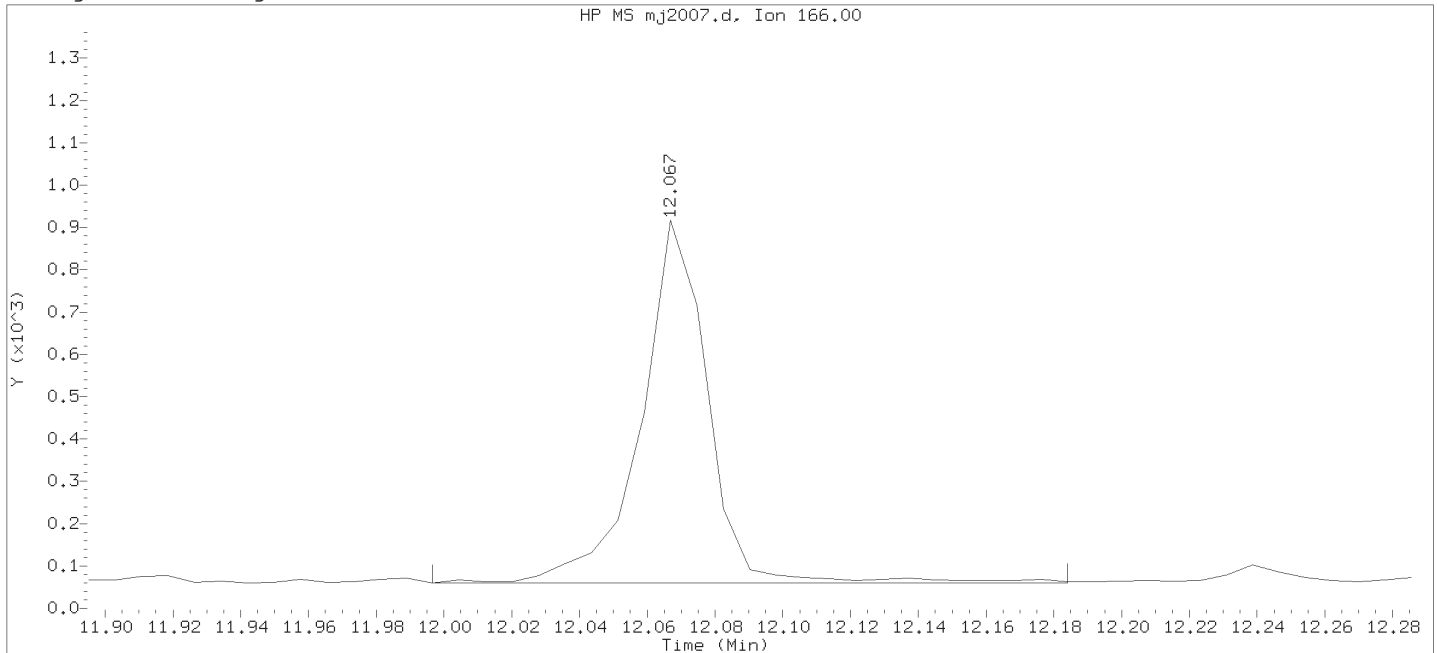
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



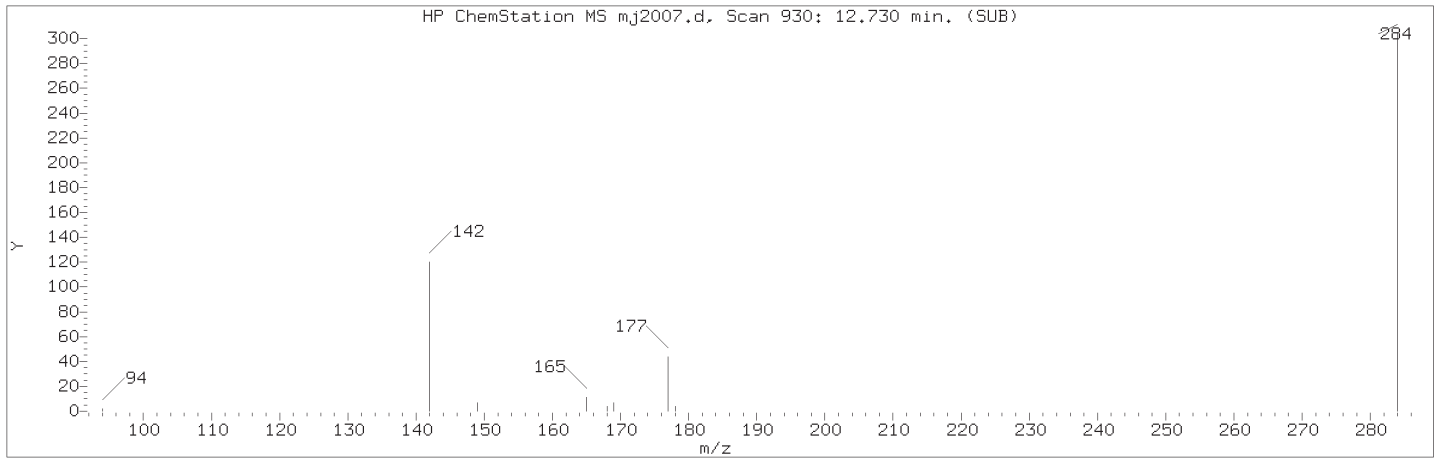
Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

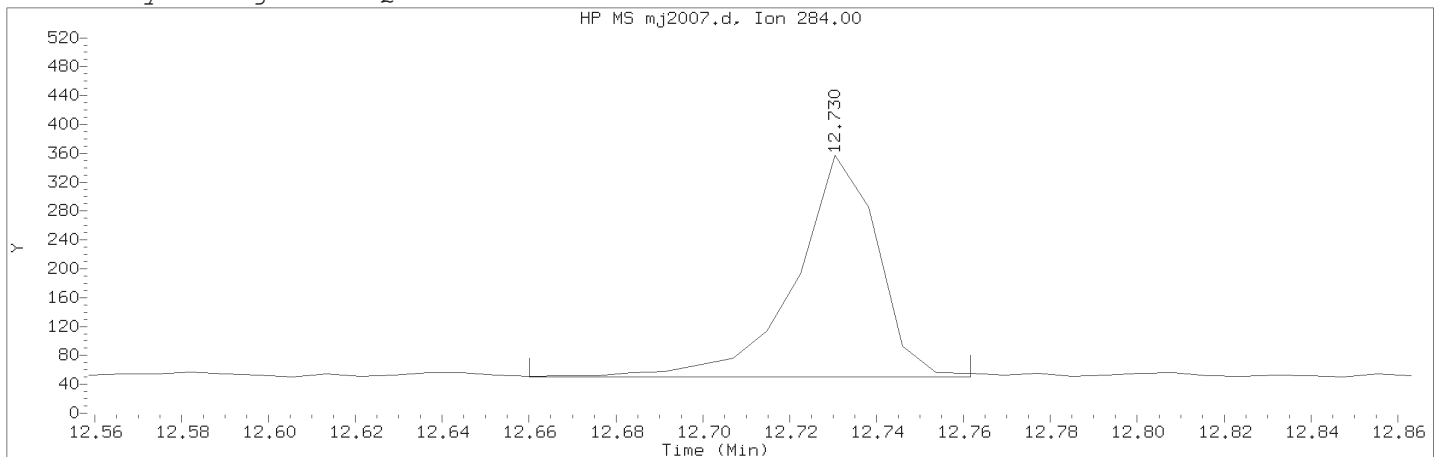
Sample Name: SSTDO.0025                                      Lab Sample ID: RVSIM2768

Compound Number                      : 18  
Compound Name                         : Fluorene  
Scan Number                            : 845  
Retention Time (minutes)             : 12.067  
Quant Ion                               : 166.00  
Area                                     : 1179  
On-column Amount (ng/ul)            : 0.0025  
Integration start scan                : 835                      Integration stop scan: 859  
Y at integration start                : 60                       Y at integration end: 60

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                      Lab Sample ID: RVSIM2768

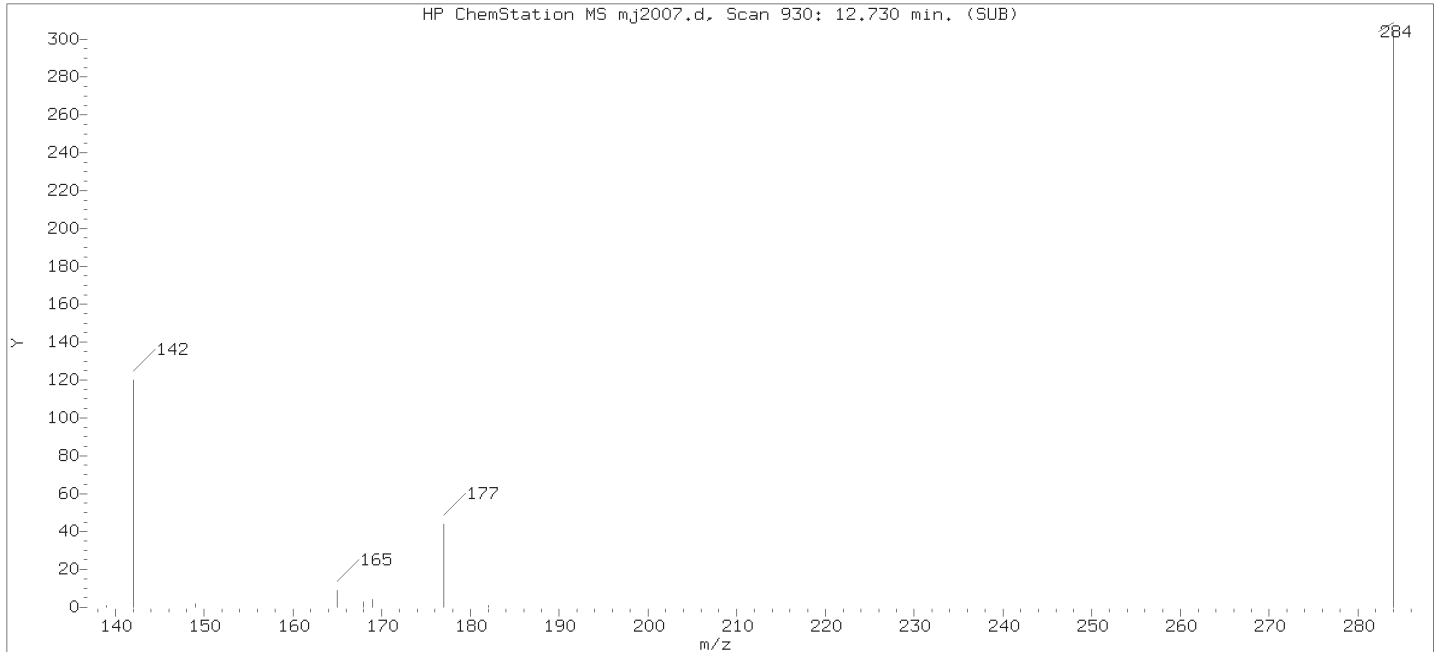
Compound Number                      : 19  
Compound Name                         : Hexachlorobenzene  
Scan Number                            : 930  
Retention Time (minutes)             : 12.730  
Quant Ion                               : 284.00  
Area (flag)                            : 405M  
On-Column Amount (ng/ul)           : 0.0028  
Integration start scan                : 920                      Integration stop scan: 933  
Y at integration start                : 50                       Y at integration end: 50

Reason for manual integration: improper integration

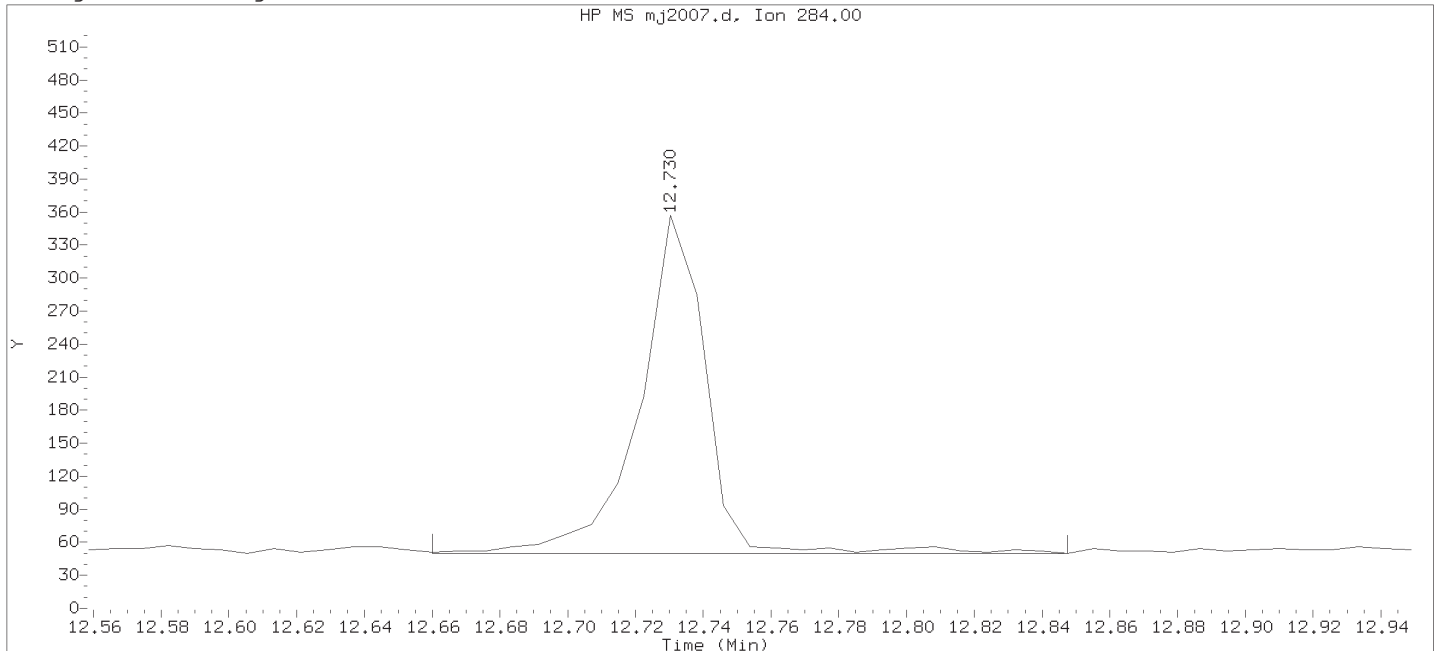
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

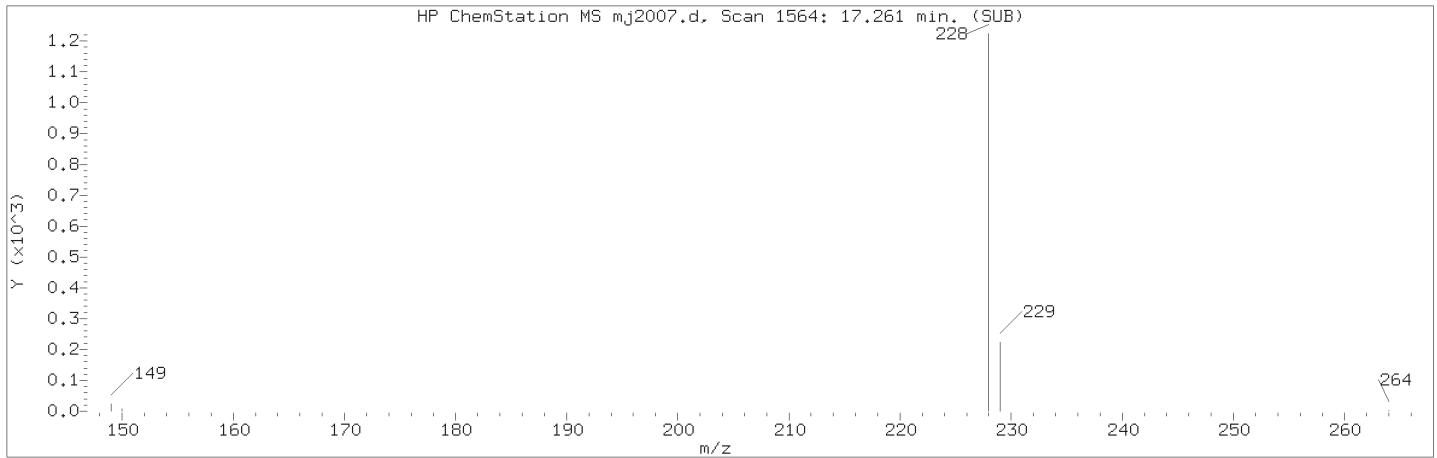
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTDO.0025

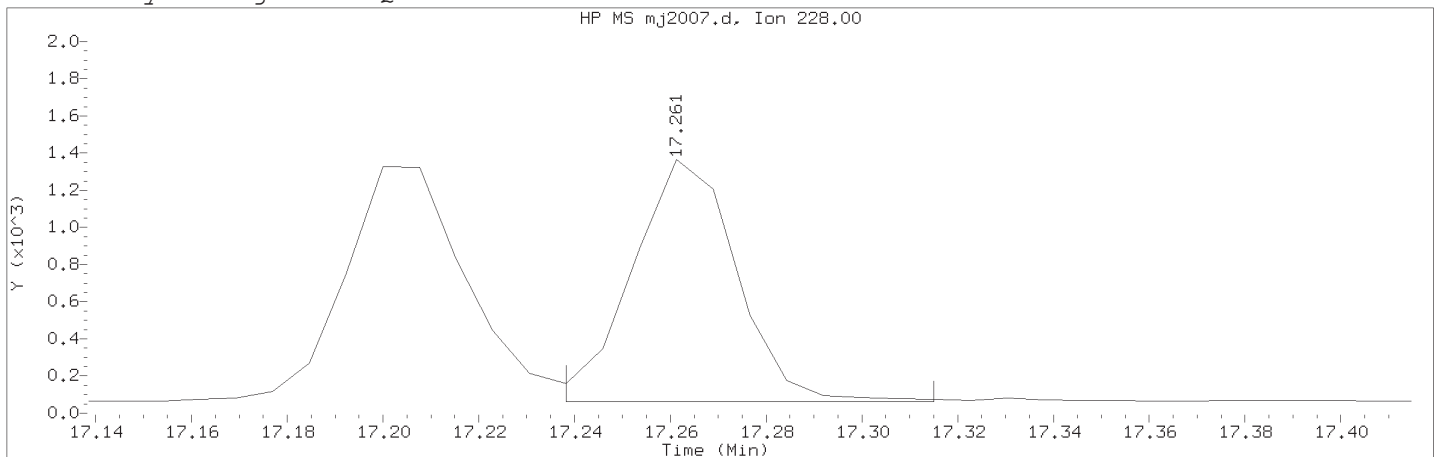
Lab Sample ID: RVSIM2768

Compound Number : 19  
Compound Name : Hexachlorobenzene  
Scan Number : 930  
Retention Time (minutes) : 12.730  
Quant Ion : 284.00  
Area : 419  
On-column Amount (ng/ul) : 0.0029  
Integration start scan : 920 Integration stop scan: 944  
Y at integration start : 50 Y at integration end: 50

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                                      Lab Sample ID: RVSIM2768

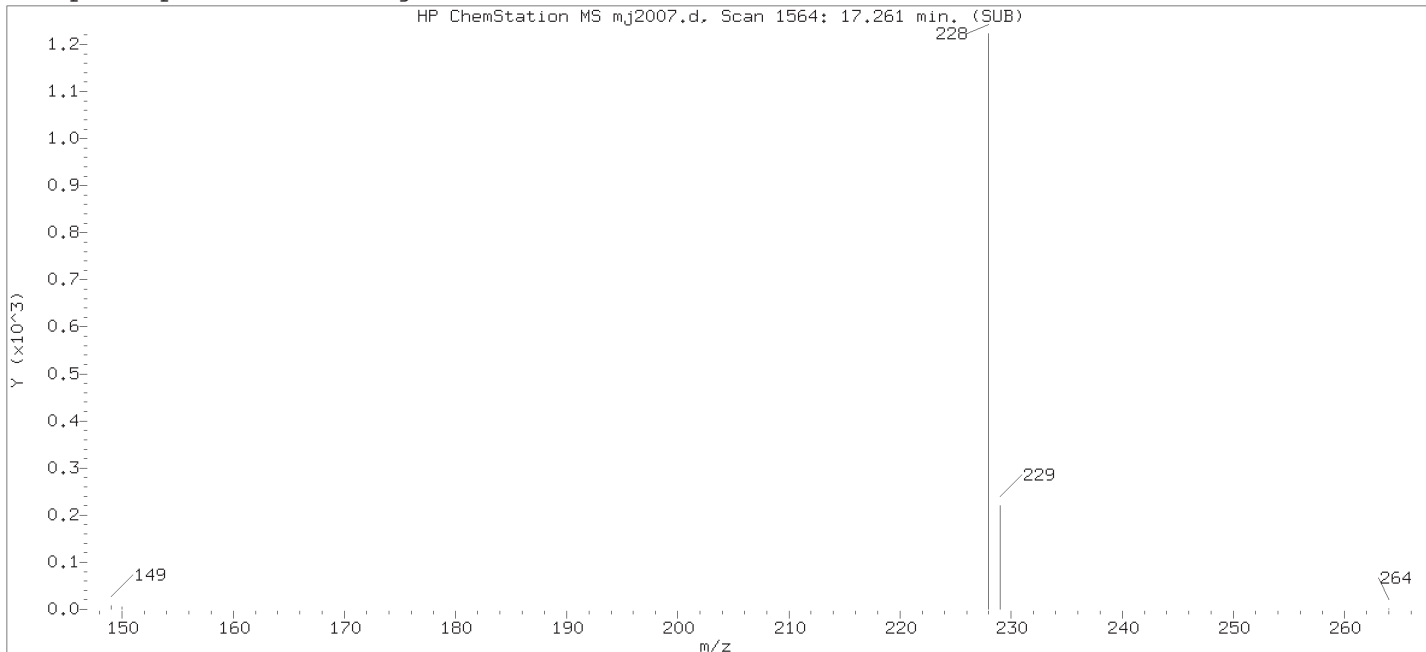
Compound Number                                      : 30  
Compound Name                                         : Chrysene  
Scan Number    : 1564  
Retention Time (minutes)                            : 17.261  
Quant Ion     : 228.00  
Area (flag)    : 1992M  
On-Column Amount (ng/ul)                           : 0.0030  
Integration start scan                               : 1560                      Integration stop scan: 1570  
Y at integration start                               : 61                         Y at integration end: 61

Reason for manual integration: improper integration

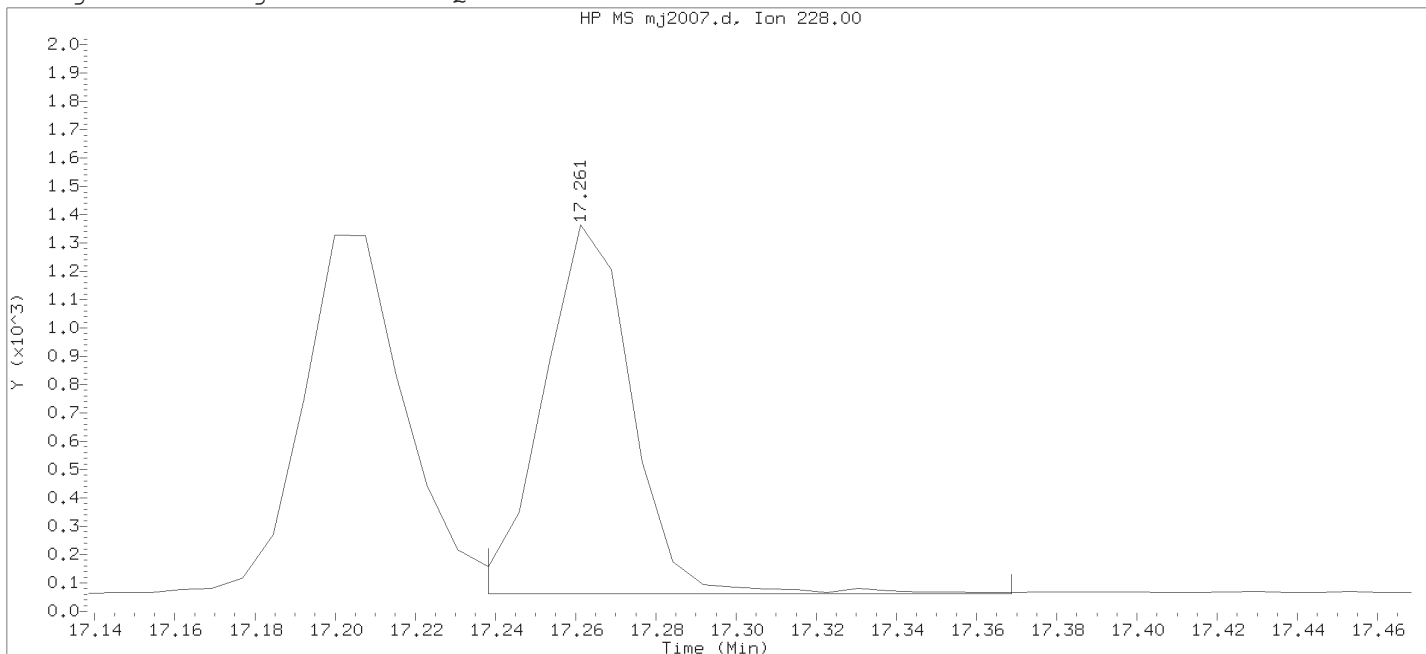
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m    Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

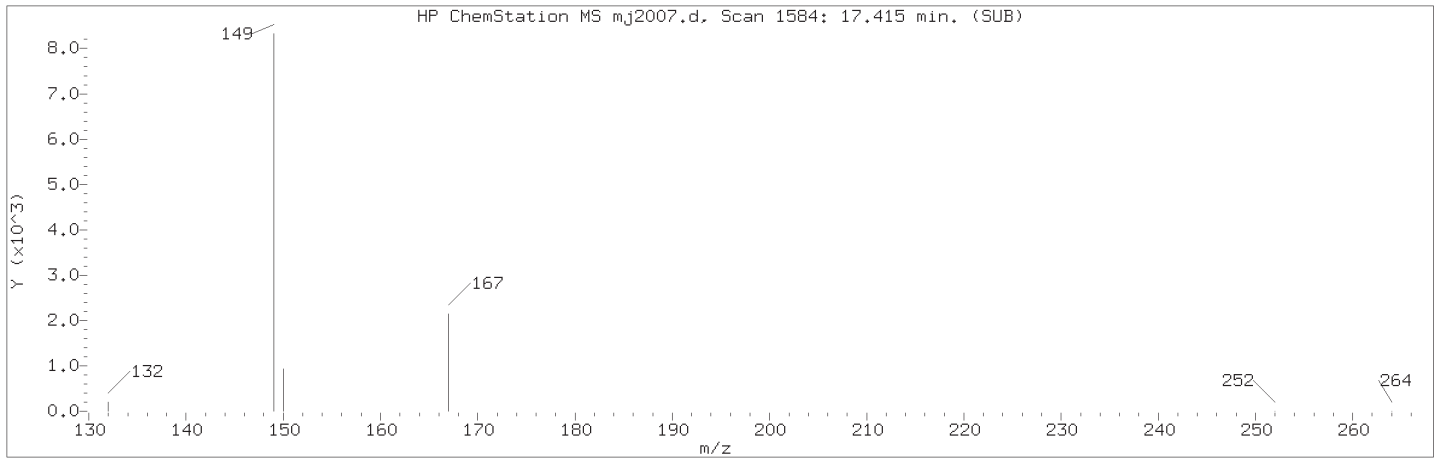
Sample Name: SSTD0.0025

Lab Sample ID: RVSIM2768

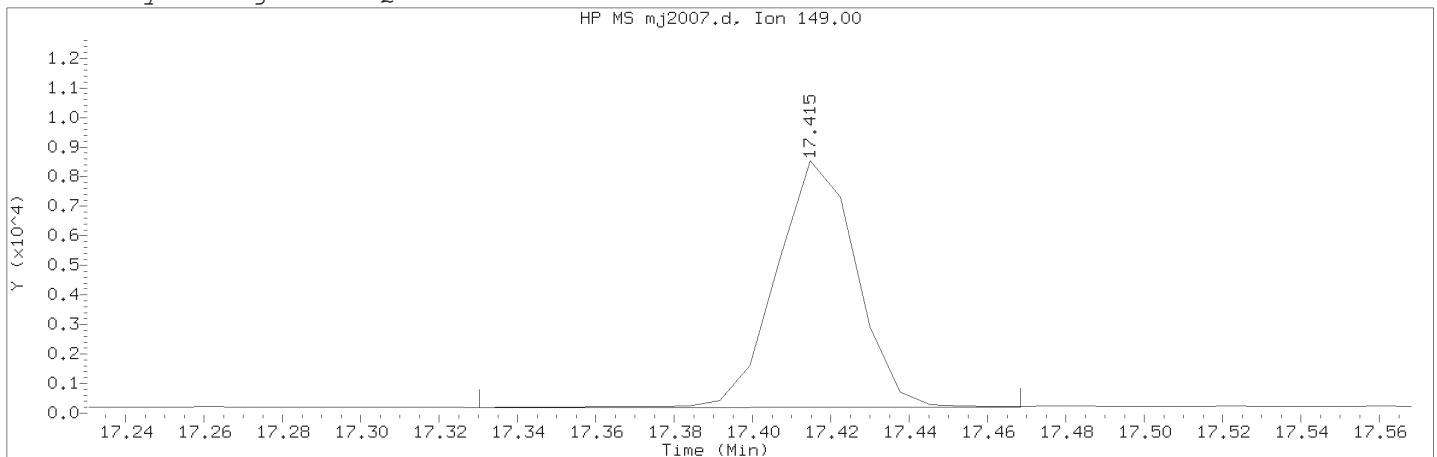
Compound Number : 30  
Compound Name : Chrysene  
Scan Number : 1564  
Retention Time (minutes) : 17.261  
Quant Ion : 228.00  
Area : 1998  
On-column Amount (ng/ul) : 0.0030  
Integration start scan : 1560    Integration stop scan: 1577  
Y at integration start : 61    Y at integration end: 61



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m                      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                      Lab Sample ID: RVSIM2768

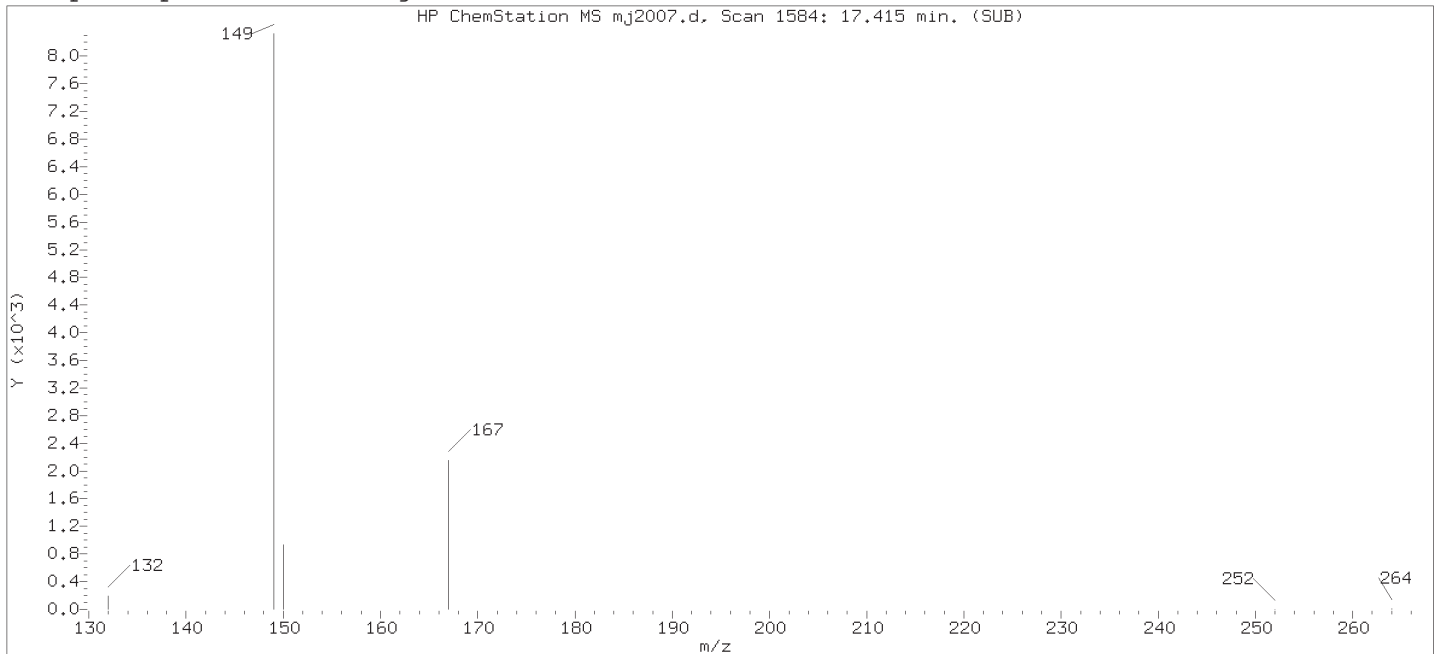
Compound Number                      : 31  
Compound Name                         : bis(2-Ethylhexyl)phthalate  
Scan Number                            : 1584  
Retention Time (minutes)             : 17.415  
Quant Ion                                : 149.00  
Area (flag)                             : 11869M  
On-Column Amount (ng/ul)            : 0.0248  
Integration start scan                 : 1572                      Integration stop scan: 1590  
Y at integration start                 : 193                       Y at integration end: 201

Reason for manual integration: improper integration

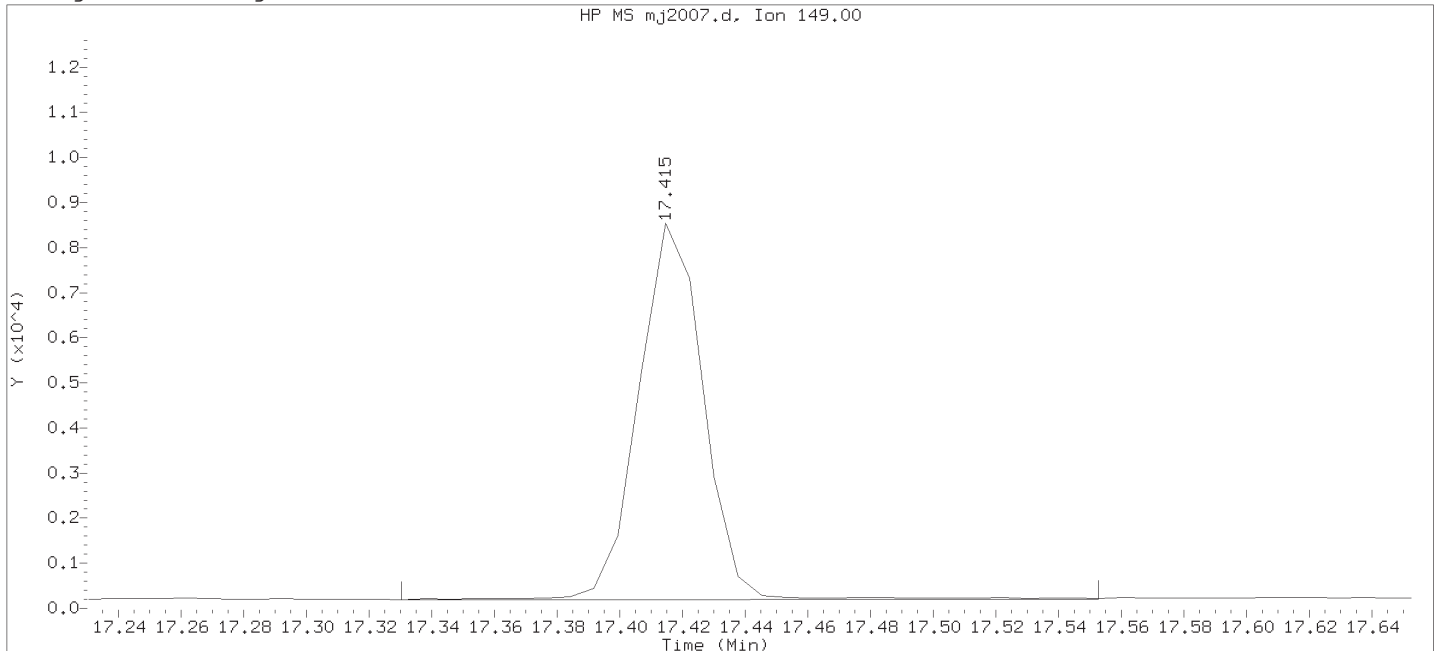
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



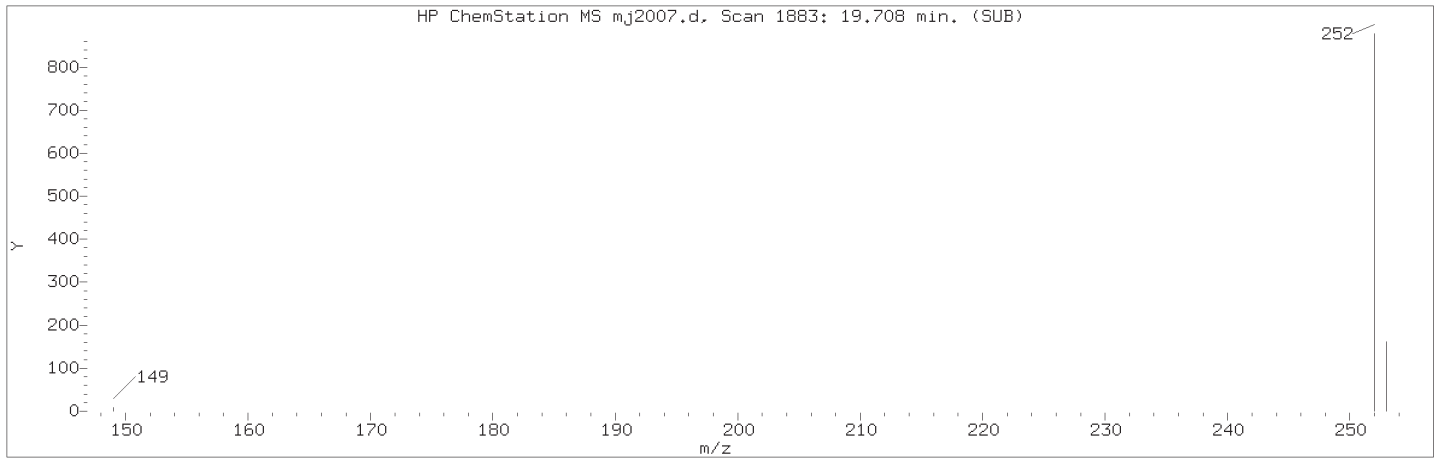
Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

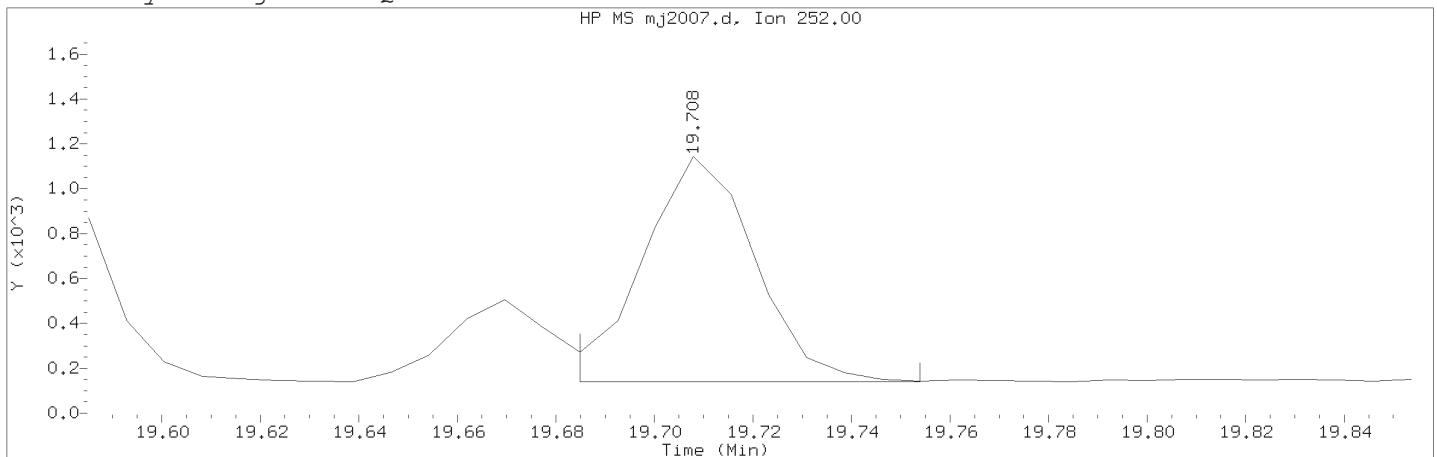
Sample Name: SSTD0.0025                                      Lab Sample ID: RVSIM2768

Compound Number                      : 31  
Compound Name                         : bis(2-Ethylhexyl)phthalate  
Scan Number                            : 1584  
Retention Time (minutes)             : 17.415  
Quant Ion                                : 149.00  
Area                                      : 11980  
On-column Amount (ng/ul)            : 0.0243  
Integration start scan                : 1572                      Integration stop scan: 1601  
Y at integration start                : 193                       Y at integration end: 206

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m                      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025    Lab Sample ID: RVSIM2768

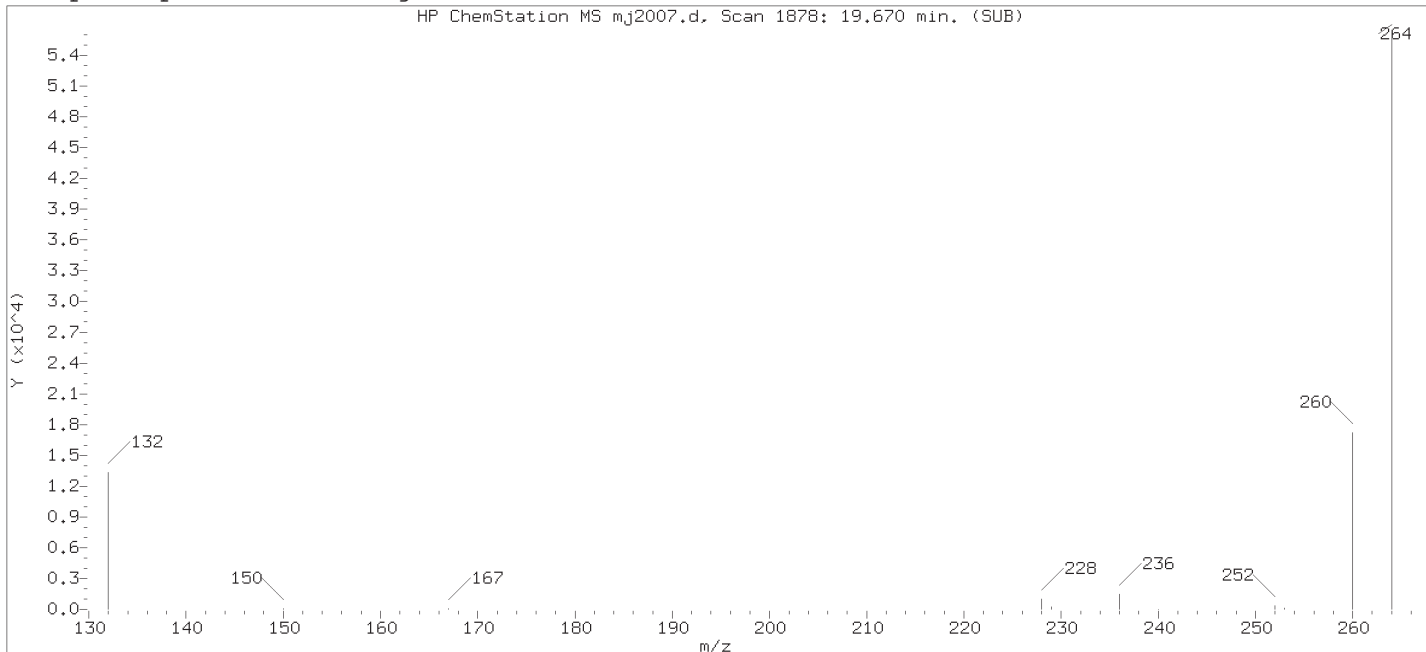
Compound Number    : 45  
Compound Name     : Perylene  
Scan Number    : 1883  
Retention Time (minutes)                                   : 19.708  
Quant Ion    : 252.00  
Area (flag)     : 1598M  
On-Column Amount (ng/ul)                                 : 0.0025  
Integration start scan                                       : 1879                      Integration stop scan: 1888  
Y at integration start                                        : 141                      Y at integration end: 141

Reason for manual integration: improper integration

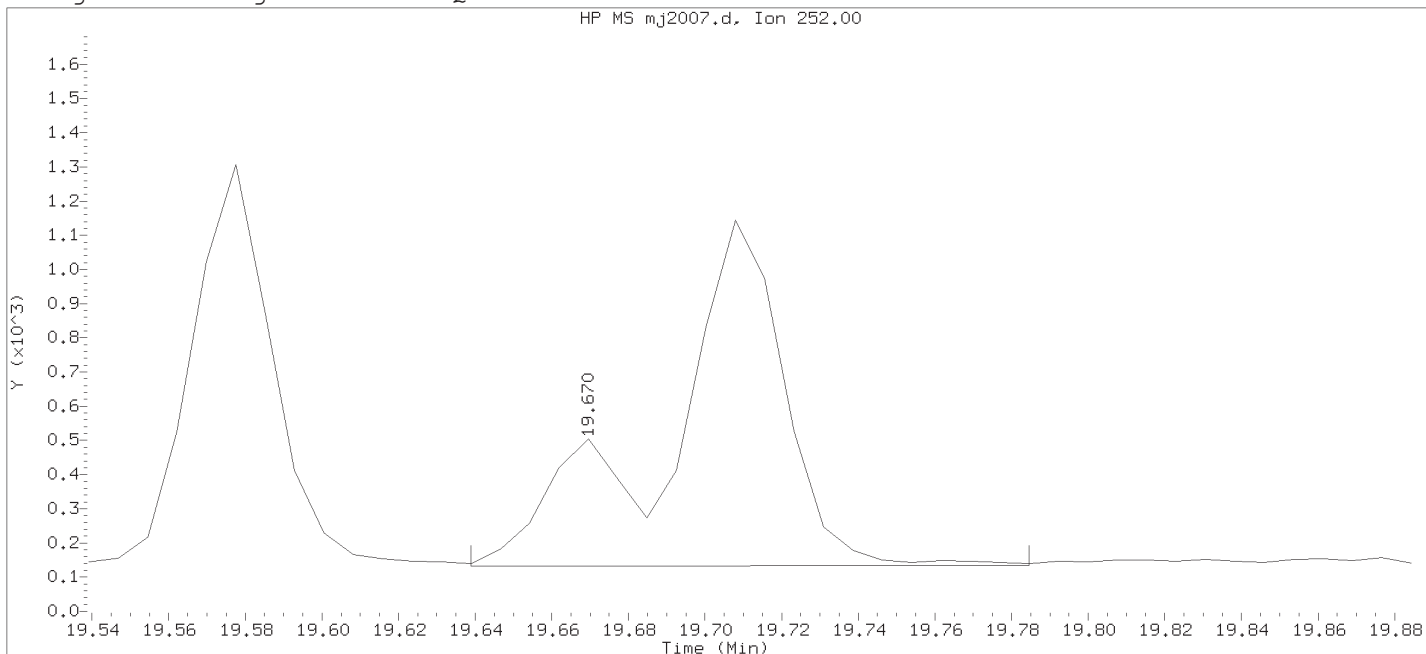
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

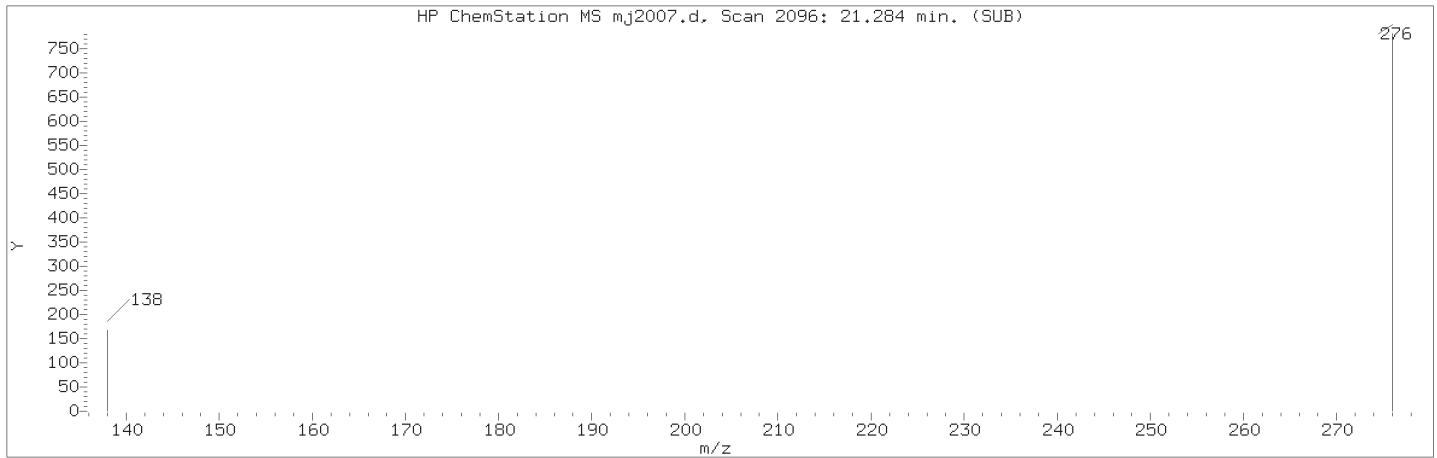
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTDO.0025

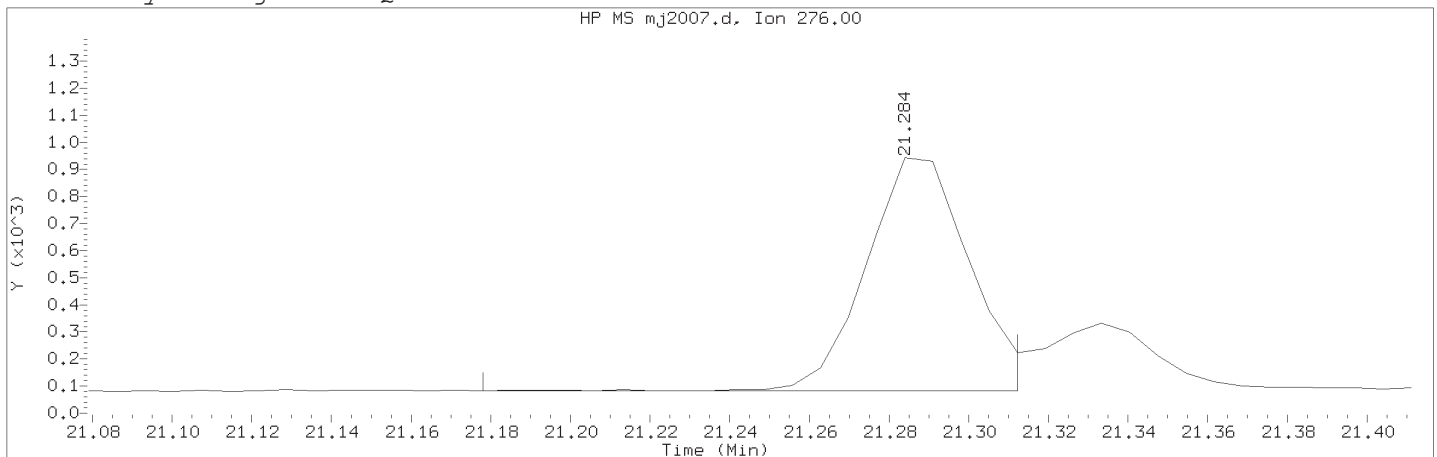
Lab Sample ID: RVSIM2768

Compound Number : 45  
Compound Name : Perylene  
Scan Number : 1878  
Retention Time (minutes) : 19.670  
Quant Ion : 252.00  
Area : 2150  
On-column Amount (ng/ul) : 0.0034  
Integration start scan : 1873 Integration stop scan: 1892  
Y at integration start : 133 Y at integration end: 134

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m                      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025                      Lab Sample ID: RVSIM2768

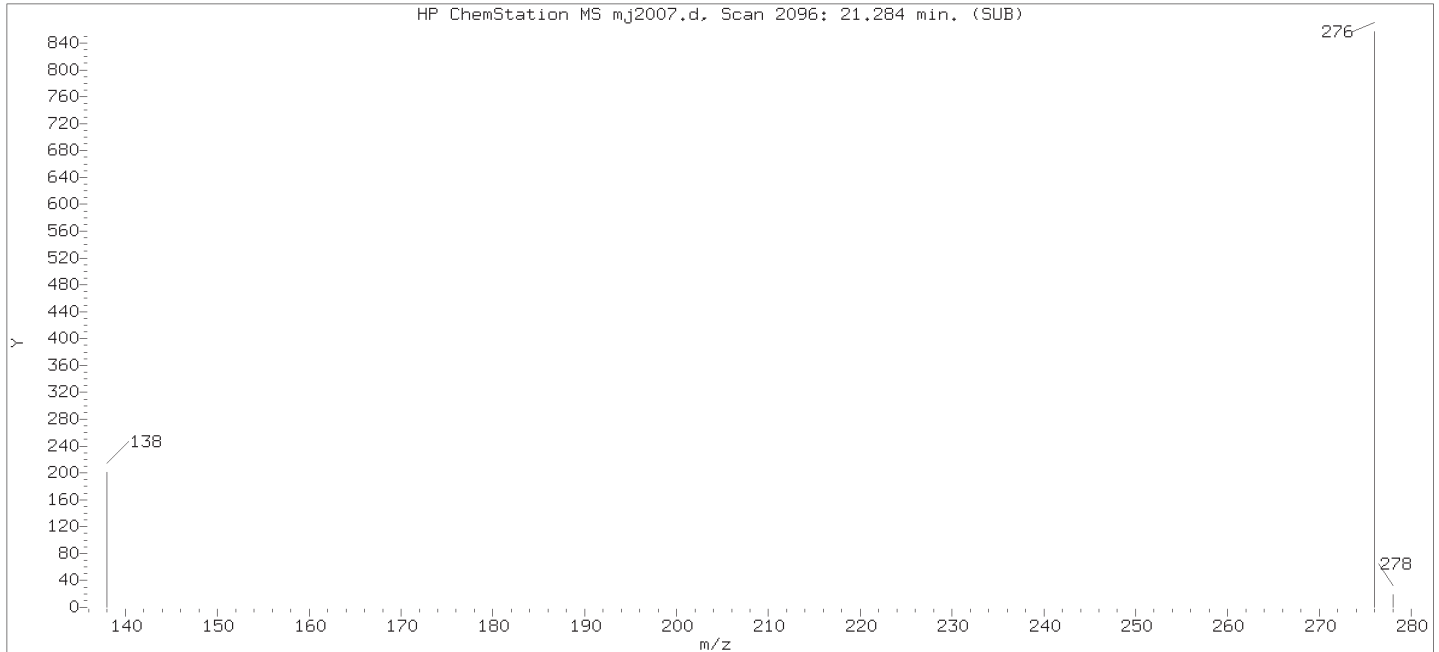
Compound Number                      : 39  
Compound Name                        : Indeno(1,2,3-cd)pyrene  
Scan Number                         : 2096  
Retention Time (minutes)           : 21.284  
Quant Ion                             : 276.00  
Area (flag)                          : 1565M  
On-Column Amount (ng/ul)         : 0.0028  
Integration start scan               : 2080                      Integration stop scan: 2099  
Y at integration start               : 82                        Y at integration end: 82

Reason for manual integration: improper integration

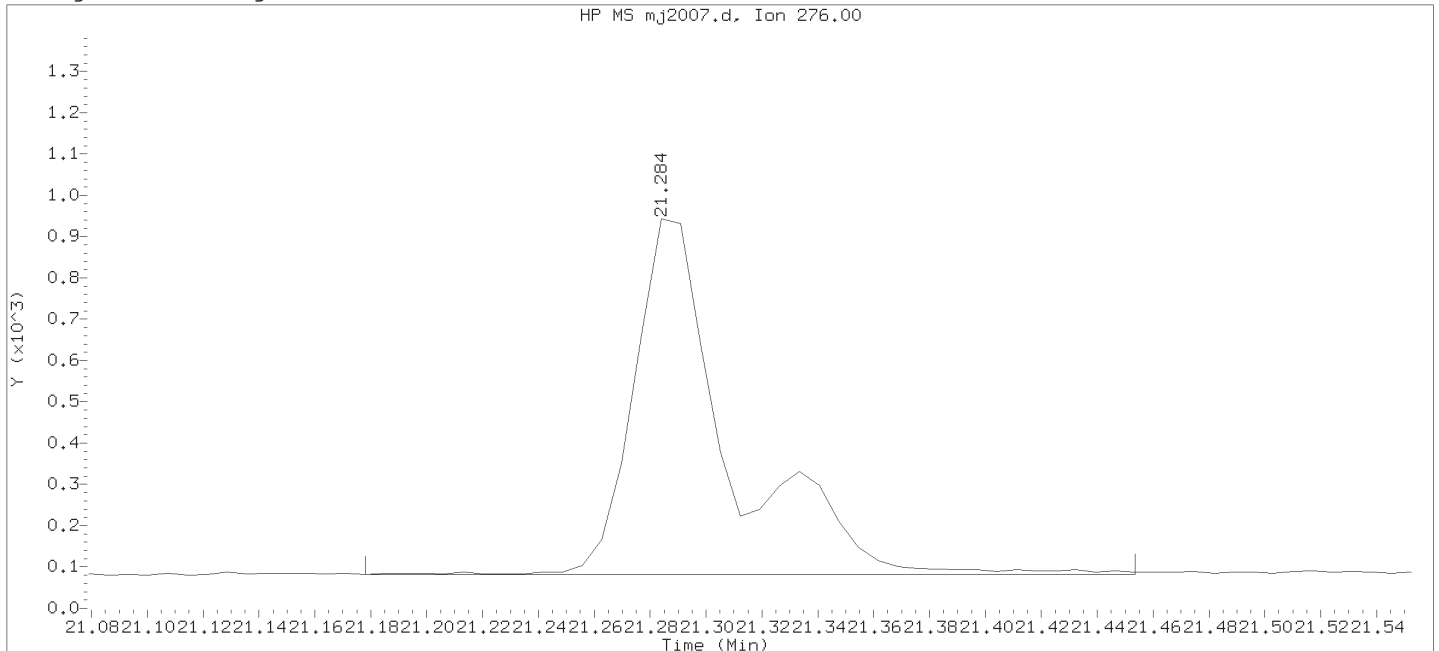
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
 Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

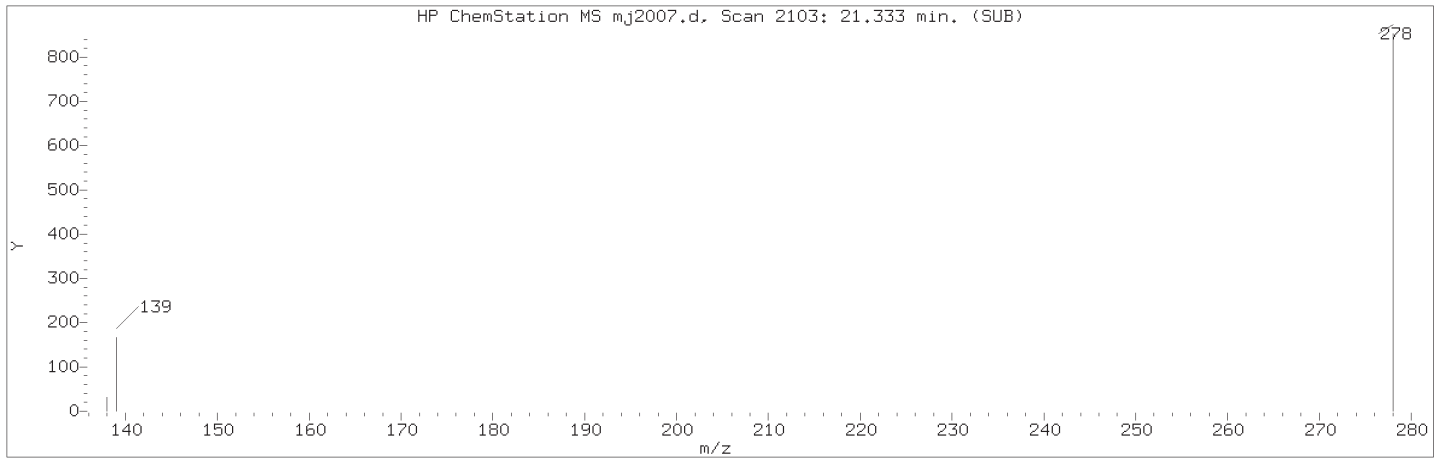
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 10:31  
 Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025

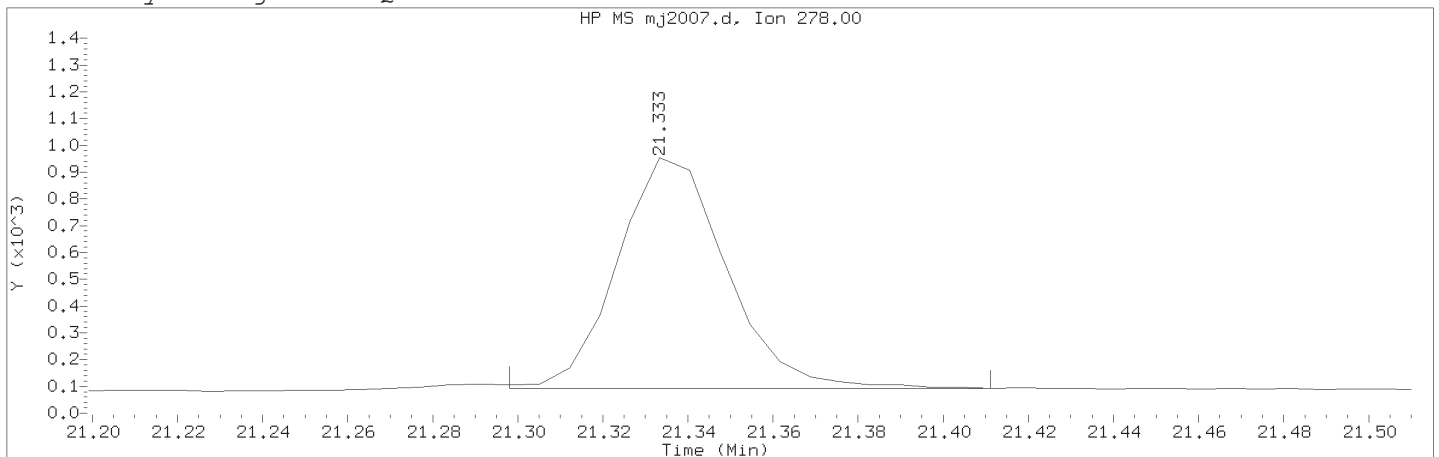
Lab Sample ID: RVSIM2768

Compound Number : 39  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 2096  
 Retention Time (minutes) : 21.284  
 Quant Ion : 276.00  
 Area : 2073  
 On-column Amount (ng/ul) : 0.0036  
 Integration start scan : 2080 Integration stop scan: 2119  
 Y at integration start : 82 Y at integration end: 82

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 10:32                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m                      Sublist used: all1  
Calibration date and time: 27-OCT-2018 17:17  
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025    Lab Sample ID: RVSIM2768

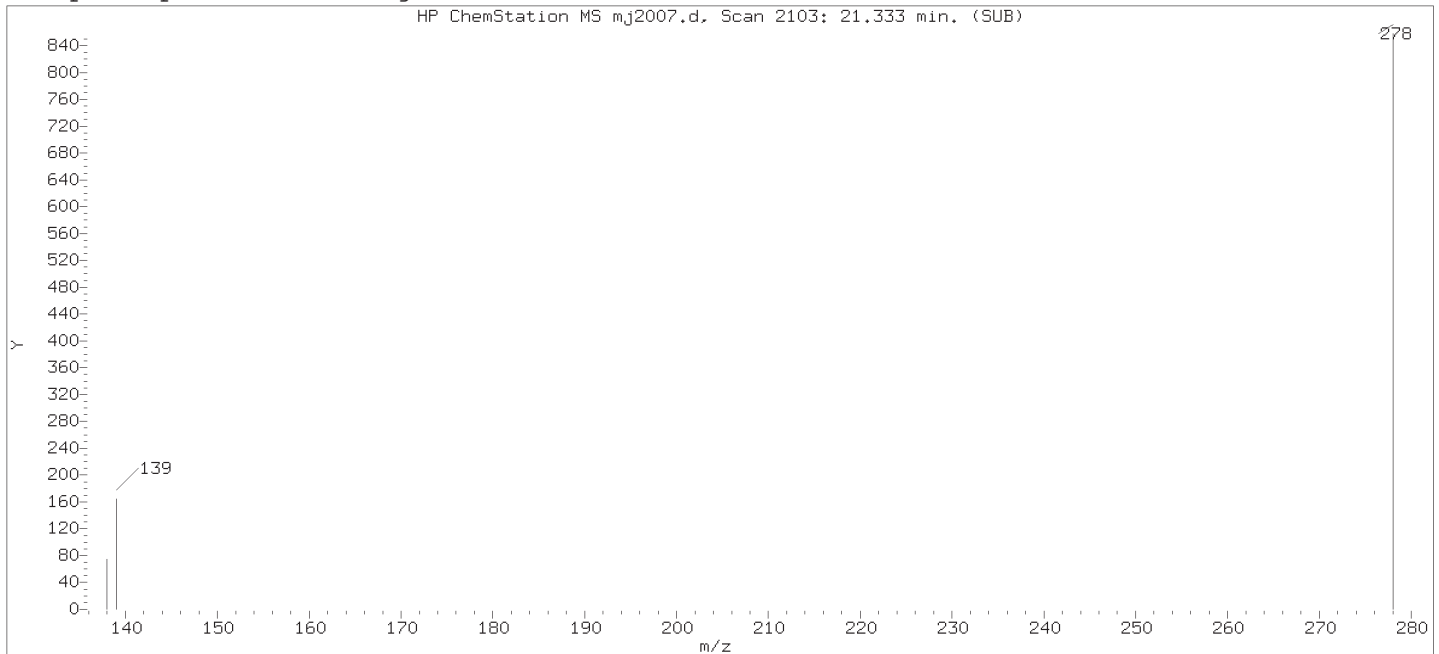
Compound Number    : 40  
Compound Name    : Dibenz (a,h) anthracene  
Scan Number    : 2103  
Retention Time (minutes)                                    : 21.333  
Quant Ion    : 278.00  
Area (flag)     : 1543M  
On-Column Amount (ng/ul)                                   : 0.0027  
Integration start scan                                        : 2097                      Integration stop scan: 2113  
Y at integration start                                        : 92                        Y at integration end: 92

Reason for manual integration: improper integration

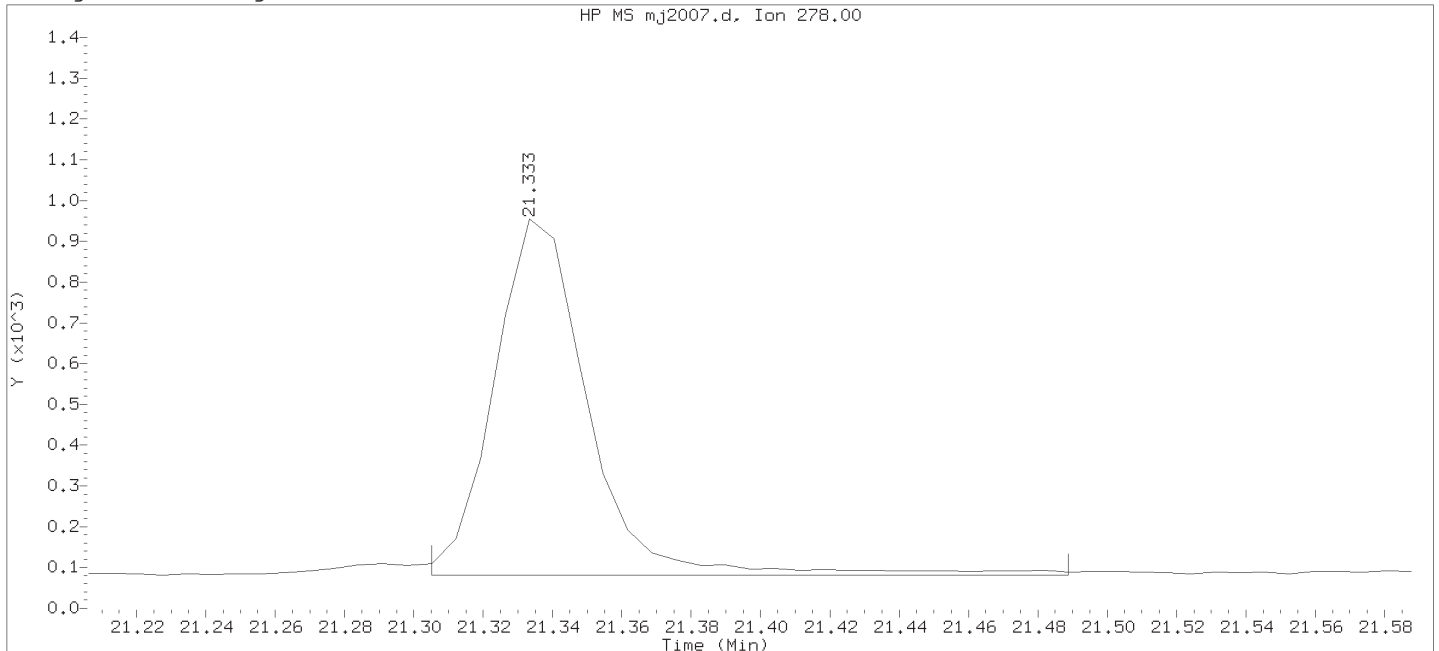
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/27/2018 at 18:22.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2007.d  
Injection date and time: 26-OCT-2018 10:32

Instrument ID: HP21585.i  
Analyst ID: ceb05247

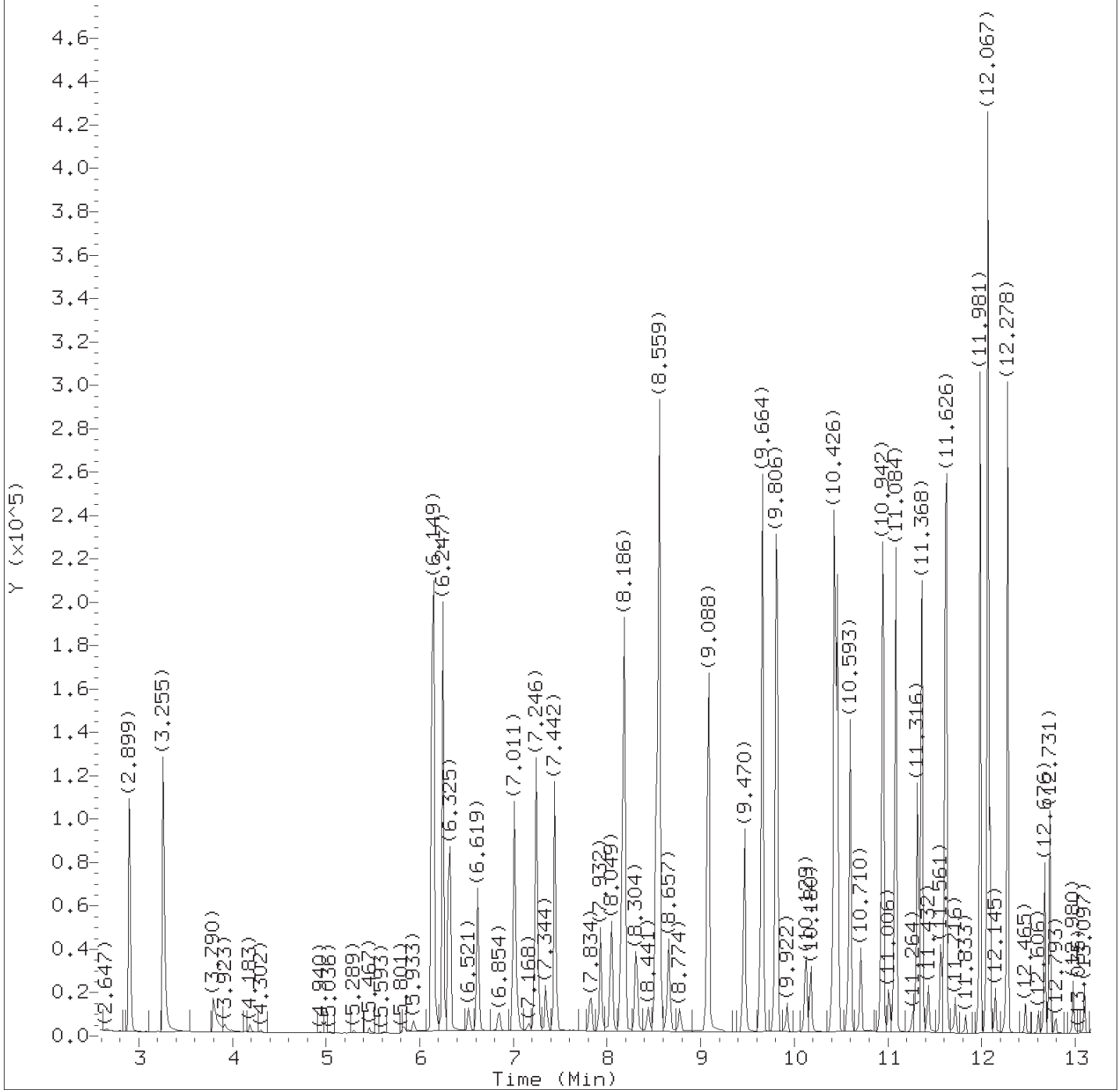
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m    Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTDO.0025

Lab Sample ID: RVSIM2768

Compound Number : 40  
Compound Name : Dibenz(a,h)anthracene  
Scan Number : 2103  
Retention Time (minutes) : 21.333  
Quant Ion : 278.00  
Area : 1644  
On-column Amount (ng/ul) : 0.0028  
Integration start scan : 2098      Integration stop scan: 2124  
Y at integration start : 82      Y at integration end: 82





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2008.d  
Injection date and time: 26-OCT-2018 11:01

Instrument ID: HP21585.i  
Analyst ID: ceb05247

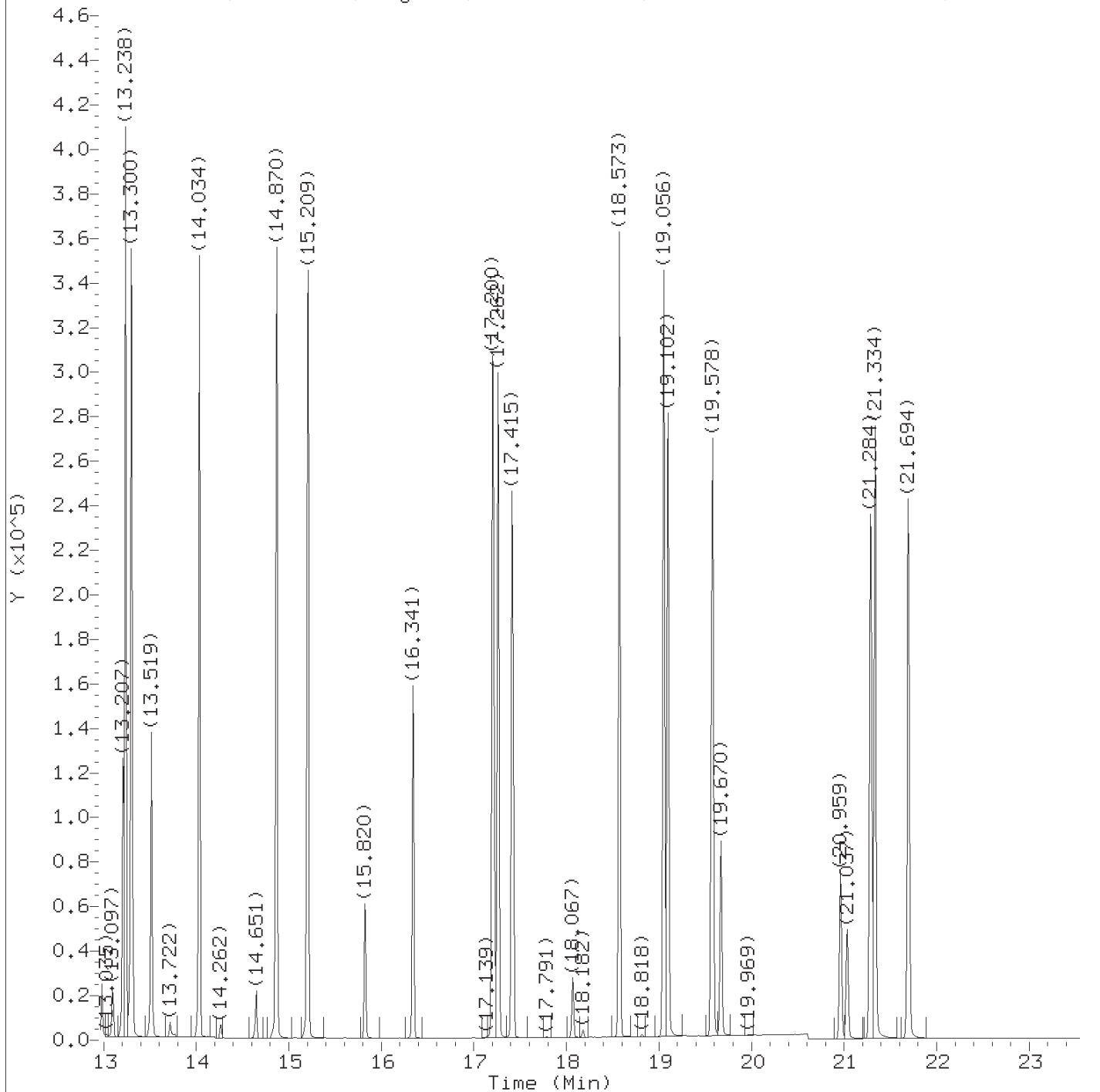
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1icv  
Calibration date and time: 30-OCT-2018 14:23  
Date, time and analyst ID of latest file update: 30-Oct-2018 14:23 knb25316

Sample Name: SSTD0.50

Lab Sample ID: RVSICV2788

Digitally signed by Kira N. Beck  
on 10/30/2018 at 14:24.

Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2008.d  
Injection date and time: 26-OCT-2018 11:01

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1icv  
Calibration date and time: 30-OCT-2018 14:23  
Date, time and analyst ID of latest file update: 30-Oct-2018 14:23 knb25316

Sample Name: SSTD0.50

Lab Sample ID: RVSICV2788

Digitally signed by Kira N. Beck  
on 10/30/2018 at 14:24.

Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct26.b/mj2008.d  
 Injection date and time: 26-OCT-2018 11:01

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: alllicv  
 Calibration date and time: 30-OCT-2018 14:23  
 Date, time and analyst ID of latest file update: 30-Oct-2018 14:23 knb25316

Sample Name: SSTD0.50

Lab Sample ID: RVSICV2788

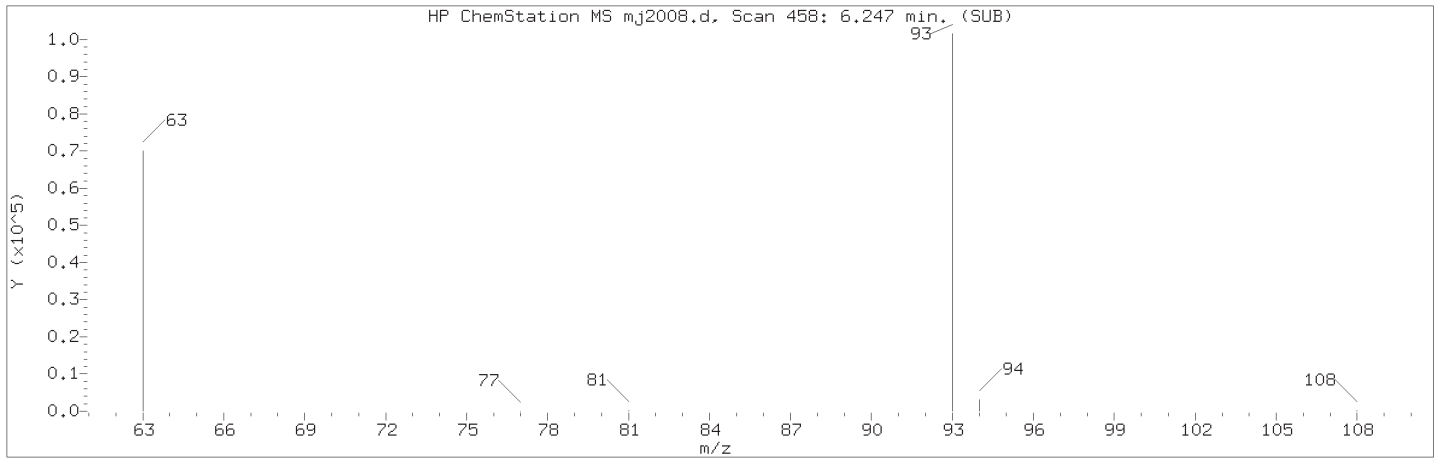
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.906	88	68458	0.500
2) N-Nitrosodimethylamine	(1)	3.255	74	109638	0.553
4) bis(2-Chloroethyl) ether	(2)	6.247	93	120926M	0.572
5) *1,4-Dichlorobenzene-d4	(1)	6.619	152	49313	0.250
6) *Naphthalene-d8	(2)	8.519	136	138248	0.250
7) Naphthalene	(2)	8.559	128	348054	0.548
8) Quinoline	(2)	9.088	129	184773	0.484
9) 2-Methylnaphthalene	(2)	9.664	142	217951	0.557
11) 1-Methylnaphthalene	(2)	9.806	142	203104	0.525
12) Dimethylphthalate	(3)	10.942	163	255933	0.534
13) Acenaphthylene	(3)	11.084	152	304239	0.476
14) *Acenaphthene-d10	(3)	11.316	164	60667	0.250
15) Acenaphthene	(3)	11.368	154	187273M	0.483
16) Dibenzofuran	(3)	11.626	168	279562	0.539
17) Diethylphthalate	(3)	11.981	149	250896	0.526
18) Fluorene	(3)	12.067	166	238813	0.528
19) Hexachlorobenzene	(4)	12.731	284	73975	0.531
20) *Phenanthrene-d10	(4)	13.207	188	124161	0.250
21) Phenanthrene	(4)	13.238	178	354234	0.532
22) Anthracene	(4)	13.300	178	357404	0.546
23) Di-n-butylphthalate	(4)	14.034	149	373857	0.512
25) Fluoranthene	(4)	14.870	202	400620	0.539
26) Pyrene	(5)	15.209	202	403014	0.522
27) Butylbenzylphthalate	(5)	16.341	149	164652	0.512
28) Benzo(a)anthracene	(5)	17.200	228	351729	0.528
29) *Chrysene-d12	(5)	17.223	240	84907	0.250
30) Chrysene	(5)	17.262	228	352892	0.524
31) bis(2-Ethylhexyl)phthalate	(5)	17.415	149	238604	0.497
32) Di-n-octylphthalate	(6)	18.573	149	426077	0.513
33) Benzo(b)fluoranthene	(6)	19.056	252	360747	0.567
34) Benzo(k)fluoranthene	(6)	19.102	252	342222	0.539
37) Benzo(a)pyrene	(6)	19.578	252	329543	0.540
38) *Perylene-d12	(6)	19.670	264	80375	0.250
39) Indeno(1,2,3-cd)pyrene	(6)	21.284	276	315036M	0.568
40) Dibenz(a,h)anthracene	(6)	21.334	278	300019	0.530
41) Benzo(g,h,i)perylene	(6)	21.694	276	341494	0.533

M = Compound was manually integrated.  
 \* = Compound is an internal standard.

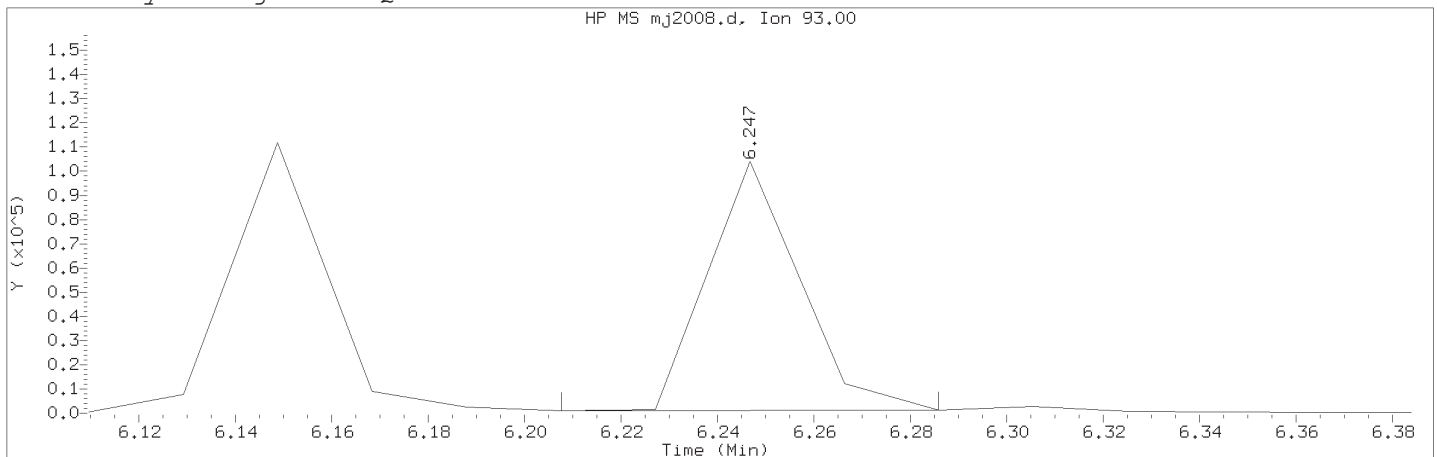
Digitally signed by Kira N. Beck  
 on 10/30/2018 at 14:24.

Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2008.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 11:01                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m              Sublist used: alllicv  
Calibration date and time: 30-OCT-2018 14:23  
Date, time and analyst ID of latest file update: 30-Oct-2018 14:23 knb25316

Sample Name: SSTD0.50    Lab Sample ID: RVSICV2788

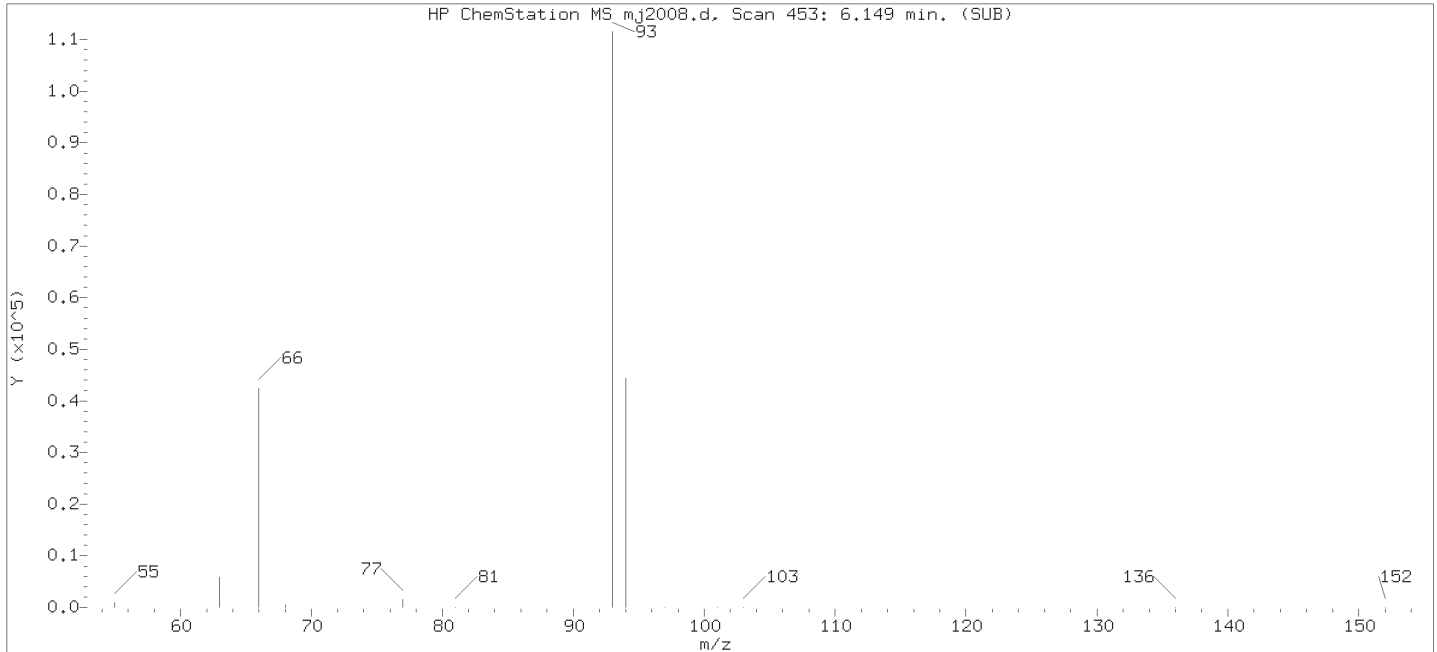
Compound Number    : 4  
Compound Name    : bis(2-Chloroethyl)ether  
Scan Number    : 458  
Retention Time (minutes)                                   : 6.247  
Quant Ion    : 93.00  
Area (flag)     : 120926M  
On-Column Amount (ng/ul)                                  : 0.5717  
Integration start scan                                       : 455                      Integration stop scan: 459  
Y at integration start                                       : 1064                    Y at integration end: 1247

Reason for manual integration: improper integration

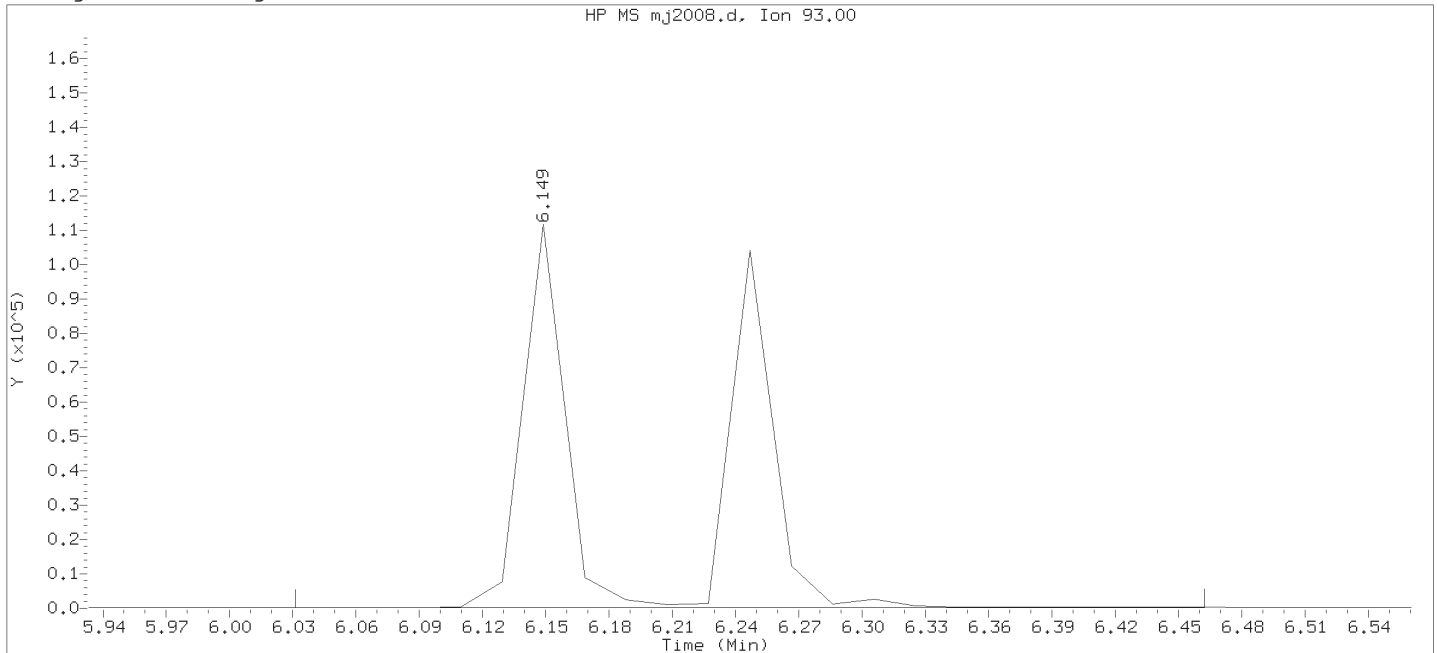
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 14:24.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/31/2018 at 07:37.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2008.d  
 Injection date and time: 26-OCT-2018 11:01

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

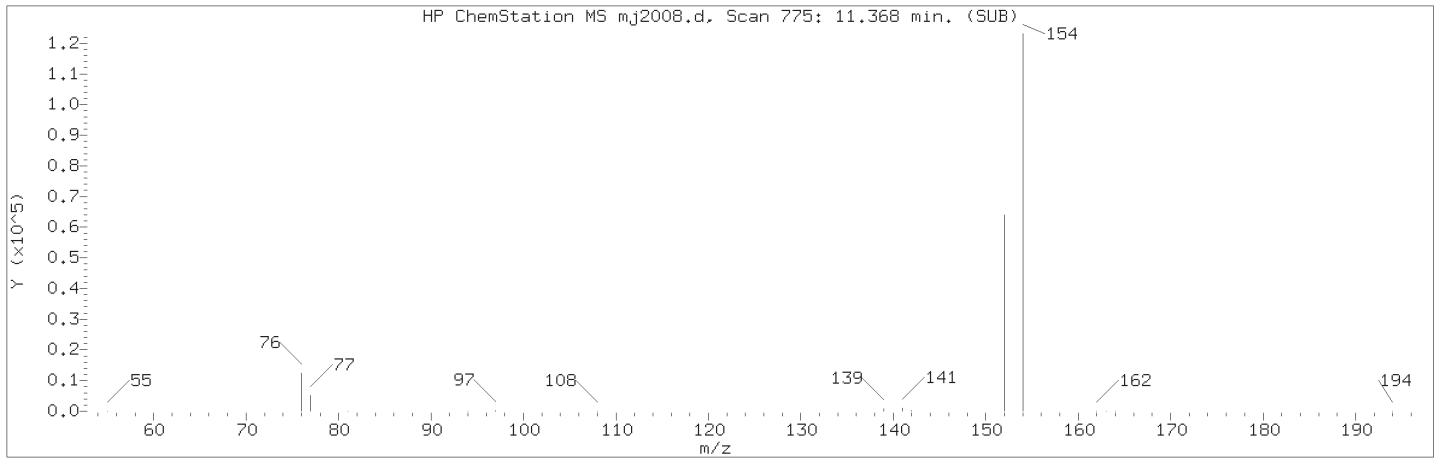
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 26-OCT-2018 10:31  
 Date, time and analyst ID of latest file update: 26-Oct-2018 11:29 Unknown

Sample Name: SSTD0.50

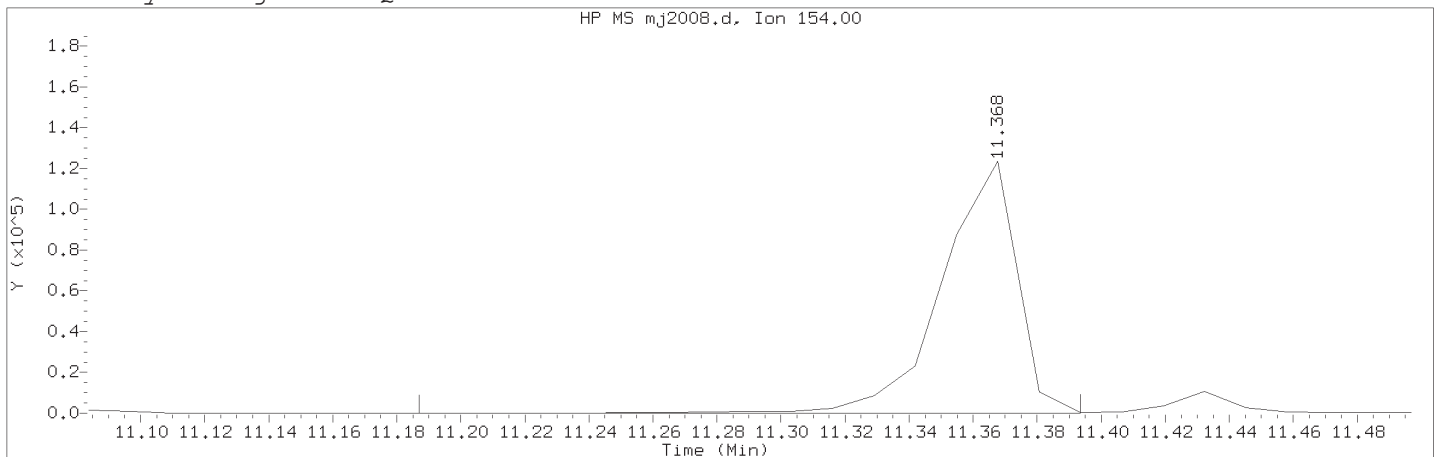
Lab Sample ID: RVSICV2788

Compound Number	: 4	
Compound Name	: bis(2-Chloroethyl)ether	
Scan Number	: 453	
Retention Time (minutes)	: 6.149	
Quant Ion	: 93.00	
Area	: 298499	
On-column Amount (ng/ul)	: 1.3229	
Integration start scan	: 446	Integration stop scan: 468
Y at integration start	: 156	Y at integration end: 210

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2008.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 11:01                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m                      Sublist used: alllicv  
Calibration date and time: 30-OCT-2018 14:23  
Date, time and analyst ID of latest file update: 30-Oct-2018 14:23 knb25316

Sample Name: SSTD0.50    Lab Sample ID: RVSICV2788

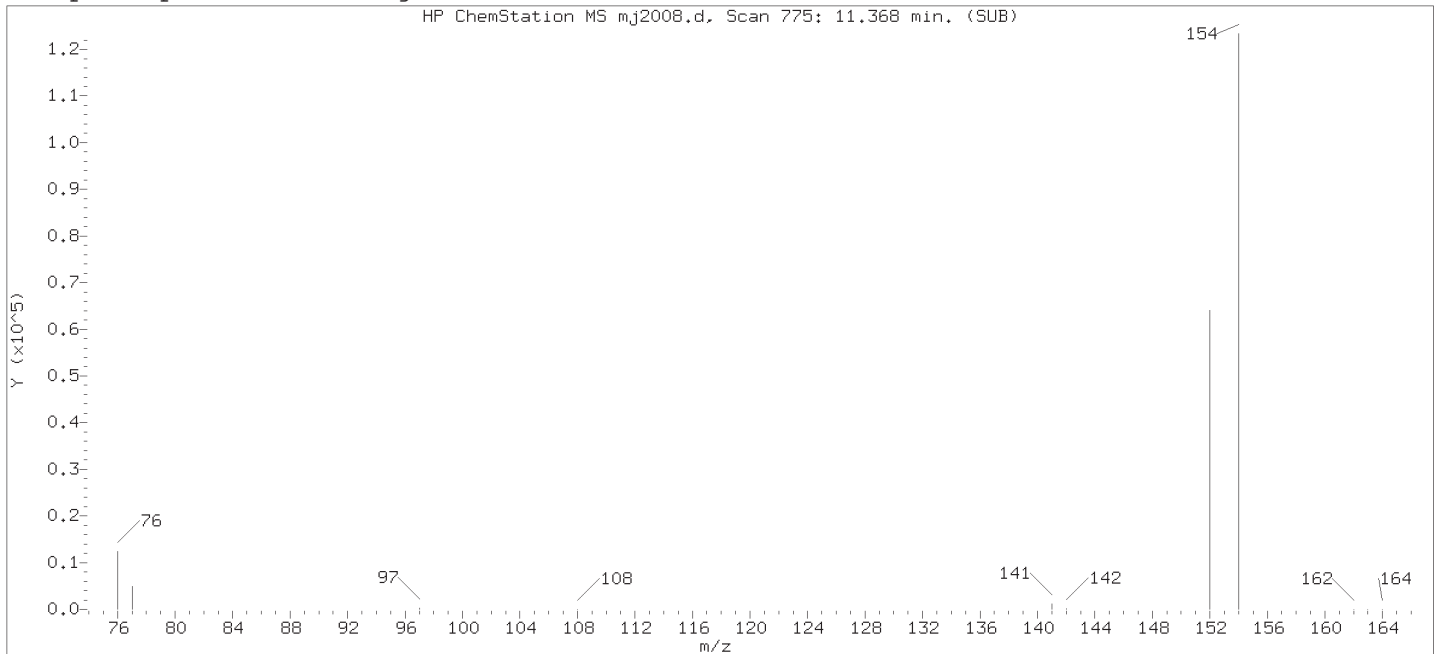
Compound Number                      : 15  
Compound Name                         : Acenaphthene  
Scan Number                            : 775  
Retention Time (minutes)             : 11.368  
Quant Ion                                : 154.00  
Area (flag)                             : 187273M  
On-Column Amount (ng/ul)            : 0.4826  
Integration start scan                : 760                      Integration stop scan: 776  
Y at integration start                : 58                       Y at integration end: 58

Reason for manual integration: improper integration

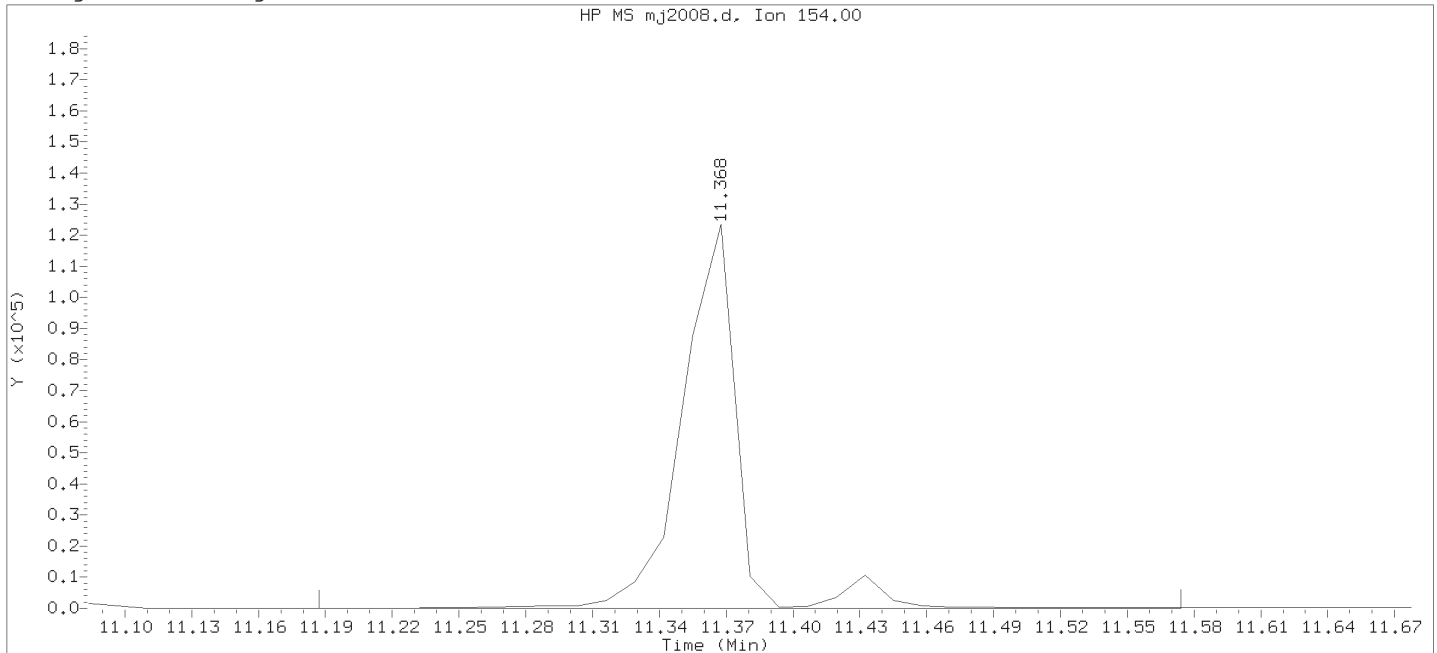
Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 14:24.  
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 10/31/2018 at 07:37.  
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



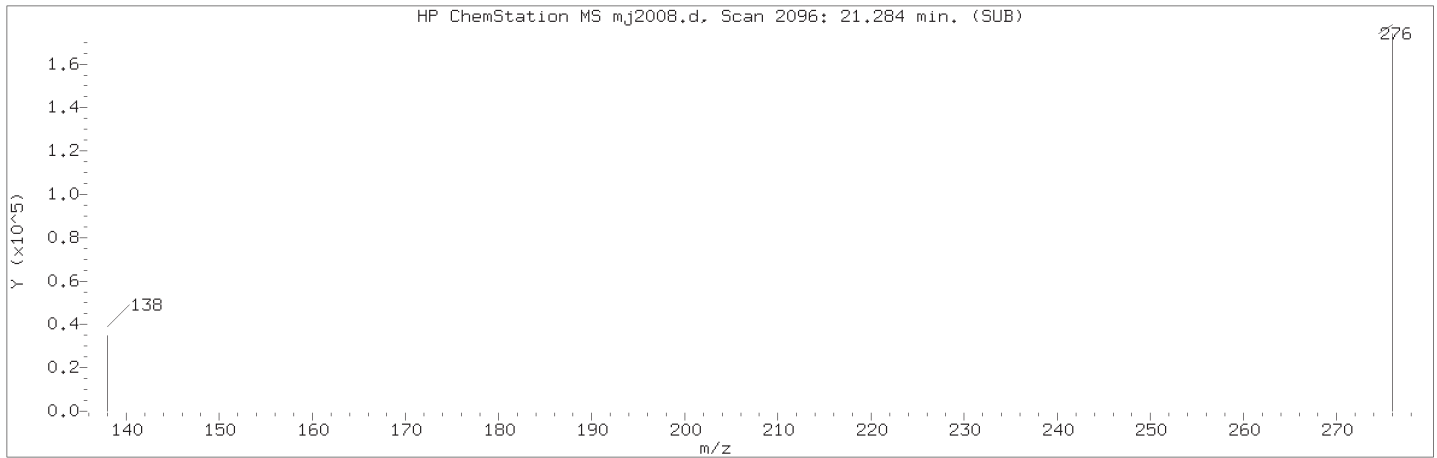
Data File: /chem/HP21585.i/18oct26.b/mj2008.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 11:01                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:29 Unknown

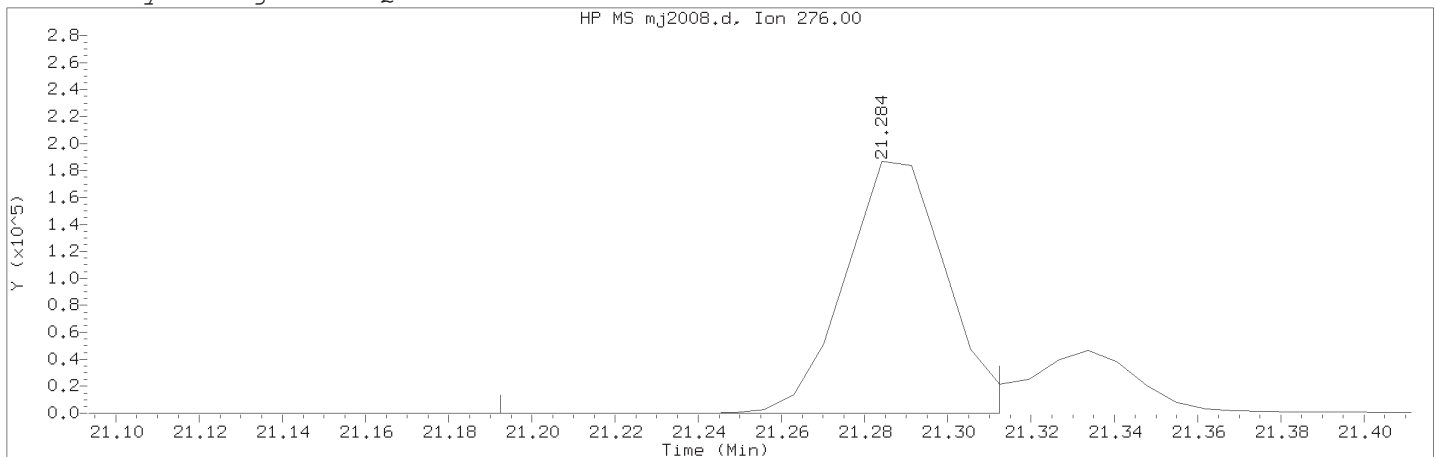
Sample Name: SSTDO.50                      Lab Sample ID: RVSICV2788

Compound Number                      : 15  
Compound Name                        : Acenaphthene  
Scan Number                            : 775  
Retention Time (minutes)            : 11.368  
Quant Ion                               : 154.00  
Area                                    : 214789  
On-column Amount (ng/ul)           : 0.5500  
Integration start scan                : 760                      Integration stop scan: 790  
Y at integration start                : 58                        Y at integration end: 58

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2008.d                      Instrument ID: HP21585.i  
Injection date and time: 26-OCT-2018 11:01                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m      Sublist used: alllicv  
Calibration date and time: 30-OCT-2018 14:23  
Date, time and analyst ID of latest file update: 30-Oct-2018 14:23 knb25316

Sample Name: SSTD0.50    Lab Sample ID: RVSICV2788

Compound Number                      : 39  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 2096  
Retention Time (minutes)            : 21.284  
Quant Ion                                : 276.00  
Area (flag)                             : 315036M  
On-Column Amount (ng/ul)           : 0.5683  
Integration start scan                : 2082                      Integration stop scan: 2099  
Y at integration start                : 101                        Y at integration end: 101

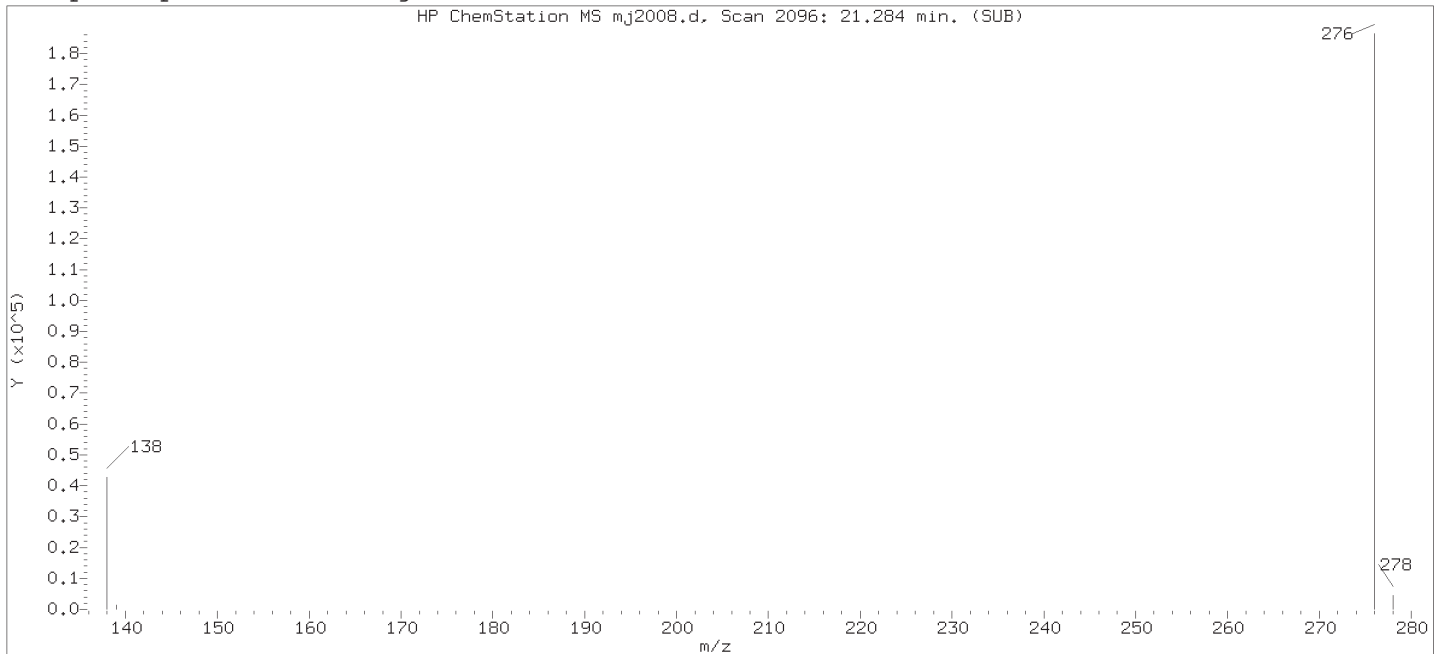
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Kira N. Beck  
on 10/30/2018 at 14:24.  
Target 3.5 esignature user ID: knb25316

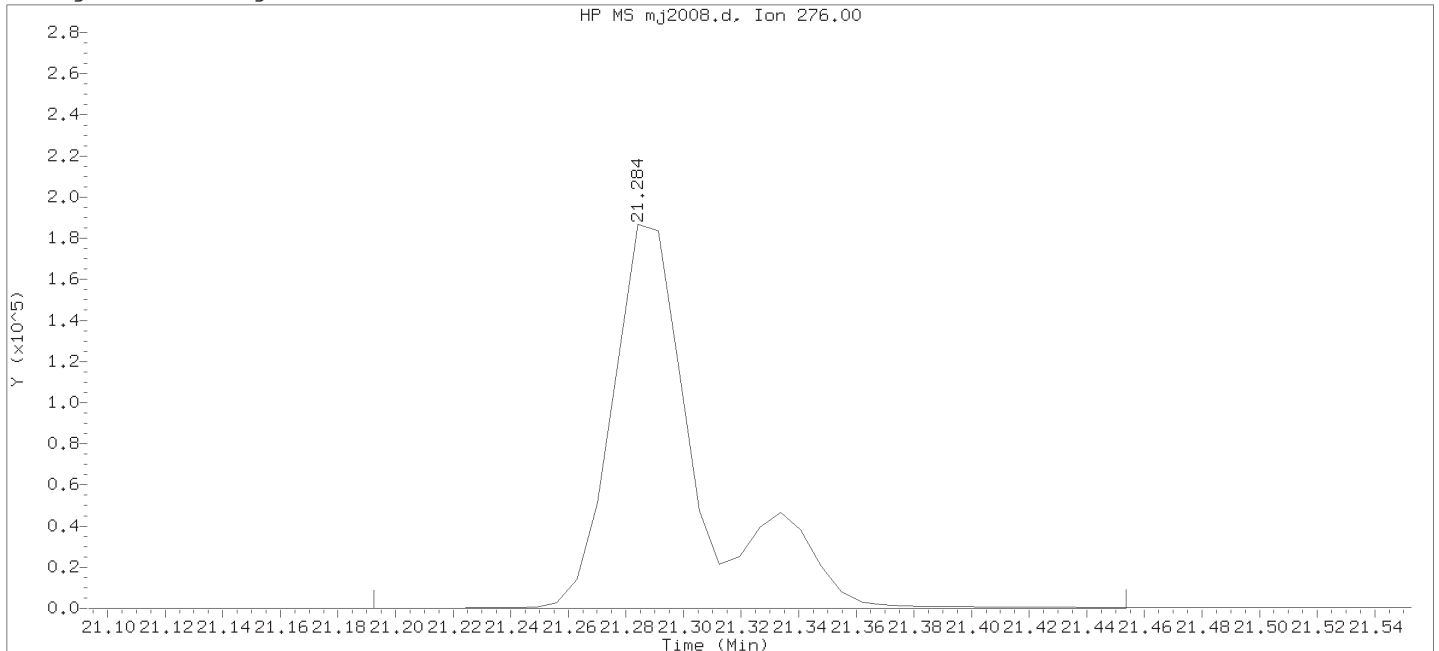
Secondary review performed and digitally signed by Holly B. Ziegler on 10/31/2018 at 07:37.  
PARALLAX ID: hb01996



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct26.b/mj2008.d  
Injection date and time: 26-OCT-2018 11:01

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 26-OCT-2018 10:31  
Date, time and analyst ID of latest file update: 26-Oct-2018 11:29 Unknown

Sample Name: SSTDO.50

Lab Sample ID: RVSICV2788

Compound Number : 39  
Compound Name : Indeno(1,2,3-cd)pyrene  
Scan Number : 2096  
Retention Time (minutes) : 21.284  
Quant Ion : 276.00  
Area : 394789  
On-column Amount (ng/ul) : 0.7034  
Integration start scan : 2082 Integration stop scan: 2119  
Y at integration start : 101 Y at integration end: 101

Date : 07-NOV-2018 16:55

Client ID: DFTPP12,5

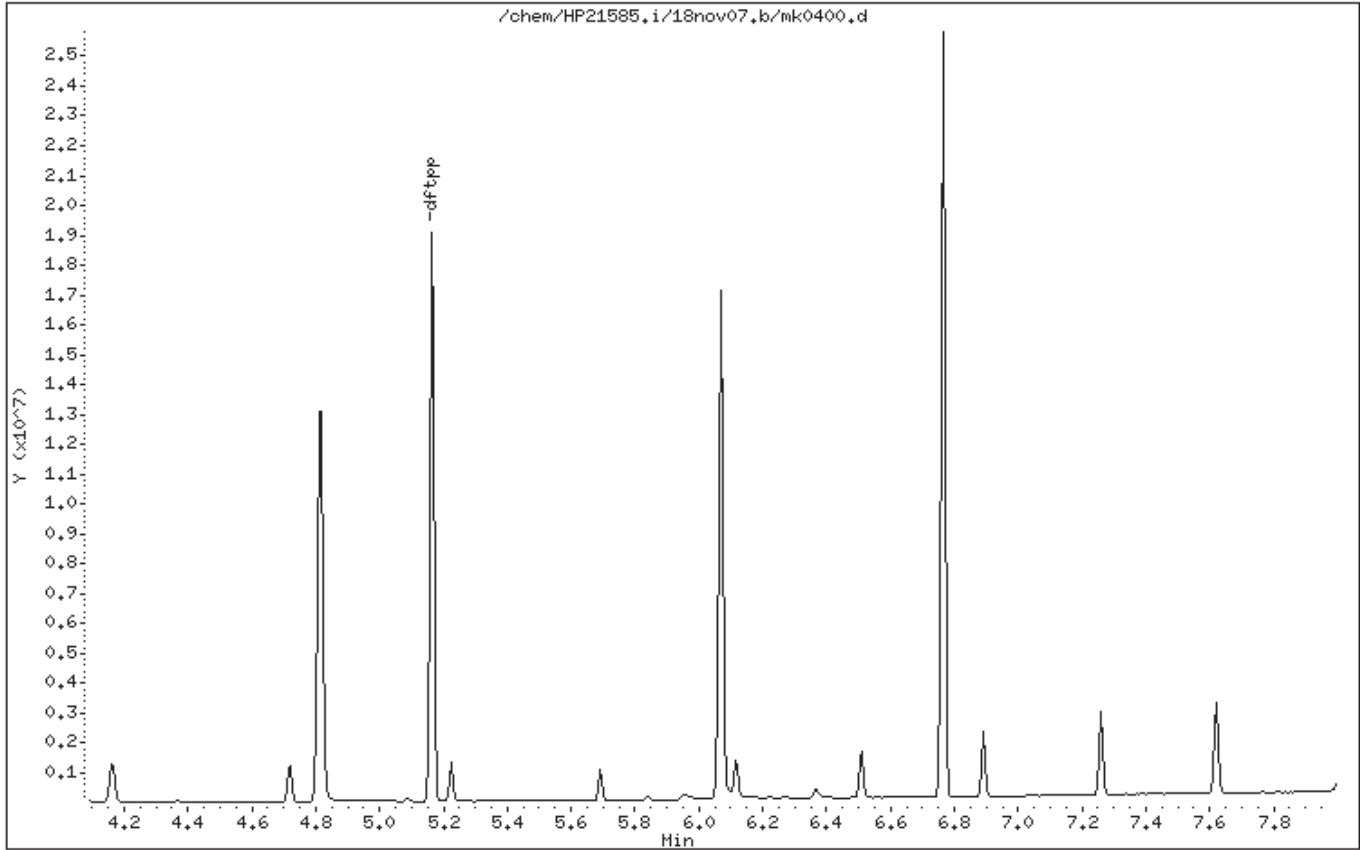
Instrument: HP21585,i

Sample Info: DFTPP12,5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0,18



Digitally signed by Kira N. Beck on 11/08/2018 at 14:46.  
Target 3.5 esignature user ID: knb25316

Date : 07-NOV-2018 16:55

Client ID: DFTPP12.5

Instrument: HP21585.i

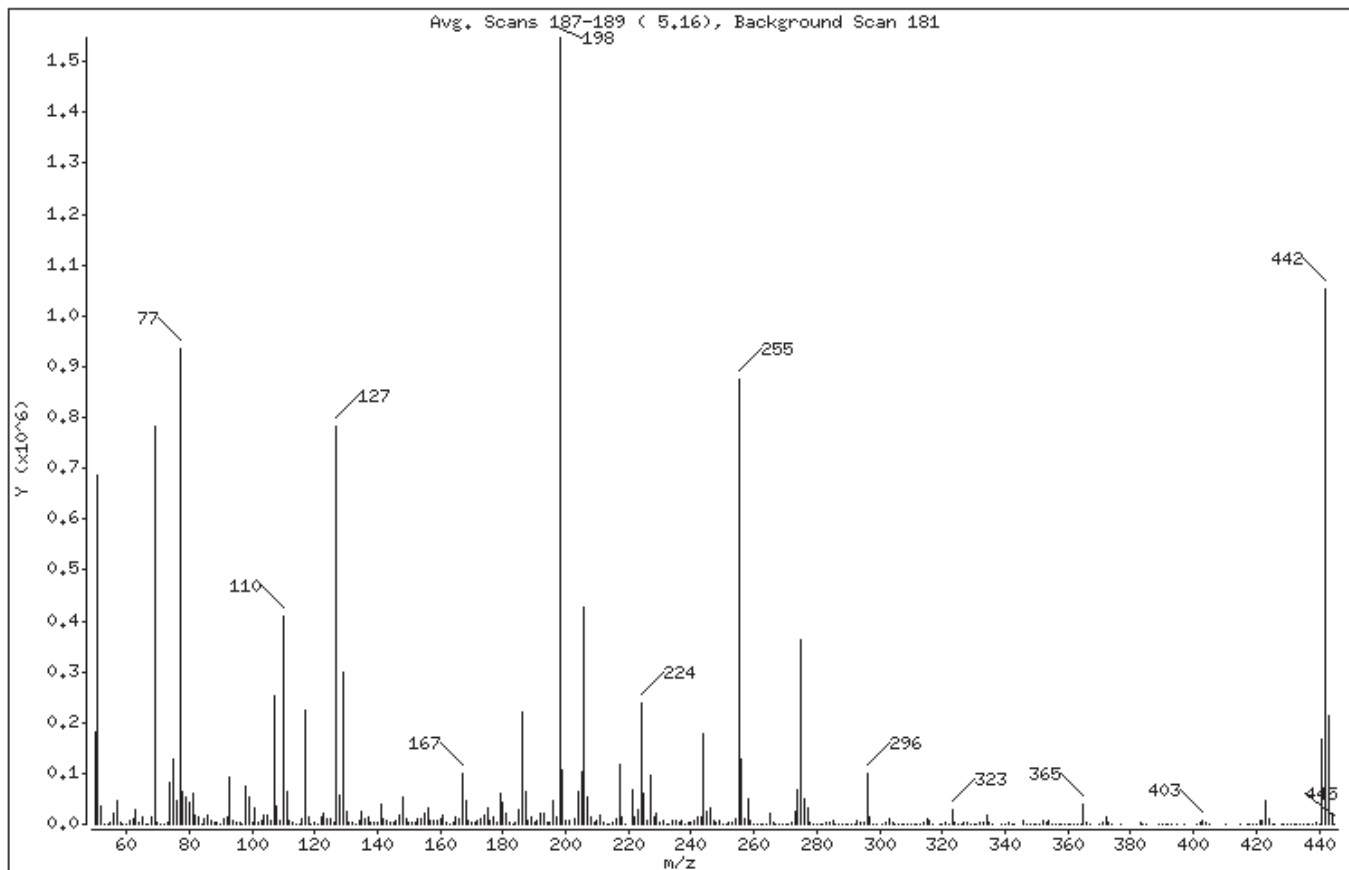
Sample Info: DFTPP12.5;RVIDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	44.48
68	Less than 2.00% of mass 69	0.82 ( 1.63)
69	Mass 69 relative abundance	50.68
70	Less than 2.00% of mass 69	0.28 ( 0.56)
127	10.00 - 80.00% of mass 198	50.61
197	Less than 2.00% of mass 198	0.83
199	5.00 - 9.00% of mass 198	6.95
275	10.00 - 60.00% of mass 198	23.54
365	Greater than 1.00% of mass 198	2.44
441	0.01 - 24.00% of mass 442	10.92 ( 16.07)
442	50.00 - 99.99% of mass 198	67.97
443	15.00 - 24.00% of mass 442	13.71 ( 20.17)

Digitally signed by Kira N. Beck on 11/08/2018 at 14:46.  
Target 3.5 esignature user ID: knb25316

Date : 07-NOV-2018 16:55

Client ID: DFTPP12.5

Instrument: HP21585.i

Sample Info: DFTPP12.5;RVIDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0,18

Data File: mk0400.d  
Spectrum: Avg. Scans 187-189 ( 5,16), Background Scan 181  
Location of Maximum: 198,00  
Number of points: 361

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50,00	180480	141,00	37824	234,00	6645	327,00	5181
51,00	688000	142,00	11813	235,00	7514	328,00	2585
52,00	34600	143,00	8550	236,00	4935	329,00	383
53,00	1564	144,00	2241	237,00	7930	330,00	99
54,00	230	145,00	1893	238,00	1329	331,00	138
55,00	3355	146,00	7663	239,00	3560	332,00	2378
56,00	19824	147,00	19184	240,00	2860	333,00	3023
57,00	45824	148,00	52032	241,00	5701	334,00	18584
58,00	1901	149,00	9455	242,00	12748	335,00	4482
59,00	446	150,00	2695	243,00	13691	336,00	654
60,00	251	151,00	4848	244,00	179008	339,00	448
61,00	7829	152,00	2522	245,00	24536	340,00	350
62,00	10297	153,00	12085	246,00	33312	341,00	3166
63,00	28704	154,00	9714	247,00	7236	342,00	798
64,00	4406	155,00	21064	248,00	1799	343,00	260
65,00	14661	156,00	30952	249,00	6391	346,00	6199
66,00	825	157,00	5560	250,00	1139	347,00	1255
67,00	791	158,00	6570	251,00	1614	348,00	198
68,00	12739	159,00	5844	252,00	2283	349,00	85
69,00	783872	160,00	11301	253,00	4494	350,00	353
70,00	4379	161,00	17192	254,00	10034	351,00	584
71,00	748	162,00	5312	255,00	875072	352,00	8195
72,00	518	163,00	1272	256,00	127352	353,00	4992
73,00	3566	164,00	2245	257,00	10123	354,00	7513
74,00	81688	165,00	13662	258,00	51472	355,00	1483
75,00	129688	166,00	12424	259,00	7733	356,00	339
76,00	47672	167,00	98936	260,00	1419	357,00	90
77,00	935360	168,00	44784	261,00	1487	358,00	250
78,00	62768	169,00	6846	262,00	269	359,00	547
79,00	53128	170,00	2397	263,00	577	360,00	208
80,00	41432	171,00	3479	264,00	1349	361,00	195
81,00	60408	172,00	7364	265,00	20792	362,00	108
82,00	16013	173,00	9606	266,00	2938	363,00	176
83,00	13679	174,00	17552	267,00	102	364,00	357
84,00	1648	175,00	32128	268,00	276	365,00	37680

Date : 07-NOV-2018 16:55

Client ID: DFTPP12.5

Instrument: HP21585.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0,18

Data File: mk0400.d  
Spectrum: Avg. Scans 187-189 ( 5,16), Background Scan 181  
Location of Maximum: 198,00  
Number of points: 361

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85,00	9853	176,00	8630	269,00	445	366,00	5215
86,00	16592	177,00	12851	270,00	1247	367,00	409
87,00	7801	178,00	4522	271,00	1753	370,00	679
88,00	3371	179,00	58928	272,00	2800	371,00	2114
89,00	1779	180,00	41840	273,00	25776	372,00	13764
90,00	395	181,00	20144	274,00	66112	373,00	3339
91,00	11658	182,00	3191	275,00	364096	374,00	362
92,00	14149	183,00	1752	276,00	49408	377,00	299
93,00	92320	184,00	5002	277,00	30720	383,00	3456
94,00	6164	185,00	29992	278,00	5075	384,00	1038
95,00	1877	186,00	221504	279,00	1029	385,00	433
96,00	3738	187,00	63240	280,00	264	389,00	72
97,00	1289	188,00	6821	281,00	282	390,00	1681
98,00	72960	189,00	14750	282,00	892	391,00	1167
99,00	53672	190,00	2827	283,00	3607	392,00	765
100,00	4491	191,00	6212	284,00	2109	393,00	148
101,00	33432	192,00	19760	285,00	5375	395,00	126
102,00	1913	193,00	21712	286,00	1081	397,00	111
103,00	8814	194,00	4274	287,00	195	401,00	788
104,00	18808	195,00	2616	288,00	454	402,00	5076
105,00	17808	196,00	45792	289,00	1353	403,00	6776
106,00	6237	197,00	12841	290,00	1181	404,00	2605
107,00	251584	198,00	1546752	291,00	699	405,00	544
108,00	36840	199,00	107488	292,00	1745	410,00	166
109,00	6326	200,00	8283	293,00	6632	415,00	400
110,00	408256	201,00	6927	294,00	2059	417,00	128
111,00	62728	203,00	11348	295,00	2450	418,00	59
112,00	7746	204,00	63088	296,00	101096	419,00	205
113,00	2854	205,00	103456	297,00	14027	420,00	134
114,00	844	206,00	426624	298,00	1085	421,00	6346
115,00	1025	207,00	53920	299,00	259	422,00	6634
116,00	12213	208,00	13260	301,00	1372	423,00	45912
117,00	223360	209,00	4249	302,00	1899	424,00	9186
118,00	15803	210,00	5998	303,00	10767	425,00	1147
119,00	1770	211,00	16680	304,00	2783	426,00	172

Digitally signed by Kira N. Beck on 11/08/2018 at 14:46.  
Target 3.5 esignature user ID: knb25316

Date : 07-NOV-2018 16:55

Client ID: DFTPP12.5

Instrument: HP21585.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

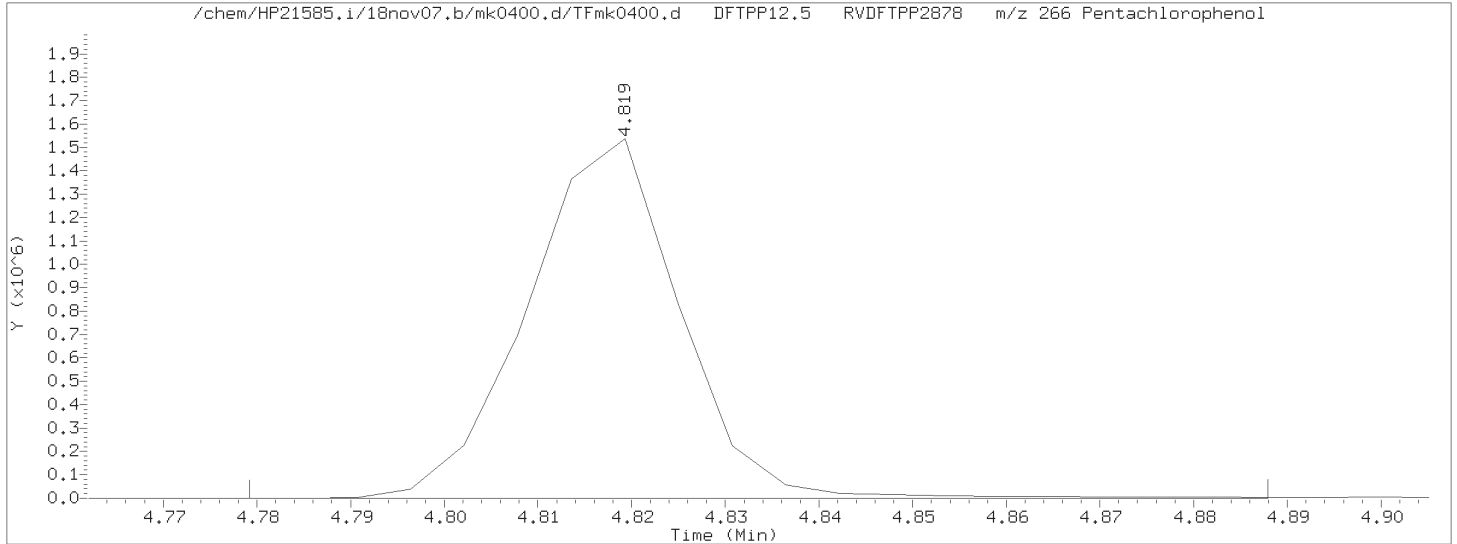
Column diameter: 0.18

Data File: mk0400.d  
Spectrum: Avg. Scans 187-189 ( 5.16), Background Scan 181  
Location of Maximum: 198.00  
Number of points: 361

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	2964	212.00	1801	305.00	381	428.00	145
121.00	899	213.00	1245	306.00	183	429.00	359
122.00	14281	214.00	642	307.00	133	430.00	56
123.00	23016	215.00	4413	308.00	1459	431.00	302
124.00	9812	216.00	9410	309.00	922	432.00	280
125.00	9995	217.00	116424	310.00	1591	433.00	219
126.00	4370	218.00	14954	311.00	309	434.00	738
127.00	782784	219.00	1168	312.00	426	435.00	346
128.00	57744	221.00	68536	313.00	638	436.00	921
129.00	298816	222.00	14410	314.00	4652	437.00	1223
130.00	24712	223.00	27024	315.00	10643	438.00	1593
131.00	4786	224.00	239360	316.00	5577	439.00	2556
132.00	2183	225.00	61064	317.00	994	440.00	231
133.00	796	226.00	6356	319.00	149	441.00	168832
134.00	7455	227.00	97280	320.00	495	442.00	1051136
135.00	23480	228.00	13964	321.00	2682	443.00	212032
136.00	9097	229.00	21368	322.00	1488	444.00	19312
137.00	12483	230.00	3206	323.00	28824	445.00	1450
138.00	2494	231.00	8640	324.00	5285		
139.00	2570	232.00	1573	325.00	382		
140.00	4414	233.00	1757	326.00	640		

# Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP21585.i Injection Date: 07-NOV-2018 16:55 Operator: ceb05247

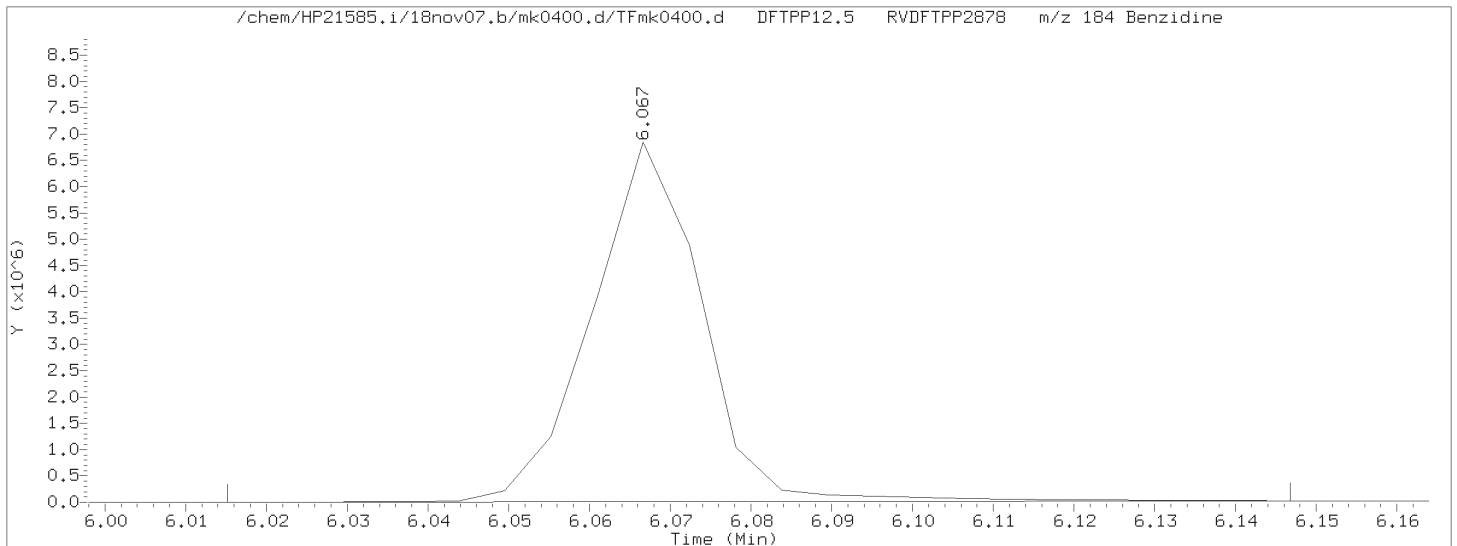


Pentachlorophenol EICP peak height = 1537941 EICP peak height at 10% = 153794 Pentachlorophenol EICP area = 1735066

Pentachlorophenol EICP peak apex (min.) = 4.819  
 RT at 10% of front half of EICP (min.) = 4.800  
 RT at 10% of back half of EICP (min.) = 4.833

'Front' peak width (min.) = 0.0193333333  
 'Tailing' peak width (min.) = 0.0138000000

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0138000000}{0.0193333333} = 0.714$$



Benzidine EICP peak height = 6839127 EICP peak height at 10% = 683913 Benzidine EICP area = 6451632

Benzidine EICP peak apex (min.) = 6.067  
 RT at 10% of front half of EICP (min.) = 6.052  
 RT at 10% of back half of EICP (min.) = 6.081

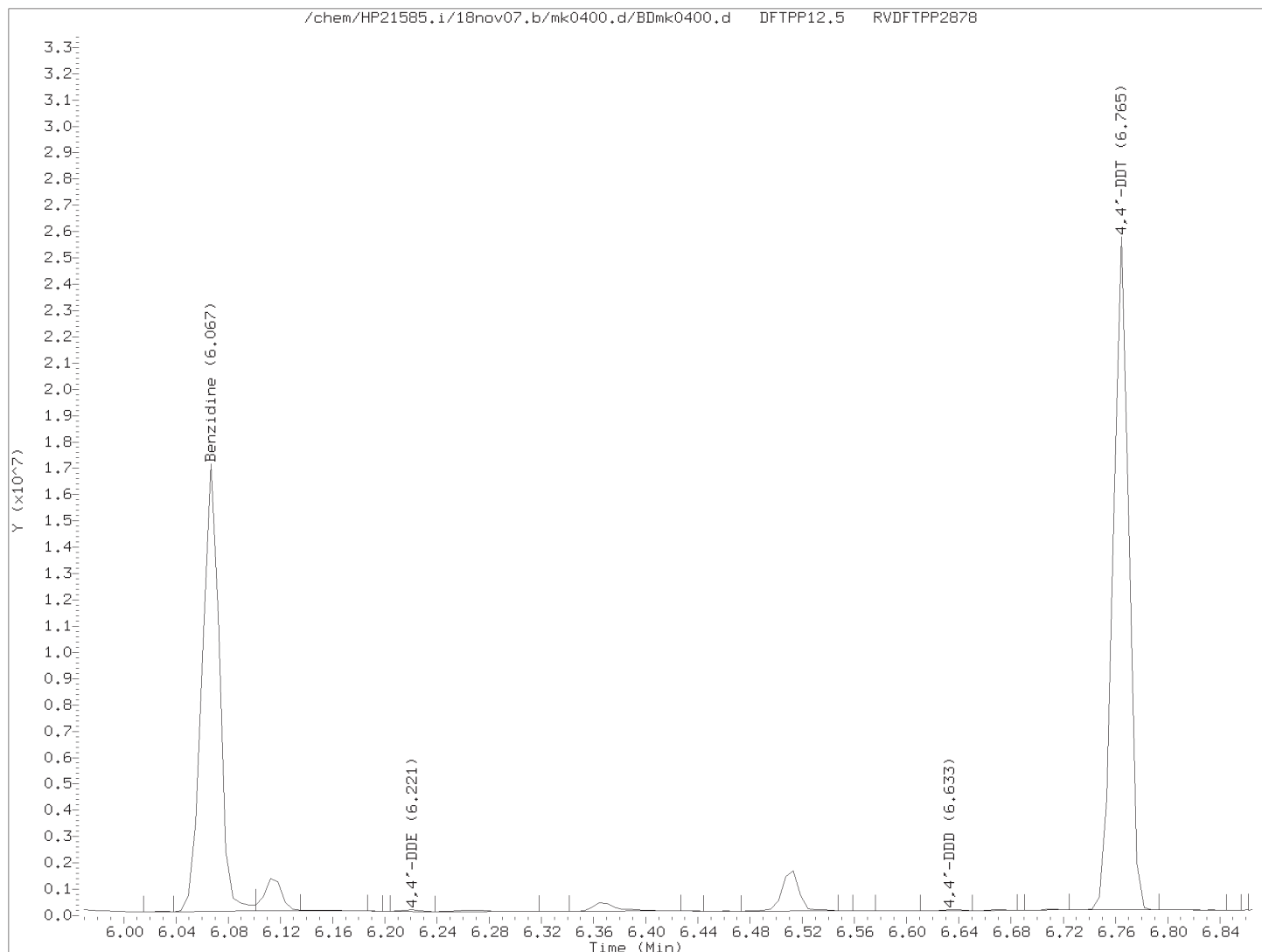
'Front' peak width (min.) = 0.0145000000  
 'Tailing' peak width (min.) = 0.0139166667

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0139166667}{0.0145000000} = 0.960$$

page 1 of 2  
 printed on 11/07/2018 at 17:10

# Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP21585.i Injection Date: 07-NOV-2018 16:55 Operator: ceb05247

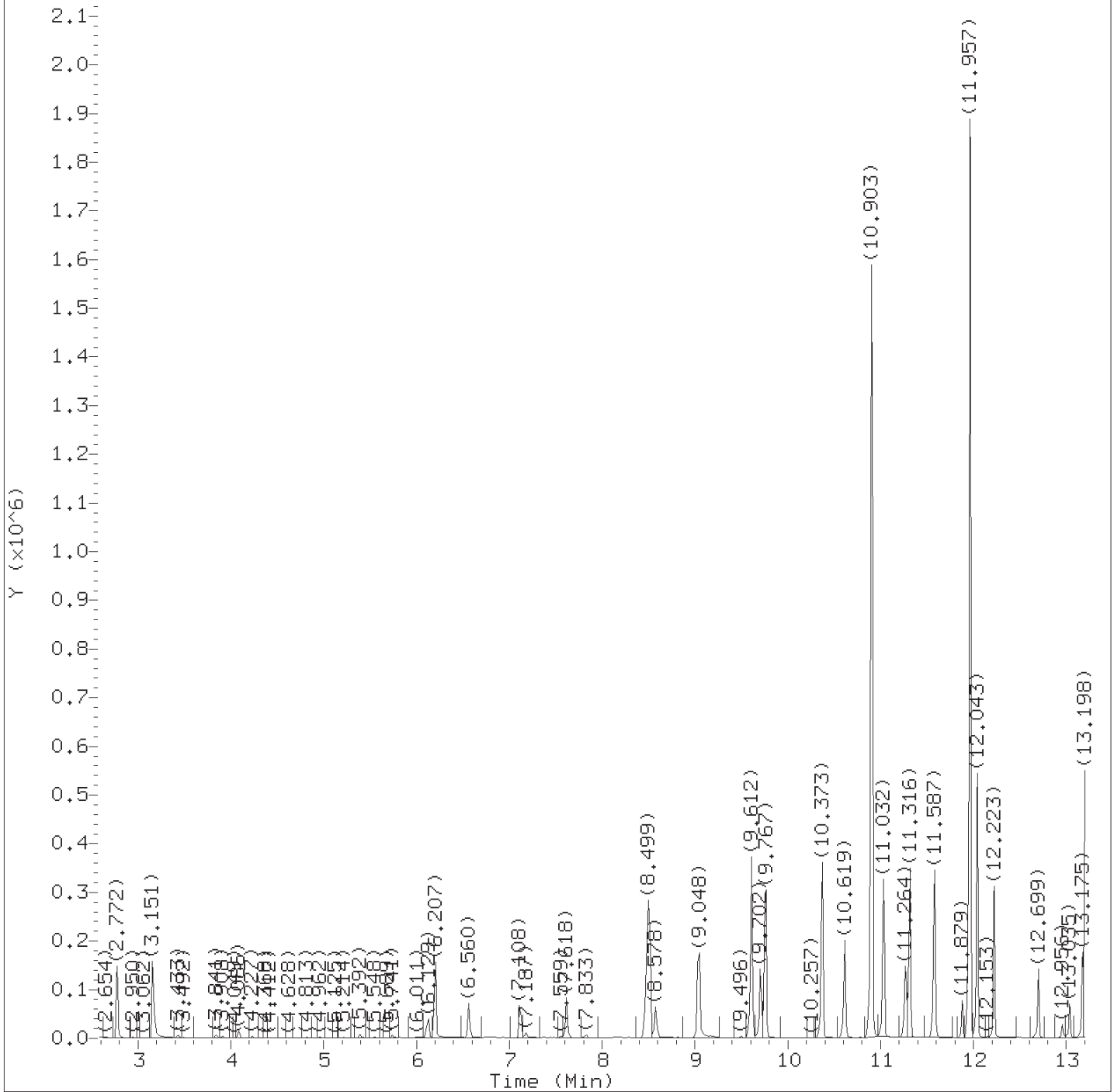


$$\% \text{ 4,4'-DDT breakdown} = \frac{4,4'\text{-DDE TIC area} + 4,4'\text{-DDD TIC area}}{4,4'\text{-DDE TIC area} + 4,4'\text{-DDD TIC area} + 4,4'\text{-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{53908 + 32463}{53908 + 32463 + 21123068} \times 100 = 0.4$$

page 2 of 2  
printed on 11/08/2018 at 14:45





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0401.d  
Injection date and time: 07-NOV-2018 17:11

Instrument ID: HP21585.i  
Analyst ID: ceb05247

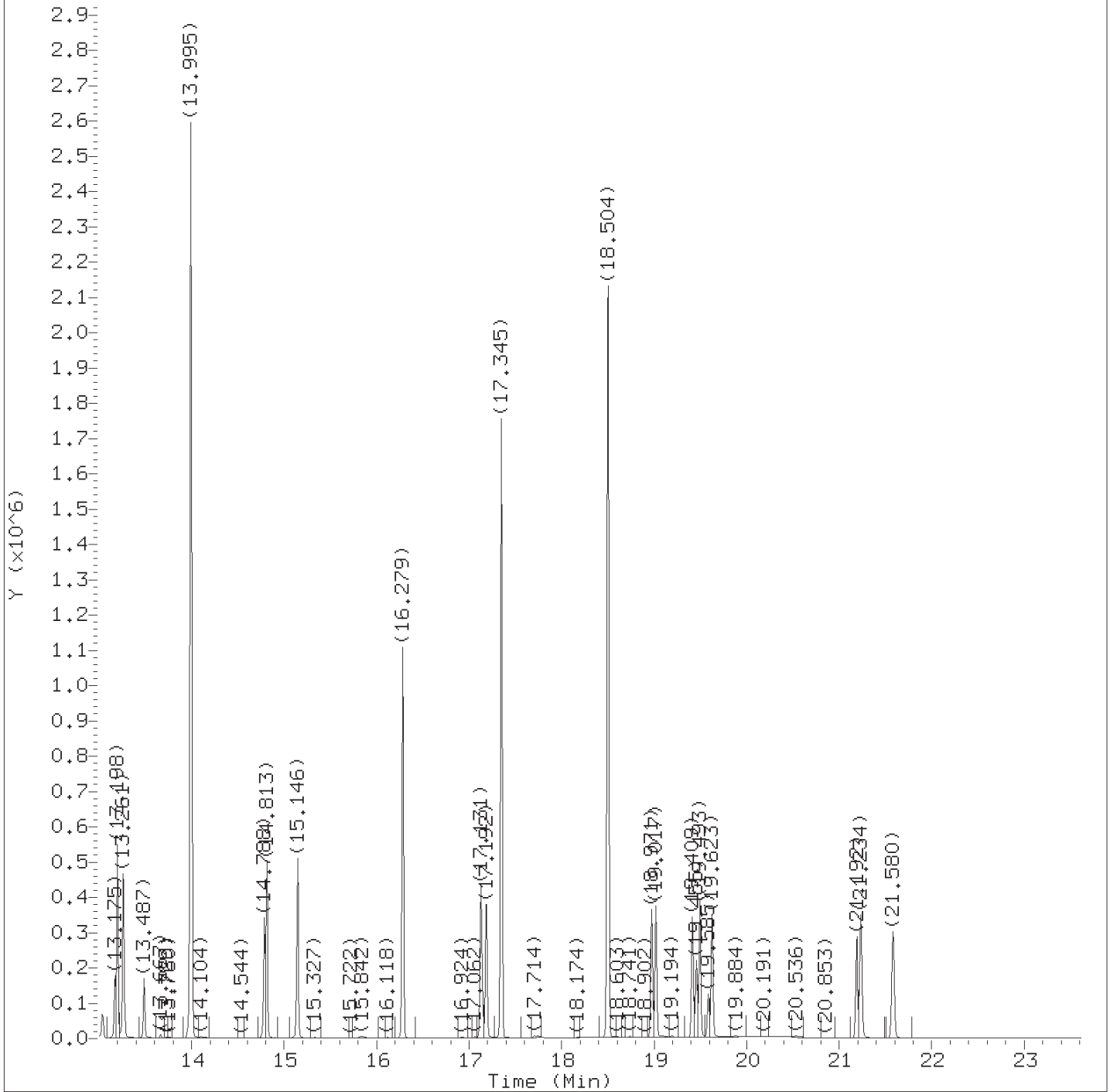
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 17:57 art12405

Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

Digitally signed by Ashley R. Transue  
on 11/07/2018 at 17:58.

Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0401.d  
Injection date and time: 07-NOV-2018 17:11

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 17:57 art12405

Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

Digitally signed by Ashley R. Transue  
on 11/07/2018 at 17:58.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0401.d  
 Injection date and time: 07-NOV-2018 17:11

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: all1  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 17:57 art12405

Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.772	88	95354	0.549
2) N-Nitrosodimethylamine	(1)	3.151	74	137048	0.544
4) bis(2-Chloroethyl) ether	(2)	6.207	93	150485	0.473
5) *1,4-Dichlorobenzene-d4	(1)	6.560	152	62638	0.250
6) *Naphthalene-d8	(2)	8.480	136	208073	0.250
7) Naphthalene	(2)	8.499	128	429084	0.449
8) Quinoline	(2)	9.048	129	244436	0.426
9) 2-Methylnaphthalene	(2)	9.612	142	275895	0.469
10) \$1-Methylnaphthalene-d10	(2)	9.702	152	176518	0.466
11) 1-Methylnaphthalene	(2)	9.767	142	274409	0.471
12) Dimethylphthalate	(3)	10.903	163	1662116	2.395
13) Acenaphthylene	(3)	11.032	152	441709	0.477
14) *Acenaphthene-d10	(3)	11.264	164	87886	0.250
15) Acenaphthene	(3)	11.316	154	266123	0.473
16) Dibenzofuran	(3)	11.587	168	380841	0.507
17) Diethylphthalate	(3)	11.957	149	1725446	2.499
18) Fluorene	(3)	12.043	166	323912	0.494
19) Hexachlorobenzene	(4)	12.699	284	97822	0.495
20) *Phenanthrene-d10	(4)	13.175	188	175925	0.250
21) Phenanthrene	(4)	13.198	178	465771	0.493
22) Anthracene	(4)	13.261	178	468194	0.505
23) Di-n-butylphthalate	(4)	13.995	149	2649378	2.561
24) \$Fluoranthene-d10	(4)	14.788	212	358972	0.520
25) Fluoranthene	(4)	14.813	202	540285	0.513
26) Pyrene	(5)	15.146	202	555392	0.510
27) Butylbenzylphthalate	(5)	16.279	149	1098199	2.420
28) Benzo(a)anthracene	(5)	17.131	228	455206	0.485
29) *Chrysene-d12	(5)	17.146	240	119703	0.250
30) Chrysene	(5)	17.184	228	469765	0.494
31) bis(2-Ethylhexyl)phthalate	(5)	17.345	149	1589083	2.349
32) Di-n-octylphthalate	(6)	18.504	149	2734211	2.382
33) Benzo(b)fluoranthene	(6)	18.971	252	438330	0.499
34) Benzo(k)fluoranthene	(6)	19.017	252	456517	0.520
35) Benzo(e)pyrene	(6)	19.409	252	422064	0.511
36) \$Benzo(a)pyrene-d12	(6)	19.455	264	210211	0.515
37) Benzo(a)pyrene	(6)	19.493	252	425757	0.505
38) *Perylene-d12	(6)	19.585	264	111011	0.250
45) Perylene	(6)	19.623	252	427805	0.500
39) Indeno(1,2,3-cd)pyrene	(6)	21.192	276	375105M	0.490
40) Dibenz(a,h)anthracene	(6)	21.234	278	391948	0.501

M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue  
 on 11/07/2018 at 17:58.

Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0401.d  
Injection date and time: 07-NOV-2018 17:11

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: all1  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 17:57 art12405

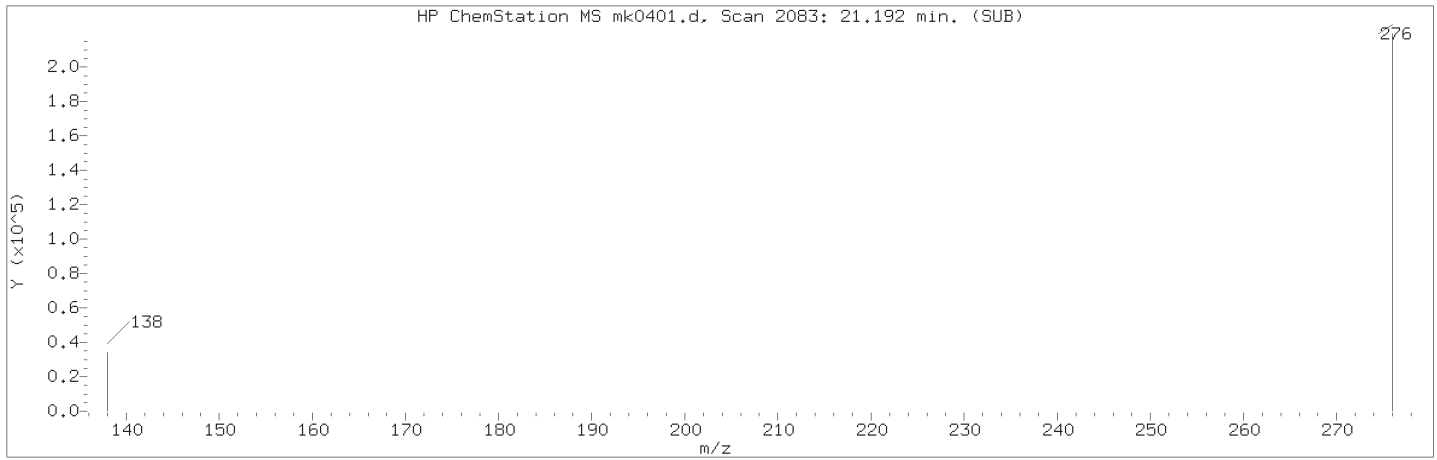
Sample Name: SSTD0.5

Lab Sample ID: RVSIM2768

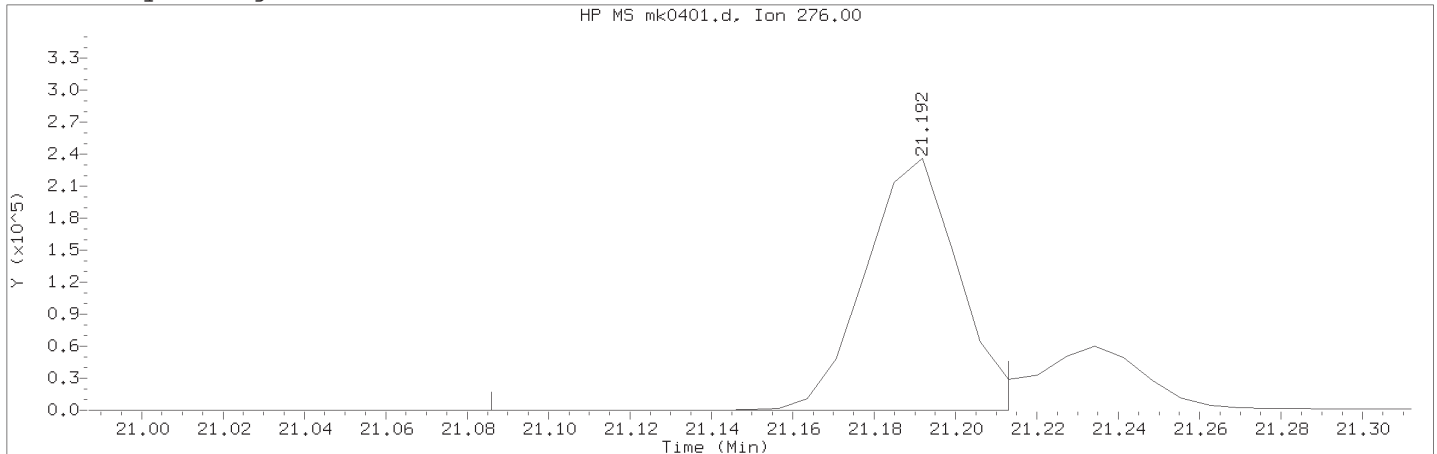
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
===== 41) Benzo(g,h,i)perylene	(6)	21.580	276	441633	0.499

Digitally signed by Ashley R. Transue  
on 11/07/2018 at 17:58.  
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0401.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 17:11                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 17:57 art12405

Sample Name: SSTD0.5    Lab Sample ID: RVSIM2768

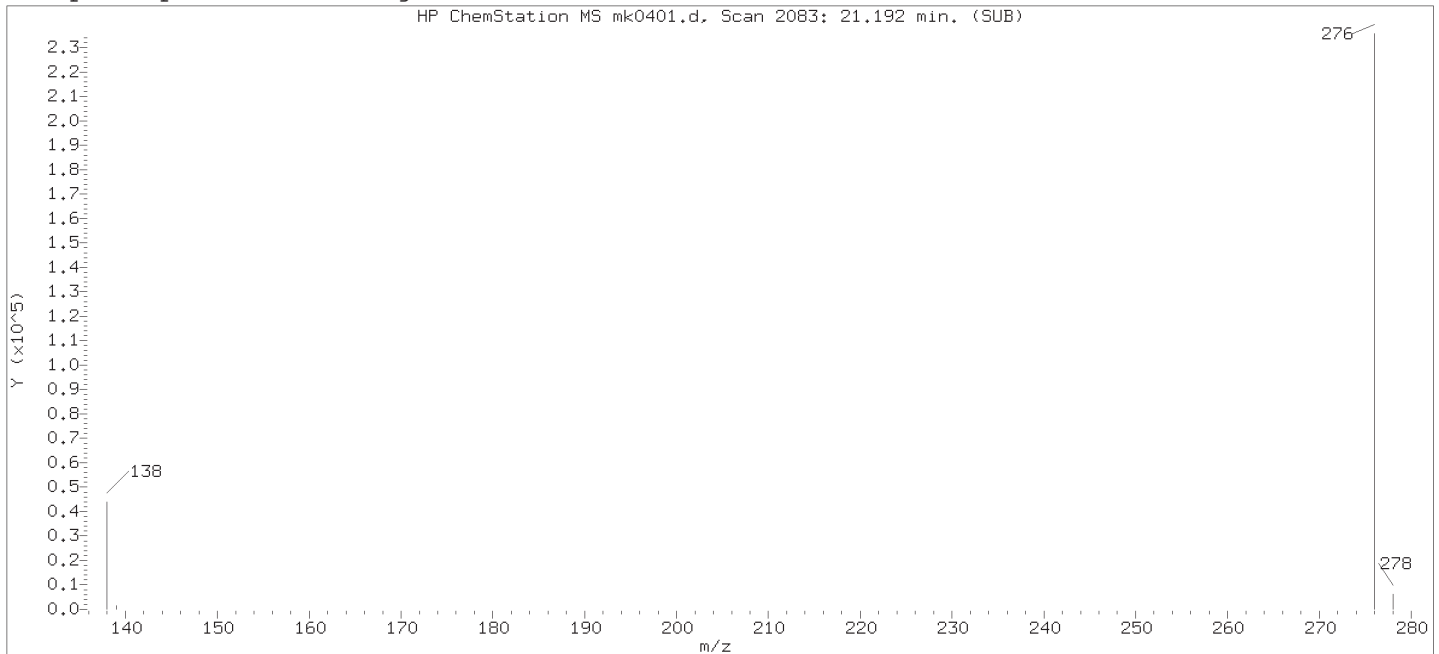
Compound Number                      : 39  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 2083  
Retention Time (minutes)            : 21.192  
Quant Ion                                : 276.00  
Area (flag)                             : 375105M  
On-Column Amount (ng/ul)           : 0.4899  
Integration start scan                : 2067                      Integration stop scan: 2085  
Y at integration start                : 150                       Y at integration end: 150

Reason for manual integration: improper integration

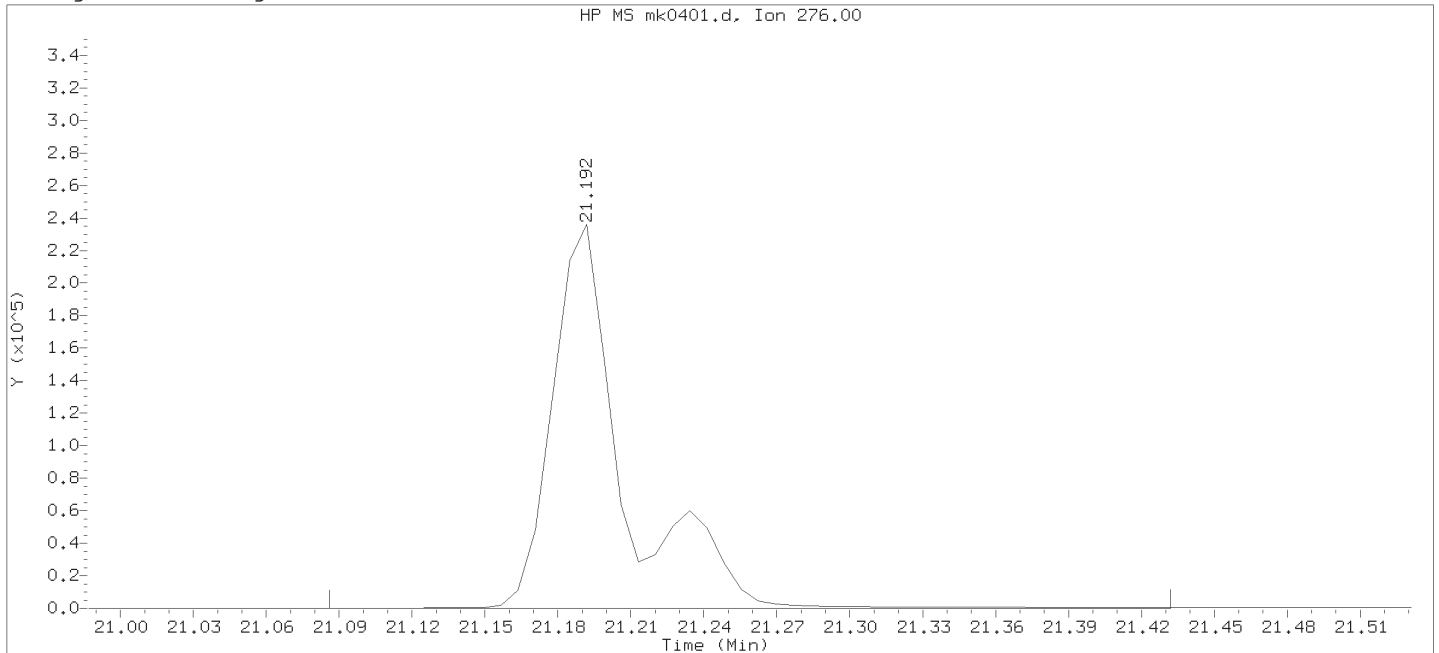
Analyst responsible for change: Digitally signed by Ashley R. Transue  
on 11/07/2018 at 17:58.  
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 12:50.  
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

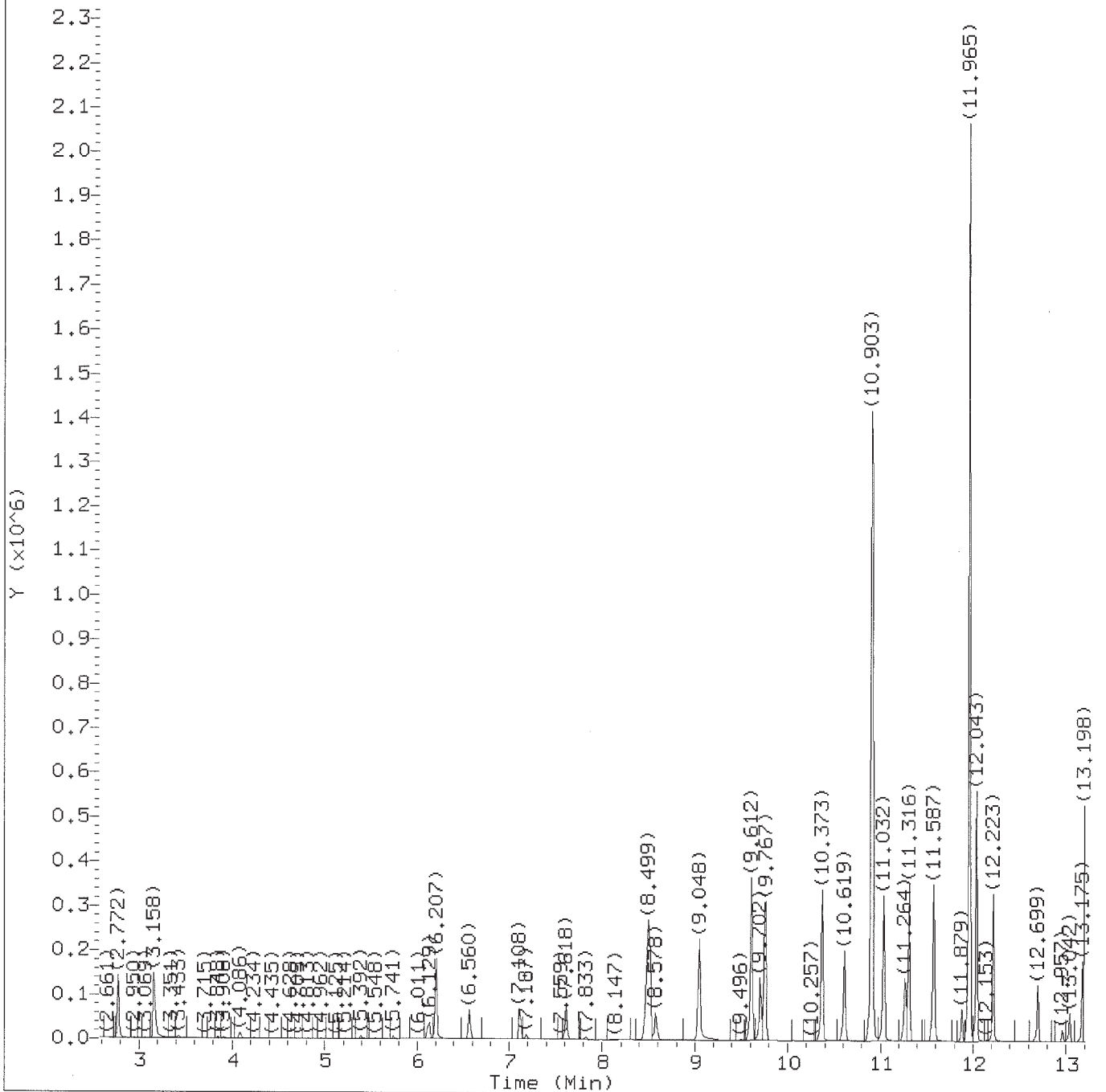


Data File: /chem/HP21585.i/18nov07.b/mk0401.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 17:11                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m      Sublist used: all1  
Calibration date and time: 07-NOV-2018 17:51  
Date, time and analyst ID of latest file update: 07-Nov-2018 17:51 art12405

Sample Name: SSTD0.5    Lab Sample ID: RVSIM2768

Compound Number                      : 39  
Compound Name                        : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 2083  
Retention Time (minutes)            : 21.192  
Quant Ion                               : 276.00  
Area                                     : 481628  
On-column Amount (ng/ul)           : 1.2581  
Integration start scan                : 2067                      Integration stop scan: 2116  
Y at integration start                : 150                       Y at integration end: 150



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0427.d  
Injection date and time: 07-NOV-2018 23:12

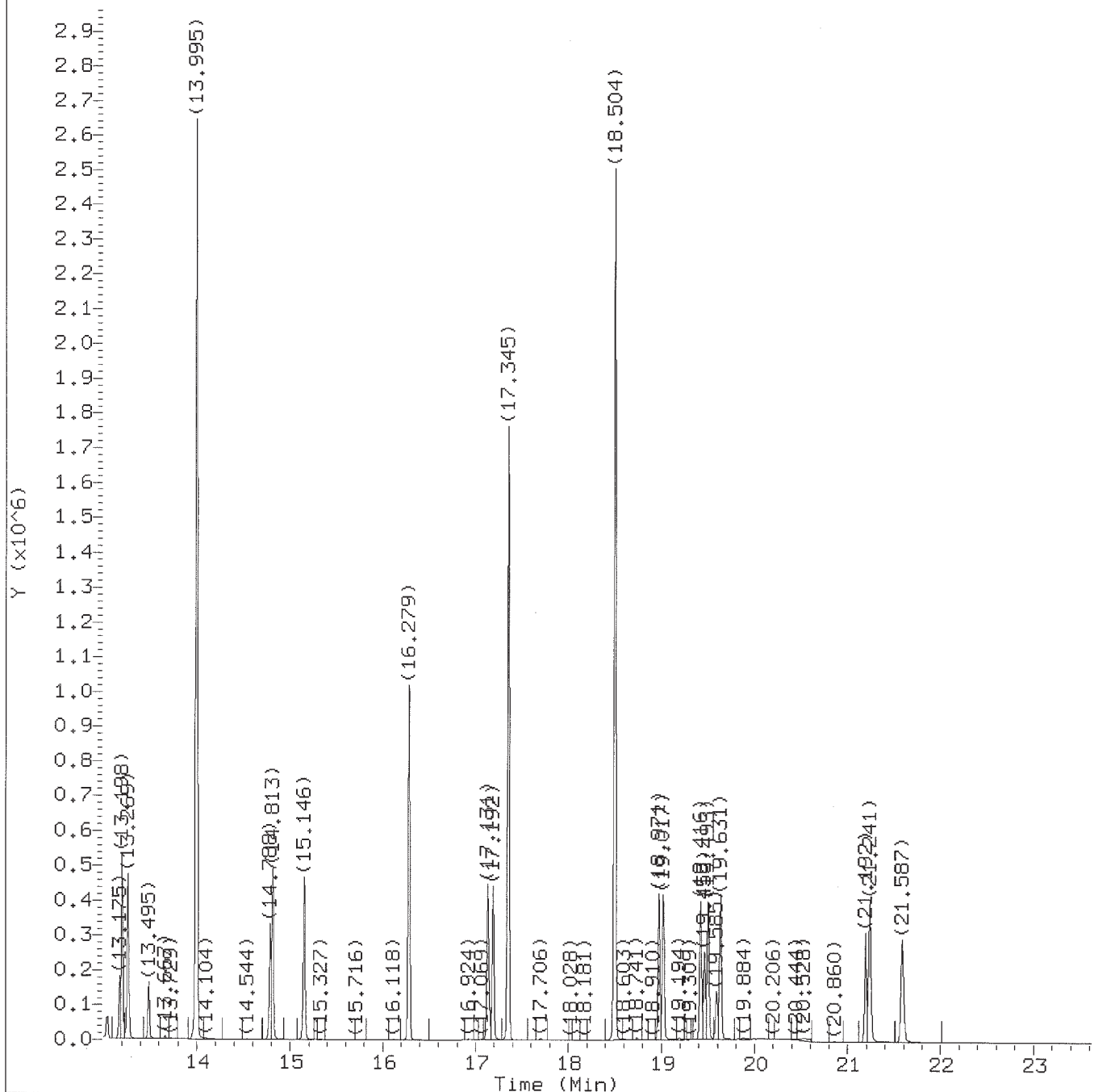
Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:07 jmg00346

Sample Name: SECC0.5

Lab Sample ID: SECC0.5

Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:07.  
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0427.d  
Injection date and time: 07-NOV-2018 23:12

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 07-NOV-2018 17:57

Sublist used: 25784

Date, time and analyst ID of latest file update: 08-Nov-2018 04:07 jmg00346

Sample Name: SECC0.5

Lab Sample ID: SECC0.5

Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:07.

Target 3.5 esignature user ID: jmg00346



Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0427.d  
 Injection date and time: 07-NOV-2018 23:12

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57

Date, time and analyst ID of latest file update: 08-Nov-2018 04:07 jmg00346

Sample Name: SECC0.5

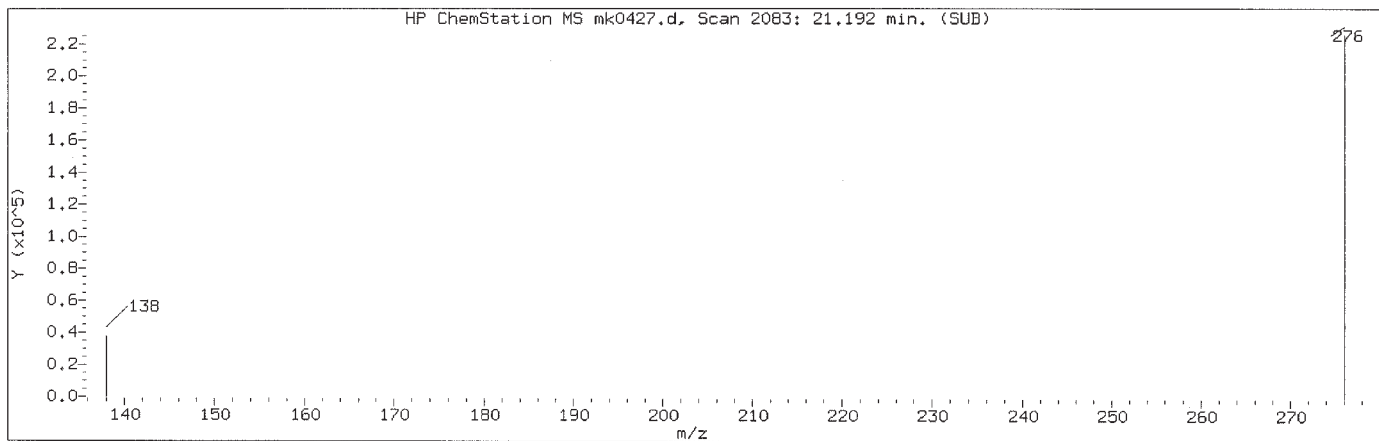
Lab Sample ID: SECC0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.772	88	94255	0.558
4) bis(2-Chloroethyl)ether	(2)	6.207	93	157880	0.503
5) *1,4-Dichlorobenzene-d4	(1)	6.560	152	60836	0.250
6) *Naphthalene-d8	(2)	8.480	136	205220	0.250
7) Naphthalene	(2)	8.499	128	427723	0.453
10) \$1-Methylnaphthalene-d10	(2)	9.702	152	181580	0.486
13) Acenaphthylene	(3)	11.032	152	441772	0.472
14) *Acenaphthene-d10	(3)	11.264	164	88818	0.250
15) Acenaphthene	(3)	11.316	154	270152	0.476
18) Fluorene	(3)	12.043	166	322970	0.488
19) Hexachlorobenzene	(4)	12.699	284	96403	0.487
20) *Phenanthrene-d10	(4)	13.175	188	176368	0.250
21) Phenanthrene	(4)	13.198	178	468802	0.495
22) Anthracene	(4)	13.269	178	465040	0.501
23) Di-n-butylphthalate	(4)	13.995	149	2720091	2.623
24) \$Fluoranthene-d10	(4)	14.788	212	361116	0.522
25) Fluoranthene	(4)	14.813	202	540053	0.511
26) Pyrene	(5)	15.146	202	558009	0.483
28) Benzo(a)anthracene	(5)	17.131	228	483084	0.485
29) *Chrysene-d12	(5)	17.146	240	127073	0.250
30) Chrysene	(5)	17.192	228	498790	0.495
31) bis(2-Ethylhexyl)phthalate	(5)	17.345	149	1695419	2.360
33) Benzo(b)fluoranthene	(6)	18.971	252	497527	0.476
34) Benzo(k)fluoranthene	(6)	19.017	252	534541	0.512
36) \$Benzo(a)pyrene-d12	(6)	19.462	264	247607	0.510
37) Benzo(a)pyrene	(6)	19.493	252	495844	0.495
38) *Perylene-d12	(6)	19.593	264	132115	0.250
39) Indeno(1,2,3-cd)pyrene	(6)	21.192	276	426280M	0.468
40) Dibenz(a,h)anthracene	(6)	21.241	278	442724	0.476
41) Benzo(g,h,i)perylene	(6)	21.587	276	473616	0.449

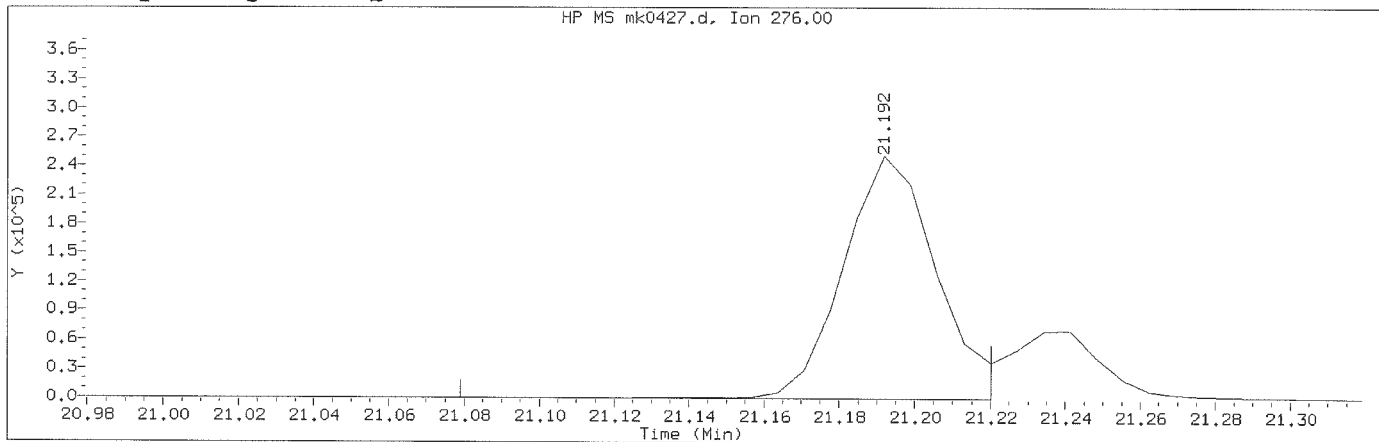
M = Compound was manually integrated.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler  
 on 11/08/2018 at 04:07.  
 Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0427.d                      Instrument ID: HP21585.i  
 Injection date and time: 07-NOV-2018 23:12                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 25784  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 08-Nov-2018 04:07 jmg00346

Sample Name: SECC0.5    Lab Sample ID: SECC0.5

Compound Number                      : 39  
 Compound Name                        : Indeno(1,2,3-cd)pyrene  
 Scan Number                            : 2083  
 Retention Time (minutes)            : 21.192  
 Quant Ion                                : 276.00  
 Area (flag)                             : 426280M  
 On-Column Amount (ng/ul)           : 0.4678  
 Integration start scan                : 2066                      Integration stop scan: 2086  
 Y at integration start                : 240                        Y at integration end: 240

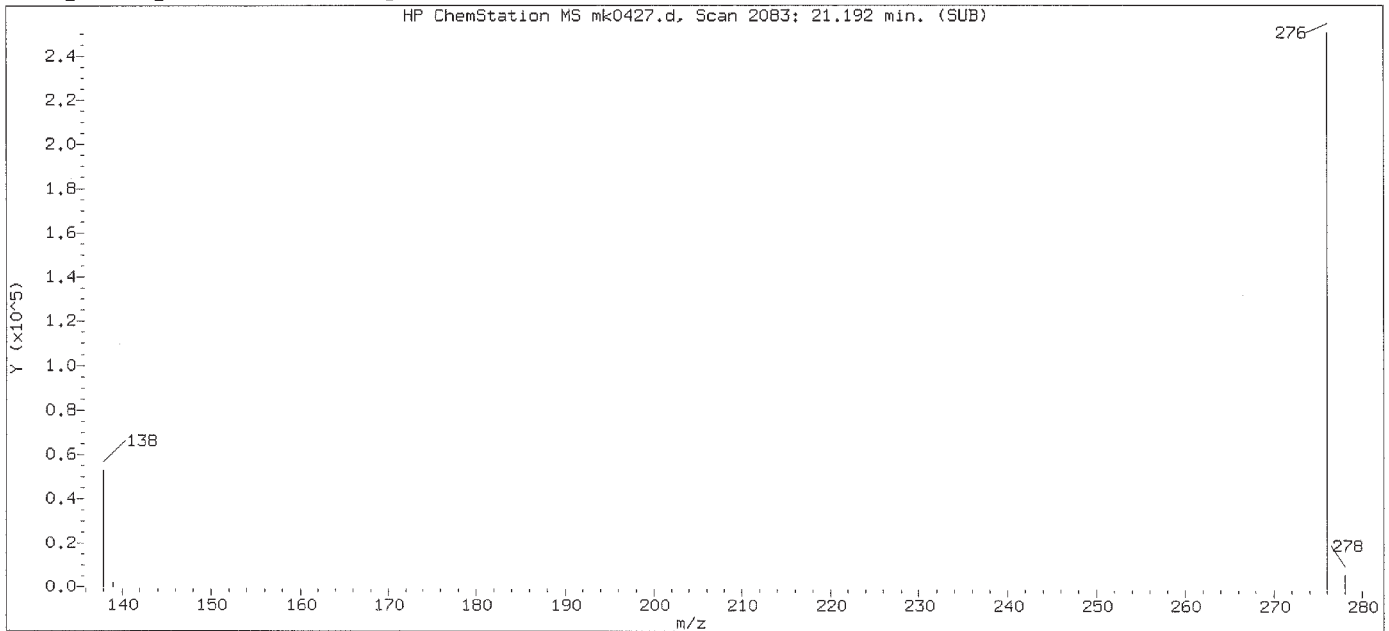
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Joseph M. Gambler  
 on 11/08/2018 at 04:07.  
 Target 3.5 esignature user ID: jmg00346

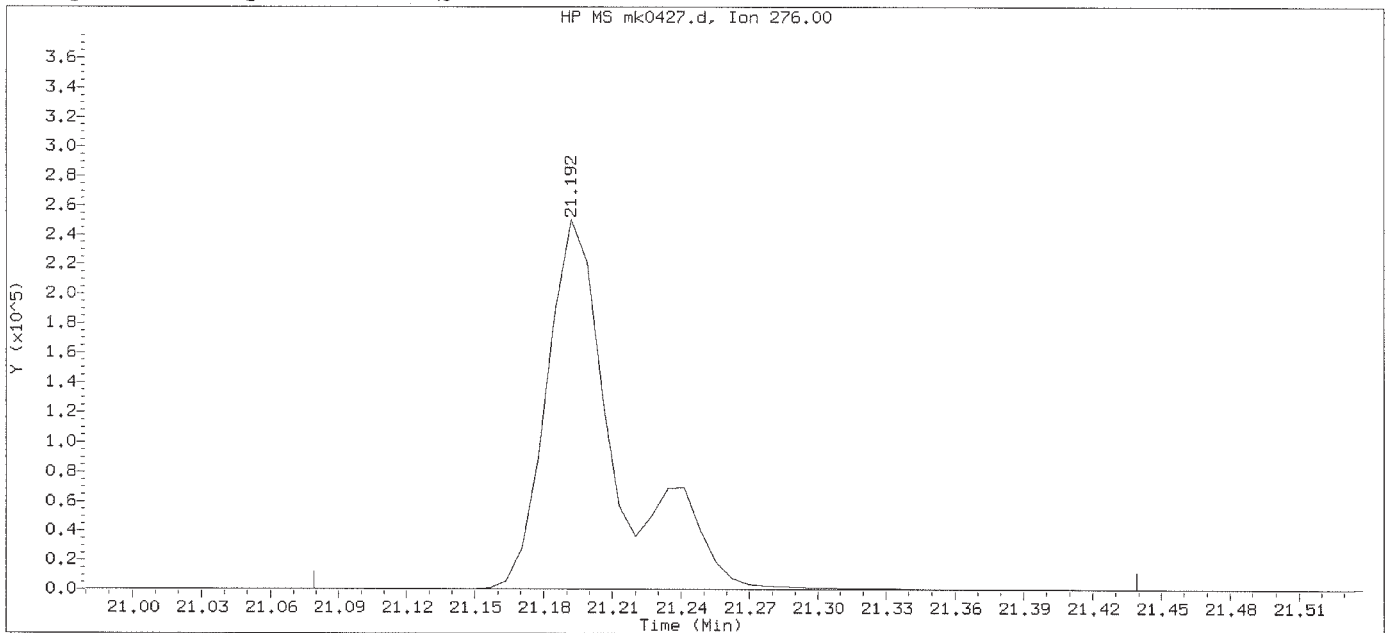
GC/MS audit/management approval: \_\_\_\_\_  
*Joseph M. Gambler*

NOV 18 2018

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0427.d  
Injection date and time: 07-NOV-2018 23:12

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 25784  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 23:41 Unknown

Sample Name: SECC0.5

Lab Sample ID: SECC0.5

Compound Number : 39  
Compound Name : Indeno(1,2,3-cd)pyrene  
Scan Number : 2083  
Retention Time (minutes) : 21.192  
Quant Ion : 276.00  
Area : 544746  
On-column Amount (ng/ul) : 0.5978  
Integration start scan : 2066 Integration stop scan: 2117  
Y at integration start : 240 Y at integration end: 240

Digitally signed by Joseph M. Gambler on 11/08/2018 at 04:07.  
Target 3.5 esignature user ID: jmg00346

**Raw QC Data**

**Semivolatiles by GC/MS-SIM**

SBLKWE309 Analysis Summary for GC/MS Semivolatiles SBLKWE309

Lancaster Laboratories, Inc.

Data file: /chem/HP21585.i/18nov07.b/mk0402.d Injection date and time: 07-NOV-2018 18:12  
 Data file Sample Info. Line: SBLKWE309;SBLKWE309;1;3;BLANK;; Instrument ID: HP21585.i Batch: 18309WAE  
 Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time (Last Method Edit): 07-NOV-2018 17:57  
 Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
 Sample Volume (Vo): 250 ml Volume Injected (Vi): 2 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
5) 1,4-Dichlorobenzene-d4	6.560( 0.000)	474	152	46872 ( -25)	0.25	
6) Naphthalene-d8	8.480( 0.000)	572	136	158787 ( -24)	0.25	
14) Acenaphthene-d10	11.264( 0.000)	767	164	65911 ( -25)	0.25	
20) Phenanthrene-d10	13.175( 0.000)	987	188	115997 ( -34)	0.25	
29) Chrysene-d12	17.146( 0.000)	1549	240	79524 ( -34)	0.25	
38) Perylene-d12	19.585( 0.000)	1867	264	76120 ( -31)	0.25	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
10) 1-Methylnaphthalene-d10	(2)	9.703( 0.000)	152	59388	0.206	82%
24) Fluoranthene-d10	(4)	14.789( 0.000)	212	124347	0.273	109%
36) Benzo(a)pyrene-d12	(6)	19.455( 0.000)	264	70201	0.251	100%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
1) 1,4-Dioxane	(1)			Not Detected					0.01
4) bis(2-Chloroethyl)ether	(2)			Not Detected					0.005
7) Naphthalene	(2)			Not Detected					0.008
13) Acenaphthylene	(3)			Not Detected					0.003
15) Acenaphthene	(3)			Not Detected					0.003
18) Fluorene	(3)			Not Detected					0.003
19) Hexachlorobenzene	(4)			Not Detected					0.003
21) Phenanthrene	(4)			Not Detected					0.008
22) Anthracene	(4)			Not Detected					0.003
23) Di-n-butylphthalate	(4)			Not Detected					0.05
25) Fluoranthene	(4)			Not Detected					0.003
26) Pyrene	(5)			Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.346(-0.000)	149	34148	0.076	0.30			0.02
28) Benzo(a)anthracene	(5)			Not Detected					0.003
30) Chrysene	(5)			Not Detected					0.003
33) Benzo(b)fluoranthene	(6)			Not Detected					0.003
34) Benzo(k)fluoranthene	(6)			Not Detected					0.003
37) Benzo(a)pyrene	(6)			Not Detected					0.003
39) Indeno(1,2,3-cd)pyrene	(6)			Not Detected					0.003
40) Dibenz(a,h)anthracene	(6)			Not Detected					0.005
41) Benzo(g,h,i)perylene	(6)			Not Detected					0.003

SBLKWE309 Analysis Summary for GC/MS Semivolatiles SBLKWE309

Data file: /chem/HP21585.i/18nov07.b/mk0402.d Injection date and time: 07-NOV-2018 18:12  
Data file Sample Info. Line: SBLKWE309;SBLKWE309;1;3;BLANK;;; Instrument ID: HP21585.i Batch: 18309WAE  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
Calibration date and time (Last Method Edit): 07-NOV-2018 17:57  
Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
Sample Volume (Vo): 250 ml Volume Injected (Vi): 2 ul

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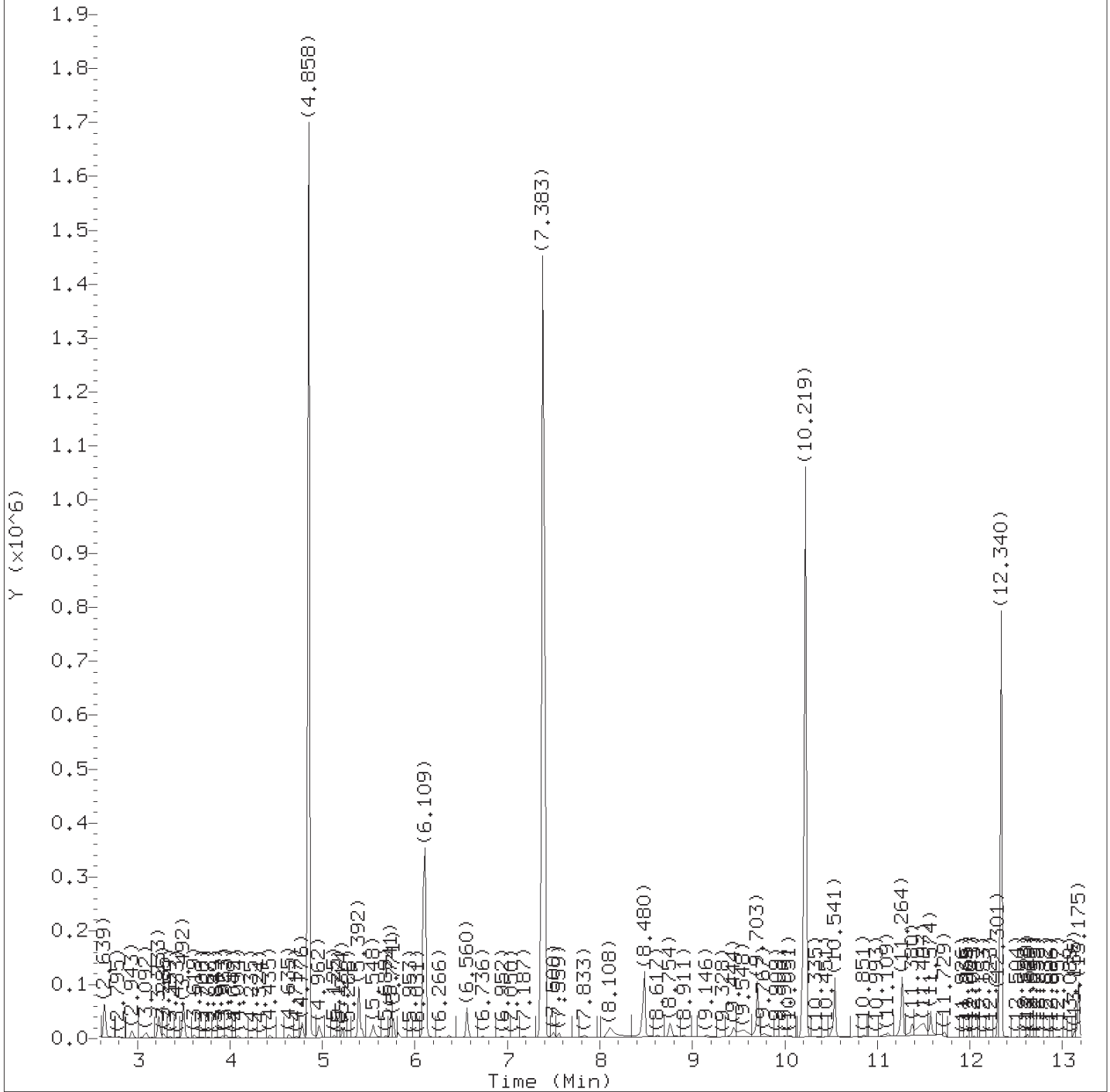
THIS SPACE  
WAS LEFT  
BLANK INTENTIONALLY

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Total number of targets = 21

Digitally signed by Joseph M. Gambler on 11/08/2018 at 04:19. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34. PARALLAX ID: ild00415



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0402.d  
Injection date and time: 07-NOV-2018 18:12

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 07-NOV-2018 17:57

Sublist used: 309WAE

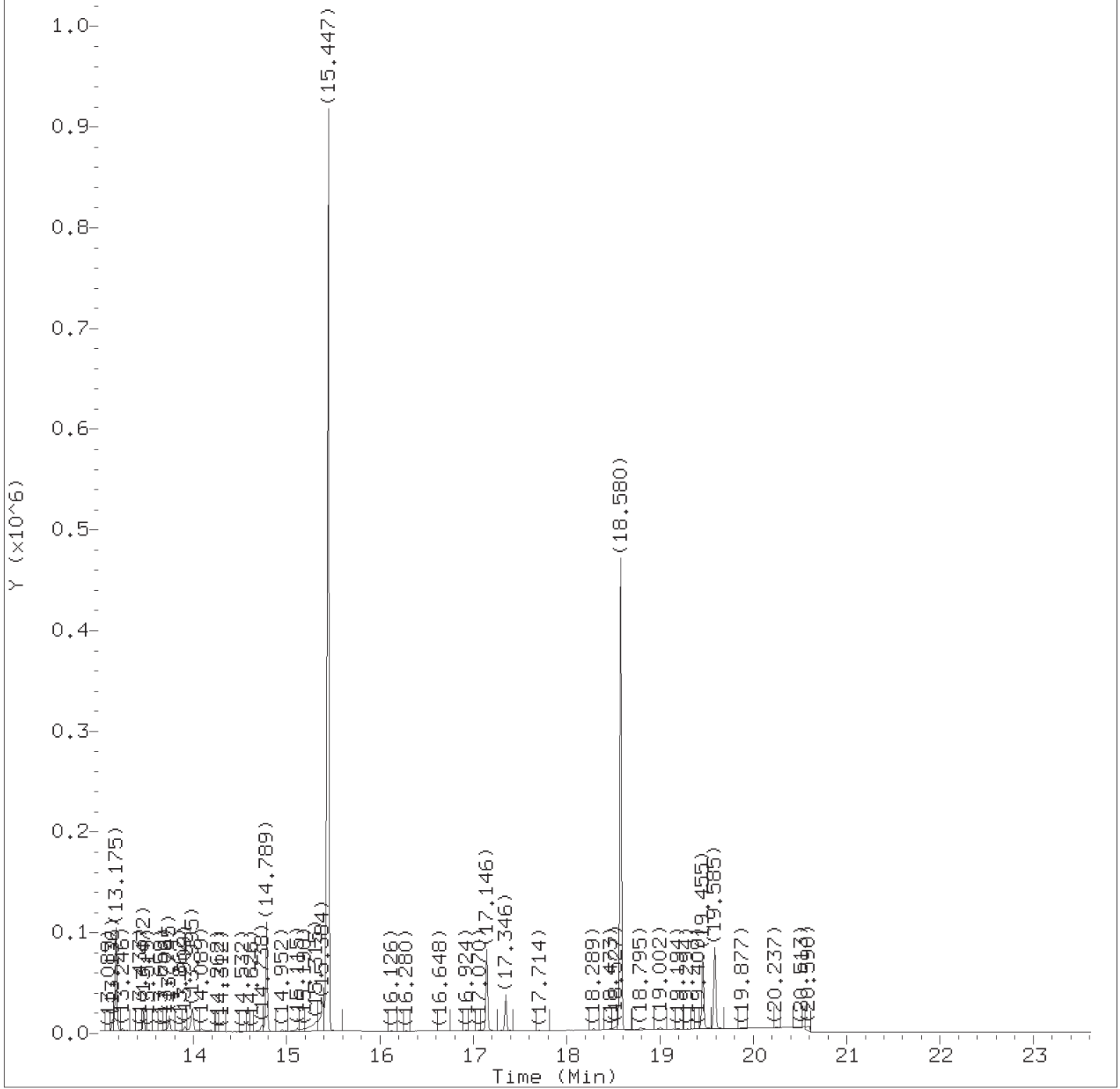
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: SBLKWE309

Lab Sample ID: SBLKWE309

Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.

Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0402.d  
Injection date and time: 07-NOV-2018 18:12

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: SBLKWE309

Lab Sample ID: SBLKWE309

Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.

Target 3.5 esignature user ID: jmg00346



Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0402.d  
 Injection date and time: 07-NOV-2018 18:12

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

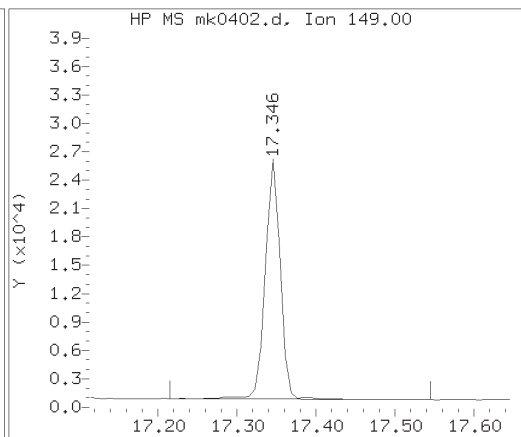
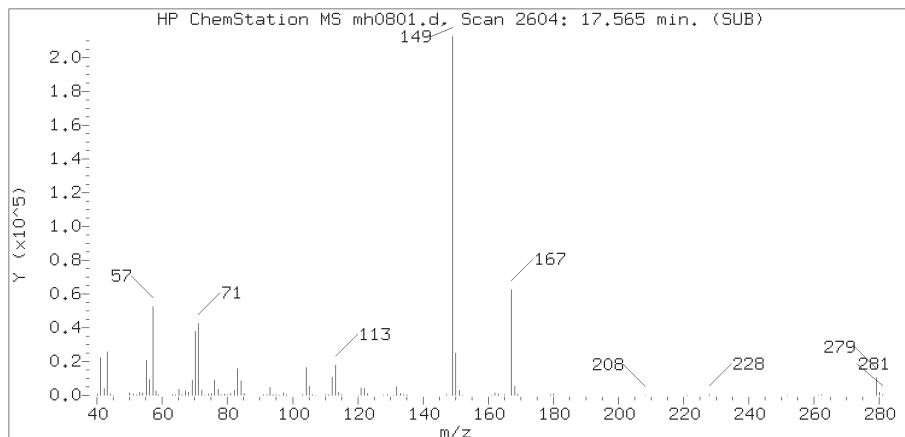
Sample Name: SBLKWE309

Lab Sample ID: SBLKWE309

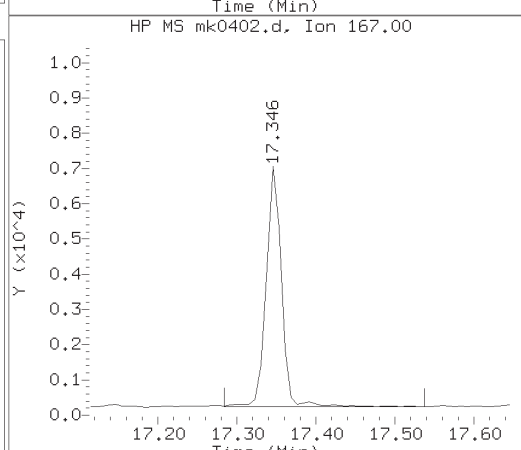
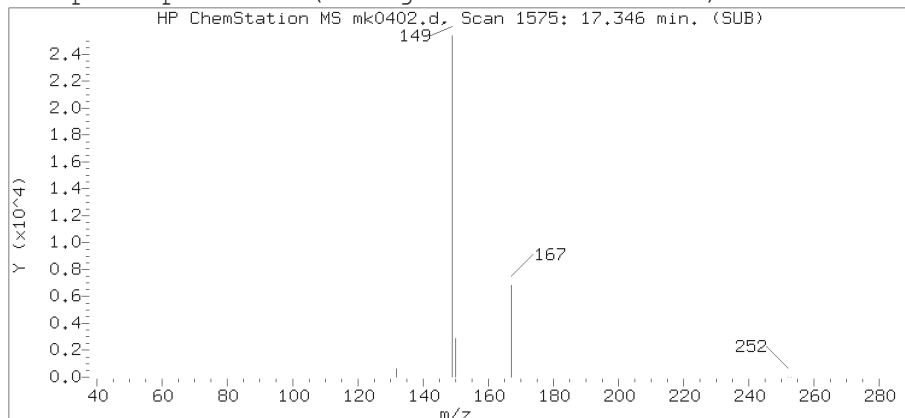
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
5) *1,4-Dichlorobenzene-d4	(1)	6.560	152	46872	0.250
6) *Naphthalene-d8	(2)	8.480	136	158787	0.250
10) \$1-Methylnaphthalene-d10	(2)	9.703	152	59388	0.206
14) *Acenaphthene-d10	(3)	11.264	164	65911	0.250
20) *Phenanthrene-d10	(4)	13.175	188	115997	0.250
24) \$Fluoranthene-d10	(4)	14.789	212	124347	0.273
29) *Chrysene-d12	(5)	17.146	240	79524	0.250
31) bis(2-Ethylhexyl)phthalate	(5)	17.346	149	34148	0.076
36) \$Benzo(a)pyrene-d12	(6)	19.455	264	70201	0.251
38) *Perylene-d12	(6)	19.585	264	76120	0.250

\* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

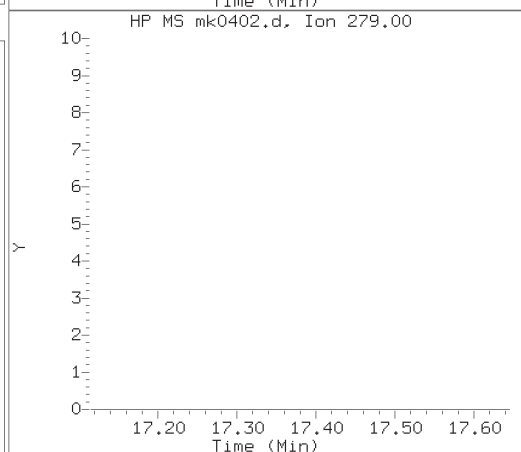
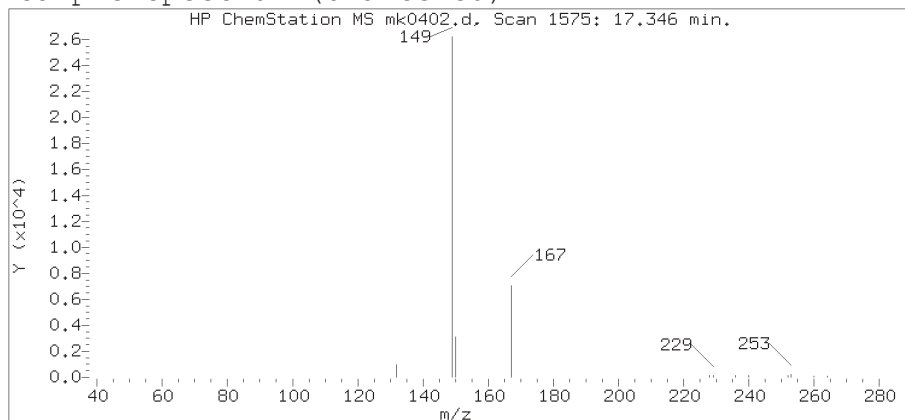
Reference Standard Spectrum for bis(2-Ethylhexyl)phthalate



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP21585.i/18nov07.b/mk0402.d  
 Injection date and time: 07-NOV-2018 18:12

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: SBLKWE309

Lab Sample ID: SBLKWE309

Compound Number : 31  
 Compound Name : bis(2-Ethylhexyl)phthalate  
 Scan Number : 1575  
 Retention Time (minutes) : 17.346  
 Relative Retention Time :-0.00000  
 Quant Ion : 149.00  
 Area (flag) : 34148  
 On-column Amount (ng/ul) : 0.0760

Data file: /chem/HP21585.i/18nov07.b/mk0403.d

Injection date and time: 07-NOV-2018 18:41

Data file Sample Info. Line: 309WELCS;309WELCS;1;3;LCS;;;

Instrument ID: HP21585.i Batch: 18309WAE

Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE

Calibration date and time (Last Method Edit): 07-NOV-2018 17:57

Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1  
Sample Volume (Vo): 250 mlUnit Correction Factor (Uf): 1  
Volume Injected (Vi): 2 ul

Final Extract Volume (Vt): 1000 ul

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
5) 1,4-Dichlorobenzene-d4	6.560(-0.001)	474	152	47269 (-25)	0.25	
6) Naphthalene-d8	8.480(-0.001)	572	136	167933 (-19)	0.25	
14) Acenaphthene-d10	11.265(-0.001)	767	164	72691 (-17)	0.25	
20) Phenanthrene-d10	13.168( 0.007)	986	188	141660M (-19)	0.25	
29) Chrysene-d12	17.147(-0.001)	1549	240	89480 (-25)	0.25	
38) Perylene-d12	19.585(-0.001)	1867	264	83173 (-25)	0.25	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
10) 1-Methylnaphthalene-d10	(2)	9.703( 0.000)	152	60551	0.198	79%
24) Fluoranthene-d10	(4)	14.783( 0.000)	212	131770	0.237	95%
36) Benzo(a)pyrene-d12	(6)	19.455( 0.000)	264	75290	0.246	98%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
1) 1,4-Dioxane	(1)	2.869(-0.014)	88	23060A	0.176	0.70			0.01
4) bis(2-Chloroethyl) ether	(2)	6.208(-0.000)	93	67986M	0.265	1.06			0.005
7) Naphthalene	(2)	8.500(-0.000)	128	158386	0.205	0.82			0.008
13) Acenaphthylene	(3)	11.032(-0.000)	152	170993	0.223	0.89			0.003
15) Acenaphthene	(3)	11.316(-0.000)	154	107747	0.232	0.93			0.003
18) Fluorene	(3)	12.036( 0.000)	166	117276	0.216	0.87			0.003
19) Hexachlorobenzene	(4)	12.699(-0.000)	284	29501	0.185	0.74			0.003
21) Phenanthrene	(4)	13.199(-0.000)	178	201735	0.265	1.06			0.008
22) Anthracene	(4)	13.261(-0.000)	178	172929	0.232	0.93			0.003
23) Di-n-butylphthalate	(4)	13.987(-0.000)	149	217771M	0.261	1.05			0.05
25) Fluoranthene	(4)	14.814(-0.000)	202	205320	0.242	0.97			0.003
26) Pyrene	(5)	15.146(-0.000)	202	213425	0.262	1.05			0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.346(-0.000)	149	148244	0.293	1.17	0.304	B	0.02
28) Benzo(a)anthracene	(5)	17.124( 0.000)	228	191754	0.273	1.09			0.003
30) Chrysene	(5)	17.185( 0.000)	228	192598	0.271	1.08			0.003
33) Benzo(b)fluoranthene	(6)	18.972(-0.000)	252	199896	0.304	1.21			0.003
34) Benzo(k)fluoranthene	(6)	19.018(-0.000)	252	189250	0.288	1.15			0.003
37) Benzo(a)pyrene	(6)	19.493(-0.000)	252	176282	0.279	1.12			0.003
39) Indeno(1,2,3-cd)pyrene	(6)	21.185( 0.000)	276	170743M	0.298	1.19			0.003
40) Dibenz(a,h)anthracene	(6)	21.235( 0.000)	278	166141	0.284	1.13			0.005
41) Benzo(g,h,i)perylene	(6)	21.581( 0.000)	276	185049	0.279	1.12			0.003

A = User selected an alternate peak. M = Compound was manually integrated. B = Compound detected in referenced method blank.

309WELCS

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Semivolatiles

309WELCS

Data file: /chem/HP21585.i/18nov07.b/mk0403.d

Injection date and time: 07-NOV-2018 18:41

Data file Sample Info. Line: 309WELCS;309WELCS;1;3;LCS;;;

Instrument ID: HP21585.i Batch: 18309WAE

Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE

Calibration date and time (Last Method Edit): 07-NOV-2018 17:57

Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1

Unit Correction Factor (Uf): 1

Final Extract Volume (Vt): 1000 ul

Sample Volume (Vo): 250 ml

Volume Injected (Vi): 2 ul

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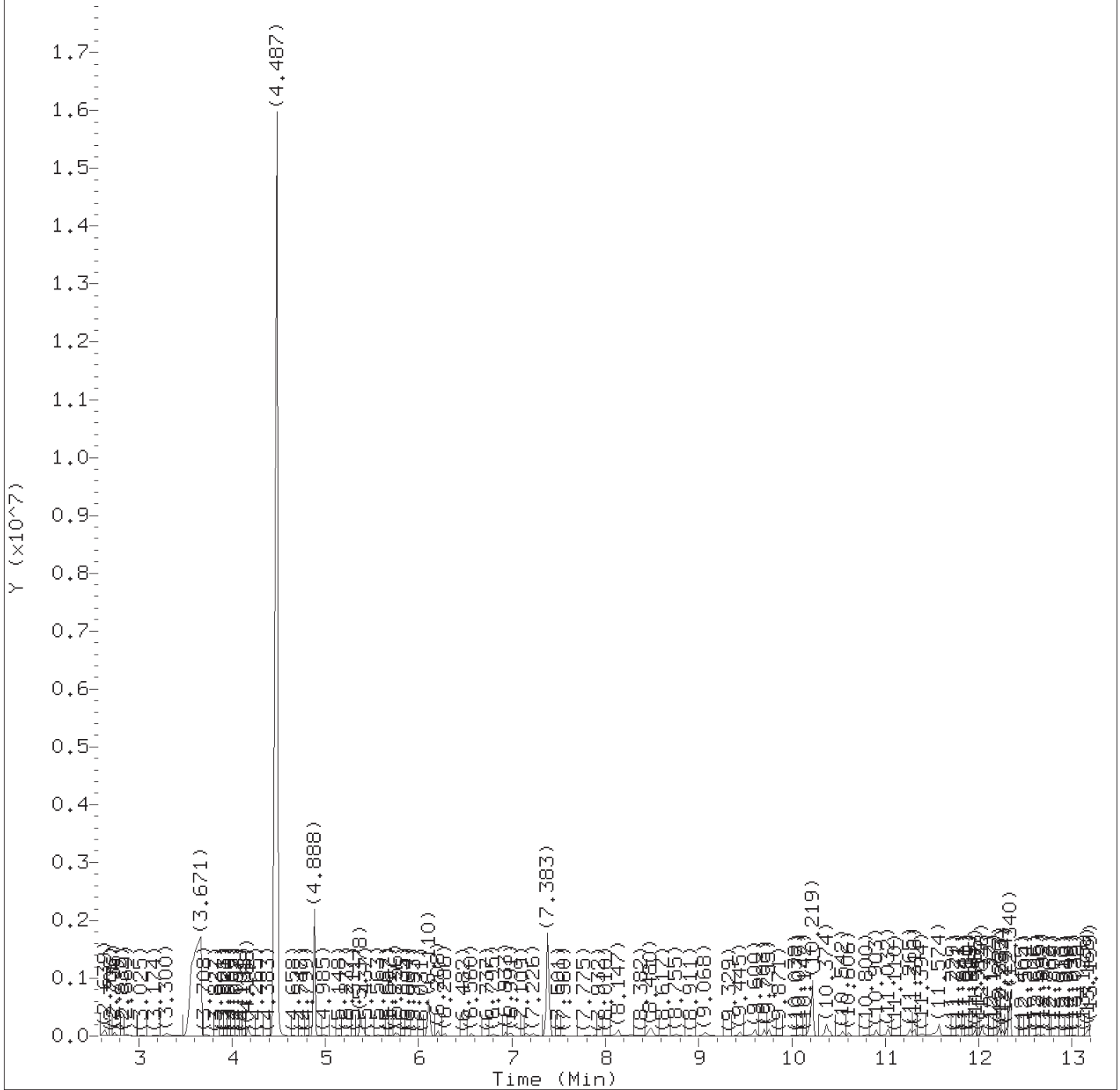
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WAS LEFT  
BLANK INTENTIONALLY

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Total number of targets = 21

Digitally signed by Joseph M. Gambler on 11/08/2018 at 04:19. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34. PARALLAX ID: ild00415



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0403.d  
Injection date and time: 07-NOV-2018 18:41

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 07-NOV-2018 17:57

Sublist used: 309WAE

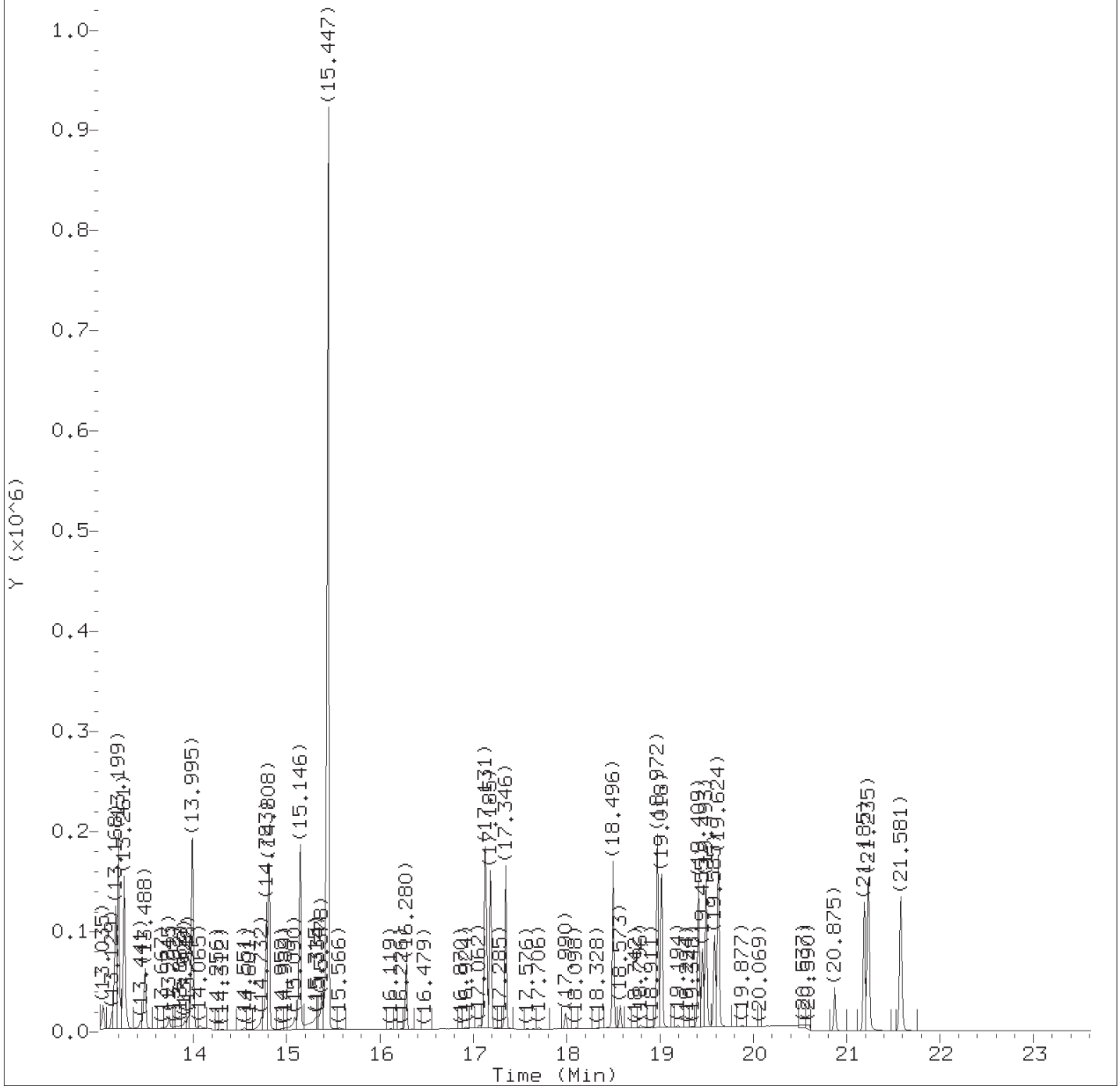
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCS

Lab Sample ID: 309WELCS

Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.

Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0403.d  
Injection date and time: 07-NOV-2018 18:41

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 07-NOV-2018 17:57

Sublist used: 309WAE

Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCS

Lab Sample ID: 309WELCS

Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.

Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0403.d  
 Injection date and time: 07-NOV-2018 18:41

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCS

Lab Sample ID: 309WELCS

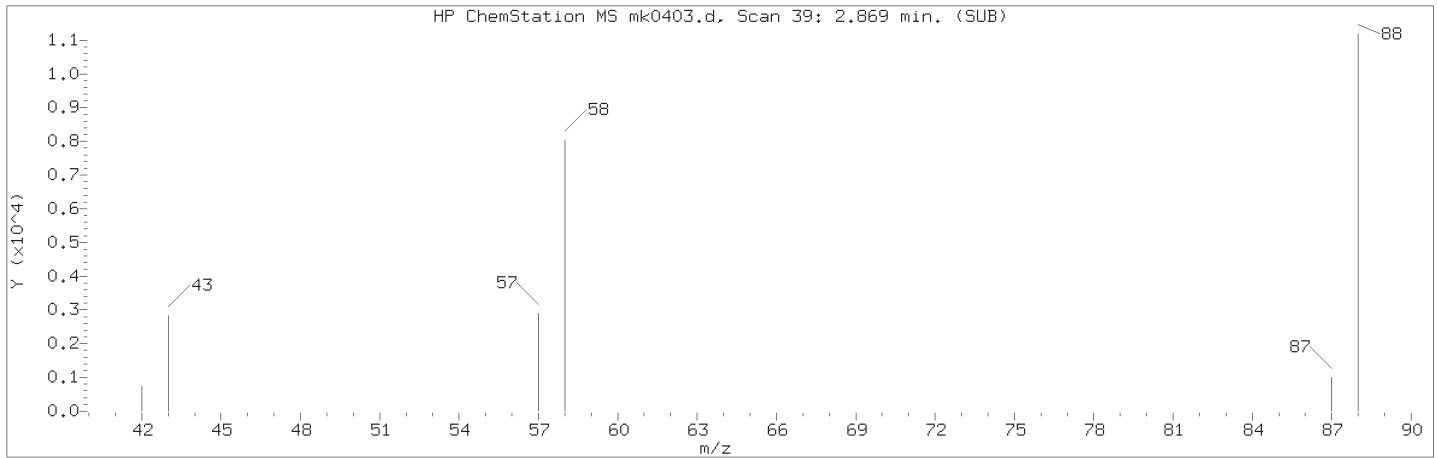
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.869	88	23060A	0.176
4) bis(2-Chloroethyl)ether	(2)	6.208	93	67986M	0.265
5)*1,4-Dichlorobenzene-d4	(1)	6.560	152	47269	0.250
6)*Naphthalene-d8	(2)	8.480	136	167933	0.250
7) Naphthalene	(2)	8.500	128	158386	0.205
10)\$1-Methylnaphthalene-d10	(2)	9.703	152	60551	0.198
13) Acenaphthylene	(3)	11.032	152	170993	0.223
14)*Acenaphthene-d10	(3)	11.265	164	72691	0.250
15) Acenaphthene	(3)	11.316	154	107747	0.232
18) Fluorene	(3)	12.036	166	117276	0.216
19) Hexachlorobenzene	(4)	12.699	284	29501	0.185
20)*Phenanthrene-d10	(4)	13.168	188	141660M	0.250
21) Phenanthrene	(4)	13.199	178	201735	0.265
22) Anthracene	(4)	13.261	178	172929	0.232
23) Di-n-butylphthalate	(4)	13.987	149	217771M	0.261
24)\$Fluoranthene-d10	(4)	14.783	212	131770	0.237
25) Fluoranthene	(4)	14.814	202	205320	0.242
26) Pyrene	(5)	15.146	202	213425	0.262
28) Benzo(a)anthracene	(5)	17.124	228	191754	0.273
29)*Chrysene-d12	(5)	17.147	240	89480	0.250
30) Chrysene	(5)	17.185	228	192598	0.271
31) bis(2-Ethylhexyl)phthalate	(5)	17.346	149	148244	0.293
33) Benzo(b)fluoranthene	(6)	18.972	252	199896	0.304
34) Benzo(k)fluoranthene	(6)	19.018	252	189250	0.288
36)\$Benzo(a)pyrene-d12	(6)	19.455	264	75290	0.246
37) Benzo(a)pyrene	(6)	19.493	252	176282	0.279
38)*Perylene-d12	(6)	19.585	264	83173	0.250
39) Indeno(1,2,3-cd)pyrene	(6)	21.185	276	170743M	0.298
40) Dibenz(a,h)anthracene	(6)	21.235	278	166141	0.284
41) Benzo(g,h,i)perylene	(6)	21.581	276	185049	0.279

M = Compound was manually integrated.  
 A = User selected an alternate hit.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

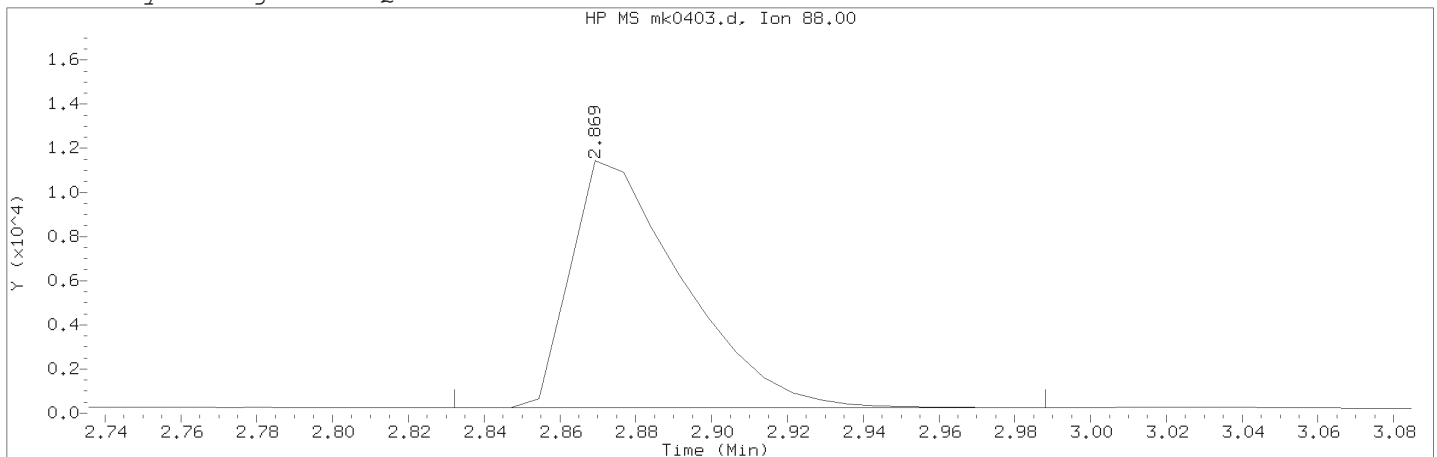
Digitally signed by Joseph M. Gambler  
 on 11/08/2018 at 04:19.

Target 3.5 esignature user ID: jmg00346  
 TID15 Page 1055 of 3058

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 18:41                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCS    Lab Sample ID: 309WELCS

Compound Number    : 1  
Compound Name    : 1,4-Dioxane  
Scan Number    : 39  
Retention Time (minutes)                                   : 2.869  
Quant Ion    : 88.00  
Area (flag)    : 23060A  
On-Column Amount (ng/ul)                                 : 0.1758  
Integration start scan                                      : 33                      Integration stop scan: 54  
Y at integration start                                      : 236                    Y at integration end: 236

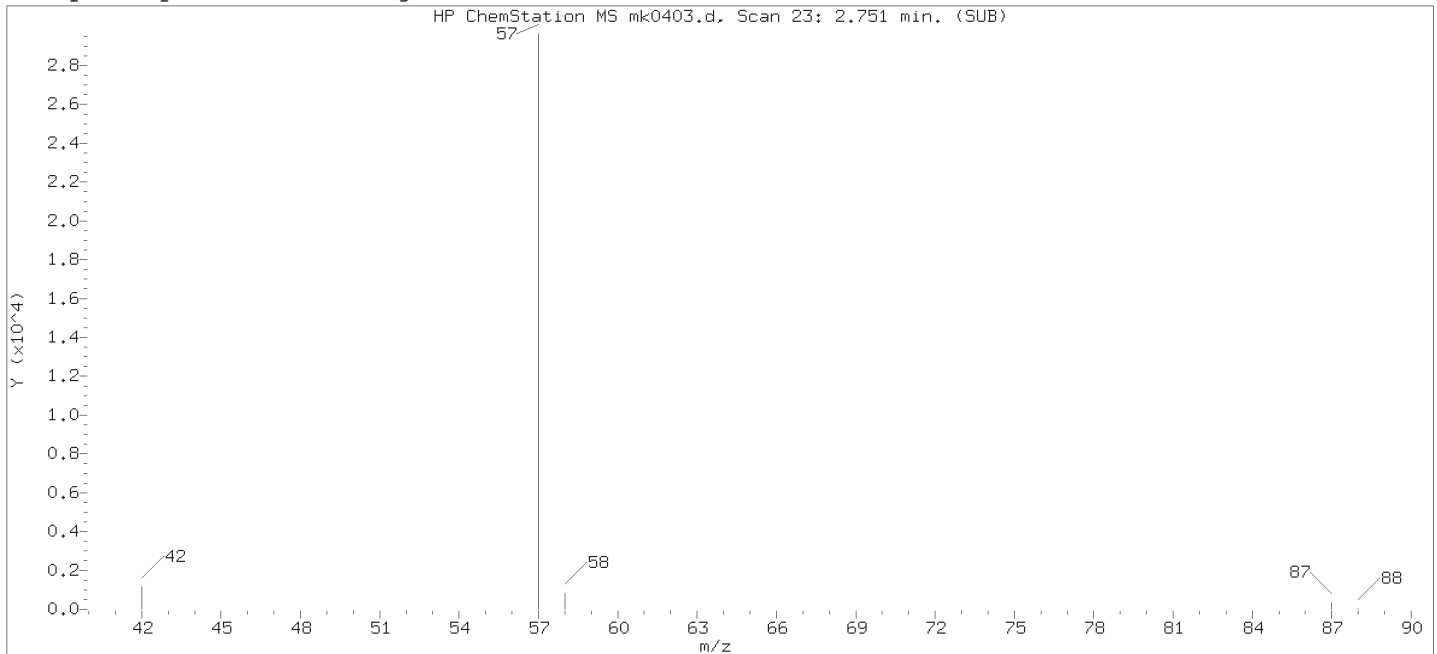
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

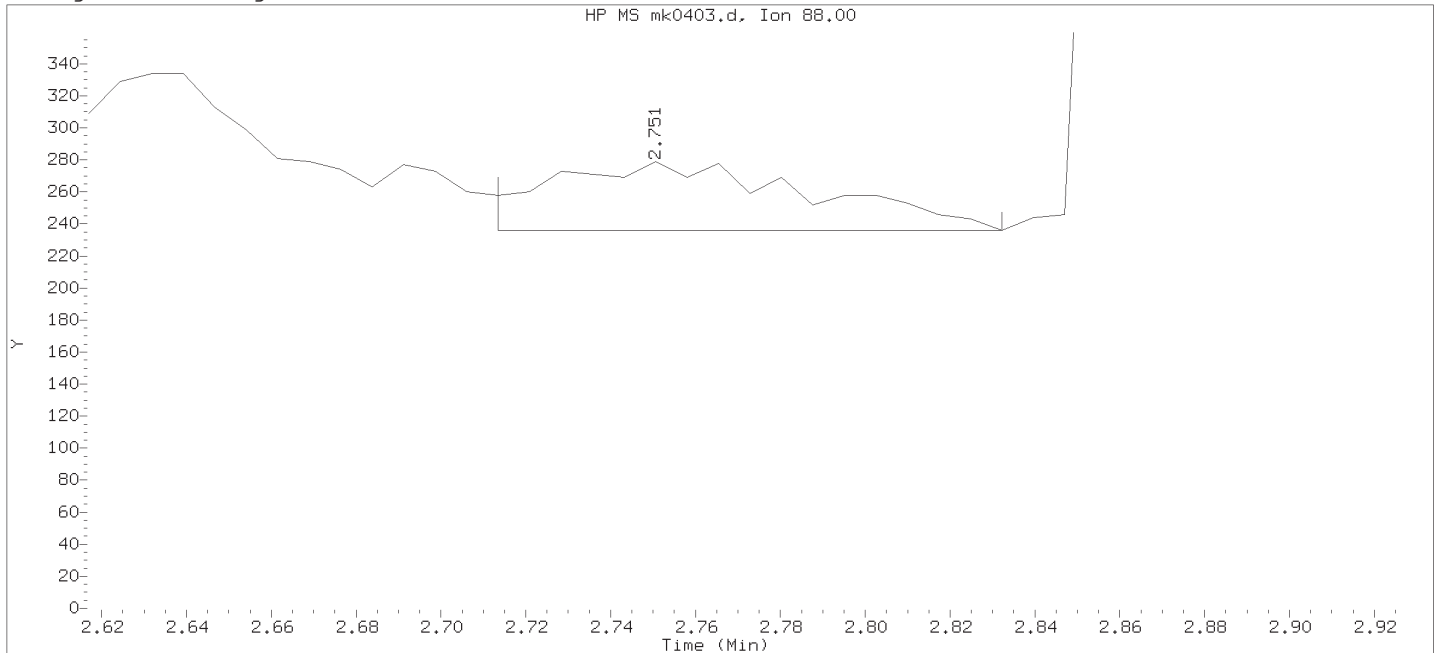
Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d  
Injection date and time: 07-NOV-2018 18:41

Instrument ID: HP21585.i  
Analyst ID: ceb05247

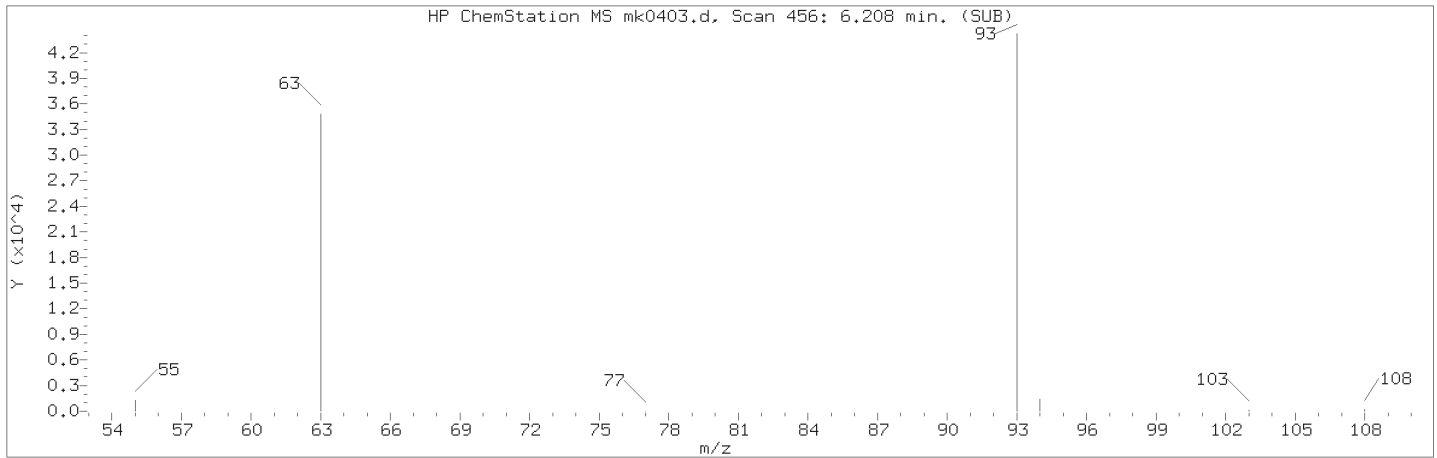
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 19:10 Unknown

Sample Name: 309WELCS

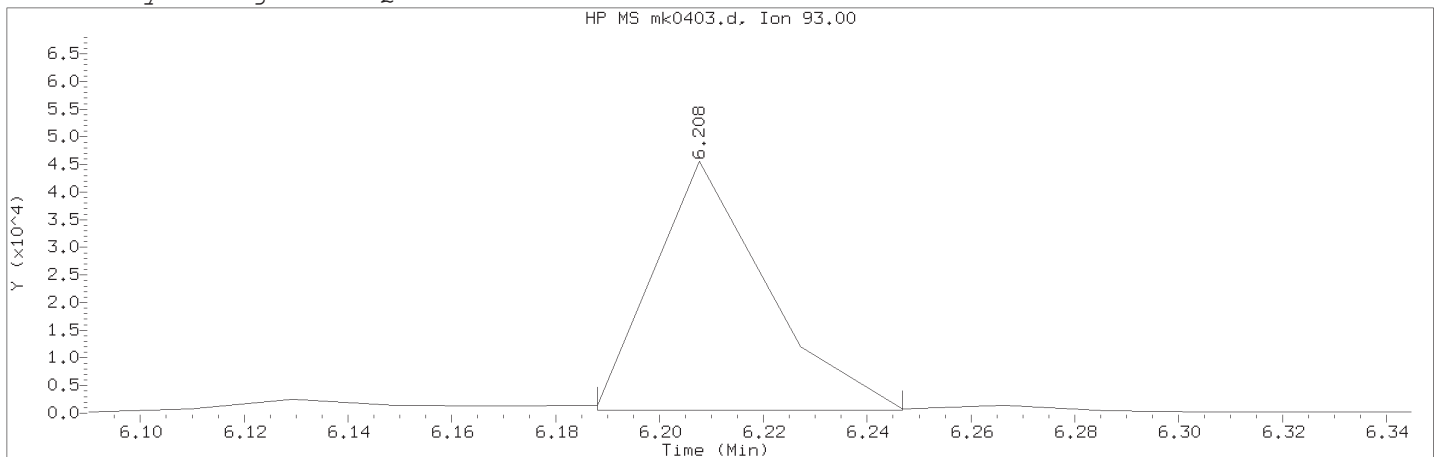
Lab Sample ID: 309WELCS

Compound Number : 1  
Compound Name : 1,4-Dioxane  
Scan Number : 23  
Retention Time (minutes) : 2.751  
Quant Ion : 88.00  
Area : 181  
On-column Amount (ng/ul) : 0.0014  
Integration start scan : 17 Integration stop scan: 33  
Y at integration start : 236 Y at integration end: 236

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 18:41                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCS    Lab Sample ID: 309WELCS

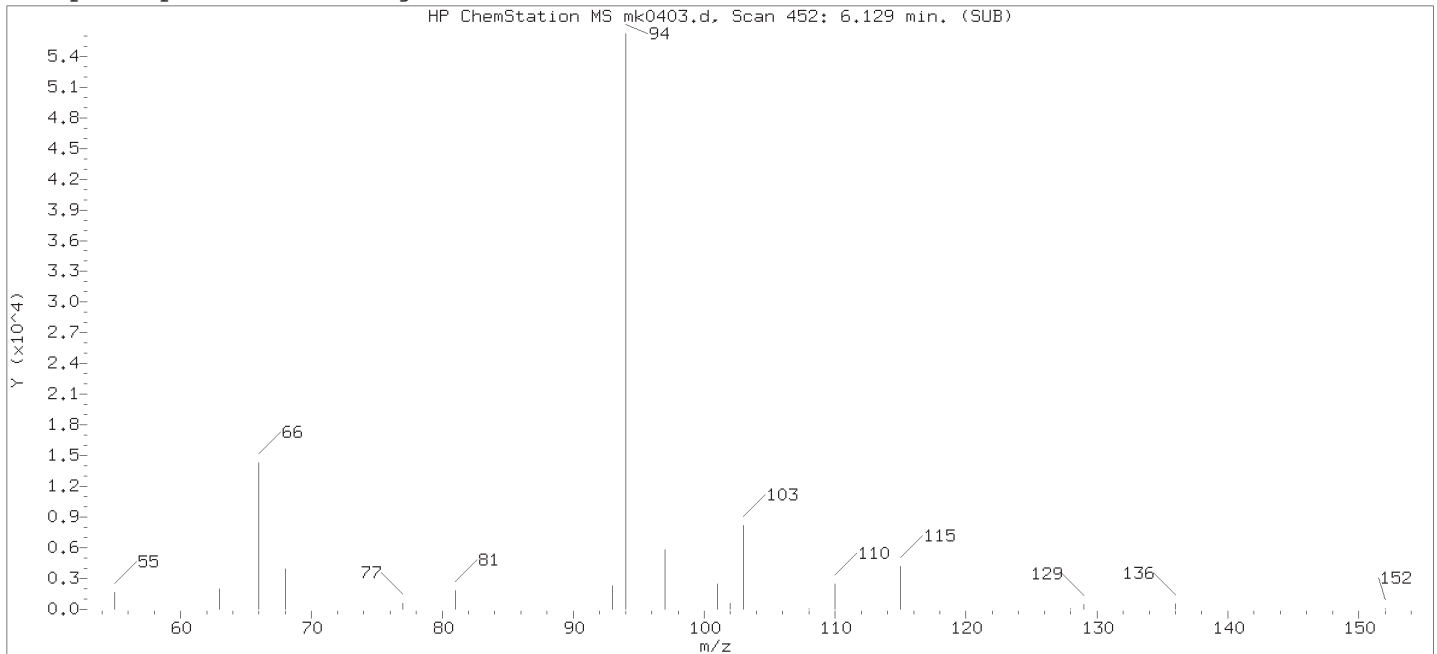
Compound Number    : 4  
Compound Name     : bis(2-Chloroethyl)ether  
Scan Number    : 456  
Retention Time (minutes)                                   : 6.208  
Quant Ion    : 93.00  
Area (flag)     : 67986M  
On-Column Amount (ng/ul)                                 : 0.2646  
Integration start scan                                      : 454                      Integration stop scan: 457  
Y at integration start                                      : 502                      Y at integration end: 502

Reason for manual integration: improper integration

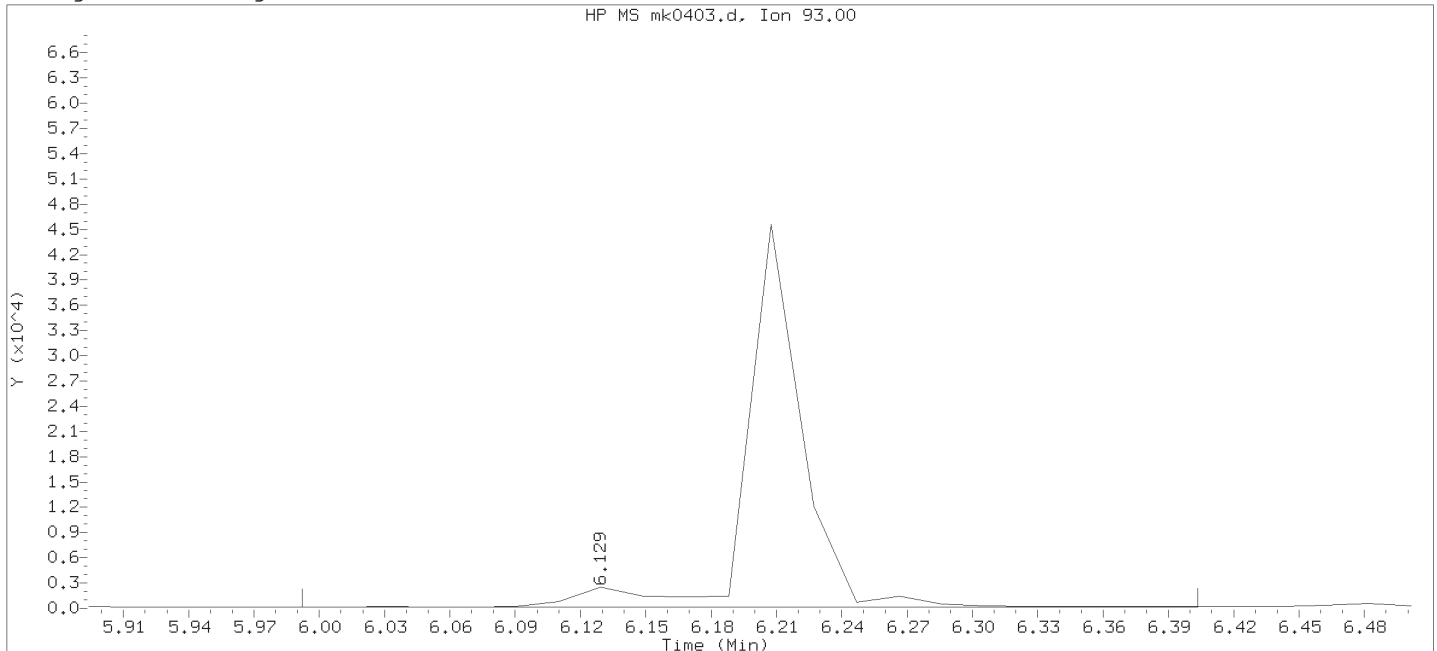
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



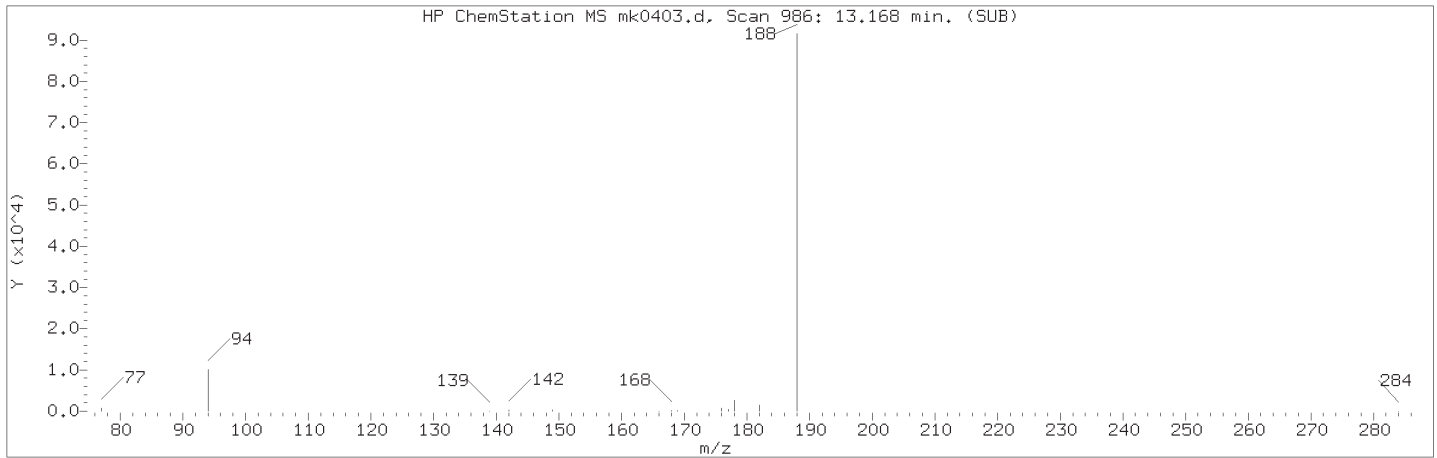
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Injection date and time: 07-NOV-2018 18:41                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 19:10 Unknown

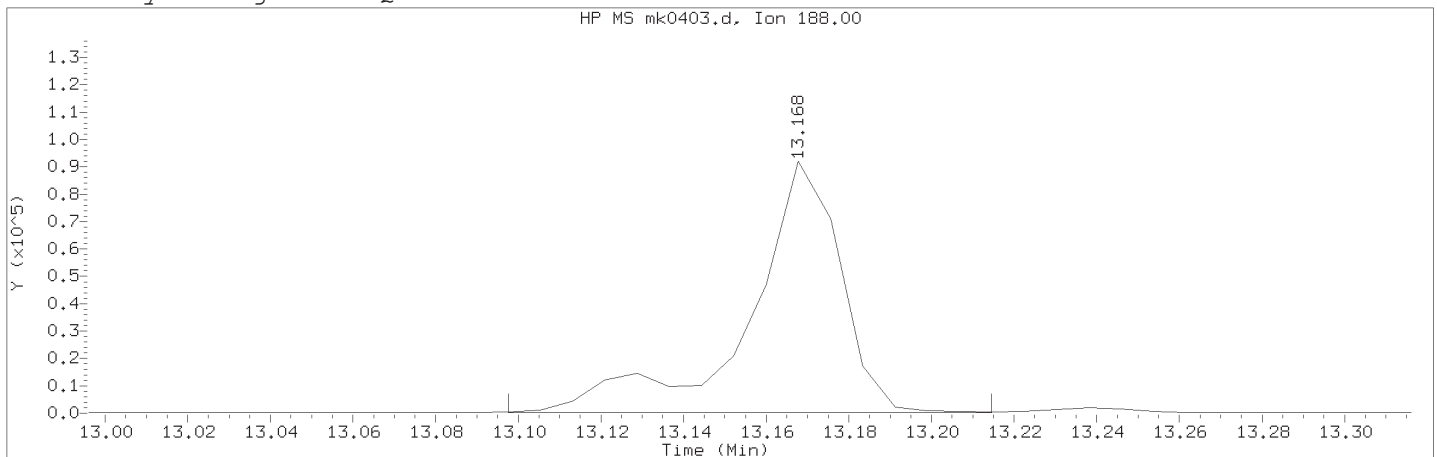
Sample Name: 309WELCS    Lab Sample ID: 309WELCS

Compound Number    : 4  
Compound Name    : bis(2-Chloroethyl)ether  
Scan Number    : 452  
Retention Time (minutes)                                   : 6.129  
Quant Ion    : 93.00  
Area     : 78548  
On-column Amount (ng/ul)                                 : 0.3057  
Integration start scan                                      : 444                      Integration stop scan: 465  
Y at integration start                                      : 139                      Y at integration end: 166

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 18:41                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCS    Lab Sample ID: 309WELCS

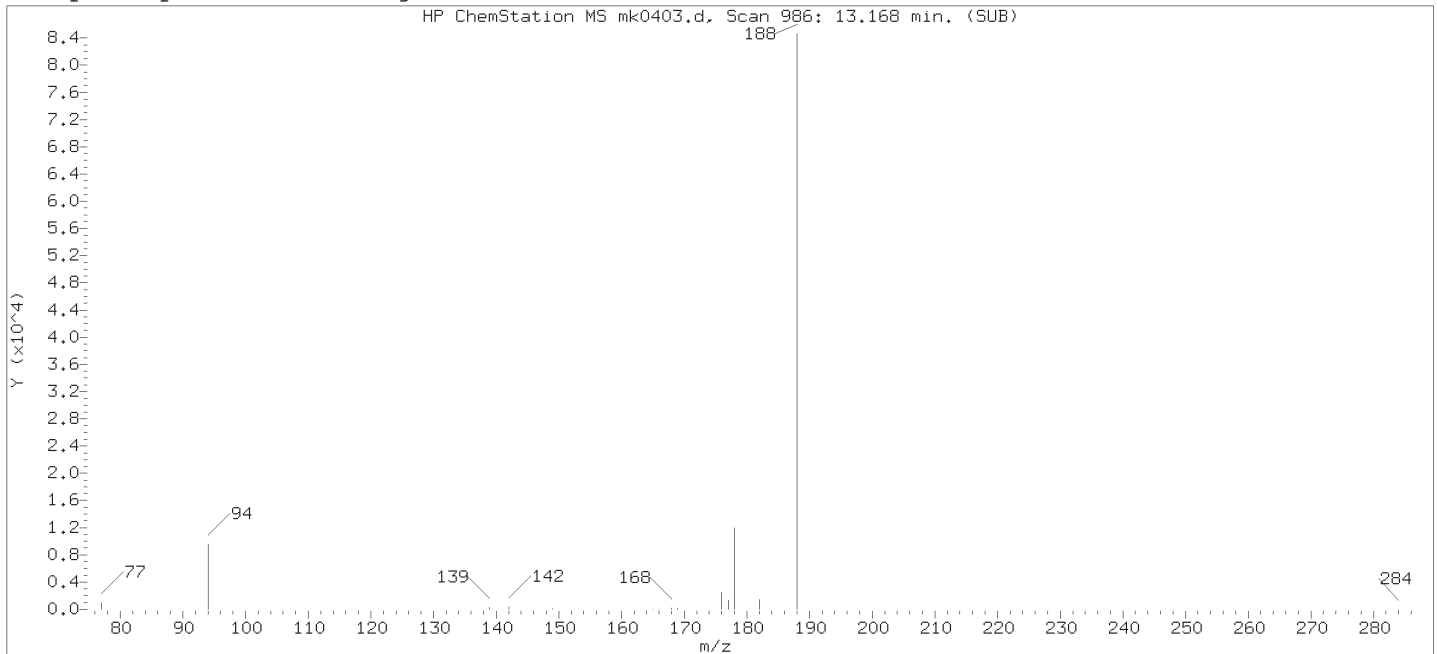
Compound Number                      : 20  
Compound Name                         : Phenanthrene-d10  
Scan Number                            : 986  
Retention Time (minutes)             : 13.168  
Quant Ion                                : 188.00  
Area (flag)                             : 141660M  
On-Column Amount (ng/ul)            : 0.2500  
Integration start scan                : 976                      Integration stop scan: 991  
Y at integration start                : 164                      Y at integration end: 164

Reason for manual integration: improper integration

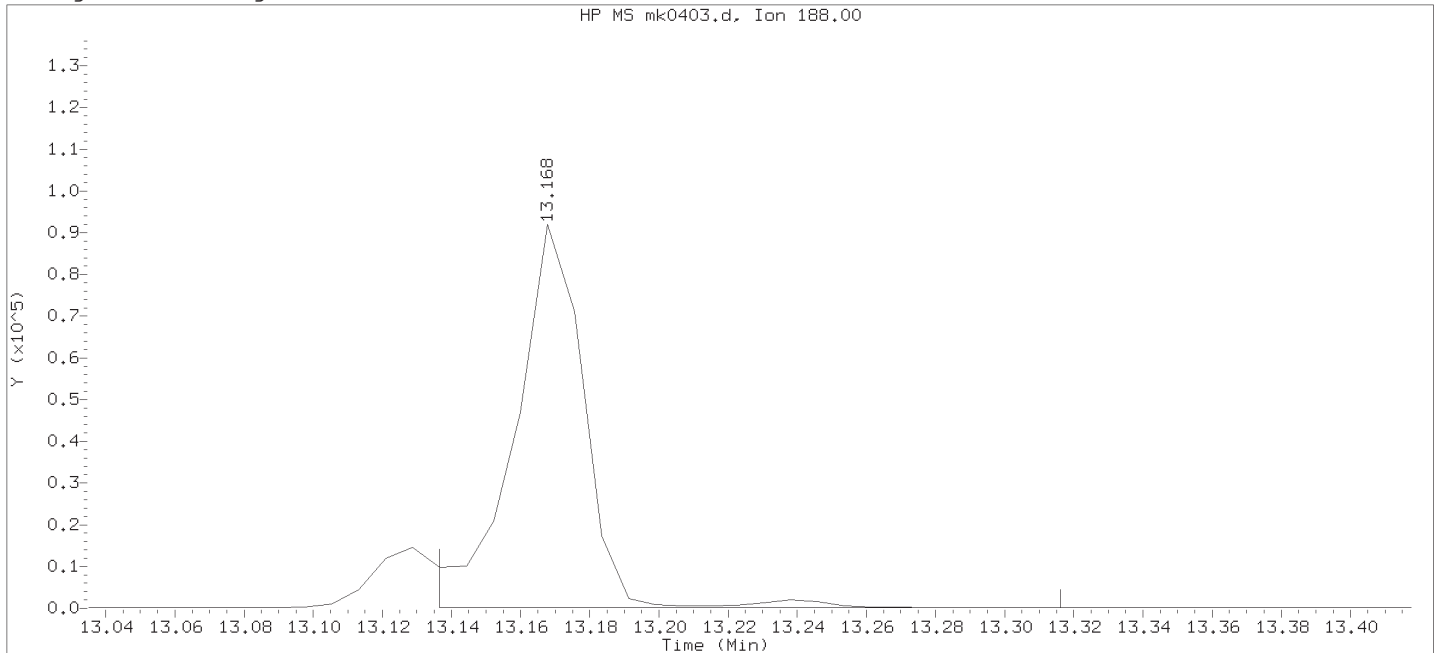
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d  
 Injection date and time: 07-NOV-2018 18:41

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

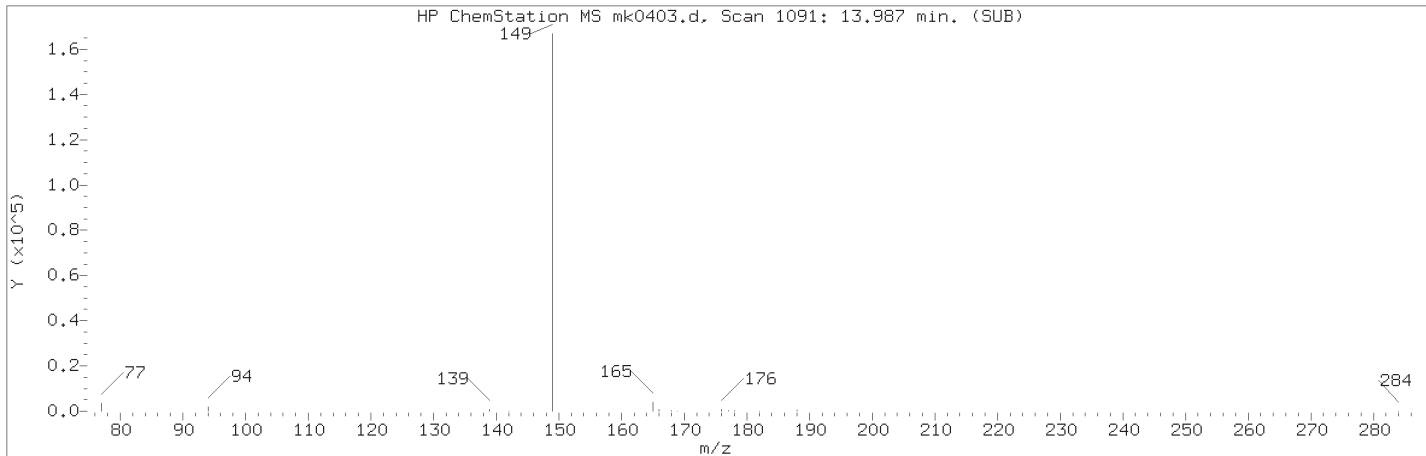
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 19:10 Unknown

Sample Name: 309WELCS

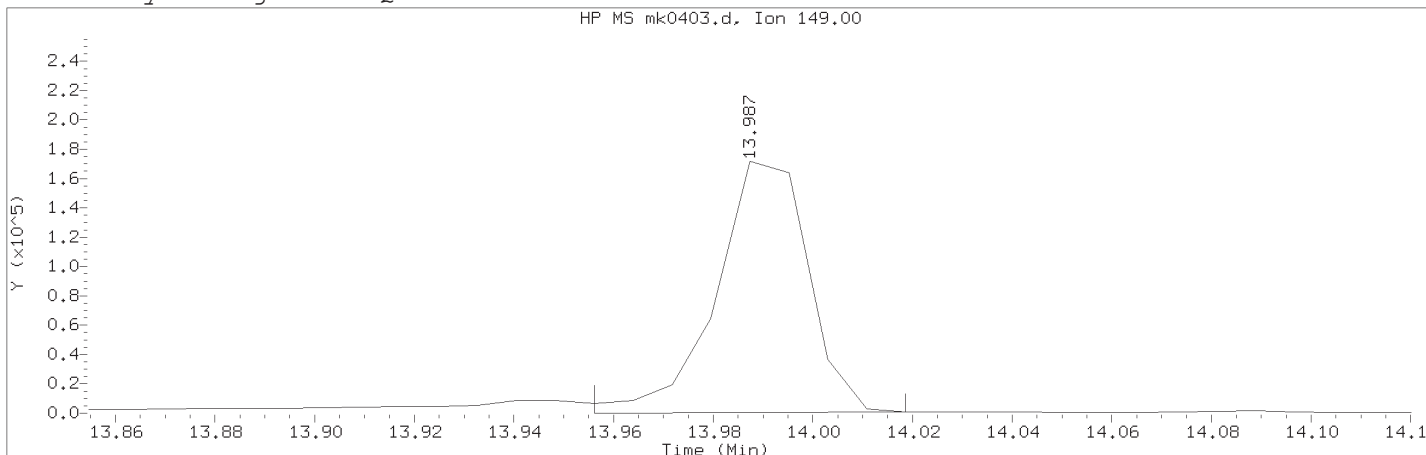
Lab Sample ID: 309WELCS

Compound Number : 20  
 Compound Name : Phenanthrene-d10  
 Scan Number : 986  
 Retention Time (minutes) : 13.168  
 Quant Ion : 188.00  
 Area : 127663  
 On-column Amount (ng/ul) : 0.2500  
 Integration start scan : 981 Integration stop scan: 1004  
 Y at integration start : 131 Y at integration end: 131

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 18:41                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCS    Lab Sample ID: 309WELCS

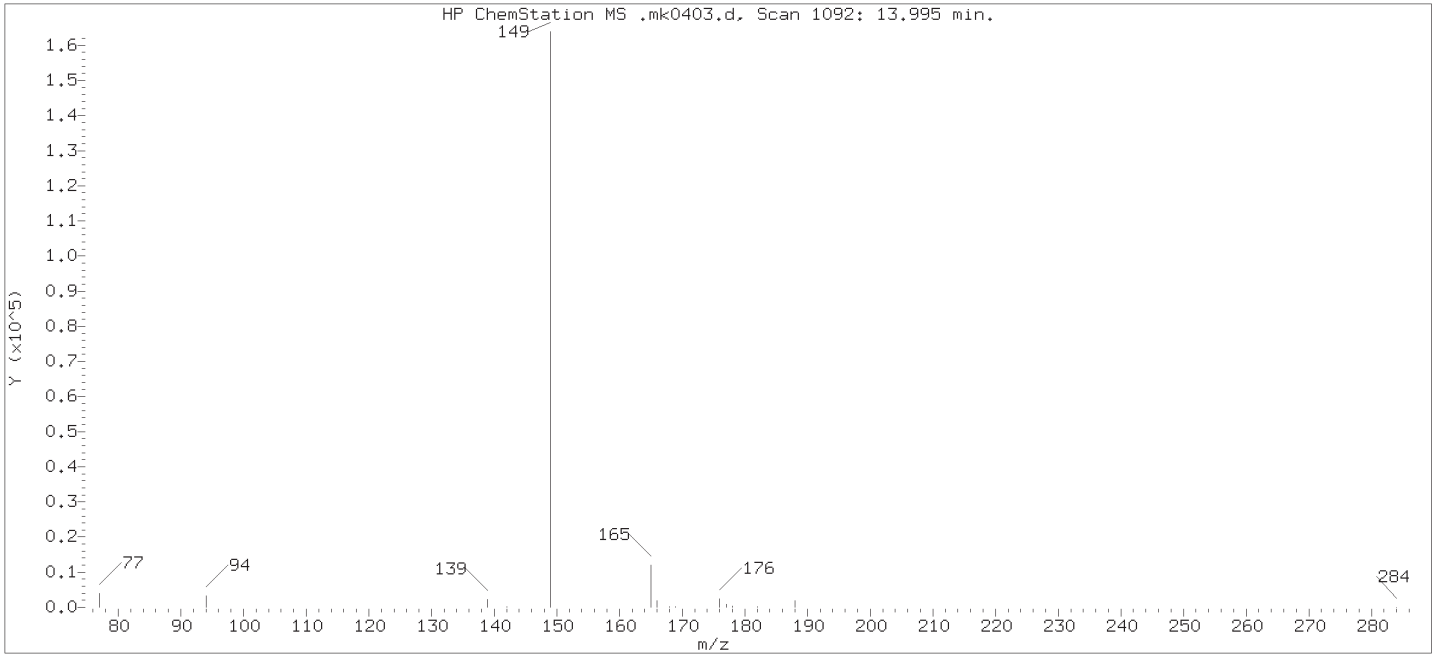
Compound Number                      : 23  
Compound Name                         : Di-n-butylphthalate  
Scan Number                            : 1091  
Retention Time (minutes)             : 13.987  
Quant Ion                               : 149.00  
Area (flag)                            : 217771M  
On-Column Amount (ng/ul)           : 0.2614  
Integration start scan                : 1086                      Integration stop scan: 1094  
Y at integration start                : 49                        Y at integration end: 660

Reason for manual integration: missed peak

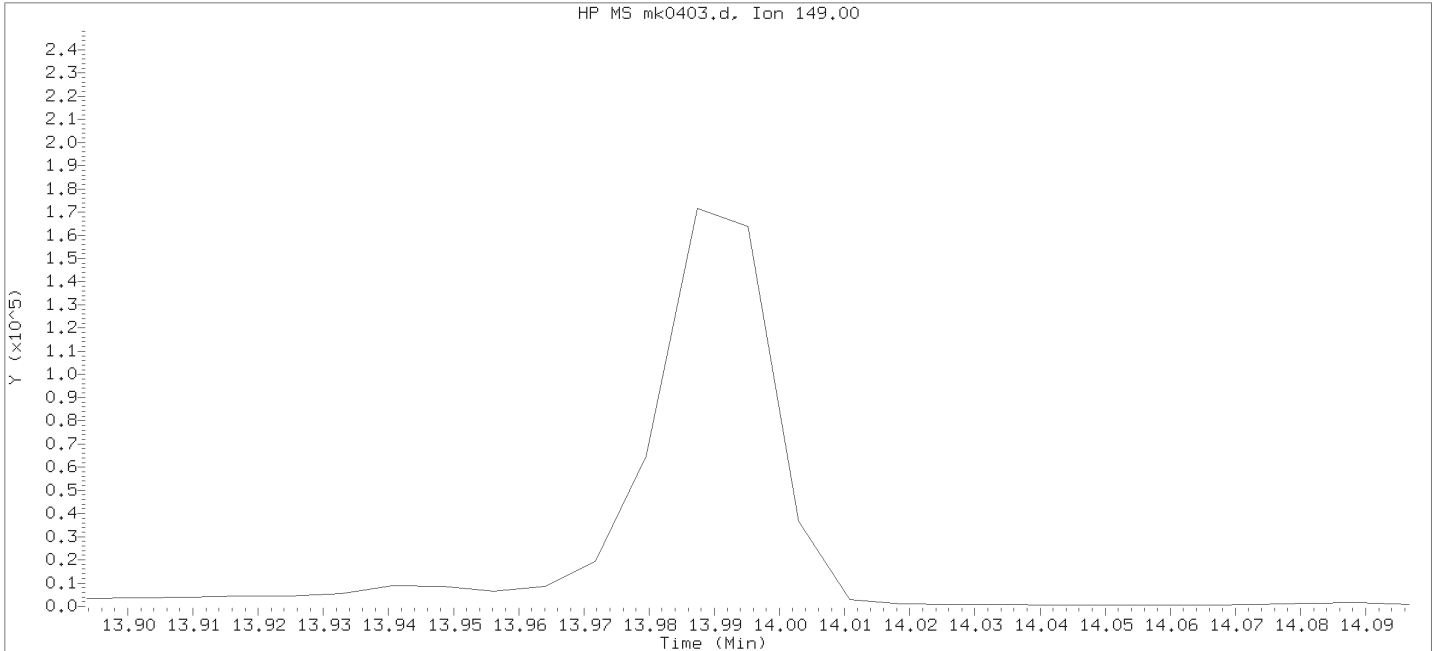
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d  
Injection date and time: 07-NOV-2018 18:41

Instrument ID: HP21585.i  
Analyst ID: ceb05247

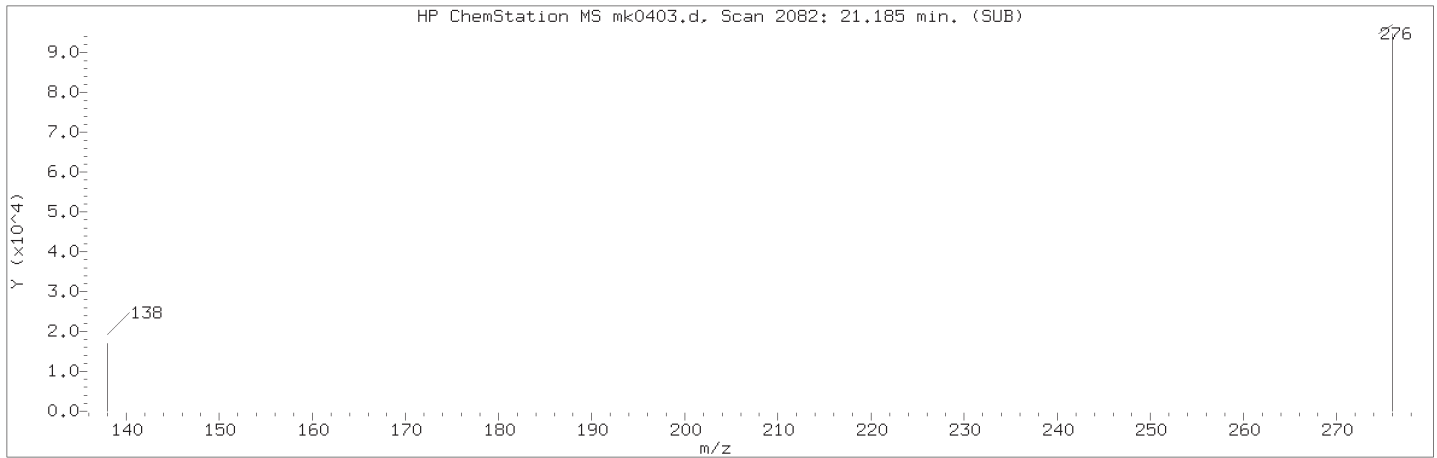
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 19:10 Unknown

Sample Name: 309WELCS

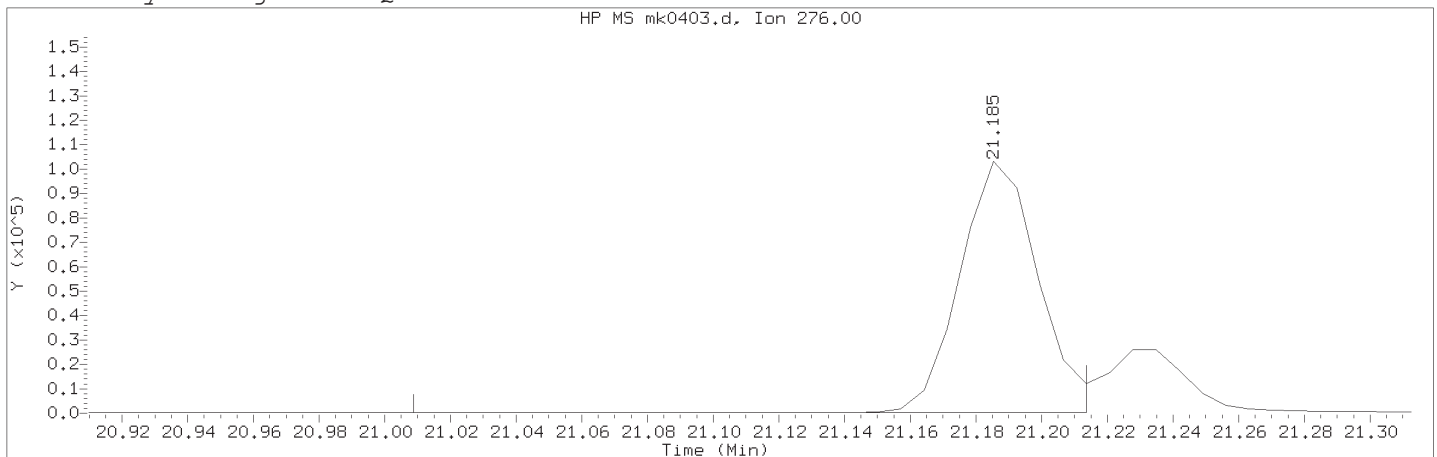
Lab Sample ID: 309WELCS

Compound Number : 23  
Compound Name : Di-n-butylphthalate  
Expected RT (minutes) : 13.995  
Quant Ion : 149.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 18:41                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCS    Lab Sample ID: 309WELCS

Compound Number    : 39  
Compound Name    : Indeno(1,2,3-cd)pyrene  
Scan Number    : 2082  
Retention Time (minutes)                                   : 21.185  
Quant Ion    : 276.00  
Area (flag)    : 170743M  
On-Column Amount (ng/ul)                                 : 0.2976  
Integration start scan                                      : 2056                      Integration stop scan: 2085  
Y at integration start                                       : 204                      Y at integration end: 204

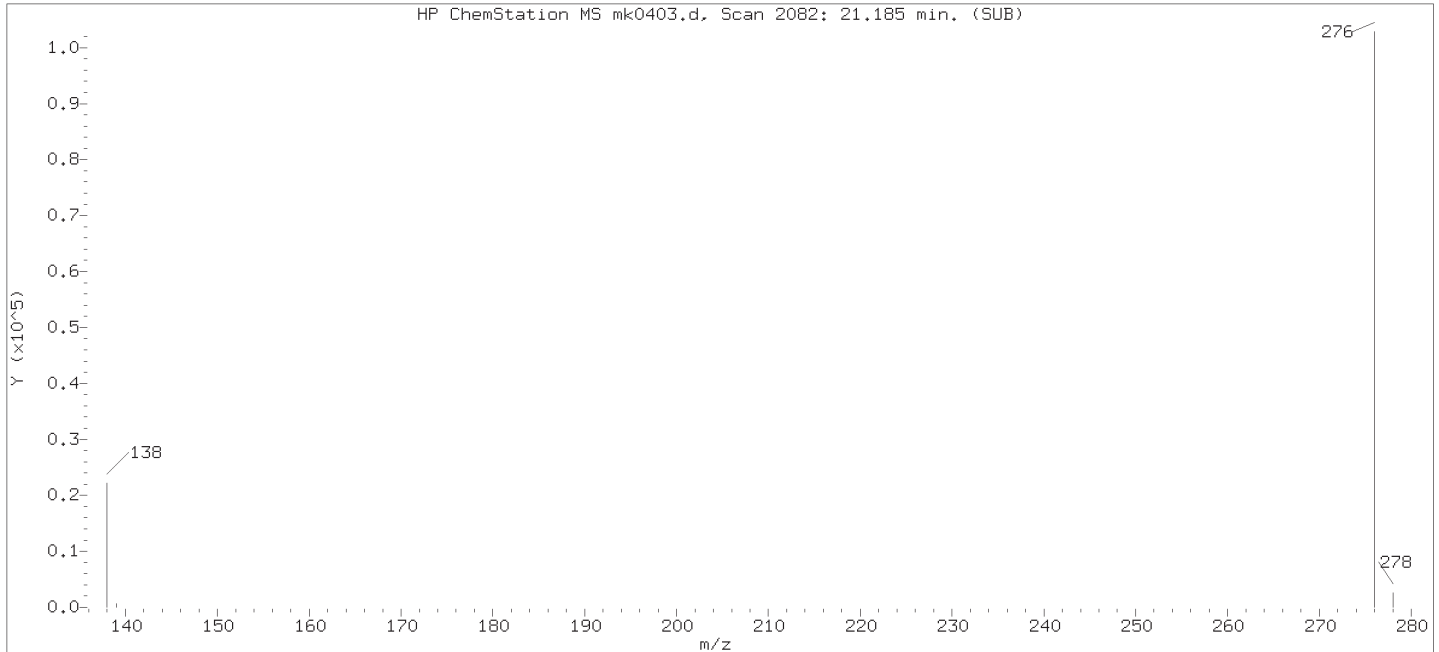
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

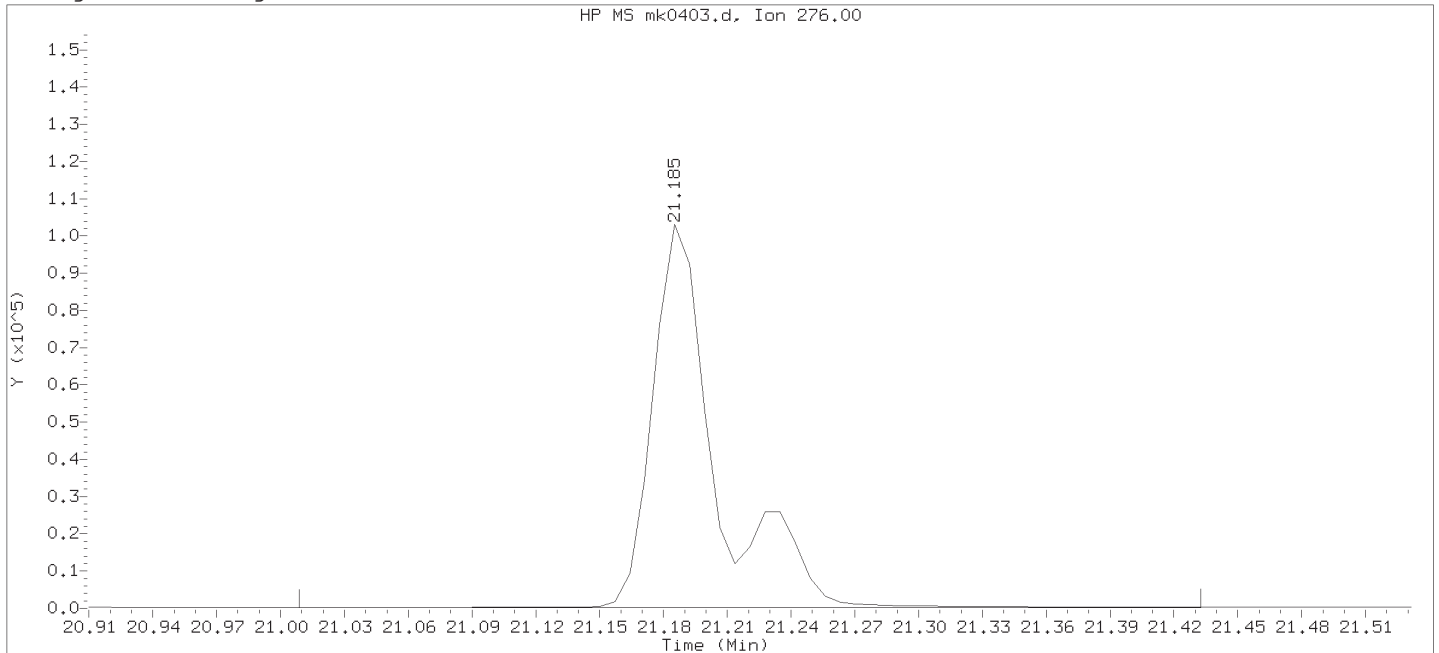
Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0403.d  
 Injection date and time: 07-NOV-2018 18:41

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 19:10 Unknown

Sample Name: 309WELCS

Lab Sample ID: 309WELCS

Compound Number : 39  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 2082  
 Retention Time (minutes) : 21.185  
 Quant Ion : 276.00  
 Area : 214996  
 On-column Amount (ng/ul) : 0.3748  
 Integration start scan : 2056 Integration stop scan: 2116  
 Y at integration start : 204 Y at integration end: 204

309WELCSD Lancaster Laboratories, Inc. 309WELCSD  
 Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP21585.i/18nov07.b/mk0404.d Injection date and time: 07-NOV-2018 19:17  
 Data file Sample Info. Line: 309WELCSD;309WELCSD;1;3;LCSD;;; Instrument ID: HP21585.i Batch: 18309WAE  
 Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time (Last Method Edit): 07-NOV-2018 17:57  
 Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
 Sample Volume (Vo): 250 ml Volume Injected (Vi): 2 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
5) 1,4-Dichlorobenzene-d4	6.580(-0.020)	475	152	45749 (-27)	0.25	
6) Naphthalene-d8	8.480( 0.000)	572	136	167600 (-19)	0.25	
14) Acenaphthene-d10	11.264( 0.000)	767	164	70426 (-20)	0.25	
20) Phenanthrene-d10	13.175( 0.000)	987	188	138659M (-21)	0.25	
29) Chrysene-d12	17.146( 0.000)	1549	240	87682 (-27)	0.25	
38) Perylene-d12	19.585( 0.000)	1867	264	85624 (-23)	0.25	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
10) 1-Methylnaphthalene-d10	(2)	9.703( 0.000)	152	68502	0.225	90%
24) Fluoranthene-d10	(4)	14.789( 0.000)	212	127337	0.234	94%
36) Benzo(a)pyrene-d12	(6)	19.455( 0.000)	264	74257	0.236	94%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
1) 1,4-Dioxane	(1)	2.869(-0.013)	88	20460	0.161	0.64			0.01
4) bis(2-Chloroethyl) ether	(2)	6.207(-0.000)	93	64885M	0.253	1.01			0.005
7) Naphthalene	(2)	8.500(-0.000)	128	173721	0.225	0.90			0.008
13) Acenaphthylene	(3)	11.032(-0.000)	152	167804	0.226	0.91			0.003
15) Acenaphthene	(3)	11.316(-0.000)	154	105929	0.235	0.94			0.003
18) Fluorene	(3)	12.036( 0.000)	166	114783	0.219	0.87			0.003
19) Hexachlorobenzene	(4)	12.699(-0.000)	284	34451A	0.221	0.89			0.003
21) Phenanthrene	(4)	13.199( 0.000)	178	199942A	0.269	1.08			0.008
22) Anthracene	(4)	13.261( 0.000)	178	163324	0.224	0.89			0.003
23) Di-n-butylphthalate	(4)	13.995( 0.000)	149	201363M	0.247	0.99			0.05
25) Fluoranthene	(4)	14.814( 0.000)	202	199401	0.240	0.96			0.003
26) Pyrene	(5)	15.146(-0.000)	202	206162	0.259	1.03			0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.346(-0.000)	149	136800	0.276	1.10	0.304	B	0.02
28) Benzo(a)anthracene	(5)	17.131(-0.000)	228	182948	0.266	1.06			0.003
30) Chrysene	(5)	17.192(-0.000)	228	182011	0.262	1.05			0.003
33) Benzo(b)fluoranthene	(6)	18.972(-0.000)	252	188729	0.278	1.11			0.003
34) Benzo(k)fluoranthene	(6)	19.018(-0.000)	252	187071	0.276	1.11			0.003
37) Benzo(a)pyrene	(6)	19.493(-0.000)	252	171270	0.264	1.05			0.003
39) Indeno(1,2,3-cd)pyrene	(6)	21.192( 0.000)	276	157128M	0.266	1.06			0.003
40) Dibenz(a,h)anthracene	(6)	21.234( 0.000)	278	154200	0.256	1.02			0.005
41) Benzo(g,h,i)perylene	(6)	21.581( 0.000)	276	172099	0.252	1.01			0.003

M = Compound was manually integrated. A = User selected an alternate peak. B = Compound detected in referenced method blank.

309WELCSD Analysis Summary for GC/MS Semivolatiles 309WELCSD  
Lancaster Laboratories, Inc.

Data file: /chem/HP21585.i/18nov07.b/mk0404.d Injection date and time: 07-NOV-2018 19:17  
Data file Sample Info. Line: 309WELCSD;309WELCSD;1;3;LCSD;;; Instrument ID: HP21585.i Batch: 18309WAE  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Blank Data file reference: /chem/HP21585.i/18nov07.b/mk0402.d

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
Calibration date and time (Last Method Edit): 07-NOV-2018 17:57  
Mid Level Daily Calibration Standard Reference: /chem/HP21585.i/18nov07.b/mk0401.d

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount \* DF \* GPCf \* Uf \* Vt/(Vo)

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul  
Sample Volume (Vo): 250 ml Volume Injected (Vi): 2 ul

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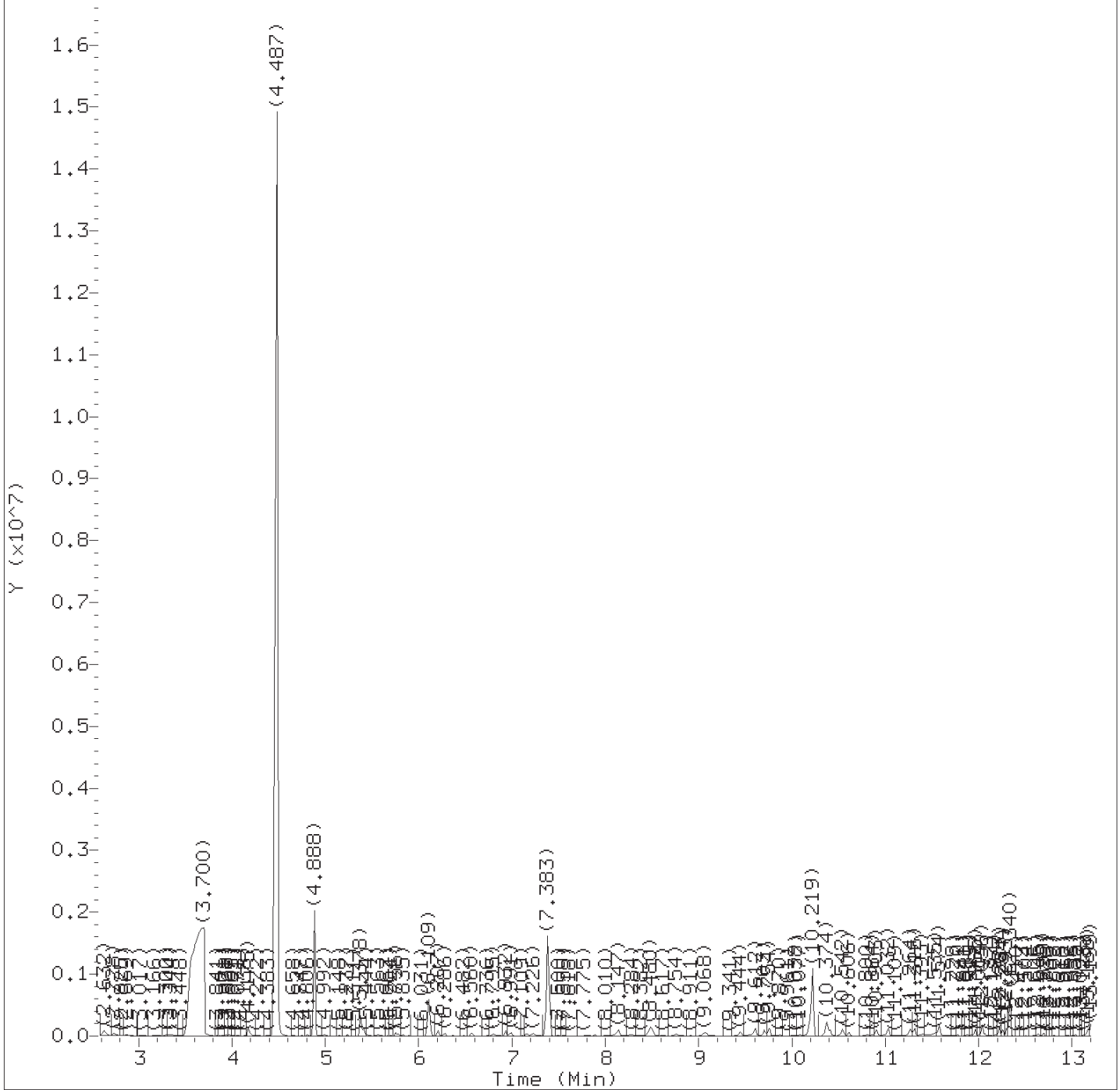
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WAS LEFT  
BLANK INTENTIONALLY

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Total number of targets = 21

Digitally signed by Joseph M. Gambler on 11/08/2018 at 04:19. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34. PARALLAX ID: ild00415



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 07-NOV-2018 17:57

Sublist used: 309WAE

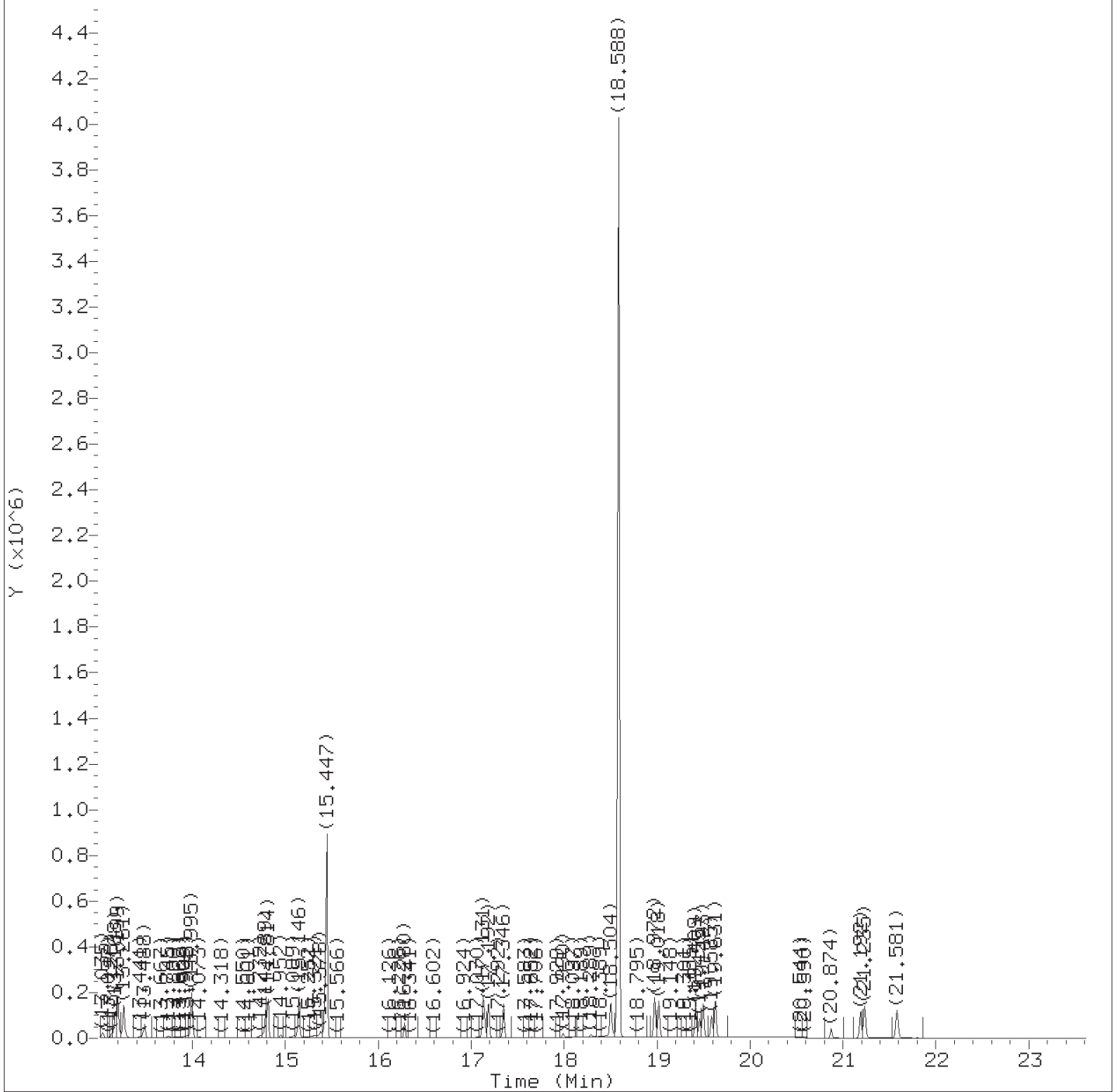
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD

Lab Sample ID: 309WELCSD

Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.

Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m  
Calibration date and time: 07-NOV-2018 17:57

Sublist used: 309WAE

Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD

Lab Sample ID: 309WELCSD

Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.

Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
 Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD

Lab Sample ID: 309WELCSD

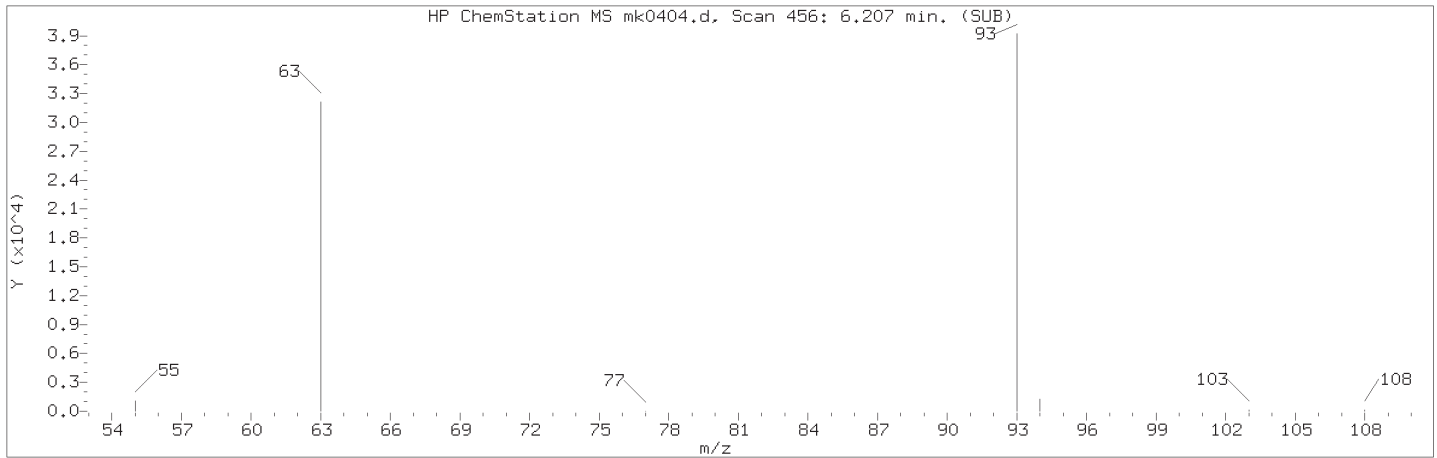
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.869	88	20460	0.161
4) bis(2-Chloroethyl)ether	(2)	6.207	93	64885M	0.253
5)*1,4-Dichlorobenzene-d4	(1)	6.580	152	45749	0.250
6)*Naphthalene-d8	(2)	8.480	136	167600	0.250
7) Naphthalene	(2)	8.500	128	173721	0.225
10)\$1-Methylnaphthalene-d10	(2)	9.703	152	68502	0.225
13) Acenaphthylene	(3)	11.032	152	167804	0.226
14)*Acenaphthene-d10	(3)	11.264	164	70426	0.250
15) Acenaphthene	(3)	11.316	154	105929	0.235
18) Fluorene	(3)	12.036	166	114783	0.219
19) Hexachlorobenzene	(4)	12.699	284	34451A	0.221
20)*Phenanthrene-d10	(4)	13.175	188	138659M	0.250
21) Phenanthrene	(4)	13.199	178	199942A	0.269
22) Anthracene	(4)	13.261	178	163324	0.224
23) Di-n-butylphthalate	(4)	13.995	149	201363M	0.247
24)\$Fluoranthene-d10	(4)	14.789	212	127337	0.234
25) Fluoranthene	(4)	14.814	202	199401	0.240
26) Pyrene	(5)	15.146	202	206162	0.259
28) Benzo(a)anthracene	(5)	17.131	228	182948	0.266
29)*Chrysene-d12	(5)	17.146	240	87682	0.250
30) Chrysene	(5)	17.192	228	182011	0.262
31) bis(2-Ethylhexyl)phthalate	(5)	17.346	149	136800	0.276
33) Benzo(b)fluoranthene	(6)	18.972	252	188729	0.278
34) Benzo(k)fluoranthene	(6)	19.018	252	187071	0.276
36)\$Benzo(a)pyrene-d12	(6)	19.455	264	74257	0.236
37) Benzo(a)pyrene	(6)	19.493	252	171270	0.264
38)*Perylene-d12	(6)	19.585	264	85624	0.250
39) Indeno(1,2,3-cd)pyrene	(6)	21.192	276	157128M	0.266
40) Dibenz(a,h)anthracene	(6)	21.235	278	154200	0.256
41) Benzo(g,h,i)perylene	(6)	21.581	276	172099	0.252

M = Compound was manually integrated.  
 A = User selected an alternate hit.  
 \* = Compound is an internal standard.  
 \$ = Compound is a surrogate standard.

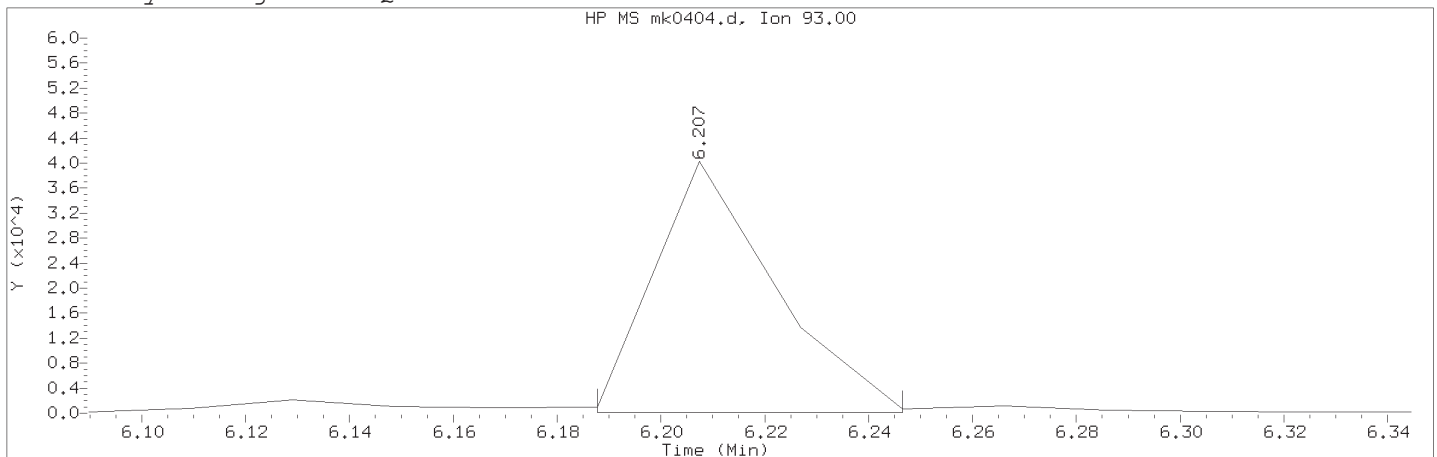
Digitally signed by Joseph M. Gambler  
 on 11/08/2018 at 04:19.

Target 3.5 esignature user ID: jmg00346  
 TID15 Page 1070 of 3058

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 19:17                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD                      Lab Sample ID: 309WELCSD

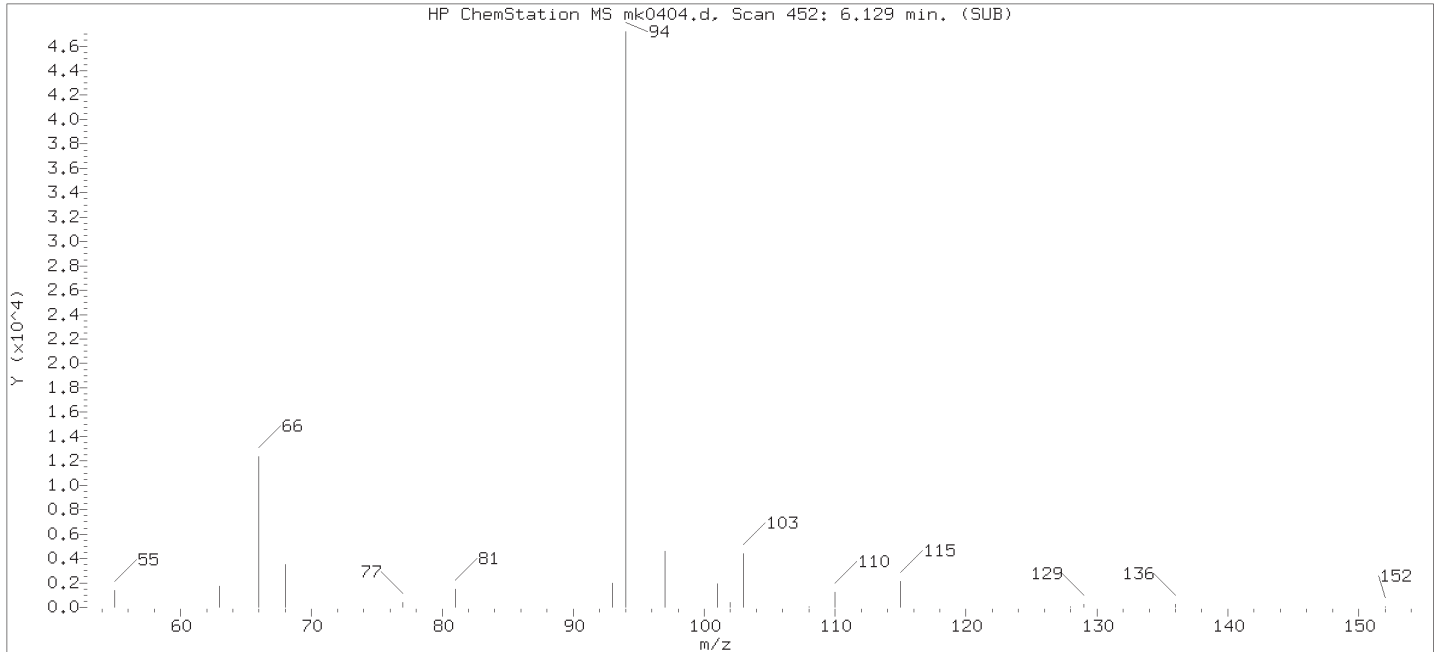
Compound Number                      : 4  
Compound Name                        : bis(2-Chloroethyl)ether  
Scan Number                           : 456  
Retention Time (minutes)            : 6.207  
Quant Ion                              : 93.00  
Area (flag)                            : 64885M  
On-Column Amount (ng/ul)           : 0.2530  
Integration start scan                : 454                      Integration stop scan: 457  
Y at integration start                : 97                        Y at integration end: 97

Reason for manual integration: improper integration

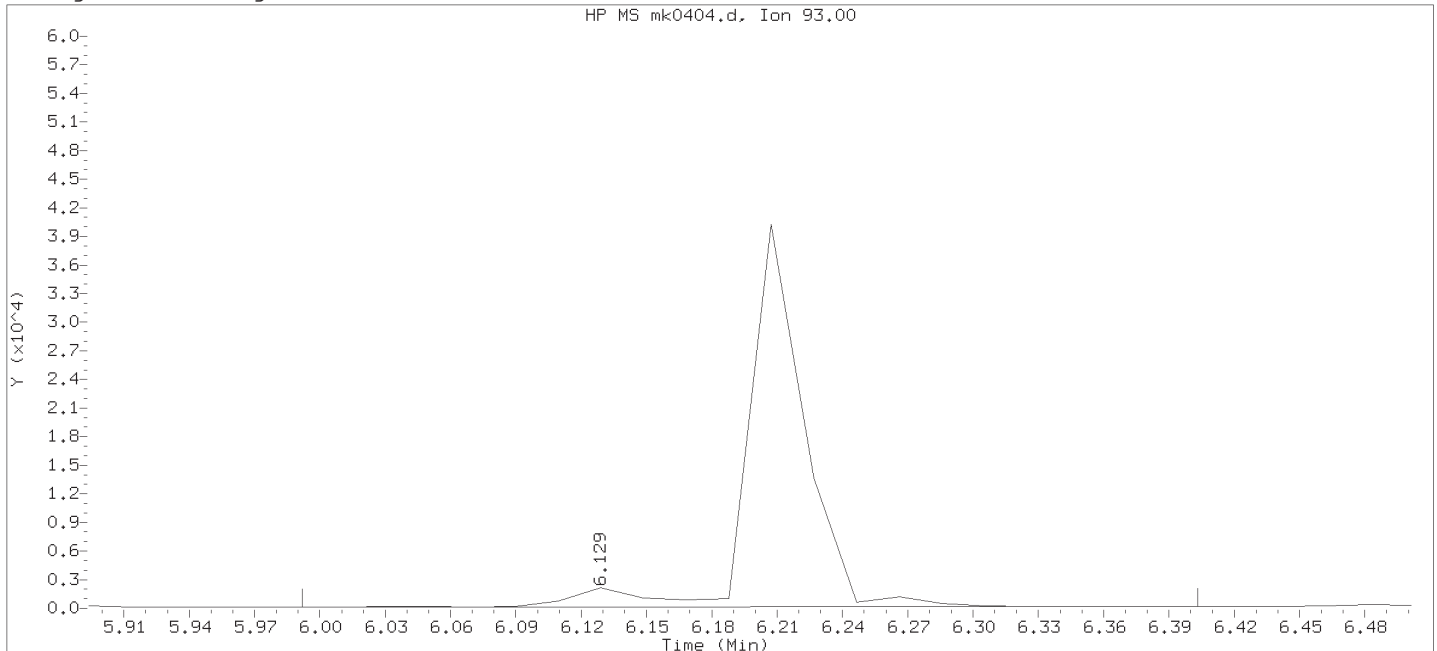
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 19:46 Unknown

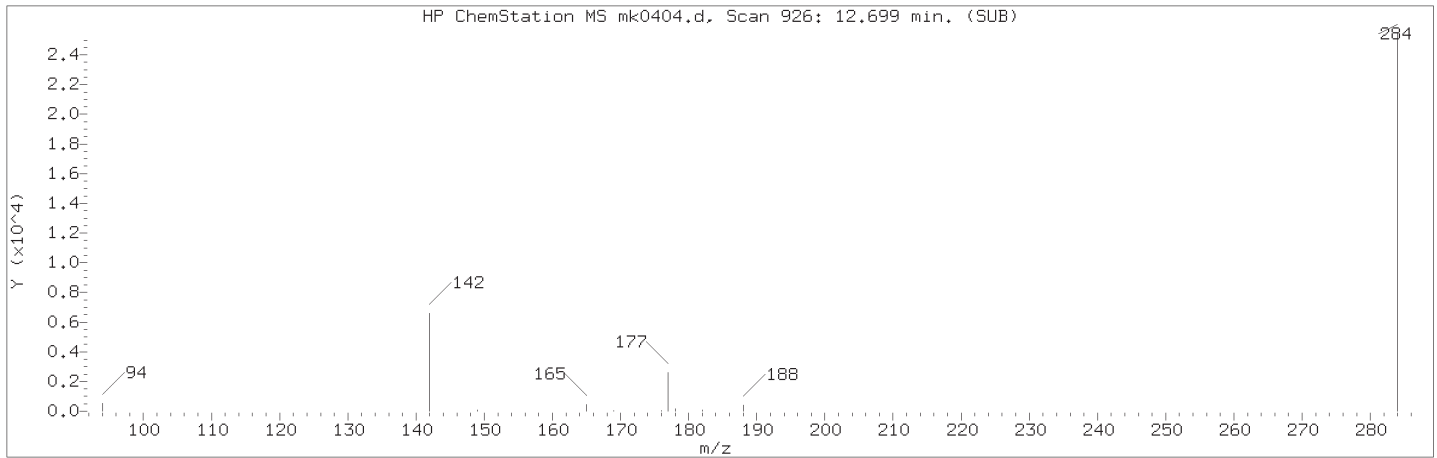
Sample Name: 309WELCSD

Lab Sample ID: 309WELCSD

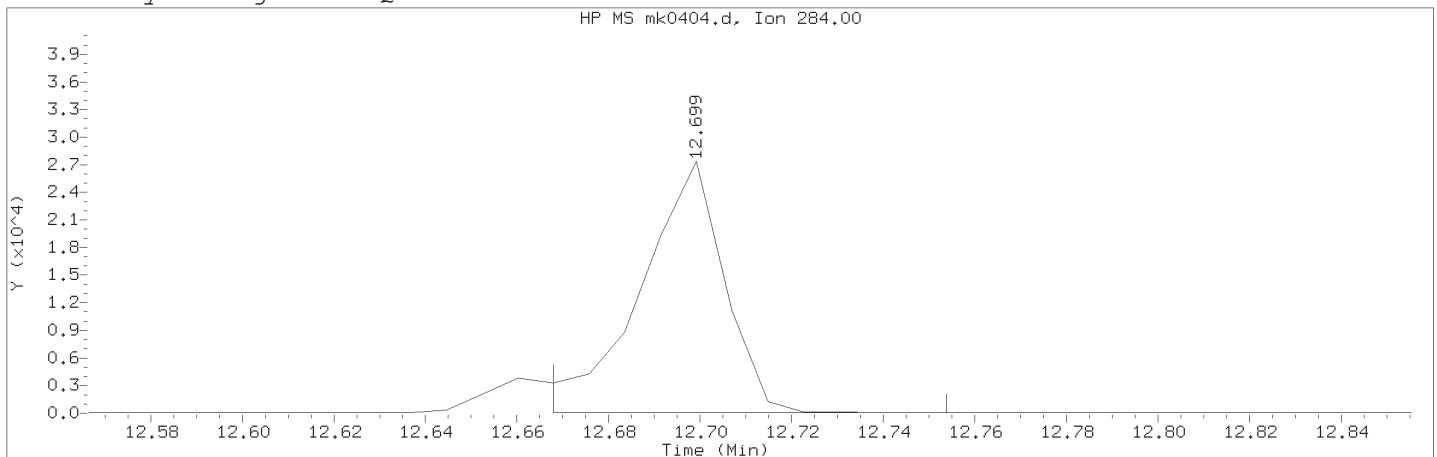
Compound Number : 4  
Compound Name : bis(2-Chloroethyl)ether  
Scan Number : 452  
Retention Time (minutes) : 6.129  
Quant Ion : 93.00  
Area : 71867  
On-column Amount (ng/ul) : 0.2803  
Integration start scan : 444      Integration stop scan: 465  
Y at integration start : 137      Y at integration end: 165



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 19:17                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD                      Lab Sample ID: 309WELCSD

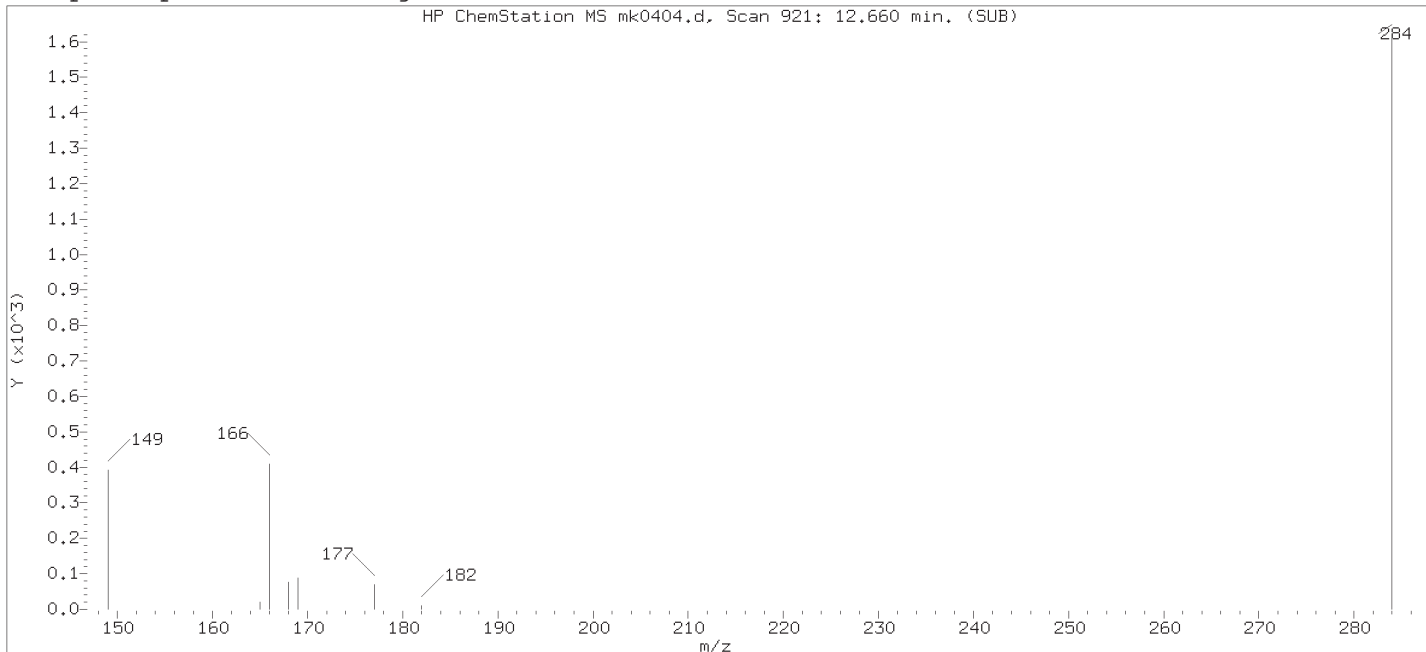
Compound Number                      : 19  
Compound Name                         : Hexachlorobenzene  
Scan Number                            : 926  
Retention Time (minutes)             : 12.699  
Quant Ion                               : 284.00  
Area (flag)                             : 34451A  
On-Column Amount (ng/ul)            : 0.2213  
Integration start scan                : 921                      Integration stop scan: 932  
Y at integration start                : 62                       Y at integration end: 62

Reason for manual integration: improper integration

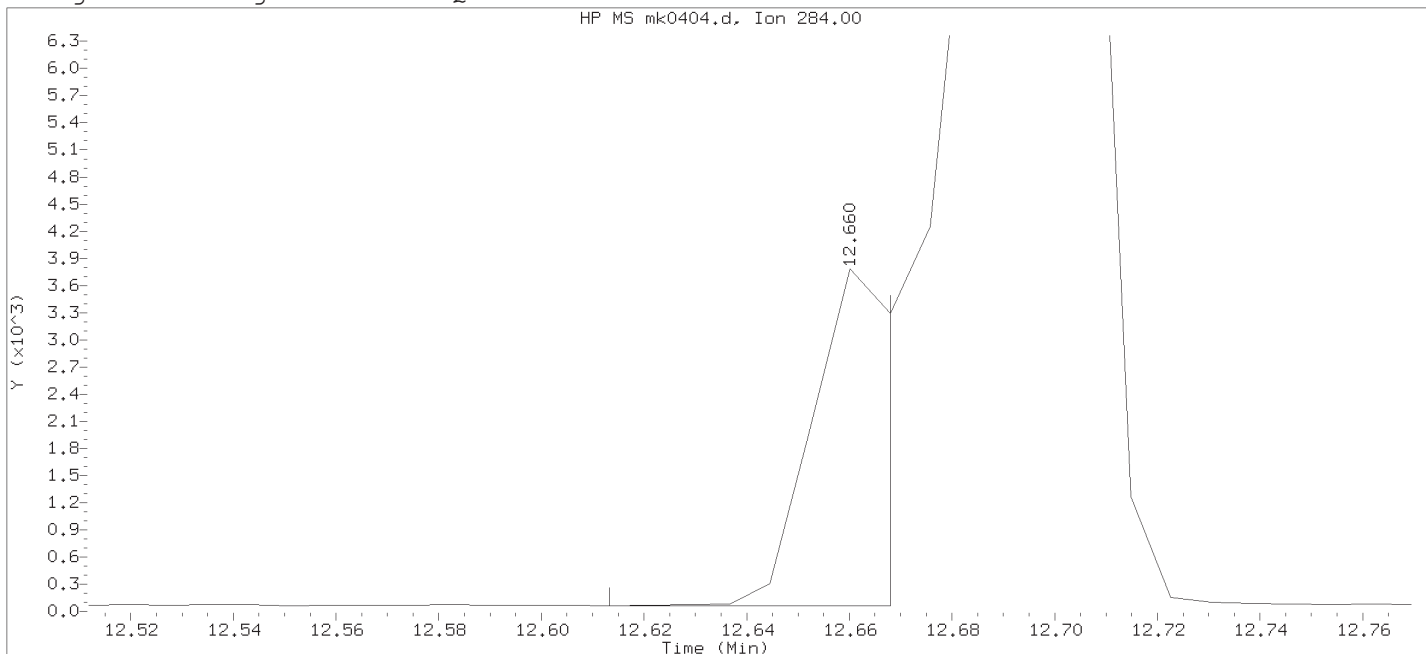
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
Analyst ID: ceb05247

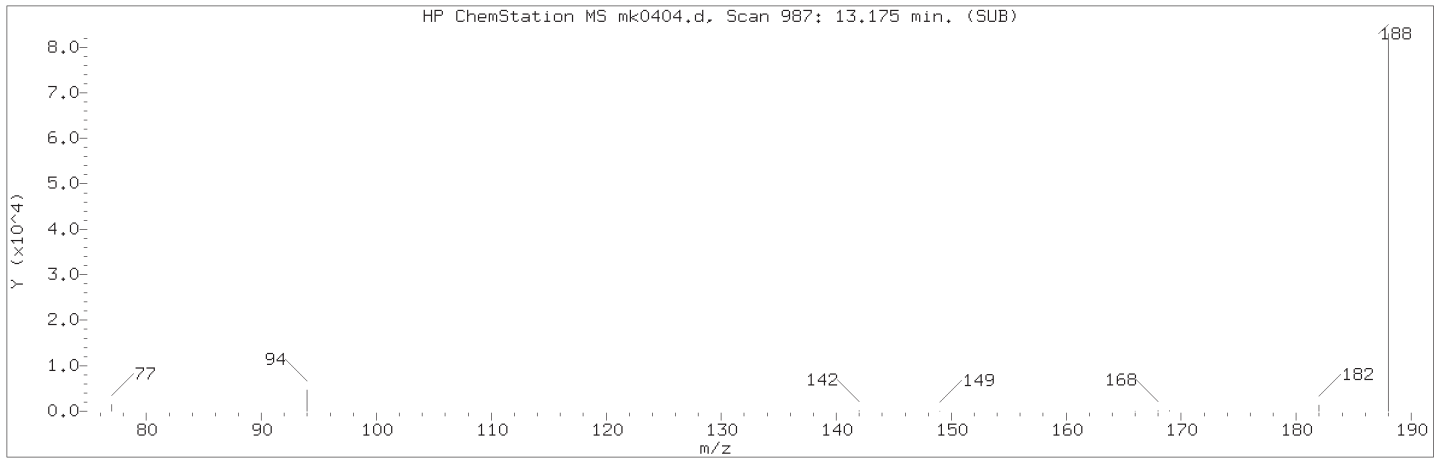
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 19:46 Unknown

Sample Name: 309WELCSD

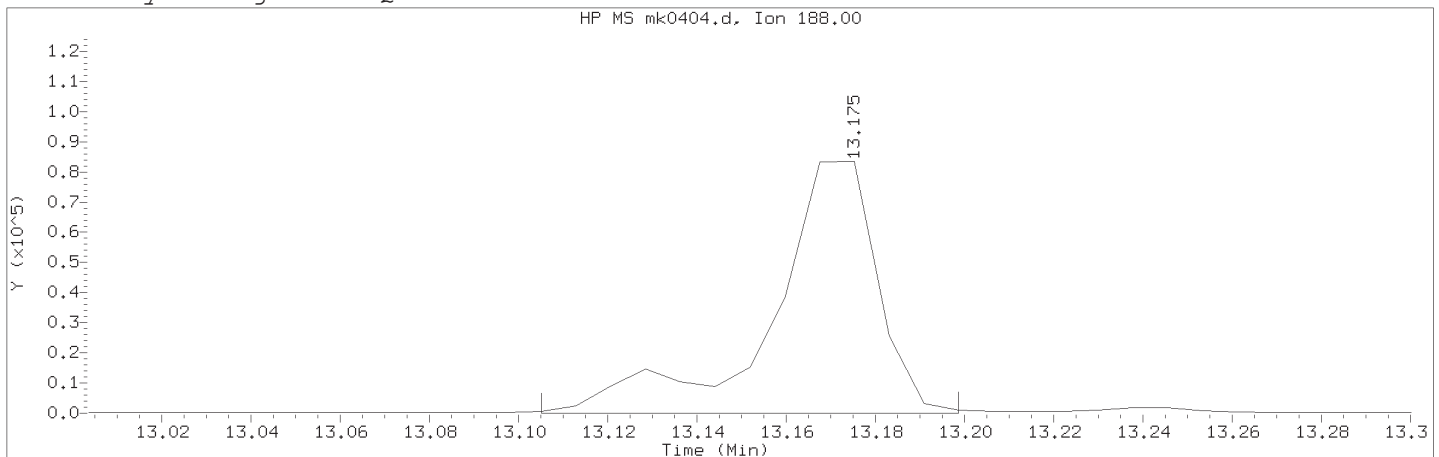
Lab Sample ID: 309WELCSD

Compound Number : 19  
Compound Name : Hexachlorobenzene  
Scan Number : 921  
Retention Time (minutes) : 12.660  
Quant Ion : 284.00  
Area : 3547  
On-column Amount (ng/ul) : 0.1600  
Integration start scan : 914      Integration stop scan: 921  
Y at integration start : 62      Y at integration end: 62

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 19:17                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD    Lab Sample ID: 309WELCSD

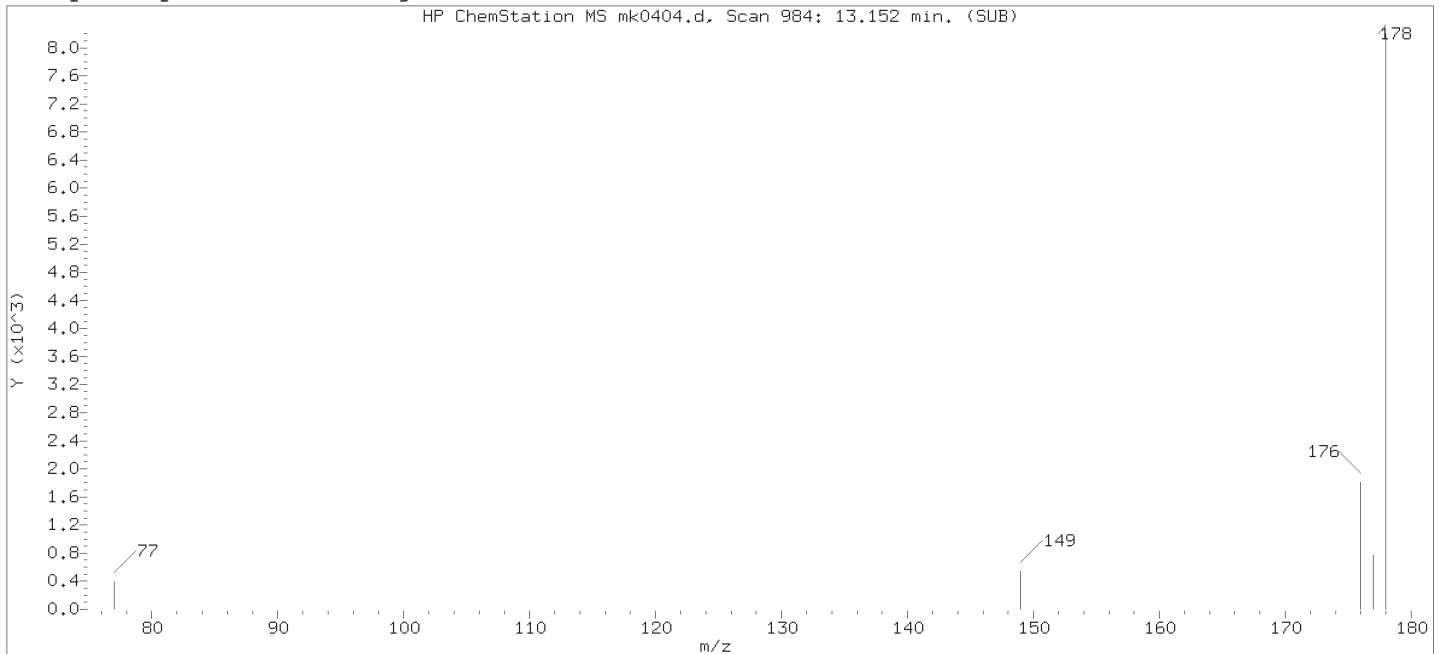
Compound Number    : 20  
Compound Name     : Phenanthrene-d10  
Scan Number    : 987  
Retention Time (minutes)                                   : 13.175  
Quant Ion    : 188.00  
Area (flag)    : 138659M  
On-Column Amount (ng/ul)                                 : 0.2500  
Integration start scan                                      : 977                      Integration stop scan: 989  
Y at integration start                                       : 0                        Y at integration end: 0

Reason for manual integration: improper integration

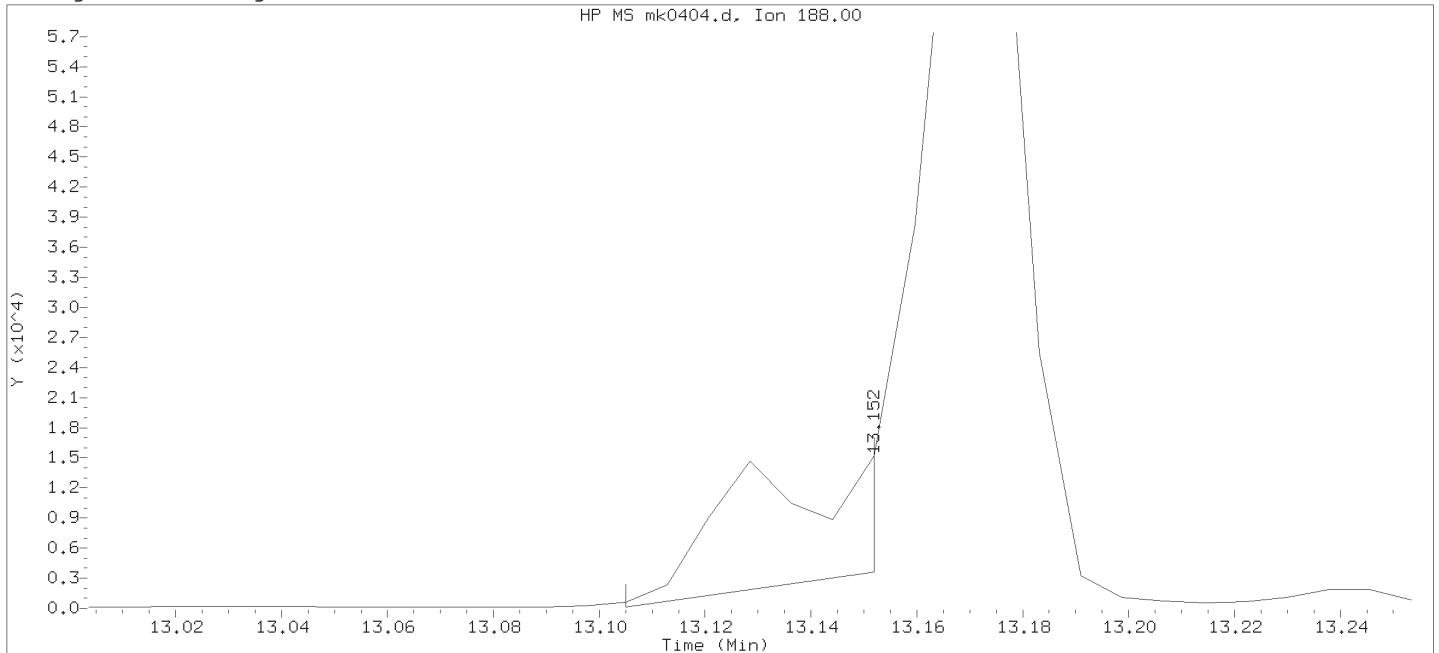
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
 Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

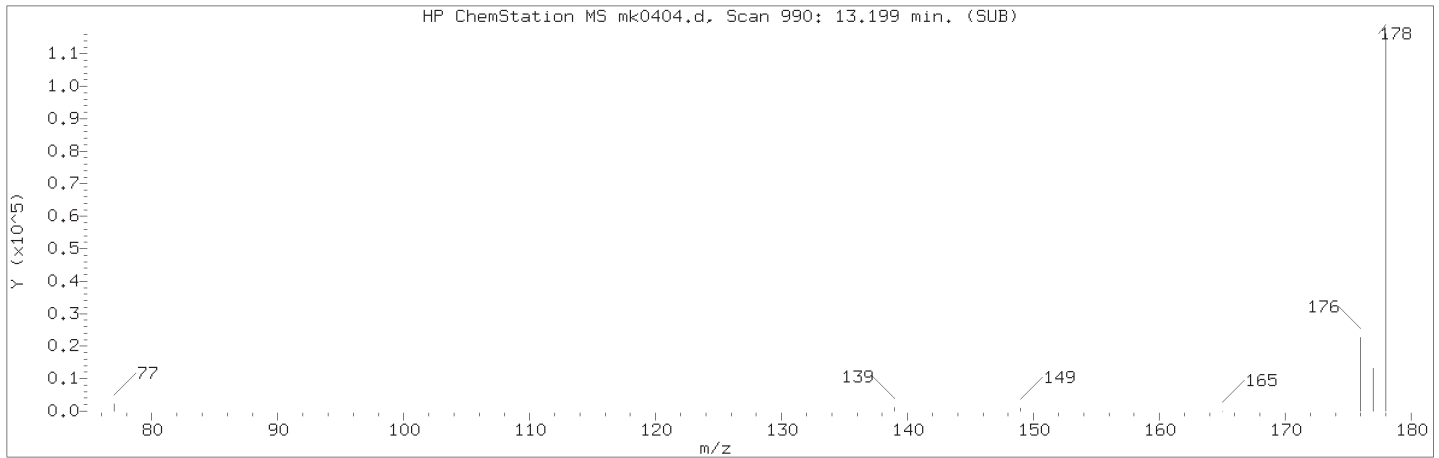
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 19:46 Unknown

Sample Name: 309WELCSD

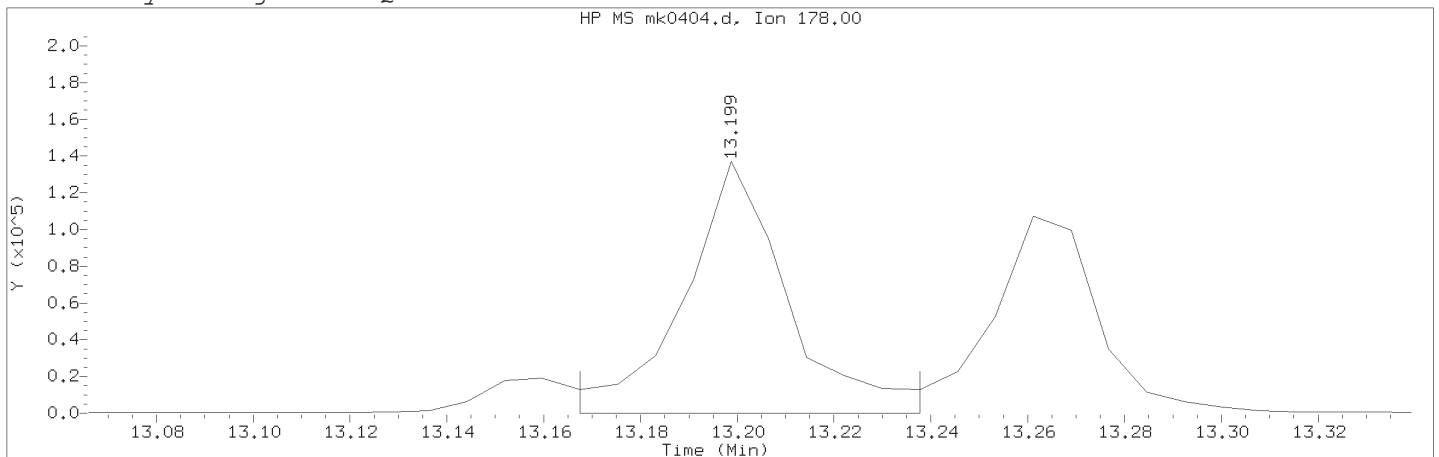
Lab Sample ID: 309WELCSD

Compound Number : 20  
 Compound Name : Phenanthrene-d10  
 Scan Number : 984  
 Retention Time (minutes) : 13.152  
 Quant Ion : 188.00  
 Area : 19741  
 On-column Amount (ng/ul) : 0.2500  
 Integration start scan : 977 Integration stop scan: 983  
 Y at integration start : 111 Y at integration end: 3593

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 19:17                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD    Lab Sample ID: 309WELCSD

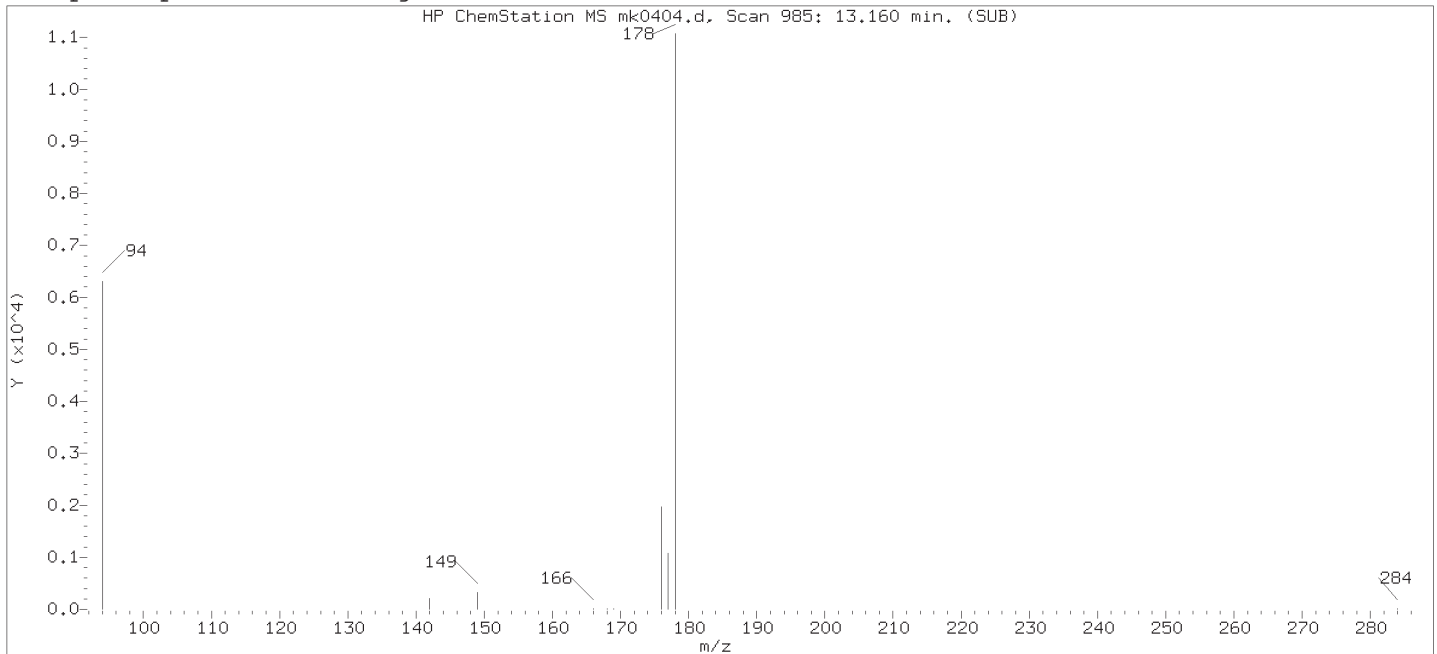
Compound Number    : 21  
Compound Name     : Phenanthrene  
Scan Number    : 990  
Retention Time (minutes)                                   : 13.199  
Quant Ion    : 178.00  
Area (flag)    : 199942A  
On-Column Amount (ng/ul)                                 : 0.2688  
Integration start scan                                      : 985                      Integration stop scan: 994  
Y at integration start                                      : 140                      Y at integration end: 140

Reason for manual integration: improper integration

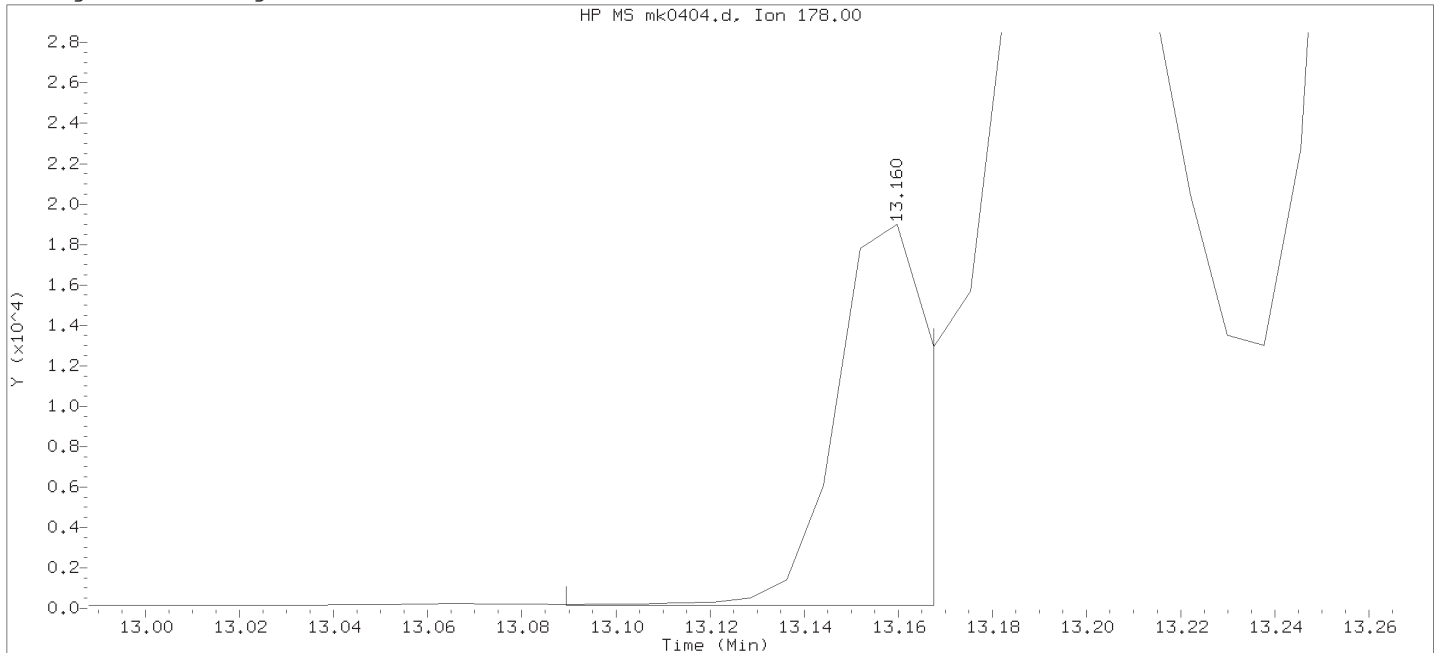
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
Analyst ID: ceb05247

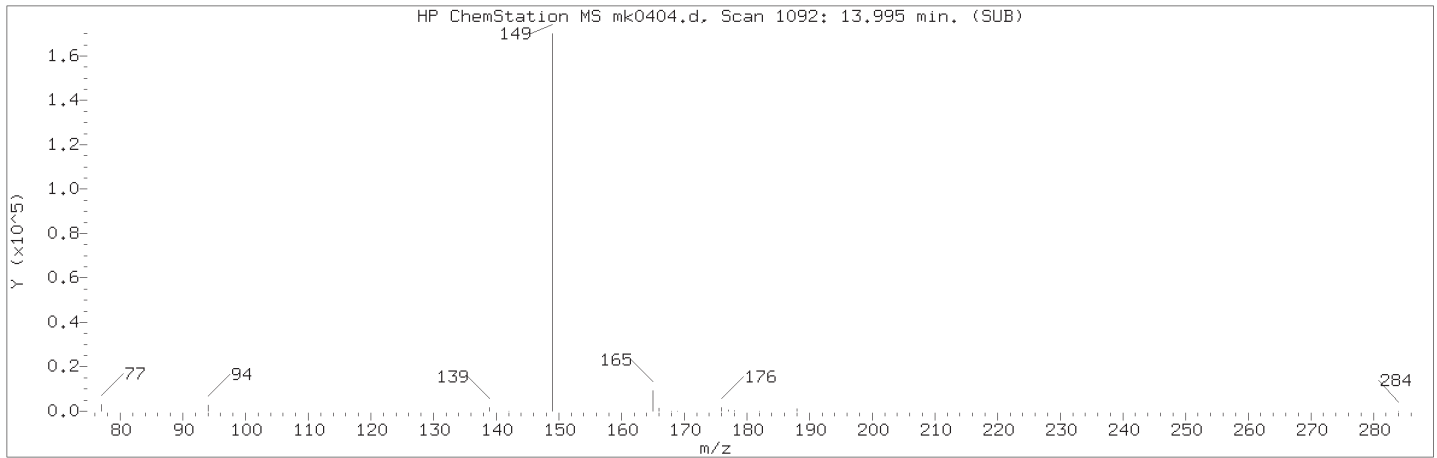
Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 19:46 Unknown

Sample Name: 309WELCSD

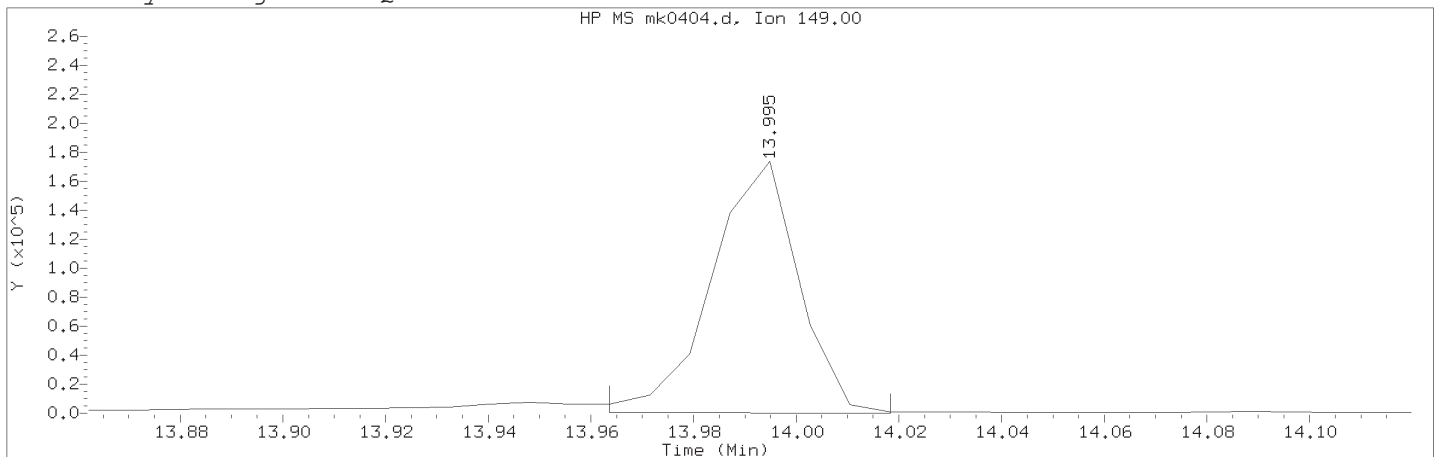
Lab Sample ID: 309WELCSD

Compound Number : 21  
Compound Name : Phenanthrene  
Scan Number : 985  
Retention Time (minutes) : 13.160  
Quant Ion : 178.00  
Area : 23870  
On-column Amount (ng/ul) : 0.2254  
Integration start scan : 975 Integration stop scan: 985  
Y at integration start : 140 Y at integration end: 140

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 19:17                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m              Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD    Lab Sample ID: 309WELCSD

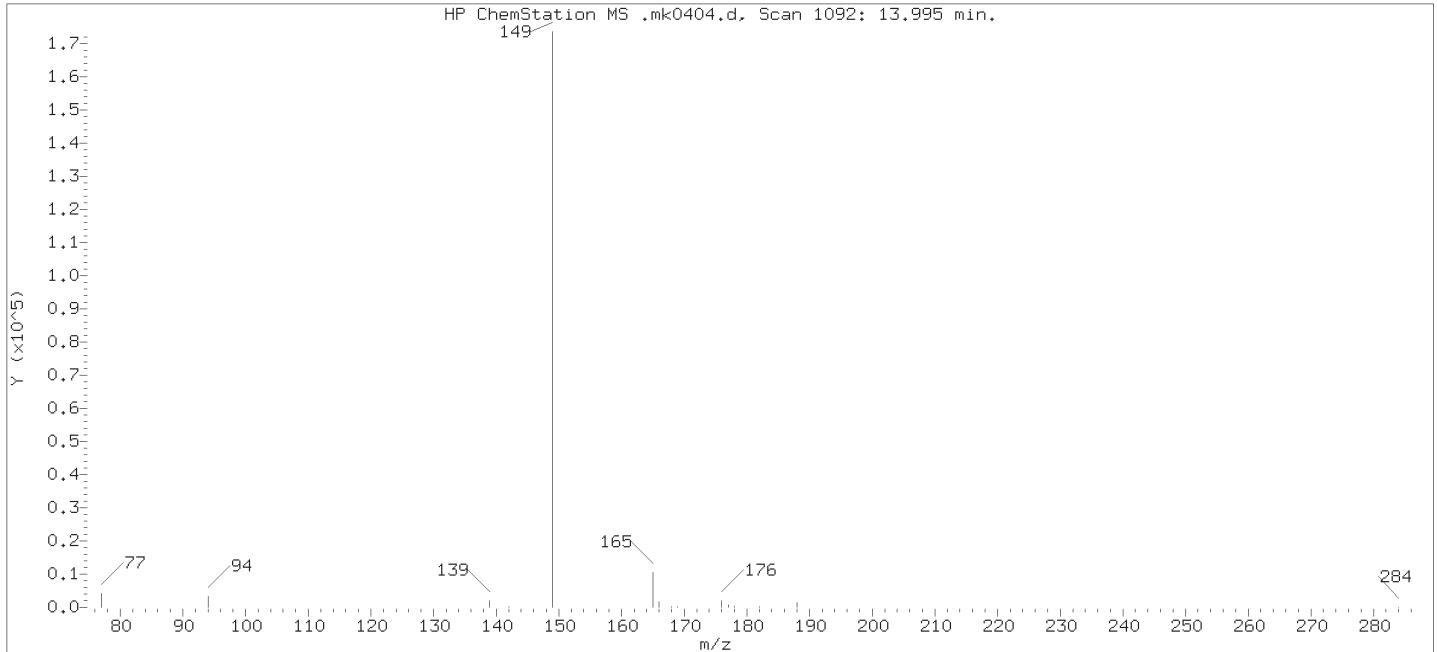
Compound Number    : 23  
Compound Name    : Di-n-butylphthalate  
Scan Number    : 1092  
Retention Time (minutes)                                   : 13.995  
Quant Ion    : 149.00  
Area (flag)    : 201363M  
On-Column Amount (ng/ul)                                 : 0.2470  
Integration start scan                                     : 1087                      Integration stop scan: 1094  
Y at integration start                                     : 483                      Y at integration end: 82

Reason for manual integration: missed peak

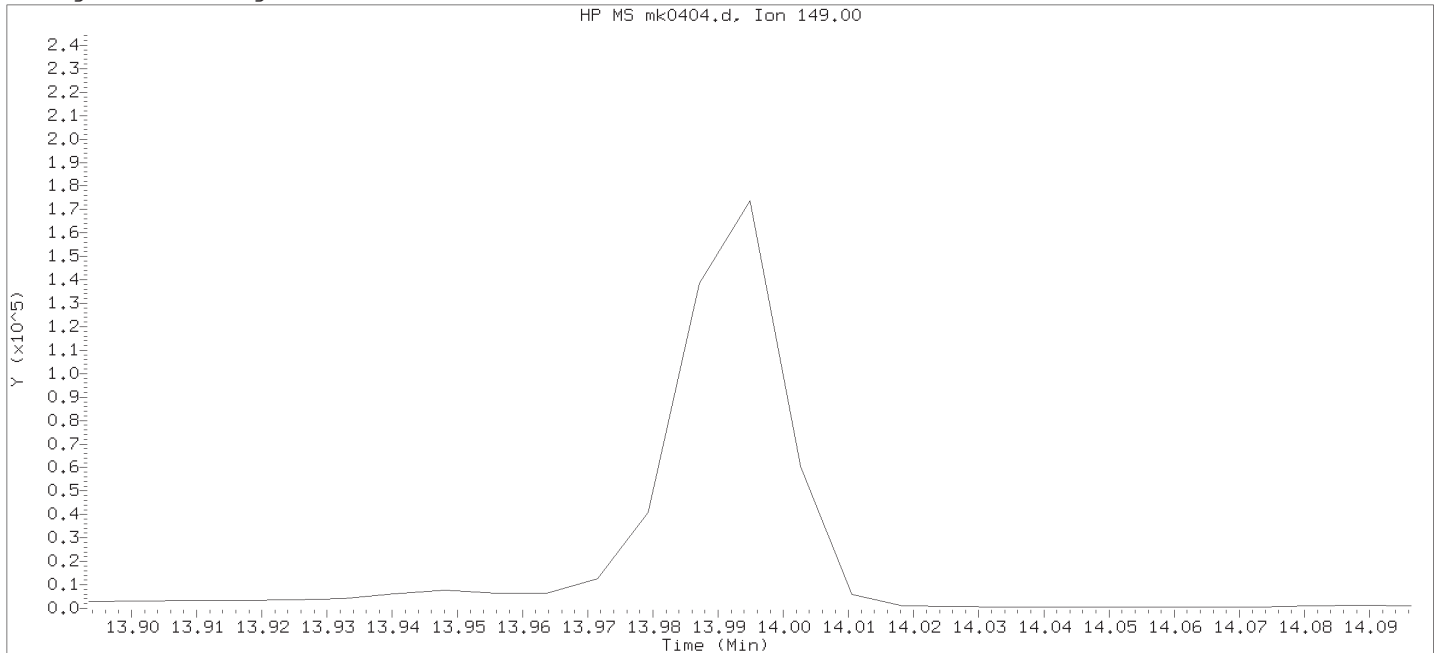
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 07-Nov-2018 19:46 Unknown

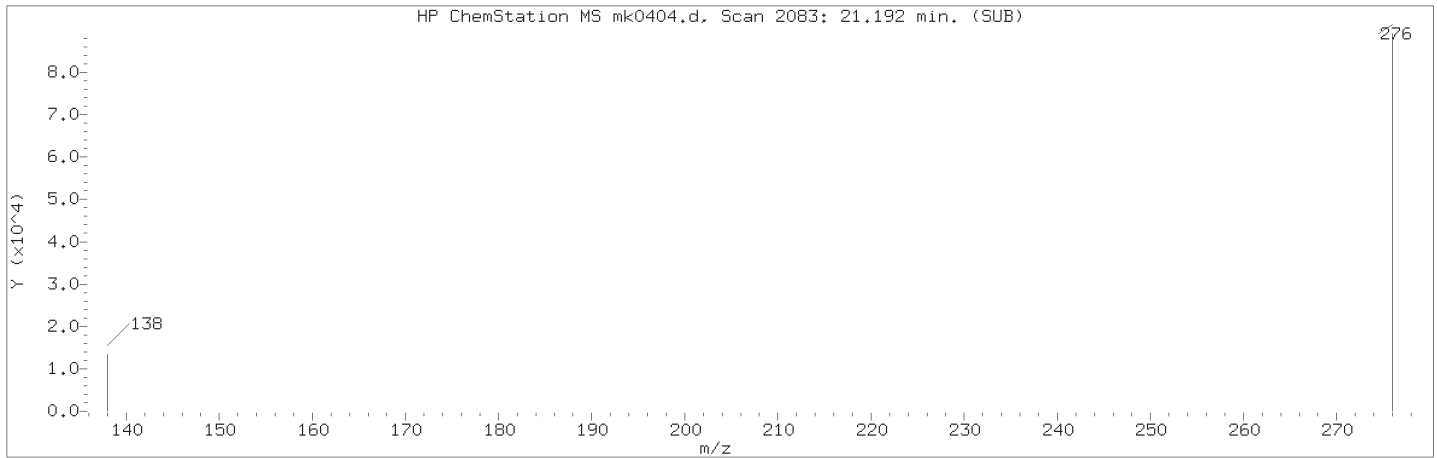
Sample Name: 309WELCSD

Lab Sample ID: 309WELCSD

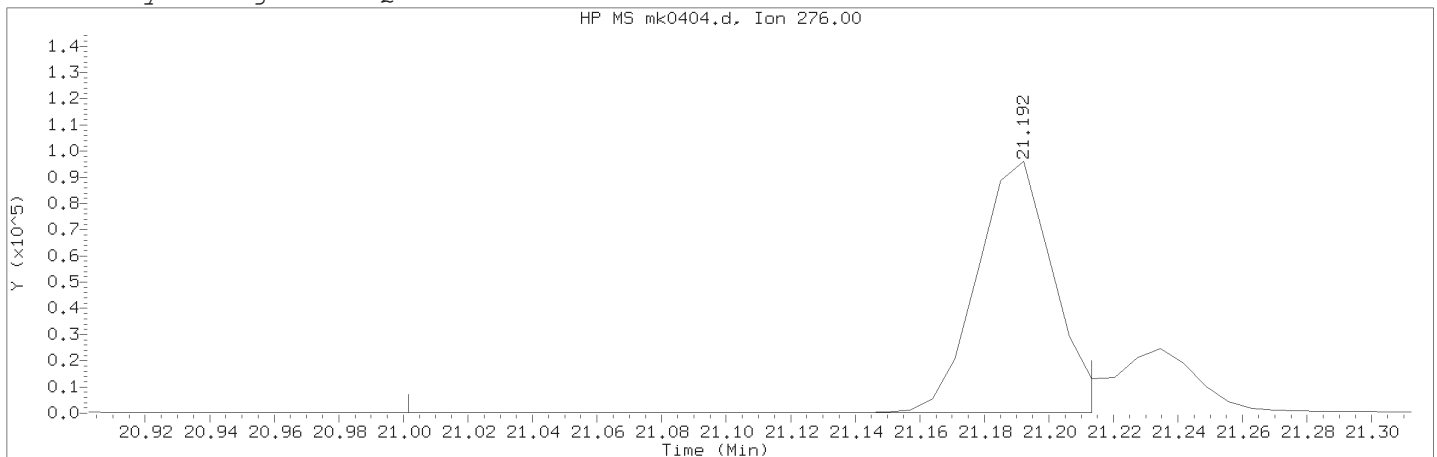
Compound Number : 23  
Compound Name : Di-n-butylphthalate  
Expected RT (minutes) : 13.995  
Quant Ion : 149.00



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d                      Instrument ID: HP21585.i  
Injection date and time: 07-NOV-2018 19:17                      Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m                      Sublist used: 309WAE  
Calibration date and time: 07-NOV-2018 17:57  
Date, time and analyst ID of latest file update: 08-Nov-2018 04:18 jmg00346

Sample Name: 309WELCSD                      Lab Sample ID: 309WELCSD

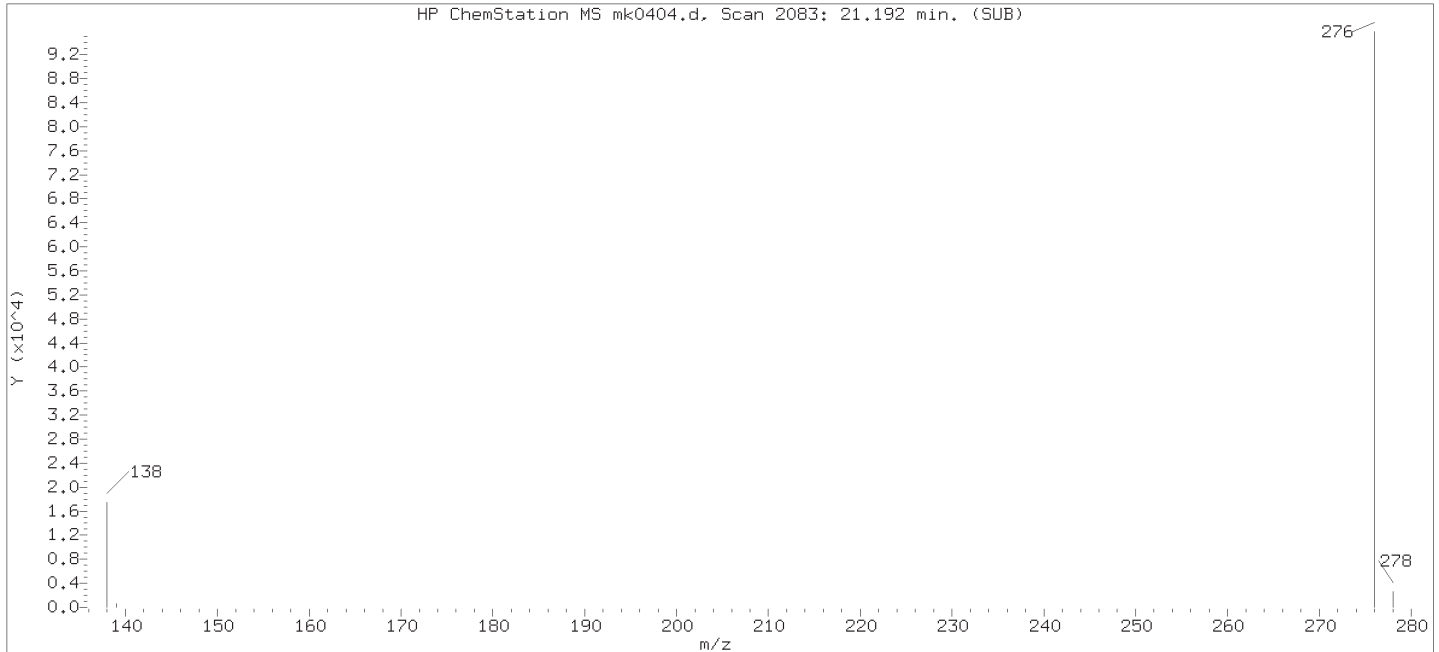
Compound Number                      : 39  
Compound Name                         : Indeno(1,2,3-cd)pyrene  
Scan Number                            : 2083  
Retention Time (minutes)             : 21.192  
Quant Ion                                : 276.00  
Area (flag)                             : 157128M  
On-Column Amount (ng/ul)            : 0.2661  
Integration start scan                : 2055                      Integration stop scan: 2085  
Y at integration start                : 198                       Y at integration end: 198

Reason for manual integration: improper integration

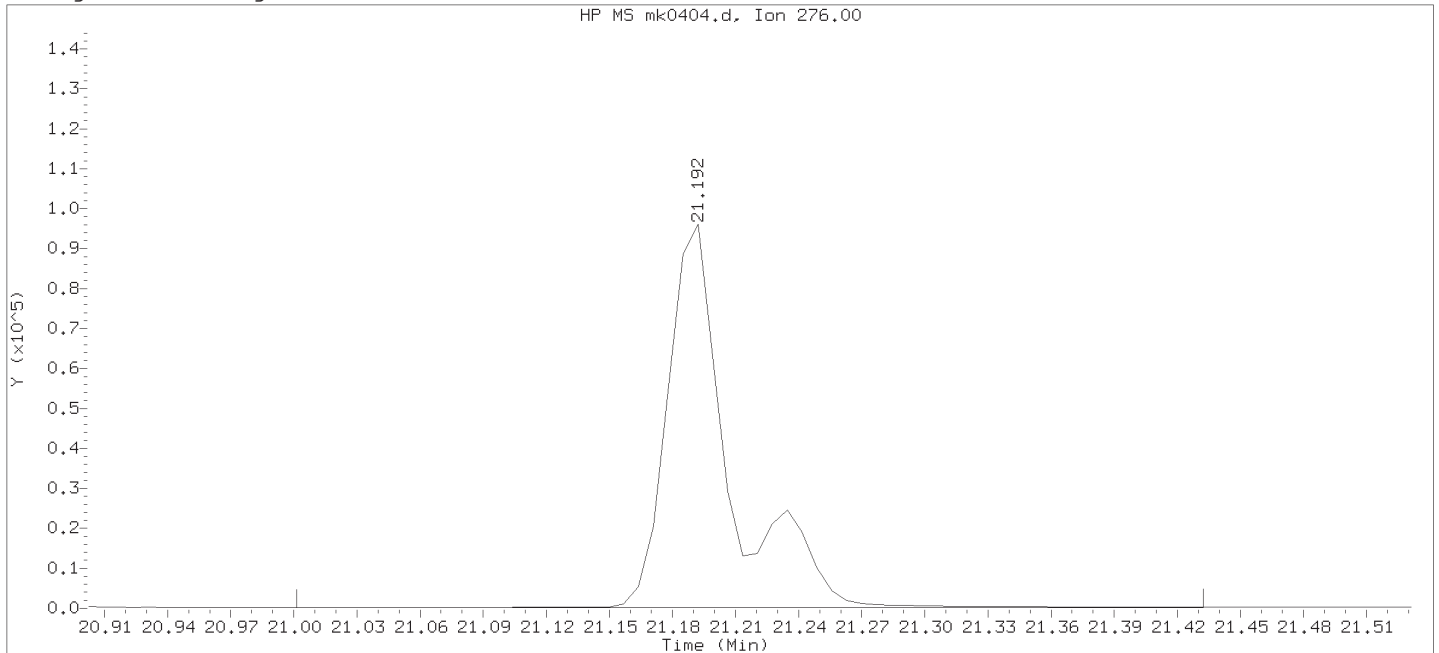
Analyst responsible for change: Digitally signed by Joseph M. Gambler  
on 11/08/2018 at 04:19.  
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Irene L. Dodd on 11/08/2018 at 13:34.  
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18nov07.b/mk0404.d  
 Injection date and time: 07-NOV-2018 19:17

Instrument ID: HP21585.i  
 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18nov07.b/rvsim8270d.m Sublist used: 309WAE  
 Calibration date and time: 07-NOV-2018 17:57  
 Date, time and analyst ID of latest file update: 07-Nov-2018 19:46 Unknown

Sample Name: 309WELCSD

Lab Sample ID: 309WELCSD

Compound Number : 39  
 Compound Name : Indeno(1,2,3-cd)pyrene  
 Scan Number : 2083  
 Retention Time (minutes) : 21.192  
 Quant Ion : 276.00  
 Area : 199616  
 On-column Amount (ng/ul) : 0.3380  
 Integration start scan : 2055 Integration stop scan: 2116  
 Y at integration start : 198 Y at integration end: 198

# **Extraction/Distillation/Digestion Logs**

## **Semivolatiles by GC/MS-SIM**

Dept: 26	Prep Analysis: 10466	BNA Water Extraction SIM	SIM SVOAs 8270D MINI								
QC	Sample Code	Amt (μl)	SS/S Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
BLANKA	SBLKWE309	250	SS1830626A	1.0	MS1830426B	1.0	1	✓	✓	7	Tap water
LCSA	309WELCS	250	SS1830626A	1.0	MS1830426B	1.0	1	✓	✓	7	Tap water
LCSDA	309WELCSD	250	SS1830626A	1.0	MS1830426B	1.0	1	✓	✓	7	Tap water

Solvent Used	Lot No.
10N NaOH	4711FS1
Methylene Chloride	187601
Sodium Sulfate	18304B
Sulfuric Acid	184517

Spike Solutions: Witness: NA  
 MS1830426B MINI SIM SPIKE  
 SS1830626A MINI SEP. BNA SURROGATE

Sample #	Sample Code	Amt (μl)	SS/S Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
1 9880803	15G09	240	SS1830626A	1.0	1	✓	✓	13A	yellow	14244	21331	11/13/2018	N
2 9880805	15G15	246	SS1830626A	1	1	✓	✓	13A	yellow	14244	21331	11/13/2018	N
3 9880806	15G14	231	SS1830626A	1	1	✓	✓	13A	yellow	14244	21331	11/13/2018	N
4 9880808	14G13	240	SS1830626A	1	1	✓	✓	13A	clear	14244	25784	11/13/2018	N
5 9881309	15T-2	249	SS1830626A	1	1	✓	✓	13A	yellow	14244	25784	11/13/2018	N
6 9881310	15T-3	244	SS1830626A	1	1	✓	✓	13A	yellow	14244	25784	11/13/2018	N
7 9881313	15T-6	236	SS1830626A	1	1	✓	✓	13A	clear	14244	25784	11/13/2018	N

NA  
CG12585  
11-5-18

Bench# 3	Bench# 2	Bench#
Rack ID:	Work Station	Micro Temp
Internal Standard	Balance #	100?

R-VAP ID 7	90° C	R-VAP ID 9	90° C	R-VAP ID 9	90° C
S-bath ID	C	S-bath ID	C	N-Evap	C
				M-vap	C



# Herbicides Data

# **Case Narrative/Conformance Summary**

## **Herbicides**

## Case Narrative/Conformance Summary

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

### Pesticide Residue Analysis

Fraction: Herbicides

Sample #	Client ID	Matrix		DF	Comments
		Liquid	Solid		
9881309	OU2-1-MW008WT	X		1	
9881310	OU2-1-MW008WT-DUP	X		1	Field Duplicate Sample
9881313	OU2-1-MW009WT	X		1	

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below.  
See QC Reference List for Associated Batch QC Samples

#### SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

#### HOLDING TIME:

All holding times were met.

#### PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

#### CALIBRATION/STANDARDIZATION:

(Sample number(s): 9881309-9881310, 9881313: Analysis: 10407)

For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

#### QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

##### LCS/LCSD

(Sample number(s): 9881309-9881310, 9881313: Analysis: 10407)

The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.

## Case Narrative/Conformance Summary

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

### Pesticide Residue Analysis

Fraction: Herbicides

#### MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

#### SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

#### Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification



# **Quality Control and Calibration Summary Forms**

## **Herbicides**

**Quality Control Reference List  
Pesticide Residue Analysis**

**CLIENT: Tidewater, Inc.  
SDG: TID15**

**Fraction: Herbicides**

<b>Analysis</b>	<b>Batch Number</b>	<b>Sample Number</b>	<b>Analysis Date</b>
Herb water 8151A Master	183100005A	PBLK05310	11/09/2018 07:22
		LCS05310	11/09/2018 07:55
		LCSD05310	11/09/2018 08:28
		9881309	11/09/2018 09:01
		9881310	11/09/2018 09:34
		9881313	11/09/2018 10:07

Fraction: Herbicides

<b>183100005A / PBLK05310</b>						
<b>Analyte</b>	<b>Analysis Date</b>	<b>Blank Results</b>	<b>Units</b>	<b>DL</b>	<b>LOD</b>	<b>LOQ</b>
Dalapon	11/09/18	N.D.	ug/l	1.8	3.6	4.0
Dicamba	11/09/18	N.D.	ug/l	0.080	0.16	0.30
MCPP	11/09/18	N.D.	ug/l	50	100	200
MCPA	11/09/18	N.D.	ug/l	50	100	200
2,4-DP (Dichloroprop)	11/09/18	N.D.	ug/l	0.16	0.32	0.50
2,4-D	11/09/18	N.D.	ug/l	0.25	0.50	0.60
2,4,5-TP	11/09/18	N.D.	ug/l	0.010	0.030	0.050
2,4,5-T	11/09/18	N.D.	ug/l	0.065	0.13	0.15
2,4-DB	11/09/18	N.D.	ug/l	0.63	1.3	1.5
Dinoseb	11/09/18	N.D.	ug/l	0.18	0.40	0.50

Fraction: Herbicides

18310005A Sample	2,4-DCAA-D1		2,4-DCAA-D2	
	Spike Added	2 ug/l	Spike Added	2 ug/l
	% Recovery	Limits	% Recovery	Limits
PBLK05310	86	32 - 138	74	32 - 138
LCS05310	95	32 - 138	95	32 - 138
LCSD05310	91	32 - 138	92	32 - 138
9881309	100	32 - 138	86	32 - 138
9881310	97	32 - 138	87	32 - 138
9881313	82	32 - 138	72	32 - 138

SDG: TID15  
Matrix: LIQUID

**Pesticide Residue Analysis**  
Fraction: Herbicides

LCS: LCS05310 LCSD: LCSD05310  Analyte	Batch: <b>183100005A</b> (Sample number(s): 9881309-9881310, 9881313 )							
	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
Dalapon	6.26	4.56	5.30	73	85	19-139	15	30
Dicamba	0.250	0.248 J	0.241 J	99	96	50-141	3	30
MCPP	250.58	279.96	284.98	112	114	33-157	2	30
MCPA	503.93	476.5	476.54	95	95	35-144	0	30
2,4-DP (Dichloroprop)	2.50	2.49	2.52	99	101	46-159	1	30
2,4-D	2.50	2.43	2.36	97	94	45-152	3	30
2,4,5-TP	0.250	0.272	0.262	109	105	51-134	4	30
2,4,5-T	0.250	0.264	0.264	106	105	42-147	0	30
2,4-DB	2.51	2.47	2.37	98	94	35-153	4	30
Dinoseb	1.25	1.30	1.32	104	106	19-133	2	30

Fraction: Herbicides

10407: Herb water 8151A Master Analyte Name	Default DL	Default LOD	Default LOQ	Units
Dalapon	1.8	3.6	4.0	ug/l
Dicamba	.08	.16	0.30	ug/l
MCPD	50	100	200	ug/l
MCPA	50	100	200	ug/l
2,4-DP (Dichloroprop)	.16	.32	0.50	ug/l
2,4-D	.25	.5	0.60	ug/l
2,4,5-TP	.01	.03	0.050	ug/l
2,4,5-T	.065	.13	0.15	ug/l
2,4-DB	.63	1.3	1.5	ug/l
Dinoseb	.18	.4	0.50	ug/l

6D

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850ACalibration File: 15HERB1830401GC Column (1): ZB XLBID: 0.32 (mm)ICAL Date(s) Analyzed: 10/31/2018 10/31/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Dalapon	3.72	3.73	3.73	3.72	3.73	3.73	3.73	3.70	3.76
2,4-DCAA	11.96	11.95	11.94	11.94	11.93	11.93	11.94	11.91	11.97
Dicamba	12.09	12.08	12.07	12.06	12.05	12.05	12.07	12.04	12.10
Mcpp	12.49	12.48	12.48	12.48	12.48	12.49	12.48	12.45	12.51
Mcpa	12.87	12.87	12.86	12.86	12.87	12.88	12.86	12.83	12.89
2,4-DP	13.46	13.46	13.46	13.45	13.45	13.44	13.46	13.43	13.49
2,4-D	13.90	13.90	13.90	13.90	13.89	13.89	13.90	13.87	13.93
PCP	15.10	15.10	15.09	15.09	15.09	15.08	15.09	15.06	15.12
2,4,5-TP	15.39	15.39	15.39	15.38	15.38	15.38	15.39	15.36	15.42
2,4,5-T	15.91	15.91	15.91	15.91	15.90	15.90	15.91	15.88	15.94
2,4-DB	16.74	16.74	16.74	16.74	16.74	16.73	16.74	16.71	16.77
Dinoseb	16.93	16.93	16.93	16.93	16.92	16.92	16.93	16.90	16.96
Picloram	17.89	17.89	17.89	17.89	17.89	17.88	17.89	17.86	17.92
Hexachlorophene	26.14	26.14	26.13	26.13	26.13	26.13	26.13	26.10	26.16

6E

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850ACalibration File: 15HERB1830401GC Column (1): ZB XLBID: 0.32 (mm)ICAL Date(s) Analyzed: 10/31/2018 10/31/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Dalapon	7.74E-04	7.50E-04	7.45E-04	7.24E-04	7.40E-04	7.54E-04	7.48E-04	2
2,4-DCAA	1.55E-03	1.42E-03	1.35E-03	1.25E-03	1.24E-03	1.28E-03	1.35E-03	9
Dicamba	5.62E-03	5.70E-03	5.48E-03	5.33E-03	5.24E-03	5.09E-03	5.41E-03	4
Mcpp	1.30E-05	1.10E-05	9.00E-06	7.00E-06	5.00E-06		9.00E-06	35
Mcpa	1.70E-05	1.40E-05	1.00E-05	8.00E-06	7.00E-06		1.12E-05	38
2,4-DP	1.25E-03	1.24E-03	1.12E-03	1.02E-03	9.28E-04		1.11E-03	13
2,4-D	1.39E-03	1.42E-03	1.35E-03	1.27E-03	1.27E-03	1.28E-03	1.33E-03	5
PCP	1.57E-02	1.66E-02	1.75E-02	1.69E-02	1.72E-02	1.68E-02	1.68E-02	4
2,4,5-TP	6.20E-03	6.30E-03	6.43E-03	6.11E-03	6.58E-03	6.55E-03	6.36E-03	3
2,4,5-T	5.19E-03	5.47E-03	5.52E-03	5.51E-03	5.91E-03	6.08E-03	5.61E-03	6
2,4-DB	7.64E-04	7.84E-04	7.94E-04	7.43E-04	7.71E-04	8.17E-04	7.79E-04	3
Dinoseb	3.09E-03	3.06E-03	3.05E-03	2.84E-03	2.84E-03	2.65E-03	2.92E-03	6
Picloram	4.35E-03	4.64E-03	4.98E-03	4.85E-03	5.10E-03	5.30E-03	4.87E-03	7
Hexachlorophenc	4.92E-03	5.25E-03	5.51E-03	5.27E-03	5.31E-03	5.58E-03	5.30E-03	4

Linear  
Linear

RU  
13378  
11/1/18



File Name: V:\CP15\15HERB1830401.CAL  
 Version: 30

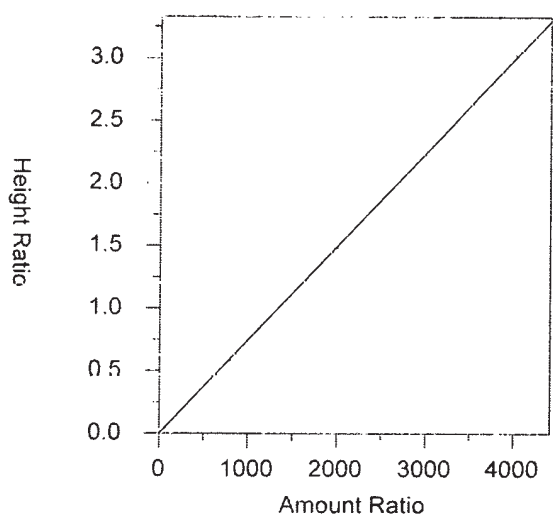
Creator:  
 Description:  
 Reason for change:

Internal standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 0  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

1 Dalapon



Expected retention time: 3.725 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

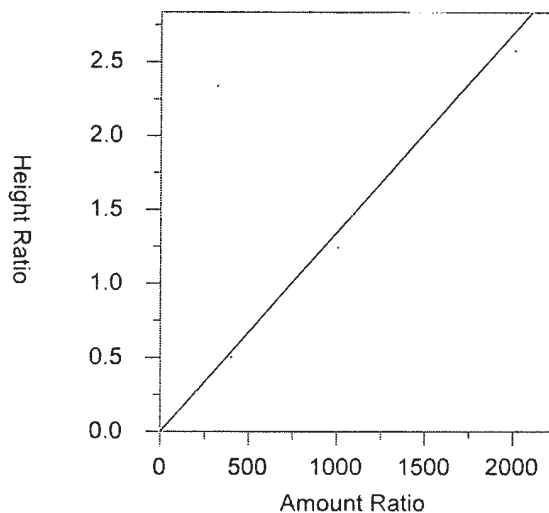
Single peak quantification by height

$$Y = 0.0007477441 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9997898  
 Average error: 1.576%  
 Average CF: 0.0007477441  
 RSD: 2.226%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	100	858224	8582.24	3.468	100	0.07736794	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
2	201	1662882	8273.045	0.357	201	0.1508334	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
3	401	3394969	8466.257	-0.421	401	0.2985827	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
4	802	6375297	7949.248	-3.236	802	0.5802846	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
5	2005	1.621528E+07	8087.421	-1.072	2005	1.48316	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
6	4010	3.123782E+07	7789.98	0.903	4010	3.025537	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'

2 DCAA



Expected retention time: 11.943 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

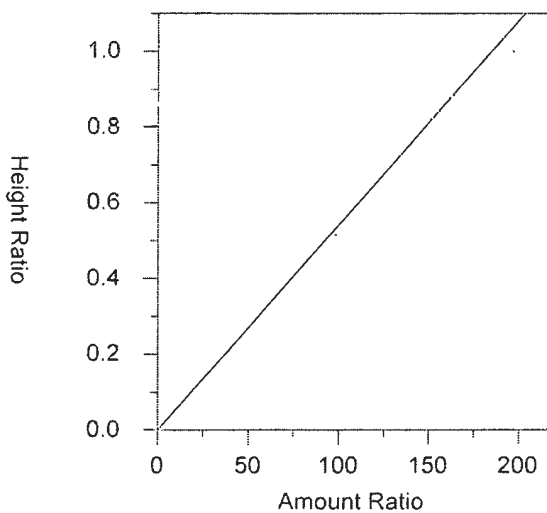
Single peak quantification by height

$Y = 0.001346959 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9933155  
 Average error: 6.738%  
 Average CF: 0.001346959  
 RSD: 8.865%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	50	859147.9	17182.96	15.002	50	0.07745123	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	101	1575704	15601.03	5.059	101	0.1429258	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	201	3083047	15338.54	0.152	201	0.2711496	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	402	5525293	13744.51	-7.121	402	0.5029166	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	1005	1.357703E+07	13509.48	-8.262	1005	1.241847	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	2010	2.660314E+07	13235.39	-4.829	2010	2.576645	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF

3 DICAMBA



Expected retention time: 12.07 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

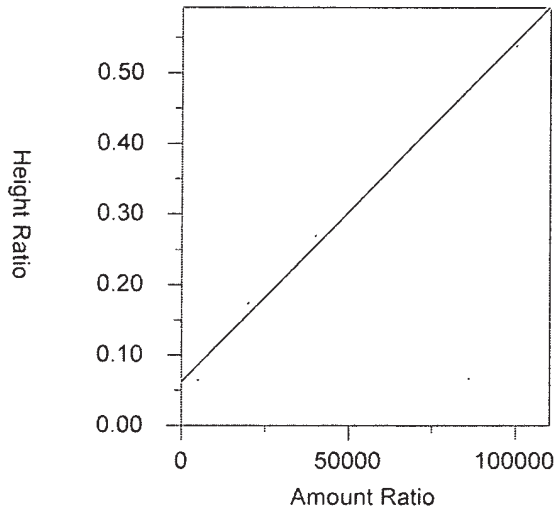
Single peak quantification by height

$Y = 0.005410979 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9939634  
 Average error: 3.509%  
 Average CF: 0.005410979  
 RSD: 4.308%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	4.9	305319.3	62310.06	3.811	4.9	0.0275242	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	9.8	616290.5	62886.79	5.419	9.8	0.05590124	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	19.7	1227761	62322.89	1.298	19.7	0.1079798	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	39.3	2301711	58567.71	-1.480	39.3	0.2095036	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	98.3	5635526	57329.87	-3.090	98.3	0.5154635	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	196.6	1.032907E+07	52538.5	-5.958	196.6	1.000421	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF

4 MCPP



Expected retention time: 12.479 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

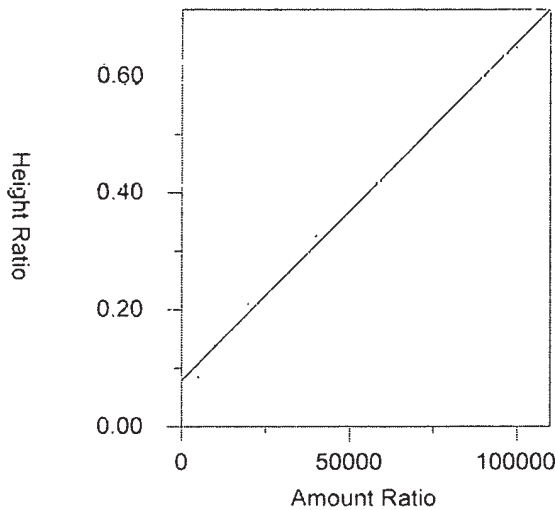
Single peak quantification by height

$$Y = 4.835912E-06 X + 0.06207189$$

Linear fit with equal weighting  
 Coefficient of determination: 0.9935448  
 Average error: 8.322%  
 Average CF: 8.964442E-06  
 RSD: 34.516%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5004	717370.8	143.3595	-25.038	5004	0.06467018	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
2	10008	1227418	122.6437	0.783	10008	0.1113342	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
3	20016	1973646	98.60342	9.260	20016	0.1735794	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
4	40032	2954836	73.81185	5.198	40032	0.2689515	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
5	100080	5890508	58.85799	-1.330	100080	0.5387859	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
6	(200160)	(9569284)	--	--	200160	9569284	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2

5 MCPA



Expected retention time: 12.863 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

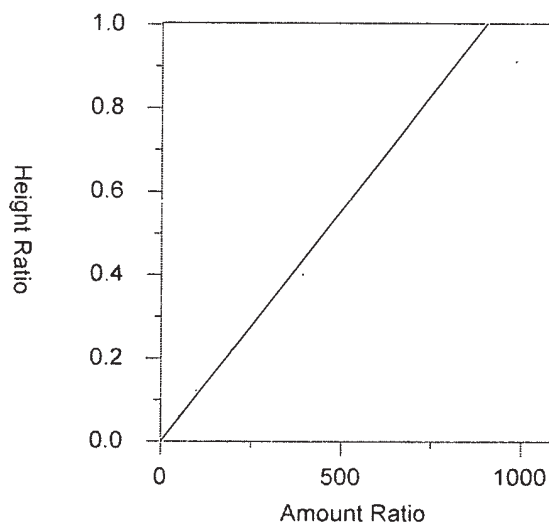
$$Y = 5.798257E-06 X + 0.07889777$$

Linear fit with equal weighting  
 Coefficient of determination: 0.9947603  
 Average error: 7.346%  
 Average CF: 1.118598E-05  
 RSD: 37.811%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	4990	935168.3	187.4085	-21.818	4990	0.08430438	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
2	9979	1530045	153.3265	1.481	9979	0.1387842	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
3	19958	2373250	118.9122	7.247	19958	0.208724	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
4	39916	3578818	89.65873	4.964	39916	0.3257469	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
5	99790	7100900	71.15843	-1.218	99790	0.6494965	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
6	(199580)	(1.183941E+07)	--	--	199580	1.183941E+07	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI

6

2,4-DP



Expected retention time: 13.455 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

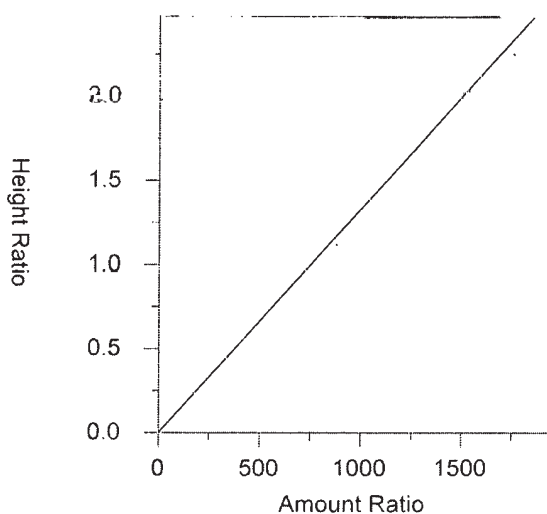
$Y = 0.001111501 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9279918  
 Average error: 9.789%  
 Average CF: 0.001111501  
 RSD: 12.501%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	49.2	682185.7	13865.56	12.457	49.2	0.06149828	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
2	98.3	1343982	13672.25	11.575	98.3	0.1219072	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
3	196.6	2495584	12693.71	0.440	196.6	0.2194831	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
4	393.2	4418721	11237.85	-7.973	393.2	0.4021955	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
5	983	9974529	10147.03	-16.499	983	0.9123381	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI
6	(1966)	(1.686066E+07)	--	--	1966	1.686066E+07	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DI

7

2,4-D



Expected retention time: 13.898 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

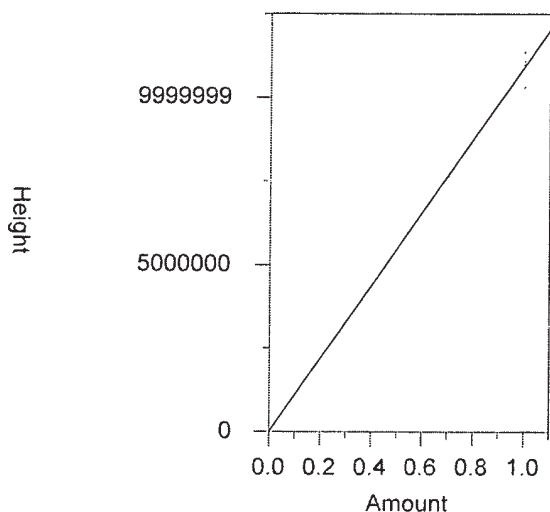
Single peak quantification by height

$Y = 0.001328755 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9969206  
 Average error: 4.296%  
 Average CF: 0.001328755  
 RSD: 5.035%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	44	678951.3	15430.71	4.689	44	0.06120671	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	88	1377651	15655.13	6.868	88	0.1249612	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	176	2694477	15309.53	1.332	176	0.2369754	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	352	4894198	13903.97	-4.757	352	0.4454738	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	880	1.223129E+07	13899.19	-4.323	880	1.118757	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	1760	2.322572E+07	13196.43	-3.809	1760	2.249525	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF

8 DBOFB \*\* Internal standard component \*\*



Expected retention time: 14.235 minutes  
 Search window: 0.03 minutes  
 No internal standard component  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

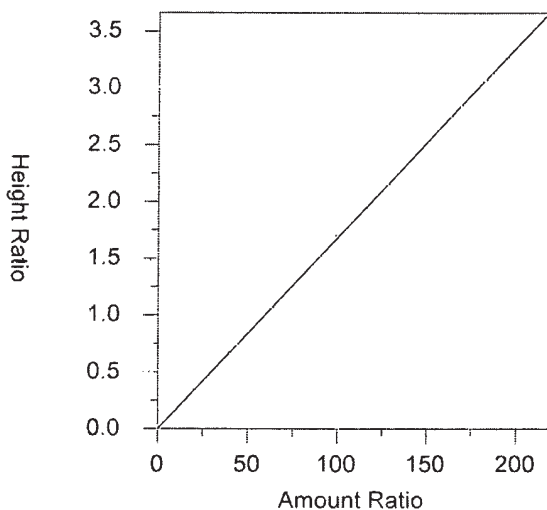
Single peak quantification by height

$Y = 1.09553E+07 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0  
 Average error: 1.987%  
 Average CF: 1.09553E+07  
 RSD: 3.149%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1.109276E+07	1.109276E+07	1.255	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
2	1	1.102463E+07	1.102463E+07	0.633	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
3	1	1.137028E+07	1.137028E+07	3.788	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
4	1	1.09865E+07	1.09865E+07	0.285	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
5	1	1.093293E+07	1.093293E+07	-0.204	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
6	1	1.032472E+07	1.032472E+07	-5.756	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304

9 PCP



Expected retention time: 15.094 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

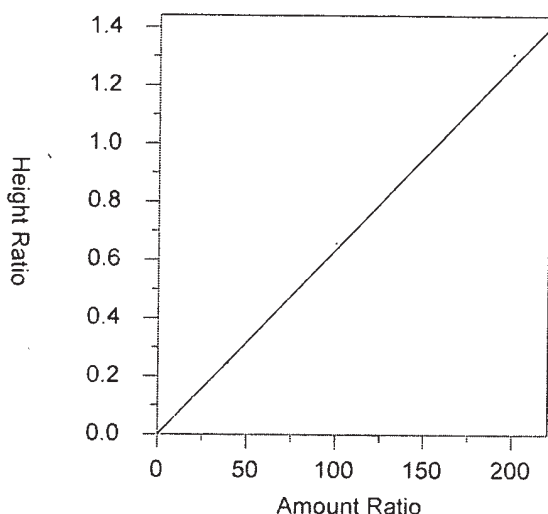
Single peak quantification by height

$Y = 0.01680253 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9997659  
 Average error: 2.525%  
 Average CF: 0.01680253  
 RSD: 3.651%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	873142.1	174628.4	-6.308	5	0.07871279	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	9.9	1810691	182898.1	-1.265	9.9	0.1642405	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	19.8	3946770	199331.8	4.335	19.8	0.3471128	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	39.6	7370801	186131.3	0.829	39.6	0.6708962	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	99.1	1.864217E+07	188114.7	2.403	99.1	1.705139	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	198.2	3.438624E+07	173492.6	0.006	198.2	3.330477	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

10 2,4,5-TP



Expected retention time: 15.386 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

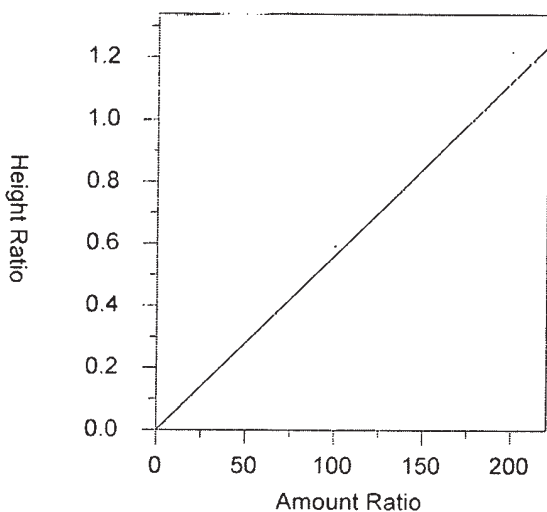
Single peak quantification by height

$Y = 0.006360548 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9984261  
 Average error: 2.472%  
 Average CF: 0.006360548  
 RSD: 2.976%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	343771.6	68754.32	-2.554	5	0.03099063	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	10	694634.1	69463.41	-0.940	10	0.06300747	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	20	1461688	73084.4	1.055	20	0.1285534	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	40	2685560	67139	-3.923	40	0.2444418	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	100	7194175	71941.75	3.455	100	0.6580281	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	200	1.351592E+07	67579.6	2.907	200	1.309083	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF

11 2,4,5-T



Expected retention time: 15.91 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

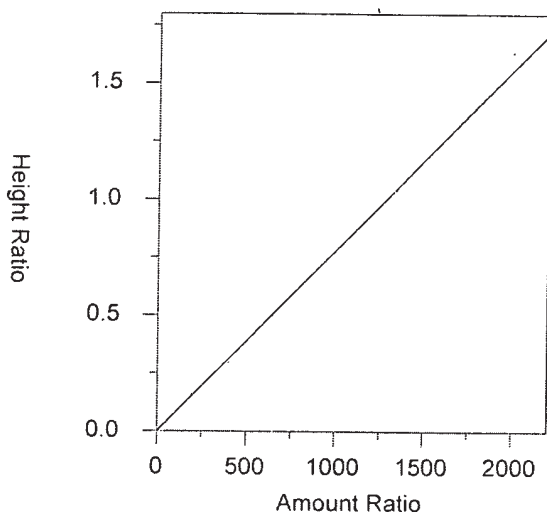
Single peak quantification by height

$Y = 0.0056143 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9909356  
 Average error: 4.557%  
 Average CF: 0.0056143  
 RSD: 5.786%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	288078.3	57615.66	-7.486	5	0.02596994	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	10	602756.8	60275.68	-2.617	10	0.05467365	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	20	1254887	62744.35	-1.710	20	0.1103655	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	40	2421446	60536.15	-1.857	40	0.2204019	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	100.1	6470386	64639.22	5.309	100.1	0.5918254	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	200.2	1.257523E+07	62813.34	8.362	200.2	1.217973	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF

12 2,4-DB



Expected retention time: 16.742 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

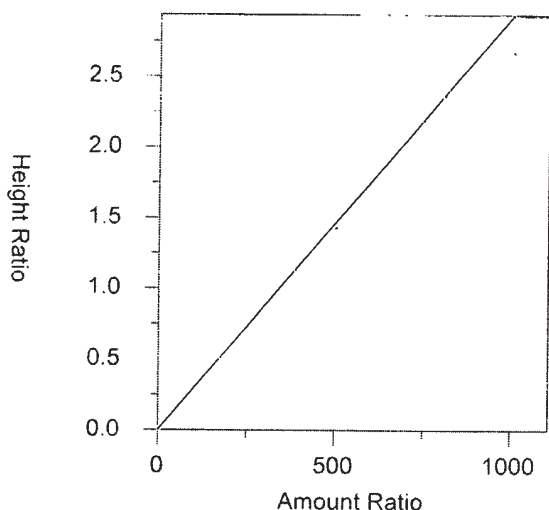
Single peak quantification by height

$Y = 0.0007789058 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9968689  
 Average error: 2.500%  
 Average CF: 0.0007789058  
 RSD: 3.274%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	50.1	424860.3	8480.246	-1.851	50.1	0.03830069	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	100.1	865643.3	8647.785	0.706	100.1	0.07851904	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	200.2	1807705	9029.496	1.955	200.2	0.1589851	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	400.4	3268072	8162.018	-4.621	400.4	0.2974625	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	1001	8436519	8428.091	-1.029	1001	0.7716613	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	2002	1.687937E+07	8431.254	4.840	2002	1.63485	Manual

13 DINOSEB



Expected retention time: 16.931 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

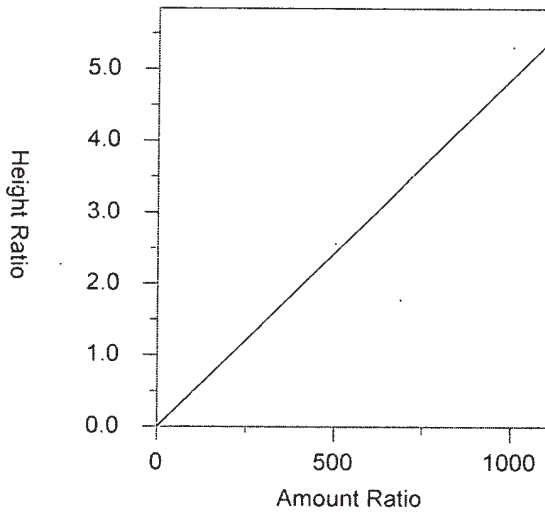
Single peak quantification by height

$Y = 0.002921449 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9853474  
 Average error: 4.915%  
 Average CF: 0.002921449  
 RSD: 5.881%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	25.2	863126.1	34251.04	5.690	25.2	0.07780986	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	50.4	1699388	33718.02	4.689	50.4	0.1541447	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	100.7	3491085	34668.18	4.367	100.7	0.307036	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	201.4	6284589	31204.51	-2.779	201.4	0.5720283	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	503.5	1.563065E+07	31043.99	-2.805	503.5	1.429685	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	1007	2.759162E+07	27399.82	-9.161	1007	2.672384	Manual

14 Picloram



Expected retention time: 17.889 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

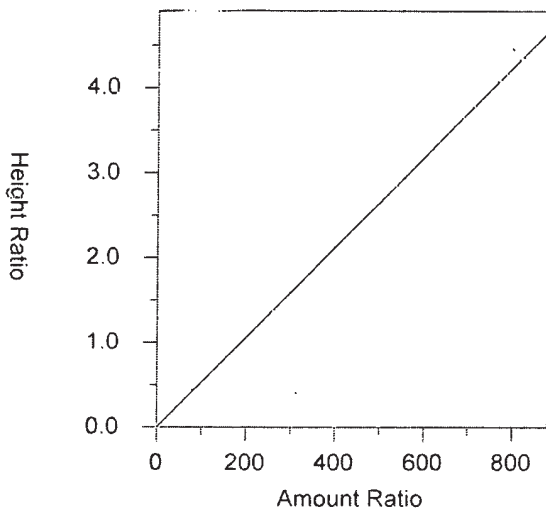
Single peak quantification by height

$Y = 0.004867646 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9902943  
 Average error: 5.279%  
 Average CF: 0.004867646  
 RSD: 6.957%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	25.1	1210413	48223.63	-10.690	25.1	0.1091174	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	50.2	2566900	51133.46	-4.716	50.2	0.2328332	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	100.4	5681229	56585.95	2.239	100.4	0.499656	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	200.7	1.068681E+07	53247.68	-0.431	200.7	0.972722	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	501.8	2.799226E+07	55783.7	4.822	501.8	2.560362	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	1003.5	5.485869E+07	54667.35	8.775	1003.5	5.313334	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF

15 Hexachlorophene



Expected retention time: 26.133 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 8 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 0.005304662 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.996512  
 Average error: 3.042%  
 Average CF: 0.005304662  
 RSD: 4.397%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	20	1091063	54553.15	-7.291	20	0.09835812	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
2	40	2313000	57825	-1.123	40	0.209803	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
3	80	5007937	62599.21	3.786	80	0.440441	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
4	160	9258325	57864.53	-0.712	160	0.8427001	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
5	400	2.322244E+07	58056.1	0.105	400	2.124082	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF
6	800	4.610935E+07	57636.69	5.236	800	4.465918	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEF



6D

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850BCalibration File: 15HERB1830401BGC Column (2): ZB 35ID: 0.32 (mm)ICAL Date(s) Analyzed: 10/31/2018 10/31/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Dalapon	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.83	3.89
2,4-DCAA	12.53	12.52	12.52	12.51	12.50	12.50	12.52	12.49	12.55
Dicamba	12.89	12.88	12.88	12.87	12.87	12.87	12.88	12.85	12.91
Mcpp	12.94	12.94	12.93	12.93	12.93	12.95	12.93	12.90	12.96
Mcpa	13.46	13.46	13.46	13.46	13.46	13.48	13.46	13.43	13.49
2,4-DP	13.99	13.99	13.99	13.98	13.98	13.97	13.99	13.96	14.02
2,4-D	14.61	14.61	14.61	14.61	14.61	14.60	14.61	14.58	14.64
PCP	15.31	15.31	15.31	15.30	15.30	15.29	15.31	15.28	15.34
2,4,5-TP	15.80	15.80	15.80	15.80	15.80	15.80	15.80	15.77	15.83
2,4,5-T	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.47	16.53
Dinoseb	16.94	16.94	16.94	16.94	16.93	16.93	16.94	16.91	16.97
2,4-DB	17.21	17.21	17.21	17.21	17.20	17.20	17.21	17.18	17.24
Picloram	19.51	19.51	19.51	19.51	19.50	19.50	19.51	19.48	19.54
Hexachlorophene	26.56	26.56	26.55	26.56	26.55	26.55	26.55	26.52	26.58

6E

INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850B

Calibration File: 15HERB1830401B

GC Column (2): ZB 35

ID: 0.32 (mm)

ICAL Date(s) Analyzed: 10/31/2018 10/31/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Dalapon	1.13E-03	1.10E-03	1.05E-03	1.00E-03	1.03E-03	9.58E-04	1.05E-03	6
2,4-DCAA	1.53E-03	1.46E-03	1.34E-03	1.29E-03	1.34E-03	1.30E-03	1.38E-03	7
Dicamba	5.99E-03	5.96E-03	5.75E-03	5.70E-03	5.62E-03	5.33E-03	5.73E-03	4
Mcpp	6.00E-06	6.00E-06	6.00E-06	5.00E-06	6.00E-06	5.00E-06	5.67E-06	6
Mcpa	9.00E-06	9.00E-06	8.00E-06	7.00E-06	7.00E-06	7.00E-06	7.83E-06	14
2,4-DP	1.45E-03	1.34E-03	1.25E-03	1.11E-03	1.08E-03	9.99E-04	1.20E-03	14
2,4-D	1.45E-03	1.44E-03	1.38E-03	1.31E-03	1.37E-03	1.33E-03	1.38E-03	4
PCP	1.71E-02	1.83E-02	1.80E-02	1.75E-02	1.79E-02	1.72E-02	1.77E-02	3
2,4,5-TP	6.58E-03	6.71E-03	6.47E-03	6.40E-03	6.68E-03	6.28E-03	6.52E-03	3
2,4,5-T	5.63E-03	5.85E-03	5.75E-03	5.64E-03	5.89E-03	5.78E-03	5.76E-03	2
Dinoseb	3.16E-03	3.14E-03	3.07E-03	2.85E-03	2.88E-03	2.68E-03	2.96E-03	6
2,4-DB	8.44E-04	8.42E-04	8.12E-04	7.72E-04	8.20E-04	8.10E-04	8.17E-04	3
Picloram	4.73E-03	5.09E-03	5.25E-03	5.14E-03	5.48E-03	5.54E-03	5.20E-03	6
Hexachlorophene	5.26E-03	5.24E-03	5.46E-03	5.44E-03	5.41E-03	5.55E-03	5.39E-03	2

File Name: V:\CP15\15HERB1830401B.CAL  
 Version: 35

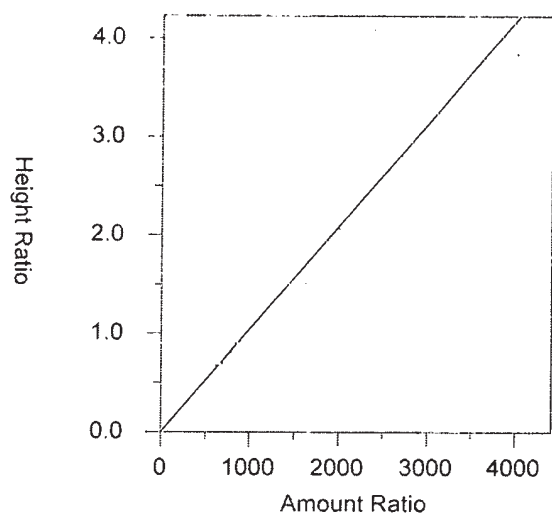
Creator:  
 Description:  
 Reason for change:

Internal standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 0  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

1 Dalapon



Expected retention time: 3.855 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

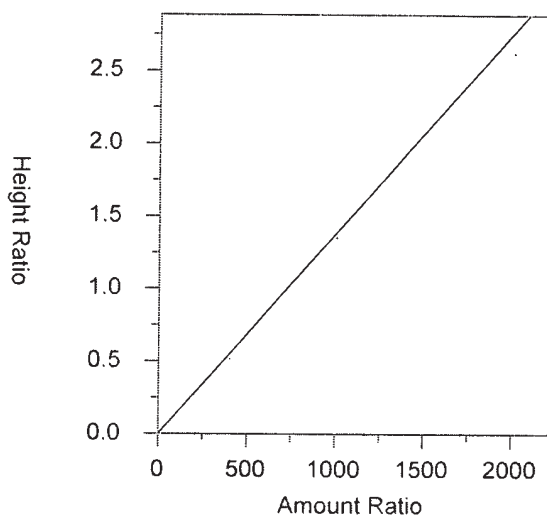
Single peak quantification by height

$Y = 0.001045819 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9881734  
 Average error: 4.685%  
 Average CF: 0.001045819  
 RSD: 6.028%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	100	1231728	12317.28	7.923	100	0.1128679	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
2	201	2383770	11859.55	5.412	201	0.2215859	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
3	401	4787344	11938.51	0.719	401	0.4223905	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
4	802	8878889	11070.93	-4.060	802	0.8046976	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
5	2005	2.213928E+07	11042.04	-1.631	2005	2.062678	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'
6	4010	4.138906E+07	10321.46	-8.364	4010	3.84297	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24'

2 DCAA



Expected retention time: 12.516 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

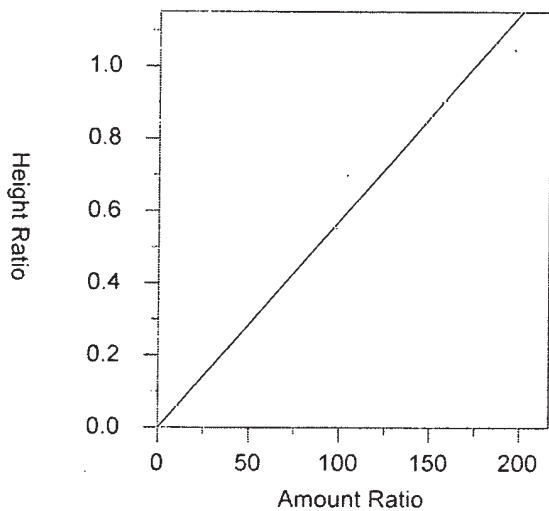
Single peak quantification by height

$Y = 0.001377822 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9950715  
 Average error: 5.543%  
 Average CF: 0.001377822  
 RSD: 6.798%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	50	832311	16646.22	10.708	50	0.07626778	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	101	1585699	15699.99	5.921	101	0.1474003	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	201	3060839	15228.05	-2.485	201	0.2700598	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	402	5720252	14229.48	-6.401	402	0.518429	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	1005	1.450293E+07	14430.78	-2.419	1005	1.351213	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	2010	2.823902E+07	14049.26	-5.324	2010	2.62199	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

3 DICAMBA



Expected retention time: 12.878 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

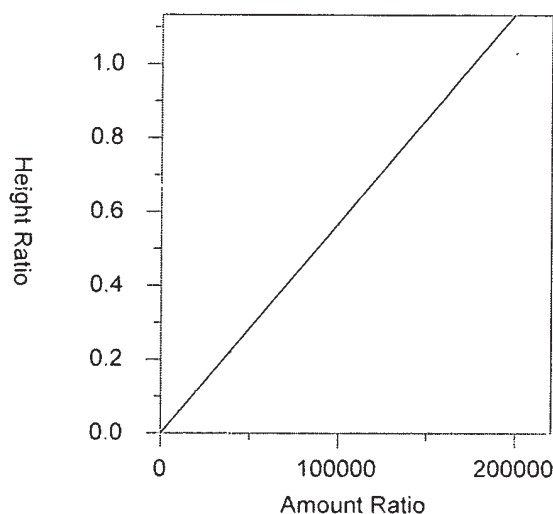
Single peak quantification by height

$Y = 0.005724836 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9920483  
 Average error: 3.044%  
 Average CF: 0.005724836  
 RSD: 4.234%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	4.9	320092.3	65324.96	4.561	4.9	0.02933126	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	9.8	628317.6	64114.04	4.104	9.8	0.05840594	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	19.7	1284205	65188.07	0.467	19.7	0.1133062	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	39.3	2472484	62913.08	-0.402	39.3	0.2240823	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	98.3	5933390	60360.02	-1.768	98.3	0.5528036	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	196.6	1.127766E+07	57363.48	-6.963	196.6	1.04713	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

4 MCPP



Expected retention time: 12.932 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DFOB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

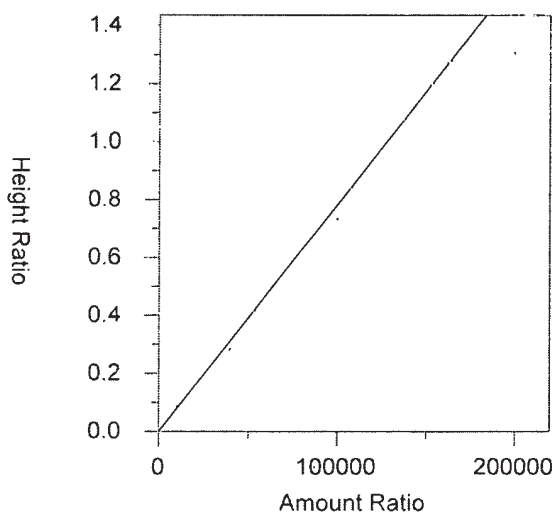
Single peak quantification by height

$Y = 5.691065E-06 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9843849  
 Average error: 4.643%  
 Average CF: 5.691065E-06  
 RSD: 6.298%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5004	333254.5	66.59762	7.231	5004	0.03053736	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	10008	652304.4	65.17829	6.460	10008	0.06063565	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	20016	1294153	64.65592	0.238	20016	0.114184	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	40032	2426446	60.61266	-3.474	40032	0.2199099	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	100080	6058388	60.53545	-0.898	100080	0.5644494	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	200160	1.109583E+07	55.4348	-9.558	200160	1.030247	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

5 MCPA



Expected retention time: 13.459 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DFOB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

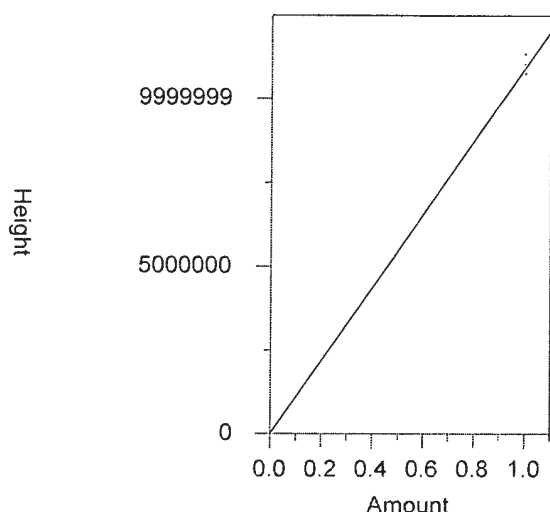
Single peak quantification by height

$Y = 7.82698E-06 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9437551  
 Average error: 10.952%  
 Average CF: 7.82698E-06  
 RSD: 13.880%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	4990	512483.5	102.7021	20.238	4990	0.04696078	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
2	9979	946254.9	94.82462	12.617	9979	0.08796013	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
3	19958	1753191	87.84402	-0.977	19958	0.1546852	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
4	39916	3123468	78.25103	-9.391	39916	0.2830813	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
5	99790	7870239	78.86801	-6.120	99790	0.7332564	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
6	199580	1.40704E+07	70.50005	-16.367	199580	1.306435	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1

6 DBOFB \*\* Internal standard component \*\*



Expected retention time: 13.715 minutes  
 Search window: 0.03 minutes  
 No internal standard component  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

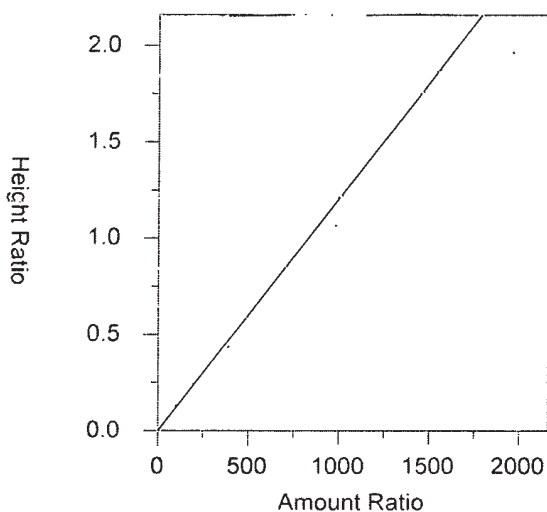
Single peak quantification by height

$Y = 1.092365E+07 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0  
 Average error: 1.588%  
 Average CF: 1.092365E+07  
 RSD: 2.119%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1.091301E+07	1.091301E+07	-0.097	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
2	1	1.075777E+07	1.075777E+07	-1.518	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
3	1	1.133393E+07	1.133393E+07	3.756	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
4	1	1.103382E+07	1.103382E+07	1.009	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
5	1	1.073327E+07	1.073327E+07	-1.743	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304
6	1	1.077007E+07	1.077007E+07	-1.406	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304

7 2,4-DP



Expected retention time: 13.985 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

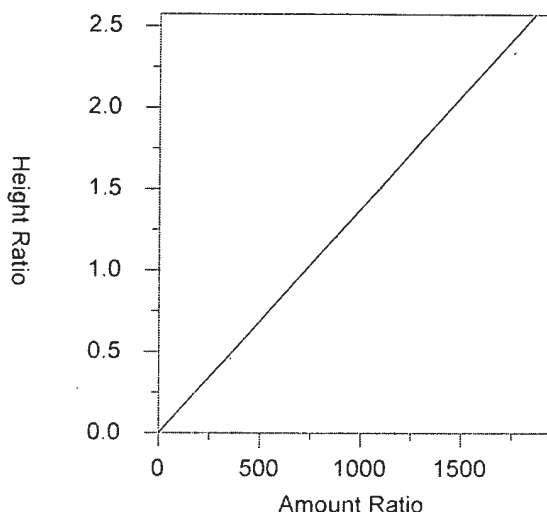
$Y = 0.001204806 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.933893  
 Average error: 11.671%  
 Average CF: 0.001204806  
 RSD: 14.159%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	49.2	777028.1	15793.25	20.119	49.2	0.071202	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	98.3	1420029	14445.87	11.456	98.3	0.1320003	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	196.6	2776951	14124.88	3.440	196.6	0.2450122	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	393.2	4812606	12239.59	-7.929	393.2	0.4361686	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	983	1.14386E+07	11636.42	-10.015	983	1.065714	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1966	2.115571E+07	10760.79	-17.071	1966	1.964306	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

8

2,4-D



Expected retention time: 14.609 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

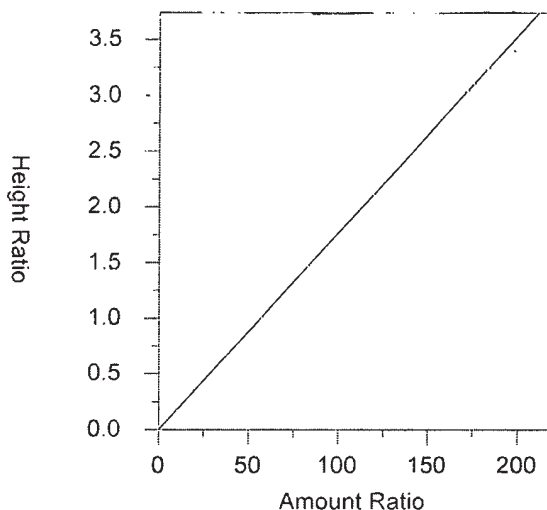
$Y = 0.001380125 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9977708  
 Average error: 3.190%  
 Average CF: 0.001380125  
 RSD: 4.109%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	44	695226.4	15800.6	4.908	44	0.0637062	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	88	1366650	15530.11	4.601	88	0.1270384	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	176	2754721	15651.82	0.061	176	0.2430508	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	352	5093714	14470.78	-4.973	352	0.4616456	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	880	1.291685E+07	14678.24	-0.911	880	1.20344	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1760	2.519645E+07	14316.17	-3.686	1760	2.339488	Manual

9

PCP



Expected retention time: 15.306 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

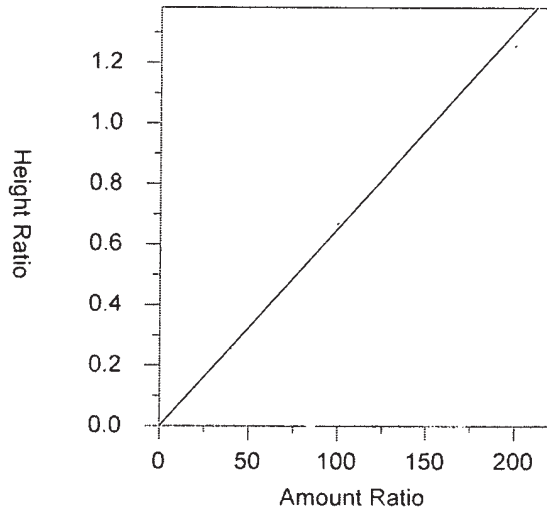
Single peak quantification by height

$Y = 0.01766282 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9986944  
 Average error: 2.357%  
 Average CF: 0.01766282  
 RSD: 2.781%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	933507.4	186701.5	-3.140	5	0.08554078	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	9.9	1950152	196985.1	3.670	9.9	0.1812785	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	19.8	4042969	204190.4	1.999	19.8	0.3567138	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	39.6	7636133	192831.7	-1.055	39.6	0.6920661	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	99.1	1.905082E+07	192238.3	1.402	99.1	1.774932	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	198.2	3.66196E+07	184760.8	-2.875	198.2	3.400126	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

10 2,4,5-TP



Expected retention time: 15.8 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

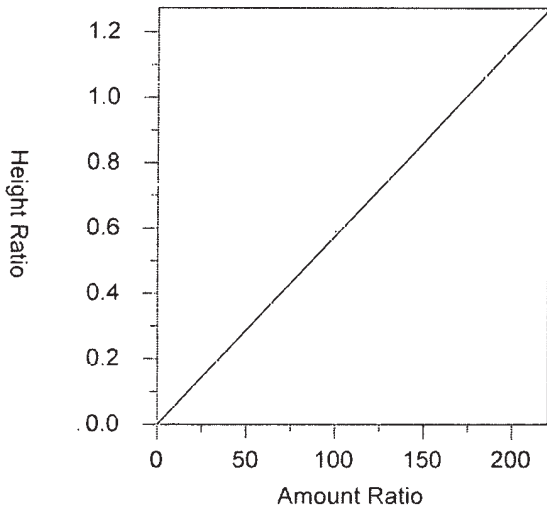
Single peak quantification by height

$Y = 0.006518227 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9977756  
 Average error: 2.110%  
 Average CF: 0.006518227  
 RSD: 2.562%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	359201	71840.2	0.994	5	0.03291493	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	10	721492.6	72149.27	2.892	10	0.06706712	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	20	1465761	73288.05	-0.797	20	0.129325	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	40	2822618	70565.45	-1.885	40	0.2558151	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	100	7167274	71672.74	2.445	100	0.6677624	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	200	1.352809E+07	67640.45	-3.648	200	1.256082	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

11 2,4,5-T



Expected retention time: 16.503 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

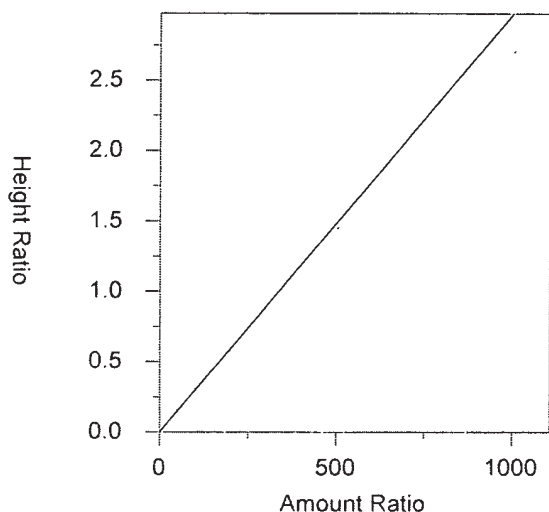
$Y = 0.005758906 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9997687  
 Average error: 1.451%  
 Average CF: 0.005758906  
 RSD: 1.854%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	307396	61479.2	-2.176	5	0.02816785	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
2	10	629615.4	62961.54	1.628	10	0.05852657	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
3	20	1304147	65207.35	-0.098	20	0.1150657	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
4	40	2488851	62221.27	-2.080	40	0.2255657	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
5	100.1	6329542	63232.19	2.298	100.1	0.5897124	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1
6	200.2	1.24703E+07	62289.21	0.428	200.2	1.157866	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP1



12 DINOSEB



Expected retention time: 16.936 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

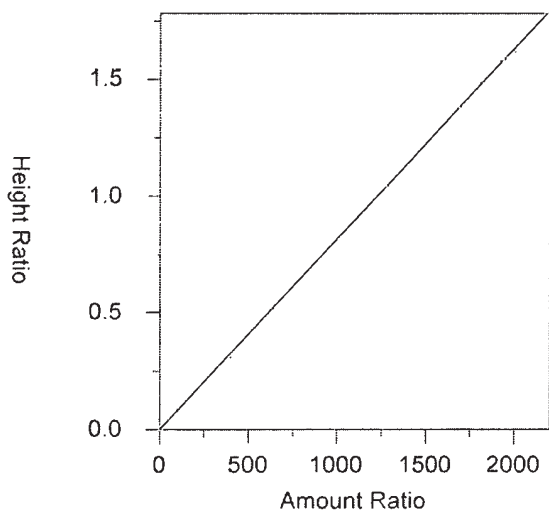
Single peak quantification by height

$Y = 0.002964897 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9842514  
 Average error: 5.443%  
 Average CF: 0.002964897  
 RSD: 6.441%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	25.2	869271.2	34491.89	6.611	25.2	0.07965457	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	50.4	1704537	33820.18	6.034	50.4	0.1584471	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	100.7	3508585	34841.96	3.684	100.7	0.3095647	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	201.4	6324136	31400.88	-4.014	201.4	0.5731593	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	503.5	1.556533E+07	30914.26	-2.856	503.5	1.450195	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1007	2.911423E+07	28911.85	-9.458	1007	2.703254	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

13 2,4-DB



Expected retention time: 17.209 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

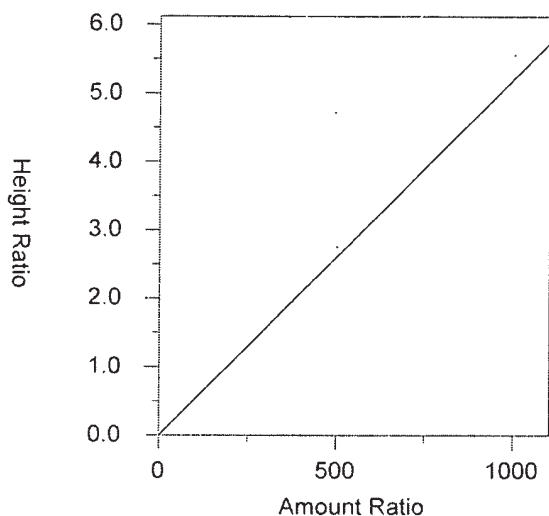
Single peak quantification by height

$Y = 0.0008163974 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.99972  
 Average error: 2.297%  
 Average CF: 0.0008163974  
 RSD: 3.235%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	50.1	461590.6	9213.386	3.413	50.1	0.04229728	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	100.1	906211.7	9053.063	3.079	100.1	0.08423787	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	200.2	1841865	9200.125	-0.571	200.2	0.1625089	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	400.4	3409265	8514.648	-5.477	400.4	0.3089832	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	1001	8806290	8797.492	0.398	1001	0.8204666	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	2002	1.745469E+07	8718.626	-0.842	2002	1.620666	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

14 Picloram



Expected retention time: 19.507 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

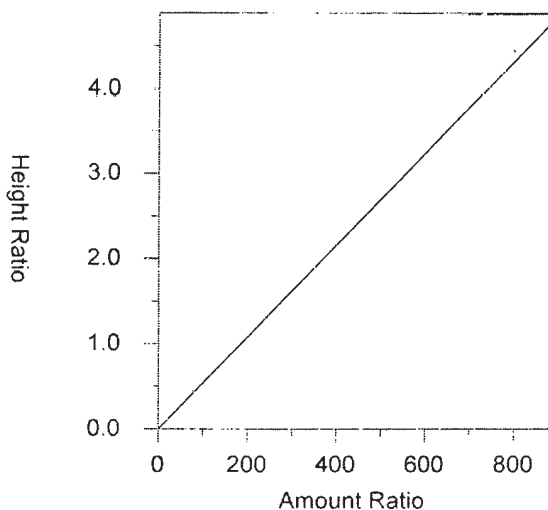
Single peak quantification by height

$Y = 0.005204885 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9939634  
 Average error: 4.220%  
 Average CF: 0.005204885  
 RSD: 5.701%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	25.1	1294424	51570.68	-9.208	25.1	0.1186129	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	50.2	2748069	54742.41	-2.233	50.2	0.2554497	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	100.4	5972955	59491.58	0.847	100.4	0.5269977	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	200.7	1.138575E+07	56730.2	-1.218	200.7	1.031896	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	501.8	2.951671E+07	58821.66	5.292	501.8	2.75002	Manual
6	1003.5	5.992133E+07	59712.34	6.521	1003.5	5.56369	Manual

15 Hexachlorophenc



Expected retention time: 26.553 minutes  
 Search window: 0.03 minutes  
 Internal standard component: 6 (DBOFB)  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 0.005393045 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.998834  
 Average error: 1.769%  
 Average CF: 0.005393045  
 RSD: 2.246%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	20	1148370	57418.5	-2.440	20	0.1052294	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	40	2254160	56354	-2.867	40	0.2095378	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	80	4950506	61881.32	1.238	80	0.4367864	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	160	9599394	59996.21	0.824	160	0.8699973	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	400	2.321953E+07	58048.82	0.283	400	2.163323	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	800	4.784262E+07	59803.27	2.961	800	4.442183	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850A

Date Analyzed: 10/31/18

GC Column (1): ZB XLB

ID: .32 (mm)

Time Analyzed: 22:13

Lab File ID: 15HERB18304001.013.RAW

Initial Calibration: 15HERB1830401

Lab Standard ID: ICHBXAA

Init. Calib Date(s): 10/31/18

10/31/18

Calibration: 15HERB1830401

COMPOUND	RT	RT WINDOW		CALC AMOUNT	NOM AMOUNT	%D
		FROM	TO			
Dalapon	3.72	3.70	3.76	415.23	481.60	-14
2,4-DCAA	11.94	11.91	11.97	186.56	201.00	-7
Dicamba	12.07	12.04	12.10	20.27	18.94	7
Mcpp	12.48	12.45	12.51	21623.53	19186.00	13
Mcpa	12.86	12.83	12.89	21327.76	19084.00	12
2,4-DP	13.45	13.43	13.49	214.13	192.80	11
2,4-D	13.90	13.87	13.93	195.75	187.20	5
PCP	15.09	15.06	15.12	93.48	93.34	0
2,4,5-TP	15.39	15.36	15.42	20.49	18.64	10
2,4,5-T	15.91	15.88	15.94	19.97	18.62	7
2,4-DB	16.74	16.71	16.77	184.24	181.80	1
Dinoseb	16.93	16.90	16.96	84.30	93.34	-10
Picloram	17.89	17.86	17.92	198.75	183.20	8
Hexachlorophene	26.14	26.10	26.16	109.82	99.20	11

Compounds 14

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850B

Date Analyzed: 10/31/18

GC Column (2): ZB 35

ID: .32 (mm)

Time Analyzed: 22:13

Lab File ID: 15HERB18304001B.013.RAW

Initial Calibration: 15HERB1830401B

Lab Standard ID: ICHBXAA

Init. Calib Date(s): 10/31/18

10/31/18

Calibration: 15HERB1830401B

COMPOUND	RT	RT WINDOW		CALC AMOUNT	NOM AMOUNT	%D
		FROM	TO			
Dalapon	3.85	3.83	3.89	418.96	481.60	-13
2,4-DCAA	12.52	12.49	12.55	194.23	201.00	-3
Dicamba	12.88	12.85	12.91	20.43	18.94	8
Mcpp	12.93	12.90	12.96	19502.99	19186.00	2
Mcpa	13.46	13.43	13.49	18662.05	19084.00	-2
2,4-DP	13.99	13.96	14.02	204.79	192.80	6
2,4-D	14.61	14.58	14.64	190.48	187.20	2
PCP	15.31	15.28	15.34	87.44	93.34	-6
2,4,5-TP	15.80	15.77	15.83	20.15	18.64	8
2,4,5-T	16.50	16.47	16.53	19.94	18.62	7
Dinoseb	16.94	16.91	16.97	82.41	93.34	-12
2,4-DB	17.21	17.18	17.24	181.39	181.80	0
Picloram	19.51	19.48	19.54	190.70	183.20	4
Hexachlorophene	26.56	26.52	26.58	111.72	99.20	13

Compounds 14

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850A

Date Analyzed: 11/09/18

GC Column (1): ZB XLB

ID: .32 (mm)

Time Analyzed: 6:16

Lab File ID: 15HERB18304004.123.RAW

Initial Calibration: 15HERB1830401

Lab Standard ID: HERB3VT

Init. Calib Date(s): 10/31/18

10/31/18

Calibration: 15HERB1830401

COMPOUND	RT	RT WINDOW		CALC AMOUNT	NOM AMOUNT	%D
		FROM	TO			
Dalapon	3.72	3.70	3.76	397.81	401.00	-1
2,4-DCAA	11.94	11.91	11.97	194.73	201.00	-3
Dicamba	12.07	12.04	12.10	19.94	19.66	1
Mcpp	12.48	12.45	12.51	22970.97	20016.00	15
Mcpa	12.86	12.83	12.89	21962.41	19958.00	10
2,4-DP	13.46	13.43	13.49	196.13	196.60	0
2,4-D	13.90	13.87	13.93	170.58	176.00	-3
PCP	15.09	15.06	15.12	20.16	19.82	2
2,4,5-TP	15.39	15.36	15.42	19.19	20.00	-4
2,4,5-T	15.91	15.88	15.94	18.48	20.02	-8
2,4-DB	16.74	16.71	16.77	183.82	200.20	-8
Dinoseb	16.93	16.90	16.96	103.63	100.70	3
Picloram	17.89	17.86	17.92	90.83	99.96	-9
Hexachlorophene	26.14	26.10	26.16	80.69	80.00	1

Compounds 14

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850B

Date Analyzed: 11/09/18

GC Column (2): ZB 35

ID: .32 (mm)

Time Analyzed: 6:16

Lab File ID: 15HERB18304004B.123.RAW

Initial Calibration: 15HERB1830401B

Lab Standard ID: HERB3VT

Init. Calib Date(s): 10/31/18

10/31/18

Calibration: 15HERB1830401B

COMPOUND	RT	RT WINDOW		CALC AMOUNT	NOM AMOUNT	%D
		FROM	TO			
Dalapon	3.86	3.83	3.89	409.91	401.00	2
2,4-DCAA	12.52	12.49	12.55	196.69	201.00	-2
Dicamba	12.88	12.85	12.91	19.88	19.66	1
Mcpp	12.93	12.90	12.96	21657.32	20016.00	8
Mcpa	13.46	13.43	13.49	20380.34	19958.00	2
2,4-DP	13.99	13.96	14.02	194.74	196.60	-1
2,4-D	14.61	14.58	14.64	166.11	176.00	-6
PCP	15.31	15.28	15.34	19.89	19.82	0
2,4,5-TP	15.80	15.77	15.83	19.56	20.00	-2
2,4,5-T	16.51	16.47	16.53	18.75	20.02	-6
Dinoseb	16.94	16.91	16.97	104.81	100.70	4
2,4-DB	17.21	17.18	17.24	184.98	200.20	-8
Picloram	19.51	19.48	19.54	92.57	99.96	-7
Hexachlorophene	26.56	26.52	26.58	79.49	80.00	-1

Compounds 14

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** HIBLKX1824B

**HIBLKTC ID:** TC

**Batchnumber:** 1831199999

**Sample Amount:** 1000

**Total Volume:** 10

**ml Analyst:** 13378

**SDG:**

**State:**

**Analyses:** 10407

**Analysis Report (A)**

**Analysis Report (B)**

Injected on : Nov 09, 2018 06:49:10  
 Instrument : CP15-19850A  
 Result file : 15HERB18304004.124.RAW  
 Calibration file : 15HERB1830401.CAL  
 Method file : 15HERB.MET

Injected on : Nov 09, 2018 06:49:10  
 Instrument : CP15-19850B  
 Result file : 15HERB18304004B.124.RAW  
 Calibration file : 15HERB1830401B.CAL  
 Method file : 15HERBB.MET

**%SSR(DCAA) :** 64% (34-142) **Conc.:** 2.558115

**%SSR(DCAA) :** 60% (34-142) **Conc.:** 2.38021

Peak name	Min	R.T.	Max	Height	Amount
DCAA	11.91	11.97	11.97	3584266	2.558115
2,4-D	13.87	13.92	13.93	2825	0.002044
DBOFB	14.21	14.24	14.26	10402220	0.001000
2,4,5-T	15.88	15.92	15.94	7598	0.001301
DINOSEB	16.90	16.94	16.96	4469	0.001471
Picloram	17.86	17.92	17.92	15652	0.003091
Hexachlorophene	26.10	26.13	26.16	18063	0.003274

Peak name	Min	R.T.	Max	Height	Amount
DCAA	12.49	12.54	12.55	3445929	2.380210
MCPA	13.43	13.46	13.49	964	0.117257
DBOFB	13.69	13.72	13.75	10507460	0.001000
2,4-DP	13.96	13.98	14.01	94350	0.074530
2,4-D	14.58	14.61	14.64	2526	0.001742
PCP	15.28	15.31	15.34	1521	0.000082
2,4,5-T	16.47	16.52	16.53	2603	0.000430
DINOSEB	16.91	16.95	16.97	3058	0.000981
Picloram	19.48	19.52	19.54	25741	0.004707
Hexachlorophene	26.52	26.56	26.58	20047	0.003538

**Summary Report**

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<4	<1.8			
<input type="checkbox"/> DCAA	A	2.558115				7.21	
<input checked="" type="checkbox"/> DICAMBA			<0.3	<0.08			
<input checked="" type="checkbox"/> MCPP			<200	<50			
<input checked="" type="checkbox"/> MCPA			<200	<50			
<input checked="" type="checkbox"/> 2,4-DP			<0.5	<0.16			
<input checked="" type="checkbox"/> 2,4-D	A	0.002044	<0.6	<0.25	<MDL	15.94	RU 13378 11/12/18
<input type="checkbox"/> DBOFB	A	0.001000				0.00	
<input checked="" type="checkbox"/> PCP			<0.07	<0.027			
<input checked="" type="checkbox"/> 2,4,5-TP			<0.05	<0.01			
<input checked="" type="checkbox"/> 2,4,5-T	B	0.000430	<0.15	<0.065	<MDL	100.61	** RU 13378 11/12/18
<input checked="" type="checkbox"/> 2,4-DB			<1.5	<0.63			
<input checked="" type="checkbox"/> DINOSEB	A	0.001471	<0.5	<0.18	<MDL	39.90	RU 13378 11/12/18
<input checked="" type="checkbox"/> Picloram	A	0.003091	<1	<0.36	<MDL	41.43	** RU 13378 11/12/18
<input checked="" type="checkbox"/> Hexachlorophene	B	0.003538	<0.2	<0.18	<MDL	7.76	RU 13378 11/12/18

Units: ug/l

Reviewed by: *[Signature]*

Verified by: *[Signature]*

Date: 11/12/18

Date: NOV 13 2018

%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850A

Date Analyzed: 11/09/18

GC Column (1): ZB XLB ID: .32 (mm)

Time Analyzed: 12:52

Lab File ID: 15HERB18304004.135.RAW

Initial Calibration: 15HERB1830401

Lab Standard ID: HERB3VU

Init. Calib Date(s): 10/31/18 10/31/18

Calibration: 15HERB1830401

COMPOUND	RT	RT WINDOW		CALC AMOUNT	NOM AMOUNT	%D
		FROM	TO			
Dalapon	3.72	3.70	3.76	397.59	401.00	-1
2,4-DCAA	11.94	11.91	11.97	197.48	201.00	-2
Dicamba	12.07	12.04	12.10	20.18	19.66	3
Mcpp	12.48	12.45	12.51	23416.24	20016.00	17
Mcpa	12.86	12.83	12.89	22010.62	19958.00	10
2,4-DP	13.45	13.43	13.49	197.74	196.60	1
2,4-D	13.90	13.87	13.93	169.56	176.00	-4
PCP	15.09	15.06	15.12	20.46	19.82	3
2,4,5-TP	15.38	15.36	15.42	19.56	20.00	-2
2,4,5-T	15.91	15.88	15.94	18.73	20.02	-6
2,4-DB	16.74	16.71	16.77	191.20	200.20	-4
Dinoseb	16.93	16.90	16.96	105.60	100.70	5
Picloram	17.89	17.86	17.92	92.48	99.96	-7
Hexachlorophene	26.13	26.10	26.16	78.07	80.00	-2

Compounds 14



7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: 19850B

Date Analyzed: 11/09/18

GC Column (2) : ZB 35

ID: .32 (mm)

Time Analyzed: 12:52

Lab File ID: 15HERB18304004B.135.RAW

Initial Calibration: 15HERB1830401B

Lab Standard ID: HERB3VU

Init. Calib Date(s): 10/31/18

10/31/18

Calibration: 15HERB1830401B

COMPOUND	RT	RT WINDOW		CALC AMOUNT	NOM AMOUNT	%D
		FROM	TO			
Dalapon	3.85	3.83	3.89	401.28	401.00	0
2,4-DCAA	12.52	12.49	12.55	195.86	201.00	-3
Dicamba	12.88	12.85	12.91	19.73	19.66	0
Mcpp	12.93	12.90	12.96	20819.06	20016.00	4
Mcpa	13.46	13.43	13.49	20274.88	19958.00	2
2,4-DP	13.98	13.96	14.02	192.23	196.60	-2
2,4-D	14.61	14.58	14.64	165.85	176.00	-6
PCP	15.31	15.28	15.34	20.13	19.82	2
2,4,5-TP	15.80	15.77	15.83	19.62	20.00	-2
2,4,5-T	16.50	16.47	16.53	18.40	20.02	-8
Dinoseb	16.94	16.91	16.97	97.97	100.70	-3
2,4-DB	17.21	17.18	17.24	181.21	200.20	-9
Picloram	19.51	19.48	19.54	92.80	99.96	-7
Hexachlorophene	26.56	26.52	26.58	82.27	80.00	3

Compounds 14

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** HIBLKX1824B      HIBLKTD ID: TD      **Batchnumber:** 1831199999  
**Sample Amount:** 1000      Total Volume: 10 ml      Analyst: 13378      SDG:      State:  
**Analyses:** 10407

**Analysis Report (A)**

Injected on : Nov 09, 2018 13:25:42  
 Instrument : CP15-19850A  
 Result file : 15HERB18304004.136.RAW  
 Calibration file : 15HERB1830401.CAL  
 Method file : 15HERB.MET

%SSR(DCAA) : 64% (34-142)      Conc.: 2.566074

**Analysis Report (B)**

Injected on : Nov 09, 2018 13:25:42  
 Instrument : CP15-19850B  
 Result file : 15HERB18304004B.136.RAW  
 Calibration file : 15HERB1830401B.CAL  
 Method file : 15HERBB.MET

%SSR(DCAA) : 58% (34-142)      Conc.: 2.305068


Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.75	3.76	2476	0.003023
DCAA	11.91	11.97	11.97	3786240	2.566074
2,4-D	13.87	13.92	13.93	2774	0.001906
DBOFB	14.21	14.23	14.26	10954300	0.001000
PCP	15.06	15.10	15.12	30035	0.001632
2,4,5-T	15.88	15.92	15.94	9015	0.001466
DINOSEB	16.90	16.93	16.96	5689	0.001778
Picloram	17.86	17.91	17.92	21285	0.003992
Hexachlorophene	26.10	26.13	26.16	17001	0.002926


Peak name	Min	R.T.	Max	Height	Amount
DCAA	12.49	12.53	12.55	3571035	2.305068
MCPA	13.43	13.46	13.49	1066	0.121099
DBOFB	13.69	13.72	13.75	11243910	0.001000
2,4-D	14.58	14.60	14.64	1546	0.000996
PCP	15.28	15.31	15.34	34997	0.001762
DINOSEB	16.91	16.94	16.97	3807	0.001142
Picloram	19.48	19.52	19.54	25930	0.004431
Hexachlorophene	26.52	26.56	26.58	25003	0.004123

**Summary Report**

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<4	<1.8			
<input type="checkbox"/> DCAA	A	2.566074				10.72	
<input checked="" type="checkbox"/> DICAMBA			<0.3	<0.08			
<input checked="" type="checkbox"/> MCPP			<200	<50			
<input checked="" type="checkbox"/> MCPA			<200	<50			
<input checked="" type="checkbox"/> 2,4-DP			<0.5	<0.16			
<input checked="" type="checkbox"/> 2,4-D	B	0.000996	<0.6	<0.25	<MDL	62.71	** RU 13378 11/12/18
<input type="checkbox"/> DBOFB	A	0.001000				0.00	
<input checked="" type="checkbox"/> PCP	B	0.001762	<0.07	<0.027	<MDL	7.68	RU 13378 11/12/18
<input checked="" type="checkbox"/> 2,4,5-TP			<0.05	<0.01			
<input checked="" type="checkbox"/> 2,4,5-T			<0.15	<0.065			
<input checked="" type="checkbox"/> 2,4-DB			<1.5	<0.63			
<input checked="" type="checkbox"/> DINOSEB	B	0.001142	<0.5	<0.18	<MDL	43.55	** RU 13378 11/12/18
<input checked="" type="checkbox"/> Picloram	B	0.004431	<1	<0.36	<MDL	10.42	RU 13378 11/12/18
<input checked="" type="checkbox"/> Hexachlorophene	B	0.004123	<0.2	<0.18	<MDL	33.98	RU 13378 11/12/18

Units: ug/l

Reviewed by:   
 Date: 11/12/18

Verified by:   
 Date: NOV 13 2018

%RPD = High - Low Amount divided by the Average times 100  
 \*\* %Difference > 40, lower amount found reported  
 \* Recovery outside QC Limits

Higher Amount Found unless RPD > 40

Eurofins Lancaster Laboratories  
Pesticide Residue Analysis  
Runlog for 15HERB18304001  
Instrument CP15--19850A

Data Directory Path is - \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
13378	15HERB18304001.001	CONDITIONER		10/31/18 15:37	1830299999	1.00
13378	15HERB18304001.002	CONDITIONER		10/31/18 16:10	1830299999	1.00
13378	15HERB18304001.003	CONDITIONER		10/31/18 16:43	1830299999	1.00
13378	15HERB18304001.004	CONDITIONER		10/31/18 17:16	1830299999	1.00
13378	15HERB18304001.005	HIBLKX1824B	HIBLKAA	10/31/18 17:49	1830299999	10.00
13378	15HERB18304001.006	HERB11824E	HERB1AA	10/31/18 18:22	1830299999	1.00
13378	15HERB18304001.007	HERB21824E	HERB2AA	10/31/18 18:55	1830299999	1.00
13378	15HERB18304001.008	HERB31824F	HERB3AA	10/31/18 19:28	1830299999	1.00
13378	15HERB18304001.009	HERB41824E	HERB4AA	10/31/18 20:01	1830299999	1.00
13378	15HERB18304001.010	HERB51824E	HERB5AA	10/31/18 20:34	1830299999	1.00
13378	15HERB18304001.011	HERB61824E	HERB6AA	10/31/18 21:07	1830299999	1.00
13378	15HERB18304001.012	MDHEX1824E	MDHEXAA	10/31/18 21:40	1830299999	1.00
13378	15HERB18304001.013	ICHBX1824G	ICHBXAA	10/31/18 22:13	1830299999	1.00
13378	15HERB18304001.014	ICHBX1824H	ICHBXQV	10/31/18 22:46	1830299999	1.00
13378	15HERB18304001.015	ICHBX1824I	ICHBXQW	10/31/18 23:19	1830299999	1.00
13378	15HERB18304001.016	BLANKA 10/29/18 F	PBLK08302	10/31/18 23:52	183020008A	10.00
13378	15HERB18304001.017	LCSA 10/29/18 F	LCS08302	11/1/18 0:25	183020008A	10.00
13378	15HERB18304001.018	LCSDA 10/29/18 F	LCSD08302	11/1/18 0:59	183020008A	10.00
13378	15HERB18304001.019	9868184 F	RCL-1	11/1/18 1:32	183020008A	10.00
13378	15HERB18304001.020	9868185 F	RCL-4	11/1/18 2:05	183020008A	10.00
13378	15HERB18304001.021	9868186 F	RCL-7	11/1/18 2:38	183020008A	10.00
13378	15HERB18304001.022	9868187 F	RCLG4	11/1/18 3:11	183020008A	10.00
13378	15HERB18304001.023	9868189 F	RCLFB	11/1/18 3:44	183020008A	10.00
13378	15HERB18304001.024	9870991 F	02W02	11/1/18 4:17	183020008A	10.00
13378	15HERB18304001.025	HERB31824F	HERB3TW	11/1/18 4:50	1830299999	1.00
13378	15HERB18304001.026	HIBLKX1824B	PIBLKFL	11/1/18 5:23	1830299999	10.00
13378	15HERB18304001.027	BLANKA 10/29/18 F	PBLK09302	11/1/18 5:56	183020009A	10.00
13378	15HERB18304001.028	LCSA 10/29/18 F	LCS09302	11/1/18 6:29	183020009A	10.00
13378	15HERB18304001.029	9863853 F	GKP-4	11/1/18 7:02	183020009A	10.00
13378	15HERB18304001.030	9863854MS F	GKP-4	11/1/18 7:35	183020009A	10.00
13378	15HERB18304001.031	9863855MSD F	GKP-4	11/1/18 8:09	183020009A	10.00
13378	15HERB18304001.032	HERB31824F	HERB3TX	11/1/18 8:42	1830299999	1.00
13378	15HERB18304001.033	HIBLKX1824B	PIBLKFM	11/1/18 9:15	1830299999	10.00
13378	15HERB18304001.034	9863851 F	GKP-1	11/1/18 9:48	183020009A	10.00
13378	15HERB18304001.035	9863852 F	GKP-2	11/1/18 10:21	183020009A	10.00
13378	15HERB18304001.036	9863857 F	GKP-D	11/1/18 10:54	183020009A	10.00
13378	15HERB18304001.037	9863858 F	GKP-3	11/1/18 11:27	183020009A	10.00
13378	15HERB18304001.038	9866461 F	T0902	11/1/18 12:00	183020009A	10.00
13378	15HERB18304001.039	9866462 F	T0003	11/1/18 12:33	183020009A	10.00
13378	15HERB18304001.040	9870992 F	02W03	11/1/18 13:06	183020009A	10.00
13378	15HERB18304001.041	HERB31824F	HERB3TY	11/1/18 13:39	1830299999	1.00
13378	15HERB18304001.042	HIBLKX1824B	PIBLKFN	11/1/18 14:13	1830299999	10.00

Eurofins Lancaster Laboratories  
Pesticide Residue Analysis  
Runlog for 15HERB18304004  
Instrument CP15--19850A

Data Directory Path is - \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
13378	15HERB18304004.001	CONDITIONER		11/6/18 8:10	1830999999	1.00
13378	15HERB18304004.002	CONDITIONER		11/6/18 8:43	1830999999	1.00
13378	15HERB18304004.003	CONDITIONER		11/6/18 9:16	1830999999	1.00
13378	15HERB18304004.004	CONDITIONER		11/6/18 9:49	1830999999	1.00
13378	15HERB18304004.005	HERB31824F	HERB3UV	11/6/18 10:22	1830999999	1.00
13378	15HERB18304004.006	HIBLKX1824B	HIBLKSE	11/6/18 10:55	1830999999	10.00
13378	15HERB18304004.007	BLANKA 10/29/18 RI	PBLK09302	11/6/18 14:36	183020009A	10.00
13378	15HERB18304004.008	9870992 RI F	02W03	11/6/18 15:09	183020009A	10.00
13378	15HERB18304004.009	LCSA 10/28/18 RI F	LCS34299	11/6/18 15:42	182990034A	10.00
13378	15HERB18304004.010	HERB31824F	HERB3UW	11/6/18 16:15	1830999999	1.00
13378	15HERB18304004.011	HIBLKX1824B	AA	11/6/18 16:48	1830999999	10.00
13378	15HERB18304004.012	BLANKA 11/5/18 F	PBLK33309	11/6/18 17:21	183090033A	10.00
13378	15HERB18304004.013	LCSA 11/5/18 F	LCS33309	11/6/18 17:54	183090033A	10.00
13378	15HERB18304004.014	9863853R F	GKP-4	11/6/18 18:27	183090033A	10.00
13378	15HERB18304004.015	9863854RMS F	GKP-4	11/6/18 19:01	183090033A	10.00
13378	15HERB18304004.016	9863855RMSD F	GKP-4	11/6/18 19:34	183090033A	10.00
13378	15HERB18304004.017	9863851R F	GKP-1	11/6/18 20:07	183090033A	10.00
13378	15HERB18304004.018	9863852R F	GKP-2	11/6/18 20:40	183090033A	10.00
13378	15HERB18304004.019	9863857R F	GKP-D	11/6/18 21:13	183090033A	10.00
13378	15HERB18304004.020	9863858R F	GKP-3	11/6/18 21:46	183090033A	10.00
13378	15HERB18304004.021	9881801 F	92E01	11/6/18 22:19	183090033A	10.00
13378	15HERB18304004.022	HERB31824F	HERB3UX	11/6/18 22:52	1830999999	1.00
13378	15HERB18304004.023	HIBLKX1824B	AA	11/6/18 23:25	1830999999	10.00
13378	15HERB18304004.024	9881804 F	92E04	11/6/18 23:58	183090033A	10.00
13378	15HERB18304004.025	9881807 F	92E07	11/7/18 0:31	183090033A	10.00
13378	15HERB18304004.026	BLANKA 11/1/18 RI F	PBLK15305	11/7/18 1:04	183050015A	10.00
13378	15HERB18304004.027	LCSA 11/1/18 RI F	LCS15305	11/7/18 1:37	183050015A	10.00
13378	15HERB18304004.028	9874412 F DF20	T1303	11/7/18 2:10	183050015A	200.00
13378	15HERB18304004.029	CONDITIONER		11/7/18 2:43	183050015A	200.00
13378	15HERB18304004.030	9874412MS F DF20	T1303MS	11/7/18 3:16	183050015A	200.00
13378	15HERB18304004.031	CONDITIONER		11/7/18 3:49	183050015A	200.00
13378	15HERB18304004.032	9874412MSD F DF20	T1303MSD	11/7/18 4:22	183050015A	200.00
13378	15HERB18304004.033	CONDITIONER		11/7/18 4:55	183050015A	200.00
13378	15HERB18304004.034	HERB31824F	HERB3UY	11/7/18 5:28	1830999999	1.00
13378	15HERB18304004.035	HIBLKX1824B	HIBLKSH	11/7/18 6:01	1830999999	10.00
13378	15HERB18304004.036	9868565 RI F	3E671	11/7/18 6:34	183050015A	10.00
13378	15HERB18304004.037	9868566 RI F	3E531	11/7/18 7:07	183050015A	10.00
13378	15HERB18304004.038	9868567 RI F	3F422	11/7/18 7:40	183050015A	10.00
13378	15HERB18304004.039	9868568 F DF10	3E441	11/7/18 8:13	183050015A	100.00
13378	15HERB18304004.040	CONDITIONER		11/7/18 8:46	183050015A	100.00
13378	15HERB18304004.041	9868571 RI F DF10	E482-	11/7/18 9:19	183050015A	100.00
13378	15HERB18304004.042	CONDITIONER		11/7/18 9:52	183050015A	100.00
13378	15HERB18304004.043	9868571 F DF20	E482-	11/7/18 10:25	183050015A	200.00
13378	15HERB18304004.044	CONDITIONER		11/7/18 10:58	183050015A	200.00
13378	15HERB18304004.045	HERB31824F	HERB3UZ	11/7/18 11:31	1830999999	1.00
13378	15HERB18304004.046	HIBLKX1824B	HIBLKSI	11/7/18 12:04	1830999999	10.00
13378	15HERB18304004.047	9870637 RI F	E538-	11/7/18 12:37	183050015A	10.00
13378	15HERB18304004.048	9870639 F DF5	E575-	11/7/18 13:10	183050015A	50.00
13378	15HERB18304004.049	CONDITIONER		11/7/18 13:43	183050015A	50.00
13378	15HERB18304004.050	9870639 F DF10	E575-	11/7/18 14:16	183050015A	100.00
13378	15HERB18304004.051	9874411 F DF10	T1302	11/7/18 14:49	183050015A	100.00
13378	15HERB18304004.052	CONDITIONER		11/7/18 15:22	183050015A	100.00
13378	15HERB18304004.054	9874413 RI F DF5	T1304	11/7/18 16:13	183050015A	50.00
13378	15HERB18304004.055	CONDITIONER		11/7/18 16:46	183050015A	50.00
13378	15HERB18304004.056	HERB31824F	HERB3VA	11/7/18 17:19	1830999999	1.00
13378	15HERB18304004.057	HIBLKX1824B	HIBLKSI	11/7/18 17:52	1830999999	10.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
13378	15HERB18304004.058	9875251 RI F	36831	11/7/18 18:25	183050015A	10.00
13378	15HERB18304004.059	BLANKA 11/2/18 F	PBLK43305	11/7/18 18:58	183050043A	10.00
13378	15HERB18304004.060	LCSA 11/2/18 F	LCS43305	11/7/18 19:31	183050043A	10.00
13378	15HERB18304004.061	9876334 F	14T04	11/7/18 20:04	183050043A	10.00
13378	15HERB18304004.062	9876335MS F	14T04	11/7/18 20:37	183050043A	10.00
13378	15HERB18304004.063	9876336MSD F	14T04	11/7/18 21:10	183050043A	10.00
13378	15HERB18304004.064	9876332 F	14T02	11/7/18 21:43	183050043A	10.00
13378	15HERB18304004.065	9876342 F	14T06	11/7/18 22:16	183050043A	10.00
13378	15HERB18304004.066	HERB31824F	HERB3VB	11/7/18 22:49	1830999999	1.00
13378	15HERB18304004.067	HIBLKX1824B	HIBLKSK	11/7/18 23:22	1830999999	10.00
13378	15HERB18304004.068	BLANKA 10/28/18 RI	PBLK34299	11/7/18 23:55	182990034A	10.00
13378	15HERB18304004.069	9860859 F DF5	02375	11/8/18 0:28	182990034A	50.00
13378	15HERB18304004.070	CONDITIONER		11/8/18 1:01	182990034A	50.00
13378	15HERB18304004.071	HERB31824F	HERB3VG	11/8/18 1:34	1831099999	1.00
13378	15HERB18304004.072	HIBLKX1824B	HIBLKSP	11/8/18 2:07	1831099999	10.00
13378	15HERB18304004.073	9866461 F DF5	T0902	11/8/18 2:40	183020009A	50.00
13378	15HERB18304004.074	9866462 F DF5	T0903	11/8/18 3:13	183020009A	50.00
13378	15HERB18304004.075	9863858R F DF200	GKP-3	11/8/18 3:46	183090033A	2,000.00
13378	15HERB18304004.076	BLANKA 11/4/18 F	PBLK17306	11/8/18 4:19	183060017A	10.00
13378	15HERB18304004.077	LCSA 11/4/18 F	LCS17306	11/8/18 4:52	183060017A	10.00
13378	15HERB18304004.078	9879191 F DF100	LS754	11/8/18 5:25	183060017A	1,000.00
13378	15HERB18304004.079	CONDITIONER		11/8/18 5:58	183060017A	1,000.00
13378	15HERB18304004.080	9879191 F DF1000	LS754	11/8/18 6:31	183060017A	10,000.00
13378	15HERB18304004.081	CONDITIONER		11/8/18 7:04	183060017A	10,000.00
13378	15HERB18304004.082	HERB31824F	HERB3VH	11/8/18 7:37	1831099999	1.00
13378	15HERB18304004.083	HIBLKX1824B	HIBLKSQ	11/8/18 8:10	1831099999	10.00
13378	15HERB18304004.084	9879191 F DF2000	LS754	11/8/18 8:43	183060017A	20,000.00
13378	15HERB18304004.085	CONDITIONER		11/8/18 9:16	183060017A	20,000.00
13378	15HERB18304004.086	9879191 F DF5000	LS754	11/8/18 9:49	183060017A	50,000.00
13378	15HERB18304004.087	CONDITIONER		11/8/18 10:22	183060017A	50,000.00
13378	15HERB18304004.088	BLANKA 11/4/18 F	PBLK13306	11/8/18 10:55	183060013A	10.00
13378	15HERB18304004.089	LCSA 11/4/18 F	LCS13306	11/8/18 11:28	183060013A	10.00
13378	15HERB18304004.090	9879191 F DF100	LS754	11/8/18 12:01	183060013A	1,000.00
13378	15HERB18304004.091	CONDITIONER		11/8/18 12:34	183060013A	1,000.00
13378	15HERB18304004.092	9879191 F DF1000	LS754	11/8/18 13:07	183060013A	10,000.00
13378	15HERB18304004.093	CONDITIONER		11/8/18 13:40	183060013A	10,000.00
13378	15HERB18304004.094	HERB31824F	HERB3VI	11/8/18 14:13	1831099999	1.00
13378	15HERB18304004.095	HIBLKX1824B	HIBLKSR	11/8/18 14:46	1831099999	10.00
13378	15HERB18304004.096	9879191 F DF2000	LS754	11/8/18 15:24	183060013A	20,000.00
13378	15HERB18304004.097	CONDITIONER		11/8/18 15:57	183060013A	20,000.00
13378	15HERB18304004.098	9879191 F DF5000	LS754	11/8/18 16:30	183060013A	50,000.00
13378	15HERB18304004.099	CONDITIONER		11/8/18 17:03	183060013A	50,000.00
13378	15HERB18304004.100	BLANKA 11/4/18 F	PBLK12306	11/8/18 17:36	183060012A	10.00
13378	15HERB18304004.101	LCSA 11/4/18 F	LCS12306	11/8/18 18:09	183060012A	10.00
13378	15HERB18304004.102	9879192 F	L7551	11/8/18 18:42	183060012A	10.00
13378	15HERB18304004.103	9879193MS F	L7551	11/8/18 19:15	183060012A	10.00
13378	15HERB18304004.104	9879194MSD F	L7551	11/8/18 19:48	183060012A	10.00
13378	15HERB18304004.105	9879196 F	L7552	11/8/18 20:21	183060012A	10.00
13378	15HERB18304004.106	HERB31824F	HERB3VJ	11/8/18 20:54	1831099999	1.00
13378	15HERB18304004.107	HIBLKX1824B	HIBLKSS	11/8/18 21:27	1831099999	10.00
13378	15HERB18304004.108	BLANKA 11/4/18	PBLK18306	11/8/18 22:00	183060018A	10.00
13378	15HERB18304004.109	LCSA 11/4/18	LCS18306	11/8/18 22:33	183060018A	10.00
13378	15HERB18304004.110	9879192	L7551	11/8/18 23:06	183060018A	10.00
13378	15HERB18304004.111	9879193MS	L7551	11/8/18 23:39	183060018A	10.00
13378	15HERB18304004.112	9879194MSD	L7551	11/9/18 0:12	183060018A	10.00
13378	15HERB18304004.113	9879196	L7552	11/9/18 0:45	183060018A	10.00
13378	15HERB18304004.114	HERB31824F	HERB3VK	11/9/18 1:18	1831099999	1.00
13378	15HERB18304004.115	HIBLKX1824B	HIBLKST	11/9/18 1:51	1831099999	10.00
13378	15HERB18304004.116	9870252 F DF50	T1103	11/9/18 2:24	183030010A	500.00
13378	15HERB18304004.117	9870253 F DF50	T1104	11/9/18 2:57	183030010A	500.00
13378	15HERB18304004.118	9870254 F DF50	T1105	11/9/18 3:30	183030010A	500.00
13378	15HERB18304004.119	9872060 F DF100	12T02	11/9/18 4:03	183030010A	1,000.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
13378	15HERB18304004.120	9872061 F DF100	12T03	11/9/18 4:36	183030010A	1,000.00
13378	15HERB18304004.121	9872062 F DF100	12T04	11/9/18 5:09	183030010A	1,000.00
13378	15HERB18304004.122	9872064 F DF100	12T06	11/9/18 5:42	183030010A	1,000.00
13378	15HERB18304004.123	HERB31824F	HERB3VT	11/9/18 6:16	1831199999	1.00
13378	15HERB18304004.124	HIBLKX1824B	HIBLKTC	11/9/18 6:49	1831199999	10.00
13378	15HERB18304004.125	BLANKA 11/6/18 F	PBLK05310	11/9/18 7:22	183100005A	10.00
13378	15HERB18304004.126	LCSA 11/6/18 F	LCS05310	11/9/18 7:55	183100005A	10.00
13378	15HERB18304004.127	LCSDA 11/6/18 F	LCSD05310	11/9/18 8:28	183100005A	10.00
13378	15HERB18304004.128	9881309 F	15T-2	11/9/18 9:01	183100005A	10.00
13378	15HERB18304004.129	9881310 F	15T-3	11/9/18 9:34	183100005A	10.00
13378	15HERB18304004.130	9881313 F	15T-6	11/9/18 10:07	183100005A	10.00
13378	15HERB18304004.131	9882870 F	PR-22	11/9/18 10:40	183100005A	10.00
13378	15HERB18304004.132	9882871 F	PR-24	11/9/18 11:13	183100005A	10.00
13378	15HERB18304004.133	9882872 F	PR-25	11/9/18 11:46	183100005A	10.00
13378	15HERB18304004.134	9882873 F	PR-26	11/9/18 12:19	183100005A	10.00
13378	15HERB18304004.135	HERB31824F	HERB3VU	11/9/18 12:52	1831199999	1.00
13378	15HERB18304004.136	HIBLKX1824B	HIBLKTD	11/9/18 13:25	1831199999	10.00
13378	15HERB18304004.137	9882874 F	PR-13	11/9/18 13:58	183100005A	10.00
13378	15HERB18304004.138	9882875 F	PR-04	11/9/18 14:31	183100005A	10.00
13378	15HERB18304004.139	9882876 F	PRFB4	11/9/18 15:04	183100005A	10.00
13378	15HERB18304004.140	HERB31824F	HERB3VV	11/9/18 15:37	1831199999	1.00
13378	15HERB18304004.141	HIBLKX1824B	HIBLKTE	11/9/18 16:11	1831199999	10.00

# **Sample Data**

## **Herbicides**

# Data Summary

Sample Name: **9881309** F 15T-2 Sample ID: AB Batchnumber: **183100005A**  
 Sample Amount: 1042 ml Total Volume: 10 ml Analyst: 120 SDG: TID15 State: NY  
 Analyses: 10407

## Analysis Report (A)

Injected on Nov 09, 2018 09:01:24  
 Instrument 19850A  
 Result file 15HERB18304004.128.RAW  
 Calibration file 15HERB1830401  
 Method file 15HERB

%SSR(DCAA) 100% (32 - 138) Conc: 1.924827

### Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	538940	0.705157
2,4-DCAA	11.91	11.94	11.97	2650011	1.924827
Dicamba	12.04	12.05	12.10	71234	0.01288
MCPP	12.45	12.45	12.51	239863	0
MCPA	12.83	12.86	12.89	110402	0
2,4-DP (Dichloroprop)	13.43	13.48	13.49	78327	0.068945
2,4-D	13.87	13.90	13.93	217561	0.16019
Pentachlorophenol	15.06	15.08	15.12	179319	0.010441
2,4,5-TP	15.36	15.37	15.42	28719	0.004417
2,4-DB	16.71	16.77	16.77	115376	0.144921
Dinoseb	18.90	16.91	16.96	93549	0.031328
Picloram	17.86	17.87	17.92	114395	0.022992
Hexachlorophene	26.10	26.11	26.16	484566	0.08937

## Analysis Report (B)

Injected on Nov 09, 2018 09:01:24  
 Instrument 19850B  
 Result file 15HERB18304004B.128.RAW  
 Calibration file 15HERB1830401B  
 Method file 15HERBB

%SSR(DCAA) 86% (32 - 138) Conc: 1.652402

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	94594	0.073623
2,4-DCAA	12.49	12.52	12.55	2797050	1.652402
MCPP	12.90	12.94	12.96	23004	3.290228
MCPA	13.43	13.47	13.49	53007	5.51247
2,4-DP (Dichloroprop)	13.96	13.97	14.01	143358	0.096853
2,4-D	14.58	14.62	14.64	56998	0.033616
Pentachlorophenol	15.28	15.30	15.34	153949	0.007095
2,4,5-TP	15.77	15.80	15.83	113152	0.01413
2,4,5-T	16.47	16.47	16.53	199963	0.028263
Picloram	19.48	19.50	19.54	128428	0.020084

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<1.7274	<3.4549	<3.8388	D2		
<input checked="" type="checkbox"/> 2,4-DCAA	A	1.924827	0.096	0.1919	0.1919		15.23	
<input checked="" type="checkbox"/> 2,4-DCAA-D1	A	1.924827	0.096	0.1919	0.1919			
<input checked="" type="checkbox"/> 2,4-DCAA-D2	B	1.652402	0.096	0.1919	0.1919			
<input checked="" type="checkbox"/> Dicamba			<0.0768	<0.1536	<0.2879	D2		
<input checked="" type="checkbox"/> MCPP			<47.9846	<95.9693	<191.9386	D1		
<input checked="" type="checkbox"/> MCPA			<47.9846	<95.9693	<191.9386	D1		
<input checked="" type="checkbox"/> 2,4-DP (Dichloroprop)			<0.1536	<0.3071	<0.4798	D1		
<input checked="" type="checkbox"/> 2,4-D			<0.2399	<0.4798	<0.5758	D2		
<input type="checkbox"/> Pentachlorophenol			<0.0259	<0.0576	<0.0672			
<input checked="" type="checkbox"/> 2,4,5-TP			<0.0096	<0.0288	<0.048	D1		
<input checked="" type="checkbox"/> 2,4,5-T			<0.0624	<0.1248	<0.144	D1		
<input checked="" type="checkbox"/> 2,4-DB			<0.6046	<1.2476	<1.4395	D2		
<input checked="" type="checkbox"/> Dinoseb			<0.1727	<0.3839	<0.4798	D2		
<input type="checkbox"/> Picloram			<0.3455	<0.7678	<0.9597			
<input type="checkbox"/> Hexachlorophene					<0.1919			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayto*  
 Valerie L. Tomayto  
 Principal Specialist

NOV 16 2018



# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** 9881309 F      15T-2      ID: AB      **Batchnumber:** 183100005A  
**Sample Amount:** 1042 ml      Total Volume: 10 ml      Analyst: 13378      SDG: TID15      State: NY  
**Analyses:** 10407

### Analysis Report (A)

Injected on : Nov 09, 2018 09:01:24  
 Instrument : CP15--19850A  
 Result file : 15HERB18304004.128.RAW  
 Calibration file : 15HERB1830401.CAL  
 Method file : 15HERB.MET  
 %SSR(DCAA) : 100% (32-138)      Conc.: 1.924827

### Analysis Report (B)

Injected on : Nov 09, 2018 09:01:24  
 Instrument : CP15--19850B  
 Result file : 15HERB18304004B.128.RAW  
 Calibration file : 15HERB1830401B.CAL  
 Method file : 15HERBB.MET  
 %SSR(DCAA) : 86% (32-138)      Conc.: 1.652402

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.72	3.76	538940	0.705157
DCAA	11.91	11.94	11.97	2650011	1.924827
DICAMBA	12.04	12.05	12.10	71234	0.012880
MCPP	12.45	12.45	12.51	239863	-74.655440
MCPA	12.83	12.86	12.89	110402	-111.958300
2,4-DP	13.43	13.48	13.49	78327	0.068945
2,4-D	13.87	13.90	13.93	217561	0.160190
DBOFB	14.21	14.22	14.26	9809211	0.000960
PCP	15.06	15.08	15.12	179319	0.010441
2,4,5-TP	15.36	15.37	15.42	28719	0.004417
2,4-DB	16.71	16.77	16.77	115376	0.144921
DINOSEB	16.90	16.91	16.96	93549	0.031328
Picloram	17.86	17.87	17.92	114395	0.022992
Hexachlorophene	26.10	26.11	26.16	484566	0.089370

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	94594	0.073623
DCAA	12.49	12.52	12.55	2797050	1.652402
MCPP	12.90	12.94	12.96	23004	3.290228
MCPA	13.43	13.47	13.49	53007	5.512470
DBOFB	13.69	13.70	13.75	11790260	0.000960
2,4-DP	13.96	13.97	14.01	143358	0.096853
2,4-D	14.58	14.62	14.64	56998	0.033616
PCP	15.28	15.30	15.34	153949	0.007095
2,4,5-TP	15.77	15.80	15.83	113152	0.014130
2,4,5-T	16.47	16.47	16.53	199963	0.028263
Picloram	19.48	19.50	19.54	128428	0.020084

### Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<3.8388	<1.7274			
<input type="checkbox"/> DCAA	A	1.924827	0.1919	0.096		15.23	
<input checked="" type="checkbox"/> DICAMBA			<0.2879	<0.0768			
<input checked="" type="checkbox"/> MCPP			<191.9386	<47.9846			
<input checked="" type="checkbox"/> MCPA			<101.0306	<47.9040			
<input checked="" type="checkbox"/> 2,4-DP			<0.4798	<0.1536			
<input checked="" type="checkbox"/> 2,4-D			<0.5758	<0.2399			
<input type="checkbox"/> DBOFB	A	0.000960				0.00	
<input type="checkbox"/> PCP			<0.0672	<0.0259			
<input checked="" type="checkbox"/> 2,4,5-TP			<0.048	<0.0096			
<input checked="" type="checkbox"/> 2,4,5-T			<0.144	<0.0624			
<input checked="" type="checkbox"/> 2,4-DB			<1.4395	<0.6046			
<input checked="" type="checkbox"/> DINOSEB			<0.4798	<0.1727			
<input type="checkbox"/> Picloram			<0.9597	<0.3455			
<input type="checkbox"/> Hexachlorophene			<0.1919				

Units: ug/l

Reviewed by: *[Signature]*  
 Date: *[Signature]*

Verified by: *[Signature]*  
 Date: NOV 16 2018

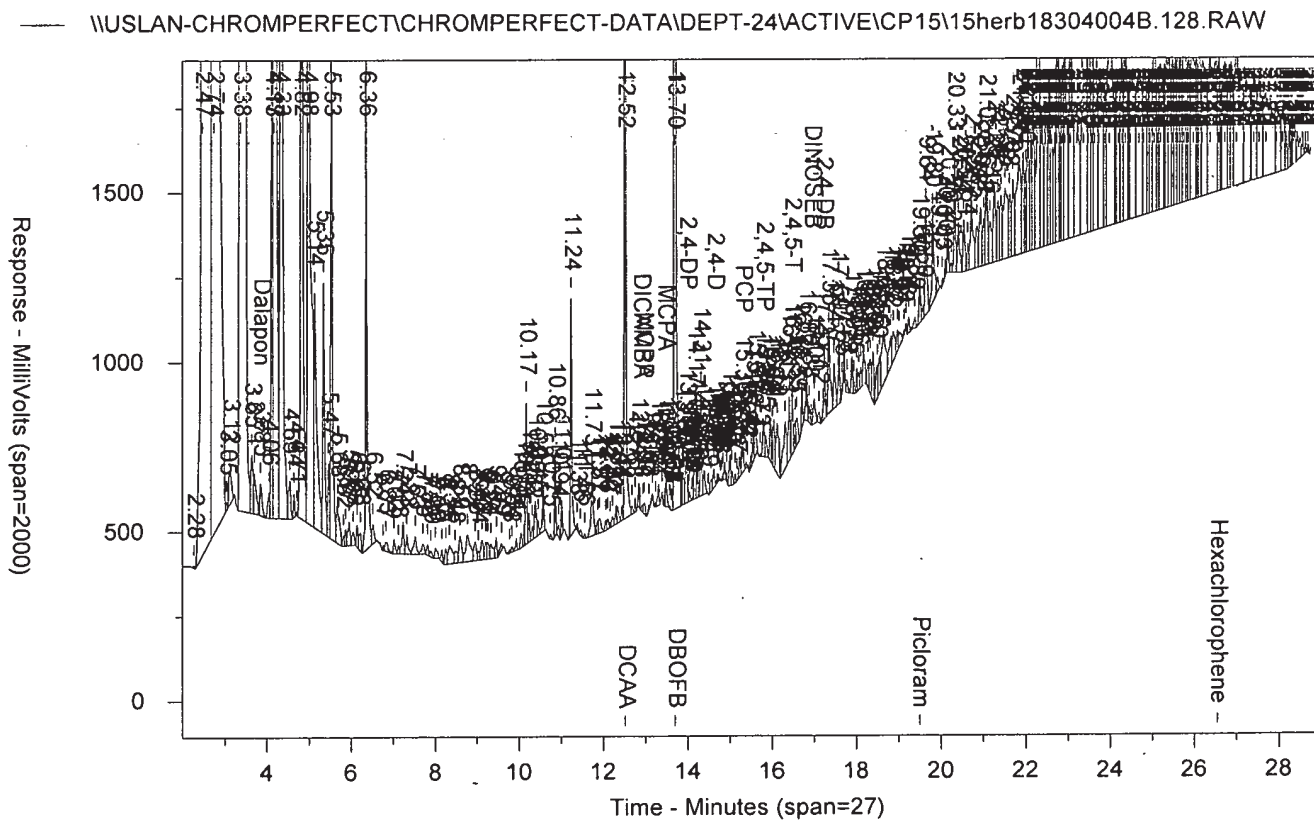
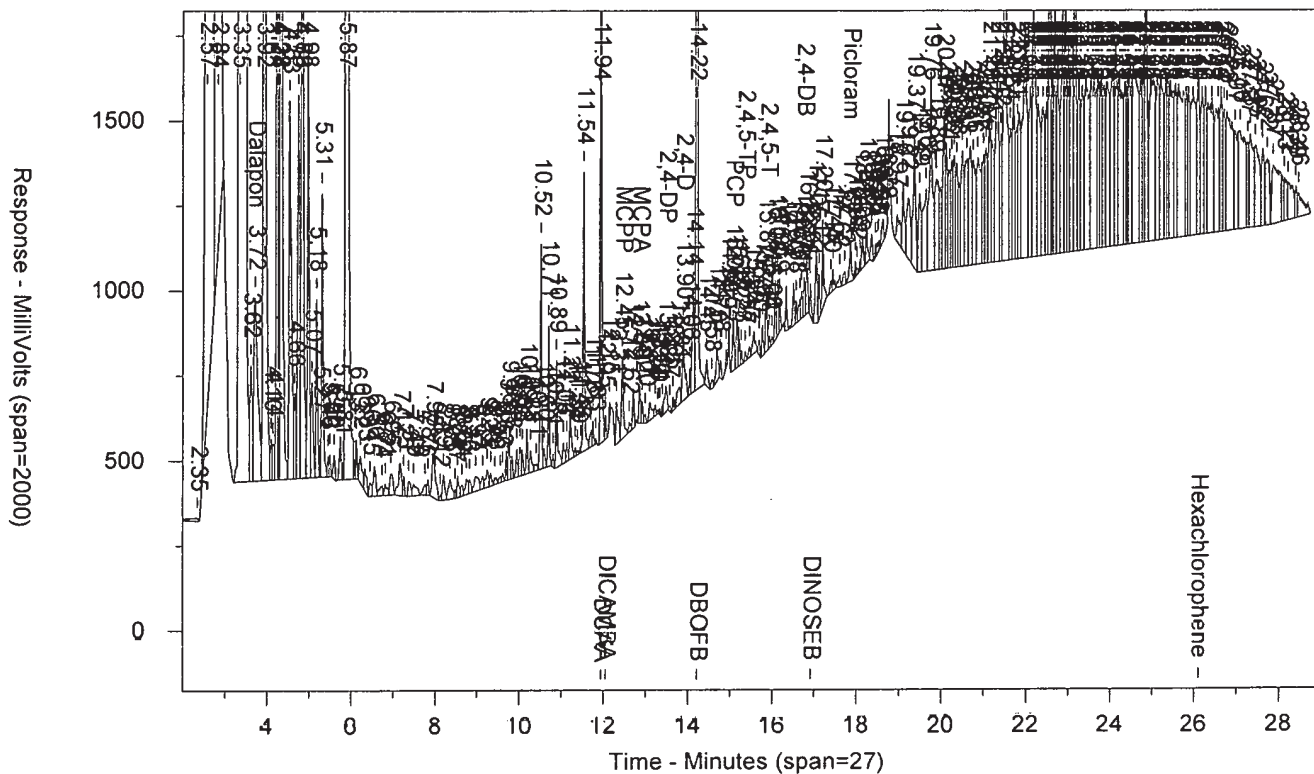
%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

9881309 F AB15T-2 T 183100005A 10407 SW-846 8151A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.128.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881309 F AB15T-2 T 183100005A 10407 SW-846 8151A  
 Injected On: 11/9/2018 9:01:24 AM Sample Weight: 1042  
 Instrument ID: CP15-19850 Dilution Factor: 10  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.717	538940	.705	Dalapon	3.853	94594	.074	Dalapon
11.944	2650011	1.925	DCAA	12.517	2797050	1.652	DCAA
12.053	71234	.013	DICAMBA		0		DICAMBA
12.453	239863	-74.655	MCPD	12.938	23004	3.29	MCPD
12.863	110402	-111.958	MCPA	13.467	53007	5.512	MCPA
13.484	78327	.069	2,4-DP	13.971	143358	.097	2,4-DP
14.216	9809211	.001	DBOFB	13.697	11790260	.001	DBOFB
13.897	217561	.16	2,4-D	14.623	56998	.034	2,4-D
15.084	179319	.01	PCP	15.296	153949	.007	PCP
15.371	28719	.004	2,4,5-TP	15.799	113152	.014	2,4,5-TP
	0		2,4,5-T	16.474	199963	.028	2,4,5-T
16.768	115376	.145	2,4-DB		0		2,4-DB
16.914	93549	.031	DINOSEB		0		DINOSEB
17.867	114395	.023	Picloram	19.495	128428	.02	Picloram
26.106	484566	.089	Hexachlorophene		0		Hexachlorophene

Files:

Area File: 15herb18304004.128.RAW  
 Area File: 15herb18304004B.128.RAW  
 Method A: 15HERB.MET  
 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
 Area File Created On: 11/9/2018 9:30:13 AM  
 File Reported On: 11/9/2018 at 3:12:50 PM



# Data Summary

Sample Name: **9881310** F 15T-3 Sample ID: AB Batchnumber: **183100005A**  
 Sample Amount: 1039 ml Total Volume: 10 ml Analyst: 120 SDG: TID15 State: NY  
 Analyses: 10407

### Analysis Report (A)

Injected on Nov 09, 2018 09:34:27  
 Instrument 19850A  
 Result file 15HERB18304004.129.RAW  
 Calibration file 15HERB1830401  
 Method file 15HERB

%SSR(DCAA) 97% (32 - 138) Conc: 1.864668

### Single Component Data

Compound	Min	RT	Max	Height
Dalapon	3.70	3.71	3.76	177966
2,4-DCAA	11.91	11.94	11.97	2362190
Dicamba	12.04	12.05	12.10	77464
MCPP	12.45	12.45	12.51	305094
MCPA	12.83	12.87	12.89	57165
2,4-D	13.87	13.90	13.93	183606
Pentachlorophenol	15.06	15.08	15.12	587704
2,4,5-TP	15.36	15.38	15.42	14065
2,4-DB	16.71	16.76	16.77	47870
Dinoseb	16.90	16.92	16.96	70087
Hexachlorophene	26.10	26.10	26.16	473636

### Analysis Report (B)

Injected on Nov 09, 2018 09:34:27  
 Instrument 19850B  
 Result file 15HERB18304004B.129.RAW  
 Calibration file 15HERB1830401B  
 Method file 15HERBB

%SSR(DCAA) 87% (32 - 138) Conc: 1.683241

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.86	3.89	53495	0.044481
2,4-DCAA	12.49	12.52	12.55	2667006	1.683241
MCPP	12.90	12.93	12.96	19280	2.945944
2,4-DP (Dichloroprop)	13.96	13.97	14.01	150584	0.108687
2,4-D	14.58	14.62	14.64	60545	0.038148
Pentachlorophenol	15.28	15.30	15.34	649989	0.032001
2,4,5-TP	15.77	15.81	15.83	88335	0.011785
2,4,5-T	16.47	16.48	16.53	134271	0.020275
Picloram	19.48	19.49	19.54	22700	0.003793

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<1.7324	<3.4649	<3.8499	D2		
<input type="checkbox"/> 2,4-DCAA	A	1.864668	0.0962	0.1925	0.1925		10.23	
<input checked="" type="checkbox"/> 2,4-DCAA-D1	A	1.864668	0.0962	0.1925	0.1925			
<input checked="" type="checkbox"/> 2,4-DCAA-D2	B	1.683241	0.0962	0.1925	0.1925			
<input checked="" type="checkbox"/> Dicamba			<0.077	<0.154	<0.2887	D?		
<input checked="" type="checkbox"/> MCPP			<48.1232	<96.2464	<192.4928	D1		
<input checked="" type="checkbox"/> MCPA			<48.1232	<96.2464	<192.4928	D1		
<input checked="" type="checkbox"/> 2,4-DP (Dichloroprop)			<0.154	<0.308	<0.4812	D1		
<input checked="" type="checkbox"/> 2,4-D			<0.2406	<0.4812	<0.5775	D2		
<input type="checkbox"/> Pentachlorophenol	A	0.03719	0.026	<0.0577	<0.0674	J	15.00	
<input checked="" type="checkbox"/> 2,4,5-TP			<0.0096	<0.0289	<0.0481	D1		
<input checked="" type="checkbox"/> 2,4,5-T			<0.0626	<0.1251	<0.1444	D1		
<input checked="" type="checkbox"/> 2,4-DB			<0.6064	<1.2512	<1.4437	D2		
<input checked="" type="checkbox"/> Dinoseb			<0.1732	<0.385	<0.4812	D2		
<input type="checkbox"/> Picloram			<0.3465	<0.77	<0.9625			
<input type="checkbox"/> Hexachlorophene					<0.1925			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Richard A Shober on 11/16/2018 10:01:05

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** 9881310 F      15T-3      ID: AB      **Batchnumber:** 183100005A  
**Sample Amount:** 1039 ml      **Total Volume:** 10 ml      **Analyst:** 13378      **SDG:** TID15      **State:** NY  
**Analyses:** 10407

**Analysis Report (A)**

Injected on : Nov 09, 2018 09:34:27  
 Instrument : CP15--19850A  
 Result file : 15HERB18304004.129.RAW  
 Calibration file : 15HERB1830401.CAL  
 Method file : 15HERB.MET  
 %SSR(DCAA) : 97% (32-138)      Conc.: 1.864668

**Analysis Report (B)**

Injected on : Nov 09, 2018 09:34:27  
 Instrument : CP15--19850B  
 Result file : 15HERB18304004B.129.RAW  
 Calibration file : 15HERB1830401B.CAL  
 Method file : 15HERBB.MET  
 %SSR(DCAA) : 87% (32-138)      Conc.: 1.683241

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.71	3.76	177966	0.253061
DCAA	11.91	11.94	11.97	2362190	1.864668
DICAMBA	12.04	12.05	12.10	77464	0.015222
MCPP	12.45	12.45	12.51	305094	-56.457600
MCPA	12.83	12.87	12.89	57165	-120.481300
2,4-D	13.87	13.90	13.93	183606	0.146921
DBOFB	14.21	14.22	14.26	9051977	0.000962
PCP	15.06	15.08	15.12	587704	0.037190
2,4,5-TP	15.36	15.38	15.42	14065	0.002351
2,4-DB	16.71	16.76	16.77	47870	0.065346
DINOSEB	16.90	16.92	16.96	70087	0.025508
Hexachlorophene	26.10	26.10	26.16	473636	0.094935

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.86	3.89	53495	0.044481
DCAA	12.49	12.52	12.55	2667006	1.683241
MCPA	12.90	12.93	12.96	19280	2.945944
DBOFB	13.69	13.70	13.75	11067990	0.000962
2,4-DP	13.96	13.97	14.01	150584	0.108687
2,4-D	14.58	14.62	14.64	60545	0.038148
PCP	15.28	15.30	15.34	649989	0.032001
2,4,5-TP	15.77	15.81	15.83	88335	0.011785
2,4,5-T	16.47	16.48	16.53	134271	0.020275
Picloram	19.48	19.49	19.54	22700	0.003793

**Summary Report**

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<3.8499	<1.7324			
<input type="checkbox"/> DCAA	A	1.864668	0.1925	0.0962		10.23	
<input checked="" type="checkbox"/> DICAMBA			<0.2887	<0.077			
<input checked="" type="checkbox"/> MCPP			<192.4928	<48.1232			
<input checked="" type="checkbox"/> MCPA			<192.4928	<48.1232			
<input checked="" type="checkbox"/> 2,4-DP			<0.4812	<0.154			
<input checked="" type="checkbox"/> 2,4-D			<0.5775	<0.2406			
<input type="checkbox"/> DBOFB	A	0.000962				0.00	
<input type="checkbox"/> PCP	A	0.037190	<0.0674	0.026	J	15.00	
<input checked="" type="checkbox"/> 2,4,5-TP			<0.0481	<0.0096			
<input checked="" type="checkbox"/> 2,4,5-T			<0.1444	<0.0626			
<input checked="" type="checkbox"/> 2,4-DB			<1.4437	<0.6064			
<input checked="" type="checkbox"/> DINOSEB			<0.4812	<0.1732			
<input type="checkbox"/> Picloram			<0.9625	<0.3465			
<input type="checkbox"/> Hexachlorophene			<0.1925				

Units: ug/l

Reviewed by: *RASRU*  
 Date: *11/16/18*

Verified by: *Valerie L. Tomayko*  
 Date: NOV 16 2018  
*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881310 F AB15T-3 T 183100005A 10407 SW-846 8151A  
 Injected On: 11/9/2018 9:34:27 AM Sample Weight: 1039  
 Instrument ID: CP15-19850 Dilution Factor: 10  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

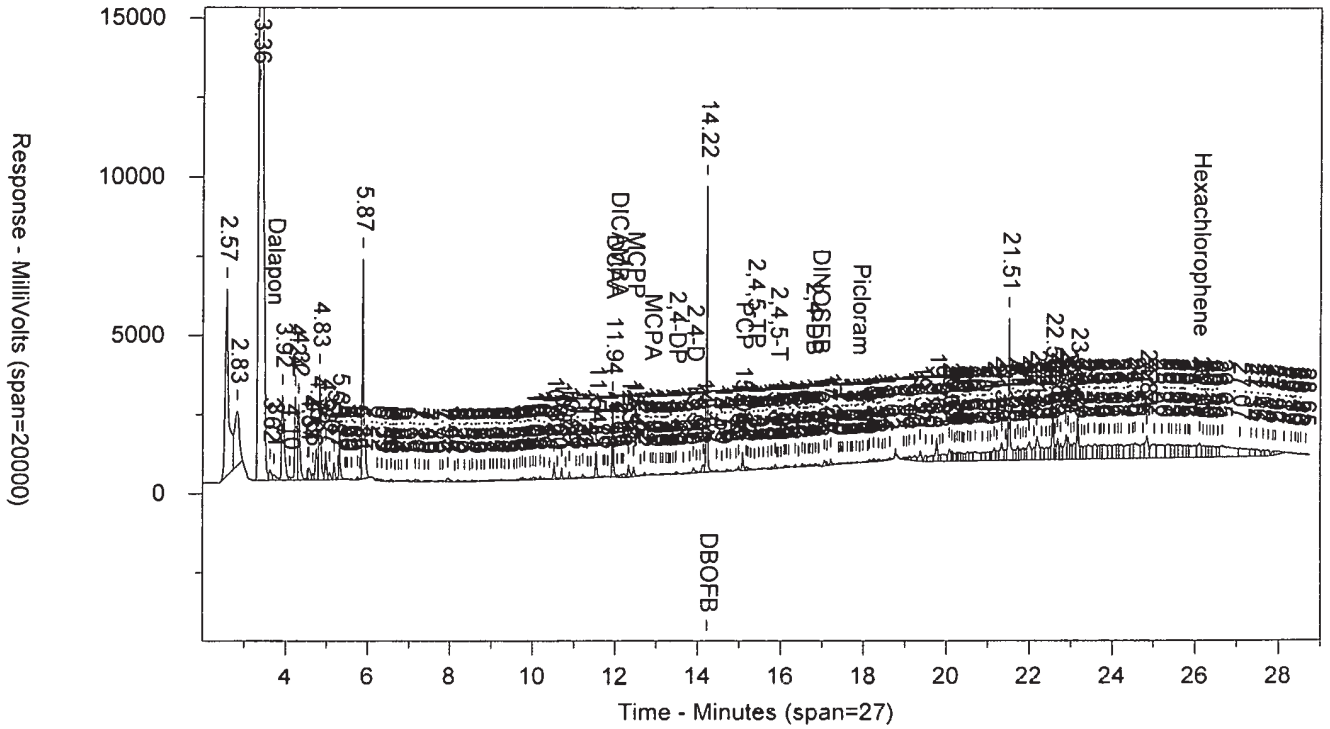
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.711	177966	.253	Dalapon	3.855	53495	.044	Dalapon
11.944	2362190	1.865	DCAA	12.517	2667006	1.683	DCAA
12.054	77464	.015	DICAMBA		0		DICAMBA
12.455	305094	-56.458	MCPPP	12.931	19280	2.946	MCPPP
12.871	57165	-120.481	MCPA		0		MCPA
14.217	9051977	.001	DBOFB	13.697	11067990	.001	DBOFB
13.896	183606	.147	2,4-D	14.623	60545	.038	2,4-D
	0		2,4-DP	13.967	150584	.109	2,4-DP
15.081	587704	.037	PCP	15.297	649989	.032	PCP
15.375	14065	.002	2,4,5-TP	15.806	88335	.012	2,4,5-TP
	0		2,4,5-T	16.478	134271	.02	2,4,5-T
16.765	47870	.065	2,4-DB		0		2,4-DB
16.917	70087	.026	DINOSEB		0		DINOSEB
	0		Picloram	19.492	22700	.004	Picloram
26.104	473636	.095	Hexachlorophene		0		Hexachlorophene

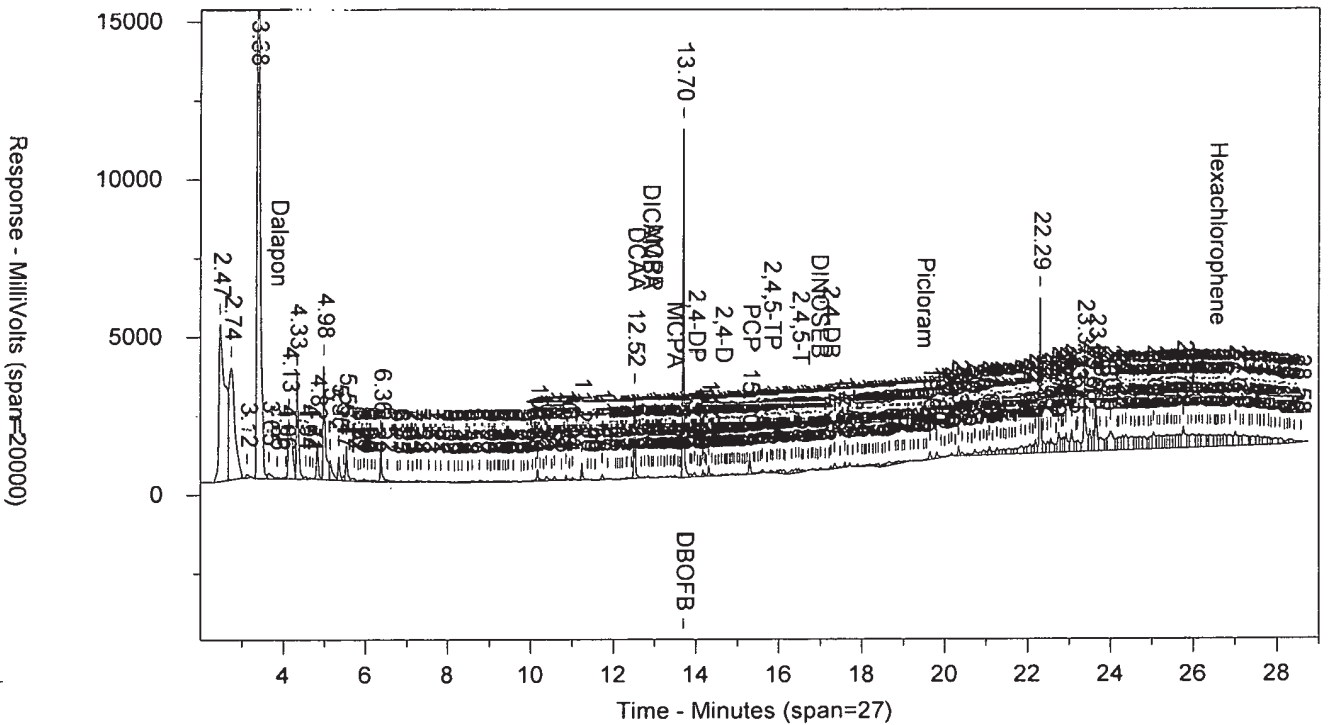
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 Area File: 15herb18304004.129.RAW  
 Area File: 15herb18304004B.129.RAW  
 Method A: 15HERB.MET  
 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
 Area File Created On: 11/9/2018 10:03:14 AM  
 File Reported On: 11/9/2018 at 3:13:10 PM



9881310 F AB15T-3 T 183100005A 10407 SW-846 8151A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.129.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.129.RAW



# Data Summary

Sample Name: 9881313 F 15T-6 Sample ID: AB Batchnumber: 18310005A  
 Sample Amount: 1044 ml Total Volume: 10 ml Analyst: 120 SDG: TID15 State: NY  
 Analyses: 10407

## Analysis Report (A)

Injected on Nov 09, 2018 10:07:29  
 Instrument 19850A  
 Result file 15HERB18304004.130.RAW  
 Calibration file 15HERB1830401  
 Method file 15HERB

%SSR(DCAA) 82% (32 - 138) Conc: 1.575138

### Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	887161	1.024801
2,4-DCAA	11.91	11.96	11.97	2456309	1.575138
MCPP	12.45	12.50	12.51	56755	0
MCPA	12.83	12.89	12.89	9188	0
2,4-D	13.87	13.89	13.93	44378	0.028848
Pentachlorophenol	15.06	15.09	15.12	36548	0.001879
2,4,5-TP	15.36	15.39	15.42	22233	0.003019
2,4,5-T	15.88	15.89	15.94	83376	0.012827
2,4-DB	16.71	16.76	16.77	20623	0.02287
Picloram	17.86	17.86	17.92	44275	0.007857

## Analysis Report (B)

Injected on Nov 09, 2018 10:07:29  
 Instrument 19850B  
 Result file 15HERB18304004B.130.RAW  
 Calibration file 15HERB1830401B  
 Method file 15HERBB

%SSR(DCAA) 72% (32 - 138) Conc: 1.385226

Compound	Min	RT	Max	Height	Amount
2,4-DCAA	12.49	12.53	12.55	2338348	1.385226
Dicamba	12.85	12.86	12.91	23026	0.003283
MCPP	12.90	12.93	12.96	11148	1.598871
MCPA	13.43	13.47	13.49	1355	0.141341
2,4-DP (Dichloroprop)	13.96	13.97	14.01	66303	0.044918
2,4-D	14.58	14.61	14.64	3133	0.001853
Pentachlorophenol	15.28	15.30	15.34	86278	0.003987
2,4,5-T	16.47	16.48	16.53	93178	0.013206
2,4-DB	17.18	17.23	17.24	63814	0.0638
Picloram	19.48	19.48	19.54	56111	0.008799

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<1.7241	<3.4483	<3.8314	D2		
<input type="checkbox"/> 2,4-DCAA	A	1.575138	0.0958	0.1916	0.1916		12.83	
<input checked="" type="checkbox"/> 2,4-DCAA-D1	A	1.575138	0.0958	0.1916	0.1916			
<input checked="" type="checkbox"/> 2,4-DCAA-D2	B	1.385226	0.0958	0.1916	0.1916			
<input checked="" type="checkbox"/> Dicamba			<0.0766	<0.1533	<0.2874	D1		
<input checked="" type="checkbox"/> MCPP			<47.8927	<95.7854	<191.5709	D1		
<input checked="" type="checkbox"/> MCPA			<47.8927	<95.7854	<191.5709	D1		
<input checked="" type="checkbox"/> 2,4-DP (Dichloroprop)			<0.1533	<0.3065	<0.4789	D1		
<input checked="" type="checkbox"/> 2,4-D			<0.2395	<0.4789	<0.5747	D2		
<input type="checkbox"/> Pentachlorophenol			<0.0259	<0.0575	<0.067			
<input checked="" type="checkbox"/> 2,4,5-TP			<0.0096	<0.0287	<0.0479	D2		
<input checked="" type="checkbox"/> 2,4,5-T			<0.0623	<0.1245	<0.1437	D1		
<input checked="" type="checkbox"/> 2,4-DB			<0.6034	<1.2452	<1.4368	D1		
<input checked="" type="checkbox"/> Dinoseb			<0.1724	<0.3831	<0.4789	D1		
<input type="checkbox"/> Picloram			<0.3448	<0.7663	<0.9579			
<input type="checkbox"/> Hexachlorophene					<0.1916			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayto*  
 Valerie L. Tomayto  
 Principal Specialist

NOV 16 2018

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** 9881313 F      15T-6      ID: AB      **Batchnumber:** 183100005A  
**Sample Amount:** 1044 ml      **Total Volume:** 10 ml      **Analyst:** 13378      **SDG:** TID15      **State:** NY  
**Analyses:** 10407

**Analysis Report (A)**

Injected on : Nov 09, 2018 10:07:29  
 Instrument : CP15--19850A  
 Result file : 15HERB18304004.130.RAW  
 Calibration file : 15HERB1830401.CAL  
 Method file : 15HERB.MET  
 %SSR(DCAA) : 82% (32-138)      Conc.: 1.575138

**Analysis Report (B)**

Injected on : Nov 09, 2018 10:07:29  
 Instrument : CP15--19850B  
 Result file : 15HERB18304004B.130.RAW  
 Calibration file : 15HERB1830401B.CAL  
 Method file : 15HERBB.MET  
 %SSR(DCAA) : 72% (32-138)      Conc.: 1.385226

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.72	3.76	887161	1.024801
DCAA	11.91	11.96	11.97	2456309	1.575138
MCPP	12.45	12.50	12.51	56755	-112.809300
MCPA	12.83	12.89	12.89	9188	-128.968000
2,4-D	13.87	13.89	13.93	44378	0.028848
DBOFB	14.21	14.23	14.26	11089440	0.000958
PCP	15.06	15.09	15.12	36548	0.001879
2,4,5-TP	15.36	15.39	15.42	22233	0.003019
2,4,5-T	15.88	15.89	15.94	83376	0.012827
2,4-DB	16.71	16.76	16.77	20623	0.022870
Picloram	17.86	17.86	17.92	44275	0.007857

Peak name	Min	R.T.	Max	Height	Amount
DCAA	12.49	12.53	12.55	2338348	1.385226
DICAMBA	12.85	12.86	12.91	23026	0.003283
MCPP	12.90	12.93	12.96	11148	1.598871
MCPA	13.43	13.47	13.49	1355	0.141341
DBOFB	13.69	13.71	13.75	11735310	0.000958
2,4-DP	13.96	13.97	14.01	66303	0.044918
2,4-D	14.58	14.61	14.64	3133	0.001853
PCP	15.28	15.30	15.34	86278	0.003987
2,4,5-T	16.47	16.48	16.53	93178	0.013206
2,4-DB	17.18	17.23	17.24	63814	0.063800
Picloram	19.48	19.48	19.54	56111	0.008799

**Summary Report**

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<3.8314	<1.7241			
<input type="checkbox"/> DCAA	A	1.575138	0.1916	0.0958		12.83	
<input checked="" type="checkbox"/> DICAMBA			<0.2874	<0.0766			
<input checked="" type="checkbox"/> MCPP			<191.5709	<47.8927			
<input checked="" type="checkbox"/> MCPA			<191.5709	<47.8927			
<input checked="" type="checkbox"/> 2,4-DP			<0.4789	<0.1533			
<input checked="" type="checkbox"/> 2,4-D			<0.5747	<0.2395			
<input type="checkbox"/> DBOFB	A	0.000958				0.00	
<input type="checkbox"/> PCP			<0.067	<0.0259			
<input checked="" type="checkbox"/> 2,4,5-TP			<0.0479	<0.0096			
<input checked="" type="checkbox"/> 2,4,5-T			<0.1437	<0.0623			
<input checked="" type="checkbox"/> 2,4-DB			<1.4368	<0.6034			
<input checked="" type="checkbox"/> DINOSEB			<0.4789	<0.1724			
<input type="checkbox"/> Picloram			<0.9579	<0.3448			
<input type="checkbox"/> Hexachlorophene			<0.1916				

Units: ug/l

Reviewed by: *RHABA*  
 Date: 11/16/18

Verified by: *Valerie L. Tomayko*  
 Date: NOV 16 2018  
Valerie L. Tomayko  
Principal Specialist

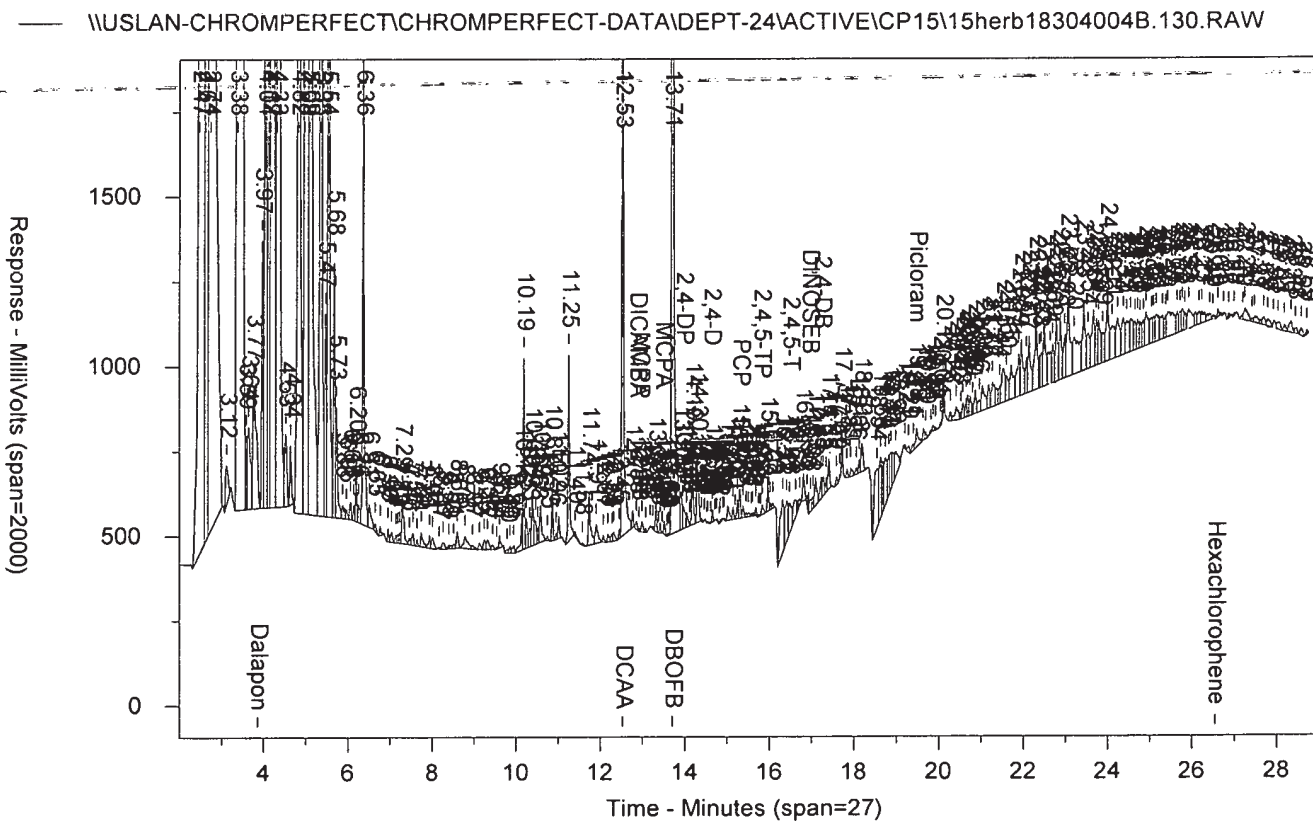
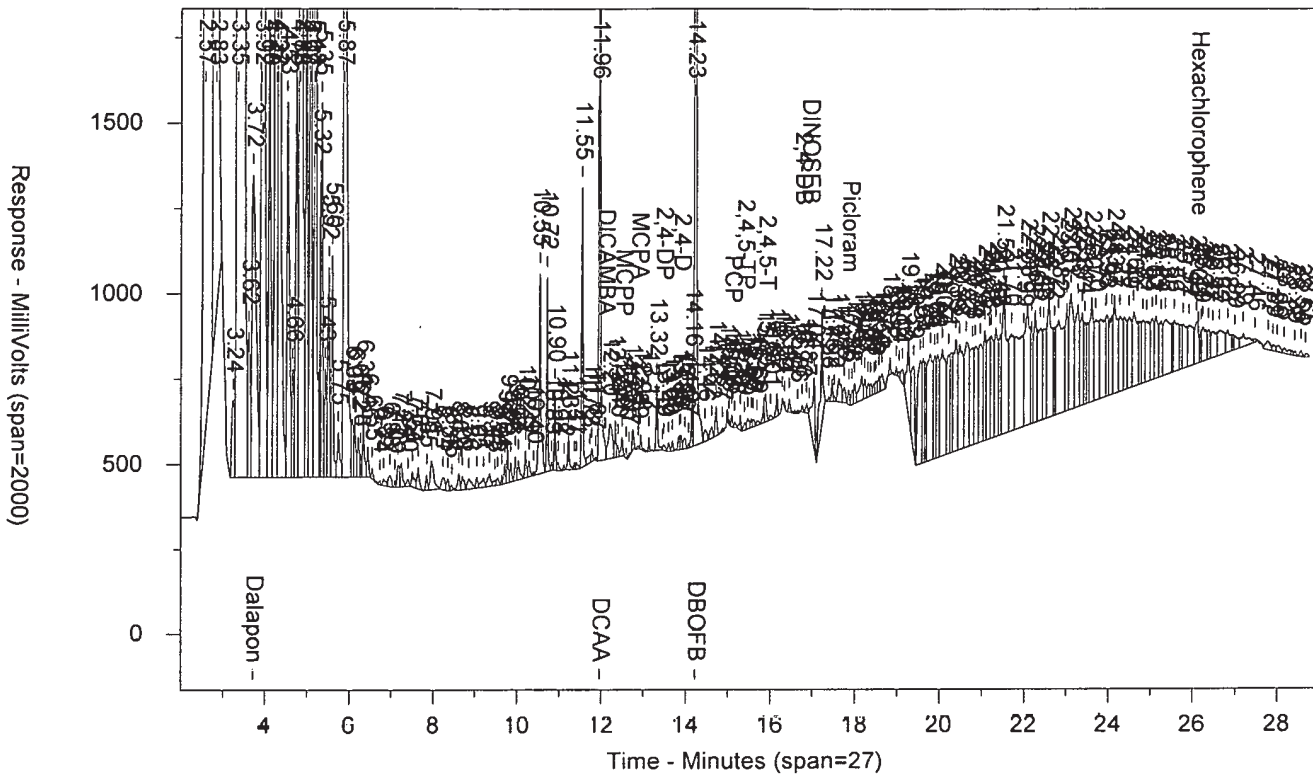
%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

9881313 F AB15T-6 T 183100005A 10407 SW-846 8151A  
 \\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.130.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881313 F AB15T-6 T 183100005A 10407 SW-846 8151A  
 Injected On: 11/9/2018 10:07:29 AM Sample Weight: 1044  
 Instrument ID: CP15-19850 Dilution Factor: 10  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

Analyst: 13378

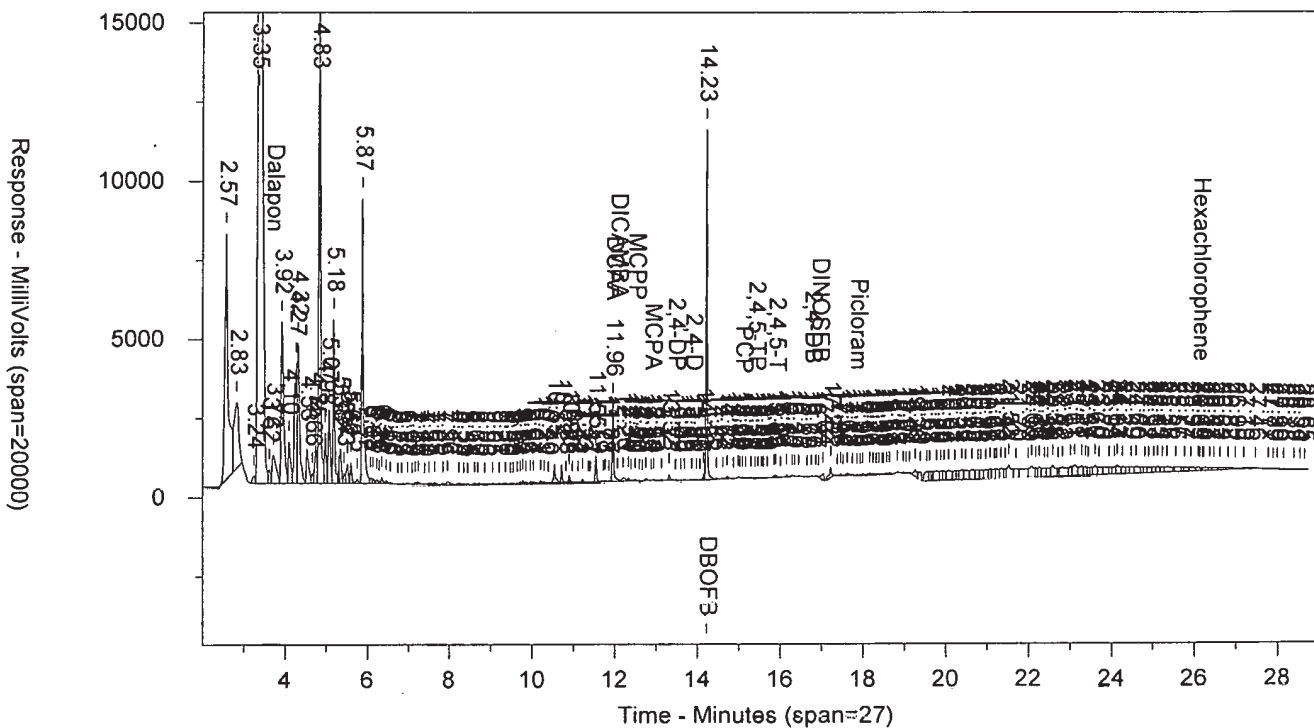
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.717	887161	1.025	Dalapon		0		Dalapon
11.957	2456309	1.575	DCAA	12.527	2338348	1.385	DCAA
12.496	56755	-112.809	MCPP	12.928	11148	1.599	M CPP
	0		DICAMBA	12.862	23026	.003	DICAMBA
12.885	9188	-128.968	MCPA	13.17	1355	.141	MCPA
14.226	11089440	.001	DBOFB	13.708	11735310	.001	DBOFB
13.885	44378	.029	2,4-D	14.612	3133	.002	2,4-D
	0		2,4-DP	13.966	66303	.045	2,4-DP
15.093	36548	.002	PCP	15.304	86278	.004	PCP
15.392	22233	.003	2,4,5-TP		0		2,4,5-TP
15.009	83378	.013	2,4,5-T	16.48	93178	.013	2,4,5-T
16.762	20623	.023	2,4-DB	17.234	63814	.064	2,4-DB
17.861	44275	.008	Picloram	19.484	56111	.009	Picloram

Files:

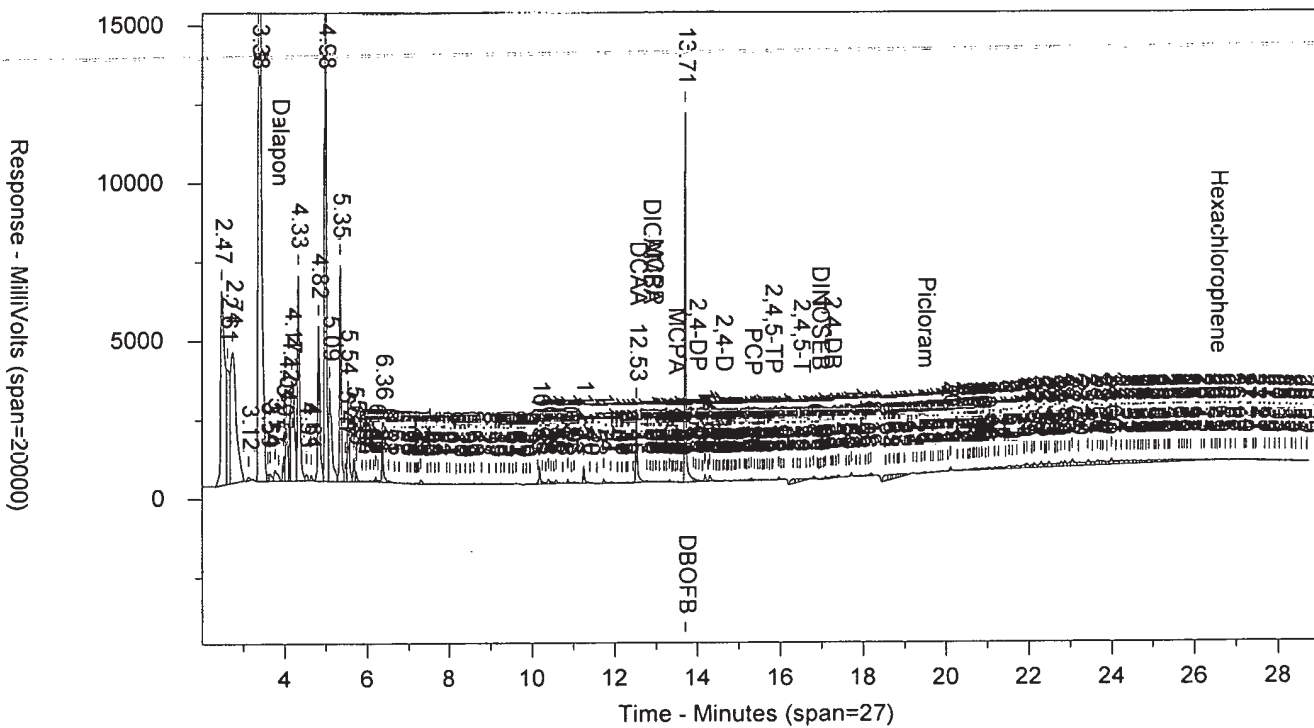
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 Method B: 15HERBB.MET  
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 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
 Area File Created On: 11/9/2018 10:36:17 AM  
 File Reported On: 11/9/2018 at 3:13:28 PM

9881313 F AB15T-6 T 183100005A 10407 SW-846 8151A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.130.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.130.RAW



# **Standards Data**

## **Herbicides**

**Eurofins Lancaster Laboratories**  
**CHROM PERFECT SEQUENCE FILE**

Sequence File: \\Uslan-chromperfect\chromperfect-data\Dept-24\Active\CP15\15herb18304001.seq

Chromatography Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15

Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15

Number of Entries: 42

Samplename	VP	Code	ID	Method	Samp Amt	DF	Int Std	C	Batch Number	Analysis
1 CONDITIONER	1	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	
2 CONDITIONER	2	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	
3 CONDITIONER	3	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	
4 CONDITIONER	4	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	
5 HIBLKX1824B	5	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830299999	10407
6 HERB11824E	6	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	1	1830299999	10407
7 HERB21824E	7	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	2	1830299999	10407
8 HERB31824F	8	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	3	1830299999	10407
9 HERB41824E	9	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	4	1830299999	10407
10 HERB51824E	10	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	5	1830299999	10407
11 HERB61824E	11	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	6	1830299999	10407
12 MDHEX1824E	12	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	10407
13 ICHBX1824G	13	CCAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	10407
14 ICHBX1824H	14	CCAL	QV	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	10407
15 ICHBX1824I	15	CCAL	QW	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	10407
16 BLANKA 10/29/18 F	16	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183020008A	10407
17 LCSA 10/29/18 F	17	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183020008A	10407
18 LCSDA 10/29/18 F	18	LCSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183020008A	10407
19 9868184 F	19	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1040	10	1	0	183020008A	10407
20 9868185 F	20	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1062	10	1	0	183020008A	10407
21 9868186 F	21	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1045	10	1	0	183020008A	10407
22 9868187 F	22	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1055	10	1	0	183020008A	10407
23 9868189 F	23	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1060	10	1	0	183020008A	10407
24 9870991 F	24	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1029	10	1	0	183020008A	10407
25 HERB31824F	25	CCAL	TW	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	10407
26 HIBLKX1824B	26	PIBLK	FL	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830299999	10407
27 BLANKA 10/29/18 F	27	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183020009A	10401
28 LCSA 10/29/18 F	28	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183020009A	10401
29 9863853 F	29	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.39	10	1	0	183020009A	10401
30 9863854MS F	30	MS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.28	10	1	0	183020009A	10401
31 9863855MSD F	31	MSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.02	10	1	0	183020009A	10401
32 HERB31824F	32	CCAL	TX	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	10407
33 HIBLKX1824B	33	PIBLK	FM	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830299999	10407
34 9863851 F	34	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183020009A	10401
35 9863852 F	35	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.03	10	1	0	183020009A	10401
36 9863857 F	36	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.29	10	1	0	183020009A	10401
37 9863858 F	37	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.27	10	1	0	183020009A	10401
38 9866461 F	38	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.06	10	1	0	183020009A	10401
39 9866462 F	39	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.18	10	1	0	183020009A	10401
40 9870992 F	40	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.41	10	1	0	183020009A	10401
41 HERB31824F	41	CCAL	TY	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830299999	10407
42 HIBLKX1824B	42	PIBLK	FN	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830299999	10407

MW 15249  
11/2/18

Set-up by: 

Date: 11/2/18





**Eurofins Lancaster Laboratories**  
**CHROM PERFECT SEQUENCE FILE**

Sequence File: \\Usian-chromperfect\chromperfect-data\Dept-24\Active\CP15\15herb18304004.seq  
 Chromatography Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15  
 Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15  
 Number of Entries: 141

<u>Samplename</u>	<u>VP</u>	<u>Code</u>	<u>ID</u>	<u>Method</u>	<u>Samp Amt</u>	<u>DF</u>	<u>Int Std</u>	<u>C</u>	<u>Batch Number</u>	<u>Analysis</u>
1 CONDITIONER	1	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	
2 CONDITIONER	2	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	
3 CONDITIONER	3	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	
4 CONDITIONER	4	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	
5 HERB31824F	5	CCAL	UV	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	10407
6 HIBLX1824B	6	MISC	SE	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830999999	10407
7 BLANKA 10/29/18 RI F	7	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183020009A	10401
8 9870992 RI F	8	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.41	10	1	0	183020009A	10401
9 LCSA 10/28/18 RI F	9	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	182990034A	10401
10 HERB31824F	10	CCAL	UV	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	10407
11 HIBLX1824B	11	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830999999	10407
12 BLANKA 11/5/18 F	12	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183090033A	10401
13 LCSA 11/5/18 F	13	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183090033A	10401
14 9863853R F	14	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.1	10	1	0	183090033A	10401
15 9863854RMS F	15	MS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183090033A	10401
16 9863855RMSD F	16	MSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.4	10	1	0	183090033A	10401
17 9863851R F	17	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.1	10	1	0	183090033A	10401
18 9863852R F	18	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.3	10	1	0	183090033A	10401
19 9863857R F	19	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.1	10	1	0	183090033A	10401
20 9863858R F	20	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.1	10	1	0	183090033A	10401
21 9881801 F	21	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.18	10	1	0	183090033A	10401
22 HERB31824F	22	CCAL	UX	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	10407
23 HIBLX1824B	23	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830999999	10407
24 9881804 F	24	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.13	10	1	0	183090033A	10401
25 9881807 F	25	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.2	10	1	0	183090033A	10401
26 BLANKA 11/1/18 RI F	26	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183050015A	10401
27 LCSA 11/1/18 RI F	27	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	183050015A	10401
28 9874412 F DF20	28	T	AD	EPT-24\ACTIVE\CP15\15HERB.MET	30.09	200	1	0	183050015A	10401
29 CONDITIONER	29	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.09	200	1	0	183050015A	10401
30 9874412MS F DF20	30	MS	AE	EPT-24\ACTIVE\CP15\15HERB.MET	30.29	200	1	0	183050015A	10401
31 CONDITIONER	31	MS	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.29	200	1	0	183050015A	10401
32 9874412MSD F DF20	32	MSD	AE	EPT-24\ACTIVE\CP15\15HERB.MET	30.5	200	1	0	183050015A	10401
33 CONDITIONER	33	MSD	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.5	200	1	0	183050015A	10401
34 HERB31824F	34	CCAL	UY	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	10407
35 HIBLX1824B	35	MISC	SH	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830999999	10407
36 9868565 RI F	36	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.14	10	1	0	183050015A	10401
37 9868566 RI F	37	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.16	10	1	0	183050015A	10401
38 9868567 RI F	38	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.22	10	1	0	183050015A	10401
39 9868568 F DF10	39	T	AD	EPT-24\ACTIVE\CP15\15HERB.MET	30.39	100	1	0	183050015A	10401
40 CONDITIONER	40	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.39	100	1	0	183050015A	10401
41 9868571 RI F DF10	41	T	AD	EPT-24\ACTIVE\CP15\15HERB.MET	30.29	100	1	0	183050015A	10401
42 CONDITIONER	42	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.29	100	1	0	183050015A	10401
43 9868571 F DF20	43	T	AH	EPT-24\ACTIVE\CP15\15HERB.MET	30.29	200	1	0	183050015A	10401
44 CONDITIONER	44	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.29	200	1	0	183050015A	10401
45 HERB31824F	45	CCAL	UZ	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	10407
46 HIBLX1824B	46	MISC	SI	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830999999	10407
47 9870637 RI F	47	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.15	10	1	0	183050015A	10401
48 9870639 F DF5	48	T	AE	EPT-24\ACTIVE\CP15\15HERB.MET	30.12	50	1	0	183050015A	10401
49 CONDITIONER	49	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.12	50	1	0	183050015A	10401
50 9870639 F DF10	50	T	AF	EPT-24\ACTIVE\CP15\15HERB.MET	30.12	100	1	0	183050015A	10401



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 Chromatography Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15  
 Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15  
 Number of Entries: 141

<u>Samplename</u>	<u>VP</u>	<u>Code</u>	<u>ID</u>	<u>Method</u>	<u>Samp Amt</u>	<u>DF</u>	<u>Int Std</u>	<u>C</u>	<u>Batch Number</u>	<u>Analysis</u>
51 9874411 F DF10	51	T	AE	EPT-24\ACTIVE\CP15\15HERB.MET	30.04	100	1	0	183050015A	10401
52 CONDITIONER	52	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.04	100	1	0	183050015A	10401
53 9874411 F DF20	53	T	AF	EPT-24\ACTIVE\CP15\15HERB.MET	30.04	200	1	0	183050015A	10401
54 9874413 RI F DF5	54	T	AC	EPT-24\ACTIVE\CP15\15HERB.MET	30.17	50	1	0	183050015A	10401
55 CONDITIONER	55	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.17	50	1	0	183050015A	10401
56 HERB31824F	56	CCAL	VA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	10407
57 HIBLX1824B	57	MISC	SJ	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830999999	10407
58 9875251 RI F	58	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30.42	10	1	0	183050015A	10401
59 BLANKA 11/2/18 F	59	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183050043A	10407
60 LCSA 11/2/18 F	60	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183050043A	10407
61 9876334 F	61	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1056	10	1	0	183050043A	10407
62 9876335MS F	62	MS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1063	10	1	0	183050043A	10407
63 9876336MSD F	63	MSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1060	10	1	0	183050043A	10407
64 9876332 F	64	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1060	10	1	0	183050043A	10407
65 9876342 F	65	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1062	10	1	0	183050043A	10407
66 HERB31824F	66	CCAL	VB	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1830999999	10407
67 HIBLX1824B	67	MISC	SK	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1830999999	10407
68 BLANKA 10/28/18 RI F	68	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	30	10	1	0	182990034A	10401
69 9860859 F DF5	69	T	AC	EPT-24\ACTIVE\CP15\15HERB.MET	30.33	50	1	0	182990034A	10401
70 CONDITIONER	70	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	30.33	50	1	0	182990034A	10401
71 HERB31824F	71	CCAL	VG	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1831099999	10407
72 HIBLX1824B	72	MISC	SP	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1831099999	10407
73 9866461 F DF5	73	T	AC	EPT-24\ACTIVE\CP15\15HERB.MET	30.06	50	1	0	183020009A	10401
74 9866462 F DF5	74	T	AC	EPT-24\ACTIVE\CP15\15HERB.MET	30.18	50	1	0	183020009A	10401
75 9863858R F DF200	75	T	AD	EPT-24\ACTIVE\CP15\15HERB.MET	30.1	2000	1	0	183090033A	10401
76 BLANKA 11/4/18 F	76	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183060017A	10407
77 LCSA 11/4/18 F	77	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183060017A	10407
78 9879191 F DF100	78	T	AC	EPT-24\ACTIVE\CP15\15HERB.MET	994	1000	1	0	183060017A	10407
79 CONDITIONER	79	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	994	1000	1	0	183060017A	10407
80 9879191 F DF1000	80	T	AD	EPT-24\ACTIVE\CP15\15HERB.MET	994	10000	1	0	183060017A	10407
81 CONDITIONER	81	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	994	10000	1	0	183060017A	10407
82 HERB31824F	82	CCAL	VH	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1831099999	10407
83 HIBLX1824B	83	MISC	SQ	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1831099999	10407
84 9879191 F DF2000	84	T	AE	EPT-24\ACTIVE\CP15\15HERB.MET	994	20000	1	0	183060017A	10407
85 CONDITIONER	85	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	994	20000	1	0	183060017A	10407
86 9879191 F DF5000	86	T	AF	EPT-24\ACTIVE\CP15\15HERB.MET	994	50000	1	0	183060017A	10407
87 CONDITIONER	87	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	994	50000	1	0	183060017A	10407
88 BLANKA 11/4/18 F	88	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183060013A	10407
89 LCSA 11/4/18 F	89	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183060013A	10407
90 9879191 F DF100	90	T	AD	EPT-24\ACTIVE\CP15\15HERB.MET	1036	1000	1	0	183060013A	10407
91 CONDITIONER	91	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1036	1000	1	0	183060013A	10407
92 9879191 F DF1000	92	T	AE	EPT-24\ACTIVE\CP15\15HERB.MET	1036	10000	1	0	183060013A	10407
93 CONDITIONER	93	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1036	10000	1	0	183060013A	10407
94 HERB31824F	94	CCAL	VI	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1831099999	10407
95 HIBLX1824B	95	MISC	SR	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1831099999	10407
96 9879191 F DF2000	96	T	AF	EPT-24\ACTIVE\CP15\15HERB.MET	1036	20000	1	0	183060013A	10407
97 CONDITIONER	97	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1036	20000	1	0	183060013A	10407
98 9879191 F DF5000	98	T	AG	EPT-24\ACTIVE\CP15\15HERB.MET	1036	50000	1	0	183060013A	10407
99 CONDITIONER	99	T	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1036	50000	1	0	183060013A	10407
100 BLANKA 11/4/18 F	100	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183060012A	10407



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<u>Samplename</u>	<u>VP Code</u>	<u>ID</u>	<u>Method</u>	<u>Samp Amt</u>	<u>DF</u>	<u>Int Std</u>	<u>C</u>	<u>Batch Number</u>	<u>Analysis</u>
101 LCSA 11/4/18 F	101	LCS	AB EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183060012A	10407
102 9879192 F	102	T	AB EPT-24\ACTIVE\CP15\15HERB.MET	1049	10	1	0	183060012A	10407
103 9879193MS F	103	MS	AB EPT-24\ACTIVE\CP15\15HERB.MET	1071	10	1	0	183060012A	10407
104 9879194MSD F	104	MSD	AB EPT-24\ACTIVE\CP15\15HERB.MET	1057	10	1	0	183060012A	10407
105 9879196 F	105	T	AB EPT-24\ACTIVE\CP15\15HERB.MET	1058	10	1	0	183060012A	10407
106 HERB31824F	106	CCAL	VJ EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1831099999	10407
107 HIBLKX1824B	107	MISC	SS EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1831099999	10407
108 BLANKA 11/4/18	108	BLK	AA EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183060018A	10407
109 LCSA 11/4/18	109	LCS	AA EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	183060018A	10407
110 9879192	110	T	AA EPT-24\ACTIVE\CP15\15HERB.MET	1062	10	1	0	183060018A	10407
111 9879193MS	111	MS	AA EPT-24\ACTIVE\CP15\15HERB.MET	1064	10	1	0	183060018A	10407
112 9879194MSD	112	MSD	AA EPT-24\ACTIVE\CP15\15HERB.MET	1061	10	1	0	183060018A	10407
113 9879196	113	T	AA EPT-24\ACTIVE\CP15\15HERB.MET	1055	10	1	0	183060018A	10407
114 HERB31824F	114	CCAL	VK EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1831099999	10407
115 HIBLKX1824B	115	MISC	ST EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1831099999	10407
116 9870252 F DF50	116	T	AD 15HERB.MET	30.14	500	1	0	183030010A	10401
117 9870253 F DF50	117	T	AD 15HERB.MET	30.18	500	1	0	183030010A	10401
118 9870254 F DF50	118	T	AD 15HERB.MET	30.15	500	1	0	183030010A	10401
119 9872060 F DF100	119	T	AD 15HERB.MET	30	1000	1	0	183030010A	10401
120 9872061 F DF100	120	T	AD 15HERB.MET	30.02	1000	1	0	183030010A	10401
121 9872062 F DF100	121	T	AD 15HERB.MET	30.41	1000	1	0	183030010A	10401
122 9872064 F DF100	122	T	AD 15HERB.MET	30.22	1000	1	0	183030010A	10401
123 HERB31824F	123	CCAL	VT 15HERB.MET	1	1	1	0	1831199999	10407
124 HIBLKX1824B	124	MISC	TC 15HERB.MET	1000	10	1	0	1831199999	10407
125 BLANKA 11/6/18 F	125	BLK	AB 15HERB.MET	1000	10	1	0	183100005A	10407
126 LCSA 11/6/18 F	126	LCS	AB 15HERB.MET	1000	10	1	0	183100005A	10407
127 LCSDA 11/6/18 F	127	LCSD	AB 15HERB.MET	1000	10	1	0	183100005A	10407
128 9881309 F	128	T	AB 15HERB.MET	1042	10	1	0	183100005A	10407
129 9881310 F	129	T	AB 15HERB.MET	1039	10	1	0	183100005A	10407
130 9881313 F	130	T	AB 15HERB.MET	1044	10	1	0	183100005A	10407
131 9882870 F	131	T	AB 15HERB.MET	1055	10	1	0	183100005A	10407
132 9882871 F	132	T	AB 15HERB.MET	1061	10	1	0	183100005A	10407
133 9882872 F	133	T	AB 15HERB.MET	1057	10	1	0	183100005A	10407
134 9882873 F	134	T	AB 15HERB.MET	1064	10	1	0	183100005A	10407
135 HERB31824F	135	CCAL	VU 15HERB.MET	1	1	1	0	1831199999	10407
136 HIBLKX1824B	136	MISC	TD 15HERB.MET	1000	10	1	0	1831199999	10407
137 9882874 F	137	T	AB 15HERB.MET	1054	10	1	0	183100005A	10407
138 9882875 F	138	T	AB 15HERB.MET	1058	10	1	0	183100005A	10407
139 9882876 F	139	T	AB 15HERB.MET	1032	10	1	0	183100005A	10407
140 HERB31824F	140	CCAL	VV 15HERB.MET	1	1	1	0	1831199999	10407
141 HIBLKX1824B	141	MISC	TE 15HERB.MET	1000	10	1	0	1831199999	10407

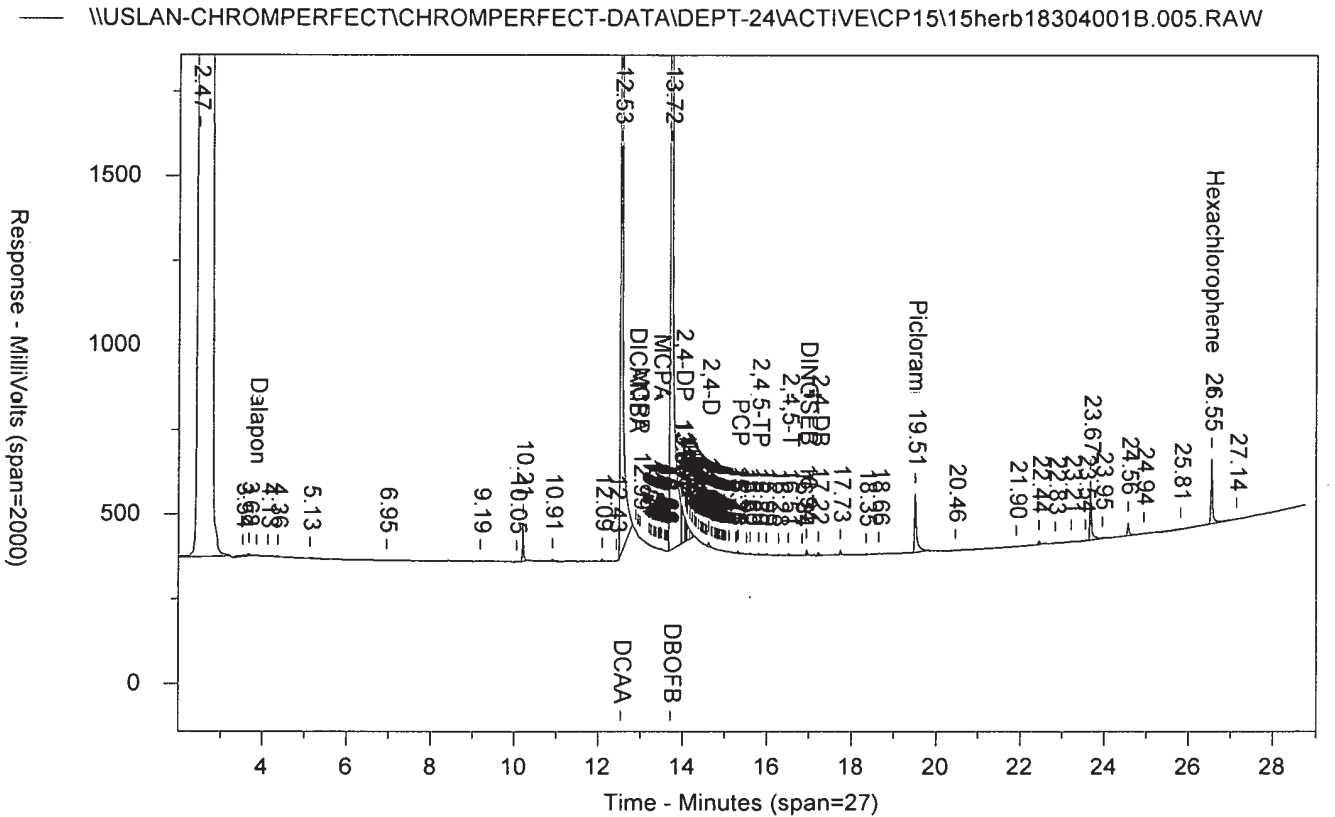
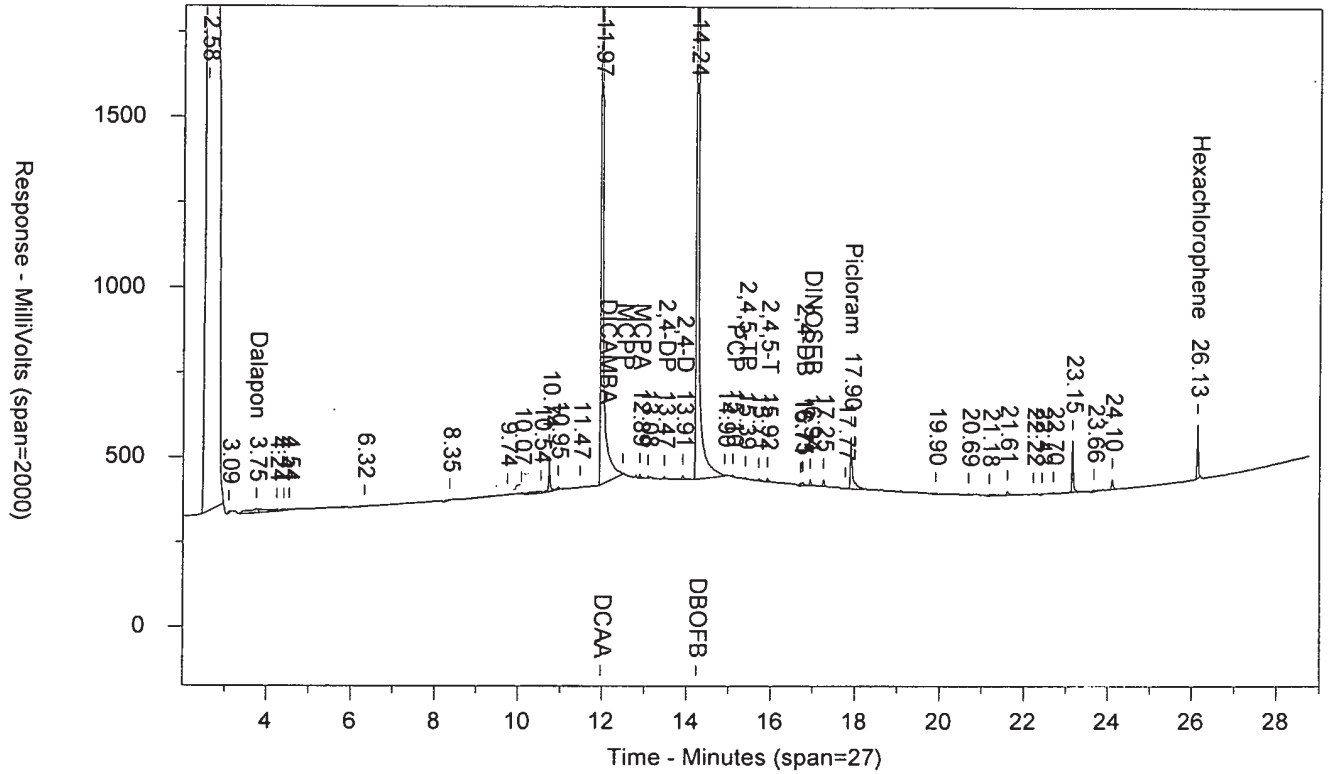
MW15249  
11/9/18

Set-up by: *Becky*  
11/8/2018

Date: 11/8/18  
TID15 Page 1147 of 3058



HIBLKX1824B AAHIBLKAA ICAL 1830299999 10407 SW-846 8015A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001.005.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: HIBLKX1824B      AAHIBLKAA      ICAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 5:49:08 PM      Sample Weight: 1000  
 Instrument ID: CP15-19850      Dilution Factor: 10  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

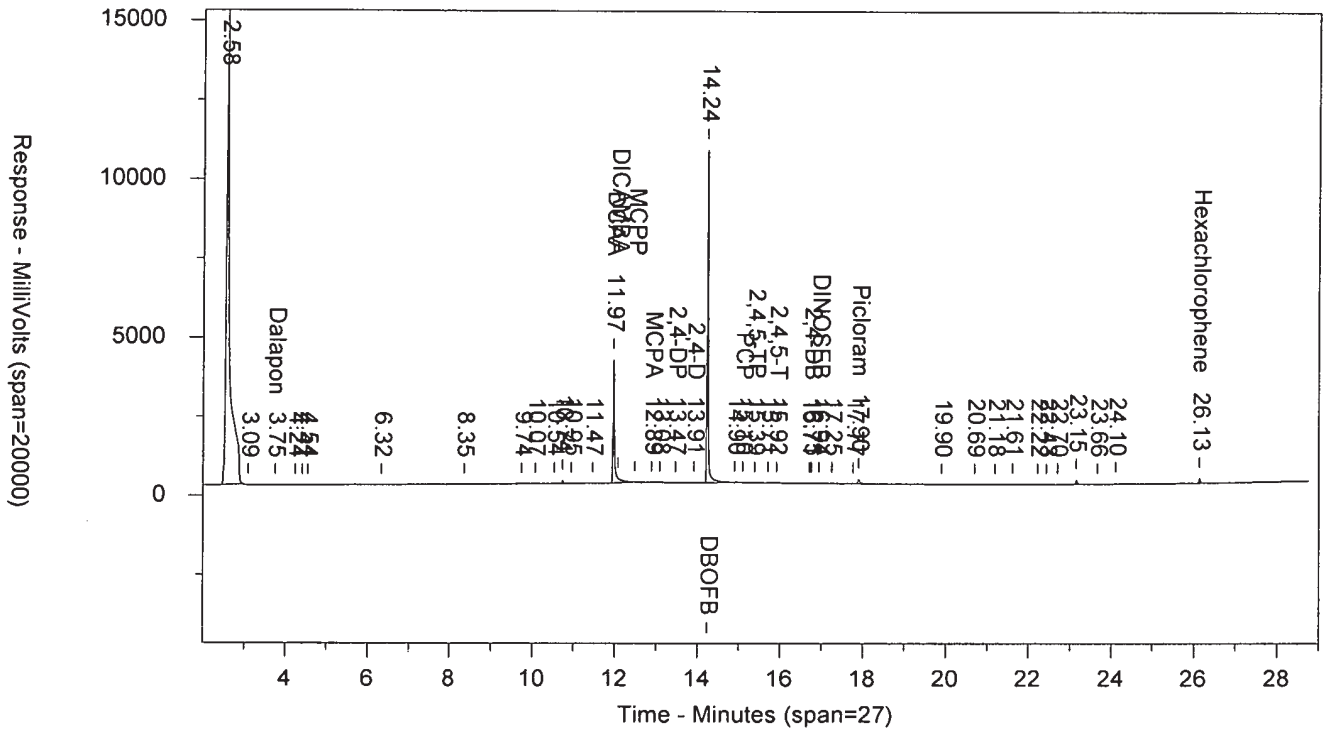
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.755	11581	.014	Dalapon		0		Dalapon
11.967	3921036	2.449	DCAA	12.534	3622133	2.326	DCAA
12.887	13381	1.111	MCPA	13.465	3261	.369	MCPA
13.47	8364	.007	2,4-DP	13.988	110770	.082	2,4-DP
14.236	10527320	.001	DBOFB	13.717	10561740	.001	DBOFB
13.912	12860	.008	2,4-D	14.617	13251	.008	2,4-D
15.097	6722		PCP	15.311	7542		PCP
15.391	5830	.001	2,4,5-TP	15.803	4935	.001	2,4,5-TP
15.917	11915	.002	2,4,5-T	16.511	6362	.001	2,4,5-T
16.752	10643	.011	2,4-DB	17.218	10684	.011	2,4-DB
16.936	19320	.006	DINOSEB	16.938	17975	.006	DINOSEB
17.9	152489	.024	Picloram	19.508	174574	.027	Picloram
26.134	158545	.026	Hexachlorophene	26.555	194068	.033	Hexachloropher

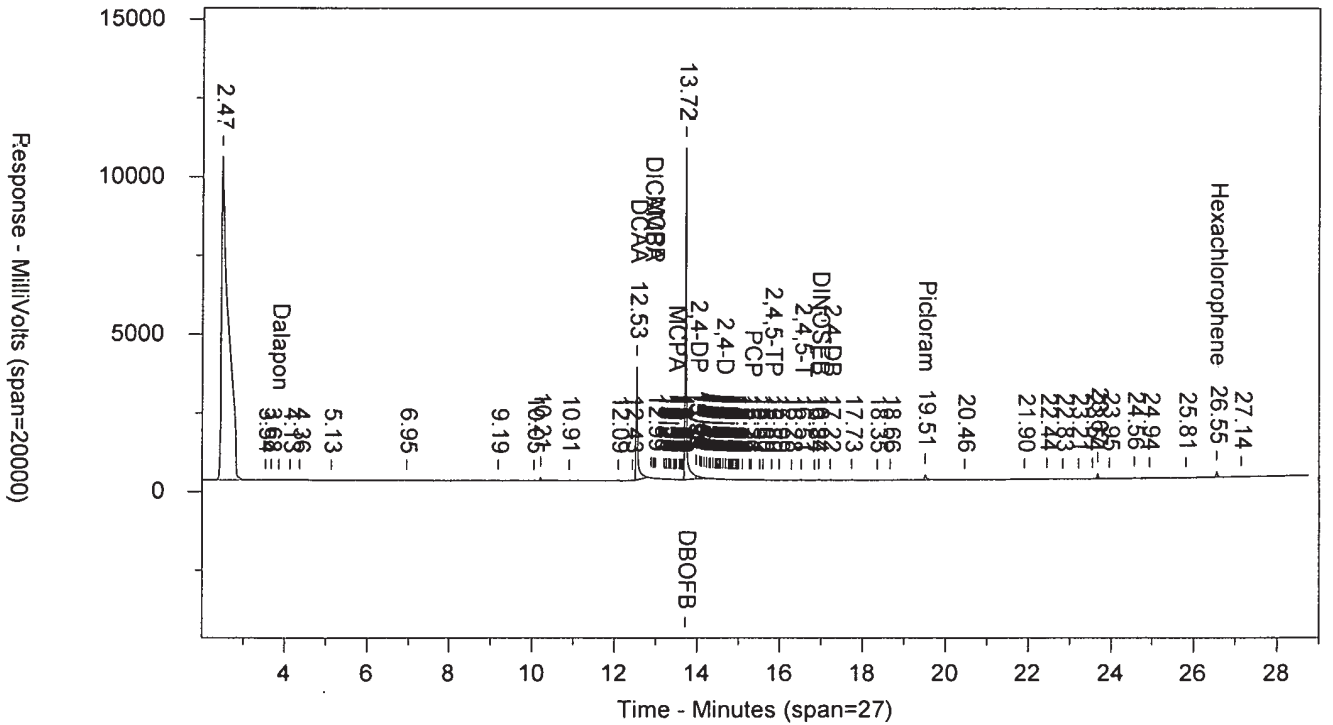
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Area File: 15herb18304001.005.RAW  
 Area File: 15herb18304001B.005.RAW  
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 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
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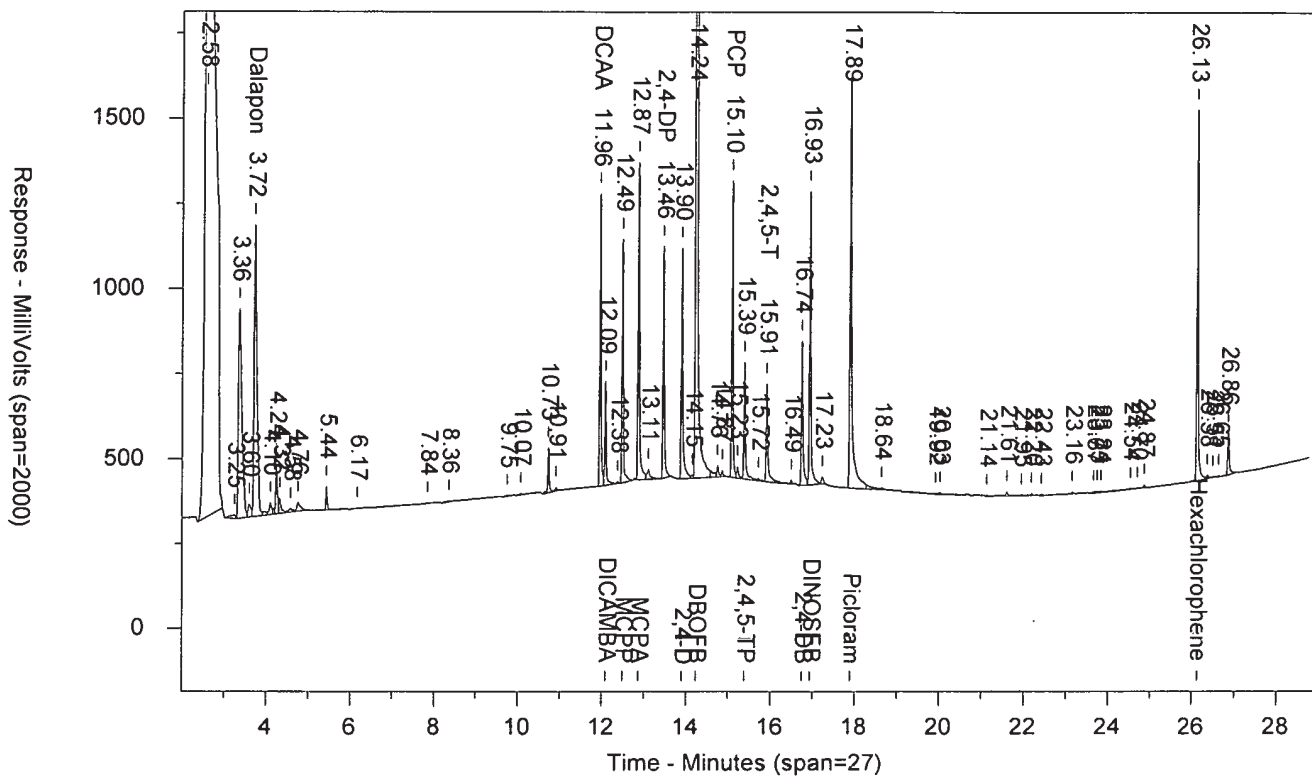
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 \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001.005.RAW



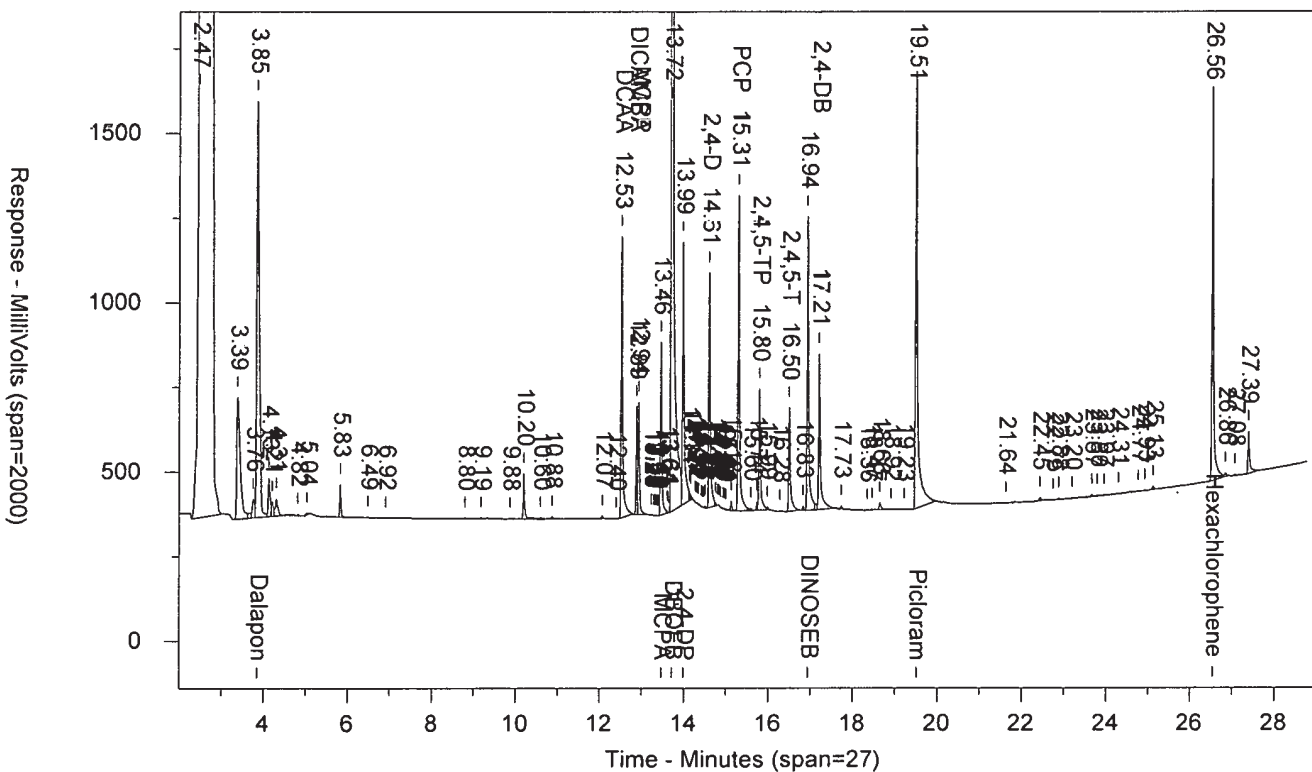
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HERB11824E AAHERB1AA ICAL 1830299999 10407 SW-846 8015A  
 \U\SLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001.006.RAW



\U\SLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.006.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: HERB11824E      AAHERB1AA      ICAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 6:22:14 PM      Sample Weight: 1  
 Instrument ID: CP15-19850      Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

Analyst: 13378

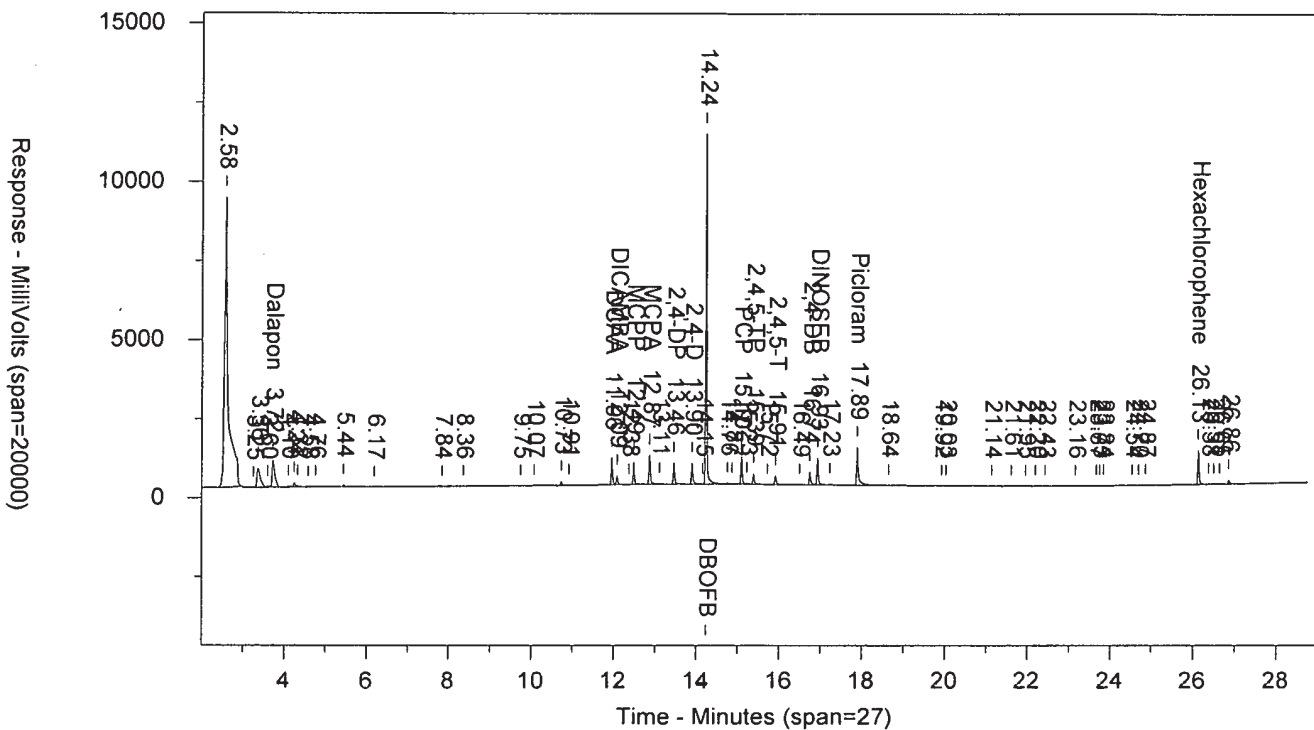
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.724	858224	97.18	Dalapon	3.855	1231728	102.024	Dalapon
11.959	859148	50.935	DCAA	12.529	832311	51.724	DCAA
12.086	305319	4.787	DICAMBA	12.889	320092	4.977	DICAMBA
12.489	717371	7031.88	MCPP	12.939	333255	5137.129	MCPP
12.869	935168	7370.042	MCPA	13.463	512484	5606.446	MCPA
13.461	682186	51.525	2,4-DP	13.989	777028	55.525	2,4-DP
14.235	11092760	1	DBOFB	13.716	10913010	1	DBOFB
13.901	678951	39.858	2,4-D	14.612	695226	41.444	2,4-D
15.097	873142	4.426	PCP	15.308	933507	4.622	PCP
15.387	343772	4.347	2,4,5-TP	15.8	359201	4.573	2,4,5-TP
15.912	288078	4.008	2,4,5-T	16.504	307396	4.333	2,4,5-T
16.744	424860	42.414	2,4-DB	17.212	461591	45.755	2,4-DB
16.934	863126	25.201	DINOSEB	16.939	869271	27.617	DINOSEB
17.894	1210413	18.349	Picloram	19.509	1294424	19.657	Picloram
26.135	1091063	17.06	Hexachlorophene	26.555	1148370	18.721	Hexachloropher

Files:

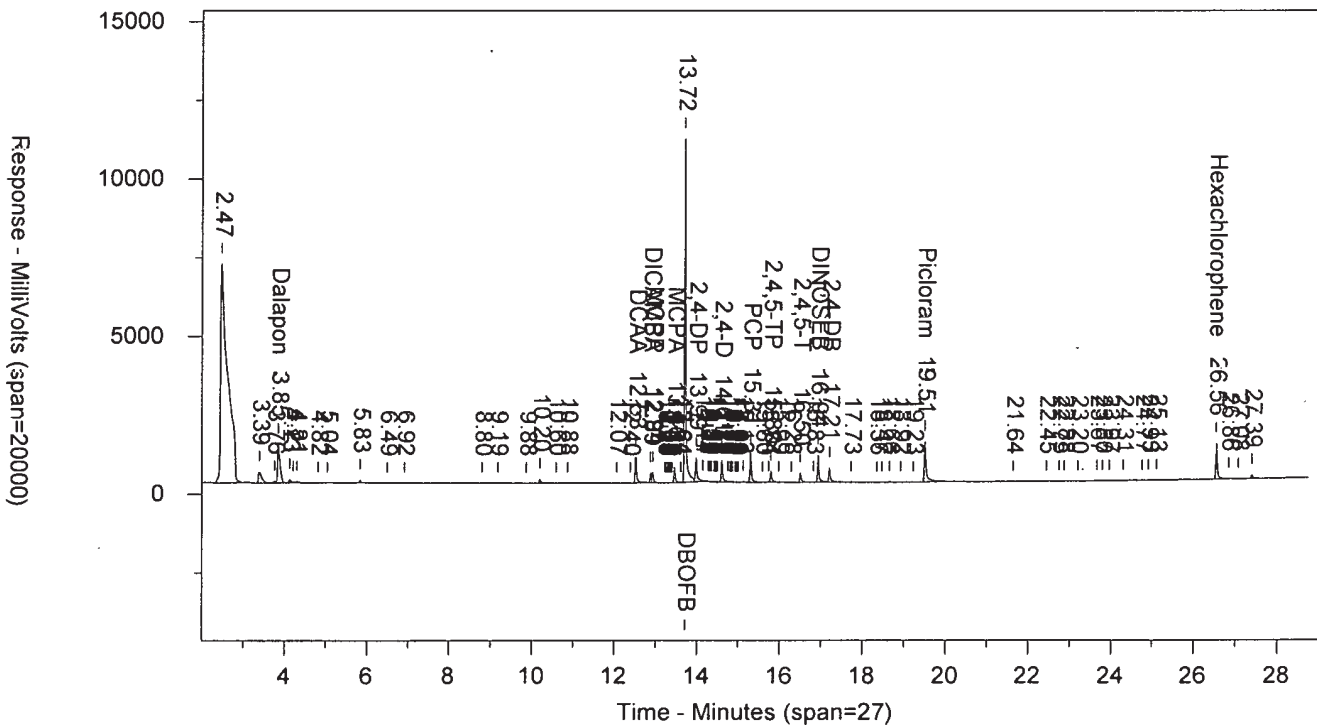
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 Area File: 15herb18304001B.006.RAW  
 Method A: 15HERB.MET  
 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
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 Area File Created On: 10/31/2018 6:51:02 PM  
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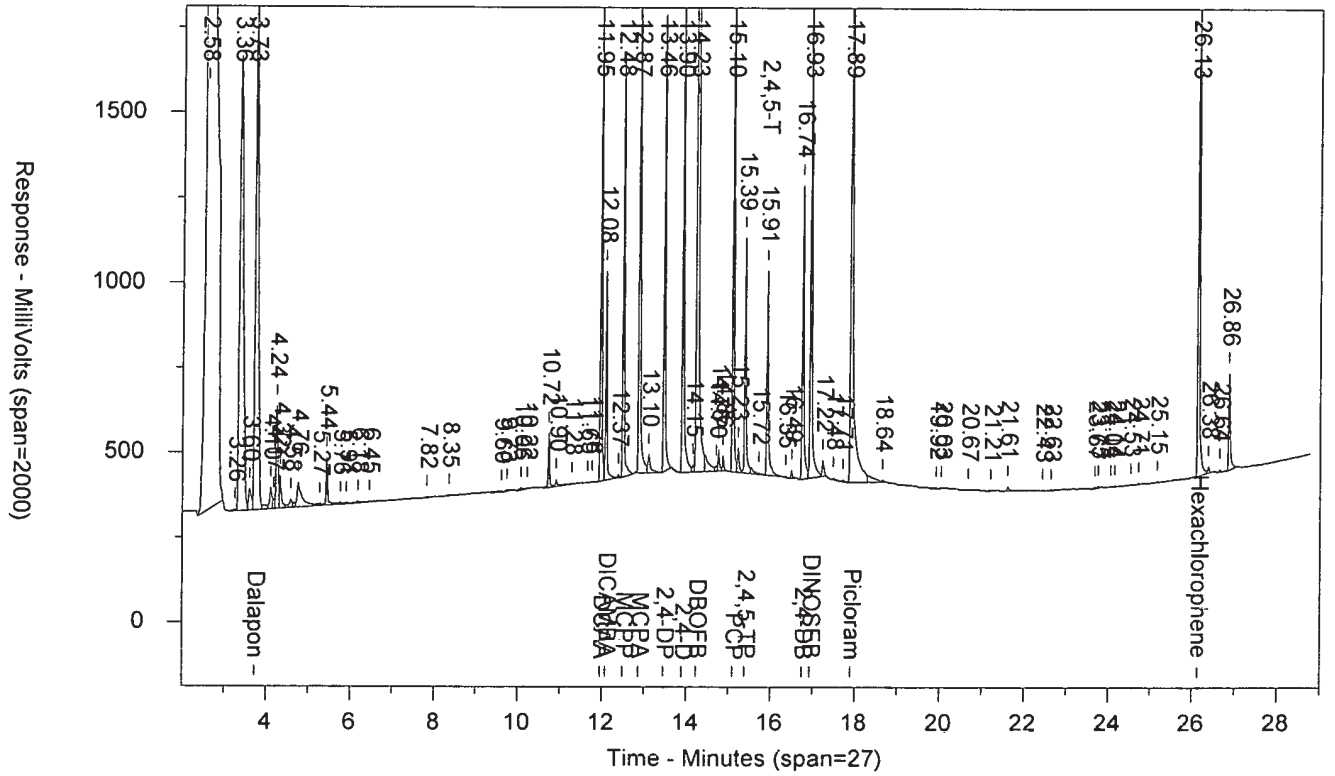
HERB11824E AAHERB1AA ICAL 183029999 10407 SW-846 801  
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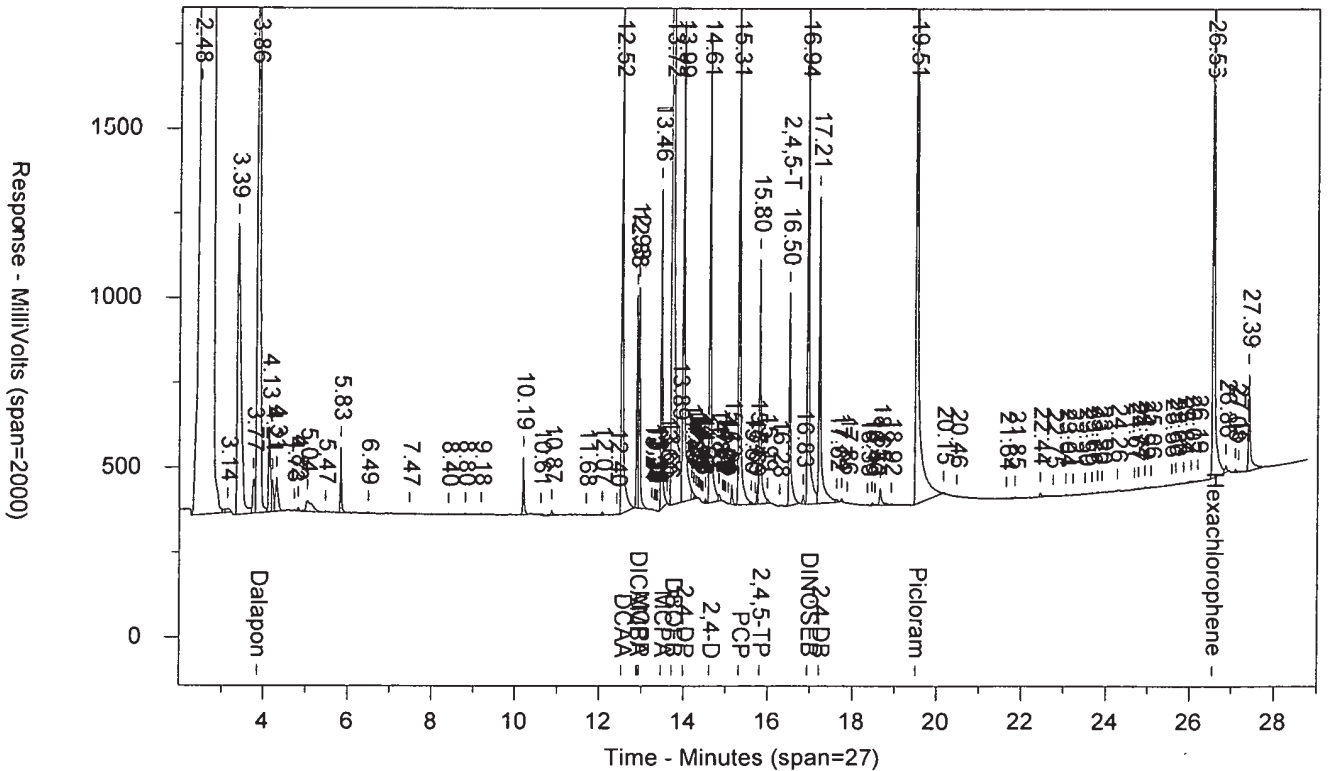
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HERB21824E AAHERB2AA ICAL 1830299999 10407 SW-846 8015A  
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.007.RAW



## LANCASTER LABORATORIES

Sample Number: HERB21824E      AAHERB2AA      ICAL 1830299999      10407      SW-846 8015A  
Injected On: 10/31/2018 6:55:13 PM      Sample Weight: 1  
Instrument ID: CP15-19850      Dilution Factor: 1  
Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
Column B ID: ZB35      30m x 0.32mm x 0.25um  
Injection Volume: 1 ul

Threshold: 4  
Calibration Type: internal  
Quantitation: Height

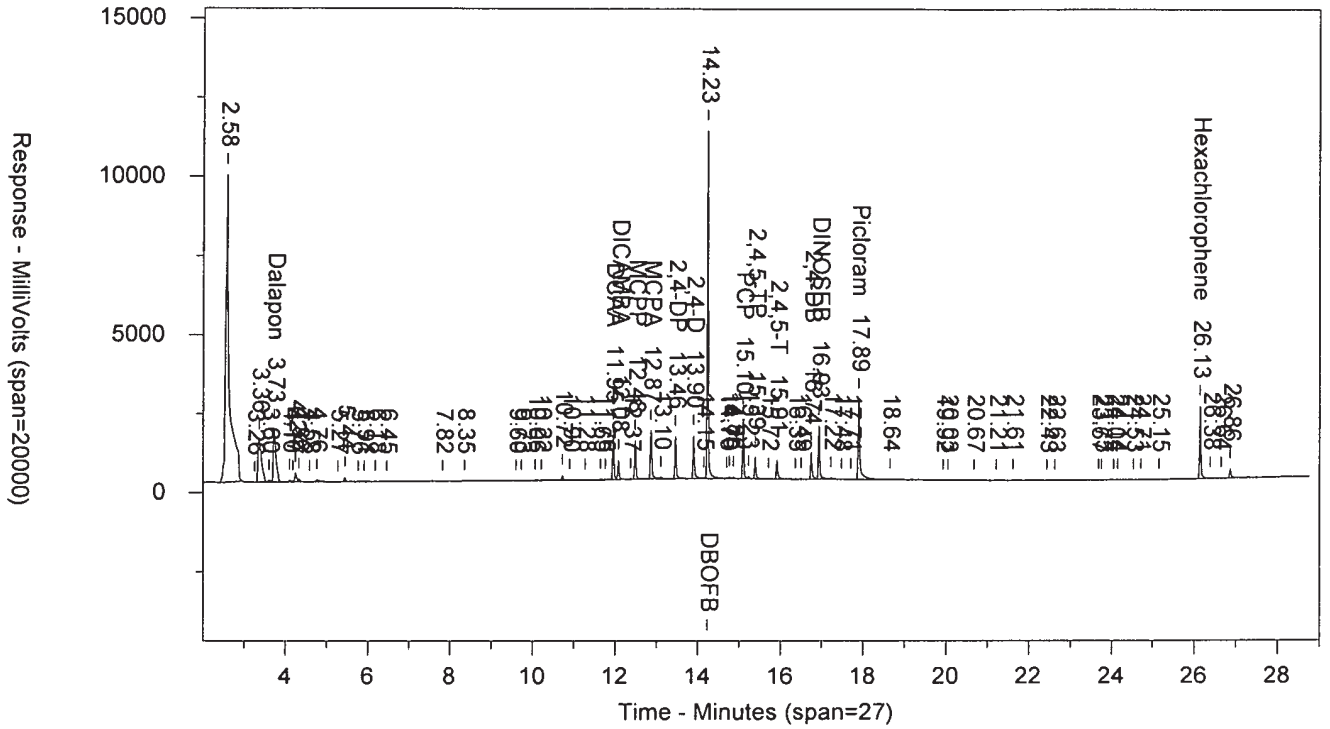
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.726	1662882	190.089	Dalapon	3.855	2383770	200.332	Dalapon
11.951	1575704	95.385	DCAA	12.522	1585699	100.285	DCAA
12.077	616291	9.777	DICAMBA	12.884	628318	9.868	DICAMBA
12.483	1227418	12419.01	MCPP	12.935	652304	10249.88	MCPP
12.865	1530045	12518.54	MCPA	13.46	946255	10607.04	MCPA
13.459	1343982	103.912	2,4-DP	13.988	1420029	103.46	2,4-DP
14.234	11024630	1	DBOFB	13.715	10757770	1	DBOFB
13.899	1377651	82.779	2,4-D	14.611	1366650	83.474	2,4-D
15.097	1810691	9.26	PCP	15.306	1950152	9.806	PCP
15.388	694634	8.902	2,4,5-TP	15.801	721493	9.384	2,4,5-TP
15.911	602757	8.55	2,4,5-T	16.503	629615	9.056	2,4,5-T
16.744	865643	88.261	2,4-DB	17.211	906212	91.255	2,4-DB
16.931	1699388	50.154	DINOSEB	16.937	1704537	54.011	DINOSEB
17.892	2566900	39.526	Picloram	19.507	2748069	42.6	Picloram
26.135	2313000	36.72	Hexachlorophene	26.555	2254160	37.344	Hexachloropher

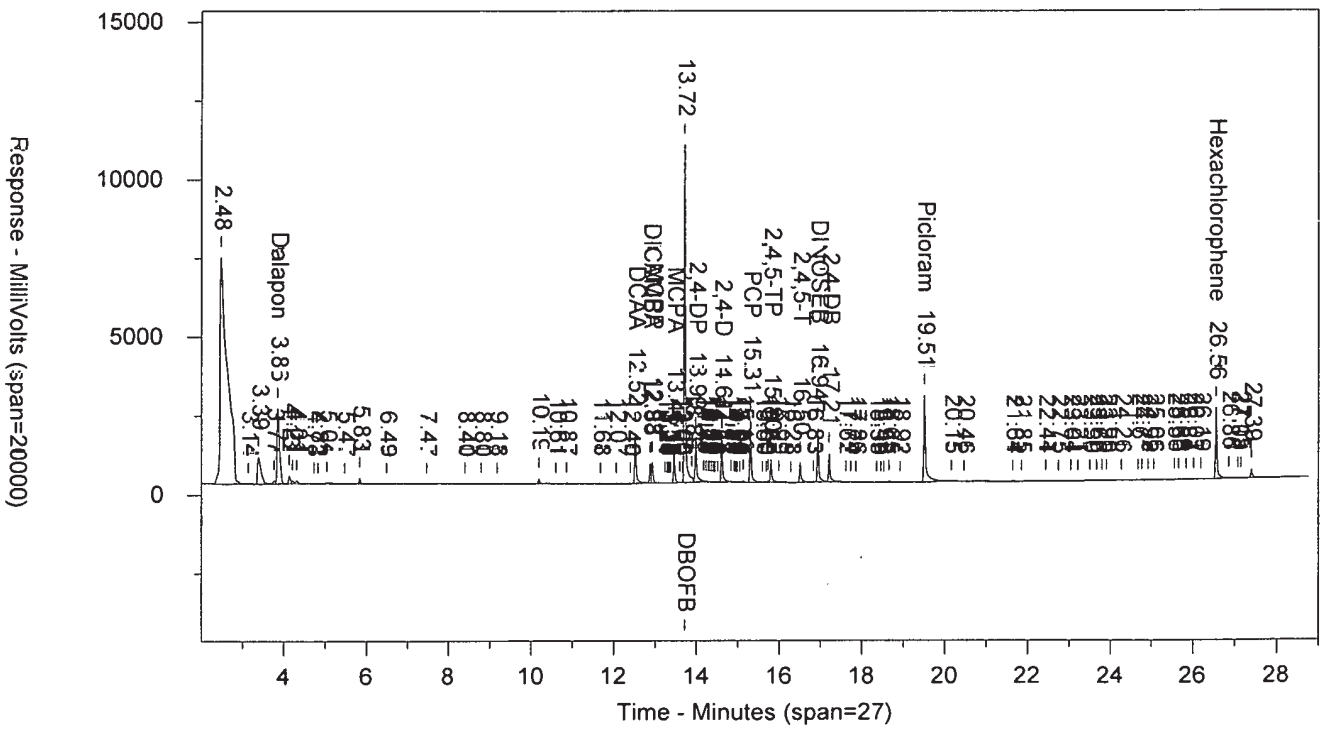
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Area File: 15herb18304001B.007.RAW  
Method A: 15HERB.MET  
Method B: 15HERBB.MET  
Calibration File A: 15HERB1830401.CAL  
Calibration File B: 15HERB1830401b.CAL  
Format A: herw15.FMTA  
Format B: herw15.FMTA  
Area File Created On: 10/31/2018 7:23:59 PM  
File Reported On: 11/1/2018 at 9:25:21 AM

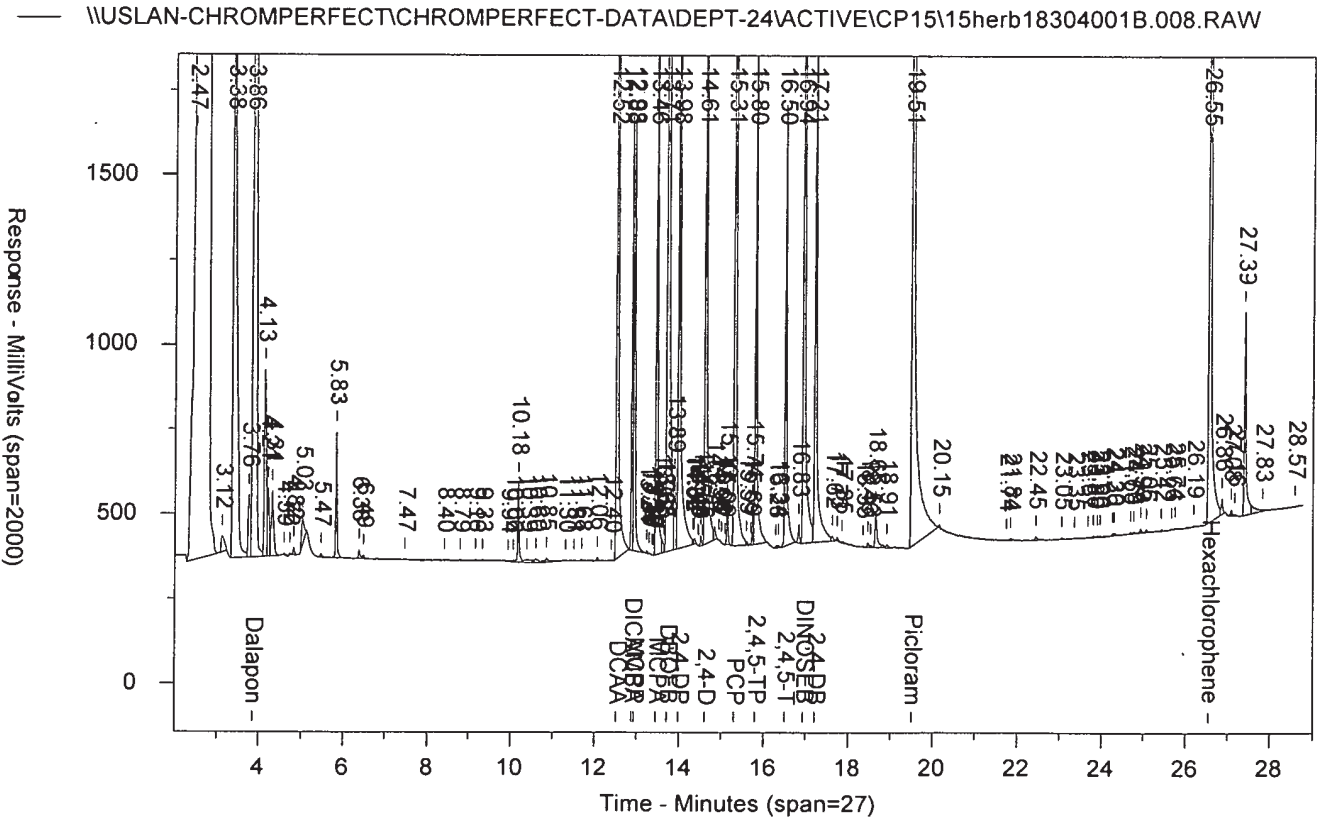
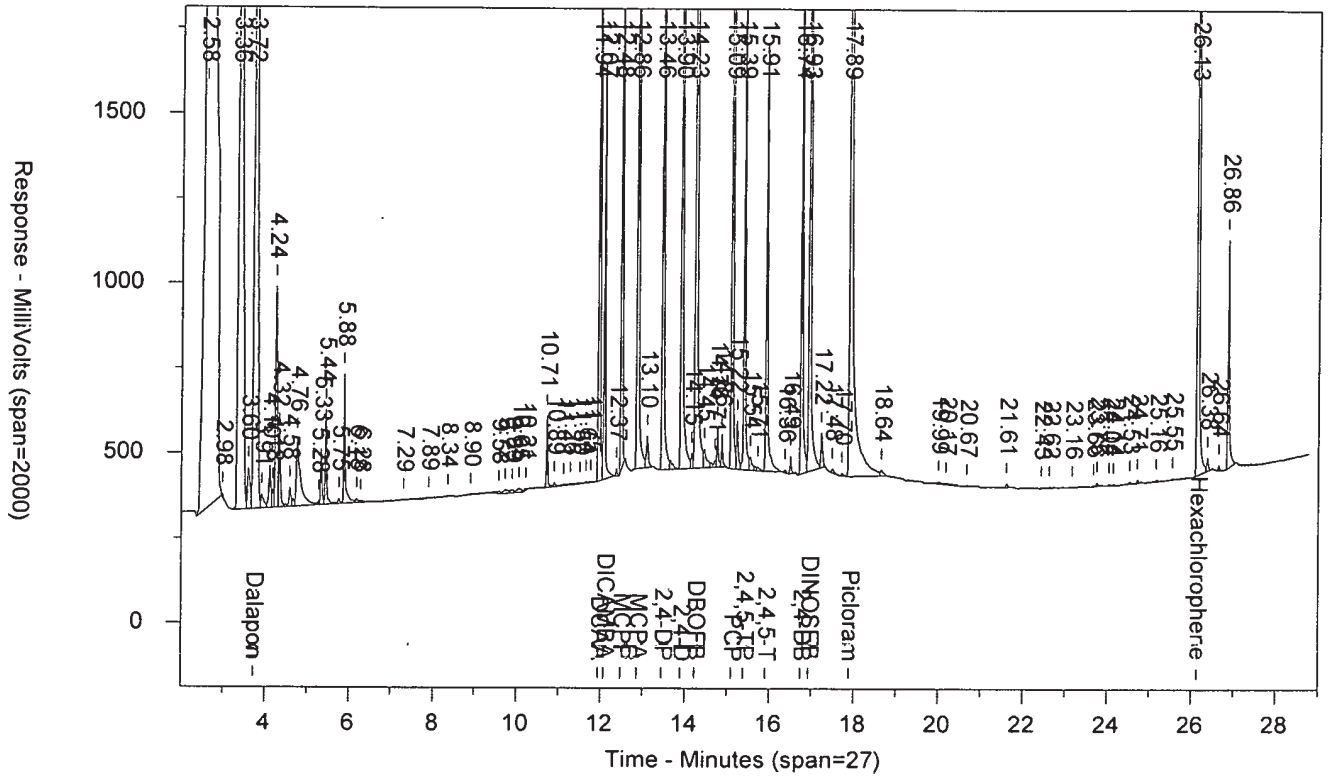
HERB21824E      AAHERB2AA      ICAL 183029999      10407      SW-846 801  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001.007.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.007.RAW



HERB31824F AAHERB3AA ICAL 1830299999 10407 SW-846 8015A  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001.008.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: HERB31824F      AAHERB3AA      ICAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 7:28:13 PM      Sample Weight: 1  
 Instrument ID: CP15-19850      Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

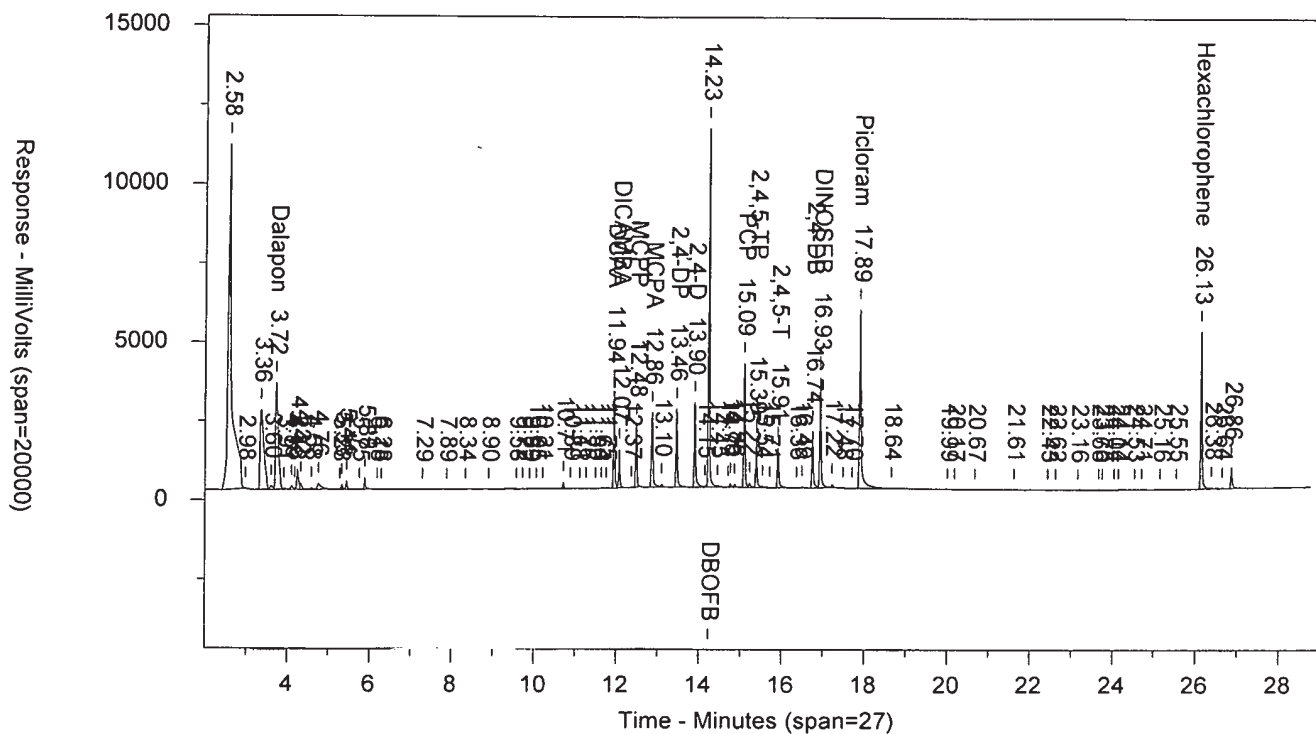
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.725	3394969	377.487	Dalapon	3.855	4787344	381.064	Dalapon
11.943	3083047	183.885	DCAA	12.516	3060839	183.609	DCAA
12.07	1227761	18.87	DICAMBA	12.878	1284205	19.049	DICAMBA
12.479	1973646	19723.64	MCPP	12.932	1294153	19296.11	MCPP
12.863	2373250	19076.33	MCPA	13.459	1753191	18699.51	MCPA
13.455	2495584	189.37	2,4-DP	13.985	2776951	191.685	2,4-DP
14.235	11370280	1	DBOFB	13.715	11333930	1	DBOFB
13.898	2694477	158.938	2,4-D	14.609	2754721	160.899	2,4-D
15.094	3946770	19.657	PCP	15.306	4042969	19.17	PCP
15.386	1461688	18.338	2,4,5-TP	15.8	1465761	18.145	2,4,5-TP
15.91	1254887	17.484	2,4,5-T	16.503	1304147	17.821	2,4,5-T
16.742	1807705	181.843	2,4-DB	17.209	1841865	177.732	2,4-DB
16.931	3491085	100.584	DINOSEB	16.936	3508585	104.421	DINOSEB
17.889	5681229	86.29	Picloram	19.507	5972955	88.349	Picloram
26.133	5007937	77.258	Hexachlorophene	26.553	4950506	77.745	Hexachloropher

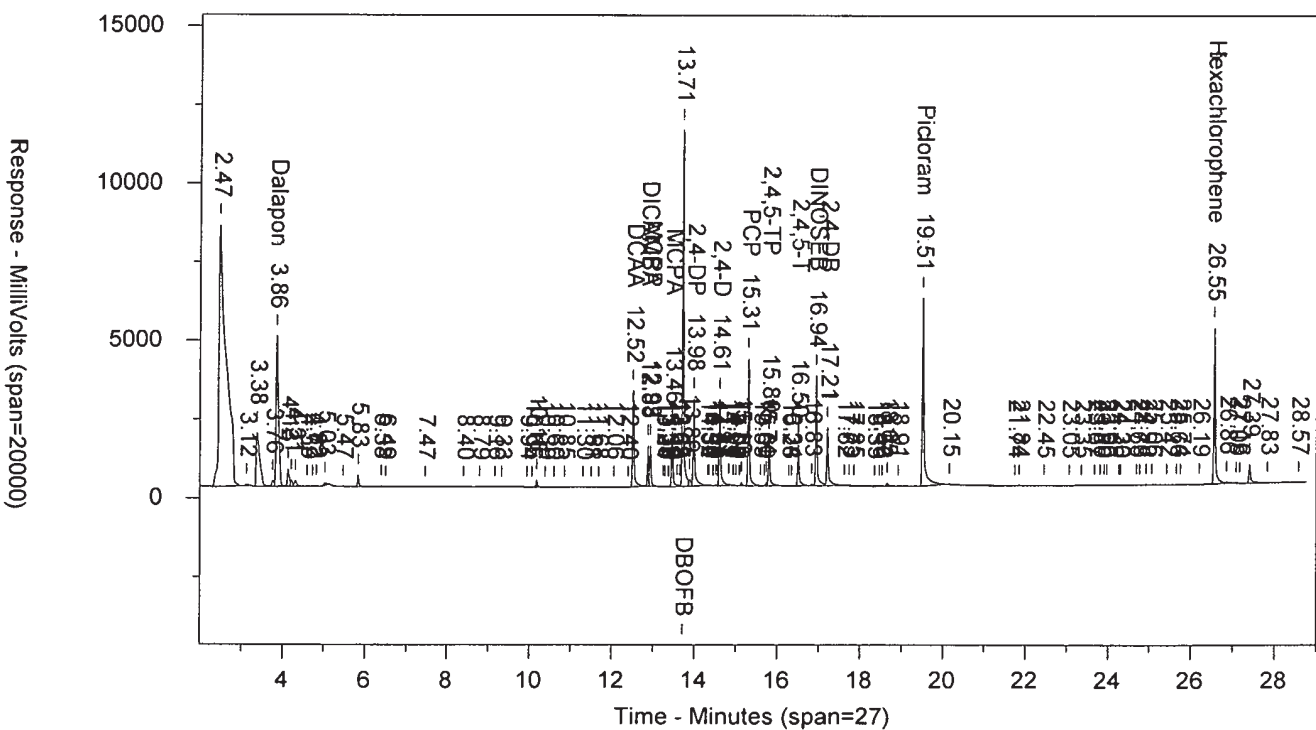
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Area File: 15herb18304001.008.RAW  
 Area File: 15herb18304001B.008.RAW  
 Method A: 15HERB.MET  
 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
 Area File Created On: 10/31/2018 7:57:01 PM  
 File Reported On: 11/1/2018 at 9:25:27 AM

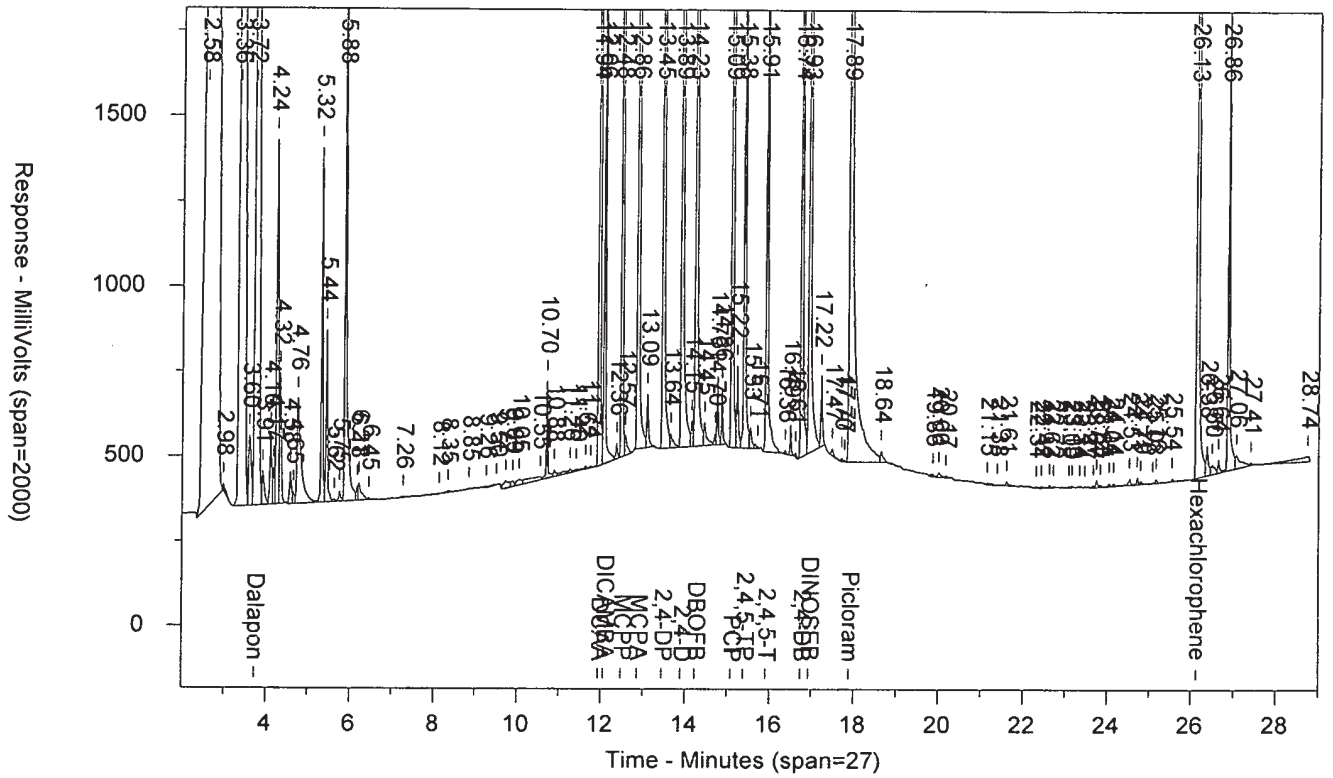
HERB31824F AAHERB3AA ICAL 183029999 10407 SW-846 801  
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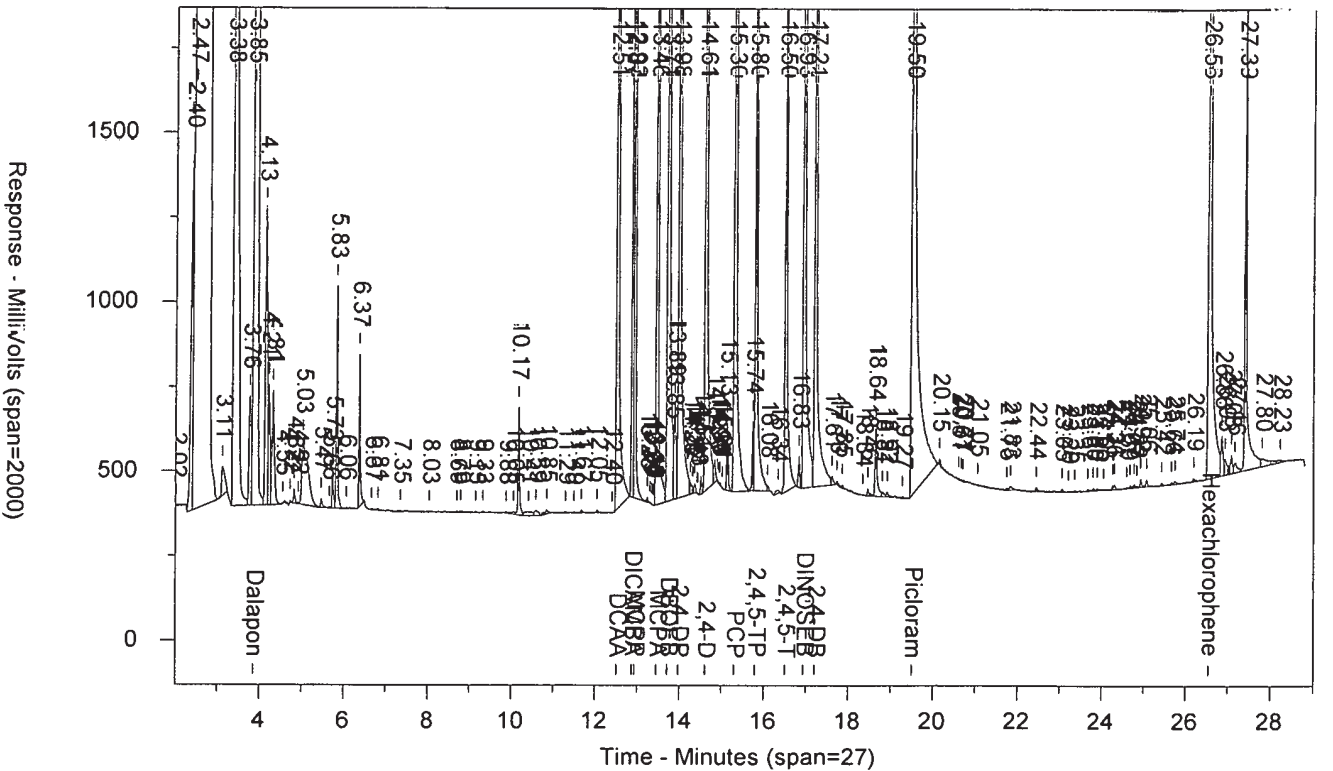
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HERB41824E AAHERB4AA ICAL 1830299999 10407 SW-846 8015A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001.009.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.009.RAW





## LANCASTER LABORATORIES

Sample Number: HERB41824E      AAHERB4AA      ICAL 1830299999      10407      SW-846 8015A  
Injected On: 10/31/2018 8:01:20 PM      Sample Weight: 1  
Instrument ID: CP15-19850      Dilution Factor: 1  
Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
Column B ID: ZB35      30m x 0.32mm x 0.25um  
Injection Volume: 1 ul

Threshold: 4  
Calibration Type: internal  
Quantitation: Height

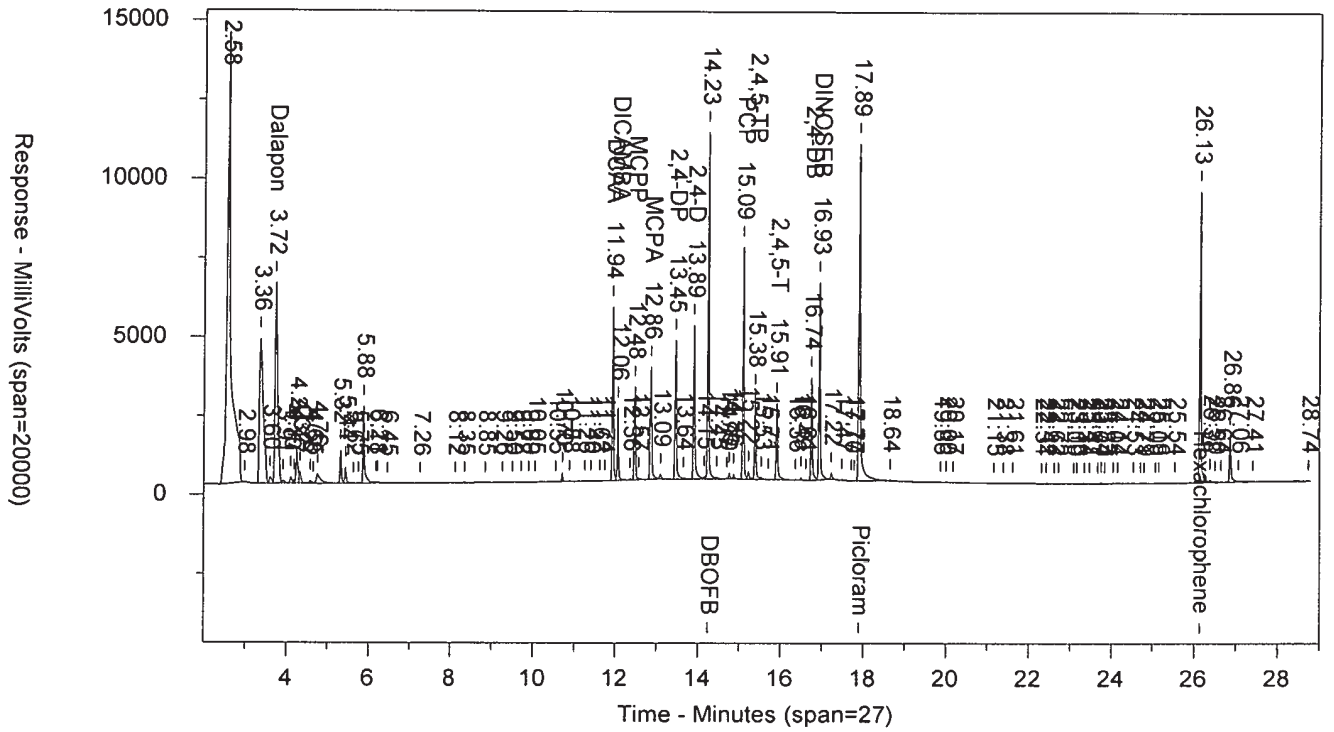
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.724	6375297	736.816	Dalapon	3.855	8878889	727.782	Dalapon
11.936	5525293	347.552	DCAA	12.51	5720252	354.284	DCAA
12.062	2301711	36.913	DICAMBA	12.873	2472484	37.404	DICAMBA
12.477	2954836	31186.8	MCPP	12.929	2426446	37139.09	MCPP
12.861	3578818	30329	MCPA	13.458	3123468	34326.52	MCPA
13.451	4418721	351.918	2,4-DP	13.983	4812606	340.739	2,4-DP
14.234	10986500	1	DBOFB	13.715	11033820	1	DBOFB
13.895	4894198	304.81	2,4-D	14.608	5093714	308.343	2,4-D
15.092	7370801	38.011	PCP	15.304	7636133	37.188	PCP
15.384	2685560	35.279	2,4,5-TP	15.799	2822618	36.323	2,4,5-TP
15.908	2421446	35.45	2,4,5-T	16.501	2488851	35.366	2,4,5-T
16.739	3268072	345.118	2,4-DB	17.208	3409265	342.171	2,4-DB
16.929	6284589	188.254	DINOSEB	16.935	6324136	190.684	DINOSEB
17.887	10686810	172.731	Picloram	19.505	11385750	175.491	Picloram
26.132	9258325	148.313	Hexachlorophene	26.556	9599394	154.091	Hexachloropher

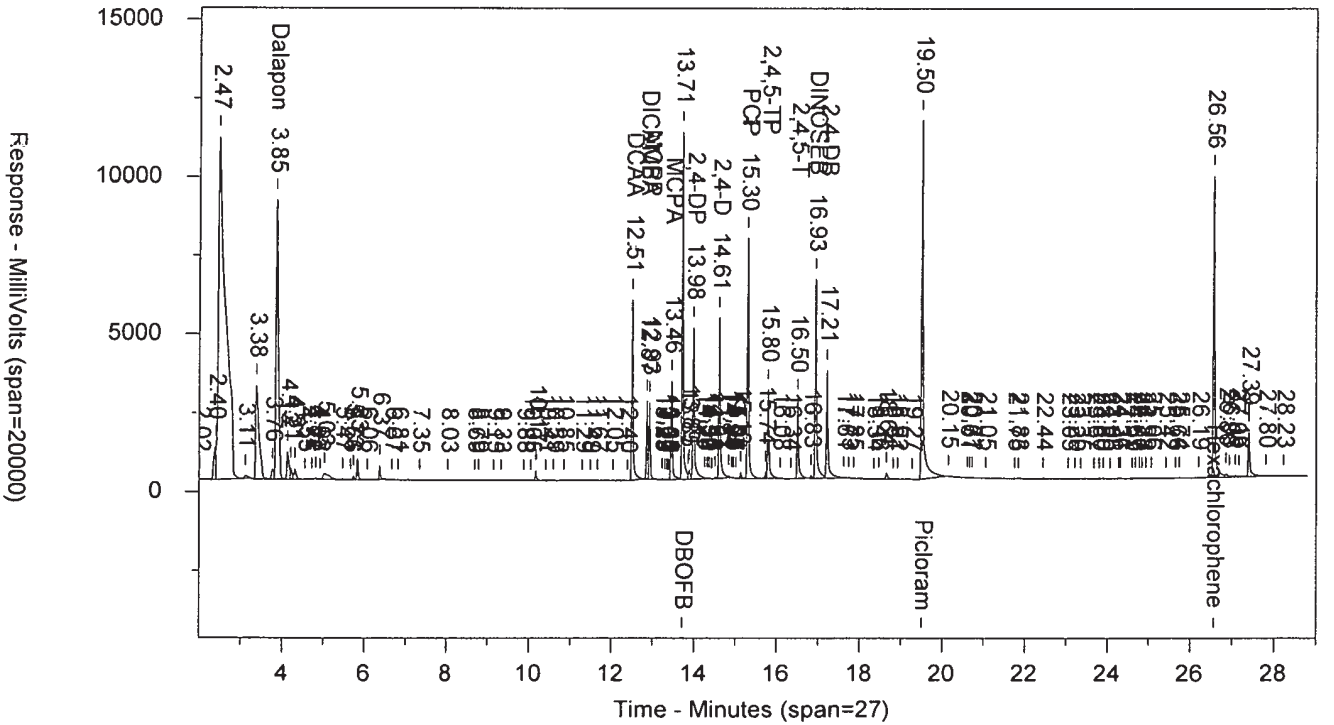
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Area File: 15herb18304001B.009.RAW  
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Method B: 15HERBB.MET  
Calibration File A: 15HERB1830401.CAL  
Calibration File B: 15HERB1830401b.CAL  
Format A: herw15.FMTA  
Format B: herw15.FMTA  
Area File Created On: 10/31/2018 8:30:11 PM  
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HERB41824E AAHERB4AA ICAL 1830299999 10407 SW-846 801  
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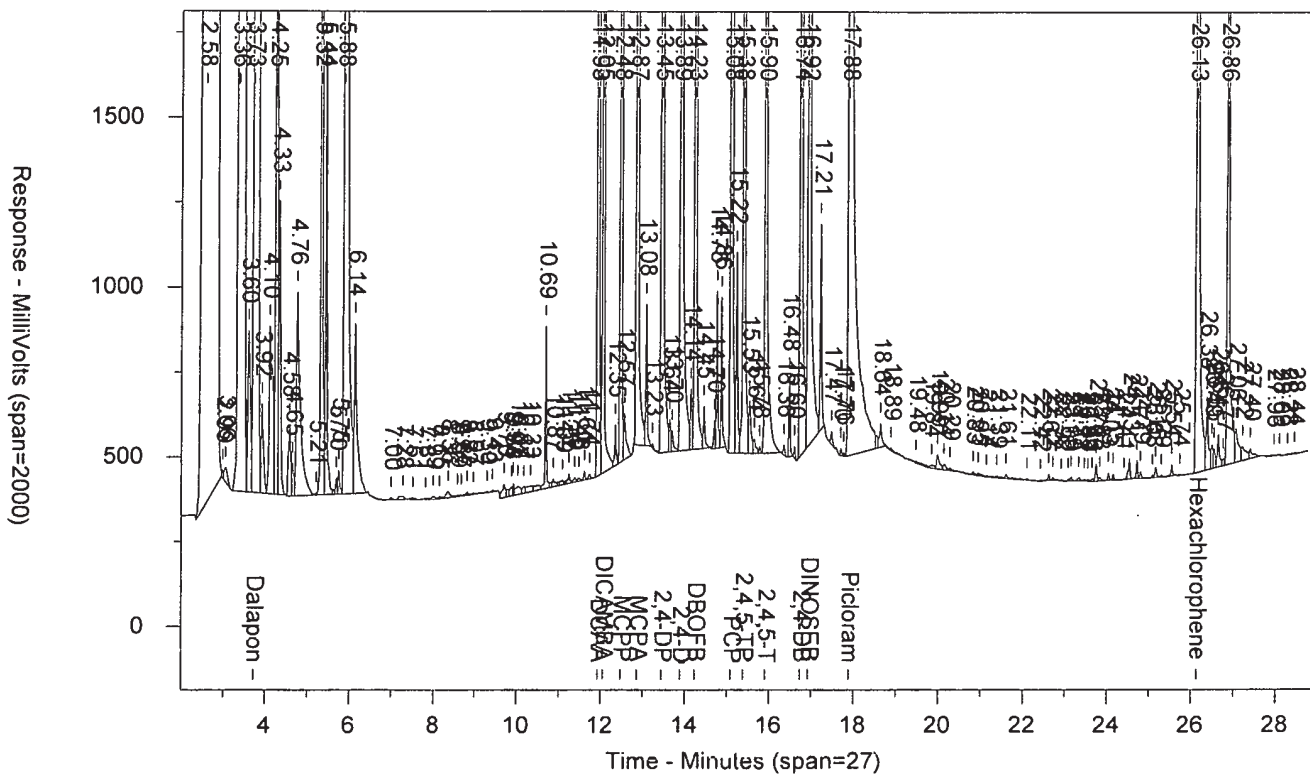


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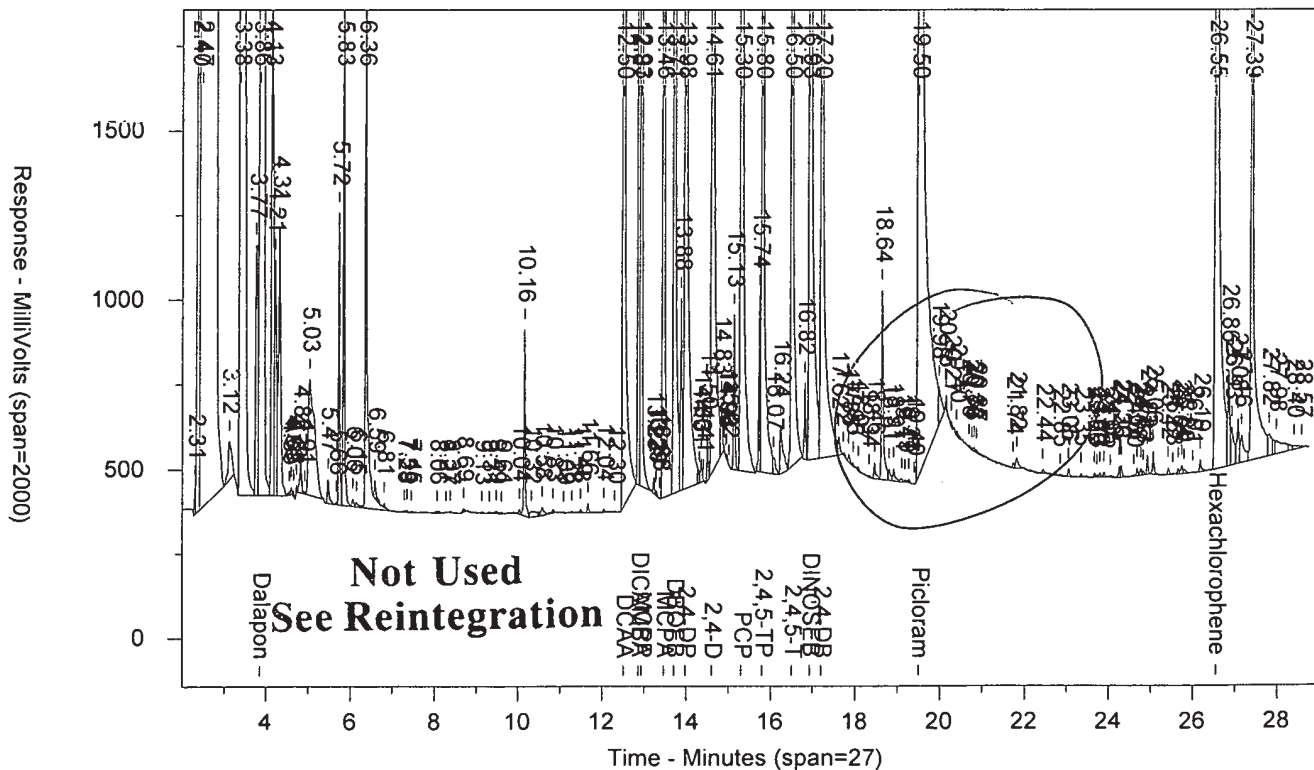


HERB51824E AAHERB5AA ICAL 183029999 10407 SW-846 8015A

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.010.RAW



## LANCASTER LABORATORIES

Sample Number: HERB51824E      AAHERB5AA      ICAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 8:34:23 PM      Sample Weight: 1  
 Instrument ID: CP15-19850      Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

Analyst: 13378

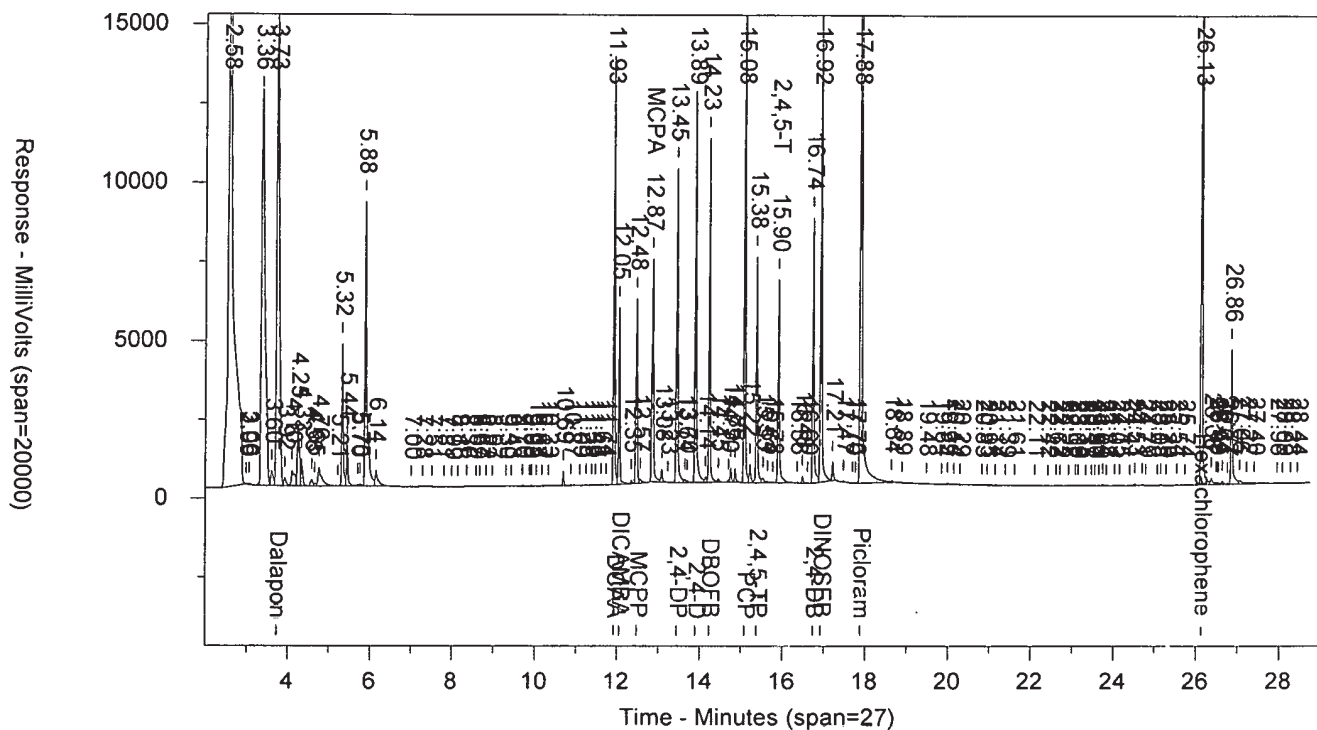
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.728	16215280	1893.653	Dalapon	3.857	22139280	1886.55	Dalapon
11.927	13577030	875.306	DCAA	12.504	14502930	935.72	DCAA
12.054	5635526	91.222	DICAMBA	12.867	5933390	92.341	DICAMBA
12.48	5890508	63367.5	MCPP	12.932	6058388	95916.18	MCPP
12.865	7100900	61143.84	MCPA	13.462	7870239	90040.71	MCPA
13.447	9974529	809.979	2,4-DP	13.978	11438600	847.173	2,4-DP
14.229	10932930	1	DBOFB	13.71	10733270	1	DBOFB
13.893	12231290	782.635	2,4-D	14.605	12916850	820.02	2,4-D
15.085	18642170	97.325	PCP	15.298	19050820	96.516	PCP
15.381	7194175	97.083	2,4,5-TP	15.797	7167274	96.357	2,4,5-TP
15.904	6470386	97.312	2,4,5-T	16.499	6329542	94.543	2,4,5-T
16.735	8436519	914.741	2,4-DB	17.203	8806290	929.471	2,4-DB
16.924	15630650	474.27	DINOSEB	16.929	15565330	483.324	DINOSEB
17.885	27992260	468.64	Picloram	19.501	29498940	482.161	Picloram
26.133	23222440	379.812	Hexachlorophene	26.554	23219530	382.92	Hexachloropher

## Files:

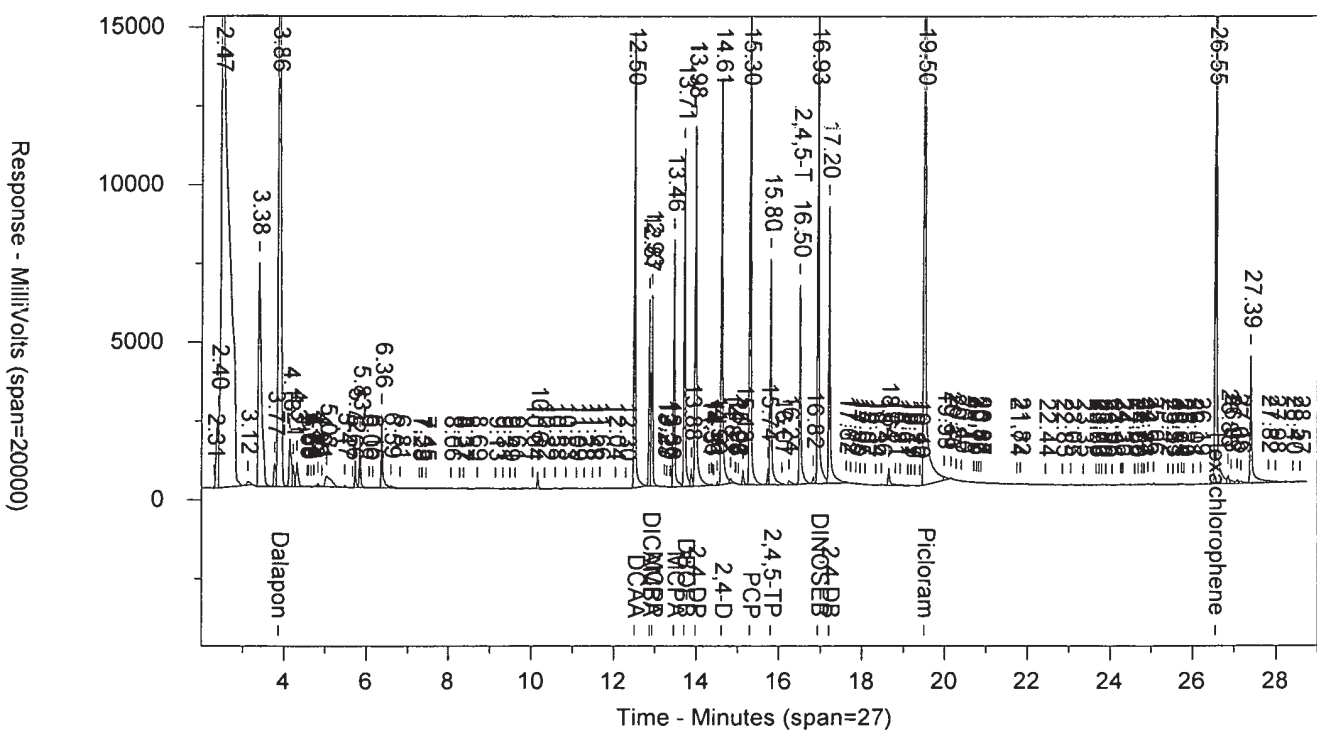
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 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
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**See Reintegration**

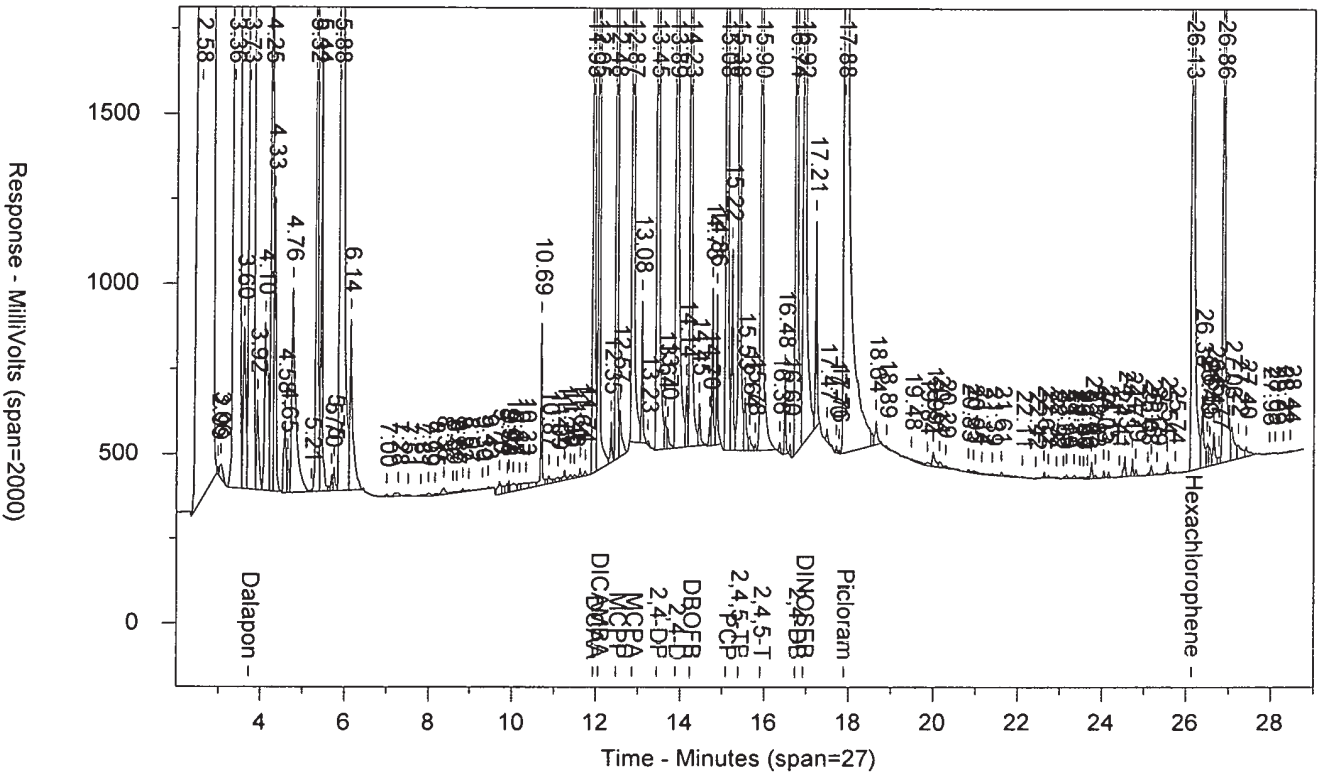
HERB51824E AAHERB5AA ICAL 1830299999 10407 SW-846 801  
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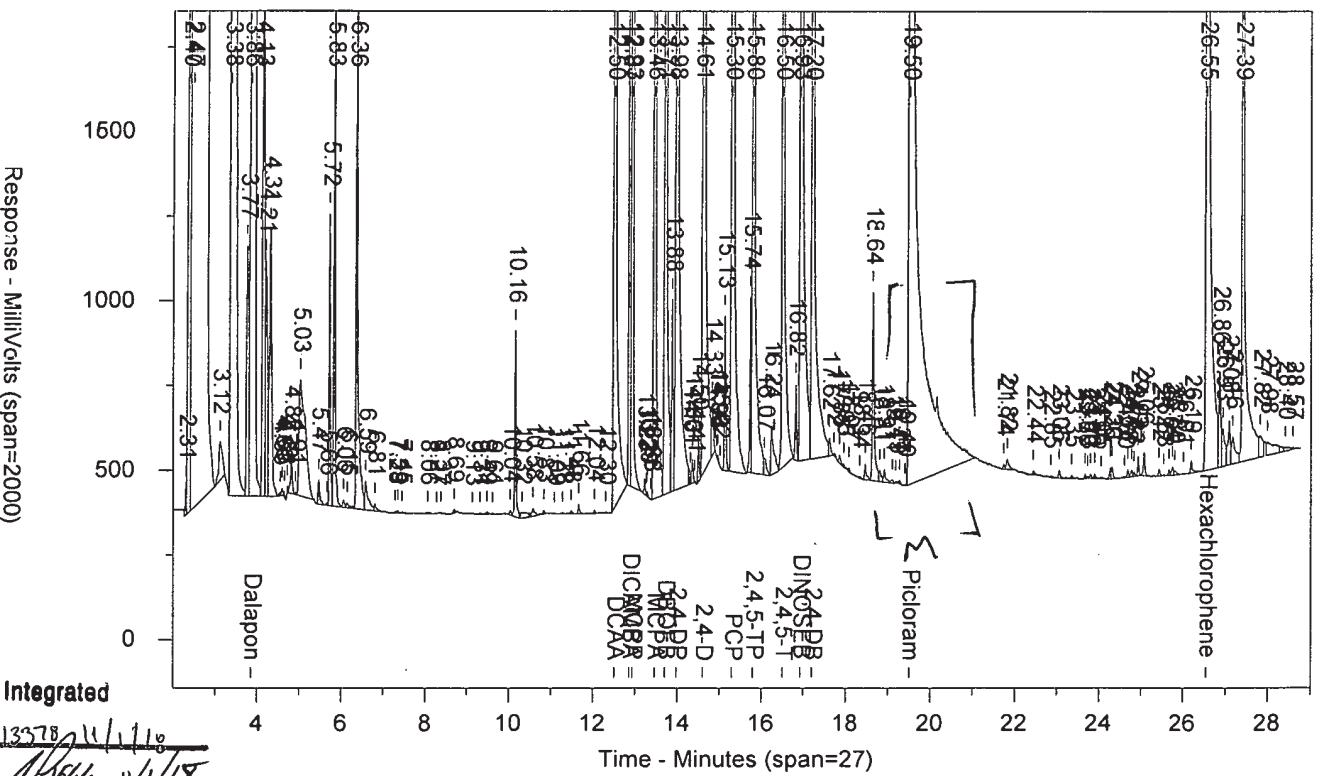
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HERB51824E AAHERB5AA ICAL 1830299999 10407 SW-846 8015A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001.010.BND



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.010.BND



M = Manually Integrated  
Analyst: RU 13378 11/1/18  
Approved by: [Signature] 11/1/18  
Circle Reason: 1 (2) 3 4  
1 = Missed Peak  
2 = Improper Baseline  
3 = RT Update  
4 = Other

Printed: 11/1/2018 10:16:47 AM

Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: HERB51824E      AAHERB5AA      ICAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 8:34:23 PM      Sample Weight: 1  
 Instrument ID: CP15-19850      Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

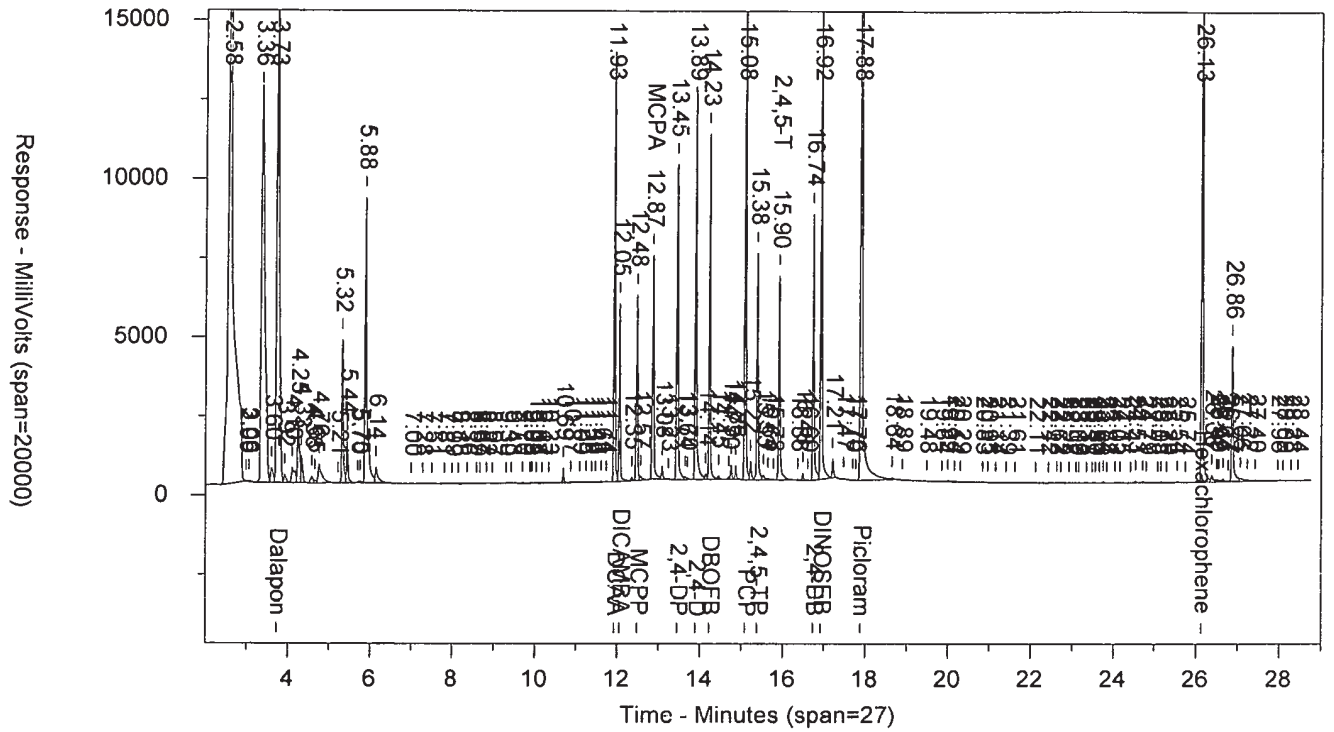
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.728	16215280	1893.653	Dalapon	3.857	22139280	1972.308	Dalapon
11.927	13577030	875.306	DCAA	12.504	14502930	980.687	DCAA
12.054	5635526	91.222	DICAMBA	12.867	5933390	96.562	DICAMBA
12.48	5890508	63367.5	MCPP	12.932	6058388	99181.66	MCPP
12.865	7100900	61143.84	MCPA	13.462	7870239	93683.16	MCPA
13.447	9974529	809.979	2,4-DP	13.978	11438600	884.552	2,4-DP
14.229	10932930	1	DBOFB	13.71	10733270	1	DBOFB
13.893	12231290	782.635	2,4-D	14.605	12916850	872.169	2,4-D
15.085	18642170	97.325	PCP	15.298	19050820	100.49	PCP
15.381	7194175	97.083	2,4,5-TP	15.797	7167274	102.445	2,4,5-TP
15.904	6470386	97.312	2,4,5-T	16.499	6329542	102.4	2,4,5-T
16.735	8436519	914.741	2,4-DB	17.203	8806290	1004.984	2,4-DB
16.924	15630650	474.27	DINOSEB	16.929	15565330	489.121	DINOSEB
17.885	27992260	468.64	Picloram	19.501	29516710	528.462	Picloram
26.133	23222440	379.812	Hexachlorophene	26.554	23219530	401.132	Hexachloropher

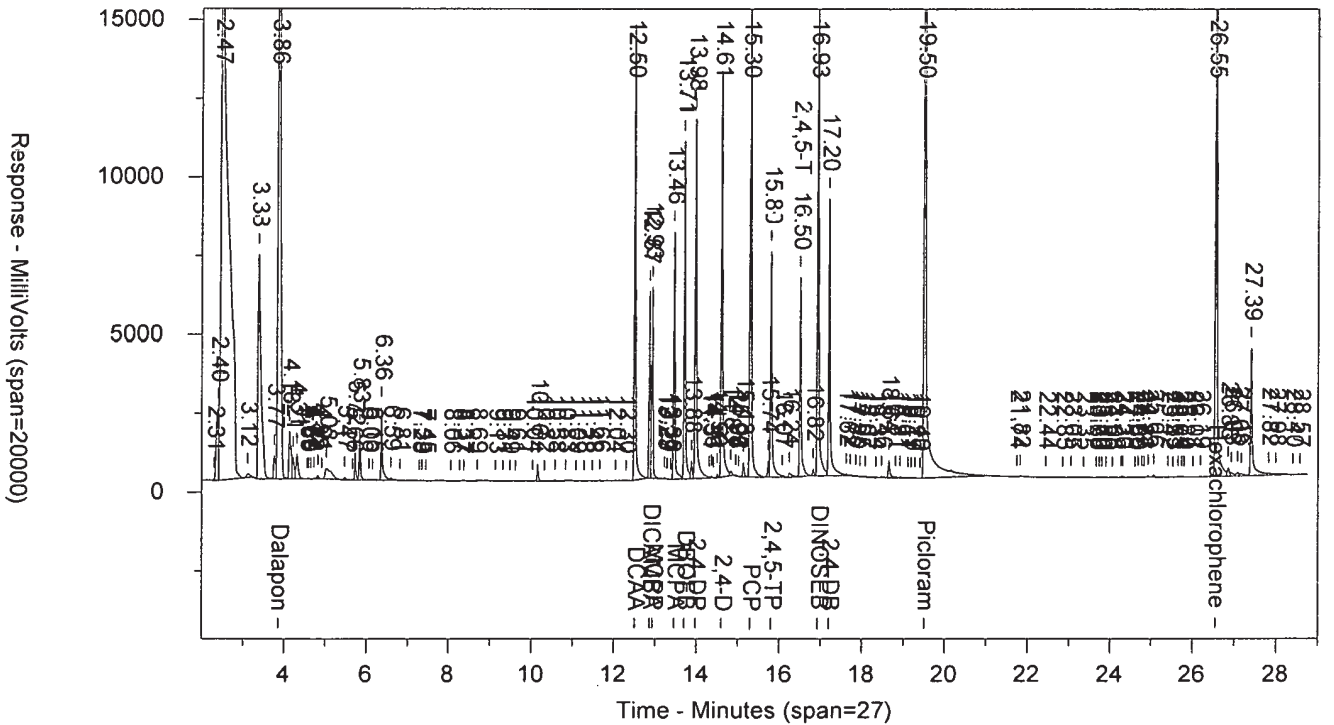
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 Area File: 15herb18304001B.010.BND  
 Method A: 15HERB.MET  
 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
 Area File Created On: 11/1/2018 9:30:20 AM  
 File Reported On: 11/1/2018 at 10:16:46 AM

HERB51824E      AAHERB5AA      ICAL 1830299999      10407      SW-846 801  
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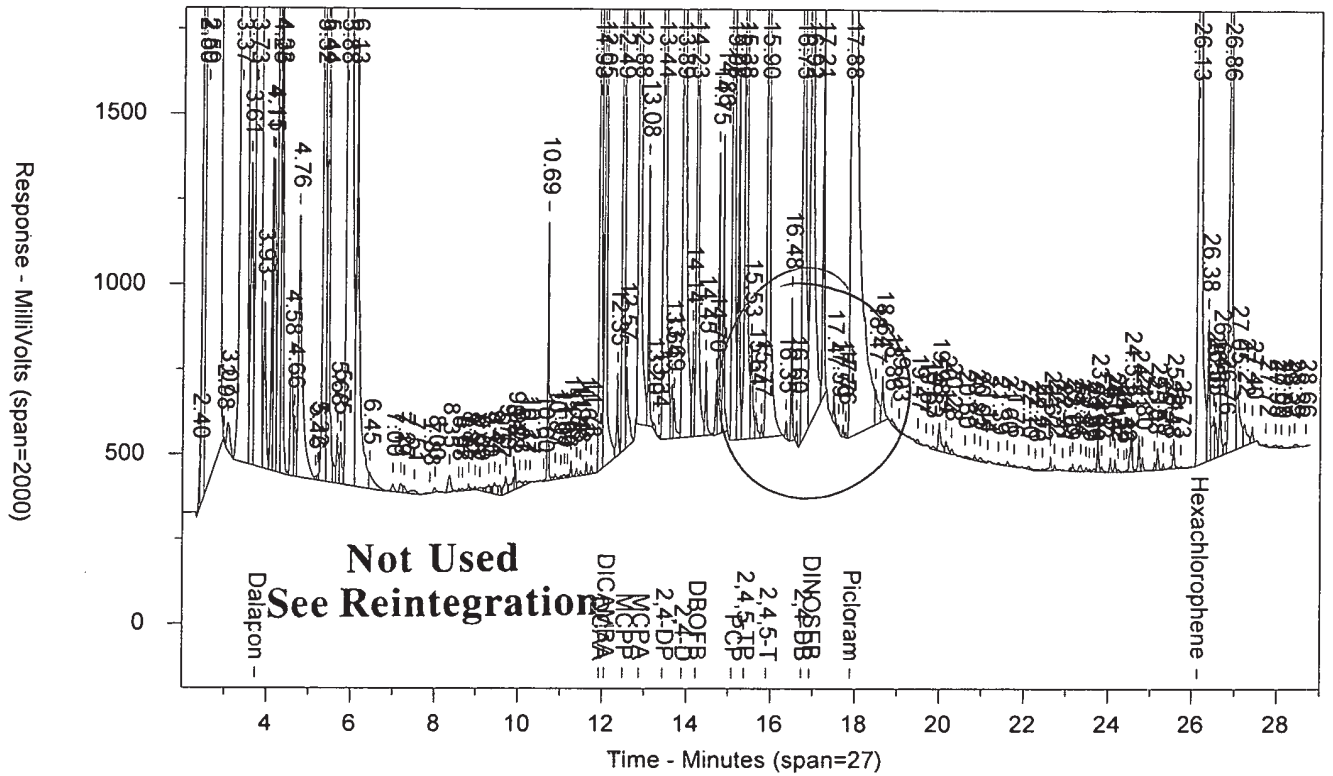


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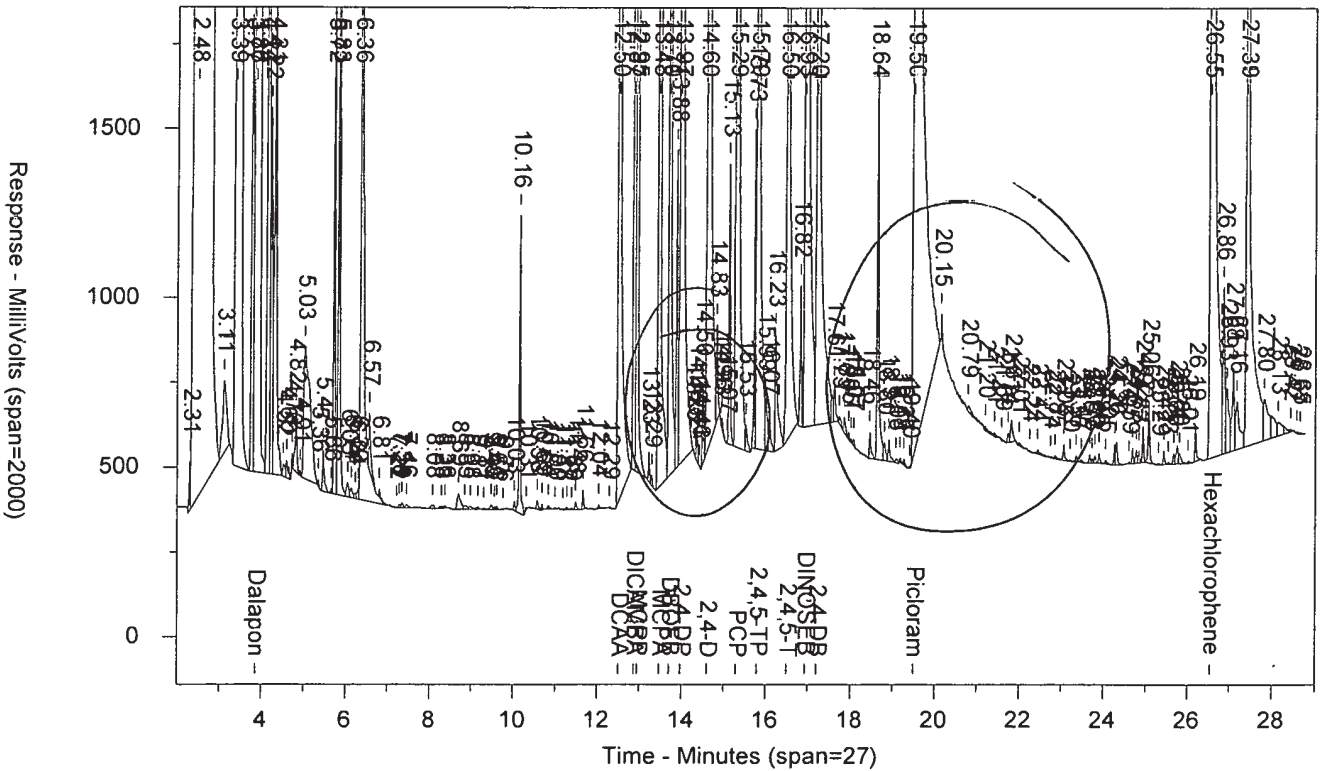




HERB61824E AAHERB6AA ICAL 1830299999 10407 SW-846 8015A  
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.011.RAW



## LANCASTER LABORATORIES

Sample Number: HERB61824E      AAHERB6AA      ICAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 9:07:29 PM      Sample Weight: 1  
 Instrument ID: CP15-19850      Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.73	31237820	3946.291	Dalapon	3.858	41389060	3568.115	Dalapon
11.927	26603140	1860.51	DCAA	12.504	28239020	1843.23	DCAA
12.054	10329070	180.491	DICAMBA	12.868	11277660	177.361	DICAMBA
12.492	9569284	110830.4	MCPP	12.945	11095830	176882.2	MCPP
12.879	11839410	109573.6	MCPA	13.475	14070400	162308.6	MCPA
13.441	16860660	1490.894	2,4-DP	13.974	21155710	1587.717	2,4-DP
14.226	10324720	1	DBOFB	13.705	10770070	1	DBOFB
13.891	23225720	1622.502	2,4-D	14.603	25162240	1631.939	2,4-D
15.081	34386240	192.968	PCP	15.294	36619600	187.367	PCP
15.378	13515920	198.53	2,4,5-TP	15.795	13528090	185.112	2,4,5-TP
15.903	12575230	208.107	2,4,5-T	16.498	12470300	191.809	2,4,5-T
16.733	16867390	2017.079	2,4-DB	17.202	17454690	1901.733	2,4-DB
16.923	27550030	893.439	DINOSEB	16.928	29114230	903.289	DINOSEB
17.882	54858690	1026.063	Picloram	19.502	59887510	1013.51	Picloram
26.132	46109350	819.744	Hexachlorophene	26.554	47842620	799.998	Hexachloropher

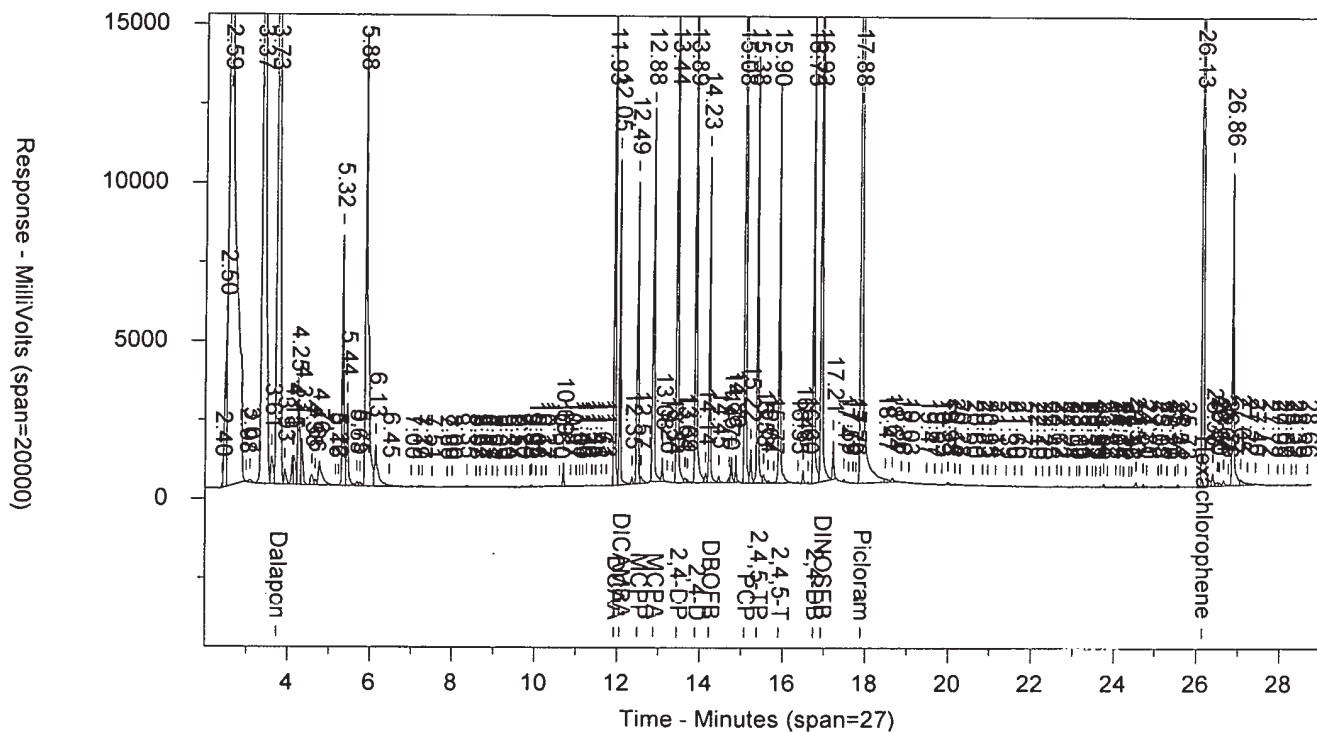
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 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
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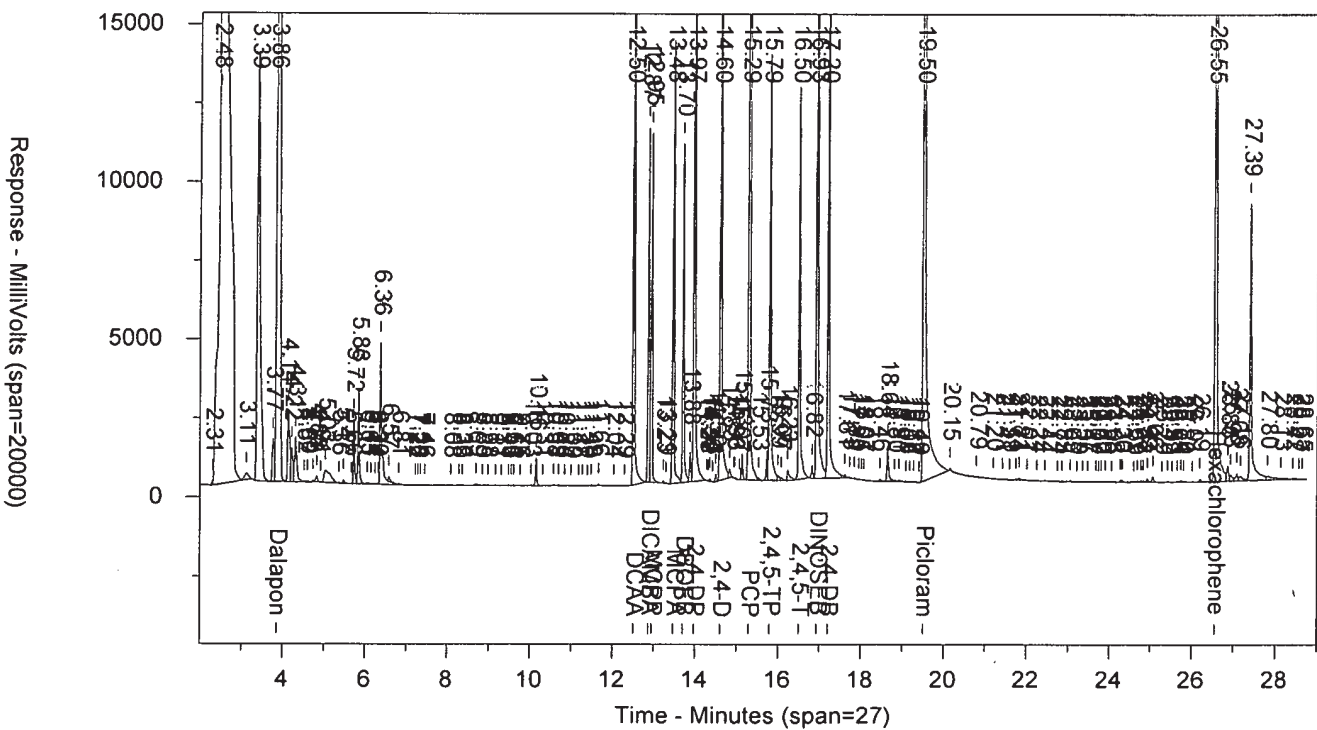
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**See Reintegration**

HERB61824E AAHERB6AA ICAL 183029999 10407 SW-846 801

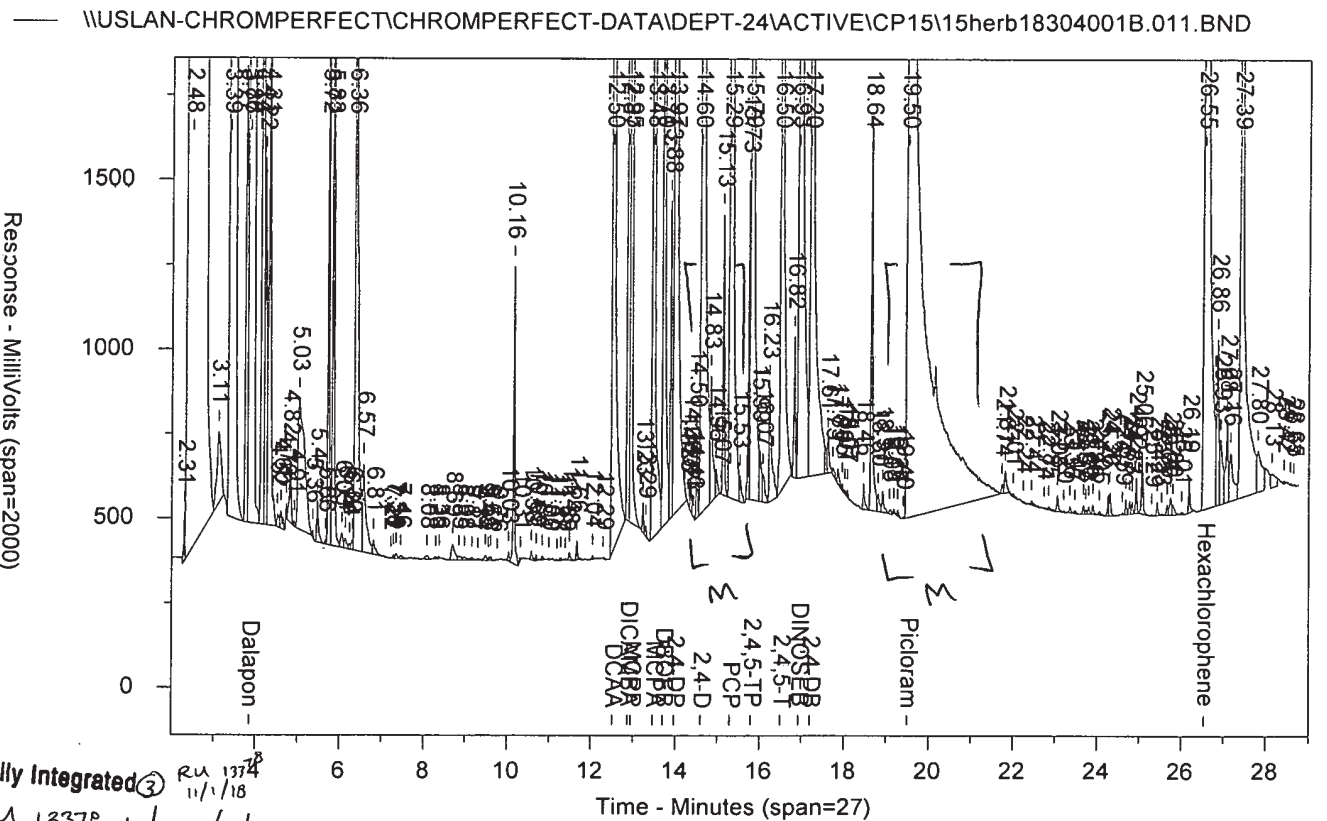
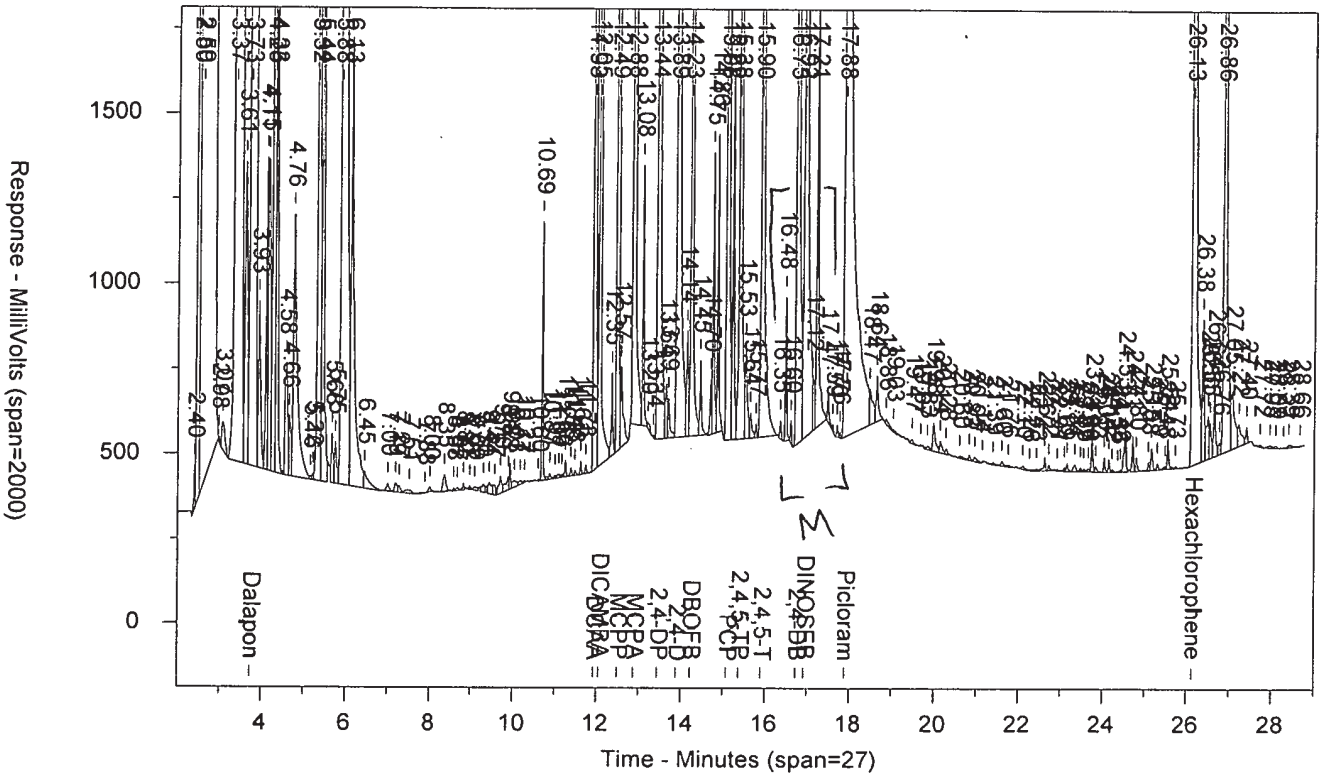
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.011.RAW



HERB61824E AAHERB6AA ICAL 1830299999 10407 SW-846 8015A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001.011.BND



M = Manually Integrated (3) RU 1337B  
Analyst RU 1337B tot 11/1/18  
Approved by [Signature] 11/1/18  
Circle Reason 1 2 3 4  
1 = Missed peak  
2 = Improper Baseline  
3 = RT Update  
4 = Other

Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: HERB61824E      AAHERB6AA      ICAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 9:07:29 PM      Sample Weight: 1  
 Instrument ID: CP15-19850      Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

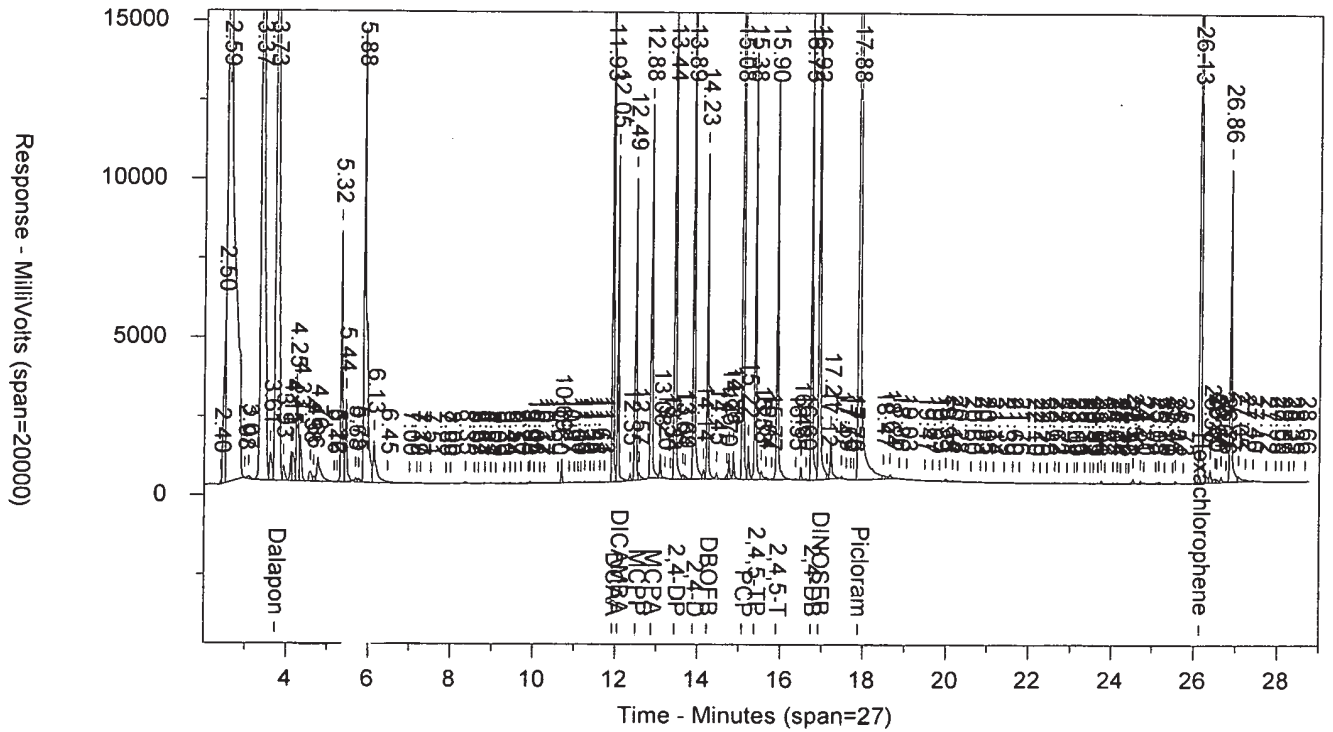
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.73	31237820	4046.221	Dalapon	3.858	41389060	3674.603	Dalapon
11.927	26603140	1912.936	DCAA	12.504	28239020	1902.996	DCAA
12.054	10329070	184.887	DICAMBA	12.868	11277660	182.91	DICAMBA
12.492	9569284	178820.6	MCPP	12.945	11095830	181028.7	MCPP
12.879	11839410	184160.1	MCPA	13.475	14070400	166914.3	MCPA
13.441	16860660	1533.814	2,4-DP	13.974	21155710	1630.392	2,4-DP
14.226	10324720	1	DBOFB	13.705	10770070	1	DBOFB
13.891	23225720	1692.958	2,4-D	14.603	25196450	1695.497	2,4-D
15.081	34386240	198.213	PCP	15.294	36619600	192.502	PCP
15.378	13515920	205.813	2,4,5-TP	15.795	13528090	192.703	2,4,5-TP
15.903	12575230	216.941	2,4,5-T	16.498	12470300	201.057	2,4,5-T
16.733	16879370	2099.167	2,4-DB	17.202	17454690	1985.144	2,4-DB
16.923	27591620	914.955	DINOSEB	16.928	29114230	911.753	DINOSEB
17.882	54858690	1091.562	Picloram	19.502	59921330	1069.156	Picloram
26.132	46109350	841.886	Hexachlorophene	26.554	47842620	823.687	Hexachloropher

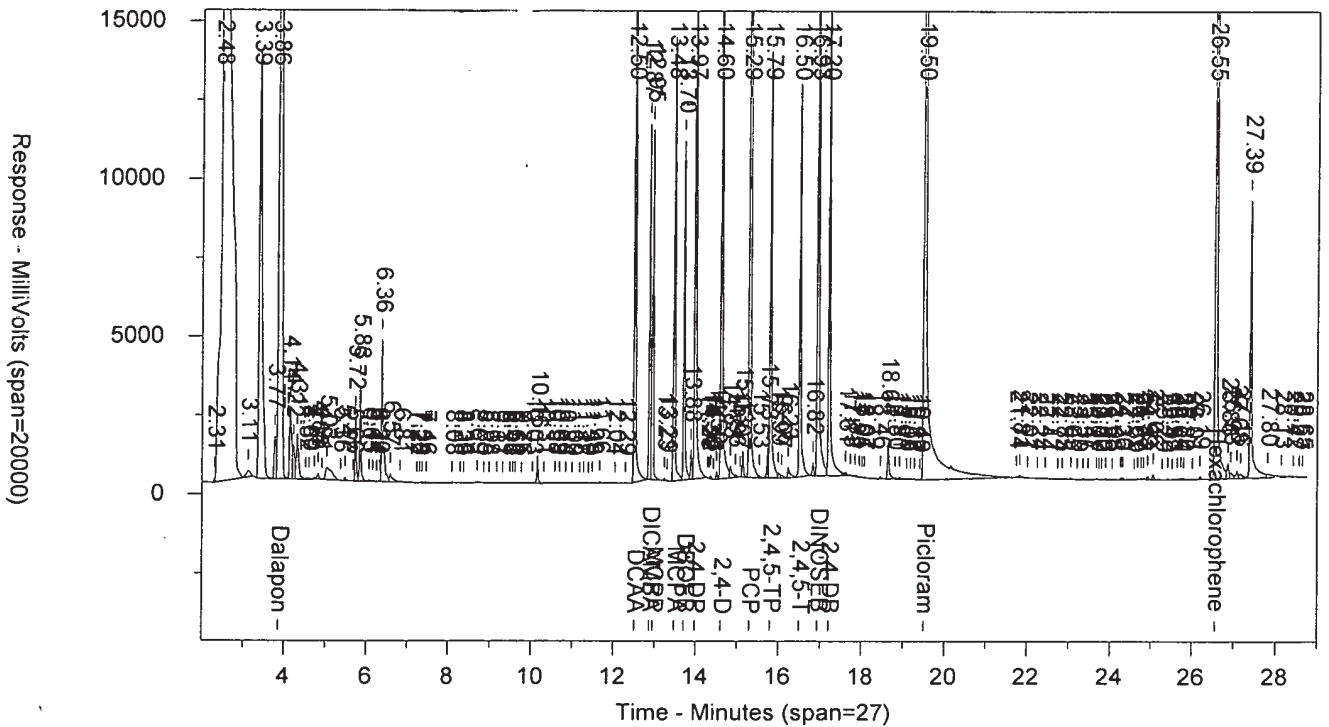
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 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
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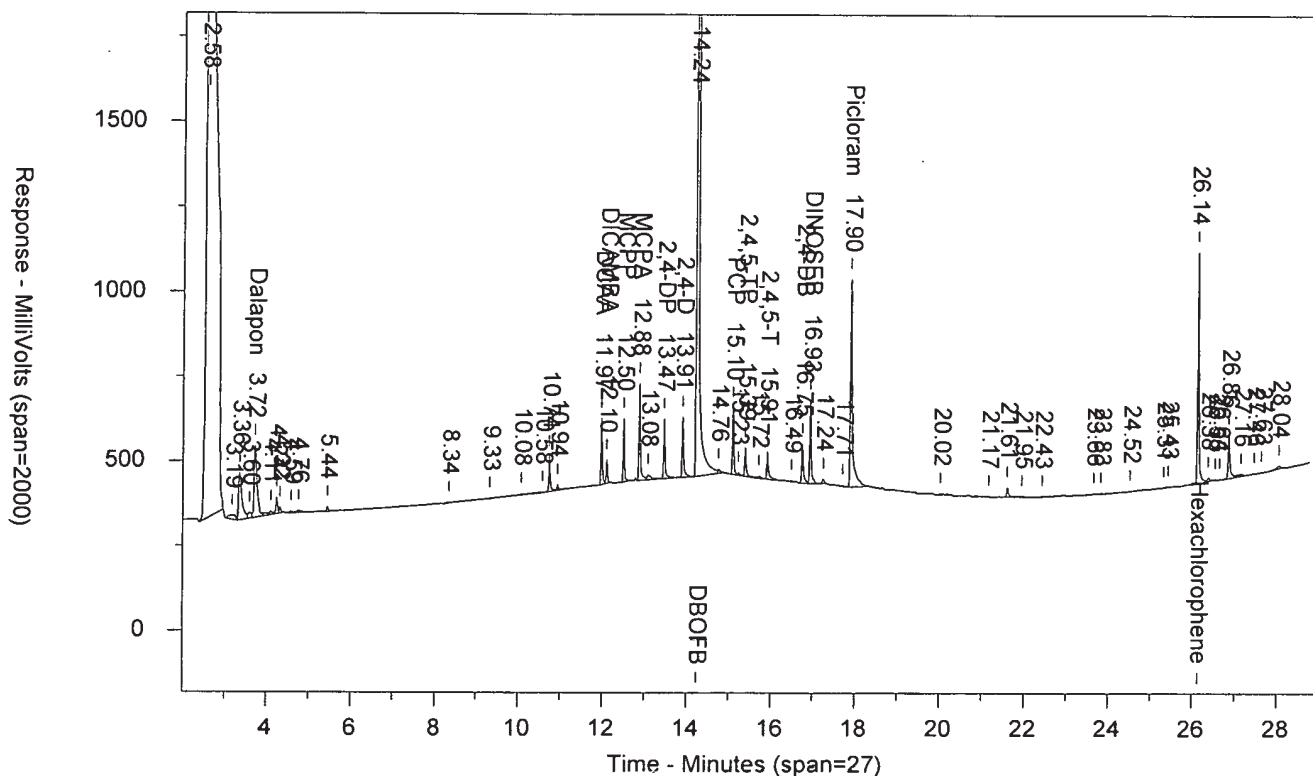
HERB61824E AAHERB6AA ICAL 183029999 10407 SW-846 801  
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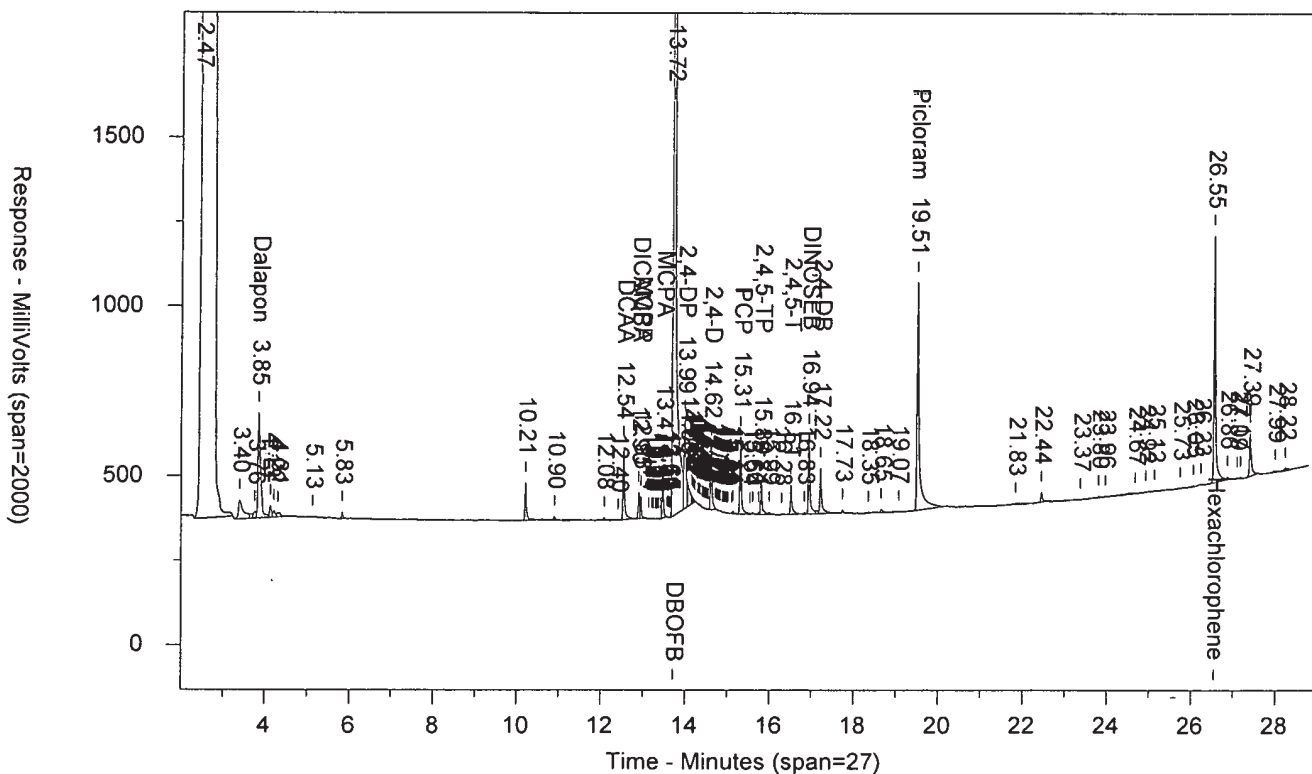
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MDHEX1824E AAMDHEXAA ICAL 1830299999 10407 SW-846 8015/  
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304001B.012.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MDHEX1824E      AAMDHEXAA      ICAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 9:40:35 PM      Sample Weight: 1  
 Instrument ID: CP15-19850      Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

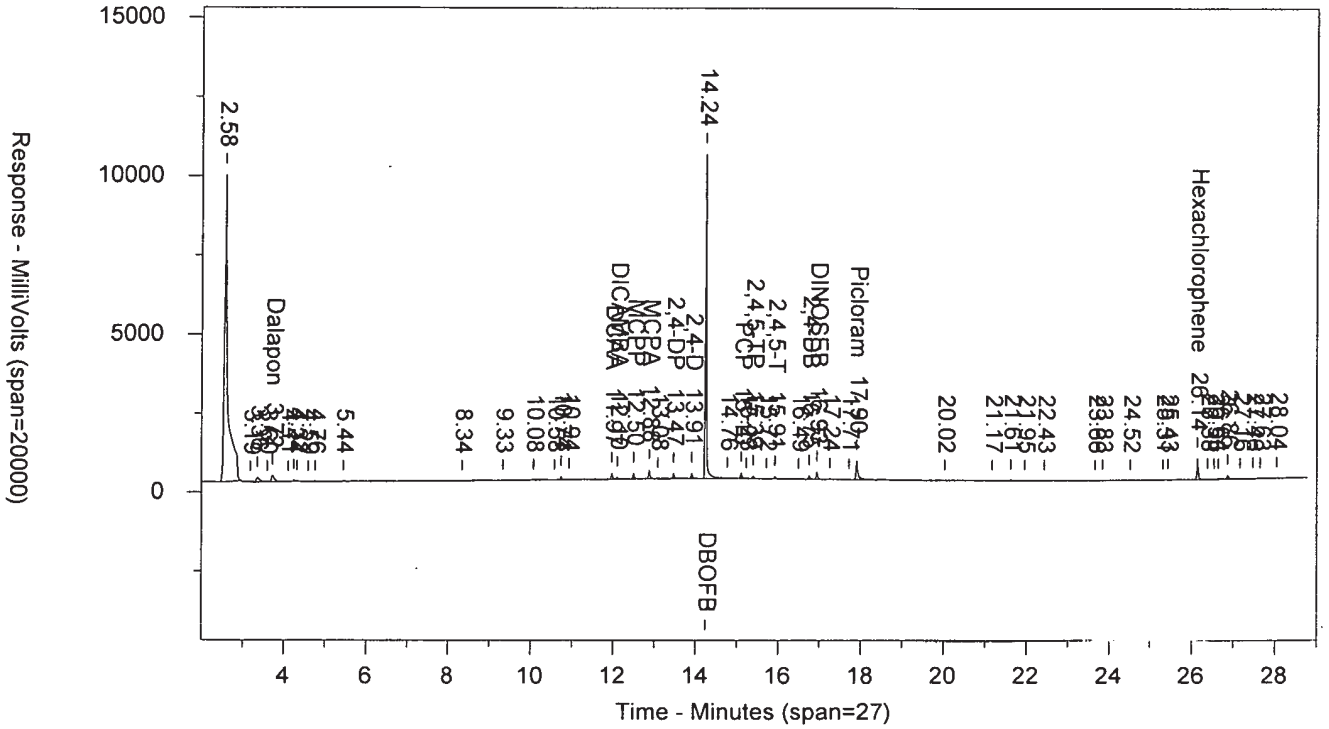
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.724	213103	27.744	Dalapon	3.854	310864	28.232	Dalapon
11.971	196530	14.204	DCAA	12.537	215005	14.821	DCAA
12.099	69358	1.248	DICAMBA	12.898	78828	1.308	DICAMBA
12.498	188428	-9042.412	MCPP	12.946	65748	1097.269	MCPP
12.877	286940	-8789.521	MCPA	13.47	140147	1700.647	MCPA
13.465	177636	16.242	2,4-DP	13.993	258124	20.349	2,4-DP
14.236	10272130	1	DBOFB	13.716	10528740	1	DBOFB
13.905	178380	13.069	2,4-D	14.615	188232	12.954	2,4-D
15.099	198728	1.151	PCP	15.309	227553	1.224	PCP
15.389	84763	1.297	2,4,5-TP	15.803	96961	1.413	2,4,5-TP
15.913	82356	1.428	2,4,5-T	16.506	87010	1.435	2,4,5-T
16.75	117280	14.658	2,4-DB	17.216	134689	15.669	2,4-DB
16.934	247547	8.249	DINOSEB	16.94	233763	7.488	DINOSEB
17.897	613381	12.267	Picloram	19.509	672706	12.275	Picloram
26.137	682844	12.532	Hexachlorophene	26.555	729938	12.855	Hexachloropher

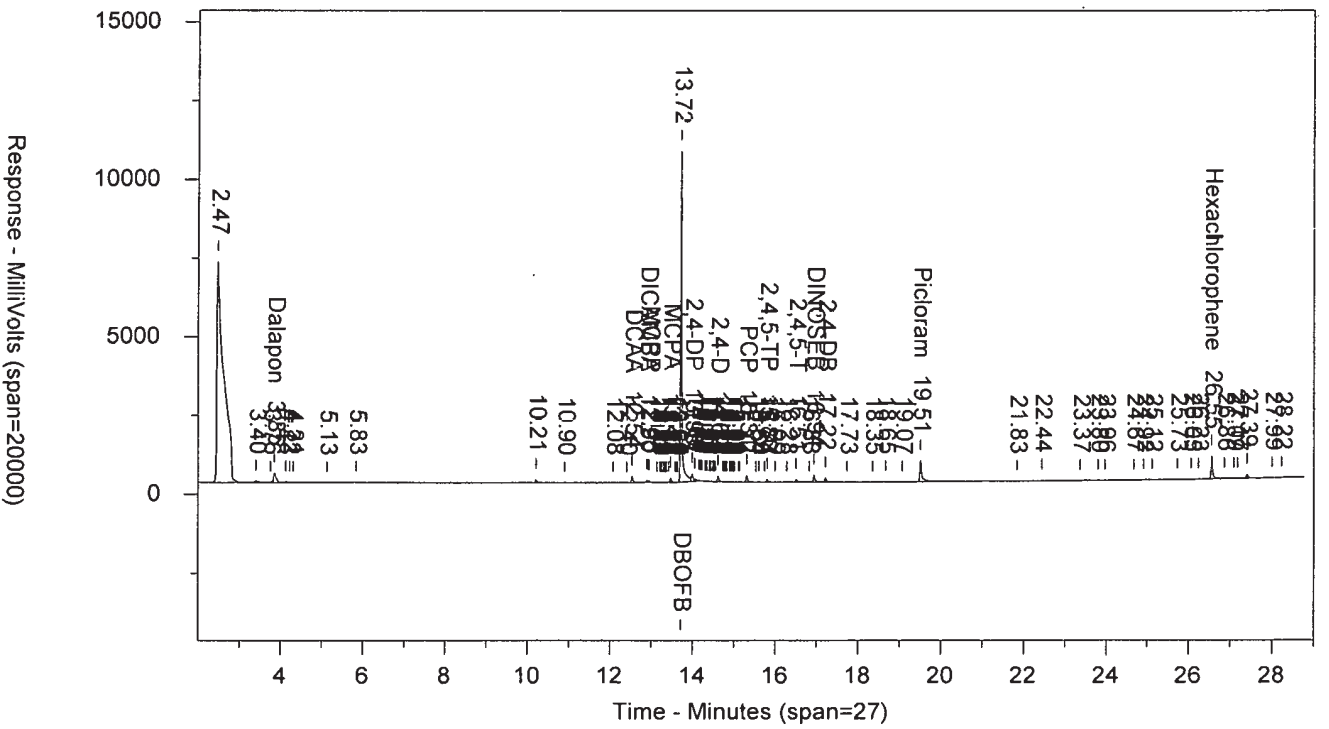
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 Area File: 15herb18304001B.012.RAW  
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 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
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 Format B: herw15.FMIA  
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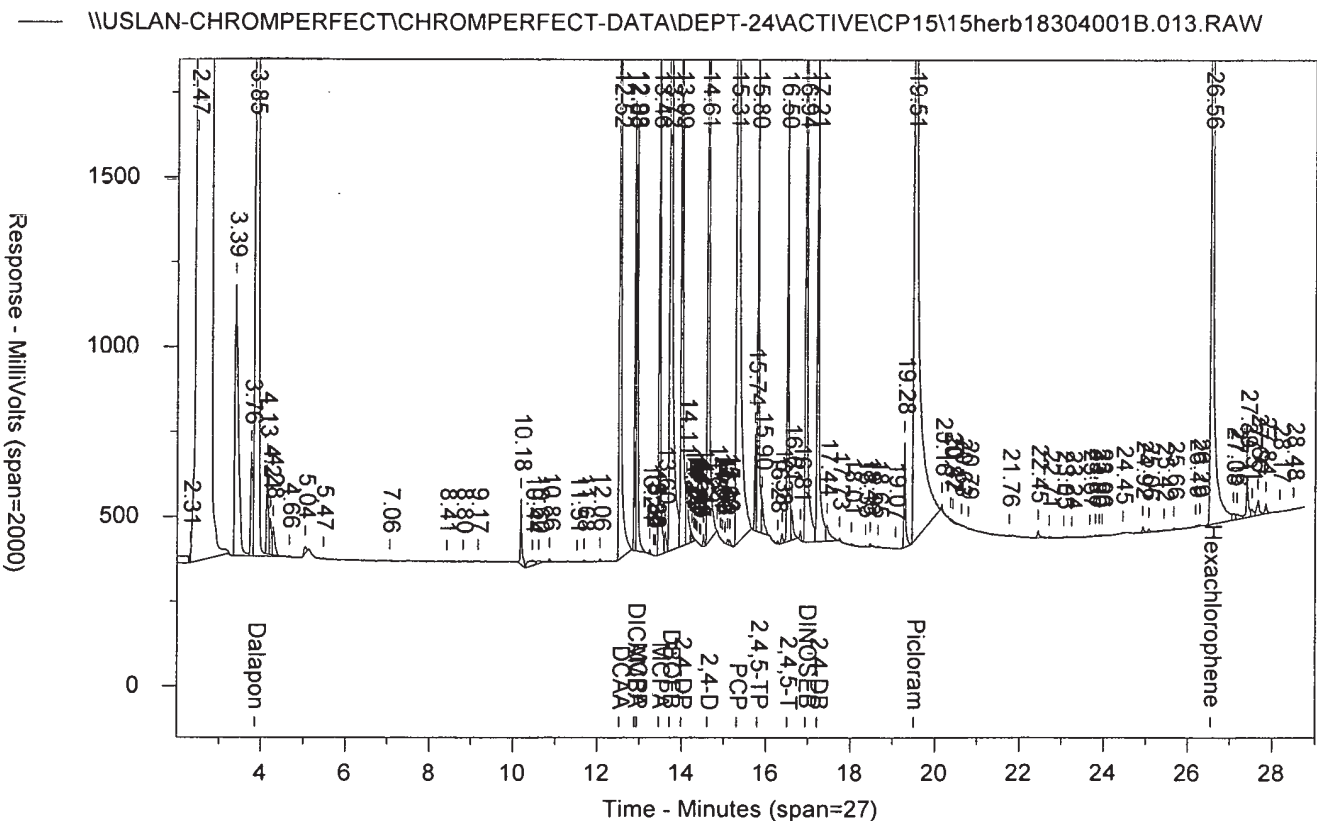
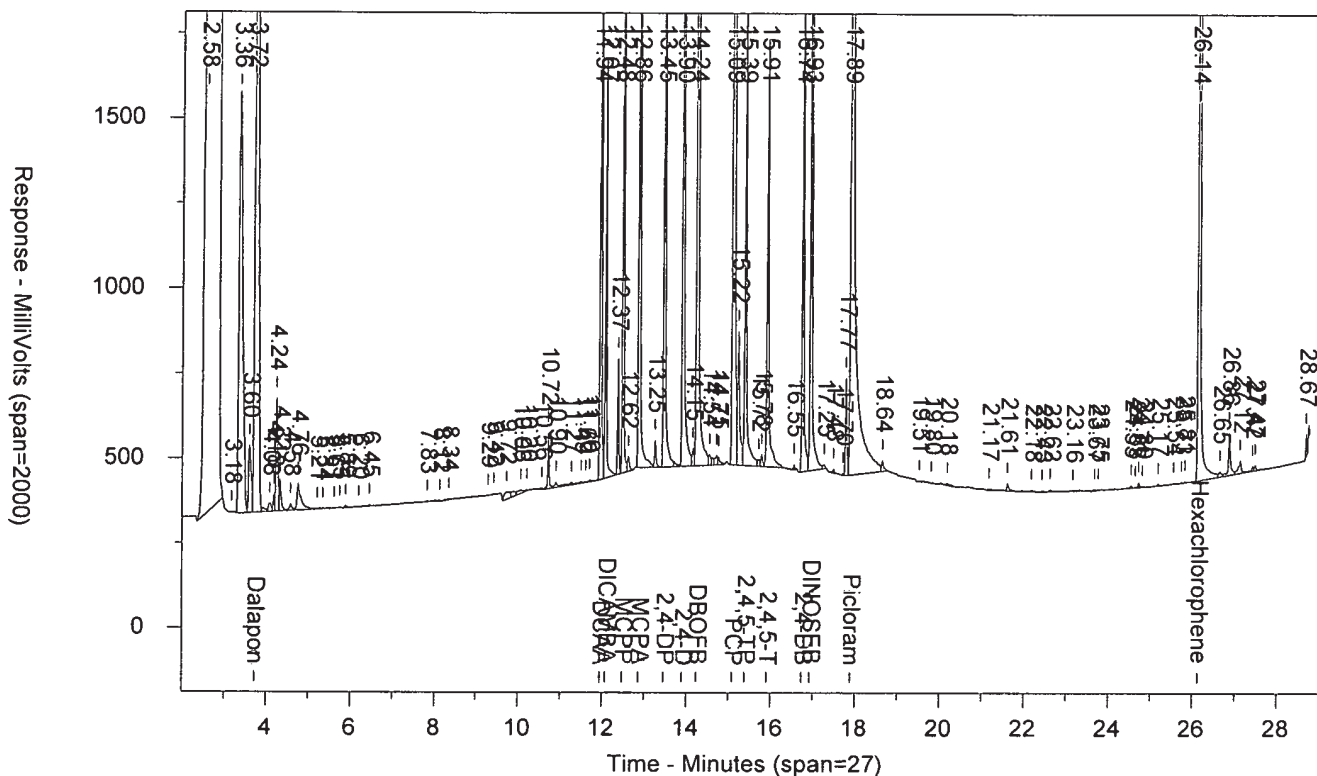
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ICHBX1824G AAICHBXAA CCAL 1830299999 10407 SW-846 8015A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICHBX1824G      AAICHBXAA      CCAL 1830299999      10407      SW-846 8015A  
 Injected On: 10/31/2018 10:13:35 PM      Sample Weight: 1  
 Instrument ID: CP15-19850      Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35      30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

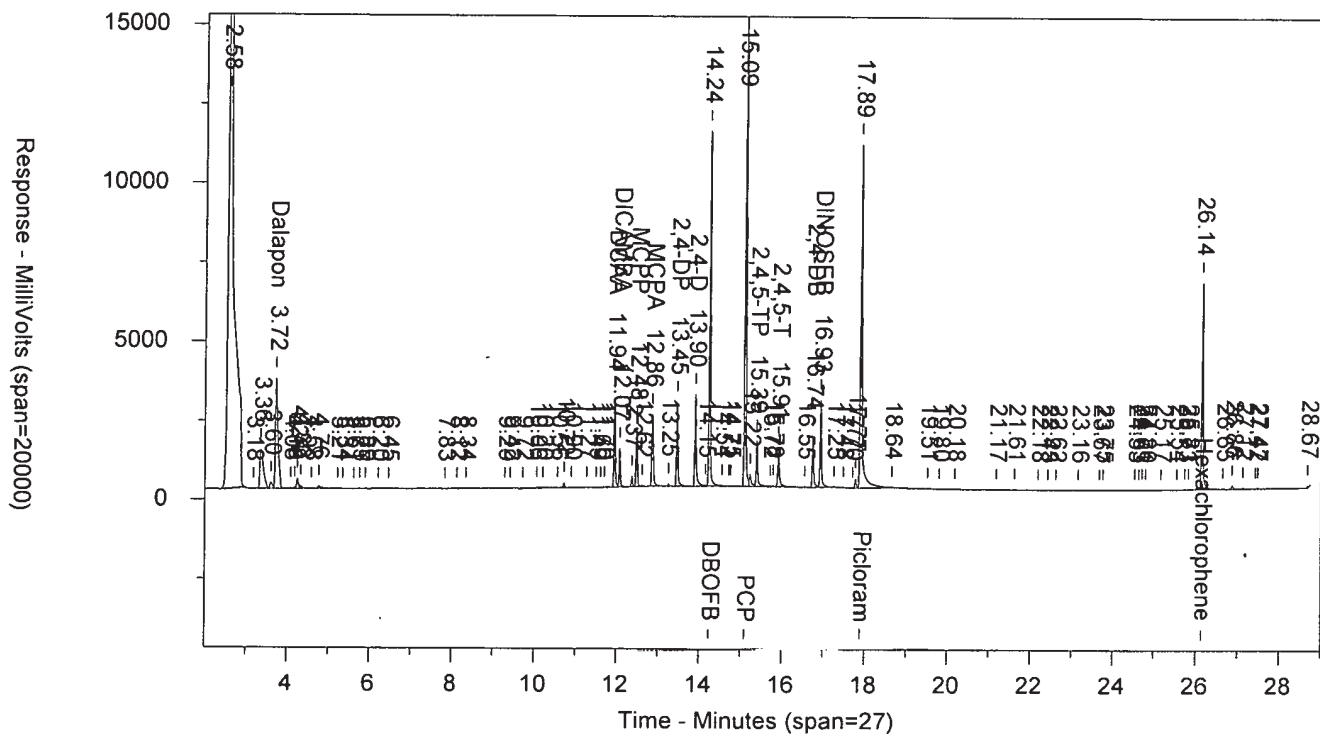
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.724	3484956	415.233	Dalapon	3.855	4969726	418.962	Dalapon
11.944	2820565	186.564	DCAA	12.518	3035387	194.232	DCAA
12.07	1230845	20.266	DICAMBA	12.879	1326542	20.429	DICAMBA
12.479	1870406	21623.53	MCPP	12.932	1258913	19502.99	MCPP
12.863	2273579	21327.76	MCPA	13.458	1656741	18662.05	MCPA
13.455	2671381	214.128	2,4-DP	13.985	2798496	204.789	2,4-DP
14.235	11224140	1	DBOFB	13.715	11342300	1	DBOFB
13.898	2919491	195.753	2,4-D	14.61	2981738	190.48	2,4-D
15.093	17630100	93.482	PCP	15.306	17516720	87.436	PCP
15.386	1462964	20.492	2,4,5-TP	15.8	1489461	20.146	2,4,5-TP
15.91	1258346	19.969	2,4,5-T	16.503	1302423	19.939	2,4,5-T
16.742	1610705	184.238	2,4-DB	17.21	1679637	181.39	2,4-DB
16.932	2764359	84.303	DINOSEB	16.936	2771244	82.407	DINOSEB
17.888	10858720	198.75	Picloram	19.505	11258260	190.704	Picloram
26.136	6538899	109.823	Hexachlorophene	26.556	6833608	111.716	Hexachloropher

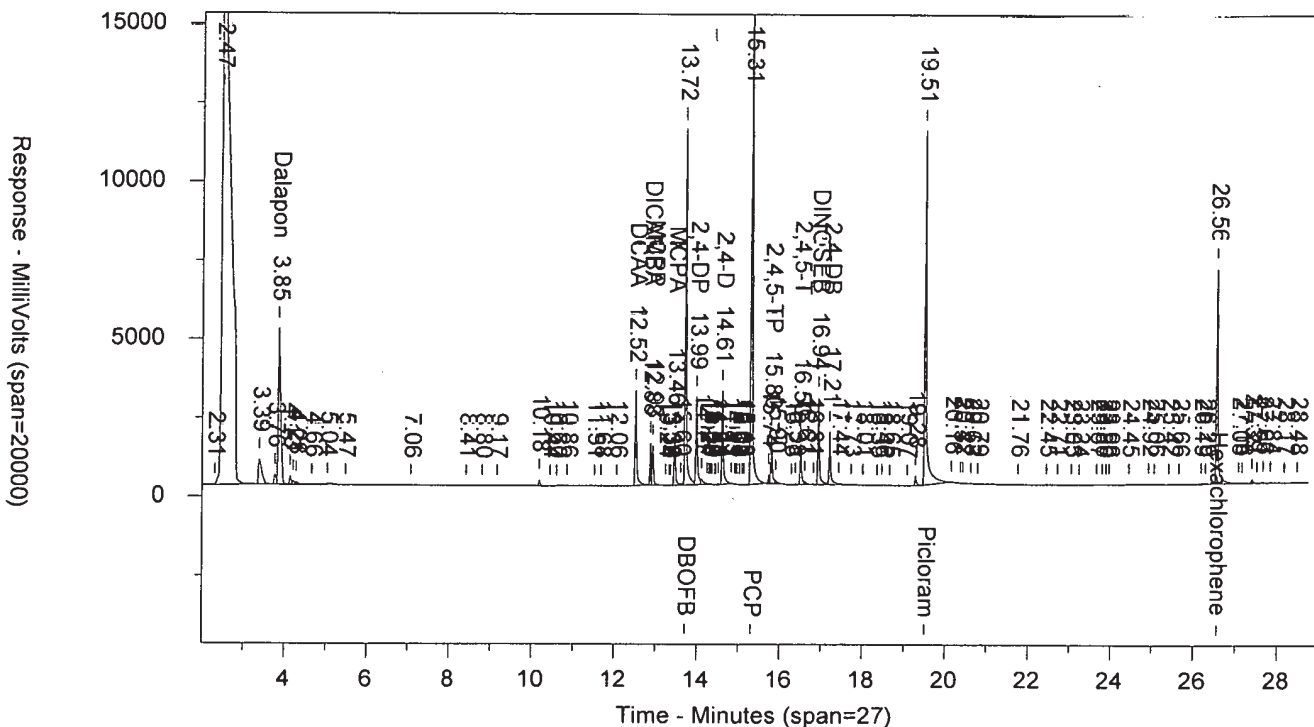
Files:

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 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
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ICHBX1824G AAICHBXAA CCAL 1830299999 10407 SW-846 801  
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HERB31824F

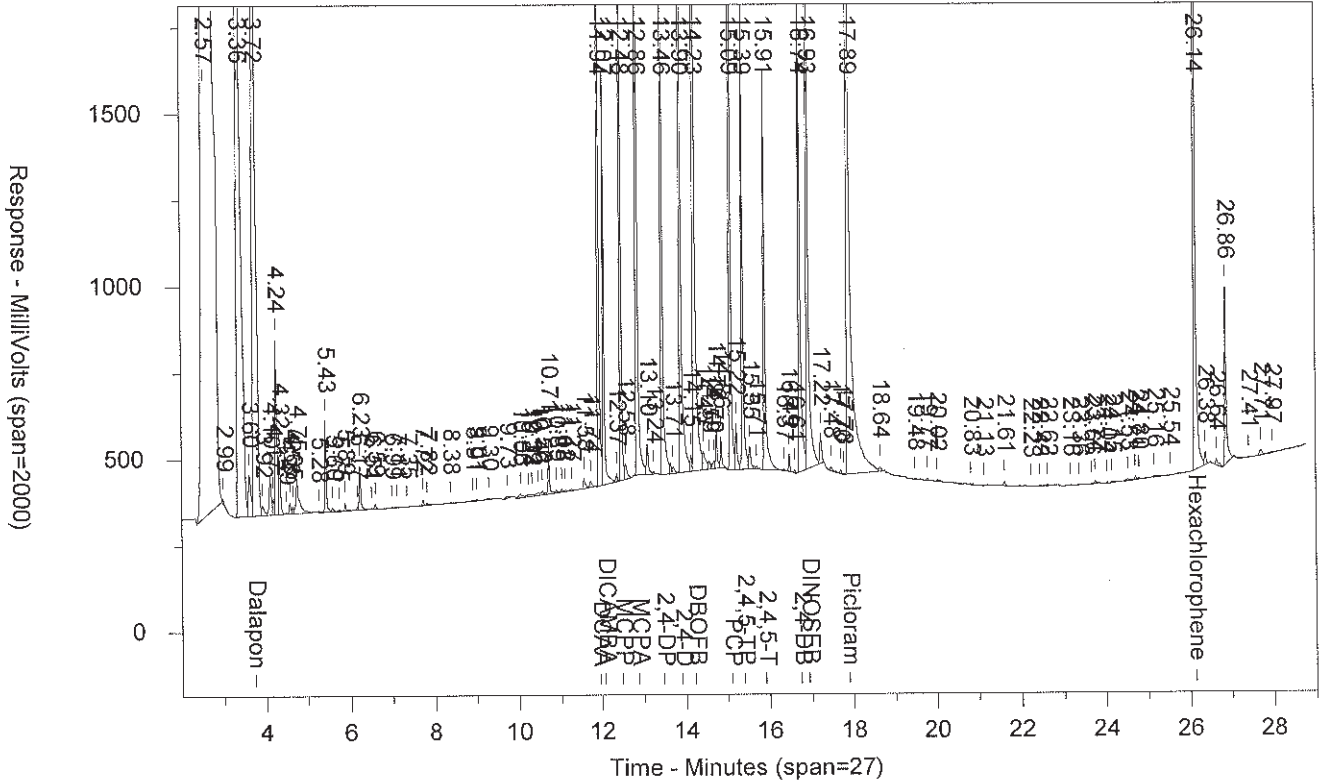
VTHERB3VT

CCAL 183119999

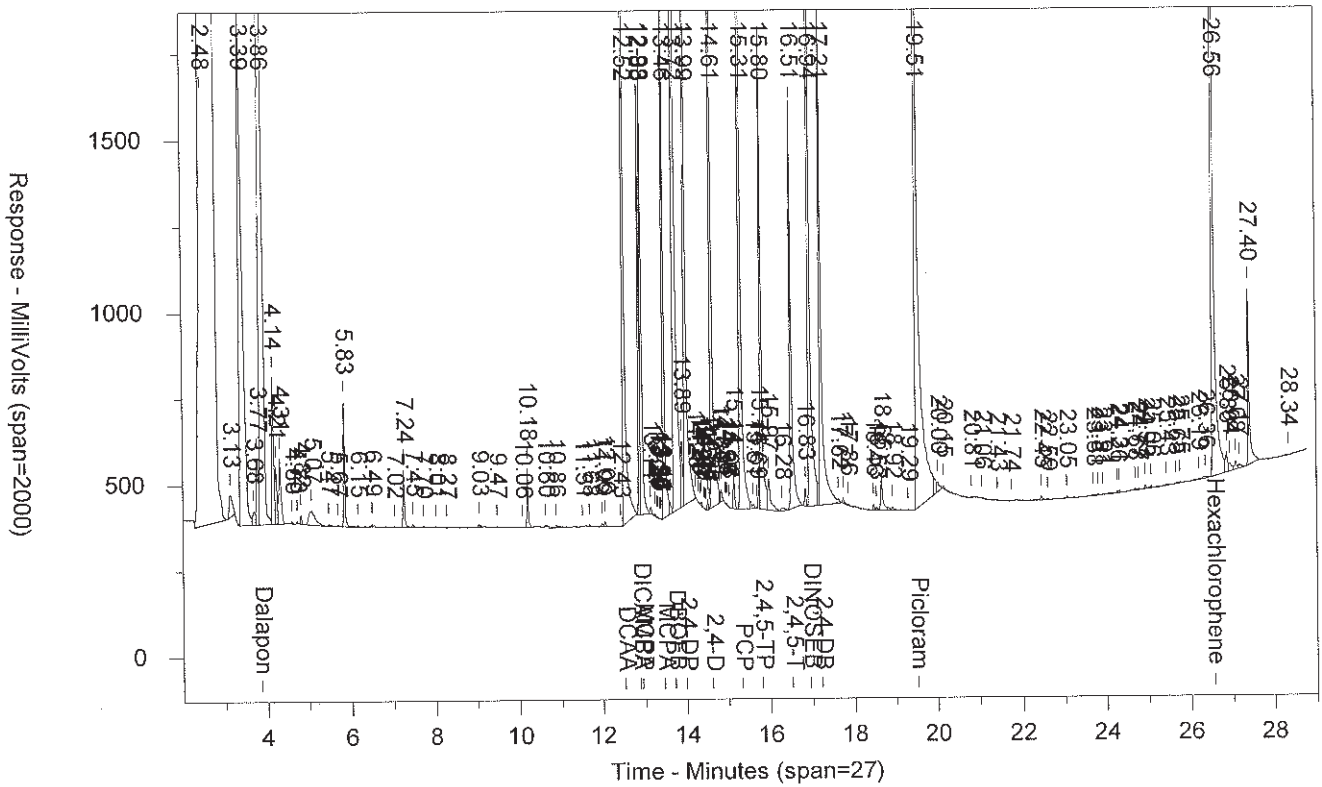
10407

SW-846 8151A

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LANCASTER LABORATORIES

Sample Number: HERB31824F V THERB3VT CCAL 1831199999 10407 SW-846 8151A  
 Injected On: 11/9/2018 6:16:05 AM Sample Weight: 1  
 Instrument ID: CP15-19850 Dilution Factor: 1  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

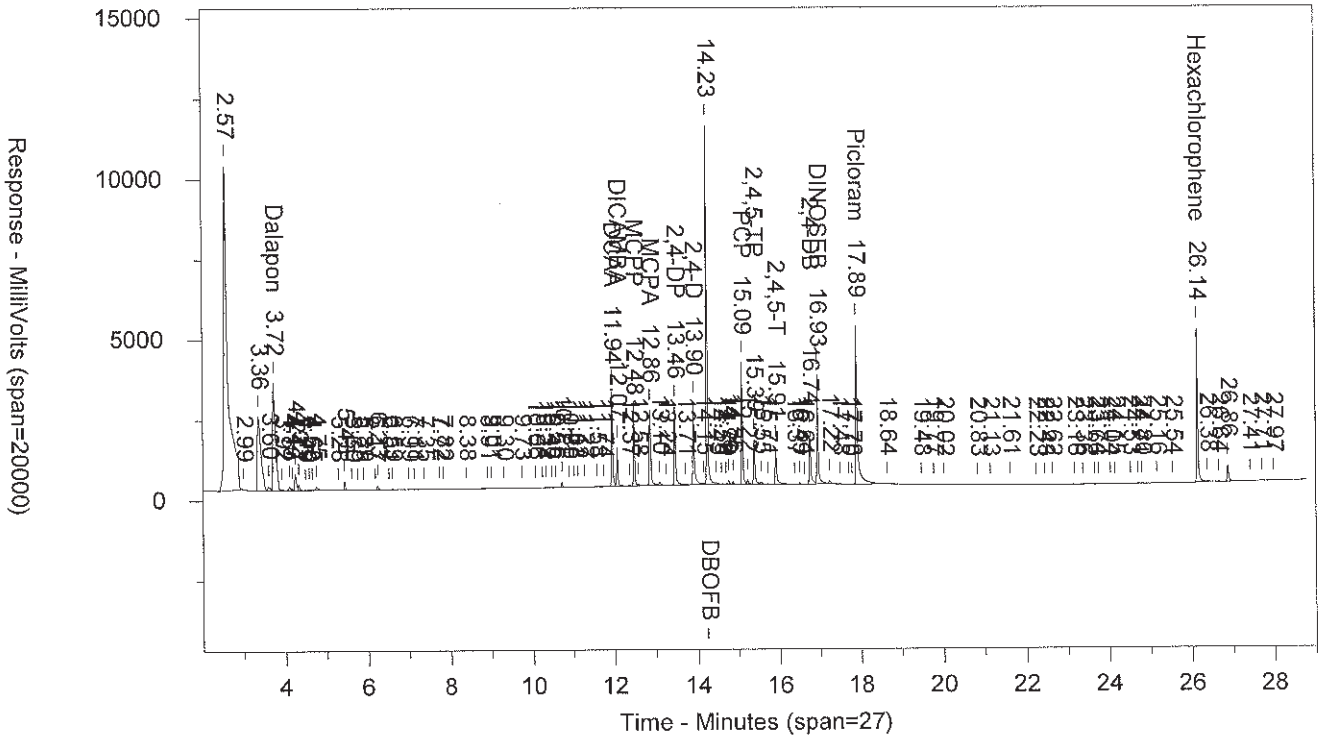
Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

Analyst: 13378

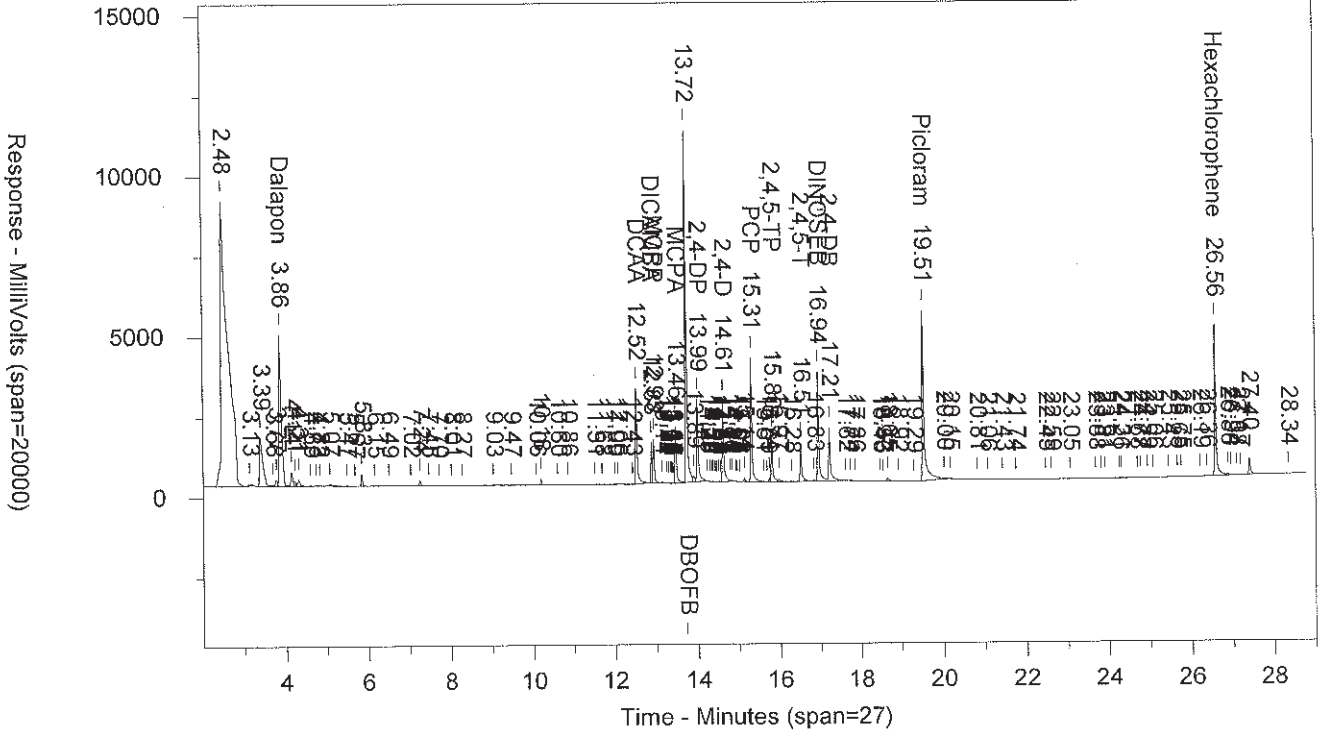
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.725	3330424	397.812	Dalapon	3.857	4708827	409.907	Dalapon
11.944	2936608	194.726	DCAA	12.519	2976847	196.694	DCAA
12.07	1208197	19.943	DICAMBA	12.88	1250012	19.878	DICAMBA
12.478	1938698	22970.97	MCPP	12.934	1353847	21657.32	MCPP
12.862	2309111	21962.41	MCPA	13.46	1752173	20380.34	MCPA
13.455	2440796	196.134	2,4-DP	13.988	2577184	194.741	2,4-DP
14.234	11196150	1	DBOFB	13.718	10984270	1	DBOFB
13.898	2537724	170.581	2,4-D	14.613	2518098	166.105	2,4-D
15.093	3793251	20.164	PCP	15.31	3859059	19.891	PCP
15.386	1366398	19.187	2,4,5-TP	15.804	1400600	19.562	2,4,5-TP
15.91	1161574	18.479	2,4,5-T	16.507	1186031	18.749	2,4,5-T
16.743	1603056	183.821	2,4-DB	17.214	1658781	184.976	2,4-DB
16.93	3389573	103.628	DINOSEB	16.939	3413417	104.811	DINOSEB
17.893	4950030	90.828	Picloram	19.51	5292573	92.573	Picloram
26.136	4792471	80.692	Hexachlorophene	26.559	4708869	79.49	Hexachloropher

Files:  
 Area File: 15herb18304004.123.RAW  
 Area File: 15herb18304004B.123.RAW  
 Method A: 15HERB.MET  
 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
 Area File Created On: 11/9/2018 6:44:54 AM  
 File Reported On: 11/9/2018 at 3:08:38 PM

HERB31824F V THERB3VT CCAL 1831199999 10407 SW-846 81  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.123.RAW

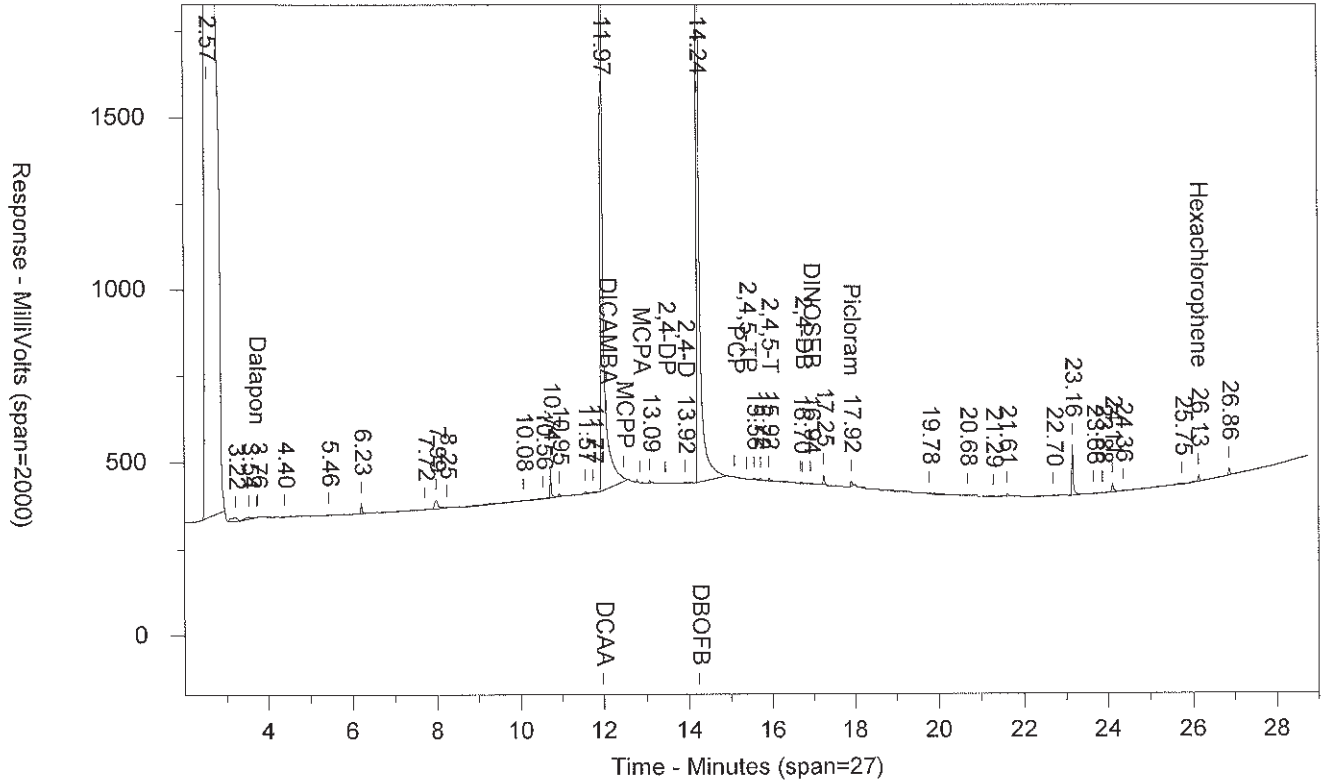


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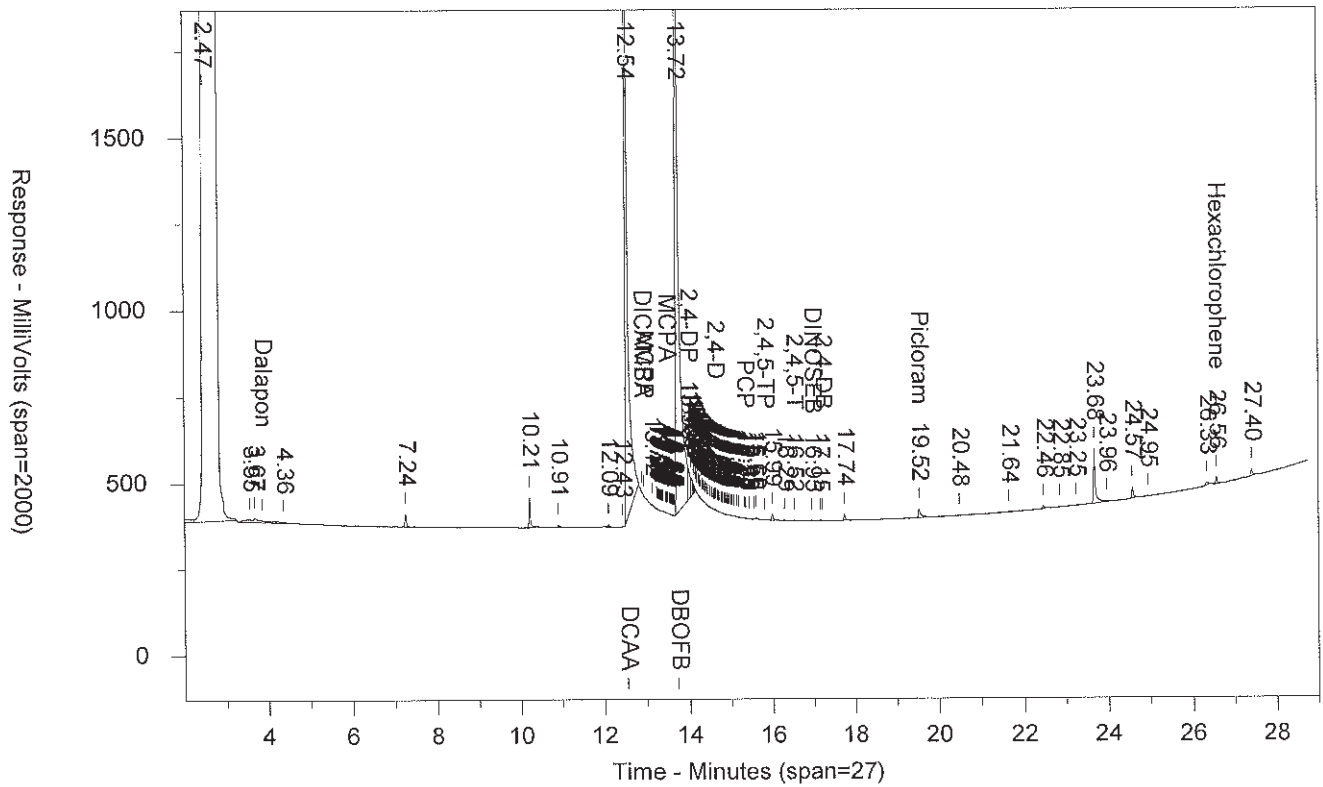


HIBLKX1824B TCHIBLKTC MISC 1831199999 10407 SW-846 8151A

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.124.RAW





## LANCASTER LABORATORIES

Sample Number: HIBLKX1824B      TCHIBLKTC      MISC 1831199999      10407      SW-846 8151A  
Injected On: 11/9/2018 6:49:10 AM      Sample Weight: 1000  
Instrument ID: CP15-19850      Dilution Factor: 10  
Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
Column B ID: ZB35      30m x 0.32mm x 0.25um  
Injection Volume: 1 ul

Threshold: 4  
Calibration Type: internal  
Quantitation: Height

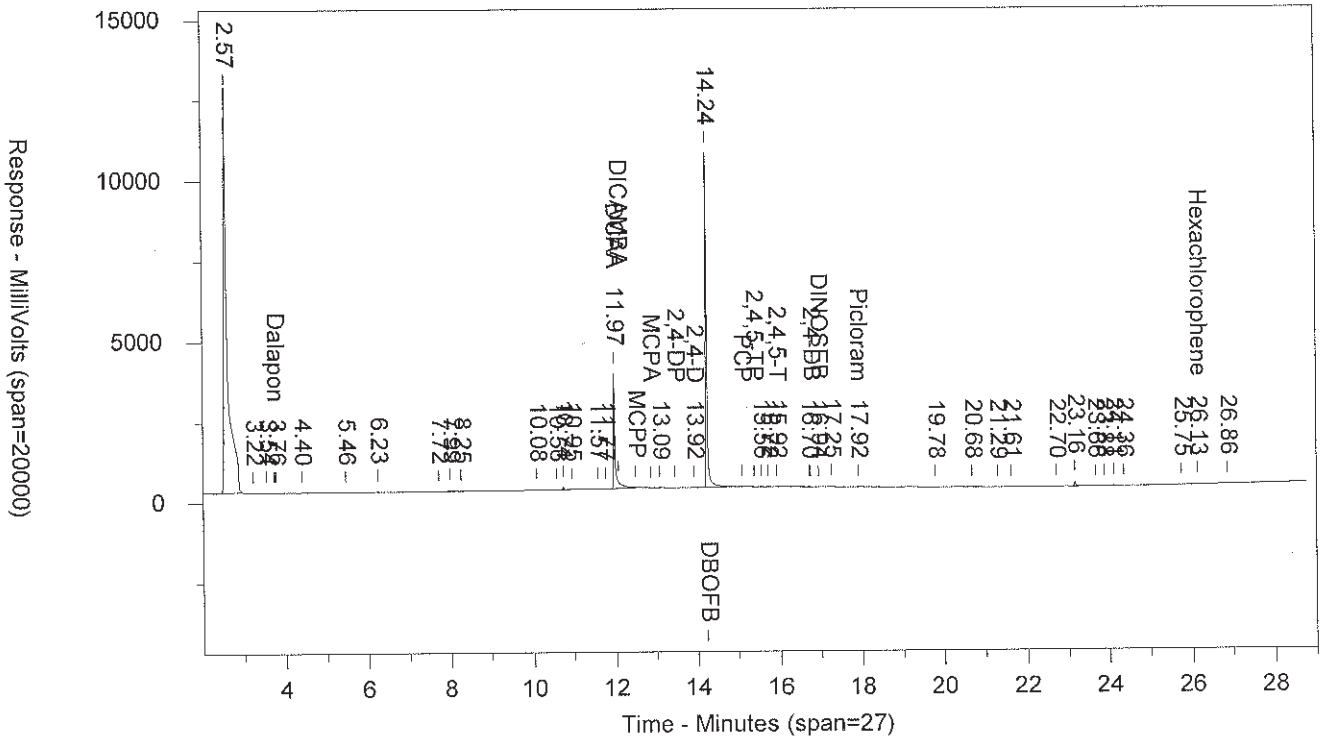
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
11.969	3584267	2.558	DCAA	12.538	3445929	2.38	DCAA
	0		MCPA	13.458	964	.117	MCPA
14.235	10402220	.001	DBOFB	13.72	10507460	.001	DBOFB
13.92	2825	.002	2,4-D	14.608	2526	.002	2,4-D
	0		2,4-DP	13.977	94350	.075	2,4-DP
	0		PCP	15.311	1521		PCP
15.921	7598	.001	2,4,5-T	16.518	2603		2,4,5-T
16.936	4469	.001	DINOSEB	16.95	3058	.001	DINOSEB
17.917	15652	.003	Picloram	19.524	25741	.005	Picloram
26.134	18063	.003	Hexachlorophene	26.56	20047	.004	Hexachloropher

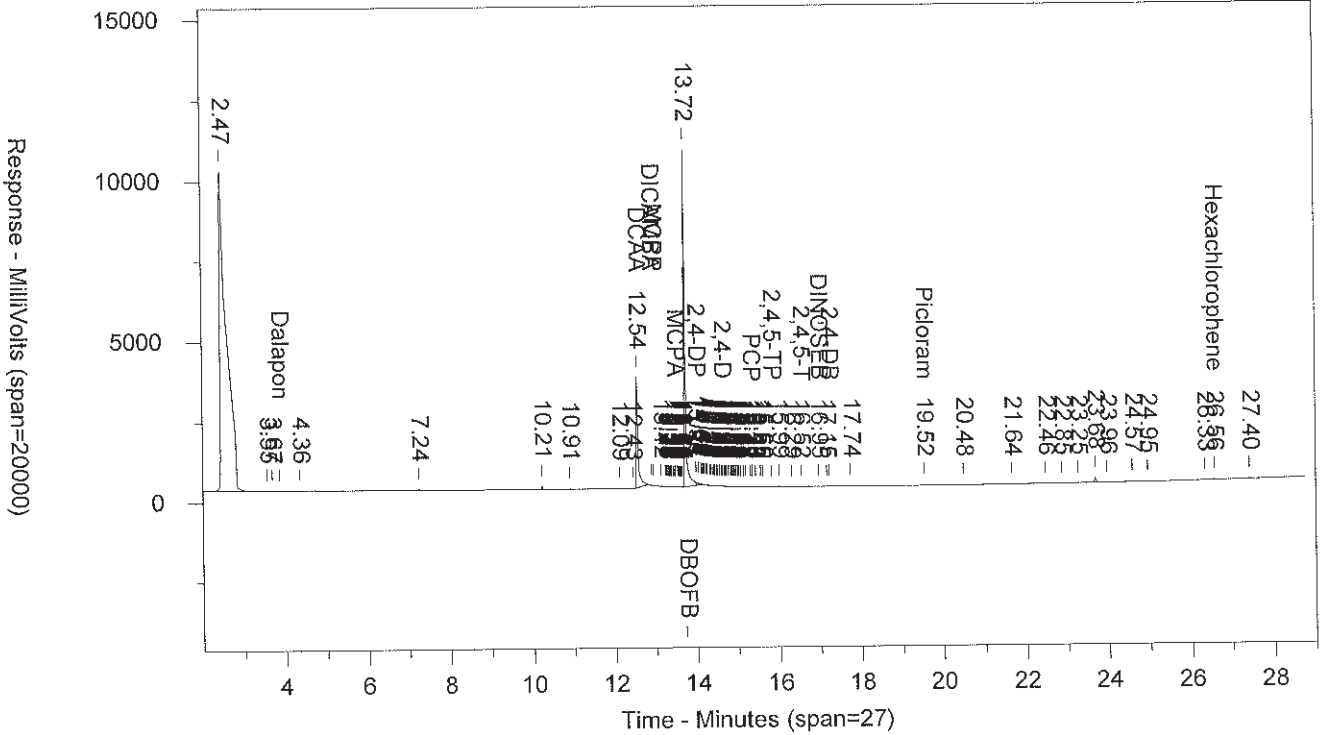
## Files:

Area File: 15herb18304004.124.RAW  
Area File: 15herb18304004B.124.RAW  
Method A: 15HERB.MET  
Method B: 15HERBB.MET  
Calibration File A: 15HERB1830401.CAL  
Calibration File B: 15HERB1830401b.CAL  
Format A: herw15.FMTA  
Format B: herw15.FMTA  
Area File Created On: 11/9/2018 7:17:57 AM  
File Reported On: 11/9/2018 at 3:08:54 PM

HIBLKX1824B TCHIBLKTC MISC 1831199999 10407 SW-846 815  
 \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.124.RAW



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HERB31824F

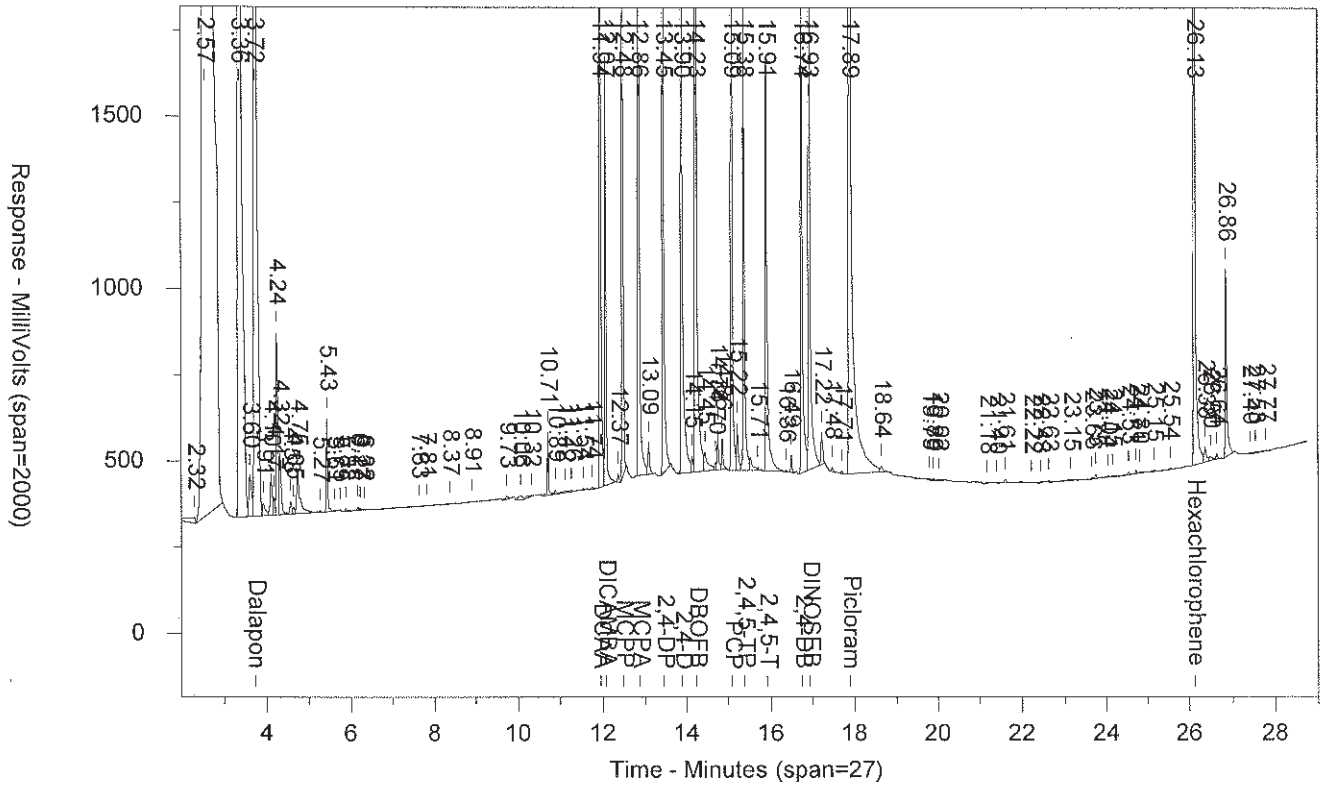
VUHERB3VU

CCAL 1831199999

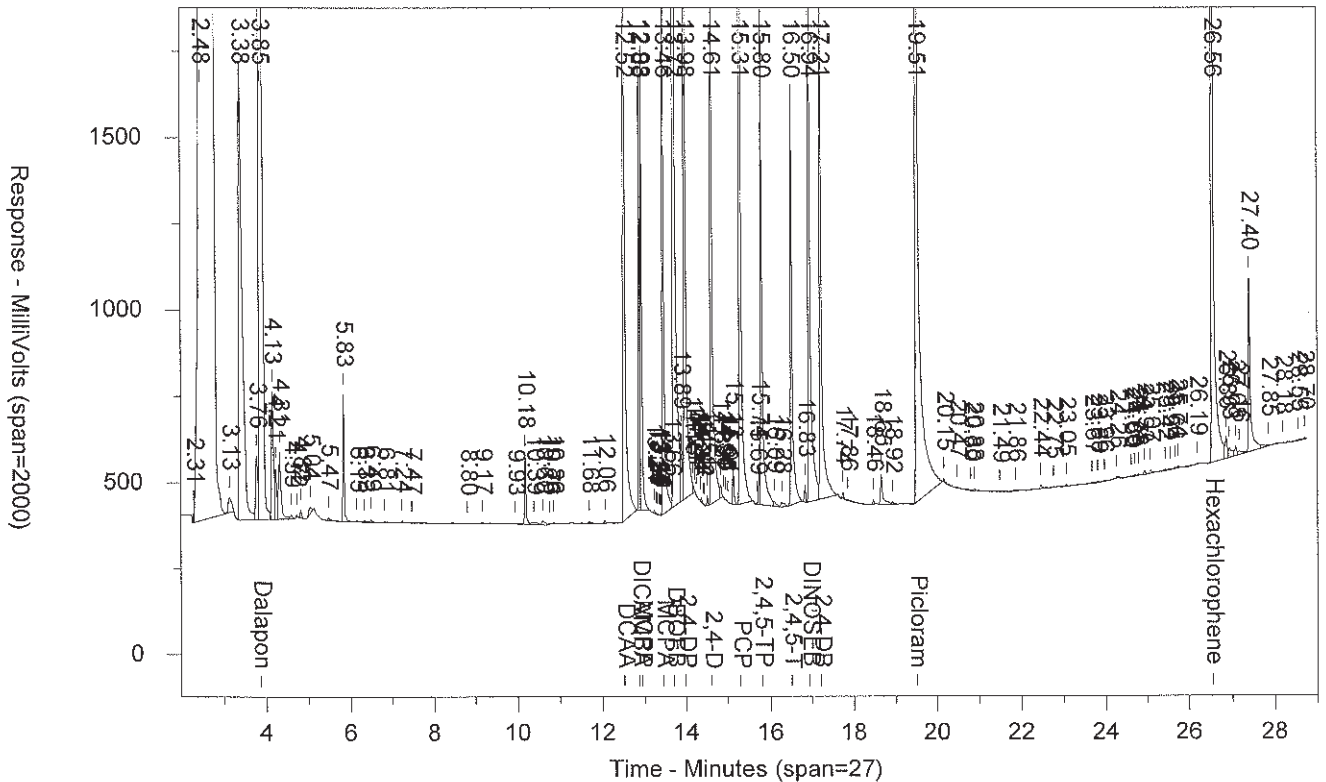
10407

SW-846 8151/

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.135.RAW



## LANCASTER LABORATORIES

Sample Number: HERB31824F VUHERB3VU CCAL 1831199999 10407 SW-846 8151A  
Injected On: 11/9/2018 12:52:38 PM Sample Weight: 1  
Instrument ID: CP15-19850 Dilution Factor: 1  
Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
Column B ID: ZB35 30m x 0.32mm x 0.25um  
Injection Volume: 1 ul

Threshold: 4  
Calibration Type: internal  
Quantitation: Height

Analyst: 13378

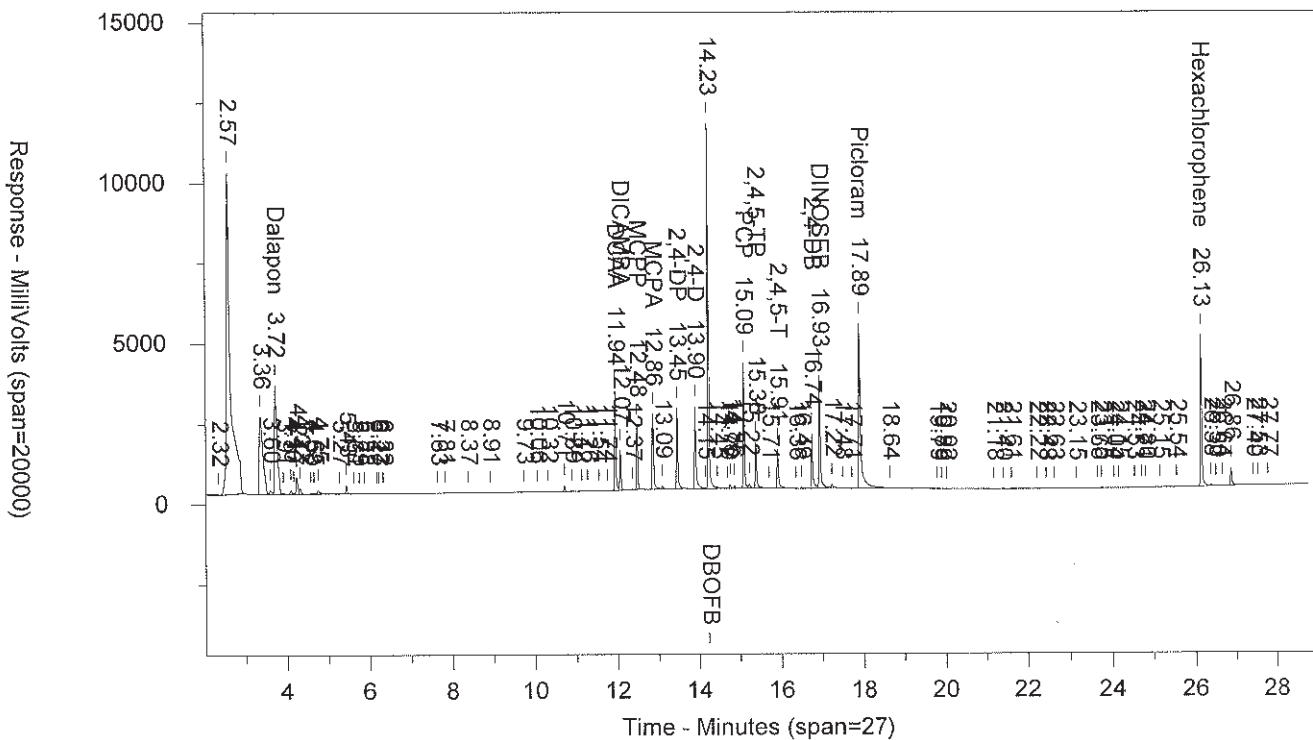
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.723	3385306	397.591	Dalapon	3.854	4779085	401.279	Dalapon
11.942	3028888	197.479	DCAA	12.516	3073143	195.861	DCAA
12.067	1243536	20.182	DICAMBA	12.878	1286495	19.733	DICAMBA
12.477	1996259	23416.24	MCP	12.932	1349263	20819.06	MCP
12.86	2351649	22010.62	MCPA	13.458	1807152	20274.88	MCPA
13.453	2502777	197.744	2,4-DP	13.984	2637459	192.232	2,4-DP
14.233	11386970	1	DBO	13.716	11387860	1	DBO
13.897	2565466	169.556	2,4-D	14.61	2606604	165.85	2,4-D
15.092	3914672	20.46	PCP	15.305	4049710	20.134	PCP
15.383	1416832	19.562	2,4,5-TP	15.8	1456361	19.62	2,4,5-TP
15.908	1197607	18.733	2,4,5-T	16.504	1206885	18.403	2,4,5-T
16.742	1695823	191.2	2,4-DB	17.21	1684669	181.205	2,4-DB
16.928	3513097	105.605	DINOSEB	16.937	3307951	97.973	DINOSEB
17.891	5125715	92.476	Picloram	19.508	5500251	92.796	Picloram
26.132	4715634	78.068	Hexachlorophene	26.556	5052613	82.27	Hexachloropher

## Files:

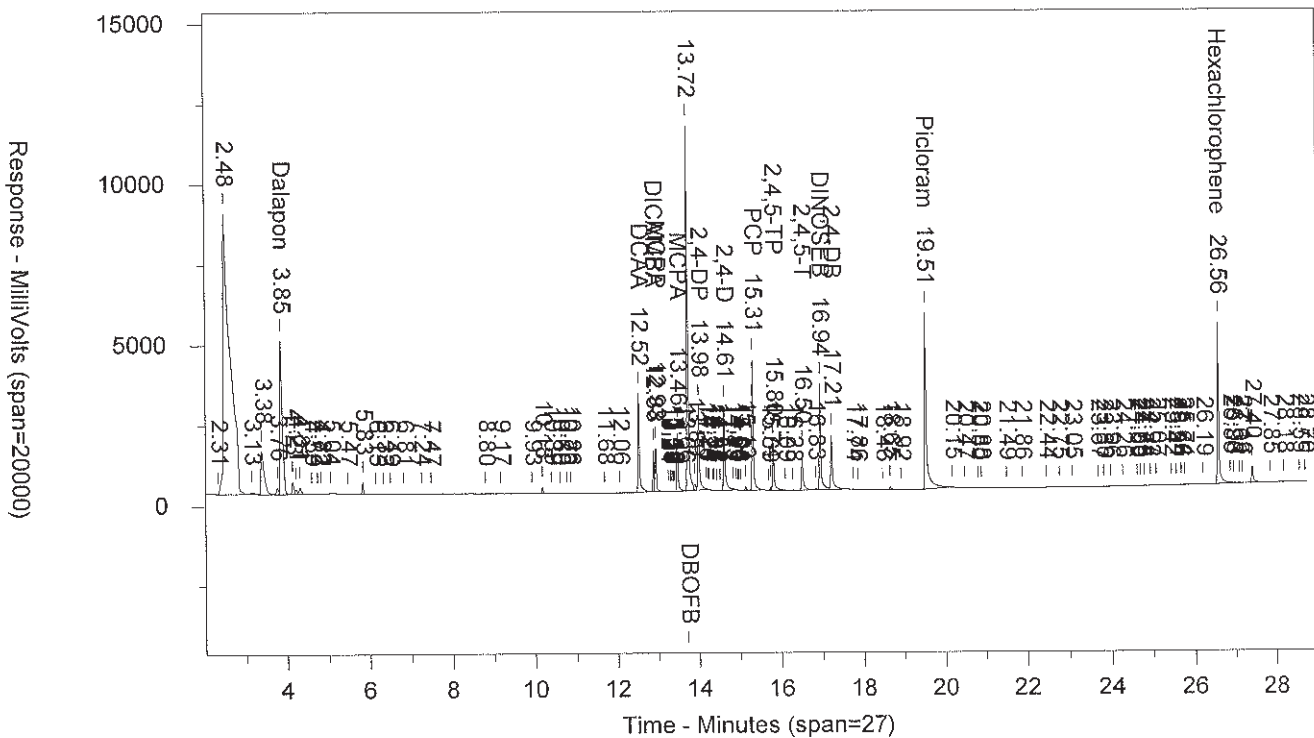
Area File: 15herb18304004.135.RAW  
Area File: 15herb18304004B.135.RAW  
Method A: 15HERB.MET  
Method B: 15HERBB.MET  
Calibration File A: 15HERB1830401.CAL  
Calibration File B: 15HERB1830401b.CAL  
Format A: herw15.FMTA  
Format B: herw15.FMTA  
Area File Created On: 11/9/2018 1:21:25 PM  
File Reported On: 11/9/2018 at 3:15:00 PM

HERB31824F VUHERB3VU CCAL 1831199999 10407 SW-846 81

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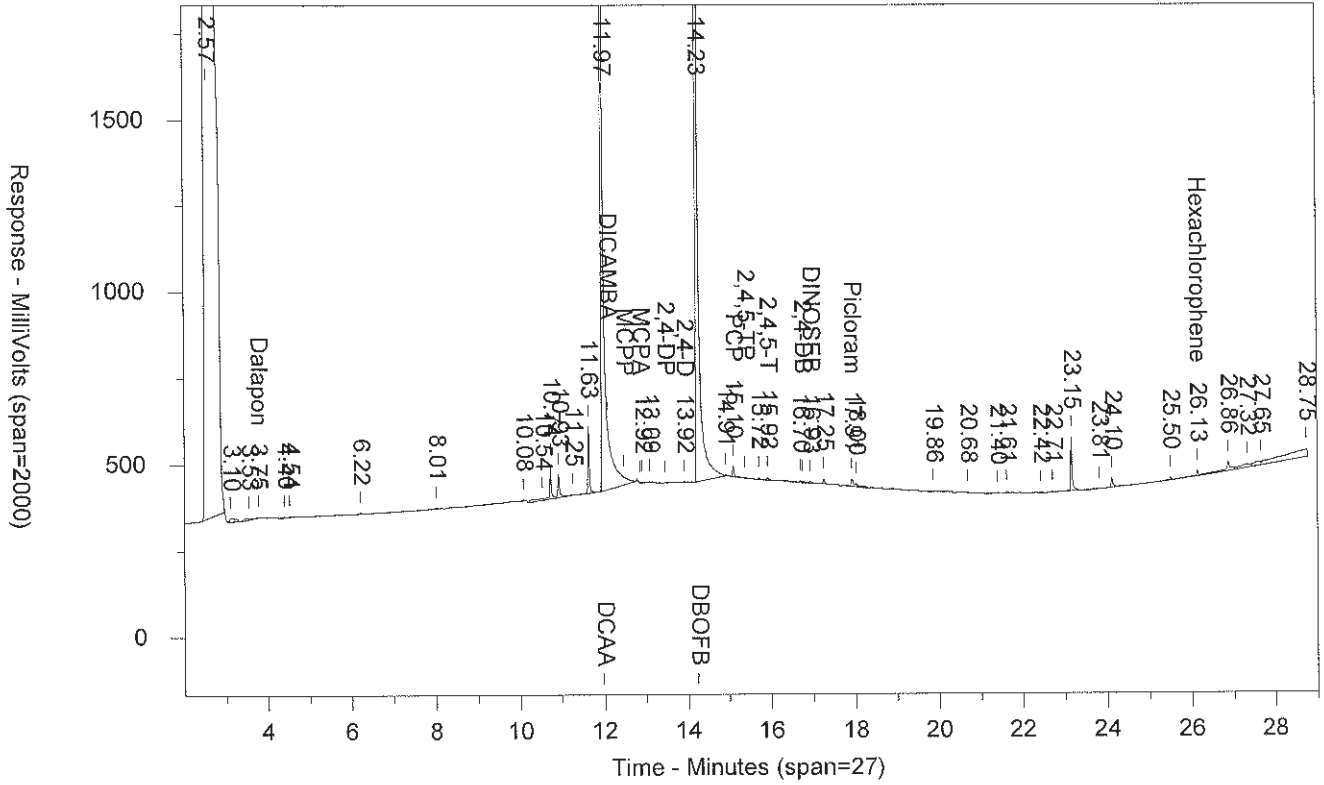


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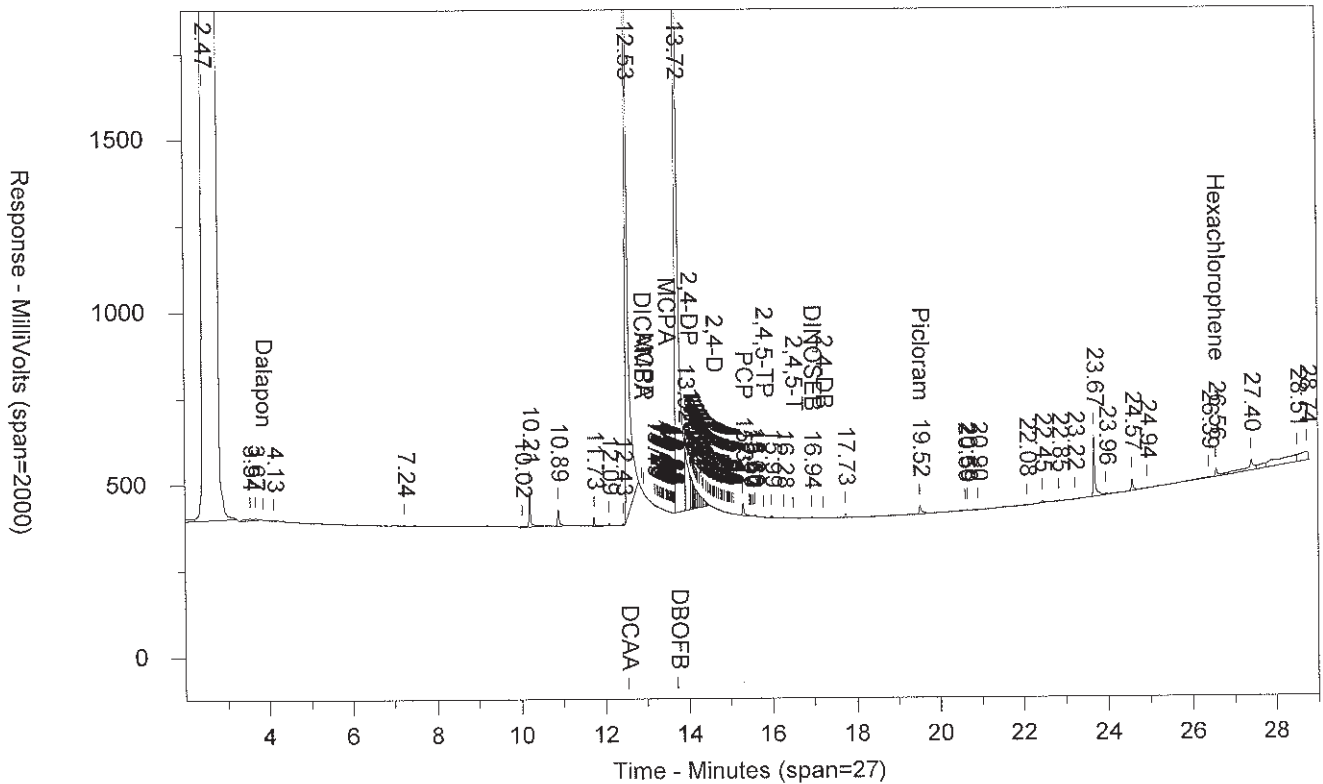


HIBLKX1824B TDHIBLKTD MISC 1831199999 10407 SW-846 8151A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.136.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.136.RAW



## LANCASTER LABORATORIES

Sample Number: HIBLKX1824B      TDHIBLKTD      MISC 1831199999      10407      SW-846 8151A  
Injected On: 11/9/2018 1:25:42 PM      Sample Weight: 1000  
Instrument ID: CP15-19850      Dilution Factor: 10  
Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
Column B ID: ZB35      30m x 0.32mm x 0.25um  
Injection Volume: 1 ul

Threshold: 4  
Calibration Type: internal  
Quantitation: Height

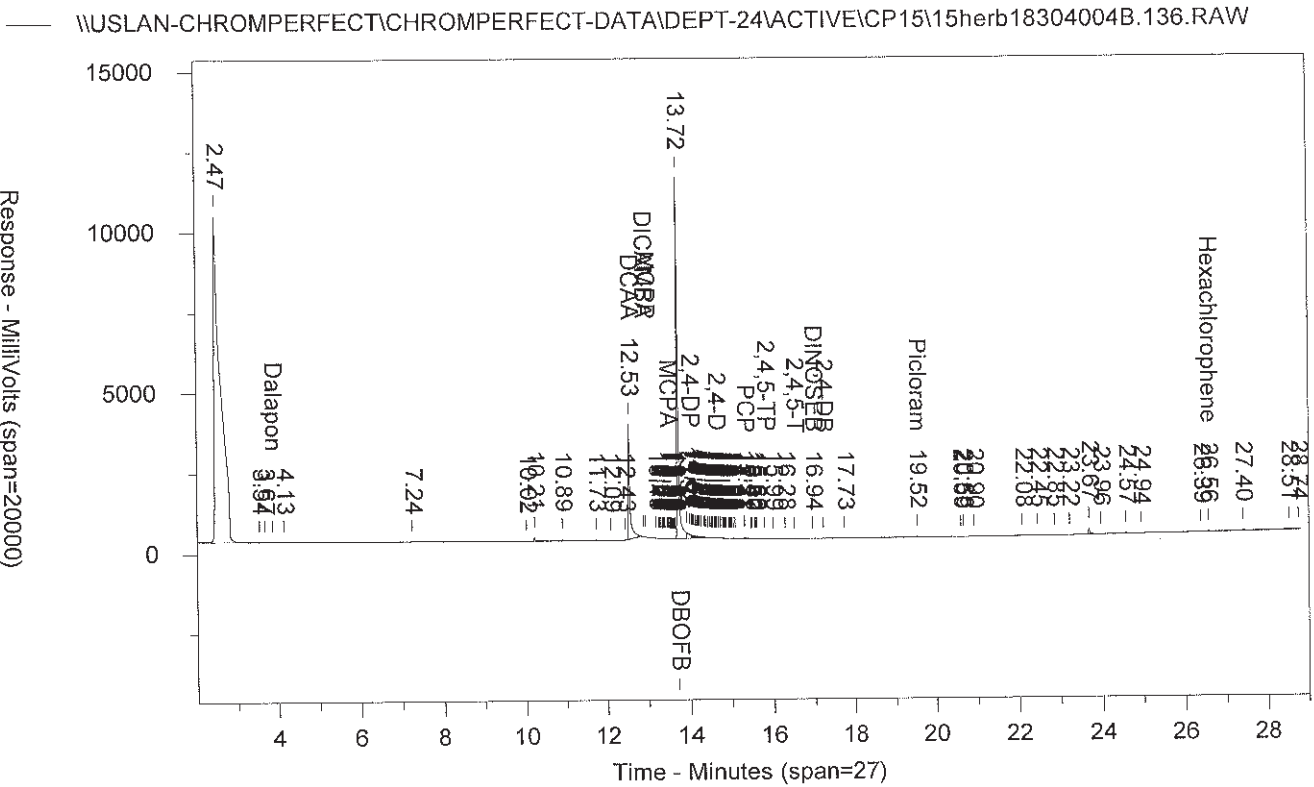
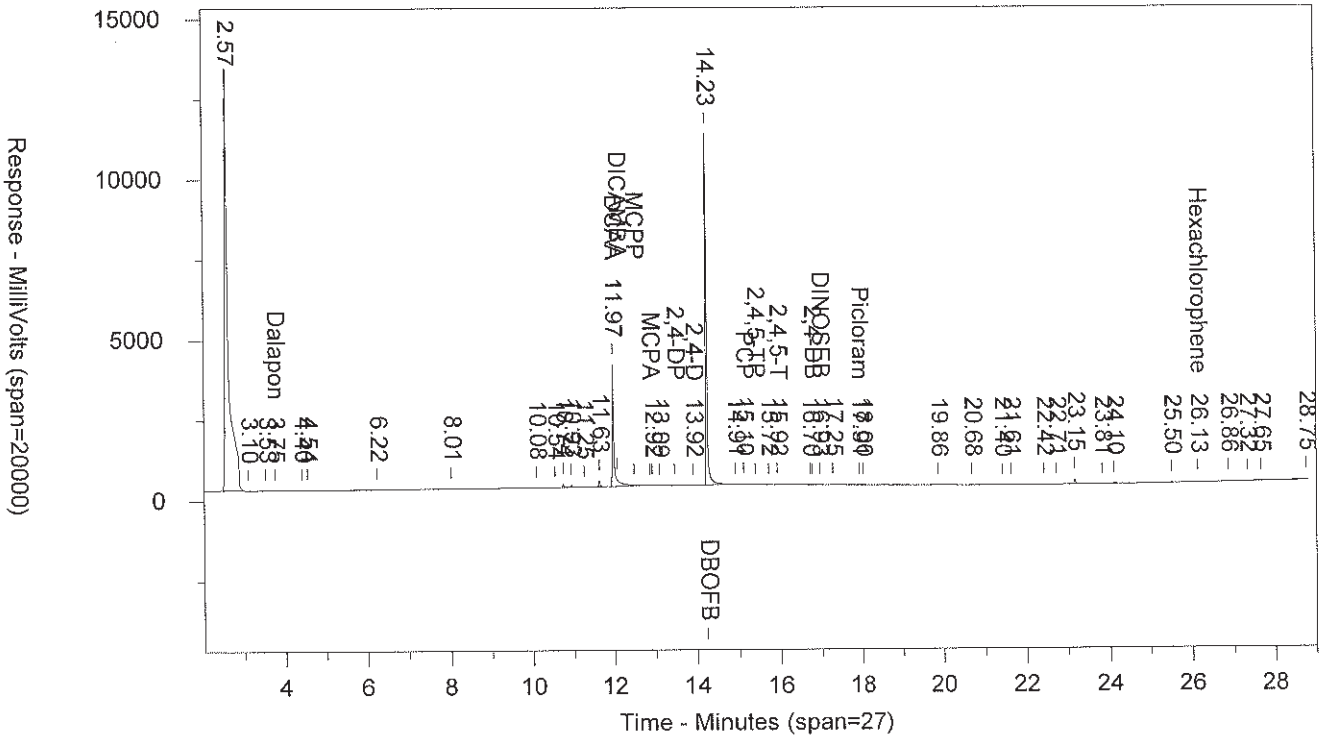
Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.754	2476	.003	Dalapon		0		Dalapon
11.965	3786240	2.566	DCAA	12.533	3571035	2.305	DCAA
	0		MCPA	13.458	1066	.121	MCPA
14.234	10954300	.001	DBOFB	13.717	11243910	.001	DBOFB
13.915	2774	.002	2,4-D	14.604	1546	.001	2,4-D
15.098	30035	.002	PCP	15.313	34997	.002	PCP
15.921	9015	.001	2,4,5-T		0		2,4,5-T
16.935	5689	.002	DINOSEB	16.941	3807	.001	DINOSEB
17.91	21285	.004	Picloram	19.521	25930	.004	Picloram
26.133	17001	.003	Hexachlorophene	26.556	25003	.004	Hexachloropher

## Files:

Area File: 15herb18304004.136.RAW  
Area File: 15herb18304004B.136.RAW  
Method A: 15HERB.MET  
Method B: 15HERBB.MET  
Calibration File A: 15HERB1830401.CAL  
Calibration File B: 15HERB1830401b.CAL  
Format A: herw15.FMTA  
Format B: herw15.FMTA  
Area File Created On: 11/9/2018 1:54:34 PM  
File Reported On: 11/9/2018 at 3:15:15 PM

HIBLKX1824B TDHIBLKTD MISC 1831199999 10407 SW-846 815  
 \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.136.RAW





# **Raw QC Data**

## **Herbicides**

# Data Summary

Sample Name: **BLANKA** 11/6/18 F PBLK05310 BLK Sample ID: AB Batchnumber: **183100005A**  
 Sample Amount: 1000 ml Total Volume: 10 ml Analyst: 120 SDG: State:  
 Analyses: 10407

### Analysis Report (A)

Injected on Nov 09, 2018 07:22:08  
 Instrument 19850A  
 Result file 15HERB18304004.125.RAW  
 Calibration file 15HERB1830401  
 Method file 15HERB

%SSR(DCAA) 86% (34 - 142) Conc: 1.716462

### Single Component Data

Compound	Min	RT	Max	Height
Dalapon	3.70	3.71	3.76	604683
2,4-DCAA	11.91	11.96	11.97	2741847
Dicamba	12.04	12.08	12.10	157621
MCPP	12.45	12.50	12.51	36149
MCPA	12.83	12.89	12.89	14984
Pentachlorophenol	15.06	15.09	15.12	149436
2,4,5-T	15.88	15.90	15.94	94684
Dinoseb	16.90	16.95	16.96	15301
Picloram	17.86	17.90	17.92	47946
Hexachlorophene	26.10	26.12	26.16	7149

### Analysis Report (B)

Injected on Nov 09, 2018 07:22:08  
 Instrument 19850B  
 Result file 15HERB18304004B.125.RAW  
 Calibration file 15HERB1830401B  
 Method file 15HERBB

%SSR(DCAA) 74% (34 - 142) Conc: 1.477054

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	52915	0.039441
2,4-DCAA	12.49	12.53	12.55	2610743	1.477054
Dicamba	12.85	12.86	12.91	117222	0.015961
MCPP	12.90	12.93	12.96	11545	1.581363
MCPA	13.43	13.48	13.49	5077	0.505658
2,4-DP (Dichloroprop)	13.96	14.00	14.01	71036	0.045961
2,4-D	14.58	14.61	14.64	1108	0.000626
Pentachlorophenol	15.28	15.31	15.34	179084	0.007904
2,4,5-TP	15.77	15.82	15.83	92141	0.011019
2,4,5-T	16.47	16.50	16.53	45371	0.006141
2,4-DB	17.18	17.23	17.24	12551	0.011984
Picloram	19.48	19.49	19.54	11095	0.001662
Hexachlorophene	26.52	26.55	26.58	7859	0.001136

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Dalapon			<1.8	<3.6	<4			
<input type="checkbox"/> 2,4-DCAA	A	1.716462	0.1	0.2	0.2		14.99	
<input type="checkbox"/> 2,4-DCAA-D1	A	1.716462	0.1	0.2	0.2			
<input type="checkbox"/> 2,4-DCAA-D2	B	1.477054	0.1	0.2	0.2			
<input type="checkbox"/> Dicamba			<0.08	<0.16	<0.3			
<input type="checkbox"/> MCPP			<50	<100	<200			
<input type="checkbox"/> MCPA			<50	<100	<200			
<input type="checkbox"/> 2,4-DP (Dichloroprop)			<0.16	<0.32	<0.5			
<input type="checkbox"/> 2,4-D			<0.25	<0.5	<0.6			
<input type="checkbox"/> Pentachlorophenol			<0.027	<0.06	<0.07			
<input type="checkbox"/> 2,4,5-TP			<0.01	<0.03	<0.05			
<input type="checkbox"/> 2,4,5-T			<0.065	<0.13	<0.15			
<input type="checkbox"/> 2,4-DB			<0.63	<1.3	<1.5			
<input type="checkbox"/> Dinoseb			<0.18	<0.4	<0.5			
<input type="checkbox"/> Picloram			<0.36	<0.8	<1			
<input type="checkbox"/> Hexachlorophene					<0.2			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomasz*  
 Valerie L. Tomasz  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Richard A Shober on 11/16/2018 10:00:50

# Data Summary

Sample Name: **BLANKA** 11/6/18 F PBLK05310 BLK Sample ID: AB Batchnumber: **183100005A**  
 Sample Amount: 1000 ml Total Volume: 10 ml Analyst: 120 SDG: State:

Analyses: 10407

### Analysis Report (A)

Injected on Nov 09, 2018 07:22:08  
 Instrument 19850A  
 Result file 15HERB18304004.125.RAW  
 Calibration file 15HERB1830401  
 Method file 15HERB

%SSR(DCAA) 86% (32 - 138) Conc: 1.716462

### Single Component Data

Compound	Min	RT	Max	Height
Dalapon	3.70	3.71	3.76	604683
2,4-DCAA	11.91	11.96	11.97	2741847
Dicamba	12.04	12.08	12.10	157621
MCPP	12.45	12.50	12.51	36149
MCPA	12.83	12.89	12.89	14984
Pentachlorophenol	15.06	15.09	15.12	149436
2,4,5-T	15.88	15.90	15.94	94684
Dinoseb	16.90	16.95	16.96	15301
Picloram	17.86	17.90	17.92	47946
Hexachlorophene	26.10	26.12	26.16	7149

### Analysis Report (B)

Injected on Nov 09, 2018 07:22:08  
 Instrument 19850B  
 Result file 15HERB18304004B.125.RAW  
 Calibration file 15HERB1830401B  
 Method file 15HERBB

%SSR(DCAA) 74% (32 - 138) Conc: 1.477054

Compound	Amount	Compound	Min	RT	Max	Height	Amount
Dalapon	0.681898	Dalapon	3.83	3.85	3.89	52915	0.039441
2,4-DCAA	1.716462	2,4-DCAA	12.49	12.53	12.55	2610743	1.477054
Dicamba	0.024563	Dicamba	12.85	12.86	12.91	117222	0.015961
MCPP	0	MCPP	12.90	12.93	12.96	11545	1.581363
MCPA	0	MCPA	13.43	13.48	13.49	5077	0.505658
Pentachlorophenol	0.007499	2,4-DP (Dichloroprop)	13.96	14.00	14.01	71036	0.045961
2,4,5-T	0.014221	2,4-D	14.58	14.61	14.64	1108	0.000626
Dinoseb	0.004416	Pentachlorophenol	15.28	15.31	15.34	179084	0.007904
Picloram	0.008306	2,4,5-TP	15.77	15.82	15.83	92141	0.011019
Hexachlorophene	0.001136	2,4,5-T	16.47	16.50	16.53	45371	0.006141
		2,4-DB	17.18	17.23	17.24	12551	0.011984
		Picloram	19.48	19.49	19.54	11095	0.001662
		Hexachlorophene	26.52	26.55	26.58	7859	0.001136

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Dalapon			<1.8	<3.6	<4			
<input type="checkbox"/> 2,4-DCAA	A	1.716462	0.1	0.2	0.2		14.99	
<input type="checkbox"/> 2,4-DCAA-D1	A	1.716462	0.1	0.2	0.2			
<input type="checkbox"/> 2,4-DCAA-D2	B	1.477054	0.1	0.2	0.2			
<input type="checkbox"/> Dicamba			<0.08	<0.16	<0.3			
<input type="checkbox"/> MCPP			<50	<100	<200			
<input type="checkbox"/> MCPA			<50	<100	<200			
<input type="checkbox"/> 2,4-DP (Dichloroprop)			<0.16	<0.32	<0.5			
<input type="checkbox"/> 2,4-D			<0.25	<0.5	<0.6			
<input type="checkbox"/> Pentachlorophenol			<0.027	<0.06	<0.07			
<input type="checkbox"/> 2,4,5-TP			<0.01	<0.03	<0.05			
<input type="checkbox"/> 2,4,5-T			<0.065	<0.13	<0.15			
<input type="checkbox"/> 2,4-DB			<0.63	<1.3	<1.5			
<input type="checkbox"/> Dinoseb			<0.18	<0.4	<0.5			
<input type="checkbox"/> Picloram			<0.36	<0.8	<1			
<input type="checkbox"/> Hexachlorophene					<0.2			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Richard A Shober on 11/16/2018 10:00:52

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** BLANKA 11/6/18 F      **PBLK05310 ID:** AB      **Batchnumber:** 183100005A  
**Sample Amount:** 1000 ml      **Total Volume:** 10 ml      **Analyst:** 13378      **SDG:**      **State:**  
**Analyses:** 10407

### Analysis Report (A)

Injected on : Nov 09, 2018 07:22:08  
 Instrument : CP15--19850A  
 Result file : 15HERB18304004.125.RAW  
 Calibration file : 15HERB1830401.CAL  
 Method file : 15HERB.MET  
**%SSR(DCAA) : 86% (34-142)      Conc.: 1.716462**

### Analysis Report (B)

Injected on : Nov 09, 2018 07:22:08  
 Instrument : CP15--19850B  
 Result file : 15HERB18304004B.125.RAW  
 Calibration file : 15HERB1830401B.CAL  
 Method file : 15HERBB.MET  
**%SSR(DCAA) : 74% (34-142)      Conc.: 1.477054**

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.71	3.76	604683	0.681898
DCAA	11.91	11.96	11.97	2741847	1.716462
DICAMBA	12.04	12.08	12.10	157621	0.024563
MCPP	12.45	12.50	12.51	36149	-122.053000
MCPA	12.83	12.89	12.89	14984	-133.892400
DBOFR	14.21	14.23	14.26	11859180	0.001000
PCP	15.06	15.09	15.12	149436	0.007499
2,4,5-T	15.88	15.90	15.94	94684	0.014221
DINOSEB	16.90	16.95	16.96	15301	0.004416
Picloram	17.86	17.90	17.92	47946	0.008306
Hexachlorophene	26.10	26.12	26.16	7149	0.001136

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	52915	0.039441
DCAA	12.49	12.53	12.55	2610743	1.477054
DICAMBA	12.85	12.86	12.91	117222	0.015961
MCPP	12.90	12.93	12.96	11545	1.581363
MCPA	13.43	13.48	13.49	5077	0.505658
DBOFR	13.69	13.71	13.75	12828460	0.001000
2,4-DP	13.96	14.00	14.01	71036	0.045961
2,4-D	14.58	14.61	14.64	1108	0.000626
PCP	15.28	15.31	15.34	179084	0.007904
2,4,5-TP	15.77	15.82	15.83	92141	0.011019
2,4,5-T	16.47	16.50	16.53	45371	0.006141
2,4-DB	17.18	17.23	17.24	12551	0.011984
Picloram	19.48	19.49	19.54	11095	0.001662
Hexachlorophene	26.52	26.55	26.58	7859	0.001136

### Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon			<4	<1.8			
<input checked="" type="checkbox"/> DCAA	A	1.716462	0.2	0.1		14.99	
<input checked="" type="checkbox"/> DICAMBA			<0.3	<0.08			
<input checked="" type="checkbox"/> MCPP			<200	<50			
<input checked="" type="checkbox"/> MCPA			<200	<50			
<input checked="" type="checkbox"/> 2,4-DP			<0.5	<0.16			
<input checked="" type="checkbox"/> 2,4-D			<0.6	<0.25			
<input type="checkbox"/> DBOFR	A	0.001000				0.00	
<input checked="" type="checkbox"/> PCP			<0.07	<0.027			
<input checked="" type="checkbox"/> 2,4,5-TP			<0.05	<0.01			
<input checked="" type="checkbox"/> 2,4,5-T			<0.15	<0.065			
<input checked="" type="checkbox"/> 2,4-DB			<1.5	<0.63			
<input checked="" type="checkbox"/> DINOSEB			<0.5	<0.18			
<input checked="" type="checkbox"/> Picloram			<1	<0.36			
<input type="checkbox"/> Hexachlorophene	A	0.001136	<0.2			0.04	

Units: ug/l

Reviewed by: *[Signature]*  
 Date: 11/16/18

Verified by: *[Signature]*  
 Date: NOV 16 2018

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

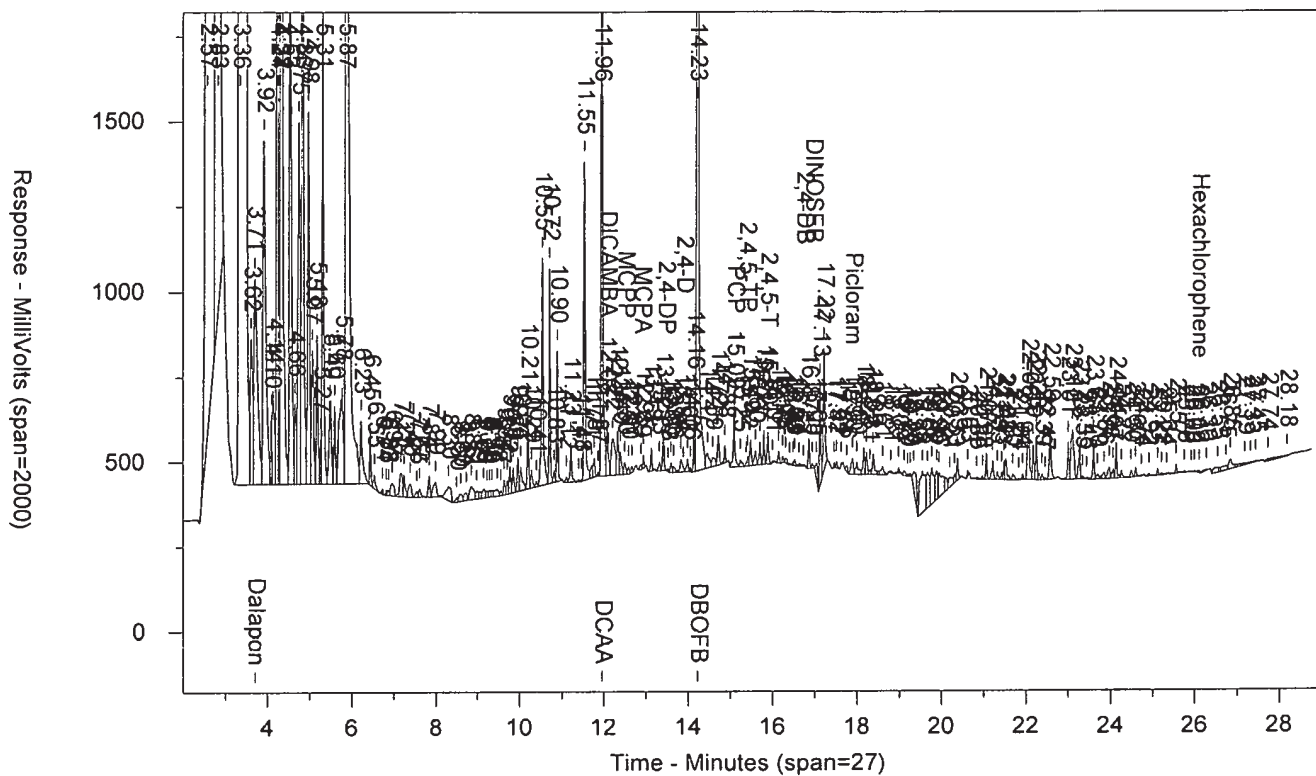
\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

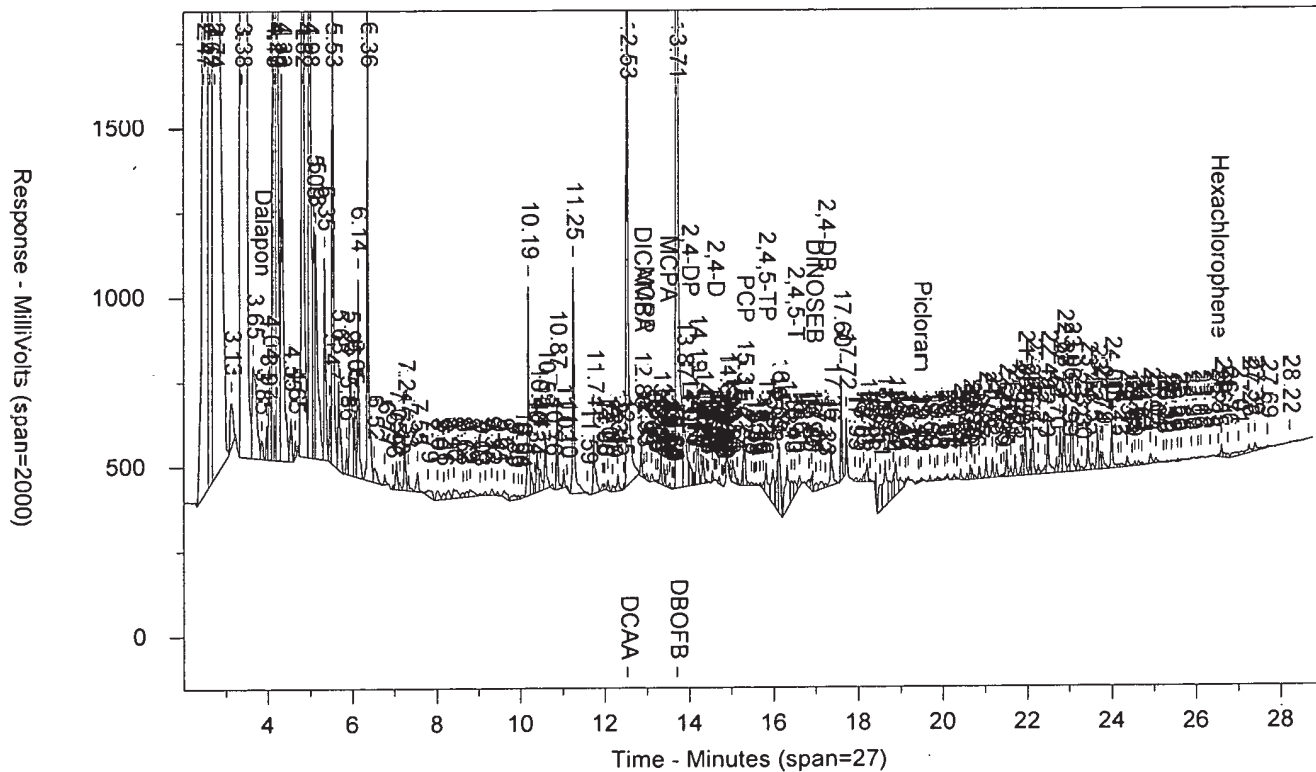
BLANKA 11/6/18 F ABPBLK05310 BLK 183100005A 10407

SW-846 8151/

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.125.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.125.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: BLANKA 11/6/18 F ABPBLK05310 BLK 183100005A 10407 SW-846 8151A  
 Injected On: 11/9/2018 7:22:08 AM Sample Weight: 1000  
 Instrument ID: CP15-19850 Dilution Factor: 10  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

Analyst: 13378

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.711	604683	.682	Dalapon	3.852	52915	.039	Dalapon
11.957	2741847	1.716	DCAA	12.529	2610743	1.477	DCAA
12.083	157621	.025	DICAMBA	12.864	117222	.016	DICAMBA
12.504	36149	-122.053	MCPP	12.934	11545	1.581	MCPP
12.892	14984	-133.892	MCPA	13.482	5077	.506	MCPA
14.227	11859180	.001	DBOFB	13.71	12828460	.001	DBOFB
	0		2,4-DP	13.996	71036	.046	2,4-DP
	0		2,4-D	14.607	1108	.001	2,4-D
15.094	149436	.007	PCP	15.306	179084	.008	PCP
	0		2,4,5-TP	15.819	92141	.011	2,4,5-TP
15.895	94684	.014	2,4,5-T	16.5	45371	.006	2,4,5-T
16.949	15301	.004	DINOSEB		0		DINOSEB
	0		2,4-DB	17.226	12551	.012	2,4-DB
17.899	47946	.008	Picloram	19.491	11095	.002	Picloram
26.12	7149	.001	Hexachlorophene	26.549	7859	.001	Hexachloropher

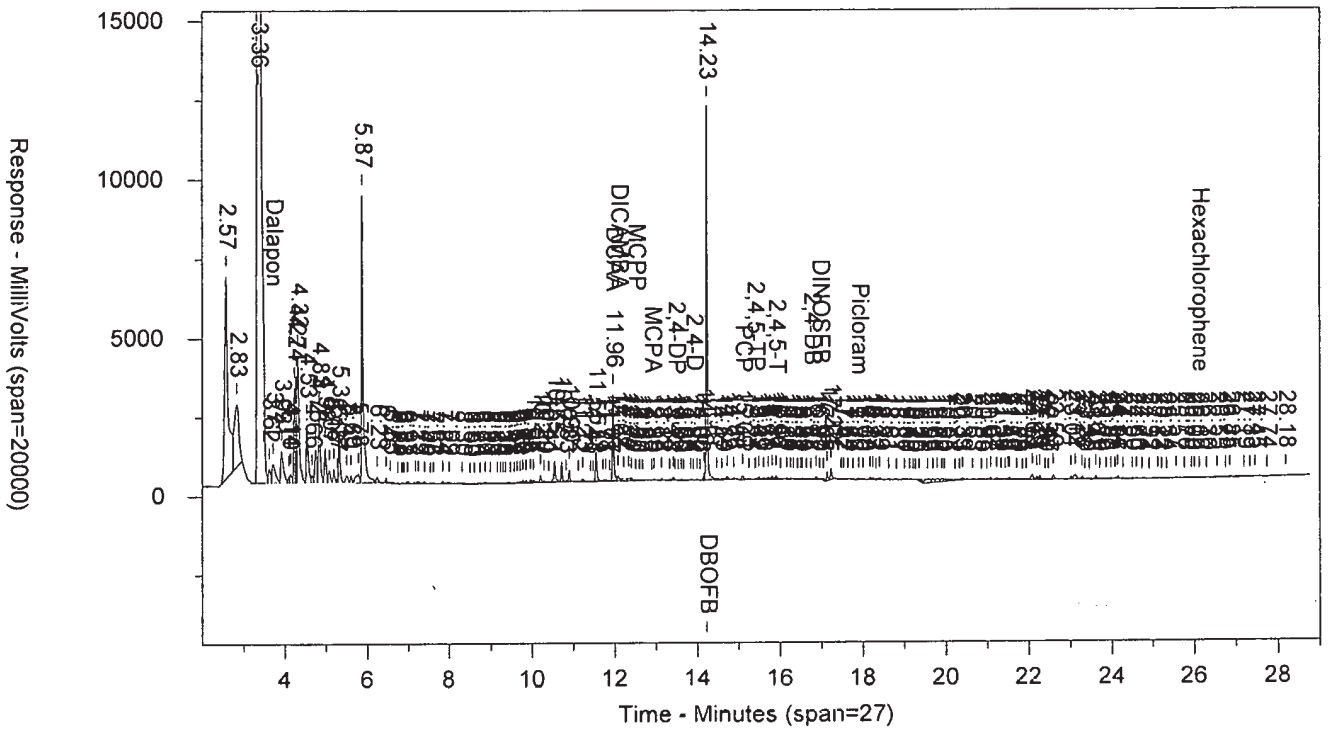
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 Area File: 15herb18304004B.125.RAW  
 Method A: 15HERB.MET  
 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
 Area File Created On: 11/9/2018 7:50:55 AM  
 File Reported On: 11/9/2018 at 3:10:51 PM

Chrom Perfect Chromatogram Report

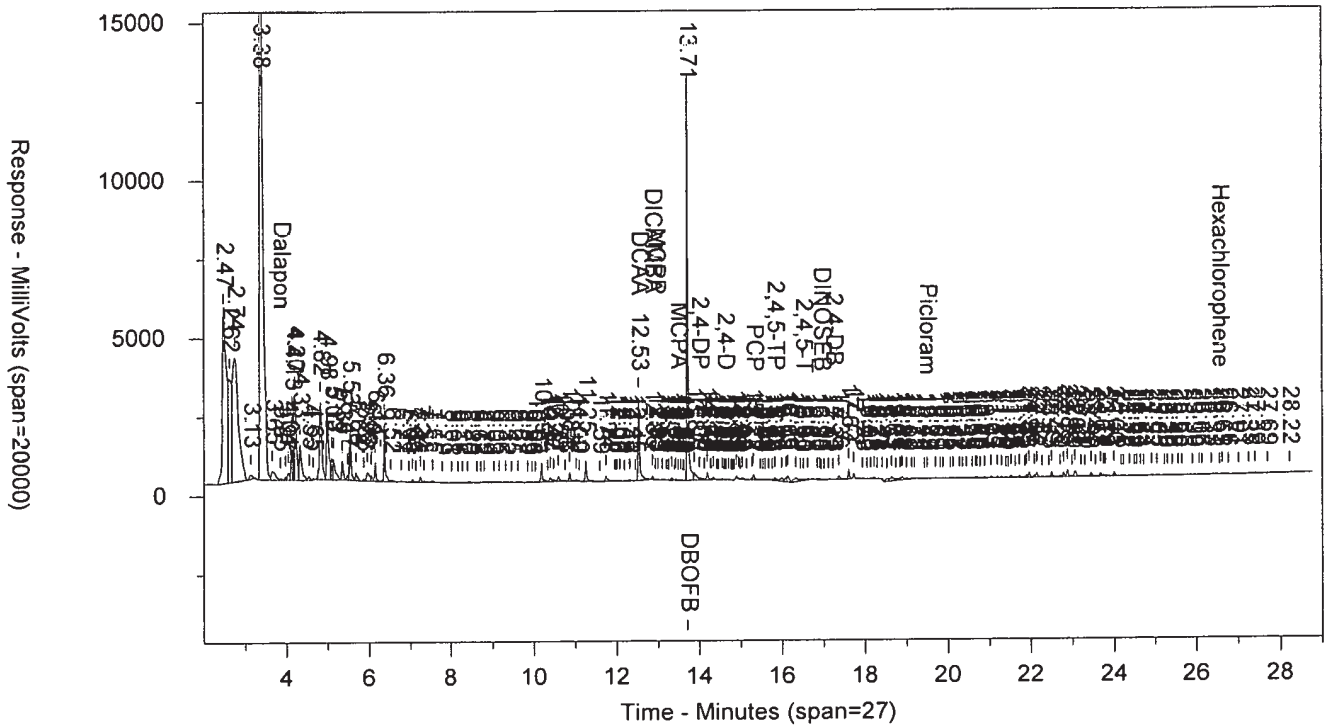
BLANKA 11/6/18 F ABPBLK05310 BLK 183100005A 10407

SW-846 81

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.125.RAW



# Data Summary

Sample Name: **LCSA** 11/6/18 F LCS05310 LCS Sample ID: AB Batchnumber: **18310005A**  
 Sample Amount: 1000 ml Total Volume: 10 ml Analyst: 120 SDG: State:

Analyses: 10407

## Analysis Report (A)

Injected on Nov 09, 2018 07:55:23  
 Instrument 19850A  
 Result file 15HERB18304004.126.RAW  
 Calibration file 15HERB1830401  
 Method file 15HERB

%SSR(DCAA) 95% (34 - 142) Conc: 1.899797

### Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	4050500	4.556654
2,4-DCAA	11.91	11.93	11.97	3042082	1.899797
Dicamba	12.04	12.06	12.10	1598339	0.248475
MCPP	12.45	12.47	12.51	2347380	279.9589
MCPA	12.83	12.86	12.89	4222458	476.5021
2,4-DP (Dichloroprop)	13.43	13.45	13.49	3283860	2.485222
2,4-D	13.87	13.89	13.93	3839982	2.430943
Pentachlorophenol	15.06	15.09	15.12	18277670	0.915033
2,4,5-TP	15.36	15.37	15.42	2053926	0.271632
2,4,5-T	15.88	15.90	15.94	1762308	0.264044
2,4-DB	16.71	16.73	16.77	2289439	2.472491
Dinoseb	16.90	16.92	16.96	4510982	1.298862
Picloram	17.86	17.88	17.92	11485440	1.984811
Hexachlorophene	26.10	26.13	26.16	9166348	1.453547

## Analysis Report (B)

Injected on Nov 09, 2018 07:55:23  
 Instrument 19850B  
 Result file 15HERB18304004B.126.RAW  
 Calibration file 15HERB1830401B  
 Method file 15HERBB

%SSR(DCAA) 95% (34 - 142) Conc: 1.899945

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.86	3.89	5128880	3.99883
2,4-DCAA	12.49	12.51	12.55	3210460	1.899945
Dicamba	12.85	12.87	12.91	1677259	0.238893
MCPP	12.90	12.93	12.96	1726741	247.4005
MCPA	13.43	13.46	13.49	3897474	406.028
2,4-DP (Dichloroprop)	13.96	13.98	14.01	3560930	2.40998
2,4-D	14.58	14.61	14.64	3912355	2.311462
Pentachlorophenol	15.28	15.30	15.34	18523490	0.855125
2,4,5-TP	15.77	15.79	15.83	2062596	0.258019
2,4,5-T	16.47	16.50	16.53	1755980	0.248626
Dinoseb	16.91	16.93	16.97	4394509	1.208559
2,4-DB	17.18	17.21	17.24	2269585	2.266793
Picloram	19.48	19.50	19.54	12028670	1.884401
Hexachlorophene	26.52	26.55	26.58	9875154	1.493059

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Dalapon	A	4.556654	1.8	3.6	4		13.04	
<input type="checkbox"/> 2,4-DCAA	B	1.899945	0.1	0.2	0.2		0.01	
<input type="checkbox"/> 2,4-DCAA-D1	A	1.899797	0.1	0.2	0.2			
<input type="checkbox"/> 2,4-DCAA-D2	B	1.899945	0.1	0.2	0.2			
<input type="checkbox"/> Dicamba	A	0.248475	0.08	0.16	<0.3	J	3.93	
<input type="checkbox"/> MCPP	A	279.9589	50	100	200		12.35	
<input type="checkbox"/> MCPA	A	476.5021	50	100	200		15.97	
<input type="checkbox"/> 2,4-DP (Dichloroprop)	A	2.485222	0.16	0.32	0.5		3.07	
<input type="checkbox"/> 2,4-D	A	2.430943	0.25	0.5	0.6		5.04	
<input type="checkbox"/> Pentachlorophenol	A	0.915033	0.027	0.06	0.07		6.77	
<input type="checkbox"/> 2,4,5-TP	A	0.271632	0.01	0.03	0.05		5.14	
<input type="checkbox"/> 2,4,5-T	A	0.264044	0.065	0.13	0.15		6.01	
<input type="checkbox"/> 2,4-DB	A	2.472491	0.63	1.3	1.5		8.68	
<input type="checkbox"/> Dinoseb	A	1.298862	0.18	0.4	0.5		7.20	
<input type="checkbox"/> Picloram	A	1.984811	0.36	0.8	1		5.19	
<input type="checkbox"/> Hexachlorophene	B	1.493059			0.2		2.68	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomaszko*  
 Valerie L. Tomaszko  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Richard A Shober on 11/16/2018 10:00:54



# Data Summary

Sample Name: **LCSA** 11/6/18 F LCS05310 LCS Sample ID: **AB** Batchnumber: **183100005A**  
 Sample Amount: 1000 ml Total Volume: 10 ml Analyst: 120 SDG: State:

Analyses: 10407

### Analysis Report (A)

Injected on Nov 09, 2018 07:55:23  
 Instrument 19850A  
 Result file 15HERB18304004.126.RAW  
 Calibration file 15HERB1830401  
 Method file 15HERB

%SSR(DCAA) 95% (32 - 138) Conc: 1.899797

### Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	4050500	4.556654
2,4-DCAA	11.91	11.93	11.97	3042082	1.899797
Dicamba	12.04	12.06	12.10	1598339	0.248475
MCPP	12.45	12.47	12.51	2347380	279.9589
MCPA	12.83	12.86	12.89	4222458	476.5021
2,4-DP (Dichloroprop)	13.43	13.45	13.49	3283860	2.485222
2,4-D	13.87	13.89	13.93	3839982	2.430943
Pentachlorophenol	15.06	15.09	15.12	18277670	0.915033
2,4,5-TP	15.36	15.37	15.42	2053926	0.271632
2,4,5-T	15.88	15.90	15.94	1762308	0.264044
2,4-DB	16.71	16.73	16.77	2289439	2.472491
Dinoseb	16.90	16.92	16.96	4510982	1.298862
Picloram	17.86	17.88	17.92	11485440	1.984811
Hexachlorophene	26.10	26.13	26.16	9166348	1.453547

### Analysis Report (B)

Injected on Nov 09, 2018 07:55:23  
 Instrument 19850B  
 Result file 15HERB18304004B.126.RAW  
 Calibration file 15HERB1830401B  
 Method file 15HERBB

%SSR(DCAA) 95% (32 - 138) Conc: 1.899945

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.86	3.89	5128880	3.99883
2,4-DCAA	12.49	12.51	12.55	3210460	1.899945
Dicamba	12.85	12.87	12.91	1677259	0.238893
MCPP	12.90	12.93	12.96	1726741	247.4005
MCPA	13.43	13.46	13.49	3897474	406.028
2,4-DP (Dichloroprop)	13.96	13.98	14.01	3560930	2.40998
2,4-D	14.58	14.61	14.64	3912355	2.311462
Pentachlorophenol	15.28	15.30	15.34	18523490	0.855125
2,4,5-TP	15.77	15.79	15.83	2062596	0.258019
2,4,5-T	16.47	16.50	16.53	1755980	0.248626
2,4-DB	16.91	16.93	16.97	4394509	1.208559
Dinoseb	17.18	17.21	17.24	2269585	2.266793
Picloram	19.48	19.50	19.54	12028670	1.884401
Hexachlorophene	26.52	26.55	26.58	9875154	1.493059

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Dalapon	A	4.556654	1.8	3.6	4		13.04	
<input type="checkbox"/> 2,4-DCAA	B	1.899945	0.1	0.2	0.2		0.01	
<input type="checkbox"/> 2,4-DCAA-D1	A	1.899797	0.1	0.2	0.2			
<input type="checkbox"/> 2,4-DCAA-D2	B	1.899945	0.1	0.2	0.2			
<input type="checkbox"/> Dicamba	A	0.248475	0.08	0.16	<0.3	J	3.93	
<input type="checkbox"/> MCPP	A	279.9589	50	100	200		12.35	
<input type="checkbox"/> MCPA	A	476.5021	50	100	200		15.97	
<input type="checkbox"/> 2,4-DP (Dichloroprop)	A	2.485222	0.16	0.32	0.5		3.07	
<input type="checkbox"/> 2,4-D	A	2.430943	0.25	0.5	0.6		5.04	
<input type="checkbox"/> Pentachlorophenol	A	0.915033	0.027	0.06	0.07		6.77	
<input type="checkbox"/> 2,4,5-TP	A	0.271632	0.01	0.03	0.05		5.14	
<input type="checkbox"/> 2,4,5-T	A	0.264044	0.065	0.13	0.15		6.01	
<input type="checkbox"/> 2,4-DB	A	2.472491	0.63	1.3	1.5		8.68	
<input type="checkbox"/> Dinoseb	A	1.298862	0.18	0.4	0.5		7.20	
<input type="checkbox"/> Picloram	A	1.984811	0.36	0.8	1		5.19	
<input type="checkbox"/> Hexachlorophene	B	1.493059			0.2		2.68	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Richard A Shober on 11/16/2018 10:00:57

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** LCSA 11/6/18 F      **LCS05310 ID:** AB      **Batchnumber:** 183100005A  
**Sample Amount:** 1000 ml      **Total Volume:** 10 ml      **Analyst:** 13378      **SDG:**      **State:**  
**Analyses:** 10407

**Analysis Report (A)**

Injected on : Nov 09, 2018 07:55:23  
 Instrument : CP15--19850A  
 Result file : 15HERB18304004.126.RAW  
 Calibration file : 15HERB1830401.CAL  
 Method file : 15HERB.MET  
 %SSR(DCAA) : 95% (34-142)      Conc.: 1.899797

**Analysis Report (B)**

Injected on : Nov 09, 2018 07:55:23  
 Instrument : CP15--19850B  
 Result file : 15HERB18304004B.126.RAW  
 Calibration file : 15HERB1830401B.CAL  
 Method file : 15HERBB.MET  
 %SSR(DCAA) : 95% (34-142)      Conc.: 1.899945

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.72	3.76	4050500	4.556654
DCAA	11.91	11.93	11.97	3042082	1.899797
DICAMBA	12.04	12.06	12.10	1598339	0.248476
MCPP	12.45	12.47	12.51	2347380	279.958900
MCPA	12.83	12.86	12.89	4222458	476.502100
2,4-DP	13.43	13.45	13.49	3283860	2.485222
2,4-D	13.87	13.89	13.93	3839982	2.430943
DBOFB	14.21	14.23	14.26	11888020	0.001000
PCP	15.06	15.09	15.12	18277670	0.915033
2,4,5-TP	15.36	15.37	15.42	2053926	0.271632
2,4,5-T	15.88	15.90	15.94	1762308	0.264044
2,4-DB	16.71	16.73	16.77	2289439	2.472491
DINOSEB	16.90	16.92	16.96	4510982	1.298862
Picloram	17.86	17.88	17.92	11485440	1.984811
Hexachlorophene	26.10	26.13	26.16	9166348	1.453547

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.86	3.89	5128880	3.998830
DCAA	12.49	12.51	12.55	3210460	1.899945
DICAMBA	12.85	12.87	12.91	1677259	0.238893
MCPP	12.90	12.93	12.96	1726741	247.400500
MCPA	13.43	13.46	13.49	3897474	406.028000
DBOFB	13.69	13.71	13.75	12264020	0.001000
2,4-DP	13.96	13.98	14.01	3560930	2.409980
2,4-D	14.58	14.61	14.64	3912355	2.311462
PCP	15.28	15.30	15.34	18523490	0.855125
2,4,5-TP	15.77	15.79	15.83	2062596	0.258019
2,4,5-T	16.47	16.50	16.53	1755980	0.248626
DINOSEB	16.91	16.93	16.97	4394509	1.208559
2,4-DB	17.18	17.21	17.24	2269585	2.266793
Picloram	19.48	19.50	19.54	12028670	1.884401
Hexachlorophene	26.52	26.55	26.58	9875154	1.493059

**Summary Report**

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon	A	4.556654	4	1.8		13.04	
<input checked="" type="checkbox"/> DCAA	B	1.899945	0.2	0.1		0.01	
<input checked="" type="checkbox"/> DICAMBA	A	0.248476	<0.3	0.08	J	3.93	
<input checked="" type="checkbox"/> MCPP	A	279.958900	200	50		12.35	
<input checked="" type="checkbox"/> MCPA	A	476.502100	200	50		15.97	
<input checked="" type="checkbox"/> 2,4-DP	A	2.485222	0.5	0.16		3.07	
<input checked="" type="checkbox"/> 2,4-D	A	2.430943	0.6	0.25		5.04	
<input type="checkbox"/> DBOFB	A	0.001000				0.00	
<input checked="" type="checkbox"/> PCP	A	0.915033	0.07	0.027		6.77	
<input checked="" type="checkbox"/> 2,4,5-TP	A	0.271632	0.05	0.01		5.14	
<input checked="" type="checkbox"/> 2,4,5-T	A	0.264044	0.15	0.065		6.01	
<input checked="" type="checkbox"/> 2,4-DB	A	2.472491	1.5	0.63		8.68	
<input checked="" type="checkbox"/> DINOSEB	A	1.298862	0.5	0.18		7.20	
<input checked="" type="checkbox"/> Picloram	A	1.984811	1	0.36		5.19	
<input type="checkbox"/> Hexachlorophene	B	1.493059	0.2			2.68	

Units: ug/l

Reviewed by: RUSSA  
 Date: 11/16/18

Verified by: Vasile L. Tomayko  
 Date: NOV 16 2018

  
 Vasile L. Tomayko  
 Principal Specialist

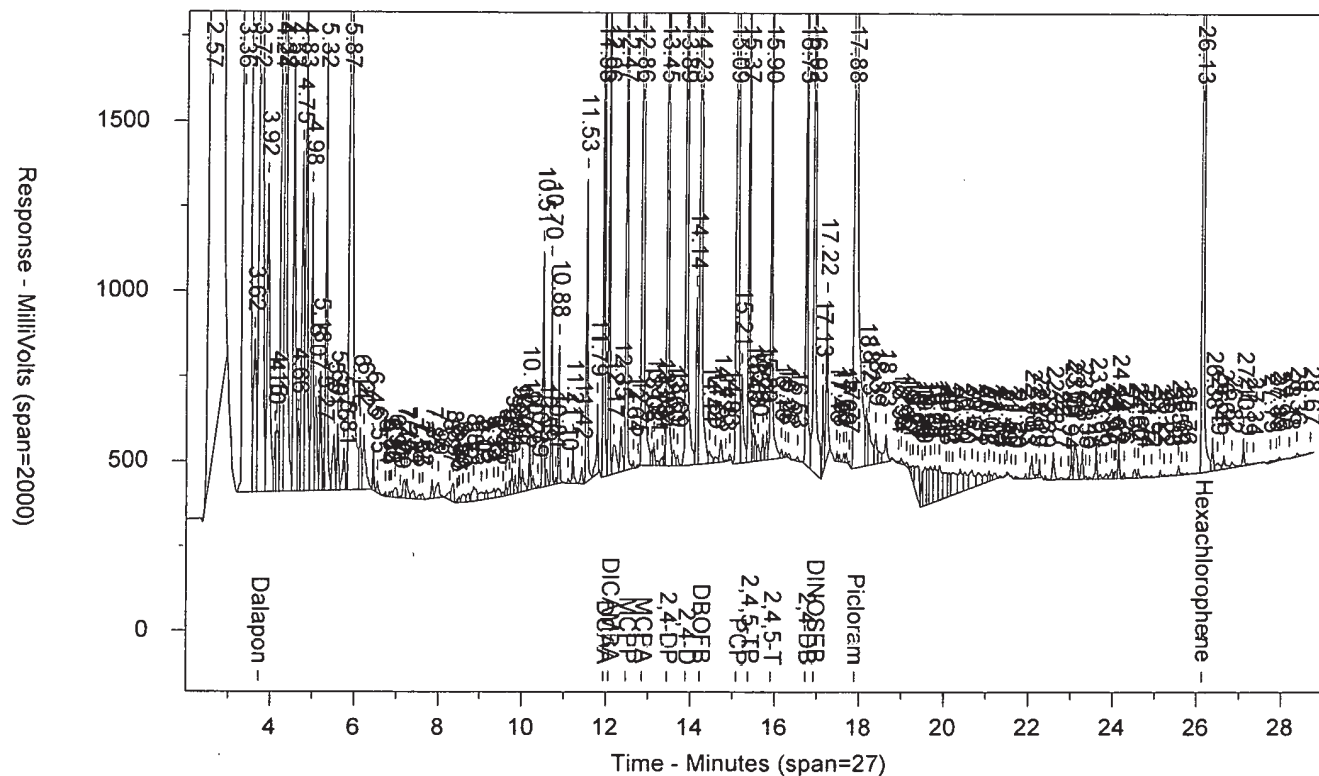
%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

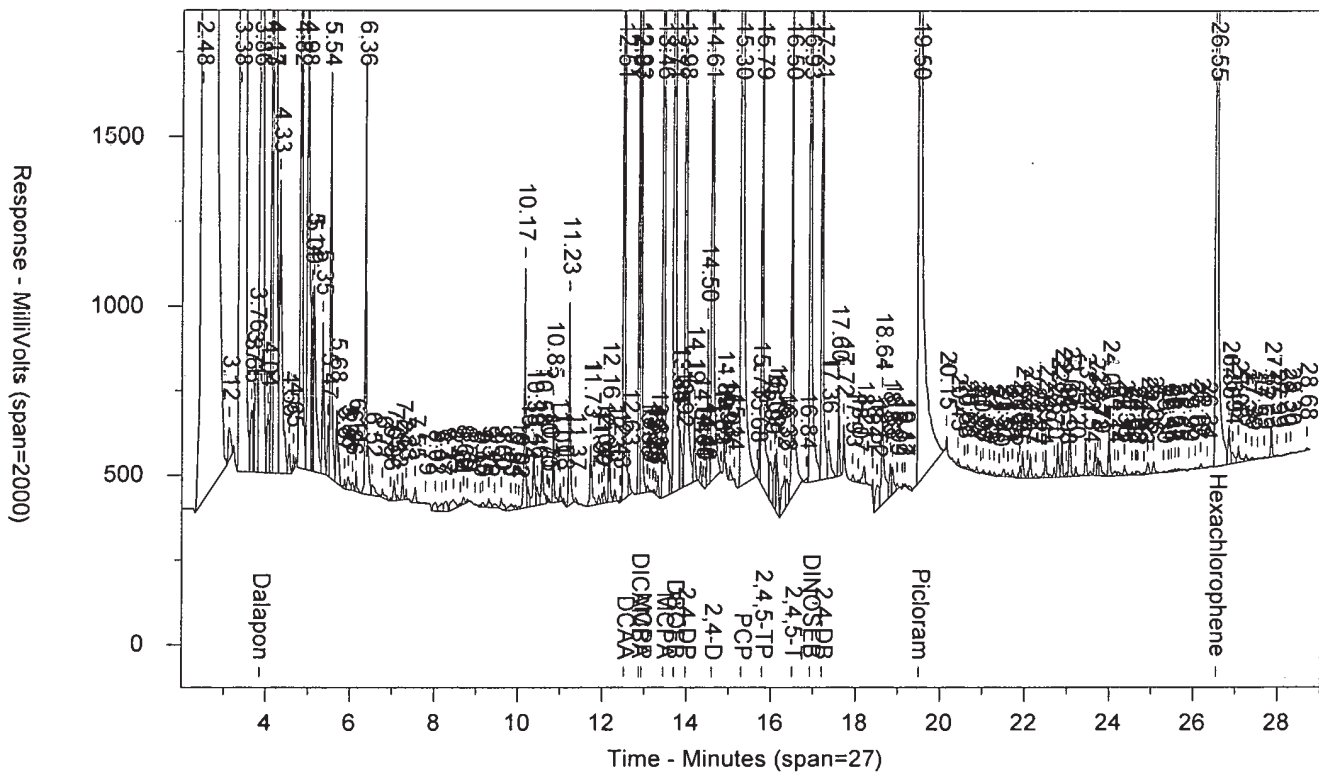
\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

LCSA 11/6/18 F ABLCS05310 LCS 183100005A 10407 SW-846 8151A  
 \\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.126.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.126.RAW



## LANCASTER LABORATORIES

Sample Number: LCSA 11/6/18 F ABLCS05310 LCS 183100005A 10407 SW-846 8151A  
Injected On: 11/9/2018 7:55:23 AM Sample Weight: 1000  
Instrument ID: CP15-19850 Dilution Factor: 10  
Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
Column B ID: ZB35 30m x 0.32mm x 0.25um  
Injection Volume: 1 ul

Threshold: 4  
Calibration Type: internal  
Quantitation: Height

Analyst: 13378

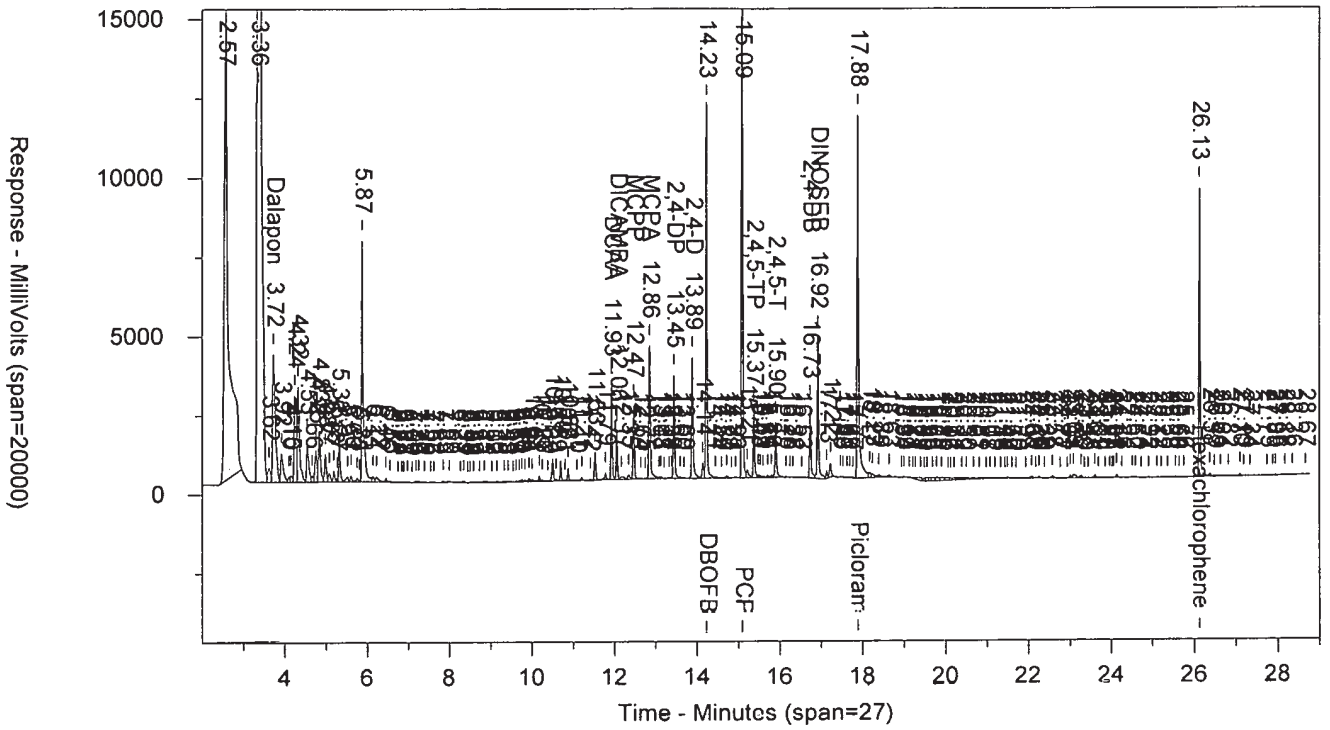
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.724	4050500	4.557	Dalapon	3.856	5128881	3.999	Dalapon
11.934	3042083	1.9	DCAA	12.512	3210460	1.9	DCAA
12.06	1598339	.248	DICAMBA	12.874	1677259	.239	DICAMBA
12.472	2347380	279.959	MCPP	12.929	1726741	247.401	MCPP
12.86	4222458	476.502	MCPA	13.459	3897474	406.028	MCPA
13.449	3283861	2.485	2,4-DP	13.982	3560930	2.41	2,4-DP
14.225	11888020	.001	DBOFB	13.708	12264020	.001	DBOFB
13.889	3839982	2.431	2,4-D	14.606	3912355	2.311	2,4-D
15.088	18277670	.915	PCP	15.304	18523490	.855	PCP
15.374	2053926	.272	2,4,5-TP	15.793	2062596	.258	2,4,5-TP
15.901	1762308	.264	2,4,5-T	16.5	1755980	.249	2,4,5-T
16.734	2289439	2.472	2,4-DB	17.207	2269585	2.267	2,4-DB
16.92	4510982	1.299	DINOSEB	16.93	4394509	1.209	DINOSEB
17.882	11485440	1.985	Picloram	19.504	12028670	1.884	Picloram
26.128	9166348	1.454	Hexachlorophene	26.555	9875154	1.493	Hexachloropher

## Files:

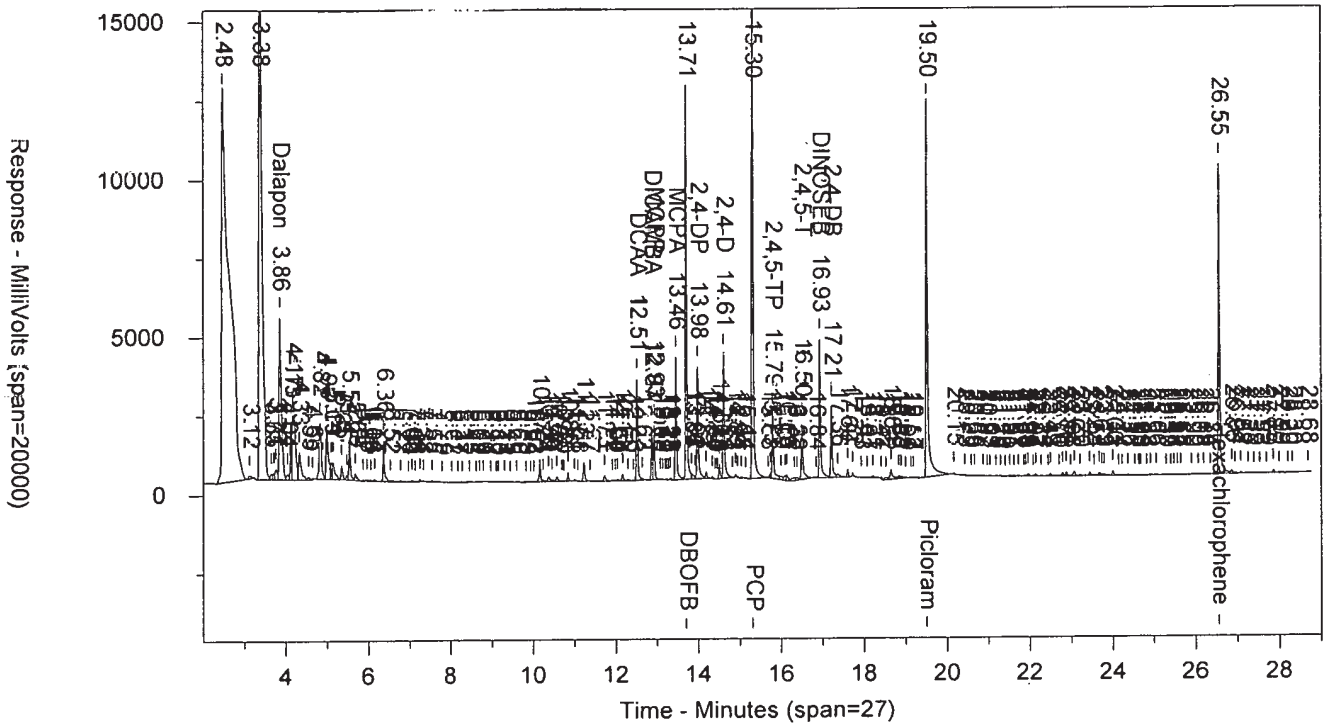
Area File: 15herb18304004.126.RAW  
Area File: 15herb18304004B.126.RAW  
Method A: 15HERB.MET  
Method B: 15HERBB.MET  
Calibration File A: 15HERB1830401.CAL  
Calibration File B: 15HERB1830401b.CAL  
Format A: herw15.FMTA  
Format B: herw15.FMTA  
Area File Created On: 11/9/2018 8:24:10 AM  
File Reported On: 11/9/2018 at 3:11:18 PM

LCSA 11/6/18 F ABLCS05310 LCS 183100005A 10407 SW-846 815

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.126.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.126.RAW



# Data Summary

Sample Name: **LCSDA** 11/6/18 F LCSD05310 LCSD Sample ID: AB Batchnumber: **183100005A**  
 Sample Amount: 1000 ml Total Volume: 10 ml Analyst: 120 SDG: State:

Analyses: 10407

## Analysis Report (A)

Injected on Nov 09, 2018 08:28:23  
 Instrument 19850A  
 Result file 15HERB18304004.127.RAW  
 Calibration file 15HERB1830401  
 Method file 15HERB

%SSR(DCAA) 91% (34 - 142) Conc: 1.816052

### Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	4282473	5.295657
2,4-DCAA	11.91	11.94	11.97	2645479	1.816052
Dicamba	12.04	12.06	12.10	1409522	0.240865
MCPP	12.45	12.47	12.51	2161758	284.9834
MCPA	12.83	12.86	12.89	3841500	476.535
2,4-DP (Dichloroprop)	13.43	13.45	13.49	3023471	2.515209
2,4-D	13.87	13.89	13.93	3384876	2.355462
Pentachlorophenol	15.06	15.09	15.12	16414870	0.903319
2,4,5-TP	15.36	15.37	15.42	1803392	0.262165
2,4,5-T	15.88	15.90	15.94	1600210	0.263548
2,4-DB	16.71	16.73	16.77	1994642	2.367872
Dinoseb	16.90	16.92	16.96	4182516	1.323785
Picloram	17.86	17.88	17.92	10728710	2.038013
Hexachlorophene	26.10	26.13	26.16	7319332	1.275828

## Analysis Report (B)

Injected on Nov 09, 2018 08:28:23  
 Instrument 19850B  
 Result file 15HERB18304004B.127.RAW  
 Calibration file 15HERB1830401B  
 Method file 15HERBB

%SSR(DCAA) 92% (34 - 142) Conc: 1.831572

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	4633830	3.899027
2,4-DCAA	12.49	12.51	12.55	2867770	1.831572
Dicamba	12.85	12.88	12.91	1491959	0.229333
MCPP	12.90	12.93	12.96	1529532	236.5036
MCPA	13.43	13.46	13.49	3509832	394.6072
2,4-DP (Dichloroprop)	13.96	13.98	14.01	3175679	2.319489
2,4-D	14.58	14.61	14.64	3590780	2.289513
Pentachlorophenol	15.28	15.30	15.34	16172400	0.805726
2,4,5-TP	15.77	15.79	15.83	1836642	0.247952
2,4,5-T	16.47	16.50	16.53	1543328	0.235826
Dinoseb	16.91	16.93	16.97	3777936	1.12129
2,4-DB	17.18	17.21	17.24	2047084	2.206515
Picloram	19.48	19.50	19.54	12070670	2.040765
Hexachlorophene	26.52	26.55	26.58	8130809	1.3267

## Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Dalapon	A	5.295657	1.8	3.6	4		30.38	
<input type="checkbox"/> 2,4-DCAA	B	1.831572	0.1	0.2	0.2		0.85	
<input type="checkbox"/> 2,4-DCAA-D1	A	1.816052	0.1	0.2	0.2			
<input type="checkbox"/> 2,4-DCAA-D2	B	1.831572	0.1	0.2	0.2			
<input type="checkbox"/> Dicamba	A	0.240865	0.08	0.16	<0.3	J	4.91	
<input type="checkbox"/> MCPP	A	284.9834	50	100	200		18.59	
<input type="checkbox"/> MCPA	A	476.535	50	100	200		18.81	
<input type="checkbox"/> 2,4-DP (Dichloroprop)	A	2.515209	0.16	0.32	0.5		8.10	
<input type="checkbox"/> 2,4-D	A	2.355462	0.25	0.5	0.6		2.84	
<input type="checkbox"/> Pentachlorophenol	A	0.903319	0.027	0.06	0.07		11.42	
<input type="checkbox"/> 2,4,5-TP	A	0.262165	0.01	0.03	0.05		5.57	
<input type="checkbox"/> 2,4,5-T	A	0.263548	0.065	0.13	0.15		11.10	
<input type="checkbox"/> 2,4-DB	A	2.367872	0.63	1.3	1.5		7.05	
<input type="checkbox"/> Dinoseb	A	1.323785	0.18	0.4	0.5		16.56	
<input type="checkbox"/> Picloram	B	2.040765	0.36	0.8	1		0.13	
<input type="checkbox"/> Hexachlorophene	B	1.3267			0.2		3.91	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayto*  
 Valerie L. Tomayto  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Richard A Shober on 11/16/2018 10:00:59

# Data Summary

**Sample Name:** LCSDA      11/6/18 F      LCSD05310 LCSD Sample ID: AB Batchnumber: 183100005A  
**Sample Amount:** 1000 ml    **Total Volume:** 10 ml    **Analyst:** 120    **SDG:**      **State:**  
**Analyses:** 10407

**Analysis Report (A)**

**Injected on** Nov 09, 2018 08:28:23  
**Instrument** 19850A  
**Result file** 15HERB18304004.127.RAW  
**Calibration file** 15HERB1830401  
**Method file** 15HERB

%SSR(DCAA) 91% (32 - 138) Conc: 1.816052

**Single Component Data**

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	4282473	5.295657
2,4-DCAA	11.91	11.94	11.97	2645479	1.816052
Dicamba	12.04	12.06	12.10	1409522	0.240865
MCPP	12.45	12.47	12.51	2161758	284.9834
MCPA	12.83	12.86	12.89	3841500	476.535
2,4-DP (Dichloroprop)	13.43	13.45	13.49	3023471	2.515209
2,4-D	13.87	13.89	13.93	3384876	2.355462
Pentachlorophenol	15.06	15.09	15.12	16414870	0.903319
2,4,5-TP	15.36	15.37	15.42	1803392	0.262165
2,4,5-T	15.88	15.90	15.94	1600210	0.263548
2,4-DB	16.71	16.73	16.77	1994642	2.367872
Dinoseb	16.90	16.92	16.96	4182516	1.323785
Picloram	17.86	17.88	17.92	10728710	2.038013
Hexachlorophene	26.10	26.13	26.16	7319332	1.275828

**Analysis Report (B)**

**Injected on** Nov 09, 2018 08:28:23  
**Instrument** 19850B  
**Result file** 15HERB18304004B.127.RAW  
**Calibration file** 15HERB1830401B  
**Method file** 15HERBB

%SSR(DCAA) 92% (32 - 138) Conc: 1.831572

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	4633830	3.899027
2,4-DCAA	12.49	12.51	12.55	2867770	1.831572
Dicamba	12.85	12.88	12.91	1491959	0.229333
MCPP	12.90	12.93	12.96	1529532	236.5036
MCPA	13.43	13.46	13.49	3509832	394.6072
2,4-DP (Dichloroprop)	13.96	13.98	14.01	3175679	2.319489
2,4-D	14.58	14.61	14.64	3590780	2.289513
Pentachlorophenol	15.28	15.30	15.34	16172400	0.805726
2,4,5-TP	15.77	15.79	15.83	1836642	0.247952
2,4,5-T	16.47	16.50	16.53	1543328	0.235826
Dinoseb	16.91	16.93	16.97	3777936	1.12129
2,4-DB	17.18	17.21	17.24	2047084	2.206515
Picloram	19.48	19.50	19.54	12070670	2.040765
Hexachlorophene	26.52	26.55	26.58	8130809	1.3267

**Single Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Dalapon	A	5.295657	1.8	3.6	4		30.38	
<input type="checkbox"/> 2,4-DCAA	B	1.831572	0.1	0.2	0.2		0.85	
<input type="checkbox"/> 2,4-DCAA-D1	A	1.816052	0.1	0.2	0.2			
<input type="checkbox"/> 2,4-DCAA-D2	B	1.831572	0.1	0.2	0.2			
<input type="checkbox"/> Dicamba	A	0.240865	0.08	0.16	<0.3	J	4.91	
<input type="checkbox"/> MCPP	A	284.9834	50	100	200		18.59	
<input type="checkbox"/> MCPA	A	476.535	50	100	200		18.81	
<input type="checkbox"/> 2,4-DP (Dichloroprop)	A	2.515209	0.16	0.32	0.5		8.10	
<input type="checkbox"/> 2,4-D	A	2.355462	0.25	0.5	0.6		2.84	
<input type="checkbox"/> Pentachlorophenol	A	0.903319	0.027	0.06	0.07		11.42	
<input type="checkbox"/> 2,4,5-TP	A	0.262165	0.01	0.03	0.05		5.57	
<input type="checkbox"/> 2,4,5-T	A	0.263548	0.065	0.13	0.15		11.10	
<input type="checkbox"/> 2,4-DB	A	2.367872	0.63	1.3	1.5		7.05	
<input type="checkbox"/> Dinoseb	A	1.323785	0.18	0.4	0.5		16.56	
<input type="checkbox"/> Picloram	B	2.040765	0.36	0.8	1		0.13	
<input type="checkbox"/> Hexachlorophene	B	1.3267			0.2		3.91	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Richard A Shober on 11/16/2018 10:01:01

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** LCSDA 11/6/18 F      **LCSD05310 ID:** AB      **Batchnumber:** 183100005A  
**Sample Amount:** 1000 ml      **Total Volume:** 10 ml      **Analyst:** 13378      **SDG:**      **State:**  
**Analyses:** 10407

### Analysis Report (A)

Injected on : Nov 09, 2018 08:28:23  
 Instrument : CP15--19850A  
 Result file : 15HERB18304004.127.RAW  
 Calibration file : 15HERB1830401.CAL  
 Method file : 15HERB.MET  
 %SSR(DCAA) : 91% (34-142)      Conc.: 1.816052

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.72	3.76	4282473	5.295657
DCAA	11.91	11.94	11.97	2645479	1.816052
DICAMBA	12.04	12.06	12.10	1409522	0.240865
MCPP	12.45	12.47	12.51	2161758	284.983400
MCPA	12.83	12.86	12.89	3841500	476.535000
2,4-DP	13.43	13.45	13.49	3023471	2.515209
2,4-D	13.87	13.89	13.93	3384876	2.355462
DBOFB	14.21	14.23	14.26	10814880	0.001000
PCP	15.06	15.09	15.12	16414870	0.903319
2,4,5-TP	15.36	15.37	15.42	1803392	0.262165
2,4,5-T	15.88	15.90	15.94	1600210	0.263548
2,4-DB	16.71	16.73	16.77	1994642	2.367872
DINOSEB	16.90	16.92	16.96	4182516	1.323785
Picloram	17.86	17.88	17.92	10728710	2.038013
Hexachlorophene	26.10	26.13	26.16	7319332	1.275828

### Analysis Report (B)

Injected on : Nov 09, 2018 08:28:23  
 Instrument : CP15--19850B  
 Result file : 15HERB18304004B.127.RAW  
 Calibration file : 15HERB1830401B.CAL  
 Method file : 15HERBB.MET  
 %SSR(DCAA) : 92% (34-142)      Conc.: 1.831572

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	4633830	3.899027
DCAA	12.49	12.51	12.55	2867770	1.831572
DICAMBA	12.85	12.88	12.91	1491959	0.229333
MCPP	12.90	12.93	12.96	1529532	236.503600
MCPA	13.43	13.46	13.49	3509832	394.607200
DBOFB	13.69	13.71	13.75	11363890	0.001000
2,4-DP	13.96	13.98	14.01	3175679	2.319489
2,4-D	14.58	14.61	14.64	3590780	2.289513
PCP	15.28	15.30	15.34	16172400	0.805726
2,4,5-TP	15.77	15.79	15.83	1836642	0.247952
2,4,5-T	16.47	16.50	16.53	1543328	0.235826
DINOSEB	16.91	16.93	16.97	3777936	1.121290
2,4-DB	17.18	17.21	17.24	2047084	2.206515
Picloram	19.48	19.50	19.54	12070670	2.040765
Hexachlorophene	26.52	26.55	26.58	8130809	1.326700

### Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Dalapon	A	5.295657	4	1.8		30.38	
<input checked="" type="checkbox"/> DCAA	B	1.831572	0.2	0.1		0.85	
<input checked="" type="checkbox"/> DICAMBA	A	0.240865	<0.3	0.08	J	4.91	
<input checked="" type="checkbox"/> MCPP	A	204.903400	200	50		18.59	
<input checked="" type="checkbox"/> MCPA	A	476.535000	200	50		18.81	
<input checked="" type="checkbox"/> 2,4-DP	A	2.515209	0.5	0.16		8.10	
<input checked="" type="checkbox"/> 2,4-D	A	2.355462	0.6	0.25		2.84	
<input type="checkbox"/> DBOFB	A	0.001000				0.00	
<input checked="" type="checkbox"/> PCP	A	0.903319	0.07	0.027		11.42	
<input checked="" type="checkbox"/> 2,4,5-TP	A	0.262165	0.05	0.01		5.57	
<input checked="" type="checkbox"/> 2,4,5-T	A	0.263548	0.15	0.065		11.10	
<input checked="" type="checkbox"/> 2,4-DB	A	2.367872	1.5	0.63		7.05	
<input checked="" type="checkbox"/> DINOSEB	A	1.323785	0.5	0.18		16.56	
<input checked="" type="checkbox"/> Picloram	B	2.040765	1	0.38		0.13	
<input type="checkbox"/> Hexachlorophene	B	1.326700	0.2			3.91	

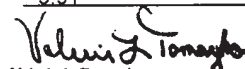
Units: ug/l

Reviewed by: *MAS*

Date: 11/16/18

Verified by: \_\_\_\_\_

Date: **NOV 16 2018**

  
 Valerie L. Tomayko  
 Principal Specialist

%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

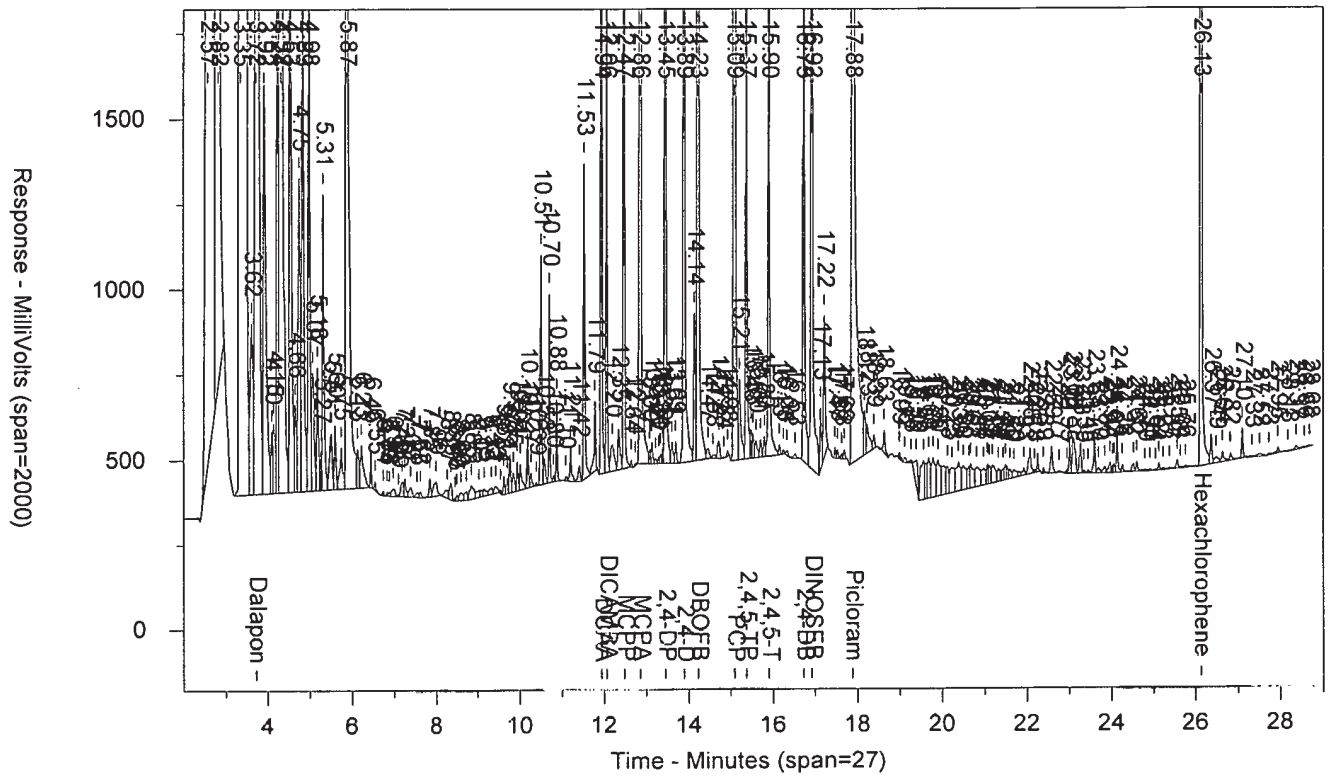
\* Recovery outside QC Limits



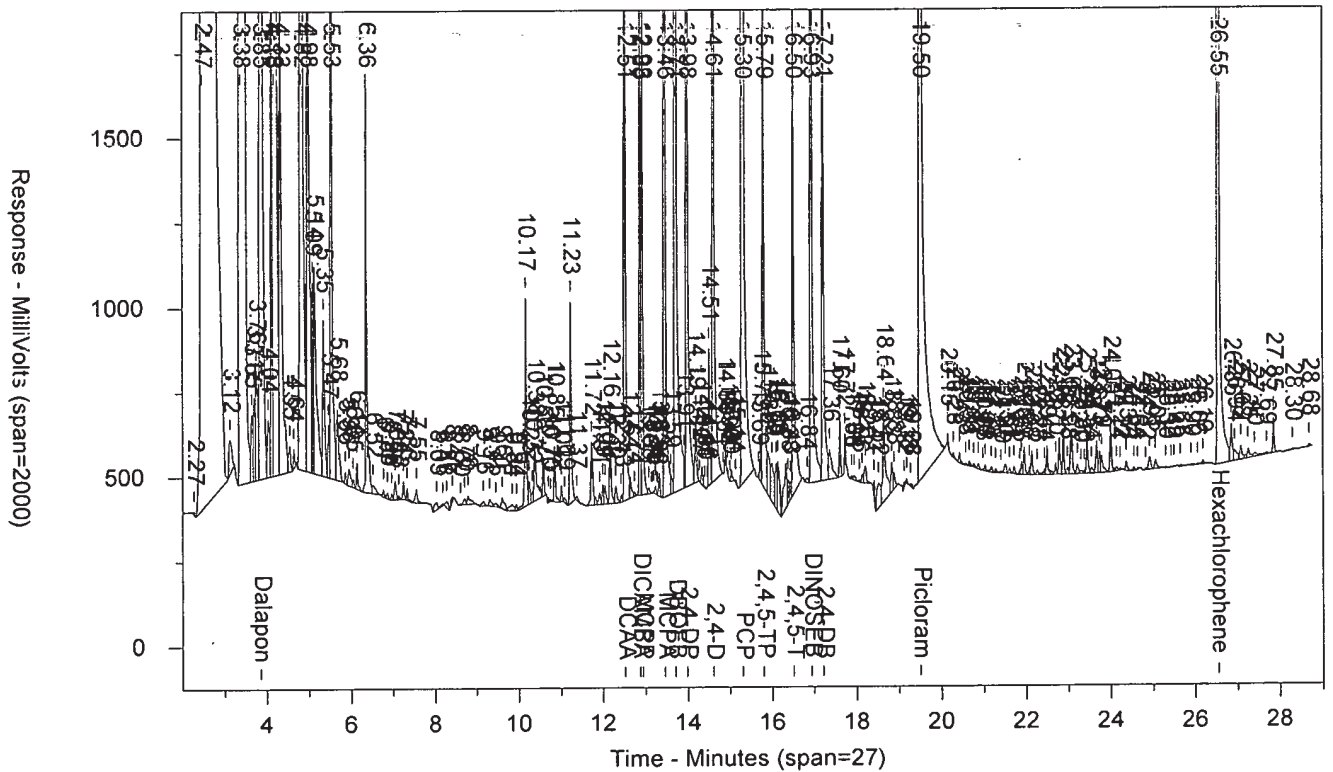
LCSA 11/6/18 F ABLCS05310 LCS0 183100005A 10407

SW-846 8151.

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.127.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.127.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: LCSDA 11/6/18 F ABLCS05310 LCSD 183100005A 10407 SW-846 8151A  
 Injected On: 11/9/2018 8:28:23 AM Sample Weight: 1000  
 Instrument ID: CP15-19850 Dilution Factor: 10  
 Oven Parameters: 50 hold 0.5 min; to 100 @ 25c/min; to 310 @ 12c/min, hold 2 min.  
 Column A ID: ZB-XLB-HT 30m x 0.32mm x 0.25um  
 Column B ID: ZB35 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 4  
 Calibration Type: internal  
 Quantitation: Height

Analyst: 13378

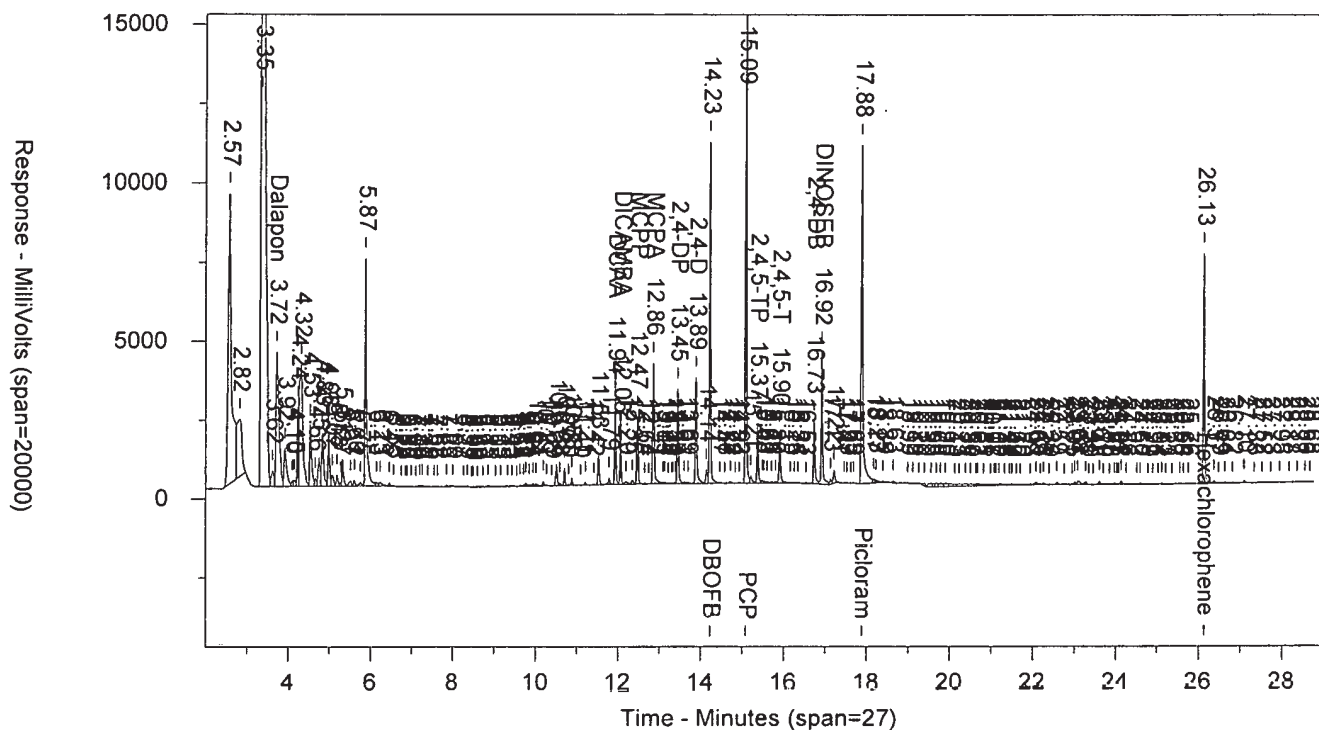
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.722	4282473	5.296	Dalapon	3.854	4633830	3.899	Dalapon
11.936	2645479	1.816	DCAA	12.513	2867770	1.832	DCAA
12.062	1409522	.241	DICAMBA	12.875	1491959	.229	DICAMBA
12.473	2161758	284.983	MCPP	12.929	1529532	236.504	MCPP
12.859	3841500	476.535	MCPA	13.458	3509833	394.607	MCPA
13.449	3023471	2.515	2,4-DP	13.982	3175679	2.319	2,4-DP
14.226	10814880	.001	DBOFB	13.709	11363890	.001	DBOFB
13.89	3384876	2.355	2,4-D	14.607	3590780	2.29	2,4-D
15.088	16414870	.903	PCP	15.303	16172400	.806	PCP
15.374	1803392	.262	2,4,5-TP	15.793	1836643	.248	2,4,5-TP
15.902	1600210	.264	2,4,5-T	16.5	1543328	.236	2,4,5-T
16.734	1994642	2.368	2,4-DB	17.207	2047084	2.207	2,4-DB
16.92	4182516	1.324	DINOSEB	16.929	3777936	1.121	DINOSEB
17.881	10728710	2.038	Picloram	19.504	12070670	2.041	Picloram
26.13	7319333	1.276	Hexachlorophene	26.555	8130809	1.327	Hexachloropher

Files:

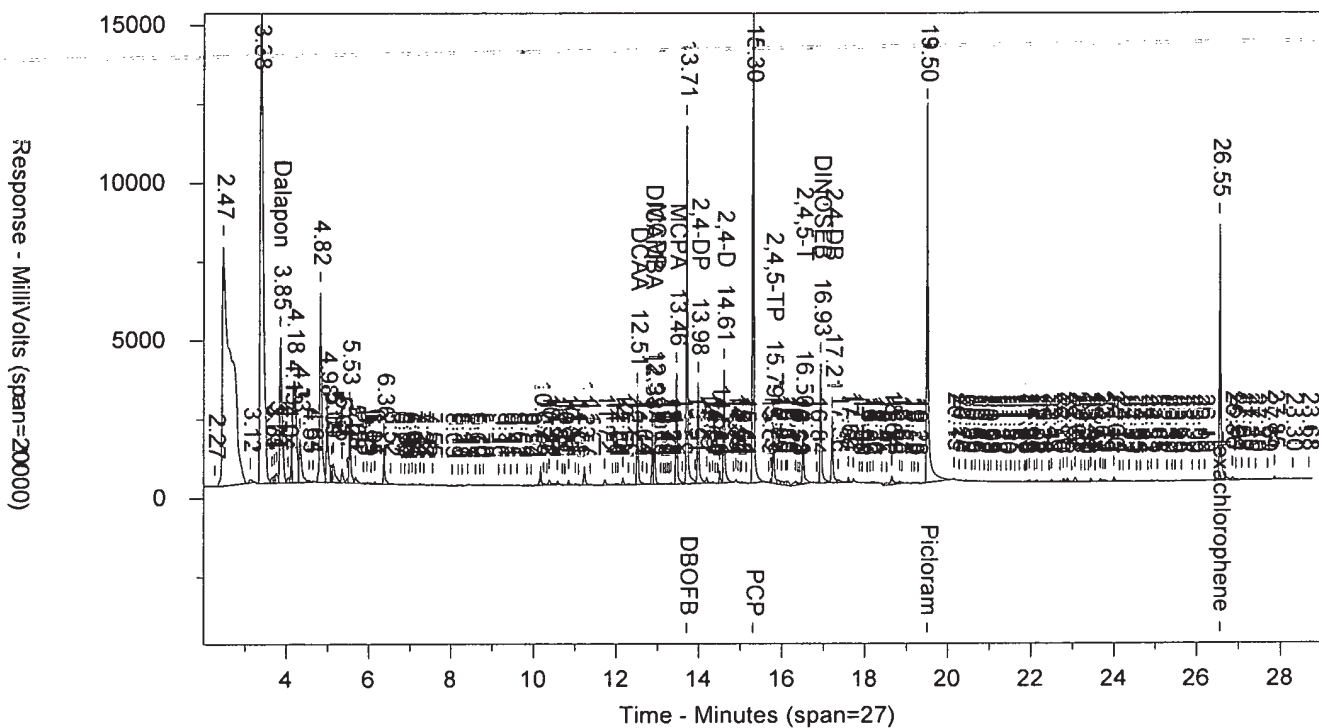
Area File: 15herb18304004.127.RAW  
 Area File: 15herb18304004B.127.RAW  
 Method A: 15HERB.MET  
 Method B: 15HERBB.MET  
 Calibration File A: 15HERB1830401.CAL  
 Calibration File B: 15HERB1830401b.CAL  
 Format A: herw15.FMTA  
 Format B: herw15.FMTA  
 Area File Created On: 11/9/2018 8:57:10 AM  
 File Reported On: 11/9/2018 at 3:12:29 PM

LCSDA 11/6/18 F ABLCS05310 LCSD 183100005A 10407 SW-846 8

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004.127.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18304004B.127.RAW



# **Extraction/Distillation/Digestion Logs**

## **Herbicides**

Dept: 24		Prep Analysis: 00816 Water Sample Herbicide Extract										Herb water 8151A Master		
QC	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH 2	pH 12	BC	Comments			
BLANKA	PBLK05310	1000	IS1830924A SS1828124A	0.1 1.0	—	10	✓	✓	✓	7	D <sub>2</sub> H <sub>2</sub> O			
LCSA	LCS05310	1000	IS1830924A SS1828124A	1 1	MS1824924C MS1828224A	10 10	✓	✓	✓	7	D <sub>2</sub> H <sub>2</sub> O			
LCSDA	LCSD05310	1000	IS1830924A SS1828124A	1 1	MS1824924C MS1828224A	10 10	✓	✓	✓	7	D <sub>2</sub> H <sub>2</sub> O			

(8) IS1828224A 89931 11-6-18  
(8A) MCPA lot is correct and did not need to be crosschecked. 89931 11-6-18

Solvent Used	Lot No.
12 N Sulfuric Acid	H022-10
6 N NaOH	2808937
Diazald Solution	993110618A 993110618 11-2-18
Ethyl Ether	183339
Hexane	186229
Methanol	181172
Methylene Chloride	187001
NaCl	18305A
Sodium Sulfate(acid)	28940318C

Spike Solutions: Witness: \_\_\_\_\_  
(8) MS1830924A HERB INTERNAL STANDARD  
 MS1828224A HERB SPIKE  
~~MS1824924C~~ (89) MCPA FORTIFICATION MIX  
 SS1828124A HERB SURROGATE STANDARD

Sample #	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	FV (mL)	pH 2	pH 12	BC	Comments	Analyses	List	Due Date	Prio
19881309	15T-2	1042	IS1830924A SS1828124A	0.1 1.0	10	✓	✓	43A	Orange/cloudy	10407	25781	11/13/2018	N
29881310	15T-3	1039	IS1830924A SS1828124A	1 1	10	✓	✓	43A	Orange/cloudy	10407	25781	11/13/2018	N
39881313	15T-6	1044	IS1830924A SS1828124A	1 1	10	✓	✓	43A	Yellow tint	10407	25781	11/13/2018	N
49882870	PR-22	1055	IS1830924A SS1828124A	1 1	10	✓	✓	43A	Clear	10407	5034	11/14/2018	N
59882871	PR-24	1061	IS1830924A SS1828124A	1 1	10	✓	✓	43A	Clear	10407	5034	11/14/2018	N
69882872	PR-25	1057	IS1830924A SS1828124A	1 1	10	✓	✓	43A	Clear	10407	5034	11/14/2018	N
79882873	PR-26	1064	IS1830924A SS1828124A	1 1	10	✓	✓	43A	yellow tint	10407	5034	11/14/2018	N

NA809931 11-6-18

Bench#	Bench#	Bench#
Rack ID:	Work Station	Micro temp
Internal Standard	Balance #	100?

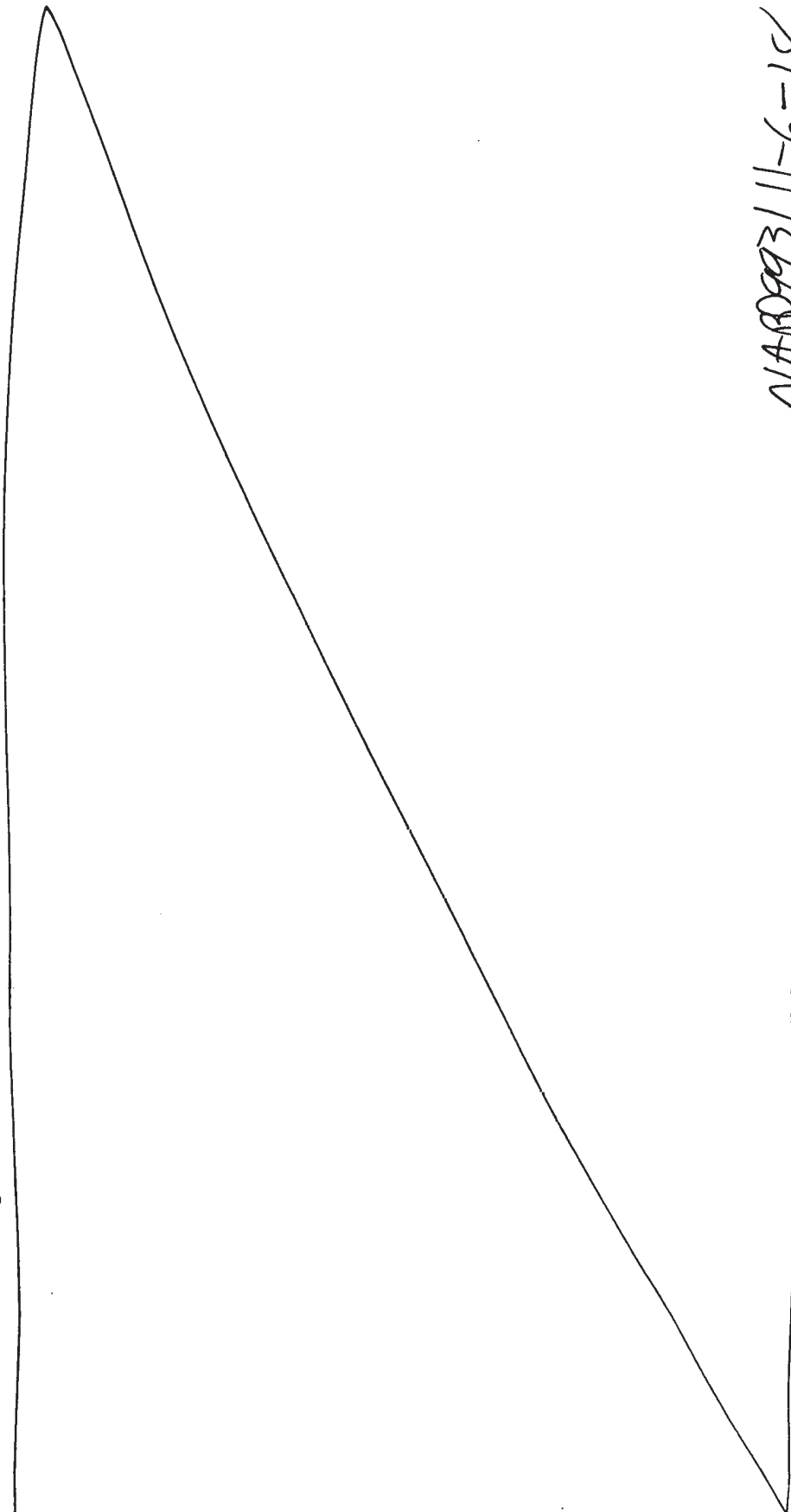
R-VAP-IC	C	R-VAP-ID	C	R-VAP-ID	C
S-bath-ID	85	S-bath-ID	C	N-Evap 3	40 C
M-Rep	C	M-Rep	C	M-Rep	C

183100005A



Sample #	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	FV (mL)	pH 2	pH 12	BC	Comments	Analyses	List	Due Date	Prio
89882874	PR-13	1059	134630924A SS1828124A	0.1 1.0	10	✓	✓	43A	yellow/clear	10407	5034	11/14/2018	N
99882875	PR-04	1058	134630924A SS1828124A	10	10	✓	✓	43A	clear	10407	5034	11/14/2018	N
109882876	PRFB4	1052	134630924A SS1828124A	10	10	✓	✓	43A	clear	10407	5034	11/14/2018	N

⑧ IS1628824A RDP93/11-6-18



NA80993/11-6-18

Bench#	Bench#	Bench#
Rack ID:	Work Station	Micro Temp
Internal Standard	Balance #	100?
	25996	—

F-VAP ID	C	R-VAP ID	C	R-VAP ID	C
S-bath ID	85	S-bath ID	C	N-Evap 3	40 C
				M-vap	C

183100005A



Documented temps are NIST corrected.

Page 2 of 2

DF = Dilution Factor FV = Final Volume

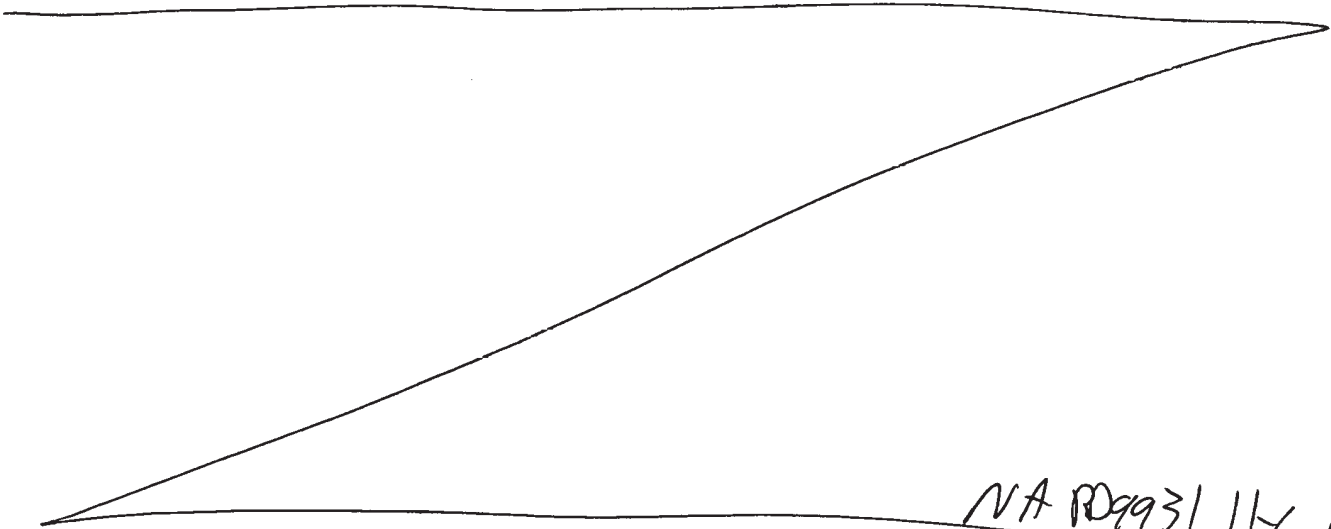
# Prep-Process Worksheet

Florisil
Prep: 00816 Water Sample Herbicide Extract
Batch: 183100005A

Verified: <u>RSK</u>
Start Date: <u>11-6-18</u>
Start Time: <u>21:10</u>
Tech 1: <u>RD9931</u>
Tech 2: _____

Sample #	Aliquot (mL)	Final Volume (mL)	D.F.		Comments
			Aliq	F.V.	
BLANKA	2	2			
LCSA	2	2			
LCSDA	2	2			

Sample #	QC	Aliquot (mL)	Final Volume (mL)	D.F.		Comments	Analyses
				Aliq	F.V.		
1	9881309	2	2				10407
2	9881310	2	2				10407
3	9881313	2	2				10407
4	9882870	2	2				10407
5	9882871	2	2				10407
6	9882872	2	2				10407
7	9882873	2	2				10407
8	9882874	2	2				10407
9	9882875	2	2				10407
10	9882876	2	2				10407

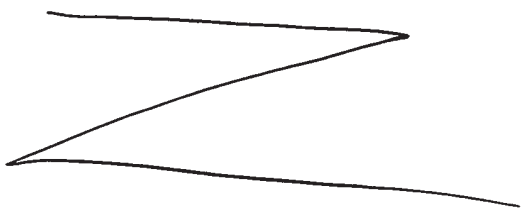


*NA RD9931 11-6-18*

Additional Comment: \_\_\_\_\_

DF = Dilution Factor FV = Final Volume

Solvent Used	Lot No.	Solvent Used	Lot No.
<del>          </del>	<del>          </del>	Florisil	6362358-17
<del>          </del>	<del>          </del>	50% Ether/Hexe	257411061813
<del>          </del>	<del>          </del>	<del>          </del>	<del>          </del>
<del>          </del>	<del>          </del>	<del>          </del>	<del>          </del>



# **Pesticides Data**



# **Case Narrative/Conformance Summary**

## **Pesticides**

## Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.  
SDG: TID15

### Pesticide Residue Analysis

Fraction: Pesticides

Sample #	Client ID	Matrix		DF	Comments
		Liquid	Solid		
9881309	OU2-1-MW008WT	X		1	
9881310	OU2-1-MW008WT-DUP	X		1	Field Duplicate Sample
9881313	OU2-1-MW009WT	X		1	

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below.  
See QC Reference List for Associated Batch QC Samples

#### SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

#### HOLDING TIME:

All holding times were met.

#### PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

#### CALIBRATION/STANDARDIZATION:

(Sample number(s): 9881309-9881310, 9881313: Analysis: 10589)

For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

#### QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

##### MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

##### Surrogate

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

## Case Narrative/Conformance Summary

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

### Pesticide Residue Analysis

Fraction: Pesticides

Batch#: 183100009A (Sample number(s): 9881309-9881310, 9881313)

The recovery(ies) for the following surrogate(s) were below the acceptance window:  
Decachlorobiphenyl-D1 (9881309, 9881310), Decachlorobiphenyl-D2 (9881309, 9881310),  
Tetrachloro-m-xylene-D1 (9881309, 9881310), Tetrachloro-m-xylene-D2 (9881309, 9881310,  
9881313)

(Sample number(s): 9881309-9881310, 9881313: Analysis: 10589)

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

### SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

#### Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

# **Quality Control and Calibration Summary Forms**

## **Pesticides**

**Quality Control Reference List**  
**Pesticide Residue Analysis**

**CLIENT: Tidewater, Inc.**  
**SDG: TID15**

**Fraction: Pesticides**

<b>Analysis</b>	<b>Batch Number</b>	<b>Sample Number</b>	<b>Analysis Date</b>
OC Pesticides in Water	183100009A	PBLK09310	11/14/2018 21:41
		LCS09310	11/14/2018 21:54
		9881309	11/14/2018 22:58
		9881310	11/14/2018 23:23
		9881313	11/15/2018 00:40

Fraction: Pesticides

183100009A / PBLK09310 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Alpha BHC	11/14/18	N.D.	ug/l	0.0024	0.0056	0.0080
Gamma BHC - Lindane	11/14/18	N.D.	ug/l	0.0016	0.0056	0.0080
Beta BHC	11/14/18	N.D.	ug/l	0.0027	0.0056	0.0080
Delta BHC	11/14/18	N.D.	ug/l	0.0027	0.0056	0.0080
Heptachlor	11/14/18	N.D.	ug/l	0.0016	0.0056	0.0080
Aldrin	11/14/18	N.D.	ug/l	0.0016	0.0056	0.0080
Heptachlor Epoxide	11/14/18	N.D.	ug/l	0.0018	0.0056	0.0080
Gamma Chlordane	11/14/18	N.D.	ug/l	0.0056	0.016	0.016
Alpha Chlordane	11/14/18	N.D.	ug/l	0.0024	0.0056	0.0080
p,p-DDE	11/14/18	N.D.	ug/l	0.0040	0.0080	0.016
Endosulfan I	11/14/18	N.D.	ug/l	0.0034	0.0072	0.0080
Dieldrin	11/14/18	N.D.	ug/l	0.0042	0.0080	0.016
Endrin	11/14/18	N.D.	ug/l	0.0065	0.016	0.016
p,p-DDD	11/14/18	N.D.	ug/l	0.0040	0.0080	0.016
Endosulfan II	11/14/18	N.D.	ug/l	0.012	0.024	0.024
p,p-DDT	11/14/18	N.D.	ug/l	0.0042	0.0080	0.016
Endosulfan Sulfate	11/14/18	N.D.	ug/l	0.0046	0.0096	0.016
Endrin Aldehyde	11/14/18	N.D.	ug/l	0.016	0.032	0.080
Endrin Ketone	11/14/18	N.D.	ug/l	0.0040	0.0080	0.016
Methoxychlor	11/14/18	N.D.	ug/l	0.024	0.056	0.080
Chlordane	11/14/18	N.D.	ug/l	0.13	0.26	0.40
Toxaphene	11/14/18	N.D.	ug/l	0.24	0.48	0.80

Fraction: Pesticides

183100009A	Decachlorobiphenyl-D1		Decachlorobiphenyl-D2		Tetrachloro-m-xylene-D1		Tetrachloro-m-xylene-D2	
	Spike Added	0.2976 ug/l	Spike Added	0.2976 ug/l	Spike Added	0.301049 ug/l	Spike Added	0.301049 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
PBLK09310	116	32 - 149	115	32 - 149	93	44 - 124	86	44 - 124
LCS09310	83	32 - 149	80	32 - 149	95	44 - 124	90	44 - 124
9881309	18 *	32 - 149	15 *	32 - 149	40 *	44 - 124	34 *	44 - 124
9881310	16 *	32 - 149	15 *	32 - 149	29 *	44 - 124	24 *	44 - 124
9881313	47	32 - 149	44	32 - 149	44	44 - 124	38 *	44 - 124

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

SDG: TID15  
Matrix: LIQUID

**Pesticide Residue Analysis**  
Fraction: Pesticides

LCS: LCS09310	Batch: 183100009A (Sample number(s): 9881309-9881310, 9881313 )							
Analyte	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
Alpha BHC	0.102	0.0960	NA	94	NA	54-138	NA	NA
Gamma BHC - Lindane	0.102	0.0977	NA	96	NA	59-134	NA	NA
Beta BHC	0.100	0.0934	NA	93	NA	56-136	NA	NA
Delta BHC	0.100	0.0907	NA	91	NA	52-142	NA	NA
Heptachlor	0.102	0.0931	NA	91	NA	54-130	NA	NA
Aldrin	0.100	0.0893	NA	89	NA	45-134	NA	NA
Heptachlor Epoxide	0.100	0.100	NA	100	NA	61-133	NA	NA
Gamma Chlordane	0.100	0.100	NA	100	NA	56-136	NA	NA
Alpha Chlordane	0.100	0.0966	NA	97	NA	60-129	NA	NA
p,p-DDE	0.200	0.202	NA	101	NA	57-135	NA	NA
Endosulfan I	0.102	0.0968	NA	95	NA	62-126	NA	NA
Dieldrin	0.204	0.218	NA	107	NA	60-136	NA	NA
Endrin	0.202	0.240	NA	119	NA	60-138	NA	NA
p,p-DDD	0.204	0.228	NA	112	NA	56-143	NA	NA
Endosulfan II	0.200	0.200	NA	100	NA	52-135	NA	NA
p,p-DDT	0.204	0.223	NA	109	NA	51-143	NA	NA
Endosulfan Sulfate	0.202	0.225	NA	112	NA	62-133	NA	NA
Endrin Aldehyde	0.202	0.207	NA	102	NA	51-132	NA	NA
Endrin Ketone	0.200	0.214	NA	107	NA	58-134	NA	NA
Methoxychlor	1.02	1.16	NA	114	NA	54-145	NA	NA



Fraction: Pesticides

10589: OC Pesticides in Water Analyte Name	Default DL	Default LOD	Default LOQ	Units
Alpha BHC	.0024	.0056	0.0080	ug/l
Gamma BHC - Lindane	.0016	.0056	0.0080	ug/l
Beta BHC	.00272	.0056	0.0080	ug/l
Delta BHC	.00272	.0056	0.0080	ug/l
Heptachlor	.0016	.0056	0.0080	ug/l
Aldrin	.0016	.0056	0.0080	ug/l
Heptachlor Epoxide	.00184	.0056	0.0080	ug/l
Gamma Chlordane	.0056	.016	0.016	ug/l
Alpha Chlordane	.0024	.0056	0.0080	ug/l
p,p-DDE	.004	.008	0.016	ug/l
Endosulfan I	.00344	.0072	0.0080	ug/l
Dieldrin	.00424	.008	0.016	ug/l
Endrin	.00648	.016	0.016	ug/l
p,p-DDD	.004	.008	0.016	ug/l
Endosulfan II	.012	.024	0.024	ug/l
p,p-DDT	.00416	.008	0.016	ug/l
Endrin Aldehyde	.016	.032	0.080	ug/l
Methoxychlor	.024	.056	0.080	ug/l
Endosulfan Sulfate	.00464	.0096	0.016	ug/l
Endrin Ketone	.004	.008	0.016	ug/l
Chlordane	.128	.256	0.40	ug/l
Toxaphene	.24	.48	0.80	ug/l

Multiple Component Initial Calibration Report: **05PEST1830601**

Area Files Used For Calibration

Sequence \_\_\_\_\_ Injections \_\_\_\_\_

Component: **Aroclor-1016**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1016

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	2.814	3.077	3.238	3.441	3.548	3.600	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1258397	1767897	520007	1349883	1412524	950075	7258783
RF (Height/Conc):	6292	8839	2600	6749	7063	4750	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1221**

**2154**

Calibration Levels: 1  
 Min # of Peaks Required: 3  
 Slope:  
 Max %RSD: 5  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1221

	<u>1</u>	<u>2</u>	<u>3</u>	<u>SUM</u>
Retention Time:	2.687	2.794	2.825	
RT Window (Mins):	0.02000	0.02000	0.02000	
Height:	717240	463346	1643091	2823677
RF (Height/Conc):	3586	2317	8215	
%RSD For RF	0.000	0.000	0.000	
Slope				
Y-Intercept				

Component: **Aroclor-1248**

**AR48**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 30  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1248

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.421	3.695	3.886	4.247	4.433	4.749	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1348494	737258	1745344	1986825	1348102	1020653	8186676
RF (Height/Conc):	6742	3686	8727	9934	6741	5103	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **05PEST1830601**

Component: **Aroclor-1254**

**AR54**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 250.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1254

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.431	4.658	4.754	4.968	5.107	5.316	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	3183021	2381729	4153502	3094382	2130002	3421102	18363738
RF (Height/Conc):	12732	9527	16614	12378	8520	13684	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1260**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1260

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.895	5.103	5.313	5.574	5.788	5.986	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	2338930	3158974	3323608	1858127	3802629	2269746	16752014
RF (Height/Conc):	11695	15795	16618	9291	19013	11349	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Chlordane**

**CHLD**

Calibration Levels: 6  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Avg Concentration (ng/ml): 50.000000  
 Report Base:  
 E-Flag Basis: Chlordane

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>	
Retention Time:	3.538	3.981	4.335	4.494	4.593	5.196		
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000		
Average Height:	1443873	1358799	921233	4228131	5683978	1380979	15016992	
RF (Height/Conc):	9696	9639	6304	28488	39081	9562		
%RSD For RF	6.909	8.452	7.311	9.020	9.094	10.086		
Slope								
Y-Intercept								
Level 1	Height Conc	123284 12.500	132521 12.500	84804 12.500	355226 12.500	499231 12.500	128443 12.500	1323509
Level 2	Height Conc	212178 25.000	220433 25.000	140109 25.000	604105 25.000	846837 25.000	203833 25.000	2227495
Level 3	Height Conc	527505 50.000	530682 50.000	342023 50.000	1601275 50.000	2217994 50.000	544557 50.000	5764036
Level 4	Height Conc	983850 100.000	973956 100.000	628222 100.000	2977870 100.000	4093850 100.000	974958 100.000	10632706
Level 5	Height Conc	1935369 200.000	1823109 200.000	1216798 200.000	5626510 200.000	7493745 200.000	1811374 200.000	19906905
Level 6	Height Conc	4881049 500.000	4472092 500.000	3115444 500.000	14203800 500.000	18952210 500.000	4622708 500.000	50247303

Multiple Component Initial Calibration Report: **05PEST1830601**

Component: **Toxaphene**

**TOXA**

Calibration Levels: 6

Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4

Max %RSD: 40

Report Base:

Slope:

Y-Intercept:

E-Flag Basis: Toxaphene

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	5.103	5.238	5.326	5.488	5.724	5.789	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:	2645327	4046250	3714010	3756450	3277898	3719319	21159254
RF (Height/Conc):	4111	6435	5844	6069	5174	6013	
%RSD For RF	<b>6.603</b>	<b>5.117</b>	<b>5.916</b>	<b>5.358</b>	<b>7.100</b>	<b>6.859</b>	
Slope							
Y-Intercept							
Level 1							
Height	181201	299491	264781	290710	228368	278776	1543327
Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 2							
Height	414282	666474	596318	637312	546142	637515	3498043
Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 3							
Height	860393	1344840	1220354	1270127	1081529	1266008	7043251
Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 4							
Height	2196185	3374814	3127568	3171599	2762580	3215731	17848477
Conc	500.000	500.000	500.000	500.000	500.000	500.000	
Level 5							
Height	4186302	6365490	5818990	5893980	5112733	5815044	33192539
Conc	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6							
Height	8033599	12226390	11256050	11274970	9936037	11102840	63829886
Conc	2000.000	2000.000	2000.000	2000.000	2000.000	2000.000	

Multiple Component Initial Calibration Report: **05PEST1830601B**

Area Files Used For Calibration

Sequence \_\_\_\_\_ Injections \_\_\_\_\_

**Component: Aroclor-1016**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1016

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	2.694	2.973	3.153	3.311	3.416	3.497	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	3842974	5325124	2218380	9323568	4671356	3074750	28456152
RF (Height/Conc):	19215	26626	11092	46618	23357	15374	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

**Component: Aroclor-1221**

**2154**

Calibration Levels: 1  
 Min # of Peaks Required: 3  
 Slope:  
 Max %RSD: 5  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1221

	<u>1</u>	<u>2</u>	<u>3</u>	<u>SUM</u>
Retention Time:	2.566	2.660	2.702	
RT Window (Mins):	0.02000	0.02000	0.02000	
Height:	2220491	1357046	4582321	8159858
RF (Height/Conc):	11102	6785	22912	
%RSD For RF	0.000	0.000	0.000	
Slope				
Y-Intercept				

**Component: Aroclor-1248**

**AR48**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 30  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1248

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.308	3.570	3.793	3.897	4.156	4.349	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	4721418	4482628	5590784	4667239	6450198	5076946	30989213
RF (Height/Conc):	23607	22413	27954	23336	32251	25385	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **05PEST1830601B**

Component: **Aroclor-1254**

**AR54**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 250.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1254

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.154	4.310	4.683	4.858	5.120	5.257	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	7787562	8789741	12700800	9113145	6700056	9683890	54775194
RF (Height/Conc):	31150	35159	50803	36453	26800	38736	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1260**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1260

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.835	4.992	5.257	5.532	5.703	5.952	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	6977575	8328938	8650472	5441882	11170040	6631015	47199922
RF (Height/Conc):	34888	41645	43252	27209	55850	33155	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Chlordane**

**CHLD**

Calibration Levels: 6  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Avg Concentration (ng/ml): 50.000000  
 Report Base:  
 E-Flag Basis: Chlordane

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>	
Retention Time:	3.276	3.786	4.123	4.311	4.432	5.126		
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000		
Average Height:	4996854	4404817	3195306	15413879	11454366	4325897	43791118	
RF (Height/Conc):	31392	30204	21179	98897	74667	30141		
%RSD For RF	9.923	7.095	8.366	10.474	9.595	11.300		
Slope								
Y-Intercept								
Level 1	Height Conc	377285 12.500	403594 12.500	272385 12.500	1185038 12.500	921260 12.500	434945 12.500	3594507
Level 2	Height Conc	652947 25.000	675287 25.000	450090 25.000	1999810 25.000	1539187 25.000	647179 25.000	5964500
Level 3	Height Conc	1642544 50.000	1638282 50.000	1162179 50.000	5404774 50.000	4127468 50.000	1676081 50.000	15651328
Level 4	Height Conc	3171962 100.000	3046482 100.000	2129964 100.000	10176280 100.000	7622940 100.000	2951771 100.000	29099399
Level 5	Height Conc	6401828 200.000	5788234 200.000	4139737 200.000	20431460 200.000	14973900 200.000	5543394 200.000	57278553
Level 6	Height Conc	17734560 500.000	14877020 500.000	11017480 500.000	53285910 500.000	39541440 500.000	14702010 500.000	151158420

Multiple Component Initial Calibration Report: **05PEST1830601B**

Component: **Toxaphene**

**TOXA**

Calibration Levels: 6

Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4

Max %RSD: 40

Report Base:

Slope:

Y-Intercept:

E-Flag Basis: Toxaphene

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.683	4.913	5.083	5.348	5.405	5.703	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:	6477675	6756723	12443933	13353907	7832836	11957411	58822485
RF (Height/Conc):	10165	10494	19322	20837	12307	18924	
%RSD For RF	0.875	1.459	1.349	2.072	1.428	1.916	
Slope							
Y-Intercept							
Level1	Height 514571 Conc 50.000	Height 511096 Conc 50.000	Height 941194 Conc 50.000	Height 1013307 Conc 50.000	Height 609072 Conc 50.000	Height 942304 Conc 50.000	4531544
Level2	Height 1018445 Conc 100.000	Height 1061126 Conc 100.000	Height 1935048 Conc 100.000	Height 2077736 Conc 100.000	Height 1249966 Conc 100.000	Height 1921570 Conc 100.000	9263891
Level3	Height 2036424 Conc 200.000	Height 2096546 Conc 200.000	Height 3882978 Conc 200.000	Height 4201018 Conc 200.000	Height 2466283 Conc 200.000	Height 3844229 Conc 200.000	18527478
Level4	Height 5103620 Conc 500.000	Height 5325630 Conc 500.000	Height 9799539 Conc 500.000	Height 10783050 Conc 500.000	Height 6263254 Conc 500.000	Height 9624753 Conc 500.000	46899846
Level5	Height 10056680 Conc 1000.000	Height 10451430 Conc 1000.000	Height 19382900 Conc 1000.000	Height 20760490 Conc 1000.000	Height 12194250 Conc 1000.000	Height 18614450 Conc 1000.000	91460200
Level6	Height 20136310 Conc 2000.000	Height 21094510 Conc 2000.000	Height 38721940 Conc 2000.000	Height 41287840 Conc 2000.000	Height 24214190 Conc 2000.000	Height 36797160 Conc 2000.000	182251950

## 6D

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830601GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/2/2018 11/2/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Tetrachloro-m-xylene	2.55	2.56	2.56	2.56	2.55	2.56	2.56	2.54	2.58
Hcb	2.84	2.84	2.84	2.84	2.84	2.84	2.84	2.82	2.86
alpha-BHC	2.97	2.97	2.97	2.97	2.96	2.97	2.97	2.95	2.99
gamma-BHC (Lindane)	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.19	3.23
beta-BHC	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.26	3.30
delta-BHC	3.43	3.43	3.43	3.43	3.42	3.43	3.43	3.41	3.45
Heptachlor	3.61	3.61	3.61	3.61	3.61	3.61	3.61	3.59	3.63
Aldrin	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.85	3.89
Telodrin	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.04	4.08
o,p-DDE	4.39	4.38	4.38	4.38	4.38	4.38	4.38	4.36	4.40
Heptachlor epoxide	4.39	4.39	4.39	4.39	4.39	4.39	4.39	4.37	4.41
gamma-Chlordane	4.49	4.49	4.49	4.49	4.49	4.50	4.49	4.47	4.51
alpha-Chlordane	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.58	4.62
4,4'-DDE	4.66	4.66	4.66	4.66	4.66	4.67	4.66	4.64	4.68
Endosulfan I	4.71	4.71	4.71	4.71	4.71	4.71	4.71	4.69	4.73
o,p-DDD	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.78	4.82
Dieldrin	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.88	4.92
o,p-DDT	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.98	5.02
Endrin	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.06	5.10
Kepone	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.10	5.14
4,4'-DDD	5.13	5.13	5.13	5.13	5.12	5.13	5.13	5.11	5.15
Endosulfan II	5.25	5.25	5.25	5.25	5.24	5.25	5.25	5.23	5.27
4,4'-DDT	5.33	5.33	5.33	5.33	5.33	5.34	5.33	5.31	5.35
Endrin aldehyde	5.55	5.55	5.55	5.55	5.55	5.55	5.55	5.53	5.57
Methoxychlor	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.66	5.70
Mirex	5.80	5.79	5.79	5.79	5.80	5.80	5.79	5.77	5.81
Endosulfan sulfate	5.86	5.86	5.86	5.86	5.85	5.86	5.86	5.84	5.88
Endrin ketone	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.03	6.07
Decachlorobiphenyl	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.68	6.74



6E

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830601GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/2/2018 11/2/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	4.38E+05	3.87E+05	3.71E+05	3.64E+05	3.67E+05	3.61E+05	3.81E+05	8
Hcb	4.79E+05	4.26E+05	4.21E+05	4.12E+05	3.97E+05	3.94E+05	4.21E+05	7
alpha-BHC	5.73E+05	5.08E+05	5.45E+05	5.51E+05	5.62E+05	5.52E+05	5.49E+05	4
gamma-BHC (Lindane)	4.92E+05	4.40E+05	4.58E+05	4.62E+05	4.73E+05	4.60E+05	4.64E+05	4
beta-BHC	2.50E+05	2.14E+05	2.01E+05	1.98E+05	2.03E+05	1.97E+05	2.10E+05	10
delta-BHC	4.54E+05	4.02E+05	4.26E+05	4.38E+05	4.50E+05	4.34E+05	4.34E+05	4
Heptachlor	4.23E+05	3.66E+05	3.70E+05	3.81E+05	3.87E+05	3.71E+05	3.83E+05	6
Aldrin	3.67E+05	3.23E+05	3.38E+05	3.52E+05	3.57E+05	3.41E+05	3.47E+05	4
Telodrin	2.36E+05	2.11E+05	2.16E+05	2.13E+05	2.10E+05	2.15E+05	2.17E+05	5
o,p-DDE	1.95E+05	1.78E+05	1.87E+05	1.85E+05	1.84E+05	1.87E+05	1.86E+05	3
Heptachlor epoxide	3.52E+05	3.05E+05	2.98E+05	3.08E+05	3.10E+05	2.98E+05	3.12E+05	7
gamma-Chlordane	3.46E+05	2.97E+05	2.93E+05	3.10E+05	3.10E+05	2.98E+05	3.09E+05	6
alpha-Chlordane	3.47E+05	3.00E+05	2.90E+05	3.02E+05	3.03E+05	2.95E+05	3.06E+05	7
4,4'-DDE	3.03E+05	2.69E+05	2.76E+05	2.85E+05	2.94E+05	2.80E+05	2.84E+05	4
Endosulfan I	3.24E+05	2.82E+05	2.75E+05	2.85E+05	2.90E+05	2.77E+05	2.89E+05	6
o,p-DDD	1.77E+05	1.62E+05	1.70E+05	1.66E+05	1.67E+05	1.72E+05	1.69E+05	3
Dieldrin	3.39E+05	3.00E+05	2.99E+05	3.02E+05	3.04E+05	2.98E+05	3.07E+05	5
o,p-DDT	2.15E+05	1.94E+05	2.09E+05	2.03E+05	2.00E+05	2.11E+05	2.05E+05	4
Endrin	3.17E+05	2.75E+05	2.76E+05	2.81E+05	2.81E+05	2.68E+05	2.83E+05	6
Kepone	2.41E+05	1.53E+05	1.37E+05	1.37E+05	1.26E+05	1.46E+05	1.57E+05	27
4,4'-DDD	2.63E+05	2.30E+05	2.33E+05	2.41E+05	2.42E+05	2.35E+05	2.41E+05	5
Endosulfan II	3.08E+05	2.60E+05	2.56E+05	2.60E+05	2.60E+05	2.49E+05	2.66E+05	8
4,4'-DDT	2.91E+05	2.49E+05	2.47E+05	2.55E+05	2.58E+05	2.48E+05	2.58E+05	6
Endrin aldehyde	2.66E+05	2.25E+05	2.11E+05	2.09E+05	2.13E+05	2.04E+05	2.21E+05	10
Methoxychlor	1.58E+05	1.32E+05	1.18E+05	1.18E+05	1.14E+05	1.11E+05	1.25E+05	14
Mirex	2.15E+05	1.88E+05	1.95E+05	1.80E+05	1.75E+05	1.86E+05	1.90E+05	7
Endosulfan sulfate	2.84E+05	2.40E+05	2.28E+05	2.33E+05	2.32E+05	2.23E+05	2.40E+05	9
Endrin ketone	3.38E+05	2.88E+05	2.72E+05	2.70E+05	2.63E+05	2.62E+05	2.82E+05	10
Decachlorobiphenyl	2.59E+05	2.11E+05	1.87E+05	1.85E+05	1.75E+05	1.78E+05	1.99E+05	16

- linear

WJ 2300  
11/4/18

6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830601GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/2/2018 11/3/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION		AMOUNT (ng)	PEAK HEIGHT	%RSD
			FROM	TO	FACTOR	LEVEL			
Aroclor-1016	1	2.81	2.78	2.84	6292	1	200	1258397	.00
	2	3.08	3.05	3.11	8839	1	200	1767897	.00
	3	3.24	3.21	3.27	2600	1	200	520007	.00
	4	3.44	3.41	3.47	6749	1	200	1349883	.00
	5	3.55	3.52	3.58	7063	1	200	1412524	.00
	6	3.60	3.57	3.63	4750	1	200	950075	.00
Aroclor-1221	1	2.69	2.67	2.71	3586	1	200	717240	.00
	2	2.79	2.77	2.81	2317	1	200	463346	.00
	3	2.83	2.81	2.85	8215	1	200	1643091	.00
Aroclor-1248	1	3.42	3.39	3.45	6742	1	200	1348494	.00
	2	3.70	3.67	3.73	3686	1	200	737258	.00
	3	3.89	3.86	3.92	8727	1	200	1745344	.00
	4	4.25	4.22	4.28	9934	1	200	1986825	.00
	5	4.43	4.40	4.46	6741	1	200	1348102	.00
	6	4.75	4.72	4.78	5103	1	200	1020653	.00
Aroclor-1254	1	4.43	4.40	4.46	12732	1	250	3183021	.00
	2	4.66	4.63	4.69	9527	1	250	2381729	.00
	3	4.75	4.72	4.78	16614	1	250	4153502	.00
	4	4.97	4.94	5.00	12378	1	250	3094382	.00
	5	5.11	5.08	5.14	8520	1	250	2130002	.00
	6	5.32	5.29	5.35	13684	1	250	3421102	.00
Aroclor-1260	1	4.90	4.87	4.93	11695	1	200	2338930	.00
	2	5.10	5.07	5.13	15795	1	200	3158974	.00
	3	5.31	5.28	5.34	16618	1	200	3323608	.00
	4	5.57	5.54	5.60	9291	1	200	1858127	.00
	5	5.79	5.76	5.82	19013	1	200	3802629	.00
	6	5.99	5.96	6.02	11349	1	200	2269746	.00

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Calibration File: 05PEST1830601

GC Column (1): RTX-CLP

ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/2/2018 11/3/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
			FROM	TO					
Chlordane	1	3.54	3.51	3.57	9696	1	12.5	123284	6.91
	1					25	212178		
	1					50	527505		
	1					100	983850		
	1					200	1935369		
	1					500	4881049		
	2	3.98	3.95	4.01	9639	1	12.5	132521	8.45
	2					25	220433		
	2					50	530682		
	2					100	973956		
	2					200	1823109		
	2					500	4472092		
	3	4.34	4.31	4.37	6304	1	12.5	84804	7.31
	3					25	140109		
	3					50	342023		
	3					100	628222		
	3					200	1216798		
	3					500	3115444		
	4	4.49	4.46	4.52	28488	1	12.5	355226	9.02
	4					25	604105		
	4					50	1601275		
	4					100	2977870		
	4					200	5626510		
	4					500	14203800		
5	4.59	4.56	4.62	39081	1	12.5	499231	9.09	
5					25	846837			
5					50	2217994			
5					100	4093850			
5					200	7493745			
5					500	18952210			
6	5.20	5.17	5.23	9562	1	12.5	128443	10.09	
6					25	203833			
6					50	544557			
6					100	974958			
6					200	1811374			
6					500	4622708			

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Calibration File: 05PEST1830601

GC Column (1): RTX-CLP

ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/2/2018 11/3/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
			FROM	TO					
Toxaphene	1	5.10	5.07	5.13	4111	1	50	181201	6.60
	1					100	414282		
	1					200	860393		
	1					500	2196185		
	1					1000	4186302		
	1					2000	8033599		
	2	5.24	5.21	5.27	6435	1	50	299491	5.12
	2					100	666474		
	2					200	1344840		
	2					500	3374814		
	2					1000	6365490		
	2					2000	12226390		
	3	5.33	5.30	5.36	5844	1	50	264781	5.92
	3					100	596318		
	3					200	1220354		
	3					500	3127568		
	3					1000	5818990		
	3					2000	11256050		
	4	5.49	5.46	5.52	6069	1	50	290710	5.36
	4					100	637312		
	4					200	1270127		
	4					500	3171599		
	4					1000	5893980		
	4					2000	11274970		
5	5.72	5.69	5.75	5174	1	50	228368	7.10	
5					100	546142			
5					200	1081529			
5					500	2762580			
5					1000	5112733			
5					2000	9936037			
6	5.79	5.76	5.82	6013	1	50	278776	6.86	
6					100	637515			
6					200	1266008			
6					500	3215731			
6					1000	5815044			
6					2000	11102840			

File Name: V:\CP5\05pest1830601.cal  
 Version: 12

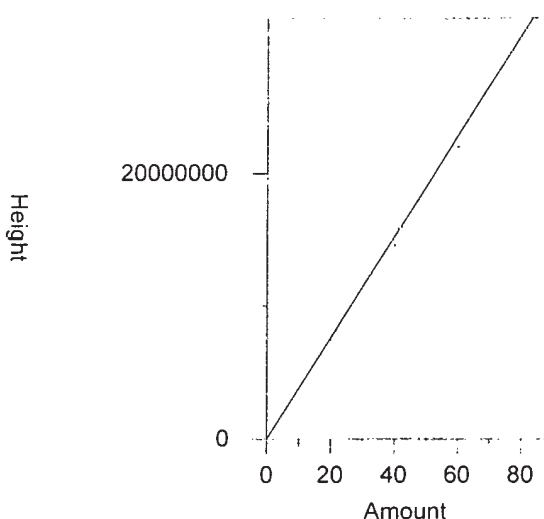
Creator:  
 Description:  
 Reason for change:

External standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 50  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

1 TCX



Expected retention time: 2.555 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

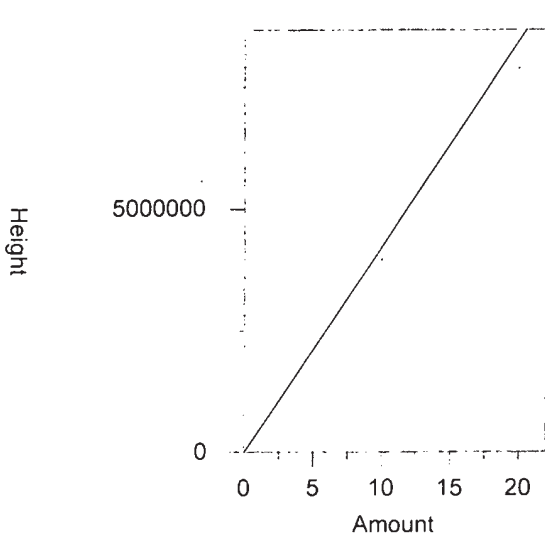
$$Y = 381451.2 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9939563  
 Average error: 5.378%  
 Average CF: 381451.2  
 RSD: 7.595%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	875375.3	437687.7	14.743	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004.B
2	4	1547011	386752.8	1.390	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005.B
3	20	7428517	371425.8	-2.628	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006.B
4	40	1.457339E+07	364334.8	-4.487	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007.B
5	60	2.204929E+07	367488.2	-3.661	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008.B
6	80	2.888144E+07	361018	-5.357	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009.B

2 HCB

Chrom Perfect Calibration File



Expected retention time: 2.838 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

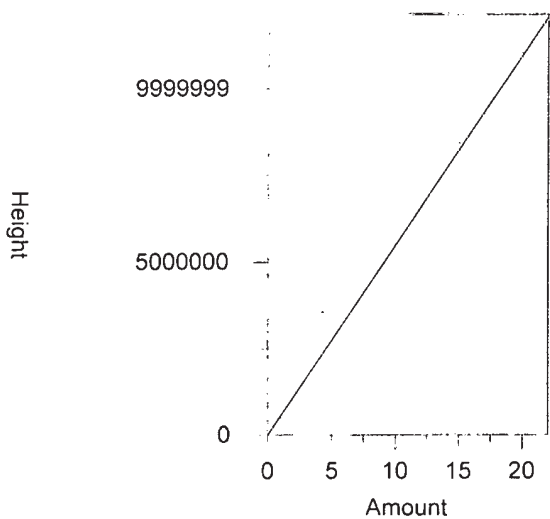
Single peak quantification by height

$Y = 421389.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9915589  
 Average error: 4.921%  
 Average CF: 421389.9  
 RSD: 7.378%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	239722	479444	13.777	Manual	11/4/2018 7:04:24 AM
2	1	425544	425544	0.986	Manual	11/4/2018 7:05:13 AM
3	2.5	1051387	420554.8	-0.198	Manual	11/4/2018 7:05:55 AM
4	5	2060389	412077.8	-2.210	Manual	11/4/2018 7:06:43 AM
5	10	3965430	396543	-5.896	Manual	11/4/2018 7:07:30 AM
6	20	7883517	394175.8	-6.458	Manual	11/4/2018 7:08:17 AM

3 alpha-BHC



Expected retention time: 2.966 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

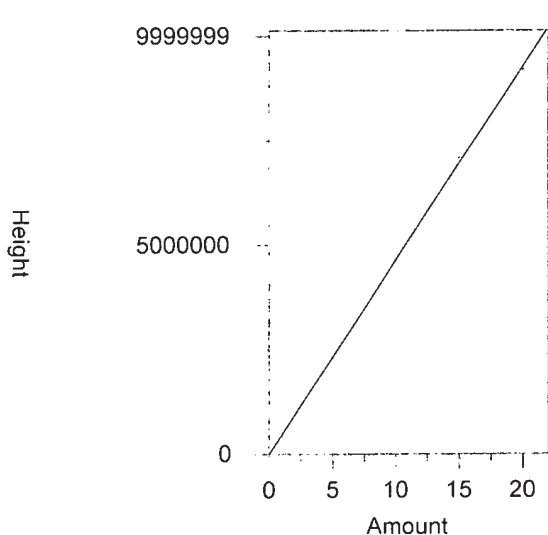
$Y = 548601.7 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9995047  
 Average error: 2.658%  
 Average CF: 548601.7  
 RSD: 4.044%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	286665.1	573330.2	4.508	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001
2	1	508014.5	508014.5	-7.398	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001
3	5	2727226	545445.2	-0.575	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001
4	10	5505940	550594	0.363	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001
5	15	8426731	561782.1	2.403	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001
6	20	1.104888E+07	552444	0.700	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001

4. gamma-BHC

Chrom Perfect Calibration File



Expected retention time: 3.212 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

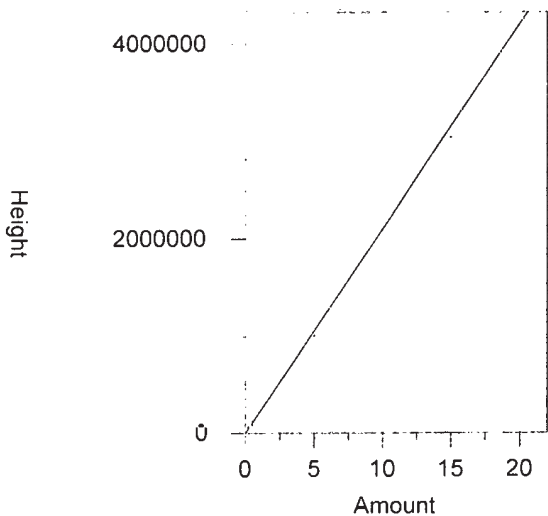
Single peak quantification by height

$Y = 464217.1 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9996197  
 Average error: 2.659%  
 Average CF: 464217.1  
 RSD: 3.786%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	246227.9	492455.8	6.083	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004..
2	1	439559.5	439559.5	-5.312	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005..
3	5	2288256	457651.2	-1.414	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006..
4	10	4621828	462182.8	-0.438	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007..
5	15	7095171	473011.4	1.894	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008..
6	20	9208842	460442.1	-0.813	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009..

5 beta-BHC



Expected retention time: 3.28 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

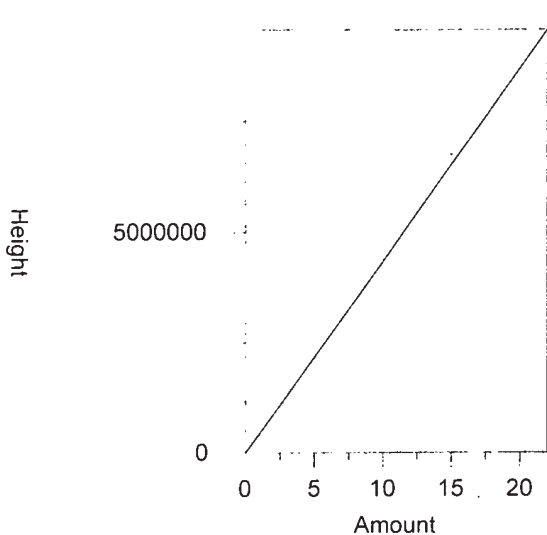
$Y = 210297.1 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9911948  
 Average error: 6.932%  
 Average CF: 210297.1  
 RSD: 9.762%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	125102.6	250205.2	18.977	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004..
2	1	214121.7	214121.7	1.819	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005..
3	5	1002772	200554.4	-4.633	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006..
4	10	1976059	197605.9	-6.035	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007..
5	15	3038471	202564.7	-3.677	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008..
6	20	3934618	196730.9	-6.451	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009..

6 delta-BHC

Chrom Perfect Calibration File



Expected retention time: 3.427 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

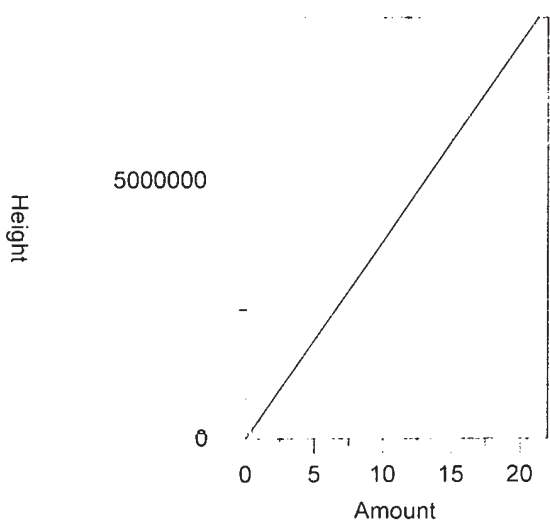
Single peak quantification by height

$Y = 433925.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9990016  
 Average error: 3.082%  
 Average CF: 433925.8  
 RSD: 4.353%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	227237.8	454475.6	4.736	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004.
2	1	401717.5	401717.5	-7.423	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005.
3	5	2130066	426013.2	-1.823	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006.
4	10	4376843	437684.3	0.866	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007.
5	15	6744890	449659.3	3.626	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008.
6	20	8680100	434005	0.018	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009.

7 Heptachlor



Expected retention time: 3.608 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 382811.3 X + 0$

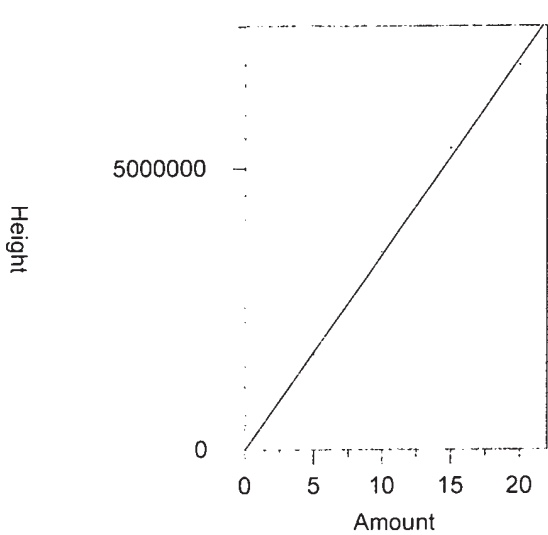
Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9984855  
 Average error: 3.831%  
 Average CF: 382811.3  
 RSD: 5.523%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	211535.8	423071.6	10.517	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004.
2	1	365933.9	365933.9	-4.409	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005.
3	5	1849526	369905.2	-3.371	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006.
4	10	3806040	380604	-0.577	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007.
5	15	5798212	386547.5	0.976	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008.
6	20	7416109	370805.4	-3.136	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009.

8 Aldrin



Chrom Perfect Calibration File



Expected retention time: 3.868 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

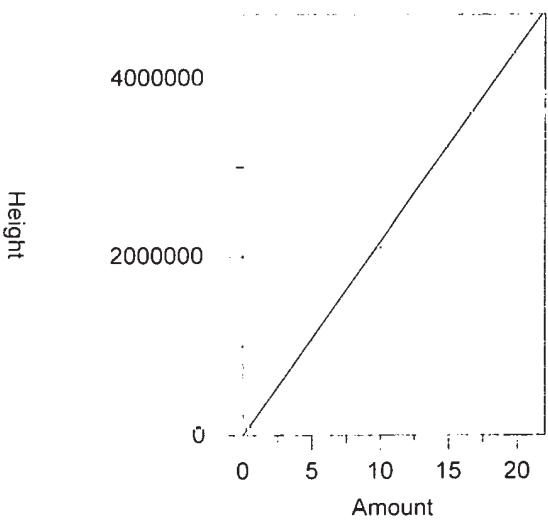
Single peak quantification by height

$Y = 346536.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9988809  
 Average error: 3.518%  
 Average CF: 346536.9  
 RSD: 4.434%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	183369.8	366739.6	5.830	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004.:
2	1	323494.1	323494.1	-6.649	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005.:
3	5	1691170	338234	-2.396	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006.:
4	10	3523617	352361.7	1.681	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007.:
5	15	5356260	357084	3.044	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008.:
6	20	6826165	341308.3	-1.509	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009.:

9 Telodrin



Expected retention time: 4.055 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

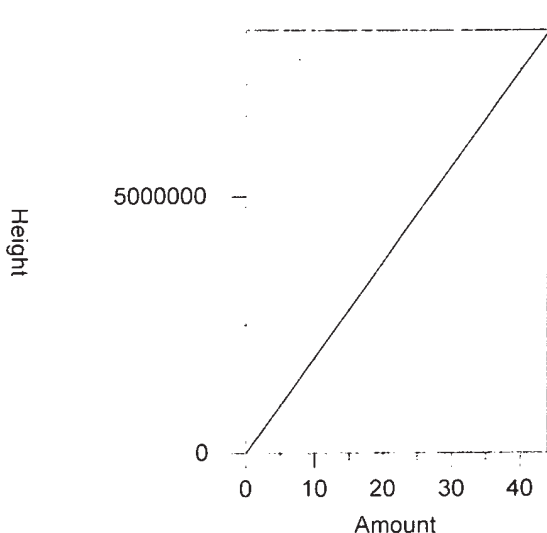
Single peak quantification by height

$Y = 216859.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994371  
 Average error: 2.996%  
 Average CF: 216859.2  
 RSD: 4.511%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	118176	236352	8.989	Manual	11/4/2018 7:04:30 AM
2	1	211036	211036	-2.685	Manual	11/4/2018 7:05:21 AM
3	2.5	539686	215874.4	-0.454	Manual	11/4/2018 7:06:02 AM
4	5	1066179	213235.8	-1.671	Manual	11/4/2018 7:06:49 AM
5	10	2101513	210151.3	-3.093	Manual	11/4/2018 7:07:37 AM
6	20	4290110	214505.5	-1.085	Manual	11/4/2018 7:08:24 AM

10 o,p-DDE



Expected retention time: 4.381 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

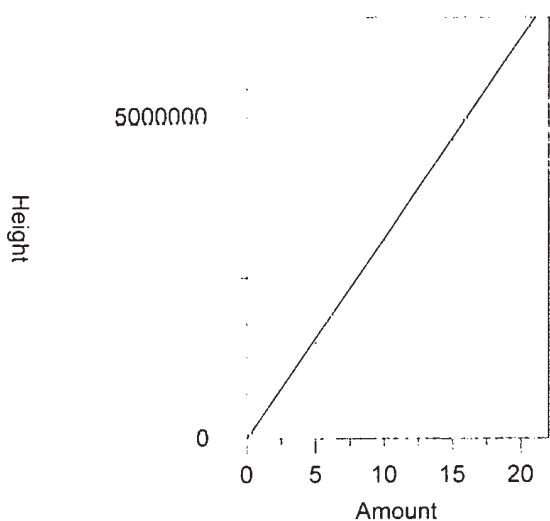
Single peak quantification by height

$Y = 186052.7 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9998639  
 Average error: 2.073%  
 Average CF: 186052.7  
 RSD: 2.971%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	195072	195072	4.848	Manual	11/4/2018 7:04:36 AM
2	2	356538	178269	-4.184	Manual	11/4/2018 7:05:27 AM
3	5	936775	187355	0.700	Manual	11/4/2018 7:06:07 AM
4	10	1846431	184643.1	-0.758	Manual	11/4/2018 7:06:55 AM
5	20	3673540	183677	-1.277	Manual	11/4/2018 7:07:44 AM
6	40	7492000	187300	0.670	Manual	11/4/2018 7:08:30 AM

11 Hept. epoxide



Expected retention time: 4.389 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

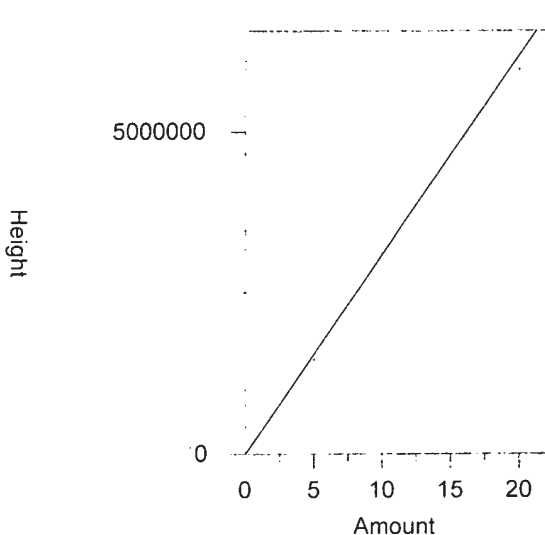
$Y = 311742.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9968866  
 Average error: 4.266%  
 Average CF: 311742.2  
 RSD: 6.500%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	175819	351638	12.798	Manual	11/4/2018 7:02:46 AM
2	1	304676	304676	-2.267	Manual	11/4/2018 7:03:12 AM
3	5	1488405	297681	-4.511	Manual	11/4/2018 7:03:19 AM
4	10	3084471	308447.1	-1.057	Manual	11/4/2018 7:03:40 AM
5	15	4656910	310460.7	-0.411	Manual	11/4/2018 7:03:46 AM
6	20	5951007	297550.3	-4.552	Manual	11/4/2018 7:04:10 AM

12 g. Chlordane

Chrom Perfect Calibration File



Expected retention time: 4.494 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

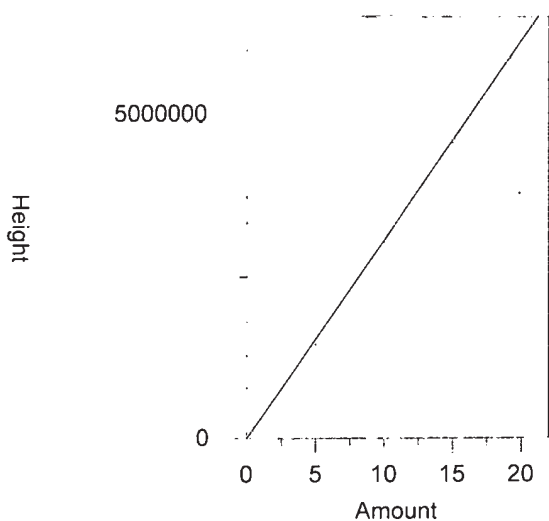
Single peak quantification by height

$Y = 309041.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9980326  
 Average error: 4.198%  
 Average CF: 309041.8  
 RSD: 6.291%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	173007.7	346015.4	11.964	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.004..
2	1	297316.4	297316.4	-3.794	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.005..
3	5	1464083	292816.6	-5.250	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.006..
4	10	3097707	309770.7	0.236	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.007..
5	15	4653881	310258.7	0.394	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.008..
6	20	5961455	298072.8	-3.549	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.009..

13 a. Chlordane



Expected retention time: 4.602 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

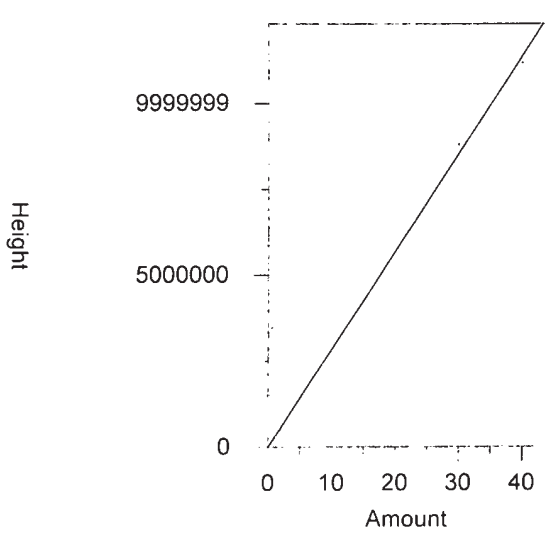
Single peak quantification by height

$Y = 306399.7 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.997845  
 Average error: 4.400%  
 Average CF: 306399.7  
 RSD: 6.667%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	173422.8	346845.6	13.200	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.004..
2	1	300285.2	300285.2	-1.996	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.005..
3	5	1450284	290056.8	-5.334	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.006..
4	10	3023141	302314.1	-1.333	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.007..
5	15	4552478	303498.5	-0.947	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.008..
6	20	5907953	295397.7	-3.591	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306001.009..

14 4,4'-DDE



Expected retention time: 4.662 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

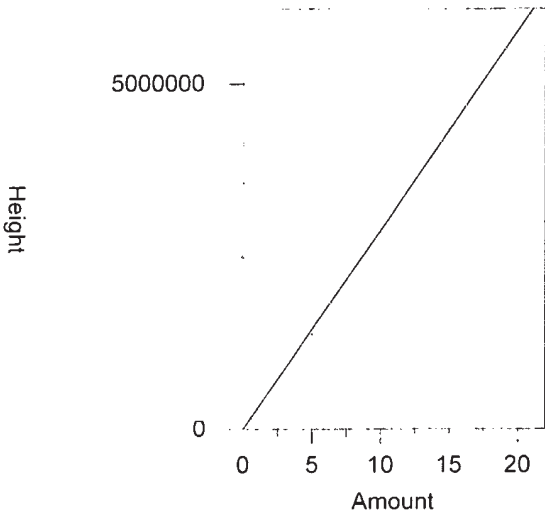
Single peak quantification by height

$Y = 284331.3 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9987975  
 Average error: 3.325%  
 Average CF: 284331.3  
 RSD: 4.351%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	302999.8	302999.8	6.566	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
2	2	537396.7	268698.3	-5.498	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
3	10	2763152	276315.2	-2.819	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
4	20	5695516	284775.8	0.156	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
5	30	8807445	293581.5	3.253	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
6	40	1.118467E+07	279616.8	-1.658	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.

15 Endosulfan I



Expected retention time: 4.711 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

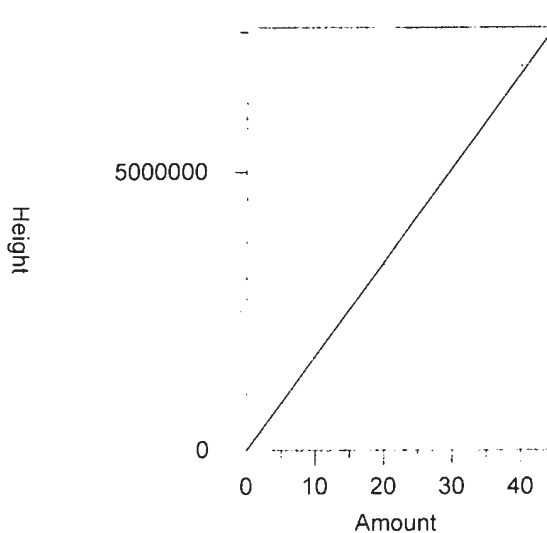
$Y = 288587.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9973946  
 Average error: 4.190%  
 Average CF: 288587.8  
 RSD: 6.263%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	161879.1	323758.2	12.187	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004.
2	1	281726.7	281726.7	-2.377	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005.
3	5	1373426	274685.2	-4.817	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006.
4	10	2849807	284980.7	-1.250	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007.
5	15	4345395	289693	0.383	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008.
6	20	5533667	276683.3	-4.125	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009.

16 o,p-DDD

Chrom Perfect Calibration File



Expected retention time: 4.799 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

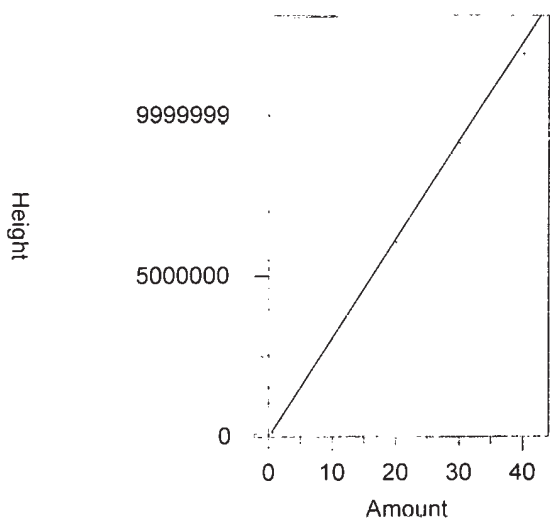
Single peak quantification by height

$Y = 169097.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994032  
 Average error: 2.474%  
 Average CF: 169097.9  
 RSD: 3.197%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	177241	177241	4.816	Manual	11/4/2018 7:04:43 AM
2	2	323376	161688	-4.382	Manual	11/4/2018 7:05:33 AM
3	5	851601	170320.2	0.723	Manual	11/4/2018 7:06:14 AM
4	10	1664119	166411.9	-1.588	Manual	11/4/2018 7:07:04 AM
5	20	3332841	166642	-1.452	Manual	11/4/2018 7:07:52 AM
6	40	6891359	172284	1.884	Manual	11/4/2018 7:08:38 AM

17 Dieldrin



Expected retention time: 4.9 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

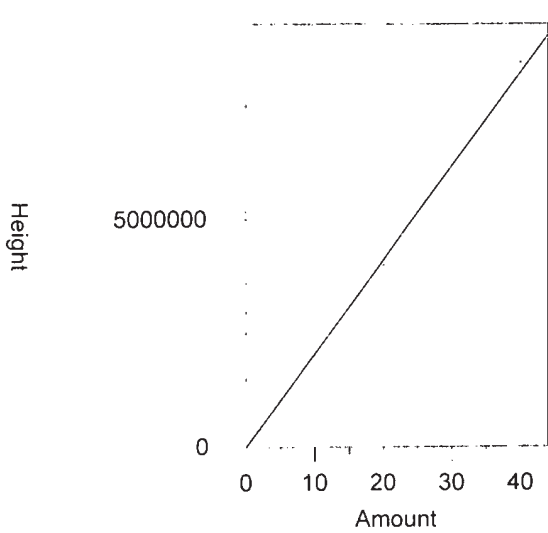
$Y = 307100.5 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9985264  
 Average error: 3.512%  
 Average CF: 307100.5  
 RSD: 5.213%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	339452.3	339452.3	10.535	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
2	2	599424.3	299712.2	-2.406	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
3	10	2992368	299236.8	-2.561	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
4	20	6046946	302347.3	-1.548	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
5	30	9121701	304056.7	-0.991	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
6	40	1.191192E+07	297798	-3.029	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.

18 o,p-DDT

Chrom Perfect Calibration File



Expected retention time: 4.998 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

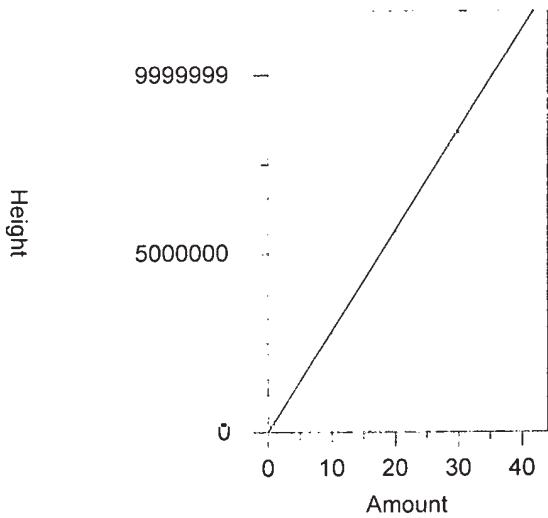
Single peak quantification by height

$Y = 205345.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.998692  
 Average error: 3.023%  
 Average CF: 205345.8  
 RSD: 3.708%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	215071	215071	4.736	Manual	11/4/2018 7:04:48 AM
2	2	388967	194483.5	-5.290	Manual	11/4/2018 7:05:39 AM
3	5	1042841	208568.2	1.569	Manual	11/4/2018 7:06:20 AM
4	10	2029898	202989.8	-1.147	Manual	11/4/2018 7:07:10 AM
5	20	3998863	199943.2	-2.631	Manual	11/4/2018 7:07:59 AM
6	40	8440755	211018.9	2.763	Manual	11/4/2018 7:08:44 AM

19 Endrin



Expected retention time: 5.078 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

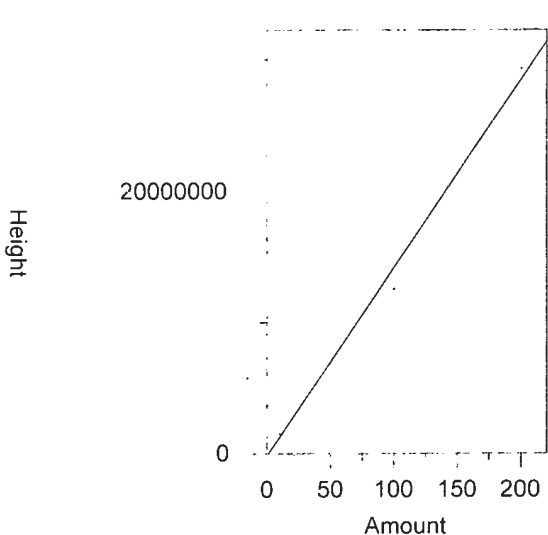
Single peak quantification by height

$Y = 283050.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9959012  
 Average error: 4.053%  
 Average CF: 283050.2  
 RSD: 6.192%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	317464.3	317464.3	12.158	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
2	2	549527.1	274763.6	-2.928	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
3	10	2760634	276063.4	-2.468	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
4	20	5627110	281355.5	-0.599	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
5	30	8418582	280619.4	-0.859	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
6	40	1.07214E+07	268035	-5.305	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0

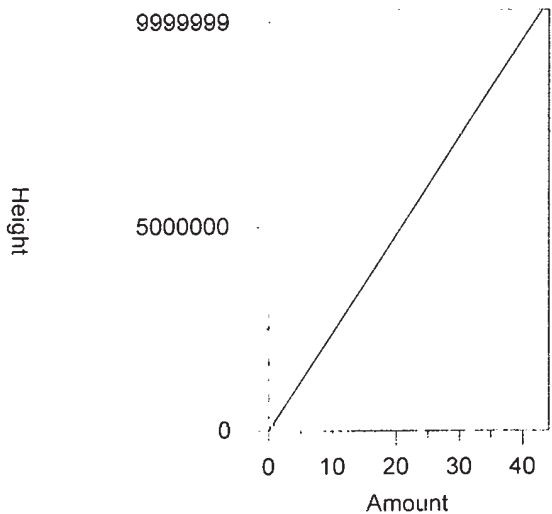
20 Kepone



Expected retention time: 5.116 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 143277.1 X + -171568.1$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.9935737  
 Average error: 26.432%  
 Average CF: 156559.7  
 RSD: 26.997%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	1203740	240748	120.944	Manual	11/4/2018 7:11:55 AM
2	10	1526835	152683.5	21.062	Manual	11/4/2018 7:12:01 AM
3	25	3424278	136971.1	0.408	Manual	11/4/2018 7:12:06 AM
4	50	6844445	136888.9	-2.114	Manual	11/4/2018 7:12:14 AM
5	100	1.256394E+07	125639.4	-11.247	Manual	11/4/2018 7:12:21 AM
6	200	2.928541E+07	146427	2.814	Manual	11/4/2018 7:15:49 AM

21 4,4'-DDD

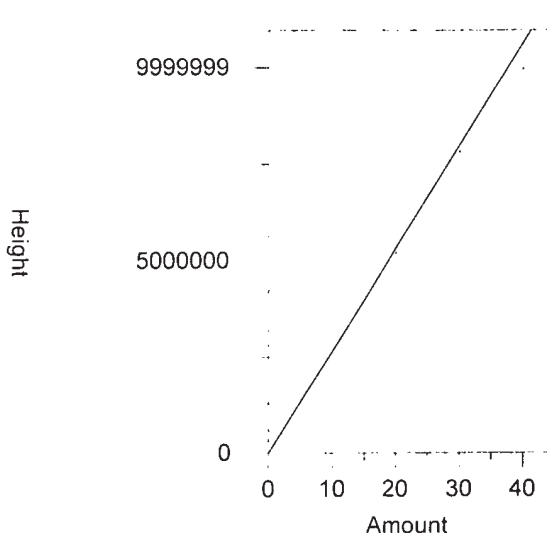


Expected retention time: 5.126 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 240558.9 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9990959  
 Average error: 3.419%  
 Average CF: 240558.9  
 RSD: 5.048%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	263347	263347	9.473	Manual	11/4/2018 7:02:57 AM
2	2	459216	229608	-4.552	Manual	11/4/2018 7:03:04 AM
3	10	2326665	232666.5	-3.281	Manual	11/4/2018 7:03:26 AM
4	20	4827969	241398.5	0.349	Manual	11/4/2018 7:03:33 AM
5	30	7248123	241604.1	0.434	Manual	11/4/2018 7:03:55 AM
6	40	9389174	234729.3	-2.423	Manual	11/4/2018 7:04:03 AM

22 Endosulfan II

Chrom Perfect Calibration File



Expected retention time: 5.247 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

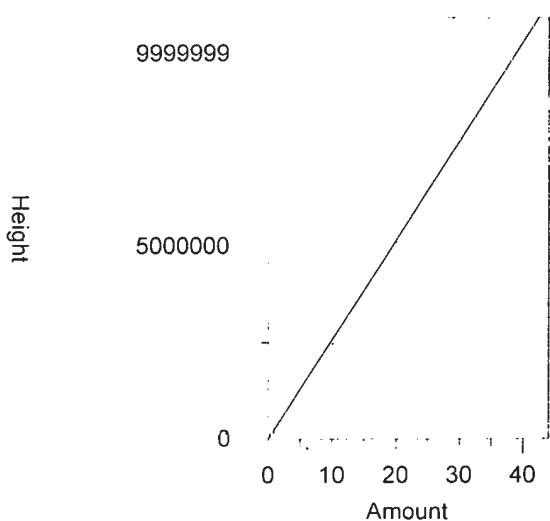
Single peak quantification by height

$Y = 265564.3 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9939034  
 Average error: 5.376%  
 Average CF: 265564.3  
 RSD: 8.063%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	308393.9	308393.9	16.128	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004..
2	2	519309.3	259654.7	-2.225	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005..
3	10	2556144	255614.4	-3.747	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006..
4	20	5207363	260368.2	-1.957	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007..
5	30	7805163	260172.1	-2.030	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008..
6	40	9967290	249182.3	-6.169	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009..

23 4,4'-DDT



Expected retention time: 5.334 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 258047.5 X + 0$

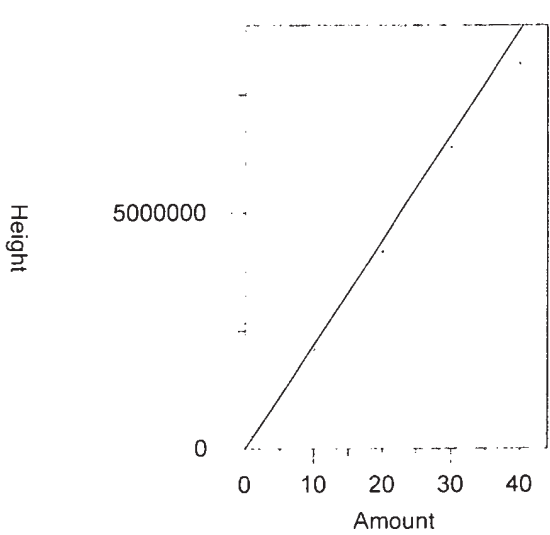
Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9978991  
 Average error: 4.250%  
 Average CF: 258047.5  
 RSD: 6.406%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	290591.2	290591.2	12.612	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004..
2	2	497102.3	248551.2	-3.680	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005..
3	10	2473217	247321.7	-4.157	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006..
4	20	5099430	254971.5	-1.192	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007..
5	30	7752076	258402.5	0.138	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008..
6	40	9937868	248446.7	-3.721	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009..

24 Endrin aldehyde



Chrom Perfect Calibration File



Expected retention time: 5.55 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

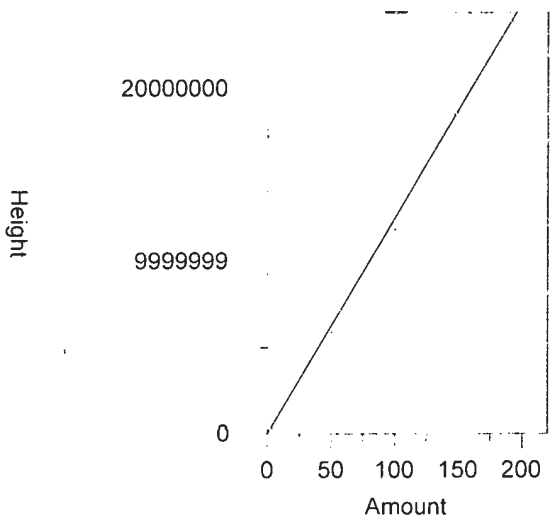
Single peak quantification by height

$Y = 221262.6 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9877159  
 Average error: 7.404%  
 Average CF: 221262.6  
 RSD: 10.498%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	266313.6	266313.6	20.361	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004..
2	2	450715.2	225357.6	1.851	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005..
3	10	2106632	210663.2	-4.790	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006..
4	20	4174453	208722.7	-5.667	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007..
5	30	6388141	212938	-3.762	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008..
6	40	8143230	203580.8	-7.991	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009..

25 Methoxychlor



Expected retention time: 5.681 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

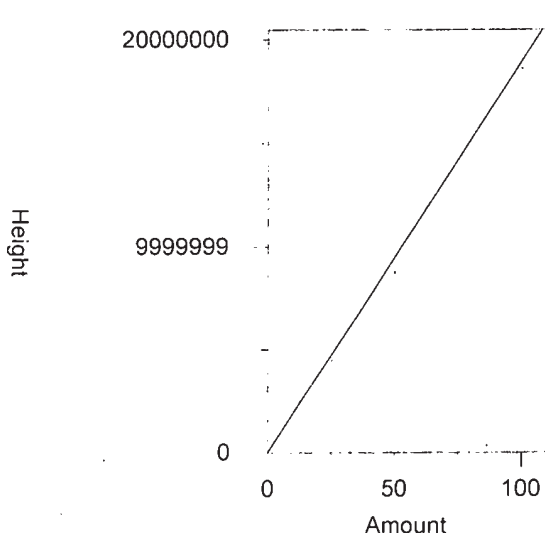
Single peak quantification by height

$Y = 125205.7 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9690081  
 Average error: 10.471%  
 Average CF: 125205.7  
 RSD: 14.081%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	790713.3	158142.7	26.306	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
2	10	1315987	131598.7	5.106	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
3	50	5924070	118481.4	-5.371	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
4	100	1.184671E+07	118467.1	-5.382	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
5	150	1.703107E+07	113540.5	-9.317	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
6	200	2.22008E+07	111004	-11.343	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.

26 Mirex



Expected retention time: 5.793 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

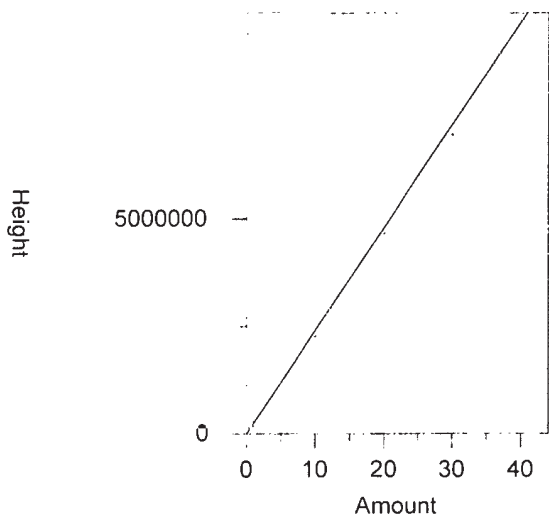
Single peak quantification by height

$Y = 189838.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9969363  
 Average error: 5.308%  
 Average CF: 189838.2  
 RSD: 7.418%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	537973	215189.2	13.354	Manual	11/4/2018 7:05:04 AM
2	5	938690	187738	-1.106	Manual	11/4/2018 7:05:45 AM
3	12.5	2433930	194714.4	2.569	Manual	11/4/2018 7:06:31 AM
4	25	4495436	179817.4	-5.279	Manual	11/4/2018 7:07:17 AM
5	50	8773674	175473.5	-7.567	Manual	11/4/2018 7:08:06 AM
6	100	1.860966E+07	186096.6	-1.971	Manual	11/4/2018 7:08:51 AM

27 Endo. sulfate



Expected retention time: 5.856 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

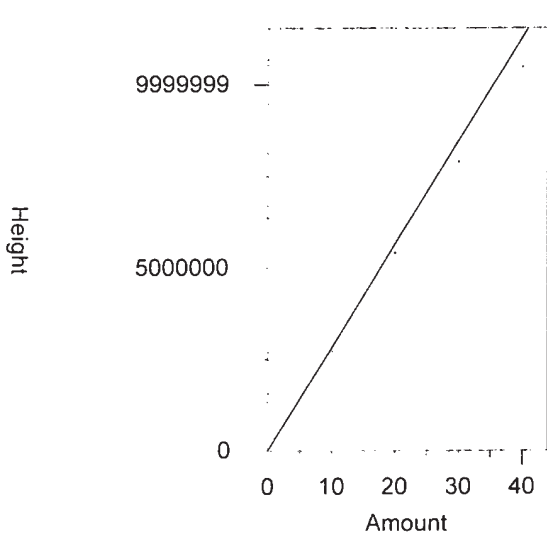
$Y = 239856.3 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9909895  
 Average error: 6.074%  
 Average CF: 239856.3  
 RSD: 9.230%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	283501.8	283501.8	18.197	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.004.
2	2	479840.5	239920.3	0.027	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005.
3	10	2278701	227870.1	-4.997	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006.
4	20	4663180	233159	-2.792	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007.
5	30	6960704	232023.5	-3.266	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008.
6	40	8906526	222663.2	-7.168	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009.

28 Endrin ketone

Chrom Perfect Calibration File



Expected retention time: 6.051 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

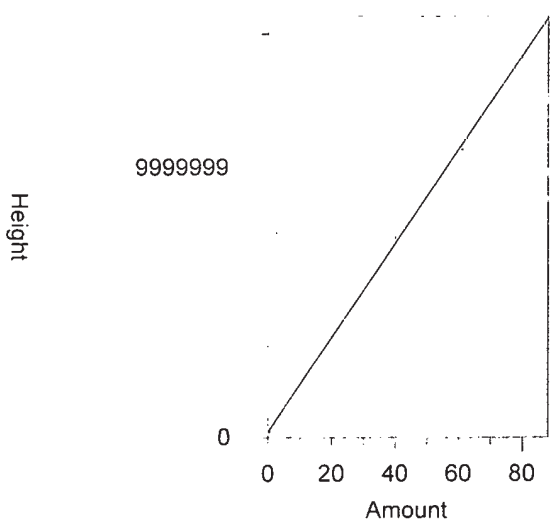
Single peak quantification by height

$Y = 282213 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9875209  
 Average error: 7.307%  
 Average CF: 282213  
 RSD: 10.238%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	337970.1	337970.1	19.757	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
2	2	576642.1	288321.1	2.164	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
3	10	2715870	271587	-3.765	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
4	20	5404888	270244.4	-4.241	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
5	30	7890607	263020.2	-6.801	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
6	40	1.04854E+07	262135	-7.114	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0

29 DCB



Expected retention time: 6.709 minutes  
 Search window: 0.03 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 174848.2 X + 202480.1$

Linear fit with equal weighting  
 Coefficient of determination: 0.9994311  
 Average error: 3.028%  
 Average CF: 199209.6  
 RSD: 16.117%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	518673.1	259336.5	-6.067	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
2	4	844831.2	211207.8	-6.325	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
3	20	3731430	186571.5	0.865	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
4	40	7410688	185267.2	2.978	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
5	61	1.06818E+07	175111.5	-1.715	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0
6	80	1.422103E+07	177762.9	0.216	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.0

6D

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830601BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/2/2018 11/2/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Tetrachloro-m-xylene	2.37	2.37	2.37	2.37	2.37	2.38	2.37	2.35	2.39
Hcb	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.67	2.71
alpha-BHC	2.78	2.79	2.78	2.79	2.79	2.79	2.79	2.77	2.81
gamma-BHC (Lindane)	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.03	3.07
beta-BHC	3.11	3.12	3.11	3.12	3.11	3.12	3.12	3.10	3.14
delta-BHC	3.34	3.35	3.34	3.35	3.34	3.35	3.35	3.33	3.37
Heptachlor	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.37	3.41
Aldrin	3.65	3.66	3.65	3.66	3.65	3.66	3.66	3.64	3.68
Telodrin	3.80	3.80	3.80	3.80	3.80	3.79	3.80	3.78	3.82
Heptachlor epoxide	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.13	4.17
gamma-Chlordane	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.29	4.33
o,p-DDE	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.30	4.34
alpha-Chlordane	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.41	4.45
Endosulfan I	4.47	4.48	4.47	4.48	4.48	4.48	4.48	4.46	4.50
1,4'-DDE	4.57	4.58	4.57	4.58	4.58	4.58	4.58	4.56	4.60
Dieldrin	4.69	4.70	4.69	4.70	4.70	4.70	4.70	4.68	4.72
o,p-DDD	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.72	4.76
Endrin	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.91	4.95
o,p-DDT	4.97	4.97	4.97	4.97	4.97	4.97	4.97	4.95	4.99
Kepone	5.02	5.02	5.01	5.02	5.01	5.01	5.01	4.99	5.03
4,4'-DDD	5.02	5.03	5.02	5.03	5.03	5.03	5.03	5.01	5.05
Endosulfan II	5.09	5.10	5.09	5.10	5.09	5.10	5.10	5.08	5.12
4,4'-DDT	5.25	5.26	5.25	5.26	5.26	5.26	5.26	5.24	5.28
Endrin aldehyde	5.34	5.35	5.34	5.35	5.34	5.35	5.35	5.33	5.37
Endosulfan sulfate	5.53	5.54	5.53	5.54	5.54	5.54	5.54	5.52	5.56
Methoxychlor	5.74	5.75	5.74	5.75	5.75	5.75	5.75	5.73	5.77
Mirex	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.85	5.89
Endrin ketone	5.90	5.91	5.90	5.91	5.90	5.91	5.91	5.89	5.93
Decachlorobiphenyl	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.67	6.73

6E

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830601BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/2/2018 11/2/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	1.51E+06	1.33E+06	1.44E+06	1.45E+06	1.48E+06	1.44E+06	1.44E+06	4
Hcb	1.49E+06	1.35E+06	1.38E+06	1.39E+06	1.40E+06	1.47E+06	1.41E+06	4
alpha-BHC	1.93E+06	1.72E+06	1.99E+06	2.11E+06	2.23E+06	2.20E+06	2.03E+06	9
gamma-BHC (Lindane)	1.65E+06	1.46E+06	1.64E+06	1.71E+06	1.80E+06	1.78E+06	1.67E+06	8
beta-BHC	7.84E+05	6.93E+05	6.66E+05	6.75E+05	6.98E+05	6.93E+05	7.01E+05	6
delta-BHC	1.44E+06	1.30E+06	1.46E+06	1.56E+06	1.66E+06	1.63E+06	1.51E+06	9
Heptachlor	1.38E+06	1.20E+06	1.25E+06	1.32E+06	1.40E+06	1.35E+06	1.32E+06	6
Aldrin	1.18E+06	1.06E+06	1.14E+06	1.21E+06	1.26E+06	1.24E+06	1.18E+06	6
Telodrin	7.51E+05	6.78E+05	6.94E+05	7.04E+05	7.05E+05	7.60E+05	7.16E+05	5
Heptachlor epoxide	1.09E+06	9.32E+05	9.31E+05	9.73E+05	1.00E+06	9.83E+05	9.85E+05	6
gamma-Chlordane	1.09E+06	9.15E+05	9.35E+05	1.00E+06	1.04E+06	1.00E+06	9.98E+05	7
o,p-DDE	5.71E+05	5.26E+05	5.63E+05	5.61E+05	5.82E+05	6.24E+05	5.71E+05	6
alpha-Chlordane	1.09E+06	9.19E+05	9.20E+05	9.62E+05	9.94E+05	9.74E+05	9.76E+05	6
Endosulfan I	1.00E+06	8.48E+05	8.51E+05	8.95E+05	9.22E+05	8.80E+05	8.99E+05	6
4,4'-DDE	9.05E+05	7.94E+05	8.52E+05	9.16E+05	9.50E+05	9.27E+05	8.91E+05	6
Dieldrin	1.03E+06	8.90E+05	9.23E+05	9.83E+05	9.94E+05	9.58E+05	9.63E+05	5
o,p-DDD	5.03E+05	4.69E+05	4.91E+05	4.92E+05	5.02E+05	5.44E+05	5.00E+05	5
Endrin	9.66E+05	8.18E+05	8.39E+05	8.89E+05	9.22E+05	8.63E+05	8.83E+05	6
o,p-DDT	5.54E+05	5.03E+05	5.80E+05	5.40E+05	5.56E+05	6.18E+05	5.59E+05	7
Kepone	7.01E+05	4.41E+05	4.06E+05	4.29E+05	4.05E+05	4.89E+05	4.78E+05	24
4,4'-DDD	8.07E+05	6.70E+05	6.95E+05	7.57E+05	7.63E+05	7.58E+05	7.42E+05	7
Endosulfan II	9.52E+05	7.77E+05	7.93E+05	8.27E+05	8.33E+05	8.07E+05	8.32E+05	8
4,4'-DDT	9.07E+05	7.28E+05	7.30E+05	7.89E+05	8.08E+05	7.97E+05	7.93E+05	8
Endrin aldehyde	7.95E+05	6.47E+05	6.15E+05	6.51E+05	6.68E+05	6.40E+05	6.69E+05	10
Endosulfan sulfate	8.79E+05	7.21E+05	7.20E+05	7.65E+05	7.84E+05	7.60E+05	7.71E+05	8
Methoxychlor	4.37E+05	3.78E+05	3.41E+05	3.49E+05	3.33E+05	3.35E+05	3.62E+05	11
Mirex	5.89E+05	5.28E+05	5.44E+05	5.32E+05	5.39E+05	5.86E+05	5.53E+05	5
Endrin ketone	9.63E+05	7.98E+05	7.69E+05	8.00E+05	8.06E+05	7.80E+05	8.20E+05	9
Decachlorobiphenyl	6.78E+05	5.53E+05	4.89E+05	5.12E+05	4.86E+05	5.11E+05	5.38E+05	13

-linear

WJZ  
11/4/18

6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830601BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/2/2018 11/3/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION		AMOUNT (ng)	PEAK HEIGHT	%RSD
			FROM	TO	FACTOR	LEVEL			
Aroclor-1016	1	2.69	2.66	2.72	19215	1	200	3842974	.00
	2	2.97	2.94	3.00	26626	1	200	5325124	.00
	3	3.15	3.12	3.18	11092	1	200	2218380	.00
	4	3.31	3.28	3.34	46618	1	200	9323568	.00
	5	3.42	3.39	3.45	23357	1	200	4671356	.00
	6	3.50	3.47	3.53	15374	1	200	3074750	.00
Aroclor-1221	1	2.57	2.55	2.59	11102	1	200	2220491	.00
	2	2.66	2.64	2.68	6785	1	200	1357046	.00
	3	2.70	2.68	2.72	22912	1	200	4582321	.00
Aroclor-1248	1	3.31	3.28	3.34	23607	1	200	4721418	.00
	2	3.57	3.54	3.60	22413	1	200	4482628	.00
	3	3.79	3.76	3.82	27954	1	200	5590784	.00
	4	3.90	3.87	3.93	23336	1	200	4667239	.00
	5	4.16	4.13	4.19	32251	1	200	6450198	.00
	6	4.35	4.32	4.38	25385	1	200	5076946	.00
Aroclor-1254	1	4.15	4.12	4.18	31150	1	250	7787562	.00
	2	4.31	4.28	4.34	35159	1	250	8789741	.00
	3	4.68	4.65	4.71	50803	1	250	12700800	.00
	4	4.86	4.83	4.89	36453	1	250	9113145	.00
	5	5.12	5.09	5.15	26800	1	250	6700056	.00
	6	5.26	5.23	5.29	38736	1	250	9683890	.00
Aroclor-1260	1	4.84	4.81	4.87	34888	1	200	6977575	.00
	2	4.99	4.96	5.02	41645	1	200	8328938	.00
	3	5.26	5.23	5.29	43252	1	200	8650472	.00
	4	5.53	5.50	5.56	27209	1	200	5441882	.00
	5	5.70	5.67	5.73	55850	1	200	11170040	.00
	6	5.95	5.92	5.98	33155	1	200	6631015	.00

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Calibration File: 05PEST1830601B

GC Column (2): RTXCLPII

ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/2/2018 11/3/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
			FROM	TO					
Chlordane	1	3.28	3.25	3.31	31392	1	12.5	377285	9.92
	1					25	652947		
	1					50	1642544		
	1					100	3171962		
	1					200	6401828		
	1					500	17734560		
	2	3.79	3.76	3.82	30204	1	12.5	403594	7.09
	2					25	675287		
	2					50	1638282		
	2					100	3046482		
	2					200	5788234		
	2					500	14877020		
	3	4.12	4.09	4.15	21179	1	12.5	272385	8.37
	3					25	450090		
	3					50	1162179		
	3					100	2129964		
	3					200	4139737		
	3					500	11017480		
	4	4.31	4.28	4.34	98897	1	12.5	1185038	10.47
	4					25	1999810		
	4					50	5404774		
	4					100	10176280		
	4					200	20431460		
	4					500	53285910		
5	4.43	4.40	4.46	74667	1	12.5	921260	9.60	
5					25	1539187			
5					50	4127468			
5					100	7622940			
5					200	14973900			
5					500	39541440			
6	5.13	5.10	5.16	30141	1	12.5	434945	11.30	
6					25	647179			
6					50	1676081			
6					100	2951771			
6					200	5543394			
6					500	14702010			

## 6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830601BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/2/2018 11/3/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
			FROM	TO					
Toxaphene	1	4.68	4.65	4.71	10165	1	50	514571	.87
	1					100	1018445		
	1					200	2036424		
	1					500	5103620		
	1					1000	10056680		
	1					2000	20136310		
	2	4.91	4.88	4.94	10494	1	50	511096	1.46
	2					100	1061126		
	2					200	2096546		
	2					500	5325630		
	2					1000	10451430		
	2					2000	21094510		
	3	5.08	5.05	5.11	19322	1	50	941194	1.35
	3					100	1935048		
	3					200	3882978		
	3					500	9799539		
	3					1000	19382900		
	3					2000	38721940		
	4	5.35	5.32	5.38	20837	1	50	1013307	2.07
	4					100	2077736		
	4					200	4201018		
	4					500	10783050		
	4					1000	20760490		
	4					2000	41287840		
5	5.41	5.38	5.44	12307	1	50	609072	1.43	
5					100	1249966			
5					200	2466283			
5					500	6263254			
5					1000	12194250			
5					2000	24214190			
6	5.70	5.67	5.73	18924	1	50	942304	1.92	
6					100	1921570			
6					200	3844229			
6					500	9624753			
6					1000	18614450			
6					2000	36797160			



File Name: V:\CP5\05pest1830601b.cal  
 Version: 11

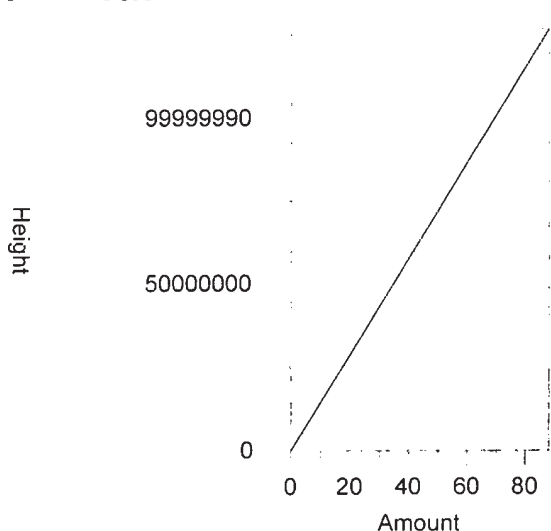
Creator:  
 Description:  
 Reason for change:

External standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 50  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

1 TCX

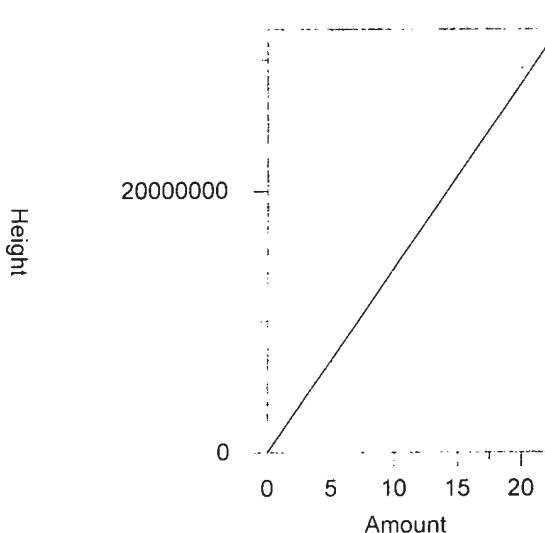


Expected retention time: 2.374 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 1440809 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9995002  
 Average error: 2.622%  
 Average CF: 1440809  
 RSD: 4.224%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	3022832	1511416	4.901	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.004.
2	4	5322303	1330576	-7.651	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.005.
3	20	2.878238E+07	1439119	-0.117	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.006.
4	40	5.787514E+07	1446879	0.421	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.007.
5	61	9.012446E+07	1477450	2.543	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.008.
6	80	1.151532E+08	1439415	-0.097	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.009.

2 HCB

Chrom Perfect Calibration File



Expected retention time: 2.692 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

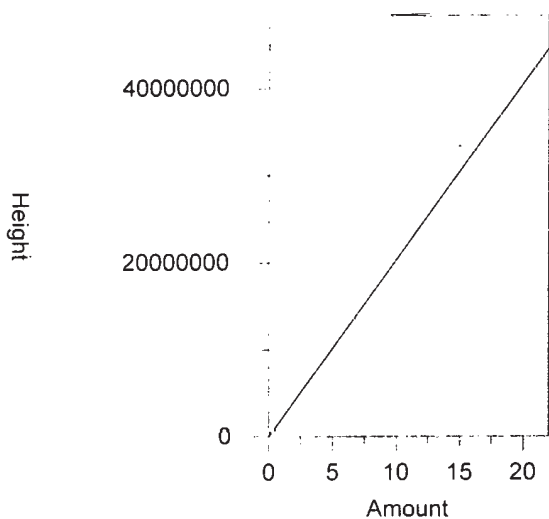
Single peak quantification by height

$Y = 1412457 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9977701  
 Average error: 3.185%  
 Average CF: 1412457  
 RSD: 3.968%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	745127	1490254	5.508	Manual	11/4/2018 7:22:19 AM
2	1	1345480	1345480	-4.742	Manual	11/4/2018 7:22:59 AM
3	2.5	3446559	1378624	-2.395	Manual	11/4/2018 7:23:44 AM
4	5	6930088	1386018	-1.872	Manual	11/4/2018 7:24:30 AM
5	10	1.404745E+07	1404745	-0.546	Manual	11/4/2018 7:25:16 AM
6	20	2.939245E+07	1469623	4.047	Manual	11/4/2018 7:26:01 AM

3 alpha-BHC



Expected retention time: 2.791 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

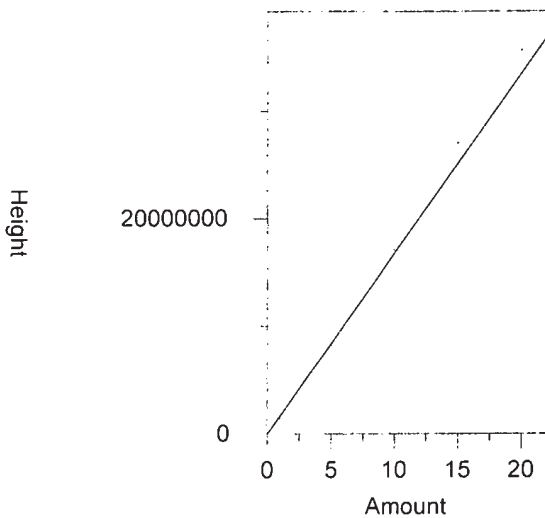
$Y = 2028591 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9860565  
 Average error: 7.468%  
 Average CF: 2028591  
 RSD: 9.498%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	962550	1925100	-5.102	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	1716187	1716187	-15.400	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	9949991	1989998	-1.902	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	2.113441E+07	2113441	4.183	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	3.338586E+07	2225724	9.718	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	4.40219E+07	2201095	8.504	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

4 gamma-BHC

Chrom Perfect Calibration File



Expected retention time: 3.052 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

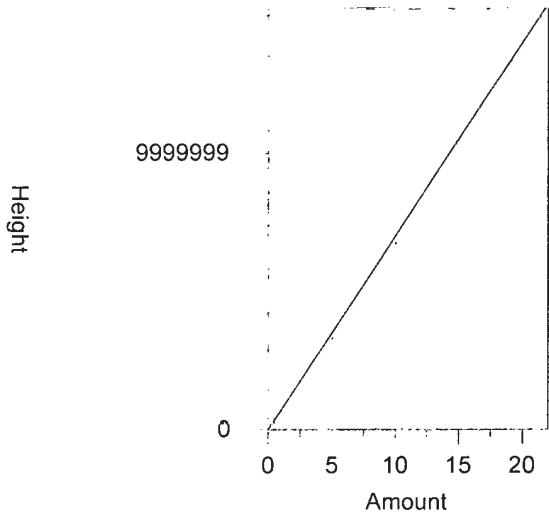
Single peak quantification by height

$Y = 1673706 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9913236  
 Average error: 5.488%  
 Average CF: 1673706  
 RSD: 7.517%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	825050.4	1650101	-1.410	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	1456248	1456248	-12.993	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	8196167	1639233	-2.060	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	1.710487E+07	1710487	2.198	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	2.706221E+07	1804147	7.794	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	3.564044E+07	1782022	6.472	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

5 beta-BHC



Expected retention time: 3.117 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

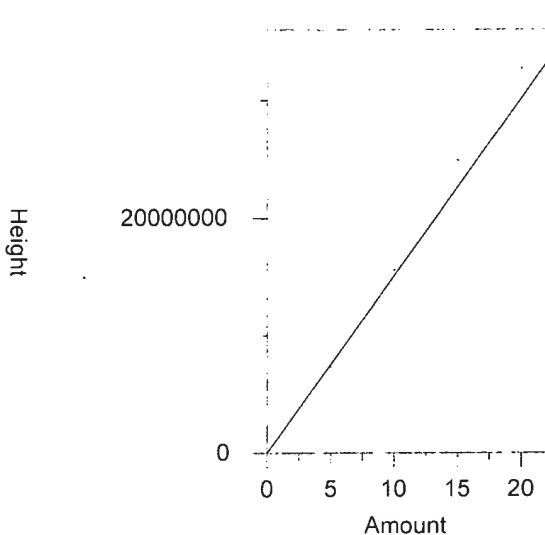
$Y = 701462.1 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9991065  
 Average error: 3.932%  
 Average CF: 701462.1  
 RSD: 6.030%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	392098.1	784196.2	11.795	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	692551.4	692551.4	-1.270	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	3329863	665972.6	-5.059	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	6754847	675484.7	-3.703	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	1.046436E+07	697624	-0.547	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	1.385888E+07	692944	-1.214	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

6 delta-BHC

Chrom Perfect Calibration File



Expected retention time: 3.347 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

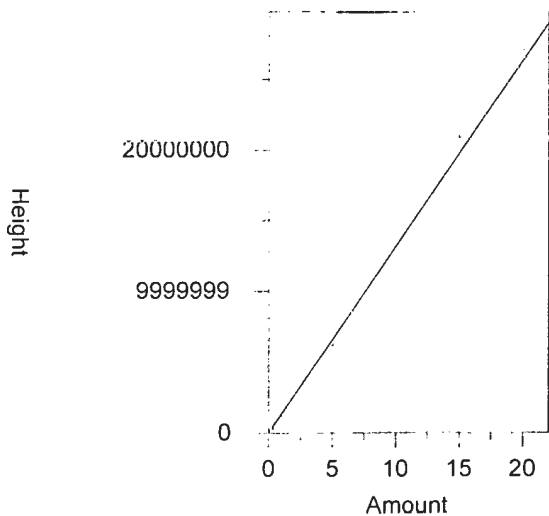
Single peak quantification by height

$Y = 1508859 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9860663  
 Average error: 7.290%  
 Average CF: 1508859  
 RSD: 9.043%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	720338.6	1440677	-4.519	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	1298466	1298466	-13.944	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	7287319	1457464	-3.406	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	1.561526E+07	1561526	3.491	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	2.49016E+07	1660107	10.024	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	3.269826E+07	1634913	8.354	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

7 Heptachlor



Expected retention time: 3.392 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

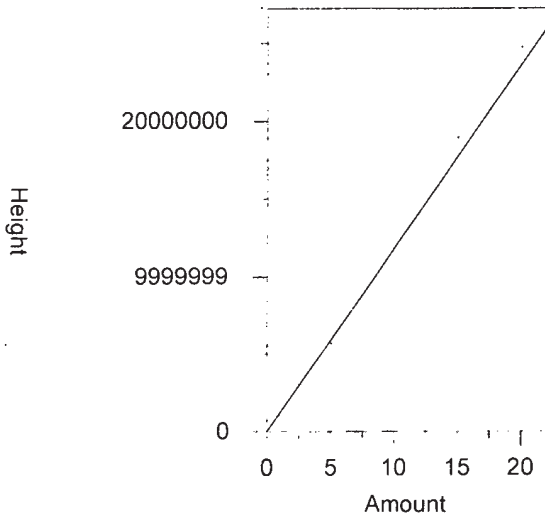
$Y = 1317226 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.996397  
 Average error: 4.626%  
 Average CF: 1317226  
 RSD: 5.805%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	690055.9	1380112	4.774	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	1204757	1204757	-8.538	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	6234459	1246892	-5.340	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	1.32049E+07	1320490	0.248	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	2.094637E+07	1396425	6.013	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	2.709364E+07	1354682	2.844	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

8 Aldrin

Chrom Perfect Calibration File



Expected retention time: 3.657 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

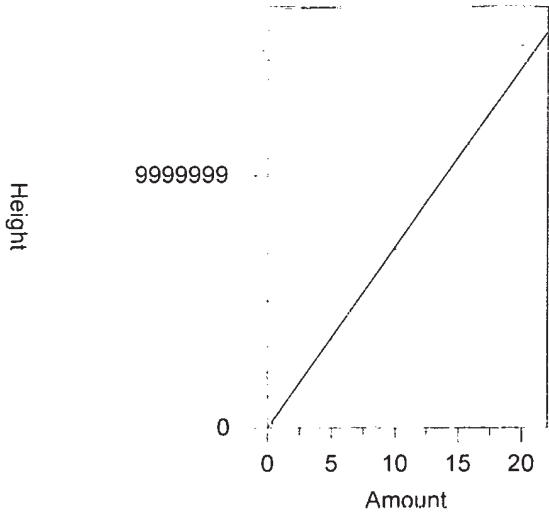
Single peak quantification by height

$Y = 1181475 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9941266  
 Average error: 4.655%  
 Average CF: 1181475  
 RSD: 6.194%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	592196.7	1184393	0.247	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	1061719	1061719	-10.136	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	5681254	1136251	-3.828	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	1.206318E+07	1206318	2.103	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	1.895099E+07	1263399	6.934	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	2.473534E+07	1236767	4.680	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

9 Telodrin



Expected retention time: 3.797 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

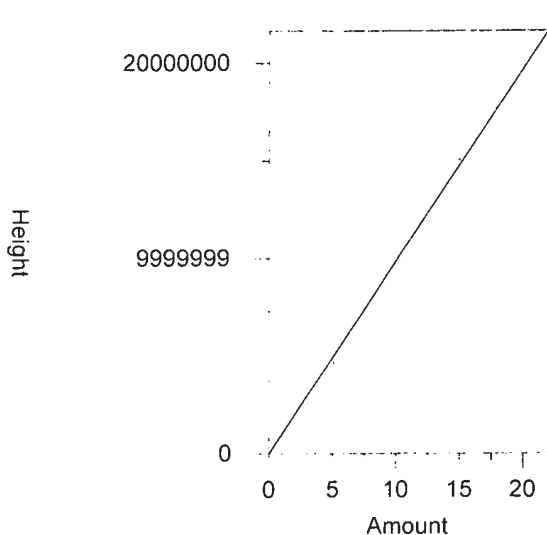
$Y = 715702.6 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9949037  
 Average error: 3.744%  
 Average CF: 715702.6  
 RSD: 4.575%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	375653	751306	4.975	Manual	11/4/2018 7:22:25 AM
2	1	678270	678270	-5.230	Manual	11/4/2018 7:23:10 AM
3	2.5	1736218	694487.2	-2.964	Manual	11/4/2018 7:23:52 AM
4	5	3521357	704271.4	-1.597	Manual	11/4/2018 7:24:40 AM
5	10	7053964	705396.4	-1.440	Manual	11/4/2018 7:25:24 AM
6	20	1.520969E+07	760484.5	6.257	Manual	11/4/2018 7:26:09 AM

10 Hept. epoxide

Chrom Perfect Calibration File



Expected retention time: 4.153 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

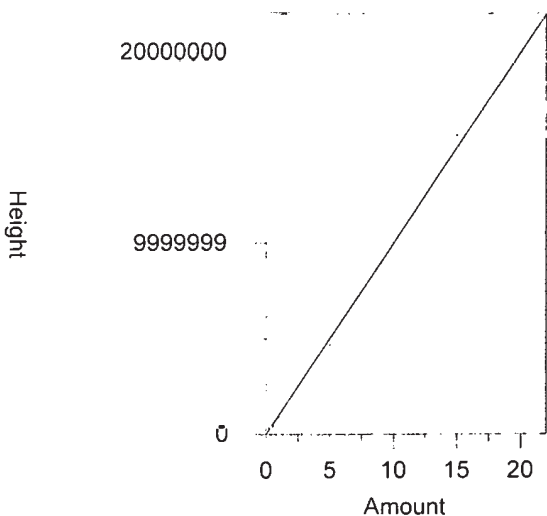
Single peak quantification by height

$Y = 984640.1 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.999442  
 Average error: 4.052%  
 Average CF: 984640.1  
 RSD: 5.819%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	542872.4	1085745	10.268	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	931718.6	931718.6	-5.375	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	4653303	930660.6	-5.482	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	9731672	973167.2	-1.165	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	1.504854E+07	1003236	1.889	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	1.966627E+07	983313.5	-0.135	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

11 g. Chlordane



Expected retention time: 4.313 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

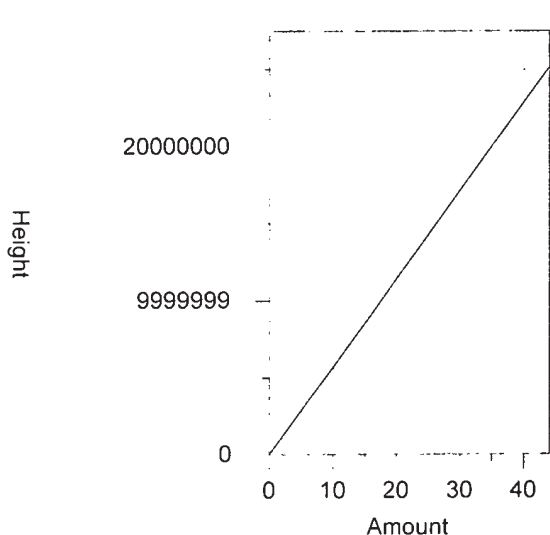
$Y = 998227.1 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9983436  
 Average error: 4.880%  
 Average CF: 998227.1  
 RSD: 6.655%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	547347.4	1094695	9.664	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	915258.8	915258.8	-8.312	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	4675297	935059.4	-6.328	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	1.002851E+07	1002851	0.463	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	1.562037E+07	1041358	4.321	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	2.000281E+07	1000141	0.192	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

12 o,p-DDE

Chrom Perfect Calibration File



Expected retention time: 4.32 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

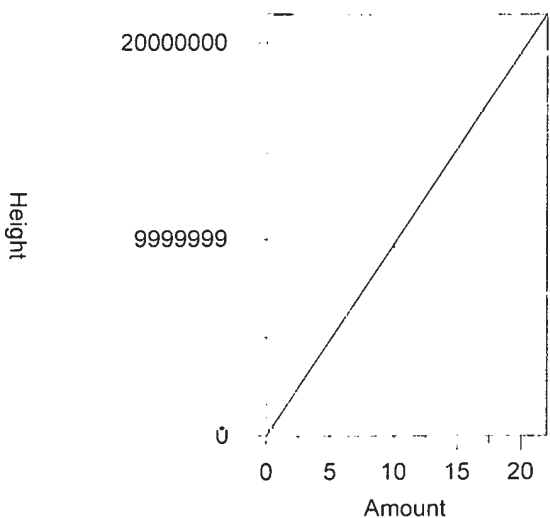
Single peak quantification by height

$Y = 571152.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9895611  
 Average error: 3.733%  
 Average CF: 571152.8  
 RSD: 5.633%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	571392	571392	0.042	Manual	11/4/2018 7:22:31 AM
2	2	1051044	525522	-7.989	Manual	11/4/2018 7:23:15 AM
3	5	2813860	562772	-1.467	Manual	11/4/2018 7:23:58 AM
4	10	5612058	561205.8	-1.742	Manual	11/4/2018 7:24:46 AM
5	20	1.163747E+07	581873.5	1.877	Manual	11/4/2018 7:25:30 AM
6	40	2.496607E+07	624151.8	9.279	Manual	11/4/2018 7:26:14 AM

13 a. Chlordane



Expected retention time: 4.433 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

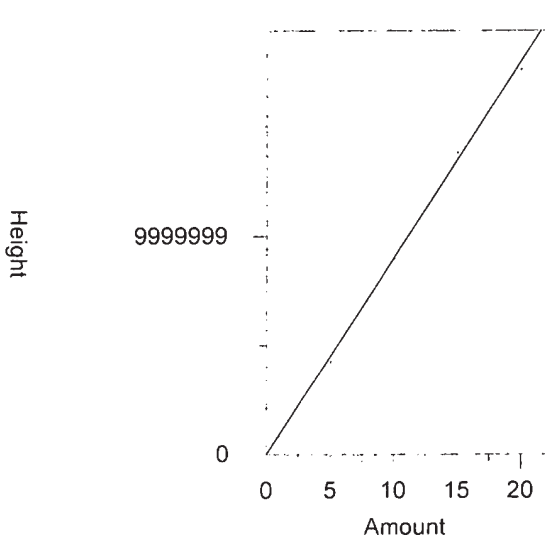
$Y = 975715.1 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994044  
 Average error: 4.387%  
 Average CF: 975715.1  
 RSD: 6.332%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	543043.1	1086086	11.312	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	918643.4	918643.4	-5.849	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	4599287	919857.4	-5.725	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	9616788	961678.8	-1.439	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	1.490618E+07	993745.3	1.848	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	1.948559E+07	974279.5	-0.147	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

14 Endosulfan I

Chrom Perfect Calibration File



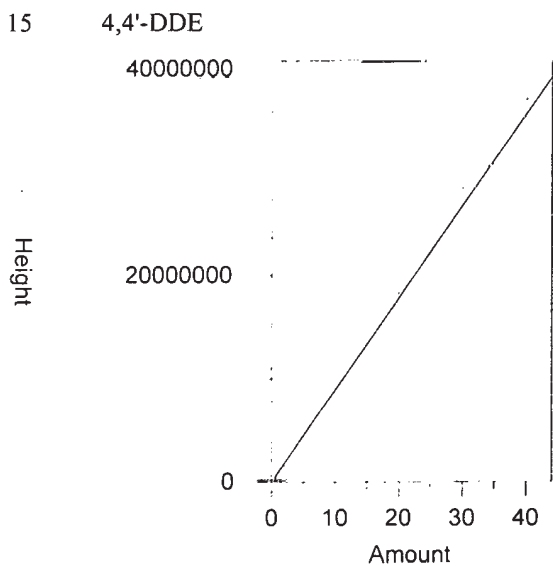
Expected retention time: 4.479 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 899243 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9987043  
 Average error: 4.561%  
 Average CF: 899243  
 RSD: 6.288%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	500014.6	1000029	11.208	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	1	848233.2	848233.2	-5.673	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	5	4253918	850783.6	-5.389	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	10	8946022	894602.2	-0.516	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	15	1.382266E+07	921510.7	2.476	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	20	1.760598E+07	880299	-2.107	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011



Expected retention time: 4.578 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

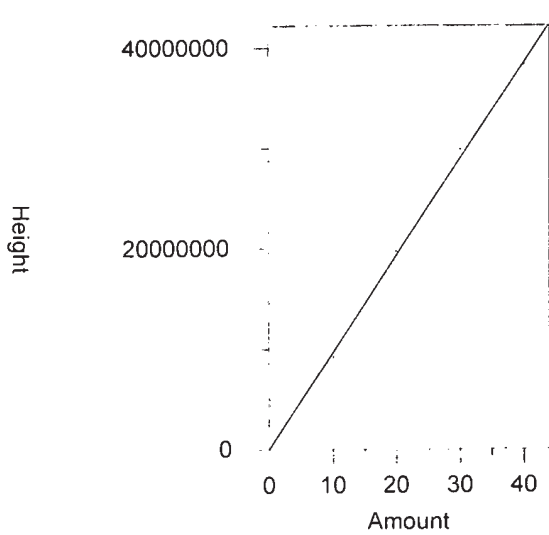
$Y = 890509.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9947959  
 Average error: 5.068%  
 Average CF: 890509.9  
 RSD: 6.454%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	905203	905203	1.650	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	2	1587767	793883.5	-10.851	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	10	8517350	851735	-4.354	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	20	1.831355E+07	915677.5	2.826	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	30	2.849341E+07	949780.3	6.656	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	40	3.707119E+07	926779.8	4.073	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

16 Dieldrin





Expected retention time: 4.698 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

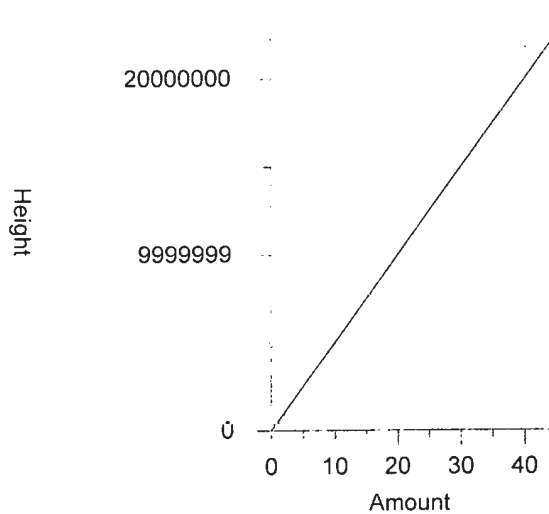
Single peak quantification by height

$Y = 963472.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9989398  
 Average error: 4.125%  
 Average CF: 963472.9  
 RSD: 5.314%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1032220	1032220	7.135	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	2	1780651	890325.5	-7.592	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	10	9226405	922640.5	-4.238	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	20	1.966382E+07	983191	2.047	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	30	2.982678E+07	994226	3.192	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	40	3.832938E+07	958234.5	-0.544	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

17 o,p-DDD



Expected retention time: 4.738 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

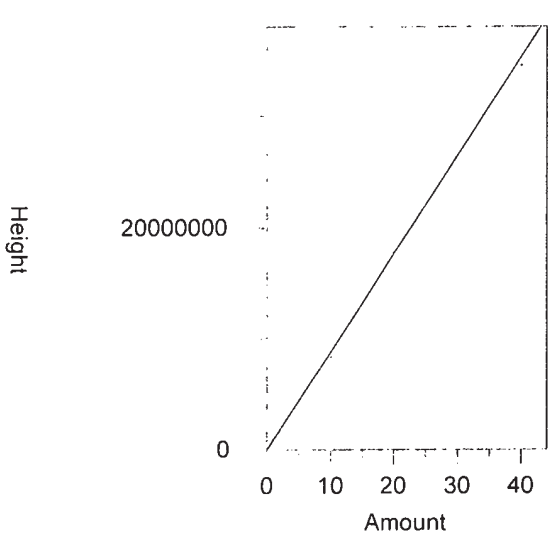
Single peak quantification by height

$Y = 500224.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.990753  
 Average error: 3.239%  
 Average CF: 500224.4  
 RSD: 4.939%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	503491	503491	0.653	Manual	11/4/2018 7:22:37 AM
2	2	937508	468754	-6.291	Manual	11/4/2018 7:23:21 AM
3	5	2456376	491275.2	-1.789	Manual	11/4/2018 7:24:07 AM
4	10	4920399	492039.9	-1.636	Manual	11/4/2018 7:24:53 AM
5	20	1.003914E+07	501957	0.346	Manual	11/4/2018 7:25:37 AM
6	40	2.175318E+07	543829.5	8.717	Manual	11/4/2018 7:26:24 AM

18 Endrin



Expected retention time: 4.934 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

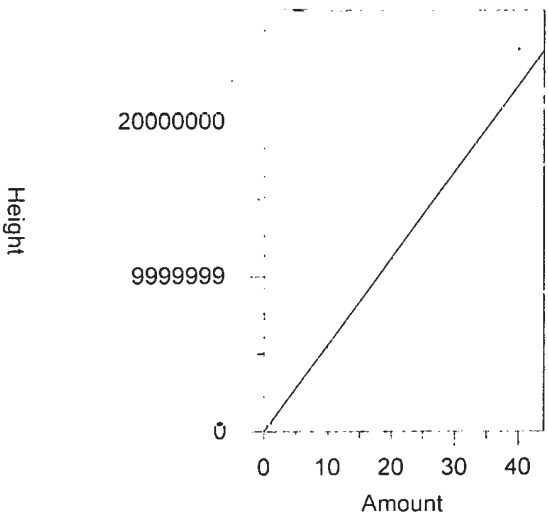
Single peak quantification by height

$Y = 882816.6 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9977493  
 Average error: 4.823%  
 Average CF: 882816.6  
 RSD: 6.189%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	966032.8	966032.8	9.426	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	2	1635880	817940	-7.349	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	10	8394281	839428.1	-4.915	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	20	1.777256E+07	888628	0.658	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	30	2.764543E+07	921514.3	4.383	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	40	3.453426E+07	863356.5	-2.204	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

19 o,p-DDT



Expected retention time: 4.971 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

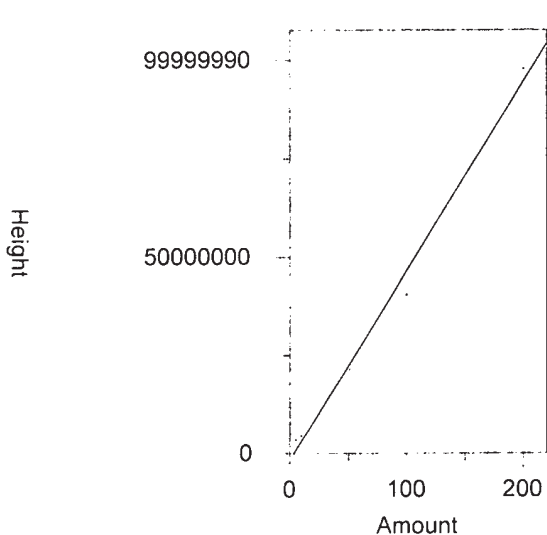
$Y = 558660 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9864926  
 Average error: 4.838%  
 Average CF: 558660  
 RSD: 6.906%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	553717	553717	-0.885	Manual	11/4/2018 7:22:43 AM
2	2	1006653	503326.5	-9.905	Manual	11/4/2018 7:23:27 AM
3	5	2900438	580087.6	3.836	Manual	11/4/2018 7:24:13 AM
4	10	5404704	540470.4	-3.256	Manual	11/4/2018 7:24:59 AM
5	20	1.112088E+07	556044	-0.468	Manual	11/4/2018 7:25:43 AM
6	40	2.473258E+07	618314.5	10.678	Manual	11/4/2018 7:26:30 AM

20 Kepone

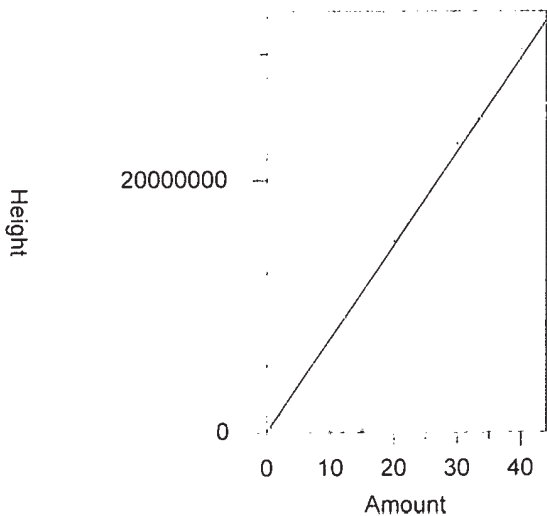
Chrom Perfect Calibration File



Expected retention time: 5.01 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 481848.6 X + -1683167$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.991312  
 Average error: 74.279%  
 Average CF: 478426.7  
 RSD: 23.644%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	3502799	700559.8	382.429	Manual	11/4/2018 7:21:15 AM
2	10	4409532	440953.2	40.641	Manual	11/4/2018 7:21:21 AM
3	25	1.014981E+07	405992.4	-2.058	Manual	11/4/2018 7:21:28 AM
4	50	2.146536E+07	429307.2	-4.212	Manual	11/4/2018 7:21:37 AM
5	100	4.045509E+07	404550.9	-13.003	Manual	11/4/2018 7:21:44 AM
6	200	9.783934E+07	489196.7	3.330	Manual	11/4/2018 7:21:54 AM

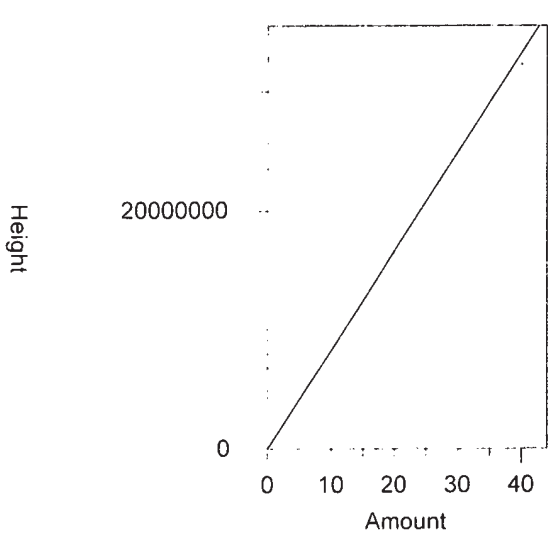
21 4,4'-DDD



Expected retention time: 5.028 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 741762.4 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9983806  
 Average error: 5.305%  
 Average CF: 741762.4  
 RSD: 6.735%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	807013	807013	8.797	Manual	11/4/2018 7:20:29 AM
2	2	1340745	670372.5	-9.624	Manual	11/4/2018 7:20:35 AM
3	10	6951066	695106.6	-6.290	Manual	11/4/2018 7:20:41 AM
4	20	1.513961E+07	756980.5	2.052	Manual	11/4/2018 7:20:47 AM
5	30	2.288148E+07	762716	2.825	Manual	11/4/2018 7:20:53 AM
6	40	3.033543E+07	758385.8	2.241	Manual	11/4/2018 7:20:59 AM

22 Endosulfan II



Expected retention time: 5.096 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

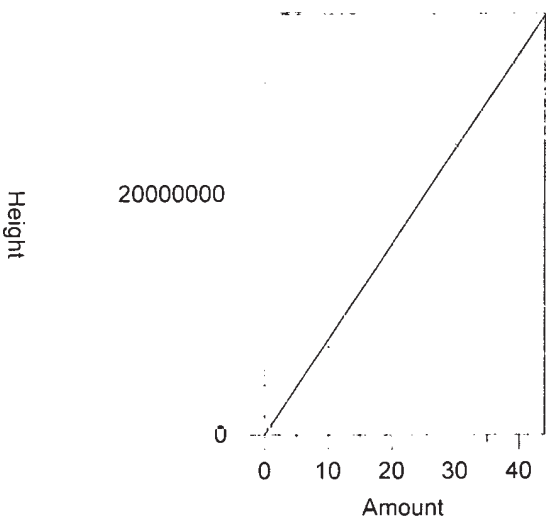
Single peak quantification by height

$$Y = 831605.1 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9986466  
 Average error: 4.892%  
 Average CF: 831605.1  
 RSD: 7.534%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	952222.4	952222.4	14.504	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	2	1553713	776856.5	-6.583	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	10	7931994	793199.4	-4.618	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	20	1.653678E+07	826839	-0.573	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	30	2.499066E+07	833022	0.170	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	40	3.229965E+07	807491.3	-2.900	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

23 4,4'-DDT



Expected retention time: 5.258 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

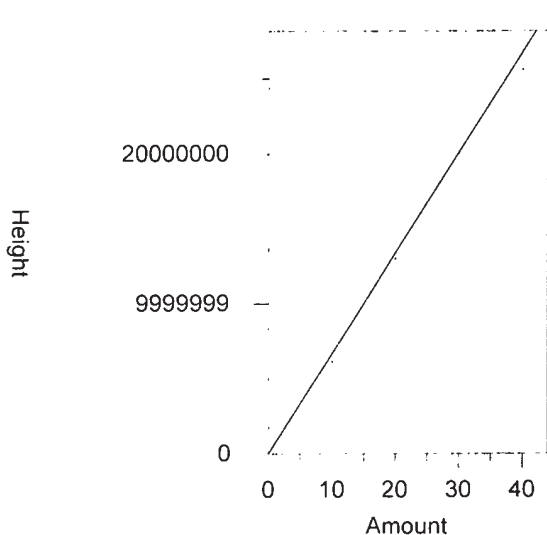
$$Y = 793230.6 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9991912  
 Average error: 5.564%  
 Average CF: 793230.6  
 RSD: 8.268%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	907311.8	907311.8	14.382	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	2	1455612	727806	-8.248	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	10	7302422	730242.2	-7.941	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	20	1.578477E+07	789238.5	-0.503	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	30	2.423469E+07	807823	1.840	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	40	3.187847E+07	796961.8	0.470	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

24 Endrin aldehyde

Chrom Perfect Calibration File



Expected retention time: 5.345 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

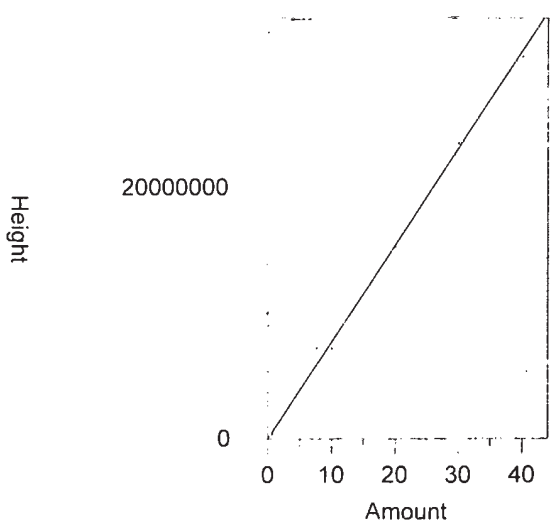
Single peak quantification by height

$Y = 669305.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9965197  
 Average error: 6.265%  
 Average CF: 669305.9  
 RSD: 9.557%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	795105.4	795105.4	18.796	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	2	1293217	646608.5	-3.391	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	10	6152456	615245.6	-8.077	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	20	1.301674E+07	650837	-2.759	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	30	2.003796E+07	667932	-0.205	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	40	2.560428E+07	640107	-4.363	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

25 Endo. sulfate



Expected retention time: 5.541 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

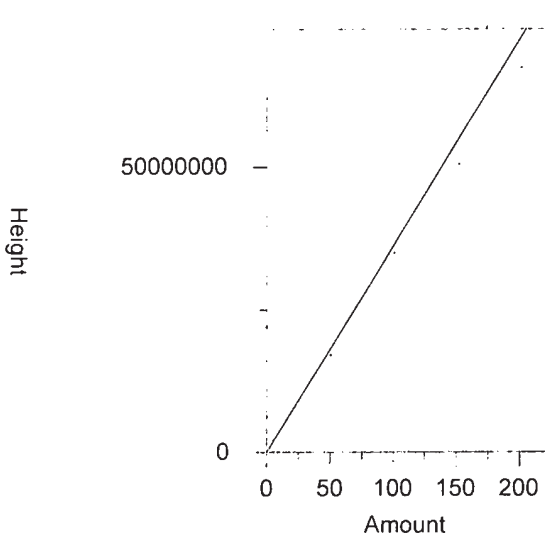
Single peak quantification by height

$Y = 771466.7 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.999136  
 Average error: 5.172%  
 Average CF: 771466.7  
 RSD: 7.572%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	879054.8	879054.8	13.946	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	2	1441987	720993.5	-6.542	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	10	7202639	720263.9	-6.637	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	20	1.529165E+07	764582.5	-0.892	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	30	2.350722E+07	783574	1.569	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	40	3.041326E+07	760331.5	-1.443	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

26 Methoxychlor



Expected retention time: 5.748 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

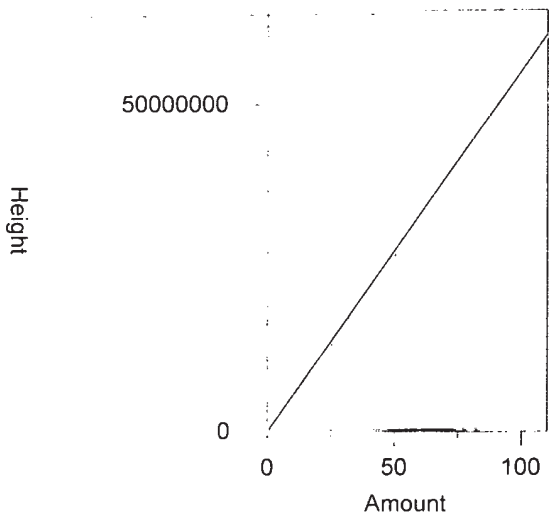
Single peak quantification by height

$Y = 362115 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.984695  
 Average error: 8.385%  
 Average CF: 362115  
 RSD: 11.141%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	2186678	437335.6	20.773	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	10	3779822	377982.2	4.382	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	50	1.706314E+07	341262.8	-5.758	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	100.5	3.503258E+07	348582.9	-3.737	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	152	5.054844E+07	332555.5	-8.163	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	201	6.732914E+07	334970.8	-7.496	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

27 Mirex



Expected retention time: 5.872 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

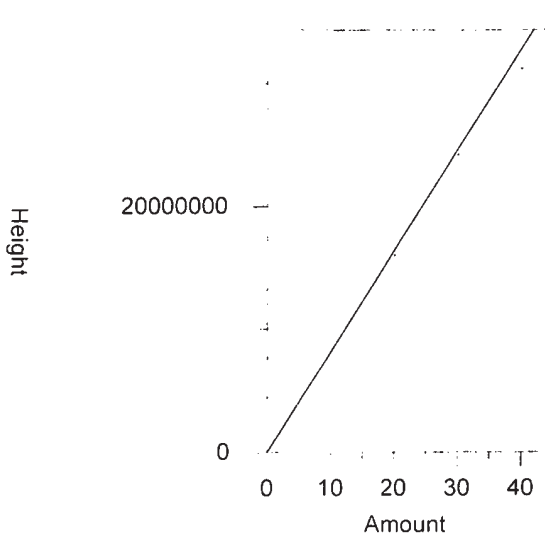
$Y = 553017.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9951053  
 Average error: 4.142%  
 Average CF: 553017.4  
 RSD: 4.923%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	1471946	588778.4	6.467	Manual	11/4/2018 7:22:50 AM
2	5	2640017	528003.4	-4.523	Manual	11/4/2018 7:23:33 AM
3	12.5	6806248	544499.8	-1.540	Manual	11/4/2018 7:24:19 AM
4	25	1.329892E+07	531956.8	-3.808	Manual	11/4/2018 7:25:05 AM
5	50	2.69448E+07	538896	-2.554	Manual	11/4/2018 7:25:50 AM
6	100	5.8597E+07	585970	5.959	Manual	11/4/2018 7:26:35 AM

28 Endrin ketone

Chrom Perfect Calibration File



Expected retention time: 5.908 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

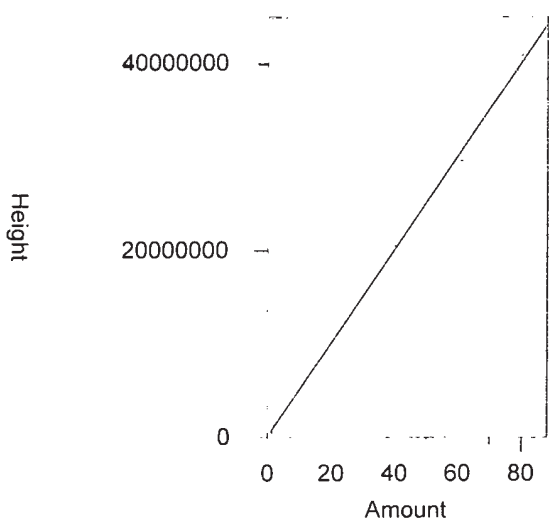
Single peak quantification by height

$Y = 819514 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9959307  
 Average error: 5.835%  
 Average CF: 819514  
 RSD: 8.742%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	962960.1	962960.1	17.504	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	2	1596816	798408	-2.575	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	10	7693721	769372.1	-6.118	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	20	1.600979E+07	800489.5	-2.321	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	30	2.41849E+07	806163.3	-1.629	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	40	3.118764E+07	779691	-4.859	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

29 DCB



Expected retention time: 6.703 minutes  
 Search window: 0.03 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 501079.7 X + 106678.8$

Linear fit with equal weighting  
 Coefficient of determination: 0.9984811  
 Average error: 6.230%  
 Average CF: 538197.8  
 RSD: 13.469%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	1355490	677745	22.244	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
2	4	2212726	553181.5	4.819	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
3	20	9781272	489063.6	-3.426	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
4	40	2.049506E+07	512376.5	1.713	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
5	61	2.962212E+07	485608.5	-3.425	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011
6	80	4.08969E+07	511211.3	1.751	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060011

Multiple Component Initial Calibration Report: **05PEST1830603**

Area Files Used For Calibration

Sequence \_\_\_\_\_ Injections \_\_\_\_\_

**Component: Aroclor-1016**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1016

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	2.807	3.069	3.230	3.433	3.539	3.591	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1258397	1767897	520007	1349883	1412524	950075	7258783
RF (Height/Conc):	6292	8839	2600	6749	7063	4750	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

**Component: Aroclor-1221**

**2154**

Calibration Levels: 1  
 Min # of Peaks Required: 3  
 Slope:  
 Max %RSD: 5  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1221

	<u>1</u>	<u>2</u>	<u>3</u>	<u>SUM</u>
Retention Time:	2.680	2.787	2.818	
RT Window (Mins):	0.02000	0.02000	0.02000	
Height:	717240	463346	1643091	2823677
RF (Height/Conc):	3586	2317	8215	
%RSD For RF	0.000	0.000	0.000	
Slope				
Y-Intercept				

**Component: Aroclor-1248**

**AR48**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 30  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1248

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.413	3.686	3.876	4.237	4.422	4.737	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1348494	737258	1745344	1986825	1348102	1020653	8186676
RF (Height/Conc):	6742	3686	8727	9934	6741	5103	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							



Multiple Component Initial Calibration Report: **05PEST1830603**

Component: **Aroclor-1254**

**AR54**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 250.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1254

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.420	4.647	4.742	4.956	5.094	5.303	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	3183021	2381729	4153502	3094382	2130002	3421102	18363738
RF (Height/Conc):	12732	9527	16614	12378	8520	13684	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1260**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1260

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.883	5.090	5.300	5.560	5.774	5.971	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	2338930	3158974	3323608	1858127	3802629	2269746	16752014
RF (Height/Conc):	11695	15795	16618	9291	19013	11349	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Chlordane**

**CHLD**

Calibration Levels: 6  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Avg Concentration (ng/ml): 50.000000  
 Report Base:  
 E-Flag Basis: Chlordane

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>	
Retention Time:	3.525	3.968	4.323	4.483	4.581	5.185		
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000		
Average Height:	1683293	1612290	1080682	5081629	6957119	1689278	18104291	
RF (Height/Conc):	11052	11126	7204	33293	46043	11007		
%RSD For RF	7.883	6.151	5.437	9.381	8.412	8.287		
Slope								
Y-Intercept								
Level 1	Height	133618	143542	90178	385830	543941	130872	1427981
	Conc	12.500	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	236102	251017	160834	706154	989388	234510	2578005
	Conc	25.000	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	575185	588202	375101	1747225	2439670	576620	6302003
	Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	1166656	1160775	744725	3612624	4938497	1155536	12778813
	Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	2343020	2265631	1467225	7166832	9776217	2343201	25362126
	Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	5645179	5264571	3646031	16871110	23055000	5694928	60176819
	Conc	500.000	500.000	500.000	500.000	500.000	500.000	

Multiple Component Initial Calibration Report: **05PEST1830603**

Component: **Toxaphene**

**TOXA**

Calibration Levels: 6

Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4

Max %RSD: 40

Report Base:

Slope:

Y-Intercept:

E-Flag Basis: Toxaphene

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	5.093	5.228	5.315	5.479	5.714	5.779	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:	3262302	4990526	4600948	4679005	4056575	4682270	26271626
RF (Height/Conc):	4782	7494	6771	6887	5950	6984	
%RSD For RF	10.403	7.448	9.655	9.862	10.617	8.098	
Slope							
Y-Intercept							
Level 1							
Height	200245	334448	289109	293419	248006	309554	1674781
Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 2							
Height	433791	698856	619639	628283	541090	650781	3572440
Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 3							
Height	1015986	1596692	1433985	1459850	1271205	1492414	8270132
Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 4							
Height	2575028	3959345	3633881	3719650	3214690	3676622	20779216
Conc	500.000	500.000	500.000	500.000	500.000	500.000	
Level 5							
Height	4889051	7412214	6786812	6888860	6024879	6813409	38815225
Conc	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6							
Height	10459710	15941600	14842260	15083970	13039580	15150840	84517960
Conc	2000.000	2000.000	2000.000	2000.000	2000.000	2000.000	

Multiple Component Initial Calibration Report: **05PEST1830603B**

Area Files Used For Calibration

Sequence \_\_\_\_\_ Injections \_\_\_\_\_

Component: **Aroclor-1016**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1016

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	2.685	2.963	3.143	3.300	3.405	3.485	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	3842974	5325124	2218380	9323568	4671356	3074750	28456152
RF (Height/Conc):	19215	26626	11092	46618	23357	15374	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1221**

**2154**

Calibration Levels: 1  
 Min # of Peaks Required: 3  
 Slope:  
 Max %RSD: 5  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1221

	<u>1</u>	<u>2</u>	<u>3</u>	<u>SUM</u>
Retention Time:	2.557	2.651	2.693	
RT Window (Mins):	0.02000	0.02000	0.02000	
Height:	2220491	1357046	4582321	8159858
RF (Height/Conc):	11102	6785	22912	
%RSD For RF	0.000	0.000	0.000	
Slope				
Y-Intercept				

Component: **Aroclor-1248**

**AR48**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 30  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1248

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.297	3.558	3.780	3.884	4.142	4.335	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	4721418	4482628	5590784	4667239	6450198	5076946	30989213
RF (Height/Conc):	23607	22413	27954	23336	32251	25385	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **05PEST1830603B**

Component: **Aroclor-1254**

**AR54**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 250.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1254

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.140	4.296	4.668	4.842	5.103	5.240	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	7787562	8789741	12700800	9113145	6700056	9683890	54775194
RF (Height/Conc):	31150	35159	50803	36453	26800	38736	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1260**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1260

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.819	4.976	5.240	5.514	5.684	5.932	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	6077575	0320930	8030472	5441882	11170040	6631015	47199922
RF (Height/Conc):	34888	41645	43252	27209	55850	33155	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Chlordane**

**CHLD**

Calibration Levels: 6  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Avg Concentration (ng/ml): 50.000000  
 Report Base:  
 F-Flag Basis: Chlordane

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>	
Retention Time:	3.263	3.772	4.109	4.298	4.419	5.113		
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000		
Average Height:	6590259	5930573	4399348	21779565	16219697	5922272	60841714	
RF (Height/Conc):	40907	38919	27794	132671	100267	37584		
%RSD For RF	11.610	6.374	10.028	14.962	13.078	9.719		
Slope								
Y-Intercept								
Level 1	Height	483583	478827	307007	1392284	1083884	435128	4180713
	Conc	12.500	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	824092	853220	599777	2638727	2042756	791205	7749777
	Conc	25.000	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	2011255	1998895	1431453	6682931	5057643	1902632	19084809
	Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	4281467	4035969	2936696	14394670	10875900	3957019	40481721
	Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	8957077	8102039	5990824	30117150	22250420	8175865	83593375
	Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	22984080	20114490	15130330	75451630	56007580	20271780	209959890
	Conc	500.000	500.000	500.000	500.000	500.000	500.000	

Multiple Component Initial Calibration Report: **05PEST1830603B**

Component: **Toxaphene**

**TOXA**

Calibration Levels: 6

Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4

Max %RSD: 40

Report Base:

Slope:

Y-Intercept:

E-Flag Basis: Toxaphene

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.670	4.901	5.071	5.336	5.392	5.692	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:	9271361	9787256	17709040	19585976	11496274	17372998	85222905
RF (Height/Conc):	13950	14403	26103	28451	16710	25515	
%RSD For RF	<b>4.538</b>	<b>6.936</b>	<b>6.965</b>	<b>8.956</b>	<b>8.563</b>	<b>7.577</b>	
Slope							
Y-Intercept							
Level 1	Height 681420 Conc 50.000	Height 677404 Conc 50.000	Height 1229368 Conc 50.000	Height 1295258 Conc 50.000	Height 772381 Conc 50.000	Height 1205551 Conc 50.000	5861382
Level 2	Height 1320478 Conc 100.000	Height 1319097 Conc 100.000	Height 2386368 Conc 100.000	Height 2546675 Conc 100.000	Height 1502096 Conc 100.000	Height 2317792 Conc 100.000	11392506
Level 3	Height 2804850 Conc 200.000	Height 2924749 Conc 200.000	Height 5334863 Conc 200.000	Height 5819004 Conc 200.000	Height 3376474 Conc 200.000	Height 5201784 Conc 200.000	25461724
Level 4	Height 7070495 Conc 500.000	Height 7300307 Conc 500.000	Height 13242650 Conc 500.000	Height 14769690 Conc 500.000	Height 8626285 Conc 500.000	Height 13027470 Conc 500.000	64036897
Level 5	Height 13649130 Conc 1000.000	Height 14408070 Conc 1000.000	Height 25950170 Conc 1000.000	Height 28318690 Conc 1000.000	Height 16608580 Conc 1000.000	Height 24991570 Conc 1000.000	123926210
Level 6	Height 30101790 Conc 2000.000	Height 32093910 Conc 2000.000	Height 58110820 Conc 2000.000	Height 64766540 Conc 2000.000	Height 38091830 Conc 2000.000	Height 57493820 Conc 2000.000	280658710

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830603GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Tetrachloro-m-xylene							2.55	2.53	2.57
Hcb							2.83	2.81	2.85
alpha-BHC							2.96	2.94	2.98
gamma-BHC (Lindane)							3.20	3.18	3.22
beta-BHC							3.27	3.25	3.29
delta-BHC							3.42	3.40	3.44
Heptachlor							3.60	3.58	3.62
Aldrin							3.86	3.84	3.88
Telodrin							4.05	4.03	4.07
o,p-DDE							4.37	4.35	4.39
Heptachlor epoxide							4.38	4.36	4.40
gamma-Chlordane							4.49	4.47	4.51
alpha-Chlordane							4.59	4.57	4.61
1,4'-DDE							4.65	4.63	4.67
Endosulfan I							4.70	4.68	4.72
o,p-DDD							4.79	4.77	4.81
Dieldrin							4.89	4.87	4.91
o,p-DDT							4.99	4.97	5.01
Endrin							5.07	5.05	5.09
Kopone							5.10	5.08	5.12
4,4'-DDD							5.12	5.10	5.14
Endosulfan II							5.24	5.22	5.26
1,4'-DDT							5.33	5.31	5.35
Endrin aldehyde							5.54	5.52	5.56
Methoxychlor							5.67	5.65	5.69
Mirex							5.78	5.76	5.80
Endosulfan sulfate							5.85	5.83	5.87
Endrin ketone							6.04	6.02	6.06
Decachlorobiphenyl							6.70	6.67	6.73

6E

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830603GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	4.38E+05	3.79E+05	3.92E+05	3.89E+05	3.96E+05	3.84E+05	3.96E+05	5
Hcb	4.79E+05	4.26E+05	4.21E+05	4.12E+05	3.97E+05	3.94E+05	4.21E+05	7
alpha-BHC	5.43E+05	4.86E+05	5.52E+05	5.71E+05	5.76E+05	5.64E+05	5.49E+05	6
gamma-BHC (Lindane)	4.63E+05	4.17E+05	4.67E+05	4.79E+05	4.84E+05	4.65E+05	4.63E+05	5
beta-BHC	2.30E+05	1.96E+05	2.03E+05	2.03E+05	2.06E+05	1.99E+05	2.06E+05	6
delta-BHC	4.25E+05	3.83E+05	4.38E+05	4.46E+05	4.54E+05	4.38E+05	4.31E+05	6
Heptachlor	4.04E+05	3.58E+05	3.93E+05	4.01E+05	4.04E+05	3.85E+05	3.91E+05	4
Aldrin	3.57E+05	3.16E+05	3.65E+05	3.75E+05	3.85E+05	3.75E+05	3.62E+05	7
Telodrin	2.36E+05	2.11E+05	2.16E+05	2.13E+05	2.10E+05	2.15E+05	2.17E+05	5
o,p-DDE	1.95E+05	1.78E+05	1.87E+05	1.85E+05	1.84E+05	1.87E+05	1.86E+05	3
Heptachlor epoxide	3.41E+05	2.97E+05	3.17E+05	3.23E+05	3.29E+05	3.16E+05	3.20E+05	5
gamma-Chlordane	3.30E+05	2.85E+05	3.11E+05	3.24E+05	3.32E+05	3.18E+05	3.17E+05	5
alpha-Chlordane	3.34E+05	2.96E+05	3.15E+05	3.27E+05	3.31E+05	3.22E+05	3.21E+05	4
4,4'-DDE	3.06E+05	2.73E+05	3.13E+05	3.21E+05	3.29E+05	3.15E+05	3.10E+05	6
Endosulfan I	3.21E+05	2.78E+05	2.94E+05	3.07E+05	3.11E+05	2.94E+05	3.01E+05	5
o,p-DDD	1.77E+05	1.62E+05	1.70E+05	1.66E+05	1.67E+05	1.72E+05	1.69E+05	3
Dieldrin	3.33E+05	2.94E+05	3.29E+05	3.29E+05	3.35E+05	3.20E+05	3.23E+05	5
o,p-DDT	2.15E+05	1.94E+05	2.09E+05	2.03E+05	2.00E+05	2.11E+05	2.05E+05	4
Endrin	3.08E+05	2.72E+05	2.97E+05	2.99E+05	3.05E+05	2.88E+05	2.95E+05	4
Kopone	2.41E+05	1.53E+05	1.37E+05	1.37E+05	1.26E+05	1.46E+05	1.57E+05	27
4,4'-DDD	2.50E+05	2.19E+05	2.49E+05	2.53E+05	2.60E+05	2.48E+05	2.47E+05	6
Endosulfan II	2.93E+05	2.56E+05	2.74E+05	2.70E+05	2.80E+05	2.62E+05	2.72E+05	5
1,1'-DDT	2.76E+05	2.45E+05	2.65E+05	2.70E+05	2.77E+05	2.62E+05	2.66E+05	4
Endrin aldehyde	2.49E+05	2.20E+05	2.23E+05	2.22E+05	2.26E+05	2.14E+05	2.26E+05	5
Methoxychlor	1.49E+05	1.29E+05	1.28E+05	1.22E+05	1.23E+05	1.13E+05	1.28E+05	9
Mirex	2.15E+05	1.88E+05	1.95E+05	1.80E+05	1.75E+05	1.86E+05	1.90E+05	7
Endosulfan sulfate	2.75E+05	2.38E+05	2.44E+05	2.47E+05	2.50E+05	2.37E+05	2.48E+05	6
Endrin ketone	3.25E+05	2.85E+05	2.93E+05	2.86E+05	2.91E+05	2.76E+05	2.93E+05	6
Decachlorobiphenyl	2.45E+05	2.06E+05	1.97E+05	1.91E+05	1.89E+05	1.82E+05	2.02E+05	11

## 6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830603GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE		AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO		CF	LEVEL			
Aroclor-1016	1	2.81	2.78	2.84	6292	6292	1	200	1258397	.00
	2	3.07	3.04	3.10	8839	8839	1	200	1767897	.00
	3	3.23	3.20	3.26	2600	2600	1	200	520007	.00
	4	3.43	3.40	3.46	6749	6749	1	200	1349883	.00
	5	3.54	3.51	3.57	7063	7063	1	200	1412524	.00
	6	3.59	3.56	3.62	4750	4750	1	200	950075	.00
Aroclor-1221	1	2.68	2.66	2.70	3586	3586	1	200	717240	.00
	2	2.79	2.77	2.81	2317	2317	1	200	463346	.00
	3	2.82	2.80	2.84	8215	8215	1	200	1643091	.00
Aroclor-1248	1	3.41	3.38	3.44	6742	6742	1	200	1348494	.00
	2	3.69	3.66	3.72	3686	3686	1	200	737258	.00
	3	3.88	3.85	3.91	8727	8727	1	200	1745344	.00
	4	4.24	4.21	4.27	9934	9934	1	200	1986825	.00
	5	4.42	4.39	4.45	6741	6741	1	200	1348102	.00
	6	4.74	4.71	4.77	5103	5103	1	200	1020653	.00
Aroclor-1254	1	4.42	4.39	4.45	12732	12732	1	250	3183021	.00
	2	4.65	4.62	4.68	9527	9527	1	250	2381729	.00
	3	4.74	4.71	4.77	16614	16614	1	250	4153502	.00
	4	4.96	4.93	4.99	12378	12378	1	250	3094382	.00
	5	5.09	5.06	5.12	8520	8520	1	250	2130002	.00
	6	5.30	5.27	5.33	13684	13684	1	250	3421102	.00
Aroclor-1260	1	4.88	4.85	4.91	11695	11695	1	200	2338930	.00
	2	5.09	5.06	5.12	15795	15795	1	200	3158974	.00
	3	5.30	5.27	5.33	16618	16618	1	200	3323608	.00
	4	5.56	5.53	5.59	9291	9291	1	200	1858127	.00
	5	5.77	5.74	5.80	19013	19013	1	200	3802629	.00
	6	5.97	5.94	6.00	11349	11349	1	200	2269746	.00



6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

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Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830603GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Chlordane	1	3.53	3.50	3.56	10689	11052	1	12.5	133618	7.88
					9444		2	25	236102	
					11504		3	50	575185	
					11667		4	100	1166656	
					11715		5	200	2343020	
					11290		6	500	5645179	
	2	3.97	3.94	4.00	11483	11126	1	12.5	143542	6.15
					10041		2	25	251017	
					11764		3	50	588202	
					11608		4	100	1160775	
					11328		5	200	2265631	
					10529		6	500	5264571	
	3	4.32	4.29	4.35	7214	7204	1	12.5	90178	5.44
					6433		2	25	160834	
					7502		3	50	375101	
					7447		4	100	744725	
					7336		5	200	1467225	
					7292		6	500	3646031	
	4	4.40	4.45	4.51	30866	33293	1	12.5	385830	9.38
					28246		2	25	706154	
					34945		3	50	1747225	
					36126		4	100	3612624	
					35834		5	200	7166832	
					33742		6	500	16871110	
5	4.58	4.55	4.61	43515	46043	1	12.5	543941	8.41	
				39576		2	25	989388		
				48793		3	50	2439670		
				49385		4	100	4938497		
				48881		5	200	9776217		
				46110		6	500	23055000		
6	5.19	5.16	5.22	10470	11007	1	12.5	130872	8.29	
				9380		2	25	234510		
				11532		3	50	576620		
				11555		4	100	1155536		
				11716		5	200	2343201		
				11390		6	500	5694928		

6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830603GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Toxaphene	1	5.09	5.06	5.12	4005	4782	1	50	200245	10.40
								100	433791	
								200	1015986	
								500	2575028	
								1000	4889051	
								2000	10459710	
	2	5.23	5.20	5.26	6689	7494	1	50	334448	7.45
								100	698856	
								200	1596692	
								500	3959345	
								1000	7412214	
								2000	15941600	
	3	5.32	5.29	5.35	5782	6771	1	50	289109	9.66
								100	619639	
								200	1433985	
								500	3633881	
								1000	6786812	
								2000	14842260	
	4	5.48	5.45	5.51	5868	6887	1	50	293419	9.86
								100	628283	
								200	1459850	
								500	3719650	
								1000	6888860	
								2000	15083970	
5	5.71	5.68	5.74	4960	5950	1	50	248006	10.62	
							100	541090		
							200	1271205		
							500	3214690		
							1000	6024879		
							2000	13039580		
6	5.78	5.75	5.81	6191	6984	1	50	309554	8.10	
							100	650781		
							200	1492414		
							500	3676622		
							1000	6813409		
							2000	15150840		

File Name: V:\CP5\05pest1830603.cal  
 Version: 1

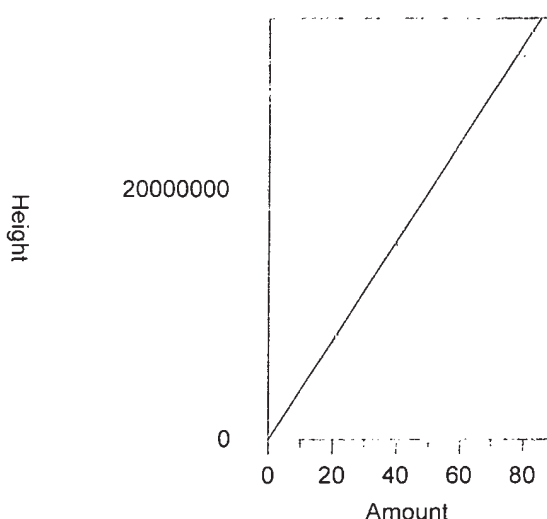
Creator:  
 Description:  
 Reason for change:

External standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 50  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

1 TCX



Expected retention time: 2.545 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

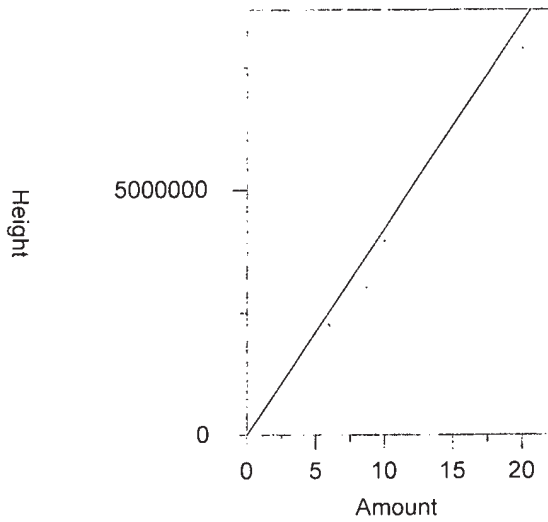
Single peak quantification by height

$$Y = 396431.1 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9985341  
 Average error: 3.456%  
 Average CF: 396431.1  
 RSD: 5.296%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	875075.8	437537.9	10.369	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004.B
2	4	1517559	379389.8	-4.299	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005.B
3	20	7844553	392227.7	-1.060	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006.B
4	40	1.556929E+07	389232.3	-1.816	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007.B
5	60	2.377041E+07	396173.5	-0.065	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008.B
6	80	3.072203E+07	384025.4	-3.129	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009.B

2 HCB



Expected retention time: 2.831 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

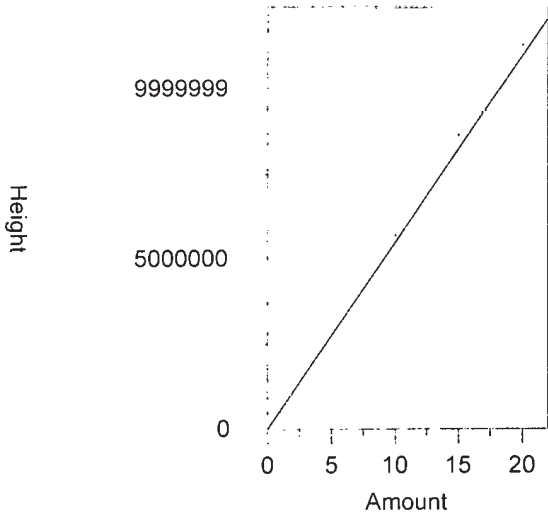
Single peak quantification by height

$Y = 421389.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9915589  
 Average error: 4.921%  
 Average CF: 421389.9  
 RSD: 7.378%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	239722	479444	13.777	Manual	11/9/2018 10:21:46 AM
2	1	425544	425544	0.986	Manual	11/9/2018 10:21:51 AM
3	2.5	1051387	420554.8	-0.198	Manual	11/9/2018 10:21:55 AM
4	5	2060389	412077.8	-2.210	Manual	11/9/2018 10:21:59 AM
5	10	3965430	396543	-5.896	Manual	11/9/2018 10:22:05 AM
6	20	7883517	394175.8	-6.458	Manual	11/9/2018 10:22:12 AM

3 alpha-BHC



Expected retention time: 2.956 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

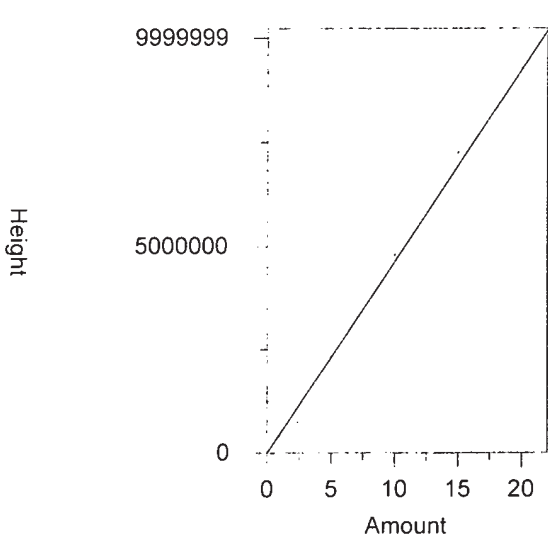
Single peak quantification by height

$Y = 548616.7 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9968377  
 Average error: 4.176%  
 Average CF: 548616.7  
 RSD: 6.044%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	271441	542882	-1.045	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
2	1	485614.4	485614.4	-11.484	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
3	5	2761876	552375.2	0.685	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
4	10	5705927	570592.7	4.006	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
5	15	8642715	576181	5.024	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
6	20	1.12811E+07	564055	2.814	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0

4 gamma-BHC



Expected retention time: 3.202 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

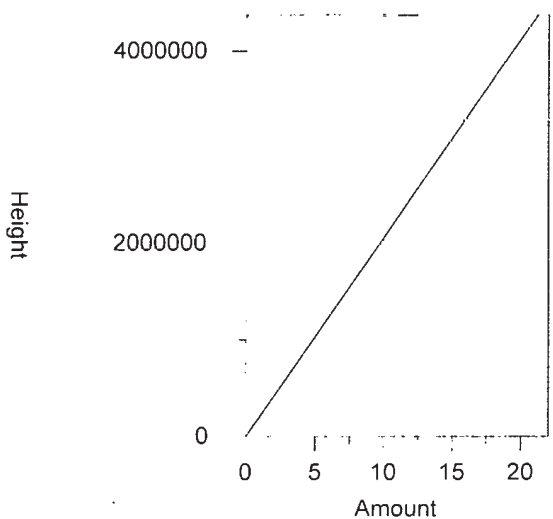
Single peak quantification by height

$Y = 462616.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9979945  
 Average error: 3.286%  
 Average CF: 462616.2  
 RSD: 5.167%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	231475.3	462950.6	0.072	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004..
2	1	417012.3	417012.3	-9.858	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005..
3	5	2334732	466946.4	0.936	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006..
4	10	4794549	479454.9	3.640	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007..
5	15	7263957	484263.8	4.679	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008..
6	20	9301385	465069.3	0.530	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009..

5 beta-BHC



Expected retention time: 3.27 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

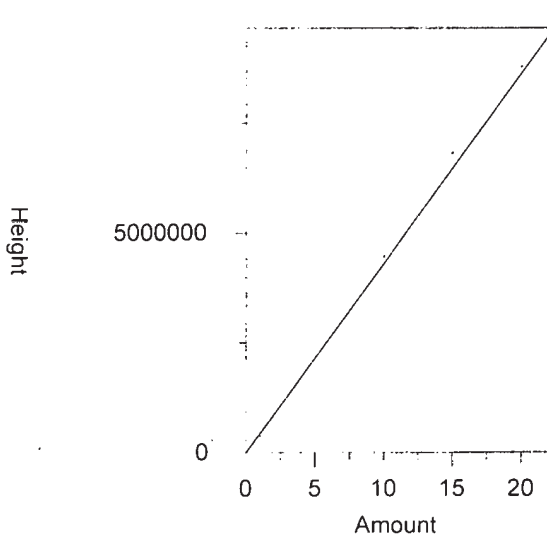
Single peak quantification by height

$Y = 206034.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9982417  
 Average error: 3.872%  
 Average CF: 206034.4  
 RSD: 5.926%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	114982.5	229965	11.615	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004..
2	1	195962.9	195962.9	-4.888	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005..
3	5	1012589	202517.8	-1.707	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006..
4	10	2033293	203329.3	-1.313	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007..
5	15	3083489	205565.9	-0.227	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008..
6	20	3977314	198865.7	-3.479	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009..

6 delta-BHC



Expected retention time: 3.417 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

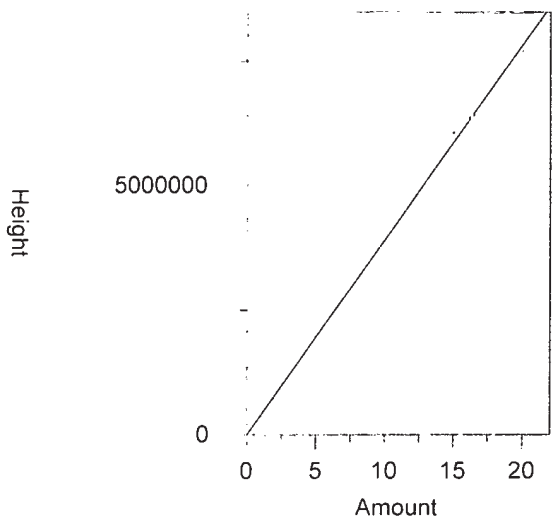
Single peak quantification by height

$Y = 430587.7 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9971236  
 Average error: 4.188%  
 Average CF: 430587.7  
 RSD: 5.928%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	212265.2	424530.4	-1.407	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004..
2	1	382546.8	382546.8	-11.157	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005..
3	5	2188619	437723.8	1.657	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006..
4	10	4464354	446435.4	3.680	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007..
5	15	6811836	454122.4	5.466	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008..
6	20	8763346	438167.3	1.760	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009..

7 Heptachlor



Expected retention time: 3.597 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

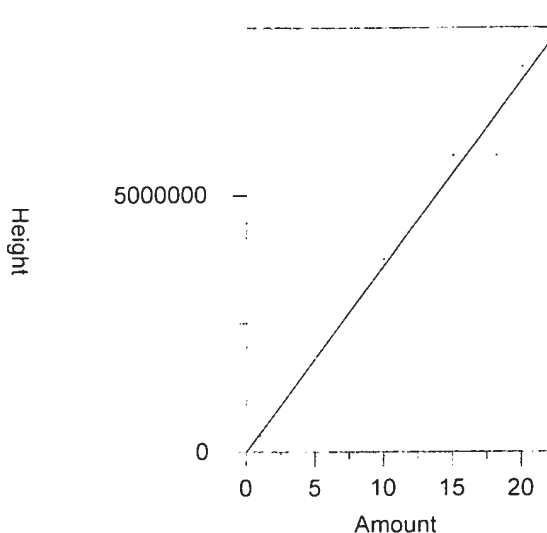
$Y = 390936.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9987035  
 Average error: 3.244%  
 Average CF: 390936.8  
 RSD: 4.484%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	202047.1	404094.2	3.366	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004..
2	1	358386.8	358386.8	-8.326	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005..
3	5	1963953	392790.6	0.474	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006..
4	10	4008956	400895.6	2.547	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007..
5	15	6060184	404012.3	3.345	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008..
6	20	7708832	385441.6	-1.406	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009..

8 Aldrin

Chrom Perfect Calibration File



Expected retention time: 3.857 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

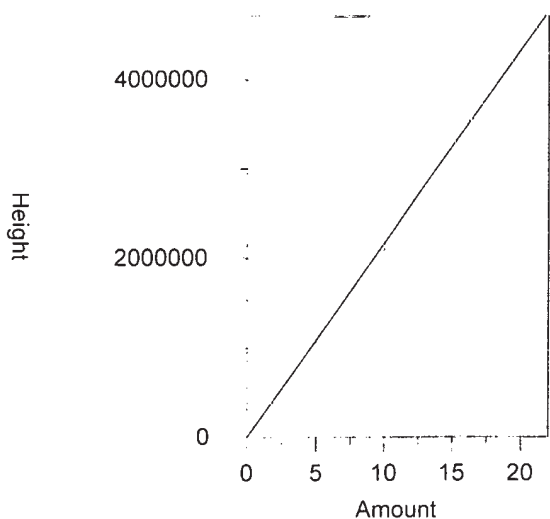
Single peak quantification by height

$Y = 362189.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.995555  
 Average error: 4.712%  
 Average CF: 362189.9  
 RSD: 6.731%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	178354.4	356708.8	-1.513	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004..
2	1	316466.5	316466.5	-12.624	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005..
3	5	1826625	365325	0.866	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006..
4	10	3748853	374885.3	3.505	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007..
5	15	5776179	385078.6	6.320	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008..
6	20	7493501	374675.1	3.447	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009..

9 Telodrin



Expected retention time: 4.045 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

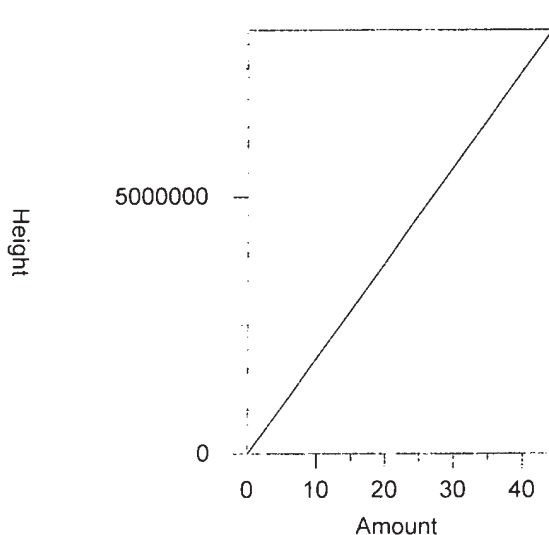
Single peak quantification by height

$Y = 216859.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994371  
 Average error: 2.996%  
 Average CF: 216859.2  
 RSD: 4.511%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	118176	236352	8.989	Manual	11/9/2018 10:24:43 AM
2	1	211036	211036	-2.685	Manual	11/9/2018 10:25:24 AM
3	2.5	539686	215874.4	-0.454	Manual	11/9/2018 10:25:32 AM
4	5	1066179	213235.8	-1.671	Manual	11/9/2018 10:25:36 AM
5	10	2101513	210151.3	-3.093	Manual	11/9/2018 10:25:41 AM
6	20	4290110	214505.5	-1.085	Manual	11/9/2018 10:25:58 AM

10 o,p-DDE



Expected retention time: 4.37 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

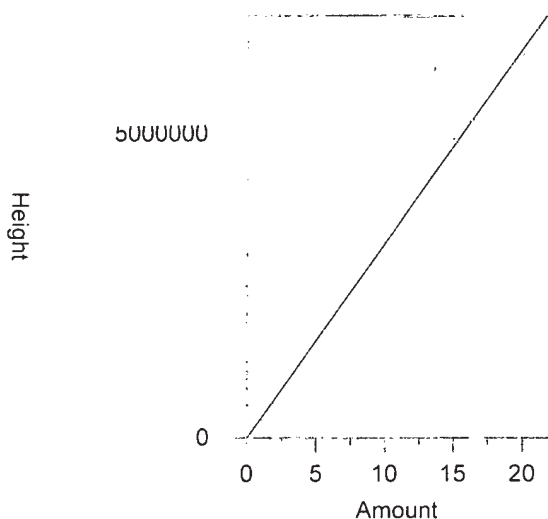
Single peak quantification by height

$$Y = 186052.7 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9998639  
 Average error: 2.073%  
 Average CF: 186052.7  
 RSD: 2.971%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	195072	195072	4.848	Manual	11/9/2018 10:26:06 AM
2	2	356538	178269	-4.184	Manual	11/9/2018 10:26:11 AM
3	5	936775	187355	0.700	Manual	11/9/2018 10:26:17 AM
4	10	1846431	184643.1	-0.758	Manual	11/9/2018 10:26:54 AM
5	20	3673540	183677	-1.277	Manual	11/9/2018 10:27:04 AM
6	40	7492000	187300	0.670	Manual	11/9/2018 10:27:24 AM

11 Hept. epoxide



Expected retention time: 4.379 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$$Y = 320389.5 X + 0$$

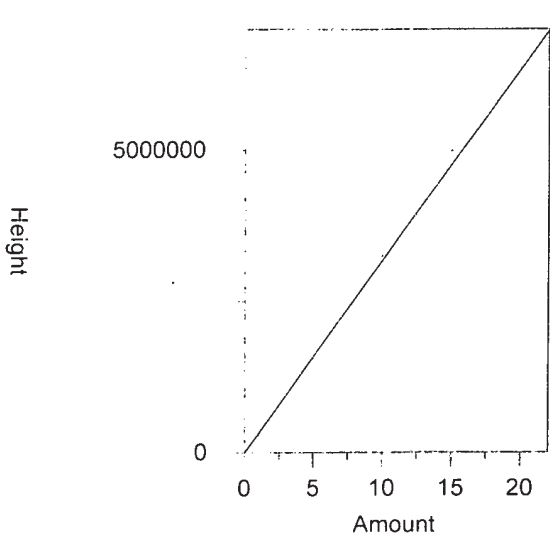
Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9992458  
 Average error: 3.229%  
 Average CF: 320389.5  
 RSD: 4.547%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	170327	340654	6.325	Manual	11/9/2018 10:16:08 AM
2	1	296989	296989	-7.304	Manual	11/9/2018 10:16:44 AM
3	5	1585160	317032	-1.048	Manual	11/9/2018 10:17:07 AM
4	10	3229806	322980.6	0.809	Manual	11/9/2018 10:17:26 AM
5	15	4928496	328566.4	2.552	Manual	11/9/2018 10:17:50 AM
6	20	6322295	316114.8	-1.334	Manual	11/9/2018 10:18:22 AM

12 g. Chlordane



Chrom Perfect Calibration File



Expected retention time: 4.485 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

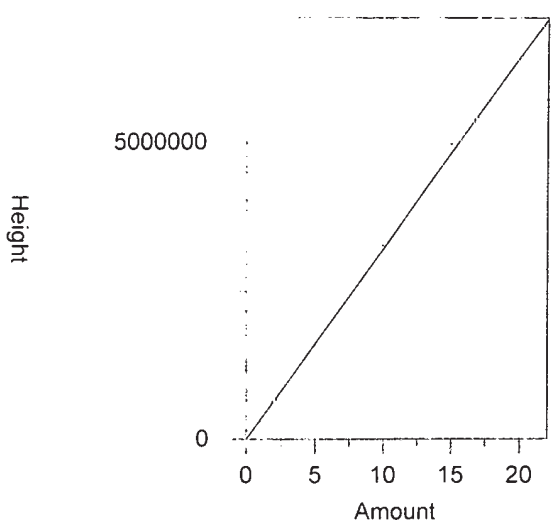
Single peak quantification by height

$Y = 316682.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9981133  
 Average error: 3.876%  
 Average CF: 316682.4  
 RSD: 5.424%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	164867.7	329735.4	4.122	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004..
2	1	285311.5	285311.5	-9.906	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005..
3	5	1556145	311229	-1.722	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006..
4	10	3237699	323769.9	2.238	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007..
5	15	4982134	332142.3	4.882	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008..
6	20	6358122	317906.1	0.386	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009..

13 a. Chlordane



Expected retention time: 4.592 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

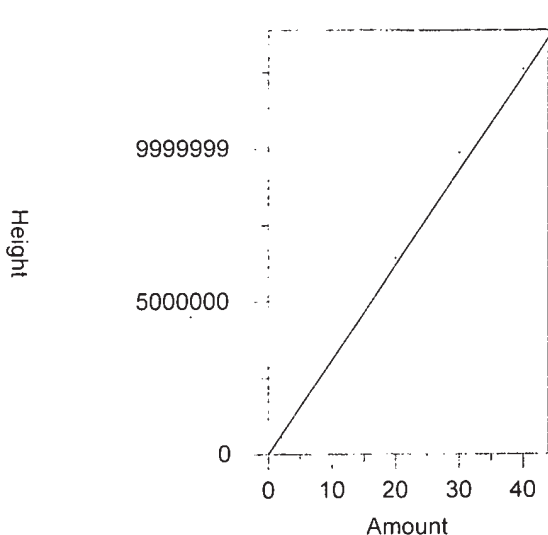
$Y = 320873.6 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9990865  
 Average error: 3.195%  
 Average CF: 320873.6  
 RSD: 4.321%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	166925.6	333851.2	4.044	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004..
2	1	296165.9	296165.9	-7.700	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005..
3	5	1574119	314823.8	-1.885	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006..
4	10	3269346	326934.6	1.889	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007..
5	15	4968234	331215.6	3.223	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008..
6	20	6445005	322250.3	0.429	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009..

14 4,4'-DDE

Chrom Perfect Calibration File



Expected retention time: 4.654 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

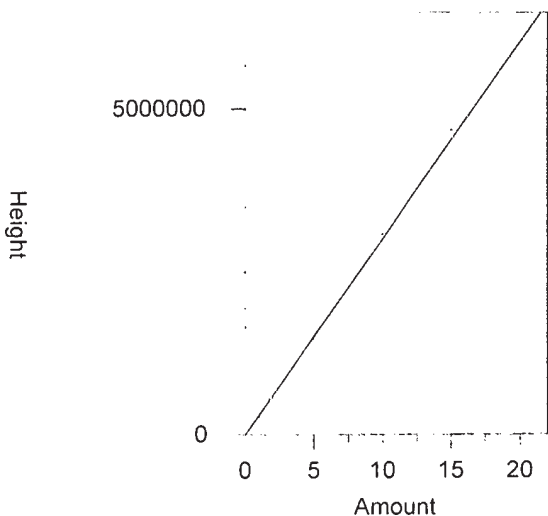
Single peak quantification by height

$Y = 309579.3 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9964097  
 Average error: 4.318%  
 Average CF: 309579.3  
 RSD: 6.300%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	305867.9	305867.9	-1.199	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
2	2	546376.5	273188.3	-11.755	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
3	10	3126089	312608.9	0.979	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
4	20	6427857	321392.8	3.816	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
5	30	9874475	329149.2	6.321	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
6	40	1.261074E+07	315268.5	1.838	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.

15 Endosulfan I



Expected retention time: 4.702 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

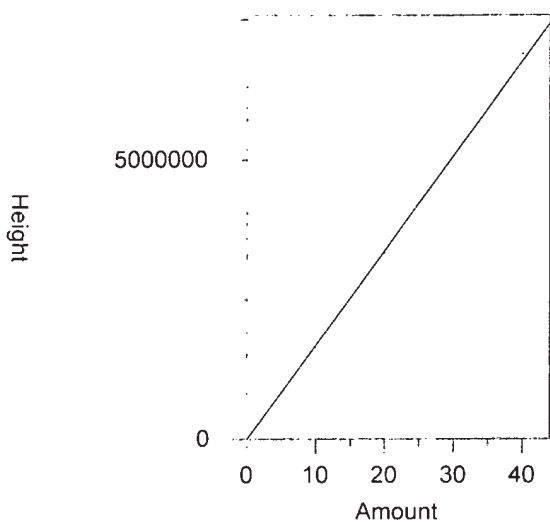
Single peak quantification by height

$Y = 300739.1 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9982342  
 Average error: 4.010%  
 Average CF: 300739.1  
 RSD: 5.000%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	160293	320586	6.599	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004.
2	1	278442.4	278442.4	-7.414	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005.
3	5	1469293	293858.6	-2.288	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006.
4	10	3067055	306705.5	1.984	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007.
5	15	4666603	311106.9	3.447	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008.
6	20	5874709	293735.4	-2.329	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009.

16 o,p-DDD



Expected retention time: 4.787 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

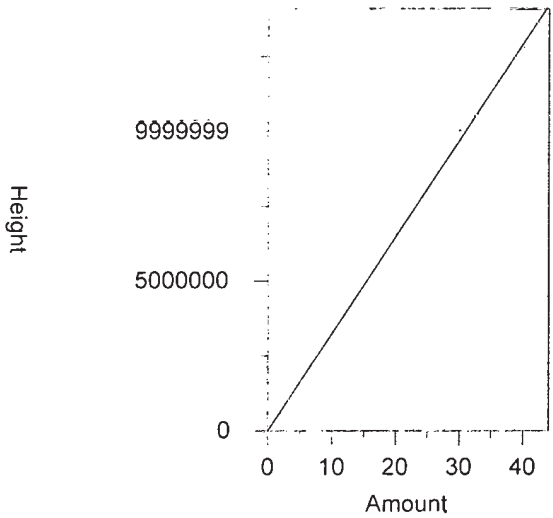
Single peak quantification by height

$Y = 169097.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994032  
 Average error: 2.474%  
 Average CF: 169097.9  
 RSD: 3.197%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	177241	177241	4.816	Manual	11/9/2018 10:27:41 AM
2	2	323376	161688	-4.382	Manual	11/9/2018 10:27:47 AM
3	5	851601	170320.2	0.723	Manual	11/9/2018 10:27:51 AM
4	10	1664119	166411.9	-1.588	Manual	11/9/2018 10:27:56 AM
5	20	3332841	166642	-1.452	Manual	11/9/2018 10:28:03 AM
6	40	6891359	172284	1.884	Manual	11/9/2018 10:28:11 AM

17 Dieldrin



Expected retention time: 4.891 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

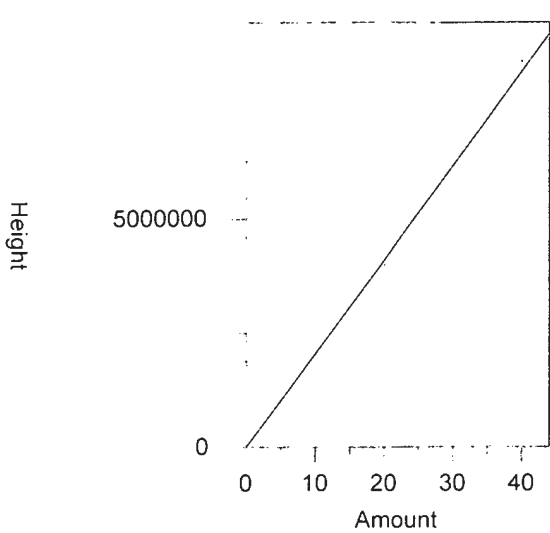
Single peak quantification by height

$Y = 323347.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9988551  
 Average error: 3.301%  
 Average CF: 323347.8  
 RSD: 4.663%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	332827.7	332827.7	2.932	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
2	2	588515.6	294257.8	-8.997	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
3	10	3287794	328779.4	1.680	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
4	20	6581498	329074.9	1.771	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
5	30	1.004197E+07	334732.3	3.521	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
6	40	1.281659E+07	320414.8	-0.907	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.

18 o,p-DDT



Expected retention time: 4.986 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

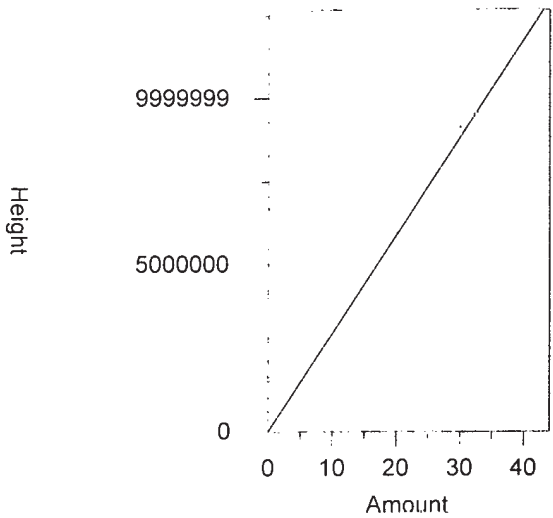
Single peak quantification by height

$$Y = 205345.8 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.998692  
 Average error: 3.023%  
 Average CF: 205345.8  
 RSD: 3.708%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	215071	215071	4.736	Manual	11/9/2018 10:28:22 AM
2	2	388967	194483.5	-5.290	Manual	11/9/2018 10:28:27 AM
3	5	1042841	208568.2	1.569	Manual	11/9/2018 10:28:31 AM
4	10	2029898	202989.8	-1.147	Manual	11/9/2018 10:28:36 AM
5	20	3998863	199943.2	-2.631	Manual	11/9/2018 10:28:42 AM
6	40	8440755	211018.9	2.763	Manual	11/9/2018 10:28:53 AM

19 Endrin



Expected retention time: 5.069 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

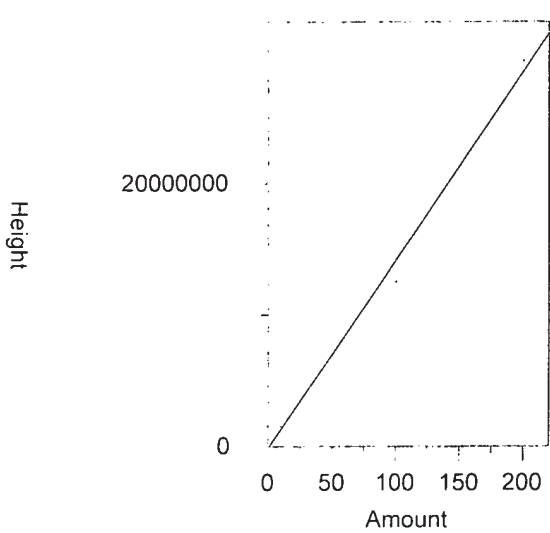
Single peak quantification by height

$$Y = 295035.1 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.998349  
 Average error: 3.314%  
 Average CF: 295035.1  
 RSD: 4.431%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	307902.2	307902.2	4.361	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
2	2	544621.1	272310.6	-7.702	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
3	10	2969349	296934.9	0.644	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
4	20	5984368	299218.4	1.418	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
5	30	9162634	305421.1	3.520	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
6	40	1.153694E+07	288423.5	-2.241	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.

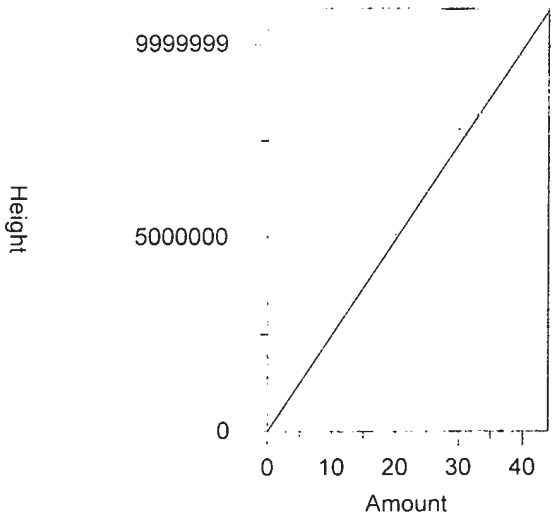
20 Kepone



Expected retention time: 5.103 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 143277.1 X + -171568.1$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.9935737  
 Average error: 26.432%  
 Average CF: 156559.7  
 RSD: 26.997%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	1203740	240748	120.944	Manual	11/9/2018 10:29:09 AM
2	10	1526835	152683.5	21.062	Manual	11/9/2018 10:29:16 AM
3	25	3424278	136971.1	0.408	Manual	11/9/2018 10:29:21 AM
4	50	6844445	136888.9	-2.114	Manual	11/9/2018 10:29:34 AM
5	100	1.256394E+07	125639.4	-11.247	Manual	11/9/2018 10:29:55 AM
6	200	2.928541E+07	146427	2.814	Manual	11/9/2018 10:30:26 AM

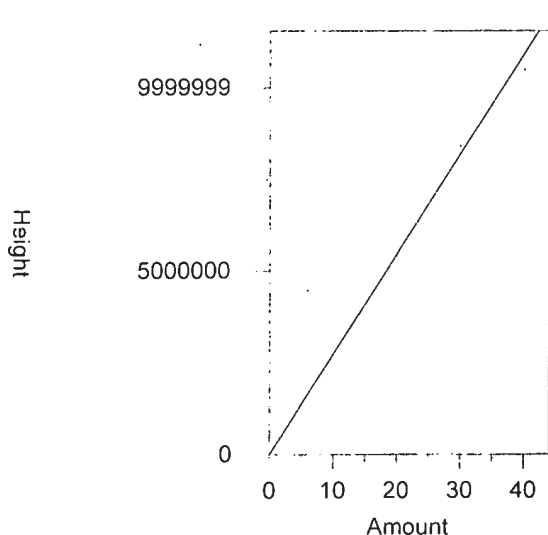
21 4,4'-DDD



Expected retention time: 5.117 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 246711.3 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9976512  
 Average error: 3.743%  
 Average CF: 246711.3  
 RSD: 5.762%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	250304	250304	1.456	Manual	11/9/2018 10:16:22 AM
2	2	438016	219008	-11.229	Manual	11/9/2018 10:16:58 AM
3	10	2493901	249390.1	1.086	Manual	11/9/2018 10:17:18 AM
4	20	5061417	253070.8	2.578	Manual	11/9/2018 10:17:40 AM
5	30	7803221	260107.4	5.430	Manual	11/9/2018 10:18:09 AM
6	40	9935488	248387.2	0.679	Manual	11/9/2018 10:18:59 AM

22 Endosulfan II



Expected retention time: 5.237 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

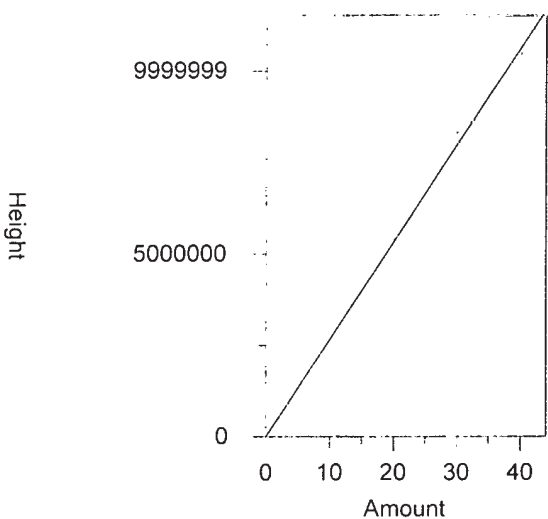
Single peak quantification by height

$Y = 272471.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9973665  
 Average error: 3.563%  
 Average CF: 272471.9  
 RSD: 4.829%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	293041.5	293041.5	7.549	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
2	2	512114.6	256057.3	-6.024	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
3	10	2736200	273620	0.421	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
4	20	5407270	270363.5	-0.774	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
5	30	8396325	279877.5	2.718	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
6	40	1.047487E+07	261871.8	-3.890	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.

23 4,4'-DDT



Expected retention time: 5.326 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

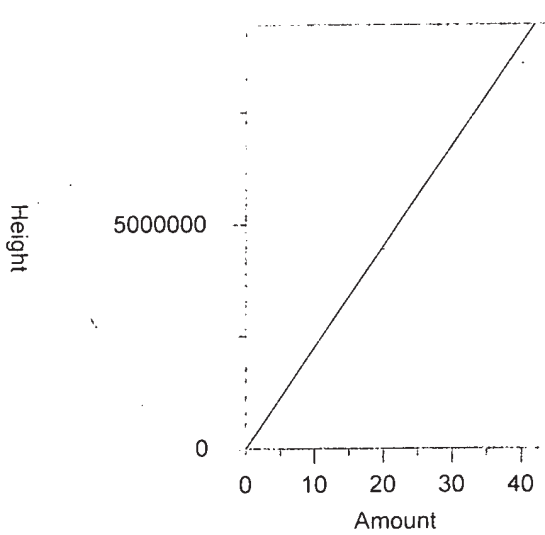
Single peak quantification by height

$Y = 265845 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9983164  
 Average error: 3.214%  
 Average CF: 265845  
 RSD: 4.499%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	275945	275945	3.799	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
2	2	489231.5	244615.8	-7.986	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
3	10	2651191	265119.1	-0.273	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
4	20	5397621	269881.1	1.518	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
5	30	8320223	277340.8	4.324	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
6	40	1.048674E+07	262168.5	-1.383	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.

24 Endrin aldehyde



Expected retention time: 5.541 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

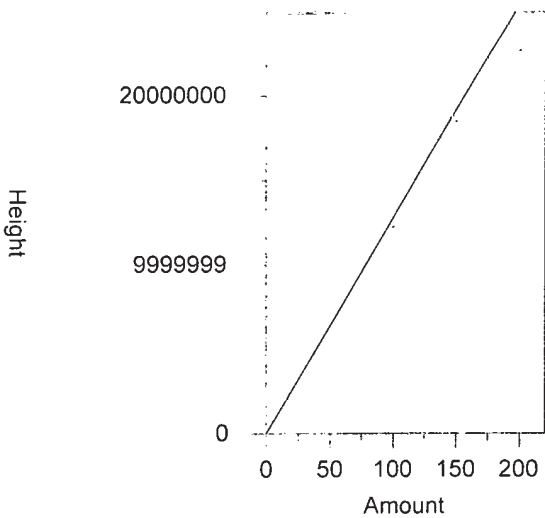
Single peak quantification by height

$Y = 225811.5 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9961764  
 Average error: 3.581%  
 Average CF: 225811.5  
 RSD: 5.427%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	249452.8	249452.8	10.470	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.004..
2	2	440222.2	220111.1	-2.524	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.005..
3	10	222664.2	222664.2	-1.394	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.006..
4	20	444023.5	222011.8	-1.683	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.007..
5	30	679290.6	226430.2	0.274	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.008..
6	40	856795.1	214198.8	-5.143	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.009..

25 Methoxychlor



Expected retention time: 5.673 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

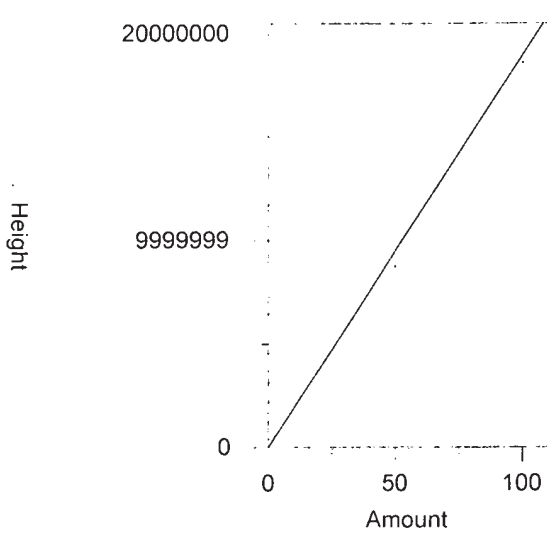
$Y = 127561.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9790114  
 Average error: 6.185%  
 Average CF: 127561.9  
 RSD: 9.418%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	746808.7	149361.7	17.090	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.
2	10	1289565	128956.5	1.093	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.
3	50	6401755	128035.1	0.371	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.
4	100	1.224278E+07	122427.8	-4.025	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.
5	150	1.84648E+07	123098.7	-3.499	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.
6	200	2.269835E+07	113491.8	-11.030	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest\18306006.

26 Mirex

Chrom Perfect Calibration File



Expected retention time: 5.779 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

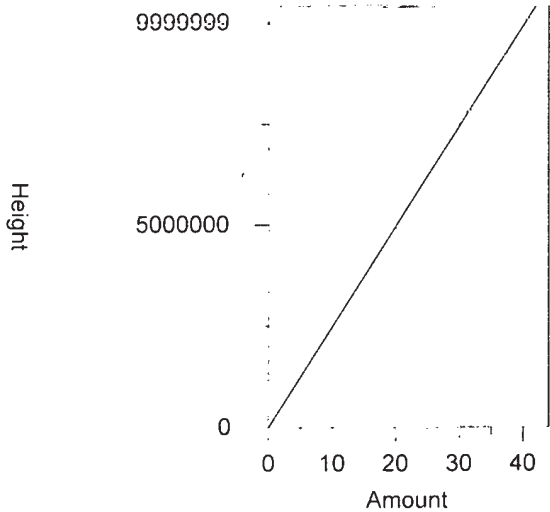
Single peak quantification by height

$Y = 189838.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9969363  
 Average error: 5.308%  
 Average CF: 189838.2  
 RSD: 7.418%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2.5	537973	215189.2	13.354	Manual
2	5	938690	187738	-1.106	Manual
3	12.5	2433930	194714.4	2.569	Manual
4	25	4495436	179817.4	-5.279	Manual
5	50	8773674	175473.5	-7.567	Manual
6	100	1.860966E+07	186096.6	-1.971	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.

27 Endo. sulfate



Expected retention time: 5.847 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 248377.6 X + 0$

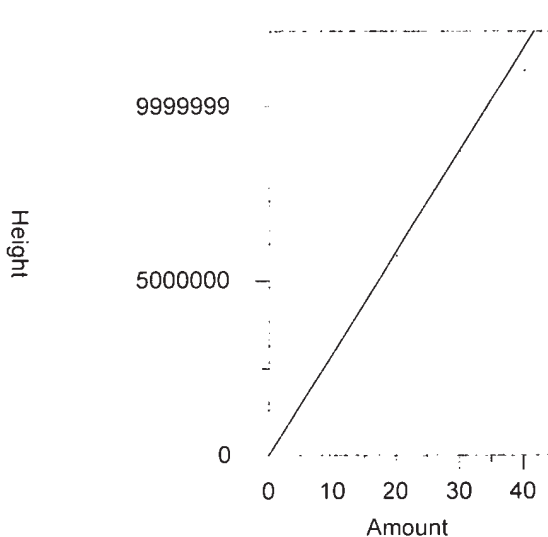
Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.996919  
 Average error: 3.778%  
 Average CF: 248377.6  
 RSD: 5.565%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	274505.5	274505.5	10.519	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.004.:
2	2	475475.7	237737.8	-4.284	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005.:
3	10	2439219	243921.9	-1.794	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006.:
4	20	4937302	246865.1	-0.609	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007.:
5	30	7512030	250401	0.815	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008.:
6	40	9473376	236834.4	-4.647	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009.:

28 Endrin ketone



Chrom Perfect Calibration File



Expected retention time: 6.042 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

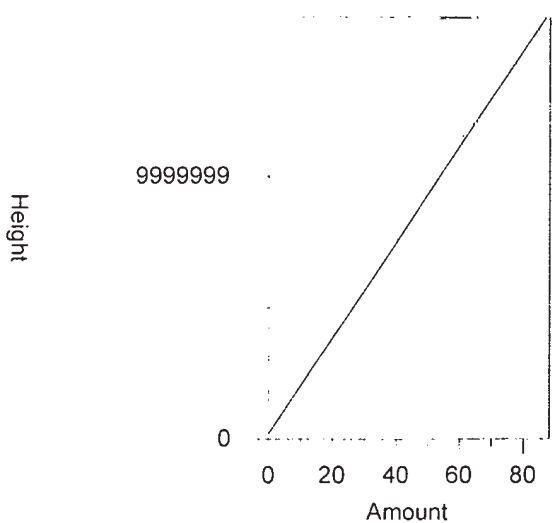
Single peak quantification by height

$$Y = 292577.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9951035  
 Average error: 3.776%  
 Average CF: 292577.9  
 RSD: 5.835%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	325262.4	325262.4	11.171	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
2	2	569565.6	284782.8	-2.664	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
3	10	2930362	293036.2	0.157	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
4	20	5721282	286064.1	-2.226	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
5	30	8715352	290511.7	-0.706	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
6	40	1.10324E+07	275810	-5.731	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0

29 DCB



Expected retention time: 6.7 minutes  
 Search window: 0.03 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$$Y = 182584.5 X + 201156.8$$

Linear fit with equal weighting  
 Coefficient of determination: 0.9992967  
 Average error: 5.313%  
 Average CF: 201819.6  
 RSD: 11.323%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	490893.7	245446.8	-13.320	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
2	4	824692.4	206173.1	-11.466	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
3	20	3946944	197347.2	2.442	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
4	40	7630587	190764.7	1.680	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
5	61	1.151316E+07	188740.3	1.538	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0
6	80	1.459565E+07	182445.6	-1.433	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.0

6D

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830603BGC Column (2) : RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Tetrachloro-m-xylene							2.36	2.34	2.38
Hcb							2.68	2.66	2.70
alpha-BHC							2.78	2.76	2.80
gamma-BHC (Lindane)							3.04	3.02	3.06
beta-BHC							3.11	3.09	3.13
delta-BHC							3.33	3.31	3.35
Heptachlor							3.38	3.36	3.40
Aldrin							3.64	3.62	3.66
Telodrin							3.78	3.76	3.80
Heptachlor epoxide							4.14	4.12	4.16
gamma-Chlordane							4.30	4.28	4.32
o,p-DDE							4.31	4.29	4.33
alpha Chlordane							4.42	4.40	4.44
Endosulfan I							4.47	4.45	4.49
4,4'-DDE							4.57	4.55	4.59
Dieldrin							4.69	4.67	4.71
o,p-DDD							4.72	4.70	4.74
Endrin							4.92	4.90	4.94
o,p-DDT							4.96	4.94	4.98
Kepone							4.99	4.97	5.01
4,4'-DDD							5.02	5.00	5.04
Endosulfan II							5.08	5.06	5.10
4,4'-DDT							5.25	5.23	5.27
Endrin aldehyde							5.33	5.31	5.35
Endosulfan sulfate							5.53	5.51	5.55
Methoxychlor							5.74	5.72	5.76
Mirex							5.85	5.83	5.87
Endrin ketone							5.90	5.88	5.92
Decachlorobiphenyl							6.69	6.66	6.72

6E

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830603BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	1.68E+06	1.47E+06	1.70E+06	1.75E+06	1.74E+06	1.69E+06	1.67E+06	6
Hcb	1.49E+06	1.35E+06	1.38E+06	1.39E+06	1.40E+06	1.47E+06	1.41E+06	4
alpha-BHC	2.02E+06	1.79E+06	2.24E+06	2.40E+06	2.52E+06	2.48E+06	2.24E+06	13
gamma-BHC (Lindane)	1.74E+06	1.56E+06	1.84E+06	1.98E+06	2.04E+06	2.01E+06	1.86E+06	10
beta-BHC	8.27E+05	7.24E+05	7.59E+05	7.78E+05	8.12E+05	7.94E+05	7.82E+05	5
delta-BHC	1.56E+06	1.38E+06	1.68E+06	1.81E+06	1.88E+06	1.87E+06	1.70E+06	12
Heptachlor	1.46E+06	1.26E+06	1.43E+06	1.52E+06	1.58E+06	1.55E+06	1.47E+06	8
Aldrin	1.31E+06	1.15E+06	1.36E+06	1.46E+06	1.54E+06	1.53E+06	1.39E+06	11
Telodrin	7.51E+05	6.78E+05	6.94E+05	7.04E+05	7.05E+05	7.60E+05	7.16E+05	5
Heptachlor epoxide	1.17E+06	9.86E+05	1.08E+06	1.12E+06	1.19E+06	1.13E+06	1.11E+06	7
gamma-Chlordane	1.18E+06	1.02E+06	1.12E+06	1.19E+06	1.25E+06	1.23E+06	1.17E+06	7
o,p-DDE	5.71E+05	5.26E+05	5.63E+05	5.61E+05	5.82E+05	6.24E+05	5.71E+05	6
alpha-Chlordane	1.18E+06	1.02E+06	1.11E+06	1.17E+06	1.24E+06	1.20E+06	1.15E+06	7
Endosulfan I	1.09E+06	9.22E+05	9.90E+05	1.02E+06	1.08E+06	1.03E+06	1.02E+06	6
4,4'-DDE	1.06E+06	9.23E+05	1.12E+06	1.19E+06	1.25E+06	1.22E+06	1.13E+06	11
Dieldrin	1.14E+06	9.94E+05	1.15E+06	1.21E+06	1.26E+06	1.20E+06	1.16E+06	8
o,p-DDD	5.03E+05	4.69E+05	4.91E+05	4.92E+05	5.02E+05	5.44E+05	5.00E+05	5
Endrin	1.05E+06	9.18E+05	1.01E+06	1.06E+06	1.11E+06	1.06E+06	1.04E+06	6
o,p-DDT	5.54E+05	5.03E+05	5.80E+05	5.40E+05	5.56E+05	6.18E+05	5.59E+05	7
Kepone	7.01E+05	4.41E+05	4.06E+05	4.29E+05	4.05E+05	4.89E+05	4.78E+05	24
4,4'-DDD	8.76E+05	7.61E+05	8.69E+05	9.12E+05	9.74E+05	9.37E+05	8.88E+05	8
Endosulfan II	1.01E+06	8.62E+05	9.55E+05	9.85E+05	1.03E+06	9.76E+05	9.70E+05	6
1,1'-DDT	9.34E+05	8.07E+05	8.92E+05	9.41E+05	1.01E+06	9.68E+05	9.25E+05	8
Endrin aldehyde	8.53E+05	7.31E+05	7.66E+05	7.58E+05	8.22E+05	7.78E+05	7.85E+05	6
Endosulfan sulfate	9.65E+05	8.13E+05	8.89E+05	9.19E+05	9.70E+05	9.32E+05	9.15E+05	6
Methoxychlor	4.84E+05	4.19E+05	4.32E+05	4.23E+05	4.22E+05	4.08E+05	4.31E+05	6
Mirex	5.89E+05	5.28E+05	5.44E+05	5.32E+05	5.39E+05	5.86E+05	5.53E+05	5
Endrin ketone	1.04E+06	8.91E+05	9.29E+05	9.64E+05	9.92E+05	9.40E+05	9.60E+05	6
Decachlorobiphenyl	7.36E+05	6.22E+05	6.08E+05	6.12E+05	6.30E+05	6.10E+05	6.36E+05	8

## 6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830603BGC Column (2) : RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Aroclor-1016	1	2.69	2.66	2.72	19215	19215	1	200	3842974	.00
	2	2.96	2.93	2.99	26626	26626	1	200	5325124	.00
	3	3.14	3.11	3.17	11092	11092	1	200	2218380	.00
	4	3.30	3.27	3.33	46618	46618	1	200	9323568	.00
	5	3.40	3.37	3.43	23357	23357	1	200	4671356	.00
	6	3.49	3.46	3.52	15374	15374	1	200	3074750	.00
Aroclor-1221	1	2.56	2.54	2.58	11102	11102	1	200	2220491	.00
	2	2.65	2.63	2.67	6785	6785	1	200	1357046	.00
	3	2.69	2.67	2.71	22912	22912	1	200	4582321	.00
Aroclor-1248	1	3.30	3.27	3.33	23607	23607	1	200	4721418	.00
	2	3.56	3.53	3.59	22413	22413	1	200	4482628	.00
	3	3.78	3.75	3.81	27954	27954	1	200	5590784	.00
	4	3.88	3.85	3.91	23336	23336	1	200	4667239	.00
	5	4.14	4.11	4.17	32251	32251	1	200	6450198	.00
	6	4.33	4.30	4.36	25385	25385	1	200	5076946	.00
Aroclor-1254	1	4.14	4.11	4.17	31150	31150	1	250	7787562	.00
	2	4.30	4.27	4.33	35159	35159	1	250	8789741	.00
	3	4.67	4.64	4.70	50803	50803	1	250	12700800	.00
	4	4.84	4.81	4.87	36453	36453	1	250	9113145	.00
	5	5.10	5.07	5.13	26800	26800	1	250	6700056	.00
	6	5.24	5.21	5.27	38736	38736	1	250	9683890	.00
Aroclor-1260	1	4.82	4.79	4.85	34888	34888	1	200	6977575	.00
	2	4.98	4.95	5.01	41645	41645	1	200	8328938	.00
	3	5.24	5.21	5.27	43252	43252	1	200	8650472	.00
	4	5.51	5.48	5.54	27209	27209	1	200	5441882	.00
	5	5.68	5.65	5.71	55850	55850	1	200	11170040	.00
	6	5.93	5.90	5.96	33155	33155	1	200	6631015	.00

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## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830603BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Chlordane	1	3.26	3.23	3.29	38687	40907	1	12.5	483583	11.61
					32964		2	25	824092	
					40225		3	50	2011255	
					42815		4	100	4281467	
					44785		5	200	8957077	
					45968		6	500	22984080	
	2	3.77	3.74	3.80	38306	38919	1	12.5	478827	6.37
					34129		2	25	853220	
					39978		3	50	1998895	
					40360		4	100	4035969	
					40510		5	200	8102039	
					40229		6	500	20114490	
	3	4.11	4.08	4.14	24561	27794	1	12.5	307007	10.03
					23991		2	25	599777	
					28629		3	50	1431453	
					29367		4	100	2936696	
					29954		5	200	5990824	
					30261		6	500	15130330	
	4	4.30	4.27	4.33	111383	132671	1	12.5	1392284	14.96
					105549		2	25	2638727	
					133659		3	50	6682931	
					143947		4	100	14394670	
					150586		5	200	30117150	
					150903		6	500	75451630	
5	4.42	4.39	4.45	86711	100267	1	12.5	1083884	13.08	
				81710		2	25	2042756		
				101153		3	50	5057643		
				108759		4	100	10875900		
				111252		5	200	22250420		
				112015		6	500	56007580		
6	5.11	5.08	5.14	34810	37584	1	12.5	435128	9.72	
				31648		2	25	791205		
				38053		3	50	1902632		
				39570		4	100	3957019		
				40879		5	200	8175865		
				40544		6	500	20271780		

6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830603BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Toxaphene	1	4.67	4.64	4.70	13628	13950	1	50	681420	4.54
					13205		2	100	1320478	
					14024		3	200	2804850	
					14141		4	500	7070495	
					13649		5	1000	13649130	
					15051		6	2000	30101790	
	2	4.90	4.87	4.93	13548	14403	1	50	677404	6.94
					13191		2	100	1319097	
					14624		3	200	2924749	
					14601		4	500	7300307	
					14408		5	1000	14408070	
					16047		6	2000	32093910	
	3	5.07	5.04	5.10	24587	26103	1	50	1229368	6.96
					23064		2	100	2386368	
					26674		3	200	5334863	
					26485		4	500	13242650	
					25950		5	1000	25950170	
					29055		6	2000	58110820	
	4	5.34	5.31	5.37	25905	28451	1	50	1295258	8.96
					25467		2	100	2546675	
					29095		3	200	5819004	
					29539		4	500	14769690	
					28319		5	1000	28318690	
					32383		6	2000	64766540	
5	5.39	5.36	5.42	15448	16710	1	50	772381	8.56	
				15021		2	100	1502096		
				16882		3	200	3376474		
				17253		4	500	8626285		
				16609		5	1000	16608580		
				19046		6	2000	38091830		
6	5.69	5.66	5.72	24111	25515	1	50	1205551	7.58	
				23178		2	100	2317792		
				26009		3	200	5201784		
				26055		4	500	13027470		
				24992		5	1000	24991570		
				28747		6	2000	57493820		

File Name: V:\CP5\05pest1830603b.cal  
 Version: 1

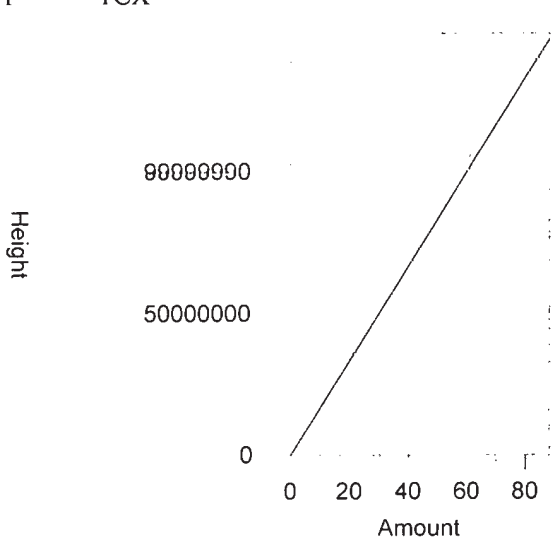
Creator:  
 Description:  
 Reason for change:

External standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 50  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

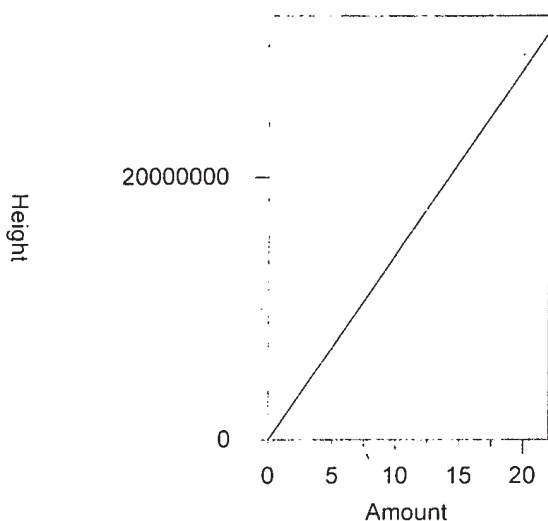
1 TCX



Expected retention time: 2.363 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 Y = 1670870 X + 0  
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9979688  
 Average error: 4.042%  
 Average CF: 1670870  
 RSD: 6.130%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	3361805	1680903	0.600	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006B.004.
2	4	5873073	1468268	-12.126	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006B.005.
3	20	3.397629E+07	1698814	1.672	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006B.006.
4	40	6.980855E+07	1745214	4.449	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006B.007.
5	61	1.059901E+08	1737543	3.990	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006B.008.
6	80	1.355582E+08	1694478	1.413	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006B.009.

2 HCB



Expected retention time: 2.683 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

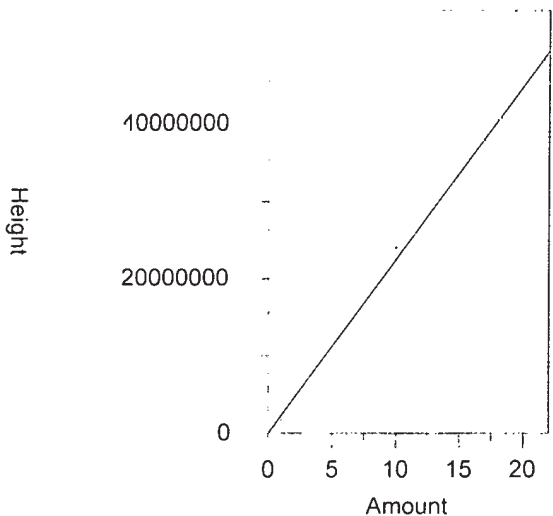
Single peak quantification by height

$Y = 1412457 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9977701  
 Average error: 3.185%  
 Average CF: 1412457  
 RSD: 3.968%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	745127	1490254	5.508	Manual	11/9/2018 10:46:11 AM
2	1	1345480	1345480	-4.742	Manual	11/9/2018 10:46:17 AM
3	2.5	3446559	1378624	-2.395	Manual	11/9/2018 10:46:22 AM
4	5	6930088	1386018	-1.872	Manual	11/9/2018 10:46:28 AM
5	10	1.404745E+07	1404745	-0.546	Manual	11/9/2018 10:46:45 AM
6	20	2.939245E+07	1469623	4.047	Manual	11/9/2018 10:47:06 AM

3 alpha-BHC



Expected retention time: 2.78 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

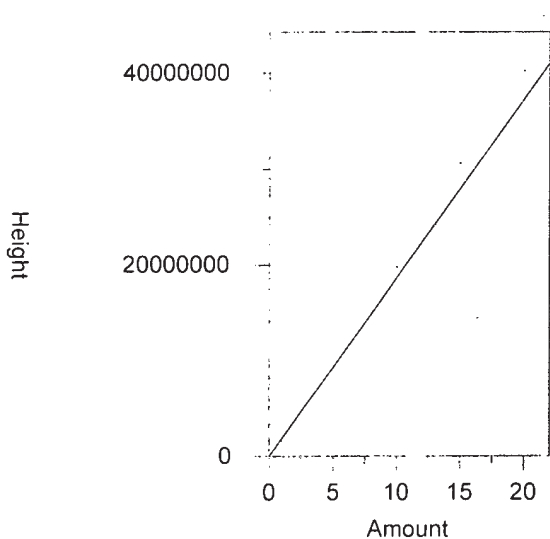
$Y = 2243786 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9781119  
 Average error: 10.075%  
 Average CF: 2243786  
 RSD: 12.826%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	1010306	2020612	-9.946	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	1792749	1792749	-20.102	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	1.119923E+07	2239846	-0.176	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	2.402683E+07	2402683	7.082	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	3.784385E+07	2522923	12.440	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	4.967804E+07	2483902	10.701	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

4 gamma-BHC

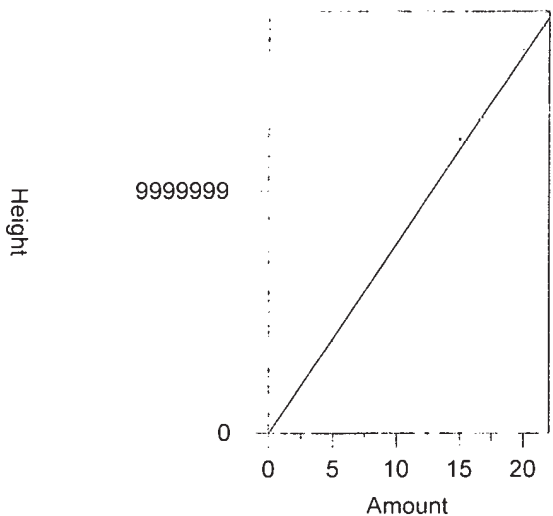




Expected retention time: 3.04 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 Y = 1862390 X + 0  
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.986496  
 Average error: 7.951%  
 Average CF: 1862390  
 RSD: 9.983%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	870635.3	1741271	-6.503	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	1562534	1562534	-16.101	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	9195616	1839123	-1.249	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	1.979611E+07	1979611	6.294	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	3.062886E+07	2041924	9.640	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	4.019756E+07	2009878	7.919	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

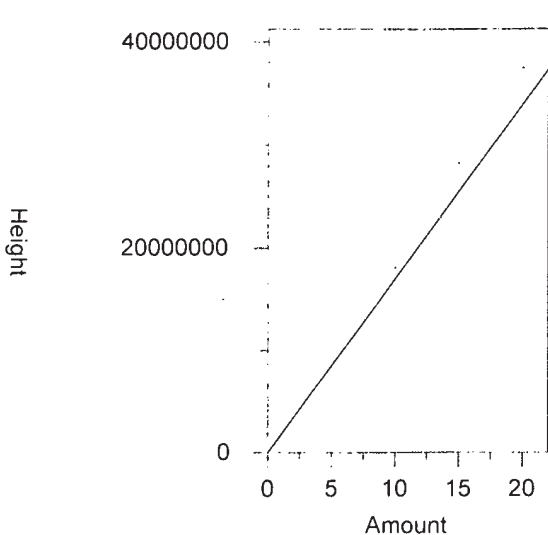
5 beta-BHC



Expected retention time: 3.105 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 Y = 782368.9 X + 0  
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9986311  
 Average error: 3.681%  
 Average CF: 782368.9  
 RSD: 4.800%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	413684.2	827368.4	5.752	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	723805	723805	-7.485	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	3793329	758665.8	-3.030	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	7782440	778244	-0.527	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	1.218022E+07	812014.7	3.789	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	1.588231E+07	794115.5	1.501	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

6 delta-BHC



Expected retention time: 3.334 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

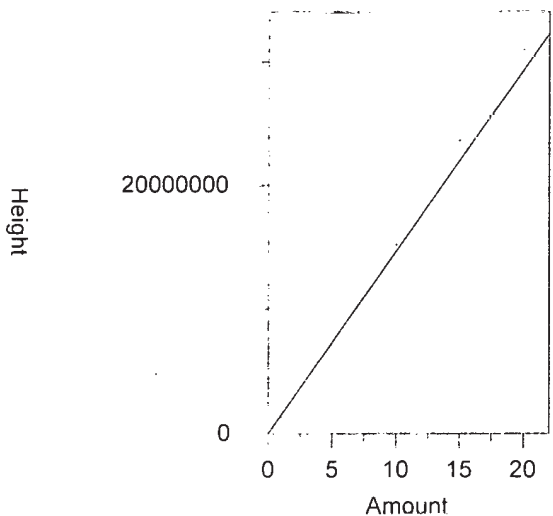
Single peak quantification by height

$Y = 1697044 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9805689  
 Average error: 9.338%  
 Average CF: 1697044  
 RSD: 11.767%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	778283.9	1556568	-8.278	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	1379774	1379774	-18.695	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	8396999	1679400	-1.040	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	1.808634E+07	1808634	6.576	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	2.825795E+07	1883863	11.009	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	3.74805E+07	1874025	10.429	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

7 Heptachlor



Expected retention time: 3.38 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

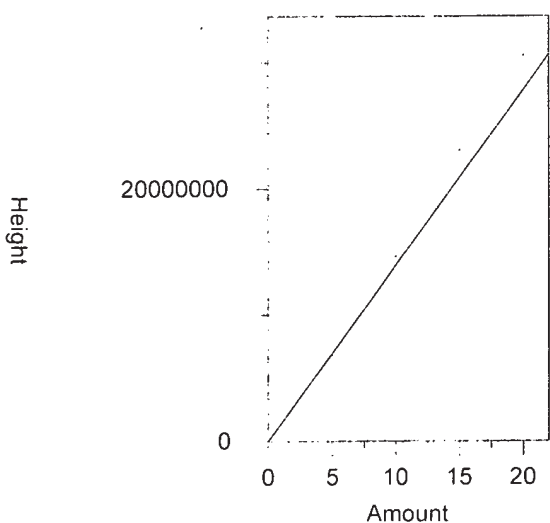
$Y = 1467773 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.992586  
 Average error: 5.549%  
 Average CF: 1467773  
 RSD: 7.694%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	729879.3	1459759	-0.546	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	1264908	1264908	-13.821	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	7171652	1434330	-2.278	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	1.521946E+07	1521946	3.691	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	2.366117E+07	1577411	7.470	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	3.096565E+07	1548283	5.485	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

8 Aldrin

Chrom Perfect Calibration File



Expected retention time: 3.643 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

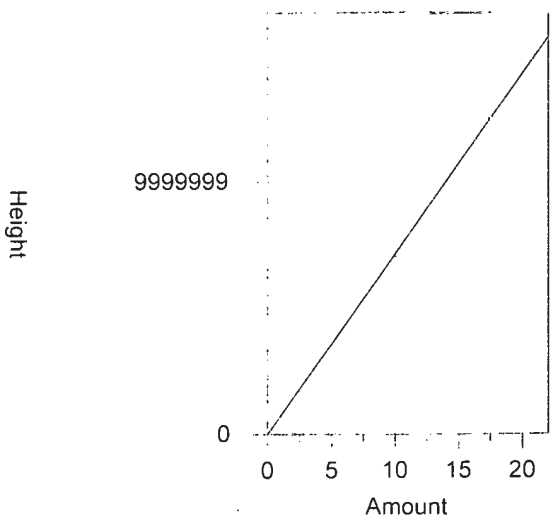
Single peak quantification by height

$Y = 1391386 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9828439  
 Average error: 8.467%  
 Average CF: 1391386  
 RSD: 10.771%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	655865.8	1311732	-5.725	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	1145551	1145551	-17.668	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	6817345	1363469	-2.006	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	1.463943E+07	1463943	5.215	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	2.303977E+07	1535985	10.392	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	3.055277E+07	1527639	9.793	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

9 Telodrin



Expected retention time: 3.784 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

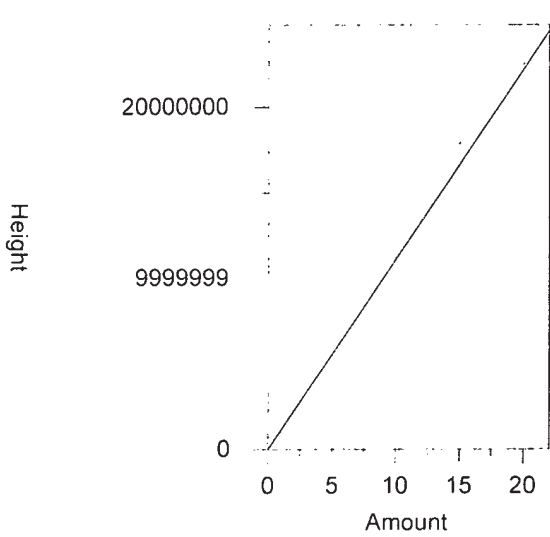
$Y = 715702.6 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9949037  
 Average error: 3.744%  
 Average CF: 715702.6  
 RSD: 4.575%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	375653	751306	4.975	Manual	11/9/2018 10:47:36 AM
2	1	678270	678270	-5.230	Manual	11/9/2018 10:47:42 AM
3	2.5	1736218	694487.2	-2.964	Manual	11/9/2018 10:47:49 AM
4	5	3521357	704271.4	-1.597	Manual	11/9/2018 10:47:54 AM
5	10	7053964	705396.4	-1.440	Manual	11/9/2018 10:48:00 AM
6	20	1.520969E+07	760484.5	6.257	Manual	11/9/2018 10:48:26 AM

10 Hept. epoxide

Chrom Perfect Calibration File



Expected retention time: 4.139 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

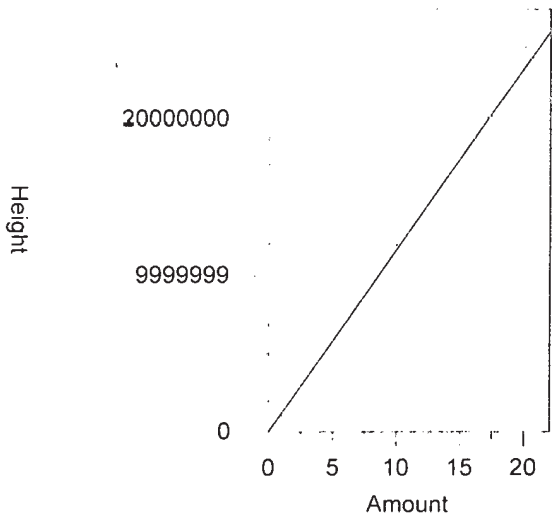
Single peak quantification by height

$Y = 1111478 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9958592  
 Average error: 4.857%  
 Average CF: 1111478  
 RSD: 6.668%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	583704.3	1167409	5.032	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	985823.8	985823.8	-11.305	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	5375842	1075168	-3.267	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	1.119286E+07	1119286	0.702	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	1.792192E+07	1194795	7.496	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	2.252775E+07	1126388	1.341	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

11 g. Chlordane



Expected retention time: 4.299 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

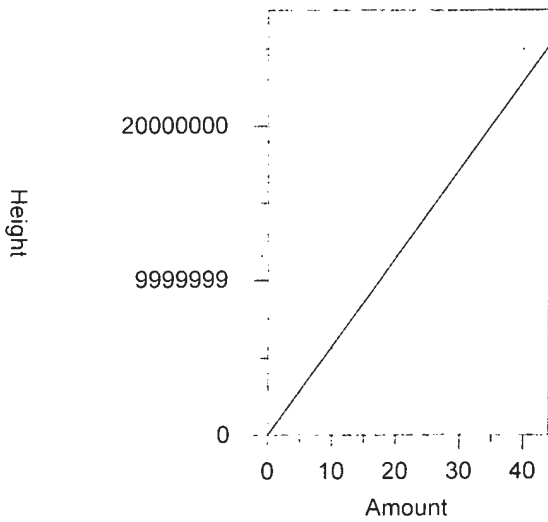
$Y = 1165326 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9925359  
 Average error: 5.506%  
 Average CF: 1165326  
 RSD: 7.361%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	588271	1176542	0.963	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	1016964	1016964	-12.731	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	5605907	1121181	-3.788	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	1.193632E+07	1193632	2.429	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	1.877864E+07	1251909	7.430	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	2.463449E+07	1231725	5.698	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

12 o,p-DDE

Chrom Perfect Calibration File



Expected retention time: 4.306 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

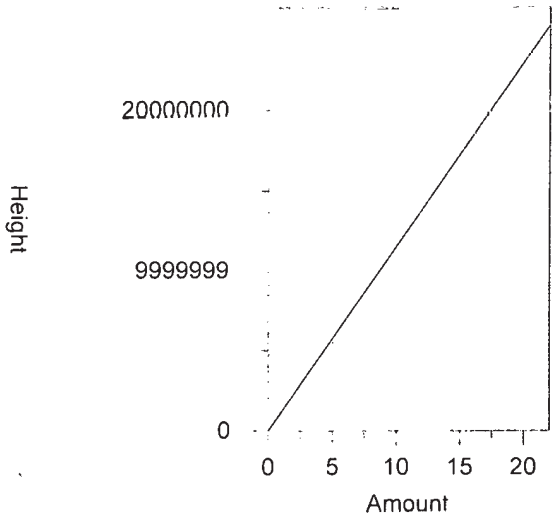
Single peak quantification by height

$Y = 571152.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9895611  
 Average error: 3.733%  
 Average CF: 571152.8  
 RSD: 5.633%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	571392	571392	0.042	Manual	11/9/2018 10:48:33 AM
2	2	1051044	525577	-7.989	Manual	11/9/2018 10:48:38 AM
3	5	2813860	562772	-1.467	Manual	11/9/2018 10:48:43 AM
4	10	5612058	561205.8	-1.742	Manual	11/9/2018 10:48:47 AM
5	20	1.163747E+07	581873.5	1.877	Manual	11/9/2018 10:49:04 AM
6	40	2.496607E+07	624151.8	9.279	Manual	11/9/2018 10:49:25 AM

13 a. Chlordane



Expected retention time: 4.42 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

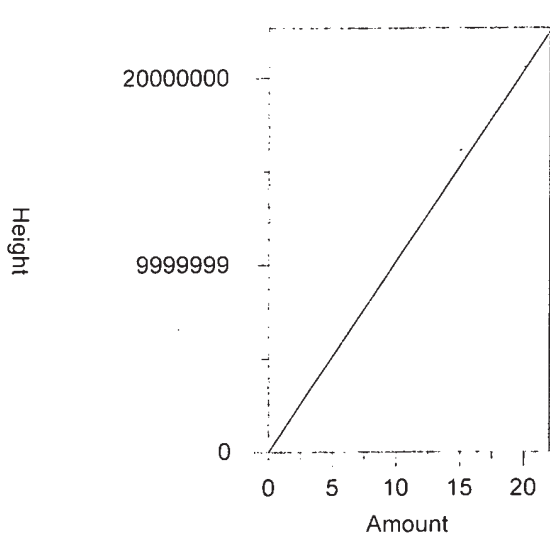
Single peak quantification by height

$Y = 1152328 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9939629  
 Average error: 5.165%  
 Average CF: 1152328  
 RSD: 6.863%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	589685.7	1179371	2.347	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	1016607	1016607	-11.778	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	5547413	1109483	-3.718	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	1.166727E+07	1166727	1.250	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	1.858898E+07	1239265	7.545	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	2.405027E+07	1202514	4.355	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

14 Endosulfan I



Expected retention time: 4.465 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

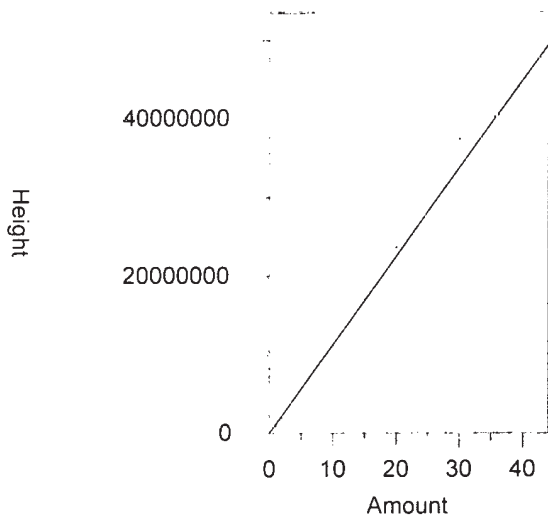
Single peak quantification by height

$Y = 1021870 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9977341  
 Average error: 4.313%  
 Average CF: 1021870  
 RSD: 5.949%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	543487.4	1086975	6.371	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	1	921965.9	921965.9	-9.777	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	5	4947742	989548.4	-3.163	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	10	1.02441E+07	1024410	0.249	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	15	1.616759E+07	1077839	5.477	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	20	2.060961E+07	1030481	0.843	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

15 4,4'-DDE



Expected retention time: 4.565 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

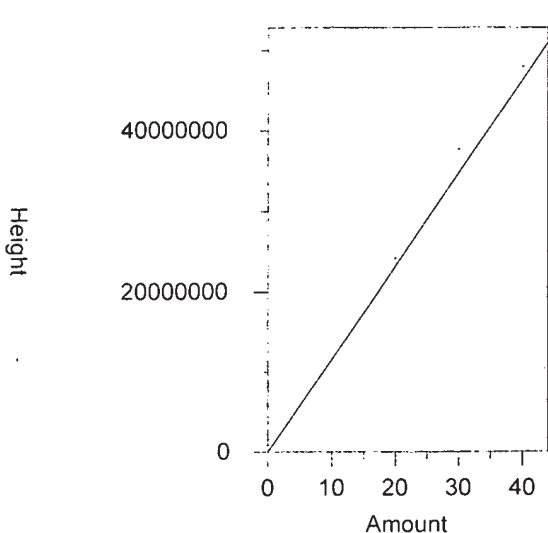
Single peak quantification by height

$Y = 1126915 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9851787  
 Average error: 8.045%  
 Average CF: 1126915  
 RSD: 10.681%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1060630	1060630	-5.882	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	2	1846496	923248	-18.073	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	10	1.124893E+07	1124893	-0.179	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	20	2.372078E+07	1186039	5.246	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	30	3.743048E+07	1247683	10.717	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	40	4.875998E+07	1219000	8.171	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

16 Dieldrin



Expected retention time: 4.685 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

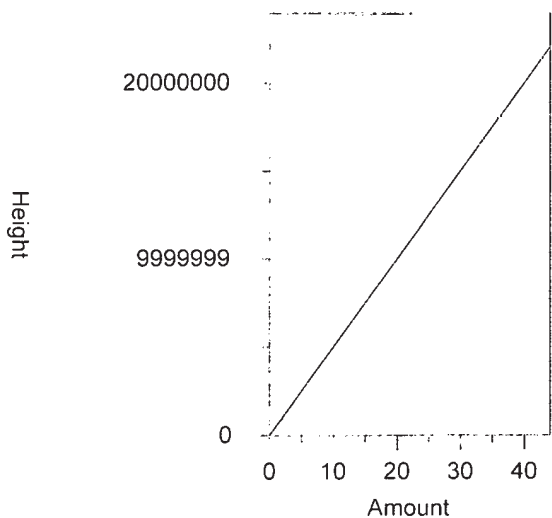
Single peak quantification by height

$Y = 1157629 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9930901  
 Average error: 5.586%  
 Average CF: 1157629  
 RSD: 7.888%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1139417	1139417	-1.573	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest183060061
2	2	1987515	993757.5	-14.156	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest183060061
3	10	1.14572E+07	1145720	-1.029	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest183060061
4	20	2.421373E+07	1210687	4.583	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest183060061
5	30	3.769675E+07	1256558	8.546	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest183060061
6	40	4.79854E+07	1199635	3.629	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest183060061

17 o,p-DDD



Expected retention time: 4.722 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

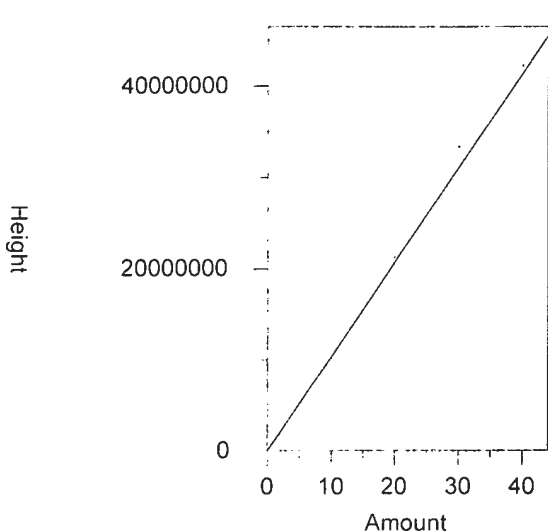
Single peak quantification by height

$Y = 500224.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.990753  
 Average error: 3.239%  
 Average CF: 500224.4  
 RSD: 4.939%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	503491	503491	0.653	Manual	11/9/2018 10:49:33 AM
2	2	937508	468754	-6.291	Manual	11/9/2018 10:49:39 AM
3	5	2456376	491275.2	-1.789	Manual	11/9/2018 10:49:48 AM
4	10	4920399	492039.9	-1.636	Manual	11/9/2018 10:49:54 AM
5	20	1.003914E+07	501957	0.346	Manual	11/9/2018 10:50:16 AM
6	40	2.175318E+07	543829.5	8.717	Manual	11/9/2018 10:50:30 AM

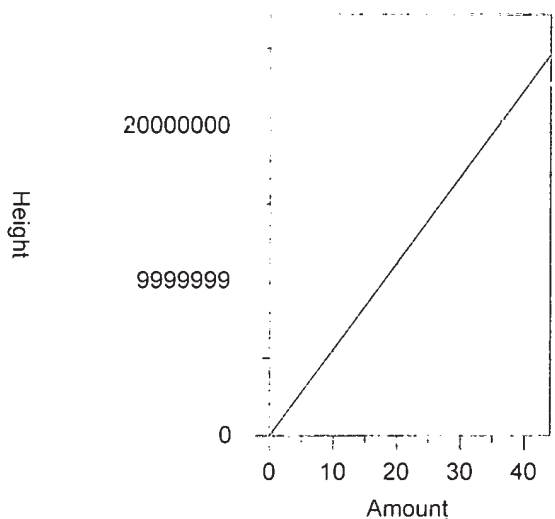
18 Endrin



Expected retention time: 4.921 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 1035135 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9956658  
 Average error: 4.496%  
 Average CF: 1035135  
 RSD: 6.327%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1050687	1050687	1.502	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	2	1835204	917602	-11.354	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	10	1.013039E+07	1013039	-2.135	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	20	2.125018E+07	1062509	2.644	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	30	3.332004E+07	1110668	7.297	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	40	4.22523E+07	1056308	2.045	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

19 o,p-DDT



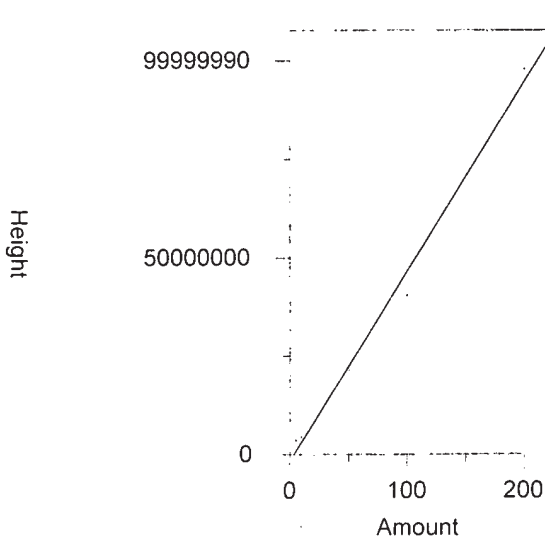
Expected retention time: 4.955 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 558660 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9864926  
 Average error: 4.838%  
 Average CF: 558660  
 RSD: 6.906%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	553717	553717	-0.885	Manual	11/9/2018 10:50:36 AM
2	2	1006653	503326.5	-9.905	Manual	11/9/2018 10:50:41 AM
3	5	2900438	580087.6	3.836	Manual	11/9/2018 10:50:45 AM
4	10	5404704	540470.4	-3.256	Manual	11/9/2018 10:50:52 AM
5	20	1.112088E+07	556044	-0.468	Manual	11/9/2018 10:51:07 AM
6	40	2.473258E+07	618314.5	10.678	Manual	11/9/2018 10:51:29 AM

20 Kepone



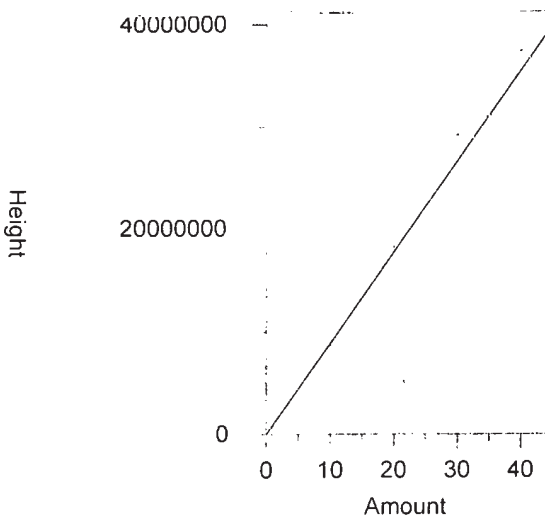
Chrom Perfect Calibration File



Expected retention time: 4.993 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 481848.6 X + -1683167$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.991312  
 Average error: 74.279%  
 Average CF: 478426.7  
 RSD: 23.644%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	3502799	700559.8	382.429	Manual	11/9/2018 10:51:43 AM
2	10	4409532	440953.2	40.641	Manual	11/9/2018 10:51:54 AM
3	25	1.014981E+07	405992.4	-2.058	Manual	11/9/2018 10:52:14 AM
4	50	2.146536E+07	429307.2	-4.212	Manual	11/9/2018 10:52:32 AM
5	100	4.045509E+07	404550.9	-13.003	Manual	11/9/2018 10:52:50 AM
6	200	9.783934E+07	489196.7	3.330	Manual	11/9/2018 10:53:14 AM

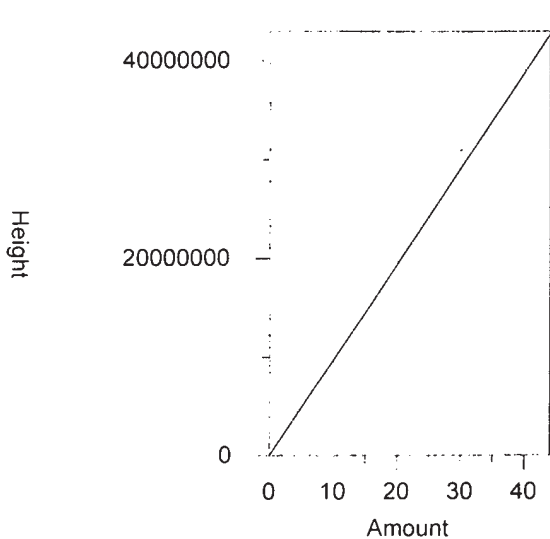
21 4,4'-DDD



Expected retention time: 5.016 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 888102.1 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9905489  
 Average error: 5.941%  
 Average CF: 888102.1  
 RSD: 8.269%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	876465	876465	-1.310	Manual	11/9/2018 10:37:45 AM
2	2	1521813	760906.5	-14.322	Manual	11/9/2018 10:37:59 AM
3	10	8686518	868651.8	-2.190	Manual	11/9/2018 10:38:14 AM
4	20	1.8245E+07	912250	2.719	Manual	11/9/2018 10:38:31 AM
5	30	2.921337E+07	973779	9.647	Manual	11/9/2018 10:38:44 AM
6	40	3.746242E+07	936560.5	5.456	Manual	11/9/2018 10:39:01 AM

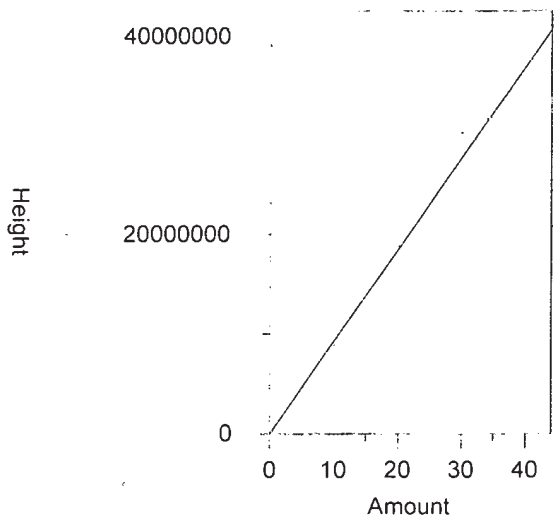
22 Endosulfan II



Expected retention time: 5.083 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 969809.6 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9970766  
 Average error: 4.244%  
 Average CF: 969809.6  
 RSD: 6.130%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1011031	1011031	4.250	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	2	1723076	861538	-11.164	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	10	9546195	954619.5	-1.566	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	20	1.969707E+07	984853.5	1.551	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	30	3.093319E+07	1031106	6.320	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	40	3.902837E+07	975709.2	0.608	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

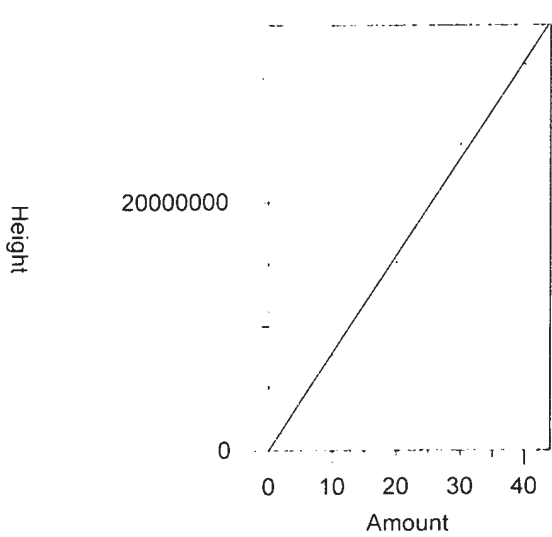
23 4,4'-DDT



Expected retention time: 5.245 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 925279.2 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9920007  
 Average error: 5.481%  
 Average CF: 925279.2  
 RSD: 7.568%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	933737.6	933737.6	0.914	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	2	1613642	806821	-12.802	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	10	8915949	891594.9	-3.640	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	20	1.882447E+07	941223.5	1.723	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	30	3.029871E+07	1009957	9.152	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	40	3.873364E+07	968341	4.654	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

24 Endrin aldehyde



Expected retention time: 5.332 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

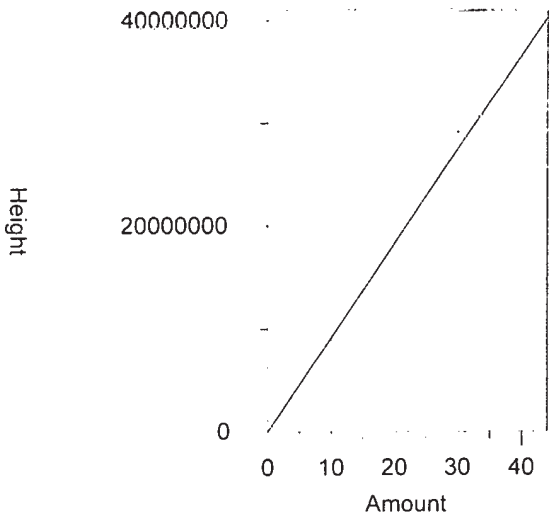
Single peak quantification by height

$$Y = 784638.4 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9978284  
 Average error: 4.490%  
 Average CF: 784638.4  
 RSD: 5.700%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	852756.6	852756.6	8.681	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	2	1462964	731482	-6.775	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	10	7659114	765911.4	-2.387	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	20	1.515264E+07	757632	-3.442	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	30	2.466607E+07	822202.3	4.787	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	40	3.111384E+07	777846	-0.866	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

25 Endo. sulfate



Expected retention time: 5.529 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

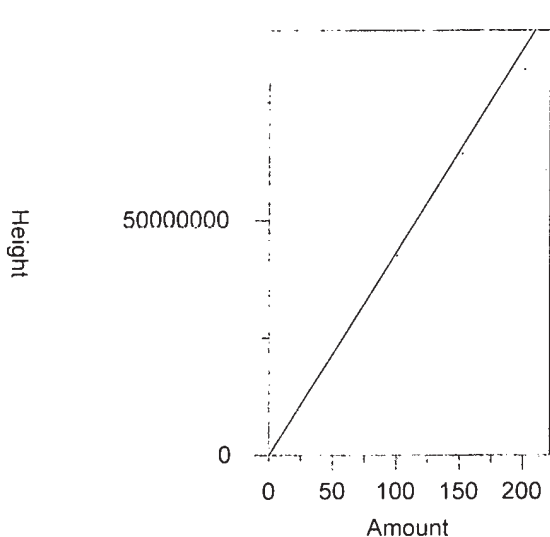
Single peak quantification by height

$$Y = 914614.1 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9970039  
 Average error: 4.619%  
 Average CF: 914614.1  
 RSD: 6.338%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	964958.3	964958.3	5.504	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	2	1626707	813353.5	-11.071	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	10	8891474	889147.4	-2.784	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	20	1.837186E+07	918593	0.435	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	30	2.909661E+07	969887	6.043	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	40	3.726982E+07	931745.5	1.873	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

26 Methoxychlor



Expected retention time: 5.736 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

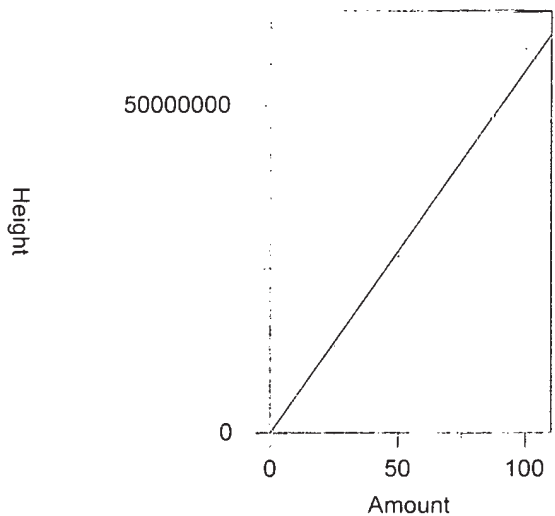
Single peak quantification by height

$Y = 431344.7 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9952362  
 Average error: 4.163%  
 Average CF: 431344.7  
 RSD: 6.291%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	2421850	484370	12.293	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	10	4188934	418893.4	-2.887	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	50	2.160978E+07	432195.6	0.197	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	100.5	4.248079E+07	422694.4	-2.005	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	152	6.416283E+07	422123.9	-2.138	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	201	8.196596E+07	407790.8	-5.461	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

27 Mirex



Expected retention time: 5.853 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

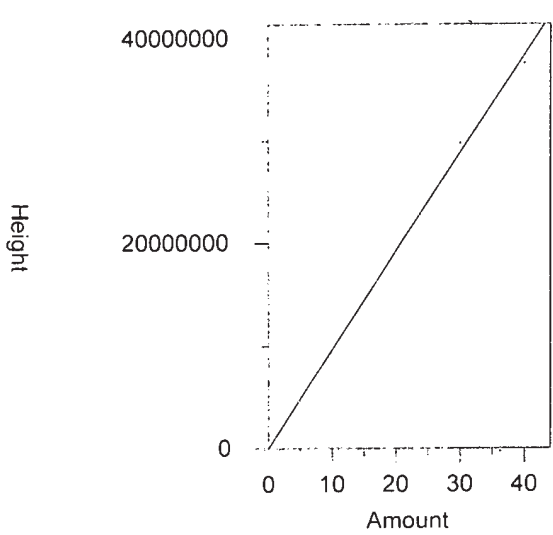
Single peak quantification by height

$Y = 553017.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9951053  
 Average error: 4.142%  
 Average CF: 553017.4  
 RSD: 4.923%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2.5	1471946	588778.4	6.467	Manual
2	5	2640017	528003.4	-4.523	Manual
3	12.5	6806248	544499.8	-1.540	Manual
4	25	1.329892E+07	531956.8	-3.808	Manual
5	50	2.69448E+07	538896	-2.554	Manual
6	100	5.8597E+07	585970	5.959	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

28 Endrin ketone



Expected retention time: 5.896 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

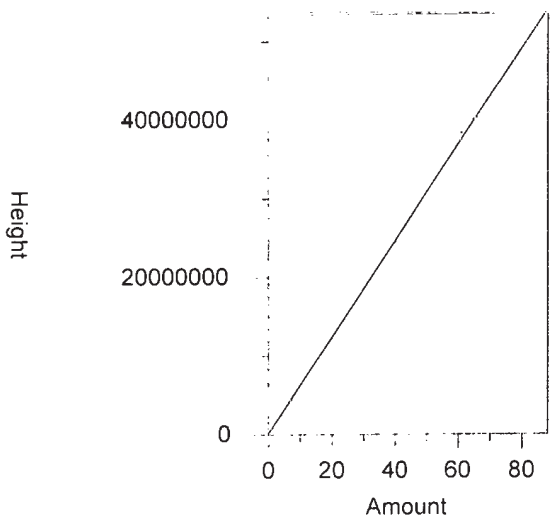
Single peak quantification by height

$Y = 960050.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9984668  
 Average error: 4.198%  
 Average CF: 960050.4  
 RSD: 5.591%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	1044480	1044480	8.794	Manual	11/9/2018 10:37:55 AM
2	2	1781000	890500	-7.244	Manual	11/9/2018 10:38:04 AM
3	10	9291490	929149	-3.219	Manual	11/9/2018 10:38:21 AM
4	20	1.928352E+07	964176	0.430	Manual	11/9/2018 10:38:40 AM
5	30	2.977238E+07	992412.7	3.371	Manual	11/9/2018 10:38:53 AM
6	40	3.75834E+07	939585	-2.132	Manual	11/9/2018 10:40:11 AM

29 DCB



Expected retention time: 6.692 minutes  
 Search window: 0.03 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 614294 X + 102401$

Linear fit with equal weighting  
 Coefficient of determination: 0.9994509  
 Average error: 3.187%  
 Average CF: 636145.9  
 RSD: 7.769%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	1471165	735582.5	10.532	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
2	4	2488901	622225.3	-2.761	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
3	20	1.215132E+07	607566	-1.913	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
4	40	2.449623E+07	612405.8	-0.721	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
5	61	3.840447E+07	629581.5	2.209	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061
6	80	4.876118E+07	609514.8	-0.984	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest183060061

Multiple Component Initial Calibration Report: **05PEST1830604**

Area Files Used For Calibration

Sequence \_\_\_\_\_ Injections \_\_\_\_\_

Component: **Aroclor-1016**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1016

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	2.807	3.069	3.230	3.433	3.539	3.591	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1258397	1767897	520007	1349883	1412524	950075	7258783
RF (Height/Conc):	6292	8839	2600	6749	7063	4750	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1221**

**2154**

Calibration Levels: 1  
 Min # of Peaks Required: 3  
 Slope:  
 Max %RSD: 5  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1221

	<u>1</u>	<u>2</u>	<u>3</u>	<u>SUM</u>
Retention Time:	2.680	2.787	2.818	
RT Window (Mins):	0.02000	0.02000	0.02000	
Height:	717240	463346	1643091	2823677
RF (Height/Conc):	3586	2317	8215	
%RSD For RF	0.000	0.000	0.000	
Slope				
Y-Intercept				

Component: **Aroclor-1248**

**AR48**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 30  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1248

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.413	3.686	3.876	4.237	4.122	4.737	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1348494	737258	1745344	1986825	1348102	1020653	8186676
RF (Height/Conc):	6742	3686	8727	9934	6711	5103	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **05PEST1830604**

Component: **Aroclor-1254**

**AR54**

Calibration Levels: 1							Concentration (ng/ml): 250.000000
Min # of Peaks Required: 4							Report Base:
Slope:							E-Flag Basis: Aroclor-1254
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.420	4.647	4.742	4.956	5.094	5.303	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	3183021	2381729	4153502	3094382	2130002	3421102	18363738
RF (Height/Conc):	12732	9527	16614	12378	8520	13684	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1260**

**AR16**

Calibration Levels: 1							Concentration (ng/ml): 200.000000
Min # of Peaks Required: 4							Report Base:
Slope:							E-Flag Basis: Aroclor-1260
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.883	5.090	5.300	5.560	5.774	5.971	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	2338930	3158974	3323608	1858127	3802629	2269746	16752014
RF (Height/Conc):	11695	15795	16618	9291	19013	11349	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Chlordane**

**CHLD**

Calibration Levels: 6							Avg Concentration (ng/ml): 50.000000	
Min # of Peaks Required: 4							Report Base:	
Slope:							E-Flag Basis: Chlordane	
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>	
Retention Time:	3.525	3.968	4.323	4.483	4.581	5.185		
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000		
Average Height:	1683293	1612290	1080682	5081629	6957119	1689278	18104291	
RF (Height/Conc):	11052	11126	7204	33293	46043	11007		
%RSD For RF	7.883	6.151	5.437	9.381	8.412	8.287		
Slope								
Y-Intercept								
Level 1	Height	133618	143542	90178	385830	543941	130872	1427981
	Conc	12.500	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	236102	251017	160834	706154	989388	234510	2578006
	Conc	25.000	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	575185	588202	375101	1747225	2439670	576620	6302003
	Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	1166656	1160775	744725	3612624	4938497	1155536	12778813
	Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	2343020	2265631	1467225	7166832	9776217	2343201	25362126
	Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	5645179	5264571	3646031	16871110	23055000	5694928	60176819
	Conc	500.000	500.000	500.000	500.000	500.000	500.000	

Multiple Component Initial Calibration Report: **05PEST1830604**

Component: **Toxaphene**

**TOXA**

Calibration Levels: 6

Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4

Max %RSD: 40

Report Base:

Slope:

Y-Intercept:

E-Flag Basis: Toxaphene

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>	
Retention Time:	5.093	5.228	5.315	5.479	5.714	5.779		
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000		
Average Height:	3262302	4990526	4600948	4679005	4056575	4682270	26271626	
RF (Height/Conc):	4782	7494	6771	6887	5950	6984		
%RSD For RF	<b>10.403</b>	<b>7.448</b>	<b>9.655</b>	<b>9.862</b>	<b>10.617</b>	<b>8.098</b>		
Slope								
Y-Intercept								
Level 1	Height	200245	334448	289109	293419	248006	309554	1674781
	Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 2	Height	433791	698856	619639	628283	541090	650781	3572440
	Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 3	Height	1015986	1596692	1433985	1459850	1271205	1492414	8270132
	Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 4	Height	2575028	3959345	3633881	3719650	3214690	3676622	20779216
	Conc	500.000	500.000	500.000	500.000	500.000	500.000	
Level 5	Height	4889051	7412214	6786812	6888860	6024879	6813409	38815225
	Conc	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6	Height	10459710	15941600	14842260	15083970	13039580	15150840	84517960
	Conc	2000.000	2000.000	2000.000	2000.000	2000.000	2000.000	



Multiple Component Initial Calibration Report: **05PEST1830604B**

Area Files Used For Calibration

Sequence \_\_\_\_\_ Injections \_\_\_\_\_

Component: **Aroclor-1016**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope: \_\_\_\_\_  
 Max %RSD: 40  
 Y-Intercept: \_\_\_\_\_  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1016

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	2.685	2.963	3.143	3.300	3.405	3.485	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	3842974	5325124	2218380	9323568	4671356	3074750	28456152
RF (Height/Conc):	19215	26626	11092	46618	23357	15374	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1221**

**2154**

Calibration Levels: 1  
 Min # of Peaks Required: 3  
 Slope: \_\_\_\_\_  
 Max %RSD: 5  
 Y-Intercept: \_\_\_\_\_  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 F-Flag Basis: Aroclor-1221

	<u>1</u>	<u>2</u>	<u>3</u>	<u>SUM</u>
Retention Time:	2.557	2.651	2.693	
RT Window (Mins):	0.02000	0.02000	0.02000	
Height:	2220491	1357046	4582321	8159858
RF (Height/Conc):	11102	6785	22912	
%RSD For RF	0.000	0.000	0.000	
Slope				
Y-Intercept				

Component: **Aroclor-1248**

**AR48**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope: \_\_\_\_\_  
 Max %RSD: 30  
 Y-Intercept: \_\_\_\_\_  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1248

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.297	3.558	3.780	3.884	4.142	4.335	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	4721418	4482628	5590784	4667239	6450198	5076946	30989213
RF (Height/Conc):	23607	22413	27954	23336	32261	25305	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **05PEST1830604B**

Component: **Aroclor-1254**

**AR54**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:

Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 250.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1254

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.140	4.296	4.668	4.842	5.103	5.240	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	7787562	8789741	12700800	9113145	6700056	9683890	54775194
RF (Height/Conc):	31150	35159	50803	36453	26800	38736	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1260**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:

Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1260

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.819	4.976	5.240	5.514	5.684	5.932	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	6977575	8328938	8650472	5441882	11170040	6631015	47199922
RF (Height/Conc):	34888	41645	43252	27209	55850	33155	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Chlordane**

**CHLD**

Calibration Levels: 6  
 Min # of Peaks Required: 4  
 Slope:

Max %RSD: 40  
 Y-Intercept:

Avg Concentration (ng/ml): 50.000000  
 Report Base:  
 E-Flag Basis: Chlordane

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.263	3.772	4.109	4.298	4.419	5.113	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:	6590259	5930573	4399348	21779565	16219697	5922272	60841714
RF (Height/Conc):	40907	38919	27794	132671	100267	37584	
%RSD For RF	11.610	6.374	10.028	14.962	13.078	9.719	
Slope							
Y-Intercept							
Level 1	Height 483583 Conc 12.500	478827 12.500	307007 12.500	1392284 12.500	1083884 12.500	435128 12.500	4180713
Level 2	Height 824092 Conc 25.000	853220 25.000	599777 25.000	2638727 25.000	2042766 25.000	791205 25.000	7749777
Level 3	Height 2011255 Conc 50.000	1998895 50.000	1431453 50.000	6682931 50.000	5057643 50.000	1902632 50.000	19084809
Level 4	Height 4281467 Conc 100.000	4035969 100.000	2936696 100.000	14394670 100.000	10875900 100.000	3957019 100.000	40481721
Level 5	Height 8957077 Conc 200.000	8102039 200.000	5990824 200.000	30117150 200.000	22250420 200.000	8175865 200.000	83593375
Level 6	Height 22984080 Conc 500.000	20114490 500.000	15130330 500.000	75451630 500.000	56007580 500.000	20271780 500.000	209959890

Multiple Component Initial Calibration Report: **05PEST1830604B**

Component: **Toxaphene**

**TOXA**

Calibration Levels: 6

Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4

Max %RSD: 40

Report Base:

Slope:

Y-Intercept:

E-Flag Basis: Toxaphene

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.670	4.901	5.071	5.336	5.392	5.692	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:	9271361	9787256	17709040	19585976	11496274	17372998	85222905
RF (Height/Conc):	13950	14403	26103	28451	16710	25515	
%RSD For RF	<b>4.538</b>	<b>6.936</b>	<b>6.965</b>	<b>8.956</b>	<b>8.563</b>	<b>7.577</b>	
Slope							
Y-Intercept							
Level 1							
Height	681420	677404	1229368	1295258	772381	1205551	5861382
Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 2							
Height	1320478	1319097	2386368	2546675	1502096	2317792	11392506
Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 3							
Height	2804850	2924749	5334863	5819004	3376474	5201784	25461724
Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 4							
Height	7070495	7300307	13242650	14769690	8626285	13027470	64036897
Conc	500.000	500.000	500.000	500.000	500.000	500.000	
Level 5							
Height	13649130	14408070	25950170	28318690	16608580	24991570	123926210
Conc	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6							
Height	30101790	32093910	58110820	64766540	38091830	57493820	280658710
Conc	2000.000	2000.000	2000.000	2000.000	2000.000	2000.000	

6D

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830604GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/12/2018 11/12/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Tetrachloro-m-xylene	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.52	2.56
Hcb							2.83	2.81	2.85
alpha-BHC	2.95	2.95	2.95	2.95	2.96	2.95	2.95	2.93	2.97
gamma-BHC (Lindane)	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.18	3.22
beta-BHC	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.25	3.29
delta-BHC	3.41	3.41	3.41	3.41	3.42	3.41	3.41	3.39	3.43
Heptachlor	3.59	3.59	3.59	3.59	3.60	3.59	3.59	3.57	3.61
Aldrin	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.83	3.87
Telodrin							4.05	4.03	4.07
Heptachlor epoxide	4.37	4.37	4.38	4.37	4.38	4.37	4.37	4.35	4.39
o,p-DDE							4.37	4.35	4.39
gamma-Chlordane	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.46	4.50
alpha-Chlordane	4.59	4.59	4.59	4.60	4.59	4.59	4.59	4.57	4.61
4,4'-DDE	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.63	4.67
Endosulfan I	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.68	4.72
o,p-DDD							4.79	4.77	4.81
Dieldrin	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.87	4.91
o,p-DDT							4.99	4.97	5.01
Endrin	5.06	5.06	5.07	5.06	5.07	5.06	5.06	5.04	5.08
Kepone							5.10	5.08	5.12
4,4'-DDD	5.11	5.11	5.11	5.11	5.12	5.11	5.11	5.09	5.13
Endosulfan II	5.23	5.23	5.23	5.23	5.24	5.23	5.23	5.21	5.25
4,4'-DDT	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.30	5.34
Endrin aldehyde	5.54	5.54	5.54	5.54	5.54	5.54	5.54	5.52	5.56
Methoxychlor	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.65	5.69
Mirex							5.78	5.76	5.80
Endosulfan sulfate	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.82	5.86
Endrin ketone	6.04	6.04	6.04	6.04	6.04	6.04	6.04	6.02	6.06
Decachlorobiphenyl	6.70	6.69	6.70	6.70	6.70	6.69	6.70	6.67	6.73

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code: Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Calibration File: 05PEST1830604

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

ICAL Date(s) Analyzed: 11/12/2018 11/12/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	4.81E+05	4.30E+05	4.32E+05	4.22E+05	4.16E+05	4.39E+05	4.37E+05	5
Hcb	4.79E+05	4.26E+05	4.21E+05	4.12E+05	3.97E+05	3.94E+05	4.21E+05	7
alpha-BHC	6.19E+05	5.74E+05	6.31E+05	6.26E+05	6.33E+05	6.72E+05	6.26E+05	5
gamma-BHC (Lindane)	5.36E+05	4.94E+05	5.30E+05	5.28E+05	5.32E+05	5.71E+05	5.32E+05	5
beta-BHC	2.72E+05	2.37E+05	2.28E+05	2.23E+05	2.25E+05	2.38E+05	2.37E+05	8
delta-BHC	4.83E+05	4.43E+05	4.85E+05	4.86E+05	4.92E+05	5.33E+05	4.87E+05	6
Heptachlor	4.72E+05	4.36E+05	4.37E+05	4.42E+05	4.39E+05	4.79E+05	4.51E+05	4
Aldrin	4.17E+05	3.85E+05	4.08E+05	4.17E+05	4.20E+05	4.52E+05	4.16E+05	5
Telodrin	2.36E+05	2.11E+05	2.16E+05	2.13E+05	2.10E+05	2.15E+05	2.17E+05	5
Heptachlor epoxide	4.00E+05	3.61E+05	3.62E+05	3.66E+05	3.59E+05	3.88E+05	3.73E+05	5
o,p-DDE	1.95E+05	1.78E+05	1.87E+05	1.85E+05	1.84E+05	1.87E+05	1.86E+05	3
gamma-Chlordane	3.98E+05	3.57E+05	3.64E+05	3.73E+05	3.75E+05	4.06E+05	3.79E+05	5
alpha-Chlordane	4.07E+05	3.63E+05	3.62E+05	3.65E+05	3.70E+05	3.98E+05	3.78E+05	5
4,4'-DDE	3.31E+05	3.09E+05	3.35E+05	3.37E+05	3.40E+05	3.79E+05	3.39E+05	7
Endosulfan I	3.80E+05	3.45E+05	3.39E+05	3.43E+05	3.44E+05	3.72E+05	3.54E+05	5
o,p-DDD	1.77E+05	1.62E+05	1.70E+05	1.66E+05	1.67E+05	1.72E+05	1.69E+05	3
Dieldrin	3.90E+05	3.57E+05	3.70E+05	3.65E+05	3.64E+05	3.95E+05	3.74E+05	4
o,p DDT	2.15E+05	1.94E+05	2.09E+05	2.03E+05	2.00E+05	2.11E+05	2.05E+05	4
Endrin	3.71E+05	3.41E+05	3.49E+05	3.41E+05	3.39E+05	3.70E+05	3.52E+05	4
Kepone	2.41E+05	1.53E+05	1.37E+05	1.37E+05	1.26E+05	1.46E+05	1.57E+05	27
4,4'-DDD	2.87E+05	2.62E+05	2.79E+05	2.80E+05	2.85E+05	3.17E+05	2.85E+05	6
Endosulfan II	3.50E+05	3.17E+05	3.19E+05	3.13E+05	3.10E+05	3.36E+05	3.24E+05	5
4,4'-DDT	3.18E+05	2.88E+05	3.04E+05	3.07E+05	3.12E+05	3.47E+05	3.13E+05	6
Endrin aldehyde	2.96E+05	2.67E+05	2.59E+05	2.50E+05	2.55E+05	2.74E+05	2.67E+05	6
Methoxychlor	1.62E+05	1.45E+05	1.38E+05	1.36E+05	1.34E+05	1.46E+05	1.44E+05	7
Mirex	2.15E+05	1.88E+05	1.95E+05	1.80E+05	1.75E+05	1.86E+05	1.90E+05	7
Endosulfan sulfate	3.22E+05	2.89E+05	2.84E+05	2.82E+05	2.80E+05	3.08E+05	2.94E+05	6
Endrin ketone	3.86E+05	3.47E+05	3.41E+05	3.32E+05	3.32E+05	3.59E+05	3.49E+05	6
Decachlorobiphenyl	2.78E+05	2.43E+05	2.22E+05	2.14E+05	2.11E+05	2.25E+05	2.32E+05	11

D. Jones

D. Jones

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Andrea L. Jones  
Chemist

NOV 13 2018

File Name: V:\CP5\05pest1830604.cal  
 Version: 10

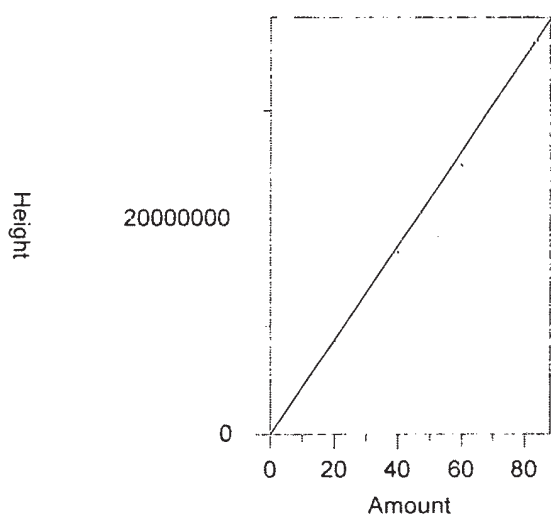
Creator:  
 Description:  
 Reason for change:

External standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 50  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

1 TCX



Expected retention time: 2.542 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

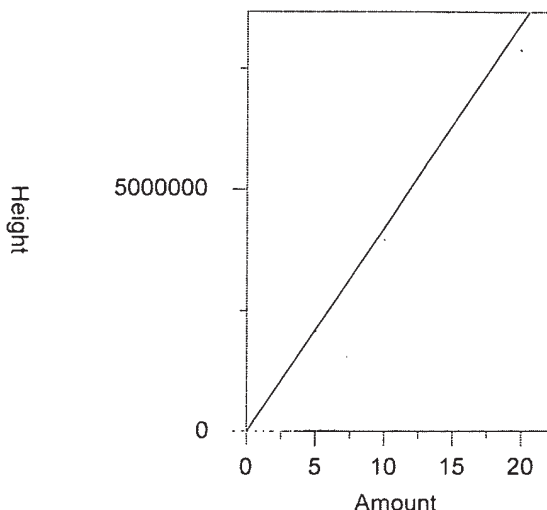
Single peak quantification by height

$$Y = 436712.2 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9979039  
 Average error: 3.572%  
 Average CF: 436712.2  
 RSD: 5.309%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	962181.7	481090.8	10.162	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.B
2	4	1720509	430127.3	-1.508	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.B
3	20	8641251	432062.6	-1.065	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.B
4	40	1.686656E+07	421664	-3.446	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.B
5	60	2.497201E+07	416200.2	-4.697	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.B
6	80	3.513028E+07	439128.5	0.553	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.B

2 HCB



Expected retention time: 2.831 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

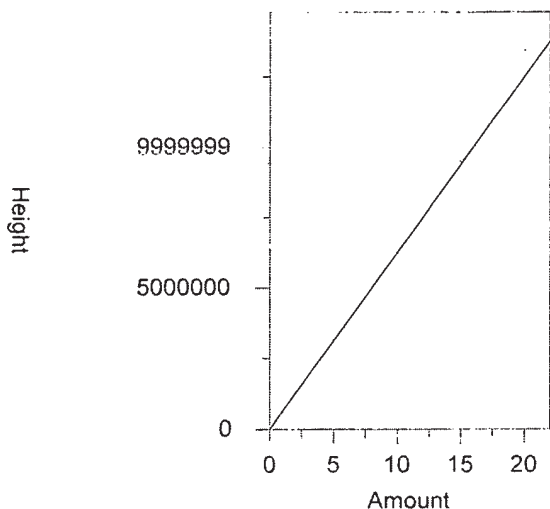
Single peak quantification by height

$$Y = 421389.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9915589  
 Average error: 4.921%  
 Average CF: 421389.9  
 RSD: 7.378%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	239722	479444	13.777	Manual	11/13/2018 10:05:26 AM
2	1	425544	425544	0.986	Manual	11/13/2018 10:05:30 AM
3	2.5	1051387	420554.8	-0.198	Manual	11/13/2018 10:05:35 AM
4	5	2060389	412077.8	-2.210	Manual	11/13/2018 10:05:40 AM
5	10	3965430	396543	-5.896	Manual	11/13/2018 10:05:47 AM
6	20	7883517	394175.8	-6.458	Manual	11/13/2018 10:05:53 AM

3 alpha-BHC



Expected retention time: 2.952 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

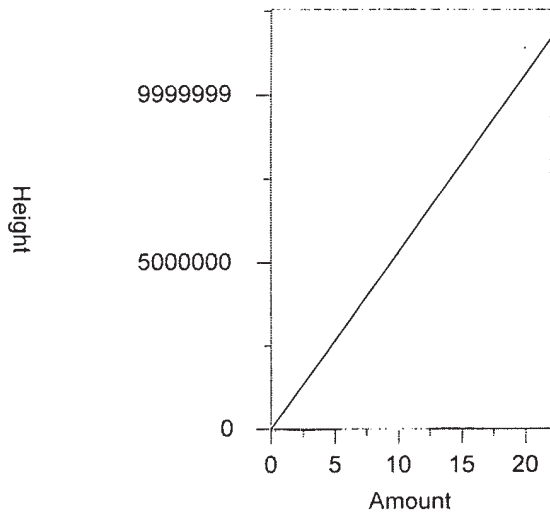
Single peak quantification by height

$$Y = 625914.1 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.99353  
 Average error: 3.153%  
 Average CF: 625914.1  
 RSD: 5.033%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	309274.3	618548.6	-1.177	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
2	1	574367.1	574367.1	-8.235	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
3	5	3155115	631023	0.816	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
4	10	6256160	625616	-0.048	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
5	15	9501960	633464	1.206	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
6	20	1.344931E+07	672465.5	7.437	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1

4 gamma-BHC



Expected retention time: 3.197 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

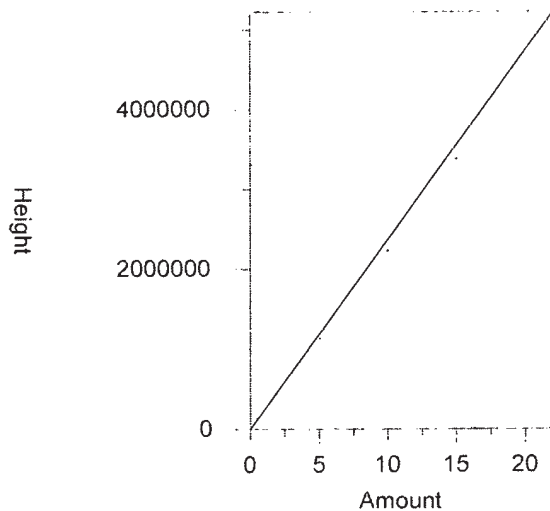
Single peak quantification by height

$Y = 531812.5 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9937794  
 Average error: 2.689%  
 Average CF: 531812.5  
 RSD: 4.571%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	267918.1	535836.2	0.757	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.E
2	1	494248.8	494248.8	-7.009	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.E
3	5	2651531	530306.2	-0.283	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.E
4	10	5280651	528065.1	-0.705	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.E
5	15	7975877	531725.1	-0.016	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.E
6	20	1.141387E+07	570693.5	7.311	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.E

5 beta-BHC



Expected retention time: 3.265 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

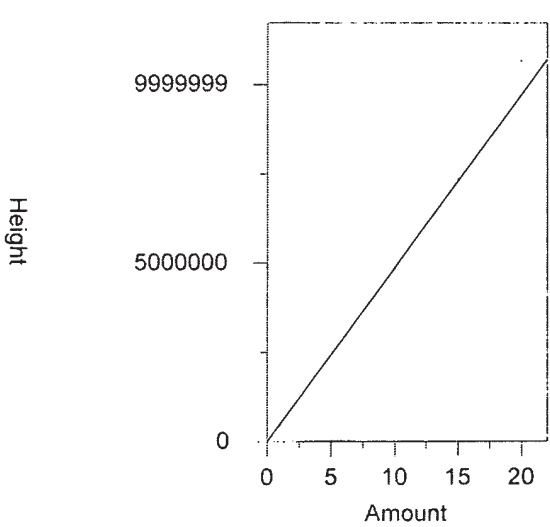
$Y = 237078.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9968132  
 Average error: 5.001%  
 Average CF: 237078.9  
 RSD: 7.677%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	136082.4	272164.8	14.799	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.E
2	1	236686.1	236686.1	-0.166	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.E
3	5	1139171	227834.2	-3.899	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.E
4	10	2228845	222884.5	-5.987	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.E
5	15	3380098	225339.9	-4.952	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.E
6	20	4751273	237563.7	0.204	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.E

6 delta-BHC





Expected retention time: 3.412 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

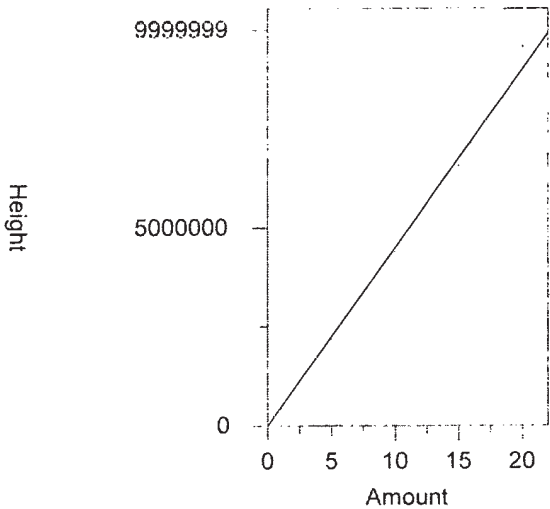
Single peak quantification by height

$$Y = 487024.6 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9897862  
 Average error: 3.489%  
 Average CF: 487024.6  
 RSD: 5.896%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	241521.4	483042.8	-0.818	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
2	1	443197.5	443197.5	-8.999	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
3	5	2422711	484542.2	-0.510	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
4	10	4863426	486342.6	-0.140	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
5	15	7373040	491536	0.926	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
6	20	1.066973E+07	533486.5	9.540	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1

7 Heptachlor



Expected retention time: 3.592 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

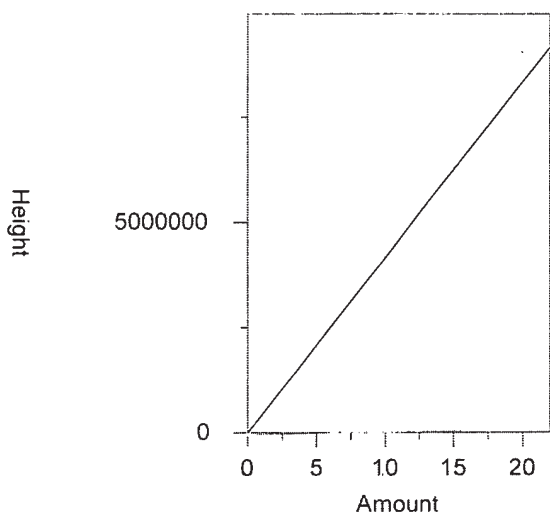
Single peak quantification by height

$$Y = 450793 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9945647  
 Average error: 3.700%  
 Average CF: 450793  
 RSD: 4.350%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	236174.3	472348.6	4.782	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.E
2	1	435747.5	435747.5	-3.338	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.E
3	5	2184311	436862.2	-3.090	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.E
4	10	4417972	441797.2	-1.996	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.E
5	15	6580982	438732.1	-2.675	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.E
6	20	9585411	479270.6	6.317	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.E

8 Aldrin



Expected retention time: 3.852 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

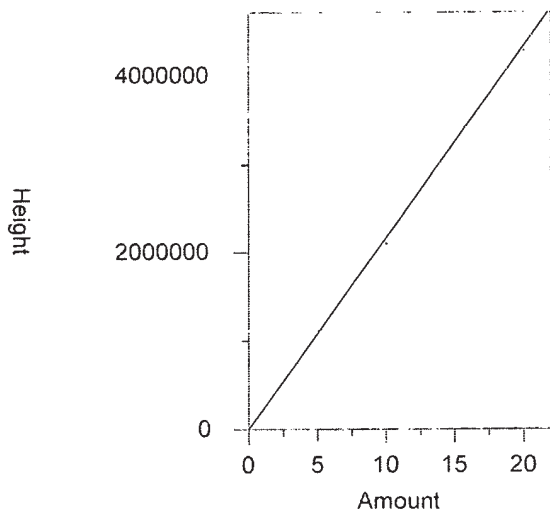
Single peak quantification by height

$Y = 416496.3 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9916111  
 Average error: 3.167%  
 Average CF: 416496.3  
 RSD: 5.185%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	208268.9	416537.8	0.010	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.E
2	1	385304.6	385304.6	-7.489	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.E
3	5	2040587	408117.4	-2.012	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.E
4	10	4166585	416658.5	0.039	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.E
5	15	6302327	420155.1	0.878	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.F
6	20	9044081	452204.1	8.573	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.E

9 Telodrin



Expected retention time: 4.045 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

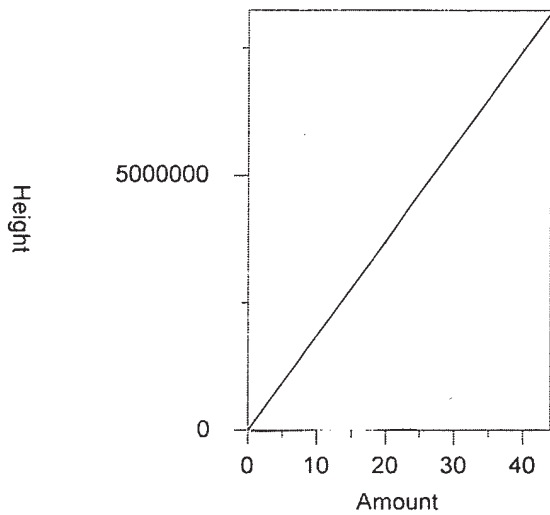
Single peak quantification by height

$Y = 216859.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994371  
 Average error: 2.996%  
 Average CF: 216859.2  
 RSD: 4.511%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	118176	236352	8.989	Manual	11/13/2018 10:06:07 AM
2	1	211036	211036	-2.685	Manual	11/13/2018 10:06:11 AM
3	2.5	539686	215874.4	-0.454	Manual	11/13/2018 10:06:17 AM
4	5	1066179	213235.8	-1.671	Manual	11/13/2018 10:06:22 AM
5	10	2101513	210151.3	-3.093	Manual	11/13/2018 10:06:27 AM
6	20	4290110	214505.5	-1.085	Manual	11/13/2018 10:06:35 AM

10 o,p-DDE



Expected retention time: 4.37 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

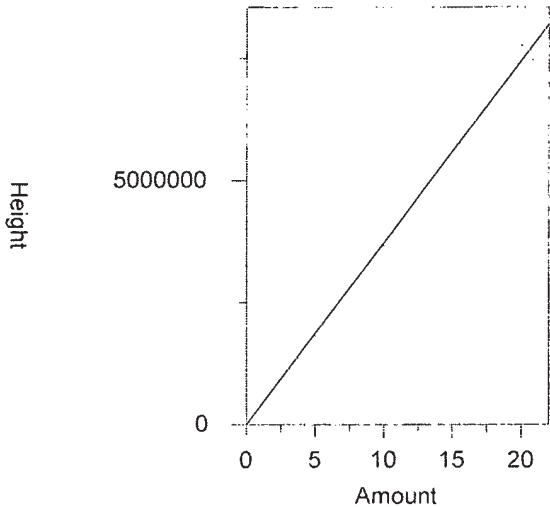
Single peak quantification by height

$$Y = 186052.7 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9998639  
 Average error: 2.073%  
 Average CF: 186052.7  
 RSD: 2.971%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	195072	195072	4.848	Manual	11/13/2018 10:06:49 AM
2	2	356538	178269	-4.184	Manual	11/13/2018 10:07:00 AM
3	5	936775	187355	0.700	Manual	11/13/2018 10:07:06 AM
4	10	1846431	184643.1	-0.758	Manual	11/13/2018 10:07:11 AM
5	20	3673540	183677	-1.277	Manual	11/13/2018 10:07:16 AM
6	40	7492000	187300	0.670	Manual	11/13/2018 10:07:23 AM

11 Hept. epoxide



Expected retention time: 4.374 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

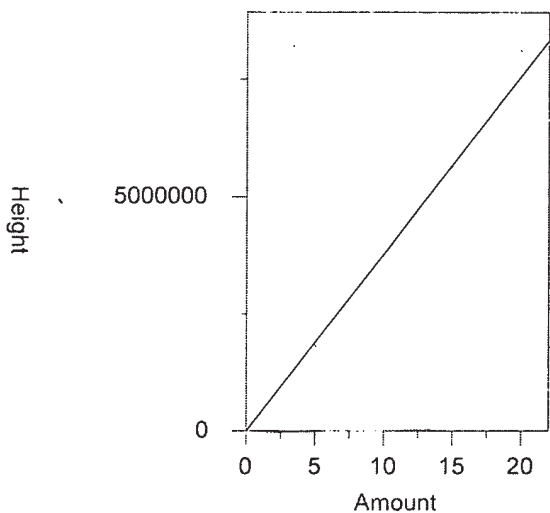
Single peak quantification by height

$$Y = 372833.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9967149  
 Average error: 3.820%  
 Average CF: 372833.9  
 RSD: 4.577%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	199979	399958	7.275	Manual	11/13/2018 9:49:21 AM
2	1	361475	361475	-3.047	Manual	11/13/2018 9:49:49 AM
3	5	1811895	362379	-2.804	Manual	11/13/2018 9:50:09 AM
4	10	3655008	365500.8	-1.967	Manual	11/13/2018 9:50:38 AM
5	15	5388763	359250.9	-3.643	Manual	11/13/2018 9:50:59 AM
6	20	7768801	388440.1	4.186	Manual	11/13/2018 9:51:12 AM

12 g. Chlordane



Expected retention time: 4.479 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

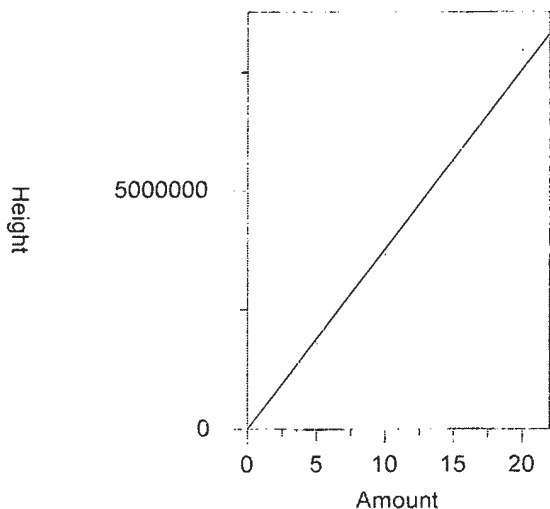
Single peak quantification by height

$$Y = 378913.2 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9936441  
 Average error: 4.068%  
 Average CF: 378913.2  
 RSD: 5.072%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	198859.8	397719.6	4.963	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.E
2	1	357012.5	357012.5	-5.780	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.E
3	5	1822132	364426.4	-3.823	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.E
4	10	3728719	372871.9	-1.594	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.E
5	15	5626571	375104.7	-1.005	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.E
6	20	8126883	406344.2	7.239	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.E

13 a. Chlordane



Expected retention time: 4.587 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

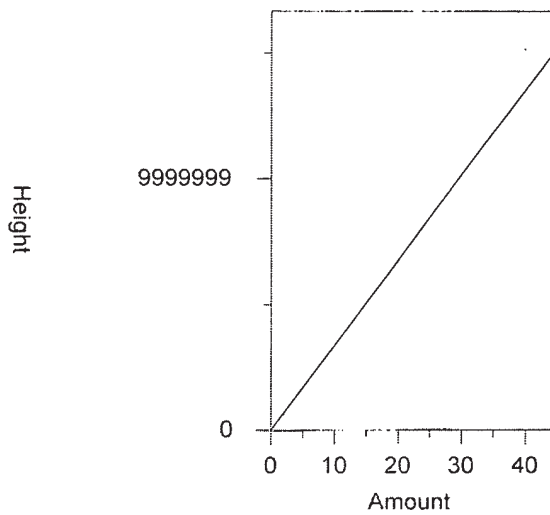
Single peak quantification by height

$$Y = 377592.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9957289  
 Average error: 4.365%  
 Average CF: 377592.9  
 RSD: 5.167%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	203278.3	406556.6	7.671	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.E
2	1	363175.3	363175.3	-3.818	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.E
3	5	1812190	362438	-4.014	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.E
4	10	3654282	365428.2	-3.222	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.E
5	15	5548260	369884	-2.042	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.E
6	20	7961508	398075.4	5.424	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.E

14 4,4'-DDE



Expected retention time: 4.649 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

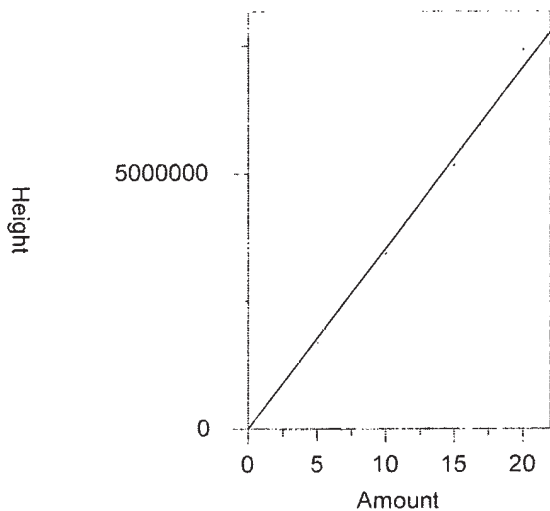
Single peak quantification by height

$$Y = 338520.4 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9845396  
 Average error: 4.138%  
 Average CF: 338520.4  
 RSD: 6.681%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	331344.5	331344.5	-2.120	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
2	2	618883.9	309441.9	-8.590	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
3	10	3346087	334608.7	-1.156	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
4	20	6733170	336658.5	-0.550	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
5	30	1.020176E+07	340058.7	0.454	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
6	40	1.516041E+07	379010.3	11.961	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1

15 Endosulfan 1



Expected retention time: 4.696 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

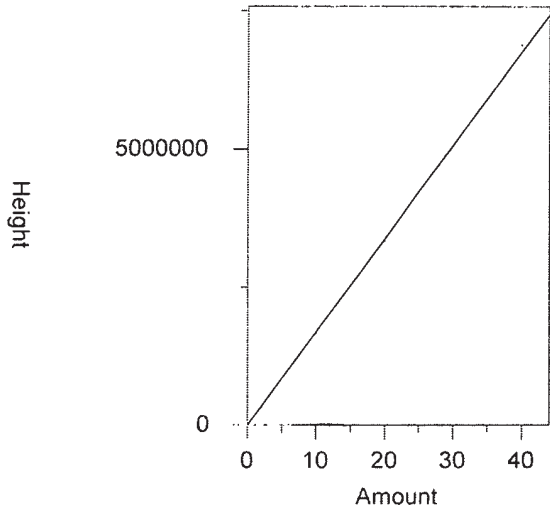
Single peak quantification by height

$$Y = 353820.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9959277  
 Average error: 4.170%  
 Average CF: 353820.9  
 RSD: 4.942%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	190042	380084	7.423	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.E
2	1	345072.6	345072.6	-2.473	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.E
3	5	1692857	338571.4	-4.310	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.E
4	10	3431670	343167	-3.011	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.E
5	15	5163197	344213.1	-2.715	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.E
6	20	7436351	371817.6	5.086	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.E

16 o,p-DDD



Expected retention time: 4.787 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

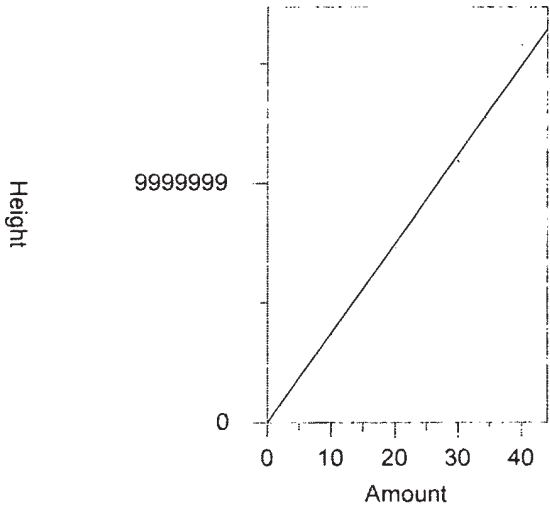
Single peak quantification by height

$$Y = 169097.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994032  
 Average error: 2.474%  
 Average CF: 169097.9  
 RSD: 3.197%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	177241	177241	4.816	Manual	11/13/2018 10:08:15 AM
2	2	323376	161688	-4.382	Manual	11/13/2018 10:08:21 AM
3	5	851601	170320.2	0.723	Manual	11/13/2018 10:08:26 AM
4	10	1664119	166411.9	-1.588	Manual	11/13/2018 10:08:30 AM
5	20	3332841	166642	-1.452	Manual	11/13/2018 10:08:35 AM
6	40	6891359	172284	1.884	Manual	11/13/2018 10:08:42 AM

17 Dieldrin



Expected retention time: 4.886 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

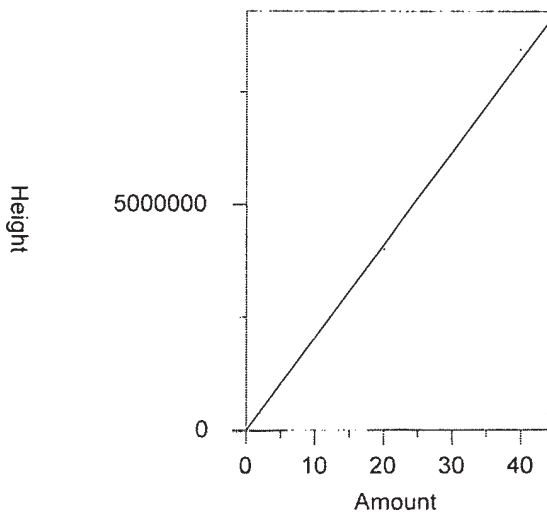
Single peak quantification by height

$$Y = 373563.6 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9955146  
 Average error: 3.397%  
 Average CF: 373563.6  
 RSD: 4.101%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	390465.5	390465.5	4.525	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
2	2	714887	357443.5	-4.315	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
3	10	3697988	369798.8	-1.008	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
4	20	7296508	364825.4	-2.339	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
5	30	1.092355E+07	364118.3	-2.528	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
6	40	1.578919E+07	394729.8	5.666	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0

18 o,p-DDT



Expected retention time: 4.986 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

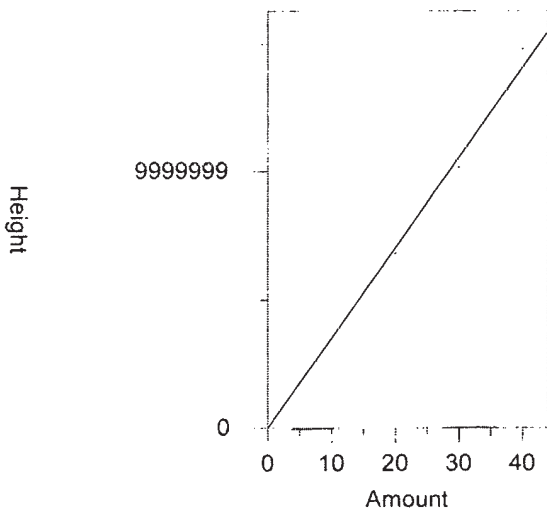
Single peak quantification by height

$$Y = 205345.8 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.998692  
 Average error: 3.023%  
 Average CF: 205345.8  
 RSD: 3.708%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	215071	215071	4.736	Manual	11/13/2018 10:08:56 AM
2	2	388967	194483.5	-5.290	Manual	11/13/2018 10:09:02 AM
3	5	1042841	208568.2	1.569	Manual	11/13/2018 10:09:06 AM
4	10	2029898	202989.8	-1.147	Manual	11/13/2018 10:09:11 AM
5	20	3998863	199943.2	-2.631	Manual	11/13/2018 10:09:16 AM
6	40	8440755	211018.9	2.763	Manual	11/13/2018 10:09:29 AM

19 Endrin



Expected retention time: 5.064 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

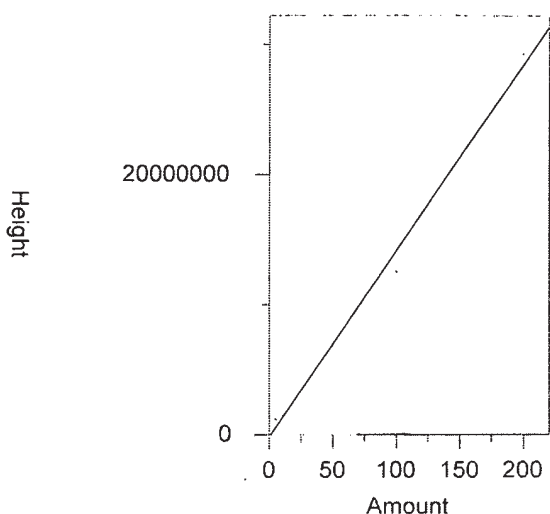
Single peak quantification by height

$$Y = 351841.3 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.995405  
 Average error: 3.582%  
 Average CF: 351841.3  
 RSD: 4.291%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	371392.7	371392.7	5.557	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.c
2	2	681913.8	340956.9	-3.094	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.c
3	10	3492551	349255.1	-0.735	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.c
4	20	6816135	340806.8	-3.136	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.c
5	30	1.01561E+07	338536.7	-3.781	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.c
6	40	1.480399E+07	370099.8	5.189	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.c

20 Kepone



Expected retention time: 5.103 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

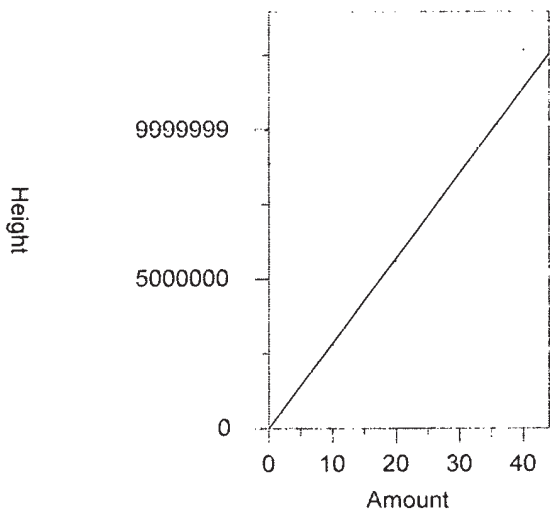
Single peak quantification by height

$Y = 143277.1 X + -171568.1$

Linear fit with equal weighting  
 Coefficient of determination: 0.9935737  
 Average error: 26.432%  
 Average CF: 156559.7  
 RSD: 26.997%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	1203740	240748	120.944	Manual	11/13/2018 10:09:38 AM
2	10	1526835	152683.5	21.062	Manual	11/13/2018 10:09:43 AM
3	25	3424278	136971.1	0.408	Manual	11/13/2018 10:09:49 AM
4	50	6844445	136888.9	-2.114	Manual	11/13/2018 10:09:55 AM
5	100	1.256394E+07	125639.4	-11.247	Manual	11/13/2018 10:10:03 AM
6	200	2.928541E+07	146427	2.814	Manual	11/13/2018 10:10:28 AM

21 4,4'-DDD



Expected retention time: 5.113 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

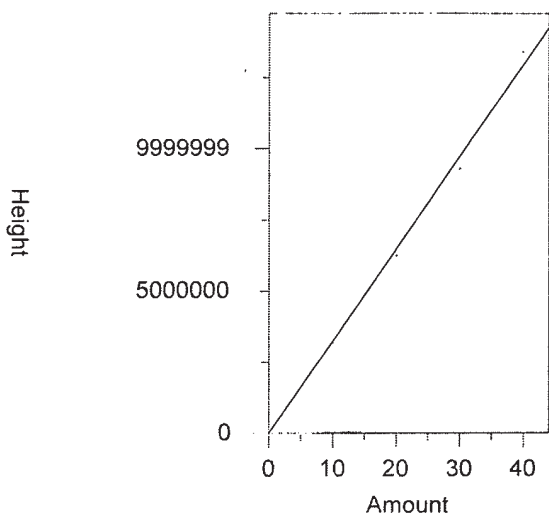
$Y = 284979 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9860317  
 Average error: 4.023%  
 Average CF: 284979  
 RSD: 6.350%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	287297	287297	0.813	Manual	11/13/2018 9:49:39 AM
2	2	523418	261709	-8.166	Manual	11/13/2018 9:50:04 AM
3	10	2792300	279230	-2.017	Manual	11/13/2018 9:50:29 AM
4	20	5592920	279646	-1.871	Manual	11/13/2018 9:50:47 AM
5	30	8548140	284938	-0.014	Manual	11/13/2018 9:51:07 AM
6	40	1.268215E+07	317053.8	11.255	Manual	11/13/2018 9:51:22 AM

22 Endosulfan II





Expected retention time: 5.232 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

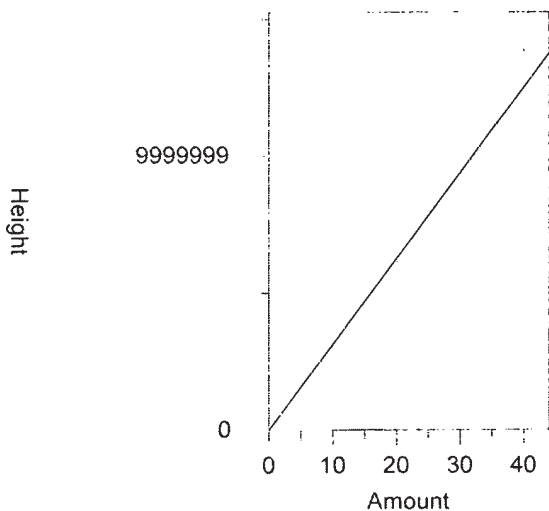
Single peak quantification by height

$Y = 324154.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9966909  
 Average error: 3.862%  
 Average CF: 324154.9  
 RSD: 4.813%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	350348.4	350348.4	8.081	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
2	2	633680.5	316040.5	-2.257	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
3	10	3191077	319107.7	-1.557	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
4	20	6264810	313240.5	-3.367	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
5	30	9296362	309878.7	-4.404	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
6	40	1.342056E+07	335514	3.504	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t

23 4,4'-DDT



Expected retention time: 5.321 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

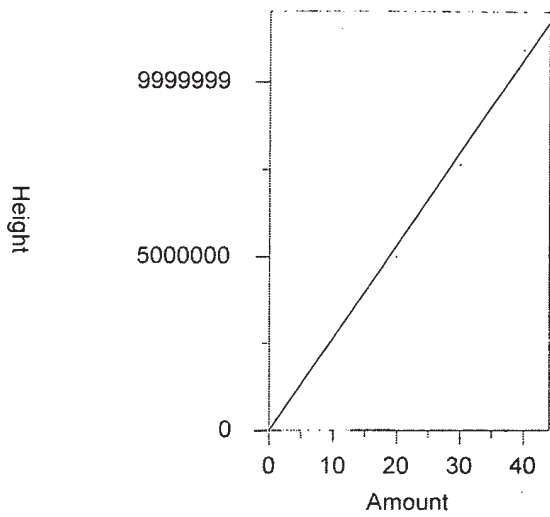
Single peak quantification by height

$Y = 312571.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.986852  
 Average error: 4.194%  
 Average CF: 312571.4  
 RSD: 6.236%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	317903.1	317903.1	1.706	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
2	2	576033.6	288016.8	-7.856	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
3	10	3037347	303734.7	-2.827	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
4	20	6134702	306735.1	-1.867	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
5	30	9374002	312466.7	-0.033	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t
6	40	1.386288E+07	346572	10.878	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008.t

24 Endrin aldehyde



Expected retention time: 5.536 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

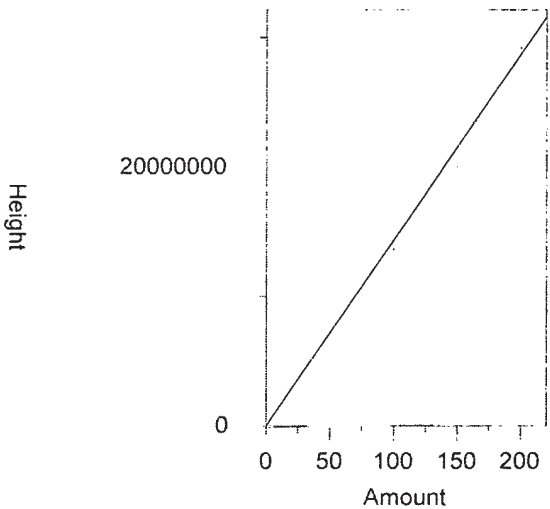
Single peak quantification by height

$Y = 266707 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9964235  
 Average error: 4.487%  
 Average CF: 266707  
 RSD: 6.180%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	295596.9	295596.9	10.832	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
2	10	2594248	259424.8	-2.730	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
3	20	4993827	249691.3	-6.380	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
4	30	7653195	255106.5	-4.350	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
5	40	1.094067E+07	273516.8	2.553	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0

25 Methoxychlor



Expected retention time: 5.669 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

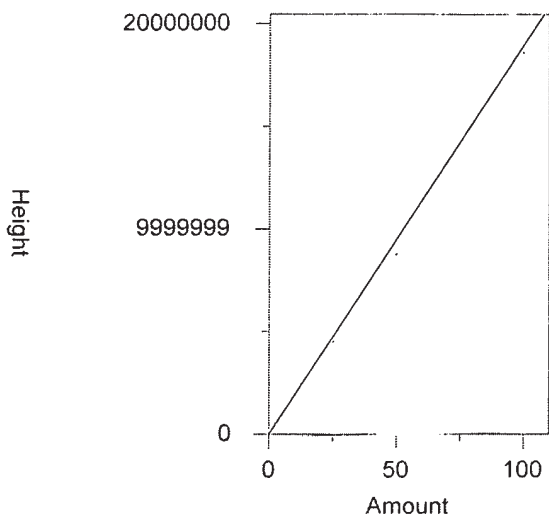
$Y = 143671.3 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.995129  
 Average error: 5.298%  
 Average CF: 143671.3  
 RSD: 7.230%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	811562.8	162312.6	12.975	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
2	10	1454593	145459.3	1.244	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
3	50	6904865	138097.3	-3.880	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
4	100	1.362689E+07	136268.9	-5.152	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
5	150	2.007221E+07	133814.7	-6.861	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0
6	200	2.921502E+07	146075.1	1.673	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.0

26 Mirex

Chrom Perfect Calibration File



Expected retention time: 5.779 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

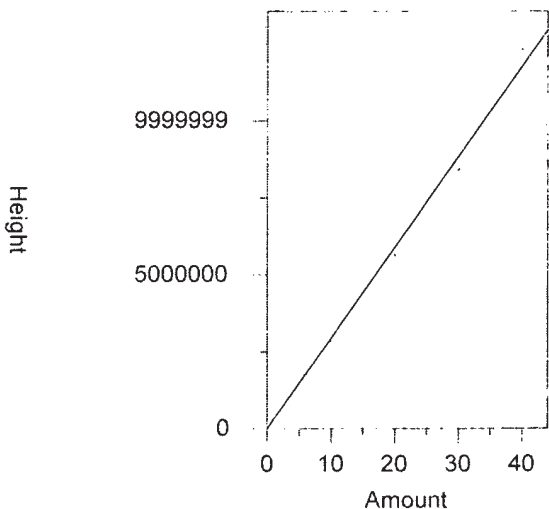
Single peak quantification by height

$Y = 189838.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9969363  
 Average error: 5.308%  
 Average CF: 189838.2  
 RSD: 7.418%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	537973	215189.2	13.354	Manual	11/13/2018 10:10:47 AM
2	5	938690	187738	-1.106	Manual	11/13/2018 10:10:51 AM
3	12.5	2433930	194714.4	2.569	Manual	11/13/2018 10:10:56 AM
4	25	4495436	179817.4	-5.279	Manual	11/13/2018 10:11:00 AM
5	50	8773674	175473.5	-7.567	Manual	11/13/2018 10:11:06 AM
6	100	1.860966E+07	186096.6	-1.971	Manual	11/13/2018 10:11:28 AM

27 Endo. sulfate



Expected retention time: 5.842 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

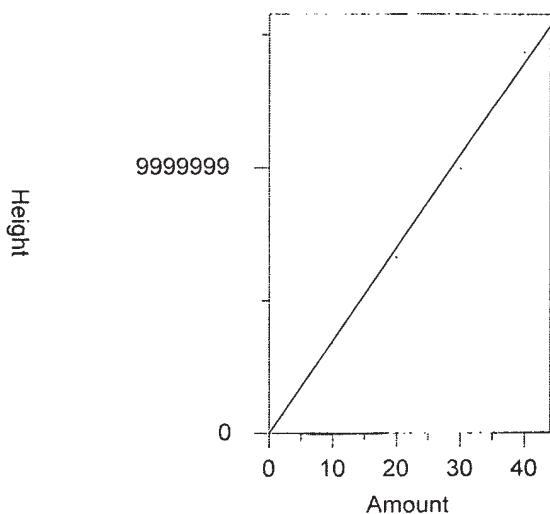
Single peak quantification by height

$Y = 294316 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9950268  
 Average error: 4.684%  
 Average CF: 294316  
 RSD: 5.731%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	321802.8	321802.8	9.339	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.t
2	2	578795.7	289397.8	-1.671	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.t
3	10	2843399	284339.9	-3.390	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.t
4	20	5635959	281797.9	-4.253	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.t
5	30	8411244	280374.8	-4.737	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.t
6	40	1.232731E+07	308182.8	4.712	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.t

28 Endrin ketone



Expected retention time: 6.036 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

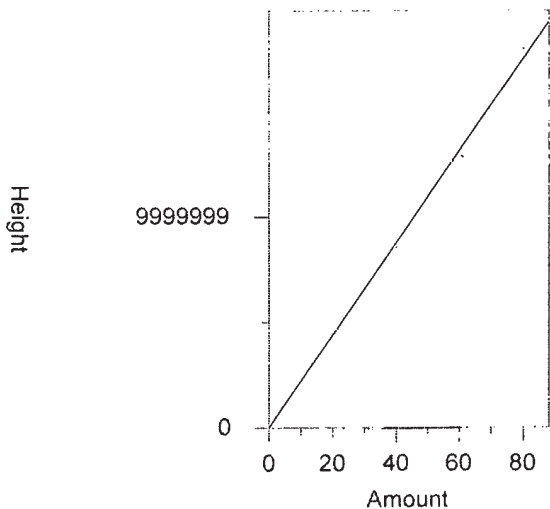
Single peak quantification by height

$$Y = 349307.8 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9964643  
 Average error: 4.353%  
 Average CF: 349307.8  
 RSD: 5.842%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	385568.3	385568.3	10.381	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
2	2	693961.3	346980.7	-0.666	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
3	10	3406585	340658.5	-2.476	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
4	20	6638934	331946.7	-4.970	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
5	30	9961020	332034	-4.945	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
6	40	1.434633E+07	358658.3	2.677	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1

29 DCB



Expected retention time: 6.695 minutes  
 Search window: 0.03 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$$Y = 219267.1 X + 6720.305$$

Linear fit with equal weighting  
 Coefficient of determination: 0.9977448  
 Average error: 7.418%  
 Average CF: 232134.2  
 RSD: 10.712%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	555071.4	277535.7	24.664	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
2	4	971188.1	242797	9.889	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
3	20	4439711	221985.5	1.085	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
4	40	8565137	214128.4	-2.418	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
5	61	1.287799E+07	211114.6	-3.766	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1
6	80	1.801951E+07	225243.9	2.686	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.1

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830604BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/12/2018 11/12/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Tetrachloro-m-xylene	2.35	2.35	2.36	2.35	2.36	2.36	2.35	2.33	2.37
Hcb							2.68	2.66	2.70
alpha-BHC	2.77	2.77	2.78	2.77	2.77	2.78	2.77	2.75	2.79
gamma-BHC (Lindane)	3.03	3.03	3.03	3.03	3.03	3.04	3.03	3.01	3.05
beta-BHC	3.09	3.09	3.10	3.09	3.10	3.10	3.09	3.07	3.11
delta-BHC	3.32	3.32	3.33	3.32	3.32	3.33	3.32	3.30	3.34
Heptachlor	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.35	3.39
Aldrin	3.63	3.63	3.64	3.63	3.63	3.64	3.63	3.61	3.65
Telodrin							3.78	3.76	3.80
Heptachlor epoxide	4.12	4.12	4.13	4.12	4.13	4.13	4.12	4.10	4.14
gamma-Chlordane	4.29	4.28	4.29	4.29	4.29	4.29	4.29	4.27	4.31
o,p-DDE							4.31	4.29	4.33
alpha-Chlordane	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.39	4.43
Endosulfan I	4.45	4.45	4.46	4.45	4.45	4.46	4.45	4.43	4.47
4,4'-DDE	4.55	4.55	4.56	4.55	4.55	4.56	4.55	4.53	4.57
Dieldrin	4.67	4.67	4.68	4.67	4.67	4.68	4.67	4.65	4.69
o,p-DDD							4.72	4.70	4.74
Endrin	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.89	4.93
o,p-DDT							4.96	4.94	4.98
Kepone							4.99	4.97	5.01
4,4'-DDD	5.00	5.00	5.01	5.00	5.01	5.01	5.00	4.98	5.02
Endosulfan II	5.07	5.07	5.08	5.07	5.07	5.08	5.07	5.05	5.09
4,4'-DDI	5.23	5.23	5.24	5.23	5.24	5.24	5.23	5.21	5.25
Endrin aldehyde	5.32	5.32	5.32	5.32	5.32	5.33	5.32	5.30	5.34
Endosulfan sulfate	5.52	5.51	5.52	5.52	5.52	5.52	5.52	5.50	5.54
Methoxychlor	5.72	5.72	5.73	5.72	5.73	5.73	5.72	5.70	5.74
Milrex							5.85	5.83	5.87
Endrin ketone	5.88	5.88	5.89	5.88	5.88	5.89	5.88	5.86	5.90
Decachlorobiphenyl	6.68	6.68	6.68	6.68	6.68	6.68	6.68	6.65	6.71

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830604BGC Column (2): RTXCLPII ID: 0.32 (mm)ICAL Date(s) Analyzed: 11/12/2018 11/12/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	1.97E+06	1.79E+06	1.98E+06	2.01E+06	2.00E+06	2.16E+06	1.99E+06	6
Hcb	1.49E+06	1.35E+06	1.38E+06	1.39E+06	1.40E+06	1.47E+06	1.41E+06	4
alpha-BHC	2.39E+06	2.24E+06	2.69E+06	2.86E+06	3.01E+06	3.31E+06	2.75E+06	14
gamma-BHC (Lindane)	2.10E+06	1.94E+06	2.20E+06	2.34E+06	2.49E+06	2.69E+06	2.29E+06	12
beta-BHC	1.01E+06	8.93E+05	8.97E+05	9.16E+05	9.39E+05	1.04E+06	9.49E+05	6
delta-BHC	1.87E+06	1.68E+06	1.99E+06	2.12E+06	2.22E+06	2.52E+06	2.07E+06	14
Heptachlor	1.77E+06	1.59E+06	1.73E+06	1.81E+06	1.85E+06	2.08E+06	1.80E+06	9
Aldrin	1.59E+06	1.46E+06	1.65E+06	1.72E+06	1.82E+06	1.98E+06	1.70E+06	11
Telodrin	7.51E+05	6.78E+05	6.94E+05	7.04E+05	7.05E+05	7.60E+05	7.16E+05	5
Heptachlor epoxide	1.43E+06	1.26E+06	1.32E+06	1.36E+06	1.39E+06	1.51E+06	1.38E+06	6
gamma-Chlordane	1.46E+06	1.27E+06	1.38E+06	1.42E+06	1.48E+06	1.68E+06	1.45E+06	9
o,p-DDE	5.71E+05	5.26E+05	5.63E+05	5.61E+05	5.82E+05	6.24E+05	5.71E+05	6
alpha-Chlordane	1.48E+06	1.30E+06	1.36E+06	1.40E+06	1.46E+06	1.62E+06	1.44E+06	8
Endosulfan I	1.33E+06	1.17E+06	1.21E+06	1.25E+06	1.20E+06	1.43E+06	1.28E+06	7
4,4'-DDE	1.24E+06	1.14E+06	1.26E+06	1.34E+06	1.41E+06	1.55E+06	1.32E+06	11
Dieldrin	1.39E+06	1.27E+06	1.40E+06	1.44E+06	1.46E+06	1.59E+06	1.42E+06	7
o,p-DDD	5.03E+05	4.69E+05	4.91E+05	4.92E+05	5.02E+05	5.44E+05	5.00E+05	5
Endrin	1.31E+06	1.18E+06	1.27E+06	1.31E+06	1.31E+06	1.43E+06	1.30E+06	6
o,p-DDT	5.54E+05	5.03E+05	5.80E+05	5.40E+05	5.56E+05	6.18E+05	5.59E+05	7
Kepone	7.01E+05	4.41E+05	4.06E+05	4.29E+05	4.05E+05	4.89E+05	4.78E+05	24
4,4'-DDD	1.07E+06	9.68E+05	1.05E+06	1.10E+06	1.15E+06	1.29E+06	1.10E+06	10
Endosulfan II	1.25E+06	1.10E+06	1.18E+06	1.17E+06	1.21E+06	1.30E+06	1.20E+06	6
4,4'-DDT	1.13E+06	1.02E+06	1.10E+06	1.15E+06	1.19E+06	1.35E+06	1.16E+06	10
Endrin aldehyde	1.04E+06	9.11E+05	9.33E+05	9.18E+05	9.54E+05	1.05E+06	9.68E+05	6
Endosulfan sulfate	1.15E+06	1.04E+06	1.09E+06	1.13E+06	1.16E+06	1.29E+06	1.14E+06	7
Methoxychlor	5.67E+05	4.90E+05	4.92E+05	4.89E+05	4.69E+05	5.20E+05	5.04E+05	7
Mirex	5.89E+05	5.28E+05	5.44E+05	5.32E+05	5.39E+05	5.86E+05	5.53E+05	5
Endrin ketone	1.28E+06	1.12E+06	1.17E+06	1.17E+06	1.19E+06	1.28E+06	1.20E+06	5
Decachlorobiphenyl	8.71E+05	7.58E+05	7.41E+05	7.37E+05	7.41E+05	8.07E+05	7.76E+05	7

① wear  
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① wear

①

Andrea L. Jones  
Andrea L. Jones  
Chemist

NOV 13 2018

RSE for linear fits

05pest1830604b ICAL

Analyte	level	response	Recovery	True value	% diff	Acceptance	linearity calculation
Alpha BHC	1	1196612	0.96	0.5	91.21904	+/-50%	y= 3271645.00 + -1931392.00
	2	2241476	1.28	1	27.54648	+/-50%	
	3	13470630	4.71	5	-5.8454	+/-30%	
	4	28580460	9.33	10	-6.7385	+/-30%	
	5	45176930	14.40	15	-4.00686	+/-30%	
	6	66235240	20.84	20	4.177917	+/-30%	
Gamma BHC	1	1051272	0.94	0.5	88.89803	+/-50%	y= 2665670.00 + -1466427.00
	2	1942044	1.28	1	27.86545	+/-50%	
	3	11018380	4.68	5	-6.32894	+/-30%	
	4	23353480	9.31	10	-6.89055	+/-30%	
	5	37279240	14.54	15	-3.09962	+/-30%	
	6	53839020	20.75	20	3.736485	+/-30%	
Delta BHC	1	937154.1	1.03	0.5	105.2372	+/-50%	y= 2464336.00 + -1591713.00
	2	1680821	1.33	1	32.79577	+/-50%	
	3	9928638	4.67	5	-6.50341	+/-30%	
	4	21236160	9.26	10	-7.36704	+/-30%	
	5	33280050	14.15	15	-5.66286	+/-30%	
	6	50300220	21.06	20	5.285832	+/-30%	

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Analyst:

Andrea L. Jones  
Chemist

NOV 16 2018

Auditor:

Anita Draig  
Chemist

NOV 16 2018

File Name: V:\CP5\05pest1830604b.cal  
 Version: 12

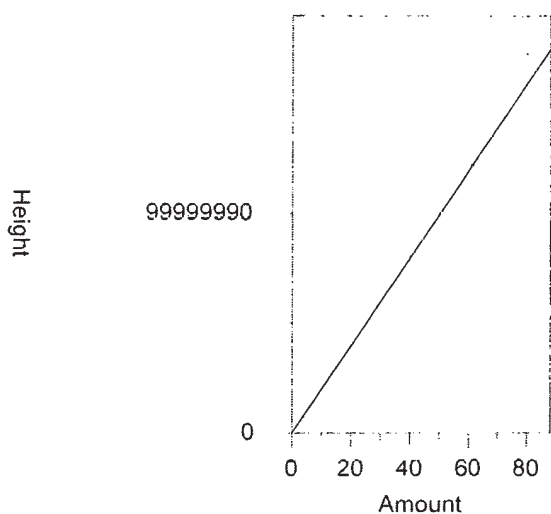
Creator:  
 Description:  
 Reason for change:

External standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 50  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

1 TCX



Expected retention time: 2.353 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

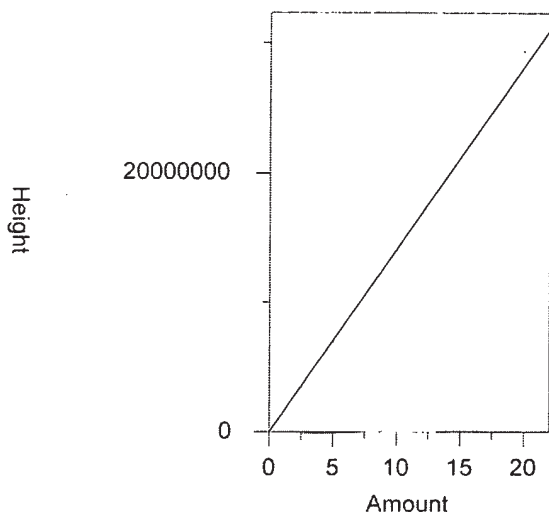
$$Y = 1985607 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9914622  
 Average error: 3.488%  
 Average CF: 1985607  
 RSD: 5.870%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	3946909	1973455	-0.612	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.011.
2	4	7169490	1792373	-9.732	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.012.
3	20	3.966459E+07	1983230	-0.120	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.013.
4	40	8.024889E+07	2006222	1.038	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.014.
5	61	1.220094E+08	2000154	0.733	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.015.
6	80	1.726566E+08	2158208	8.693	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.016.

2 HCB





Expected retention time: 2.683 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

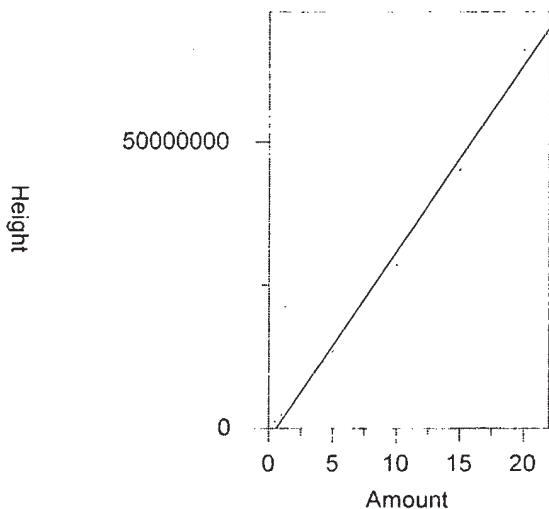
Single peak quantification by height

$$Y = 1412457 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9977701  
 Average error: 3.185%  
 Average CF: 1412457  
 RSD: 3.968%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	745127	1490254	5.508	Manual	11/13/2018 10:21:13 AM
2	1	1345480	1345480	-4.742	Manual	11/13/2018 10:21:21 AM
3	2.5	3446559	1378624	-2.395	Manual	11/13/2018 10:21:25 AM
4	5	6930088	1386018	-1.872	Manual	11/13/2018 10:21:31 AM
5	10	1.404745E+07	1404745	-0.546	Manual	11/13/2018 10:21:47 AM
6	20	2.939245E+07	1469623	4.047	Manual	11/13/2018 10:22:12 AM

3 alpha-BHC



Expected retention time: 2.768 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

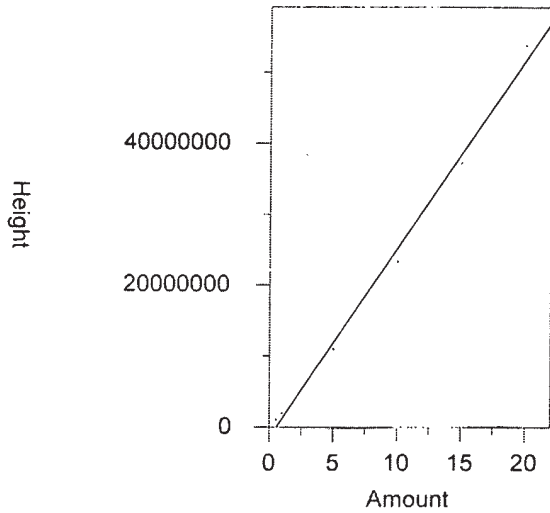
Single peak quantification by height

$$Y = 3271645 X + -1931392$$

Linear fit with equal weighting  
 Coefficient of determination: 0.9939476  
 Average error: 99.060%  
 Average CF: 2751738  
 RSD: 14.397%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	1196612	2393224	-504.849	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	2241476	2241476	67.243	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	1.347063E+07	2694126	-6.628	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	2.858046E+07	2858046	-7.161	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	4.517693E+07	3011795	-4.171	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	6.623524E+07	3311762	4.305	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

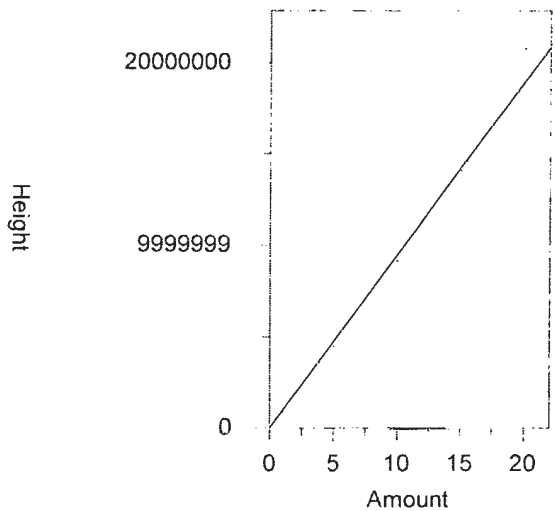
4 gamma-BHC



Expected retention time: 3.028 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 2665670 X + -1466427$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.9947728  
 Average error: 161.721%  
 Average CF: 2293474  
 RSD: 11.786%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	1051272	2102544	-886.925	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	1947044	1042044	61.939	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	1.101838E+07	2203676	-7.111	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	2.335348E+07	2335348	-7.292	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	3.727924E+07	2485283	-3.218	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	5.383902E+07	2691951	3.842	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

5 beta-BHC

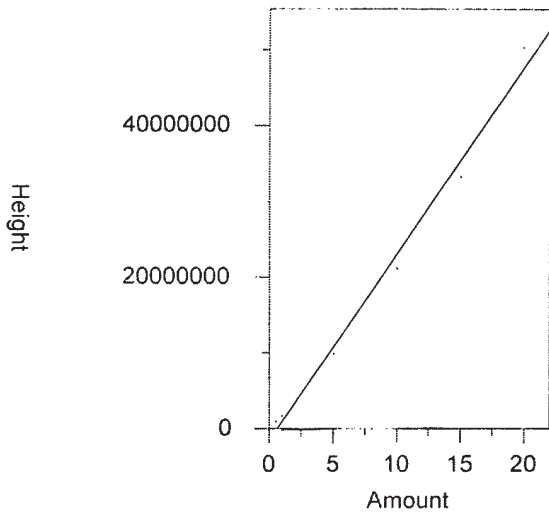


Expected retention time: 3.093 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 948558.1 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9890434  
 Average error: 5.223%  
 Average CF: 948558.1  
 RSD: 6.406%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	503074	1006148	6.071	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	893131.3	893131.3	-5.843	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	4486267	897253.4	-5.409	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	9158719	915871.9	-3.446	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	1.409004E+07	939336	-0.972	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	2.079216E+07	1039608	9.599	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

6 delta-BHC

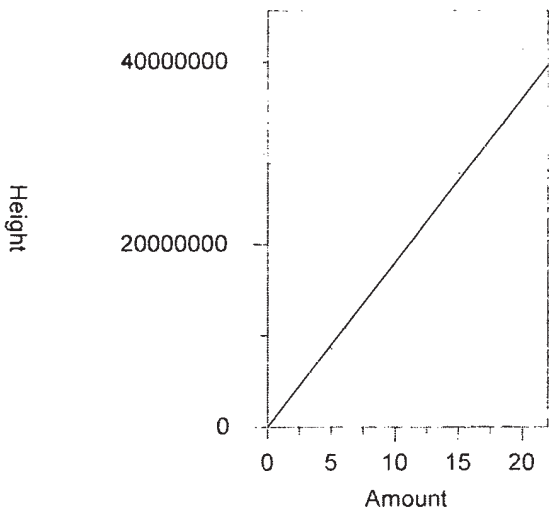
Chrom Perfect Calibration File



Expected retention time: 3.321 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 2464336 X + -1591713$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.9907972  
 Average error: 79.999%  
 Average CF: 2066359  
 RSD: 14.023%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	937154.1	1874308	-360.650	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	1690821	1680021	92.617	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	9928638	1985728	-7.468	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	2.123616E+07	2123616	-7.876	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	3.328005E+07	2218670	-5.918	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	5.030022E+07	2515011	5.462	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

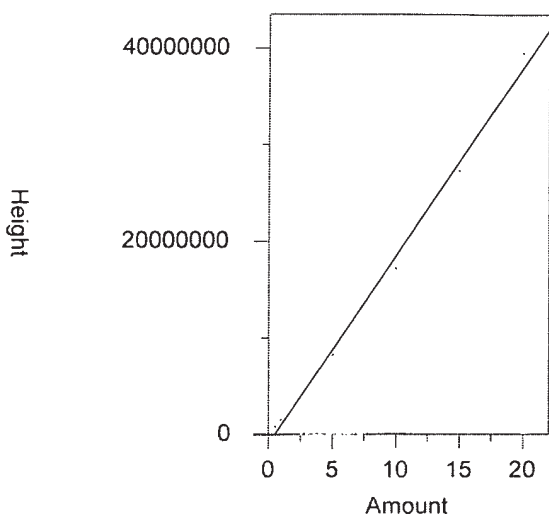
7 Heptachlor



Expected retention time: 3.366 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 1804350 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9764897  
 Average error: 6.049%  
 Average CF: 1804350  
 RSD: 8.961%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	885721	1771442	-1.824	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	1585660	1585660	-12.120	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	8642598	1728520	-4.203	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	1.811809E+07	1811809	0.413	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	2.779441E+07	1852961	2.694	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	4.151418E+07	2075709	15.039	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

8 Aldrin



Expected retention time: 3.63 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

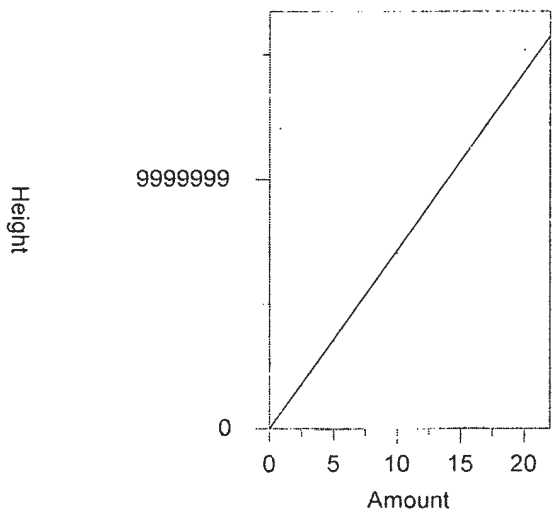
Single peak quantification by height

$$Y = 1953031 X + -1002315$$

Linear fit with equal weighting  
 Coefficient of determination: 0.9948645  
 Average error: 541.979%  
 Average CF: 1702493  
 RSD: 10.701%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	794255.4	1588511	-3178.517	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	1453714	1453714	53.118	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	8255960	1651192	-5.784	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	1.723597E+07	1723597	-6.973	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	2.728063E+07	1818709	-3.579	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	3.954466E+07	1977233	3.905	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

9 Telodrin



Expected retention time: 3.784 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

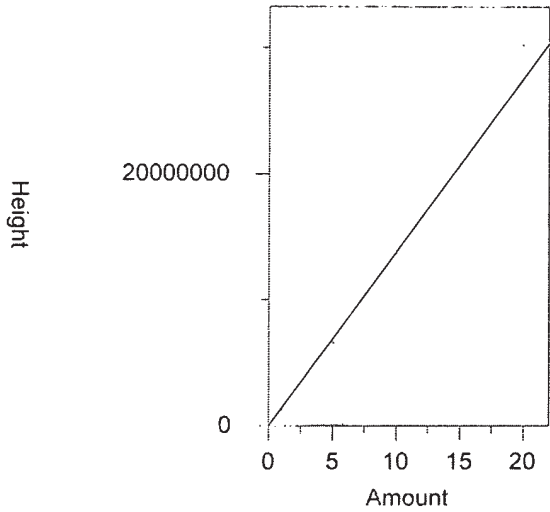
Single peak quantification by height

$$Y = 715702.6 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9949037  
 Average error: 3.744%  
 Average CF: 715702.6  
 RSD: 4.575%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	375653	751306	4.975	Manual	11/13/2018 10:22:22 AM
2	1	678270	678270	-5.230	Manual	11/13/2018 10:22:27 AM
3	2.5	1736218	694487.2	-2.964	Manual	11/13/2018 10:22:31 AM
4	5	3521357	704271.4	-1.597	Manual	11/13/2018 10:22:36 AM
5	10	7053964	705396.4	-1.440	Manual	11/13/2018 10:22:43 AM
6	20	1.520969E+07	760484.5	6.257	Manual	11/13/2018 10:23:04 AM

10 Hept. epoxide



Expected retention time: 4.124 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

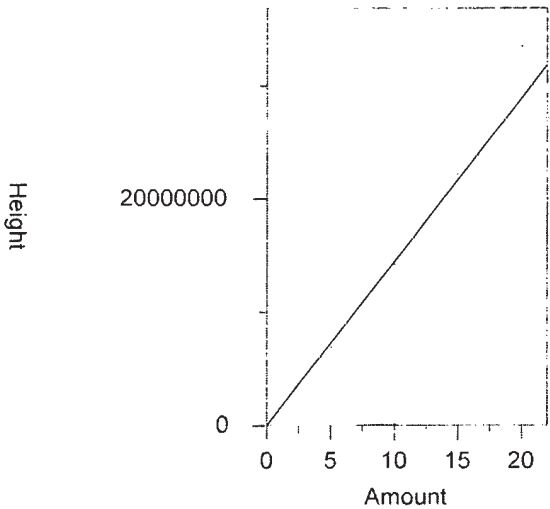
Single peak quantification by height

$Y = 1379625 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9895011  
 Average error: 4.715%  
 Average CF: 1379625  
 RSD: 6.344%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	716398.6	1432797	3.854	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	1262439	1262439	-8.494	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	6590490	1318098	-4.460	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	1.363207E+07	1363207	-1.190	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	2.083403E+07	1388935	0.675	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	3.024551E+07	1512276	9.615	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

11 g. Chlordane



Expected retention time: 4.285 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

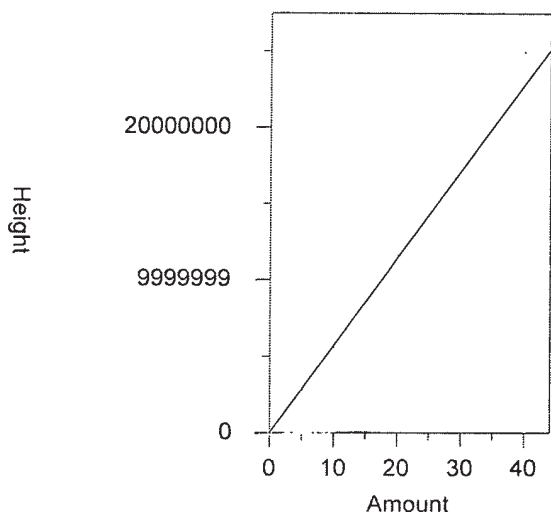
Single peak quantification by height

$Y = 1448334 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9744207  
 Average error: 6.281%  
 Average CF: 1448334  
 RSD: 9.294%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	731815.1	1463630	1.056	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	1270048	1270048	-12.310	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	6891823	1378365	-4.831	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	1.423658E+07	1423658	-1.704	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	2.216159E+07	1477439	2.010	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	3.353722E+07	1676861	15.779	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

12 o,p-DDE



Expected retention time: 4.306 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

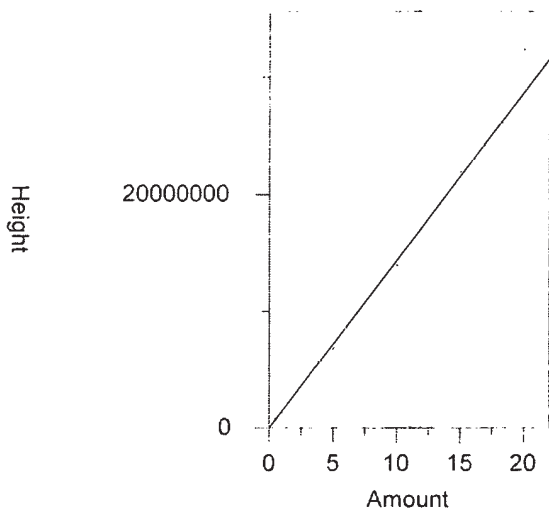
Single peak quantification by height

$$Y = 571152.8 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9895611  
 Average error: 3.733%  
 Average CF: 571152.8  
 RSD: 5.633%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	571392	571392	0.042	Manual	11/13/2018 10:23:17 AM
2	2	1051044	525522	-7.989	Manual	11/13/2018 10:23:21 AM
3	5	2813860	562772	-1.467	Manual	11/13/2018 10:23:26 AM
4	10	5612058	561205.8	-1.742	Manual	11/13/2018 10:23:31 AM
5	20	1.163747E+07	581873.5	1.877	Manual	11/13/2018 10:23:53 AM
6	40	2.496607E+07	624151.8	9.279	Manual	11/13/2018 10:24:44 AM

13 a. Chlordane



Expected retention time: 4.406 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

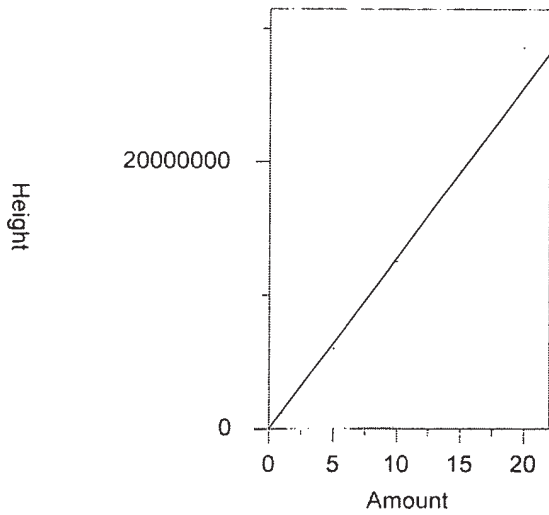
$$Y = 1436289 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9819992  
 Average error: 5.811%  
 Average CF: 1436289  
 RSD: 7.797%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	738324.8	1476650	2.810	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	1296094	1296094	-9.761	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	6821885	1364377	-5.007	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	1.397997E+07	1397997	-2.666	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	2.192313E+07	1461542	1.758	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	3.242146E+07	1621073	12.865	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

14 Endosulfan I

Chrom Perfect Calibration File



Expected retention time: 4.451 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

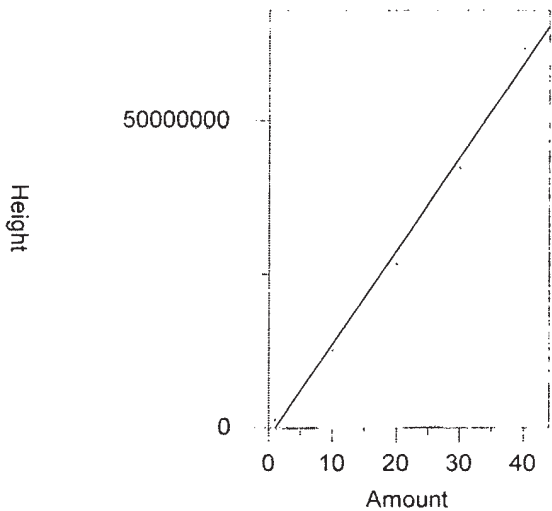
Single peak quantification by height

$$Y = 1281340 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9849896  
 Average error: 5.492%  
 Average CF: 1281340  
 RSD: 7.250%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	665641.9	1331284	3.898	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	1	1171645	1171643	-8.561	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	5	6036841	1207368	-5.773	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	10	1.253877E+07	1253877	-2.143	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	15	1.940039E+07	1293359	0.938	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	20	2.861017E+07	1430509	11.642	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

15 4,4'-DDE



Expected retention time: 4.551 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

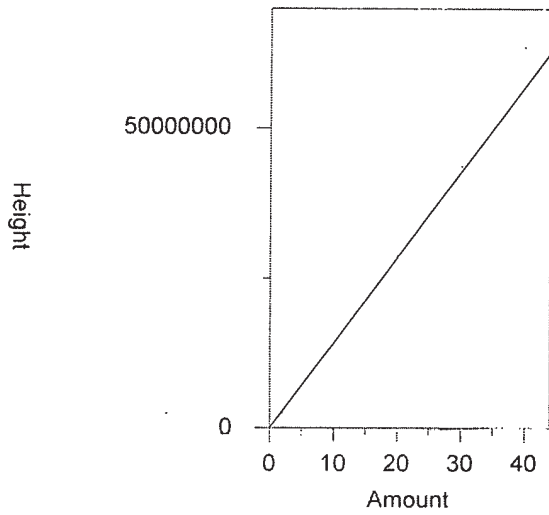
Single peak quantification by height

$$Y = 1525521 X + -1668305$$

Linear fit with equal weighting  
 Coefficient of determination: 0.994047  
 Average error: 175.862%  
 Average CF: 1323434  
 RSD: 10.731%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1238132	1238132	-967.133	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	2	2289147	1144574	65.552	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	10	1.262415E+07	1262415	-7.086	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	20	2.671635E+07	1335818	-7.370	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	30	4.240716E+07	1413572	-3.833	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	40	6.184386E+07	1546097	4.198	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

16 Dieldrin



Expected retention time: 4.671 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

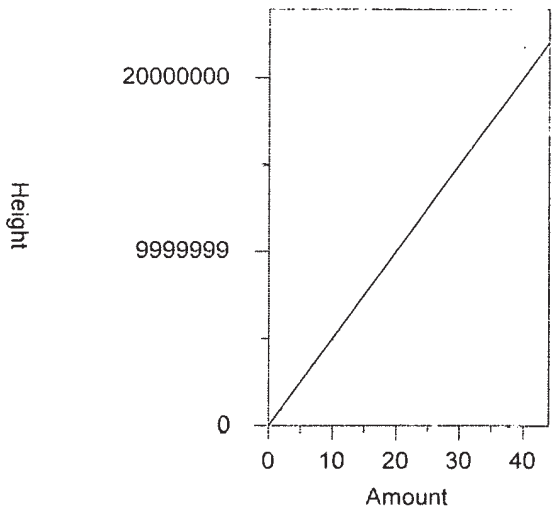
Single peak quantification by height

$Y = 1424421 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9854976  
 Average error: 4.877%  
 Average CF: 1424421  
 RSD: 7.179%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1390192	1390192	-2.403	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	2	3547786	1273891	-10.368	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	10	1.400788E+07	1400788	-1.659	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	20	2.876239E+07	1438120	0.962	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	30	4.366732E+07	1455577	2.187	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	40	6.351819E+07	1587955	11.481	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

17 o,p-DDD



Expected retention time: 4.722 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

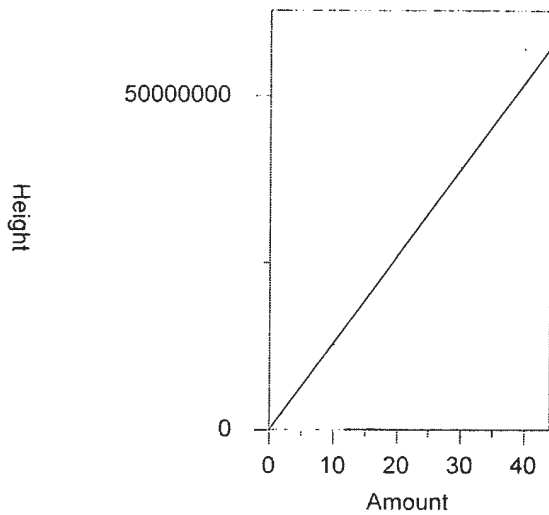
$Y = 500224.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.990753  
 Average error: 3.239%  
 Average CF: 500224.4  
 RSD: 4.939%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	503491	503491	0.653	Manual	11/13/2018 10:24:53 AM
2	2	937508	468754	-6.291	Manual	11/13/2018 10:24:57 AM
3	5	2456376	491275.2	-1.789	Manual	11/13/2018 10:25:02 AM
4	10	4920399	492039.9	-1.636	Manual	11/13/2018 10:25:08 AM
5	20	1.003914E+07	501957	0.346	Manual	11/13/2018 10:25:22 AM
6	40	2.175318E+07	543829.5	8.717	Manual	11/13/2018 10:25:46 AM

18 Endrin





Expected retention time: 4.907 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

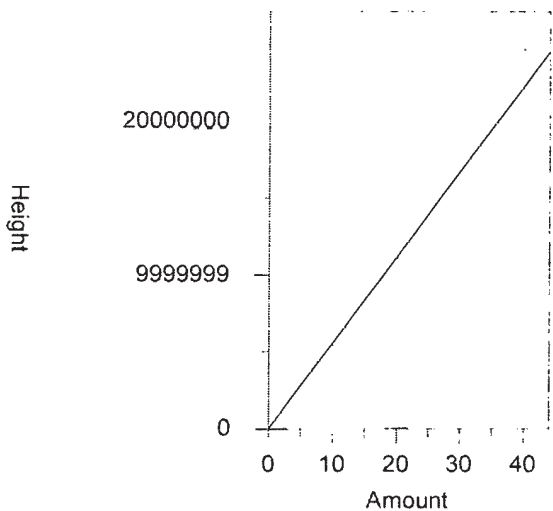
Single peak quantification by height

$Y = 1301456 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9896358  
 Average error: 3.827%  
 Average CF: 1301456  
 RSD: 6.068%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1307413	1307413	0.458	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008E
2	2	2362144	1181072	-9.250	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008E
3	10	1.272433E+07	1272433	-2.230	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008E
4	20	2.617681E+07	1308841	0.567	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008E
5	30	3.937438E+07	1312479	0.847	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008E
6	40	5.705999E+07	1426500	9.608	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05\pest18306008E

19 o,p-DDT



Expected retention time: 4.955 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

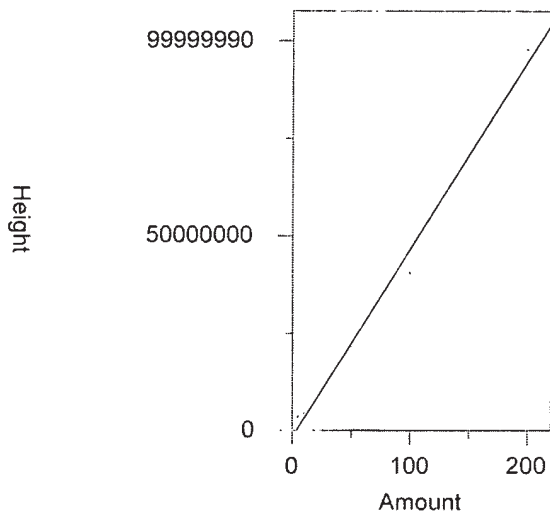
Single peak quantification by height

$Y = 558660 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9864926  
 Average error: 4.838%  
 Average CF: 558660  
 RSD: 6.906%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	553717	553717	-0.885	Manual	11/13/2018 10:26:17 AM
2	2	1006653	503326.5	-9.905	Manual	11/13/2018 10:26:21 AM
3	5	2900438	580087.6	3.836	Manual	11/13/2018 10:26:29 AM
4	10	5404704	540470.4	-3.256	Manual	11/13/2018 10:26:34 AM
5	20	1.112088E+07	556044	-0.468	Manual	11/13/2018 10:27:18 AM
6	40	2.473258E+07	618314.5	10.678	Manual	11/13/2018 10:27:45 AM

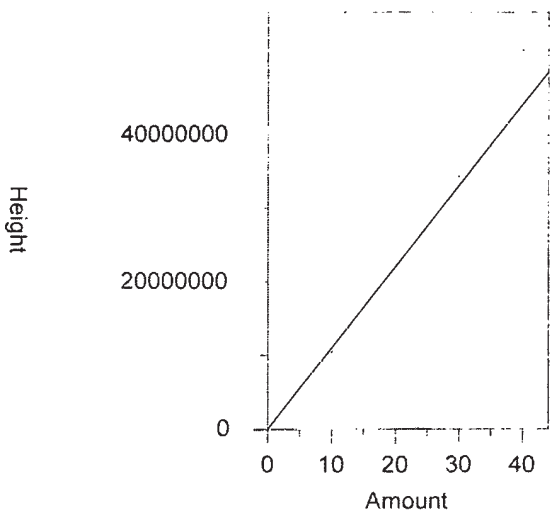
20 Kepone



Expected retention time: 4.993 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 481848.6 X + -1683167$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.991312  
 Average error: 74.279%  
 Average CF: 478426.7  
 RSD: 23.644%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	3502799	700559.8	382.429	Manual	11/13/2018 10:27:53 AM
2	10	4409532	440953.2	40.641	Manual	11/13/2018 10:27:58 AM
3	25	1.014981E+07	405992.4	-2.058	Manual	11/13/2018 10:28:12 AM
4	50	2.146536E+07	429307.2	-4.212	Manual	11/13/2018 10:28:29 AM
5	100	4.045509E+07	404550.9	-13.003	Manual	11/13/2018 10:28:42 AM
6	200	9.783934E+07	489196.7	3.330	Manual	11/13/2018 10:29:03 AM

21 4,4'-DDD

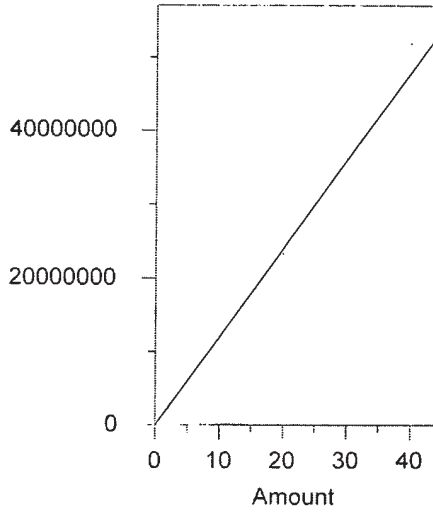


Expected retention time: 5.003 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 1103814 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.971738  
 Average error: 6.793%  
 Average CF: 1103814  
 RSD: 9.725%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1074226	1074226	-2.681	Manual
2	2	1936739	968369.5	-12.271	Manual
3	10	1.049626E+07	1049626	-4.909	Manual
4	20	2.196183E+07	1098092	-0.518	Manual
5	30	3.435449E+07	1145150	3.745	Manual
6	40	5.149694E+07	1287424	16.634	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

22 Endosulfan II

Height



Expected retention time: 5.07 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

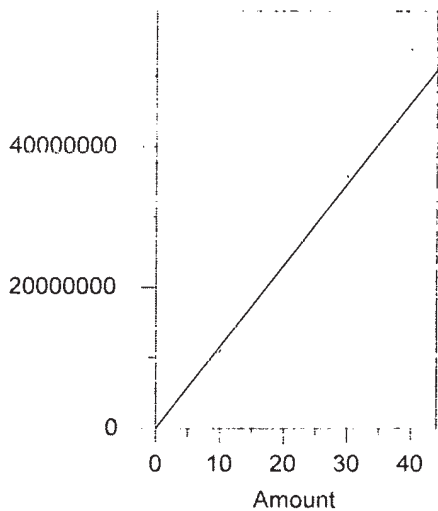
$Y = 1200450 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9922942  
 Average error: 4.275%  
 Average CF: 1200450  
 RSD: 5.662%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1252666	1252666	4.350	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	2	2208184	1104092	-8.027	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	10	1.176258E+07	1176258	-2.015	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	20	2.334088E+07	1167044	-2.783	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	30	3.616262E+07	1205421	0.414	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	40	5.188866E+07	1297217	8.061	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

23 4,4'-DDT

Height



Expected retention time: 5.232 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

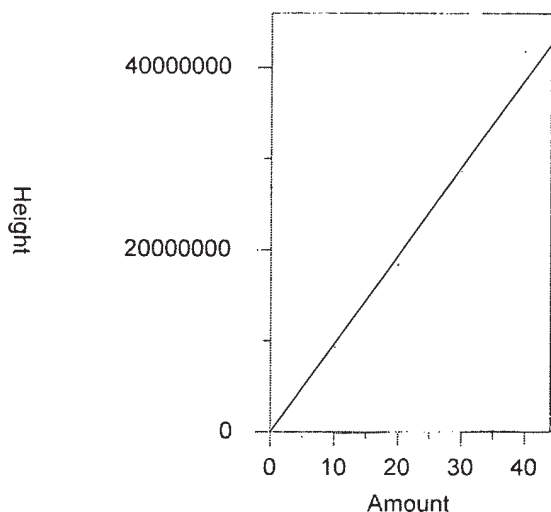
Single peak quantification by height

$Y = 1156601 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9724656  
 Average error: 6.548%  
 Average CF: 1156601  
 RSD: 9.540%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1126121	1126121	-2.635	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	2	2034436	1017218	-12.051	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	10	1.101717E+07	1101717	-4.745	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	20	2.308253E+07	1154127	-0.214	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	30	3.581272E+07	1193757	3.213	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	40	5.386653E+07	1346663	16.433	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

24 Endrin aldehyde



Expected retention time: 5.318 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

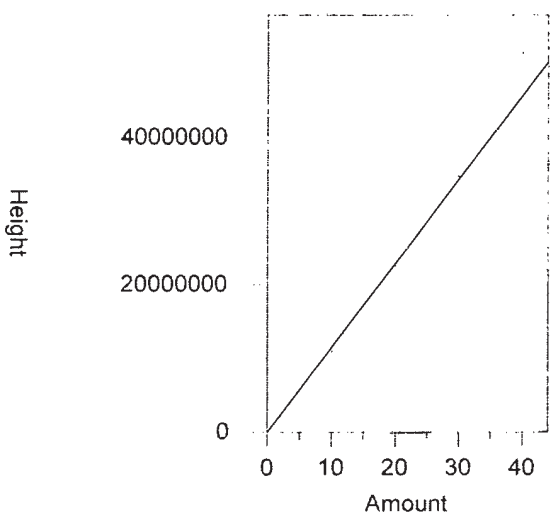
Single peak quantification by height

$Y = 967709.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9915627  
 Average error: 5.336%  
 Average CF: 967709.4  
 RSD: 6.386%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1044996	1044996	7.987	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	2	1822256	911128	-5.847	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	10	9327411	932741.1	-3.614	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	20	1.835575E+07	917787.5	-5.159	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	30	2.86285E+07	954283.3	-1.387	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	40	4.181282E+07	1045321	8.020	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

25 Endo. sulfate



Expected retention time: 5.515 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

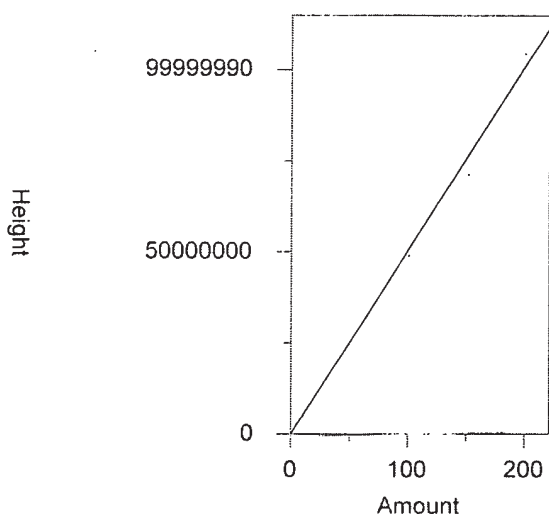
Single peak quantification by height

$Y = 1142190 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9825962  
 Average error: 4.937%  
 Average CF: 1142190  
 RSD: 7.328%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1150129	1150129	0.695	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	2	2074231	1037116	-9.199	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	10	1.093787E+07	1093787	-4.238	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	20	2.252993E+07	1126497	-1.374	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	30	3.474668E+07	1158223	1.404	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	40	5.149557E+07	1287389	12.712	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

26 Methoxychlor



Expected retention time: 5.723 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

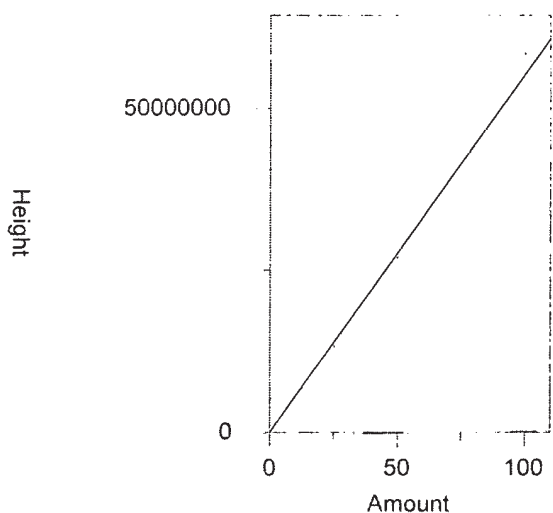
Single peak quantification by height

$$Y = 504496.8 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9948303  
 Average error: 5.146%  
 Average CF: 504496.8  
 RSD: 6.866%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	2834814	566962.8	12.382	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	10	4800210	409931	-2.887	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	50	2.462163E+07	492432.6	-2.391	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	100.5	4.910164E+07	488573.5	-3.156	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	152	7.131348E+07	469167.6	-7.003	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	201	1.045025E+08	519912.9	3.056	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

27 Mirex



Expected retention time: 5.853 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

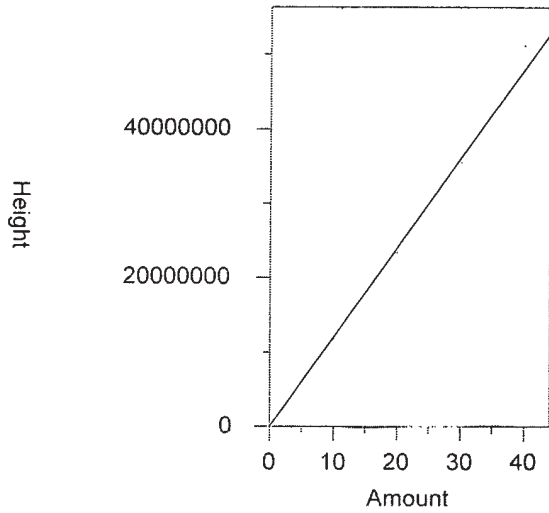
Single peak quantification by height

$$Y = 553017.4 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9951053  
 Average error: 4.142%  
 Average CF: 553017.4  
 RSD: 4.923%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	1471946	588778.4	6.467	Manual	11/13/2018 10:34:46 AM
2	5	2640017	528003.4	-4.523	Manual	11/13/2018 10:34:52 AM
3	12.5	6806248	544499.8	-1.540	Manual	11/13/2018 10:35:04 AM
4	25	1.329892E+07	531956.8	-3.808	Manual	11/13/2018 10:35:21 AM
5	50	2.69448E+07	538896	-2.554	Manual	11/13/2018 10:35:36 AM
6	100	5.8597E+07	585970	5.959	Manual	11/13/2018 10:36:04 AM

28 Endrin ketone



Expected retention time: 5.881 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

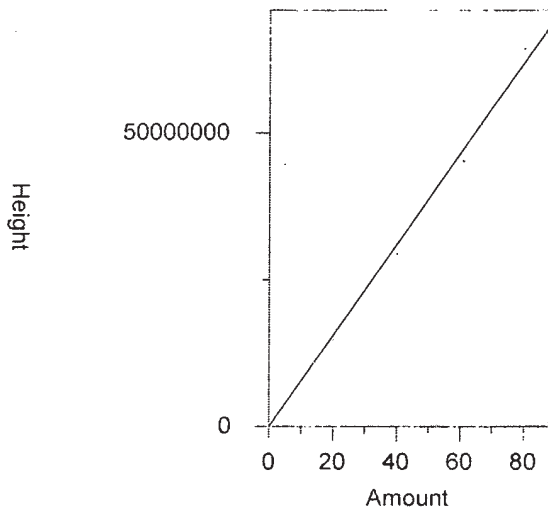
Single peak quantification by height

$$Y = 1202196 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9946568  
 Average error: 4.268%  
 Average CF: 1202196  
 RSD: 5.259%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1278217	1278217	6.324	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	2	2247938	1123969	-6.507	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	10	1.174065E+07	1174065	-2.340	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	20	2.343064E+07	1171532	-2.551	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	30	3.555872E+07	1185291	-1.406	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	40	5.120406E+07	1280102	6.480	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

29 DCB



Expected retention time: 6.677 minutes  
 Search window: 0.03 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$$Y = 775841.6 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9956638  
 Average error: 5.422%  
 Average CF: 775841.6  
 RSD: 6.891%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	1742450	871225	12.294	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
2	4	3031938	757984.5	-2.302	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
3	20	1.481757E+07	740878.5	-4.506	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
4	40	2.948091E+07	737022.8	-5.003	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
5	61	4.521773E+07	741274.3	-4.455	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E
6	80	6.453314E+07	806664.3	3.973	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008E

Multiple Component Initial Calibration Report: **05PEST1830605**

Area Files Used For Calibration

Sequence \_\_\_\_\_ Injections \_\_\_\_\_

**Component: Aroclor-1016**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1016

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	2.807	3.069	3.230	3.433	3.539	3.591	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1258397	1767897	520007	1349883	1412524	950075	7258783
RF (Height/Conc):	6292	8839	2600	6749	7063	4750	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

**Component: Aroclor-1221**

**2154**

Calibration Levels: 1  
 Min # of Peaks Required: 3  
 Slope:  
 Max %RSD: 5  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1221

	<u>1</u>	<u>2</u>	<u>3</u>	<u>SUM</u>
Retention Time:	2.680	2.787	2.818	
RT Window (Mins):	0.02000	0.02000	0.02000	
Height:	717240	463346	1643091	2823677
RF (Height/Conc):	3586	2317	8215	
%RSD For RF	0.000	0.000	0.000	
Slope				
Y-Intercept				

**Component: Aroclor-1248**

**AR48**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 30  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1248

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.413	3.686	3.876	4.237	4.422	4.737	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1348494	737258	1745344	1986825	1348102	1020653	8186676
RF (Height/Conc):	6742	3686	8727	9934	6741	5103	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **05PEST1830605**

Component: **Aroclor-1254**

**AR54**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 250.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1254

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.420	4.647	4.742	4.956	5.094	5.303	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	3183021	2381729	4153502	3094382	2130002	3421102	18363738
RF (Height/Conc):	12732	9527	16614	12378	8520	13684	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1260**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1260

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.883	5.090	5.300	5.560	5.774	5.971	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	2338930	3158974	3323608	1858127	3802629	2269746	16752014
RF (Height/Conc):	11695	15795	16618	9291	19013	11349	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Chlordane**

**CHLD**

Calibration Levels: 6  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:

Avg Concentration (ng/ml): 50.000000  
 Report Base:  
 E-Flag Basis: Chlordane

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>	
Retention Time:	3.525	3.968	4.323	4.483	4.581	5.185		
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000		
Average Height:	1683293	1612290	1080682	5081629	6957119	1689278	18104291	
RF (Height/Conc):	11052	11126	7204	33293	46043	11007		
%RSD For RF	7.883	6.151	5.437	9.381	8.412	8.287		
Slope								
Y-Intercept								
Level 1	Height Conc	133618 12.500	143542 12.500	90178 12.500	385830 12.500	543941 12.500	130872 12.500	1427981
Level 2	Height Conc	236102 25.000	251017 25.000	160834 25.000	706154 25.000	989388 25.000	234510 25.000	2578005
Level 3	Height Conc	575185 50.000	588202 50.000	375101 50.000	1747225 50.000	2439670 50.000	576620 50.000	6302003
Level 4	Height Conc	1166656 100.000	1160775 100.000	744725 100.000	3612624 100.000	4938497 100.000	1155536 100.000	12778813
Level 5	Height Conc	2343020 200.000	2265631 200.000	1467225 200.000	7166832 200.000	9776217 200.000	2343201 200.000	25362126
Level 6	Height Conc	5645179 500.000	5264571 500.000	3646031 500.000	16871110 500.000	23055000 500.000	5694928 500.000	60176819



Multiple Component Initial Calibration Report: **05PEST1830605**

Component: **Toxaphene**

**TOXA**

Calibration Levels: 6

Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4

Max %RSD: 40

Report Base:

Slope:

Y-Intercept:

E-Flag Basis: Toxaphene

		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:		5.093	5.228	5.315	5.479	5.714	5.779	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		3262302	4990526	4600948	4679005	4056575	4682270	26271626
RF (Height/Conc):		4782	7494	6771	6887	5950	6984	
%RSD For RF		<b>10.403</b>	<b>7.448</b>	<b>9.655</b>	<b>9.862</b>	<b>10.617</b>	<b>8.098</b>	
Slope		5223.261				6502.041		
Y-Intercept		-89290.73				-115567.8		
Level 1	Height	200245	334448	289109	293419	248006	309554	1674781
	Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 2	Height	433791	698856	619639	628283	541090	650781	3572440
	Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 3	Height	1015986	1596692	1433985	1459850	1271205	1492414	8270132
	Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 4	Height	2575028	3959345	3633881	3719650	3214690	3676622	20779216
	Conc	500.000	500.000	500.000	500.000	500.000	500.000	
Level 5	Height	4889051	7412214	6786812	6888860	6024879	6813409	38815225
	Conc	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6	Height	10459710	15941600	14842260	15083970	13039580	15150840	84517960
	Conc	2000.000	2000.000	2000.000	2000.000	2000.000	2000.000	

Multiple Component Initial Calibration Report: **05PEST1830605B**

Area Files Used For Calibration

Sequence \_\_\_\_\_ Injections \_\_\_\_\_

Component: **Aroclor-1016**

**AR16**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 40  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1016

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	2.685	2.963	3.143	3.300	3.405	3.485	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	3842974	5325124	2218380	9323568	4671356	3074750	28456152
RF (Height/Conc):	19215	26626	11092	46618	23357	15374	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1221**

**2154**

Calibration Levels: 1  
 Min # of Peaks Required: 3  
 Slope:  
 Max %RSD: 5  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1221

	<u>1</u>	<u>2</u>	<u>3</u>	<u>SUM</u>
Retention Time:	2.557	2.651	2.693	
RT Window (Mins):	0.02000	0.02000	0.02000	
Height:	2220491	1357046	4582321	8159858
RF (Height/Conc):	11102	6785	22912	
%RSD For RF	0.000	0.000	0.000	
Slope				
Y-Intercept				

Component: **Aroclor-1248**

**AR48**

Calibration Levels: 1  
 Min # of Peaks Required: 4  
 Slope:  
 Max %RSD: 30  
 Y-Intercept:  
 Concentration (ng/ml): 200.000000  
 Report Base:  
 E-Flag Basis: Aroclor-1248

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	3.297	3.558	3.780	3.884	4.142	4.335	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	4721418	4482628	5590784	4667239	6450198	5076946	30989213
RF (Height/Conc):	23607	22413	27954	23336	32251	25385	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **05PEST1830605B**

Component: **Aroclor-1254**

**AR54**

Calibration Levels: 1  
Min # of Peaks Required: 4  
Slope:

Max %RSD: 40  
Y-Intercept:

Concentration (ng/ml): 250.000000  
Report Base:  
E-Flag Basis: Aroclor-1254

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.140	4.296	4.668	4.842	5.103	5.240	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	7787562	8789741	12700800	9113145	6700056	9683890	54775194
RF (Height/Conc):	31150	35159	50803	36453	26800	38736	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Aroclor-1260**

**AR16**

Calibration Levels: 1  
Min # of Peaks Required: 4  
Slope:

Max %RSD: 40  
Y-Intercept:

Concentration (ng/ml): 200.000000  
Report Base:  
E-Flag Basis: Aroclor-1260

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.819	4.976	5.240	5.514	5.684	5.932	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	6977575	8328938	8650472	5441882	11170040	6631015	47199922
RF (Height/Conc):	34888	41645	43252	27209	55850	33155	
%RSD For RF	0.000	0.000	0.000	0.000	0.000	0.000	
Slope							
Y-Intercept							

Component: **Chlordane**

**CHLD**

Calibration Levels: 6  
Min # of Peaks Required: 4  
Slope:

Max %RSD: 40  
Y-Intercept:

Avg Concentration (ng/ml): 50.000000  
Report Base:  
E-Flag Basis: Chlordane

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>	
Retention Time:	3.263	3.772	4.109	4.298	4.419	5.113		
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000		
Average Height:	6590259	5930573	4399348	21779565	16219697	5922272	60841714	
RF (Height/Conc):	40907	38919	27794	132671	100267	37584		
%RSD For RF	11.610	6.374	10.028	14.962	13.078	9.719		
Slope	46451.83		30481.54	152767.9	113159.3			
Y-Intercept	-280741.9		-109379.5	-817347.3	-518443.8			
Level 1	Height Conc	483583 12.500	478827 12.500	307007 12.500	1392284 12.500	1083884 12.500	435128 12.500	4180713
Level 2	Height Conc	824092 25.000	853220 25.000	599777 25.000	2638727 25.000	2042756 25.000	791205 25.000	7749777
Level 3	Height Conc	2011255 50.000	1998895 50.000	1431453 50.000	6682931 50.000	5057643 50.000	1902632 50.000	19084809
Level 4	Height Conc	4281467 100.000	4035969 100.000	2936696 100.000	14394670 100.000	10875900 100.000	3957019 100.000	40481721
Level 5	Height Conc	8957077 200.000	8102039 200.000	5990824 200.000	30117150 200.000	22250420 200.000	8175865 200.000	83593375
Level 6	Height Conc	22984080 500.000	20114490 500.000	15130330 500.000	75451630 500.000	56007580 500.000	20271780 500.000	209959890

Multiple Component Initial Calibration Report: **05PEST1830605B**

Component: **Toxaphene**

**TOXA**

Calibration Levels: 6

Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4

Max %RSD: 40

Report Base:

Slope:

Y-Intercept:

E-Flag Basis: Toxaphene

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>SUM</u>
Retention Time:	4.670	4.901	5.071	5.336	5.392	5.692	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:	9271361	9787256	17709040	19585976	11496274	17372998	85222905
RF (Height/Conc):	13950	14403	26103	28451	16710	25515	
%RSD For RF	<b>4.538</b>	<b>6.936</b>	<b>6.965</b>	<b>8.956</b>	<b>8.563</b>	<b>7.577</b>	
Slope							
Y-Intercept							
Level 1							
Height	681420	677404	1229368	1295258	772381	1205551	5861382
Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 2							
Height	1320478	1319097	2386368	2546675	1502096	2317792	11392506
Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 3							
Height	2804850	2924749	5334863	5819004	3376474	5201784	25461724
Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 4							
Height	7070495	7300307	13242650	14769690	8626285	13027470	64036897
Conc	500.000	500.000	500.000	500.000	500.000	500.000	
Level 5							
Height	13649130	14408070	25950170	28318690	16608580	24991570	123926210
Conc	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6							
Height	30101790	32093910	58110820	64766540	38091830	57493820	280658710
Conc	2000.000	2000.000	2000.000	2000.000	2000.000	2000.000	

## INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830605GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Tetrachloro-m-xylene							2.54	2.52	2.56
Hcb							2.83	2.81	2.85
alpha-BHC							2.95	2.93	2.97
gamma-BHC (Lindane)							3.20	3.18	3.22
beta-BHC							3.27	3.25	3.29
delta-BHC							3.41	3.39	3.43
Heptachlor							3.59	3.57	3.61
Aldrin							3.85	3.83	3.87
Telodrin							4.05	4.03	4.07
Heptachlor epoxide							4.37	4.35	4.39
o,p-DDE							4.37	4.35	4.39
gamma-Chlordane							4.48	4.46	4.50
alpha-Chlordane							4.59	4.57	4.61
4,4'-DDE							4.65	4.63	4.67
Endosulfan I							4.70	4.68	4.72
o,p-DDD							4.79	4.77	4.81
Dieldrin							4.89	4.87	4.91
o,p-DDT							4.99	4.97	5.01
Endrin							5.06	5.04	5.08
Kepone	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.08	5.12
4,4'-DDD							5.11	5.09	5.13
Endosulfan II							5.23	5.21	5.25
4,4'-DDT							5.32	5.30	5.34
Endrin aldehyde							5.54	5.52	5.56
Methoxychlor							5.67	5.65	5.69
Mirex							5.78	5.76	5.80
Endosulfan sulfate							5.84	5.82	5.86
Endrin ketone							6.04	6.02	6.06
Decachlorobiphenyl							6.70	6.67	6.73

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830605GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	4.81E+05	4.30E+05	4.32E+05	4.22E+05	4.16E+05	4.39E+05	4.37E+05	5
Hcb	4.79E+05	4.26E+05	4.21E+05	4.12E+05	3.97E+05	3.94E+05	4.21E+05	7
alpha-BHC	6.19E+05	5.74E+05	6.31E+05	6.26E+05	6.33E+05	6.72E+05	6.26E+05	5
gamma-BHC (Lindane)	5.36E+05	4.94E+05	5.30E+05	5.28E+05	5.32E+05	5.71E+05	5.32E+05	5
beta-BHC	2.72E+05	2.37E+05	2.28E+05	2.23E+05	2.25E+05	2.38E+05	2.37E+05	8
delta-BHC	4.83E+05	4.43E+05	4.85E+05	4.86E+05	4.92E+05	5.33E+05	4.87E+05	6
Heptachlor	4.72E+05	4.36E+05	4.37E+05	4.42E+05	4.39E+05	4.79E+05	4.51E+05	4
Aldrin	4.17E+05	3.85E+05	4.08E+05	4.17E+05	4.20E+05	4.52E+05	4.16E+05	5
Telodrin	2.36E+05	2.11E+05	2.16E+05	2.13E+05	2.10E+05	2.15E+05	2.17E+05	5
Heptachlor epoxide	4.00E+05	3.61E+05	3.62E+05	3.66E+05	3.59E+05	3.88E+05	3.73E+05	5
o,p-DDE	1.95E+05	1.78E+05	1.87E+05	1.85E+05	1.84E+05	1.87E+05	1.86E+05	3
gamma-Chlordane	3.98E+05	3.57E+05	3.64E+05	3.73E+05	3.75E+05	4.06E+05	3.79E+05	5
alpha-Chlordane	4.07E+05	3.63E+05	3.62E+05	3.65E+05	3.70E+05	3.98E+05	3.78E+05	5
4,4'-DDE	3.31E+05	3.09E+05	3.35E+05	3.37E+05	3.40E+05	3.79E+05	3.39E+05	7
Endosulfan I	3.80E+05	3.45E+05	3.39E+05	3.43E+05	3.44E+05	3.72E+05	3.54E+05	5
o,p-DDD	1.77E+05	1.62E+05	1.70E+05	1.66E+05	1.67E+05	1.72E+05	1.69E+05	3
Dieldrin	3.90E+05	3.57E+05	3.70E+05	3.65E+05	3.64E+05	3.95E+05	3.74E+05	4
o,p-DDT	2.15E+05	1.94E+05	2.09E+05	2.03E+05	2.00E+05	2.11E+05	2.05E+05	4
Endrin	3.71E+05	3.41E+05	3.49E+05	3.41E+05	3.39E+05	3.70E+05	3.52E+05	4
Kepone	1.51E+05	1.38E+05	1.54E+05	1.61E+05	1.60E+05	1.70E+05	1.56E+05	7
4,4'-DDD	2.87E+05	2.62E+05	2.79E+05	2.80E+05	2.85E+05	3.17E+05	2.85E+05	6
Endosulfan II	3.50E+05	3.17E+05	3.19E+05	3.13E+05	3.10E+05	3.36E+05	3.24E+05	5
4,4'-DDT	3.18E+05	2.88E+05	3.04E+05	3.07E+05	3.12E+05	3.47E+05	3.13E+05	6
Endrin aldehyde	2.96E+05	2.67E+05	2.59E+05	2.50E+05	2.55E+05	2.74E+05	2.67E+05	6
Methoxychlor	1.62E+05	1.45E+05	1.38E+05	1.36E+05	1.34E+05	1.46E+05	1.44E+05	7
Mirex	2.15E+05	1.88E+05	1.95E+05	1.80E+05	1.75E+05	1.86E+05	1.90E+05	7
Endosulfan sulfate	3.22E+05	2.89E+05	2.84E+05	2.82E+05	2.80E+05	3.08E+05	2.94E+05	6
Endrin ketone	3.86E+05	3.47E+05	3.41E+05	3.32E+05	3.32E+05	3.59E+05	3.49E+05	6
Decachlorobiphenyl	2.78E+05	2.43E+05	2.22E+05	2.14E+05	2.11E+05	2.25E+05	2.32E+05	11

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830605GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE		AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO		CF	LEVEL			
Aroclor-1016	1	2.81	2.78	2.84	6292	6292	1	200	1258397	.00
	2	3.07	3.04	3.10	8839	8839	1	200	1767897	.00
	3	3.23	3.20	3.26	2600	2600	1	200	520007	.00
	4	3.43	3.40	3.46	6749	6749	1	200	1349883	.00
	5	3.54	3.51	3.57	7063	7063	1	200	1412524	.00
	6	3.59	3.56	3.62	4750	4750	1	200	950075	.00
Aroclor-1221	1	2.68	2.66	2.70	3586	3586	1	200	717240	.00
	2	2.79	2.77	2.81	2317	2317	1	200	463346	.00
	3	2.82	2.80	2.84	8215	8215	1	200	1643091	.00
Aroclor-1248	1	3.41	3.38	3.44	6742	6742	1	200	1348494	.00
	2	3.69	3.66	3.72	3686	3686	1	200	737258	.00
	3	3.88	3.85	3.91	8727	8727	1	200	1745344	.00
	4	4.24	4.21	4.27	9934	9934	1	200	1986825	.00
	5	4.42	4.39	4.45	6741	6741	1	200	1348102	.00
	6	4.74	4.71	4.77	5103	5103	1	200	1020653	.00
Aroclor-1254	1	4.42	4.39	4.45	12732	12732	1	250	3183021	.00
	2	4.65	4.62	4.68	9527	9527	1	250	2381729	.00
	3	4.74	4.71	4.77	16614	16614	1	250	4153502	.00
	4	4.96	4.93	4.99	12378	12378	1	250	3094382	.00
	5	5.09	5.06	5.12	8520	8520	1	250	2130002	.00
	6	5.30	5.27	5.33	13684	13684	1	250	3421102	.00
Aroclor-1260	1	4.88	4.85	4.91	11695	11695	1	200	2338930	.00
	2	5.09	5.06	5.12	15795	15795	1	200	3158974	.00
	3	5.30	5.27	5.33	16618	16618	1	200	3323608	.00
	4	5.56	5.53	5.59	9291	9291	1	200	1858127	.00
	5	5.77	5.74	5.80	19013	19013	1	200	3802629	.00
	6	5.97	5.94	6.00	11349	11349	1	200	2269746	.00

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## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830605GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Chlordane	1	3.53	3.50	3.56	10689	11052	1	12.5	133618	7.88
					9444			25	236102	
					11504			50	575185	
					11667			100	1166656	
					11715			200	2343020	
					11290			500	5645179	
	2	3.97	3.94	4.00	11483	11126	1	12.5	143542	6.15
					10041			25	251017	
					11764			50	588202	
					11608			100	1160775	
					11328			200	2265631	
					10529			500	5264571	
	3	4.32	4.29	4.35	7214	7204	1	12.5	90178	5.44
					6433			25	160834	
					7502			50	375101	
					7447			100	744725	
					7336			200	1467225	
					7292			500	3646031	
	4	4.48	4.45	4.51	30866	33293	1	12.5	385830	9.38
					28246			25	706154	
					34945			50	1747225	
					36126			100	3612624	
					35834			200	7166832	
					33742			500	16871110	
5	4.58	4.55	4.61	43515	46043	1	12.5	543941	8.41	
				39576			25	989388		
				48793			50	2439670		
				49385			100	4938497		
				48881			200	9776217		
				46110			500	23055000		
6	5.19	5.16	5.22	10470	11007	1	12.5	130872	8.29	
				9380			25	234510		
				11532			50	576620		
				11555			100	1155536		
				11716			200	2343201		
				11390			500	5694928		



6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190ACalibration File: 05PEST1830605GC Column (1): RTX-CLPID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Toxaphene	1-L	5.09	5.06	5.12	4005	4782	1	50	200245	10.40
					4338		2	100	433791	
					5080		3	200	1015986	
					5150		4	500	2575028	
					4889		5	1000	4889051	
					5230		6	2000	10459710	
	2	5.23	5.20	5.26	6689	7494	1	50	334448	7.45
					6989		2	100	698856	
					7983		3	200	1596692	
					7919		4	500	3959345	
					7412		5	1000	7412214	
					7971		6	2000	15941600	
	3	5.32	5.29	5.35	5782	6771	1	50	289109	9.66
					6196		2	100	619639	
					7170		3	200	1433985	
					7268		4	500	3633881	
					6787		5	1000	6786812	
					7421		6	2000	14842260	
	4	5.48	5.45	5.51	5868	6887	1	50	293419	9.86
					6283		2	100	628283	
					7299		3	200	1459850	
					7439		4	500	3719650	
					6889		5	1000	6888860	
					7542		6	2000	15083970	
5-L	5.71	5.68	5.74	4960	5950	1	50	248006	10.62	
				5411		2	100	541090		
				6356		3	200	1271205		
				6429		4	500	3214690		
				6025		5	1000	6024879		
				6520		6	2000	13039580		
6	5.78	5.75	5.81	6191	6984	1	50	309554	8.10	
				6508		2	100	650781		
				7462		3	200	1492414		
				7353		4	500	3676622		
				6813		5	1000	6813409		
				7575		6	2000	15150840		

File Name: V:\CP5\05pest1830605.cal  
Version: 4

Creator:  
Description:  
Reason for change:

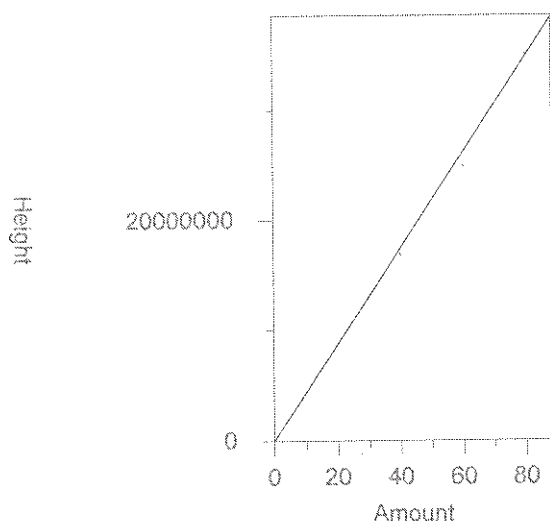
✓  
Keppom  
9/27/18 11-4518

External standard calibration  
Standard injection volume: 1  
No sample weight correction  
Area reject threshold: 0  
Reference peak area reject threshold: 50  
Amount units: PPB  
No default component

Method of calculating data point averages: Current update equal to cal data  
No calibration update report

All levels are normal data points.

1 TCX



Expected retention time: 2.542 minutes  
Search window: 0.02 minutes  
No retention time reference component  
No response proxy component  
Group number: 0  
High alarm limit: 0.1  
Low alarm limit: 0  
Component constant: 0

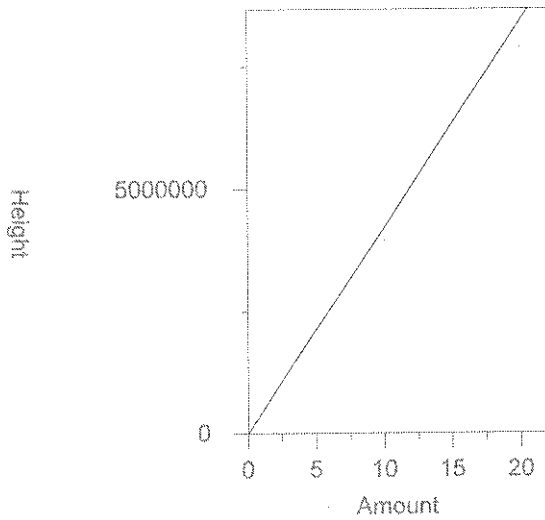
Single peak quantification by height

$$Y = 436712.2 X + 0$$

Average CF fit with equal weighting, forced to origin  
Coefficient of determination: 0.9979039  
Average error: 3.572%  
Average CF: 436712.2  
RSD: 5.309%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	962181.7	481090.8	10.162	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.BN
2	4	1720509	430127.3	-1.508	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.BN
3	20	8641251	432062.6	-1.065	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.BN
4	40	1.686656E+07	421664	-3.446	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.BN
5	60	2.497201E+07	416200.2	-4.697	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.BN
6	80	3.513028E+07	439128.5	0.553	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.BN

2 HCB



Expected retention time: 2.831 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

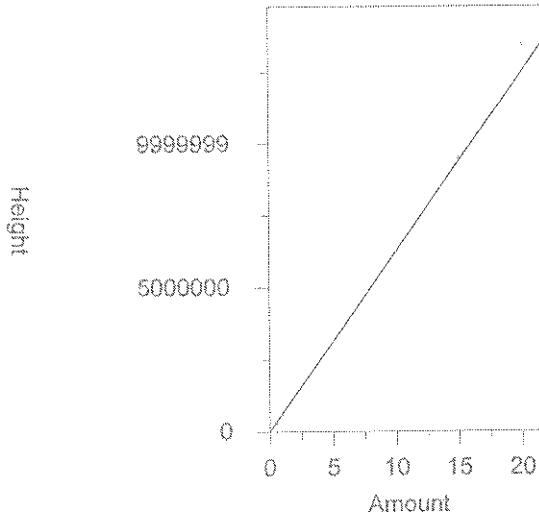
Single peak quantification by height

$$Y = 421389.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9915589  
 Average error: 4.921%  
 Average CF: 421389.9  
 RSD: 7.378%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	239722	479444	13.777	Manual	11/13/2018 10:05:26 AM
2	1	425544	425544	0.986	Manual	11/13/2018 10:05:30 AM
3	2.5	1051387	420554.8	-0.198	Manual	11/13/2018 10:05:35 AM
4	5	2060389	412077.8	-2.210	Manual	11/13/2018 10:05:40 AM
5	10	3965430	396543	-5.896	Manual	11/13/2018 10:05:47 AM
6	20	7883517	394175.8	-6.458	Manual	11/13/2018 10:05:53 AM

3 alpha-BHC



Expected retention time: 2.952 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

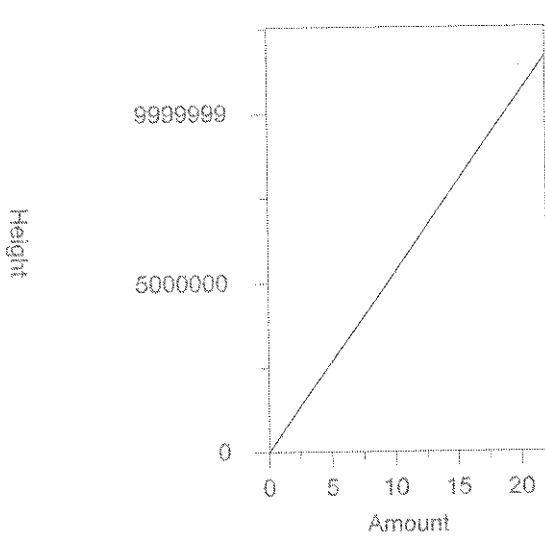
$$Y = 625914.1 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.99353  
 Average error: 3.153%  
 Average CF: 625914.1  
 RSD: 5.033%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	309274.3	618548.6	-1.177	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	1	574367.1	574367.1	-8.235	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	5	3155115	631023	0.816	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	10	6256160	625616	-0.048	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	15	9501960	633464	1.206	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	20	1.344931E+07	672465.5	7.437	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

4 gamma-BHC

Chrom Perfect Calibration File



Expected retention time: 3.197 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

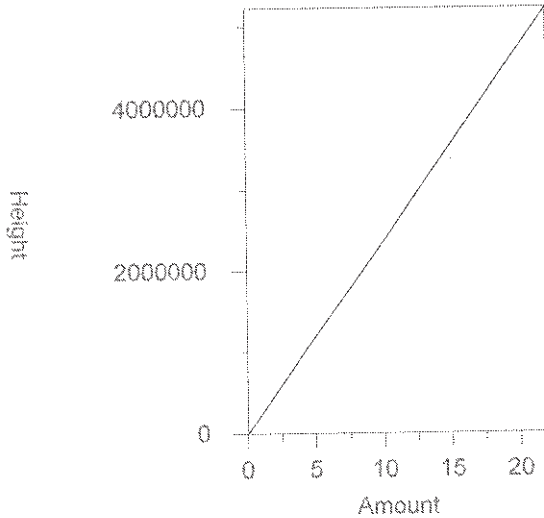
Single peak quantification by height

$Y = 531812.5 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9937794  
 Average error: 2.689%  
 Average CF: 531812.5  
 RSD: 4.571%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	267918.1	535836.2	0.757	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	1	494248.8	494248.8	-7.063	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	5	2651531	530306.2	-0.283	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	10	5280651	528065.1	-0.705	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	15	7975877	531725.1	-0.016	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	20	1.141387E+07	570693.5	7.311	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

5 beta-BHC



Expected retention time: 3.265 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

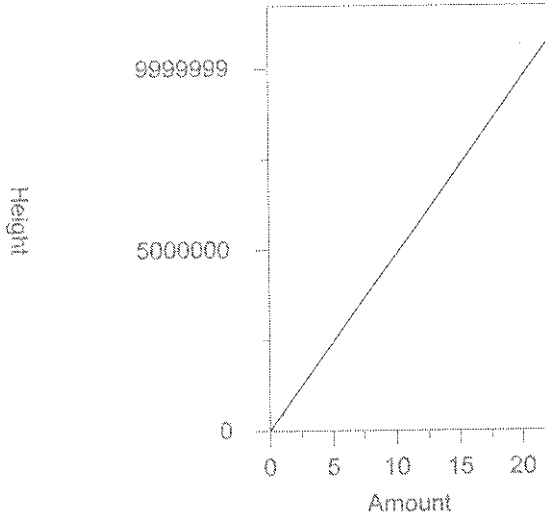
$Y = 237078.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9968132  
 Average error: 5.001%  
 Average CF: 237078.9  
 RSD: 7.677%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	136082.4	272164.8	14.799	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.BNI
2	1	236686.1	236686.1	-0.166	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.BNI
3	5	1139171	227834.2	-3.899	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.BNI
4	10	2228845	222884.5	-5.987	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.BNI
5	15	3380098	225339.9	-4.952	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.BNI
6	20	4751273	237563.7	0.204	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.BNI

6 delta-BHC

Chrom Perfect Calibration File



Expected retention time: 3.412 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

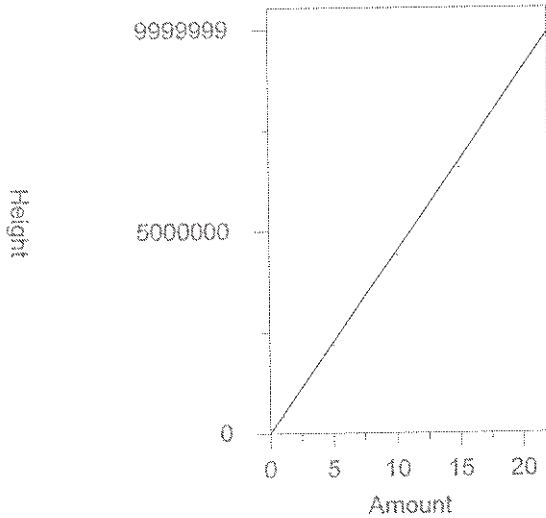
Single peak quantification by height

$Y = 487024.6 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9897862  
 Average error: 3.489%  
 Average CF: 487024.6  
 RSD: 5.896%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	241521.4	483042.8	-0.818	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	1	443197.5	443197.5	-8.999	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	5	2422711	484542.2	-0.510	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	10	4863426	486342.6	-0.140	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	15	7373040	491536	0.926	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	20	1.066973E+07	533486.5	9.540	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

7 Heptachlor



Expected retention time: 3.592 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$Y = 450793 X + 0$

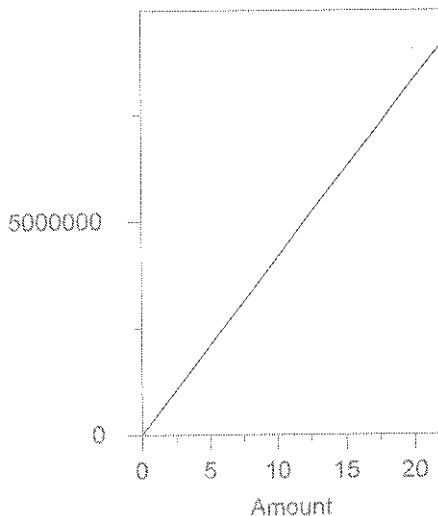
Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9945647  
 Average error: 3.700%  
 Average CF: 450793  
 RSD: 4.350%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	236174.3	472348.6	4.782	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.BNI
2	1	435747.5	435747.5	-3.338	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.BNI
3	5	2184311	436862.2	-3.090	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.BNI
4	10	4417972	441797.2	-1.996	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.BNI
5	15	6580982	438732.1	-2.675	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.BNI
6	20	9585411	479270.6	6.317	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.BNI

8 Aldrin

Chrom Perfect Calibration File

Height



Expected retention time: 3.852 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

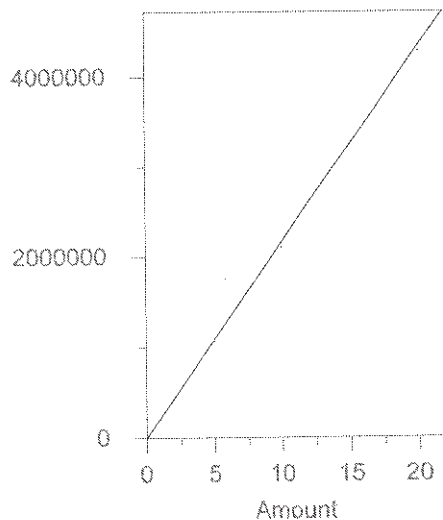
$Y = 416496.3 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9916111  
 Average error: 3.167%  
 Average CF: 416496.3  
 RSD: 5.185%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	208268.9	416537.8	0.010	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.BNI
2	1	385304.6	385304.6	-7.489	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.BNI
3	5	2040587	408117.4	-2.012	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.BNI
4	10	4166585	416658.5	0.039	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.BNI
5	15	6302327	420155.1	0.878	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.BNI
6	20	9044081	452204.1	8.573	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.BNI

9 Telodrin

Height



Expected retention time: 4.045 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

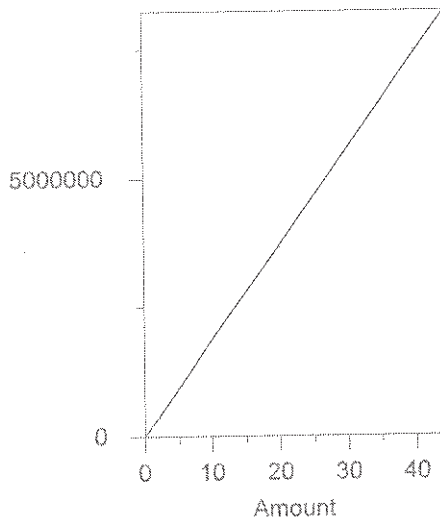
$Y = 216859.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994371  
 Average error: 2.996%  
 Average CF: 216859.2  
 RSD: 4.511%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	118176	236352	8.989	Manual	11/13/2018 10:06:07 AM
2	1	211036	211036	-2.685	Manual	11/13/2018 10:06:11 AM
3	2.5	539686	215874.4	-0.454	Manual	11/13/2018 10:06:17 AM
4	5	1066179	213235.8	-1.671	Manual	11/13/2018 10:06:22 AM
5	10	2101513	210151.3	-3.093	Manual	11/13/2018 10:06:27 AM
6	20	4290110	214505.5	-1.085	Manual	11/13/2018 10:06:35 AM

10 o,p-DDE

Height



Expected retention time: 4.37 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

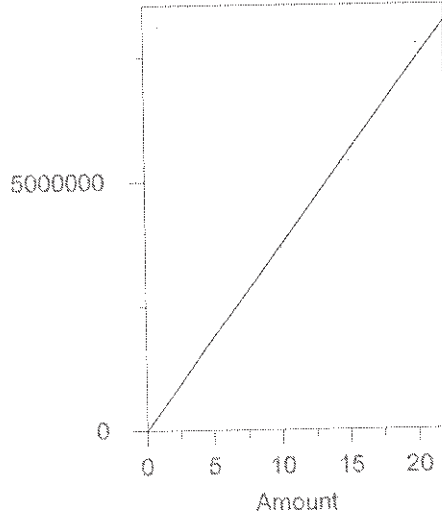
$$Y = 186052.7 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9998639  
 Average error: 2.073%  
 Average CF: 186052.7  
 RSD: 2.971%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	195072	195072	4.848	Manual	11/13/2018 10:06:49 AM
2	2	356538	178269	-4.184	Manual	11/13/2018 10:07:00 AM
3	5	936775	187355	0.700	Manual	11/13/2018 10:07:06 AM
4	10	1846431	184643.1	-0.758	Manual	11/13/2018 10:07:11 AM
5	20	3673540	183677	-1.277	Manual	11/13/2018 10:07:16 AM
6	40	7492000	187300	0.670	Manual	11/13/2018 10:07:23 AM

11 Hept. epoxide

Height



Expected retention time: 4.374 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

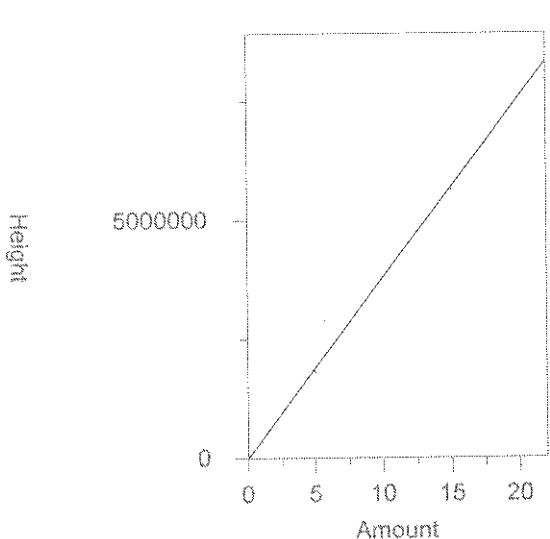
$$Y = 372833.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9967149  
 Average error: 3.820%  
 Average CF: 372833.9  
 RSD: 4.577%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	199979	399958	7.275	Manual	11/13/2018 9:49:21 AM
2	1	361475	361475	-3.047	Manual	11/13/2018 9:49:49 AM
3	5	1811895	362379	-2.804	Manual	11/13/2018 9:50:09 AM
4	10	3655008	365500.8	-1.967	Manual	11/13/2018 9:50:38 AM
5	15	5388763	359250.9	-3.643	Manual	11/13/2018 9:50:59 AM
6	20	7768801	388440.1	4.186	Manual	11/13/2018 9:51:12 AM

12 g. Chlordane

Chrom Perfect Calibration File



Expected retention time: 4.479 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

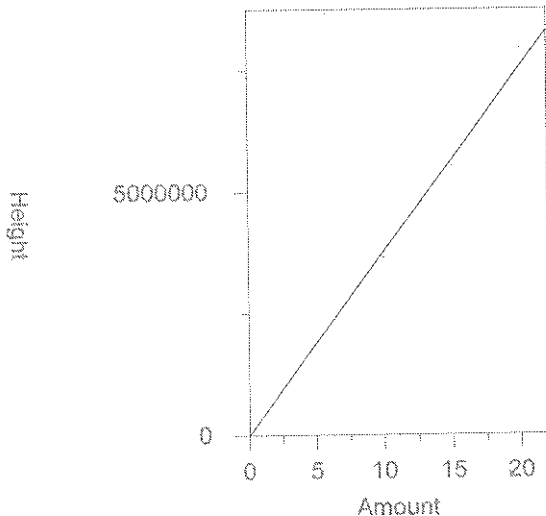
Single peak quantification by height

$$Y = 378913.2 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9936441  
 Average error: 4.068%  
 Average CF: 378913.2  
 RSD: 5.072%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	198859.8	397719.6	4.963	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.BNE
2	1	357012.5	357012.5	-5.780	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.BNE
3	5	1822132	364426.4	-3.823	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.BNE
4	10	3728719	372871.9	-1.594	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.BNE
5	15	5626571	375104.7	-1.005	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.BNE
6	20	8126883	406344.2	7.239	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.BNE

13 a. Chlordane



Expected retention time: 4.587 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$$Y = 377592.9 X + 0$$

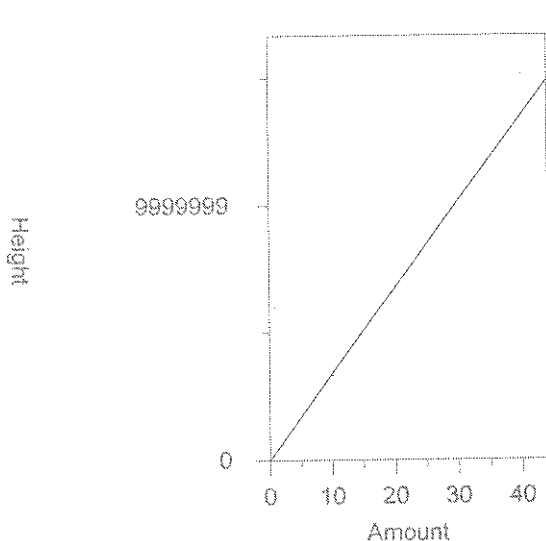
Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9957289  
 Average error: 4.365%  
 Average CF: 377592.9  
 RSD: 5.167%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	203278.3	406556.6	7.671	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.BNE
2	1	363175.3	363175.3	-3.818	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.BNE
3	5	1812190	362438	-4.014	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.BNE
4	10	3654282	365428.2	-3.222	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.BNE
5	15	5548260	369884	-2.042	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.BNE
6	20	7961508	398075.4	5.424	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.BNE

14 4,4'-DDE



Chrom Perfect Calibration File



Expected retention time: 4.649 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

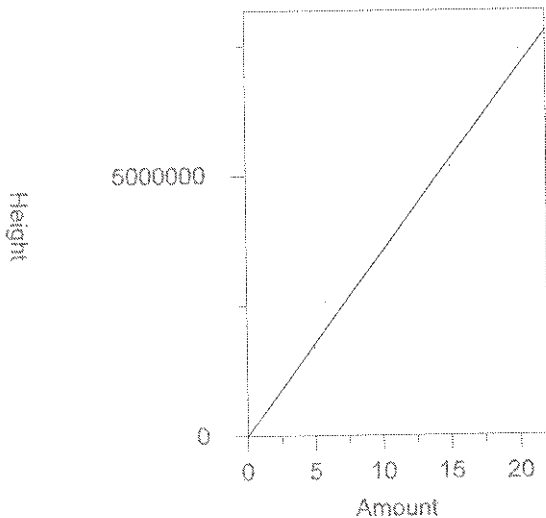
Single peak quantification by height

$Y = 338520.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9845396  
 Average error: 4.138%  
 Average CF: 338520.4  
 RSD: 6.681%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	331344.5	331344.5	-2.120	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	2	618883.9	309441.9	-8.590	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	10	3346087	334608.7	-1.156	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	20	6733170	336658.5	-0.550	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	30	1.020176E+07	340058.7	0.454	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	40	1.516041E+07	379010.3	11.961	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

15 Endosulfan I



Expected retention time: 4.696 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

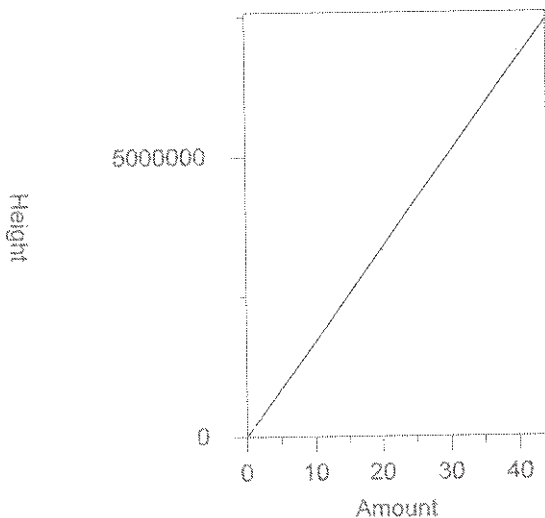
Single peak quantification by height

$Y = 353820.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9959277  
 Average error: 4.170%  
 Average CF: 353820.9  
 RSD: 4.942%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	190042	380084	7.423	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.BNI
2	1	345072.6	345072.6	-2.473	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.BNI
3	5	1692857	338571.4	-4.310	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013.BNI
4	10	3431670	343167	-3.011	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014.BNI
5	15	5163197	344213.1	-2.715	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015.BNI
6	20	7436351	371817.6	5.086	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016.BNI

16 o,p-DDD



Expected retention time: 4.787 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

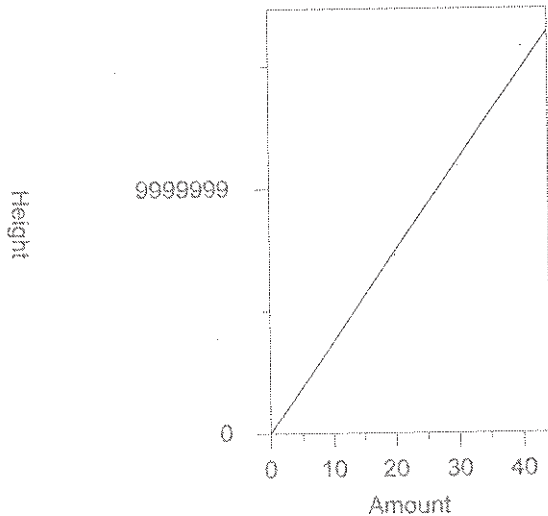
Single peak quantification by height

$$Y = 169097.9 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9994032  
 Average error: 2.474%  
 Average CF: 169097.9  
 RSD: 3.197%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	177241	177241	4.816	Manual	11/13/2018 10:08:15 AM
2	2	323376	161688	-4.382	Manual	11/13/2018 10:08:21 AM
3	5	851601	170320.2	0.723	Manual	11/13/2018 10:08:26 AM
4	10	1664119	166411.9	-1.588	Manual	11/13/2018 10:08:30 AM
5	20	3332841	166642	-1.452	Manual	11/13/2018 10:08:35 AM
6	40	6891359	172284	1.884	Manual	11/13/2018 10:08:42 AM

17 Dielddrin



Expected retention time: 4.886 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

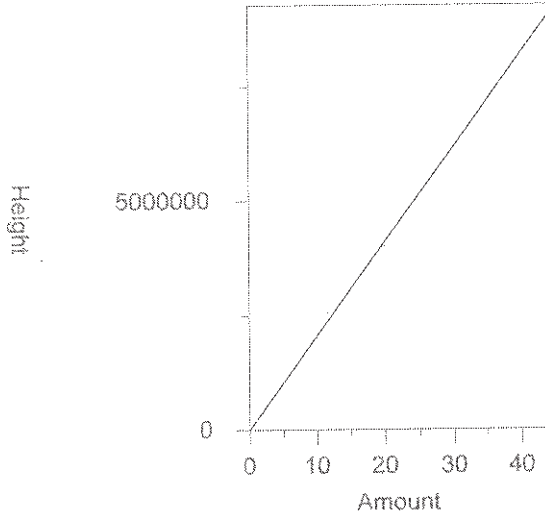
$$Y = 373563.6 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9955146  
 Average error: 3.397%  
 Average CF: 373563.6  
 RSD: 4.101%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	390465.5	390465.5	4.525	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	2	714887	357443.5	-4.315	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	10	3697988	369798.8	-1.008	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	20	7296508	364825.4	-2.339	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	30	1.092355E+07	364118.3	-2.528	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	40	1.578919E+07	394729.8	5.666	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

18 o,p-DDT

Chrom Perfect Calibration File



Expected retention time: 4.986 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

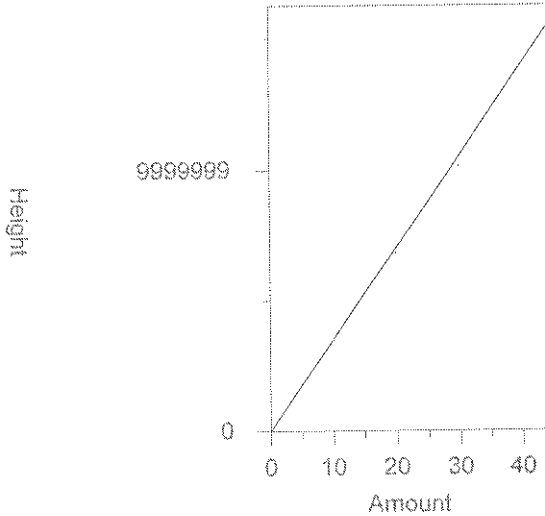
Single peak quantification by height

$$Y = 205345.8 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.998692  
 Average error: 3.023%  
 Average CF: 205345.8  
 RSD: 3.708%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	215071	215071	4.736	Manual	11/13/2018 10:08:56 AM
2	2	388967	194483.5	-5.290	Manual	11/13/2018 10:09:02 AM
3	5	1042841	208568.2	1.569	Manual	11/13/2018 10:09:06 AM
4	10	2029898	202989.8	-1.147	Manual	11/13/2018 10:09:11 AM
5	20	3998863	199943.2	-2.631	Manual	11/13/2018 10:09:16 AM
6	40	8440755	211018.9	2.763	Manual	11/13/2018 10:09:29 AM

19 Endrin



Expected retention time: 5.064 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

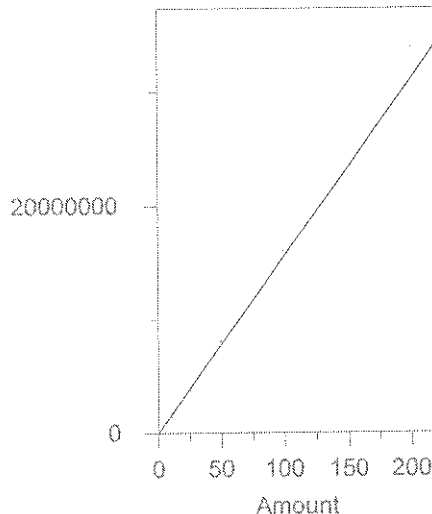
$$Y = 351841.3 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.995405  
 Average error: 3.582%  
 Average CF: 351841.3  
 RSD: 4.291%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	371392.7	371392.7	5.557	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	2	681913.8	340956.9	-3.094	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	10	3492551	349255.1	-0.735	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	20	6816135	340806.8	-3.136	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	30	1.01561E+07	338536.7	-3.781	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	40	1.480399E+07	370099.8	5.189	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

20 Kepone

Height



Expected retention time: 5.102 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

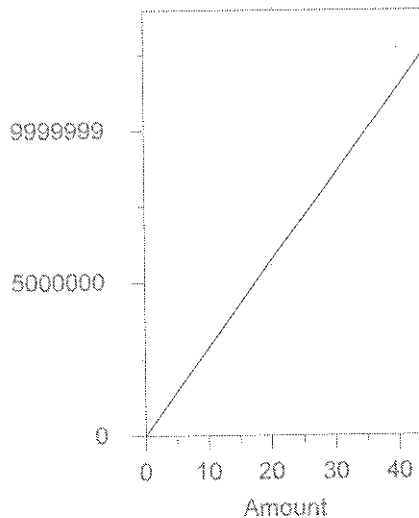
$$Y = 155538.8 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9897372  
 Average error: 5.097%  
 Average CF: 155538.8  
 RSD: 6.863%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	755120	151024	-2.903	Manual	11/14/2018 4:39:37 PM
2	10	1382874	138287.4	-11.091	Manual	11/14/2018 4:39:44 PM
3	25	3838039	153521.6	-1.297	Manual	11/14/2018 4:39:52 PM
4	50	8053918	161078.4	3.562	Manual	11/14/2018 4:39:58 PM
5	100	1.596316E+07	159631.6	2.631	Manual	11/14/2018 4:40:05 PM
6	200	3.393796E+07	169689.8	9.098	Manual	11/14/2018 4:41:37 PM

21 4,4'-DDD

Height



Expected retention time: 5.113 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

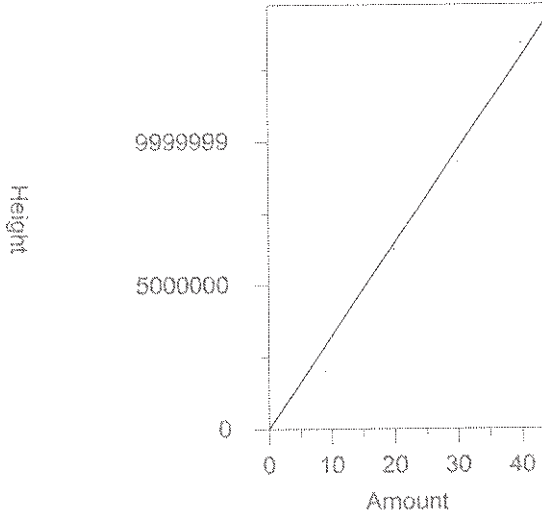
$$Y = 284979 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9860317  
 Average error: 4.023%  
 Average CF: 284979  
 RSD: 6.350%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	287297	287297	0.813	Manual	11/13/2018 9:49:39 AM
2	2	523418	261709	-8.166	Manual	11/13/2018 9:50:04 AM
3	10	2792300	279230	-2.017	Manual	11/13/2018 9:50:29 AM
4	20	5592920	279646	-1.871	Manual	11/13/2018 9:50:47 AM
5	30	8548140	284938	-0.014	Manual	11/13/2018 9:51:07 AM
6	40	1.268215E+07	317053.8	11.255	Manual	11/13/2018 9:51:22 AM

22 Endosulfan II

Chrom Perfect Calibration File



Expected retention time: 5.232 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

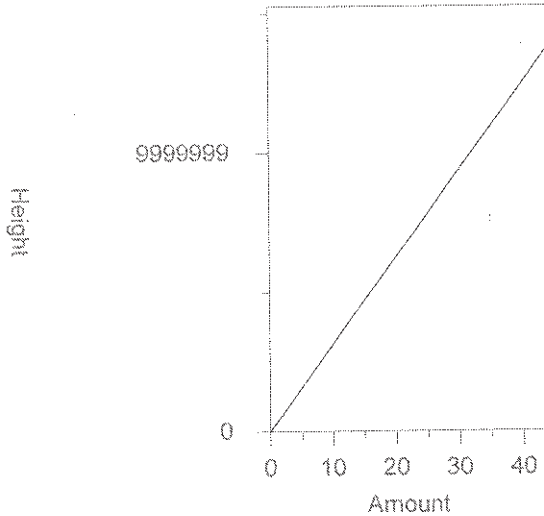
Single peak quantification by height

$Y = 324154.9 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9966909  
 Average error: 3.862%  
 Average CF: 324154.9  
 RSD: 4.813%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	350348.4	350348.4	8.081	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	2	633680.5	316840.3	-2.257	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	10	3191077	319107.7	-1.557	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	20	6264810	313240.5	-3.367	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	30	9296362	309878.7	-4.404	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	40	1.342056E+07	335514	3.504	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

23 4,4'-DDT



Expected retention time: 5.321 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

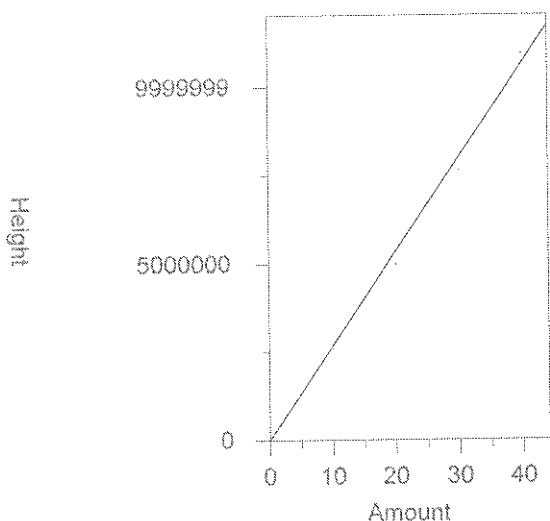
Single peak quantification by height

$Y = 312571.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.986852  
 Average error: 4.194%  
 Average CF: 312571.4  
 RSD: 6.236%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	317903.1	317903.1	1.706	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	2	576033.6	288016.8	-7.856	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	10	3037347	303734.7	-2.827	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	20	6134702	306735.1	-1.867	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	30	9374002	312466.7	-0.033	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	40	1.386288E+07	346572	10.878	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

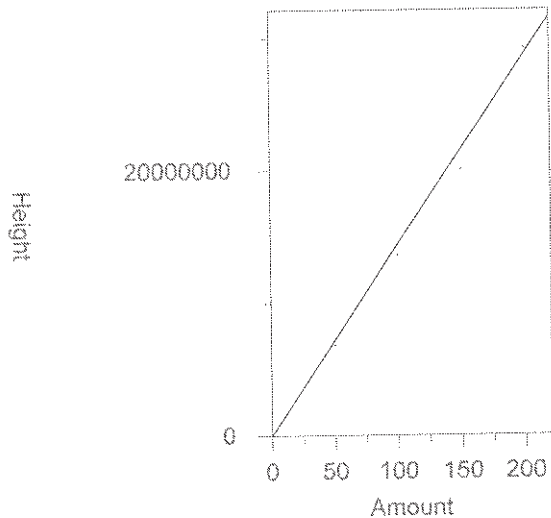
24 Endrin aldehyde



Expected retention time: 5.536 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 266707 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9964235  
 Average error: 4.487%  
 Average CF: 266707  
 RSD: 6.180%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	295596.9	295596.9	10.832	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	2	533811.4	266905.7	0.074	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	10	2594248	259424.8	-2.730	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	20	4993827	249691.3	-6.380	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	30	7653195	255106.5	-4.350	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	40	1.094067E+07	273516.8	2.553	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

25 Methoxychlor

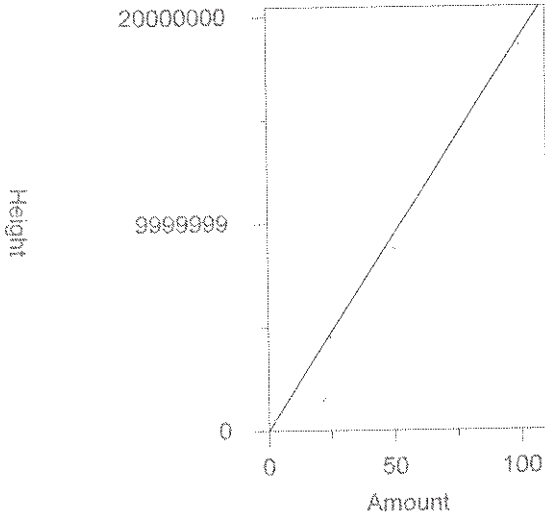


Expected retention time: 5.669 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 143671.3 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.995129  
 Average error: 5.298%  
 Average CF: 143671.3  
 RSD: 7.230%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	811562.8	162312.6	12.975	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	10	1454593	145459.3	1.244	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	50	6904865	138097.3	-3.880	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	100	1.362689E+07	136268.9	-5.152	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	150	2.007221E+07	133814.7	-6.861	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	200	2.921502E+07	146075.1	1.673	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

26 Mirex

Chrom Perfect Calibration File



Expected retention time: 5.779 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

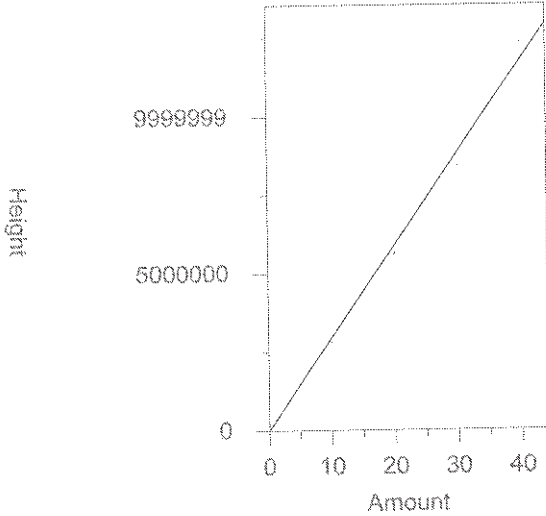
Single peak quantification by height

$Y = 189838.2 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9969363  
 Average error: 5.308%  
 Average CF: 189838.2  
 RSD: 7.418%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	537973	215189.2	13.354	Manual	11/13/2018 10:10:47 AM
2	5	938690	187738	-1.106	Manual	11/13/2018 10:10:51 AM
3	12.5	2433930	194714.4	2.569	Manual	11/13/2018 10:10:56 AM
4	25	4495436	179817.4	-5.279	Manual	11/13/2018 10:11:00 AM
5	50	8773674	175473.5	-7.567	Manual	11/13/2018 10:11:06 AM
6	100	1.860966E+07	186096.6	-1.971	Manual	11/13/2018 10:11:28 AM

27 Endo. sulfate



Expected retention time: 5.842 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

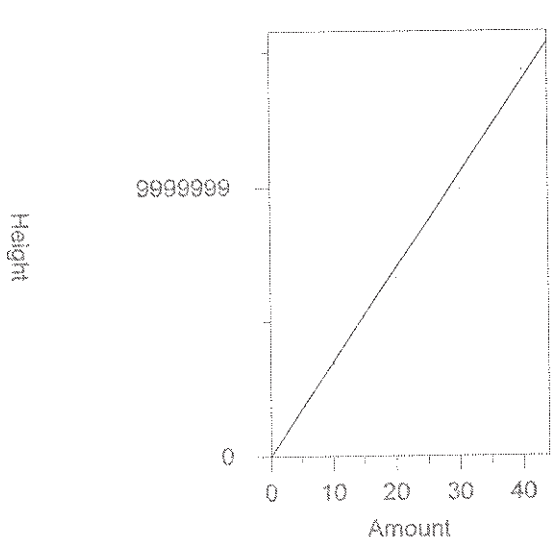
Single peak quantification by height

$Y = 294316 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9950268  
 Average error: 4.684%  
 Average CF: 294316  
 RSD: 5.731%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	321802.8	321802.8	9.339	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	2	578795.7	289397.8	-1.671	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	10	2843399	284339.9	-3.390	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	20	5635959	281797.9	-4.253	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	30	8411244	280374.8	-4.737	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	40	1.232731E+07	308182.8	4.712	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

28 Endrin ketone



Expected retention time: 6.036 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

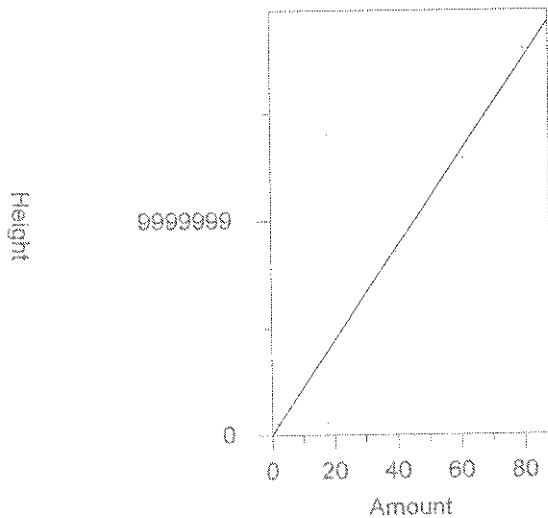
Single peak quantification by height

$$Y = 349307.8 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9964643  
 Average error: 4.353%  
 Average CF: 349307.8  
 RSD: 5.842%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	385568.3	385568.3	10.381	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	2	693961.3	346980.7	-0.666	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	10	3406585	340658.5	-2.476	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	20	6638934	331946.7	-4.970	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	30	9961020	332034	-4.945	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	40	1.434633E+07	358658.3	2.677	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016

29 DCB



Expected retention time: 6.695 minutes  
 Search window: 0.03 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$$Y = 219267.1 X + 6720.305$$

Linear fit with equal weighting  
 Coefficient of determination: 0.9977448  
 Average error: 7.418%  
 Average CF: 232134.2  
 RSD: 10.712%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	555071.4	277535.7	24.664	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011
2	4	971188.1	242797	9.889	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012
3	20	4439711	221985.5	1.085	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.013
4	40	8565137	214128.4	-2.418	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.014
5	61	1.287799E+07	211114.6	-3.766	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.015
6	80	1.801951E+07	225243.9	2.686	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.016



6D

INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Calibration File: 05PEST1830605B

GC Column (2) : RTXCLPII

ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Tetrachloro-m-xylene							2.35	2.33	2.37
Hcb							2.68	2.66	2.70
alpha-BHC							2.77	2.75	2.79
gamma-BHC (Lindane)							3.03	3.01	3.05
beta-BHC							3.09	3.07	3.11
delta-BHC							3.32	3.30	3.34
Heptachlor							3.37	3.35	3.39
Aldrin							3.63	3.61	3.65
Telodrin							3.78	3.76	3.80
Heptachlor epoxide							4.12	4.10	4.14
gamma-Chlordane							4.29	4.27	4.31
o,p-DDE							4.31	4.29	4.33
alpha-Chlordane							4.41	4.39	4.43
Endosulfan I							4.45	4.43	4.47
4,4'-DDE							4.55	4.53	4.57
Dieldrin							4.67	4.65	4.69
o,p-DDD							4.72	4.70	4.74
Endrin							4.91	4.89	4.93
o,p-DDT							4.96	4.94	4.98
Kepone	4.99	4.99	4.99	4.99	4.99	4.99	4.99	4.97	5.01
4,4'-DDD							5.00	4.98	5.02
Endosulfan II							5.07	5.05	5.09
4,4'-DDT							5.23	5.21	5.25
Endrin aldehyde							5.32	5.30	5.34
Endosulfan sulfate							5.52	5.50	5.54
Methoxychlor							5.72	5.70	5.74
Mirex							5.85	5.83	5.87
Endrin ketone							5.88	5.86	5.90
Decachlorobiphenyl							6.68	6.65	6.71

## INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830605BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	1.97E+06	1.79E+06	1.98E+06	2.01E+06	2.00E+06	2.16E+06	1.99E+06	6
Hcb	1.49E+06	1.35E+06	1.38E+06	1.39E+06	1.40E+06	1.47E+06	1.41E+06	4
alpha-BHC	2.39E+06	2.24E+06	2.69E+06	2.86E+06	3.01E+06	3.31E+06	2.75E+06	14
gamma-BHC (Lindane)	2.10E+06	1.94E+06	2.20E+06	2.34E+06	2.49E+06	2.69E+06	2.29E+06	12
beta-BHC	1.01E+06	8.93E+05	8.97E+05	9.16E+05	9.39E+05	1.04E+06	9.49E+05	6
delta-BHC	1.87E+06	1.68E+06	1.99E+06	2.12E+06	2.22E+06	2.52E+06	2.07E+06	14
Heptachlor	1.77E+06	1.59E+06	1.73E+06	1.81E+06	1.85E+06	2.08E+06	1.80E+06	9
Aldrin	1.59E+06	1.46E+06	1.65E+06	1.72E+06	1.82E+06	1.98E+06	1.70E+06	11
Telodrin	7.51E+05	6.78E+05	6.94E+05	7.04E+05	7.05E+05	7.60E+05	7.16E+05	5
Heptachlor epoxide	1.43E+06	1.26E+06	1.32E+06	1.36E+06	1.39E+06	1.51E+06	1.38E+06	6
gamma-Chlordane	1.46E+06	1.27E+06	1.38E+06	1.42E+06	1.48E+06	1.68E+06	1.45E+06	9
o,p-DDE	5.71E+05	5.26E+05	5.63E+05	5.61E+05	5.82E+05	6.24E+05	5.71E+05	6
alpha-Chlordane	1.48E+06	1.30E+06	1.36E+06	1.40E+06	1.46E+06	1.62E+06	1.44E+06	8
Endosulfan I	1.33E+06	1.17E+06	1.21E+06	1.25E+06	1.29E+06	1.43E+06	1.28E+06	7
4,4'-DDE	1.24E+06	1.14E+06	1.26E+06	1.34E+06	1.41E+06	1.55E+06	1.32E+06	11
Dieldrin	1.39E+06	1.27E+06	1.40E+06	1.44E+06	1.46E+06	1.59E+06	1.42E+06	7
o,p-DDD	5.03E+05	4.69E+05	4.91E+05	4.92E+05	5.02E+05	5.44E+05	5.00E+05	5
Endrin	1.31E+06	1.18E+06	1.27E+06	1.31E+06	1.31E+06	1.43E+06	1.30E+06	6
o,p-DDT	5.54E+05	5.03E+05	5.80E+05	5.40E+05	5.56E+05	6.18E+05	5.59E+05	7
Kepone	5.30E+05	4.89E+05	5.57E+05	6.19E+05	6.31E+05	6.82E+05	5.85E+05	12
4,4'-DDD	1.07E+06	9.68E+05	1.05E+06	1.10E+06	1.15E+06	1.29E+06	1.10E+06	10
Endosulfan II	1.25E+06	1.10E+06	1.18E+06	1.17E+06	1.21E+06	1.30E+06	1.20E+06	6
4,4'-DDT	1.13E+06	1.02E+06	1.10E+06	1.15E+06	1.19E+06	1.35E+06	1.16E+06	10
Endrin aldehyde	1.04E+06	9.11E+05	9.33E+05	9.18E+05	9.54E+05	1.05E+06	9.68E+05	6
Endosulfan sulfate	1.15E+06	1.04E+06	1.09E+06	1.13E+06	1.16E+06	1.29E+06	1.14E+06	7
Methoxychlor	5.67E+05	4.90E+05	4.92E+05	4.89E+05	4.69E+05	5.20E+05	5.04E+05	7
Mirex	5.89E+05	5.28E+05	5.44E+05	5.32E+05	5.39E+05	5.86E+05	5.53E+05	5
Endrin ketone	1.28E+06	1.12E+06	1.17E+06	1.17E+06	1.19E+06	1.28E+06	1.20E+06	5
Decachlorobiphenyl	8.71E+05	7.58E+05	7.41E+05	7.37E+05	7.41E+05	8.07E+05	7.76E+05	7

6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830605BGC Column (2): RTXCLPII ID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE		AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO		CF	LEVEL			
Aroclor-1016	1	2.69	2.66	2.72	19215	19215	1	200	3842974	.00
	2	2.96	2.93	2.99	26626	26626	1	200	5325124	.00
	3	3.14	3.11	3.17	11092	11092	1	200	2218380	.00
	4	3.30	3.27	3.33	46618	46618	1	200	9323568	.00
	5	3.40	3.37	3.43	23357	23357	1	200	4671356	.00
	6	3.49	3.46	3.52	15374	15374	1	200	3074750	.00
Aroclor-1221	1	2.56	2.54	2.58	11102	11102	1	200	2220491	.00
	2	2.65	2.63	2.67	6785	6785	1	200	1357046	.00
	3	2.69	2.67	2.71	22912	22912	1	200	4582321	.00
Aroclor-1248	1	3.30	3.27	3.33	23607	23607	1	200	4721418	.00
	2	3.56	3.53	3.59	22413	22413	1	200	4482628	.00
	3	3.78	3.75	3.81	27954	27954	1	200	5590784	.00
	4	3.88	3.85	3.91	23336	23336	1	200	4667239	.00
	5	4.14	4.11	4.17	32251	32251	1	200	6450198	.00
	6	4.33	4.30	4.36	25385	25385	1	200	5076946	.00
Aroclor-1254	1	4.14	4.11	4.17	31150	31150	1	250	7787562	.00
	2	4.30	4.27	4.33	35159	35159	1	250	8789741	.00
	3	4.67	4.64	4.70	50803	50803	1	250	12700800	.00
	4	4.84	4.81	4.87	36453	36453	1	250	9113145	.00
	5	5.10	5.07	5.13	26800	26800	1	250	6700056	.00
	6	5.24	5.21	5.27	38736	38736	1	250	9683890	.00
Aroclor-1260	1	4.82	4.79	4.85	34888	34888	1	200	6977575	.00
	2	4.98	4.95	5.01	41645	41645	1	200	8328938	.00
	3	5.24	5.21	5.27	43252	43252	1	200	8650472	.00
	4	5.51	5.48	5.54	27209	27209	1	200	5441882	.00
	5	5.68	5.65	5.71	55850	55850	1	200	11170040	.00
	6	5.93	5.90	5.96	33155	33155	1	200	6631015	.00

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830605BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Chlordane	1-L	3.26	3.23	3.29	38687	40907	1	12.5	483583	11.61
					32964		2	25	824092	
					40225		3	50	2011255	
					42815		4	100	4281467	
					44785		5	200	8957077	
					45968		6	500	22984080	
	2	3.77	3.74	3.80	38306	38919	1	12.5	478827	6.37
					34129		2	25	853220	
					39978		3	50	1998895	
					40360		4	100	4035969	
					40510		5	200	8102039	
					40229		6	500	20114490	
	3-L	4.11	4.08	4.14	24561	27794	1	12.5	307007	10.03
					23991		2	25	599777	
					28629		3	50	1431453	
					29367		4	100	2936696	
					29954		5	200	5990824	
					30261		6	500	15130330	
	4-L	4.30	4.27	4.33	111383	132671	1	12.5	1392284	14.96
					105549		2	25	2638727	
					133659		3	50	6682931	
					143947		4	100	14394670	
					150586		5	200	30117150	
					150903		6	500	75451630	
5-L	4.42	4.39	4.45	86711	100267	1	12.5	1083884	13.08	
				81710		2	25	2042756		
				101153		3	50	5057643		
				108759		4	100	10875900		
				111252		5	200	22250420		
				112015		6	500	56007580		
6	5.11	5.08	5.14	34810	37584	1	12.5	435128	9.72	
				31648		2	25	791205		
				38053		3	50	1902632		
				39570		4	100	3957019		
				40879		5	200	8175865		
				40544		6	500	20271780		

6F

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190BCalibration File: 05PEST1830605BGC Column (2): RTXCLPIIID: 0.32 (mm)ICAL Date(s) Analyzed: 11/14/2018 11/14/2018

COMPOUND	PEAK	RT	RT WINDOW		CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
			FROM	TO						
Toxaphene	1	4.67	4.64	4.70	13628	13950	1	50	681420	4.54
					13205		2	100	1320478	
					14024		3	200	2804850	
					14141		4	500	7070495	
					13649		5	1000	13649130	
					15051		6	2000	30101790	
	2	4.90	4.87	4.93	13548	14403	1	50	677404	6.94
					13191		2	100	1319097	
					14624		3	200	2924749	
					14601		4	500	7300307	
					14408		5	1000	14408070	
					16047		6	2000	32093910	
	3	5.07	5.04	5.10	24587	26103	1	50	1229368	6.96
					23864		2	100	2386368	
					26674		3	200	5334863	
					26485		4	500	13242650	
					25950		5	1000	25950170	
					29055		6	2000	58110820	
	4	5.34	5.31	5.37	25905	28451	1	50	1295258	8.96
					25467		2	100	2546675	
					29095		3	200	5819004	
					29539		4	500	14769690	
					28319		5	1000	28318690	
					32383		6	2000	64766540	
5	5.39	5.36	5.42	15448	16710	1	50	772381	8.56	
				15021		2	100	1502096		
				16882		3	200	3376474		
				17253		4	500	8626285		
				16609		5	1000	16608580		
				19046		6	2000	38091830		
6	5.69	5.66	5.72	24111	25515	1	50	1205551	7.58	
				23178		2	100	2317792		
				26009		3	200	5201784		
				26055		4	500	13027470		
				24992		5	1000	24991570		
				28747		6	2000	57493820		

File Name: V:\CP5\05pest1830605b.cal  
 Version: 6

Creator:  
 Description:  
 Reason for change:

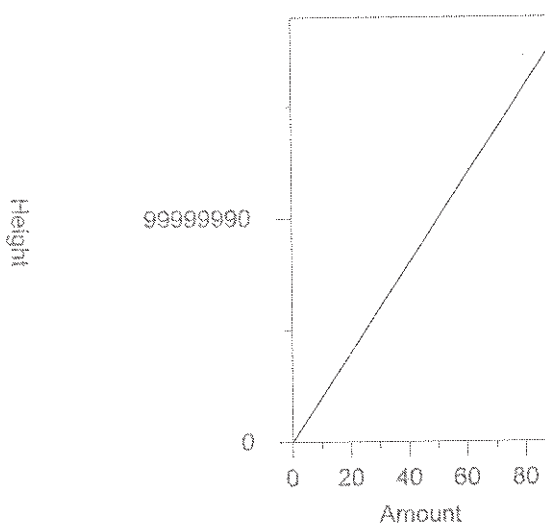
*✓*  
*Keaton*  
*9/27/18, 11-15-18*

External standard calibration  
 Standard injection volume: 1  
 No sample weight correction  
 Area reject threshold: 0  
 Reference peak area reject threshold: 50  
 Amount units: PPB  
 No default component

Method of calculating data point averages: Current update equal to cal data  
 No calibration update report

All levels are normal data points.

1 TCX

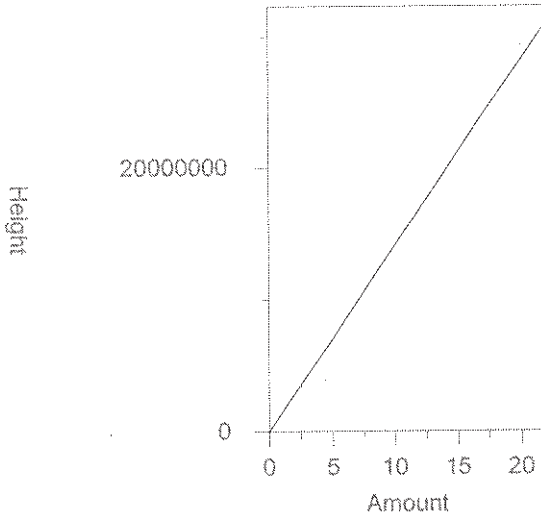


Expected retention time: 2.353 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 1985607 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9914622  
 Average error: 3.488%  
 Average CF: 1985607  
 RSD: 5.870%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	3946909	1973455	-0.612	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.011.B
2	4	7169490	1792373	-9.732	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.012.B
3	20	3.966459E+07	1983230	-0.120	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.013.B
4	40	8.024889E+07	2006222	1.038	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.014.B
5	61	1.220094E+08	2000154	0.733	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.015.B
6	80	1.726566E+08	2158208	8.693	WUSLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.016.B

2 HCB

Chrom Perfect Calibration File



Expected retention time: 2.683 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

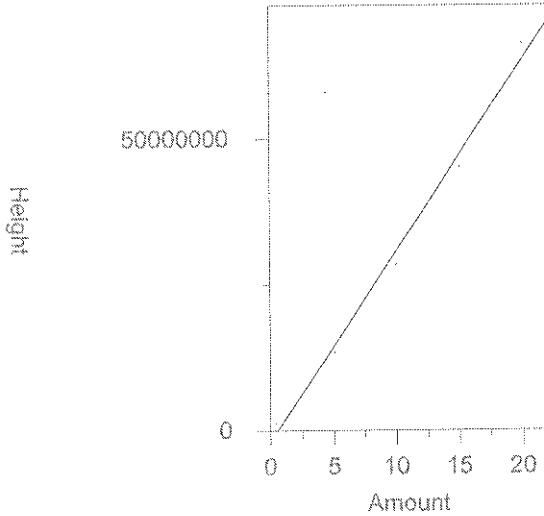
Single peak quantification by height

$$Y = 1412457 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9977701  
 Average error: 3.185%  
 Average CF: 1412457  
 RSD: 3.968%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	745127	1490254	5.508	Manual	11/13/2018 10:21:13 AM
2	1	1345480	1345480	-4.742	Manual	11/13/2018 10:21:21 AM
3	2.5	3446559	1378624	-2.395	Manual	11/13/2018 10:21:25 AM
4	5	6930088	1386018	-1.872	Manual	11/13/2018 10:21:31 AM
5	10	1.404745E+07	1404745	-0.546	Manual	11/13/2018 10:21:47 AM
6	20	2.939245E+07	1469623	4.047	Manual	11/13/2018 10:22:12 AM

3 alpha-BHC



Expected retention time: 2.768 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

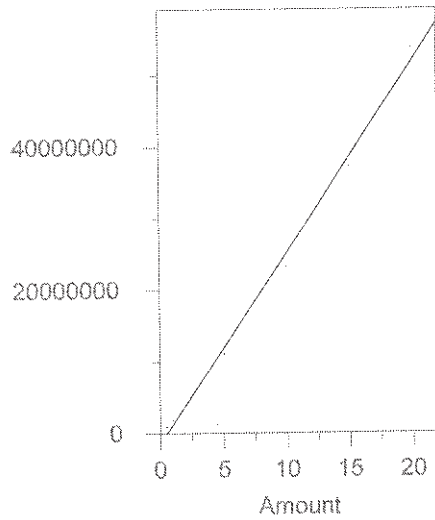
$$Y = 3271645 X + -1931392$$

Linear fit with equal weighting  
 Coefficient of determination: 0.9939476  
 Average error: 99.060%  
 Average CF: 2751738  
 RSD: 14.397%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	1196612	2393224	-504.849	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	2241476	2241476	67.243	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	1.347063E+07	2694126	-6.628	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	2.858046E+07	2858046	-7.161	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	4.517693E+07	3011795	-4.171	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	6.623524E+07	3311762	4.305	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

4 gamma-BHC

Height

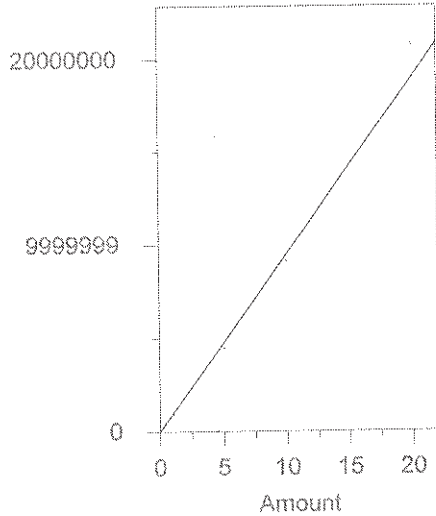


Expected retention time: 3.028 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 2665670 X + -1466427$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.9947728  
 Average error: 161.721%  
 Average CF: 2293474  
 RSD: 11.786%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	1051272	2102544	-886.925	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	1942044	1942044	61.939	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	1.101838E+07	2203676	-7.111	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	2.335348E+07	2335348	-7.292	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	3.727924E+07	2485283	-3.218	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	5.383902E+07	2691951	3.842	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

5 beta-BHC

Height



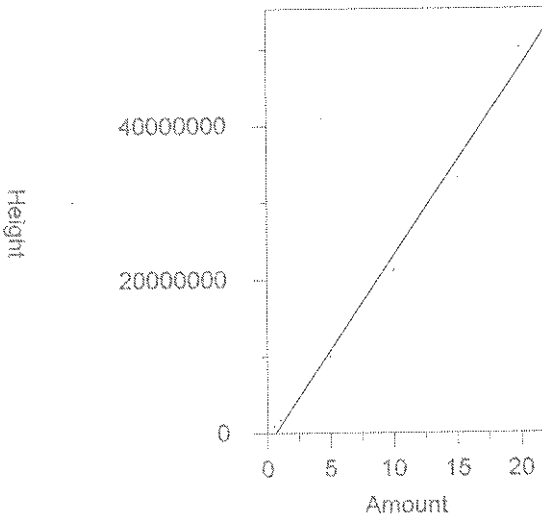
Expected retention time: 3.093 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 948558.1 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9890434  
 Average error: 5.223%  
 Average CF: 948558.1  
 RSD: 6.406%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	503074	1006148	6.071	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	893131.3	893131.3	-5.843	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	4486267	897253.4	-5.409	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	9158719	915871.9	-3.446	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	1.409004E+07	939336	-0.972	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	2.079216E+07	1039608	9.599	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

6 delta-BHC



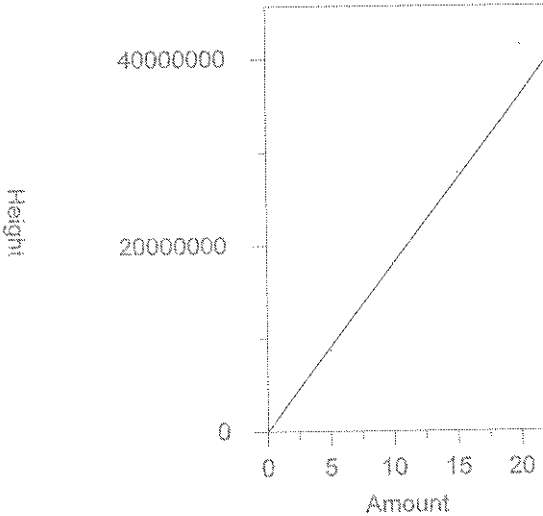
Chrom Perfect Calibration File



Expected retention time: 3.321 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 2464336 X + -1591713$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.9907972  
 Average error: 79.9999%  
 Average CF: 2066359  
 RSD: 14.023%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	937154.1	1874308	-360.650	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	1680821	1680821	92.617	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	9928638	1985728	-7.468	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	2.123616E+07	2123616	-7.876	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	3.328005E+07	2218670	-5.918	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	5.030022E+07	2515011	5.462	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

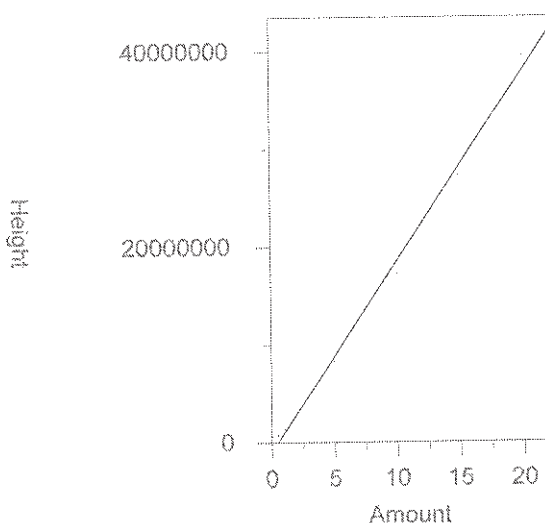
7 Heptachlor



Expected retention time: 3.366 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 1804350 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9764897  
 Average error: 6.049%  
 Average CF: 1804350  
 RSD: 8.961%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	885721	1771442	-1.824	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	1585660	1585660	-12.120	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	8642598	1728520	-4.203	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	1.811809E+07	1811809	0.413	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	2.779441E+07	1852961	2.694	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	4.151418E+07	2075709	15.039	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

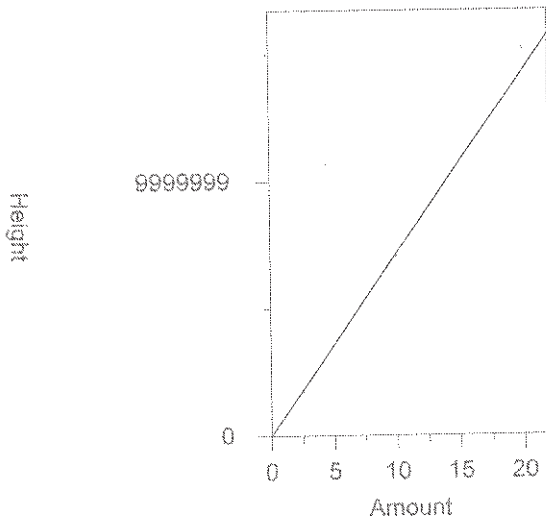
8 Aldrin



Expected retention time: 3.63 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 1953031 X + -1002315$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.9948645  
 Average error: 541.979%  
 Average CF: 1702493  
 RSD: 10.701%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	794255.4	1588511	-3178.517	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	1455714	1455714	53.118	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	8255960	1651192	-5.784	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	1.723597E+07	1723597	-6.973	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	2.728063E+07	1818709	-3.579	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	3.954466E+07	1977233	3.905	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

9 Telodrin



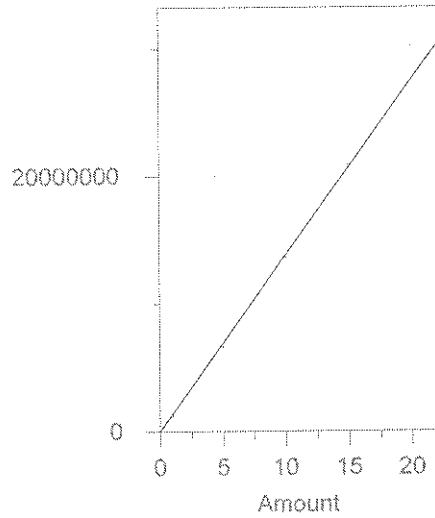
Expected retention time: 3.784 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 715702.6 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9949037  
 Average error: 3.744%  
 Average CF: 715702.6  
 RSD: 4.575%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	375653	751306	4.975	Manual	11/13/2018 10:22:22 AM
2	1	678270	678270	-5.230	Manual	11/13/2018 10:22:27 AM
3	2.5	1736218	694487.2	-2.964	Manual	11/13/2018 10:22:31 AM
4	5	3521357	704271.4	-1.597	Manual	11/13/2018 10:22:36 AM
5	10	7053964	705396.4	-1.440	Manual	11/13/2018 10:22:43 AM
6	20	1.520969E+07	760484.5	6.257	Manual	11/13/2018 10:23:04 AM

10 Hept. epoxide

Chrom Perfect Calibration File

Height



Expected retention time: 4.124 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

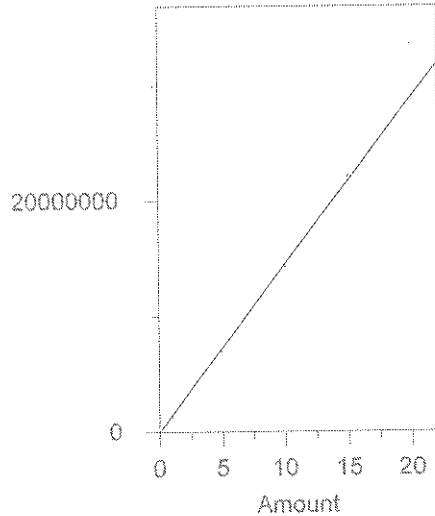
$Y = 1379625 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9895011  
 Average error: 4.715%  
 Average CF: 1379625  
 RSD: 6.344%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	716398.6	1432797	3.854	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	1262439	1262439	-8.494	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	6590490	1318098	-4.460	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	1.363207E+07	1363207	-1.190	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	2.083403E+07	1388935	0.675	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	3.024551E+07	1512276	9.615	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

11 g. Chlordane

Height



Expected retention time: 4.285 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

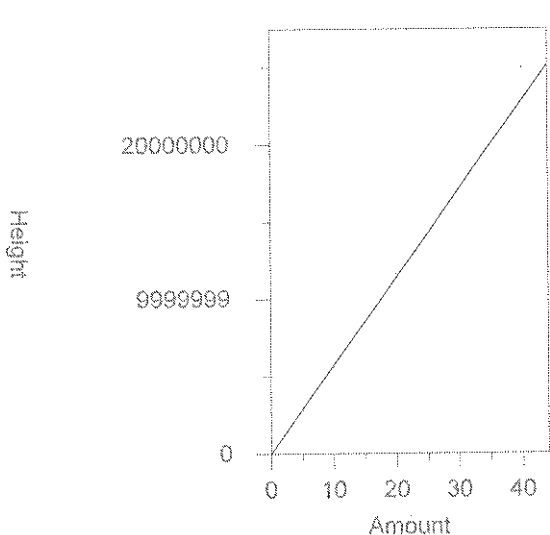
$Y = 1448334 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9744207  
 Average error: 6.281%  
 Average CF: 1448334  
 RSD: 9.294%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	731815.1	1463630	1.056	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	1270048	1270048	-12.310	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	6891823	1378365	-4.831	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	1.423658E+07	1423658	-1.704	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	2.216159E+07	1477439	2.010	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	3.353722E+07	1676861	15.779	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

12 o,p-DDE

Chrom Perfect Calibration File



Expected retention time: 4.306 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

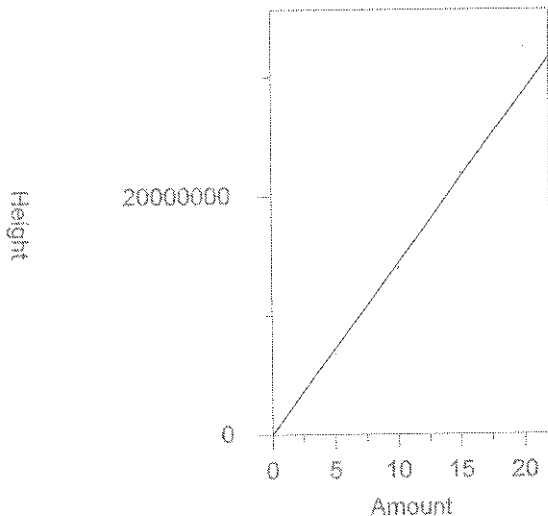
Single peak quantification by height

$Y = 571152.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9895611  
 Average error: 3.733%  
 Average CF: 571152.8  
 RSD: 5.633%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	571392	571392	0.042	Manual	11/13/2018 10:23:17 AM
2	2	1051044	525522	-7.989	Manual	11/13/2018 10:23:21 AM
3	5	2813860	562772	-1.467	Manual	11/13/2018 10:23:26 AM
4	10	5612058	561205.8	-1.742	Manual	11/13/2018 10:23:31 AM
5	20	1.163747E+07	581873.5	1.877	Manual	11/13/2018 10:23:53 AM
6	40	2.496607E+07	624151.8	9.279	Manual	11/13/2018 10:24:44 AM

13 a. Chlordane



Expected retention time: 4.406 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

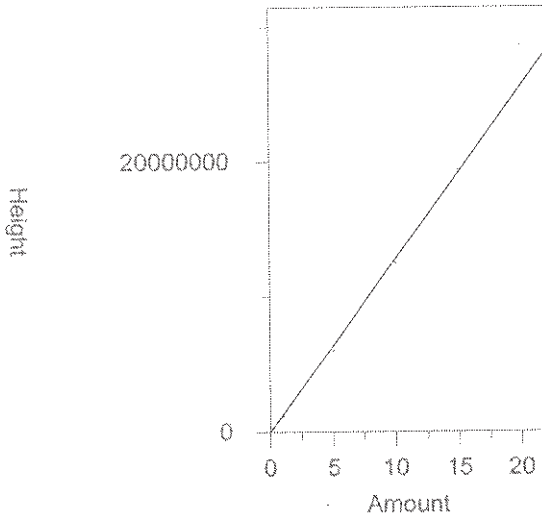
$Y = 1436289 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9819992  
 Average error: 5.811%  
 Average CF: 1436289  
 RSD: 7.797%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	738324.8	1476650	2.810	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	1296094	1296094	-9.761	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	6821885	1364377	-5.007	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	1.397997E+07	1397997	-2.666	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	2.192313E+07	1461542	1.758	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	3.242146E+07	1621073	12.865	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

14 Endosulfan I

Chrom Perfect Calibration File



Expected retention time: 4.451 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

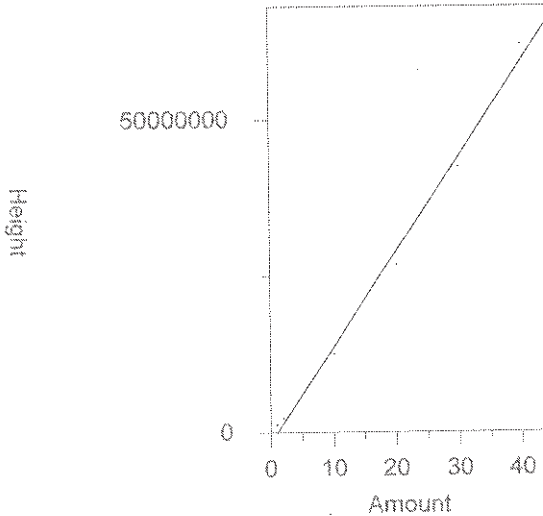
Single peak quantification by height

$$Y = 1281340 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9849896  
 Average error: 5.492%  
 Average CF: 1281340  
 RSD: 7.250%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	665641.9	1331284	3.898	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	1	1171645	1171645	-8.561	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	5	6036841	1207368	-5.773	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	10	1.253877E+07	1253877	-2.143	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	15	1.940039E+07	1293359	0.938	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	20	2.861017E+07	1430509	11.642	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

15 4,4'-DDE



Expected retention time: 4.551 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

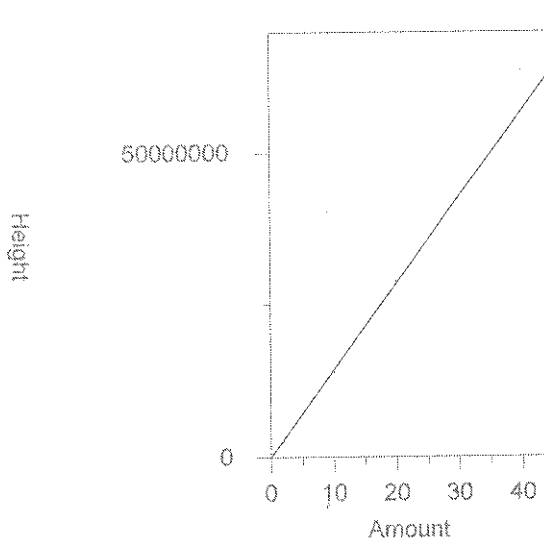
$$Y = 1525521 X + -1668305$$

Linear fit with equal weighting  
 Coefficient of determination: 0.994047  
 Average error: 175.862%  
 Average CF: 1323434  
 RSD: 10.731%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1238132	1238132	-967.133	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	2	2289147	1144574	65.552	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	10	1.262415E+07	1262415	-7.086	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	20	2.671635E+07	1335818	-7.370	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	30	4.240716E+07	1413572	-3.833	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	40	6.184386E+07	1546097	4.198	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

16 Dieldrin

Chrom Perfect Calibration File



Expected retention time: 4.671 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

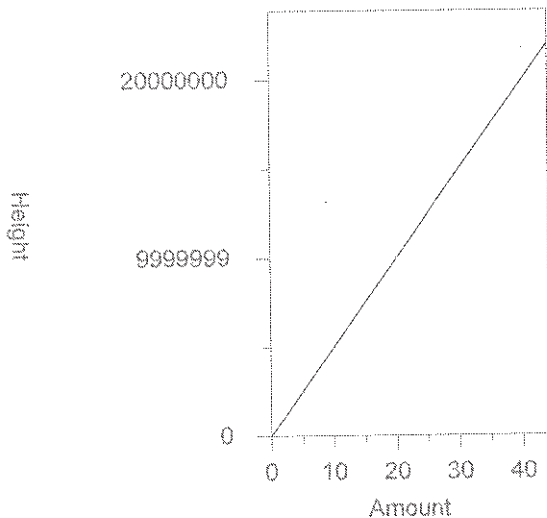
Single peak quantification by height

$Y = 1424421 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9854976  
 Average error: 4.877%  
 Average CF: 1424421  
 RSD: 7.179%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1390192	1390192	-2.403	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	2	2547786	1273893	-10.568	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	10	1.400788E+07	1400788	-1.659	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	20	2.876239E+07	1438120	0.962	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	30	4.366732E+07	1455577	2.187	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	40	6.351819E+07	1587955	11.481	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

17 o,p-DDD



Expected retention time: 4.722 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

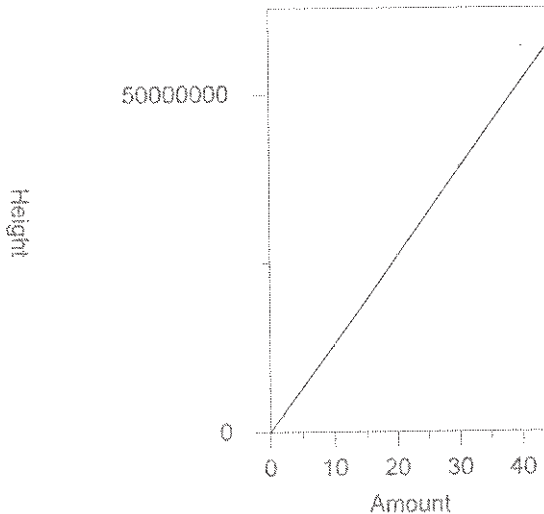
$Y = 500224.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.990753  
 Average error: 3.239%  
 Average CF: 500224.4  
 RSD: 4.939%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	503491	503491	0.653	Manual	11/13/2018 10:24:53 AM
2	2	937508	468754	-6.291	Manual	11/13/2018 10:24:57 AM
3	5	2456376	491275.2	-1.789	Manual	11/13/2018 10:25:02 AM
4	10	4920399	492039.9	-1.636	Manual	11/13/2018 10:25:08 AM
5	20	1.003914E+07	501957	0.346	Manual	11/13/2018 10:25:22 AM
6	40	2.175318E+07	543829.5	8.717	Manual	11/13/2018 10:25:46 AM

18 Endrin

Chrom Perfect Calibration File



Expected retention time: 4.907 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

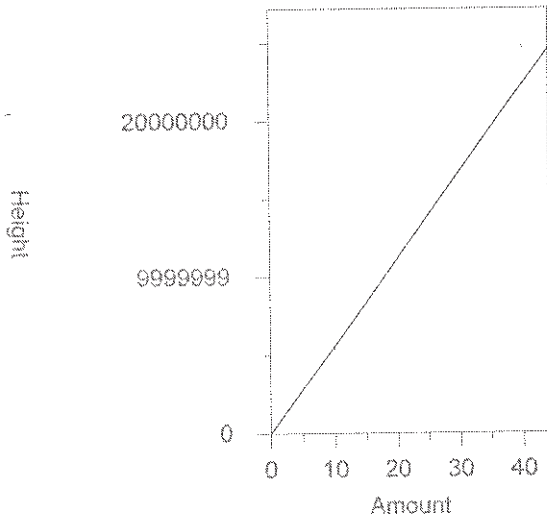
Single peak quantification by height

$Y = 1301456 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9896358  
 Average error: 3.827%  
 Average CF: 1301456  
 RSD: 6.068%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1307413	1307413	0.458	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	2	2362144	1181072	-9.250	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	10	1.272433E+07	1272433	-2.230	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	20	2.617681E+07	1308841	0.567	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	30	3.937438E+07	1312479	0.847	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	40	5.705999E+07	1426500	9.608	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

19 o,p-DDT



Expected retention time: 4.955 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

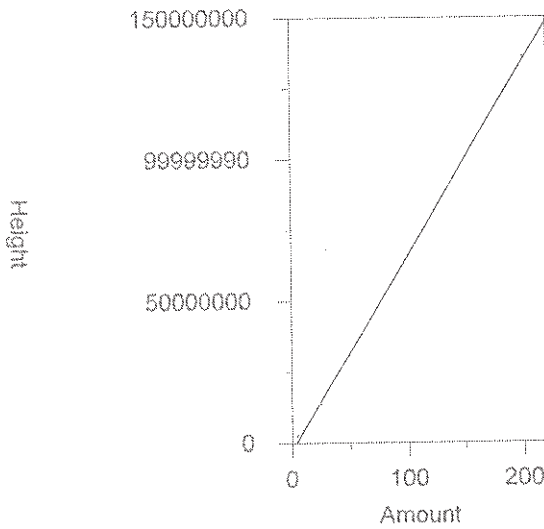
Single peak quantification by height

$Y = 558660 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9864926  
 Average error: 4.838%  
 Average CF: 558660  
 RSD: 6.906%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	553717	553717	-0.885	Manual	11/13/2018 10:26:17 AM
2	2	1006653	503326.5	-9.905	Manual	11/13/2018 10:26:21 AM
3	5	2900438	580087.6	3.836	Manual	11/13/2018 10:26:29 AM
4	10	5404704	540470.4	-3.256	Manual	11/13/2018 10:26:34 AM
5	20	1.112088E+07	556044	-0.468	Manual	11/13/2018 10:27:18 AM
6	40	2.473258E+07	618314.5	10.678	Manual	11/13/2018 10:27:45 AM

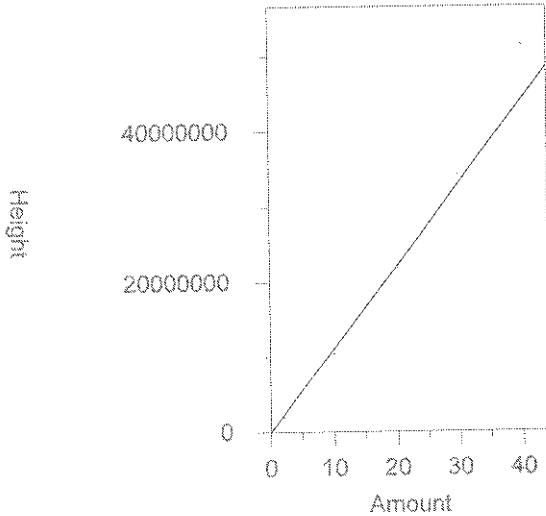
20 Kepone



Expected retention time: 4.989 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 686774.6 X + -2672595$   
 Linear fit with equal weighting  
 Coefficient of determination: 0.9987743  
 Average error: 46.117%  
 Average CF: 584554.3  
 RSD: 12.249%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	2651410	530282	248.284	Manual	11/14/2018 4:43:26 PM
2	10	4888691	488869.1	16.532	Manual	11/14/2018 4:43:36 PM
3	25	1.391454E+07	556581.6	-4.016	Manual	11/14/2018 4:43:48 PM
4	50	3.096481E+07	619296.2	-2.215	Manual	11/14/2018 4:44:01 PM
5	100	6.30723E+07	630723	-4.443	Manual	11/14/2018 5:24:28 PM
6	200	1.363148E+08	681574	1.212	Manual	11/14/2018 4:44:28 PM

21 4,4'-DDD



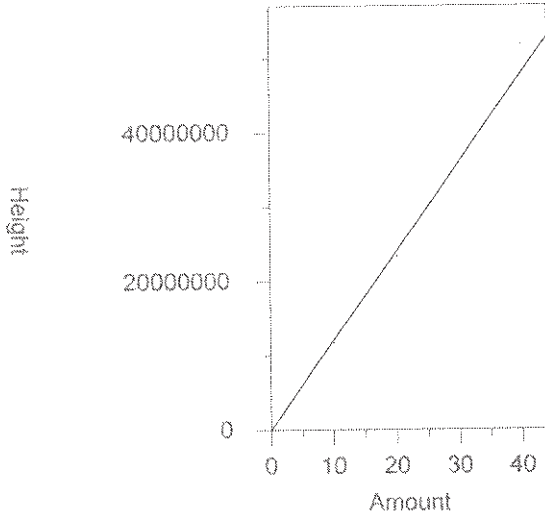
Expected retention time: 5.003 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by height  
 $Y = 1103814 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.971738  
 Average error: 6.793%  
 Average CF: 1103814  
 RSD: 9.725%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1074226	1074226	-2.681	Manual
2	2	1936739	968369.5	-12.271	Manual
3	10	1.049626E+07	1049626	-4.909	Manual
4	20	2.196183E+07	1098092	-0.518	Manual
5	30	3.435449E+07	1145150	3.745	Manual
6	40	5.149694E+07	1287424	16.634	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

22 Endosulfan II



Chrom Perfect Calibration File



Expected retention time: 5.07 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

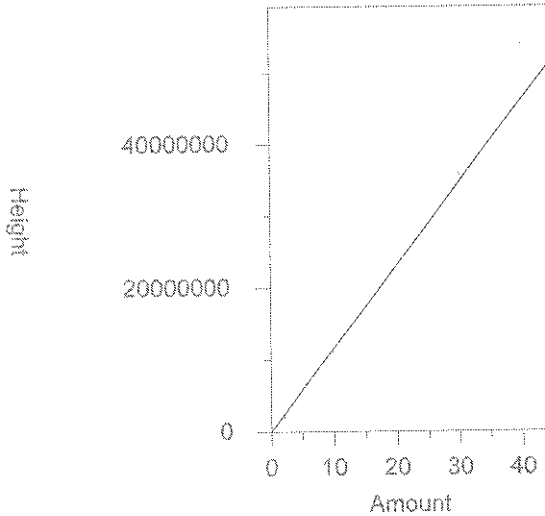
Single peak quantification by height

$Y = 1200450 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9922942  
 Average error: 4.275%  
 Average CF: 1200450  
 RSD: 5.662%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1252666	1252666	4.350	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	2	2208184	1104092	-8.027	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	10	1.176258E+07	1176258	-2.015	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	20	2.334088E+07	1167044	-2.783	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	30	3.616262E+07	1205421	0.414	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	40	5.188866E+07	1297217	8.061	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

23 4,4'-DDT



Expected retention time: 5.232 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

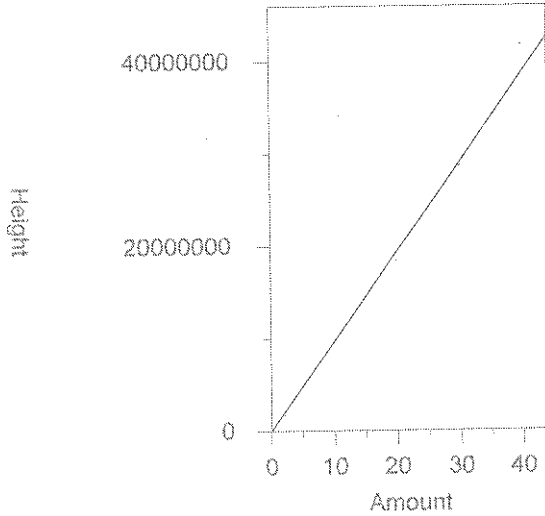
Single peak quantification by height

$Y = 1156601 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9724656  
 Average error: 6.548%  
 Average CF: 1156601  
 RSD: 9.540%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1126121	1126121	-2.635	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	2	2034436	1017218	-12.051	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	10	1.101717E+07	1101717	-4.745	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	20	2.308253E+07	1154127	-0.214	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	30	3.581272E+07	1193757	3.213	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	40	5.386653E+07	1346663	16.433	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

24 Endrin aldehyde



Expected retention time: 5.318 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

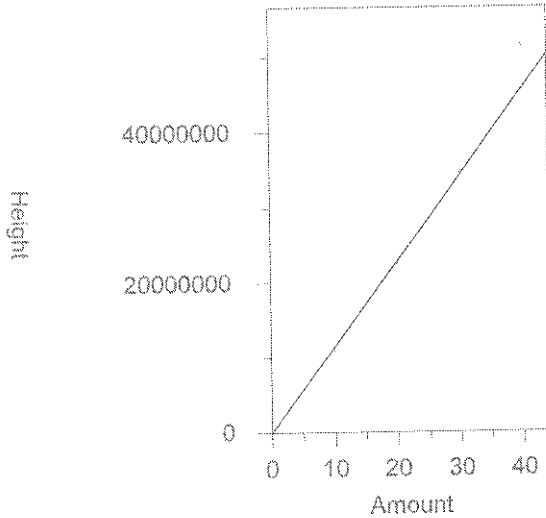
Single peak quantification by height

$$Y = 967709.4 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9915627  
 Average error: 5.336%  
 Average CF: 967709.4  
 RSD: 6.386%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1044996	1044996	7.987	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	2	1822256	911128	-5.847	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	10	9327411	932741.1	-3.614	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	20	1.835575E+07	917787.5	-5.159	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	30	2.86285E+07	954283.3	-1.387	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	40	4.181282E+07	1045321	8.020	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

25 Endo. sulfate



Expected retention time: 5.515 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

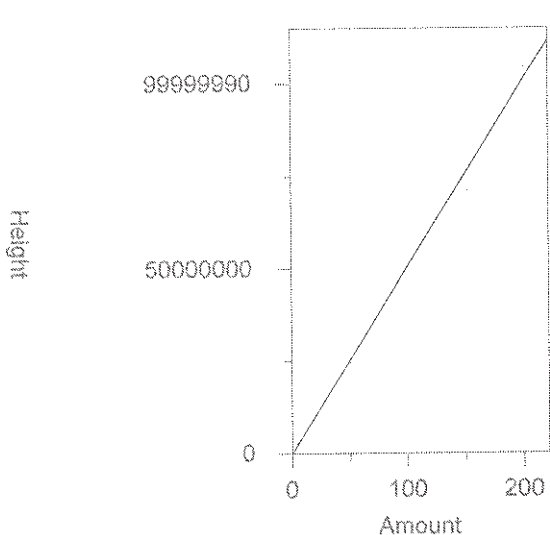
$$Y = 1142190 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9825962  
 Average error: 4.937%  
 Average CF: 1142190  
 RSD: 7.328%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1150129	1150129	0.695	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	2	2074231	1037116	-9.199	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	10	1.093787E+07	1093787	-4.238	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	20	2.252993E+07	1126497	-1.374	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	30	3.474668E+07	1158223	1.404	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	40	5.149557E+07	1287389	12.712	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

26 Methoxychlor

Chrom Perfect Calibration File



Expected retention time: 5.723 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

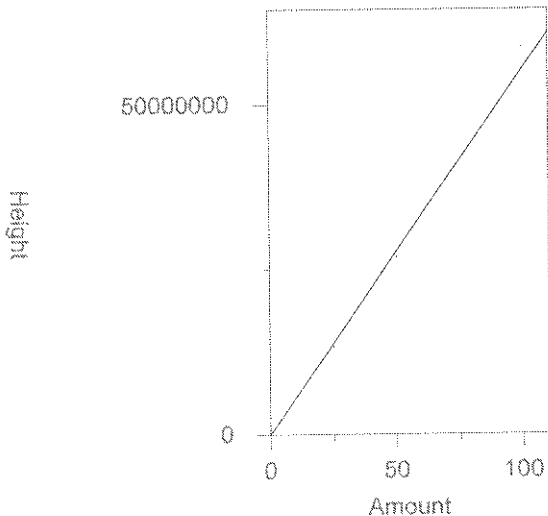
Single peak quantification by height

$Y = 504496.8 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9948303  
 Average error: 5.146%  
 Average CF: 504496.8  
 RSD: 6.866%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	2834814	566962.8	12.382	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	10	4899310	489931	-2.887	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	50	2.462163E+07	492432.6	-2.391	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	100.5	4.910164E+07	488573.5	-3.156	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	152	7.131348E+07	469167.6	-7.003	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	201	1.045025E+08	519912.9	3.056	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

27 Mirex



Expected retention time: 5.853 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 1  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

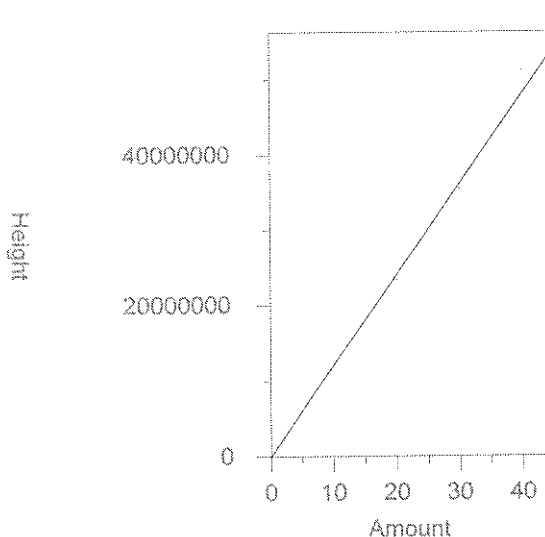
$Y = 553017.4 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9951053  
 Average error: 4.142%  
 Average CF: 553017.4  
 RSD: 4.923%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	1471946	588778.4	6.467	Manual	11/13/2018 10:34:46 AM
2	5	2640017	528003.4	-4.523	Manual	11/13/2018 10:34:52 AM
3	12.5	6806248	544499.8	-1.540	Manual	11/13/2018 10:35:04 AM
4	25	1.329892E+07	531956.8	-3.808	Manual	11/13/2018 10:35:21 AM
5	50	2.69448E+07	538896	-2.554	Manual	11/13/2018 10:35:36 AM
6	100	5.8597E+07	585970	5.959	Manual	11/13/2018 10:36:04 AM

28 Endrin ketone

Chrom Perfect Calibration File



Expected retention time: 5.881 minutes  
 Search window: 0.02 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

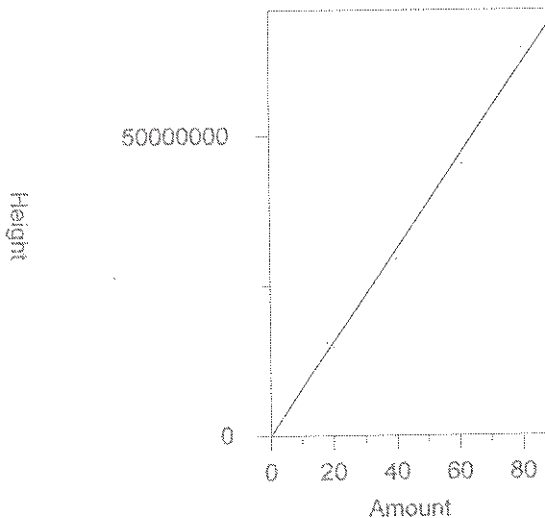
Single peak quantification by height

$$Y = 1202196 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9946568  
 Average error: 4.268%  
 Average CF: 1202196  
 RSD: 5.259%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1278217	1278217	6.324	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	2	2247938	1123969	-6.507	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	10	1.174065E+07	1174065	-2.340	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	20	2.343064E+07	1171532	-2.551	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	30	3.555872E+07	1185291	-1.406	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	40	5.120406E+07	1280102	6.480	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

29 DCB



Expected retention time: 6.677 minutes  
 Search window: 0.03 minutes  
 No retention time reference component  
 No response proxy component  
 Group number: 0  
 High alarm limit: 0.2  
 Low alarm limit: 0  
 Component constant: 0

Single peak quantification by height

$$Y = 775841.6 X + 0$$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9956638  
 Average error: 5.422%  
 Average CF: 775841.6  
 RSD: 6.891%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	1742450	871225	12.294	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
2	4	3031938	757984.5	-2.302	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
3	20	1.481757E+07	740878.5	-4.506	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
4	40	2.948091E+07	737022.8	-5.003	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
5	61	4.521773E+07	741274.3	-4.455	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01
6	80	6.453314E+07	806664.3	3.973	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.01

7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/02/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 19:24

Lab File ID: 05PEST18306001.003.RAW

Initial Calibration: 05PEST1830601

Lab Standard ID: PEMAA

Init. Calib Date(s): 11/02/18

11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
		FROM	TO			
Tetrachloro-m-xylene	2.56	2.54	2.58	20.54	20.10	2
alpha-BHC	2.97	2.95	2.99	10.10	10.00	1
gamma-BHC (Lindane)	3.21	3.19	3.23	10.08	10.00	1
beta-BHC	3.28	3.26	3.30	9.04	10.00	-10
4,4'-DDE	4.66	4.64	4.68	0.29		
Endrin	5.08	5.06	5.10	48.10	50.10	-4
4,4'-DDD	5.13	5.11	5.15	0.58		
4,4'-DDT	5.33	5.31	5.35	92.16	100.40	-8
Endrin aldehyde	5.55	5.53	5.57	0.38		
Methoxychlor	5.68	5.66	5.70	200.51	250.90	-20
Endrin ketone	6.05	6.03	6.07	0.65		
Decachlorobiphenyl	6.71	6.68	6.74	20.03	20.00	0

4,4'-DDT % breakdown: 1

Endrin % breakdown: 2

Combined % breakdown: 2.9

Compounds 12

7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/02/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 19:24

Lab File ID: 05PEST18306001B.003.RAW

Initial Calibration: 05PEST1830601B

Lab Standard ID: PEMAA

Init. Calib Date(s): 11/02/18

11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.37	2.35	2.39	21.57	20.10	7
alpha-BHC	2.78	2.77	2.81	10.84	10.00	8
gamma-BHC (Lindane)	3.05	3.03	3.07	10.94	10.00	9
beta-BHC	3.11	3.10	3.14	9.43	10.00	-6
4,4'-DDE	4.57	4.56	4.60	0.27		
Endrin	4.93	4.91	4.95	53.77	50.10	7
4,4'-DDD	5.02	5.01	5.05	0.48		
4,4'-DDT	5.25	5.24	5.28	104.06	100.40	4
Endrin aldehyde	5.34	5.33	5.37	0.46		
Methoxychlor	5.74	5.73	5.77	222.74	250.90	-11
Endrin ketone	5.90	5.89	5.93	0.78		
Decachlorobiphenyl	6.70	6.67	6.73	20.02	20.00	0

4,4'-DDT % breakdown: 1

Endrin % breakdown: 2

Combined % breakdown: 2.7

Compounds 12

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/02/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 22:24

Lab File ID: 05PEST18306001.017.RAW

Initial Calibration: 05PEST1830601

Lab Standard ID: ICMEXAA

Init. Calib Date(s): 11/02/18

11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Hcb	2.84	2.82	2.86	4.22	4.99	-15
Telodrin	4.06	4.04	4.08	4.93	5.05	-2
o,p-DDE	4.38	4.36	4.40	9.25	10.09	-8
o,p-DDD	4.80	4.78	4.82	8.90	10.14	-12
o,p-DDT	5.00	4.98	5.02	8.49	10.00	-15
<del>Kepona</del>	<del>5.12</del>	<del>5.10</del>	<del>5.14</del>	<del>4.65</del>	<del>50.22</del>	<del>-91</del>
Mirex	5.79	5.77	5.81	22.54	24.76	-9

Compounds 7

Ⓢ see in  
05pest18306001.024  
W 2300  
11/4/18

7E

### CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/02/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 22:24

Lab File ID: 05PEST18306001B.017.RAW

Initial Calibration: 05PEST1830601B

Lab Standard ID: ICMEXAA

Init. Calib Date(s): 11/02/18

11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Hcb	2.69	2.67	2.71	4.28	4.99	-14
Telodrin	3.80	3.78	3.82	5.01	5.05	-1
o,p-DDE	4.32	4.30	4.34	9.17	10.09	-9
o,p-DDD	4.74	4.72	4.76	8.78	10.14	-13
o,p-DDT	4.97	4.95	4.99	9.13	10.00	-9
<del>Kepona</del>	5.02	4.99	5.03	6.50	50.22	-87
Mirex	5.87	5.85	5.89	21.86	24.76	-12

Compounds 7

⑧ see mJ # 05pest18306001B.024

W-230  
11/4/18



7D

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/09/18

GC Column (1) : RTX-CLP ID: .32 (mm)

Time Analyzed: 18:25

Lab File ID: 05PEST18306007.025.RAW

Initial Calibration: 05PEST1830603

Lab Standard ID: PEMAA

Init. Calib Date(s): 11/09/18

11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
		FROM	TO			
Tetrachloro-m-xylene	2.55	2.53	2.57	22.01	20.10	10
alpha-BHC	2.96	2.94	2.98	11.08	10.00	11
gamma-BHC (Lindane)	3.20	3.18	3.22	11.04	10.00	10
beta-BHC	3.27	3.25	3.29	10.26	10.00	3
4,4'-DDE	4.66	4.63	4.67	0.61		
Endrin	5.07	5.05	5.09	56.47	50.10	13
4,4'-DDD	5.12	5.10	5.14	0.96		
4,4'-DDT	5.33	5.31	5.35	107.94	100.40	8
Endrin aldehyde	5.54	5.52	5.56	0.14		
Methoxychlor	5.68	5.65	5.69	253.21	250.90	1
Endrin ketone	6.05	6.02	6.06	0.57		
Decachlorobiphenyl	6.70	6.67	6.73	24.40	20.00	22

4,4'-DDT % breakdown: 1

Endrin % breakdown: 1

Combined % breakdown: 2.5

Compounds 12

7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/09/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 18:25

Lab File ID: 05PEST18306007B.025.RAW

Initial Calibration: 05PEST1830603B

Lab Standard ID: PEMAA

Init. Calib Date(s): 11/09/18

11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
		FROM	TO			
Tetrachloro-m-xylene	2.36	2.34	2.38	25.11	20.10	25
alpha-BHC	2.78	2.76	2.80	13.16	10.00	32
gamma-BHC (Lindane)	3.04	3.02	3.06	13.10	10.00	31
beta-BHC	3.11	3.09	3.13	11.43	10.00	14
4,4'-DDE	4.57	4.55	4.59	0.57		
Endrin	4.92	4.90	4.94	66.50	50.10	33
4,4'-DDD	5.02	5.00	5.04	0.76		
4,4'-DDT	5.25	5.23	5.27	135.82	100.40	35
Endrin aldehyde	5.33	5.31	5.35	0.27		
Methoxychlor	5.74	5.72	5.76	291.98	250.90	16
Endrin ketone	5.90	5.88	5.92	0.72		
Decachlorobiphenyl	6.69	6.66	6.72	25.62	20.00	28

4,4'-DDT % breakdown: 1

Endrin % breakdown: 1

Combined % breakdown: 2

Compounds 12

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/09/18

GC Column (1) : RTX-CLP ID: .32 (mm)

Time Analyzed: 19:54

Lab File ID: 05PEST18306007.032.RAW

Initial Calibration: 05PEST1830603

Lab Standard ID: ICTXXAA

Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Toxaphene	5.09	5.06	5.12	512.76	501.00	2
	5.23	5.20	5.26	506.81	501.00	1
	5.32	5.29	5.35	515.21	501.00	3
	5.48	5.45	5.51	509.47	501.00	2
	5.71	5.68	5.74	519.58	501.00	4
	5.78	5.75	5.81	508.68	501.00	2

Compounds 6

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/09/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 19:54

Lab File ID: 05PEST18306007B.032.RAW

Initial Calibration: 05PEST1830603B

Lab Standard ID: ICTXXAA

Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Toxaphene	4.67	4.64	4.70	468.64	501.00	-6
	4.90	4.87	4.93	473.54	501.00	-5
	5.07	5.04	5.10	477.95	501.00	-5
	5.34	5.31	5.37	485.45	501.00	-3
	5.39	5.36	5.42	476.60	501.00	-5
	5.69	5.66	5.72	480.17	501.00	-4

Compounds 6

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** ICTXX1824D      **ICTXXAA ID:** AA      **Batchnumber:** 1831299999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

**Analysis Report (A)**

Injected on : Nov 09, 2018 19:54:46  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306007.032.RAW  
 Calibration file : 05PEST1830603.CAL  
 Method file : 05PESTD1.MET

**Analysis Report (B)**

Injected on : Nov 09, 2018 19:54:46  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306007B.032.RAW  
 Calibration file : 05PEST1830603B.CAL  
 Method file : 05PESTD1B.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.04	3.08	3.10	3852.217	0.435797	4	77.82	2
3.40	3.42	3.46	5848.87	0.866574			4
+ 3.40	3.46	3.46	10495.76	1.555062			4
3.51	3.52	3.57	12979.6	1.837788			5
3.56	3.59	3.62	15345.42	3.23036			6
<b>Height Summation:</b>				<b>38026.107</b>			
<b>Amount Avg CF:</b>				<b>1.59263</b>	<b>Linear:</b>		

<b>Aroclor-1248</b>							
3.38	3.42	3.44	5848.87	0.867467	6	150.07	1
3.66	3.69	3.72	25157.56	6.824629			2
+ 3.85	3.86	3.91	17784.58	2.037946			3
3.85	3.90	3.91	4684.029	0.536746			3
4.21	4.22	4.27	161198.1	16.226703			4
4.39	4.41	4.45	383694.5	56.92366			5
E+ 4.71	4.71	4.77	1061769	208.056803			6
4.71	4.74	4.77	739586.6	144.9242			6
<b>Height Summation:</b>				<b>1320169.659</b>			
<b>Amount Avg CF:</b>				<b>37.717234</b>	<b>Linear:</b>		

<b>Aroclor-1254</b>							
4.39	4.41	4.45	383694.5	30.136033	6	81.84	1
4.62	4.62	4.68	575616.6	60.420035			2
4.71	4.74	4.77	739586.6	44.515845			3
4.93	4.96	4.99	1756496	141.910081			4
E 5.06	5.09	5.12	2451988	287.791749			5
E 5.27	5.32	5.33	3488304	254.910845			6
<b>Height Summation:</b>				<b>9395685.7</b>			
<b>Amount Avg CF:</b>				<b>136.614098</b>	<b>Linear:</b>		

<b>Aroclor-1260</b>							
4.85	4.89	4.91	1580052	135.10896	6	38.56	1
5.06	5.09	5.12	2451988	155.239518			2
E 5.27	5.32	5.33	3488304	209.910675			3
E 5.53	5.57	5.59	2540398	273.436423			4
5.74	5.78	5.80	3552567	186.817941			5
5.94	5.94	6.00	892464.4	78.640024			6
<b>Height Summation:</b>				<b>14505773.4</b>			
<b>Amount Avg CF:</b>				<b>173.197257</b>	<b>Linear:</b>		

<b>Chlordane</b>							
3.50	3.52	3.56	12979.6	1.174461	6	134.53	1
3.94	3.96	4.00	57601.53	5.177423			2
4.29	4.30	4.35	511554.2	71.008008			3
+ 4.45	4.46	4.51	415023.1	12.465672			4
4.45	4.51	4.51	575975.3	17.300047			4
4.55	4.57	4.61	731167.4	15.879969			5
5.15	5.17	5.22	1684524	153.037029			6
<b>Height Summation:</b>				<b>3573802.03</b>			
<b>Amount Avg CF:</b>				<b>43.929489</b>	<b>Linear:</b>		

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.67	2.72	9590.152	0.499101	5	69.77	1
3.11	3.14	3.17	16752.88	1.510371			3
+ 3.11	3.17	3.17	28339.98	2.555016			3
3.27	3.30	3.33	32459.74	0.696294			4
3.37	3.39	3.43	42396.18	1.815155			5
3.46	3.50	3.52	49313.8	3.207662			6

<b>Height Summation:</b>				<b>150512.752</b>			
<b>Amount Avg CF:</b>				<b>1.545717</b>	<b>Linear:</b>		
<b>Aroclor-1221</b>							
2.54	2.54	2.58	14616.34	1.316496	1		1
<b>Height Summation:</b>				<b>14616.34</b>			
<b>Amount Avg CF:</b>				<b>1.316496</b>	<b>Linear:</b>		

<b>Aroclor-1248</b>							
3.27	3.30	3.33	32459.74	1.375	5	106.52	1
3.53	3.56	3.59	144385	6.44198			2
+ 3.53	3.58	3.59	146591.8	6.54044			2
+ 3.85	3.86	3.91	506315.3	21.696566			4
3.85	3.90	3.91	688666.6	29.510664			4
4.11	4.14	4.17	1473742	45.696024			5
4.30	4.36	4.36	2441356	96.174196			6

<b>Height Summation:</b>				<b>4780609.34</b>			
<b>Amount Avg CF:</b>				<b>35.839573</b>	<b>Linear:</b>		
<b>Aroclor-1254</b>							
4.11	4.14	4.17	1473742	47.310763	5	47.31	1
4.27	4.29	4.33	1605666	45.668752			2
4.64	4.67	4.70	6537470	128.682248			3
4.81	4.83	4.87	4666220	128.007949			4
+ 4.81	4.85	4.87	3904877	107.122102			4
5.21	5.24	5.27	3227906	83.331853			6

<b>Height Summation:</b>				<b>17511004</b>			
<b>Amount Avg CF:</b>				<b>86.600313</b>	<b>Linear:</b>		
<b>Aroclor-1260</b>							
+ 4.79	4.80	4.85	5011050	143.632996	6	51.63	1
4.79	4.83	4.85	4666220	133.749046			1
4.95	4.96	5.01	5271414	126.5807			2
5.21	5.24	5.27	3227906	74.629592			3
E 5.48	5.50	5.54	7445448	273.63504			4
+ 5.65	5.66	5.71	5977164	107.021354			5
E 5.65	5.69	5.71	12251690	219.366985			5
5.90	5.95	5.96	2805687	84.623153			6

<b>Height Summation:</b>				<b>35668365</b>			
<b>Amount Avg CF:</b>				<b>152.09742</b>	<b>Linear:</b>		

# Eurofins Lancaster Laboratories - Multiple Component Data Summary

**Sample Name:** ICTXX1824D      **ICTXXAA ID:** AA      **Batchnumber:** 1831299999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 09, 2018 19:54:46  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306007.032.RAW  
 Calibration file : 05PEST1830603.CAL  
 Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.09	5.12	2451988	512.758985	6	0.93	1
5.20	5.23	5.26	3797906	506.807734			2
5.29	5.32	5.35	3488304	515.205826			3
5.45	5.48	5.51	3508634	509.474728			4
5.68	5.71	5.74	3091600	519.580716			5
5.75	5.78	5.81	3552567	508.68399			6

**Height Summation:** 19890999  
**Amount Avg CF:** 512.08533      Linear:

### Analysis Report (B)

Injected on : Nov 09, 2018 19:54:46  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306007B.032.RAW  
 Calibration file : 05PEST1830603B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.23	3.26	3.29	96215.48	2.352039	4	101.59	1
4.08	4.08	4.14	1393530	50.138269			3
+ 4.08	4.14	4.14	1473742	53.024242			3
4.27	4.29	4.33	1605666	12.102613			4
4.39	4.39	4.45	1710354	17.05805			5
+ 4.39	4.45	4.45	1674065	16.696125			5

**Height Summation:** 4805765.48  
**Amount Avg CF:** 20.412742      Linear:

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.67	4.70	6537470	468.644549	6	1.20	1
4.87	4.90	4.93	6820392	473.537301			2
+ 4.87	4.92	4.93	5807375	403.203904			2
+ 5.04	5.05	5.10	8435576	323.168642			3
5.04	5.07	5.10	12475720	477.947385			3
5.31	5.34	5.37	13811770	185.461701			4
5.36	5.39	5.42	7963872	476.602614			5
5.66	5.69	5.72	12251690	480.17196			6

**Height Summation:** 59860914  
**Amount Avg CF:** 477.059252      Linear:

### Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		2.99	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0	E	5.11	4	30	
Aroclor-1254			0	0	E	**44.81	4	40	
Aroclor-1260			0	0	E	12.97	4	40	
Chlordane			0.5	0.16		**73.10	4	40	
Toxaphene			1	0.3		7.08	4	40	

Units: ug/l

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/09/18

GC Column (1) : RTX-CLP ID: .32 (mm)

Time Analyzed: 21:24

Lab File ID: 05PEST18306007.039.RAW

Initial Calibration: 05PEST1830603

Lab Standard ID: ICCHXAA

Init. Calib Date(s): 11/09/18

11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Chlordane	3.53	3.50	3.56	104.97	100.20	5
	3.97	3.94	4.00	113.10	100.20	13
	4.33	4.29	4.35	97.84	100.20	-2
	4.49	4.45	4.51	104.05	100.20	4
	4.59	4.55	4.61	82.34	100.20	-18
	5.19	5.16	5.22	98.28	100.20	-2

Compounds 6

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/09/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 21:24

Lab File ID: 05PEST18306007B.039.RAW

Initial Calibration: 05PEST1830603B

Lab Standard ID: ICCHXAA

Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Chlordane	3.26	3.23	3.29	103.45	100.20	3
	3.77	3.74	3.80	113.91	100.20	14
	4.11	4.08	4.14	96.71	100.20	-3
	4.30	4.27	4.33	100.74	100.20	1
	4.42	4.39	4.45	112.75	100.20	13
	5.11	5.08	5.14	95.16	100.20	-5

Compounds 6



# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** ICCHX1824F      **ICCHXAA ID: AA**      **Batchnumber: 1831299999**  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

**Analysis Report (A)**

Injected on : Nov 09, 2018 21:24:36  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306007.039.RAW  
 Calibration file : 05PEST1830603.CAL  
 Method file : 05PESTDI.MET

**Analysis Report (B)**

Injected on : Nov 09, 2018 21:24:36  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306007B.039.RAW  
 Calibration file : 05PEST1830603B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
+ 3.04	3.04	3.10	7293.358	0.825089	5	142.84	2
3.04	3.08	3.10	98875.15	11.185623			2
3.20	3.25	3.26	32638.95	12.553273			3
3.40	3.43	3.46	32580.64	4.82718			4
3.51	3.53	3.57	1160100	164.259156			5
E 3.56	3.60	3.62	1836706	386.644423			6
<b>Height Summation:</b>			<b>3160900.74</b>				
<b>Amount Avg CF:</b>			<b>115.893931</b>	<b>Linear:</b>			

<b>Aroclor-1221</b>							
2.66	2.70	2.70	7719.903	2.152669	1		1
<b>Height Summation:</b>			<b>7719.903</b>				
<b>Amount Avg CF:</b>			<b>2.152669</b>	<b>Linear:</b>			

<b>Aroclor-1248</b>							
3.38	3.43	3.44	32580.64	4.832152	R	102.10	1
3.66	3.69	3.72	270817.3	73.466086			2
3.85	3.87	3.91	54469.2	6.241658			3
4.21	4.24	4.27	183693.7	18.491181			4
4.39	4.42	4.45	454566.4	67.437983			5
4.71	4.72	4.77	68354.56	13.39428			6
+ 4.71	4.76	4.77	226764.8	44.435239			6
<b>Height Summation:</b>			<b>1064481.8</b>				
<b>Amount Avg CF:</b>			<b>30.64389</b>	<b>Linear:</b>			

<b>Aroclor-1254</b>							
4.39	4.42	4.45	454566.4	35.702435	6	100.58	1
4.62	4.66	4.68	103913.9	10.907402			2
4.71	4.72	4.77	68354.56	4.114273			3
+ 4.71	4.76	4.77	226764.8	13.649012			3
4.93	4.95	4.99	187074.2	15.11402			4
5.06	5.10	5.12	440650.2	51.719458			5
5.27	5.28	5.33	13159.05	0.961609			6
<b>Height Summation:</b>			<b>1267718.31</b>				
<b>Amount Avg CF:</b>			<b>19.753199</b>	<b>Linear:</b>			

<b>Aroclor-1260</b>							
4.85	4.91	4.91	98054.51	8.384561	5	147.74	1
5.06	5.10	5.12	440650.2	27.898311			2
5.27	5.28	5.33	13159.05	0.791853			3
5.53	5.56	5.59	18863.29	2.030355			4
5.74	5.75	5.80	5977.584	0.314392			5
<b>Height Summation:</b>			<b>576704.634</b>				
<b>Amount Avg CF:</b>			<b>7.883895</b>	<b>Linear:</b>			

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.66	2.72	41944.84	2.182936	5	173.71	1
3.11	3.13	3.17	411374.8	37.087857			3
3.27	3.32	3.33	21127.99	0.453217			4
E 3.37	3.38	3.43	7055068	302.056533			5
+ 3.46	3.47	3.52	740550.9	48.169828			6
3.46	3.50	3.52	431853.9	28.090342			6
<b>Height Summation:</b>			<b>7961369.53</b>				
<b>Amount Avg CF:</b>			<b>73.974177</b>	<b>Linear:</b>			

<b>Aroclor-1221</b>							
2.63	2.66	2.67	41944.84	6.181786	1		2
<b>Height Summation:</b>			<b>41944.84</b>				
<b>Amount Avg CF:</b>			<b>6.181786</b>	<b>Linear:</b>			

<b>Aroclor-1248</b>							
3.27	3.32	3.33	21127.99	0.894985	5	175.55	1
3.53	3.56	3.59	39338.11	1.755136			2
3.75	3.77	3.81	4433260	158.591711			3
3.85	3.88	3.91	468206.2	20.063519			4
+ 3.85	3.91	3.91	542388.8	23.242384			4
4.11	4.16	4.17	360991.3	11.193185			5
<b>Height Summation:</b>			<b>5322923.6</b>				
<b>Amount Avg CF:</b>			<b>38.499707</b>	<b>Linear:</b>			

<b>Aroclor-1254</b>							
4.11	4.16	4.17	360991.3	11.588714	6	162.74	1
E 4.27	4.30	4.33	13365200	380.136343			2
4.64	4.68	4.70	454500.9	8.946305			3
4.81	4.83	4.87	532841.8	14.617396			4
5.07	5.11	5.13	3576444	133.448288			5
+ 5.21	5.22	5.27	154750.9	3.99506			6
5.21	5.25	5.27	118465.6	3.058316			6
<b>Height Summation:</b>			<b>18408443.6</b>				
<b>Amount Avg CF:</b>			<b>91.965894</b>	<b>Linear:</b>			

<b>Aroclor-1260</b>							
+ 4.79	4.79	4.85	470140.1	13.475745	5	138.38	1
4.79	4.83	4.85	532841.8	15.27298			1
4.95	4.98	5.01	1627916	39.090602			2
+ 5.21	5.22	5.27	154750.9	3.57786			3
5.21	5.25	5.27	118465.6	2.73894			3
5.48	5.53	5.54	49744.41	1.828206			4
5.65	5.68	5.71	12779.98	0.228826			5
<b>Height Summation:</b>			<b>2341747.79</b>				
<b>Amount Avg CF:</b>			<b>11.831911</b>	<b>Linear:</b>			

# Eurofins Lancaster Laboratories - Multiple Component Data Summary

**Sample Name:** ICCHX1824F      **ICCHXAA ID:** AA      **Batchnumber:** 1831299999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 09, 2018 21:24:36  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306007.039.RAW  
 Calibration file : 05PEST1830603.CAL  
 Method file : 05PESTD1.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.50	3.53	3.56	1160100	104.971799	6	10.31	1
3.94	3.97	4.00	1258262	113.096904			2
4.29	4.33	4.35	704857.6	97.840139			3
4.45	4.49	4.51	3464036	104.046102			4
4.55	4.59	4.61	3790998	82.335362			5
+ 5.15	5.16	5.22	96142.85	8.734465			6
5.15	5.19	5.22	1081813	98.281442			6

**Height Summation:** 11460066.6  
**Amount Avg CF:** 100.095291      **Linear:**

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.10	5.12	440650.2	92.148636	3	160.18	1
5.45	5.48	5.51	27800.17	4.036752			4
+ 5.45	5.50	5.51	40804.37	5.92504			4
5.75	5.75	5.81	5977.584	0.855917			6

**Height Summation:** 474427.954  
**Amount Avg CF:** 32.347101      **Linear:**

### Analysis Report (B)

Injected on : Nov 09, 2018 21:24:36  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306007B.039.RAW  
 Calibration file : 05PEST1830603B.CAL  
 Method file : 05PESTD1B.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
+ 3.23	3.24	3.29	132930.6	3.249559	6	7.67	1
3.23	3.26	3.29	4231794	103.448452			1
3.74	3.77	3.80	4433260	113.911025			2
4.08	4.11	4.14	2687821	96.705985			3
4.27	4.30	4.33	13365200	100.739407			4
4.39	4.42	4.45	11304860	112.747924			5
5.08	5.11	5.14	3576444	95.158619			6

**Height Summation:** 39599379  
**Amount Avg CF:** 103.785235      **Linear:**

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.68	4.70	454500.9	32.581315	5	65.96	1
4.87	4.90	4.93	250158	17.368378			2
+ 4.87	4.92	4.93	341577.7	23.715614			2
5.04	5.06	5.10	415624.4	15.922656			3
5.31	5.34	5.37	596492	20.965311			4
5.66	5.68	5.72	12779.98	0.500877			6
+ 5.66	5.72	5.72	14873.64	0.582932			6

**Height Summation:** 1729555.28  
**Amount Avg CF:** 17.467707      **Linear:**

### Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0	E	** 44.16	4	40	
Aroclor-1221			0	0		** 96.69	3	5	
Aroclor-1248			0	0		22.72	4	30	
Aroclor-1254			0	0		** 129.28	4	40	
Aroclor-1260			0	0		** 40.05	4	40	
Chlordane			0.5	0.16		3.62	4	40	
Toxaphene			1	0.3		** 59.74	4	40	

Units: ug/l

7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/12/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 20:30

Lab File ID: 05PEST18306008.010.RAW

Initial Calibration:

Lab Standard ID: PEMMK

Init. Calib Date(s): 11/12/18

11/12/18

Calibration: 05PEST1830604

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.54	2.52 2.56	21.33	20.10	6
alpha-BHC	2.95	2.93 2.97	10.64	10.00	6
gamma-BHC (Lindane)	3.20	3.18 3.22	10.77	10.00	8
beta-BHC	3.27	3.25 3.29	9.60	10.00	-4
4,4'-DDE	4.65	4.63 4.67	0.47		
Endrin	5.07	5.04 5.08	52.37	50.10	5
4,4'-DDD	5.11	5.09 5.13	0.69		
4,4'-DDT	5.32	5.30 5.34	105.92	100.40	5
Endrin aldehyde	5.54	5.52 5.56	0.18		
Methoxychlor	5.67	5.65 5.69	246.37	250.90	-2
Endrin ketone	6.04	6.02 6.06	0.50		
Decachlorobiphenyl	6.70	6.67 6.73	23.33	20.00	17

4,4'-DDT % breakdown: 1

Endrin % breakdown: 1

Combined % breakdown: 2.1

Compounds 12

## 7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/12/18

GC Column (2): RTXCLPII ID: .32 (mm)

Time Analyzed: 20:30

Lab File ID: 05PEST18306008B.010.RAW

Initial Calibration:

Lab Standard ID: PEMMK

Init. Calib Date(s): 11/12/18

11/12/18

Calibration: 05PEST1830604B

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.35	2.33 2.37	23.65	20.10	18
alpha-BHC	2.77	2.75 2.79	10.77	10.00	8
gamma-BHC (Lindane)	3.03	3.01 3.05	10.95	10.00	9
beta-BHC	3.09	3.07 3.11	10.46	10.00	5
4,4'-DDE	4.55	4.53 4.57	1.48		
Endrin	4.91	4.89 4.93	59.33	50.10	18
4,4'-DDD	5.00	4.98 5.02	0.51		
4,4'-DDT	5.23	5.21 5.25	122.58	100.40	22
Endrin aldehyde	5.32	5.30 5.34	0.36		
Methoxychlor	5.72	5.70 5.74	267.14	250.90	6
Endrin ketone	5.88	5.86 5.90	0.72		
Decachlorobiphenyl	6.68	6.65 6.71	23.02	20.00	15

4,4'-DDT % breakdown: 1

Endrin % breakdown: 2

Combined % breakdown: 2.8

Compounds 12

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/12/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 21:59

Lab File ID: 05PEST18306008.017.RAW

Initial Calibration:

Lab Standard ID: ICMAXAA

Init. Calib Date(s): 11/12/18

11/12/18

Calibration: 05PEST1830604

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT	NOM AMOUNT	%D
Tetrachloro-m-xylene	2.54	2.52 2.56	43.32	40.06	8
alpha-BHC	2.95	2.93 2.97	21.60	20.04	8
gamma-BHC (Lindane)	3.19	3.18 3.22	21.46	19.98	7
beta-BHC	3.26	3.25 3.29	19.91	20.10	-1
delta-BHC	3.41	3.39 3.43	22.05	20.16	9
Heptachlor	3.59	3.57 3.61	20.81	20.12	3
Aldrin	3.85	3.83 3.87	20.86	20.10	4
Heptachlor epoxide	4.37	4.35 4.39	19.59	20.10	-3
gamma-Chlordane	4.48	4.46 4.50	21.34	20.04	6
alpha-Chlordane	4.58	4.57 4.61	20.76	20.06	3
4,4'-DDE	4.65	4.63 4.67	21.89	19.98	10
Endosulfan I	4.69	4.68 4.72	20.48	20.06	2
Dieldrin	4.88	4.87 4.91	20.49	19.94	3
Endrin	5.06	5.04 5.08	22.12	19.64	13
4,4'-DDD	5.11	5.09 5.13	21.88	20.00	9
Endosulfan II	5.23	5.21 5.25	21.02	19.70	7
4,4'-DDT	5.32	5.30 5.34	22.24	20.00	11
Endrin aldehyde	5.53	5.52 5.56	20.81	20.14	3
Methoxychlor	5.67	5.65 5.69	98.70	99.08	0
Endosulfan sulfate	5.84	5.82 5.86	20.43	20.10	2
Endrin ketone	6.03	6.02 6.06	19.85	19.76	0
Decachlorobiphenyl	6.69	6.67 6.73	43.47	40.04	9

Compounds 22

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/12/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 21:59

Lab File ID: 05PEST18306008B.017.RAW

Initial Calibration:

Lab Standard ID: ICMAAAA

Init. Calib Date(s): 11/12/18

11/12/18

Calibration: 05PEST1830604B

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT	NOM AMOUNT	%D
Tetrachloro-m-xylene	2.36	2.33 2.37	43.06	40.06	7
alpha-BHC	2.77	2.75 2.79	21.08	20.04	5
gamma-BHC (Lindane)	3.03	3.01 3.05	20.81	19.98	4
beta-BHC	3.10	3.07 3.11	21.52	20.10	7
delta-BHC	3.33	3.30 3.34	20.84	20.16	3
Heptachlor	3.37	3.35 3.39	22.80	20.12	13
Aldrin	3.63	3.61 3.65	19.85	20.10	-1
Heptachlor epoxide	4.13	4.10 4.14	20.75	20.10	3
gamma-Chlordane	4.29	4.27 4.31	22.77	20.04	14
alpha-Chlordane	4.41	4.39 4.43	22.35	20.06	11
Endosulfan I	4.45	4.43 4.47	21.92	20.06	9
4,4'-DDE	4.55	4.53 4.57	20.55	19.98	3
Dieldrin	4.67	4.65 4.69	21.00	19.94	5
Endrin	4.91	4.89 4.93	23.16	19.64	18
4,4'-DDD	5.01	4.98 5.02	22.34	20.00	12
Endosulfan II	5.07	5.05 5.09	21.88	19.70	11
4,4'-DDT	5.24	5.21 5.25	22.71	20.00	14
Endrin aldehyde	5.32	5.30 5.34	21.55	20.14	7
Endosulfan sulfate	5.52	5.50 5.54	21.45	20.10	7
Methoxychlor	5.73	5.70 5.74	103.34	99.08	4
Endrin ketone	5.89	5.86 5.90	20.52	19.76	4
Decachlorobiphenyl	6.68	6.65 6.71	43.26	40.04	8

Compounds 22

7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/14/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 10:23

Lab File ID: 05PEST18306010.003.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: PEMAA

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.54	2.52 2.56	21.75	20.10	8
alpha-BHC	2.95	2.93 2.97	10.60	10.00	6
gamma-BHC (Lindane)	3.19	3.18 3.22	10.59	10.00	6
beta-BHC	3.26	3.25 3.29	9.66	10.00	-3
4,4'-DDE	4.65	4.63 4.67	0.57		
Endrin	5.06	5.04 5.08	53.18	50.10	6
4,4'-DDD	5.11	5.09 5.13	0.84		
4,4'-DDT	5.32	5.30 5.34	108.38	100.40	8
Endrin aldehyde	5.53	5.52 5.56	0.18		
Methoxychlor	5.67	5.65 5.69	259.13	250.90	3
Endrin ketone	6.03	6.02 6.06	0.57		
Decachlorobiphenyl	6.69	6.67 6.73	23.79	20.00	19

4,4'-DDT % breakdown: 1

Endrin % breakdown: 1

Combined % breakdown: 2.3

Compounds 12

7D

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/14/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 10:23

Lab File ID: 05PEST18306010B.003.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: PEMAA

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.36	2.33 2.37	24.16	20.10	20
alpha-BHC	2.77	2.75 2.79	11.02	10.00	10
gamma-BHC (Lindane)	3.03	3.01 3.05	11.27	10.00	13
beta-BHC	3.10	3.07 3.11	10.88	10.00	9
4,4'-DDE	4.55	4.53 4.57	1.56		
Endrin	4.91	4.89 4.93	61.48	50.10	23
4,4'-DDD	5.01	4.98 5.02	0.70		
4,4'-DDT	5.24	5.21 5.25	127.72	100.40	27
Endrin aldehyde	5.32	5.30 5.34	0.28		
Methoxychlor	5.73	5.70 5.74	291.27	250.90	16
Endrin ketone	5.88	5.86 5.90	0.66		
Decachlorobiphenyl	6.68	6.65 6.71	24.17	20.00	21

4,4'-DDT % breakdown: 1

Endrin % breakdown: 1

Combined % breakdown: 2

Compounds 12



7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/14/18

GC Column (1) : RTX-CLP ID: .32 (mm)

Time Analyzed: 11:53

Lab File ID: 05PEST18306010.010.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: ICKEPAA

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Kepone	5.10	5.08	5.12	47.19	49.65	-5

Compounds 1

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/14/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 11:53

Lab File ID: 05PEST18306010B.010.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: ICKEPAA

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Kepone	4.99	4.97	5.01	45.87	49.65	-8

Compounds 1

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:  
 Lab Code: Case No.: SAS No.: SDG No.:  
 Instrument: H9190A Date Analyzed: 11/14/18  
 GC Column (1): RTX-CLP ID: .32 (mm) Time Analyzed: 20:50  
 Lab File ID: 05PEST18306010.044.RAW Initial Calibration: 05PEST1830605  
 Lab Standard ID: MIXA3FA Init. Calib Date(s): 11/14/18 11/14/18  
 Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Tetrachloro-m-xylene	2.54	2.52	2.56	19.38	20.03	-3
alpha-BHC	2.95	2.93	2.97	4.93	5.00	-1
gamma-BHC (Lindane)	3.20	3.18	3.22	4.95	5.00	-1
beta-BHC	3.26	3.25	3.29	4.78	5.00	-4
delta-BHC	3.41	3.39	3.43	5.05	5.00	1
Heptachlor	3.59	3.57	3.61	4.86	5.06	-4
Aldrin	3.85	3.83	3.87	4.91	5.06	-3
Heptachlor epoxide	4.37	4.35	4.39	4.96	5.06	-2
gamma-Chlordane	4.48	4.46	4.50	4.85	5.06	-4
alpha-Chlordane	4.59	4.57	4.61	4.88	5.06	-4
4,4'-DDE	4.65	4.63	4.67	10.49	10.06	4
Endosulfan I	4.70	4.68	4.72	4.84	5.06	-4
Dieldrin	4.88	4.87	4.91	10.16	10.06	1
Endrin	5.06	5.04	5.08	9.94	10.00	-1
4,4'-DDD	5.11	5.09	5.13	10.67	10.00	7
Endosulfan II	5.23	5.21	5.25	9.97	10.06	-1
4,4'-DDT	5.32	5.30	5.34	10.08	10.00	1
Endrin aldehyde	5.53	5.52	5.56	9.89	10.00	-1
Methoxychlor	5.67	5.65	5.69	52.07	50.13	4
Endosulfan sulfate	5.84	5.82	5.86	9.93	9.88	1
Endrin ketone	6.04	6.02	6.06	9.96	10.00	0
Decachlorobiphenyl	6.69	6.67	6.73	21.10	20.02	5

Compounds 22

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/14/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 20:50

Lab File ID: 05PEST18306010B.044.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: MIXA3FA

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Tetrachloro-m-xylene	2.36	2.33	2.37	20.25	20.03	1
alpha-BHC	2.77	2.75	2.79	4.70	5.00	-6
gamma-BHC (Lindane)	3.03	3.01	3.05	4.78	5.00	-4
beta-BHC	3.10	3.07	3.11	4.79	5.00	-4
delta-BHC	3.32	3.30	3.34	4.79	5.00	-4
Heptachlor	3.37	3.35	3.39	4.88	5.06	-4
Aldrin	3.63	3.61	3.65	4.72	5.06	-7
Heptachlor epoxide	4.13	4.10	4.14	4.89	5.06	-3
gamma-Chlordane	4.29	4.27	4.31	4.83	5.06	-5
alpha-Chlordane	4.41	4.39	4.43	4.85	5.06	-4
Endosulfan I	4.45	4.43	4.47	4.91	5.06	-3
4,4'-DDE	4.55	4.53	4.57	9.89	10.06	-2
Dieldrin	4.67	4.65	4.69	10.13	10.06	1
Endrin	4.91	4.89	4.93	9.96	10.00	0
4,4'-DDD	5.01	4.98	5.02	10.05	10.00	0
Endosulfan II	5.07	5.05	5.09	9.99	10.06	-1
4,4'-DDT	5.24	5.21	5.25	9.77	10.00	-2
Endrin aldehyde	5.32	5.30	5.34	9.98	10.00	0
Endosulfan sulfate	5.52	5.50	5.54	9.82	9.88	-1
Methoxychlor	5.73	5.70	5.74	51.60	50.13	3
Endrin ketone	5.89	5.86	5.90	9.95	10.00	-1
Decachlorobiphenyl	6.68	6.65	6.71	20.00	20.02	0

Compounds 22

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/14/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 21:03

Lab File ID: 05PEST18306010.045.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: MIXE4AR

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Hcb	2.82	2.81	2.85	5.53	5.00	11
Telodrin	4.04	4.03	4.07	5.90	5.05	17
o,p-DDE	4.36	4.35	4.39	12.33	10.10	22
o,p-DDD	4.78	4.77	4.81	12.33	10.00	23
o,p-DDT	4.98	4.97	5.01	11.75	10.00	17
Kepone	5.10	5.08	5.12	3.75	50.25	-93
Mirex	5.78	5.76	5.80	30.93	25.10	23

Compounds 7

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/14/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 21:03

Lab File ID: 05PEST18306010B.045.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: MIXE4AR

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Hcb	2.67	2.66	2.70	6.75	5.00	35
Telodrin	3.77	3.76	3.80	7.06	5.05	40
o,p-DDE	4.30	4.29	4.33	14.84	10.10	47
o,p-DDD	4.71	4.70	4.74	14.99	10.00	50
o,p-DDT	4.95	4.94	4.98	14.67	10.00	47
Kepone	4.99	4.97	5.01	6.83	50.25	-86
Mirex	5.85	5.83	5.87	37.48	25.10	49

Compounds 7

7E

### CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/14/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 21:16

Lab File ID: 05PEST18306010.046.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: TOXA4ZR

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Toxaphene	5.09	5.06	5.12	537.19	504.25	7 (L)
	5.22	5.20	5.26	555.87	504.25	10
	5.31	5.29	5.35	560.23	504.25	11
	5.47	5.45	5.51	560.62	504.25	11
	5.71	5.68	5.74	534.71	504.25	6 (L)
	5.77	5.75	5.81	560.22	504.25	11

Compounds 6

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/14/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 21:16

Lab File ID: 05PEST18306010B.046.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: TOXA4ZR

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Toxaphene	4.65	4.64	4.70	537.57	504.25	7
	4.91	4.87	4.93	464.86	504.25	-8
	5.06	5.04	5.10	566.18	504.25	12
	5.32	5.31	5.37	567.62	504.25	13
	5.38	5.36	5.42	557.96	504.25	11
	5.68	5.66	5.72	562.68	504.25	12

Compounds 6



# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** TOXA41824E      TOXA4ZR    ID: ZR    **Batchnumber:** 1831799999  
**Sample Amount:** 1      Total Volume: 1    ml    Analyst: 2306    SDG:      State:  
**Analyses:** 00177

## Analysis Report (A)

Injected on : Nov 14, 2018 21:16:03  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.046.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.04	3.08	3.10	4813.457	0.54454	4	66.06	2
3.40	3.46	3.46	15405.27	2.28246			4
3.51	3.52	3.57	33576.17	4.754067			5
3.56	3.60	3.62	21717.11	4.571662			6

**Height Summation:** 75512.007  
**Amount Avg CF:** 3.038182    Linear:

<b>Aroclor-1248</b>							
3.38	3.39	3.44	7090.647	1.051639	6	148.42	1
3.66	3.68	3.72	30180.7	8.187283			2
3.85	3.85	3.91	16875.38	1.93376			3
4.21	4.22	4.27	177493.3	17.867029			4
+ 4.21	4.26	4.27	420328.1	42.311537			4
4.39	4.41	4.45	426770.9	63.314334			5
4.71	4.74	4.77	822517.8	161.174817			6

**Height Summation:** 1480928.727  
**Amount Avg CF:** 42.25481    Linear:

<b>Aroclor-1254</b>							
4.39	4.41	4.45	426770.9	33.519328	6	81.96	1
4.62	4.62	4.68	623344.8	65.429862			2
4.71	4.74	4.77	822517.8	49.507488			3
4.93	4.96	4.99	1922175	155.295549			4
E 5.06	5.09	5.12	2716574	318.846414			5
E 5.27	5.31	5.33	3793156	277.188169			6

**Height Summation:** 10304538.5  
**Amount Avg CF:** 149.964468    Linear:

<b>Aroclor-1260</b>							
4.85	4.89	4.91	1715826	146.718884	5	27.44	1
5.06	5.09	5.12	2716574	171.990906			2
E 5.27	5.31	5.33	3793156	228.255318			3
E 5.53	5.56	5.59	2753282	296.350249			4
E 5.74	5.77	5.80	3912498	205.778581			5

**Height Summation:** 14891336  
**Amount Avg CF:** 209.818788    Linear:

<b>Chlordane</b>							
3.50	3.52	3.56	33576.17	3.038144	6	130.54	1
3.94	3.96	4.00	73827.51	6.63587			2
4.29	4.30	4.35	576195.2	79.98072			3
+ 4.45	4.45	4.51	456021.5	13.697103			4
4.45	4.50	4.51	646878.2	19.429693			4
4.55	4.57	4.61	831850.1	18.066662			5
5.15	5.16	5.22	1821791	165.507574			6

**Height Summation:** 3984118.18  
**Amount Avg CF:** 48.776444    Linear:

## Analysis Report (B)

Injected on : Nov 14, 2018 21:16:03  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.046.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
+ 3.11	3.13	3.17	36897.25	3.326504	3	24.19	3
3.11	3.15	3.17	19378.02	1.747042			3
3.27	3.29	3.33	67928.13	1.457127			4
3.37	3.38	3.43	54506.49	2.333647			5

**Height Summation:** 141812.64  
**Amount Avg CF:** 1.845939    Linear:

<b>Aroclor-1248</b>							
3.27	3.29	3.33	67928.13	2.877446	5	105.18	1
3.53	3.57	3.59	208293	9.293343			2
3.85	3.89	3.91	797962.1	34.194182			4
4.11	4.12	4.17	1696872	52.614571			5
4.30	4.34	4.36	2921318	115.081705			6

**Height Summation:** 5692373.23  
**Amount Avg CF:** 42.812249    Linear:

<b>Aroclor-1254</b>							
4.11	4.12	4.17	1696872	54.473788	6	139.70	1
4.27	4.27	4.33	2004275	57.006088			2
4.64	4.65	4.70	7498994	147.608694			3
4.81	4.82	4.87	5480624	150.349413			4
E 5.07	5.13	5.13	23800120	888.056757			5
5.21	5.23	5.27	3662359	94.547723			6
+ 5.21	5.26	5.27	9532326	246.087213			6

**Height Summation:** 44143244  
**Amount Avg CF:** 232.007077    Linear:

<b>Aroclor-1260</b>							
4.79	4.82	4.85	5480624	157.092514	5	46.45	1
+ 4.95	4.95	5.01	6121032	146.982292			2
4.95	4.99	5.01	5911308	141.94626			2
5.21	5.23	5.27	3662359	84.6742			3
E+ 5.21	5.26	5.27	9532326	220.388575			3
E 5.65	5.68	5.71	14357020	257.063001			5
5.90	5.94	5.96	3179341	95.893042			6

**Height Summation:** 32590652  
**Amount Avg CF:** 147.333803    Linear:

<b>Chlordane</b>							
3.23	3.25	3.29	49385.54	1.207256	5	187.05	1
+ 3.23	3.29	3.29	67928.13	1.660539			L: 7.106876
4.08	4.12	4.14	1696872	61.052309			L: 7.506055
4.27	4.27	4.33	2004275	15.107105			L: 59.25722
4.39	4.43	4.45	1984850	19.795709			L: 18.46999
E 5.08	5.13	5.14	23800120	633.250948			L: 22.12185

**Height Summation:** 29535502.54  
**Amount Avg CF:** 146.082665    Linear:

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** TOXA41824E      TOXA4ZR ID: ZR      **Batchnumber:** 1831799999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 14, 2018 21:16:03  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.046.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD1.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.09	5.12	2716574	568.089129	6	0.76	
L: 537.1863							
5.20	5.22	5.26	4165544	555.866816			2
5.29	5.31	5.35	3793156	560.231009			3
5.45	5.47	5.51	3860885	560.623689			4
5.68	5.71	5.74	3361149	564.881681	L: 534.7116		5
5.75	5.77	5.81	3912498	560.221691			6

**Height Summation:** 21809806  
**Amount Avg CF:** 561.652336      Linear:

### Analysis Report (B)

Injected on : Nov 14, 2018 21:16:03  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.046.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD1B.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.65	4.70	7498994	537.572281	6	7.32	1
+ 4.87	4.88	4.93	7940050	551.274743			2
4.87	4.91	4.93	6695347	464.855473			2
5.04	5.06	5.10	14778830	566.18			3
5.31	5.32	5.37	16149640	567.622412			4
5.36	5.38	5.42	9323408	557.964847			5
+ 5.36	5.41	5.42	6861086	410.605736			5
5.66	5.68	5.72	14357020	562.684694			6
+ 5.66	5.71	5.72	7009135	274.70415			6

**Height Summation:** 68803239  
**Amount Avg CF:** 542.813285      Linear:

### Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 48.82	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		1.31	4	30	
Aroclor-1254			0	0	E	** 42.96	4	40	
Aroclor-1260			0	0	E	34.99	4	40	
Chlordane			0.5	0.16		** 99.87	4	40	
Toxaphene			1	0.3		3.41	4	40	

Units: ug/l

7E

### CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/14/18

GC Column (1) : RTX-CLP ID: .32 (mm)

Time Analyzed: 21:28

Lab File ID: 05PEST18306010.047.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: CHLD4FK

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.52	3.50 3.56	105.81	100.20	6
	3.97	3.94 4.00	104.90	100.20	5
	4.32	4.29 4.35	104.62	100.20	4
	4.48	4.45 4.51	112.10	100.20	12
	4.58	4.55 4.61	112.65	100.20	12
	5.18	5.16 5.22	110.18	100.20	10

Compounds 6

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/14/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 21:28

Lab File ID: 05PEST18306010B.047.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: CHLD4FK

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Chlordane	3.25	3.23	3.29	100.67	100.20	0 (L)
	3.76	3.74	3.80	111.12	100.20	11
	4.10	4.08	4.14	105.32	100.20	5 (L)
	4.29	4.27	4.33	107.66	100.20	7 (L)
	4.41	4.39	4.45	108.14	100.20	8 (L)
	5.10	5.08	5.14	115.15	100.20	15

Compounds 6

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** CHLD41824D      CHLD4FK ID: FK      **Batchnumber:** 1831799999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 14, 2018 21:28:50  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.047.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.04	3.07	3.10	82894.32	9.377732	5	132.77	2
3.20	3.25	3.26	39409.42	15.157265			3
3.40	3.46	3.46	139681.4	20.695334			4
3.51	3.52	3.57	1169396	165.575381			5
E 3.56	3.59	3.62	1690129	355.788543			6
<u>Height Summation:</u>			<b>3121510.14</b>				
Amount Avg CF:			<b>113.318851</b>	Linear:			
<b>Aroclor-1221</b>							
2.66	2.70	2.70	7387.907	2.060093	1		1
<u>Height Summation:</u>			<b>7387.907</b>				
Amount Avg CF:			<b>2.060093</b>	Linear:			
<b>Aroclor-1248</b>							
3.66	3.69	3.72	218180.4	59.186987	5	76.02	2
3.85	3.89	3.91	10031.62	1.149529			3
4.21	4.24	4.27	314575.6	31.666161			4
4.39	4.41	4.45	730649.7	108.396798			5
+ 4.71	4.72	4.77	106952.9	20.95774			6
4.71	4.76	4.77	310397	60.823218			6
<u>Height Summation:</u>			<b>1583834.32</b>				
Amount Avg CF:			<b>52.244539</b>	Linear:			
<b>Aroclor-1254</b>							
4.39	4.41	4.45	730649.7	57.386497	5	86.61	1
4.62	4.65	4.68	147003.7	15.430355			2
+ 4.71	4.72	4.77	106952.9	6.437513			3
4.71	4.76	4.77	310397	18.682849			3
4.93	4.95	4.99	354309.3	28.625207			4
5.06	5.09	5.12	954159.1	111.9904			5
<u>Height Summation:</u>			<b>2496518.8</b>				
Amount Avg CF:			<b>46.423062</b>	Linear:			
<b>Aroclor-1260</b>							
4.85	4.90	4.91	104475.4	8.933606	5	177.47	1
5.06	5.09	5.12	954159.1	60.40943			2
5.53	5.56	5.59	18415.43	1.98215			4
+ 5.53	5.59	5.59	41935.91	4.513783			4
5.74	5.77	5.80	10448.32	0.549531			5
5.94	5.96	6.00	10895.69	0.96008			6
+ 5.94	6.00	6.00	38772.62	3.416472			6
<u>Height Summation:</u>			<b>1098393.94</b>				
Amount Avg CF:			<b>14.56696</b>	Linear:			

### Analysis Report (B)

Injected on : Nov 14, 2018 21:28:50  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.047.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.71	2.72	8882.304	0.462262	5	127.08	1
2.93	2.96	2.99	99160.8	3.724263			2
3.11	3.12	3.17	360991.9	32.545542			3
+ 3.11	3.17	3.17	33051.43	2.979781			3
3.27	3.31	3.33	22700.5	0.486949			4
+ 3.46	3.46	3.52	458655.9	29.833704			6
3.46	3.50	3.52	276542.1	17.98794			6
<u>Height Summation:</u>			<b>768277.604</b>				
Amount Avg CF:			<b>11.041391</b>	Linear:			
<b>Aroclor-1221</b>							
2.54	2.56	2.58	15080.07	1.358264	3	76.61	1
2.63	2.65	2.67	17663.31	2.6032			2
2.67	2.71	2.71	8882.304	0.387677			3
<u>Height Summation:</u>			<b>41625.684</b>				
Amount Avg CF:			<b>1.449714</b>	Linear:			
<b>Aroclor-1248</b>							
3.27	3.31	3.33	22700.5	0.961597	6	173.99	1
3.53	3.55	3.59	78076.63	3.48352			2
3.75	3.76	3.81	4324654	154.706531			3
+ 3.85	3.87	3.91	641415.9	27.485882			4
3.85	3.90	3.91	560167.5	24.004235			4
4.11	4.15	4.17	356053.8	11.040089			5
E 4.30	4.36	4.36	13735460	541.091436			6
<u>Height Summation:</u>			<b>19077112.43</b>				
Amount Avg CF:			<b>122.547901</b>	Linear:			
<b>Aroclor-1254</b>							
4.11	4.15	4.17	356053.8	11.430208	6	155.35	1
E 4.27	4.29	4.33	15630120	444.555761			2
4.64	4.68	4.70	1574749	30.997043			3
4.81	4.82	4.87	588850.4	16.153874			4
5.07	5.10	5.13	4327760	161.482232			5
5.21	5.24	5.27	196857.1	5.082077			6
<u>Height Summation:</u>			<b>22674390.3</b>				
Amount Avg CF:			<b>111.616866</b>	Linear:			
<b>Aroclor-1260</b>							
4.79	4.82	4.85	588850.4	16.878368	6	172.63	1
4.95	4.97	5.01	3589539	86.194398			2
5.21	5.24	5.27	196857.1	4.551361			3
+ 5.48	5.49	5.54	61973.34	2.277644			4
5.48	5.52	5.54	125491	4.612044			4
5.65	5.70	5.71	62827.98	1.124937			5
5.90	5.94	5.96	75341.11	2.272385			6
<u>Height Summation:</u>			<b>4638906.59</b>				
Amount Avg CF:			<b>19.272249</b>	Linear:			

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** CHLD41824D      CHLD4FK ID: FK      **Batchnumber:** 1831799999  
**Sample Amount:** 1      Total Volume: 1 ml      Analyst: 2306      SDG:      State:  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 14, 2018 21:28:50  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.047.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD1.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.50	3.52	3.56	1169396	105.812949	6	3.41	1
3.94	3.97	4.00	1167096	104.902591			2
4.29	4.32	4.35	753699.7	104.619832			3
4.45	4.48	4.51	3732159	112.099469			4
4.55	4.58	4.61	5186794	112.650168			5
5.15	5.18	5.22	1212809	110.182274			6

**Height Summation:** 13221953.7  
**Amount Avg CF:** 108.37788      Linear:

### Toxaphene

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.09	5.12	954159.1	199.533461	5	196.99	1
5.20	5.23	5.26	65402.11	8.727519			2
5.45	5.49	5.51	68094.04	9.887664			4
+ 5.68	5.68	5.74	26440.91	4.443714		L: 21.84063	5
5.68	5.74	5.74	6420.399	1.079026		L: 18.76152	5
5.75	5.77	5.81	10448.32	1.496071			6

**Height Summation:** 1104523.969  
**Amount Avg CF:** 44.144748      Linear:

### Analysis Report (B)

Injected on : Nov 14, 2018 21:28:50  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.047.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD1B.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.23	3.25	3.29	4395499	107.450307	6	3.50	1
3.74	3.76	3.80	4324654	111.120433			2
4.08	4.10	4.14	3100950	111.570087		L: 105.3204	3
4.27	4.29	4.33	15630120	117.811108		L: 107.6631	4
4.39	4.41	4.45	11718490	116.873222		L: 108.1390	5
5.08	5.10	5.14	4327760	115.14892			6
+ 5.08	5.14	5.14	320227.2	8.520301			6

**Height Summation:** 43497473  
**Amount Avg CF:** 113.329013      Linear:

### Toxaphene

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.68	4.70	1574749	112.88733	4	91.81	1
4.87	4.88	4.93	965758.9	67.052284			2
5.31	5.33	5.37	788181.8	27.702763			4
5.66	5.70	5.72	62827.98	2.462373			6

**Height Summation:** 3391517.68  
**Amount Avg CF:** 52.526188      Linear:

### Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0	E	** 164.49	4	40	
Aroclor-1221			0	0		34.78	3	5	
Aroclor-1248			0	0		** 80.44	4	30	
Aroclor-1254			0	0		** 82.50	4	40	
Aroclor-1260			0	0		27.81	4	40	
Chlordane			0.5	0.16		4.47	4	40	
Toxaphene			1	0.3		17.34	4	40	

Units: ug/l

7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/14/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 23:49

Lab File ID: 05PEST18306010.058.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: PEMNI

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.54	2.52 2.56	20.18	20.10	0
alpha-BHC	2.95	2.93 2.97	9.93	10.00	-1
gamma-BHC (Lindane)	3.20	3.18 3.22	10.05	10.00	1
beta-BHC	3.26	3.25 3.29	9.16	10.00	-8
4,4'-DDE	4.65	4.63 4.67	0.62		
Endrin	5.06	5.04 5.08	50.31	50.10	0
4,4'-DDD	5.11	5.09 5.13	1.04		
4,4'-DDT	5.32	5.30 5.34	101.83	100.40	1
Endrin aldehyde	5.53	5.52 5.56	0.30		
Methoxychlor	5.67	5.65 5.69	252.20	250.90	1
Endrin ketone	6.03	6.02 6.06	0.64		
Decachlorobiphenyl	6.69	6.67 6.73	22.81	20.00	14

4,4'-DDT % breakdown: 2

Endrin % breakdown: 2

Combined % breakdown: 3.6

Compounds 12

7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/14/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 23:49

Lab File ID: 05PEST18306010B.058.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: PEMNI

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.35	2.33 2.37	21.19	20.10	5
alpha-BHC	2.77	2.75 2.79	9.60	10.00	-4
gamma-BHC (Lindane)	3.03	3.01 3.05	9.77	10.00	-2
beta-BHC	3.09	3.07 3.11	9.58	10.00	-4
4,4'-DDE	4.55	4.53 4.57	1.58		
Endrin	4.90	4.89 4.93	53.48	50.10	7
4,4'-DDD	5.00	4.98 5.02	0.77		
4,4'-DDT	5.23	5.21 5.25	113.17	100.40	13
Endrin aldehyde	5.32	5.30 5.34	0.32		
Methoxychlor	5.72	5.70 5.74	258.74	250.90	3
Endrin ketone	5.88	5.86 5.90	0.51		
Decachlorobiphenyl	6.67	6.65 6.71	21.75	20.00	9

4,4'-DDT % breakdown: 1

Endrin % breakdown: 1

Combined % breakdown: 2.2

Compounds 12



## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/15/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 0:02

Lab File ID: 05PEST18306010.059.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: MIXA4YH

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Tetrachloro-m-xylene	2.54	2.52	2.56	37.35	40.06	-7
alpha-BHC	2.95	2.93	2.97	9.89	10.00	-1
gamma-BHC (Lindane)	3.20	3.18	3.22	9.90	10.00	-1
beta-BHC	3.26	3.25	3.29	9.53	10.00	-5
delta-BHC	3.41	3.39	3.43	10.17	10.00	2
Heptachlor	3.59	3.57	3.61	9.98	10.13	-1
Aldrin	3.85	3.83	3.87	10.05	10.13	-1
Heptachlor epoxide	4.37	4.35	4.39	10.07	10.13	-1
gamma-Chlordane	4.48	4.46	4.50	9.98	10.13	-1
alpha-Chlordane	4.59	4.57	4.61	10.06	10.13	-1
4,4'-DDE	4.65	4.63	4.67	21.36	20.13	6
Endosulfan I	4.69	4.68	4.72	9.93	10.13	-2
Dieldrin	4.88	4.87	4.91	19.87	20.13	-1
Endrin	5.06	5.04	5.08	20.01	20.00	0
4,4'-DDD	5.11	5.09	5.13	21.69	20.00	8
Endosulfan II	5.23	5.21	5.25	19.60	20.13	-3
4,4'-DDT	5.32	5.30	5.34	20.83	20.00	4
Endrin aldehyde	5.53	5.52	5.56	19.17	20.00	-4
Methoxychlor	5.67	5.65	5.69	104.74	100.25	4
Endosulfan sulfate	5.84	5.82	5.86	19.65	19.75	-1
Endrin ketone	6.03	6.02	6.06	19.54	20.00	-2
Decachlorobiphenyl	6.69	6.67	6.73	41.19	40.04	3

Compounds 22

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/15/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 0:02

Lab File ID: 05PEST18306010B.059.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: MIXA4YH

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Tetrachloro-m-xylene	2.35	2.33	2.37	40.83	40.06	2
alpha-BHC	2.77	2.75	2.79	9.57	10.00	-4
gamma-BHC (Lindane)	3.03	3.01	3.05	9.73	10.00	-3
beta-BHC	3.09	3.07	3.11	10.04	10.00	0
delta-BHC	3.32	3.30	3.34	9.68	10.00	-3
Heptachlor	3.36	3.35	3.39	10.40	10.13	3
Aldrin	3.63	3.61	3.65	9.66	10.13	-5
Heptachlor epoxide	4.12	4.10	4.14	10.34	10.13	2
gamma-Chlordane	4.28	4.27	4.31	10.54	10.13	4
alpha-Chlordane	4.40	4.39	4.43	10.49	10.13	4
Endosulfan I	4.45	4.43	4.47	10.50	10.13	4
4,4'-DDE	4.55	4.53	4.57	20.76	20.13	3
Dieldrin	4.67	4.65	4.69	21.75	20.13	8
Endrin	4.90	4.89	4.93	21.09	20.00	5
4,4'-DDD	5.00	4.98	5.02	22.11	20.00	11
Endosulfan II	5.07	5.05	5.09	21.09	20.13	5
4,4'-DDT	5.23	5.21	5.25	21.67	20.00	8
Endrin aldehyde	5.32	5.30	5.34	20.21	20.00	1
Endosulfan sulfate	5.51	5.50	5.54	21.36	19.75	8
Methoxychlor	5.72	5.70	5.74	103.73	100.25	3
Endrin ketone	5.88	5.86	5.90	20.54	20.00	3
Decachlorobiphenyl	6.67	6.65	6.71	41.80	40.04	4

Compounds 22

7E

### CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/15/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 0:14

Lab File ID: 05PEST18306010.060.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: TOXA4ZS

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Toxaphene	5.09	5.06	5.12	559.19	504.25	11 (L)
	5.22	5.20	5.26	580.45	504.25	15
	5.31	5.29	5.35	588.41	504.25	17
	5.47	5.45	5.51	579.59	504.25	15
	5.71	5.68	5.74	562.87	504.25	12 (L)
	5.77	5.75	5.81	594.03	504.25	18

Compounds 6

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/15/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 0:14

Lab File ID: 05PEST18306010B.060.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: TOXA4ZS

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Toxaphene	4.65	4.64	4.70	568.38	504.25	13
	4.88	4.87	4.93	566.48	504.25	12
	5.05	5.04	5.10	584.83	504.25	16
	5.32	5.31	5.37	604.00	504.25	20
	5.37	5.36	5.42	585.51	504.25	16
	5.67	5.66	5.72	589.87	504.25	17

Compounds 6

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** TOXA41824E      **TOXA4ZS ID: ZS**      **Batchnumber: 1831799999**  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 15, 2018 00:14:46  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.060.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.04	3.08	3.10	4365.844	0.493903	4	68.01	2
3.40	3.46	3.46	15171.62	2.247842			4
3.51	3.52	3.57	33992.12	4.812962			5
3.56	3.59	3.62	22392.95	4.713933			6
<u>Height Summation:</u>			<b>75922.534</b>				
Amount Avg CF:			3.06716	Linear:			
<b>Aroclor-1248</b>							
3.38	3.39	3.44	7153.269	1.060927	6	148.59	1
3.66	3.68	3.72	31589.02	8.569326			2
3.85	3.85	3.91	16520.53	1.893097			3
4.21	4.22	4.27	189999.5	19.125942			4
+ 4.21	4.26	4.27	216590.2	21.802645			4
4.39	4.40	4.45	445432.8	66.082952			5
+ 4.39	4.45	4.45	484528.5	71.883062			5
4.71	4.74	4.77	865484.1	169.594191			6
<u>Height Summation:</u>			<b>1556179.219</b>				
Amount Avg CF:			44.387739	Linear:			
<b>Aroclor-1254</b>							
4.39	4.40	4.45	445432.8	34.985066	5	77.42	1
4.71	4.74	4.77	865484.1	52.093637			3
4.93	4.96	4.99	2011440	162.507409			4
E 5.06	5.09	5.12	2831480	332.333021			5
E 5.27	5.31	5.33	3983954	291.130899			6
<u>Height Summation:</u>			<b>10137790.9</b>				
Amount Avg CF:			174.610006	Linear:			
<b>Aroclor-1260</b>							
4.85	4.89	4.91	1807572	154.56401	5	27.56	1
5.06	5.09	5.12	2831480	179.2658			2
E 5.27	5.31	5.33	3983954	239.736696			3
E 5.53	5.56	5.59	2899023	312.037121			4
E 5.74	5.77	5.80	4148580	218.195359			5
<u>Height Summation:</u>			<b>15670609</b>				
Amount Avg CF:			220.759797	Linear:			
<b>Chlordane</b>							
3.50	3.52	3.56	33992.12	3.075781	6	131.86	1
3.94	3.96	4.00	78004.38	7.011301			2
4.29	4.29	4.35	582395.2	80.841332			3
4.45	4.50	4.51	676759.1	20.327198			4
4.55	4.56	4.61	866732.8	18.824267			5
5.15	5.16	5.22	1926432	175.014086			6
<u>Height Summation:</u>			<b>4164315.6</b>				
Amount Avg CF:			50.848994	Linear:			

### Analysis Report (B)

Injected on : Nov 15, 2018 00:14:46  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.060.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.67	2.72	4704.065	0.244814	5	53.95	1
+ 3.11	3.13	3.17	44734.9	4.033114			3
3.11	3.15	3.17	19349.95	1.744512			3
3.27	3.29	3.33	69170.52	1.483778			4
3.37	3.38	3.43	60511.41	2.590743			5
3.46	3.50	3.52	28220.9	1.835655			6
<u>Height Summation:</u>			<b>181956.845</b>				
Amount Avg CF:			1.5799	Linear:			
<b>Aroclor-1221</b>							
2.67	2.67	2.71	4704.065	0.205314	1		3
<u>Height Summation:</u>			<b>4704.065</b>				
Amount Avg CF:			0.205314	Linear:			
<b>Aroclor-1248</b>							
3.27	3.29	3.33	69170.52	2.930074	5	107.86	1
+ 3.53	3.55	3.59	162100.4	7.232382			2
3.53	3.57	3.59	170008.9	7.585233			2
3.85	3.89	3.91	780088.9	33.428282			4
4.11	4.12	4.17	1730133	53.645888			5
4.30	4.34	4.36	2981223	117.441588			6
<u>Height Summation:</u>			<b>5730624.32</b>				
Amount Avg CF:			43.006213	Linear:			
<b>Aroclor-1254</b>							
4.11	4.12	4.17	1730133	55.541548	6	139.89	1
4.27	4.27	4.33	2062614	58.66538			2
4.64	4.65	4.70	7928808	156.069067			3
4.81	4.81	4.87	5664794	155.40173			4
E 5.07	5.13	5.13	24814770	925.916515			5
5.21	5.23	5.27	3819350	98.600614			6
E+ 5.21	5.26	5.27	9931972	256.404503			6
<u>Height Summation:</u>			<b>46020469</b>				
Amount Avg CF:			241.699142	Linear:			
<b>Aroclor-1260</b>							
4.79	4.81	4.85	5664794	162.371426	5	46.67	1
4.95	4.99	5.01	6155315	147.805519			2
5.21	5.23	5.27	3819350	88.303852			3
E+ 5.21	5.26	5.27	9931972	229.628441			3
E 5.65	5.67	5.71	15050720	269.483726			5
+ 5.65	5.71	5.71	7633628	136.680406			5
5.90	5.94	5.96	3340141	100.742978			6
<u>Height Summation:</u>			<b>34030320</b>				
Amount Avg CF:			153.7415	Linear:			

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** TOXA41824E      TOXA4ZS ID: ZS      **Batchnumber:** 1831799999  
**Sample Amount:** 1      Total Volume: 1 ml      Analyst: 2306      SDG:      State:  
**Analyses:** 00177

**Analysis Report (A)**

Injected on : Nov 15, 2018 00:14:46  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.060.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD1.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.09	5.12	2831480	592.118237	6	1.17	
L: 559.1852 1							
5.20	5.22	5.26	4349773	580.451069			2
5.29	5.31	5.35	3983954	588.410962			3
5.45	5.47	5.51	3991521	579.592821			4
5.68	5.71	5.74	3544238	595.651999	L: 562.8703		5
5.75	5.77	5.81	4148580	594.025736			6

Height Summation:      **22849546**  
 Amount Avg CF:      **588.375137**      Linear:

**Analysis Report (B)**

Injected on : Nov 15, 2018 00:14:46  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.060.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD1B.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.23	3.25	3.29	47636.41	1.164497			
L: 7.069222 1							
+ 3.23	3.29	3.29	69170.52	1.69091			1
L: 7.532801 1							
4.08	4.12	4.14	1730133	62.249017			3
L: 60.34841 3							
4.27	4.27	4.33	2062614	15.546831			4
L: 18.85187 4							
4.39	4.43	4.45	1981464	19.761939			5
L: 22.09193 5							
E 5.08	5.13	5.14	24814770	660.24779			6

Height Summation:      **30636617.41**  
 Amount Avg CF:      **151.794015**      Linear:

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.65	4.70	7928808	568.383893	6	2.41	
L: 7.069222 1							
4.87	4.88	4.93	8159103	566.483512			2
L: 7.532801 1							
5.04	5.05	5.10	15265700	584.83209			3
L: 60.34841 3							
5.31	5.32	5.37	17184520	603.996045			4
L: 18.85187 4							
5.36	5.37	5.42	9783626	585.506864			5
L: 22.09193 5							
+ 5.36	5.41	5.42	7211468	431.574553			5
5.66	5.67	5.72	15050720	589.872395			6
L: 60.34841 3							
+ 5.66	5.71	5.72	7633628	299.17947			6

Height Summation:      **73372477**  
 Amount Avg CF:      **583.179133**      Linear:

**Summary Report**

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 64.01	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		3.16	4	30	
Aroclor-1254			0	0	E	32.23	4	40	
Aroclor-1260			0	0	E	35.79	4	40	
Chlordane			0.5	0.16		** 99.63	4	40	
Toxaphene			1	0.3		0.89	4	40	

Units: ug/l

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/15/18

GC Column (1) : RTX-CLP ID: .32 (mm)

Time Analyzed: 0:27

Lab File ID: 05PEST18306010.061.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: CHLD4FL

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Chlordane	3.52	3.50	3.56	105.62	100.20	5
	3.96	3.94	4.00	106.83	100.20	7
	4.32	4.29	4.35	104.84	100.20	5
	4.48	4.45	4.51	112.61	100.20	12
	4.58	4.55	4.61	112.36	100.20	12
	5.18	5.16	5.22	113.74	100.20	14

Compounds 6

7E

### CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/15/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 0:27

Lab File ID: 05PEST18306010B.061.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: CHLD4FL

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Chlordane	3.25	3.23	3.29	104.51	100.20	4 (L)
	3.76	3.74	3.80	113.09	100.20	13
	4.09	4.08	4.14	106.02	100.20	6 (L)
	4.28	4.27	4.33	109.68	100.20	9 (L)
	4.40	4.39	4.45	110.96	100.20	11 (L)
	5.10	5.08	5.14	117.73	100.20	17

Compounds 6



# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** CHLD41824D      **CHLD4FL ID: FL**      **Batchnumber: 1831799999**  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 15, 2018 00:27:41  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.061.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.04	3.07	3.10	82656.6	9.350839	5	132.83	2
3.20	3.24	3.26	39311.76	15.119704			3
3.40	3.45	3.46	140299.4	20.786898			4
3.51	3.52	3.57	1167212	165.266148			5
E 3.56	3.59	3.62	1691127	355.998632			6
<u>Height Summation:</u>			<b>3120606.76</b>				
Amount Avg CF:			<b>113.304444</b>	Linear:			
<b>Aroclor-1221</b>							
2.66	2.70	2.70	7940.2	2.214098	1		1
<u>Height Summation:</u>			<b>7940.2</b>				
Amount Avg CF:			<b>2.214098</b>	Linear:			
<b>Aroclor-1248</b>							
3.66	3.68	3.72	220231.1	59.743292	5	75.98	2
3.85	3.89	3.91	9025.908	1.034284			3
4.21	4.23	4.27	312686.2	31.475968			4
4.39	4.41	4.45	738796.8	109.605475			5
+ 4.71	4.71	4.77	121337.7	23.776484			6
4.71	4.75	4.77	327678	64.209482			6
<u>Height Summation:</u>			<b>1608418.008</b>				
Amount Avg CF:			<b>53.2137</b>	Linear:			
<b>Aroclor-1254</b>							
4.39	4.41	4.45	738796.8	58.026384	5	85.55	1
4.62	4.65	4.68	158511.3	16.638259			2
+ 4.71	4.71	4.77	121337.7	7.303337			3
4.71	4.75	4.77	327678	19.722995			3
4.93	4.94	4.99	377115.7	30.467772			4
5.06	5.09	5.12	985907.8	115.716769			5
<u>Height Summation:</u>			<b>2588009.6</b>				
Amount Avg CF:			<b>48.114436</b>	Linear:			
<b>Aroclor-1260</b>							
4.85	4.90	4.91	123144.3	10.529969	4	153.87	1
5.06	5.09	5.12	985907.8	62.419494			2
5.53	5.55	5.59	18170.4	1.955776			4
+ 5.53	5.58	5.59	43997.76	4.735711			4
5.94	5.96	6.00	12866.36	1.133727			6
+ 5.94	5.99	6.00	40804.36	3.5955			6
<u>Height Summation:</u>			<b>1140088.86</b>				
Amount Avg CF:			<b>19.009742</b>	Linear:			
<b>Chlordane</b>							
3.50	3.52	3.56	1167212	105.615329	6	3.65	1
3.94	3.96	4.00	1188497	106.826187			2
4.29	4.32	4.35	755272.9	104.838205			3
4.45	4.48	4.51	3749308	112.614558			4
4.55	4.58	4.61	5173547	112.362461			5
5.15	5.18	5.22	1252009	113.743548			6
<u>Height Summation:</u>			<b>13285845.9</b>				
Amount Avg CF:			<b>109.333381</b>	Linear:			

### Analysis Report (B)

Injected on : Nov 15, 2018 00:27:41  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.061.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.70	2.72	9241.712	0.480967	5	126.10	1
2.93	2.96	2.99	107265.2	4.028646			2
+ 2.93	2.99	2.99	133909.8	5.029359			2
3.11	3.11	3.17	370450.2	33.398264			3
3.27	3.31	3.33	23383.92	0.501609			4
3.46	3.49	3.52	287282.4	18.686553			6
<u>Height Summation:</u>			<b>797623.432</b>				
Amount Avg CF:			<b>11.419208</b>	Linear:			
<b>Aroclor-1221</b>							
2.54	2.55	2.58	13613.5	1.22617	3	75.80	1
2.63	2.65	2.67	16645.44	2.453187			2
2.67	2.70	2.71	9241.712	0.403364			3
<u>Height Summation:</u>			<b>39500.652</b>				
Amount Avg CF:			<b>1.360907</b>	Linear:			
<b>Aroclor-1248</b>							
3.27	3.31	3.33	23383.92	0.990546	6	174.21	1
3.53	3.54	3.59	77910.28	3.476098			2
3.75	3.76	3.81	4401180	157.444108			3
+ 3.85	3.86	3.91	649475.1	27.831234			4
3.85	3.89	3.91	571848.9	24.504805			4
4.11	4.15	4.17	359464.1	11.145831			5
E 4.30	4.36	4.36	14038500	553.029321			6
<u>Height Summation:</u>			<b>19472287.2</b>				
Amount Avg CF:			<b>125.098452</b>	Linear:			
<b>Aroclor-1254</b>							
4.11	4.15	4.17	359464.1	11.539687	6	155.24	1
E 4.27	4.28	4.33	15938500	453.326782			2
4.64	4.67	4.70	1604419	31.581062			3
4.81	4.82	4.87	603703.9	16.561349			4
5.07	5.10	5.13	4424668	165.098172			5
+ 5.07	5.13	5.13	335707.9	12.526309			5
5.21	5.24	5.27	206542.3	5.332111			6
+ 5.21	5.27	5.27	173662.3	4.483278			6
<u>Height Summation:</u>			<b>23137297.3</b>				
Amount Avg CF:			<b>113.906527</b>	Linear:			
<b>Aroclor-1260</b>							
4.79	4.82	4.85	603703.9	17.304118	6	170.74	1
4.95	4.97	5.01	3676686	88.28703			2
5.21	5.24	5.27	206542.3	4.775284			3
+ 5.21	5.27	5.27	173662.3	4.015094			3
+ 5.48	5.48	5.54	78114.41	2.87086			4
5.48	5.52	5.54	139891.5	5.141291			4
5.65	5.70	5.71	78391.62	1.403605			5
5.90	5.94	5.96	83228.7	2.510285			6
<u>Height Summation:</u>			<b>4788444.02</b>				
Amount Avg CF:			<b>19.903602</b>	Linear:			

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** CHLD41824D      CHLD4FL ID: FL      **Batchnumber:** 1831799999  
**Sample Amount:** 1      Total Volume: 1 ml      Analyst: 2306      SDG:      State:  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 15, 2018 00:27:41  
 Instrument : CP05-H9190A  
 Result file : 05PEST18306010.061.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.09	5.12	985907.8	206.172739	4	172.05	
					L: 205.8481		1
5.20	5.23	5.26	103020.6	13.74748			2
5.45	5.49	5.51	67572.25	9.811897			4
5.68	5.74	5.74	4907.192	0.824713	L: 18.52879		5
<b>Height Summation:</b>			<b>1161407.842</b>				
<b>Amount Avg CF:</b>			<b>57.639207</b>		Linear:		

### Analysis Report (B)

Injected on : Nov 15, 2018 00:27:41  
 Instrument : CP05-H9190B  
 Result file : 05PEST18306010B.061.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.23	3.25	3.29	4574122	111.816841	6	3.36	
					L: 104.5139		1
3.74	3.76	3.80	4401180	113.086741			2
4.08	4.09	4.14	3122216	112.335224	L: 106.0181		3
4.27	4.28	4.33	15938500	120.135504	L: 109.6817		4
4.39	4.40	4.45	12038110	120.060922	L: 110.9635		5
5.08	5.10	5.14	4424668	117.727356			6
+ 5.08	5.13	5.14	335707.9	8.932196			6
<b>Height Summation:</b>			<b>44498796</b>				
<b>Amount Avg CF:</b>			<b>115.860431</b>		Linear:		

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.67	4.70	1604419	115.014251	6	99.63	
							1
4.87	4.88	4.93	986661.2	68.503523			2
+ 4.87	4.93	4.93	578092.2	40.136728			2
5.04	5.10	5.10	4424668	169.509936			3
5.31	5.33	5.37	808770.1	28.426394			4
5.36	5.39	5.42	180044.5	10.774869			5
5.66	5.70	5.72	78391.62	3.072348			6
<b>Height Summation:</b>			<b>8082954.42</b>				
<b>Amount Avg CF:</b>			<b>65.883554</b>		Linear:		

### Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0	E	** 163.38	4	40	
Aroclor-1221			0	0		** 47.73	3	5	
Aroclor-1248			0	0		** 80.63	4	30	
Aroclor-1254			0	0		** 81.21	4	40	
Aroclor-1260			0	0		4.59	4	40	
Chlordane			0.5	0.16		5.80	4	40	
Toxaphene			1	0.3		13.35	4	40	

Units: ug/l

7D

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/15/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 2:48

Lab File ID: 05PEST18306010.072.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: PEMNJ

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.54	2.52 2.56	21.23	20.10	6
alpha-BHC	2.95	2.93 2.97	10.46	10.00	5
gamma-BHC (Lindane)	3.20	3.18 3.22	10.46	10.00	5
beta-BHC	3.26	3.25 3.29	9.60	10.00	-4
4,4'-DDE	4.65	4.63 4.67	0.51		
Endrin	5.06	5.04 5.08	52.54	50.10	5
4,4'-DDD	5.11	5.09 5.13	0.90		
4,4'-DDT	5.32	5.30 5.34	108.11	100.40	8
Endrin aldehyde	5.53	5.52 5.56	0.27		
Methoxychlor	5.67	5.65 5.69	262.27	250.90	5
Endrin ketone	6.03	6.02 6.06	0.62		
Decachlorobiphenyl	6.69	6.67 6.73	23.43	20.00	17

4,4'-DDT % breakdown: 1

Endrin % breakdown: 2

Combined % breakdown: 3.3

Compounds 12

7D

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/15/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 2:48

Lab File ID: 05PEST18306010B.072.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: PEMNJ

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.35	2.33 2.37	22.14	20.10	10
alpha-BHC	2.77	2.75 2.79	10.06	10.00	1
gamma-BHC (Lindane)	3.03	3.01 3.05	10.19	10.00	2
beta-BHC	3.09	3.07 3.11	10.03	10.00	0
4,4'-DDE	4.55	4.53 4.57	1.49		
Endrin	4.90	4.89 4.93	56.78	50.10	13
4,4'-DDD	5.00	4.98 5.02	0.65		
4,4'-DDT	5.23	5.21 5.25	119.91	100.40	19
Endrin aldehyde	5.32	5.30 5.34	0.22		
Methoxychlor	5.72	5.70 5.74	274.21	250.90	9
Endrin ketone	5.88	5.86 5.90	0.63		
Decachlorobiphenyl	6.67	6.65 6.71	23.16	20.00	16

4,4'-DDT % breakdown: 1

Endrin % breakdown: 1

Combined % breakdown: 1.9

Compounds 12

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/15/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 3:00

Lab File ID: 05PEST18306010.073.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: MIXA4YM

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.54	2.52 2.56	41.68	40.06	4
alpha-BHC	2.95	2.93 2.97	10.76	10.00	8
gamma-BHC (Lindane)	3.20	3.18 3.22	10.72	10.00	7
beta-BHC	3.26	3.25 3.29	10.31	10.00	3
delta-BHC	3.41	3.39 3.43	11.14	10.00	11
Heptachlor	3.59	3.57 3.61	10.84	10.13	7
Aldrin	3.85	3.83 3.87	10.78	10.13	6
Heptachlor epoxide	4.37	4.35 4.39	10.75	10.13	6
gamma-Chlordane	4.48	4.46 4.50	10.67	10.13	5
alpha-Chlordane	4.59	4.57 4.61	10.68	10.13	6
4,4'-DDE	4.65	4.63 4.67	23.16	20.13	15
Endosulfan I	4.70	4.68 4.72	10.78	10.13	6
Dieldrin	4.88	4.87 4.91	21.63	20.13	8
Endrin	5.06	5.04 5.08	21.50	20.00	8
4,4'-DDD	5.11	5.09 5.13	23.26	20.00	16
Endosulfan II	5.23	5.21 5.25	21.35	20.13	6
4,4'-DDT	5.32	5.30 5.34	22.79	20.00	14
Endrin aldehyde	5.53	5.52 5.56	21.01	20.00	5
Methoxychlor	5.67	5.65 5.69	113.27	100.25	13
Endosulfan sulfate	5.84	5.82 5.86	21.30	19.75	8
Endrin ketone	6.04	6.02 6.06	21.17	20.00	6
Decachlorobiphenyl	6.69	6.67 6.73	43.41	40.04	8

Compounds 22

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/15/18

GC Column (2) : RTXCLP11 ID: .32 (mm)

Time Analyzed: 3:00

Lab File ID: 05PEST18306010B.073.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: MIXA4YM

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Tetrachloro-m-xylene	2.35	2.33	2.37	44.69	40.06	12
alpha-BHC	2.77	2.75	2.79	10.37	10.00	4
gamma-BHC (Lindane)	3.03	3.01	3.05	10.59	10.00	6
beta-BHC	3.09	3.07	3.11	10.84	10.00	8
delta-BHC	3.32	3.30	3.34	10.49	10.00	5
Heptachlor	3.37	3.35	3.39	11.85	10.13	17
Aldrin	3.63	3.61	3.65	10.57	10.13	4
Heptachlor epoxide	4.12	4.10	4.14	11.29	10.13	12
gamma-Chlordane	4.28	4.27	4.31	11.40	10.13	13
alpha-Chlordane	4.41	4.39	4.43	11.26	10.13	11
Endosulfan I	4.45	4.43	4.47	11.66	10.13	15
4,4'-DDE	4.55	4.53	4.57	21.99	20.13	9
Dieldrin	4.67	4.65	4.69	23.10	20.13	15
Endrin	4.91	4.89	4.93	23.26	20.00	16
4,4'-DDD	5.00	4.98	5.02	23.69	20.00	18
Endosulfan II	5.07	5.05	5.09	22.95	20.13	14
4,4'-DDT	5.23	5.21	5.25	23.74	20.00	19
Endrin aldehyde	5.32	5.30	5.34	22.50	20.00	13
Endosulfan sulfate	5.52	5.50	5.54	23.46	19.75	19
Methoxychlor	5.72	5.70	5.74	116.34	100.25	16
Endrin ketone	5.88	5.86	5.90	22.34	20.00	12
Decachlorobiphenyl	6.68	6.65	6.71	43.78	40.04	9

Compounds 22

7E

## CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/15/18

GC Column (1) : RTX-CLP ID: .32 (mm)

Time Analyzed: 3:13

Lab File ID: 05PEST18306010.074.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: TOXA4ZV

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	5.09	5.06	5.12	539.93	504.25	7 (L)
	5.22	5.20	5.26	554.77	504.25	10
	5.31	5.29	5.35	567.97	504.25	13
	5.47	5.45	5.51	559.45	504.25	11
	5.71	5.68	5.74	535.21	504.25	6 (L)
	5.77	5.75	5.81	560.15	504.25	11

Compounds 6

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/15/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 3:13

Lab File ID: 05PEST18306010B.074.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: TOXA4ZV

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Toxaphene	4.66	4.64	4.70	546.84	504.25	8
	4.91	4.87	4.93	474.69	504.25	-6
	5.06	5.04	5.10	568.43	504.25	13
	5.32	5.31	5.37	583.37	504.25	16
	5.38	5.36	5.42	564.83	504.25	12
	5.68	5.66	5.72	576.60	504.25	14

Compounds 6



# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** TOXA41824E      **TOXA4ZV ID: ZV**      **Batchnumber: 1831799999**  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 15, 2018 03:13:42  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.074.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD1.MET

### Analysis Report (B)

Injected on : Nov 15, 2018 03:13:42  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.074.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>								<b>Aroclor-1016</b>							
3.04	3.08	3.10	5104.718	0.57749	4	67.81	2	3.11	3.13	3.17	49642.25	4.475541	4	47.60	3
3.40	3.46	3.46	15054.26	2.230454			4	+ 3.11	3.15	3.17	19776.54	1.782971			3
3.51	3.52	3.57	34683.12	4.910801			5	3.27	3.29	3.33	69299.88	1.486553			4
3.56	3.59	3.62	23627.3	4.973776			6	3.37	3.38	3.43	55772.27	2.387841			5
<u>Height Summation:</u>				<b>78469.398</b>				<u>Height Summation:</u>				<b>210629.65</b>			
Amount Avg CF:				<b>3.17313</b>	Linear:			Amount Avg CF:				<b>2.671519</b>	Linear:		
<b>Aroclor-1248</b>								<b>Aroclor-1248</b>							
3.38	3.39	3.44	8345.799	1.237795	6	148.31	1	3.27	3.29	3.33	69299.88	2.935554	5	106.93	1
3.66	3.68	3.72	32960.11	8.941269			2	3.53	3.57	3.59	170843.6	7.622475			2
3.85	3.85	3.91	15206.42	1.742513			3	3.85	3.89	3.91	772023.8	33.082677			4
4.21	4.22	4.27	175702.3	17.686741			4	4.11	4.13	4.17	1696946	52.616865			5
+ 4.21	4.26	4.27	193001.9	19.428173			4	4.30	4.35	4.36	2895148	114.05077			6
4.39	4.40	4.45	424688.4	63.005381			5	<u>Height Summation:</u>				<b>5604261.28</b>			
+ 4.39	4.45	4.45	454898.3	67.487223			5	Amount Avg CF:				<b>42.061668</b>	Linear:		
4.71	4.74	4.77	826717.8	161.997819			6	<b>Aroclor-1254</b>							
<u>Height Summation:</u>				<b>1483620.829</b>				4.11	4.13	4.17	1696946	54.476163	5	43.70	1
Amount Avg CF:				<b>42.435253</b>	Linear:			4.27	4.28	4.33	1973280	56.124521			2
<b>Aroclor-1254</b>								<b>Aroclor-1254</b>							
4.39	4.40	4.45	424688.4	33.355765	5	77.54	1	4.64	4.66	4.70	7628330	150.154518			3
4.71	4.74	4.77	826717.8	49.760287			3	+ 4.81	4.82	4.87	5492054	150.662971			4
4.93	4.96	4.99	1951604	157.673164			4	4.81	4.84	4.87	4543952	124.653783			4
E 5.06	5.09	5.12	2730911	320.529159			5	5.21	5.23	5.27	3701380	95.555092			6
E 5.27	5.31	5.33	3845521	281.014787			6	+ 5.21	5.27	5.27	9649613	249.115103			6
<u>Height Summation:</u>				<b>9779442.2</b>				<u>Height Summation:</u>				<b>19543888</b>			
Amount Avg CF:				<b>168.466632</b>	Linear:			Amount Avg CF:				<b>96.192815</b>	Linear:		
<b>Aroclor-1260</b>								<b>Aroclor-1260</b>							
4.85	4.89	4.91	1722926	147.325999	5	26.95	1	4.79	4.82	4.85	5492054	157.420135	6	52.92	1
5.06	5.09	5.12	2730911	172.898606			2	+ 4.79	4.84	4.85	4543952	130.244447			1
E 5.27	5.31	5.33	3845521	231.406411			3	+ 4.95	4.95	5.01	6204814	148.994121			2
E 5.53	5.56	5.59	2731954	294.054604			4	4.95	5.00	5.01	5903208	141.751758			2
E 5.74	5.77	5.80	3911985	205.7516			5	5.21	5.23	5.27	3701380	85.576371			3
<u>Height Summation:</u>				<b>14943297</b>				E+ 5.21	5.27	5.27	9649613	223.100266			3
Amount Avg CF:				<b>210.287444</b>	Linear:			E 5.48	5.48	5.54	8670419	318.655164			4
<b>Chlordane</b>								<b>Chlordane</b>							
3.50	3.52	3.56	34683.12	3.138307	6	131.41	1	E 5.65	5.68	5.71	14712170	263.421975			5
3.94	3.96	4.00	75321.62	6.770166			2	5.90	5.94	5.96	3202726	96.598364			6
4.29	4.29	4.35	563138.8	78.168383			3	<u>Height Summation:</u>				<b>41681957</b>			
4.45	4.50	4.51	646497.6	19.418261			4	Amount Avg CF:				<b>177.237294</b>	Linear:		
4.55	4.56	4.61	817924.4	17.764214			5	<b>Chlordane</b>							
5.15	5.16	5.22	1835350	166.739394			6	3.23	3.26	3.29	53053.42	1.296919	5	187.68	1
<u>Height Summation:</u>				<b>3972915.54</b>				4.08	4.13	4.14	1696946	61.054971		L: 7.185837	3
Amount Avg CF:				<b>48.666454</b>	Linear:			4.27	4.28	4.33	1973280	14.873482		L: 59.25965	3
<b>Aroclor-1260</b>								<b>Aroclor-1260</b>							
4.85	4.89	4.91	1722926	147.325999	5	26.95	1	4.79	4.82	4.85	5492054	157.420135	6	52.92	1
5.06	5.09	5.12	2730911	172.898606			2	+ 4.79	4.84	4.85	4543952	130.244447			1
E 5.27	5.31	5.33	3845521	231.406411			3	+ 4.95	4.95	5.01	6204814	148.994121			2
E 5.53	5.56	5.59	2731954	294.054604			4	4.95	5.00	5.01	5903208	141.751758			2
E 5.74	5.77	5.80	3911985	205.7516			5	5.21	5.23	5.27	3701380	85.576371			3
<u>Height Summation:</u>				<b>14943297</b>				E+ 5.21	5.27	5.27	9649613	223.100266			3
Amount Avg CF:				<b>210.287444</b>	Linear:			E 5.48	5.48	5.54	8670419	318.655164			4
<b>Chlordane</b>								<b>Chlordane</b>							
3.50	3.52	3.56	34683.12	3.138307	6	131.41	1	E 5.65	5.68	5.71	14712170	263.421975			5
3.94	3.96	4.00	75321.62	6.770166			2	5.90	5.94	5.96	3202726	96.598364			6
4.29	4.29	4.35	563138.8	78.168383			3	<u>Height Summation:</u>				<b>41681957</b>			
4.45	4.50	4.51	646497.6	19.418261			4	Amount Avg CF:				<b>177.237294</b>	Linear:		
4.55	4.56	4.61	817924.4	17.764214			5	<b>Chlordane</b>							
5.15	5.16	5.22	1835350	166.739394			6	3.23	3.26	3.29	53053.42	1.296919	5	187.68	1
<u>Height Summation:</u>				<b>3972915.54</b>				4.08	4.13	4.14	1696946	61.054971		L: 7.185837	3
Amount Avg CF:				<b>48.666454</b>	Linear:			4.27	4.28	4.33	1973280	14.873482		L: 59.25965	3

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** TOXA41824E      TOXA4ZV    ID: ZV    **Batchnumber:** 1831799999  
**Sample Amount:** 1      Total Volume: 1    ml    Analyst: 2306    SDG:      State:  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 15, 2018 03:13:42  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.074.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD1.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.09	5.12	2730911	571.087278	6	1.08	
L: 539.9312    1							
5.20	5.22	5.26	4157329	554.770574			2
5.29	5.31	5.35	3845521	567.965069			3
5.45	5.47	5.51	3852785	559.44752			4
5.68	5.71	5.74	3364387	565.425866	L: 535.2096		5
5.75	5.77	5.81	3911985	560.148236			6
<b>Height Summation:</b>			<b>21862918</b>				
<b>Amount Avg CF:</b>			<b>563.140757</b>		Linear:		

### Analysis Report (B)

Injected on : Nov 15, 2018 03:13:42  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.074.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD1B.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.66	4.70	7628330	546.843851	6	7.25	1
+ 4.87	4.89	4.93	7927852	550.42784			2
4.87	4.91	4.93	6836950	474.686917			2
5.04	5.06	5.10	14837550	568.429576			3
5.31	5.32	5.37	16597720	583.371386			4
5.36	5.38	5.42	9438072	564.826982			5
+ 5.36	5.42	5.42	6993124	418.507628			5
5.66	5.68	5.72	14712170	576.603841			6
+ 5.66	5.72	5.72	7177377	281.297942			6
<b>Height Summation:</b>			<b>70050792</b>				
<b>Amount Avg CF:</b>			<b>552.460425</b>		Linear:		

### Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		17.16	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		0.88	4	30	
Aroclor-1254			0	0	E	** 54.62	4	40	
Aroclor-1260			0	0	E	17.06	4	40	
Chlordane			0.5	0.16		** 101.01	4	40	
Toxaphene			1	0.3		1.91	4	40	

Units: ug/l

7E

### CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190A

Date Analyzed: 11/15/18

GC Column (1): RTX-CLP ID: .32 (mm)

Time Analyzed: 3:26

Lab File ID: 05PEST18306010.075.RAW

Initial Calibration: 05PEST1830605

Lab Standard ID: CHLD4FM

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.52	3.50	3.56	108.54	100.20	8
	3.96	3.94	4.00	109.90	100.20	10
	4.31	4.29	4.35	110.32	100.20	10
	4.47	4.45	4.51	115.68	100.20	15
	4.57	4.55	4.61	115.42	100.20	15
	5.18	5.16	5.22	118.53	100.20	18

Compounds 6

7E

**CALIBRATION VERIFICATION SUMMARY**

Lab Name: Lancaster Laboratories

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument: H9190B

Date Analyzed: 11/15/18

GC Column (2) : RTXCLPII ID: .32 (mm)

Time Analyzed: 3:26

Lab File ID: 05PEST18306010B.075.RAW

Initial Calibration: 05PEST1830605B

Lab Standard ID: CHLD4FM

Init. Calib Date(s): 11/14/18 11/14/18

Calibration: 05PEST1830605B

COMPOUND	RT	RT WINDOW		CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
		FROM	TO			
Chlordane	3.25	3.23	3.29	104.99	100.20	5 (L)
	3.76	3.74	3.80	116.03	100.20	16
	4.10	4.08	4.14	109.43	100.20	9 (L)
	4.28	4.27	4.33	111.98	100.20	12 (L)
	4.41	4.39	4.45	113.21	100.20	13 (L)
	5.10	5.08	5.14	119.87	100.20	20

Compounds 6

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** CHLD41824D      **CHLD4FM ID: FM**      **Batchnumber: 1831799999**  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 15, 2018 03:26:30  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.075.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.04	3.07	3.10	85504.12	9.672975	5	133.36	2
3.20	3.24	3.26	39670.65	15.257737			3
3.40	3.45	3.46	144704.3	21.439532			4
3.51	3.52	3.57	1199554	169.845468			5
E 3.56	3.59	3.62	1757238	369.915638			6
<u>Height Summation:</u>			<b>3226671.07</b>				
Amount Avg CF:			<b>117.22627</b>	Linear:			
<b>Aroclor-1221</b>							
2.66	2.69	2.70	7437.548	2.073936	1		1
<u>Height Summation:</u>			<b>7437.548</b>				
Amount Avg CF:			<b>2.073936</b>	Linear:			
<b>Aroclor-1248</b>							
3.66	3.68	3.72	219134	59.445676	5	76.81	2
3.85	3.88	3.91	9244.003	1.059276			3
4.21	4.23	4.27	320765.7	32.289276			4
4.39	4.40	4.45	767854.4	113.916365			5
+ 4.71	4.71	4.77	128013	25.084529			6
4.71	4.75	4.77	339808.6	66.586509			6
<u>Height Summation:</u>			<b>1656806.703</b>				
Amount Avg CF:			<b>54.65942</b>	Linear:			
<b>Aroclor-1254</b>							
4.39	4.40	4.45	767854.4	60.308619	5	84.63	1
4.62	4.65	4.68	168917	17.730502			2
4.71	4.75	4.77	339808.6	20.453138			3
4.93	4.94	4.99	391838.8	31.657274			4
5.06	5.08	5.12	1013354	118.938151			5
<u>Height Summation:</u>			<b>2681772.8</b>				
Amount Avg CF:			<b>49.817537</b>	Linear:			
<b>Aroclor-1260</b>							
4.85	4.89	4.91	127421.9	10.895743	5	174.66	1
5.06	5.08	5.12	1013354	64.15716			2
5.53	5.55	5.59	18483.33	1.989458			4
+ 5.53	5.58	5.59	45048.36	4.848792			4
5.74	5.76	5.80	8913.087	0.468786			5
5.94	5.95	6.00	11212.26	0.987975			6
+ 5.94	5.99	6.00	40495.04	3.568244			6
<u>Height Summation:</u>			<b>1179384.577</b>				
Amount Avg CF:			<b>15.699824</b>	Linear:			

### Analysis Report (B)

Injected on : Nov 15, 2018 03:26:30  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.075.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.70	2.72	9290.021	0.483481	5	150.28	1
2.93	2.96	2.99	86083.24	3.233098			2
+ 2.93	2.99	2.99	143414.8	5.386346			2
+ 3.11	3.12	3.17	377251.4	34.011432			3
3.11	3.17	3.17	32817.04	2.958649			3
3.27	3.31	3.33	23075	0.494982			4
3.46	3.49	3.52	298677.7	19.427771			6
<u>Height Summation:</u>			<b>449943.001</b>				
Amount Avg CF:			<b>5.319596</b>	Linear:			
<b>Aroclor-1221</b>							
2.54	2.56	2.58	13470.14	1.213258	3	75.72	1
2.63	2.65	2.67	16556.32	2.440053			2
2.67	2.70	2.71	9290.021	0.405472			3
<u>Height Summation:</u>			<b>39316.481</b>				
Amount Avg CF:			<b>1.352928</b>	Linear:			
<b>Aroclor-1248</b>							
3.27	3.31	3.33	23075	0.977461	6	174.23	1
3.53	3.55	3.59	81146.06	3.620468			2
3.75	3.76	3.81	4515570	161.5362			3
+ 3.85	3.87	3.91	666654.1	28.567386			4
3.85	3.89	3.91	579114	24.816128			4
4.11	4.15	4.17	370640.6	11.492379			5
E 4.30	4.36	4.36	14387730	566.786805			6
<u>Height Summation:</u>			<b>19957275.66</b>				
Amount Avg CF:			<b>128.204907</b>	Linear:			
<b>Aroclor-1254</b>							
4.11	4.15	4.17	370640.6	11.89848	6	155.15	1
E 4.27	4.28	4.33	16289750	463.317122			2
4.64	4.67	4.70	1680925	33.086991			3
4.81	4.82	4.87	612144.2	16.792891			4
5.07	5.10	5.13	4505179	168.102289			5
5.21	5.24	5.27	206808.8	5.338991			6
<u>Height Summation:</u>			<b>23665447.6</b>				
Amount Avg CF:			<b>116.422794</b>	Linear:			
<b>Aroclor-1260</b>							
4.79	4.82	4.85	612144.2	17.546044	6	172.31	1
4.95	4.97	5.01	3746191	89.95603			2
5.21	5.24	5.27	206808.8	4.781445			3
5.48	5.52	5.54	131215.6	4.822435			4
5.65	5.70	5.71	71827.41	1.286073			5
5.90	5.93	5.96	80861.88	2.438899			6
<u>Height Summation:</u>			<b>4849048.89</b>				
Amount Avg CF:			<b>20.138488</b>	Linear:			

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** CHLD41824D      **CHLD4FM ID: FM**      **Batchnumber: 1831799999**  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

**Analysis Report (A)**

Injected on : Nov 15, 2018 03:26:30  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.075.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.50	3.52	3.56	1199554	108.541799	6	3.54	1
3.94	3.96	4.00	1222655	109.896425			2
+ 3.94	4.00	4.00	45516.54	4.091183			2
4.29	4.31	4.35	794772.9	110.321136			3
4.45	4.47	4.51	3851422	115.681663			4
4.55	4.57	4.61	5314478	115.423292			5
5.15	5.18	5.22	1304705	118.530918			6

**Height Summation:** 13687586.9  
**Amount Avg CF:** 113.065872      Linear:

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.08	5.12	1013354	211.91228	5	191.12	1
5.20	5.23	5.26	111208.2	14.840066			2
5.45	5.49	5.51	77213.7	11.211893			4
5.68	5.74	5.74	5678.489	0.954339			5
5.75	5.76	5.81	8913.087	1.276245			6

**Height Summation:** 1216367.476  
**Amount Avg CF:** 48.038965      Linear:

**Analysis Report (B)**

Injected on : Nov 15, 2018 03:26:30  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.075.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.23	3.25	3.29	4596220	112.357039			1
3.74	3.76	3.80	4515570	116.025951			2
4.08	4.10	4.14	3226208	116.076786			3
4.27	4.28	4.33	16289750	122.78303			4
4.39	4.41	4.45	12292070	122.593767			5
5.08	5.10	5.14	4505179	119.869516			6

**Height Summation:** 45424997  
**Amount Avg CF:** 118.284348      Linear:

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.67	4.70	1680925	120.498654	5	86.55	1
4.87	4.88	4.93	1023847	71.08532			2
+ 4.87	4.93	4.93	607297.9	42.164469			2
5.04	5.10	5.10	4505179	172.594329			3
5.31	5.33	5.37	833158.9	29.283604			4
5.66	5.70	5.72	71827.41	2.815082			6

**Height Summation:** 8114937.31  
**Amount Avg CF:** 79.255398      Linear:

**Summary Report**

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0	E	** 182.64	4	40	
Aroclor-1221			0	0		** 42.08	3	5	
Aroclor-1248			0	0		** 80.44	4	30	
Aroclor-1254			0	0		** 80.13	4	40	
Aroclor-1260			0	0		24.77	4	40	
Chlordane			0.5	0.16		4.51	4	40	
Toxaphene			1	0.3		** 49.05	4	40	

Units: ug/l

Eurofins Lancaster Laboratories  
Pesticide Residue Analysis  
Runlog for 05PEST18306001  
Instrument CP05--H9190A

Data Directory Path is - \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	05PEST18306001.001	HEXANE	AA	11/2/18 18:58	1830599999	1.00
2306	05PEST18306001.002	IBLKX1824B	PIBLKAA	11/2/18 19:11	1830599999	10.00
2306	05PEST18306001.003	EVALX1824B	PEMAA	11/2/18 19:24	1830599999	1.00
2306	05PEST18306001.004	MIXA11824B	MIXA1AA	11/2/18 19:37	1830599999	1.00
2306	05PEST18306001.005	MIXA21824B	MIXA2AA	11/2/18 19:50	1830599999	1.00
2306	05PEST18306001.006	MIXA31824B	MIXA3AA	11/2/18 20:02	1830599999	1.00
2306	05PEST18306001.007	MIXA41824B	MIXA4AA	11/2/18 20:15	1830599999	1.00
2306	05PEST18306001.008	MIXA51824B	MIXA5AA	11/2/18 20:28	1830599999	1.00
2306	05PEST18306001.009	MIXA61824B	MIXA6AA	11/2/18 20:41	1830599999	1.00
2306	05PEST18306001.010	ICMAX1824C	ICMAXAA	11/2/18 20:54	1830599999	1.00
2306	05PEST18306001.011	MIXE11824D	MIXE1AA	11/2/18 21:07	1830599999	1.00
2306	05PEST18306001.012	MIXE21824D	MIXE2AA	11/2/18 21:20	1830599999	1.00
2306	05PEST18306001.013	MIXE31824D	MIXE3AA	11/2/18 21:33	1830599999	1.00
2306	05PEST18306001.014	MIXE41824D	MIXE4AA	11/2/18 21:45	1830599999	1.00
2306	05PEST18306001.015	MIXE51824D	MIXE5AA	11/2/18 21:58	1830599999	1.00
2306	05PEST18306001.016	MIXE61824D	MIXE6AA	11/2/18 22:11	1830599999	1.00
2306	05PEST18306001.017	ICMEX1824D	ICMEXAA	11/2/18 22:24	1830599999	1.00
2306	05PEST18306001.018	KEPN11824C	KEPN1AA	11/2/18 22:37	1830599999	1.00
2306	05PEST18306001.019	KEPN21824C	KEPN2AA	11/2/18 22:50	1830599999	1.00
2306	05PEST18306001.020	KEPN31824C	KEPN3AA	11/2/18 23:03	1830599999	1.00
2306	05PEST18306001.021	KEPN41824C	KEPN4AA	11/2/18 23:16	1830599999	1.00
2306	05PEST18306001.022	KEPN51824C	KEPN5AA	11/2/18 23:28	1830599999	1.00
2306	05PEST18306001.023	KEPN61824C	KEPN6AA	11/2/18 23:41	1830599999	1.00
2306	05PEST18306001.024	ICKEPX1824E	ICKEPAA	11/2/18 23:54	1830599999	1.00
2306	05PEST18306001.025	TOXA11824D	TOXA1AA	11/3/18 0:07	1830599999	1.00
2306	05PEST18306001.026	TOXA21824D	TOXA2AA	11/3/18 0:20	1830599999	1.00
2306	05PEST18306001.027	TOXA31824D	TOXA3AA	11/3/18 0:33	1830599999	1.00
2306	05PEST18306001.028	TOXA41824E	TOXA4AA	11/3/18 0:46	1830599999	1.00
2306	05PEST18306001.029	TOXA51824D	TOXA5AA	11/3/18 0:58	1830599999	1.00
2306	05PEST18306001.030	TOXA61824D	TOXA6AA	11/3/18 1:11	1830599999	1.00
2306	05PEST18306001.031	ICTXX1824D	ICTXXAA	11/3/18 1:24	1830599999	1.00
2306	05PEST18306001.032	CHLD11824D	CHLD1AA	11/3/18 1:37	1830599999	1.00
2306	05PEST18306001.033	CHLD21824D	CHLD2AA	11/3/18 1:50	1830599999	1.00
2306	05PEST18306001.034	CHLD31824D	CHLD3AA	11/3/18 2:03	1830599999	1.00
2306	05PEST18306001.035	CHLD41824D	CHLD4AA	11/3/18 2:16	1830599999	1.00
2306	05PEST18306001.036	CHLD51824D	CHLD5AA	11/3/18 2:29	1830599999	1.00
2306	05PEST18306001.037	CHLD61824E	CHLD6AA	11/3/18 2:41	1830599999	1.00
2306	05PEST18306001.038	ICCHX1824F	ICCHXAA	11/3/18 2:54	1830599999	1.00
2306	05PEST18306001.039	AR1641824D	AR164AA	11/3/18 3:07	1830599999	1.00
2306	05PEST18306001.040	AR5441824C	AR544AA	11/3/18 3:20	1830599999	1.00
2306	05PEST18306001.041	AR4841824C	AR484AA	11/3/18 3:33	1830599999	1.00
2306	05PEST18306001.042	MDLAX1824D	MDLAXAA	11/3/18 3:46	1830599999	1.00
2306	05PEST18306001.043	MDLEX1824D	MDLEXAA	11/3/18 3:58	1830599999	1.00
2306	05PEST18306001.044	MDKPX1824C	MDKPXAA	11/3/18 4:11	1830599999	1.00
2306	05PEST18306001.045	MDTXX1824D	MDTXXAA	11/3/18 4:24	1830599999	1.00
2306	05PEST18306001.046	MDCHX1824D	MDCHXAA	11/3/18 4:37	1830599999	1.00
2306	05PEST18306001.047	BLANKA 10/19/18 RI	PBLK23292	11/3/18 4:50	182920023A	10.00
2306	05PEST18306001.048	BLANKA 10/23/18 RI	PBLK06296	11/3/18 5:03	182960006A	2.00
2306	05PEST18306001.049	BLANKA 10/23/18 CF	PBLK13296	11/3/18 5:16	182960013A	2.00
2306	05PEST18306001.050	LCSA 10/23/18 CF	LCS13296	11/3/18 5:28	182960013A	2.00
2306	05PEST18306001.051	LCSDA 10/23/18 CF	LCSD13296	11/3/18 5:41	182960013A	2.00
2306	05PEST18306001.052	EVALX1824B	PEMKT	11/3/18 5:54	1830599999	1.00
2306	05PEST18306001.053	MIXA41824B	MIXA4TT	11/3/18 6:07	1830599999	1.00
2306	05PEST18306001.054	MIXE41824D	MIXE4ZK	11/3/18 6:20	1830599999	1.00
2306	05PEST18306001.055	TOXA41824E	TOXA4VI	11/3/18 6:33	1830599999	1.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	05PEST18306001.056	TOXA41824E	TOXA4VI	11/3/18 6:46	1830599999	1.00
2306	05PEST18306001.057	9854344 CF DF10	97606	11/3/18 6:58	182960013A	20.00
2306	05PEST18306001.058	HEXANE	AA	11/3/18 7:11	1830599999	1.00
2306	05PEST18306001.059	9851509 RI	B276N	11/3/18 7:24	182910013A	2.00
2306	05PEST18306001.060	9851512 RI	B124N	11/3/18 7:37	182910013A	2.00
2306	05PEST18306001.061	9851515 RI	BA64N	11/3/18 7:50	182910013A	2.00
2306	05PEST18306001.062	9851518 RI	BA42N	11/3/18 8:03	182910013A	2.00
2306	05PEST18306001.063	MIXA31824B	MIXA3DZ	11/3/18 8:16	1830599999	1.00
2306	05PEST18306001.064	TOXA41824E	TOXA4VJ	11/3/18 8:28	1830599999	1.00
2306	05PEST18306001.065	CHLD41824D	CHLD4BW	11/3/18 8:41	1830599999	1.00
2306	05PEST18306001.066	BLANKA 10/23/18 F	PBLK38292	11/3/18 8:54	182920038A	2.00
2306	05PEST18306001.067	LCSA 10/23/18 F	LCS38292	11/3/18 9:07	182920038A	2.00
2306	05PEST18306001.068	LCSDA 10/23/18 F	LCSD38292	11/3/18 9:20	182920038A	2.00
2306	05PEST18306001.069	9859469 F	22561	11/3/18 9:33	182920038A	2.00
2306	05PEST18306001.070	9859478 F	83051	11/3/18 9:46	182920038A	2.00
2306	05PEST18306001.071	9859481 F	20295	11/3/18 9:59	182920038A	2.00
2306	05PEST18306001.072	9859484 F	04321	11/3/18 10:11	182920038A	2.00
2306	05PEST18306001.073	9859494 F	07771	11/3/18 10:24	182920038A	2.00
2306	05PEST18306001.074	9859528 F	63501	11/3/18 10:37	182920038A	2.00
2306	05PEST18306001.075	9859535 F	05181	11/3/18 10:50	182920038A	2.00
2306	05PEST18306001.076	EVALX1824B	PEMKU	11/3/18 11:03	1830599999	1.00
2306	05PEST18306001.077	MIXA41824B	MIXA4TV	11/3/18 11:16	1830599999	1.00
2306	05PEST18306001.078	KEPN41824C	KEPN4CK	11/3/18 11:29	1830599999	1.00
2306	05PEST18306001.079	TOXA41824E	TOXA4VK	11/3/18 11:41	1830599999	1.00
2306	05PEST18306001.080	CHLD41824D	CHLD4BX	11/3/18 11:54	1830599999	1.00
2306	05PEST18306001.081	BLANKA 10/25/18	PBLK30297	11/3/18 12:07	182970030A	2.00
2306	05PEST18306001.082	LCSA 10/25/18	LCS30297	11/3/18 12:20	182970030A	2.00
2306	05PEST18306001.083	LCSDA 10/25/18	LCSD30297	11/3/18 12:33	182970030A	2.00
2306	05PEST18306001.084	9859872	C3311	11/3/18 12:46	182970030A	2.00
2306	05PEST18306001.085	9859873	C3312	11/3/18 12:59	182970030A	2.00
2306	05PEST18306001.086	HEXANE	AA	11/3/18 13:12	1830599999	1.00
2306	05PEST18306001.087	9859874	C3313	11/3/18 13:25	182970030A	2.00
2306	05PEST18306001.088	9859875	C3314	11/3/18 13:37	182970030A	2.00
2306	05PEST18306001.089	MIXA31824B	MIXA3EA	11/3/18 13:50	1830599999	1.00
2306	05PEST18306001.090	KEPN41824C	KEPN4CL	11/3/18 14:03	1830599999	1.00
2306	05PEST18306001.091	TOXA41824E	TOXA4VL	11/3/18 14:16	1830599999	1.00
2306	05PEST18306001.092	CHLD41824D	CHLD4BY	11/3/18 14:29	1830599999	1.00



Eurofins Lancaster Laboratories  
Pesticide Residue Analysis  
Runlog for 05PEST18306007  
Instrument CP05--H9190A

Data Directory Path is - \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	05PEST18306007.001	HEXANE	AA	11/9/18 9:56	1831299999	1.00
2306	05PEST18306007.002	EVALX1824B	PEMMB	11/9/18 10:09	1831299999	1.00
2306	05PEST18306007.003	MIXA41824B	MIXA4WB	11/9/18 10:22	1831299999	1.00
2306	05PEST18306007.004	TOXA41824E	TOXA4XN	11/9/18 10:35	1831299999	1.00
2306	05PEST18306007.005	CHLD41824D	CHLD4DM	11/9/18 10:47	1831299999	1.00
2306	05PEST18306007.006	BLANKA 11/5/18 C	PBLK17309	11/9/18 13:04	183090017A	2.00
2306	05PEST18306007.007	LCSA 11/5/18 C	LCS17309	11/9/18 13:16	183090017A	2.00
2306	05PEST18306007.008	LCSA 11/5/18 C	LCS17309	11/9/18 13:29	183090017A	2.00
2306	05PEST18306007.009	BLANKA 11/7/18	PBLK23311	11/9/18 13:42	183110023A	2.00
2306	05PEST18306007.010	LCSA 11/7/18	LCS23311	11/9/18 13:55	183110023A	2.00
2306	05PEST18306007.011	9879198 C DF5	SET-2	11/9/18 14:08	183090017A	10.00
2306	05PEST18306007.012	9881532 C DF5	2974N	11/9/18 14:21	183090017A	10.00
2306	05PEST18306007.013	9881802	92E02	11/9/18 14:33	183110023A	2.00
2306	05PEST18306007.014	9881805	92E05	11/9/18 14:46	183110023A	2.00
2306	05PEST18306007.015	9881808	92E08	11/9/18 14:59	183110023A	2.00
2306	05PEST18306007.016	MIXA41824B	MIXA4WC	11/9/18 15:12	1831299999	1.00
2306	05PEST18306007.017	TOXA41824E	TOXA4XO	11/9/18 15:25	1831299999	1.00
2306	05PEST18306007.018	CHLD41824D	CHLD4DN	11/9/18 15:37	1831299999	1.00
2306	05PEST18306007.020	BLANKA 11/5/18 RI	CPBLK17309	11/9/18 16:03	183090017A	2.00
2306	05PEST18306007.021	MIXA41824B	MIXA4WD	11/9/18 16:16	1831299999	1.00
2306	05PEST18306007.022	TOXA41824E	TOXA4XP	11/9/18 16:28	1831299999	1.00
2306	05PEST18306007.023	CHLD41824D	CHLD4DO	11/9/18 16:41	1831299999	1.00
2306	05PEST18306007.024	IBLKX1824B	PIBLKAA	11/9/18 18:12	1831299999	10.00
2306	05PEST18306007.025	EVALX1824B	PEMAA	11/9/18 18:25	1831299999	1.00
2306	05PEST18306007.026	TOXA11824D	TOXA1AA	11/9/18 18:37	1831299999	1.00
2306	05PEST18306007.027	TOXA21824D	TOXA2AA	11/9/18 18:50	1831299999	1.00
2306	05PEST18306007.028	TOXA31824D	TOXA3AA	11/9/18 19:03	1831299999	1.00
2306	05PEST18306007.029	TOXA41824E	TOXA4AA	11/9/18 19:16	1831299999	1.00
2306	05PEST18306007.030	TOXA51824D	TOXA5AA	11/9/18 19:29	1831299999	1.00
2306	05PEST18306007.031	TOXA61824D	TOXA6AA	11/9/18 19:41	1831299999	1.00
2306	05PEST18306007.032	ICTXX1824D	ICTXXAA	11/9/18 19:54	1831299999	1.00
2306	05PEST18306007.033	CHLD11824D	CHLD1AA	11/9/18 20:07	1831299999	1.00
2306	05PEST18306007.034	CHLD21824D	CHLD2AA	11/9/18 20:20	1831299999	1.00
2306	05PEST18306007.035	CHLD31824D	CHLD3AA	11/9/18 20:33	1831299999	1.00
2306	05PEST18306007.036	CHLD41824D	CHLD4AA	11/9/18 20:46	1831299999	1.00
2306	05PEST18306007.037	CHLD51824D	CHLD5AA	11/9/18 20:58	1831299999	1.00
2306	05PEST18306007.038	CHLD61824E	CHLD6AA	11/9/18 21:11	1831299999	1.00
2306	05PEST18306007.039	ICCHX1824F	ICCHXAA	11/9/18 21:24	1831299999	1.00
2306	05PEST18306007.040	MDTXX1824D	MDTXXAA	11/9/18 21:37	1831299999	1.00
2306	05PEST18306007.041	MDCHX1824D	MDCHXAA	11/9/18 21:50	1831299999	1.00
2306	05PEST18306007.042	LCSA 11/7/18	LCSD23311	11/9/18 22:03	183110023A	2.00
2306	05PEST18306007.043	IBLKX1824B	PIBLKQH	11/9/18 22:15	1831299999	10.00
2306	05PEST18306007.044	EVALX1824B	PEMMC	11/9/18 22:28	1831299999	1.00
2306	05PEST18306007.045	MIXA41824B	MIXA4WE	11/9/18 22:41	1831299999	1.00
2306	05PEST18306007.046	TOXA41824E	TOXA4XQ	11/9/18 22:54	1831299999	1.00
2306	05PEST18306007.047	CHLD41824D	CHLD4DP	11/9/18 23:07	1831299999	1.00
2306	05PEST18306007.048	9861917 RI F	GKP01	11/9/18 23:19	182980006A	2.00
2306	05PEST18306007.049	9861918 RI F	GKP03	11/9/18 23:32	182980006A	2.00
2306	05PEST18306007.050	9861919 RI F	GKP04	11/9/18 23:45	182980006A	2.00
2306	05PEST18306007.051	9861920 RI F	GKPR1	11/9/18 23:58	182980006A	2.00
2306	05PEST18306007.052	9861921 RI F	GKP05	11/10/18 0:11	182980006A	2.00
2306	05PEST18306007.053	9861922 RI F	GKP02	11/10/18 0:24	182980006A	2.00
2306	05PEST18306007.054	IBLKX1824B	PIBLKQG	11/10/18 0:37	1831299999	10.00
2306	05PEST18306007.055	MIXA41824B	MIXA4WF	11/10/18 0:49	1831299999	1.00
2306	05PEST18306007.056	TOXA41824E	TOXA4XR	11/10/18 1:02	1831299999	1.00
2306	05PEST18306007.057	CHLD41824D	CHLD4DQ	11/10/18 1:15	1831299999	1.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	05PEST18306007.058	9862003MS RI F	L4205	11/10/18	1:28 182980006A	2.00
2306	05PEST18306007.059	9862004MSD RI F	L4205	11/10/18	1:41 182980006A	2.00
2306	05PEST18306007.060	9862010 RI F	L4210	11/10/18	1:53 182980006A	2.00
2306	05PEST18306007.061	9862011 RI F	L4211	11/10/18	2:06 182980006A	2.00
2306	05PEST18306007.062	9862013 RI F	L4213	11/10/18	2:19 182980006A	2.00
2306	05PEST18306007.063	MIXA41824B	MIXA4WG	11/10/18	2:32 1831299999	1.00
2306	05PEST18306007.064	MIXE41824D	MIXE4AG	11/10/18	2:45 1831299999	1.00
2306	05PEST18306007.065	TOXA41824E	TOXA4XS	11/10/18	2:57 1831299999	1.00
2306	05PEST18306007.066	CHLD41824D	CHLD4DR	11/10/18	3:10 1831299999	1.00
2306	05PEST18306007.067	9860265 RI F	GW3C1	11/10/18	3:23 182970009A	2.00
2306	05PEST18306007.068	9860266MS RI F	GW3C1	11/10/18	3:36 182970009A	2.00
2306	05PEST18306007.069	9860267MSD RI F	GW3C1	11/10/18	3:49 182970009A	2.00
2306	05PEST18306007.070	9860269 RI F	GW3FD	11/10/18	4:02 182970009A	2.00
2306	05PEST18306007.071	9860270 RI F	GW3BL	11/10/18	4:14 182970009A	2.00
2306	05PEST18306007.072	9860376MS RI F	GW3C1	11/10/18	4:27 182970009A	2.00
2306	05PEST18306007.073	9860378MSD RI F	GW3C1	11/10/18	4:40 182970009A	2.00
2306	05PEST18306007.074	EVALX1824B	PEMMD	11/10/18	4:53 1831299999	1.00
2306	05PEST18306007.075	MIXA41824B	MIXA4WH	11/10/18	5:06 1831299999	1.00
2306	05PEST18306007.076	MIXE41824D	MIXE4AH	11/10/18	5:19 1831299999	1.00
2306	05PEST18306007.077	KEPN41824C	KEPN4CN	11/10/18	5:31 1831299999	1.00
2306	05PEST18306007.078	TOXA41824E	TOXA4XT	11/10/18	5:44 1831299999	1.00
2306	05PEST18306007.079	CHLD41824D	CHLD4DS	11/10/18	5:57 1831299999	1.00
2306	05PEST18306007.080	9855381 RI	BC334	11/10/18	6:10 182960006A	2.00
2306	05PEST18306007.081	9855384 RI	BC335	11/10/18	6:23 182960006A	2.00
2306	05PEST18306007.082	9855385 RI	BC336	11/10/18	6:36 182960006A	2.00
2306	05PEST18306007.083	9857898 RI	C3308	11/10/18	6:49 182960006A	2.00
2306	05PEST18306007.084	9857899 RI	C3309	11/10/18	7:02 182960006A	2.00
2306	05PEST18306007.085	KEPN41824C	KEPN4CN	11/10/18	7:14 1831299999	1.00
2306	05PEST18306007.086	CHLD41824D	CHLD4DT	11/10/18	7:27 1831299999	1.00

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Pesticide Residue Analysis  
Runlog for 05PEST18306008  
Instrument CP05--H9190A

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Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	05PEST18306008.001	HEXANE	AA	11/12/18	13:22 1831599999	1.00
2306	05PEST18306008.002	IBLKX1824B	PIBLKRE	11/12/18	13:35 1831599999	10.00
2306	05PEST18306008.003	EVALX1824B	PEMMG	11/12/18	13:47 1831599999	1.00
2306	05PEST18306008.004	MIXA41824B	MIXA4WI	11/12/18	14:00 1831599999	1.00
2306	05PEST18306008.005	MIXE41824D	MIXE4AI	11/12/18	14:13 1831599999	1.00
2306	05PEST18306008.006	TOXA41824E	TOXA4XU	11/12/18	14:26 1831599999	1.00
2306	05PEST18306008.007	CHLD41824D	CHLD4DU	11/12/18	14:39 1831599999	1.00
2306	05PEST18306008.008	HEXANE	AA	11/12/18	20:04 1831599999	1.00
2306	05PEST18306008.009	IBLKX1824B	PIBLKRM	11/12/18	20:17 1831599999	10.00
2306	05PEST18306008.010	EVALX1824B	PEMMK	11/12/18	20:30 1831599999	1.00
2306	05PEST18306008.011	MIXA11824B	MIXA1AA	11/12/18	20:42 1831599999	1.00
2306	05PEST18306008.012	MIXA21824B	MIXA2AA	11/12/18	20:55 1831599999	1.00
2306	05PEST18306008.013	MIXA31824B	MIXA3AA	11/12/18	21:08 1831599999	1.00
2306	05PEST18306008.014	MIXA41824B	MIXA4AA	11/12/18	21:21 1831599999	1.00
2306	05PEST18306008.015	MIXA51824B	MIXA5AA	11/12/18	21:34 1831599999	1.00
2306	05PEST18306008.016	MIXA61824B	MIXA6AA	11/12/18	21:46 1831599999	1.00
2306	05PEST18306008.017	ICMAX1824C	ICMAXAA	11/12/18	21:59 1831599999	1.00
2306	05PEST18306008.018	MDLAX1824D	MDLAXAA	11/12/18	22:12 1831599999	1.00
2306	05PEST18306008.019	TOXA41824E	TOXA4YB	11/12/18	22:25 1831599999	1.00
2306	05PEST18306008.020	CHLD41824D	CHLD4EB	11/12/18	22:38 1831599999	1.00
2306	05PEST18306008.021	BLANKA 11/8/18	PBLK14312	11/12/18	22:51 183120014A	2.00
2306	05PEST18306008.022	LCSA 11/8/18	LCS14312	11/12/18	23:03 183120014A	2.00
2306	05PEST18306008.023	LCSDA 11/8/18	LCSD14312	11/12/18	23:16 183120014A	2.00
2306	05PEST18306008.024	BLANKA 11/8/18	PBLK12312	11/12/18	23:29 183120012A	2.00
2306	05PEST18306008.025	LCSA 11/8/18	LCS12312	11/12/18	23:42 183120012A	2.00
2306	05PEST18306008.026	LCSDA 11/8/18	LCSD12312	11/12/18	23:55 183120012A	2.00
2306	05PEST18306008.027	BLANKA 11/9/18	PBLK06313	11/13/18	0:07 183130006A	2.00
2306	05PEST18306008.028	LCSA 11/9/18	LCS06313	11/13/18	0:20 183130006A	2.00
2306	05PEST18306008.029	LCSDA 11/9/18	LCSD06313	11/13/18	0:33 183130006A	2.00
2306	05PEST18306008.030	MIXA41824B	MIXA4WQ	11/13/18	0:46 1831599999	1.00
2306	05PEST18306008.031	TOXA41824E	TOXA4YC	11/13/18	0:59 1831599999	1.00
2306	05PEST18306008.032	CHLD41824D	CHLD4EC	11/13/18	1:11 1831599999	1.00
2306	05PEST18306008.033	9885288	EPADN	11/13/18	1:24 183120014A	2.00
2306	05PEST18306008.034	9885535	O3706	11/13/18	1:37 183120014A	2.00
2306	05PEST18306008.035	9884531	76592	11/13/18	1:50 183120012A	2.00
2306	05PEST18306008.036	9887821	24581	11/13/18	2:03 183130006A	2.00
2306	05PEST18306008.037	HEXANE	AA	11/13/18	2:15 1831599999	1.00
2306	05PEST18306008.038	EVALX1824B	PEMML	11/13/18	2:28 1831599999	1.00
2306	05PEST18306008.039	MIXA31824B	MIXA3EP	11/13/18	2:41 1831599999	1.00
2306	05PEST18306008.040	TOXA41824E	TOXA4YD	11/13/18	2:54 1831599999	1.00
2306	05PEST18306008.041	CHLD41824D	CHLD4ED	11/13/18	3:07 1831599999	1.00
2306	05PEST18306008.042	9885262 DF5	EVT1N	11/13/18	3:20 183130006A	10.00
2306	05PEST18306008.043	HEXANE	AA	11/13/18	3:32 1831599999	1.00
2306	05PEST18306008.044	9885262 DF10	EVT1N	11/13/18	3:45 183130006A	20.00
2306	05PEST18306008.045	HEXANE	AA	11/13/18	3:58 1831599999	1.00
2306	05PEST18306008.046	9885531 DF100	O3702	11/13/18	4:11 183130006A	200.00
2306	05PEST18306008.047	HEXANE	AA	11/13/18	4:24 1831599999	1.00
2306	05PEST18306008.048	9885531 DF200	O3702	11/13/18	4:37 183130006A	400.00
2306	05PEST18306008.049	HEXANE	AA	11/13/18	4:49 1831599999	1.00
2306	05PEST18306008.050	MIXA41824B	MIXA4WS	11/13/18	5:02 1831599999	1.00
2306	05PEST18306008.051	TOXA41824E	TOXA4YE	11/13/18	5:15 1831599999	1.00
2306	05PEST18306008.052	CHLD41824D	CHLD4EE	11/13/18	5:28 1831599999	1.00
2306	05PEST18306008.053	BLANKA 10/26/18 F	PBLK07299	11/13/18	5:41 182990007A	2.00
2306	05PEST18306008.054	LCSA 10/26/18 F	LCS07299	11/13/18	5:54 182990007A	2.00
2306	05PEST18306008.055	LCSDA 10/26/18 F	LCSD07299	11/13/18	6:06 182990007A	2.00
2306	05PEST18306008.056	9869228 F	79E01	11/13/18	6:19 182990007A	2.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	05PEST18306008.057	9869230 F	79E03	11/13/18 6:32	182990007A	2.00
2306	05PEST18306008.058	HEXANE	AA	11/13/18 6:45	1831599999	1.00
2306	05PEST18306008.059	9869232 F	79E05	11/13/18 6:58	182990007A	2.00
2306	05PEST18306008.060	HEXANE	AA	11/13/18 7:10	1831599999	1.00
2306	05PEST18306008.061	MIXA31824B	MIXA3EQ	11/13/18 7:23	1831599999	1.00
2306	05PEST18306008.062	TOXA41824E	TOXA4YF	11/13/18 7:36	1831599999	1.00
2306	05PEST18306008.063	CHLD41824D	CHLD4EF	11/13/18 7:49	1831599999	1.00
2306	05PEST18306008.064	9879203	BNZ03	11/13/18 8:02	183120014A	2.00
2306	05PEST18306008.065	9879207	BNK03	11/13/18 8:15	183120014A	2.00
2306	05PEST18306008.066	9881335	NV947	11/13/18 8:27	183120014A	2.00
2306	05PEST18306008.067	9884244	30952	11/13/18 8:40	183120014A	2.00
2306	05PEST18306008.068	9884246	310NF	11/13/18 8:53	183120014A	2.00
2306	05PEST18306008.069	9881779 DF200	29172	11/13/18 9:06	183120012A	400.00
2306	05PEST18306008.070	HEXANE	AA	11/13/18 9:19	1831599999	1.00
2306	05PEST18306008.071	9882054	18811	11/13/18 9:32	183120012A	2.00
2306	05PEST18306008.072	EVALX1824B	PEMMM	11/13/18 9:44	1831599999	1.00
2306	05PEST18306008.073	MIXA41824B	MIXA4WU	11/13/18 9:57	1831599999	1.00
2306	05PEST18306008.074	TOXA41824E	TOXA4YG	11/13/18 10:10	1831599999	1.00
2306	05PEST18306008.075	CHLD41824D	CHLD4EG	11/13/18 10:23	1831599999	1.00
2306	05PEST18306008.076	9881341 DF25	16T02	11/13/18 10:36	183130006A	50.00
2306	05PEST18306008.077	9881344	16T05	11/13/18 10:49	183130006A	2.00
2306	05PEST18306008.078	9882159	WCS02	11/13/18 11:01	183130006A	2.00
2306	05PEST18306008.079	MIXA31824B	MIXA3ER	11/13/18 11:14	1831599999	1.00
2306	05PEST18306008.080	TOXA41824E	TOXA4YH	11/13/18 11:27	1831599999	1.00
2306	05PEST18306008.081	CHLD41824D	CHLD4EH	11/13/18 11:40	1831599999	1.00

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Pesticide Residue Analysis  
Runlog for 05PEST18306010  
Instrument CP05--H9190A

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2306	05PEST18306010.001	HEXANE	AA	11/14/18 9:57	1831799999	1.00
2306	05PEST18306010.002	IBLKX1824B	PIBLKAA	11/14/18 10:10	1831799999	10.00
2306	05PEST18306010.003	EVALX1824B	PEMAA	11/14/18 10:23	1831799999	1.00
2306	05PEST18306010.004	KEPN11824C	KEPN1AA	11/14/18 10:36	1831799999	1.00
2306	05PEST18306010.005	KEPN21824C	KEPN2AA	11/14/18 10:49	1831799999	1.00
2306	05PEST18306010.006	KEPN31824C	KEPN3AA	11/14/18 11:01	1831799999	1.00
2306	05PEST18306010.007	KEPN41824C	KEPN4AA	11/14/18 11:14	1831799999	1.00
2306	05PEST18306010.008	KEPN51824C	KEPN5AA	11/14/18 11:27	1831799999	1.00
2306	05PEST18306010.009	KEPN61824C	KEPN6AA	11/14/18 11:40	1831799999	1.00
2306	05PEST18306010.010	ICKEPX1824E	ICKEPAA	11/14/18 11:53	1831799999	1.00
2306	05PEST18306010.011	MDKPX1824C	MDKPXAA	11/14/18 12:05	1831799999	1.00
2306	05PEST18306010.012	9855384 RI	BC335	11/14/18 12:18	182960006A	2.00
2306	05PEST18306010.013	9855385 RI	BC336	11/14/18 12:31	182960006A	2.00
2306	05PEST18306010.014	9857898 RI	C3308	11/14/18 12:44	182960006A	2.00
2306	05PEST18306010.015	9857899 RI	C3309	11/14/18 12:57	182960006A	2.00
2306	05PEST18306010.016	MIXA41824B	MIXA4XW	11/14/18 13:09	1831799999	1.00
2306	05PEST18306010.017	MIXE41824D	MIXE4AN	11/14/18 13:22	1831799999	1.00
2306	05PEST18306010.018	KEPN41824C	KEPN4CO	11/14/18 13:35	1831799999	1.00
2306	05PEST18306010.019	TOXA41824E	TOXA4ZI	11/14/18 13:48	1831799999	1.00
2306	05PEST18306010.020	CHLD41824D	CHLD4FG	11/14/18 14:01	1831799999	1.00
2306	05PEST18306010.021	BLANKA 10/25/18 RI	PBLK30297	11/14/18 15:50	182970030A	2.00
2306	05PEST18306010.022	9859872 RI	C3311	11/14/18 16:02	182970030A	2.00
2306	05PEST18306010.023	9859875 RI	C3314	11/14/18 16:15	182970030A	2.00
2306	05PEST18306010.024	9859874 DF10	C3313	11/14/18 16:28	182970030A	20.00
2306	05PEST18306010.025	HEXANE	AA	11/14/18 16:41	1831799999	1.00
2306	05PEST18306010.026	9859873 DF20	C3312	11/14/18 16:54	182970030A	40.00
2306	05PEST18306010.027	HEXANE	AA	11/14/18 17:06	1831799999	1.00
2306	05PEST18306010.028	EVALX1824B	PEMNC	11/14/18 17:19	1831799999	1.00
2306	05PEST18306010.029	MIXA41824B	MIXA4XX	11/14/18 17:32	1831799999	1.00
2306	05PEST18306010.030	MIXE41824D	MIXE4AO	11/14/18 17:45	1831799999	1.00
2306	05PEST18306010.031	KEPN41824C	KEPN4CP	11/14/18 17:57	1831799999	1.00
2306	05PEST18306010.032	TOXA41824E	TOXA4ZJ	11/14/18 18:10	1831799999	1.00
2306	05PEST18306010.033	CHLD41824D	CHLD4FH	11/14/18 18:23	1831799999	1.00
2306	05PEST18306010.034	HEXANE	AA	11/14/18 18:42	1831799999	1.00
2306	05PEST18306010.035	BLANKA 11/5/18 F	PBLK40309	11/14/18 18:55	183090040A	2.00
2306	05PEST18306010.036	LCSA 11/5/18 F	LCS40309	11/14/18 19:08	183090040A	2.00
2306	05PEST18306010.037	LCSDA 11/5/18 F	LCSD40309	11/14/18 19:20	183090040A	2.00
2306	05PEST18306010.038	BLANKA 10/17/18 CF	PBLK11290	11/14/18 19:33	182900011A	10.00
2306	05PEST18306010.039	LCSA 10/17/18 CF	LCS11290	11/14/18 19:46	182900011A	10.00
2306	05PEST18306010.040	LCSDA 10/17/18 CF	LCSD11290	11/14/18 19:59	182900011A	10.00
2306	05PEST18306010.041	9874451 F	-63C	11/14/18 20:12	183090040A	2.00
2306	05PEST18306010.042	9854246 CF	10004	11/14/18 20:24	182900011A	10.00
2306	05PEST18306010.043	HEXANE	AA	11/14/18 20:37	1831799999	1.00
2306	05PEST18306010.044	MIXA31824B	MIXA3FA	11/14/18 20:50	1831799999	1.00
2306	05PEST18306010.045	MIXE41824D	MIXE4AR	11/14/18 21:03	1831799999	1.00
2306	05PEST18306010.046	TOXA41824E	TOXA4ZR	11/14/18 21:16	1831799999	1.00
2306	05PEST18306010.047	CHLD41824D	CHLD4FK	11/14/18 21:28	1831799999	1.00
2306	05PEST18306010.048	BLANKA 11/6/18 F	PBLK09310	11/14/18 21:41	183100009A	2.00
2306	05PEST18306010.049	LCSA 11/6/18 F	LCS09310	11/14/18 21:54	183100009A	2.00
2306	05PEST18306010.050	9861406R F	RT01D	11/14/18 22:07	183100009A	2.00
2306	05PEST18306010.051	9861406RMS F	RT01DMS	11/14/18 22:19	183100009A	2.00
2306	05PEST18306010.052	9861406RMSD F	RT01DMSD	11/14/18 22:32	183100009A	2.00
2306	05PEST18306010.053	9861413R F	RT29L	11/14/18 22:45	183100009A	2.00
2306	05PEST18306010.054	9881309 F	15T-2	11/14/18 22:58	183100009A	2.00
2306	05PEST18306010.055	HEXANE	AA	11/14/18 23:10	1831799999	1.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	05PEST18306010.056	9881310 F	15T-3	11/14/18 23:23	183100009A	2.00
2306	05PEST18306010.057	HEXANE	AA	11/14/18 23:36	1831799999	1.00
2306	05PEST18306010.058	EVALX1824B	PEMNI	11/14/18 23:49	1831799999	1.00
2306	05PEST18306010.059	MIXA41824B	MIXA4YH	11/15/18 0:02	1831799999	1.00
2306	05PEST18306010.060	TOXA41824E	TOXA4ZS	11/15/18 0:14	1831799999	1.00
2306	05PEST18306010.061	CHLD41824D	CHLD4FL	11/15/18 0:27	1831799999	1.00
2306	05PEST18306010.062	9881313 F	15T-6	11/15/18 0:40	183100009A	2.00
2306	05PEST18306010.063	9861403 RI F DF5	RT09D	11/15/18 0:53	182950007A	10.00
2306	05PEST18306010.064	HEXANE	AA	11/15/18 1:06	1831799999	1.00
2306	05PEST18306010.065	BLANKA 10/26/18	CFBLK07299	11/15/18 1:18	182990007A	2.00
2306	05PEST18306010.066	LCSA 10/26/18 CF	LCS07299	11/15/18 1:31	182990007A	2.00
2306	05PEST18306010.067	LCSDA 10/26/18 CF	LCSD07299	11/15/18 1:44	182990007A	2.00
2306	05PEST18306010.068	9869228 CF DF20	79E01	11/15/18 1:57	182990007A	40.00
2306	05PEST18306010.069	9869230 CF DF20	79E03	11/15/18 2:09	182990007A	40.00
2306	05PEST18306010.070	9869232 CF DF20	79E05	11/15/18 2:22	182990007A	40.00
2306	05PEST18306010.071	HEXANE	AA	11/15/18 2:35	1831799999	1.00
2306	05PEST18306010.072	EVALX1824B	PEMNI	11/15/18 2:48	1831799999	1.00
2306	05PEST18306010.073	MIXA41824B	MIXA4YM	11/15/18 3:00	1831799999	1.00
2306	05PEST18306010.074	TOXA41824E	TOXA4ZV	11/15/18 3:13	1831799999	1.00
2306	05PEST18306010.075	CHLD41824D	CHLD4FM	11/15/18 3:26	1831799999	1.00
2306	05PEST18306010.076	9873116 F DF5	83E01	11/15/18 3:39	183040018A	10.00
2306	05PEST18306010.077	9868184 CF	RCL-1	11/15/18 3:52	182990007A	2.00
2306	05PEST18306010.078	9868185 CF	RCL-4	11/15/18 4:04	182990007A	2.00
2306	05PEST18306010.079	9868186 CF	RCL-7	11/15/18 4:17	182990007A	2.00
2306	05PEST18306010.080	9868187 CF	RCLG4	11/15/18 4:30	182990007A	2.00
2306	05PEST18306010.081	9868189 CF	RCLFB	11/15/18 4:43	182990007A	2.00
2306	05PEST18306010.082	9868786 CF	42L03	11/15/18 4:56	182990007A	2.00
2306	05PEST18306010.083	9868787 CF	42L04	11/15/18 5:09	182990007A	2.00
2306	05PEST18306010.084	9868788 CF	42L05	11/15/18 5:21	182990007A	2.00
2306	05PEST18306010.085	9868789 CF	42L06	11/15/18 5:34	182990007A	2.00
2306	05PEST18306010.086	9868791 CF	42L08	11/15/18 5:47	182990007A	2.00
2306	05PEST18306010.087	9868793 CF	42L10	11/15/18 6:00	182990007A	2.00
2306	05PEST18306010.088	MIXA41824B	MIXA4YJ	11/15/18 6:12	1831799999	1.00
2306	05PEST18306010.089	TOXA41824E	TOXA4ZU	11/15/18 6:25	1831799999	1.00
2306	05PEST18306010.090	CHLD41824D	CHLD4FN	11/15/18 6:38	1831799999	1.00

# **Sample Data**

## **Pesticides**

# Data Summary

**Sample Name:** 9881309      **F**      **15T-2**      **Sample ID:** AB **Batchnumber:** 18310009A  
**Sample Amount:** 246 ml    **Total Volume:** 2 ml    **Analyst:** 9588    **SDG:** TID15    **State:** NY  
**Analyses:** 10589

**Analysis Report (A)**

**Injected on** Nov 14, 2018 22:58:08  
**Instrument** H9190A  
**Result file** 05PEST18306010.054.RAW  
**Calibration file** 05PEST1830605  
**Method file** 05PESTD

%SSR(TCX) \* 40% (44 - 124) Conc: 0.121651  
 %SSR(DCB) \* 18% (32 - 149) Conc: 0.053004

**Analysis Report (B)**

**Injected on** Nov 14, 2018 22:58:08  
**Instrument** H9190B  
**Result file** 05PEST18306010B.054.RAW  
**Calibration file** 05PEST1830605B  
**Method file** 05PESTD

%SSR(TCX) \* 34% (44 - 124) Conc: 0.102506  
 %SSR(DCB) \* 15% (32 - 149) Conc: 0.045825

**Single Component Data**

Compound	Min	RT	Max	Height	Amount	Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.52	2.54	2.56	6534558	0.121651	Tetrachloro-m-xylene	2.33	2.36	2.37	25034960	0.102506
TCB	2.81	2.82	2.85	126178	0.002434	TCB	2.66	2.69	2.70	876903	0.005047
Alpha BHC	2.93	2.95	2.97	1405301	0.018254	Alpha BHC	2.75	2.77	2.79	5220660	0.017773
Gamma BHC - Lindane	3.18	3.20	3.22	21095	0.000322	Gamma BHC - Lindane	3.01	3.04	3.05	787809	0.006875
Beta BHC	3.25	3.28	3.29	304873	0.010455	Beta BHC	3.07	3.09	3.11	206880	0.001773
Delta BHC	3.39	3.40	3.43	103896	0.001734	Delta BHC	3.30	3.30	3.34	229766	0.006009
Aldrin	3.83	3.86	3.87	36824	0.000719	Heptachlor	3.35	3.35	3.39	627094	0.002826
o,p-DDE	4.35	4.37	4.39	85875	0.003753	Aldrin	3.61	3.63	3.65	84920	0.004526
Gamma Chlordane	4.46	4.50	4.50	276631	0.005935	Telodrin	3.76	3.77	3.80	210971	0.002397
Alpha Chlordane	4.57	4.59	4.61	31484	0.000678	Heptachlor Epoxide	4.10	4.14	4.14	395458	0.00233
p,p-DDE	4.63	4.65	4.67	108820	0.002613	Gamma Chlordane	4.27	4.30	4.31	227661	0.001278
Endosulfan I	4.68	4.72	4.72	59088	0.001358	Alpha Chlordane	4.39	4.40	4.43	45620	0.000258
o,p-DDD	4.77	4.80	4.81	40220	0.001934	Endosulfan I	4.43	4.45	4.47	76804	0.000487
Dieldrin	4.87	4.88	4.91	110804	0.002411	p,p-DDE	4.53	4.55	4.57	200640	0.00996
Endrin	5.04	5.06	5.08	38532	0.00089	Dieldrin	4.65	4.66	4.69	139094	0.000794
Kepone	5.08	5.11	5.12	21658	0.001132	o,p-DDT	4.94	4.95	4.97	991831	0.014434
Endosulfan II	5.21	5.22	5.25	101192	0.002538	Kepone	4.97	5.00	5.01	111826	0.032962
p,p-DDT	5.30	5.31	5.34	256550	0.006673	Endosulfan II	5.05	5.07	5.09	39850	0.00027
Methoxychlor	5.65	5.67	5.69	71051	0.004021	p,p-DDT	5.21	5.24	5.25	839279	0.0059
Endosulfan Sulfate	5.82	5.84	5.86	51099	0.001412	Endrin Aldehyde	5.30	5.32	5.34	186666	0.001568
Endrin Ketone	6.02	6.03	6.06	54348	0.001265	Endosulfan Sulfate	5.50	5.52	5.53	41193	0.000293
Decachlorobiphenyl	6.67	6.69	6.73	1436231	0.053004	Mirex	5.83	5.86	5.87	38769	0.00057
						Endrin Ketone	5.86	5.89	5.90	135612	0.000917
						Decachlorobiphenyl	6.65	6.68	6.71	4373014	0.045825

**Single Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Total DDTs			<0.0041	<0.0081	<0.0163			
<input type="checkbox"/> Total Endosulfans (I + II)					<0.0081			
<input type="checkbox"/> Tetrachloro-m-xylene	A	0.121651	0.0122	0.0244	0.0244		17.08	
<input checked="" type="checkbox"/> Tetrachloro-m-xylene-D1	A	0.121651	0.0122	0.0244	0.0244			
<input checked="" type="checkbox"/> Tetrachloro-m-xylene-D2	B	0.102506	0.0122	0.0244	0.0244			
<input type="checkbox"/> HCB			<0.0024	<0.0057	<0.0081			
<input checked="" type="checkbox"/> Alpha BHC	A	0.018254	0.0024	0.0057	0.0081	D1	2.67	
<input checked="" type="checkbox"/> Gamma BHC - Lindane			<0.0016	<0.0057	<0.0081	D1		
<input checked="" type="checkbox"/> Beta BHC			<0.0028	<0.0057	<0.0081	D2		
<input checked="" type="checkbox"/> Delta BHC			<0.0028	<0.0057	<0.0081	D1		
<input checked="" type="checkbox"/> Heptachlor			<0.0016	<0.0057	<0.0081	D1		
<input checked="" type="checkbox"/> Aldrin			<0.0016	<0.0057	<0.0081	D1		
<input type="checkbox"/> Telodrin					<0.0081			
<input type="checkbox"/> o,p-DDE			<0.0057	<0.0114	<0.0163			
<input checked="" type="checkbox"/> Heptachlor Epoxide			<0.0019	<0.0057	<0.0081	D1		
<input checked="" type="checkbox"/> Gamma Chlordane			<0.0057	<0.0163	<0.0163	D2		
<input checked="" type="checkbox"/> Alpha Chlordane			<0.0024	<0.0057	<0.0081	D2		
<input checked="" type="checkbox"/> p,p-DDE			<0.0041	<0.0081	<0.0163	D1		

Reviewed and digitally signed by Andrea L Jones on 11/19/2018 12:01:51



# Data Summary

Sample Name: 9881309 F 15T-2 Sample ID: AB Batchnumber: 183100009A  
 Sample Amount: 246 ml Total Volume: 2 ml Analyst: 9588 SDG: TID15 State: NY  
 Analyses: 10589

### Analysis Report (A)

Injected on Nov 14, 2018 22:58:08  
 Instrument H9190A  
 Result file 05PEST18306010.054.RAW  
 Calibration file 05PEST1830605  
 Method file 05PESTD

### Analysis Report (B)

Injected on Nov 14, 2018 22:58:08  
 Instrument H9190B  
 Result file 05PEST18306010B.054.RAW  
 Calibration file 05PEST1830605B  
 Method file 05PESTDB

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Endosulfan I			<0.0035	<0.0073	<0.0081	D2		
<input type="checkbox"/> o,p-DDD			<0.0041	<0.0081	<0.0163			
<input checked="" type="checkbox"/> Dieldrin			<0.0043	<0.0081	<0.0163	D2		
<input type="checkbox"/> o,p-DDT			<0.0041	<0.0081	<0.0163			
<input checked="" type="checkbox"/> Endrin			<0.0066	<0.0163	<0.0163	D2		
<input type="checkbox"/> Kepone					<0.1626			
<input checked="" type="checkbox"/> p,p-DDD			<0.0041	<0.0081	<0.0163	D1		
<input checked="" type="checkbox"/> Endosulfan II			<0.0122	<0.0244	<0.0244	D2		
<input checked="" type="checkbox"/> p,p-DDT	A	0.006673	0.0042	<0.0081	<0.0163	JD1	12.30	
<input checked="" type="checkbox"/> Endrin Aldehyde			<0.0163	<0.0325	<0.0813	D1		
<input checked="" type="checkbox"/> Methoxychlor			<0.0244	<0.0569	<0.0813	D2		
<input type="checkbox"/> Mirex			<0.0081	<0.0325	<0.0407			
<input checked="" type="checkbox"/> Endosulfan Sulfate			<0.0047	<0.0098	<0.0163	D2		
<input checked="" type="checkbox"/> Endrin Ketone			<0.0041	<0.0081	<0.0163	D2		
<input type="checkbox"/> Decachlorobiphenyl	A	0.053004	0.0122	0.0244	0.0244		14.53	
<input checked="" type="checkbox"/> Decachlorobiphenyl-D1	A	0.053004	0.0122	0.0244	0.0244			
<input checked="" type="checkbox"/> Decachlorobiphenyl-D2	B	0.045825	0.0122	0.0244	0.0244			

### Multiple Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
<input checked="" type="checkbox"/> Chlordane			<0.1301	<0.2602	<0.4065	D1		4	
<input checked="" type="checkbox"/> Toxaphene			<0.2439	<0.4878	<0.813	D1		4	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

NOV 19 2018

# Eurofins Lancaster Laboratories Single Component Data Summary

**Sample Name:** 9881309 F 15T-2 ID: AB Batchnumber: 183100009A  
**Sample Amount:** 246 ml Total Volume: 2 ml Analyst: 2306 SDG: TID15 State: NY  
**Analyses:** 10589

## Analysis Report (A)

Injected on : Nov 14, 2018 22:58:08  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.054.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

%SSR(TCX) : \*40% (44-124) Conc.: 0.121651  
 %SSR(DCB) : \*18% (32-149) Conc.: 0.053004

Peak name	Min	R.T	Max	Height	Amount
TCX	2.52	2.54	2.56	6534558	0.121651
HCX	2.81	2.82	2.85	126178	0.002434
alpha-BHC	2.93	2.95	2.97	1405301	0.018254
gamma-BHC	3.18	3.20	3.22	21095	0.000322
beta-BHC	3.25	3.28	3.29	304873	0.010455
delta-BHC	3.39	3.40	3.43	103896	0.001734
Aldrin	3.83	3.86	3.87	36824	0.000719
o,p-DDE	4.35	4.37	4.39	85875	0.003753
g. Chlordane	4.46	4.50	4.50	276631	0.005935
a. Chlordane	4.57	4.59	4.61	31484	0.000678
4,4'-DDE	4.63	4.65	4.67	108820	0.002613
Endosulfan I	4.68	4.72	4.72	59088	0.001358
o,p-DDD	4.77	4.80	4.81	40220	0.001934
Dieldrin	4.87	4.88	4.91	110804	0.002411
Endrin	5.04	5.06	5.08	38532	0.000890
Kepone	5.08	5.11	5.12	21658	0.001132
Endosulfan II	5.21	5.22	5.25	101192	0.002538
4,4'-DDT	5.30	5.31	5.34	256550	0.006673
Methoxychlor	5.65	5.67	5.69	71051	0.004021
Endo. sulfate	5.82	5.84	5.86	51099	0.001412
Endrin ketone	6.02	6.03	6.06	54348	0.001265
DCB	6.67	6.69	6.73	1436231	0.053004

*hept epox*  
*U.M-DDD*  
*hept epox: 85875 x 2 = 0.001872605*  
*372833.9 246*  
*U.M-DDD: 21658 x 2 = 0.00417825*  
*284979 246*

## Analysis Report (B)

Injected on : Nov 14, 2018 22:58:08  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.054.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

%SSR(TCX) : \*34% (44-124) Conc.: 0.102506  
 %SSR(DCB) : \*15% (32-149) Conc.: 0.045825

Peak name	Min	R.T	Max	Height	Amount
TCX	2.33	2.36	2.37	25034960	0.102506
HCX	2.66	2.69	2.70	876903	0.005047
alpha-BHC	2.75	2.77	2.79	5220660	0.017773
gamma-BHC	3.01	3.04	3.05	787809	0.006875
beta-BHC	3.07	3.09	3.11	206880	0.001773
delta-BHC	3.30	3.30	3.34	229766	0.006009
Heptachlor	3.35	3.35	3.39	627094	0.002826
Aldrin	3.61	3.63	3.65	84920	0.004526
Telodrin	3.76	3.77	3.80	210971	0.002397
Hept. epoxide	4.10	4.14	4.14	395458	0.002330
g. Chlordane	4.27	4.30	4.31	227661	0.001278
a. Chlordane	4.39	4.40	4.43	45620	0.000258
Endosulfan I	4.43	4.45	4.47	76804	0.000487
4,4'-DDE	4.53	4.55	4.57	200640	0.009960
Dieldrin	4.65	4.66	4.69	139094	0.000794
o,p-DDT	4.94	4.95	4.97	991831	0.014434
Kepone	4.97	5.00	5.01	111826	0.032962
Endosulfan II	5.05	5.07	5.09	39850	0.000270
4,4'-DDT	5.21	5.24	5.25	839279	0.005900
Endrin aldehyde	5.30	5.32	5.34	186666	0.001568
Endo. sulfate	5.50	5.52	5.53	41193	0.000293
Mirex	5.83	5.86	5.87	38769	0.000570
Endrin ketone	5.86	5.89	5.90	135612	0.000917
DCB	6.65	6.68	6.71	4373014	0.045825

*Matrix*  
*End*  
*U.M-DDD: 21658 x 2 = 0.00417825*  
*284979 246*

## Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input type="checkbox"/> TCX	A	0.121651	0.0244	0.0122		17.08	
<input type="checkbox"/> HCB			<0.0081	<0.0024			
<input checked="" type="checkbox"/> alpha-BHC	A	0.018254	0.0081	0.0024		2.67	
<input checked="" type="checkbox"/> gamma-BHC			<0.0081	<0.0016			
<input checked="" type="checkbox"/> beta-BHC			<0.0081	<0.0028			
<input checked="" type="checkbox"/> delta-BHC			<0.0081	<0.0028			
<input checked="" type="checkbox"/> Heptachlor			<0.0081	<0.0016			
<input checked="" type="checkbox"/> Aldrin			<0.0081	<0.0016			
<input type="checkbox"/> Telodrin			<0.0081				
<input type="checkbox"/> o,p-DDE			<0.0163	<0.0057			
<input checked="" type="checkbox"/> Hept. epoxide			<0.0081	<0.0019			
<input checked="" type="checkbox"/> g. Chlordane			<0.0163	<0.0057			
<input checked="" type="checkbox"/> a. Chlordane			<0.0081	<0.0024			
<input checked="" type="checkbox"/> 4,4'-DDE			<0.0163	<0.0041			
<input checked="" type="checkbox"/> Endosulfan I			<0.0081	<0.0035			
<input type="checkbox"/> o,p-DDD			<0.0163	<0.0041			
<input checked="" type="checkbox"/> Dieldrin			<0.0163	<0.0043			
<input type="checkbox"/> o,p-DDT			<0.0163	<0.0041			

%RPD = High - Low Amount divided by the Average times 100

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

Andrea L. Jones  
 Chemist

Higher Amount Found unless RPD > 40

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** 9881309 F      15T-2      ID: AB      **Batchnumber:** 183100009A  
**Sample Amount:** 246 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:** TID15      **State:** NY  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 14, 2018 22:58:08  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.054.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

### Analysis Report (B)

Injected on : Nov 14, 2018 22:58:08  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.054.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

### Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Endrin			<0.0163	<0.0066			
<input type="checkbox"/> Kepone	A	0.001132	<0.1626			186.72	**
<input checked="" type="checkbox"/> 4,4'-DDD			<0.0163	<0.0041			
<input checked="" type="checkbox"/> Endosulfan II			<0.0244	<0.0122			
<input checked="" type="checkbox"/> 4,4'-DDT	A	0.006673	<0.0163	0.0042	J	12.30	
<input checked="" type="checkbox"/> Endrin aldehyde			<0.0813	<0.0163			
<input checked="" type="checkbox"/> Methoxychlor			<0.0813	<0.0244			
<input type="checkbox"/> Mirex			<0.0407	<0.0081			
<input checked="" type="checkbox"/> Endo. sulfate			<0.0163	<0.0047			
<input checked="" type="checkbox"/> Endrin ketone			<0.0163	<0.0041			
<input type="checkbox"/> DCB	A	0.053004	0.0244	0.0122		14.53	
<input type="checkbox"/> Total DDT's	A	0.006673	<0.0163	0.0041	J	0.00	
<input type="checkbox"/> Total Endosulfans	A	0.000000	<0.0081				

Units: ug/l

*Andreas L. Jones*  
 Andreas L. Jones  
 Chemist

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

Reviewed by: \_\_\_\_\_

Verified by: \_\_\_\_\_

Date: NOV 19 2018

Date: NOV 19 2018

%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** 9881309 F      15T-2      ID: AB      **Batchnumber:** 183100009A  
**Sample Amount:** 246 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:** TID15      **State:** NY  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 14, 2018 22:58:08  
 Instrument : CP05-H9190A  
 Result file : 05PEST18306010.054.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : \*40% (44-124)      Conc.: 0.121651  
 %SSR(DCB) : \*18% (32-149)      Conc.: 0.053004

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
+ 2.78	2.79	2.84	29526.03	0.038152	5	106.87	1
2.78	2.82	2.84	126177.8	0.163038			1
3.04	3.10	3.10	63169.05	0.058099			2
3.20	3.24	3.26	363967.5	1.138094			3
+ 3.51	3.53	3.57	132388.4	0.152398			5
* 3.56	3.56	3.62	226860.7	0.388263			6
* 3.51	3.56	3.57	226860.7	0.261149			5

**Height Summation:** 1007035.75  
**Amount Avg CF:** 0.401729      Linear:

<b>Aroclor-1221</b>							
2.66	2.69	2.70	631154.8	1.430857	3	137.44	1
2.77	2.79	2.81	29526.03	0.103615			2
2.80	2.82	2.84	126177.8	0.124867			3

**Height Summation:** 786858.63  
**Amount Avg CF:** 0.553113      Linear:

<b>Aroclor-1248</b>							
3.38	3.40	3.44	103895.6	0.125277	6	59.88	1
3.66	3.67	3.72	138389.1	0.305216			2
3.85	3.86	3.91	36824.21	0.034307			3
4.21	4.25	4.27	282803.1	0.231446			4
+ 4.39	4.42	4.45	169132.7	0.204			5
4.39	4.44	4.45	191728.1	0.231253			5
4.71	4.72	4.77	59088.28	0.094134			6

**Height Summation:** 812728.39  
**Amount Avg CF:** 0.170272      Linear:

<b>Aroclor-1254</b>							
+ 4.39	4.42	4.45	169132.7	0.108	7	72.72	1
4.39	4.44	4.45	191728.1	0.122428			1
4.62	4.65	4.68	108820.4	0.092865			2
4.71	4.72	4.77	59088.28	0.028915			3
4.93	4.96	4.99	27070.34	0.017781			4
5.06	5.11	5.12	21658.14	0.020667			5
+ 5.27	5.27	5.33	32428.00	0.010266			0
5.27	5.31	5.33	256549.5	0.152419			6
5.27	5.31	5.33	256549.5	0.152419			6

**Height Summation:** 921464.26  
**Amount Avg CF:** 0.083928      Linear:

<b>Aroclor-1260</b>							
4.85	4.88	4.91	110804.1	0.077031	6	59.25	1
5.06	5.11	5.12	21658.14	0.011148			2
+ 5.27	5.27	5.33	32428.99	0.015865			3
5.27	5.31	5.33	256549.5	0.125512			3
5.27	5.31	5.33	256549.5	0.125512			3
5.53	5.56	5.59	43081.9	0.0377			4
5.94	5.99	6.00	151578	0.108588			6

**Height Summation:** 840221.14  
**Amount Avg CF:** 0.080915      Linear:

### Analysis Report (B)

Injected on : Nov 14, 2018 22:58:08  
 Instrument : CP05-H9190B  
 Result file : 05PEST18306010B.054.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : \*34% (44-124)      Conc.: 0.102506  
 %SSR(DCB) : \*15% (32-149)      Conc.: 0.045825

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.69	2.72	876903.1	0.371103	5	103.45	1
2.93	2.96	2.99	364515.3	0.111304			2
+ 2.93	2.97	2.99	340276.6	0.103903			2
3.11	3.13	3.17	706780.2	0.518052			3
3.27	3.30	3.33	229765.9	0.040071			4
3.37	3.42	3.43	68923.56	0.023991			5

**Height Summation:** 2246888.06  
**Amount Avg CF:** 0.21289      Linear:

<b>Aroclor-1221</b>							
2.63	2.65	2.67	404380.1	0.484529	2	30.81	2
2.67	2.69	2.71	878903.1	0.311165			3

**Height Summation:** 1281283.2  
**Amount Avg CF:** 0.397847      Linear:

<b>Aroclor-1248</b>							
3.27	3.30	3.33	229765.9	0.079129	5	48.85	1
3.53	3.55	3.59	398779	0.144652			2
3.75	3.77	3.81	210971.3	0.061359			3
+ 3.85	3.88	3.91	25058.39	0.00873			4
3.85	3.91	3.91	103425.8	0.036032			4
4.11	4.14	4.17	395458.1	0.09969			5

**Height Summation:** 1338400.1  
**Amount Avg CF:** 0.084173      Linear:

<b>Aroclor-1254</b>							
4.11	4.14	4.17	395458.1	0.103213	5	71.66	1
4.27	4.30	4.33	227660.7	0.052644			2
4.64	4.66	4.70	139094.4	0.022259			3
+ 4.64	4.69	4.70	40388.46	0.006463			3
4.81	4.84	4.87	274016.8	0.061114			4
5.21	5.24	5.27	839279.4	0.176154			6

**Height Summation:** 1875509.4  
**Amount Avg CF:** 0.083077      Linear:

<b>Aroclor-1260</b>							
4.79	4.84	4.85	274016.8	0.063855	6	99.27	1
4.95	4.95	5.01	991831.4	0.19363			2
+ 4.95	5.00	5.01	111825.9	0.021831			2
5.21	5.24	5.27	839279.4	0.157758			3
5.48	5.52	5.54	41192.68	0.012308			4
5.65	5.70	5.71	196265.6	0.02857			5
5.90	5.94	5.96	65610.55	0.016089			6

**Height Summation:** 2408196.43  
**Amount Avg CF:** 0.078702      Linear:

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** 9881309 F      15T-2      ID: AB      **Batchnumber:** 183100009A  
**Sample Amount:** 246 ml      Total Volume: 2 ml      Analyst: 2306      SDG: TID15      State: NY  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 14, 2018 22:58:08  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.054.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.50	3.53	3.56	132388.4	0.097392	6	61.76	1
3.94	3.98	4.00	71423.62	0.052193			2
+ 4.29	4.30	4.35	50606.55	0.057111			3
4.29	4.35	4.35	78457.59	0.088541			3
4.45	4.50	4.51	276630.9	0.067552			4
4.55	4.59	4.61	31483.79	0.005559			5
5.15	5.16	5.22	40138.01	0.029646			6
<b>Height Summation:</b>				<b>630522.31</b>			
<b>Amount Avg CF:</b>				<b>0.056814</b>	<b>Linear:</b>		

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.11	5.12	21658.14	0.036822	6	63.02	1
5.20	5.22	5.26	101191.6	0.109784			2
5.29	5.31	5.35	256549.5	0.308058			3
5.29	5.31	5.35	256549.5	0.308058			3
+ 5.29	5.34	5.35	49616.51	0.059578			3
5.45	5.50	5.51	99451.67	0.117406			4
5.68	5.69	5.74	132253.1	0.180705			5
<b>Height Summation:</b>				<b>867653.51</b>			
<b>Amount Avg CF:</b>				<b>0.176806</b>	<b>Linear:</b>		

### Analysis Report (B)

Injected on : Nov 14, 2018 22:58:08  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.054.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.74	3.77	3.80	210971.3	0.044072	5	94.42	2
+ 4.08	4.11	4.14	307522	0.089955			3
4.08	4.14	4.14	395458.1	0.115677			3
4.27	4.30	4.33	227660.7	0.013951			4
4.39	4.40	4.45	45620.2	0.003699			5
5.08	5.14	5.14	595919.6	0.128908			6
<b>Height Summation:</b>				<b>1475629.9</b>			
<b>Amount Avg CF:</b>				<b>0.061261</b>	<b>Linear:</b>		

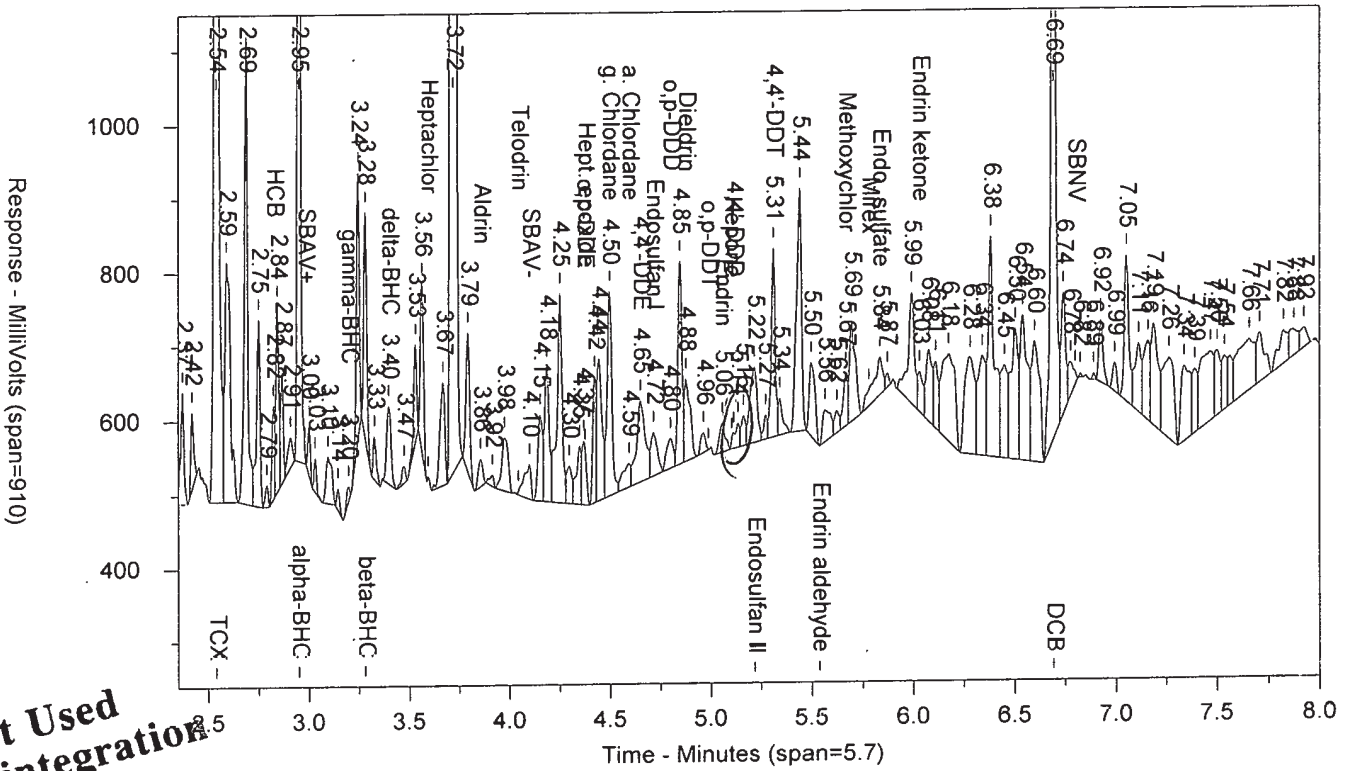
Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.66	4.70	139094.4	0.081066	5	53.80	1
+ 4.64	4.69	4.70	40388.46	0.023539			1
5.04	5.07	5.10	39849.86	0.012412			3
5.31	5.31	5.37	256549.5	0.07331			4
+ 5.31	5.32	5.37	186666.2	0.053341			4
* 5.36	5.37	5.42	235225.1	0.114449			5
+* 5.31	5.37	5.37	235225.1	0.067216			4
+ 5.36	5.40	5.42	82729.18	0.040252			5
5.66	5.70	5.72	196265.6	0.062537			6
<b>Height Summation:</b>				<b>866984.46</b>			
<b>Amount Avg CF:</b>				<b>0.068755</b>	<b>Linear:</b>		

### Summary Report

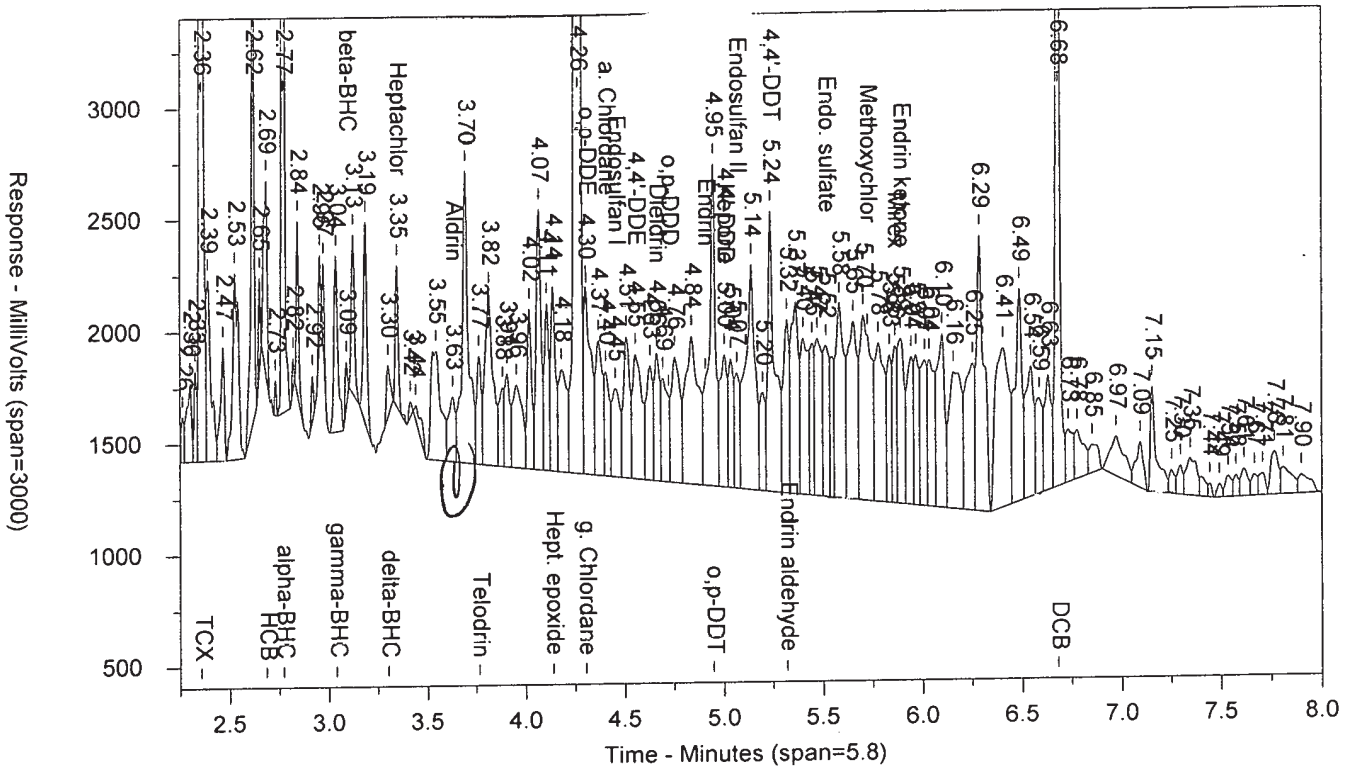
Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 61.45	4	40	
Aroclor-1221			0	0		32.65	3	5	
Aroclor-1248			0	0		** 67.68	4	30	
Aroclor-1254			0	0		1.02	4	40	
Aroclor-1260			0	0		2.77	4	40	
Chlordane			0.4065	0.1301		7.53	4	40	
Toxaphene			0.813	0.2439		** 88.00	4	40	

Units: ug/l

9881309 F AB15T-2 T 18310009A 10589 SW-846 8081B  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.054.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.054.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881309 F AB15T-2 T 183100009A 10589  
 Injected On: 11/14/2018 10:58:08 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

SW-846 8081B  
 Sample Weight: 246  
 Dilution Factor: 2

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.539	6534558	.122	TCX	2.357	25034960	.103	TCX
2.824	126178	.002	HCB	2.686	876903	.005	HCB
2.95	1405301	.018	alpha-BHC	2.772	5220660	.018	alpha-BHC
3.197	21095		gamma-BHC	3.039	787809	.007	gamma-BHC
3.28	304873	.01	beta-BHC	3.092	206880	.002	beta-BHC
3.397	103896	.002	delta-BHC	3.303	229766	.006	delta-BHC
	0		Heptachlor	3.347	627094	.003	Heptachlor
3.857	36824	.001	Aldrin	3.631	290972	.005	Aldrin
	0		Telodrin	3.766	484903	.006	Telodrin
	0		Hept. epoxide	4.139	825164	.005	Hept. epoxide
4.497	276631	.006	g. Chlordane	4.303	839132	.005	g. Chlordane
4.368	85875	.004	o,p-DDE		0		o,p-DDE
4.594	31484	.001	a. Chlordane	4.405	467458	.003	a. Chlordane
4.715	59088	.001	Endosulfan I	4.454	396515	.003	Endosulfan I
4.65	108820	.003	4,4'-DDE	4.555	558968	.012	4,4'-DDE
4.876	110804	.002	Dieldrin	4.662	572238	.003	Dieldrin
4.799	40220	.002	o,p-DDD		0		o,p-DDD
	0		o,p-DDT	4.946	1442303	.021	o,p-DDT
	0		Kepone	5.004	595606	.039	Kepone
5.058	38532	.001	Endrin		0		Endrin
5.218	101192	.003	Endosulfan II	5.066	517940	.004	Endosulfan II
5.312	256550	.007	4,4'-DDT	5.237	1254245	.009	4,4'-DDT
	0		Endrin aldehyde	5.322	777265	.007	Endrin aldehyde
5.835	51099	.001	Endo. sulfate	5.516	676154	.005	Endo. sulfate
5.666	71051	.004	Methoxychlor		0		Methoxychlor
	0		Mirex	5.863	705106	.01	Mirex
6.032	54348	.001	Endrin ketone	5.891	739505	.005	Endrin ketone
6.692	1436231	.053	DCB	6.68	4676533	.049	DCB

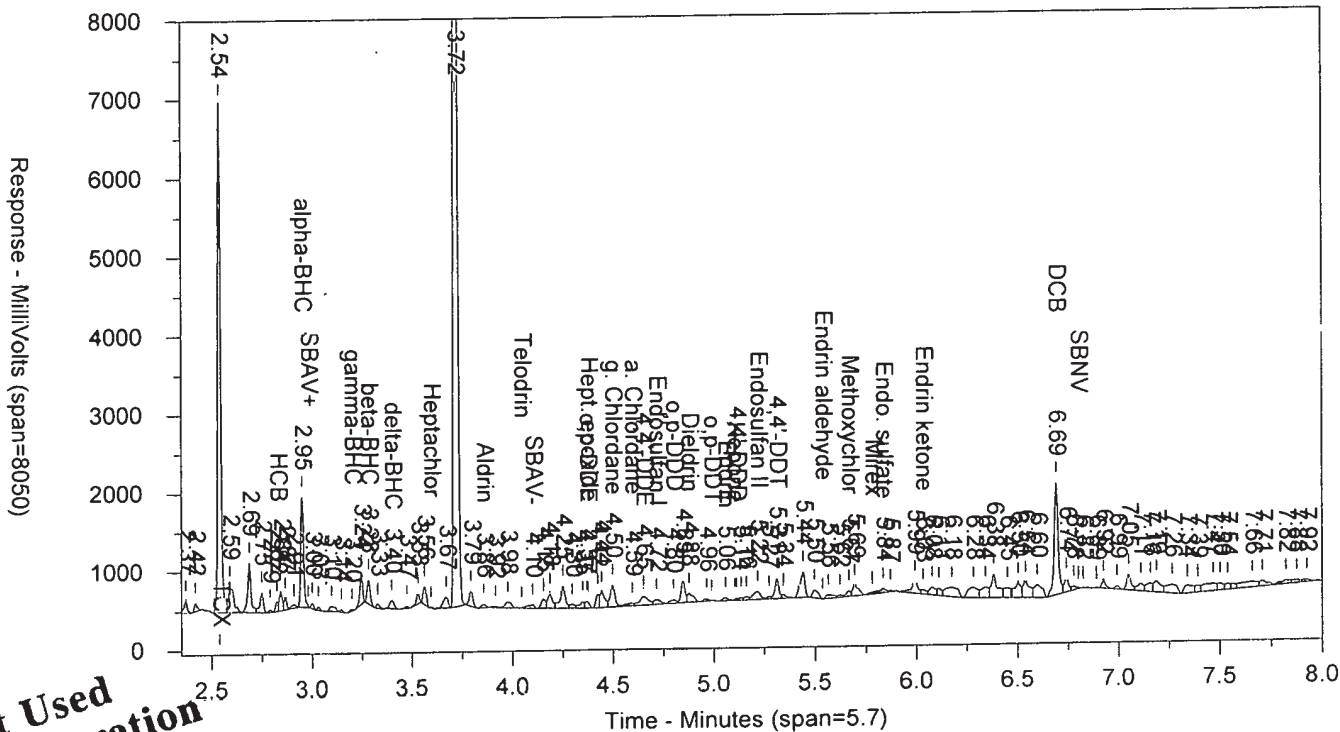
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Area File: 05pest18306010.054.RAW  
 Area File: 05pest18306010B.054.RAW  
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 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:08 AM  
 File Reported On: 11/15/2018 at 7:41:11 AM

**Not Used  
 See Reintegration**

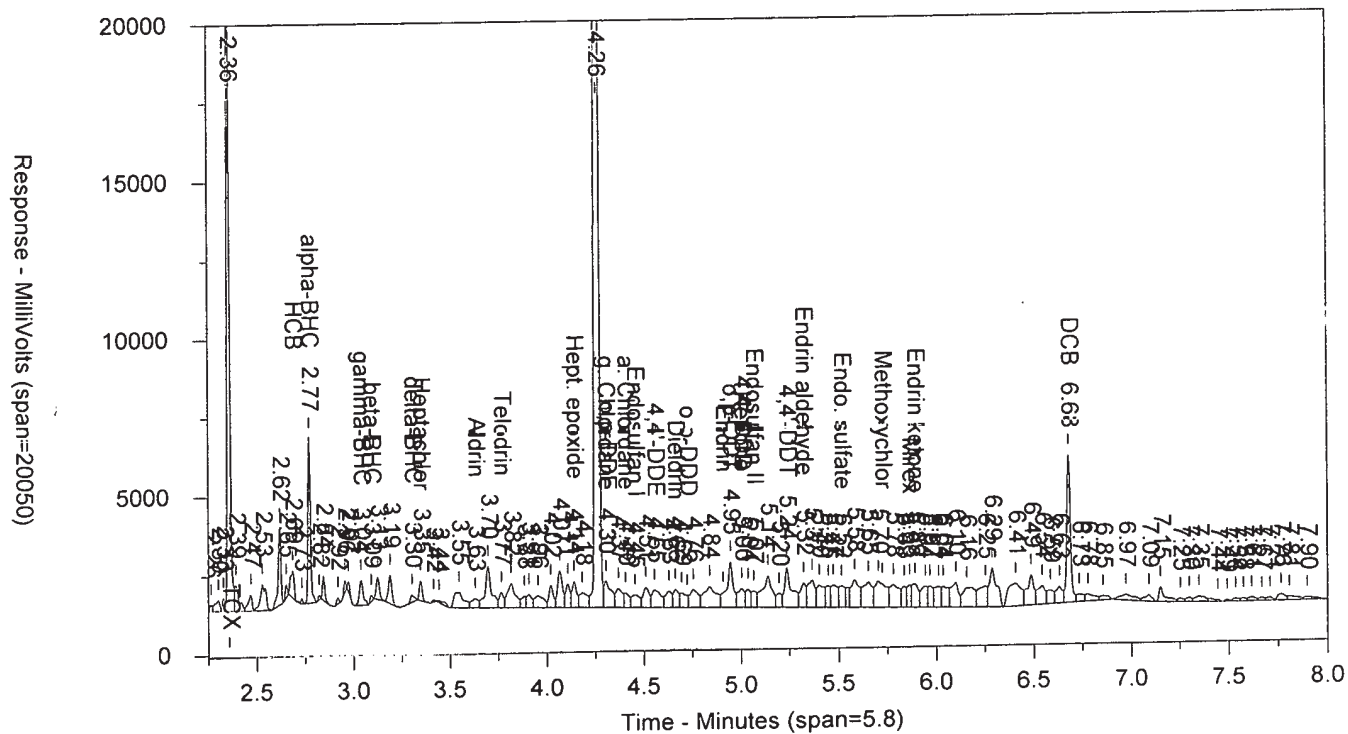
9881309 F AB15T-2 T 183100009A 10589 SW-846 8081B

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**Not Used  
See Reintegration**

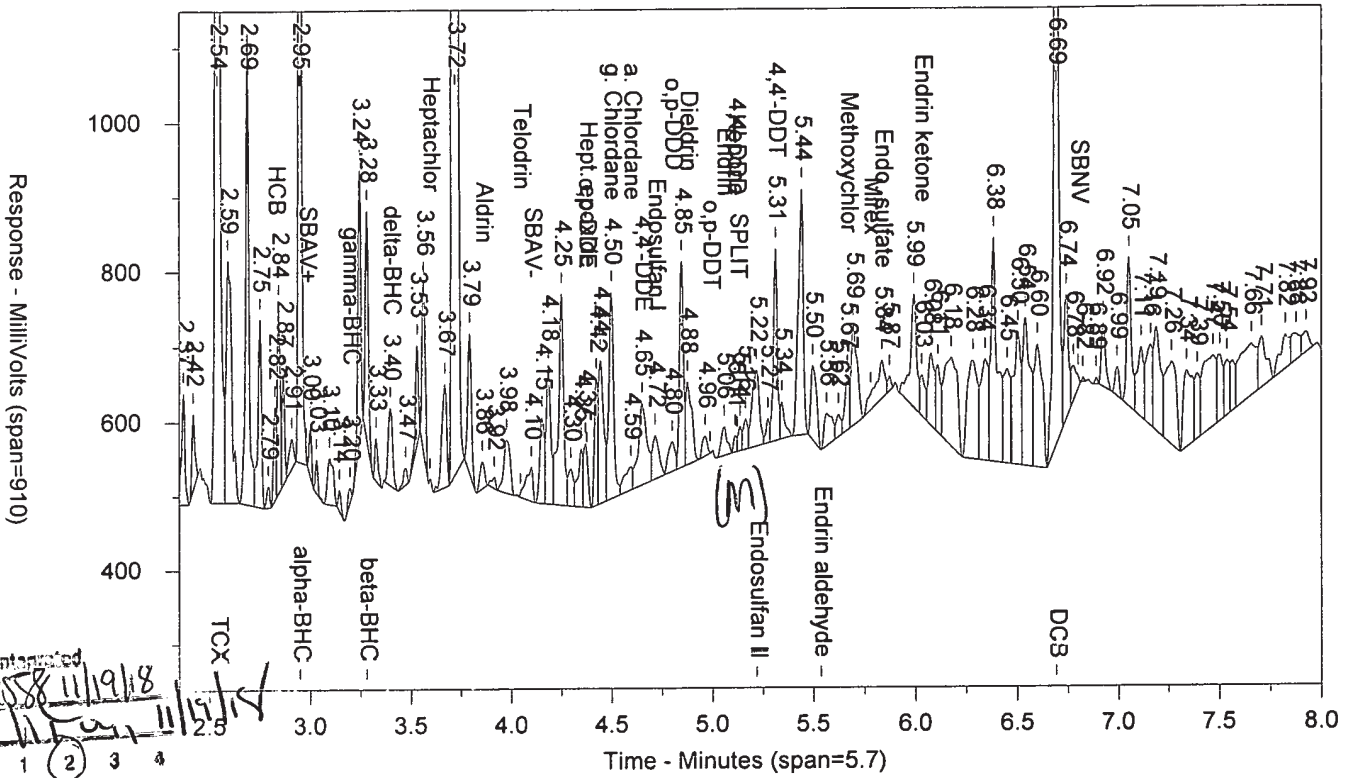
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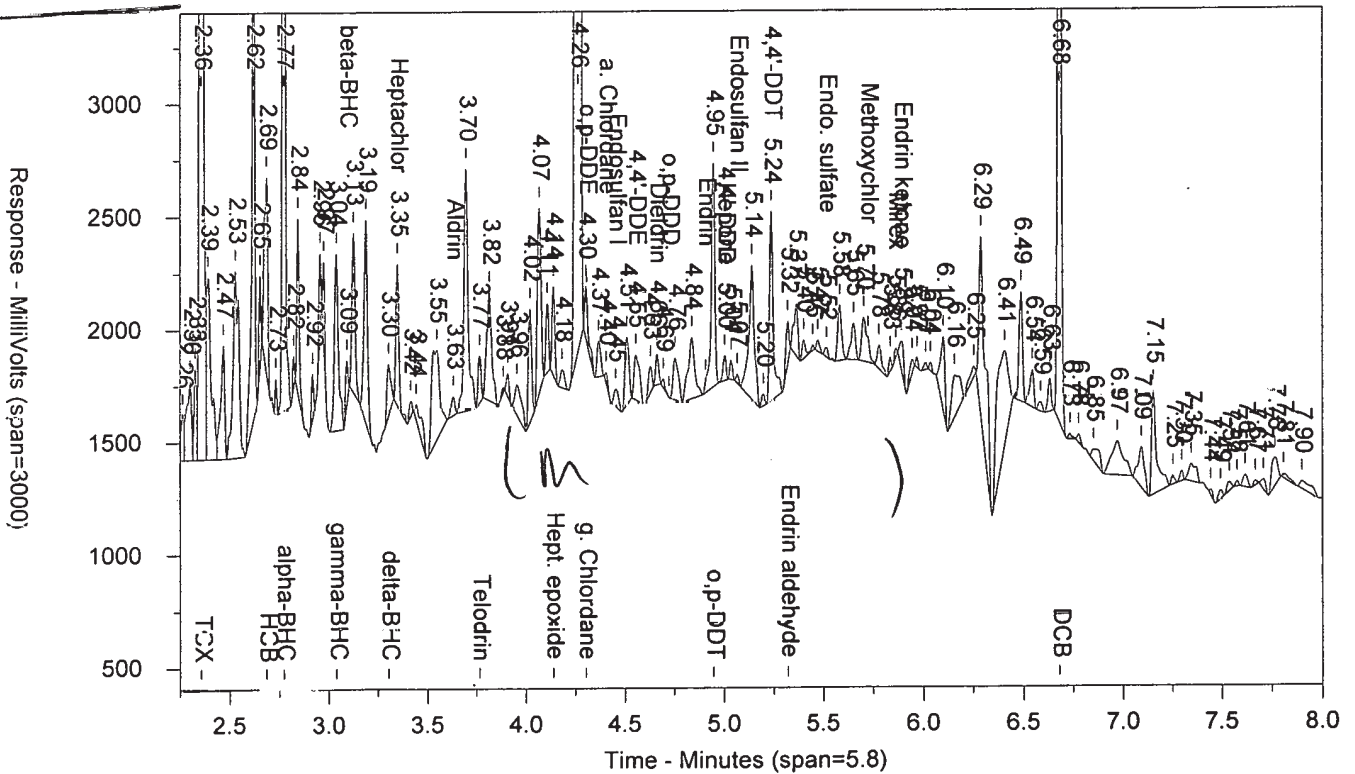
9881309 F AB15T-2 T 183100009A 10589 SW-846 8081B

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M = Manually Integrated  
 Analyst: [Signature]  
 Approved by: [Signature]  
 Circle Reason 1 (2) 3 4  
 1 = Missed Peak  
 2 = Improper Baseline  
 3 = RT Update  
 4 = Other

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.054.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881309 F AB15T-2 T 183100009A 10589  
 Injected On: 11/14/2018 10:58:08 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

SW-846 8081B  
 Sample Weight: 246  
 Dilution Factor: 2

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

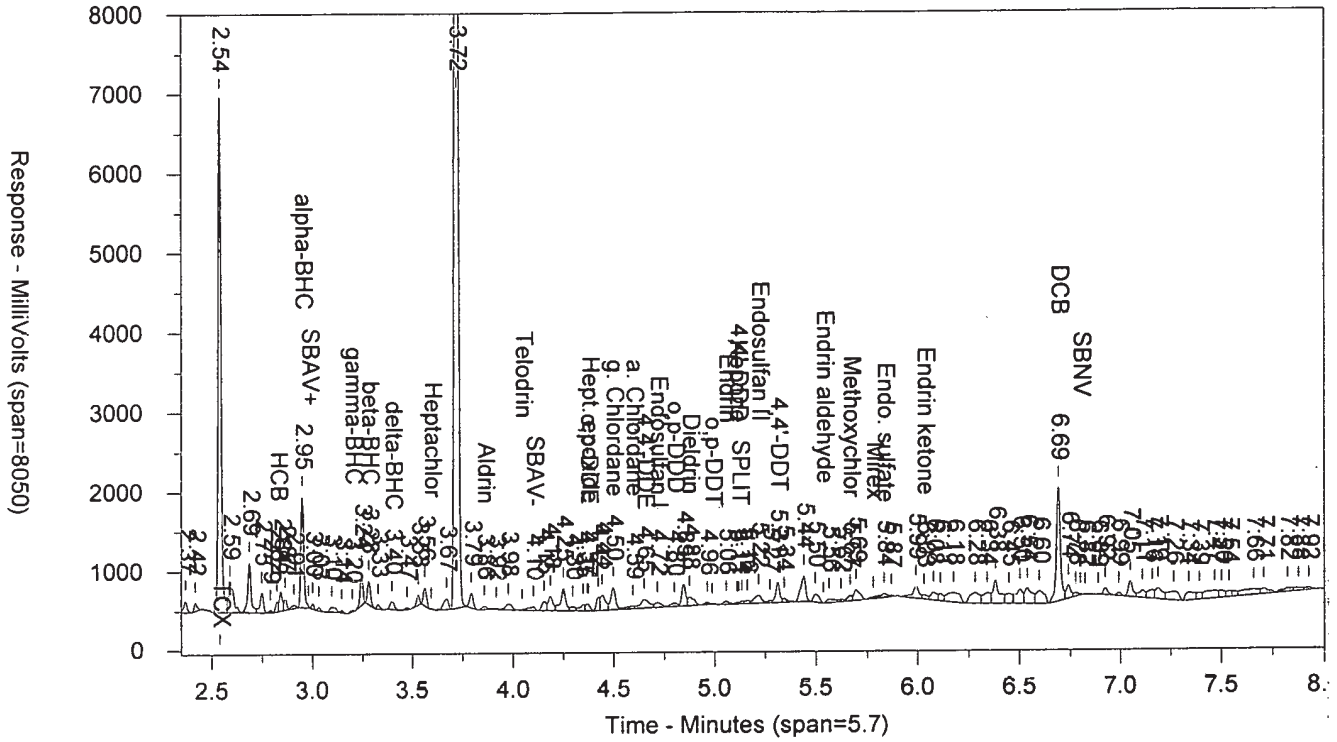
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.539	6534558	.122	TCX	2.357	25034960	.103	TCX
2.824	126178	.002	HCB	2.686	876903	.005	HCB
2.95	1405301	.018	alpha-BHC	2.772	5220660	.018	alpha-BHC
3.197	21095		gamma-BHC	3.039	787809	.007	gamma-BHC
3.28	304873	.01	beta-BHC	3.092	206880	.002	beta-BHC
3.397	103896	.002	delta-BHC	3.303	229766	.006	delta-BHC
	0		Heptachlor	3.347	627094	.003	Heptachlor
3.857	36824	.001	Aldrin	3.631	84920	.005	Aldrin
	0		Telodrin	3.766	210971	.002	Telodrin
	0		Hept. epoxide	4.139	395458	.002	Hept. epoxide
4.497	276631	.006	g. Chlordane	4.303	227661	.001	g. Chlordane
4.368	85875	.004	o,p-DDE		0		o,p-DDE
4.594	31484	.001	a. Chlordane	4.405	45620		a. Chlordane
4.715	59088	.001	Endosulfan I	4.454	76804		Endosulfan I
4.65	108820	.003	4,4'-DDE	4.555	200640	.01	4,4'-DDE
4.876	110804	.002	Dieldrin	4.662	139094	.001	Dieldrin
4.799	40220	.002	o,p-DDD		0		o,p-DDD
	0		o,p-DDT	4.946	991831	.014	o,p-DDT
5.111	21658	.001	Kepone	5.004	111826	.033	Kepone
5.058	38532	.001	Endrin		0		Endrin
5.218	101192	.003	Endosulfan II	5.066	39850		Endosulfan II
5.312	256550	.007	4,4'-DDT	5.237	839279	.006	4,4'-DDT
	0		Endrin aldehyde	5.322	186666	.002	Endrin aldehyde
5.835	51099	.001	Endo. sulfate	5.516	41193		Endo. sulfate
5.666	71051	.004	Methoxychlor		0		Methoxychlor
	0		Mirex	5.863	38769	.001	Mirex
6.032	54348	.001	Endrin ketone	5.891	135612	.001	Endrin ketone
6.692	1436231	.053	DCB	6.68	4373015	.046	DCB

Files:

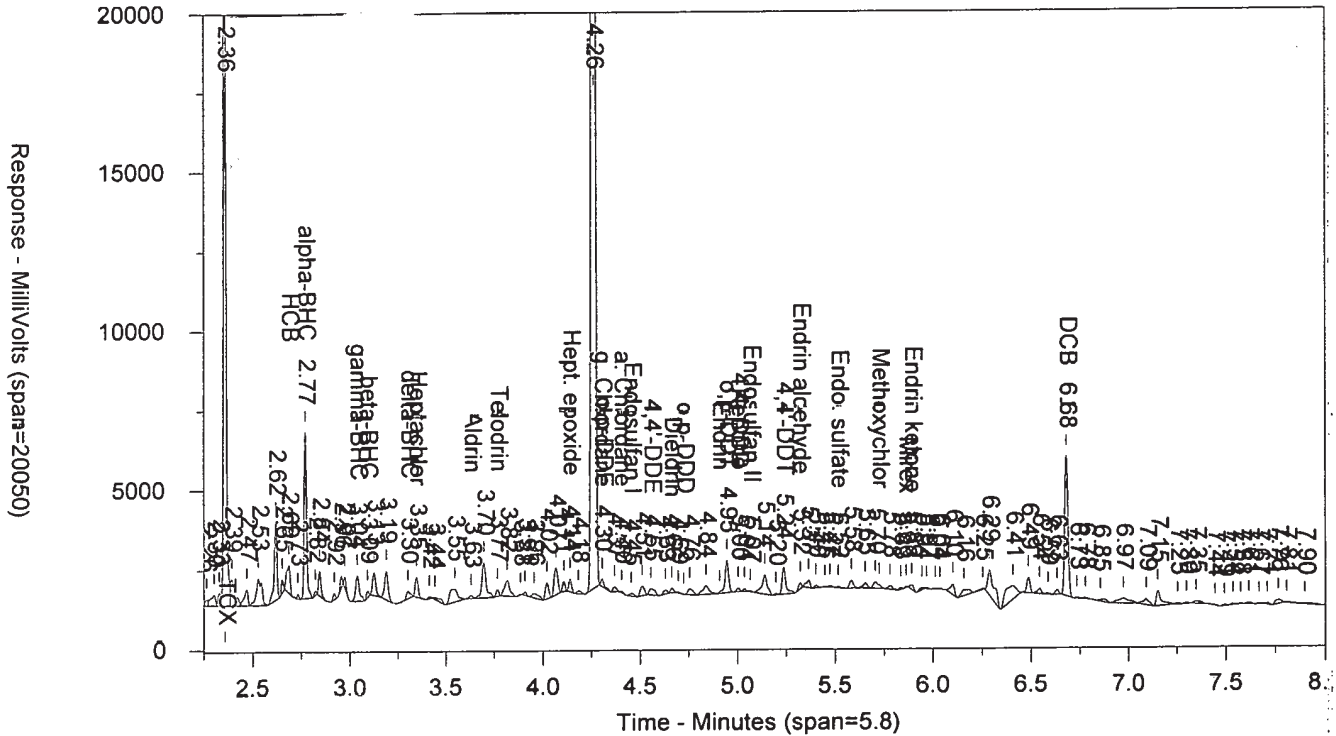
Area File: 05pest18306010.054.BND  
 Area File: 05pest18306010B.054.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/16/2018 12:28:23 PM  
 File Reported On: 11/19/2018 at 11:49:10 AM

9881309 F AB15T-2 T 18310009A 10589 SW-846 8081B

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.054.BND



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.054.BND



# Data Summary

**Sample Name:** 9881310      **F**      **15T-3**      **Sample ID:** AB **Batchnumber:** 183100009A  
**Sample Amount:** 247 ml      **Total Volume:** 2 ml      **Analyst:** 9588      **SDG:** TID15      **State:** NY  
**Analyses:** 10589

## Analysis Report (A)

**Injected on** Nov 14, 2018 23:23:48  
**Instrument** H9190A  
**Result file** 05PEST18306010.056.RAW  
**Calibration file** 05PEST1830605  
**Method file** 05PESTD

%SSR(TCX) \* 29% (44 - 124) Conc: 0.086933  
 %SSR(DCB) \* 16% (32 - 149) Conc: 0.049233

## Analysis Report (B)

**Injected on** Nov 14, 2018 23:23:48  
**Instrument** H9190B  
**Result file** 05PEST18306010B.056.RAW  
**Calibration file** 05PEST1830605B  
**Method file** 05PESTD

%SSR(TCX) \* 24% (44 - 124) Conc: 0.072235  
 %SSR(DCB) \* 15% (32 - 149) Conc: 0.044869

## Single Component Data

Compound	Min	RT	Max	Height	Amount	Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.52	2.54	2.56	4688616	0.086933	Tetrachloro-m-xylene	2.33	2.35	2.37	17713570	0.072235
HCB	2.81	2.84	2.85	262698	0.005048	HCB	2.66	2.68	2.70	852365	0.004886
Alpha BHC	2.93	2.95	2.97	1043028	0.013493	Alpha BHC	2.75	2.77	2.79	3839454	0.014283
Beta BHC	3.25	3.28	3.29	335287	0.011451	Gamma BHC - Lindane	3.01	3.03	3.05	269877	0.005274
Delta BHC	3.39	3.39	3.43	30586	0.000509	Beta BHC	3.07	3.09	3.11	215807	0.001842
Aldrin	3.83	3.86	3.87	44244	0.00086	Aldrin	3.61	3.63	3.65	30205	0.004281
o,p-DDE	4.35	4.37	4.39	41999	0.001828	o,p-DDE	4.29	4.31	4.33	50709	0.000719
Gamma Chlordane	4.46	4.49	4.50	104826	0.00224	Alpha Chlordane	4.39	4.40	4.43	36950	0.000208
Alpha Chlordane	4.57	4.59	4.61	12628	0.000271	Endosulfan I	4.43	4.44	4.47	39862	0.000252
p,p-DDE	4.63	4.65	4.67	62033	0.001484	p,p-DDE	4.53	4.56	4.57	114932	0.009465
Dieldrin	4.87	4.88	4.91	70532	0.001529	Dieldrin	4.65	4.66	4.69	44024	0.00025
Endrin	5.04	5.08	5.08	9430	0.000217	Endrin	4.89	4.92	4.93	93906	0.000584
Kepone	5.08	5.11	5.12	10874	0.000566	Kepone	4.97	5.00	5.01	56002	0.032171
Endosulfan II	5.21	5.24	5.25	8589	0.000215	p,p-DDT	5.21	5.23	5.25	87567	0.000613
Endosulfan Sulfate	5.82	5.85	5.86	9858	0.000271	Endrin Aldehyde	5.30	5.32	5.34	60703	0.000508
Endrin Ketone	6.02	6.04	6.06	2991	0.000069	Methoxychlor	5.70	5.74	5.74	33403	0.000536
Decachlorobiphenyl	6.67	6.69	6.73	1339913	0.049233	Mirex	5.83	5.86	5.87	66593	0.000975
						Endrin Ketone	5.86	5.89	5.90	65527	0.000441
						Decachlorobiphenyl	6.65	6.67	6.71	4299206	0.044869

## Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Total DDTs			<0.004	<0.0081	<0.0162			
<input type="checkbox"/> Total Endosulfans (I + II)					<0.0081			
<input type="checkbox"/> Tetrachloro-m-xylene	A	0.086933	0.0121	0.0243	0.0243		18.47	
<input type="checkbox"/> Tetrachloro-m-xylene-D1	A	0.086933	0.0121	0.0243	0.0243			
<input checked="" type="checkbox"/> Tetrachloro-m-xylene-D2	B	0.072235	0.0121	0.0243	0.0243			
<input type="checkbox"/> HCB	A	0.005048	0.0024	<0.0057	<0.0081	J	3.26	
<input checked="" type="checkbox"/> Alpha BHC	B	0.014283	0.0024	0.0057	0.0081	D2	5.69	
<input checked="" type="checkbox"/> Gamma BHC - Lindane			<0.0016	<0.0057	<0.0081	D1		
<input checked="" type="checkbox"/> Beta BHC			<0.0028	<0.0057	<0.0081	D2		
<input checked="" type="checkbox"/> Delta BHC			<0.0028	<0.0057	<0.0081	D2		
<input checked="" type="checkbox"/> Heptachlor			<0.0016	<0.0057	<0.0081	D1		
<input checked="" type="checkbox"/> Aldrin			<0.0016	<0.0057	<0.0081	D1		
<input type="checkbox"/> Telodrin					<0.0081			
<input type="checkbox"/> o,p-DDE			<0.0057	<0.0113	<0.0162			
<input checked="" type="checkbox"/> Heptachlor Epoxide			<0.0019	<0.0057	<0.0081	D1		
<input checked="" type="checkbox"/> Gamma Chlordane			<0.0057	<0.0162	<0.0162	D2		
<input checked="" type="checkbox"/> Alpha Chlordane			<0.0024	<0.0057	<0.0081	D2		
<input checked="" type="checkbox"/> p,p-DDE			<0.004	<0.0081	<0.0162	D1		
<input checked="" type="checkbox"/> Endosulfan I			<0.0035	<0.0073	<0.0081	D1		
<input type="checkbox"/> o,p-DDD			<0.004	<0.0081	<0.0162			
<input checked="" type="checkbox"/> Dieldrin			<0.0043	<0.0081	<0.0162	D2		
<input type="checkbox"/> o,p-DDT			<0.0041	<0.0081	<0.0162			
<input checked="" type="checkbox"/> Endrin			<0.0066	<0.0162	<0.0162	D1		

Reviewed and digitally signed by Andrea L Jones on 11/19/2018 12:01:54

# Data Summary

**Sample Name:** 9881310      F      15T-3      Sample ID: AB Batchnumber: 183100009A  
 Sample Amount: 247 ml      Total Volume: 2 ml      Analyst: 9588      SDG: TID15      State: NY  
**Analyses:** 10589

**Analysis Report (A)**

Injected on Nov 14, 2018 23:23:48  
 Instrument H9190A  
 Result file 05PEST18306010.056.RAW  
 Calibration file 05PEST1830605  
 Method file 05PESTD

**Analysis Report (B)**

Injected on Nov 14, 2018 23:23:48  
 Instrument H9190B  
 Result file 05PEST18306010B.056.RAW  
 Calibration file 05PEST1830605B  
 Method file 05PESTD

**Single Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Kepone					<0.1619			
<input checked="" type="checkbox"/> p,p-DDD			<0.004	<0.0081	<0.0162	D1		
<input checked="" type="checkbox"/> Endosulfan II			<0.0121	<0.0243	<0.0243	D2		
<input checked="" type="checkbox"/> p,p-DDT			<0.0042	<0.0081	<0.0162	D1		
<input checked="" type="checkbox"/> Endrin Aldehyde			<0.0162	<0.0324	<0.081	D1		
<input type="checkbox"/> Methoxychlor			<0.0243	<0.0567	<0.081	D1		
<input type="checkbox"/> Mirex			<0.0081	<0.0324	<0.0405			
<input checked="" type="checkbox"/> Endosulfan Sulfate			<0.0047	<0.0097	<0.0162	D2		
<input checked="" type="checkbox"/> Endrin Ketone			<0.004	<0.0081	<0.0162	D1		
<input type="checkbox"/> Decachlorobiphenyl	A	0.049233	0.0121	0.0243	0.0243		9.28	
<input checked="" type="checkbox"/> Decachlorobiphenyl-D1	A	0.049233	0.0121	0.0243	0.0243			
<input checked="" type="checkbox"/> Decachlorobiphenyl-D2	B	0.044869	0.0121	0.0243	0.0243			

**Multiple Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
<input checked="" type="checkbox"/> Chlordane			<0.1296	<0.2591	<0.4049	D1		4	
<input checked="" type="checkbox"/> Toxaphene			<0.2429	<0.4858	<0.8097	D1		4	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

NOV 19 2018

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** 9881310 F      15T-3      ID: AB      **Batchnumber:** 183100009A  
**Sample Amount:** 247 ml      Total Volume: 2 ml      Analyst: 2306      SDG: TID15      State: NY  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 14, 2018 23:23:48  
 Instrument : CP05-H9190A  
 Result file : 05PEST18306010.056.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

%SSR(TCX) : \*29% (44-124)      Conc.: 0.086933  
 %SSR(DCB) : \*16% (32-149)      Conc.: 0.049233

### Analysis Report (B)

Injected on : Nov 14, 2018 23:23:48  
 Instrument : CP05-H9190B  
 Result file : 05PEST18306010B.056.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

%SSR(TCX) : \*24% (44-124)      Conc.: 0.072235  
 %SSR(DCB) : \*15% (32-149)      Conc.: 0.044869

matrix

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.52	2.54	2.56	4688616	0.086933
HCB	2.81	2.84	2.85	262698	0.005048
alpha-BHC	2.93	2.95	2.97	1043028	0.013493
beta-BHC	3.25	3.28	3.29	335287	0.011451
delta-BHC	3.39	3.39	3.43	30586	0.000509
Aldrin	3.83	3.86	3.87	44244	0.000860
o,p-DDE	4.35	4.37	4.39	41999	0.001828
g. Chlordane	4.46	4.49	4.50	104826	0.002240
a. Chlordane	4.57	4.59	4.61	12628	0.000271
4,4'-DDE	4.63	4.65	4.67	62033	0.001484
Dieldrin	4.87	4.88	4.91	70532	0.001529
Endrin	5.04	5.08	5.08	9430	0.000217
Kepone	5.08	5.11	5.12	10874	0.000566
Endosulfan II	5.21	5.24	5.25	8589	0.000215
Endo. sulfate	5.82	5.85	5.86	9858	0.000271
Endrin ketone	6.02	6.04	6.06	2991	0.000069
DCB	6.67	6.69	6.73	1339913	0.049233

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.33	2.35	2.37	17713570	0.072235
HCB	2.66	2.68	2.70	852365	0.004886
alpha-BHC	2.75	2.77	2.79	3839454	0.014283
gamma-BHC	3.01	3.03	3.05	269877	0.005274
beta-BHC	3.07	3.09	3.11	215807	0.001842
Aldrin	3.61	3.63	3.65	30205	0.004281
o,p-DDE	4.29	4.31	4.33	50709	0.000719
a. Chlordane	4.39	4.40	4.43	36950	0.000208
Endosulfan I	4.43	4.44	4.47	39862	0.000252
4,4'-DDE	4.53	4.56	4.57	114932	0.009465
Dieldrin	4.65	4.66	4.69	44024	0.000250
Endrin	4.89	4.92	4.93	93906	0.000584
Kepone	4.97	5.00	5.01	56002	0.032171
4,4'-DDT	5.21	5.23	5.25	87567	0.000613
Endrin aldehyde	5.30	5.32	5.34	60703	0.000508
Methoxychlor	5.70	5.74	5.74	33403	0.000536
Mirex	5.83	5.86	5.87	66593	0.000975
Endrin ketone	5.86	5.89	5.90	65527	0.000441
DCB	6.65	6.67	6.71	4299206	0.044869

4,4'-DDD:  $\frac{10874}{284979} \times 2 = 0.000308965 \text{ } \mu\text{mol}$

### Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input type="checkbox"/> TCX	A	0.086933	0.0243	0.0121		18.47	
<input type="checkbox"/> HCB	A	0.005048	<0.0081	0.0024	J	3.25	
<input checked="" type="checkbox"/> alpha-BHC	B	0.014283	0.0081	0.0024		5.68	
<input checked="" type="checkbox"/> gamma-BHC			<0.0081	<0.0016			
<input checked="" type="checkbox"/> beta-BHC			<0.0081	<0.0028			
<input checked="" type="checkbox"/> delta-BHC			<0.0081	<0.0028			
<input checked="" type="checkbox"/> Heptachlor			<0.0081	<0.0016			
<input checked="" type="checkbox"/> Aldrin			<0.0081	<0.0016			
<input type="checkbox"/> Telodrin			<0.0081				
<input type="checkbox"/> o,p-DDE			<0.0162	<0.0057			
<input checked="" type="checkbox"/> Hept. epoxide			<0.0081	<0.0019			
<input checked="" type="checkbox"/> g. Chlordane			<0.0162	<0.0057			
<input checked="" type="checkbox"/> a. Chlordane			<0.0081	<0.0024			
<input checked="" type="checkbox"/> 4,4'-DDE			<0.0162	<0.004			
<input checked="" type="checkbox"/> Endosulfan I			<0.0081	<0.0035			
<input type="checkbox"/> o,p-DDD			<0.0162	<0.004			
<input checked="" type="checkbox"/> Dieldrin			<0.0162	<0.0043			
<input type="checkbox"/> o,p-DDT			<0.0162	<0.0041			
<input checked="" type="checkbox"/> Endrin			<0.0162	<0.0066			
<input type="checkbox"/> Kepone	A	0.000566	<0.1619			193.08	**
<input checked="" type="checkbox"/> 4,4'-DDD			<0.0162	<0.004			
<input checked="" type="checkbox"/> Endosulfan II			<0.0243	<0.0121			

%RPD = High - Low Amount divided by the Average times 100      Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** 9881310 F      15T-3      ID: AB      **Batchnumber:** 183100009A  
**Sample Amount:** 247 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:** TID15      **State:** NY  
**Analyses:** 10589

**Analysis Report (A)**

Injected on : Nov 14, 2018 23:23:48  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.056.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

**Analysis Report (B)**

Injected on : Nov 14, 2018 23:23:48  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.056.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

**Summary Report**

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> 4,4'-DDT			<0.0162	<0.0042			
<input checked="" type="checkbox"/> Endrin aldehyde			<0.081	<0.0162			
<input checked="" type="checkbox"/> Methoxychlor			<0.081	<0.0243			
<input type="checkbox"/> Mirex			<0.0405	<0.0081			
<input checked="" type="checkbox"/> Endo. sulfate			<0.0162	<0.0047			
<input checked="" type="checkbox"/> Endrin ketone			<0.0162	<0.004			
<input type="checkbox"/> DCB	A	0.049233	0.0243	0.0121		9.27	
<input type="checkbox"/> Total DDTs	B	0.009465	<0.0162	0.004	J	0.00	
<input type="checkbox"/> Total DDTs	A	0.009465	<0.0162	0.004	J	0.00	
<input type="checkbox"/> Total Endosulfans	A	0.000000	<0.0081				

Units: ug/l

*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

Reviewed by: \_\_\_\_\_

Date: NOV 19 2018

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

Verified by: \_\_\_\_\_

Date: NOV 19 2018

%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** 9881310 F      **15T-3**      **ID:** AB      **Batchnumber:** 183100009A  
**Sample Amount:** 247 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:** TID15      **State:** NY  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 14, 2018 23:23:48  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.056.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : \*29% (44-124)      Conc.: 0.086933  
 %SSR(DCB) : \*16% (32-149)      Conc.: 0.049233

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.78	2.79	2.84	17308.2	0.022274	6	136.84	1
3.04	3.10	3.10	63197.09	0.05789			2
3.20	3.25	3.26	310143.2	0.965864			3
3.40	3.45	3.46	9166.9	0.010997			4
+ 3.51	3.53	3.57	59643.43	0.06838			5
* 3.56	3.56	3.62	189351	0.322755	6		6
* 3.51	3.56	3.57	189351	0.217087	5		5
<u>Height Summation:</u>			<b>778517.39</b>				
Amount Avg CF:			<b>0.266145</b>	Linear:			
<b>Aroclor-1221</b>							
2.66	2.69	2.70	135783.3	0.306581	2	94.81	1
2.77	2.79	2.81	17308.2	0.060494			2
<u>Height Summation:</u>			<b>153091.5</b>				
Amount Avg CF:			<b>0.183537</b>	Linear:			
<b>Aroclor-1248</b>							
3.38	3.39	3.44	30586.11	0.036731	6	65.08	1
3.66	3.67	3.72	65086.14	0.142966			2
3.85	3.86	3.91	44244	0.041052			3
4.21	4.25	4.27	141127.4	0.115031			4
4.39	4.45	4.45	158335.4	0.190203			5
4.71	4.72	4.77	33810.13	0.053645			6
<u>Height Summation:</u>			<b>473189.18</b>				
Amount Avg CF:			<b>0.096605</b>	Linear:			
<b>Aroclor-1254</b>							
4.39	4.45	4.45	158335.4	0.100696	6	86.60	1
4.62	4.65	4.68	62033.08	0.052723			2
4.71	4.72	4.77	33810.13	0.016478			3
4.93	4.96	4.99	80332.19	0.052552			4
+ 5.06	5.08	5.12	9430.071	0.008962			5
5.06	5.11	5.12	10874.49	0.010335			5
+ 5.27	5.28	5.33	17623.34	0.010428			6
5.27	5.30	5.33	19907.74	0.01178			6
<u>Height Summation:</u>			<b>365203.03</b>				
Amount Avg CF:			<b>0.040761</b>	Linear:			
<b>Aroclor-1260</b>							
4.85	4.88	4.91	70532.33	0.048835	5	88.22	1
+ 5.06	5.08	5.12	9430.071	0.004834			2
5.06	5.11	5.12	10874.49	0.005575			2
+ 5.27	5.28	5.33	17623.34	0.008587			3
5.27	5.30	5.33	19907.74	0.0097			3
5.53	5.57	5.59	23969.86	0.020891			4
5.94	5.99	6.00	96302.46	0.068711			6
<u>Height Summation:</u>			<b>221586.88</b>				
Amount Avg CF:			<b>0.030742</b>	Linear:			

### Analysis Report (B)

Injected on : Nov 14, 2018 23:23:48  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.056.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : \*24% (44-124)      Conc.: 0.072235  
 %SSR(DCB) : \*15% (32-149)      Conc.: 0.044869

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.68	2.72	852365.4	0.359188	5	81.75	1
2.93	2.95	2.99	803982	0.2445			2
3.11	3.12	3.17	315811.1	0.230544			3
3.27	3.30	3.33	193156.4	0.03355			4
3.37	3.41	3.43	66710.73	0.023127			5
<u>Height Summation:</u>			<b>2232025.63</b>				
Amount Avg CF:			<b>0.178182</b>	Linear:			
<b>Aroclor-1221</b>							
2.54	2.54	2.58	149004.8	0.108671	3	61.43	1
2.63	2.65	2.67	391977.8	0.467767			2
2.67	2.68	2.71	852365.4	0.301234			3
<u>Height Summation:</u>			<b>1393348</b>				
Amount Avg CF:			<b>0.292557</b>	Linear:			
<b>Aroclor-1248</b>							
3.27	3.30	3.33	193156.4	0.066252	5	73.82	1
3.75	3.76	3.81	114163.6	0.033069			3
+ 3.85	3.88	3.91	33145.88	0.011501			4
3.85	3.90	3.91	84708.15	0.029392			4
4.11	4.14	4.17	13166.53	0.003306			5
+ 4.30	4.31	4.36	50708.81	0.016175			6
4.30	4.36	4.36	71060.76	0.022667			6
<u>Height Summation:</u>			<b>476255.44</b>				
Amount Avg CF:			<b>0.030937</b>	Linear:			
<b>Aroclor-1254</b>							
4.11	4.14	4.17	13166.53	0.003422	5	72.67	1
4.27	4.31	4.33	50708.81	0.011678			2
+ 4.64	4.66	4.70	44024.3	0.007017			3
4.64	4.69	4.70	213540.6	0.034035			3
4.81	4.84	4.87	51967.41	0.011543			4
5.21	5.23	5.27	87566.98	0.018305			6
+ 5.21	5.24	5.27	8588.684	0.001795			6
<u>Height Summation:</u>			<b>416950.33</b>				
Amount Avg CF:			<b>0.015197</b>	Linear:			
<b>Aroclor-1260</b>							
+ 4.79	4.81	4.85	48838.92	0.011335	6	52.27	1
4.79	4.84	4.85	51967.41	0.012061			1
4.95	5.00	5.01	56001.62	0.010889			2
5.21	5.23	5.27	87566.98	0.016393			3
+ 5.21	5.24	5.27	8588.684	0.001608			3
5.48	5.54	5.54	11345.76	0.003376			4
5.65	5.70	5.71	175251.1	0.025408			5
5.90	5.94	5.96	81272.91	0.019849			6
+ 5.90	5.96	5.96	38435.81	0.009387			6
<u>Height Summation:</u>			<b>463405.78</b>				
Amount Avg CF:			<b>0.014663</b>	Linear:			



# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** 9881310 F 15T-3 ID: AB **Batchnumber:** 183100009A  
**Sample Amount:** 247 ml **Total Volume:** 2 ml **Analyst:** 2306 **SDG:** TID15 **State:** NY  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 14, 2018 23:23:48  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.056.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.50	3.53	3.56	59643.43	0.043699	6	51.89	1
3.94	3.98	4.00	46280.16	0.033683			2
+ 4.29	4.30	4.35	25466.22	0.028623			3
4.29	4.35	4.35	40373.54	0.045378			3
4.45	4.49	4.51	104826	0.025494			4
4.55	4.59	4.61	12628.44	0.002221			5
+ 5.15	5.17	5.22	22468.08	0.016528			6
5.15	5.20	5.22	42018.84	0.03091			6

**Height Summation:** 305770.41  
**Amount Avg CF:** 0.030231 **Linear:**

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
+ 5.06	5.08	5.12	9430.071	0.015968	6	76.63	1
5.06	5.11	5.12	10874.49	0.018414			1
5.20	5.20	5.26	42018.84	0.045402			2
+ 5.20	5.24	5.20	8588.684	0.00928			2
+ 5.20	5.24	5.26	8588.684	0.00928			2
+ 5.29	5.30	5.35	19907.74	0.023808			3
5.29	5.34	5.35	30679.25	0.03669			3
5.45	5.50	5.51	52897.66	0.062195			4
5.68	5.70	5.74	87893.84	0.119608			5
5.75	5.81	5.81	14456.06	0.016761			6

**Height Summation:** 238820.14  
**Amount Avg CF:** 0.049845 **Linear:**

### Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		39.59	4	40	
Aroclor-1221			0	0		** 45.80	3	5	
Aroclor-1248			0	0		** 102.97	4	30	
Aroclor-1254			0	0		** 88.28	4	40	
Aroclor-1260			0	0		** 70.83	4	40	
Chlordane			0.4049	0.1296		3.47	4	40	
Toxaphene			0.8097	0.2429		23.27	4	40	

Units: ug/l

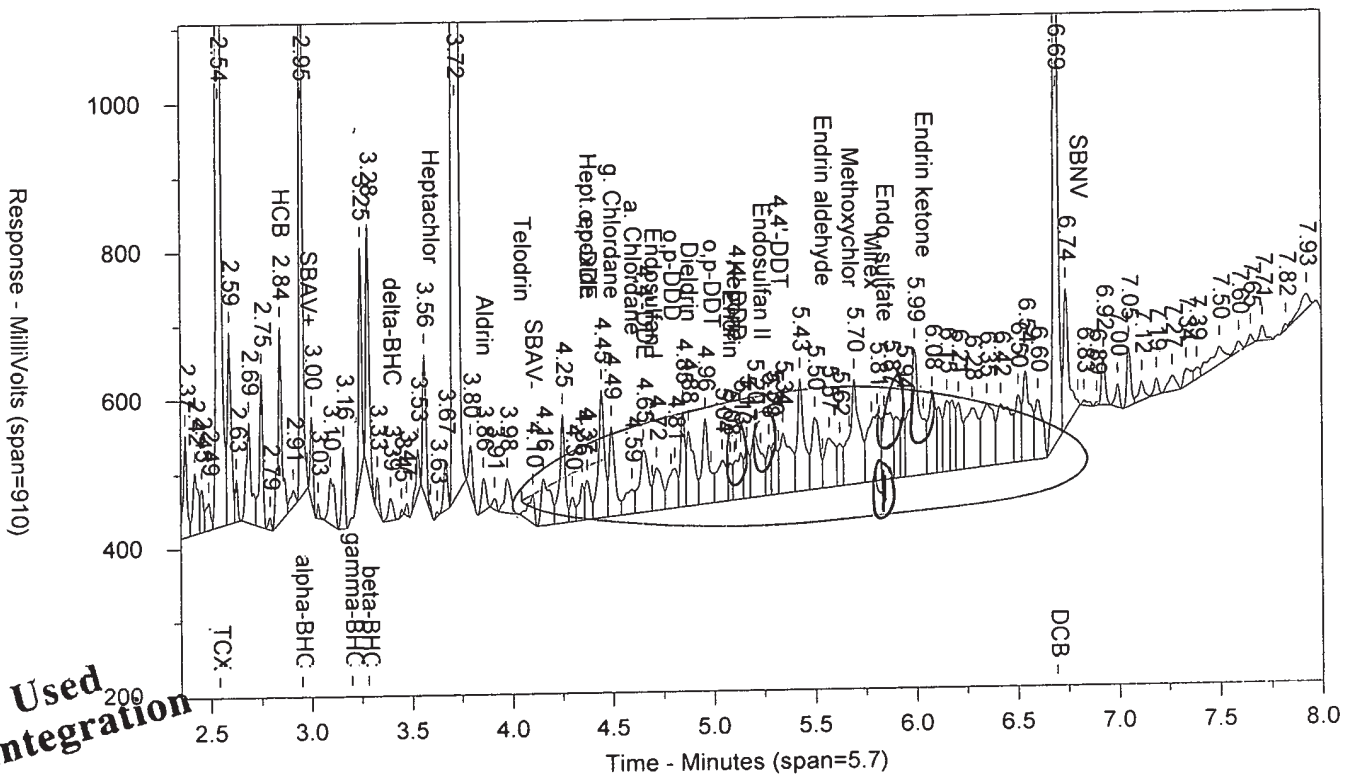
### Analysis Report (B)

Injected on : Nov 14, 2018 23:23:48  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.056.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.74	3.76	3.80	114163.6	0.023752	4	139.45	2
4.27	4.31	4.33	50708.81	0.003095			L: 0.046009 4
+ 4.39	4.40	4.45	36949.87	0.002984			L: 0.039741 5
4.39	4.44	4.45	39862.18	0.003219			L: 0.039949 5
5.08	5.13	5.14	441546.7	0.095128			6
<b>Height Summation:</b>			<b>646281.29</b>				
<b>Amount Avg CF:</b>			<b>0.031298</b>	<b>Linear:</b>			

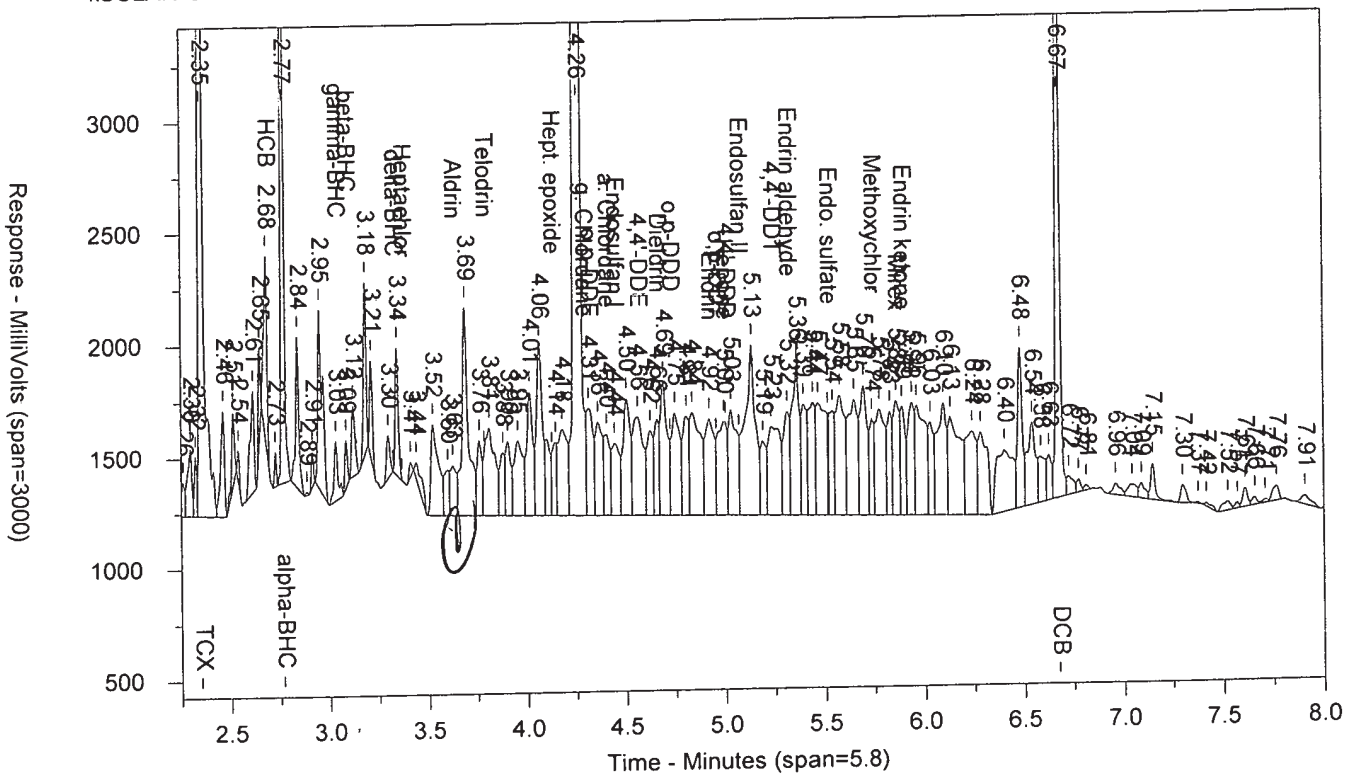
Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
+ 4.64	4.66	4.70	44024.3	0.025554	5	59.63	1
4.64	4.69	4.70	213540.6	0.12395			1
4.87	4.92	4.93	93905.71	0.052792			2
+ 5.31	5.32	5.37	60703.14	0.017276			4
5.31	5.36	5.37	216102.9	0.061502			4
5.36	5.39	5.42	43336.93	0.021			5
5.66	5.70	5.72	175251.1	0.055615			6
<b>Height Summation:</b>			<b>742137.24</b>				
<b>Amount Avg CF:</b>			<b>0.062972</b>	<b>Linear:</b>			

9881310 F AB15T-3 T 18310009A 10589 SW-846 8081B  
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Not Used  
See Reintegration

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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881310 F AB15T-3 T 183100009A 10589  
 Injected On: 11/14/2018 11:23:48 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

SW-846 8081B  
 Sample Weight: 247  
 Dilution Factor: 2

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

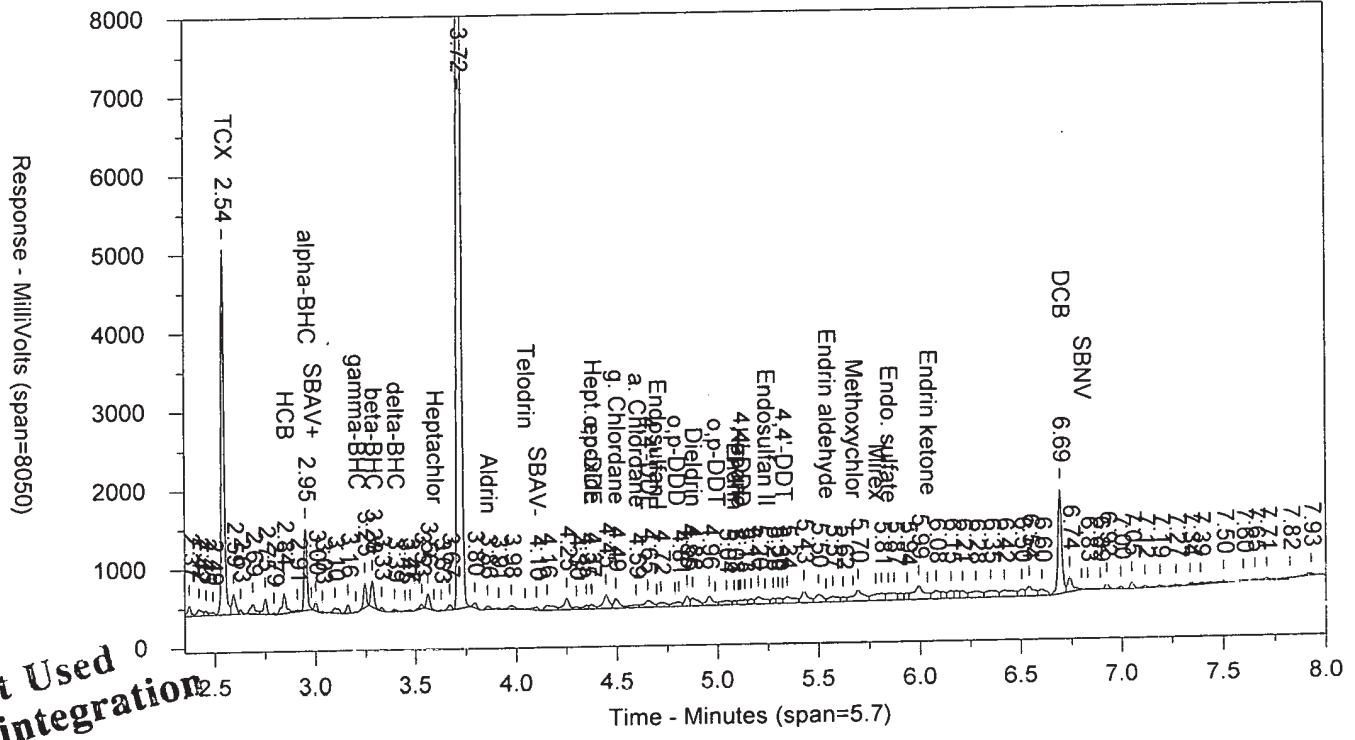
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	4688616	.087	TCX	2.351	17713570	.072	TCX
2.845	262698	.005	HCB	2.681	852365	.005	HCB
2.951	1043028	.013	alpha-BHC	2.766	3839455	.014	alpha-BHC
	0		gamma-BHC	3.034	269877	.005	gamma-BHC
3.282	335287	.011	beta-BHC	3.086	215807	.002	beta-BHC
3.393	30588	.001	delta-BHC		0		delta-BHC
3.859	44244	.001	Aldrin	3.627	226486	.005	Aldrin
4.373	53144	.002	o,p-DDE	4.312	481008	.007	o,p-DDE
4.594	32809	.001	a. Chlordane	4.403	364069	.002	a. Chlordane
	0		Endosulfan I	4.445	323504	.002	Endosulfan I
4.495	121396	.003	g. Chlordane		0		g. Chlordane
4.652	83839	.002	4,4'-DDE	4.561	443752	.011	4,4'-DDE
4.877	101431	.002	Dieldrin	4.658	432523	.002	Dieldrin
5.083	50868	.001	Endrin	4.922	434928	.003	Endrin
	0		Kepone	4.996	425085	.037	Kepone
	0		4,4'-DDT	5.234	398292	.003	4,4'-DDT
	0		Endrin aldehyde	5.315	466882	.004	Endrin aldehyde
	0		Methoxychlor	5.739	431473	.007	Methoxychlor
	0		Mirex	5.86	514645	.008	Mirex
	0		Endrin ketone	5.889	490072	.003	Endrin ketone
6.693	1339913	.049	DCB	6.675	4420551	.046	DCB

Files:  
 Area File: 05pest18306010.056.RAW  
 Area File: 05pest18306010B.056.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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 File Reported On: 11/15/2018 at 7:41:31 AM

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 See Reintegration**

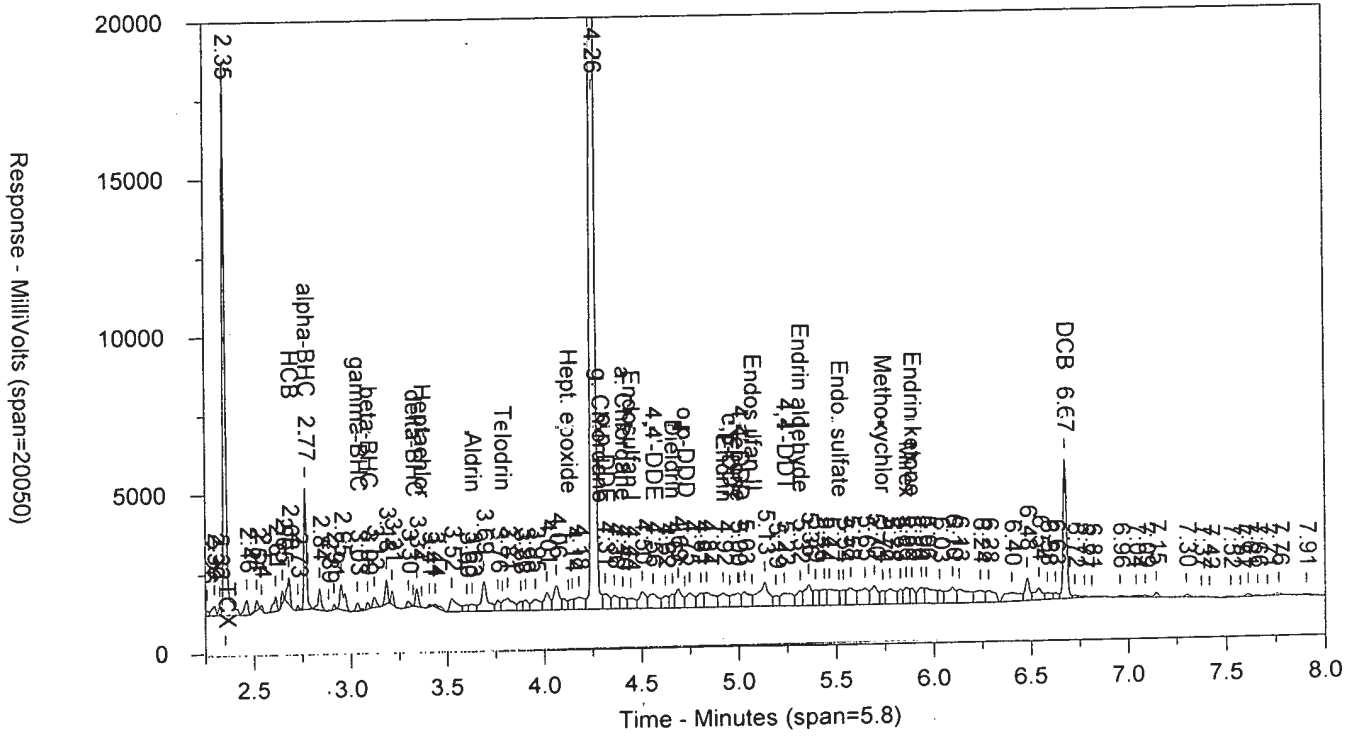
9881310 F AB15T-3 T 18310009A 10589 SW-846 8081B

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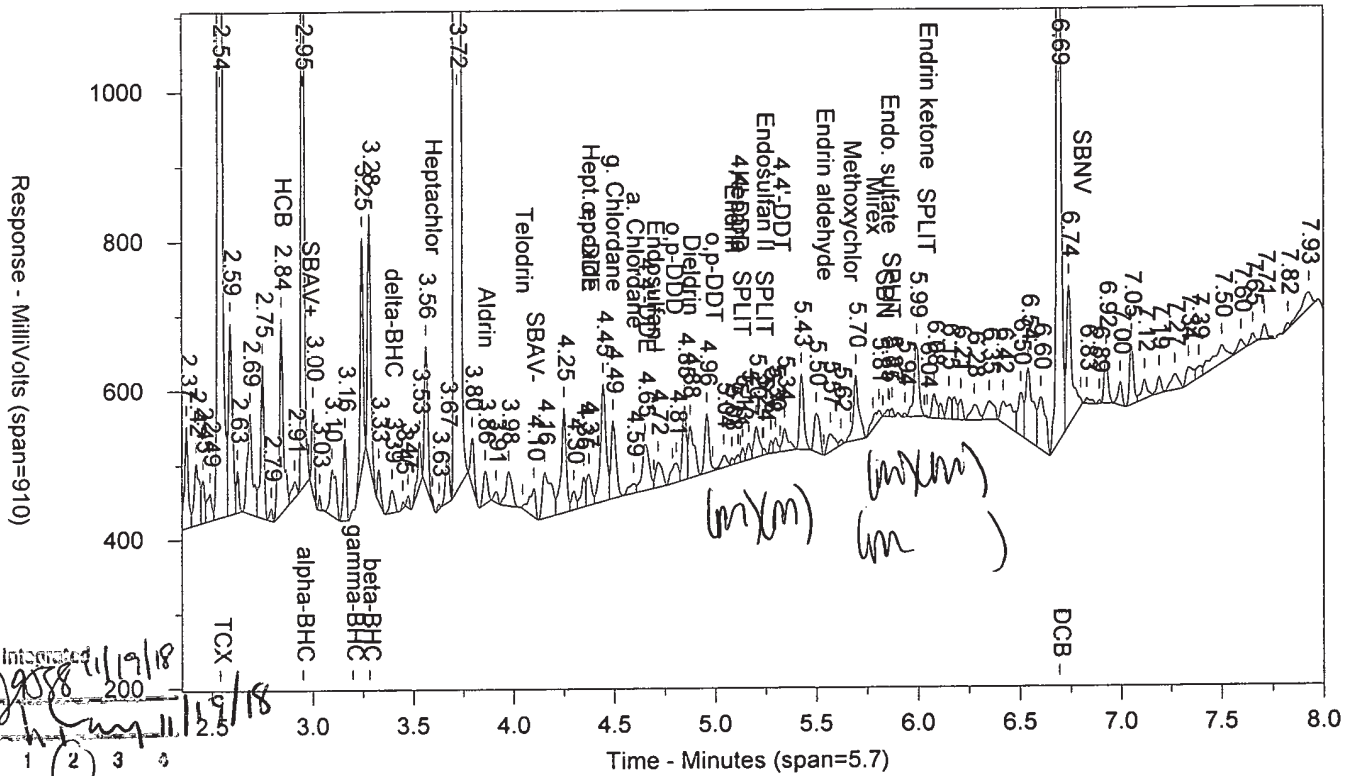


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See Reintegration

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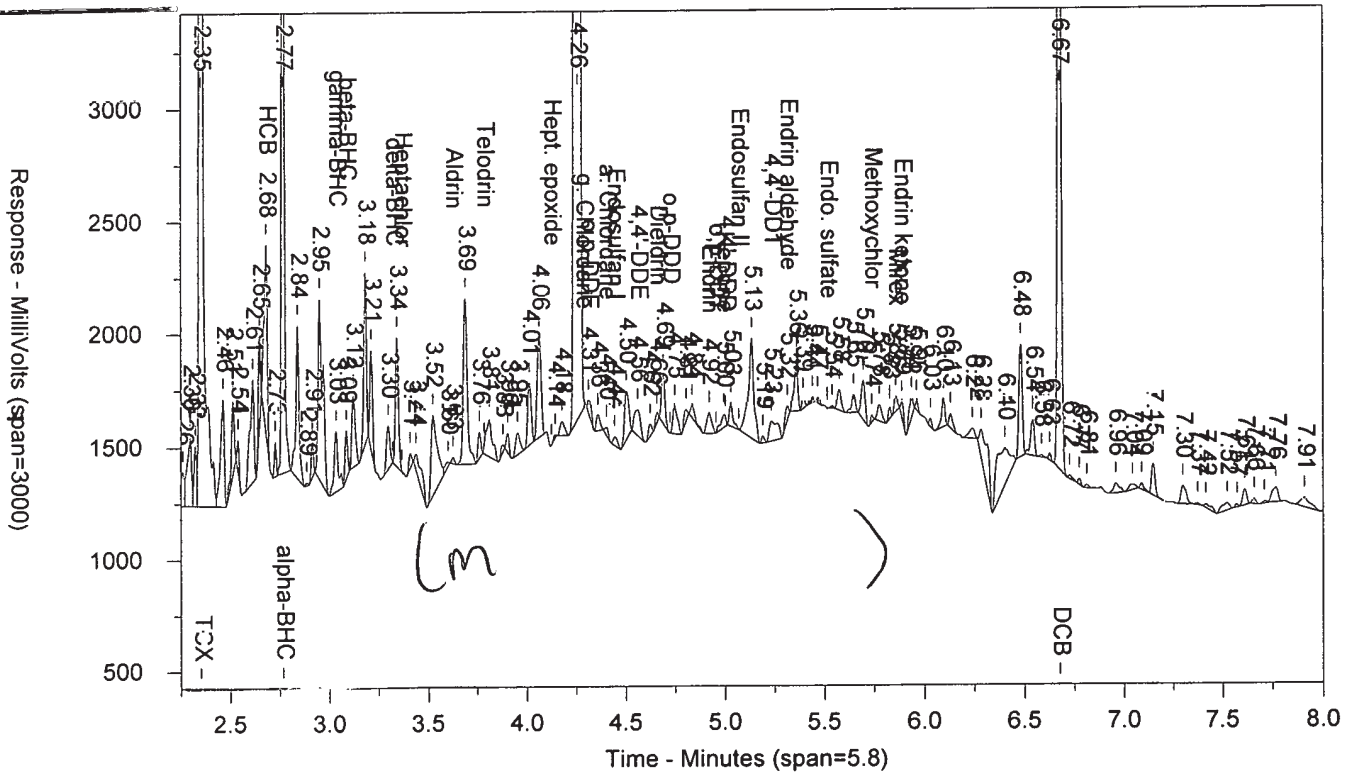


9881310 F AB15T-3 T 18310009A 10589 SW-846 8081B  
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M = Manually Integrated  
 Analyst: *[Signature]* 11/19/18  
 Approved by: *[Signature]* 11/19/18  
 Circle Reason 1 2 3 4  
 1 = Missed Peak  
 2 = Improper Baseline  
 3 = IIT Update  
 4 = Other

\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.056.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881310 F AB15T-3 T 183100009A 10589  
 Injected On: 11/14/2018 11:23:48 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

SW-846 8081B  
 Sample Weight: 247  
 Dilution Factor: 2

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

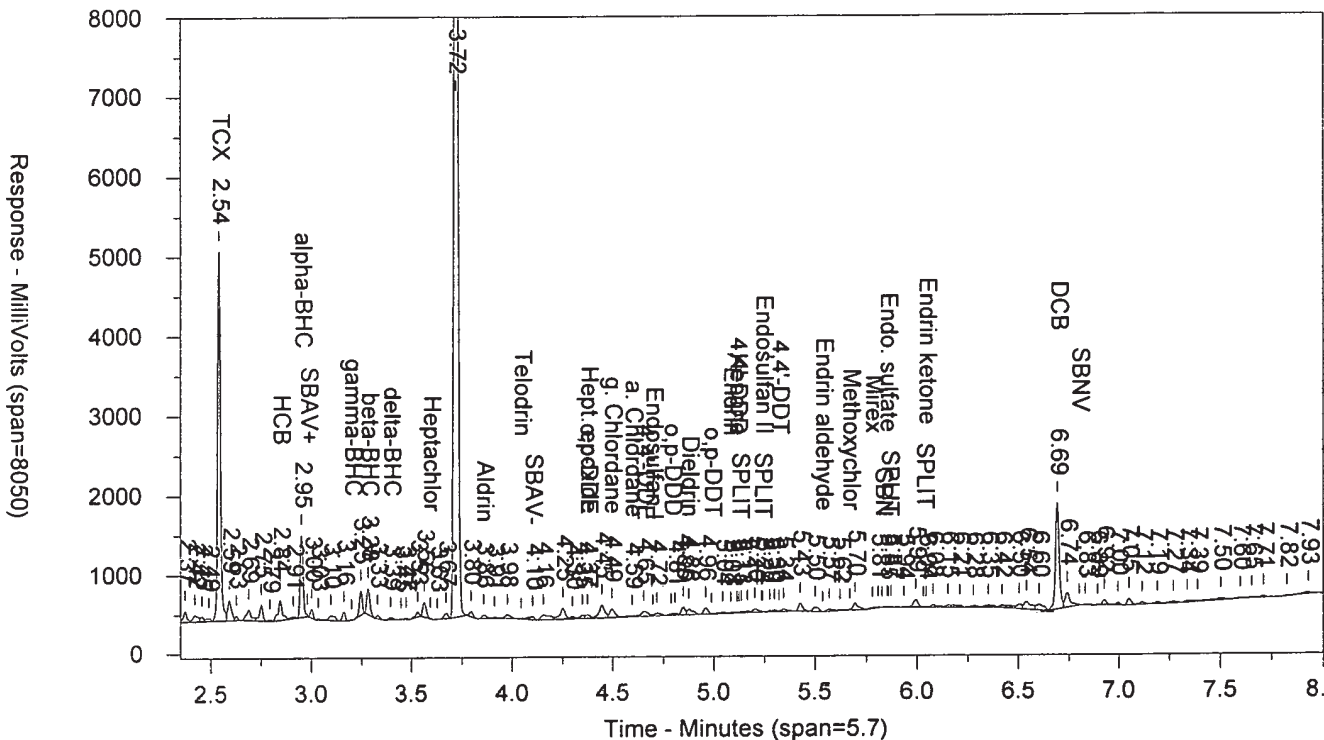
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	4688616	.087	TCX	2.351	17713570	.072	TCX
2.845	262698	.005	HCB	2.681	852365	.005	HCB
2.951	1043028	.013	alpha-BHC	2.766	3839455	.014	alpha-BHC
	0		gamma-BHC	3.034	269877	.005	gamma-BHC
3.282	335287	.011	beta-BHC	3.086	215807	.002	beta-BHC
3.393	30586	.001	delta-BHC		0		delta-BHC
3.859	44244	.001	Aldrin	3.627	30205	.004	Aldrin
4.373	41999	.002	o,p-DDE	4.312	50709	.001	o,p-DDE
4.594	12628		a. Chlordane	4.403	36950		a. Chlordane
	0		Eridosulfan I	4.445	39852		Endosulfan I
4.495	104826	.002	g. Chlordane		0		g. Chlordane
4.652	62033	.001	4,4'-DDE	4.561	114932	.009	4,4'-DDE
4.877	70532	.002	Dieldrin	4.658	44024		Dieldrin
5.083	9430		Endrin	4.922	93906	.001	Endrin
5.114	10874	.001	Kepone	4.996	56002	.032	Kepone
	0		4,4'-DDT	5.234	87567	.001	4,4'-DDT
5.241	8589		Endosulfan II		0		Endosulfan II
	0		Endrin aldehyde	5.315	60703	.001	Endrin aldehyde
	0		Methoxychlor	5.739	33403	.001	Methoxychlor
5.853	9858		Endo. sulfate		0		Endo. sulfate
	0		Mirex	5.86	66593	.001	Mirex
6.044	2991		Endrin ketone	5.889	65527		Endrin ketone
6.693	1339913	.049	DCB	6.675	4299206	.045	DCB

Files:

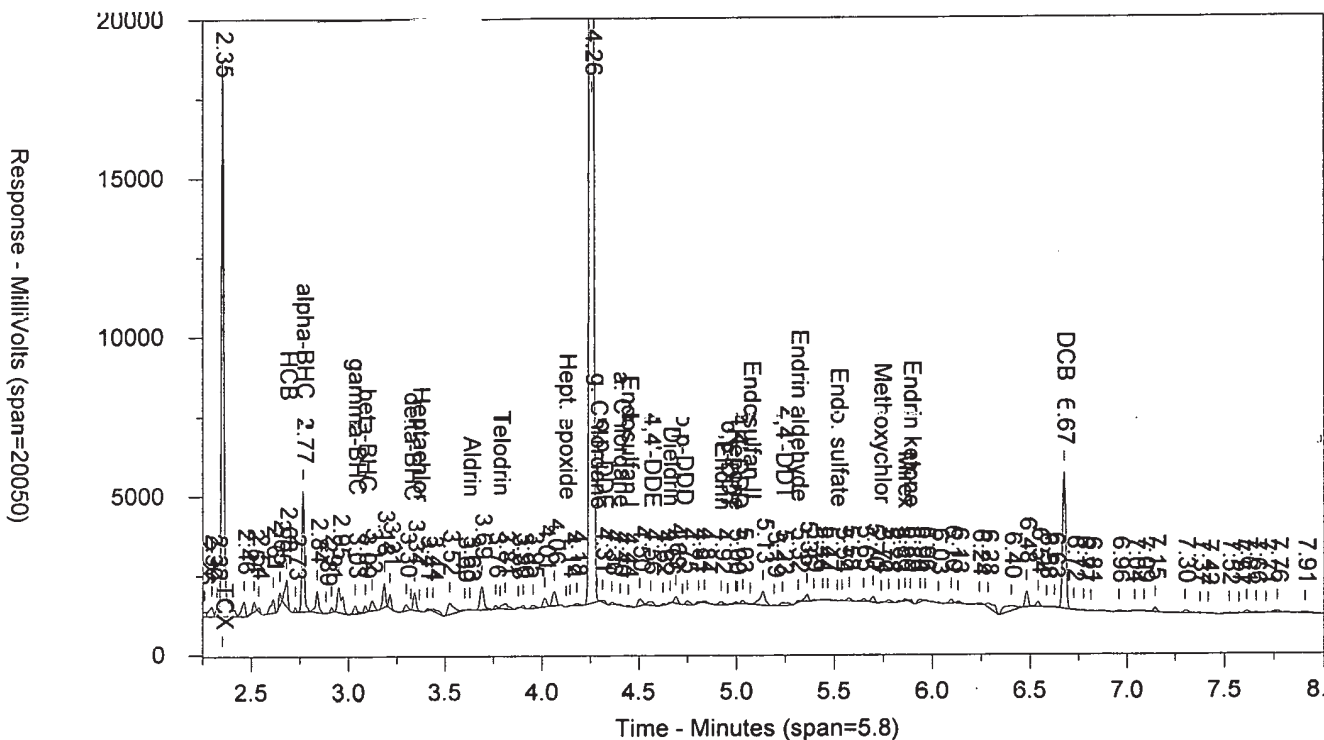
Area File: 05pest18306010.056.BND  
 Area File: 05pest18306010B.056.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/16/2018 12:43:09 PM  
 File Reported On: 11/19/2018 at 11:55:33 AM

9881310 F AB15T-3 T 18310009A 10589 SW-846 8081B

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# Data Summary

Sample Name: 9881313 F 15T-6 Sample ID: AB Batchnumber: 18310009A  
 Sample Amount: 248 ml Total Volume: 2 ml Analyst: 9588 SDG: TID15 State: NY  
 Analyses: 10589

## Analysis Report (A)

Injected on Nov 15, 2018 00:40:28  
 Instrument H9190A  
 Result file 05PEST18306010.062.RAW  
 Calibration file 05PEST1830605  
 Method file 05PESTD

%SSR(TCX) 44% (44 - 124) Conc: 0.134918  
 %SSR(DCB) 47% (32 - 149) Conc: 0.141033

## Analysis Report (B)

Injected on Nov 15, 2018 00:40:28  
 Instrument H9190B  
 Result file 05PEST18306010B.062.RAW  
 Calibration file 05PEST1830605B  
 Method file 05PESTD

%SSR(TCX) \* 38% (44 - 124) Conc: 0.115346  
 %SSR(DCB) 44% (32 - 149) Conc: 0.13253

## Single Component Data

Compound	Min	RT	Max	Height	Amount	Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.52	2.54	2.56	7306126	0.134918	Tetrachloro-m-xylene	2.33	2.35	2.37	28400050	0.115346
HCB	2.81	2.83	2.85	105492	0.002019	HCB	2.66	2.68	2.70	1118105	0.006384
Alpha BHC	2.93	2.95	2.97	1830476	0.023585	Alpha BHC	2.75	2.77	2.79	6985811	0.021981
Gamma BHC - Lindane	3.18	3.20	3.22	9520	0.000144	Gamma BHC - Lindane	3.01	3.04	3.05	262208	0.00523
Delta BHC	3.39	3.41	3.43	20949	0.000347	Beta BHC	3.07	3.09	3.11	345416	0.002937
Heptachlor	3.57	3.60	3.61	16888	0.000302	Delta BHC	3.30	3.31	3.34	128864	0.005631
Aldrin	3.83	3.87	3.87	10358	0.000201	Aldrin	3.61	3.63	3.65	247338	0.00516
Heptachlor Epoxide	4.35	4.39	4.39	7817	0.000169	Telodrin	3.76	3.80	3.80	378939	0.00427
p,p-DDE	4.63	4.67	4.67	38469	0.000916	Heptachlor Epoxide	4.10	4.14	4.14	406915	0.002379
o,p-DDD	4.77	4.78	4.81	14075	0.000671	Gamma Chlordane	4.27	4.30	4.31	371879	0.002071
Dieldrin	4.87	4.89	4.91	26296	0.000568	Endosulfan I	4.43	4.45	4.47	311689	0.001962
Kepone	5.08	5.11	5.12	38429	0.001992	p,p-DDE	4.53	4.55	4.57	365055	0.010749
p,p-DDT	5.30	5.32	5.34	46537	0.001201	Dieldrin	4.65	4.66	4.69	375253	0.002125
Methoxychlor	5.65	5.66	5.69	5282	0.000296	Endrin	4.89	4.92	4.93	308986	0.001915
Decachlorobiphenyl	6.67	6.69	6.73	3841294	0.141033	Kepone	4.97	5.00	5.01	470690	0.03691
						p,p-DDT	5.21	5.23	5.25	382096	0.002664
						Endrin Aldehyde	5.30	5.31	5.34	346636	0.002889
						Methoxychlor	5.70	5.74	5.74	257295	0.004113
						Endrin Ketone	5.86	5.88	5.90	275228	0.001846
						Decachlorobiphenyl	6.65	6.68	6.71	12749950	0.13253

## Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Total DDTs			<0.004	<0.0081	<0.0161			
<input type="checkbox"/> Total Endosulfans (I + II)					<0.0081			
<input type="checkbox"/> Tetrachloro-m-xylene	A	0.134918	0.0121	0.0242	0.0242		15.64	
<input checked="" type="checkbox"/> Tetrachloro-m-xylene-D1	A	0.134918	0.0121	0.0242	0.0242			
<input checked="" type="checkbox"/> Tetrachloro-m-xylene-D2	B	0.115346	0.0121	0.0242	0.0242			
<input type="checkbox"/> HCB			<0.0024	<0.0056	<0.0081			
<input checked="" type="checkbox"/> Alpha BHC	A	0.023585	0.0024	0.0056	0.0081	D1	7.04	
<input checked="" type="checkbox"/> Gamma BHC - Lindane			<0.0016	<0.0056	<0.0081	D1		
<input checked="" type="checkbox"/> Beta BHC			<0.0027	<0.0056	<0.0081	D1		
<input checked="" type="checkbox"/> Delta BHC			<0.0027	<0.0056	<0.0081	D1		
<input checked="" type="checkbox"/> Heptachlor			<0.0016	<0.0056	<0.0081	D2		
<input checked="" type="checkbox"/> Aldrin			<0.0016	<0.0056	<0.0081	D1		
<input type="checkbox"/> Telodrin					<0.0081			
<input type="checkbox"/> o,p-DDE			<0.0056	<0.0113	<0.0161			
<input checked="" type="checkbox"/> Heptachlor Epoxide			<0.0019	<0.0056	<0.0081	D1		
<input checked="" type="checkbox"/> Gamma Chlordane			<0.0056	<0.0161	<0.0161	D1		
<input checked="" type="checkbox"/> Alpha Chlordane			<0.0024	<0.0056	<0.0081	D1		
<input checked="" type="checkbox"/> p,p-DDE			<0.004	<0.0081	<0.0161	D1		
<input checked="" type="checkbox"/> Endosulfan I			<0.0035	<0.0073	<0.0081	D1		
<input type="checkbox"/> o,p-DDD			<0.004	<0.0081	<0.0161			
<input checked="" type="checkbox"/> Dieldrin			<0.0043	<0.0081	<0.0161	D1		
<input type="checkbox"/> o,p-DDT			<0.0041	<0.0081	<0.0161			

Reviewed and digitally signed by Andrea L Jones on 11/16/2018 14:32:44



# Data Summary

Sample Name: 9881313 F 15T-6 Sample ID: AB Batchnumber: 18310009A  
 Sample Amount: 248 ml Total Volume: 2 ml Analyst: 9588 SDG: TID15 State: NY  
 Analyses: 10589

**Analysis Report (A)**

Injected on Nov 15, 2018 00:40:28  
 Instrument H9190A  
 Result file 05PEST18306010.062.RAW  
 Calibration file 05PEST1830605  
 Method file 05PESTD

**Analysis Report (B)**

Injected on Nov 15, 2018 00:40:28  
 Instrument H9190B  
 Result file 05PEST18306010B.062.RAW  
 Calibration file 05PEST1830605B  
 Method file 05PESTD

**Single Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Endrin			<0.0065	<0.0161	<0.0161	D1		
<input type="checkbox"/> Kepone					<0.1613			
<input checked="" type="checkbox"/> p,p-DDD			<0.004	<0.0081	<0.0161	D1		
<input checked="" type="checkbox"/> Endosulfan II			<0.0121	<0.0242	<0.0242	D1		
<input checked="" type="checkbox"/> p,p-DDT			<0.0042	<0.0081	<0.0161	D1		
<input checked="" type="checkbox"/> Endrin Aldehyde			<0.0161	<0.0323	<0.0806	D1		
<input checked="" type="checkbox"/> Methoxychlor			<0.0242	<0.0565	<0.0806	D1		
<input type="checkbox"/> Mirex			<0.0081	<0.0323	<0.0403			
<input checked="" type="checkbox"/> Endosulfan Sulfate			<0.0047	<0.0097	<0.0161	D1		
<input checked="" type="checkbox"/> Endrin Ketone			<0.004	<0.0081	<0.0161	D1		
<input type="checkbox"/> Decachlorobiphenyl	A	0.141033	0.0121	0.0242	0.0242		6.22	
<input checked="" type="checkbox"/> Decachlorobiphenyl-D1	A	0.141033	0.0121	0.0242	0.0242			
<input checked="" type="checkbox"/> Decachlorobiphenyl-D2	B	0.13253	0.0121	0.0242	0.0242			

**Multiple Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Hits	Comments
<input checked="" type="checkbox"/> Chlordane			<0.129	<0.2581	<0.4032	D1		4	No Req.
<input checked="" type="checkbox"/> Toxaphene			<0.2419	<0.4839	<0.8065	D1		4	No Req.

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomasz*  
 Valerie L. Tomasz  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Andrea L Jones on 11/16/2018 14:32:44

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** 9881313 F 15T-6 ID: AB **Batchnumber:** 183100009A  
**Sample Amount:** 248 ml **Total Volume:** 2 ml **Analyst:** 2306 **SDG:** TID15 **State:** NY  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 15, 2018 00:40:28  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.062.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : 44% (44-124) Conc.: 0.134918  
 %SSR(DCB) : 47% (32-149) Conc.: 0.141033

### Analysis Report (B)

Injected on : Nov 15, 2018 00:40:28  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.062.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : \*38% (44-124) Conc.: 0.115346  
 %SSR(DCB) : 44% (32-149) Conc.: 0.13253

*matrix*

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.52	2.54	2.56	7306126	0.134918
HCB	2.81	2.83	2.85	105492	0.002019
alpha-BHC	2.93	2.95	2.97	1830476	0.023585
gamma-BHC	3.18	3.20	3.22	9520	0.000144
delta-BHC	3.39	3.41	3.43	20949	0.000347
Heptachlor	3.57	3.60	3.61	16888	0.000302
Aldrin	3.83	3.87	3.87	10358	0.000201
Hept. epoxide	4.35	4.39	4.39	7817	0.000169
4,4'-DDE	4.63	4.67	4.67	38469	0.000916
o,p-DDD	4.77	4.78	4.81	14075	0.000671
Dieldrin	4.87	4.89	4.91	26296	0.000568
Kepone	5.08	5.11	5.12	38429	0.001992
4,4'-DDT	5.30	5.32	5.34	46537	0.001201
Methoxychlor	5.65	5.66	5.69	5282	0.000296
DCB	6.67	6.69	6.73	3841294	0.141033

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.33	2.35	2.37	28400050	0.115346
HCB	2.66	2.68	2.70	1118105	0.006384
alpha-BHC	2.75	2.77	2.79	6985811	0.021981
gamma-BHC	3.01	3.04	3.05	262208	0.005230
beta-BHC	3.07	3.09	3.11	345416	0.002937
delta-BHC	3.30	3.31	3.34	128864	0.005631
Aldrin	3.61	3.63	3.65	247338	0.005160
Telodrin	3.76	3.80	3.80	378939	0.004270
Hept. epoxide	4.10	4.14	4.14	408915	0.002379
g. Chlordane	4.27	4.30	4.31	371879	0.002071
Endosulfan I	4.43	4.45	4.47	311689	0.001962
4,4'-DDE	4.53	4.55	4.57	365055	0.010749
Dieldrin	4.65	4.66	4.69	375253	0.002125
Endrin	4.89	4.92	4.93	308986	0.001915
Kepone	4.97	5.00	5.01	470690	0.036910
4,4'-DDT	5.21	5.23	5.25	382096	0.002664
Endrin aldehyde	5.30	5.31	5.34	346636	0.002889
Methoxychlor	5.70	5.74	5.74	257295	0.004113
Endrin ketone	5.86	5.88	5.90	275228	0.001846
DCB	6.65	6.68	6.71	12749950	0.132530

*4,4'-DDD: 38429*

*Handwritten calculations:*  
 $38429 \times 2 = 76858$   
 $284479 \div 248 = 1147.1$   
 $0.001087488$

### Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input type="checkbox"/> TCX	A	0.134918	0.0242	0.0121		15.64	
<input type="checkbox"/> HCB			<0.0081	<0.0024			
<input checked="" type="checkbox"/> alpha-BHC	A	0.023585	0.0081	0.0024		7.04	
<input checked="" type="checkbox"/> gamma-BHC			<0.0081	<0.0016			
<input checked="" type="checkbox"/> beta-BHC			<0.0081	<0.0027			
<input checked="" type="checkbox"/> delta-BHC			<0.0081	<0.0027			
<input checked="" type="checkbox"/> Heptachlor			<0.0081	<0.0016			
<input checked="" type="checkbox"/> Aldrin			<0.0081	<0.0016			
<input type="checkbox"/> Telodrin			<0.0081				
<input type="checkbox"/> o,p-DDD			<0.0161	<0.0056			
<input checked="" type="checkbox"/> Hept. epoxide			<0.0081	<0.0019			
<input checked="" type="checkbox"/> g. Chlordane			<0.0161	<0.0056			
<input checked="" type="checkbox"/> a. Chlordane			<0.0081	<0.0024			
<input checked="" type="checkbox"/> 4,4'-DDE			<0.0161	<0.004			
<input checked="" type="checkbox"/> Endosulfan I			<0.0081	<0.0035			
<input type="checkbox"/> o,p-DDD			<0.0161	<0.004			
<input checked="" type="checkbox"/> Dieldrin			<0.0161	<0.0043			
<input type="checkbox"/> o,p-DDT			<0.0161	<0.0041			
<input checked="" type="checkbox"/> Endrin			<0.0161	<0.0065			
<input type="checkbox"/> Kepone	A	0.001992	<0.1613			179.51	**
<input checked="" type="checkbox"/> 4,4'-DDD			<0.0161	<0.004			
<input checked="" type="checkbox"/> Endosulfan II			<0.0242	<0.0121			

%RPD = High - Low Amount divided by the Average times 100  
 \*\* %Difference > 40, lower amount found reported  
 \* Recovery outside QC Limits  
 Higher Amount Found unless RPD > 40

Andrea L. Jones  
Chemist

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** 9881313 F      15T-6      ID: AB      **Batchnumber:** 183100009A  
**Sample Amount:** 248 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:** TID15      **State:** NY  
**Analyses:** 10589

**Analysis Report (A)**

Injected on : Nov 15, 2018 00:40:28  
 Instrument : CP05-H9190A  
 Result file : 05PEST18306010.062.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

**Analysis Report (B)**

Injected on : Nov 15, 2018 00:40:28  
 Instrument : CP05-H9190B  
 Result file : 05PEST18306010B.062.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

**Summary Report**

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> 4,4'-DDT			<0.0161	<0.0042			
<input checked="" type="checkbox"/> Endrin aldehyde			<0.0806	<0.0161			
<input checked="" type="checkbox"/> Methoxychlor			<0.0806	<0.0242			
<input type="checkbox"/> Mirex			<0.0403	<0.0081			
<input checked="" type="checkbox"/> Endo. sulfate			<0.0161	<0.0047			
<input checked="" type="checkbox"/> Endrin ketone			<0.0161	<0.004			
<input type="checkbox"/> DCB	A	0.141033	0.0242	0.0121		6.22	
<input type="checkbox"/> Total DDTs	B	0.010749	<0.0161	0.004	J	0.00	
<input type="checkbox"/> Total DDTs	A	0.010749	<0.0161	0.004	J	0.00	
<input type="checkbox"/> Total Endosulfans	A	0.000000	<0.0081				

Units: ug/l

Reviewed by: Andrea L. Jones  
 Chemist

Verified by: Valerie L. Tomaszko  
 Principal Specialist

Date: NOV 16 2018

Date: NOV 16 2018

%RPD = High - Low Amount divided by the Average times 100

Higher Amount Found unless RPD > 40

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** 9881313 F      **15T-6**      **ID:** AB      **Batchnumber:** 183100009A  
**Sample Amount:** 248 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:** TID15      **State:** NY  
**Analyses:** 10589

**Analysis Report (A)**

Injected on : Nov 15, 2018 00:40:28  
 Instrument : CP05-H9190A  
 Result file : 05PEST18306010.062.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : 44% (44-124)      Conc.: 0.134918  
 %SSR(DCB) : 47% (32-149)      Conc.: 0.141033

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.78	2.83	2.84	105492.2	0.135211	6	61.37	1
+ 3.04	3.06	3.10	10224.07	0.009328			2
3.04	3.10	3.10	67955.79	0.061998			2
3.20	3.24	3.26	77472.08	0.240295			3
3.40	3.41	3.46	20949.22	0.025031			4
+ 3.51	3.54	3.57	11985.23	0.013685			5
* 3.56	3.57	3.62	104110.7	0.176744			6
* 3.51	3.57	3.57	104110.7	0.11888			5
+ 3.56	3.60	3.62	16888.27	0.028671			6
<b>Height Summation:</b>			<b>480090.69</b>				
<b>Amount Avg CF:</b>			<b>0.12636</b>	Linear:			
<b>Aroclor-1221</b>							
2.66	2.69	2.70	108800.8	0.244667	2	57.31	1
2.80	2.83	2.84	105492.2	0.103554			3
<b>Height Summation:</b>			<b>214293</b>				
<b>Amount Avg CF:</b>			<b>0.174111</b>	Linear:			
<b>Aroclor-1248</b>							
3.38	3.41	3.44	20949.22	0.025057	6	115.16	1
3.66	3.68	3.72	40211.07	0.08797			2
3.85	3.87	3.91	10357.81	0.009572			3
4.21	4.25	4.27	55400.27	0.044974			4
4.39	4.45	4.45	201875.2	0.241529			5
4.71	4.74	4.77	24376.52	0.038521			6
<b>Height Summation:</b>			<b>353170.09</b>				
<b>Amount Avg CF:</b>			<b>0.074604</b>	Linear:			
<b>Aroclor-1254</b>							
+ 4.39	4.39	4.45	7817.241	0.004951	6	85.41	1
4.39	4.45	4.45	201875.2	0.127868			1
4.62	4.67	4.68	38468.84	0.032564			2
4.71	4.74	4.77	24376.52	0.011832			3
4.93	4.96	4.99	82682.02	0.053871			4
5.06	5.11	5.12	38428.7	0.036374			5
5.27	5.32	5.33	46536.7	0.027426			6
<b>Height Summation:</b>			<b>432367.98</b>				
<b>Amount Avg CF:</b>			<b>0.048322</b>	Linear:			
<b>Aroclor-1260</b>							
4.85	4.89	4.91	26296.2	0.018134	5	35.63	1
5.06	5.11	5.12	38428.7	0.019621			2
5.27	5.32	5.33	46536.7	0.022584			3
5.53	5.56	5.59	31800.12	0.027603			4
5.94	5.99	6.00	57474.84	0.040842			6
<b>Height Summation:</b>			<b>200536.56</b>				
<b>Amount Avg CF:</b>			<b>0.025757</b>	Linear:			

**Analysis Report (B)**

Injected on : Nov 15, 2018 00:40:28  
 Instrument : CP05-H9190B  
 Result file : 05PEST18306010B.062.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDB.MET  
 %SSR(TCX) : \*38% (44-124)      Conc.: 0.115346  
 %SSR(DCB) : 44% (32-149)      Conc.: 0.13253

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.68	2.72	1118105	0.469271	5	134.78	1
2.93	2.97	2.99	372723.7	0.112893			2
3.11	3.14	3.17	86330.98	0.062768			3
3.27	3.31	3.33	128863.7	0.022292			4
+ 3.37	3.41	3.43	58241.58	0.020109			5
3.37	3.43	3.43	85903.98	0.029661			5
<b>Height Summation:</b>			<b>1791927.36</b>				
<b>Amount Avg CF:</b>			<b>0.139377</b>	Linear:			
<b>Aroclor-1221</b>							
2.63	2.65	2.67	471151.3	0.559982	2	24.68	2
2.67	2.68	2.71	1110105	0.393555			3
<b>Height Summation:</b>			<b>1689256.3</b>				
<b>Amount Avg CF:</b>			<b>0.476769</b>	Linear:			
<b>Aroclor-1248</b>							
3.27	3.31	3.33	128863.7	0.044022	5	31.43	1
3.53	3.54	3.59	337003.6	0.121258			2
3.75	3.80	3.81	378938.5	0.109321			3
3.85	3.89	3.91	281026.7	0.097117			4
4.11	4.14	4.17	406915.4	0.101751			5
<b>Height Summation:</b>			<b>1532747.9</b>				
<b>Amount Avg CF:</b>			<b>0.094694</b>	Linear:			
<b>Aroclor-1254</b>							
4.11	4.14	4.17	406915.4	0.105347	6	15.28	1
4.27	4.30	4.33	371879.3	0.085299			2
+ 4.64	4.66	4.70	375252.6	0.059568			3
4.64	4.69	4.70	557951.8	0.088569			3
4.81	4.83	4.87	381346.2	0.084366			4
5.07	5.11	5.13	385349.7	0.115956			5
5.21	5.23	5.27	382095.5	0.07955			6
<b>Height Summation:</b>			<b>2485537.9</b>				
<b>Amount Avg CF:</b>			<b>0.093181</b>	Linear:			
<b>Aroclor-1260</b>							
+ 4.79	4.80	4.85	379060.7	0.087622	5	15.26	1
4.79	4.83	4.85	381346.2	0.08815			1
4.95	5.00	5.01	470689.7	0.091149			2
5.21	5.23	5.27	382095.5	0.071243			3
5.65	5.70	5.71	436680.1	0.063055			5
5.90	5.93	5.96	304299.4	0.074017			6
<b>Height Summation:</b>			<b>1975110.9</b>				
<b>Amount Avg CF:</b>			<b>0.077523</b>	Linear:			

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** 9881313 F      15T-6      ID: AB      **Batchnumber:** 183100009A  
**Sample Amount:** 248 ml      Total Volume: 2 ml      Analyst: 2306      SDG: TID15      State: NY  
**Analyses:** 10589

**Analysis Report (A)**

Injected on : Nov 15, 2018 00:40:28  
 Instrument : CP05-H9190A  
 Result file : 05PEST18306010.062.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.50	3.54	3.56	11985.23	0.008746	6	57.09	1
3.94	3.99	4.00	18093.59	0.013115			2
4.29	4.32	4.35	11596.2	0.012981			3
4.45	4.50	4.51	74255.44	0.017987			4
4.55	4.56	4.81	7554.083	0.001323			5
5.15	5.21	5.22	30348.19	0.022235			6

**Height Summation:** 153832.733  
**Amount Avg CF:** 0.012731      Linear:

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.11	5.12	38428.7	0.064808	4	98.42	1
5.20	5.21	5.26	30348.19	0.03266			2
5.29	5.32	5.35	46536.7	0.055429			3
5.68	5.70	5.74	180634.4	0.244821			5

**Height Summation:** 295947.99  
**Amount Avg CF:** 0.099429      Linear:

**Analysis Report (B)**

Injected on : Nov 15, 2018 00:40:28  
 Instrument : CP05-H9190B  
 Result file : 05PEST18306010B.062.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTDB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.74	3.80	3.80	378938.5	0.078522	5	77.22	2
4.08	4.10	4.14	603215.6	0.175027			L: 0.188531 3
+ 4.08	4.14	4.14	406915.4	0.118069			L: 0.136596 3
4.27	4.30	4.33	371879.3	0.022605			L: 0.062778 4
4.39	4.45	4.45	311688.8	0.025069			L: 0.059161 5
+ 5.08	5.11	5.14	385349.7	0.082686			6
5.08	5.14	5.14	532676.7	0.114298			6

**Height Summation:** 2198398.9  
**Amount Avg CF:** 0.083104      Linear:

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
+ 4.64	4.66	4.70	375252.6	0.216938	5	31.95	1
4.64	4.69	4.70	557951.8	0.322559			1
4.87	4.87	4.93	313007.6	0.175258			2
+ 4.87	4.92	4.93	308986	0.173006			2
+ 5.31	5.31	5.37	346635.8	0.098254			4
5.31	5.36	5.37	829371.2	0.235084			4
5.36	5.40	5.42	456935.8	0.220529			5
5.66	5.70	5.72	436680.1	0.13802			6

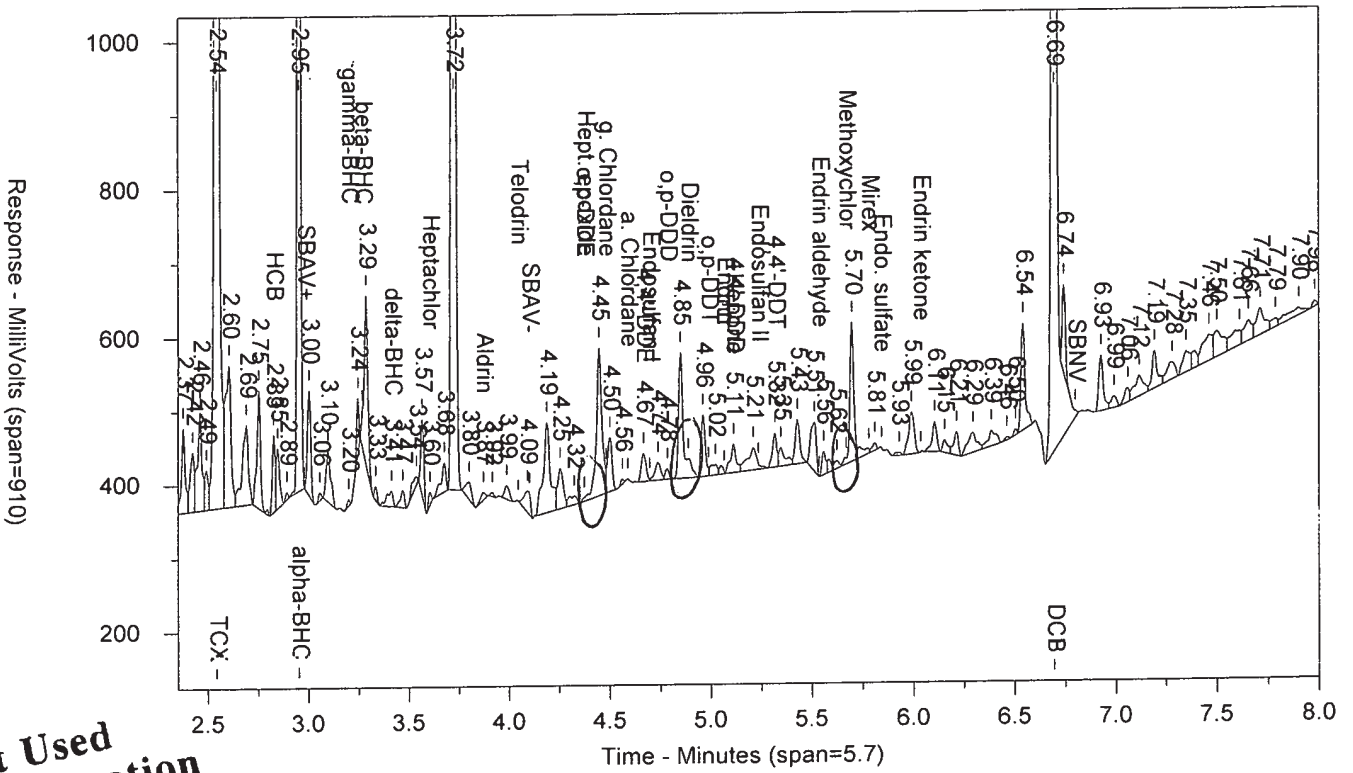
**Height Summation:** 2593946.5  
**Amount Avg CF:** 0.21829      Linear:

**Summary Report**

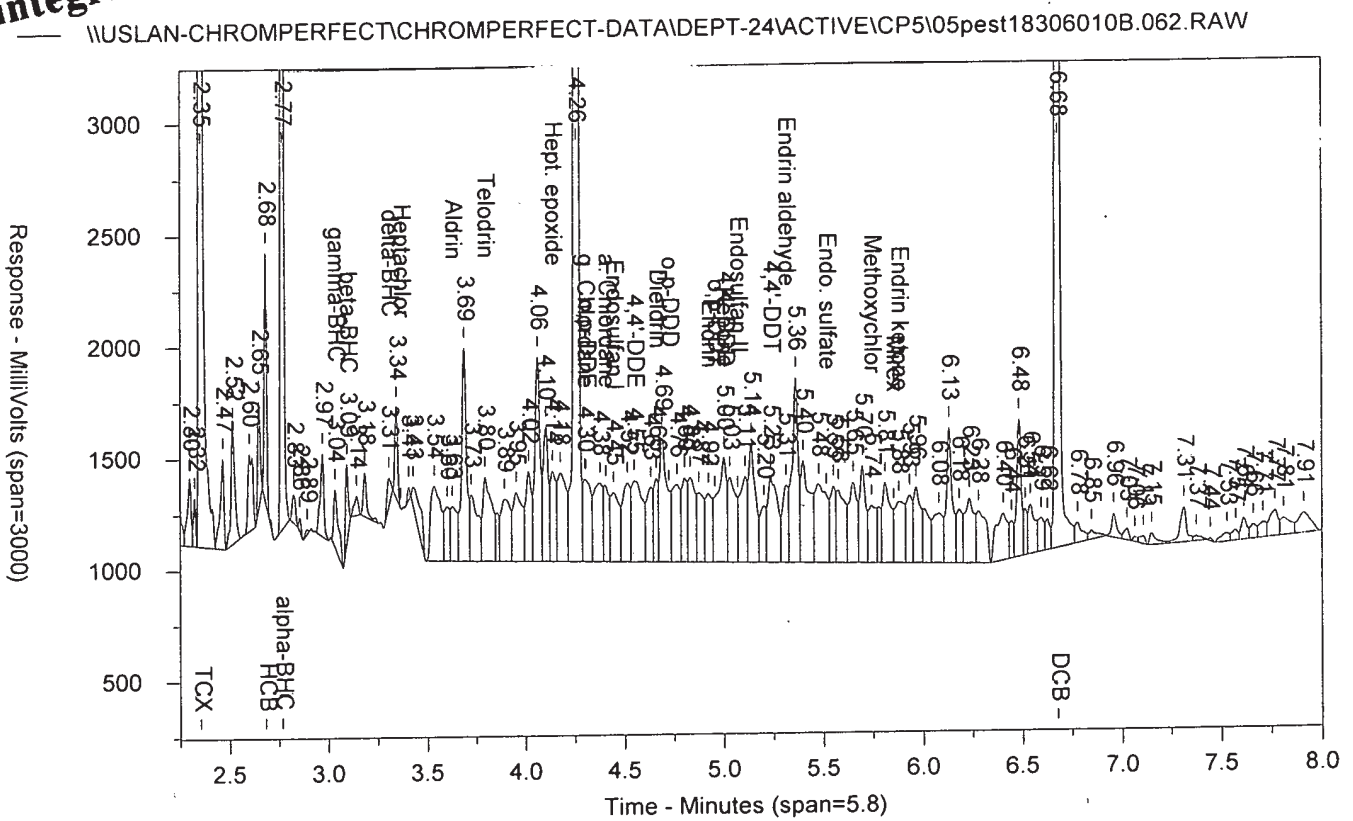
Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		9.80	4	40	
Aroclor-1221			0	0		** 93.00	3	5	
Aroclor-1248			0	0		23.73	4	30	
Aroclor-1254			0	0		** 63.40	4	40	
Aroclor-1260			0	0		** 100.24	4	40	
Chlordane	DI		0.4032	0.129		** 146.86	4	40	COV 9.02, ndl
Toxaphene			0.8065	0.2419		** 74.82	4	40	

Units: ug/l

9881313 F AB15T-6 T 18310009A 10589 SW-846 8081B



Not Used  
See Reintegration



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881313 F AB15T-6 T 183100009A 10589  
 Injected On: 11/15/2018 12:40:28 AM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

SW-846 8081B  
 Sample Weight: 248  
 Dilution Factor: 2

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	7306126	.135	TCX	2.353	28400050	.115	TCX
2.826	105492	.002	HCB	2.683	1118105	.006	HCB
2.953	1830476	.024	alpha-BHC	2.768	6985811	.022	alpha-BHC
3.198	9520		gamma-BHC	3.035	262208	.005	gamma-BHC
	0		beta-BHC	3.094	345416	.003	beta-BHC
3.411	20949		delta-BHC	3.307	128864	.006	delta-BHC
3.604	16888		Heptachlor		0		Heptachlor
3.871	10358		Aldrin	3.629	247338	.005	Aldrin
	0		Telodrin	3.796	378939	.004	Telodrin
	0		Hept. epoxide	4.137	406915	.002	Hept. epoxide
	0		g. Chlordane	4.3	371879	.002	g. Chlordane
	0		Endosulfan I	4.445	311689	.002	Endosulfan I
4.666	38469	.001	4,4'-DDE	4.55	365055	.011	4,4'-DDE
	0		Dieldrin	4.66	375253	.002	Dieldrin
4.783	14075	.001	o,p-DDD		0		o,p-DDD
	0		Endrin	4.923	308986	.002	Endrin
5.111	39295	.002	Kepone	5	470690	.037	Kepone
5.316	46537	.001	4,4'-DDT	5.234	382096	.003	4,4'-DDT
	0		Endrin aldehyde	5.313	346636	.003	Endrin aldehyde
	0		Methoxychlor	5.743	257295	.004	Methoxychlor
	0		Endrin ketone	5.878	275228	.002	Endrin ketone
6.694	3841294	.141	DCB	6.676	12749950	.133	DCB

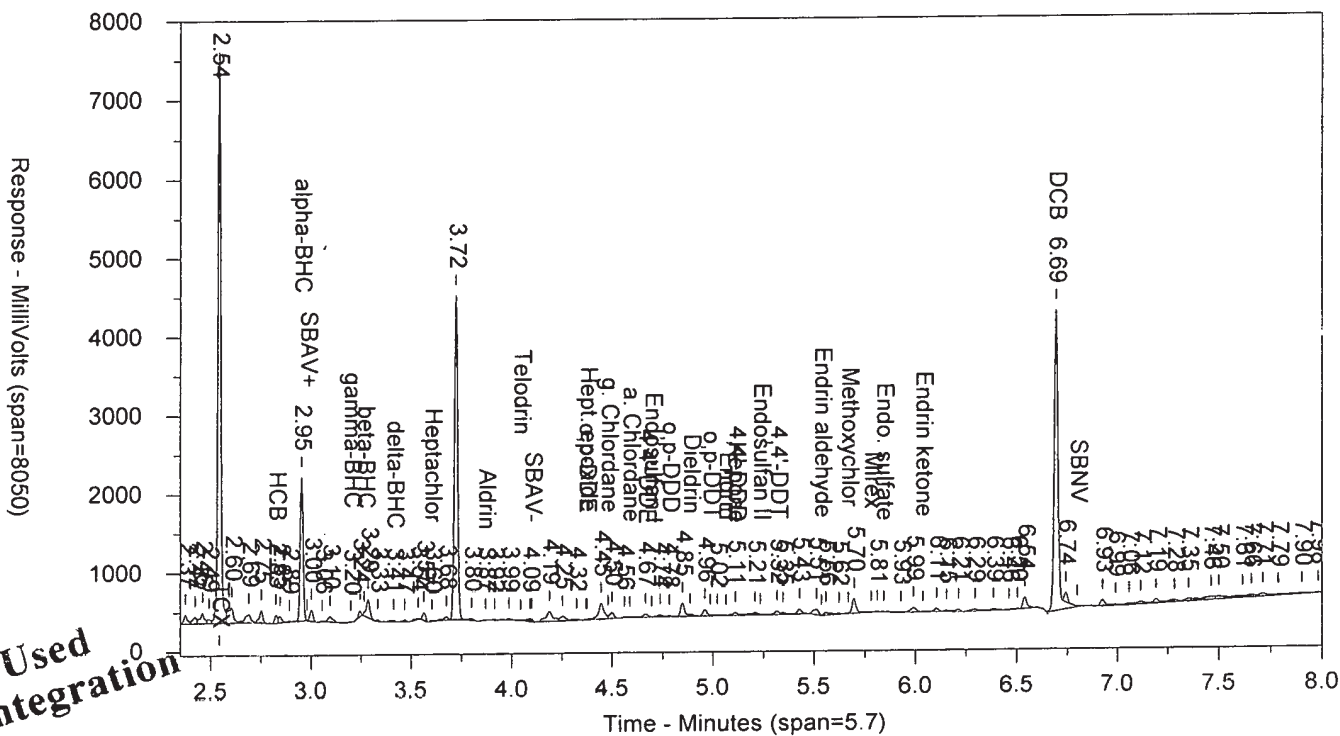
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Area File: 05pest18306010.062.RAW  
 Area File: 05pest18306010B.062.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:10 AM  
 File Reported On: 11/15/2018 at 7:42:23 AM

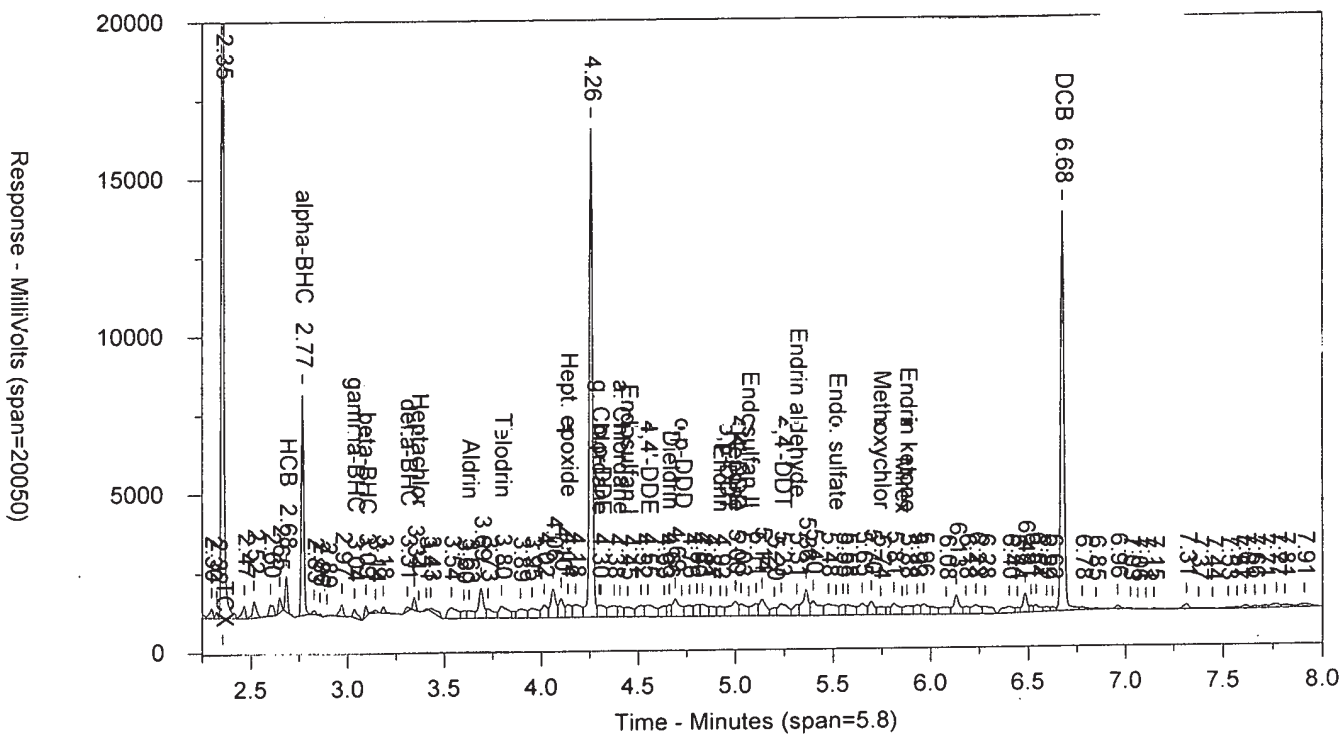
**Not Used  
 See Reintegration**

9881313 F AB15T-6 T 18310009A 10589 SW-846 8081B

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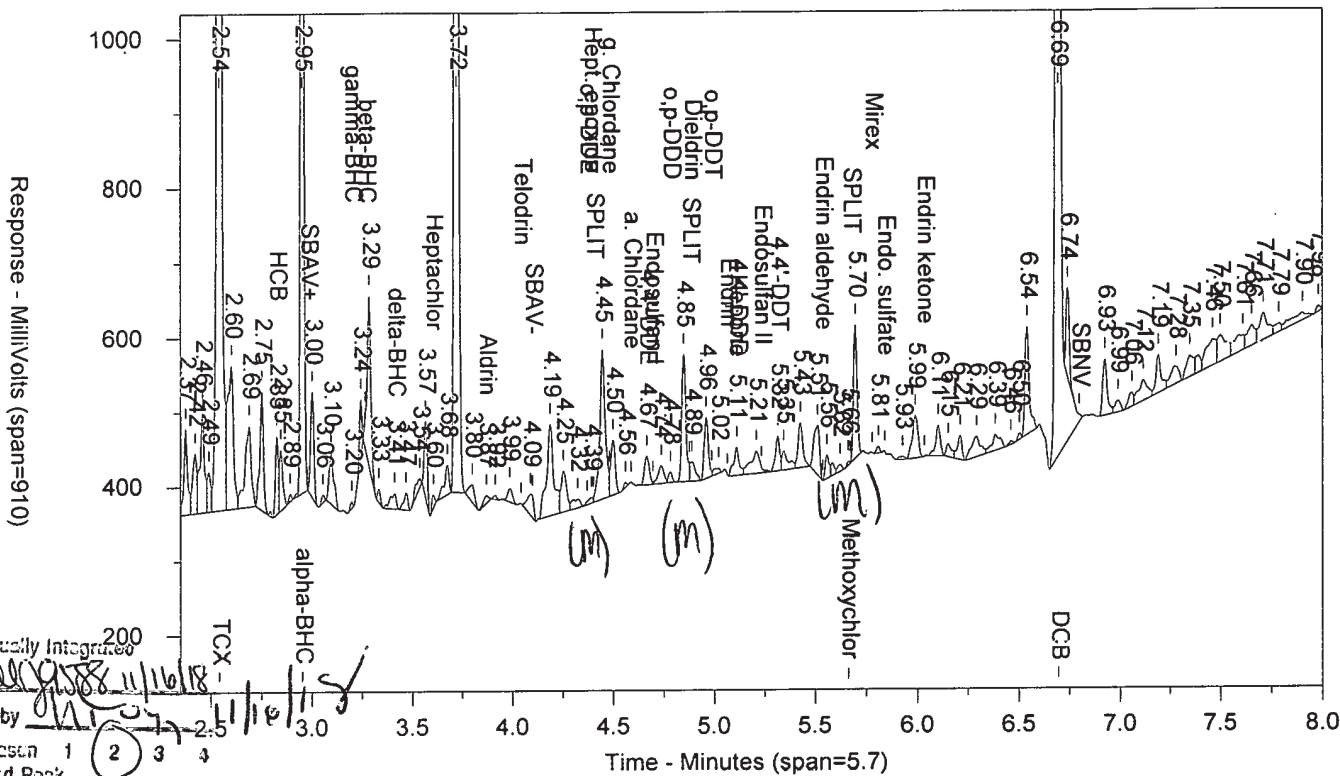
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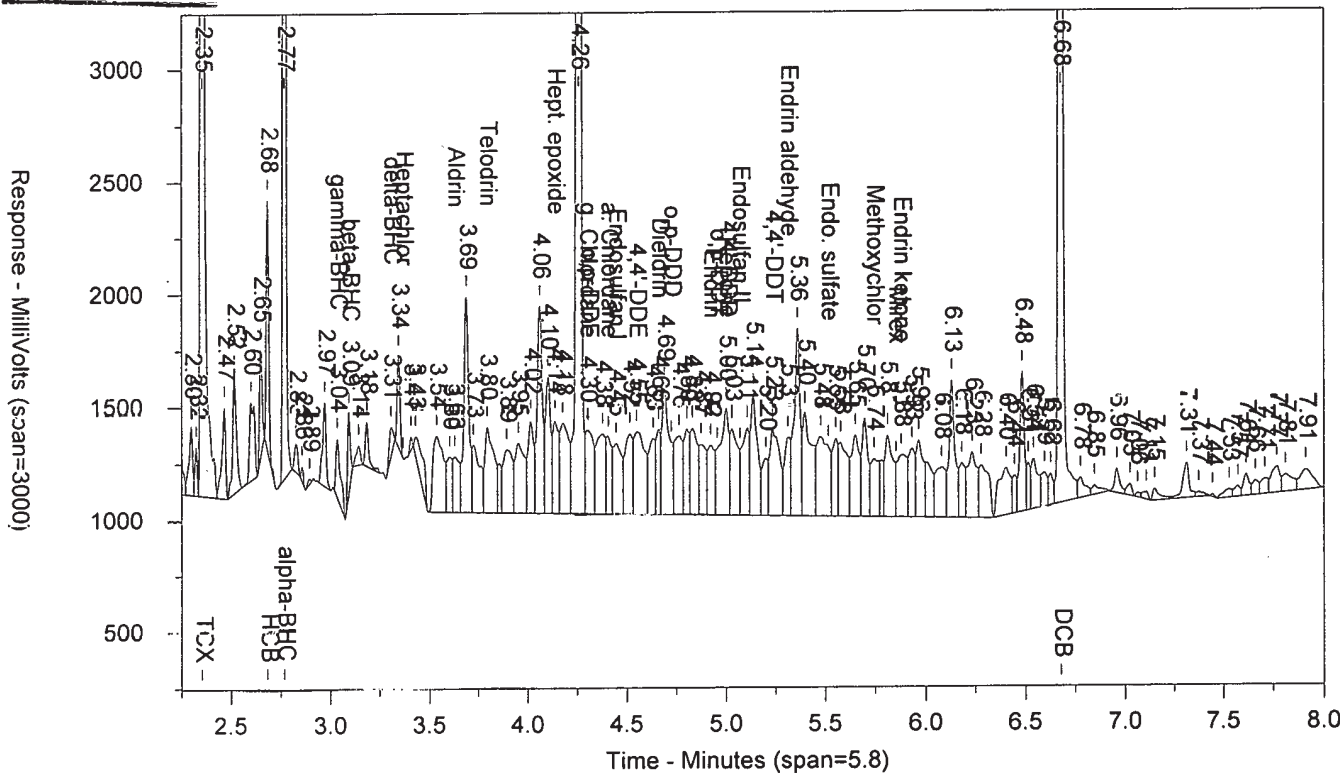
9881313 F AB15T-6 T 18310009A 10589 SW-846 8081B

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.062.BND



M = Manually Integrated  
 Analyst: *01/16/18*  
 Approved by: *[Signature]*  
 Circle Reason 1 2 3 4  
 1 = Missed Peak  
 2 = Improper Baseline  
 3 = RT Update  
 4 = Other

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.062.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: 9881313 F AB15T-6 T 183100009A 10589  
 Injected On: 11/15/2018 12:40:28 AM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

SW-846 8081B  
 Sample Weight: 248  
 Dilution Factor: 2

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

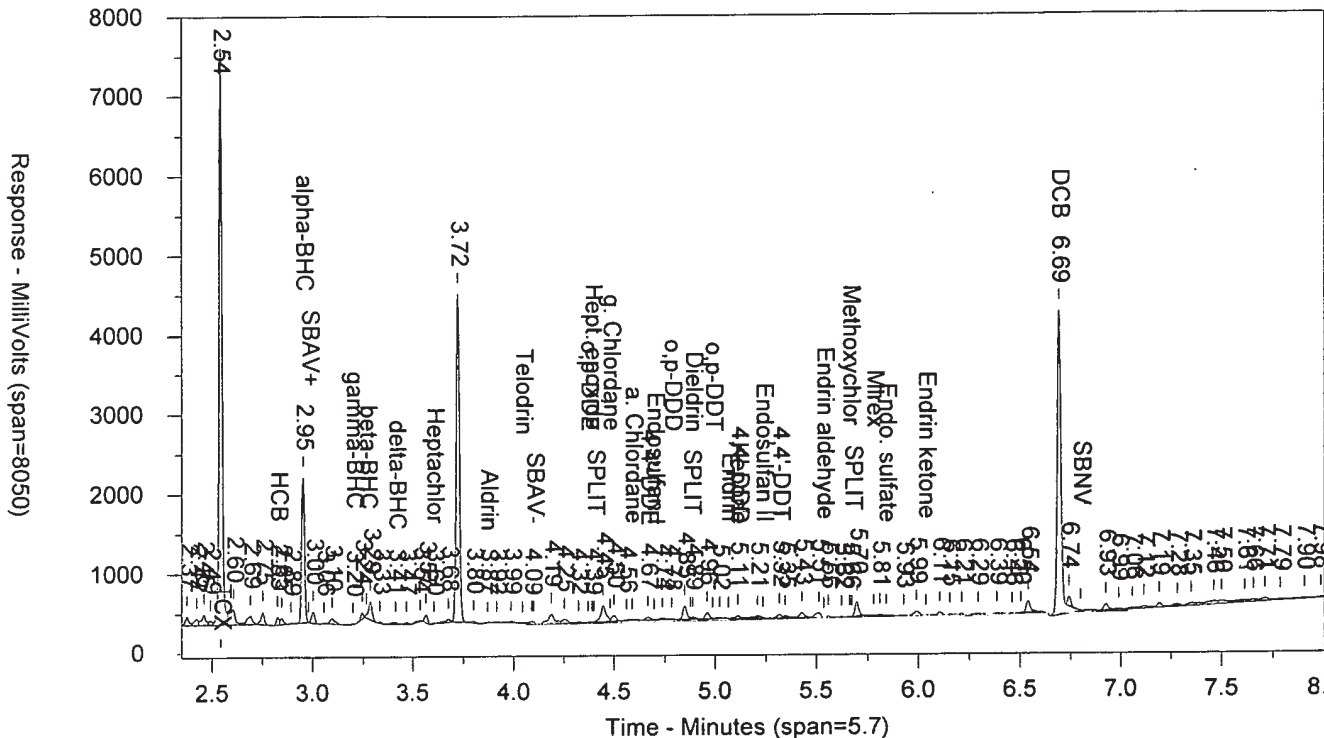
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	7306126	.135	TCX	2.353	28400050	.115	TCX
2.826	105492	.002	HCB	2.683	1118105	.006	HCB
2.953	1830476	.024	alpha-BHC	2.768	6985811	.022	alpha-BHC
3.198	9520		gamma-BHC	3.035	262208	.005	gamma-BHC
	0		beta-BHC	3.094	345416	.003	beta-BHC
3.411	20949		delta-BHC	3.307	128864	.006	delta-BHC
3.604	16888		Heptachlor		0		Heptachlor
3.871	10358		Aldrin	3.629	247338	.005	Aldrin
	0		Telodrin	3.796	378939	.004	Telodrin
4.391	7817		Hept. epoxide	4.137	406915	.002	Hept. epoxide
	0		g. Chlordane	4.3	371879	.002	g. Chlordane
	0		Endosulfan I	4.445	311689	.002	Endosulfan I
4.666	38469	.001	4,4'-DDE	4.55	365055	.011	4,4'-DDE
4.889	26296	.001	Dieldrin	4.66	375253	.002	Dieldrin
4.783	14075	.001	o,p-DDD		0		o,p-DDD
	0		Endrin	4.923	308986	.002	Endrin
5.111	38429	.002	Kepone	5	470690	.037	Kepone
5.316	46537	.001	4,4'-DDT	5.234	382096	.003	4,4'-DDT
	0		Endrin aldehyde	5.313	346636	.003	Endrin aldehyde
5.663	5282		Methoxychlor	5.743	257295	.004	Methoxychlor
	0		Endrin ketone	5.878	275228	.002	Endrin ketone
6.694	3841294	.141	DCB	6.676	12749950	.133	DCB

Files:

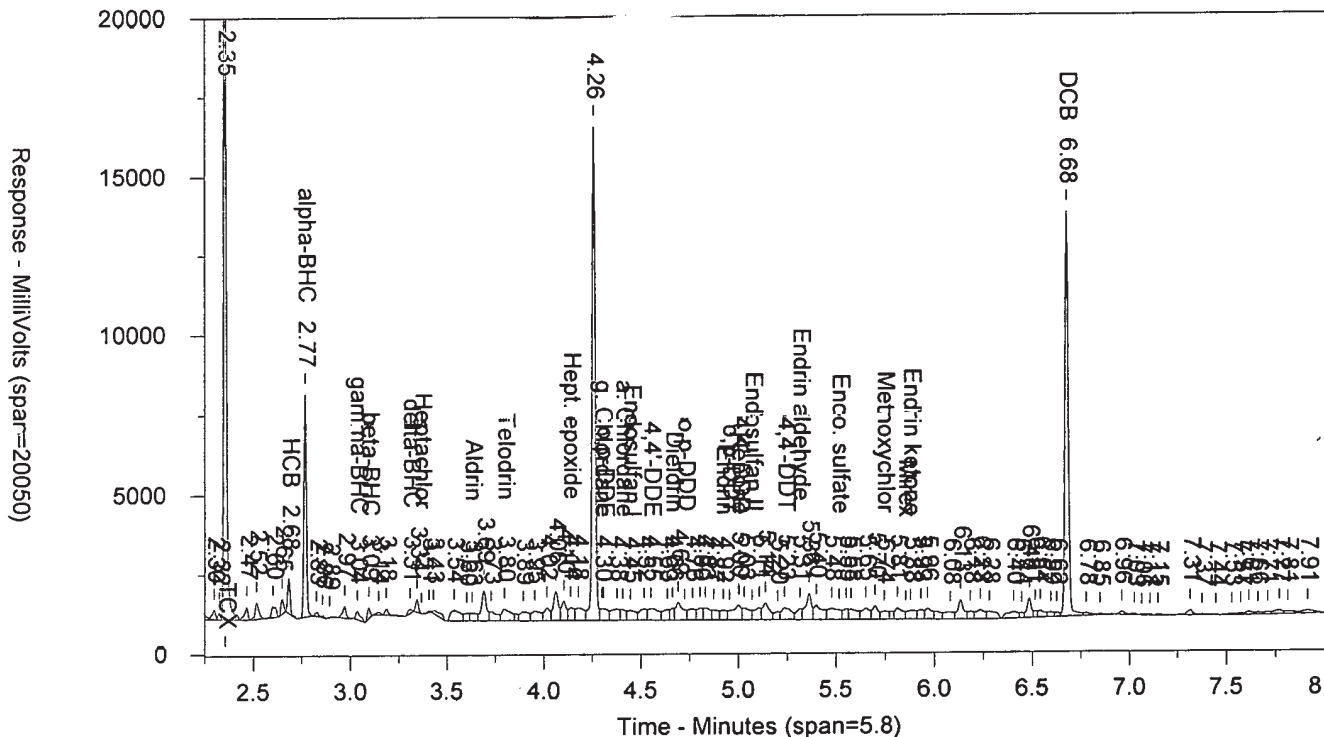
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 Area File: 05pest18306010B.062.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/16/2018 12:56:10 PM  
 File Reported On: 11/16/2018 at 12:57:25 PM

9881313 F AB15T-6 T 18310009A 10589 SW-846 8081B

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.062.BND



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.062.RAW



# **Standards Data**

## **Pesticides**

**Eurofins Lancaster Laboratories**  
**CHROM PERFECT SEQUENCE FILE**

Sequence File: \\USlan-chromperfect\chromperfect-data\Dept-24\Active\CP5\05pest18306001.seq  
 Chromatography Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5  
 Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5  
 Number of Entries: 92

<u>Samplename</u>	<u>VP</u>	<u>Code</u>	<u>ID</u>	<u>Method</u>	<u>Samp Amt</u>	<u>DF</u>	<u>Int Std</u>	<u>C</u>	<u>Batch Number</u>	<u>Analysis</u>
1 HEXANE	1	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1830599999	
2 IBLKX1824B	2	PIBLK	AA	05pestd.MET	1000	10	1	0	1830599999	00177
3 EVALX1824B	3	IPEM	AA	05pestd.MET	1	1	1	0	1830599999	00177
4 MIXA11824B	4	ICAL	AA	05pestd.MET	1	1	1	1	1830599999	00177
5 MIXA21824B	5	ICAL	AA	05pestd.MET	1	1	1	2	1830599999	00177
6 MIXA31824B	6	ICAL	AA	05pestd.MET	1	1	1	3	1830599999	00177
7 MIXA41824B	7	ICAL	AA	05pestd.MET	1	1	1	4	1830599999	00177
8 MIXA51824B	8	ICAL	AA	05pestd.MET	1	1	1	5	1830599999	00177
9 MIXA61824B	9	ICAL	AA	05pestd.MET	1	1	1	6	1830599999	00177
10 ICMAX1824C	10	CCAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
11 MIXE11824D	11	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
12 MIXE21824D	12	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
13 MIXE31824D	13	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
14 MIXE41824D	14	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
15 MIXE51824D	15	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
16 MIXE61824D	16	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
17 ICMEX1824D	17	CCAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
18 KEPN11824C	18	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	
19 KEPN21824C	19	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	
20 KEPN31824C	20	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	
21 KEPN41824C	21	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	
22 KEPN51824C	22	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	
23 KEPN61824C	23	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	
24 ICKEPX1824E	24	CCAL	AA	05pestd.MET	1	1	1	0	1830599999	
25 TOXA11824D	25	ICAL	AA	05PESTD.MET	1	1	1	0	1830599999	00177
26 TOXA21824D	26	ICAL	AA	05PESTD.MET	1	1	1	0	1830599999	00177
27 TOXA31824D	27	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
28 TOXA41824E	28	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
29 TOXA51824D	29	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
30 TOXA61824D	30	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
31 ICTXX1824D	31	CCAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
32 CHLD11824D	32	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
33 CHLD21824D	33	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
34 CHLD31824D	34	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
35 CHLD41824D	35	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
36 CHLD51824D	36	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
37 CHLD61824E	37	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
38 ICCHX1824F	38	CCAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
39 AR1641824D	39	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
40 AR5441824C	40	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
41 AR4841824C	41	ICAL	AA	05pestdi.MET	1	1	1	0	1830599999	00177
42 MDLAX1824D	42	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
43 MDLEX1824D	43	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
44 MDKPX1824C	44	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	
45 MDTXX1824D	45	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
46 MDCHX1824D	46	ICAL	AA	05pestd.MET	1	1	1	0	1830599999	00177
47 BLANKA 10/19/18 RI	47	BLK	AA	05PESTD.MET	1000	10	1	0	182920023A	10589
48 BLANKA 10/23/18 RI	48	BLK	AA	05PESTD.MET	250	2	1	0	182960006A	00177
49 BLANKA 10/23/18 CF	49	BLK	AC	05PESTD.MET	250	2	1	0	182960013A	00177
50 LCSA 10/23/18 CF	50	LCS	AC	05PESTD.MET	250	2	1	0	182960013A	00177



Eurofins Lancaster Laboratories  
CHROM PERFECT SEQUENCE FILE

Sequence File: \\Uslan-chromperfect\chromperfect-data\Dept-24\Active\CP5\05pest18306001.seq  
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Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5  
Number of Entries: 92

Samplename	VP	Code	ID	Method	Samp Amt	DF	Int Std	C	Batch Number	Analysis
51 LCSDA 10/23/18 CF	51	LCSD	AC		05PESTD.MET	250		2	1 0 182960013A	00177
52 EVALX1824B	52	PEM	KT		05pestd.MET	1		1	1 0 1830599999	00177
53 MIXA41824B	53	CCAL	TT		05pestd.MET	1		1	1 0 1830599999	00177
54 MIXE41824D	54	CCAL	ZK		05pestd.MET	1		1	1 0 1830599999	00177
55 TOXA41824E	55	CCAL	VI		05pestdi.MET	1		1	1 0 1830599999	00177
56 CHLD41824D	56	CCAL	BV		05pestdi.MET	1		1	1 0 1830599999	00177
57 9854344 CF DF10	57	T	AD		05PESTD.MET	243		20	1 0 182960013A	00177
58 HEXANE	58	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1		1	1 0 1830599999	
59 9851509 RI	59	T	AA		05PESTD.MET	50		2	1 0 182910013A	10647
60 9851512 RI	60	T	AA		05PESTD.MET	50		2	1 0 182910013A	10647
61 9851515 RI	61	T	AA		05PESTD.MET	50		2	1 0 182910013A	10647
62 9851518 RI	62	T	AA		05PESTD.MET	50		2	1 0 182910013A	10647
63 MIXA31824B	63	CCAL	DZ		05pestd.MET	1		1	1 0 1830599999	00177
64 TOXA41824E	64	CCAL	VJ		05pestdi.MET	1		1	1 0 1830599999	00177
65 CHLD41824D	65	CCAL	BW		05pestdi.MET	1		1	1 0 1830599999	00177
66 BLANKA 10/23/18 F	66	BLK	AB		05PESTD.MET	2793		2	1 0 182920038A	10589
67 LCSA 10/23/18 F	67	LCS	AB		05PESTD.MET	2793		2	1 0 182920038A	10589
68 LCSDA 10/23/18 F	68	LCSD	AB		05PESTD.MET	2793		2	1 0 182920038A	10589
69 9859469 F	69	T	AB		05PESTD.MET	490		2	1 0 182920038A	10589
70 9859478 F	70	T	AB		05PESTD.MET	487		2	1 0 182920038A	10589
71 9859481 F	71	T	AB		05PESTD.MET	2793		2	1 0 182920038A	10589
72 9859484 F	72	T	AB		05PESTD.MET	1224		2	1 0 182920038A	10589
73 9859494 F	73	T	AB		05PESTD.MET	485		2	1 0 182920038A	10589
74 9859528 F	74	T	AB		05PESTD.MET	518		2	1 0 182920038A	10589
75 9859535 F	75	T	AB		05PESTD.MET	1071		2	1 0 182920038A	10589
76 EVALX1824B	76	PEM	KU		05pestd.MET	1		1	1 0 1830599999	00177
77 MIXA41824B	77	CCAL	TV		05pestd.MET	1		1	1 0 1830599999	00177
78 KEPN41824C	78	CCAL	CK		05pestdi.MET	1		1	1 0 1830599999	00177
79 TOXA41824E	79	CCAL	VK		05pestdi.MET	1		1	1 0 1830599999	00177
80 CHLD41824D	80	CCAL	BX		05pestdi.MET	1		1	1 0 1830599999	00177
81 BLANKA 10/25/18	81	BLK	AA		05PESTD.MET	250		2	1 0 182970030A	00177
82 LCSA 10/25/18	82	LCS	AA		05PESTD.MET	250		2	1 0 182970030A	00177
83 LCSDA 10/25/18	83	LCSD	AA		05PESTD.MET	250		2	1 0 182970030A	00177
84 9859872	84	T	AA		05PESTD.MET	243		2	1 0 182970030A	00177
85 9859873	85	T	AA		05PESTD.MET	247		2	1 0 182970030A	00177
86 HEXANE	86	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1		1	1 0 1830599999	
87 9859874	87	T	AA		05PESTD.MET	246		2	1 0 182970030A	00177
88 9859875	88	T	AA		05PESTD.MET	240		2	1 0 182970030A	00177
89 MIXA31824B	89	CCAL	EA		05pestd.MET	1		1	1 0 1830599999	00177
90 KEPN41824C	90	CCAL	CL		05pestdi.MET	1		1	1 0 1830599999	00177
91 TOXA41824E	91	CCAL	VL		05pestdi.MET	1		1	1 0 1830599999	00177
92 CHLD41824D	92	CCAL	BY		05pestdi.MET	1		1	1 0 1830599999	00177

*JJ 2855 5 Nov 18*

*[Signature]*

Date: *11/2/18*  
TID15 Page 1510 of 3058



# Eurofins Lancaster Laboratories

## CHROM PERFECT SEQUENCE FILE

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 Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5  
 Number of Entries: 86

Samplename	VP	Code	ID	Method	Samp Amt	DF	Int Std	C	Batch Number	Analysis
1 HEXANE	1	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	
2 EVALX1824B	2	PEM	MB	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
3 MIXA41824B	3	CCAL	WB	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
4 TOXA41824E	4	CCAL	XN	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
5 CHLD41824D	5	CCAL	DM	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
6 BLANKA 11/5/18 C	6	BLK	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183090017A	10647
7 LCSA 11/5/18 C	7	LCS	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183090017A	10647
8 LCSDA 11/5/18 C	8	LCSD	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183090017A	10647
9 BLANKA 11/7/18	9	BLK	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183110023A	10647
10 LCSA 11/7/18	10	LCS	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183110023A	10647
11 9879198 C DF5	11	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	50	10	1	0	183090017A	10647
12 9881532 C DF5	12	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	50	10	1	0	183090017A	10647
13 9881802	13	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183110023A	10647
14 9881805	14	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183110023A	10647
15 9881808	15	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183110023A	10647
16 MIXA41824B	16	CCAL	WC	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
17 TOXA41824E	17	CCAL	XO	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
18 CHLD41824D	18	CCAL	DN	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
19 VIAL POSITION MISSED	19	CCAL	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
20 BLANKA 11/5/18 RI C	20	BLK	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183090017A	10647
21 MIXA41824B	21	CCAL	WD	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
22 TOXA41824E	22	CCAL	XP	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
23 CHLD41824D	23	CCAL	DO	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
24 IBLKX1824B	24	PIBLK	AA	05pestd.MET	1000	10	1	0	1831299999	00177
25 EVALX1824B	25	IPEM	AA	05pestd.MET	1	1	1	0	1831299999	00177
26 TOXA11824D	26	ICAL	AA	05PESTD.MET	1	1	1	0	1831299999	00177
27 TOXA21824D	27	ICAL	AA	05PESTD.MET	1	1	1	0	1831299999	00177
28 TOXA31824D	28	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
29 TOXA41824E	29	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
30 TOXA51824D	30	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
31 TOXA61824D	31	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
32 ICTXX1824D	32	CCAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
33 CHLD11824D	33	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
34 CHLD21824D	34	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
35 CHLD31824D	35	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
36 CHLD41824D	36	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
37 CHLD51824D	37	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
38 CHLD61824E	38	ICAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
39 ICCHX1824F	39	CCAL	AA	05pestdi.MET	1	1	1	0	1831299999	00177
40 MDTXX1824D	40	ICAL	AA	05pestd.MET	1	1	1	0	1831299999	00177
41 MDCHX1824D	41	ICAL	AA	05pestd.MET	1	1	1	0	1831299999	00177
42 LCSDA 11/7/18	42	LCSD	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	50	2	1	0	183110023A	10647
43 IBLKX1824B	43	PIBLK	QH	EPT-24\ACTIVE\CP5\05PESTD.MET	1000	10	1	0	1831299999	00177
44 EVALX1824B	44	PEM	MC	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
45 MIXA41824B	45	CCAL	WE	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
46 TOXA41824E	46	CCAL	XQ	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
47 CHLD41824D	47	CCAL	DP	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
48 9861917 RI F	48	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	238	2	1	0	182980006A	10589
49 9861918 RI F	49	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	245	2	1	0	182980006A	10589
50 9861919 RI F	50	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	235	2	1	0	182980006A	10589



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**CHROM PERFECT SEQUENCE FILE**

Sequence File: \\Uslan-chromperfect\chromperfect-data\Dept-24\Active\CP5\05pest18306007.seq  
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 Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5  
 Number of Entries: 86

Samplename	VP	Code	ID	Method	Samp Amt	DF	Int Std	C	Batch Number	Analysis
51 9861920 RI F	51	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	223	2	1	0	182980006A	10589
52 9861921 RI F	52	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	247	2	1	0	182980006A	10589
53 9861922 RI F	53	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182980006A	10589
54 IBLKX1824B	54	PIBLK	QG	EPT-24\ACTIVE\CP5\05PESTD.MET	1000	10	1	0	1831299999	00177
55 MIXA41824B	55	CCAL	WF	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
56 TOXA41824E	56	CCAL	XR	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
57 CHLD41824D	57	CCAL	DQ	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
58 9862003MS RI F	58	MS	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	244	2	1	0	182980006A	10589
59 9862004MSD RI F	59	MSD	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	244	2	1	0	182980006A	10589
60 9862010 RI F	60	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	230	2	1	0	182980006A	10589
61 9862011 RI F	61	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	232	2	1	0	182980006A	10589
62 9862013 RI F	62	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	222	2	1	0	182980006A	10589
63 MIXA41824B	63	CCAL	WG	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
64 MIXE41824D	64	CCAL	AG	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
65 TOXA41824E	65	CCAL	XS	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
66 CHLD41824D	66	CCAL	DR	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
67 9860265 RI F	67	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	195	2	1	0	182970009A	00177
68 9860266MS RI F	68	MS	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	243	2	1	0	182970009A	00177
69 9860267MSD RI F	69	MSD	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	241	2	1	0	182970009A	00177
70 9860269 RI F	70	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	203	2	1	0	182970009A	00177
71 9860270 RI F	71	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	242	2	1	0	182970009A	00177
72 9860376MS RI F	72	MS	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	195	2	1	0	182970009A	00177
73 9860378MSD RI F	73	MSD	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	235	2	1	0	182970009A	00177
74 EVALX1824B	74	PEM	MD	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
75 MIXA41824B	75	CCAL	WH	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
76 MIXE41824D	76	CCAL	AH	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
77 KEPN41824C	77	CCAL	CN	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
78 TOXA41824E	78	CCAL	XT	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
79 CHLD41824D	79	CCAL	DS	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
80 9855381 RI	80	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	244	2	1	0	182960006A	00177
81 9855384 RI	81	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	249	2	1	0	182960006A	00177
82 9855385 RI	82	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182960006A	00177
83 9857898 RI	83	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	244	2	1	0	182960006A	00177
84 9857899 RI	84	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	243	2	1	0	182960006A	00177
85 KEPN41824C	85	CCAL	CN	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177
86 CHLD41824D	86	CCAL	DT	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831299999	00177

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Set-up by: DJS 15222  
 11/9/2018

Date: 11/9/18  
 TID15 Page 1512 of 3058





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**CHROM PERFECT SEQUENCE FILE**

Sequence File: \\Uslan-chromperfect\chromperfect-data\Dept-24\Active\CP5\05pest18306008.seq  
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 Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5  
 Number of Entries: 81

<u>Samplename</u>	<u>VP</u>	<u>Code</u>	<u>ID</u>	<u>Method</u>	<u>Samp Amt</u>	<u>DF</u>	<u>Int Std</u>	<u>C</u>	<u>Batch Number</u>	<u>Analysis</u>
1 HEXANE	1	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
2 IBLKX1824B	2	PIBLK	RE	05pestd.MET	1000	10	1	0	1831599999	00177
3 EVALX1824B	3	PEM	MG	05pestd.MET	1	1	1	0	1831599999	00177
4 MIXA41824B	4	CCAL	WI	05pestd.MET	1	1	1	0	1831599999	00177
5 MIXE41824D	5	CCAL	AI	05pestd.MET	1	1	1	0	1831599999	00177
6 TOXA41824E	6	CCAL	XU	05pestdi.MET	1	1	1	0	1831599999	00177
7 CHLD41824D	7	CCAL	DU	05pestdi.MET	1	1	1	0	1831599999	00177
8 HEXANE	8	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
9 IBLKX1824B	9	PIBLK	RM	05pestd.MET	1000	10	1	0	1831599999	00177
10 EVALX1824B	10	PEM	MK	05pestd.MET	1	1	1	0	1831599999	00177
11 MIXA11824B	11	ICAL	AA	05pestd.MET	1	1	1	1	1831599999	00177
12 MIXA21824B	12	ICAL	AA	05pestd.MET	1	1	1	2	1831599999	00177
13 MIXA31824B	13	ICAL	AA	05pestd.MET	1	1	1	3	1831599999	00177
14 MIXA41824B	14	ICAL	AA	05pestd.MET	1	1	1	4	1831599999	00177
15 MIXA51824B	15	ICAL	AA	05pestd.MET	1	1	1	5	1831599999	00177
16 MIXA61824B	16	ICAL	AA	05pestd.MET	1	1	1	6	1831599999	00177
17 ICMAX1824C	17	CCAL	AA	05pestd.MET	1	1	1	0	1831599999	00177
18 MDLAX1824D	18	ICAL	AA	05pestd.MET	1	1	1	0	1831599999	00177
19 TOXA41824E	19	CCAL	YB	05pestdi.MET	1	1	1	0	1831599999	00177
20 CHLD41824D	20	CCAL	EB	05pestdi.MET	1	1	1	0	1831599999	00177
21 BLANKA 11/8/18	21	BLK	AA	05PESTD.MET	50	2	1	0	183120014A	10647
22 LCSA 11/8/18	22	LCS	AA	05PESTD.MET	50	2	1	0	183120014A	10647
23 LCSDA 11/8/18	23	LCSD	AA	05PESTD.MET	50	2	1	0	183120014A	10647
24 BLANKA 11/8/18	24	BLK	AA	05PESTD.MET	50	2	1	0	183120012A	00950
25 LCSA 11/8/18	25	LCS	AA	05PESTD.MET	50	2	1	0	183120012A	00950
26 LCSDA 11/8/18	26	LCSD	AA	05PESTD.MET	50	2	1	0	183120012A	00950
27 BLANKA 11/9/18	27	BLK	AA	05PESTD.MET	50	2	1	0	183130006A	10647
28 LCSA 11/9/18	28	LCS	AA	05PESTD.MET	50	2	1	0	183130006A	10647
29 LCSDA 11/9/18	29	LCSD	AA	05PESTD.MET	50	2	1	0	183130006A	10647
30 MIXA41824B	30	CCAL	WQ	05pestd.MET	1	1	1	0	1831599999	00177
31 TOXA41824E	31	CCAL	YC	05pestdi.MET	1	1	1	0	1831599999	00177
32 CHLD41824D	32	CCAL	EC	05pestdi.MET	1	1	1	0	1831599999	00177
33 9885288	33	T	AA	05PESTD.MET	50	2	1	0	183120014A	10647
34 9885535	34	T	AA	05PESTD.MET	50	2	1	0	183120014A	10647
35 9884531	35	T	AA	05PESTD.MET	50	2	1	0	183120012A	00950
36 9887821	36	T	AA	05PESTD.MET	50	2	1	0	183130006A	10647
37 HEXANE	37	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
38 EVALX1824B	38	PEM	ML	05pestd.MET	1	1	1	0	1831599999	00177
39 MIXA31824B	39	CCAL	EP	05pestd.MET	1	1	1	0	1831599999	00177
40 TOXA41824E	40	CCAL	YD	05pestdi.MET	1	1	1	0	1831599999	00177
41 CHLD41824D	41	CCAL	ED	05pestdi.MET	1	1	1	0	1831599999	00177
42 9885262 DF5	42	T	AB	05PESTD.MET	50	10	1	0	183130006A	10647
43 HEXANE	43	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
44 9885262 DF10	44	T	AC	05PESTD.MET	50	20	1	0	183130006A	10647
45 HEXANE	45	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
46 9885531 DF100	46	T	AB	05PESTD.MET	50	200	1	0	183130006A	10647
47 HEXANE	47	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
48 9885531 DF200	48	T	AC	05PESTD.MET	50	400	1	0	183130006A	10647
49 HEXANE	49	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
50 MIXA41824B	50	CCAL	WS	05pestd.MET	1	1	1	0	1831599999	00177



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**CHROM PERFECT SEQUENCE FILE**

Sequence File: \\USlan-chromperfect\chromperfect-data\Dept-24\Active\CP5\05pest18306008.seq  
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 Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5  
 Number of Entries: 81

<u>Samplename</u>	<u>VP</u>	<u>Code</u>	<u>ID</u>	<u>Method</u>	<u>Samp Amt</u>	<u>DF</u>	<u>Int Std</u>	<u>C</u>	<u>Batch Number</u>	<u>Analysis</u>
51 TOXA41824E	51	CCAL	YE	05pestdi.MET	1	1	1	0	1831599999	00177
52 CHLD41824D	52	CCAL	EE	05pestdi.MET	1	1	1	0	1831599999	00177
53 BLANKA 10/26/18 F	53	BLK	AB	05PESTD.MET	250	2	1	0	182990007A	10589
54 LCSA 10/26/18 F	54	LCS	AB	05PESTD.MET	250	2	1	0	182990007A	10589
55 LCSDA 10/26/18 F	55	LCSD	AB	05PESTD.MET	250	2	1	0	182990007A	10589
56 9869228 F	56	T	AB	05PESTD.MET	250	2	1	0	182990007A	10589
57 9869230 F	57	T	AB	05PESTD.MET	249	2	1	0	182990007A	10589
58 HEXANE	58	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
59 9869232 F	59	T	AB	05PESTD.MET	250	2	1	0	182990007A	10589
60 HEXANE	60	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
61 MIXA31824B	61	CCAL	EQ	05pestdi.MET	1	1	1	0	1831599999	00177
62 TOXA41824E	62	CCAL	YF	05pestdi.MET	1	1	1	0	1831599999	00177
63 CHLD41824D	63	CCAL	EF	05pestdi.MET	1	1	1	0	1831599999	00177
64 9879203	64	T	AA	05PESTD.MET	50	2	1	0	183120014A	10647
65 9879207	65	T	AA	05PESTD.MET	50	2	1	0	183120014A	10647
66 9881335	66	T	AA	05PESTD.MET	50	2	1	0	183120014A	10647
67 9884244	67	T	AA	05PESTD.MET	50	2	1	0	183120014A	10647
68 9884246	68	T	AA	05PESTD.MET	50	2	1	0	183120014A	10647
69 9881779 DF200	69	T	AB	05PESTD.MET	50	400	1	0	183120012A	00950
70 HEXANE	70	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831599999	
71 9882054	71	T	AA	05PESTD.MET	50	2	1	0	183120012A	00950
72 EVALX1824B	72	PEM	MM	05pestdi.MET	1	1	1	0	1831599999	00177
73 MIXA41824B	73	CCAL	WUJ	05pestdi.MET	1	1	1	0	1831599999	00177
74 TOXA41824E	74	CCAL	YG	05pestdi.MET	1	1	1	0	1831599999	00177
75 CHLD41824D	75	CCAL	EG	05pestdi.MET	1	1	1	0	1831599999	00177
76 9881341 DF25	76	T	AB	05PESTD.MET	50	50	1	0	183130006A	10647
77 9881344	77	T	AA	05PESTD.MET	50	2	1	0	183130006A	10647
78 9882159	78	T	AA	05PESTD.MET	50	2	1	0	183130006A	10647
79 MIXA31824B	79	CCAL	ER	05pestdi.MET	1	1	1	0	1831599999	00177
80 TOXA41824E	80	CCAL	YH	05pestdi.MET	1	1	1	0	1831599999	00177
81 CHLD41824D	81	CCAL	EH	05pestdi.MET	1	1	1	0	1831599999	00177

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**CHROM PERFECT SEQUENCE FILE**

Sequence File: \\Uslan-chromperfect\chromperfect-data\Dept-24\Active\CP5\05pest18306010.seq

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Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5

Number of Entries: 90

Samplename	VP	Code	ID	Method	Samp Amt	DF	Int Std	C	Batch Number	Analysis
1 HEXANE	1	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
2 IBLKX1824B	2	PIBLK	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1000	10	1	0	1831799999	00177
3 EVALX1824B	3	IPEM	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
4 KEPN11824C	4	ICAL	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
5 KEPN21824C	5	ICAL	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
6 KEPN31824C	6	ICAL	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
7 KEPN41824C	7	ICAL	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
8 KEPN51824C	8	ICAL	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
9 KEPN61824C	9	ICAL	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
10 ICKEPX1824E	10	CCAL	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
11 MDKPX1824C	11	ICAL	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
12 9855384 RI	12	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	249	2	1	0	182960006A	00177
13 9855385 RI	13	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182960006A	00177
14 9857898 RI	14	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	244	2	1	0	182960006A	00177
15 9857899 RI	15	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	243	2	1	0	182960006A	00177
16 MIXA41824B	16	CCAL	XW	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
17 MIXE41824D	17	CCAL	AN	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
18 KEPN41824C	18	CCAL	CO	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
19 TOXA41824E	19	CCAL	ZI	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
20 CHLD41824D	20	CCAL	FG	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
21 BLANKA 10/25/18 RI	21	BLK	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182970030A	00177
22 9859872 RI	22	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	243	2	1	0	182970030A	00177
23 9859875 RI	23	T	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	240	2	1	0	182970030A	00177
24 9859874 DF10	24	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	246	20	1	0	182970030A	00177
25 HEXANE	25	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
26 9859873 DF20	26	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	247	40	1	0	182970030A	00177
27 HEXANE	27	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
28 EVALX1824B	28	PEM	NC	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
29 MIXA41824B	29	CCAL	XX	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
30 MIXE41824D	30	CCAL	AO	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
31 KEPN41824C	31	CCAL	CP	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
32 TOXA41824E	32	CCAL	ZJ	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
33 CHLD41824D	33	CCAL	FH	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
34 HEXANE	34	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
35 BLANKA 11/5/18 F	35	BLK	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	183090040A	00177
36 LCSA 11/5/18 F	36	LCS	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	183090040A	00177
37 LCSDA 11/5/18 F	37	LCSD	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	183090040A	00177
38 BLANKA 10/17/18 CF	38	BLK	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	1000	10	1	0	182900011A	07572
39 LCSA 10/17/18 CF	39	LCS	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	1000	10	1	0	182900011A	07572
40 LCSDA 10/17/18 CF	40	LCSD	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	1000	10	1	0	182900011A	07572
41 9874451 F	41	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	239	2	1	0	183090040A	00177
42 9854246 CF	42	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	976	10	1	0	182900011A	07572
43 HEXANE	43	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
44 MIXA31824B	44	CCAL	FA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
45 MIXE41824D	45	CCAL	AR	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
46 TOXA41824E	46	CCAL	ZR	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
47 CHLD41824D	47	CCAL	FK	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
48 BLANKA 11/6/18 F	48	BLK	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	183100009A	10589
49 LCSA 11/6/18 F	49	LCS	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	183100009A	10589
50 9861406R F	50	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	230	2	1	0	183100009A	10589



**Eurofins Lancaster Laboratories**  
**CHROM PERFECT SEQUENCE FILE**

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 Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5  
 Number of Entries: 90

Samplename	VP	Code	ID	Method	Samp Amt	DF	Int Std	C	Batch Number	Analysis
51 9861406RMS F	51	MS	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	235	2	1	0	183100009A	10589
52 9861406RMSD F	52	MSD	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	245	2	1	0	183100009A	10589
53 9861413R F	53	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	241	2	1	0	183100009A	10589
54 9881309 F	54	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	246	2	1	0	183100009A	10589
55 HEXANE	55	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
56 9881310 F	56	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	247	2	1	0	183100009A	10589
57 HEXANE	57	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
58 EVALX1824B	58	PEM	NI	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
59 MIXA41824B	59	CCAL	YH	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
60 TOXA41824E	60	CCAL	ZS	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
61 CHLD41824D	61	CCAL	FL	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
62 9881313 F	62	T	AB	EPT-24\ACTIVE\CP5\05PESTD.MET	248	2	1	0	183100009A	10589
63 9861403 RI F DF5	63	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	231	10	1	0	182950007A	10589
64 HEXANE	64	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
65 BLANKA 10/26/18 CF	65	BLK	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182990007A	10589
66 LCSA 10/26/18 CF	66	LCS	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182990007A	10589
67 LCSDA 10/26/18 CF	67	LCSD	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182990007A	10589
68 9869228 CF DF20	68	T	AD	EPT-24\ACTIVE\CP5\05PESTD.MET	250	40	1	0	182990007A	10589
69 9869230 CF DF20	69	T	AD	EPT-24\ACTIVE\CP5\05PESTD.MET	249	40	1	0	182990007A	10589
70 9869232 CF DF20	70	T	AD	EPT-24\ACTIVE\CP5\05PESTD.MET	250	40	1	0	182990007A	10589
71 HEXANE	71	MISC	AA	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	
72 EVALX1824B	72	PEM	NJ	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
73 MIXA41824B	73	CCAL	YM	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
74 TOXA41824E	74	CCAL	ZV	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
75 CHLD41824D	75	CCAL	FM	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
76 9873116 CF DF5	76	T	AD	EPT-24\ACTIVE\CP5\05PESTD.MET	248	10	1	0	183040018A	10589
77 9868184 CF	77	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	249	2	1	0	182990007A	10589
78 9868185 CF	78	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182990007A	10589
79 9868186 CF	79	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182990007A	10589
80 9868187 CF	80	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	243	2	1	0	182990007A	10589
81 9868189 CF	81	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	250	2	1	0	182990007A	10589
82 9868786 CF	82	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	238	2	1	0	182990007A	10589
83 9868787 CF	83	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	237	2	1	0	182990007A	10589
84 9868788 CF	84	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	222	2	1	0	182990007A	10589
85 9868789 CF	85	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	248	2	1	0	182990007A	10589
86 9868791 CF	86	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	229	2	1	0	182990007A	10589
87 9868793 CF	87	T	AC	EPT-24\ACTIVE\CP5\05PESTD.MET	228	2	1	0	182990007A	10589
88 MIXA41824B	88	CCAL	YJ	EPT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
89 TOXA41824E	89	CCAL	ZU	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177
90 CHLD41824D	90	CCAL	FN	:PT-24\ACTIVE\CP5\05PESTD.MET	1	1	1	0	1831799999	00177

*Ahita Dale*  
 Ahita Dale  
 Chemist

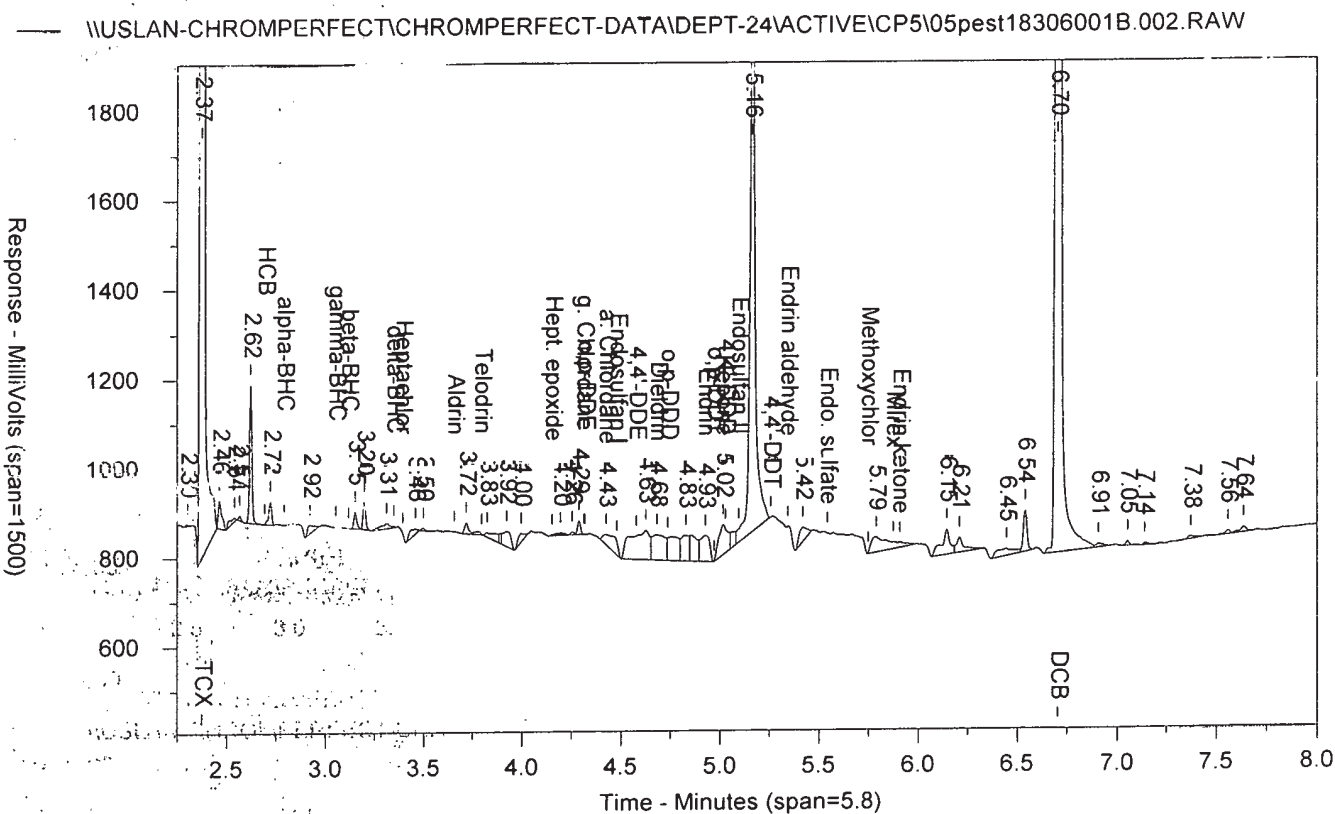
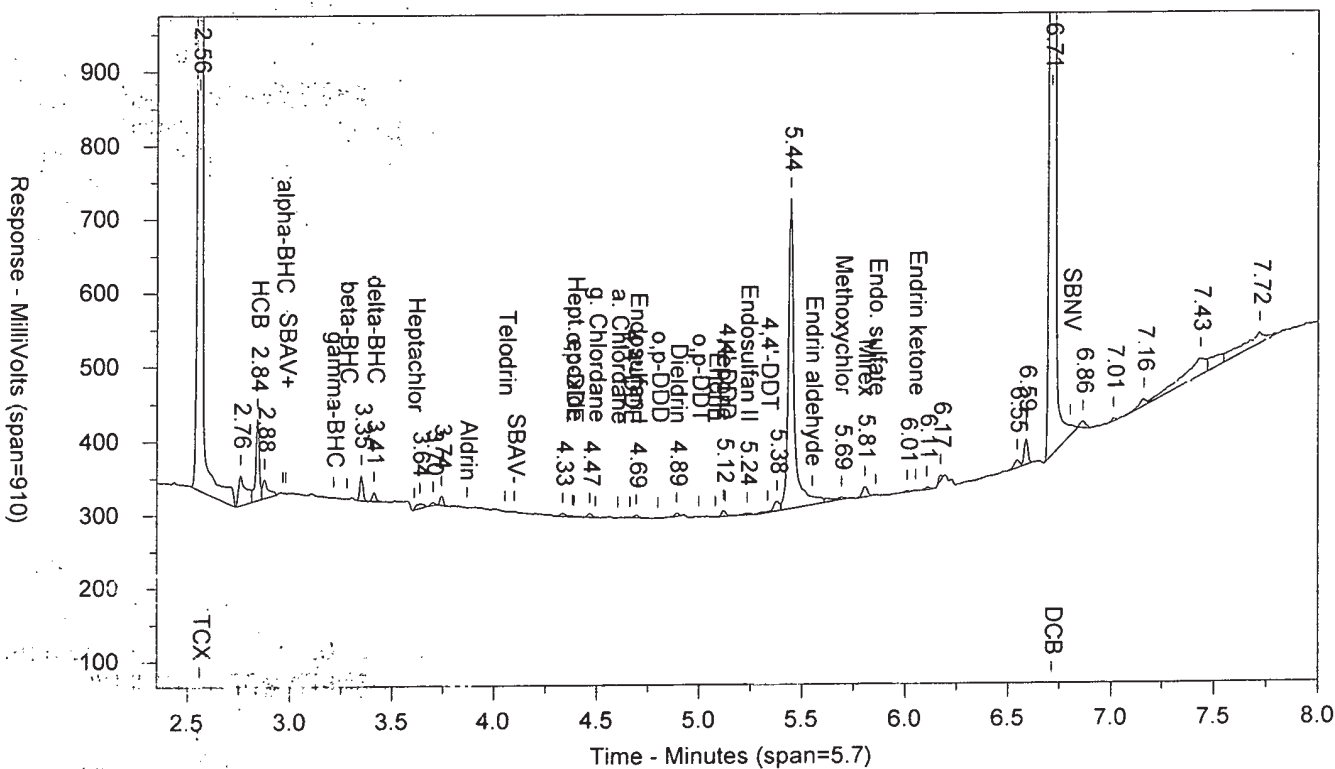
**NOV 15 2018**

Set-up by: *AD 1300*  
 11/15/2018

Date: *11/15/18*



IBLKX1824B AAPIBLKAA PIBLK183059999 00177 SW-846 8081A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.002.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: IBLX1824B    AAPIBLKAA    PIBLK1830599999    00177  
 Injected On: 11/2/2018 7:11:30 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2-30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

SW-846 8081A  
 Sample Weight: 1000  
 Dilution Factor: 10

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.557	7917979	.208	TCX	2.374	31004830	.215	TCX
2.841	110290	.003	HCB		0		HCB
3.411	12668		delta-BHC		0		delta-BHC
	0		a. Chlordane	4.427	24141		a. Chlordane
4.891	4267		Dieldrin	4.683	57795	.001	Dieldrin
4.694	3803		Endosulfan I		0		Endosulfan I
	0		Endrin	4.928	59052	.001	Endrin
5.12	8254	.013	Kepone	5.017	66914	.036	Kepone
5.235	2361		Endosulfan II		0		Endosulfan II
5.691	3336		Methoxychlor		0		Methoxychlor
5.805	13713	.001	Mirex		0		Mirex
6.712	3965906	.215	DCB	6.703	11132370	.22	DCB

Files:

Area File: 05pest18306001 002.RAW  
 Area File: 05pest18306001B.002.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/2/2018 7:19:31 PM  
 File Reported On: 11/4/2018 at 7:30:04 AM

Area File: 05pest18306001 002.RAW  
 Area File: 05pest18306001B.002.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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IBLKX1824B

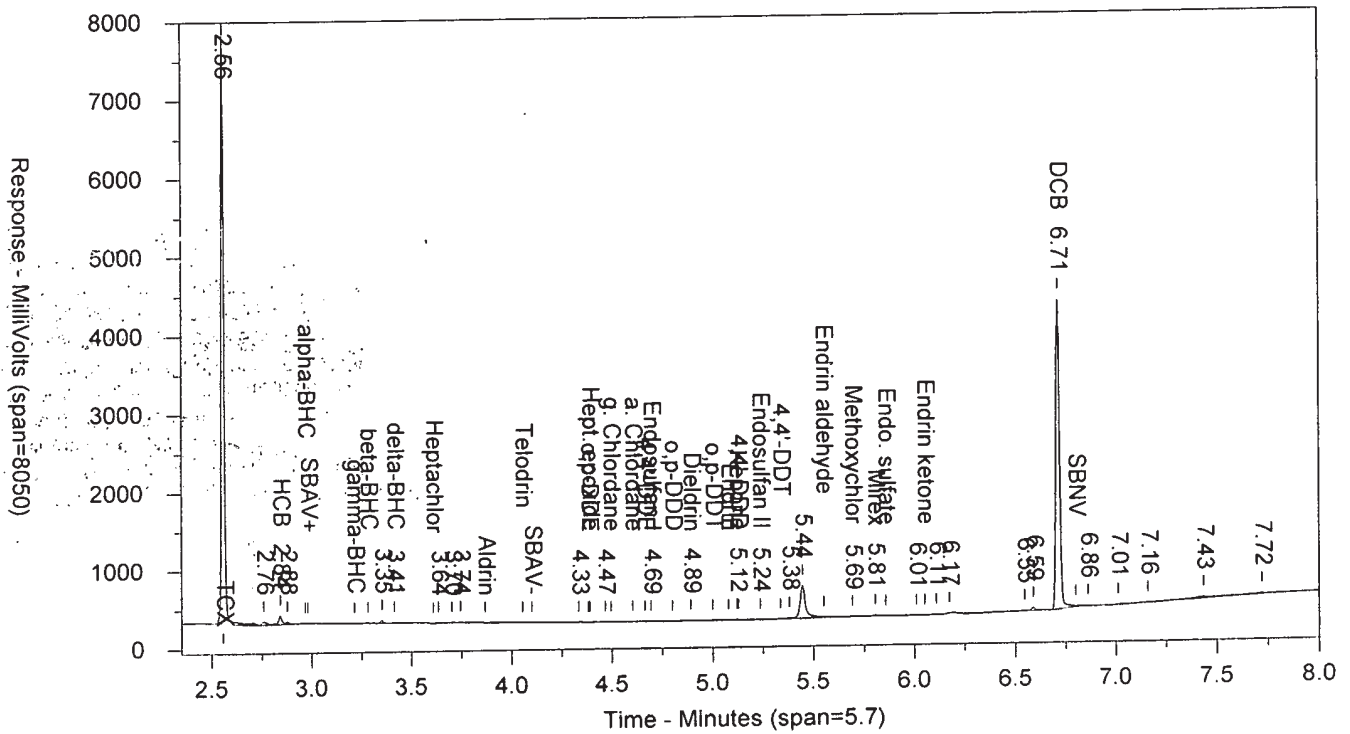
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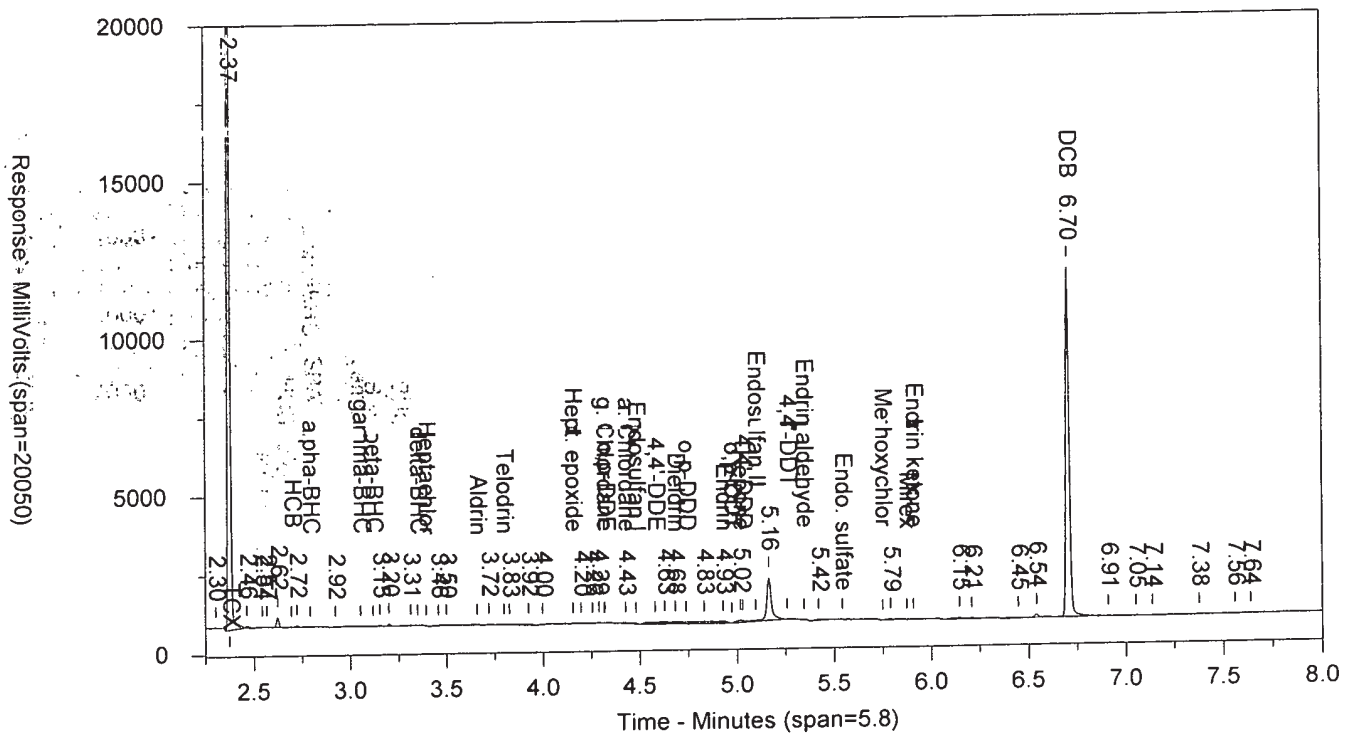
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SW-846 8081A

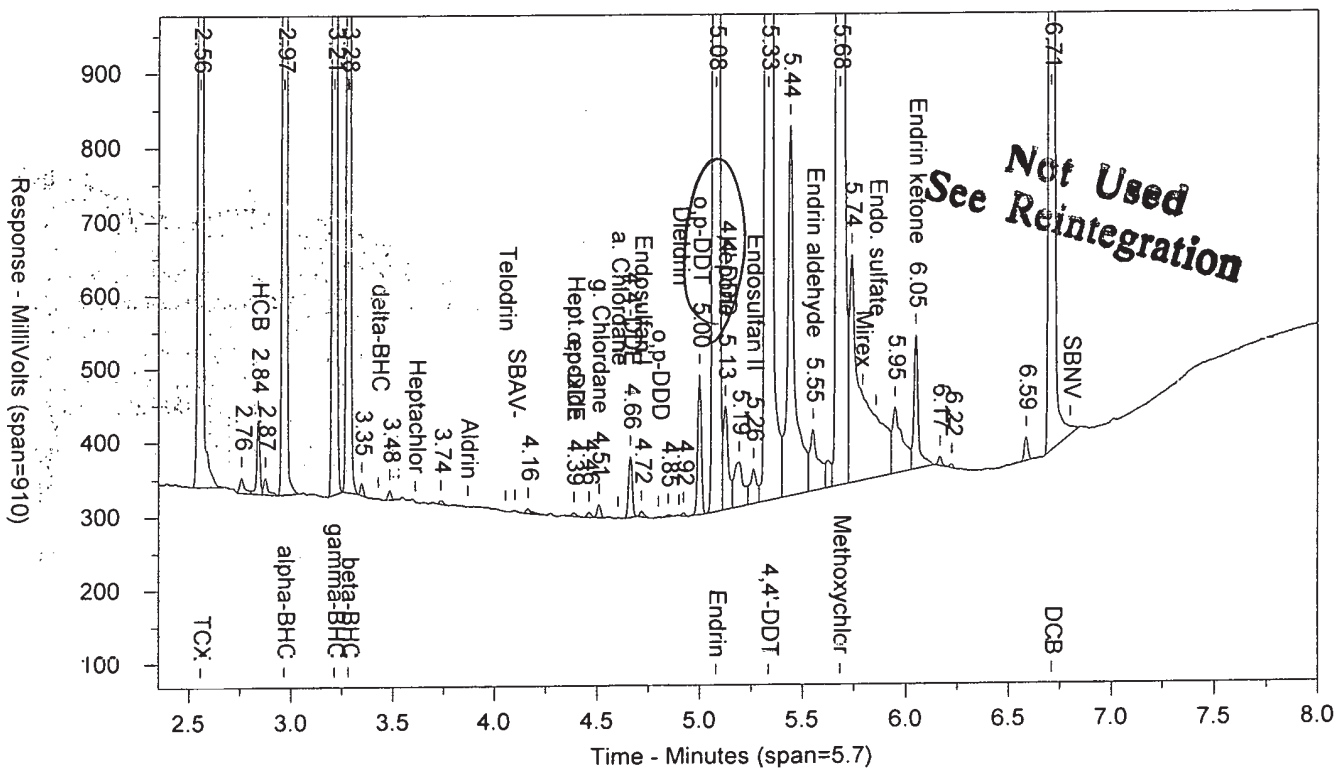
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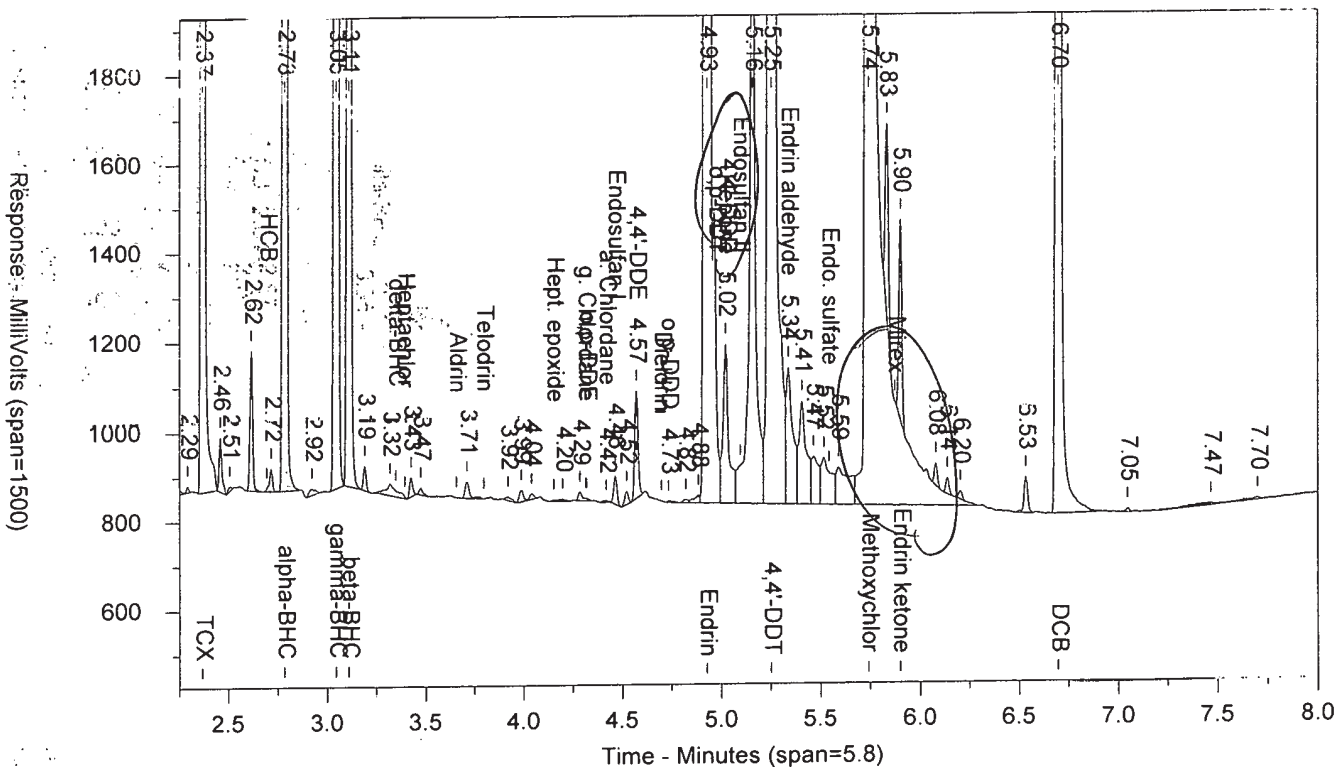
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EVALX1824B      AAPEMAA      IPEM 183059999      00177      SW-846 8081A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.003.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.003.RAW





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B    AAPEMAA    IPEM 1830599999    00177  
 Injected On: 11/2/2018 7:24:19 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

SW-846 8081A

Sample Weight: 1  
 Dilution Factor: 1

**Not Used  
 See Reintegration**

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.555	7833479	20.536	TCX	2.367	31084690	21.574	TCX
2.967	5542616	10.103	alpha-BHC	2.785	21985840	10.838	alpha-BHC
2.839	100478	.238	HCB		0		HCB
3.212	4678230	10.078	gamma-BHC	3.046	18308170	10.939	gamma-BHC
3.281	1901960	9.044	beta-BHC	3.111	6614712	9.43	beta-BHC
4.387	4917	.026	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.418	4374	.004	a. Chlordane
4.717	7687	.027	Endosulfan I	4.465	64519	.072	Endosulfan I
4.511	17690	.057	g. Chlordane		0		g. Chlordane
4.663	82512	.29	4,4'-DDE	4.571	240408	.27	4,4'-DDE
	0		o,p-DDD	4.734	3852	.008	o,p-DDD
5.079	13616010	48.105	Endrin	4.928	47469580	53.771	Endrin
5	189856	.925	o,p-DDT		0		o,p-DDT
5.126	140102	2.175	Kepone	5.022	356786	4.234	Kepone
5.335	23780480	92.155	4,4'-DDT	5.251	82544040	104.061	4,4'-DDT
5.263	46819	.176	Endosulfan II		0		Endosulfan II
5.551	83340	.377	Endrin aldehyde	5.338	305218	456	Endrin aldehyde
5.682	25105350	200.513	Methoxychlor	5.741	80657760	222.741	Methoxychlor
6.051	182439	.646	Endrin ketone	5.901	450896	.55	Endrin ketone
6.709	3705080	20.032	DCB	6.696	10138040	20.019	DCB

Files:

Area File: 05pest18306001.003.RAW  
 Area File: 05pest18306001B.003.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/2/2018 7:32:21 PM  
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EVALX1824B

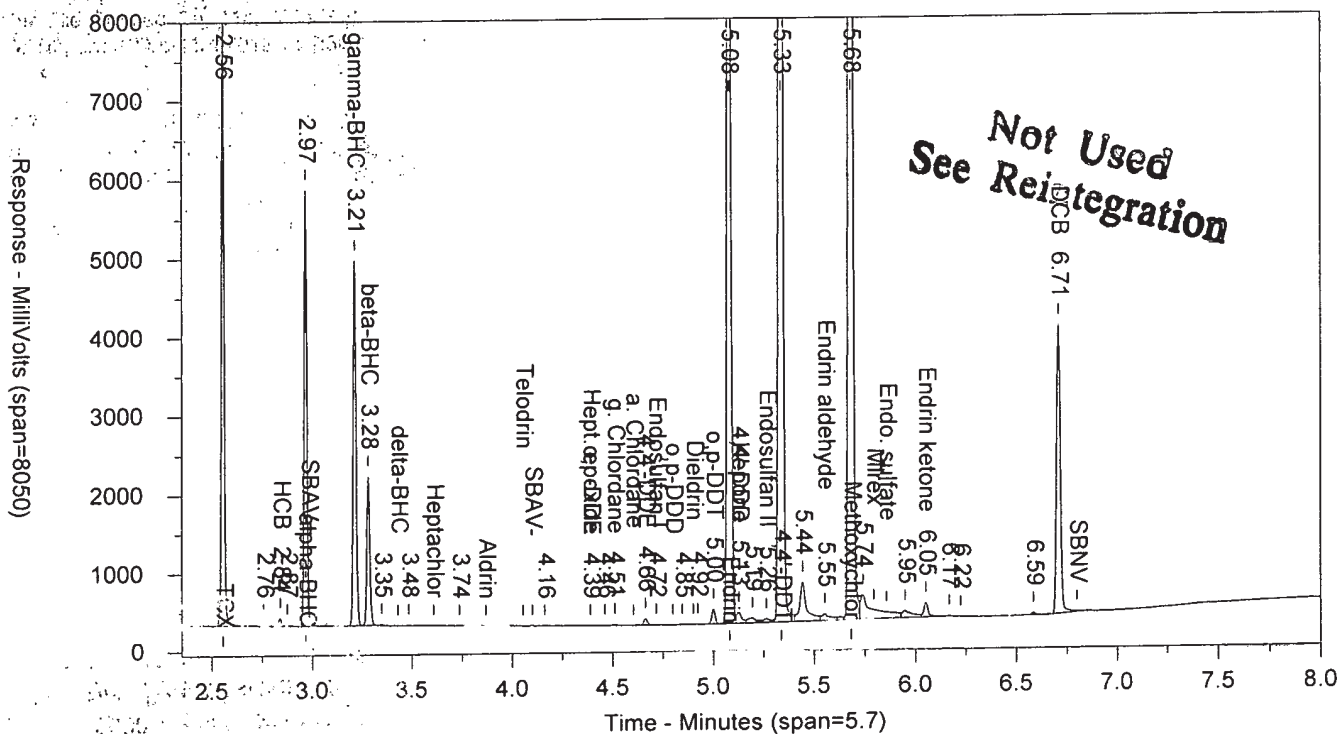
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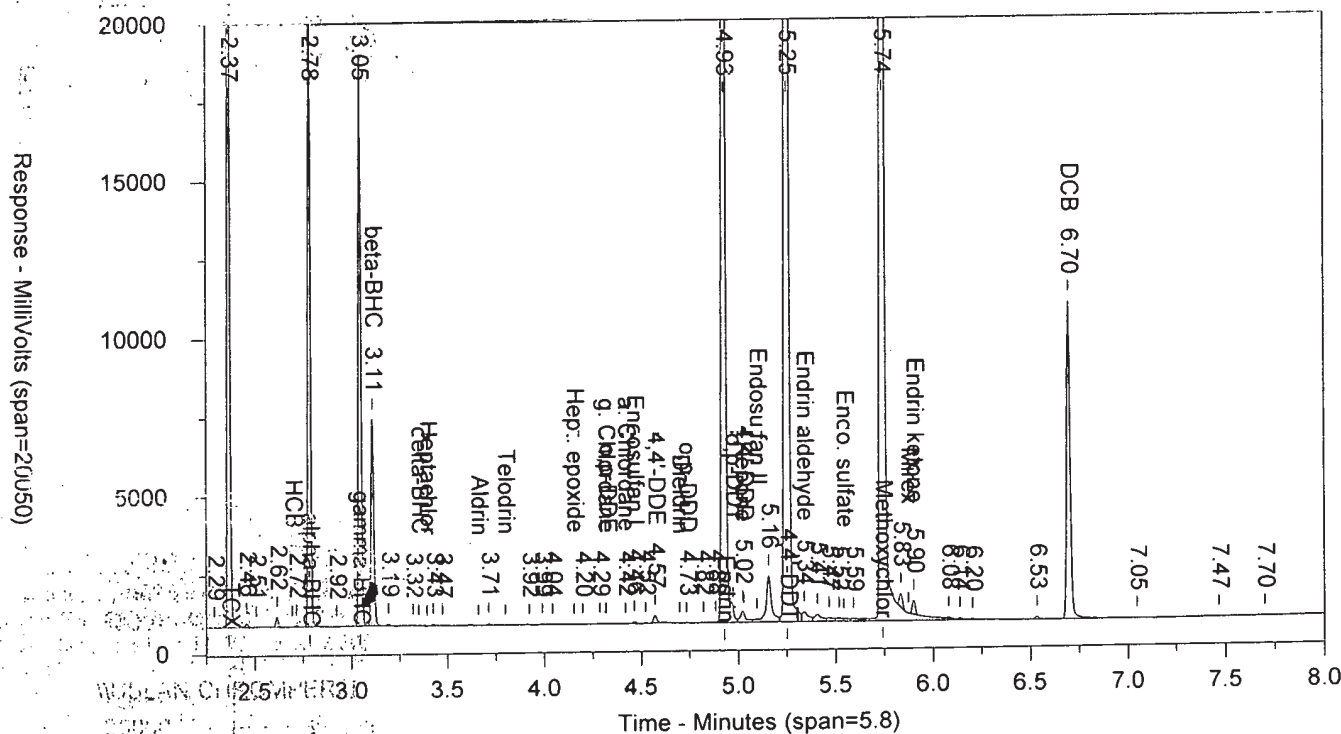
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SW-846 8081A

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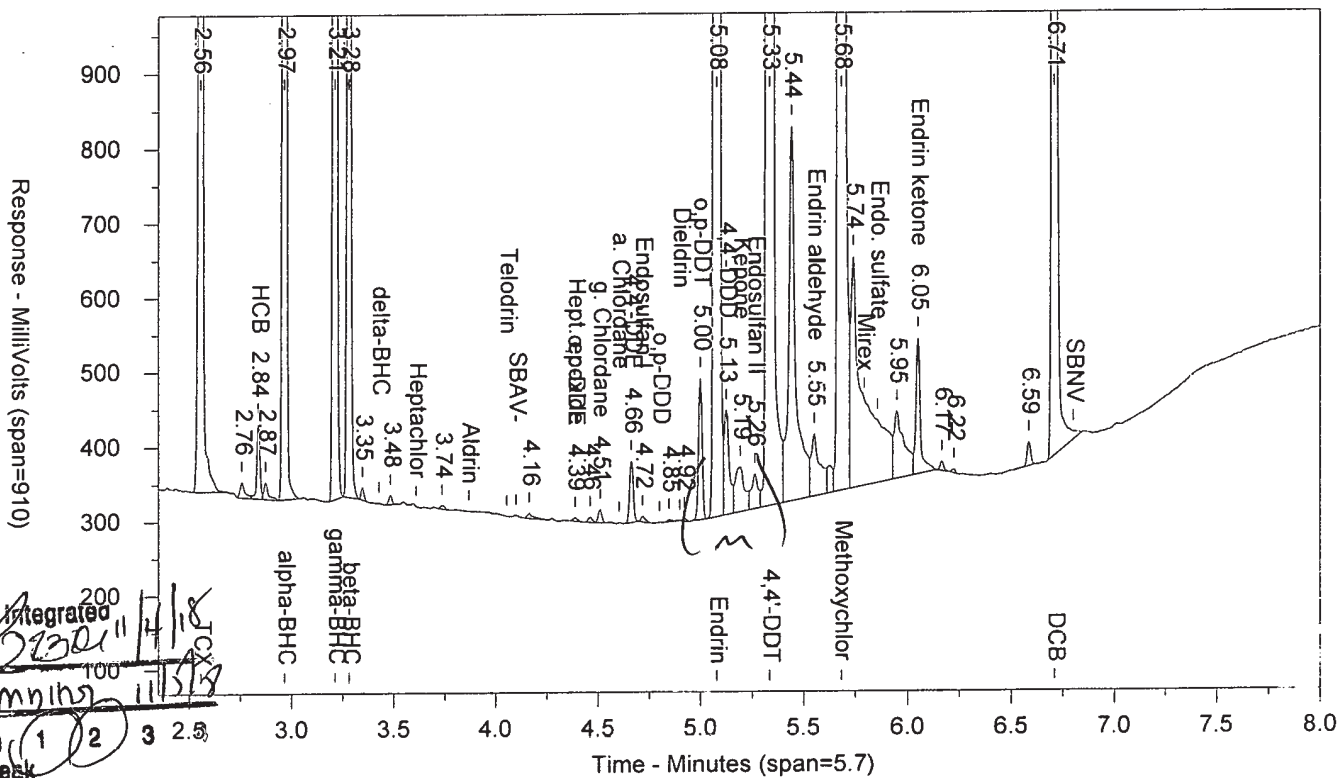
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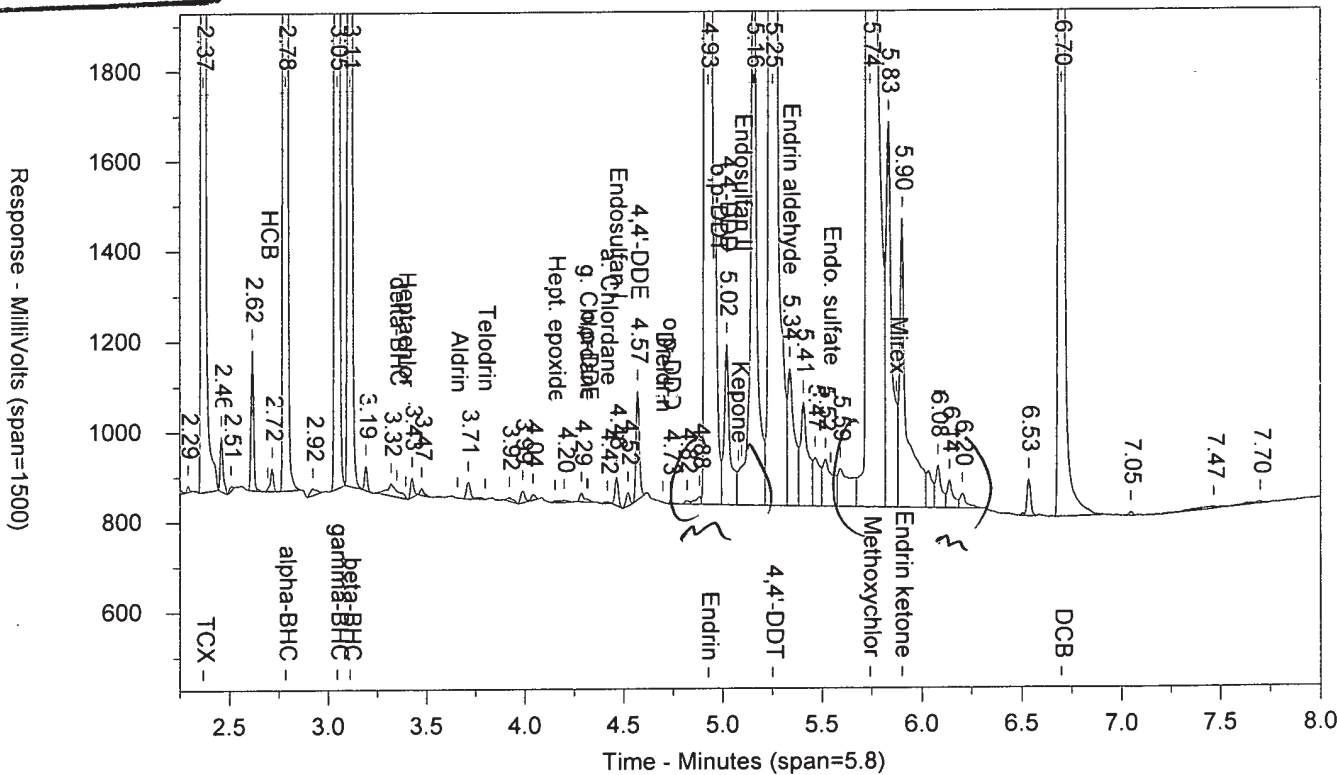
SW-846 8081A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.003.BND



M = Manually Integrated  
 Analyst: *[Signature]*  
 Approved by: *[Signature]*  
 Circle Reason: 1 2 3 2.5  
 1 = Missed Peak  
 2 = Improper Baseline  
 3 = RT Update  
 4 = Other

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.003.BND



## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B    AAPEMAA    IPEM 1830599999    00177

SW-846 8081A

Injected On: 11/2/2018 7:24:19 PM

Sample Weight: 1

Instrument ID: CP5-9190

Dilution Factor: 1

Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min

Column A ID: STX-CLP 30m x 0.32mm x 0.5um

Column B ID: STX-CLP2 30m x 0.32mm x 0.25um

Injection Volume: 1 ul

Threshold: 7

Calibration Type: external

Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.555	7833479	20.536	TCX	2.367	31084690	21.574	TCX
2.967	5542616	10.103	alpha-BHC	2.785	21985840	10.838	alpha-BHC
2.839	100478	.238	HCB		0		HCB
3.212	4678230	10.078	gamma-BHC	3.046	18308170	10.939	gamma-BHC
3.281	1901960	9.044	beta-BHC	3.111	6614712	9.43	beta-BHC
4.387	4917	.026	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.418	4374	.004	a. Chlordane
4.717	7687	.027	Endosulfan I	4.465	64519	.072	Endosulfan I
4.511	17690	.057	g. Chlordane		0		g. Chlordane
4.663	82512	.29	4,4'-DDE	4.571	240408	.27	4,4'-DDE
	0		o,p-DDD	4.734	3852	.008	o,p-DDD
5.079	13616010	48.105	Endrin	4.928	47469580	53.771	Endrin
5	189856	.925	o,p-DDT		0		o,p-DDT
5.126	140102	.582	4,4'-DDD	5.022	356786	.481	4,4'-DDD
5.194	60246	1.618	Kepone		0		Kepone
5.335	23780480	92.155	4,4'-DDT	5.251	82544040	104.061	4,4'-DDT
5.263	46819	.176	Endosulfan II		0		Endosulfan II
5.551	83340	.377	Endrin aldehyde	5.338	305218	.456	Endrin aldehyde
5.682	25105350	200.513	Methoxychlor	5.741	80657760	222.741	Methoxychlor
6.051	182439	.646	Endrin ketone	5.901	641803	.783	Endrin ketone
6.709	3705080	20.032	DCB	6.696	10138040	20.019	DCB

Files:

Area File: 05pest18306001.003.BND

Area File: 05pest18306001B.003.BND

Method A: 05PESTD.MET

Method B: 05PESTDDB.MET

Calibration File A: 05pest1830601.cal

Calibration File B: 05pest1830601b.cal

Format A: pestD5.FMTA

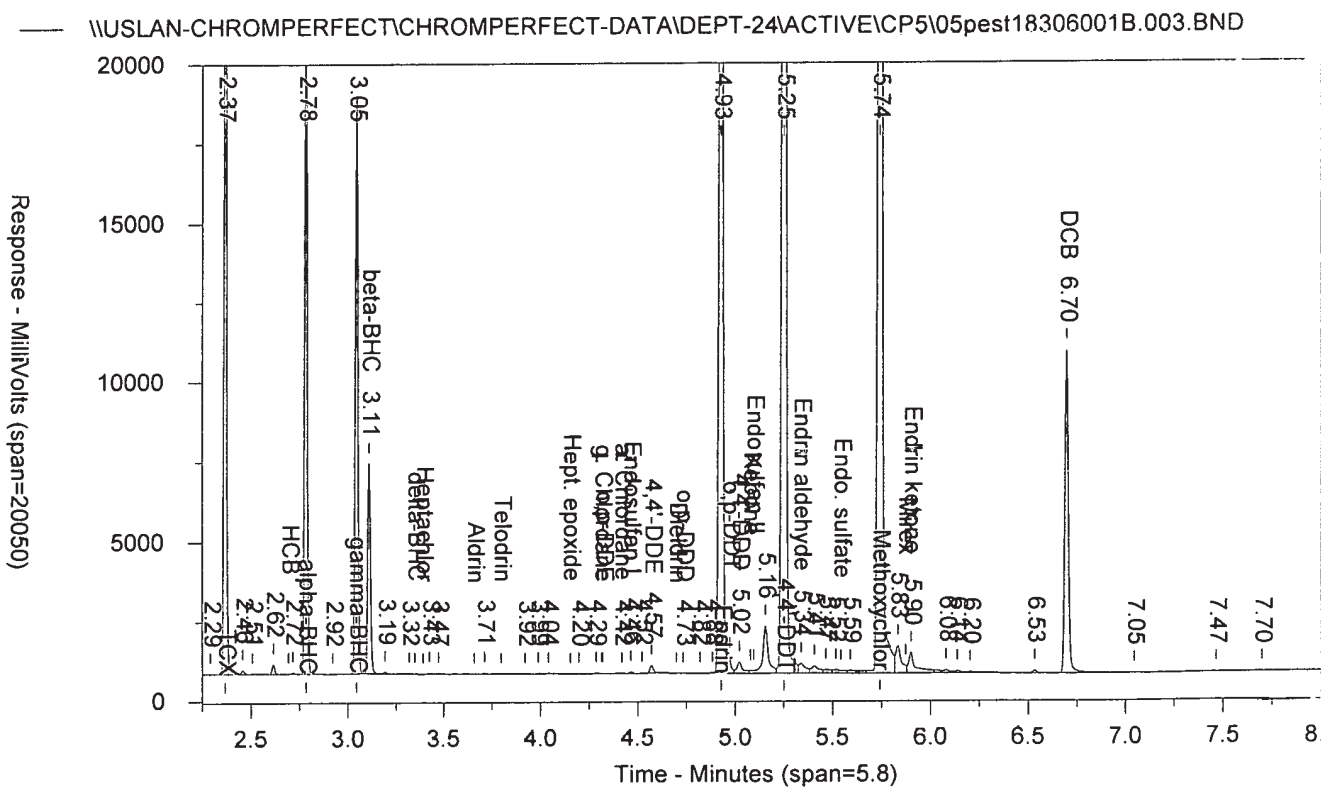
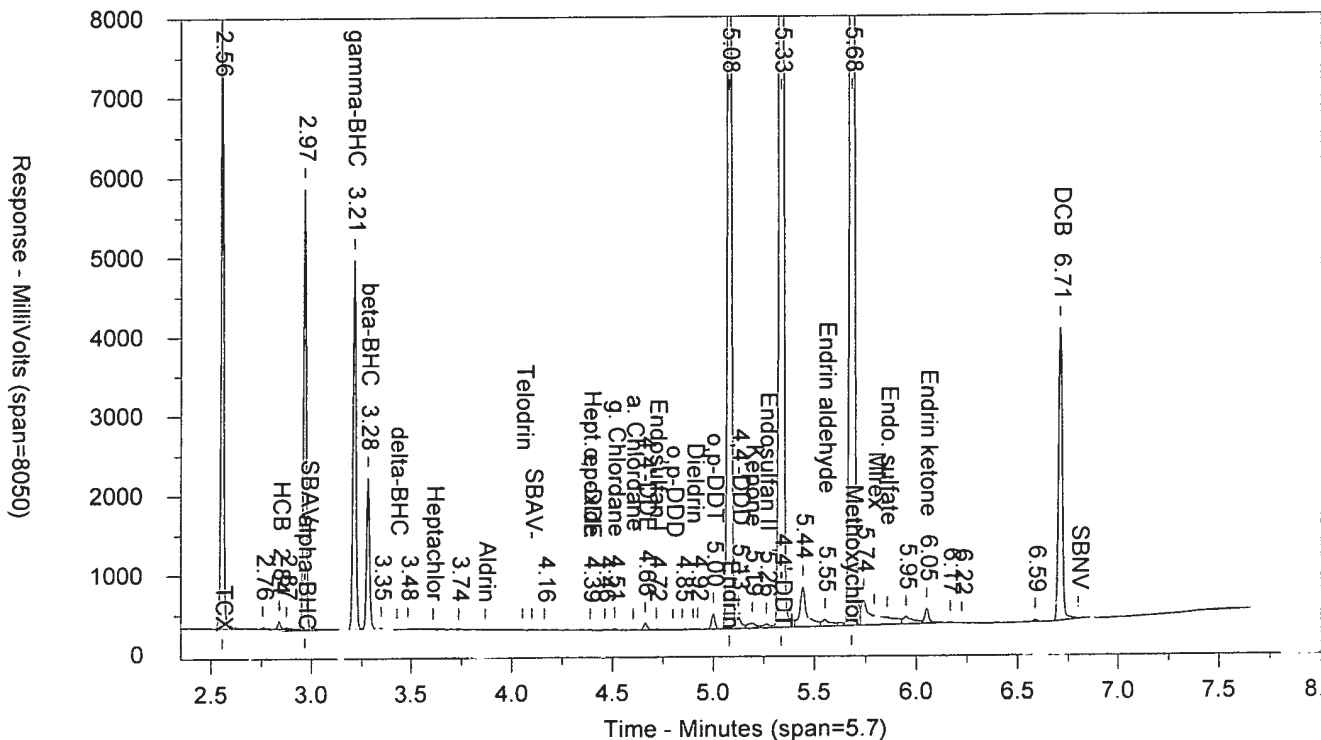
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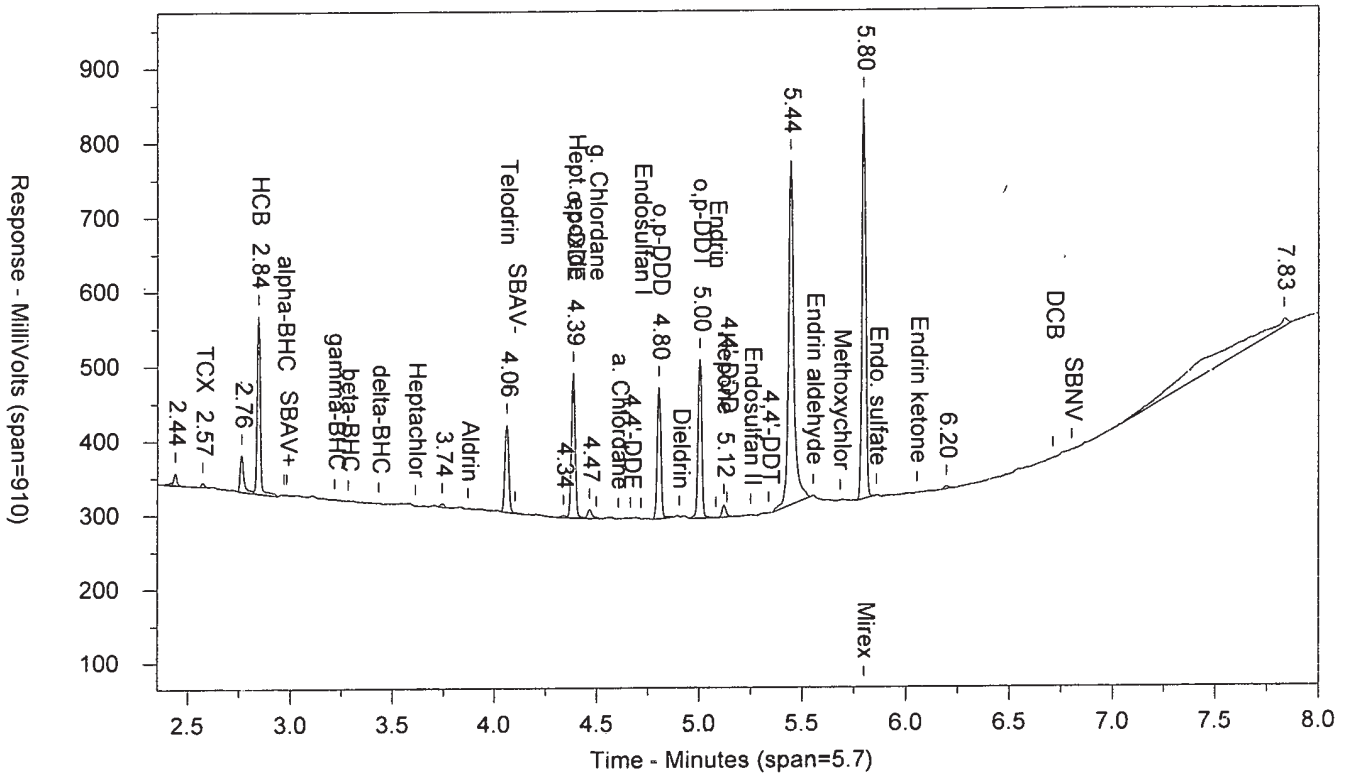
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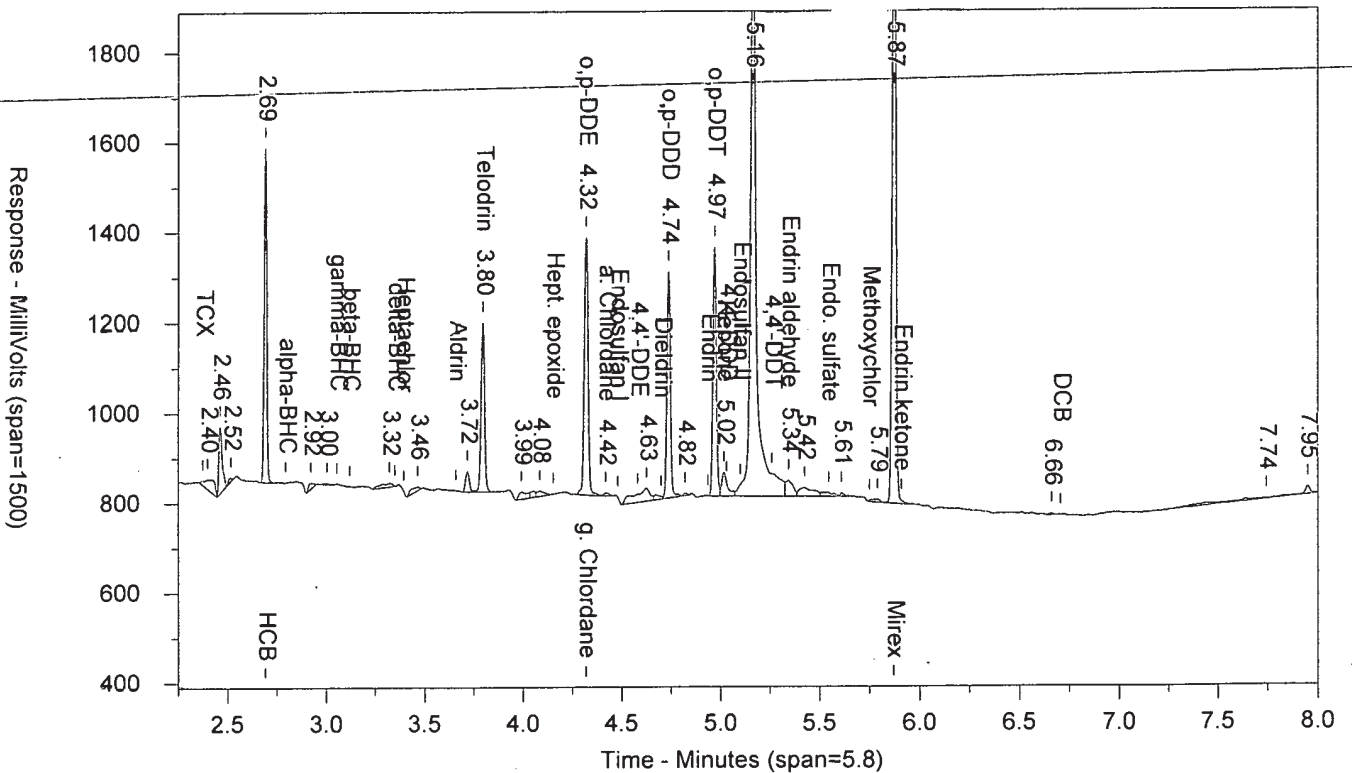
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.003.BND



MIXE11824D AAMIXE1AA ICAL 183059999 00177 SW-846 8081A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.011.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.011.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXE11824D      AAMIXE1AA      ICAL 1830599999      00177      SW-846 8081A  
 Injected On: 11/2/2018 9:07:23 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

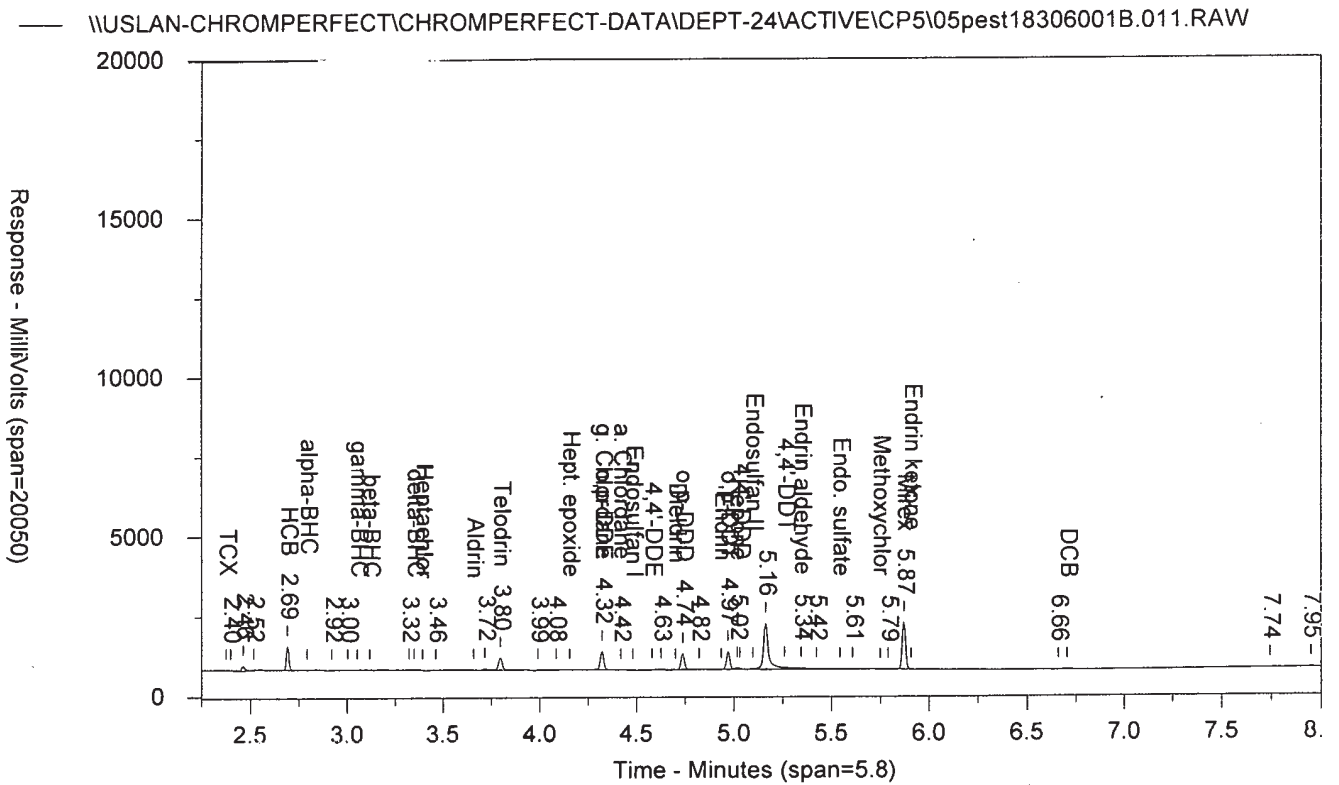
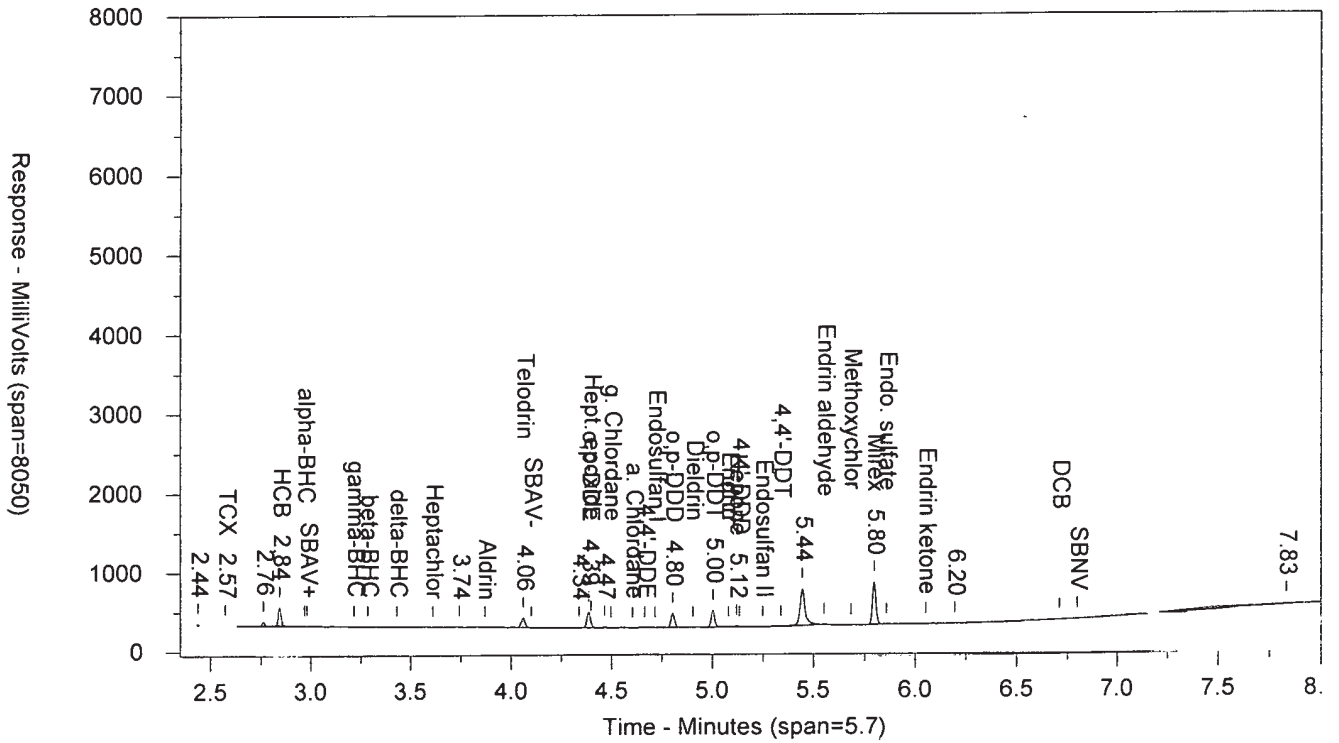
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.572	5873	.015	TCX		0		TCX
2.843	239722	9.166	HCB	2.691	745127	71.881	HCB
4.06	118176		Telodrin	3.796	375653	227.002	Telodrin
	0		g. Chlordane	4.32	571392	.572	g. Chlordane
4.385	195072	.889	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.419	6424	.007	a. Chlordane
4.804	177241	1024.04	o,p-DDD	4.737	503491		o,p-DDD
5.003	215071	205.397	o,p-DDT	4.97	553717		o,p-DDT
5.12	16671	.245	Kepone	5.016	53637	.256	Kepone
	0		Endrin aldehyde	5.343	35759	.053	Endrin aldehyde
5.798	537973		Mirex	5.871	1471946		Mirex

Files:

Area File: 05pest18306001.011.RAW  
 Area File: 05pest18306001B.011.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/2/2018 9:15:24 PM  
 File Reported On: 11/4/2018 at 6:54:57 AM

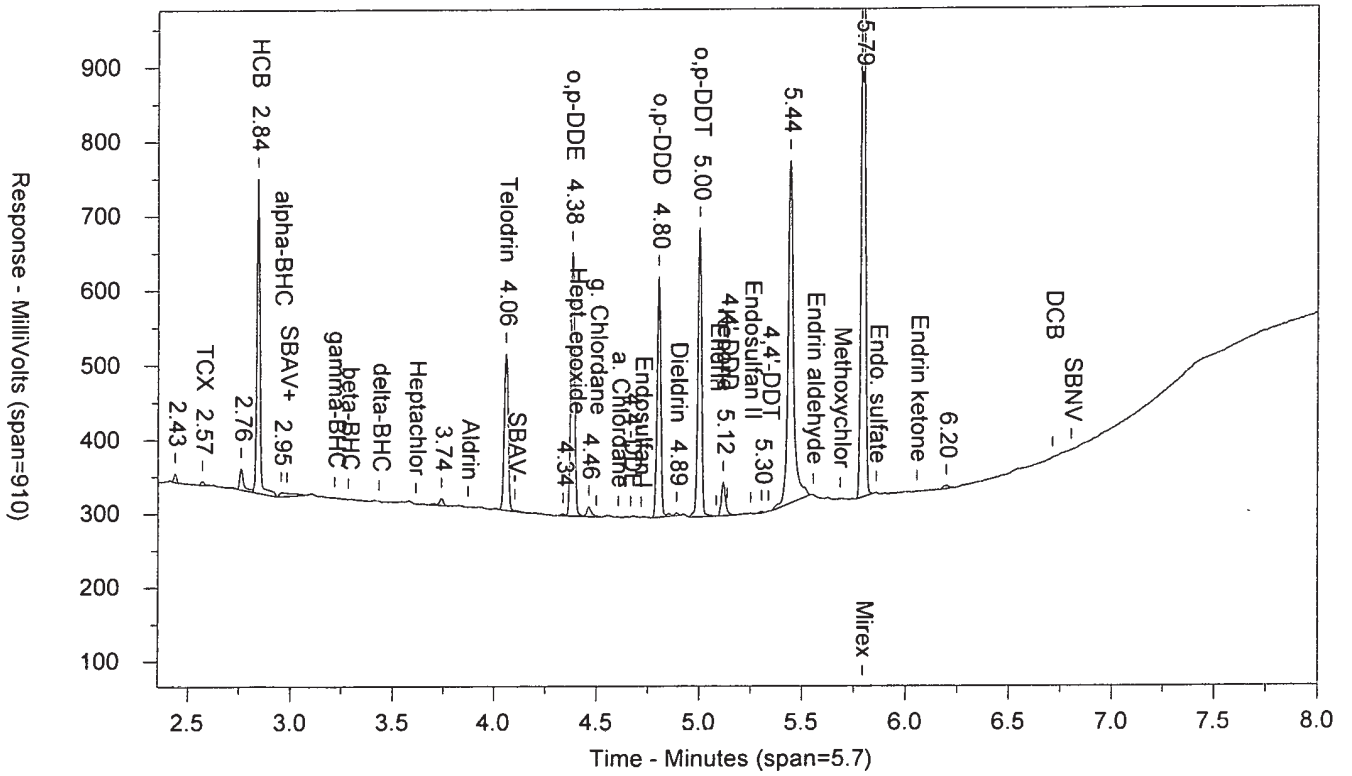
MIXE11824D AAMIXE1AA ICAL 1830599999 00177 SW-846 808

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.011.RAW

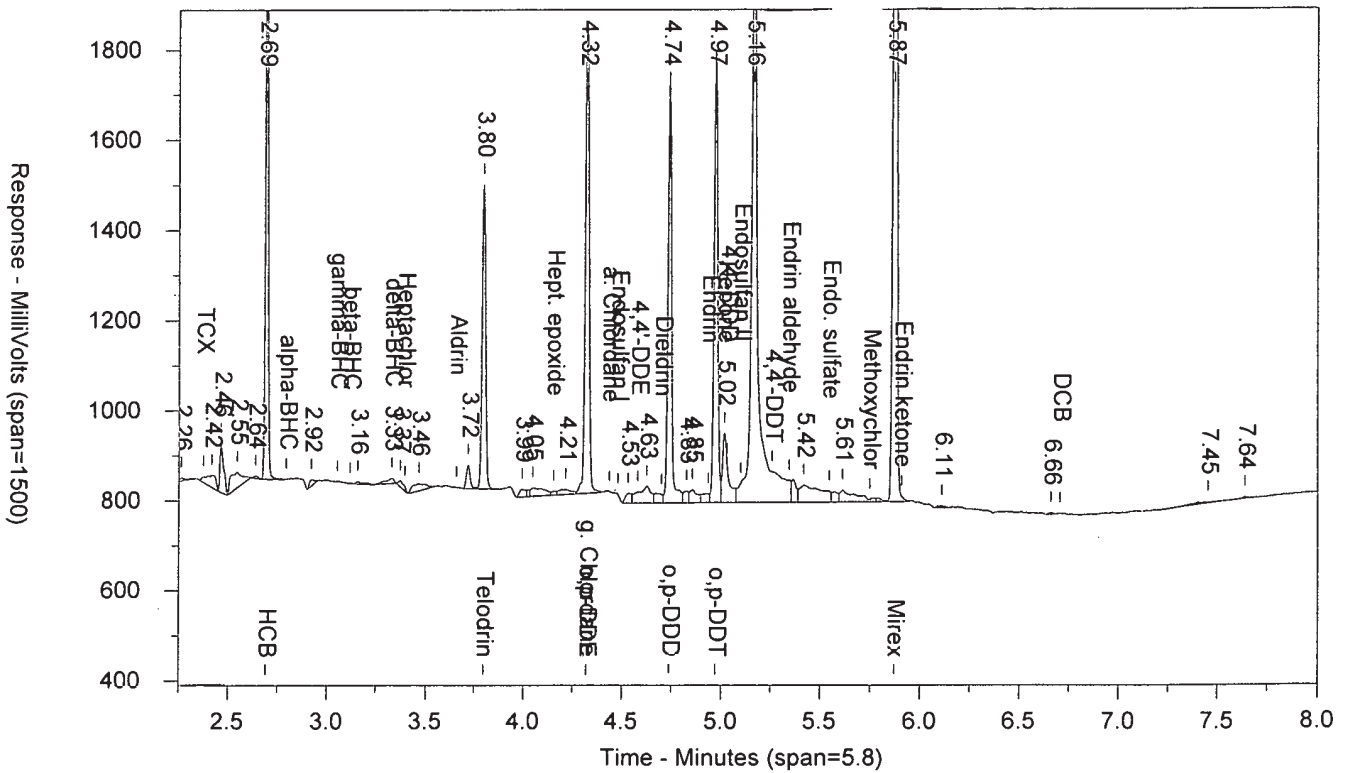




MIXE21824D AAMIXE2AA ICAL 183059999 00177 SW-846 8081A  
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\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.012.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXE21824D      AAMIXE2AA      ICAL 1830599999      00177      SW-846 8081A  
 Injected On: 11/2/2018 9:20:15 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

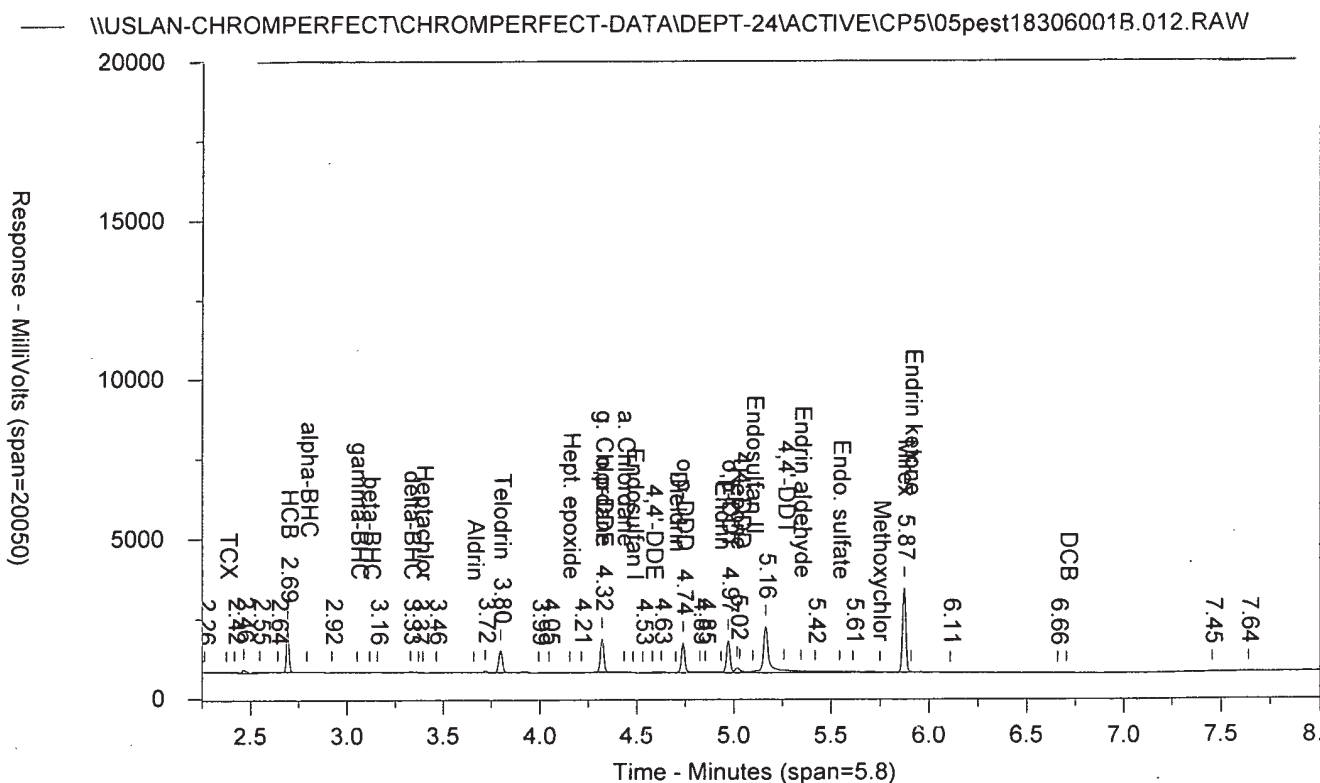
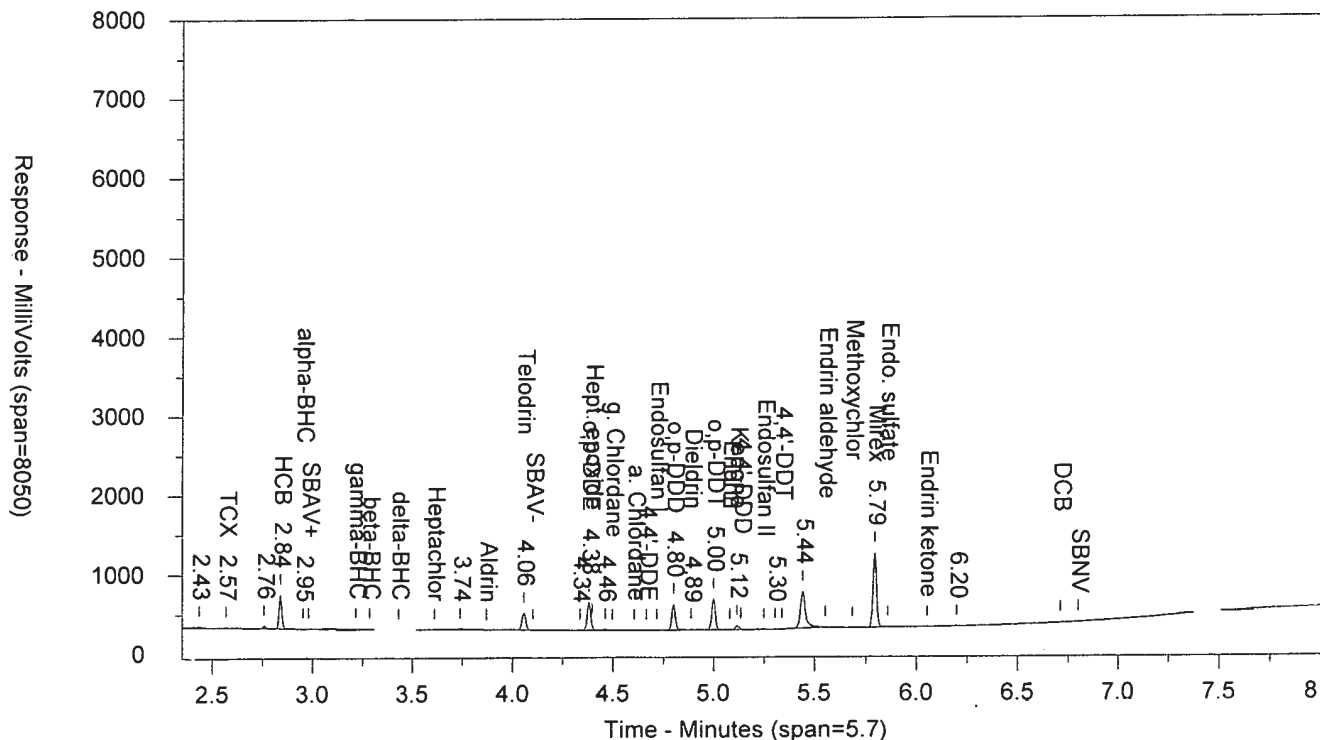
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.568	5235	.014	TCX		0		TCX
2.839	425544	16.271	HCB	2.692	1345480	129.797	HCB
2.952	5878	.011	alpha-BHC		0		alpha-BHC
	0		delta-BHC	3.329	11550	.008	delta-BHC
4.056	211036		Telodrin	3.798	678270	409.869	Telodrin
	0		g. Chlordane	4.321	1051044	1.053	g. Chlordane
4.381	356538	1.626	o,p-DDE		0		o,p-DDE
4.8	323376	1868.362	o,p-DDD	4.738	937508		o,p-DDD
4.887	3666	.012	Dieldrin		0		Dieldrin
4.999	388967	371.471	o,p-DDT	4.971	1006653		o,p-DDT
5.115	46072	.678	Kepone	5.017	153894	.735	Kepone
5.794	938690		Mirex	5.873	2640017		Mirex

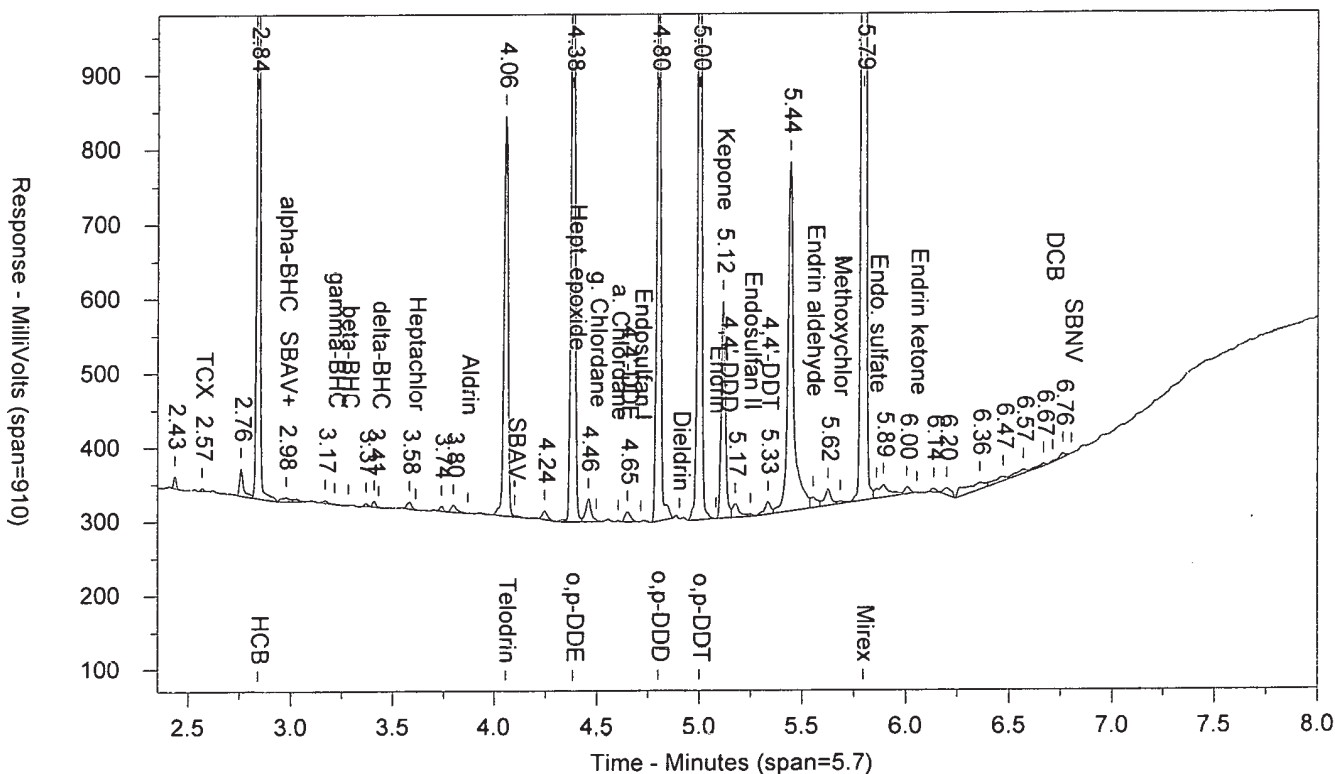
Files:

Area File: 05pest18306001.012.RAW  
 Area File: 05pest18306001B.012.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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 File Reported On: 11/4/2018 at 6:55:07 AM

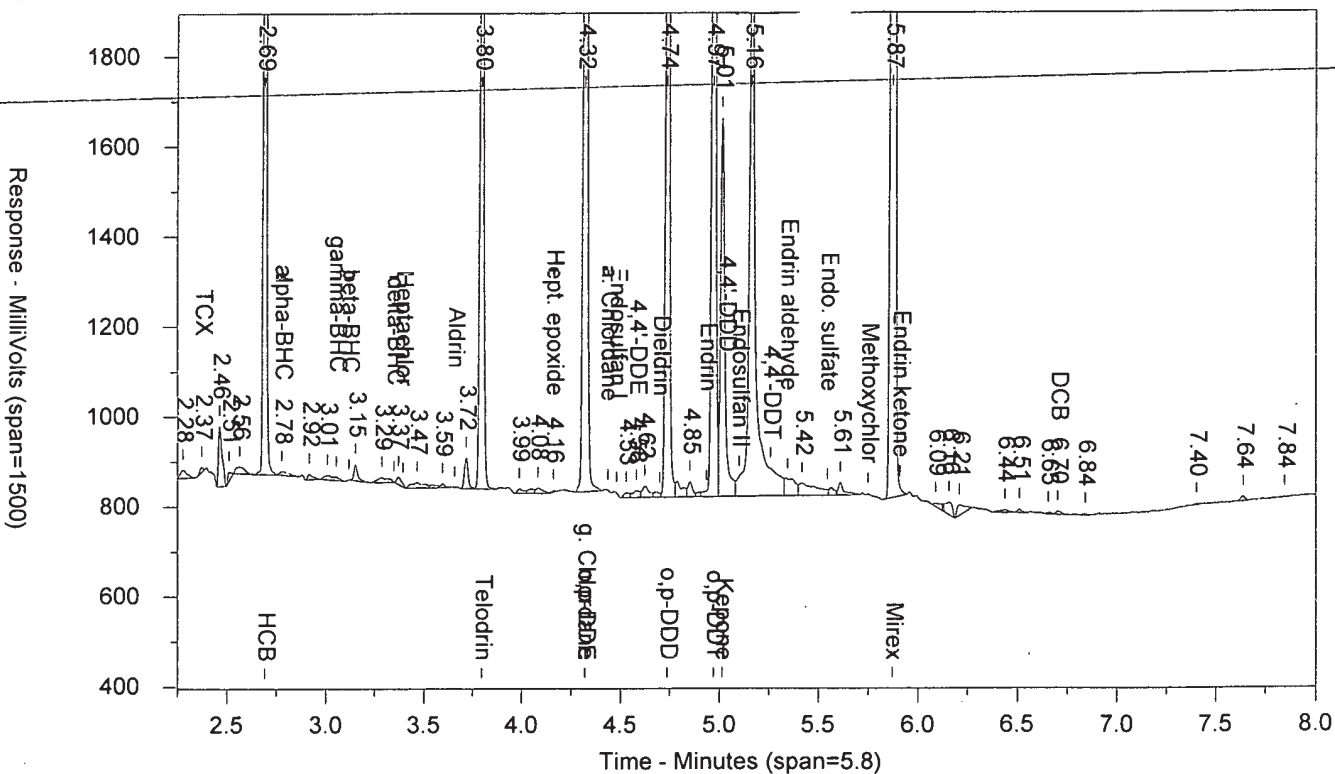
MIXE21824D AAMIXE2AA ICAL 183059999 00177 SW-846 808  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.012.RAW



MIXE31824D AAMIXE3AA ICAL 183059999 00177 SW-846 8081A  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.013.RAW



\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.013.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXE31824D      AAMIXE3AA      ICAL 1830599999      00177      SW-846 8081A  
 Injected On: 11/2/2018 9:33:03 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

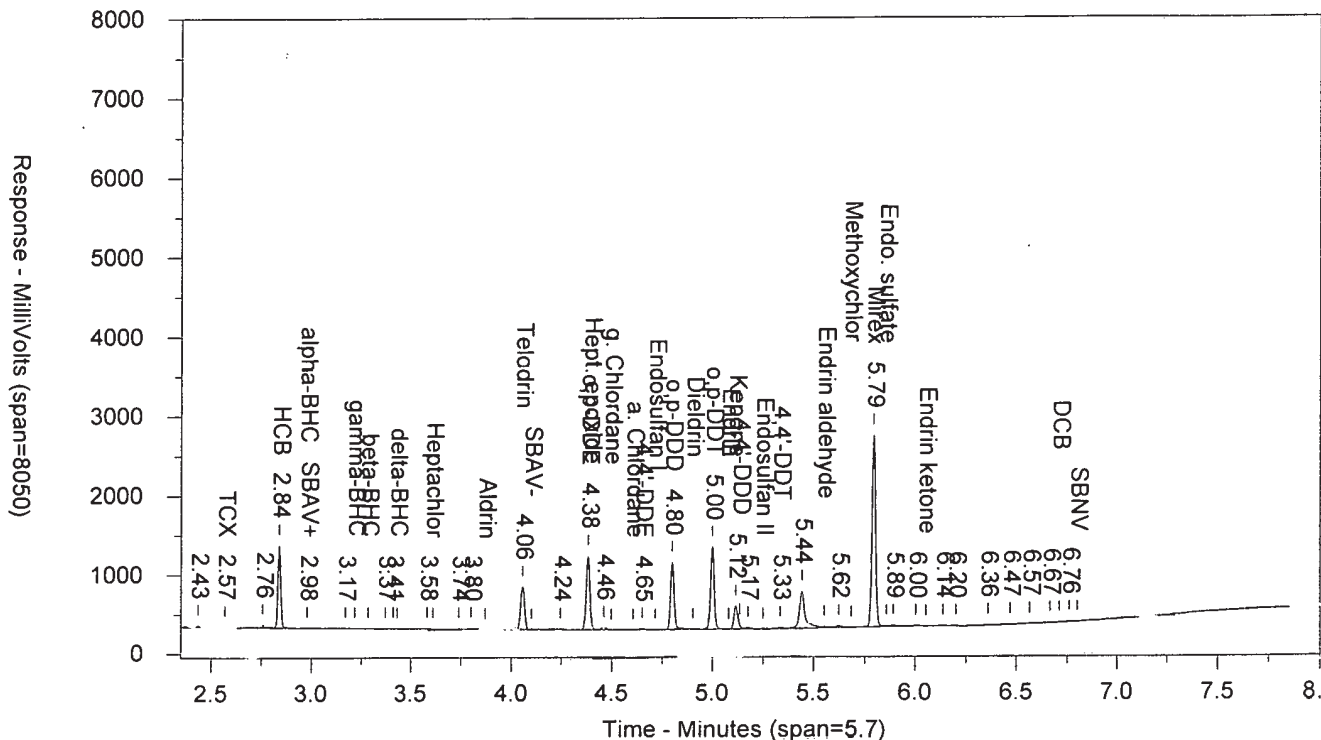
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.567	3826	.01	TCX	2.373	10475	.007	TCX
2.84	1051387	40.2	HCB	2.692	3446559	332.485	HCB
2.976	5649	.01	alpha-BHC	2.777	8163	.004	alpha-BHC
4.056	539686		Telodrin	3.797	1736218	1049.171	Telodrin
	0		Hept. epoxide	4.161	3695	.004	Hept. epoxide
	0		g. Chlordane	4.32	2813860	2.819	g. Chlordane
4.382	936775	4.271	o,p-DDE		0		o,p-DDE
4.65	13766	.048	4,4'-DDE	4.581	15087	.017	4,4'-DDE
4.8	851601	4920.279	o,p-DDD	4.737	2456376		o,p-DDD
4.999	1042841	995.932	o,p-DDT	4.97	2900438		o,p-DDT
5.115	292262	4.302	Kepone	5.014	844877	4.033	Kepone
5.335	17093	.066	4,4'-DDT		0		4,4'-DDT
5.794	2433930		Mirex	5.871	6806248		Mirex
	0		DCB	6.698	7173	.013	DCB

Files:

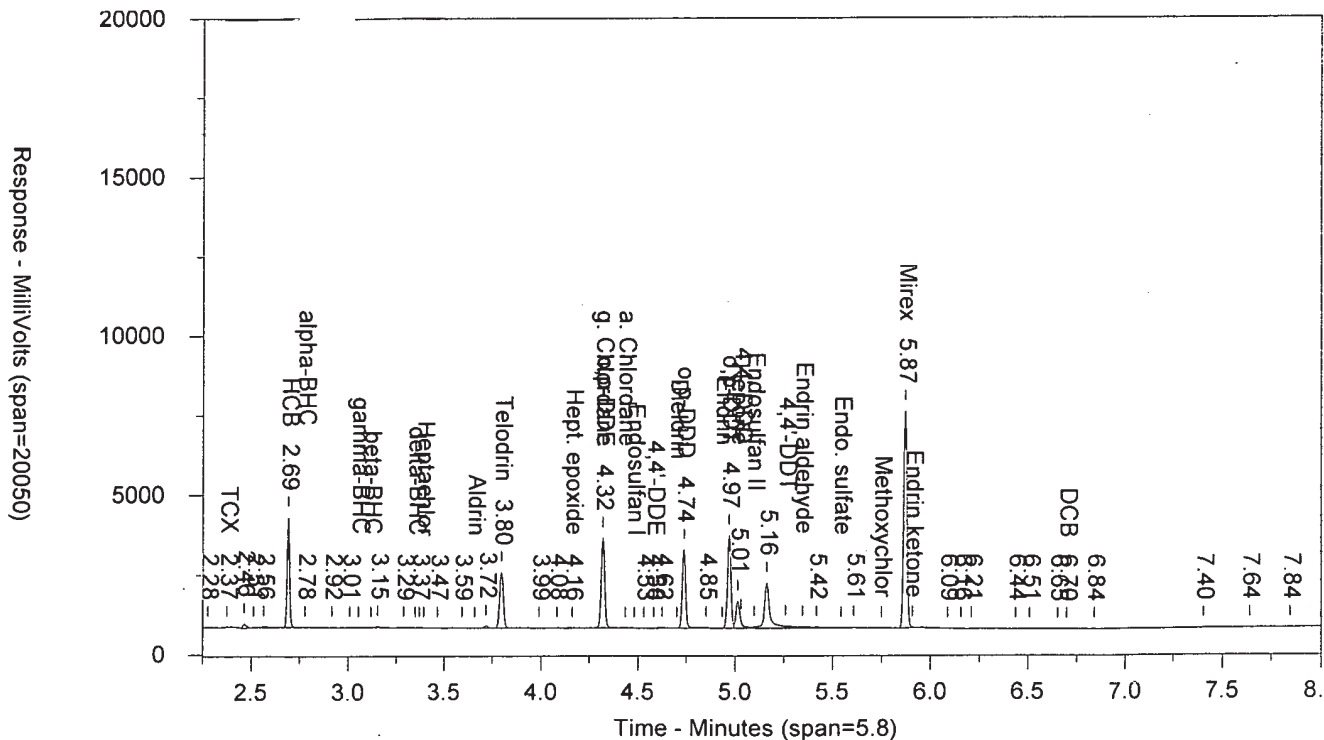
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 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/2/2018 9:41:04 PM  
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MIXE31824D AAMIXE3AA ICAL 1830599999 00177 SW-846 808

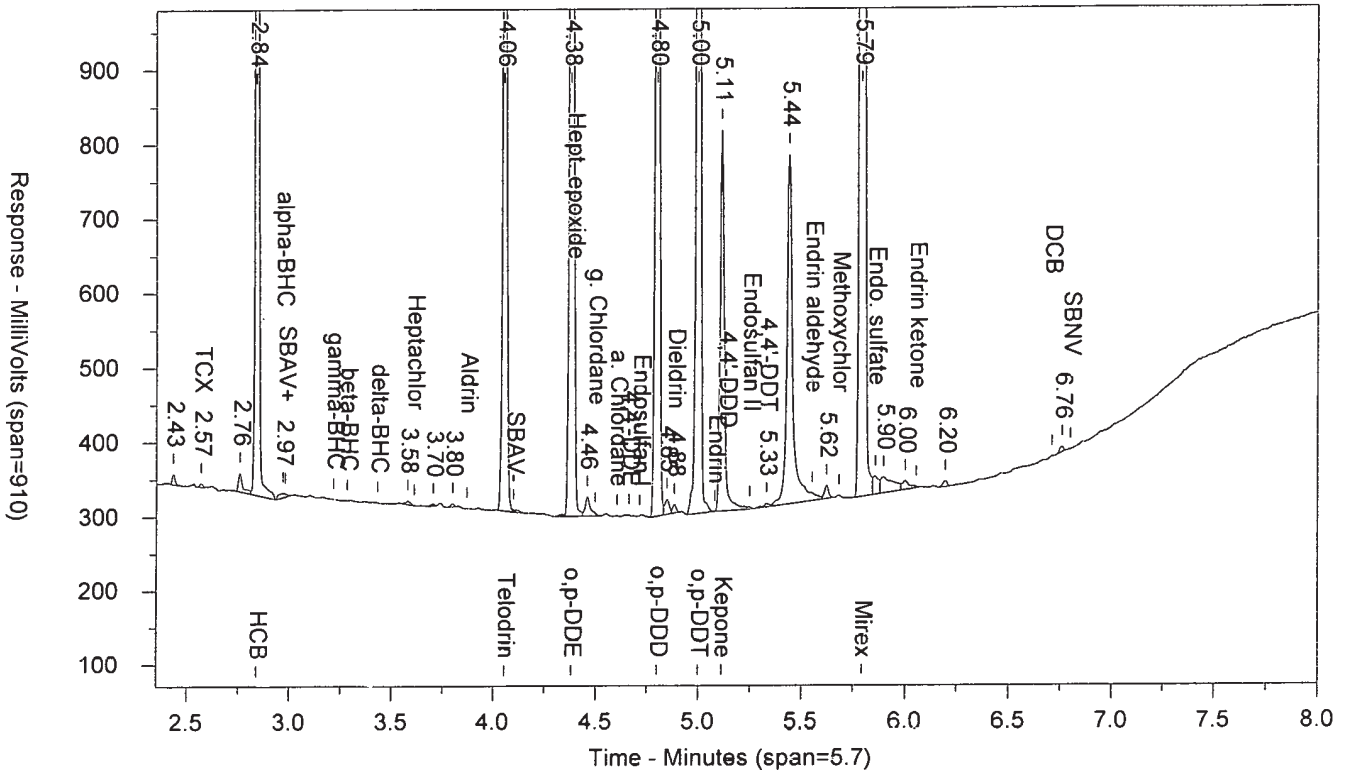
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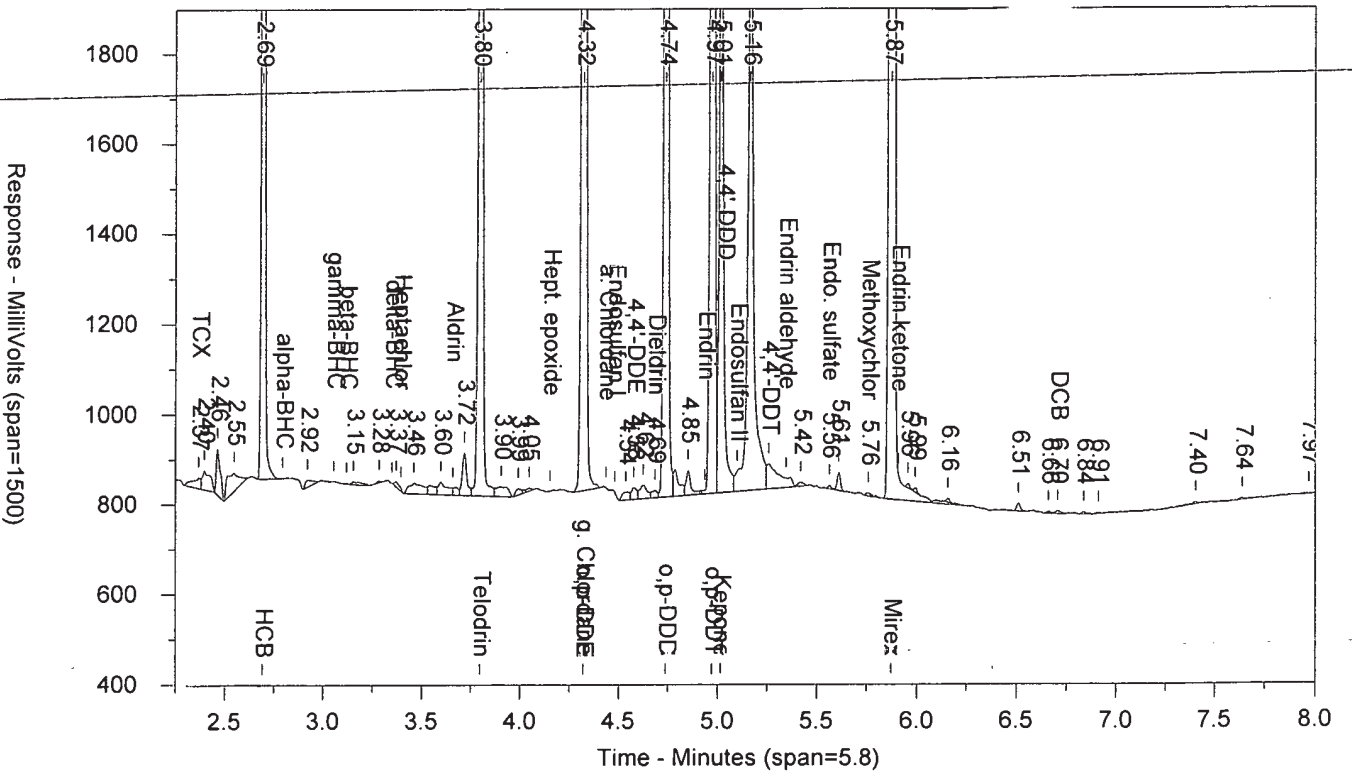
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MIXE41824D AAMIXE4AA ICAL 183059999 00177 SW-846 8081A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.014.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.014.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXE41824D      AAMIXE4AA      ICAL 1830599999      00177      SW-846 8081A  
 Injected On: 11/2/2018 9:45:52 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.568	5051	.013	TCX	2.368	24103	.017	TCX
2.838	2060389	78.78	HCB	2.692	6930088	668.537	HCB
2.969	6288	.011	alpha-BHC		0		alpha-BHC
4.055	1066179		Telodrin	3.797	3521357	2127.905	Telodrin
	0		g. Chlordane	4.32	5612058	5.622	g. Chlordane
4.381	1846431	8.419	o,p-DDE		0		o,p-DDE
	0		4,4'-DDE	4.577	26668	.03	4,4'-DDE
4.884	11545	.038	Dieldrin	4.685	16848	.017	Dieldrin
4.799	1664119	9614.746	o,p-DDD	4.738	4920399		o,p-DDD
4.998	2029898	1938.589	o,p-DDT	4.971	5404704		o,p-DDT
5.114	512686	7.546	Kepone	5.015	1463021	6.984	Kepone
5.332	4953	.019	4,4'-DDT		0		4,4'-DDT
	0		Endo. sulfate	5.562	8205	.011	Endo. sulfate
	0		Methoxychlor	5.758	7587	.021	Methoxychlor
5.793	4495436		Mirex	5.872	13298920		Mirex
	0		DCB	6.703	6749	.013	DCB

Files:

Area File: 05pest18306001.014.RAW  
 Area File: 05pest18306001B.014.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/2/2018 9:53:52 PM  
 File Reported On: 11/4/2018 at 6:55:23 AM



MIXE41824D

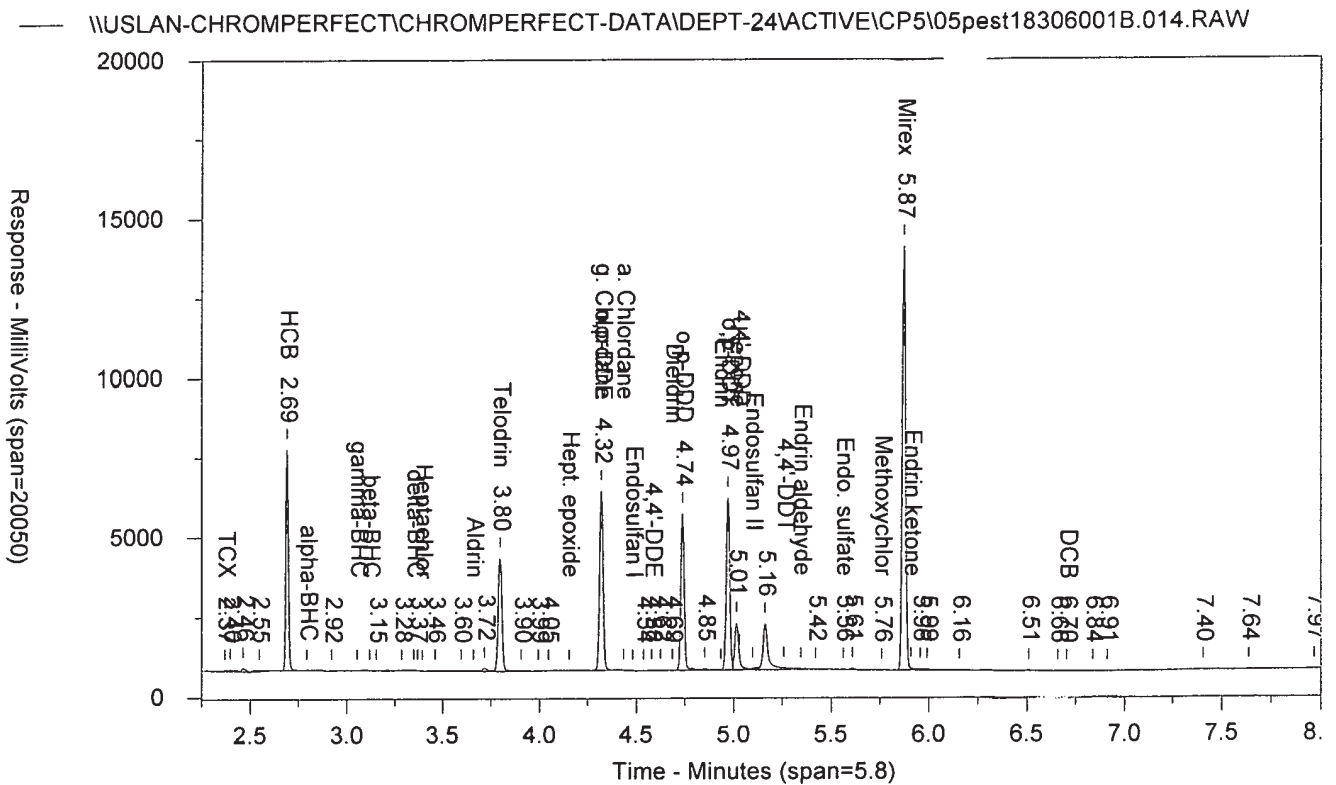
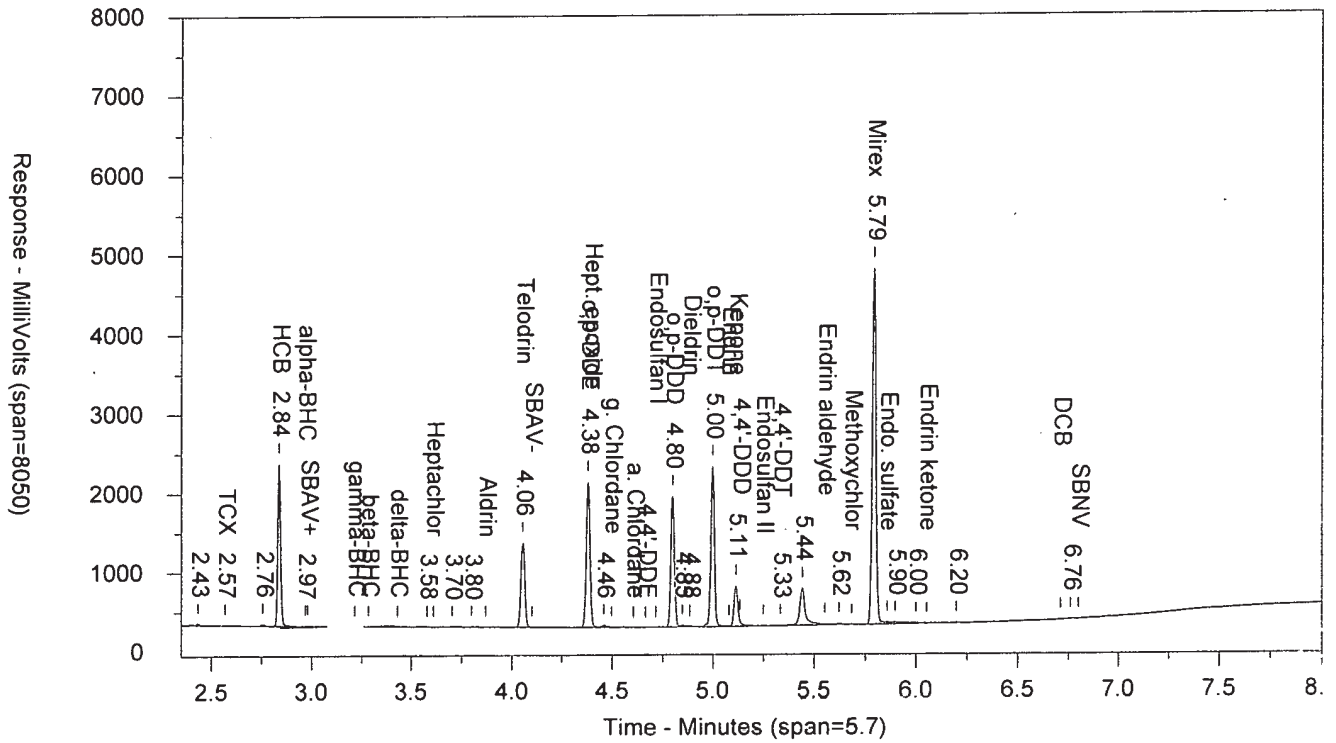
AAMIXE4AA

ICAL 1830599999

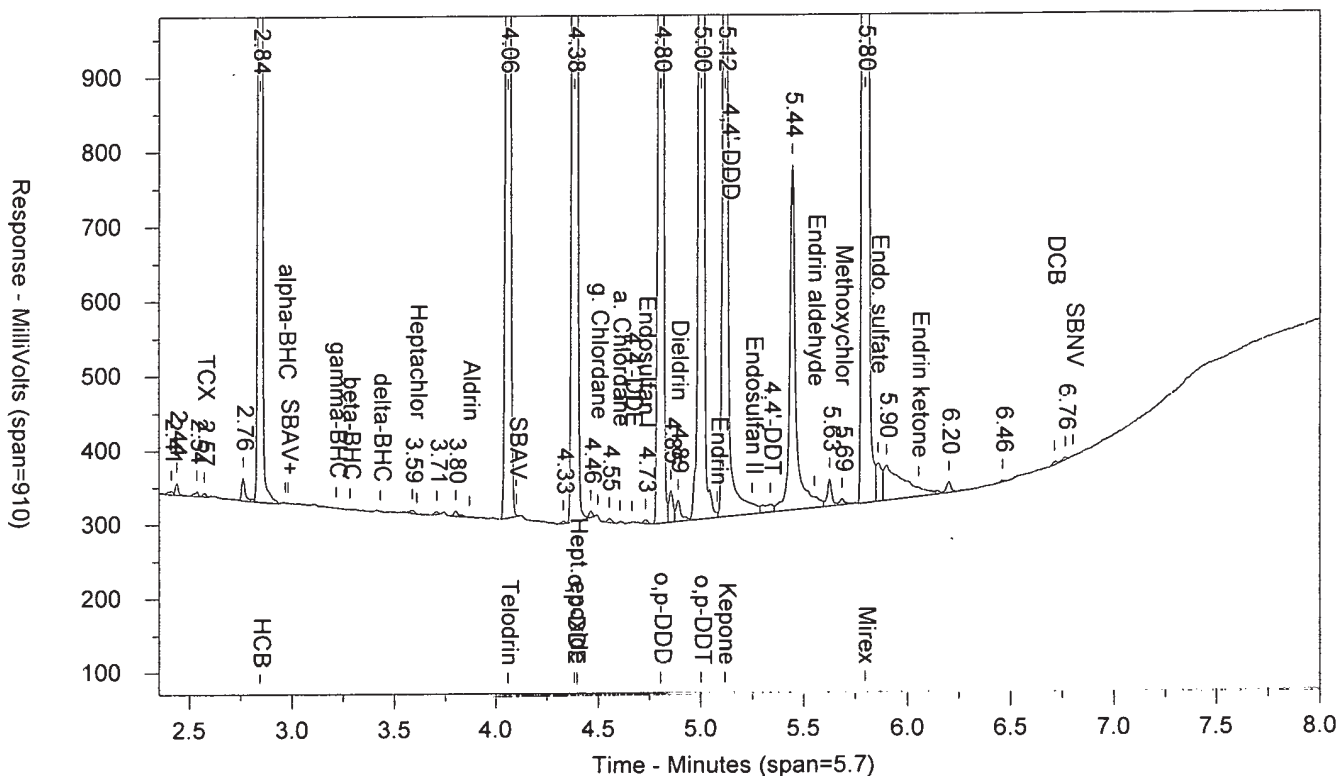
00177

SW-846 808

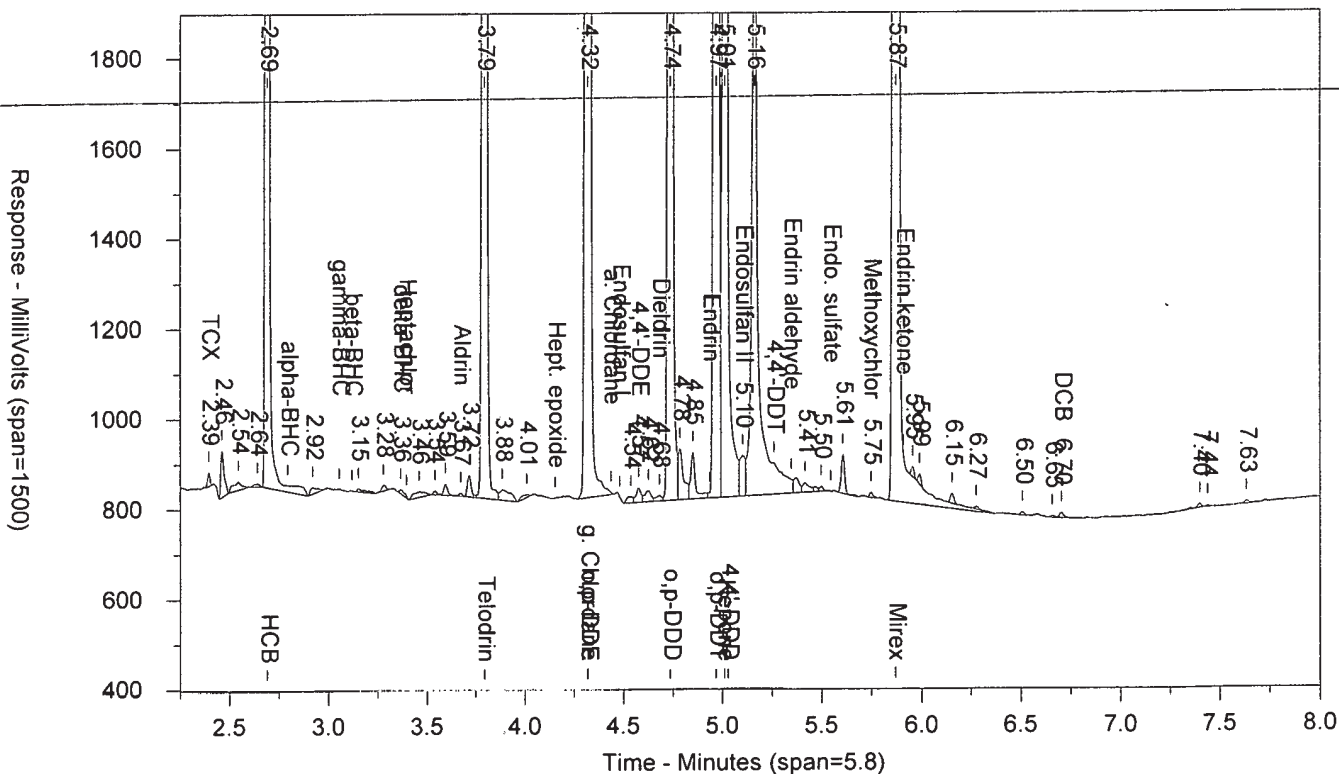
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.014.RAW



MIXE51824D AAMIXE5AA ICAL 1830599999 00177 SW-846 8081A  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.015.RAW



\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.015.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXE51824D      AAMIXE5AA      ICAL 1830599999      00177      SW-846 8081A  
 Injected On: 11/2/2018 9:58:45 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

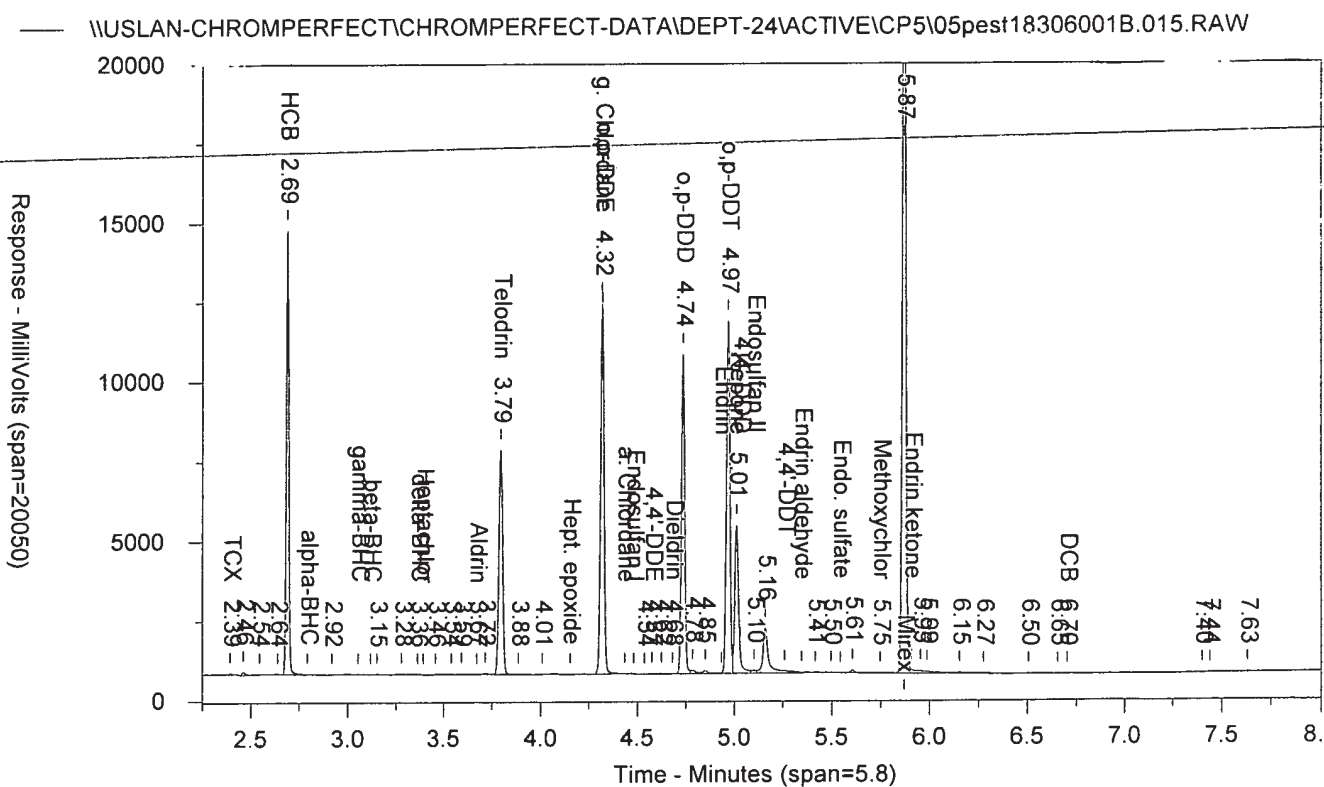
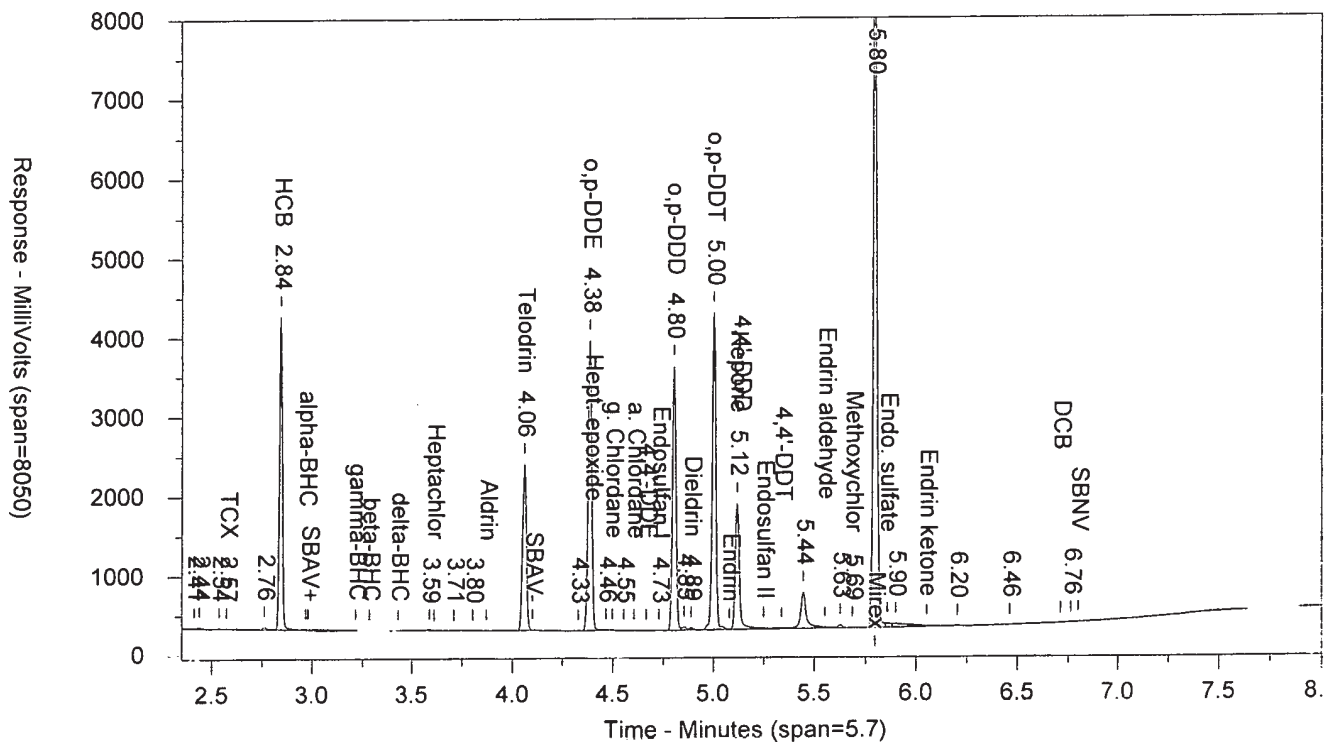
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.572	4718	.012	TCX	2.394	31184	.022	TCX
2.842	3965430	151.621	HCB	2.689	14047450	1355.139	HCB
	0		delta-BHC	3.364	8297	.005	delta-BHC
	0		Aldrin	3.672	7178	.006	Aldrin
4.059	2101513		Telodrin	3.795	7053964	4262.608	Telodrin
	0		g. Chlordane	4.318	11637470	11.658	g. Chlordane
4.384	3673540	16.75	o,p-DDE		0		o,p-DDE
	0		4,4'-DDE	4.574	31631	.036	4,4'-DDE
4.888	28514	.093	Dieldrin	4.681	12053	.013	Dieldrin
4.729	5196	.018	Endosulfan I		0		Endosulfan I
4.803	3332841	19256.09	o,p-DDD	4.735	10039140		o,p-DDD
5.002	3998863	3818.986	o,p-DDT	4.967	11120880		o,p-DDT
5.118	1595777	23.488	Kepone	5.011	4661890	22.256	Kepone
	0		Endosulfan II	5.102	90006	.108	Endosulfan II
5.685	7895	.063	Methoxychlor	5.747	11485	.032	Methoxychlor
5.797	8773674		Mirex	5.869	26944800		Mirex
	0		DCB	6.701	12061	.022	DCB

Files:

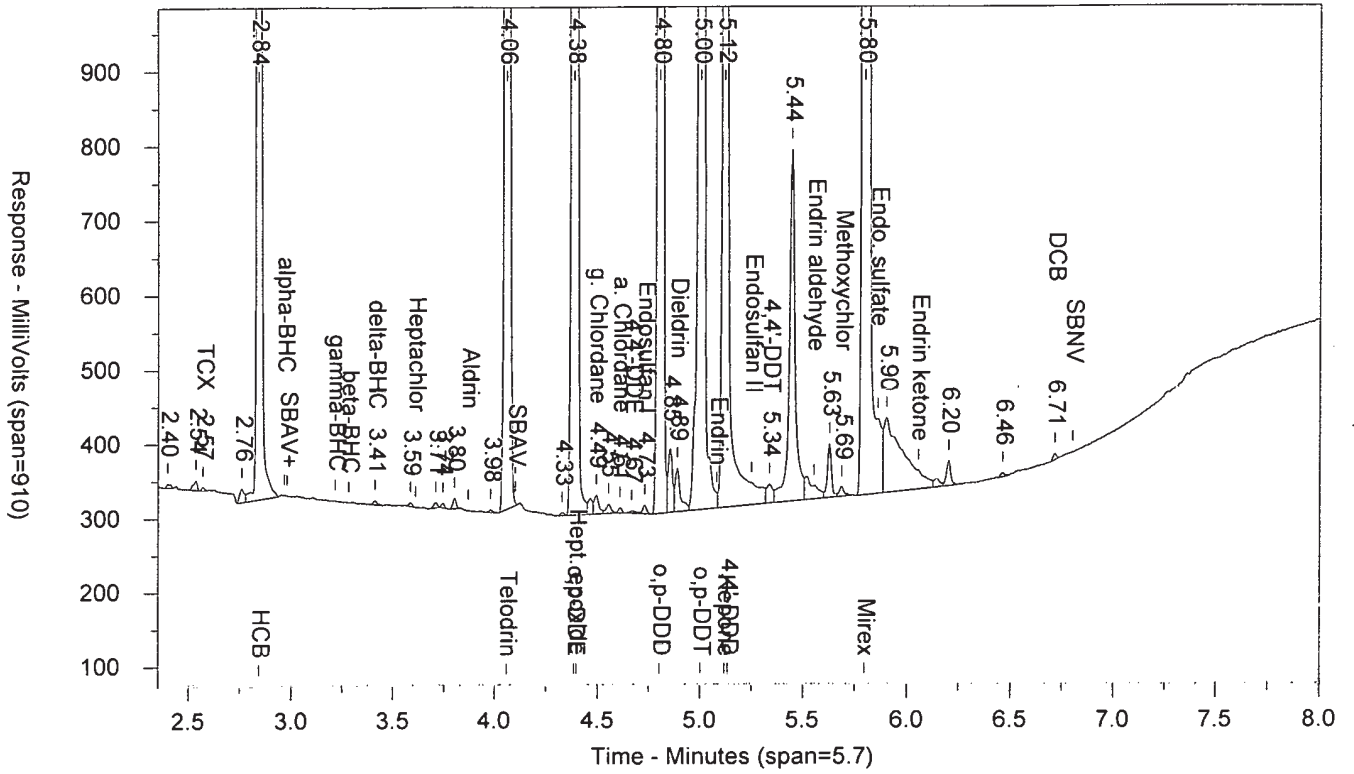
Area File: 05pest18306001.015.RAW  
 Area File: 05pest18306001B.015.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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 File Reported On: 11/4/2018 at 6:55:31 AM

MIXE51824D AAMIXE5AA ICAL 1830599999 00177 SW-846 808

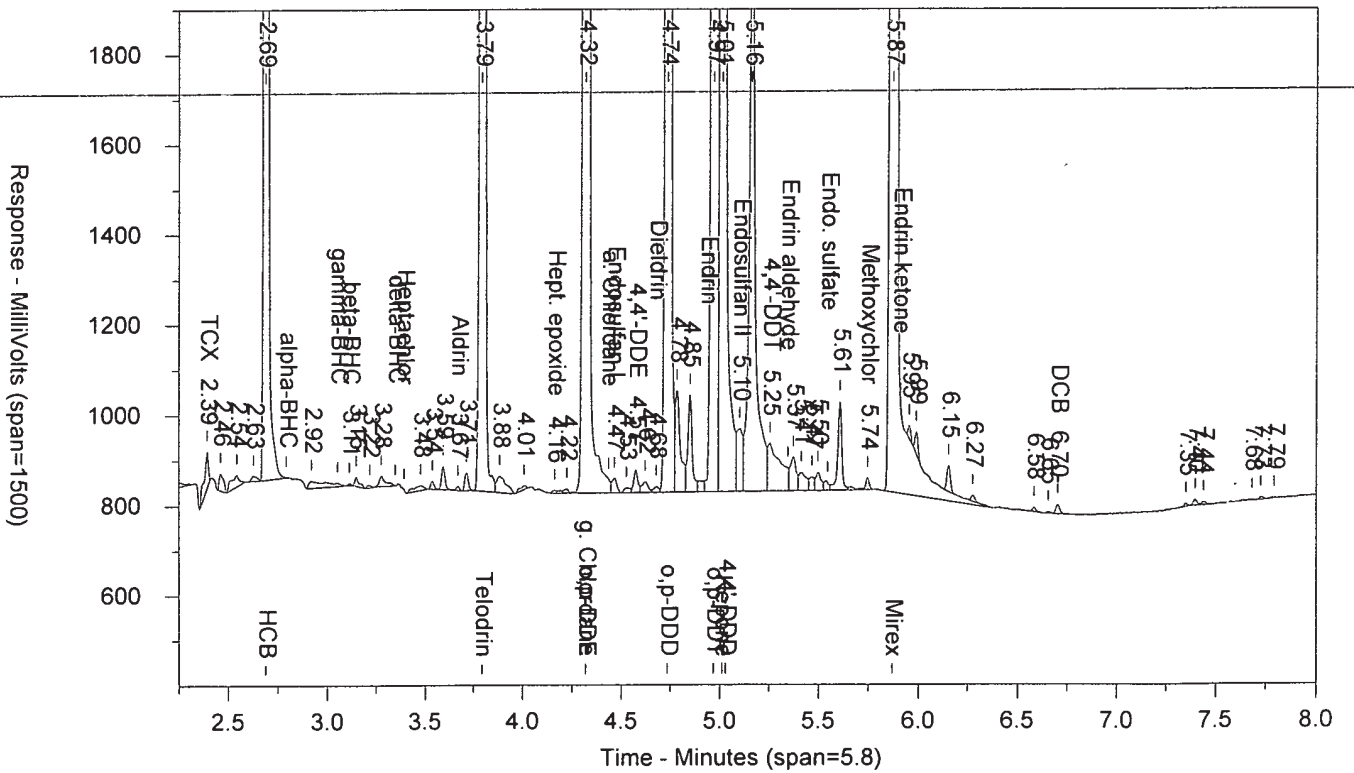
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MIXE61824D AAMIXE6AA ICAL 183059999 00177 SW-846 8081A  
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.016.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXE61824D      AAMIXE6AA      ICAL 1830599999      00177      SW-846 8081A  
 Injected On: 11/2/2018 10:11:45 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

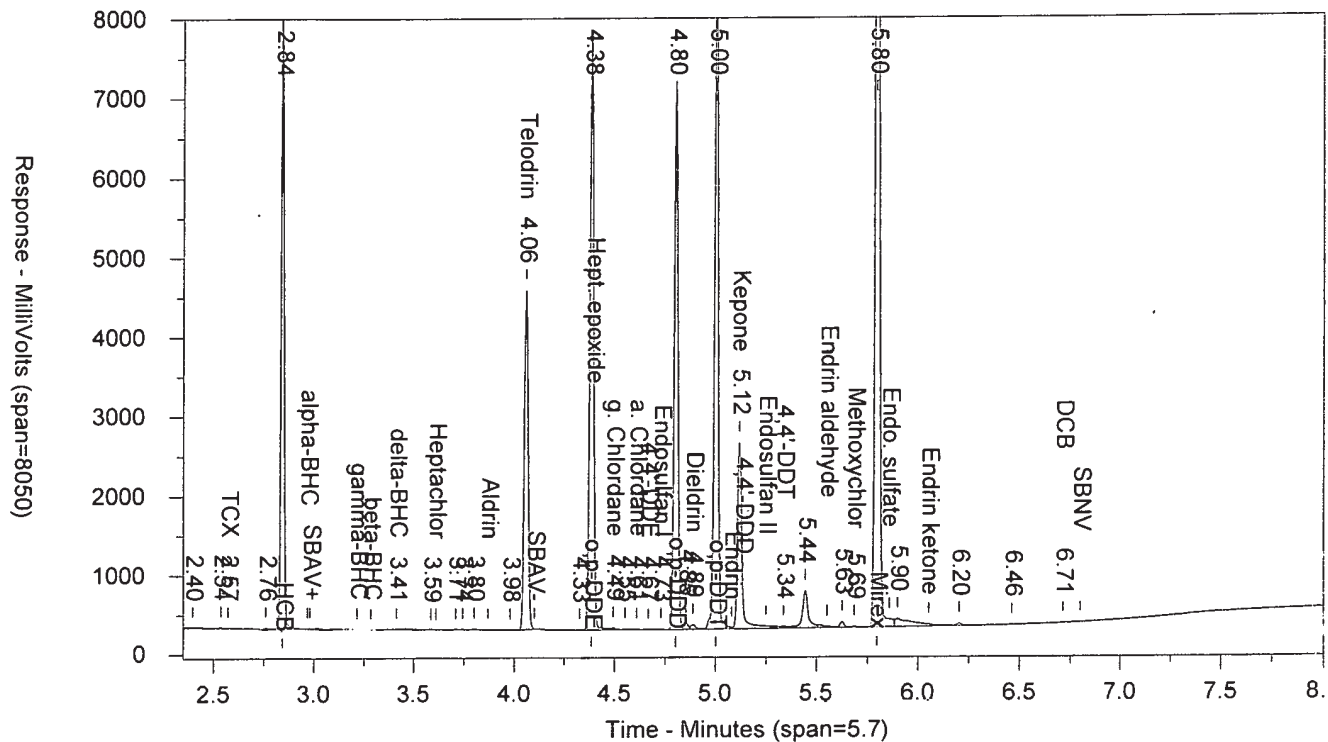
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.571	4790	.013	TCX	2.394	81269	.056	TCX
2.842	7883517	301.431	HCB	2.689	29392450	2835.453	HCB
	0		beta-BHC	3.115	4434	.006	beta-BHC
3.412	5573	.013	delta-BHC		0		delta-BHC
	0		Aldrin	3.67	9716	.008	Aldrin
4.059	4290110		Telodrin	3.794	15209690	9190.993	Telodrin
	0		Hept. epoxide	4.162	6355	.006	Hept. epoxide
4.493	25128	.081	g. Chlordane	4.318	24966070	25.01	g. Chlordane
4.384	7492000	34.161	o,p-DDE		0		o,p-DDE
4.73	11646	.04	Endosulfan I	4.466	32383	.036	Endosulfan I
4.666	2993	.011	4,4'-DDE	4.575	51066	.057	4,4'-DDE
4.609	7118	.023	a. Chlordane		0		a. Chlordane
4.888	58967	.192	Dieldrin	4.679	13667	.014	Dieldrin
4.803	6891359	39816.07	o,p-DDD	4.735	21753180		o,p-DDD
5.002	8440755	8061.073	o,p-DDT	4.968	24732580		o,p-DDT
5.118	2353961	34.647	Kepone	5.011	7032328	33.572	Kepone
	0		Endosulfan II	5.1	138805	.167	Endosulfan II
5.336	25342	.098	4,4'-DDT	5.255	105419	.133	4,4'-DDT
5.685	12763	.102	Methoxychlor	5.745	26838	.074	Methoxychlor
5.797	18609660		Mirex	5.869	58597000		Mirex
6.713	8358	.042	DCB	6.7	21090	.039	DCB

Files:

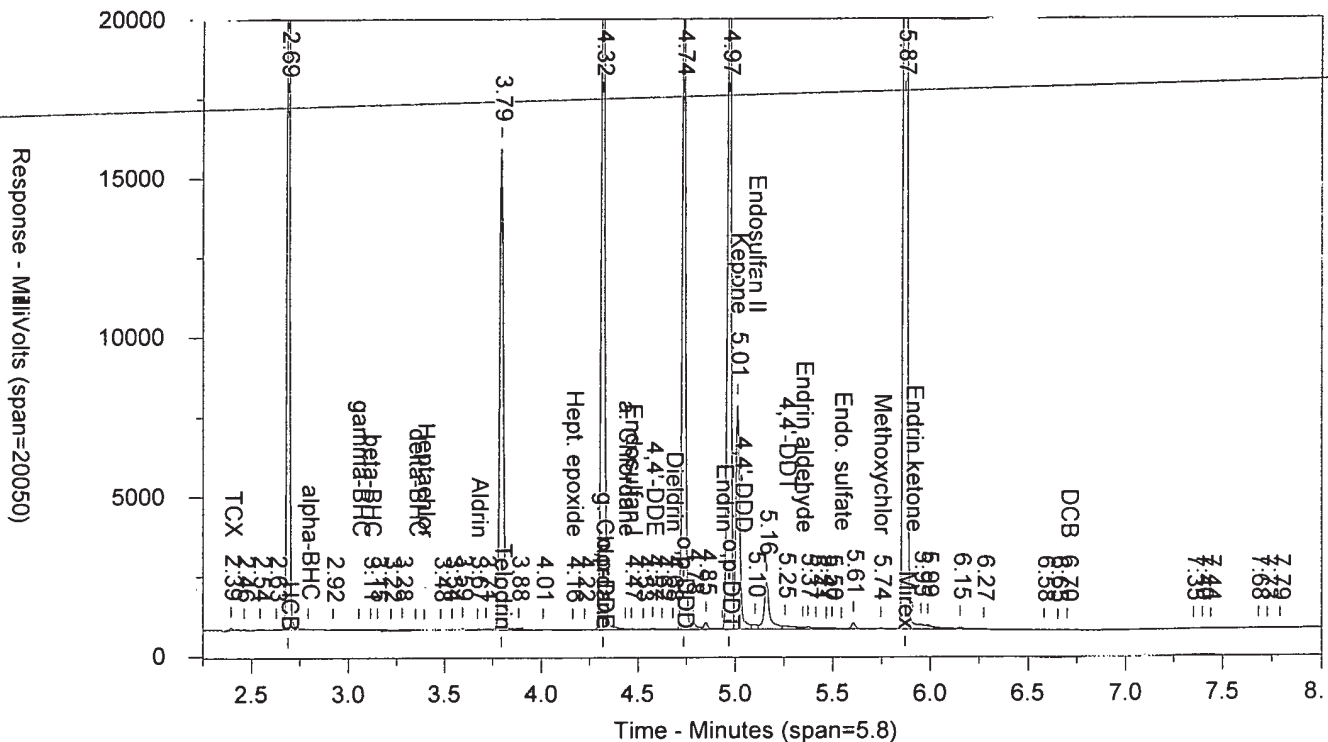
Area File: 05pest18306001.016.RAW  
 Area File: 05pest18306001B.016.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/2/2018 10:19:48 PM  
 File Reported On: 11/4/2018 at 6:55:39 AM

MIXE61824D AAMIXE6AA ICAL 1830599999 00177 SW-846 808

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.016.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.016.RAW



ICMEX1824D

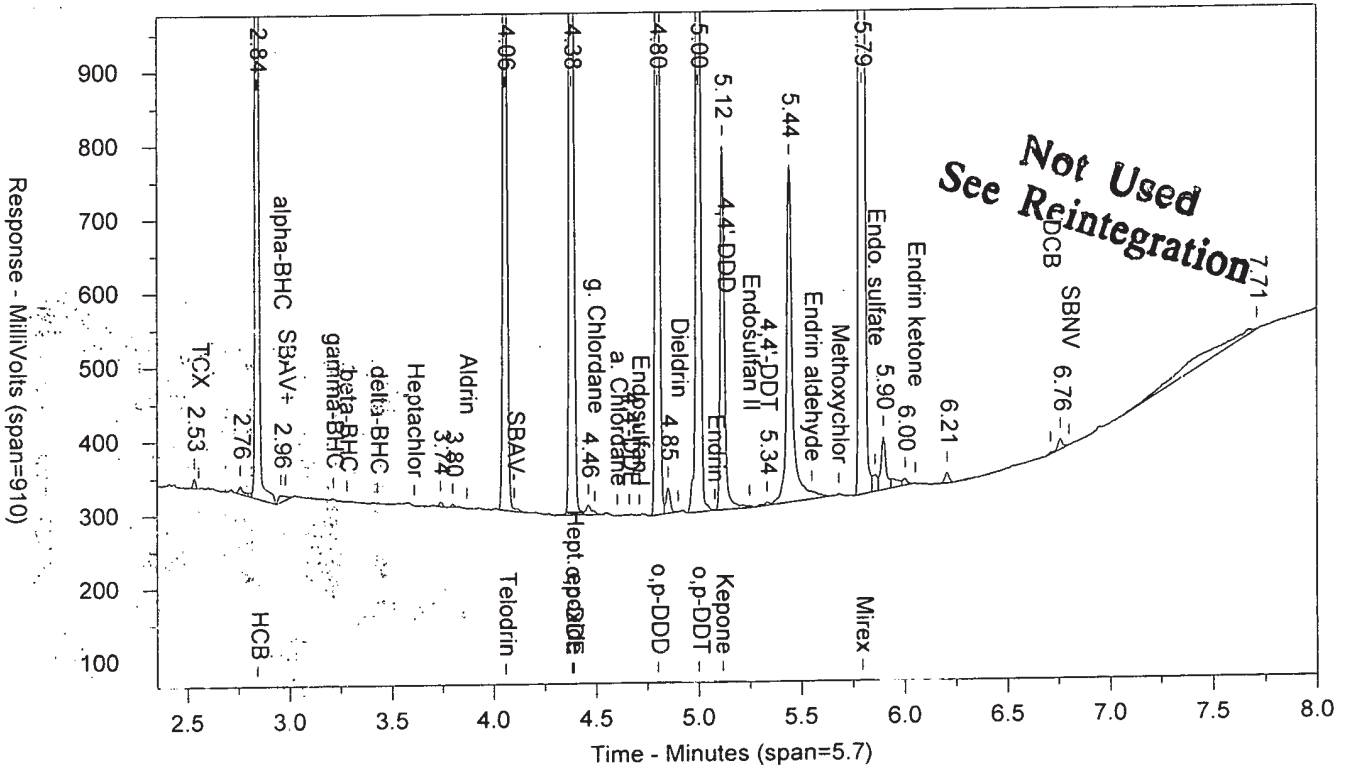
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CCAL 183059999

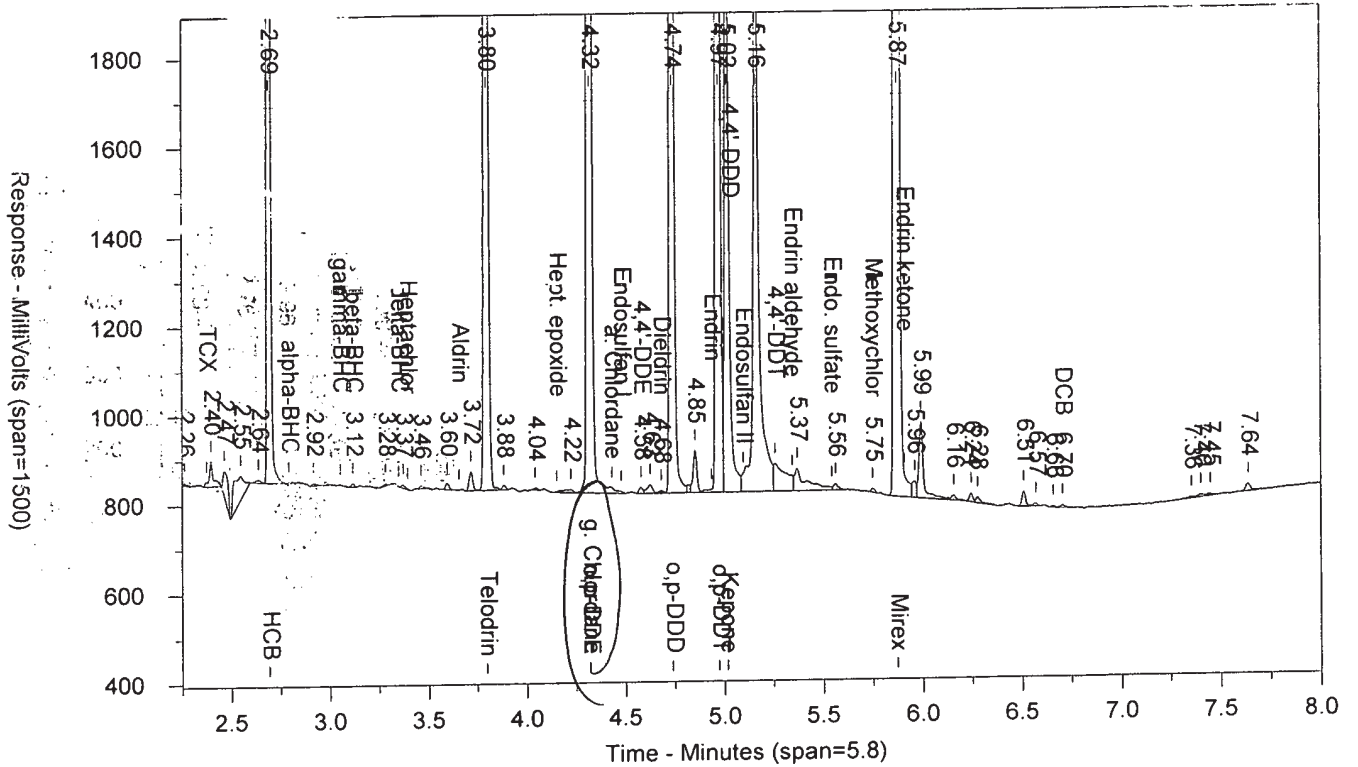
00177

SW-846 8081A

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.017.RAW





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: JCMEX1824D AAICMEXAA CCAL 1830599999 00177  
 Injected On: 11/2/2018 10:24:36 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Sample Weight: 1  
 Dilution Factor: 1  
 SW-846 8081A

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

**Not Used  
 See Reintegration**

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.841	1779733	4.223	HCB	2.692	6049837	4.283	HCB
2.957	9403	.017	alpha-BHC		0		alpha-BHC
	0		beta-BHC	3.117	7806	.011	beta-BHC
4.057	1069955	4.934	Telodrin	3.798	3582965	5.006	Telodrin
	0		g. Chlordane	4.321	5236935	5.246	g. Chlordane
4.383	1720795	0.249	o,p-DDE		0		o,p-DDE
	0		4,4'-DDE	4.579	13511	.015	4,4'-DDE
	0		Dieldrin	4.682	5333	.006	Dieldrin
4.801	1505310	8.902	o,p-DDD	4.738	4390509	8.777	o,p-DDD
5	1744054	8.493	o,p-DDT	4.971	5100233	9.129	o,p-DDT
5.116	494392	4.648	Kepone	5.015	1450727	6.504	Kepone
5.335	4451	.017	4,4'-DDT		0		4,4'-DDT
	0		Methoxychlor	5.748	8357	.023	Methoxychlor
5.795	4278805	22.539	Mirex	5.872	12088710	21.86	Mirex
	0		DCB	6.705	6118	-.201	DCB

Files:  
 Area File: 05pest18306001.017.RAW  
 Area File: 05pest18306001B.017.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/2/2018 10:32:37 PM  
 File Reported On: 11/4/2018 at 7:30:30 AM

ICMEX1824D

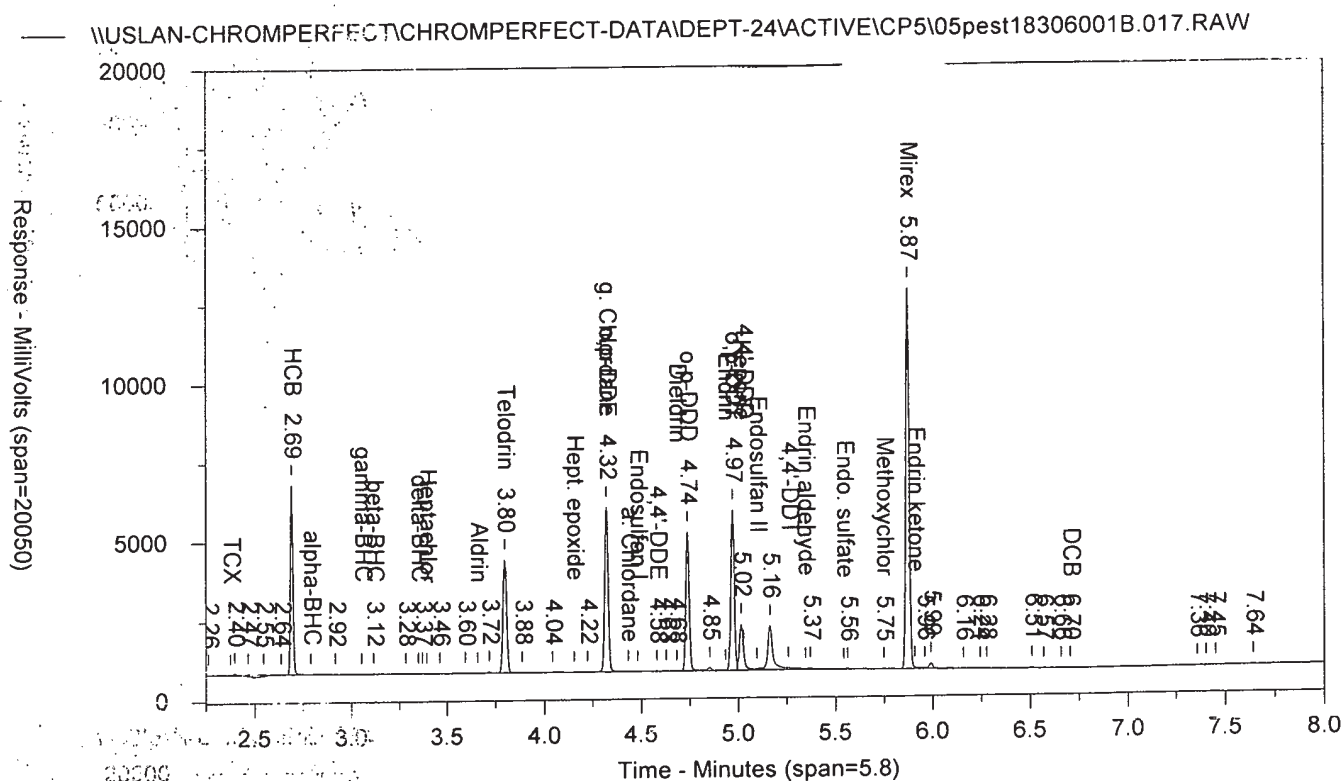
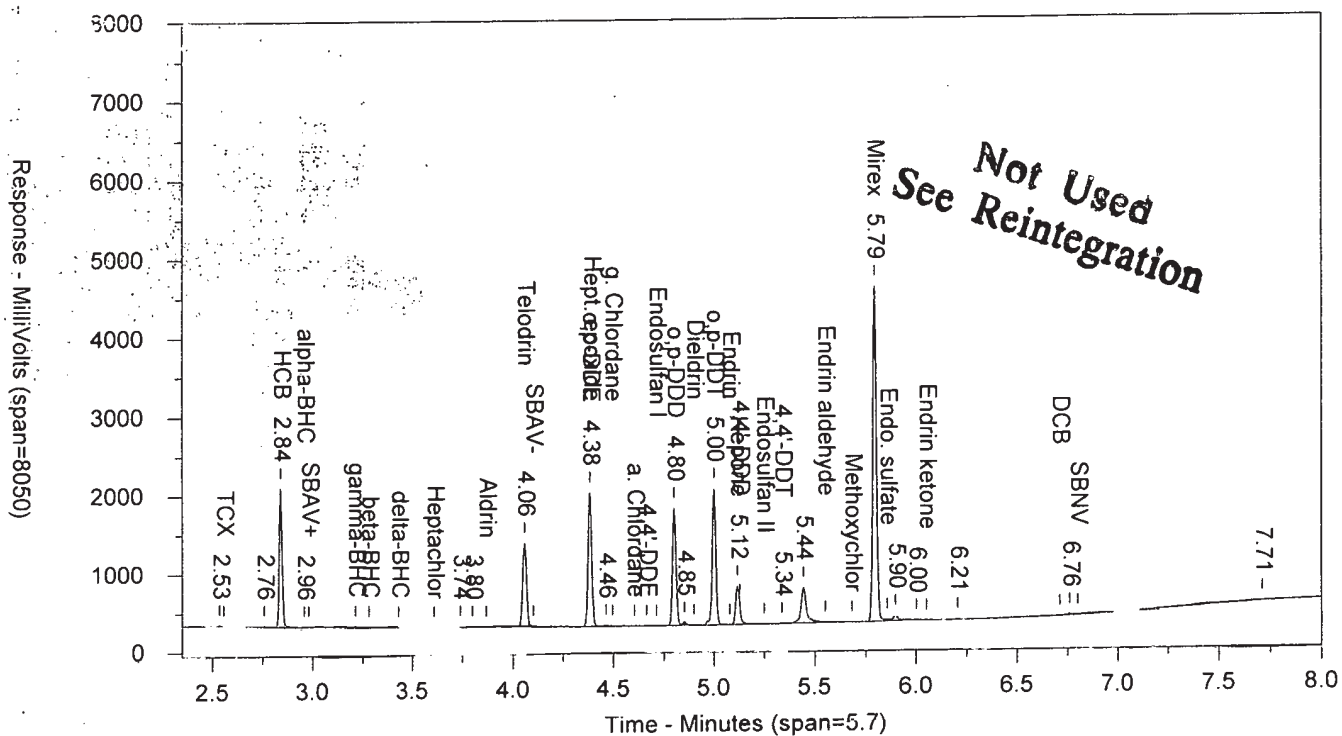
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CCAL 183059999

00177

SW-846 8081

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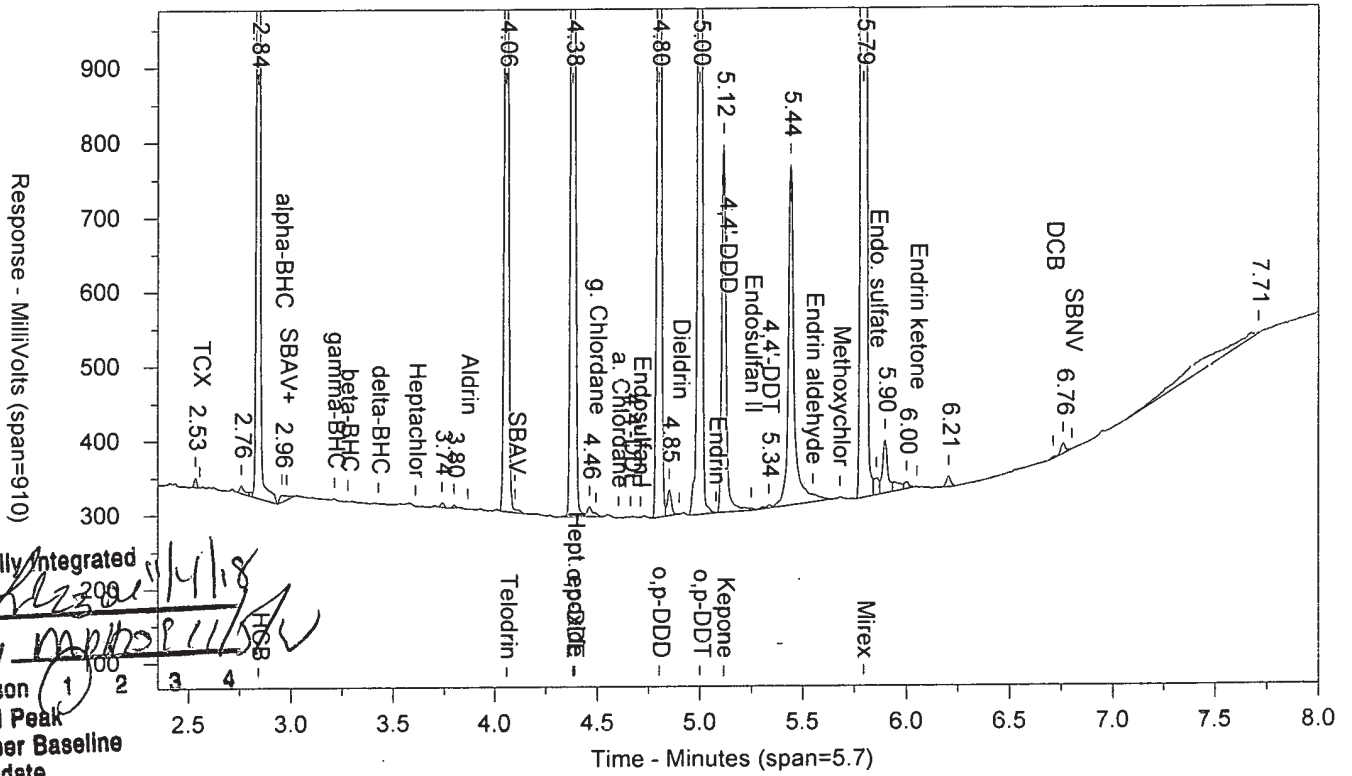
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CCAL 183059999

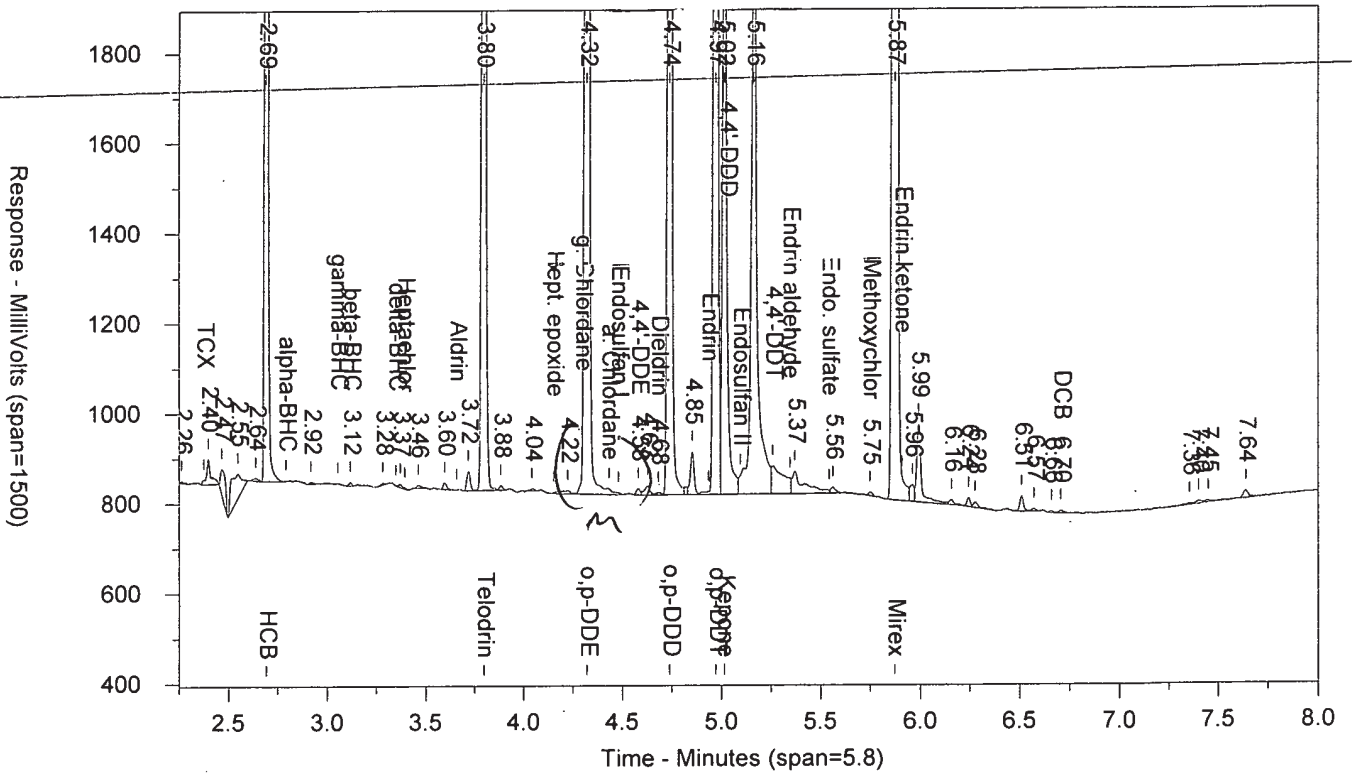
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SW-846 8081A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.017.BND



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.017.BND



## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICMEX1824D AAICMEXAA CCAL 183059999 00177

SW-846 8081A

Injected On: 11/2/2018 10:24:36 PM

Sample Weight: 1

Instrument ID: CP5-9190

Dilution Factor: 1

Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min

Column A ID: STX-CLP 30m x 0.32mm x 0.5um

Column B ID: STX-CLP2 30m x 0.32mm x 0.25um

Injection Volume: 1 ul

Threshold: 7

Calibration Type: external

Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.841	1779733	4.223	HCB	2.692	6049837	4.283	HCB
2.957	9403	.017	alpha-BHC		0		alpha-BHC
	0		beta-BHC	3.117	7806	.011	beta-BHC
4.057	1069955	4.934	Telodrin	3.798	3582965	5.006	Telodrin
4.383	1720785	9.249	o,p-DDE	4.321	5236935	9.169	o,p-DDE
	0		4,4'-DDE	4.579	13511	.015	4,4'-DDE
	0		Dieldrin	4.682	5333	.006	Dieldrin
4.801	1505310	8.902	o,p-DDD	4.738	4390509	8.777	o,p-DDD
5	1744054	8.493	o,p-DDT	4.971	5100233	9.129	o,p-DDT
5.116	494392	4.648	Kepone	5.015	1450727	6.504	Kepone
5.335	4451	.017	4,4'-DDT		0		4,4'-DDT
	0		Methoxychlor	5.748	8357	.023	Methoxychlor
5.795	4278805	22.539	Mirex	5.872	12088710	21.86	Mirex
	0		DCB	6.705	6118	-.201	DCB

## Files:

Area File: 05pest18306001.017.BND

Area File: 05pest18306001B.017.BND

Method A: 05PESTD.MET

Method B: 05PESTDB.MET

Calibration File A: 05pest1830601.cal

Calibration File B: 05pest1830601b.cal

Format A: pestD5.FMTA

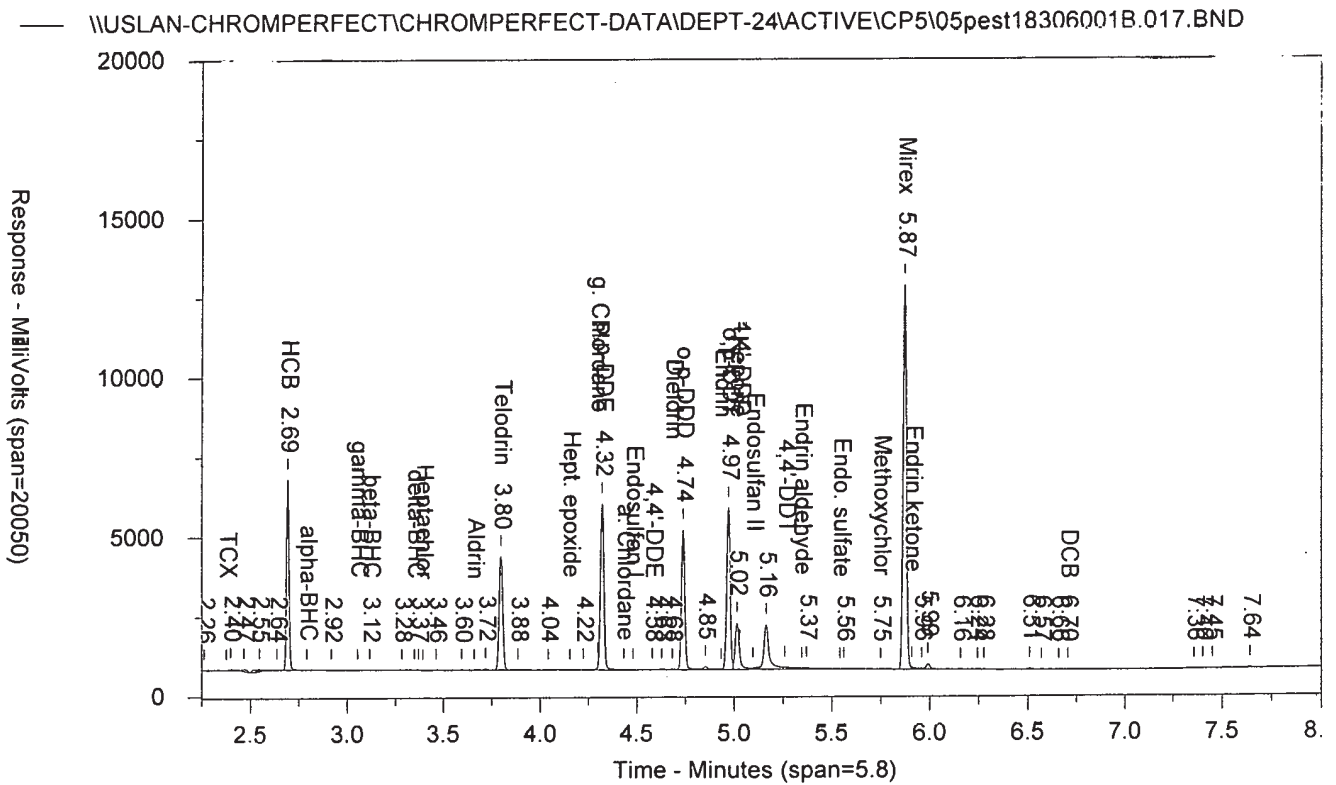
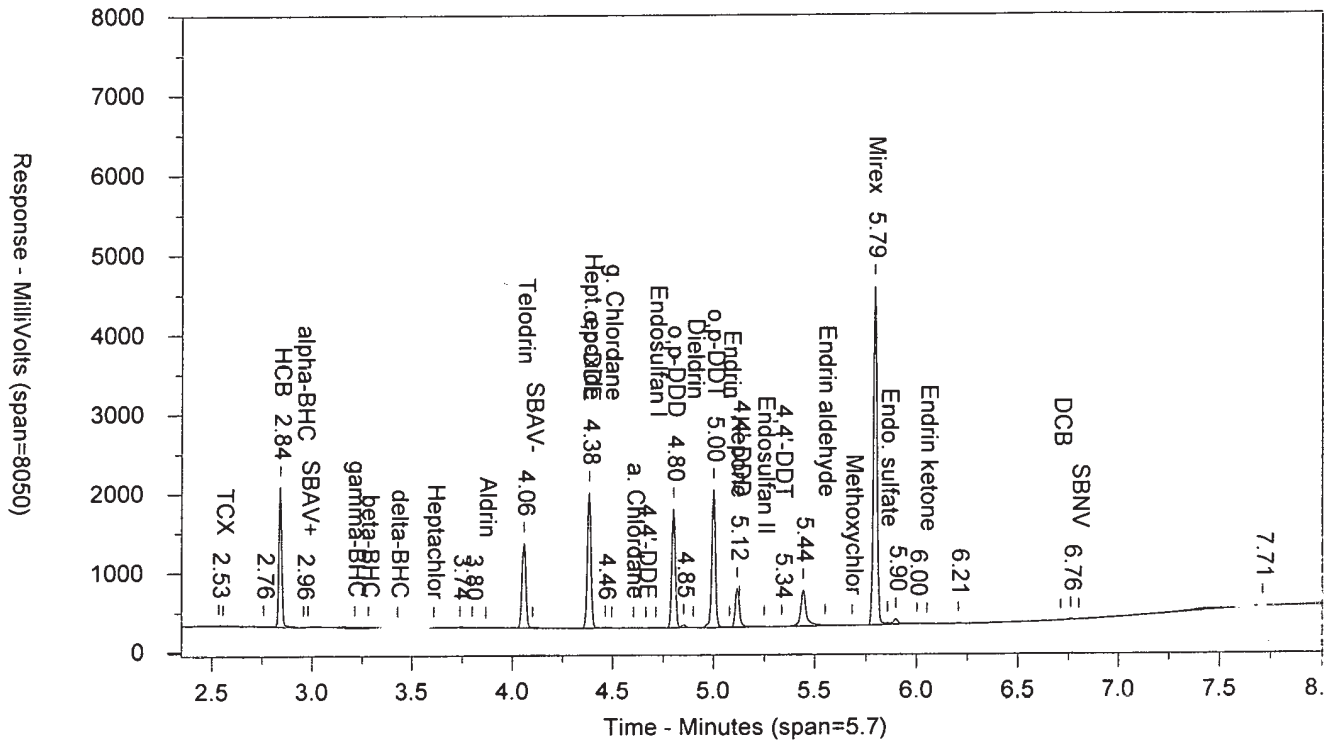
Format B: pestD5.FMTB

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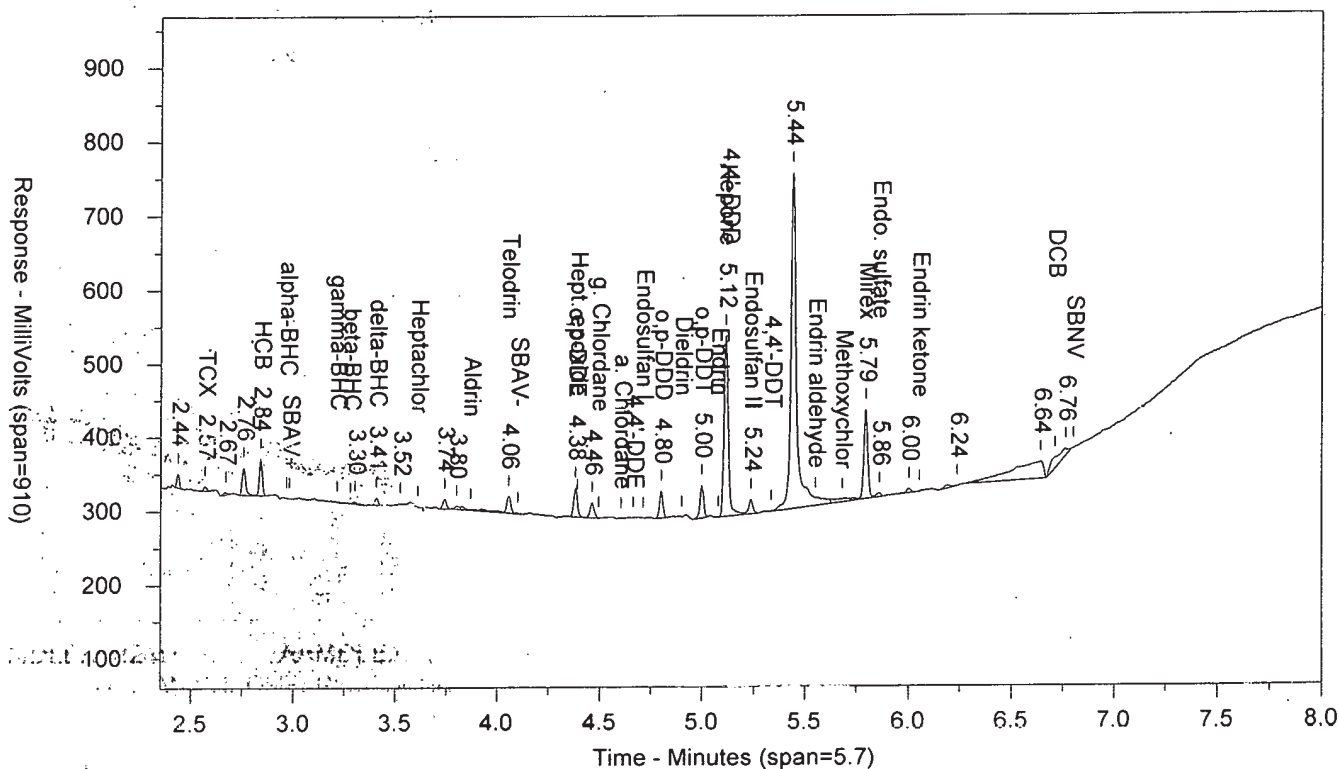
ICMEX1824D AAICMEXAA CCAL 1830599999 00177 SW-846 80

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.017.BND

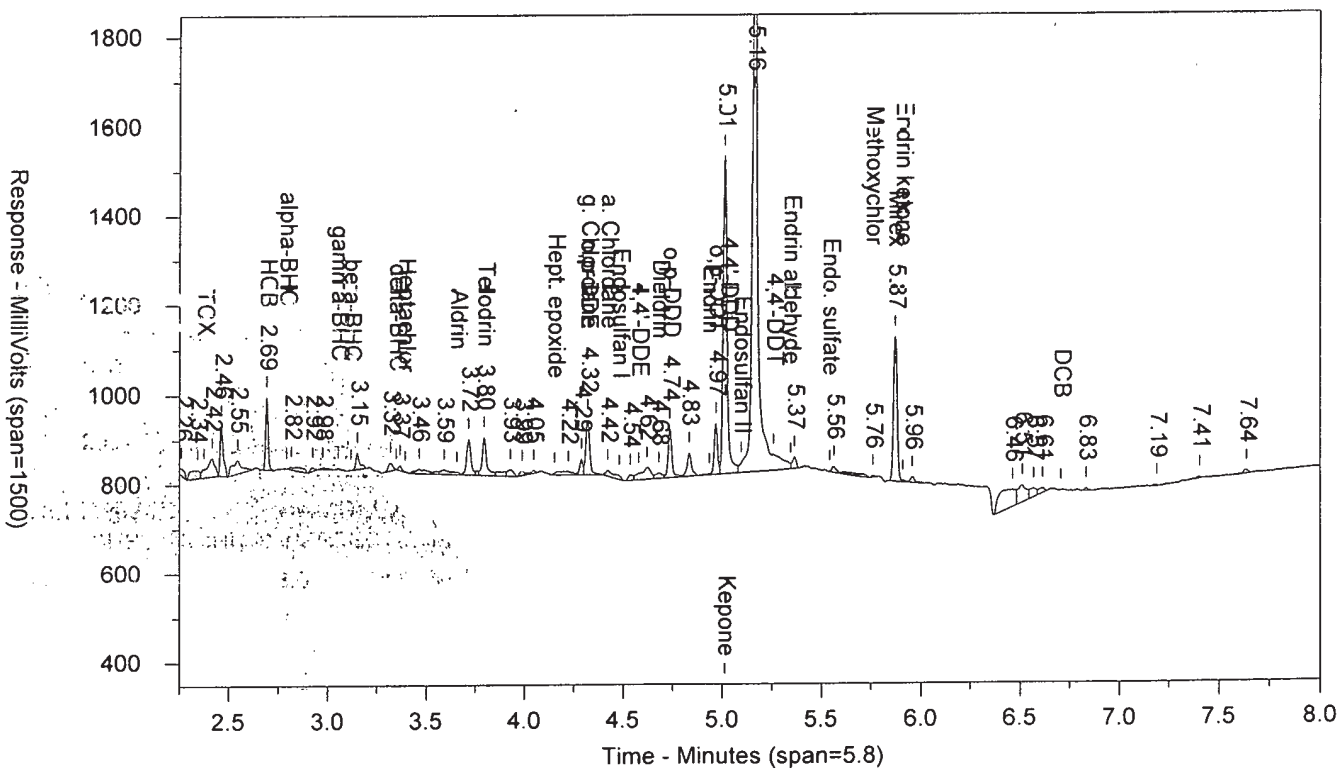


MDLEX1824D AAMDLEXAA ICAL 1830599999 00177 SW-846 8081A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.043.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001B.043.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MDLEX1824D AAMDLEXAA ICAL 183059999 00177 SW-846 8081A  
 Injected On: 11/3/2018 3:58:57 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.568	5876	.015	TCX		0		TCX
2.84	49534	.118	HCB	2.692	161881	.115	HCB
3.408	9342	.022	delta-BHC		0		delta-BHC
4.056	22606	.104	Telodrin	3.797	85319	.119	Telodrin
	0		g. Chlordane	4.32	122311	.123	g. Chlordane
4.381	39467	.212	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.422	13936	.014	a. Chlordane
	0		Dieldrin	4.68	12866	.013	Dieldrin
4.8	36659	.217	o,p-DDD	4.737	109829	.22	o,p-DDD
4.999	44436	.215	o,p-DDT	4.969	114669	.205	o,p-DDT
5.115	245835	2.913	Kepone	5.014	712384	4.972	Kepone
5.236	19721	.074	Endosulfan II		0		Endosulfan II
	0		Methoxychlor	5.759	4398	.012	Methoxychlor
5.794	121622	.641	Mirex	5.871	324664	.587	Mirex
5.86	5218	.022	Endo. sulfate		0		Endo. sulfate

Files:  
 Area File: 05pest18306001.043.RAW  
 Area File: 05pest18306001B.043.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830601.cal  
 Calibration File B: 05pest1830601b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/3/2018 4:06:58 AM  
 File Reported On: 11/4/2018 at 7:33:31 AM

MDLEX1824D

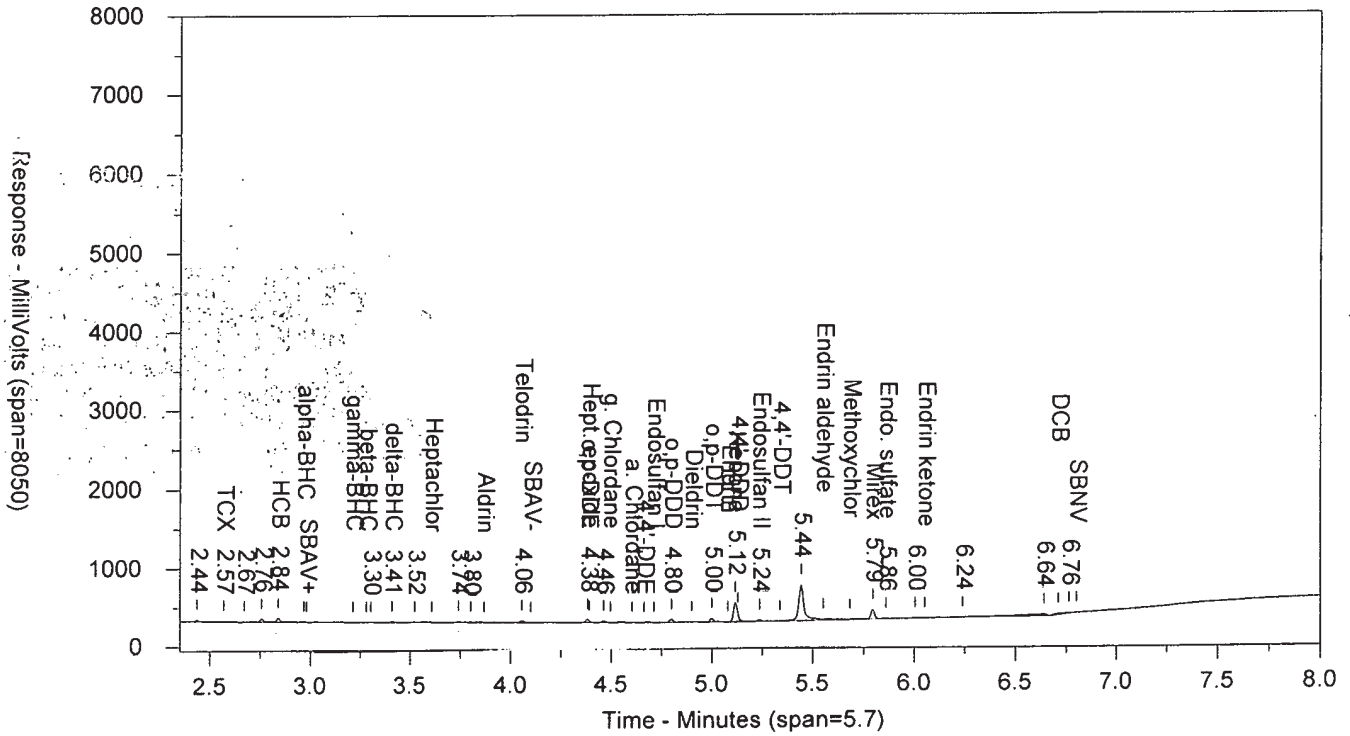
AAMDLEXAA

ICAL 1830599999

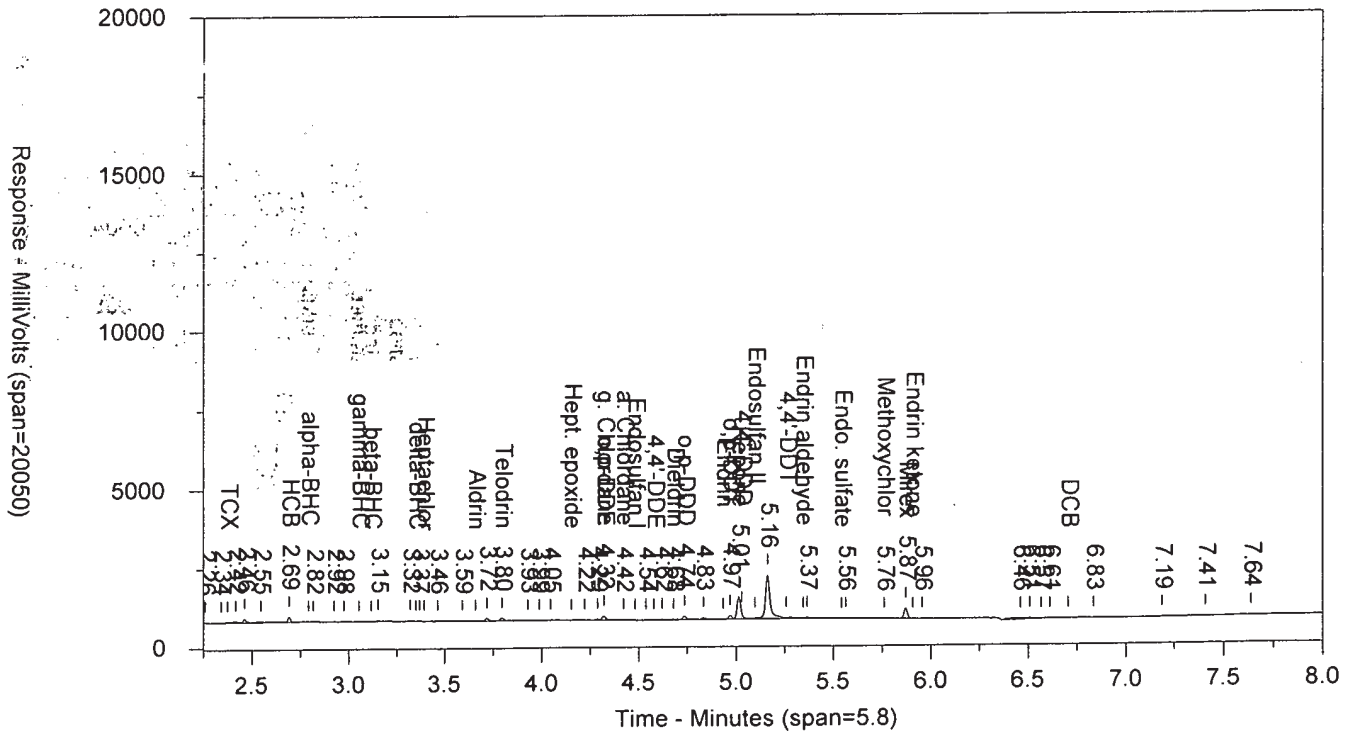
00177

SW-846 8081

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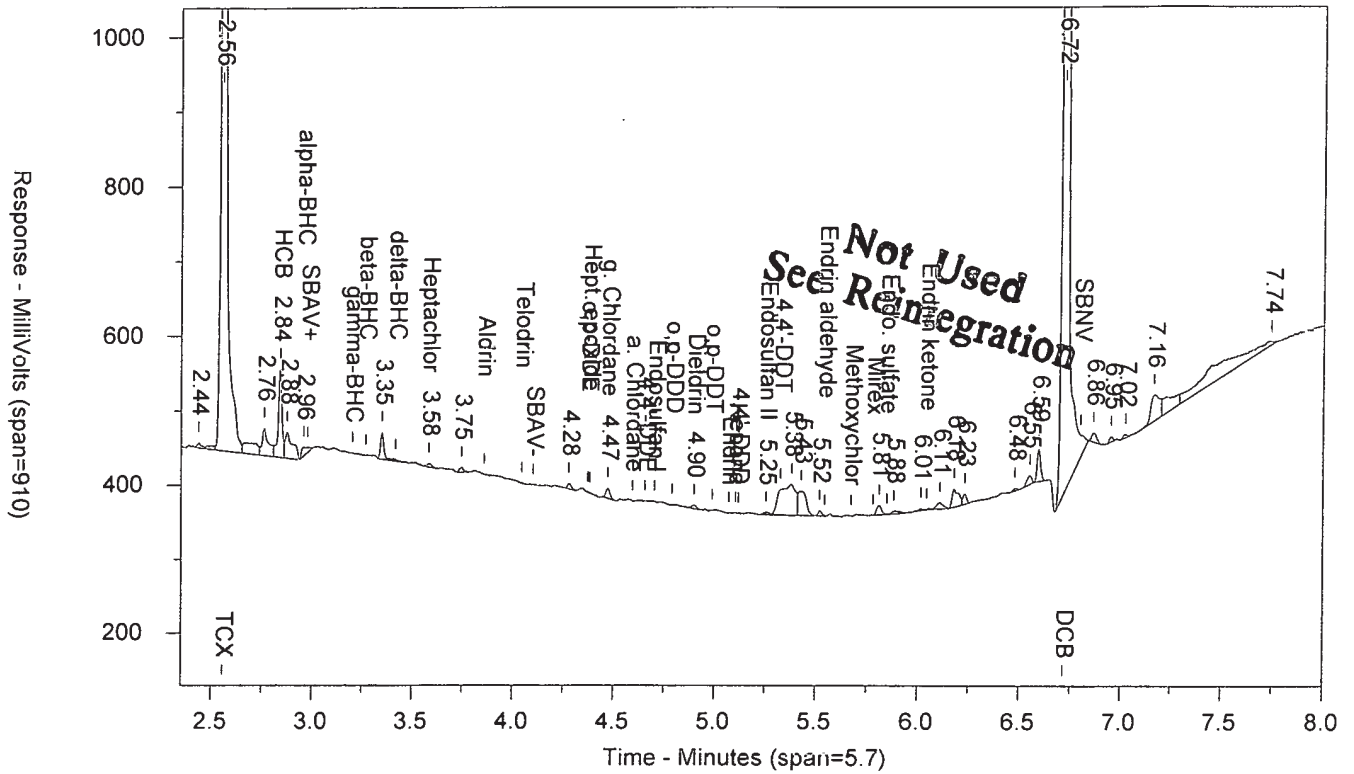


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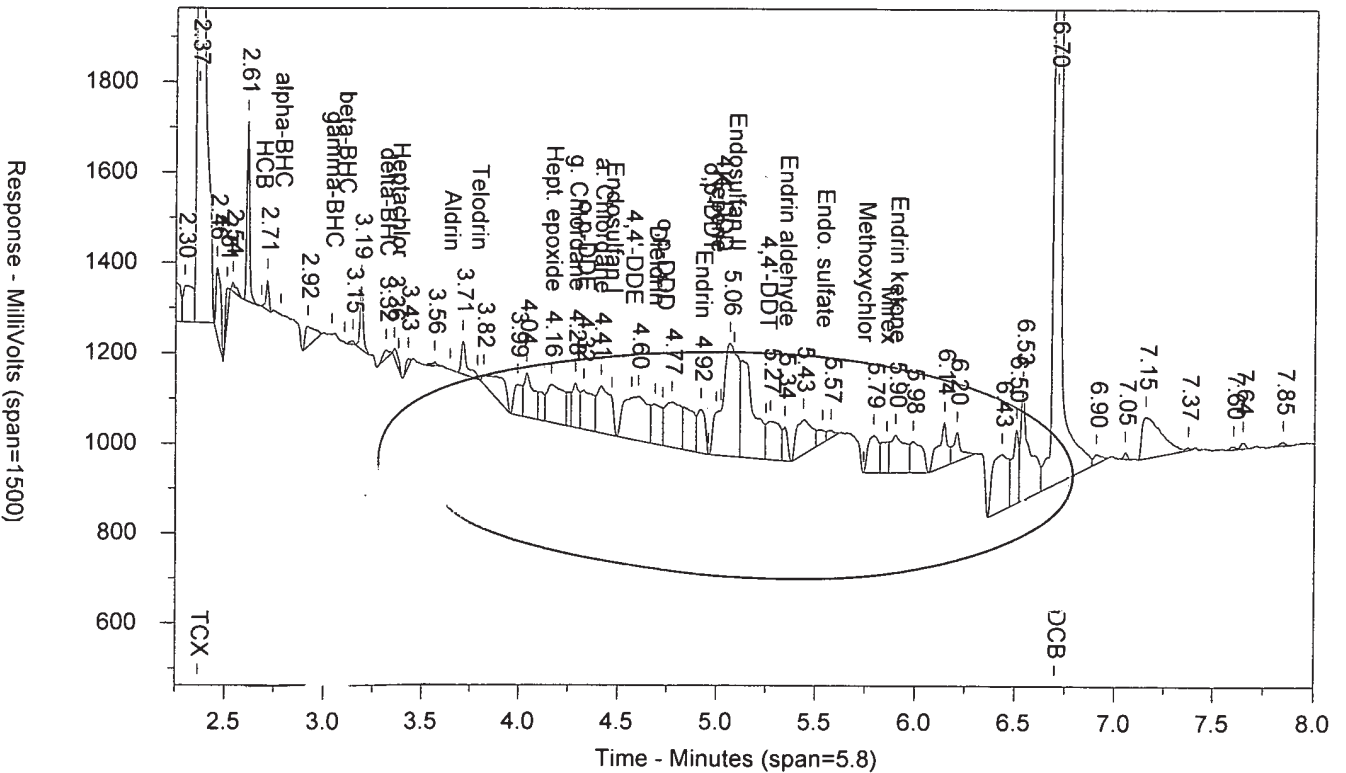




IBLKX1824B    AAPIBLKAA    PIBLK1831299999    00177    SW-846 8081A  
— \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.024.RAW



— \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.024.RAW



LANCASTER LABORATORIES

Sample Number: IBLKX1824B      AAPIBLKAA      PIBLK183129999      00177      SW-846 8081A  
 Injected On: 11/9/2018 6:12:20 PM      Sample Weight: 1000  
 Instrument ID: CP5-9190      Dilution Factor: 10  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

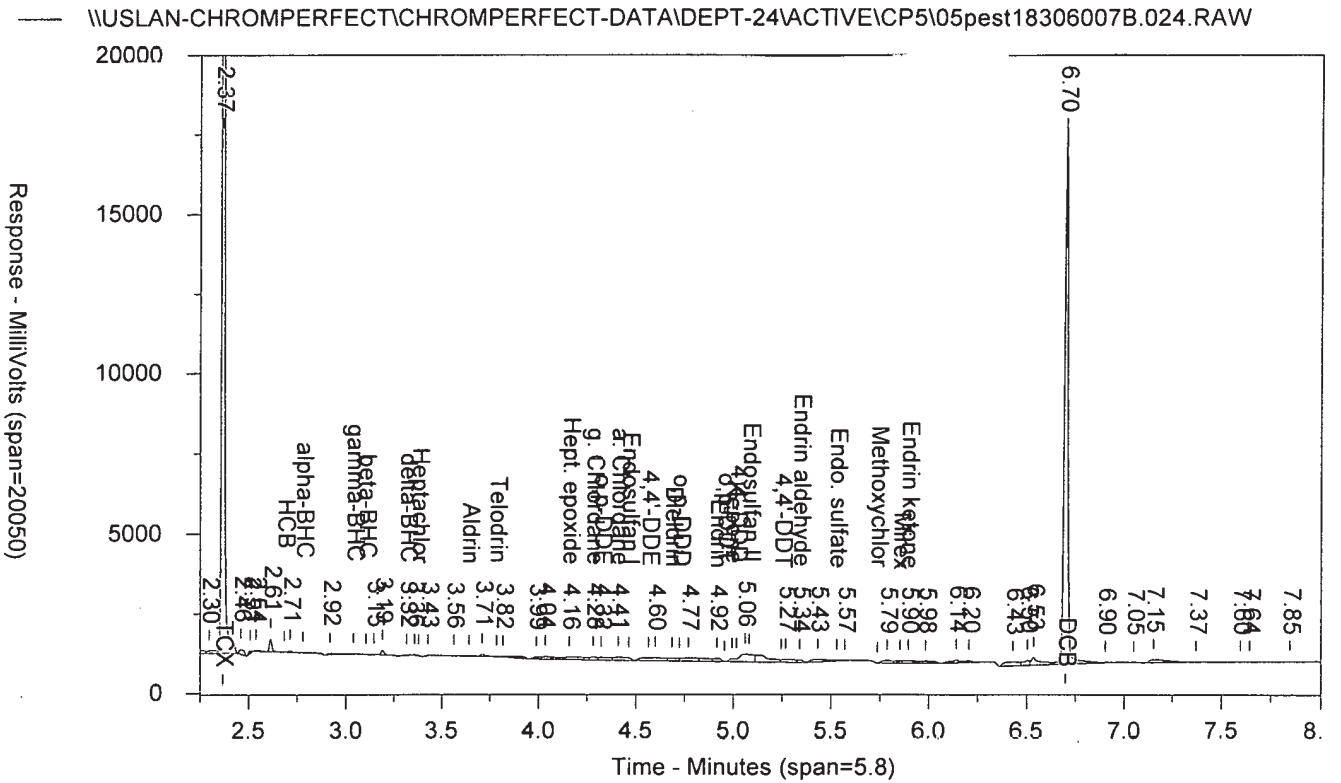
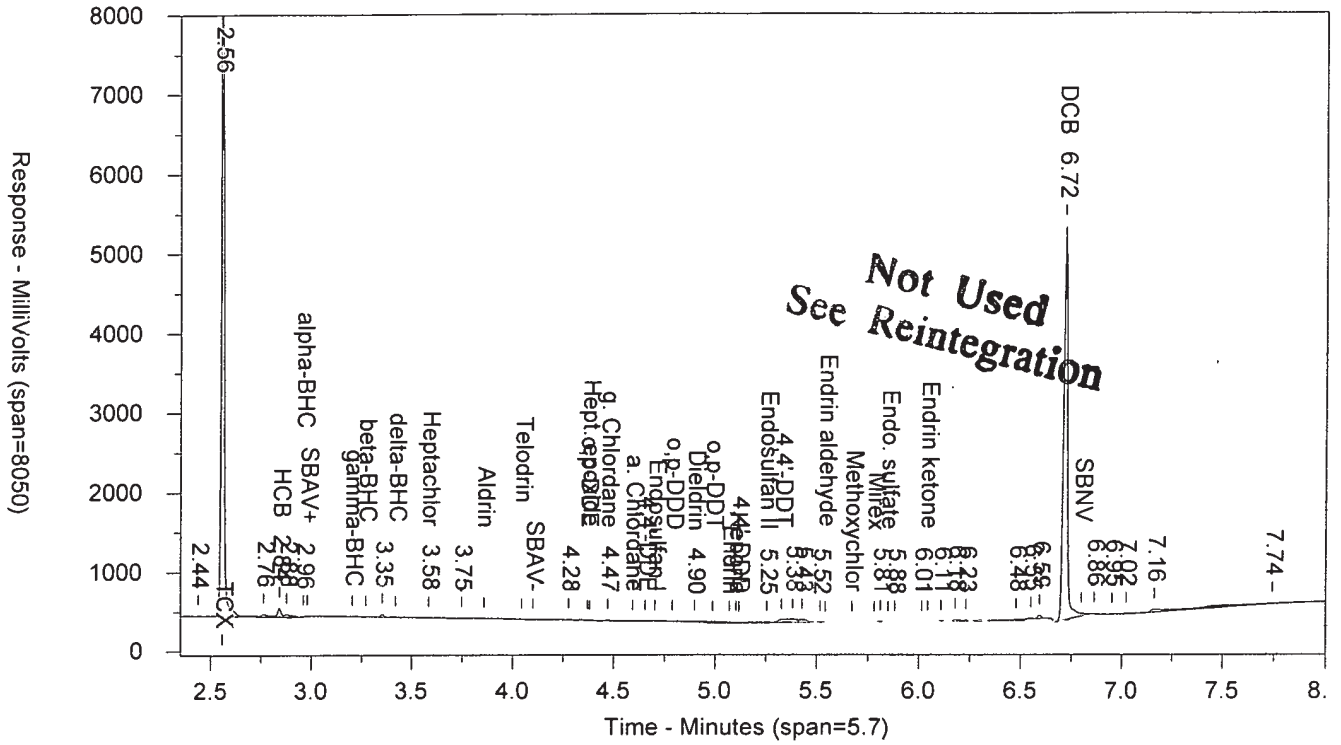
**Not Used  
 See Reintegration**

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.557	9489675	.239	TCX	2.365	46819960	.28	TCX
2.842	118748	.003	TCX		0		TCX
2.96	12137		alpha-BHC		0		alpha-BHC
	0		delta-BHC	3.317	19050		delta-BHC
3.584	4690		Heptachlor		0		Heptachlor
	0		Hept. epoxide	4.159	84209	.001	Hept. epoxide
4.471	13827		g. Chlordane	4.28	98670	.001	g. Chlordane
	0		o,p-DDE	4.322	87057	.002	o,p-DDE
	0		a. Chlordane	4.41	104289	.001	a. Chlordane
4.898	5113		Dieldrin		0		Dieldrin
	0		Endrin	4.916	97272	.001	Endrin
5.254	3385		Endosulfan II		0		Endosulfan II
	0		Endrin aldehyde	5.34	75427	.001	Endrin aldehyde
	0		Endrin ketone	5.896	84214	.001	Endrin ketone
6.716	4949797	.26	DCB	6.698	16993450	.275	DCB

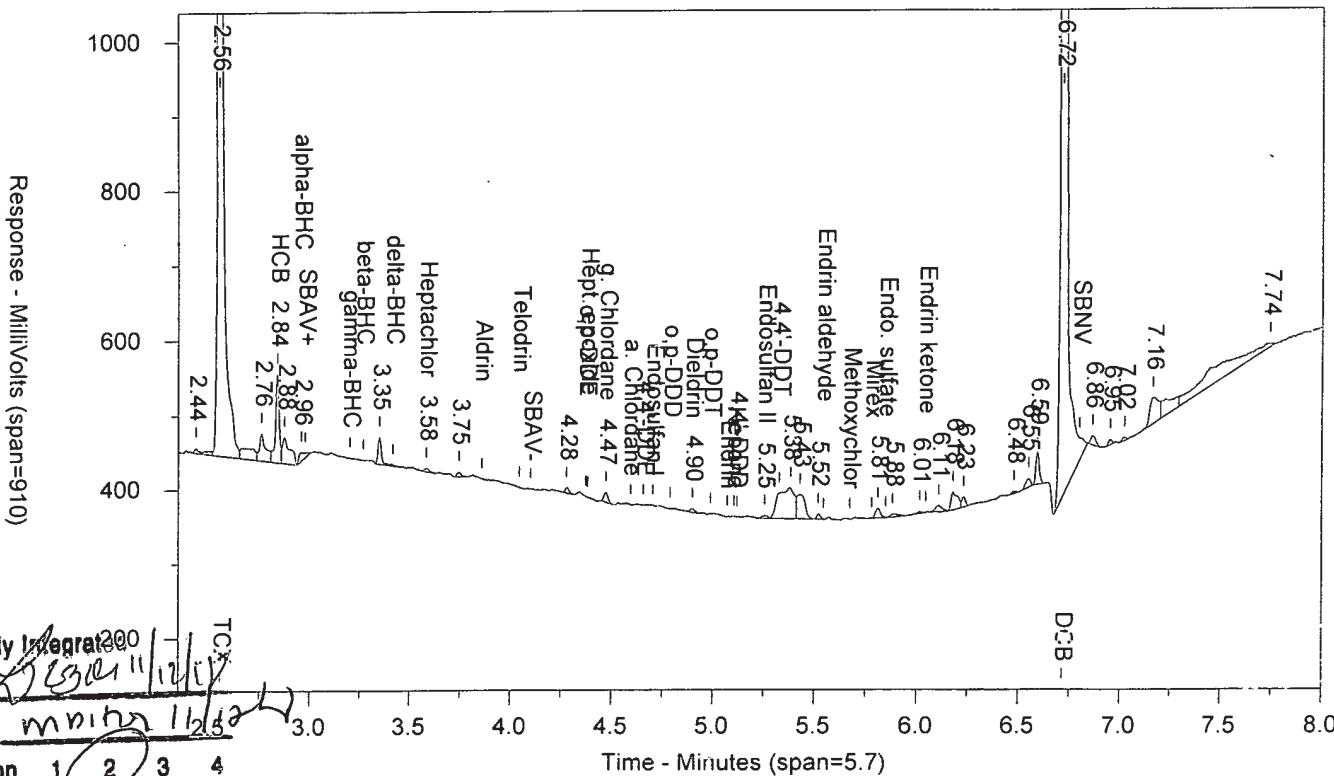
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 Method B: 05PESTD.MFT  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/9/2018 6:20:21 PM  
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IBLKX1824B      AAPIBLKAA      PIBLK1831299999      00177      SW-846 8081  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.024.RAW



IBLKX1824B    AAPIBLKAA    PIBLK183129999    00177    SW-846 8081A  
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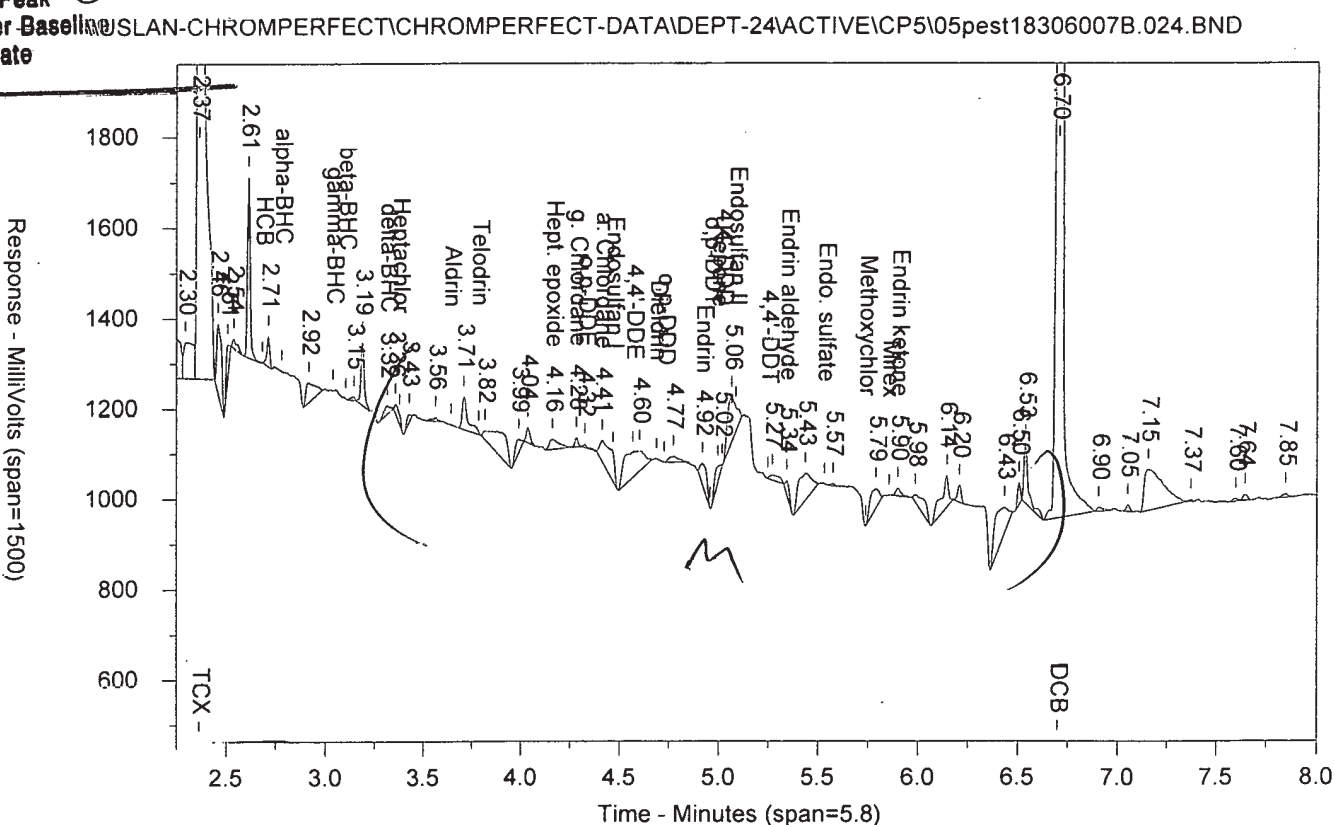
M = Manually Integrated

Analyst

Approved by

Circle Reason 1 2 3 4

- 1 = Missed Peak
- 2 = Improper Baseline
- 3 = RT Update
- 4 = Other



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: IBLKX1824B      AAPIBLKAA      PIBLK183129999      00177      SW-846 8081A  
 Injected On: 11/9/2018 6:12:20 PM      Sample Weight: 1000  
 Instrument ID: CP5-9190      Dilution Factor: 10  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

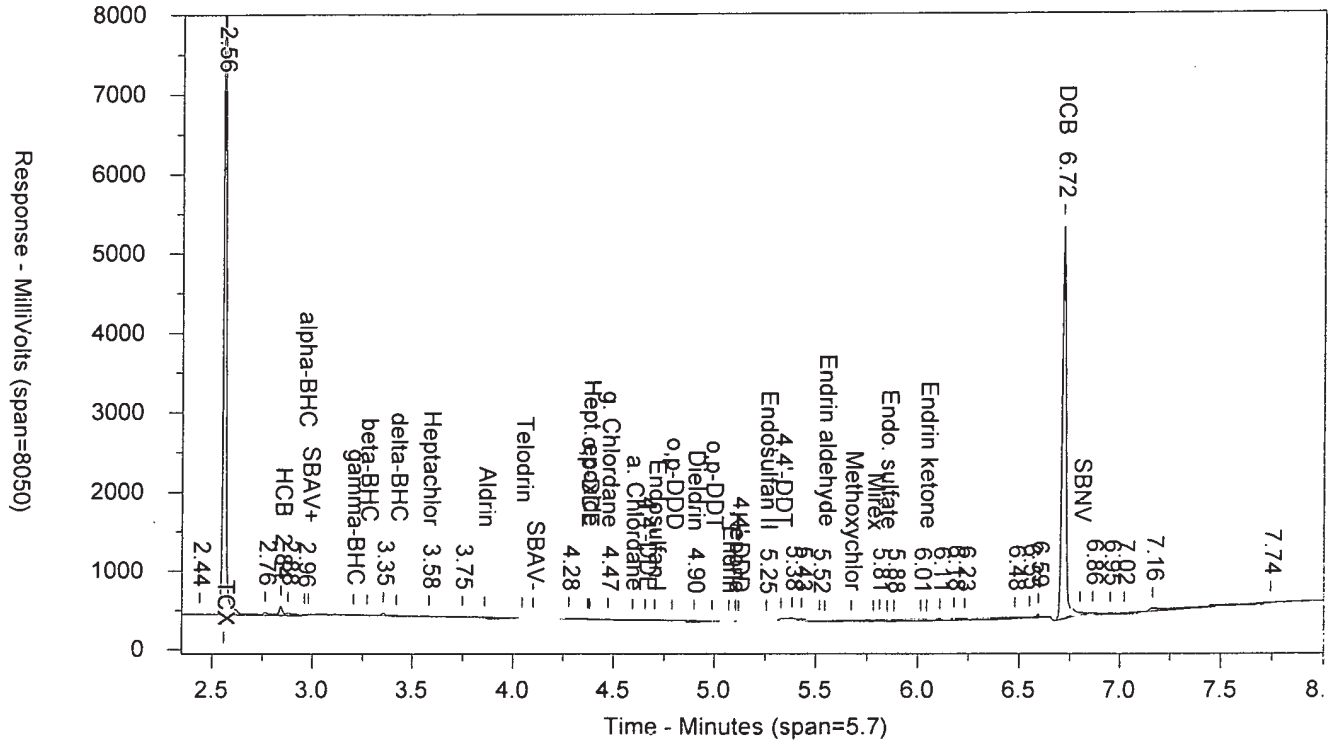
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.557	9489675	.239	TCX	2.365	46819960	.28	TCX
2.842	118748	.003	TCX		0		TCX
2.96	12137		alpha-BHC		0		alpha-BHC
	0		delta-BHC	3.317	19050		delta-BHC
3.584	4690		Heptachlor		0		Heptachlor
	0		Hept. epoxide	4.159	22551		Hept. epoxide
4.471	13827		g. Chlordane	4.28	21118		g. Chlordane
	0		o,p-DDE	4.322	7724		o,p-DDE
	0		a. Chlordane	4.41	46806		a. Chlordane
4.898	5113		Dieldrin		0		Dieldrin
	0		Endrin	4.916	45003		Endrin
	0		4,4'-DDD	5.016	3272		4,4'-DDD
5.254	3385		Endosulfan II		0		Endosulfan II
	0		Endrin aldehyde	5.34	30084		Endrin aldehyde
	0		Endrin ketone	5.896	17616		Endrin ketone
6.716	4949797	.26	DCB	6.698	16950700	.274	DCB

Files:

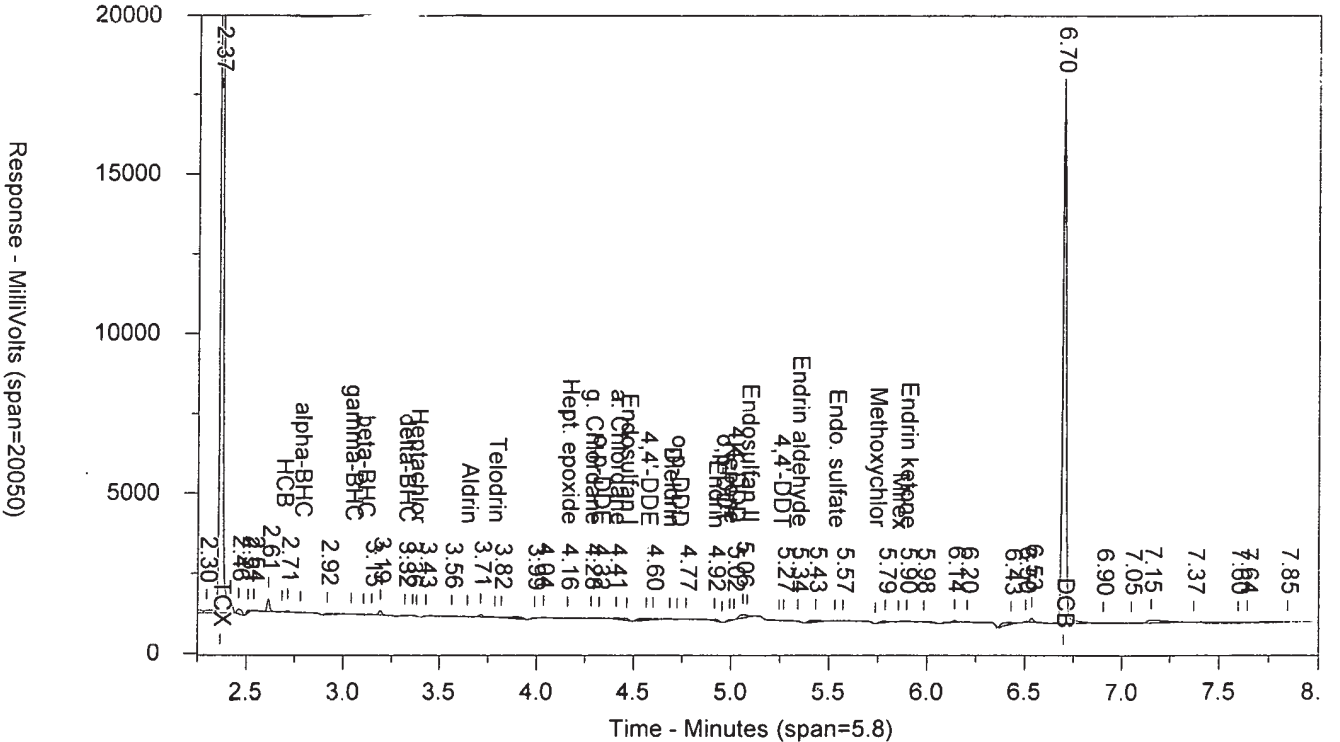
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 Area File: 05pest18306007B.024.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/12/2018 1:04:25 PM  
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IBLKX1824B      AAPIBLKAA      PIBLK1831299999      00177      SW-846 8081

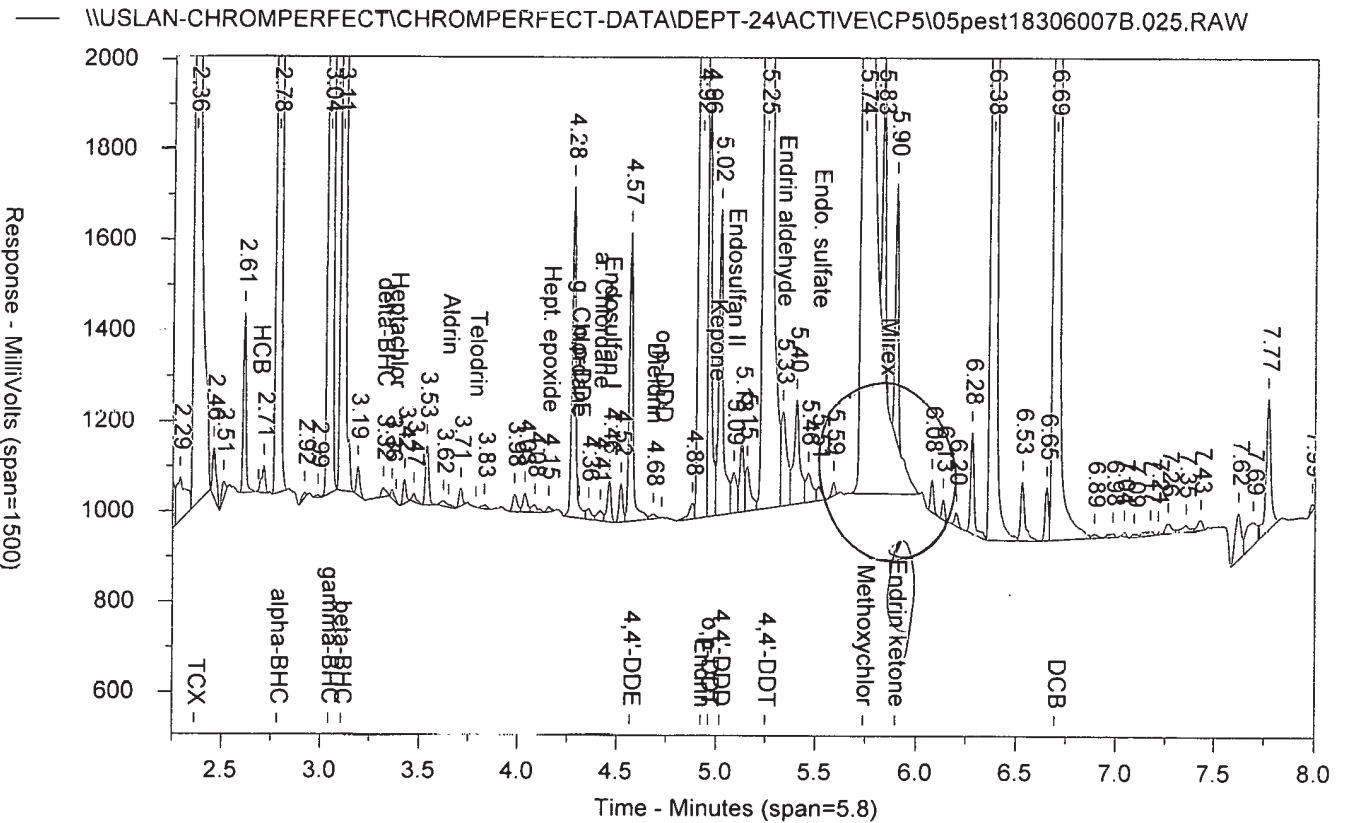
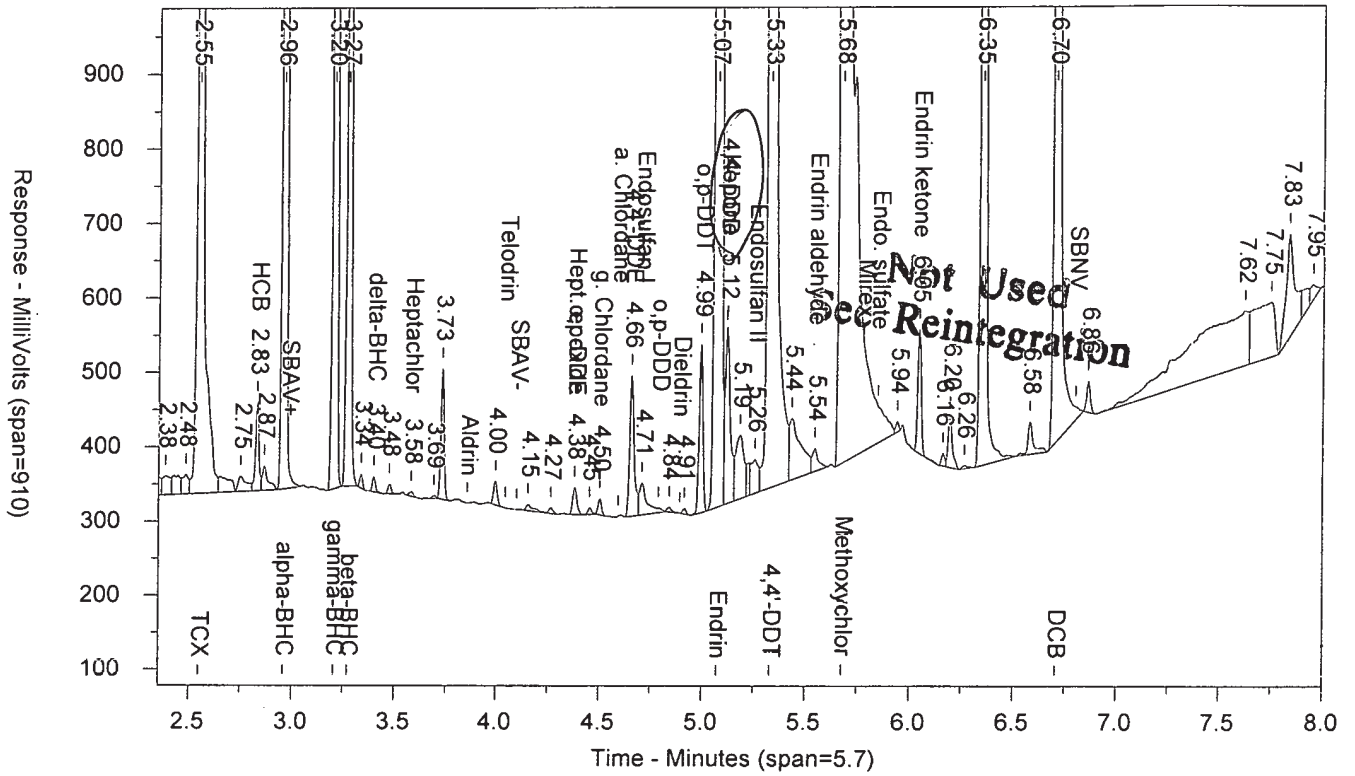
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EVALX1824B AAPEMAA IPEM 1831299999 00177 SW-846 8081A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.025.RAW



## LANCASTER LABORATORIES

Sample Number: EVALX1824B    AAPEMAA    IPEM 1831299999    00177

SW-846 8081A

Injected On: 11/9/2018 6:25:05 PM

Sample Weight: 1

Instrument ID: CP5-9190

Dilution Factor: 1

Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min

Column A ID: STX-CLP 30m x 0.32mm x 0.5um

Column B ID: STX-CLP2 30m x 0.32mm x 0.25um

Injection Volume: 1 ul

Threshold: 7

Calibration Type: external

Quantitation: Height

Analyst: 2306

**Not Used  
See Reintegration**

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.546	8726545	22.013	TCX	2.364	41955910	25.11	TCX
2.958	6076299	11.076	alpha-BHC	2.781	29522420	13.157	alpha-BHC
2.83	119413	.283	HCB		0		HCB
3.204	5107467	11.04	gamma-BHC	3.041	24398100	13.1	gamma-BHC
3.272	2113856	10.26	beta-BHC	3.106	8942492	11.43	beta-BHC
3.399	20550	.048	delta-BHC	3.316	21230	.013	delta-BHC
3.58	6170	.016	Heptachlor		0		Heptachlor
	0		Hept. epoxide	4.152	11483	.01	Hept. epoxide
4.381	36977	.199	o,p-DDE		0		o,p-DDF
	0		a. Chlordane	4.413	23541	.02	a. Chlordane
4.71	42660	.142	Endosulfan I	4.459	91941	.09	Endosulfan I
4.504	21905	.069	g. Chlordane		0		g. Chlordane
4.658	189053	.611	4,4'-DDE	4.566	640086	.568	4,4'-DDE
	0		Dieldrin	4.681	11496	.01	Dieldrin
5.072	16661300	56.472	Endrin	4.922	68832150	66.496	Endrin
4.993	226110	1.101	o,p-DDT	4.959	919879	1.647	o,p-DDT
	0		4,4'-DDD	5.018	678687	.764	4,4'-DDD
5.256	45322	.166	Endosulfan II	5.087	90238	.093	Endosulfan II
5.12	237260	2.853	Kepone		0		Kepone
5.33	28694300	107.936	4,4'-DDT	5.248	125669400	135.818	4,4'-DDT
5.545	30735	.136	Endrin aldehyde	5.333	208751	.266	Endrin aldehyde
	0		Endo. sulfate	5.512	31049	.034	Endo. sulfate
5.677	32299730	253.208	Methoxychlor	5.738	125942600	291.977	Methoxychlor
6.045	165521	.566	Endrin ketone	5.897	565297	.589	Endrin ketone
6.704	4657094	24.405	DCB	6.692	15842980	25.624	DCB

## Files:

Area File: 05pest18306007.025.RAW

Area File: 05pest18306007B.025.RAW

Method A: 05PESTD.MET

Method B: 05PESTDDB.MET

Calibration File A: 05pest1830603.cal

Calibration File B: 05pest1830603b.cal

Format A: pestD5.FMTA

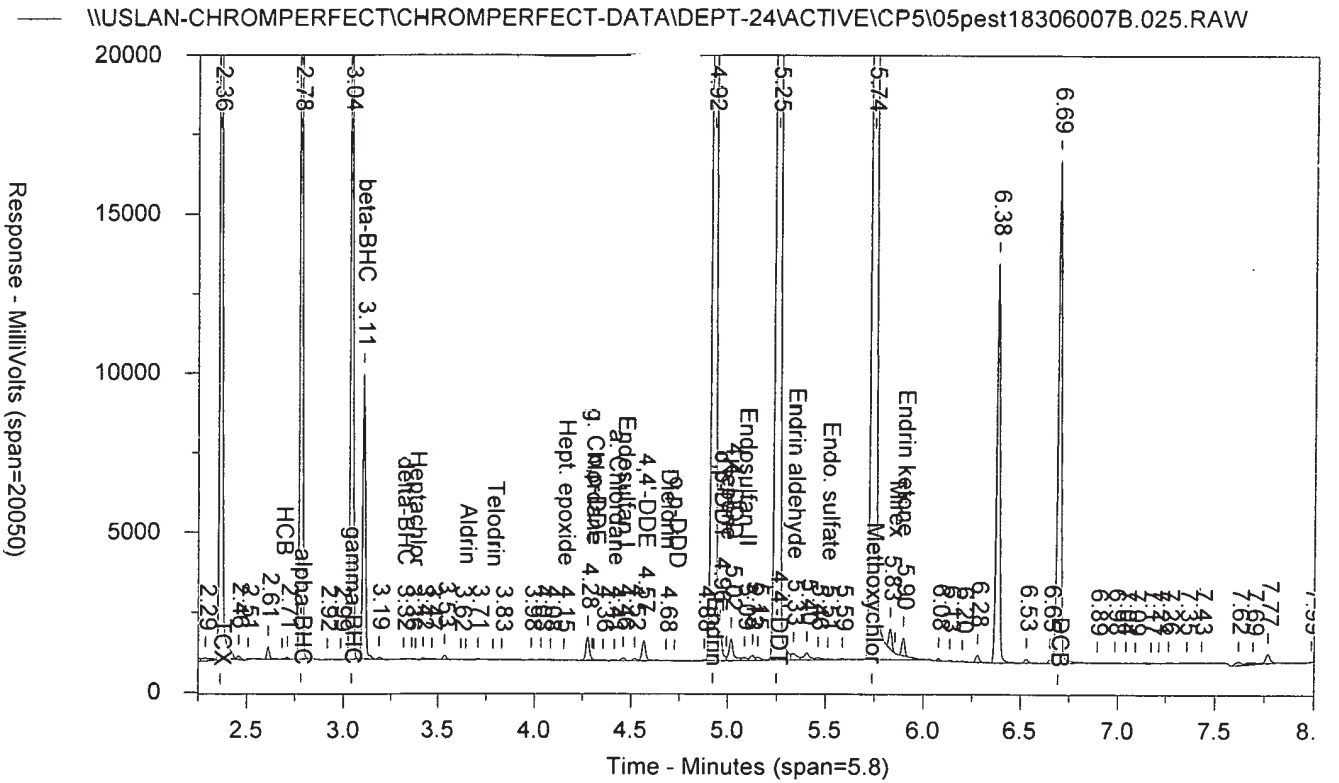
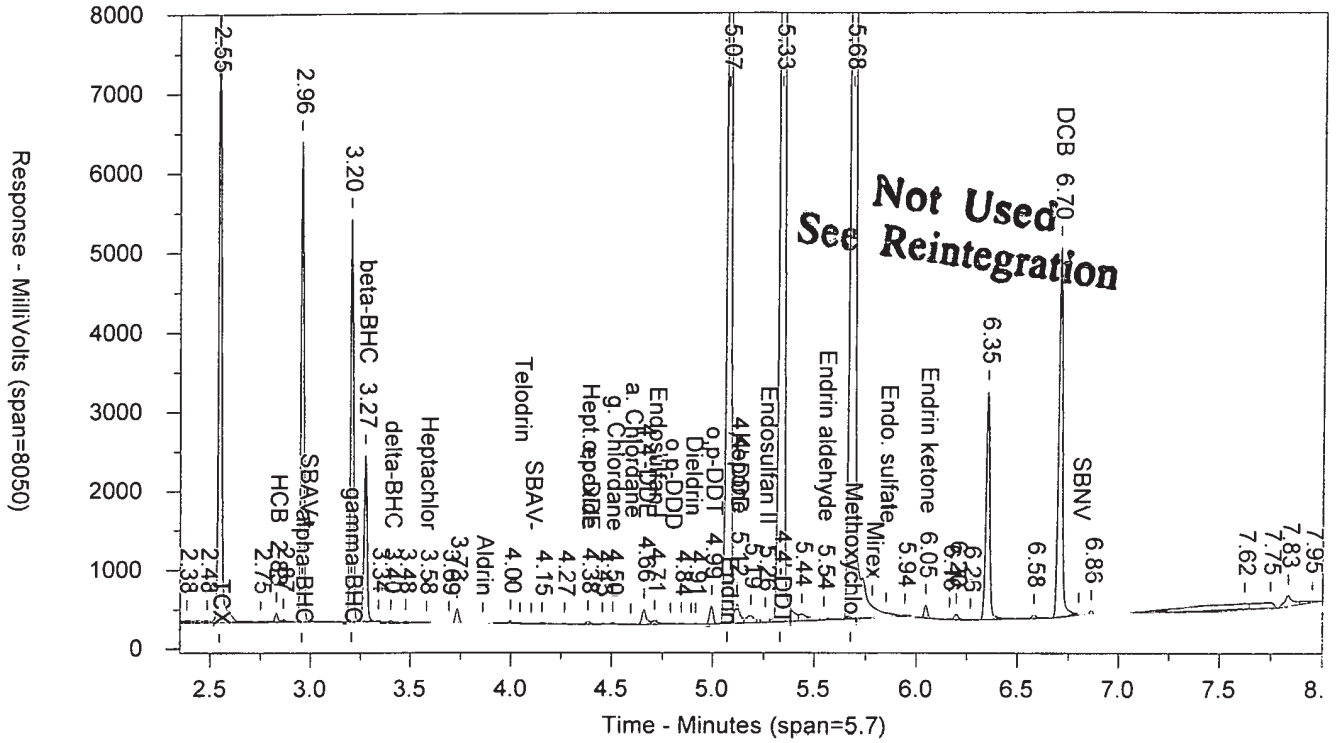
Format B: pestD5.FMTB

Area File Created On: 11/9/2018 6:33:06 PM

File Reported On: 11/12/2018 at 1:04:45 PM



EVALX1824B      AAPEMAA      IPEM 1831299999      00177      SW-846 808  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.025.RAW



EVALX1824B

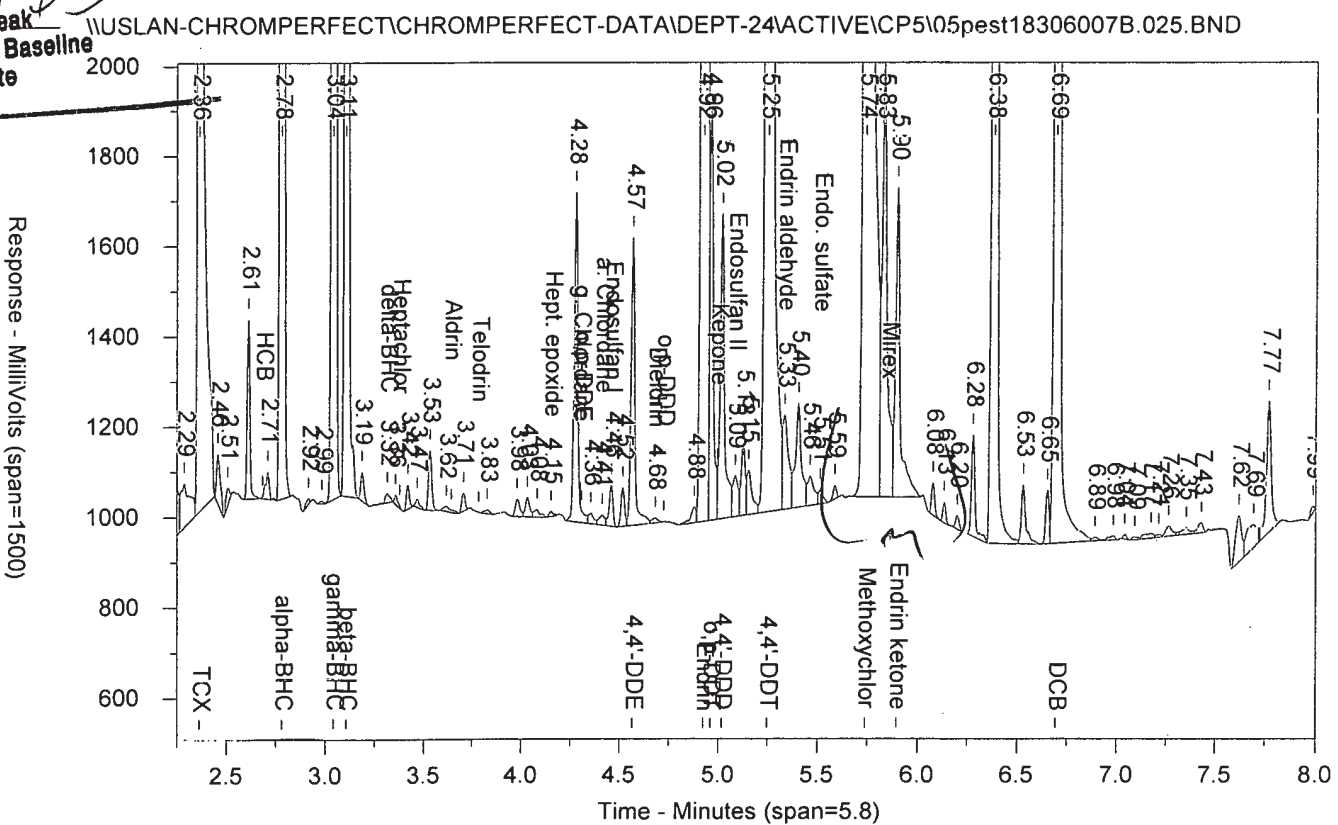
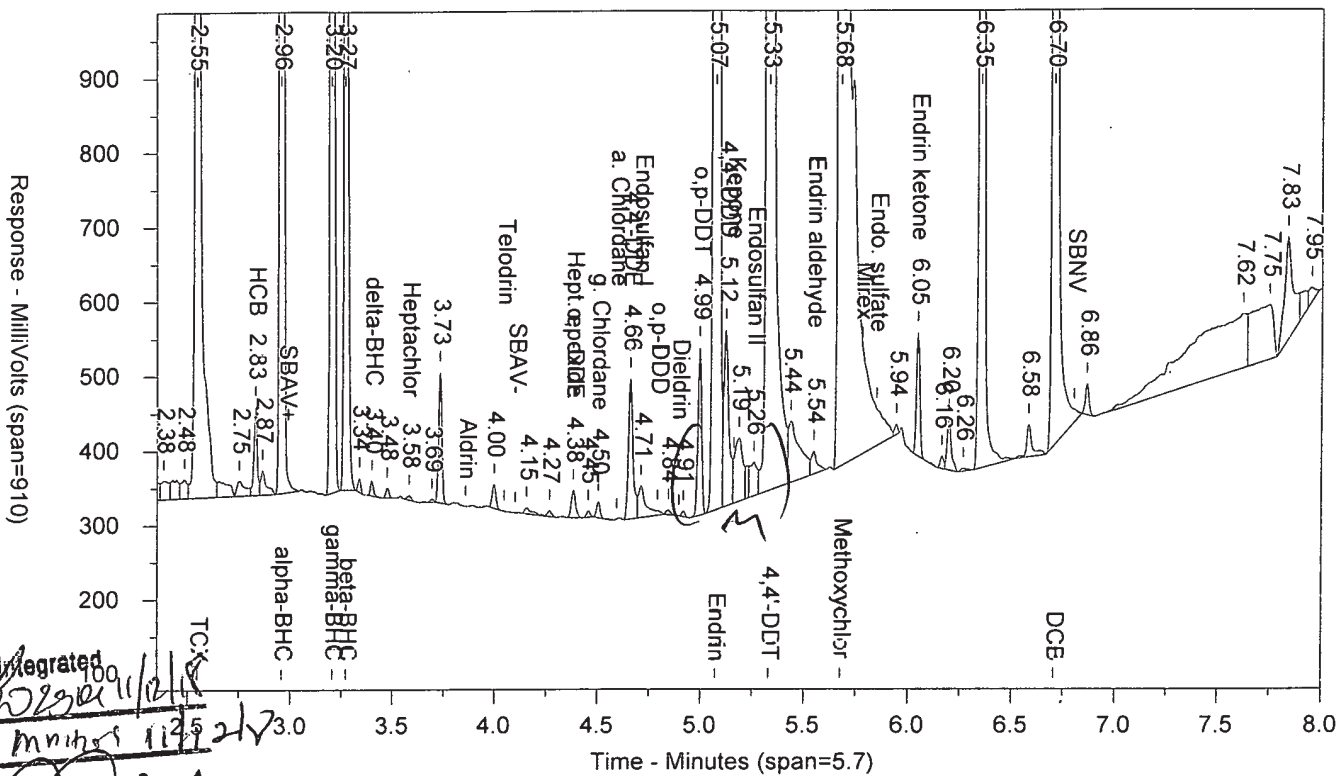
AAPEMAA

IPEM 1831299999

00177

SW-846 8081A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.025.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B      AAPEMAA      IPEM 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 6:25:05 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

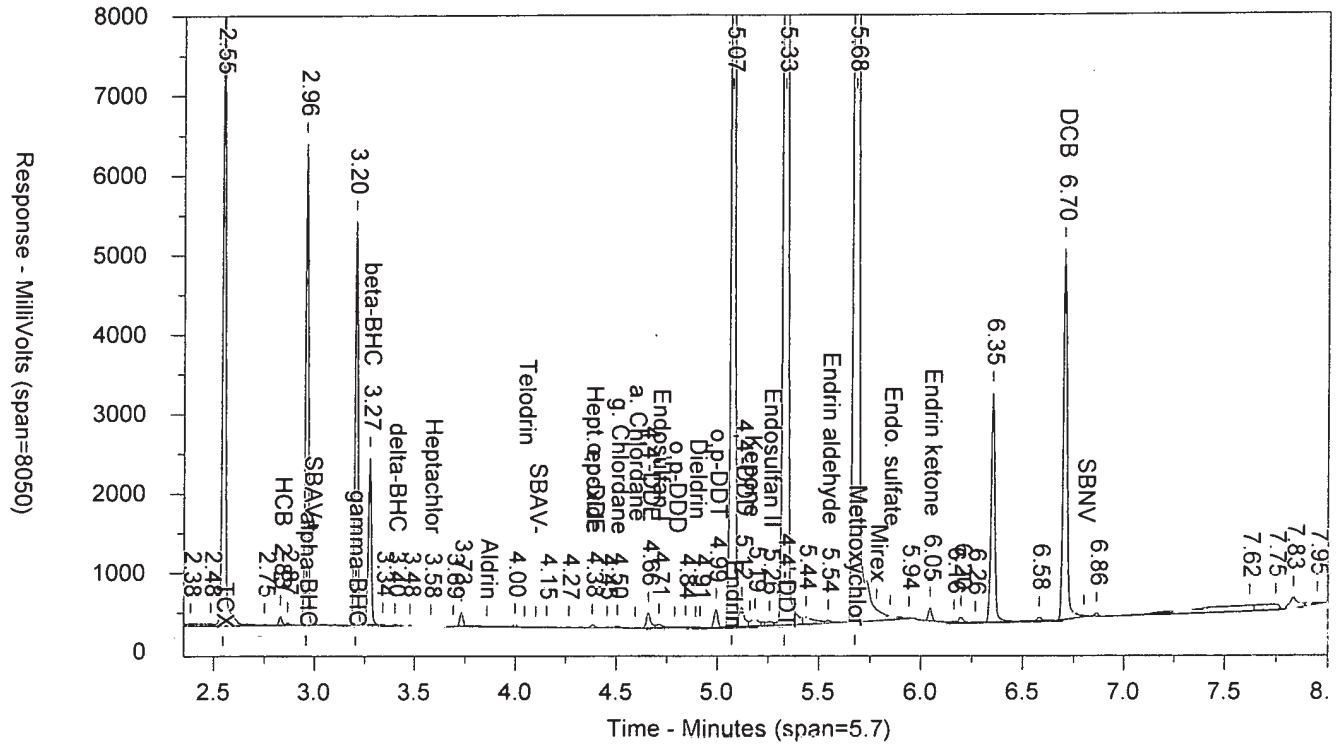
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.546	8726545	22.013	TCX	2.364	41955910	25.11	TCX
2.958	6076299	11.076	alpha-BHC	2.781	29522420	13.157	alpha-BHC
2.83	119413	.283	HCB		0		HCB
3.204	5107467	11.04	gamma-BHC	3.041	24398100	13.1	gamma-BHC
3.272	2113856	10.26	beta-BHC	3.106	8942492	11.43	beta-BHC
3.399	20550	.048	delta-BHC	3.316	21230	.013	delta-BHC
3.58	6170	.016	Heptachlor		0		Heptachlor
	0		Hept. epoxide	4.152	11483	.01	Hopt. opoxide
4.381	36977	.199	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.413	23541	.02	a. Chlordane
4.71	42660	.142	Endosulfan I	4.459	91941	.09	Endosulfan I
4.504	21905	.069	g. Chlordane		0		g. Chlordane
4.658	189053	.611	4,4'-DDE	4.566	640086	.568	4,4'-DDE
	0		Dieldrin	4.681	11496	.01	Dieldrin
5.072	16661300	56.472	Endrin	4.922	68832150	66.496	Endrin
4.993	226110	1.101	o,p-DDT	4.959	919879	1.647	o,p-DDT
5.12	237260	.962	4,4'-DDD	5.018	678687	.764	4,4'-DDD
5.256	45322	.166	Endosulfan II	5.087	90238	.093	Endosulfan II
5.33	28694300	107.936	4,4'-DDT	5.248	125669400	135.818	4,4'-DDT
5.545	30735	.136	Endrin aldehyde	5.333	208751	.266	Endrin aldehyde
	0		Endo sulfate	5.612	31049	.034	Endo. sulfate
5.677	32299730	253.208	Methoxychlor	5.738	125942600	291.977	Methoxychlor
6.045	165521	.566	Endrin ketone	5.897	686828	.715	Endrin ketone
6.704	4657094	24.405	DCB	6.692	15842980	25.624	DCB

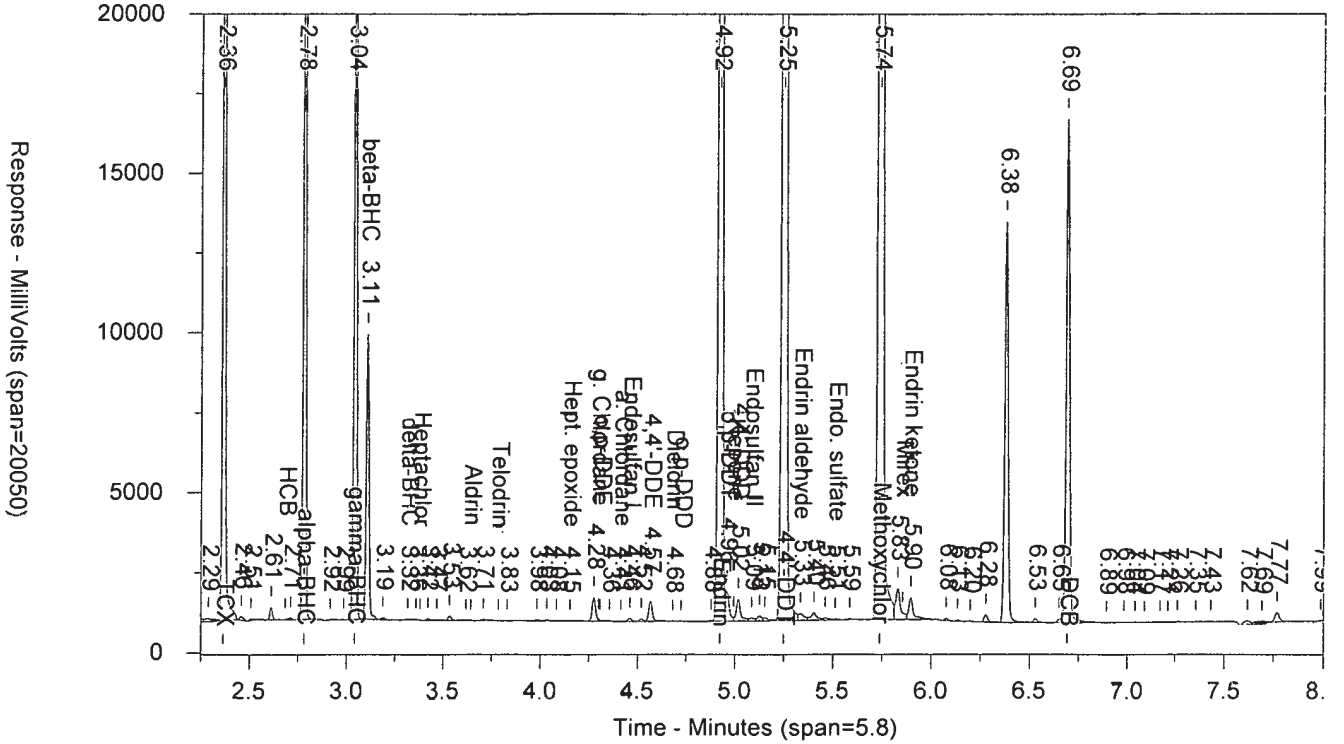
Files:  
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 Area File: 05pest18306007B.025.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/12/2018 1:10:40 PM  
 File Reported On: 11/12/2018 at 1:10:57 PM

EVALX1824B    AAPEMAA    IPEM 1831299999    00177    SW-846 808

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.025.BND



## LANCASTER LABORATORIES

Sample Number: TOXA11824D      AATOXA1AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 6:37:52 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.026.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.828		4804	4468
2.021		8874	8315
2.188		44225	41003
2.428		10090	13359
2.752		24099	29978
2.952	alpha-BHC	6564	26749
3.494		3875	9460
3.684		3583	4856
3.732		5606	5716
3.811		4733	7809
3.968		4506	6386
4.031	Telodrin	25917	61313
4.145		19008	51861
4.227		13398	20457
4.305		47579	153550
4.414		28618	51796
4.461		35335	57557
4.509		44956	83131
4.572	a. Chlordane	55745	99993
4.626		40728	67831
4.713	Endosulfan I	86221	233625
4.75		48957	96630
4.808		89407	168847
4.854		91998	209299
4.896	Dieldrin	135462	245784
4.967	o,p-DDT	139294	228908
5.011		175144	365791
5.044		118457	163983
5.098	Kepone	200245	539716
5.141		120742	177719
5.168		122618	230417
5.231	Endosulfan II	334448	769962
5.319	4,4'-DDT	289109	1007667
5.368		57667	81385
5.44		174863	536291
5.482		293419	492125
5.526	Endrin aldehyde	215846	488853
5.57		189739	443022
5.639		189511	449024
5.717		248006	694024
5.783	Mirex	309554	546932
5.822		148009	402458
5.896		51290	75228
5.947		29825	73868
6.037	Endrin ketone	47561	85367
6.096		20490	22351
6.138		14097	21729
6.173		6364	6208
6.255		16766	25819
6.295		6886	8332
6.36		5707	6907
6.393		11731	15586

Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
6.457		8824	22273
6.555		28536	40610
6.587		30701	40745
6.708	DCB	5912	10937
6.749		6732	8805

## LANCASTER LABORATORIES

Sample Number: TOXA11824D      AATOXA1AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 6:37:52 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.026.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
2.015		21947	31908
2.058		27083	70052
2.11		62284	126166
2.177		37929	148016
2.281		38520	171579
2.407		50556	147859
2.453		101293	147764
2.502		26207	29805
2.905		14775	32925
3.043	gamma-BHC	9381	24705
3.139		8252	6211
3.202		18546	21133
3.351	delta-BHC	9130	14653
3.45		35199	112739
3.557		24686	73902
3.621		21379	33554
3.726		119719	478687
3.836		79742	185745
3.901		86809	202527
3.999		164154	354250
4.038		93981	184344
4.078		167001	309321
4.135	Hept. epoxide	164509	461961
4.214		129436	332833
4.251		143135	286228
4.286	g. Chlordane	182674	334479
4.354		255813	820931
4.393		188076	456547
4.446	Endosulfan I	177959	443738
4.492		255260	774995
4.572	4,4'-DDE	364441	1101642
4.624		259655	551059
4.667	Dieldrin	681420	1460073
4.715	o,p-DDD	349636	604025
4.756		431513	784097
4.798		507049	1015495
4.83		485184	1121803
4.898		677404	1641368
4.922	Endrin	587856	898061
4.96	o,p-DDT	528849	1166062
5.005	Kepone	510091	933484
5.045		827948	1249464
5.068	Endosulfan II	1229368	2005725
5.142		1972627	3910779
5.196		513181	1054126
5.242	4,4'-DDT	313152	385610
5.278		811729	1974541
5.334	Endrin aldehyde	1295258	2122952
5.389		772381	2074149
5.427		602311	913904
5.462		640003	1187450
5.494		708136	1835119

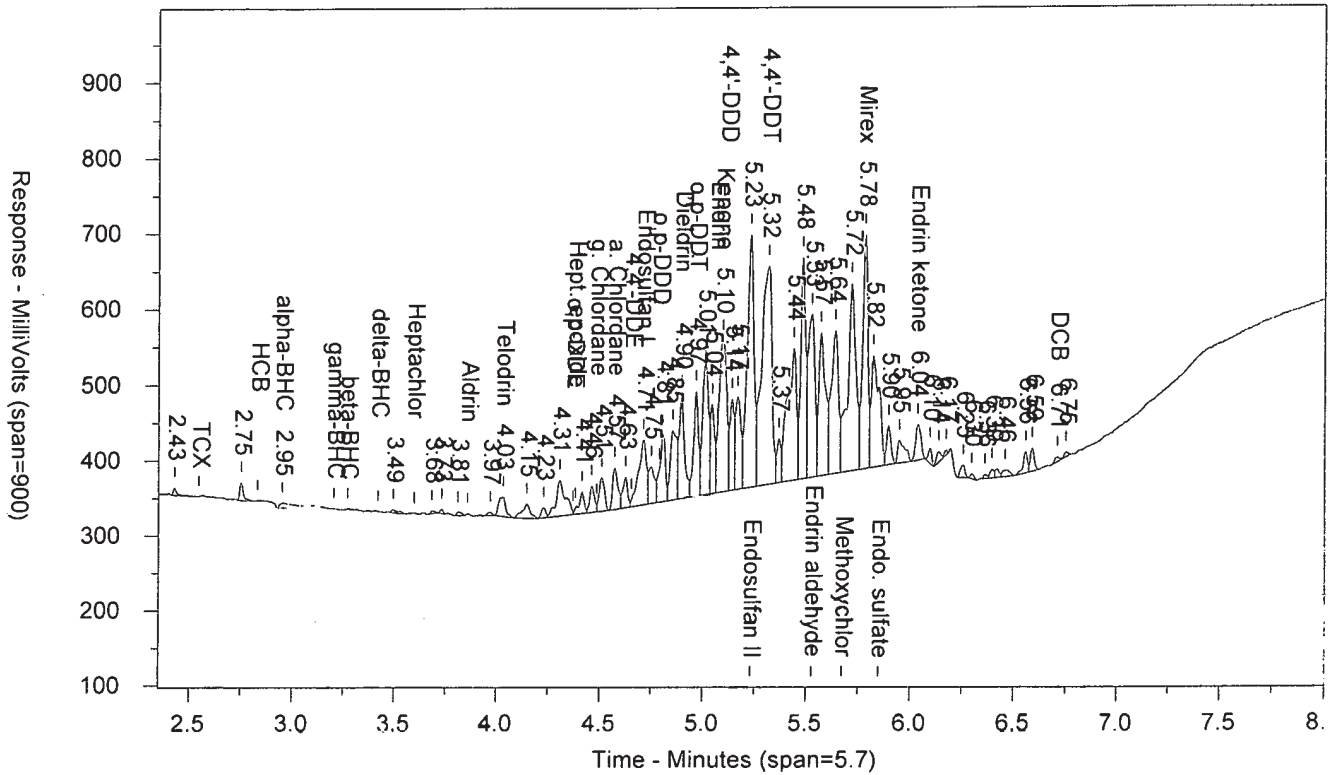
## Chrom Perfect Chromatogram Report

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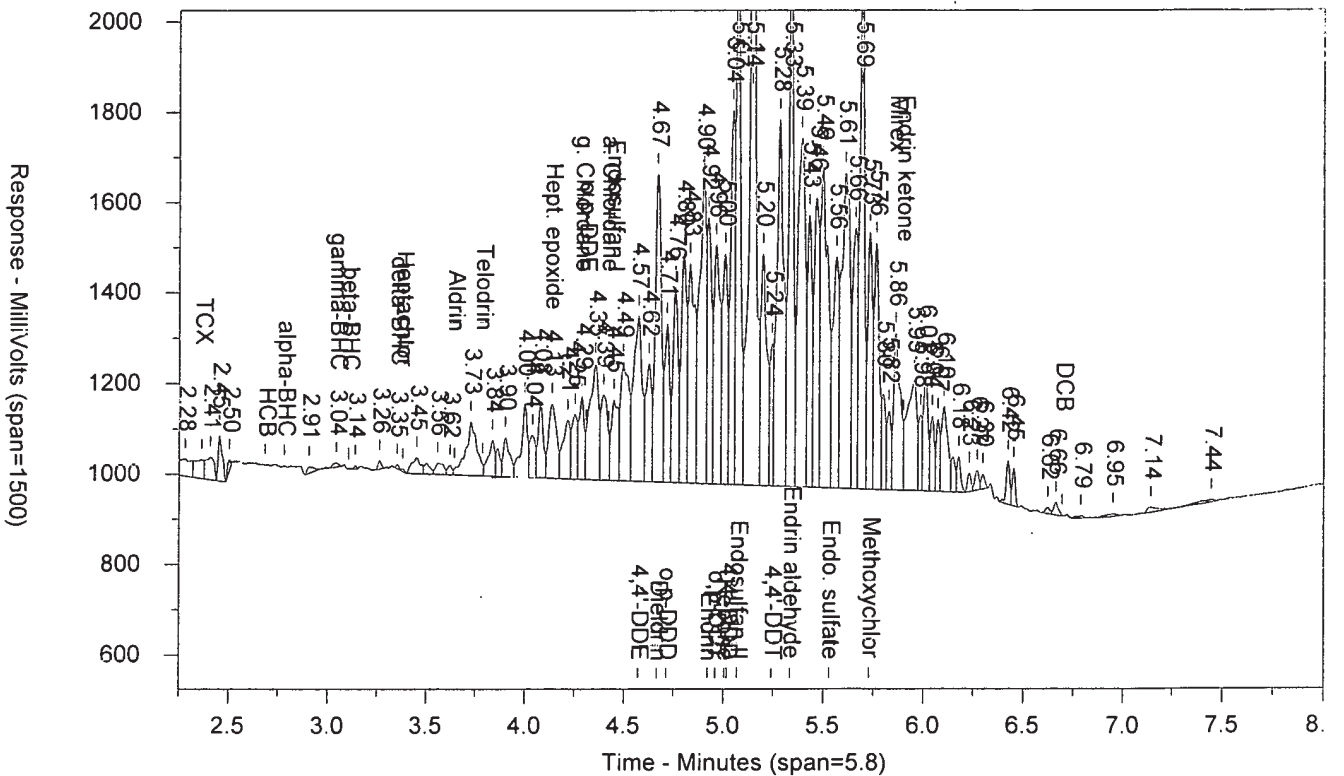
RT B	Compound B	Height B	Area B
5.562		511493	1054053
5.607		697241	2074678
5.658		575747	985860
5.69		1205551	1919753
5.728	Methoxychlor	568114	956699
5.76		544313	950642
5.796		210544	282966
5.825		174849	247337
5.859	Mirex	345022	828113
5.951		243648	855838
5.984		166885	192486
6.01		248140	436879
6.042		166616	226251
6.072		159289	205098
6.101		188459	422396
6.176		78899	102209
6.229		40792	52769
6.268		44039	61248
6.296		33123	42794
6.422		97045	119898
6.451		83671	93882
6.621		14202	23987
6.662		28332	45567
6.787		5349	13985
6.95		5506	22957
7.143		11637	45104
7.445		5289	40951



TOXA11824D AATOXA1AA ICAL 1831299999 00177 SW-846 801  
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.026.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA11824D      AATOXA1AA      ICAL 183129999      00177      SW-846 8081A  
 Injected On: 11/9/2018 6:37:52 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

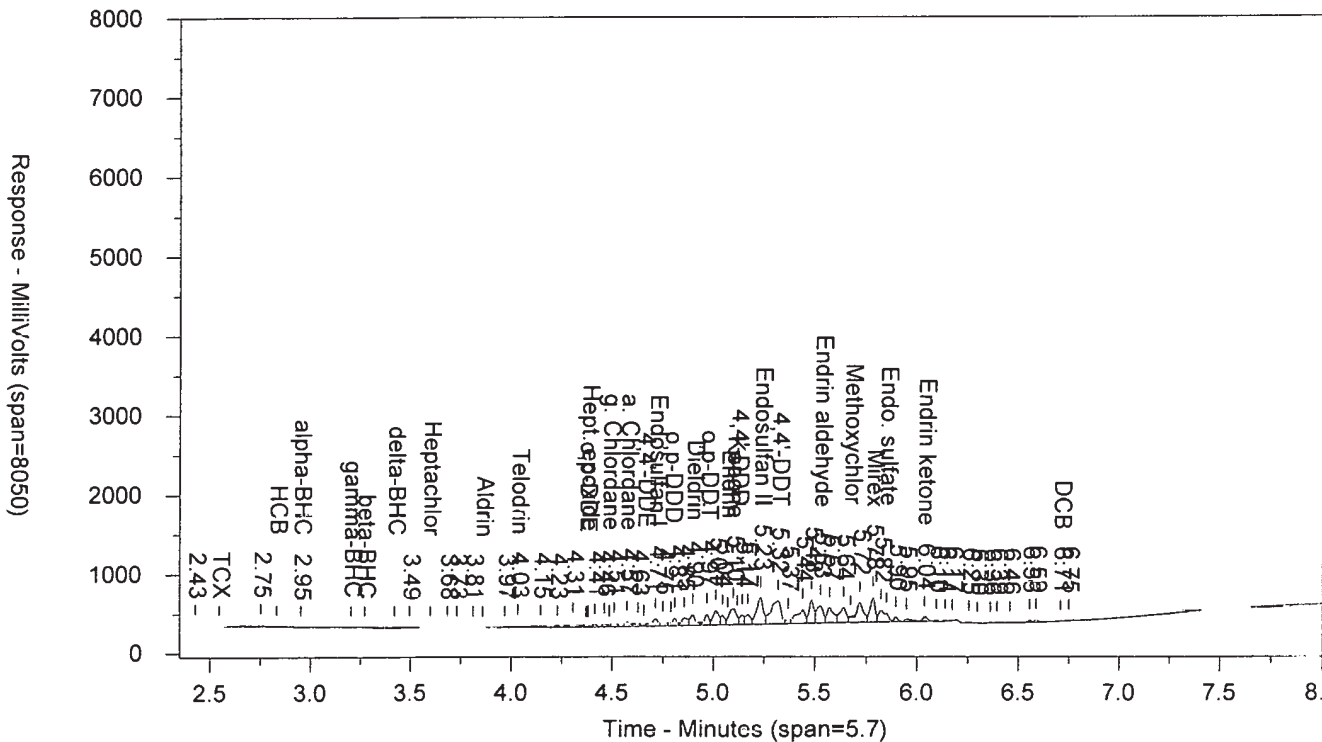
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.952	6564	.012	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.043	9381	.005	gamma-BHC
	0		delta-BHC	3.351	9130	.005	delta-BHC
4.031	25917	.12	Telodrin		0		Telodrin
	0		Hept. epoxide	4.135	164509	.148	Hept. epoxide
	0		g. Chlordane	4.286	182674	.157	g. Chlordane
4.713	86221	.287	Endosulfan I	4.446	177959	.174	Endosulfan I
	0		4,4'-DDE	4.572	364441	.323	4,4'-DDE
4.572	55745	.174	a. Chlordane		0		a. Chlordane
4.896	135462	.419	Dieldrin	4.667	681420	.589	Dieldrin
	0		o,p-DDD	4.715	349636	.699	o,p-DDD
	0		Endrin	4.922	587856	.568	Endrin
4.967	139294	.678	o,p-DDT	4.96	528849	.947	o,p-DDT
5.098	200245	2.595	Kepone	5.005	510091	4.552	Kepone
5.231	334448	1.227	Endosulfan II	5.068	1229368	1.268	Endosulfan II
5.319	289109	1.088	4,4'-DDT	5.242	313152	.338	4,4'-DDT
5.526	215846	.956	Endrin aldehyde	5.334	1295258	1.651	Endrin aldehyde
	0		Methoxychlor	5.728	568114	1.317	Methoxychlor
5.783	309554	1.631	Mirex	5.859	345022	.624	Mirex
6.037	47561	.163	Endrin ketone		0		Endrin ketone
6.708	5912	-1.069	DCB		0		DCB

Files:

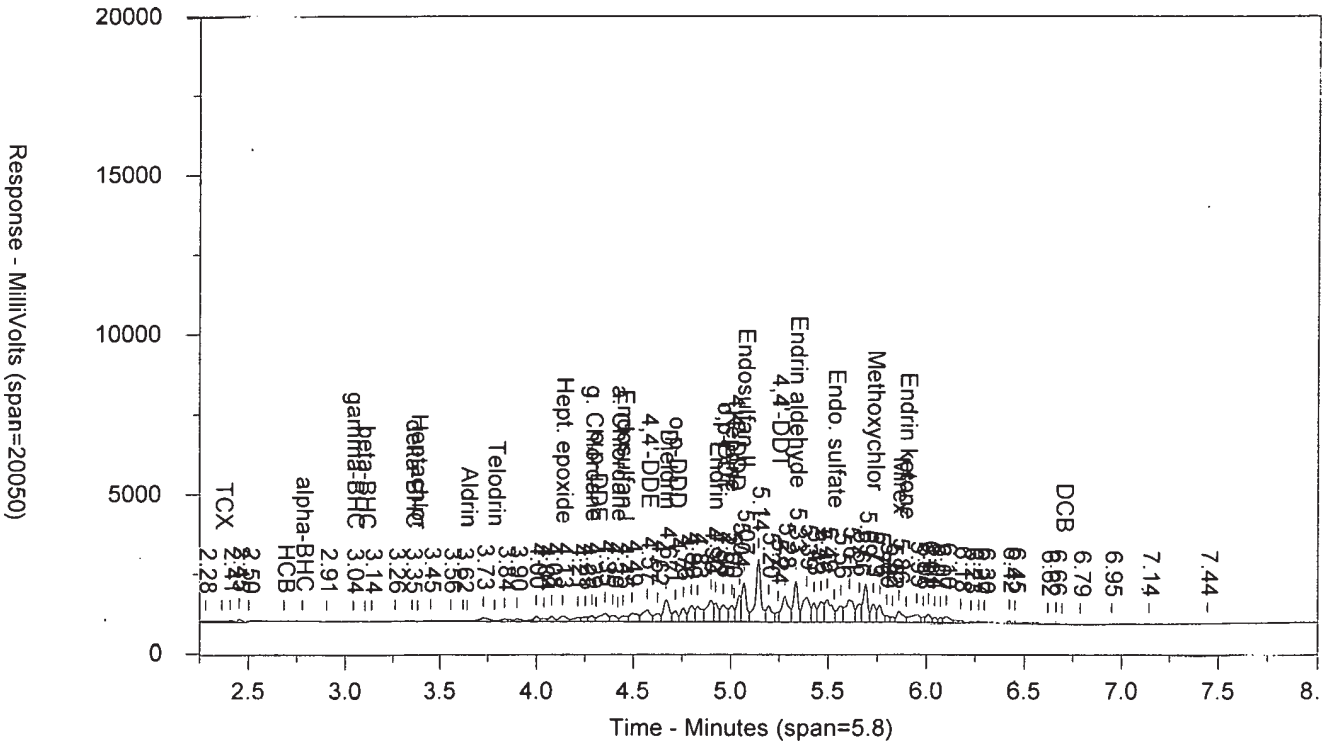
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 Method A: 05PESTD1.MET  
 Method B: 05PESTD1B.MET  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/9/2018 6:45:54 PM  
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TOXA11824D AATOXA1AA ICAL 1831299999 00177 SW-846 801

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.026.RAW



## LANCASTER LABORATORIES

Sample Number: TOXA21824D      AATOXA2AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 6:50:40 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.027.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.821		3733	3473
2.015		16800	14843
2.07		6526	6361
2.182		31898	26547
2.422		9453	9622
2.557	TCX	3930	7499
2.745		12186	81017
2.953	alpha-BHC	8387	21550
3.268	beta-BHC	2872	3906
3.366		3745	3725
3.486		6545	7050
3.59	Heptachlor	4670	7332
3.633		4553	5525
3.682		10274	24477
3.753		7978	12561
3.809		10982	16725
3.914		3343	4045
3.96		11365	16795
4.025		52124	131630
4.141		41653	116205
4.221		29942	49682
4.298		100987	355865
4.381	o,p-DDE	31898	40615
4.407		69120	105676
4.455		77957	144855
4.503	g. Chlordane	102065	213100
4.566		125019	257155
4.62		100890	190589
4.706	Endosulfan I	190453	595463
4.742		124386	248392
4.802	o,p-DDD	203151	426556
4.848		210702	499356
4.89	Dieldrin	296549	586825
4.96		311542	589963
5.005	o,p-DDT	379008	811128
5.037		269930	388414
5.089	Kepone	433791	1243906
5.135	4,4'-DDD	286274	407262
5.162		290364	565236
5.225	Endosulfan II	698856	1696703
5.313	4,4'-DDT	619639	2266520
5.361		165107	256573
5.433		388125	1315282
5.476		628283	1108115
5.521		484990	1135122
5.564		434376	1061716
5.632		427289	1151348
5.679	Methoxychlor	232269	375315
5.71		541090	1318682
5.776	Mirex	650781	1257795
5.816		360390	1104810
5.889		172096	367190

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.941		130319	483213
6.03	Endrin ketone	162800	465802
6.09		98930	200241
6.133		90022	184027
6.165		87040	146478
6.187		91008	145815
6.247		44140	86232
6.289		16911	25435
6.356		6683	7647
6.386		18681	22838
6.411		15109	15787
6.46		13767	29271
6.549		51055	69922
6.581		57995	74595
6.697	DCB	12599	21920
6.742		12039	24234

## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA21824D      AATOXA2AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 6:50:40 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.027.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

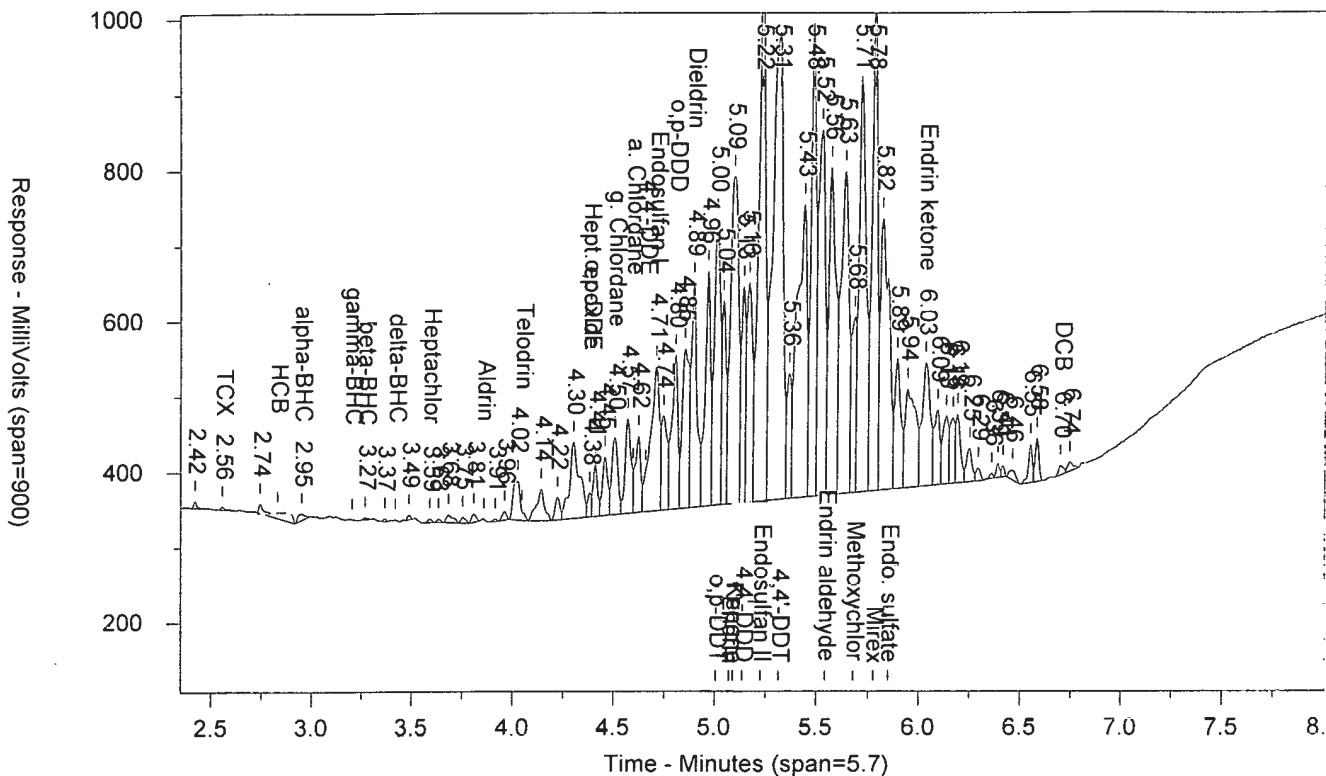
RT B	Compound B	Height B	Area B
2.001		24572	43857
2.063		43191	125379
2.109		60325	152922
2.175		31424	87500
2.249		13926	13996
2.277		12304	20601
2.453		81135	146541
2.502		40757	46864
2.609		5697	9951
2.668	HCB	5347	10446
2.736		6780	9712
2.918		19047	50887
3.032	gamma-BHC	18366	44618
3.082		16717	15022
3.136		6689	4756
3.164		7407	6879
3.26		38905	50805
3.326	delta-BHC	7316	6615
3.349		13941	11222
3.379	Heptachlor	11052	11175
3.45		42927	108844
3.499		20498	27875
3.561		35834	87262
3.618		25412	30177
3.681		61498	113664
3.726		224167	686382
3.836		155494	346009
3.862		114001	165043
3.901		161381	364098
3.999		319844	686851
4.037		171452	340104
4.078		315617	594364
4.135	Hept. epoxide	318911	891866
4.212		244454	621330
4.25		280922	580981
4.286	g. Chlordane	346235	536423
4.354		497734	1620421
4.396		370040	883271
4.445	Endosulfan I	345879	881532
4.492		498075	1521472
4.571	4,4'-DDE	708373	2218698
4.623		501956	1042737
4.667	Dieldrin	1320478	2890744
4.715	o,p-DDD	681403	1183851
4.755		850802	1509884
4.797		1000451	1985049
4.828		941381	1440148
4.852		785708	837585
4.898		1319097	4876094
4.959	o,p-DDT	1031787	2221551
5.004	Kepona	998317	1912830
5.044		1593135	2407106

## Chrom Perfect Chromatogram Report

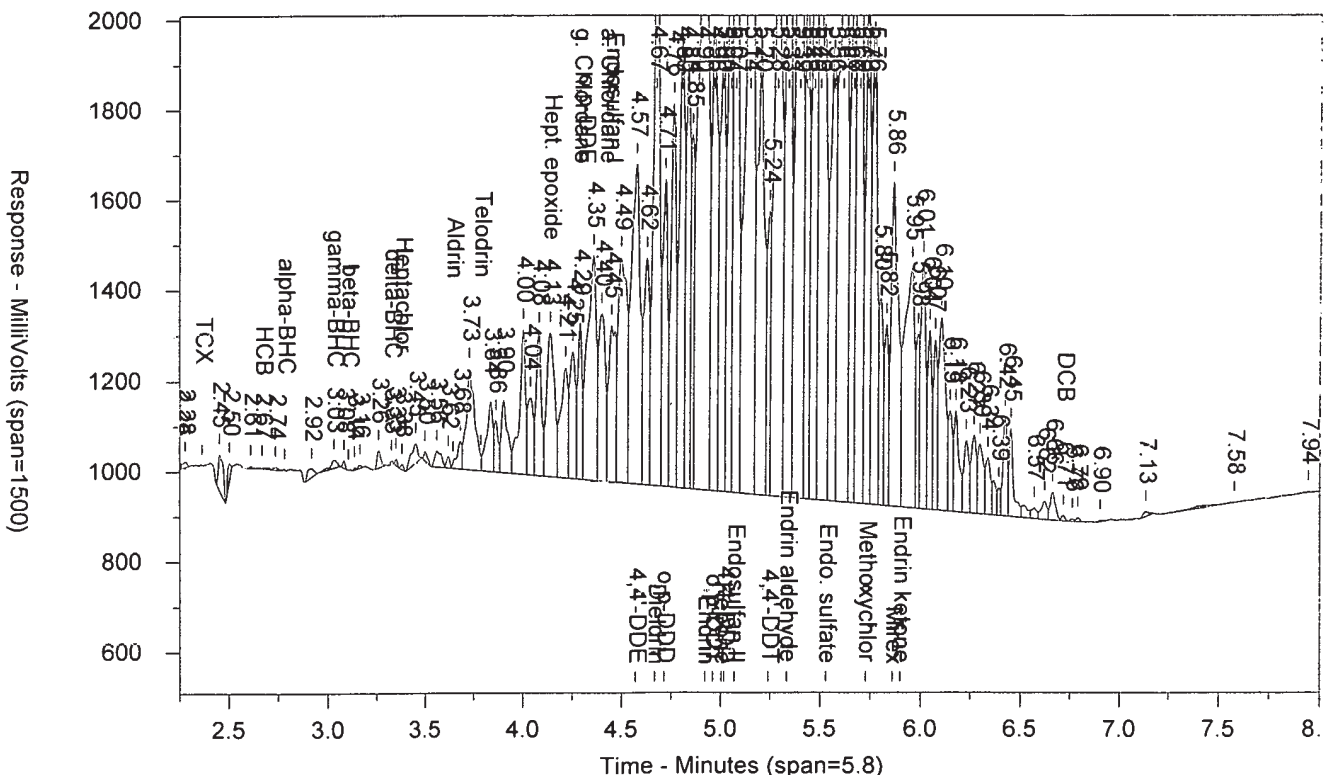
RT B	Compound B	Height B	Area B
5.068	Endosulfan II	2386368	3931685
5.141		3826679	7155767
5.195		1020979	2543987
5.24	4,4'-DDT	630021	778934
5.277		1574302	3957578
5.333	Endrin aldehyde	2546675	4094153
5.389		1502096	4142621
5.426		1166395	1719773
5.462		1234803	2568889
5.493		1384958	3483578
5.561		1024414	2132315
5.606		1385297	4106193
5.657		1135757	1864721
5.689		2317792	3838889
5.728	Methoxychlor	1158659	1963621
5.76		1072369	1886601
5.795		459453	669219
5.824		402484	543962
5.858	Mirex	720037	1838865
5.952		531948	1915224
5.983		385887	411011
6.009		546165	1000005
6.042		397537	562283
6.07		377817	531960
6.101		428961	1013684
6.146		224007	321017
6.175		224623	405086
6.228		161016	301571
6.266		174179	304087
6.296		154994	304833
6.335		126447	229291
6.39		60917	69199
6.421		221276	310624
6.45		194761	303924
6.567		23585	46127
6.621		41277	87198
6.661		62606	115686
6.715	DCB	12729	15658
6.76		5926	7801
6.789		9924	12035
6.901		3138	4322
7.134		10925	22016
7.577		1302	39937
7.945		3571	27406

TOXA21824D AATOXA2AA ICAL 1831299999 00177 SW-846 801

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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA21824D      AATOXA2AA      ICAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 6:50:40 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.557	3930	.01	TCX		0		TCX
	0		HCB	2.668	5347	.004	HCB
2.953	8387	.015	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.032	18366	.01	gamma-BHC
3.268	2872	.014	beta-BHC		0		beta-BHC
	0		delta-BHC	3.326	7316	.004	delta-BHC
3.59	4670	.012	Heptachlor	3.379	11052	.008	Heptachlor
	0		Hept. epoxide	4.105	318911	.287	Hept. epoxide
4.503	102065	.322	g. Chlordane	4.286	346235	.297	g. Chlordane
4.381	31808	.171	o,p-DDE		0		o,p-DDE
4.706	190453	.633	Endosulfan I	4.445	345879	.338	Endosulfan I
	0		4,4'-DDE	4.571	708373	.629	4,4'-DDE
4.89	296549	.917	Dieldrin	4.667	1320478	1.141	Dieldrin
4.802	203151	1.201	o,p-DDD	4.715	681403	1.362	o,p-DDD
5.005	379008	1.846	o,p-DDT	4.959	1031787	1.847	o,p-DDT
5.089	433791	4.225	Kepone	5.004	998317	5.565	Kepone
5.225	698856	2.565	Endosulfan II	5.068	2386368	2.461	Endosulfan II
5.135	286274	1.16	4,4'-DDD		0		4,4'-DDD
5.313	619639	2.331	4,4'-DDT	5.24	630021	.681	4,4'-DDT
	0		Endrin aldehyde	5.333	2546675	3.246	Endrin aldehyde
5.679	232269	1.821	Methoxychlor	5.728	1158659	2.686	Methoxychlor
5.776	650781	3.428	Mirex	5.858	720037	1.302	Mirex
6.03	162800	.556	Endrin ketone		0		Endrin ketone
6.697	12599	-1.033	DCB	6.715	12729	-.146	DCB

Files:

Area File: 05pest18306007.027.RAW  
 Area File: 05pest18306007B.027.RAW  
 Method A: 05PESTD1.MET  
 Method B: 05PESTD1B.MET  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/9/2018 6:58:40 PM  
 File Reported On: 11/12/2018 at 12:05:34 PM



## Chrom Perfect Chromatogram Report

## LANCASTER LABORATORIES

Sample Number: TOXA31824D      AATOXA3AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:03:26 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.028.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.821		7926	9476
2.014		31853	23788
2.07		7063	6909
2.181		45843	37623
2.331		4083	3941
2.42		13722	13114
2.555	TCX	3811	3990
2.745		19477	24838
2.945	alpha-BHC	7225	14340
3.089		2270	3508
3.265	beta-BHC	3640	4079
3.364		6816	6341
3.458		4241	3591
3.486		8962	8861
3.591	Heptachlor	6616	10785
3.633		9791	11095
3.679		14414	37211
3.751		15196	26394
3.807		14015	21870
3.853	Aldrin	7983	9546
3.958		23945	37990
4.023		104990	259561
4.138		80853	239997
4.22		66560	121173
4.297		216165	781472
4.379	o,p-DDE	82747	107575
4.406		155329	265282
4.454		170359	335855
4.502	g. Chlordane	237346	525887
4.565		299887	639472
4.619		238780	459213
4.705	Endosulfan I	437792	1412856
4.741		295384	606243
4.8	o,p-DDD	472836	1049140
4.847		492012	1158420
4.889	Dieldrin	668052	1416096
4.959		732836	1408343
5.003	o,p-DDT	890492	1912226
5.036		654830	989259
5.087	Endrin	1015986	2898529
5.133	4,4'-DDD	680653	1038502
5.161		691772	1311264
5.224	Endosulfan II	1596692	3955013
5.312	4,4'-DDT	1433985	5358048
5.36		424489	621280
5.408		687635	1543705
5.432		913473	1624491
5.474		1459850	2705070
5.518		1139439	2596374
5.563		1039725	2567586
5.631		1027753	2788684
5.677	Methoxychlor	576783	935302

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.709		1271205	3166325
5.775	Mirex	1492414	2957162
5.814		858859	1680358
5.842	Endo. sulfate	678201	1037907
5.888		447061	1014149
5.939		350235	1330522
6.028	Endrin ketone	413765	1273033
6.088		268366	544324
6.131		246235	551222
6.162		241195	367222
6.186		243329	455656
6.246		136719	309800
6.288		75957	154802
6.351		54120	85856
6.384		77681	118948
6.453		47771	129893
6.547		119867	163709
6.579		132152	167921
6.644		6032	8720
6.695	DCB	32849	62402
6.742		29964	56216
6.802		7908	8422

## LANCASTER LABORATORIES

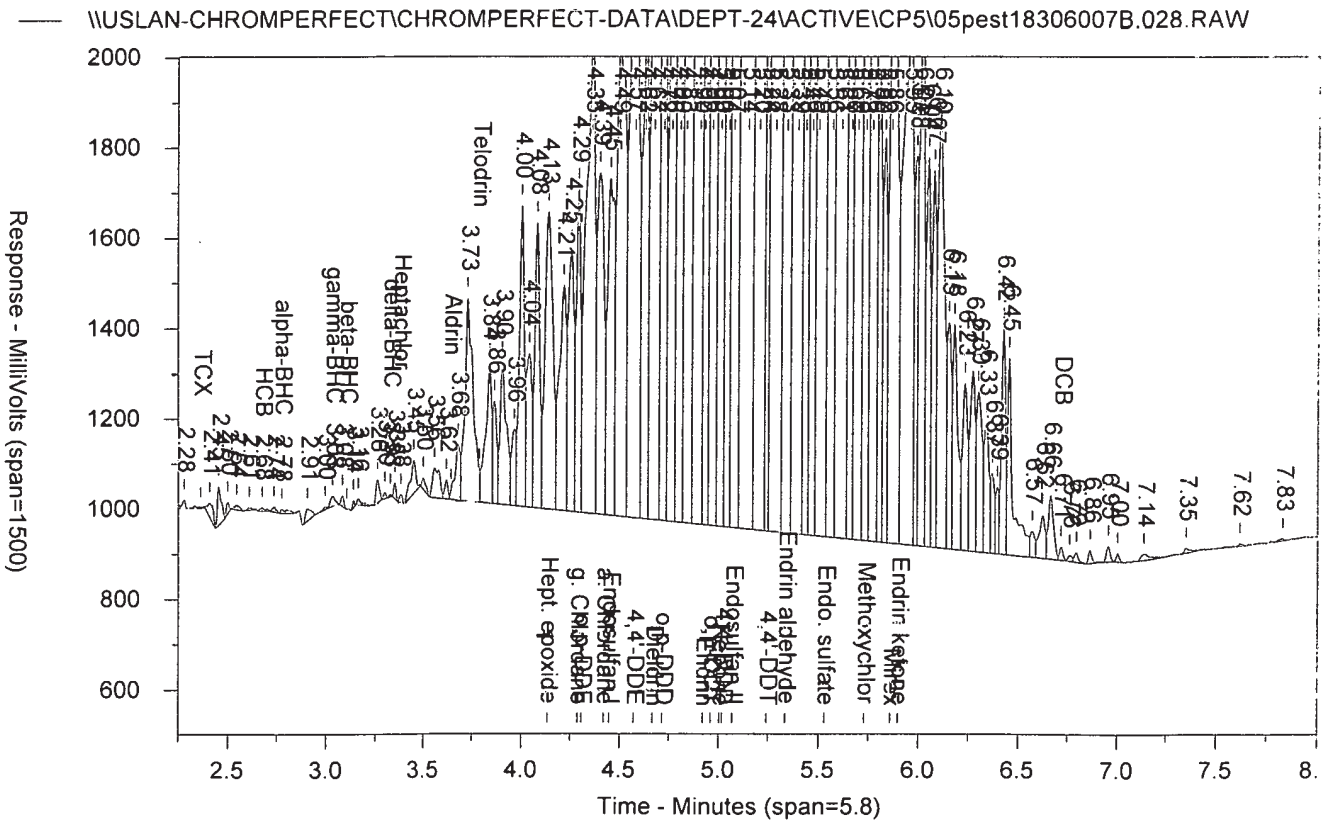
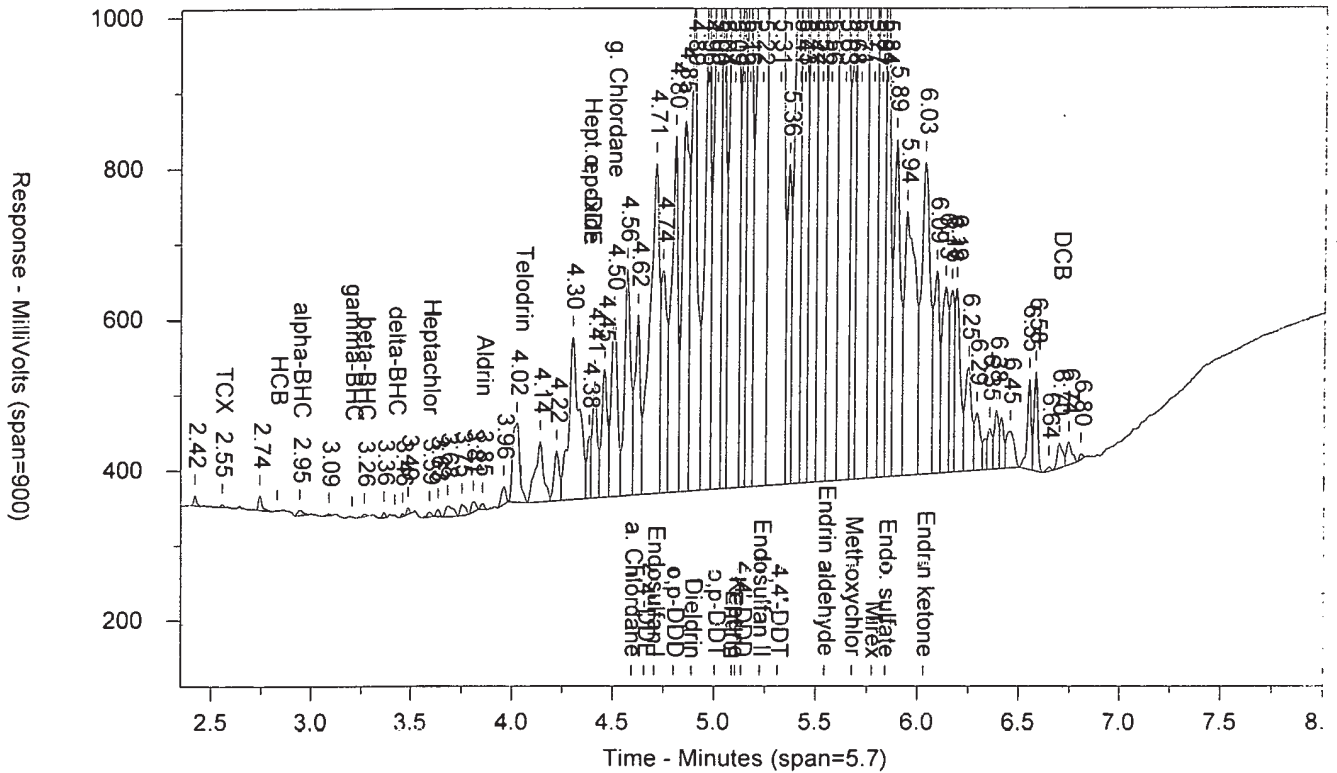
Sample Number: TOXA31824D      AATOXA3AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:03:26 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.028.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
2		25148	43783
2.062		37639	118966
2.11		49151	65719
2.152		12077	11559
2.248		11343	10262
2.28		20339	21625
2.408		30954	64656
2.453		86814	120723
2.499		25225	22861
2.544		10231	20881
2.609		6372	7349
2.676	HCB	7187	12958
2.736		11388	15160
2.775	alpha-BHC	9238	22440
2.908		26448	54548
2.995		6134	7566
3.034	gamma-BHC	22577	36592
3.082		23463	23197
3.139		16364	11670
3.162		13150	24903
3.261		51635	62884
3.3		13766	12366
3.328	delta-BHC	6030	4477
3.351		35933	30259
3.382	Heptachlor	17395	17698
3.451		73063	154329
3.5		25833	34250
3.559		67127	175136
3.619		43553	49532
3.679		124143	232701
3.726		451234	1319590
3.836		302844	666733
3.862		228653	316133
3.901		316632	725657
3.962		169454	269301
3.999		668490	1174730
4.039		341406	639636
4.078		634402	1158089
4.134	Hept. epoxide	660137	1891819
4.213		500000	1244598
4.251		577606	1194892
4.287	g. Chlordane	715149	1156417
4.354		1065253	3396773
4.393		757208	1853882
4.446	Endosulfan I	747744	1833091
4.492		1049598	3318754
4.571	4,4'-DDE	1519266	4678702
4.624		1081369	2315496
4.666	Dieldrin	2804850	6093930
4.715	o,p-DDD	1457463	2557558
4.756		1829400	3352282
4.798		2149068	4187267

## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.829		2026234	4921284
4.898		2924749	7012236
4.922	Endrin	2508572	3831321
4.96	o,p-DDT	2252795	4835226
5.004	Kepone	2194083	4192943
5.044		3574914	5099061
5.068	Endosulfan II	5334863	8990433
5.142		8660469	15753340
5.196		2260116	5709546
5.241	4,4'-DDT	1378766	1589349
5.277		3483635	8743312
5.333	Endrin aldehyde	5819004	9322441
5.389		3376474	8953249
5.427		2604046	3983267
5.462		2797149	5300400
5.493		3147086	7873270
5.562		2275318	4886604
5.607		3076213	9187487
5.657		2549423	4160006
5.689		5201784	8533158
5.728	Methoxychlor	2452621	4187203
5.76		2437405	4325186
5.796		1031215	1490297
5.825		899201	1210712
5.858	Mirex	1611106	4127406
5.952		1180528	4212892
5.983		863828	920835
6.009		1229395	2250949
6.042		863862	1230552
6.071		835915	1240969
6.101		985106	2280496
6.148		503832	727445
6.175		500022	913418
6.228		371010	676428
6.267		402238	724669
6.296		355610	675044
6.335		287566	522615
6.366		177440	222553
6.392		147908	166618
6.422		501096	708048
6.45		437221	892878
6.569		57687	94521
6.621		95692	207537
6.662		141337	264181
6.714	DCB	29342	34502
6.757		12761	17470
6.791		21803	31529
6.86		29299	32930
6.953		34485	46664
7		18531	21369
7.135		13769	44775
7.348		10610	22746
7.616		5676	17447
7.828		4789	11118

TOXA31824D AATOXA3AA ICAL 1831299999 00177 SW-846 801  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA31824D      AATOXA3AA      ICAL 183129999      00177      SW-846 8081A  
 Injected On: 11/9/2018 7:03:26 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.555	3811	.01	TCX		0		TCX
	0		TCX		0		TCX
	0		TCX		0		TCX
2.945	7225	.013	alpha-BHC	2.676	7187	.005	TCX
	0		alpha-BHC	2.775	9238	.004	alpha-BHC
	0		gamma-BHC	3.034	22577	.012	gamma-BHC
3.265	3640	.018	beta-BHC		0		beta-BHC
	0		beta-BHC	3.328	6030	.004	beta-BHC
	0		delta-BHC	3.382	17395	.012	delta-BHC
3.591	6616	.017	Heptachlor		0		Heptachlor
3.853	7983	.022	Aldrin		0		Aldrin
	0		Aldrin		0		Aldrin
	0		Hept. epoxide	4.134	660137	.594	Hept. epoxide
4.502	237346	.749	g. Chlordane	4.287	715149	.614	g. Chlordane
4.379	82747	.445	o,p-DDE		0		o,p-DDE
4.705	437792	1.456	Endosulfan I	4.446	747744	.732	Endosulfan I
	0		4,4'-DDE	4.571	1519266	1.348	4,4'-DDE
4.889	668052	2.066	Dieldrin	4.666	2804850	2.423	Dieldrin
4.8	472836	2.796	o,p-DDD	4.715	1457463	2.914	o,p-DDD
5.087	1015986	3.444	Endrin	4.922	2508572	2.423	Endrin
5.003	890492	4.337	o,p-DDT	4.96	2252795	4.032	o,p-DDT
	0		Kepone	5.004	2194083	8.047	Kepone
5.224	1596692	5.86	Endosulfan II	5.068	5334863	5.501	Endosulfan II
5.133	680653	2.759	4,4'-DDD		0		4,4'-DDD
5.312	1433985	5.394	4,4'-DDT	5.241	1378766	1.49	4,4'-DDT
	0		Endrin aldehyde	5.333	5819004	7.416	Endrin aldehyde
5.677	576783	4.522	Methoxychlor	5.728	2452621	5.686	Methoxychlor
5.775	1492414	7.862	Mirex	5.858	1611106	2.913	Mirex
5.842	678201	2.731	Endo. sulfate		0		Endo. sulfate
6.028	413765	1.414	Endrin ketone		0		Endrin ketone
6.695	32849	-.922	DCB	6.714	29342	-.119	DCB

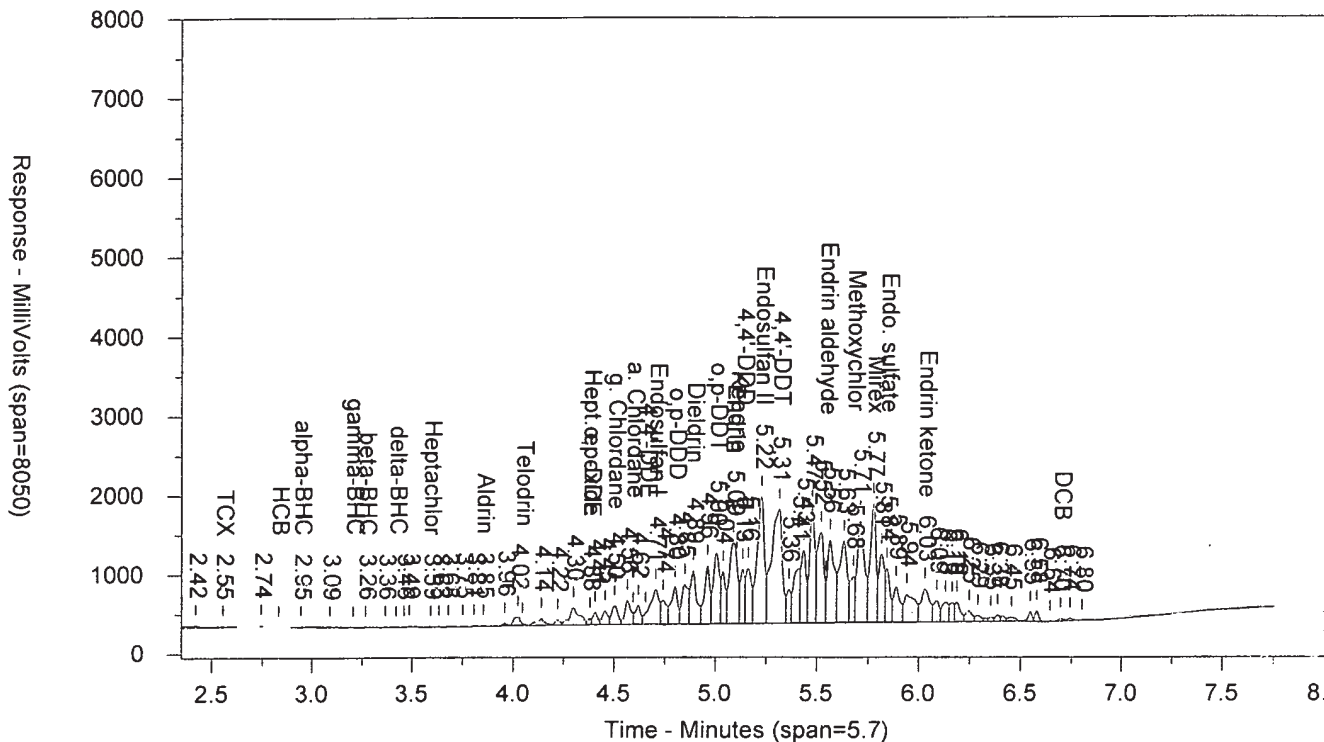
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 Area File: 05pest18306007B.028.RAW  
 Method A: 05PESTD1.MET  
 Method B: 05PESTD1D.MET  
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 Format A: pestD5.FMTA  
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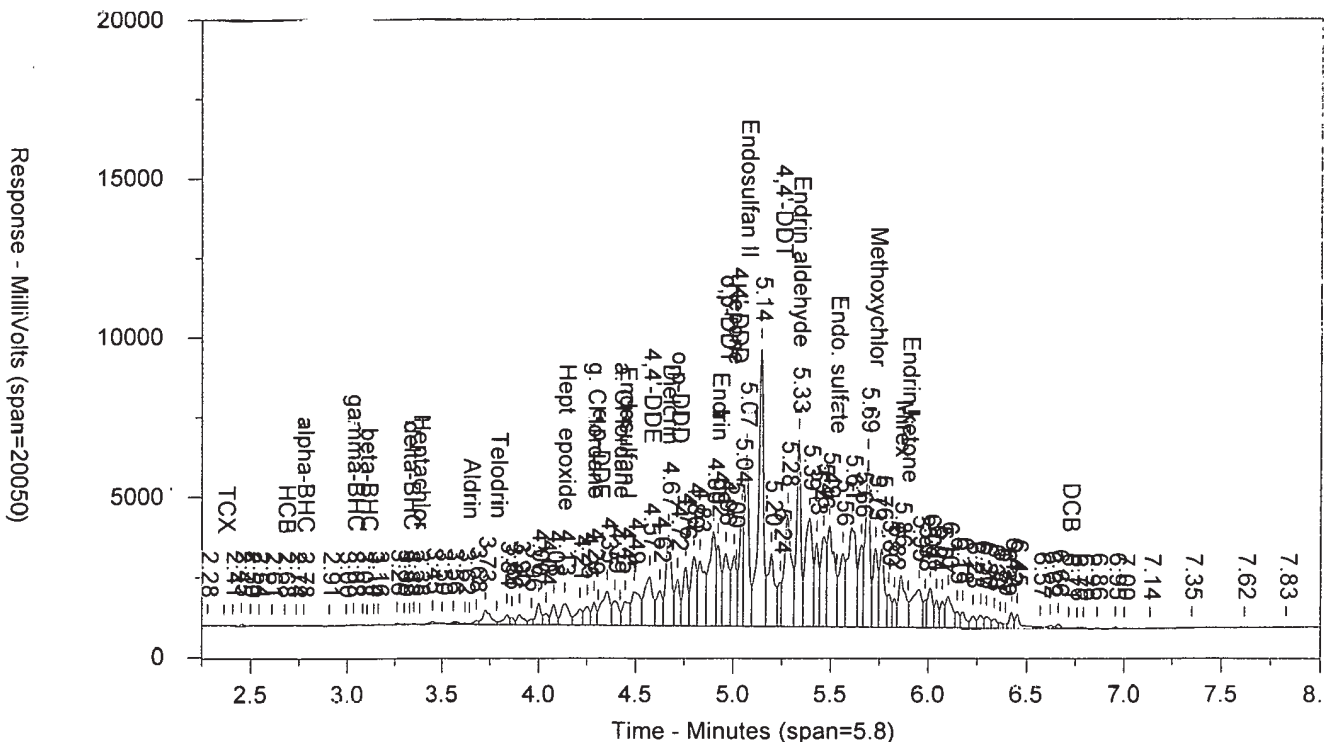


TOXA31824D AATOXA3AA ICAL 1831299999 00177 SW-846 801

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## LANCASTER LABORATORIES

Sample Number: TOXA41824E      AATOXA4AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:16:17 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.029.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.794		17237	13182
1.825		9371	12319
1.889		10723	18127
1.962		9691	12858
2.018		79516	58810
2.074		8381	8615
2.148		4502	5902
2.185		49633	42492
2.298		3917	3953
2.335		8185	7436
2.425		20779	22765
2.559	TCX	4676	7506
2.648		7393	8004
2.749		15803	14872
2.868		9868	32286
2.956	alpha-BHC	14921	28477
3.086		4463	7805
3.124		7020	10753
3.194	gamma-BHC	5904	10235
3.27	beta-BHC	8104	10766
3.314		8541	10716
3.369		16973	16808
3.397	delta-BHC	7217	5879
3.461		12054	10952
3.49		19725	20140
3.523		18715	23817
3.595	Heptachlor	28638	41042
3.637		24891	31364
3.687		42816	106724
3.756		37018	62841
3.81		28672	43830
3.857	Aldrin	18906	22526
3.917		5642	7685
3.965		70923	110927
4.027	Telodrin	259168	630390
4.143		202062	627749
4.225		168432	331930
4.302		543991	2020775
4.384	o,p-DDE	223661	287874
4.41		407680	732686
4.459		438480	874835
4.506		614512	1462209
4.57		794369	1896913
4.623		610439	1106304
4.709	Endosulfan I	1095911	3604745
4.745		770767	1578923
4.805	o,p-DDD	1217220	2712357
4.851		1261358	2992047
4.893	Dieldrin	1650783	3477485
4.963		1838080	3579722
5.008		2193623	4935588
5.041		1650161	2396971

## Chrom Perfect Chromatogram Report

RT A	Compound A	Height A	Area A
5.093	Kepona	2575028	7487440
5.138		1733331	2508262
5.165		1746950	3507660
5.228	Endosulfan II	3959345	9917143
5.315	4,4'-DDT	3633881	13498070
5.364		1088157	1615194
5.411		1721315	3612963
5.436		2294823	4304088
5.479		3719650	6782468
5.523	Endrin aldehyde	2893958	6814584
5.567		2628353	6574020
5.634		2610698	7095548
5.682	Methoxychlor	1472825	2273263
5.714		3214690	8061816
5.779	Mirex	3676622	7578579
5.819		2216186	6918058
5.893		1173018	2716809
5.944		930492	3592201
6.032	Endrin ketone	1090572	3392612
6.092		720354	1487462
6.136		666469	1505846
6.168		646279	1049896
6.191		650777	1243452
6.249		396672	958662
6.292		244044	504773
6.356		180540	522536
6.39		240551	366137
6.414		209528	299503
6.446		160355	501259
6.552		307101	473938
6.583		337163	443531
6.648		13004	20452
6.701	DCB	67895	120462
6.746		65324	126563
6.807		22430	36428
6.881		3957	5496

## LANCASTER LABORATORIES

Sample Number: TOXA41824E      AATOXA4AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:16:17 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.029.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
1.934		3918	4275
1.979		6336	6241
2.005		51270	64743
2.063		50729	114444
2.113		59314	82684
2.139		36437	67638
2.176		42621	56299
2.199		40628	57198
2.251		25954	30087
2.282		48885	48516
2.336		9258	6049
2.411		32688	81716
2.455		90430	157651
2.502		70034	65072
2.547		18292	38405
2.612		12717	13724
2.672	HCB	12921	13924
2.739		17288	26190
2.781	alpha-BHC	17866	13301
2.813		7941	10994
2.866		27773	36860
2.91		42388	93199
3.034	gamma-BHC	58013	131297
3.085	beta-BHC	68424	66532
3.142		31713	23536
3.164		31038	25728
3.264		131201	152946
3.304		48191	44528
3.331	delta-BHC	9460	6652
3.353		77740	64306
3.387	Heptachlor	70829	90103
3.454		157170	286537
3.502		64816	93914
3.563		157327	414243
3.623		85526	94270
3.682		297302	574865
3.728		1090110	3164108
3.839		742879	1551300
3.864		554969	799286
3.904		748333	1718405
3.963		414059	661826
4.002		1609863	2797004
4.042		812769	1588728
4.081		1518989	2782807
4.138	Hept. epoxide	1582413	4585925
4.216		1214647	3017318
4.254		1383525	2852251
4.29	g. Chlordane	1853584	2993843
4.358		2636018	8378644
4.394		1873973	4713651
4.449	Endosulfan I	1787098	4461081
4.495		2555978	7851824

## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.574	4,4'-DDE	3794267	11657030
4.627		2624641	5386527
4.67	Dieldrin	7070495	15284060
4.718	o,p-DDD	3551059	6122378
4.759		4593510	8014324
4.8		5359883	10671410
4.832		5030242	12157680
4.901		7300307	26513790
4.963	o,p-DDT	5629910	12153640
5.007	Kepone	5417140	10453560
5.047		8888525	13244880
5.071	Endosulfan II	13242650	22211420
5.145		21548620	39495550
5.199		5548668	13826740
5.244	4,4'-DDT	3416320	4229043
5.28		8665848	21723850
5.336	Endrin aldehyde	14769690	23090370
5.392		8626285	22894460
5.43		6323926	9290236
5.464		7010436	13735530
5.496		8035921	19719370
5.564		5651152	12158980
5.61		7696717	22972020
5.66		6346407	10377640
5.692		13027470	21313500
5.731	Methoxychlor	6378810	10787070
5.763		6146199	10799870
5.798		2542500	3459930
5.827		2185072	2983868
5.861	Mirex	3994128	10204080
5.955		2929636	10605780
5.987		2112105	2250986
6.012		3033025	5539284
6.045		2159199	3090529
6.074		2058112	2920992
6.104		2398229	5647162
6.149		1228483	1805338
6.178		1231079	2306700
6.231		907135	1726277
6.27		978863	1709444
6.299		864167	1722696
6.339		725631	1939822
6.394		368936	388170
6.425		1230077	1745055
6.454		1070307	1715505
6.519		180151	486770
6.571		156415	277567
6.624		253360	551461
6.664		340000	002431
6.718	DCB	81006	112073
6.761		40182	62071
6.793		58489	89323
6.861		6415	7147
6.948		12353	19117
7.004		11543	13975
7.057		3754	3252
7.131		11802	20430
7.552		1707	39737
7.625		4054	9884

TOXA41824E

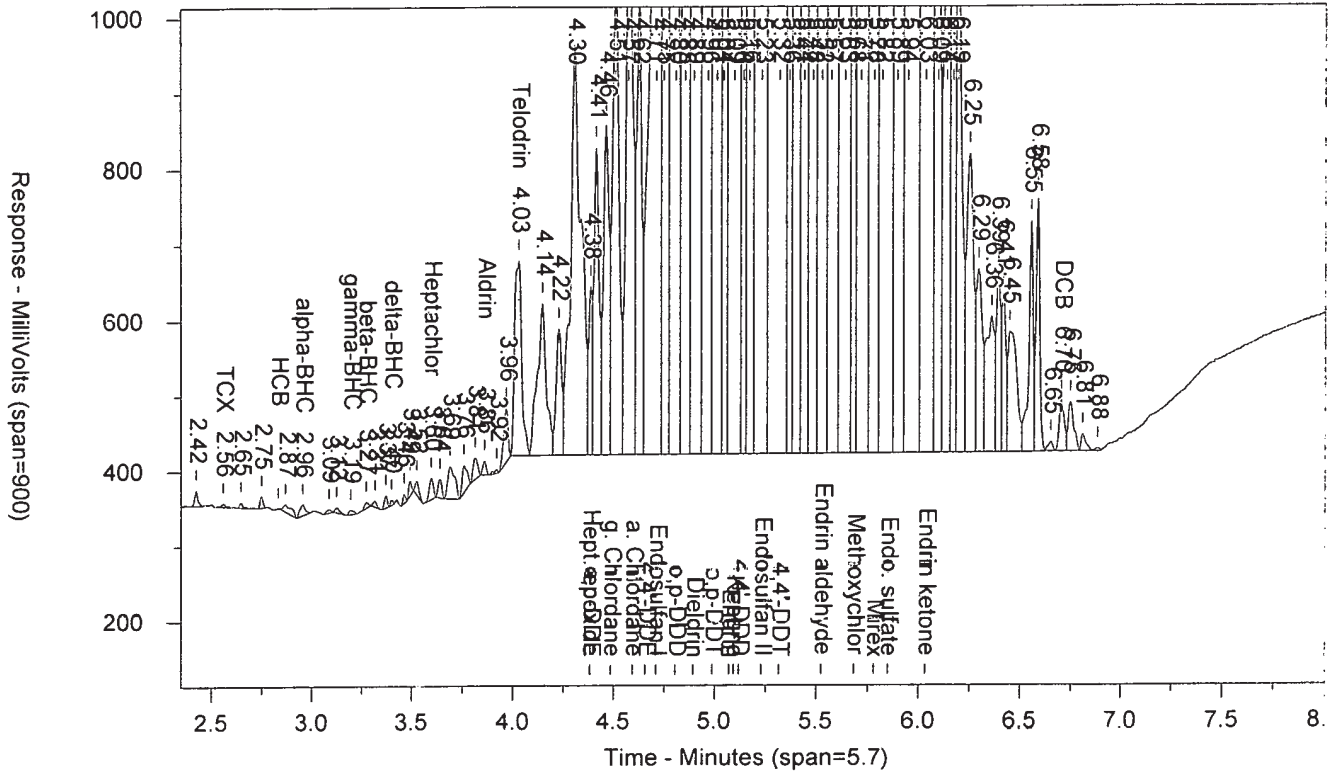
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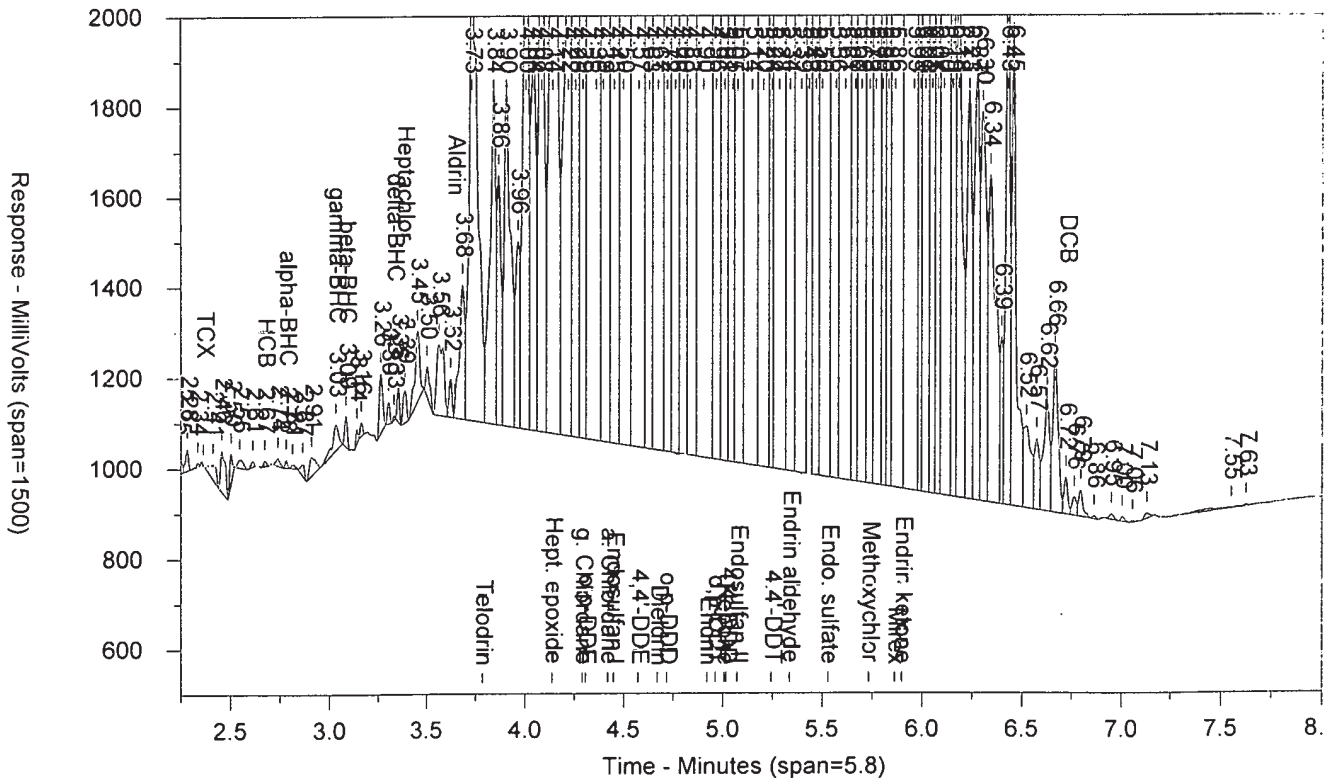
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SW-846 808

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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA41824E      AATOXA4AA      ICAL 183129999      00177      SW-846 8081A  
 Injected On: 11/9/2018 7:16:17 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

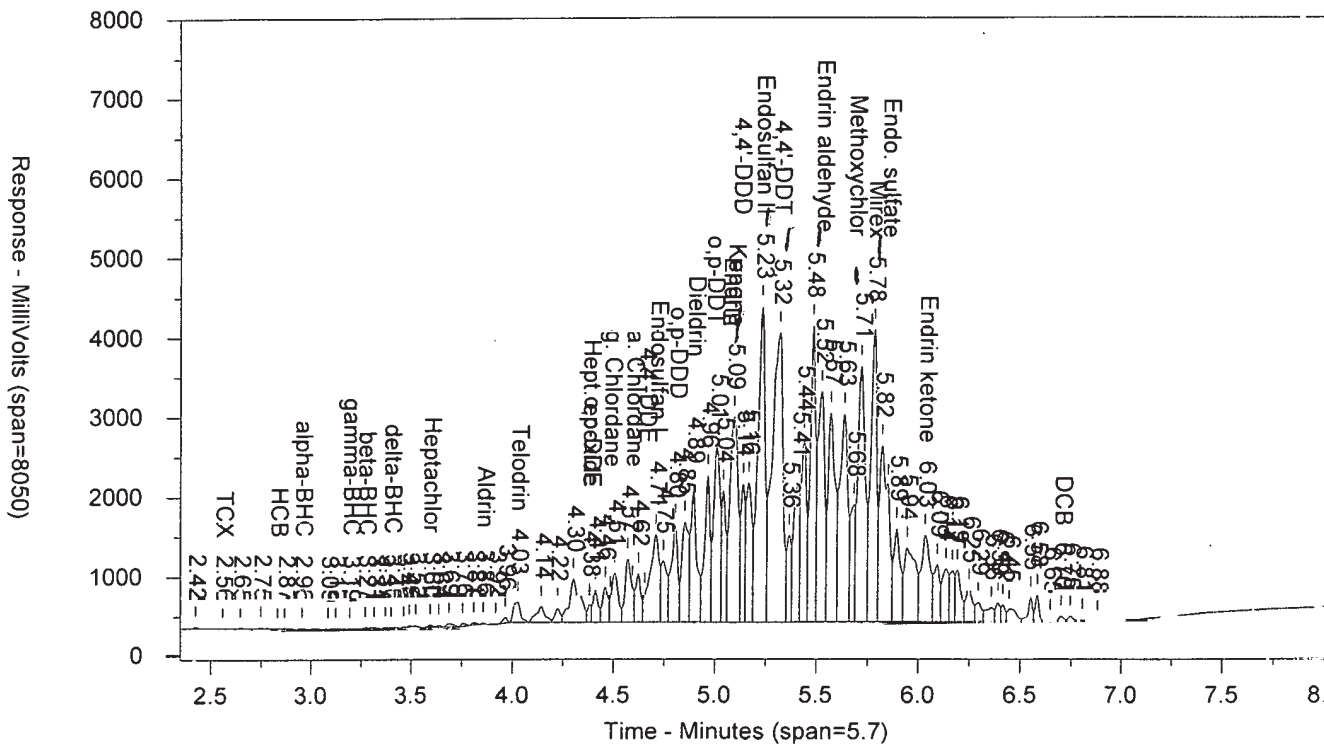
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.559	4676	.012	TCX		0		TCX
	0		TCX		0		TCX
			TCX		0		TCX
			TCX		0		TCX
2.956	14921	.027	alpha-BHC	2.672	12921	.009	alpha-BHC
3.194	5904	.013	gamma-BHC	2.781	17866	.008	alpha-BHC
3.27	8104	.039	beta-BHC	3.034	58013	.031	gamma-BHC
3.397	7217	.017	delta-BHC	3.085	68424	.087	beta-BHC
3.595	28638	.073	Heptachlor	3.331	9460	.006	delta-BHC
3.857	18906	.052	Aldrin	3.387	70829	.048	Heptachlor
4.027	259168	1.195	Telodrin		0		Aldrin
	0		Telodrin		0		Telodrin
	0		Hept. epoxide	4.138	1582413	1.424	Hept. epoxide
4.384	223661	1.202	g. Chlordane	4.29	1853584	1.591	g. Chlordane
4.709	1095911	3.644	Endosulfan I		0		Endosulfan I
	0		Endosulfan I	4.449	1787098	1.749	Endosulfan I
4.893	1650783	5.105	Dieldrin	4.574	3794267	3.367	4,4'-DDE
4.805	1217220	7.198	o,p-DDD	4.67	7070495	6.108	Dieldrin
	0		o,p-DDD	4.718	3551059	7.099	o,p-DDD
5.093	2575028	19.17	Kepone	4.963	5629910	10.078	o,p-DDT
5.228	3959345	14.531	Endosulfan II	5.007	5417140	14.736	Kepone
5.315	3633881	13.669	4,4'-DDT	5.071	13242650	13.655	Endosulfan II
5.523	2893958	12.816	Endrin aldehyde	5.244	3416320	3.692	4,4'-DDT
5.682	1472825	11.546	Methoxychlor	5.336	14769690	18.824	Endrin aldehyde
5.779	3676622	19.367	Mirex	5.731	6378810	14.788	Methoxychlor
6.032	1090572	3.727	Endrin ketone	5.861	3994128	7.222	Mirex
6.701	67895	-.73	DCB		0		Endrin ketone
			DCB	6.718	81006	-.035	DCB

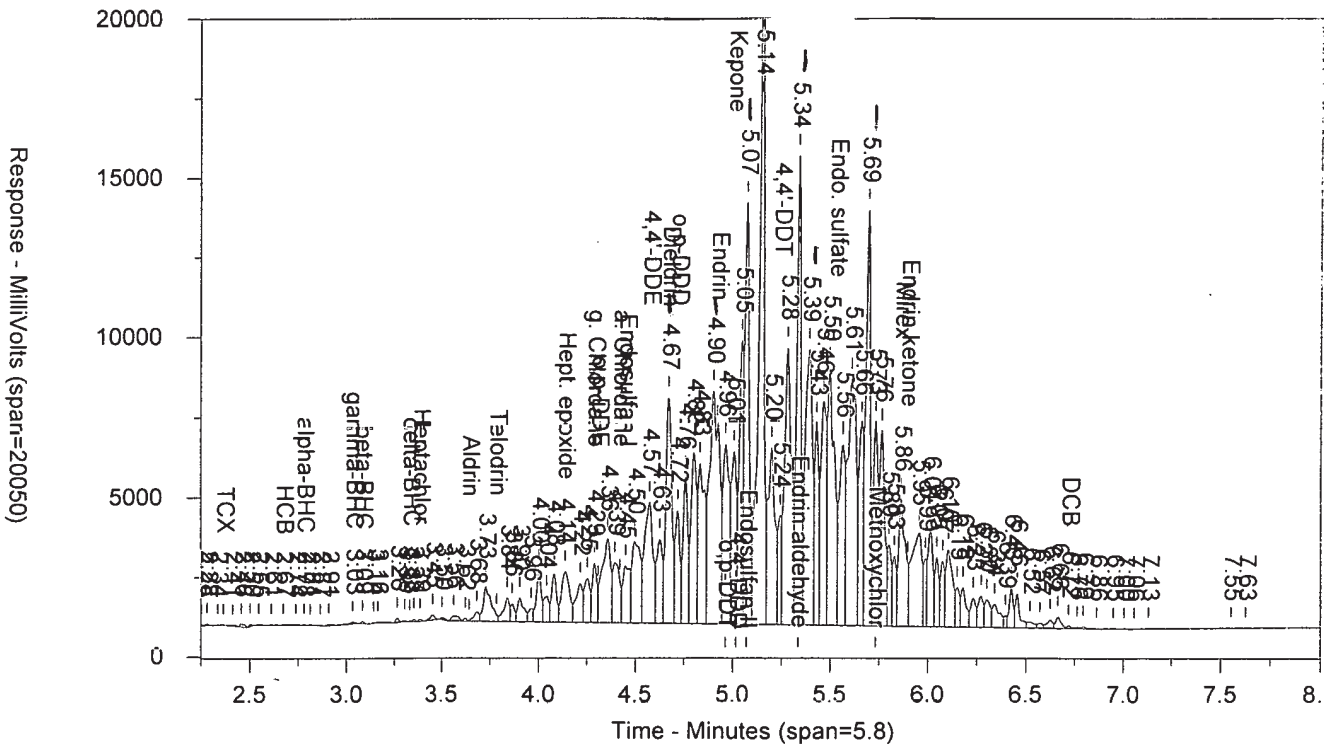
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 Area File: 05pest18306007B.029.RAW  
 Method A: 05PESTD1.MET  
 Method B: 05PESTD1B.MET  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1030603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/9/2018 7:24:18 PM  
 File Reported On: 11/12/2018 at 12:06:02 PM

TOXA41824E AATOXA4AA ICAL 1831299999 00177 SW-846 808

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## LANCASTER LABORATORIES

Sample Number: TOXA51824D      AATOXA5AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:29:07 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.030.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.827		7156	8960
1.872		5381	3868
1.964		8699	5913
2.02		151579	114178
2.076		6941	6664
2.15		8464	7297
2.187		42342	39806
2.301		6464	6002
2.337		13597	14108
2.427		37290	34277
2.561	TCX	4797	12153
2.649		16362	13630
2.751		9876	10356
2.871		16251	65778
2.957	alpha-BHC	31249	57327
3.01		5177	10747
3.084		9578	13979
3.127		18525	29749
3.196	gamma-BHC	11456	19594
3.276	beta-BHC	18152	22959
3.318		20015	26756
3.372		34364	34989
3.426	delta-BHC	18757	29921
3.464		22427	18935
3.495		39252	41546
3.523		25981	35107
3.597	Heptachlor	45174	72152
3.641		49683	63161
3.69		72413	202398
3.759		85592	150703
3.813		84692	125259
3.86	Aldrin	38536	49302
3.92		9328	11191
3.965		117691	183061
4.03	Telodrin	521447	1325465
4.146		450191	1398691
4.227		350549	685561
4.304		1065767	2921824
4.339		649937	1237995
4.386	o,p-DDE	430842	531101
4.413		809076	1462940
4.462		864678	1739363
4.509		1184530	2726351
4.572		1527366	3291071
4.625		1188748	2431241
4.712	Endosulfan I	2136624	7147236
4.748		1549877	3132228
4.807		2370187	5260326
4.853		2382837	5919198
4.896	Dieldrin	3184959	6548376
4.966		3550996	7069280
5.01		4167849	9195907

## Chrom Perfect Chromatogram Report

RT A	Compound A	Height A	Area A
5.043		3147607	4820177
5.094	Kepone	4889051	13969020
5.141		3320305	5097312
5.168		3385980	6684986
5.23	Endosulfan II	7412214	18347480
5.316	4,4'-DDT	6786812	25391250
5.367		2079011	3074381
5.414		3314825	7498534
5.439		4261235	7780172
5.481		6888860	12818240
5.526	Endrin aldehyde	5379846	12442190
5.57		4898553	12081450
5.637		4855514	13791540
5.685	Methoxychlor	2859305	4647131
5.716		6024879	15181680
5.781	Mirex	6813409	14155230
5.821		4137732	7922528
5.848	Endo. sulfate	3309466	5178450
5.895		2225458	5210953
5.946		1803352	6939131
6.036	Endrin ketone	2066210	6403826
6.095		1393554	2898023
6.138		1295223	2919279
6.169		1267733	2055060
6.193		1251356	2514505
6.251		784925	1860158
6.295		488467	1037130
6.358		373615	1052551
6.392		477560	770884
6.415		420955	609170
6.45		324280	1055731
6.554		596323	985841
6.586		651827	874313
6.652		36175	79253
6.703	DCB	139466	259582
6.748		126063	251769
6.809		42567	70357
6.879		7970	9408
6.997		5031	20651
7.039		5052	6166

## LANCASTER LABORATORIES

Sample Number: TOXA51824D      AATOXA5AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:29:07 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.030.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
1.932		6122	6336
1.974		22924	27577
2		55796	75020
2.06		47291	85937
2.085		38661	33836
2.111		53904	95421
2.174		42592	81851
2.196		54724	57974
2.248		36949	39134
2.28		101654	105702
2.332		29399	34129
2.36	TCX	8474	8729
2.423		30751	65136
2.453		21265	17391
2.5		118114	110614
2.552		36541	67029
2.611		26973	29847
2.673	HCB	21629	22534
2.736		39823	87263
2.777	alpha-BHC	28985	22405
2.814		19910	23916
2.864		30118	37698
2.908		62876	142815
3.033	gamma-BHC	131602	305377
3.083		149513	147417
3.114	beta-BHC	16612	11953
3.14		19727	12981
3.163		68910	68698
3.22		37071	50192
3.263		231731	296871
3.299		52769	44620
3.331	delta-BHC	34616	28518
3.351		148738	121763
3.387	Heptachlor	132945	147543
3.451		360682	657910
3.501		170576	253921
3.563		330809	807874
3.62		158151	155060
3.68		575021	1103002
3.726		2223199	6051848
3.836		1594733	3282488
3.863		1121882	1581613
3.901		1476275	3331434
3.961		784692	1275267
4		3153488	5495571
4.039		1625074	3052154
4.079		3056161	5629192
4.135	Hept. epoxide	3127942	8847907
4.214		2309685	5430804
4.252		2684878	5625695
4.287	g. Chlordane	3430097	5126842
4.355		5206484	16044470

## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.4		3572482	8866478
4.446	Endosulfan I	3456209	8441511
4.492		4944234	15445720
4.571	4,4'-DDE	7369108	22778710
4.624		4994820	10270010
4.667	Dieldrin	13649130	29127540
4.715	o,p-DDD	6727036	11683390
4.756		8900236	15825110
4.798		10365710	20729710
4.829		9669219	23296810
4.899		14408070	31851060
4.922	Endrin	12021970	19490130
4.96	o,p-DDT	10904870	24222170
5.005	Kepone	10384610	19084860
5.044		17337610	26017690
5.069	Endosulfan II	25950170	41911800
5.142		41631040	75565530
5.196		10542490	26291040
5.242	4,4'-DDT	6525264	8628113
5.277		16927650	40923000
5.334	Endrin aldehyde	28318690	45356640
5.389		16608580	43173960
5.427		12109910	18565520
5.463		13451220	25368450
5.494		15213420	39008540
5.561		10973790	22489480
5.607		14792630	44185460
5.658		12110050	19697030
5.689		24991570	41278380
5.729	Methoxychlor	12366220	20629280
5.761		11695950	20820810
5.796		4852179	7001638
5.825		4162822	5648500
5.858	Mirex	7650198	19143630
5.952		5599419	20178650
5.984		4009779	4291022
6.009		5723432	10881980
6.042		4153774	5625011
6.071		3988006	5930675
6.101		4616145	10693720
6.147		2331828	3204373
6.176		2334745	4457561
6.229		1722356	3155713
6.268		1834794	3351324
6.296		1616170	3229825
6.336		1373578	3585689
6.391		698882	734450
6.422		2317791	3298283
6.45		2010719	3294690
6.512		346919	931591
6.569		297939	533889
6.621		485303	1037740
6.661		660580	1285378
6.715	DCB	159250	226084
6.758		81248	125081
6.791		112610	179282
6.859		13798	16506
6.907		5041	7471
6.946		20160	30859
7.002		19997	26812
7.052		3931	4750
7.135		10162	18767
7.457		4272	26284

TOXA51824D

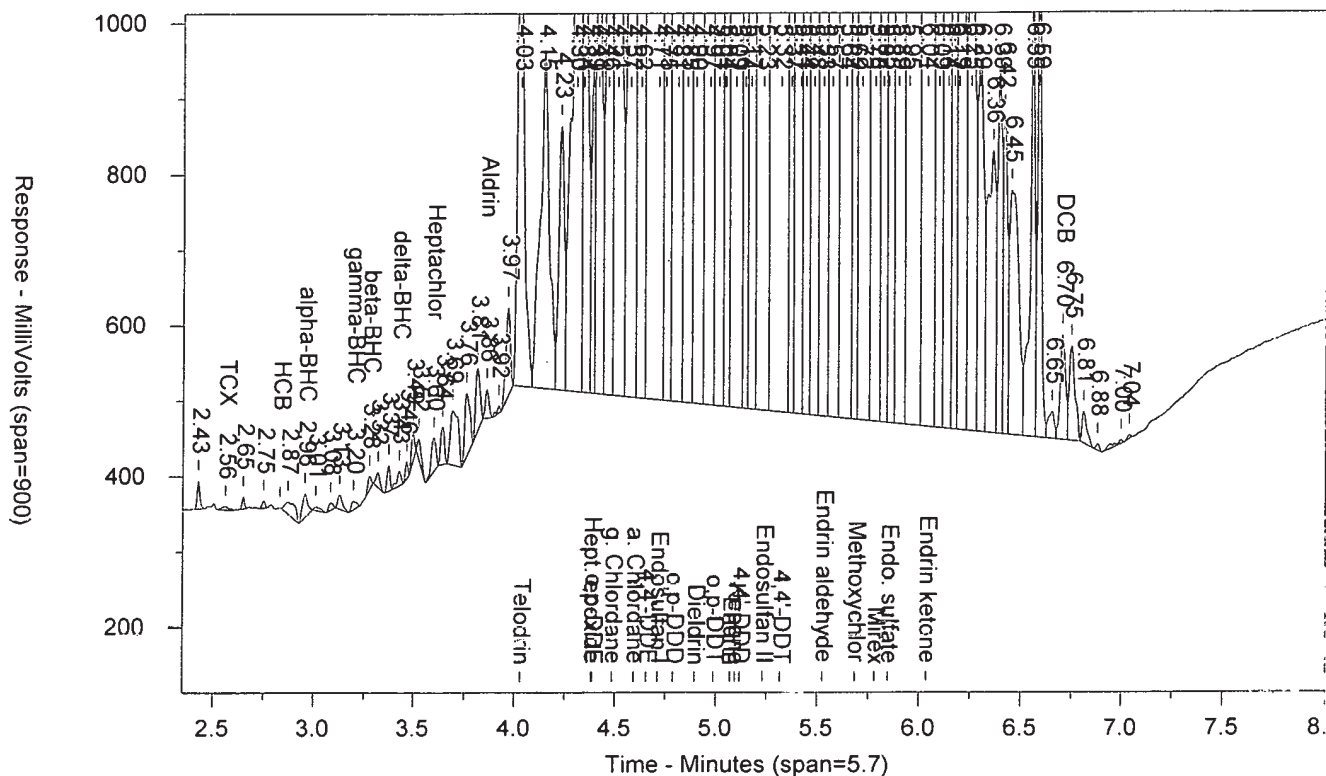
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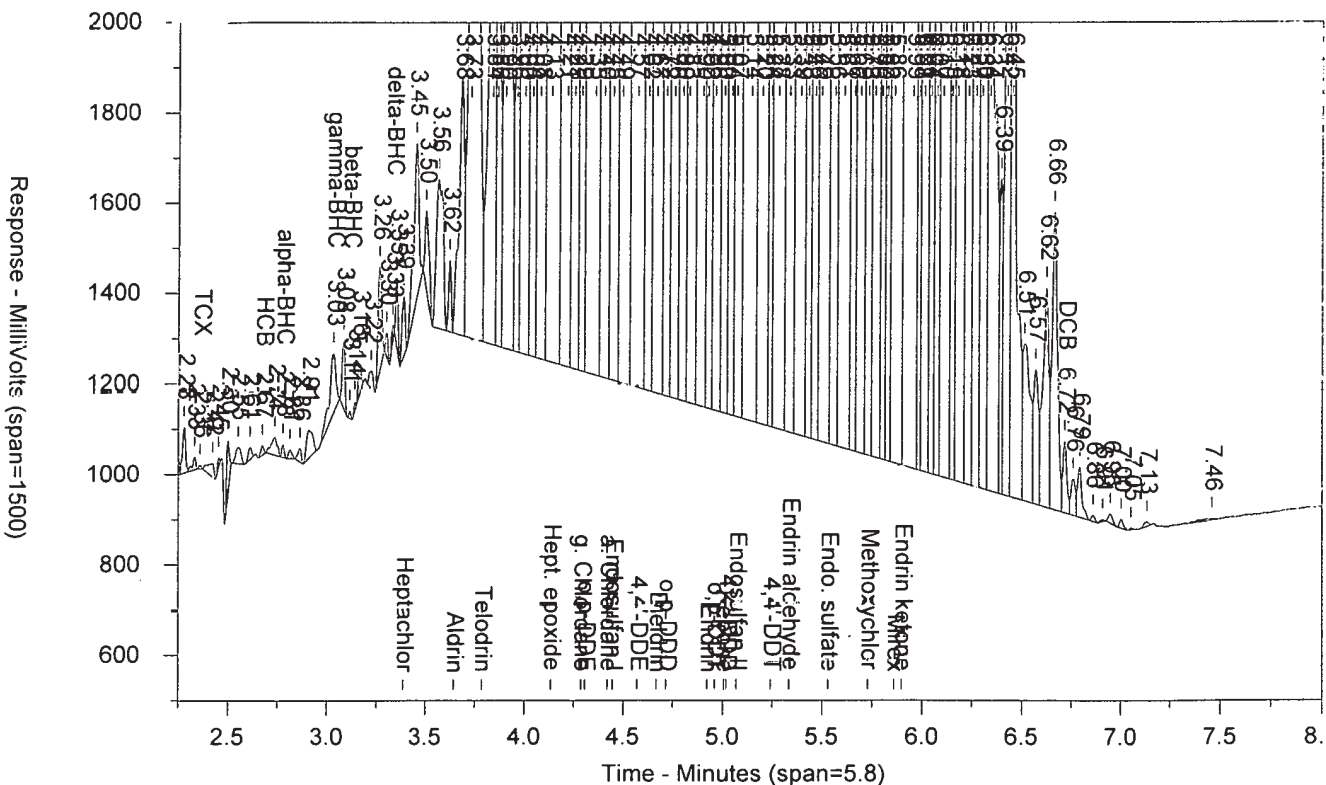
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA51824D      AATOXA5AA      ICAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 7:29:07 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

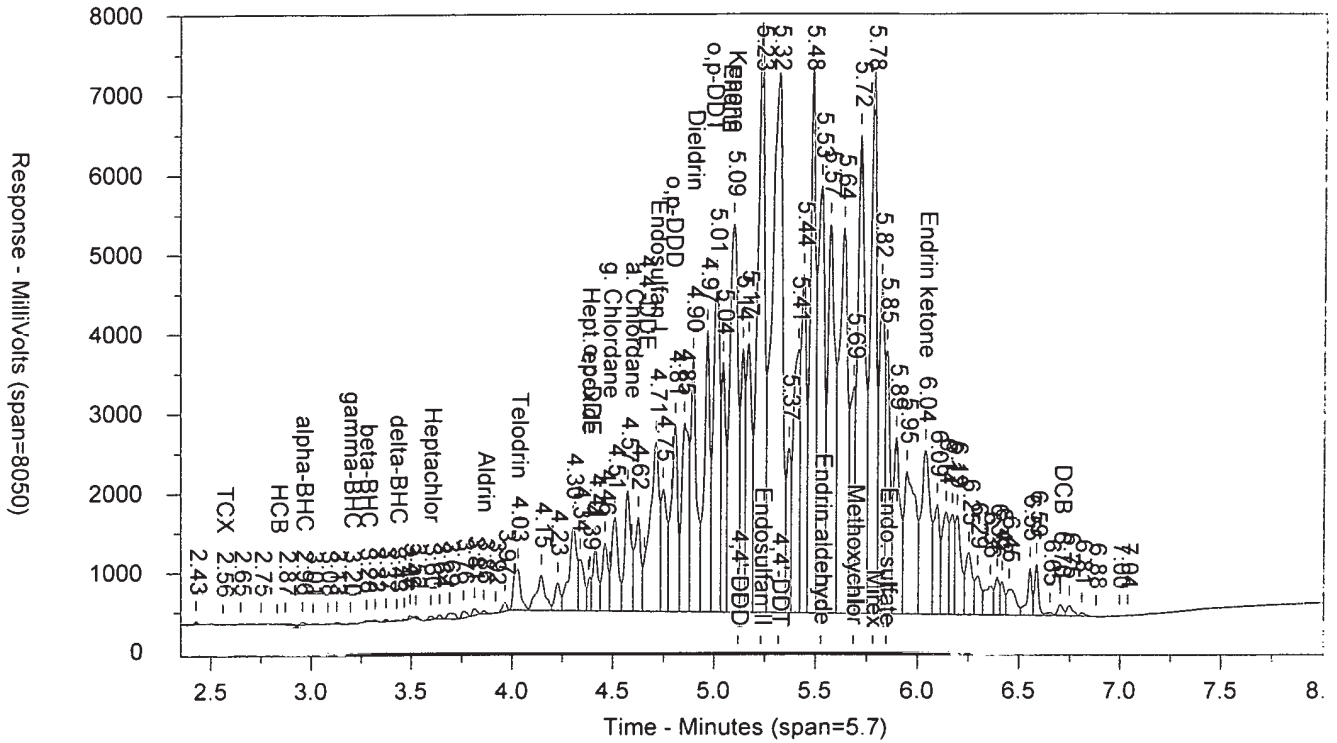
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.561	4797	.012	TCX	2.36	8474	.005	TCX
	0		TCX	2.673	21629	.015	TCX
			TCX	2.777	28985	.013	TCX
2.957	31249	.057	alpha-BHC	2.777	28985	.013	alpha-BHC
3.196	11456	.025	gamma-BHC	3.033	131602	.071	gamma-BHC
3.276	18152	.088	beta-BHC	3.114	16612	.021	beta-BHC
3.426	18757	.044	delta-BHC	3.331	34616	.02	delta-BHC
3.597	45174	.116	Heptachlor	3.387	132945	.091	Heptachlor
3.86	38536	.106	Aldrin		0		Aldrin
4.03	521447	2.405	Telodrin		0		Telodrin
	0		Hept. epoxide	4.136	3127942	2.814	Hept. epoxide
	0		g. Chlordane	4.287	3430097	2.943	g. Chlordane
4.386	430842	2.316	o,p-DDE		0		o,p-DDE
4.712	2136624	7.105	Endosulfan I	4.446	3456209	3.382	Endosulfan I
	0		4,4'-DDE	4.571	7369108	6.539	4,4'-DDE
4.896	3184959	9.85	Dieldrin	4.667	13649130	11.791	Dieldrin
	0		o,p-DDD	4.715	6727036	13.448	o,p-DDD
	0		Endrin	4.922	12021970	11.614	Endrin
	0		o,p-DDT	4.96	10904870	19.52	o,p-DDT
5.094	4889051	35.321	Kepone	5.005	10384610	25.045	Kepone
5.23	7412214	27.204	Endosulfan II	5.069	25950170	26.758	Endosulfan II
5.316	6786812	25.529	4,4'-DDT	5.242	6525264	7.052	4,4'-DDT
5.526	5379846	23.825	Endrin aldehyde	5.334	28318690	36.091	Endrin aldehyde
5.685	2859305	22.415	Methoxychlor	5.729	12366220	28.669	Methoxychlor
5.781	6813409	35.891	Mirex	5.858	7650198	13.834	Mirex
5.848	3309466	13.324	Endo. sulfate		0		Endo. sulfate
6.036	2066210	7.062	Endrin ketone		0		Endrin ketone
6.703	139466	-.338	DCB	6.715	159250	.093	DCB

Files:

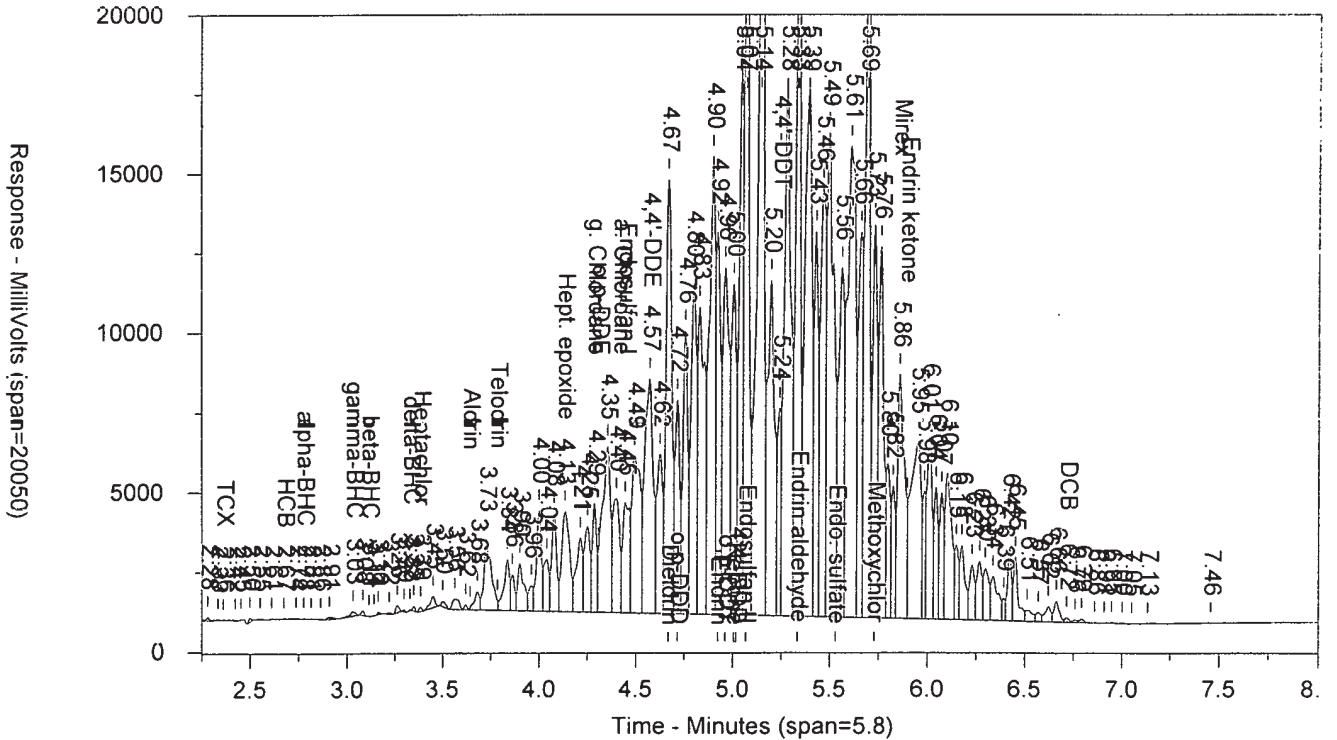
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 Method B: 05PFSTD1B.MET  
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 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/9/2018 7:37:08 PM  
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TOXA51824D AATOXA5AA ICAL 1831299999 00177 SW-846 801

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## LANCASTER LABORATORIES

Sample Number: TOXA61824D      AATOXA6AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:41:57 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.031.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.795		5374	3657
1.843		12242	15539
1.902		18888	26462
1.931		15380	18838
1.984		12164	13399
2.019		313455	242674
2.074		9781	10156
2.116		5542	4223
2.148		19938	19875
2.186		51041	53449
2.257		7019	8094
2.299		13539	11462
2.337		24390	21593
2.425		71315	65016
2.502		15791	14325
2.555	TCX	6111	13071
2.648		33032	26958
2.75		18137	21876
2.784		11087	19883
2.871		25109	63009
2.894		29354	54153
2.957	alpha-BHC	43138	70261
3.01		8407	20809
3.081		16492	24253
3.127		24001	40884
3.194	gamma-BHC	21323	38043
3.274	beta-BHC	20233	26125
3.315		22865	31695
3.37		61744	62875
3.398		10651	7703
3.424	delta-BHC	22968	24634
3.463		47084	41802
3.493		39487	40114
3.522		55557	81152
3.599	Heptachlor	55669	88420
3.638		98531	121301
3.703		97166	275755
3.757		139822	263718
3.813		101368	152491
3.857	Aldrin	68068	85350
3.894		14463	18015
3.964		251924	413569
4.027	Telodrin	1086080	2715295
4.144		855043	2800124
4.228		733789	1460903
4.27		770338	1139959
4.303		2280259	7505797
4.385	o,p-DDE	969781	1286343
4.411		1736550	3102301
4.46		1863538	3787605
4.507		2613049	6076401
4.57		3340869	7304237



## Chrom Perfect Chromatogram Report

RT A	Compound A	Height A	Area A
4.624		2575444	5200151
4.71	Endosulfan I	4589799	15448430
4.746		3335623	7127063
4.806	o,p-DDD	5077003	11252710
4.853		5158300	12828180
4.894	Dieldrin	6749946	14269220
4.964		7613812	15128920
5.008		9035208	19912420
5.041		6841881	10521240
5.092	Kepone	10459710	30325860
5.139		7187303	10502780
5.165		7395234	15220210
5.229	Endosulfan II	15941600	39791120
5.317	4,4'-DDT	14842260	55262560
5.365		4580661	6830869
5.412		7133549	15664790
5.438		9384524	17727500
5.48		15083970	27911190
5.525	Endrin aldehyde	11693420	27862300
5.568		10736240	26700770
5.636		10814620	30217390
5.684	Methoxychlor	6312232	10277630
5.715		13039580	32868810
5.78	Mirex	15150840	31291450
5.819		9152821	29140900
5.893		5009259	11824770
5.945		4075555	15927920
6.035	Endrin ketone	4670233	14914350
6.093		3191377	6648397
6.138		2967296	6800466
6.167		2905354	4456673
6.192		2884988	5867982
6.249		1807470	4346706
6.293		1168591	2471822
6.334		768451	977992
6.357		883619	1548653
6.39		1113067	1816388
6.414		985901	1510051
6.446		766861	2515076
6.552		1371754	2298432
6.584		1468416	2035387
6.648		102109	231651
6.702	DCB	318242	633124
6.746		293904	575353
6.807		94469	156697
6.879		19789	24426
6.937		14336	32704
6.993		9706	10238
7.035		11871	15868

## LANCASTER LABORATORIES

Sample Number: TOXA61824D      AATOXA6AA      ICAL 1831299999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:41:57 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.031.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
1.942		18700	26216
1.976		45671	53924
2.002		95141	117971
2.063		75414	115692
2.088		64053	66182
2.113		87917	174152
2.154		67999	72745
2.177		101575	129697
2.199		145533	210747
2.25		130918	201467
2.282		258234	341059
2.335		143694	288227
2.363	TCX	104152	154996
2.389		110723	136073
2.427		120397	156225
2.455		145607	162575
2.472		148528	136402
2.501		170141	145669
2.551		43140	79339
2.612		33747	40080
2.674	HCB	25297	27846
2.737		67186	129959
2.78	alpha-BHC	68096	54417
2.815		25633	27257
2.867		57364	71049
2.91		75321	162669
3.004		21675	39079
3.034	gamma-BHC	158471	254062
3.085		271286	265486
3.142		46234	31736
3.164		128324	169316
3.226		57594	65545
3.265		307318	365658
3.301		152712	151456
3.353	delta BHC	302120	451196
3.39	Heptachlor	208727	225407
3.454		573636	979306
3.503		186733	280884
3.562		595099	857893
3.582		621775	781355
3.622		287972	298123
3.682		1184036	2254397
3.728		4626958	12576890
3.839		3004653	6390028
3.863		2270567	3170896
3.902		2981473	6740839
3.962		1674501	2693133
4.001		6722571	11526000
4.042		3364048	6220748
4.08		6394545	11686870
4.137	Hept. epoxide	6730564	18694350
4.215		5077014	12267860

## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.252		5769710	11737410
4.289	g. Chlordane	7474146	11710790
4.356		11531420	35479160
4.394		7789026	18830260
4.447	Endosulfan I	7684008	18675110
4.493		10977400	34413960
4.573	4,4'-DDE	16565170	49800720
4.626		11174270	23666810
4.67	Dieldrin	30101790	65022020
4.717	o,p-DDD	14861520	25992410
4.758		20371030	35852430
4.8		23469320	47145680
4.831		21804650	52770080
4.9		32093910	74892740
4.924	Endrin	27133440	42192000
4.962	o,p-DDT	25079280	51994370
5.006	Kepone	23563090	47574700
5.047		39000410	58777260
5.07	Endosulfan II	58110820	95952600
5.145		91264760	179601600
5.198		24440830	48354320
5.244	4,4'-DDT	14741820	18087840
5.28		38508880	94688260
5.336	Endrin aldehyde	64766540	103290500
5.392		38091830	99443700
5.43		27351240	42264920
5.465		31020090	61126060
5.496		35191800	88268950
5.564		24893860	49619950
5.609		34431470	101996600
5.661		27803020	47716650
5.691		57493820	91602260
5.731	Methoxychlor	28792840	50046420
5.763		26689120	46479500
5.799		11146960	16102940
5.827		9613420	13062540
5.861	Mirex	17600460	43104440
5.955		12837460	48353080
5.986		9131568	9789660
6.012		13316120	24227300
6.045		9483266	13591130
6.073		9090570	12900870
6.103		10670950	24735390
6.149		5333525	7821135
6.178		5325668	9861605
6.231		3900307	7438567
6.269		4265755	7407608
6.299		3707412	7380320
6.338		3145106	8188576
6.394		1571597	1794320
6.424		5304334	7544076
6.452		4532625	7254558
6.516		802277	2147622
6.571		683833	1230709
6.623		1066742	2396736
6.663		1460885	2776282
6.717	DCB	357128	520707
6.759		183154	285925
6.792		248281	400337
6.861		30358	33433
6.913		13522	18506
6.948		45156	65594
7.003		42521	53857
7.133		19506	42508
7.168		13996	23393
7.44		4098	21811

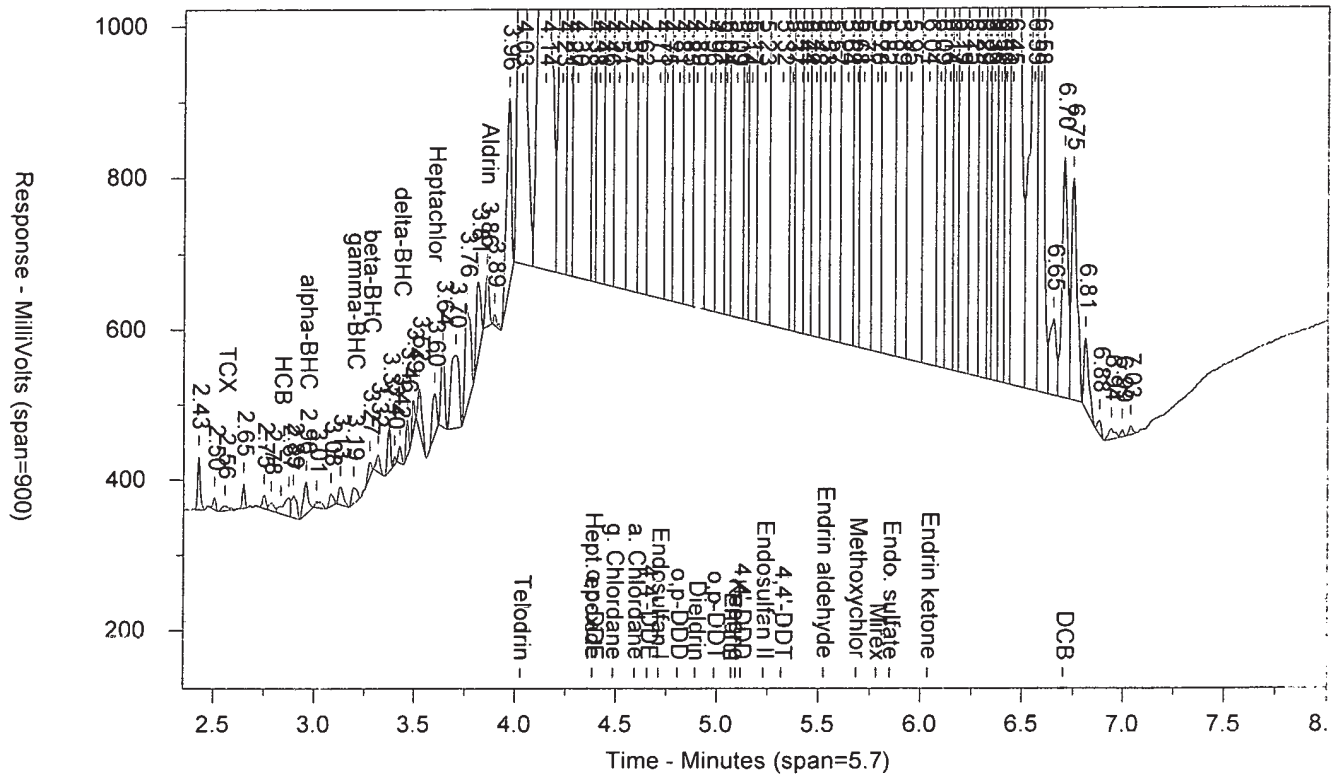
Chrom Perfect Chromatogram Report

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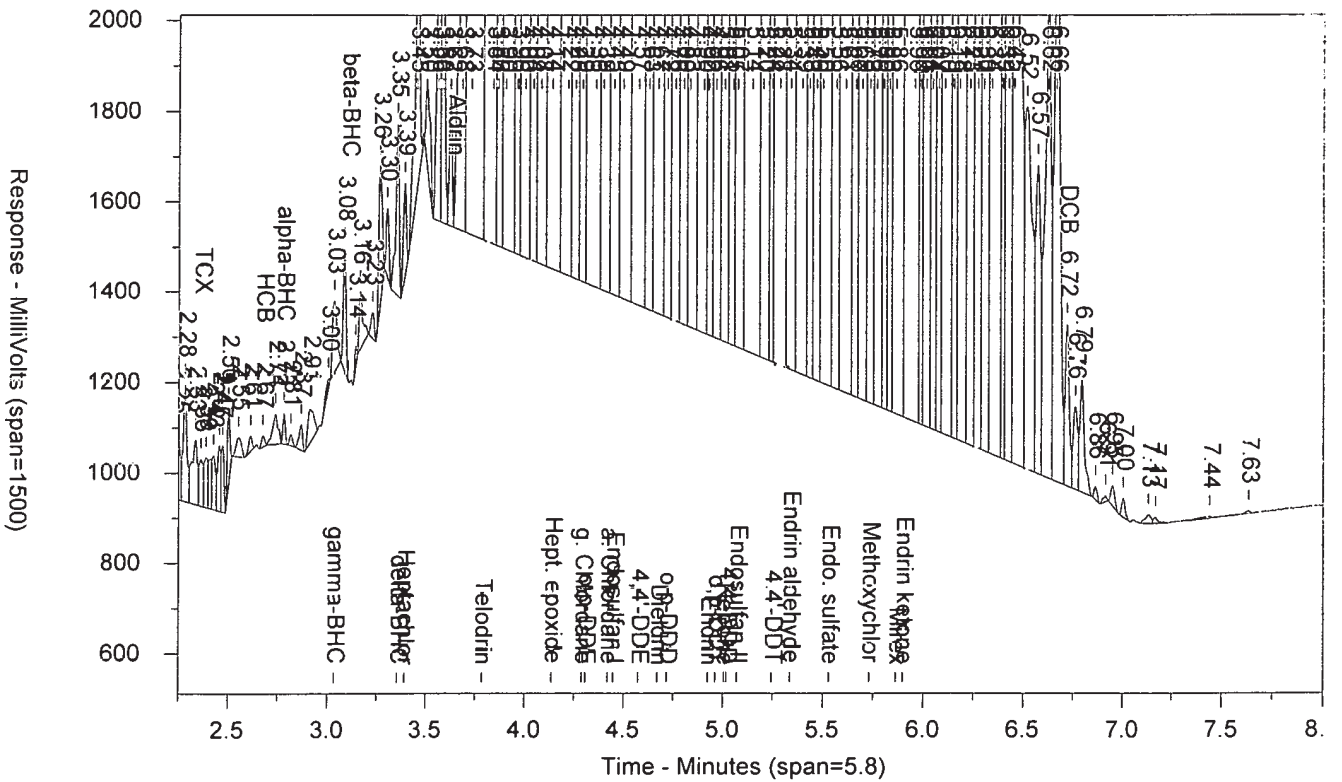
RT B	Compound B	Height B	Area B
7.632		5803	9639

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TOXA61824D AATOXA6AA ICAL 1831299999 00177 SW-846 801  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA61824D      AATOXA6AA      ICAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 7:41:57 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

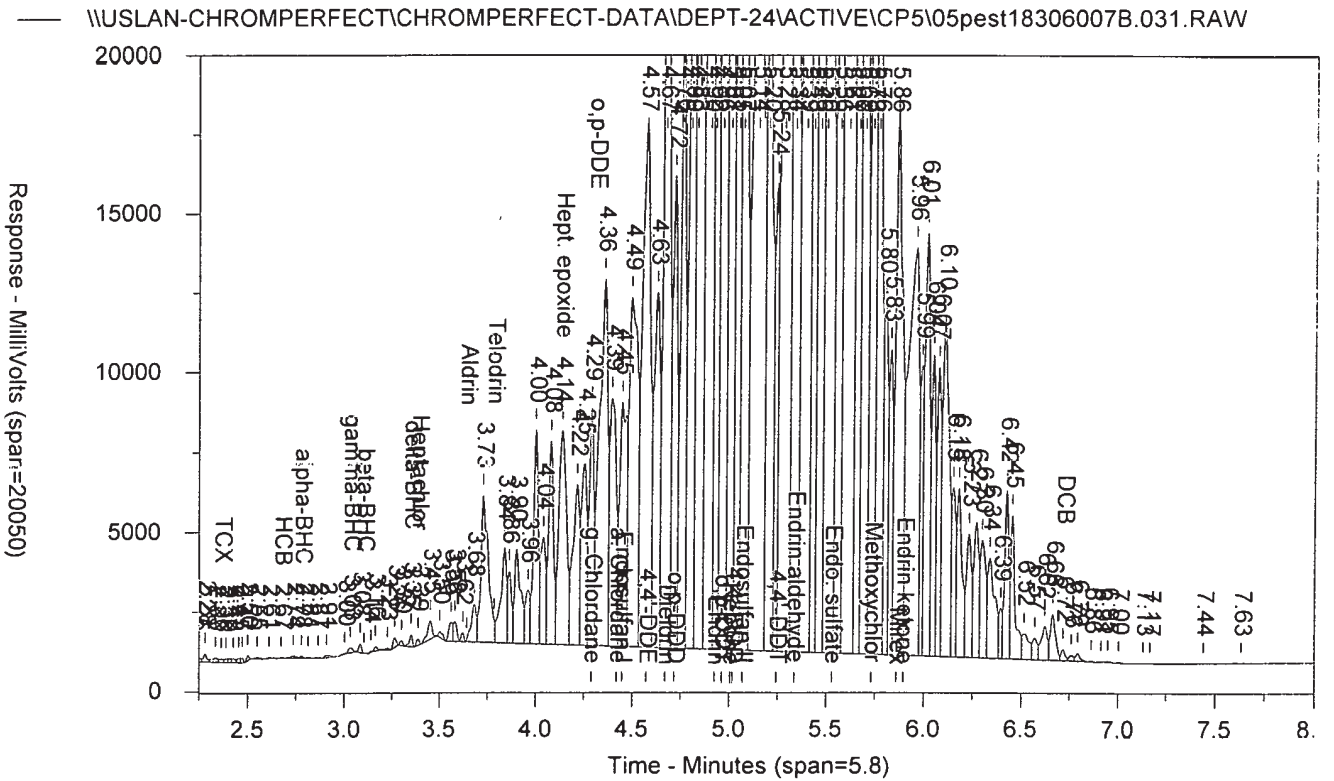
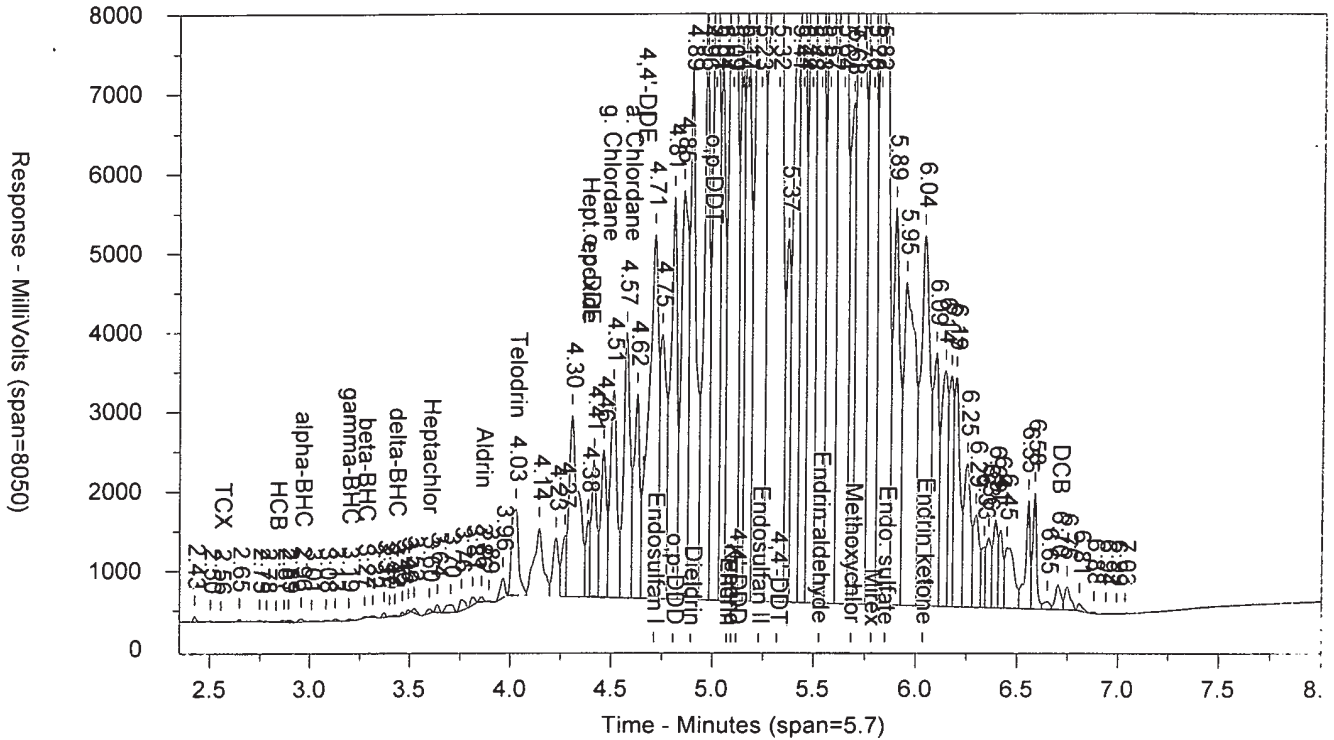
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.555	6111	.015	TCX	2.363	104152	.062	TCX
	0		TCX	2.674	25297	.018	TCX
			TCX	2.78	68096	.03	TCX
2.957	43138	.079	alpha-BHC	2.78	68096	.03	alpha-BHC
3.194	21323	.046	gamma-BHC	3.034	158471	.085	gamma-BHC
3.274	20233	.098	beta-BHC		0		beta-BHC
3.424	22968	.053	delta-BHC	3.353	382120	.225	delta-BHC
3.599	55669	.142	Heptachlor	3.39	208727	.142	Heptachlor
3.857	68068	.188	Aldrin		0		Aldrin
4.027	1086080	5.008	Telodrin		0		Telodrin
	0		Hept epoxide	4.137	6730564	6.056	Hept. epoxide
	0		g. Chlordane	4.289	7474146	6.414	g. Chlordane
4.385	969781	5.212	o,p-DDE		0		o,p-DDE
4.71	4589799	15.262	Endosulfan I	4.447	7684008	7.52	Endosulfan I
	0		4,4'-DDE	4.573	16565170	14.7	4,4'-DDE
4.894	6749946	20.875	Dieldrin	4.67	30101790	26.003	Dieldrin
4.806	5077003	30.024	o,p-DDD	4.717	14861520	29.71	o,p-DDD
	0		Endrin	4.924	27133410	26.212	Endrin
	0		o,p-DDT	4.962	25079280	44.892	o,p-DDT
5.092	10459710	74.201	Kepone	5.006	23563090	52.395	Kepone
5.229	15941600	58.507	Endosulfan II	5.07	58110820	59.92	Endosulfan II
5.317	14842260	55.031	4,4'-DDT	5.244	14741820	15.932	4,4'-DDT
5.525	11693420	51.784	Endrin aldehyde	5.336	64766540	82.543	Endrin aldehyde
5.684	6312232	49.484	Methoxychlor	5.731	28792840	66.751	Methoxychlor
5.78	15150840	79.809	Mirex	5.861	17600460	31.826	Mirex
6.035	4670233	15.962	Endrin ketone		0		Endrin ketone
6.702	318242	.641	DCB	6.717	357128	.415	DCB

Files:

Area File: 05pest18306007.031.RAW  
 Area File: 05pest18306007B.031.RAW  
 Method A: 05PESTD1.MET  
 Method B: 05PESTD1B.MET  
 Calibration File A: 05pest1830603.cal  
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 Format A: pestD5.FMTA  
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TOXA61824D AATOXA6AA ICAL 1831299999 00177 SW-846 801  
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## LANCASTER LABORATORIES

Sample Number: ICTXX1824D      AAICTXXAA · CCAL 1831299999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:54:46 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.032.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.824		8208	10699
1.901		7606	22086
1.961		9466	16528
2.018		75728	59314
2.074		7957	8919
2.185		44391	48402
2.298		4421	4901
2.335		7754	10192
2.425		22862	22596
2.559	TCX	4139	6150
2.647		8508	12816
2.749		22214	29699
2.954	alpha-BHC	15847	51166
3.083		3852	6619
3.124		6435	10276
3.197	gamma-BHC	4316	7732
3.271	beta-BHC	6508	7868
3.313		6238	9800
3.369		15927	15629
3.422	delta-BHC	5849	6313
3.462		10496	9043
3.489		16676	16376
3.521		12980	17682
3.593	Heptachlor	15345	23303
3.637		24267	29848
3.688		25158	69241
3.755		30179	56161
3.811		27244	41028
3.856	Aldrin	17785	20664
3.895		4684	7174
3.962		57602	91549
4.026	Telodrin	245183	604014
4.143		186709	588902
4.224		161198	306598
4.268		166793	241509
4.301		511554	1105562
4.383	o,p-DDE	211741	275999
4.41		383695	673528
4.458		415023	833031
4.506		575975	1336420
4.569		731167	1579202
4.623		575617	1150027
4.709	Endosulfan I	1061769	3458585
4.745		739587	1516628
4.805	o,p-DDD	1155269	2584903
4.851		1184534	2901957
4.893	Dieldrin	1580052	3327128
4.963		1756496	3419308
5.007		2091190	4730954
5.041		1564782	2285853
5.092	Kepone	2451988	6994559
5.138		1654280	2538811



## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.166		1684524	3349176
5.228	Endosulfan II	3797906	9499429
5.315	4,4'-DDT	3488304	12853980
5.364		1047800	1638514
5.413		1663792	3635104
5.437		2198400	3960139
5.478		3508634	6678315
5.523	Endrin aldehyde	2772282	6325912
5.567		2540399	6140853
5.635		2503991	6960657
5.681	Methoxychlor	1423330	2329812
5.714		3091600	7729539
5.779	Mirex	3552567	7134497
5.819		2104802	6614936
5.892		1110177	2600064
5.944		892464	3438129
6.033	Endrin ketone	1039150	3199222
6.092		690848	1487105
6.135		639533	1442961
6.166		622188	951350
6.19		616511	1238197
6.249		376463	918339
6.292		233989	483918
6.356		175690	473580
6.388		227046	360268
6.413		199141	298142
6.45		151024	468201
6.551		293632	454108
6.583		319304	416270
6.648		11872	18911
6.701	DCB	64086	114005
6.746		62313	120070
6.808		21356	35345
6.88		4005	5544

## LANCASTER LABORATORIES

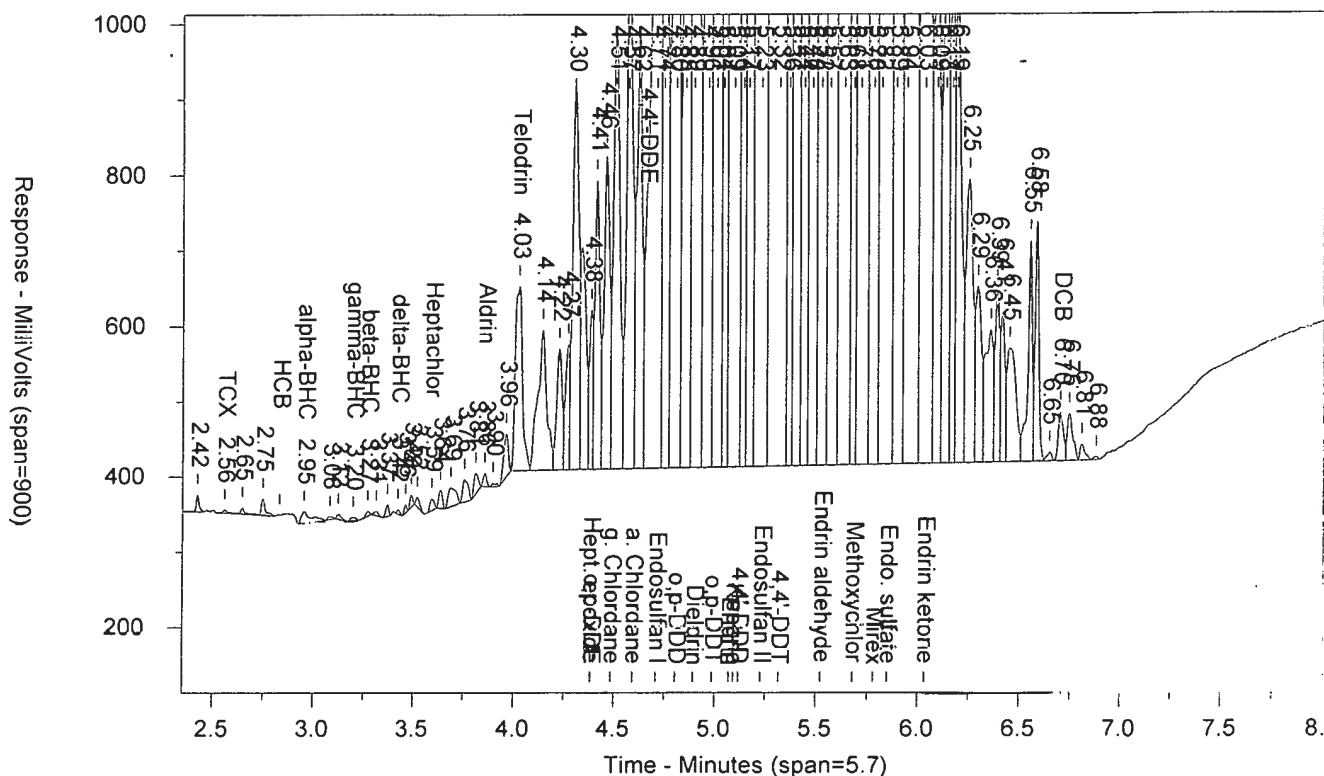
Sample Number: ICTXX1824D      AAICTXXAA      CCAL 1831299999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 7:54:46 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.032.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
1.977		18809	25714
2.002		43419	71388
2.064		52438	108819
2.113		79283	169355
2.177		58959	79516
2.2		62584	85805
2.251		58051	78335
2.282		84348	137638
2.336		56628	123495
2.409		56066	196495
2.456		102457	167231
2.502		63936	58400
2.544		14616	30094
2.615		10801	12937
2.672	HCB	9590	10705
2.737		16865	27525
2.78	alpha-BHC	16669	13322
2.811		7309	7391
2.865		23927	32270
2.909		34916	71158
3.034	gamma-BHC	47229	99261
3.085	beta-BHC	66012	64013
3.142		16753	11364
3.165		28340	26711
3.224		7880	8791
3.264		96215	114543
3.302		32460	30431
3.331	delta-BHC	10565	7711
3.353		73446	62362
3.388	Heptachlor	42396	45152
3.455		136833	259916
3.503		49314	72720
3.562		144385	212278
3.583		146592	172164
3.622		74373	63020
3.682		273373	524332
3.729		1008470	2856263
3.84		658898	1456276
3.864		506315	685270
3.903		688667	1558642
3.963		370492	631619
4.002		1488201	2609156
4.041		744202	1391990
4.08		1393530	2546311
4.138	Hept. epoxide	1473742	4146629
4.217		1120767	2829402
4.254		1281553	2657725
4.289	g. Chlordane	1605666	2493125
4.357		2441356	7624613
4.395		1710354	4146256
4.448	Endosulfan I	1674065	4224836
4.496		2410424	7340796

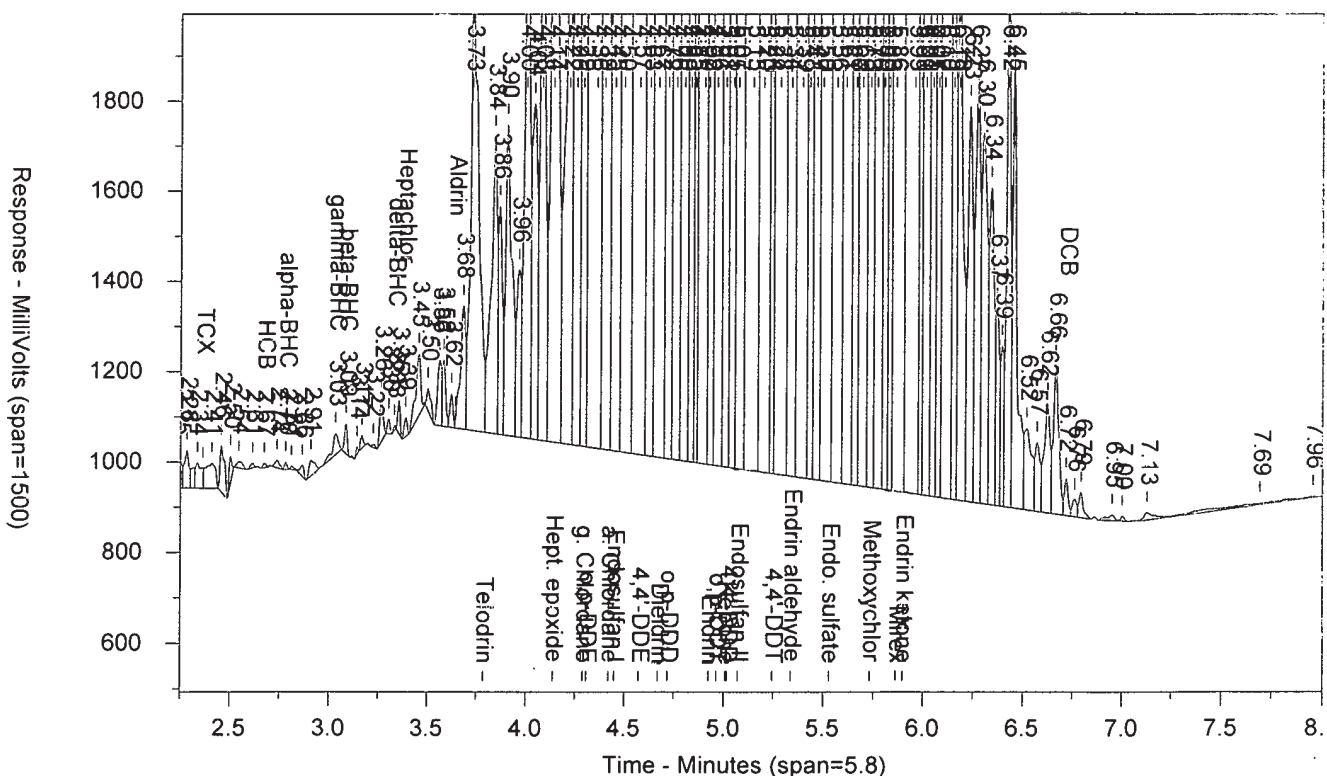
## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.573	4,4'-DDE	3501706	10655530
4.627		2456225	5192769
4.67	Dieldrin	6537470	14178640
4.718	o,p-DDD	3273692	5713094
4.759		4331143	7502891
4.8		5011050	9986643
4.832		4666220	7170229
4.855		3904877	4192910
4.901		6820392	15773130
4.925	Endrin	5807375	9056319
4.963	o,p-DDT	5271414	11785870
5.008	Kepone	5046971	9323219
5.047		8435576	12355160
5.071	Endosulfan II	12475720	20778570
5.145		20070910	36717420
5.199		5219761	12956760
5.245	4,4'-DDT	3227906	3986383
5.281		8188555	20513210
5.336	Endrin aldehyde	13811770	21798050
5.393		7963872	21606670
5.43		6035521	8806786
5.465		6528227	12912150
5.496		7445449	19036320
5.564		5318900	15003540
5.61		7311191	17825300
5.66		5977165	9779965
5.692		12251690	20138340
5.731	Methoxychlor	6058547	10285230
5.763		5747326	10242780
5.799		2419016	3460613
5.827		2081233	2656564
5.861	Mirex	3756683	9815489
5.954		2805687	9842509
5.987		1985587	2128939
6.012		2834110	5243012
6.045		2058293	2960448
6.074		1972882	2790479
6.104		2284146	5352520
6.15		1179714	1725847
6.179		1175156	2200140
6.231		876937	1656793
6.27		926468	1634053
6.299		822690	1643914
6.338		702797	1282500
6.368		439640	544667
6.394		355762	406759
6.424		1155844	1657646
6.453		999925	1645062
6.519		180399	477449
6.572		153117	274008
6.624		241236	525925
6.664		327395	632111
6.717	DCB	81650	113535
6.761		39239	59610
6.793		56659	90322
6.952		12969	36045
7.002		10242	13077
7.13		10005	56524
7.692		4310	106928
7.955		3115	27139

ICTXX1824D    AAICTXXAA    CCAL 1831299999    00177    SW-846 808  
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\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.032.RAW



## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICTXX1824D      AAICTXXAA      CCAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 7:54:46 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

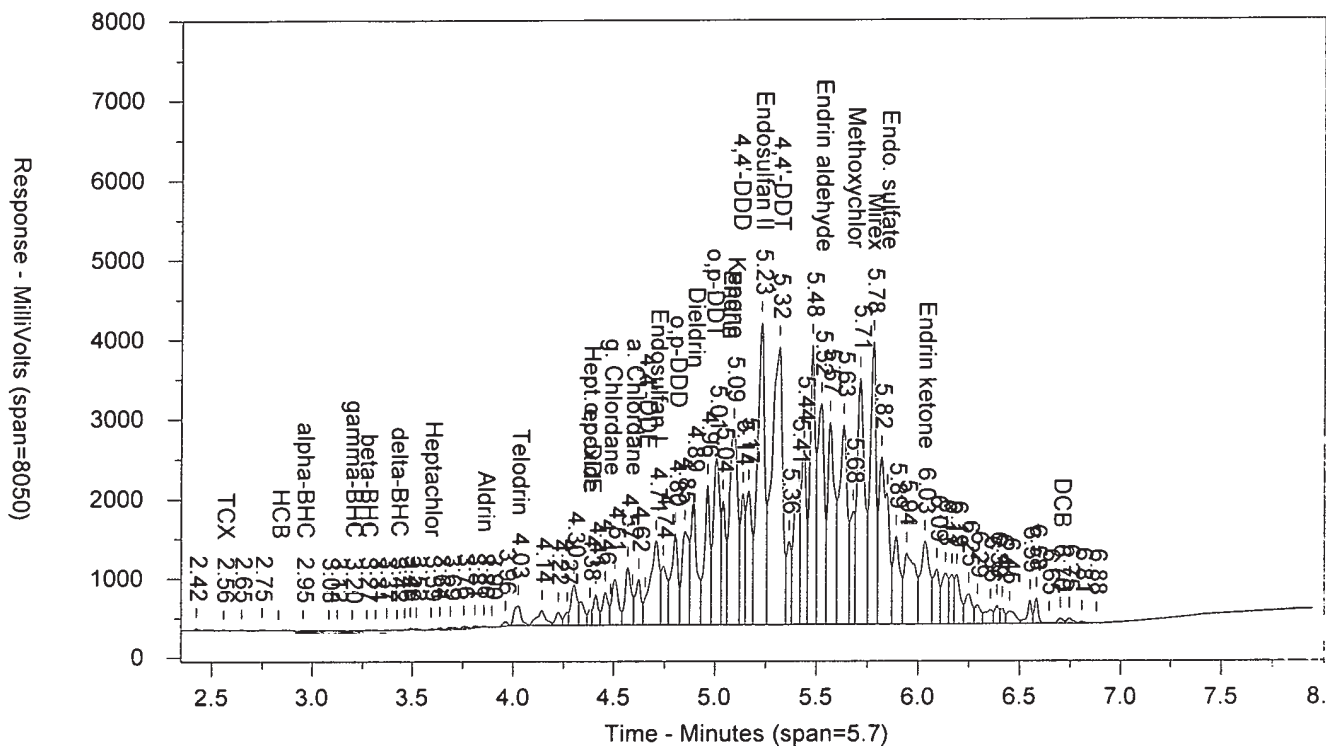
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.559	4139	.01	TCX		0		TCX
	0		HCB	2.672	9590	.007	HCB
2.954	15847	.029	alpha-BHC	2.78	16669	.007	alpha-BHC
3.197	4316	.009	gamma-BHC	3.034	47229	.025	gamma-BHC
3.271	6508	.032	beta-BHC	3.085	66012	.084	beta-BHC
3.422	5849	.014	delta-BHC	3.331	10565	.006	delta-BHC
3.593	15345	.039	Heptachlor	3.388	42396	.029	Heptachlor
3.856	17785	.049	Aldrin		0		Aldrin
4.026	245183	1.131	Telodrin		0		Telodrin
	0		Hept. epoxide	4.138	1473742	1.326	Hept. epoxide
	0		g. Chlordane	4.289	1605666	1.378	g. Chlordane
4.383	211741	1.138	o,p-DDE		0		o,p-DDE
4.709	1061769	3.531	Endosulfan I	4.448	1674065	1.638	Endosulfan I
	0		4,4'-DDE	4.573	3501706	3.107	4,4'-DDE
4.893	1580052	4.887	Dieldrin	4.67	6537470	5.647	Dieldrin
4.805	1155269	6.832	o,p-DDD	4.718	3273692	6.544	o,p-DDD
	0		Endrin	4.925	5807375	5.61	Endrin
	0		o,p-DDT	4.963	5271414	9.436	o,p-DDT
5.092	2451988	18.311	Kepone	5.008	5046971	13.967	Kepone
5.228	3797906	13.939	Endosulfan II	5.071	12475720	12.864	Endosulfan II
5.315	3488304	13.122	4,4'-DDT	5.245	3227906	3.489	4,4'-DDT
5.523	2772282	12.277	Endrin aldehyde	5.336	13811770	17.603	Endrin aldehyde
5.681	1423330	11.158	Methoxychlor	5.731	6058547	14.046	Methoxychlor
5.779	3552567	18.714	Mirex	5.861	3756683	6.793	Mirex
6.033	1039150	3.552	Endrin ketone		0		Endrin ketone
6.701	64086	-.751	DCB	6.717	81650	-.034	DCB

## Files:

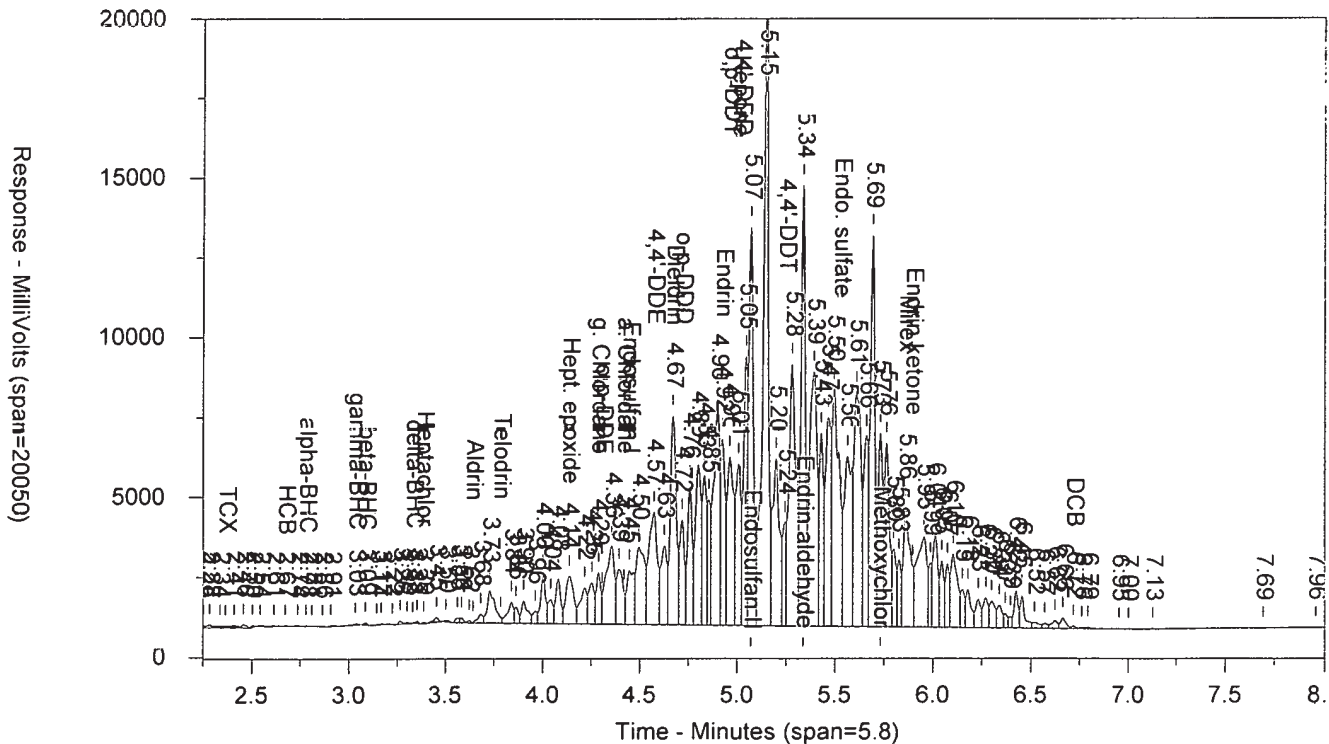
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 Area File: 05pest18306007B.032.RAW  
 Method A: 05PESTD1.MET  
 Method B: 05PESTD1B.MET  
 Calibration File A: 05poot1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/9/2018 8:02:48 PM  
 File Reported On: 11/12/2018 at 1:04:56 PM

ICTXX1824D      AAICTXXAA      CCAL 1831299999      00177      SW-846 808

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.032.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.032.RAW



## Chrom Perfect Chromatogram Report

## LANCASTER LABORATORIES

Sample Number: CHLD11824D      AACHLD1AA      ICAL 1831299999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 8:07:35 PM  
Instrument ID: CP5-9190      Sample Weight: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Dilution Factor: 1  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.033.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.826		5523	4125
1.891		3862	3353
1.967		10486	21749
2.021		11339	13149
2.074		10785	14711
2.102		20080	21697
2.148		14626	16473
2.186		68212	63570
2.424		9469	8328
2.507		132878	116985
2.56	TCX	3766	3746
2.749		16160	20465
2.947	alpha-BHC	8184	15763
3		12669	13804
3.076		8424	11611
3.248		4424	4641
3.292		5869	7392
3.381		10971	17835
3.461		14821	21354
3.527		133618	157485
3.597	Heptachlor	182737	219870
3.691		27940	61106
3.783		6340	6662
3.927		8621	8953
3.97		143542	184056
4.062	Telodrin	8133	15653
4.116		17297	49241
4.191		25073	32546
4.24		35027	56244
4.325		90178	118269
4.376	o,p-DDE	38653	85313
4.417		80195	120326
4.485	g. Chlordane	385830	613589
4.584	a. Chlordane	543941	1056941
4.657	4,4'-DDE	14832	24148
4.721	Endosulfan I	7870	8010
4.76		24533	25721
4.837		47376	74572
4.906	Dieldrin	10970	16046
4.953		40559	59531
5.021		17867	29297
5.055	Endrin	10527	13559
5.096	Kepone	107514	150063
5.155		13053	13549
5.187		130872	161514
5.368		30998	49510
5.436		19393	29472
5.502		10872	18874
5.588		4356	5484
5.687	Methoxychlor	3429	7492
5.849	Endo. sulfate	6358	16702
5.887		10923	12215

Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.933		6741	7626
6		5113	5754
6.179		5741	8412



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD11824D      AACHLD1AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
 Injected On: 11/9/2018 8:07:35 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Data File: 05pest18306007B.033.RAW  
 Method File: 05PESTDIB.MET  
 Calibration File: 05pest1830603b.cal

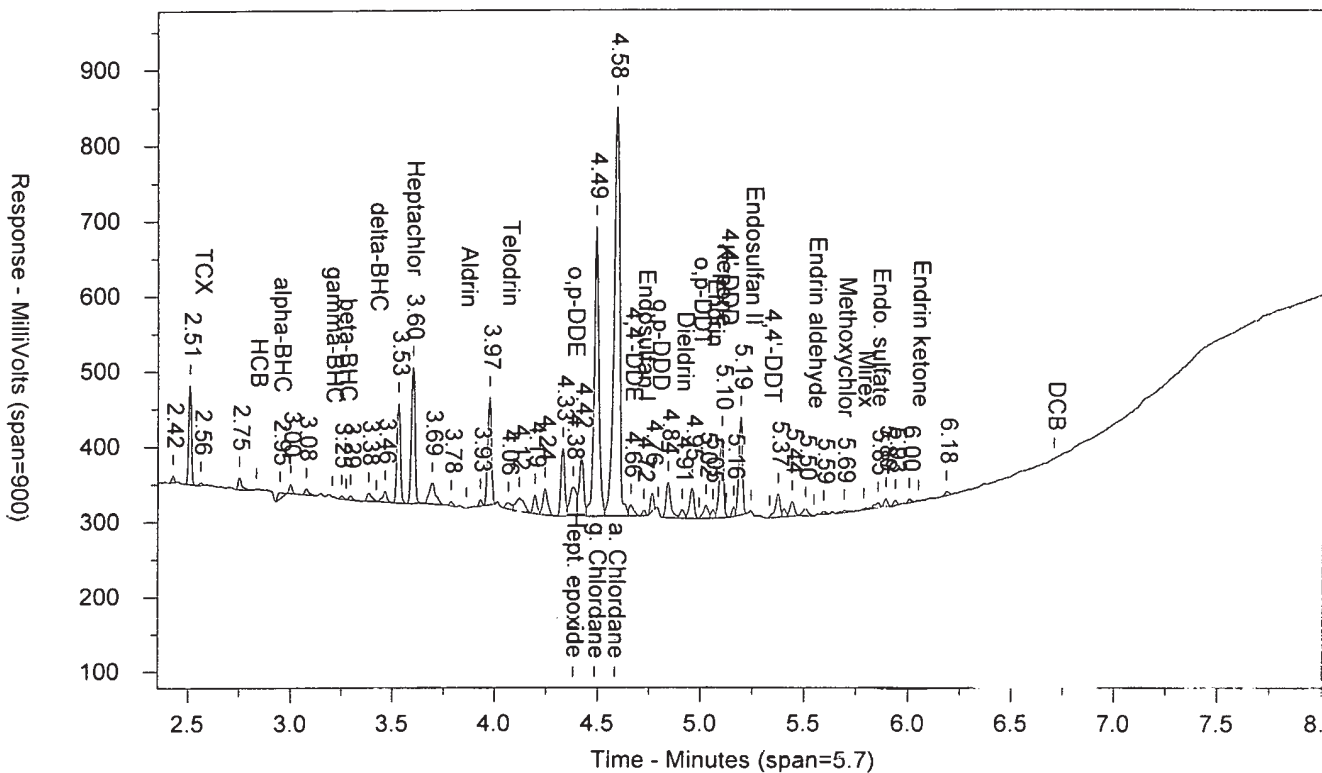
RT B	Compound B	Height B	Area B
1.923		56988	39711
2.002		67705	83256
2.046		66742	98100
2.112		49733	72958
2.153		6997	9764
2.245		8516	7429
2.387		504375	596737
2.455		117331	208338
2.533		65004	305375
2.742		53608	54400
2.802		37871	36912
2.911		17508	36877
2.971		9151	7392
3.001		22393	26088
3.047	gamma-BHC	23527	32287
3.128		39245	50627
3.199		19897	37387
3.264		483583	589662
3.321	delta-BHC	8201	8955
3.378	Heptachlor	649124	718609
3.468		55985	54378
3.505		29139	36977
3.559		8921	12150
3.605		21745	35208
3.698		128698	190001
3.773	Telodrin	478827	677630
3.828		49121	75642
3.88		65623	101484
3.909		59164	85042
3.942		114962	158123
4.003		89992	112388
4.041		16257	20605
4.109		307007	450774
4.163		26533	39910
4.207		333214	498854
4.245		84001	124944
4.298	g. Chlordane	1392284	1887260
4.376		1261904	2021172
4.42	a. Chlordane	1083884	1418893
4.537		42655	68805
4.615		112091	133756
4.687	Dieldrin	163146	256811
4.762		30056	50572
4.794		50145	94504
4.833		57661	96899
4.896		104013	177187
4.942	o,p-DDT	47530	53235
4.984	Kepone	365422	454900
5.026	4,4'-DDD	36485	43435
5.05		63533	120961
5.113		435128	556941
5.151		88512	152852

## Chrom Perfect Chromatogram Report

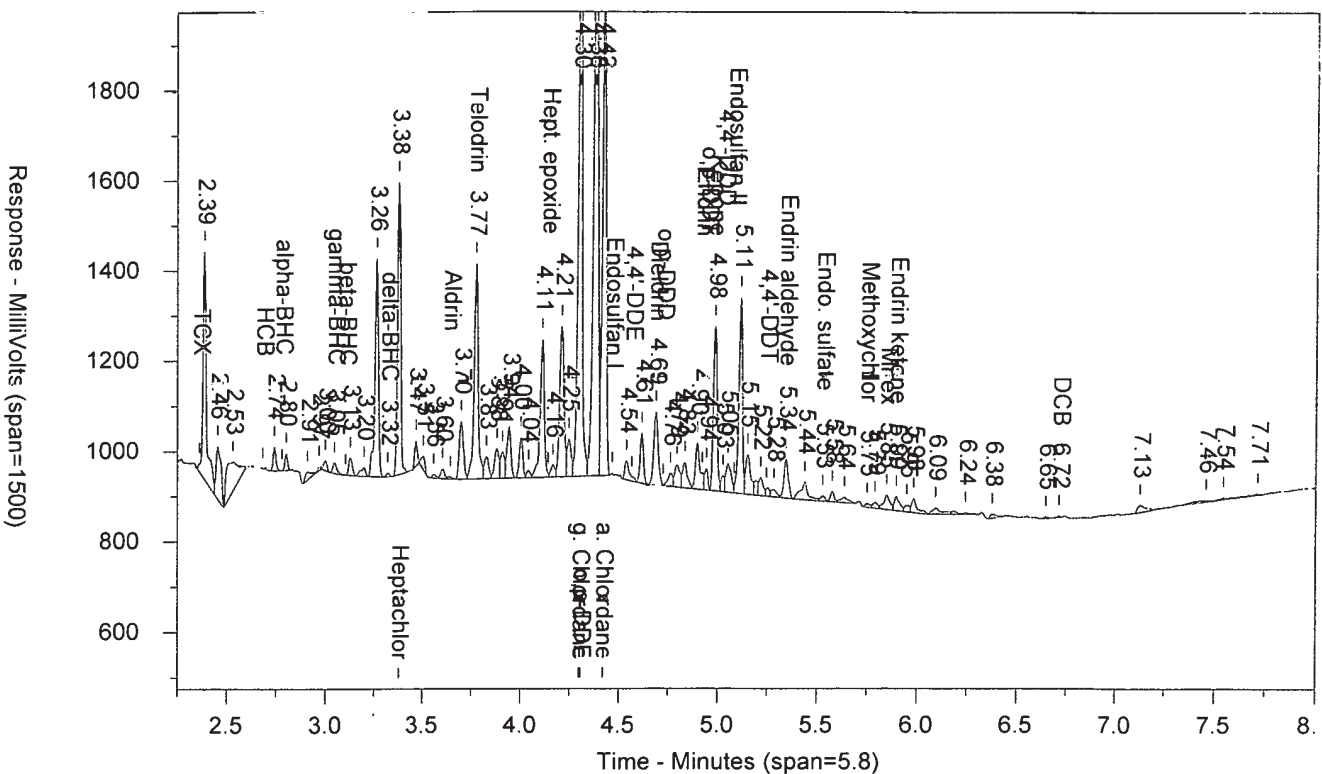
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RT B	Compound B	Height B	Area B
5.216		40629	62268
5.281		17165	32766
5.342	Endrin aldehyde	87172	135476
5.438		40003	107714
5.529	Endo. sulfate	12037	17447
5.577		23250	30755
5.638		12373	33261
5.75	Methoxychlor	8728	14545
5.789		13561	22506
5.847	Mirex	32004	69792
5.896	Endrin ketone	31030	59451
5.949		14909	26460
5.983		31108	56680
6.092		14163	44356
6.243		4302	9821
6.378		9076	18935
6.649		3939	5139
6.715	DCB	3506	4728
7.129		15859	47608
7.457		3879	28555
7.544		5144	10649
7.713		3071	18810

CHLD11824D AACHLD1AA ICAL 1831299999 00177 SW-846 801  
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\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.033.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD11824D      AACHLD1AA      ICAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 8:07:35 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

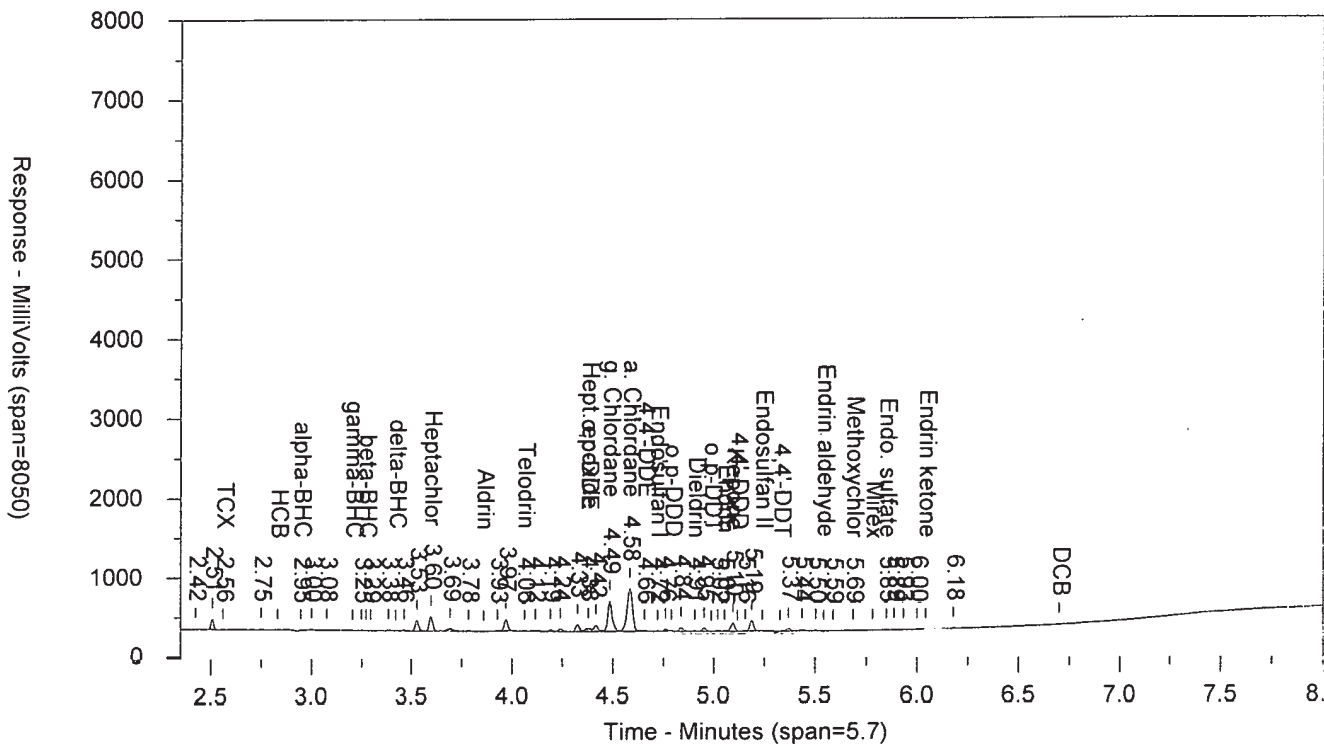
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.56	3766	.01	TCX		0		TCX
2.947	8184	.015	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.047	23527	.013	gamma-BHC
	0		delta-BHC	3.321	8201	.005	delta-BHC
3.597	182737	.467	Heptachlor	3.378	649124	.442	Heptachlor
4.062	8133	.038	Telodrin	3.773	478827	.669	Telodrin
4.485	385830	1.218	g. Chlordane	4.298	1392284	1.195	g. Chlordane
4.376	38653	.208	o,p-DDE		0		o,p-DDE
4.584	543941	1.695	a. Chlordane	4.42	1083884	.941	a. Chlordane
4.657	14832	.040	4,4'-DDE		0		4,4' DDE
4.906	10970	.034	Dieldrin	4.687	163146	.141	Dieldrin
4.721	7870	.026	Endosulfan I		0		Endosulfan I
	0		o,p-DDT	4.942	47530	.085	o,p-DDT
5.096	107514	1.948	Kepone	4.984	365422	4.252	Kepone
	0		4,4'-DDD	5.026	36485	.041	4,4'-DDD
5.055	10527	.036	Endrin		0		Endrin
	0		Endrin aldehyde	5.342	87172	.111	Endrin aldehyde
5.849	6358	.026	Endo. sulfate	5.529	12037	.013	Endo. sulfate
5.687	3429	.027	Methoxychlor	5.75	8728	.02	Methoxychlor
	0		Mirex	5.847	32004	.058	Mirex
	0		Endrin ketone	5.896	31030	.032	Endrin ketone
	0		DCB	6.715	3506	-.161	DCB

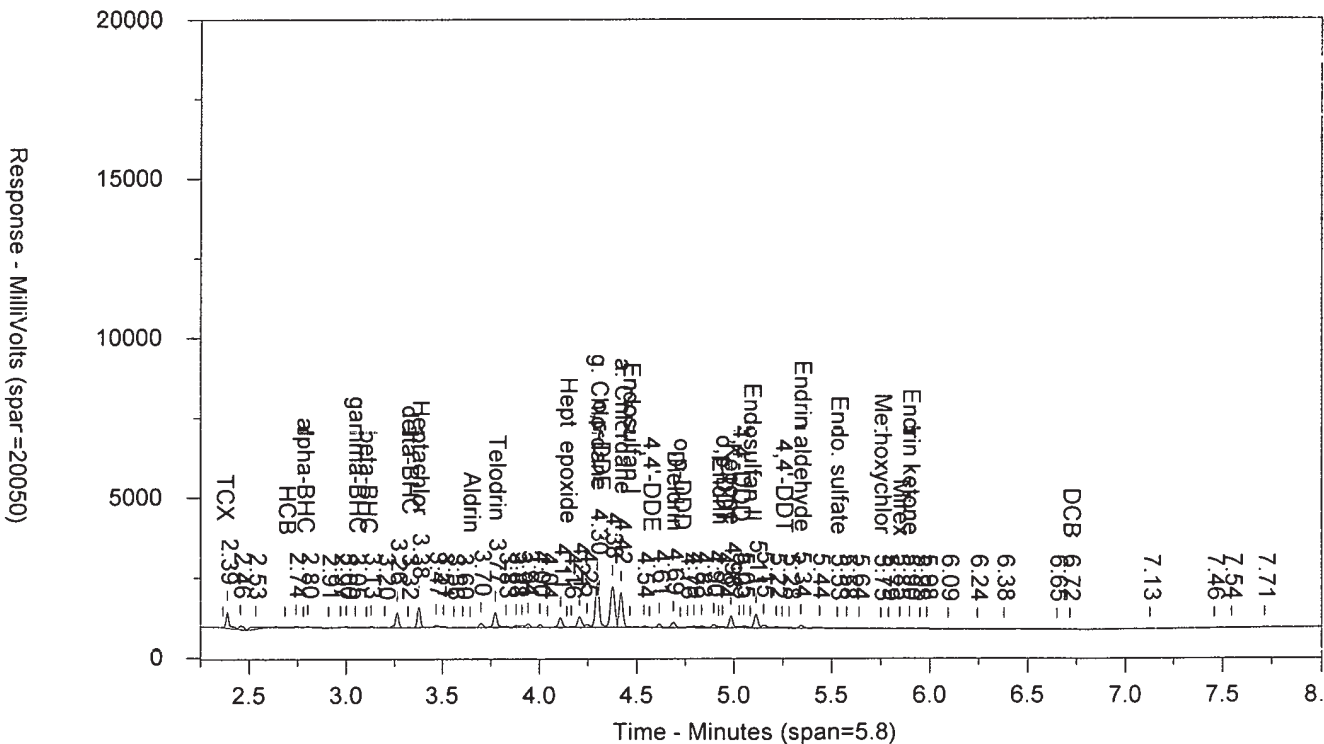
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 Method B: 05PESTD1B.MET  
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 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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CHLD11824D AACHLD1AA ICAL 1831299999 00177 SW-846 801

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## LANCASTER LABORATORIES

Sample Number: CHLD21824D      AACHLD2AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 8:20:31 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.034.RAW  
Method File: 05PESTD1.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.828		4264	3136
1.87		5817	4743
1.969		11383	18656
2.022		12065	18042
2.076		8784	9834
2.103		31439	28545
2.15		22489	20939
2.188		71199	59730
2.425		9572	8945
2.509		237886	211490
2.562	TCX	3690	4064
2.751		10178	13127
3.001		26166	49700
3.078		16518	19957
3.148		7251	7747
3.186	gamma-BHC	5758	8918
3.25	beta-BHC	7294	7647
3.294		10051	11268
3.382		20175	29023
3.463		26851	39592
3.529		236102	283892
3.599	Heptachlor	326907	396815
3.693		50741	108238
3.785		10967	12376
3.929		16311	16498
3.972		251017	326316
4.011		10265	8509
4.063	Telodrin	15672	27941
4.117		31906	93877
4.193		47045	60333
4.242		64877	103628
4.327		160834	212834
4.38	o,p-DDE	69897	151681
4.418		148170	233036
4.487	g. Chlordane	706154	1092750
4.585	a. Chlordane	989388	1932220
4.659	4,4'-DDE	29391	53916
4.723		19715	24722
4.762		59448	105371
4.84		83355	130499
4.907	Dieldrin	20276	28105
4.954		73039	107897
5.022		30976	53764
5.057	Endrin	18500	25085
5.097	Kepon	188239	265152
5.157		25091	26827
5.189		234510	299470
5.241	Endosulfan II	13279	21028
5.37		55064	91017
5.439		21631	35394
5.502		16073	32018
5.593		8439	16966

Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.632		7486	9546
5.69	Methoxychlor	5560	8436
5.852	Endo. sulfate	10257	20445
5.888		18165	20690
5.934		10948	12278
6.003		7935	9348
6.183		7364	10887
6.362		5012	7495

## LANCASTER LABORATORIES

Sample Number: CHLD21824D      AACHLD2AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 8:20:31 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.034.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
1.92		102779	75855
1.999		106503	117322
2.044		93133	158939
2.109		47859	79079
2.174		11907	13895
2.241		24806	34487
2.268		35401	100092
2.385		916597	992872
2.453		96638	176131
2.533		57475	289903
2.74		94264	92598
2.8		66302	70939
2.906		15860	20717
2.968		16583	13251
2.999		37748	42517
3.045	gamma-BHC	39177	46633
3.126		72076	78807
3.198		33677	62791
3.237		32141	24394
3.261		824092	839249
3.32	delta-BHC	8916	10763
3.376	Heptachlor	1194047	1344150
3.466		99993	100753
3.504		54904	74054
3.556		14042	16142
3.602		31133	32717
3.694		180547	253890
3.771	Telodrin	853220	1236661
3.825		97721	161121
3.877		129532	206169
3.908		114356	171185
3.94		230854	357873
4.001		180621	258524
4.039		46571	74523
4.107		600777	046631
4.163		76866	137824
4.205		628949	1002557
4.244		183656	297415
4.296	g. Chlordane	2638727	3638453
4.374		2341889	3863589
4.418	a. Chlordane	2042756	2743536
4.481	Endosulfan I	72792	226301
4.535		116265	293388
4.613		221834	339064
4.685	Dieldrin	319798	587334
4.761		78459	165224
4.791		115056	220465
4.831		124027	251333
4.895		204350	310485
4.94	Endrin	115341	211371
4.983	Kepone	670611	875479
5.024	4,4'-DDD	80229	100462

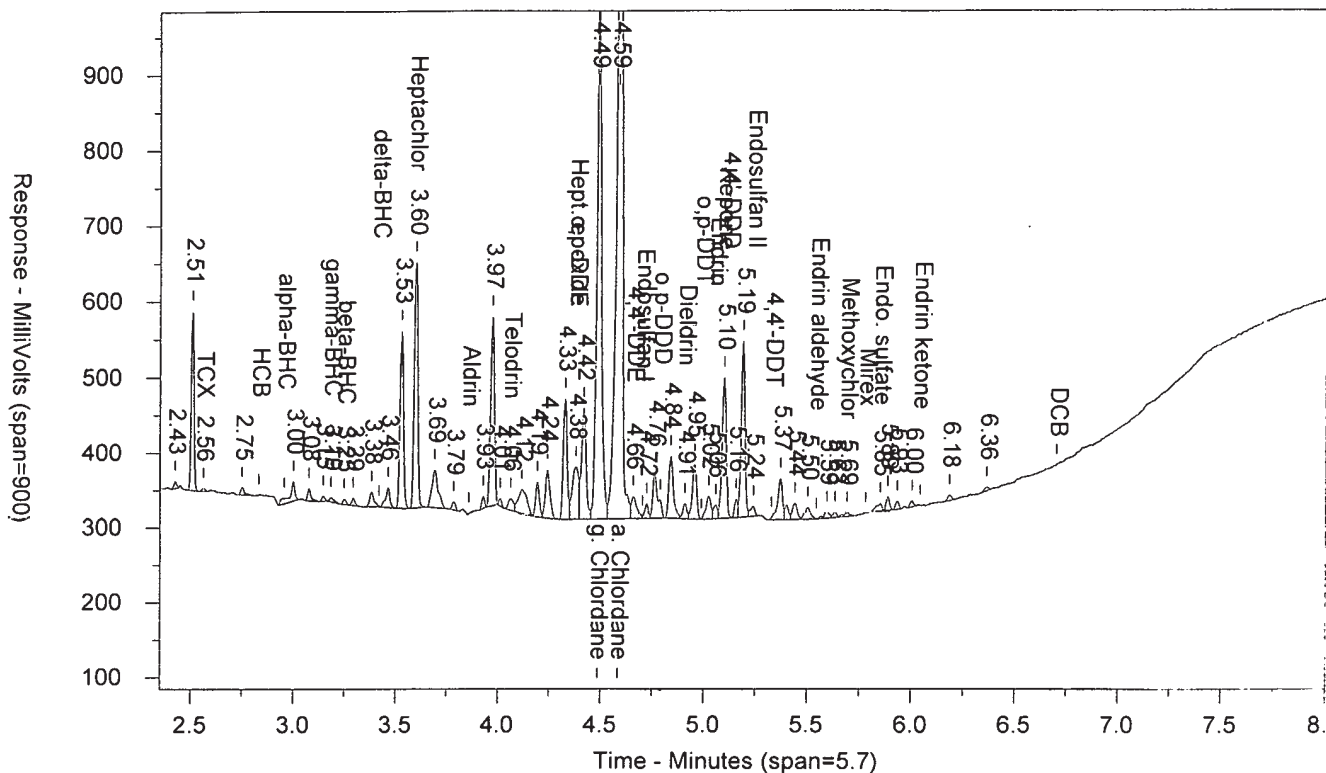


## Chrom Perfect Chromatogram Report

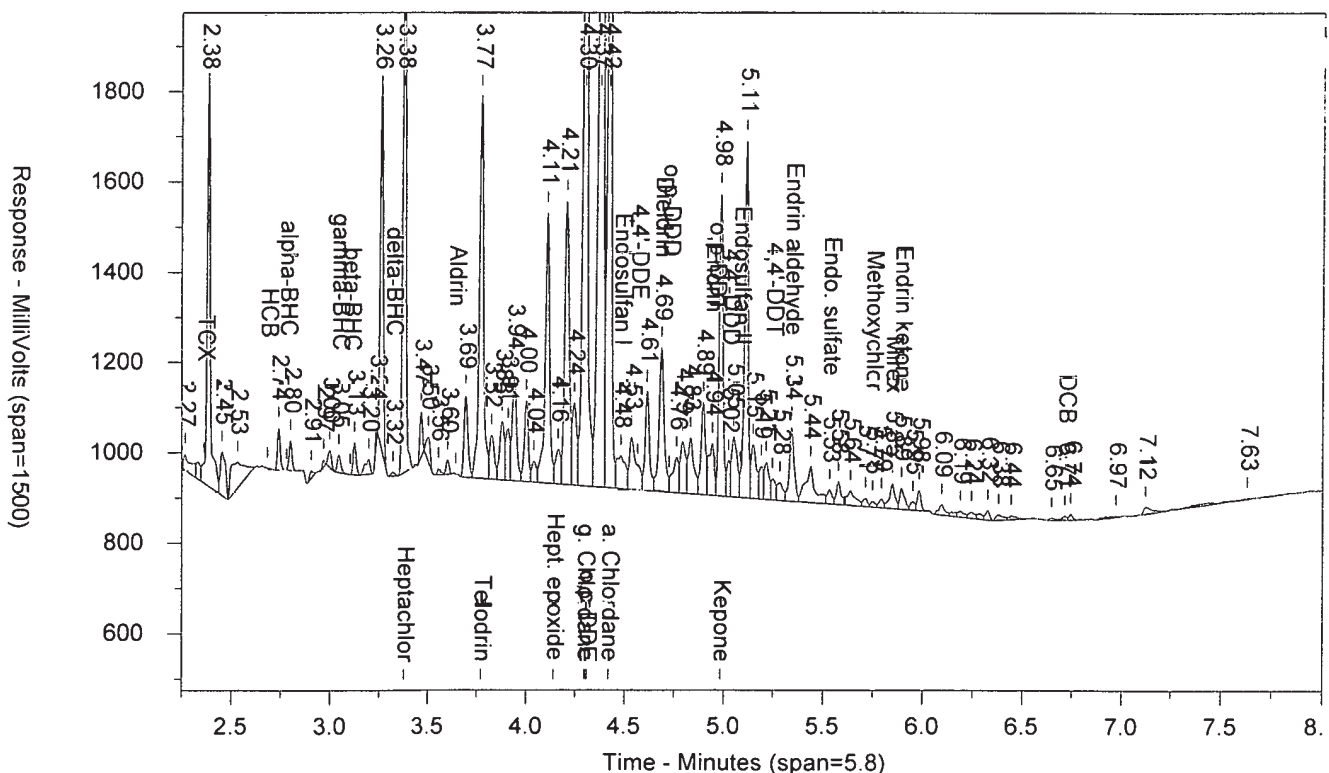
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RT B	Compound B	Height B	Area B
5.049		133692	262542
5.111		791205	1046228
5.148		119109	224728
5.19		73167	100402
5.214		83288	133841
5.281		40198	85009
5.34	Endrin aldehyde	163412	279895
5.436		79314	276186
5.531	Endo. sulfate	31211	54372
5.576		50930	85159
5.635		32556	94207
5.711		18480	29020
5.747	Methoxychlor	13186	20700
5.791		20239	32887
5.847	Mirex	55192	111301
5.892	Endrin ketone	46783	81685
5.949		18829	31795
5.981		44697	53692
6.093		23221	49744
6.187		13015	30014
6.241		13840	29633
6.324		21204	30500
6.378		12516	31302
6.443		9526	22838
6.646		4799	10263
6.713	DCB	9495	15031
6.742		13152	16810
6.97		3224	19303
7.122		15418	50760
7.628		3114	54346

CHLD21824D AACHLD2AA ICAL 1831299999 00177 SW-846 801  
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\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.034.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD21824D      AACHLD2AA      ICAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 8:20:31 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

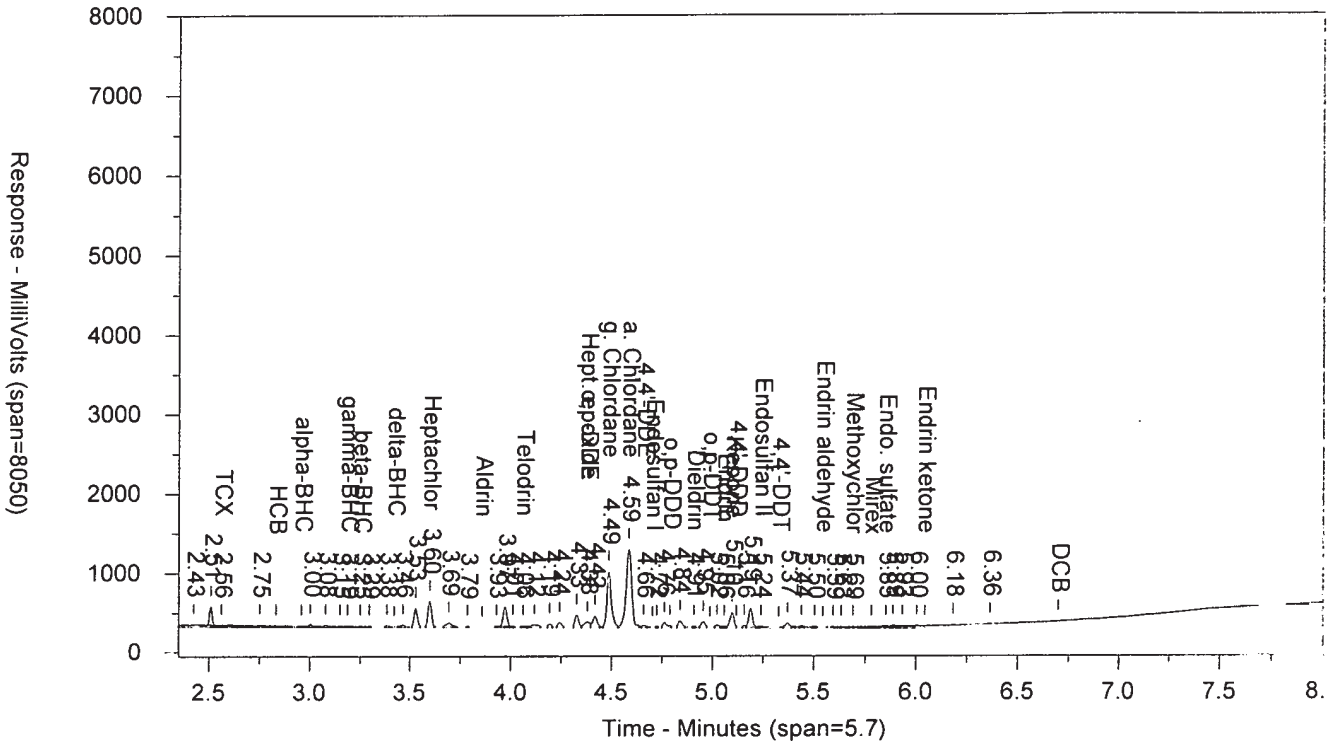
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.562	3690	.009	TCX		0		TCX
3.186	5758	.012	gamma-BHC	3.045	39177	.021	gamma-BHC
3.25	7294	.035	beta-BHC		0		beta-BHC
	0		delta-BHC	3.32	8916	.005	delta-BHC
3.599	326907	.836	Heptachlor	3.376	1194047	.814	Heptachlor
4.063	15672	.072	Telodrin	3.771	853220	1.192	Telodrin
4.487	706154	2.23	g. Chlordane	4.296	2638727	2.264	g. Chlordane
4.38	69897	.376	o,p-DDE		0		o,p-DDE
4.585	989388	3.083	a. Chlordane	4.418	2042756	1.773	a. Chlordane
	0		Endosulfan I	4.481	72792	.071	Endosulfan I
4.659	29391	.095	4,4'-DDE		0		4,4'-DDE
4.907	20276	.063	Dieldrin	4.685	319798	.276	Dieldrin
5.057	18500	.063	Endrin	4.94	115341	.111	Endrin
5.097	188239	2.511	Kepone	4.983	670611	4.885	Kepone
	0		4,4'-DDD	5.024	80229	.09	4,4'-DDD
5.241	13279	.049	Endosulfan II		0		Endosulfan II
	0		Endrin aldehyde	5.34	163412	.208	Endrin aldehyde
5.852	10257	.041	Endo. sulfate	5.531	31211	.034	Endo. sulfate
5.69	5560	.044	Methoxychlor	5.747	13186	.031	Methoxychlor
	0		Mirex	5.847	55192	.1	Mirex
	0		Endrin ketone	5.892	46783	.049	Endrin ketone
	0		DCB	6.713	9495	-.151	DCB

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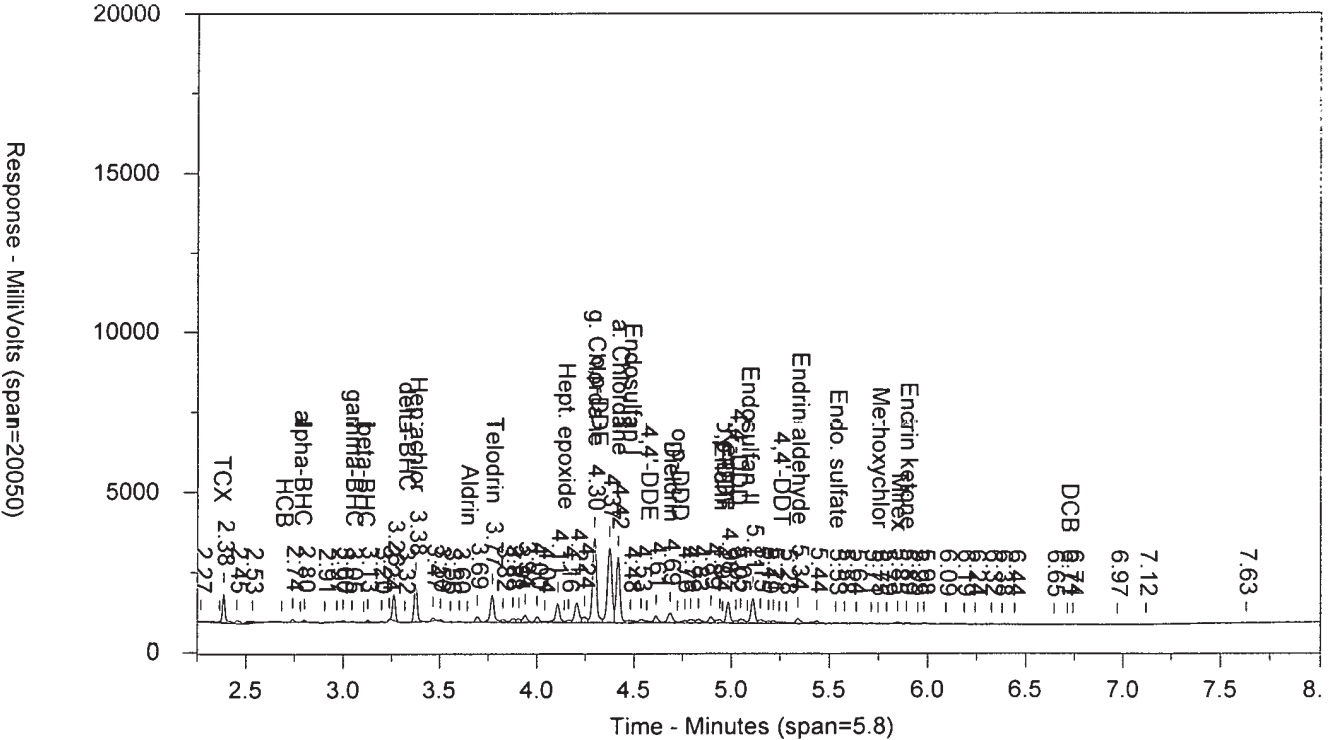
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 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
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CHLD21824D AACHLD2AA ICAL 1831299999 00177 SW-846 801

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## LANCASTER LABORATORIES

Sample Number: CHLD31824D      AACHLD3AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 8:33:19 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.035.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.829		6345	5502
1.869		12998	19728
1.892		20160	27053
1.925		17883	26497
1.969		19955	29040
2.023		23115	30895
2.104		75571	76297
2.15		54914	45844
2.189		86730	73212
2.388		4153	3398
2.425		15722	14152
2.509		565341	501518
2.583	TCX	4116	3916
2.703		4212	5842
2.752		10514	14016
3.002		58918	59008
3.079		40421	47278
3.149		15273	16863
3.187	gamma-BHC	13044	20734
3.252	beta-BHC	18028	19264
3.295		22208	25285
3.383		50994	66796
3.464		68205	97816
3.53		575185	683150
3.6	Heptachlor	800169	966901
3.694		116464	249603
3.786		26606	29881
3.83		9183	11390
3.929		40679	42369
3.973		588202	761530
4.012		23125	20658
4.064	Telodrin	40158	76670
4.118		77796	231165
4.194		110836	144014
4.242		152764	242249
4.328		375101	498432
4.379	o,p-DDE	164357	370022
4.419		352608	555382
4.487	g. Chlordane	1747225	2679174
4.586	a. Chlordane	2439670	4753980
4.659	4,4'-DDE	76070	154461
4.724		55835	80701
4.763		151170	214729
4.84		204944	343945
4.909	Dieldrin	55532	84854
4.955		179432	277379
5.024		78522	147969
5.058	Endrin	52451	69308
5.098	Kepone	451202	660324
5.158		71175	84975
5.19		576620	750475
5.24	Endosulfan II	44448	106865

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.371		127579	212824
5.401		45376	56374
5.441		30430	45056
5.502		34686	66236
5.565		8808	8608
5.592		22365	38480
5.633		18224	21042
5.666	Methoxychlor	9063	10857
5.691		12570	20042
5.776	Mirex	4052	7690
5.851	Endo. sulfate	28873	64219
5.888		45240	52630
5.934		28148	30569
5.968		7933	6801
6.004		19207	20374
6.11		3577	7553
6.184		15729	20573
6.285		3476	4318
6.366		11645	16315
6.438		2718	3806
6.509		4754	4181
6.828		8670	15722

## LANCASTER LABORATORIES

Sample Number: CHLD31824D      AACHLD3AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 8:33:19 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.035.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
1.92		251489	192869
1.999		223600	205833
2.043		170819	179044
2.109		71960	163011
2.147		57276	77415
2.173		52754	78175
2.199		59018	84345
2.241		86098	149948
2.268		84709	183184
2.332		49400	81045
2.384		2129704	1945150
2.452		66538	95479
2.525		17197	47155
2.563		7078	6440
2.654		13194	23806
2.74		217783	209021
2.8	alpha-BHC	155602	165781
2.865		18203	17798
2.911		12551	24147
2.968		37666	32166
3		87653	101040
3.045	gamma-BHC	87430	102875
3.125		170004	187542
3.197		76197	140131
3.237		73286	56912
3.261		2011255	2040995
3.321	delta-BHC	15798	17435
3.376	Heptachlor	2984179	3377794
3.438		8831	5598
3.466		236250	236287
3.503		128940	174109
3.556		38639	46235
3.601		76487	79610
3.693		412806	549504
3.771	Telndrin	1908806	2874760
3.825		225967	385826
3.878		305756	504095
3.906		267612	374352
3.939		569076	880374
4.001		425480	599232
4.04		99637	156288
4.107		1431453	2242841
4.162		175628	283823
4.205		1535040	2409797
4.244		431224	691357
4.296	g. Chlordane	6682931	9118367
4.374		5970063	9650438
4.418	a. Chlordane	5057643	6760868
4.481	Endosulfan I	198715	594679
4.535		273569	684395
4.612		532928	807508
4.685	Dieldrin	757767	1394660

## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.761		181923	398058
4.791		273474	521788
4.83		285773	568468
4.894		490454	772589
4.941	Endrin	296644	568687
4.982	Kepona	1606206	2087621
5.023	4,4'-DDD	185418	228414
5.049		306423	647460
5.111		1902632	2506123
5.146		190256	329043
5.19		166978	282259
5.214		190181	306977
5.247	4,4'-DDT	108573	161511
5.282		92393	195175
5.34	Endrin aldehyde	392288	688880
5.436		195658	586444
5.53	Endo. sulfate	75861	130544
5.575		125290	203647
5.636		78803	239045
5.714		54782	161871
5.79		52827	92111
5.846	Mirex	141718	308463
5.893	Endrin ketone	121054	215682
5.95		56577	101571
5.981		119368	167876
6.033		17619	34585
6.092		52441	109192
6.134		18499	28707
6.187		26625	48312
6.24		28307	63782
6.285		27442	43732
6.323		50445	70391
6.375		26497	62441
6.444		20980	44292
6.642		8313	12453
6.712	DCB	21314	32356
6.742		28750	35025
6.944		8245	26079
7.01		7037	10987
7.123		16102	55815
7.252		6526	9726
7.454		6304	62897
7.626		9179	31014
7.948		3185	38600



CHLD31824D

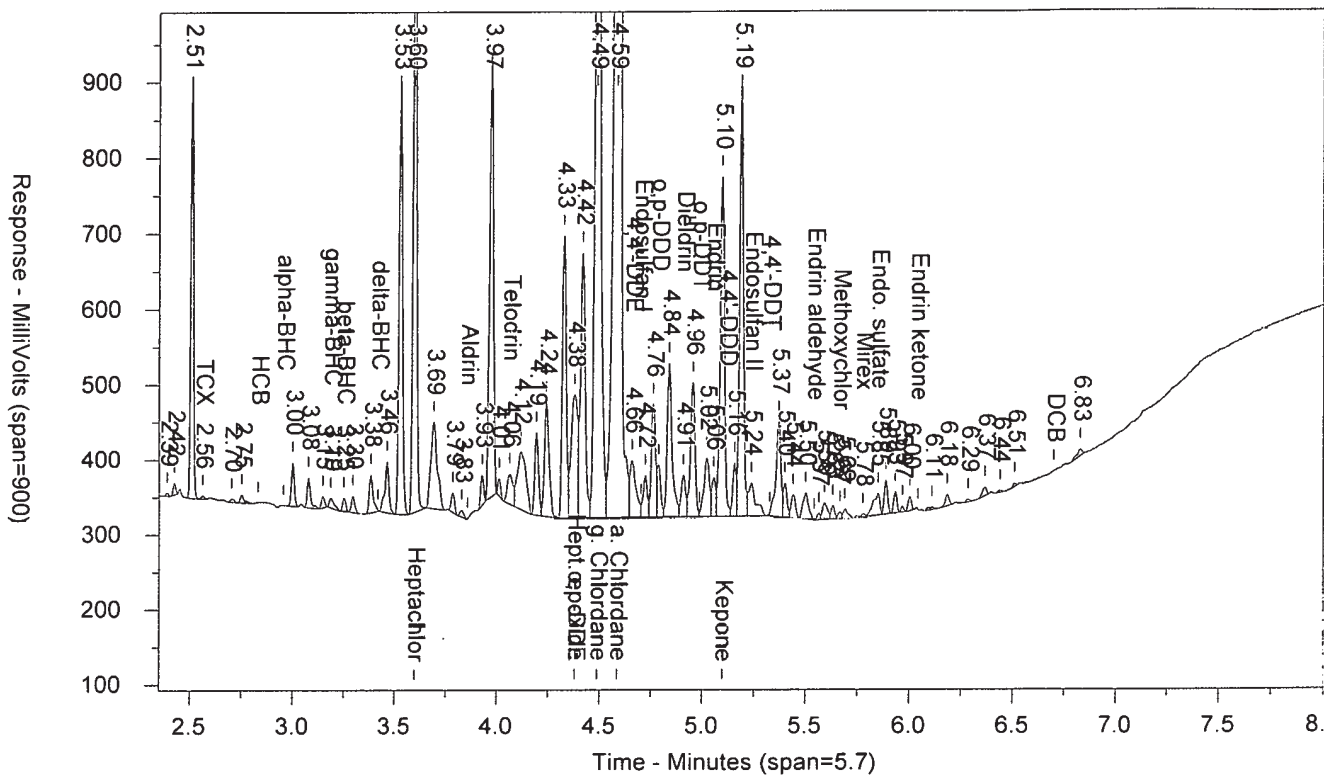
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ICAL 1831299999

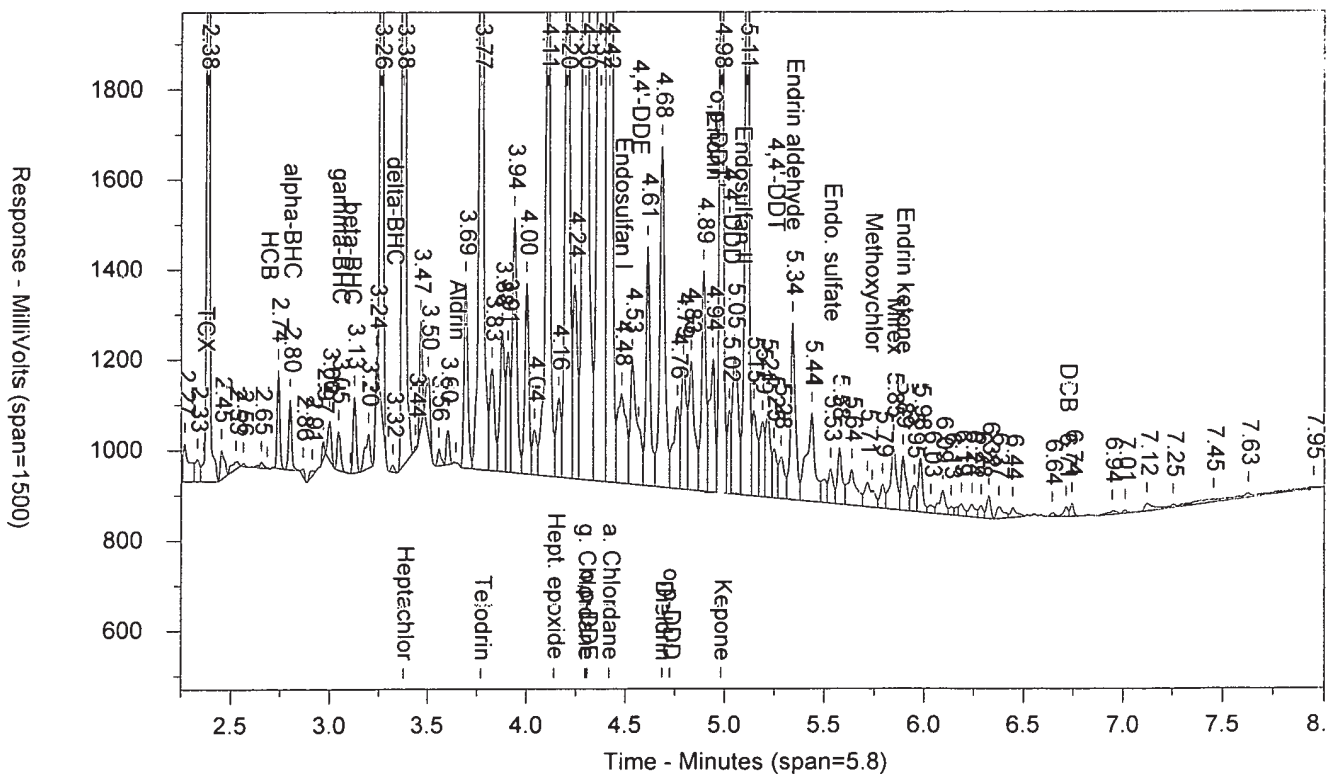
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SW-846 80:

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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD31824D      AACHLD3AA      ICAL 183129999      00177      SW-846 8081A  
 Injected On: 11/9/2018 8:33:19 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

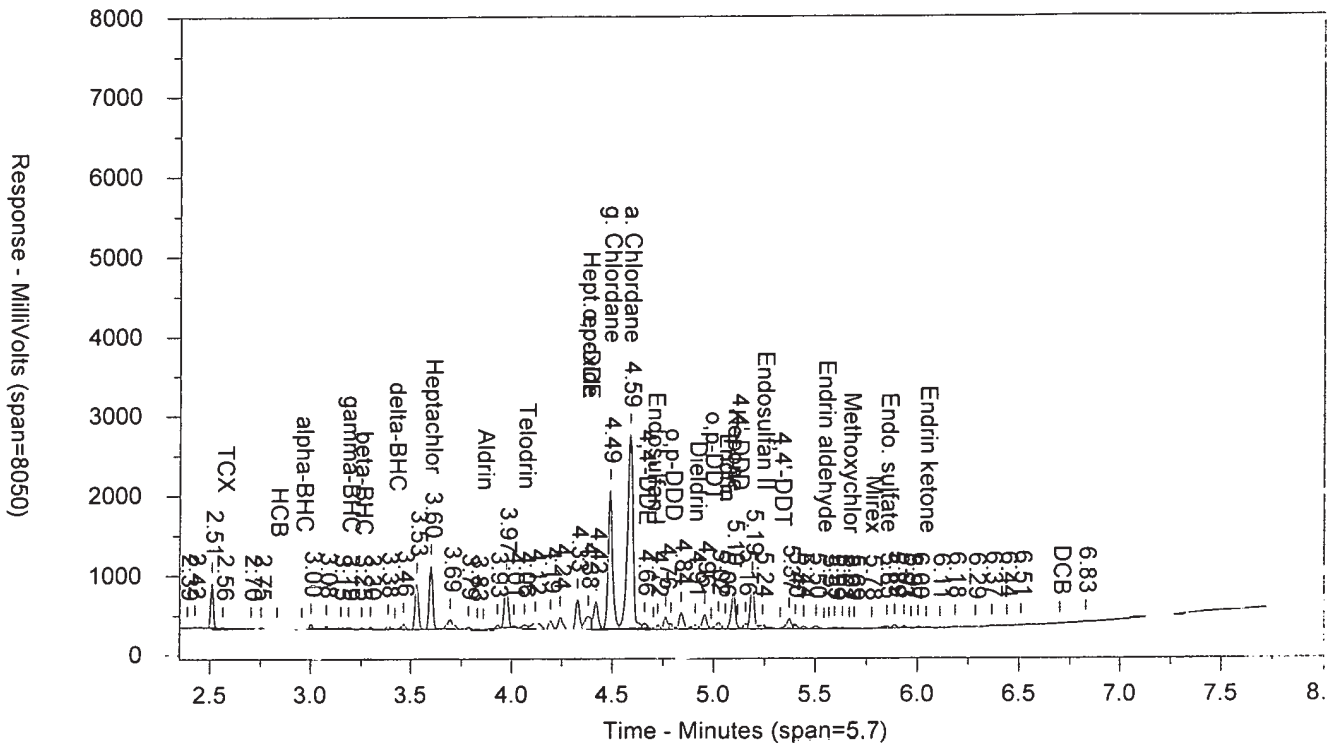
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.563	4116	.01	TCX		0		TCX
	0		alpha-BHC	2.8	155602	.069	alpha-BHC
3.187	13044	.028	gamma-BHC	3.045	87430	.047	gamma-BHC
3.252	18028	.087	beta-BHC		0		beta-BHC
	0		delta-BHC	3.321	15798	.009	delta-BHC
3.6	800169	2.047	Heptachlor	3.376	2984179	2.033	Heptachlor
4.064	40158	.185	Telodrin	3.771	1998895	2.793	Telodrin
4.487	1747225	5.517	g. Chlordane	4.296	6682931	5.735	g. Chlordane
4.379	164357	.883	o,p-DDE		0		o,p-DDE
4.586	2439670	7.003	a. Chlordane	4.418	5057643	4.389	a. Chlordane
	0		Endosulfan I	4.481	198715	.194	Endosulfan I
4.659	76070	.246	4,4'-DDE		0		4,4'-DDE
4.909	55532	.172	Dieldrin	4.685	757767	.655	Dieldrin
5.058	52451	.178	Endrin	4.941	296644	.287	Endrin
5.098	451202	4.347	Kepone	4.982	1606206	6.827	Kepone
	0		4,4'-DDD	5.023	185418	.209	4,4'-DDD
5.24	44448	.163	Endosulfan II		0		Endosulfan II
	0		4,4'-DDT	5.247	108573	.117	4,4'-DDT
	0		Endrin aldehyde	5.34	392288	.5	Endrin aldehyde
5.851	28873	.116	Endo. sulfate	5.53	75861	.083	Endo. sulfate
5.666	9063	.071	Methoxychlor		0		Methoxychlor
5.776	4052	.021	Mirex	5.846	141718	.256	Mirex
	0		Endrin ketone	5.893	121054	.126	Endrin ketone
	0		DCB	6.712	21314	-.132	DCB

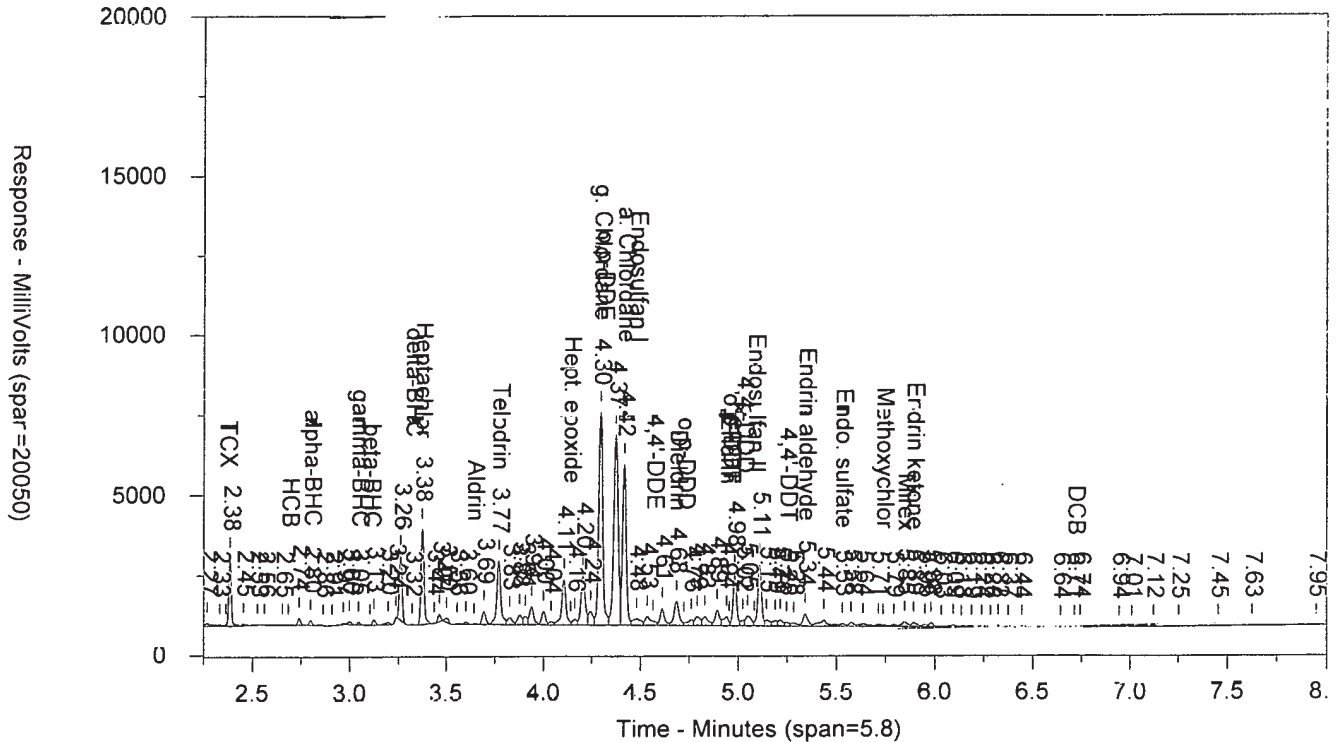
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CHLD31824D AACHL3AA ICAL 1831299999 00177 SW-846 801

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## LANCASTER LABORATORIES

Sample Number: CHLD41824D      AACHLD4AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 8:46:03 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.036.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.865		21833	27169
1.887		32314	38777
1.921		26169	32894
1.965		32920	39582
2.018		38003	37812
2.072		9937	14357
2.1		150932	131405
2.146		111423	89866
2.184		122594	103773
2.283		5571	4203
2.384		9225	8228
2.42		33628	35492
2.446		22665	22037
2.505		1135299	1014028
2.557	TCX	5565	6021
2.592		5150	13544
2.7		7892	10504
2.747		9786	8929
2.997		120417	153809
3.037		7205	6605
3.074		79360	79365
3.144		31658	33819
3.183	gamma-BHC	25541	41163
3.247		38349	40472
3.29		46275	52909
3.378		102646	131126
3.459		138377	202561
3.525		1166656	1393446
3.595	Heptachlor	1658175	1982463
3.689		220702	475545
3.781		59481	81575
3.825		19844	23638
3.925		80853	83603
3.968		1160775	1496309
4.007		45069	38904
4.059	Telodrin	78244	149602
4.113		153356	454386
4.189		216106	283872
4.238		305539	472949
4.323		744725	989238
4.374	o,p-DDE	327013	733653
4.414		728194	1123843
4.483	g. Chlordane	3612624	5517603
4.581	a. Chlordane	4938497	9671179
4.655	4,4'-DDC	146209	280003
4.719	Endosulfan I	104765	151379
4.758		297291	561581
4.835		406500	648257
4.904	Dieldrin	101212	139601
4.95		349062	523546
5.019		144781	253118
5.053	Endrin	90602	113796

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.093	Kepone	894515	1258608
5.153		119343	130352
5.185		1155536	1443462
5.236	Endosulfan II	59337	90265
5.366		252554	426630
5.396		92812	115377
5.437		47814	68134
5.498		66518	130428
5.559	Endrin aldehyde	18060	18795
5.589		47641	83965
5.628		38584	46211
5.661	Methoxychlor	19843	23735
5.687		26343	43184
5.744		6302	6888
5.772	Mirex	9291	12108
5.846	Endo. sulfate	57709	134091
5.884		91347	106923
5.929		58458	64799
5.964		18206	17405
5.999		39431	42643
6.107		6511	14742
6.179		32934	42539
6.278		7309	6984
6.36		26914	39232
6.433		6257	8499
6.505		6976	7093
6.823		21473	50761
7.148		4887	24787

## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD41824D      AACHLD4AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 8:46:03 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.036.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

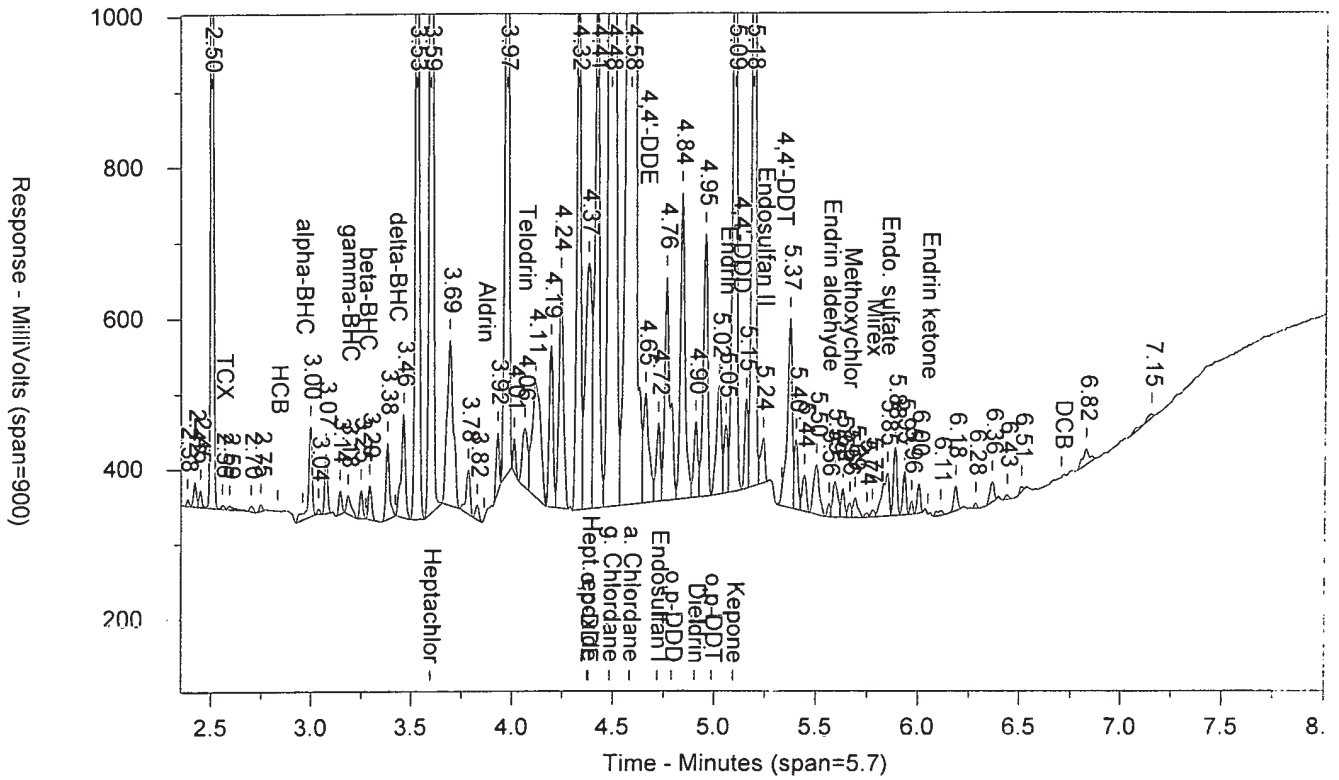
RT B	Compound B	Height B	Area B
1.922		503235	394872
2.001		430346	371045
2.045		308751	300996
2.111		91505	216716
2.15		98163	130582
2.202		97177	132179
2.242		152306	254447
2.27		150299	276701
2.333		90260	182439
2.386		4468205	4016298
2.455		119977	212901
2.525		48375	156677
2.564		14227	13220
2.658		26302	48539
2.742		429532	412257
2.802		313546	329236
2.867		32720	36879
2.911		18435	29152
2.97		77167	66508
3.002		168990	193477
3.047	gamma-BHC	170922	193407
3.127		342902	354042
3.18		33334	32783
3.199		90029	79676
3.239		148740	111398
3.263		4281467	4310325
3.322	delta-BHC	25464	28632
3.378	Heptachlor	6185374	6987641
3.439		19342	11853
3.468		477576	471799
3.505		258508	353145
3.559		78497	100332
3.604		161157	219804
3.695		802887	1051161
3.772	Telodrin	4035969	5758618
3.827		448944	757366
3.879		611585	1017703
3.908		532160	739516
3.941		1100934	1696124
4.003		855319	1169721
4.041		183454	283809
4.109		2936696	4533338
4.164		343465	567035
4.207		3211548	4930818
4.246		857963	1395380
4.298	g. Chlordane	14394670	19231420
4.375		12496930	20047770
4.419	a. Chlordane	10875900	14151750
4.482	Endosulfan I	359343	1114821
4.536		539066	1316672
4.614		1075945	1556224
4.686	Dieldrin	1549888	2801439

## Chrom Perfect Chromatogram Report

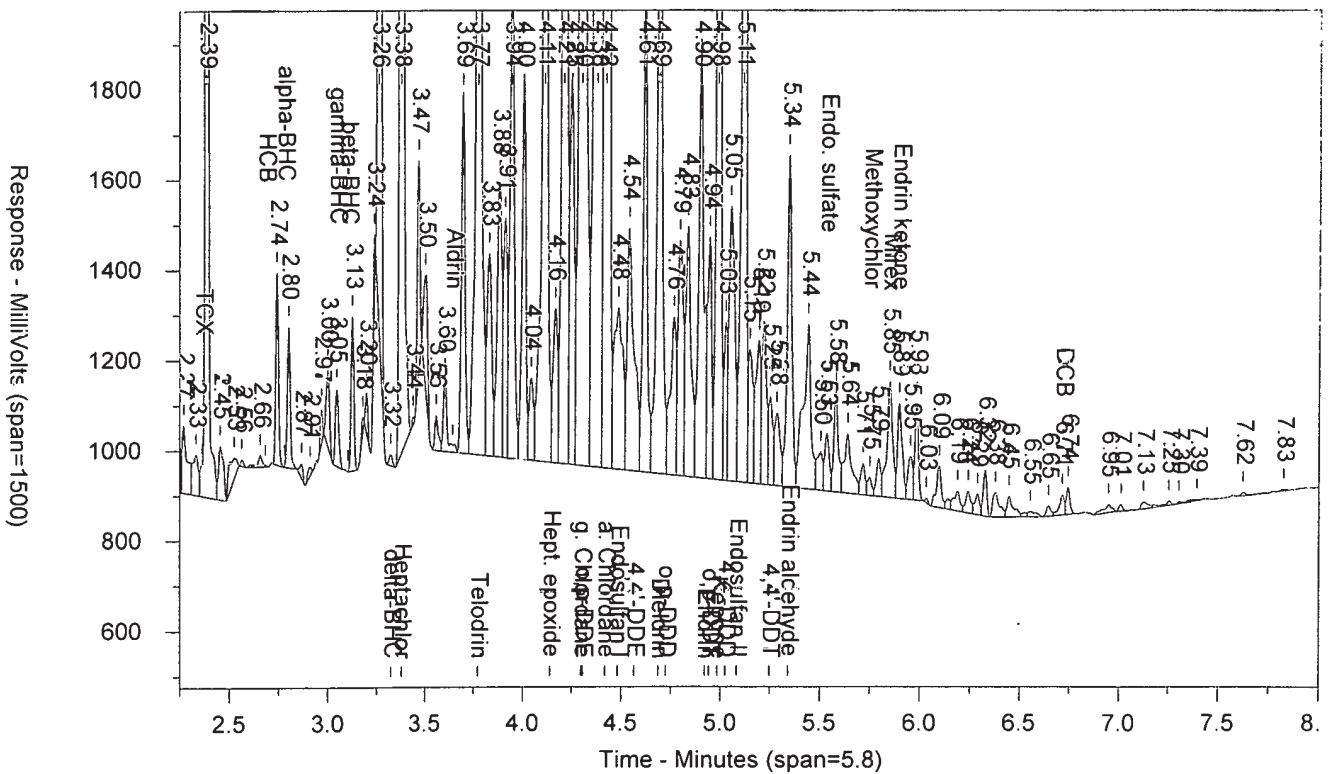
RT B	Compound B	Height B	Area B
4.762		350664	724321
4.792		522898	1002443
4.832		555746	1078107
4.896		978015	1780957
4.942	o,p-DDT	536698	761752
4.984	Kepone	3323001	4173856
5.025	4,4'-DDD	352194	431108
5.05		609948	1255404
5.113		3957019	5092443
5.146		297099	464247
5.192		319091	585866
5.216		363153	572936
5.249	4,4'-DDT	195975	279266
5.282		162170	318597
5.341	Endrin aldehyde	740092	1197426
5.438		367455	1003880
5.501		85124	171057
5.533	Endo. sulfate	128983	206086
5.577		223955	355352
5.637		132237	350499
5.714		69650	107596
5.748	Methoxychlor	41618	62440
5.792		83881	131293
5.847	Mirex	258530	520361
5.895	Endrin ketone	211136	362048
5.951		96151	188434
5.982		217177	256630
6.032		11322	8808
6.094		92948	160939
6.187		44851	101068
6.24		49141	89279
6.286		46063	80665
6.325		103434	128672
6.378		54953	130256
6.446		46370	104798
6.553		12012	33765
6.646		22866	35666
6.714	DCB	45354	77613
6.743		60741	75906
6.947		17778	53553
7.011		15564	21222
7.126		15663	38208
7.253		10067	19850
7.303		5301	8116
7.394		2884	13163
7.622		7275	13501
7.827		3804	7897

CHLD41824D AACHLD4AA ICAL 1831299999 00177 SW-846 801

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.036.RAW





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD41824D      AACHLD4AA      ICAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 8:46:03 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

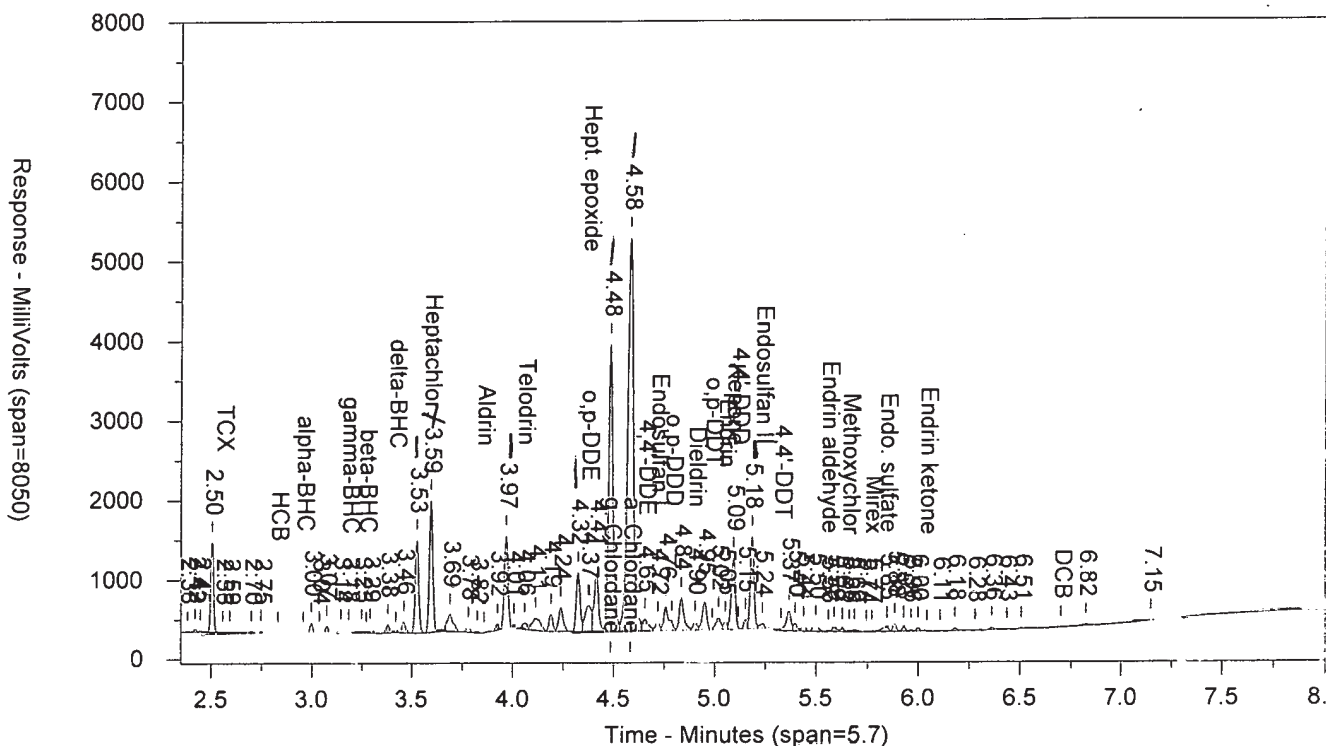
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2.557	5565	.014	TCX		0		TCX
3.183	25541	.055	gamma-BHC	3.047	170922	.092	gamma-BHC
	0		delta-BHC	3.322	25464	.015	delta-BHC
3.595	1658175	4.242	Heptachlor	3.378	6185374	4.214	Heptachlor
4.059	78244	.361	Telodrin	3.772	4035969	5.639	Telodrin
4.483	3612624	11.408	g. Chlordane	4.298	14394670	12.352	g. Chlordane
4.374	327013	1.758	o,p-DDE		0		o,p-DDE
4.581	4938497	15.391	a. Chlordane	4.419	10875900	9.438	a. Chlordane
4.719	104765	.348	Endosulfan I	4.482	359343	.352	Endosulfan I
4.65b	146209	.472	4,4'-DDE		0		4,4'-DDE
4.904	101212	.313	Dieldrin	4.686	1549888	1.339	Dieldrin
	0		o,p-DDT	4.942	536698	.961	o,p-DDT
5.093	894515	7.441	Kepone	4.984	3323001	10.39	Kepone
	0		4,4'-DDD	5.025	352194	.397	4,4'-DDD
5.053	90602	.307	Endrin		0		Endrin
5.236	59337	.218	Endosulfan II		0		Endosulfan II
	0		4,4'-DDT	5.249	195975	.212	4,4'-DDT
5.559	18060	.08	Endrin aldehyde	5.341	740092	.943	Endrin aldehyde
5.846	57709	.232	Endo. sulfate	5.533	128983	.141	Endo. sulfate
5.661	19843	.156	Methoxychlor	5.748	41618	.096	Methoxychlor
5.772	9291	.049	Mirex	5.847	258530	.467	Mirex
	0		Endrin ketone	5.895	211136	.22	Endrin ketone
	0		DCB	6.714	45354	-.093	DCB

Files:

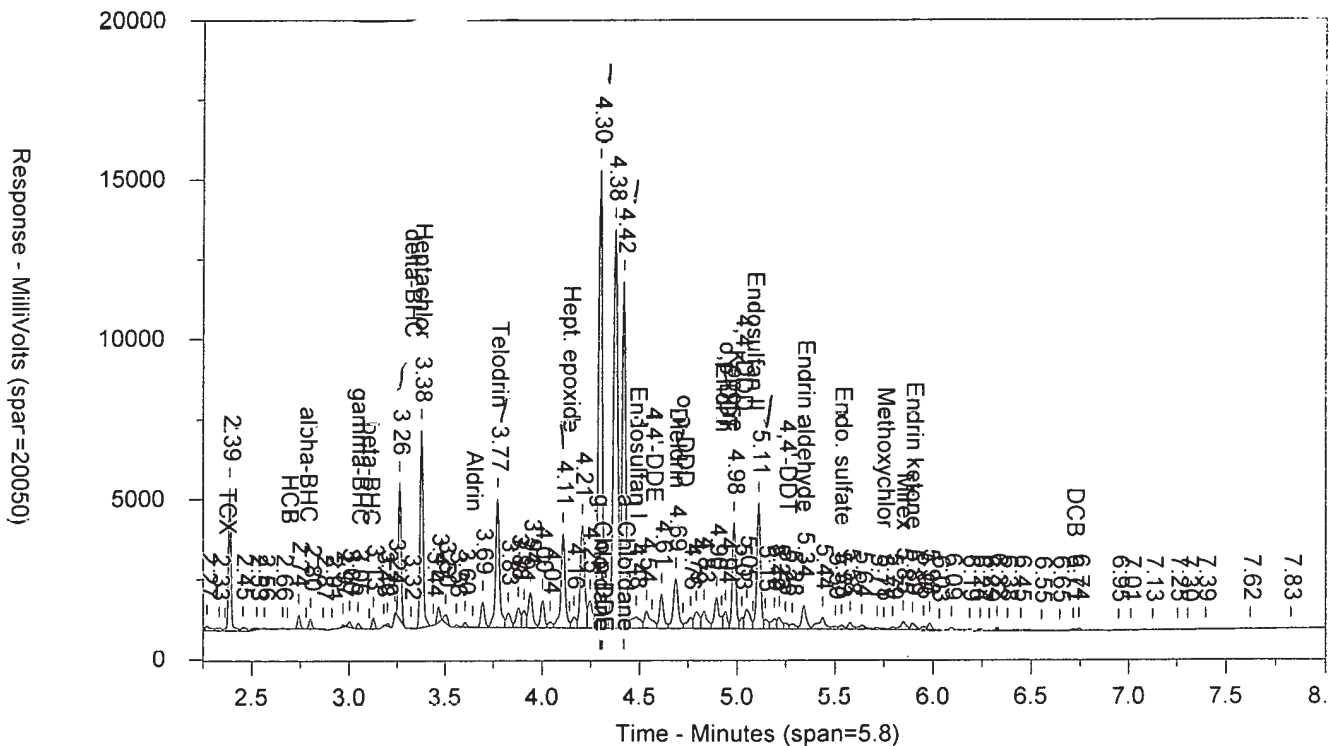
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CHLD41824D AACHLD4AA ICAL 1831299999 00177 SW-846 801

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## LANCASTER LABORATORIES

Sample Number: CHLD51824D      AACHLD5AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 8:58:52 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.037.RAW  
Method File: 05PESTD1.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.863		32412	38876
1.886		58604	65381
1.92		45067	49287
1.964		61925	69893
2.018		80587	73049
2.07		11847	21608
2.099		286238	250479
2.145		218422	176102
2.184		184048	163595
2.251		11513	19111
2.282		10632	8021
2.311		5615	5123
2.384		18266	15042
2.419		63164	64309
2.446		45901	40728
2.504		2268886	2006408
2.558	TCX	6988	7331
2.593		7541	13929
2.697		12822	17656
2.746		17405	15599
2.881		9391	25920
2.997		230172	266434
3.037		12939	12172
3.074		154422	157949
3.144		54978	59409
3.182	gamma-BHC	40238	62512
3.247		76961	82772
3.29	beta-BHC	92142	105292
3.378		196489	254305
3.458		272357	405529
3.525		2343020	2783704
3.595	Heptachlor	3364168	4033373
3.689		407733	877458
3.781		118113	169042
3.824		39333	47101
3.021		160263	162084
3.967		2265631	2902660
4.006		87850	76338
4.058	Telodrin	146922	279160
4.113		297716	869666
4.188		417794	539573
4.237		615618	932018
4.323		1467225	1956734
4.374	o,p-DDE	656529	1458539
4.414		1484147	2256513
4.483	g. Chlordane	7166832	11011610
4.581	a. Chlordane	9776217	19176310
4.654	4,4'-DDE	296005	559784
4.719	Endosulfan I	207572	297969
4.758		611620	1134974
4.835		822168	1293480
4.904	Dieldrin	194016	268500

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
4.951		690507	1033877
5.019		288478	506010
5.053	Endrin	175653	220332
5.093	Kepone	1797859	2525769
5.153		239594	257519
5.185		2343201	2928237
5.236	Endosulfan II	119759	168798
5.366		496090	843385
5.395		182270	217294
5.437		85782	116153
5.497		124049	248406
5.559	Endrin aldehyde	33463	34826
5.588		90584	163281
5.628		79110	95865
5.66	Methoxychlor	38944	47695
5.686		50863	82969
5.745		16156	20705
5.771	Mirex	18306	20160
5.846	Endo. sulfate	108859	247542
5.883		180402	211152
5.929		113558	121085
5.963		34400	31855
5.998		79639	87480
6.083		9982	9400
6.108		11546	18360
6.179		54112	63131
6.246		6084	5776
6.276		12853	12627
6.36		66734	109154
6.433		17152	33131
6.504		24064	33751
6.559		7202	15722
6.71	DCB	5536	15081
6.751		9824	14760
6.822		42418	85709
7.019		4822	12277
7.072		10939	17710
7.271		12944	71969
7.659		6790	252176

Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

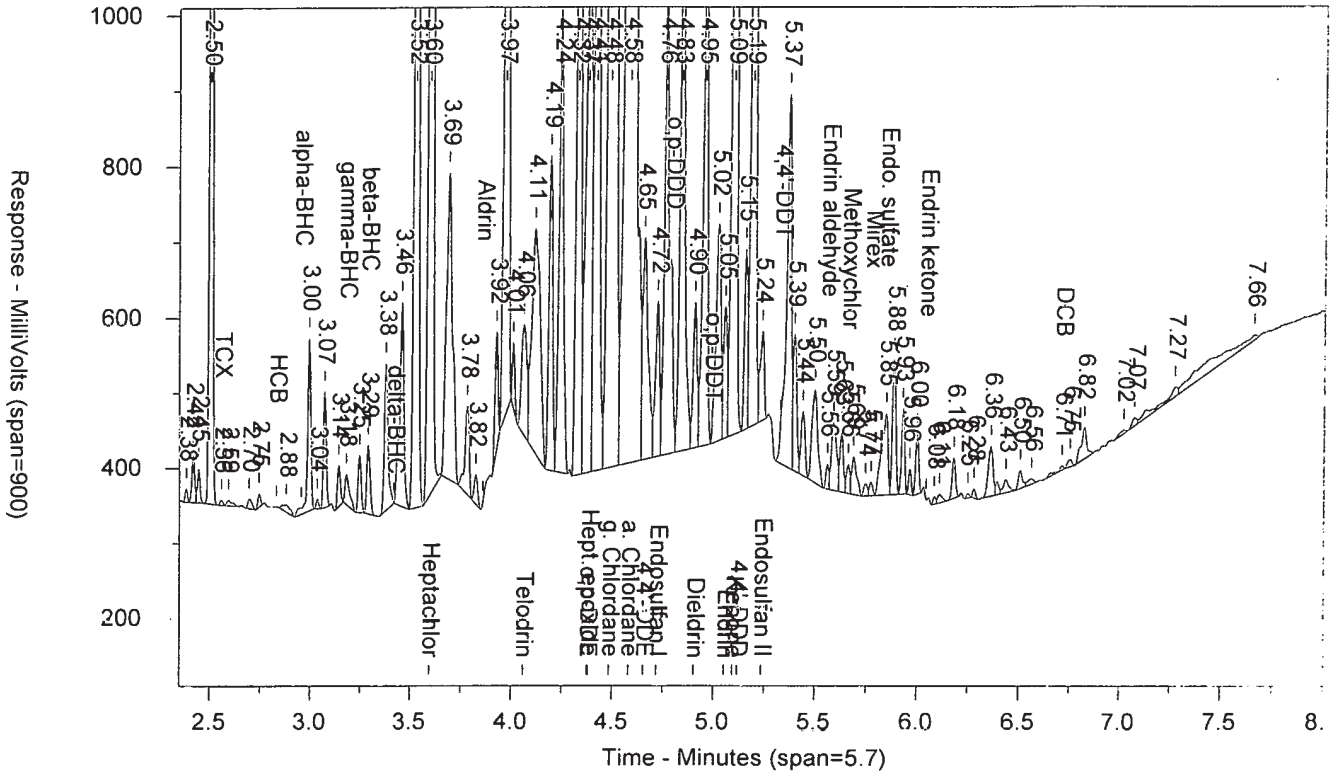
Sample Number: CHLD51824D      AACHLD5AA      ICAL 183129999      00177      Analyst: 2306      SW-846 8081A  
 Injected On: 11/9/2018 8:58:52 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Data File: 05pest18306007B.037.RAW  
 Method File: 05PESTDIB.MET  
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RT B	Compound B	Height B	Area B
1.921		986473	779184
2.001		835039	692162
2.044		568656	502489
2.08		77898	88352
2.109		108715	264983
2.149		130901	172725
2.2		131311	164285
2.242		241169	336334
2.27		231867	354684
2.333		104257	163166
2.386		9018956	7787464
2.454		143221	220130
2.535		37816	134698
2.563		27041	24913
2.656		50105	76737
2.713		12296	8005
2.742		850822	808293
2.801		603193	615277
2.868		50982	53482
2.91		26177	39554
2.945		14926	11203
2.969		144981	121927
3.001		315997	343850
3.046	gamma-BHC	337544	372932
3.126		689573	706523
3.18		49362	52507
3.198		187551	162165
3.238		292464	243627
3.263		8957077	8882606
3.323	delta-BHC	45318	51038
3.377	Heptachlor	13001450	14673710
3.439		25240	15206
3.467		871277	855181
3.504		508876	711388
3.558		146078	173836
3.603		293127	303156
3.694		1600761	2066911
3.772	Telodrin	8102039	11418170
3.826		875394	1453635
3.878		1189150	1937888
3.908		1037413	1523460
3.941		2319148	3523623
4.002		1651746	2243054
4.041		349480	515473
4.108		5990824	9132555
4.163		665139	1088392
4.206		6649577	10149820
4.245		1692751	2690546
4.297	g. Chlordane	30117150	40071130
4.375		25819770	42051780
4.419	a. Chlordane	22250420	29176400
4.482	Endosulfan I	810349	2343923

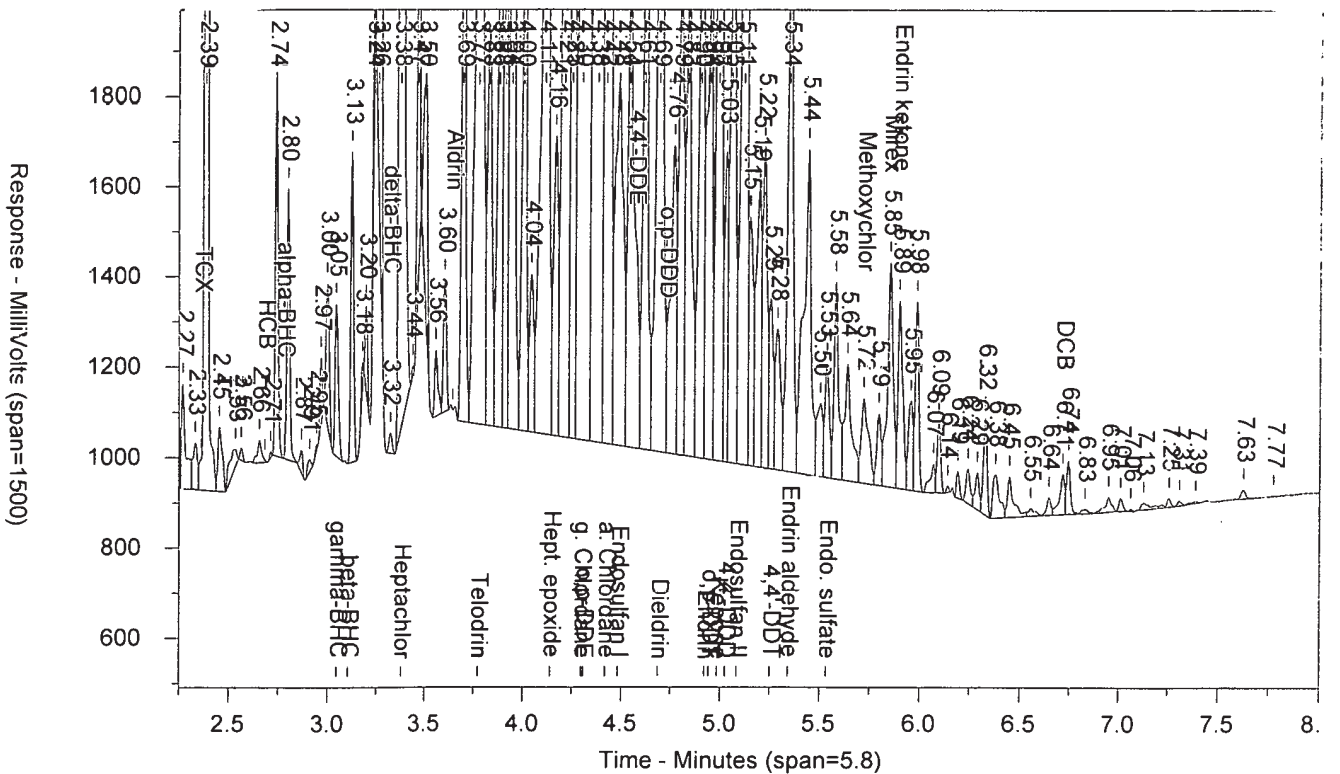
## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.536		1066148	2584152
4.614		2158108	3107704
4.686	Dieldrin	3152847	5586845
4.762		684754	1447600
4.792		1052436	1978770
4.831		1080999	2097545
4.896		1952256	3005588
4.943	o,p-DDT	1185316	2229879
4.984	Kepone	6741872	8574845
5.025	4,4'-DDD	688774	848820
5.05		1216360	2429892
5.113		8175865	10422440
5.145		551914	808878
5.192		617980	1185738
5.216		714910	1113017
5.249	4,4'-DDT	377434	539059
5.283		311949	616271
5.341	Endrin aldehyde	1481124	2540018
5.437		722047	1938883
5.501		161520	339800
5.532	Endo. sulfate	251478	395853
5.577		435591	714602
5.637		257373	643384
5.717	Methoxychlor	188144	473729
5.792		158569	252006
5.847	Mirex	497803	1011886
5.894	Endrin ketone	417069	709199
5.952		197488	331857
5.982		419717	517030
6.066		63943	115212
6.093		153589	185878
6.138		14643	11385
6.189		59366	65240
6.239		76343	116040
6.286		82239	124003
6.324		215928	270483
6.376		96642	219764
6.445		90547	197320
6.552		17153	41084
6.645		39278	57639
6.714	DCB	90009	164021
6.743		119613	164247
6.826		9926	24914
6.947		33371	79883
7.009		28700	41103
7.06		4976	4505
7.127		14724	48360
7.253		19123	23293
7.306		11173	14761
7.386		4398	12596
7.626		20660	35527
7.773		2730	3901

CHLD51824D AACHLD5AA ICAL 1831299999 00177 SW-846 801  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD51824D      AACHLD5AA      ICAL 183129999      00177      SW-846 8081A  
 Injected On: 11/9/2018 8:58:52 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.558	6988	.018	TCX		0		TCX
3.182	40238	.087	gamma-BHC	3.046	337544	.181	gamma-BHC
3.29	92142	.447	beta-BHC		0		beta-BHC
	0		delta-BHC	3.323	45318	.027	delta-BHC
3.595	3364168	8.605	Heptachlor	3.377	13001450	8.858	Heptachlor
4.058	146922	.677	Telodrin	3.772	8102039	11.32	Telodrin
4.483	7166832	22.631	g. Chlordane	4.297	30117150	25.844	g. Chlordane
4.374	656529	3.529	o,p-DDE		0		o,p-DDE
4.581	9776217	30.468	a. Chlordane	4.419	22250420	19.309	a. Chlordane
4.719	207572	.69	Endosulfan I	4.482	810349	.793	Endosulfan I
4.654	296005	.956	4,4'-DDE		0		4,4'-DDE
4.904	194016	.6	Dieldrin	4.686	3152847	2.724	Dieldrin
	0		o,p-DDT	4.943	1185316	2.122	o,p-DDT
5.093	1797859	13.746	Kepone	4.984	6741872	17.485	Kepone
	0		4,4'-DDD	5.025	688774	.776	4,4'-DDD
5.053	175653	.595	Endrin		0		Endrin
5.236	119759	.44	Endosulfan II		0		Endosulfan II
	0		4,4'-DDT	5.249	377434	.408	4,4'-DDT
5.559	33463	.148	Endrin aldehyde	5.341	1481124	1.888	Endrin aldehyde
5.846	108859	.438	Endo. sulfate	5.532	251478	.275	Endo. sulfate
5.66	38944	.305	Methoxychlor	5.717	188144	.436	Methoxychlor
5.771	18306	.096	Mirex	5.847	497803	.9	Mirex
	0		Endrin ketone	5.894	417069	.434	Endrin ketone
6.71	5536	-1.071	DCB	6.714	90009	-.02	DCB

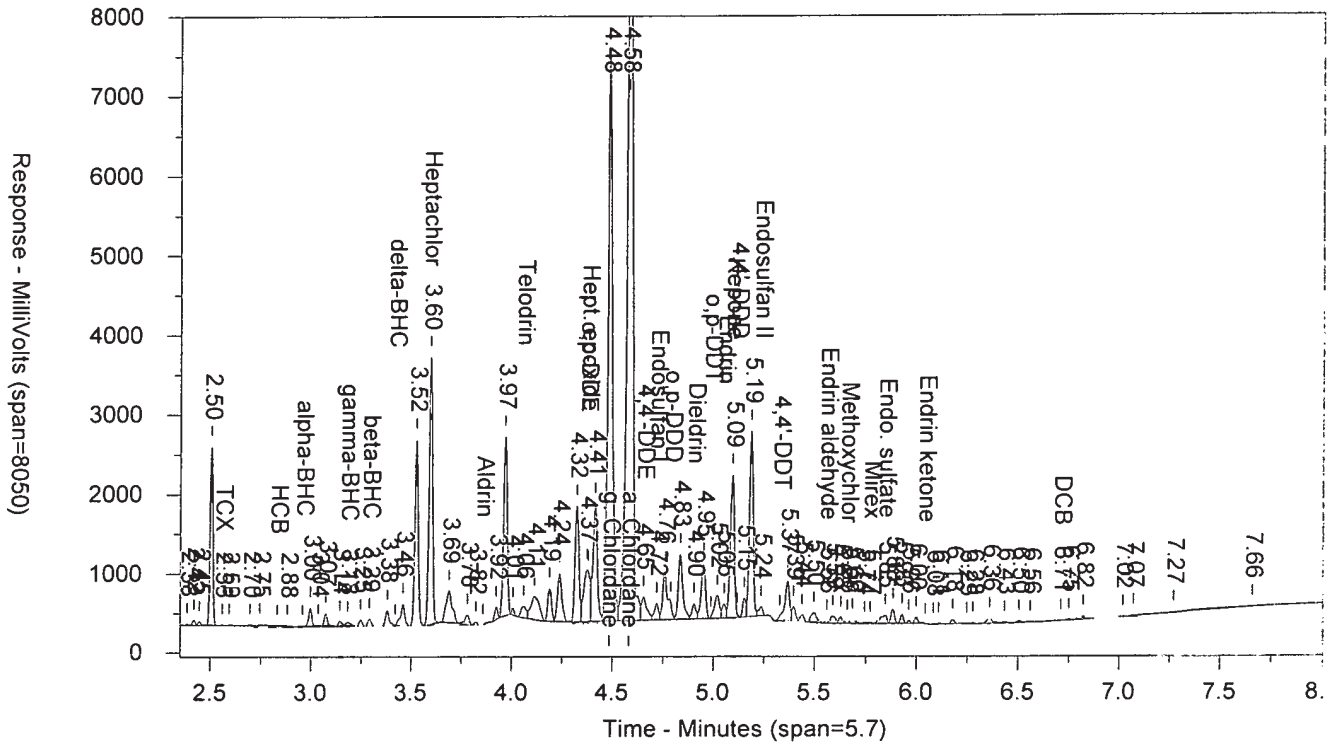
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 Method A: 05PESTD1.MET  
 Method B: 05PESTD1B.MET  
 Calibration File A: 05pest1830603.cal  
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 Format A: poctD5.FMTA  
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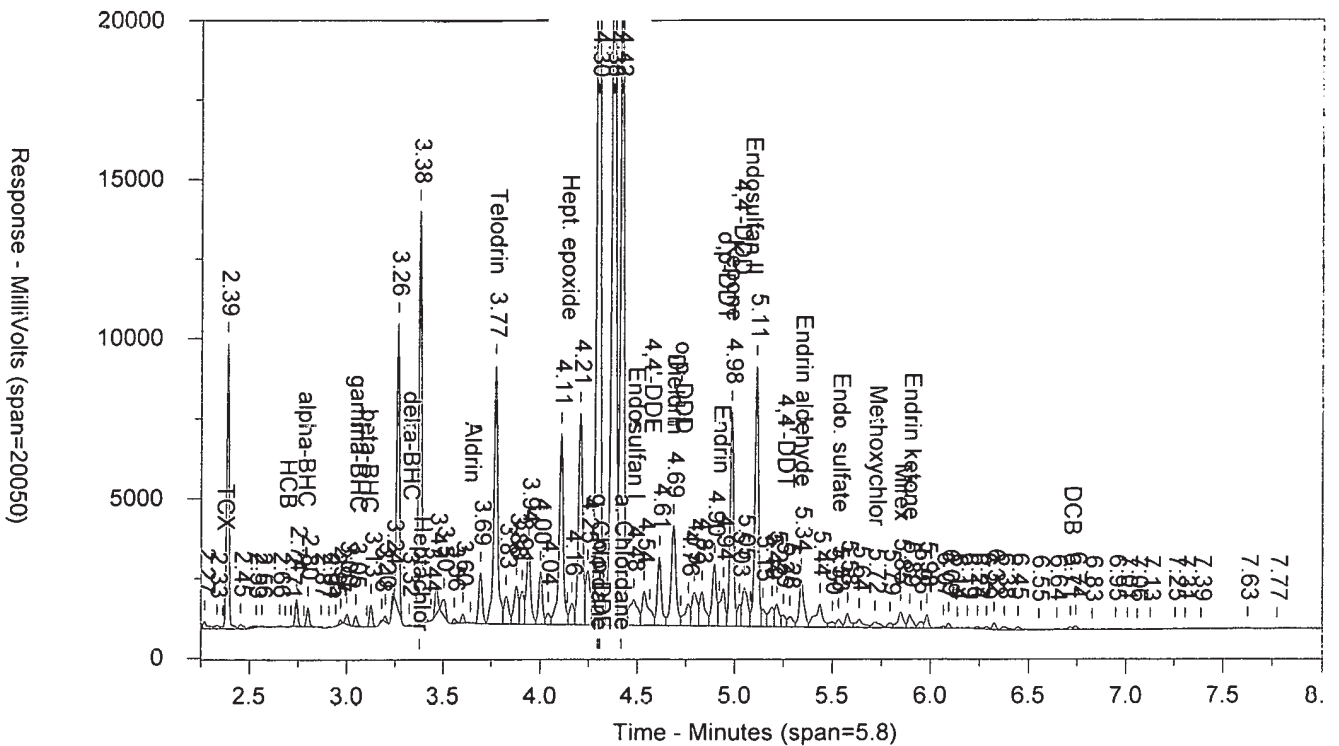


CHLD51824D AACHLD5AA ICAL 1831299999 00177 SW-846 801

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## LANCASTER LABORATORIES

Sample Number: CHLD61824E      AACHLD6AA      ICAL 1831299999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 9:11:41 PM  
Instrument ID: CP5-9190      Sample Weight: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min      Dilution Factor: 1  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.038.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.763		35756	21037
1.859		73431	91800
1.883		129271	135076
1.917		90848	81502
1.961		131169	113401
2.015		176985	168161
2.053		15346	15904
2.096		650129	569687
2.142		512242	411469
2.181		349469	297490
2.232		12253	7746
2.279		24563	17873
2.307		15096	13835
2.381		44866	37676
2.415		140438	142432
2.443		105632	96304
2.501		5355754	4786858
2.551	TCX	6032	6061
2.589		16803	27247
2.695		30585	39918
2.744		6714	5387
2.769		11536	8670
2.878		26363	69015
2.994		542321	631261
3.034		34078	32436
3.07		357424	365000
3.103		16025	12681
3.141		143042	161293
3.179		86290	136966
3.244		181766	196659
3.287	beta-BHC	213465	251440
3.375		467734	608771
3.455		655006	949686
3.522		5645179	6802449
3.592	Heptachlor	7895175	9622666
3.686		1006638	2131924
3.778		277055	391446
3.821		91336	111096
3.891		18842	67646
3.922		375994	384930
3.964		5264571	6805453
4.003		202946	175497
4.054	Telodrin	354917	653411
4.11		714766	2121092
4.188		1000235	1298479
4.235		1512223	2278077
4.283		19643	11687
4.32		3646031	4894470
4.372	o,p-DDE	1610856	3526149
4.411		3637220	5604418
4.48	g. Chlordane	16871110	26504450
4.578	a. Chlordane	23055000	45884820

## Chrom Perfect Chromatogram Report

RT A	Compound A	Height A	Area A
4.651	4,4'-DDE	775796	1571558
4.716	Endosulfan I	579048	934093
4.755		1602197	3146975
4.831		2026548	3526215
4.9	Dieldrin	572231	892899
4.947		1800644	2923474
5.015		836543	1661438
5.05	Endrin	579456	779869
5.09	Kepone	4535853	6727444
5.15		746520	953084
5.182		5694928	7571191
5.233	Endosulfan II	501932	1422161
5.363		1252694	2349620
5.392		492709	636445
5.435		212877	315531
5.494		307002	635385
5.556	Endrin aldehyde	75203	76654
5.584		225531	391303
5.625		179069	217642
5.657		88829	108648
5.683	Methoxychlor	114019	184078
5.74		30606	36778
5.768	Mirex	38672	40036
5.824		200191	271997
5.842	Endo. sulfate	249012	293075
5.881		411445	460745
5.926		259459	277599
5.96		84470	77306
5.995		179052	191982
6.026	Endrin ketone	29902	23242
6.08		25008	24375
6.104		25566	29800
6.176		132074	174011
6.214		25555	47291
6.274		31419	29350
6.357		165236	266781
6.387		44899	55284
6.429		44719	71247
6.501		57697	70107
6.68		11194	33655
6.707	DCB	19977	24023
6.743		20645	35121
6.819		101098	191415
6.88		4649	3660
6.909		6823	7191
7.014		14594	51940
7.067		35408	74126
7.127		24144	77050
7.268		29965	106360
7.933		2543	757072

## Chrom Perfect Chromatogram Report

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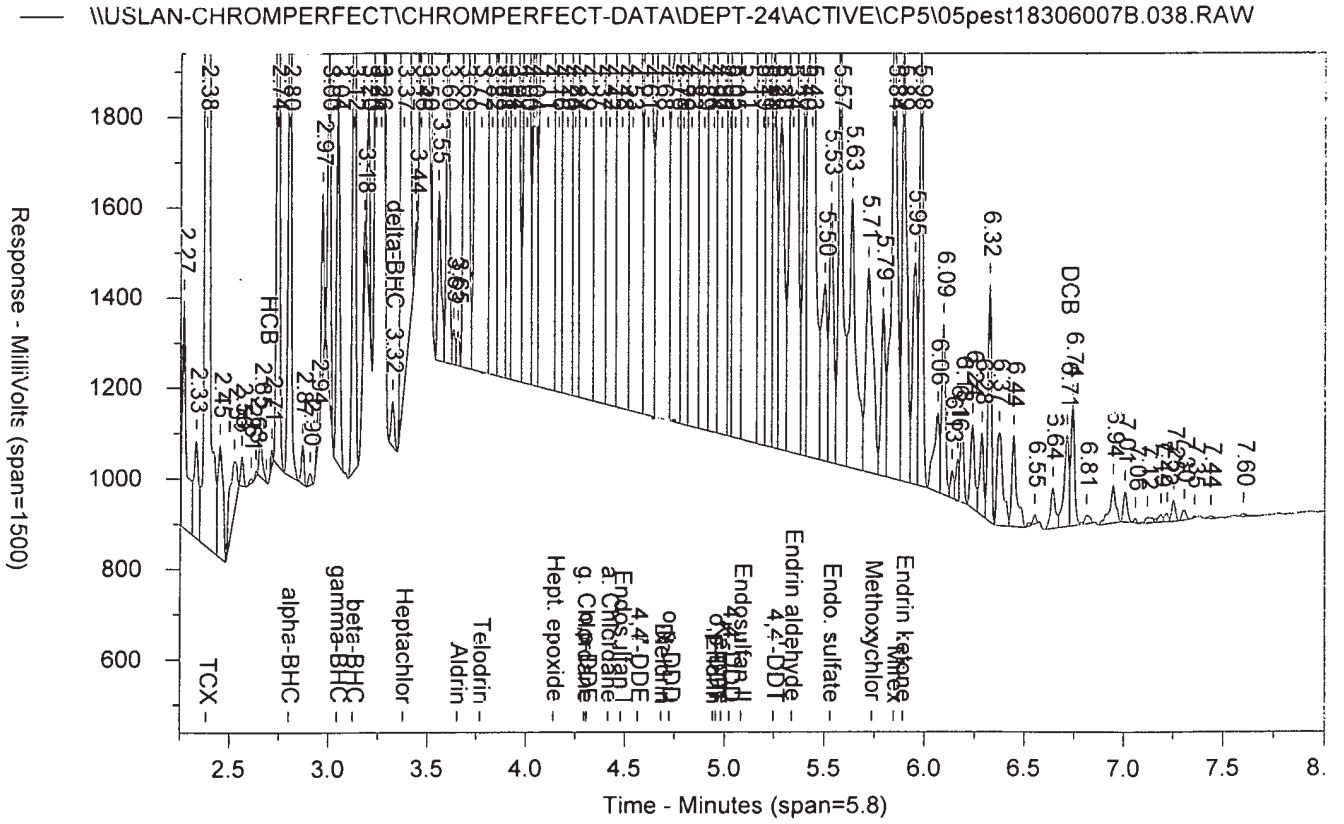
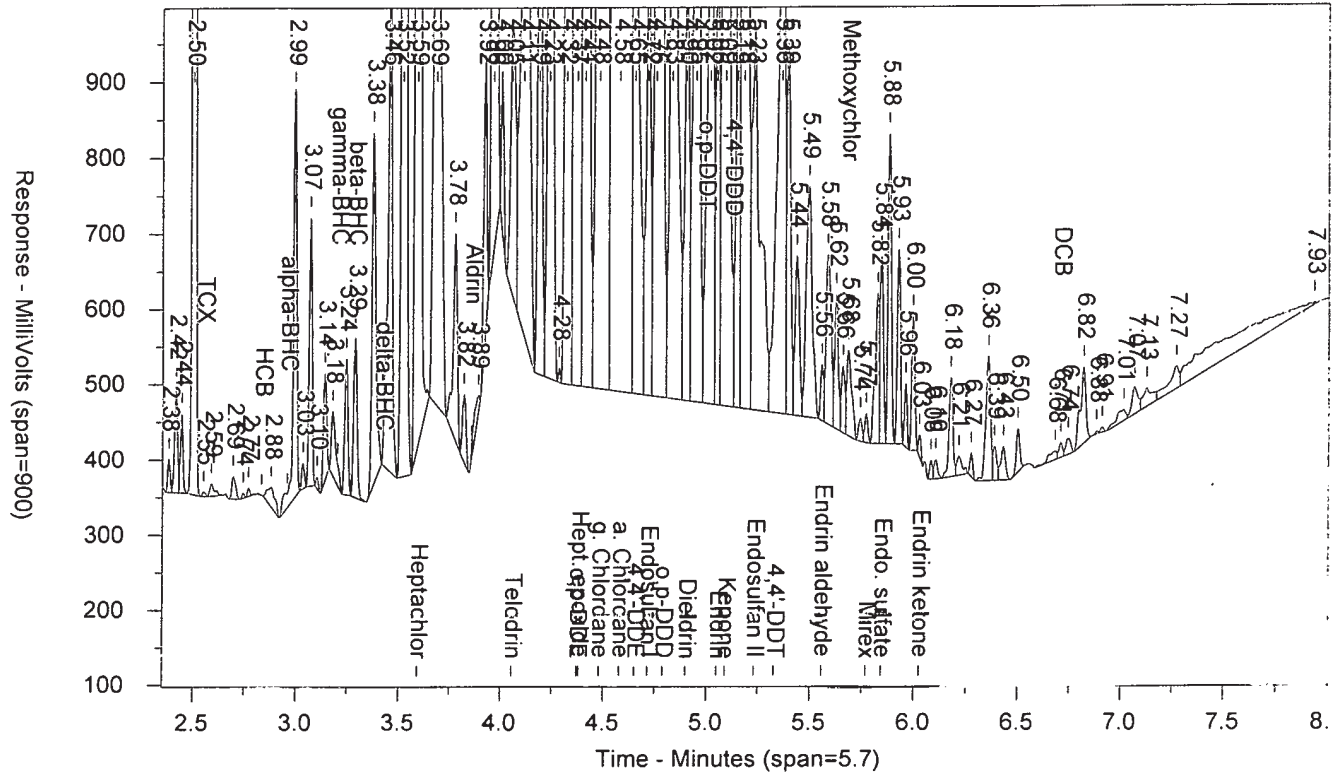
Sample Number: CHLD61824E      AACHLD6AA      ICAL 1831299999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 9:11:41 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306007B.038.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
1.918		2338741	1875738
1.998		1936266	1509576
2.041		1276584	980271
2.078		62603	63868
2.098		122432	156246
2.124		143728	143949
2.146		226884	254835
2.197		243079	275271
2.238		503775	648363
2.267		502119	720773
2.33		215283	341995
2.383	TCX	23340590	19709140
2.45		247877	435455
2.521		120985	330918
2.561		65444	60371
2.608		10748	10499
2.632		12422	8332
2.654		90123	101439
2.711		41222	29010
2.739		2044037	1926945
2.798	alpha-BHC	1413737	1494447
2.867		86721	86908
2.905		26242	29865
2.942		39675	30740
2.966		403554	357966
2.998		725312	763463
3.044	gamma-BHC	817634	901078
3.124	beta-BHC	1660506	1713433
3.177		146575	144678
3.195		413243	357746
3.236		760275	564128
3.26		22984080	23076010
3.32	delta-BHC	100076	105066
3.375	Heptachlor	33287730	38056480
3.437		58331	38340
3.464		2180741	2151604
3.501		1182899	1623880
3.555		377020	473821
3.6		748549	825380
3.63		78528	82705
3.652	Aldrin	76721	69361
3.691		3965210	5032057
3.769	Telodrin	20114490	28201890
3.824		2136349	3545671
3.876		2931803	4853886
3.905		2583359	3578577
3.939		6228966	9390992
3.999		4076283	5486102
4.038		821416	1221482
4.106		15130330	22943440
4.161		1614412	2625666
4.204		16984890	25743920

## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.243		4209284	6576501
4.295	g. Chlordane	75451630	100855800
4.373		66026710	106957900
4.416	a. Chlordane	56007580	74196510
4.48	Endosulfan I	2107696	5790417
4.533		2594687	6194901
4.611		5541213	7826290
4.683	Dieldrin	7777598	13619710
4.76		1652524	3401709
4.789		2515061	4721414
4.829		2601151	5007730
4.892		4830317	7367512
4.94	Endrin	3089070	5621354
4.981	Kepone	16991100	21503270
5.023	4,4'-DDD	1637104	1880642
5.047		2991828	5995487
5.11		20271780	27279190
5.19		1475501	2933598
5.213		1734079	2677304
5.246	4,4'-DDT	891601	1268893
5.28		726607	1448855
5.338	Endrin aldehyde	3585500	6202632
5.4		816795	1062504
5.434		1735817	3528271
5.498		392786	796777
5.53	Endo. sulfate	576791	882616
5.574		1023192	1689562
5.634		599708	1443259
5.715		452011	1152908
5.788		372488	576341
5.844	Mirex	1156860	2366202
5.892	Endrin ketone	963473	1621805
5.95		490206	821207
5.979		998434	1196489
6.063		175612	346235
6.091		376476	470396
6.135		61759	70421
6.162		91634	93309
6.184		159433	211597
6.236		185853	277310
6.283		183106	260606
6.322		523888	632866
6.372		204638	430738
6.443		201340	341219
6.551		19701	28633
6.642		89724	154236
6.712	DCB	200287	342210
6.74		265023	351021
6.81		18809	33637
6.945		82968	182011
7.005		67063	94695
7.058		10554	8477
7.121		13032	35673
7.189		16614	23559
7.218		18727	25112
7.25		46785	55818
7.302		22659	32928
7.354		4665	4177
7.436		5589	9536
7.598		6113	12970

CHLD61824E AACHLD6AA ICAL 1831299999 00177 SW-846 808  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD61824E      AACHLD6AA      ICAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 9:11:41 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.551	6032	.015	TCX	2.383	23340590	13.969	TCX
	0		alpha-BHC	2.798	1413737	.63	alpha-BHC
	0		gamma-BHC	3.044	817634	.439	gamma-BHC
3.287	213465	1.036	beta-BHC	3.124	1660506	2.122	beta-BHC
	0		delta-BHC	3.32	100076	.059	delta-BHC
3.592	7895175	20.196	Heptachlor	3.375	33287730	22.679	Heptachlor
	0		Aldrin	3.652	76721	.055	Aldrin
4.054	354917	1.637	Telodrin	3.769	20114490	28.105	Telodrin
4.48	16871110	53.275	g. Chlordane	4.295	75451630	64.747	g. Chlordane
4.372	1610866	8.658	o,p-DDE		U		o,p-DDE
4.578	23055000	71.851	a. Chlordane	4.416	56007580	48.604	a. Chlordane
4.716	579048	1.925	Endosulfan I	4.48	2107696	2.063	Endosulfan I
4.651	775796	2.506	4,4'-DDE		0		4,4'-DDE
4.9	572231	1.77	Dieldrin	4.683	7777598	6.719	Dieldrin
5.05	579456	1.964	Endrin	4.94	3089070	2.984	Endrin
5.09	4535853	32.855	Kepone	4.981	16991100	38.755	Kepone
	0		4,4'-DDD	5.023	1637104	1.843	4,4'-DDD
5.233	501932	1.842	Endosulfan II		0		Endosulfan II
	0		4,4'-DDT	5.246	891601	.964	4,4'-DDT
5.556	75203	.333	Endrin aldehyde	5.338	3585500	4.57	Endrin aldehyde
5.842	249012	1.003	Endo. sulfate	5.53	576791	.631	Endo. sulfate
5.683	114019	.894	Methoxychlor		0		Methoxychlor
5.768	38672	.204	Mirex	5.844	1156860	2.092	Mirex
6.026	29902	.102	Endrin ketone	5.892	963473	1.004	Endrin ketone
6.707	19977	-.992	DCB	6.712	200287	.159	DCB

Files:  
 Area File: 05pest18306007.038.RAW  
 Area File: 05pest18306007B.038.RAW  
 Method A: 05PESTDI.MET  
 Method B: 05PESTDIB.MET  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/9/2018 9:19:43 PM  
 File Reported On: 11/12/2018 at 12:07:45 PM





## Chrom Perfect Chromatogram Report

## LANCASTER LABORATORIES

Sample Number: ICCHX1824F      AAICCHXAA      CCAL 1831299999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/9/2018 9:24:36 PM  
Instrument ID: CP5-9190      Sample Weight: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min      Dilution Factor: 1  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306007.039.RAW  
Method File: 05PESTD1.MET  
Calibration File: 05pest1830603.cal

RT A	Compound A	Height A	Area A
1.828		5667	8261
1.891		4616	4568
1.968		13664	31805
2.023		16699	21580
2.078		7124	8389
2.15		19026	20983
2.188		54769	46937
2.426		7703	7793
2.565	TCX	12383	11891
2.699		7720	9457
2.752		9836	15412
2.889		10779	14914
2.943	alpha-BHC	7495	10126
3.001		123800	124680
3.042		7293	6909
3.078		98875	99806
3.149		8235	7687
3.183	gamma-BHC	52262	74262
3.251		32639	30730
3.286	beta-BHC	18491	21474
3.319		27240	29070
3.382		119005	133047
3.425	delta-BHC	32581	33208
3.463		127369	133477
3.53		1160100	1366907
3.6	Heptachlor	1836706	2256214
3.694		270817	649710
3.784		65220	70556
3.838		8693	11172
3.869	Aldrin	54469	59420
3.929		61992	64034
3.972		1258262	1686092
4.074		62486	89495
4.13		113137	391656
4.191		296698	405020
4.243		183694	290792
4.328		704858	949017
4.419		454566	1213679
4.487	g. Chlordane	3464036	5080605
4.591	a. Chlordane	3790998	7447712
4.659	4,4'-DDE	103914	227280
4.723		68355	93047
4.764		226765	441662
4.84		149983	325302
4.908	Dieldrin	98055	138079
4.953		187074	271897
5.029		62408	105804
5.097	Kepone	440650	749940
5.159		96143	106416
5.19		1081813	1437606
5.283		13159	12966
5.371		168406	296395

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.4		64308	86378
5.44		18733	24050
5.479		27800	32465
5.504		40804	57557
5.562		18863	20783
5.606		15522	17603
5.632		15544	15320
5.667	Methoxychlor	16769	39371
5.749		5978	6746
5.851	Endo. sulfate	33816	80499
5.889		28697	31824
5.934		54144	62740
6.002		17714	20278
6.182		13341	17863
6.225		9425	11709
6.283		4386	4449
6.368		5283	8833
6.43		3138	4173
6.534		6793	11439
6.656		7647	10896
6.715	DCB	5606	6558
6.826		14331	28897
6.916		4180	4343

Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICCHX1824F      AAICCHXAA      CCAL 1831299999      00177      Analyst: 2306      SW-846 8081A  
 Injected On: 11/9/2018 9:24:36 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Data File: 05pest18306007B.039.RAW  
 Method File: 05PESTDIB.MET  
 Calibration File: 05pest1830603b.cal

RT B	Compound B	Height B	Area B
1.921		31731	21411
2		87475	105147
2.046		44881	157763
2.111		63811	138332
2.171		60925	232400
2.25		73632	213771
2.296		100188	247351
2.407		81024	352704
2.453		108402	188243
2.533		32178	139094
2.58		7585	7343
2.621		14357	14816
2.656		41945	54104
2.741		458382	444955
2.801		407222	445514
2.868		45699	44137
2.905		48325	69957
3.003		293176	639962
3.064		62572	115349
3.094	beta-BHC	107460	92764
3.126		411375	405761
3.18		172167	250738
3.238		132931	120238
3.262		4231795	4250403
3.321	delta-BHC	21128	20637
3.377	Heptachlor	7055068	8231915
3.465		740551	929035
3.505		431854	536552
3.557		39338	34871
3.603		275210	344526
3.634	Aldrin	36802	53885
3.694		913820	1162317
3.771	Telodrin	4433260	5932470
3.823		281102	423028
3.879		468206	735178
3.907		542389	803616
3.943		1097482	1789147
4.002		854203	1172155
4.039		110333	161000
4.108		2687821	3921420
4.163		360991	568103
4.205		2134492	3411415
4.242		672805	990316
4.297	y. Chlordane	13365200	18307120
4.373		6888526	11509360
4.418	a. Chlordane	11304860	15083000
4.504		159831	270101
4.536		442582	1095449
4.613		837463	1475192
4.683	Dieldrin	454501	1342974
4.761		253865	394446
4.791		470140	858676

## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.832		532842	877669
4.898		250158	404006
4.923	Endrin	341578	569485
4.983	Kepone	1627916	2399058
5.064	Endosulfan II	415624	955120
5.112		3576444	4448782
5.147		211464	297654
5.193		184189	339201
5.215		154751	235230
5.246	4,4'-DDT	118466	168741
5.288		93833	152529
5.339	Endrin aldehyde	596492	870515
5.435		118571	270508
5.483		12307	14368
5.53	Endo. sulfate	49744	78558
5.576		102141	109455
5.607		33613	31844
5.677		12780	12455
5.715		14874	16788
5.748	Methoxychlor	15363	23846
5.791		18509	23937
5.847	Mirex	150765	245309
5.894	Endrin ketone	76967	151331
5.981		166815	185986
6.03		27571	31535
6.091		36604	67225
6.157		18224	17893
6.239		18849	30573
6.38		44442	106960
6.465		31114	51345
6.499		28133	50063
6.551		23509	55627
6.645		15888	38597
6.716	DCB	42077	71275
6.741		49632	72911
6.821		8210	18871
6.948		17007	54953
7.005		12197	19014
7.122		19329	38195
7.252		4845	5547
7.398		3226	11423
7.967		2179	24758

ICCHX1824F

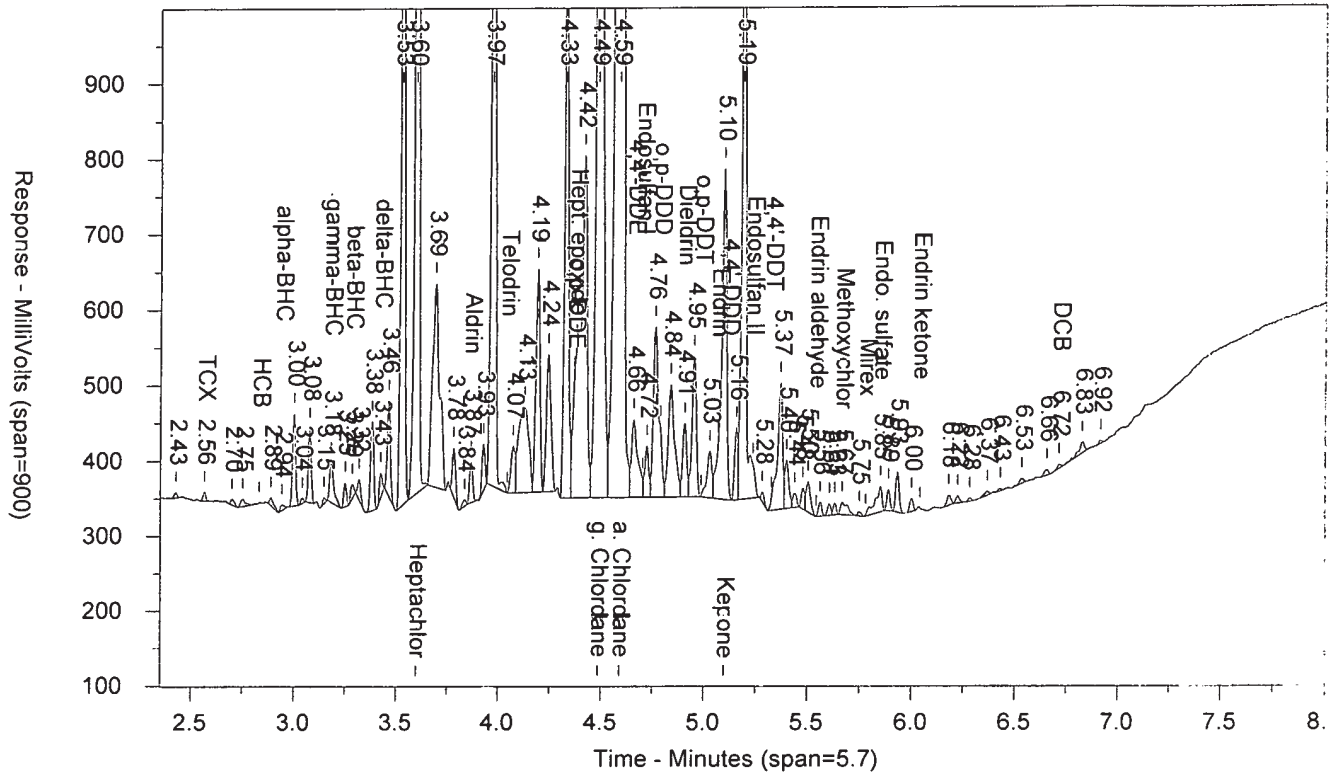
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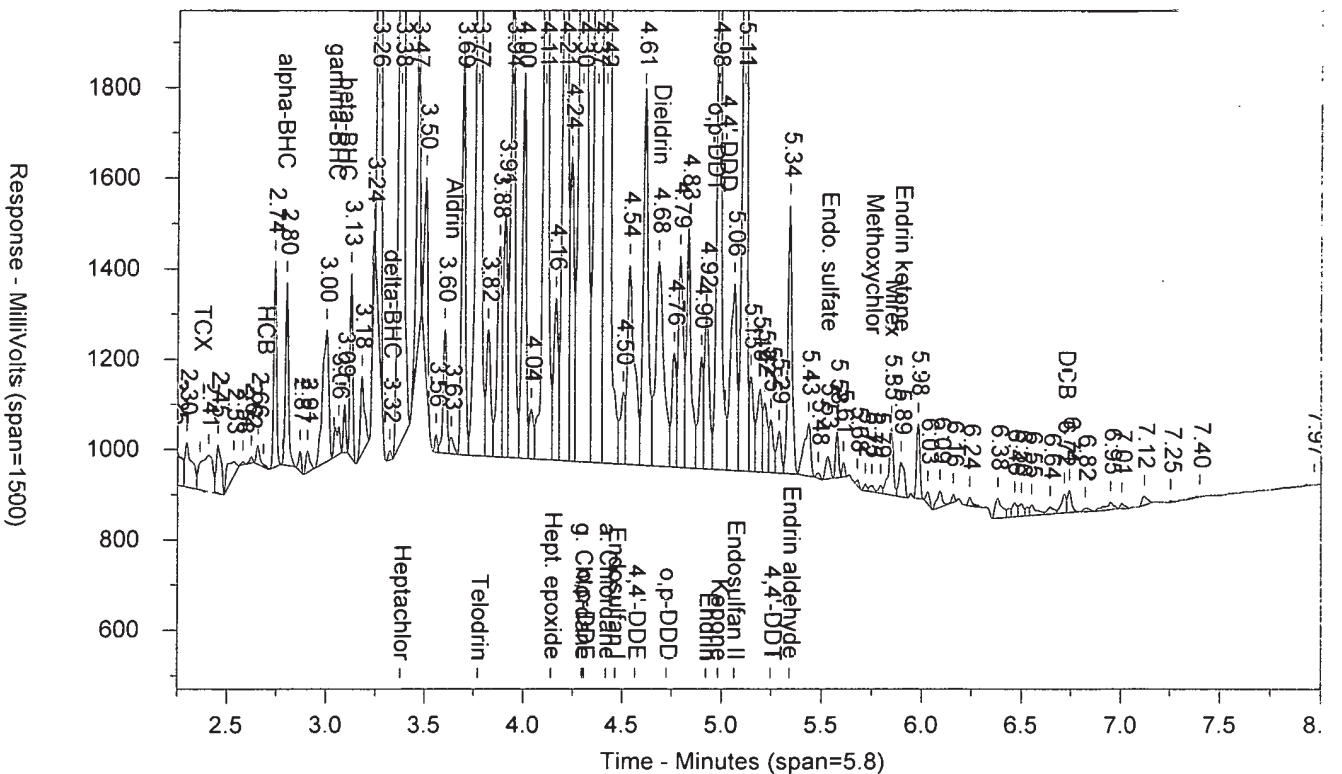
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SW-846 801

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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICCHX1824F      AAICCHXAA      CCAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 9:24:36 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.565	12383	.031	TCX		0		TCX
2.943	7495	.014	alpha-BHC		0		alpha-BHC
3.286	18491	.09	beta-BHC	3.094	107460	.137	beta-BHC
3.183	52262	.113	gamma-BHC		0		gamma-BHC
3.425	32581	.076	delta-BHC	3.321	21128	.012	delta-BHC
3.6	1836706	4.698	Heptachlor	3.377	7055068	4.807	Heptachlor
3.869	54469	.15	Aldrin	3.634	36802	.026	Aldrin
	0		Telodrin	3.771	4433260	6.194	Telodrin
4.487	3464036	10.939	g. Chlordane	4.297	13365200	11.469	g. Chlordane
4.591	3790998	11.815	a. Chlordane	4.418	11304860	9.81	a. Chlordane
4.659	103914	.336	4,4'-DDE		0		4,4'-DDE
4.908	98055	.303	Dieldrin	4.683	454501	.393	Dieldrin
	0		Endrin	4.923	341578	.33	Endrin
5.097	440650	4.273	Kepone	4.983	1627916	6.872	Kepone
	0		Endosulfan II	5.064	415624	.429	Endosulfan II
	0		4,4'-DDT	5.246	118466	.128	4,4'-DDT
	0		Endrin aldehyde	5.339	596492	.76	Endrin aldehyde
5.851	33816	.136	Endo. sulfate	5.53	49744	.054	Endo. sulfate
5.667	16769	.131	Methoxychlor	5.748	15363	.036	Methoxychlor
	0		Mirex	5.847	150765	.273	Mirex
	0		Endrin ketone	5.894	76967	.08	Endrin ketone
6.715	5606	-1.071	DCB	6.716	42077	-.098	DCB

Files:

Area File: 05pest18306007.039.RAW  
 Area File: 05pest18306007B.039.RAW  
 Method A: 05PESTD1.MET  
 Method B: 05PESTD1B.MET  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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 File Reported On: 11/12/2018 at 1:05:10 PM

ICCHX1824F

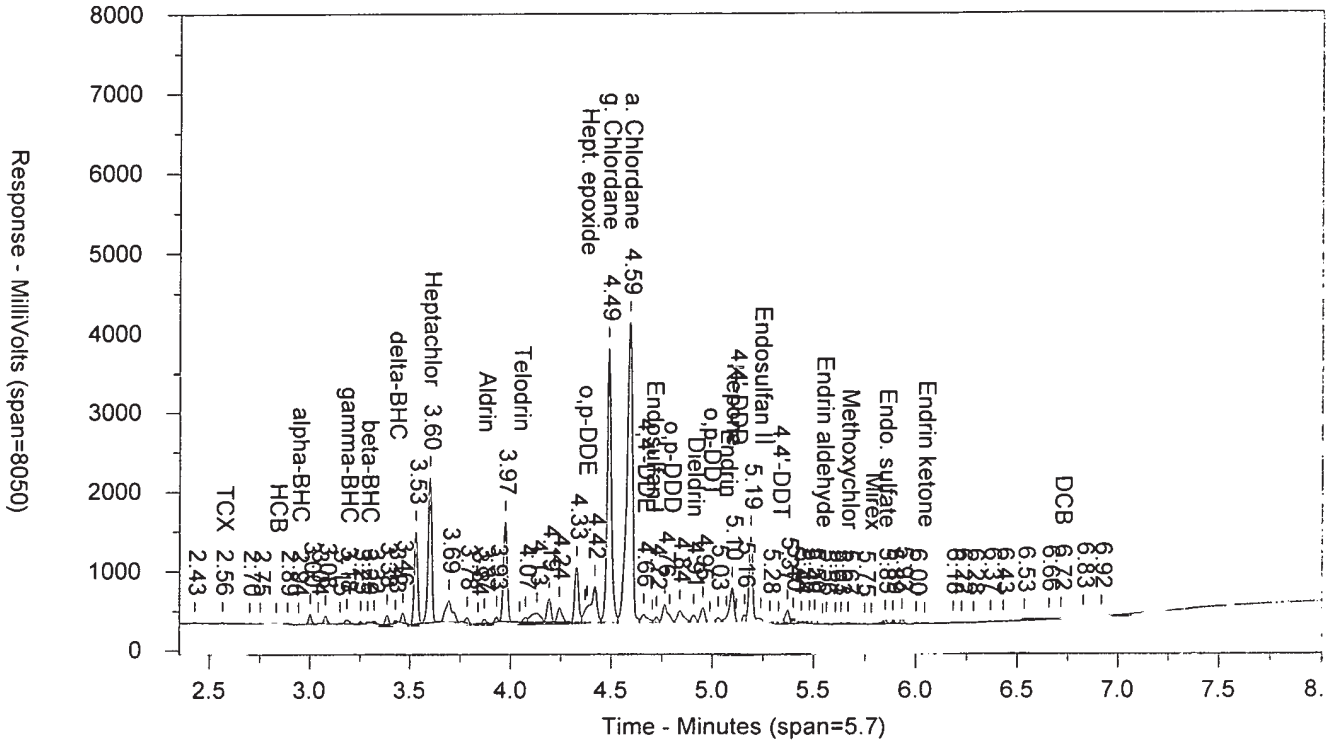
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CCAL 1831299999

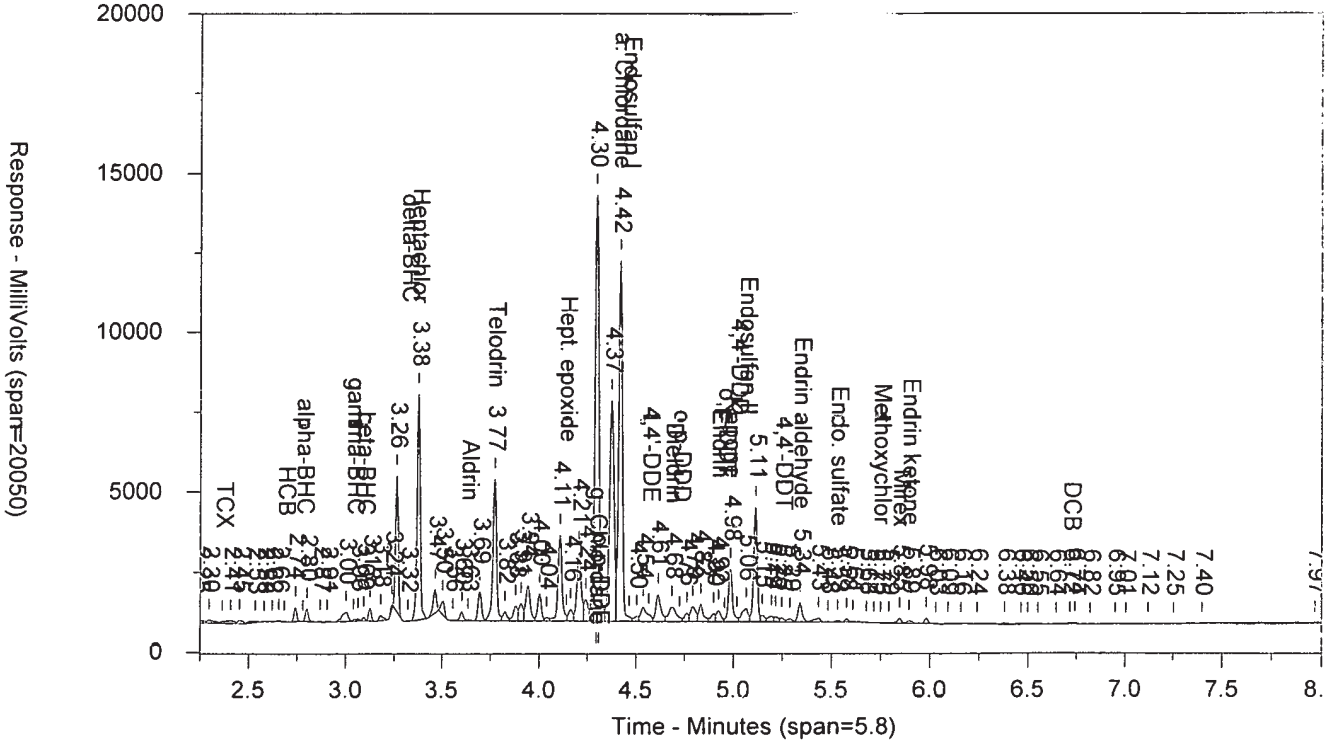
00177

SW-846 801

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# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** MDTXX1824D      **MDTXXAA ID:** AA      **Batchnumber:** 1831299999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 09, 2018 21:37:25  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306007.040.RAW  
 Calibration file : 05PEST1830603.CAL  
 Method file : 05PESTD.MET

### Analysis Report (B)

Injected on : Nov 09, 2018 21:37:25  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306007B.040.RAW  
 Calibration file : 05PEST1830603B.CAL  
 Method file : 05PESTDB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1248</b>							
3.38	3.40	3.44	6385.798	0.947101	4	79.13	1
4.21	4.22	4.27	2862.668	0.288165	4		4
4.39	4.45	4.45	14494.57	2.150367	5		5
4.71	4.71	4.77	16618.31	3.256407	6		6
<u>Height Summation:</u>			<b>40361.346</b>				
Amount Avg CF:			<b>1.66051</b>	Linear:			
<b>Aroclor-1254</b>							
4.62	4.62	4.68	7769.757	0.815558	4	60.73	2
4.93	4.96	4.99	27493.35	2.221231	4		4
5.06	5.09	5.12	40712.89	4.778504	5		5
5.27	5.31	5.33	57539.33	4.204737	6		6
<u>Height Summation:</u>			<b>133515.327</b>				
Amount Avg CF:			<b>3.005007</b>	Linear:			
<b>Aroclor-1260</b>							
4.85	4.89	4.91	28047.99	2.398361	6	40.86	1
5.06	5.09	5.12	40712.89	2.577602	2		2
5.27	5.31	5.33	57539.33	3.462462	3		3
5.53	5.57	5.59	30690.34	3.303363	4		4
5.74	5.78	5.80	52246.52	2.747916	5		5
5.94	5.95	6.00	6755.946	0.595304	6		6
<u>Height Summation:</u>			<b>215993.016</b>				
Amount Avg CF:			<b>2.514168</b>	Linear:			
<b>Chlordane</b>							
4.29	4.30	4.35	7531.214	1.045396	4	95.10	3
4.45	4.50	4.51	7537.853	0.226408	4		4
4.55	4.57	4.61	10654.72	0.231406	5		5
5.15	5.16	5.22	21499.82	1.953233	6		6
<u>Height Summation:</u>			<b>47223.607</b>				
Amount Avg CF:			<b>0.864111</b>	Linear:			
<b>Toxaphene</b>							
5.06	5.09	5.12	40712.89	8.513867	6	12.67	1
5.20	5.23	5.26	71436.45	9.532765	2		2
5.29	5.31	5.35	57539.33	8.498284	3		3
5.45	5.48	5.51	54823.41	7.960688	4		4
5.68	5.71	5.74	38860.45	6.530968	5		5
5.75	5.78	5.81	52246.52	7.48106	6		6
<u>Height Summation:</u>			<b>315619.05</b>				
Amount Avg CF:			<b>8.086272</b>	Linear:			

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.11	3.14	3.17	30943.48	2.789737	1		3
<u>Height Summation:</u>			<b>30943.48</b>				
Amount Avg CF:			<b>2.789737</b>	Linear:			
<b>Aroclor-1248</b>							
3.53	3.56	3.59	15550.1	0.693794	4	52.16	2
3.85	3.90	3.91	32928.16	1.411034	4		4
4.11	4.14	4.17	45645.22	1.415312	5		5
4.30	4.36	4.36	66646.07	2.625439	6		6
<u>Height Summation:</u>			<b>160769.55</b>				
Amount Avg CF:			<b>1.536395</b>	Linear:			
<b>Aroclor-1254</b>							
4.11	4.14	4.17	45645.22	1.465324	4	41.49	1
4.27	4.29	4.33	53327.05	1.516741	2		2
4.64	4.67	4.70	157138.4	3.093081	3		3
4.81	4.83	4.87	117551.4	3.224776	4		4
<u>Height Summation:</u>			<b>373662.07</b>				
Amount Avg CF:			<b>2.324981</b>	Linear:			
<b>Aroclor-1260</b>							
+ 4.79	4.80	4.85	120104.6	3.442589	5	43.09	1
4.79	4.83	4.85	117551.4	3.369406	1		1
4.95	4.96	5.01	120467.8	2.892753	2		2
5.48	5.49	5.54	154309.9	5.671196	4		4
+ 5.65	5.66	5.71	131331.2	2.35149	5		5
5.65	5.69	5.71	264344.2	4.733093	5		5
5.90	5.95	5.96	54321.79	1.638416	6		6
<u>Height Summation:</u>			<b>710995.09</b>				
Amount Avg CF:			<b>3.660973</b>	Linear:			
<b>Chlordane</b>							
3.23	3.26	3.29	6119.886	0.149604	4	96.89	1
4.08	4.14	4.14	45645.22	1.642284	3		3
4.27	4.29	4.33	53327.05	0.401949	4		4
4.39	4.40	4.45	53244.55	0.531029	5		5
+ 4.39	4.45	4.45	48946.91	0.488167	5		5
<u>Height Summation:</u>			<b>158336.706</b>				
Amount Avg CF:			<b>0.681217</b>	Linear:			
<b>Toxaphene</b>							
4.64	4.67	4.70	157138.4	11.264611	6	4.47	1
4.87	4.90	4.93	155685.1	10.809159	2		2
+ 5.04	5.05	5.10	185755.9	7.116347	3		3
5.04	5.07	5.10	270114.8	10.348153	3		3
5.31	5.33	5.37	281935.7	9.909386	4		4
5.36	5.39	5.42	172458.4	10.320875	5		5
5.66	5.69	5.72	264344.2	10.360258	6		6
<u>Height Summation:</u>			<b>1301676.6</b>				
Amount Avg CF:			<b>10.502074</b>	Linear:			



# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** MDTXX1824D      MDTXXAA ID: AA      **Batchnumber:** 1831299999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

**Analysis Report (A)**

Injected on : Nov 09, 2018 21:37:25  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306007.040.RAW  
 Calibration file : 05PEST1830603.CAL  
 Method file : 05PESTD.MET

**Analysis Report (B)**

Injected on : Nov 09, 2018 21:37:25  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306007B.040.RAW  
 Calibration file : 05PEST1830603B.CAL  
 Method file : 05PESTD.B.MET

**Summary Report**

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0			4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		7.76	4	30	
Aroclor-1254			0	0		25.52	4	40	
Aroclor-1260			0	0		37.14	4	40	
Chlordane			0.5	0.16		23.67	4	40	
Toxaphene			1	0.3		25.99	4	40	

Units: ug/l

MDTXX1824D

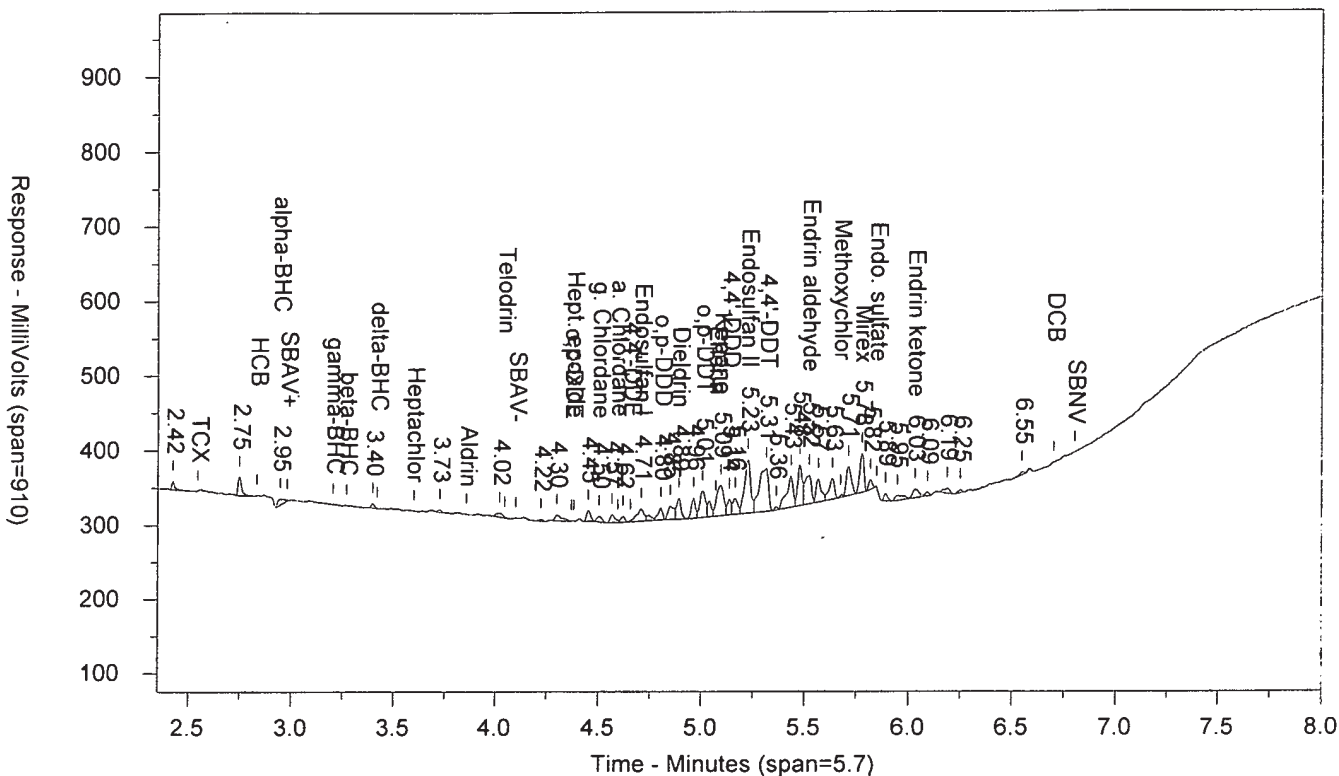
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ICAL 1831299999

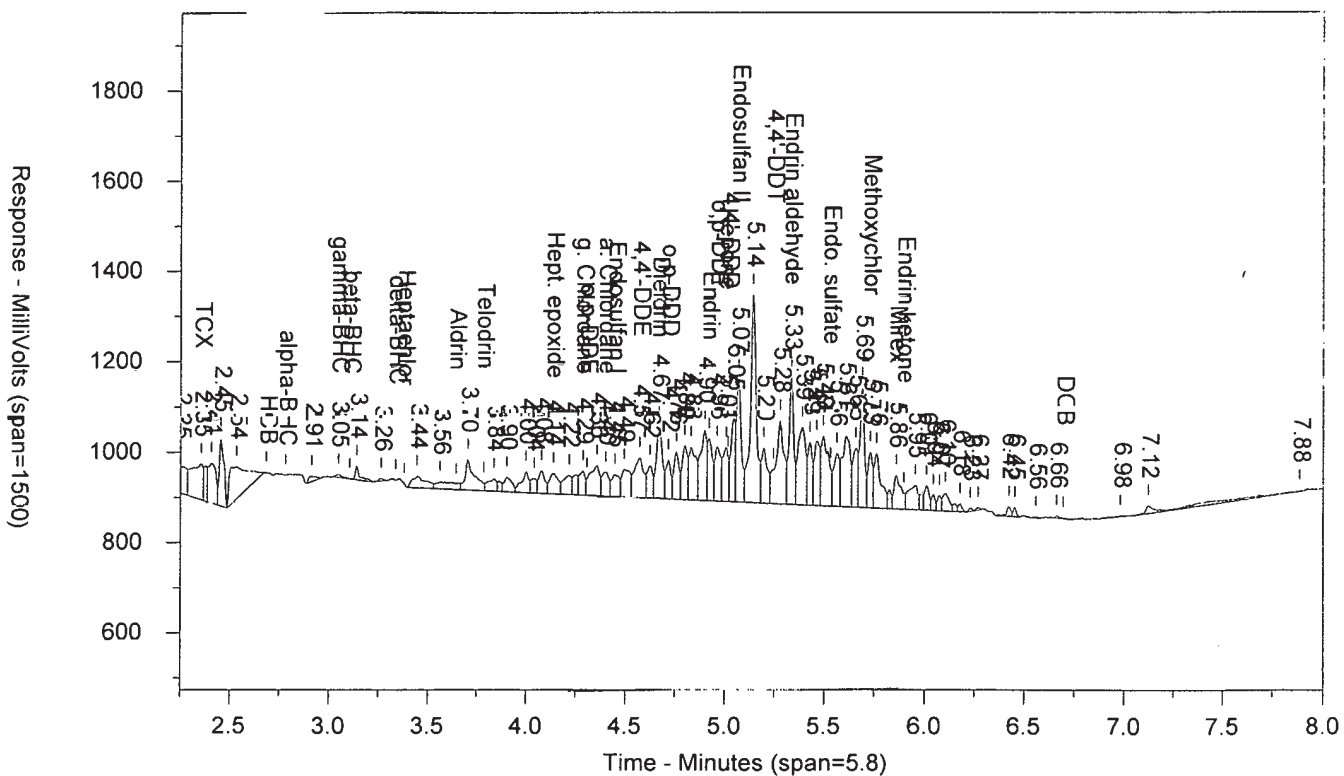
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SW-846 8081A

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## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MDTXX1824D AAMDTXXAA ICAL 1831299999 00177

SW-846 8081A

Injected On: 11/9/2018 9:37:25 PM

Sample Weight: 1

Instrument ID: CP5-9190

Dilution Factor: 1

Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min

Column A ID: STX-CLP 30m x 0.32mm x 0.5um

Column B ID: STX-CLP2 30m x 0.32mm x 0.25um

Injection Volume: 1 ul

Threshold: 7

Calibration Type: external

Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
		0	TCX	2.355	79648	.048	TCX
2.945	8074	.015	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.048	7124	.004	gamma-BHC
	0		Hept. epoxide	4.138	45645	.041	Hept. epoxide
4.503	7538	.024	g. Chlordane	4.286	53327	.046	g. Chlordane
	0		a. Chlordane	4.4	53245	.046	a. Chlordane
4.708	16618	.055	Endosulfan I	4.448	48947	.048	Endosulfan I
	0		4,4'-DDE	4.572	88900	.079	4,4'-DDE
4.891	28048	.087	Dieldrin	4.668	157138	.136	Dieldrin
4.803	16165	.090	o,p-DDD	4.716	86608	.173	o,p-DDD
5.006	35093	.171	o,p-DDT	4.961	120468	.216	o,p-DDT
5.094	40713	1.482	Kepone	5.006	119577	3.741	Kepone
5.226	71436	.262	Endosulfan II	5.069	270115	.279	Endosulfan II
5.136	21030	.085	4,4'-DDD		0		4,4'-DDD
5.315	57539	.216	4,4'-DDT		0		4,4'-DDT
5.522	37967	.168	Endrin aldehyde	5.335	281936	.359	Endrin aldehyde
	0		Methoxychlor	5.73	123946	.287	Methoxychlor
5.778	52247	.275	Mirex	5.86	74945	.136	Mirex
6.031	11472	.039	Endrin ketone		0		Endrin ketone

## Files:

Area File: 05pest18306007.040.RAW

Area File: 05pest18306007B.040.RAW

Method A: 05PESTD.MET

Method B: 05PESTDB.MET

Calibration File A: 05pest1830603.cal

Calibration File B: 05pest1830603b.cal

Format A: pestD5.FMTA

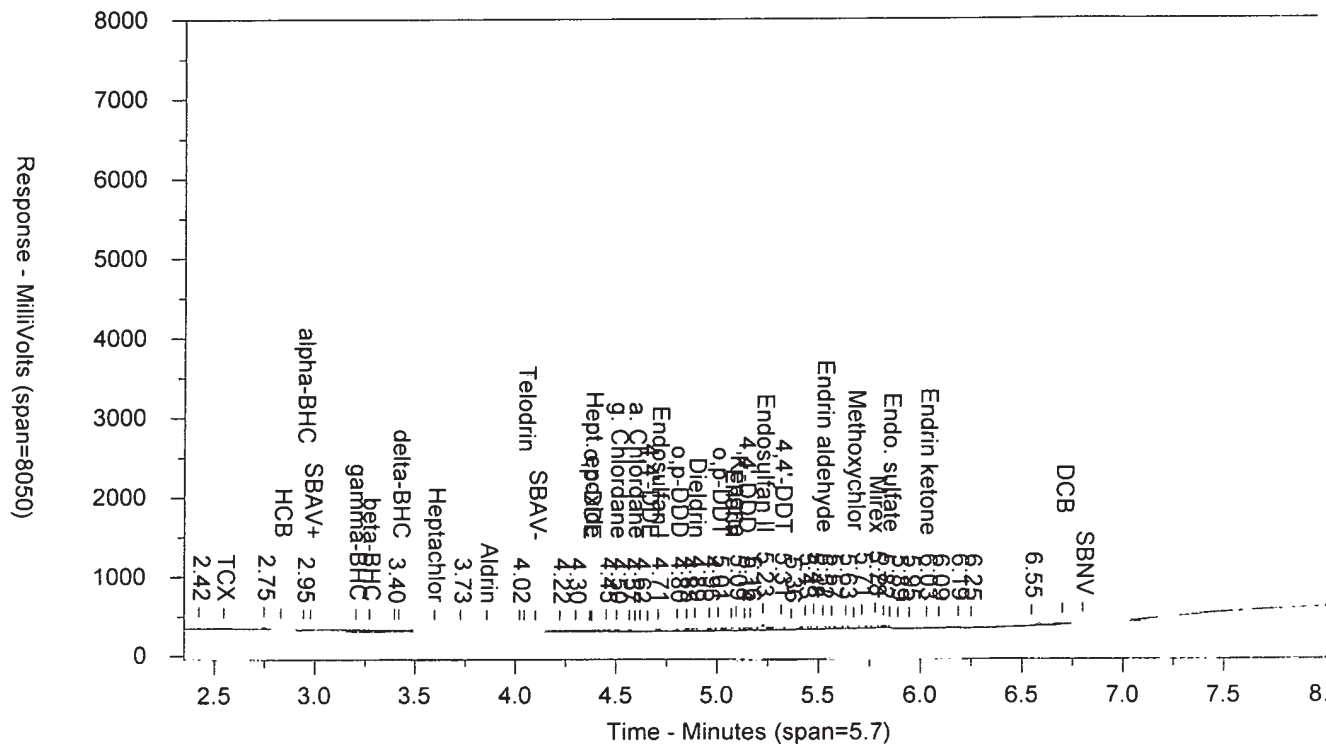
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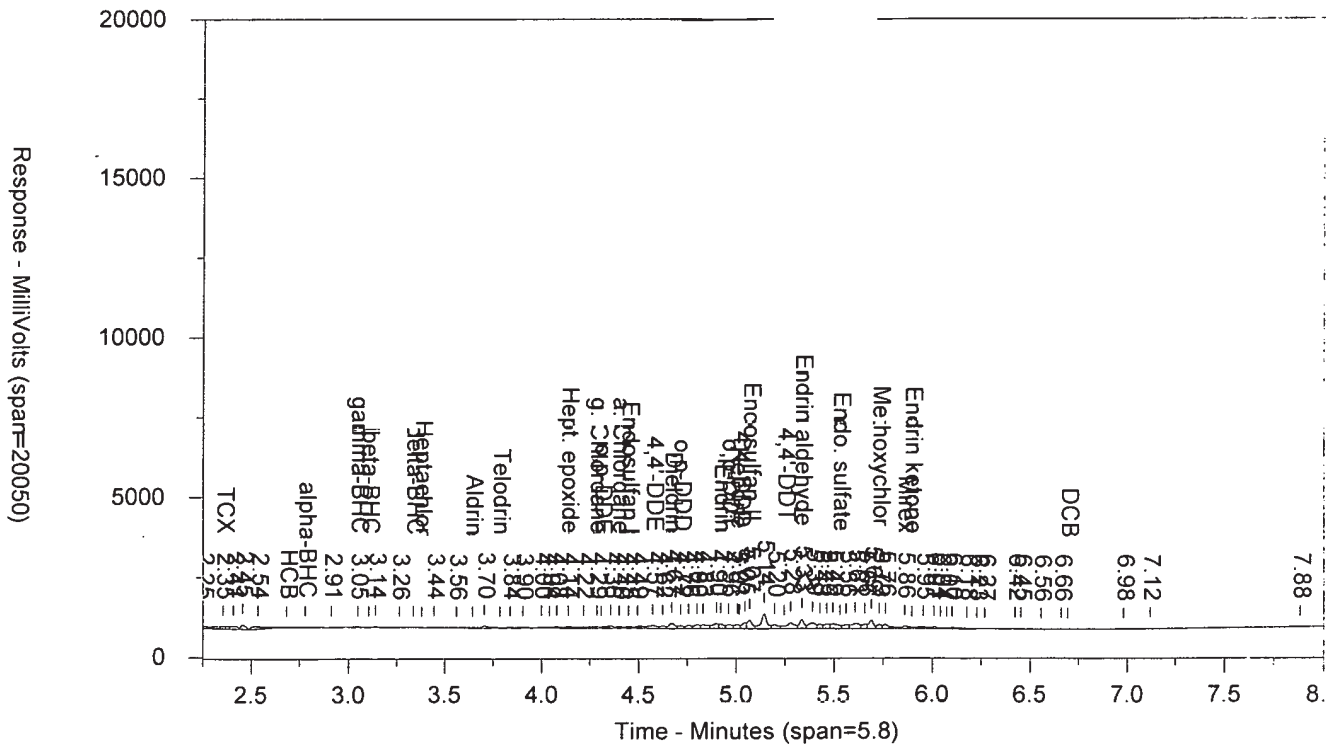
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MDTXX1824D AAMDTXXAA ICAL 1831299999 00177 SW-846 8C

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# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** MDCHX1824D      **MDCHXAA ID:** AA      **Batchnumber:** 1831299999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

**Analysis Report (A)**

Injected on : Nov 09, 2018 21:50:16  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306007.041.RAW  
 Calibration file : 05PEST1830603.CAL  
 Method file : 05PESTD.MET

**Analysis Report (B)**

Injected on : Nov 09, 2018 21:50:16  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306007B.041.RAW  
 Calibration file : 05PEST1830603B.CAL  
 Method file : 05PESTDB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.40	3.46	3.46	6750.492	1.00016	3	91.68	4
3.51	3.52	3.57	61926.16	8.768157			5
3.56	3.59	3.62	84945.39	17.881828			6
<b>Height Summation:</b>			<b>153622.042</b>				
<b>Amount Avg CF:</b>			<b>9.216715</b>	<b>Linear:</b>			
<b>Aroclor-1248</b>							
3.38	3.39	3.44	6021.115	0.893013	5	82.67	1
3.66	3.69	3.72	14914.18	4.045851			2
4.21	4.24	4.27	14891.51	1.499026			4
4.39	4.41	4.45	35249.14	5.229447			5
+ 4.39	4.45	4.45	18948.75	2.811175			5
4.71	4.72	4.77	3518.639	0.689488			6
+ 4.71	4.76	4.77	13245.74	2.595542			6
<b>Height Summation:</b>			<b>74594.584</b>				
<b>Amount Avg CF:</b>			<b>2.471365</b>	<b>Linear:</b>			
<b>Aroclor-1254</b>							
4.39	4.41	4.45	35249.14	2.768529	4	84.57	1
+ 4.39	4.45	4.45	18948.75	1.488268			1
+ 4.71	4.72	4.77	3518.639	0.211787			3
4.71	4.76	4.77	13245.74	0.797263			3
4.93	4.95	4.99	17345	1.40133			4
5.06	5.09	5.12	50965.92	5.98191			5
<b>Height Summation:</b>			<b>116805.8</b>				
<b>Amount Avg CF:</b>			<b>2.737258</b>	<b>Linear:</b>			
<b>Aroclor-1260</b>							
5.06	5.09	5.12	50965.92	3.226739	1		2
<b>Height Summation:</b>			<b>50965.92</b>				
<b>Amount Avg CF:</b>			<b>3.226739</b>	<b>Linear:</b>			
<b>Chlordane</b>							
3.50	3.52	3.56	61926.16	5.603397	6	4.86	1
3.94	3.97	4.00	67542.98	6.070995			2
4.29	4.32	4.35	42097.36	5.843466			3
4.45	4.48	4.51	177881.1	5.342853			4
4.55	4.58	4.61	248435.1	5.395675			5
5.15	5.18	5.22	61930.81	5.626341			6
<b>Height Summation:</b>			<b>659813.51</b>				
<b>Amount Avg CF:</b>			<b>5.647121</b>	<b>Linear:</b>			
<b>Toxaphene</b>							
5.06	5.09	5.12	50965.92	10.657978	2	112.57	1
5.45	5.50	5.51	8337.568	1.210665			4
<b>Height Summation:</b>			<b>59303.488</b>				
<b>Amount Avg CF:</b>			<b>5.934321</b>	<b>Linear:</b>			

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
3.11	3.13	3.17	24866.77	2.241886	4	146.70	3
3.27	3.32	3.33	11244.12	0.241198			4
3.37	3.38	3.43	297692	12.745421			5
+ 3.46	3.47	3.52	25117.17	1.63377			6
3.46	3.50	3.52	12515.96	0.814112			6
<b>Height Summation:</b>			<b>346318.85</b>				
<b>Amount Avg CF:</b>			<b>4.010654</b>	<b>Linear:</b>			
<b>Aroclor-1248</b>							
3.27	3.32	3.33	11244.12	0.476303	4	132.56	1
3.75	3.77	3.81	232980.1	8.334434			3
3.85	3.88	3.91	37186.34	1.593505			4
+ 3.85	3.91	3.91	37010.35	1.585963			4
4.11	4.17	4.17	26144.63	0.810661			5
<b>Height Summation:</b>			<b>307555.19</b>				
<b>Amount Avg CF:</b>			<b>2.803726</b>	<b>Linear:</b>			
<b>Aroclor-1254</b>							
4.11	4.17	4.17	26144.63	0.839307	6	143.04	1
4.27	4.30	4.33	669230.2	19.034412			2
4.64	4.69	4.70	87830.8	1.728844			3
4.81	4.83	4.87	39729.77	1.089903			4
5.07	5.11	5.13	204775	7.640794			5
5.21	5.22	5.27	15371.36	0.396828			6
<b>Height Summation:</b>			<b>1043081.76</b>				
<b>Amount Avg CF:</b>			<b>5.121681</b>	<b>Linear:</b>			
<b>Aroclor-1260</b>							
+ 4.79	4.79	4.85	32515.78	0.932008	4	123.18	1
4.79	4.83	4.85	39729.77	1.138784			1
4.95	4.98	5.01	184060.5	4.419783			2
5.21	5.22	5.27	15371.36	0.355388			3
5.90	5.95	5.96	12196.67	0.367867			6
<b>Height Summation:</b>			<b>251358.3</b>				
<b>Amount Avg CF:</b>			<b>1.570456</b>	<b>Linear:</b>			
<b>Chlordane</b>							
3.23	3.20	3.29	228423.8	5.583941	6	5.94	1
3.74	3.77	3.80	232980.1	5.98634			2
4.08	4.11	4.14	157688.4	5.673522			3
4.27	4.30	4.33	669230.2	5.044283			4
4.39	4.42	4.45	528847.2	5.274406			5
5.08	5.11	5.14	204775	5.448458			6
<b>Height Summation:</b>			<b>2021944.7</b>				
<b>Amount Avg CF:</b>			<b>5.501825</b>	<b>Linear:</b>			

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** MDCHX1824D      MDCHXAA ID: AA      **Batchnumber:** 1831299999  
**Sample Amount:** 1      **Total Volume:** 1 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 00177

### Analysis Report (A)

Injected on : Nov 09, 2018 21:50:16  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306007.041.RAW  
 Calibration file : 05PEST1830603.CAL  
 Method file : 05PESTD.MET

### Analysis Report (B)

Injected on : Nov 09, 2018 21:50:16  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306007B.041.RAW  
 Calibration file : 05PEST1830603B.CAL  
 Method file : 05PESTDDB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.69	4.70	87830.8	6.296232	4	70.74	1
4.87	4.90	4.93	56083.39	3.893849			2
5.04	5.05	5.10	36360.72	1.392987			3
5.31	5.34	5.37	43367.37	1.524263			4
<b>Height Summation:</b>				<b>223642.28</b>			
<b>Amount Avg CF:</b>				<b>3.276832</b>	<b>Linear:</b>		

### Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 78.72	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		12.60	4	30	
Aroclor-1254			0	0		** 60.68	4	40	
Aroclor-1260			0	0		** 69.05	4	40	
Chlordane			0.5	0.16		2.61	4	40	
Toxaphene			1	0.3		** 57.70	4	40	

Units: ug/l

MDCHX1824D

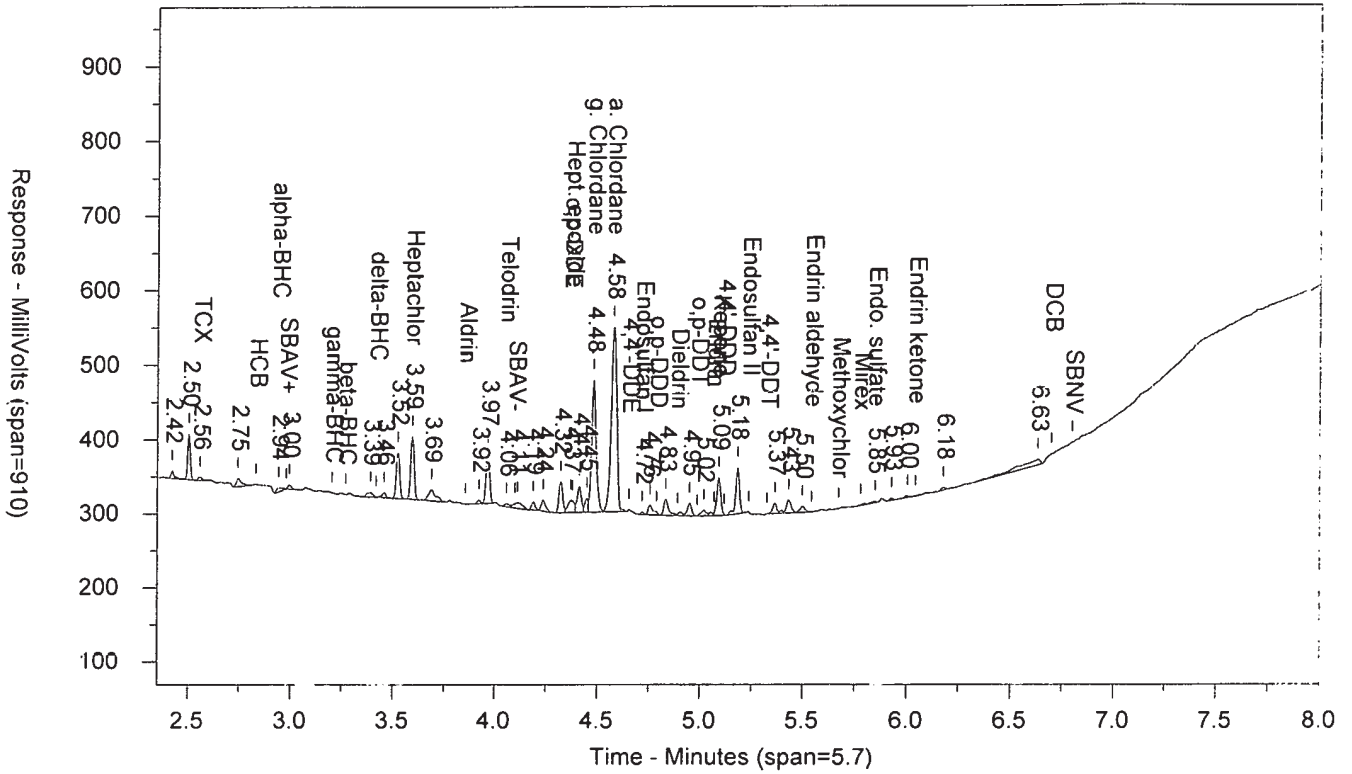
AAMDCHXAA

ICAL 1831299999

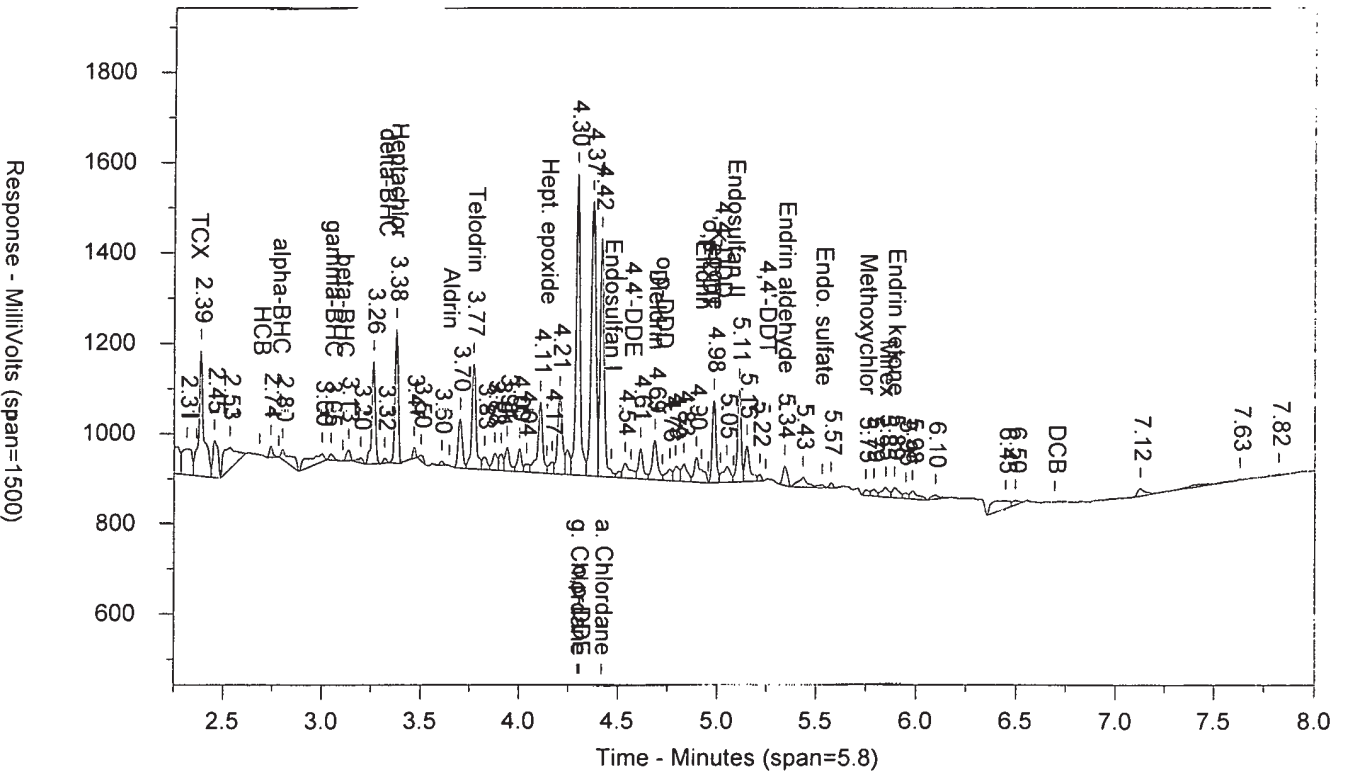
00177

SW-846 8081.

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.041.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MDCHX1824D      AAMDCHXAA      ICAL 1831299999      00177      SW-846 8081A  
 Injected On: 11/9/2018 9:50:16 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

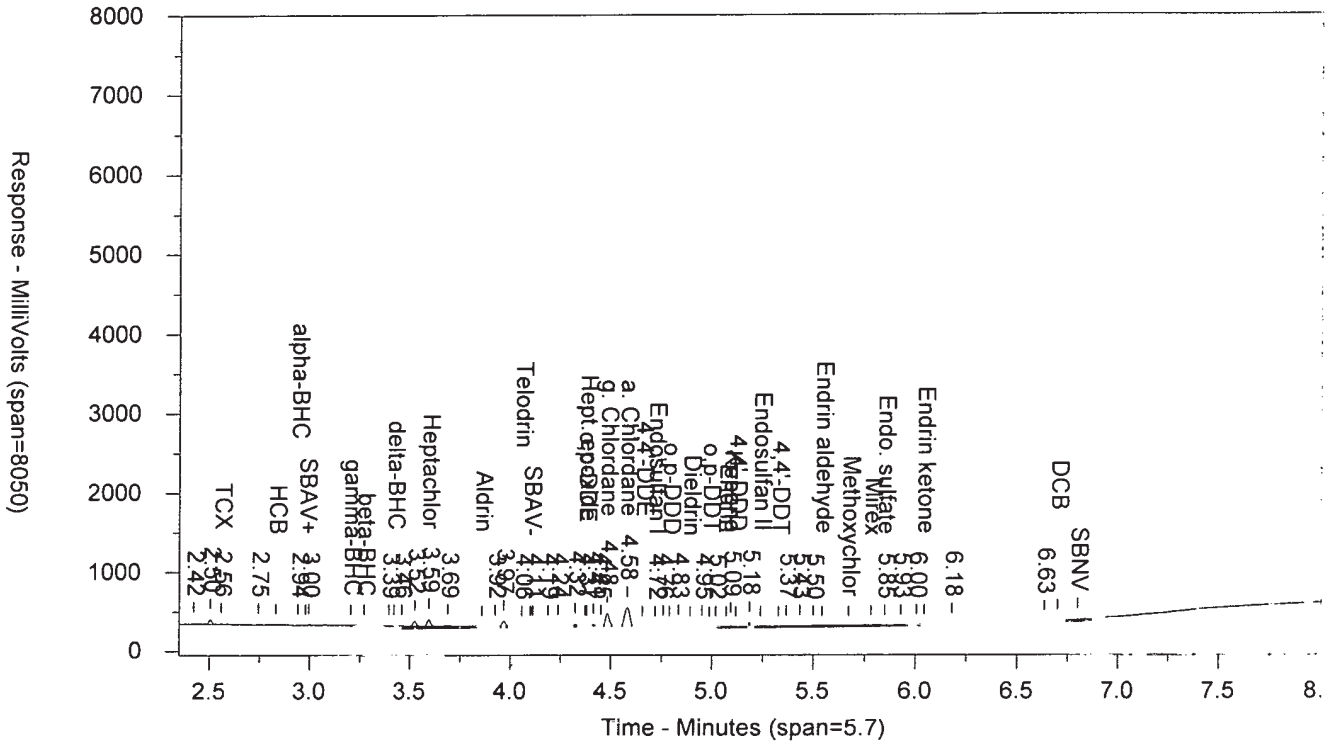
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.559	4448	.011	TCX		0		TCX
2.942	5592	.01	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.046	14001	.008	gamma-BHC
	0		delta-BHC	3.318	11244	.007	delta-BHC
3.594	84945	.217	Heptachlor	3.377	297692	.203	Heptachlor
4.057	4084	.019	Telodrin	3.771	232980	.326	Telodrin
4.482	177881	.562	g. Chlordane	4.296	669230	.574	g. Chlordane
4.372	16621	.089	o,p-DDE		0		o,p-DDE
4.581	248435	.774	a. Chlordane	4.418	528847	.459	a. Chlordane
	0		Dieldrin	4.888	87831	.076	Dieldrin
4.719	3519	.012	Endosulfan I		0		Endosulfan I
5.093	50966	1.553	Kepone	4.984	184061	3.875	Kepone
	0		Endrin aldehyde	5.341	43367	.055	Endrin aldehyde
	0		Methoxychlor	5.748	12343	.029	Methoxychlor
	0		Mirex	5.848	21545	.039	Mirex
5.85	2065	.008	Endo. sulfate		0		Endo. sulfate
	0		Endrin ketone	5.892	22582	.024	Endrin ketone

Files:  
 Area File: 05pest18306007.041.RAW  
 Area File: 05pest18306007B.041.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830603.cal  
 Calibration File B: 05pest1830603b.cal  
 Format A: pestD5.FMTA  
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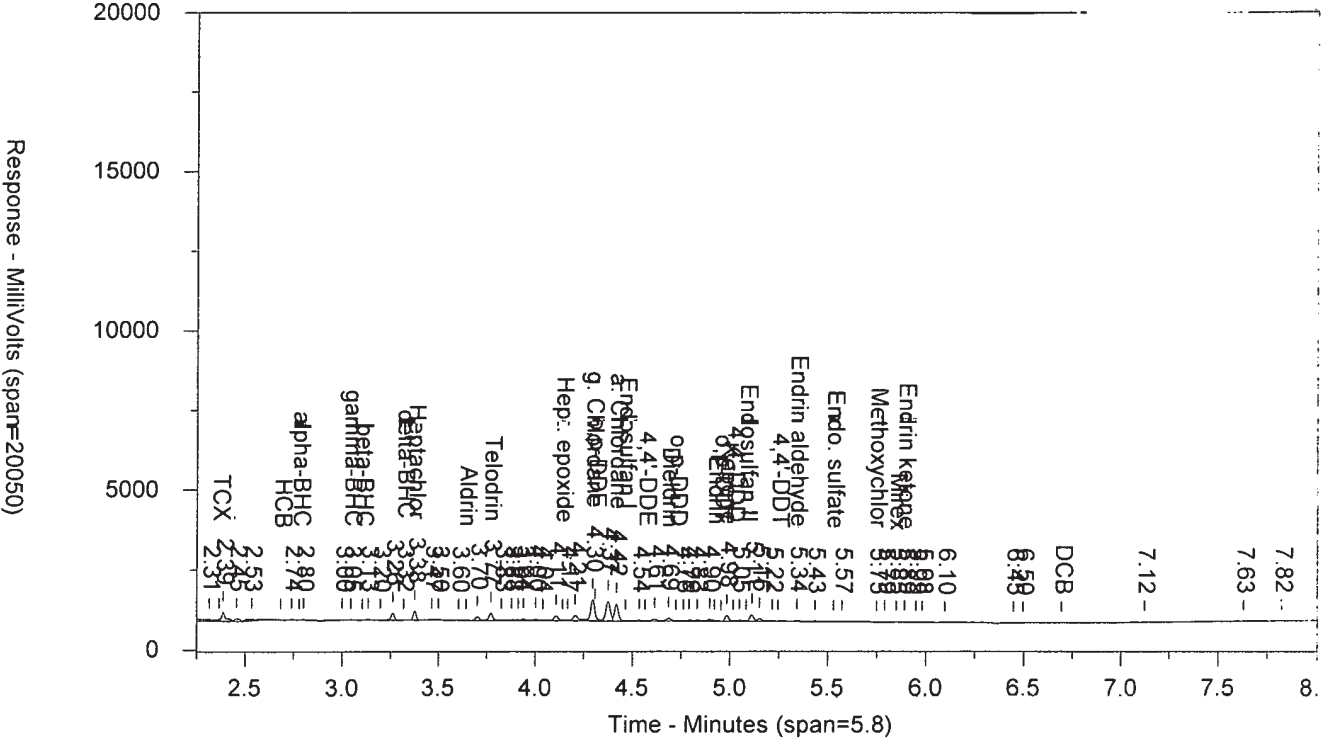


MDCHX1824D AAMDCHXAA ICAL 1831299999 00177 SW-846 8

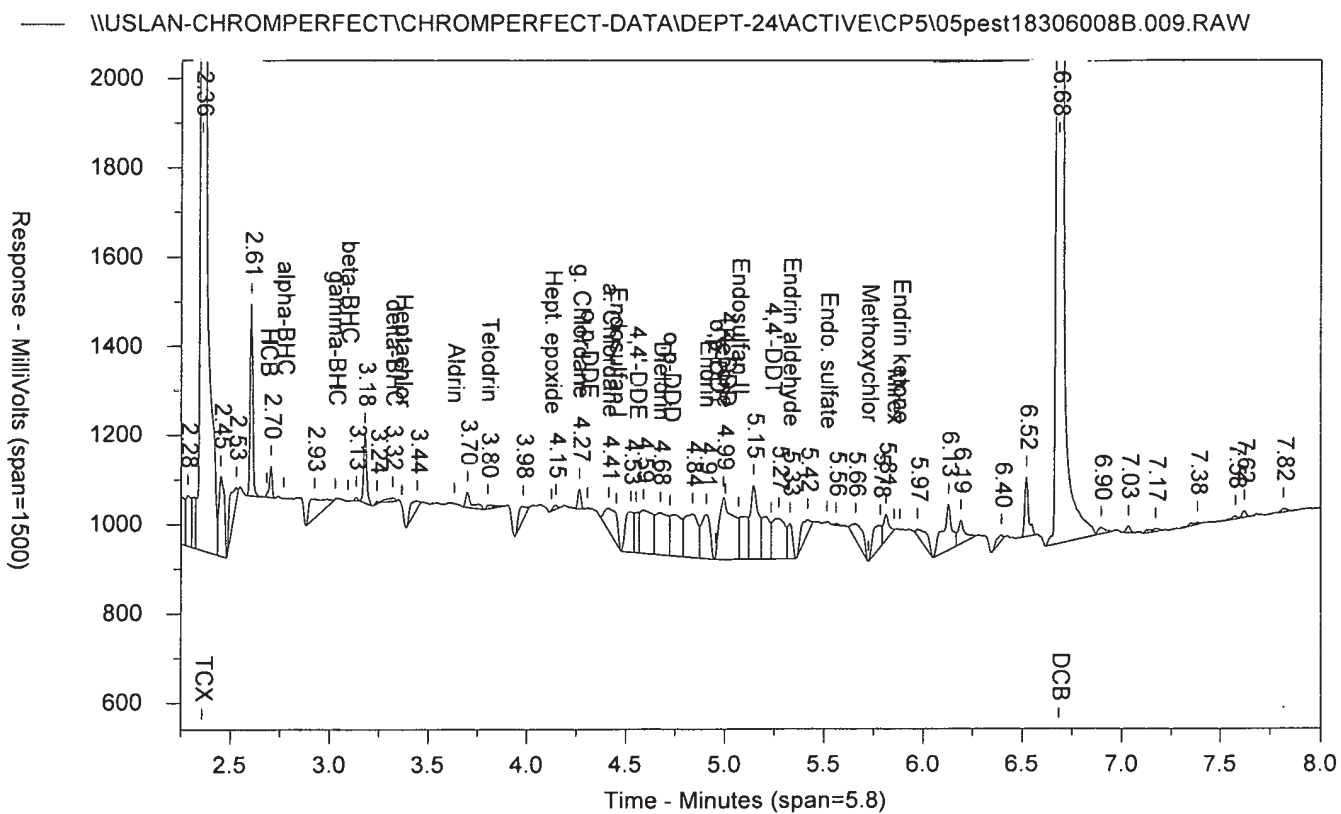
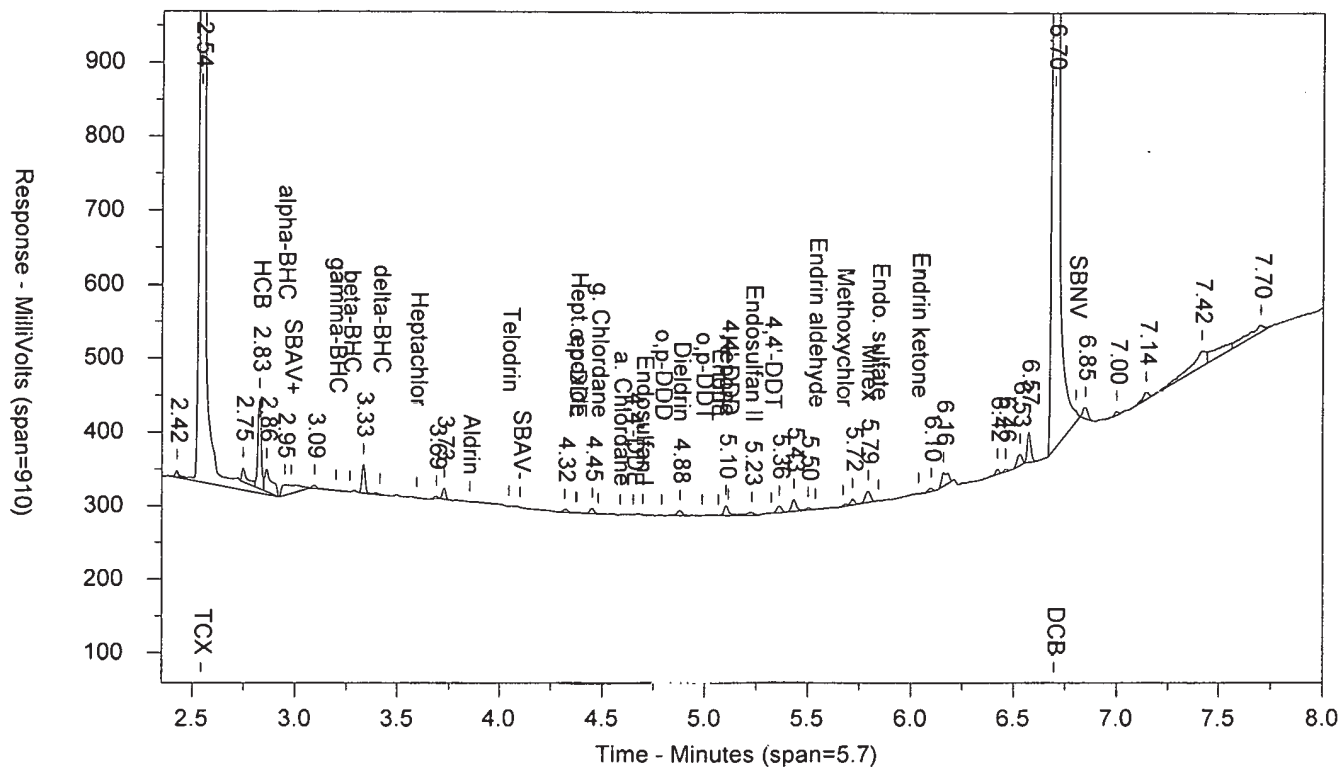
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IBLKX1824B RMPBLKRM PIBLK183159999 00177 SW-846 8081A  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.009.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: IBLKX1824B      RMPIBLKRM      PIBLK183159999      00177      SW-846 8081A  
 Injected On: 11/12/2018 8:17:22 PM      Sample Weight: 1000  
 Instrument ID: CP5-9190      Dilution Factor: 10  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

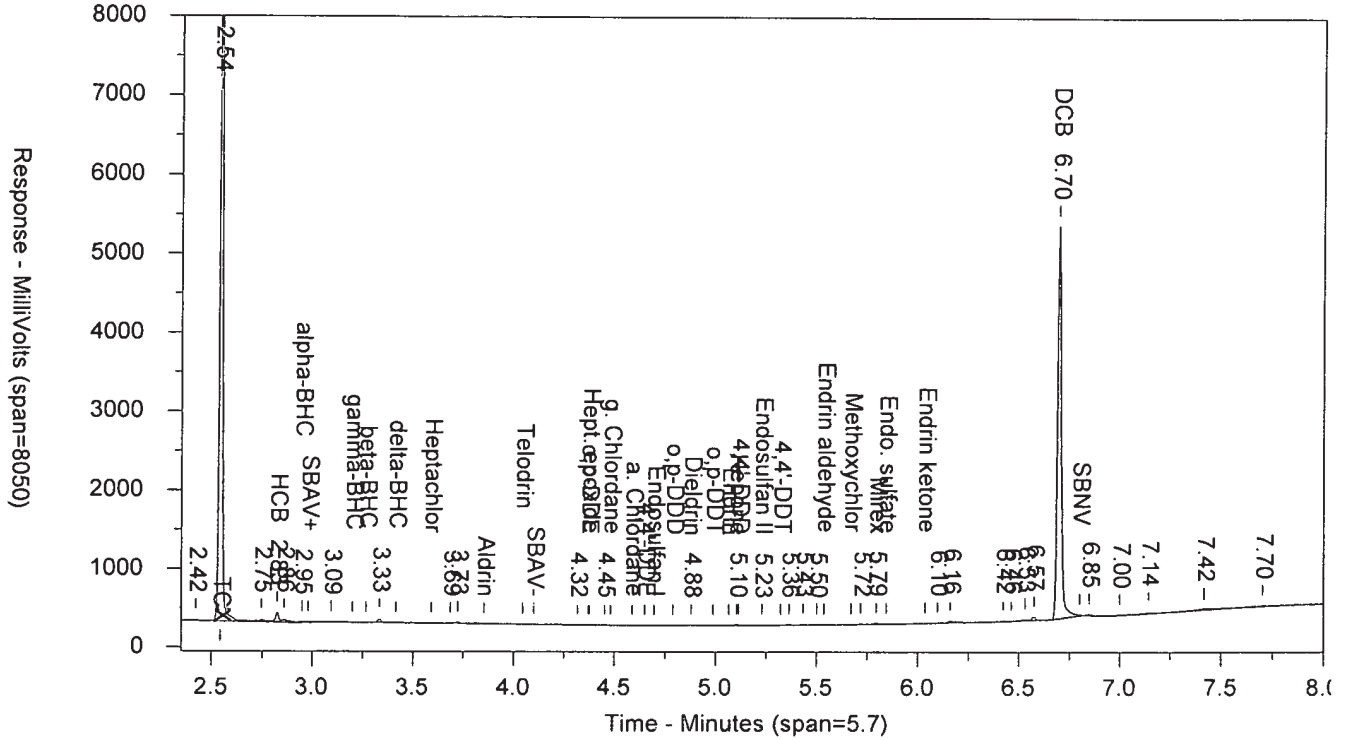
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	9454944	.217	TCX	2.358	49320520	.248	TCX
2.825	121999	.003	TCX		0		TCX
2.949	14111		alpha-BHC		0		alpha-BHC
	0		delta-BHC	3.32	8337	.006	delta-BHC
	0		Telodrin	3.804	9549		Telodrin
	0		g. Chlordane	4.265	44873		g. Chlordane
	0		a. Chlordane	4.414	50958		a. Chlordane
4.879	6577		Dieldrin	4.675	94819	.001	Dieldrin
	0		Endrin	4.909	99955	.001	Endrin
5.103	13584	.013	Kepone	4.994	139812	.038	Kepone
5.229	3823		Endosulfan II		0		Endosulfan II
	0		Endrin aldehyde	5.329	79388	.001	Endrin aldehyde
5.794	15684	.001	Mirex		0		Mirex
6.697	5000256	.228	DCB	6.684	18305620	.236	DCB

Files:

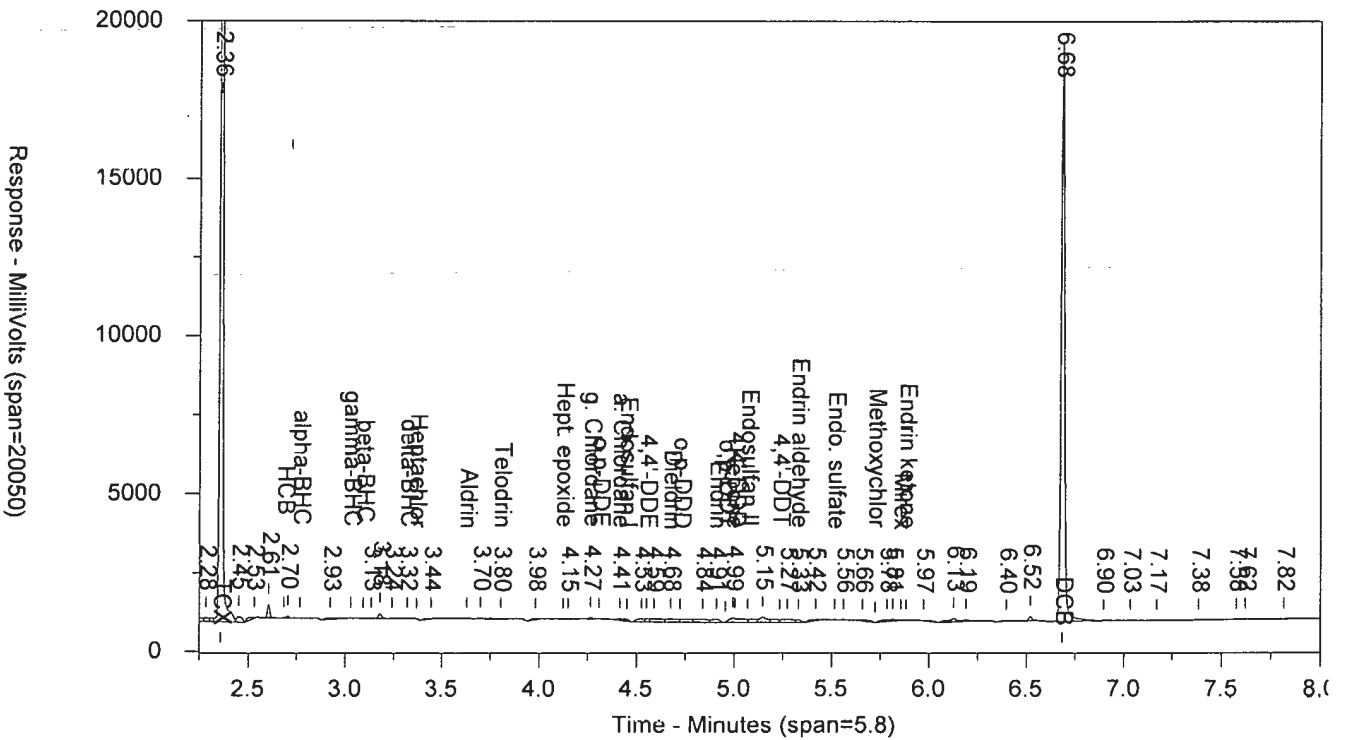
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 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830604.cal  
 Calibration File B: 05pest1830604b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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IBLKX1824B RMPIBLKRM PIBLK183159999 00177 SW-846 808

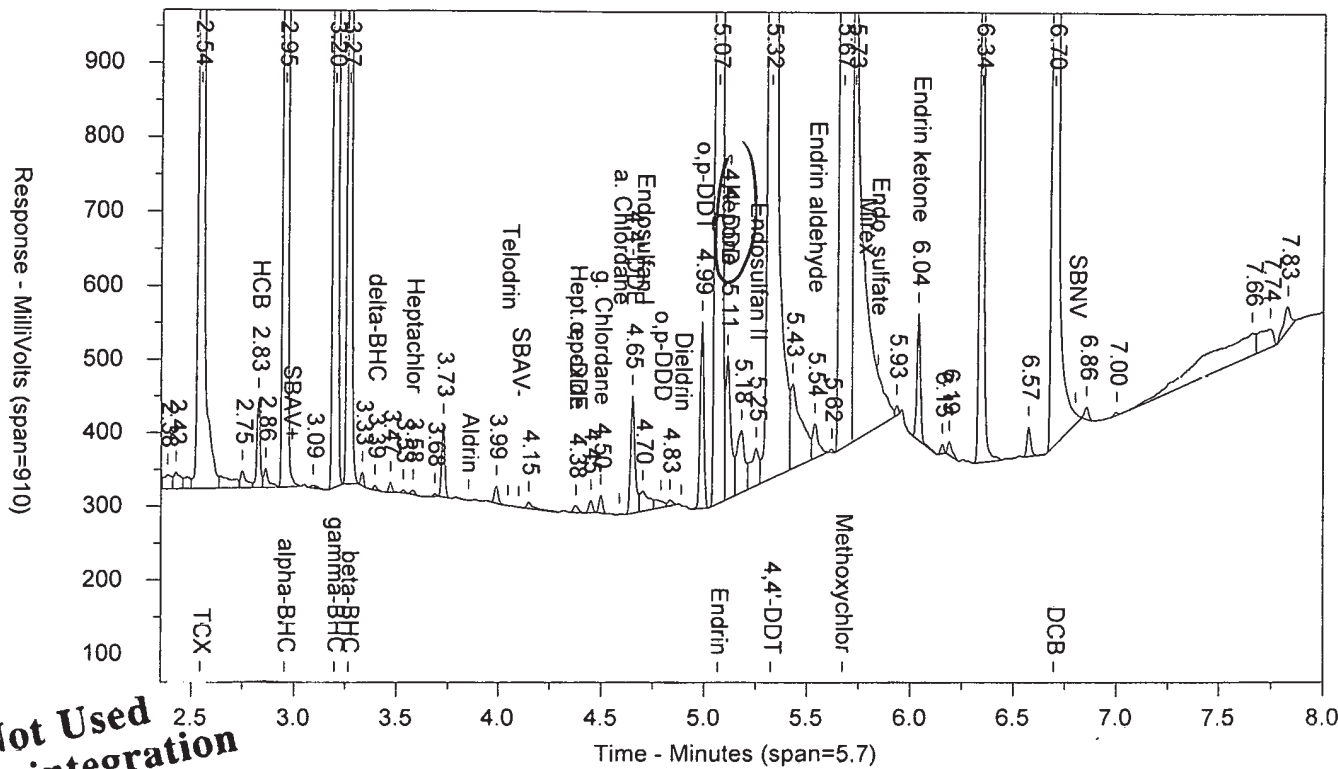
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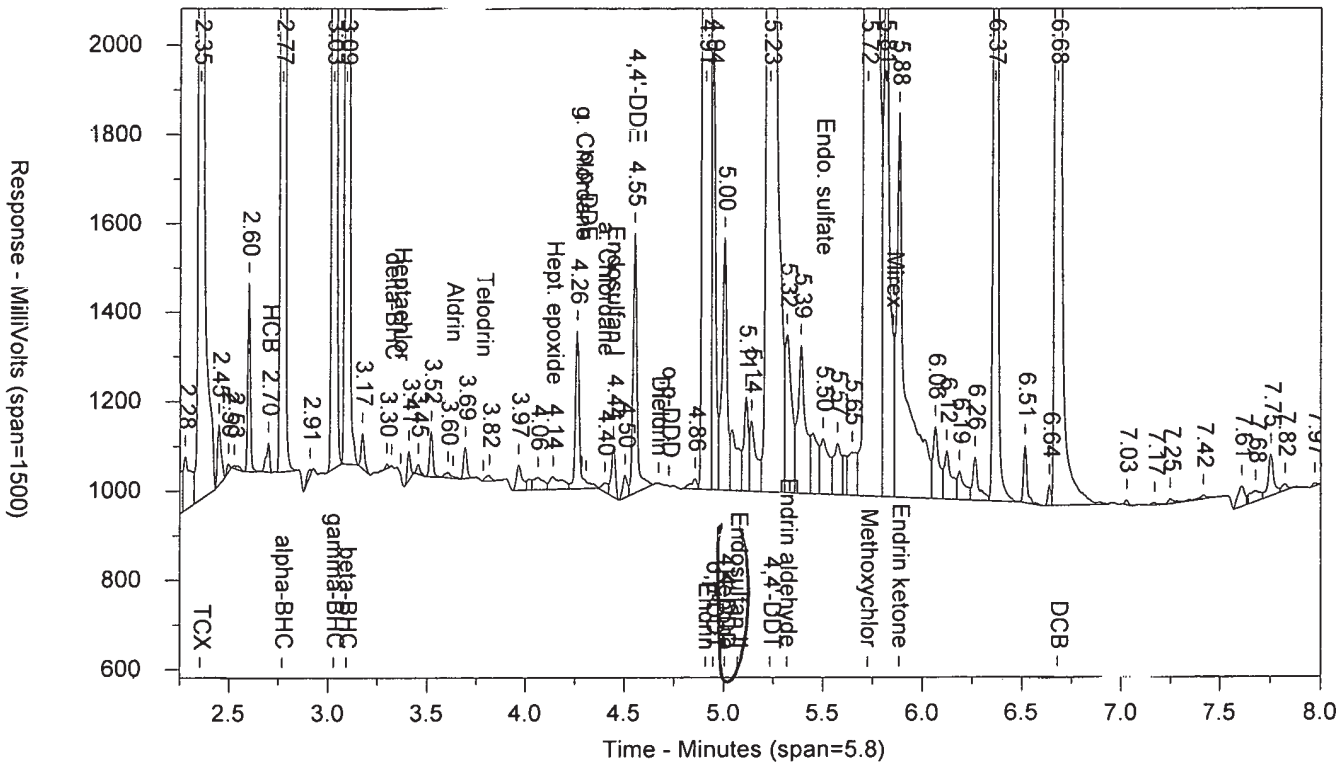


EVALX1824B MKPEMMK PEM 183159999 00177 SW-846 8081A  
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Not Used  
See Reintegration

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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B      MKPEMMK      PEM 1831599999      00177      SW-846 8081A  
 Injected On: 11/12/2018 8:30:09 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.543	9315619	21.331	TCX	2.353	46956830	23.649	TCX
2.826	121211	.288	HCB	2.7	65666	.046	HCB
2.954	6657317	10.636	alpha-BHC	2.769	33307350	10.771	alpha-BHC
3.199	5730208	10.775	gamma-BHC	3.028	27713240	10.946	gamma-BHC
3.267	2276628	9.603	beta-BHC	3.094	9923319	10.461	beta-BHC
3.395	6798	.014	delta-BHC		0		delta-BHC
3.578	6295	.014	Heptachlor		0		Heptachlor
	0		Hept. epoxide	4.14	28566	.021	Hept. epoxide
4.376	9708	.052	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.401	20512	.014	a. Chlordane
4.702	27649	.078	Endosulfan I	4.444	111936	.087	Endosulfan I
4.498	24148	.064	g. Chlordane		0		g. Chlordane
4.652	160601	.474	4,4'-DDE	4.552	583096	1.476	4,4'-DDE
5.066	18427000	52.373	Endrin	4.908	77215600	59.33	Endrin
4.987	255790	1.246	o,p-DDT	4.945	991020	1.774	o,p-DDT
5.113	196483	2.569	Kepone	5.003	565689	4.667	Kepone
5.323	33106650	105.917	4,4'-DDT	5.234	141774900	122.579	4,4'-DDT
5.252	51271	.158	Endosulfan II		0		Endosulfan II
5.537	47508	.178	Endrin aldehyde	5.32	352785	.365	Endrin aldehyde
	0		Endo. sulfate	5.5	124532	.109	Endo. sulfate
5.671	35396100	246.369	Methoxychlor	5.724	134769900	267.137	Methoxychlor
6.039	173507	.497	Endrin ketone	5.883	866340	.721	Endrin ketone
6.697	5121154	23.325	DCB	6.678	17863330	23.024	DCB

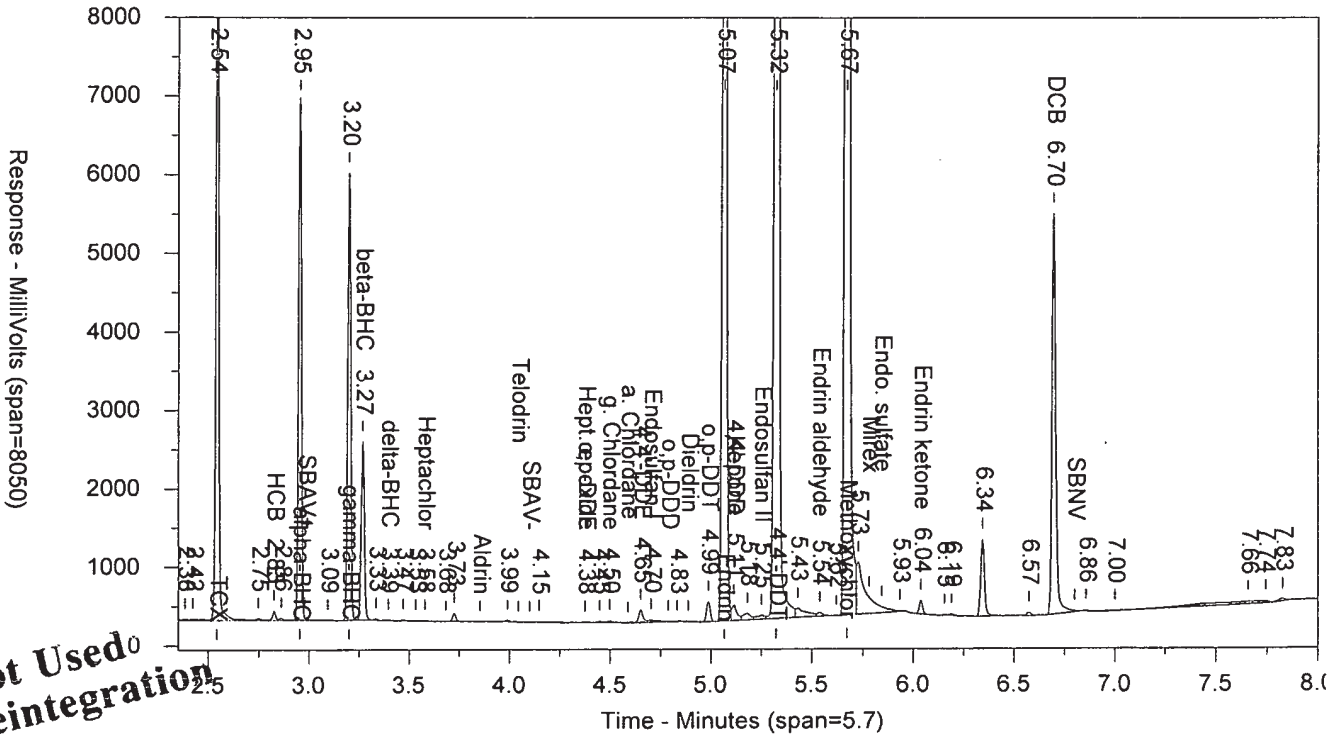
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 Method B: 05PESTD.B.MET  
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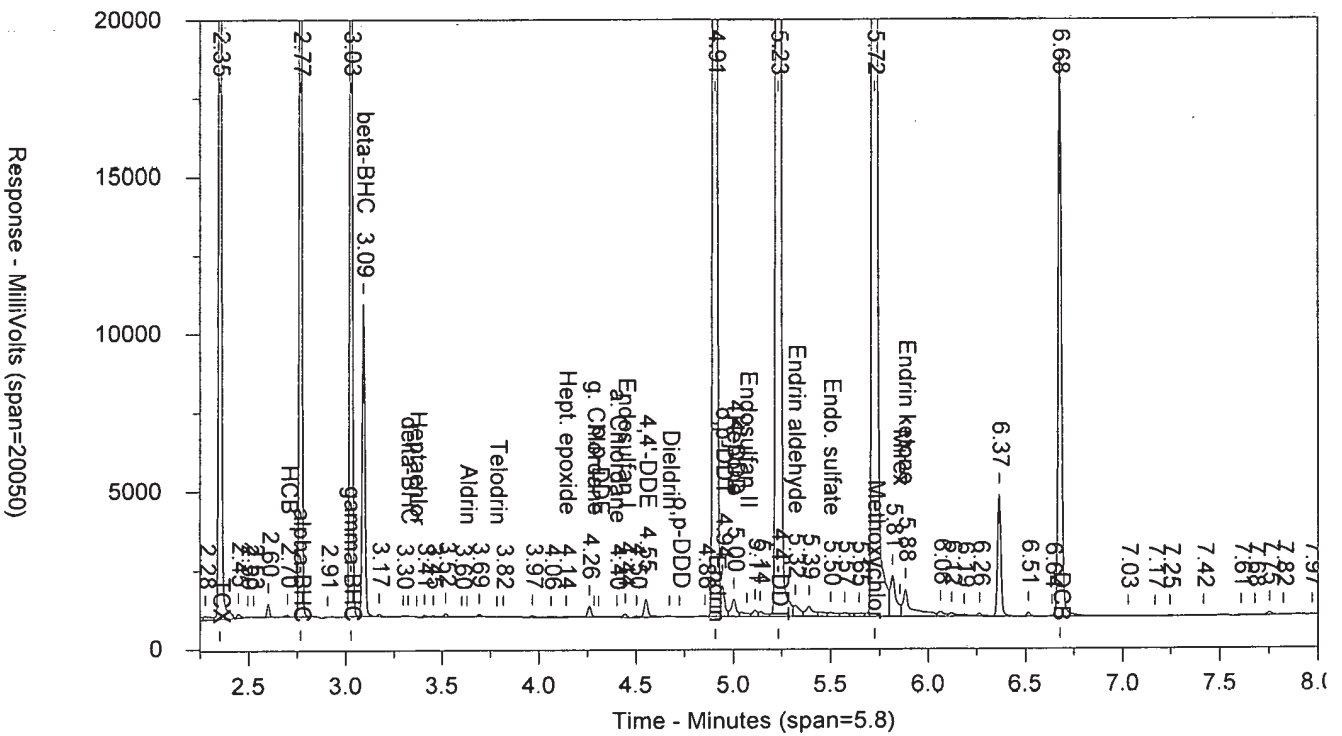
EVALX1824B MKPEMMK PEM 183159999 00177 SW-846 808

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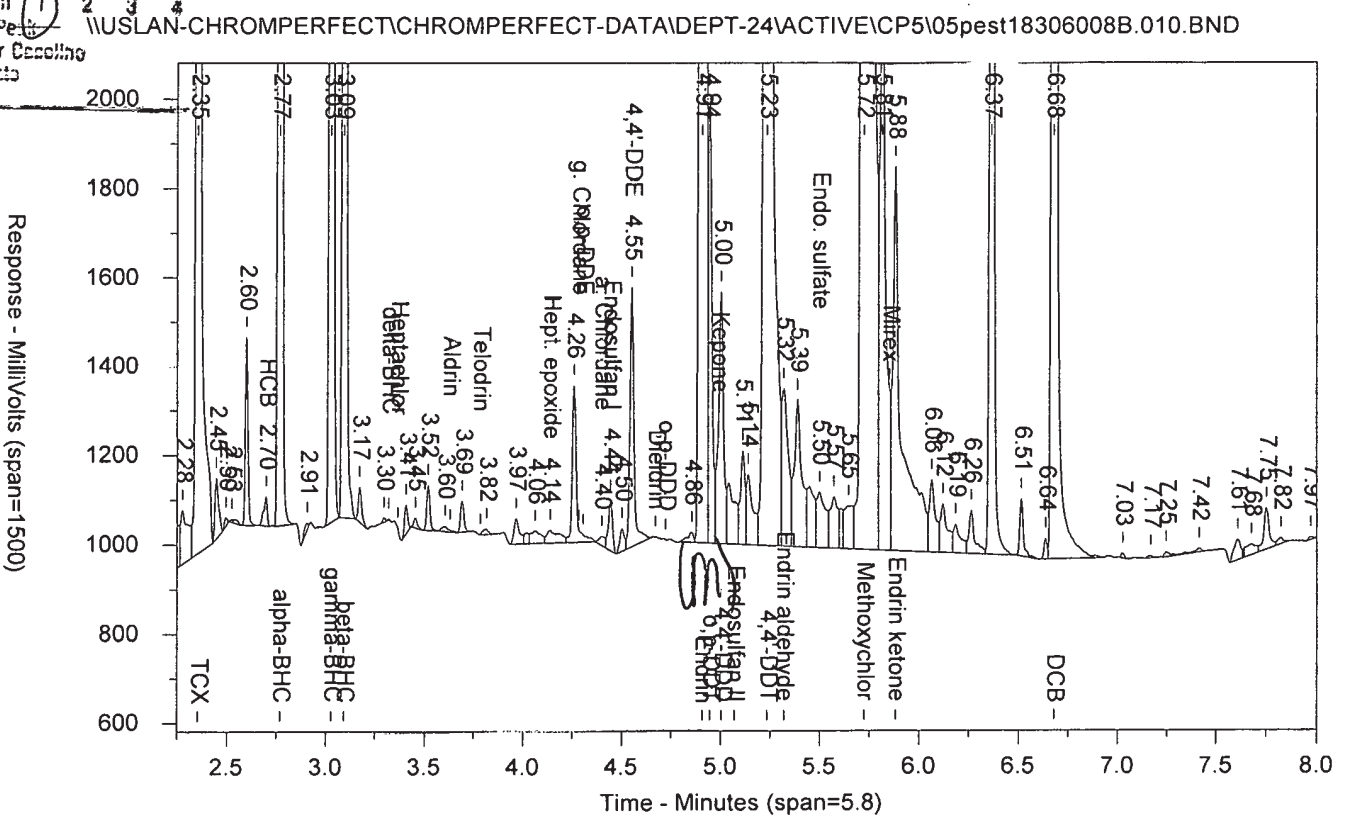
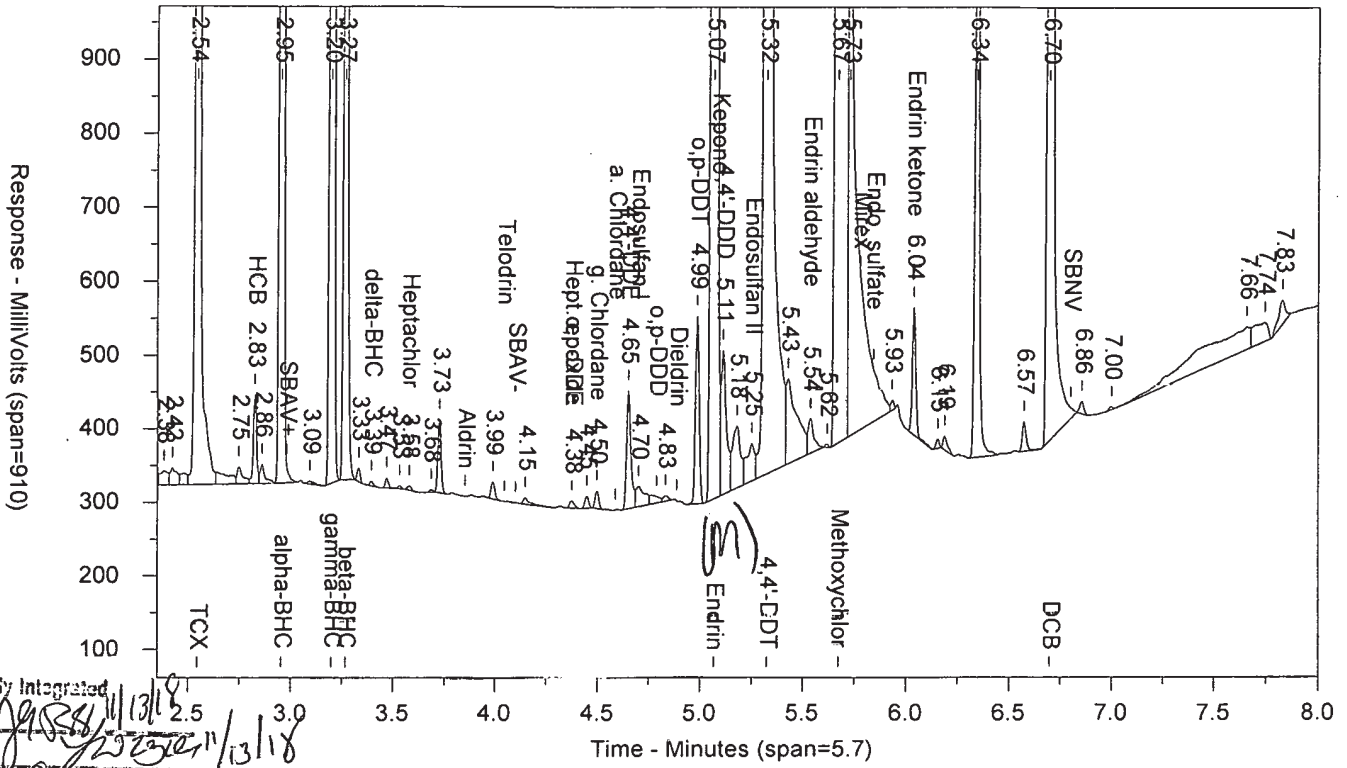


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See Reintegration

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EVALX1824B MKPEMMK PEM 183159999 00177 SW-846 8081A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.010.BND





## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B MKPEMMK PEM 183159999 00177 SW-846 8081A  
 Injected On: 11/12/2018 8:30:09 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

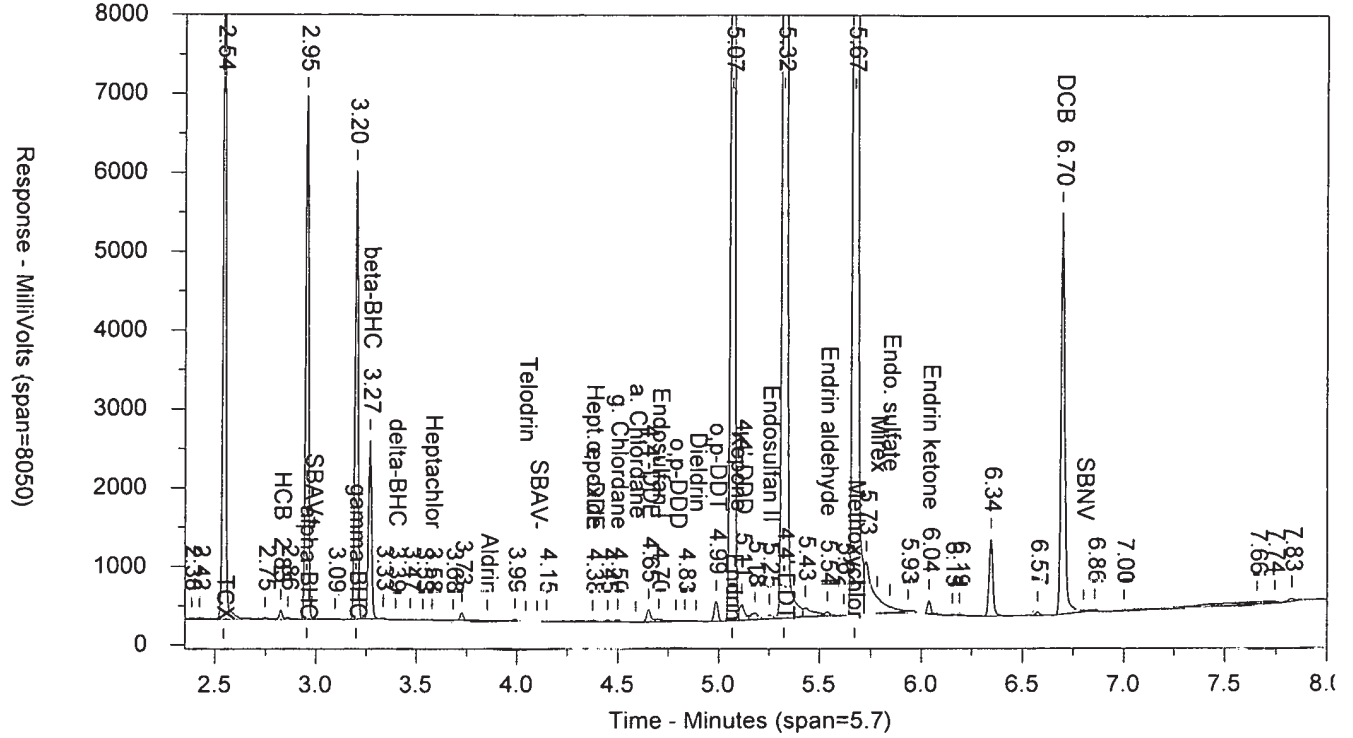
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.543	9315619	21.331	TCX	2.353	46956830	23.649	TCX
2.826	121211	.288	HCB	2.7	65666	.046	HCB
2.954	6657317	10.636	alpha-BHC	2.769	33307350	10.771	alpha-BHC
3.199	5730208	10.775	gamma-BHC	3.028	27713240	10.946	gamma-BHC
3.267	2276628	9.603	beta-BHC	3.094	9923319	10.461	beta-BHC
3.395	6798	.014	delta-BHC		0		delta-BHC
3.578	6295	.014	Heptachlor		0		Heptachlor
	0		Hept. epoxide	4.14	28566	.021	Hept. epoxide
4.376	9708	.052	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.401	20512	.014	a. Chlordane
4.702	27649	.078	Endosulfan I	4.444	111936	.087	Endosulfan I
4.498	24148	.064	g. Chlordane		0		g. Chlordane
4.652	160601	.474	4,4'-DDE	4.552	583096	1.476	4,4'-DDE
5.066	18427000	52.373	Endrin	4.908	77215600	59.33	Endrin
4.987	255790	1.246	o,p-DDT	4.945	991020	1.774	o,p-DDT
5.113	196483	.689	4,4'-DDD	5.003	565689	.512	4,4'-DDD
5.323	33106650	105.917	4,4'-DDT	5.234	141774900	122.579	4,4'-DDT
5.252	51271	.158	Endosulfan II		0		Endosulfan II
5.537	47508	.178	Endrin aldehyde	5.32	352785	.365	Endrin aldehyde
	0		Endo. sulfate	5.5	124532	.109	Endo. sulfate
5.671	35396100	246.369	Methoxychlor	5.724	134769900	267.137	Methoxychlor
6.039	173507	.497	Endrin ketone	5.883	866340	.721	Endrin ketone
6.697	5121154	23.325	DCB	6.678	17863330	23.024	DCB

## Files:

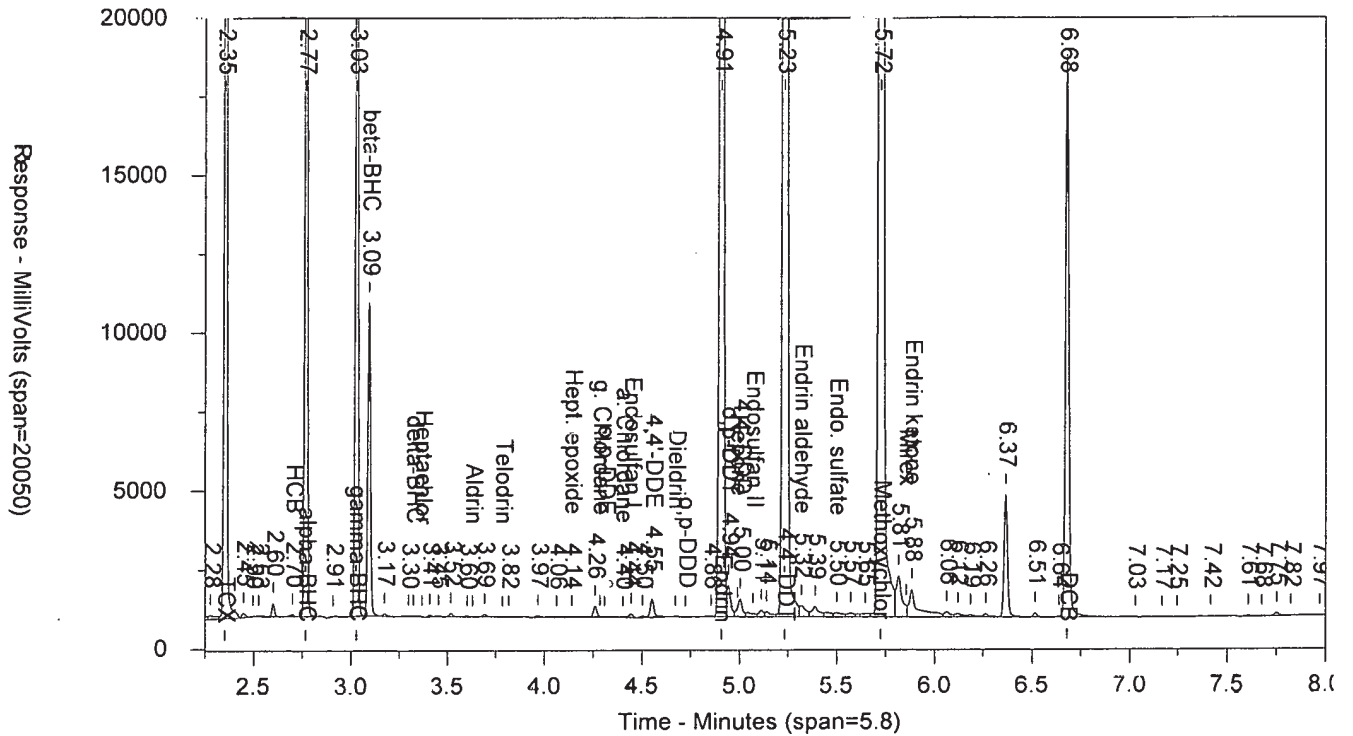
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EVALX1824B MKPEMMK PEM 183159999 00177 SW-846 80E

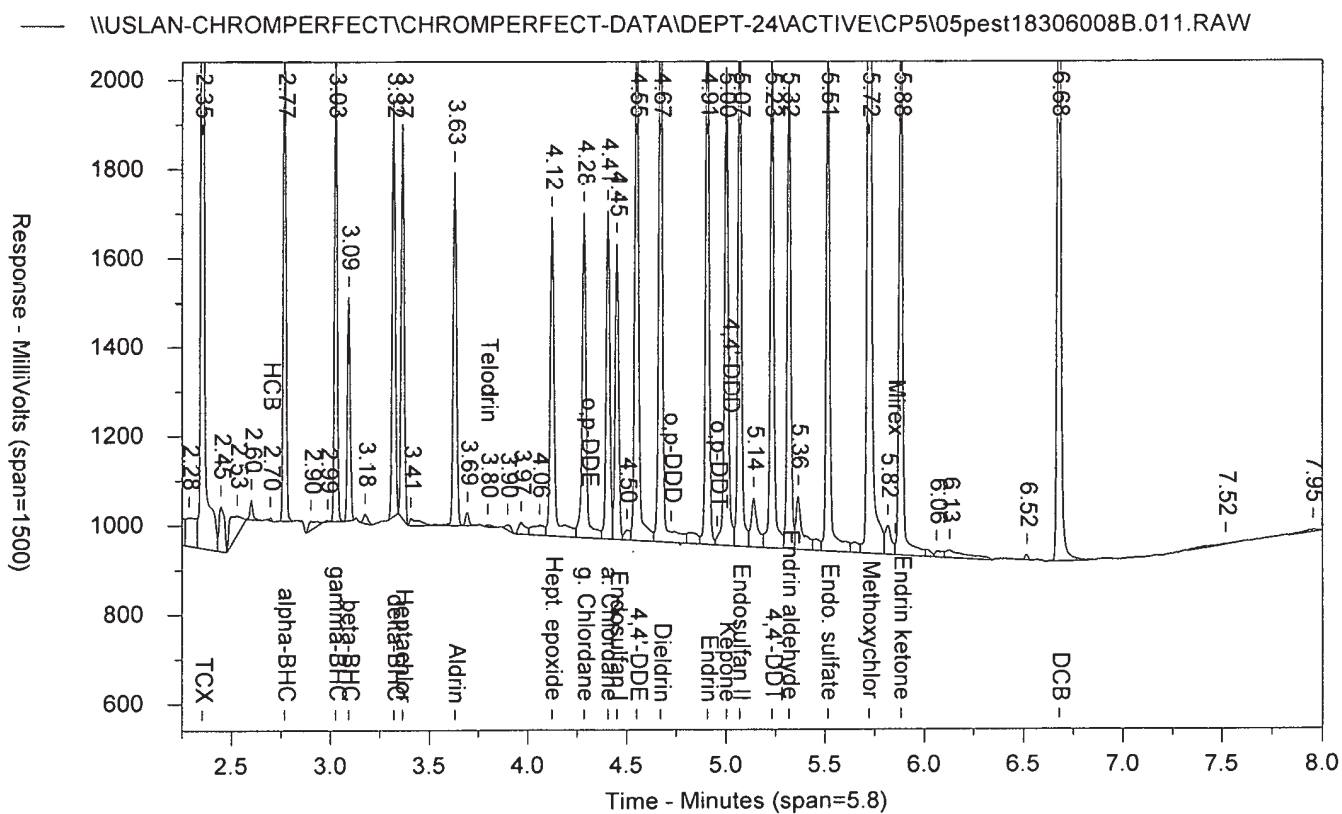
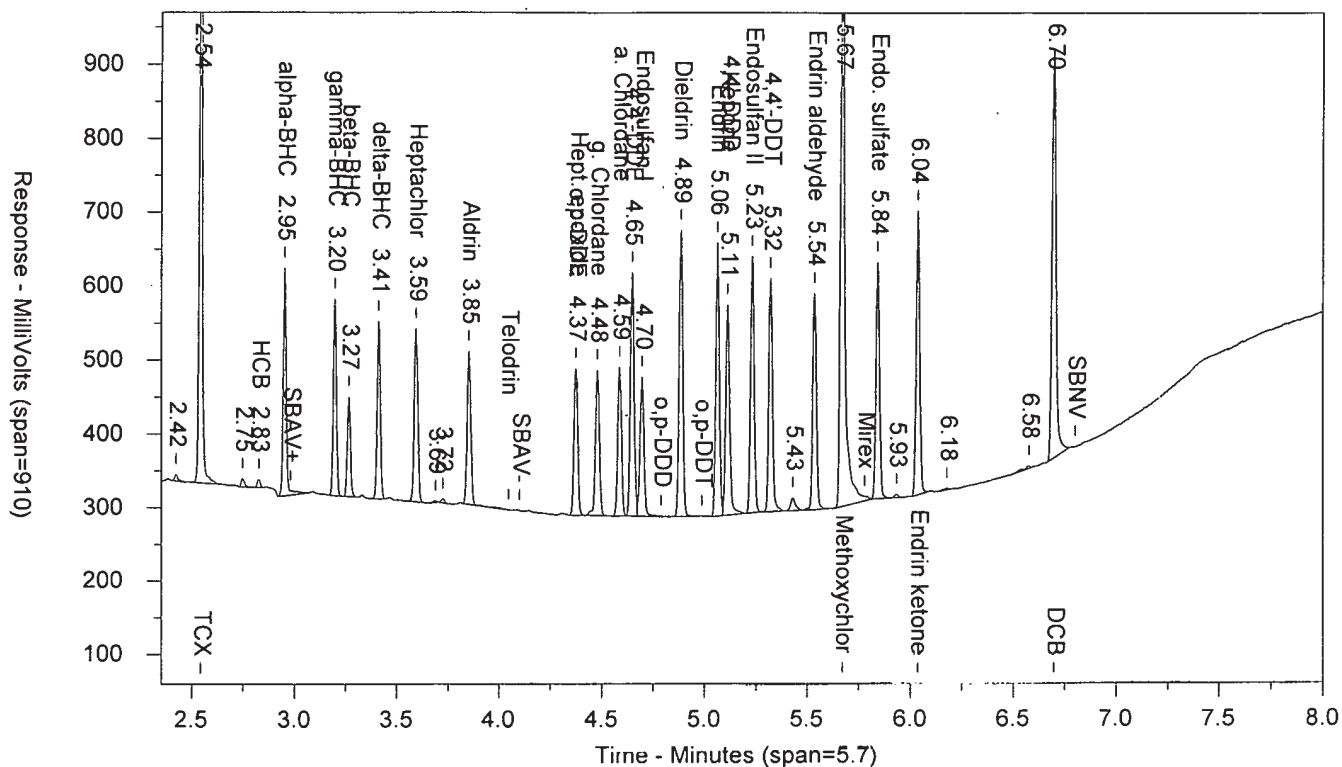
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008B.010.BND



MIXA11824B AAMIXA1AA ICAL 183159999 00177 SW-846 8081A  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.011.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA11824B      AAMIXA1AA      ICAL 183159999      00177      SW-846 8081A  
 Injected On: 11/12/2018 8:42:57 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	962182	2.427	TCX	2.352	3946909	2.362	TCX
2.825	11183	.027	HCB	2.696	7008	.005	HCB
2.952	309274	.564	alpha-BHC	2.767	1196612	.533	alpha-BHC
3.197	267918	.579	gamma-BHC	3.027	1051272	.564	gamma-BHC
3.265	136082	.66	beta-BHC	3.093	503074	.643	beta-BHC
3.412	241521	.561	delta-BHC	3.32	937154	.552	delta-BHC
3.592	236174	.604	Heptachlor	3.366	885721	.603	Heptachlor
3.852	208269	.575	Aldrin	3.629	794255	.571	Aldrin
	0		Telodrin	3.798	4912	.007	Telodrin
	0		Hept. epoxide	4.123	716399	.645	Hept. epoxide
4.479	198860	.628	g. Chlordane	4.285	731815	.628	g. Chlordane
4.374	199979	1.075	<del>o,p-DDE</del> neptepox		0		o,p-DDE
4.587	203278	.634	a. Chlordane	4.405	738325	.641	a. Chlordane
4.696	190042	.632	Endosulfan I	4.451	665642	.651	Endosulfan I
4.649	331345	1.07	4,4'-DDE	4.55	1238132	1.099	4,4'-DDE
4.886	390466	1.208	Dieldrin	4.67	1390192	1.201	Dieldrin
5.063	371393	1.259	Endrin	4.906	1307413	1.263	Endrin
5.112	287297	3.203	<del>Kepon</del> 4,4'-DDD	5.002	1074226	5.723	<del>Kepon</del> 4,4'-DDD
5.233	350348	1.286	Endosulfan II	5.069	1252666	1.292	Endosulfan II
5.321	317903	1.196	4,4'-DDT	5.232	1126121	1.217	4,4'-DDT
5.536	295597	1.309	Endrin aldehyde	5.318	1044996	1.332	Endrin aldehyde
5.842	321803	1.296	Endo. sulfate	5.515	1150129	1.258	Endo. sulfate
5.67	811563	6.362	Methoxychlor	5.723	2834814	6.572	Methoxychlor
6.037	385568	1.318	Endrin ketone	5.882	1278217	1.331	Endrin ketone
6.696	555071	1.938	DCB	6.677	1742450	2.67	DCB

Files:

Area File: 05pest18306008.011.RAW  
 Area File: 05pest18306008B.011.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830604.cal  
 Calibration File B: 05pest1830604b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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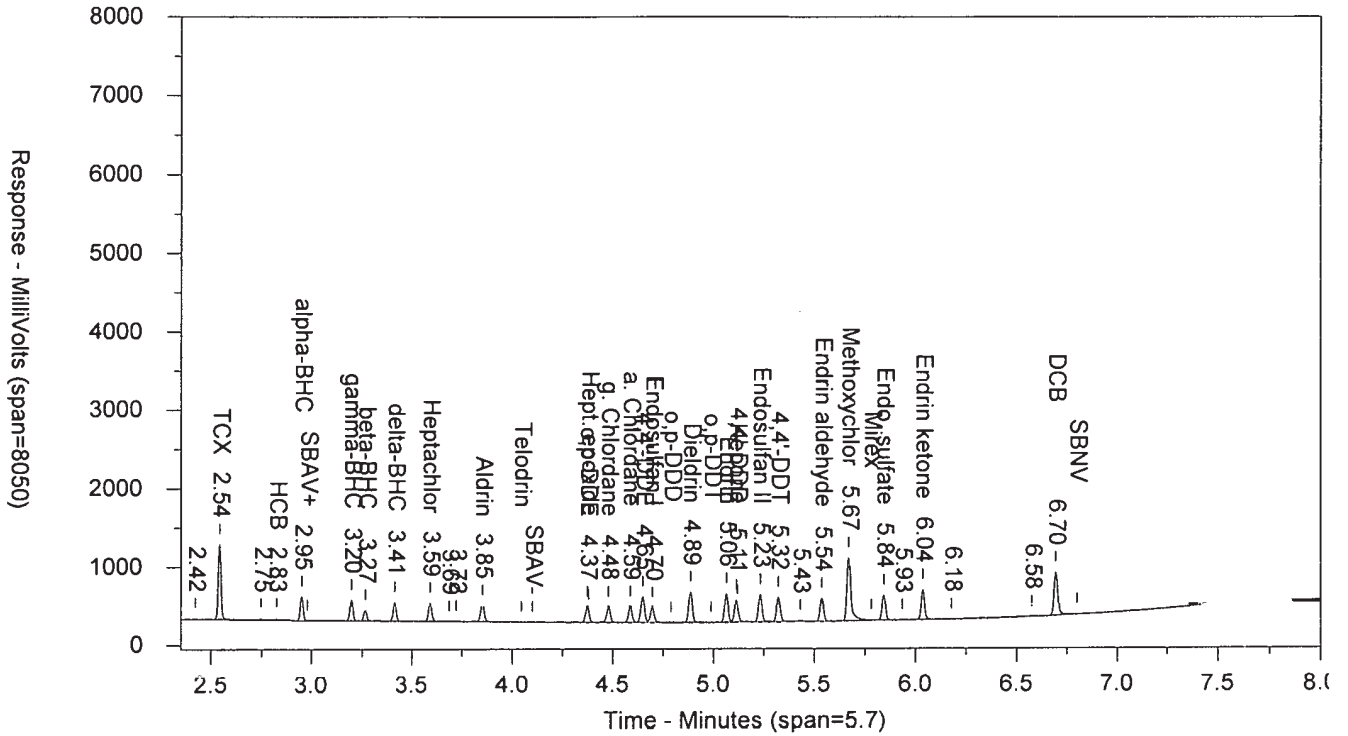
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*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

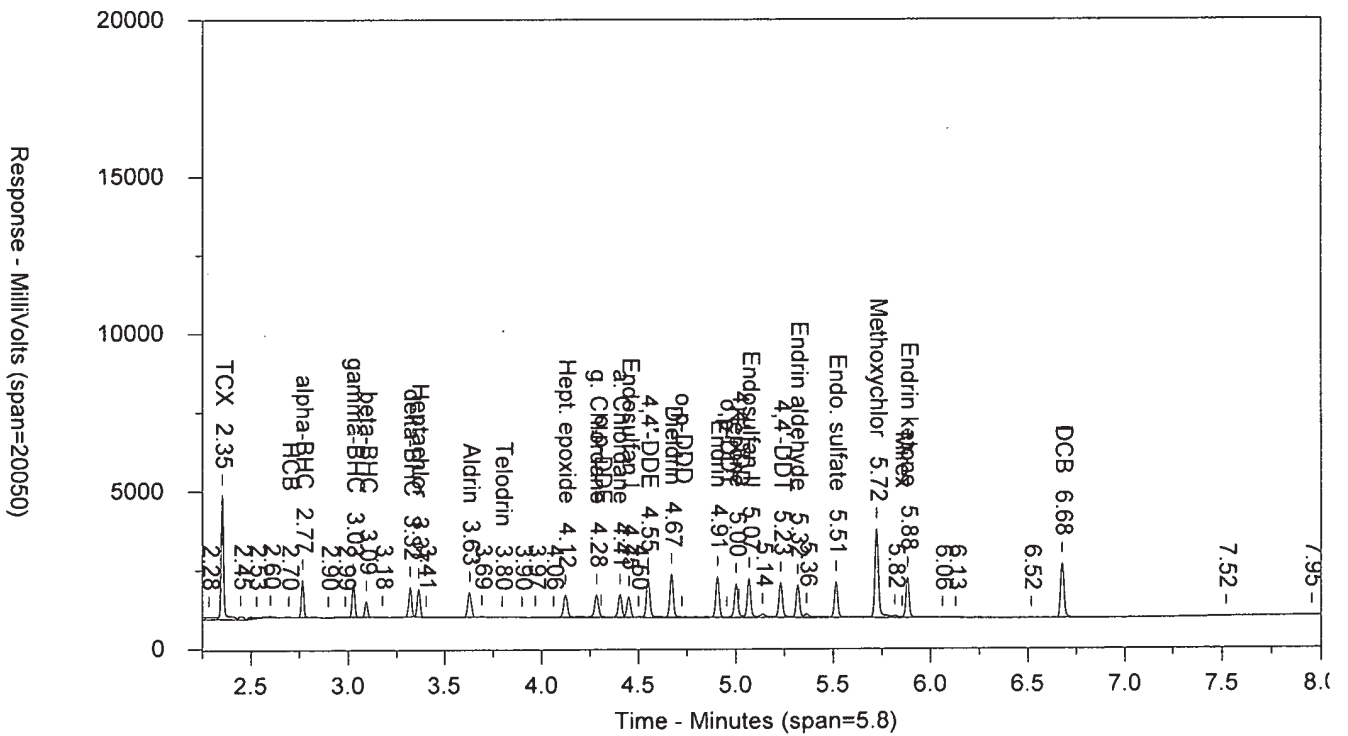
NOV 13 2018

MIXA11824B AAMIXA1AA ICAL 183159999 00177 SW-846 8081

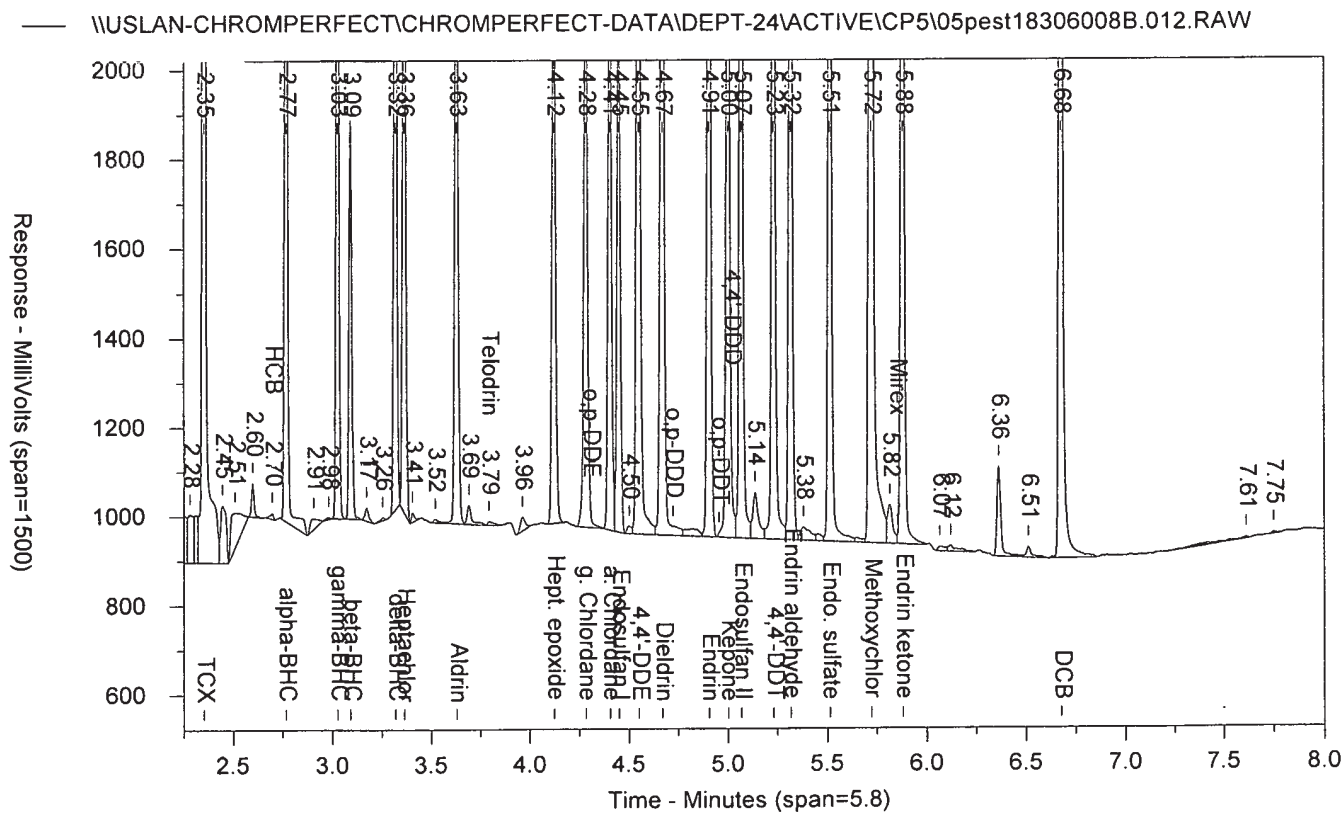
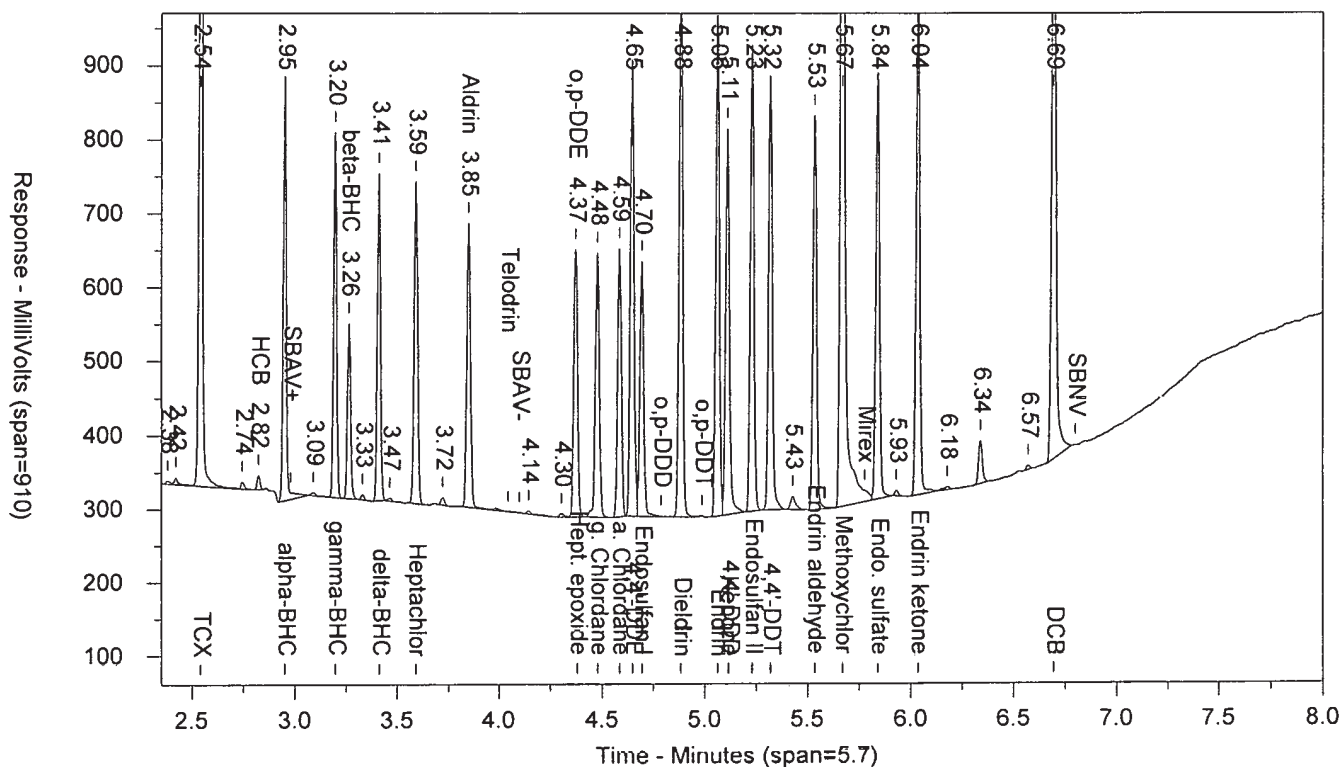
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MIXA21824B AAMIXA2AA ICAL 183159999 00177 SW-846 8081A  
 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.012.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA21824B      AAMIXA2AA      ICAL 183159999      00177      SW-846 8081A  
 Injected On: 11/12/2018 8:55:46 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	1720509	4.262	TCX	2.351	7169490	4.169	TCX
2.824	19495	.056	HCB	2.697	14363	.012	HCB
2.951	574367	1.023	alpha-BHC	2.767	2241476	.972	alpha-BHC
3.196	494249	1.041	gamma-BHC	3.027	1942044	1.01	gamma-BHC
3.265	236686	1.111	beta-BHC	3.092	893131	1.1	beta-BHC
3.411	443198	1.006	delta-BHC	3.32	1680821	.96	delta-BHC
3.591	435748	1.083	Heptachlor	3.365	1585660	1.043	Heptachlor
3.851	385305	1.035	Aldrin	3.628	1455714	1.013	Aldrin
	0		Telodrin	3.794	8649	.015	Telodrin
	0		Hept. epoxide	4.123	1262439	1.092	Hept. epoxide
4.478	357013	1.088	g. Chlordane	4.284	1270048	1.047	g. Chlordane
4.373	361475	1.934	o,p-DDE <i>heptepox</i>		0		o,p-DDE
4.586	363175	1.091	a. Chlordane	4.405	1296094	1.078	a. Chlordane
4.695	345073	1.111	Endosulfan I	4.45	1171645	1.103	Endosulfan I
4.648	618884	1.972	4,4'-DDE	4.55	2289147	1.979	4,4'-DDE
4.885	714887	2.147	Dieldrin	4.67	2547786	2.124	Dieldrin
5.082	681914	2.231	Endrin	4.906	2362144	2.191	Endrin
5.111	523418	6.718	<del>Kepon</del> <i>4,4'-DDP</i>	5.001	1936739	8.96	<del>Kepon</del> <i>4,4'-DDP</i>
5.231	633681	2.247	Endosulfan II	5.068	2208184	2.186	Endosulfan II
5.32	576034	2.111	4,4'-DDT	5.231	2034436	2.125	4,4'-DDT
5.535	533811	2.286	Endrin aldehyde	5.317	1822256	2.231	Endrin aldehyde
5.841	578796	2.259	Endo. sulfate	5.514	2074231	2.194	Endo. sulfate
5.668	1454593	11.213	Methoxychlor	5.722	4899310	11.007	Methoxychlor
6.035	693961	2.293	Endrin ketone	5.881	2247938	2.25	Endrin ketone
6.694	971188	4.089	DCB	6.676	3031938	4.61	DCB

Files:

Area File: 05pest18306008.012.RAW  
 Area File: 05pest18306008B.012.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830604.cal  
 Calibration File B: 05pest1830604b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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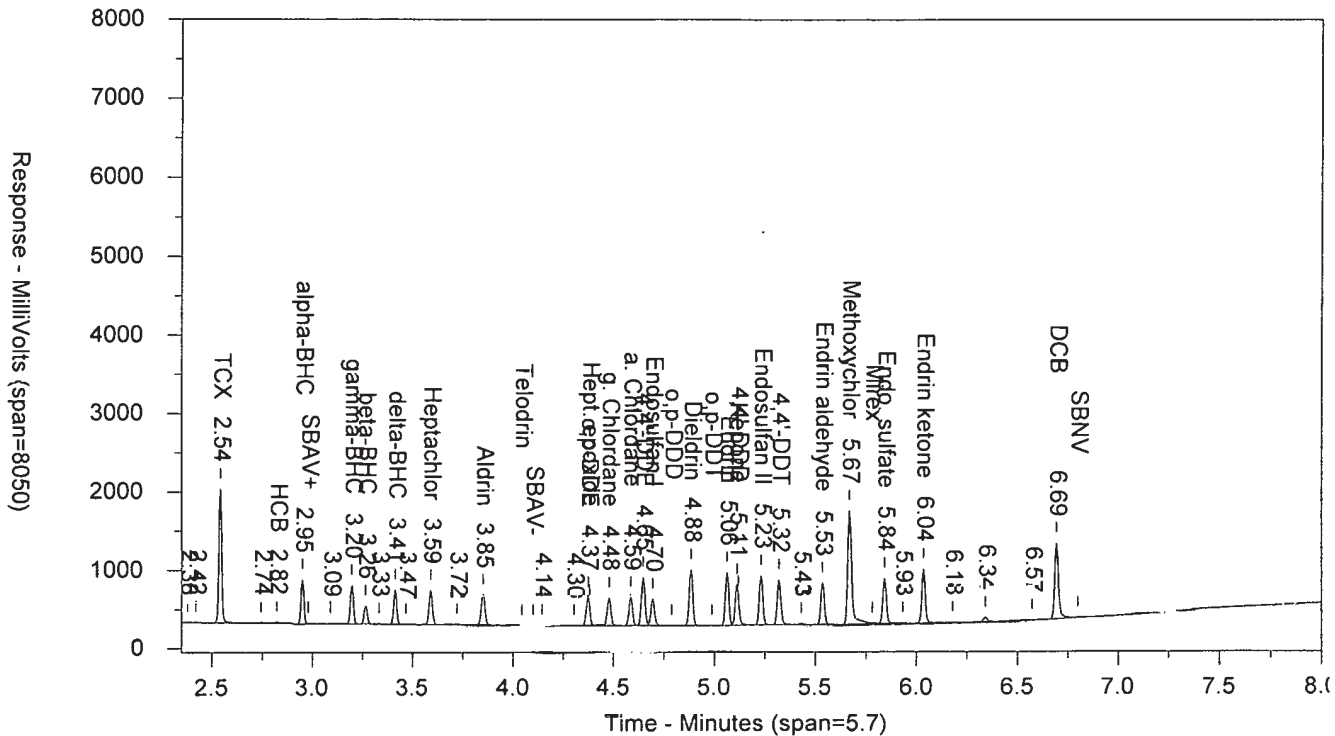
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*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

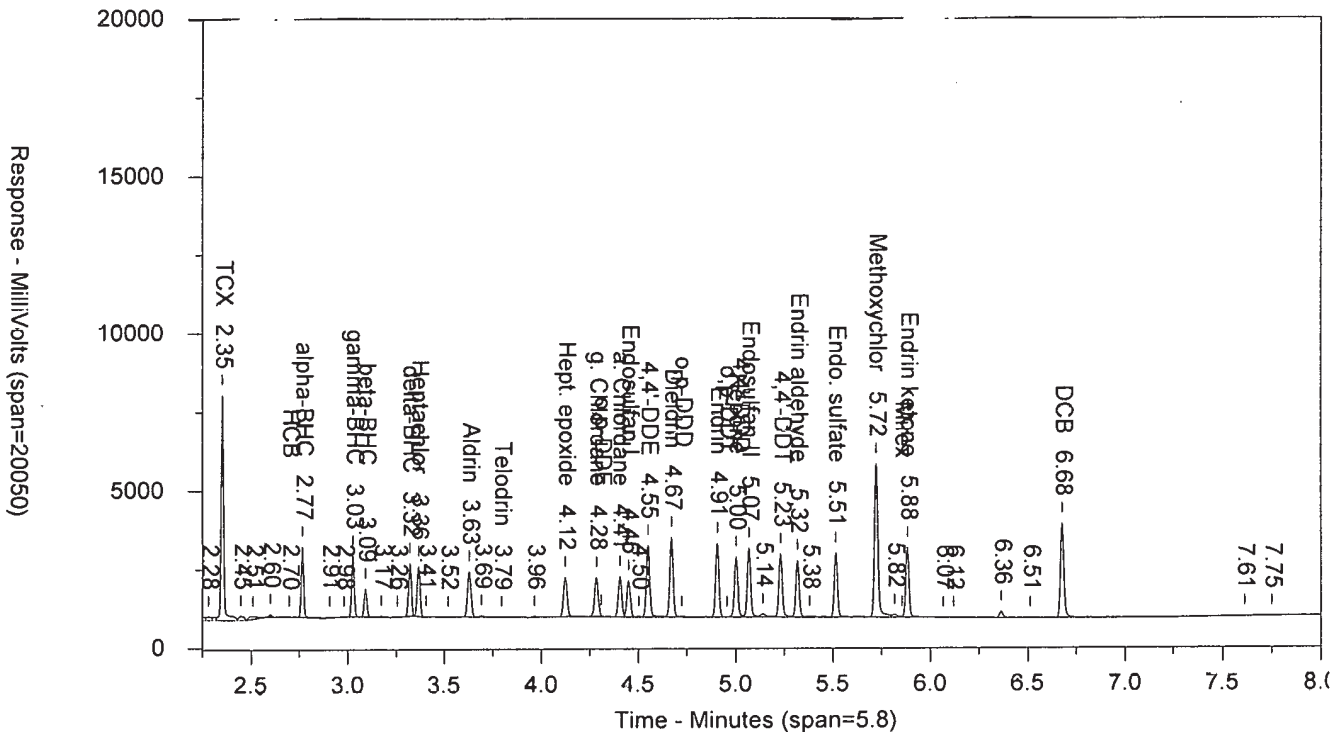
NOV 13 2018

MIXA21824B AAMIXA2AA ICAL 1831599999 00177 SW-846 8081

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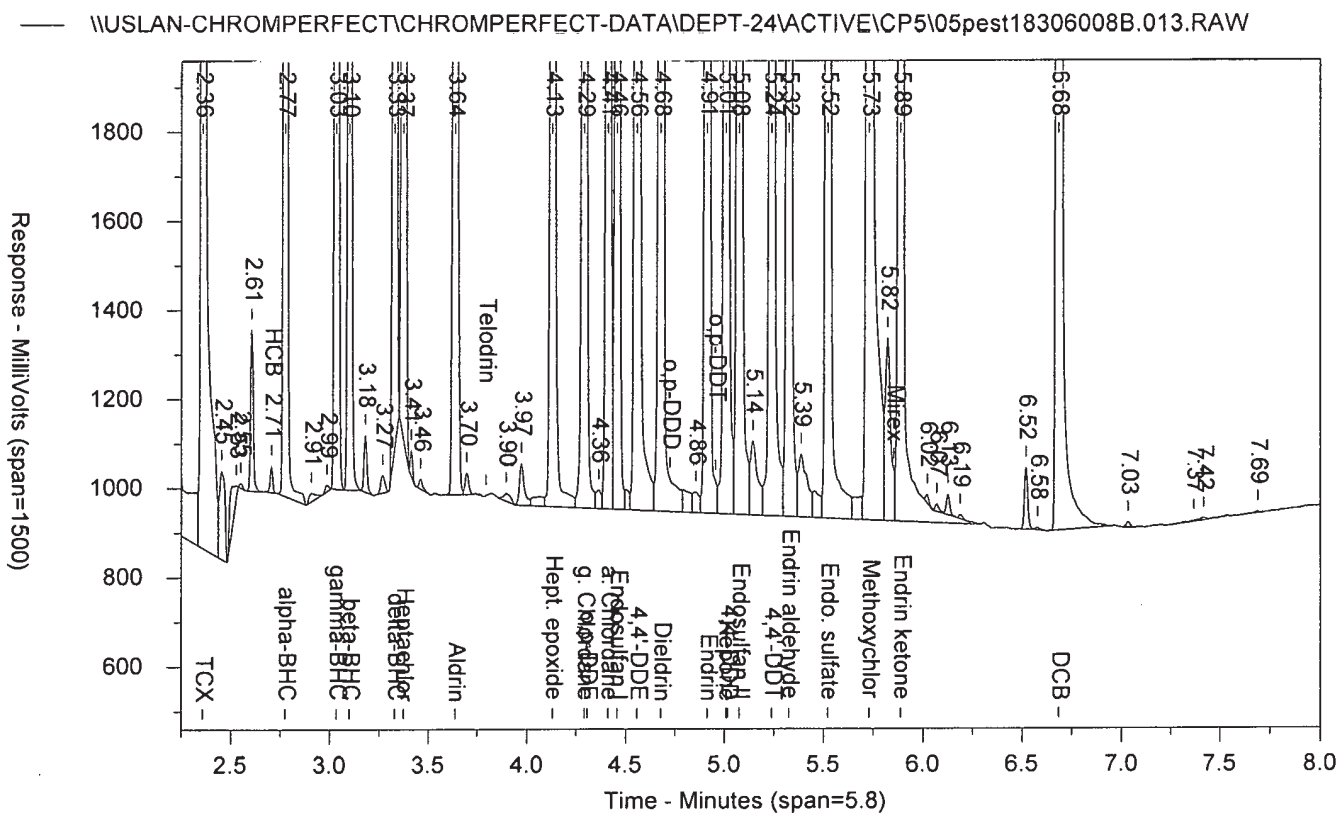
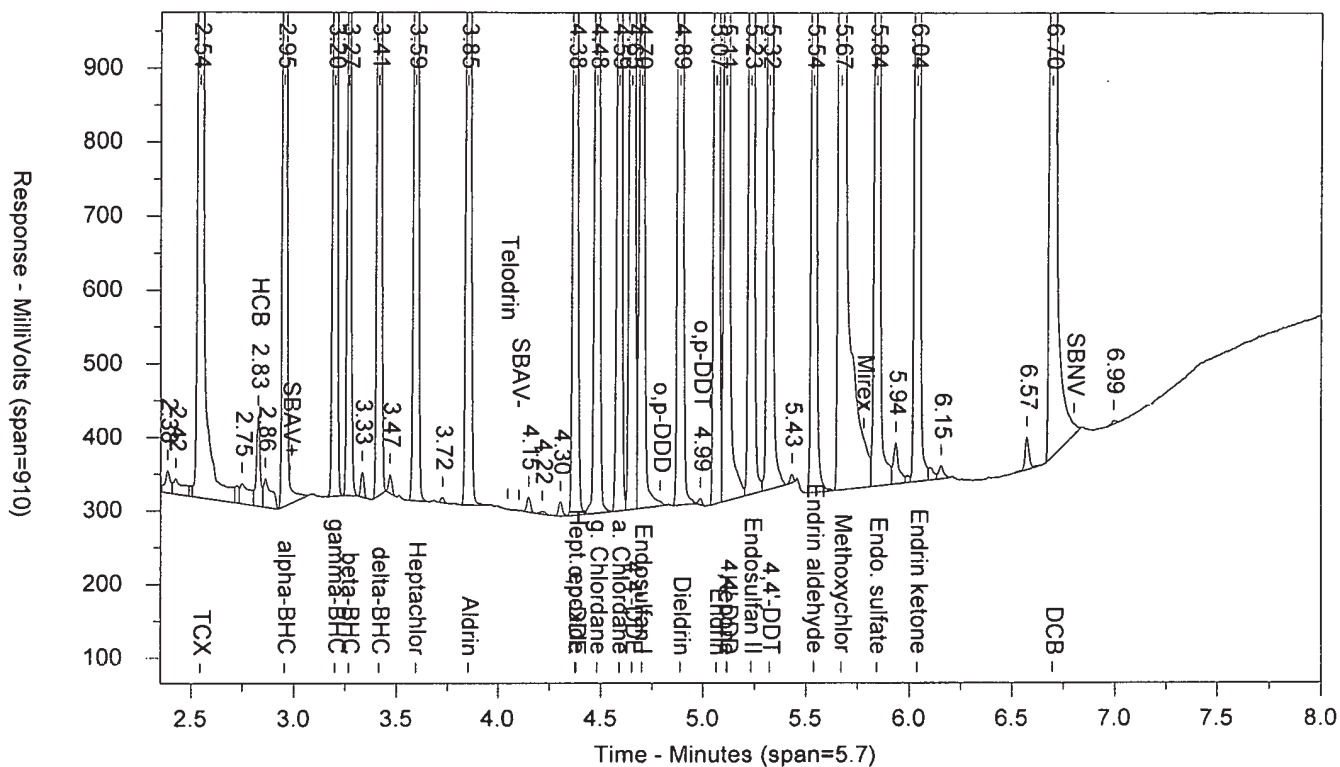


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MIXA31824B AAMIXA3AA ICAL 183159999 00177 SW-846 8081A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA31824B      AAMIXA3AA      ICAL 183159999      00177      SW-846 8081A  
 Injected On: 11/12/2018 9:08:41 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.543	8641251	20.966	TCX	2.359	39664590	22.363	TCX
2.827	122819	.443	HCB	2.706	61010	.065	HCB
2.954	3155115	5.477	alpha-BHC	2.775	13470630	5.658	alpha-BHC
3.199	2651531	5.438	gamma-BHC	3.034	11018380	5.548	gamma-BHC
3.267	1139171	5.181	beta-BHC	3.1	4486267	5.338	beta-BHC
3.414	2422711	5.378	delta-BHC	3.328	9928638	5.515	delta-BHC
3.594	2184311	5.261	Heptachlor	3.372	8642598	5.494	Heptachlor
3.854	2040587	5.319	Aldrin	3.636	8255960	5.544	Aldrin
	0		Hept. epoxide	4.131	6590490	5.484	Hept. epoxide
4.481	1822132	5.36	g. Chlordane	4.291	6891823	5.49	g. Chlordane
4.376	1811895	9.675	<del>o,p-DDE</del> <i>heptepox</i>		0		o,p-DDE
4.589	1812190	5.266	a. Chlordane	4.412	6821885	5.464	a. Chlordane
4.698	1692857	5.261	Endosulfan I	4.457	6036841	5.467	Endosulfan I
4.651	3346087	10.461	4,4'-DDE	4.557	12624150	10.578	4,4'-DDE
4.888	3697988	10.766	Dieldrin	4.677	14007880	11.241	Dieldrin
5.065	3492551	11.016	Endrin	4.913	12724330	11.342	Endrin
4.986	8690	.063	o,p-DDT		0		o,p-DDT
5.114	2792300	24.048	<del>Kepon</del> <i>4,4-DDD</i>	5.009	10496260	27.752	<del>Kepon</del> <i>4,4-DDD</i>
5.234	3191077	10.923	Endosulfan II	5.075	11762580	11.197	Endosulfan II
5.323	3037347	10.845	4,4'-DDT	5.238	11017170	11.101	4,4'-DDT
5.537	2594248	10.751	Endrin aldehyde	5.324	9327411	11.017	Endrin aldehyde
5.843	2843399	10.735	Endo. sulfate	5.521	10937870	11.13	Endo. sulfate
5.871	6904865	52.124	Methoxychlor	5.729	24621630	53.883	Methoxychlor
6.038	3406585	10.884	Endrin ketone	5.888	11740650	11.312	Endrin ketone
6.696	4439711	22.939	DCB	6.683	14817570	23.644	DCB

Files:

Area File: 05pest18306008.013.RAW  
 Area File: 05pest18306008B.013.RAW  
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 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830604.cal  
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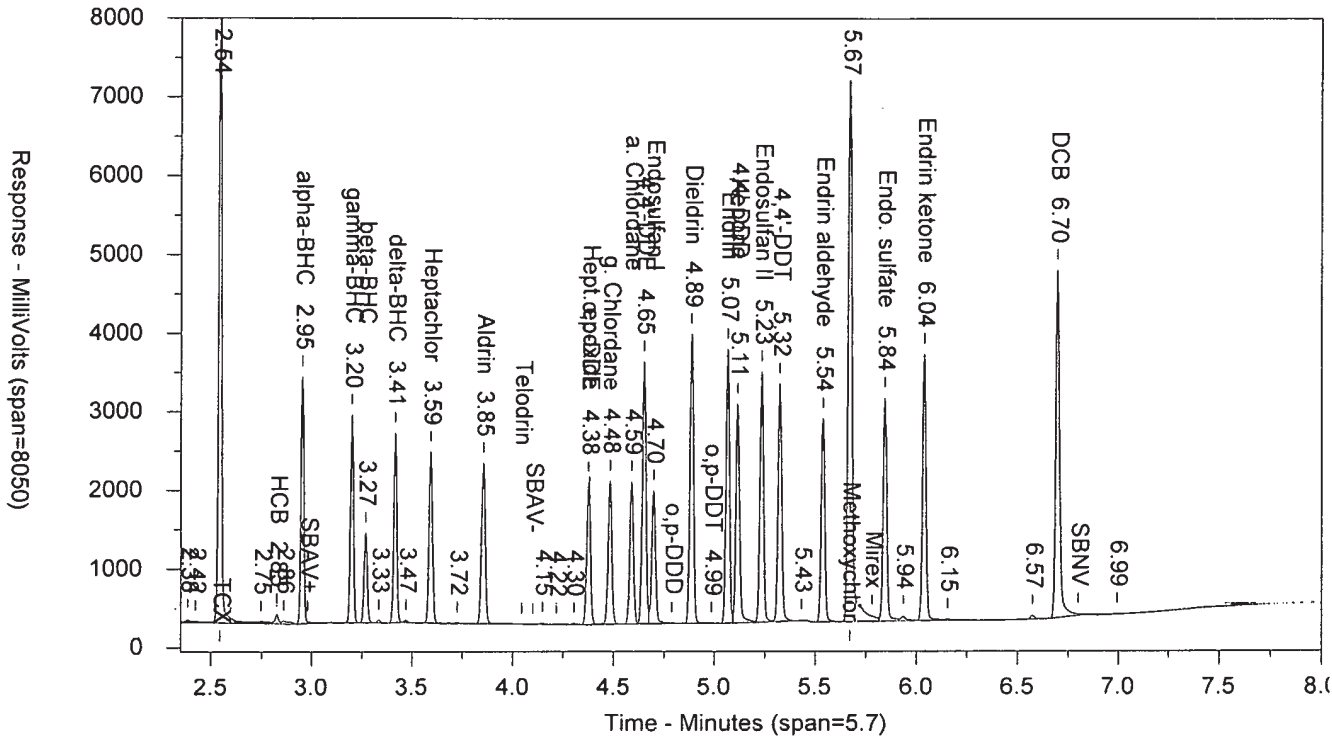
*Close eluters*

*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

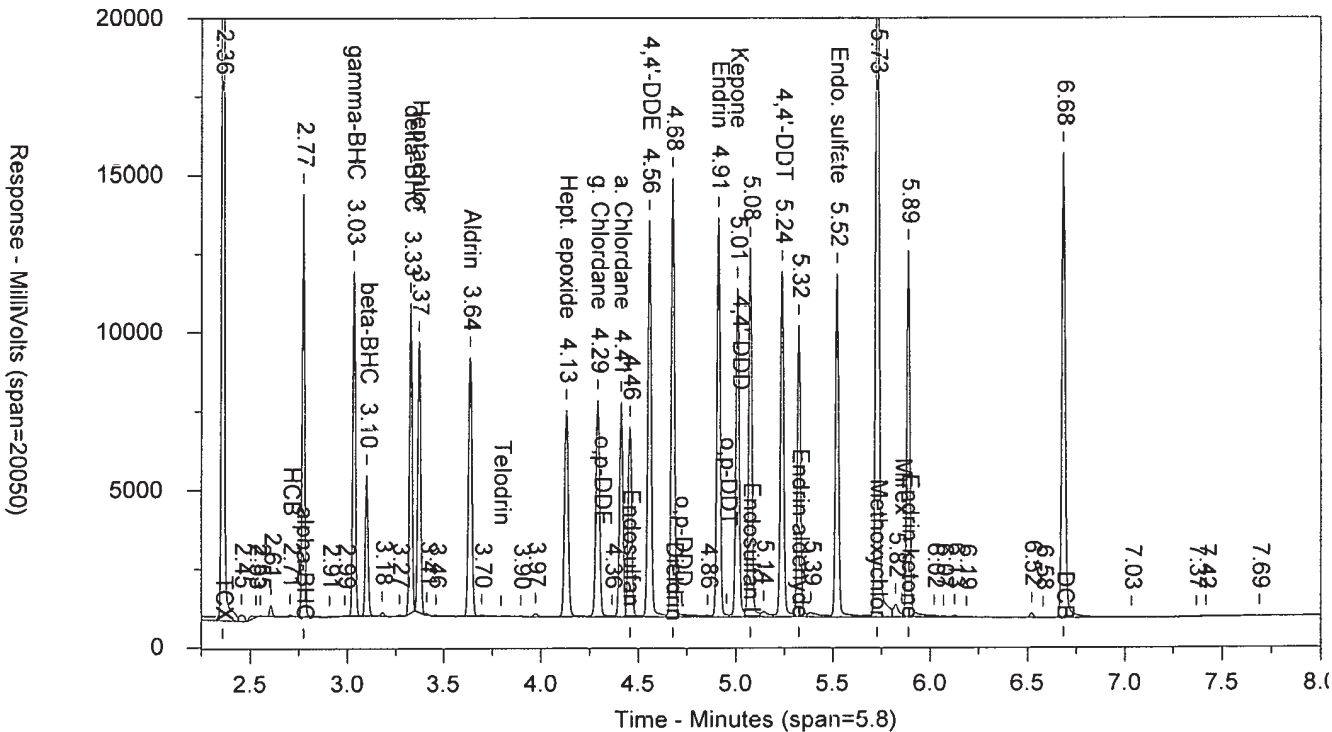
NOV 13 2018

MIXA31824B AAMIXA3AA ICAL 1831599999 00177 SW-846 8081

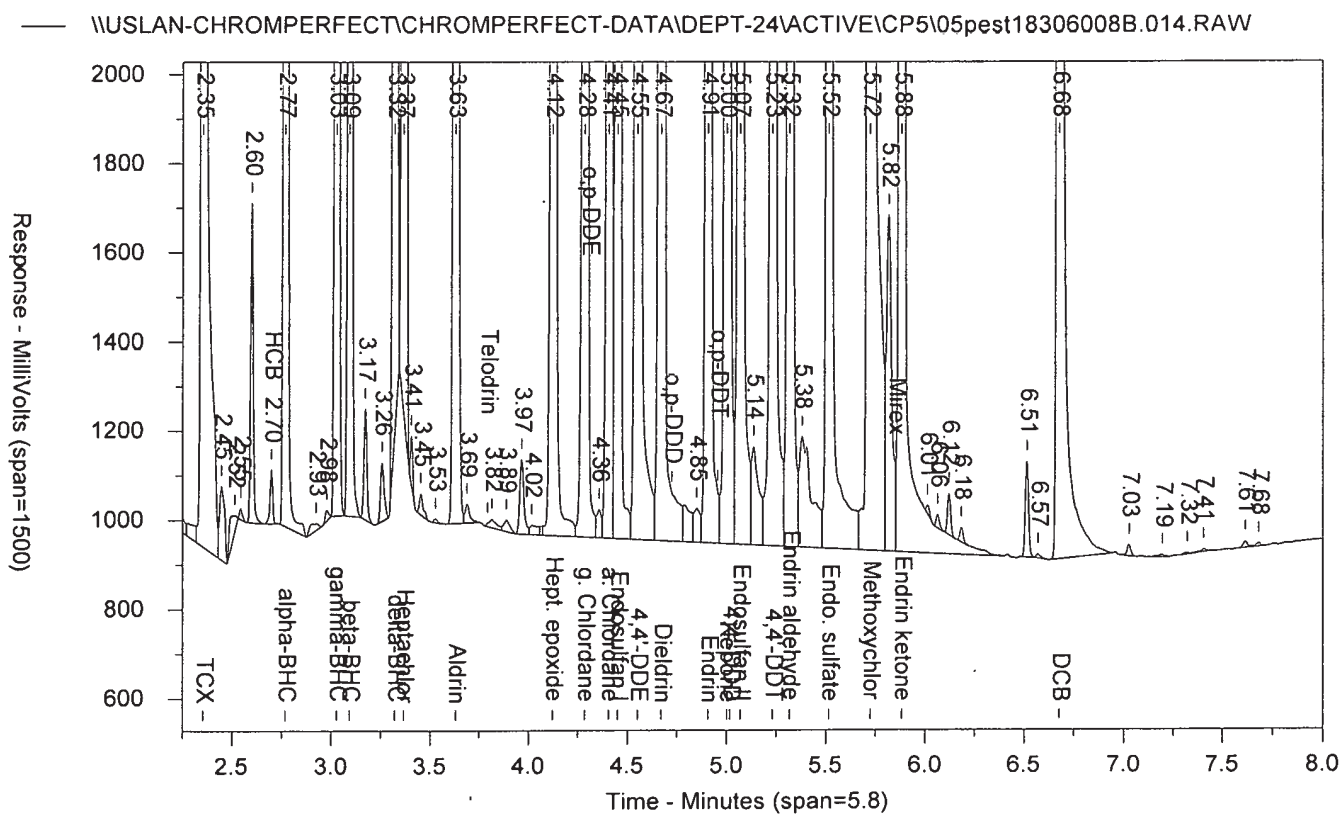
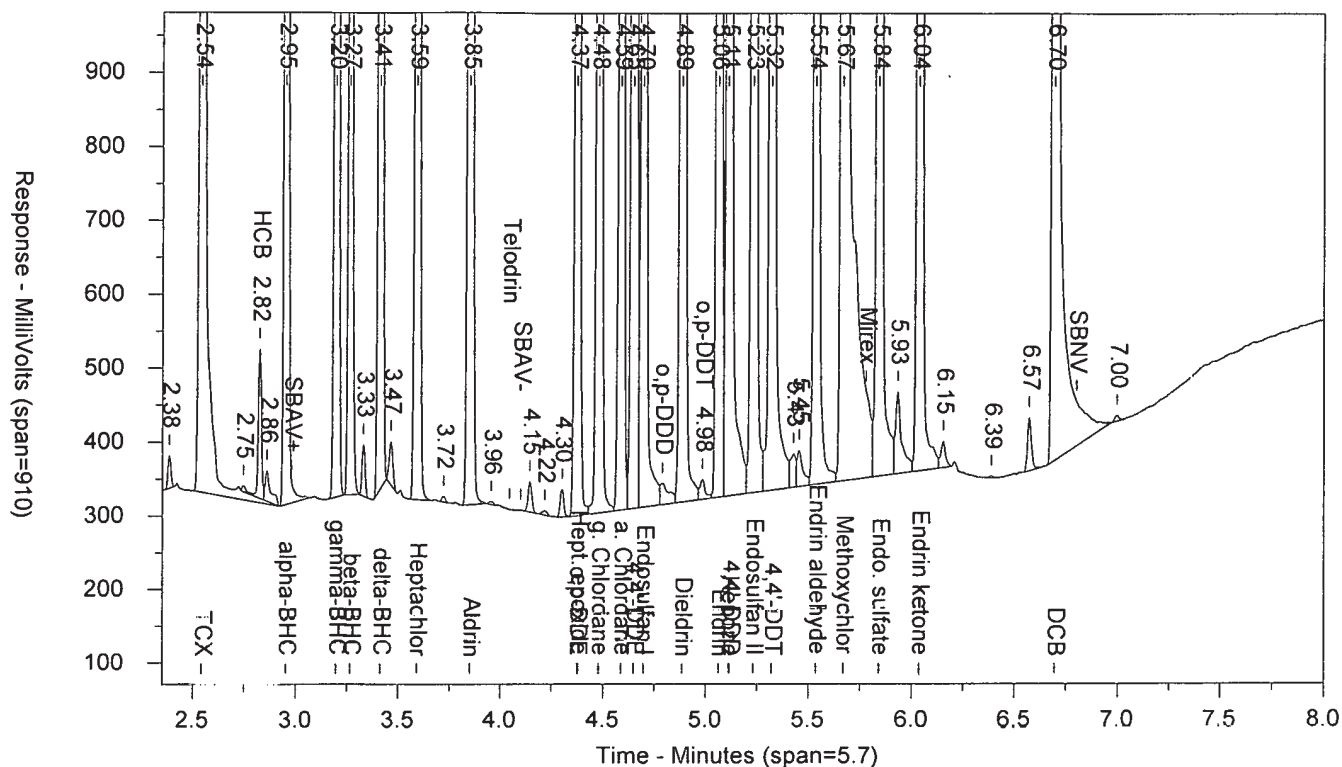
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MIXA41824B AAMIXA4AA ICAL 183159999 00177 SW-846 8081A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA41824B AAMIXA4AA ICAL 183159999 00177 SW-846 8081A  
 Injected On: 11/12/2018 9:21:29 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5µm  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25µm  
 Injection Volume: 1 µl

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	16866560	40.275	TCX	2.353	80248890	44.067	TCX
2.825	201944	.937	HCB	2.699	122026	.17	HCB
2.952	6256160	10.619	alpha-BHC	2.768	28580460	11.635	alpha-BHC
3.197	5280651	10.6	gamma-BHC	3.028	23353480	11.411	gamma-BHC
3.265	2228845	9.947	beta-BHC	3.093	9158719	10.607	beta-BHC
3.412	4863426	10.613	delta-BHC	3.321	21236160	11.471	delta-BHC
3.592	4417972	10.455	Heptachlor	3.366	18118090	11.169	Heptachlor
3.852	4166585	10.663	Aldrin	3.63	17235970	11.213	Aldrin
	0		Hept. époxide	4.124	13632070	10.973	Hept. epoxide
4.479	3728719	10.689	g. Chlordane	4.285	14236580	10.966	g. Chlordane
4.374	3655008	16.886	o,p-DDE <i>heptepox.</i>		0		o,p-DDE
4.587	3654282	10.379	a. Chlordane	4.406	13979970	10.829	a. Chlordane
4.696	3431670	10.424	Endosulfan I	4.451	12538770	10.994	Endosulfan I
4.649	6733170	20.811	4,4'-DDE	4.551	26716350	21.965	4,4'-DDE
4.886	7296508	20.828	Dieldrin	4.671	28762390	22.32	Dieldrin
5.064	6816135	20.923	Endrin	4.907	26176810	22.468	Endrin
4.984	26735	.261	o,p-DDT		0		o,p-DDT
5.113	5592920	43.916	Kepon <i>4,4'-DDT</i>	5.003	21961830	50.927	Kepon <i>4,4'-DDT</i>
5.232	6264810	20.901	Endosulfan II	5.07	23340880	21.464	Endosulfan II
5.321	6134702	21.412	4,4'-DDT	5.232	23082530	22.466	4,4'-DDT
5.536	4993827	20.183	Endrin aldehyde	5.318	18355750	20.992	Endrin aldehyde
5.842	5635959	20.75	Endo. sulfate	5.515	22529930	22.156	Endo. sulfate
5.669	13626890	101.581	Methoxychlor	5.723	49101640	105.145	Methoxychlor
6.036	6638934	20.686	Endrin ketone	5.881	23430640	21.72	Endrin ketone
6.695	8565137	45.329	DCB	6.677	29480910	47.144	DCB

Files:

Area File: 05pest18306008.014.RAW  
 Area File: 05pest18306008B.014.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830604.cal  
 Calibration File B: 05pest1830604b.cal  
 Format A: pestD5.FMTA  
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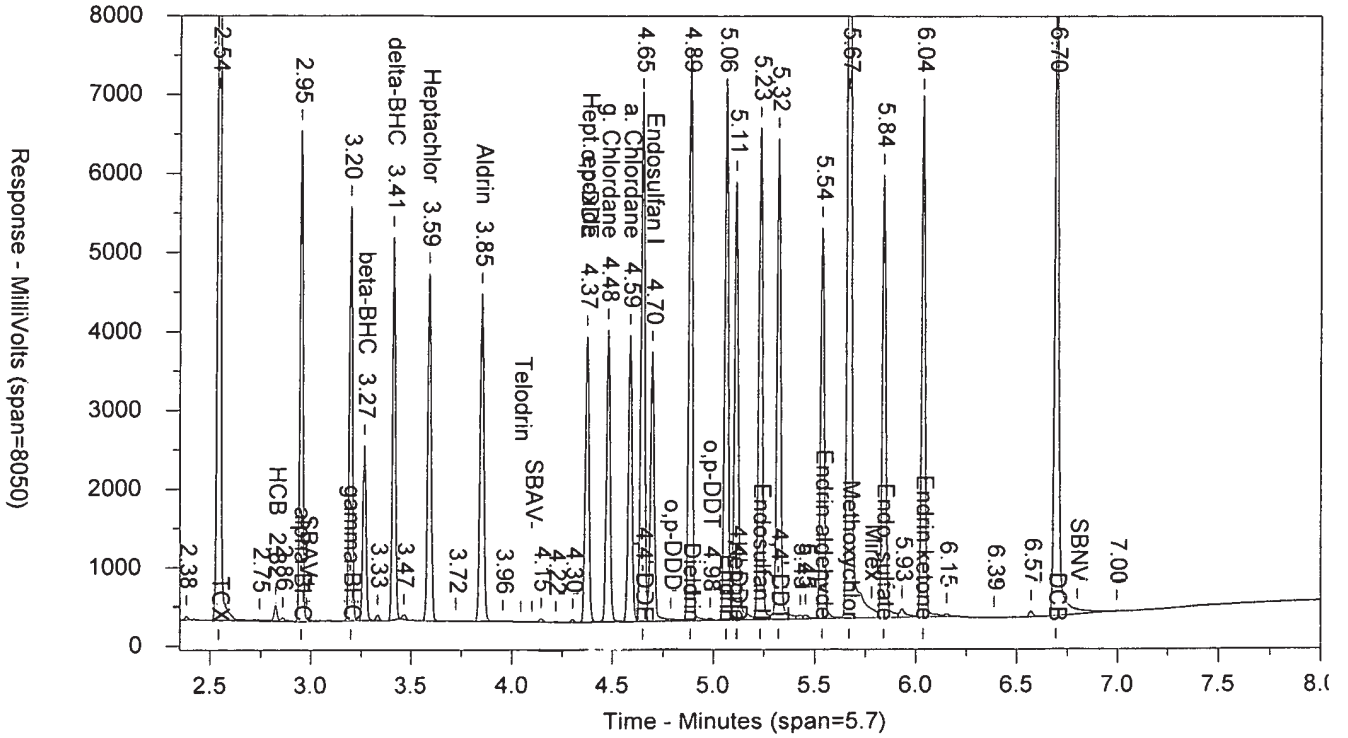
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*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

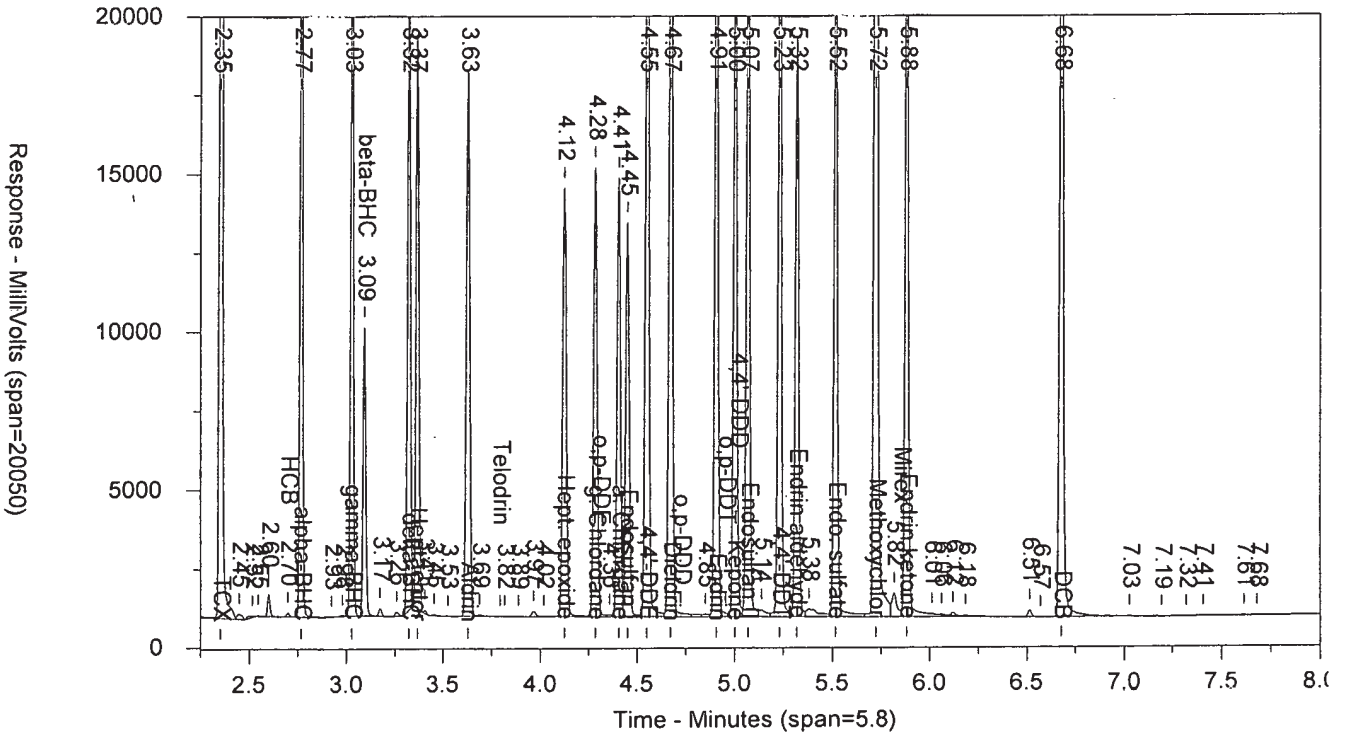
NOV 13 2018

MIXA41824B AAMIXA4AA ICAL 183159999 00177 SW-846 8081

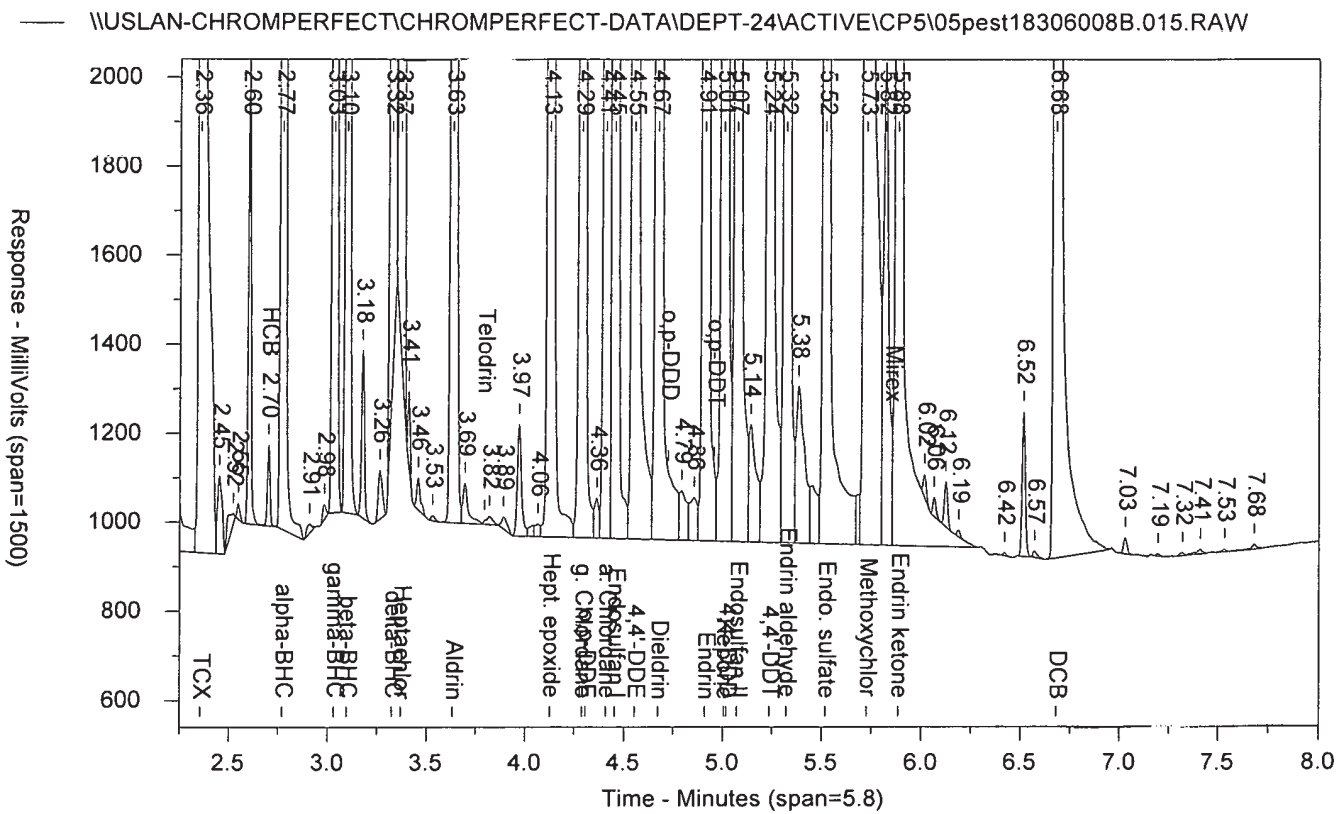
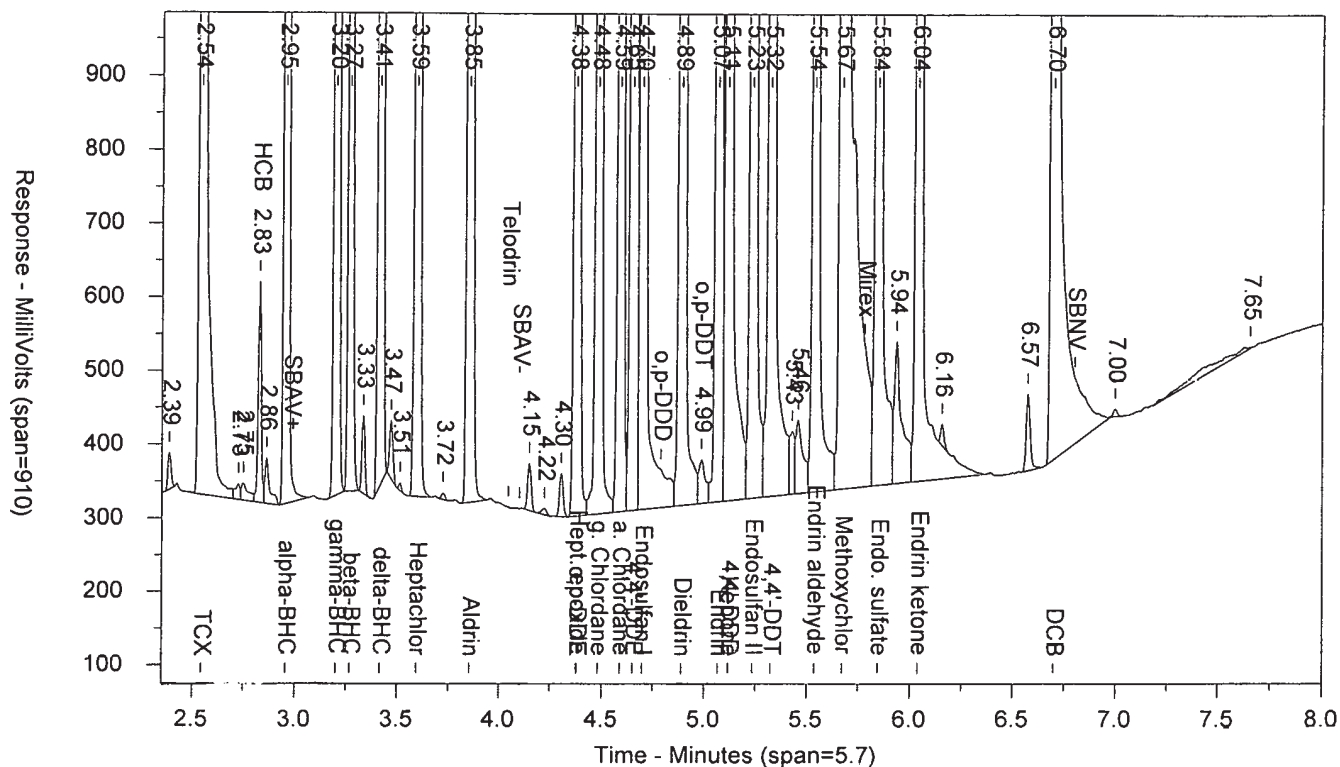
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MIXA51824B AAMIXA5AA ICAL 183159999 00177 SW-846 8081A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA51824B AAMIXA5AA ICAL 183159999 00177 SW-846 8081A  
 Injected On: 11/12/2018 9:34:14 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.544	24972010	58.87	TCX	2.355	122009400	65.436	TCX
2.827	301297	1.961	HCB	2.702	182724	.371	HCB
2.955	9501960	15.882	alpha-BHC	2.771	45176930	17.84	alpha-BHC
3.2	7975877	15.753	gamma-BHC	3.031	37279240	17.702	gamma-BHC
3.268	3380098	14.868	beta-BHC	3.096	14090040	15.895	beta-BHC
3.415	7373040	15.859	delta-BHC	3.324	33280050	17.482	delta-BHC
3.595	6580982	15.327	Heptachlor	3.369	27794410	16.638	Heptachlor
3.854	6302327	15.846	Aldrin	3.632	27280630	17.261	Aldrin
	0		Hept. epoxide	4.127	20834030	16.239	Hept. epoxide
4.482	5626571	15.76	g. Chlordane	4.288	22161590	16.581	g. Chlordane
4.376	5388763	21.853	<del>o,p-DDE</del> <i>heptepox</i>		0		o,p-DDE
4.59	5548260	15.476	a. Chlordane	4.409	21923130	16.49	a. Chlordane
4.699	5163197	15.399	Endosulfan I	4.453	19400390	16.458	Endosulfan I
4.651	10201760	31.286	4,4'-DDE	4.554	42407160	34.164	4,4'-DDE
4.889	10923550	30.66	Dieldrin	4.674	43667320	32.918	Dieldrin
5.066	10156100	30.525	Endrin	4.91	39374380	32.645	Endrin
4.986	59382	.858	<del>o,p-DDT</del>		0		o,p-DDT
5.115	8548140	65.273	<del>Kepon</del> <i>4,4'-DDT</i>	5.006	34354490	75.981	<del>Kepon</del> <i>4,4'-DDT</i>
5.235	9296362	30.293	Endosulfan II	5.072	36162620	32.351	Endosulfan II
5.323	9374002	32.031	4,4'-DDT	5.235	35812720	33.693	4,4'-DDT
5.538	7653195	30.365	Endrin aldehyde	5.321	28628500	31.77	Endrin aldehyde
5.844	8411244	30.319	Endo. sulfate	5.518	34746680	33.044	Endo. sulfate
5.871	20072210	147.098	Methoxychlor	5.725	71313480	149.201	Methoxychlor
6.039	9961020	30.315	Endrin ketone	5.884	35558720	31.94	Endrin ketone
6.697	12877990	68.251	DCB	6.68	45217730	71.588	DCB

Files:

Area File: 05pest18306008.015.RAW  
 Area File: 05pest18306008B.015.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
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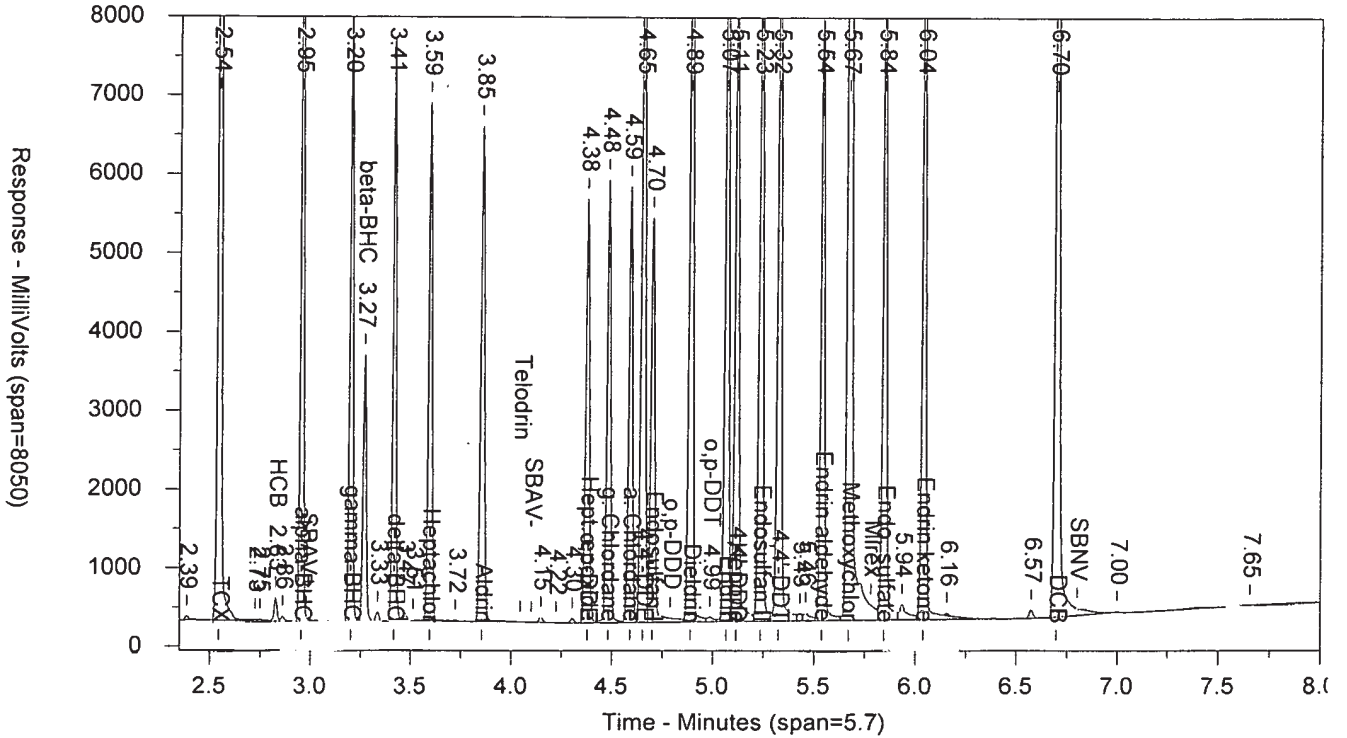
*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

NOV 13 2018

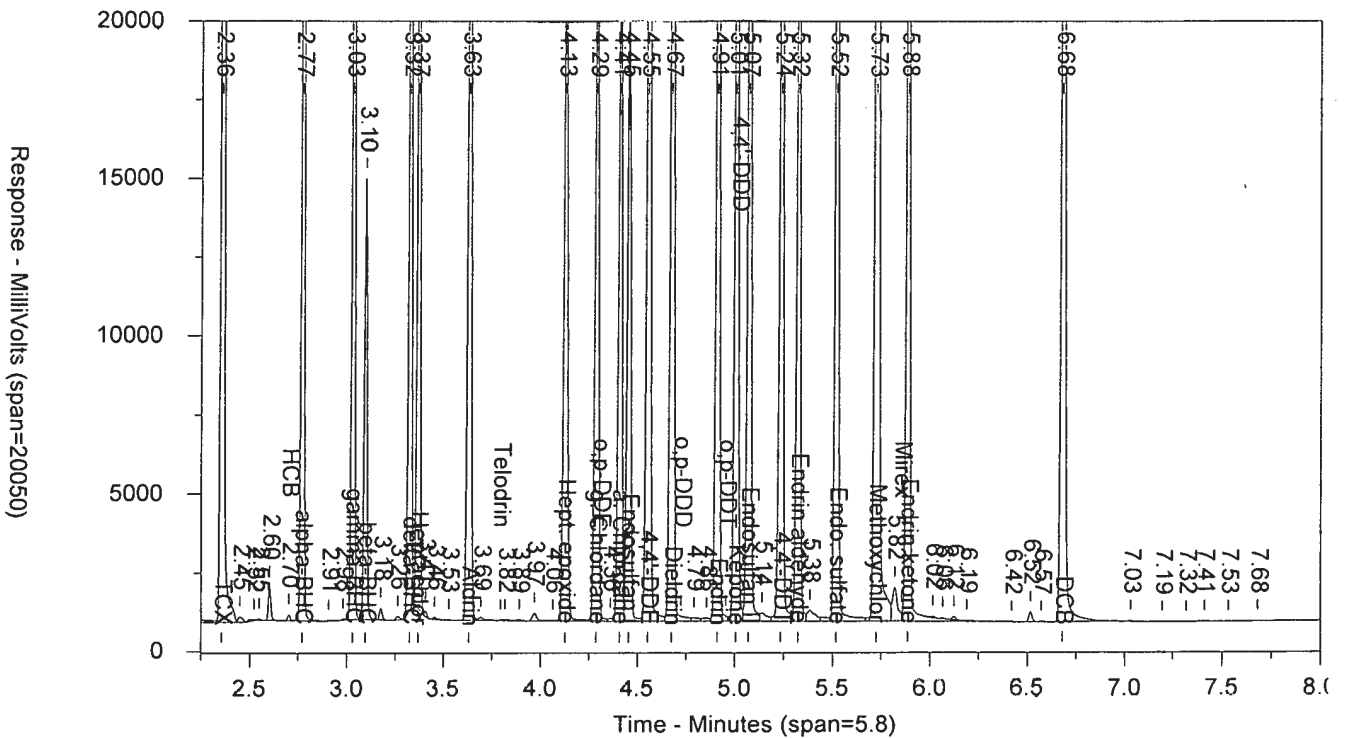


MIXA51824B AAMIXA5AA ICAL 183159999 00177 SW-846 8081

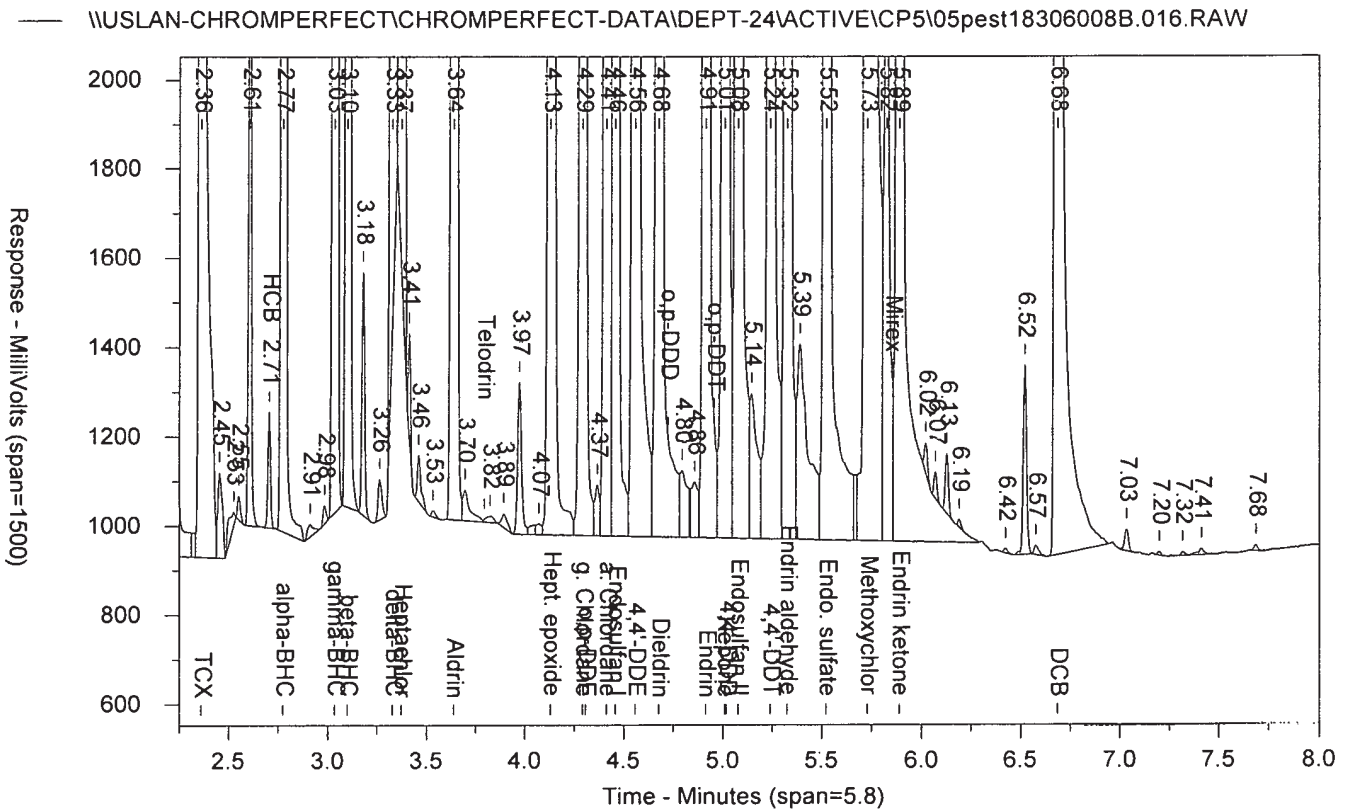
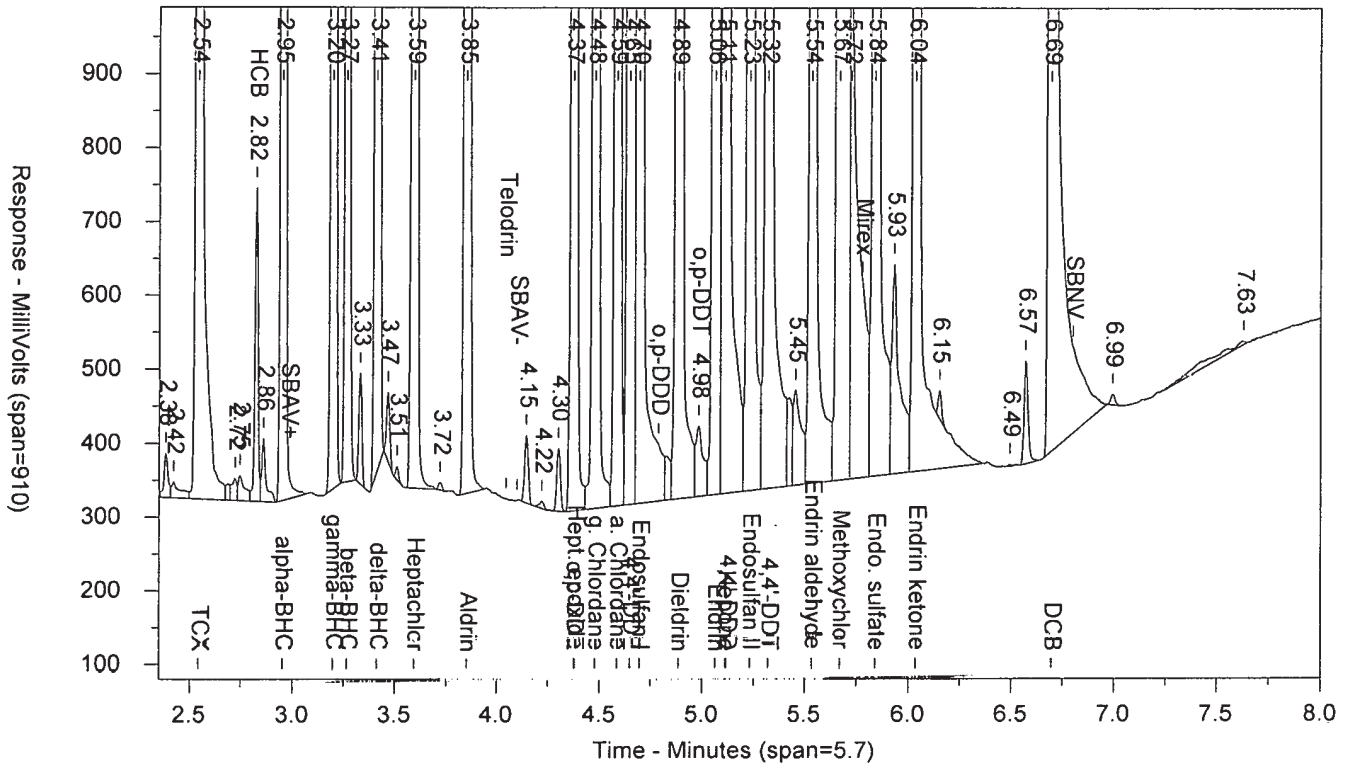
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MIXA61824B AAMIXA6AA ICAL 183159999 00177 SW-846 8081A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA61824B      AAMIXA6AA      ICAL 183159999      00177      SW-846 8081A  
 Injected On: 11/12/2018 9:46:58 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	35130280	82.171	TCX	2.359	172656600	90.476	TCX
2.825	424964	4.589	HCB	2.706	262588	1.007	HCB
2.952	13449310	22.126	alpha-BHC	2.775	66235240	25.341	alpha-BHC
3.197	11413870	22.197	gamma-BHC	3.035	53839020	24.699	gamma-BHC
3.265	4751273	20.601	beta-BHC	3.1	20792160	22.908	beta-BHC
3.412	10669730	22.647	delta-BHC	3.328	50300220	25.67	delta-BHC
3.592	9585411	22.028	Heptachlor	3.373	41514180	24.186	Heptachlor
3.852	9044081	22.41	Aldrin	3.636	39544660	24.297	Aldrin
	0		Hept. epoxide	4.131	30245510	22.995	Hept. epoxide
4.479	8126883	22.310	g. Chlordane	4.291	33537220	24.406	g. Chlordane
4.374	7768801	29.778	<del>o,p-DDE</del> <i>hept-epox</i>		0		o,p-DDE
4.587	7961508	21.815	a. Chlordane	4.412	32421460	23.725	a. Chlordane
4.696	7436351	21.82	Endosulfan I	4.457	28610170	23.554	Endosulfan I
4.648	15160410	46.235	4,4'-DDE	4.557	61843860	48.737	4,4'-DDE
4.886	15789190	43.716	Dieldrin	4.677	63518190	46.715	Dieldrin
5.063	14803990	43.769	Endrin	4.913	57059990	46.025	Endrin
4.984	95179	2.615	o,p-DDT		0		o,p-DDT
5.112	12682150	98.693	<del>ketone</del> <i>4,4'-DDT</i>	5.009	51496940	113.711	<del>ketone</del> <i>4,4'-DDT</i>
5.232	13420560	43.031	Endosulfan II	5.076	51888660	45.244	Endosulfan II
5.32	13862880	46.441	4,4'-DDT	5.239	53866530	49.259	4,4'-DDT
5.535	10940670	42.6	Endrin aldehyde	5.325	41812820	45.295	Endrin aldehyde
5.841	12327310	43.648	Endo. sulfate	5.522	51495570	47.553	Endo. sulfate
5.668	29215020	211.334	Methoxychlor	5.729	104502500	215.11	Methoxychlor
6.036	14346330	42.761	Endrin ketone	5.888	51204060	44.702	Endrin ketone
6.694	18019510	93.077	DCB	6.684	64533140	97.775	DCB

Files:

Area File: 05pest18306008.016.RAW  
 Area File: 05pest18306008B.016.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830604.cal  
 Calibration File B: 05pest1830604b.cal  
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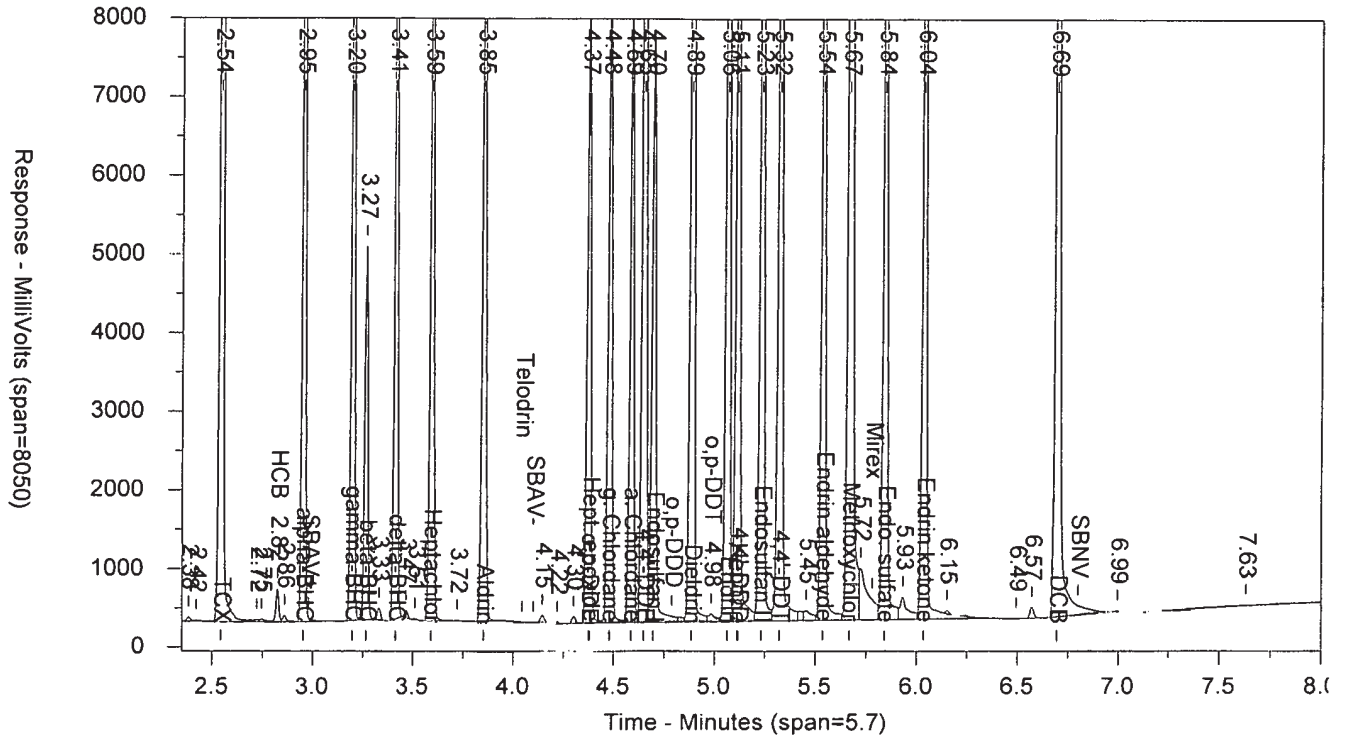
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 Andrea L. Jones  
 Chemist

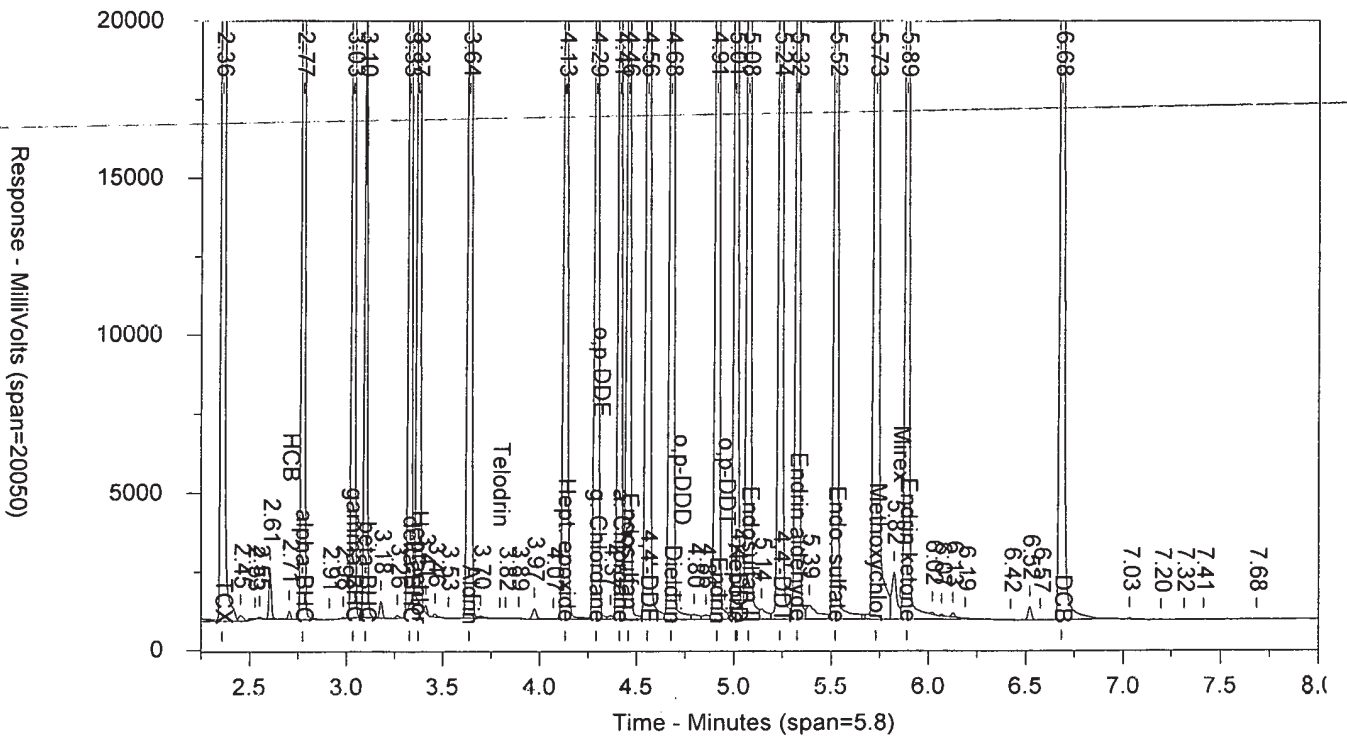
NOV 13 2018

MIXA61824B AAMIXA6AA ICAL 183159999 00177 SW-846 8081

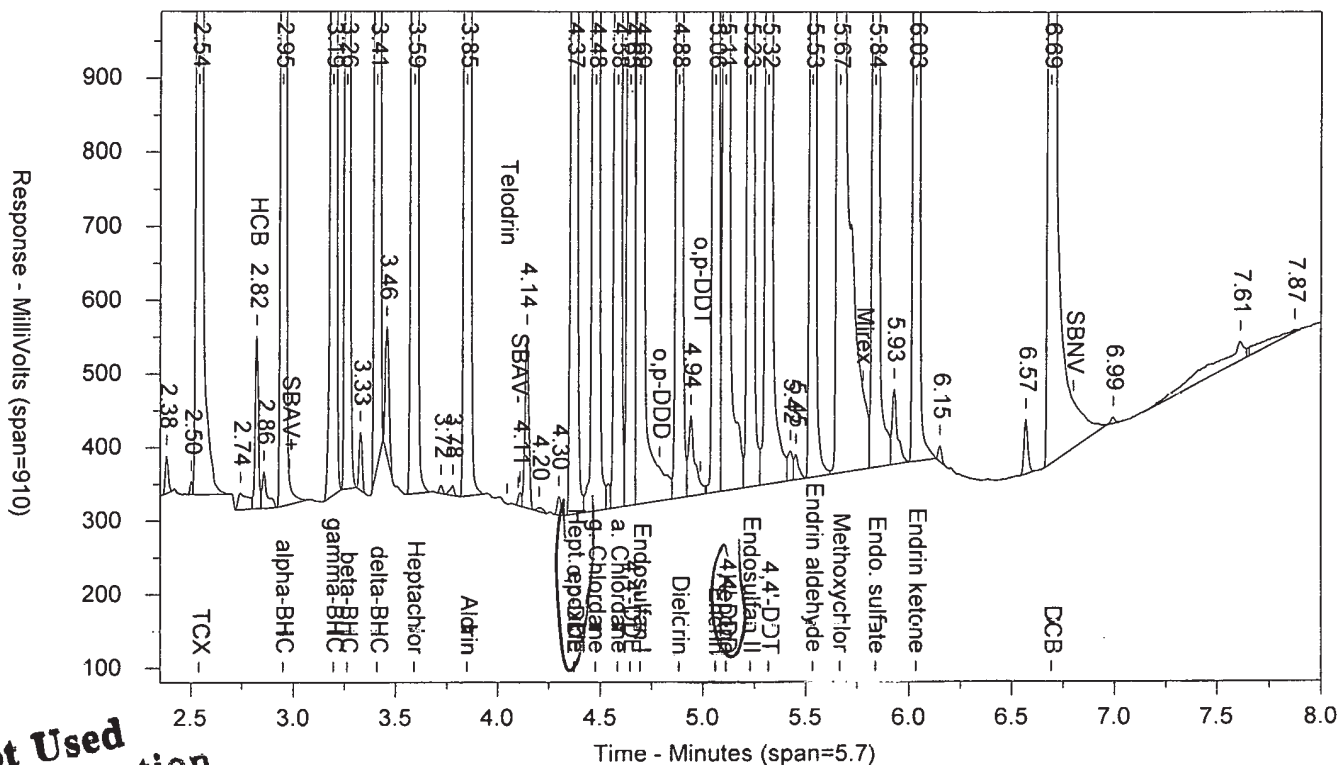
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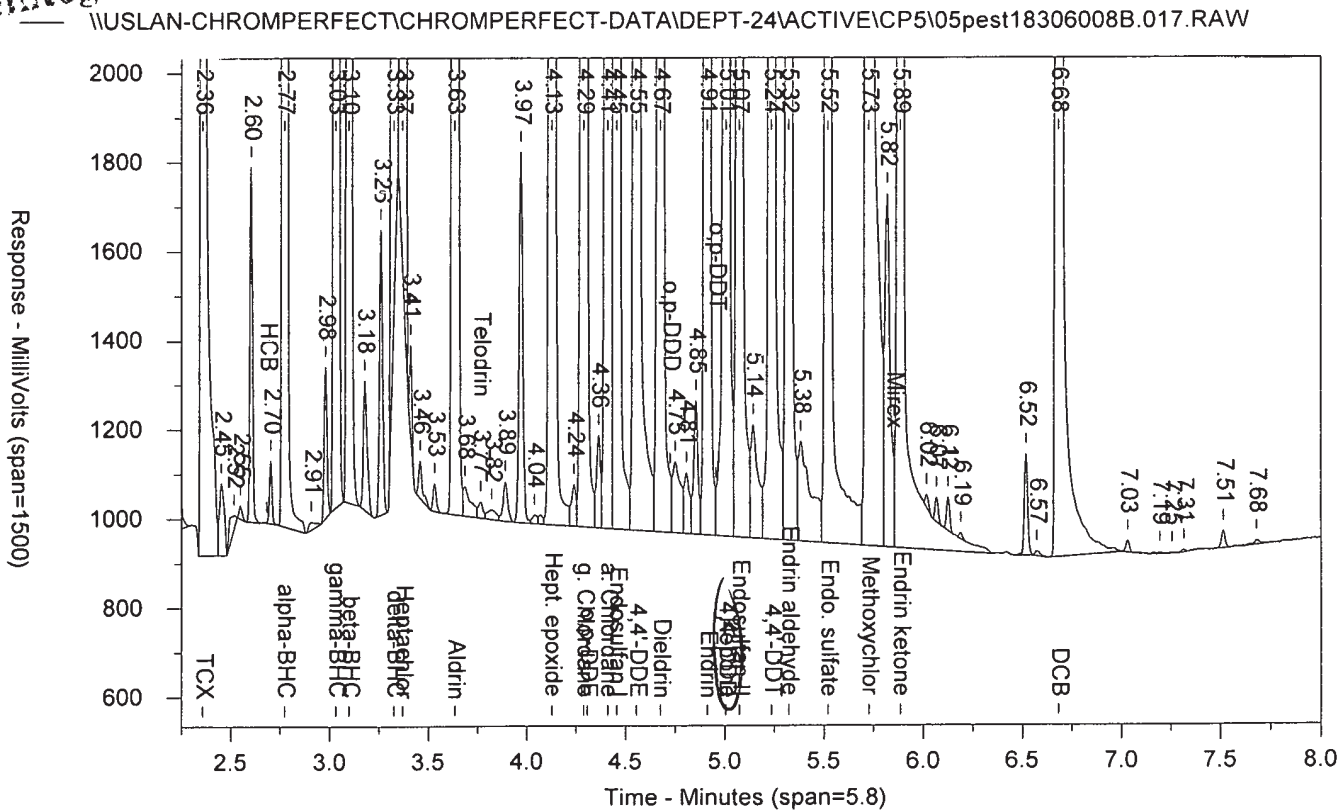
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ICMAX1824C AAICMAXAA CCAL 183159999 00177 SW-846 8081A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.017.RAW



Not Used  
See Reintegration



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICMAX1824C AAICMAXAA CCAL 183159999 00177 SW-846 8081A  
 Injected On: 11/12/2018 9:59:46 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.539	18920550	43.325	TCX	2.357	85508490	43.064	TCX
2.95	13520920	21.602	alpha-BHC	2.773	67029580	21.078	alpha-BHC
2.822	235472	.559	HCB		0		HCB
3.195	11414920	21.464	gamma-BHC	3.032	54005450	20.81	gamma-BHC
3.262	4719777	19.908	beta-BHC	3.097	20412550	21.52	beta-BHC
3.41	10738010	22.048	delta-BHC	3.325	49773200	20.843	delta-BHC
3.59	9382549	20.813	Heptachlor	3.37	41143810	22.803	Heptachlor
3.849	8686984	20.857	Aldrin	3.634	37770440	19.853	Aldrin
	0		Telodrin	3.766	36810	.051	Telodrin
	0		Hept. epoxide	4.128	28630900	20.753	Hept. epoxide
4.477	8084971	21.337	g. Chlordane	4.289	32977120	22.769	g. Chlordane
4.371	7302049	39.247	o,p-DDE <i>heptepox</i>		0		o,p-DDE
4.584	7837154	20.756	a. Chlordane	4.41	32099510	22.349	a. Chlordane
4.694	7244851	20.476	Endosulfan I	4.455	28084540	21.918	Endosulfan I
4.646	7409084	21.887	4,4'-DDE	4.555	29681110	20.55	4,4'-DDE
4.883	7653952	20.489	Dieldrin	4.675	29909670	20.998	Dieldrin
5.061	7783275	22.122	Endrin	4.911	30144880	23.162	Endrin
5.11	6233963	44.707	Kepona <i>4,4-DDD</i>	5.007	24653780	54.658	Kepona <i>4,4-DDD</i>
5.229	6812482	21.016	Endosulfan II	5.073	26261840	21.877	Endosulfan II
5.318	6952350	22.242	4,4'-DDT	5.236	26270410	22.713	4,4'-DDT
5.533	5550638	20.812	Endrin aldehyde	5.322	20855640	21.552	Endrin aldehyde
5.839	6014153	20.434	Endo. sulfate	5.519	24501990	21.452	Endo. sulfate
5.666	14179860	98.697	Methoxychlor	5.726	52132550	103.336	Methoxychlor
6.033	6932111	19.845	Endrin ketone	5.886	24671270	20.522	Endrin ketone
6.692	9539321	43.475	DCB	6.681	33562780	43.26	DCB

Files:

Area File: 05pest18306008.017.RAW  
 Area File: 05pest18306008B.017.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830604.cal  
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 Format A: pestD5.FMTA  
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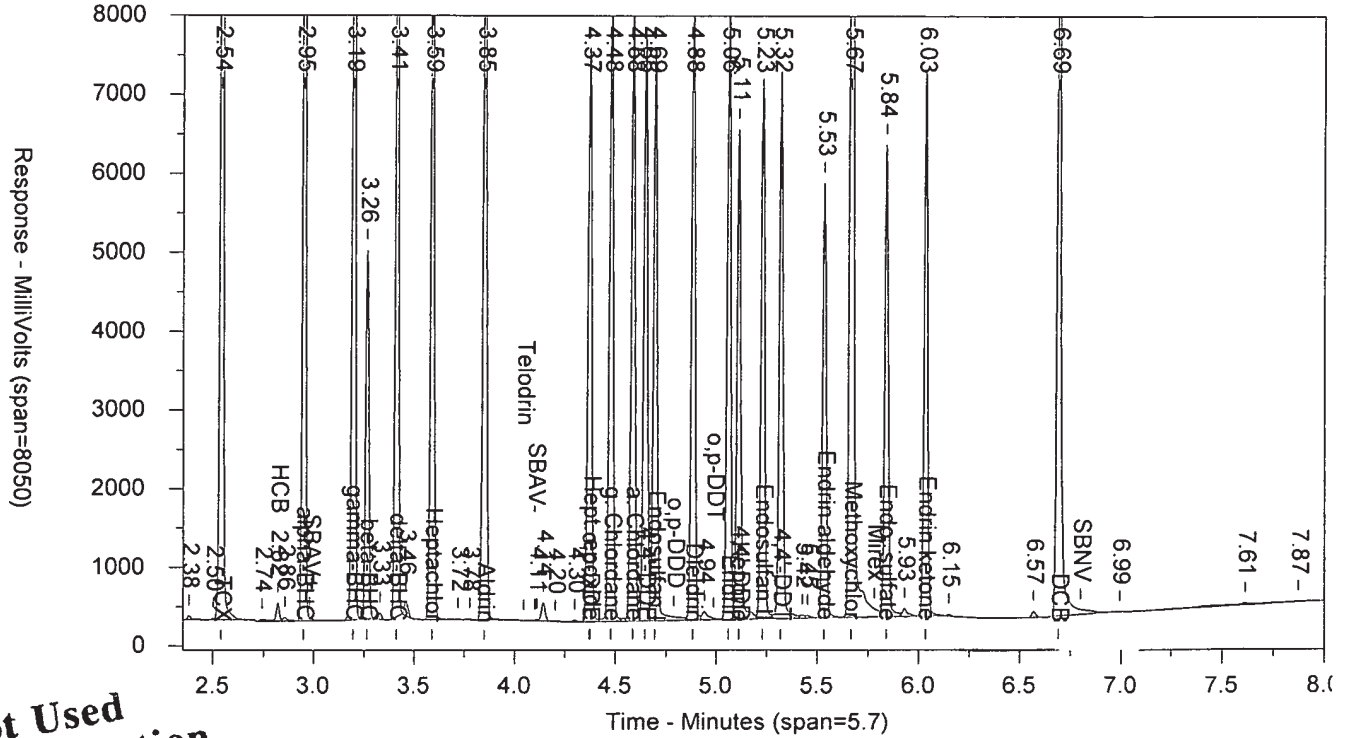
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 Chemist

NOV 13 2018

**Not Used  
 See Reintegration**

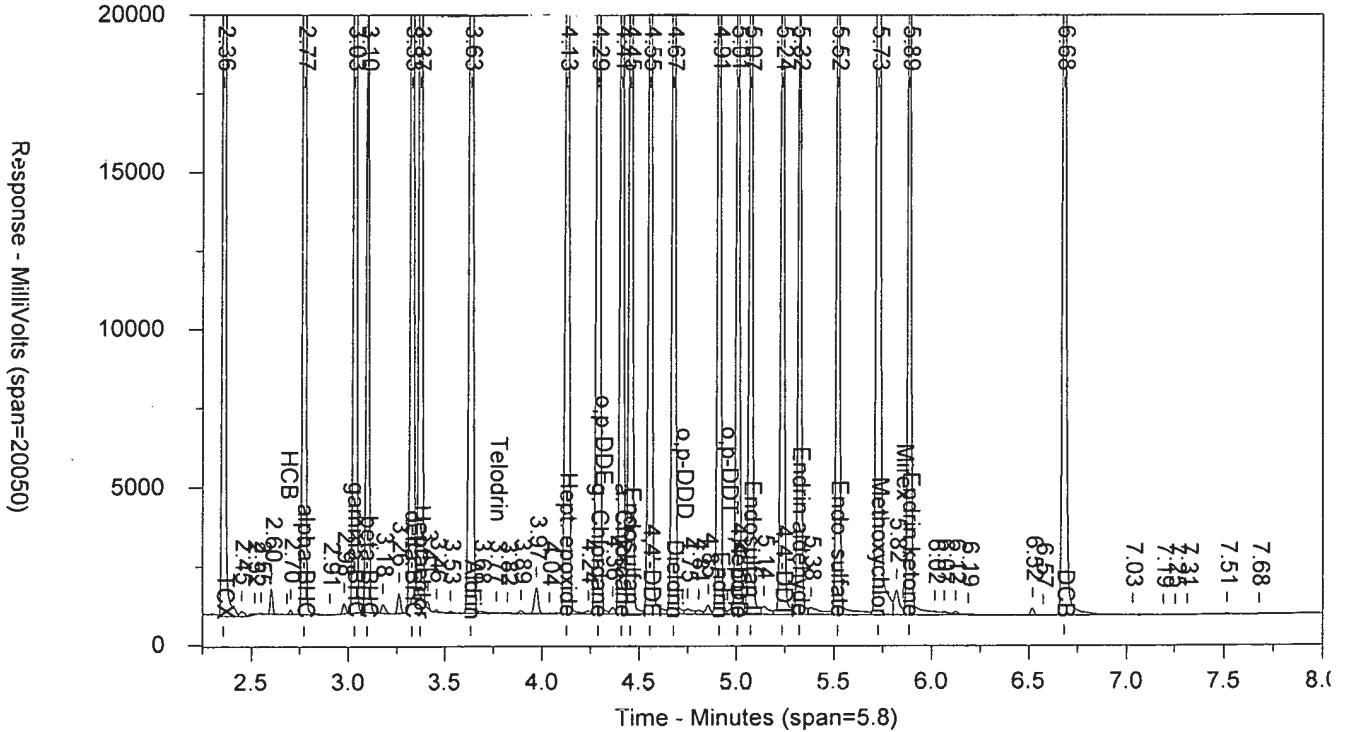
ICMAX1824C AAICMAXAA CCAL 183159999 00177 SW-846 801

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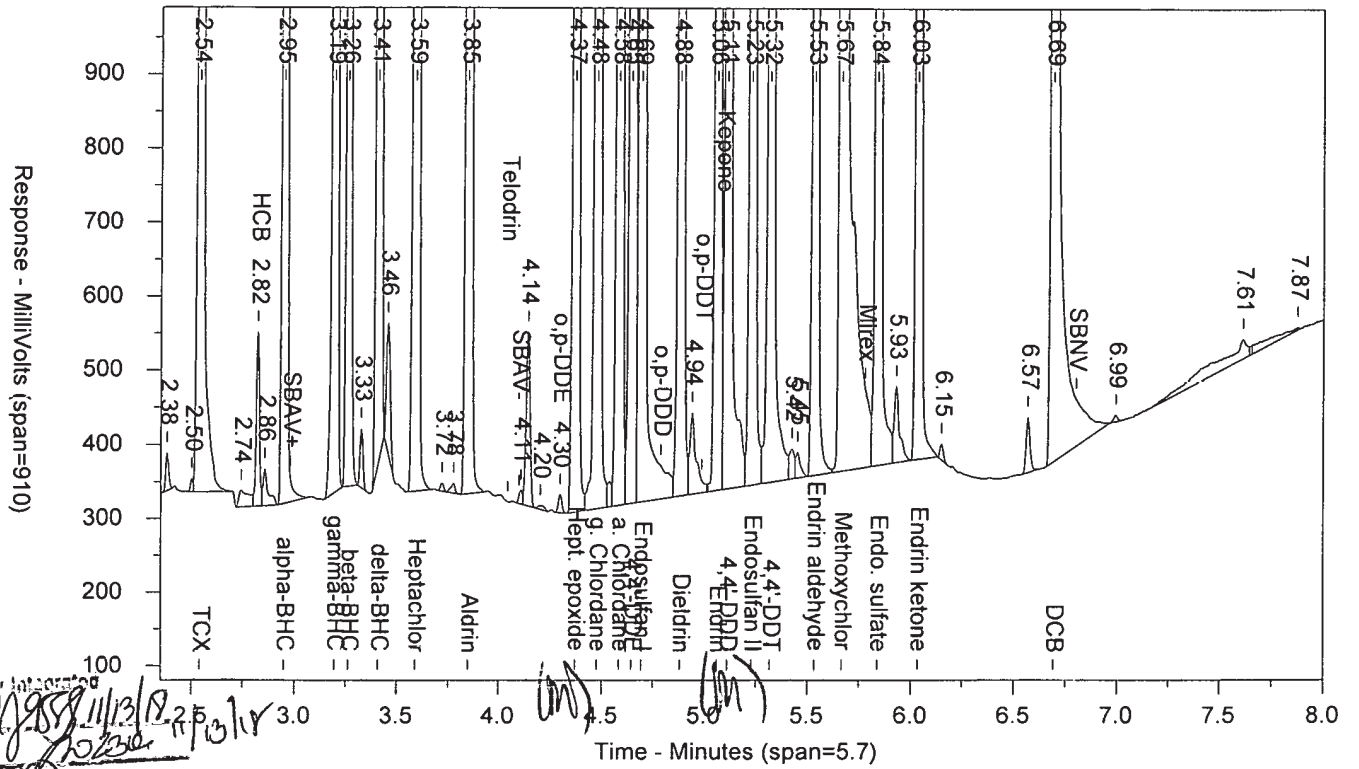


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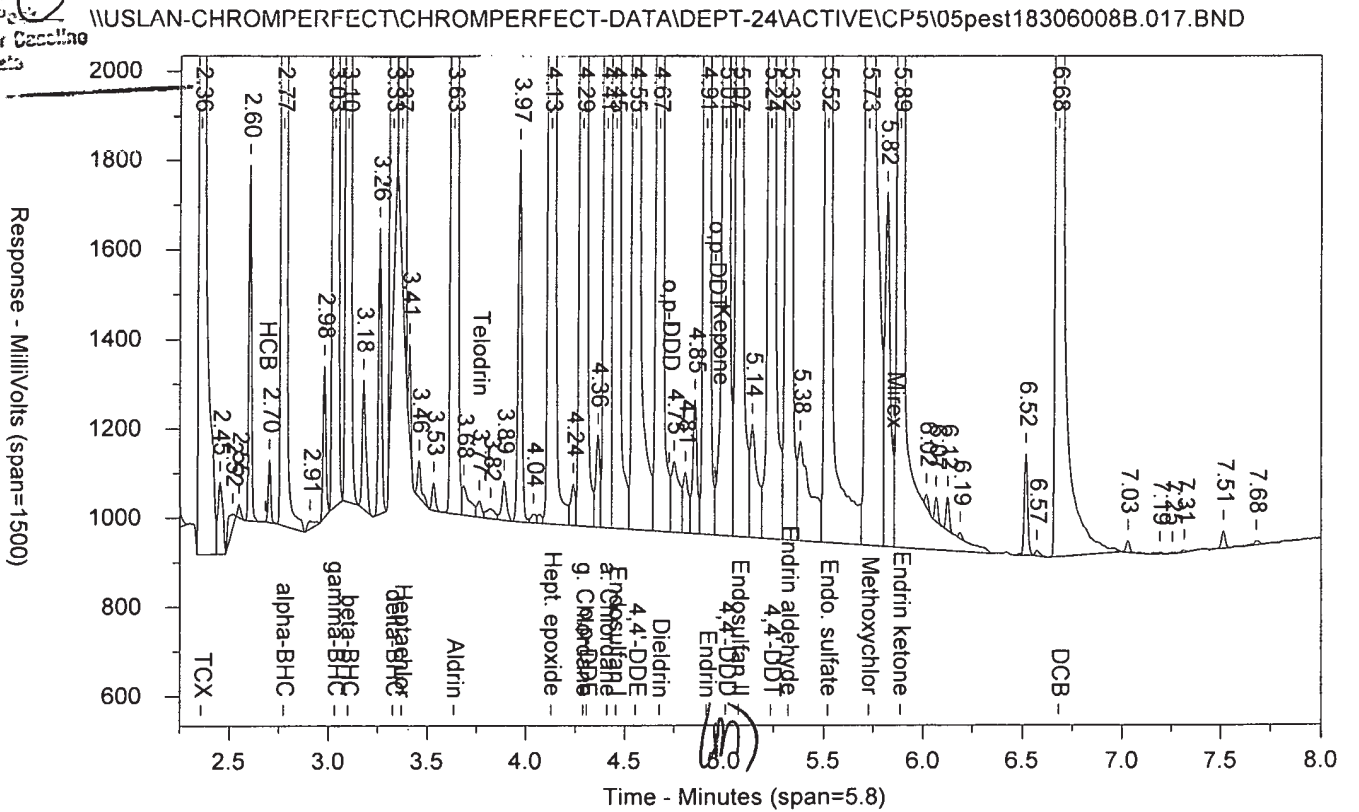
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ICMAX1824C AAICMAXAA CCAL 183159999 00177 SW-846 8081A  
\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306008.017.BND



M = Microinjector Integrated  
Analyst: *[Signature]*  
Approved by: *[Signature]*  
Circle Reason: 1 2 3 4  
1 = Missed Peak  
2 = Missed Peak  
3 = RT Update  
4 = Other





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICMAX1824C      AAICMAXAA      CCAL 1831599999      00177      SW-846 8081A  
 Injected On: 11/12/2018 9:59:46 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

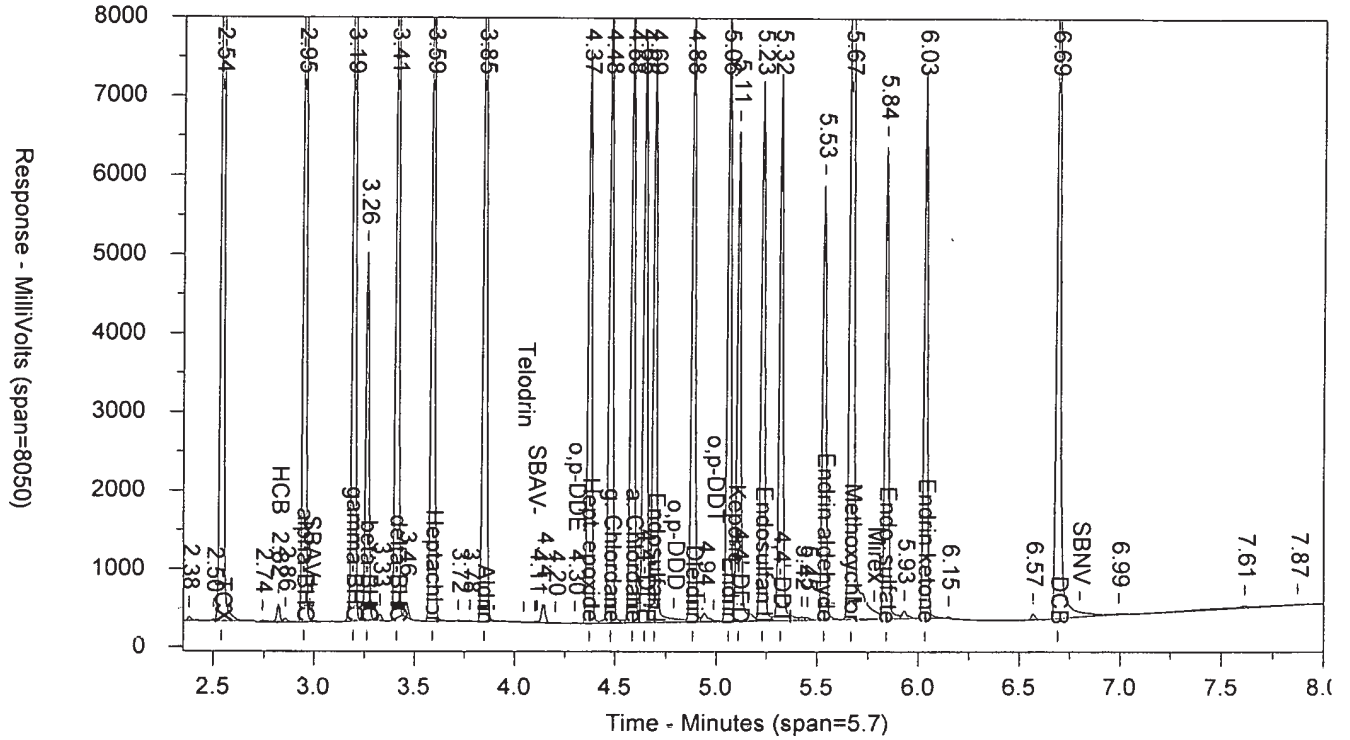
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.539	18920550	43.325	TCX	2.357	85508490	43.064	TCX
2.95	13520920	21.602	alpha-BHC	2.773	67029580	21.078	alpha-BHC
2.822	235472	.559	HCB		0		HCB
3.195	11414920	21.464	gamma-BHC	3.032	54005450	20.81	gamma-BHC
3.262	4719777	19.908	beta-BHC	3.097	20412550	21.52	beta-BHC
3.41	10738010	22.048	delta-BHC	3.325	49773200	20.843	delta-BHC
3.59	9382549	20.813	Heptachlor	3.37	41143810	22.803	Heptachlor
3.849	8686984	20.857	Aldrin	3.634	37770440	19.853	Aldrin
	0		Telodrin	3.766	36810	.051	Telodrin
4.371	7302049	19.585	Hept. epoxide	4.128	28630900	20.753	Hept. epoxide
4.477	8084971	21.337	g. Chlordane	4.289	32977120	22.769	g. Chlordane
4.299	25266	.136	o,p-DDE		0		o,p-DDE
4.584	7837154	20.756	a. Chlordane	4.41	32099510	22.349	a. Chlordane
4.694	7244851	20.476	Endosulfan I	4.455	28084540	21.918	Endosulfan I
4.646	7409084	21.887	4,4'-DDE	4.555	29681110	20.55	4,4'-DDE
4.883	7653952	20.489	Dieldrin	4.675	29909670	20.998	Dieldrin
5.061	7783275	22.122	Endrin	4.911	30144880	23.162	Endrin
5.11	6233963	21.875	4,4'-DDD	5.007	24653780	22.335	4,4'-DDD
5.229	6812482	21.016	Endosulfan II	5.073	26261840	21.877	Endosulfan II
5.318	6952350	22.242	4,4'-DDT	5.236	26270410	22.713	4,4'-DDT
5.533	5550638	20.812	Endrin aldehyde	5.322	20855640	21.552	Endrin aldehyde
5.839	6014153	20.434	Endo. sulfate	5.519	24501990	21.452	Endo. sulfate
5.666	14170860	90.097	Methoxychlor	5.726	52132550	103.336	Methoxychlor
6.033	6932111	19.845	Endrin ketone	5.886	24671270	20.522	Endrin ketone
6.692	9539321	43.475	DCB	6.681	33562780	43.26	DCB

Files:

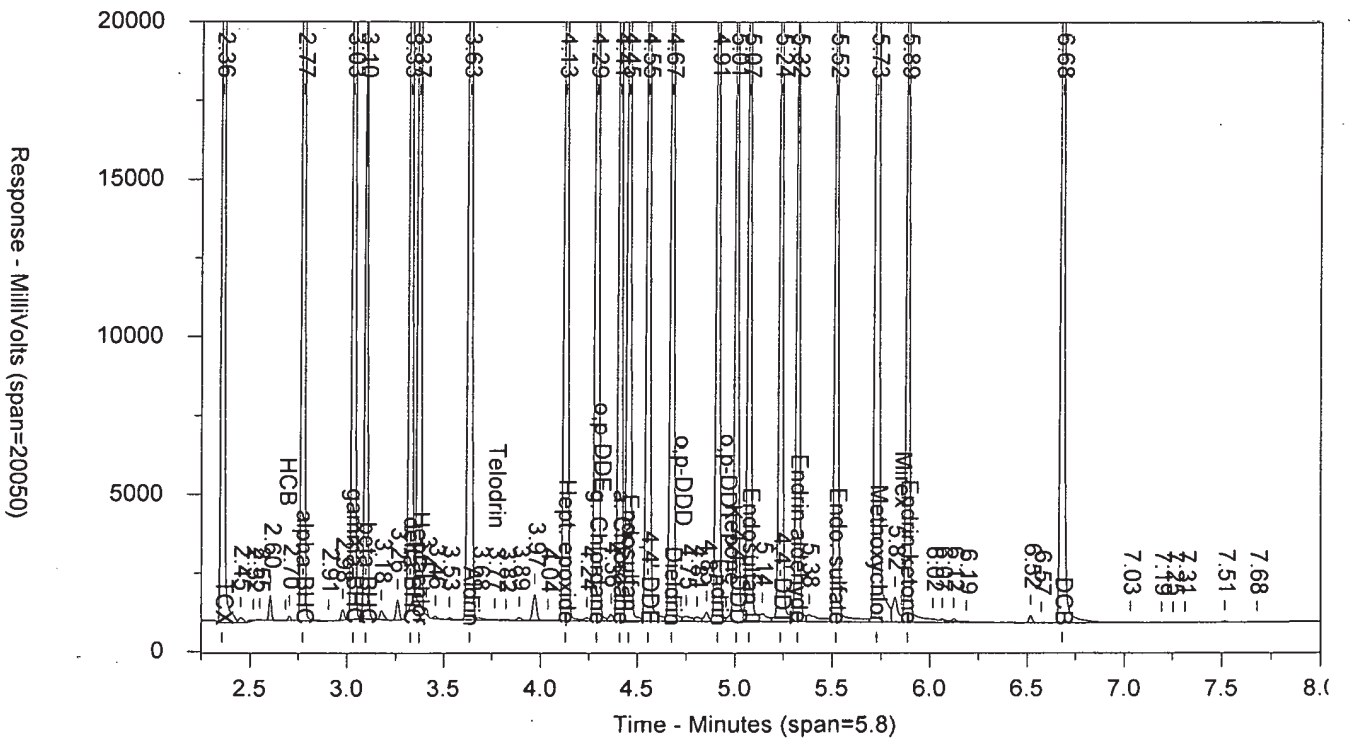
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ICMAX1824C AAICMAXAA CCAL 183159999 00177 SW-846 80:

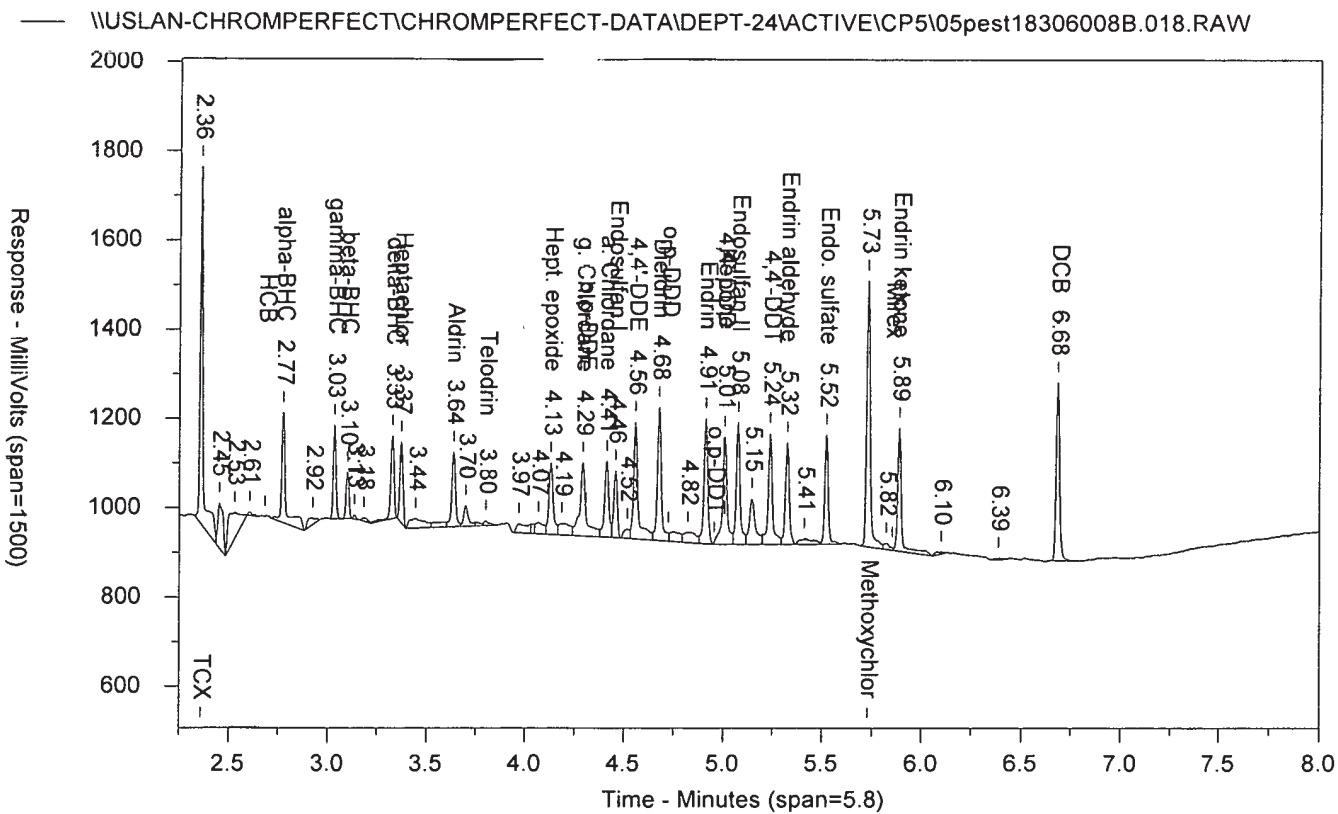
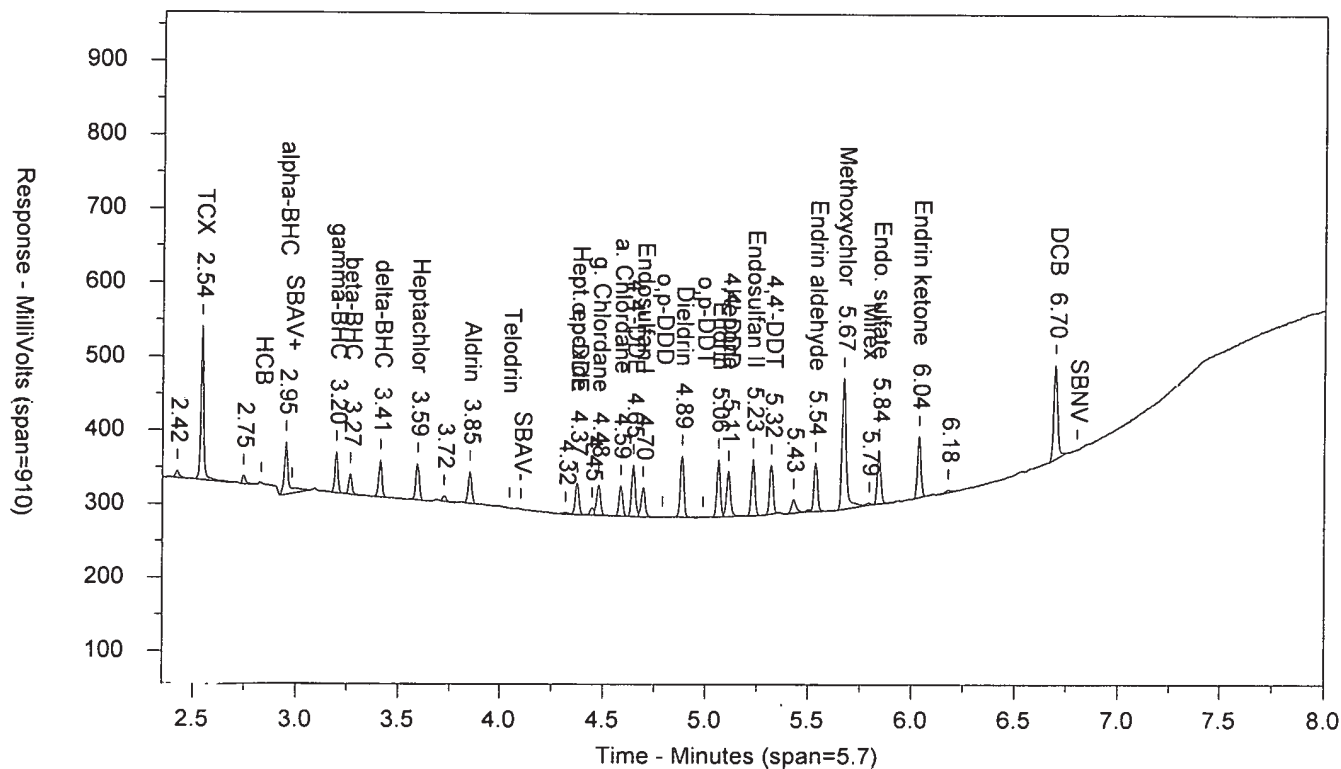
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MDLAX1824D AAMD LAXAA ICAL 1831599999 00177 SW-846 8081A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MDLAX1824D AAMD LAXAA ICAL 1831599999 00177 SW-846 8081A  
 Injected On: 11/12/2018 10:12:41 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	208219	.477	TCX	2.359	800150	.403	TCX
2.952	71470	.114	alpha-BHC	2.774	249047	.666	alpha-BHC
3.197	55746	.105	gamma-BHC	3.034	211489	.629	gamma-BHC
3.265	28210	.119	beta-BHC	3.1	103668	.109	beta-BHC
3.412	50447	.104	delta-BHC	3.327	186035	.721	delta-BHC
3.592	49586	.11	Heptachlor	3.372	182176	.101	Heptachlor
3.852	43424	.104	Aldrin	3.636	168290	.599	Aldrin
	0		Telodrin	3.803	10281	.014	Telodrin
	0		Hept. epoxide	4.131	161394	.117	Hept. epoxide
4.479	41877	.111	g. Chlordane	4.291	164875	.114	g. Chlordane
4.374	43074	.232	o,p-DDE <i>neptapx</i>		0		o,p-DDE
4.587	41330	.109	a. Chlordane	4.413	171989	.12	a. Chlordane
4.696	40499	.114	Endosulfan I	4.457	150843	.118	Endosulfan I
4.648	70447	.208	4,4'-DDE	4.557	262918	1.266	4,4'-DDE
4.885	83825	.224	Dieldrin	4.677	299509	.21	Dieldrin
5.063	78134	.222	Endrin	4.913	281675	.216	Endrin
5.112	61812	1.629	Kepon <i>4,4-DDD</i>	5.009	241421	3.994	Kepon <i>4,4-DDD</i>
5.232	77232	.238	Endosulfan II	5.076	274321	.229	Endosulfan II
5.32	66716	.213	4,4'-DDT	5.239	248871	.215	4,4'-DDT
5.535	66559	.25	Endrin aldehyde	5.325	228131	.236	Endrin aldehyde
5.842	73701	.25	Endo. sulfate	5.522	245236	.215	Endo. sulfate
5.669	178727	1.244	Methoxychlor	5.729	599802	1.189	Methoxychlor
5.794	3241	.017	Mirex		0		Mirex
6.036	83314	.239	Endrin ketone	5.888	276906	.23	Endrin ketone
6.696	127892	.553	DCB	6.684	401581	.518	DCB

Files:

Area File: 05pest18306008.018.RAW  
 Area File: 05pest18306008B.018.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830604.cal  
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 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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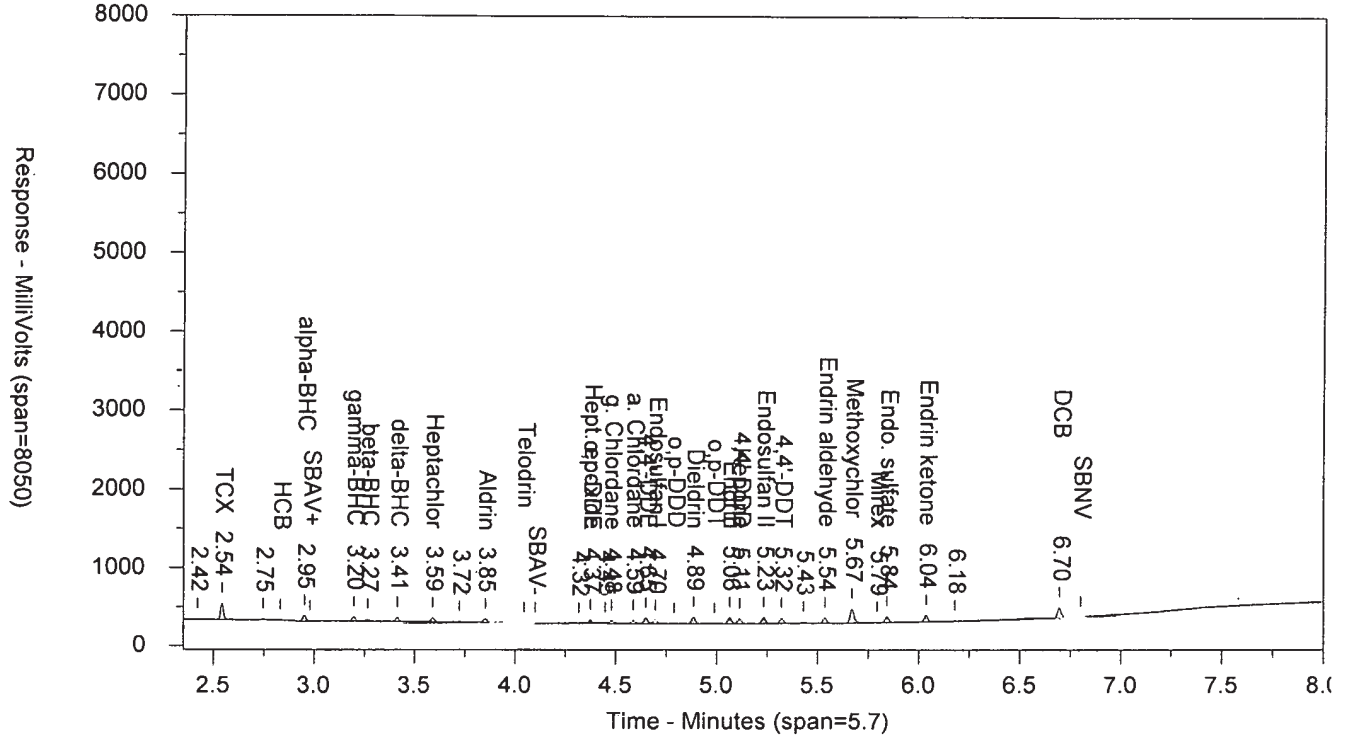
*Ⓟ close eluters*

*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

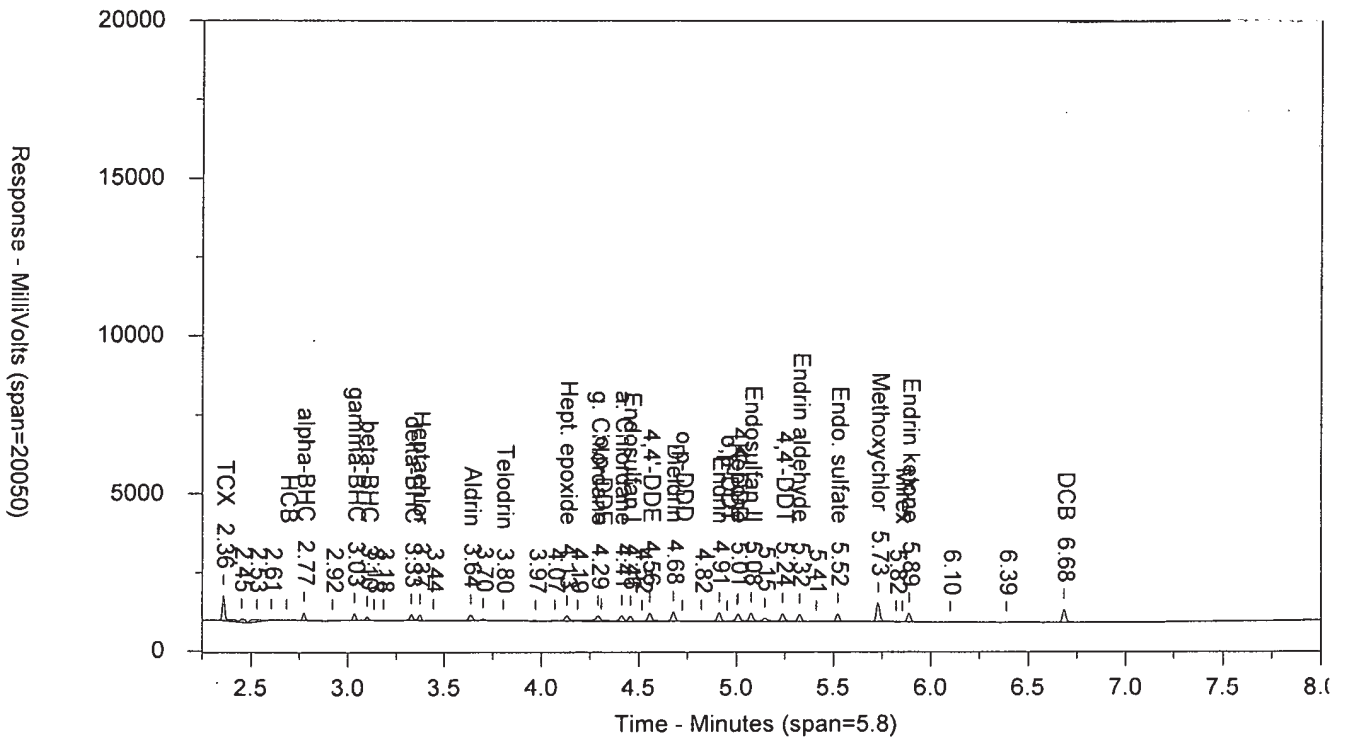
NOV 13 2018

MDLAX1824D AAMD LAXAA ICAL 183159999 00177 SW-846 80

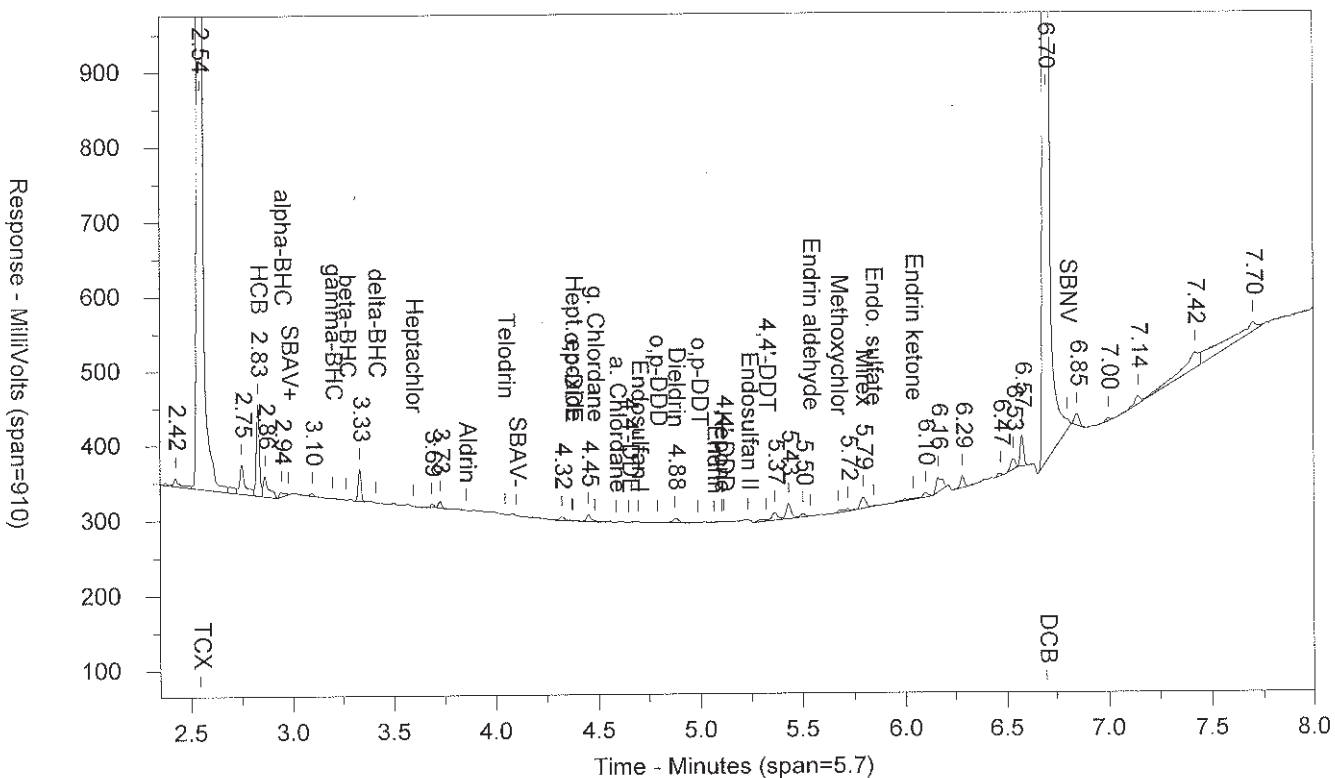
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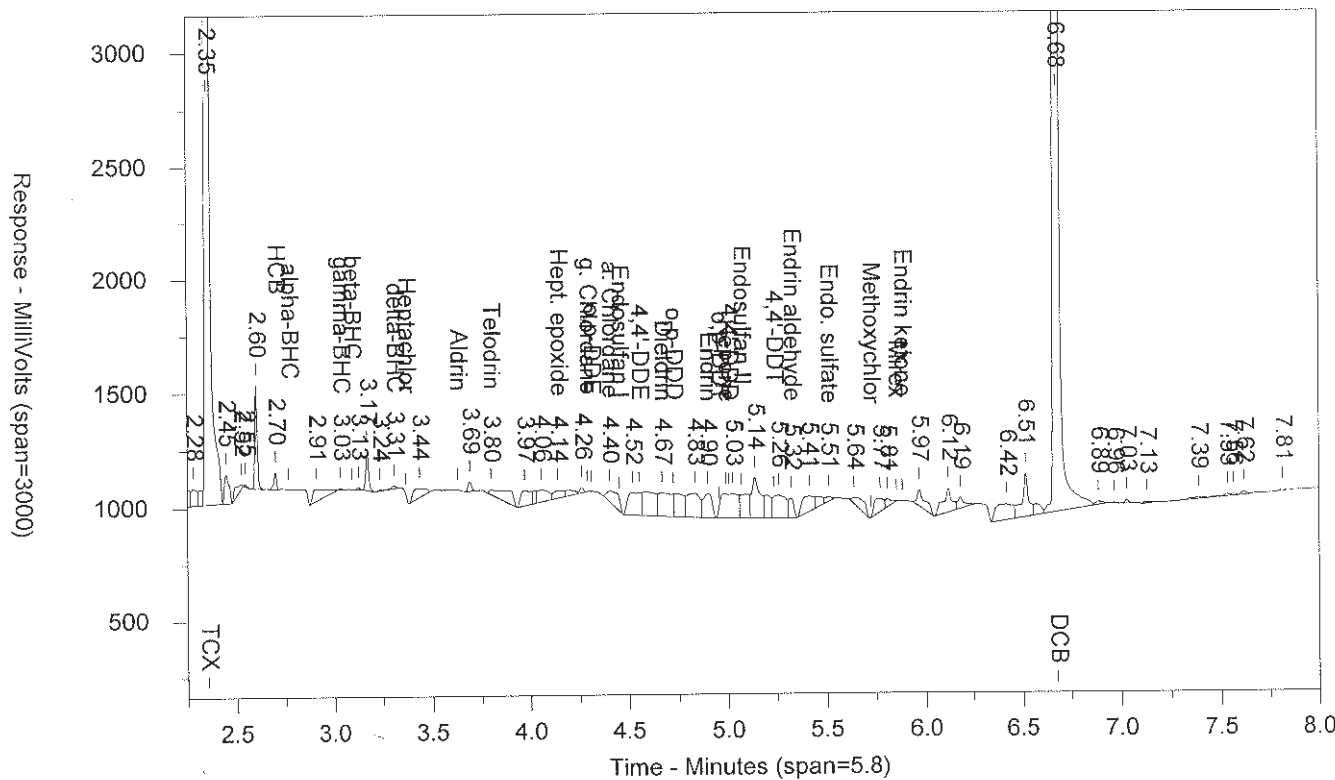
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IBLKX1824B    AAPIBLKAA    PIBLK1831799999    00177    SW-846 8081A  
 \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.002.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.002.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: IBLKX1824B      AAPIBLKAA      PIBLK1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 10:10:41 AM      Sample Weight: 1000  
 Instrument ID: CP5-9190      Dilution Factor: 10  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

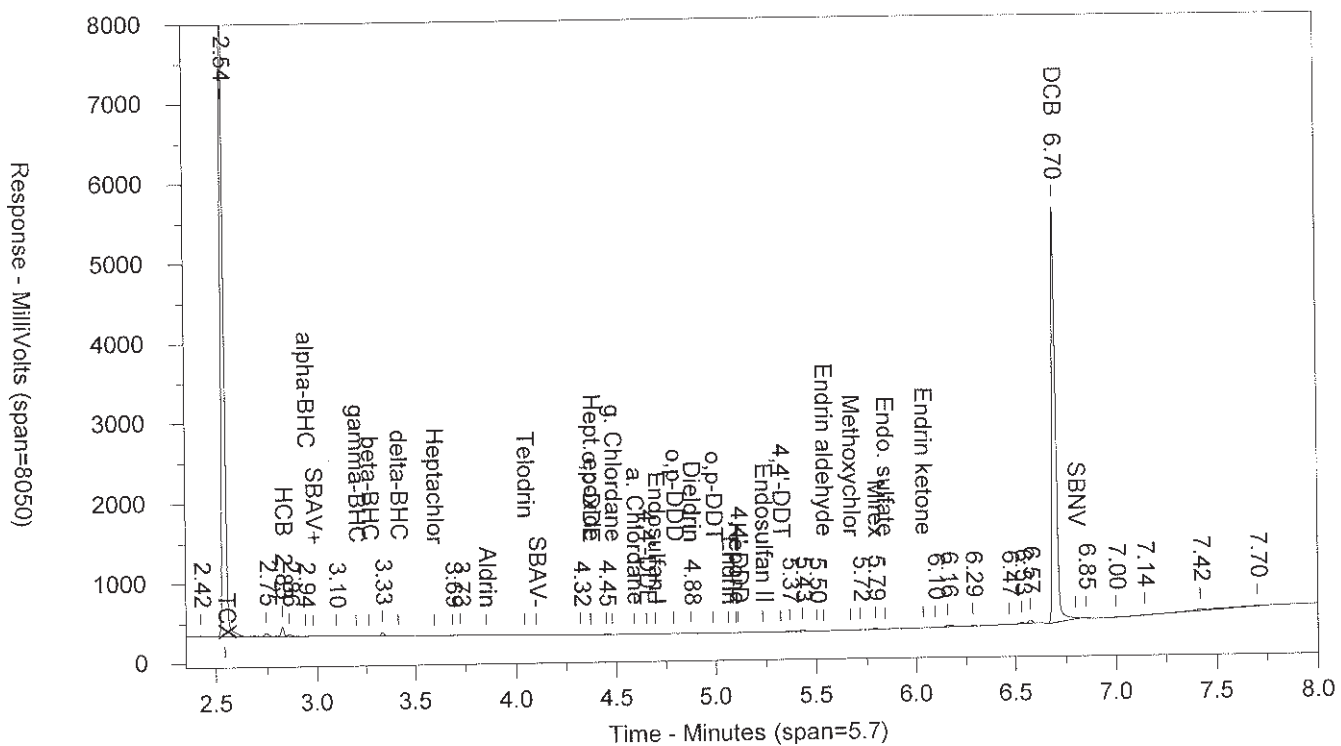
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.544	9657670	.221	TCX	2.352	51316700	.258	TCX
2.827	123541	.003	HCB	2.699	74219	.001	HCB
2.943	6325		alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.035	5205	.006	gamma-BHC
	0		delta-BHC	3.308	13738	.007	delta-BHC
	0		Telodrin	3.799	20660		Telodrin
	0		Hept. epoxide	4.14	34344		Hept. epoxide
	0		a. Chlordane	4.4	45424		a. Chlordane
4.875	6143		Dieldrin	4.667	102842	.001	Dieldrin
	0		Endrin	4.899	107206	.001	Endrin
	0		Endrin aldehyde	5.323	86892	.001	Endrin aldehyde
	0		Endo. sulfate	5.51	20719		Endo. sulfate
5.793	14493	.001	Mirex		0		Mirex
6.698	5208377	.237	DCB	6.678	19122650	.246	DCB

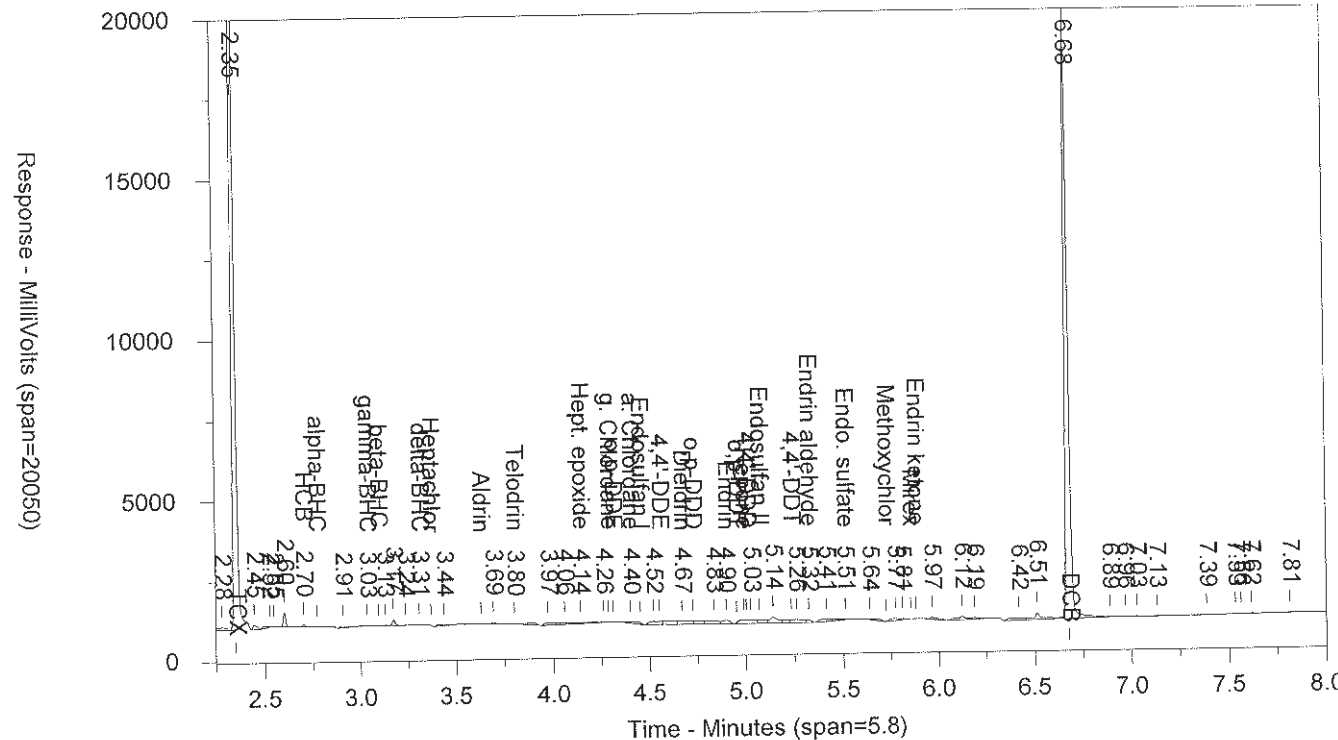
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 Area File: 05pest18306010B.002.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 10:18:42 AM  
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IBLKX1824B      AAPIBLKAA      PIBLK1831799999      00177      SW-846 8081A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.002.RAW



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EVALX1824B

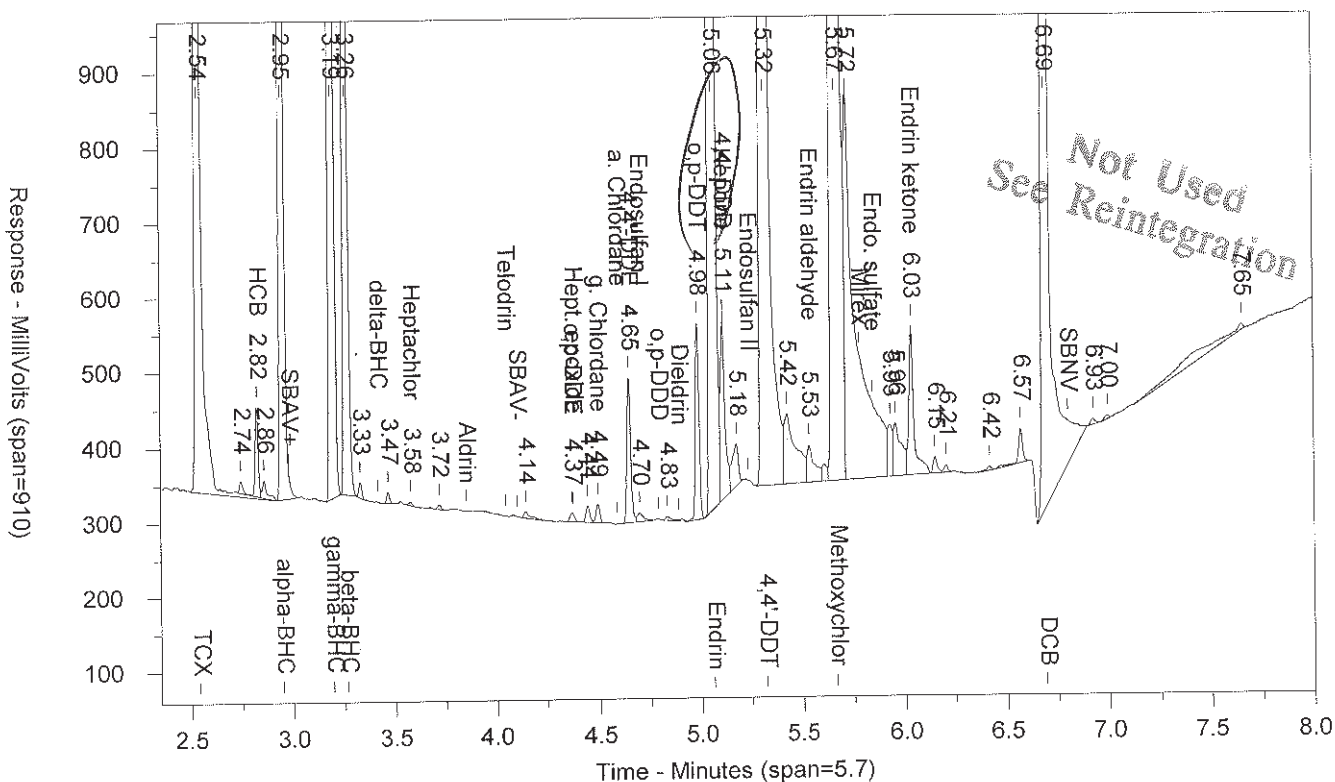
AAPEMAA

IPEM 1831799999

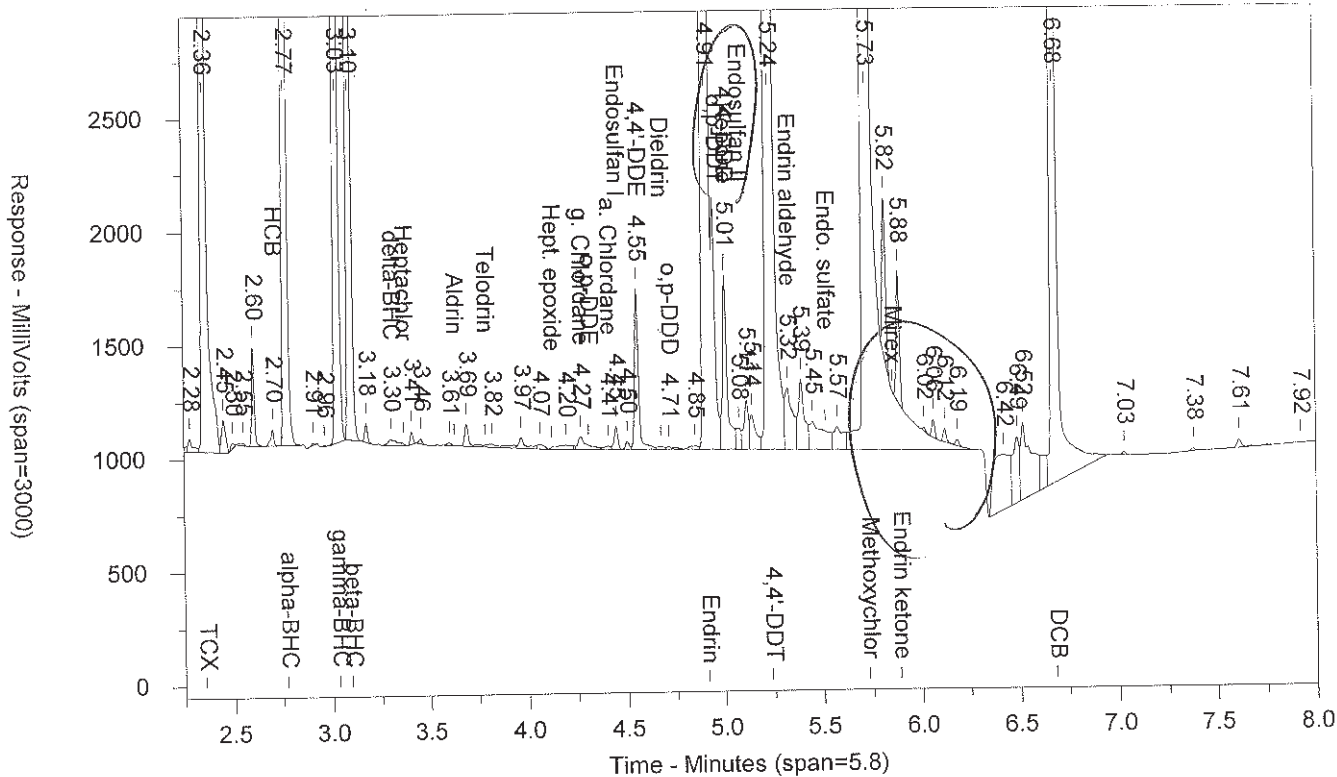
00177

SW-846 8081A

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.003.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B      AAPEMAA      IPEM 183179999      00177  
 Injected On: 11/14/2018 10:23:27 AM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Sample Weight: 1  
 Dilution Factor: 1  
 SW-846 8081A

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

*Not Used  
 See Reintegration*

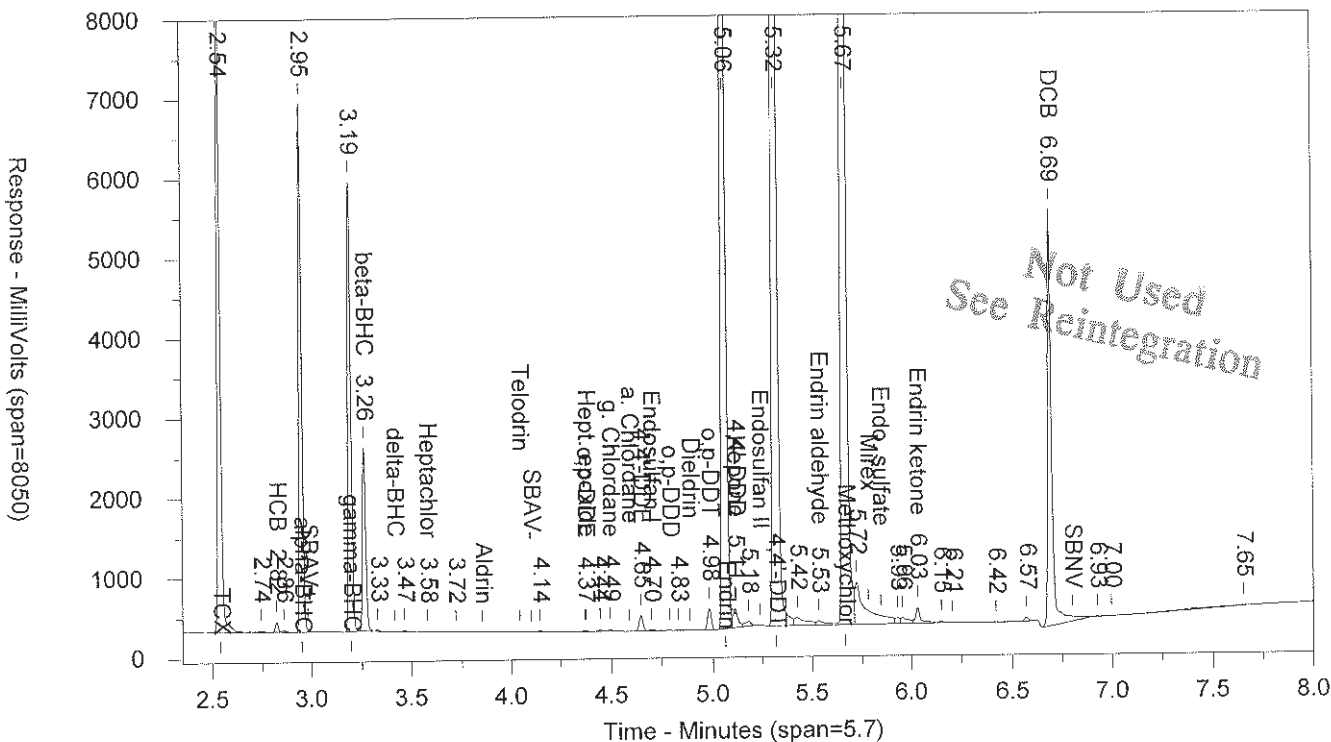
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.539	9499402	21.752	TCX	2.355	47978140	24.163	TCX
2.822	118442	.281	HCB	2.702	72164	.051	HCB
2.95	6634162	10.599	alpha-BHC	2.771	34122400	11.02	alpha-BHC
3.195	5631223	10.589	gamma-BHC	3.031	28579800	11.272	gamma-BHC
3.263	2290036	9.659	beta-BHC	3.096	10321640	10.881	beta-BHC
	0		delta-BHC	3.304	27065	.657	delta-BHC
3.577	5201	.012	Heptachlor		0		Heptachlor
4.493	24572	.065	g. Chlordane	4.267	54684	.038	g. Chlordane
4.37	12221	.066	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.405	14820	.01	a. Chlordane
4.699	11852	.033	Endosulfan I	4.447	99000	.077	Endosulfan I
4.647	192975	.57	4,4'-DDE	4.554	708945	1.558	4,4'-DDE
	0		o,p-DDD	4.713	11634	.023	o,p-DDD
5.061	18711230	53.181	Endrin	4.909	80014820	61.481	Endrin
4.983	263040	1.281	o,p-DDT		0		o,p-DDT
5.11	238187	1.531	Kepone	5.006	770976	5.014	Kepone
	0		Endosulfan II	5.075	94745	.079	Endosulfan II
5.319	33876000	108.378	4,4'-DDT	5.235	147722400	127.721	4,4'-DDT
5.533	49212	.185	Endrin aldehyde	5.322	274043	.283	Endrin aldehyde
5.666	37230250	259.135	Methoxychlor	5.726	146944000	291.269	Methoxychlor
6.033	198544	.568	Endrin ketone	5.884	580949	.483	Endrin ketone
6.692	5223540	23.792	DCB	6.68	18752460	24.17	DCB

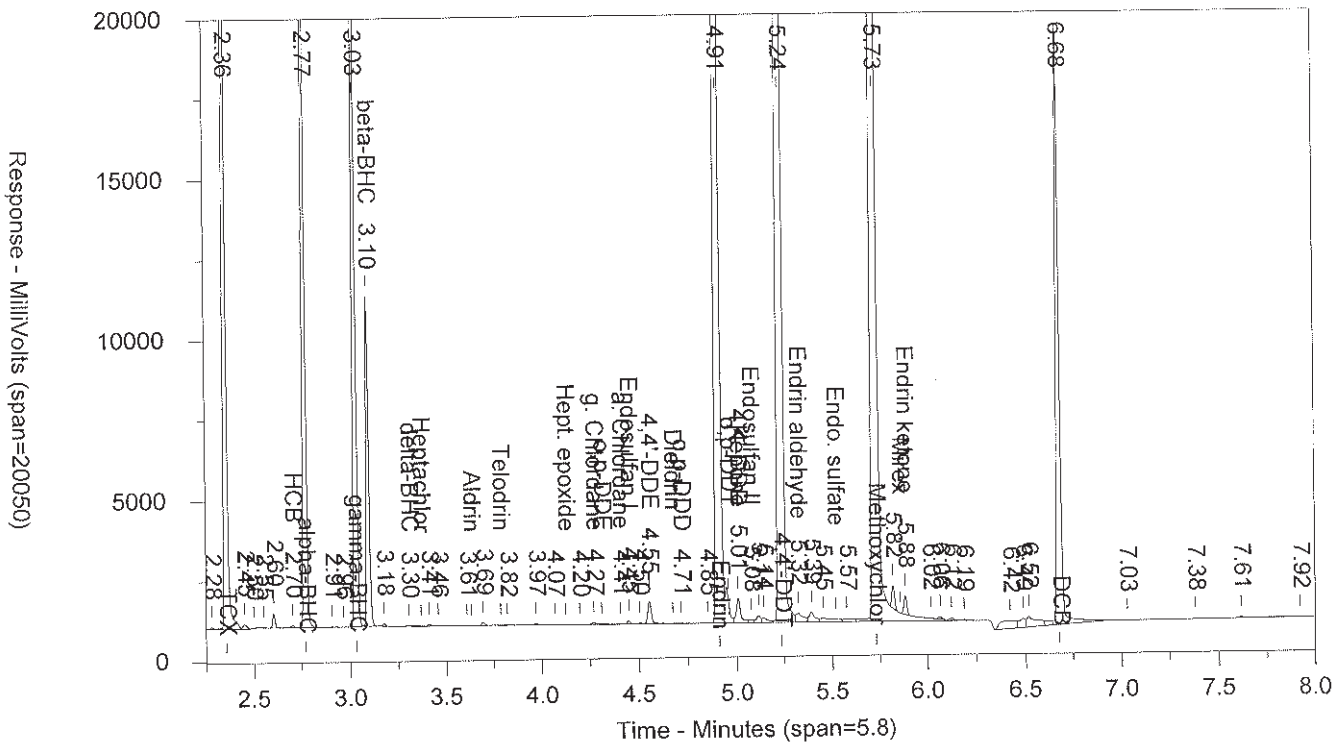
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 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 10:31:28 AM  
 File Reported On: 11/14/2018 at 5:13:07 PM

EVALX1824B AAPEMAA IPEM 1831799999 00177 SW-846 8081A

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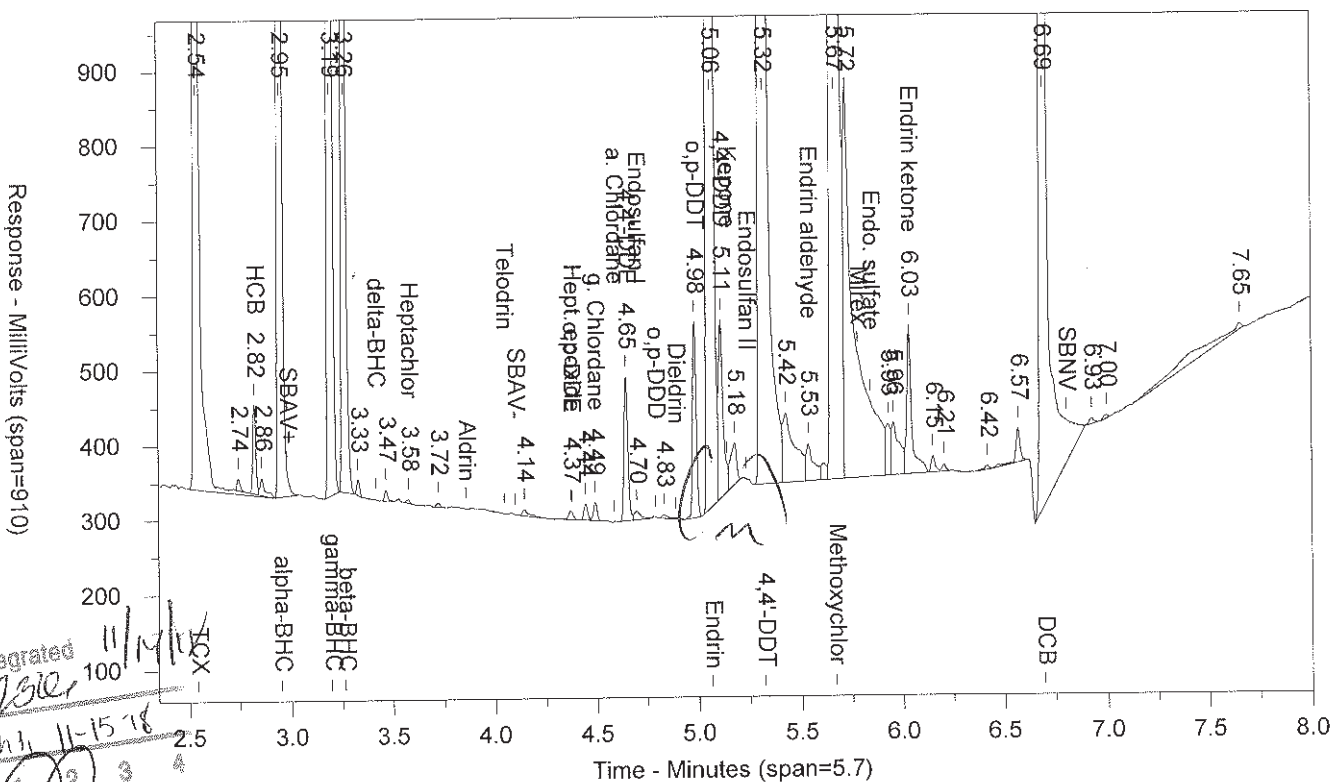


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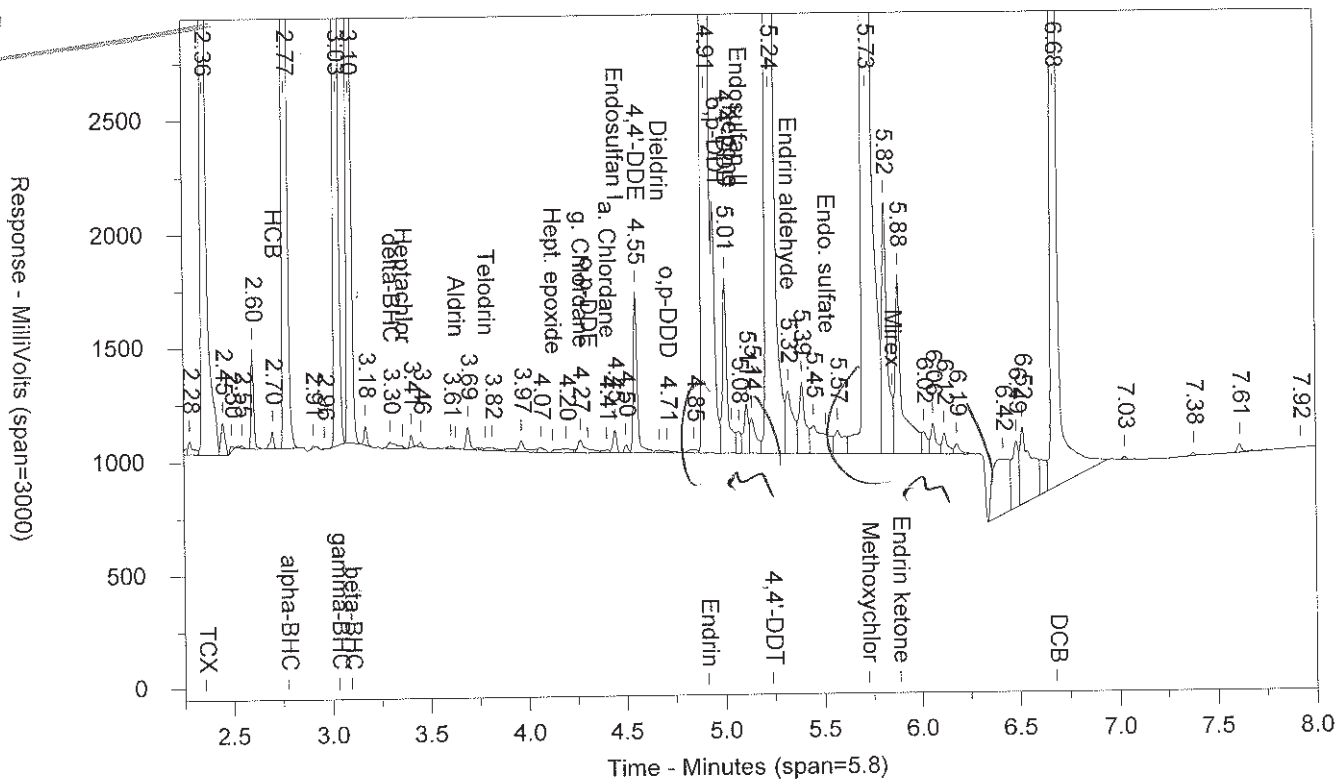
EVALX1824B AAPEMAA IPEM 183179999 00177 SW-846 8081A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.003.BND



M = Manually Integrated  
 Analyst *[Signature]*  
 Approved by *[Signature]* 11-15-18  
 Circle Reason  
 1 = Missed Peak  
 2 = Improper Baseline  
 3 = RT Update  
 4 = Other

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.003.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B      AAPEMAA      IPEM 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 10:23:27 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.539	9499402	21.752	TCX	2.355	47978140	24.163	TCX
2.822	118442	.281	HCB	2.702	72164	.051	HCB
2.95	6634162	10.599	alpha-BHC	2.771	34122400	11.02	alpha-BHC
3.195	5631223	10.589	gamma-BHC	3.031	28579800	11.272	gamma-BHC
3.263	2290036	9.659	beta-BHC	3.096	10321640	10.881	beta-BHC
	0		delta-BHC	3.304	27065	.657	delta-BHC
3.577	5201	.012	Heptachlor		0		Heptachlor
4.493	24572	.065	g. Chlordane	4.267	54684	.038	g. Chlordane
4.37	12221	.066	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.405	14820	.01	a. Chlordane
4.699	11852	.033	Endosulfan I	4.447	99000	.077	Endosulfan I
4.647	192975	.57	4,4'-DDE	4.554	708945	1.558	4,4'-DDE
	0		o,p-DDD	4.713	11634	.023	o,p-DDD
5.061	18711230	53.181	Endrin	4.909	80014820	61.481	Endrin
4.983	263040	1.281	o,p-DDT		0		o,p-DDT
5.11	238187	.836	4,4'-DDD	5.006	770976	.698	4,4'-DDD
	0		Endosulfan II	5.075	94745	.079	Endosulfan II
5.319	33876000	108.378	4,4'-DDT	5.235	147722400	127.721	4,4'-DDT
5.533	49212	.185	Endrin aldehyde	5.322	274043	.283	Endrin aldehyde
5.666	37230250	259.135	Methoxychlor	5.726	146944000	291.269	Methoxychlor
6.033	198544	.568	Endrin ketone	5.884	789701	.657	Endrin ketone
6.692	5223540	23.792	DCB	6.68	18752460	24.17	DCB

Files:

Area File: 05pest18306010.003.BND  
 Area File: 05pest18306010B.003.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 5:16:50 PM  
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KEPN11824C

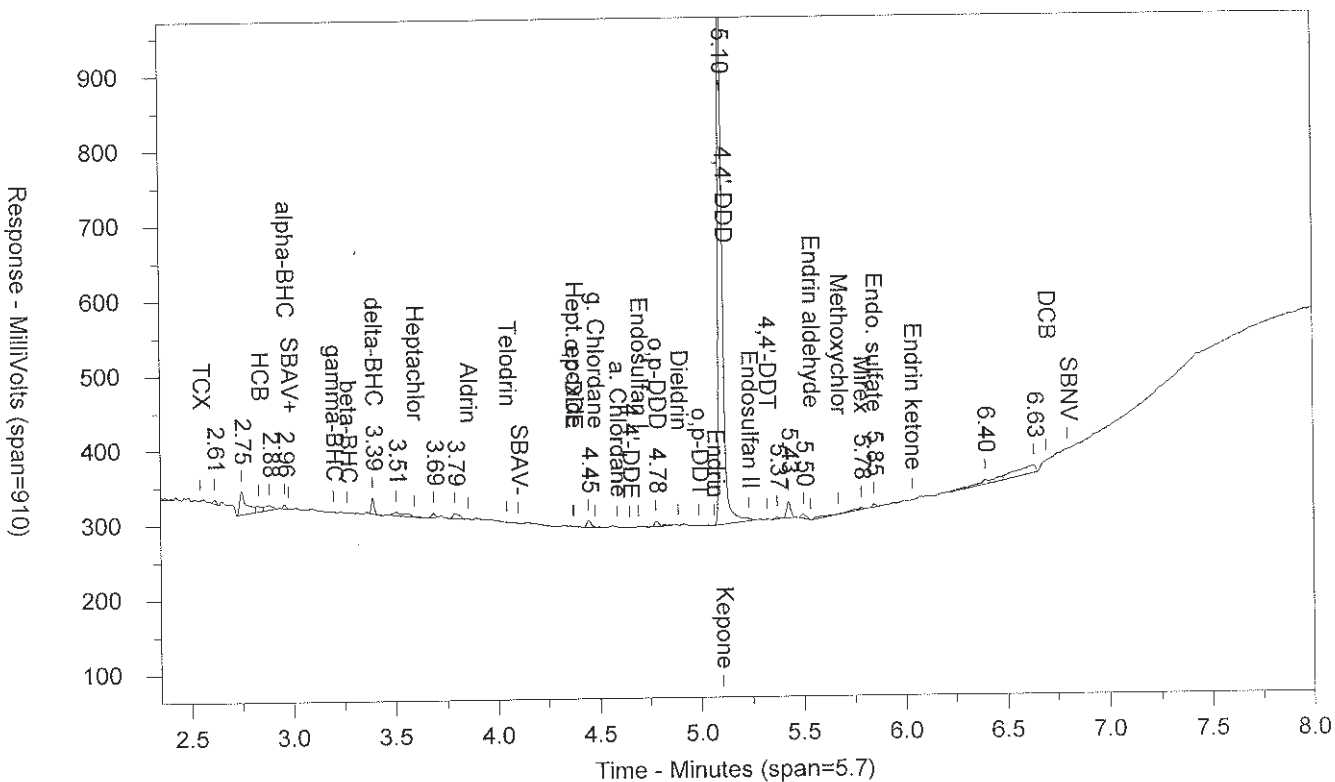
AAKEPN1AA

ICAL 1831799999

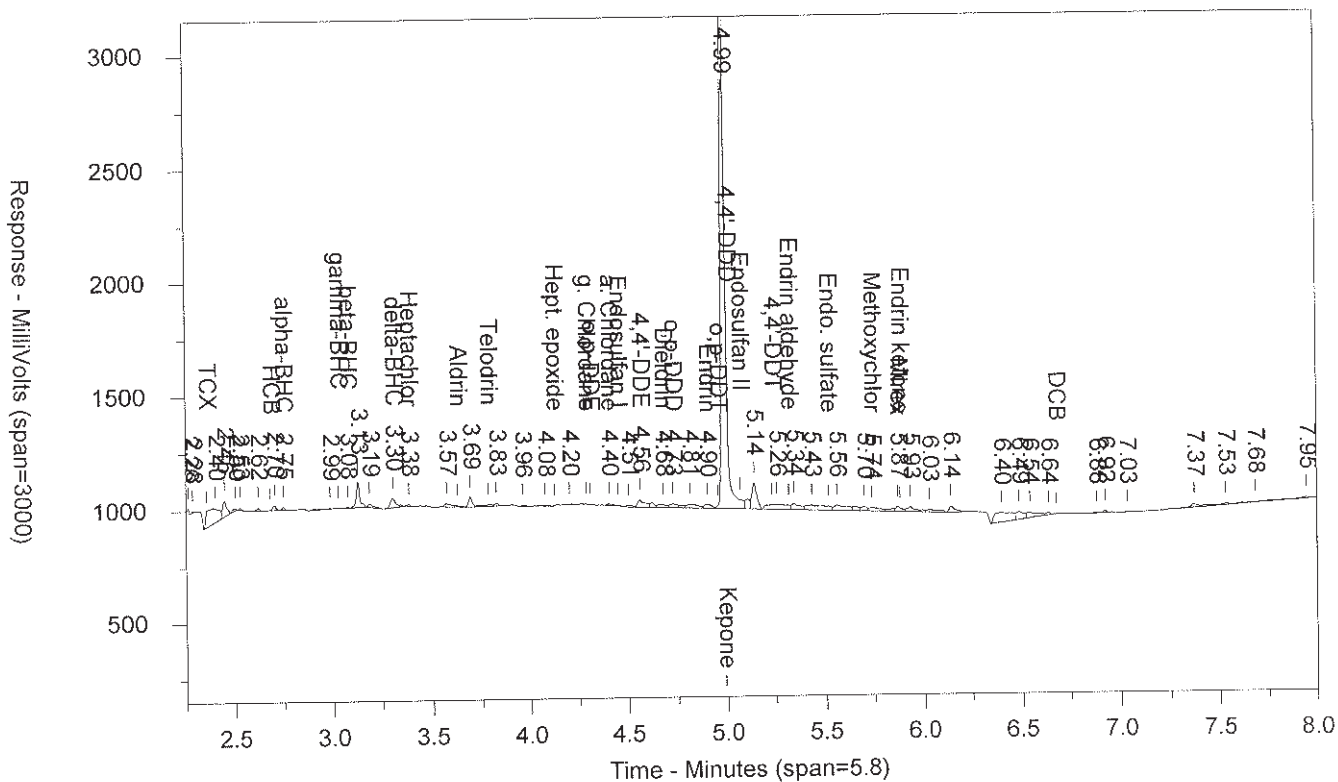
00177

SW-846 8081A

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.004.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: KEPN11824C      AAKEPN1AA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 10:36:14 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

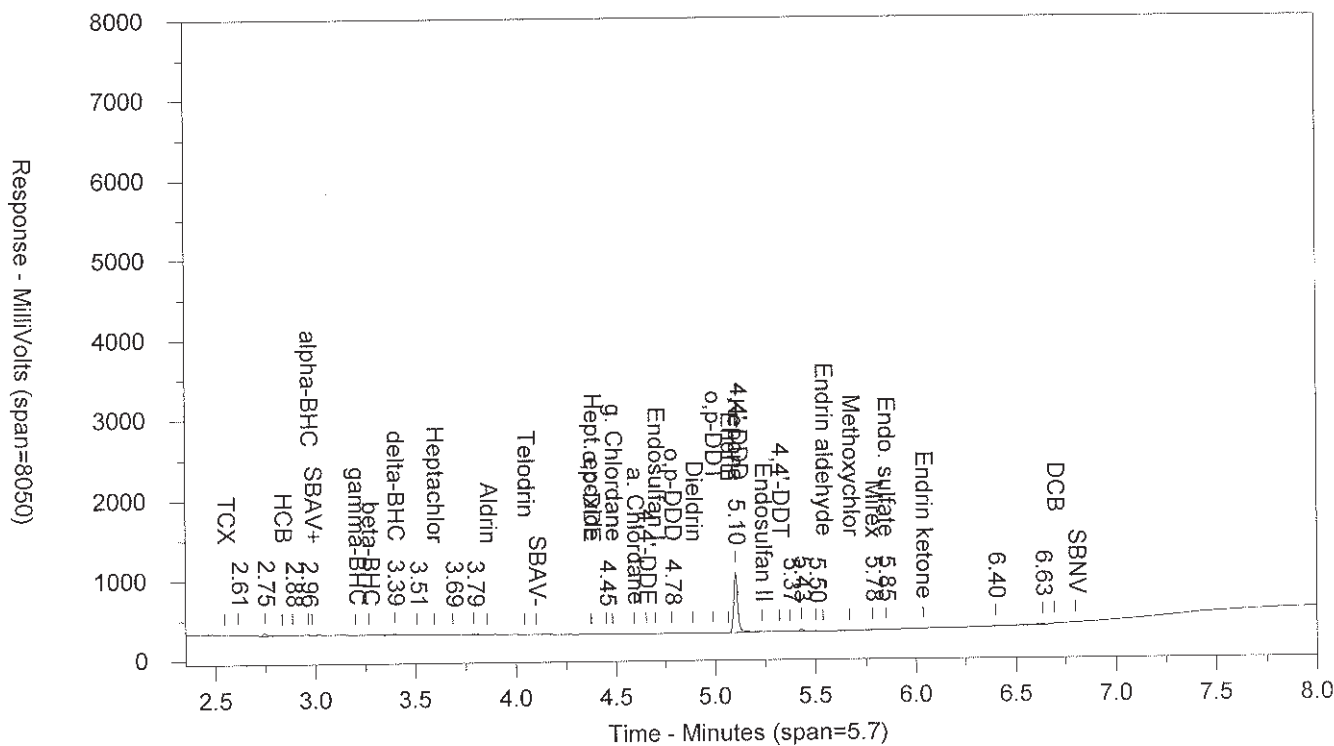
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.96	5212	.008	alpha-BHC	2.75	12966	.594	alpha-BHC
	0		beta-BHC	3.076	4964	.005	beta-BHC
3.394	21437	.044	delta-BHC	3.305	40605	.662	delta-BHC
	0		Heptachlor	3.384	7078	.004	Heptachlor
	0		a. Chlordane	4.404	7457	.005	a. Chlordane
	0		4,4'-DDE	4.563	32037	1.115	4,4'-DDE
	0		Dieldrin	4.679	13200	.009	Dieldrin
4.781	7158	.042	o,p-DDD	4.727	17835	.036	o,p-DDD
	0		Endrin	4.901	17021	.013	Endrin
5.102	755120	4.855	Kepone	4.99	2651410	7.752	Kepone
	0		Methoxychlor	5.738	15274	.03	Methoxychlor
5.782	3298	.017	Mirex	5.87	20764	.038	Mirex
5.846	4880	.017	Endo. sulfate		0		Endo. sulfate

Files:  
 Area File: 05pest18306010.004.RAW  
 Area File: 05pest18306010B.004.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
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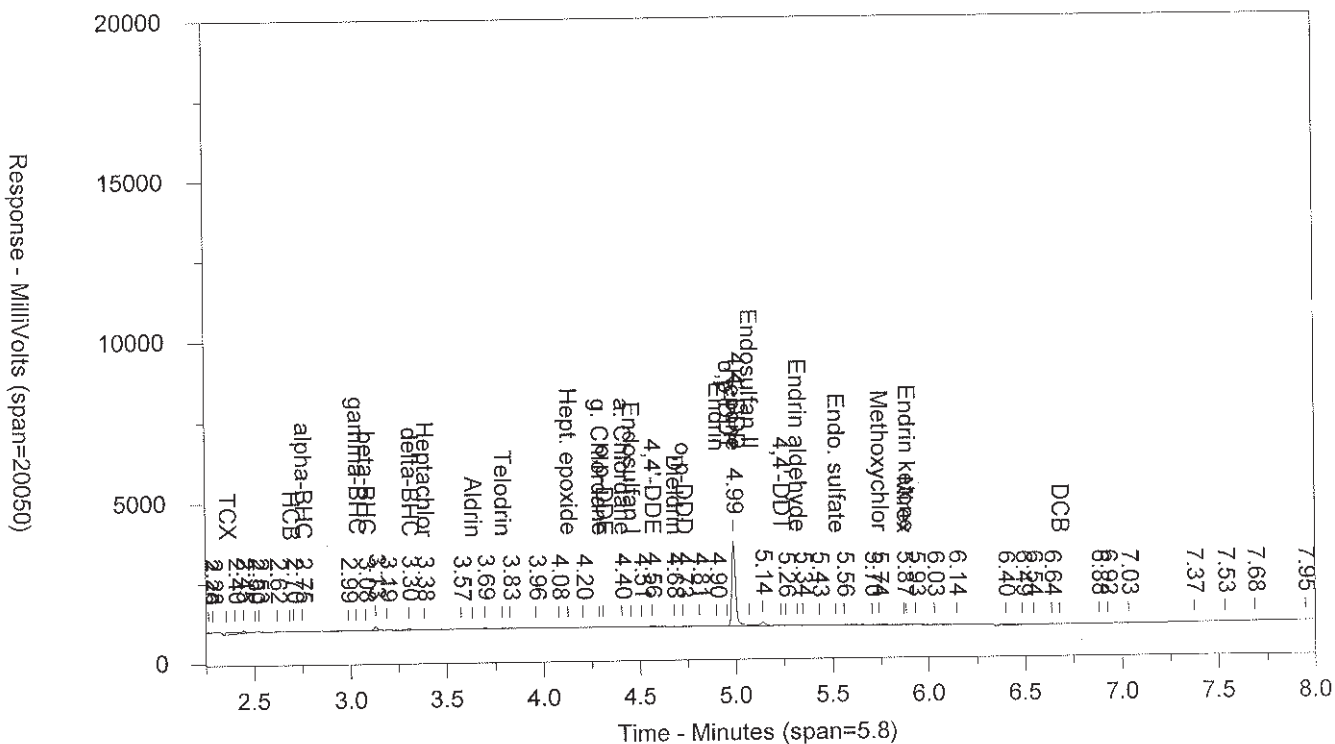


KEPN11824C AAKEPN1AA ICAL 1831799999 00177 SW-846 8081/

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KEPN21824C

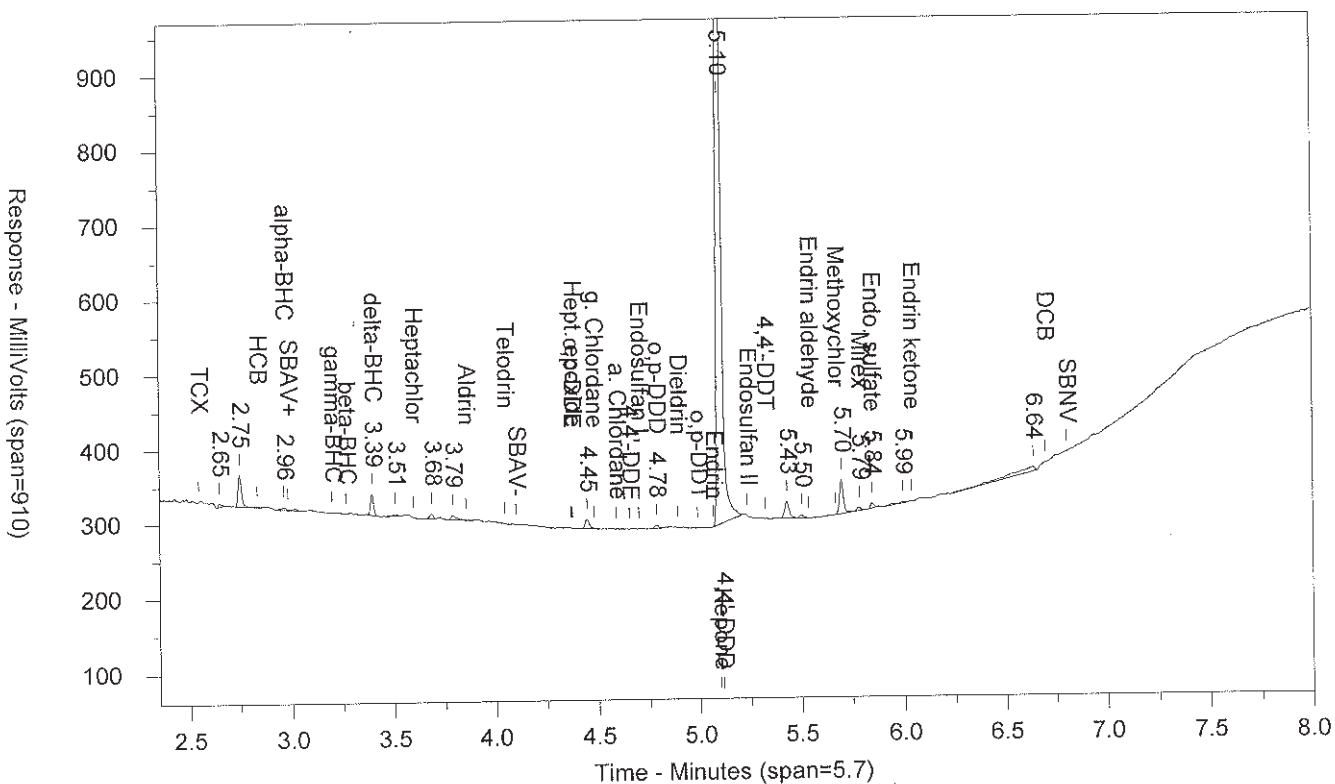
AAKEPN2AA

ICAL 1831799999

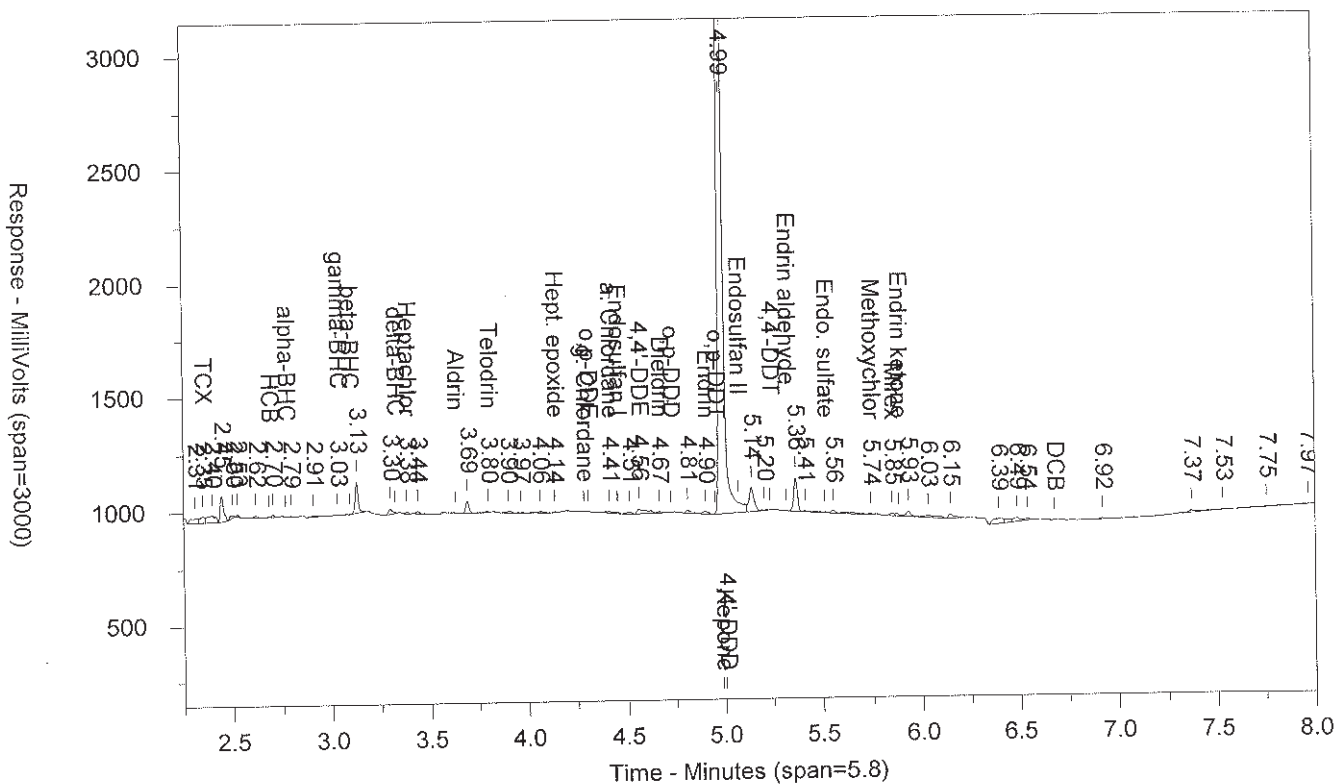
00177

SW-846 8081A

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.005.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: KEPN21824C      AAKEPN2AA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 10:49:00 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
	0		TCX	2.347	26748	.013	TCX
2.961	4091	.007	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.032	3216	.551	gamma-BHC
	0		Heptachlor	3.383	10139	.006	Heptachlor
3.393	28465	.058	delta-BHC		0		delta-BHC
	0		Telodrin	3.8	5337	.007	Telodrin
	0		Hept. epoxide	4.139	4448	.003	Hept. epoxide
	0		a. Chlordane	4.411	7559	.005	a. Chlordane
	0		4,4'-DDE	4.562	21466	1.108	4,4'-DDE
	0		Dieldrin	4.665	6563	.005	Dieldrin
4.783	3948	.023	o,p-DDD		0		o,p-DDD
	0		Endrin	4.903	11343	.009	Endrin
5.101	1382874	8.891	Kepone	4.989	4888691	11.01	Kepone
	0		Methoxychlor	5.741	3786	.008	Methoxychlor
5.786	3975	.021	Mirex	5.851	11934	.022	Mirex
5.844	6456	.022	Endo. sulfate		0		Endo. sulfate

Files:  
 Area File: 05pest18306010.005.RAW  
 Area File: 05pest18306010B.005.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
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KEPN21824C

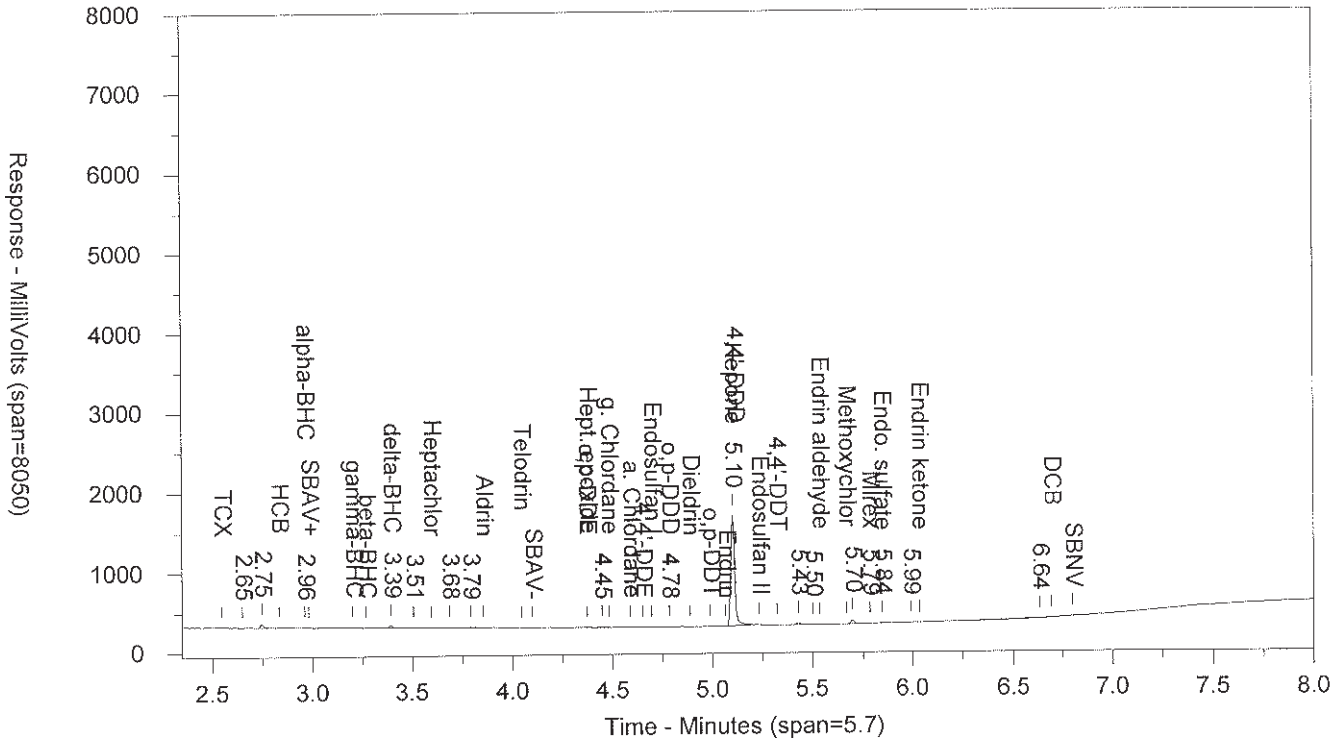
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ICAL 1831799999

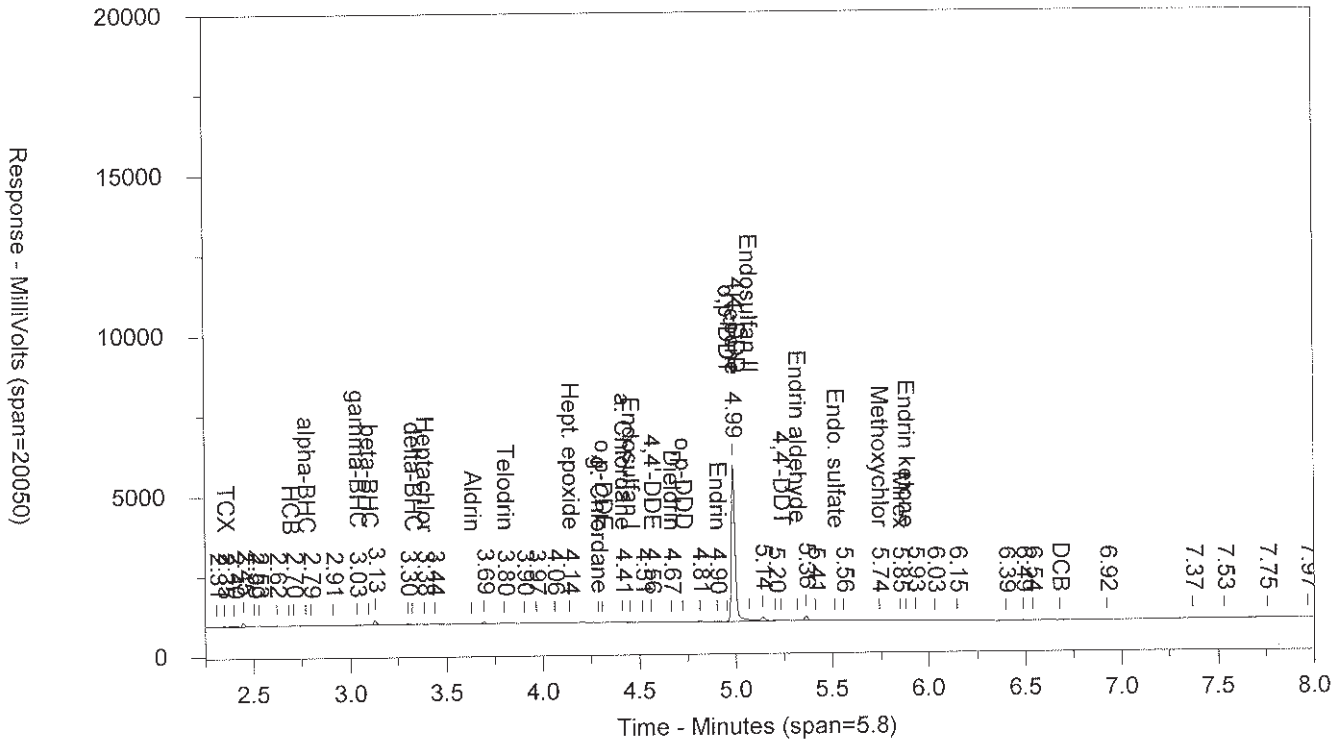
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SW-846 8081/

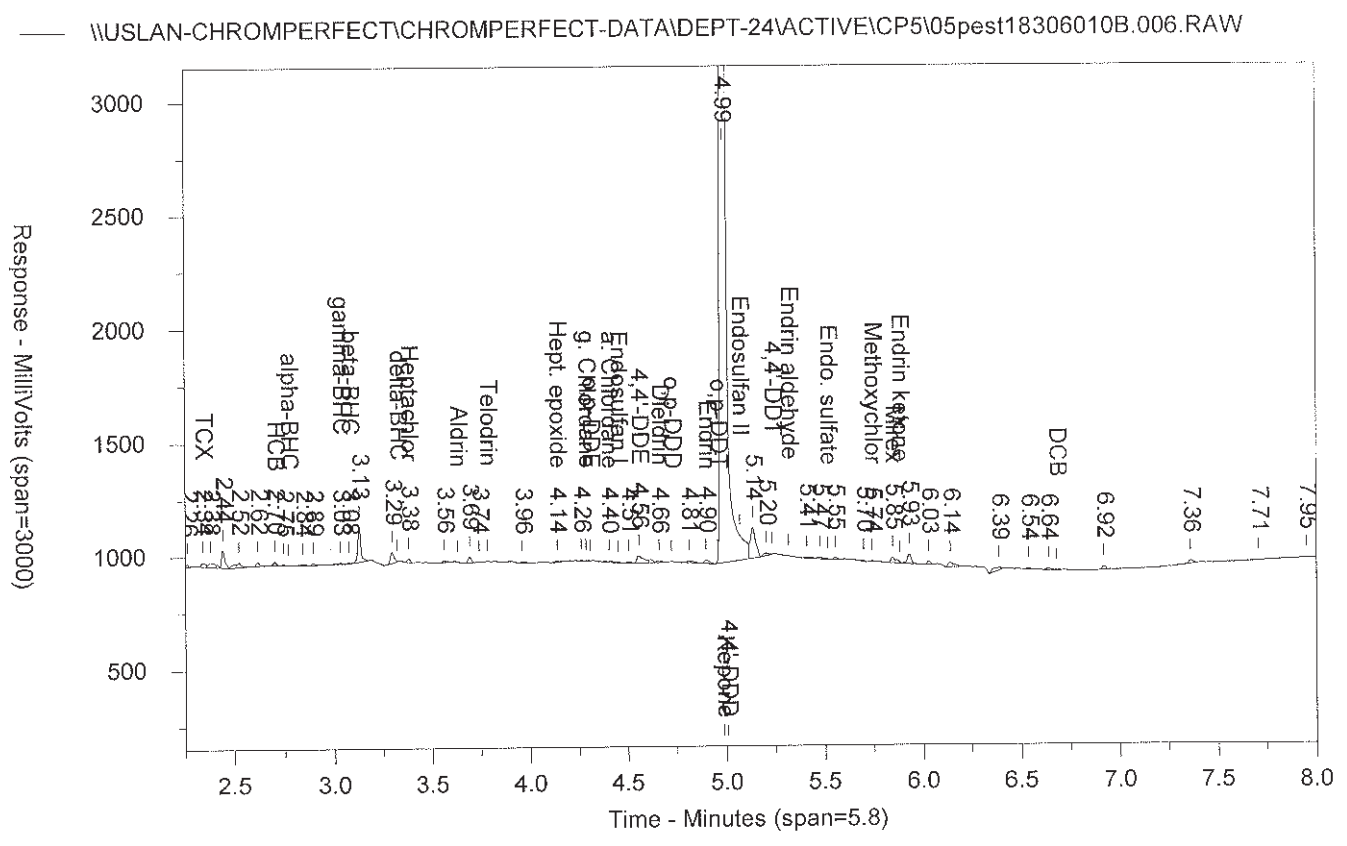
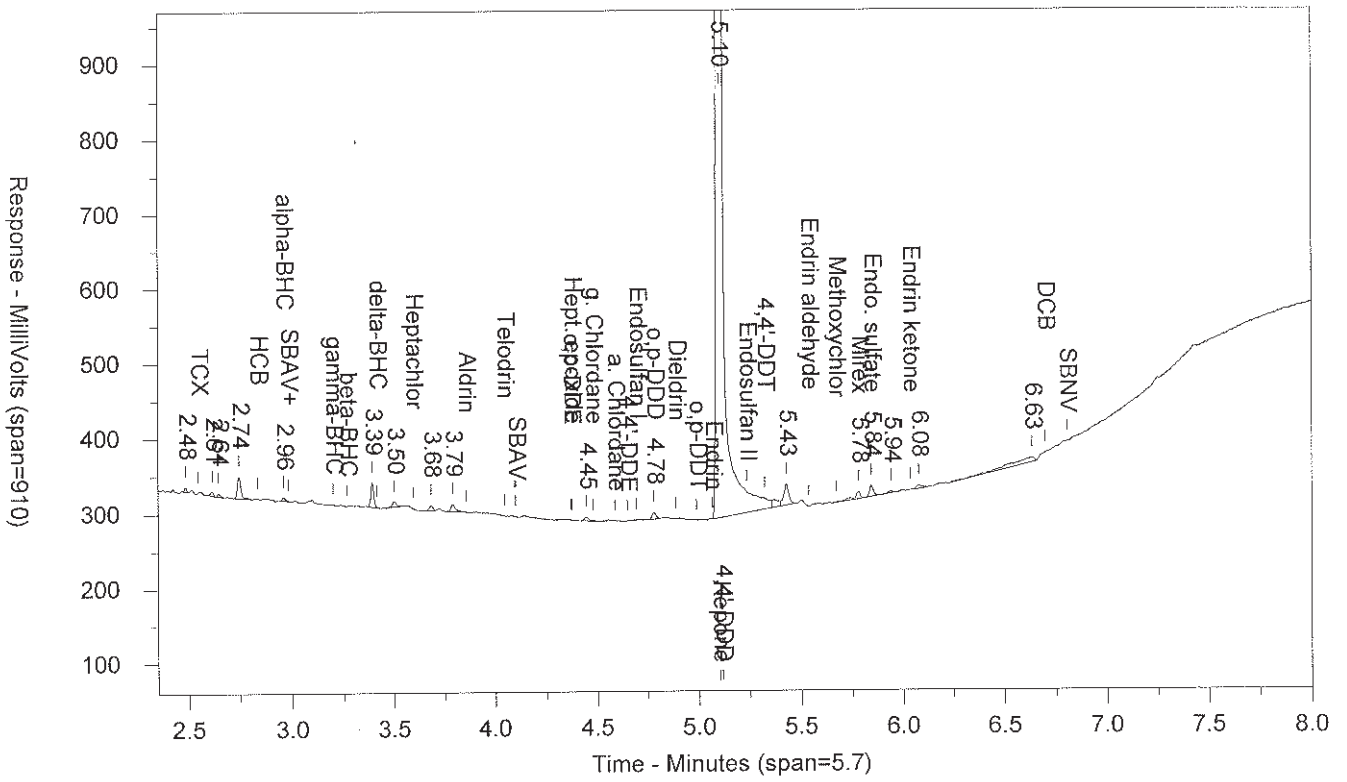
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.005.RAW



KEPN31824C AAKEPN3AA ICAL 1831799999 00177 SW-846 8081A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: KEPN31824C      AAKEPN3AA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 11:01:51 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
	0		TCX	2.339	17078	.009	TCX
	0		HCB	2.7	16744	.012	HCB
2.959	4418	.007	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.031	6238	.552	gamma-BHC
	0		beta-BHC	3.075	5348	.006	beta-BHC
	0		Heptachlor	3.382	15922	.009	Heptachlor
	0		Hept. epoxide	4.138	6014	.004	Hept. epoxide
	0		a. Chlordane	4.404	7819	.005	a. Chlordane
	0		4,4'-DDE	4.558	31836	1.114	4,4'-DDE
	0		Dieldrin	4.66	8007	.006	Dieldrin
4.781	9084	.054	o,p-DDD		0		o,p-DDD
	0		Endrin	4.898	15341	.012	Endrin
5.1	3838039	24.676	Kepone	4.987	13914540	24.152	Kepone
	0		Methoxychlor	5.741	4375	.009	Methoxychlor
5.782	9937	.052	Mirex	5.845	26736	.048	Mirex
5.845	15027	.051	Endo. sulfate		0		Endo. sulfate

Files:

Area File: 05pest18306010.006.RAW  
 Area File: 05pest18306010B.006.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 11:09:53 AM  
 File Reported On: 11/14/2018 at 5:13:36 PM

KEPN31824C

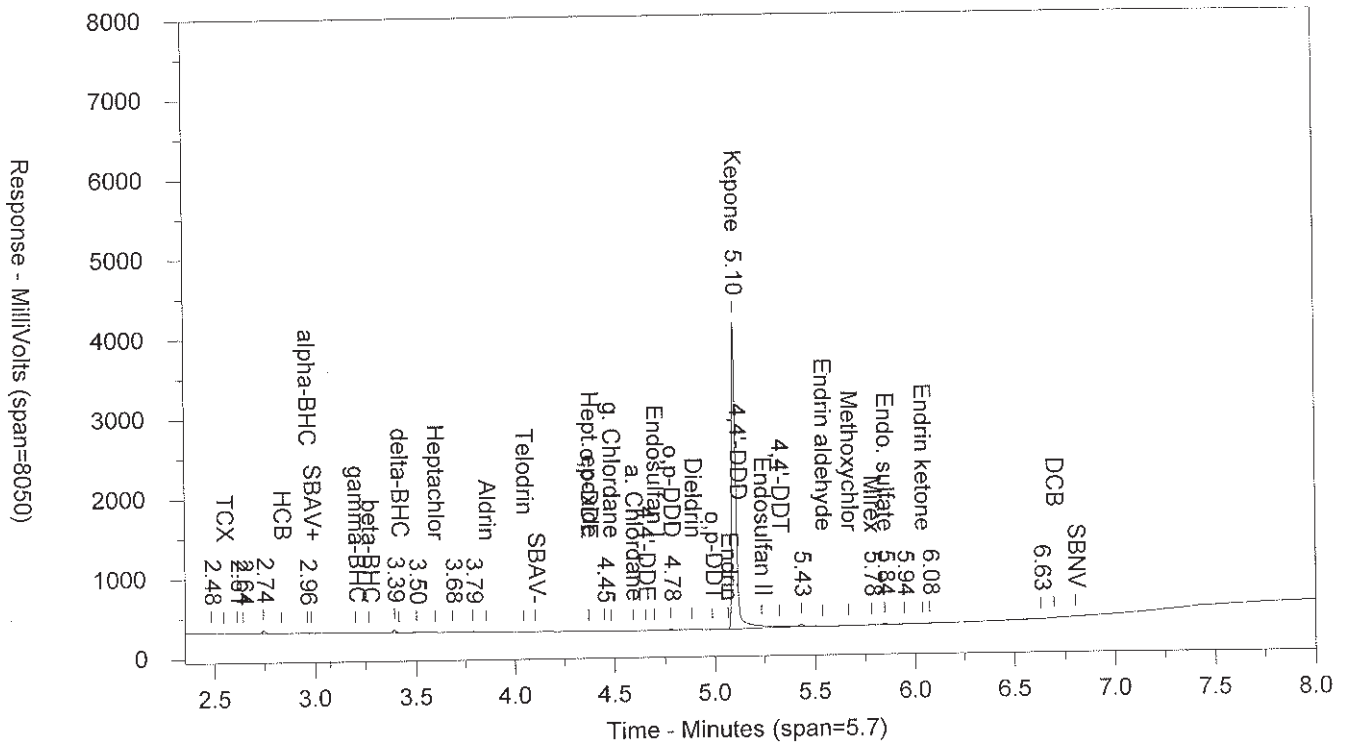
AAKEPN3AA

ICAL 1831799999

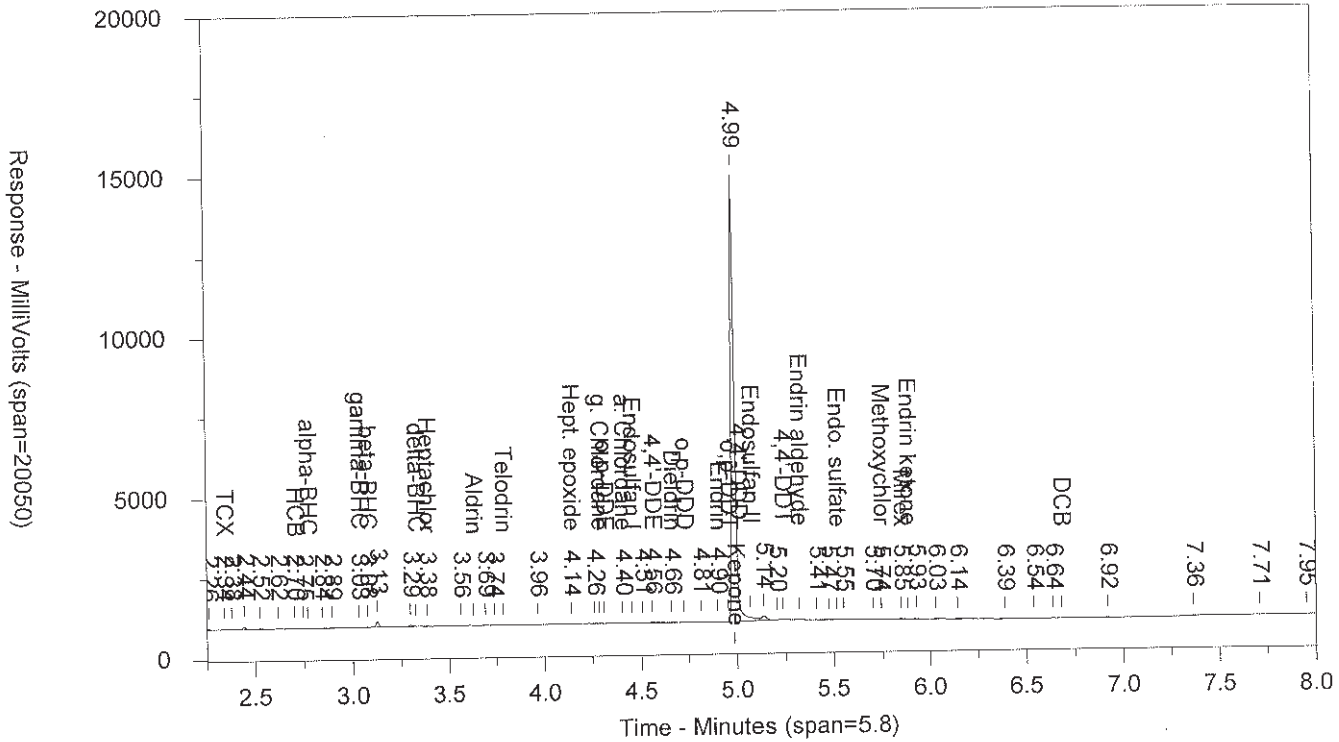
00177

SW-846 8081/

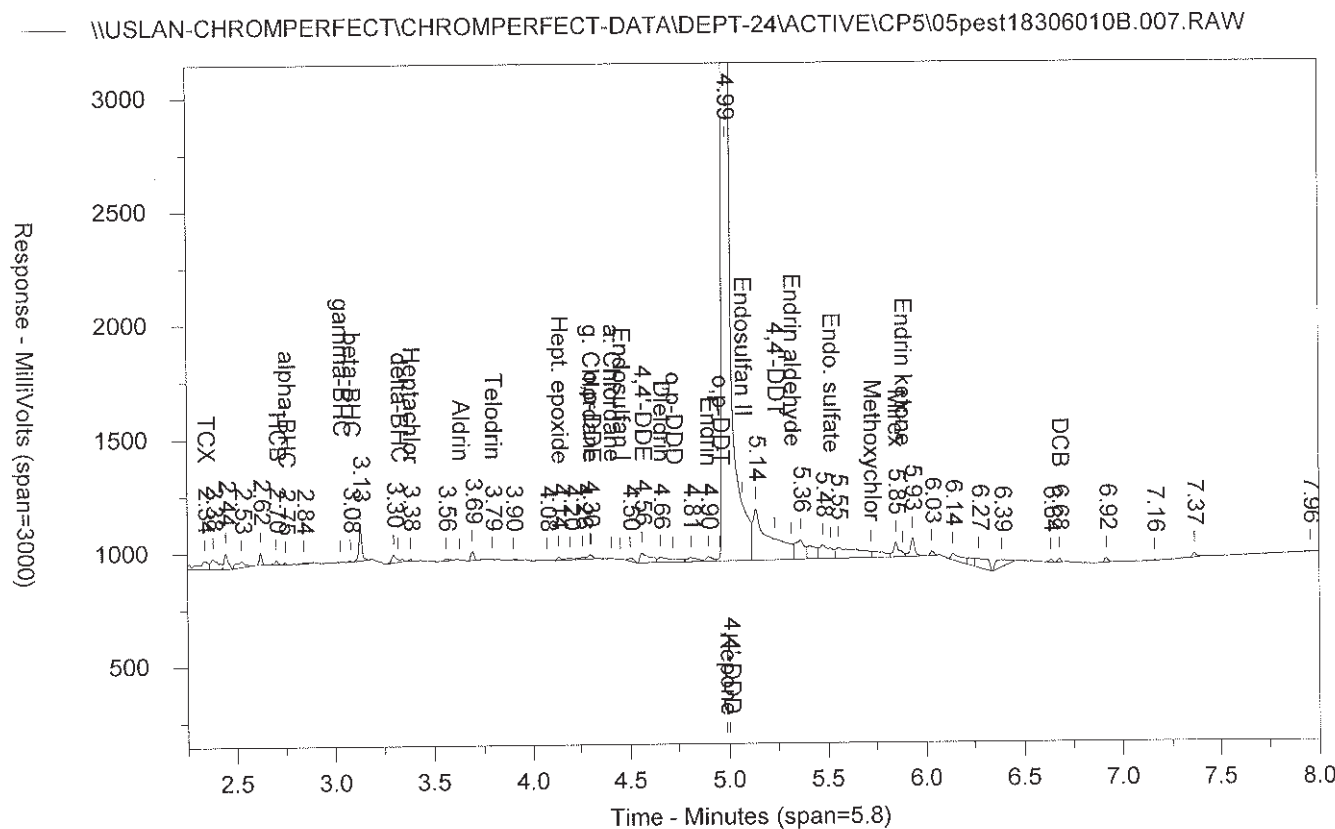
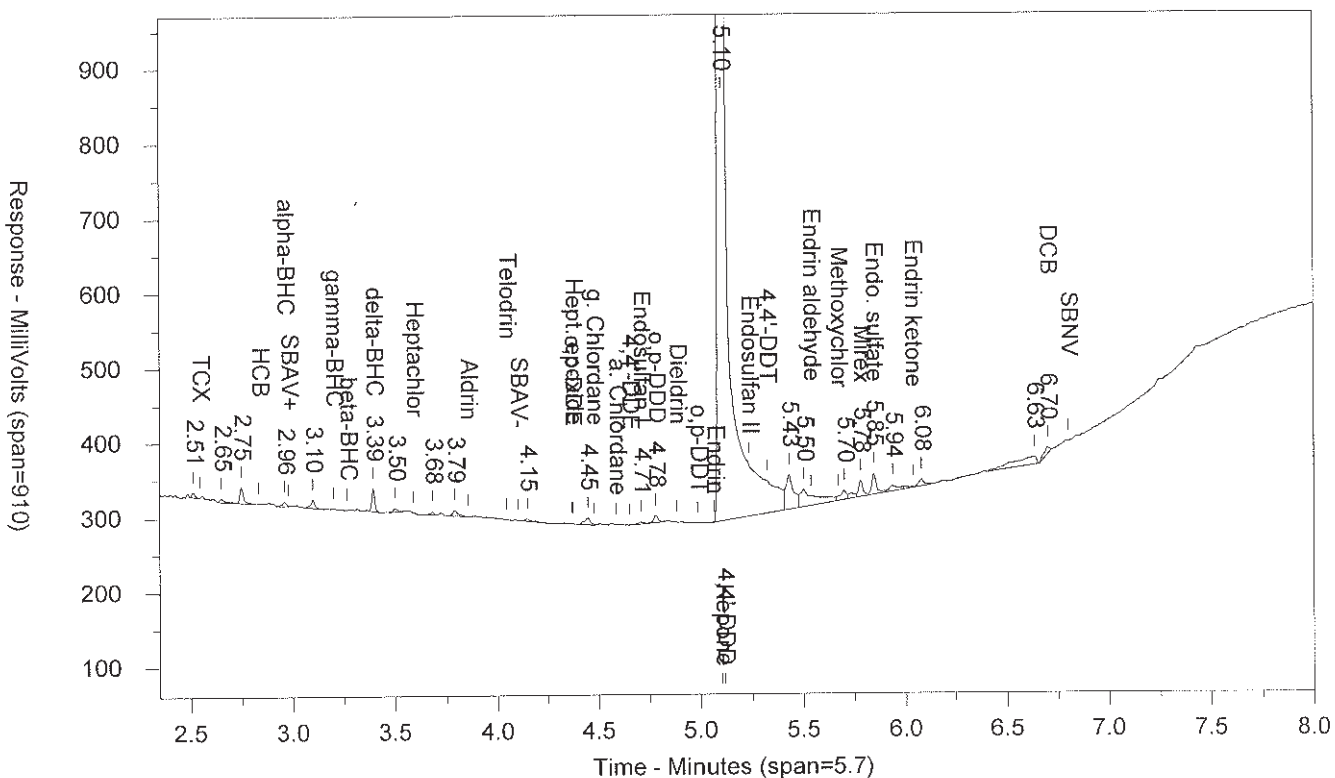
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KEPN41824C AAKEPN4AA ICAL 1831799999 00177 SW-846 8081A  
 \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.007.RAW





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: KEPN41824C      AAKEPN4AA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 11:14:38 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

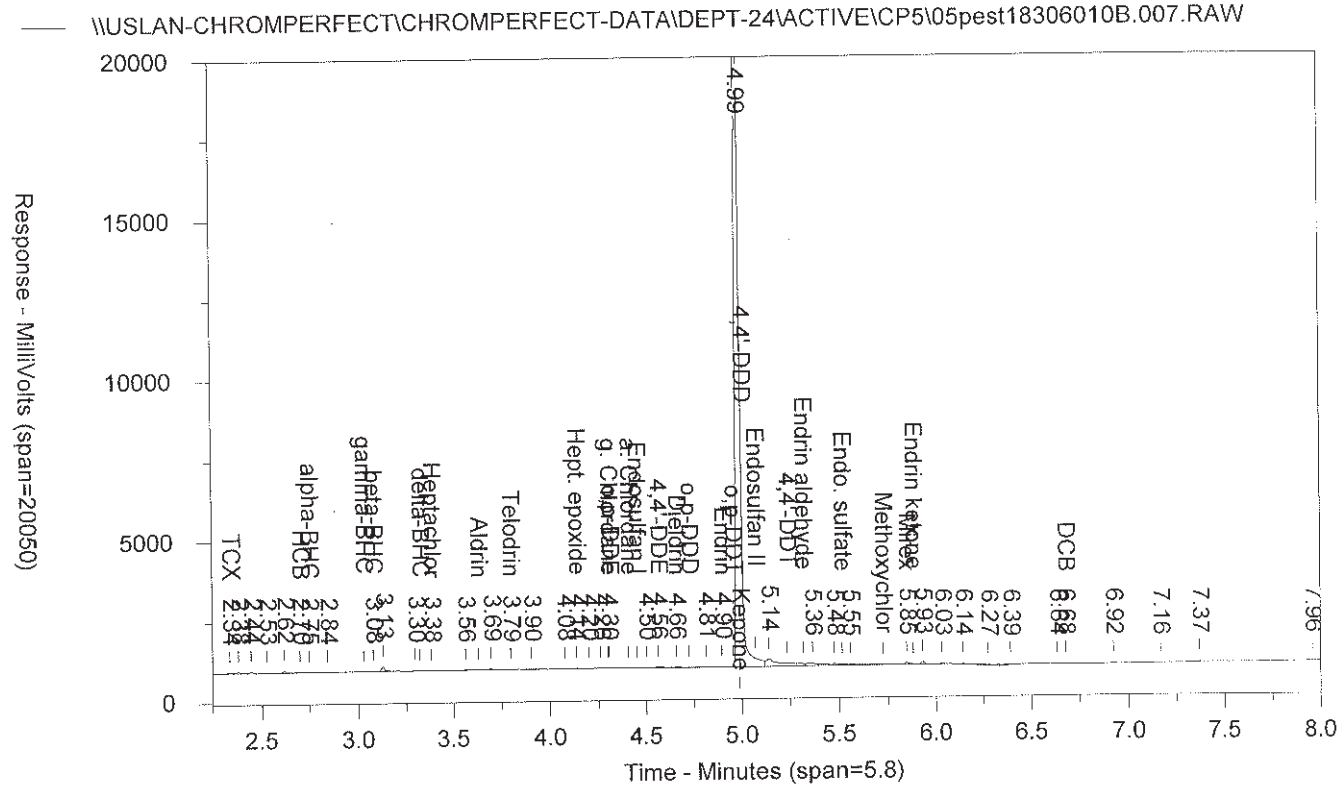
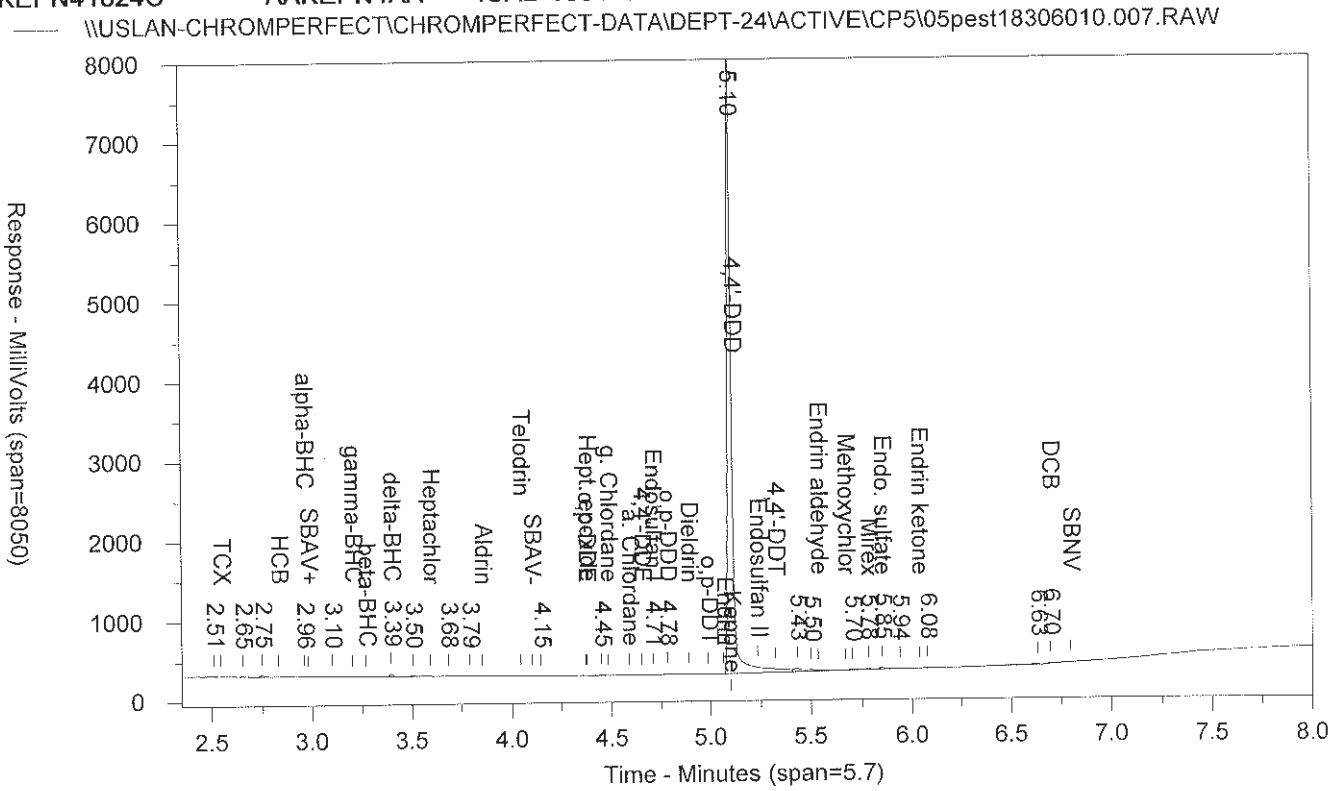
Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

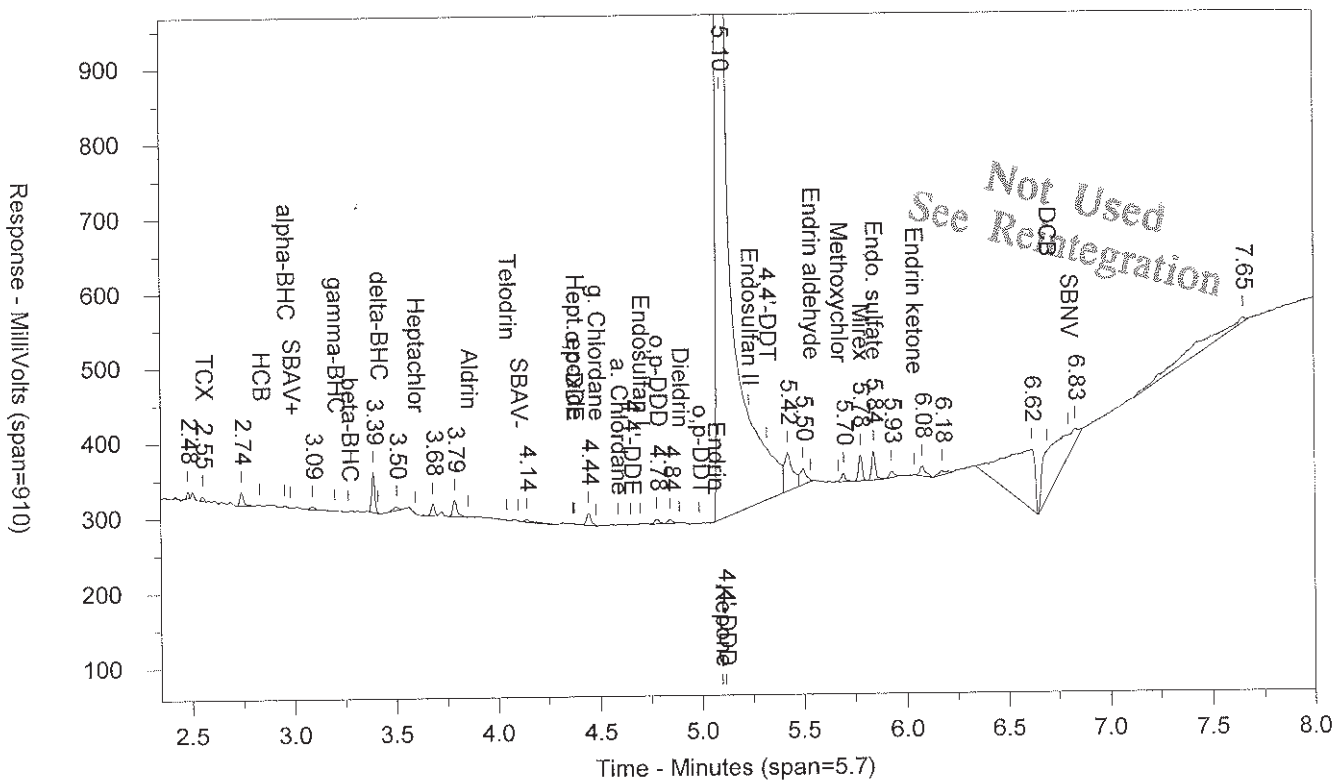
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
	0		TCX	2.338	34550	.017	TCX
	0		HCB	2.702	18439	.013	HCB
2.96	5381	.009	alpha-BHC	2.749	6939	.592	alpha-BHC
	0		beta-BHC	3.078	6437	.007	beta-BHC
	0		Heptachlor	3.384	9097	.005	Heptachlor
3.394	30215	.062	delta-BHC		0		delta-BHC
	0		Telodrin	3.794	4538	.006	Telodrin
	0		Hept. epoxide	4.138	16108	.012	Hept. epoxide
	0		g. Chlordane	4.3	18599	.013	g. Chlordane
	0		4,4'-DDE	4.561	43138	1.122	4,4'-DDE
	0		Dieldrin	4.658	24582	.017	Dieldrin
4.708	2860	.008	Endosulfan I		0		Endosulfan I
4.781	9368	.055	o,p-DDD		0		o,p-DDD
	0		Endrin	4.898	19877	.015	Endrin
5.102	8053918	51.781	Kepone	4.989	30964810	48.979	Kepone
5.782	20994	.111	Mirex	5.847	65115	.118	Mirex
5.847	27642	.094	Endo. sulfate		0		Endo. sulfate
6.698	8506	.008	DCB	6.679	17564	.023	DCB

Files:  
 Area File: 05pest18306010.007.RAW  
 Area File: 05pest18306010B.007.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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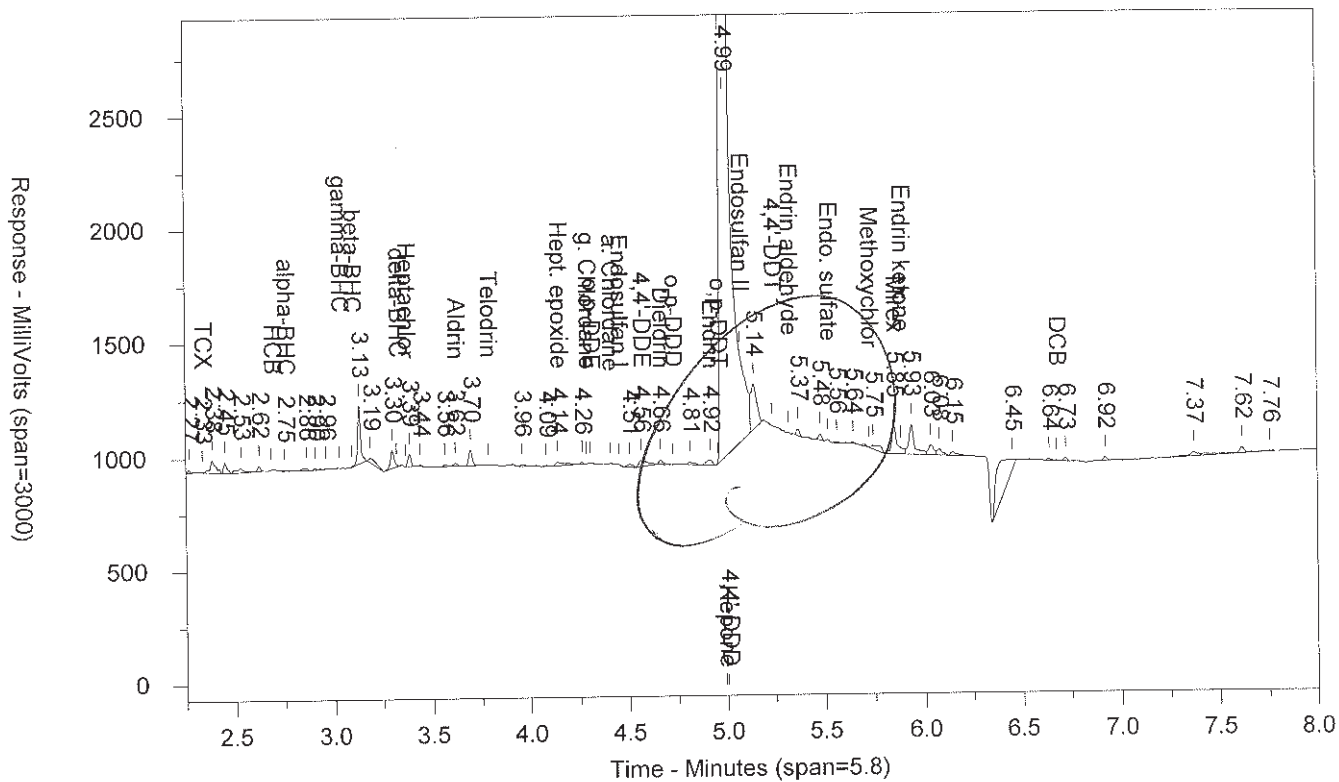
KEPN41824C AAKEPN4AA ICAL 1831799999 00177 SW-846 8081/



KEPN51824C AAKEPN5AA ICAL 1831799999 00177 SW-846 8081A  
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.008.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: KEPN51824C      AAKEPN5AA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 11:27:26 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

*Not Used  
See Reintegration*

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.551	5865	.013	TCX	2.333	5790	.003	TCX
	0		alpha-BHC	2.751	3533	.591	alpha-BHC
	0		Aldrin	3.617	11234	.519	Aldrin
	0		Hept. epoxide	4.144	15699	.011	Hept. epoxide
	0		4,4'-DDE	4.565	28226	1.112	4,4'-DDE
	0		Dieldrin	4.661	19527	.014	Dieldrin
4.778	6438	.038	o,p-DDD		0		o,p-DDD
	0		Endrin	4.918	22669	.017	Endrin
5.098	15963160	102.631	Kepone	4.992	63042160	95.686	Kepone
5.778	34341	.181	Mirex	5.849	124357	.225	Mirex
5.842	38176	.13	Endo. sulfate		0		Endo. sulfate

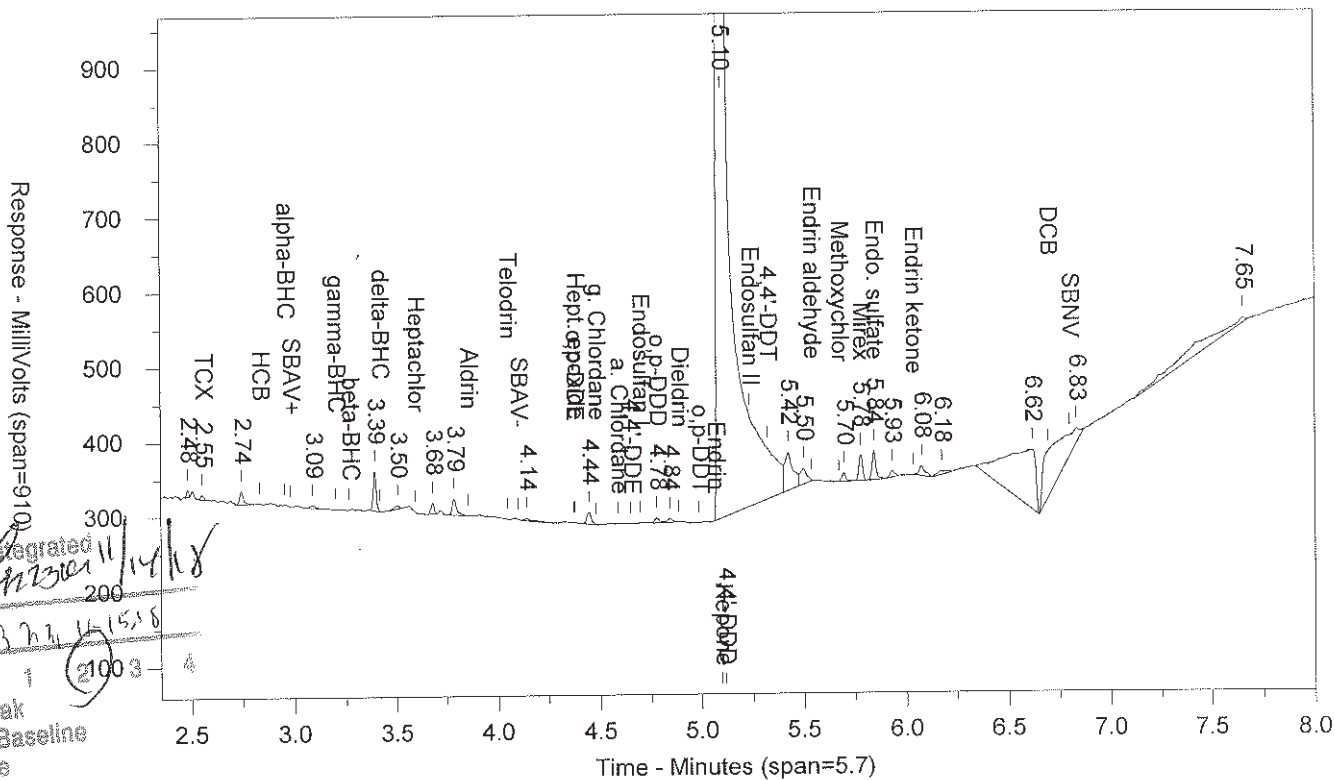
Files:

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 Area File: 05pest18306010B.008.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
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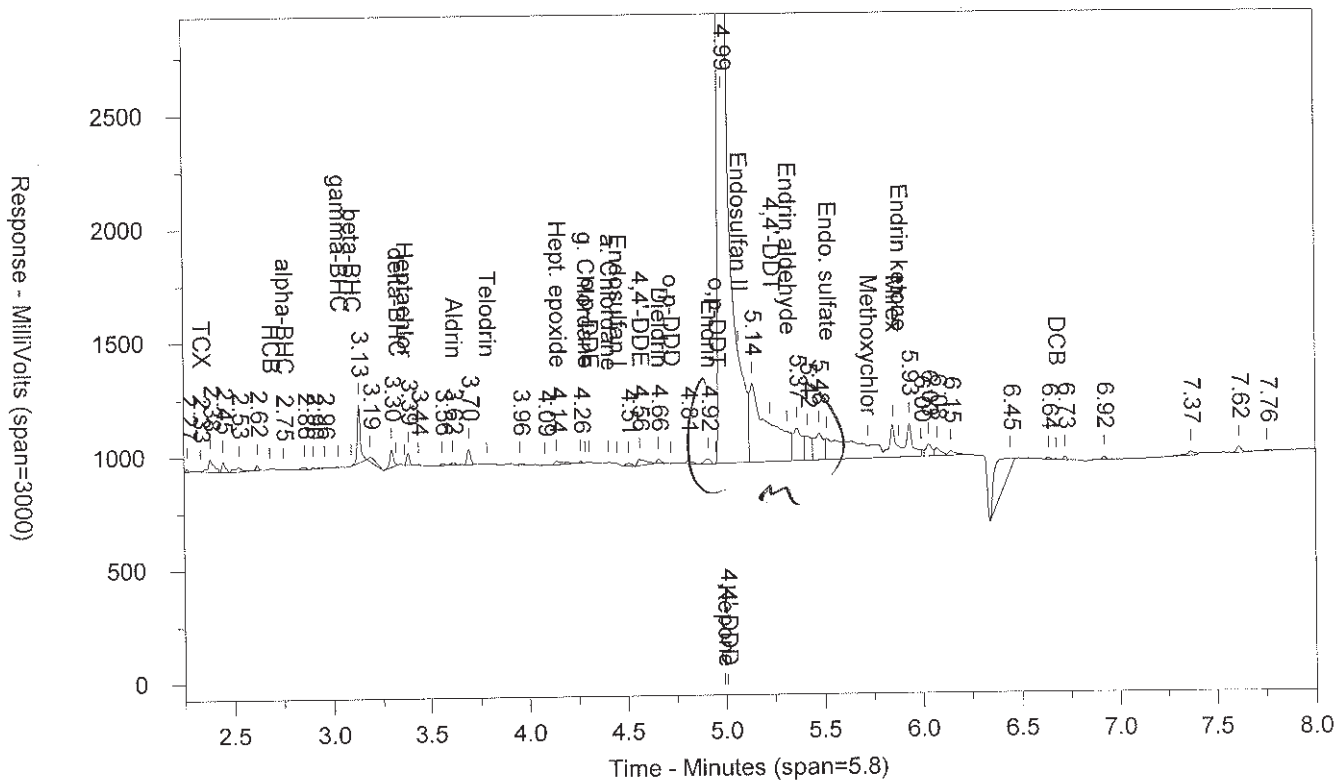


KEPN51824C AAKEPN5AA ICAL 1831799999 00177 SW-846 8081A

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.008.BND



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.008.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: KEPN51824C      AAKEPN5AA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 11:27:26 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

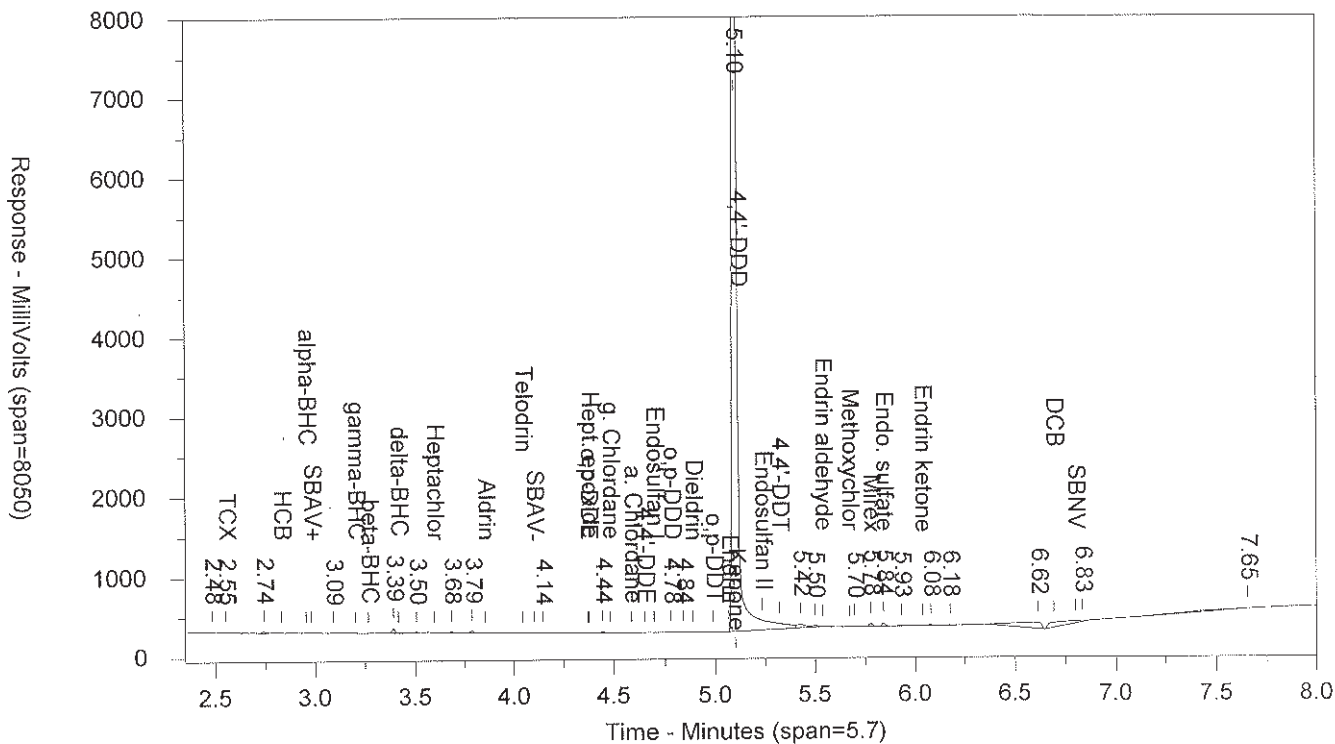
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.551	5865	.013	TCX	2.333	5790	.003	TCX
	0		alpha-BHC	2.751	3533	.591	alpha-BHC
	0		Aldrin	3.617	11234	.519	Aldrin
	0		Hept. epoxide	4.144	15699	.011	Hept. epoxide
	0		4,4'-DDE	4.565	28226	1.112	4,4'-DDE
	0		Dieldrin	4.661	19527	.014	Dieldrin
4.778	6438	.038	o,p-DDD		0		o,p-DDD
	0		Endrin	4.918	22669	.017	Endrin
5.098	15963160	102.631	Kepone	4.992	63072300	95.73	Kepone
5.778	34341	.181	Mirex		0		Mirex
5.842	38176	.13	Endo. sulfate		0		Endo. sulfate

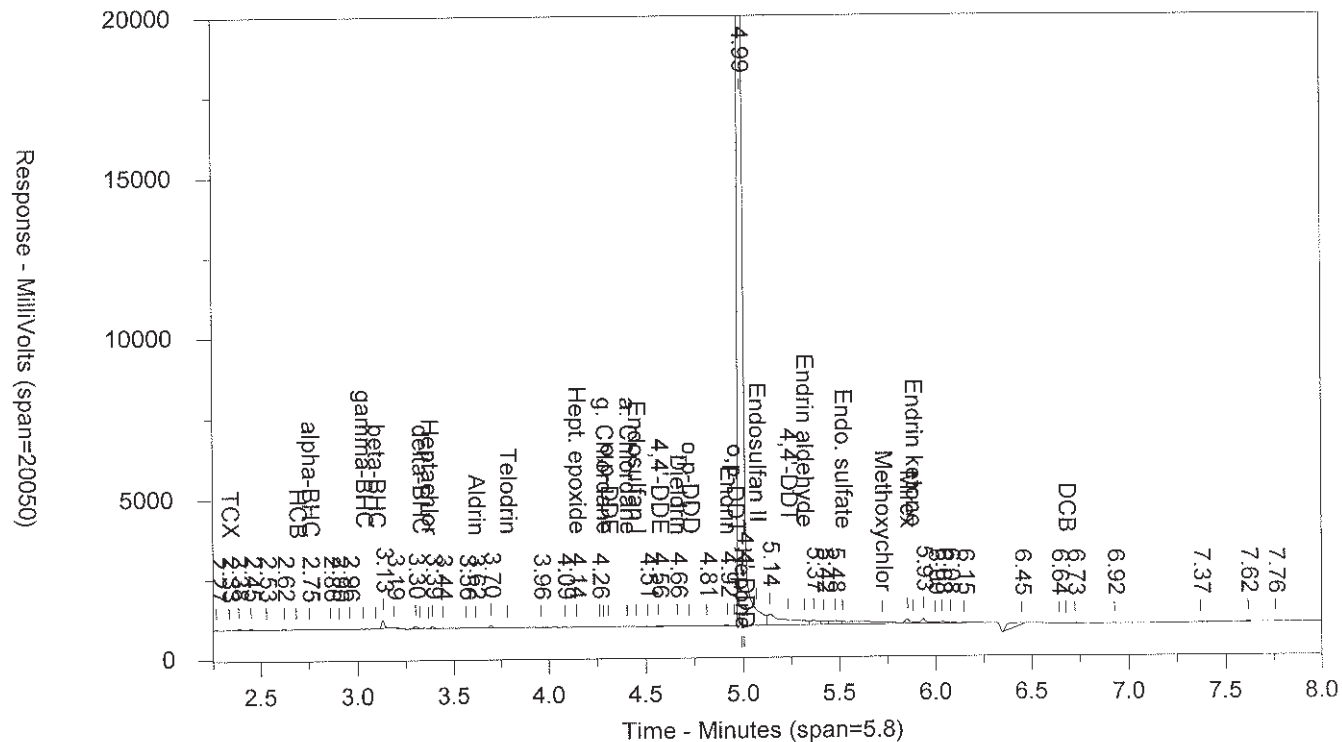
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 Area File: 05pest18306010B.008.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 5:13:52 PM  
 File Reported On: 11/14/2018 at 5:19:12 PM

KEPN51824C AAKEPN5AA ICAL 1831799999 00177 SW-846 8081/

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.008.BND



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.008.BND







Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: KEPN61824C      AAKEPN6AA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 11:40:13 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

*Not Used  
 See Reintegration*

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.555	7515	.017	TCX	2.348	30281	.015	TCX
	0		HCB	2.702	8657	.006	HCB
	0		gamma-BHC	3.033	5881	.552	gamma-BHC
	0		Heptachlor	3.384	19981	.011	Heptachlor
3.393	55558	.114	delta-BHC		0		delta-BHC
	0		Aldrin	3.619	42090	.535	Aldrin
	0		Telodrin	3.797	9457	.013	Telodrin
	0		g. Chlordane	4.3	9651	.007	g. Chlordane
	0		a. Chlordane	4.403	13422	.009	a. Chlordane
	0		4,4'-DDE	4.563	10486	1.1	4,4'-DDE
	0		Dieldrin	4.659	36226	.025	Dieldrin
4.78	8236	.049	o,p-DDD	4.742	5294	.011	o,p-DDD
	0		Endrin	4.902	21785	.017	Endrin
5.101	33937960	218.196	Kepone	4.99	136302900	202.36	Kepone
5.845	109797	.373	Endo. sulfate	5.516	49729	.044	Endo. sulfate
5.68	54765	.381	Methoxychlor		0		Methoxychlor
5.781	113931	.6	Mirex	5.848	229211	.414	Mirex

Files:

Area File: 05pest18306010.009.RAW  
 Area File: 05pest18306010B.009.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 11:48:14 AM  
 File Reported On: 11/14/2018 at 5:14:07 PM





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: KEPN61824C      AAKEPN6AA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 11:40:13 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

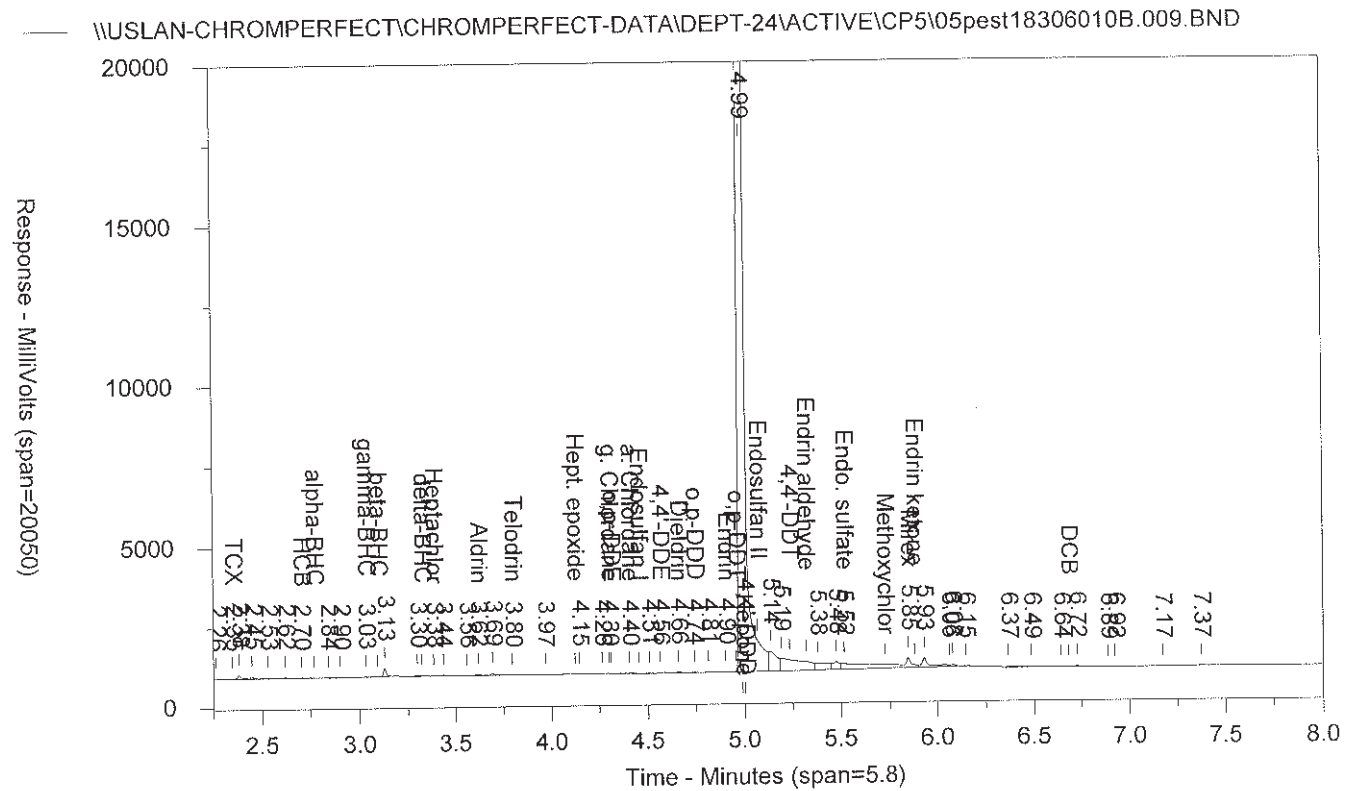
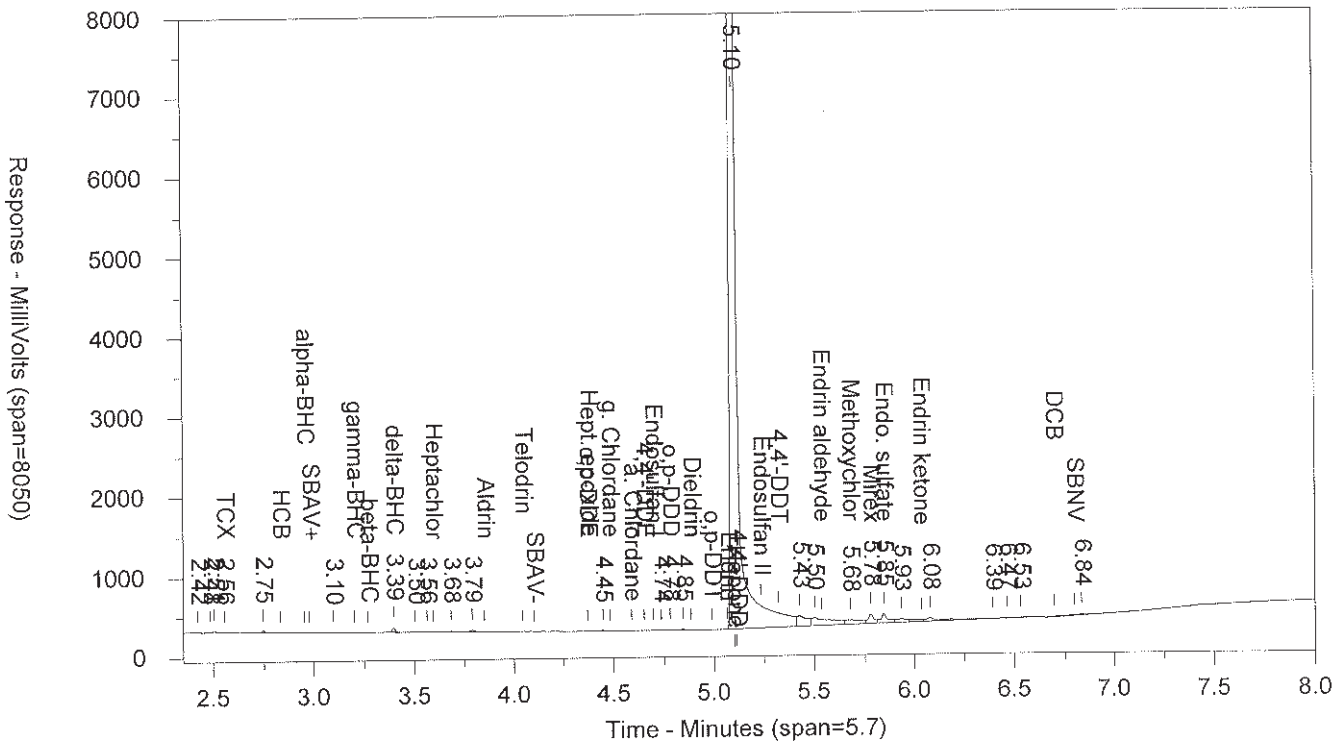
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.555	7515	.017	TCX	2.348	30281	.015	TCX
	0		HCB	2.702	8657	.006	HCB
	0		gamma-BHC	3.033	5881	.552	gamma-BHC
	0		Heptachlor	3.384	19981	.011	Heptachlor
3.393	55558	.114	delta-BHC		0		delta-BHC
	0		Aldrin	3.619	42090	.535	Aldrin
	0		Telodrin	3.797	9457	.013	Telodrin
	0		g. Chlordane	4.3	9651	.007	g. Chlordane
	0		a. Chlordane	4.403	13422	.009	a. Chlordane
	0		4,4'-DDE	4.563	10486	1.1	4,4'-DDE
	0		Dieldrin	4.659	36226	.025	Dieldrin
4.78	8236	.049	o,p-DDD	4.742	5294	.011	o,p-DDD
	0		Endrin	4.902	21785	.017	Endrin
5.101	33937960	218.196	Kepone	4.99	136314800	202.378	Kepone
5.845	109797	.373	Endo. sulfate	5.516	190815	.167	Endo. sulfate
5.68	54765	.381	Methoxychlor		0		Methoxychlor
5.781	113931	.6	Mirex	5.848	302928	.548	Mirex

Files:  
 Area File: 05pest18306010.009.BND  
 Area File: 05pest18306010B.009.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 5:14:02 PM  
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KEPN61824C AAKEPN6AA ICAL 1831799999 00177 SW-846 8081/

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ICKEPX1824E

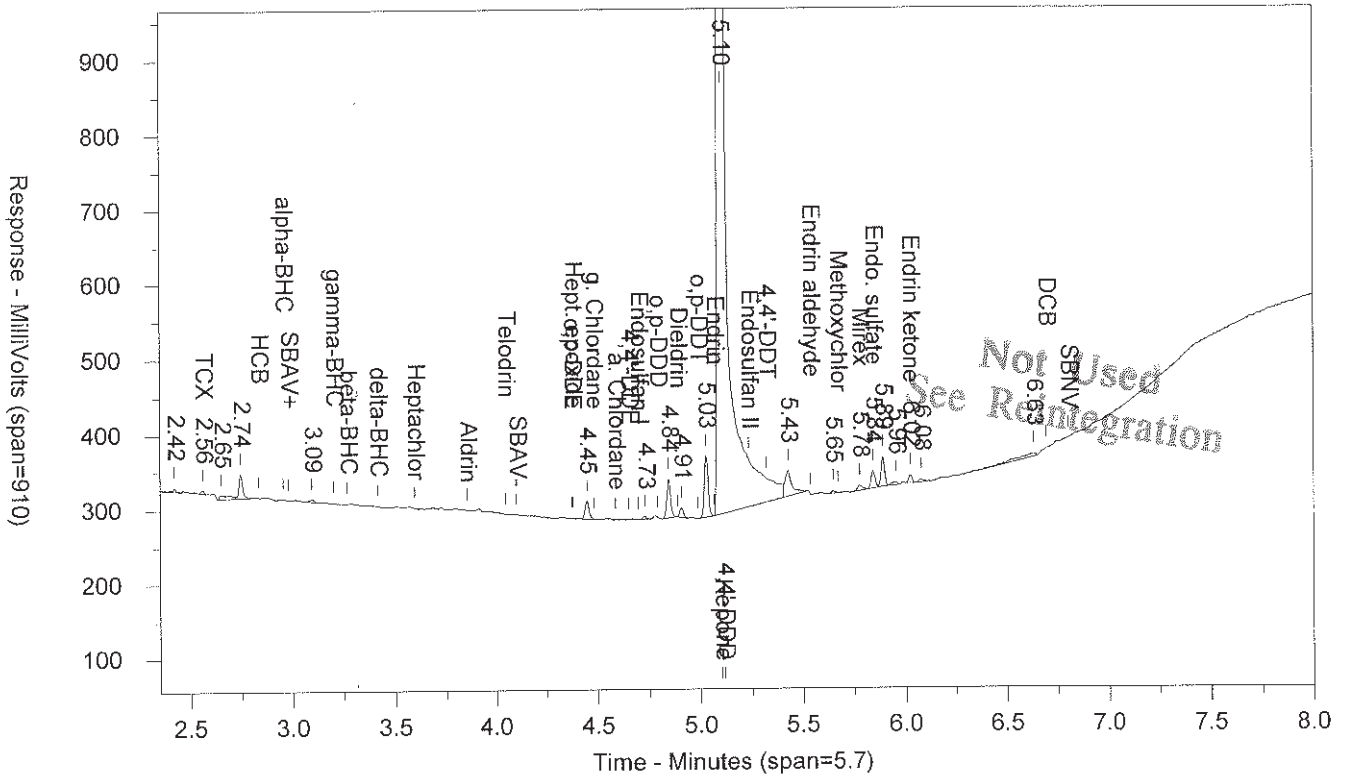
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CCAL 1831799999

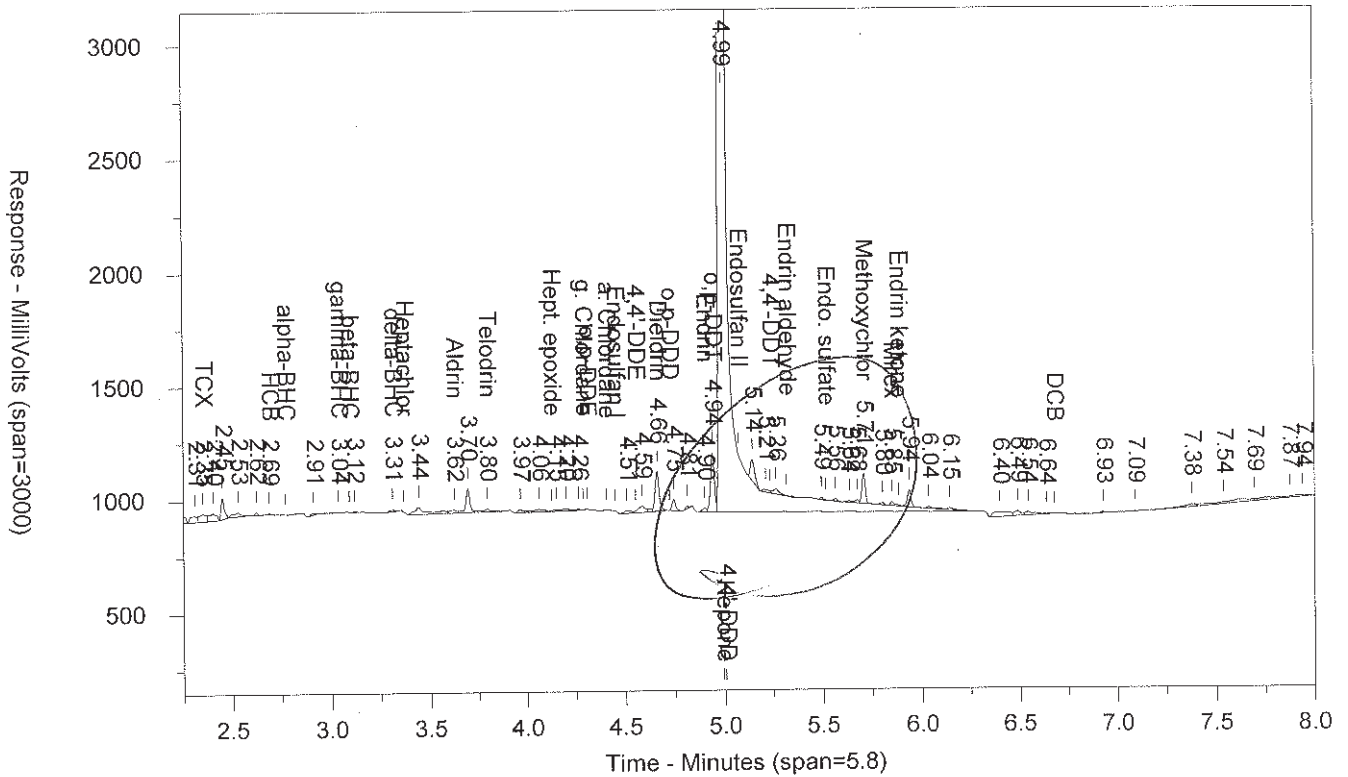
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SW-846 8081A

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.010.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICKEPX1824E    AAICKEPAA    CCAL 1831799999    00177    SW-846 8081A  
 Injected On: 11/14/2018 11:53:02 AM    Sample Weight: 1  
 Instrument ID: CP5-9190    Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

*Not Used  
 See Reintegration*

Analyst: 2306

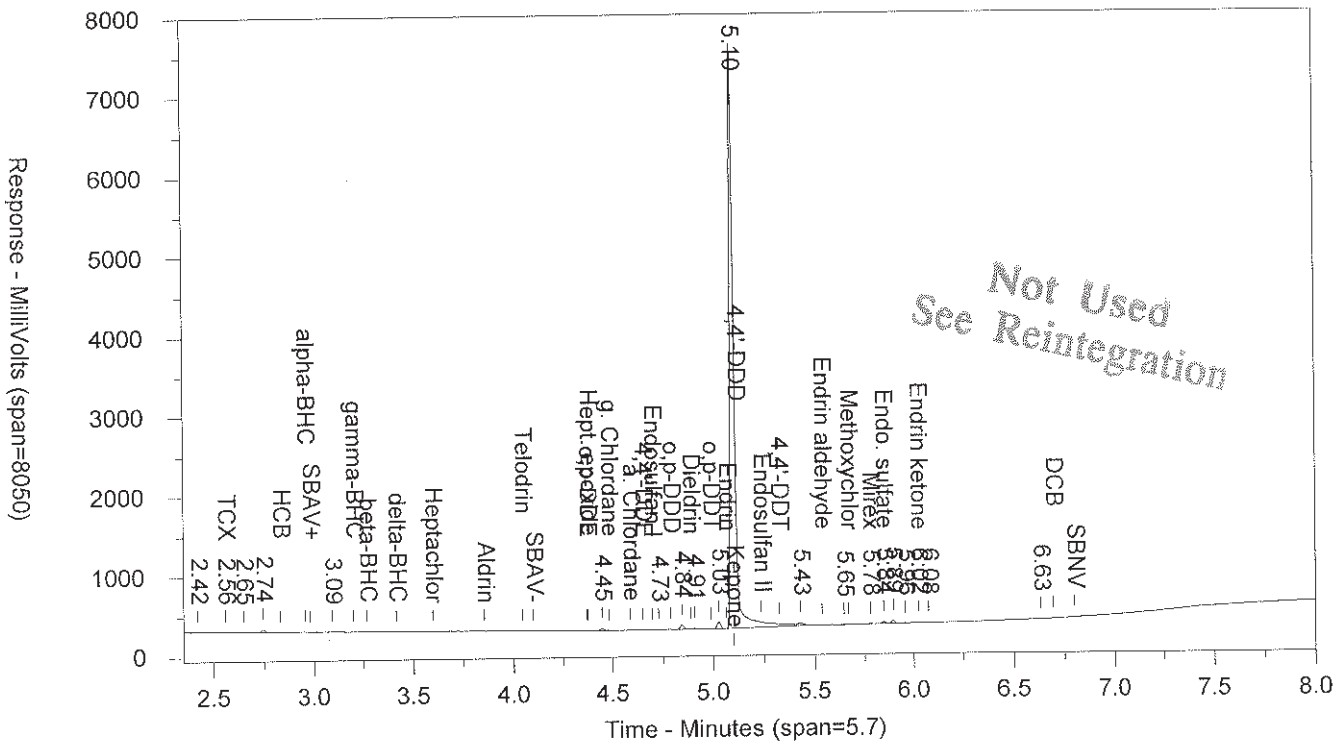
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.558	4210	.01	TCX	2.349	32779	.017	TCX
	0		HCB	2.688	6990	.005	HCB
	0		gamma-BHC	3.038	4146	.552	gamma-BHC
	0		delta-BHC	3.31	7662	.649	delta-BHC
	0		Aldrin	3.623	13829	.52	Aldrin
	0		Telodrin	3.795	12002	.017	Telodrin
	0		Dieldrin	4.66	173692	.122	Dieldrin
	0		Endrin	4.9	15531	.012	Endrin
	0		o,p-DDT	4.939	258511	.463	o,p-DDT
5.1	7339889	47.19	Kepone	4.992	28829230	45.869	Kepone
	0		Methoxychlor	5.71	130665	.259	Methoxychlor
5.78	6883	.036	Mirex	5.85	17016	.031	Mirex
5.845	23420	.08	Endo. sulfate		0		Endo. sulfate
6.025	10240	.029	Endrin ketone		0		Endrin ketone

Files:  
 Area File: 05pest18306010.010.RAW  
 Area File: 05pest18306010B.010.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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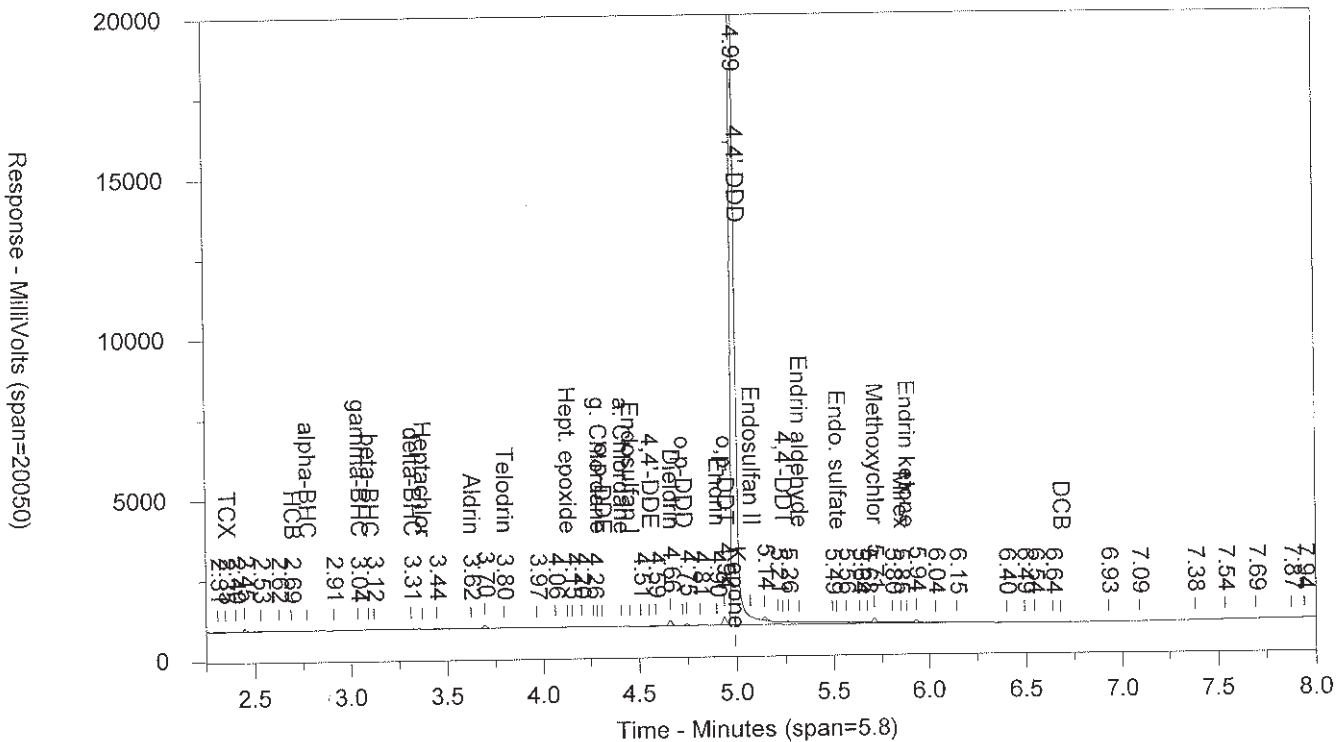


ICKEPX1824E AAICKEPAA CCAL 1831799999 00177 SW-846 8081

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ICKEPX1824E

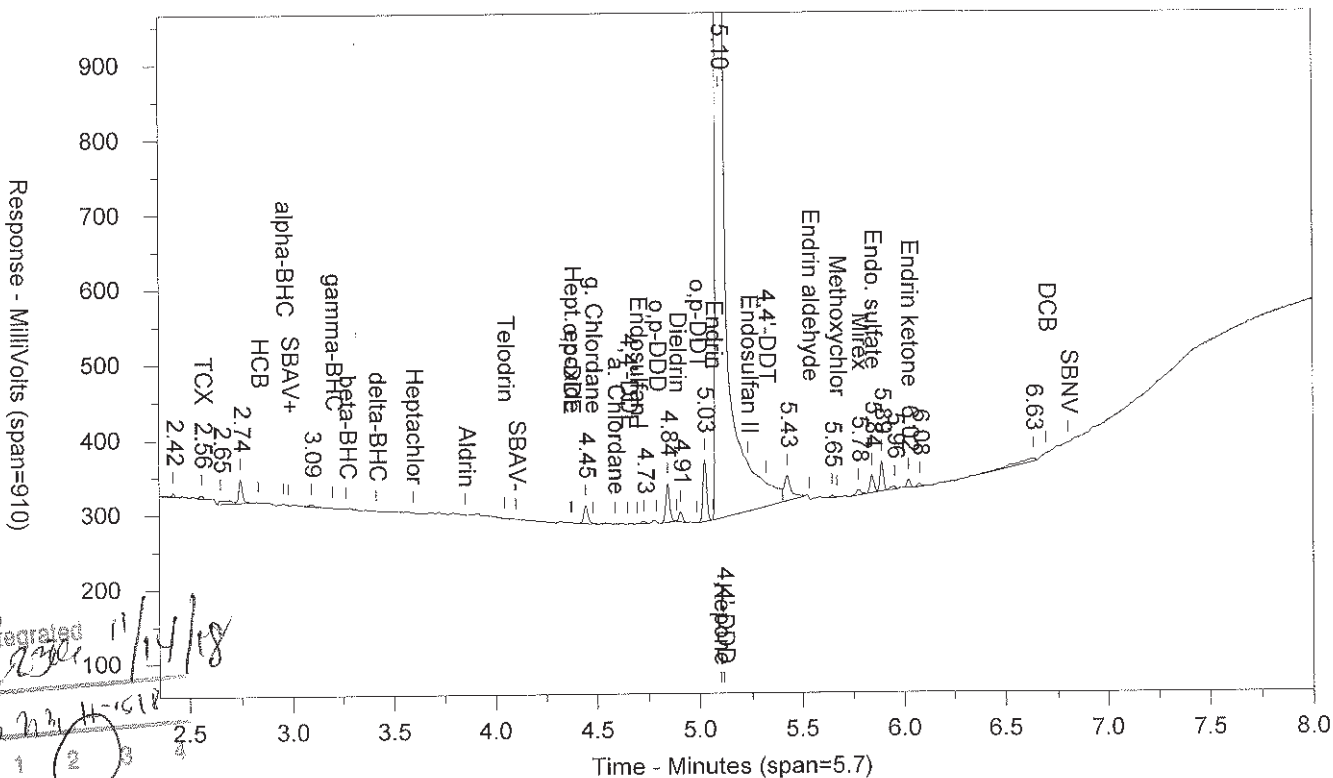
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CCAL 1831799999

00177

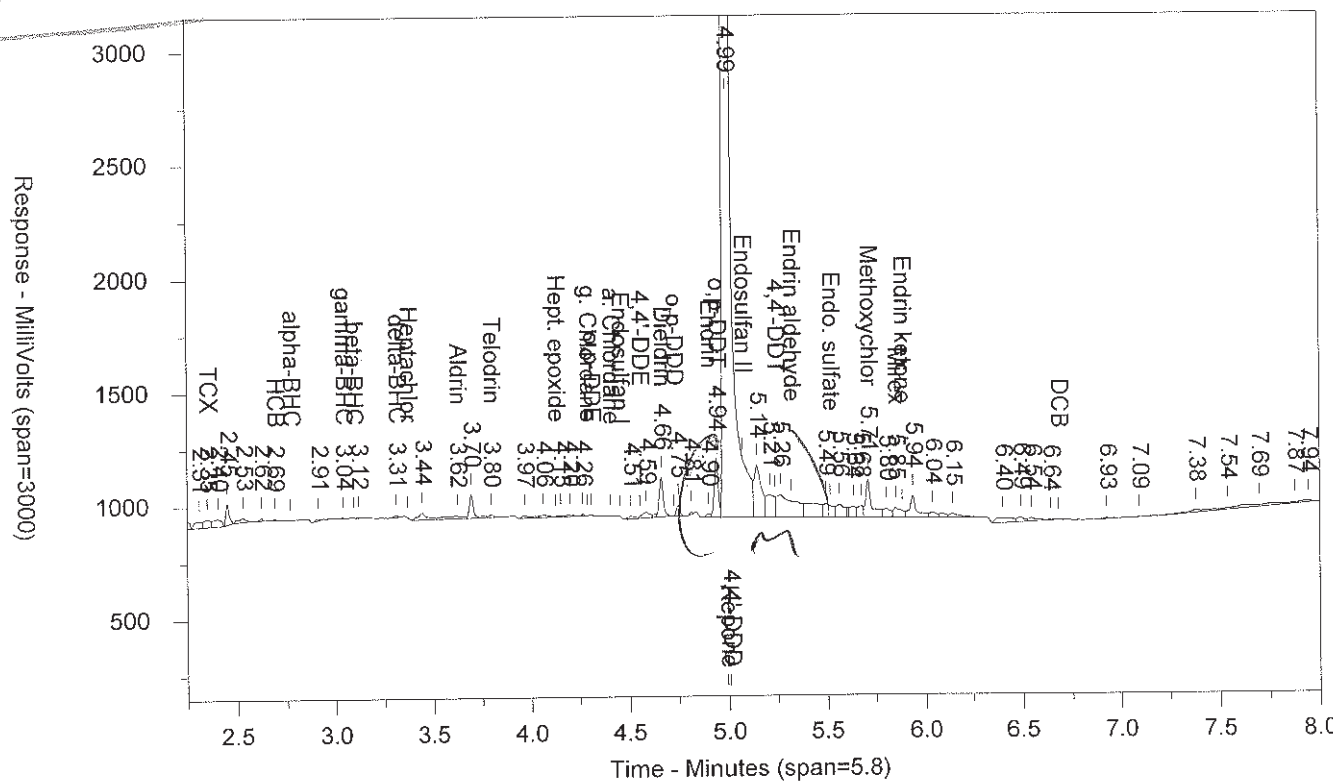
SW-846 8081A

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M = Manually Integrated  
 Analyst: *[Signature]*  
 Approved by: *[Signature]*  
 Circle Reason: 1 (2) 3  
 1 = Missed Peak  
 2 = Improper Baseline  
 3 = RT Update  
 4 = Other

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.010.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: ICKEPX1824E      AAICKEPAA      CCAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 11:53:02 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.558	4210	.01	TCX	2.349	32779	.017	TCX
	0		HCB	2.688	6990	.005	HCB
	0		gamma-BHC	3.038	4146	.552	gamma-BHC
	0		delta-BHC	3.31	7662	.649	delta-BHC
	0		Aldrin	3.623	13829	.52	Aldrin
	0		Telodrin	3.795	12002	.017	Telodrin
	0		Dieldrin	4.66	173692	.122	Dieldrin
	0		Endrin	4.9	15531	.012	Endrin
	0		o,p-DDT	4.939	258511	.463	o,p-DDT
5.1	7339889	47.19	Kepone	4.992	28829230	45.869	Kepone
	0		Methoxychlor	5.71	166034	.329	Methoxychlor
5.78	6883	.036	Mirex	5.85	43149	.078	Mirex
5.845	23420	.08	Endo. sulfate		0		Endo. sulfate
6.025	10240	.029	Endrin ketone		0		Endrin ketone

Files:

Area File: 05pest18306010.010.BND  
 Area File: 05pest18306010B.010.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 5:25:24 PM  
 File Reported On: 11/14/2018 at 5:27:42 PM

ICKEPX1824E

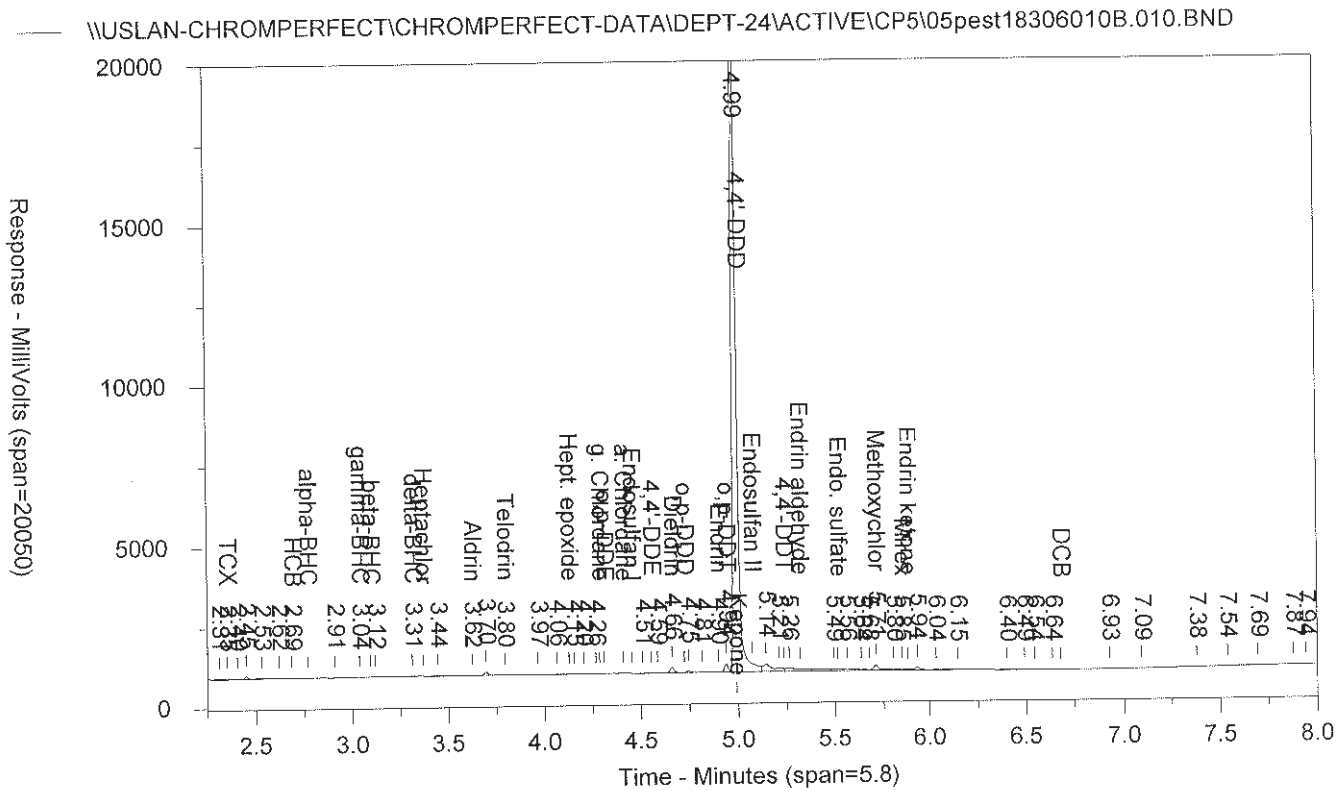
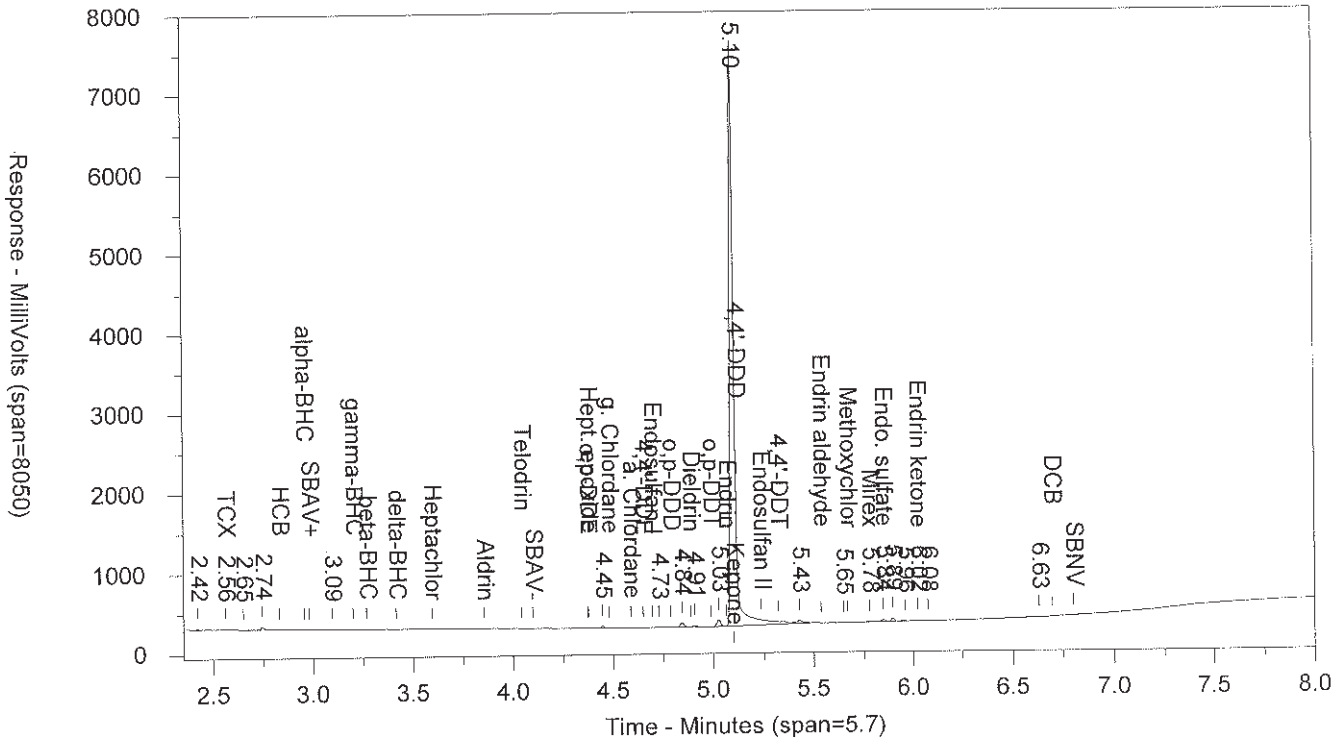
AAICKEPAA

CCAL 1831799999

00177

SW-846 8081.

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.010.BND





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MDKPX1824C      AAMDKPXAA      ICAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 12:05:56 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.553	6268	.014	TCX	2.35	22823	.011	TCX
	0		Heptachlor	3.382	24216	.013	Heptachlor
	0		a. Chlordane	4.399	9282	.006	a. Chlordane
	0		4,4'-DDE	4.56	21476	1.108	4,4'-DDE
	0		Dieldrin	4.664	17039	.012	Dieldrin
4.782	2936	.017	o,p-DDD		0		o,p-DDD
	0		Endrin	4.899	22867	.018	Endrin
5.099	266617	1.714	Kepone	4.987	916893	5.227	Kepone
	0		Methoxychlor	5.736	6452	.013	Methoxychlor
5.795	2776	.015	Mirex	5.868	11611	.021	Mirex
5.851	3287	.011	Endo. sulfate		0		Endo. sulfate

Files:  
 Area File: 05pest18306010.011.RAW  
 Area File: 05pest18306010B.011.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/14/2018 12:13:57 PM  
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MDKPX1824C

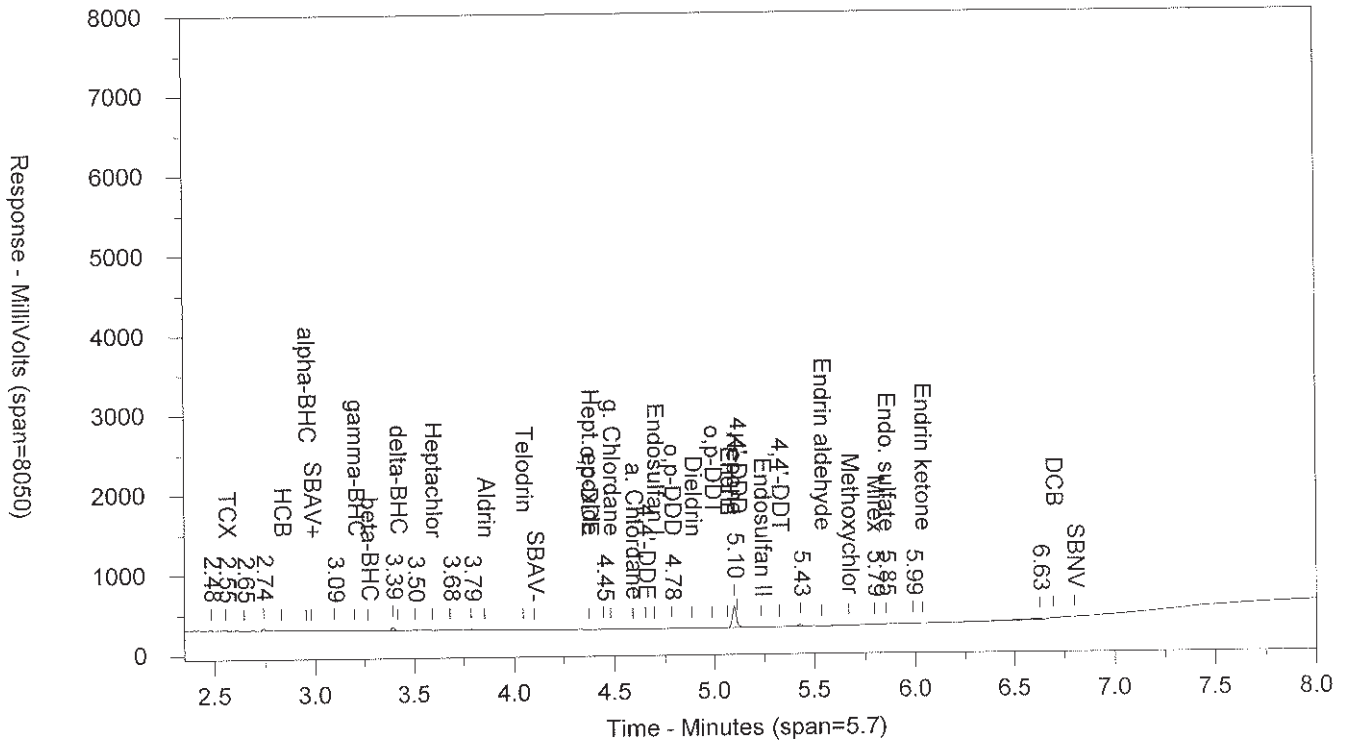
AAMDKPXAA

ICAL 1831799999

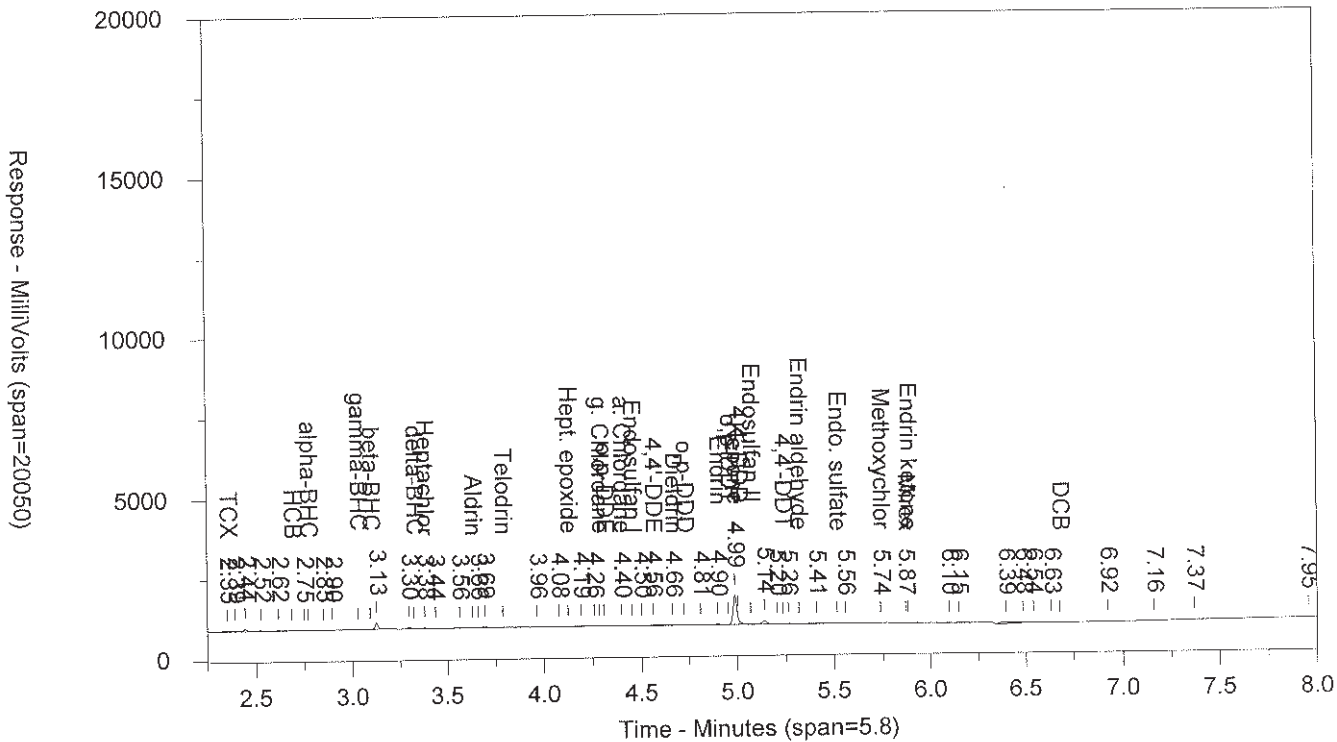
00177

SW-846 808

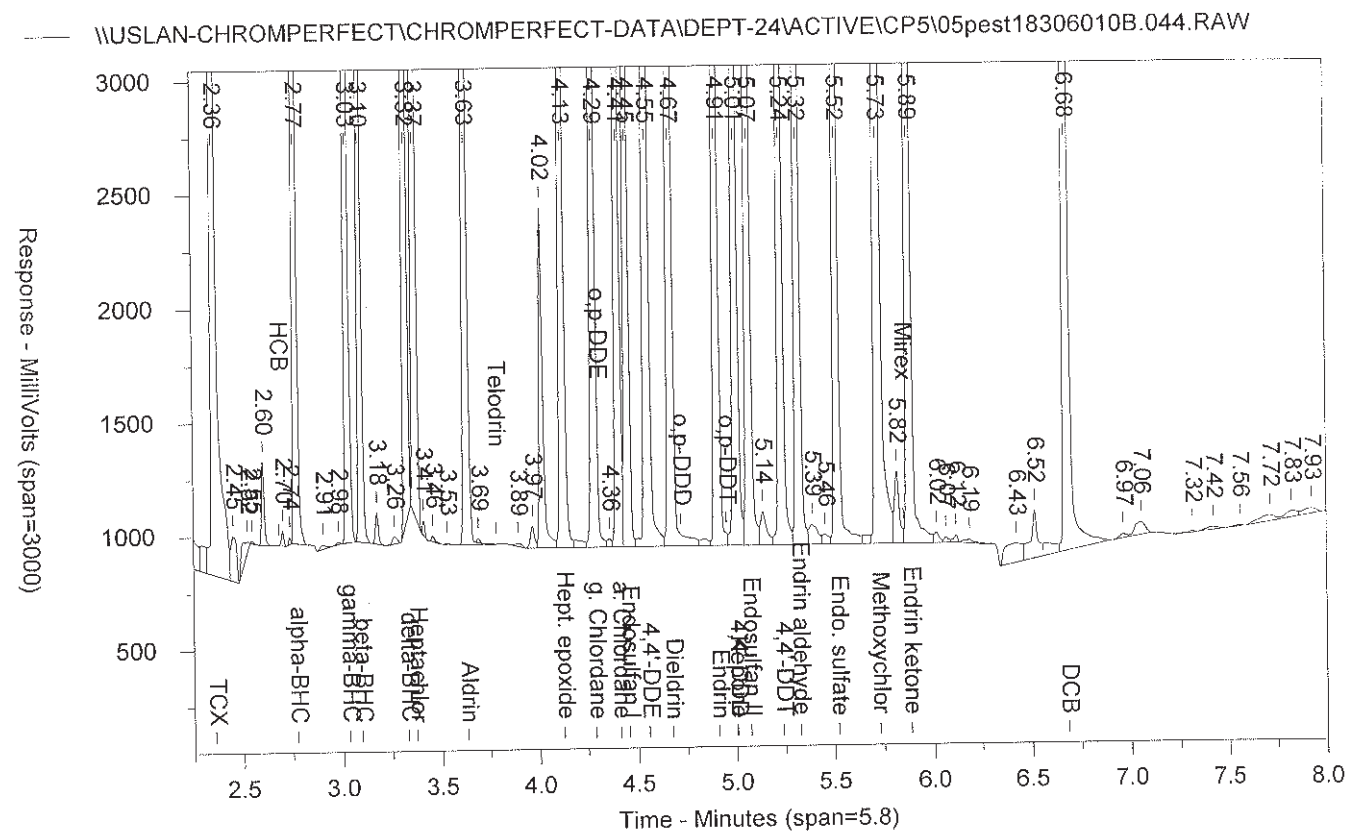
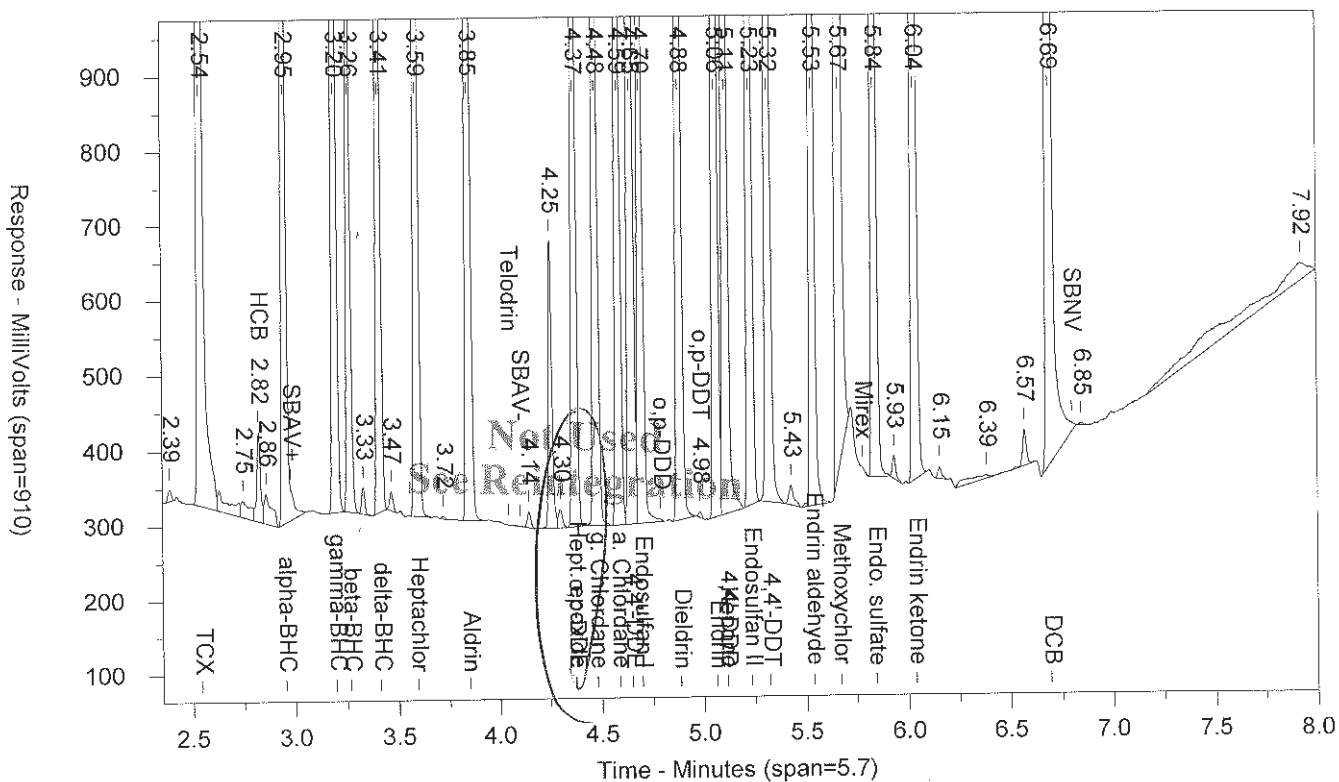
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.011.RAW



MIXA31824B FAMIXA3FA CCAL 1831799999 00177 SW-846 8081A  
 \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.044.RAW





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA31824B      FAMIXA3FA      CCAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 8:50:29 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

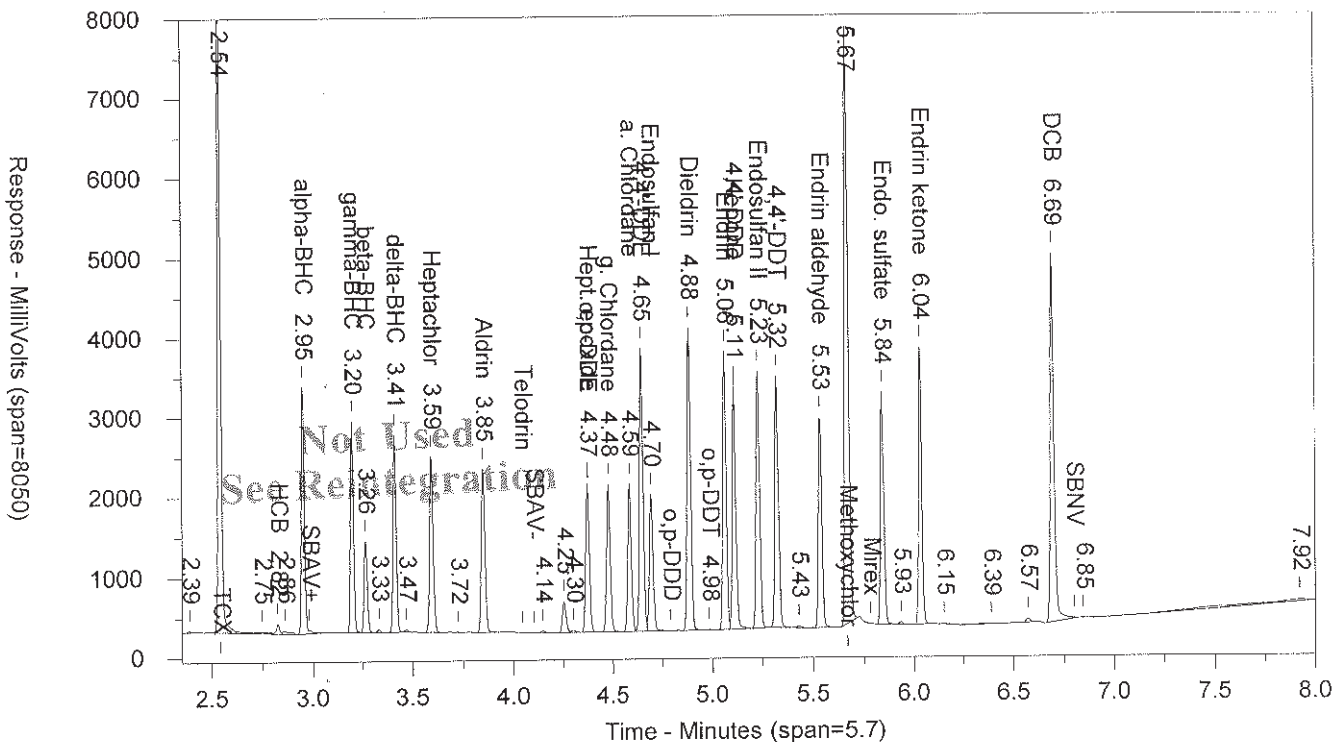
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	8465505	19.385	TCX	2.357	40215880	20.254	TCX
2.952	3085335	4.929	alpha-BHC	2.772	13459920	4.704	alpha-BHC
2.824	120297	.285	HCB		0		HCB
3.197	2630569	4.946	gamma-BHC	3.032	11277550	4.781	gamma-BHC
3.265	1133470	4.781	beta-BHC	3.097	4543516	4.79	beta-BHC
3.411	2460621	5.052	delta-BHC	3.325	10203260	4.786	delta-BHC
3.591	2192967	4.865	Heptachlor	3.369	8803469	4.879	Heptachlor
3.851	2044897	4.91	Aldrin	3.633	8218210	4.721	Aldrin
	0		Hept. epoxide	4.127	6739964	4.885	Hept. epoxide
4.478	1836633	4.847	g. Chlordane	4.288	6990746	4.827	g. Chlordane
4.373	1850176	9.944	o,p-DDE		0		o,p-DDE
4.586	1842176	4.879	a. Chlordane	4.409	6962194	4.847	a. Chlordane
4.695	1712320	4.84	Endosulfan I	4.454	6294937	4.913	Endosulfan I
4.647	3550807	10.489	4,4'-DDE	4.554	13423290	9.893	4,4'-DDE
4.885	3794758	10.158	Dieldrin	4.674	14432340	10.132	Dieldrin
5.063	3497421	9.94	Endrin	4.91	12965160	9.962	Endrin
4.983	8035	.039	o,p-DDT		0		o,p-DDT
5.111	3040649	19.549	Kepone	5.006	11093190	20.044	Kepone
5.231	3230604	9.966	Endosulfan II	5.073	11995700	9.993	Endosulfan II
5.32	3152095	10.084	4,4'-DDT	5.236	11302780	9.772	4,4'-DDT
5.534	2638953	9.895	Endrin aldehyde	5.322	9658424	9.981	Endrin aldehyde
5.841	2923738	9.934	Endo. sulfate	5.519	11217940	9.821	Endo. sulfate
5.668	7481428	52.073	Methoxychlor	5.727	26033340	51.603	Methoxychlor
6.035	3477814	9.956	Endrin ketone	5.886	11957240	9.946	Endrin ketone
6.694	4633031	21.099	DCB	6.681	15517410	20.001	DCB

Files:

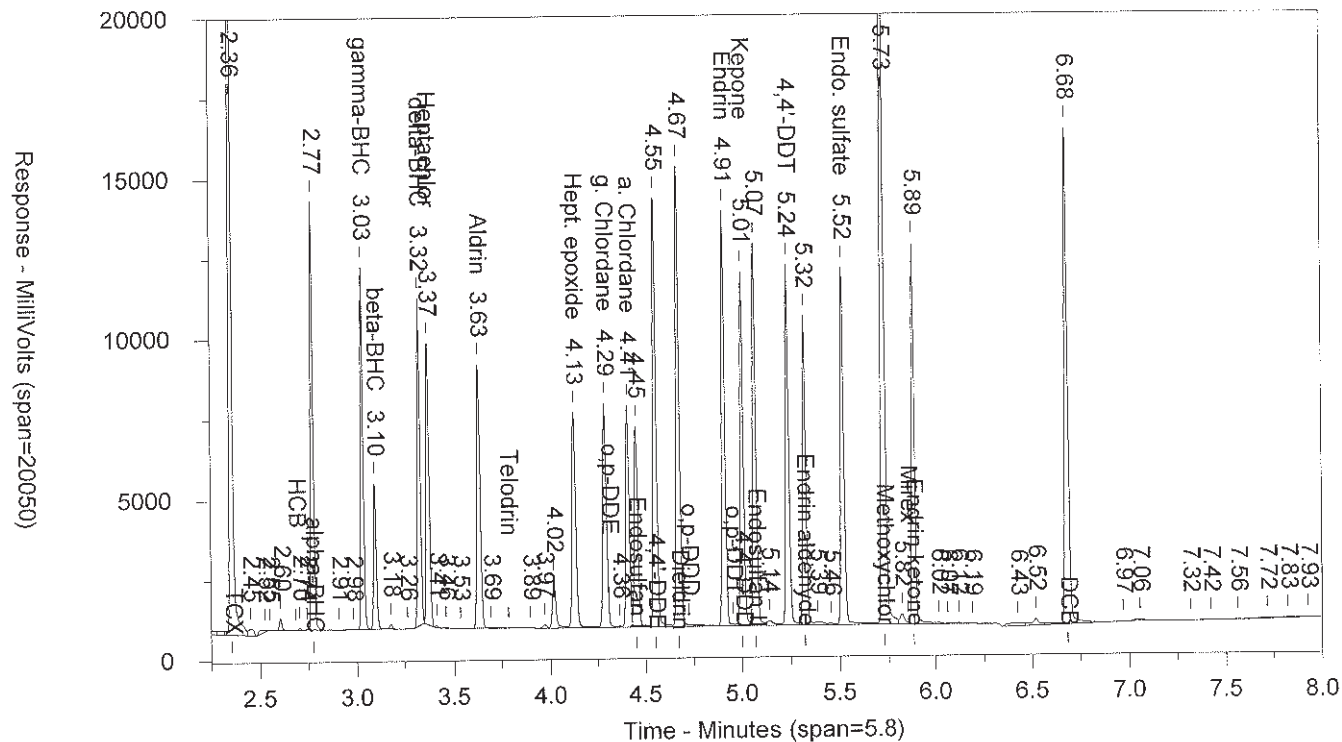
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 Area File: 05pest18306010B.044.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:06 AM  
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MIXA31824B FAMIXA3FA CCAL 1831799999 00177 SW-846 8081A

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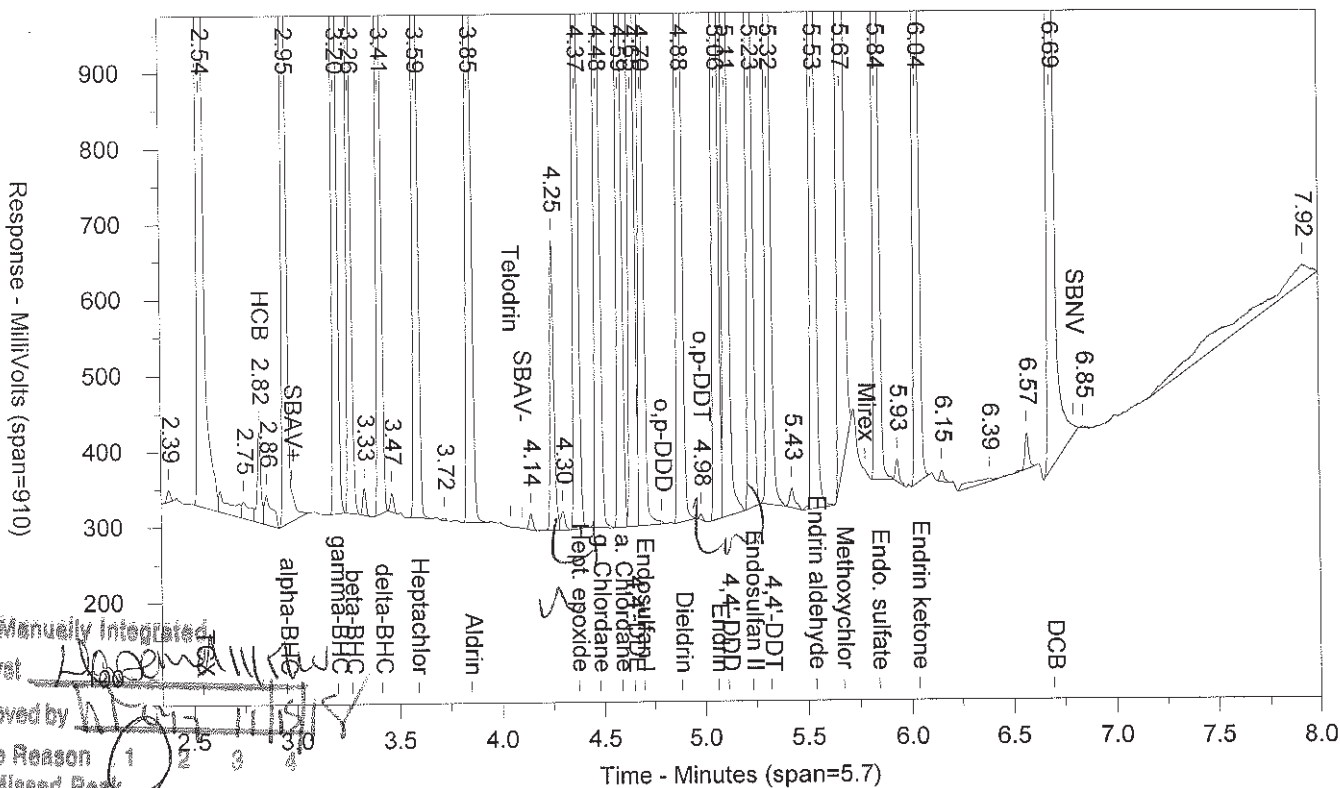


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MIXA31824B FAMIXA3FA CCAL 1831799999 00177 SW-846 8081A

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M = Manually Integrated

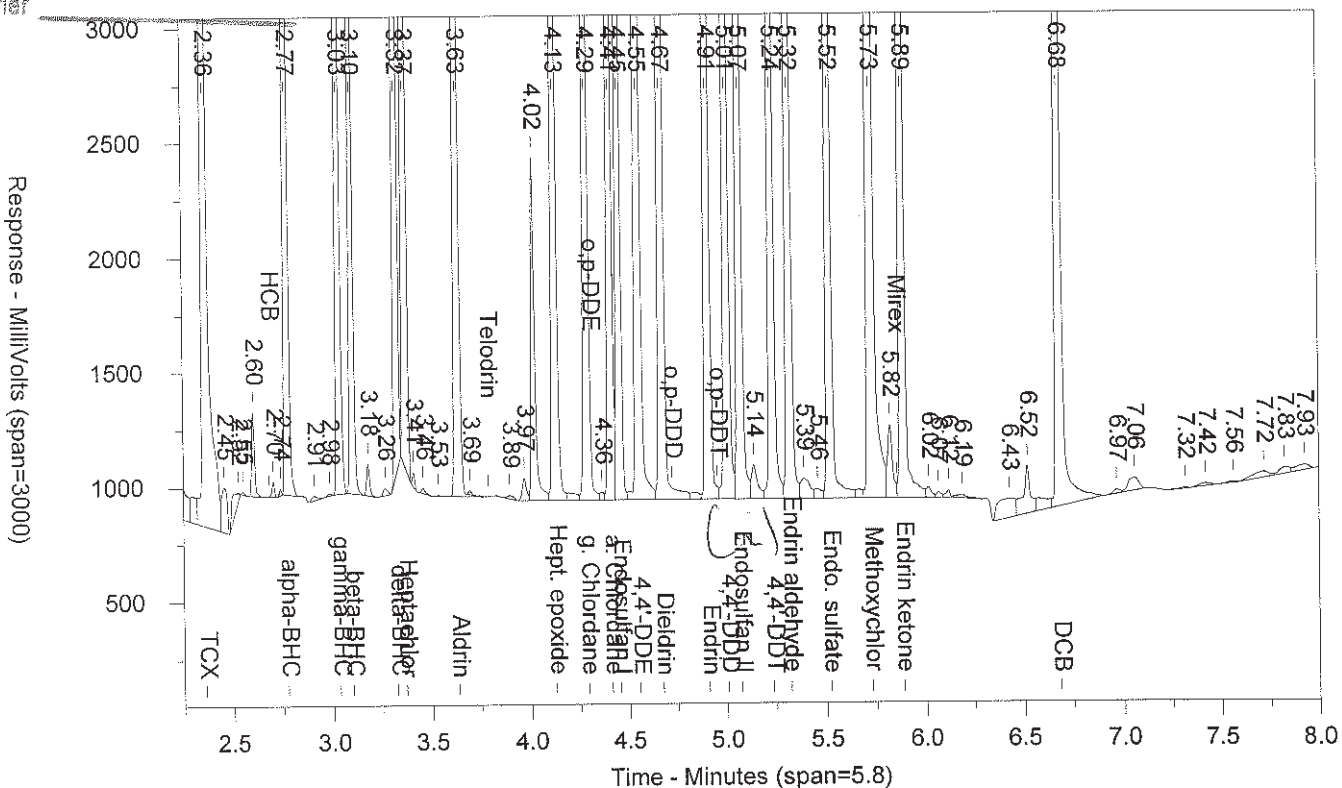
Analyst

Approved by

Circle Reason

- 1 = Missed Peak
- 2 = Improper Baseline
- 3 = RT Update
- 4 = Other

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.044.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA31824B      FAMIXA3FA      CCAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 8:50:29 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	8465505	19.385	TCX	2.357	40215880	20.254	TCX
2.952	3085335	4.929	alpha-BHC	2.772	13459920	4.704	alpha-BHC
2.824	120297	.285	HCB		0		HCB
3.197	2630569	4.946	gamma-BHC	3.032	11277550	4.781	gamma-BHC
3.265	1133470	4.781	beta-BHC	3.097	4543516	4.79	beta-BHC
3.411	2460621	5.052	delta-BHC	3.325	10203260	4.786	delta-BHC
3.591	2192967	4.865	Heptachlor	3.369	8803469	4.879	Heptachlor
3.851	2044897	4.91	Aldrin	3.633	8218210	4.721	Aldrin
4.373	1850176	4.962	Hept. epoxide	4.127	6739964	4.885	Hept. epoxide
4.478	1836633	4.847	g. Chlordane	4.288	6990746	4.827	g. Chlordane
4.586	1842176	4.879	a. Chlordane	4.409	6962194	4.847	a. Chlordane
4.695	1712320	4.84	Endosulfan I	4.454	6294937	4.913	Endosulfan I
4.647	3550807	10.489	4,4'-DDE	4.554	13423290	9.893	4,4'-DDE
4.885	3794758	10.158	Dieldrin	4.674	14432340	10.132	Dieldrin
5.063	3497421	9.94	Endrin	4.91	12965160	9.962	Endrin
4.983	8035	.039	o,p-DDT		0		o,p-DDT
5.111	3040649	10.67	4,4'-DDD	5.006	11093190	10.05	4,4'-DDD
5.231	3230604	9.966	Endosulfan II	5.073	11995700	9.993	Endosulfan II
5.32	3152095	10.084	4,4'-DDT	5.236	11302780	9.772	4,4'-DDT
5.534	2638953	9.895	Endrin aldehyde	5.322	9658424	9.981	Endrin aldehyde
5.841	2923738	9.934	Endo. sulfate	5.519	11217940	9.821	Endo. sulfate
5.668	7481428	52.073	Methoxychlor	5.727	26033340	51.603	Methoxychlor
6.035	3477814	9.956	Endrin ketone	5.886	11957240	9.946	Endrin ketone
6.694	4633031	21.099	DCB	6.681	15517410	20.001	DCB

Files:

Area File: 05pest18306010.044.BND  
 Area File: 05pest18306010B.044.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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MIXA31824B

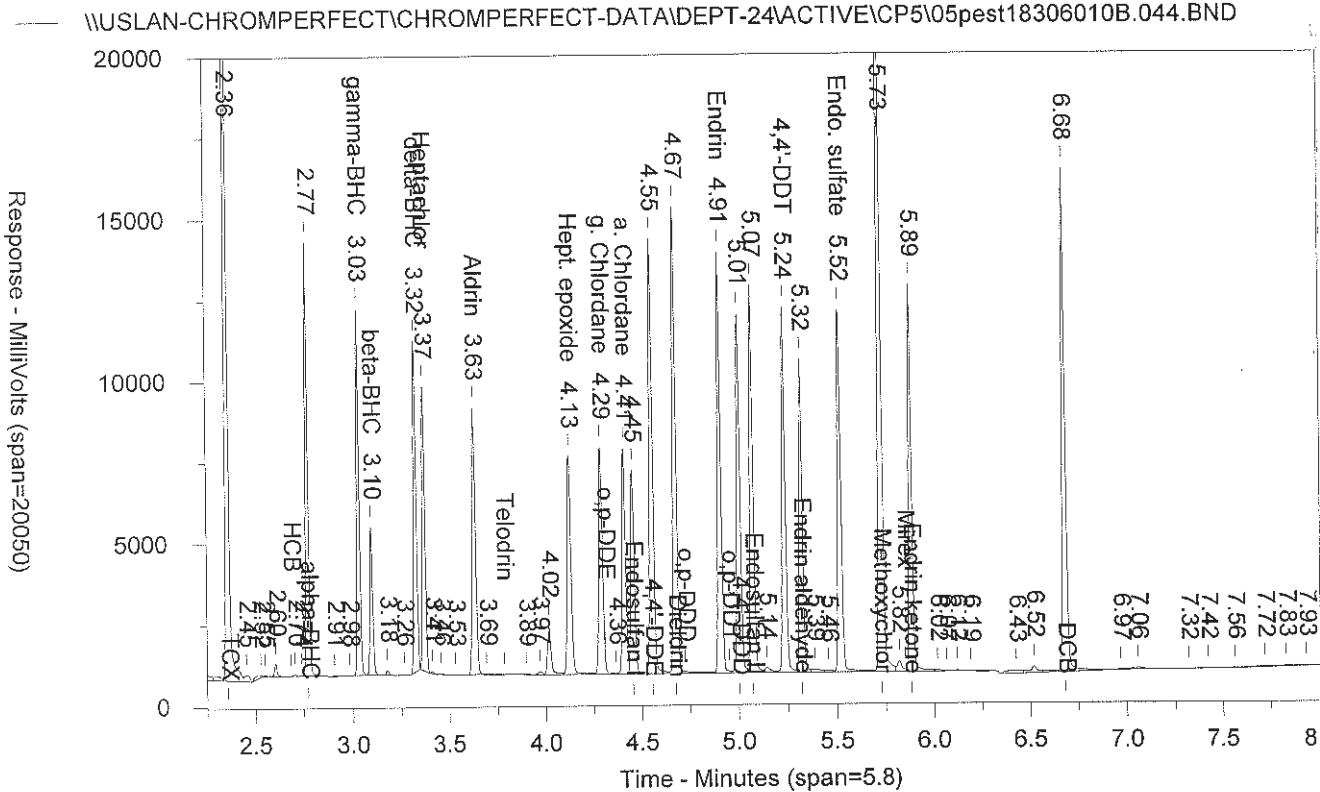
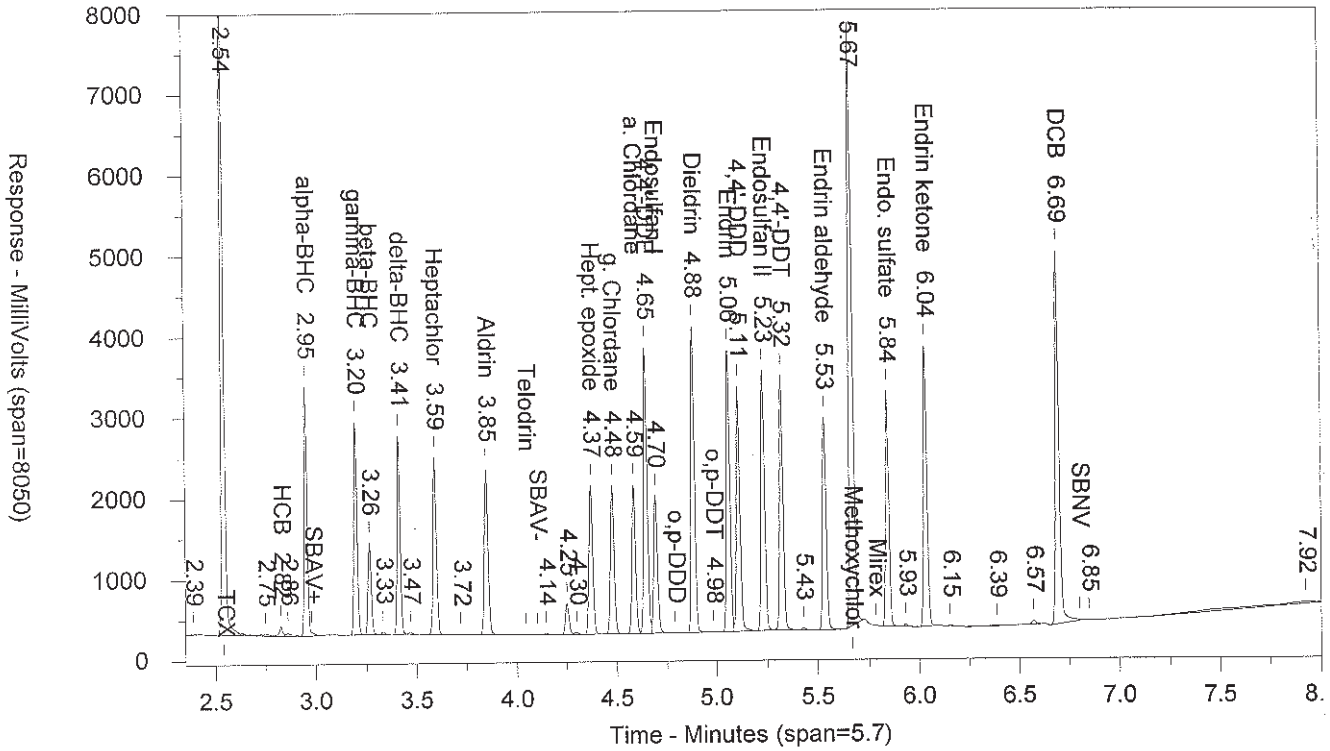
FAMIXA3FA

CCAL 1831799999

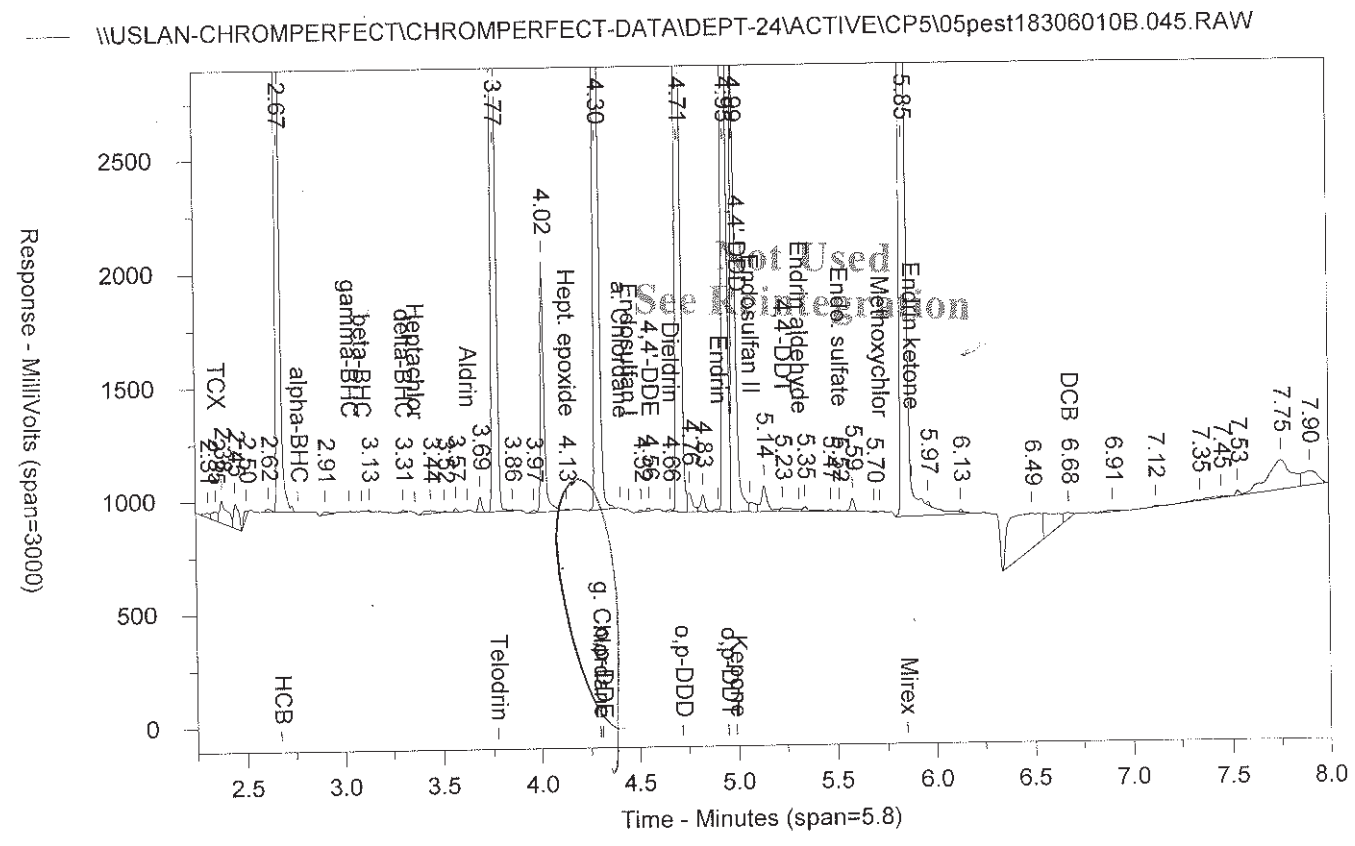
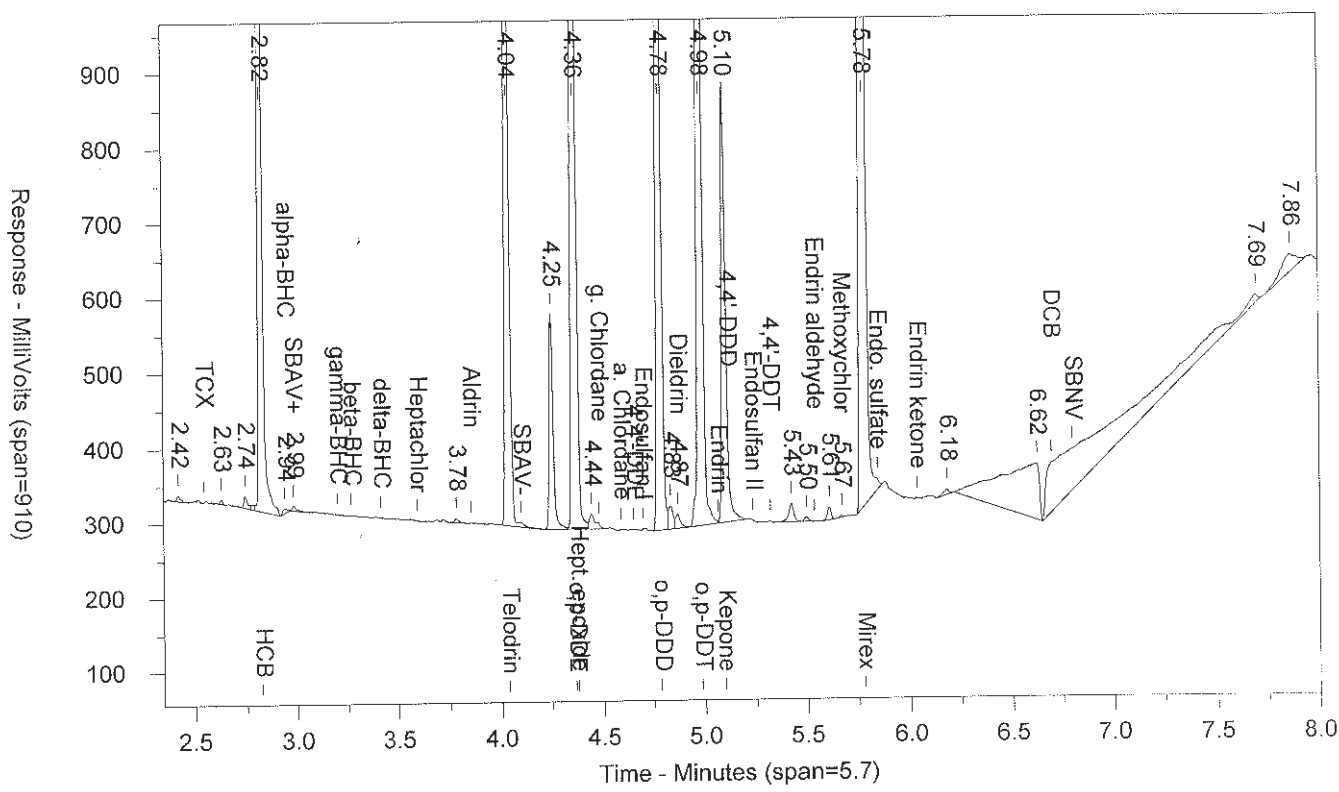
00177

SW-846 808

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MIXE41824D ARMIXE4AR CCAL 1831799999 00177 SW-846 8081A



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXE41824D      ARMIXE4AR      CCAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 9:03:13 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
	0		TCX	2.349	38945	.02	TCX
2.824	2330223	5.53	TCX	2.673	9532884	6.749	TCX
2.941	5826	.009	alpha-BHC		0		alpha-BHC
	0		delta-BHC	3.307	8532	.649	delta-BHC
4.038	1280217	5.903	Telodrin	3.772	5054048	7.062	Telodrin
	0		Hept. epoxide	4.133	5512	.004	Hept. epoxide
	0		g. Chlordane	4.296	8475810	5.852	g. Chlordane
4.364	2294101	12.33	o,p-DDE		0		o,p-DDE
	0		4,4'-DDE	4.556	13477	1.102	4,4'-DDE
4.869	18746	.05	Dieldrin	4.664	9434	.007	Dieldrin
4.784	2084743	12.329	o,p-DDD	4.714	7497219	14.988	o,p-DDD
4.983	2412130	11.747	o,p-DDT	4.947	8195080	14.669	o,p-DDT
5.098	583671	3.753	Kepone	4.99	2020140	6.833	Kepone
	0		4,4'-DDT	5.234	16227	.014	4,4'-DDT
	0		Endo. sulfate	5.519	7242	.006	Endo. sulfate
5.668	2711	.019	Methoxychlor		0		Methoxychlor
5.777	5872621	30.935	Mirex	5.848	20725730	37.478	Mirex
	0		DCB	6.683	30183	.039	DCB

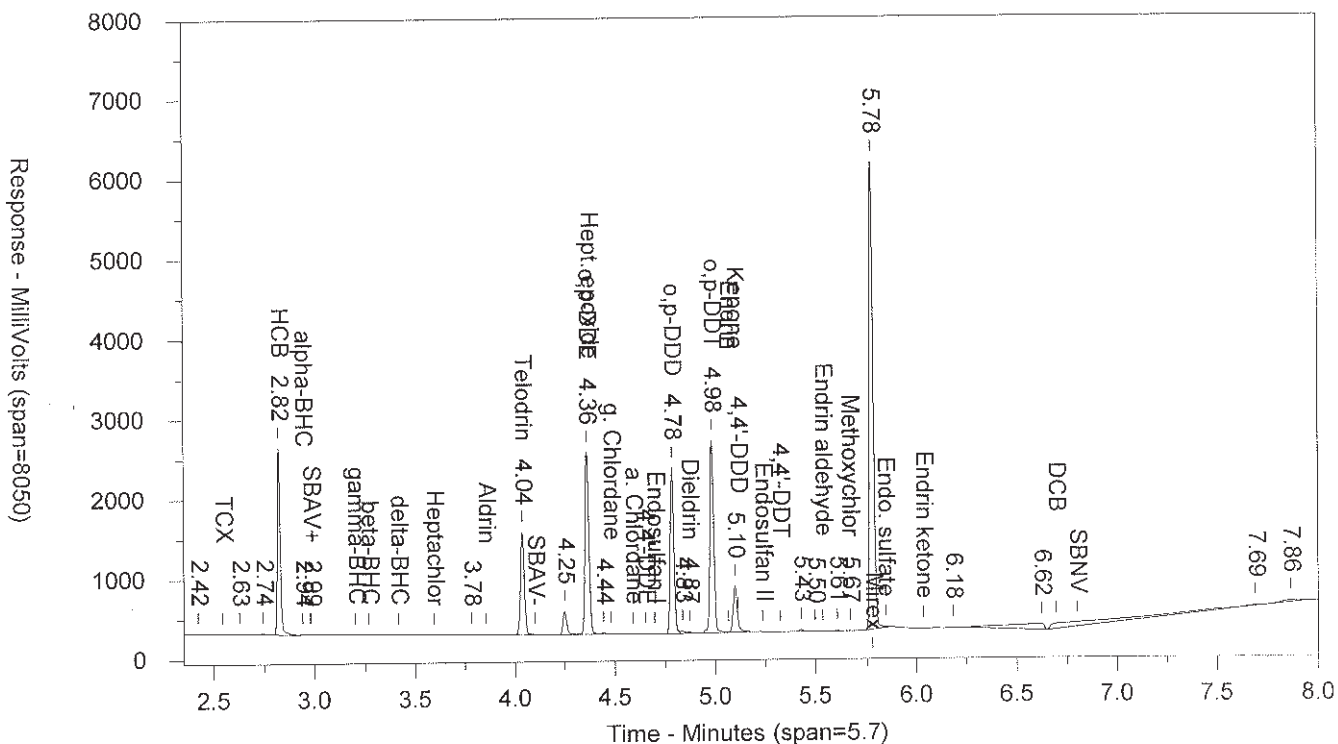
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Area File: 05pest18306010.045.RAW  
 Area File: 05pest18306010B.045.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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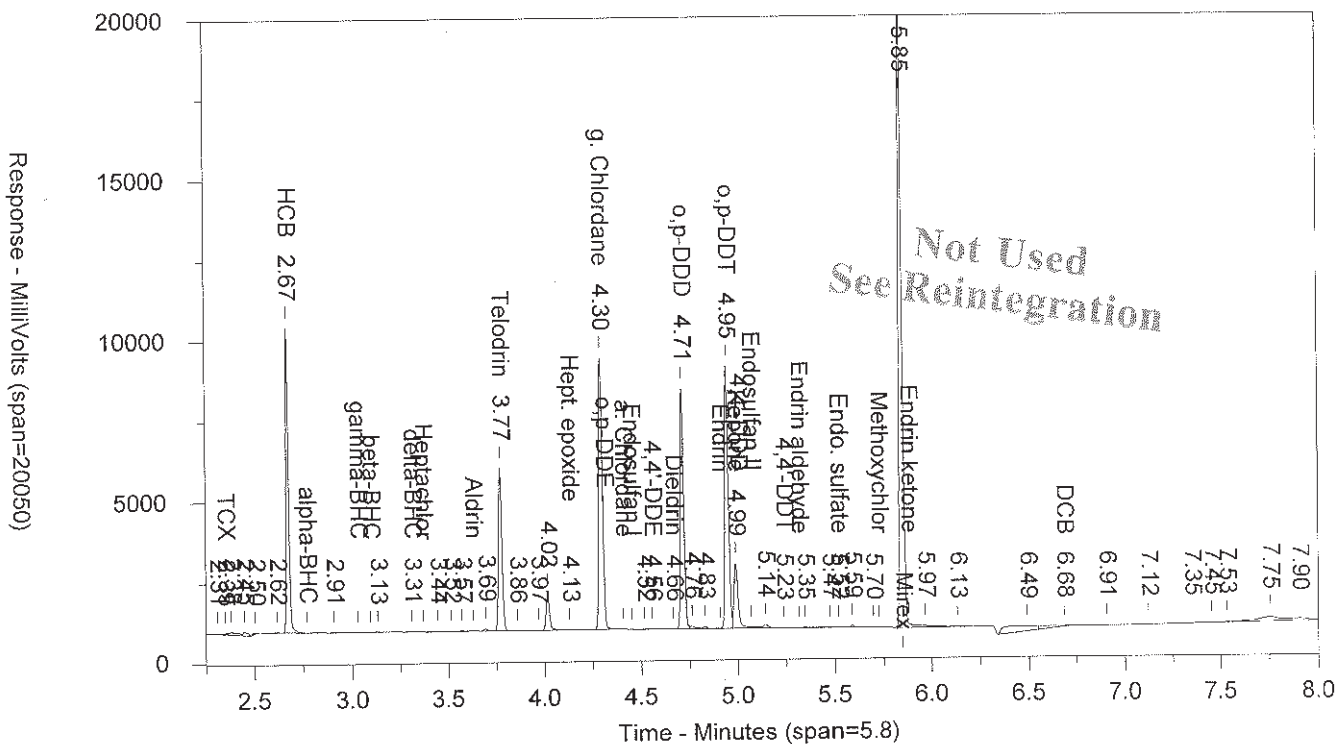
**Not Used  
 See Reintegration**

MIXE41824D ARMIXE4AR CCAL 1831799999 00177 SW-846 8081/

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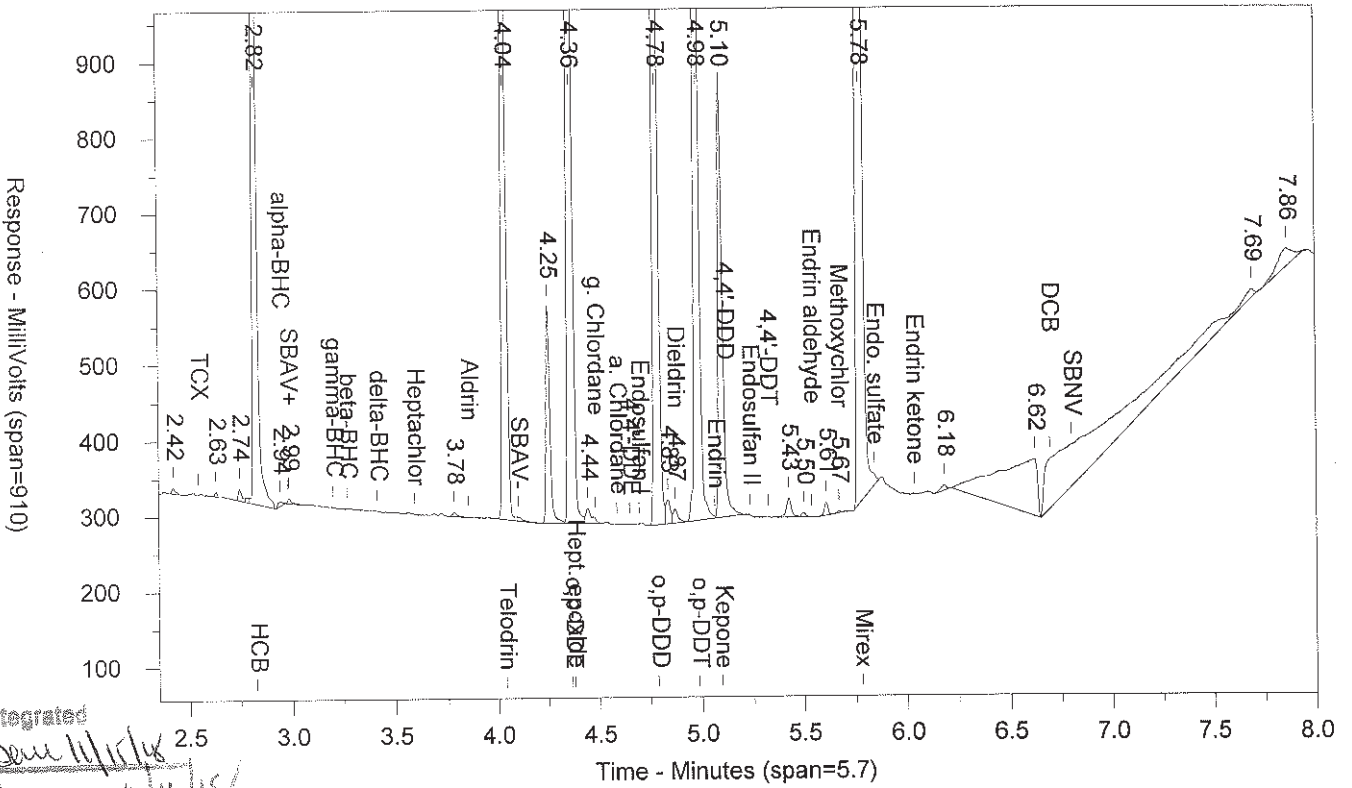


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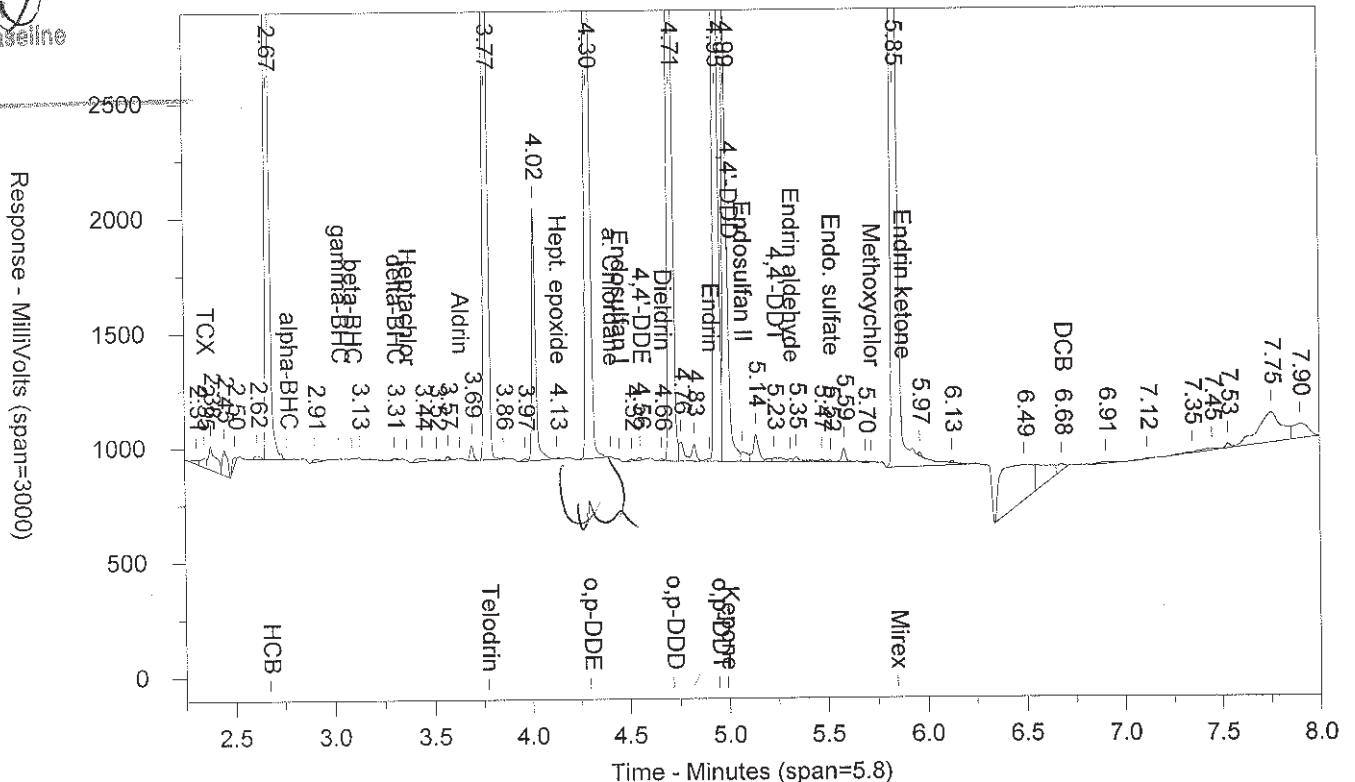
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M = Manually Integrated  
 Analyst: *[Signature]*  
 Approved by: *[Signature]*

Circle Reason 1 2 \USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.045.BND

- 1 = Missed Peak
- 2 = Improper Baseline
- 3 = RT Update
- 4 = Other



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXE41824D      ARMIXE4AR      CCAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/14/2018 9:03:13 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

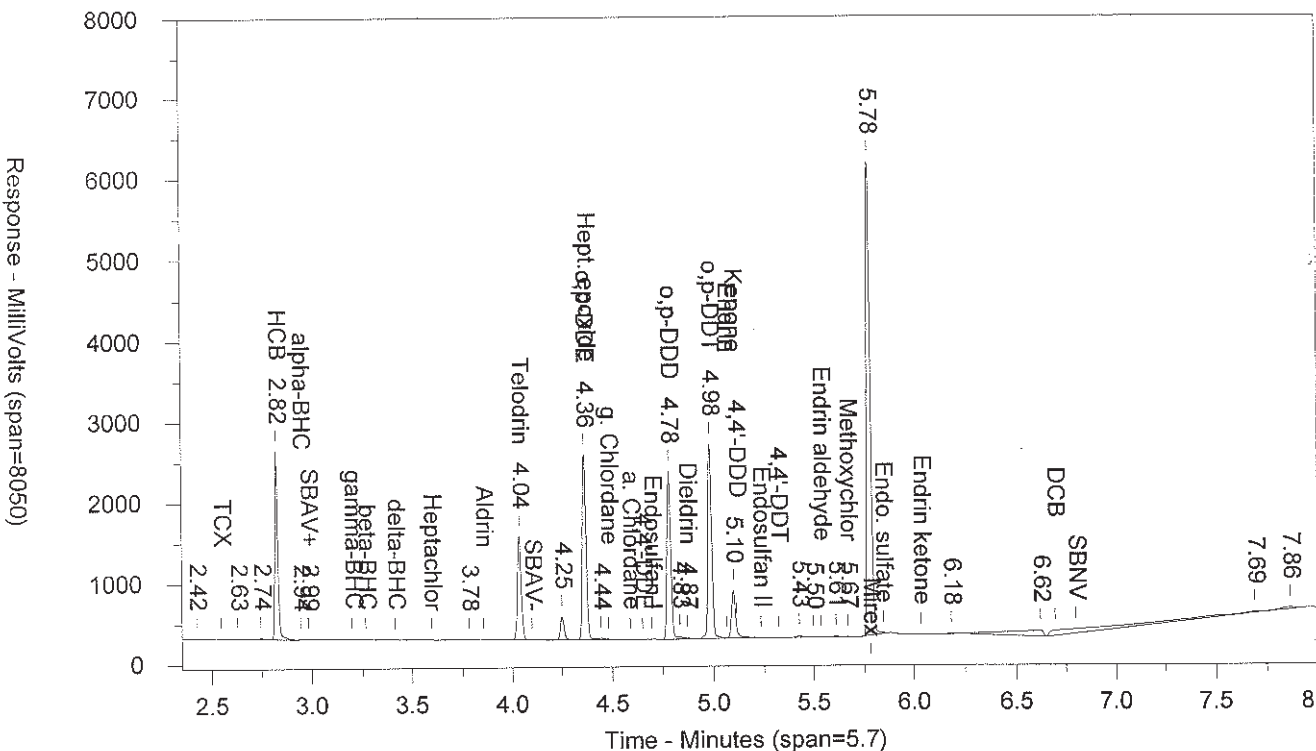
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
	0		TCX	2.349	38945	.02	TCX
2.824	2330223	5.53	TCX	2.673	9532884	6.749	TCX
2.941	5626	.009	alpha-BHC		0		alpha-BHC
	0		delta-BHC	3.307	8532	.649	delta-BHC
4.038	1280217	5.903	Telodrin	3.772	5054048	7.062	Telodrin
	0		Hept. epoxide	4.133	5512	.004	Hept. epoxide
4.364	2294101	12.33	o,p-DDE	4.296	8475810	14.84	o,p-DDE
	0		4,4'-DDE	4.556	13477	1.102	4,4'-DDE
4.869	18746	.05	Dieldrin	4.664	9434	.007	Dieldrin
4.784	2084743	12.329	o,p-DDD	4.714	7497219	14.988	o,p-DDD
4.983	2412130	11.747	o,p-DDT	4.947	8195080	14.669	o,p-DDT
5.098	583671	3.753	Kepone	4.99	2020140	6.833	Kepone
	0		4,4'-DDT	5.234	16227	.014	4,4'-DDT
	0		Endo. sulfate	5.519	7242	.006	Endo. sulfate
5.668	2711	.019	Methoxychlor		0		Methoxychlor
5.777	5872621	30.935	Mirex	5.848	20725730	37.478	Mirex
	0		DCB	6.683	30183	.039	DCB

Files:

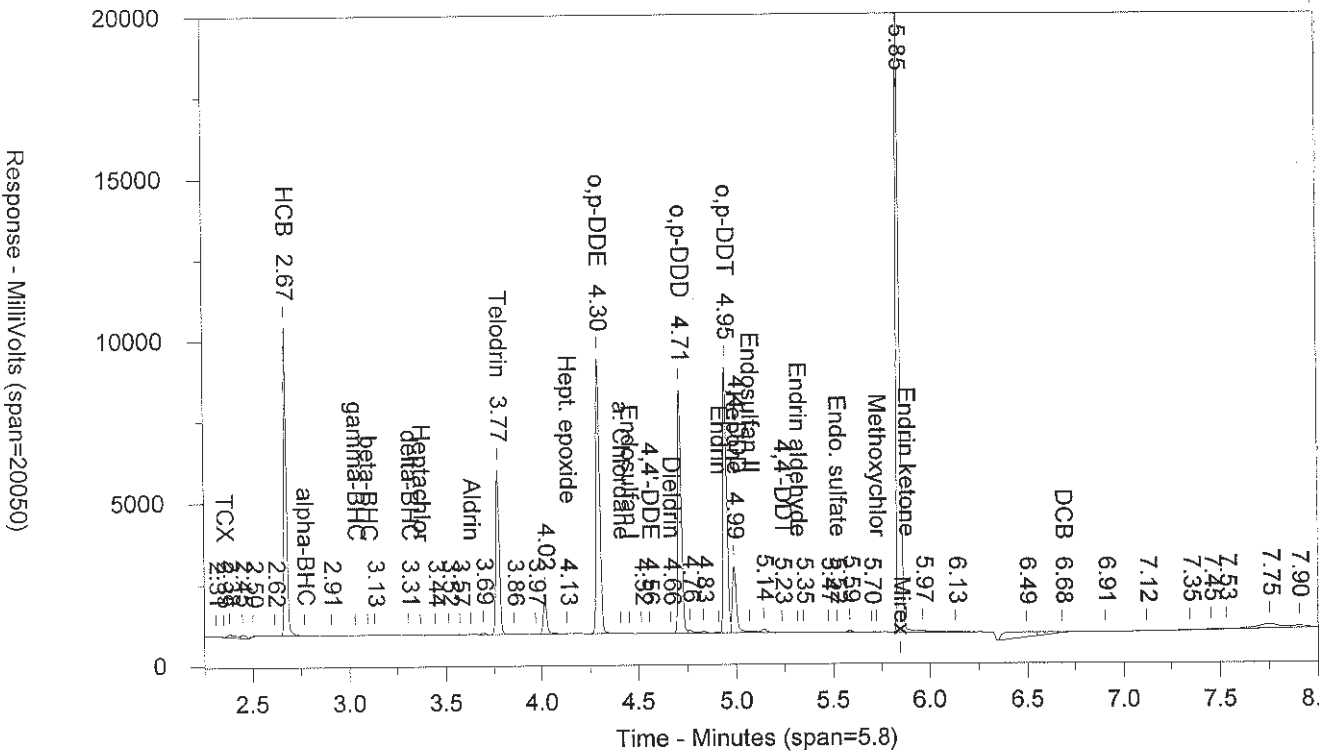
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 Method B: 05PESTDDB.MET  
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 Format A: pestD5.FMTA  
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 File Reported On: 11/15/2018 at 9:41:51 AM

MIXE41824D ARMIXE4AR CCAL 1831799999 00177 SW-846 801

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.045.BND



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## LANCASTER LABORATORIES

Sample Number: TOXA41824E      ZRTOXA4ZR      CCAL 1831799999      00177 Analyst: 2306      SW-846 8081A  
Injected On: 11/14/2018 9:16:03 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306010.046.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830605.cal

RT A	Compound A	Height A	Area A
1.793		28670	22929
1.888		14285	13659
2.018		85349	77061
2.146		4468	3127
2.185		32086	27789
2.334		6080	4750
2.423		19515	20482
2.5		4048	5002
2.559	TCX	4799	8807
2.645		8582	11675
2.748		8218	12983
2.954	alpha-BHC	10153	17705
2.988		4716	10379
3.083		4813	8201
3.187	gamma-BHC	6464	11853
3.307		7353	26002
3.366		12562	12575
3.393	delta-BHC	7091	5084
3.458		15405	15034
3.522		33576	70801
3.595	Heptachlor	21717	29951
3.634		23294	27701
3.682		30181	75711
3.766		19811	45854
3.813		17785	28804
3.851	Aldrin	16875	19551
3.959		73828	126010
4.023		269679	636409
4.139		209152	658605
4.22		177493	311985
4.256		420328	676868
4.297		576195	1829921
4.38	o,p-DDE	236969	310380
4.406		426771	754238
4.455		456022	919717
4.501		646878	1545289
4.565		831850	2022463
4.618		623345	1113841
4.705	Endosulfan I	1158394	3799108
4.742		822518	1758303
4.8	o,p-DDD	1261167	2829222
4.846		1296072	3241662
4.889	Dieldrin	1715826	3468157
4.959		1922175	3896419
5.003	o,p-DDT	2326838	5064401
5.036		1733000	2645402
5.087	Kepone	2716574	7724636
5.133		1806136	2619476
5.161		1821791	3665376
5.223	Endosulfan II	4165545	10378270
5.311	4,4'-DDT	3793156	14101400
5.359		1129795	1672924

## Chrom Perfect Chromatogram Report

RT A	Compound A	Height A	Area A
5.406		1802037	3948797
5.432		2396248	4311902
5.474		3860885	7287368
5.519	Endrin aldehyde	3035909	6905210
5.562		2753282	6806339
5.63		2738603	7566688
5.676	Methoxychlor	1534168	2228103
5.709		3361149	8601461
5.774	Mirex	3912498	7825300
5.814		2297411	4493224
5.841	Endo. sulfate	1798926	2785397
5.887		1226482	2836633
5.939		983496	3702723
6.028	Endrin ketone	1148932	3519233
6.087		757808	1632456
6.129		701230	1586861
6.162		695874	1119278
6.185		692930	1326392
6.245		436281	1038373
6.288		272517	601343
6.351		217783	612606
6.384		271753	420190
6.409		245048	368816
6.444		185259	587525
6.547		345725	561645
6.578		378019	515879
6.633		22269	36457
6.695	DCB	80234	153902
6.742		86855	167348
6.8		25820	44558
6.929		8950	16202
7.605		41233	490569
7.702		35854	222214
7.873		12251	80954

Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA41824E      ZRTOXA4ZR      CCAL 1831799999      00177 Analyst: 2306      SW-846 8081A  
 Injected On: 11/14/2018 9:16:03 PM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Data File: 05pest18306010B.046.RAW  
 Method File: 05PESTDIB.MET  
 Calibration File: 05pest1830605b.cal

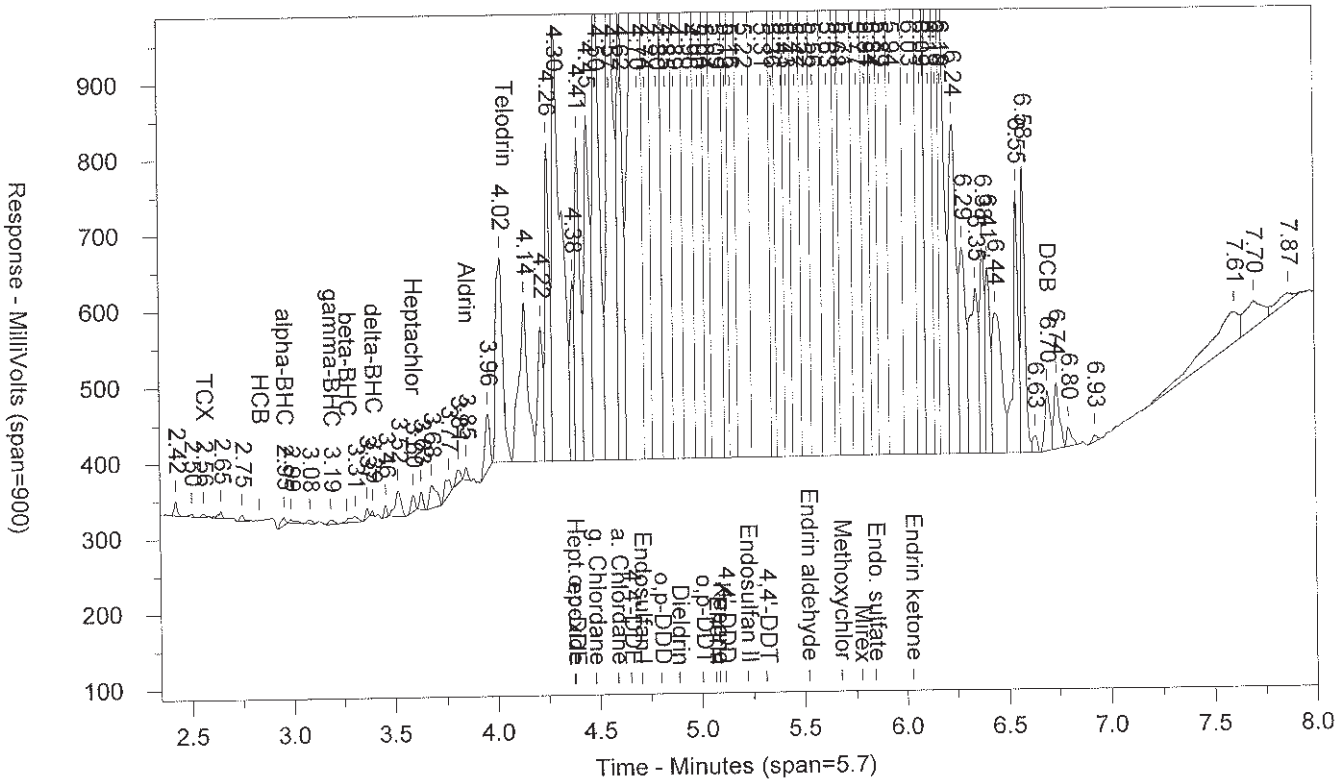
RT B	Compound B	Height B	Area B
1.963		13123	18481
1.994		54768	72235
2.054		47423	94843
2.103		65372	200870
2.163		69154	98085
2.189		75426	142762
2.239		74509	155152
2.272		90596	146995
2.323		79161	102993
2.377		102781	432590
2.444		94715	195197
2.491		79353	77874
2.526		10516	13849
2.599		6164	12340
2.732		25533	36046
2.767	alpha-BHC	17501	13977
2.854		26939	37786
2.906		28103	76908
3.02	gamma-BHC	40199	97068
3.072		64152	64909
3.127		36897	31471
3.15		19378	14322
3.185		11135	9696
3.214		16958	15084
3.251		49386	53729
3.29		67928	74535
3.339	delta-BHC	96374	101520
3.376	Heptachlor	54506	62080
3.44		203745	448942
3.567		208293	612731
3.607		106460	135839
3.667		344139	721270
3.712		1129602	3502808
3.824		800450	1739951
3.849		612062	863055
3.887		797962	1909220
3.946		463573	760296
3.985		1723188	2878240
4.015		1837281	3207093
4.064		1608416	3040564
4.121	Hept. epoxide	1696873	5021120
4.199		1312098	3306435
4.237		1495478	3093183
4.274	g. Chlordane	2004275	3270005
4.341		2921318	9037035
4.375		2012663	5275802
4.433	Endosulfan I	1984850	4912268
4.477		2777237	8744086
4.557	4,4'-DDE	4063803	12466820
4.61		2887604	6136672
4.654	Dieldrin	7498994	16233900
4.702		3856627	6689196

## Chrom Perfect Chromatogram Report

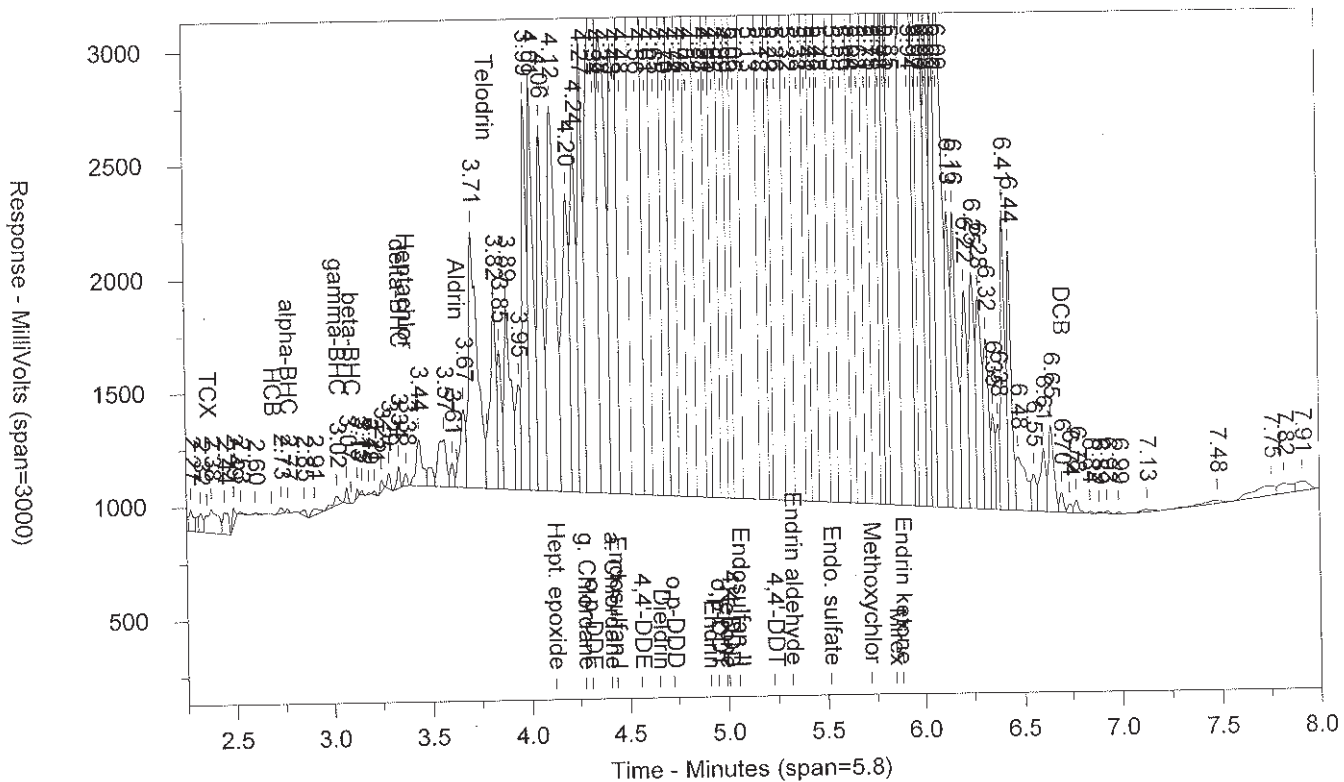
RT B	Compound B	Height B	Area B
4.742		4992587	9001654
4.784		5804276	11263910
4.816		5480624	13184580
4.885		7940050	18175210
4.908	Endrin	6695347	11026120
4.947	o,p-DDT	6121032	12721830
4.992	Kepone	5911308	11813920
5.031		9726763	13765570
5.055	Endosulfan II	14778830	24564500
5.129		23800120	45453470
5.182		5786997	12041560
5.228	4,4'-DDT	3662359	4488992
5.264		9532326	23391410
5.321	Endrin aldehyde	16149640	25637300
5.377		9323408	24357940
5.414		6861087	10561510
5.45		7537796	14930890
5.48		8553838	21540120
5.549		6083021	12165650
5.594		8225974	24888930
5.644		6870189	11804810
5.676		14357020	22807660
5.715	Methoxychlor	7009135	11751730
5.747		6575033	11613110
5.783		2664270	3841037
5.812		2310289	3107344
5.845	Mirex	4307987	10698570
5.938		3179341	11249690
5.971		2246298	2605680
5.996		3217430	5876892
6.029		2331011	3160354
6.058		2207480	3282715
6.088		2530438	5903515
6.134		1305147	1870570
6.163		1305067	2385996
6.216		962326	1767460
6.254		1045209	1889164
6.283		937251	1841954
6.321		751472	1237641
6.355		419259	526874
6.378		374952	426681
6.409		1323291	1924167
6.438		1147892	1522656
6.476		234687	839349
6.555		161707	281804
6.608		276150	601151
6.648		379873	720938
6.701	DCB	87865	121250
6.744		39293	61322
6.776		55835	87142
6.844		10083	10997
6.889		5677	7053
6.929		11045	16551
6.987		10918	13558
7.128		12489	46835
7.478		12793	100480
7.754		42398	373398
7.821		44566	219905
7.915		42915	190061

TOXA41824E ZRTOXA4ZR CCAL 1831799999 00177 SW-846 8081

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.046.RAW





Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA41824E ZRTOXA4ZR CCAL 1831799999 00177 SW-846 8081A  
 Injected On: 11/14/2018 9:16:03 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

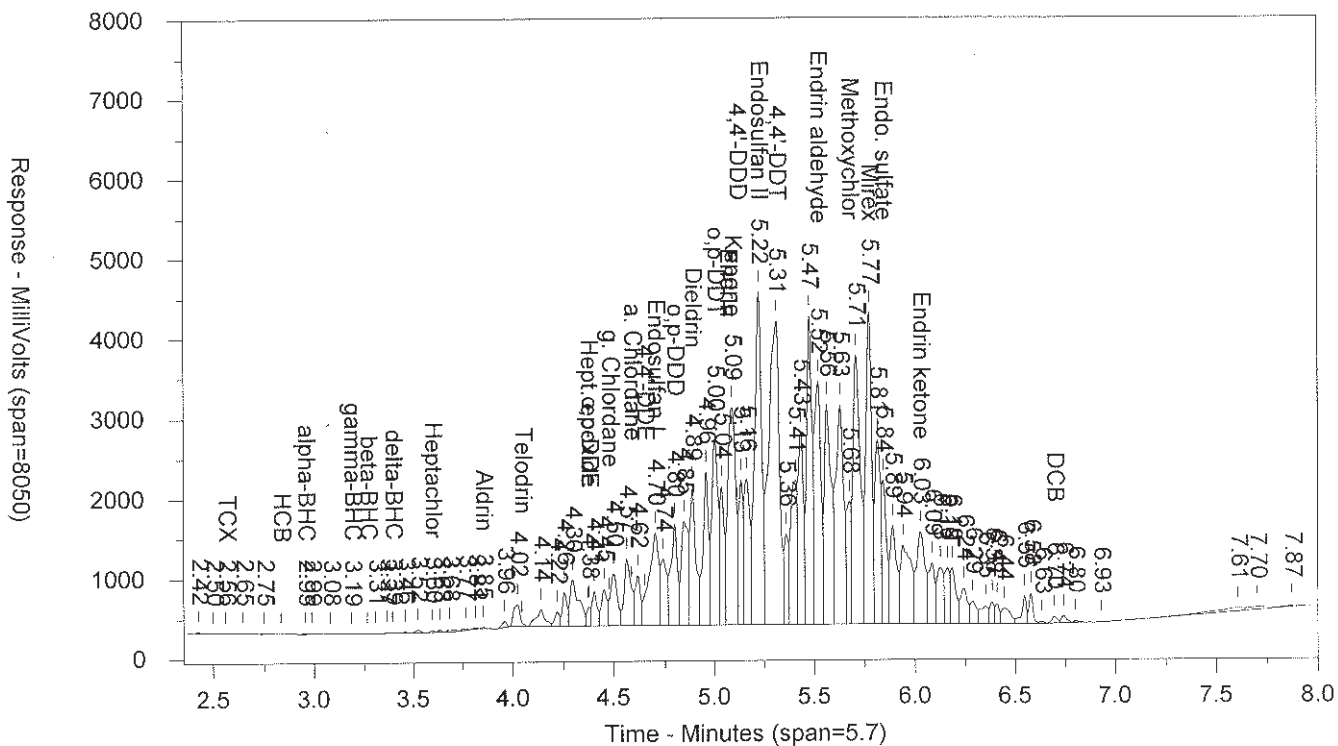
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.559	4799	.011	TCX		0		TCX
2.954	10153	.016	alpha-BHC	2.767	17501	.596	alpha-BHC
3.187	6464	.012	gamma-BHC	3.02	40199	.565	gamma-BHC
3.393	7091	.015	delta-BHC	3.339	96374	.685	delta-BHC
3.595	21717	.048	Heptachlor	3.376	54506	.03	Heptachlor
3.851	16875	.041	Aldrin		0		Aldrin
	0		Hept. epoxide	4.121	1696873	1.23	Hept. epoxide
	0		g. Chlordane	4.274	2004275	1.384	g. Chlordane
4.38	236969	1.274	o,p-DDE		0		o,p-DDE
4.705	1158394	3.274	Endosulfan I	4.433	1984850	1.549	Endosulfan I
	0		4,4'-DDE	4.557	4063803	3.757	4,4'-DDE
4.889	1715826	4.593	Dieldrin	4.654	7498994	5.265	Dieldrin
4.8	1261167	7.458	o,p-DDD		0		o,p-DDD
	0		Endrin	4.908	6695347	5.145	Endrin
5.003	2326838	11.331	o,p-DDT	4.947	6121032	10.957	o,p-DDT
5.087	2716574	17.466	Kepone	4.992	5911308	12.499	Kepone
5.223	4165545	12.85	Endosulfan II	5.055	14778830	12.311	Endosulfan II
5.311	3793156	12.135	4,4'-DDT	5.228	3662359	3.166	4,4'-DDT
5.519	3035909	11.383	Endrin aldehyde	5.321	16149640	16.689	Endrin aldehyde
5.676	1534168	10.678	Methoxychlor	5.715	7009135	13.893	Methoxychlor
5.774	3912498	20.61	Mirex	5.845	4307987	7.79	Mirex
5.841	1798926	6.112	Endo. sulfate		0		Endo. sulfate
6.028	1148932	3.289	Endrin ketone		0		Endrin ketone
6.695	80234	.335	DCB	6.701	87865	.113	DCB

Files:

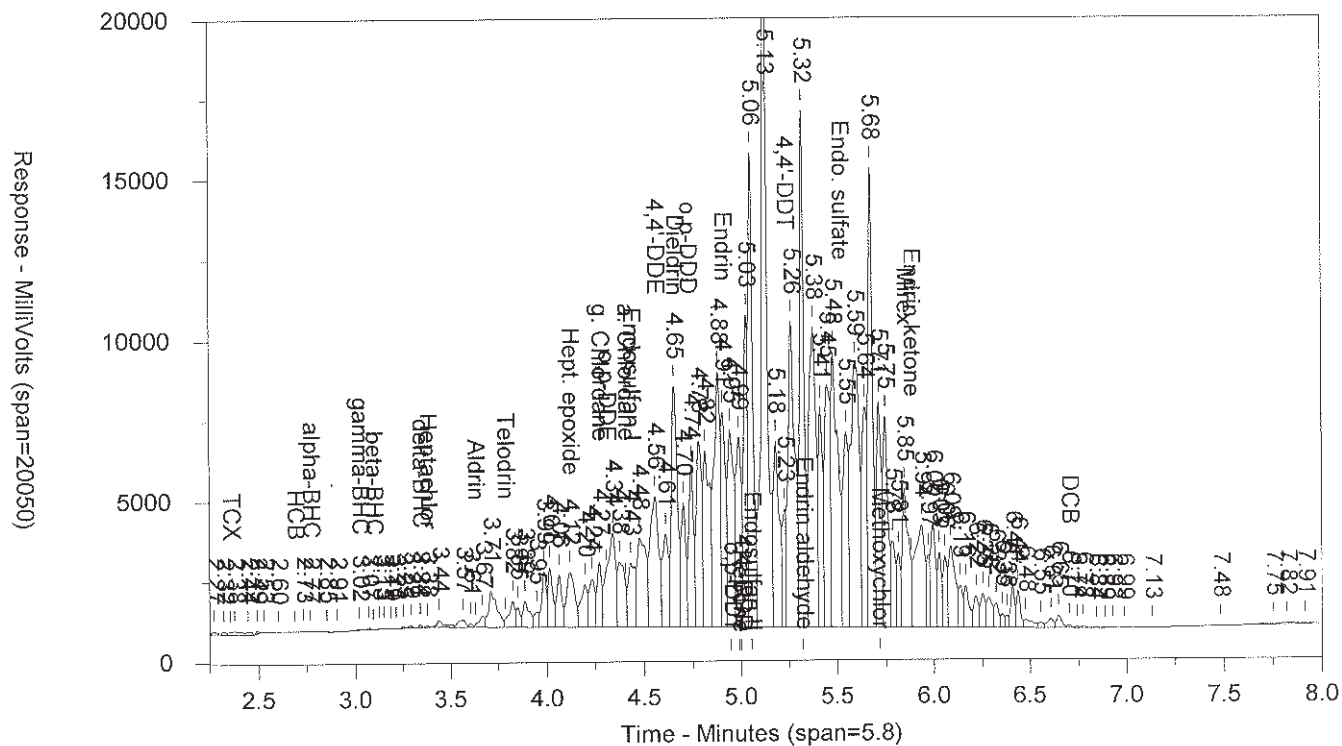
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 Method A: 05PESTD1.MET  
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 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:06 AM  
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TOXA41824E ZRTOXA4ZR CCAL 1831799999 00177 SW-846 8081

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.046.RAW



## Chrom Perfect Chromatogram Report

## LANCASTER LABORATORIES

Sample Number: CHLD41824D      FKCHLD4FK      CCAL 1831799999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/14/2018 9:28:50 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306010.047.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830605.cal

RT A	Compound A	Height A	Area A
1.793		8817	7384
1.865		26451	34779
1.888		41441	53533
1.922		34519	48880
1.967		43753	61740
2.019		49649	80235
2.101		160176	161191
2.147		117458	101067
2.185		130654	117844
2.284		5022	3566
2.386		9637	8980
2.421		30362	30570
2.447		22728	22062
2.505		1104872	998568
2.56	TCX	4177	4055
2.697		7388	11878
2.748		19351	20785
2.997		122866	165503
3.074		82894	93164
3.144		30379	33127
3.179	gamma-BHC	9672	10759
3.247	beta-BHC	39409	42449
3.29		45980	53281
3.377		101375	129392
3.457		139681	203093
3.524		1169396	1387492
3.594	Heptachlor	1690129	2028931
3.688		218180	499071
3.78		61929	85351
3.823		20057	24065
3.89		10032	21318
3.922		83404	86631
3.966		1167096	1536139
4.005		41862	37099
4.057	Telodrin	81353	151024
4.111		158578	479077
4.187		219510	283528
4.236		314576	613505
4.321		753700	1009723
4.374	o,p-DDE	335649	752221
4.412		730650	1105128
4.481	g. Chlordane	3732159	5742357
4.579	a. Chlordane	5186795	10052090
4.652	4,4'-DDE	147004	271206
4.717		106953	156038
4.755		310397	580437
4.833		399655	646021
4.902	Dieldrin	104475	148118
4.948		354309	532295
5.017		144416	260218
5.05	Endrin	94061	119378
5.091	Kepone	954159	1328636

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.151		124386	130979
5.183		1212809	1513573
5.233	Endosulfan II	65402	99656
5.363		264641	439113
5.393		98593	125441
5.434		54259	80509
5.495		68094	132174
5.557		18415	18390
5.585		41936	74642
5.625		41088	47468
5.658	Methoxychlor	19583	24401
5.685		26441	44579
5.74		6420	7164
5.77	Mirex	10448	13903
5.843	Endo. sulfate	62752	146165
5.881		96965	116068
5.926		64524	71737
5.961		10896	9458
5.996		38773	42399
6.08		4991	3583
6.176		33147	44036
6.274		9148	10310
6.357		16246	26223
6.43		4207	4631
6.532		9479	26024
6.745		21364	37931
6.82		18398	33409

## LANCASTER LABORATORIES

Sample Number: CHLD41824D      FKCHLD4FK      CCAL 1831799999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/14/2018 9:28:50 PM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306010B.047.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830605b.cal

RT B	Compound B	Height B	Area B
1.917		517273	403999
1.996		439113	370517
2.04		302682	288768
2.106		84754	202855
2.143		100305	146221
2.195		105904	153565
2.236		164232	273313
2.264		164540	357579
2.328		115787	296962
2.38		4550444	4186343
2.448		182162	319468
2.518		68645	227784
2.558		15080	12694
2.625		5051	8697
2.65		17663	17568
2.706		8882	6133
2.735		447392	421667
2.794		316122	316495
2.862		35533	37999
2.903		18498	23983
2.962		99161	104146
2.994		135425	128122
3.038	gamma-BHC	182704	207544
3.118		360992	374774
3.172		33051	33312
3.19		90753	77787
3.23		149215	127666
3.254		4395499	4432750
3.314	delta-BHC	22701	24253
3.369	Heptachlor	6730397	7606015
3.458		458656	464676
3.495		276542	381899
3.548		78077	95739
3.593		166189	203876
3.645	Aldrin	25188	26296
3.684		869483	1156488
3.762		4324655	6146652
3.816		462384	758049
3.868		641416	1038214
3.897		560168	827344
3.93		1187804	1805661
3.991		867970	1154607
4.02		561251	874299
4.098		3100950	4823436
4.153		356054	585693
4.196		3367731	5183829
4.235		927628	1447315
4.287	g. Chlordane	15630130	20945020
4.365		13735460	22279010
4.408	a. Chlordane	11718490	15303150
4.47	Endosulfan I	374878	1137427
4.526		582487	1393695

## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.603		1170560	1679330
4.676	Dieldrin	1574749	2865882
4.752		365798	769550
4.782		560974	1058430
4.821		588850	1111047
4.885		965759	1484023
4.931		566520	1092565
4.974	o,p-DDT	3589539	4556661
5.015	4,4'-DDD	370228	429978
5.039		646302	1284285
5.102		4327761	5539620
5.136		320227	467629
5.182		319597	617915
5.205		379584	585765
5.239	4,4'-DDT	196857	282846
5.273		162728	315378
5.33	Endrin aldehyde	788182	1252773
5.427		360172	913366
5.489		61973	134992
5.522	Endo. sulfate	125491	187969
5.567		224610	323188
5.627		121649	296547
5.705		62828	82756
5.738	Methoxychlor	22024	25866
5.782		74130	103218
5.837	Mirex	264429	510841
5.884	Endrin ketone	217769	352179
5.937		75341	112688
5.971		224164	280969
6.02		14270	16325
6.083		103508	166555
6.127		22183	34032
6.178		30848	54371
6.23		35624	55307
6.276		22888	29062
6.315		61969	74616
6.368		66138	167176
6.435		39469	84885
6.485		74509	141068
6.542		33603	88678
6.634		25327	50492
6.704	DCB	51241	85450
6.732		67557	93736
6.805		10020	31578
6.896		6341	12214
6.995		11413	16224
7.138		4282	10045
7.179		3085	3308
7.242		11472	13466
7.296		5901	8217
7.557		11291	63846
7.721		74422	479319
7.819		94395	441982
7.916		78152	374943

CHLD41824D

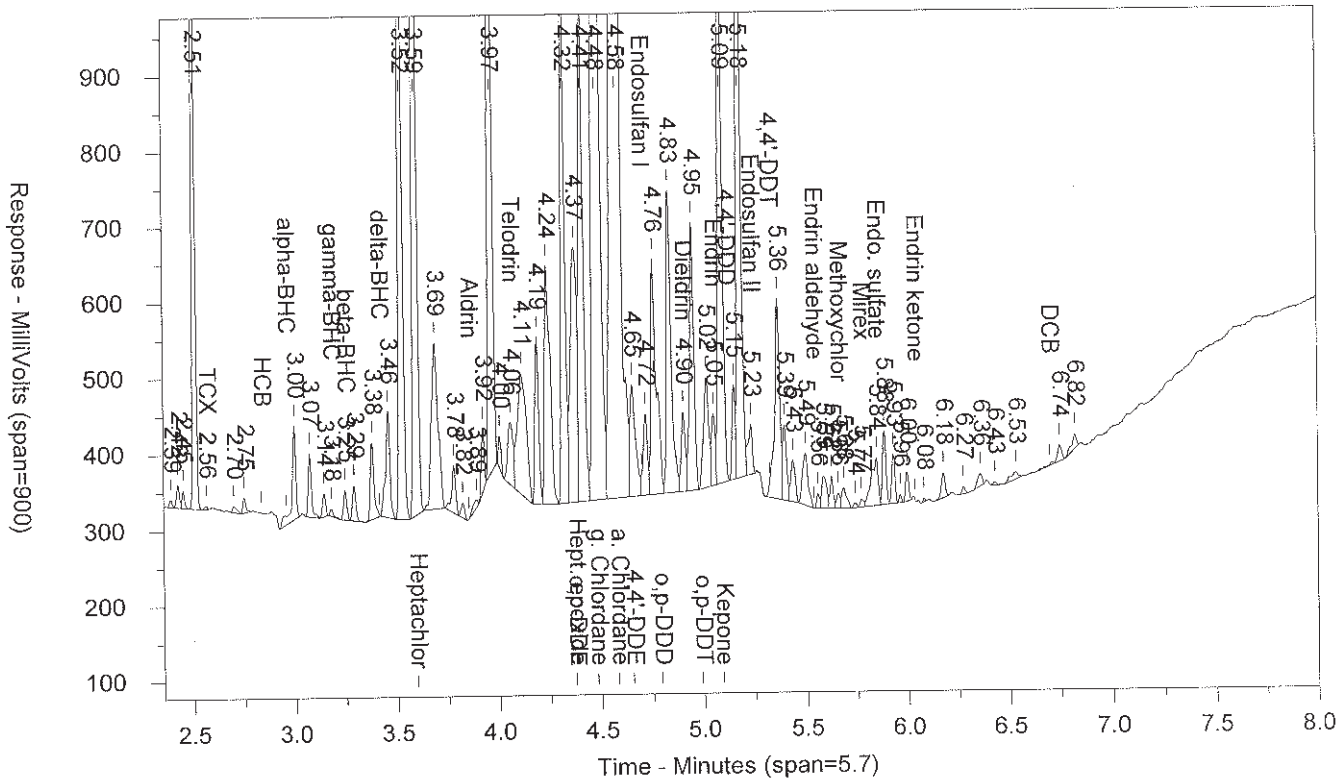
FKCHLD4FK

CCAL 183179999

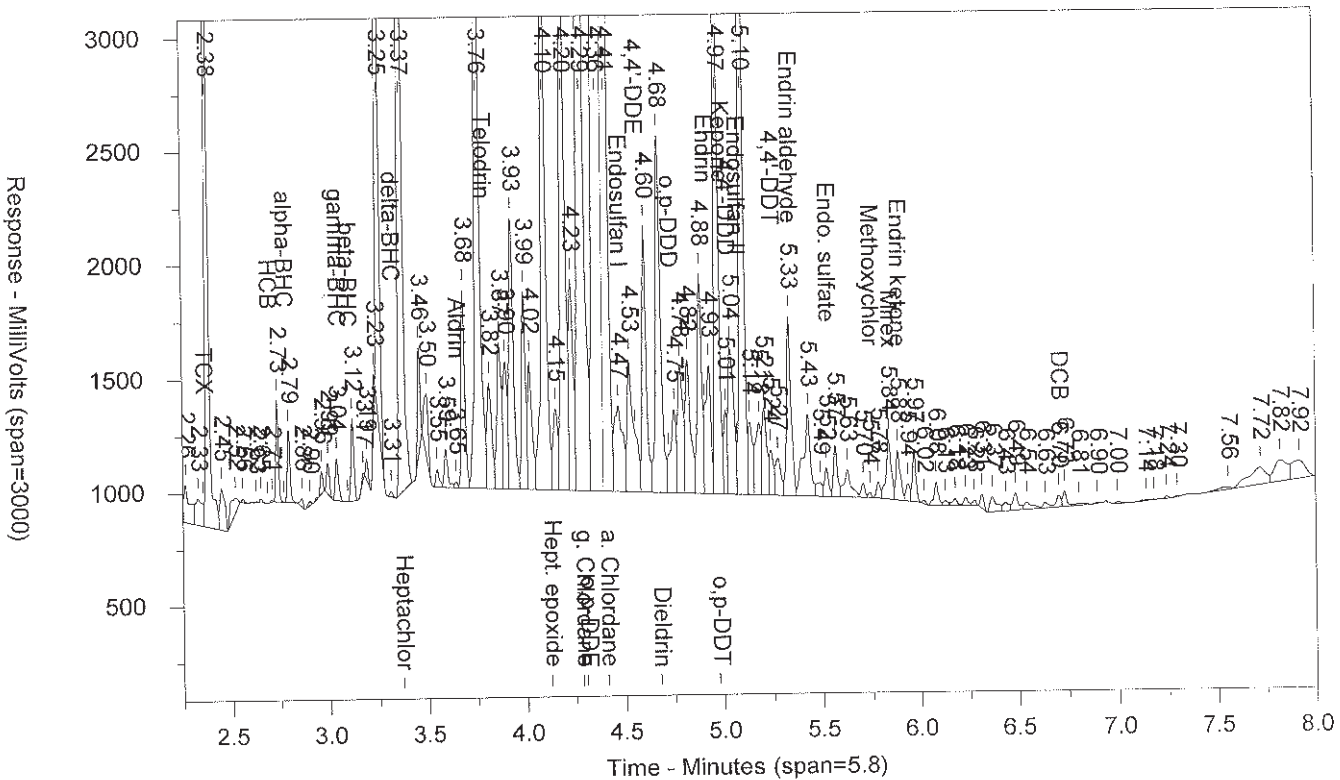
00177

SW-846 8081

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.047.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.047.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD41824D FKCHLD4FK CCAL 1831799999 00177 SW-846 8081A  
 Injected On: 11/14/2018 9:28:50 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.56	4177	.01	TCX		0		TCX
3.179	9672	.018	gamma-BHC	3.038	182704	.619	gamma-BHC
3.247	39409	.166	beta-BHC		0		beta-BHC
	0		delta-BHC	3.314	22701	.655	delta-BHC
3.594	1690129	3.749	Heptachlor	3.369	6730397	3.73	Heptachlor
	0		Aldrin	3.645	25188	.526	Aldrin
4.057	81353	.375	Telodrin		0		Telodrin
4.481	3732159	9.85	g. Chlordane	4.287	15630130	10.792	g. Chlordane
4.374	335649	1.804	o,p-DDE		0		o,p-DDE
4.579	5186795	13.736	a. Chlordane	4.408	11718490	8.159	a. Chlordane
	0		Endosulfan I	4.47	374878	.293	Endosulfan I
4.652	147004	.434	4,4'-DDE		0		4,4'-DDE
4.902	104475	.28	Dieldrin	4.676	1574749	1.106	Dieldrin
	0		o,p-DDT	4.974	3589539	6.425	o,p-DDT
	0		4,4'-DDD	5.015	370228	.335	4,4'-DDD
5.05	94061	.267	Endrin		0		Endrin
5.091	954159	6.135	Kepone		0		Kepone
5.233	65402	.202	Endosulfan II		0		Endosulfan II
	0		4,4'-DDT	5.239	196857	.17	4,4'-DDT
	0		Endrin aldehyde	5.33	788182	.814	Endrin aldehyde
5.843	62752	.213	Endo. sulfate	5.522	125491	.11	Endo. sulfate
5.658	19583	.136	Methoxychlor	5.738	22024	.044	Methoxychlor
5.77	10448	.055	Mirex	5.837	264429	.478	Mirex
	0		Endrin ketone	5.884	217769	.181	Endrin ketone
	0		DCB	6.704	51241	.066	DCB

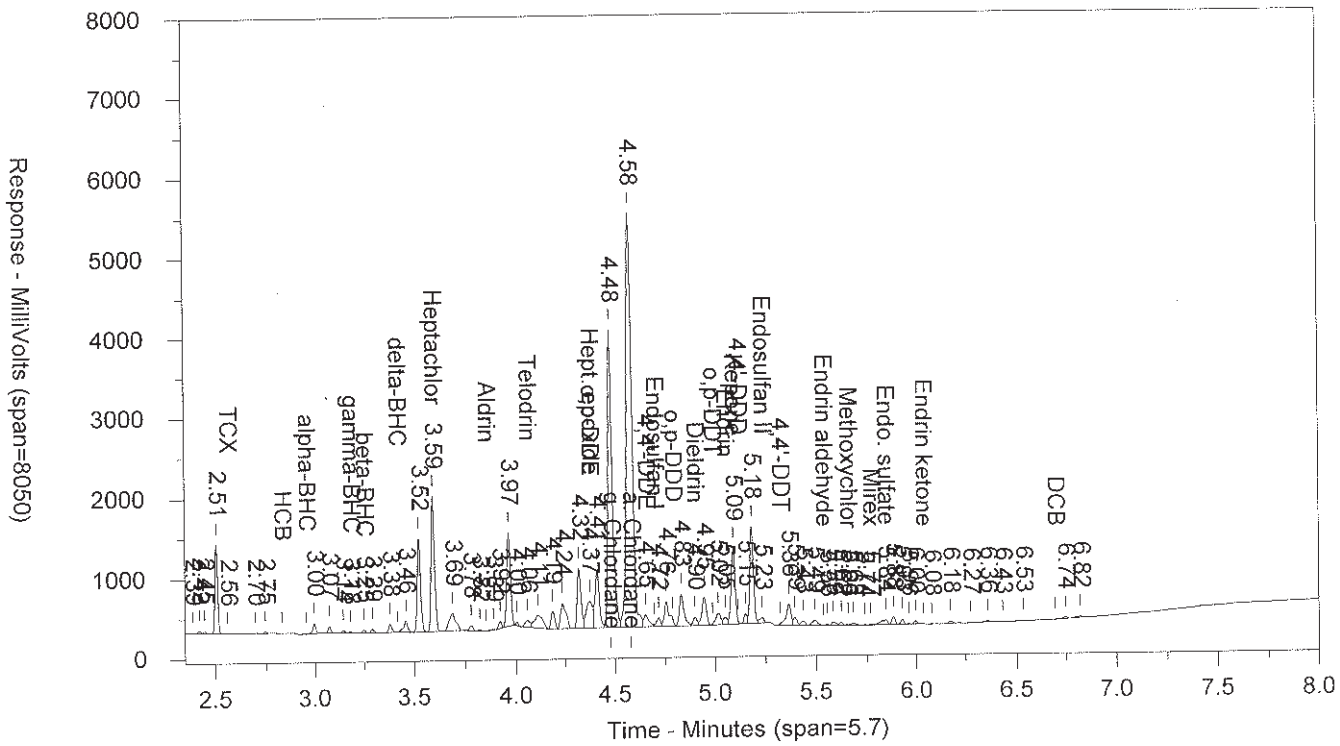
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 Method B: 05PESTD1B.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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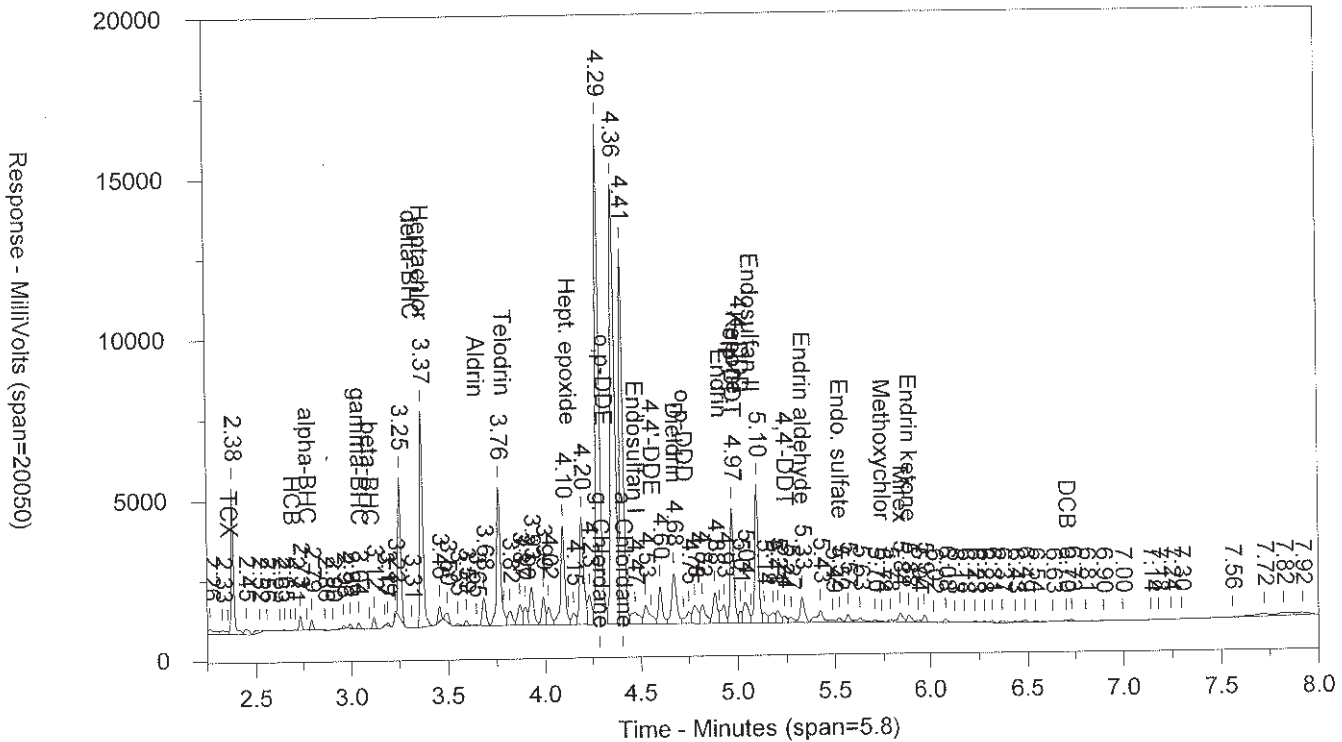


CHLD41824D FKCHLD4FK CCAL 1831799999 00177 SW-846 8081

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EVALX1824B

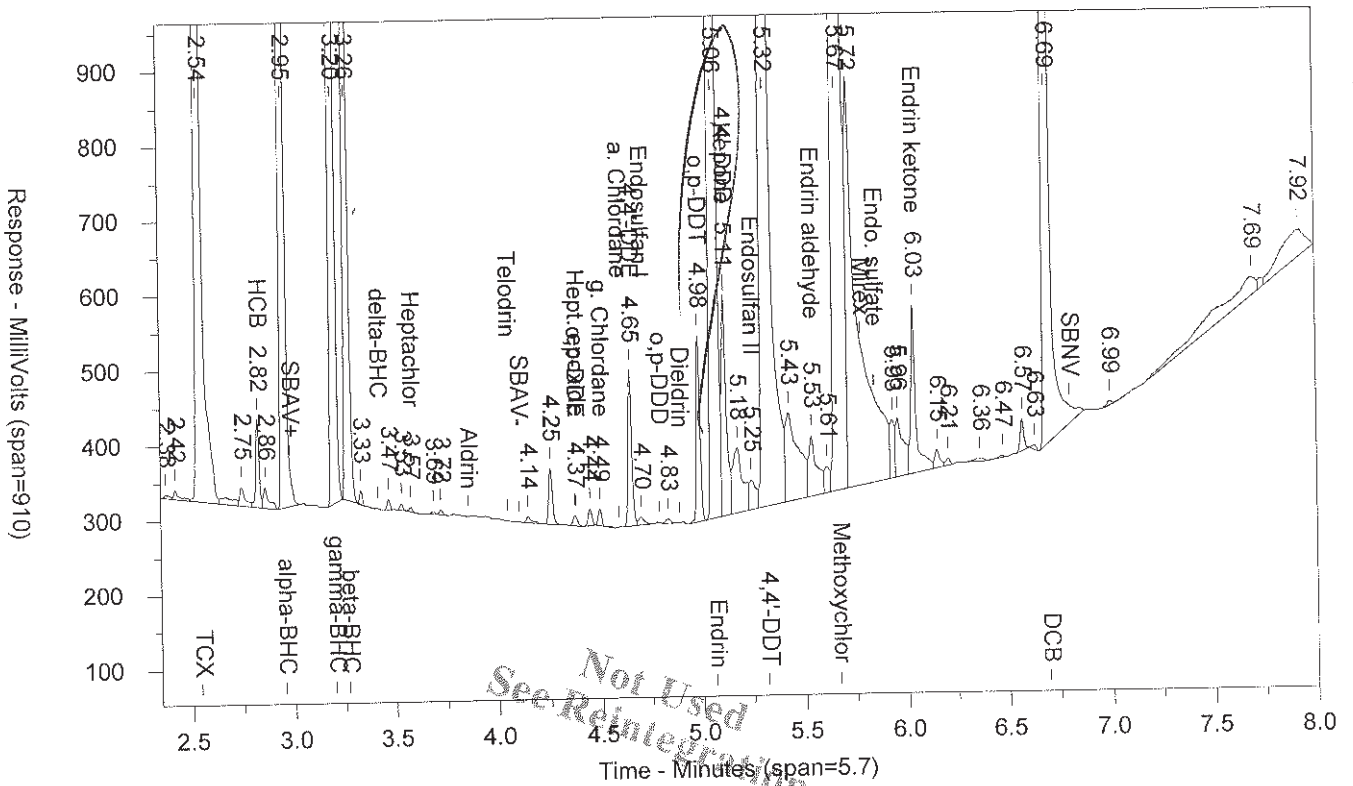
NIPEMNI

PEM 1831799999

00177

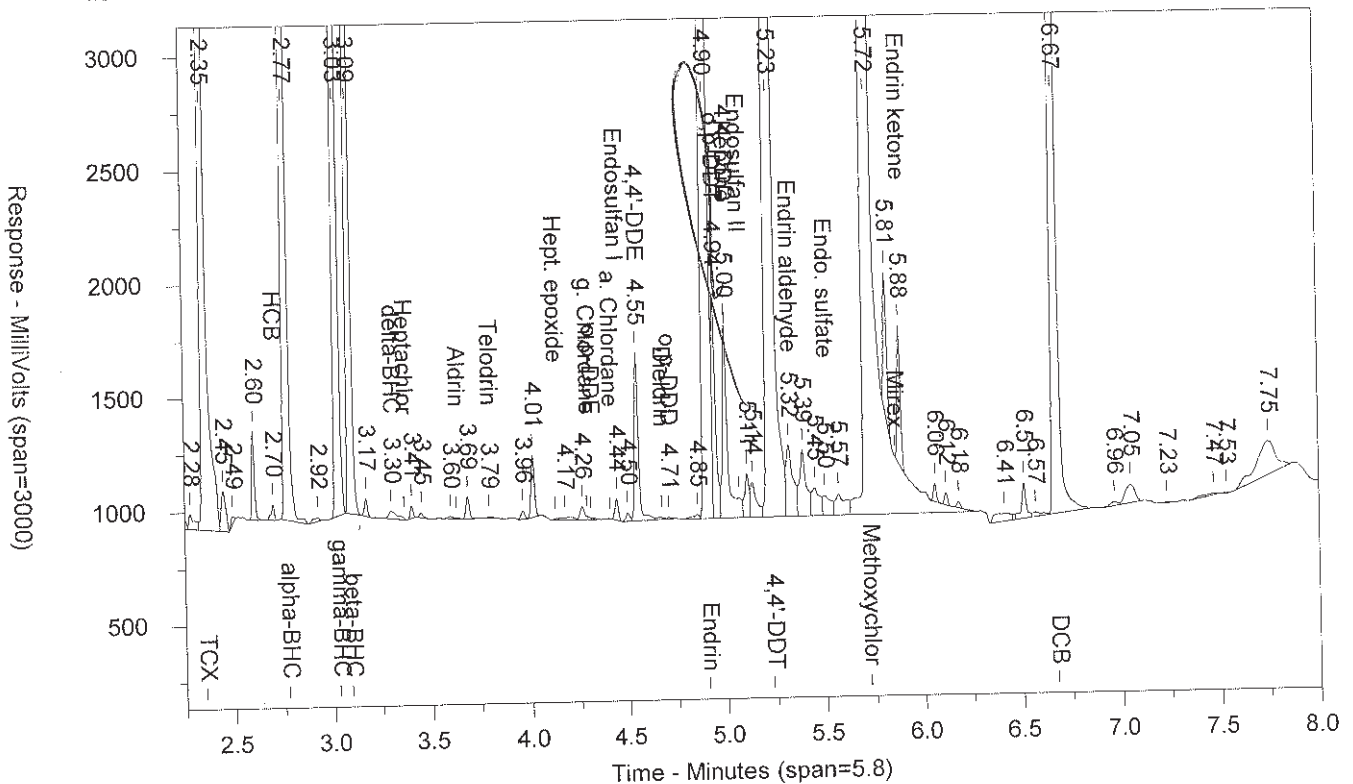
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Not Used  
See Reintegration

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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B NIPEMNI PEM 1831799999 00177 SW-846 8081A  
 Injected On: 11/14/2018 11:49:18 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	8810730	20.175	TCX	2.352	42084070	21.195	TCX
2.824	117900	.28	HCB	2.699	65453	.046	HCB
2.951	6213960	9.928	alpha-BHC	2.767	29470420	9.598	alpha-BHC
3.197	5347300	10.055	gamma-BHC	3.027	24571140	9.768	gamma-BHC
3.264	2171317	9.159	beta-BHC	3.092	9090367	9.583	beta-BHC
	0		delta-BHC	3.302	33649	.66	delta-BHC
3.575	5975	.013	Heptachlor		0		Heptachlor
	0		Telodrin	3.795	7601	.011	Telodrin
4.371	13836	.074	o,p-DDE		0		o,p-DDE
4.7	11068	.031	Endosulfan I	4.442	93146	.073	Endosulfan I
4.494	21548	.057	g. Chlordane		0		g. Chlordane
4.648	209233	.618	4,4'-DDE	4.549	743802	1.581	4,4'-DDE
	0		o,p-DDD	4.708	7533	.015	o,p-DDD
5.062	17700310	50.308	Endrin	4.905	69597820	53.477	Endrin
4.983	248314	1.209	o,p-DDT	4.943	994598	1.78	o,p-DDT
5.111	295934	1.903	Kepone	5.001	852628	5.133	Kepone
5.319	31827770	101.826	4,4'-DDT	5.231	130886800	113.165	4,4'-DDT
5.245	39956	.123	Endosulfan II		0		Endosulfan II
5.535	80670	.302	Endrin aldehyde	5.317	312008	.322	Endrin aldehyde
	0		Endo. sulfate	5.498	86956	.076	Endo. sulfate
5.667	36234520	252.204	Methoxychlor	5.721	130532700	258.738	Methoxychlor
6.035	224266	.642	Endrin ketone	5.879	618239	.514	Endrin ketone
6.693	5007462	22.807	DCB	6.675	16877780	21.754	DCB

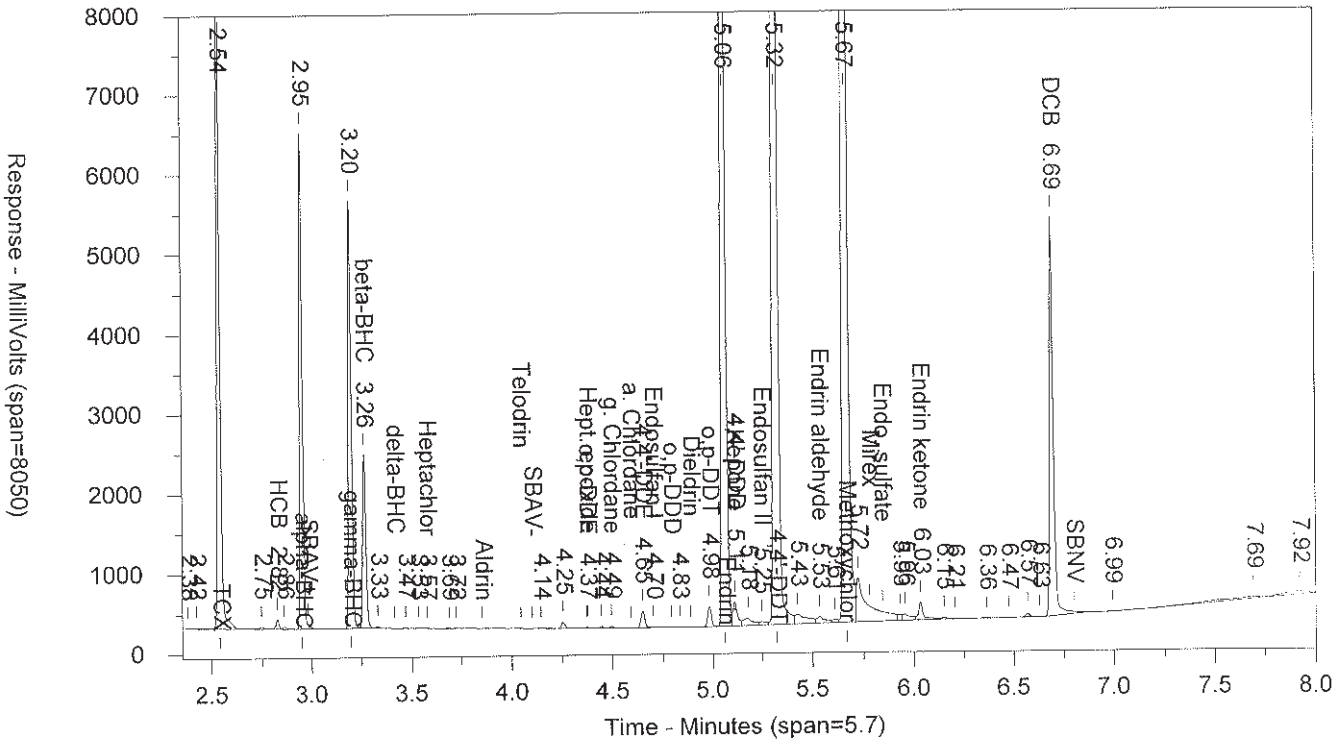
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 Method A: 05PESTD.MET  
 Method B: 05PESTD.B.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:09 AM  
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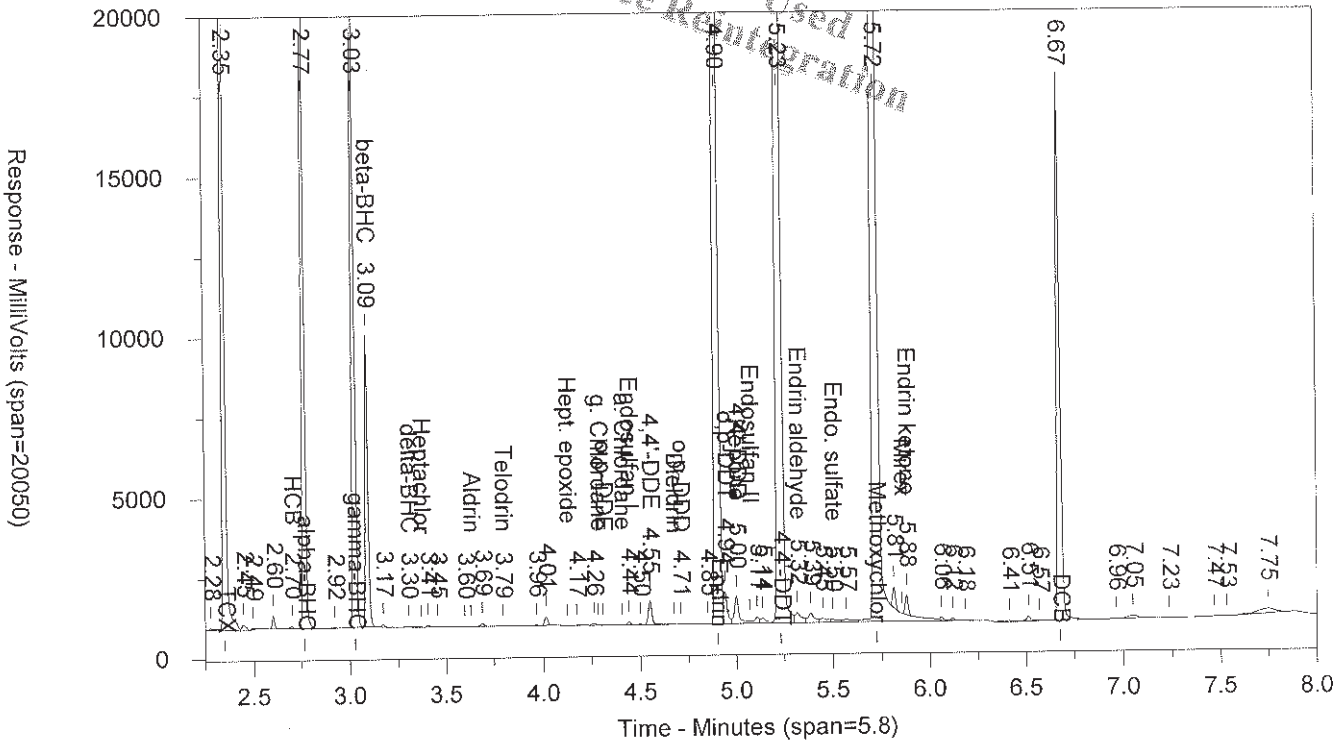
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See Reintegration

EVALX1824B NIPEMNI PEM 1831799999 00177 SW-846 8081A

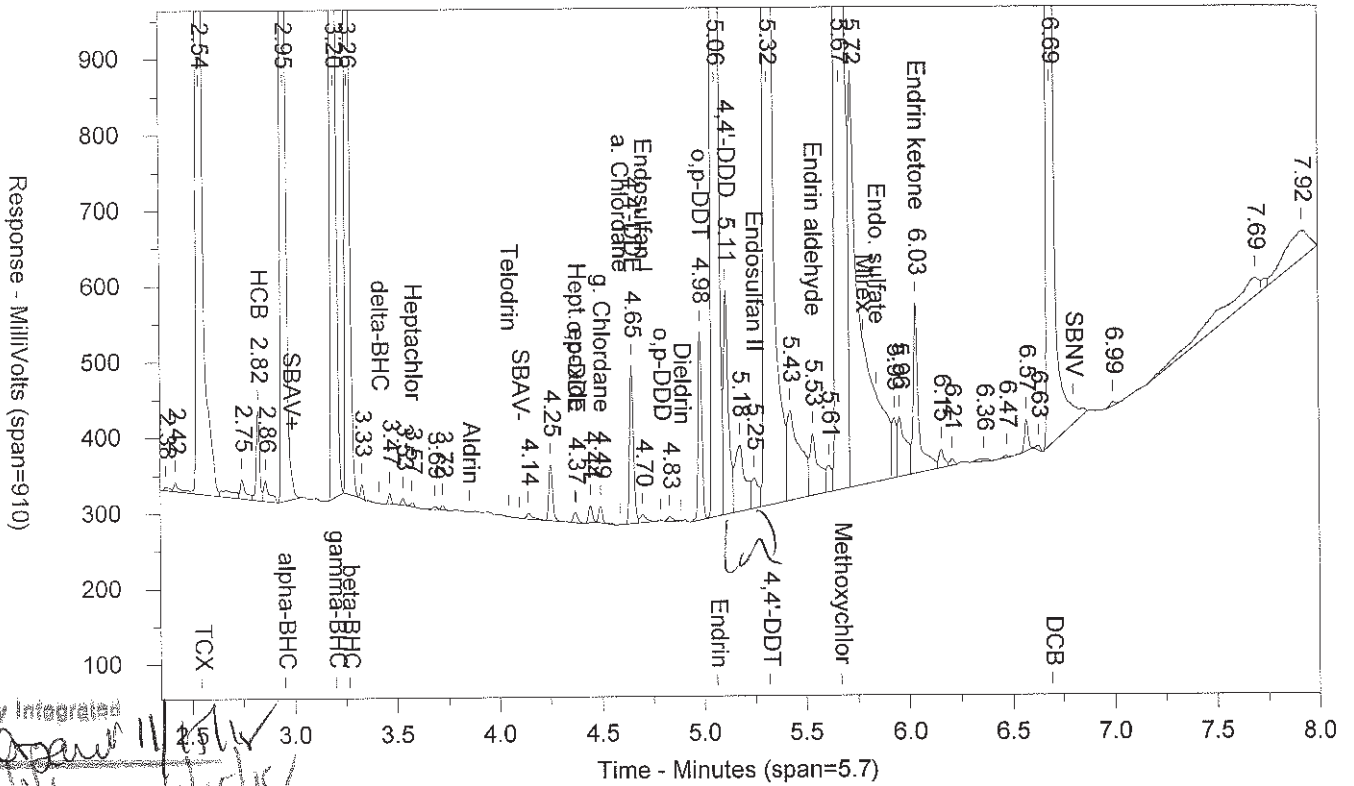
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EVALX1824B NIPEMNI PEM 1831799999 00177 SW-846 8081A  
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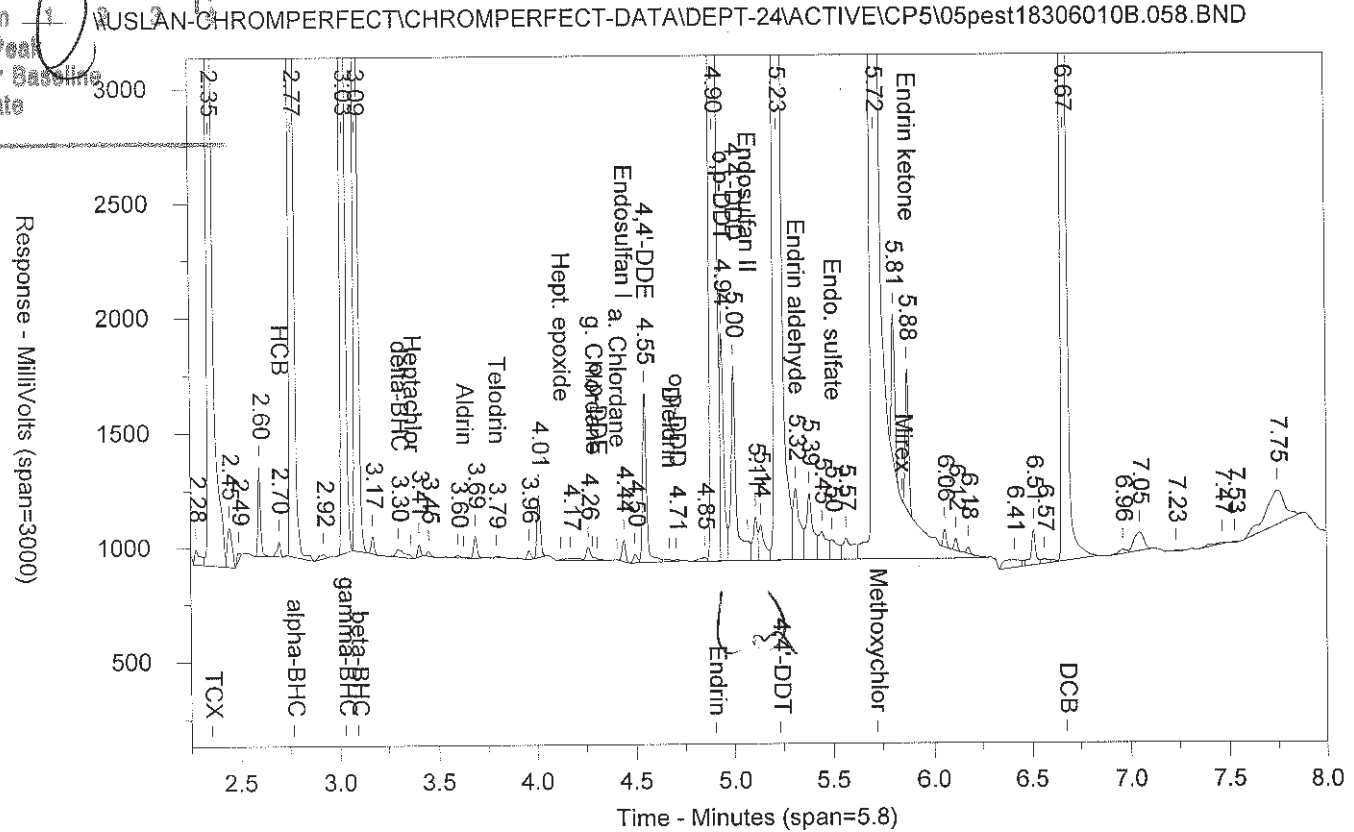
M = Manually Integrated

Analyt [Signature]

Approved by [Signature]

Circle Reason

- 1 = Missed Peak
- 2 = Improper Baseline
- 3 = RT Update
- 4 = Other



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B NIPEMNI PEM 1831799999 00177 SW-846 8081A  
 Injected On: 11/14/2018 11:49:18 PM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

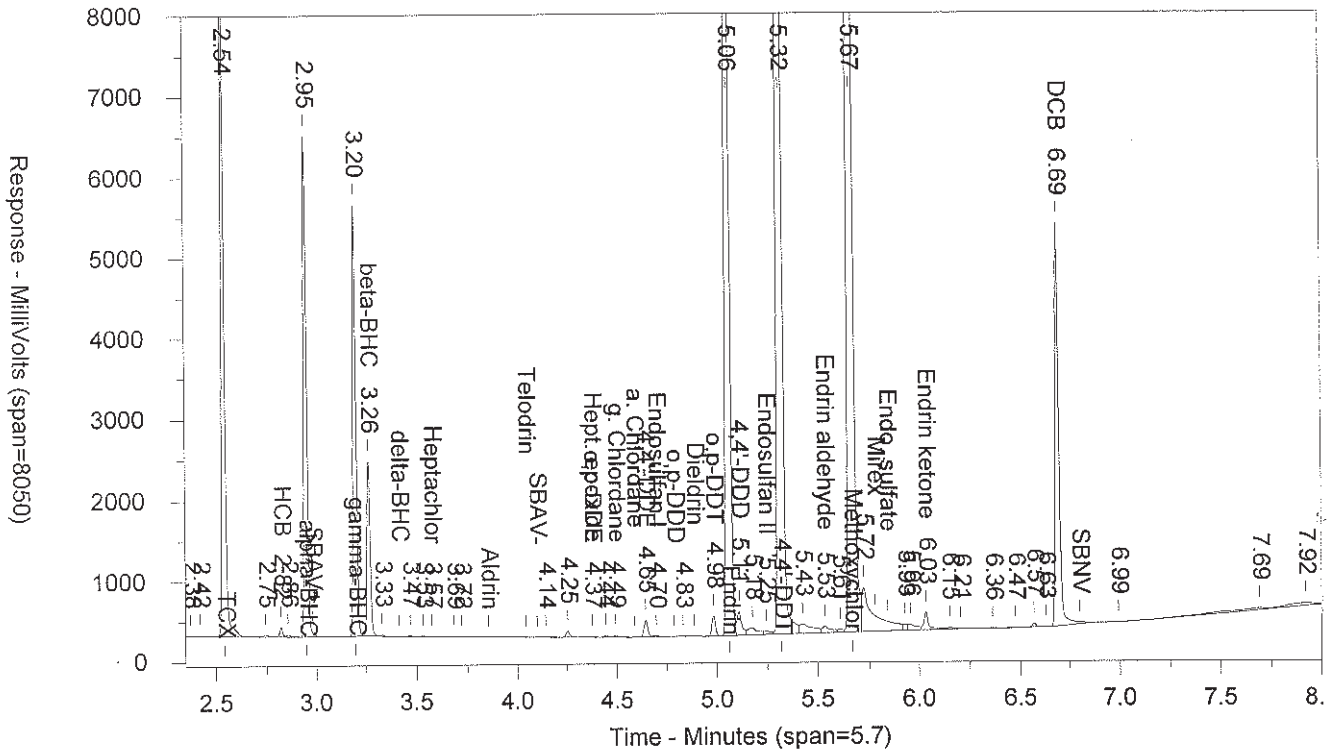
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	8810730	20.175	TCX	2.352	42084070	21.195	TCX
2.824	117900	.28	HCB	2.699	65453	.046	HCB
2.951	6213960	9.928	alpha-BHC	2.767	29470420	9.598	alpha-BHC
3.197	5347300	10.055	gamma-BHC	3.027	24571140	9.768	gamma-BHC
3.264	2171317	9.159	beta-BHC	3.092	9090367	9.583	beta-BHC
	0		delta-BHC	3.302	33649	.66	delta-BHC
3.575	5975	.013	Heptachlor		0		Heptachlor
	0		Telodrin	3.795	7601	.011	Telodrin
4.371	13836	.074	o,p-DDE		0		o,p-DDE
4.7	11068	.031	Endosulfan I	4.442	93146	.073	Endosulfan I
4.494	21548	.057	g. Chlordane		0		g. Chlordane
4.648	209233	.618	4,4'-DDE	4.549	743802	1.581	4,4'-DDE
	0		o,p-DDD	4.708	7533	.015	o,p-DDD
5.062	17700310	50.308	Endrin	4.905	69597820	53.477	Endrin
4.983	248314	1.209	o,p-DDT	4.943	994598	1.78	o,p-DDT
5.111	295934	1.038	4,4'-DDD	5.001	852628	.772	4,4'-DDD
5.319	31827770	101.826	4,4'-DDT	5.231	130886800	113.165	4,4'-DDT
5.245	39956	.123	Endosulfan II		0		Endosulfan II
5.535	80670	.302	Endrin aldehyde	5.317	312008	.322	Endrin aldehyde
	0		Endo. sulfate	5.498	86956	.076	Endo. sulfate
5.667	36234520	252.204	Methoxychlor	5.721	130532700	258.738	Methoxychlor
6.035	224266	.642	Endrin ketone	5.879	618239	.514	Endrin ketone
6.693	5007462	22.807	DCB	6.675	16877780	21.754	DCB

Files:

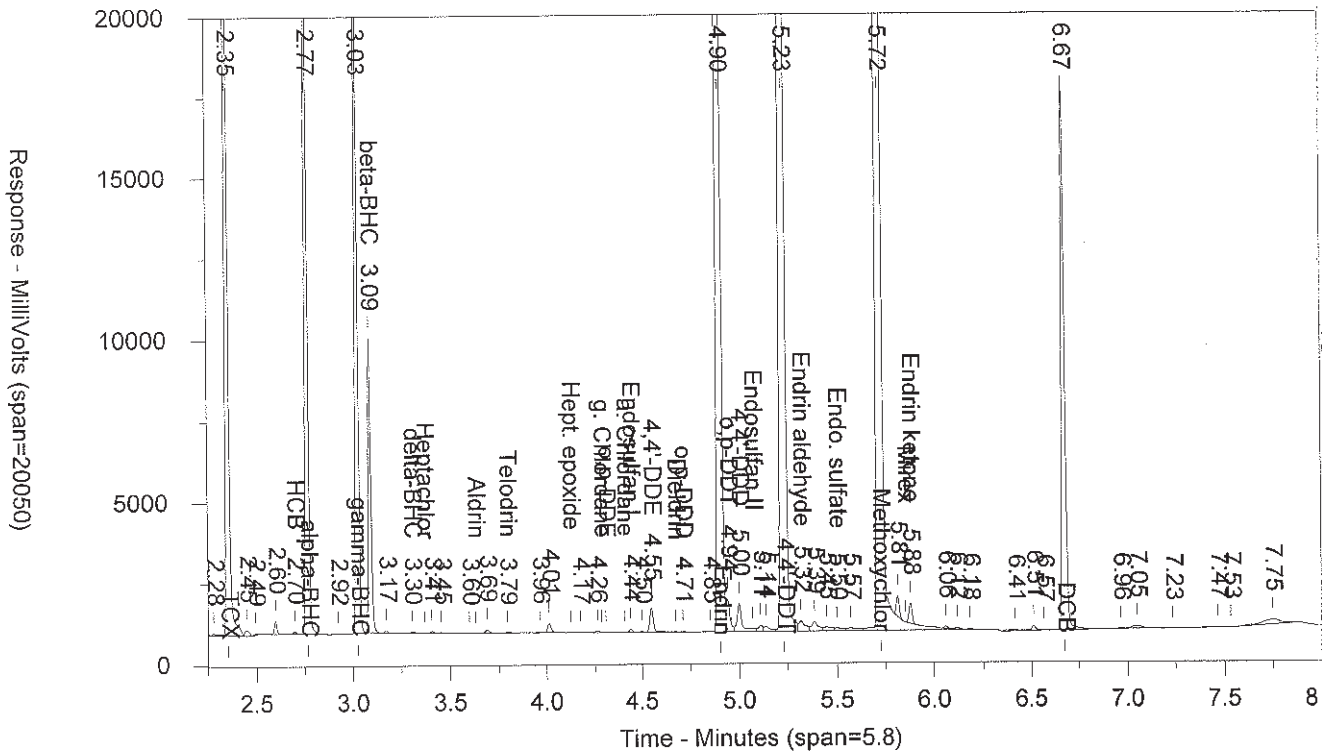
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 Area File: 05pest18306010B.058.BND  
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 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
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EVALX1824B NIPEMNI PEM 183179999 00177 SW-846 8081

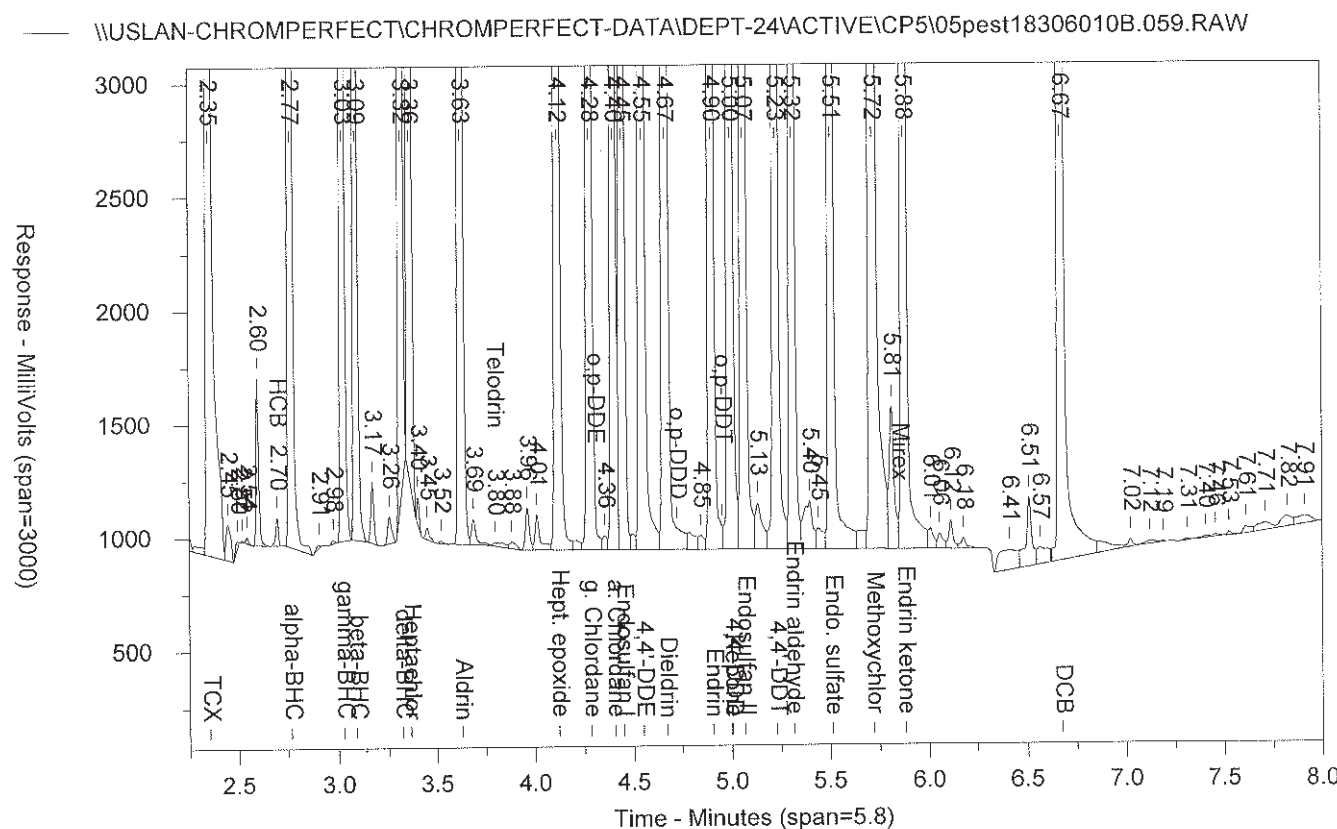
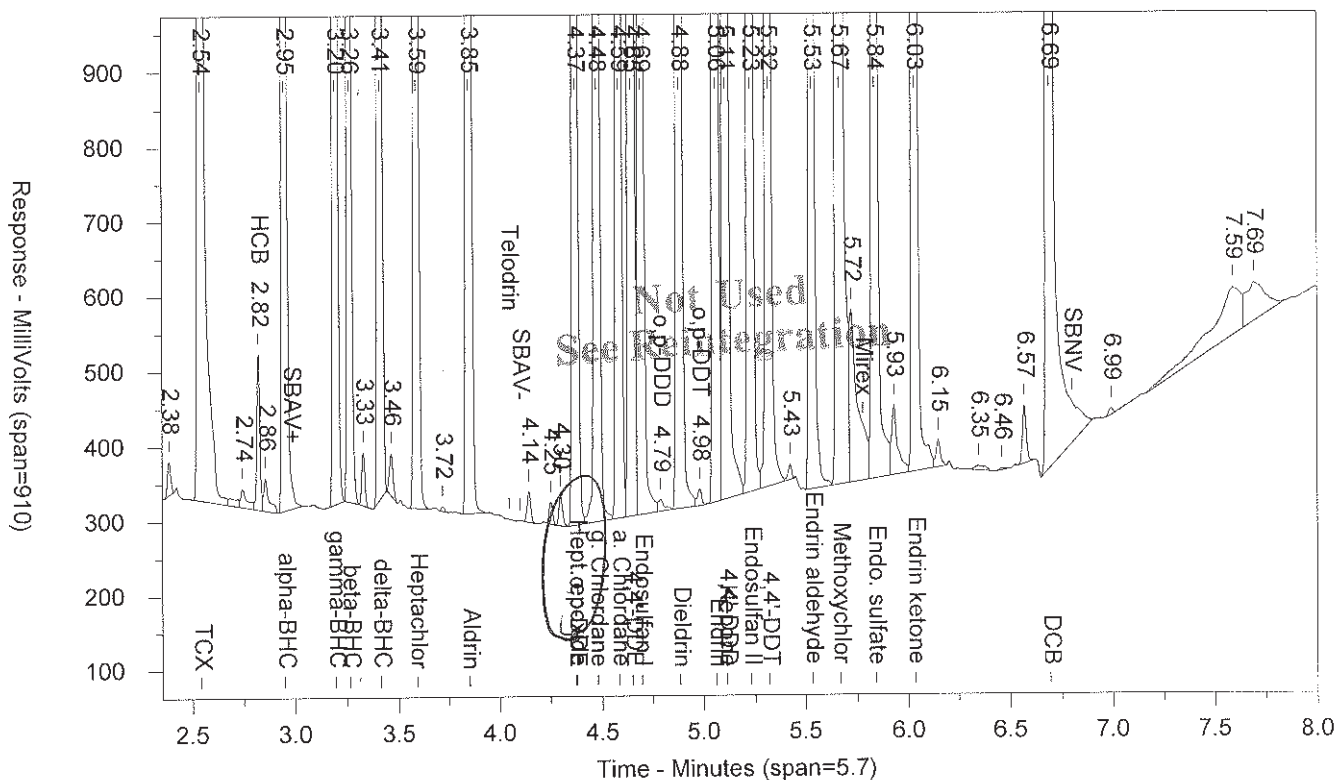
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MIXA41824B YHMIXA4YH CCAL 1831799999 00177 SW-846 8081A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA41824B YHMIXA4YH CCAL 1831799999 00177 SW-846 8081A  
 Injected On: 11/15/2018 12:02:00 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

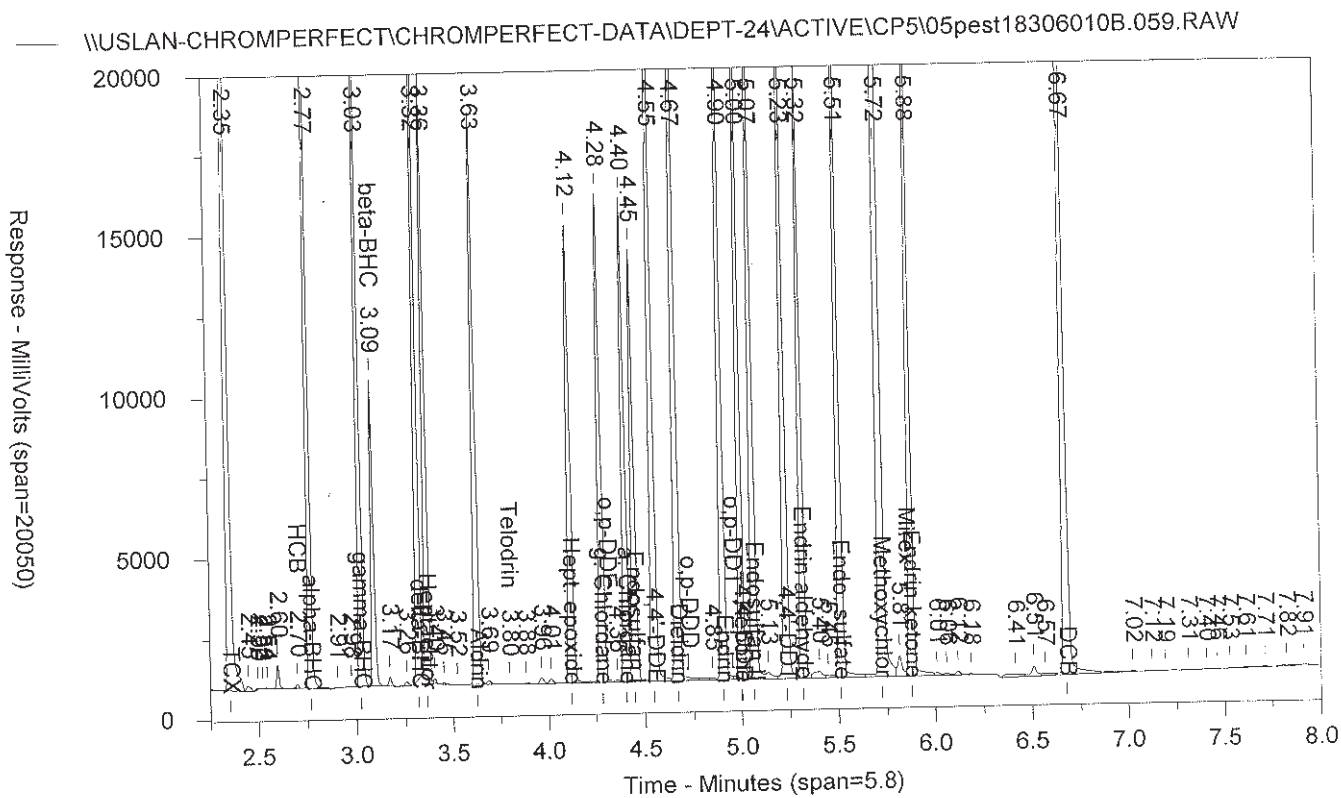
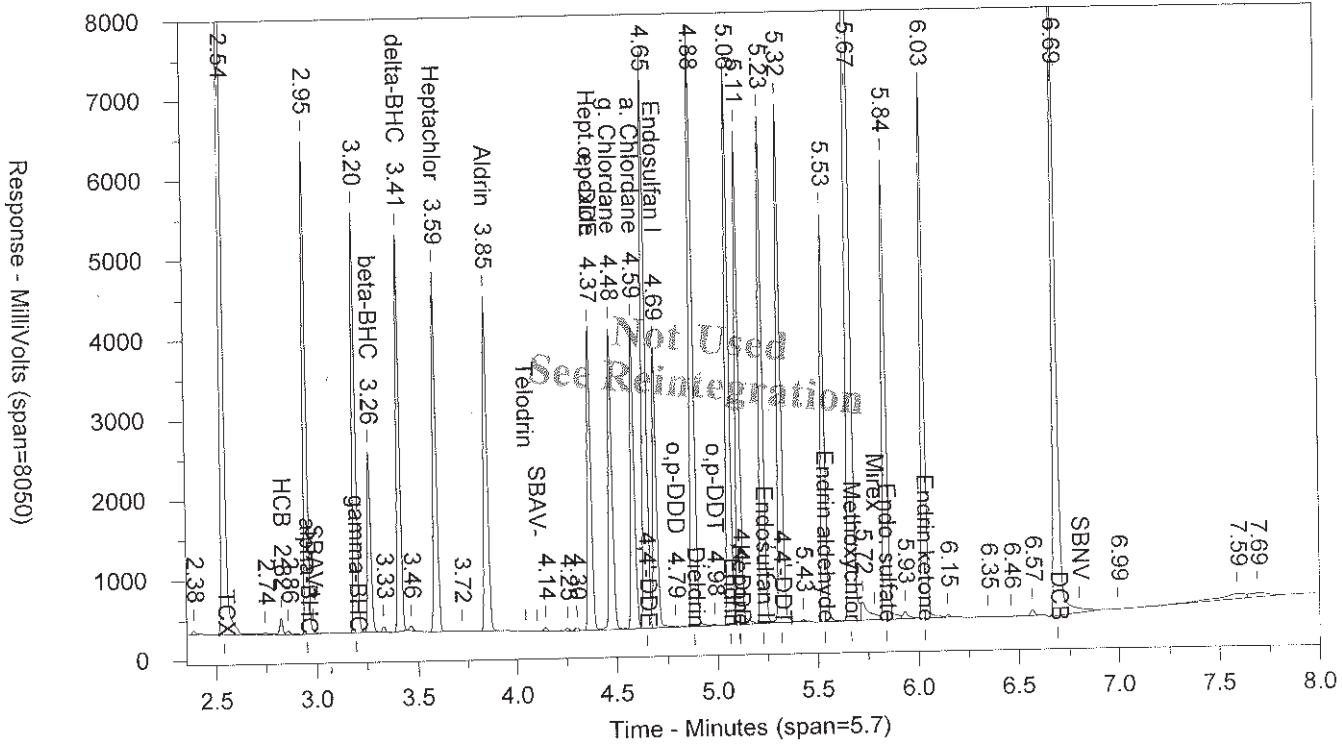
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 See Reintegration

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.54	16311470	37.351	TCX	2.352	81080620	40.834	TCX
2.823	206656	.49	HCB	2.698	124016	.088	HCB
2.951	6187672	9.886	alpha-BHC	2.767	29365110	9.566	alpha-BHC
3.195	5264241	9.899	gamma-BHC	3.026	24480790	9.734	gamma-BHC
3.264	2260243	9.534	beta-BHC	3.092	9525700	10.042	beta-BHC
3.41	4954293	10.173	delta-BHC	3.319	22261150	9.679	delta-BHC
3.59	4499109	9.98	Heptachlor	3.364	18761160	10.398	Heptachlor
3.85	4185981	10.05	Aldrin	3.627	17866010	9.661	Aldrin
	0		Telodrin	3.797	13588	.019	Telodrin
	0		Hept. epoxide	4.122	14270720	10.344	Hept. epoxide
4.477	3780103	9.976	g. Chlordane	4.283	15268700	10.542	g. Chlordane
4.372	3755597	20.186	o,p-DDE		0		o,p-DDE
4.585	3797442	10.057	a. Chlordane	4.404	15069900	10.492	a. Chlordane
4.694	3511825	9.925	Endosulfan I	4.448	13448010	10.495	Endosulfan I
4.647	7229987	21.358	4,4'-DDE	4.549	29998360	20.758	4,4'-DDE
4.884	7424567	19.875	Dieldrin	4.669	30985480	21.753	Dieldrin
4.789	15606	.092	o,p-DDD		0		o,p-DDD
5.061	7041327	20.013	Endrin	4.904	27454160	21.095	Endrin
4.983	22031	.107	o,p-DDT		0		o,p-DDT
5.11	6180901	39.739	Kepone	5.001	24407540	39.431	Kepone
5.23	6354127	19.602	Endosulfan II	5.067	25319220	21.091	Endosulfan II
5.319	6511249	20.831	4,4'-DDT	5.229	25067660	21.674	4,4'-DDT
5.533	5112601	19.169	Endrin aldehyde	5.316	19560350	20.213	Endrin aldehyde
5.839	5782501	19.647	Endo. sulfate	5.513	24401760	21.364	Endo. sulfate
5.667	15048430	104.742	Methoxychlor	5.72	52328930	103.725	Methoxychlor
6.034	6825414	19.54	Endrin ketone	5.879	24695020	20.542	Endrin ketone
6.693	9039384	41.195	DCB	6.674	32428850	41.798	DCB

Files:  
 Area File: 05pest18306010.059.RAW  
 Area File: 05pest18306010B.059.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
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 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:10 AM  
 File Reported On: 11/15/2018 at 7:41:57 AM

MIXA41824B YHMIXA4YH CCAL 1831799999 00177 SW-846 8081/

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MIXA41824B

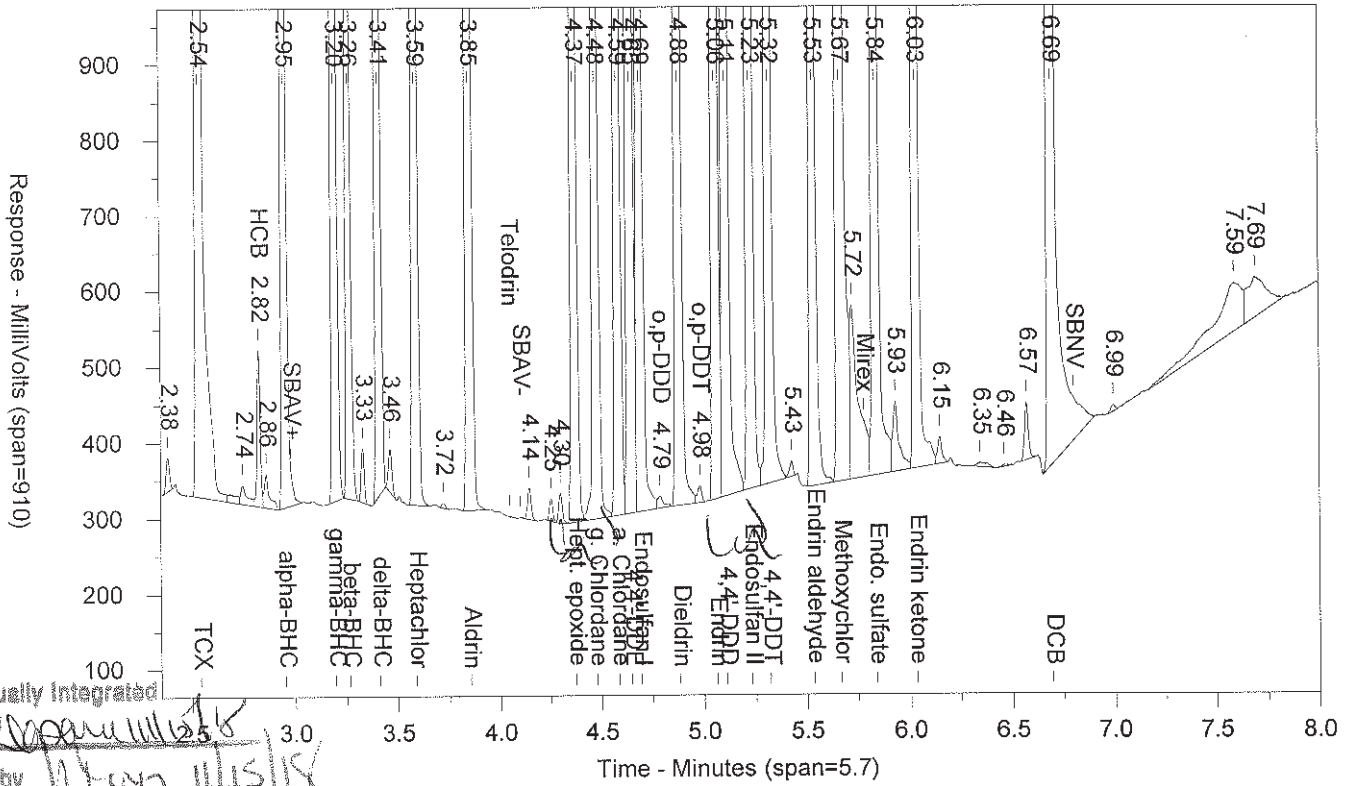
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SW-846 8081A

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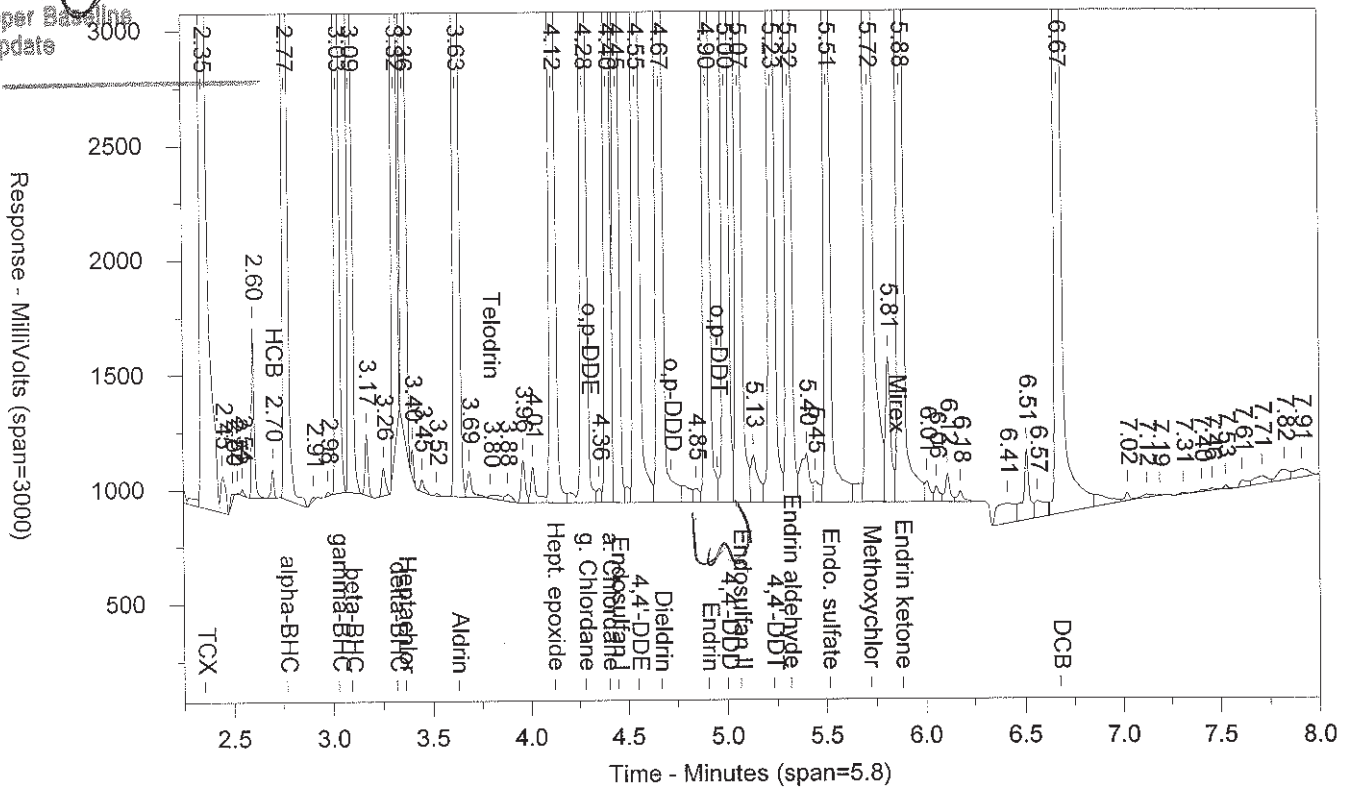


M = Manually Integrated

Analyst *[Signature]*

Approved by *[Signature]*

Circle Reason 1 = Missed Peak 2 = Improper Baseline 3 = RT Update 4 = Other



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA41824B YHMIXA4YH CCAL 1831799999 00177 SW-846 8081A  
 Injected On: 11/15/2018 12:02:00 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

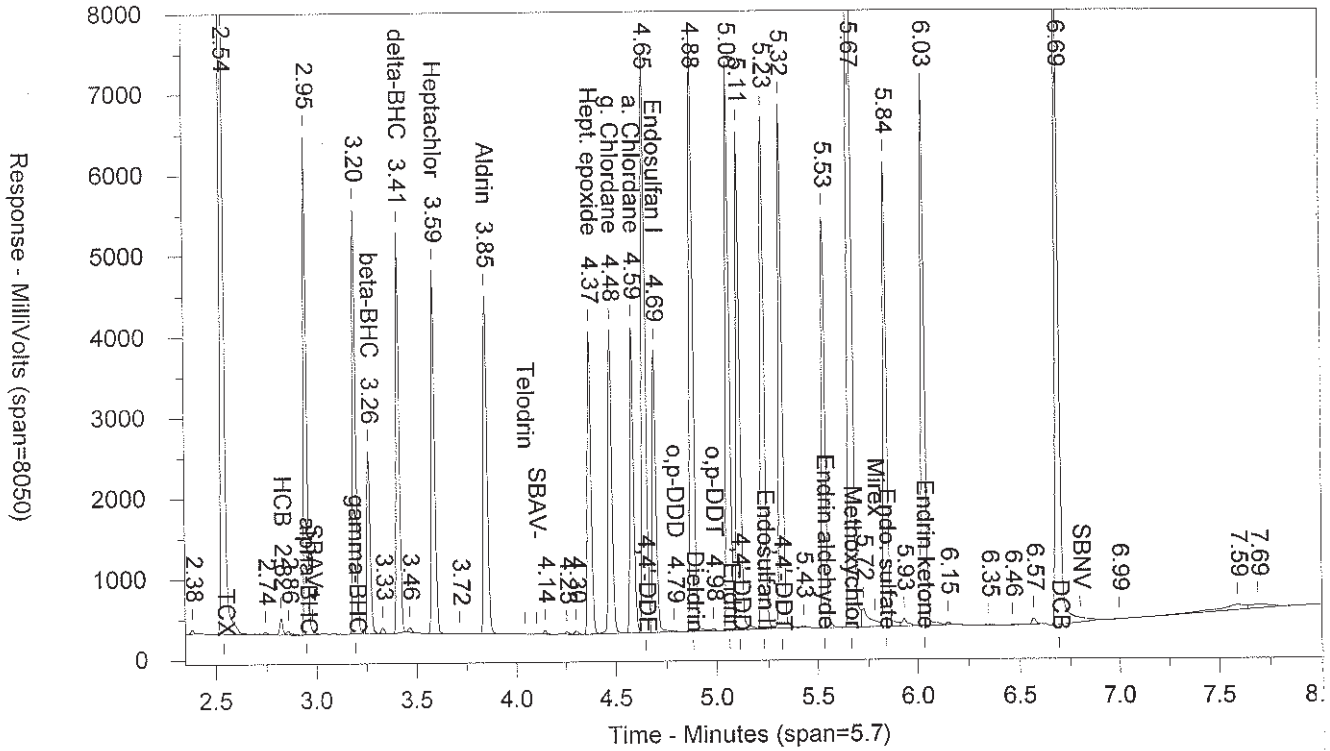
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.02	57543	.37	Kepona		0		Kepona
2.54	16311470	37.351	TCX	2.352	81080620	40.834	TCX
2.823	206656	.49	HCB	2.698	124016	.088	HCB
2.951	6187672	9.886	alpha-BHC	2.767	29365110	9.566	alpha-BHC
3.195	5264241	9.899	gamma-BHC	3.026	24480790	9.734	gamma-BHC
3.264	2260243	9.534	beta-BHC	3.092	9525700	10.042	beta-BHC
3.41	4954293	10.173	delta-BHC	3.319	22261150	9.679	delta-BHC
3.59	4499109	9.98	Heptachlor	3.364	18761160	10.398	Heptachlor
3.85	4185981	10.05	Aldrin	3.627	17866010	9.661	Aldrin
	0		Telodrin	3.797	13588	.019	Telodrin
4.372	3755597	10.073	Hept. epoxide	4.122	14270720	10.344	Hept. epoxide
4.477	3780103	9.976	g. Chlordane	4.283	15268700	10.542	g. Chlordane
4.585	3797442	10.057	a. Chlordane	4.404	15069900	10.492	a. Chlordane
4.694	3511825	9.925	Endosulfan I	4.448	13448010	10.495	Endosulfan I
4.647	7229987	21.358	4,4'-DDE	4.549	29998360	20.758	4,4'-DDE
4.884	7424567	19.875	Dieldrin	4.669	30985480	21.753	Dieldrin
4.789	15606	.092	o,p-DDD		0		o,p-DDD
5.061	7041327	20.013	Endrin	4.904	27454160	21.095	Endrin
4.983	22031	.107	o,p-DDT		0		o,p-DDT
5.11	6180901	21.689	4,4'-DDD	5.001	24407540	22.112	4,4'-DDD
5.23	6354127	19.602	Endosulfan II	5.067	25319220	21.091	Endosulfan II
5.319	6511249	20.831	4,4'-DDT	5.229	25067660	21.674	4,4'-DDT
5.533	5112601	19.169	Endrin aldehyde	5.316	19560350	20.213	Endrin aldehyde
5.839	5782501	19.647	Endo. sulfate	5.513	24401760	21.364	Endo. sulfate
5.667	15048430	104.742	Methoxychlor	5.72	52328930	103.725	Methoxychlor
6.034	6825414	19.54	Endrin ketone	5.879	24695020	20.542	Endrin ketone
6.693	9039384	41.195	DCB	6.674	32428850	41.798	DCB

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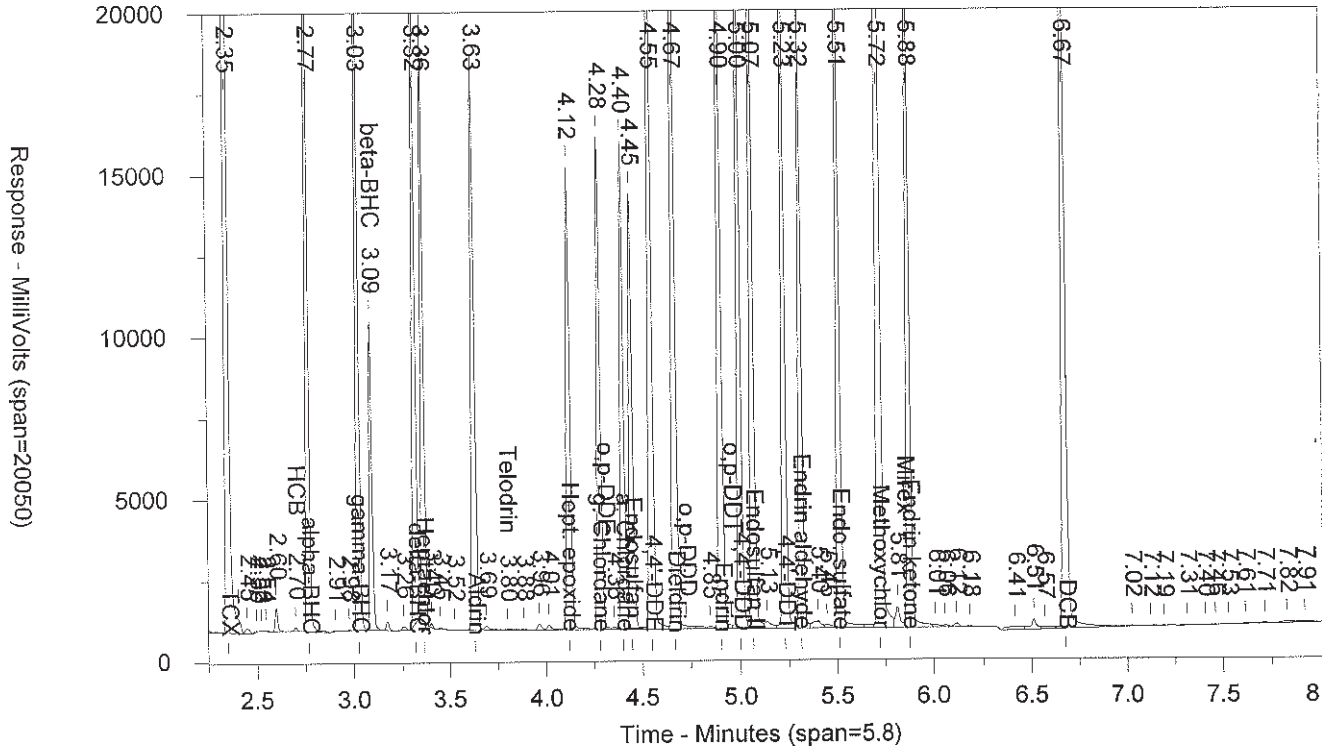
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MIXA41824B YHMIXA4YH CCAL 1831799999 00177 SW-846 808

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## LANCASTER LABORATORIES

Sample Number: TOXA41824E ZSTOXA4ZS CCAL 1831799999 00177 Analyst: 2306 SW-846 8081A  
Injected On: 11/15/2018 12:14:46 AM Sample Weight: 1  
Instrument ID: CP5-9190 Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306010.060.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830605.cal

RT A	Compound A	Height A	Area A
1.79		13189	10322
1.885		14681	13717
1.959		5460	3634
2.015		88928	79918
2.143		6120	4857
2.182		33344	33748
2.331		6314	4894
2.42		27665	29905
2.553	TCX	4188	12226
2.642		9881	8432
2.744		22111	26712
2.95	alpha-BHC	8532	14450
3.009		3278	7139
3.079		4366	7276
3.187	gamma-BHC	5670	9856
3.306		7078	27986
3.364		12443	11424
3.389		7153	5027
3.456		15172	14768
3.518		33992	72751
3.592	Heptachlor	22393	30660
3.63		25069	29283
3.681		31589	77029
3.749		26671	46548
3.811		16613	27217
3.849	Aldrin	16521	18428
3.956		78004	132030
4.019		278223	661509
4.135		213000	690243
4.217		190000	369384
4.259		216590	339648
4.293		582395	1934811
4.376	o,p-DDE	250971	332156
4.402		445433	798725
4.451		484529	981367
4.498	g. Chlordane	676759	1630396
4.562		866733	2083450
4.615		661724	1256901
4.701	Endosulfan I	1219115	4048578
4.738		865484	1772344
4.797	o,p-DDD	1315592	2978271
4.844		1356147	3312295
4.885	Dieldrin	1807572	3831809
4.956		2011440	3921592
5	o,p-DDT	2391890	5417628
5.033		1818614	2659624
5.085	Kepone	2831480	8219743
5.13	4,4'-DDD	1901397	2759749
5.157		1926432	3860557
5.22	Endosulfan II	4349773	10877810
5.308	4,4'-DDT	3983954	14806360
5.356		1216623	1806151

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.401		1892381	3987253
5.429		2531310	4752933
5.471		3991521	7649419
5.516		3168682	7254858
5.559		2899023	7029451
5.627		2856755	8051033
5.673	Methoxychlor	1643268	2522210
5.705		3544238	9097814
5.771	Mirex	4148581	8279505
5.811		2426790	4783185
5.838	Endo. sulfate	1933539	3006240
5.884		1325396	3009092
5.936		1071681	4188397
6.025	Endrin ketone	1238610	3984473
6.084		841347	1608377
6.127		767775	1684422
6.159		773668	1314311
6.182		767456	1514526
6.24		497148	1242530
6.284		327271	751312
6.349		265867	717525
6.381		329307	517609
6.405		298048	468247
6.451		243798	846974
6.543		413323	780510
6.575		449290	705306
6.623		77580	124548
6.692	DCB	122516	291082
6.737		107715	257133
6.798		40352	83754
6.869		5137	6971
7.534		22159	280240
7.685		30774	185263
7.869		39989	359947

## LANCASTER LABORATORIES

Sample Number: TOXA41824E      ZSTOXA4ZS      CCAL 183179999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/15/2018 12:14:46 AM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306010B.060.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830605b.cal

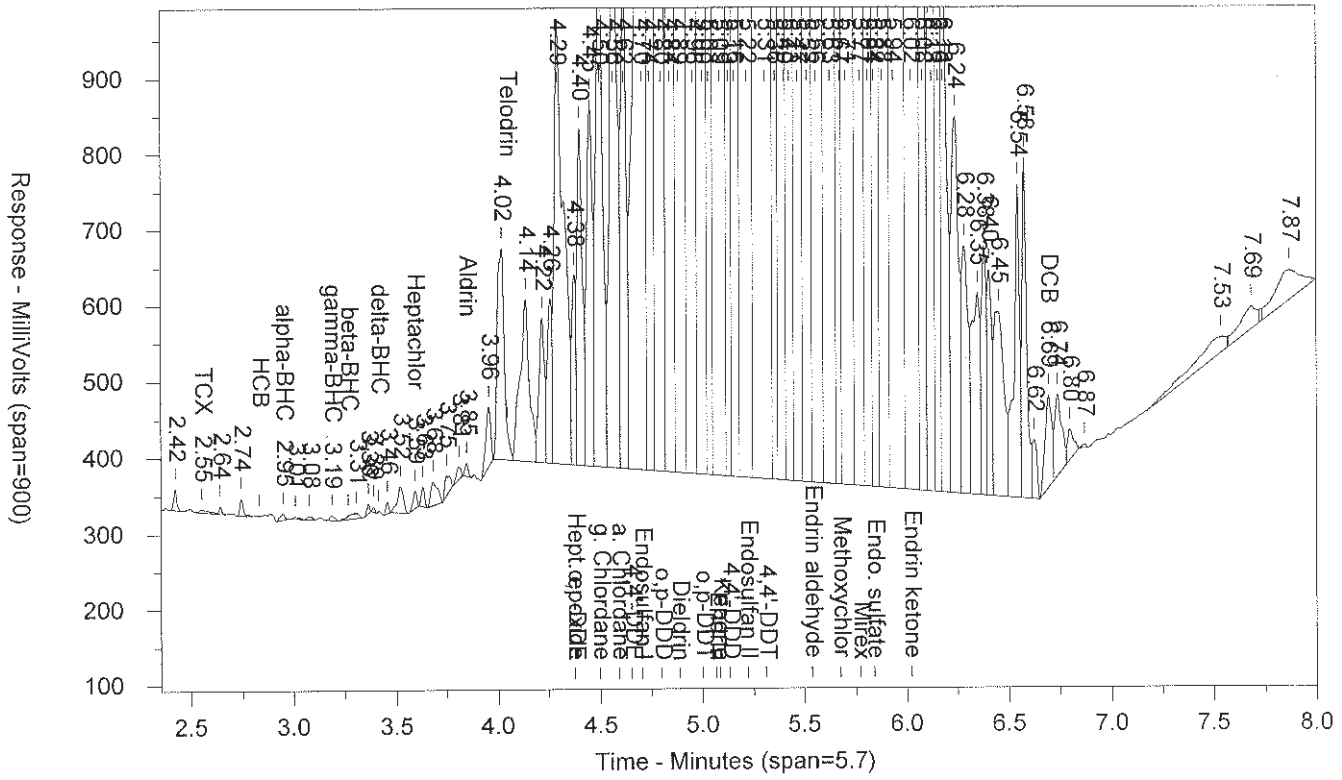
RT B	Compound B	Height B	Area B
1.932		7152	11633
1.964		14436	19440
1.993		51252	62832
2.052		33369	57776
2.101		82278	130650
2.161		52372	71772
2.187		54836	75672
2.239		48738	98829
2.271		68525	87061
2.323		50958	85842
2.352	TCX	44003	60144
2.377		49042	116335
2.443		101344	154333
2.489		65755	63026
2.522		7986	13519
2.605		6971	16073
2.673	HCB	4704	5615
2.725		15110	23083
2.766	alpha-BHC	19563	14951
2.852		21786	30261
2.906		22402	58911
3.02	gamma-BHC	38147	89209
3.071		65357	65668
3.126		44735	42069
3.148		19350	13783
3.185		8766	7429
3.211		20273	21312
3.251		47636	51197
3.29		69171	79526
3.338	delta-BHC	97723	98330
3.376	Heptachlor	60511	70090
3.438		165060	261390
3.502		28221	27492
3.547		162100	209513
3.566		170009	241947
3.606		72580	72429
3.666		315336	599461
3.712		1124866	3414138
3.822		784725	1652385
3.847		594766	856024
3.886		780089	1799073
3.945		455293	785441
3.984		1741036	3005802
4.022		928420	1823959
4.063		1618344	2994053
4.119	Hept. epoxide	1730133	5006800
4.199		1312954	3278870
4.236		1508815	3211508
4.272	g. Chlordane	2062614	3306608
4.34		2981223	9250091
4.376		2048188	5285081
4.431		1981465	4834414



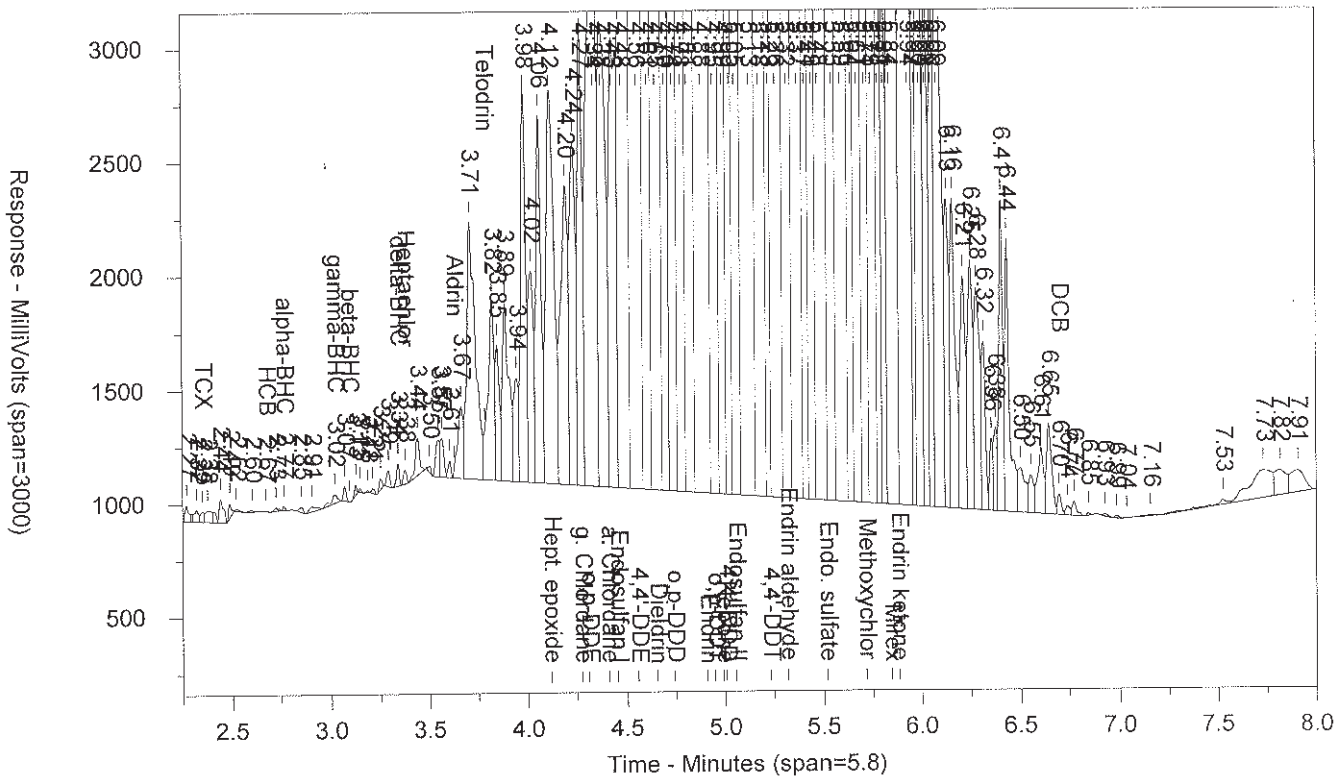
## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.477		2932842	9111395
4.556	4,4'-DDE	4226558	12619450
4.609		2968394	6492431
4.653	Dieldrin	7928808	16817550
4.7		4011000	6923097
4.741	o,p-DDD	5182940	9299359
4.782		6096267	12207660
4.814		5664794	13709830
4.883		8159103	30068690
4.945	o,p-DDT	6609162	14565070
4.99	Kepone	6155315	11289850
5.03		10257040	15294930
5.054	Endosulfan II	15265700	24749400
5.128		24814770	45321360
5.181		6094426	14740410
5.226	4,4'-DDT	3819351	5049442
5.263		9931972	24103730
5.319	Endrin aldehyde	17184520	27103010
5.375		9783626	25892550
5.412		7211468	11049820
5.448		7877076	14870400
5.479		9027449	22893580
5.548		6286547	13700500
5.592		8813077	26103830
5.644		7210033	11824640
5.674		15050720	23974620
5.713	Methoxychlor	7633629	12586910
5.746		6921777	12269800
5.781		2782578	3978761
5.81		2374899	3193137
5.844	Mirex	4526798	11376690
5.938		3340141	11830660
5.97		2359168	2514571
5.995		3392720	6183715
6.028		2493577	3535511
6.057		2352869	3334425
6.086		2679771	6224635
6.132		1359037	1969427
6.161		1364534	2510283
6.214		1023063	1927665
6.252		1097613	1916259
6.282		977449	1922436
6.317		743144	935532
6.356		317189	364710
6.377		369029	410998
6.408		1369983	1954568
6.436		1202353	1873400
6.503		196172	523171
6.554		168624	303896
6.606		290028	631434
6.647		396829	734297
6.699	DCB	89825	120121
6.743		40508	61979
6.775		61005	99288
6.846		10900	12277
6.927		10725	16608
6.986		10508	14615
7.038		3092	4400
7.158		6433	25220
7.53		21133	119714
7.732		123602	960131
7.817		111585	464307
7.905		98813	484970

TOXA41824E ZSTOXA4ZS CCAL 1831799999 00177 SW-846 8081  
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\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.060.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA41824E ZSTOXA4ZS CCAL 1831799999 00177 SW-846 8081A  
 Injected On: 11/15/2018 12:14:46 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

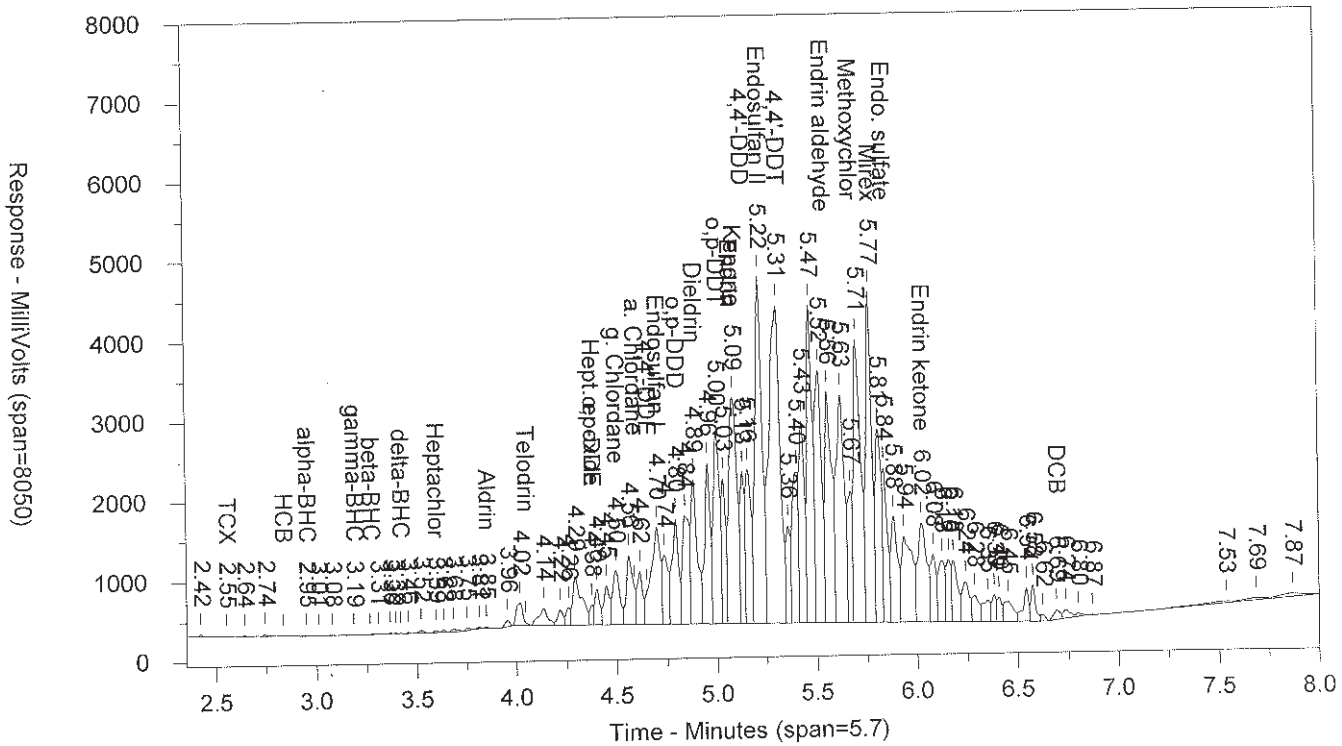
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.553	4188	.01	TCX	2.352	44003	.022	TCX
	0		HCB	2.673	4704	.003	HCB
2.95	8532	.014	alpha-BHC	2.766	19563	.596	alpha-BHC
3.187	5670	.011	gamma-BHC	3.02	38147	.564	gamma-BHC
	0		delta-BHC	3.338	97723	.686	delta-BHC
3.592	22393	.05	Heptachlor	3.376	60511	.034	Heptachlor
3.849	16521	.04	Aldrin		0		Aldrin
	0		Hept. epoxide	4.119	1730133	1.254	Hept. epoxide
4.498	676759	1.786	g. Chlordane	4.272	2062614	1.424	g. Chlordane
4.376	250971	1.349	o,p-DDE		0		o,p-DDE
	0		4,4'-DDE	4.556	4226558	3.864	4,4'-DDE
4.885	1807572	4.839	Dieldrin	4.653	7928808	5.566	Dieldrin
4.701	1219115	3.446	Endosulfan I		0		Endosulfan I
4.797	1315592	7.78	o,p-DDD	4.741	5182940	10.361	o,p-DDD
5	2391890	11.648	o,p-DDT	4.945	6609162	11.83	o,p-DDT
5.085	2831480	18.204	Kepone	4.99	6155315	12.854	Kepone
5.22	4349773	13.419	Endosulfan II	5.054	15265700	12.717	Endosulfan II
5.13	1901397	6.672	4,4'-DDD		0		4,4'-DDD
5.308	3983954	12.746	4,4'-DDT	5.226	3819351	3.302	4,4'-DDT
	0		Endrin aldehyde	5.319	17184520	17.758	Endrin aldehyde
5.673	1643268	11.438	Methoxychlor	5.713	7633629	15.131	Methoxychlor
5.771	4148581	21.853	Mirex	5.844	4526798	8.186	Mirex
5.838	1933539	6.57	Endo. sulfate		0		Endo. sulfate
6.025	1238610	3.546	Endrin ketone		0		Endrin ketone
6.692	122516	.528	DCB	6.699	89825	.116	DCB

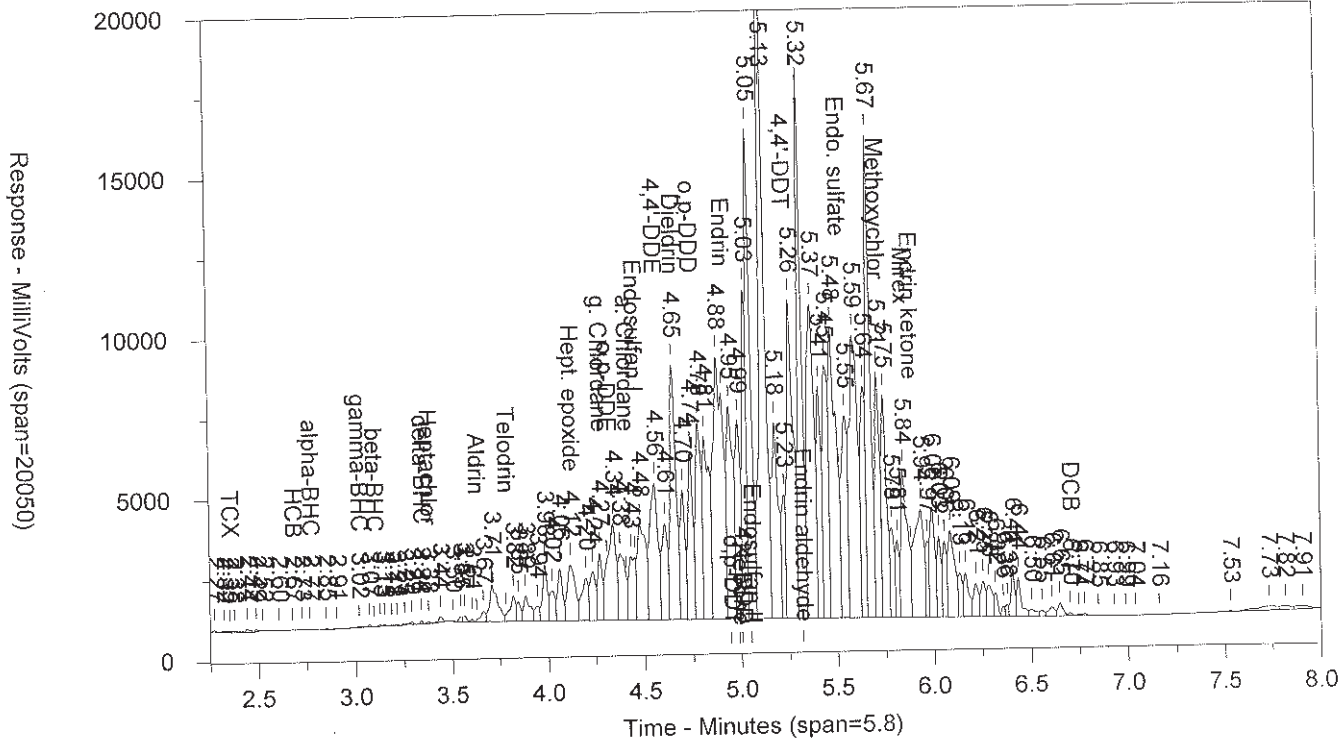
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 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:10 AM  
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TOXA41824E ZSTOXA4ZS CCAL 1831799999 00177 SW-846 8081

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## LANCASTER LABORATORIES

Sample Number: CHLD41824D      FLCHLD4FL      CCAL 1831799999      00177      Analyst: 2306      SW-846 8081A  
 Injected On: 11/15/2018 12:27:41 AM  
 Instrument ID: CP5-9190      Sample Weight: 1  
 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Date File: 05pest18306010.061.RAW  
 Method File: 05PESTDI.MET  
 Calibration File: 05pest1830605.cal

RT A	Compound A	Height A	Area A
1.789		5988	4933
1.861		26849	35147
1.885		41922	54069
1.919		35189	49079
1.963		41829	55504
2.016		37303	39457
2.097		146923	126314
2.143		108752	86412
2.182		126471	108850
2.28		4307	3327
2.381		9804	8778
2.417		31661	32063
2.443		22991	21553
2.501		1113874	1003552
2.555	TCX	5522	5877
2.695		7940	12887
2.743		28233	43101
2.993		118464	143463
3.07		82657	93339
3.14		31134	34550
3.176		8875	10440
3.243		39312	42663
3.285		45365	53394
3.374		101576	129563
3.454		140299	203833
3.52		1167212	1390237
3.59	Heptachlor	1691127	2026875
3.684		220231	503098
3.775		60708	82910
3.819		18823	22612
3.887		9026	19180
3.919		85118	87606
3.962		1188497	1543146
4.001		42695	38277
4.053	Telodrin	80711	152842
4.107		159723	480524
4.183		219617	287849
4.232		312686	496192
4.317		755273	1017928
4.369	o,p-DDE	343261	771874
4.408		738797	1122198
4.477	g. Chlordane	3749308	5839117
4.576	a. Chlordane	5173547	10107220
4.648	4,4'-DDE	158511	325102
4.713	Endosulfan I	121338	186088
4.752		327678	645900
4.83		421771	725585
4.898	Dieldrin	123144	188447
4.944		377116	605337
5.013		170661	339847
5.047	Endrin	120042	151734
5.087	Kepone	985908	1452187

## Chrom Perfect Chromatogram Report

RT A	Compound A	Height A	Area A
5.148		157036	189451
5.179		1252009	1629094
5.23	Endosulfan II	103021	274259
5.36		267819	472730
5.389		103036	131726
5.43		57541	84730
5.491		67572	133021
5.553	Endrin aldehyde	18170	18663
5.581		43998	77278
5.621		39933	45782
5.654		18943	23491
5.68	Methoxychlor	26276	42241
5.74		4907	5400
5.839	Endo. sulfate	62637	162613
5.878		98473	119593
5.923		64420	73955
5.957		12866	11991
5.992		40804	44498
6.101		6291	15804
6.173		37157	53625
6.27		10057	11600
6.353		22979	39999
6.426		4938	5197
6.526		10957	31002
6.741		34937	80091
6.816		17260	30461
6.932		5019	9354
7.142		9212	50580
7.601		39136	557391
7.856		3211	255919

## LANCASTER LABORATORIES

Sample Number: CHLD41824D      FLCHLD4FL      CCAL 1831799999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/15/2018 12:27:41 AM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306010B.061.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830605b.cal

RT B	Compound B	Height B	Area B
1.913		511820	382310
1.992		454758	399257
2.036		316879	304991
2.102		93651	211313
2.139		97106	133669
2.191		91979	137637
2.231		146693	206282
2.26		140354	170643
2.324		80420	176455
2.376		4584692	4046388
2.444		144880	213886
2.516		45894	147129
2.552		13614	12017
2.62		7152	9584
2.647		16645	16564
2.703		9242	5955
2.731		446827	424298
2.79		323236	322902
2.856		36867	37390
2.901		17209	28037
2.958		107265	112119
2.99		133910	127861
3.035	gamma-BHC	188086	210608
3.114		370450	383653
3.186		154403	280901
3.226		160980	116438
3.25		4574123	4525482
3.31	delta-BHC	23384	25589
3.364	Heptachlor	6827264	7663941
3.454		489765	487817
3.491		287282	379934
3.544		77910	95907
3.589		168827	204457
3.641	Aldrin	22291	22408
3.68		917535	1260304
3.758		4401181	6258524
3.812		467137	781051
3.864		649475	1080991
3.893		571849	797210
3.926		1147521	1799595
3.988		879449	1197675
4.024		215203	322860
4.094		3122216	4824270
4.149		359464	591033
4.192		3363048	5201440
4.231		929636	1522542
4.283	g. Chlordane	15938500	21372930
4.361		14038500	22468360
4.405	a. Chlordane	12038110	15762020
4.466	Endosulfan I	369176	1124433
4.522		597751	1429370
4.6		1182592	1732102

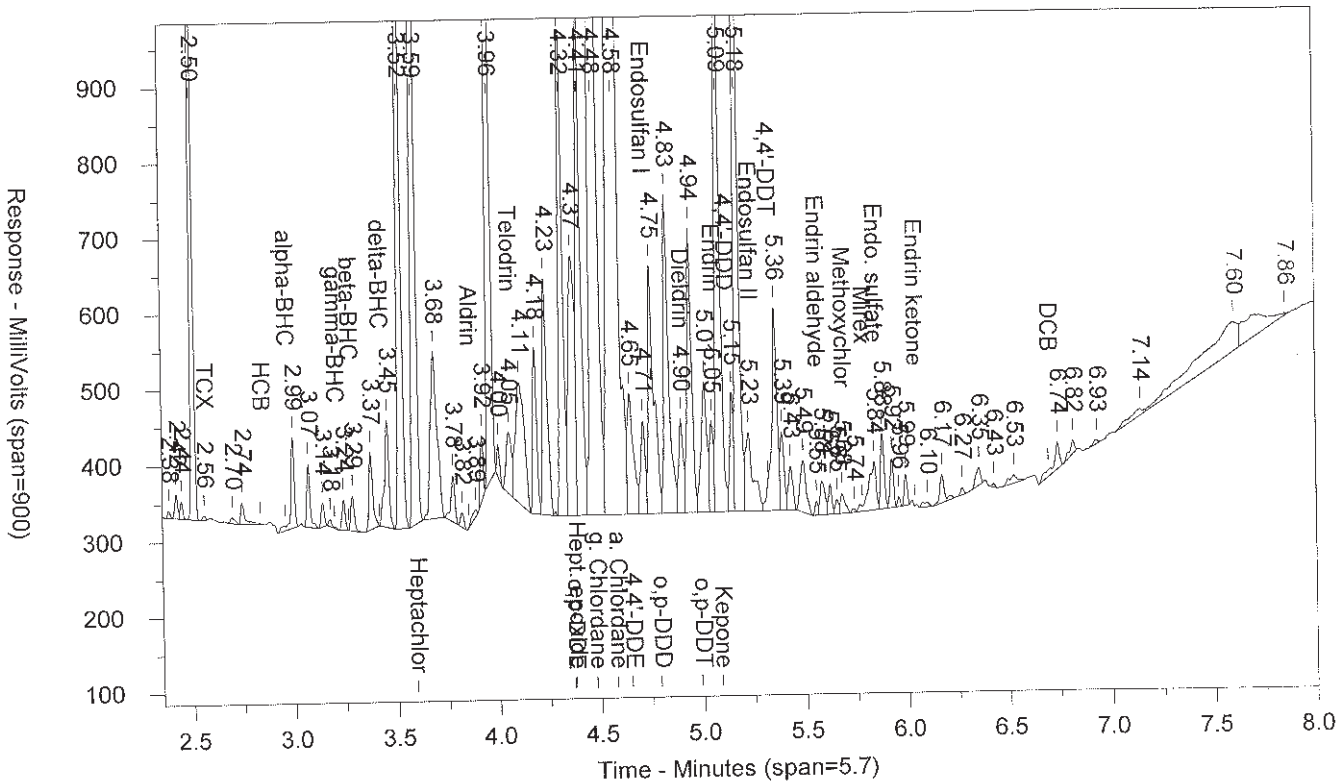
## Chrom Perfect Chromatogram Report

RT B	Compound B	Height B	Area B
4.672	Dieldrin	1604419	2925522
4.749		367234	756262
4.779		573450	1075046
4.818		603704	1171340
4.882		986661	1507814
4.928		578092	1124583
4.97	o,p-DDT	3676686	4594488
5.011	4,4'-DDD	378193	430134
5.037		667347	1354286
5.098		4424669	5653529
5.132		335708	515879
5.179		327768	591166
5.202		393371	635507
5.236	4,4'-DDT	206542	296659
5.269		173662	340159
5.327	Endrin aldehyde	808770	1297239
5.389		180045	238249
5.423		381444	773007
5.485		78114	156150
5.518	Endo. sulfate	139892	225316
5.563		242667	365735
5.623		137392	369629
5.701		78392	112416
5.737	Methoxychlor	34448	52850
5.778		85135	132394
5.833	Mirex	278371	550157
5.88	Endrin ketone	227125	376341
5.936		83229	137775
5.968		230782	289015
6.017		15284	17247
6.079		112360	202874
6.127		43753	110712
6.173		68817	150925
6.227		87556	211149
6.272		88891	177253
6.311		132308	221239
6.364		111675	325220
6.433		80058	182468
6.481		137295	271297
6.538		61136	205885
6.632		37788	94155
6.701	DCB	57717	103633
6.728		71136	97315
6.894		5563	9485
6.934		10568	15856
6.998		14925	23484
7.125		13191	36400
7.238		14240	42129
7.346		5751	20333
7.379		19525	41088
7.47		15652	59294
7.612		12278	22819
7.866		13470	92066

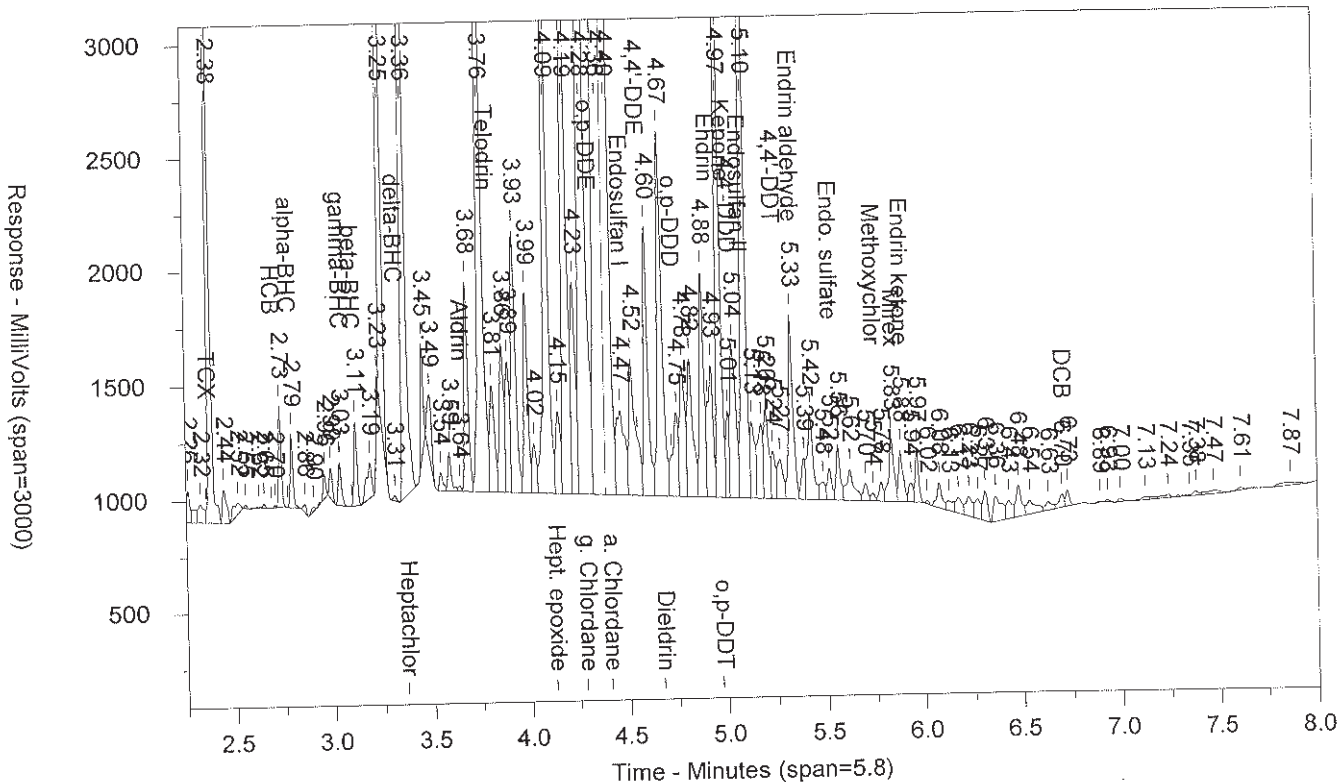


CHLD41824D FLCHLD4FL CCAL 1831799999 00177 SW-846 8081

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.061.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD41824D      FLCHLD4FL      CCAL 1831799999      00177      SW-846 8081A  
 Injected On: 11/15/2018 12:27:41 AM      Sample Weight: 1  
 Instrument ID: CP5-9190      Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

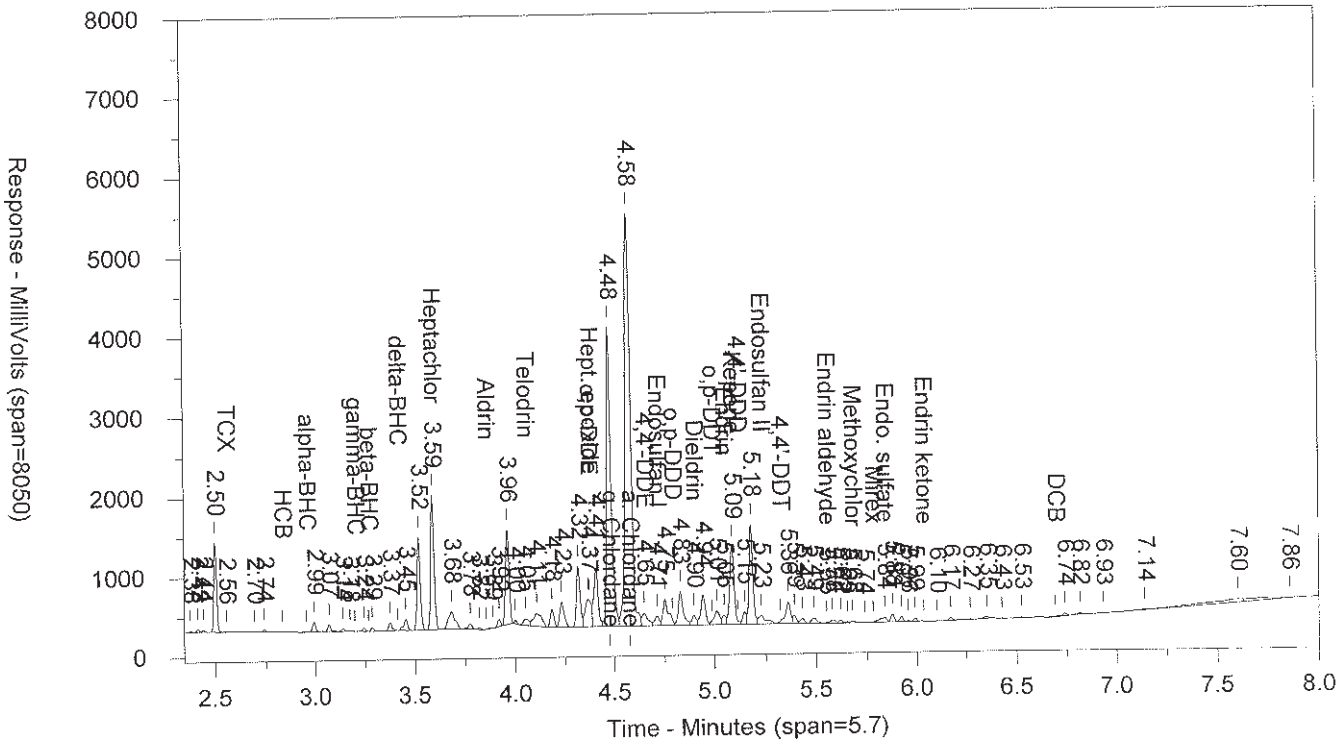
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.555	5522	.013	TCX		0		TCX
	0		gamma-BHC	3.035	188086	.621	gamma-BHC
	0		delta-BHC	3.31	23384	.655	delta-BHC
3.59	1691127	3.751	Heptachlor	3.364	6827264	3.784	Heptachlor
	0		Aldrin	3.641	22291	.525	Aldrin
4.053	80711	.372	Telodrin		0		Telodrin
4.477	3749308	9.895	g. Chlordane	4.283	15938500	11.005	g. Chlordane
4.369	343261	1.845	o,p-DDE		0		o,p-DDE
4.576	5173547	13.701	a. Chlordane	4.405	12038110	8.381	a. Chlordane
4.713	121338	.343	Endosulfan I	4.466	369176	.288	Endosulfan I
4.648	158511	.468	4,4'-DDE		0		4,4'-DDE
4.898	123144	.33	Dieldrin	4.672	1604419	1.126	Dieldrin
	0		o,p-DDT	4.97	3676686	6.581	o,p-DDT
	0		4,4'-DDD	5.011	378193	.343	4,4'-DDD
5.047	120042	.341	Endrin		0		Endrin
5.087	985908	6:339	Kepone		0		Kepone
5.23	103021	.318	Endosulfan II		0		Endosulfan II
	0		4,4'-DDT	5.236	206542	.179	4,4'-DDT
5.553	18170	.068	Endrin aldehyde	5.327	808770	.836	Endrin aldehyde
5.839	62637	.213	Endo. sulfate	5.518	139892	.122	Endo. sulfate
5.68	26276	.183	Methoxychlor	5.737	34448	.068	Methoxychlor
	0		Mirex	5.833	278371	.503	Mirex
	0		Endrin ketone	5.88	227125	.189	Endrin ketone
	0		DCB	6.701	57717	.074	DCB

Files:

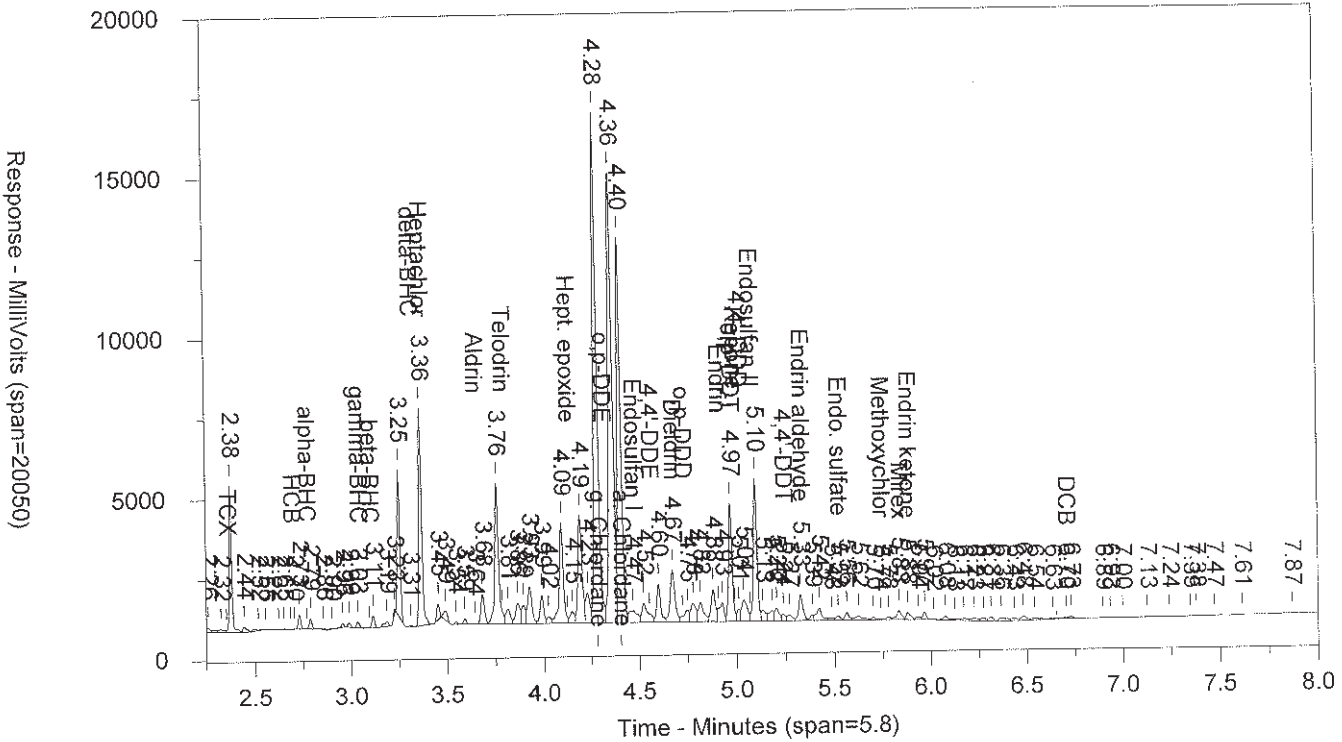
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 Method B: 05PESTD1B.MET  
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 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:10 AM  
 File Reported On: 11/15/2018 at 7:42:14 AM

CHLD41824D FLCHLD4FL CCAL 1831799999 00177 SW-846 8081.

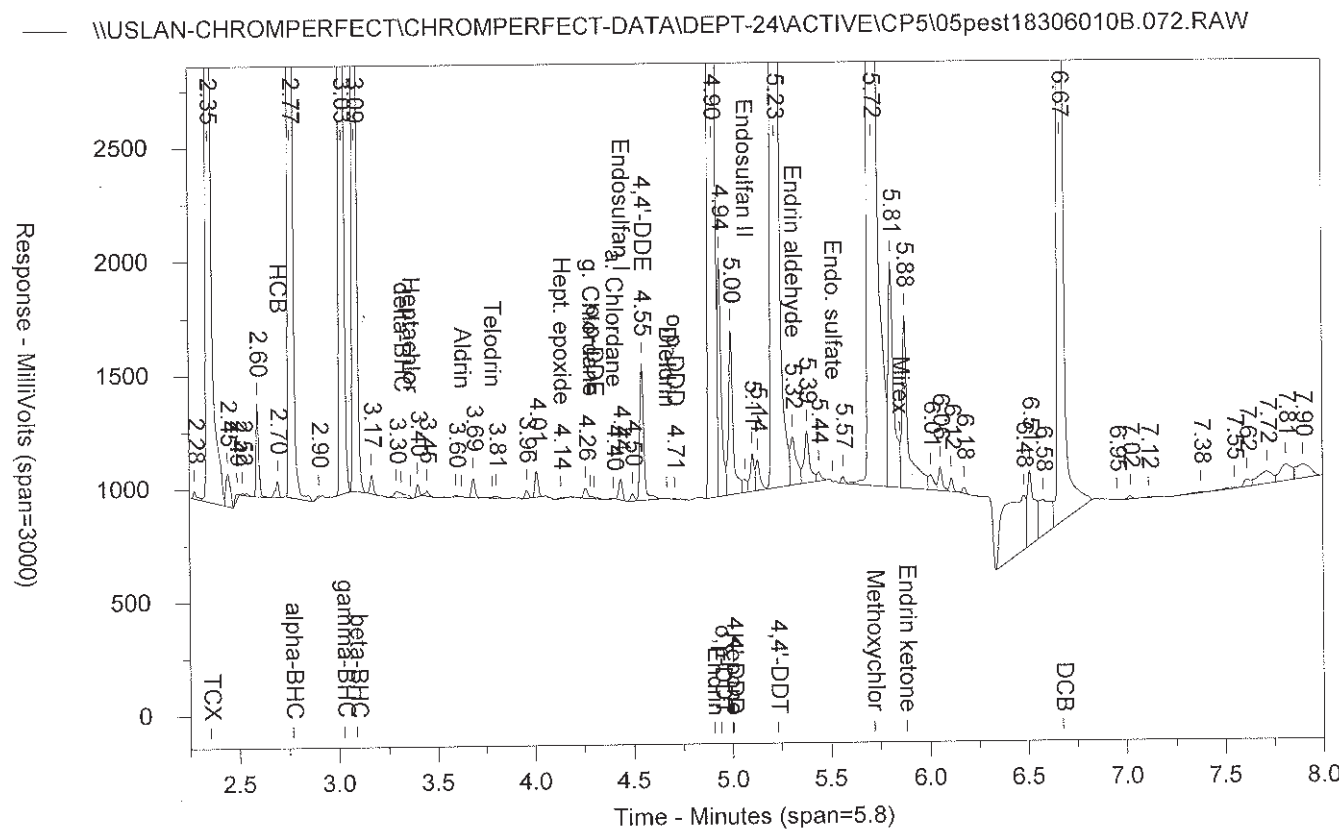
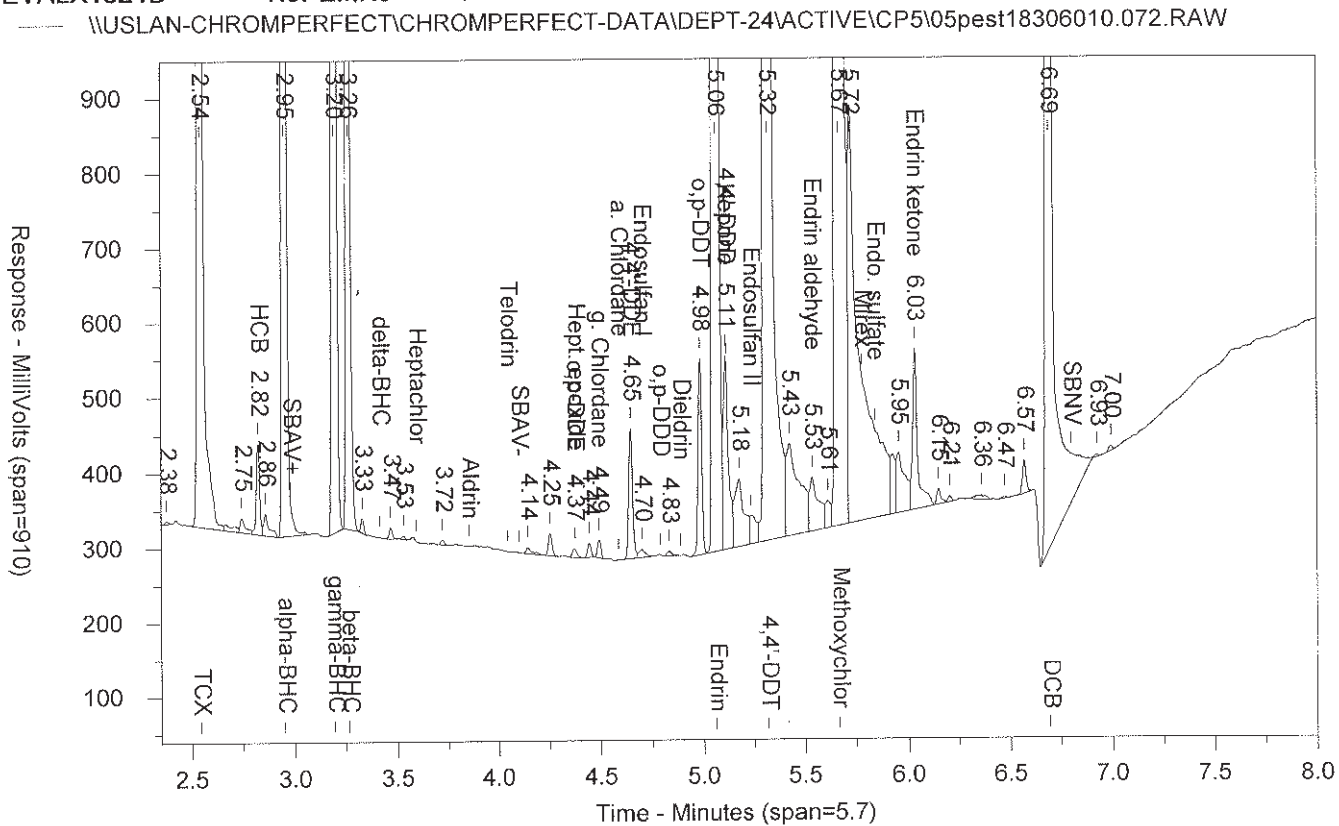
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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.061.RAW



EVALX1824B NJPEMNJ PEM 1831799999 00177 SW-846 8081A



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B NJPEMNJ PEM 1831799999 00177 SW-846 8081A  
 Injected On: 11/15/2018 2:48:16 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

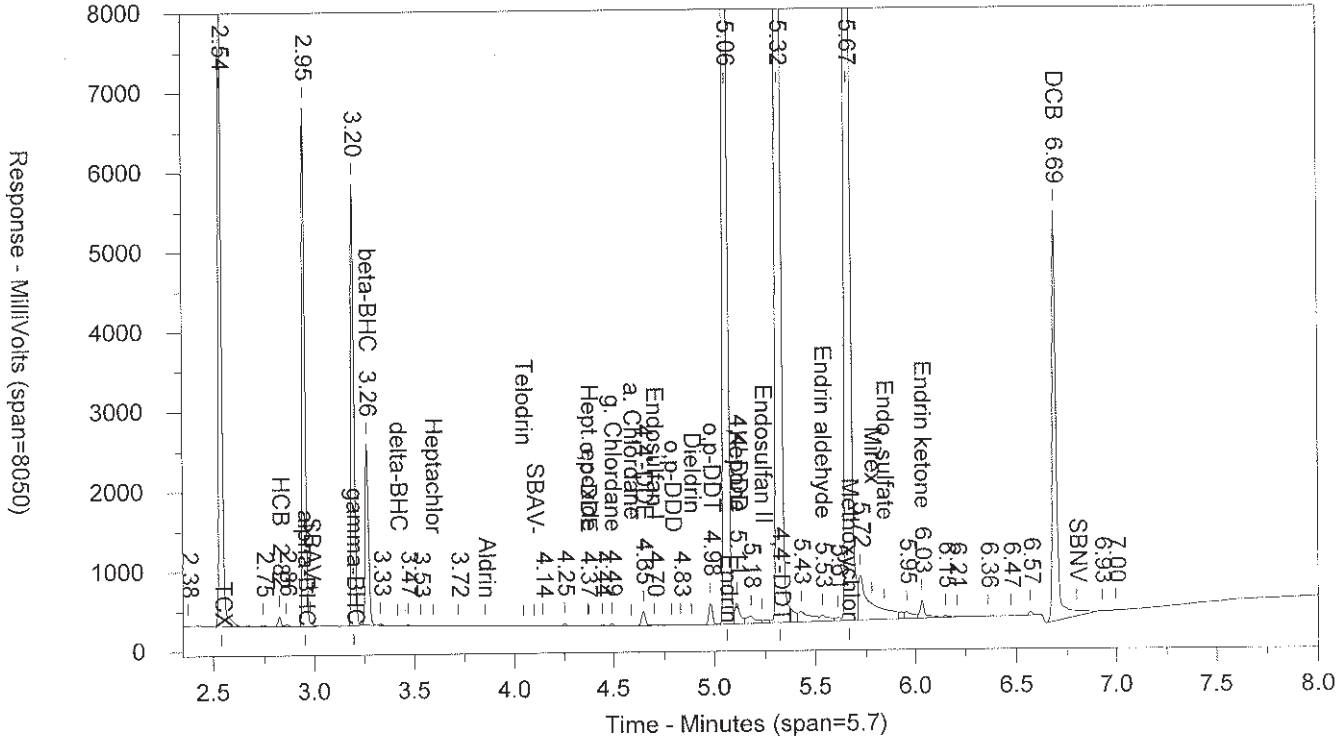
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	9269709	21.226	TCX	2.351	43968060	22.143	TCX
2.823	120336	.286	HCB	2.698	68860	.049	HCB
2.951	6547584	10.461	alpha-BHC	2.766	30968490	10.056	alpha-BHC
3.196	5562804	10.46	gamma-BHC	3.026	25699760	10.191	gamma-BHC
3.264	2277103	9.605	beta-BHC	3.091	9514975	10.031	beta-BHC
	0		Hept. epoxide	4.136	4311	.003	Hept. epoxide
4.371	12267	.066	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.404	3666	.003	a. Chlordane
4.7	11103	.031	Endosulfan I	4.441	92400	.072	Endosulfan I
4.493	23608	.062	g. Chlordane		0		g. Chlordane
4.647	173501	.513	4,4'-DDE	4.549	603706	1.489	4,4'-DDE
	0		o,p-DDD	4.711	5037	.01	o,p-DDD
5.061	18486210	52.541	Endrin	4.904	73894710	56.778	Endrin
4.983	261590	1.274	o,p-DDT	4.942	1048473	1.877	o,p-DDT
5.11	257355	1.655	Kepone	5	721005	4.941	Kepone
5.319	33791910	108.109	4,4'-DDT	5.23	138688900	119.911	4,4'-DDT
5.534	71495	.268	Endrin aldehyde	5.316	213747	.221	Endrin aldehyde
5.667	37680520	262.269	Methoxychlor	5.72	138338200	274.21	Methoxychlor
6.034	215415	.617	Endrin ketone	5.879	761613	.634	Endrin ketone
6.693	5145196	23.435	DCB	6.675	17971510	23.164	DCB

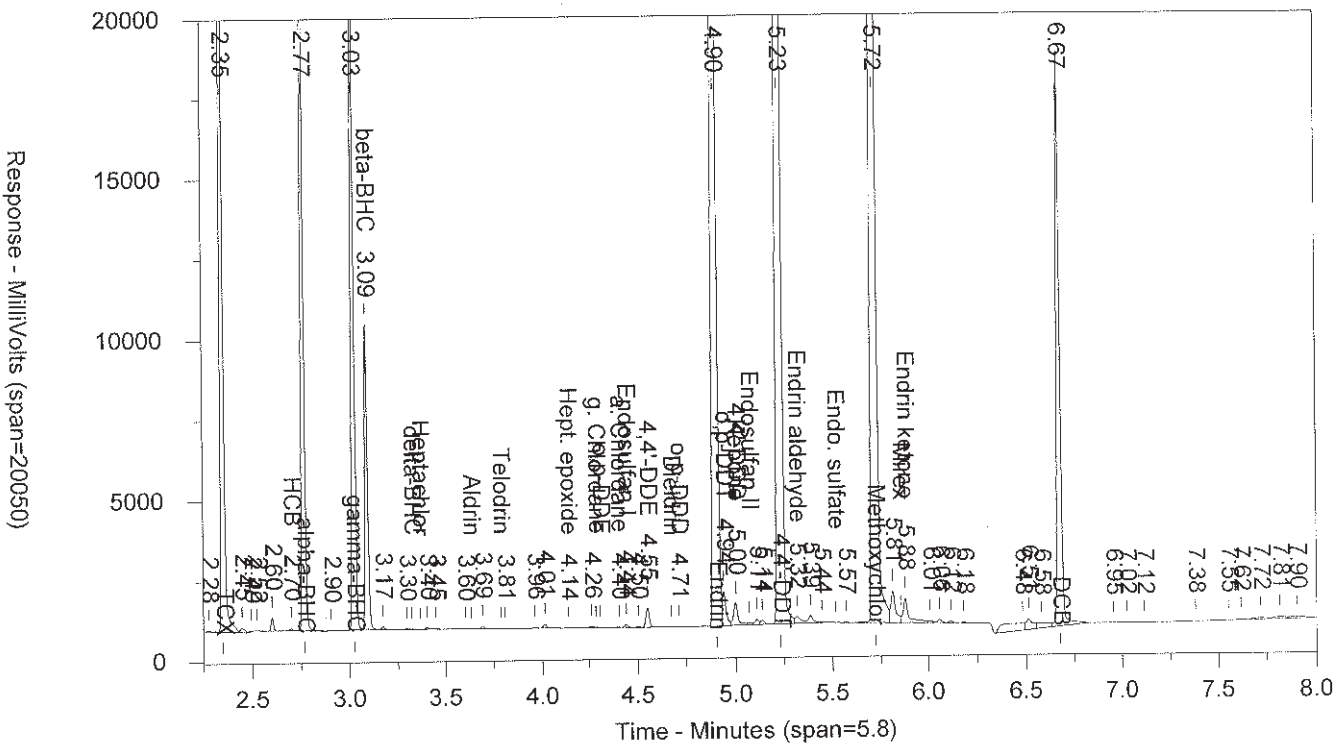
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 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:13 AM  
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EVALX1824B NJPEMNJ PEM 1831799999 00177 SW-846 8081A

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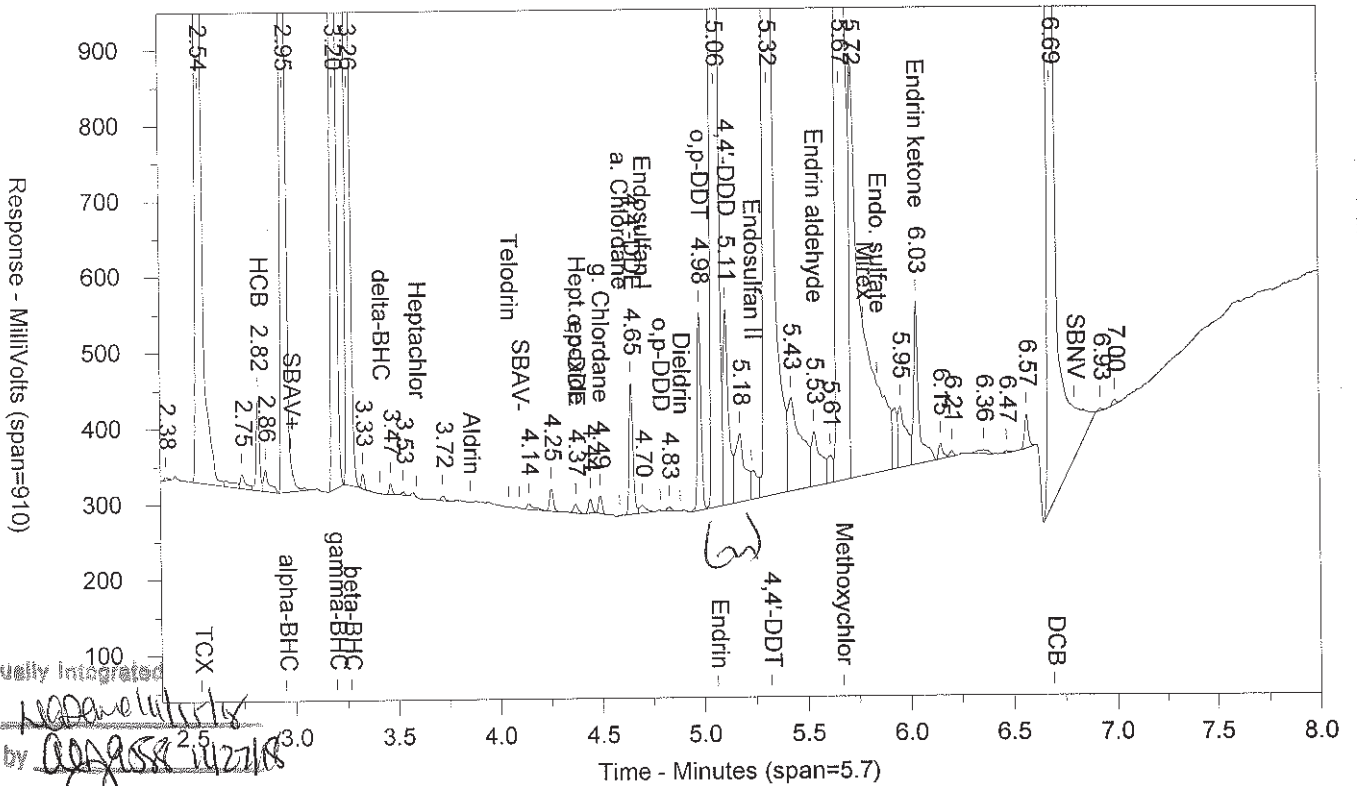


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EVALX1824B NJPEMNJ PEM 183179999 00177 SW-846 8081A

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M = Manually Integrated

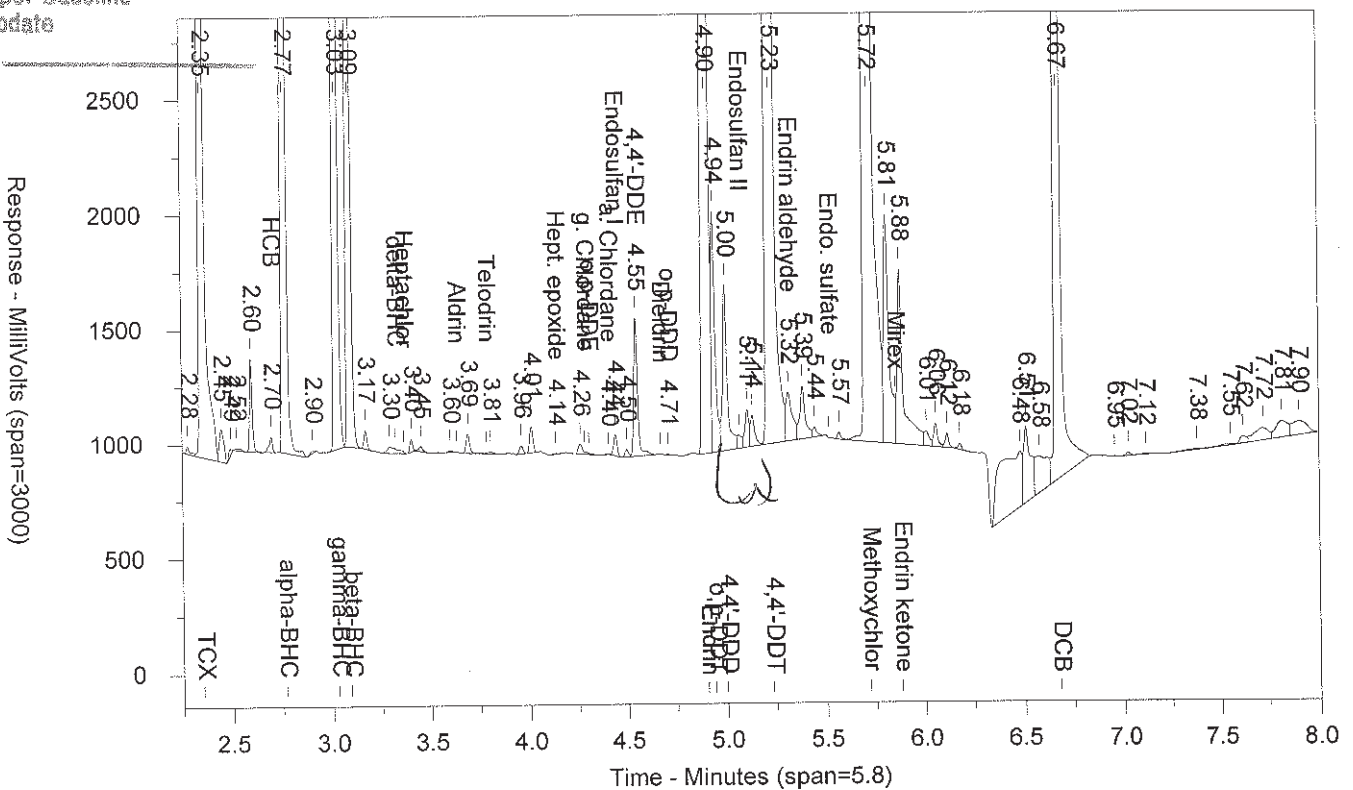
Analyst *Wade Miller*

Approved by *Wade Miller*

Circle Reason 1 2 3 4

- 1 = Missed Peak
- 2 = Improper Baseline
- 3 = RT Update
- 4 = Other

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.072.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: EVALX1824B NJPEMNJ PEM 1831799999 00177 SW-846 8081A  
 Injected On: 11/15/2018 2:48:16 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

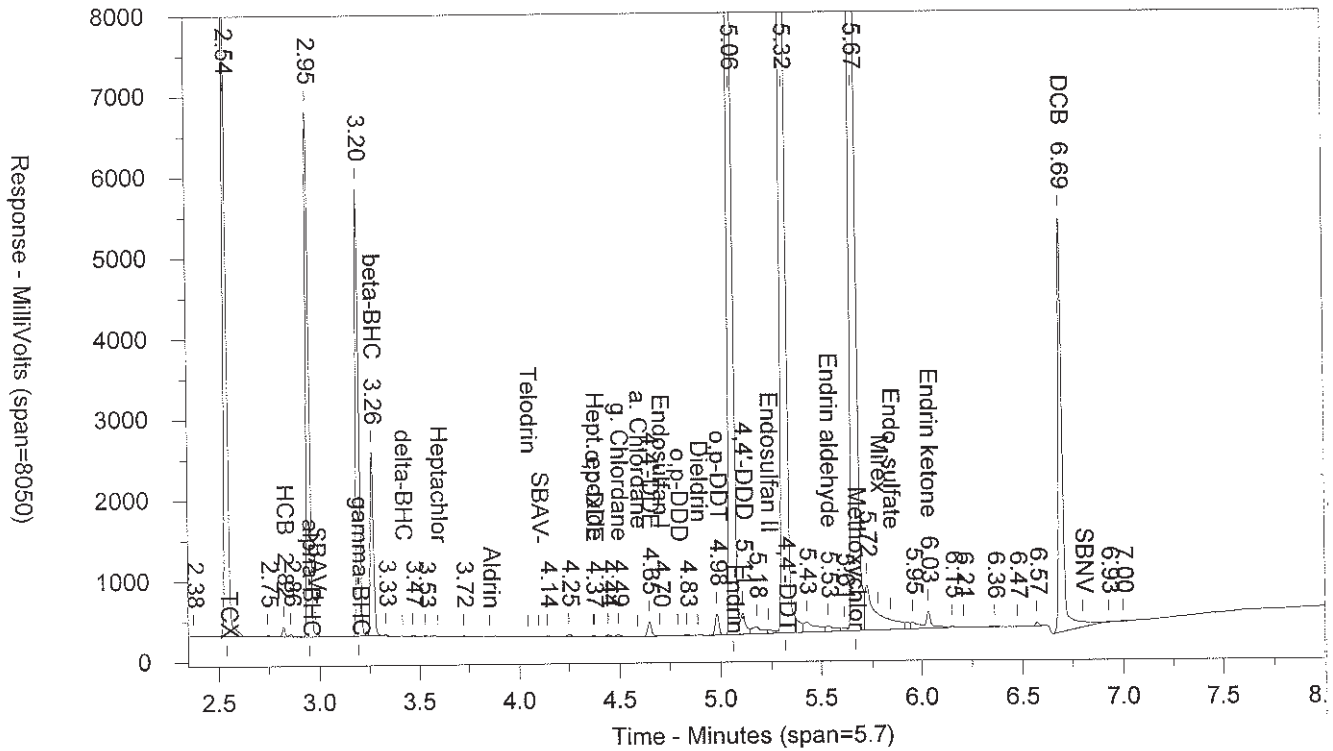
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.541	9269709	21.226	TCX	2.351	43968060	22.143	TCX
2.823	120336	.286	HCB	2.698	68860	.049	HCB
2.951	6547584	10.461	alpha-BHC	2.766	30968490	10.056	alpha-BHC
3.196	5562804	10.46	gamma-BHC	3.026	25699760	10.191	gamma-BHC
3.264	2277103	9.605	beta-BHC	3.091	9514975	10.031	beta-BHC
	0		Hept. epoxide	4.136	4311	.003	Hept. epoxide
4.371	12267	.066	o,p-DDE		0		o,p-DDE
	0		a. Chlordane	4.404	3666	.003	a. Chlordane
4.7	11103	.031	Endosulfan I	4.441	92400	.072	Endosulfan I
4.493	23608	.062	g. Chlordane		0		g. Chlordane
4.647	173501	.513	4,4'-DDE	4.549	603706	1.489	4,4'-DDE
	0		o,p-DDD	4.711	5037	.01	o,p-DDD
5.061	18486210	52.541	Endrin	4.904	73894710	56.778	Endrin
4.983	261590	1.274	o,p-DDT	4.942	1048473	1.877	o,p-DDT
5.11	257355	.903	4,4'-DDD	5	721005	.653	4,4'-DDD
5.319	33791910	108.109	4,4'-DDT	5.23	138688900	119.911	4,4'-DDT
5.534	71495	.268	Endrin aldehyde	5.316	213747	.221	Endrin aldehyde
5.667	37680520	262.269	Methoxychlor	5.72	138338200	274.21	Methoxychlor
6.034	215415	.617	Endrin ketone	5.879	761613	.634	Endrin ketone
6.693	5145196	23.435	DCB	6.675	17971510	23.164	DCB

Files:  
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 Area File: 05pest18306010B.072.BND  
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 Method B: 05PESTDB.MET  
 Calibration File A: 05pest1830605.cal  
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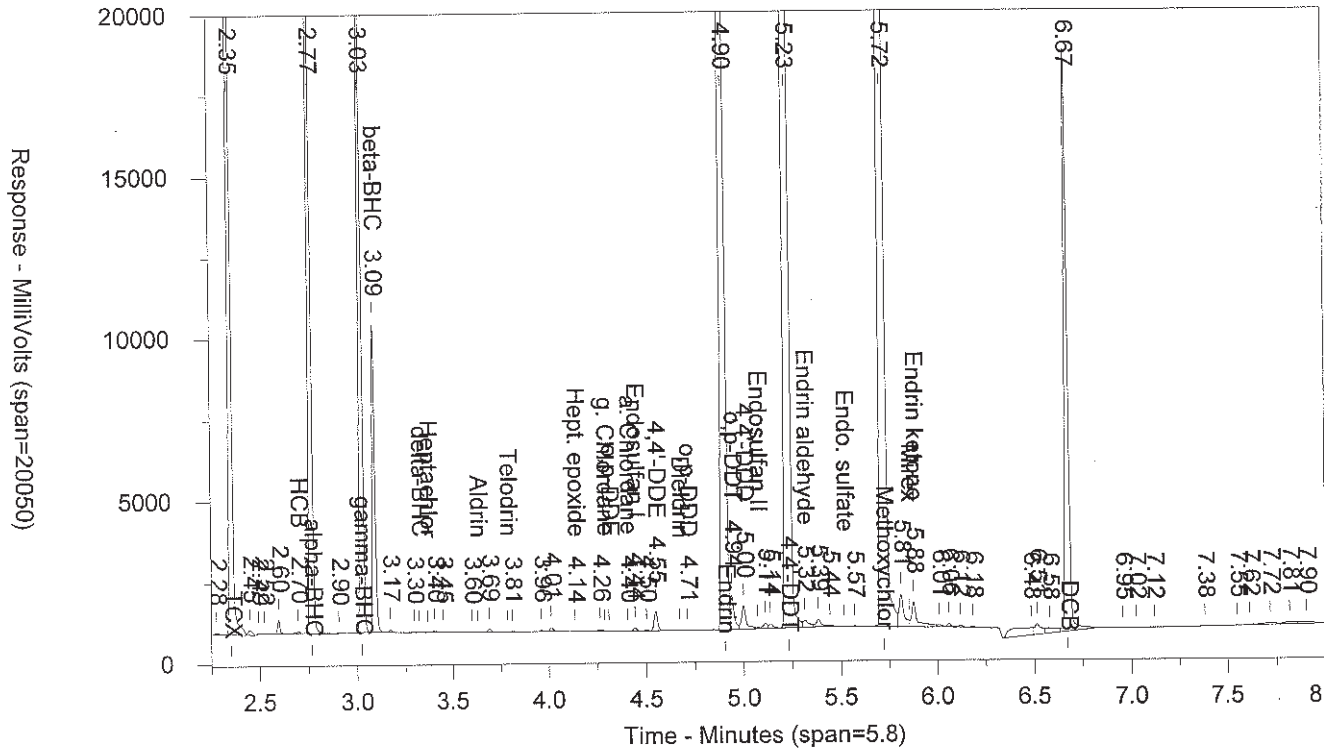


EVALX1824B NJPEMNJ PEM 1831799999 00177 SW-846 808

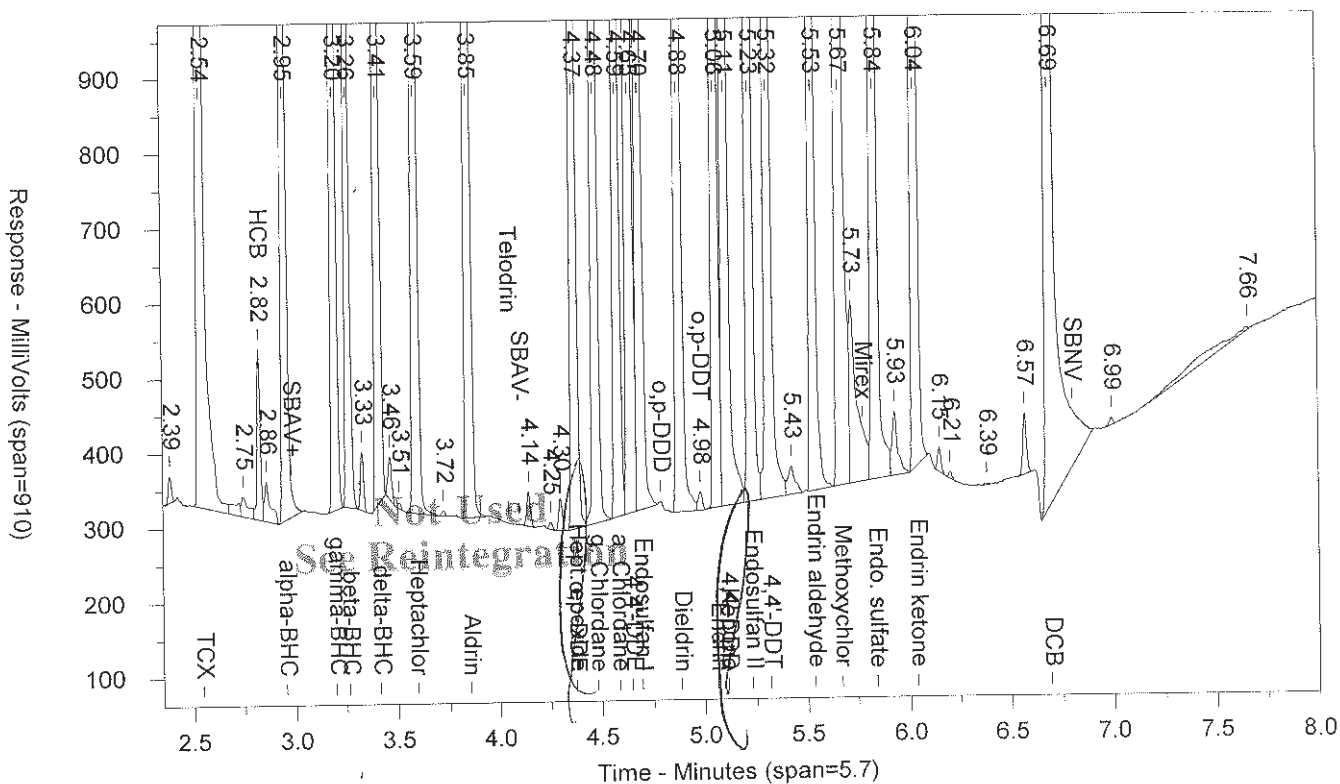
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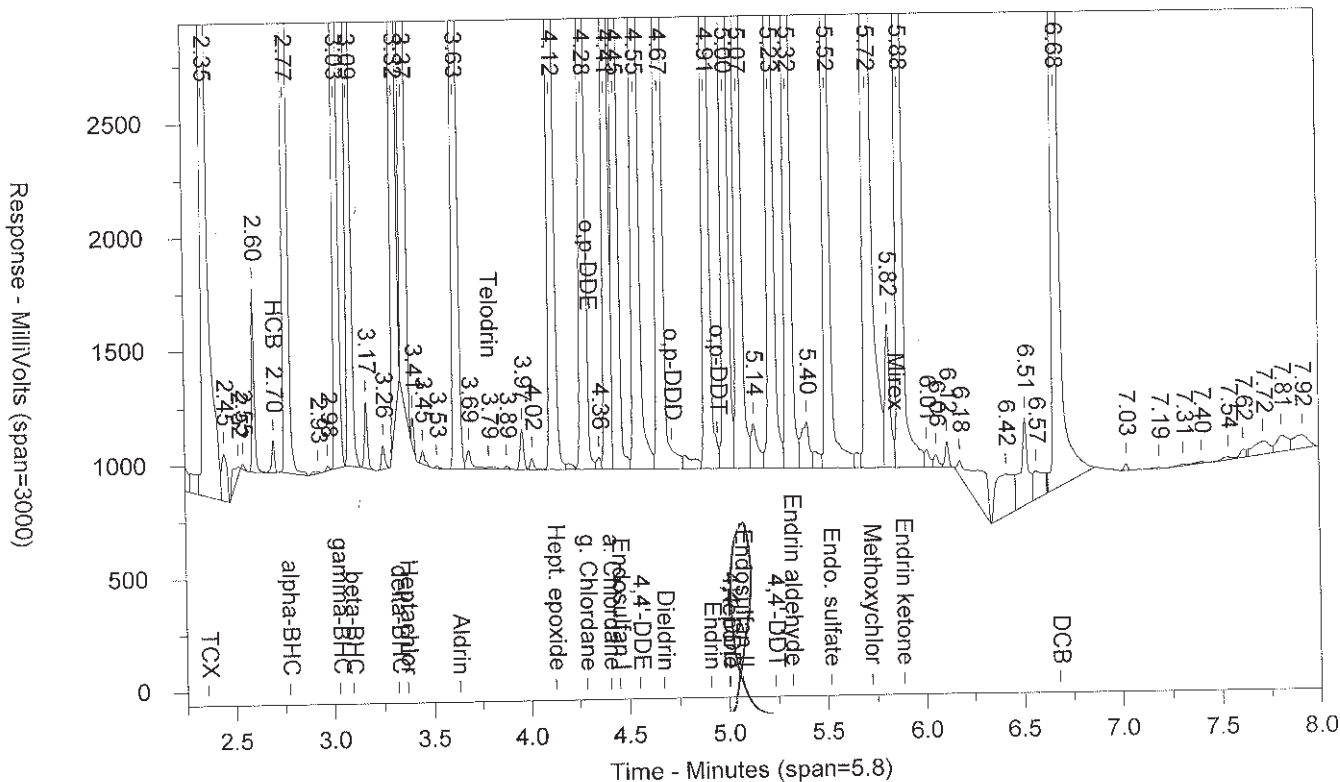
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MIXA41824B YMMIXA4YM CCAL 1831799999 00177 SW-846 8081A  
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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA41824B YMMIXA4YM CCAL 183179999 00177 SW-846 8081A  
 Injected On: 11/15/2018 3:00:57 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

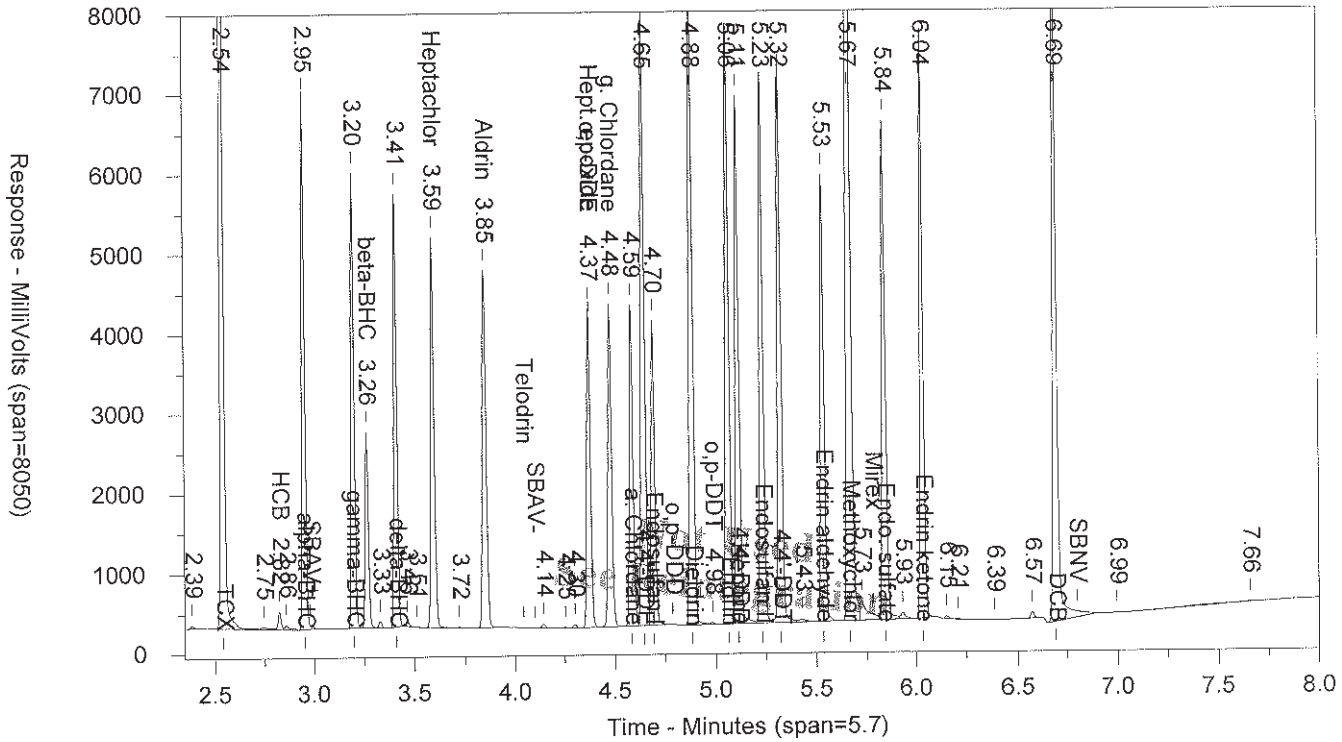
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	18201190	41.678	TCX	2.354	88740090	44.692	TCX
2.825	229222	.544	TCX	2.701	139458	.099	TCX
2.952	6736495	10.763	alpha-BHC	2.769	31986770	10.367	alpha-BHC
3.197	5701802	10.721	gamma-BHC	3.029	26762870	10.59	gamma-BHC
3.265	2444538	10.311	beta-BHC	3.094	10284580	10.842	beta-BHC
3.411	5424193	11.137	delta-BHC	3.322	24252360	10.487	delta-BHC
3.592	4884853	10.836	Heptachlor	3.366	21375580	11.847	Heptachlor
3.851	4489385	10.779	Aldrin	3.63	19634700	10.567	Aldrin
	0		Telodrin	3.794	10028	.014	Telodrin
	0		Hept. epoxide	4.124	15577990	11.291	Hept. epoxide
4.478	4044622	10.674	g. Chlordane	4.285	16513790	11.402	g. Chlordane
4.372	4008550	21.545	o,p-DDE		0		o,p-DDE
4.586	4033709	10.683	a. Chlordane	4.406	16170250	11.258	a. Chlordane
4.695	3813571	10.778	Endosulfan I	4.451	14937180	11.657	Endosulfan I
4.647	7839032	23.157	4,4'-DDE	4.551	31872330	21.986	4,4'-DDE
4.885	8081977	21.635	Dieldrin	4.671	32899990	23.097	Dieldrin
5.063	7566284	21.505	Endrin	4.907	30266400	23.256	Endrin
4.983	24552	.12	o,p-DDT		0		o,p-DDT
5.111	6627314	42.609	Kepone	5.003	26147280	41.964	Kepone
5.231	6919443	21.346	Endosulfan II	5.069	27549870	22.95	Endosulfan II
5.32	7123753	22.791	4,4'-DDT	5.232	27459930	23.742	4,4'-DDT
5.535	5603999	21.012	Endrin aldehyde	5.319	21776880	22.504	Endrin aldehyde
5.84	6267965	21.297	Endo. sulfate	5.516	26790460	23.455	Endo. sulfate
5.668	16273190	113.267	Methoxychlor	5.723	58695600	116.345	Methoxychlor
6.035	7394972	21.17	Endrin ketone	5.882	26855220	22.338	Endrin ketone
6.694	9525774	43.413	DCB	6.678	33969040	43.783	DCB

Not Used  
 See Reintegration

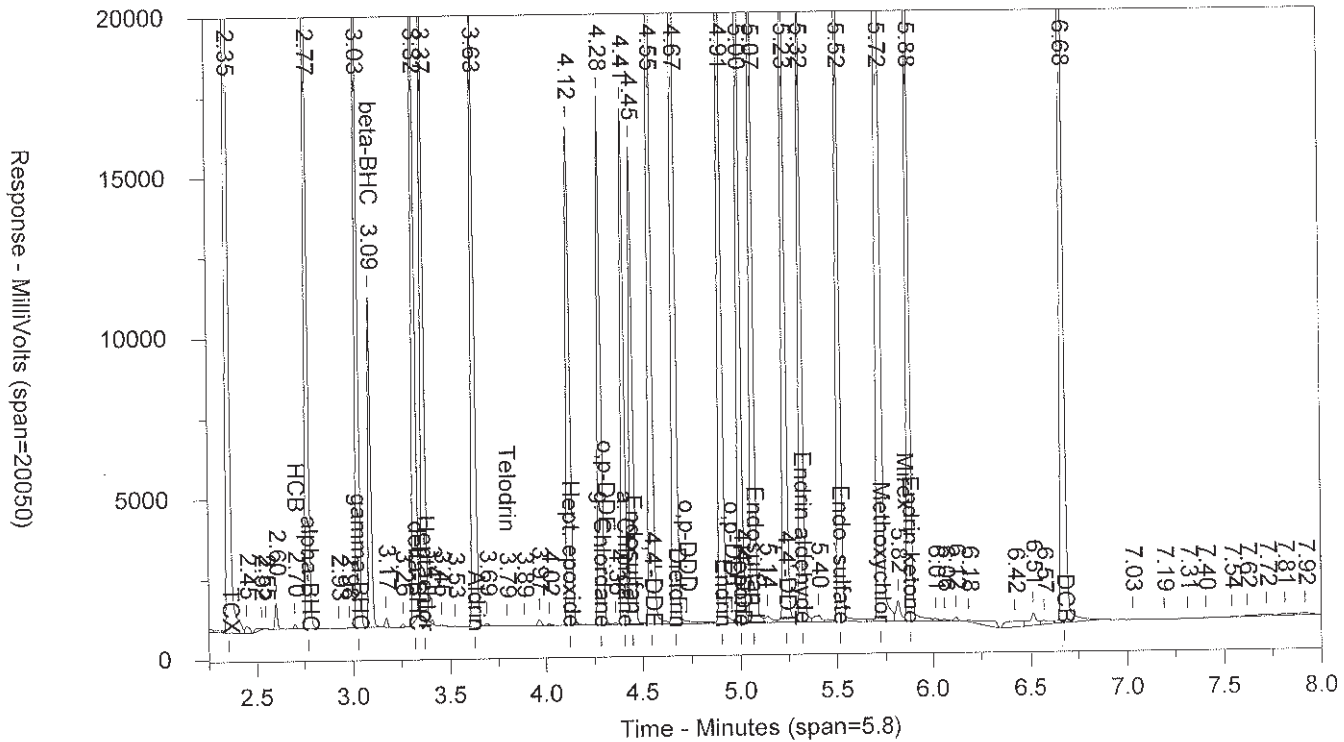
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MIXA41824B YMMIXA4YM CCAL 1831799999 00177 SW-846 8081.

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MIXA41824B

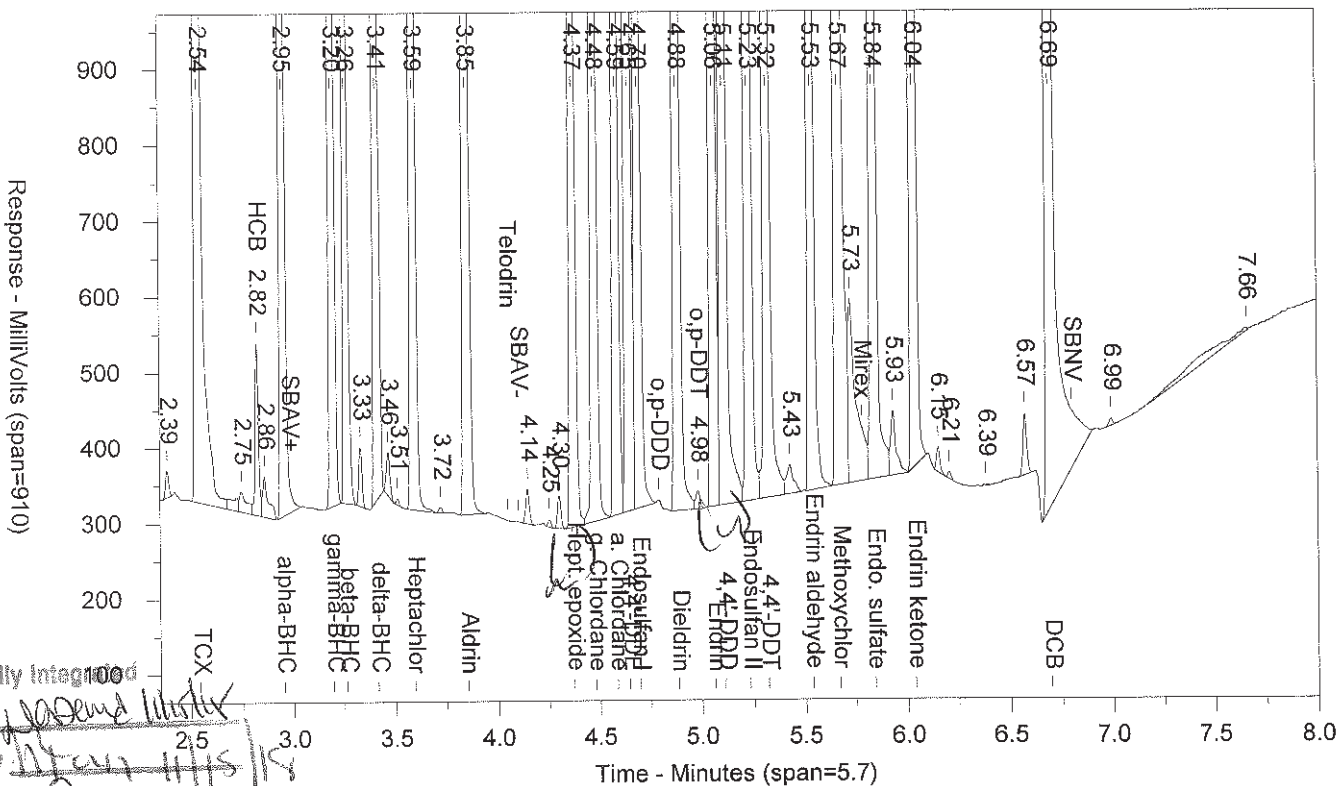
YMMIXA4YM

CCAL 1831799999

00177

SW-846 8081A

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M = Manually Integrated

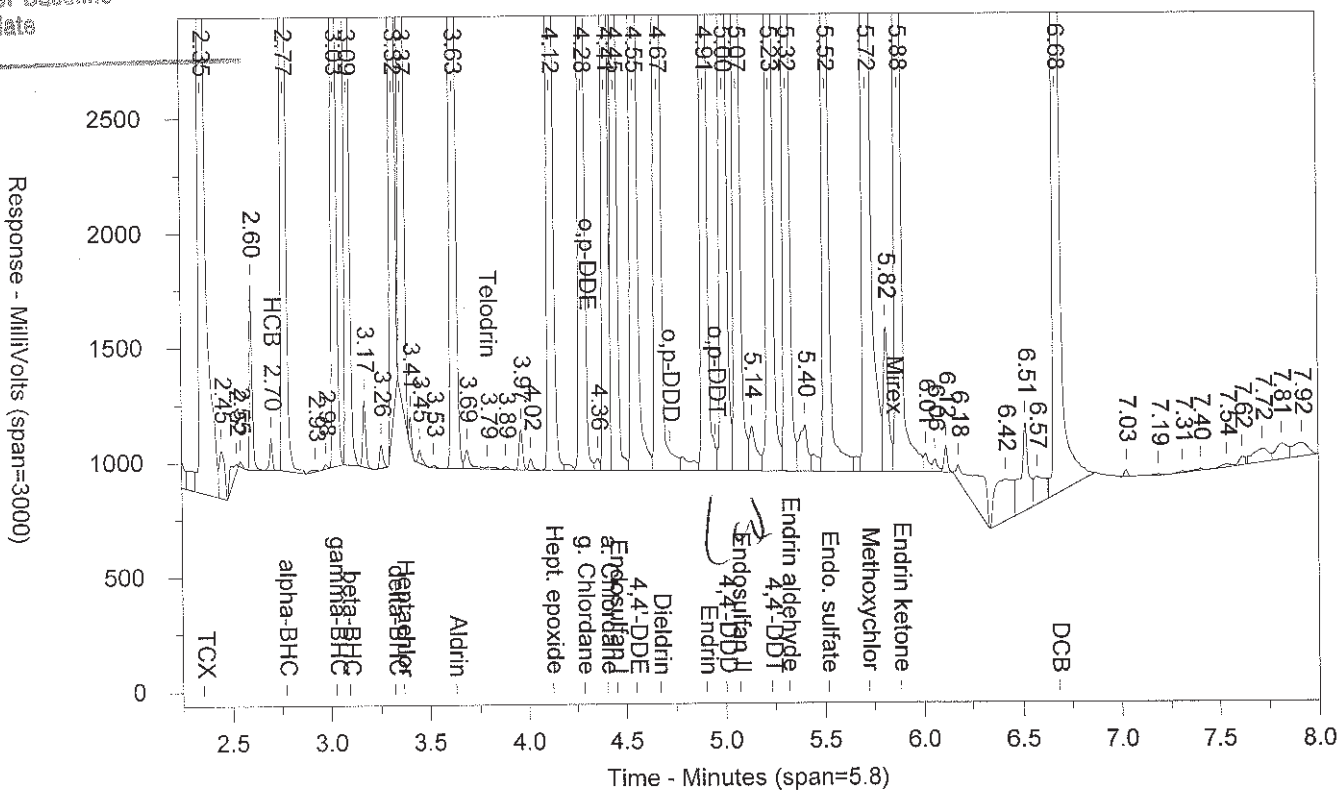
Analyst

Approved by

Circle Reason

- 1 = Missed Peak
- 2 = Improper Baseline
- 3 = RT Update
- 4 = Other

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.073.BND



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: MIXA41824B YMMIXA4YM CCAL 1831799999 00177 SW-846 8081A  
 Injected On: 11/15/2018 3:00:57 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

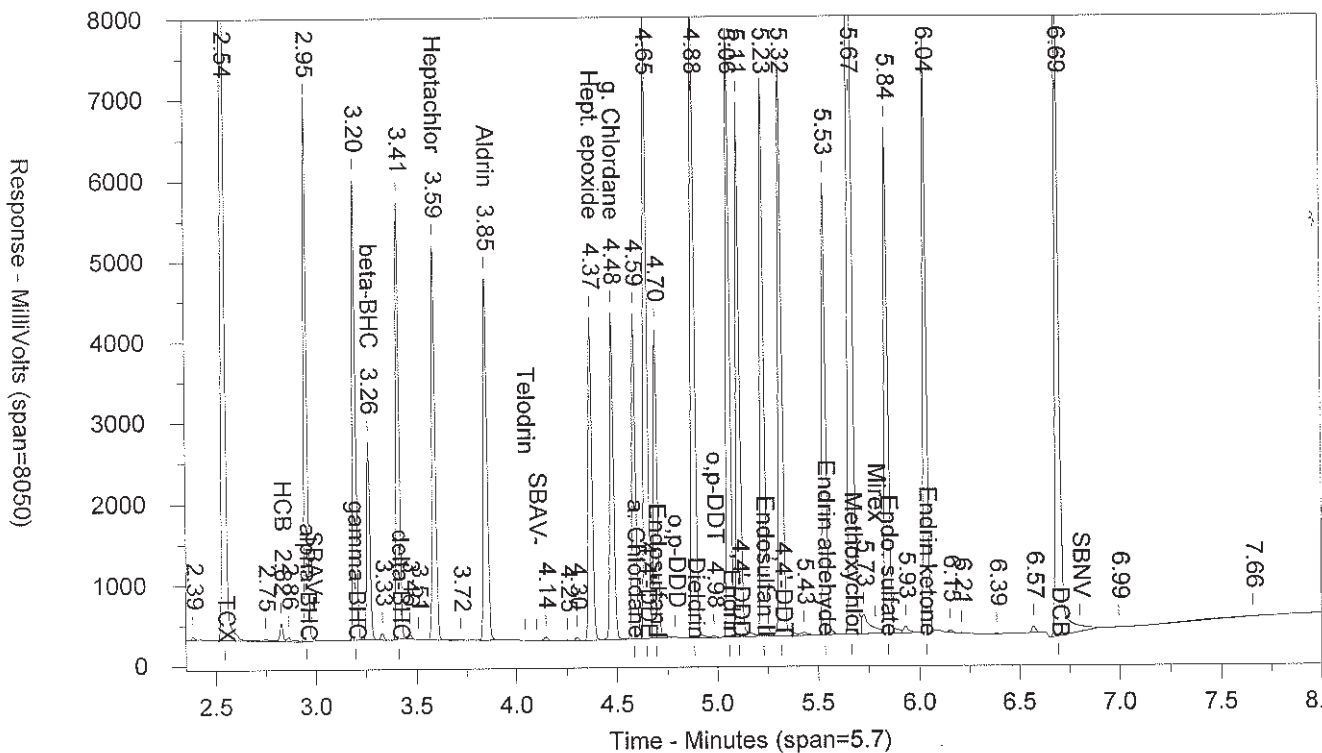
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	18201190	41.678	TCX	2.354	88740090	44.692	TCX
2.825	229222	.544	HCB	2.701	139458	.099	HCB
2.952	6736495	10.763	alpha-BHC	2.769	31986770	10.367	alpha-BHC
3.197	5701802	10.721	gamma-BHC	3.029	26762870	10.59	gamma-BHC
3.265	2444538	10.311	beta-BHC	3.094	10284580	10.842	beta-BHC
3.411	5424193	11.137	delta-BHC	3.322	24252360	10.487	delta-BHC
3.592	4884853	10.836	Heptachlor	3.366	21375580	11.847	Heptachlor
3.851	4489385	10.779	Aldrin	3.63	19634700	10.567	Aldrin
	0		Telodrin	3.794	10028	.014	Telodrin
4.372	4008550	10.752	Hept. epoxide	4.124	15577990	11.291	Hept. epoxide
4.478	4044622	10.674	g. Chlordane	4.285	16513790	11.402	g. Chlordane
4.586	4033709	10.683	a. Chlordane	4.406	16170250	11.258	a. Chlordane
4.695	3813571	10.778	Endosulfan I	4.451	14937180	11.657	Endosulfan I
4.647	7839032	23.157	4,4'-DDE	4.551	31872330	21.986	4,4'-DDE
4.885	8081977	21.635	Dieldrin	4.671	32899990	23.097	Dieldrin
5.063	7566284	21.505	Endrin	4.907	30266400	23.256	Endrin
4.983	24552	.12	o,p-DDT		0		o,p-DDT
5.111	6627314	23.255	4,4'-DDD	5.003	26147280	23.688	4,4'-DDD
5.231	6919443	21.346	Endosulfan II	5.069	27549870	22.95	Endosulfan II
5.32	7123753	22.791	4,4'-DDT	5.232	27459930	23.742	4,4'-DDT
5.535	5603999	21.012	Endrin aldehyde	5.319	21776880	22.504	Endrin aldehyde
5.84	6267965	21.297	Endo. sulfate	5.516	26790460	23.455	Endo. sulfate
5.668	16273190	113.267	Methoxychlor	5.723	58695600	116.345	Methoxychlor
6.035	7394972	21.17	Endrin ketone	5.882	26855220	22.338	Endrin ketone
6.694	9525774	43.413	DCB	6.678	33969040	43.783	DCB

Files:

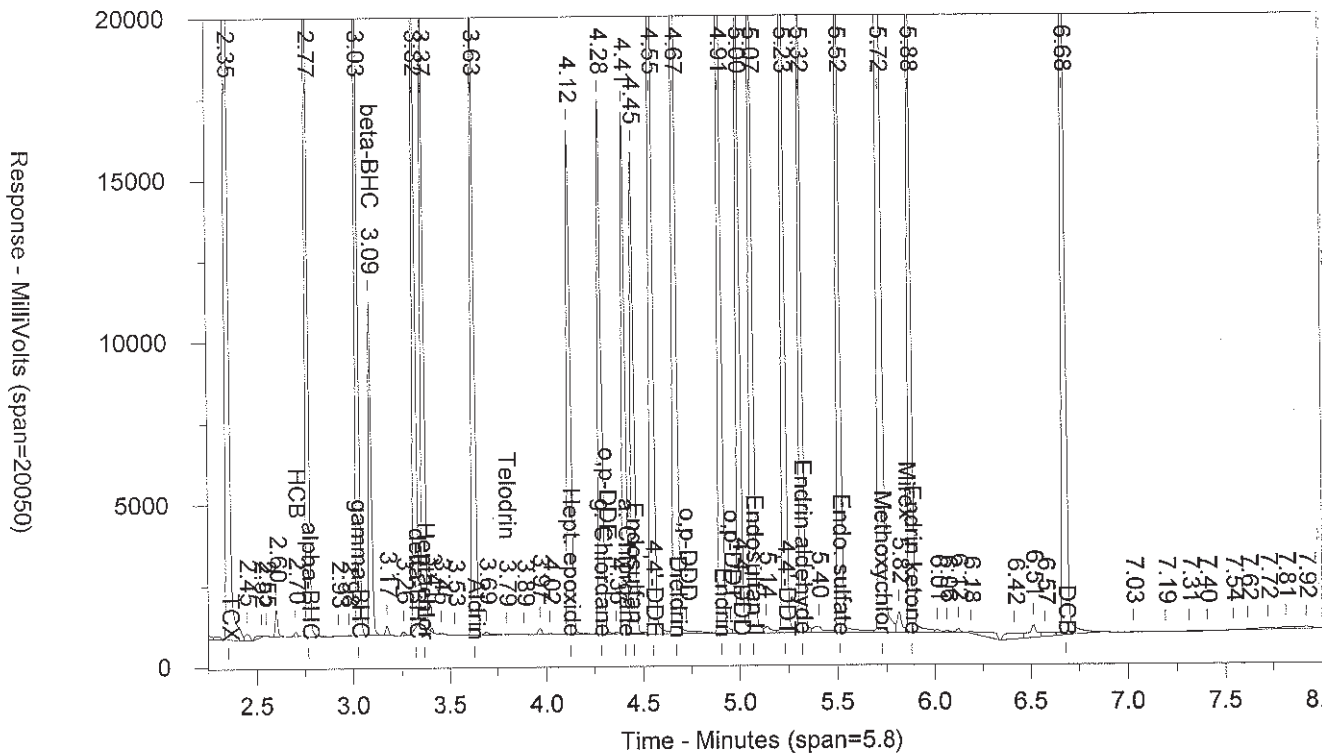
Area File: 05pest18306010.073.BND  
 Area File: 05pest18306010B.073.BND  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 9:36:14 AM  
 File Reported On: 11/15/2018 at 9:44:12 AM

MIXA41824B YMMIXA4YM CCAL 183179999 00177 SW-846 80

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.073.BND



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## LANCASTER LABORATORIES

Sample Number: TOXA41824E      ZVTOXA4ZV      CCAL 1831799999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/15/2018 3:13:42 AM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306010.074.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830605.cal

RT A	Compound A	Height A	Area A
1.791		18521	14174
1.886		17516	47714
1.961		16206	36244
2.016		84770	77809
2.183		76252	102972
2.332		7265	10437
2.421		24422	26288
2.556	TCX	6669	13174
2.643		9752	8631
2.744		27496	32554
2.951	alpha-BHC	7837	11566
3.008		3461	8059
3.081		5105	8594
3.184	gamma-BHC	5665	10485
3.307		8358	30790
3.364		12187	11490
3.39		8346	6492
3.456		15054	14764
3.519		34683	75151
3.592	Heptachlor	23627	32372
3.631		23452	27536
3.681		32960	80257
3.749		23873	40196
3.81		17346	30365
3.85	Aldrin	15206	17894
3.957		75322	126964
4.019		267839	639904
4.136		207049	661892
4.218		175702	346149
4.261		193002	281911
4.294		563139	1852284
4.377	o,p-DDE	234662	306677
4.403		424688	776163
4.452		454898	893345
4.499	g. Chlordane	646498	1556356
4.563		817924	1962818
4.616		639989	1203083
4.702	Endosulfan I	1147390	3826509
4.739		826718	1699159
4.798	o,p-DDD	1278137	2848310
4.844		1318128	3240609
4.886	Dieldrin	1722927	3623761
4.956		1951604	3771926
5	o,p-DDT	2323132	5054689
5.034		1725712	2661231
5.086	Kepone	2730911	7741676
5.13	4,4'-DDD	1815678	2778951
5.157		1835350	3656969
5.22	Endosulfan II	4157329	10420630
5.309	4,4'-DDT	3845521	14034010
5.358		1141303	1681214
5.403		1815189	3921558



## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.43		2393324	4512719
5.471		3852785	7387632
5.516		3039976	6895756
5.56		2731955	6712502
5.628		2738026	7630828
5.675	Methoxychlor	1553388	2387229
5.706		3364387	8494038
5.772	Mirex	3911985	8018560
5.812		2309263	7240996
5.885		1233750	2865099
5.937		989114	3796448
6.026	Endrin ketone	1146738	3561152
6.085		771856	1646703
6.127		712550	1614331
6.159		697955	1132901
6.183		703576	1336420
6.242		439203	1096868
6.286		279081	555753
6.343		277576	684323
6.382		271594	443517
6.406		246060	352568
6.441		191946	622681
6.544		360954	595943
6.576		386537	531456
6.629		29005	50059
6.693	DCB	88109	174047
6.738		82310	175149
6.799		28743	50467
6.866		3773	5480

## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA41824E      ZVTOXA4ZV      CCAL 1831799999      00177      Analyst: 2306      SW-846 8081A  
Injected On: 11/15/2018 3:13:42 AM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306010B.074.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830605b.cal

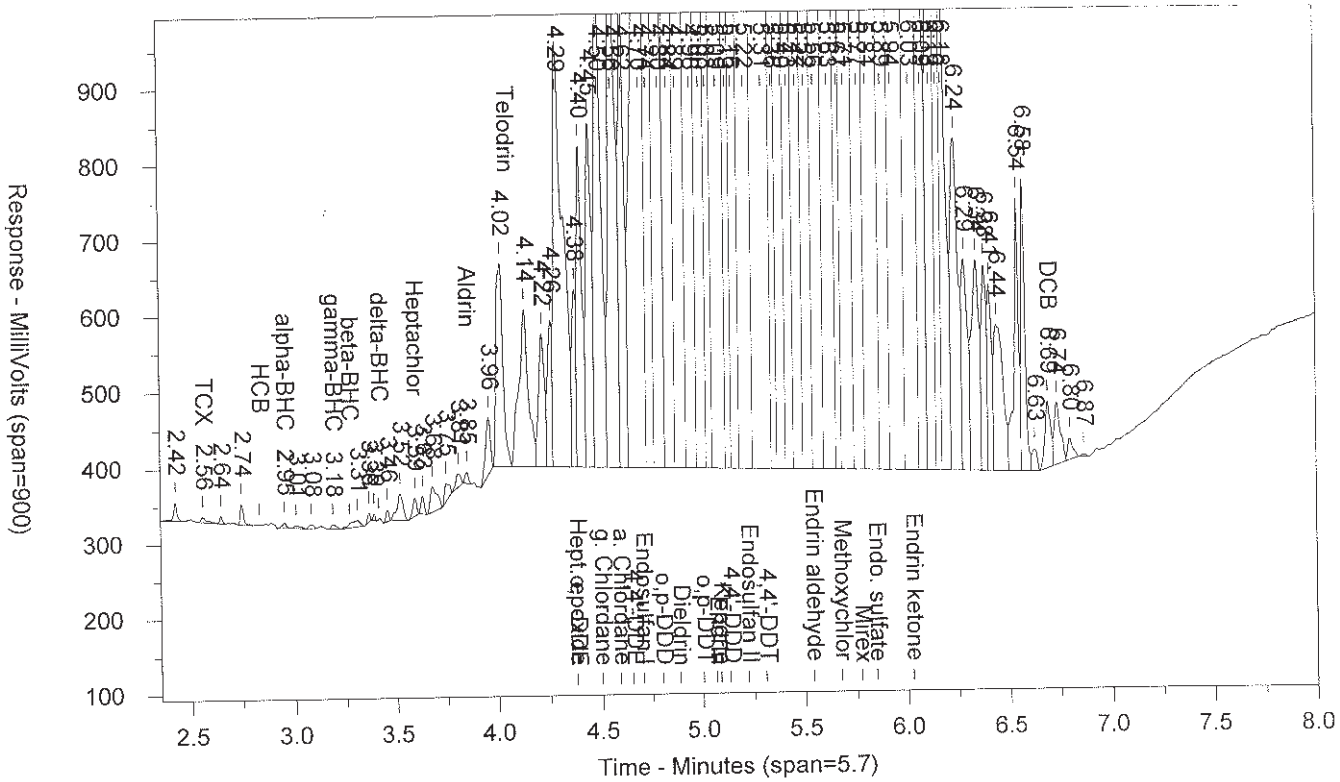
RT B	Compound B	Height B	Area B
1.999		72850	112525
2.057		46491	87257
2.107		72815	157753
2.169		39129	49441
2.193		42936	48966
2.244		29195	35213
2.276		45932	42370
2.329		13099	10034
2.416		44354	90177
2.448		108026	148904
2.494		47166	40668
2.529		9977	15428
2.603		7859	18761
2.732		13935	20022
2.772	alpha-BHC	17679	13741
2.859		26801	35526
2.916		28534	84572
3.027	gamma-BHC	40232	98772
3.077	beta-BHC	65559	66668
3.132		49642	42603
3.154		19777	15975
3.19		10473	9325
3.218		18432	18400
3.255		53053	56927
3.295		69300	74498
3.344		100283	102693
3.38	Heptachlor	55772	65376
3.445		161743	265693
3.508		35915	44955
3.571		170844	442806
3.612	Aldrin	66995	64963
3.672		314771	603416
3.717		1102542	3306098
3.828		781055	1680834
3.853		584399	802352
3.892		772024	1802335
3.951		435118	711503
3.99		1718725	2997986
4.029		867080	1644342
4.068		1574430	2947113
4.125	Hept. epoxide	1696946	4901010
4.204		1302020	3203328
4.24		1468088	3146437
4.278	g. Chlordane	1973281	3219618
4.345		2895148	9153626
4.381		1992170	5048892
4.436		1953545	3051292
4.455	Endosulfan I	1853702	1648228
4.482		2791324	8719845
4.562	4,4'-DDE	4042576	12419710
4.615		2896815	6090044
4.658	Dieldrin	7628331	16561140

## Chrom Perfect Chromatogram Report

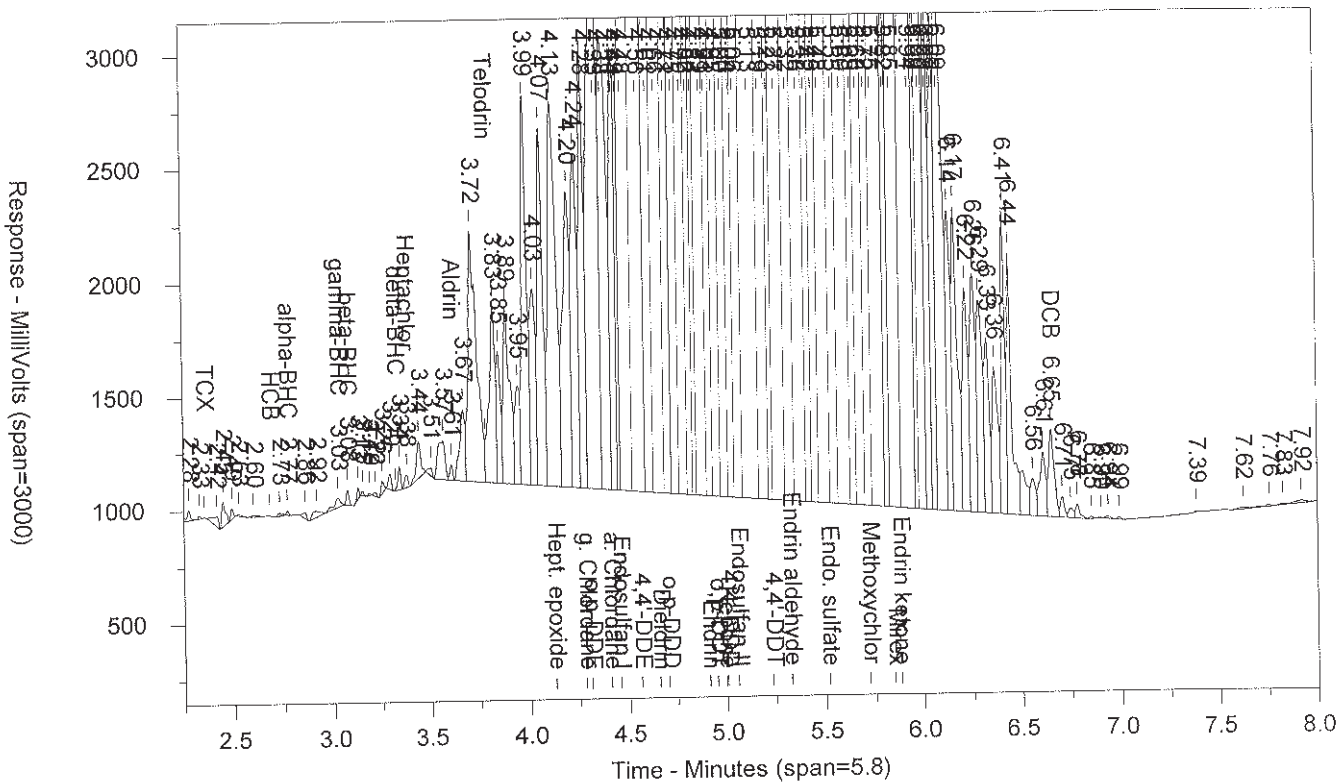
RT B	Compound B	Height B	Area B
4.706	o,p-DDD	3817270	6634147
4.747		5082286	8791481
4.788		5918209	11695780
4.82		5492054	7895044
4.843		4543952	5318530
4.889		7927852	18357000
4.912	Endrin	6836950	10610500
4.951	o,p-DDT	6204814	12876510
4.996	Kepone	5903208	11886200
5.036		9846067	14627650
5.059	Endosulfan II	14837550	24277630
5.133		24175290	46471970
5.187		5995659	12298550
5.232	4,4'-DDT	3701381	4588379
5.268		9649613	23329010
5.325	Endrin aldehyde	16597720	26209510
5.381		9438072	25280850
5.418		6993124	10205280
5.454		7665540	15037340
5.484		8670419	22028390
5.554		6147729	12802390
5.598		8407849	25269610
5.65		6927653	11377820
5.68		14712170	23678550
5.719	Methoxychlor	7177377	11980580
5.752		6675594	15455790
5.816		2317003	3149045
5.85	Mirex	4387376	10820630
5.943		3202726	11664520
5.975		2278841	2424274
6.001		3284374	6016149
6.034		2384129	3398034
6.063		2246038	3174530
6.093		2571350	6057366
6.138		1322422	1918520
6.167		1341103	2513065
6.22		987292	1805839
6.259		1053318	1932976
6.288		938321	1801979
6.326		770338	1264376
6.365		644822	1312735
6.414		1337997	1896511
6.442		1153571	1928891
6.559		163309	303480
6.612		282579	595593
6.653	DCB	384655	731211
6.706		91032	126037
6.748		42911	67907
6.781		60096	94253
6.849		9971	12419
6.901		3682	6587
6.937		11214	18215
6.992		11084	14017
7.386		6547	6598
7.623		7777	23981
7.758		8219	13841
7.827		5808	12178
7.919		12913	52599

TOXA41824E ZVTOXA4ZV CCAL 183179999 00177 SW-846 8081

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Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: TOXA41824E ZVTOXA4ZV CCAL 1831799999 00177 SW-846 8081A  
 Injected On: 11/15/2018 3:13:42 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

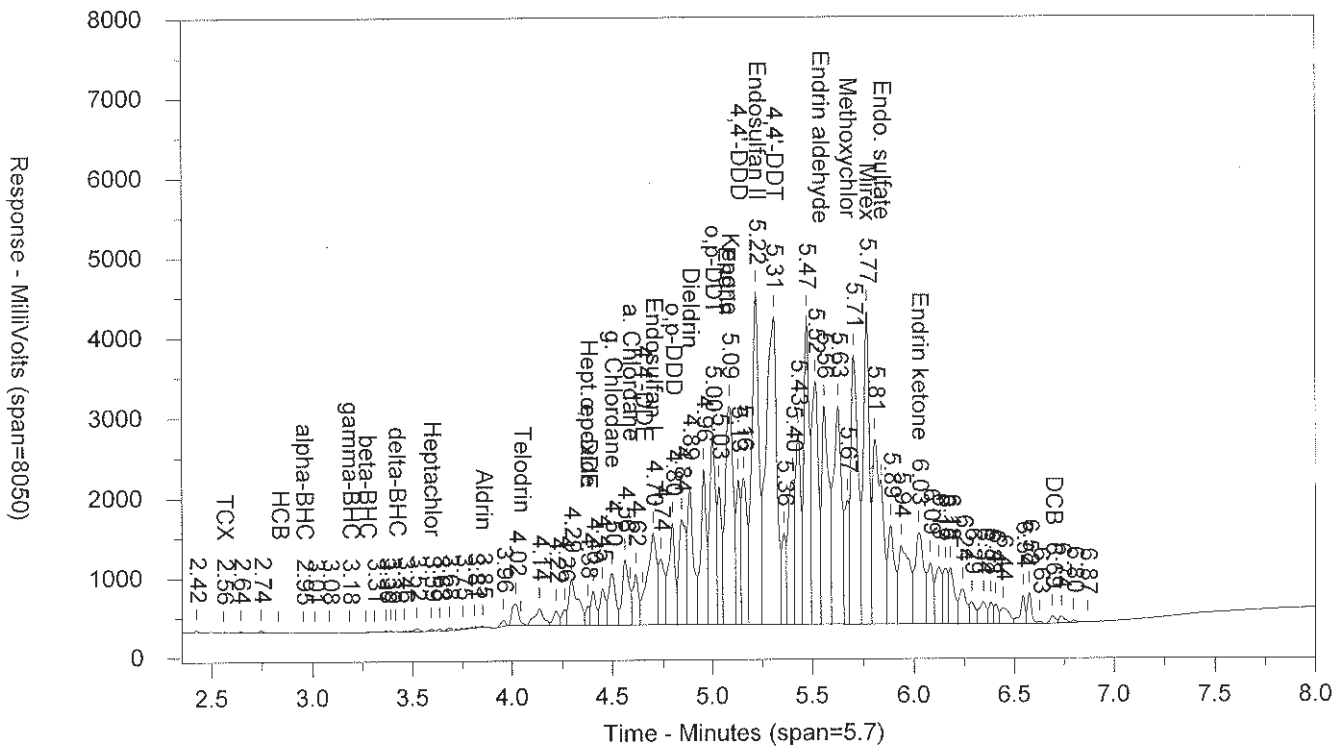
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.556	6669	.015	TCX		0		TCX
2.951	7837	.013	alpha-BHC	2.772	17679	.596	alpha-BHC
3.184	5665	.011	gamma-BHC	3.027	40232	.565	gamma-BHC
	0		beta-BHC	3.077	65559	.069	beta-BHC
3.592	23627	.052	Heptachlor	3.38	55772	.031	Heptachlor
3.85	15206	.037	Aldrin	3.612	66995	.548	Aldrin
	0		Hept. epoxide	4.125	1696946	1.23	Hept. epoxide
4.499	646498	1.706	g. Chlordane	4.278	1973281	1.362	g. Chlordane
4.377	234662	1.261	o,p-DDE		0		o,p-DDE
4.702	1147390	3.243	Endosulfan I	4.455	1853702	1.447	Endosulfan I
	0		4,4'-DDE	4.562	4042576	3.744	4,4'-DDE
4.886	1722927	4.612	Dieldrin	4.658	7628331	5.355	Dieldrin
4.798	1278137	7.559	o,p-DDD	4.706	3817270	7.631	o,p-DDD
	0		Endrin	4.912	6836950	5.253	Endrin
5	2323132	11.313	o,p-DDT	4.951	6204814	11.107	o,p-DDT
5.086	2730911	17.558	Kepone	4.996	5903208	12.487	Kepone
5.22	4157329	12.825	Endosulfan II	5.059	14837550	12.36	Endosulfan II
5.13	1815678	6.371	4,4'-DDD		0		4,4'-DDD
5.309	3845521	12.303	4,4'-DDT	5.232	3701381	3.2	4,4'-DDT
	0		Endrin aldehyde	5.325	16597720	17.152	Endrin aldehyde
5.675	1553388	10.812	Methoxychlor	5.719	7177377	14.227	Methoxychlor
5.772	3911985	20.607	Mirex	5.85	4387376	7.934	Mirex
6.026	1146738	3.283	Endrin ketone		0		Endrin ketone
6.693	88109	.371	DCB	6.653	384655	.496	DCB

Files:

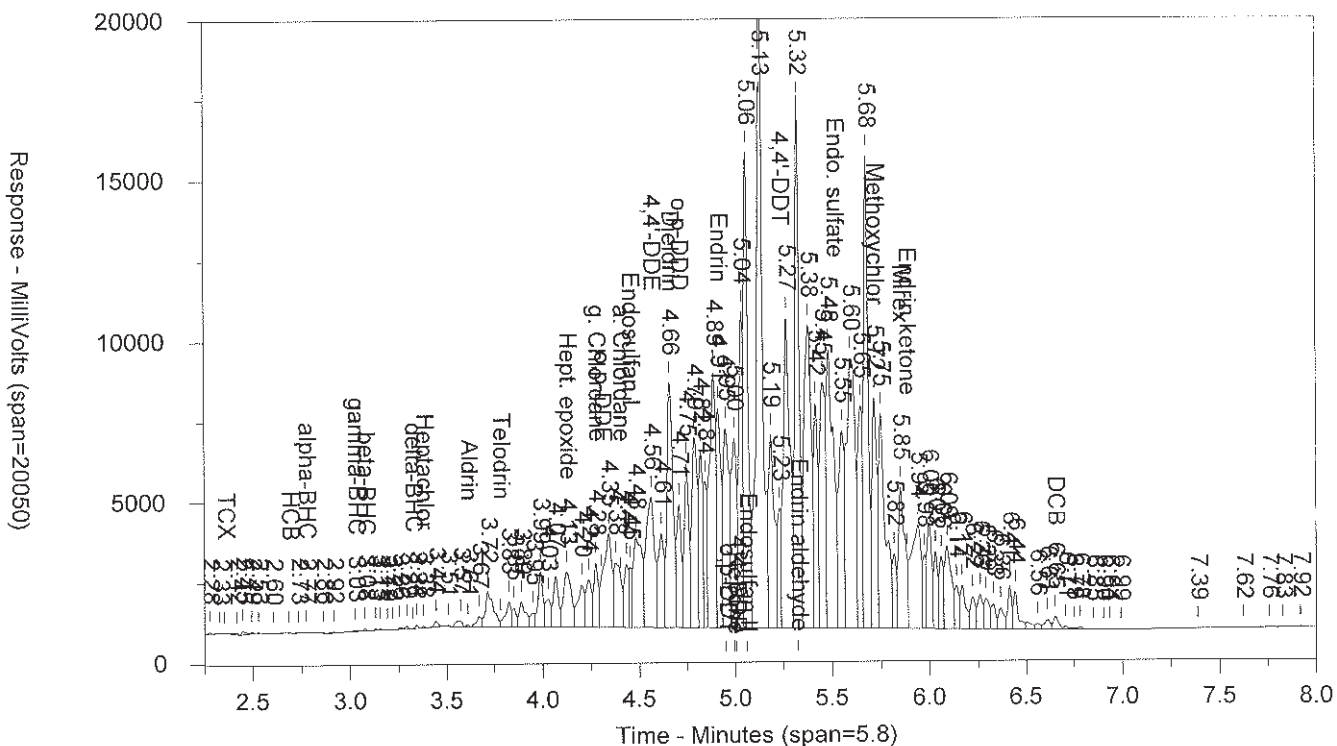
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 Method B: 05PESTD1B.MET  
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 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:13 AM  
 File Reported On: 11/15/2018 at 7:44:15 AM

TOXA41824E ZVTOXA4ZV CCAL 1831799999 00177 SW-846 8081

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## LANCASTER LABORATORIES

Sample Number: CHLD41824D      FMCHLD4FM      CCAL 1831799999      00177 Analyst: 2306      SW-846 8081A  
Injected On: 11/15/2018 3:26:30 AM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Date File: 05pest18306010.075.RAW  
Method File: 05PESTDI.MET  
Calibration File: 05pest1830605.cal

RT A	Compound A	Height A	Area A
1.786		9019	7438
1.858		28051	38357
1.881		45052	57910
1.915		37659	52821
1.96		42554	55193
2.013		37479	39804
2.094		156190	138951
2.141		105099	83944
2.178		158821	141244
2.277		5619	3981
2.378		9717	8707
2.414		39876	39288
2.44		22993	21255
2.498		1164135	1038839
2.586		4139	9181
2.689		7438	13374
2.74		37422	54099
2.989		123854	147899
3.066		85504	94146
3.136		26109	27819
3.172		9862	11644
3.239		39671	43051
3.282	beta-BHC	48001	55755
3.37		104459	130349
3.45		144704	211956
3.516		1199554	1418785
3.587	Heptachlor	1757238	2098060
3.68		219134	497028
3.772		61879	85328
3.815		20077	23772
3.884		9244	20104
3.916		86239	88808
3.959		1222655	1575850
3.997		45517	41570
4.049	Telodrin	82024	156730
4.103		163231	487777
4.179		225756	294379
4.229		320766	497347
4.314		794773	1043636
4.366	o,p-DDE	355628	784168
4.405		767854	1194506
4.473	g. Chlordane	3851422	5959993
4.572	a. Chlordane	5314478	10428060
4.645	4,4'-DDE	168917	346179
4.71	Endosulfan I	128013	199796
4.749		339809	673299
4.826		445051	771117
4.894	Dieldrin	127422	200337
4.941		391839	635368
5.01		176876	355454
5.043		127385	170754
5.084	Endrin	1013355	1496851

## Chrom Perfect Chromatogram Report

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RT A	Compound A	Height A	Area A
5.144		167772	208579
5.176		1304705	1696885
5.226	Endosulfan II	111208	322446
5.356		289073	519543
5.386		112899	148643
5.426		68531	110447
5.487		77214	154539
5.55	Endrin aldehyde	18483	19452
5.578		45048	78049
5.618		42111	47813
5.651		19611	22794
5.677	Methoxychlor	26306	42598
5.735		5678	5719
5.763	Mirex	8913	10426
5.836	Endo. sulfate	63243	146294
5.874		99046	117130
5.919		66835	73296
5.954		11212	10036
5.989		40495	44732
6.072		6155	11176
6.17		32643	41044
6.267		8852	10028
6.337		40578	67168
6.38		8547	8842
6.422		5118	8062
6.523		10865	32938
6.628		4214	7232
6.739		22450	56331
6.812		24153	59671
7.746		14939	700028
7.822		13175	44954
7.947		2893	39632



## Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD41824D      FMCHLD4FM      CCAL 1831799999      00177 Analyst: 2306      SW-846 8081A  
Injected On: 11/15/2018 3:26:30 AM      Sample Weight: 1  
Instrument ID: CP5-9190      Dilution Factor: 1  
Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
Data File: 05pest18306010B.075.RAW  
Method File: 05PESTDIB.MET  
Calibration File: 05pest1830605b.cal

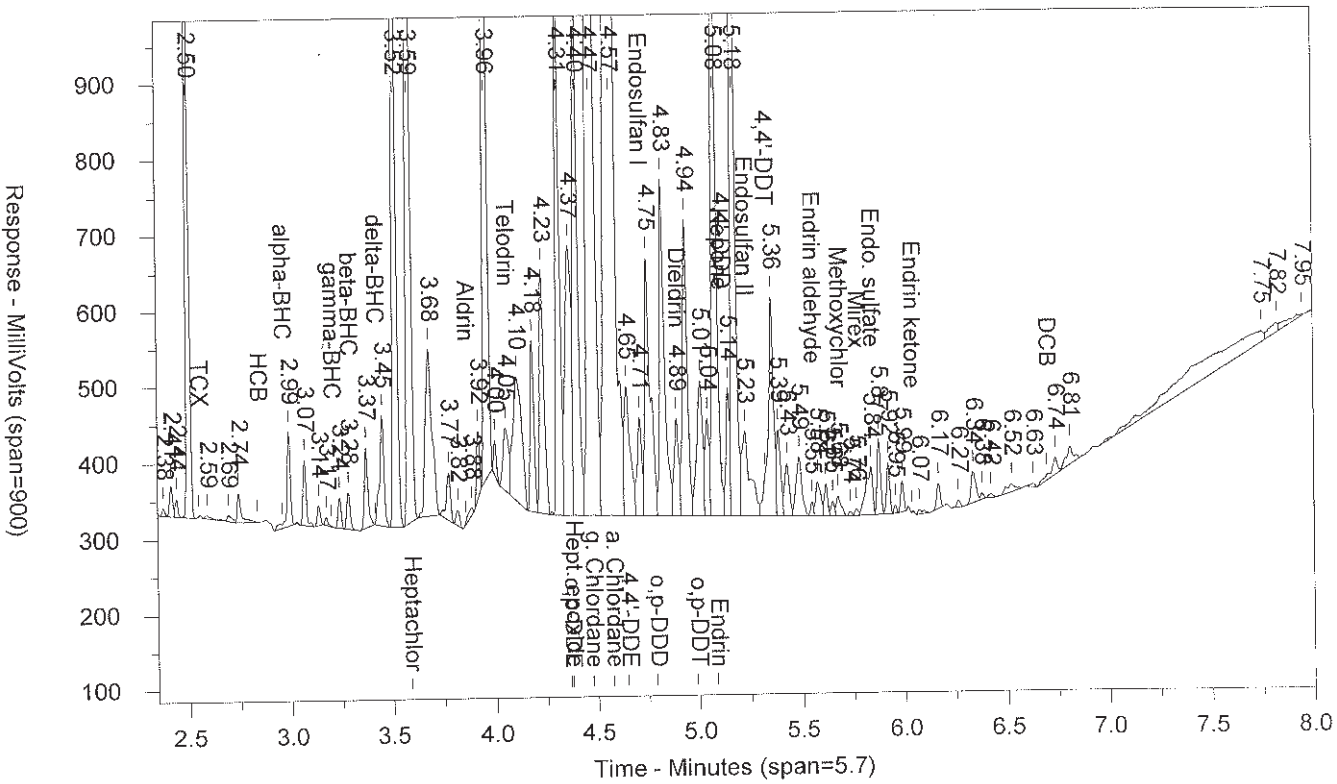
RT B	Compound B	Height B	Area B
1.914		551452	548149
1.993		527371	551408
2.037		372234	394697
2.103		160781	330787
2.141		125321	171148
2.169		91903	123826
2.193		115833	169614
2.233		168461	268708
2.262		161722	331255
2.326		94177	218243
2.377		4788588	4201734
2.445		167935	245638
2.493		30090	34139
2.556		13470	10811
2.623		5116	3456
2.648		16556	16733
2.705		9290	5627
2.732		459018	430948
2.792		331173	329094
2.858		33913	36473
2.9		15668	21280
2.959		86083	92067
2.992		143415	139882
3.036	gamma-BHC	195906	217921
3.116		377251	393179
3.169		32817	30629
3.187		100425	88596
3.227		159365	125159
3.251		4596220	4628440
3.311	delta-BHC	23075	24510
3.366	Heptachlor	7225069	8104514
3.455		469945	467110
3.492		298678	420226
3.545		81146	101691
3.591		174290	211182
3.643	Aldrin	23435	27949
3.682		909316	1217669
3.759		4515570	6410026
3.813		479827	801885
3.866		666654	1111087
3.895		579114	810031
3.928		1235070	1927022
3.99		901610	1203361
4.027		200515	295982
4.095		3226208	4964495
4.15		370641	605331
4.193		3565097	5394017
4.233		954953	1566775
4.284	g. Chlordane	16289750	21848620
4.362		14387730	23195730
4.406	a. Chlordane	12292070	16076390
4.468	Endosulfan I	409005	1222210

## Chrom Perfect Chromatogram Report

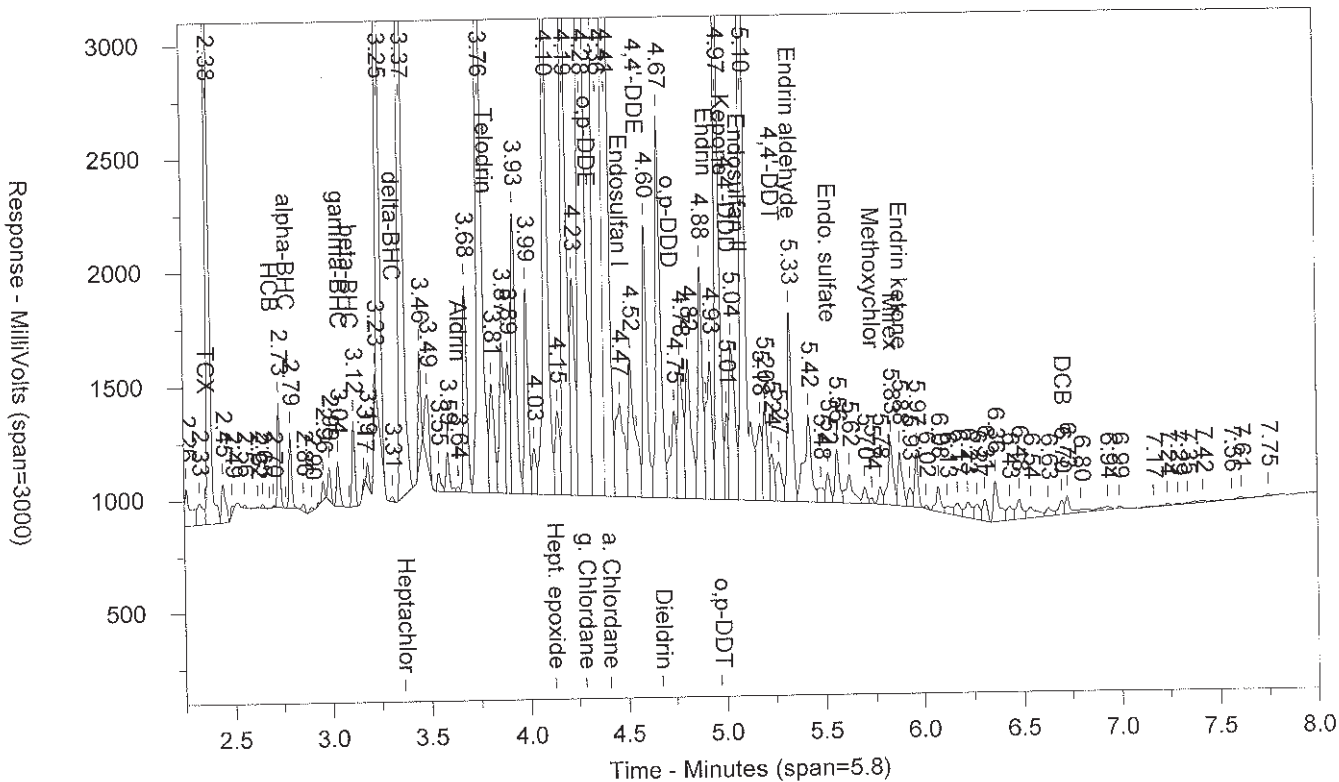
RT B	Compound B	Height B	Area B
4.523		606211	1448728
4.601		1200902	1761686
4.673	Dieldrin	1680925	2984340
4.749		384524	795176
4.78		588982	1095754
4.819		612144	1163035
4.883		1023847	1585612
4.929		607298	1149576
4.971	o,p-DDT	3746191	4723288
5.012	4,4'-DDD	382299	435728
5.037		681244	1367360
5.1		4505179	6339424
5.179		339811	607752
5.203		398892	622804
5.236	4,4'-DDT	206809	297924
5.27		171035	335032
5.328	Endrin aldehyde	833159	1336245
5.424		383403	972378
5.483		65118	138039
5.519	Endo. sulfate	131216	195396
5.564		232903	342856
5.624		126897	312180
5.702		71827	100423
5.736	Methoxychlor	25788	29399
5.779		75497	104017
5.835	Mirex	278825	536761
5.882	Endrin ketone	234040	376324
5.935		80862	126662
5.969		237845	298629
6.019		15444	18049
6.081		111616	189173
6.125		35315	82186
6.175		55053	119535
6.227		69997	170405
6.273		68385	127298
6.312		98641	159026
6.364		180436	364696
6.433		61266	135228
6.483		87400	186516
6.54		49224	173820
6.633		37072	88100
6.702	DCB	62229	112357
6.73		79360	136221
6.801		14320	46615
6.935		15443	60752
6.994		13480	19085
7.169		4863	17665
7.242		11846	15935
7.293		7448	12418
7.345		7296	11483
7.422		8515	36142
7.563		1512	21289
7.613		9836	21772
7.751		9460	24665

CHLD41824D FMCHLD4FM CCAL 1831799999 00177 SW-846 808

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.075.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.075.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: CHLD41824D FMCHLD4FM CCAL 1831799999 00177 SW-846 8081A  
 Injected On: 11/15/2018 3:26:30 AM Sample Weight: 1  
 Instrument ID: CP5-9190 Dilution Factor: 1  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

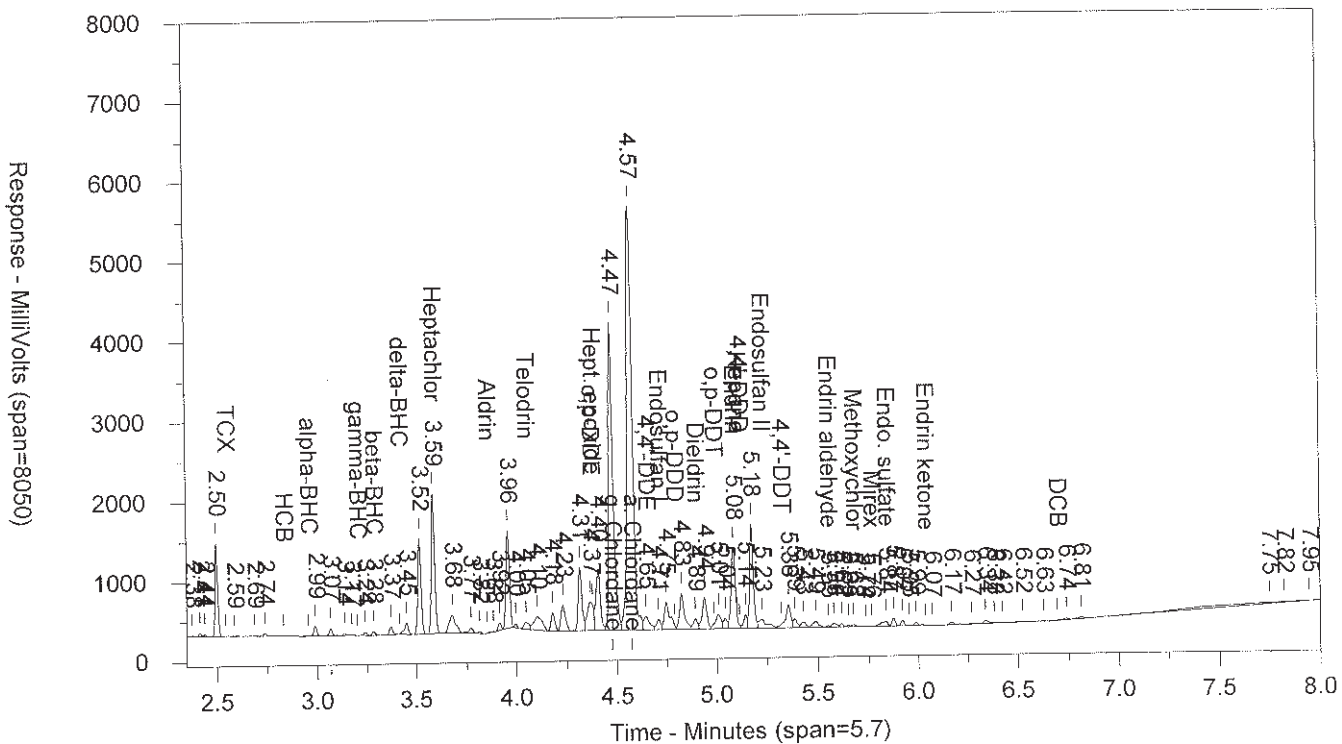
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
	0		gamma-BHC	3.036	195906	.624	gamma-BHC
3.282	48001	.202	beta-BHC		0		beta-BHC
	0		delta-BHC	3.311	23075	.655	delta-BHC
3.587	1757238	3.898	Heptachlor	3.366	7225069	4.004	Heptachlor
	0		Aldrin	3.643	23435	.525	Aldrin
4.049	82024	.378	Telodrin		0		Telodrin
4.473	3851422	10.164	g. Chlordane	4.284	16289750	11.247	g. Chlordane
4.366	355628	1.911	o,p-DDE		0		o,p-DDE
4.572	5314478	14.075	a. Chlordane	4.406	12292070	8.558	a. Chlordane
4.71	128013	.362	Endosulfan I	4.468	409005	.319	Endosulfan I
4.645	168917	.499	4,4'-DDE		0		4,4'-DDE
4.894	127422	.341	Dieldrin	4.673	1680925	1.18	Dieldrin
	0		o,p-DDT	4.971	3746191	6.706	o,p-DDT
	0		4,4'-DDD	5.012	382299	.346	4,4'-DDD
5.084	1013355	2.88	Endrin		0		Endrin
5.226	111208	.343	Endosulfan II		0		Endosulfan II
	0		4,4'-DDT	5.236	206809	.179	4,4'-DDT
5.55	18483	.069	Endrin aldehyde	5.328	833159	.861	Endrin aldehyde
5.836	63243	.215	Endo. sulfate	5.519	131216	.115	Endo. sulfate
5.677	26306	.183	Methoxychlor	5.736	25788	.051	Methoxychlor
5.763	8913	.047	Mirex	5.835	278825	.504	Mirex
	0		Endrin ketone	5.882	234040	.195	Endrin ketone
	0		DCB	6.702	62229	.08	DCB

Files:

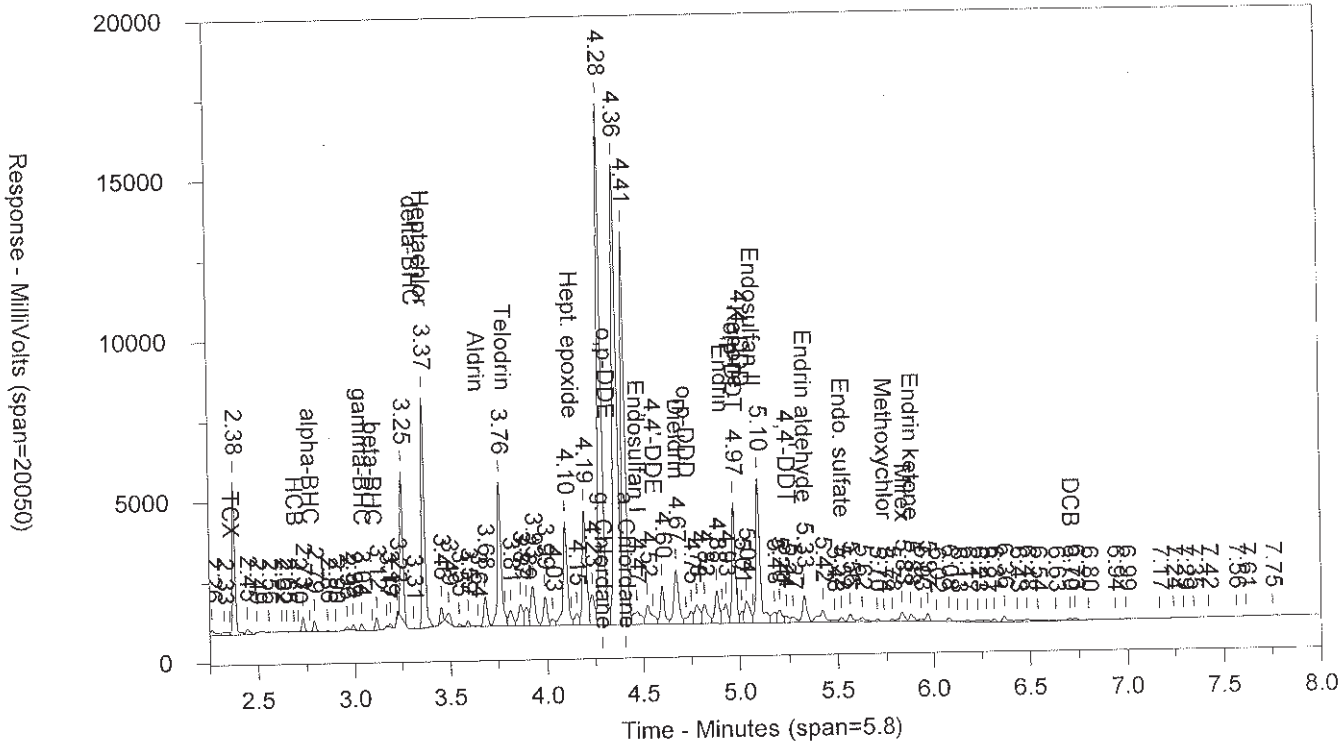
Area File: 05pest18306010.075.RAW  
 Area File: 05pest18306010B.075.RAW  
 Method A: 05PESTD1.MET  
 Method B: 05PESTD1B.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:13 AM  
 File Reported On: 11/15/2018 at 7:44:23 AM

CHLD41824D FMCHLD4FM CCAL 1831799999 00177 SW-846 808

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.075.RAW



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.075.RAW



# **Raw QC Data**

## **Pesticides**

# Data Summary

Sample Name: **BLANKA** 11/6/18 F PBLK09310 BLK Sample ID: AB Batchnumber: **183100009A**  
 Sample Amount: 250 ml Total Volume: 2 ml Analyst: 9588 SDG: State:  
 Analyses: 10589

## Analysis Report (A)

Injected on Nov 14, 2018 21:41:33  
 Instrument H9190A  
 Result file 05PEST18306010.048.RAW  
 Calibration file 05PEST1830605  
 Method file 05PESTD

%SSR(TCX) 93% (29 - 129) Conc: 0.280923  
 %SSR(DCB) 116% (32 - 149) Conc: 0.345871

### Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.52	2.54	2.56	15335330	0.280923
HCB	2.81	2.83	2.85	202099	0.003837
Alpha BHC	2.93	2.96	2.97	43334	0.000554
Gamma BHC - Lindane	3.18	3.20	3.22	23773	0.000358
Beta BHC	3.25	3.28	3.29	309021	0.010428
Delta BHC	3.39	3.40	3.43	25239	0.000415
Aldrin	3.83	3.87	3.87	8732	0.000168
o,p-DDE	4.35	4.37	4.39	35741	0.001537
Gamma Chlordane	4.46	4.50	4.50	111370	0.002351
Alpha Chlordane	4.57	4.59	4.61	43271	0.000917
p,p-DDE	4.63	4.67	4.67	79931	0.001889
o,p-DDD	4.77	4.78	4.81	52480	0.002483
Endrin	5.04	5.08	5.08	71368	0.001623
Endosulfan II	5.21	5.22	5.25	58730	0.001449
p,p-DDT	5.30	5.30	5.34	101673	0.002602
Decachlorobiphenyl	6.67	6.69	6.73	9486494	0.345871

## Analysis Report (B)

Injected on Nov 14, 2018 21:41:33  
 Instrument H9190B  
 Result file 05PEST18306010B.048.RAW  
 Calibration file 05PEST1830605B  
 Method file 05PESTD

%SSR(TCX) 86% (29 - 129) Conc: 0.260363  
 %SSR(DCB) 115% (32 - 149) Conc: 0.341901

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.33	2.35	2.37	64622240	0.260363
HCB	2.66	2.68	2.70	1124094	0.006367
Gamma BHC - Lindane	3.01	3.04	3.05	432432	0.005699
Delta BHC	3.30	3.30	3.34	94438	0.005474
Aldrin	3.61	3.63	3.65	217301	0.004996
Telodrin	3.76	3.80	3.80	350648	0.003919
Heptachlor Epoxide	4.10	4.11	4.14	347526	0.002015
Gamma Chlordane	4.27	4.30	4.31	296919	0.00164
Endosulfan I	4.43	4.45	4.47	128843	0.000804
p,p-DDE	4.53	4.55	4.57	119789	0.009377
Dieldrin	4.65	4.66	4.69	215453	0.00121
Endrin	4.89	4.93	4.93	9803	0.00006
Kepone	4.97	4.99	5.01	62443	0.03186
Endosulfan II	5.05	5.06	5.09	34598	0.000231
p,p-DDT	5.21	5.24	5.25	231446	0.001601
Endrin Aldehyde	5.30	5.32	5.34	293012	0.002422
Decachlorobiphenyl	6.65	6.68	6.71	33157600	0.341901

### Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Total DDTs			<0.004	<0.008	<0.016			
<input type="checkbox"/> Total Endosulfans (I + II)					<0.008			
<input type="checkbox"/> Tetrachloro-m-xylene	A	0.280923	0.012	0.024	0.024		7.60	
<input type="checkbox"/> Tetrachloro-m-xylene-D1	A	0.280923	0.012	0.024	0.024			
<input type="checkbox"/> Tetrachloro-m-xylene-D2	B	0.260363	0.012	0.024	0.024			
<input type="checkbox"/> HCB	A	0.003837	0.0024	<0.0056	<0.008	JP	49.59	
<input type="checkbox"/> Alpha BHC			<0.0024	<0.0056	<0.008			
<input type="checkbox"/> Gamma BHC - Lindane			<0.0016	<0.0056	<0.008			
<input type="checkbox"/> Beta BHC			<0.0027	<0.0056	<0.008			
<input type="checkbox"/> Delta BHC			<0.0027	<0.0056	<0.008			
<input type="checkbox"/> Heptachlor			<0.0016	<0.0056	<0.008			
<input type="checkbox"/> Aldrin			<0.0016	<0.0056	<0.008			
<input type="checkbox"/> Telodrin					<0.008			
<input type="checkbox"/> o,p-DDE			<0.0056	<0.0112	<0.016			
<input type="checkbox"/> Heptachlor Epoxide			<0.0018	<0.0056	<0.008			
<input type="checkbox"/> Gamma Chlordane			<0.0056	<0.016	<0.016			
<input type="checkbox"/> Alpha Chlordane			<0.0024	<0.0056	<0.008			
<input type="checkbox"/> p,p-DDE			<0.004	<0.008	<0.016			
<input type="checkbox"/> Endosulfan I			<0.0034	<0.0072	<0.008			
<input type="checkbox"/> o,p-DDD			<0.004	<0.008	<0.016			
<input type="checkbox"/> Dieldrin			<0.0042	<0.008	<0.016			
<input type="checkbox"/> o,p-DDT			<0.0041	<0.008	<0.016			
<input type="checkbox"/> Endrin			<0.0065	<0.016	<0.016			
<input type="checkbox"/> Kepone					<0.16			
<input type="checkbox"/> p,p-DDD			<0.004	<0.008	<0.016			

Reviewed and digitally signed by Andrea L Jones on 11/16/2018 14:31:39

# Data Summary

Sample Name: **BLANKA**      11/6/18 F      PBLK09310 BLK    Sample ID: AB    Batchnumber: 183100009A  
 Sample Amount: 250 ml    Total Volume: 2 ml    Analyst: 9588    SDG:      State:

Analyses: 10589

**Analysis Report (A)**

Injected on Nov 14, 2018 21:41:33  
 Instrument H9190A  
 Result file 05PEST18306010.048.RAW  
 Calibration file 05PEST1830605  
 Method file 05PESTD

**Analysis Report (B)**

Injected on Nov 14, 2018 21:41:33  
 Instrument H9190B  
 Result file 05PEST18306010B.048.RAW  
 Calibration file 05PEST1830605B  
 Method file 05PESTDB

**Single Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Endosulfan II	---	---	<0.012	<0.024	<0.024	---	---	---
<input type="checkbox"/> p,p-DDT	---	---	<0.0042	<0.008	<0.016	---	---	---
<input type="checkbox"/> Endrin Aldehyde	---	---	<0.016	<0.032	<0.08	---	---	---
<input type="checkbox"/> Methoxychlor	---	---	<0.024	<0.056	<0.08	---	---	---
<input type="checkbox"/> Mirex	---	---	<0.008	<0.032	<0.04	---	---	---
<input type="checkbox"/> Endosulfan Sulfate	---	---	<0.0046	<0.0096	<0.016	---	---	---
<input type="checkbox"/> Endrin Ketone	---	---	<0.004	<0.008	<0.016	---	---	---
<input type="checkbox"/> Decachlorobiphenyl	A	0.345871	0.012	0.024	0.024	---	1.15	---
<input type="checkbox"/> Decachlorobiphenyl-D1	A	0.345871	0.012	0.024	0.024	---	---	---
<input type="checkbox"/> Decachlorobiphenyl-D2	B	0.341901	0.012	0.024	0.024	---	---	---

**Multiple Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Nó Req. Hits	Comments
<input type="checkbox"/> Chlordane	---	---	<0.128	<0.256	<0.4	---	---	4	---
<input type="checkbox"/> Toxaphene	---	---	<0.24	<0.48	<0.8	---	---	4	---

Units. ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Epidemiologist

NOV 16 2018

Reviewed and digitally signed by Andrea L Jones on 11/16/2018 14:31:39



# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** BLANKA 11/6/18 F      **PBLK09310 ID:** AB      **Batchnumber:** 183100009A  
**Sample Amount:** 250 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 10589

**Analysis Report (A)**

Injected on : Nov 14, 2018 21:41:33  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.048.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : 93% (29-129)      Conc.: 0.280923  
 %SSR(DCB) : 116% (32-149)      Conc.: 0.345871

**Analysis Report (B)**

Injected on : Nov 14, 2018 21:41:33  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.048.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : 86% (29-129)      Conc.: 0.260363  
 %SSR(DCB) : 115% (32-149)      Conc.: 0.341901

Peak name	Min	R.T	Max	Height	Amount
TCX	2.52	2.54	2.56	15335330	0.280923
HCB	2.81	2.83	2.85	202099	0.003837
alpha-BHC	2.93	2.96	2.97	43334	0.000554
gamma-BHC	3.18	3.20	3.22	23773	0.000358
beta-BHC	3.25	3.28	3.29	309021	0.010428
delta-BHC	3.39	3.40	3.43	25239	0.000415
Aldrin	3.83	3.87	3.87	8732	0.000168
o,p-DDE/hept epox	4.35	4.37	4.39	35741	0.001537
g. Chlordane	4.46	4.50	4.50	111370	0.002351
a. Chlordane	4.57	4.59	4.61	43271	0.000917
4,4'-DDE	4.63	4.67	4.67	79931	0.001889
o,p-DDD	4.77	4.78	4.81	52480	0.002483
Endrin	5.04	5.08	5.08	71368	0.001623
Endosulfan II	5.21	5.22	5.25	58730	0.001449
4,4'-DDT	5.30	5.30	5.34	101673	0.002602
DCB	6.67	6.69	6.73	9486494	0.345871

Peak name	Min	R.T	Max	Height	Amount
TCX	2.33	2.35	2.37	64622240	0.260363
HCB	2.66	2.68	2.70	1124094	0.006367
gamma-BHC	3.01	3.04	3.05	432432	0.005699
delta-BHC	3.30	3.30	3.34	94438	0.005474
Aldrin	3.61	3.63	3.65	217301	0.004996
Telodrin	3.76	3.80	3.80	350648	0.003919
Hept. epoxide	4.10	4.11	4.14	347526	0.002015
g. Chlordane	4.27	4.30	4.31	296919	0.001640
Endosulfan I	4.43	4.45	4.47	128843	0.000804
4,4'-DDE	4.53	4.55	4.57	119789	0.009377
Dieldrin	4.65	4.66	4.69	215453	0.001210
Endrin	4.89	4.93	4.93	9803	0.000060
Kepone/4,4-DDD	4.97	4.99	5.01	62443	0.031860
Endosulfan II	5.05	5.06	5.09	34598	0.000231
4,4'-DDT	5.21	5.24	5.25	231446	0.001601
Endrin aldehyde	5.30	5.32	5.34	293012	0.002422
DCB	6.65	6.68	6.71	33157600	0.341901

**Summary Report**

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> TCX	A	0.280923	0.024	0.012		7.60	
<input checked="" type="checkbox"/> HCB	A	0.003837	<0.008	0.0024	J	49.59	**
<input checked="" type="checkbox"/> alpha-BHC			<0.008	<0.0024			
<input checked="" type="checkbox"/> gamma-BHC			<0.008	<0.0016			
<input checked="" type="checkbox"/> beta-BHC			<0.008	<0.0027			
<input checked="" type="checkbox"/> delta-BHC			<0.008	<0.0027			
<input checked="" type="checkbox"/> Heptachlor			<0.008	<0.0016			
<input checked="" type="checkbox"/> Aldrin			<0.008	<0.0016			
<input type="checkbox"/> Telodrin			<0.008				
<input checked="" type="checkbox"/> o,p-DDE			<0.016	<0.0056			
<input checked="" type="checkbox"/> Hept. epoxide			<0.008	<0.0018			
<input checked="" type="checkbox"/> g. Chlordane			<0.016	<0.0056			
<input checked="" type="checkbox"/> a. Chlordane			<0.008	<0.0024			
<input checked="" type="checkbox"/> 4,4'-DDE			<0.016	<0.004			
<input checked="" type="checkbox"/> Endosulfan I			<0.008	<0.0034			
<input checked="" type="checkbox"/> o,p-DDD			<0.016	<0.004			
<input checked="" type="checkbox"/> Dieldrin			<0.016	<0.0042			
<input checked="" type="checkbox"/> o,p-DDT			<0.016	<0.0041			
<input checked="" type="checkbox"/> Endrin			<0.016	<0.0065			
<input type="checkbox"/> Kepone			<0.16				
<input checked="" type="checkbox"/> 4,4'-DDD			<0.016	<0.004			
<input checked="" type="checkbox"/> Endosulfan II			<0.024	<0.012			
<input checked="" type="checkbox"/> 4,4'-DDT			<0.016	<0.0042			
<input checked="" type="checkbox"/> Endrin aldehyde			<0.08	<0.016			

hept epox:  $\frac{35741}{3728339} \times 2 = 0.000766905$  (4,4-DDD)  
 $\frac{62443}{1103814} \times 2 = 0.000452562$  (Endrin)

%RPD = High - Low Amount divided by the Average times  
 \*\* %Difference > 40, lower amount found reported  
 \* Recovery outside QC Limits

*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

Higher Amount Found unless RPD > 40

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** BLANKA 11/6/18 F      PBLK09310 ID: AB      Batchnumber: 183100009A  
**Sample Amount:** 250 ml      Total Volume: 2 ml      Analyst: 2306      SDG:      State:  
**Analyses:** 10589

**Analysis Report (A)**

Injected on : Nov 14, 2018 21:41:33  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.048.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

**Analysis Report (B)**

Injected on : Nov 14, 2018 21:41:33  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.048.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

**Summary Report**

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> Methoxychlor			<0.08	<0.024			
<input checked="" type="checkbox"/> Mirex			<0.04	<0.008			
<input checked="" type="checkbox"/> Endo. sulfate			<0.016	<0.0046			
<input checked="" type="checkbox"/> Endrin ketone			<0.016	<0.004			
<input checked="" type="checkbox"/> DCB	A	0.345871	0.024	0.012		1.15	
<input checked="" type="checkbox"/> Total DDTs	B	0.009377	<0.016	0.004	J	0.00	
<input checked="" type="checkbox"/> Total DDTs	A	0.009377	<0.016	0.004	J	0.00	
<input type="checkbox"/> Total Endosulfans	A	0.000000	<0.008				

Units: ug/l

*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

Reviewed by: \_\_\_\_\_

Date: NOV 16 2018

Verified by: \_\_\_\_\_

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

Date: NOV 16 2018

%RPD = High - Low Amount divided by the Average times 100

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

Higher Amount Found unless RPD > 40

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** BLANKA 11/6/18 F      **PBLK09310 ID:** AB      **Batchnumber:** 183100009A  
**Sample Amount:** 250 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 10589

## Analysis Report (A)

Injected on : Nov 14, 2018 21:41:33  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.048.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : 93% (29-129)      Conc.: 0.280923  
 %SSR(DCB) : 116% (32-149)      Conc.: 0.345871

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.78	2.83	2.84	202098.5	0.25696	6	75.48	1
3.04	3.06	3.10	34781.79	0.031479			2
+ 3.04	3.10	3.10	60576.04	0.054823			2
3.20	3.24	3.26	114350	0.351841			3
3.40	3.45	3.46	9827.928	0.011649			4
* 3.56	3.57	3.62	149544.4	0.251844			6
* 3.51	3.57	3.57	149544.4	0.169393			5
<u>Height Summation:</u>			660147.018				
Amount Avg CF:			0.178861	Linear:			
<b>Aroclor-1221</b>							
E 2.66	2.69	2.70	3854145	8.597725	2	135.09	1
2.80	2.83	2.84	202098.5	0.196798			3
<u>Height Summation:</u>			4056243.5				
Amount Avg CF:			4.397261	Linear:			
<b>Aroclor-1248</b>							
3.38	3.40	3.44	25238.69	0.029946	6	77.27	1
3.66	3.68	3.72	81500.91	0.176874			2
3.85	3.87	3.91	8731.725	0.008005			3
4.21	4.25	4.27	277378.2	0.223374			4
4.39	4.45	4.45	209487.3	0.248631			5
4.71	4.73	4.77	61924.23	0.097074			6
<u>Height Summation:</u>			664261.055				
Amount Avg CF:			0.13065	Linear:			
<b>Aroclor-1254</b>							
4.39	4.45	4.45	209487.3	0.131628	6	46.44	1
4.62	4.67	4.68	79930.65	0.06712			2
4.71	4.73	4.77	61924.23	0.029818			3
4.93	4.96	4.99	116852.9	0.075526			4
5.06	5.08	5.12	71368.3	0.067012			5
5.27	5.30	5.33	101672.8	0.059439			6
<u>Height Summation:</u>			641236.18				
Amount Avg CF:			0.071757	Linear:			
<b>Aroclor-1260</b>							
5.06	5.08	5.12	71368.3	0.036148	4	21.13	2
5.27	5.30	5.33	101672.8	0.048946			3
5.53	5.59	5.59	37649.86	0.03242			4
5.94	6.00	6.00	70577.1	0.049752			6
<u>Height Summation:</u>			281268.06				
Amount Avg CF:			0.041816	Linear:			
<b>Chlordane</b>							
3.94	3.96	4.00	9703.695	0.006978	4	69.05	2
4.29	4.33	4.35	27165.03	0.030166			3
4.45	4.50	4.51	111370.1	0.026761			4
4.55	4.59	4.61	43270.62	0.007518			5
<u>Height Summation:</u>			191509.445				
Amount Avg CF:			0.017856	Linear:			

## Analysis Report (B)

Injected on : Nov 14, 2018 21:41:33  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.048.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : 86% (29-129)      Conc.: 0.260363  
 %SSR(DCB) : 115% (32-149)      Conc.: 0.341901

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Aroclor-1016</b>							
2.66	2.68	2.72	1124094	0.46801	5	119.79	1
2.93	2.96	2.99	329350.8	0.098958			2
3.11	3.15	3.17	53762.76	0.038776			3
3.27	3.30	3.33	94438.3	0.016206			4
3.37	3.43	3.43	414845.3	0.14209			5
<u>Height Summation:</u>			2016491.16				
Amount Avg CF:			0.152808	Linear:			
<b>Aroclor-1221</b>							
2.54	2.56	2.58	987962.5	0.711888	3	41.58	1
2.63	2.65	2.67	290212.4	0.34217			2
2.67	2.68	2.71	1124094	0.392498			3
<u>Height Summation:</u>			2402268.9				
Amount Avg CF:			0.482186	Linear:			
<b>Aroclor-1248</b>							
3.27	3.30	3.33	94438.3	0.032003	4	97.24	1
3.53	3.54	3.59	921880.4	0.32905			2
3.75	3.80	3.81	350648.3	0.10035			3
3.85	3.90	3.91	238377.4	0.081719			4
<u>Height Summation:</u>			1605344.4				
Amount Avg CF:			0.135781	Linear:			
<b>Aroclor-1254</b>							
4.27	4.30	4.33	296919.4	0.06756	4	29.77	2
4.64	4.66	4.70	215452.9	0.033927			3
+ 4.64	4.69	4.70	296100.7	0.046627			3
5.07	5.11	5.13	142281.1	0.042472			5
+ 5.21	5.22	5.27	58730.24	0.012129			6
5.21	5.24	5.27	231445.5	0.0478			6
<u>Height Summation:</u>			886098.9				
Amount Avg CF:			0.04794	Linear:			
<b>Aroclor-1260</b>							
4.79	4.80	4.85	130138.5	0.029842	6	49.46	1
4.95	4.99	5.01	62443.48	0.011995			2
+ 5.21	5.22	5.27	58730.24	0.010863			3
5.21	5.24	5.27	231445.5	0.042808			3
+ 5.48	5.48	5.54	304577.9	0.089551			4
5.48	5.54	5.54	230922	0.067895			4
5.65	5.70	5.71	364081.2	0.052151			5
5.90	5.94	5.96	295888.7	0.071395			6
<u>Height Summation:</u>			1314919.38				
Amount Avg CF:			0.046014	Linear:			

# Eurofins Lancaster Laboratories-Multiple Component Data Summary

**Sample Name:** BLANKA 11/6/18 F      **PBLK09310 ID:** AB      **Batchnumber:** 183100009A  
**Sample Amount:** 250 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 14, 2018 21:41:33  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.048.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
5.06	5.08	5.12	71368.3	0.119396	6	33.46	L: 0.246067 1
5.20	5.22	5.26	58730.24	0.062698			2
5.20	5.22	5.26	58730.24	0.062698			2
5.29	5.30	5.35	101672.8	0.120133			3
5.45	5.50	5.51	100319.9	0.116536			4
5.68	5.70	5.74	111838.8	0.150367			L: 0.279797 5

**Height Summation:** 502660.28  
**Amount Avg CF:** 0.105305      Linear:

### Analysis Report (B)

Injected on : Nov 14, 2018 21:41:33  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.048.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Chlordane</b>							
3.23	3.24	3.29	590996.4	0.115578	5	63.31	L: 0.150132 1
3.74	3.80	3.80	350648.3	0.072078			2
4.08	4.11	4.14	347525.8	0.10003			L: 0.119916: 3
4.27	4.30	4.33	296919.4	0.017904			L: 0.058350 4
5.08	5.11	5.14	142281.1	0.030285			6
+ 5.08	5.14	5.14	357483.9	0.076093			6

**Height Summation:** 1728371  
**Amount Avg CF:** 0.067175      Linear:

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
<b>Toxaphene</b>							
4.64	4.66	4.70	215452.9	0.12356	6	94.32	1
+ 4.64	4.69	4.70	298100.7	0.16981			1
+ 4.87	4.88	4.93	46506.18	0.025831			2
4.87	4.93	4.93	9803.01	0.005445			2
5.04	5.06	5.10	34598.48	0.010604			3
5.31	5.32	5.37	293011.5	0.082389			4
+* 5.31	5.36	5.37	546818.3	0.153755			4
* 5.36	5.36	5.42	546818.3	0.261797			5
5.66	5.70	5.72	364081.2	0.114153			6

**Height Summation:** 1463765.39  
**Amount Avg CF:** 0.099658      Linear:

### Summary Report

Compound Name	Column	Higher Amount Found	I.OQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		15.71	4	40	
Aroclor-1221			0	0	E	** 160.47	3	5	
Aroclor-1248			0	0		3.85	4	30	
Aroclor-1254			0	0		39.80	4	40	
Aroclor-1260			0	0		9.56	4	40	
Chlordane			0.4	0.128		** 116.00	4	40	
Toxaphene			0.8	0.24		5.51	4	40	

Units: ug/l



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: BLANKA 11/6/18 F ABPBLK09310 BLK 183100009A 10589 SW-846 8081B  
 Injected On: 11/14/2018 9:41:33 PM Sample Weight: 250  
 Instrument ID: CP5-9190 Dilution Factor: 2  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

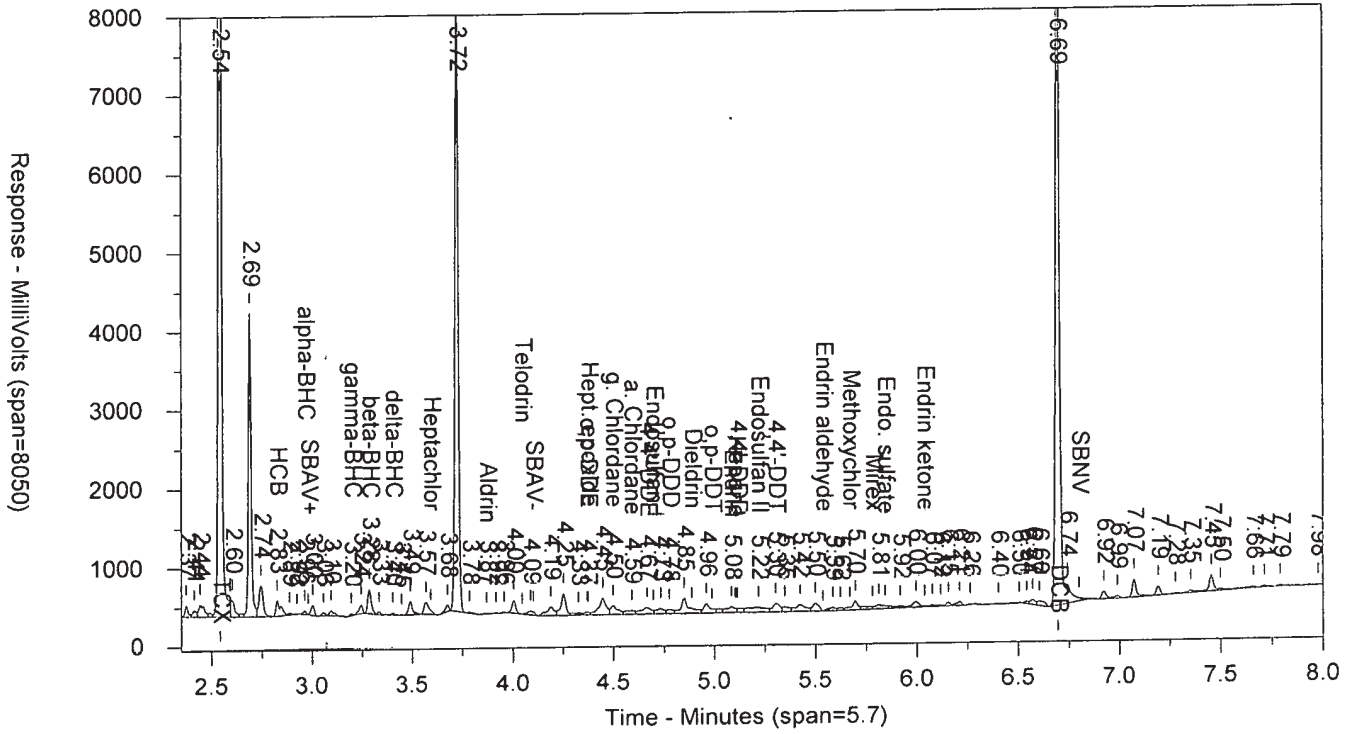
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.542	15335330	.281	TCX	2.354	64622240	.26	TCX
2.826	202099	.004	HCB	2.684	1124095	.006	HCB
2.963	43334	.001	alpha-BHC		0		alpha-BHC
3.196	23773		gamma-BHC	3.038	432432	.006	gamma-BHC
3.284	309021	.01	beta-BHC		0		beta-BHC
3.4	25239		delta-BHC	3.304	94438	.005	delta-BHC
3.87	8732		Aldrin	3.63	217301	.005	Aldrin
	0		Telodrin	3.798	350648	.004	Telodrin
	0		Hept. epoxide	4.106	347526	.002	Hept. epoxide
4.498	111370	.002	g. Chlordane	4.3	296919	.002	g. Chlordane
4.369	35741	.002	o,p-DDE		0		o,p-DDE
	0		Endosulfan I	4.45	128843	.001	Endosulfan I
4.666	79931	.002	4,4'-DDE	4.549	119789	.009	4,4'-DDE
4.591	43271	.001	a. Chlordane		0		a. Chlordane
	0		Dieldrin	4.659	215453	.001	Dieldrin
4.776	52480	.002	o,p-DDD		0		o,p-DDD
5.084	71368	.002	Endrin	4.926	9803		Endrin
	0		Kepone	4.995	62443	.032	Kepone
5.217	58730	.001	Endosulfan II	5.057	34598		Endosulfan II
5.303	101673	.003	4,4'-DDT	5.237	231446	.002	4,4'-DDT
	0		Endrin aldehyde	5.317	293012	.002	Endrin aldehyde
6.694	9486494	.346	DCB	6.678	33157600	.342	DCB

Files:  
 Area File: 05pest18306010.048.RAW  
 Area File: 05pest18306010B.048.RAW  
 Method A: 05PESTD.MET  
 Method B: 05PESTDDB.MET  
 Calibration File A: 05pest1830605.cal  
 Calibration File B: 05pest1830605b.cal  
 Format A: pestD5.FMTA  
 Format B: pestD5.FMTB  
 Area File Created On: 11/15/2018 7:35:07 AM  
 File Reported On: 11/15/2018 at 7:40:02 AM

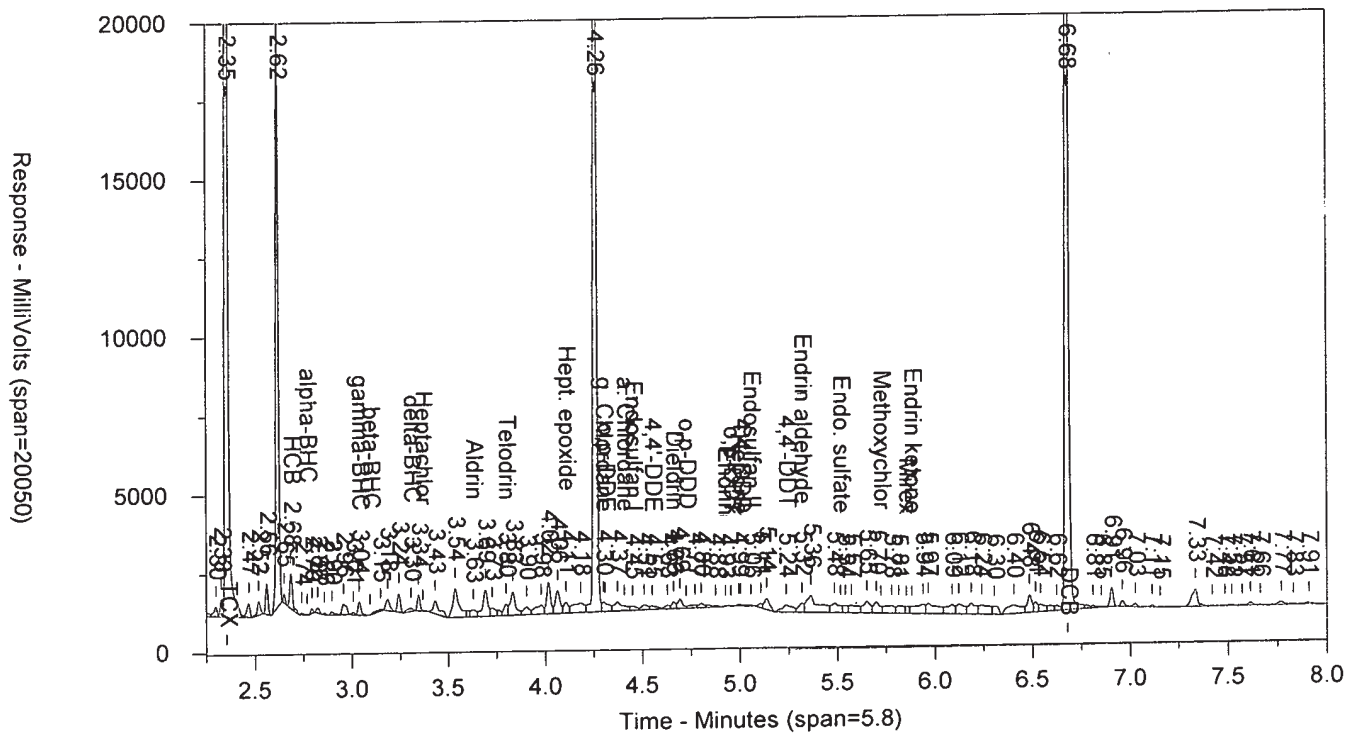
BLANKA 11/6/18 F ABPBLK09310 BLK 183100009A 10589

SW-846 808

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.048.RAW



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# Data Summary

**Sample Name:** LCSA      11/6/18 F      LCS09310 LCS    **Sample ID:** AB    **Batchnumber:** 183100009A  
**Sample Amount:** 250 ml    **Total Volume:** 2 ml    **Analyst:** 9588    **SDG:**      **State:**  
**Analyses:** 10589

## Analysis Report (A)

**Injected on** Nov 14, 2018 21:54:17  
**Instrument** H9190A  
**Result file** 05PEST18306010.049.RAW  
**Calibration file** 05PEST1830605  
**Method file** 05PESTD

%SSR(TCX) 95% (29 - 129) Conc: 0.285037  
 %SSR(DCB) 83% (32 - 149) Conc: 0.246313

## Analysis Report (B)

**Injected on** Nov 14, 2018 21:54:17  
**Instrument** H9190B  
**Result file** 05PEST18306010B.049.RAW  
**Calibration file** 05PEST1830605B  
**Method file** 05PESTD

%SSR(TCX) 90% (29 - 129) Conc: 0.270123  
 %SSR(DCB) 80% (32 - 149) Conc: 0.239356

## Single Component Data

Compound	Min	RT	Max	Height	Amount	Compound	Min	RT	Max	Height	Amount
Kepono	5.08	2.02	5.12	55886	0.002874	Tetrachloro-m-xylene	2.33	2.35	2.37	67044690	0.270123
Tetrachloro-m-xylene	2.52	2.54	2.56	15559910	0.285037	HCB	2.66	2.68	2.70	776982	0.004401
HCB	2.81	2.82	2.85	313170	0.005945	Alpha BHC	2.75	2.77	2.79	32241230	0.083561
Alpha BHC	2.93	2.95	2.97	7513696	0.096035	Gamma BHC - Lindane	3.01	3.03	3.05	25726510	0.081609
Gamma BHC - Lindane	3.18	3.19	3.22	6494131	0.097691	Beta BHC	3.07	3.09	3.11	9918843	0.083654
Beta BHC	3.25	3.26	3.29	2767915	0.093401	Delta BHC	3.30	3.32	3.34	25363200	0.087504
Delta BHC	3.39	3.41	3.43	5519171	0.090659	Heptachlor	3.35	3.37	3.39	21007790	0.093143
Heptachlor	3.57	3.59	3.61	5020754	0.089101	Aldrin	3.61	3.63	3.65	18697820	0.080696
Aldrin	3.83	3.85	3.87	4647192	0.089263	Telodrin	3.76	3.80	3.80	139610	0.001561
Heptachlor Epoxide	4.35	4.37	4.39	4681029	0.100013	Heptachlor Epoxide	4.10	4.13	4.14	17031780	0.098762
Gamma Chlordane	4.46	4.47	4.50	4672941	0.09866	Gamma Chlordane	4.27	4.29	4.31	18156740	0.10029
Alpha Chlordane	4.57	4.58	4.61	4559304	0.096597	Alpha Chlordane	4.39	4.41	4.43	17335890	0.096559
p,p-DDE	4.63	4.64	4.67	8545217	0.201943	Endosulfan I	4.43	4.45	4.47	15502350	0.096788
Endosulfan I	4.68	4.69	4.72	4061548	0.091901	p,p-DDE	4.53	4.55	4.57	33697760	0.185464
o,p-DDD	4.77	4.78	4.81	140596	0.006652	Dieldrin	4.65	4.67	4.69	38853020	0.218211
Dieldrin	4.87	4.88	4.91	9794706	0.209757	Endrin	4.89	4.91	4.93	38995560	0.239704
o,p-DDT	4.97	4.98	5.01	128322	0.004999	p,p-DDD	4.98	5.00	5.02	31102370	0.225417
Endrin	5.04	5.06	5.08	9366036	0.21296	Endosulfan II	5.05	5.07	5.09	29396850	0.195906
p,p-DDD	5.09	5.11	5.13	8137366	0.228434	p,p-DDT	5.21	5.23	5.25	31566050	0.218337
Endosulfan II	5.21	5.23	5.25	8113720	0.200243	Endrin Aldehyde	5.30	5.32	5.34	25005890	0.206722
p,p-DDT	5.30	5.31	5.34	8727180	0.223365	Endosulfan Sulfate	5.50	5.52	5.53	32162530	0.225269
Endrin Aldehyde	5.52	5.53	5.56	5843959	0.175292	Methoxychlor	5.70	5.72	5.74	72909050	1.156147
Methoxychlor	5.65	5.66	5.69	20649160	1.1498	Endrin Ketone	5.86	5.88	5.90	26146540	0.173992
Endosulfan Sulfate	5.82	5.84	5.86	7844836	0.213236	Decachlorobiphenyl	6.65	6.68	6.71	23212750	0.239356
Endrin Ketone	6.02	6.03	6.06	9351302	0.214168						
Decachlorobiphenyl	6.67	6.69	6.73	6757775	0.246313						

## Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Total DDTs	A	0.653742	0.004	0.008	0.016		0.00	
<input type="checkbox"/> Total Endosulfans (I + II)	A	0.297031			0.008		0.00	
<input type="checkbox"/> Tetrachloro-m-xylene	A	0.285037	0.012	0.024	0.024		5.37	
<input type="checkbox"/> Tetrachloro-m-xylene-D1	A	0.285037	0.012	0.024	0.024			
<input type="checkbox"/> Tetrachloro-m-xylene-D2	B	0.270123	0.012	0.024	0.024			
<input type="checkbox"/> HCB	A	0.005945	0.0024	0.0056	<0.008	J	29.85	
<input type="checkbox"/> Alpha BHC	A	0.096035	0.0024	0.0056	0.008		13.89	
<input type="checkbox"/> Gamma BHC - Lindane	A	0.097691	0.0016	0.0056	0.008		17.94	
<input type="checkbox"/> Beta BHC	A	0.093401	0.0027	0.0056	0.008		11.01	
<input type="checkbox"/> Delta BHC	A	0.090659	0.0027	0.0056	0.008		3.54	
<input type="checkbox"/> Heptachlor	B	0.093143	0.0016	0.0056	0.008		4.44	
<input type="checkbox"/> Aldrin	A	0.089263	0.0016	0.0056	0.008		10.08	
<input type="checkbox"/> Telodrin					<0.008			
<input type="checkbox"/> o,p-DDE			<0.0056	<0.0112	<0.016			
<input type="checkbox"/> Heptachlor Epoxide	A	0.100013	0.0018	0.0056	0.008		1.26	
<input type="checkbox"/> Gamma Chlordane	B	0.10029	0.0056	0.016	0.016		1.64	

Reviewed and digitally signed by Andrea L Jones on 11/16/2018 14:31:50



# Data Summary

Sample Name: **LCSA** 11/6/18 F LCS09310 LCS Sample ID: AB Batchnumber: 183100009A  
 Sample Amount: 250 ml Total Volume: 2 ml Analyst: 9588 SDG: State:  
 Analyses: 10589

**Analysis Report (A)**

Injected on Nov 14, 2018 21:54:17  
 Instrument H9190A  
 Result file 05PEST18306010.049.RAW  
 Calibration file 05PEST1830605  
 Method file 05PESTD

**Analysis Report (B)**

Injected on Nov 14, 2018 21:54:17  
 Instrument H9190B  
 Result file 05PEST18306010B.049.RAW  
 Calibration file 05PEST1830605B  
 Method file 05PESTD

**Single Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
<input type="checkbox"/> Alpha Chlordane	A	0.096597	0.0024	0.0056	0.008		0.04	
<input type="checkbox"/> p,p-DDE	A	0.201943	0.004	0.008	0.016		8.51	
<input type="checkbox"/> Endosulfan I	B	0.096788	0.0034	0.0072	0.008		5.18	
<input type="checkbox"/> o,p-DDD			<0.004	<0.008	<0.016			
<input type="checkbox"/> Dieldrin	B	0.218211	0.0042	0.008	0.016		3.95	
<input type="checkbox"/> o,p-DDT			<0.0041	<0.008	<0.016			
<input type="checkbox"/> Endrin	B	0.239704	0.0065	0.016	0.016		11.82	
<input type="checkbox"/> Kepone					<0.16			
<input type="checkbox"/> p,p-DDD	A	0.228434	0.004	0.008	0.016		1.33	
<input type="checkbox"/> Endosulfan II	A	0.200243	0.012	0.024	0.024		2.19	
<input type="checkbox"/> p,p-DDT	A	0.223365	0.0042	0.008	0.016		2.28	
<input type="checkbox"/> Endrin Aldehyde	B	0.206722	0.016	0.032	0.08		16.15	
<input type="checkbox"/> Methoxychlor	B	1.156147	0.024	0.056	0.08		0.55	
<input type="checkbox"/> Mirex			<0.008	<0.032	<0.04			
<input type="checkbox"/> Endosulfan Sulfate	B	0.225269	0.0046	0.0096	0.016		5.49	
<input type="checkbox"/> Endrin Kctone	A	0.214168	0.004	0.008	0.016		20.70	
<input type="checkbox"/> Decachlorobiphenyl	A	0.246313	0.012	0.024	0.024		2.86	
<input type="checkbox"/> Decachlorobiphenyl-D1	A	0.246313	0.012	0.024	0.024			
<input type="checkbox"/> Decachlorobiphenyl-D2	B	0.239356	0.012	0.024	0.024			

**Multiple Component Summary**

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
<input type="checkbox"/> Chlordane			<0.128	<0.256	<0.4			4	
<input type="checkbox"/> Toxaphene			<0.24	<0.48	<0.8			4	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

*Valerie L. Tomayko*  
 Valerie L. Tomayko  
 Principal Specialist

NOV 16 2018

Reviewed and digitally signed by Andrea L Jones on 11/16/2018 14:31:50

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** LCSA 11/6/18 F      **LCS09310 ID:** AB      **Batchnumber:** 183100009A  
**Sample Amount:** 250 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 10589

### Analysis Report (A)

Injected on : Nov 14, 2018 21:54:17  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.049.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : 95% (29-129)      Conc.: 0.285037  
 %SSR(DCB) : 83% (32-149)      Conc.: 0.246314

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.52	2.54	2.56	15559910	0.285037
HCB	2.81	2.82	2.85	313170	0.005945
alpha-BHC	2.93	2.95	2.97	7513696	0.096035
gamma-BHC	3.18	3.19	3.22	6494131	0.097691
beta-BHC	3.25	3.26	3.29	2767915	0.093401
delta-BHC	3.39	3.41	3.43	5519171	0.090659
Heptachlor	3.57	3.59	3.61	5020754	0.089101
Aldrin	3.83	3.85	3.87	4647192	0.089263
Hept. epoxide	4.35	4.37	4.39	4661029	0.100013
g. Chlordane	4.46	4.47	4.50	4672941	0.098660
a. Chlordane	4.57	4.58	4.61	4559304	0.096597
4,4'-DDE	4.63	4.64	4.67	8545217	0.201943
Endosulfan I	4.68	4.69	4.72	4064548	0.091901
o,p-DDD	4.77	4.78	4.81	140596	0.006652
Dieldrin	4.87	4.88	4.91	9794706	0.209757
o,p-DDT	4.97	4.98	5.01	128322	0.004999
Endrin	5.04	5.06	5.08	9366036	0.212961
Kepone	5.08	2.02	5.12	55886	0.002874
4,4'-DDD	5.09	5.11	5.13	8137366	0.228434
Endosulfan II	5.21	5.23	5.25	8113720	0.200243
4,4'-DDT	5.30	5.31	5.34	8727180	0.223365
Endrin aldehyde	5.52	5.53	5.56	5843959	0.175292
Methoxychlor	5.65	5.66	5.69	20649160	1.149800
Endo. sulfate	5.82	5.84	5.86	7844836	0.213236
Endrin ketone	6.02	6.03	6.06	9351302	0.214168
DCB	6.67	6.69	6.73	6757775	0.246314

### Analysis Report (B)

Injected on : Nov 14, 2018 21:54:17  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.049.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET  
 %SSR(TCX) : 90% (29-129)      Conc.: 0.270123  
 %SSR(DCB) : 80% (32-149)      Conc.: 0.239356

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.33	2.35	2.37	67044690	0.270123
HCB	2.66	2.68	2.70	776982	0.004401
alpha-BHC	2.75	2.77	2.79	32241230	0.083561
gamma-BHC	3.01	3.03	3.05	25726510	0.081609
beta-BHC	3.07	3.09	3.11	9918843	0.083654
delta-BHC	3.30	3.32	3.34	25363200	0.087504
Heptachlor	3.35	3.37	3.39	21007790	0.093143
Aldrin	3.61	3.63	3.65	18697820	0.080696
Telodrin	3.76	3.80	3.80	139610	0.001561
Hept. epoxide	4.10	4.13	4.14	17031780	0.098762
g. Chlordane	4.27	4.29	4.31	18156740	0.100290
a. Chlordane	4.39	4.41	4.43	17335890	0.096559
Endosulfan I	4.43	4.45	4.47	15502350	0.096788
4,4'-DDE	4.53	4.55	4.57	33697760	0.185464
Dieldrin	4.65	4.67	4.69	38853020	0.218211
Endrin	4.89	4.91	4.93	38995560	0.239704
4,4'-DDD	4.98	5.00	5.02	31102370	0.225417
Endosulfan II	5.05	5.07	5.09	29396850	0.195906
4,4'-DDT	5.21	5.23	5.25	31566050	0.218337
Endrin aldehyde	5.30	5.32	5.34	25005890	0.206722
Endo. sulfate	5.50	5.52	5.53	32162530	0.225269
Methoxychlor	5.70	5.72	5.74	72909050	1.156147
Endrin ketone	5.86	5.88	5.90	26146540	0.173992
DCB	6.65	6.68	6.71	23212750	0.239356

### Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> TCX	A	0.285037	0.024	0.012		5.37	
<input checked="" type="checkbox"/> HCB	A	0.005945	<0.008	0.0024	J	29.86	
<input checked="" type="checkbox"/> alpha-BHC	A	0.096035	0.008	0.0024		13.89	
<input checked="" type="checkbox"/> gamma-BHC	A	0.097691	0.008	0.0016		17.94	
<input checked="" type="checkbox"/> beta-BHC	A	0.093401	0.008	0.0027		11.01	
<input checked="" type="checkbox"/> delta-BHC	A	0.090659	0.008	0.0027		3.54	
<input checked="" type="checkbox"/> Heptachlor	B	0.093143	0.008	0.0016		4.44	
<input checked="" type="checkbox"/> Aldrin	A	0.089263	0.008	0.0016		10.08	
<input type="checkbox"/> Telodrin			<0.008				
<input checked="" type="checkbox"/> o,p-DDE			<0.016	<0.0056			
<input checked="" type="checkbox"/> Hept. epoxide	A	0.100013	0.008	0.0018		1.26	
<input checked="" type="checkbox"/> g. Chlordane	B	0.100290	0.016	0.0056		1.64	
<input checked="" type="checkbox"/> a. Chlordane	A	0.096597	0.008	0.0024		0.04	
<input checked="" type="checkbox"/> 4,4'-DDE	A	0.201943	0.016	0.004		8.51	
<input checked="" type="checkbox"/> Endosulfan I	B	0.096788	0.008	0.0034		5.18	

%RPD = High - Low Amount divided by the Average times 100

\*\* %Difference > 40, lower amount found reported

\* Recovery outside QC Limits

*Andrea L. Jones*  
 Andrea L. Jones  
 Chemist

Higher Amount Found unless RPD > 40

# Eurofins Lancaster Laboratories-Single Component Data Summary

**Sample Name:** LCSA 11/6/18 F      **LCS09310 ID:** AB      **Batchnumber:** 183100009A  
**Sample Amount:** 250 ml      **Total Volume:** 2 ml      **Analyst:** 2306      **SDG:**      **State:**  
**Analyses:** 10589

**Analysis Report (A)**

Injected on : Nov 14, 2018 21:54:17  
 Instrument : CP05--H9190A  
 Result file : 05PEST18306010.049.RAW  
 Calibration file : 05PEST1830605.CAL  
 Method file : 05PESTD.MET

**Analysis Report (B)**

Injected on : Nov 14, 2018 21:54:17  
 Instrument : CP05--H9190B  
 Result file : 05PEST18306010B.049.RAW  
 Calibration file : 05PEST1830605B.CAL  
 Method file : 05PESTD.MET

**Summary Report**

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
<input checked="" type="checkbox"/> o,p-DDD			<0.016	<0.004			
<input checked="" type="checkbox"/> Dieldrin	B	0.218211	0.016	0.0042		3.95	
<input checked="" type="checkbox"/> o,p-DDT			<0.016	<0.0041			
<input checked="" type="checkbox"/> Endrin	B	0.239704	0.016	0.0065		11.82	
<input type="checkbox"/> Kepone			<0.16				
<input checked="" type="checkbox"/> 4,4'-DDD	A	0.228434	0.016	0.004		1.33	
<input checked="" type="checkbox"/> Endosulfan II	A	0.200243	0.024	0.012		2.19	
<input checked="" type="checkbox"/> 4,4'-DDT	A	0.223365	0.016	0.0042		2.28	
<input checked="" type="checkbox"/> Endrin aldehyde	B	0.206722	0.08	0.016		16.45	
<input checked="" type="checkbox"/> Methoxychlor	B	1.156147	0.08	0.024		0.55	
<input checked="" type="checkbox"/> Mirex			<0.04	<0.008			
<input checked="" type="checkbox"/> Endo. sulfate	B	0.225269	0.016	0.0046		5.49	
<input checked="" type="checkbox"/> Endrin ketone	A	0.214168	0.016	0.004		20.70	
<input checked="" type="checkbox"/> DCB	A	0.246314	0.024	0.012		2.87	
<input checked="" type="checkbox"/> Total DDTs	A	0.653742	0.016	0.004		0.00	
<input type="checkbox"/> Total Endosulfans	A	0.297031	0.008			0.00	

**Units:** ug/l  
 Reviewed by: Andrea L. Jones  
 Date: NOV 16 2018

Verified by: Valerio L. Tomayko  
 Date: NOV 16 2018

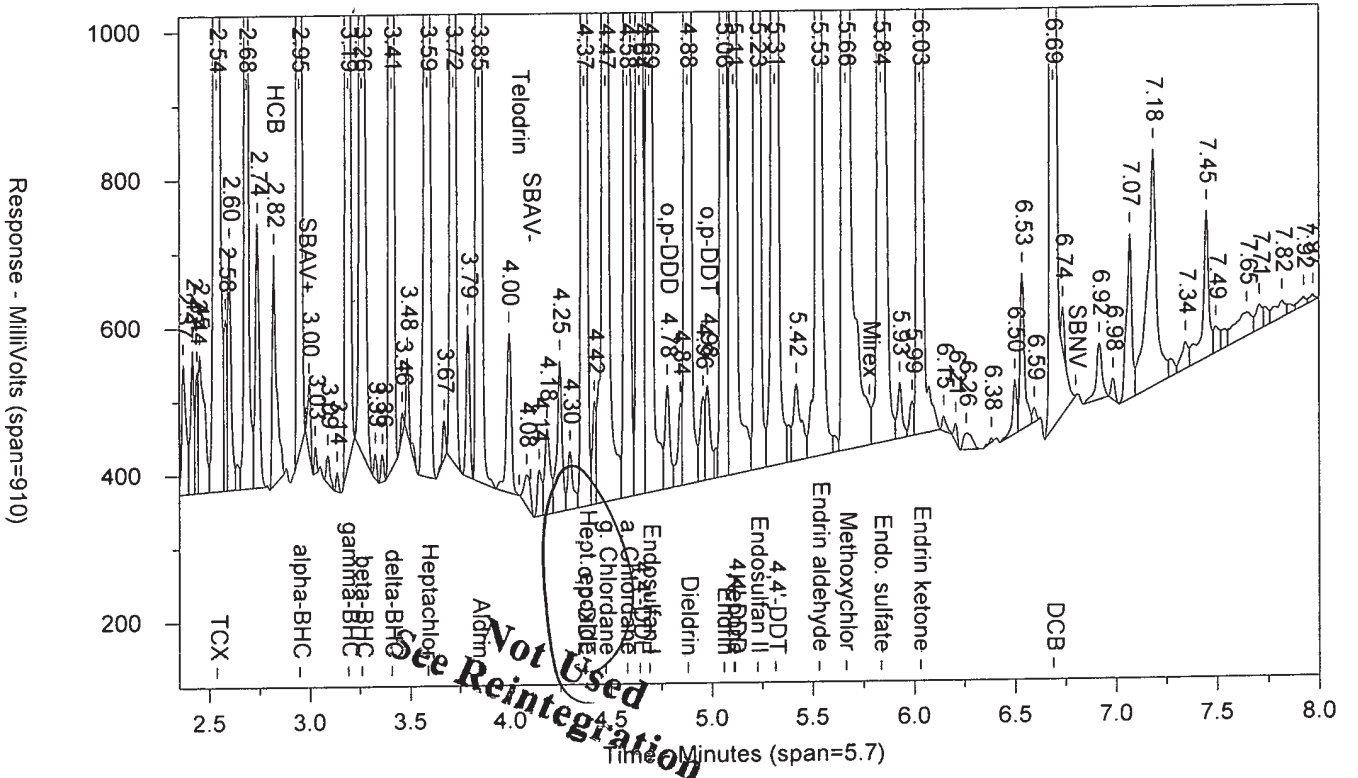
%RPD = High - Low Amount divided by the Average times 100  
 \*\* %Difference > 40, lower amount found reported  
 \* Recovery outside QC Limits

Higher Amount Found unless RPD > 40

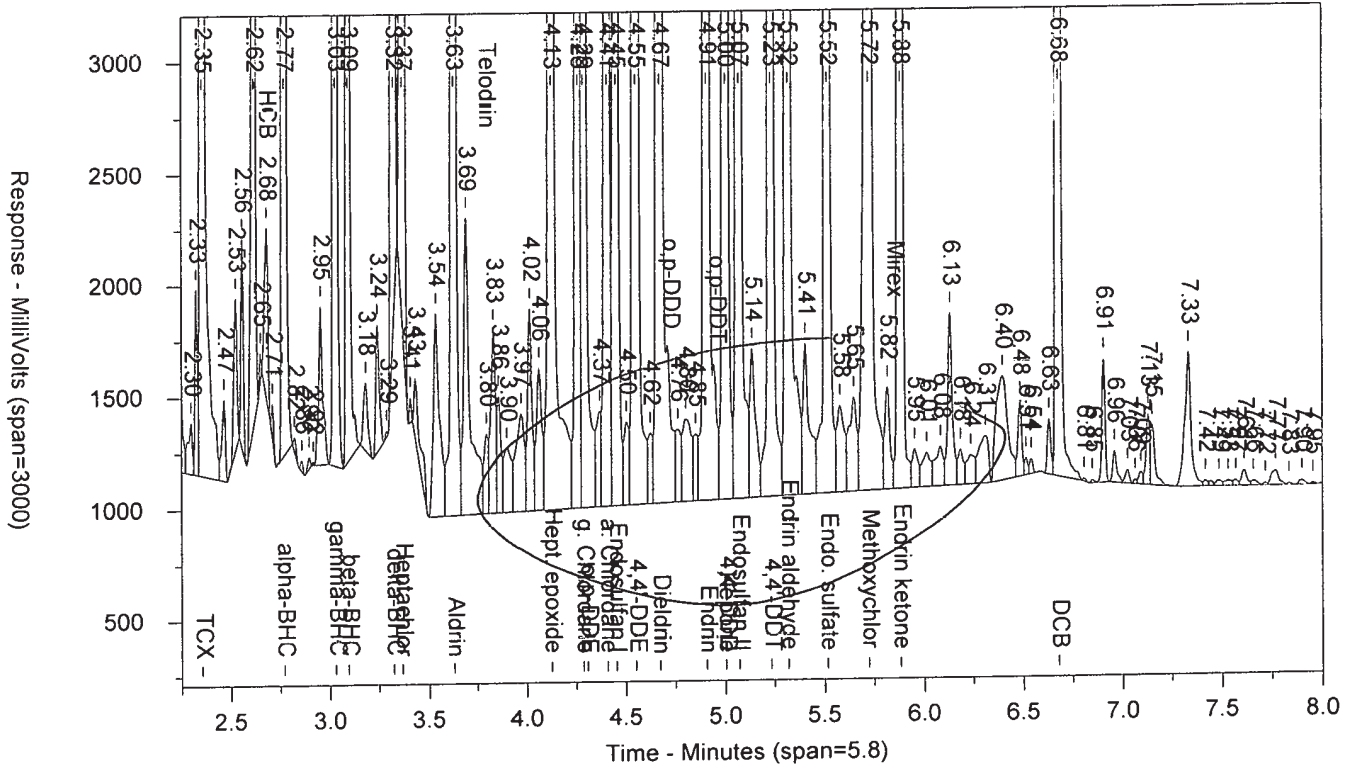
LCSA 11/6/18 F ABLCS09310 LCS 18310009A 10589

SW-846 8081B

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\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.049.RAW



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: LCSA 11/6/18 F ABLCS09310 LCS 183100009A 10589  
 Injected On: 11/14/2018 9:54:17 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Sample Weight: 250  
 Dilution Factor: 2  
 SW-846 8081B

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

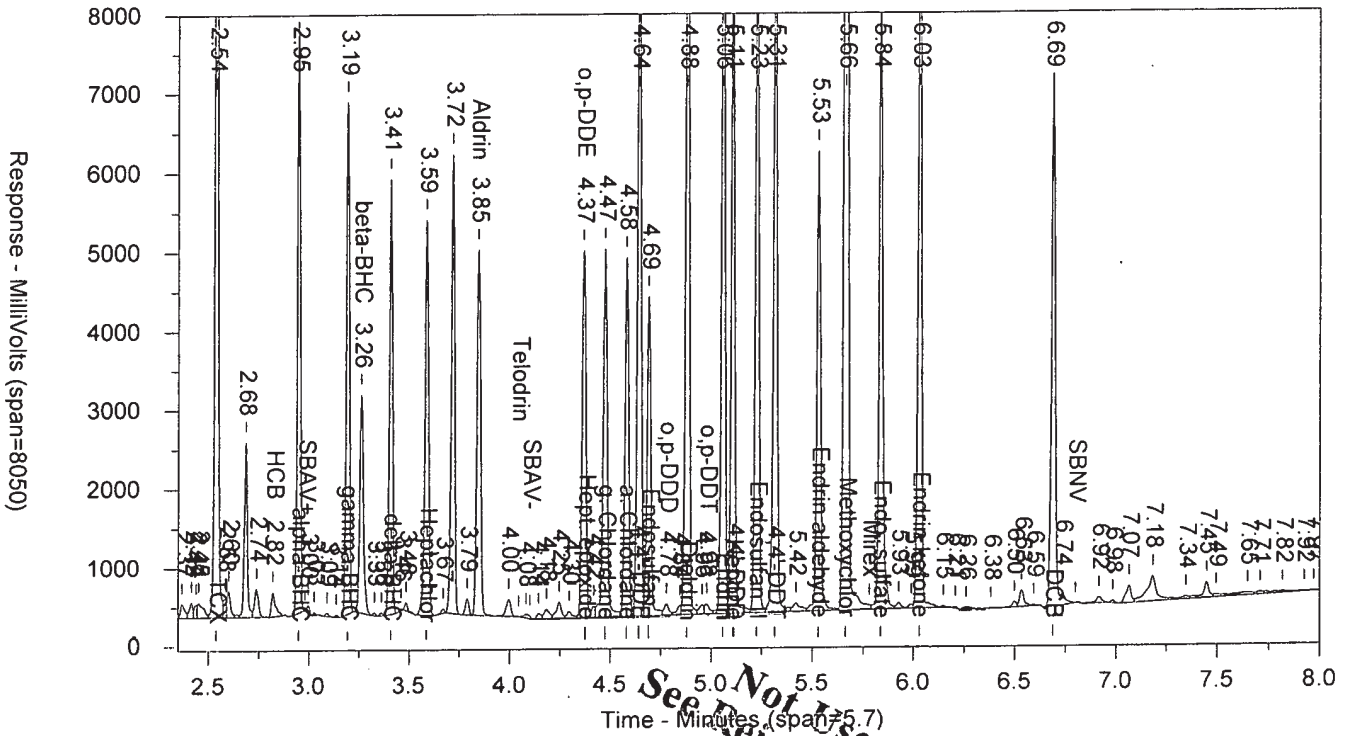
RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.537	15559910	.285	TCX	2.354	67044690	.27	TCX
2.82	313170	.006	HCB	2.683	776982	.004	HCB
2.947	7513696	.096	alpha-BHC	2.769	32241230	.084	alpha-BHC
3.192	6494131	.098	gamma-BHC	3.029	25726510	.082	gamma-BHC
3.26	2767915	.093	beta-BHC	3.094	9918843	.084	beta-BHC
3.407	5519171	.091	delta-BHC	3.322	25363200	.088	delta-BHC
3.587	5020754	.089	Heptachlor	3.367	21007790	.093	Heptachlor
3.846	4647192	.089	Aldrin	3.63	18917770	.082	Aldrin
	0		Telodrin	3.797	354012	.004	Telodrin
	0		Hept. epoxide	4.125	17307490	.1	Hept. epoxide
4.473	4672941	.099	g. Chlordane	4.285	18452240	.102	g. Chlordane
4.368	4661029	.2	o,p-DDE		0		o,p-DDE
4.581	4559305	.097	a. Chlordane	4.406	17620810	.098	a. Chlordane
4.691	4064548	.092	Endosulfan I	4.451	15783360	.099	Endosulfan I
4.643	8545217	.202	4,4'-DDE	4.351	33978840	.187	4,4'-DDE
4.88	9794706	.21	Dieldrin	4.671	39149820	.22	Dieldrin
4.78	140596	.007	o,p-DDD		0		o,p-DDD
5.058	9366036	.213	Endrin	4.907	39293050	.242	Endrin
4.978	128322	.005	o,p-DDT		0		o,p-DDT
5.106	8137366	.419	Kepone	5.003	31434270	.397	Kepone
5.226	8113720	.2	Endosulfan II	5.069	29763870	.198	Endosulfan II
5.315	8727180	.223	4,4'-DDT	5.233	31746950	.22	4,4'-DDT
5.529	5843959	.175	Endrin aldehyde	5.319	25225680	.209	Endrin aldehyde
5.836	7844836	.213	Endo. sulfate	5.516	32399900	.227	Endo. sulfate
5.663	20649160	1.15	Methoxychlor	5.723	73146940	1.16	Methoxychlor
6.03	9351302	.214	Endrin ketone	5.882	26258020	.175	Endrin ketone
6.689	6757775	.246	DCB	6.678	23212750	.239	DCB

Not Used  
See Reintegration

Files:  
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 Area File: 05pest18306010B.049.RAW  
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 Method B: 05PESTDDB.MET  
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 Calibration File B: 05pest1830605b.cal  
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 Format B: pestD5.FMTB  
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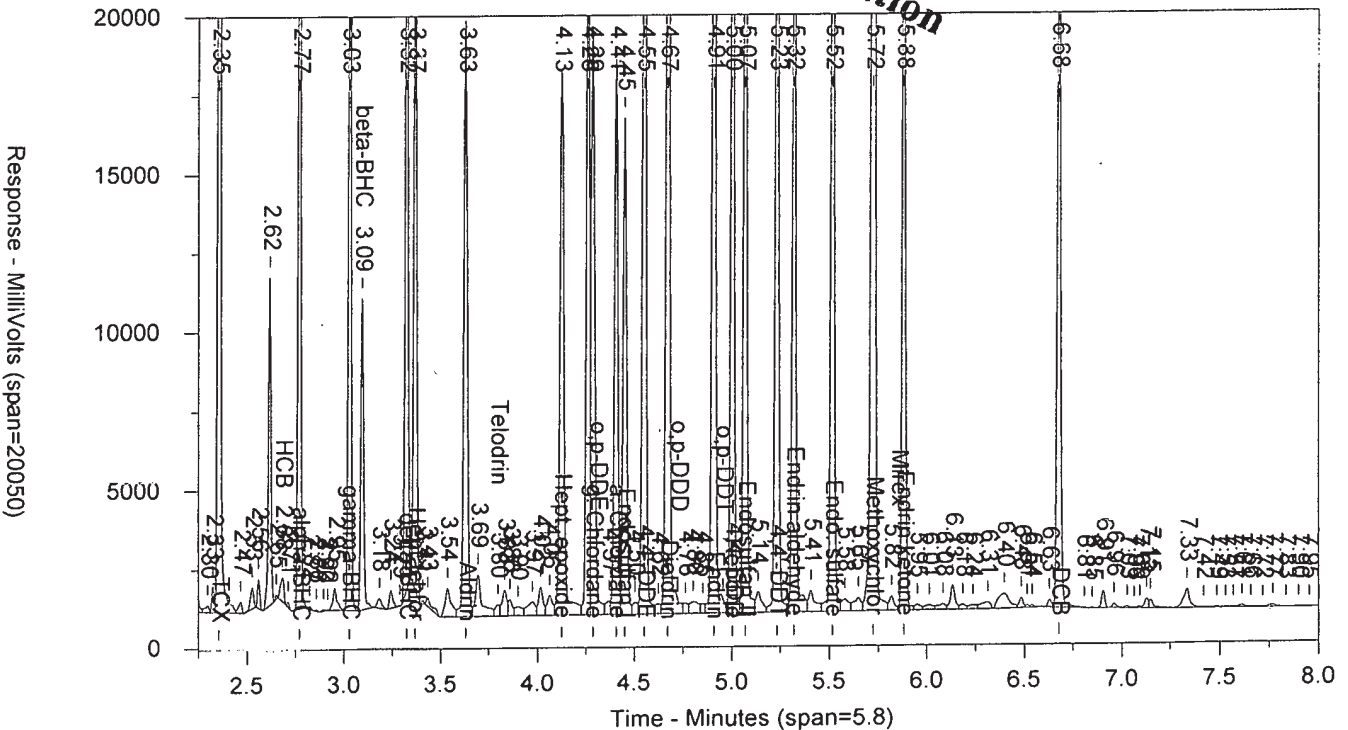
LCSA 11/6/18 F ABLCS09310 LCS 183100009A 10589 SW-846 8081B

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Reintegration

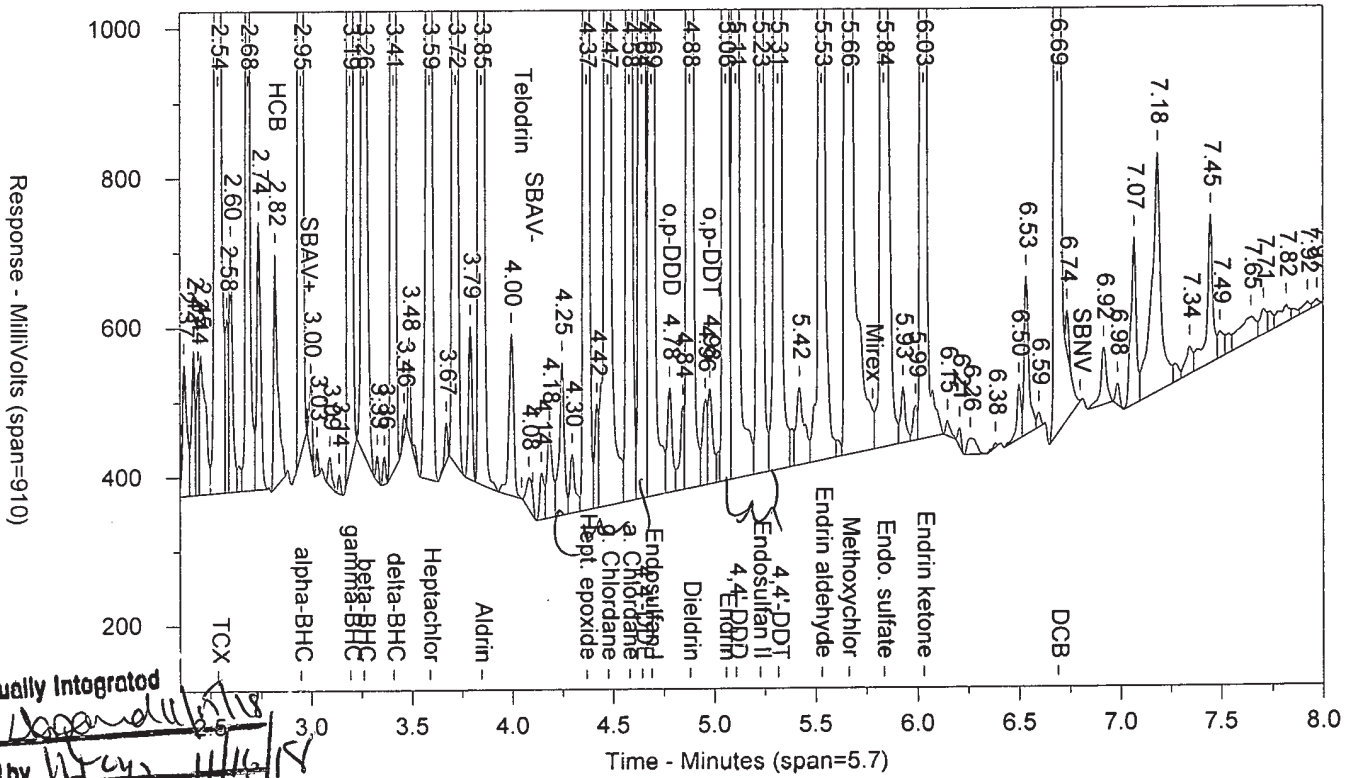
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SW-846 8081B

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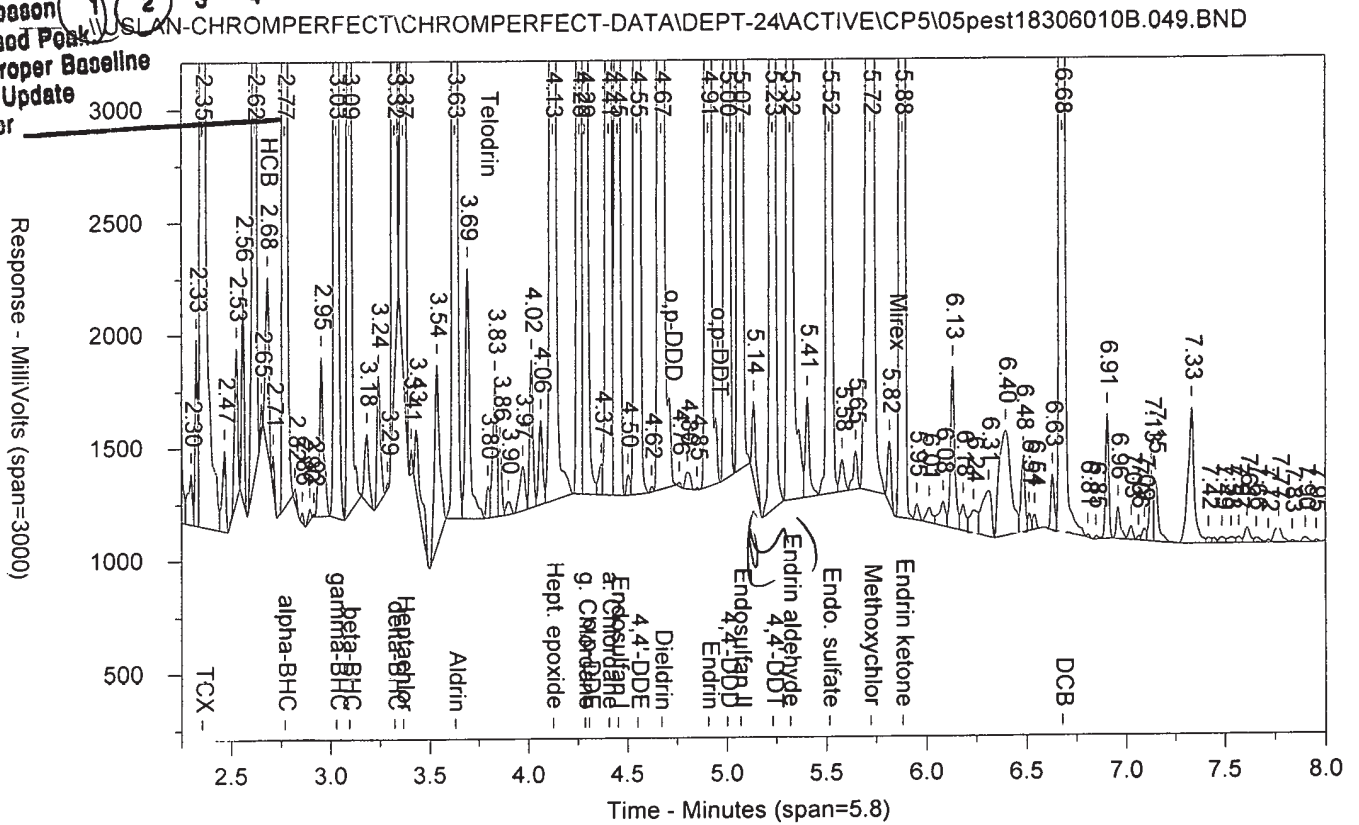
M = Manually Integrated

Analyt *Handwritten signature*

Approved by *Handwritten signature*

Circle Reason

- 1 = Missed Peak
- 2 = Improper Baseline
- 3 = RT Update
- 4 = Other



Chrom Perfect Chromatogram Report

LANCASTER LABORATORIES

Sample Number: LCSA 11/6/18 F ABLCS09310 LCS 183100009A 10589  
 Injected On: 11/14/2018 9:54:17 PM  
 Instrument ID: CP5-9190  
 Oven Parameters: 110c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min  
 Column A ID: STX-CLP 30m x 0.32mm x 0.5um  
 Column B ID: STX-CLP2 30m x 0.32mm x 0.25um  
 Injection Volume: 1 ul

Sample Weight: 250  
 Dilution Factor: 2  
 SW-846 8081B

Threshold: 7  
 Calibration Type: external  
 Quantitation: Height

Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.015	55886	.003	Kepone		0		Kepone
2.537	15559910	.285	TCX	2.354	67044690	.27	TCX
2.82	313170	.006	HCX	2.683	776982	.004	HCX
2.947	7513696	.096	alpha-BHC	2.769	32241230	.084	alpha-BHC
3.192	6494131	.098	gamma-BHC	3.029	25726510	.082	gamma-BHC
3.26	2767915	.093	beta-BHC	3.094	9918843	.084	beta-BHC
3.407	5519171	.091	delta-BHC	3.322	25363200	.088	delta-BHC
3.587	5020754	.089	Heptachlor	3.367	21007790	.093	Heptachlor
3.846	4647192	.089	Aldrin	3.63	18697820	.081	Aldrin
	0		Telodrin	3.797	139610	.002	Telodrin
4.368	4661029	.1	Hept. epoxide	4.125	17031780	.099	Hept. epoxide
4.473	4672941	.099	g. Chlordane	4.285	18156740	.1	g. Chlordane
4.581	4559305	.097	a. Chlordane	4.406	17335890	.097	a. Chlordane
4.691	4064548	.092	Endosulfan I	4.451	15502350	.097	Endosulfan I
4.643	8545217	.202	4,4'-DDE	4.551	33697760	.185	4,4'-DDE
4.88	9794706	.21	Dieldrin	4.671	38853020	.218	Dieldrin
4.78	140596	.007	o,p-DDD		0		o,p-DDD
5.058	9366036	.213	Endrin	4.907	38995560	.24	Endrin
4.978	128322	.005	o,p-DDT		0		o,p-DDT
5.106	8137366	.228	4,4'-DDD	5.003	31102370	.225	4,4'-DDD
5.226	8113720	.2	Endosulfan II	5.069	29396850	.196	Endosulfan II
5.315	8727180	.223	4,4'-DDT	5.233	31566050	.218	4,4'-DDT
5.529	5843959	.175	Endrin aldehyde	5.319	25005890	.207	Endrin aldehyde
5.836	7844836	.213	Endo. sulfate	5.516	32162530	.225	Endo. sulfate
5.663	20649160	1.15	Methoxychlor	5.723	72909050	1.156	Methoxychlor
6.03	9351302	.214	Endrin ketone	5.882	26146540	.174	Endrin ketone
6.689	6757775	.246	DCB	6.678	23212750	.239	DCB

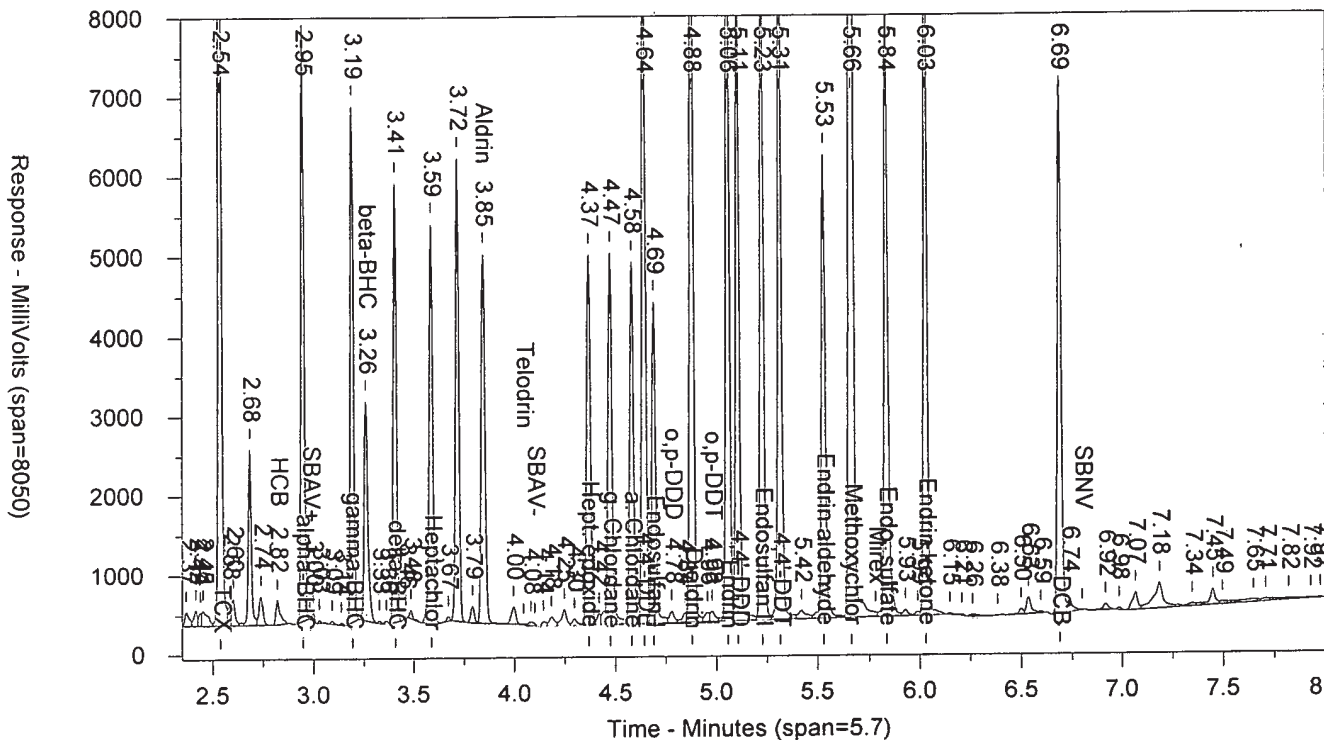
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 Method B: 05PESTDB.MET  
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 Calibration File B: 05pest1830605b.cal  
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 File Reported On: 11/15/2018 at 9:42:07 AM

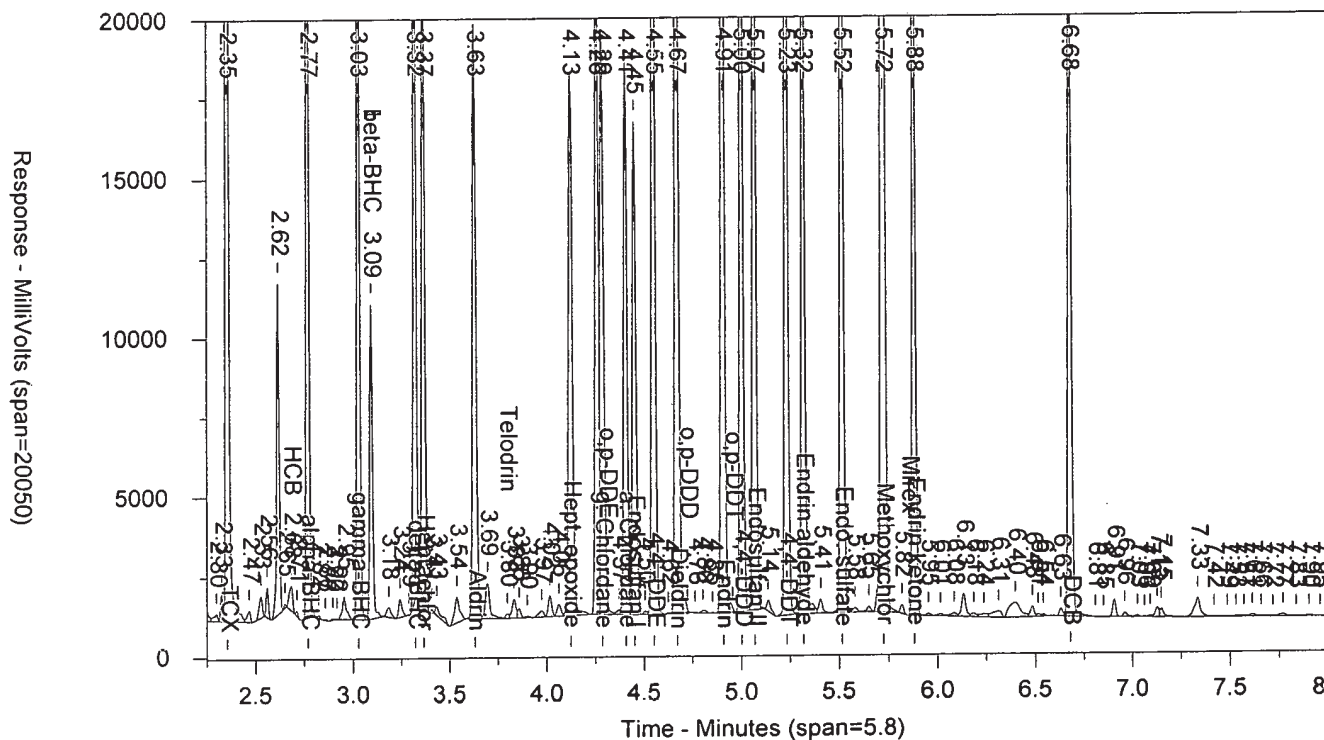


LCSA 11/6/18 F ABLCS09310 LCS 183100009A 10589 SW-846 808

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010.049.BND



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306010B.049.BND



# **Extraction/Distillation/Digestion Logs**

## **Pesticides**

183100009A Tech 1: WTC Tech 2: \_\_\_\_\_

Dept: 24		Prep Analysis: 11120 Pesticide Waters Update IV Ext										QC Pesticides in Water			
QC	Sample Code	Amt (µA)	SS/S Sol.	MS Sol.	Amt (mL)	FV (mL)	pH	BC	Comments	pH	EC	EC	Comments	Solvent Used	Lot No.
9861406MSD	RT01DMSD	245	SS1828324A	MS1830024A	1.0	3	6	153F	Clean	6	153E	153E	Clean	Hexane	176229
9861406MS	RT01DMS	235	SS1828324A	MS1830024A	1.0	2	6	153B	Clean	6	153D	153D	Clean	Methylene Chloride	187001
BLANKA	PBLK09310	250	SS1828324A		1.0	2	6	153E	yellow	6	153E	153E		Sodium Sulfate	183098
LCSA	LCS09310	250	SS1828324A	MS1830024A	1.0	2	6	153B	yellow	6	153B	153B			

Spike Solutions: Witness: MA  
 MS1830024A SW846 SPIKE  
 SS1828324A MINI SEP. SW846 SURR.

Sample #	Sample Code	Amt (µA)	SS/S Sol.	Amt (mL)	FV (mL)	pH	BC	Comments	Analyses	List	Due Date	Prio
1	9861406BKGR	230	SS1828324A	1.0	3	6	153F	Clean	10589	18239	10/30/2018	N
2	9861413 R	241	SS1828324A	1.0	2	6	153B	Clean	10589	18239	10/30/2018	N
3	9881309	246	SS1828324A	1.0	2	6	153B	yellow	10589	25783	11/13/2018	N
4	9881310	247	SS1828324A	1.0	2	6	153E	yellow	10589	25783	11/13/2018	N
5	9881313	248	SS1828324A	1.0	2	6	153B	yellow	10589	25783	11/13/2018	N

\*split w/ 183100010A  
MA 18371  
11/6/18

MA 18371  
11/6/18

Bench#	Bench#	Bench#	Work Station	Balance #	Micro Temp	R-VAP ID	R-VAP ID	R-VAP ID	R-VAP ID	N-Evap	M-vap	183100009A
			<u>Bench 1</u>	<u>25990</u>	<u>100?</u>	<u>1</u>	<u>553</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>183100009A</u>

# Prep-Process Worksheet

Florisil
Prep: 11120 Pesticide Waters Update IV Ext
Batch: 183100009A

Verified: <u>WT 047</u>
Start Date: <u>11/7/11</u>
Start Time: <u>01:45</u>
Tech 1: <u>WT 01</u>
Tech 2: _____

Sample #	Aliquot (mL)	Final Volume (mL)	D.F.		Comments
			Aliq	F.V.	
9861408MSD	2	2			
9861406MS	2	2			
BLANKA	1	1			
LCSA	2	2			

Sample #	QC	Aliquot (mL)	Final Volume (mL)	D.F.		Comments	Analyses
				Aliq	F.V.		
1 9861406		2	2				10589
2 9861413		2	2				10589
3 9881309		1	1				10589
4 9881310		1	1				10589
5 9881313		1	1				10589

*WT 047*

*11/7/11*

Additional Comment: \_\_\_\_\_

DF = Dilution Factor FV = Final Volume

Solvent Used	Lot No.	Solvent Used	Lot No.
<i>10% Acetone</i>	<i>701 110718A</i>		
<i>Florisil</i>	<i>4362355-17</i>		
S-Evap/bath	<i>C</i> S-Evap/bath	<i>C</i>	N-Evap <i>400 C</i>