Appendix H: Eurofins Analytical Reports

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2425 New Holland Pike, Lancaster, PA 17601 | 717-656-2300 | Fax: 717-656-2681 | www.LancasterLabs.com

DoD Type I Data Package

Prepared for:

Tidewater, Inc.
3761 Attucks Drive
Powell OH 43065

Project: Great Kills Park Phase I RI OU2
Surface Water and Water Samples
Collected on 10/18/18-10/19/18

SDG# TID07

GROUP	SAMPLE NUMBERS
2000768	9861916-9861922

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: Dana M. Kauffman

Dana M. Kauffman
Manager

Date: **11/29/2018**

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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Table of Contents for SDG# TID07

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Sample Reference List for SDG Number TID07
with a Data Package Type of I-DOD

43062 - Tidewater, Inc.

Project: Great Kills Park Phase I RI OU2

Lab Sample Number	Client Sample ID	Collection Date	Date Received
9861916	OU2TB101818-001	10/18/2018 08:50	10/20/2018 09:40
9861917	OU2-1-SW001	10/18/2018 10:10	10/20/2018 09:40
9861918	OU2-1-SW003	10/18/2018 11:40	10/20/2018 09:40
9861919	OU2-1-SW004	10/18/2018 13:55	10/20/2018 09:40
9861920	REF-1-SW001	10/18/2018 15:40	10/20/2018 09:40
9861921	OU1-1-SW005	10/19/2018 09:10	10/20/2018 09:40
9861922	OU2-1-SW002	10/19/2018 12:50	10/20/2018 09:40

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Sample pH Log

SDG: TID07

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
9861916	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/31/2018 8:35:15PM	14951
9861917	008A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 9:04:36PM	1201
9861917	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/31/2018 8:35:11PM	14951
9861917	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 1:57:53PM	25804
9861917	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 1:57:26PM	25804
9861917	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:18PM	25804
9861917	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:24PM	25804
9861917	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:31PM	25804
9861917	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:37PM	25804
9861917	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 1:56:33PM	25804
9861917	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 1:56:58PM	25804
9861918	008A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 8:58:01PM	1201
9861918	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/31/2018 8:35:11PM	14951
9861918	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 1:58:46PM	25804
9861918	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 1:58:20PM	25804
9861918	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:49PM	25804
9861918	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:56PM	25804
9861918	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:11:04PM	25804
9861918	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:11:11PM	25804
9861918	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 1:59:59PM	25804
9861918	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 1:59:21PM	25804
9861919	008A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 8:55:47PM	1201
9861919	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/31/2018 8:35:11PM	14951
9861919	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:00:40PM	25804
9861919	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:01:06PM	25804
9861919	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:11:18PM	25804
9861919	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:11:59PM	25804
9861919	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:11:53PM	25804
9861919	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:12:28PM	25804
9861919	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:01:41PM	25804
9861919	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:02:06PM	25804
9861920	008A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 8:56:56PM	1201
9861920	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/31/2018 8:35:11PM	14951
9861920	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:04:02PM	25804
9861920	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:04:35PM	25804
9861920	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:12:15PM	25804
9861920	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:12:12PM	25804
9861920	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:12:08PM	25804

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
9861920	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:12:24PM	25804
9861920	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:03:03PM	25804
9861920	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:03:31PM	25804
9861921	008A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 9:03:21PM	1201
9861921	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/31/2018 8:35:11PM	14951
9861921	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:05:29PM	25804
9861921	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:05:02PM	25804
9861921	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:09:57PM	25804
9861921	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:11PM	25804
9861921	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:09:32PM	25804
9861921	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:09:44PM	25804
9861921	153E		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:09:51PM	25804
9861921	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:05:59PM	25804
9861921	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:06:28PM	25804
9861922	008A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 9:02:28PM	1201
9861922	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/31/2018 8:35:11PM	14951
9861922	043A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:08:45PM	25804
9861922	043B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:09:14PM	25804
9861922	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:09:22PM	25804
9861922	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:09:26PM	25804
9861922	153C		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:09:38PM	25804
9861922	153D		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:43PM	25804
9861922	153E		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	10/20/2018 2:10:04PM	25804
9861922	243A	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:07:50PM	25804
9861922	243B	7	7-9	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	10/20/2018 2:08:15PM	25804

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

****Chlorine Present Code Key**
NA = Chlorine Not Checked
Y = Chlorine Present
N = Chlorine Not Present

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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.

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.

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

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

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

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

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.

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.

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.

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.

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.

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

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.

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

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.

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.

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)

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

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pi□e
Lancaster□PA 17601

Prepared for:

Tidewater□Inc.
3761 Attuc□s Drive
Powell OH 43065

Report Date: November 19□2018 14:17

Project: Great Kills Park Phase I RI OU2

Account □: 43062
Group Number: 2000768
SDG: TID07
PO Number: 2016-007-02
State of Sample Origin: NY

Electronic Copy To	AECOM	Attn: Devon Chicoine
Electronic Copy To	AECOM	Attn: Colleen Scott
Electronic Copy To	Tidewater□Inc.	Attn: Ryan Wensin□
Electronic Copy To	AECOM	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 your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE
OU2TB101818-001 Water	10/18/2018 08:50	9861916
OU2-1-SW001 Grab Surface Water	10/18/2018 10:10	9861917
OU2-1-SW003 Grab Surface Water	10/18/2018 11:40	9861918
OU2-1-SW004 Grab Surface Water	10/18/2018 13:55	9861919
REF-1-SW001 Grab Surface Water	10/18/2018 15:40	9861920
OU1-1-SW005 Grab Surface Water	10/19/2018 09:10	9861921
OU2-1-SW002 Grab Surface Water	10/19/2018 12:50	9861922

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

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Project Name: Great Kills Park Phase I RI OU2
ELLE Group #: 2000768

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: 9861916

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: 9861917, 9861918, 9861919, 9861920, 9861921, 9861922

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: 9861917, 9861918, 9861919, 9861920, 9861922

Z1=The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection, the data is reported.

Z2=The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection, the data is reported.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

Sample #s: 9861921

Z1=The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection, the data is reported.

Z2=The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection, the data is reported.

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

Batch #: 18297WAE026 (Sample number(s): 9861917-9861922)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window:
Hexachlorocyclopentadiene

The recovery(ies) for one or more surrogates were below the acceptance window for sample(s) 9861921

SW-846 8270D SIM, GC/MS Semivolatiles

Sample #s: 9861917, 9861918, 9861919, 9861920, 9861921, 9861922

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The concentrations of the detections in the method blank are below the minimum screening level, therefore the data is reported.

Batch #: 18297WAF026 (Sample number(s): 9861917-9861922)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Phenanthrene

SW-846 8081B, Pesticides

Sample #s: 9861918

The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blank and Labratory Control Spike is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits, the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within

the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Sample #s: 9861917, 9861920, 9861921, 9861922

The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blank and Labratory Control Spike is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits, the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

Z=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Z1=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. The client was contacted and the data reported.

B=Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The client was contacted and the data reported.

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

Sample #s: 9861919

The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blank and Labratory Control Spike is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits, the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

Z=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

Batch #: 182980006A (Sample number(s): 9861917-9861922)

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The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: Endosulfan I

The recovery(ies) for one or more surrogates were below the acceptance window for sample(s) 9861919

SW-846 8151A, Herbicides

Batch #: 182950006A (Sample number(s): 9861917-9861922)

The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: Dinoseb

SW-846 6020A, Metals

Batch #: 182951063904A (Sample number(s): 9861917-9861922 UNSPK: 9861918 BKG: 9861918)

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

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

Batch #: 182951063904B (Sample number(s): 9861917-9861922 UNSPK: 9861918 BKG: 9861918)

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

Batch #: 182951063904D (Sample number(s): 9861917-9861922 UNSPK: 9861918 BKG: 9861918)

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 #: 182970571306 (Sample number(s): 9861917-9861922 UNSPK: 9861917 BKG: 9861917)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Mercury

Sample Description: **OU2TB101818-001 Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 08:50
SDG□: TID07-01TB

Tidewater, Inc.
ELLE Sample #: **WW 9861916**
ELLE Group #: **2000768**
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		ug/l	ug/l	ug/l	ug/l	
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 Tertiary Butyl 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□2□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: **OU2TB101818-001 Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 08:50
SDG□: TID07-01TB

Tidewater, Inc.
ELLE Sample #: WW 9861916
ELLE Group #: 2000768
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		ug/l	ug/l	ug/l	ug/l	
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	Xylene (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%D 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 by SW-846 6010C
Cyclohexanone by SW-846 8260C
Bis(2-chloroethyl)ether by SW-846 8270D/SW-846 8270D SIM
Di-n-butyl phthalate by SW-846 8270D SIM
Hexachlorobenzene by 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 by 8260C	SW-846 8260C 25mL purge	1	H183041AA	10/31/2018 11:41	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H183041AA	10/31/2018 11:41	Kerri E Legerlotz	1

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

Sample Description: **OU2-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		ug/l	ug/l	ug/l	ug/l	
11996	Acetone	67-64-1	2.3 J	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 Tertiary Butyl 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□2□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-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
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	Xylene (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%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.

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	21	31	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□-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1	2	1
	Bis(2-chloroisopropyl) ether CAS □39638-32-9 and 2□2□-Oxybis(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-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
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	21	22	1
14241	2□4-Dinitrophenol	51-28-5	N.D. □2	15	29	31	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	21	31	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	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

□1=The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

□2=The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

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

Sample Description: **OU2-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result		Detection Limit*	Limit of Detection	Limit of Quantitation	DF
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was ta□en: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.							
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	0.05	1
14244	Acenaphthylene	208-96-8	N.D.		0.01	0.03	0.05	1
14244	Anthracene	120-12-7	N.D.		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(□)fluoranthene	207-08-9	N.D.		0.01	0.03	0.05	1
14244	Di-n-butylphthalate	84-74-2	N.D.		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	N.D.		0.01	0.03	0.05	1
14244	Dibenz(a□h)anthracene	53-70-3	N.D.		0.02	0.06	0.07	1
14244	1□4-Dioxane	123-91-1	0.2	J	0.1	0.2	0.3	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		0.08	0.2	1	1
14244	Fluoranthene	206-44-0	N.D.		0.01	0.03	0.05	1
14244	Fluorene	86-73-7	N.D.		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	0.05	J	0.03	0.06	0.07	1
14244	Phenanthrene	85-01-8	N.D.		0.03	0.06	0.07	1
14244	Pyrene	129-00-0	N.D.		0.01	0.03	0.05	1
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample□the data is reported.							
	Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The concentrations of the detections in the method blan□are below the minimum screening level□ therefore the data is reported.							
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10407	2□4-D	94-75-7	N.D.	D2	0.25	0.50	0.60	1
10407	Dalapon	75-99-0	N.D.	D2	1.8	3.6	4.0	1
10407	2□4-DB	94-82-6	N.D.	D1	0.63	1.3	1.5	1
10407	Dicamba	1918-00-9	N.D.	D1	0.080	0.16	0.30	1
10407	Dinoseb	88-85-7	N.D.	D2	0.18	0.40	0.50	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.							

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

Sample Description: **OU2-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Herbicides		**SW-846 8151A**	**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10407	2□4-DP (Dichloroprop)	120-36-5	N.D. D1	0.16	0.32	0.50	1
10407	MCPA	94-74-6	N.D. D1	50	100	200	1
10407	MCPP	93-65-2	N.D. D1	50	100	200	1
10407	2□4□5-T	93-76-5	N.D. D2	0.065	0.13	0.15	1
10407	2□4□5-TP	93-72-1	0.016 JD1	0.010	0.030	0.050	1
PCBs		**SW-846 8082A**	**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10591	PCB-1016	12674-11-2	N.D. D1	0.084	0.25	0.42	1
10591	PCB-1221	11104-28-2	N.D. D1	0.084	0.25	0.42	1
10591	PCB-1232	11141-16-5	N.D. D1	0.17	0.34	0.42	1
10591	PCB-1242	53469-21-9	N.D. D1	0.084	0.25	0.42	1
10591	PCB-1248	12672-29-6	N.D. D1	0.084	0.25	0.42	1
10591	PCB-1254	11097-69-1	N.D. D1	0.084	0.25	0.42	1
10591	PCB-1260	11096-82-5	N.D. D1	0.13	0.25	0.42	1
10591	PCB-1262	37324-23-5	N.D. D1	0.17	0.34	0.42	1
10591	PCB-1268	11100-14-4	N.D. D1	0.13	0.27	0.42	1
Pesticides		**SW-846 8081B**	**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	N.D. D1	0.0017	0.0059	0.0084	1
10589	Alpha BHC	319-84-6	N.D. D1	0.0025	0.0059	0.0084	1
10589	Beta BHC	319-85-7	N.D. VD1	0.014	0.028	0.028	1
10589	Gamma BHC - Lindane	58-89-9	N.D. D1	0.0017	0.0059	0.0084	1
10589	Alpha Chlordane	5103-71-9	0.0037 JD1	0.0025	0.0059	0.0084	1
10589	Chlordane	57-74-9	N.D. □D1	0.13	0.27	0.42	1
10589	Gamma Chlordane	5103-74-2	N.D. □D1	0.0059	0.017	0.017	1
10589	p□p-DDD	72-54-8	N.D. □D1	0.0042	0.0084	0.017	1
10589	p□p-DDE	72-55-9	N.D. D1	0.0042	0.0084	0.017	1
10589	p□p-DDT	50-29-3	0.030 B□1D1	0.0044	0.0084	0.017	1
10589	Delta BHC	319-86-8	N.D. D1	0.0029	0.0059	0.0084	1
10589	Dieldrin	60-57-1	N.D. D1	0.0045	0.0084	0.017	1
10589	Endosulfan I	959-98-8	0.0063 JD1	0.0036	0.0076	0.0084	1
10589	Endosulfan II	33213-65-9	N.D. D1	0.013	0.025	0.025	1
10589	Endosulfan Sulfate	1031-07-8	N.D. □D1	0.0049	0.010	0.017	1
10589	Endrin	72-20-8	N.D. □D1	0.0068	0.017	0.017	1
10589	Endrin Aldehyde	7421-93-4	N.D. D1	0.017	0.034	0.084	1
10589	Endrin Ketone	53494-70-5	N.D. D1	0.0042	0.0084	0.017	1
10589	Heptachlor	76-44-8	N.D. D1	0.0017	0.0059	0.0084	1
10589	Heptachlor Epoxide	1024-57-3	N.D. D1	0.0019	0.0059	0.0084	1
10589	Methoxychlor	72-43-5	N.D. D1	0.025	0.059	0.084	1
10589	Toxaphene	8001-35-2	N.D. □D1	0.25	0.50	0.84	1

The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blan□and Labratory

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

Sample Description: **OU2-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

Control Spi□e is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits□the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

□=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity□and the target analyte(s) is not detected in the sample□the data is reported.

□1=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. The client was contacted and the data reported.

B=Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The client was contacted and the data reported.

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
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
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06023	Aluminum	7429-90-5	0.0771 J	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	N.D.	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.00095 J	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	0.0330	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	60.7	0.0598	0.200	0.700	1
06031	Chromium	7440-47-3	0.0020 J	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0014	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	0.336	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	37.6	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.178	0.0049	0.0080	0.0100	1
06039	Nic□el	7440-02-0	0.0129	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	13.3	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1

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

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Analysis Report

Sample Description: **OU2-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Metals		**SW-846 6020A**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	253	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	0.00050 J	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.00075 J	0.00024	0.00050	0.0010	1
06049	□inc	7440-66-6	0.0108 J	0.0062	0.0120	0.0150	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000055 J	0.000050	0.00010	0.00020	1

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

Sample Description: **OU2-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		ng/l	ng/l	ng/l	ng/l	
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	0.010	0.025	1
12936	123478-HxCDD	39227-28-6	N.D.	0.003	0.010	0.025	1
12936	123678-HxCDD	57653-85-7	N.D.	0.003	0.010	0.025	1
12936	123789-HxCDD	19408-74-3	N.D.	0.003	0.010	0.025	1
12936	1234678-HpCDD	35822-46-9	N.D.	0.005	0.010	0.025	1
12936	OCDD	3268-87-9	0.072 J	0.036	0.073	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	0.010	0.025	1
12936	23478-PeCDF	57117-31-4	N.D.	0.003	0.010	0.025	1
12936	123478-HxCDF	70648-26-9	N.D.	0.003	0.010	0.025	1
12936	123678-HxCDF	57117-44-9	N.D.	0.003	0.010	0.025	1
12936	123789-HxCDF	72918-21-9	N.D.	0.003	0.010	0.025	1
12936	234678-HxCDF	60851-34-5	N.D.	0.003	0.010	0.025	1
12936	1234678-HpCDF	67562-39-4	N.D.	0.003	0.010	0.025	1
12936	1234789-HpCDF	55673-89-7	N.D.	0.003	0.010	0.025	1
12936	OCDF	39001-02-0	N.D.	0.006	0.020	0.050	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	78	40 - 135	0.002
13C12-12378-PeCDD	78	40 - 135	0.01
13C12-123478-HxCDD	74	40 - 135	0.01
13C12-123678-HxCDD	73	40 - 135	0.01
13C12-123789-HxCDD	75	40 - 135	0.01
13C12-1234678-HpCDD	76	40 - 135	0.01
13C12-OCDD	71	40 - 135	0.07
13C12-2378-TCDF	62	40 - 135	0.002
13C12-12378-PeCDF	70	40 - 135	0.01
13C12-23478-PeCDF	76	40 - 135	0.01
13C12-123478-HxCDF	72	40 - 135	0.01
13C12-123678-HxCDF	70	40 - 135	0.01
13C12-234678-HxCDF	70	40 - 135	0.01
13C12-123789-HxCDF	74	40 - 135	0.01
13C12-1234678-HpCDF	72	40 - 135	0.01
13C12-1234789-HpCDF	71	40 - 135	0.01
13C12-OCDF	65	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

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Sample Description: **OU2-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

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-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:
Thorium by SW-846 6010C
Cyclohexanone by SW-846 8260C
Bis(2-chloroethyl)ether by SW-846 8270D/SW-846 8270D SIM
Di-n-butyl phthalate by SW-846 8270D SIM
Hexachlorobenzene by 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 by 8260C	SW-846 8260C 25mL purge	1	H183041AA	10/31/2018 12:02	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H183041AA	10/31/2018 12:02	Kerri E Legerlotz	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18297WAE026	10/31/2018 16:53	Edward C Monborne	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18297WAF026	10/27/2018 21:28	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18297WAF026	10/24/2018 16:30	Osvaldo R Sanchez	1
11010	8270D BNA Extraction	SW-846 3510C	1	18297WAE026	10/24/2018 16:30	Osvaldo R Sanchez	1
10407	Herb water 8151A Master	SW-846 8151A	1	182950006A	10/24/2018 11:35	Richard A Shober	1
10591	PCBs in Water by 8082A	SW-846 8082A	1	182980007A	10/31/2018 10:57	Covenant Mutu□u	1
10589	OC Pesticides in Water	SW-846 8081B	1	182980006A	11/09/2018 23:19	Dylan Schreiner	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	182980007A	10/25/2018 17:45	Kate E Lutte	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	182980006A	10/25/2018 17:45	Kate E Lutte	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	182950006A	10/22/2018 16:00	Ryan J Dowdy	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18299008	10/27/2018 20:24	Michael □iegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	2	18299008	10/26/2018 15:40	Amy Girvin	1
13495	Thorium	SW-846 6010C	1	183061063501	11/09/2018 11:55	Lisa J Coo□e	1
06023	Aluminum	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06024	Antimony	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06026	Barium	SW-846 6020A	1	182951063904D	10/28/2018 00:38	Choon Y Tian	1
06027	Beryllium	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06028	Cadmium	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06029	Calcium	SW-846 6020A	1	182951063904B	10/28/2018 00:38	Choon Y Tian	1
06031	Chromium	SW-846 6020A	1	183061063901A	11/05/2018 18:46	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06033	Copper	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06034	Iron	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06035	Lead	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06036	Magnesium	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06037	Manganese	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06039	Nic□el	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06040	Potassium	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06041	Selenium	SW-846 6020A	1	182951063904B	10/28/2018 00:38	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06043	Sodium	SW-846 6020A	1	182951063904A	10/31/2018 16:34	Bradley M Berlot	1
06045	Thallium	SW-846 6020A	1	182951063904B	10/28/2018 00:38	Choon Y Tian	1
13501	Uranium	SW-846 6020A	1	182951063904A	10/31/2018 16:34	Bradley M Berlot	1

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

Sample Description: **OU2-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 10:10
SDG□: TID07-02

Tidewater, Inc.
ELLE Sample #: WW 9861917
ELLE Group #: 2000768
Matrix: Surface Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
06049	□inc	SW-846 6020A	1	182951063904A	10/28/2018 00:38	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	182970571306	10/25/2018 10:50	Damary Valentin	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	1	182981063502	10/27/2018 15:20	JoElla L Rice	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	2	183061063501	11/05/2018 06:18	Annamaria Kuhns	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	1	182951063904	10/24/2018 05:09	James L Mertz	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	2	183061063901	11/05/2018 05:32	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	182970571306	10/25/2018 06:30	James L Mertz	1

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

Sample Description: **OU2-1-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	3.5 J	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 Tertiary Butyl 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□2□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-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
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	Xylene (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%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.

GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
14241	Aniline	62-53-3	N.D.	3	10	11	1
14241	Benzyl alcohol	100-51-6	N.D.	11	22	33	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.6	1	2	1
14241	Carbazole	86-74-8	N.D.	0.6	1	2	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.6	1	2	1
14241	4-Chloroaniline	106-47-8	N.D.	4	10	11	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.6	1	2	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	0.9	1	1
14241	2-Chlorophenol	95-57-8	N.D.	0.6	1	2	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.6	1	2	1
14241	2□2□-oxybis(1-Chloropropane)	108-60-1	N.D.	0.6	1	2	1
	Bis(2-chloroisopropyl) ether CAS □39638-32-9 and 2□2□-Oxybis(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.	0.6	1	2	1
14241	1□2-Dichlorobenzene	95-50-1	N.D.	0.6	1	2	1
14241	1□3-Dichlorobenzene	541-73-1	N.D.	0.6	1	2	1
14241	1□4-Dichlorobenzene	106-46-7	N.D.	0.6	1	2	1
14241	3□3□-Dichlorobenzidine	91-94-1	N.D.	3	10	11	1

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

Sample Description: **OU2-1-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
14241	2□4-Dichlorophenol	120-83-2	N.D.	0.6	1	2	1
14241	Diethylphthalate	84-66-2	N.D.	2	4	6	1
14241	2□4-Dimethylphenol	105-67-9	N.D.	3	10	11	1
14241	Dimethylphthalate	131-11-3	N.D.	2	4	6	1
14241	4□6-Dinitro-2-methylphenol	534-52-1	N.D.	9	22	23	1
14241	2□4-Dinitrophenol	51-28-5	N.D. □2	15	31	33	1
14241	2□4-Dinitrotoluene	121-14-2	N.D.	1	2	6	1
14241	2□6-Dinitrotoluene	606-20-2	N.D.	0.6	1	2	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.6	1	2	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	6	11	12	1
14241	Hexachloroethane	67-72-1	N.D.	1	2	6	1
14241	Isophorone	78-59-1	N.D.	0.6	1	2	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	0.2	0.6	1
14241	2-Methylphenol	95-48-7	N.D.	0.6	1	2	1
14241	4-Methylphenol	106-44-5	N.D.	0.6	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	7	8	1
14241	3-Nitroaniline	99-09-2	N.D.	3	7	8	1
14241	4-Nitroaniline	100-01-6	N.D.	1	2	3	1
14241	Nitrobenzene	98-95-3	N.D.	0.6	1	2	1
14241	2-Nitrophenol	88-75-5	N.D.	3	10	11	1
14241	4-Nitrophenol	100-02-7	N.D.	11	22	33	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.8	2	3	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.8	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.	6	11	12	1
14241	Pentachlorophenol	87-86-5	N.D. □1	1	4	6	1
14241	Phenol	108-95-2	N.D.	0.6	1	2	1
14241	Pyridine	110-86-1	N.D.	2	4	6	1
14241	1□2□4-Trichlorobenzene	120-82-1	N.D.	0.6	1	2	1
14241	2□4□5-Trichlorophenol	95-95-4	N.D.	0.6	1	2	1
14241	2□4□6-Trichlorophenol	88-06-2	N.D.	0.6	1	2	1

□1=The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

□2=The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

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

Sample Description: **OU2-1-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result		Detection Limit*	Limit of Detection	Limit of Quantitation	DF
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was ta□en: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.							
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
14244	Acenaphthene	83-32-9	0.04	J	0.01	0.03	0.06	1
14244	Acenaphthylene	208-96-8	N.D.		0.01	0.03	0.06	1
14244	Anthracene	120-12-7	N.D.		0.01	0.03	0.06	1
14244	Benzo(a)anthracene	56-55-3	N.D.		0.01	0.03	0.06	1
14244	Benzo(a)pyrene	50-32-8	N.D.		0.01	0.03	0.06	1
14244	Benzo(b)fluoranthene	205-99-2	N.D.		0.01	0.03	0.06	1
14244	Benzo(g□i)perylene	191-24-2	N.D.		0.01	0.03	0.06	1
14244	Benzo(□)fluoranthene	207-08-9	N.D.		0.01	0.03	0.06	1
14244	Di-n-butylphthalate	84-74-2	0.07	J	0.06	0.1	1	1
14244	bis(2-Chloroethyl)ether	111-44-4	N.D.		0.02	0.07	0.08	1
14244	Chrysene	218-01-9	N.D.		0.01	0.03	0.06	1
14244	Dibenz(a□h)anthracene	53-70-3	N.D.		0.02	0.07	0.08	1
14244	1□4-Dioxane	123-91-1	0.1	J	0.1	0.2	0.3	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		0.09	0.2	1	1
14244	Fluoranthene	206-44-0	0.01	J	0.01	0.03	0.06	1
14244	Fluorene	86-73-7	0.02	J	0.01	0.03	0.06	1
14244	Hexachlorobenzene	118-74-1	N.D.		0.01	0.03	0.06	1
14244	Indeno(1□2□3-cd)pyrene	193-39-5	N.D.		0.01	0.03	0.06	1
14244	Naphthalene	91-20-3	0.05	J	0.03	0.07	0.08	1
14244	Phenanthrene	85-01-8	N.D.		0.03	0.07	0.08	1
14244	Pyrene	129-00-0	N.D.		0.01	0.03	0.06	1
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample□the data is reported.							
	Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The concentrations of the detections in the method blan□are below the minimum screening level□ therefore the data is reported.							
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10407	2□4-D	94-75-7	N.D.	D2	0.26	0.52	0.62	1
10407	Dalapon	75-99-0	N.D.	D2	1.9	3.7	4.1	1
10407	2□4-DB	94-82-6	N.D.	D1	0.65	1.3	1.5	1
10407	Dicamba	1918-00-9	N.D.	D1	0.083	0.17	0.31	1
10407	Dinoseb	88-85-7	N.D.	D2	0.19	0.41	0.52	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.							

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

Sample Description: **OU2-1-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Herbicides		**SW-846 8151A**	**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10407	2□4-DP (Dichloroprop)	120-36-5	N.D. D1	0.17	0.33	0.52	1
10407	MCPA	94-74-6	N.D. D1	52	100	210	1
10407	MCPP	93-65-2	N.D. D1	52	100	210	1
10407	2□4□5-T	93-76-5	N.D. D2	0.067	0.13	0.15	1
10407	2□4□5-TP	93-72-1	0.016 JD1	0.010	0.031	0.052	1
PCBs		**SW-846 8082A**	**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10591	PCB-1016	12674-11-2	N.D. D1	0.082	0.24	0.41	1
10591	PCB-1221	11104-28-2	N.D. D1	0.082	0.24	0.41	1
10591	PCB-1232	11141-16-5	N.D. D1	0.16	0.33	0.41	1
10591	PCB-1242	53469-21-9	N.D. D1	0.082	0.24	0.41	1
10591	PCB-1248	12672-29-6	N.D. D1	0.082	0.24	0.41	1
10591	PCB-1254	11097-69-1	N.D. D1	0.082	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
Pesticides		**SW-846 8081B**	**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	N.D. D2	0.0016	0.0057	0.0082	1
10589	Alpha BHC	319-84-6	N.D. D2	0.0024	0.0057	0.0082	1
10589	Beta BHC	319-85-7	0.012 PD1	0.0028	0.0057	0.0082	1
10589	Gamma BHC - Lindane	58-89-9	N.D. D1	0.0016	0.0057	0.0082	1
10589	Alpha Chlordane	5103-71-9	N.D. D1	0.0024	0.0057	0.0082	1
10589	Chlordane	57-74-9	N.D. D2	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. D2	0.0041	0.0082	0.016	1
10589	p□p-DDE	72-55-9	N.D. D1	0.0041	0.0082	0.016	1
10589	p□p-DDT	50-29-3	N.D. D1	0.0042	0.0082	0.016	1
10589	Delta BHC	319-86-8	N.D. D2	0.0028	0.0057	0.0082	1
10589	Dieldrin	60-57-1	N.D. D1	0.0043	0.0082	0.016	1
10589	Endosulfan I	959-98-8	N.D. D2	0.0035	0.0073	0.0082	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	0.0098	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	0.033	0.082	1
10589	Endrin Ketone	53494-70-5	N.D. D1	0.0041	0.0082	0.016	1
10589	Heptachlor	76-44-8	N.D. D2	0.0016	0.0057	0.0082	1
10589	Heptachlor Epoxide	1024-57-3	N.D. D1	0.0019	0.0057	0.0082	1
10589	Methoxychlor	72-43-5	N.D. D1	0.024	0.057	0.082	1
10589	Toxaphene	8001-35-2	N.D. D1	0.24	0.49	0.82	1

The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blan□and Labratory

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

Sample Description: **OU2-1-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

Control Spi□e is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits□the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity□and the target analyte(s) is not detected in the sample□the data is reported.

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
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
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06023	Aluminum	7429-90-5	0.203 J	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	0.00080 J	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0016 J	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	0.308	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	94.6	0.0598	0.200	0.700	1
06031	Chromium	7440-47-3	0.0028 J	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0012	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	3.23	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	0.0020 J	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	86.7	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.645	0.0049	0.0080	0.0100	1
06039	Nic□el	7440-02-0	0.0105	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	29.3	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	677	0.500	2.00	9.00	10
06045	Thallium	7440-28-0	N.D.	0.00011	0.00025	0.00050	1
13501	Uranium	7440-61-1	0.00044 J	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.0021	0.00024	0.00050	0.0010	1
06049	□inc	7440-66-6	0.0224	0.0062	0.0120	0.0150	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
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-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		ng/l	ng/l	ng/l	ng/l	
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	0.006 J	0.004	0.01	0.025	1
12936	OCDD	3268-87-9	0.060 J	0.035	0.071	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	0.002 JQ	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	N.D.	0.006	0.020	0.049	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	82	40 - 135	0.002
13C12-12378-PeCDD	81	40 - 135	0.01
13C12-123478-HxCDD	75	40 - 135	0.01
13C12-123678-HxCDD	75	40 - 135	0.01
13C12-123789-HxCDD	78	40 - 135	0.01
13C12-1234678-HpCDD	82	40 - 135	0.01
13C12-OCDD	79	40 - 135	0.07
13C12-2378-TCDF	63	40 - 135	0.002
13C12-12378-PeCDF	71	40 - 135	0.01
13C12-23478-PeCDF	78	40 - 135	0.01
13C12-123478-HxCDF	72	40 - 135	0.01
13C12-123678-HxCDF	69	40 - 135	0.01
13C12-234678-HxCDF	73	40 - 135	0.01
13C12-123789-HxCDF	74	40 - 135	0.01
13C12-1234678-HpCDF	72	40 - 135	0.01
13C12-1234789-HpCDF	76	40 - 135	0.01
13C12-OCDF	72	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-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

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-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:
Thorium by SW-846 6010C
Cyclohexanone by SW-846 8260C
Bis(2-chloroethyl)ether by SW-846 8270D/SW-846 8270D SIM
Di-n-butyl phthalate by SW-846 8270D SIM
Hexachlorobenzene by 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 by 8260C	SW-846 8260C 25mL purge	1	H183041AA	10/31/2018 12:23	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H183041AA	10/31/2018 12:23	Kerri E Legerlotz	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18297WAE026	10/31/2018 17:20	Edward C Monborne	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18297WAF026	10/27/2018 21:57	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18297WAF026	10/24/2018 16:30	Osvaldo R Sanchez	1
11010	8270D BNA Extraction	SW-846 3510C	1	18297WAE026	10/24/2018 16:30	Osvaldo R Sanchez	1
10407	Herb water 8151A Master	SW-846 8151A	1	182950006A	10/24/2018 13:14	Richard A Shober	1
10591	PCBs in Water by 8082A	SW-846 8082A	1	182980007A	10/31/2018 11:08	Covenant Mutu□u	1
10589	OC Pesticides in Water	SW-846 8081B	1	182980006A	11/09/2018 23:32	Jamie L Brillhart	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	182980007A	10/25/2018 17:45	Kate E Lutte	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	182980006A	10/25/2018 17:45	Kate E Lutte	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	182950006A	10/22/2018 16:00	Ryan J Dowdy	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18299008	10/27/2018 21:20	Michael □iegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	2	18299008	10/26/2018 15:40	Amy Girvin	1
13495	Thorium	SW-846 6010C	1	183061063501	11/09/2018 11:58	Lisa J Coo□e	1
06023	Aluminum	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06024	Antimony	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06026	Barium	SW-846 6020A	1	182951063904D	10/28/2018 00:25	Choon Y Tian	1
06027	Beryllium	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06028	Cadmium	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06029	Calcium	SW-846 6020A	1	182951063904B	10/31/2018 16:09	Bradley M Berlot	1
06031	Chromium	SW-846 6020A	1	183061063901A	11/05/2018 18:48	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06033	Copper	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06034	Iron	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06035	Lead	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06036	Magnesium	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06037	Manganese	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06039	Nic□el	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06040	Potassium	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06041	Selenium	SW-846 6020A	1	182951063904B	10/28/2018 00:25	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06043	Sodium	SW-846 6020A	1	182951063904A	10/31/2018 16:20	Bradley M Berlot	10
06045	Thallium	SW-846 6020A	1	182951063904B	10/28/2018 00:25	Choon Y Tian	1
13501	Uranium	SW-846 6020A	1	182951063904A	10/31/2018 16:09	Bradley M Berlot	1

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

Sample Description: **OU2-1-SW003 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 11:40
SDG□: TID07-03

Tidewater, Inc.
ELLE Sample #: WW 9861918
ELLE Group #: 2000768
Matrix: Surface Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
06049	□inc	SW-846 6020A	1	182951063904A	10/28/2018 00:25	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	182970571306	10/25/2018 11:03	Damary Valentin	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	1	182981063502	10/27/2018 15:20	JoElla L Rice	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	2	183061063501	11/05/2018 06:18	Annamaria Kuhns	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	1	182951063904	10/24/2018 05:09	James L Mertz	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	2	183061063901	11/05/2018 05:32	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	182970571306	10/25/2018 06:30	James L Mertz	1

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

Sample Description: **OU2-1-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	4.2 J	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 Tertiary Butyl 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□2□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-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
11996	Tetrachloroethene	127-18-4	N.D.	0.06	0.2	0.5	1
11996	Toluene	108-88-3	0.2 J	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	Xylene (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%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.

GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
14241	Aniline	62-53-3	N.D.	3	10	11	1
14241	Benzyl alcohol	100-51-6	N.D.	11	22	33	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.6	1	2	1
14241	Carbazole	86-74-8	N.D.	0.6	1	2	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.6	1	2	1
14241	4-Chloroaniline	106-47-8	N.D.	4	10	11	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.6	1	2	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	0.9	1	1
14241	2-Chlorophenol	95-57-8	N.D.	0.6	1	2	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.6	1	2	1
14241	2□2□-oxybis(1-Chloropropane)	108-60-1	N.D.	0.6	1	2	1
	Bis(2-chloroisopropyl) ether CAS □39638-32-9 and 2□2□-Oxybis(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.	0.6	1	2	1
14241	1□2-Dichlorobenzene	95-50-1	N.D.	0.6	1	2	1
14241	1□3-Dichlorobenzene	541-73-1	N.D.	0.6	1	2	1
14241	1□4-Dichlorobenzene	106-46-7	N.D.	0.6	1	2	1
14241	3□3□-Dichlorobenzidine	91-94-1	N.D.	3	10	11	1

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

Sample Description: **OU2-1-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
14241	2□4-Dichlorophenol	120-83-2	N.D.	0.6	1	2	1
14241	Diethylphthalate	84-66-2	N.D.	2	4	6	1
14241	2□4-Dimethylphenol	105-67-9	N.D.	3	10	11	1
14241	Dimethylphthalate	131-11-3	N.D.	2	4	6	1
14241	4□6-Dinitro-2-methylphenol	534-52-1	N.D.	9	22	23	1
14241	2□4-Dinitrophenol	51-28-5	N.D. □2	15	31	33	1
14241	2□4-Dinitrotoluene	121-14-2	N.D.	1	2	6	1
14241	2□6-Dinitrotoluene	606-20-2	N.D.	0.6	1	2	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.6	1	2	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	6	11	12	1
14241	Hexachloroethane	67-72-1	N.D.	1	2	6	1
14241	Isophorone	78-59-1	N.D.	0.6	1	2	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	0.2	0.6	1
14241	2-Methylphenol	95-48-7	N.D.	0.6	1	2	1
14241	4-Methylphenol	106-44-5	N.D.	0.6	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	7	8	1
14241	3-Nitroaniline	99-09-2	N.D.	3	7	8	1
14241	4-Nitroaniline	100-01-6	N.D.	1	2	3	1
14241	Nitrobenzene	98-95-3	N.D.	0.6	1	2	1
14241	2-Nitrophenol	88-75-5	N.D.	3	10	11	1
14241	4-Nitrophenol	100-02-7	N.D.	11	22	33	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.8	2	3	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.8	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.	6	11	12	1
14241	Pentachlorophenol	87-86-5	N.D. □1	1	4	6	1
14241	Phenol	108-95-2	N.D.	0.6	1	2	1
14241	Pyridine	110-86-1	N.D.	2	4	6	1
14241	1□2□4-Trichlorobenzene	120-82-1	N.D.	0.6	1	2	1
14241	2□4□5-Trichlorophenol	95-95-4	N.D.	0.6	1	2	1
14241	2□4□6-Trichlorophenol	88-06-2	N.D.	0.6	1	2	1

□1=The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

□2=The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

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

Sample Description: **OU2-1-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was ta□en: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.						
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	0.06	1
14244	Acenaphthylene	208-96-8	N.D.	0.01	0.03	0.06	1
14244	Anthracene	120-12-7	N.D.	0.01	0.03	0.06	1
14244	Benzo(a)anthracene	56-55-3	N.D.	0.01	0.03	0.06	1
14244	Benzo(a)pyrene	50-32-8	N.D.	0.01	0.03	0.06	1
14244	Benzo(b)fluoranthene	205-99-2	N.D.	0.01	0.03	0.06	1
14244	Benzo(g□h□i)perylene	191-24-2	0.01 J	0.01	0.03	0.06	1
14244	Benzo(□)fluoranthene	207-08-9	N.D.	0.01	0.03	0.06	1
14244	Di-n-butylphthalate	84-74-2	N.D.	0.06	0.1	1	1
14244	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.02	0.07	0.08	1
14244	Chrysene	218-01-9	N.D.	0.01	0.03	0.06	1
14244	Dibenz(a□h)anthracene	53-70-3	N.D.	0.02	0.07	0.08	1
14244	1□4-Dioxane	123-91-1	0.2 J	0.1	0.2	0.3	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	0.09	0.2	1	1
14244	Fluoranthene	206-44-0	N.D.	0.01	0.03	0.06	1
14244	Fluorene	86-73-7	N.D.	0.01	0.03	0.06	1
14244	Hexachlorobenzene	118-74-1	N.D.	0.01	0.03	0.06	1
14244	Indeno(1□2□3-cd)pyrene	193-39-5	N.D.	0.01	0.03	0.06	1
14244	Naphthalene	91-20-3	N.D.	0.03	0.07	0.08	1
14244	Phenanthrene	85-01-8	N.D.	0.03	0.07	0.08	1
14244	Pyrene	129-00-0	N.D.	0.01	0.03	0.06	1
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample□the data is reported.						
	Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The concentrations of the detections in the method blan□are below the minimum screening level□ therefore the data is reported.						
Herbicides	**SW-846 8151A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10407	2□4-D	94-75-7	N.D. D2	0.26	0.52	0.62	1
10407	Dalapon	75-99-0	N.D. D2	1.9	3.7	4.1	1
10407	2□4-DB	94-82-6	N.D. D2	0.65	1.3	1.6	1
10407	Dicamba	1918-00-9	N.D. D1	0.083	0.17	0.31	1
10407	Dinoseb	88-85-7	N.D. D1	0.19	0.41	0.52	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						

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

Sample Description: **OU2-1-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Herbicides	**SW-846 8151A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10407	2□4-DP (Dichloroprop)	120-36-5	N.D. D1	0.17	0.33	0.52	1
10407	MCPA	94-74-6	N.D. D1	52	100	210	1
10407	MCPP	93-65-2	N.D. D1	52	100	210	1
10407	2□4□5-T	93-76-5	N.D. D2	0.067	0.13	0.16	1
10407	2□4□5-TP	93-72-1	N.D. VD2	0.024	0.048	0.052	1
PCBs	**SW-846 8082A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10591	PCB-1016	12674-11-2	N.D. D1	0.085	0.26	0.43	1
10591	PCB-1221	11104-28-2	N.D. D1	0.085	0.26	0.43	1
10591	PCB-1232	11141-16-5	N.D. D1	0.17	0.34	0.43	1
10591	PCB-1242	53469-21-9	N.D. D1	0.085	0.26	0.43	1
10591	PCB-1248	12672-29-6	N.D. D1	0.085	0.26	0.43	1
10591	PCB-1254	11097-69-1	N.D. D1	0.085	0.26	0.43	1
10591	PCB-1260	11096-82-5	N.D. D1	0.13	0.26	0.43	1
10591	PCB-1262	37324-23-5	N.D. D1	0.17	0.34	0.43	1
10591	PCB-1268	11100-14-4	N.D. D1	0.14	0.27	0.43	1
Pesticides	**SW-846 8081B**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	N.D. D1	0.0017	0.0060	0.0085	1
10589	Alpha BHC	319-84-6	N.D. D1	0.0026	0.0060	0.0085	1
10589	Beta BHC	319-85-7	0.0061 JPD1	0.0029	0.0060	0.0085	1
10589	Gamma BHC - Lindane	58-89-9	0.0022 JD1	0.0017	0.0060	0.0085	1
10589	Alpha Chlordane	5103-71-9	N.D. D1	0.0026	0.0060	0.0085	1
10589	Chlordane	57-74-9	N.D. □D1	0.14	0.27	0.43	1
10589	Gamma Chlordane	5103-74-2	N.D. □D1	0.0060	0.017	0.017	1
10589	p□p-DDD	72-54-8	N.D. □D1	0.0043	0.0085	0.017	1
10589	p□p-DDE	72-55-9	N.D. D1	0.0043	0.0085	0.017	1
10589	p□p-DDT	50-29-3	N.D. □D1	0.0044	0.0085	0.017	1
10589	Delta BHC	319-86-8	N.D. D1	0.0029	0.0060	0.0085	1
10589	Dieldrin	60-57-1	N.D. D1	0.0045	0.0085	0.017	1
10589	Endosulfan I	959-98-8	N.D. D1	0.0037	0.0077	0.0085	1
10589	Endosulfan II	33213-65-9	N.D. D1	0.013	0.026	0.026	1
10589	Endosulfan Sulfate	1031-07-8	N.D. □D1	0.0049	0.010	0.017	1
10589	Endrin	72-20-8	N.D. □D1	0.0069	0.017	0.017	1
10589	Endrin Aldehyde	7421-93-4	N.D. D1	0.017	0.034	0.085	1
10589	Endrin Ketone	53494-70-5	N.D. D1	0.0043	0.0085	0.017	1
10589	Heptachlor	76-44-8	N.D. D1	0.0017	0.0060	0.0085	1
10589	Heptachlor Epoxide	1024-57-3	N.D. D1	0.0020	0.0060	0.0085	1
10589	Methoxychlor	72-43-5	N.D. D1	0.026	0.060	0.085	1
10589	Toxaphene	8001-35-2	N.D. □D1	0.26	0.51	0.85	1

The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blan□and Labratory

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

Sample Description: **OU2-1-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

Control Spi□e is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits□the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

□=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity□and the target analyte(s) is not detected in the sample□the data is reported.

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
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
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06023	Aluminum	7429-90-5	N.D.	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	0.00085 J	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0032	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	0.138	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	0.00033 J	0.00015	0.00050	0.0010	1
06029	Calcium	7440-70-2	25.2	0.0598	0.200	0.700	1
06031	Chromium	7440-47-3	0.0178	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0015	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	0.0178 J	0.0099	0.0200	0.0400	1
06034	Iron	7439-89-6	6.25	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	0.0087	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	13.0	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.0673	0.0049	0.0080	0.0100	1
06039	Nic□el	7440-02-0	0.0187	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	7.00	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	0.00030 J	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	47.2	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	0.00020 J	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.0053	0.00024	0.00050	0.0010	1
06049	□inc	7440-66-6	0.0396	0.0062	0.0120	0.0150	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	

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

Sample Description: **OU2-1-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Metals		**SW-846 7470A**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
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-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		ng/l	ng/l	ng/l	ng/l	
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	0.010	0.025	1
12936	123478-HxCDD	39227-28-6	N.D.	0.003	0.010	0.025	1
12936	123678-HxCDD	57653-85-7	N.D.	0.003	0.010	0.025	1
12936	123789-HxCDD	19408-74-3	N.D.	0.003	0.010	0.025	1
12936	1234678-HpCDD	35822-46-9	N.D.	0.005	0.010	0.025	1
12936	OCDD	3268-87-9	N.D.	0.036	0.073	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	0.010	0.025	1
12936	23478-PeCDF	57117-31-4	N.D.	0.003	0.010	0.025	1
12936	123478-HxCDF	70648-26-9	N.D.	0.003	0.010	0.025	1
12936	123678-HxCDF	57117-44-9	N.D.	0.003	0.010	0.025	1
12936	123789-HxCDF	72918-21-9	N.D.	0.003	0.010	0.025	1
12936	234678-HxCDF	60851-34-5	N.D.	0.003	0.010	0.025	1
12936	1234678-HpCDF	67562-39-4	N.D.	0.003	0.010	0.025	1
12936	1234789-HpCDF	55673-89-7	N.D.	0.003	0.010	0.025	1
12936	OCDF	39001-02-0	N.D.	0.006	0.020	0.050	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	61	40 - 135	0.002
13C12-12378-PeCDD	65	40 - 135	0.01
13C12-123478-HxCDD	62	40 - 135	0.01
13C12-123678-HxCDD	61	40 - 135	0.01
13C12-123789-HxCDD	64	40 - 135	0.01
13C12-1234678-HpCDD	65	40 - 135	0.01
13C12-OCDD	62	40 - 135	0.07
13C12-2378-TCDF	48	40 - 135	0.002
13C12-12378-PeCDF	57	40 - 135	0.01
13C12-23478-PeCDF	61	40 - 135	0.01
13C12-123478-HxCDF	58	40 - 135	0.01
13C12-123678-HxCDF	57	40 - 135	0.01
13C12-234678-HxCDF	59	40 - 135	0.01
13C12-123789-HxCDF	66	40 - 135	0.01
13C12-1234678-HpCDF	61	40 - 135	0.01
13C12-1234789-HpCDF	61	40 - 135	0.01
13C12-OCDF	57	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-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

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-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:
Thorium by SW-846 6010C
Cyclohexanone by SW-846 8260C
Bis(2-chloroethyl)ether by SW-846 8270D/SW-846 8270D SIM
Di-n-butyl phthalate by SW-846 8270D SIM
Hexachlorobenzene by 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 by 8260C	SW-846 8260C 25mL purge	1	H183041AA	10/31/2018 12:44	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H183041AA	10/31/2018 12:44	Kerri E Legerlotz	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18297WAE026	10/31/2018 17:48	Edward C Monborne	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18297WAF026	10/27/2018 22:27	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18297WAF026	10/24/2018 16:30	Osvaldo R Sanchez	1
11010	8270D BNA Extraction	SW-846 3510C	1	18297WAE026	10/24/2018 16:30	Osvaldo R Sanchez	1
10407	Herb water 8151A Master	SW-846 8151A	1	182950006A	10/24/2018 13:47	Richard A Shober	1
10591	PCBs in Water by 8082A	SW-846 8082A	1	182980007A	10/31/2018 11:19	Covenant Mutu□u	1
10589	OC Pesticides in Water	SW-846 8081B	1	182980006A	11/09/2018 23:45	Dylan Schreiner	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	182980007A	10/25/2018 17:45	Kate E Lutte	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	182980006A	10/25/2018 17:45	Kate E Lutte	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	182950006A	10/22/2018 16:00	Ryan J Dowdy	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18299008	10/28/2018 01:25	Michael □iegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	2	18299008	10/26/2018 15:40	Amy Girvin	1
13495	Thorium	SW-846 6010C	1	183061063501	11/09/2018 12:06	Lisa J Coo□e	1
06023	Aluminum	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06024	Antimony	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06026	Barium	SW-846 6020A	1	182951063904D	10/28/2018 00:40	Choon Y Tian	1
06027	Beryllium	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06028	Cadmium	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06029	Calcium	SW-846 6020A	1	182951063904B	10/28/2018 00:40	Choon Y Tian	1
06031	Chromium	SW-846 6020A	1	183061063901A	11/05/2018 18:54	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06033	Copper	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06034	Iron	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06035	Lead	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06036	Magnesium	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06037	Manganese	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06039	Nic□el	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06040	Potassium	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06041	Selenium	SW-846 6020A	1	182951063904B	10/28/2018 00:40	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06043	Sodium	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	182951063904B	10/28/2018 00:40	Choon Y Tian	1
13501	Uranium	SW-846 6020A	1	182951063904A	10/31/2018 16:38	Bradley M Berlot	1

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

Sample Description: **OU2-1-SW004 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 13:55
SDG□: TID07-04

Tidewater, Inc.
ELLE Sample #: WW 9861919
ELLE Group #: 2000768
Matrix: Surface Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
06049	□inc	SW-846 6020A	1	182951063904A	10/28/2018 00:40	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	182970571306	10/25/2018 11:05	Damary Valentin	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	1	182981063502	10/27/2018 15:20	JoElla L Rice	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	2	183061063501	11/05/2018 06:18	Annamaria Kuhns	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	1	182951063904	10/24/2018 05:09	James L Mertz	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	2	183061063901	11/05/2018 05:32	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	182970571306	10/25/2018 06:30	James L Mertz	1

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

Sample Description: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		ug/l	ug/l	ug/l	ug/l	
11996	Acetone	67-64-1	2.1 J	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 Tertiary Butyl 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□2□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: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
11996	Tetrachloroethene	127-18-4	N.D.	0.06	0.2	0.5	1
11996	Toluene	108-88-3	0.1 J	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	Xylene (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%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.

GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
14241	Aniline	62-53-3	N.D.	3	10	11	1
14241	Benzyl alcohol	100-51-6	N.D.	11	22	34	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.6	1	2	1
14241	Carbazole	86-74-8	N.D.	0.6	1	2	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.6	1	2	1
14241	4-Chloroaniline	106-47-8	N.D.	4	10	11	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.6	1	2	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	0.9	1	1
14241	2-Chlorophenol	95-57-8	N.D.	0.6	1	2	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.6	1	2	1
14241	2□2□-oxybis(1-Chloropropane)	108-60-1	N.D.	0.6	1	2	1
	Bis(2-chloroisopropyl) ether CAS □39638-32-9 and 2□2□-Oxybis(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.	0.6	1	2	1
14241	1□2-Dichlorobenzene	95-50-1	N.D.	0.6	1	2	1
14241	1□3-Dichlorobenzene	541-73-1	N.D.	0.6	1	2	1
14241	1□4-Dichlorobenzene	106-46-7	N.D.	0.6	1	2	1
14241	3□3□-Dichlorobenzidine	91-94-1	N.D.	3	10	11	1

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

Sample Description: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
14241	2□4-Dichlorophenol	120-83-2	N.D.	0.6	1	2	1
14241	Diethylphthalate	84-66-2	N.D.	2	4	6	1
14241	2□4-Dimethylphenol	105-67-9	N.D.	3	10	11	1
14241	Dimethylphthalate	131-11-3	N.D.	2	4	6	1
14241	4□6-Dinitro-2-methylphenol	534-52-1	N.D.	9	22	24	1
14241	2□4-Dinitrophenol	51-28-5	N.D. □2	16	31	34	1
14241	2□4-Dinitrotoluene	121-14-2	N.D.	1	2	6	1
14241	2□6-Dinitrotoluene	606-20-2	N.D.	0.6	1	2	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.6	1	2	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	6	11	12	1
14241	Hexachloroethane	67-72-1	N.D.	1	2	6	1
14241	Isophorone	78-59-1	N.D.	0.6	1	2	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	0.2	0.6	1
14241	2-Methylphenol	95-48-7	N.D.	0.6	1	2	1
14241	4-Methylphenol	106-44-5	N.D.	0.6	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	7	8	1
14241	3-Nitroaniline	99-09-2	N.D.	3	7	8	1
14241	4-Nitroaniline	100-01-6	N.D.	1	2	3	1
14241	Nitrobenzene	98-95-3	N.D.	0.6	1	2	1
14241	2-Nitrophenol	88-75-5	N.D.	3	10	11	1
14241	4-Nitrophenol	100-02-7	N.D.	11	22	34	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.8	2	3	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.8	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.	6	11	12	1
14241	Pentachlorophenol	87-86-5	N.D. □1	1	4	6	1
14241	Phenol	108-95-2	N.D.	0.6	1	2	1
14241	Pyridine	110-86-1	N.D.	2	4	6	1
14241	1□2□4-Trichlorobenzene	120-82-1	N.D.	0.6	1	2	1
14241	2□4□5-Trichlorophenol	95-95-4	N.D.	0.6	1	2	1
14241	2□4□6-Trichlorophenol	88-06-2	N.D.	0.6	1	2	1

□1=The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

□2=The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

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

Sample Description: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result		Detection Limit*	Limit of Detection	Limit of Quantitation	DF
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was ta□en: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.							
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	0.06	1
14244	Acenaphthylene	208-96-8	N.D.		0.01	0.03	0.06	1
14244	Anthracene	120-12-7	N.D.		0.01	0.03	0.06	1
14244	Benzo(a)anthracene	56-55-3	N.D.		0.01	0.03	0.06	1
14244	Benzo(a)pyrene	50-32-8	N.D.		0.01	0.03	0.06	1
14244	Benzo(b)fluoranthene	205-99-2	N.D.		0.01	0.03	0.06	1
14244	Benzo(g□h□i)perylene	191-24-2	N.D.		0.01	0.03	0.06	1
14244	Benzo(□)fluoranthene	207-08-9	N.D.		0.01	0.03	0.06	1
14244	Di-n-butylphthalate	84-74-2	N.D.		0.06	0.1	1	1
14244	bis(2-Chloroethyl)ether	111-44-4	N.D.		0.02	0.07	0.08	1
14244	Chrysene	218-01-9	N.D.		0.01	0.03	0.06	1
14244	Dibenz(a□h)anthracene	53-70-3	N.D.		0.02	0.07	0.08	1
14244	1□4-Dioxane	123-91-1	0.2	J	0.1	0.2	0.3	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		0.09	0.2	1	1
14244	Fluoranthene	206-44-0	N.D.		0.01	0.03	0.06	1
14244	Fluorene	86-73-7	N.D.		0.01	0.03	0.06	1
14244	Hexachlorobenzene	118-74-1	N.D.		0.01	0.03	0.06	1
14244	Indeno(1□2□3-cd)pyrene	193-39-5	N.D.		0.01	0.03	0.06	1
14244	Naphthalene	91-20-3	0.2		0.03	0.07	0.08	1
14244	Phenanthrene	85-01-8	N.D.		0.03	0.07	0.08	1
14244	Pyrene	129-00-0	N.D.		0.01	0.03	0.06	1
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample□the data is reported.							
	Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The concentrations of the detections in the method blan□are below the minimum screening level□ therefore the data is reported.							
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10407	2□4-D	94-75-7	N.D.	D2	0.26	0.52	0.63	1
10407	Dalapon	75-99-0	N.D.	D2	1.9	3.8	4.2	1
10407	2□4-DB	94-82-6	N.D.	D2	0.66	1.4	1.6	1
10407	Dicamba	1918-00-9	N.D.	D1	0.084	0.17	0.31	1
10407	Dinoseb	88-85-7	N.D.	D2	0.19	0.42	0.52	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.							

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

Sample Description: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Herbicides	**SW-846 8151A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10407	2□4-DP (Dichloroprop)	120-36-5	N.D. D1	0.17	0.34	0.52	1
10407	MCPA	94-74-6	N.D. D1	52	100	210	1
10407	MCPP	93-65-2	N.D. D1	52	100	210	1
10407	2□4□5-T	93-76-5	N.D. D1	0.068	0.14	0.16	1
10407	2□4□5-TP	93-72-1	0.020 JD2	0.010	0.031	0.052	1
PCBs	**SW-846 8082A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10591	PCB-1016	12674-11-2	N.D. D1	0.090	0.27	0.45	1
10591	PCB-1221	11104-28-2	N.D. D1	0.090	0.27	0.45	1
10591	PCB-1232	11141-16-5	N.D. D1	0.18	0.36	0.45	1
10591	PCB-1242	53469-21-9	N.D. D1	0.090	0.27	0.45	1
10591	PCB-1248	12672-29-6	N.D. D1	0.090	0.27	0.45	1
10591	PCB-1254	11097-69-1	N.D. D1	0.090	0.27	0.45	1
10591	PCB-1260	11096-82-5	N.D. D1	0.13	0.27	0.45	1
10591	PCB-1262	37324-23-5	N.D. D1	0.18	0.36	0.45	1
10591	PCB-1268	11100-14-4	N.D. D1	0.14	0.29	0.45	1
Pesticides	**SW-846 8081B**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	N.D. D1	0.0018	0.0063	0.0090	1
10589	Alpha BHC	319-84-6	N.D. D1	0.0027	0.0063	0.0090	1
10589	Beta BHC	319-85-7	0.017 PD2	0.0030	0.0063	0.0090	1
10589	Gamma BHC - Lindane	58-89-9	N.D. D1	0.0018	0.0063	0.0090	1
10589	Alpha Chlordane	5103-71-9	N.D. D1	0.0027	0.0063	0.0090	1
10589	Chlordane	57-74-9	N.D. □D1	0.14	0.29	0.45	1
10589	Gamma Chlordane	5103-74-2	N.D. □D1	0.0063	0.018	0.018	1
10589	p□p-DDD	72-54-8	N.D. □D1	0.0045	0.0090	0.018	1
10589	p□p-DDE	72-55-9	N.D. D1	0.0045	0.0090	0.018	1
10589	p□p-DDT	50-29-3	0.0083 JB□1D1	0.0047	0.0090	0.018	1
10589	Delta BHC	319-86-8	N.D. D1	0.0030	0.0063	0.0090	1
10589	Dieldrin	60-57-1	N.D. D1	0.0048	0.0090	0.018	1
10589	Endosulfan I	959-98-8	0.0068 JD1	0.0039	0.0081	0.0090	1
10589	Endosulfan II	33213-65-9	N.D. D1	0.013	0.027	0.027	1
10589	Endosulfan Sulfate	1031-07-8	N.D. □D1	0.0052	0.011	0.018	1
10589	Endrin	72-20-8	N.D. □D1	0.0073	0.018	0.018	1
10589	Endrin Aldehyde	7421-93-4	N.D. D1	0.018	0.036	0.090	1
10589	Endrin Ketone	53494-70-5	N.D. D1	0.0045	0.0090	0.018	1
10589	Heptachlor	76-44-8	N.D. D1	0.0018	0.0063	0.0090	1
10589	Heptachlor Epoxide	1024-57-3	N.D. D1	0.0021	0.0063	0.0090	1
10589	Methoxychlor	72-43-5	N.D. D1	0.027	0.063	0.090	1
10589	Toxaphene	8001-35-2	N.D. □D1	0.27	0.54	0.90	1

The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blan□and Labratory

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

Sample Description: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

Control Spi□e is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits□the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

□=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity□and the target analyte(s) is not detected in the sample□the data is reported.

□1=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. The client was contacted and the data reported.

B=Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The client was contacted and the data reported.

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
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
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06023	Aluminum	7429-90-5	N.D.	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	N.D.	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0012 J	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	0.143	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	83.0	0.0598	0.200	0.700	1
06031	Chromium	7440-47-3	0.0010 J	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0012	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	1.18	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	27.0	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.907	0.0049	0.0080	0.0100	1
06039	Nic□el	7440-02-0	0.0099	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	5.44	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1

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

Sample Description: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Metals		**SW-846 6020A**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	61.4	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	0.00033 J	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.00046 J	0.00024	0.00050	0.0010	1
06049	□inc	7440-66-6	N.D.	0.0062	0.0120	0.0150	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
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: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		ng/l	ng/l	ng/l	ng/l	
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	0.011	0.026	1
12936	123478-HxCDD	39227-28-6	N.D.	0.003	0.011	0.026	1
12936	123678-HxCDD	57653-85-7	N.D.	0.003	0.011	0.026	1
12936	123789-HxCDD	19408-74-3	N.D.	0.003	0.011	0.026	1
12936	1234678-HpCDD	35822-46-9	N.D.	0.005	0.011	0.026	1
12936	OCDD	3268-87-9	N.D.	0.038	0.076	0.12	1
12936	2378-TCDF	51207-31-9	N.D.	0.0009	0.002	0.005	1
12936	12378-PeCDF	57117-41-6	N.D.	0.003	0.011	0.026	1
12936	23478-PeCDF	57117-31-4	N.D.	0.003	0.011	0.026	1
12936	123478-HxCDF	70648-26-9	N.D.	0.003	0.011	0.026	1
12936	123678-HxCDF	57117-44-9	N.D.	0.003	0.011	0.026	1
12936	123789-HxCDF	72918-21-9	N.D.	0.003	0.011	0.026	1
12936	234678-HxCDF	60851-34-5	N.D.	0.003	0.011	0.026	1
12936	1234678-HpCDF	67562-39-4	N.D.	0.003	0.011	0.026	1
12936	1234789-HpCDF	55673-89-7	N.D.	0.003	0.011	0.026	1
12936	OCDF	39001-02-0	N.D.	0.006	0.021	0.053	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	81	40 - 135	0.002
13C12-12378-PeCDD	83	40 - 135	0.01
13C12-123478-HxCDD	78	40 - 135	0.01
13C12-123678-HxCDD	79	40 - 135	0.01
13C12-123789-HxCDD	81	40 - 135	0.01
13C12-1234678-HpCDD	84	40 - 135	0.01
13C12-OCDD	80	40 - 135	0.08
13C12-2378-TCDF	64	40 - 135	0.002
13C12-12378-PeCDF	73	40 - 135	0.01
13C12-23478-PeCDF	79	40 - 135	0.01
13C12-123478-HxCDF	73	40 - 135	0.01
13C12-123678-HxCDF	71	40 - 135	0.01
13C12-234678-HxCDF	73	40 - 135	0.01
13C12-123789-HxCDF	78	40 - 135	0.01
13C12-1234678-HpCDF	78	40 - 135	0.01
13C12-1234789-HpCDF	77	40 - 135	0.01
13C12-OCDF	72	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: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

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: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:
Thorium by SW-846 6010C
Cyclohexanone by SW-846 8260C
Bis(2-chloroethyl)ether by SW-846 8270D/SW-846 8270D SIM
Di-n-butyl phthalate by SW-846 8270D SIM
Hexachlorobenzene by 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 by 8260C	SW-846 8260C 25mL purge	1	H183041AA	10/31/2018 13:06	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H183041AA	10/31/2018 13:06	Kerri E Legerlotz	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18297WAE026	10/31/2018 18:15	Edward C Monborne	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18297WAF026	10/27/2018 22:56	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18297WAF026	10/24/2018 16:30	Osvaldo R Sanchez	1
11010	8270D BNA Extraction	SW-846 3510C	1	18297WAE026	10/24/2018 16:30	Osvaldo R Sanchez	1
10407	Herb water 8151A Master	SW-846 8151A	1	182950006A	10/24/2018 14:20	Richard A Shober	1
10591	PCBs in Water by 8082A	SW-846 8082A	1	182980007A	10/31/2018 11:30	Covenant Mutu□u	1
10589	OC Pesticides in Water	SW-846 8081B	1	182980006A	11/09/2018 23:58	Dylan Schreiner	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	182980007A	10/25/2018 17:45	Kate E Lutte	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	182980006A	10/25/2018 17:45	Kate E Lutte	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	182950006A	10/22/2018 16:00	Ryan J Dowdy	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18299008	10/28/2018 02:21	Michael □iegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	2	18299008	10/26/2018 15:40	Amy Girvin	1
13495	Thorium	SW-846 6010C	1	183061063501	11/09/2018 12:09	Lisa J Coo□e	1
06023	Aluminum	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06024	Antimony	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06026	Barium	SW-846 6020A	1	182951063904D	10/28/2018 00:46	Choon Y Tian	1
06027	Beryllium	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06028	Cadmium	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06029	Calcium	SW-846 6020A	1	182951063904B	10/28/2018 00:46	Choon Y Tian	1
06031	Chromium	SW-846 6020A	2	183061063901A	11/05/2018 18:56	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06033	Copper	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06034	Iron	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06035	Lead	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06036	Magnesium	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06037	Manganese	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06039	Nic□el	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06040	Potassium	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06041	Selenium	SW-846 6020A	1	182951063904B	10/28/2018 00:46	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06043	Sodium	SW-846 6020A	1	182951063904A	10/31/2018 16:41	Bradley M Berlot	1
06045	Thallium	SW-846 6020A	1	182951063904B	10/28/2018 00:46	Choon Y Tian	1
13501	Uranium	SW-846 6020A	1	182951063904A	10/31/2018 16:41	Bradley M Berlot	1

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

Sample Description: **REF-1-SW001 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/18/2018 15:40
SDG□: TID07-05

Tidewater, Inc.
ELLE Sample #: WW 9861920
ELLE Group #: 2000768
Matrix: Surface Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
06049	□inc	SW-846 6020A	1	182951063904A	10/28/2018 00:46	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	182970571306	10/25/2018 11:07	Damary Valentin	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	1	182981063502	10/27/2018 15:20	JoElla L Rice	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	2	183061063501	11/05/2018 06:18	Annamaria Kuhns	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	1	182951063904	10/24/2018 05:09	James L Mertz	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	2	183061063901	11/05/2018 05:32	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	182970571306	10/25/2018 06:30	James L Mertz	1

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

Sample Description: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		ug/l	ug/l	ug/l	ug/l	
11996	Acetone	67-64-1	2.7 J	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 Tertiary Butyl 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□2□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: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
11996	Tetrachloroethene	127-18-4	N.D.	0.06	0.2	0.5	1
11996	Toluene	108-88-3	0.1 J	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	Xylene (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%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.

GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
14241	Aniline	62-53-3	N.D.	3	10	11	1
14241	Benzyl alcohol	100-51-6	N.D.	11	22	33	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	10	11	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	0.9	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□-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1	2	1
	Bis(2-chloroisopropyl) ether CAS □39638-32-9 and 2□2□-Oxybis(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	10	11	1

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

Sample Description: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
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	10	11	1
14241	Dimethylphthalate	131-11-3	N.D.	2	4	5	1
14241	4□6-Dinitro-2-methylphenol	534-52-1	N.D.	9	22	23	1
14241	2□4-Dinitrophenol	51-28-5	N.D. □2	15	31	33	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	11	12	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	7	8	1
14241	3-Nitroaniline	99-09-2	N.D.	3	7	8	1
14241	4-Nitroaniline	100-01-6	N.D.	1	2	3	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1	2	1
14241	2-Nitrophenol	88-75-5	N.D.	3	10	11	1
14241	4-Nitrophenol	100-02-7	N.D.	11	22	33	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.8	2	3	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.8	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	11	12	1
14241	Pentachlorophenol	87-86-5	N.D. □1	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

□1=The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

□2=The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

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

Sample Description: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result		Detection Limit*	Limit of Detection	Limit of Quantitation	DF
	The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was ta□en: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.							
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	0.05	1
14244	Acenaphthylene	208-96-8	N.D.		0.01	0.03	0.05	1
14244	Anthracene	120-12-7	N.D.		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(□)fluoranthene	207-08-9	N.D.		0.01	0.03	0.05	1
14244	Di-n-butylphthalate	84-74-2	N.D.		0.05	0.1	1	1
14244	bis(2-Chloroethyl)ether	111-44-4	N.D.		0.02	0.07	0.08	1
14244	Chrysene	218-01-9	N.D.		0.01	0.03	0.05	1
14244	Dibenz(a□h)anthracene	53-70-3	N.D.		0.02	0.07	0.08	1
14244	1□4-Dioxane	123-91-1	0.1	J	0.1	0.2	0.3	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		0.09	0.2	1	1
14244	Fluoranthene	206-44-0	N.D.		0.01	0.03	0.05	1
14244	Fluorene	86-73-7	N.D.		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	0.06	J	0.03	0.07	0.08	1
14244	Phenanthrene	85-01-8	N.D.		0.03	0.07	0.08	1
14244	Pyrene	129-00-0	N.D.		0.01	0.03	0.05	1
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample□the data is reported.							
	Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The concentrations of the detections in the method blan□are below the minimum screening level□ therefore the data is reported.							
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10407	2□4-D	94-75-7	N.D.	D2	0.24	0.47	0.56	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.	D2	0.59	1.2	1.4	1
10407	Dicamba	1918-00-9	N.D.	D1	0.075	0.15	0.28	1
10407	Dinoseb	88-85-7	N.D.	D2	0.17	0.38	0.47	1

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

Sample Description: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Herbicides	**SW-846 8151A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
	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	0.30	0.47	1
10407	MCPA	94-74-6	N.D. D1	47	94	190	1
10407	MCPP	93-65-2	N.D. D1	47	94	190	1
10407	2□4□5-T	93-76-5	N.D. D2	0.061	0.12	0.14	1
10407	2□4□5-TP	93-72-1	0.014 JD1	0.0094	0.028	0.047	1
PCBs	**SW-846 8082A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
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
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
Pesticides	**SW-846 8081B**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	N.D. D1	0.0016	0.0057	0.0081	1
10589	Alpha BHC	319-84-6	N.D. D1	0.0024	0.0057	0.0081	1
10589	Beta BHC	319-85-7	N.D. VD2	0.0036	0.0072	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. D1	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. □D1	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	0.029 B□1D1	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. 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	0.0066	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	0.0042 JPD1	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 response for the decachlorobiphenyl surrogate in the continuing						

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

Sample Description: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

calibration verification standard associated with the Blan□and Labratory Control Spi□e is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits□the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

□=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity□and the target analyte(s) is not detected in the sample□the data is reported.

□1=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. The client was contacted and the data reported.

B=Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The client was contacted and the data reported.

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
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
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06023	Aluminum	7429-90-5	0.0738 J	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	N.D.	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0015 J	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	0.116	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	57.5	0.0598	0.200	0.700	1
06031	Chromium	7440-47-3	0.0094	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.00087 J	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	1.52	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	26.2	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	0.747	0.0049	0.0080	0.0100	1
06039	Nic□el	7440-02-0	0.0094	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	6.82	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1

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

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Analysis Report

Sample Description: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Metals		**SW-846 6020A**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	127	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	0.00063	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.00090 J	0.00024	0.00050	0.0010	1
06049	□inc	7440-66-6	N.D.	0.0062	0.0120	0.0150	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
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: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		ng/l	ng/l	ng/l	ng/l	
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	0.009	0.024	1
12936	123478-HxCDD	39227-28-6	N.D.	0.002	0.009	0.024	1
12936	123678-HxCDD	57653-85-7	N.D.	0.002	0.009	0.024	1
12936	123789-HxCDD	19408-74-3	N.D.	0.002	0.009	0.024	1
12936	1234678-HpCDD	35822-46-9	0.004 J	0.004	0.009	0.024	1
12936	OCDD	3268-87-9	0.044 J	0.034	0.068	0.10	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	0.009	0.024	1
12936	23478-PeCDF	57117-31-4	N.D.	0.002	0.009	0.024	1
12936	123478-HxCDF	70648-26-9	N.D.	0.002	0.009	0.024	1
12936	123678-HxCDF	57117-44-9	N.D.	0.002	0.009	0.024	1
12936	123789-HxCDF	72918-21-9	N.D.	0.002	0.009	0.024	1
12936	234678-HxCDF	60851-34-5	N.D.	0.002	0.009	0.024	1
12936	1234678-HpCDF	67562-39-4	N.D.	0.002	0.009	0.024	1
12936	1234789-HpCDF	55673-89-7	N.D.	0.002	0.009	0.024	1
12936	OCDF	39001-02-0	N.D.	0.006	0.019	0.047	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	82	40 - 135	0.002
13C12-12378-PeCDD	88	40 - 135	0.009
13C12-123478-HxCDD	77	40 - 135	0.009
13C12-123678-HxCDD	75	40 - 135	0.009
13C12-123789-HxCDD	80	40 - 135	0.009
13C12-1234678-HpCDD	81	40 - 135	0.009
13C12-OCDD	76	40 - 135	0.07
13C12-2378-TCDF	66	40 - 135	0.002
13C12-12378-PeCDF	75	40 - 135	0.009
13C12-23478-PeCDF	89	40 - 135	0.009
13C12-123478-HxCDF	74	40 - 135	0.009
13C12-123678-HxCDF	73	40 - 135	0.009
13C12-234678-HxCDF	73	40 - 135	0.009
13C12-123789-HxCDF	90	40 - 135	0.009
13C12-1234678-HpCDF	75	40 - 135	0.009
13C12-1234789-HpCDF	75	40 - 135	0.009
13C12-OCDF	70	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: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

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: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:
Thorium by SW-846 6010C
Cyclohexanone by SW-846 8260C
Bis(2-chloroethyl)ether by SW-846 8270D/SW-846 8270D SIM
Di-n-butyl phthalate by SW-846 8270D SIM
Hexachlorobenzene by 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 by 8260C	SW-846 8260C 25mL purge	1	H183041AA	10/31/2018 13:27	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H183041AA	10/31/2018 13:27	Kerri E Legerlotz	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18297WAE026	10/31/2018 18:42	Edward C Monborne	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18297WAF026	10/27/2018 23:25	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18297WAF026	10/24/2018 16:30	Osvaldo R Sanchez	1
11010	8270D BNA Extraction	SW-846 3510C	1	18297WAE026	10/24/2018 16:30	Osvaldo R Sanchez	1
10407	Herb water 8151A Master	SW-846 8151A	1	182950006A	10/24/2018 14:53	Richard A Shober	1
10591	PCBs in Water by 8082A	SW-846 8082A	1	182980007A	10/31/2018 11:41	Covenant Mutu□u	1
10589	OC Pesticides in Water	SW-846 8081B	1	182980006A	11/10/2018 00:11	Dylan Schreiner	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	182980007A	10/25/2018 17:45	Kate E Lutte	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	182980006A	10/25/2018 17:45	Kate E Lutte	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	182950006A	10/22/2018 16:00	Ryan J Dowdy	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18299008	10/28/2018 03:18	Michael □iegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	2	18299008	10/26/2018 15:40	Amy Girvin	1
13495	Thorium	SW-846 6010C	1	183061063501	11/09/2018 12:12	Lisa J Coo□e	1
06023	Aluminum	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06024	Antimony	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06026	Barium	SW-846 6020A	1	182951063904D	10/28/2018 00:49	Choon Y Tian	1
06027	Beryllium	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06028	Cadmium	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06029	Calcium	SW-846 6020A	1	182951063904B	10/28/2018 00:49	Choon Y Tian	1
06031	Chromium	SW-846 6020A	1	183061063901A	11/05/2018 18:58	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06033	Copper	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06034	Iron	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06035	Lead	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06036	Magnesium	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06037	Manganese	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06039	Nic□el	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06040	Potassium	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06041	Selenium	SW-846 6020A	1	182951063904B	10/28/2018 00:49	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06043	Sodium	SW-846 6020A	1	182951063904A	10/31/2018 16:46	Bradley M Berlot	1
06045	Thallium	SW-846 6020A	1	182951063904B	10/28/2018 00:49	Choon Y Tian	1
13501	Uranium	SW-846 6020A	1	182951063904A	10/31/2018 16:46	Bradley M Berlot	1

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

Sample Description: **OU1-1-SW005 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 09:10
SDG□: TID07-06

Tidewater, Inc.
ELLE Sample #: WW 9861921
ELLE Group #: 2000768
Matrix: Surface Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
06049	□inc	SW-846 6020A	1	182951063904A	10/28/2018 00:49	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	182970571306	10/25/2018 11:13	Damary Valentin	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	1	182981063502	10/27/2018 15:20	JoElla L Rice	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	2	183061063501	11/05/2018 06:18	Annamaria Kuhns	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	1	182951063904	10/24/2018 05:09	James L Mertz	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	2	183061063901	11/05/2018 05:32	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	182970571306	10/25/2018 06:30	James L Mertz	1

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

Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	3.2 J	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	0.08 J	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 Tertiary Butyl 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□2□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-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
11996	Tetrachloroethene	127-18-4	N.D.	0.06	0.2	0.5	1
11996	Toluene	108-88-3	0.2 J	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	Xylene (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%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.

GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
14241	Aniline	62-53-3	N.D.	3	9	11	1
14241	Benzyl alcohol	100-51-6	N.D.	11	21	32	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	11	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□-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1	2	1
	Bis(2-chloroisopropyl) ether CAS □39638-32-9 and 2□2□-Oxybis(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	11	1

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

Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
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	11	1
14241	Dimethylphthalate	131-11-3	N.D.	2	4	5	1
14241	4□6-Dinitro-2-methylphenol	534-52-1	N.D.	8	21	22	1
14241	2□4-Dinitrophenol	51-28-5	N.D. □2	15	30	32	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	11	12	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	11	1
14241	4-Nitrophenol	100-02-7	N.D.	11	21	32	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	11	12	1
14241	Pentachlorophenol	87-86-5	N.D. □1	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

□1=The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

□2=The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection□the data is reported.

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

Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result		Detection Limit*	Limit of Detection	Limit of Quantitation	DF
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was ta□en: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.							
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	0.05	1
14244	Acenaphthylene	208-96-8	N.D.		0.01	0.03	0.05	1
14244	Anthracene	120-12-7	N.D.		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(□)fluoranthene	207-08-9	N.D.		0.01	0.03	0.05	1
14244	Di-n-butylphthalate	84-74-2	0.07	J	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	N.D.		0.01	0.03	0.05	1
14244	Dibenz(a□h)anthracene	53-70-3	N.D.		0.02	0.06	0.07	1
14244	1□4-Dioxane	123-91-1	0.3	J	0.1	0.2	0.3	1
14244	bis(2-Ethylhexyl)phthalate	117-81-7	0.1	J	0.08	0.2	1	1
14244	Fluoranthene	206-44-0	N.D.		0.01	0.03	0.05	1
14244	Fluorene	86-73-7	N.D.		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	0.05	J	0.03	0.06	0.07	1
14244	Phenanthrene	85-01-8	N.D.		0.03	0.06	0.07	1
14244	Pyrene	129-00-0	N.D.		0.01	0.03	0.05	1
	The recovery for a target analyte(s) in the Laboratory Control Spi□e(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample□the data is reported.							
	Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The concentrations of the detections in the method blan□are below the minimum screening level□ therefore the data is reported.							
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
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	3.9	1
10407	2□4-DB	94-82-6	N.D.	D1	0.61	1.3	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	0.39	0.48	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.							

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

Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Herbicides	**SW-846 8151A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
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. D2	0.063	0.13	0.14	1
10407	2□4□5-TP	93-72-1	0.014 JD1	0.0096	0.029	0.048	1
PCBs	**SW-846 8082A**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10591	PCB-1016	12674-11-2	N.D. D1	0.080	0.24	0.40	1
10591	PCB-1221	11104-28-2	N.D. D1	0.080	0.24	0.40	1
10591	PCB-1232	11141-16-5	N.D. D1	0.16	0.32	0.40	1
10591	PCB-1242	53469-21-9	N.D. D1	0.080	0.24	0.40	1
10591	PCB-1248	12672-29-6	N.D. D1	0.080	0.24	0.40	1
10591	PCB-1254	11097-69-1	N.D. D1	0.080	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
Pesticides	**SW-846 8081B**		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	N.D. D1	0.0016	0.0056	0.0080	1
10589	Alpha BHC	319-84-6	N.D. D1	0.0024	0.0056	0.0080	1
10589	Beta BHC	319-85-7	N.D. VD1	0.0068	0.014	0.014	1
10589	Gamma BHC - Lindane	58-89-9	N.D. D1	0.0016	0.0056	0.0080	1
10589	Alpha Chlordane	5103-71-9	N.D. D1	0.0024	0.0056	0.0080	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	0.0080	0.016	1
10589	p□p-DDE	72-55-9	N.D. D1	0.0040	0.0080	0.016	1
10589	p□p-DDT	50-29-3	0.0090 JB□1D1	0.0042	0.0080	0.016	1
10589	Delta BHC	319-86-8	N.D. D1	0.0027	0.0056	0.0080	1
10589	Dieldrin	60-57-1	N.D. D1	0.0042	0.0080	0.016	1
10589	Endosulfan I	959-98-8	0.0051 JD1	0.0034	0.0072	0.0080	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	0.0046	0.0096	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	0.080	1
10589	Endrin Ketone	53494-70-5	N.D. D1	0.0040	0.0080	0.016	1
10589	Heptachlor	76-44-8	N.D. D1	0.0016	0.0056	0.0080	1
10589	Heptachlor Epoxide	1024-57-3	N.D. D1	0.0018	0.0056	0.0080	1
10589	Methoxychlor	72-43-5	N.D. D1	0.024	0.056	0.080	1
10589	Toxaphene	8001-35-2	N.D. □D1	0.24	0.48	0.80	1

The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blan□and Labratory

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

Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

Control Spi□e is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits□the data is reported.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

□=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity□and the target analyte(s) is not detected in the sample□the data is reported.

□1=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. The client was contacted and the data reported.

B=Target analytes were detected in the method blan□associated with the samples as noted on the QC Summary. The client was contacted and the data reported.

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
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
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06023	Aluminum	7429-90-5	0.0427 J	0.0197	0.0500	0.400	1
06024	Antimony	7440-36-0	0.00042 J	0.00041	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0044	0.00068	0.0016	0.0020	1
06026	Barium	7440-39-3	0.284	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	132	0.0598	0.200	0.700	1
06031	Chromium	7440-47-3	0.0013 J	0.00070	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0018	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	11.9	0.0228	0.0800	0.100	1
06035	Lead	7439-92-1	0.0014 J	0.0011	0.0024	0.0030	1
06036	Magnesium	7439-95-4	25.3	0.0104	0.0250	0.100	1
06037	Manganese	7439-96-5	1.21	0.0049	0.0080	0.0100	1
06039	Nic□el	7440-02-0	0.0088	0.00060	0.0020	0.0040	1
06040	Potassium	7440-09-7	6.81	0.107	0.200	0.400	1
06041	Selenium	7782-49-2	N.D.	0.00065	0.0016	0.0020	1

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

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Analysis Report

Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Metals		**SW-846 6020A**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06042	Silver	7440-22-4	N.D.	0.00017	0.00040	0.00050	1
06043	Sodium	7440-23-5	63.0	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	0.00023 J	0.00011	0.00050	0.00050	1
06048	Vanadium	7440-62-2	0.00069 J	0.00024	0.00050	0.0010	1
06049	□inc	7440-66-6	0.0065 J	0.0062	0.0120	0.0150	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000059 J	0.000050	0.00010	0.00020	1

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

Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		ng/l	ng/l	ng/l	ng/l	
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	0.009	0.024	1
12936	123478-HxCDD	39227-28-6	N.D.	0.002	0.009	0.024	1
12936	123678-HxCDD	57653-85-7	N.D.	0.002	0.009	0.024	1
12936	123789-HxCDD	19408-74-3	N.D.	0.002	0.009	0.024	1
12936	1234678-HpCDD	35822-46-9	0.007 J	0.004	0.009	0.024	1
12936	OCDD	3268-87-9	0.050 J	0.034	0.068	0.10	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	0.009	0.024	1
12936	23478-PeCDF	57117-31-4	N.D.	0.002	0.009	0.024	1
12936	123478-HxCDF	70648-26-9	N.D.	0.002	0.009	0.024	1
12936	123678-HxCDF	57117-44-9	N.D.	0.002	0.009	0.024	1
12936	123789-HxCDF	72918-21-9	N.D.	0.002	0.009	0.024	1
12936	234678-HxCDF	60851-34-5	N.D.	0.002	0.009	0.024	1
12936	1234678-HpCDF	67562-39-4	0.003 J	0.002	0.009	0.024	1
12936	1234789-HpCDF	55673-89-7	N.D.	0.002	0.009	0.024	1
12936	OCDF	39001-02-0	N.D.	0.006	0.019	0.047	1

Labeled Compounds	%Rec	Windows	LOD (ng/l)
13C12-2378-TCDD	78	40 - 135	0.002
13C12-12378-PeCDD	86	40 - 135	0.009
13C12-123478-HxCDD	79	40 - 135	0.009
13C12-123678-HxCDD	79	40 - 135	0.009
13C12-123789-HxCDD	83	40 - 135	0.009
13C12-1234678-HpCDD	86	40 - 135	0.009
13C12-OCDD	83	40 - 135	0.07
13C12-2378-TCDF	62	40 - 135	0.002
13C12-12378-PeCDF	75	40 - 135	0.009
13C12-23478-PeCDF	83	40 - 135	0.009
13C12-123478-HxCDF	77	40 - 135	0.009
13C12-123678-HxCDF	75	40 - 135	0.009
13C12-234678-HxCDF	77	40 - 135	0.009
13C12-123789-HxCDF	96	40 - 135	0.009
13C12-1234678-HpCDF	82	40 - 135	0.009
13C12-1234789-HpCDF	81	40 - 135	0.009
13C12-OCDF	76	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-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

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

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Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

Sample Comments

The following analyte(s) is not covered under our DoD ELAP accreditation:
Thorium by SW-846 6010C
Cyclohexanone by SW-846 8260C
Bis(2-chloroethyl)ether by SW-846 8270D/SW-846 8270D SIM
Di-n-butyl phthalate by SW-846 8270D SIM
Hexachlorobenzene by 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 by 8260C	SW-846 8260C 25mL purge	1	H183041AA	10/31/2018 13:49	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H183041AA	10/31/2018 13:49	Kerri E Legerlotz	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18297WAE026	10/31/2018 19:10	Edward C Monborne	1
14244	SIM SVOAs 8270D MINI	SW-846 8270D SIM	1	18297WAF026	10/27/2018 23:55	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18297WAF026	10/24/2018 16:30	Osvaldo R Sanchez	1
11010	8270D BNA Extraction	SW-846 3510C	1	18297WAE026	10/24/2018 16:30	Osvaldo R Sanchez	1
10407	Herb water 8151A Master	SW-846 8151A	1	182950006A	10/24/2018 15:26	Richard A Shober	1
10591	PCBs in Water by 8082A	SW-846 8082A	1	182980007A	10/31/2018 11:52	Covenant Mutu□u	1
10589	OC Pesticides in Water	SW-846 8081B	1	182980006A	11/10/2018 00:24	Dylan Schreiner	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	182980007A	10/25/2018 17:45	Kate E Lutte	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	182980006A	10/25/2018 17:45	Kate E Lutte	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	182950006A	10/22/2018 16:00	Ryan J Dowdy	1
12936	Dioxins/Furans in Water - 8290	SW-846 8290A Feb 2007 Rev 1	1	18299008	10/28/2018 04:15	Michael □iegler	1
10914	Dioxins/Furans in Water - SepF	SW-846 8290A Feb 2007 Rev 1	2	18299008	10/26/2018 15:40	Amy Girvin	1
13495	Thorium	SW-846 6010C	1	183061063501	11/09/2018 12:15	Lisa J Coo□e	1
06023	Aluminum	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06024	Antimony	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06026	Barium	SW-846 6020A	1	182951063904D	10/28/2018 00:51	Choon Y Tian	1
06027	Beryllium	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06028	Cadmium	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06029	Calcium	SW-846 6020A	1	182951063904B	10/31/2018 16:48	Bradley M Berlot	1
06031	Chromium	SW-846 6020A	1	183061063901A	11/05/2018 19:01	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06033	Copper	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06034	Iron	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06035	Lead	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06036	Magnesium	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06037	Manganese	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06039	Nic□el	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06040	Potassium	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06041	Selenium	SW-846 6020A	1	182951063904B	10/28/2018 00:51	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06043	Sodium	SW-846 6020A	1	182951063904A	10/31/2018 16:48	Bradley M Berlot	1
06045	Thallium	SW-846 6020A	1	182951063904B	10/28/2018 00:51	Choon Y Tian	1
13501	Uranium	SW-846 6020A	1	182951063904A	10/31/2018 16:48	Bradley M Berlot	1

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

Sample Description: **OU2-1-SW002 Grab Surface Water**
Great Kills Park, NY

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

Submittal Date/Time: 10/20/2018 09:40
Collection Date/Time: 10/19/2018 12:50
SDG□: TID07-07

Tidewater, Inc.
ELLE Sample #: WW 9861922
ELLE Group #: 2000768
Matrix: Surface Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
06049	□inc	SW-846 6020A	1	182951063904A	10/28/2018 00:51	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	182970571306	10/25/2018 11:15	Damary Valentin	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	1	182981063502	10/27/2018 15:20	JoElla L Rice	1
10635	ICP-WW□3005A (tot rec) - U4	SW-846 3005A	2	183061063501	11/05/2018 06:18	Annamaria Kuhns	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	1	182951063904	10/24/2018 05:09	James L Mertz	1
10639	ICPMS - Water□3020A - U4	SW-846 3020A	2	183061063901	11/05/2018 05:32	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	182970571306	10/25/2018 06:30	James L Mertz	1

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

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Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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 Blan s 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: H183041AA	Sample number(s): 9861916-9861922			
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
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(2) The unspi ed result was more than four times the spi e added.
(3) The surrogate spi e amount was less than the LOD.

Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

Method Blank (continued)

Analysis Name	Result	DL**	LOD	LOQ
	ug/l	ug/l	ug/l	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
Xylene (Total)	N.D.	0.1	0.4	0.5
Batch number: 18297WAE026	Sample number(s): 9861917-9861922			
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 -oxybis(1-Chloropropane)	N.D.	0.5	1	2
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

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Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

Method Blank (continued)

Analysis Name	Result	DL**	LOD	LOQ
	ug/l	ug/l	ug/l	ug/l
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
Pyridine	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: 18297WAF026	Sample number(s): 9861917-9861922			
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(g h i)perylene	N.D.	0.01	0.03	0.05
Benzo( )fluoranthene	N.D.	0.01	0.03	0.05
Di-n-butylphthalate	N.D.	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
Dibenz(a h)anthracene	N.D.	0.02	0.06	0.07
1 4-Dioxane	0.2 J	0.1	0.2	0.3
bis(2-Ethylhexyl)phthalate	N.D.	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: 182950006A	Sample number(s): 9861917-9861922			
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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Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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: 182980007A	Sample number(s): 9861917-9861922			
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: 182980006A	Sample number(s): 9861917-9861922			
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	0.0081 J	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: 182951063904A	Sample number(s): 9861917-9861922			
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
Cobalt	N.D.	0.00016	0.00050	0.0010

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Quality Control Summary

Client Name: Tidewater Inc.
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Group Number: 2000768

Method Blank (continued)

Analysis Name	Result	DL**	LOD	LOQ
	mg/l	mg/l	mg/l	mg/l
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
Nic el	0.0020 J	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
Uranium	N.D.	0.00011	0.00050	0.00050
Vanadium	N.D.	0.00024	0.00050	0.0010
inc	N.D.	0.0062	0.0120	0.0150
Batch number: 182951063904B	Sample number(s): 9861917-9861922			
Calcium	N.D.	0.0598	0.200	0.700
Selenium	N.D.	0.00065	0.0016	0.0020
Thallium	N.D.	0.00011	0.00025	0.00050
Batch number: 182951063904D	Sample number(s): 9861917-9861922			
Barium	N.D.	0.00075	0.0020	0.0040
Batch number: 182970571306	Sample number(s): 9861917-9861922			
Mercury	0.000056 J	0.000050	0.00010	0.00020
Batch number: 183061063501	Sample number(s): 9861917-9861922			
Thorium	N.D.	0.205	0.400	0.500
Batch number: 183061063901A	Sample number(s): 9861917-9861922			
Chromium	N.D.	0.00070	0.0020	0.0040

Analysis Name	Result	DL**	LOD	LOQ
	ng/l	ng/l	ng/l	ng/l
Batch number: 18299008	Sample number(s): 9861917-9861922			
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

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Quality Control Summary

Client Name: Tidewater Inc.
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Group Number: 2000768

Method Blank (continued)

Analysis Name	Result	DL**	LOD	LOQ
	ng/l	ng/l	ng/l	ng/l
1234678-HpCDF	N.D.	0.003	0.010	0.025
1234789-HpCDF	N.D.	0.003	0.010	0.025
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: H183041AA	Sample number(s): 9861916-9861922								
Acetone	37.5	30.41	37.5	30.43	81	81	39-160	0	20
Benzene	5.00	4.82	5.00	4.80	96	96	79-120	0	20
Bromodichloromethane	5.00	5.09	5.00	5.00	102	100	79-125	2	20
Bromoform	5.00	5.11	5.00	5.03	102	101	66-130	1	20
Bromomethane	5.00	3.69	5.00	3.63	74	73	53-141	2	20
2-Butanone	37.5	33.39	37.5	35.98	89	96	56-143	7	20
Carbon Disulfide	5.00	4.55	5.00	4.44	91	89	64-133	2	20
Carbon Tetrachloride	5.00	5.11	5.00	5.05	102	101	72-136	1	20
Chlorobenzene	5.00	5.08	5.00	5.06	102	101	82-118	0	20
Chloroethane	5.00	3.97	5.00	3.95	79	79	60-138	1	20
Chloroform	5.00	5.02	5.00	5.04	100	101	79-124	0	20
Chloromethane	5.00	3.88	5.00	3.81	78	76	50-139	2	20
Cyclohexane	5.00	4.56	5.00	4.49	91	90	71-130	2	20
Cyclohexanone	125	116.87	125	116.75	93	93	26-147	0	30
1 2-Dibromo-3-chloropropane	5.00	3.41	5.00	3.78	68	76	62-128	10	20
Dibromochloromethane	5.00	5.20	5.00	5.10	104	102	74-126	2	20
1 2-Dibromoethane	5.00	5.20	5.00	5.18	104	104	77-121	0	20
1 2-Dichlorobenzene	5.00	5.00	5.00	4.86	100	97	80-119	3	20
1 3-Dichlorobenzene	5.00	5.06	5.00	4.92	101	98	80-119	3	20
1 4-Dichlorobenzene	5.00	5.08	5.00	5.02	102	100	79-118	1	20
Dichlorodifluoromethane	5.00	3.18	5.00	3.13	64	63	32-152	2	20
1 1-Dichloroethane	5.00	4.98	5.00	4.88	100	98	77-125	2	20
1 2-Dichloroethane	5.00	5.03	5.00	4.89	101	98	73-128	3	20
1 1-Dichloroethene	5.00	5.27	5.00	5.11	105	102	71-131	3	20
cis-1 2-Dichloroethene	5.00	5.03	5.00	4.98	101	100	78-123	1	20
trans-1 2-Dichloroethene	5.00	5.08	5.00	4.98	102	100	75-124	2	20
1 2-Dichloropropane	5.00	5.00	5.00	4.98	100	100	78-122	0	20
cis-1 3-Dichloropropene	5.00	4.93	5.00	4.84	99	97	75-124	2	20
trans-1 3-Dichloropropene	5.00	5.36	5.00	5.18	107	104	73-127	3	20
Ethylbenzene	5.00	5.06	5.00	5.03	101	101	79-121	1	20
Freon 113	5.00	4.57	5.00	4.44	91	89	70-136	3	20
2-Hexanone	25	21.97	25	23.48	88	94	57-139	7	20

Outside of specification
This limit was used in the evaluation of the final result for the blan
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(2) The unspi ed result was more than four times the spi e added.
(3) The surrogate spi e amount was less than the LOD.

Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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
Isopropylbenzene	5.00	5.07	5.00	5.08	101	102	72-131	0	20
Methyl Acetate	5.00	4.06	5.00	4.46	81	89	56-136	10	20
Methyl Tertiary Butyl Ether	5.00	4.69	5.00	4.61	94	92	71-124	2	20
4-Methyl-2-Pentanone	25	21.72	25	23.41	87	94	67-130	7	20
Methylcyclohexane	5.00	4.12	5.00	4.02	82	80	72-132	2	20
Methylene Chloride	5.00	4.77	5.00	4.76	95	95	74-124	0	20
Styrene	5.00	5.19	5.00	5.16	104	103	78-123	1	20
1 1 2 2-Tetrachloroethane	5.00	5.03	5.00	4.83	101	97	71-121	4	20
Tetrachloroethene	5.00	5.13	5.00	5.07	103	101	74-129	1	20
Toluene	5.00	4.99	5.00	5.04	100	101	80-121	1	20
1 2 4-Trichlorobenzene	5.00	4.60	5.00	4.49	92	90	69-130	2	20
1 1 1-Trichloroethane	5.00	5.01	5.00	4.99	100	100	74-131	0	20
1 1 2-Trichloroethane	5.00	5.26	5.00	5.20	105	104	80-119	1	20
Trichloroethene	5.00	4.87	5.00	4.83	97	97	79-123	1	20
Trichlorofluoromethane	5.00	3.88	5.00	3.82	78	76	65-141	2	20
Vinyl Chloride	5.00	4.04	5.00	3.97	81	79	58-137	2	20
Xylene (Total)	15	15.3	15	15.4	102	103	79-121	1	20
	ug/l	ug/l	ug/l	ug/l					
Batch number: 18297WAE026	Sample number(s): 9861917-9861922								
Aniline	50	22	50	22.82	44	46	29-101	4	30
Benzyl alcohol	50	37.89	50	37.75	76	75	31-112	0	20
4-Bromophenyl-phenylether	50	37.27	50	39.16	75	78	55-124	5	20
Carbazole	50	44.43	50	46.59	89	93	60-122	5	20
4-Chloro-3-methylphenol	50	41.04	50	45.15	82	90	52-119	10	20
4-Chloroaniline	50	30.47	50	29.98	61	60	33-117	2	20
bis(2-Chloroethoxy)methane	50	37.36	50	39.6	75	79	48-120	6	20
2-Chloronaphthalene	50	34.17	50	36.72	68	73	40-116	7	20
2-Chlorophenol	50	37.22	50	40.05	74	80	38-117	7	20
4-Chlorophenyl-phenylether	50	34.85	50	36.37	70	73	53-121	4	20
2 2 -oxybis(1-Chloropropane)	50	32.46	50	34.81	65	70	48-118	7	30
Dibenzofuran	50	36.72	50	38.63	73	77	53-118	5	20
1 2-Dichlorobenzene	50	28.32	50	30.47	57	61	32-111	7	20
1 3-Dichlorobenzene	50	26.36	50	28.55	53	57	28-110	8	20
1 4-Dichlorobenzene	50	26.73	50	29.5	53	59	29-112	10	20
3 3 -Dichlorobenzidine	50	37.04	50	38.31	74	77	27-129	3	20
2 4-Dichlorophenol	50	37.86	50	41.11	76	82	47-121	8	20
Diethylphthalate	50	41.28	50	42.76	83	86	56-125	4	20
2 4-Dimethylphenol	50	32.03	50	33.89	64	68	31-124	6	20
Dimethylphthalate	50	36.44	50	41.11	73	82	45-127	12	20
4 6-Dinitro-2-methylphenol	50	51.46	50	55.43	103	111	44-137	7	20
2 4-Dinitrophenol	100	109.09	100	119.81	109	120	23-143	9	20
2 4-Dinitrotoluene	50	44.43	50	45.12	89	90	57-128	2	20
2 6-Dinitrotoluene	50	44.63	50	47.13	89	94	57-124	5	20

Outside of specification
This limit was used in the evaluation of the final result for the blan
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(2) The unspi ed result was more than four times the spi e added.
(3) The surrogate spi e amount was less than the LOD.

Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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
Hexachlorobutadiene	50	24.29	50	26.2	49	52	22-124	8	20
Hexachlorocyclopentadiene	100	8.57	100	11.03	9	11	10-117	25	30
Hexachloroethane	50	24.68	50	26.44	49	53	21-115	7	20
Isophorone	50	39.68	50	42.61	79	85	42-124	7	20
2-Methylnaphthalene	50	32.16	50	34.58	64	69	40-121	7	20
2-Methylphenol	50	35.98	50	39.09	72	78	30-117	8	20
4-Methylphenol	50	33.49	50	35.96	67	72	25-120	7	20
2-Nitroaniline	50	47.82	50	50.19	96	100	55-127	5	20
3-Nitroaniline	50	42.71	50	41.51	85	83	41-128	3	20
4-Nitroaniline	50	38.33	50	36.53	77	73	53-111	5	30
Nitrobenzene	50	35.87	50	37.49	72	75	45-121	4	20
2-Nitrophenol	50	40.4	50	44.65	81	89	47-123	10	20
4-Nitrophenol	50	25.24	50	23.24	50	46	28-88	8	30
N-Nitroso-di-n-propylamine	50	37.68	50	41.02	75	82	49-119	9	20
N-Nitrosodiphenylamine	50	44.73	50	47.56	89	95	51-123	6	20
Di-n-octylphthalate	50	43.66	50	45.25	87	90	51-140	4	20
Pentachlorophenol	50	49.17	50	55.8	98	112	35-138	13	20
Phenol	50	19.16	50	20.03	38	40	23-82	4	30
Pyridine	50	16.52	50	15.97	33	32	13-83	3	30
1 2 4-Trichlorobenzene	50	27.72	50	29.93	55	60	29-116	8	20
2 4 5-Trichlorophenol	50	42.46	50	46.42	85	93	53-123	9	20
2 4 6-Trichlorophenol	50	42.64	50	46.81	85	94	50-125	9	20
Batch number: 18297WAF026	Sample number(s): 9861917-9861922								
Acenaphthene	1.00	1.02	1.00	0.947	102	95	48-114	8	20
Acenaphthylene	1.00	0.969	1.00	0.914	97	91	35-121	6	20
Anthracene	1.00	1.06	1.00	0.926	106	93	53-119	14	20
Benzo(a)anthracene	1.00	1.10	1.00	1.08	110	108	59-120	2	20
Benzo(a)pyrene	1.00	1.08	1.00	1.06	108	106	53-120	1	20
Benzo(b)fluoranthene	1.00	1.14	1.00	1.12	114	112	53-126	1	20
Benzo(g h i)perylene	1.00	1.03	1.00	1.04	103	104	44-128	0	20
Benzo( )fluoranthene	1.00	1.09	1.00	1.07	109	107	54-125	1	20
Di-n-butylphthalate	1.00	1.03	1.00	0.903	103	90	60-145	13	20
bis(2-Chloroethyl)ether	1.00	1.14	1.00	1.04	114	104	40-116	9	20
Chrysene	1.00	1.08	1.00	1.05	108	105	57-120	2	20
Dibenz(a h)anthracene	1.00	1.07	1.00	1.06	107	106	44-131	1	20
1 4-Dioxane	1.00	0.714	1.00	0.747	71	75	10-113	4	30
bis(2-Ethylhexyl)phthalate	1.00	1.03	1.00	0.946	103	95	55-173	9	20
Fluoranthene	1.00	1.08	1.00	0.956	108	96	58-120	13	20
Fluorene	1.00	1.05	1.00	0.999	105	100	50-118	5	20
Hexachlorobenzene	1.00	0.962	1.00	0.853	96	85	46-124	12	20
Indeno(1 2 3-cd)pyrene	1.00	1.10	1.00	1.11	110	111	48-130	1	20
Naphthalene	1.00	0.916	1.00	0.862	92	86	43-114	6	20
Phenanthrene	1.00	1.20	1.00	1.01	120	101	53-115	17	20

Outside of specification
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(3) The surrogate spi e amount was less than the LOD.

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Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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
Pyrene	1.00	1.00	1.00	0.982	100	98	53-121	2	20
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 182950006A	Sample number(s): 9861917-9861922								
2 4-D	2.50	1.87			75		45-152		
Dalapon	6.26	2.92			47		19-139		
2 4-DB	2.51	1.89			75		35-153		
Dicamba	0.250	0.221			88		50-141		
Dinoseb	1.25	0.211			17		19-133		
2 4-DP (Dichloroprop)	2.50	2.24			90		46-159		
MCPA	503.93	305.3			61		35-144		
MCPP	250.58	199.03			79		33-157		
2 4 5-T	0.250	0.201			80		42-147		
2 4 5-TP	0.250	0.220			88		51-134		
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 182980007A	Sample number(s): 9861917-9861922								
PCB-1016	5.01	4.46			89		46-129		
PCB-1260	5.00	4.50			90		45-134		
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 182980006A	Sample number(s): 9861917-9861922								
Aldrin	0.100	0.0455			46		45-134		
Alpha BHC	0.102	0.0702			69		54-138		
Beta BHC	0.100	0.0661			66		56-136		
Gamma BHC - Lindane	0.102	0.0696			68		59-134		
Alpha Chlordane	0.100	0.0701			70		60-129		
Gamma Chlordane	0.100	0.0712			71		56-136		
p p-DDD	0.204	0.164			81		56-143		
p p-DDE	0.200	0.141			70		57-135		
p p-DDT	0.204	0.148			72		51-143		
Delta BHC	0.100	0.0737			74		52-142		
Dieldrin	0.204	0.149			73		60-136		
Endosulfan I	0.102	0.0576			56		62-126		
Endosulfan II	0.200	0.124			62		52-135		
Endosulfan Sulfate	0.202	0.152			75		62-133		
Endrin	0.202	0.158			78		60-138		
Endrin Aldehyde	0.202	0.132			65		51-132		
Endrin Ketone	0.200	0.153			76		58-134		
Heptachlor	0.102	0.0585			57		54-130		
Heptachlor Epoxide	0.100	0.0717			72		61-133		
Methoxychlor	1.02	0.815			80		54-145		
	mg/l	**mg/l**	**mg/l**	**mg/l**					

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Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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
Batch number: 182951063904A	Sample number(s): 9861917-9861922								
Aluminum	2.00	2.03			102		84-117		
Antimony	0.00600	0.00605			101		85-117		
Arsenic	0.0100	0.0103			103		84-116		
Beryllium	0.00400	0.00363			91		83-121		
Cadmium	0.00500	0.00529			106		87-115		
Cobalt	0.250	0.257			103		86-115		
Copper	0.0500	0.0518			104		85-118		
Iron	1.00	1.00			100		87-118		
Lead	0.0150	0.0158			105		88-115		
Magnesium	2.00	1.99			99		83-118		
Manganese	0.0500	0.0522			104		87-115		
Nic el	0.0500	0.0526			105		85-117		
Potassium	10	10.1			101		87-115		
Silver	0.0500	0.0502			100		85-116		
Sodium	10	10.28			103		85-117		
Uranium	0.0250	0.0259			104		86-115		
Vanadium	0.0500	0.0512			102		86-115		
inc	0.500	0.507			101		83-119		
Batch number: 182951063904B	Sample number(s): 9861917-9861922								
Calcium	4.00	4.02			100		87-118		
Selenium	0.0100	0.0102			102		80-120		
Thallium	0.00200	0.00220			110		82-116		
Batch number: 182951063904D	Sample number(s): 9861917-9861922								
Barium	0.0500	0.0509			102		86-114		
Batch number: 182970571306	Sample number(s): 9861917-9861922								
Mercury	0.00100	0.000925			93		82-119		
Batch number: 183061063501	Sample number(s): 9861917-9861922								
Thorium	0.500	0.521			104		88-113		
Batch number: 183061063901A	Sample number(s): 9861917-9861922								
Chromium	0.0500	0.0496			99		85-116		

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: 18299008	Sample number(s): 9861917-9861922								
2378-TCDD	0.200	0.174			87		71-125		
12378-PeCDD	1.00	1.04			104		76-121		
123478-HxCDD	1.00	1.08			108		80-126		
123678-HxCDD	1.00	1.07			107		78-134		
123789-HxCDD	1.00	1.04			104		76-137		

Outside of specification
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Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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
1234678-HpCDD	1.00	1.06			106		79-122		
OCDD	2.00	2.12			106		81-135		
2378-TCDF	0.200	0.211			106		72-138		
12378-PeCDF	1.00	1.13			113		82-130		
23478-PeCDF	1.00	1.07			107		77-129		
123478-HxCDF	1.00	1.05			105		80-130		
123678-HxCDF	1.00	1.08			108		79-131		
123789-HxCDF	1.00	1.06			106		83-130		
234678-HxCDF	1.00	1.05			105		81-130		
1234678-HpCDF	1.00	1.06			106		81-130		
1234789-HpCDF	1.00	1.08			108		77-128		
OCDF	2.00	2.16			108		66-150		

MS/MSD

Unspi ed (UNSPK) = the sample used in conjunction with the matrix spi e

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: 182951063904A	Sample number(s): 9861917-9861922 UNSPK: 9861918									
Aluminum	0.203	2.00	2.30	2.00	2.36	105	108	84-117	3	20
Antimony	0.000804	0.00600	0.00649	0.00600	0.00693	95	102	85-117	7	20
Arsenic	0.00156	0.0100	0.0125	0.0100	0.0133	109	117	84-116	6	20
Beryllium	N.D.	0.00400	0.00370	0.00400	0.00390	93	98	83-121	5	20
Cadmium	N.D.	0.00500	0.00499	0.00500	0.00500	100	100	87-115	0	20
Cobalt	0.00125	0.250	0.267	0.250	0.272	106	108	86-115	2	20
Copper	N.D.	0.0500	0.0608	0.0500	0.0609	122	122	85-118	0	20
Iron	3.23	1.00	4.03	1.00	4.11	80	88	87-118	2	20
Lead	0.00203	0.0150	0.0180	0.0150	0.0181	107	107	88-115	0	20
Magnesium	86.69	2.00	85.43	2.00	87.3	-63 (2)	30 (2)	83-118	2	20
Manganese	0.645	0.0500	0.669	0.0500	0.679	49 (2)	69 (2)	87-115	1	20
Nic el	0.0105	0.0500	0.0629	0.0500	0.0636	105	106	85-117	1	20
Potassium	29.26	10	38.59	10	39.34	93	101	87-115	2	20
Silver	N.D.	0.0500	0.0499	0.0500	0.0505	100	101	85-116	1	20
Sodium	677.14	10	633.06	10	642.78	-441 (2)	-344 (2)	85-117	2	20
Uranium	0.000439	0.0250	0.0281	0.0250	0.0277	111	109	75-125	2	20
Vanadium	0.00209	0.0500	0.0544	0.0500	0.0529	105	102	86-115	3	20
inc	0.0224	0.500	0.511	0.500	0.522	98	100	83-119	2	20
Batch number: 182951063904B	Sample number(s): 9861917-9861922 UNSPK: 9861918									
Calcium	94.56	4.00	94.79	4.00	93.48	6 (2)	-27 (2)	87-118	1	20

Outside of specification
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(3) The surrogate spi e amount was less than the LOD.

Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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
Selenium	N.D.	0.0100	0.00985	0.0100	0.00991	98	99	80-120	1	20
Thallium	N.D.	0.00200	0.00219	0.00200	0.00221	109	110	82-116	1	20
Batch number: 182951063904D	Sample number(s): 9861917-9861922 UNSPK: 9861918									
Barium	0.308	0.0500	0.344	0.0500	0.354	73 (2)	92 (2)	86-114	3	20
Batch number: 182970571306	Sample number(s): 9861917-9861922 UNSPK: 9861917									
Mercury	0.0000551	0.00100	0.000962	0.00100	0.000960	91	90	82-119	0	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: 182951063904A	Sample number(s): 9861917-9861922 BKG: 9861918			
Aluminum	0.203	0.172	17 (1)	20
Antimony	0.000804	0.000667	19 (1)	20
Arsenic	0.00156	0.00146	7 (1)	20
Beryllium	N.D.	N.D.	0 (1)	20
Cadmium	N.D.	N.D.	0 (1)	20
Cobalt	0.00125	0.00106	16 (1)	20
Copper	N.D.	N.D.	0 (1)	20
Iron	3.23	3.07	5	20
Lead	0.00203	0.00197	3 (1)	20
Magnesium	86.69	82.5	5	20
Manganese	0.645	0.614	5	20
Nickel	0.0105	0.0100	4 (1)	20
Potassium	29.26	28.14	4	20
Silver	N.D.	N.D.	0 (1)	20
Sodium	677.14	626.42	8	20
Uranium	0.000439	0.000439	0 (1)	20
Vanadium	0.00209	0.00185	13 (1)	20
Zinc	0.0224	0.0198	13 (1)	20
Batch number: 182951063904B	Sample number(s): 9861917-9861922 BKG: 9861918			
Calcium	94.56	88.54	7	20
Selenium	N.D.	N.D.	0 (1)	20
Thallium	N.D.	N.D.	0 (1)	20
Batch number: 182951063904D	Sample number(s): 9861917-9861922 BKG: 9861918			

+ 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: 11/19/2018 14:17

Group Number: 2000768

Laboratory Duplicate (continued)

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
Barium	0.308	0.295	4	20
Batch number: 182970571306	Sample number(s): 9861917-9861922 BKG: 9861917			
Mercury	0.0000551	0.0000733	28 (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 by 8260C
Batch number: H183041AA

	Dibromofluoromethane %Rec	LOD (ug/l)	1,2-Dichloroethane-d4 %Rec	LOD (ug/l)	Toluene-d8 %Rec	LOD (ug/l)	4-Bromofluorobenzene %Rec	LOD (ug/l)
9861916	99	0.5	102	0.5	102	0.5	99	0.5
9861917	98	0.5	103	0.5	103	0.5	98	0.5
9861918	98	0.5	102	0.5	102	0.5	98	0.5
9861919	98	0.5	101	0.5	103	0.5	97	0.5
9861920	98	0.5	101	0.5	102	0.5	97	0.5
9861921	98	0.5	101	0.5	104	0.5	97	0.5
9861922	98	0.5	101	0.5	104	0.5	97	0.5
Blank	98	0.5	103	0.5	103	0.5	98	0.5
LCS	98	0.5	101	0.5	102	0.5	98	0.5
LCSD	98	0.5	101	0.5	104	0.5	100	0.5
Limits:	80-119		81-118		89-112		85-114	

Analysis Name: SVOAs 8270D MINI
Batch number: 18297WAE026

	Phenol-d6 %Rec	LOD (ug/l)	2-Fluorophenol %Rec	LOD (ug/l)	2,4,6-Tribromophenol %Rec	LOD (ug/l)	Nitrobenzene-d5 %Rec	LOD (ug/l)	2-Fluorobiphenyl %Rec	LOD (ug/l)	Terphenyl-d14 %Rec	LOD (ug/l)
9861917	28	83	37	83	75	83	59	42	60	42	69	42
9861918	38	88	40	88	82	88	62	44	56	44	76	44
9861919	25	88	33	88	80	88	54	44	53	44	53	44
9861920	21	90	27	90	62	90	52	45	49	45	71	45
9861921	14	87	18	87	41	87	30	44	29	44	40	44
9861922	29	84	31	84	75	84	53	42	53	42	66	42
Blank	21	80	30	80	76	80	56	40	51	40	76	40
LCS	38	80	50	80	89	80	71	40	61	40	92	40

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: 11/19/2018 14:17

Group Number: 2000768

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: SVOAs 8270D MINI
Batch number: 18297WAE026

	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)
LCSD	41	80	50	80	92	80	74	40	64	40	91	40
Limits:	10-72		19-119		43-140		44-120		44-119		50-134	

Analysis Name: SIM SVOAs 8270D MINI
Batch number: 18297WAF026

	Fluoranthene-d10		Benzo(a)pyrene-d12		1-Methylnaphthalene-d10	
	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)
9861917	109	0.4	74	0.4	92	0.4
9861918	108	0.4	90	0.4	81	0.4
9861919	81	0.4	60	0.4	64	0.4
9861920	106	0.5	66	0.5	79	0.5
9861921	47	0.4	43	0.4	40	0.4
9861922	105	0.4	88	0.4	78	0.4
Blan	100	0.4	102	0.4	82	0.4
LCS	106	0.4	98	0.4	84	0.4
LCSD	94	0.4	98	0.4	82	0.4
Limits:	38-119		18-129		29-112	

Analysis Name: Herb water 8151A Master
Batch number: 182950006A

	2,4-DCAA-D1		2,4-DCAA-D2	
	%Rec	LOD (ug/l)	%Rec	LOD (ug/l)
9861917	83	0.20	86	0.20
9861918	80	0.21	79	0.21
9861919	83	0.21	79	0.21
9861920	78	0.21	83	0.21
9861921	78	0.19	75	0.19
9861922	77	0.19	81	0.19
Blan	80	0.20	73	0.20
LCS	81	0.20	80	0.20
Limits:	32-138		32-138	

Analysis Name: OC Pesticides in Water
Batch number: 182980006A

Outside of specification
This limit was used in the evaluation of the final result for the blan
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspi ed result was more than four times the spi e added.
(3) The surrogate spi e amount was less than the LOD.

Quality Control Summary

Client Name: Tidewater Inc. Group Number: 2000768
Reported: 11/19/2018 14:17

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: OC Pesticides in Water
Batch number: 182980006A

	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)
9861917	78	0.025	76	0.025	72	0.025	75	0.025
9861918	71	0.024	51	0.024	63	0.024	49	0.024
9861919	59	0.026	29	0.026	53	0.026	27	0.026
9861920	78	0.027	52	0.027	71	0.027	50	0.027
9861921	76	0.024	70	0.024	64	0.024	67	0.024
9861922	74	0.024	62	0.024	68	0.024	58	0.024
Blan	72	0.024	80	0.024	71	0.024	85	0.024
LCS	66	0.024	72	0.024	65	0.024	75	0.024
Limits:	44-124		32-149		44-124		32-149	

Analysis Name: PCBs in Water by 8082A
Batch number: 182980007A

	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)
9861917	106	0.025	79	0.025	100	0.025	84	0.025
9861918	114	0.024	66	0.024	112	0.024	68	0.024
9861919	74	0.026	33	0.026	72	0.026	34	0.026
9861920	103	0.027	54	0.027	100	0.027	56	0.027
9861921	105	0.024	75	0.024	101	0.024	80	0.024
9861922	106	0.024	68	0.024	104	0.024	70	0.024
Blan	78	0.024	74	0.024	85	0.024	72	0.024
LCS	85	0.024	57	0.024	86	0.024	54	0.024
Limits:	33-137		10-148		33-137		10-148	

Analysis Name: Dioxins/Furans in Water - 8290
Batch number: 18299008

	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)
9861917	78	0.002	78	0.01	74	0.01	73	0.01	75	0.01	76	0.01
9861918	82	0.002	81	0.01	75	0.01	75	0.01	78	0.01	82	0.01
9861919	61	0.002	65	0.01	62	0.01	61	0.01	64	0.01	65	0.01
9861920	81	0.002	83	0.01	78	0.01	79	0.01	81	0.01	84	0.01
9861921	82	0.002	88	0.009	77	0.009	75	0.009	80	0.009	81	0.009
9861922	78	0.002	86	0.009	79	0.009	79	0.009	83	0.009	86	0.009
Blan	87	0.002	87	0.01	82	0.01	81	0.01	82	0.01	82	0.01
OPR	86	0.002	84	0.01	80	0.01	80	0.01	82	0.01	89	0.01

Outside of specification
This limit was used in the evaluation of the final result for the blan
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspi ed result was more than four times the spi e added.
(3) The surrogate spi e amount was less than the LOD.

Quality Control Summary

Client Name: Tidewater Inc.
Reported: 11/19/2018 14:17

Group Number: 2000768

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: 18299008

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)
9861917	71	0.07	62	0.002	70	0.01	76	0.01	72	0.01	70	0.01
9861918	79	0.07	63	0.002	71	0.01	78	0.01	72	0.01	69	0.01
9861919	62	0.07	48	0.002	57	0.01	61	0.01	58	0.01	57	0.01
9861920	80	0.08	64	0.002	73	0.01	79	0.01	73	0.01	71	0.01
9861921	76	0.07	66	0.002	75	0.009	89	0.009	74	0.009	73	0.009
9861922	83	0.07	62	0.002	75	0.009	83	0.009	77	0.009	75	0.009
Blan	77	0.07	65	0.002	77	0.01	82	0.01	75	0.01	73	0.01
OPR	86	0.07	68	0.002	74	0.01	81	0.01	76	0.01	73	0.01

Limits:	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)
9861917	70	0.01	74	0.01	72	0.01	71	0.01	65	0.02
9861918	73	0.01	74	0.01	72	0.01	76	0.01	72	0.02
9861919	59	0.01	66	0.01	61	0.01	61	0.01	57	0.02
9861920	73	0.01	78	0.01	78	0.01	77	0.01	72	0.02
9861921	73	0.009	90	0.009	75	0.009	75	0.009	70	0.02
9861922	77	0.009	96	0.009	82	0.009	81	0.009	76	0.02
Blan	75	0.01	77	0.01	75	0.01	74	0.01	71	0.02
OPR	75	0.01	98	0.01	81	0.01	80	0.01	78	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 blan
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspi ed result was more than four times the spi e added.
(3) The surrogate spi e amount was less than the LOD.

Environmental Analysis Request/Chain of Custody

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For Eurofins Lancaster Laboratories Environmental use only

Acct. # 43062 Group # 2000768 Sample # 9861916-22

COC # 556666

Client Information

Client: Tidewater | Acct. #:

Project Name/#: Phase I Remedial Investigation OU2 at Great Kills Park #2016-007 | PWSID #:

Project Manager: Ryan Wensink | P.O. #:

Sampler: John C Schroeder | Quote #:

State where samples were collected: New York | For Compliance: Yes ☐ No ☒

Matrix

Soil ☐ Sediment ☐ Tissue ☐ | Water ☐ Potable ☐ Ground ☐ NPDES ☐ Surface ☒ | Other: ____

Analysis Requested

Preservation and Filtration Codes

For Lab Use Only

FSC:

SCR#: 2304410

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Remarks

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	VOCs (8260C)	SVOCs (8270D)	PAHs (8270D-SIM)	Inorganics (6020A)	Mercury (7470A)	Pesticides (8081B)	PCBs (8082A)	Herbicides (8151A)	Dioxins/Furans (8290A)
						1†			N	N				
OU2TB101818-001	101818	0850	✓		2	X								
OU2-1-SW001	101818	1010	✓		12	X	X	X	X	X	X	X	X	X
OU2-1-SW003	101818	1140	✓		12	X	X	X	X	X	X	X	X	X
OU2-1-SW004	101818	1355	✓		12	X	X	X	X	X	X	X	X	X
REF-1-SW001	101818	1540	✓		12	X	X	X	X	X	X	X	X	X
OU1-1-SW005	101918	0910	✓		13	X	X	X	X	X	X	X	X	X
OU2-1-SW002	101918	1250	✓		13	X	X	X	X	X	X	X	X	X

† 10/19/18

Turnaround Time (TAT) Requested (please circle)

Standard Rush

(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed:

E-mail address: colleen.scott@aecom.com ryan.wensink@tidech2o.net devon.chicoine@aecom.com

Data Package Options (circle if required)

Type I (EPA Level 3 Equivalent/non-CLP) | Type VI (Raw Data Only)

Type III (Reduced non-CLP) | NJ DKQP | TX TRRP-13

NYSDEC Category A or B | MA MCP | CT RCP

Relinquished by	Date	Time	Received by	Date	Time
	10/18/18	1135		101918	0700
	101918	1900	FedEx	101918	1900
				10/20/18	0940

EDD Required? (Yes) No

If yes, format: contact Ryan Wensink

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier: UPS ____ FedEx ✓ Other ____

Temperature upon receipt 0.6-1.4 °C

TIDEWATER INC
RADIOLOGICAL SERVICES

2000768

Location	Great Kills Park	Survey Type	Shipping		Survey Log #	GKP-001
Cooler No	GKP-001	Surveyor	B. Cole		Date	10/19/18

Shipping Survey

Smear Results in dpm/100 cm²			Dose Rate (microR)	
Location	α Result	β result	Location	β result
Right	<MDA	<MDA	Right Side	4
Back	<MDA	<MDA	Back Side	4
Left	<MDA	<MDA	Left Side	5
Top	<MDA	<MDA	Top	4
Bottom	<MDA	<MDA	Bottom	5

Meter	3030E	microRem
Serial No.	217607	19142
Detector	43-10-1	
Serial No.	229364	
Cal Due Date	9-10-19	
MDA	20α/200βγ	

Comments

Dose Rate on contact 4.uR

cal due for microRem: 5-29-19

Surveyor:	B. Cole	10/19/18	Reviewer:	Clif Gray	10/19/18
Signature:	B. Cole	Date	Signature:	Clif Gray	Date

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Sample Administration Receipt Documentation Log

Doc Log ID: 230691

Group Number(s): 2000768

Client: Tidewater

Phase 1 Remediation Investigation OU2 at Great Kiills Park

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	10/20/2018 9:40
Number of Packages:	4	Number of Projects:	1
State/Province of Origin:	NY		

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 ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Nicole Reiff (25684) at 12:51 on 10/20/2018

Samples Chilled Details: Phase 1 Remediation Investigation OU2 at Great Kiills Park

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	0.8	DT	Wet	Y	Bagged	N
2	DT146	0.7	DT	Wet	Y	Bagged	N
3	DT146	1.4	DT	Wet	Y	Bagged	N
4	DT146	0.6	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17601-5994
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

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

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	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.
ppb	parts per billion
Dry weight basis	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 >= 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

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Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9861916	OU2TB101818-001	X		1	Trip Blank
9861917	OU2-1-SW001	X		1	
9861918	OU2-1-SW003	X		1	
9861919	OU2-1-SW004	X		1	
9861920	REF-1-SW001	X		1	
9861921	OU1-1-SW005	X		1	
9861922	OU2-1-SW002	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): 9861916-9861922: 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: TID07

GC/MS Volatiles

Fraction: Volatiles by GC/MS

SAMPLE ANALYSIS:

(Sample number(s): 9861917-9861922: 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): 9861916: 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

eurofins | Lancaster Laboratories Environmental

Quality Control Reference List
GC/MS Volatiles

CLIENT: Tidewater, Inc.
SDG: TID07

Fraction: Volatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
VOCs- 25ml Water by 8260C	H183041AA	VBLKH80	10/31/2018 10:57
		LCSH80	10/31/2018 09:09
		LCDH80	10/31/2018 09:31
		LCSH81	10/31/2018 09:52
		LCDH81	10/31/2018 10:14
		9861916	10/31/2018 11:41
		9861917	10/31/2018 12:02
		9861918	10/31/2018 12:23
		9861919	10/31/2018 12:44
		9861920	10/31/2018 13:06
		9861921	10/31/2018 13:27
		9861922	10/31/2018 13:49

Quality Control Summary
Method Blank
GC/MS Volatiles
SDG: TID07
Matrix: LIQUID

Fraction: Volatiles by GC/MS

H183041AA / VBLKH80 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Dichlorodifluoromethane	10/31/18	N.D.	ug/l	0.05	0.2	0.5
Chloromethane	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Vinyl Chloride	10/31/18	N.D.	ug/l	0.1	0.2	0.5
Bromomethane	10/31/18	N.D.	ug/l	0.07	0.2	0.5
Chloroethane	10/31/18	N.D.	ug/l	0.07	0.2	0.5
Trichlorofluoromethane	10/31/18	N.D.	ug/l	0.05	0.2	0.5
1,1-Dichloroethene	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Freon 113	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Acetone	10/31/18	N.D.	ug/l	0.9	2.0	5.0
Carbon Disulfide	10/31/18	N.D.	ug/l	0.06	0.2	1.0
Methyl Acetate	10/31/18	N.D.	ug/l	0.1	0.2	1.0
Methylene Chloride	10/31/18	N.D.	ug/l	0.07	0.2	0.5
trans-1,2-Dichloroethene	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Methyl Tertiary Butyl Ether	10/31/18	N.D.	ug/l	0.05	0.2	0.5
1,1-Dichloroethane	10/31/18	N.D.	ug/l	0.07	0.2	0.5
2-Butanone	10/31/18	N.D.	ug/l	0.6	2.0	5.0
cis-1,2-Dichloroethene	10/31/18	N.D.	ug/l	0.05	0.2	0.5
Chloroform	10/31/18	N.D.	ug/l	0.09	0.2	0.5
1,1,1-Trichloroethane	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Cyclohexane	10/31/18	N.D.	ug/l	0.05	0.2	0.5
Carbon Tetrachloride	10/31/18	N.D.	ug/l	0.07	0.2	0.5
Benzene	10/31/18	N.D.	ug/l	0.05	0.2	0.5
1,2-Dichloroethane	10/31/18	N.D.	ug/l	0.05	0.2	0.5
Trichloroethene	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Methylcyclohexane	10/31/18	N.D.	ug/l	0.05	0.2	0.5
1,2-Dichloropropane	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Bromodichloromethane	10/31/18	N.D.	ug/l	0.05	0.2	0.5
cis-1,3-Dichloropropene	10/31/18	N.D.	ug/l	0.05	0.2	0.5
4-Methyl-2-Pentanone	10/31/18	N.D.	ug/l	0.7	2.0	5.0
Toluene	10/31/18	N.D.	ug/l	0.07	0.2	0.5
trans-1,3-Dichloropropene	10/31/18	N.D.	ug/l	0.06	0.2	0.5
1,1,2-Trichloroethane	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Tetrachloroethene	10/31/18	N.D.	ug/l	0.06	0.2	0.5
2-Hexanone	10/31/18	N.D.	ug/l	0.6	2.0	5.0
Dibromochloromethane	10/31/18	N.D.	ug/l	0.07	0.2	0.5
1,2-Dibromoethane	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Chlorobenzene	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Ethylbenzene	10/31/18	N.D.	ug/l	0.06	0.2	0.5
Xylene (Total)	10/31/18	N.D.	ug/l	0.1	0.4	0.5
Styrene	10/31/18	N.D.	ug/l	0.05	0.2	0.5
Bromoform	10/31/18	N.D.	ug/l	0.3	0.5	1.0
Isopropylbenzene	10/31/18	N.D.	ug/l	0.05	0.2	0.5
Cyclohexanone	10/31/18	N.D.	ug/l	1.8	7.2	25
1,1,2,2-Tetrachloroethane	10/31/18	N.D.	ug/l	0.07	0.2	0.5
1,3-Dichlorobenzene	10/31/18	N.D.	ug/l	0.06	0.2	0.5

Fraction: Volatiles by GC/MS

H183041AA / VBLKH80 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
1,4-Dichlorobenzene	10/31/18	N.D.	ug/l	0.07	0.2	0.5
1,2-Dichlorobenzene	10/31/18	N.D.	ug/l	0.06	0.2	0.5
1,2-Dibromo-3-chloropropane	10/31/18	N.D.	ug/l	0.1	0.4	0.5
1,2,4-Trichlorobenzene	10/31/18	N.D.	ug/l	0.06	0.2	0.5

Quality Control Summary
Surrogates
GC/MS Volatiles
SDG: TID07
Matrix: LIQUID

Fraction: Volatiles by GC/MS

H183041AA	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
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLKH80	103	81 - 118	98	85 - 114	98	80 - 119	103	89 - 112
LCSH80	101	81 - 118	98	85 - 114	98	80 - 119	102	89 - 112
LCDH80	101	81 - 118	100	85 - 114	98	80 - 119	104	89 - 112
9861916	102	81 - 118	99	85 - 114	99	80 - 119	102	89 - 112
9861917	103	81 - 118	98	85 - 114	98	80 - 119	103	89 - 112
9861918	102	81 - 118	98	85 - 114	98	80 - 119	102	89 - 112
9861919	101	81 - 118	97	85 - 114	98	80 - 119	103	89 - 112
9861920	101	81 - 118	97	85 - 114	98	80 - 119	102	89 - 112
9861921	101	81 - 118	97	85 - 114	98	80 - 119	104	89 - 112
9861922	101	81 - 118	97	85 - 114	98	80 - 119	104	89 - 112

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: TID07
Matrix: LIQUID

GC/MS Volatiles

Fraction: Volatiles by GC/MS

LCS: LCSH80 LCSD: LCDH80	Batch: **H183041AA** (Sample number(s): 9861916-9861922)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dichlorodifluoromethane	5.00	3.18	3.13	64	63	32-152	2	20
Chloromethane	5.00	3.88	3.81	78	76	50-139	2	20
Vinyl Chloride	5.00	4.04	3.97	81	79	58-137	2	20
Bromomethane	5.00	3.69	3.63	74	73	53-141	2	20
Chloroethane	5.00	3.97	3.95	79	79	60-138	1	20
Trichlorofluoromethane	5.00	3.88	3.82	78	76	65-141	2	20
1,1-Dichloroethene	5.00	5.27	5.11	105	102	71-131	3	20
Freon 113	5.00	4.57	4.44	91	89	70-136	3	20
Acetone	37.5	30.41	30.43	81	81	39-160	0	20
Carbon Disulfide	5.00	4.55	4.44	91	89	64-133	2	20
Methyl Acetate	5.00	4.06	4.46	81	89	56-136	10	20
Methylene Chloride	5.00	4.77	4.76	95	95	74-124	0	20
trans-1,2-Dichloroethene	5.00	5.08	4.98	102	100	75-124	2	20
Methyl Tertiary Butyl Ether	5.00	4.69	4.61	94	92	71-124	2	20
1,1-Dichloroethane	5.00	4.98	4.88	100	98	77-125	2	20
2-Butanone	37.5	33.39	35.98	89	96	56-143	7	20
cis-1,2-Dichloroethene	5.00	5.03	4.98	101	100	78-123	1	20
Chloroform	5.00	5.02	5.04	100	101	79-124	0	20
1,1,1-Trichloroethane	5.00	5.01	4.99	100	100	74-131	0	20
Cyclohexane	5.00	4.56	4.49	91	90	71-130	2	20
Carbon Tetrachloride	5.00	5.11	5.05	102	101	72-136	1	20
Benzene	5.00	4.82	4.80	96	96	79-120	0	20
1,2-Dichloroethane	5.00	5.03	4.89	101	98	73-128	3	20
Trichloroethene	5.00	4.87	4.83	97	97	79-123	1	20
Methylcyclohexane	5.00	4.12	4.02	82	80	72-132	2	20
1,2-Dichloropropane	5.00	5.00	4.98	100	100	78-122	0	20
Bromodichloromethane	5.00	5.09	5.00	102	100	79-125	2	20
cis-1,3-Dichloropropene	5.00	4.93	4.84	99	97	75-124	2	20
4-Methyl-2-Pentanone	25	21.72	23.41	87	94	67-130	7	20
Toluene	5.00	4.99	5.04	100	101	80-121	1	20
trans-1,3-Dichloropropene	5.00	5.36	5.18	107	104	73-127	3	20
1,1,2-Trichloroethane	5.00	5.26	5.20	105	104	80-119	1	20
Tetrachloroethene	5.00	5.13	5.07	103	101	74-129	1	20
2-Hexanone	25	21.97	23.48	88	94	57-139	7	20
Dibromochloromethane	5.00	5.20	5.10	104	102	74-126	2	20
1,2-Dibromoethane	5.00	5.20	5.18	104	104	77-121	0	20
Chlorobenzene	5.00	5.08	5.06	102	101	82-118	0	20
Ethylbenzene	5.00	5.06	5.03	101	101	79-121	1	20
Xylene (Total)	15	15.3	15.4	102	103	79-121	1	20
Styrene	5.00	5.19	5.16	104	103	78-123	1	20
Bromoform	5.00	5.11	5.03	102	101	66-130	1	20
Isopropylbenzene	5.00	5.07	5.08	101	102	72-131	0	20

GC/MS Volatiles

Fraction: Volatiles by GC/MS

LCS: LCSH80 LCSD: LCDH80	Batch: **H183041AA** (Sample number(s): 9861916-9861922)							
Analyte	**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	5.03	4.83	101	97	71-121	4	20
1,3-Dichlorobenzene	5.00	5.06	4.92	101	98	80-119	3	20
1,4-Dichlorobenzene	5.00	5.08	5.02	102	100	79-118	1	20
1,2-Dichlorobenzene	5.00	5.00	4.86	100	97	80-119	3	20
1,2-Dibromo-3-chloropropane	5.00	3.41	3.78	68	76	62-128	10	20
1,2,4-Trichlorobenzene	5.00	4.60	4.49	92	90	69-130	2	20

LCS: LCSH81 LCSD: LCDH81	Batch: **H183041AA** (Sample number(s): 9861916-9861922)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Cyclohexanone	125	116.87	116.75	93	93	26-147	0	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.:_____ SDG No.:_____

Lab File ID: hy02t07.d BFB Injection Date: 05/02/18

Instrument ID: HP19094 BFB Injection Time: 18:32

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	22.13
75	30.0 - 60.0% of mass 95	52.51
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.69
173	Less than 2.0% of mass 174	0.74 (0.91)1
174	Greater than 50.0% of mass 95	81.35
175	5.0 - 9.0% of mass 174	6.02 (7.39)1
176	Greater than 95.0%, but less than 101.0% of mass 174	78.44 (96.43)1
177	5.0 - 9.0% of mass 176	5.34 (6.81)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	hy02i11.d	05/02/18	19:15
02	VSTD10	hy02i12.d	05/02/18	19:36
03	VSTD5	hy02i13.d	05/02/18	19:58
04	VSTD2	hy02i14.d	05/02/18	20:19
05	VSTD1	hy02i15.d	05/02/18	20:40
06	VSTD.5	hy02i16.d	05/02/18	21:02
07	VSTD.2	hy02i17.d	05/02/18	21:23
08	MDL0.1 - MDL0.1	hy02m11.d	05/02/18	21:45
09	LCSH88	hy02v11.d	05/02/18	22:07

FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: hs24t05.d BFB Injection Date: 09/24/18

Instrument ID: HP19094 BFB Injection Time: 17:53

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	18.30
75	30.0 - 60.0% of mass 95	48.01
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.23
173	Less than 2.0% of mass 174	0.88 (0.99)1
174	Greater than 50.0% of mass 95	88.37
175	5.0 - 9.0% of mass 174	6.59 (7.45)1
176	Greater than 95.0%, but less than 101.0% of mass 174	86.23 (97.58)1
177	5.0 - 9.0% of mass 176	6.27 (7.28)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	hs24i01.d	09/24/18	18:29
02	VSTD10	hs24i02.d	09/24/18	18:50
03	VSTD5	hs24i03.d	09/24/18	19:11
04	VSTD2	hs24i04.d	09/24/18	19:33
05	VSTD1	hs24i05.d	09/24/18	19:54
06	VSTD.5	hs24i06.d	09/24/18	20:16
07	VSTD.2	hs24i07.d	09/24/18	20:37
08	MDL0.1 - MDL0.1	hs24m01.d	09/24/18	20:59
09	ICVHLG	hs24v01.d	09/24/18	21:20

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: hc31t01.d BFB Injection Date: 10/31/18

Instrument ID: HP19094 BFB Injection Time: 07:29

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	19.97
75	30.0 - 60.0% of mass 95	51.75
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.07
173	Less than 2.0% of mass 174	1.26 (1.49)1
174	Greater than 50.0% of mass 95	84.55
175	5.0 - 9.0% of mass 174	6.34 (7.49)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.38 (95.07)1
177	5.0 - 9.0% of mass 176	5.17 (6.44)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	hc31c01.d	10/31/18	08:27
02	VSTD10	hc31c02.d	10/31/18	08:48
03	LCSH80	hc31l01.d	10/31/18	09:09
04	LCSH82	hc31l21.d	10/31/18	09:09
05	LCDH80	hc31l02.d	10/31/18	09:31
06	LCDH82	hc31l22.d	10/31/18	09:31
07	LCSH81	hc31l03.d	10/31/18	09:52
08	LCSH83	hc31l23.d	10/31/18	09:52
09	LCDH81	hc31l04.d	10/31/18	10:14
10	LCDH83	hc31l24.d	10/31/18	10:14
11	MDLH80 - MDLH80	hc31m01.d	10/31/18	10:35
12	MDLH82 - MDLH82	hc31m21.d	10/31/18	10:35
13	VBLKH80	hc31b01.d	10/31/18	10:57
14	VBLKH82	hc31b21.d	10/31/18	10:57
15	9861916	hc31s01.d	10/31/18	11:41
16	9861917	hc31s02.d	10/31/18	12:02
17	9861918	hc31s03.d	10/31/18	12:23
18	9861919	hc31s04.d	10/31/18	12:44
19	9861920	hc31s05.d	10/31/18	13:06
20	9861921	hc31s06.d	10/31/18	13:27
21	9861922	hc31s07.d	10/31/18	13:49
22	9863850	hc31s08.d	10/31/18	14:10

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: hc31t01.d BFB Injection Date: 10/31/18

Instrument ID: HP19094 BFB Injection Time: 07:29

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	19.97
75	30.0 - 60.0% of mass 95	51.75
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.07
173	Less than 2.0% of mass 174	1.26 (1.49)1
174	Greater than 50.0% of mass 95	84.55
175	5.0 - 9.0% of mass 174	6.34 (7.49)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.38 (95.07)1
177	5.0 - 9.0% of mass 176	5.17 (6.44)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	9861930	hc31s21.d	10/31/18	14:32
24	9861930DL	hc31s36.d	10/31/18	14:53
25	9861931	hc31s37.d	10/31/18	15:15
26	9861931DL	hc31s38.d	10/31/18	15:36
27	9861940	hc31s39.d	10/31/18	15:57
28	9861941	hc31s40.d	10/31/18	16:19
29	9861942	hc31s41.d	10/31/18	16:40
30	9861943	hc31s42.d	10/31/18	17:01
31	9861944	hc31s43.d	10/31/18	17:23
32	9861945	hc31s44.d	10/31/18	17:45
33	9861946	hc31s45.d	10/31/18	18:06
34	9861955	hc31s46.d	10/31/18	18:28
35	SECC010	hc31s09.d	10/31/18	18:49
36	SECB010	hc31s10.d	10/31/18	19:11

FORM V VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19094 Calibration Date(s): 09/24/18 09/24/18

Heated Purge: (Y/N) Y Calibration Times: 18:29 20:37

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

LAB FILE ID: RRF0.2= hs24i07.d RRF0.5= hs24i06.d RRF 1 = hs24i05.d
RRF 2 = hs24i04.d RRF 5 = hs24i03.d RRF 10= hs24i02.d RRF 25= hs24i01.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
Dichlorodifluoromethane	#0.3380	0.3844	0.3955	0.3840	0.4097	0.4153	0.4089	0.3908	7	AVG #
Chloromethane	#0.3666	0.3812	0.3853	0.3730	0.3900	0.3939	0.3892	0.3827	3	AVG #
Vinyl Chloride	#0.3437	0.3452	0.3656	0.3476	0.3655	0.3717	0.3695	0.3584	3	AVG #
1,3-Butadiene	0.4071	0.3994	0.4295	0.4025	0.4024	0.4033	0.3977	0.4060	3	AVG
Bromomethane	#0.2658	0.2790	0.2802	0.2752	0.2802	0.2863	0.2838	0.2786	2	AVG #
Chloroethane	#0.2153	0.2148	0.2244	0.2134	0.2173	0.2205	0.2162	0.2174	2	AVG #
Dichlorofluoromethane	0.4863	0.4967	0.5291	0.5160	0.5340	0.5250	0.5325	0.5171	4	AVG
Trichlorofluoromethane	#0.4040	0.4488	0.4614	0.4428	0.4717	0.4709	0.4699	0.4528	5	AVG #
Ethyl ether	0.1522	0.1489	0.1504	0.1542	0.1545	0.1583	0.1563	0.1535	2	AVG
Freon 123a	0.2447	0.2821	0.2934	0.2879	0.3015	0.3019	0.2965	0.2869	7	AVG
Acrolein	2.1198	2.0592	2.1962	2.0635	2.3423	2.4323	2.3181	2.2188	7	AVG
1,1-Dichloroethene	#0.1600	0.1855	0.2038	0.1994	0.2077	0.2075	0.2086	0.1961	9	AVG #
Freon 113	#0.1774	0.2175	0.2391	0.2337	0.2475	0.2531	0.2494	0.2311	11	AVG #
Acetone	#3.2559	2.8395	2.9519	2.8356	2.9753	3.0172	2.9856	2.9801	5	AVG #
Methyl Iodide	0.3727	0.3995	0.4135	0.4033	0.4227	0.4255	0.4237	0.4087	5	AVG
Carbon Disulfide	#0.5967	0.6051	0.6303	0.6060	0.6379	0.6471	0.6440	0.6239	3	AVG #
Allyl Chloride	0.3543	0.3501	0.3714	0.3743	0.3829	0.3890	0.3870	0.3727	4	AVG
Methyl Acetate	#	8.0473	8.9174	8.2822	8.4178	8.3747	8.1582	8.3663	4	AVG #
Methylene Chloride	#0.2543	0.2082	0.2246	0.2127	0.2144	0.2186	0.2156	0.2212	7	AVG #
t-Butyl Alcohol	0.8075	0.8290	0.8990	0.8853	0.8581	0.9014	0.7939	0.8535	5	AVG
Acrylonitrile	3.6046	3.6151	3.8689	3.5796	4.0954	4.1849	3.9920	3.8486	7	AVG
trans-1,2-Dichloroethene	#0.2055	0.2092	0.2290	0.2160	0.2279	0.2325	0.2290	0.2213	5	AVG #
Methyl Tertiary Butyl Ether	#0.3525	0.3879	0.4149	0.4082	0.4218	0.4292	0.4083	0.4032	6	AVG #
n-Hexane	0.2565	0.3255	0.3632	0.3491	0.3833	0.3933	0.3923	0.3519	14	AVG
1,1-Dichloroethane	#0.3762	0.4022	0.4348	0.4176	0.4398	0.4430	0.4357	0.4213	6	AVG #
di-Isopropyl Ether	0.7011	0.7115	0.7555	0.7496	0.7609	0.7819	0.7771	0.7482	4	AVG
2-Chloro-1,3-Butadiene	0.3109	0.3474	0.3840	0.3818	0.4066	0.4138	0.4095	0.3791	10	AVG
Ethyl t-butyl ether	0.5277	0.5761	0.6125	0.6028	0.6146	0.6262	0.5944	0.5935	6	AVG
cis-1,2-Dichloroethene	#0.2191	0.2336	0.2512	0.2409	0.2547	0.2573	0.2548	0.2445	6	AVG #
2,2-Dichloropropane	0.2529	0.2750	0.3029	0.3083	0.3200	0.3278	0.3195	0.3009	9	AVG
2-Butanone	#4.7407	4.4717	4.8604	4.4839	5.2815	5.3633	4.9464	4.8783	7	AVG #
Propionitrile	1.1750	1.3038	1.3751	1.2700	1.4479	1.4295	1.2676	1.3241	7	AVG
Methacrylonitrile	4.3615	4.3517	4.7414	4.3969	5.1979	5.2827	5.0894	4.7745	9	AVG
Bromochloromethane	0.1024	0.0949	0.1024	0.1048	0.1062	0.1068	0.1056	0.1033	4	AVG
Tetrahydrofuran	1.2361	1.1778	1.2836	1.2200	1.3946	1.4399	1.3263	1.2969	7	AVG
Chloroform	#0.3416	0.3782	0.4144	0.3892	0.4020	0.4101	0.4064	0.3917	6	AVG #
1,1,1-Trichloroethane	#0.2842	0.3160	0.3433	0.3371	0.3555	0.3569	0.3525	0.3351	8	AVG #
Cyclohexane	#0.3470	0.4028	0.4493	0.4389	0.4704	0.4796	0.4739	0.4374	11	AVG #
Cyclohexane(2)	#0.2914	0.3151	0.3783	0.3668	0.3893	0.3943	0.3892	0.3606	11	AVG #
Cyclohexane(3)	#0.1022	0.1183	0.1318	0.1288	0.1387	0.1419	0.1407	0.1289	11	AVG #
1,1-Dichloropropene	0.2759	0.2910	0.3278	0.3191	0.3346	0.3387	0.3371	0.3177	8	AVG
Carbon Tetrachloride	#0.2319	0.2693	0.2968	0.2885	0.3032	0.3144	0.3103	0.2878	10	AVG #
Isobutyl Alcohol	0.2897	0.3375	0.3434	0.3190	0.3348	0.3491	0.3379	0.3302	6	AVG
Benzene	#0.8848	0.9069	0.9593	0.9138	0.9669	0.9701	0.9685	0.9386	4	AVG #
1,2-Dichloroethane	#0.2384	0.2152	0.2154	0.2064	0.2100	0.2143	0.2124	0.2160	5	AVG #
t-Amyl methyl ether	0.4510	0.4674	0.5059	0.4955	0.5077	0.5220	0.4947	0.4920	5	AVG
n-Heptane	0.2678	0.3330	0.3732	0.3588	0.3968	0.4037	0.4063	0.3628	14	AVG
n-Butanol	0.2534	0.2553	0.2725	0.2718	0.2920	0.3060	0.3017	0.2790	8	AVG
Trichloroethene	#0.2151	0.2224	0.2471	0.2423	0.2494	0.2532	0.2529	0.2403	6	AVG #
Methylcyclohexane	#0.4063	0.4157	0.4453	0.4529	0.4752	0.4906	0.4911	0.4539	8	AVG #
1,2-Dichloropropane	#0.2175	0.2096	0.2288	0.2255	0.2362	0.2385	0.2379	0.2277	5	AVG #
Methyl Methacrylate	7.4866	7.5623	8.6561	8.1346	9.7939	10.147	10.081	8.8375	13	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: HP19094 Calibration Date(s): 09/24/18 09/24/18

Heated Purge: (Y/N) Y Calibration Times: 18:29 20:37

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

LAB FILE ID: RRF0.2= hs24i07.d RRF0.5= hs24i06.d RRF 1 = hs24i05.d
RRF 2 = hs24i04.d RRF 5 = hs24i03.d RRF 10= hs24i02.d RRF 25= hs24i01.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
Dibromomethane	0.0859	0.0918	0.0963	0.0957	0.0964	0.0974	0.0982	0.0945	5	AVG
1,4-Dioxane		0.0512	0.0674	0.0735	0.0717	0.0692	0.0699	0.0672	12	AVG
Bromodichloromethane	#0.2375	0.2374	0.2531	0.2486	0.2658	0.2725	0.2772	0.2560	6	AVG #
2-Nitropropane	2.1943	2.1326	2.3103	2.2662	2.7615	2.9069	2.9516	2.5034	14	AVG
cis-1,3-Dichloropropene	#0.2646	0.2677	0.2918	0.2956	0.3133	0.3253	0.3282	0.2981	9	AVG #
4-Methyl-2-Pentanone	#10.423	10.703	12.049	11.150	13.294	13.683	13.638	12.134	12	AVG #
Toluene	#0.6968	0.7194	0.7473	0.7411	0.7565	0.7709	0.7625	0.7421	4	AVG #
trans-1,3-Dichloropropene	#0.2330	0.2716	0.2792	0.2845	0.2990	0.3169	0.3174	0.2859	10	AVG #
Ethyl Methacrylate	0.2095	0.2309	0.2354	0.2500	0.2537	0.2684	0.2669	0.2450	9	AVG
1,1,2-Trichloroethane	#0.1691	0.1575	0.1727	0.1725	0.1711	0.1785	0.1739	0.1708	4	AVG #
Tetrachloroethene	#0.2956	0.3305	0.3401	0.3373	0.3460	0.3515	0.3460	0.3353	6	AVG #
1,3-Dichloropropane	0.2838	0.2841	0.3046	0.3097	0.3104	0.3149	0.3111	0.3026	4	AVG
2-Hexanone	#7.3199	7.3166	8.1580	7.5786	9.0091	9.2952	9.1412	8.2598	11	AVG #
Dibromochloromethane	#0.1948	0.1857	0.1947	0.2070	0.2115	0.2179	0.2208	0.2046	6	AVG #
1,2-Dibromoethane	#0.1471	0.1541	0.1589	0.1562	0.1643	0.1719	0.1680	0.1601	5	AVG #
1-Chlorohexane	0.4437	0.4223	0.4433	0.4259	0.4476	0.4585	0.4569	0.4426	3	AVG
Chlorobenzene	#0.7275	0.7494	0.8164	0.7808	0.8015	0.8151	0.8204	0.7873	5	AVG #
1,1,1,2-Tetrachloroethane	0.2148	0.2441	0.2605	0.2596	0.2721	0.2837	0.2840	0.2598	9	AVG
Ethylbenzene	#1.2688	1.3813	1.4741	1.4462	1.4984	1.5393	1.5444	1.4504	7	AVG #
m+p-Xylene	#0.4752	0.5146	0.5391	0.5376	0.5603	0.5690	0.5701	0.5380	6	AVG #
o-Xylene	#0.4328	0.4897	0.5241	0.5154	0.5368	0.5477	0.5536	0.5143	8	AVG #
Styrene	#0.6878	0.7466	0.8289	0.8287	0.8757	0.8924	0.9000	0.8229	10	AVG #
Bromoform	#0.0962	0.1042	0.1113	0.1109	0.1171	0.1227	0.1250	0.1125	9	AVG #
Isopropylbenzene	#1.1958	1.3049	1.4259	1.4006	1.4806	1.4990	1.5215	1.4040	8	AVG #
1,1,2,2-Tetrachloroethane	#0.3905	0.3709	0.3819	0.3843	0.4123	0.4144	0.4225	0.3967	5	AVG #
Bromobenzene	0.5278	0.5708	0.6063	0.6016	0.6293	0.6307	0.6550	0.6030	7	AVG
trans-1,4-Dichloro-2-butene	3.2707	3.2389	3.7050	3.4423	4.2002	4.3536	4.3928	3.8005	13	AVG
1,2,3-Trichloropropane	0.0983	0.1022	0.1028	0.1034	0.1042	0.1033	0.1036	0.1025	2	AVG
n-Propylbenzene	2.8181	3.0518	3.2914	3.2490	3.4590	3.4886	3.5948	3.2790	8	AVG
2-Chlorotoluene	0.5518	0.6185	0.6460	0.6324	0.6632	0.6645	0.6753	0.6360	7	AVG
1,3,5-Trimethylbenzene	1.8494	2.0479	2.2234	2.2089	2.3773	2.3691	2.4731	2.2213	10	AVG
4-Chlorotoluene	0.5465	0.6043	0.6553	0.6366	0.6706	0.6636	0.6842	0.6373	7	AVG
tert-Butylbenzene	0.3899	0.4598	0.4952	0.4960	0.5055	0.5106	0.5245	0.4831	9	AVG
Pentachloroethane	0.3255	0.3274	0.3543	0.3751	0.4049	0.4175	0.4346	0.3770	12	AVG
1,2,4-Trimethylbenzene	1.8578	2.1050	2.2557	2.2683	2.4136	2.4170	2.5493	2.2667	10	AVG
sec-Butylbenzene	2.3074	2.5867	2.9178	2.8538	3.0767	3.1336	3.2726	2.8784	12	AVG
1,3-Dichlorobenzene	#1.0200	1.1416	1.2276	1.1973	1.2481	1.2485	1.3039	1.1981	8	AVG #
p-Isopropyltoluene	1.8768	2.1348	2.3564	2.3843	2.5700	2.6128	2.7544	2.3842	13	AVG
1,4-Dichlorobenzene	#1.0899	1.0941	1.1950	1.1603	1.2155	1.2175	1.2607	1.1761	6	AVG #
1,2,3-Trimethylbenzene	1.0207	0.9774	1.0183	1.0334	1.0455	1.0757	1.1084	1.0399	4	AVG
Benzyl Chloride		0.1092	0.1229	0.1383	0.1502	0.1669	0.1729	0.1434	17	AVG
n-Butylbenzene	0.9426	1.0785	1.2030	1.1681	1.2616	1.2878	1.3425	1.1834	12	AVG
1,2-Dichlorobenzene	#0.9680	1.0221	1.0665	1.0569	1.0918	1.0822	1.1123	1.0571	5	AVG #
1,2-Dibromo-3-chloropropane	#1.6120	1.6792	2.1671	1.8688	2.3036	2.3298	2.4378	2.0569	16	AVG #
1,3,5-Trichlorobenzene	0.7724	0.8416	0.8987	0.8625	0.9221	0.9492	0.9929	0.8913	8	AVG
1,2,4-Trichlorobenzene	#0.6328	0.6854	0.7128	0.7113	0.7490	0.7750	0.8160	0.7260	8	AVG #
Hexachlorobutadiene	0.2548	0.2553	0.2675	0.2668	0.2841	0.2891	0.3032	0.2744	7	AVG
Naphthalene	0.9415	1.0203	1.1133	1.1358	1.2217	1.2836	1.3262	1.1489	12	AVG
1,2,3-Trichlorobenzene	0.5182	0.5589	0.5959	0.5792	0.6174	0.6490	0.6602	0.5970	8	AVG
Dibromofluoromethane	0.2512	0.2521	0.2524	0.2530	0.2528	0.2517	0.2511	0.2520	0	AVG
Dibromofluoromethane(2)	0.2598	0.2573	0.2615	0.2599	0.2578	0.2618	0.2579	0.2594	1	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: HP19094 Calibration Date(s): 09/24/18 09/24/18

Heated Purge: (Y/N) Y Calibration Times: 18:29 20:37

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

LAB FILE ID: RRF0.2= hs24i07.d RRF0.5= hs24i06.d RRF 1 = hs24i05.d
RRF 2 = hs24i04.d RRF 5 = hs24i03.d RRF 10= hs24i02.d RRF 25= hs24i01.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
1,2-Dichloroethane-d4	0.0442	0.0434	0.0434	0.0451	0.0436	0.0447	0.0432	0.0439	2	AVG
1,2-Dichloroethane-d4(2)	0.2145	0.2128	0.2150	0.2127	0.2086	0.2137	0.2105	0.2125	1	AVG
1,2-Dichloroethane-d4(3)	0.0282	0.0281	0.0289	0.0277	0.0280	0.0285	0.0276	0.0281	2	AVG
Toluene-d8	1.3052	1.2869	1.2788	1.3015	1.2877	1.2898	1.2594	1.2870	1	AVG
Toluene-d8(2)	0.8344	0.8306	0.8301	0.8441	0.8303	0.8321	0.8133	0.8307	1	AVG
4-Bromofluorobenzene	0.4770	0.4703	0.4684	0.4767	0.4646	0.4676	0.4556	0.4686	2	AVG
4-Bromofluorobenzene(2)	0.4124	0.4112	0.4059	0.4114	0.4017	0.4081	0.3976	0.4069	1	AVG

Average %RSD 7

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/HP19094.i/18sep24i.b/hs24i01.d	VSTD025
/chem2/HP19094.i/18sep24i.b/hs24i02.d	VSTD010
/chem2/HP19094.i/18sep24i.b/hs24i03.d	VSTD005
/chem2/HP19094.i/18sep24i.b/hs24i04.d	VSTD002
/chem2/HP19094.i/18sep24i.b/hs24i05.d	VSTD001
/chem2/HP19094.i/18sep24i.b/hs24i06.d	VSTD0.5
/chem2/HP19094.i/18sep24i.b/hs24i07.d	VSTD0.2

Area Summary

File ID:

Internal Standard Name	hs24i01.d	hs24i02.d	hs24i03.d	hs24i04.d	hs24i05.d	hs24i06.d	hs24i07.d	Avg. Area	%RSD	In Spec
t-Butyl Alcohol-d10	123769	126410	127180	147863	137024	140183	136477	134129	6	Yes
Fluorobenzene	2609636	2675616	2745022	2771401	2758903	2743076	2763999	2723950	2	Yes
Chlorobenzene-d5	2080614	2091043	2142668	2139668	2171615	2144655	2139400	2129952	2	Yes
1,4-Dichlorobenzene-d4	1041754	1077251	1089195	1109693	1123390	1119082	1132249	1098945	3	Yes

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

RT Summary

File ID:

Internal Standard Name	hs24i01.d	hs24i02.d	hs24i03.d	hs24i04.d	hs24i05.d	hs24i06.d	hs24i07.d	Avg. RT
t-Butyl Alcohol-d10	4.470	4.483	4.482	4.476	4.470	4.477	4.482	4.477
Fluorobenzene	7.970	7.970	7.963	7.964	7.963	7.964	7.970	7.966
Chlorobenzene-d5	11.384	11.384	11.384	11.384	11.383	11.384	11.384	11.384
1,4-Dichlorobenzene-d4	13.255	13.249	13.249	13.249	13.249	13.249	13.249	13.250

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

Report generated on 09/25/2018 at 07:39.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19094 ICV Date: 09/24/18 Time: 21:20

Lab File ID: hs24v01.d Init. Calib. Date(s): 09/24/18 09/24/18

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

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.3908	0.3172	4.06	5	-19	#
# Chloromethane	0.3827	0.3497	4.57	5	-9	#
# Vinyl Chloride	0.3584	0.3392	4.73	5	-5	#
1,3-Butadiene	0.4060	0.3387	4.17	5	-17	
# Bromomethane	0.2786	0.2311	4.15	5	-17	#
# Chloroethane	0.2174	0.1959	4.51	5	-10	#
Dichlorofluoromethane	0.5171	0.4978	4.81	5	-4	
# Trichlorofluoromethane	0.4528	0.4031	4.45	5	-11	#
Ethyl ether	0.1535	0.1414	4.61	5	-8	
Freon 123a	0.2869	0.2963	5.16	5	3	
Acrolein	2.2188	1.8796	31.77	37.5	-15	
# 1,1-Dichloroethene	0.1961	0.2212	5.64	5	13	#
# Freon 113	0.2311	0.2437	5.27	5	5	#
# Acetone	2.9801	2.5719	32.36	37.5	-14	#
Methyl Iodide	0.4087	0.3967	4.85	5	-3	
# Carbon Disulfide	0.6239	0.5961	4.78	5	-4	#
Allyl Chloride	0.3727	0.3366	4.52	5	-10	
# Methyl Acetate	8.3663	7.1758	4.29	5	-14	#
# Methylene Chloride	0.2212	0.2191	4.95	5	-1	#
t-Butyl Alcohol	0.8535	0.8243	48.29	50	-3	
Acrylonitrile	3.8486	3.5584	23.11	25	-8	
# trans-1,2-Dichloroethene	0.2213	0.2368	5.35	5	7	#
# Methyl Tertiary Butyl Ether	0.4032	0.3967	4.92	5	-2	#
n-Hexane	0.3519	0.3623	5.15	5	3	
# 1,1-Dichloroethane	0.4213	0.4392	5.21	5	4	#
di-Isopropyl Ether	0.7482	0.7508	5.02	5	0	
2-Chloro-1,3-Butadiene	0.3791	0.3807	5.02	5	0	
Ethyl t-butyl ether	0.5935	0.5760	4.85	5	-3	
# cis-1,2-Dichloroethene	0.2445	0.2605	5.33	5	7	#
2,2-Dichloropropane	0.3009	0.3204	5.32	5	6	
# 2-Butanone	4.8783	4.5905	35.29	37.5	-6	#
Propionitrile	1.3241	1.3362	37.84	37.5	1	
Methacrylonitrile	4.7745	4.5420	35.67	37.5	-5	
Bromochloromethane	0.1033	0.0938	4.54	5	-9	
Tetrahydrofuran	1.2969	1.2254	23.62	25	-6	
# Chloroform	0.3917	0.4191	5.35	5	7	#

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: HP19094 ICV Date: 09/24/18 Time: 21:20

Lab File ID: hs24v01.d Init. Calib. Date(s): 09/24/18 09/24/18

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

COMPOUND	$\overline{RRF}$	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
# 1,1,1-Trichloroethane	0.3351	0.3556	5.31	5	6	#
# Cyclohexane	0.4374	0.4418	5.05	5	1	#
1,1-Dichloropropene	0.3177	0.3305	5.20	5	4	
# Carbon Tetrachloride	0.2878	0.3045	5.29	5	6	#
Isobutyl Alcohol	0.3302	0.3194	120.92	125	-3	
# Benzene	0.9386	0.9606	5.12	5	2	#
# 1,2-Dichloroethane	0.2160	0.2161	5.00	5	0	#
t-Amyl methyl ether	0.4920	0.4796	4.87	5	-3	
n-Heptane	0.3628	0.3736	5.15	5	3	
n-Butanol	0.2790	0.2586	231.70	250	-7	
# Trichloroethene	0.2403	0.2508	5.22	5	4	#
# Methylcyclohexane	0.4539	0.4251	4.68	5	-6	#
# 1,2-Dichloropropane	0.2277	0.2359	5.18	5	4	#
Methyl Methacrylate	8.8375	8.4056	4.76	5	-5	
Dibromomethane	0.0945	0.0974	5.15	5	3	
1,4-Dioxane	0.0672	0.0678	126.10	125	1	
# Bromodichloromethane	0.2560	0.2699	5.27	5	5	#
2-Nitropropane	2.5034	2.0564	4.11	5	-18	
# cis-1,3-Dichloropropene	0.2981	0.3034	5.09	5	2	#
# 4-Methyl-2-Pentanone	12.134	11.2665	23.21	25	-7	#
# Toluene	0.7421	0.7621	5.14	5	3	#
# trans-1,3-Dichloropropene	0.2859	0.2900	5.07	5	1	#
Ethyl Methacrylate	0.2450	0.2371	4.84	5	-3	
# 1,1,2-Trichloroethane	0.1708	0.1782	5.22	5	4	#
# Tetrachloroethene	0.3353	0.3454	5.15	5	3	#
1,3-Dichloropropane	0.3026	0.3017	4.98	5	0	
# 2-Hexanone	8.2598	7.5207	22.76	25	-9	#
# Dibromochloromethane	0.2046	0.2117	5.17	5	3	#
# 1,2-Dibromoethane	0.1601	0.1646	5.14	5	3	#
1-Chlorohexane	0.4426	0.4372	4.94	5	-1	
# Chlorobenzene	0.7873	0.7981	5.07	5	1	#
1,1,1,2-Tetrachloroethane	0.2598	0.2675	5.15	5	3	
# Ethylbenzene	1.4504	1.4813	5.11	5	2	#
# m+p-Xylene	0.5380	0.5552	10.32	10	3	#
# o-Xylene	0.5143	0.5235	5.09	5	2	#
# Styrene	0.8229	0.8625	5.24	5	5	#

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: HP19094 ICV Date: 09/24/18 Time: 21:20

Lab File ID: hs24v01.d Init. Calib. Date(s): 09/24/18 09/24/18

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

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# Bromoform	0.1125	0.1136	5.05	5	1	#
# Isopropylbenzene	1.4040	1.4667	5.22	5	4	#
# 1,1,2,2-Tetrachloroethane	0.3967	0.3962	4.99	5	0	#
Bromobenzene	0.6030	0.6209	5.15	5	3	
trans-1,4-Dichloro-2-butene	3.8005	3.6717	24.15	25	-3	
1,2,3-Trichloropropane	0.1025	0.1010	4.92	5	-2	
n-Propylbenzene	3.2790	3.4213	5.22	5	4	
2-Chlorotoluene	0.6360	0.6495	5.11	5	2	
1,3,5-Trimethylbenzene	2.2213	2.2866	5.15	5	3	
4-Chlorotoluene	0.6373	0.6518	5.11	5	2	
tert-Butylbenzene	0.4831	0.4924	5.10	5	2	
Pentachloroethane	0.3770	0.3672	4.87	5	-3	
1,2,4-Trimethylbenzene	2.2667	2.3009	5.08	5	2	
sec-Butylbenzene	2.8784	3.0190	5.24	5	5	
# 1,3-Dichlorobenzene	1.1981	1.2031	5.02	5	0	#
p-Isopropyltoluene	2.3842	2.5039	5.25	5	5	
# 1,4-Dichlorobenzene	1.1761	1.1959	5.08	5	2	#
1,2,3-Trimethylbenzene	1.0399	0.9939	4.78	5	-4	
Benzyl Chloride	0.1434	0.1356	4.73	5	-5	
n-Butylbenzene	1.1834	1.2376	5.23	5	5	
# 1,2-Dichlorobenzene	1.0571	1.0599	5.01	5	0	#
# 1,2-Dibromo-3-chloropropane	2.0569	2.1820	5.30	5	6	#
1,3,5-Trichlorobenzene	0.8913	0.9013	5.06	5	1	
# 1,2,4-Trichlorobenzene	0.7260	0.7345	5.06	5	1	#
Hexachlorobutadiene	0.2744	0.2834	5.16	5	3	
Naphthalene	1.1489	1.1935	5.19	5	4	
1,2,3-Trichlorobenzene	0.5970	0.6118	5.12	5	2	
			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: HP19094 Calibration Date(s): 05/02/18 05/02/18

Heated Purge: (Y/N) Y Calibration Times: 19:15 21:23

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

LAB FILE ID: RRF0.2= hy02i17.d RRF0.5= hy02i16.d RRF 1 = hy02i15.d
RRF 2 = hy02i14.d RRF 5 = hy02i13.d RRF 10= hy02i12.d RRF 25= hy02i11.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
Dimethyl ether	0.3386	0.3353	0.2933	0.3164	0.3235	0.3148	0.3253	0.3210	5	AVG
Acetonitrile	1.3045	1.3808	1.2557	1.1805	1.1636	1.0924	1.0738	1.2073	9	AVG
Vinyl Acetate	0.3155	0.2879	0.2935	0.3123	0.2982	0.3172	0.3162	0.3058	4	AVG
Methyl Acrylate	0.0917	0.0916	0.0965	0.0933	0.0946	0.0954	0.0975	0.0944	2	AVG
1-Chlorobutane	0.4459	0.3974	0.3542	0.4876	0.4909	0.4956	0.4897	0.4516	12	AVG
Chloroacetonitrile	0.0036	0.0030	0.0039	0.0040	0.0031	0.0041	0.0046	0.0038	15	AVG
2-Chloroethyl vinyl ether	0.0762	0.0858	0.0872	0.0926	0.0953	0.0974	0.0984	0.0904	9	AVG
cis-1,4-Dichloro-2-butene	5.6633	6.5513	5.6636	6.1849	7.9391	6.6860	6.6395	6.4754	12	AVG
Cyclohexanone	0.3645	0.2849	0.3292	0.3093	0.3122	0.3993	0.3058	0.3293	12	AVG
Hexachloroethane	0.3743	0.3585	0.3237	0.4363	0.4562	0.4921	0.5058	0.4210	17	AVG

Average %RSD 10

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

FORM VI VOA

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem2/HP19094.i/18may02b.b/hy02i11.d	VSTD025
/chem2/HP19094.i/18may02b.b/hy02i12.d	VSTD010
/chem2/HP19094.i/18may02b.b/hy02i13.d	VSTD005
/chem2/HP19094.i/18may02b.b/hy02i14.d	VSTD002
/chem2/HP19094.i/18may02b.b/hy02i15.d	VSTD001
/chem2/HP19094.i/18may02b.b/hy02i16.d	VSTD0.5
/chem2/HP19094.i/18may02b.b/hy02i17.d	VSTD0.2

Area Summary

File ID:

Internal Standard Name	hy02i11.d	hy02i12.d	hy02i13.d	hy02i14.d	hy02i15.d	hy02i16.d	hy02i17.d	Avg. Area	%RSD	In Spec
t-Butyl Alcohol-d10	98437	91579	74336	92293	90627	78931	87604	87687	9	Yes
Fluorobenzene	2303816	2321054	2326423	2301576	2267030	2334989	2247400	2300327	1	Yes
Chlorobenzene-d5	1683927	1697976	1698280	1681083	1663736	1693467	1641487	1679994	1	Yes
1,4-Dichlorobenzene-d4	883503	883093	890934	885161	872428	891691	866486	881899	1	Yes

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

RT Summary

File ID:

Internal Standard Name	hy02i11.d	hy02i12.d	hy02i13.d	hy02i14.d	hy02i15.d	hy02i16.d	hy02i17.d	Avg. RT
t-Butyl Alcohol-d10	4.458	4.489	4.495	4.470	4.483	4.464	4.476	4.476
Fluorobenzene	7.970	7.976	7.976	7.970	7.970	7.970	7.970	7.971
Chlorobenzene-d5	11.396	11.396	11.396	11.396	11.396	11.396	11.396	11.396
1,4-Dichlorobenzene-d4	13.267	13.267	13.268	13.268	13.268	13.267	13.267	13.267

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

Report generated on 05/02/2018 at 22:25.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19094 ICV Date: 05/02/18 Time: 22:07

Lab File ID: hy02v11.d Init. Calib. Date(s): 05/02/18 05/02/18

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

COMPOUND	$\overline{RRF}$	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT
Dimethyl ether	0.3210	0.3151	4.91	5	-2
Acetonitrile	1.2073	1.3135	40.80	37.5	9
Vinyl Acetate	0.3058	0.2888	11.80	12.5	-6
Methyl Acrylate	0.0944	0.0999	26.46	25	6
1-Chlorobutane	0.4516	0.4576	5.07	5	1
Chloroacetonitrile	0.0038	0.0037	247.49	250	-1
2-Chloroethyl vinyl ether	0.0904	0.0919	5.08	5	2
cis-1,4-Dichloro-2-butene	6.4754	6.7681	13.06	12.5	5
Cyclohexanone	0.3293	0.3493	132.59	125	6
Hexachloroethane	0.4210	0.4432	5.26	5	5

Average %Drift 4

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

page 1 of 1 FORM VII VOA

Lancaster Laboratories

Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP19094.i/18sep24i.b/hs24i07.d
/chem2/HP19094.i/18sep24i.b/hs24i06.d
/chem2/HP19094.i/18sep24i.b/hs24i05.d
/chem2/HP19094.i/18sep24i.b/hs24i04.d
/chem2/HP19094.i/18sep24i.b/hs24i03.d
/chem2/HP19094.i/18sep24i.b/hs24i02.d
/chem2/HP19094.i/18sep24i.b/hs24i01.d

File /chem2/HP19094.i/18sep24i.b/hs24i02.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP19094.i/18oct31a.b/hc31c01.d

RT Summary

Internal Standard Name	File ID: hc31c01.d	ICAL RT	In Spec
t-Butyl Alcohol-d10	4.489	4.483	Yes
Fluorobenzene	7.970	7.970	Yes
Chlorobenzene-d5	11.384	11.384	Yes
1,4-Dichlorobenzene-d4	13.249	13.249	Yes

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

Area Summary

Internal Standard Name	File ID: hc31c01.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl Alcohol-d10	125260	126410	63205	252820	Yes
Fluorobenzene	2548841	2675616	1337808	5351232	Yes
Chlorobenzene-d5	1924638	2091043	1045522	4182086	Yes
1,4-Dichlorobenzene-d4	979276	1077251	538626	2154502	Yes

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

Comments: _____

report generated on 10/31/2018 at 09:28

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19094 Calibration Date: 10/31/18 Time: 08:27

Lab File ID: hc31c01.d Init. Calib. Date(s): 09/24/18 09/24/18

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

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF10	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.3908	0.3728	9.54	10	-5	#
# Chloromethane	0.3827	0.3408	8.90	10	-11	#
# Vinyl Chloride	0.3584	0.3234	9.02	10	-10	#
1,3-Butadiene	0.4060	0.2781	6.85	10	-32	<-
# Bromomethane	0.2786	0.2475	8.88	10	-11	#
# Chloroethane	0.2174	0.1926	8.86	10	-11	#
Dichlorofluoromethane	0.5171	0.4653	9.00	10	-10	
# Trichlorofluoromethane	0.4528	0.4283	9.46	10	-5	#
Ethyl ether	0.1535	0.1327	8.64	10	-14	
Freon 123a	0.2869	0.2575	8.97	10	-10	
Acrolein	2.2188	1.7885	403.03	500	-19	
# 1,1-Dichloroethene	0.1961	0.1680	8.57	10	-14	#
# Freon 113	0.2311	0.1994	8.63	10	-14	#
# Acetone	2.9801	2.1474	72.06	100	-28	#<-
Methyl Iodide	0.4087	0.3411	8.35	10	-17	
# Carbon Disulfide	0.6239	0.4842	7.76	10	-22	#<-
Allyl Chloride	0.3727	0.3189	8.56	10	-14	
# Methyl Acetate	8.3663	7.3224	8.75	10	-12	#
# Methylene Chloride	0.2212	0.1866	8.44	10	-16	#
t-Butyl Alcohol	0.8535	0.6673	156.37	200	-22	<-
Acrylonitrile	3.8486	3.3869	44.00	50	-12	
# trans-1,2-Dichloroethene	0.2213	0.1917	8.66	10	-13	#
# Methyl Tertiary Butyl Ether	0.4032	0.3723	9.23	10	-8	#
n-Hexane	0.3519	0.3137	8.92	10	-11	
# 1,1-Dichloroethane	0.4213	0.3847	9.13	10	-9	#
di-Isopropyl Ether	0.7482	0.6867	9.18	10	-8	
2-Chloro-1,3-Butadiene	0.3791	0.3520	9.28	10	-7	
Ethyl t-butyl ether	0.5935	0.5369	9.05	10	-10	
# cis-1,2-Dichloroethene	0.2445	0.2206	9.02	10	-10	#
2,2-Dichloropropane	0.3009	0.2831	9.41	10	-6	
# 2-Butanone	4.8783	4.4382	90.98	100	-9	#
Propionitrile	1.3241	1.2709	191.97	200	-4	
Methacrylonitrile	4.7745	4.2676	89.38	100	-11	
Bromochloromethane	0.1033	0.0898	8.70	10	-13	
Tetrahydrofuran	1.2969	1.1520	88.83	100	-11	
# Chloroform	0.3917	0.3689	9.42	10	-6	#

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

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19094 Calibration Date: 10/31/18 Time: 08:27

Lab File ID: hc31c01.d Init. Calib. Date(s): 09/24/18 09/24/18

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

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF10	CONC.	CONC.	DRIFT	
# 1,1,1-Trichloroethane	0.3351	0.3065	9.15	10	-9	#
# Cyclohexane	0.4374	0.3837	8.77	10	-12	#
# Cyclohexane(2)	0.3606	0.3172	8.80	10	-12	#
# Cyclohexane(3)	0.1289	0.1145	8.88	10	-11	#
1,1-Dichloropropene	0.3177	0.2906	9.15	10	-9	
# Carbon Tetrachloride	0.2878	0.2735	9.51	10	-5	#
Isobutyl Alcohol	0.3302	0.3235	489.76	500	-2	
# Benzene	0.9386	0.8401	8.95	10	-10	#
# 1,2-Dichloroethane	0.2160	0.2003	9.27	10	-7	#
t-Amyl methyl ether	0.4920	0.4465	9.07	10	-9	
n-Heptane	0.3628	0.3437	9.47	10	-5	
n-Butanol	0.2790	0.2593	929.45	1000	-7	
# Trichloroethene	0.2403	0.2174	9.05	10	-10	#
# Methylcyclohexane	0.4539	0.3937	8.67	10	-13	#
# 1,2-Dichloropropane	0.2277	0.2115	9.29	10	-7	#
Methyl Methacrylate	8.8375	8.4323	9.54	10	-5	
Dibromomethane	0.0945	0.0889	9.40	10	-6	
1,4-Dioxane	0.0672	0.0609	453.57	500	-9	
# Bromodichloromethane	0.2560	0.2476	9.67	10	-3	#
2-Nitropropane	2.5034	2.6410	105.50	100	5	
# cis-1,3-Dichloropropene	0.2981	0.2869	9.63	10	-4	#
# 4-Methyl-2-Pentanone	12.1340	11.2768	92.93	100	-7	#
# Toluene	0.7421	0.6932	9.34	10	-7	#
# trans-1,3-Dichloropropene	0.2859	0.2950	10.32	10	3	#
Ethyl Methacrylate	0.2450	0.2440	9.96	10	0	
# 1,1,2-Trichloroethane	0.1708	0.1603	9.39	10	-6	#
# Tetrachloroethene	0.3353	0.3170	9.46	10	-5	#
1,3-Dichloropropane	0.3026	0.2922	9.66	10	-3	
# 2-Hexanone	8.2598	7.6762	92.93	100	-7	#
# Dibromochloromethane	0.2046	0.2053	10.03	10	0	#
# 1,2-Dibromoethane	0.1601	0.1572	9.82	10	-2	#
1-Chlorohexane	0.4426	0.4093	9.25	10	-8	
# Chlorobenzene	0.7873	0.7481	9.50	10	-5	#
1,1,1,2-Tetrachloroethane	0.2598	0.2609	10.04	10	0	
# Ethylbenzene	1.4504	1.3929	9.60	10	-4	#
# m+p-Xylene	0.5380	0.5158	19.18	20	-4	#

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

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19094 Calibration Date: 10/31/18 Time: 08:27

Lab File ID: hc31c01.d Init. Calib. Date(s): 09/24/18 09/24/18

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

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF10	CONC.	CONC.	DRIFT	
# o-Xylene	0.5143	0.4929	9.58	10	-4	#
# Styrene	0.8229	0.8103	9.85	10	-2	#
# Bromoform	0.1125	0.1127	10.02	10	0	#
# Isopropylbenzene	1.4040	1.3577	9.67	10	-3	#
# 1,1,2,2-Tetrachloroethane	0.3967	0.3895	9.82	10	-2	#
Bromobenzene	0.6030	0.5899	9.78	10	-2	
trans-1,4-Dichloro-2-butene	3.8005	3.4380	90.46	100	-10	
1,2,3-Trichloropropane	0.1025	0.0969	9.45	10	-6	
n-Propylbenzene	3.2790	3.2270	9.84	10	-2	
2-Chlorotoluene	0.6360	0.6187	9.73	10	-3	
1,3,5-Trimethylbenzene	2.2213	2.1806	9.82	10	-2	
4-Chlorotoluene	0.6373	0.6196	9.72	10	-3	
tert-Butylbenzene	0.4831	0.4787	9.91	10	-1	
Pentachloroethane	0.3770	0.3701	9.82	10	-2	
1,2,4-Trimethylbenzene	2.2667	2.1974	9.69	10	-3	
sec-Butylbenzene	2.8784	2.8377	9.86	10	-1	
# 1,3-Dichlorobenzene	1.1981	1.1487	9.59	10	-4	#
p-Isopropyltoluene	2.3842	2.4051	10.09	10	1	
# 1,4-Dichlorobenzene	1.1761	1.1194	9.52	10	-5	#
1,2,3-Trimethylbenzene	1.0399	0.9239	8.88	10	-11	
Benzyl Chloride	0.1434	0.1519	10.59	10	6	
n-Butylbenzene	1.1834	1.1896	10.05	10	1	
# 1,2-Dichlorobenzene	1.0571	0.9844	9.31	10	-7	#
# 1,2-Dibromo-3-chloropropane	2.0569	1.4790	7.19	10	-28	#<-
1,3,5-Trichlorobenzene	0.8913	0.8250	9.26	10	-7	
# 1,2,4-Trichlorobenzene	0.7260	0.6422	8.85	10	-12	#
Hexachlorobutadiene	0.2744	0.2601	9.48	10	-5	
Naphthalene	1.1489	0.9951	8.66	10	-13	
1,2,3-Trichlorobenzene	0.5970	0.4942	8.28	10	-17	
Dibromofluoromethane	0.2520	0.2504	9.94	10	-1	
Dibromofluoromethane(2)	0.2594	0.2577	9.93	10	-1	
1,2-Dichloroethane-d4	0.0439	0.0451	10.26	10	3	
1,2-Dichloroethane-d4(2)	0.2125	0.2268	10.67	10	7	
1,2-Dichloroethane-d4(3)	0.0281	0.0285	10.13	10	1	
Toluene-d8	1.2870	1.3121	10.19	10	2	

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

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19094 Calibration Date: 10/31/18 Time: 08:27

Lab File ID: hc31c01.d Init. Calib. Date(s): 09/24/18 09/24/18

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

COMPOUND	RRF	RRF10	ACTUAL CONC.	TRUE CONC.	% DRIFT
Toluene-d8(2)	0.8307	0.8430	10.15	10	1
4-Bromofluorobenzene	0.4686	0.4628	9.88	10	-1
4-Bromofluorobenzene(2)	0.4069	0.4023	9.89	10	-1

Average %Drift 8

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

Data File: /chem2/HP19094.i/18oct31a.b/hc31s09.d
Report Date: 10/31/2018 20:31

Lancaster Laboratories, Inc.
Shift Ending Continuing Calibration Check Report

Instrument ID: HP19094.i Injection Date and Time: 31-OCT-2018 18:49
Client ID: SECC010 Initial Calibration Date(s): 02-MAY-2018 24-SEP-2018
Lab Sample ID: SECC010 Initial Calibration Time(s): 19:15 20:37
Sublist used: 25789-SM.sub Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Dichlorodifluoromethane	0.39081	0.32052	0.01	-18.0	50.0
Chloromethane	0.38274	0.30981	0.01	-19.1	50.0
Vinyl Chloride	0.35841	0.29564	0.01	-17.5	50.0
Bromomethane	0.27864	0.23331	0.01	-16.3	50.0
Chloroethane	0.21739	0.17814	0.01	-18.1	50.0
Trichlorofluoromethane	0.45279	0.38671	0.01	-14.6	50.0
1,1-Dichloroethene	0.19607	0.15189	0.01	-22.5	50.0
Freon 113	0.23109	0.17831	0.01	-22.8	50.0
Acetone	2.98014	2.28752	0.01	-23.2	50.0
Carbon Disulfide	0.62388	0.43088	0.01	-30.9	50.0
Methyl Acetate	8.36626	7.15054	0.01	-14.5	50.0
Methylene Chloride	0.22120	0.17244	0.01	-22.0	50.0
trans-1,2-Dichloroethene	0.22129	0.17747	0.01	-19.8	50.0
Methyl Tertiary Butyl Ether	0.40325	0.34188	0.01	-15.2	50.0
1,1-Dichloroethane	0.42133	0.35928	0.01	-14.7	50.0
cis-1,2-Dichloroethene	0.24451	0.20682	0.01	-15.4	50.0
2-Butanone	4.87826	4.59492	0.01	-5.8	50.0
Chloroform	0.39172	0.34509	0.01	-11.9	50.0
1,1,1-Trichloroethane	0.33506	0.28344	0.01	-15.4	50.0
Cyclohexane	0.43741	0.34379	0.01	-21.4	50.0
Carbon Tetrachloride	0.28777	0.24719	0.01	-14.1	50.0
Benzene	0.93862	0.78461	0.01	-16.4	50.0
1,2-Dichloroethane	0.21601	0.18204	0.01	-15.7	50.0
Trichloroethene	0.24033	0.20547	0.01	-14.5	50.0
Methylcyclohexane	0.45388	0.35657	0.01	-21.4	50.0
1,2-Dichloropropane	0.22773	0.19867	0.01	-12.8	50.0
Bromodichloromethane	0.25602	0.22858	0.01	-10.7	50.0
cis-1,3-Dichloropropene	0.29807	0.26137	0.01	-12.3	50.0
4-Methyl-2-Pentanone	12.13435	11.86228	0.01	-2.2	50.0
Toluene	0.74209	0.66834	0.01	-9.9	50.0
trans-1,3-Dichloropropene	0.28594	0.27638	0.01	-3.3	50.0
1,1,2-Trichloroethane	0.17076	0.15680	0.01	-8.2	50.0
Tetrachloroethene	0.33529	0.29865	0.01	-10.9	50.0
2-Hexanone	8.25980	8.03037	0.01	-2.8	50.0
Dibromochloromethane	0.20466	0.19707	0.01	-3.7	50.0
1,2-Dibromoethane	0.16005	0.15311	0.01	-4.3	50.0
Chlorobenzene	0.78730	0.72424	0.01	-8.0	50.0
Ethylbenzene	1.45036	1.34882	0.01	-7.0	50.0
m+p-Xylene	0.53796	0.49962	0.01	-7.1	50.0
o-Xylene	0.51431	0.47961	0.01	-6.7	50.0
Xylene (Total)	0.53008	0.49295	0.01	-7.0	50.0
Styrene	0.82286	0.78283	0.01	-4.9	50.0
Bromoform	0.11248	0.10733	0.01	-4.6	50.0
Isopropylbenzene	1.40404	1.28895	0.01	-8.2	50.0
1,1,2,2-Tetrachloroethane	0.39667	0.37580	0.01	-5.3	50.0
1,3-Dichlorobenzene	1.19815	1.13810	0.01	-5.0	50.0
1,4-Dichlorobenzene	1.17614	1.10029	0.01	-6.4	50.0
1,2-Dichlorobenzene	1.05712	0.96952	0.01	-8.3	50.0

Data File: /chem2/HP19094.i/18oct31a.b/hc31s09.d
Report Date: 10/31/2018 20:31

Lancaster Laboratories, Inc.
Shift Ending Continuing Calibration Check Report

Instrument ID: HP19094.i
Client ID: SECC010
Lab Sample ID: SECC010
Sublist used: 25789-SM.sub
Injection Date and Time: 31-OCT-2018 18:49
Initial Calibration Date(s): 02-MAY-2018 24-SEP-2018
Initial Calibration Time(s): 19:15 20:37
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
1,2-Dibromo-3-chloropropane	2.05690	1.42875	0.01	-30.5	50.0
1,2,4-Trichlorobenzene	0.72604	0.62161	0.01	-14.4	50.0

Surrogate Standards	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Dibromofluoromethane	0.25204	0.24369	0.01	-3.3	20.5
1,2-Dichloroethane-d4	0.04394	0.04472	0.01	1.8	20.5
Toluene-d8	1.28704	1.32394	0.01	2.9	20.5
4-Bromofluorobenzene	0.46859	0.45326	0.01	-3.3	20.5

Lancaster Laboratories

Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP19094.i/18may02b.b/hy02i17.d
/chem2/HP19094.i/18may02b.b/hy02i16.d
/chem2/HP19094.i/18may02b.b/hy02i15.d
/chem2/HP19094.i/18may02b.b/hy02i14.d
/chem2/HP19094.i/18may02b.b/hy02i13.d
/chem2/HP19094.i/18may02b.b/hy02i12.d
/chem2/HP19094.i/18may02b.b/hy02i11.d

File /chem2/HP19094.i/18may02b.b/hy02i12.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP19094.i/18oct31a.b/hc31c02.d

RT Summary

File ID:

Internal Standard Name	hc31c02.d	ICAL RT	In Spec
t-Butyl Alcohol-d10	4.482	4.489	Yes
Fluorobenzene	7.963	7.976	Yes
Chlorobenzene-d5	11.377	11.396	Yes
1,4-Dichlorobenzene-d4	13.249	13.267	Yes

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

Area Summary

File ID:

Internal Standard Name	hc31c02.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl Alcohol-d10	107970	91579	45790	183158	Yes
Fluorobenzene	2591048	2321054	1160527	4642108	Yes
Chlorobenzene-d5	1914691	1697976	848988	3395952	Yes
1,4-Dichlorobenzene-d4	978667	883093	441546	1766186	Yes

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

Comments: _____

report generated on 10/31/2018 at 09:31

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19094 Calibration Date: 10/31/18 Time: 08:48

Lab File ID: hc31c02.d Init. Calib. Date(s): 05/02/18 05/02/18

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

COMPOUND	RRF	RRF10	ACTUAL CONC.	TRUE CONC.	% DRIFT	
Dimethyl ether	0.3210	0.2295	7.15	10	-28	<-
Acetonitrile	1.2073	1.0916	361.64	400	-10	
Vinyl Acetate	0.3058	0.2414	7.89	10	-21	<-
Methyl Acrylate	0.0944	0.0937	49.63	50	-1	
1-Chlorobutane	0.4516	0.4363	9.66	10	-3	
Chloroacetonitrile	0.0038	0.0048	639.31	500	28	
2-Chloroethyl vinyl ether	0.0904	0.0887	9.81	10	-2	
cis-1,4-Dichloro-2-butene	6.4754	4.4075	13.61	20	-32	<-
Cyclohexanone	0.3293	0.3246	492.80	500	-1	
Hexachloroethane	0.4210	0.4478	10.64	10	6	

Average %Drift 13

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

Data File: /chem2/HP19094.i/18oct31a.b/hc31s10.d
Report Date: 10/31/2018 20:31

Lancaster Laboratories, Inc.
Shift Ending Continuing Calibration Check Report

Instrument ID: HP19094.i
Client ID: SECB010
Lab Sample ID: SECB010
Sublist used: 25789SM.sub
Injection Date and Time: 31-OCT-2018 19:11
Initial Calibration Date(s): 02-MAY-2018 24-SEP-2018
Initial Calibration Time(s): 19:15 20:37
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Cyclohexanone	0.32931	0.32350	0.01	-1.8	50.0

Surrogate Standards	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Dibromofluoromethane	0.25204	0.24421	0.01	-3.1	20.5
1,2-Dichloroethane-d4	0.04394	0.04415	0.01	0.5	20.5
Toluene-d8	1.28704	1.34260	0.01	4.3	20.5
4-Bromofluorobenzene	0.46859	0.47033	0.01	0.4	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): hc31c01.d Date Analyzed: 10/31/18

Instrument ID: HP19094 Time Analyzed: 08:27

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	125260	4.489	2548841	7.970	1924638	11.384	979276	13.249
UPPER LIMIT	250520	4.989	5097682	8.470	3849276	11.884	1958552	13.749
LOWER LIMIT	62630	3.989	1274420	7.470	962319	10.884	489638	12.749
LAB SAMPLE ID								
01 LCSH80	136054	4.483	2628996	7.964	1964705	11.378	998821	13.249
02 LCSH82	136053	4.483	2626464	7.964	1964705	11.378	998821	13.249
03 LCDH80	121933	4.489	2621176	7.964	1932681	11.378	997911	13.249
04 LCDH82	131111	4.489	2621154	7.964	1932665	11.378	997911	13.249
05 LCSH81	125603	4.501	2628340	7.970	1946762	11.377	1003336	13.249
06 LCSH83	129249	4.501	2628410	7.970	1946762	11.377	1003336	13.249
07 LCDH81	134481	4.489	2633165	7.970	1946411	11.378	993474	13.249
08 LCDH83	134482	4.489	2632857	7.970	1946411	11.378	993474	13.249
09 MDLH80 - MD	133512	4.488	2630700	7.964	1927972	11.377	1010153	13.249
10 MDLH82 - MD	133510	4.488	2630700	7.964	1927972	11.377	1010153	13.249
11 VBLKH80	117137	4.489	2608598	7.964	1932277	11.378	989266	13.249
12 VBLKH82	117137	4.489	2612400	7.964	1932293	11.378	989266	13.249
13 9861916	136889	4.483	2723610	7.970	2011191	11.384	1030749	13.249
14 9861917	133056	4.476	2550052	7.964	1879083	11.378	970198	13.249
15 9861918	120205	4.501	2569578	7.970	1887894	11.377	965454	13.249
16 9861919	104942	4.476	2575734	7.964	1893169	11.378	965131	13.249
17 9861920	109461	4.476	2557265	7.963	1888285	11.377	956759	13.249
18 9861921	98733	4.483	2605010	7.970	1917383	11.378	982817	13.249
19 9861922	76372	4.483	2573443	7.970	1884265	11.378	953289	13.249
20 9863850	119844	4.489	2588586	7.970	1900089	11.384	965732	13.249
21 9861930	129596	4.488	2642434	7.963	1936543	11.377	982418	13.249
22 9861930DL	124745	4.495	2640045	7.970	1919476	11.384	965165	13.249

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.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): hc31c01.d Date Analyzed: 10/31/18

Instrument ID: HP19094 Time Analyzed: 08:27

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	125260	4.489	2548841	7.970	1924638	11.384	979276	13.249
UPPER LIMIT	250520	4.989	5097682	8.470	3849276	11.884	1958552	13.749
LOWER LIMIT	62630	3.989	1274420	7.470	962319	10.884	489638	12.749
LAB SAMPLE ID								
23 9861931	128501	4.488	2654049	7.970	1932690	11.384	990953	13.249
24 9861931DL	120751	4.476	2609773	7.964	1893342	11.378	962582	13.249
25 9861940	123629	4.476	2585988	7.964	1895469	11.378	964789	13.249
26 9861941	111657	4.501	2552016	7.970	1854409	11.378	935842	13.249
27 9861942	120619	4.489	2591655	7.970	1885687	11.378	963988	13.249
28 9861943	109583	4.483	2558402	7.970	1880338	11.378	952298	13.249
29 9861944	123060	4.476	2627267	7.964	1903800	11.378	968284	13.249
30 9861945	115057	4.495	2601901	7.970	1895286	11.377	963799	13.249
31 9861946	117270	4.476	2581570	7.964	1891135	11.378	956436	13.249
32 9861955	116924	4.489	2600190	7.964	1906808	11.378	955351	13.249
33 SECC010	115171	4.476	2658785	7.964	1947414	11.378	975532	13.249
34 SECB010	123227	4.477	2652099	7.970	1898522	11.378	972859	13.249

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.

Sample Data

Volatiles by GC/MS

GKPTB

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9861916

Data file: /chem2/HP19094.i/18oct31a.b/hc31s01.d Injection date and time: **31-OCT-2018 11:41**
Data file Sample Info. Line: GKPTB;9861916;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:29 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.483(0.006)	475	65	136889 (9)	50.00	
63) Fluorobenzene	7.970(0.000)	1047	96	2723610 (7)	10.00	
97) Chlorobenzene-d5	11.384(0.000)	1607	117	2011191 (4)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249(0.000)	1913	152	1030749 (5)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074(0.000)	113	676600	9.856	99%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.531(0.000)	102	122094	10.202	102%		81 - 118
82) Toluene-d8	(3)	9.951(0.000)	98	2644675	10.217	102%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371(0.000)	95	928739	9.855	99%		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)			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

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:34. Target 3.5 esignature user ID: jgc14951

GKPTB

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9861916

Data file: /chem2/HP19094.i/18oct31a.b/hc31s01.d Injection date and time: **31-OCT-2018 11:41**
Data file Sample Info. Line: GKPTB;9861916;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:29 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

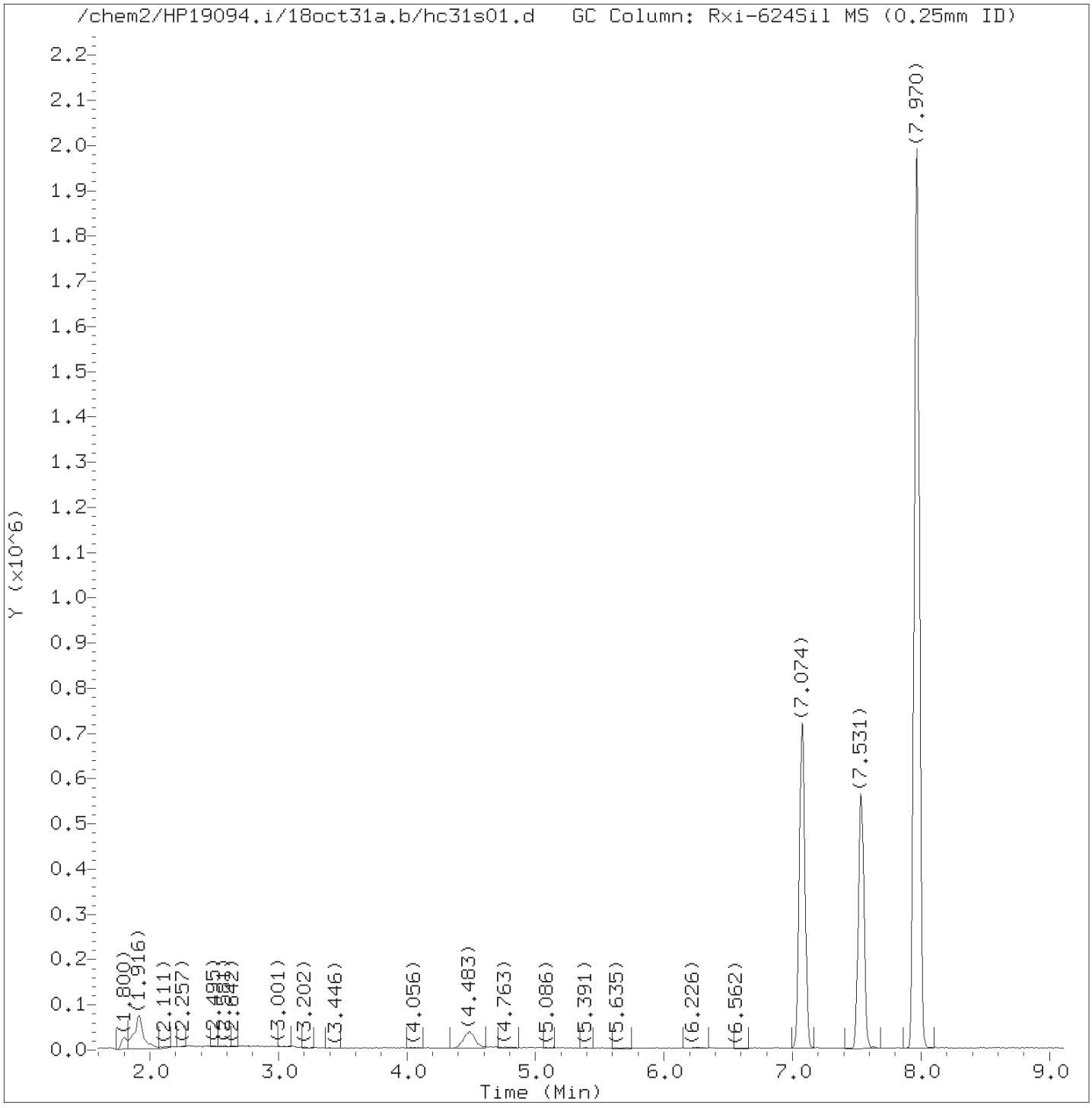
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
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 Joel G. Chachapoya on 10/31/2018 at 20:34. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

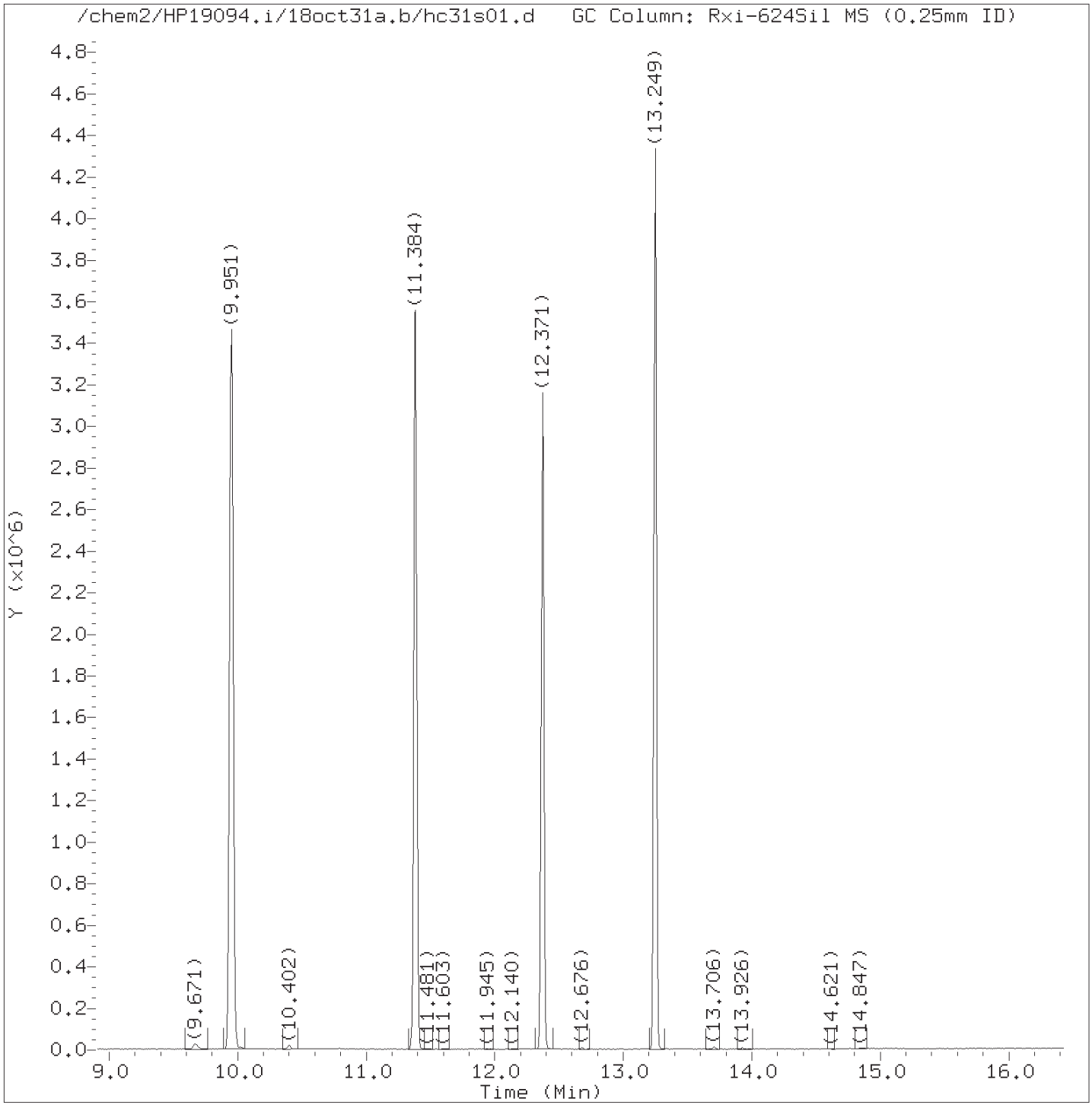
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 11:41 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:29 kel01973

Sample Name: GKPTB Lab Sample ID: 9861916

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 11:41 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:29 kel01973

Sample Name: GKPTB Lab Sample ID: 9861916

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 11:41 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:29 kel01973

Sample Name: GKPTB Lab Sample ID: 9861916

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.483	65	136889	50.000
50)$Dibromofluoromethane	(2)	7.074	113	676600	9.856
57)$1,2-Dichloroethane-d4	(2)	7.531	102	122094	10.202
63)*Fluorobenzene	(2)	7.970	96	2723610	10.000
82)$Toluene-d8	(3)	9.951	98	2644675	10.217
97)*Chlorobenzene-d5	(3)	11.384	117	2011191	10.000
111)$4-Bromofluorobenzene	(3)	12.371	95	928739	9.855
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1030749	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

GKP01 Lancaster Laboratories 9861917
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s02.d Injection date and time: **31-OCT-2018 12:02**
Data file Sample Info. Line: GKP01;9861917;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.477(0.012)	474	65	133056 (6)	50.00	
63) Fluorobenzene	7.964(0.006)	1046	96	2550052 (0)	10.00	
97) Chlorobenzene-d5	11.378(0.006)	1606	117	1879083 (-2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249(0.000)	1913	152	970198 (-1)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074(-0.001)	113	632569	9.842	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.531(-0.001)	102	115015	10.265	103%		81 - 118
82) Toluene-d8	(3)	9.945(0.000)	98	2494544	10.315	103%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371(-0.001)	95	860685	9.775	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)			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)	3.788(0.000)	43	18060	2.277	2.28		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

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:34. Target 3.5 esignature user ID: jgc14951

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s02.d Injection date and time: **31-OCT-2018 12:02**
Data file Sample Info. Line: GKP01;9861917;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

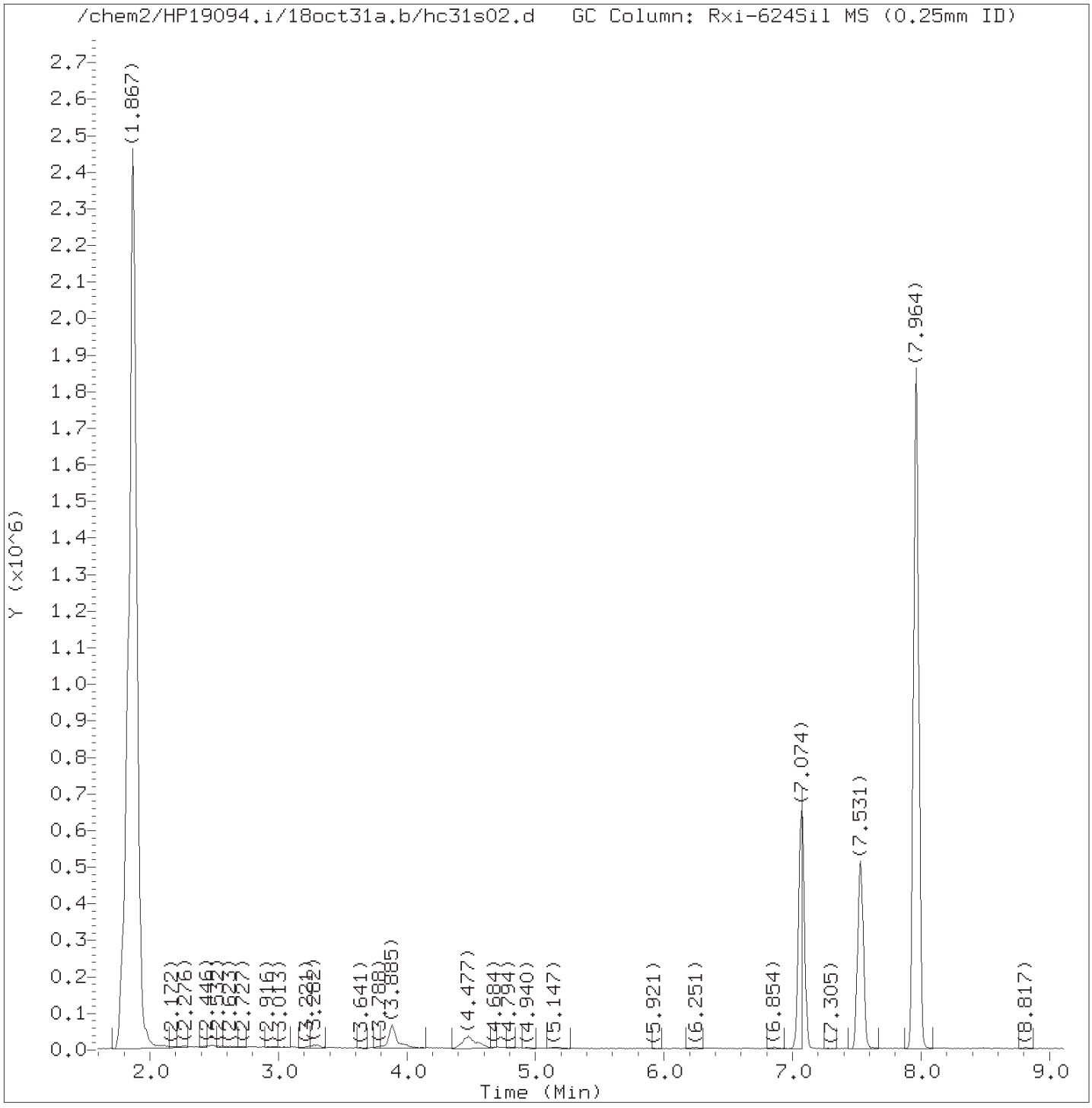
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
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 Joel G. Chachapoya on 10/31/2018 at 20:34. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

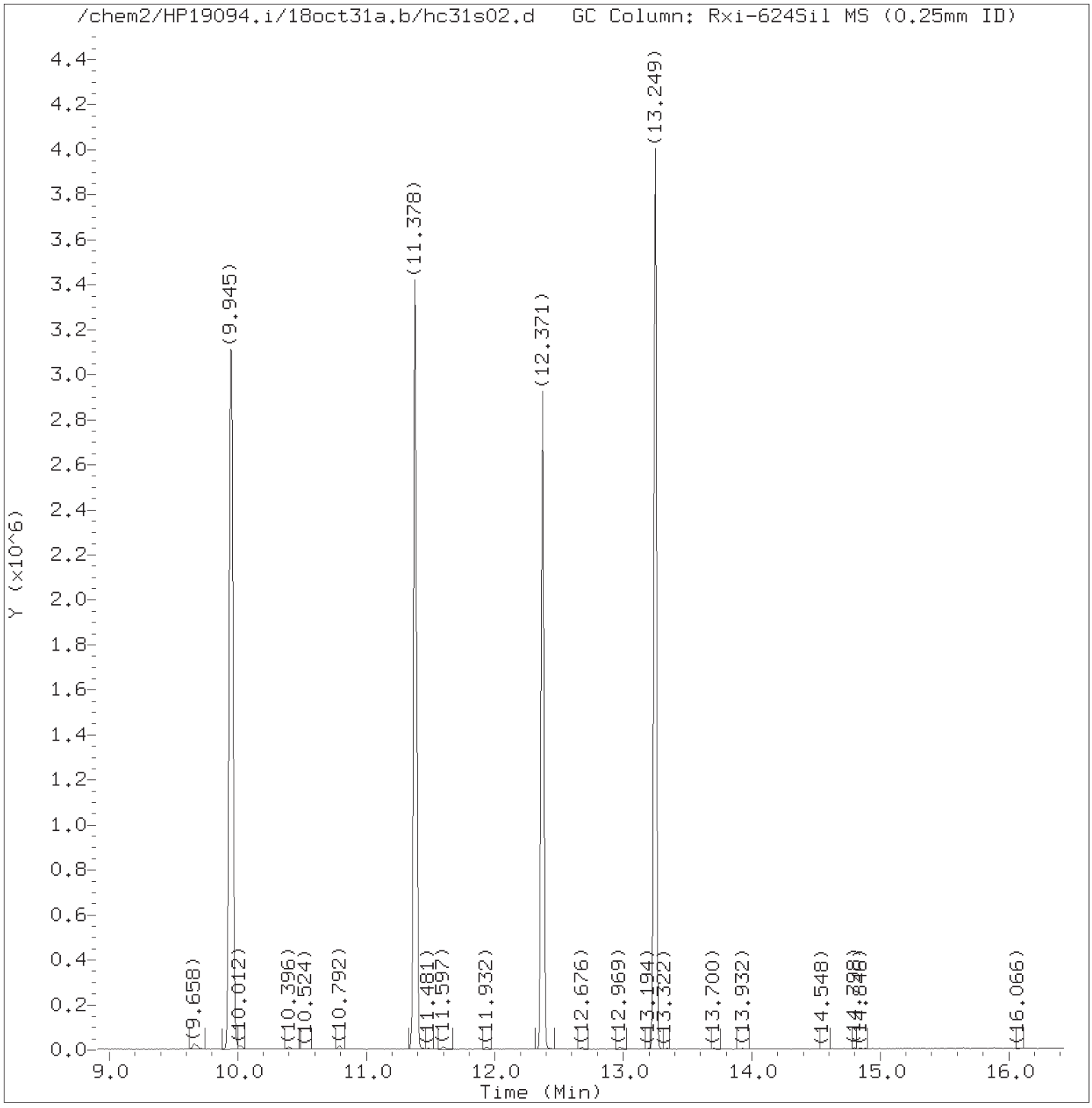
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:02 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Sample Name: GKP01 Lab Sample ID: 9861917

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:02 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Sample Name: GKP01 Lab Sample ID: 9861917

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:02 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

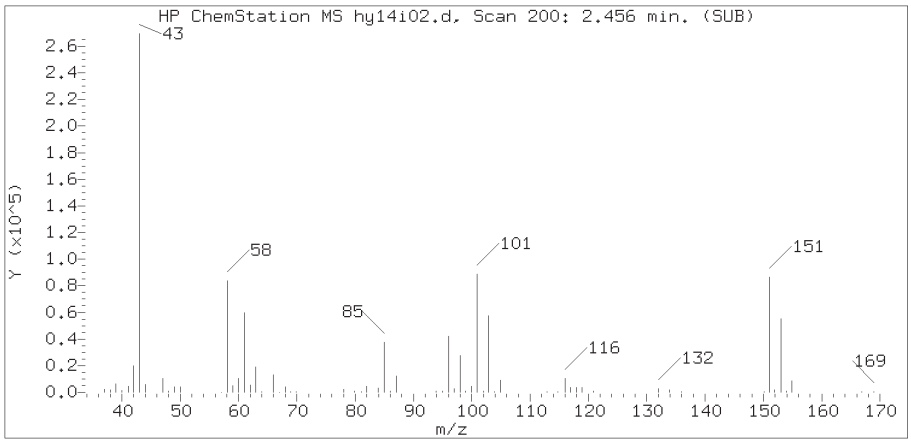
Sample Name: GKP01 Lab Sample ID: 9861917

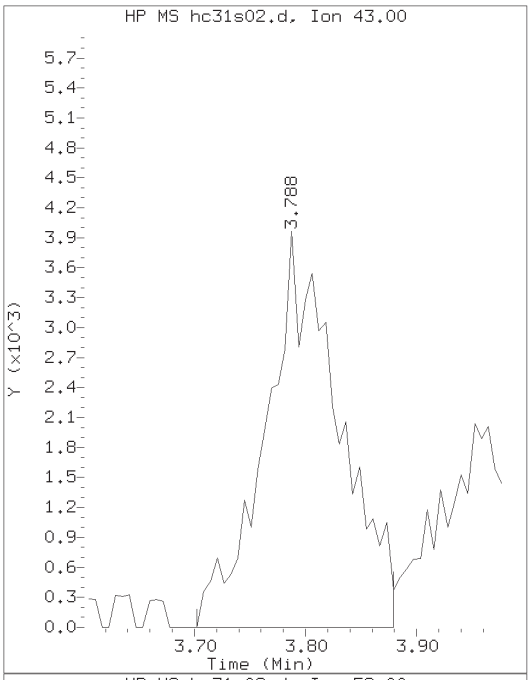
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
14) Acetone	(1)	3.788	43	18060	2.277
26)*t-Butyl Alcohol-d10	(1)	4.477	65	133056	50.000
50)$Dibromofluoromethane	(2)	7.074	113	632569	9.842
57)$1,2-Dichloroethane-d4	(2)	7.531	102	115015	10.265
63)*Fluorobenzene	(2)	7.964	96	2550052	10.000
82)$Toluene-d8	(3)	9.945	98	2494544	10.315
97)*Chlorobenzene-d5	(3)	11.378	117	1879083	10.000
111)$4-Bromofluorobenzene	(3)	12.371	95	860685	9.775
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	970198	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

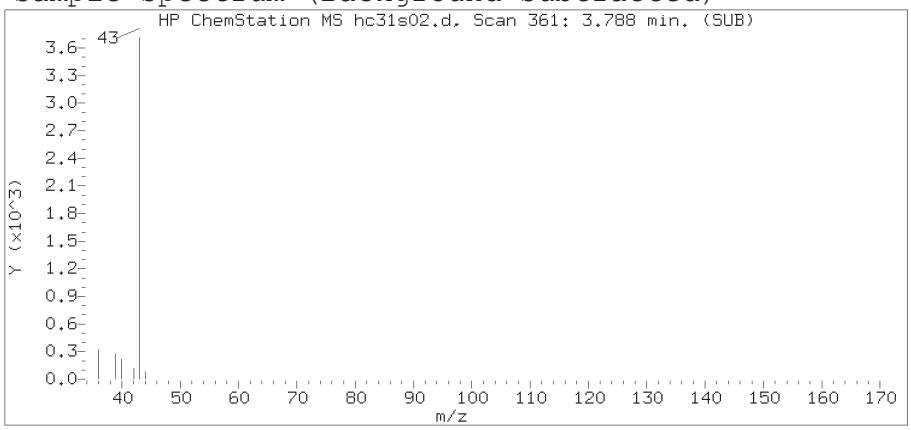
Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

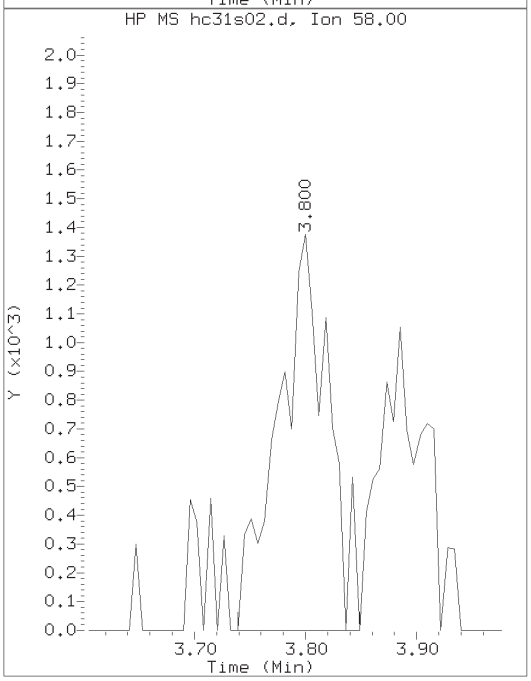
Reference Standard Spectrum for Acetone



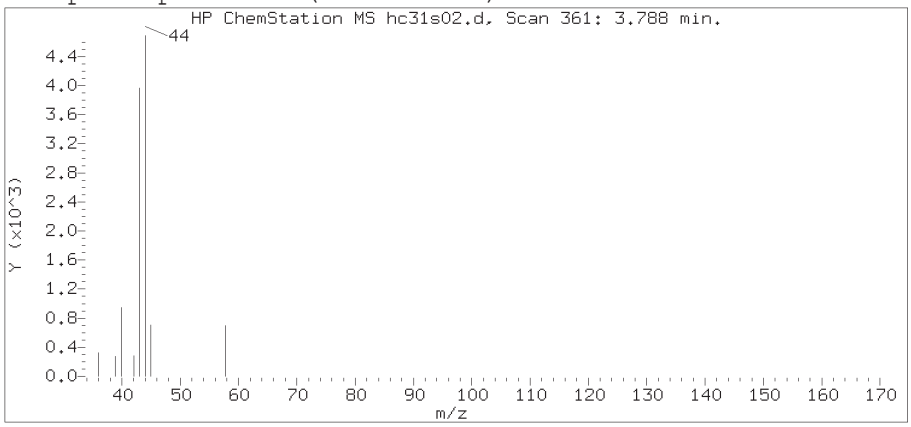


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem2/HP19094.i/18oct31a.b/hc31s02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:02 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Sample Name: GKP01 Lab Sample ID: 9861917

Compound Number	: 14
Compound Name	: Acetone
Scan Number	: 361
Retention Time (minutes)	: 3.788
Relative Retention Time	: 0.00041
Quant Ion	: 43.00
Area (flag)	: 18060
On-Column Amount (ng)	: 2.2773

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

GKP03 Lancaster Laboratories 9861918
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s03.d Injection date and time: **31-OCT-2018 12:23**
Data file Sample Info. Line: GKP03;9861918;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.501(-0.012)	478	65	120205	(-4)	50.00	
63) Fluorobenzene	7.970(0.000)	1047	96	2569578	(1)	10.00	
97) Chlorobenzene-d5	11.377(0.006)	1606	117	1887894	(-2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249(0.000)	1913	152	965454	(-1)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.073(0.000)	113	633950	9.789	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.531(0.000)	102	114704	10.159	102%		81 - 118
82) Toluene-d8	(3)	9.951(0.000)	98	2481710	10.214	102%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371(-0.001)	95	866892	9.799	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)			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)	3.806(0.000)	43	24810	3.463	3.46		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

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Data file: /chem2/HP19094.i/18oct31a.b/hc31s03.d Injection date and time: **31-OCT-2018 12:23**
Data file Sample Info. Line: GKP03;9861918;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

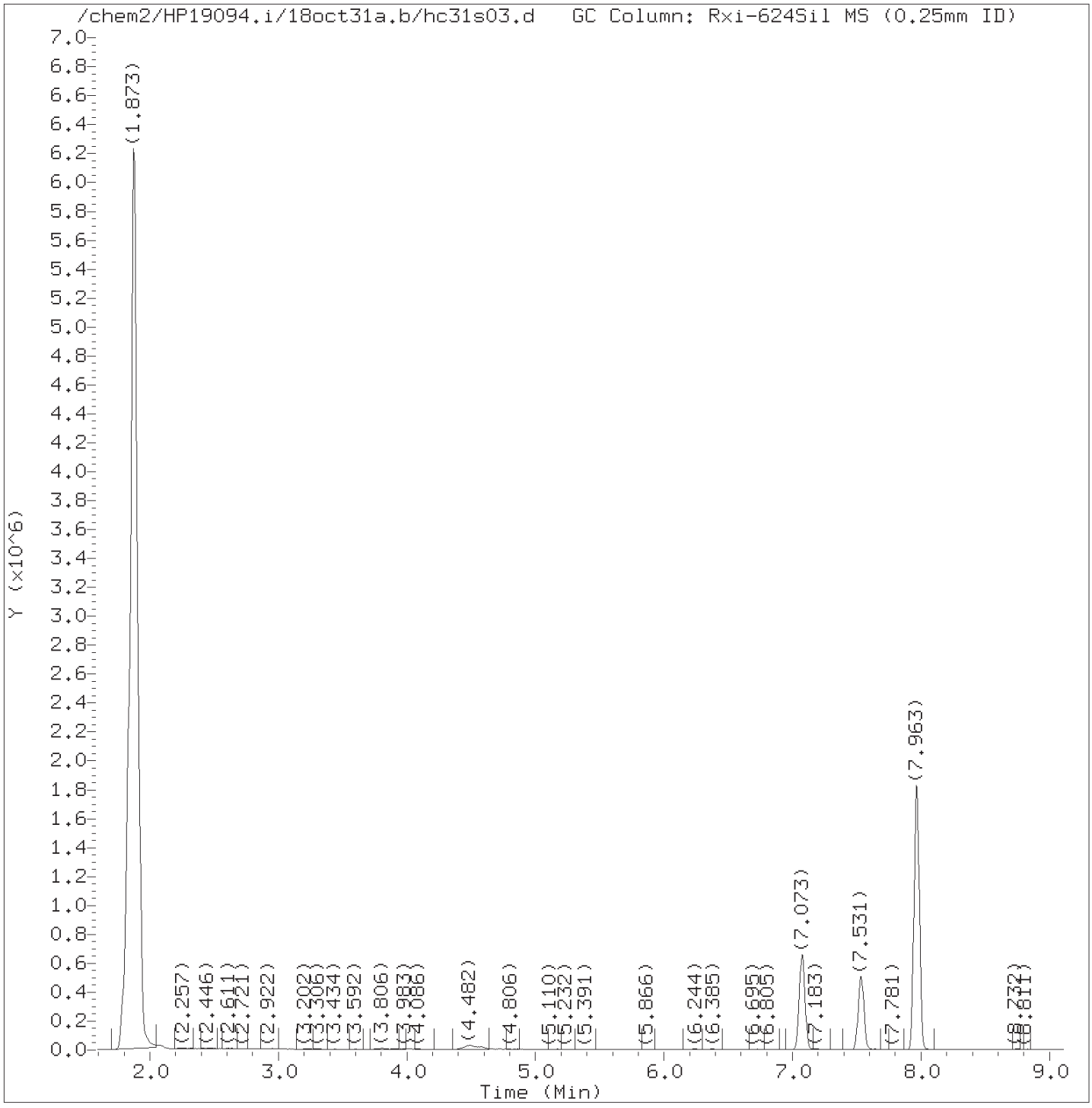
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
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 Joel G. Chachapoya on 10/31/2018 at 20:34. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

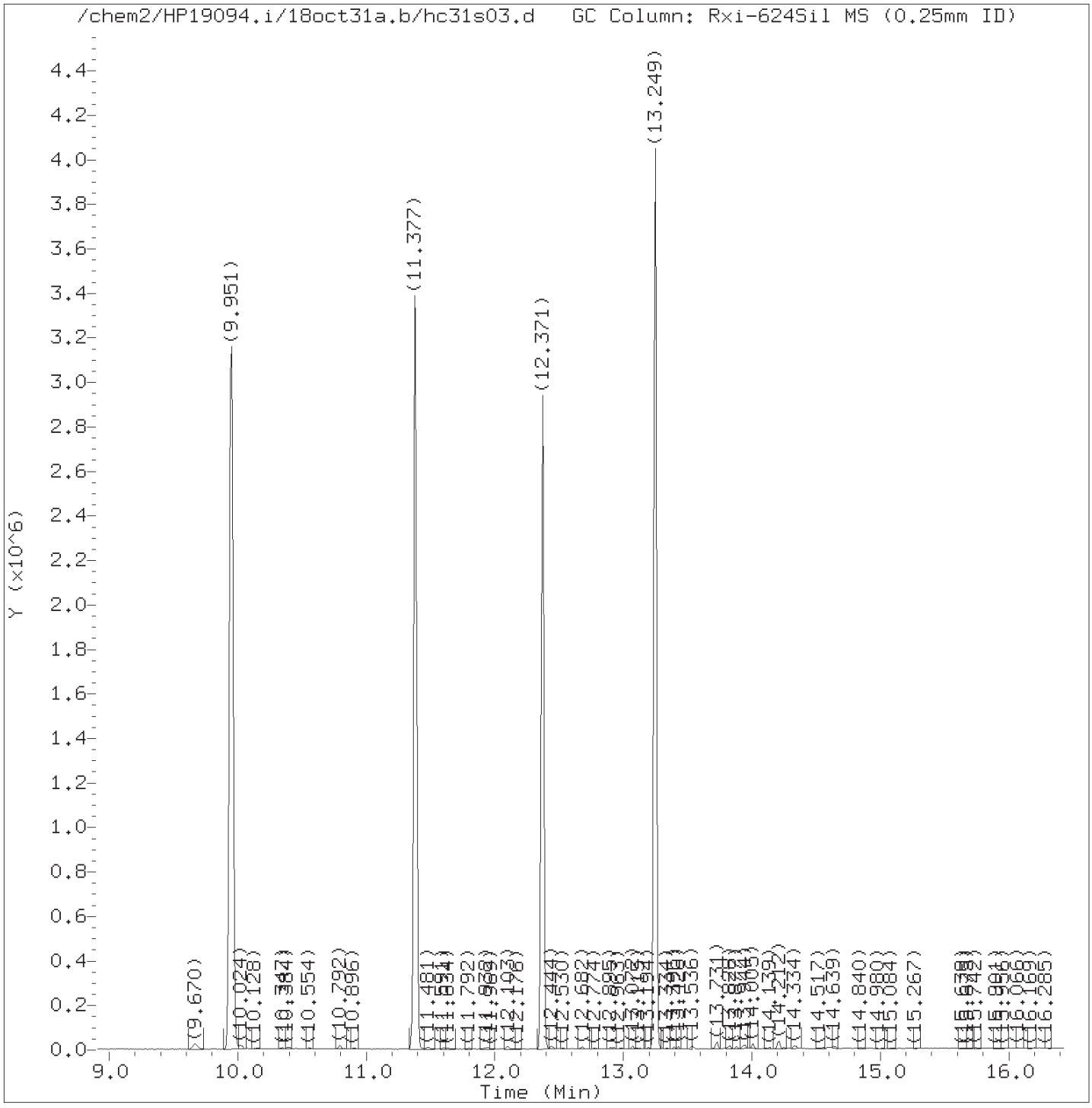
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s03.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:23 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Sample Name: GKP03 Lab Sample ID: 9861918

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s03.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:23 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Sample Name: GKP03 Lab Sample ID: 9861918

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s03.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:23 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

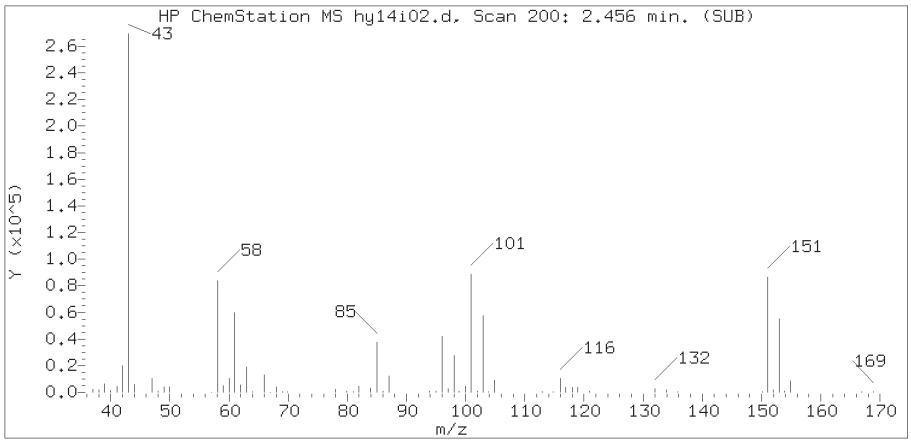
Sample Name: GKP03 Lab Sample ID: 9861918

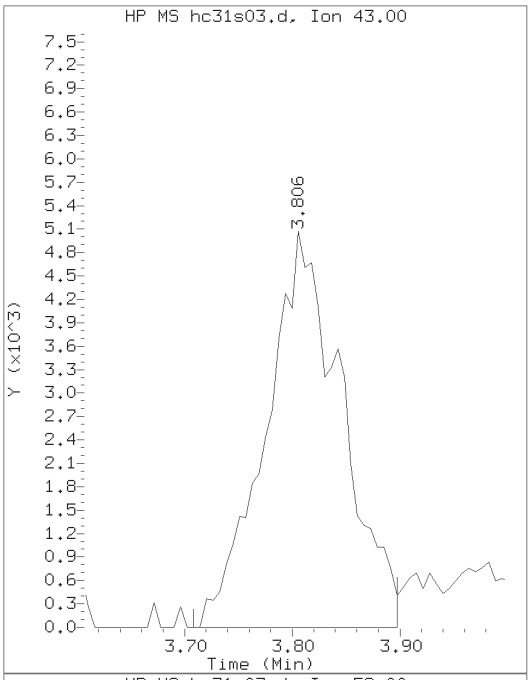
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
14) Acetone	(1)	3.806	43	24810	3.463
26)*t-Butyl Alcohol-d10	(1)	4.501	65	120205	50.000
50)$Dibromofluoromethane	(2)	7.073	113	633950	9.789
57)$1,2-Dichloroethane-d4	(2)	7.531	102	114704	10.159
63)*Fluorobenzene	(2)	7.970	96	2569578	10.000
82)$Toluene-d8	(3)	9.951	98	2481710	10.214
97)*Chlorobenzene-d5	(3)	11.377	117	1887894	10.000
111)$4-Bromofluorobenzene	(3)	12.371	95	866892	9.799
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	965454	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

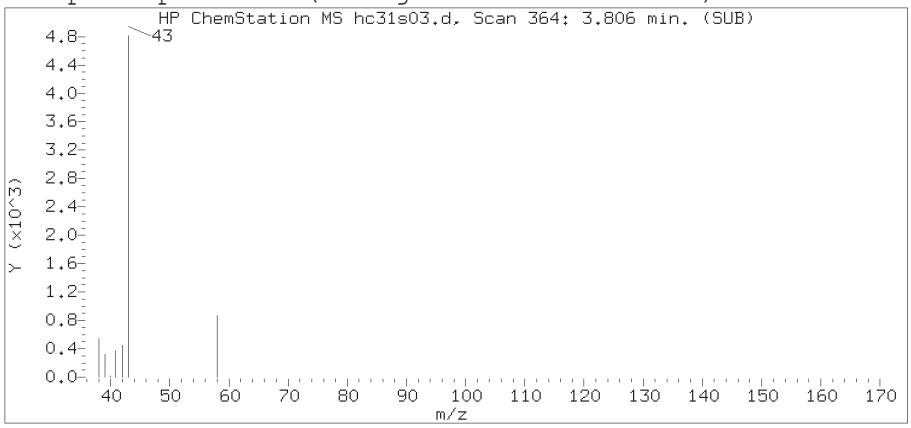
Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

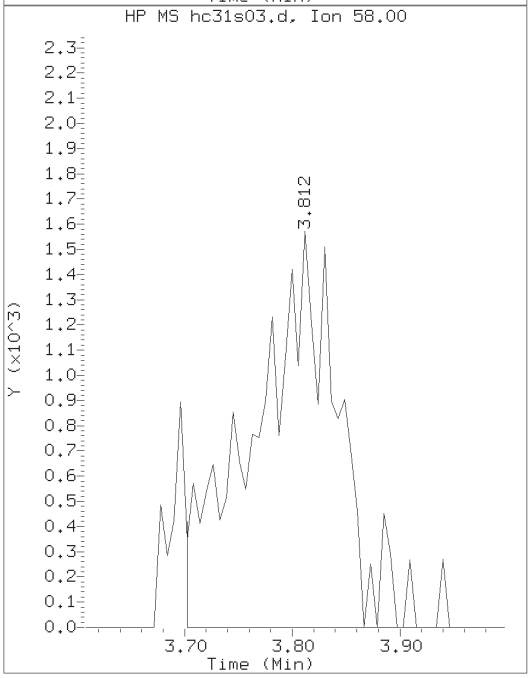
Reference Standard Spectrum for Acetone



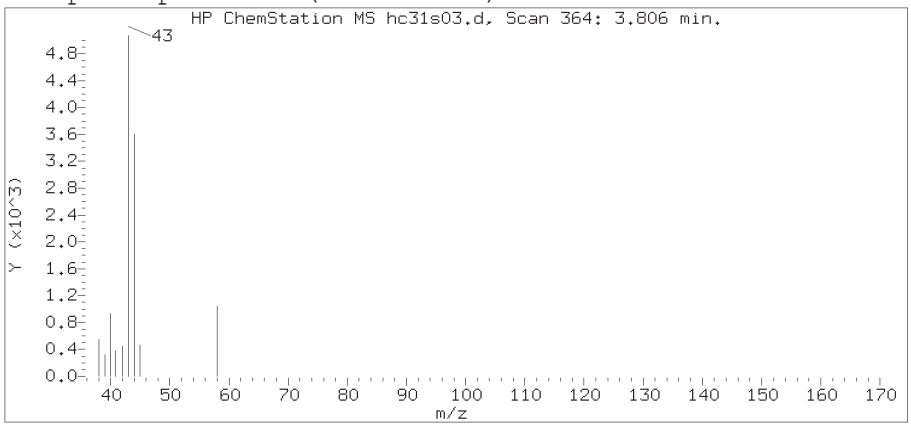


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem2/HP19094.i/18oct31a.b/hc31s03.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:23 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:30 kel01973

Sample Name: GKP03 Lab Sample ID: 9861918

Compound Number	: 14
Compound Name	: Acetone
Scan Number	: 364
Retention Time (minutes)	: 3.806
Relative Retention Time	: 0.00094
Quant Ion	: 43.00
Area (flag)	: 24810
On-Column Amount (ng)	: 3.4629

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

GKP04 Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9861919

Data file: /chem2/HP19094.i/18oct31a.b/hc31s04.d Injection date and time: **31-OCT-2018 12:44**
Data file Sample Info. Line: GKP04;9861919;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:32 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.477(0.012)	474	65	104942	(-16)	50.00	
63) Fluorobenzene	7.964(0.006)	1046	96	2575734	(1)	10.00	
97) Chlorobenzene-d5	11.378(0.006)	1606	117	1893169	(-2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249(0.000)	1913	152	965131	(-1)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074(-0.001)	113	637428	9.819	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.531(-0.001)	102	114330	10.102	101%		81 - 118
82) Toluene-d8	(3)	9.945(0.000)	98	2501157	10.265	103%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371(-0.001)	95	864376	9.744	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)			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)	3.806(-0.003)	43	26515	4.239	4.24		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)	10.024(-0.000)	92	24297	0.173	0.17		J	0.07	0.5

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:34. Target 3.5 esignature user ID: jgc14951

Data file: /chem2/HP19094.i/18oct31a.b/hc31s04.d Injection date and time: **31-OCT-2018 12:44**
Data file Sample Info. Line: GKP04;9861919;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:32 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

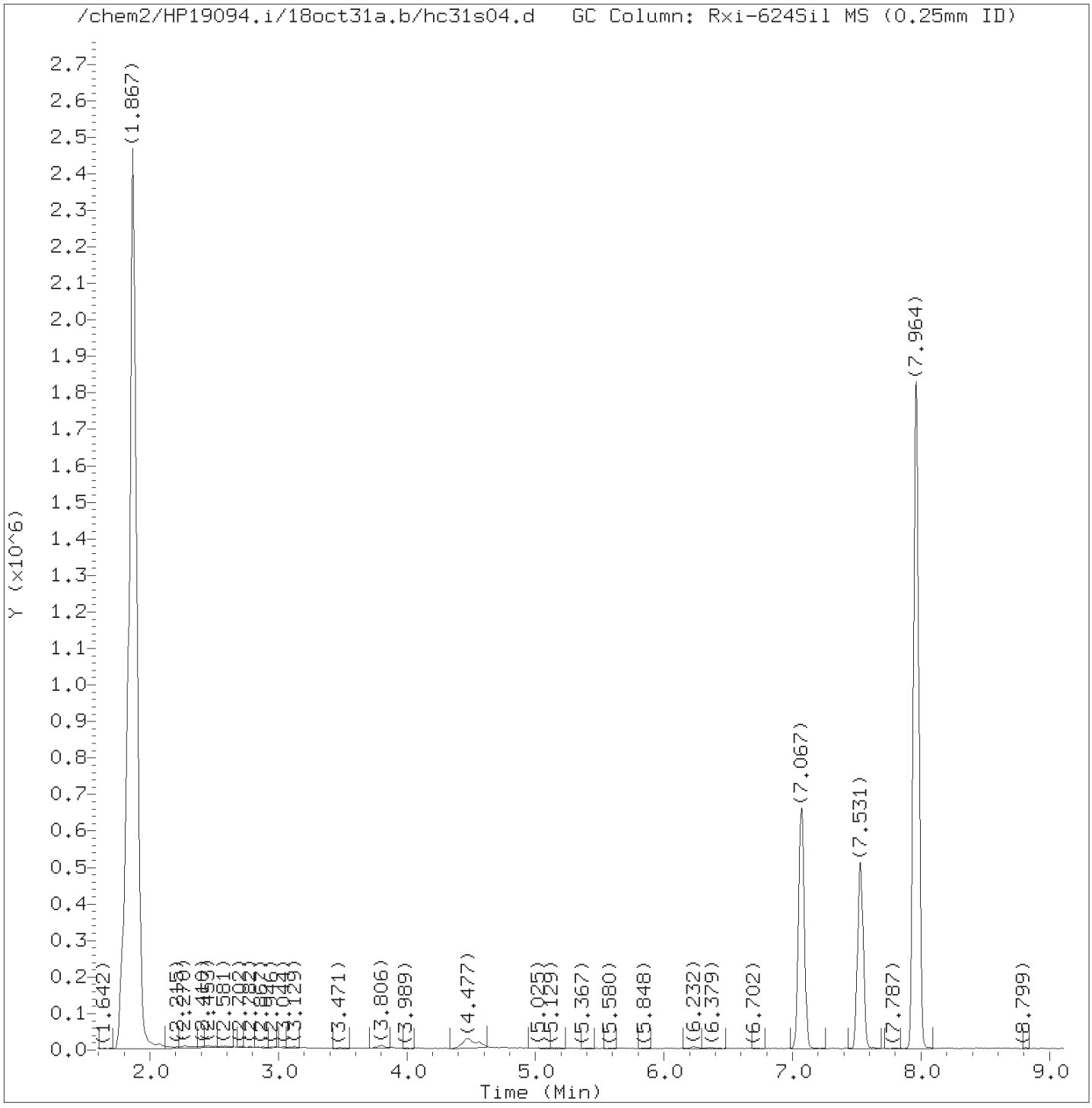
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
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 Joel G. Chachapoya on 10/31/2018 at 20:34. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

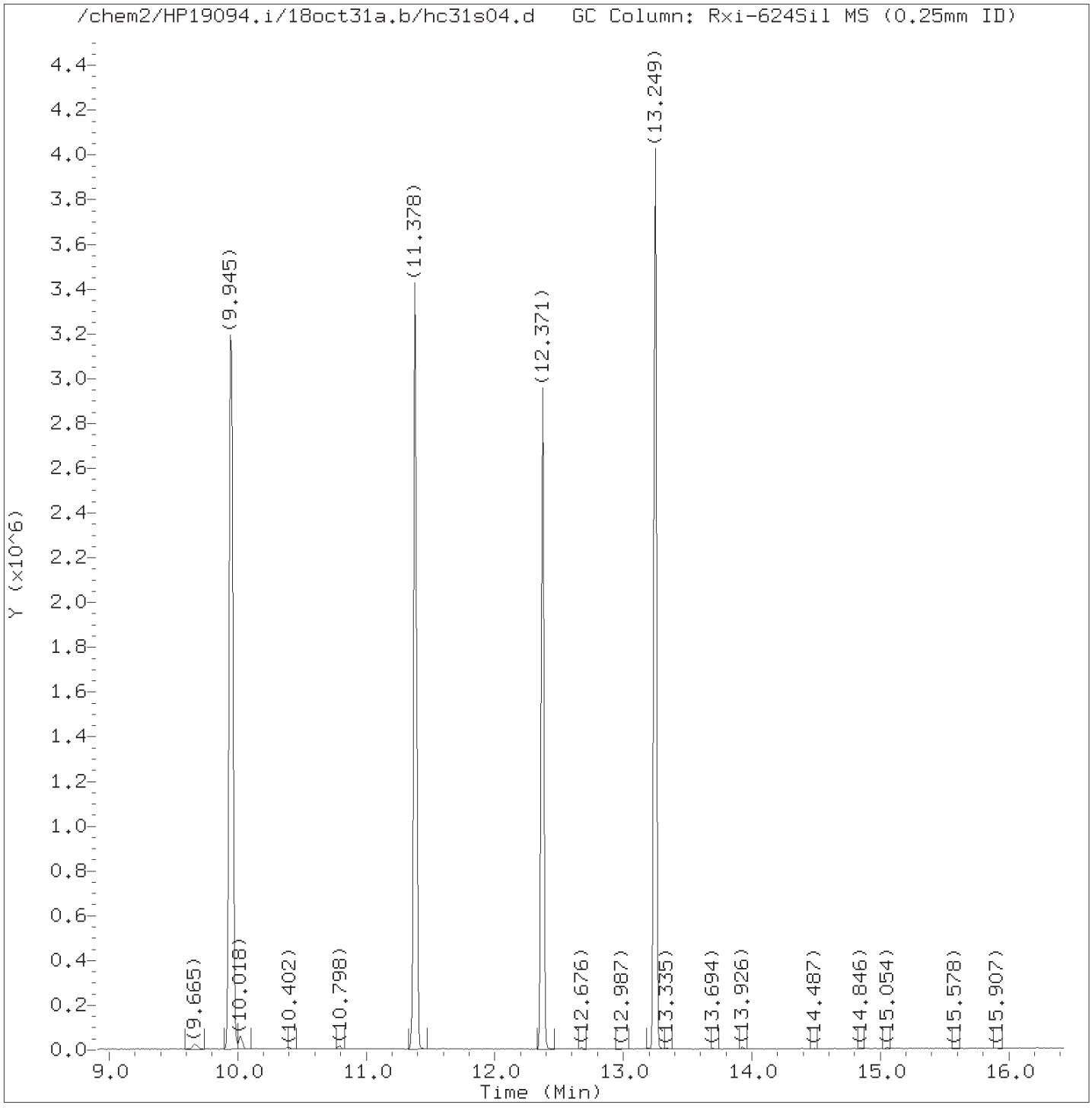
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s04.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:44 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:32 kel01973

Sample Name: GKP04 Lab Sample ID: 9861919

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s04.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:44 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:32 kel01973

Sample Name: GKP04 Lab Sample ID: 9861919

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s04.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:44 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:32 kel01973

Sample Name: GKP04 Lab Sample ID: 9861919

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
14) Acetone	(1)	3.806	43	26515	4.239
26)*t-Butyl Alcohol-d10	(1)	4.477	65	104942	50.000
50)$Dibromofluoromethane	(2)	7.074	113	637428	9.819
57)$1,2-Dichloroethane-d4	(2)	7.531	102	114330	10.102
63)*Fluorobenzene	(2)	7.964	96	2575734	10.000
82)$Toluene-d8	(3)	9.945	98	2501157	10.265
83) Toluene	(3)	10.024	92	24297	0.173
97)*Chlorobenzene-d5	(3)	11.378	117	1893169	10.000
111)$4-Bromofluorobenzene	(3)	12.371	95	864376	9.744
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	965131	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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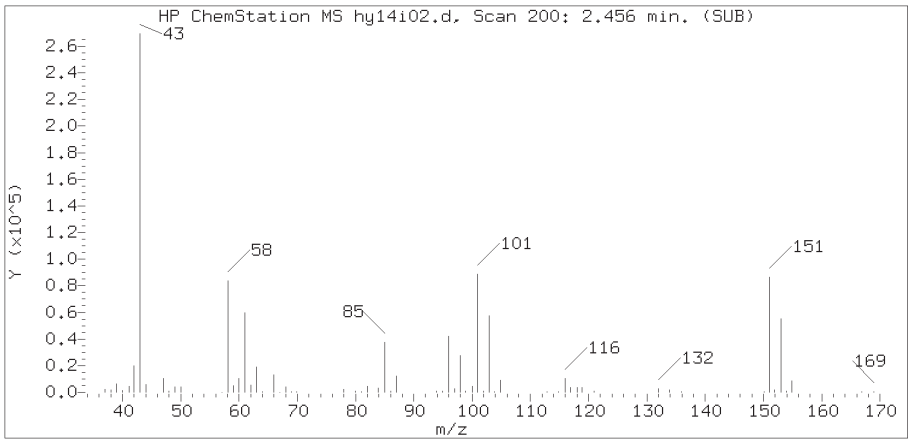
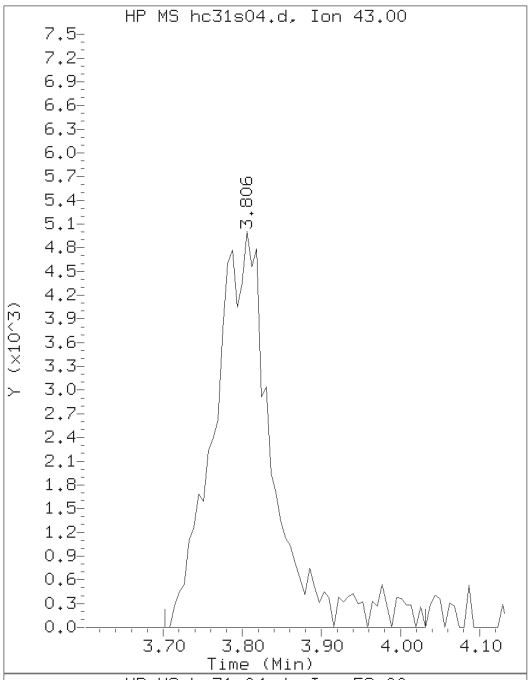
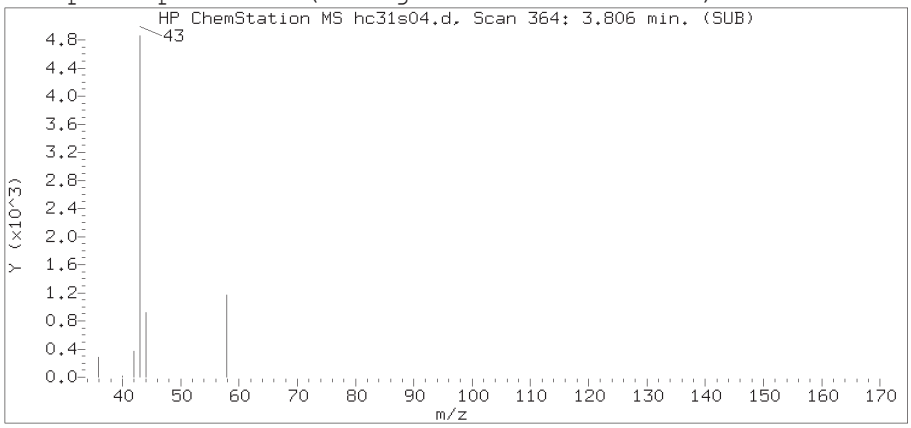
on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

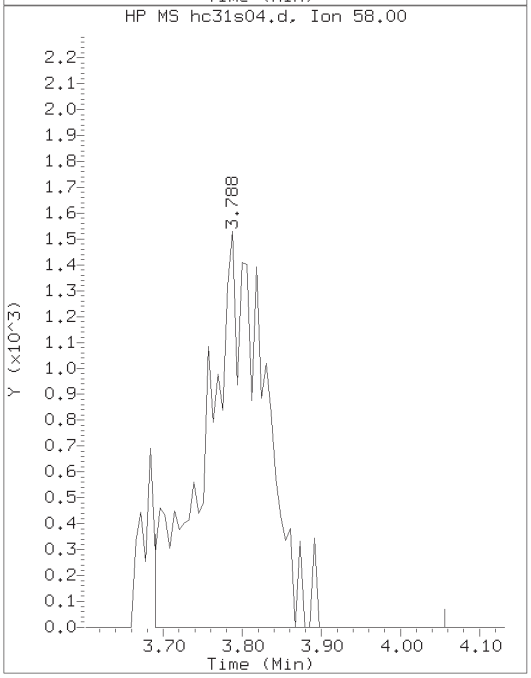
Reference Standard Spectrum for Acetone



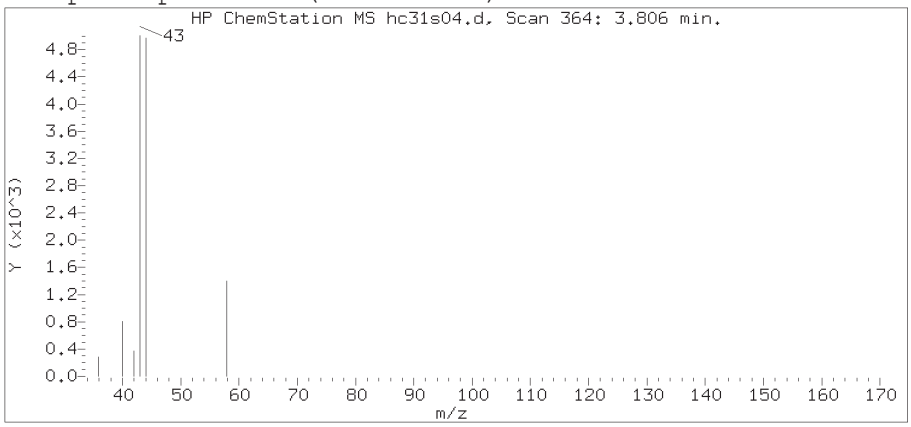


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem2/HP19094.i/18oct31a.b/hc31s04.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:44 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:32 kel01973

Sample Name: GKP04 Lab Sample ID: 9861919

Compound Number : 14
Compound Name : Acetone
Scan Number : 364
Retention Time (minutes): 3.806
Relative Retention Time :-0.00367
Quant Ion : 43.00
Area (flag) : 26515
On-Column Amount (ng) : 4.2391

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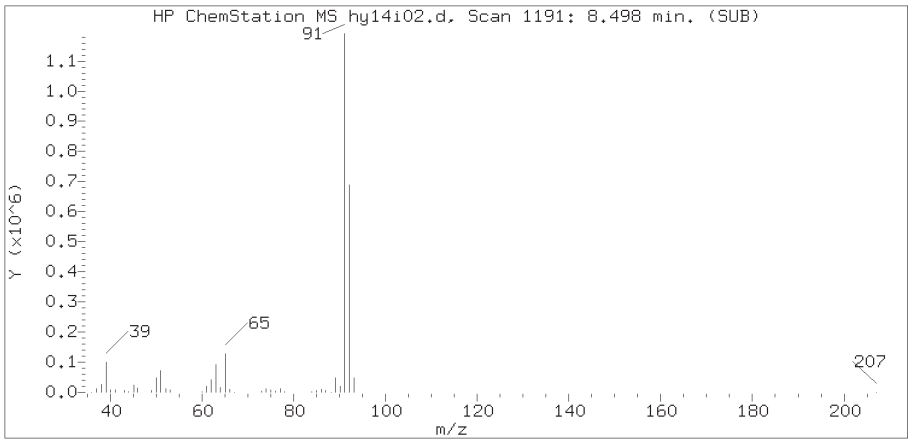
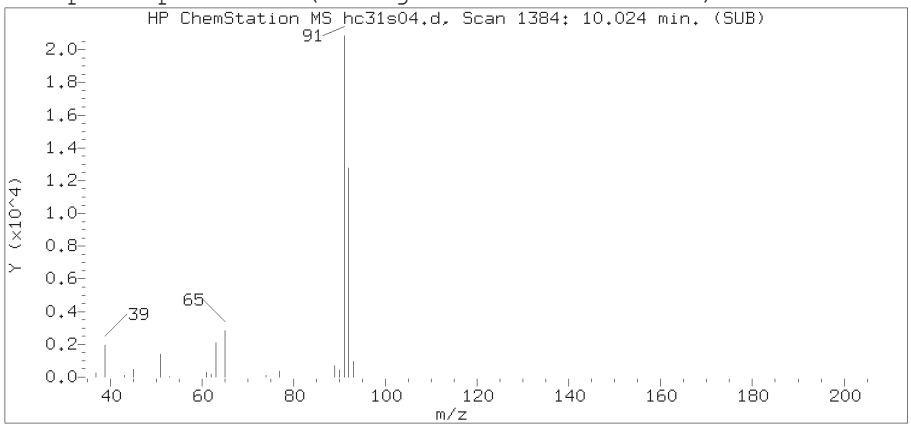
Target 3.5 esignature user ID: jgc14951

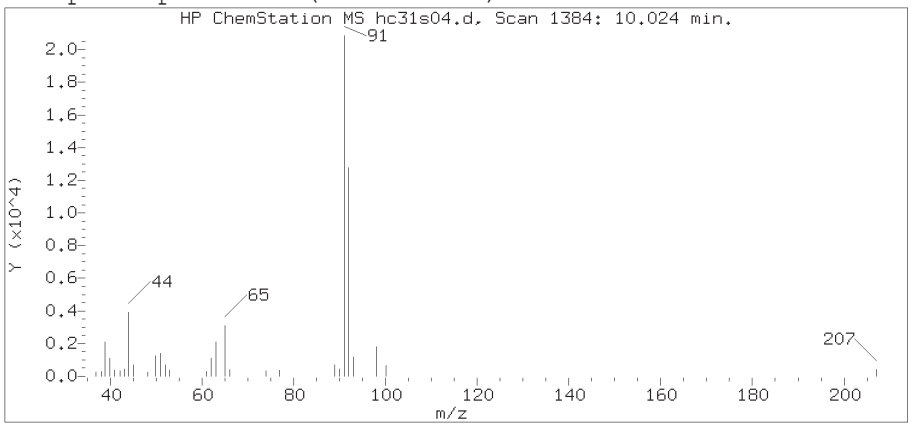
Reference Standard Spectrum for Toluene

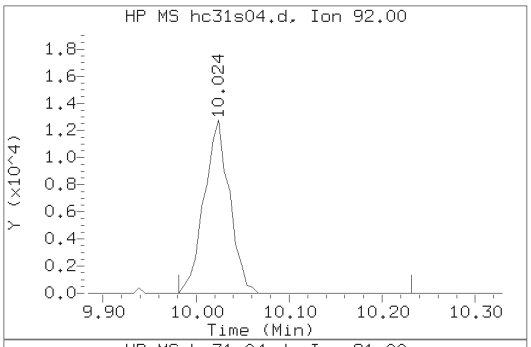


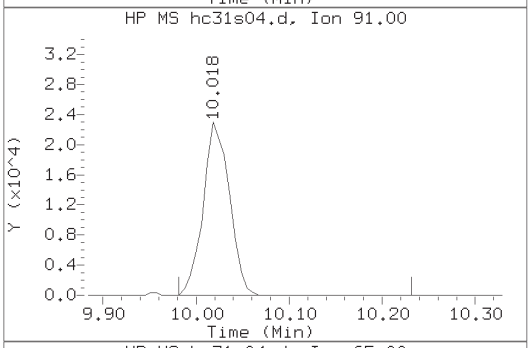
Sample Spectrum (Background Subtracted)

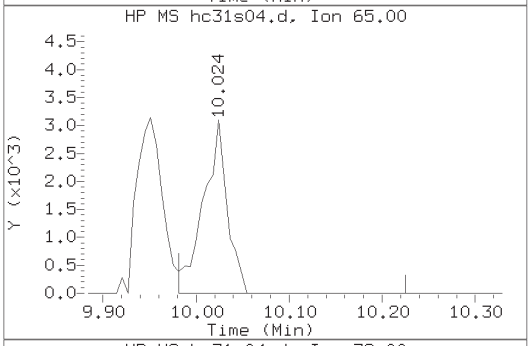


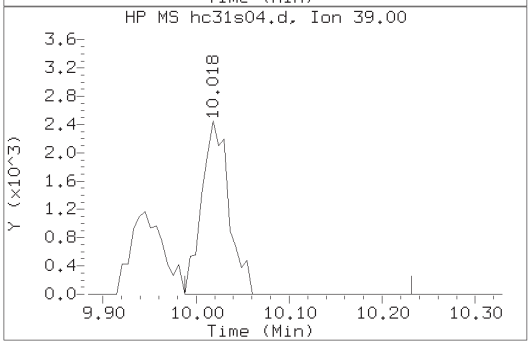
Sample Spectrum (Unaltered)











Data File: /chem2/HP19094.i/18oct31a.b/hc31s04.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 12:44 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:32 kel01973

Sample Name: GKP04 Lab Sample ID: 9861919

Compound Number	: 83
Compound Name	: Toluene
Scan Number	: 1384
Retention Time (minutes)	: 10.024
Relative Retention Time	:-0.00047
Quant Ion	: 92.00
Area (flag)	: 24297
On-Column Amount (ng)	: 0.1729

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:34.
Target 3.5 esignature user ID: jgc14951

GKPR1 Lancaster Laboratories 9861920
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s05.d Injection date and time: **31-OCT-2018 13:06**
Data file Sample Info. Line: GKPR1;9861920;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:33 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.476(0.012)	474	65	109461	(-13)	50.00	
63) Fluorobenzene	7.963(0.006)	1046	96	2557265	(0)	10.00	
97) Chlorobenzene-d5	11.377(0.006)	1606	117	1888285	(-2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249(0.000)	1913	152	956759	(-2)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.073(-0.001)	113	629297	9.764	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.525(0.000)	102	112932	10.051	101%		81 - 118
82) Toluene-d8	(3)	9.951(0.000)	98	2490872	10.249	102%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371(-0.001)	95	862249	9.745	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)			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)	3.812(-0.005)	43	13647	2.092	2.09		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)	10.024(-0.000)	92	14762	0.105	0.11		J	0.07	0.5

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:33. Target 3.5 esignature user ID: jgc14951

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s05.d Injection date and time: **31-OCT-2018 13:06**
Data file Sample Info. Line: GKPR1;9861920;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:33 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

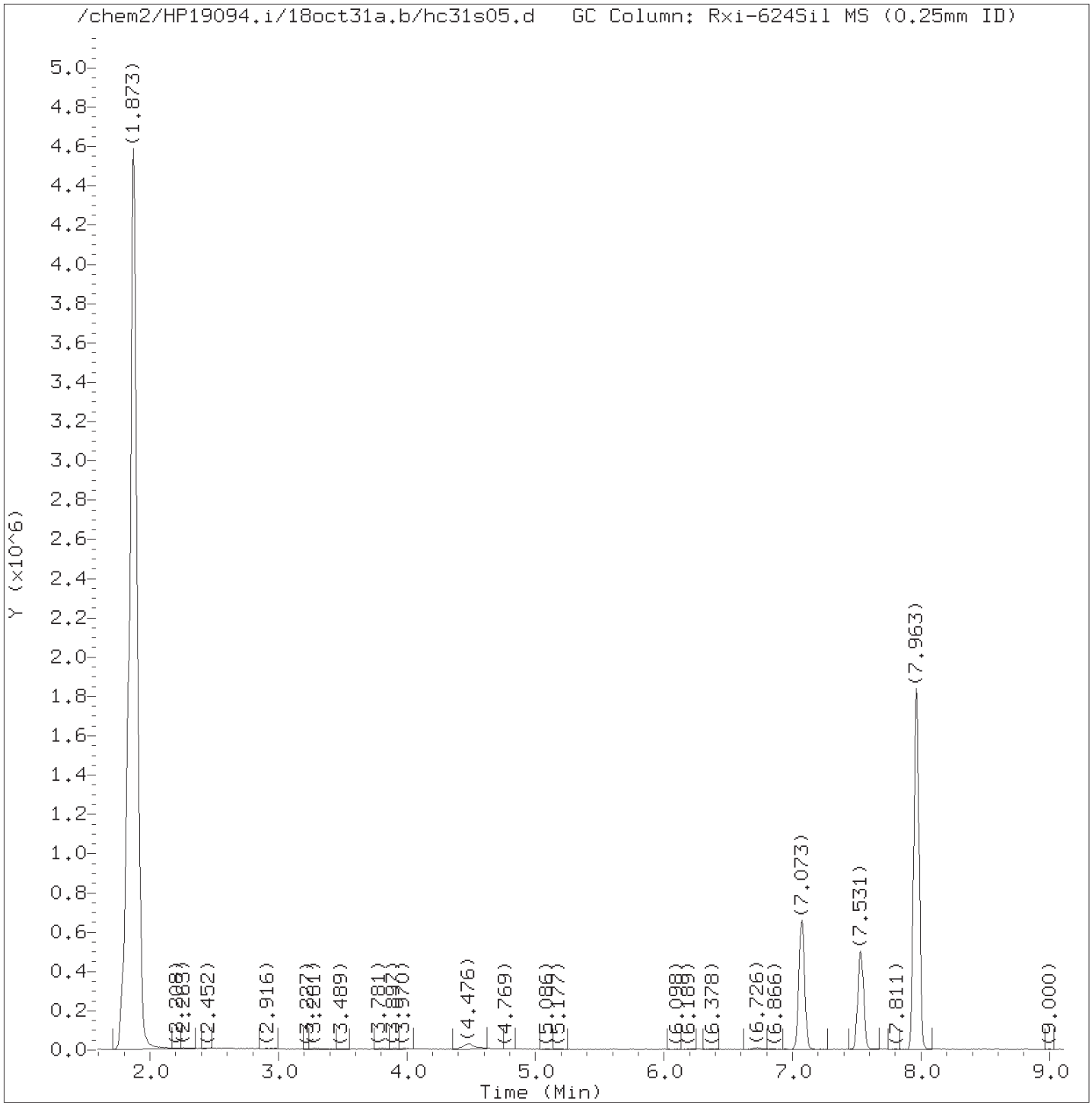
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
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 Joel G. Chachapoya on 10/31/2018 at 20:33. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

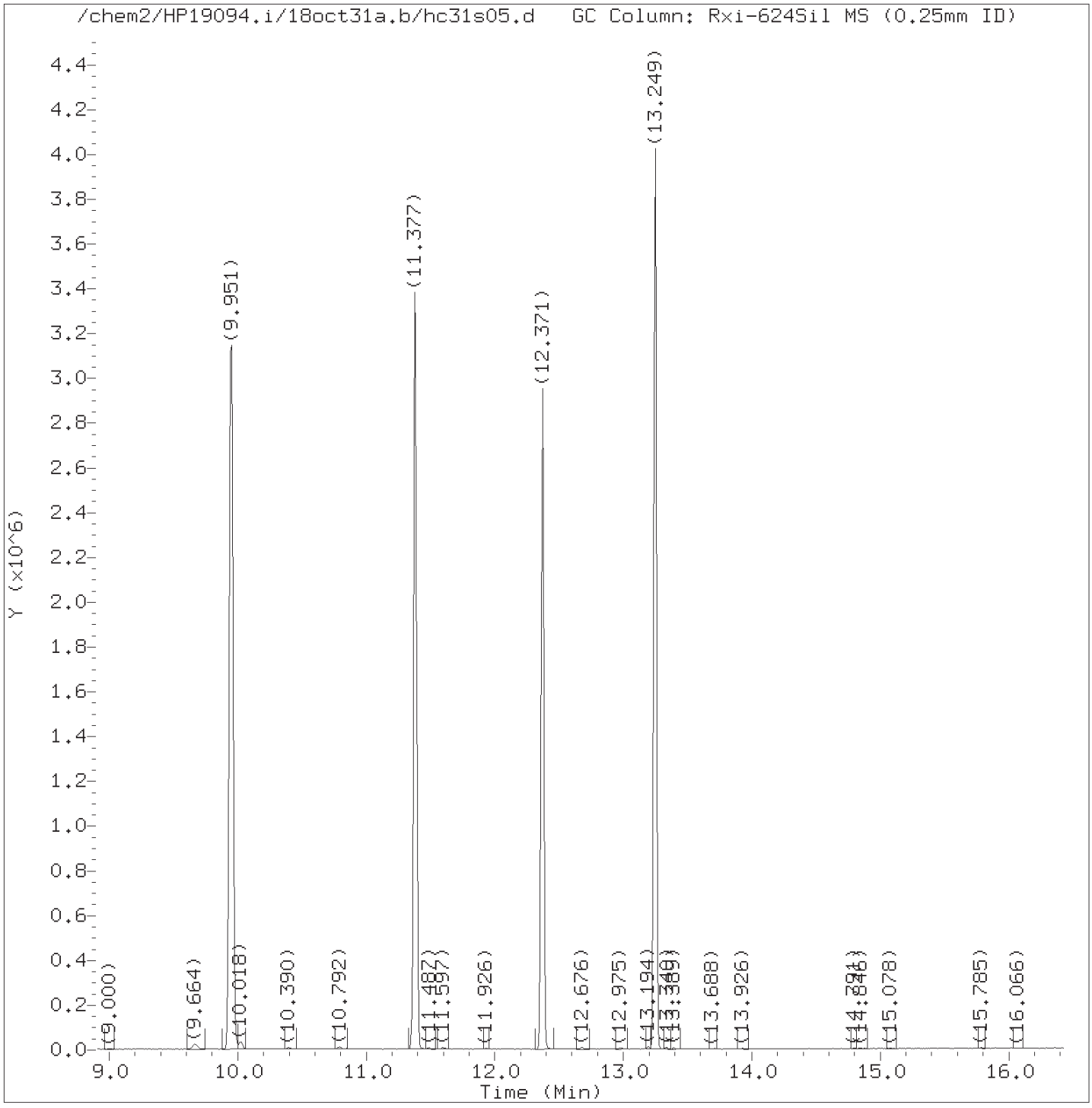
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s05.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:06 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:33 kel01973

Sample Name: GKPR1 Lab Sample ID: 9861920

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s05.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:06 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:33 kel01973

Sample Name: GKPR1 Lab Sample ID: 9861920

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s05.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:06 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:33 kel01973

Sample Name: GKPR1 Lab Sample ID: 9861920

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
14) Acetone	(1)	3.812	43	13647	2.092
26)*t-Butyl Alcohol-d10	(1)	4.476	65	109461	50.000
50)$Dibromofluoromethane	(2)	7.073	113	629297	9.764
57)$1,2-Dichloroethane-d4	(2)	7.525	102	112932	10.051
63)*Fluorobenzene	(2)	7.963	96	2557265	10.000
82)$Toluene-d8	(3)	9.951	98	2490872	10.249
83) Toluene	(3)	10.024	92	14762	0.105
97)*Chlorobenzene-d5	(3)	11.377	117	1888285	10.000
111)$4-Bromofluorobenzene	(3)	12.371	95	862249	9.745
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	956759	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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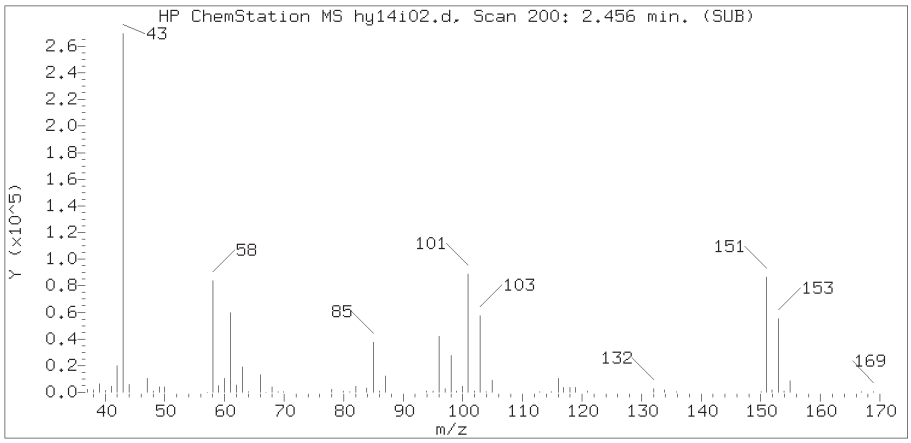
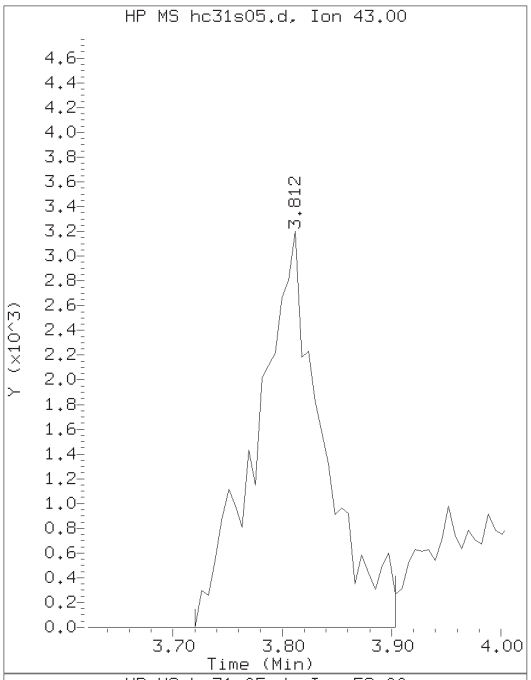
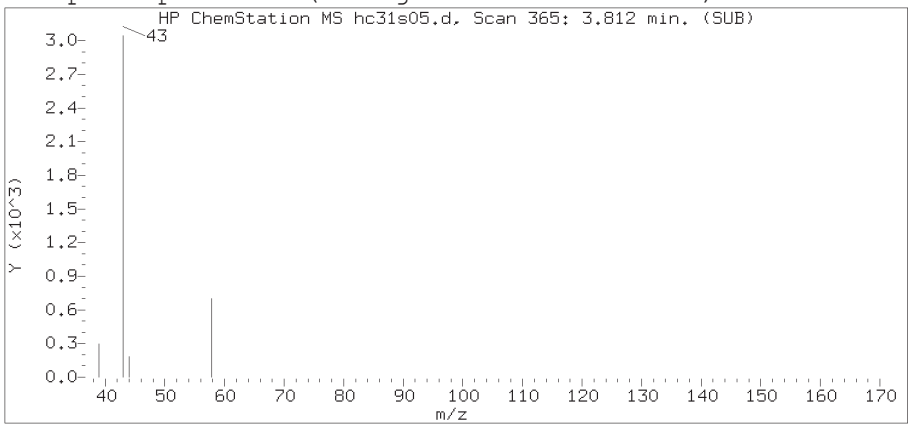
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

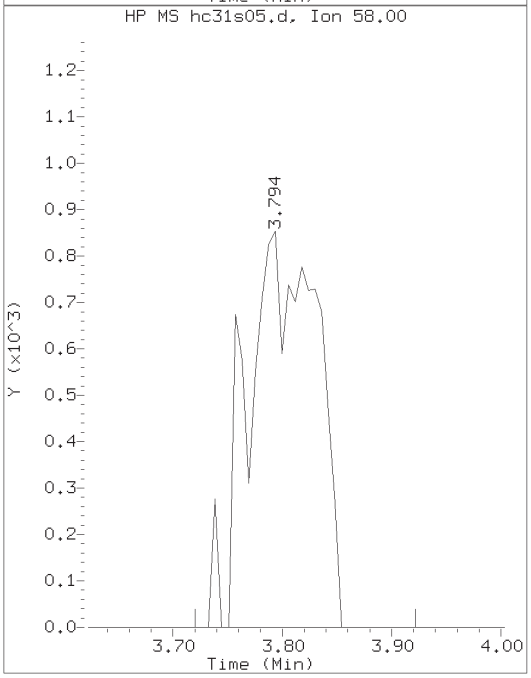
Reference Standard Spectrum for Acetone



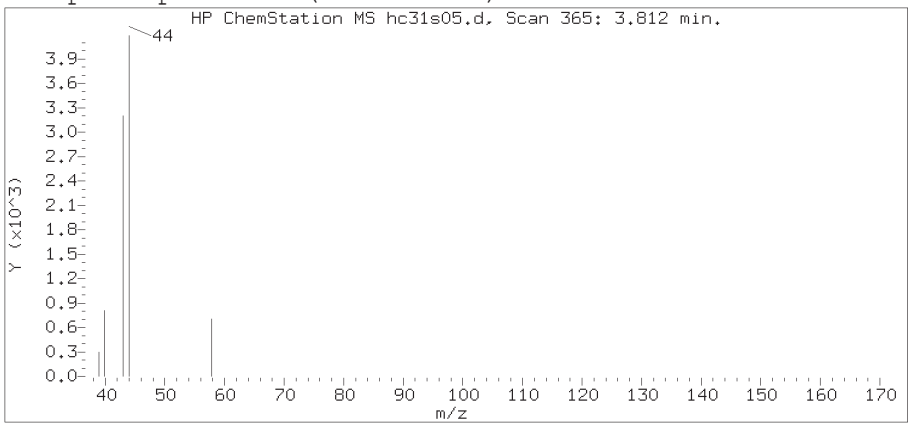


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem2/HP19094.i/18oct31a.b/hc31s05.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:06 Analyst ID: KEL01973

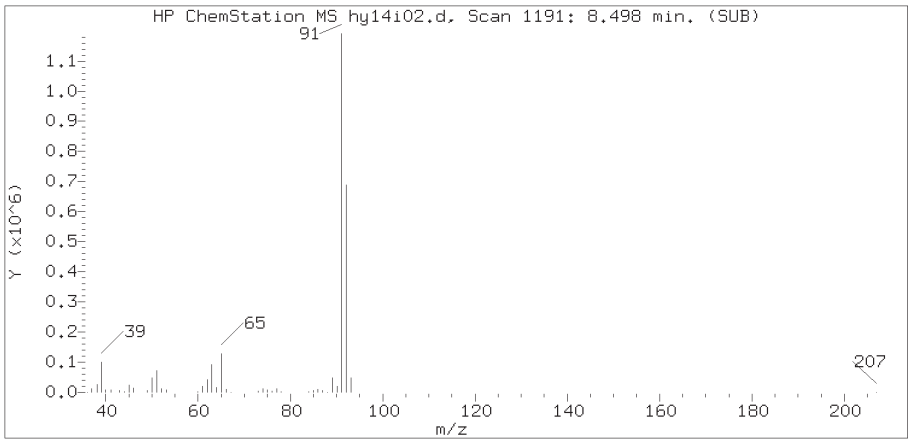
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:33 kel01973

Sample Name: GKPR1 Lab Sample ID: 9861920

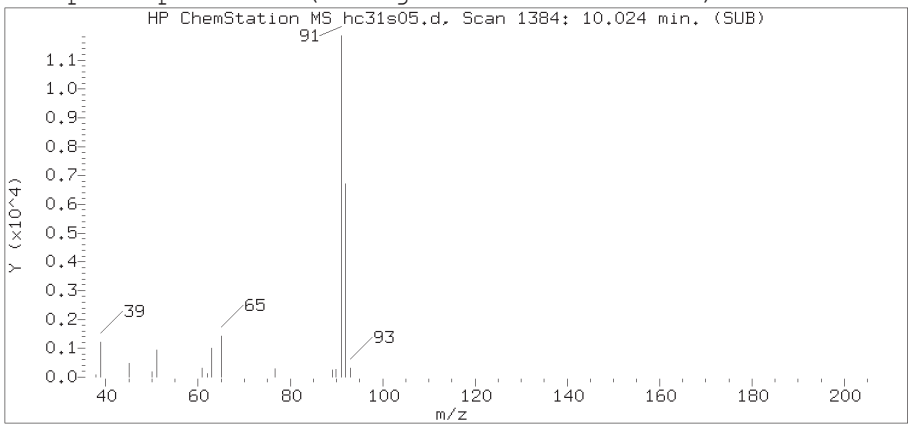
Compound Number : 14
Compound Name : Acetone
Scan Number : 365
Retention Time (minutes): 3.812
Relative Retention Time :-0.00502
Quant Ion : 43.00
Area (flag) : 13647
On-Column Amount (ng) : 2.0918

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

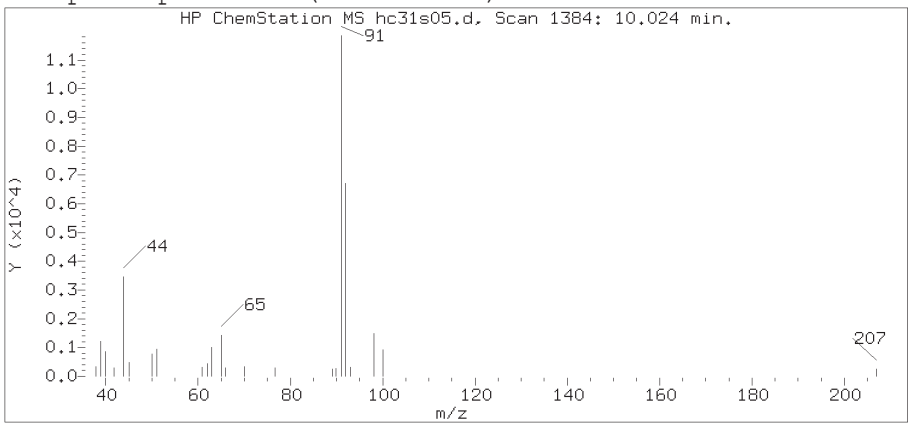
Reference Standard Spectrum for Toluene

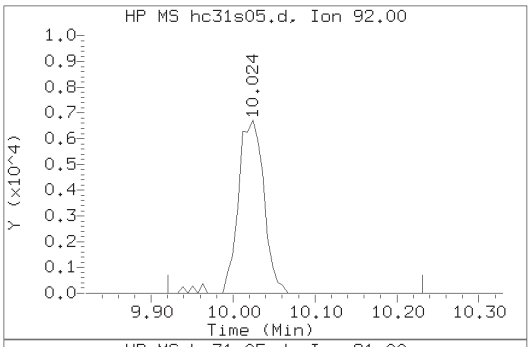


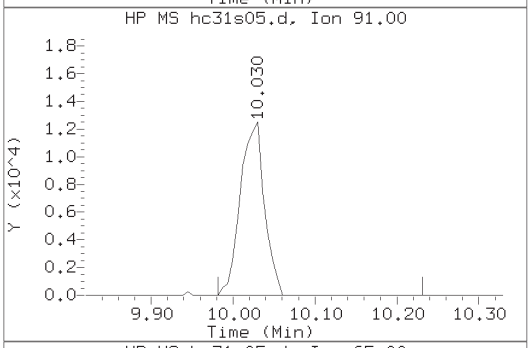
Sample Spectrum (Background Subtracted)

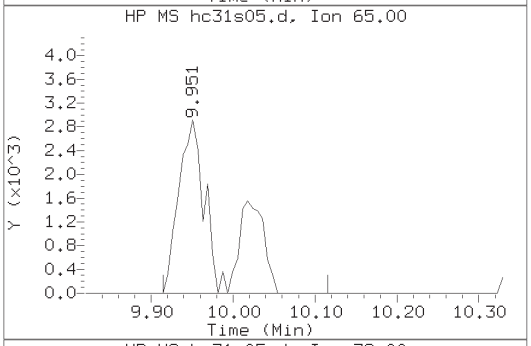


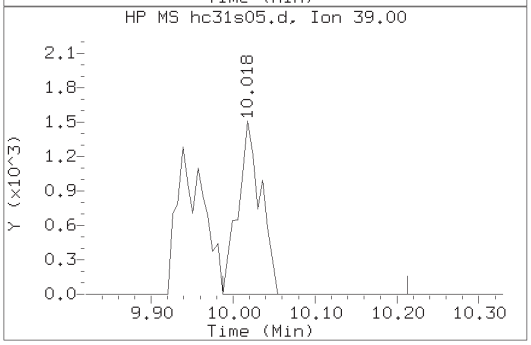
Sample Spectrum (Unaltered)











Data File: /chem2/HP19094.i/18oct31a.b/hc31s05.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:06 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:33 kel01973

Sample Name: GKPR1 Lab Sample ID: 9861920

Compound Number : 83
Compound Name : Toluene
Scan Number : 1384
Retention Time (minutes): 10.024
Relative Retention Time :-0.00047
Quant Ion : 92.00
Area (flag) : 14762
On-Column Amount (ng) : 0.1053

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

GKP05 Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9861921

Data file: /chem2/HP19094.i/18oct31a.b/hc31s06.d Injection date and time: **31-OCT-2018 13:27**
Data file Sample Info. Line: GKP05;9861921;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:34 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.483(0.006)	475	65	98733	(-21)	50.00	
63) Fluorobenzene	7.970(0.000)	1047	96	2605010	(2)	10.00	
97) Chlorobenzene-d5	11.378(0.006)	1606	117	1917383	(0)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249(0.000)	1913	152	982817	(0)	10.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.080(-0.001)	113	641043	9.764	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.537(-0.001)	102	115695	10.108	101%		81 - 118
82) Toluene-d8	(3)	9.951(0.000)	98	2555652	10.356	104%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371(-0.001)	95	875217	9.741	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)			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)	3.806(-0.002)	43	15920	2.705	2.71		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)			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)	10.024(-0.000)	92	18120	0.127	0.13		J	0.07	0.5

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:33. Target 3.5 esignature user ID: jgc14951

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s06.d Injection date and time: **31-OCT-2018 13:27**
Data file Sample Info. Line: GKP05;9861921;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 14:34 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

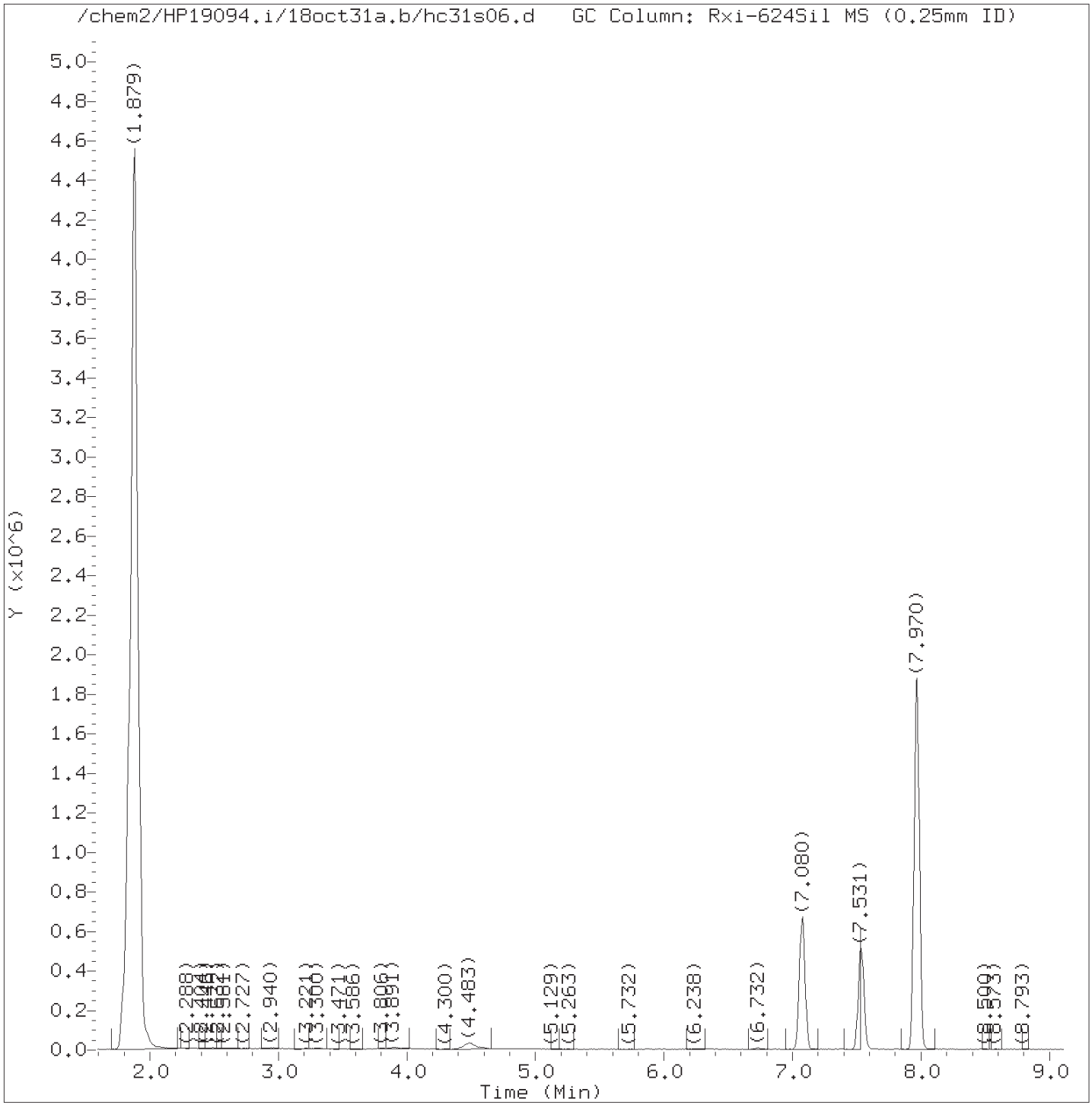
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
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 Joel G. Chachapoya on 10/31/2018 at 20:33. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

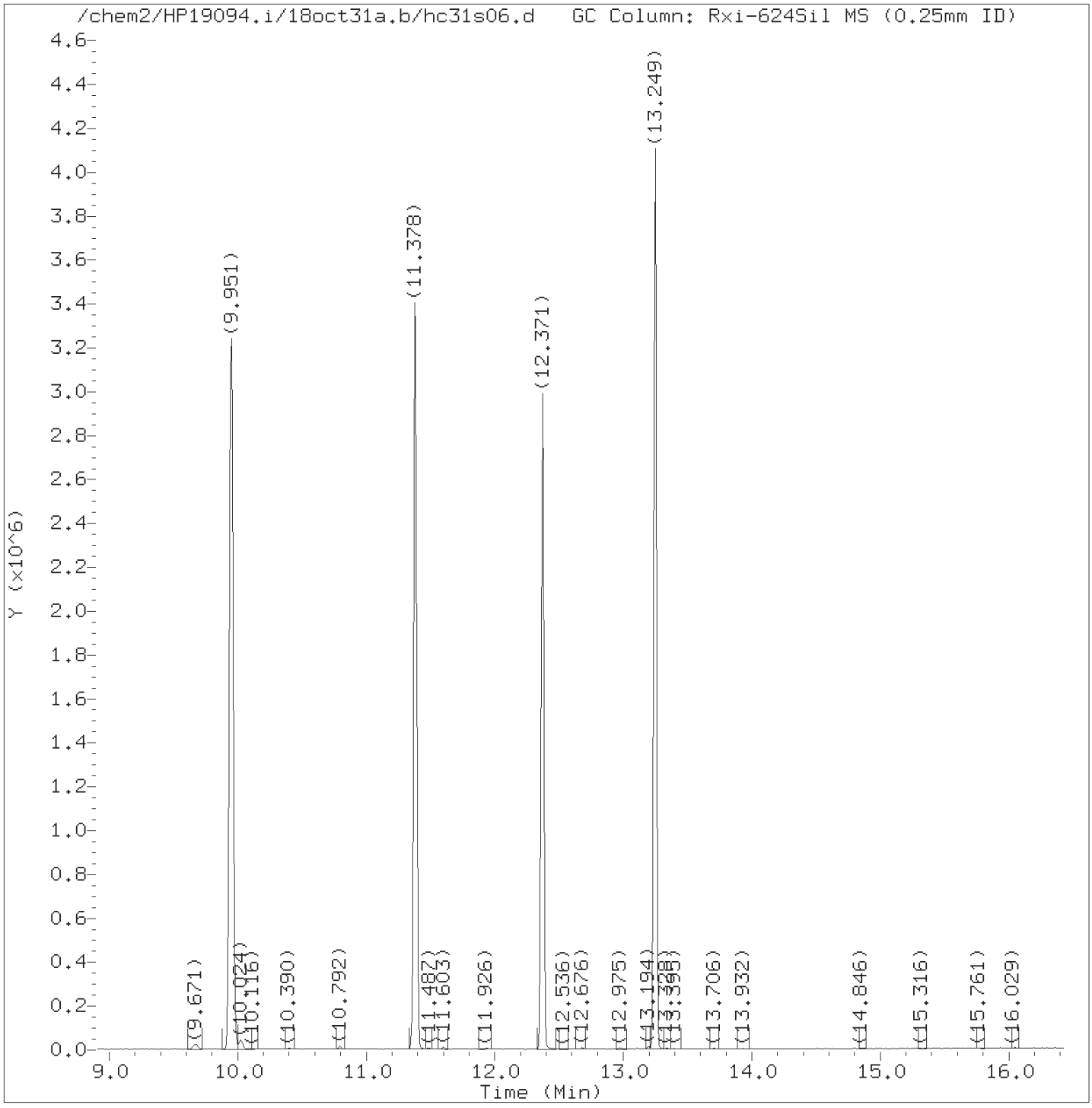
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s06.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:34 kel01973

Sample Name: GKP05 Lab Sample ID: 9861921

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s06.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:34 kel01973

Sample Name: GKP05 Lab Sample ID: 9861921

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s06.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:34 kel01973

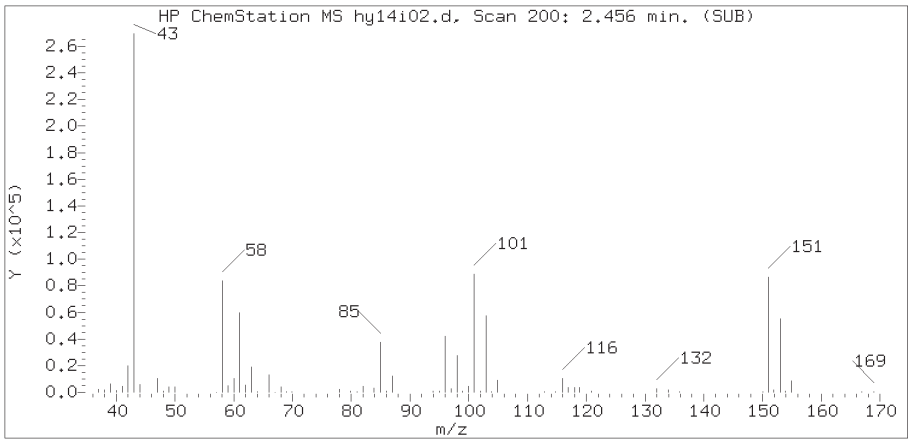
Sample Name: GKP05 Lab Sample ID: 9861921

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
14) Acetone	(1)	3.806	43	15920	2.705
26)*t-Butyl Alcohol-d10	(1)	4.483	65	98733	50.000
50)$Dibromofluoromethane	(2)	7.080	113	641043	9.764
57)$1,2-Dichloroethane-d4	(2)	7.537	102	115695	10.108
63)*Fluorobenzene	(2)	7.970	96	2605010	10.000
82)$Toluene-d8	(3)	9.951	98	2555652	10.356
83) Toluene	(3)	10.024	92	18120	0.127
97)*Chlorobenzene-d5	(3)	11.378	117	1917383	10.000
111)$4-Bromofluorobenzene	(3)	12.371	95	875217	9.741
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	982817	10.000

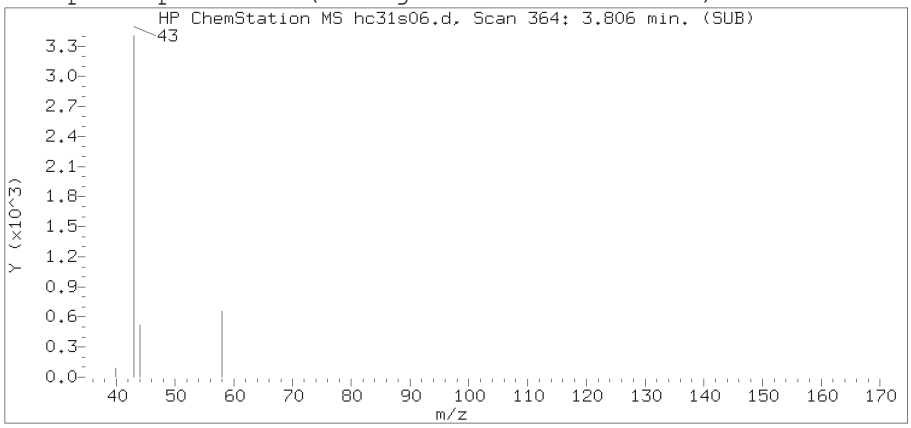
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

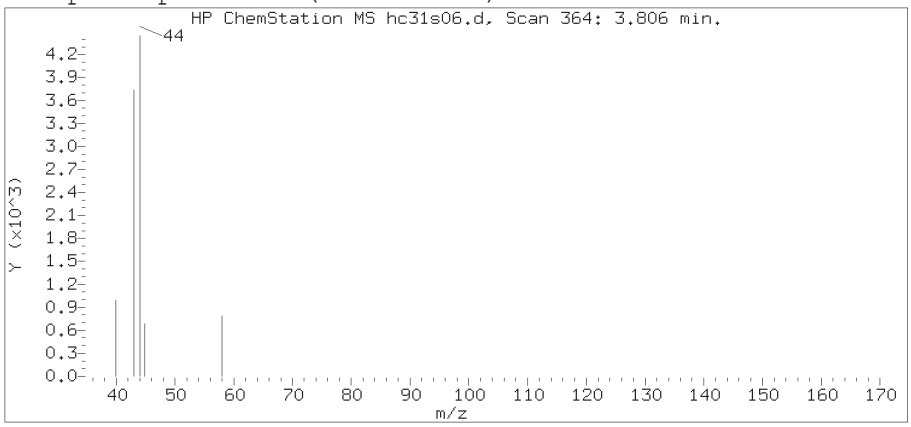
Reference Standard Spectrum for Acetone

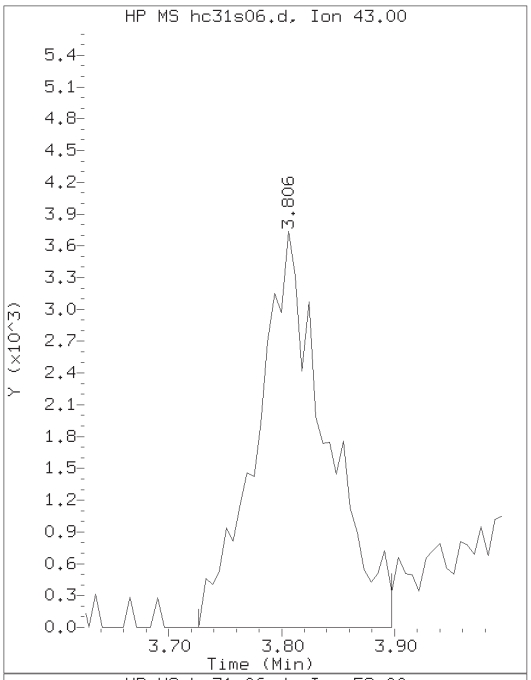


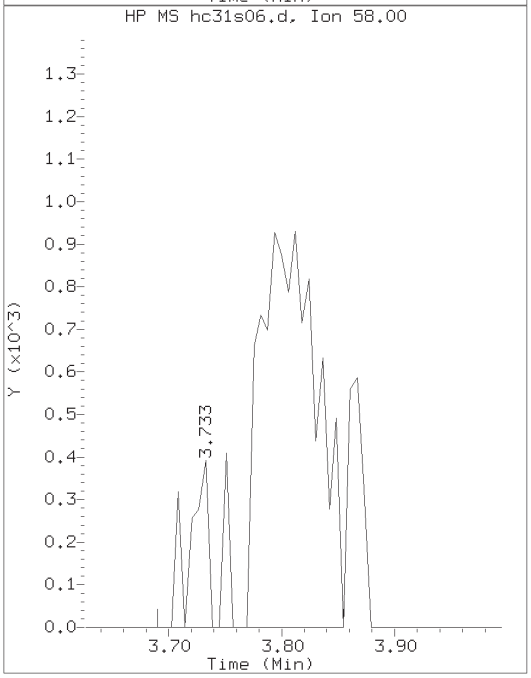
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem2/HP19094.i/18oct31a.b/hc31s06.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:34 kel01973

Sample Name: GKP05 Lab Sample ID: 9861921

Compound Number : 14
Compound Name : Acetone
Scan Number : 364
Retention Time (minutes): 3.806
Relative Retention Time :-0.00251
Quant Ion : 43.00
Area (flag) : 15920
On-Column Amount (ng) : 2.7053

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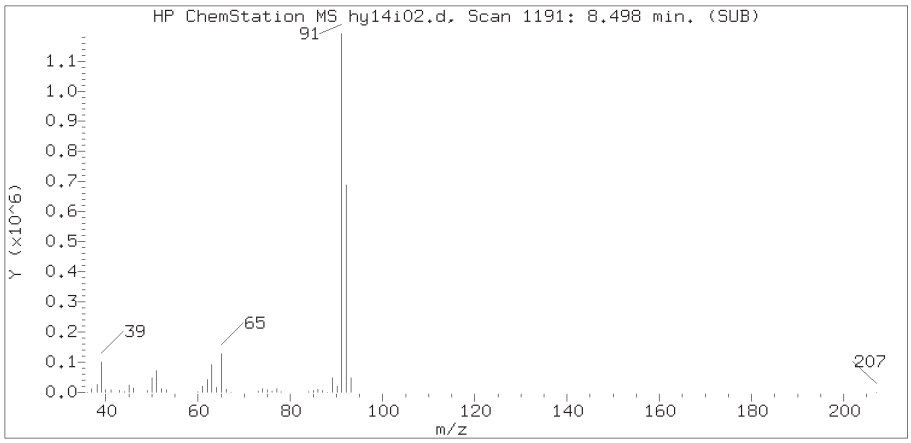
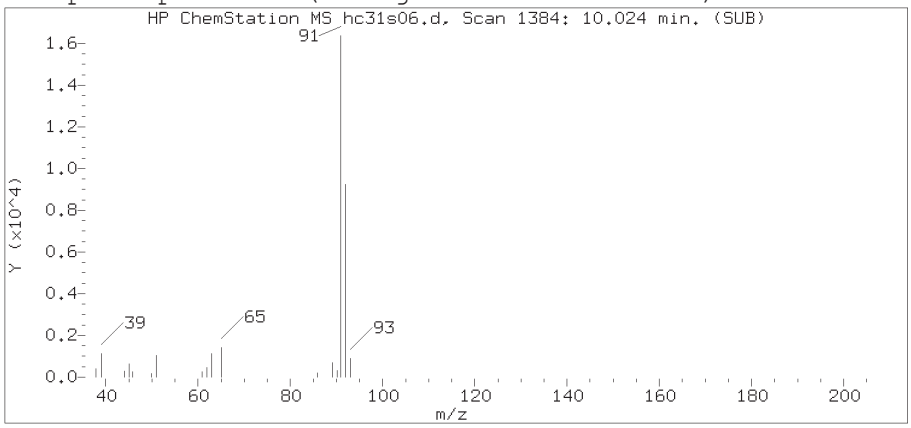
Target 3.5 esignature user ID: jgc14951

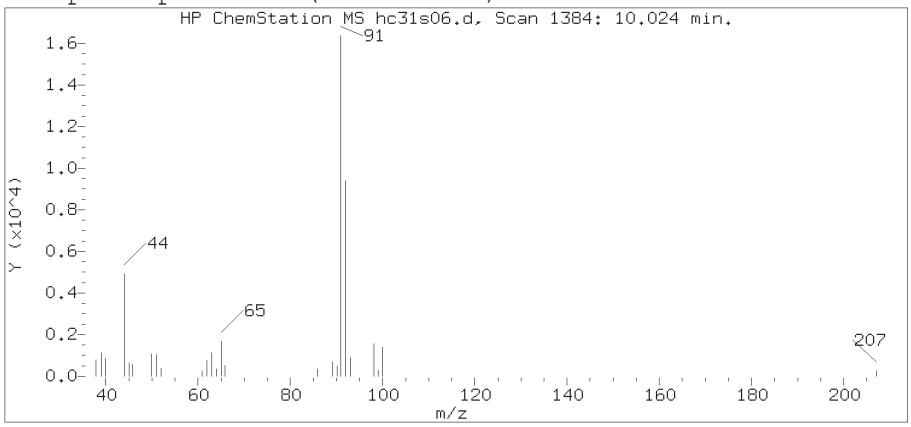
Reference Standard Spectrum for Toluene

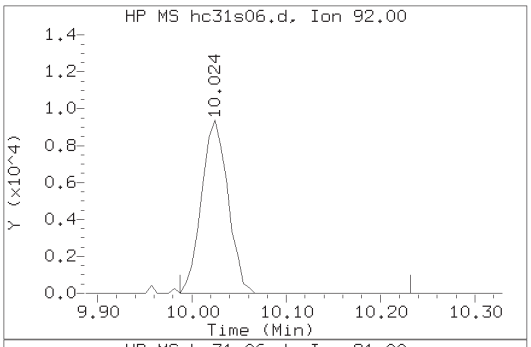


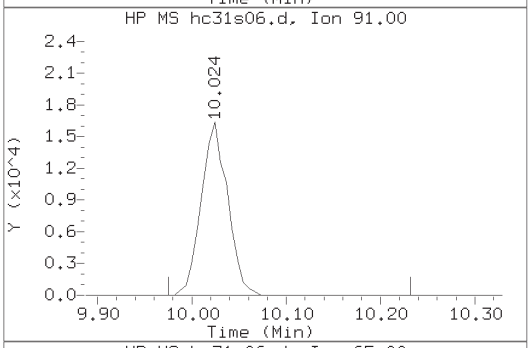
Sample Spectrum (Background Subtracted)

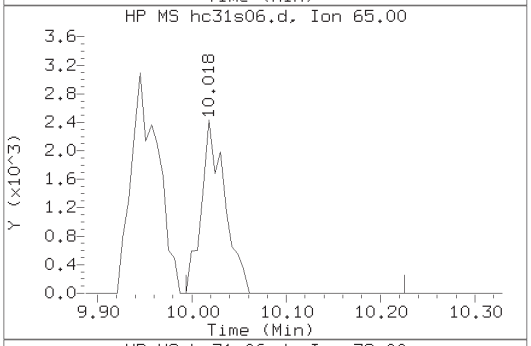


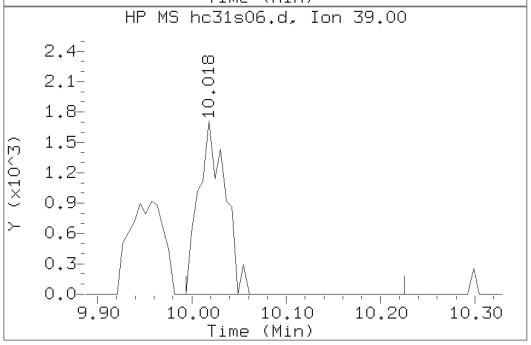
Sample Spectrum (Unaltered)











Data File: /chem2/HP19094.i/18oct31a.b/hc31s06.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 14:34 kel01973

Sample Name: GKP05 Lab Sample ID: 9861921

Compound Number	: 83
Compound Name	: Toluene
Scan Number	: 1384
Retention Time (minutes)	: 10.024
Relative Retention Time	:-0.00047
Quant Ion	: 92.00
Area (flag)	: 18120
On-Column Amount (ng)	: 0.1273

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

GKP02 Lancaster Laboratories Analysis Summary for GC/MS Volatiles 9861922

Data file: /chem2/HP19094.i/18oct31a.b/hc31s07.d Injection date and time: **31-OCT-2018 13:49**
Data file Sample Info. Line: GKP02;9861922;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 20:29 jgc14951

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.483	(0.006)	475	65	76372	(-39)	50.00	
63) Fluorobenzene	7.970	(0.000)	1047	96	2573443	(1)	10.00	
97) Chlorobenzene-d5	11.378	(0.006)	1606	117	1884265	(-2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249	(0.000)	1913	152	953289	(-3)	10.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074	(0.000)	113	633392	9.765	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.537	(-0.001)	102	113826	10.067	101%		81 - 118
82) Toluene-d8	(3)	9.951	(0.000)	98	2517781	10.382	104%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371	(-0.001)	95	856505	9.700	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)				Not Detected					0.05	0.5
2) Chloromethane	(2)	2.276	(0.000)	50	8021	0.081	0.08		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)	3.818	(-0.005)	43	14724	3.235	3.23		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)	10.024	(-0.000)	92	21093	0.151	0.15		J	0.07	0.5

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s07.d Injection date and time: **31-OCT-2018 13:49**
Data file Sample Info. Line: GKP02;9861922;1;0;;TID07;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 20:29 jgc14951

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

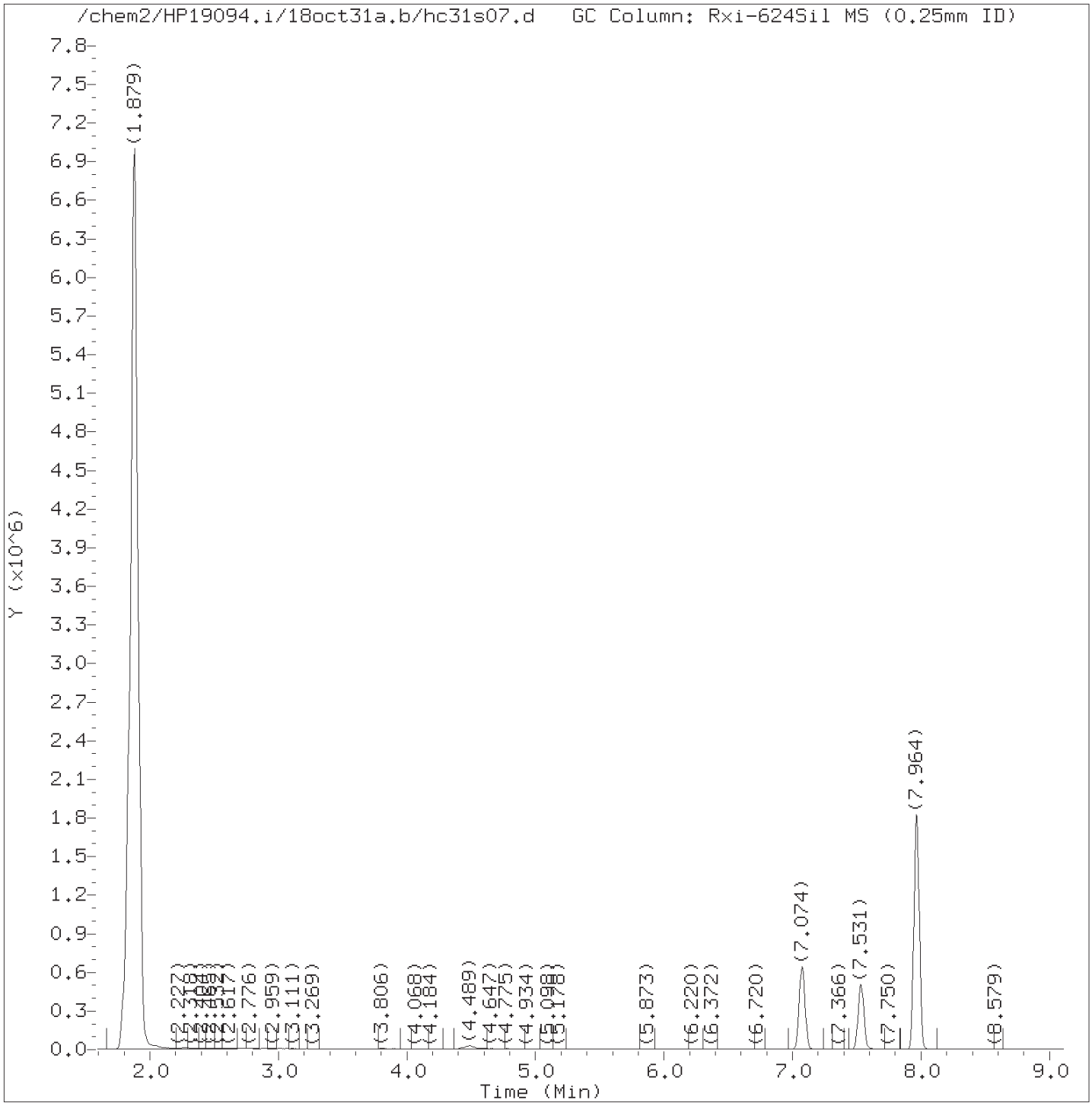
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
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 Joel G. Chachapoya on 10/31/2018 at 20:39. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

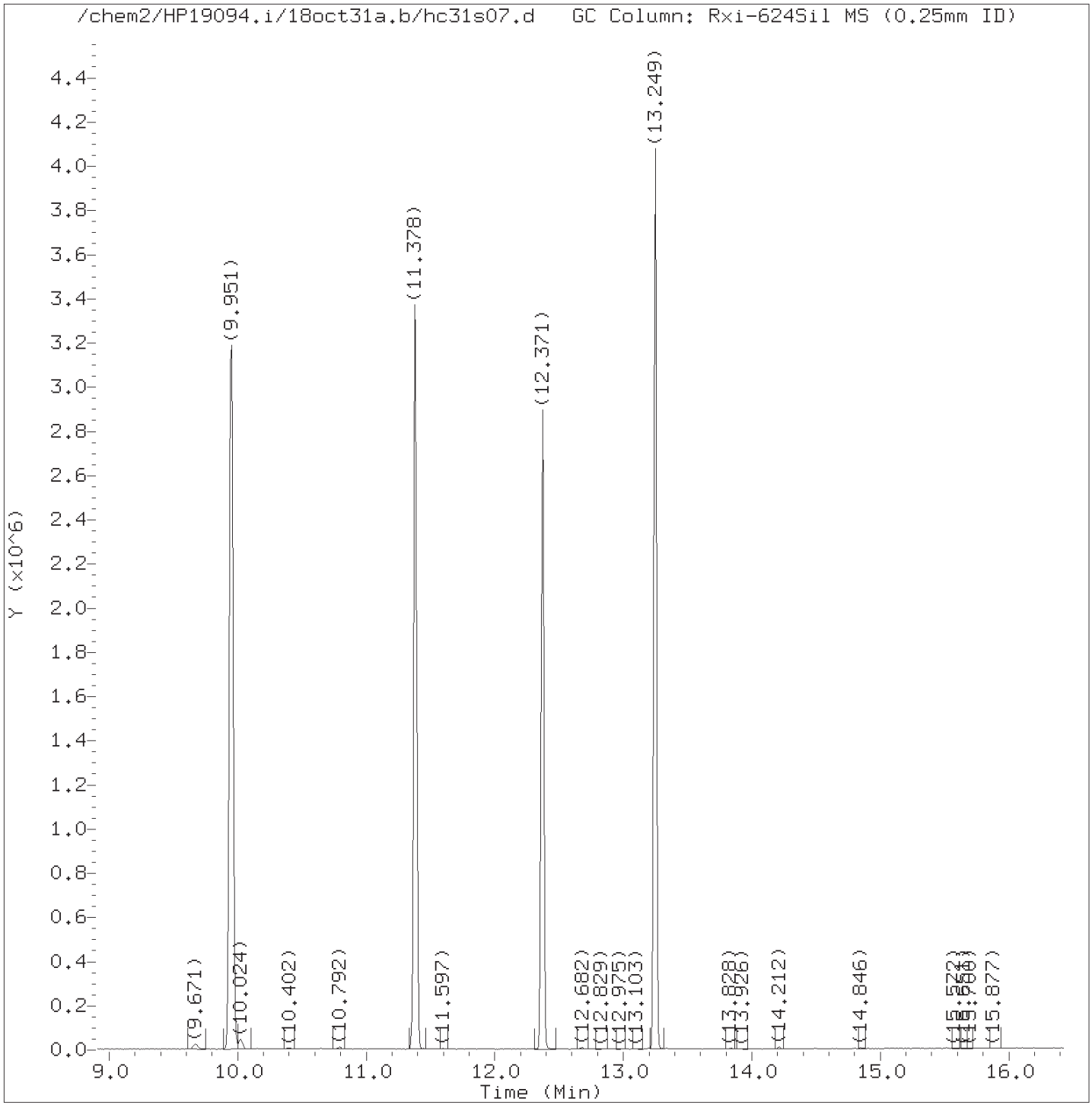
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s07.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:49 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 20:29 jgc14951

Sample Name: GKP02 Lab Sample ID: 9861922

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:39.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s07.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:49 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 20:29 jgc14951

Sample Name: GKP02 Lab Sample ID: 9861922

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:39.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s07.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:49 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 20:29 jgc14951

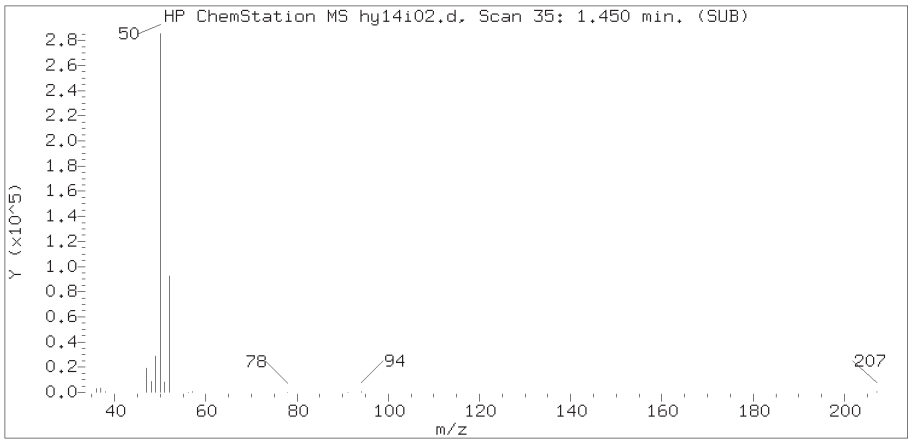
Sample Name: GKP02 Lab Sample ID: 9861922

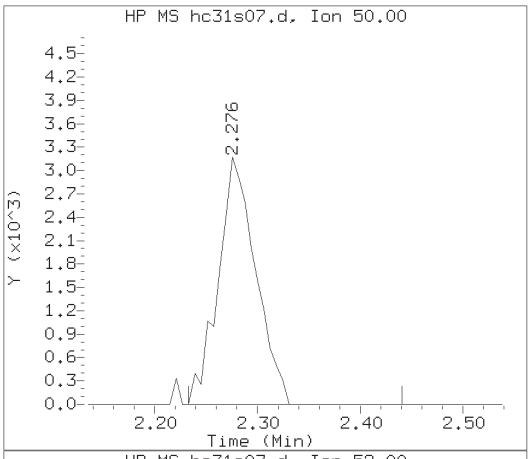
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Chloromethane	(2)	2.276	50	8021	0.081
14) Acetone	(1)	3.818	43	14724	3.235
26)*t-Butyl Alcohol-d10	(1)	4.483	65	76372	50.000
50)$Dibromofluoromethane	(2)	7.074	113	633392	9.765
57)$1,2-Dichloroethane-d4	(2)	7.537	102	113826	10.067
63)*Fluorobenzene	(2)	7.970	96	2573443	10.000
82)$Toluene-d8	(3)	9.951	98	2517781	10.382
83) Toluene	(3)	10.024	92	21093	0.151
97)*Chlorobenzene-d5	(3)	11.378	117	1884265	10.000
111)$4-Bromofluorobenzene	(3)	12.371	95	856505	9.700
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	953289	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

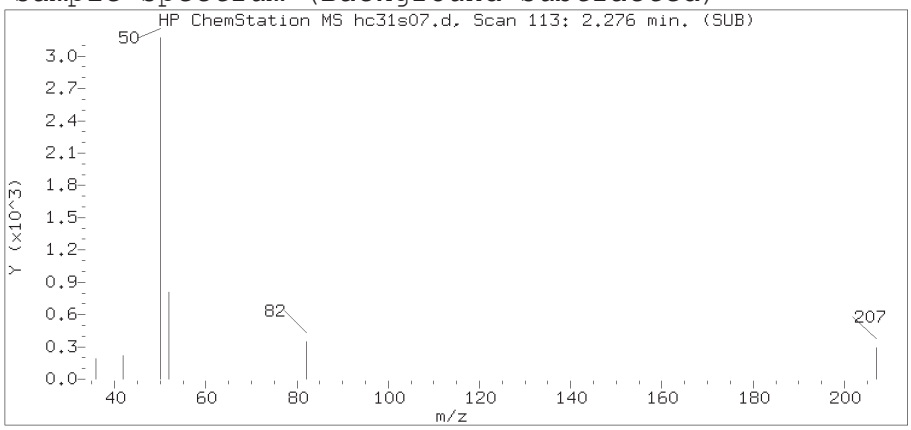
Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:39.
Target 3.5 esignature user ID: jgc14951

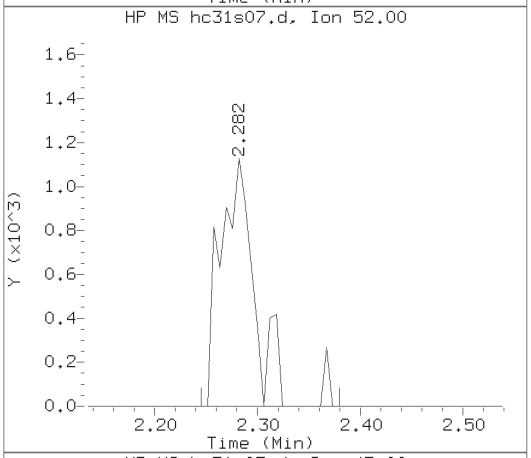
Reference Standard Spectrum for Chloromethane



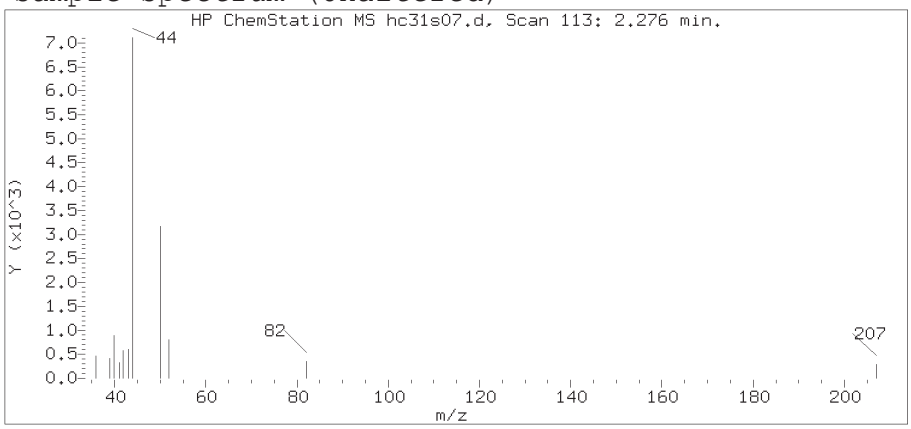


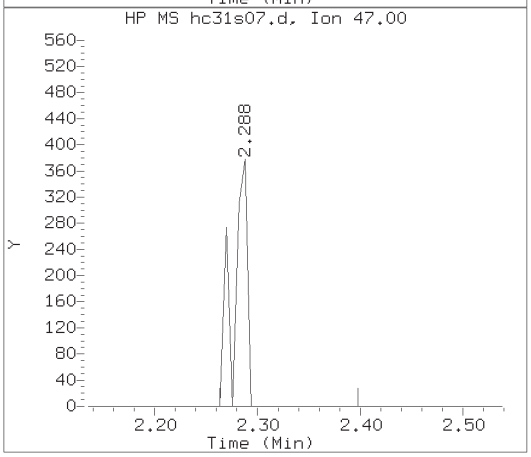
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19094.i/18oct31a.b/hc31s07.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:49 Analyst ID: KEL01973

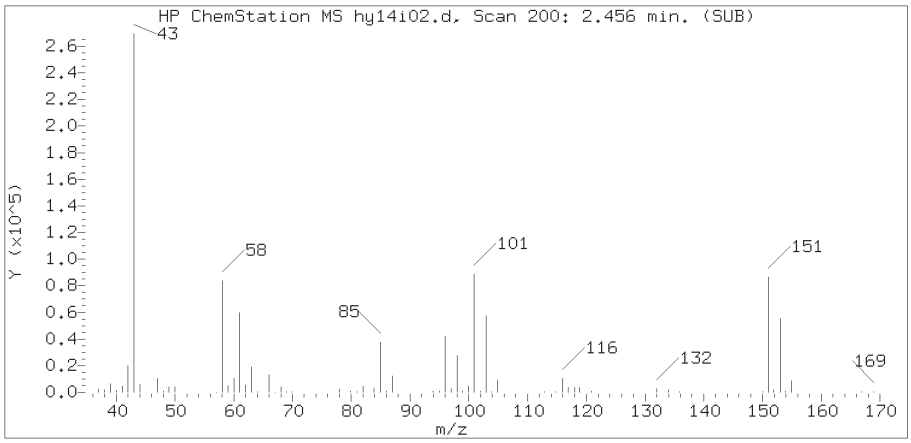
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 20:29 jgc14951

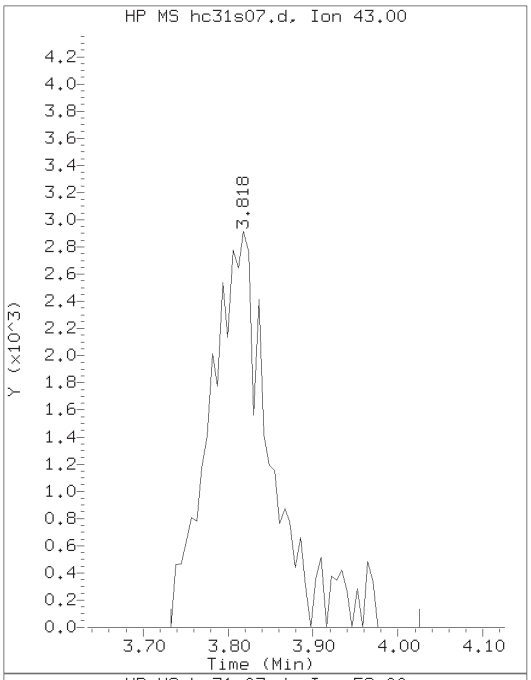
Sample Name: GKP02 Lab Sample ID: 9861922

Compound Number	: 2
Compound Name	: Chloromethane
Scan Number	: 113
Retention Time (minutes)	: 2.276
Relative Retention Time	: 0.00000
Quant Ion	: 50.00
Area (flag)	: 8021
On-Column Amount (ng)	: 0.0814

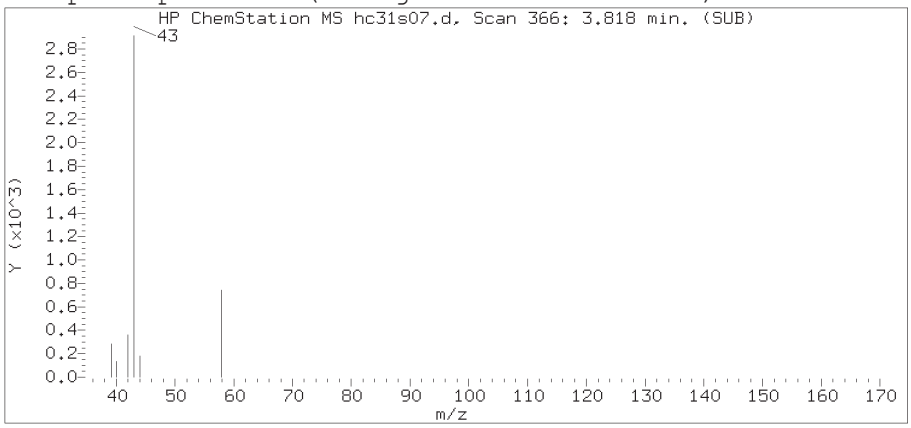
Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:39.
Target 3.5 esignature user ID: jgc14951

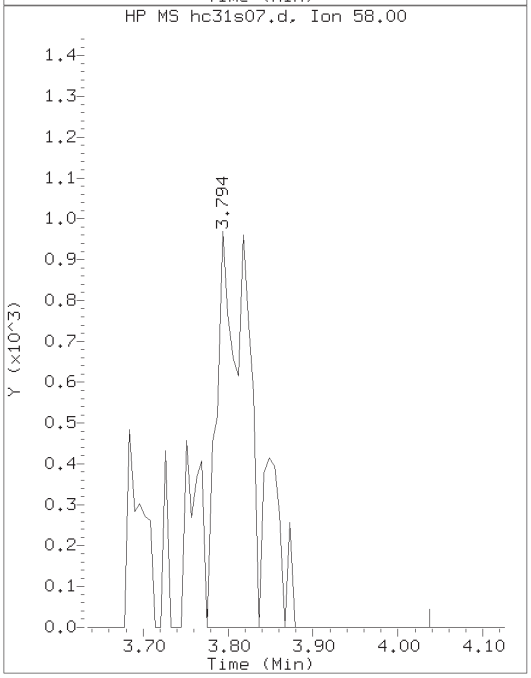
Reference Standard Spectrum for Acetone



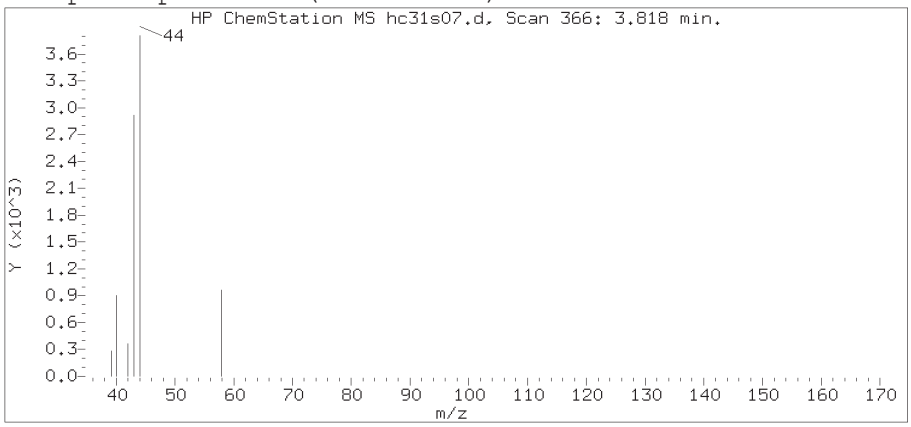


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem2/HP19094.i/18oct31a.b/hc31s07.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:49 Analyst ID: KEL01973

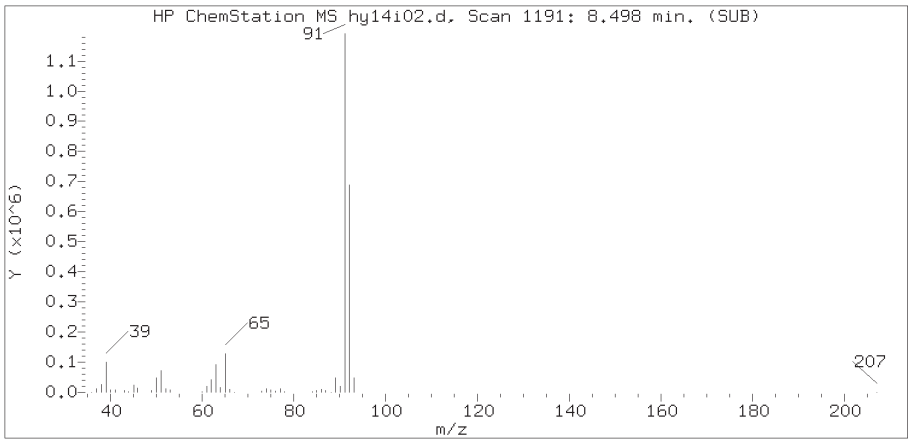
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 20:29 jgc14951

Sample Name: GKP02 Lab Sample ID: 9861922

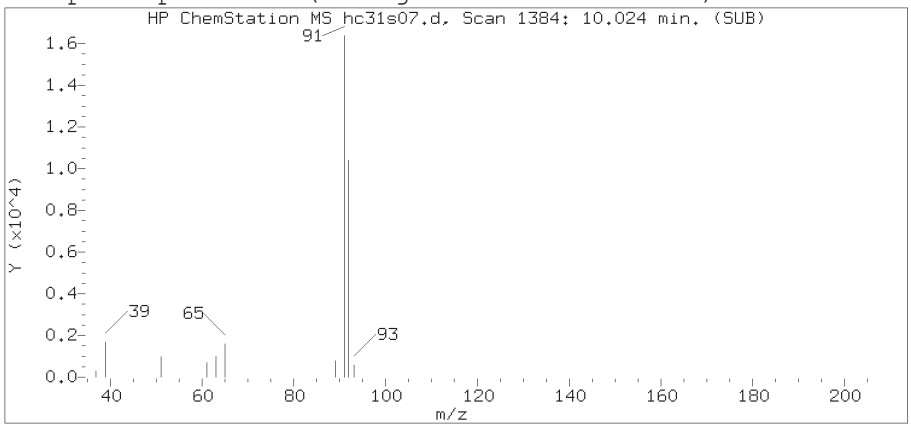
Compound Number : 14
Compound Name : Acetone
Scan Number : 366
Retention Time (minutes): 3.818
Relative Retention Time :-0.00523
Quant Ion : 43.00
Area (flag) : 14724
On-Column Amount (ng) : 3.2346

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:39.
Target 3.5 esignature user ID: jgc14951

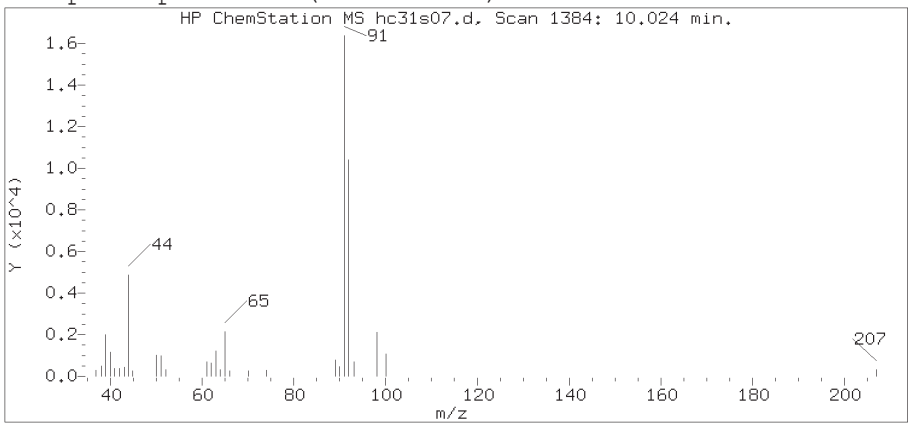
Reference Standard Spectrum for Toluene

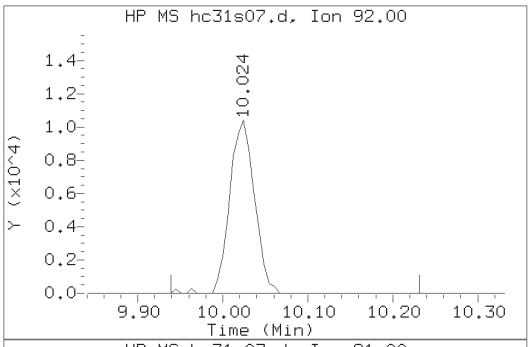


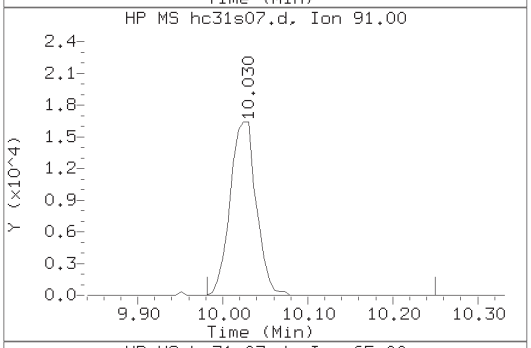
Sample Spectrum (Background Subtracted)

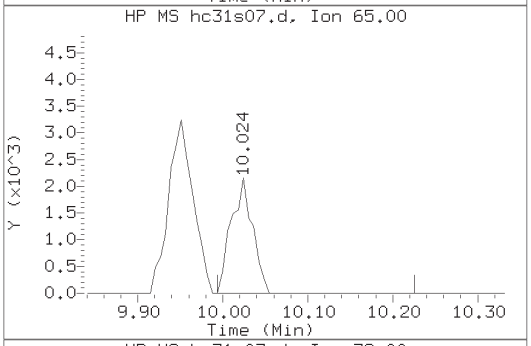


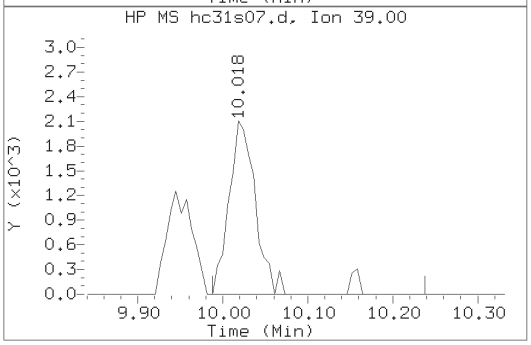
Sample Spectrum (Unaltered)











Data File: /chem2/HP19094.i/18oct31a.b/hc31s07.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 13:49 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 20:29 jgc14951

Sample Name: GKP02 Lab Sample ID: 9861922

Compound Number : 83
Compound Name : Toluene
Scan Number : 1384
Retention Time (minutes): 10.024
Relative Retention Time :-0.00047
Quant Ion : 92.00
Area (flag) : 21093
On-Column Amount (ng) : 0.1508

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Target 3.5 esignature user ID: jgc14951

Standards Data

Volatiles by GC/MS

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP19094 **HP #30**

Data Directory Path is - D:\DATA\18SEP24I\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jkh09052	HS24T05.D	BFB AUG07-18	09/24/2018	17:53		
JKH09052	HS24X01.D	blk	09/24/2018	18:07		
JKH09052	HS24i01.D	VSTD025	09/24/2018	18:29		
JKH09052	HS24i02.D	VSTD010	09/24/2018	18:50		
JKH09052	HS24i03.D	VSTD005	09/24/2018	19:11		
JKH09052	HS24i04.D	VSTD002	09/24/2018	19:33		
JKH09052	HS24i05.D	VSTD001	09/24/2018	19:54		
JKH09052	HS24i06.D	VSTD0.5	09/24/2018	20:16		
JKH09052	HS24i07.D	VSTD0.2	09/24/2018	20:37		
JKH09052	HS24M01.D	MDL0.1	09/24/2018	20:59		
JKH09052	HS24V01.D	ICVHLG	09/24/2018	21:20		

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP19094 **HP #30**

Data Directory Path is - D:\DATA\18MAY02B\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
DVV10203	HY02T05.D	BFB FEB13-18	05/02/2018	18:06		
DVV10203	HY02T06.D	BFB FEB13-18	05/02/2018	18:15		
DVV10203	HY02T07.D	BFB FEB13-18	05/02/2018	18:32		
DVV10203	HY02X11.D	blk	05/02/2018	18:54		
DVV10203	HY02I11.D	VSTD025	05/02/2018	19:15		
DVV10203	HY02I12.D	VSTD010	05/02/2018	19:36		
DVV10203	HY02I13.D	VSTD005	05/02/2018	19:58		
DVV10203	HY02I14.D	VSTD002	05/02/2018	20:19		
DVV10203	HY02I15.D	VSTD001	05/02/2018	20:40		
DVV10203	HY02I16.D	VSTD0.5	05/02/2018	21:02		
DVV10203	HY02I17.D	VSTD0.2	05/02/2018	21:23		
DVV10203	HY02M11.D	MDL0.1	05/02/2018	21:45		
DVV10203	HY02V11.D	ICVHSM	05/02/2018	22:07		
DVV10203	HY02V12.D	ICVDHSM	05/02/2018	22:28		
DVV10203	HY02C01.D	VSTD010	05/02/2018	22:49	H181221AA	
DVV10203	HY02S01.D	LCSH87	05/02/2018	23:11	H181221AA	
DVV10203	HY02S02.D	LCDH87	05/02/2018	23:32	H181221AA	
DVV10203	HY02X60.D	BLK	05/02/2018	23:53	H181221AA	
DVV10203	HY02B01.D	VBLKH87	05/03/2018	00:15	H181221AA	
DVV10203	HY02S05.D	9571212DL	05/03/2018	00:36	H181221AA	10
DVV10203	HY02S06.D	9573419	05/03/2018	00:58	H181221AA	
DVV10203	HY02S07.D	9583593	05/03/2018	01:20	H181221AA	
DVV10203	HY02S08.D	9583706	05/03/2018	01:41	H181221AA	
DVV10203	HY02S09.D	9583587	05/03/2018	02:03	H181221AA	
DVV10203	HY02S10.D	9583594	05/03/2018	02:24	H181221AA	
DVV10203	HY02S11.D	9583707	05/03/2018	02:46	H181221AA	
DVV10203	HY02S12.D	9583590	05/03/2018	03:07	H181221AA	
DVV10203	HY02S13.D	9583592	05/03/2018	03:28	H181221AA	
DVV10203	HY02S14.D	9583708	05/03/2018	03:50	H181221AA	
DVV10203	HY02S15.D	9583709	05/03/2018	04:11	H181221AA	
DVV10203	HY02S16.D	9583710	05/03/2018	04:33	H181221AA	
DVV10203	HY02S17.D	9583713	05/03/2018	04:55	H181221AA	
DVV10203	HY02S18.D	9583711	05/03/2018	05:16	H181221AA	10
DVV10203	HY02S19.D	9583711DL	05/03/2018	05:38	H181221AA	100
DVV10203	HY02S20.D	9583712	05/03/2018	05:59	H181221AA	1000
DVV10203	HY02S21.D	9583712DL	05/03/2018	06:21	H181221AA	10000

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP19094 **HP #30**

Data Directory Path is - D:\DATA\18OCT31A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
KEL01973	HC31T01.D	BFB AUG07-18	10/31/2018	07:29		
KEL01973	HC31X01.D	BLK	10/31/2018	08:05	H183041AA	
KEL01973	HC31C01.D	VSTD010	10/31/2018	08:27	H183041AA	
KEL01973	HC31C02.D	VSTD010	10/31/2018	08:48	H183041AA	
KEL01973	HC31L01.D	LCSH80	10/31/2018	09:09	H183041AA	
KEL01973	HC31L02.D	LCDH80	10/31/2018	09:31	H183041AA	
KEL01973	HC31L03.D	LCSH81	10/31/2018	09:52	H183041AA	
KEL01973	HC31L04.D	LCDH81	10/31/2018	10:14	H183041AA	
KEL01973	HC31M01.D	MDLH80	10/31/2018	10:35	H183041AA	
KEL01973	HC31B01.D	VBLKH80	10/31/2018	10:57	H183041AA	
KEL01973	HC31S01.D	9861916	10/31/2018	11:41	H183041AA	
KEL01973	HC31S02.D	9861917	10/31/2018	12:02	H183041AA	
KEL01973	HC31S03.D	9861918	10/31/2018	12:23	H183041AA	
KEL01973	HC31S04.D	9861919	10/31/2018	12:44	H183041AA	
KEL01973	HC31S05.D	9861920	10/31/2018	13:06	H183041AA	
KEL01973	HC31S06.D	9861921	10/31/2018	13:27	H183041AA	
KEL01973	HC31S07.D	9861922	10/31/2018	13:49	H183041AA	
KEL01973	HC31S08.D	9863850	10/31/2018	14:10	H183041AA	
KEL01973	HC31S21.D	9861930	10/31/2018	14:32	H183042AA	
KEL01973	HC31S36.D	9861930DL	10/31/2018	14:53	H183042AA	10
KEL01973	HC31S37.D	9861931	10/31/2018	15:15	H183042AA	
KEL01973	HC31S38.D	9861931DL	10/31/2018	15:36	H183042AA	10
KEL01973	HC31S39.D	9861940	10/31/2018	15:57	H183042AA	
KEL01973	HC31S40.D	9861941	10/31/2018	16:19	H183042AA	
KEL01973	HC31S41.D	9861942	10/31/2018	16:40	H183042AA	
KEL01973	HC31S42.D	9861943	10/31/2018	17:01	H183042AA	
KEL01973	HC31S43.D	9861944	10/31/2018	17:23	H183042AA	
KEL01973	HC31S44.D	9861945	10/31/2018	17:45	H183042AA	
KEL01973	HC31S45.D	9861946	10/31/2018	18:06	H183042AA	
KEL01973	HC31S46.D	9861955	10/31/2018	18:28	H183042AA	
KEL01973	HC31S09.D	SECC010	10/31/2018	18:49	H183041AA	
KEL01973	HC31S10.D	SECB010	10/31/2018	19:11	H183041AA	

Data File: /chem2/HP19094.i/18sep24i.b/hs24t05.d

Page 1

Date : 24-SEP-2018 17:53

Client ID: BFB 50ng

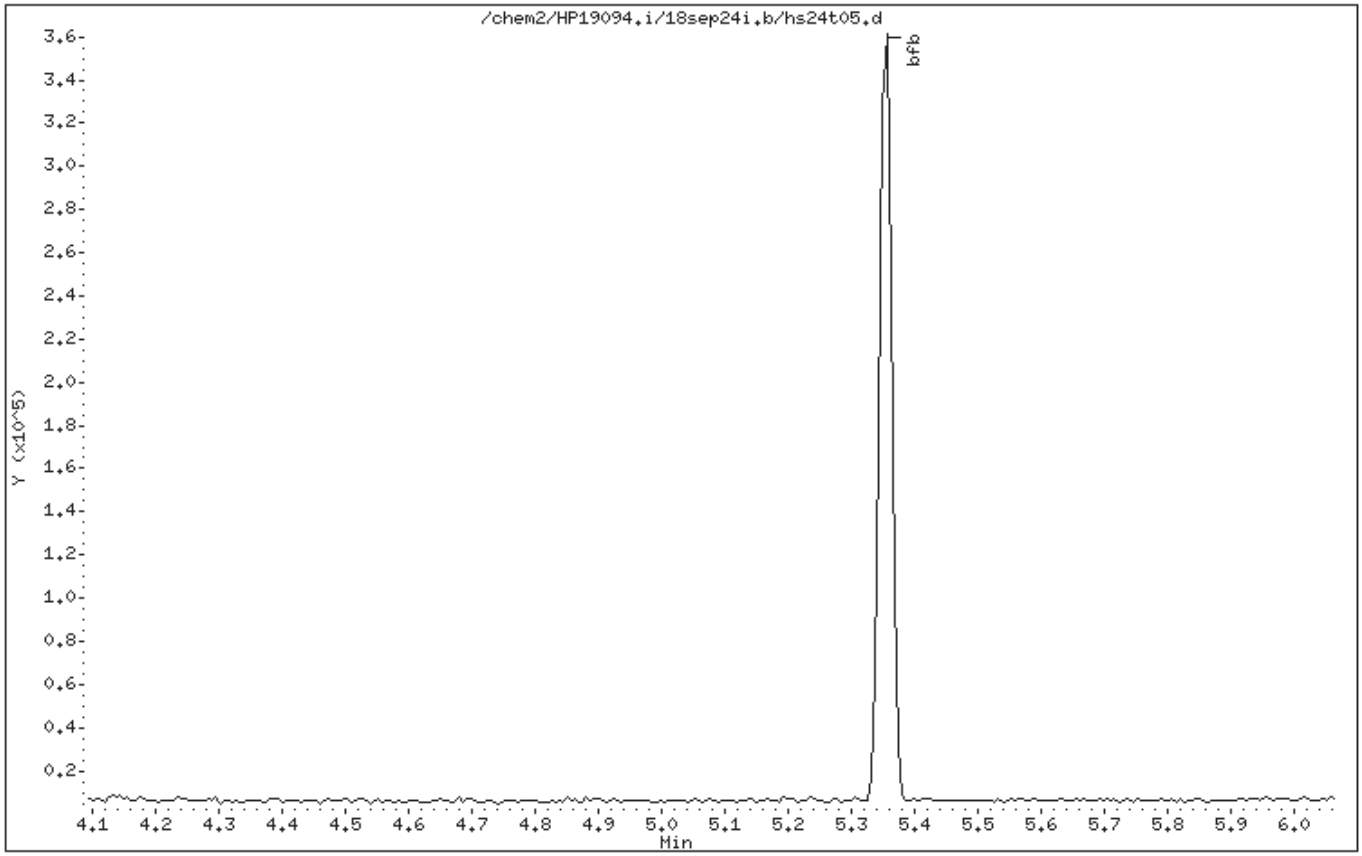
Instrument: HP19094.i

Sample Info: BFB 50ng;BFB AUG07-18;1;3;;;;;

Operator: jkh09052

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:31.
Target 3.5 esignature user ID: jkh09052

Data File: /chem2/HP19094.i/18sep24i.b/hs24t05.d

Date : 24-SEP-2018 17:53

Client ID: BFB 50ng

Instrument: HP19094.i

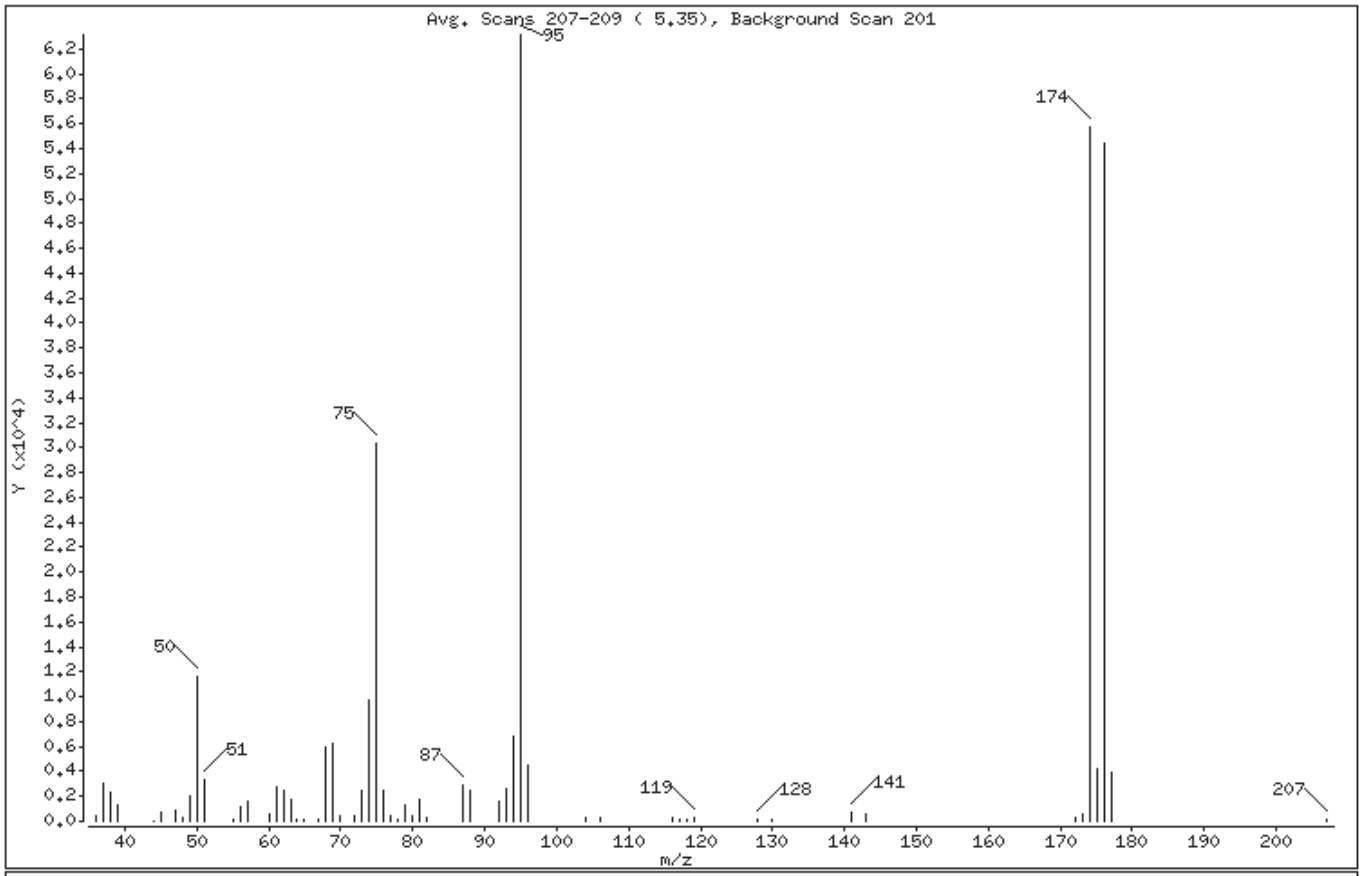
Sample Info: BFB 50ng;BFB AUG07-18;1;3;;;;;

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	18.30
75	30.00 - 60.00% of mass 95	48.01
96	5.00 - 9.00% of mass 95	7.23
173	Less than 2.00% of mass 174	0.88 (0.99)
174	50.00 - 100.00% of mass 95	88.37
175	5.00 - 9.00% of mass 174	6.59 (7.45)
176	95.00 - 101.00% of mass 174	86.23 (97.58)
177	5.00 - 9.00% of mass 176	6.27 (7.28)

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:31.
Target 3.5 esignature user ID: jkh09052

Date : 24-SEP-2018 17:53

Client ID: BFB 50ng Instrument: HP19094.i

Sample Info: BFB 50ng;BFB AUG07-18;1;3;;;;;

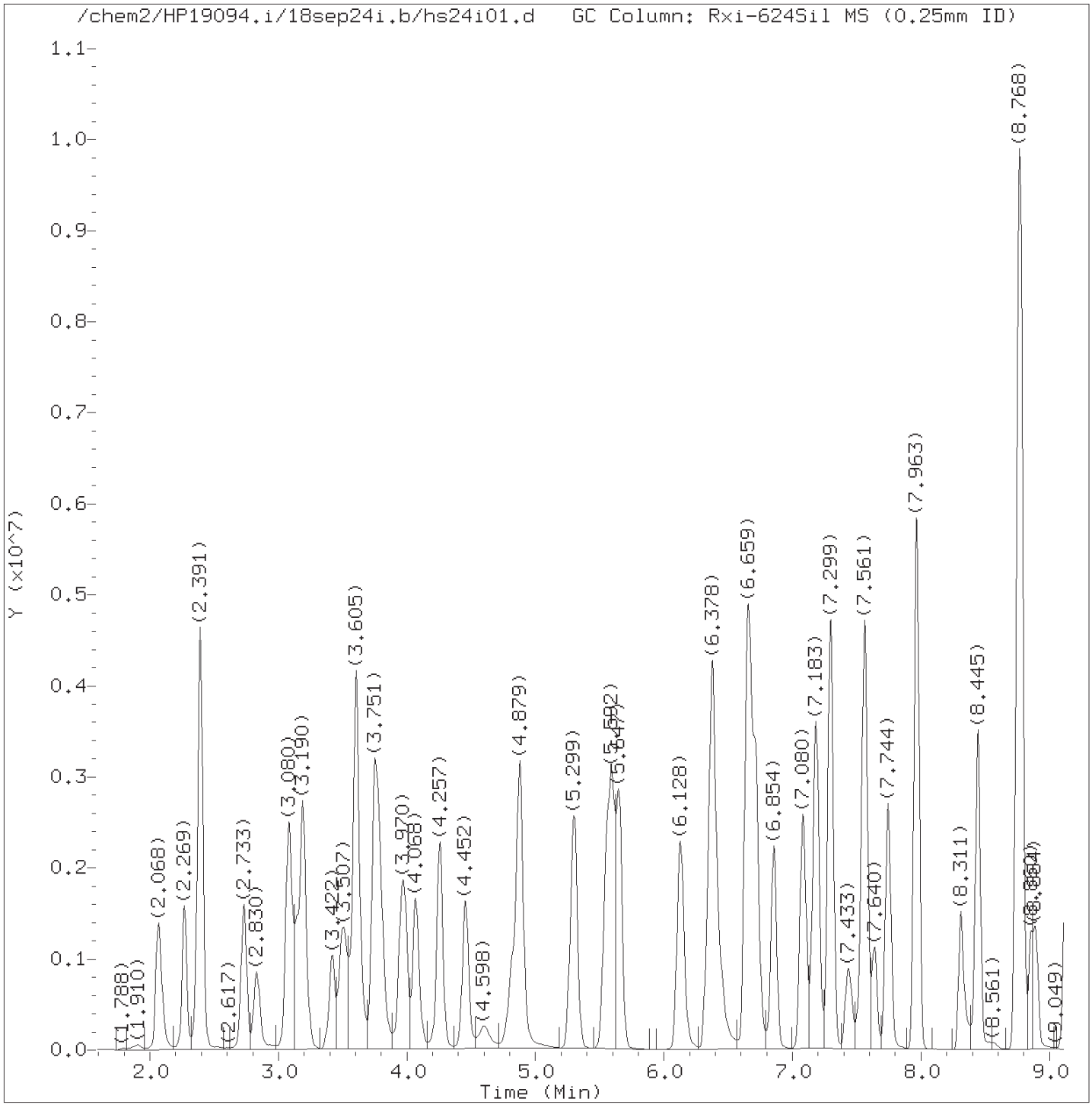
Operator: jkh09052

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: hs24t05.d
Spectrum: Avg. Scans 207-209 (5.35), Background Scan 201
Location of Maximum: 95.00
Number of points: 59

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	380	61.00	2761	78.00	85	117.00	165
37.00	3109	62.00	2478	79.00	1339	118.00	125
38.00	2327	63.00	1778	80.00	478	119.00	271
39.00	1285	64.00	95	81.00	1678	128.00	207
44.00	4	65.00	114	82.00	305	130.00	104
45.00	778	67.00	89	87.00	2896	141.00	746
47.00	856	68.00	6016	88.00	2501	143.00	552
48.00	257	69.00	6278	92.00	1547	172.00	224
49.00	2059	70.00	428	93.00	2614	173.00	555
50.00	11554	72.00	423	94.00	6758	174.00	55792
51.00	3390	73.00	2434	95.00	63136	175.00	4158
55.00	180	74.00	9779	96.00	4567	176.00	54440
56.00	1094	75.00	30304	104.00	228	177.00	3961
57.00	1606	76.00	2509	106.00	307	207.00	187
60.00	530	77.00	454	116.00	237		

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:31.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

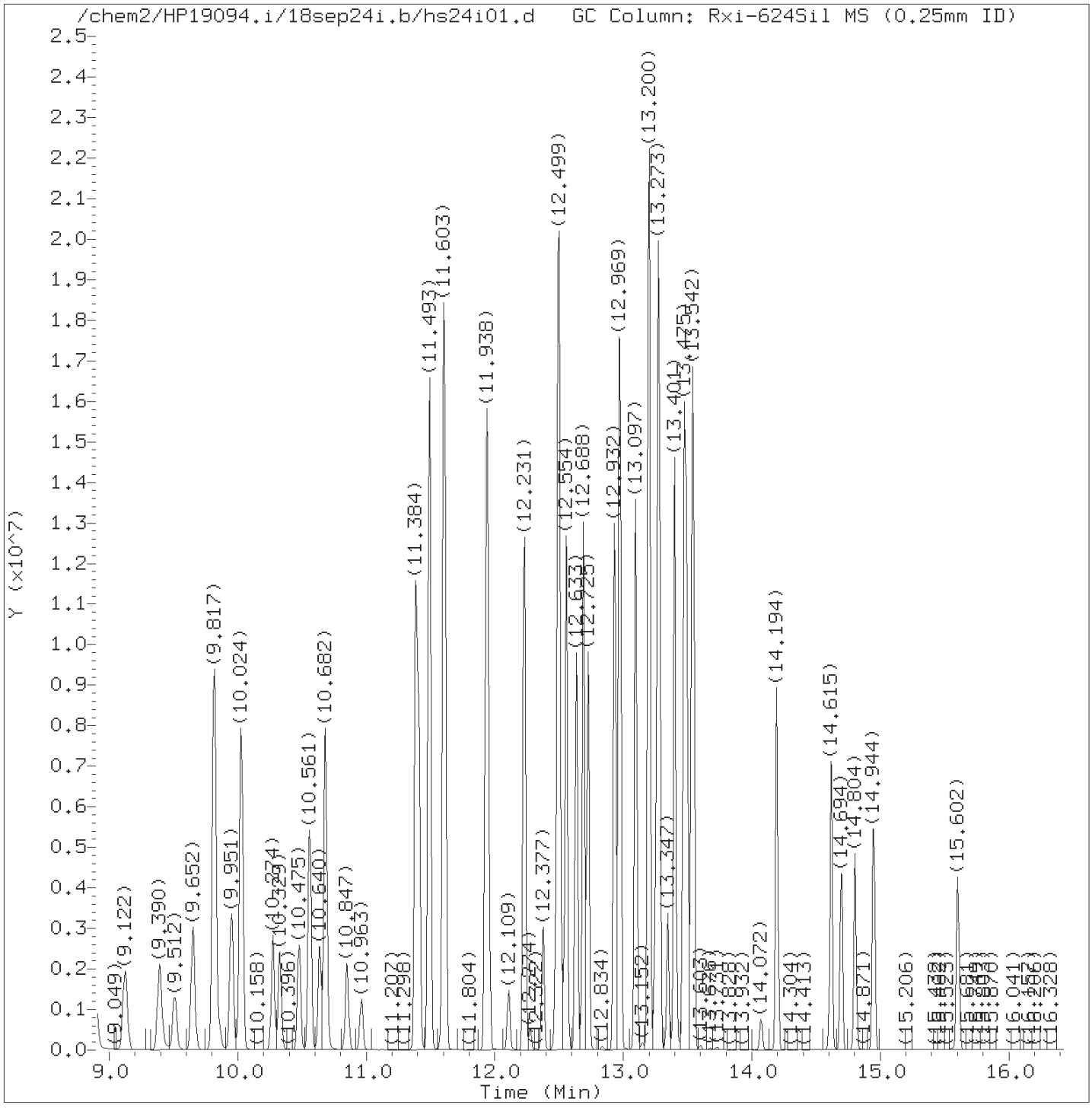
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.068	85	2667477	26.155
2) Chloromethane	(2)	2.269	50	2539335	25.424
5) Vinyl Chloride	(2)	2.391	62	2410925	25.776
6) 1,3-Butadiene	(2)	2.391	39	2594646	24.489
7) Bromomethane	(2)	2.733	94	1851509	25.463
8) Chloroethane	(2)	2.830	64	1410558	24.864
9) Dichlorofluoromethane	(2)	3.080	67	3474207	25.746
10) Trichlorofluoromethane	(2)	3.141	101	3065694	25.945
11) Ethyl ether	(2)	3.416	59	1019569	25.448
12) Freon 123a	(2)	3.501	67	1934522	25.841
13) Acrolein	(1)	3.605	56	7172863	1305.987
15) 1,1-Dichloroethene	(2)	3.745	96	1360935	26.597
16) Freon 113	(2)	3.775	101	1627334	26.985
14) Acetone	(1)	3.787	43	1847599M	250.454
17) Methyl Iodide	(2)	3.958	142	2764121	25.916
18) Carbon Disulfide	(2)	4.068	76	4201344	25.805
21) Methyl Acetate	(1)	4.233	43	504865	24.378
22) Allyl Chloride	(2)	4.257	41	2524824	25.958
23) Methylene Chloride	(2)	4.458	84	1406291	24.362
26)*t-Butyl Alcohol-d10	(1)	4.470	65	123769M	50.000
28) t-Butyl Alcohol	(1)	4.604	59	982548	465.083
29) Acrylonitrile	(1)	4.812	53	1235214M	129.656
30) Methyl Tertiary Butyl Ether	(2)	4.867	73	2663697	25.312
31) trans-1,2-Dichloroethene	(2)	4.879	96	1493749	25.866
32) n-Hexane	(2)	5.299	57	2559536	27.873
33) 1,1-Dichloroethane	(2)	5.543	63	2842374M	25.851
34) di-Isopropyl Ether	(2)	5.592	45	5070137	25.966
35) 2-Chloro-1,3-Butadiene	(2)	5.653	53	2671346	27.000
40) 1,2-Dichloroethene (Total)	(2)		96	3155804	51.914
37) Ethyl t-butyl ether	(2)	6.128	59	3878205	25.041
38) 2-Butanone	(1)	6.348	43	3061047	253.491
39) cis-1,2-Dichloroethene	(2)	6.372	96	1662055	26.048
41) 2,2-Dichloropropane	(2)	6.391	77	2084281	26.541
42) Propionitrile	(1)	6.446	54	1568878	478.649
45) Methacrylonitrile	(1)	6.653	67	3149545	266.488
47) Bromochloromethane	(2)	6.714	128	688648	25.549
48) Tetrahydrofuran	(1)	6.720	71	820759	255.663
49) Chloroform	(2)	6.854	83	2651699	25.940

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.073	113	655219	9.962
50)$Dibromofluoromethane	(2)	7.073	111	673113	9.943
51) 1,1,1-Trichloroethane	(2)	7.086	97	2299905	26.303
52) Cyclohexane	(2)	7.183	56	3091541	27.084
52) Cyclohexane	(2)	7.183	84	2539041	26.980
52) Cyclohexane	(2)	7.183	69	918069	27.291
54) Carbon Tetrachloride	(2)	7.293	117	2024542	26.959
55) 1,1-Dichloropropene	(2)	7.299	75	2199442	26.527
56) Isobutyl Alcohol	(1)	7.433	41	1045544	1279.099
57)$1,2-Dichloroethane-d4	(2)	7.531	102	112838	9.841
57)$1,2-Dichloroethane-d4	(2)	7.537	65	549372	9.906
57)$1,2-Dichloroethane-d4	(2)	7.537	104	71973	9.801
58) Benzene	(2)	7.561	78	6318666	25.796
59) 1,2-Dichloroethane	(2)	7.640	62	1386008M	24.587
60) t-Amyl methyl ether	(2)	7.744	73	3227765	25.138
62) n-Heptane	(2)	7.963	43	2650704	27.997
63)*Fluorobenzene	(2)	7.970	96	2609636	10.000
65) n-Butanol	(1)	8.311	56	1867070	2703.605
67) Trichloroethene	(2)	8.445	95	1649864	26.306
69) Methylcyclohexane	(2)	8.750	83	3203740	27.048
70) 1,2-Dichloropropane	(2)	8.787	63	1552299	26.120
71) Methyl Methacrylate	(1)	8.854	69	623886	28.519
72) 1,4-Dioxane	(1)	8.872	88	216251M	1300.575
73) Dibromomethane	(2)	8.890	93	640944	25.985
74) Bromodichloromethane	(2)	9.122	83	1808486	27.068
76) 2-Nitropropane	(1)	9.390	41	1826609	294.768
80) cis-1,3-Dichloropropene	(2)	9.652	75	2141489	27.530
81) 4-Methyl-2-Pentanone	(1)	9.817	43	8439729	280.977
82)$Toluene-d8	(3)	9.951	98	2620387	9.785
82)$Toluene-d8	(3)	9.951	100	1692208	9.791
83) Toluene	(3)	10.024	92	3966390	25.689
85) 1,3-Dichloropropene (total)	(3)		75	3792374	55.280
84) trans-1,3-Dichloropropene	(3)	10.274	75	1650885	27.750
86) Ethyl Methacrylate	(3)	10.329	69	1388174	27.235
88) 1,1,2-Trichloroethane	(3)	10.475	97	904681	25.463
89) Tetrachloroethene	(3)	10.561	166	1799885	25.801
90) 1,3-Dichloropropane	(3)	10.640	76	1618164	25.698
91) 2-Hexanone	(1)	10.682	43	5656981	276.677

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) Dibromochloromethane	(3)	10.847	129	1148646	26.975
95) 1,2-Dibromoethane	(3)	10.963	107	873629	26.234
96) 1-Chlorohexane	(3)	11.384	91	2376499	25.807
97)*Chlorobenzene-d5	(3)	11.384	117	2080614	10.000
98) Chlorobenzene	(3)	11.408	112	4267356	26.051
100) Ethylbenzene	(3)	11.493	91	8033395	26.621
99) 1,1,1,2-Tetrachloroethane	(3)	11.493	131	1477189	27.325
101) m+p-Xylene	(3)	11.603	106	5930803	52.987
105) Xylene (Total)	(3)		106	8810207	79.883
104) o-Xylene	(3)	11.932	106	2879404	26.908
106) Styrene	(3)	11.944	104	4681599	27.345
107) Bromoform	(3)	12.109	173	650012	27.775
108) Isopropylbenzene	(3)	12.231	105	7914371	27.092
111)$4-Bromofluorobenzene	(3)	12.377	95	947875	9.722
111)$4-Bromofluorobenzene	(3)	12.377	174	827331	9.773
113) 1,1,2,2-Tetrachloroethane	(4)	12.475	83	1100327M	26.627
114) Bromobenzene	(4)	12.493	156	1705745	27.152
115) trans-1,4-Dichloro-2-butene	(1)	12.499	53	2718489	288.965
116) 1,2,3-Trichloropropane	(4)	12.524	110	269907	25.264
117) n-Propylbenzene	(4)	12.554	91	9362269	27.408
119) 2-Chlorotoluene	(4)	12.633	126	1758732	26.546
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	6440866	27.834
122) 4-Chlorotoluene	(4)	12.725	126	1781873	26.840
125) tert-Butylbenzene	(4)	12.932	134	1366112	27.146
126) Pentachloroethane	(4)	12.969	167	1131984	28.820
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	6639441	28.118
128) sec-Butylbenzene	(4)	13.097	105	8523009	28.424
131) 1,3-Dichlorobenzene	(4)	13.194	146	3395836	27.206
132) p-Isopropyltoluene	(4)	13.200	119	7173555	28.882
133)*1,4-Dichlorobenzene-d4	(4)	13.255	152	1041754	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	3283435	26.798
135) 1,2,3-Trimethylbenzene	(4)	13.280	120	2886733	26.647
136) Benzyl Chloride	(4)	13.347	126	450358	30.147
138) n-Butylbenzene	(4)	13.493	92	3496269	28.360
139) 1,2-Dichlorobenzene	(4)	13.529	146	2896879	26.305
143) 1,2-Dibromo-3-chloropropane	(1)	14.072	155	150859	29.629
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	2585997	27.849
145) 1,2,4-Trichlorobenzene	(4)	14.621	180	2125128	28.097

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on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

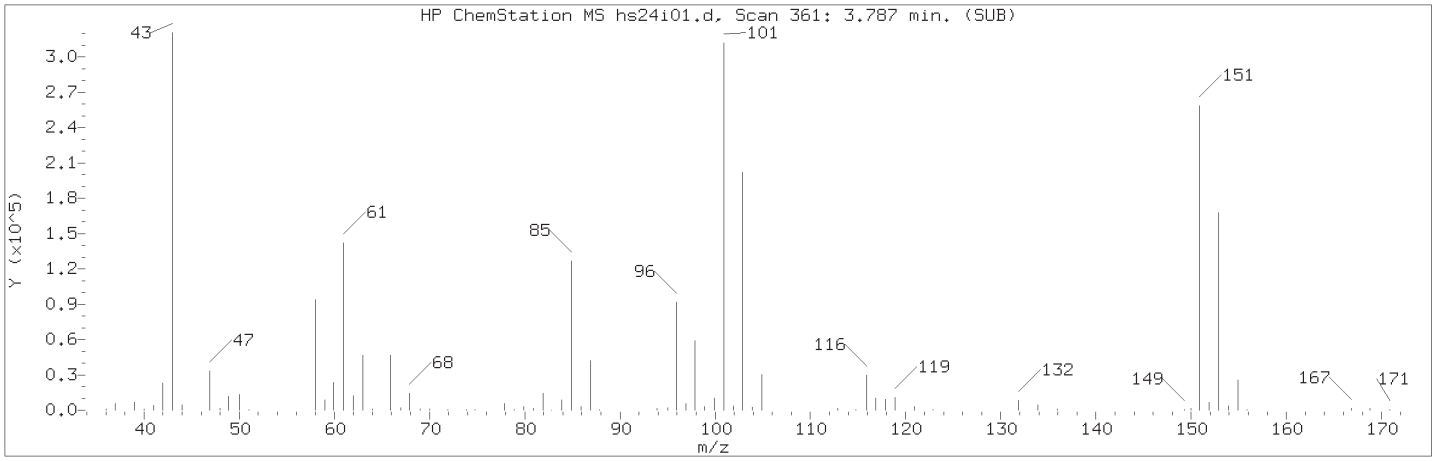
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

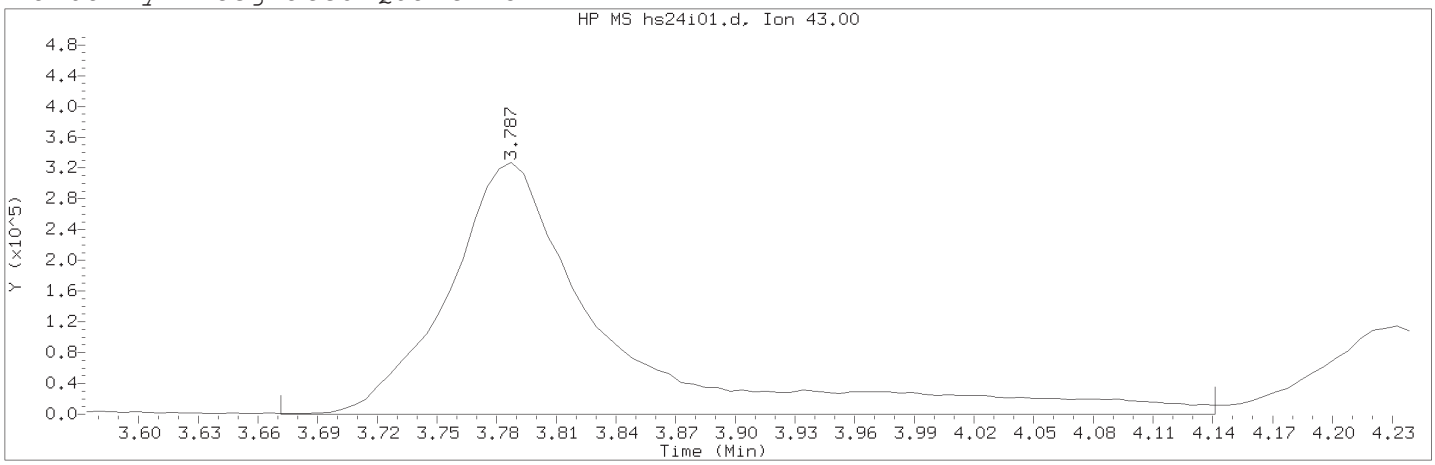
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) Hexachlorobutadiene	(4)	14.700	225	789734	27.625
147) Naphthalene	(4)	14.804	128	3453963	28.858
148) 1,2,3-Trichlorobenzene	(4)	14.950	180	1719365	27.647

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

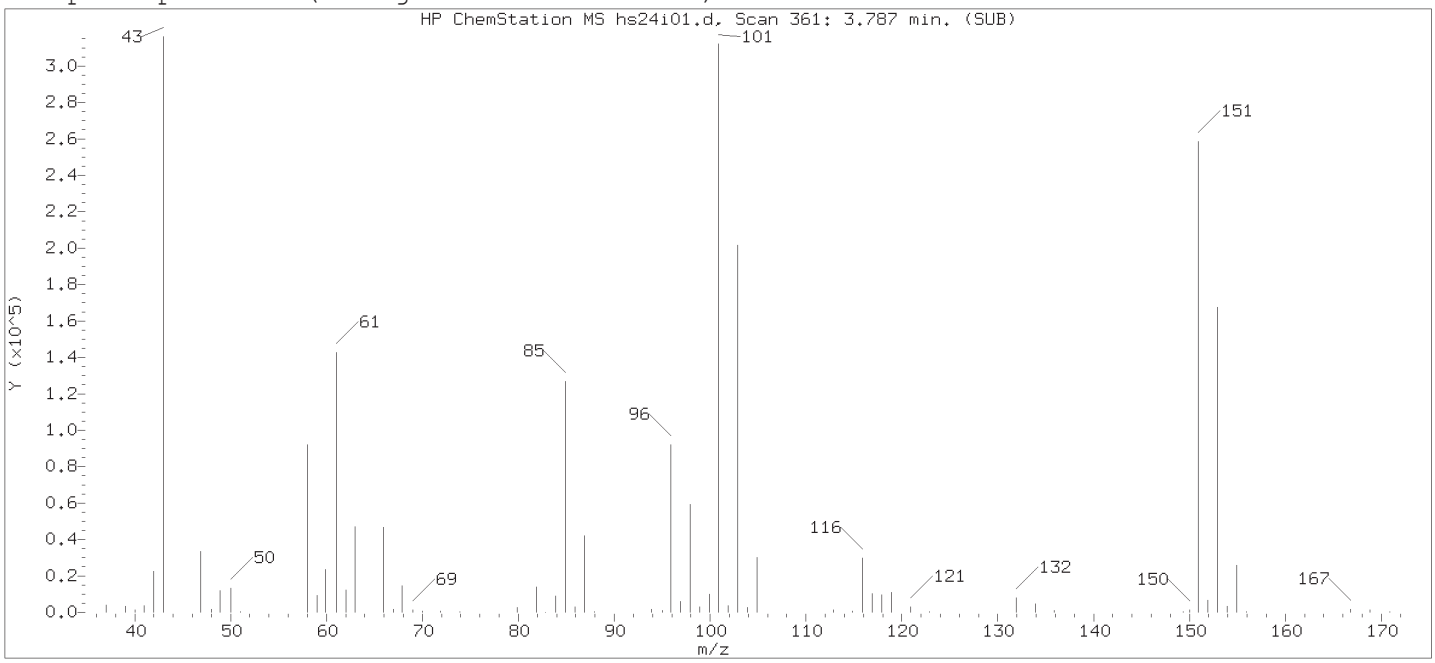
Compound Number : 14
Compound Name : Acetone
Scan Number : 361
Retention Time (minutes): 3.787
Quant Ion : 43.00
Area (flag) : 1847599M
On-Column Amount (ng) : 250.4543
Integration start scan : 341 Integration stop scan: 418
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

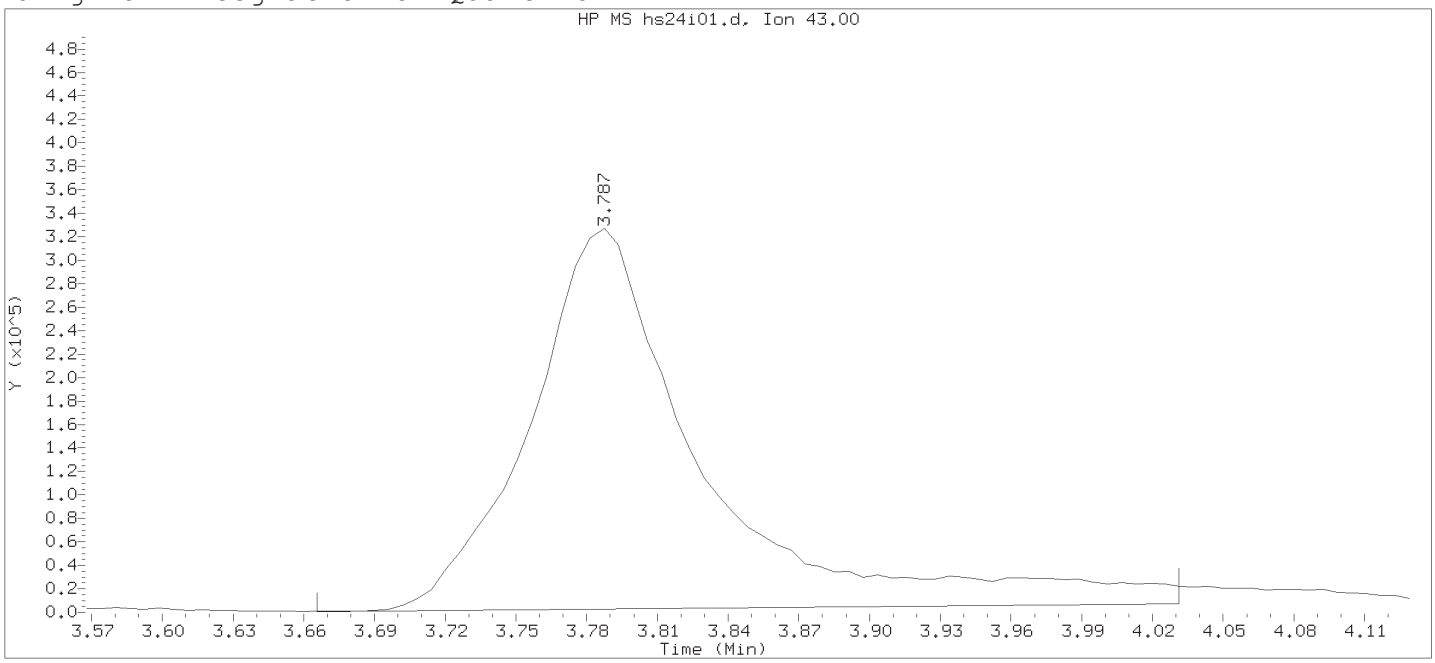
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

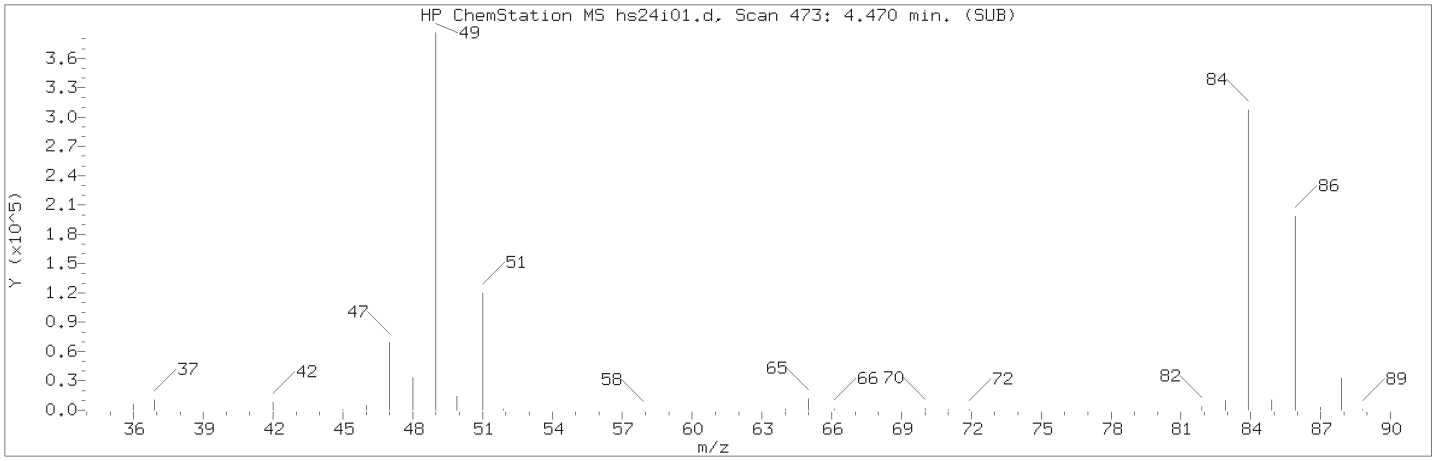
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

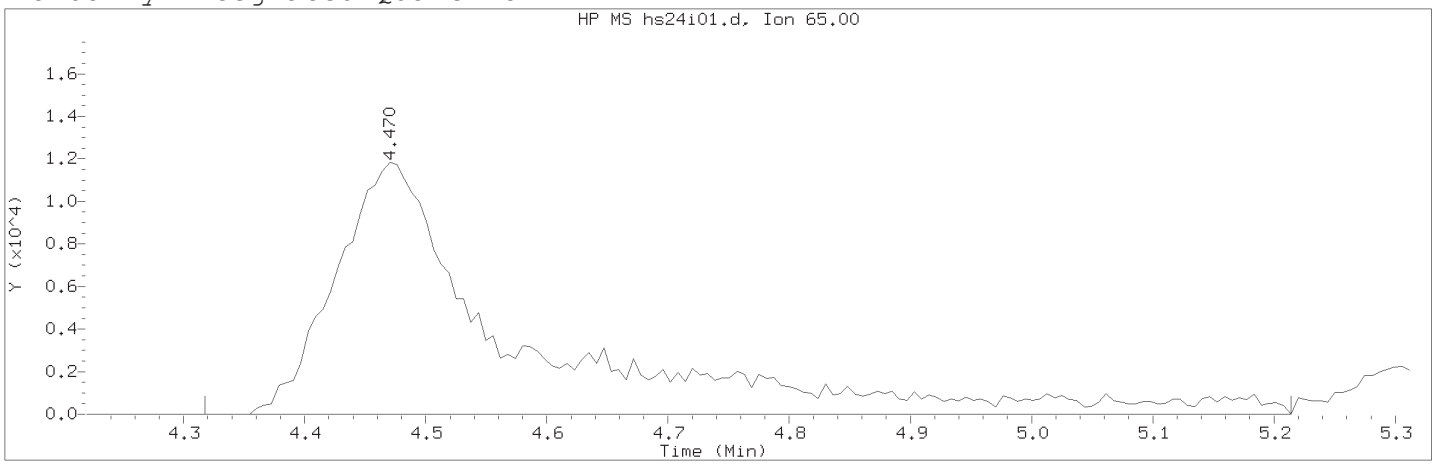
Compound Number : 14
Compound Name : Acetone
Scan Number : 361
Retention Time (minutes): 3.787
Quant Ion : 43.00
Area : 1639725
On-column Amount (ng) : 243.3952
Integration start scan : 340 Integration stop scan: 400
Y at integration start : 625 Y at integration end: 7448

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

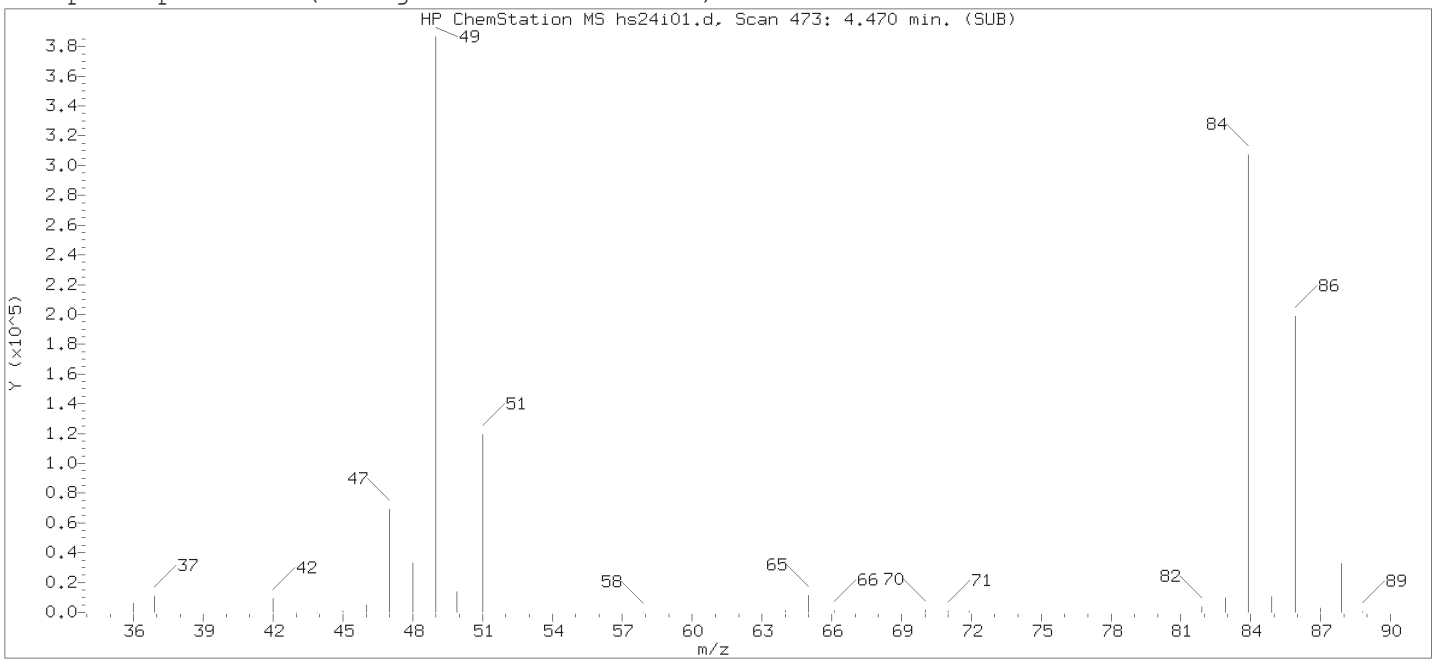
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area (flag) : 123769M
On-Column Amount (ng) : 50.0000
Integration start scan : 447 Integration stop scan: 594
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

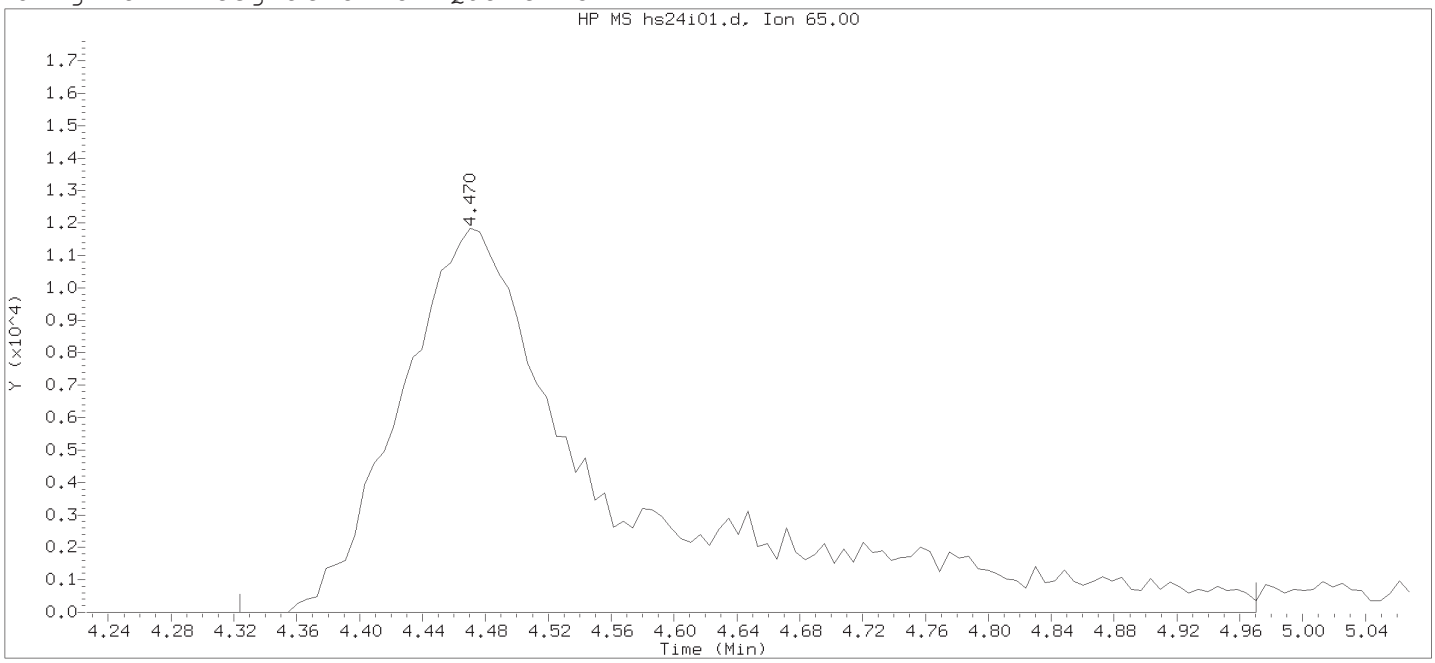
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

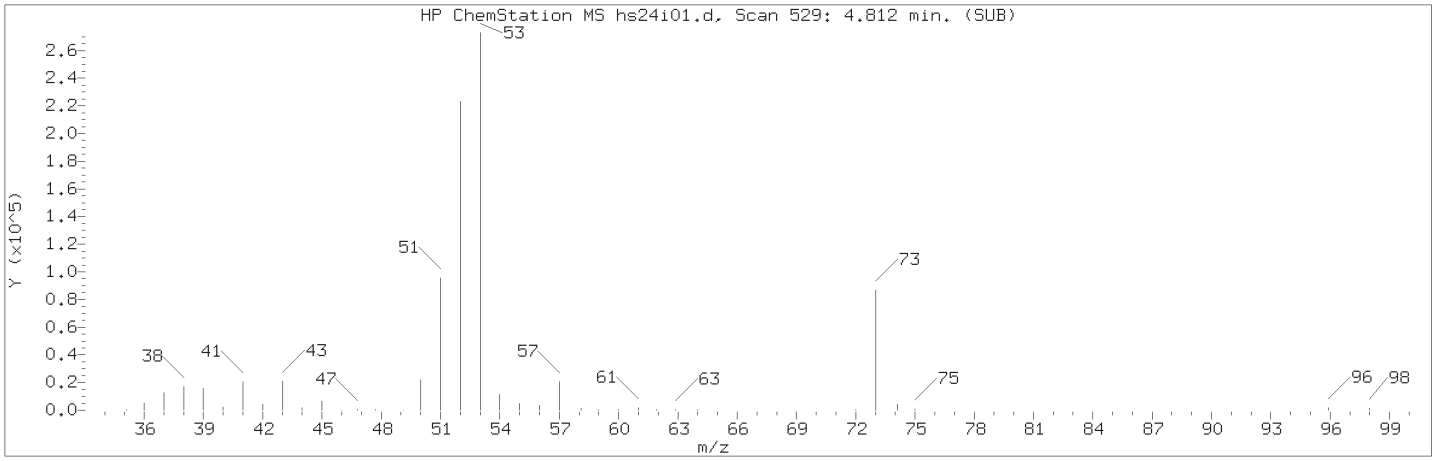
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

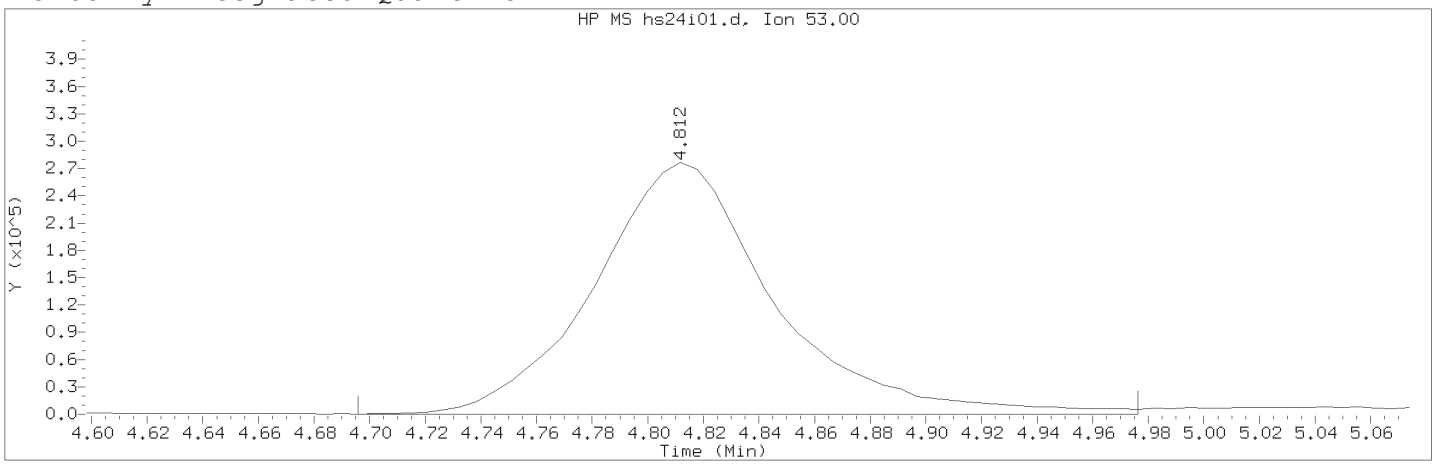
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area : 114590
On-column Amount (ng) : 50.0000
Integration start scan : 448 Integration stop scan: 554
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

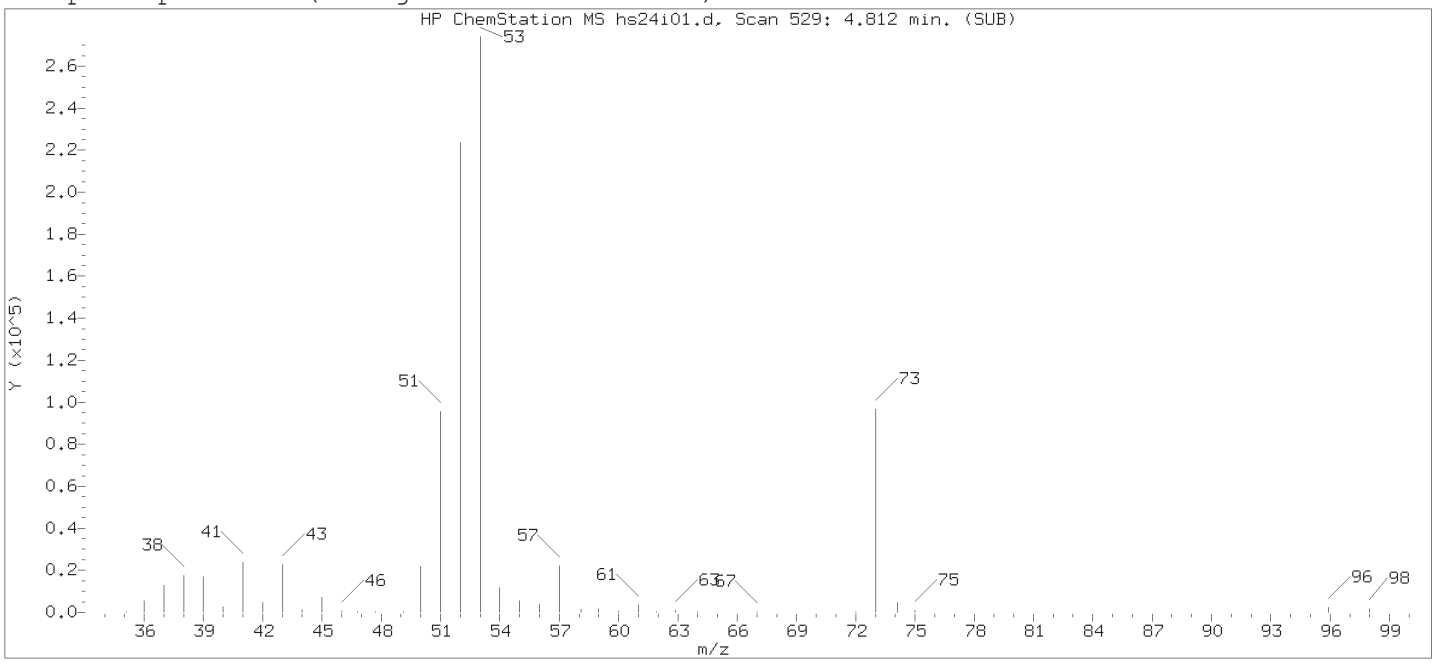
Compound Number : 29
Compound Name : Acrylonitrile
Scan Number : 529
Retention Time (minutes): 4.812
Quant Ion : 53.00
Area (flag) : 1235214M
On-Column Amount (ng) : 129.6558
Integration start scan : 509 Integration stop scan: 555
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

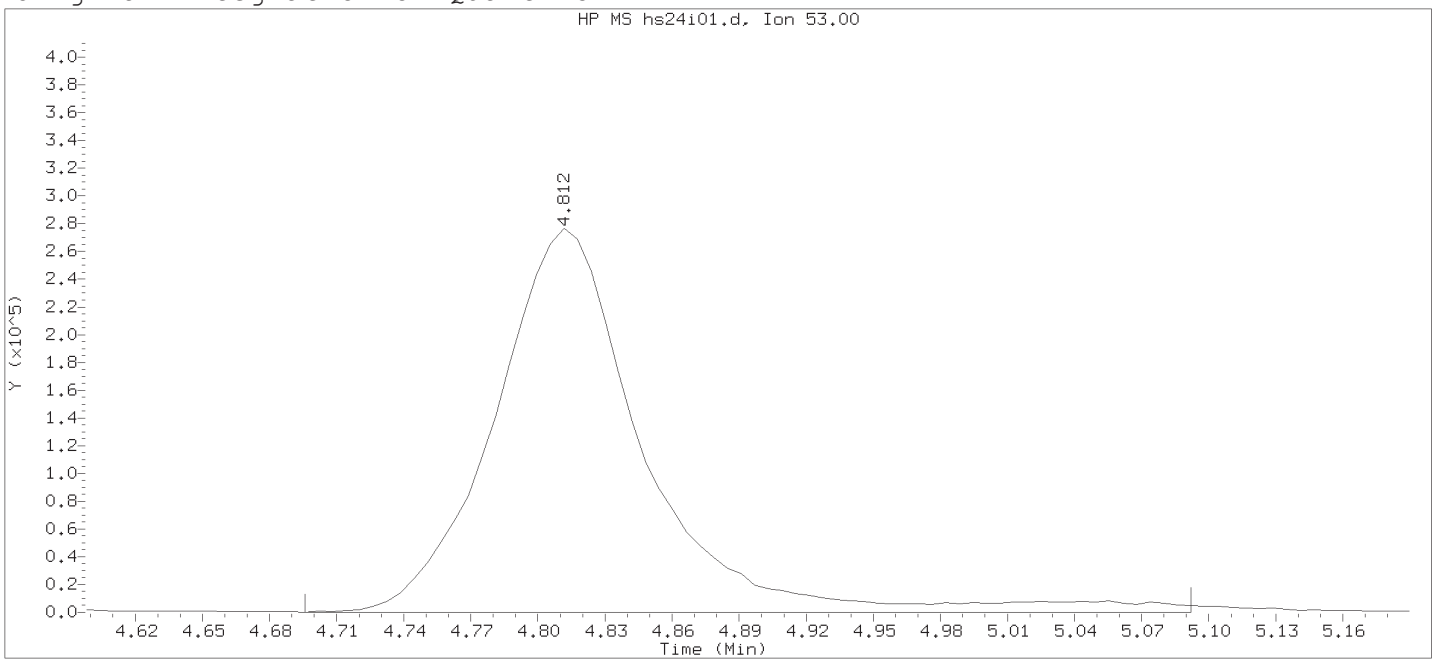
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

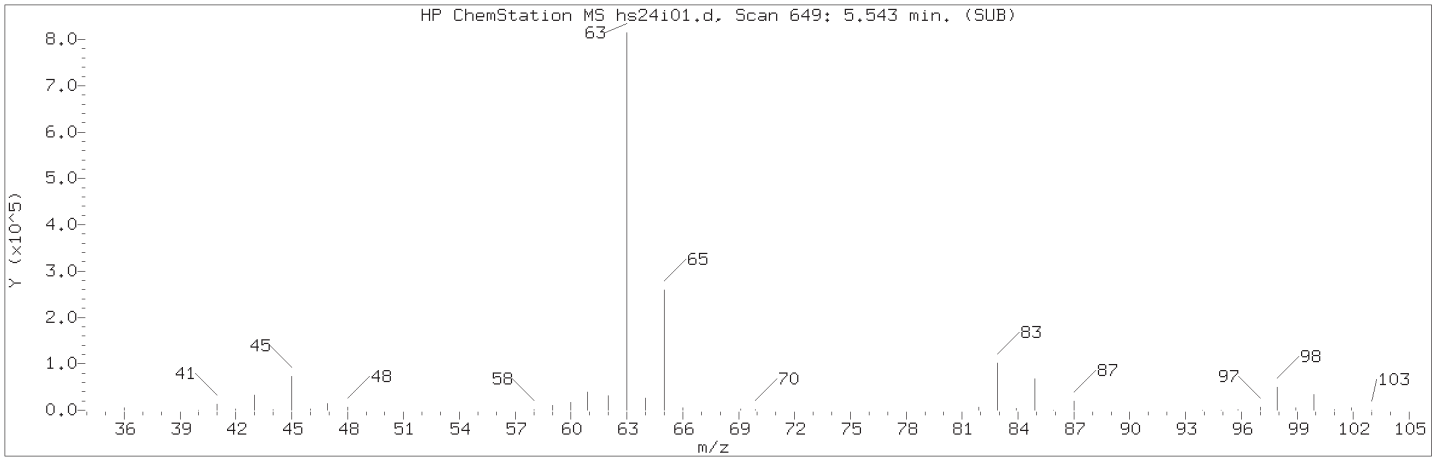
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

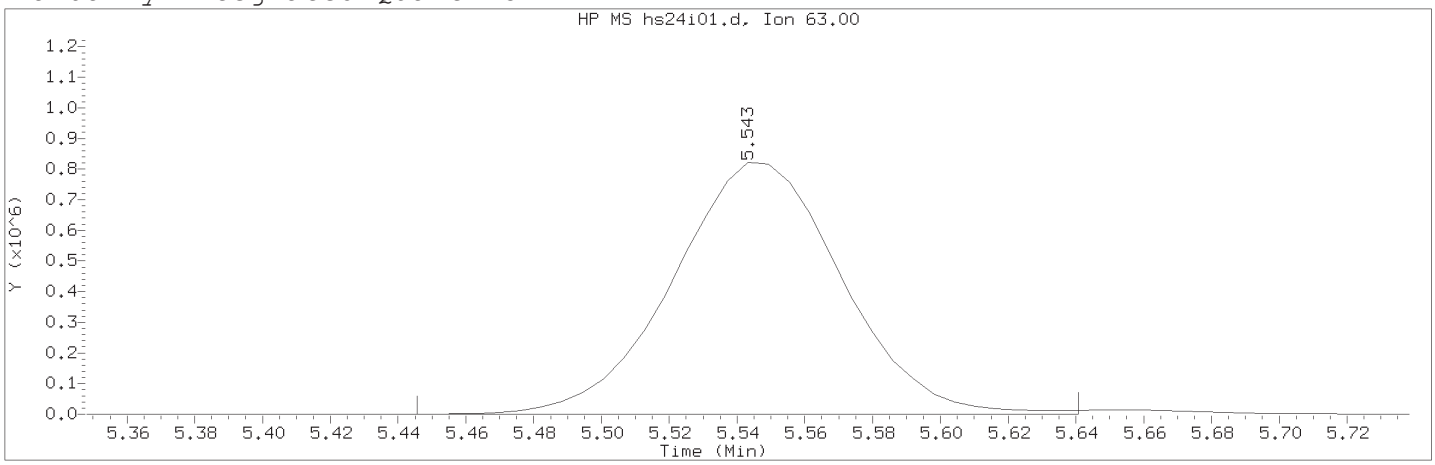
Compound Number : 29
Compound Name : Acrylonitrile
Scan Number : 529
Retention Time (minutes): 4.812
Quant Ion : 53.00
Area : 1282020
On-column Amount (ng) : 129.1888
Integration start scan : 509 Integration stop scan: 574
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

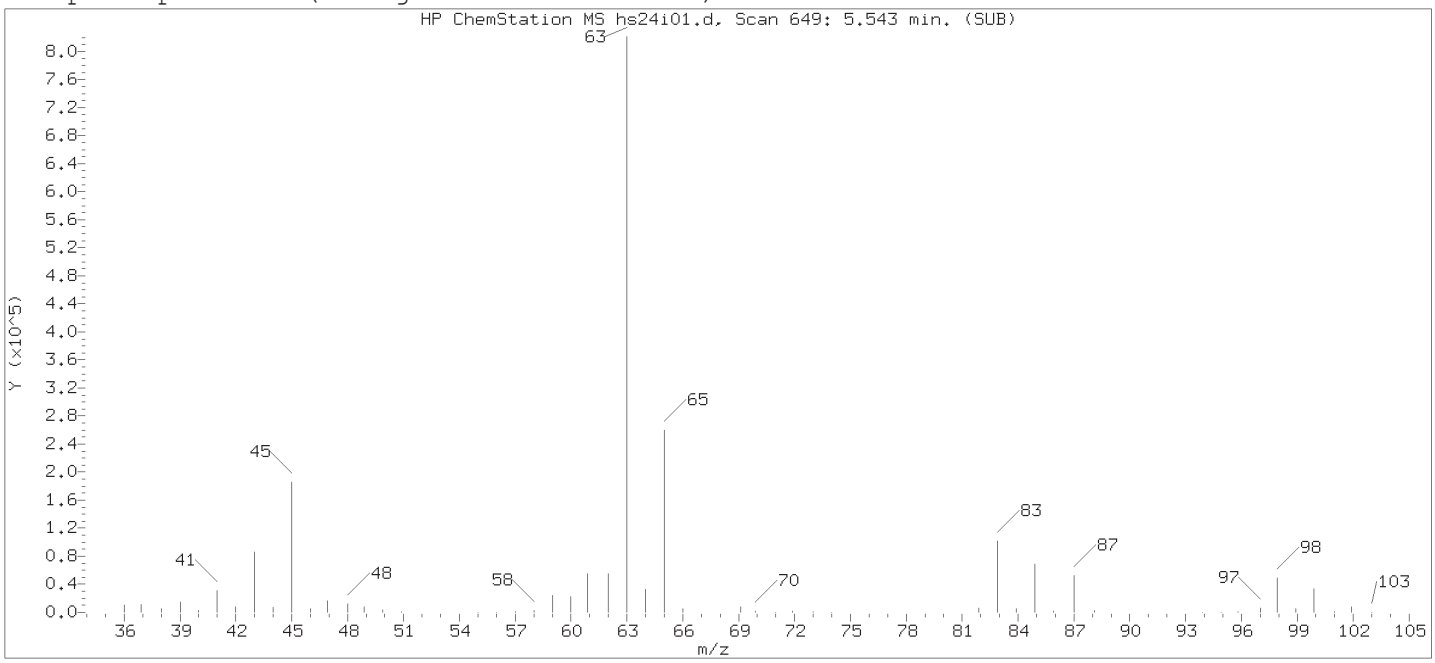
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 649
Retention Time (minutes): 5.543
Quant Ion : 63.00
Area (flag) : 2842374M
On-Column Amount (ng) : 25.8511
Integration start scan : 632 Integration stop scan: 664
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

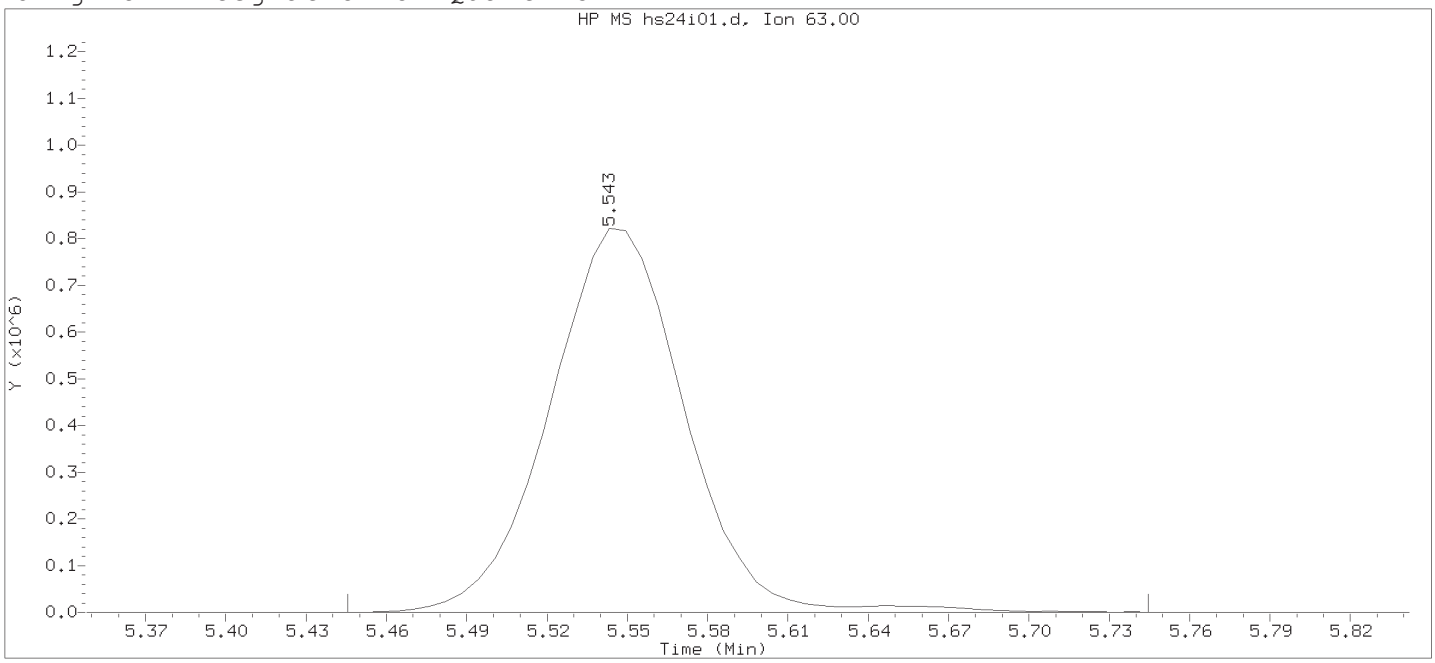
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

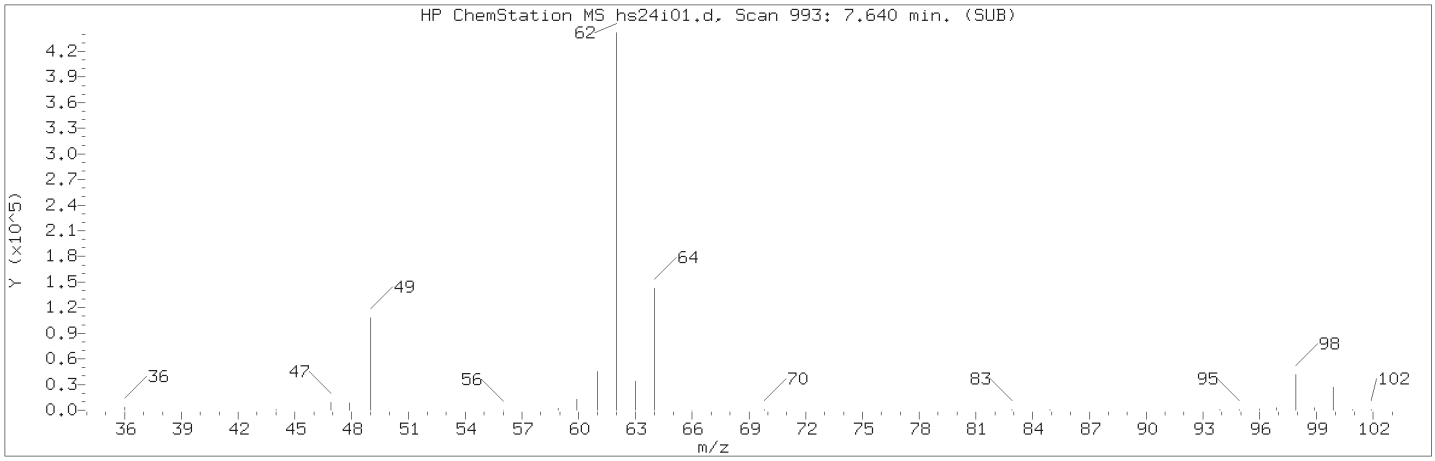
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

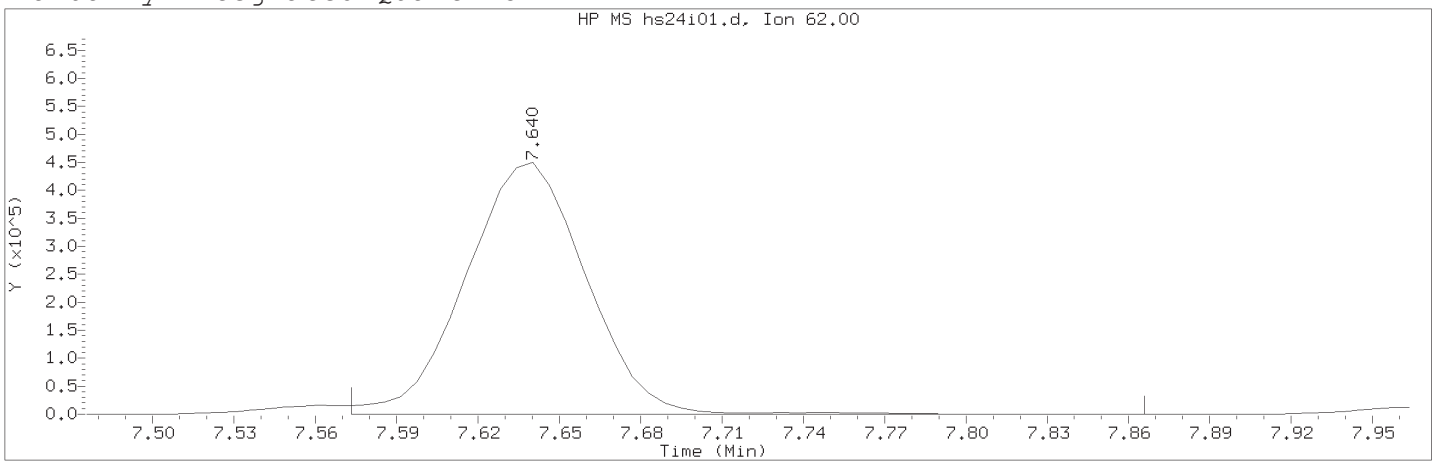
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 649
Retention Time (minutes): 5.543
Quant Ion : 63.00
Area : 2874978
On-column Amount (ng) : 24.9330
Integration start scan : 632 Integration stop scan: 681
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

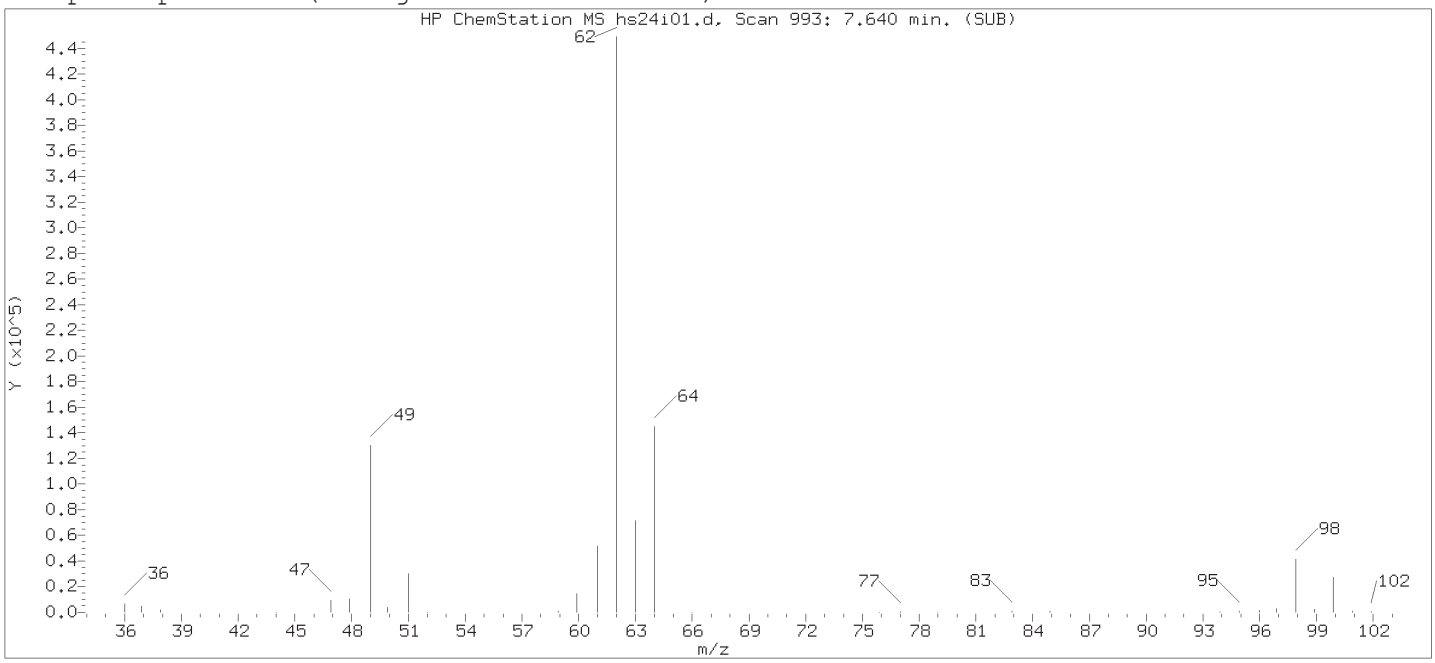
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 993
Retention Time (minutes): 7.640
Quant Ion : 62.00
Area (flag) : 1386008M
On-Column Amount (ng) : 24.5870
Integration start scan : 981 Integration stop scan: 1029
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

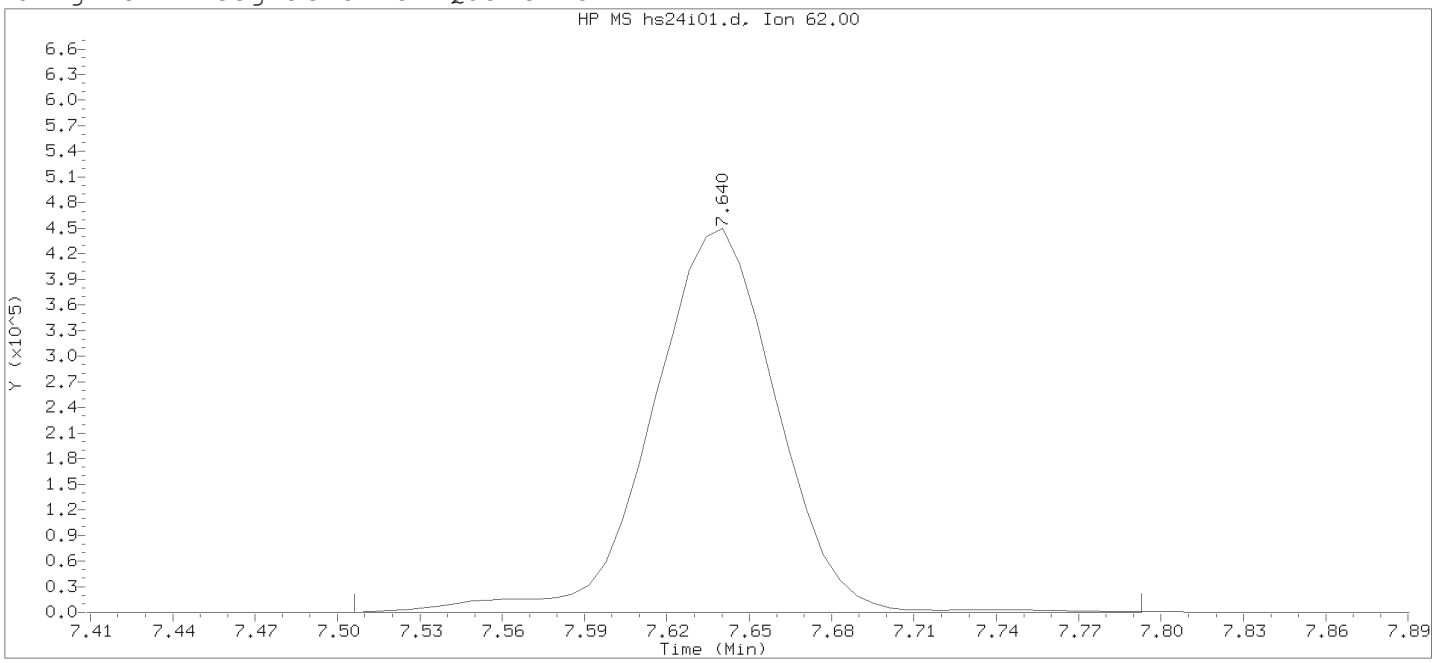
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 993
Retention Time (minutes): 7.640
Quant Ion : 62.00
Area : 1414553
On-column Amount (ng) : 25.1444
Integration start scan : 970 Integration stop scan: 1017
Y at integration start : 0 Y at integration end: 260

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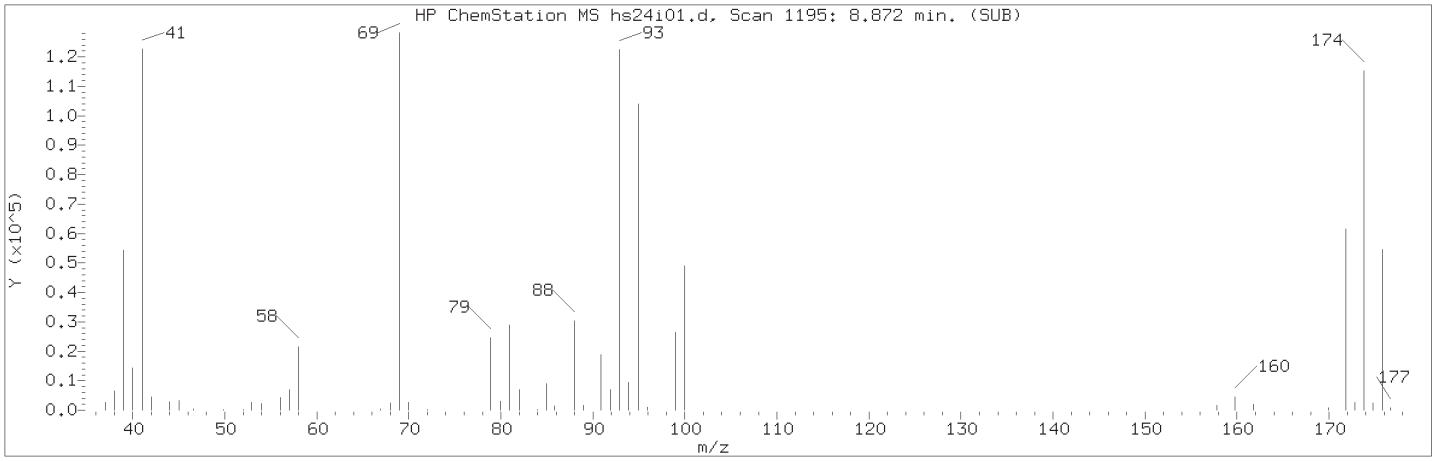
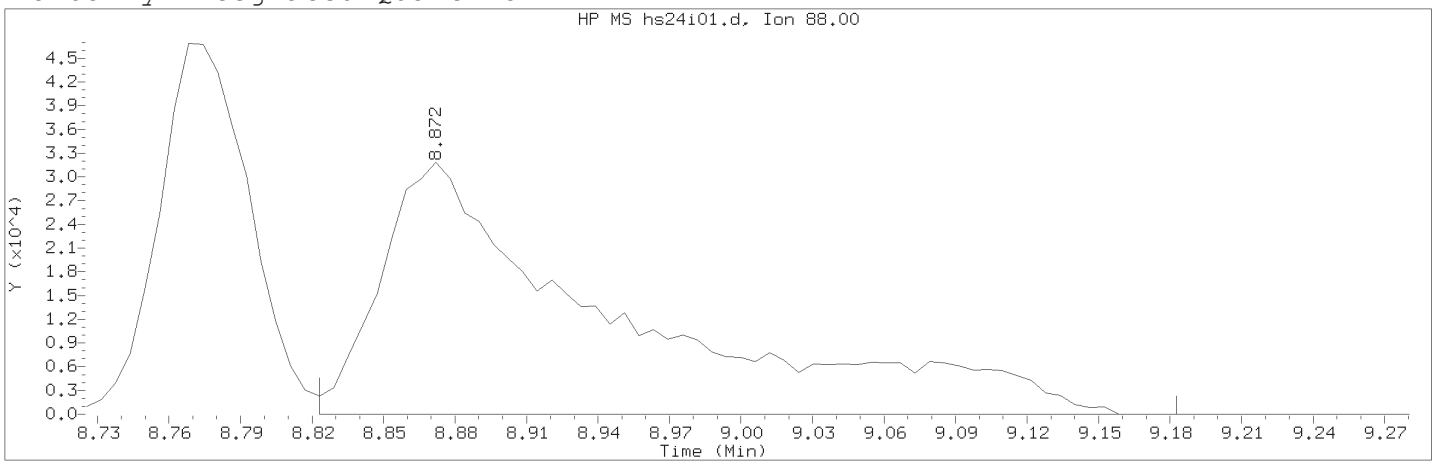
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

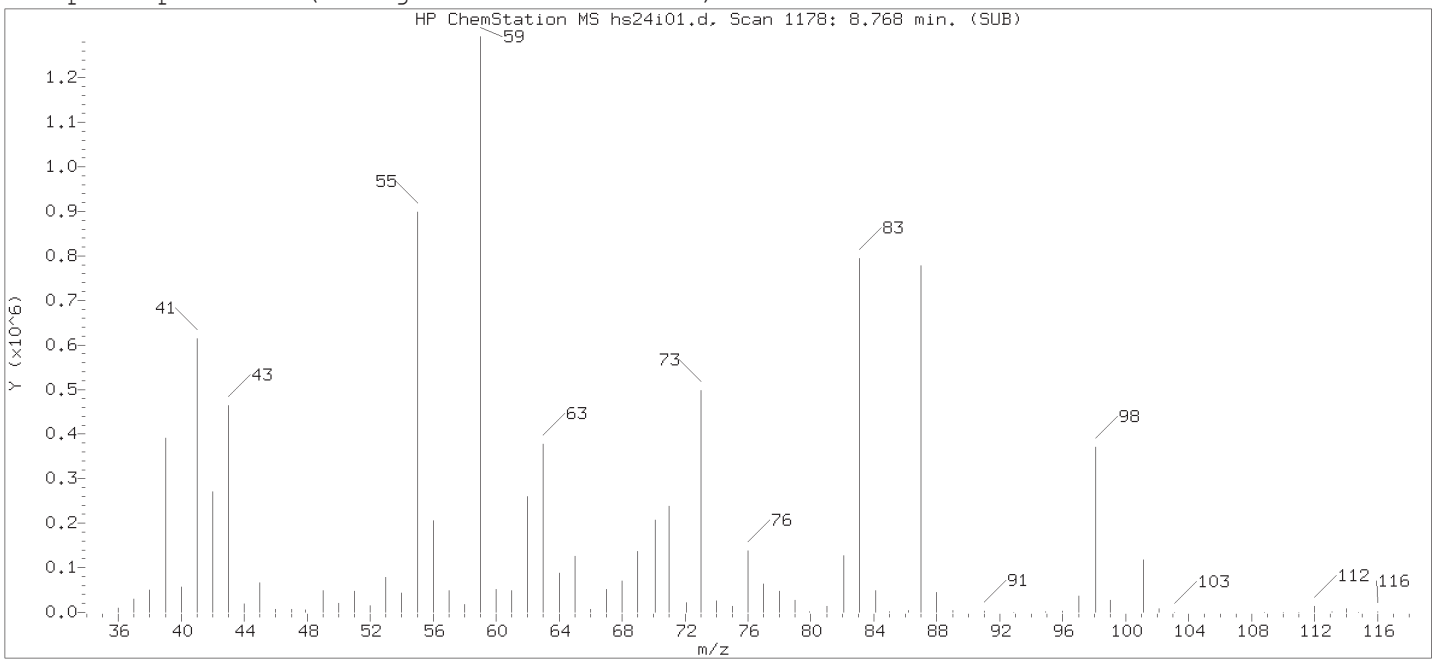
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1195
Retention Time (minutes): 8.872
Quant Ion : 88.00
Area (flag) : 216251M
On-Column Amount (ng) : 1300.5754
Integration start scan : 1186 Integration stop scan: 1245
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

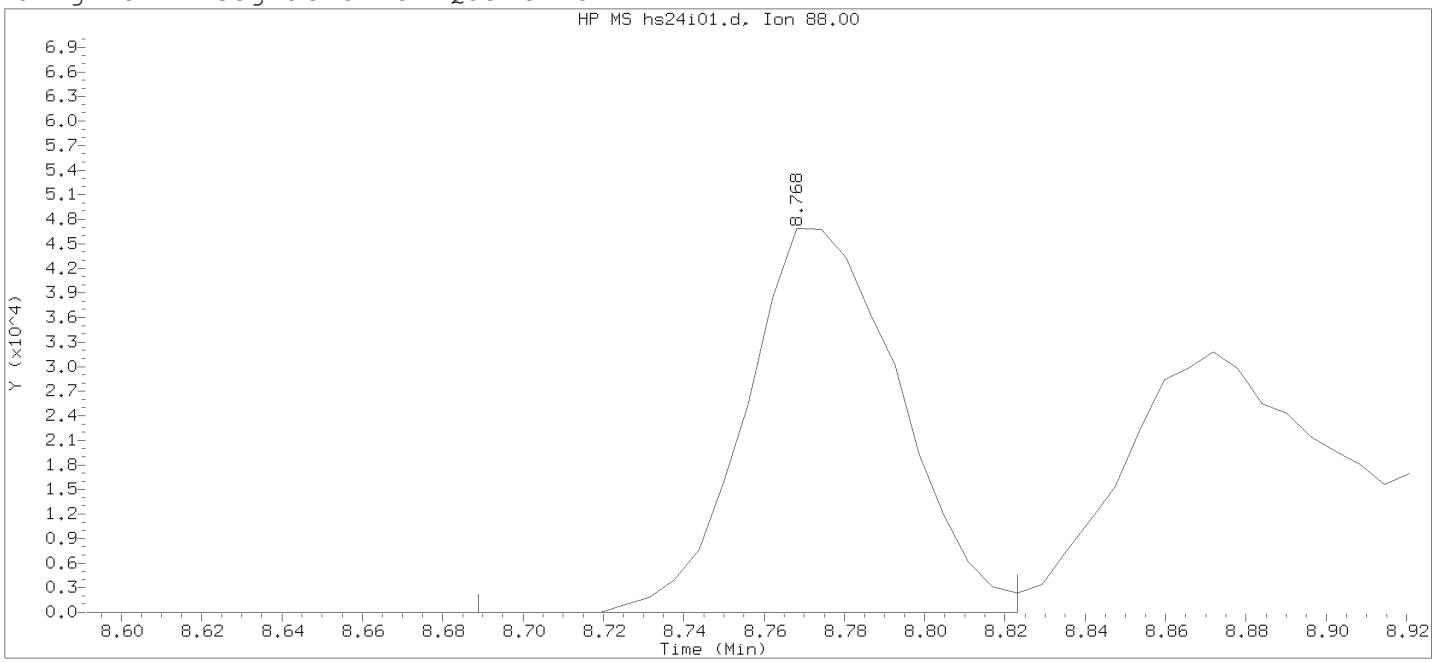
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

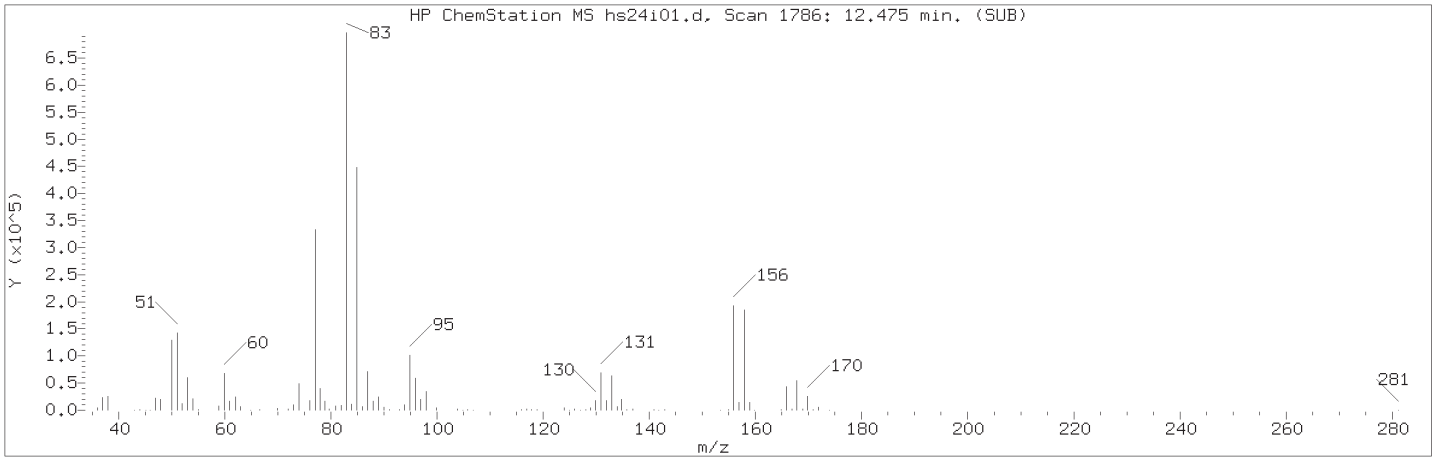
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

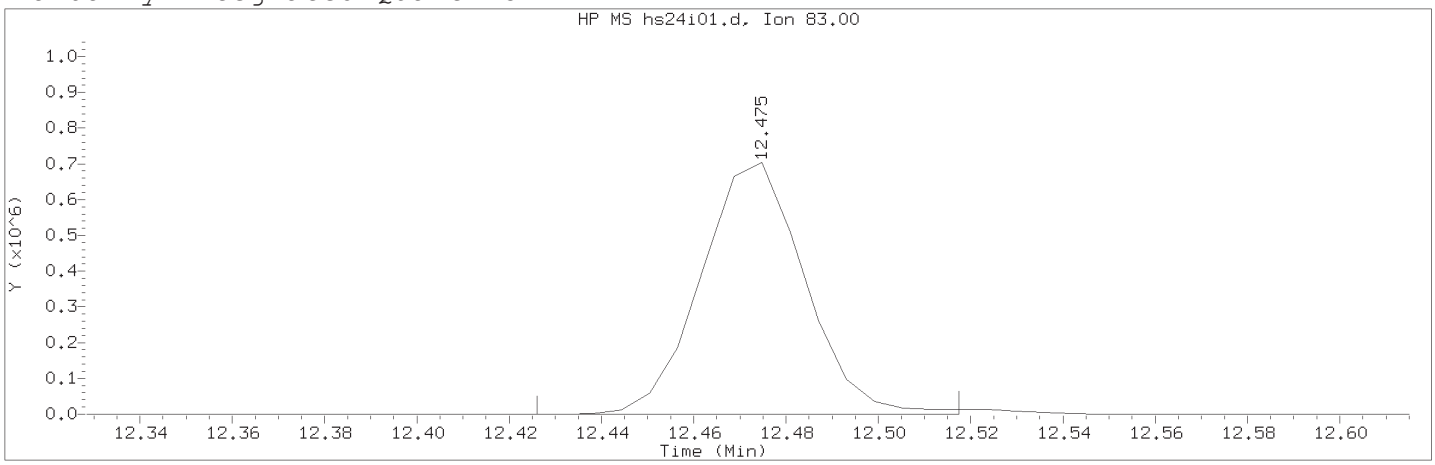
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1178
Retention Time (minutes): 8.768
Quant Ion : 88.00
Area : 124030
On-column Amount (ng) : 962.4201
Integration start scan : 1164 Integration stop scan: 1186
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

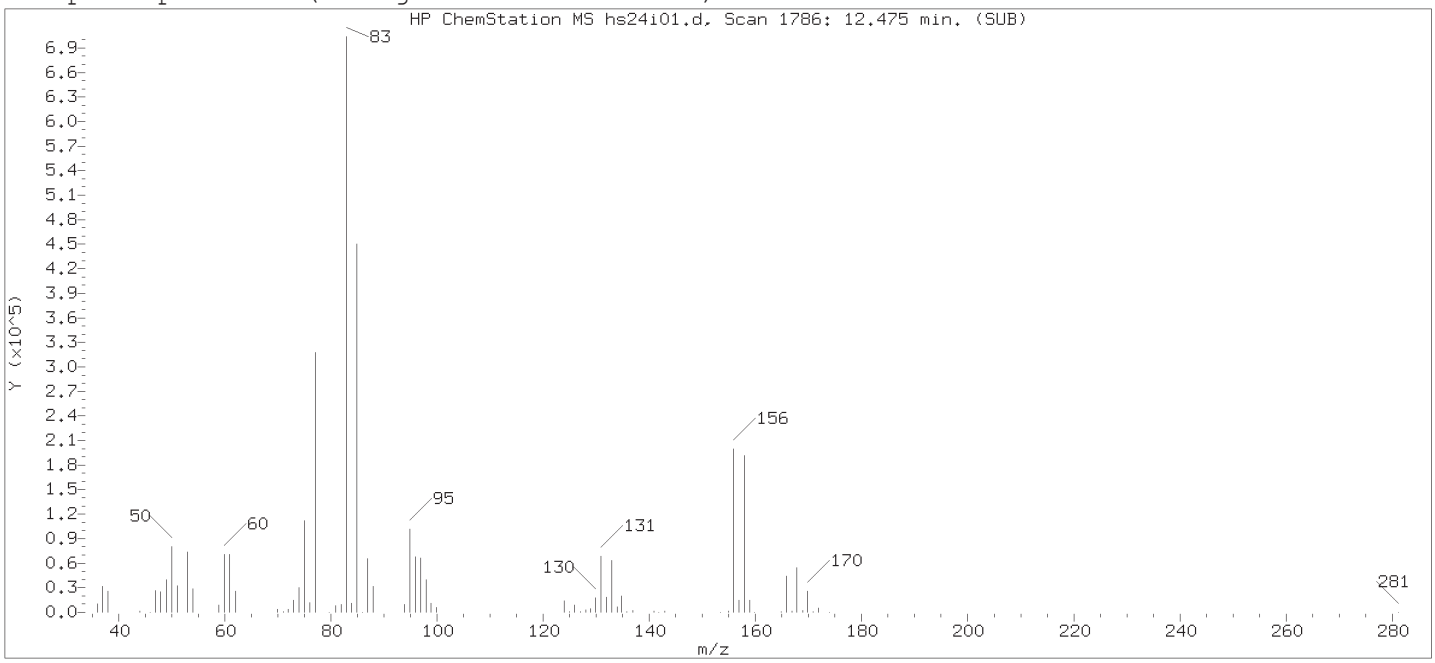
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area (flag) : 1100327M
On-Column Amount (ng) : 26.6273
Integration start scan : 1777 Integration stop scan: 1792
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

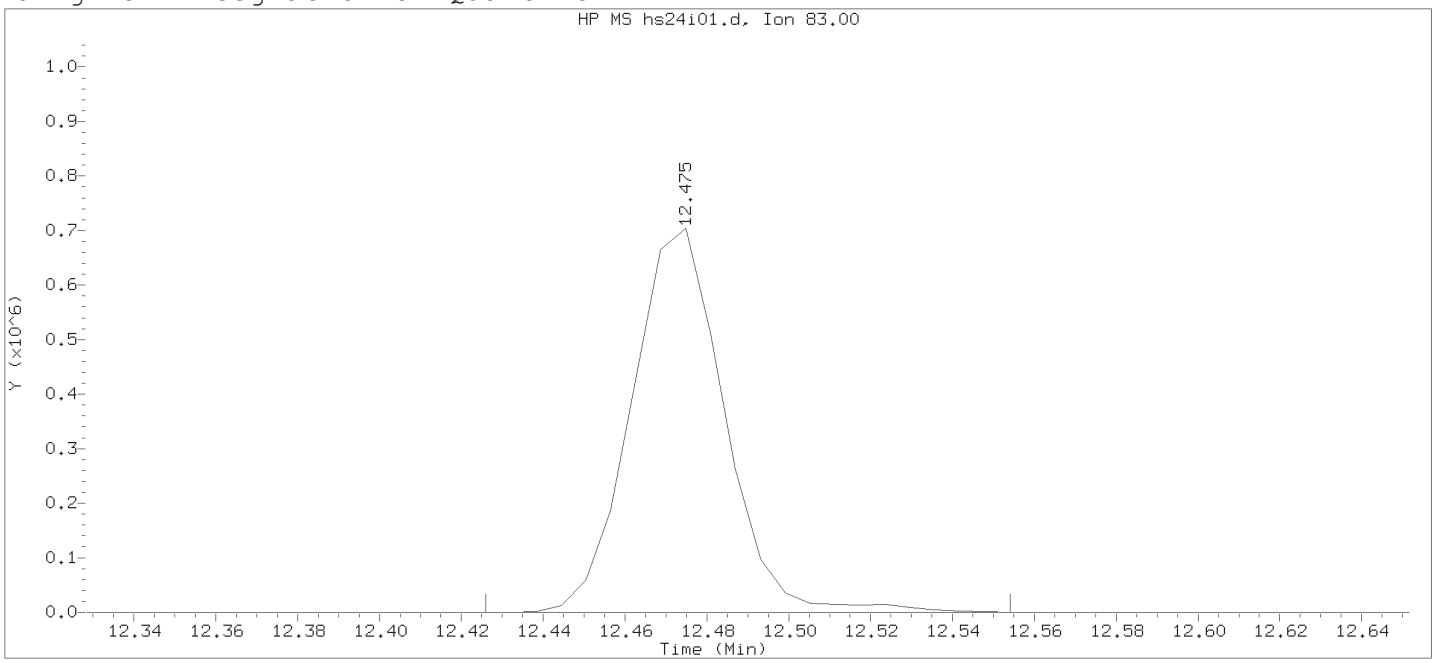
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



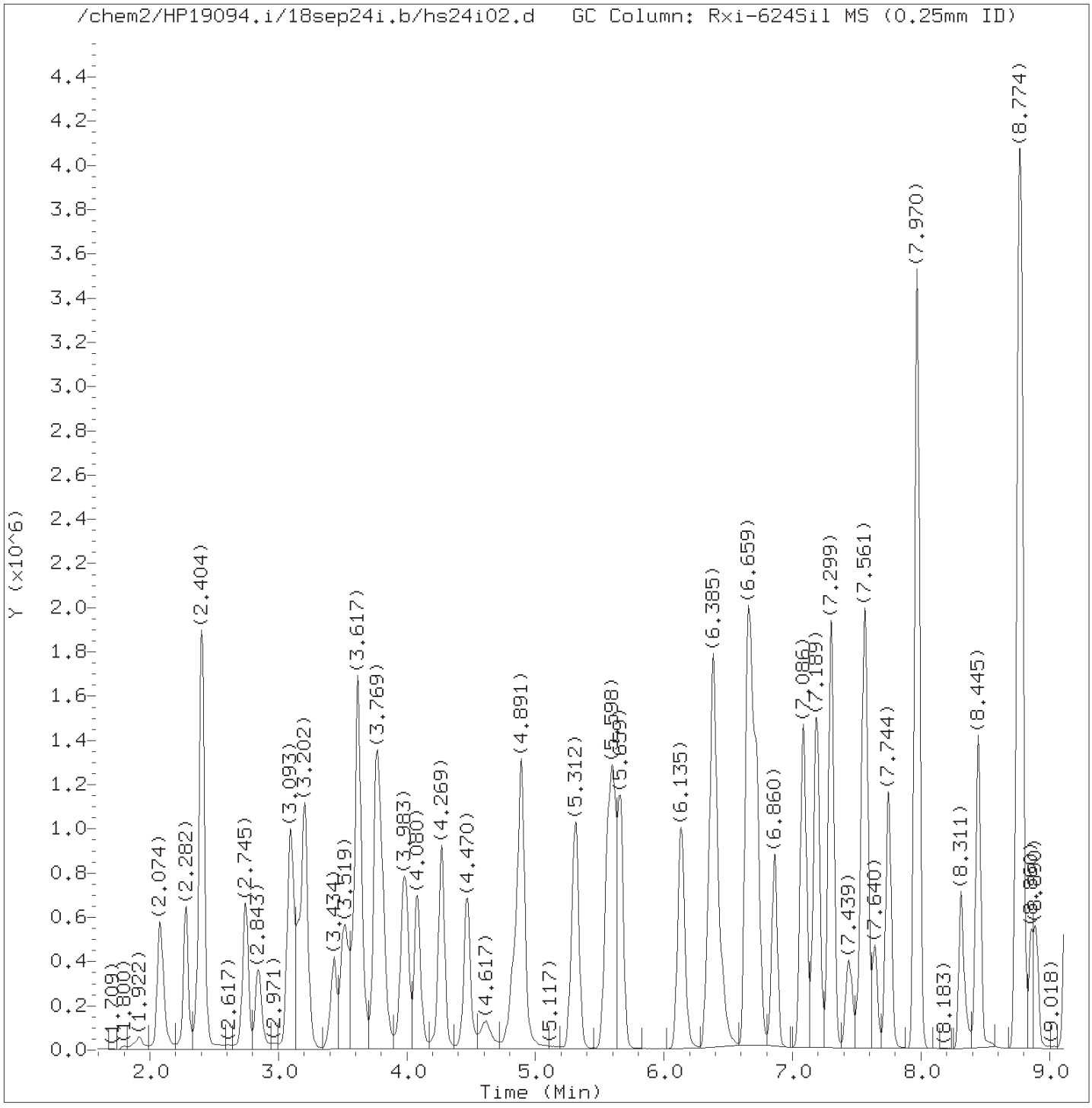
Data File: /chem2/HP19094.i/18sep24i.b/hs24i01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:29 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area : 1111309
On-column Amount (ng) : 25.3663
Integration start scan : 1777 Integration stop scan: 1798
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052



Total Ion Chromatogram (TIC)

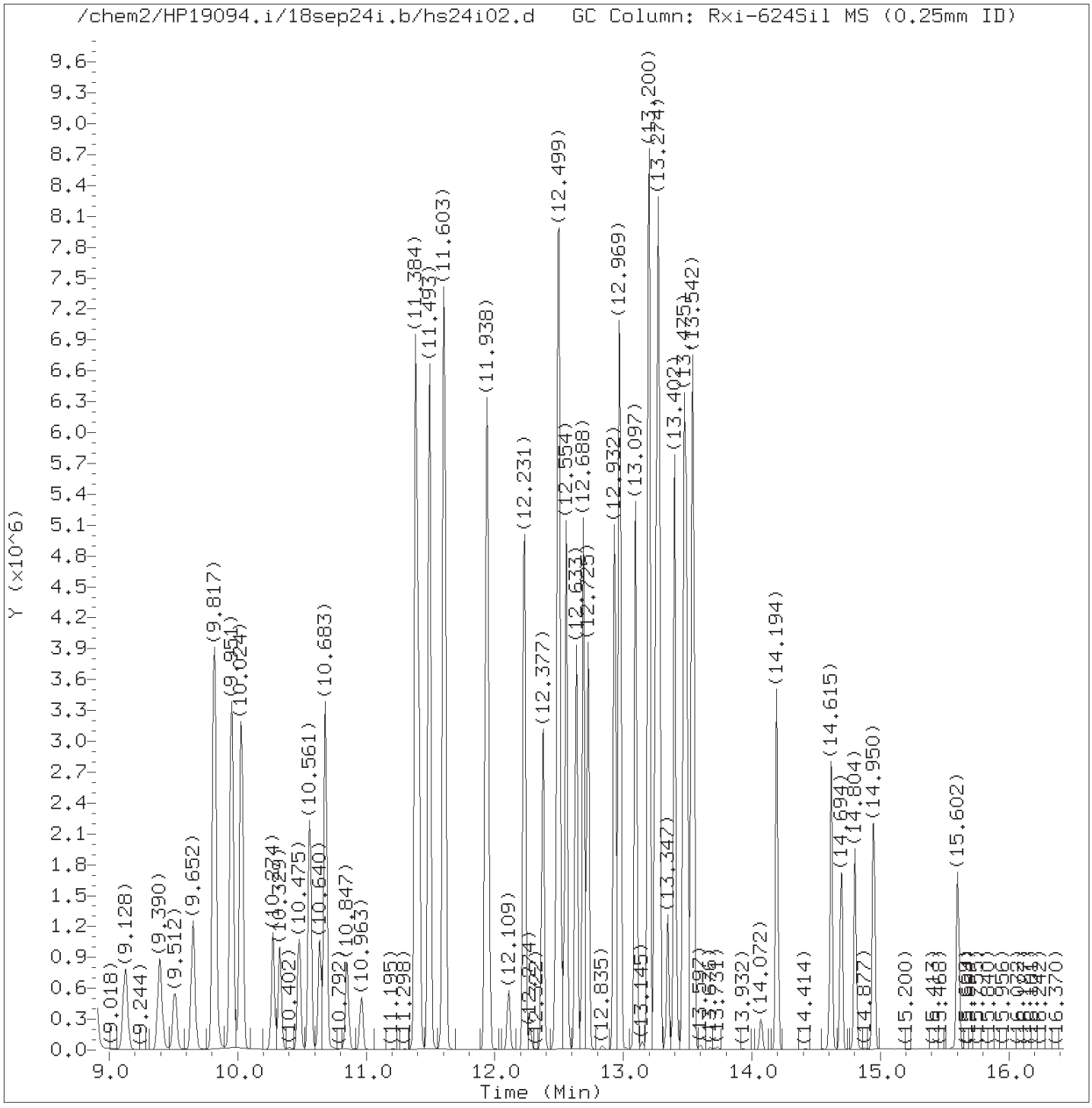
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.074	85	1111195	10.627
2) Chloromethane	(2)	2.282	50	1053821	10.291
5) Vinyl Chloride	(2)	2.404	62	994450	10.370
6) 1,3-Butadiene	(2)	2.404	39	1079138	9.934
7) Bromomethane	(2)	2.739	94	765899	10.273
8) Chloroethane	(2)	2.843	64	589896	10.142
9) Dichlorofluoromethane	(2)	3.093	67	1404728	10.153
10) Trichlorofluoromethane	(2)	3.154	101	1259997	10.400
11) Ethyl ether	(2)	3.434	59	423587	10.312
12) Freon 123a	(2)	3.513	67	807807	10.524
13) Acrolein	(1)	3.617	56	3074728	548.130
15) 1,1-Dichloroethene	(2)	3.757	96	555090	10.581
16) Freon 113	(2)	3.794	101	677125	10.951
14) Acetone	(1)	3.806	43	762811	101.244
17) Methyl Iodide	(2)	3.970	142	1138408	10.410
18) Carbon Disulfide	(2)	4.080	76	1731295	10.372
21) Methyl Acetate	(1)	4.251	43	211729	10.010
22) Allyl Chloride	(2)	4.269	41	1040687	10.436
23) Methylene Chloride	(2)	4.464	84	584981	9.884
26)*t-Butyl Alcohol-d10	(1)	4.483	65	126410	50.000
28) t-Butyl Alcohol	(1)	4.617	59	455794M	211.240
29) Acrylonitrile	(1)	4.824	53	529018	54.369
30) Methyl Tertiary Butyl Ether	(2)	4.873	73	1148303	10.643
31) trans-1,2-Dichloroethene	(2)	4.891	96	621983	10.505
32) n-Hexane	(2)	5.318	57	1052293	11.177
33) 1,1-Dichloroethane	(2)	5.556	63	1185400	10.515
34) di-Isopropyl Ether	(2)	5.604	45	2092042	10.450
35) 2-Chloro-1,3-Butadiene	(2)	5.665	53	1107150	10.914
40) 1,2-Dichloroethene (Total)	(2)		96	1310379	21.027
37) Ethyl t-butyl ether	(2)	6.135	59	1675402	10.551
38) 2-Butanone	(1)	6.342	43	1355942	109.942
39) cis-1,2-Dichloroethene	(2)	6.385	96	688396	10.523
41) 2,2-Dichloropropane	(2)	6.397	77	877144	10.894
42) Propionitrile	(1)	6.446	54	722828	215.920
45) Methacrylonitrile	(1)	6.659	67	1335578	110.644
47) Bromochloromethane	(2)	6.720	128	285662	10.337
48) Tetrahydrofuran	(1)	6.720	71	364027	111.024
49) Chloroform	(2)	6.866	83	1097143	10.468

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.080	113	673469	9.987
50)$Dibromofluoromethane	(2)	7.074	111	700447	10.091
51) 1,1,1-Trichloroethane	(2)	7.092	97	954892M	10.651
52) Cyclohexane	(2)	7.189	56	1283297	10.965
52) Cyclohexane	(2)	7.189	84	1055029	10.934
52) Cyclohexane	(2)	7.189	69	379671	11.008
54) Carbon Tetrachloride	(2)	7.299	117	841170	10.925
55) 1,1-Dichloropropene	(2)	7.305	75	906209	10.660
56) Isobutyl Alcohol	(1)	7.439	41	441325	528.629
57)$1,2-Dichloroethane-d4	(2)	7.531	102	119504	10.165
57)$1,2-Dichloroethane-d4	(2)	7.537	65	571691	10.054
57)$1,2-Dichloroethane-d4	(2)	7.537	104	76384	10.145
58) Benzene	(2)	7.567	78	2595708	10.336
59) 1,2-Dichloroethane	(2)	7.647	62	573462M	9.922
60) t-Amyl methyl ether	(2)	7.744	73	1396741	10.610
62) n-Heptane	(2)	7.970	43	1080061	11.126
63)*Fluorobenzene	(2)	7.970	96	2675616	10.000
65) n-Butanol	(1)	8.311	56	773741	1097.005
67) Trichloroethene	(2)	8.445	95	677458	10.535
69) Methylcyclohexane	(2)	8.756	83	1312618	10.809
70) 1,2-Dichloropropane	(2)	8.787	63	638119	10.473
71) Methyl Methacrylate	(1)	8.854	69	256545	11.482
72) 1,4-Dioxane	(1)	8.878	88	87437M	514.877
73) Dibromomethane	(2)	8.896	93	260508	10.301
74) Bromodichloromethane	(2)	9.122	83	729114	10.644
76) 2-Nitropropane	(1)	9.390	41	734933	116.122
80) cis-1,3-Dichloropropene	(2)	9.652	75	870258	10.912
81) 4-Methyl-2-Pentanone	(1)	9.817	43	3459344	112.763
82)$Toluene-d8	(3)	9.951	98	2697002	10.021
82)$Toluene-d8	(3)	9.951	100	1740056	10.017
83) Toluene	(3)	10.024	92	1612018	10.388
85) 1,3-Dichloropropene (total)	(3)		75	1532900	21.995
84) trans-1,3-Dichloropropene	(3)	10.274	75	662642	11.083
86) Ethyl Methacrylate	(3)	10.329	69	561170	10.955
88) 1,1,2-Trichloroethane	(3)	10.475	97	373327	10.455
89) Tetrachloroethene	(3)	10.561	166	735072	10.485
90) 1,3-Dichloropropane	(3)	10.640	76	658558	10.406
91) 2-Hexanone	(1)	10.683	43	2350012	112.535

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) Dibromochloromethane	(3)	10.853	129	455725	10.649
95) 1,2-Dibromoethane	(3)	10.963	107	359375	10.738
96) 1-Chlorohexane	(3)	11.384	91	958778	10.360
97)*Chlorobenzene-d5	(3)	11.384	117	2091043	10.000
98) Chlorobenzene	(3)	11.408	112	1704436	10.353
100) Ethylbenzene	(3)	11.493	91	3218789	10.613
99) 1,1,1,2-Tetrachloroethane	(3)	11.493	131	593286	10.920
101) m+p-Xylene	(3)	11.603	106	2379515	21.153
105) Xylene (Total)	(3)		106	3524795	31.800
104) o-Xylene	(3)	11.932	106	1145280	10.649
106) Styrene	(3)	11.951	104	1866075	10.845
107) Bromoform	(3)	12.109	173	256472	10.904
108) Isopropylbenzene	(3)	12.231	105	3134574	10.677
111)$4-Bromofluorobenzene	(3)	12.377	95	977708	9.978
111)$4-Bromofluorobenzene	(3)	12.377	174	853274	10.029
113) 1,1,2,2-Tetrachloroethane	(4)	12.475	83	446396M	10.447
114) Bromobenzene	(4)	12.493	156	679412	10.458
115) trans-1,4-Dichloro-2-butene	(1)	12.499	53	1100680	114.554
116) 1,2,3-Trichloropropane	(4)	12.524	110	111265M	10.072
117) n-Propylbenzene	(4)	12.554	91	3758147	10.639
119) 2-Chlorotoluene	(4)	12.633	126	715824	10.449
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	2552095	10.665
122) 4-Chlorotoluene	(4)	12.725	126	714849	10.413
125) tert-Butylbenzene	(4)	12.932	134	550044	10.570
126) Pentachloroethane	(4)	12.969	167	449742	11.073
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	2603683	10.663
128) sec-Butylbenzene	(4)	13.097	105	3375632	10.887
131) 1,3-Dichlorobenzene	(4)	13.194	146	1344989	10.421
132) p-Isopropyltoluene	(4)	13.200	119	2814592	10.959
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1077251	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	1311510	10.351
135) 1,2,3-Trimethylbenzene	(4)	13.280	120	1158798	10.344
136) Benzyl Chloride	(4)	13.347	126	179783	11.638
138) n-Butylbenzene	(4)	13.493	92	1387276	10.882
139) 1,2-Dichlorobenzene	(4)	13.530	146	1165776	10.237
143) 1,2-Dibromo-3-chloropropane	(1)	14.072	155	58902	11.327
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	1022554	10.649
145) 1,2,4-Trichlorobenzene	(4)	14.621	180	834904	10.675

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) Hexachlorobutadiene	(4)	14.700	225	311460	10.536
147) Naphthalene	(4)	14.804	128	1382804	11.173
148) 1,2,3-Trichlorobenzene	(4)	14.950	180	699158	10.872

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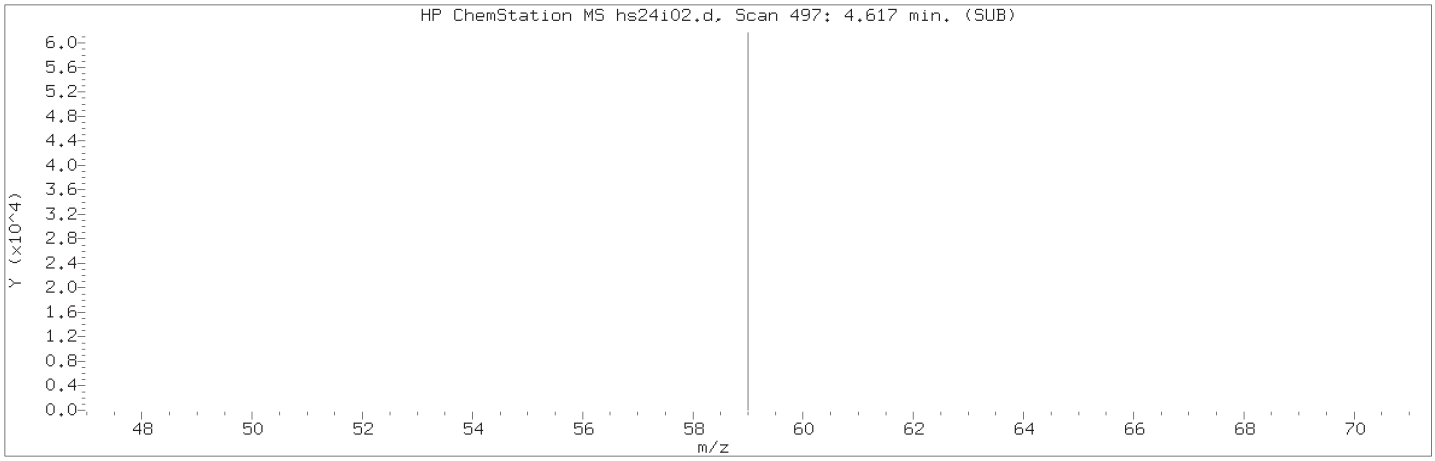
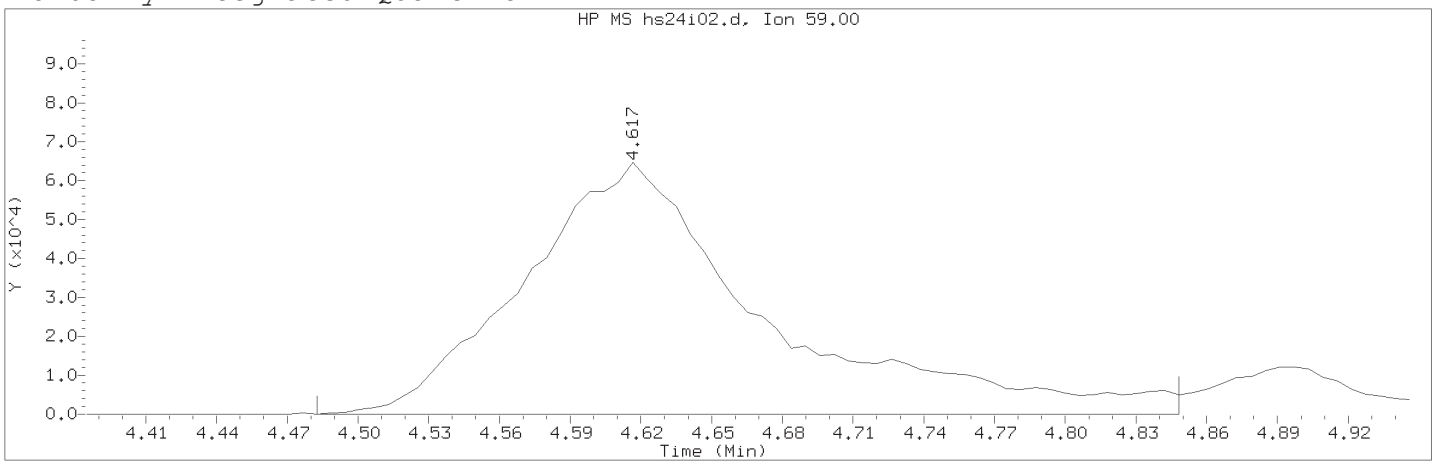
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

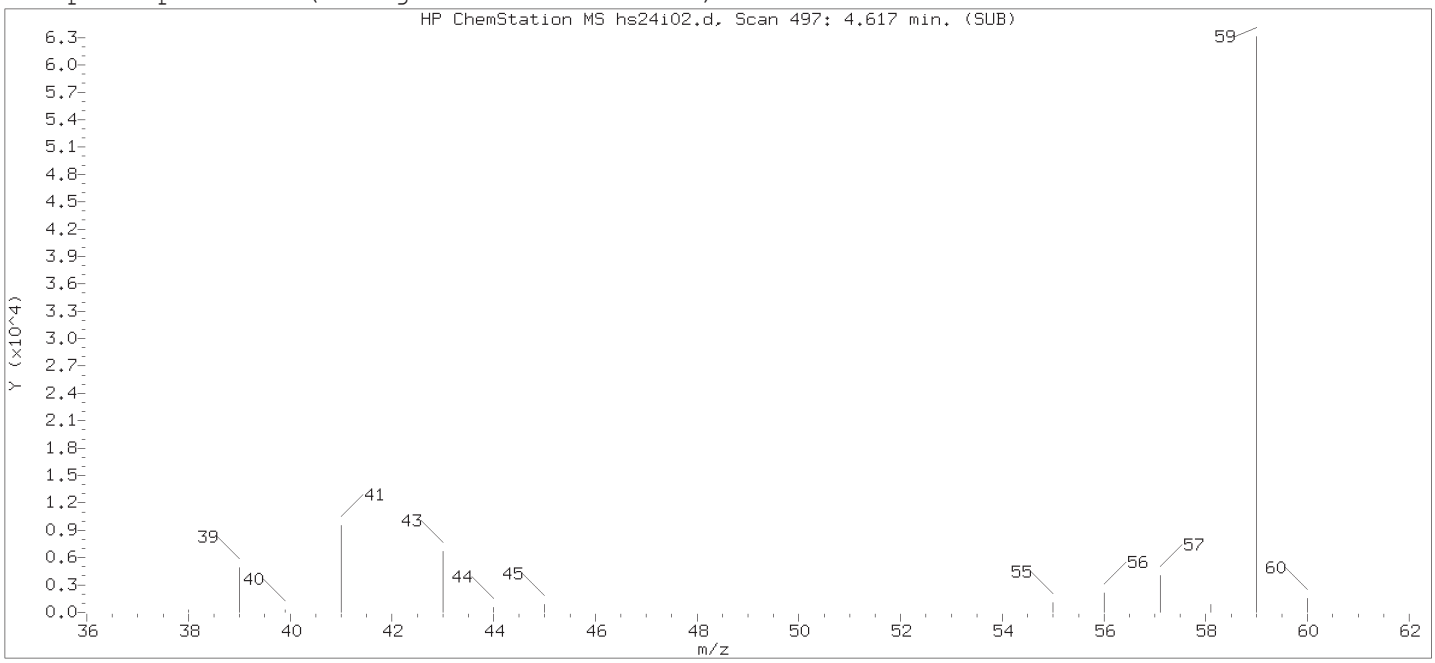
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 497
Retention Time (minutes): 4.617
Quant Ion : 59.00
Area (flag) : 455794M
On-Column Amount (ng) : 211.2399
Integration start scan : 474 Integration stop scan: 534
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

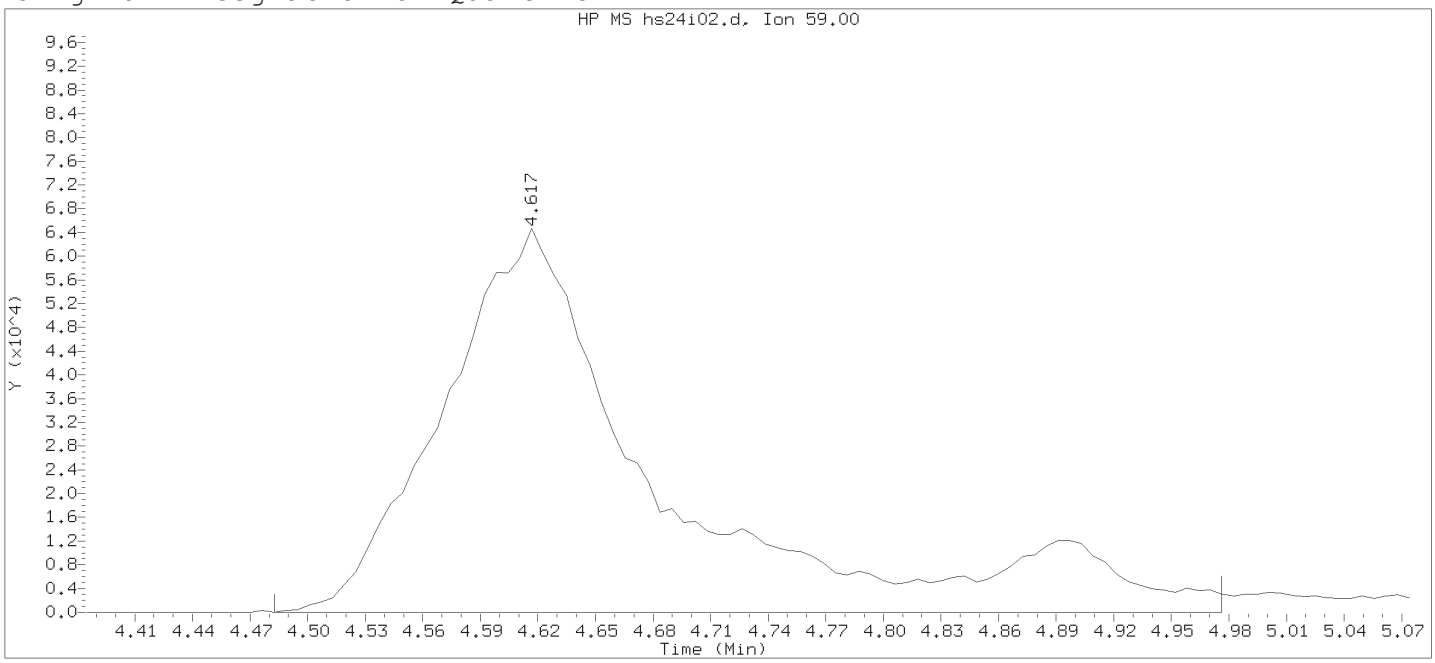
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

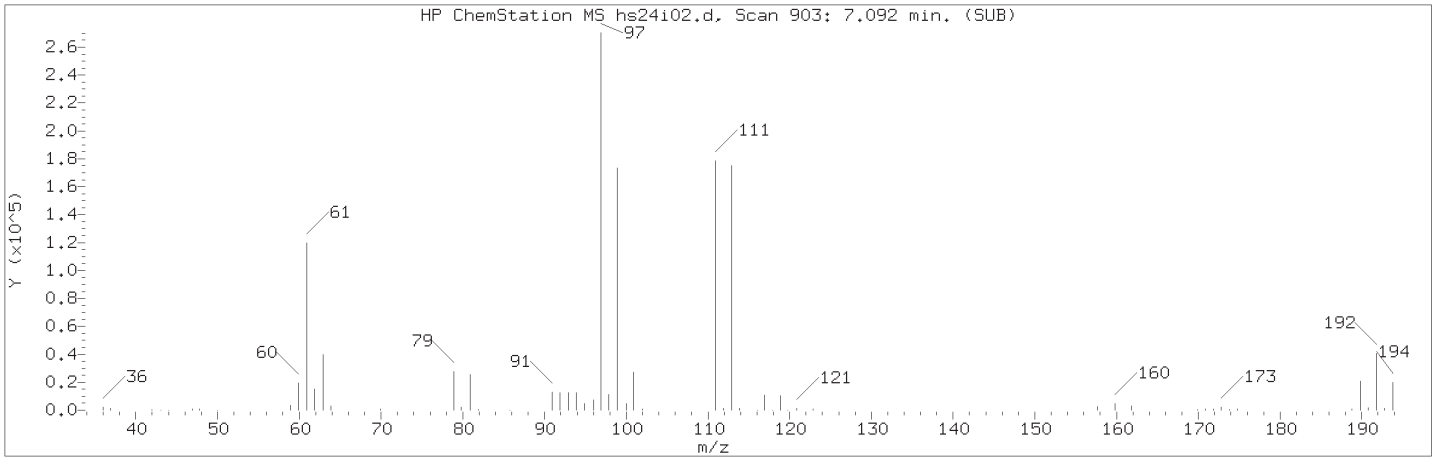
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:50
Date, time and analyst ID of latest file update: 25-Sep-2018 06:50 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

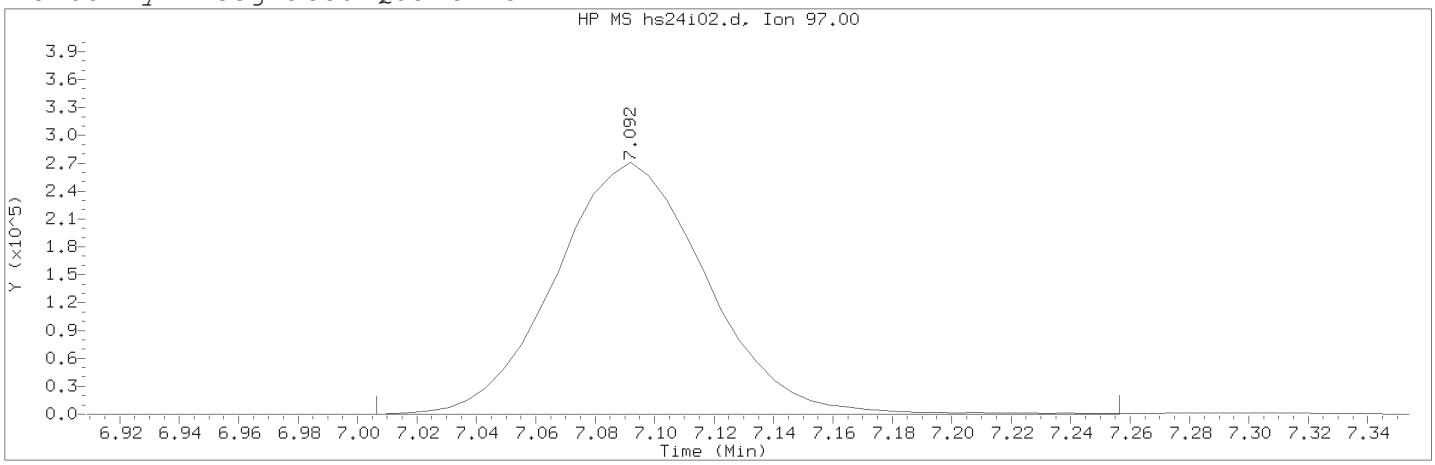
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 497
Retention Time (minutes): 4.617
Quant Ion : 59.00
Area : 508509
On-column Amount (ng) : 200.0000
Integration start scan : 474 Integration stop scan: 555
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

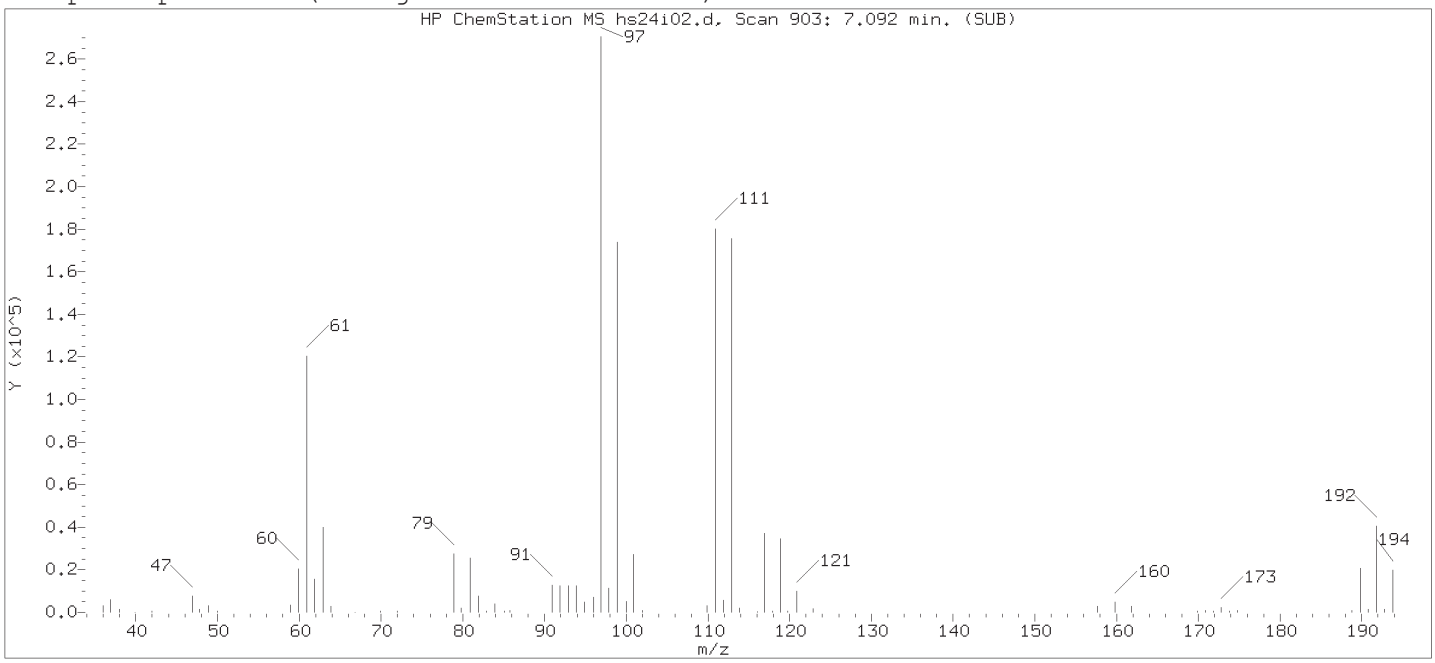
Compound Number : 51
Compound Name : 1,1,1-Trichloroethane
Scan Number : 903
Retention Time (minutes): 7.092
Quant Ion : 97.00
Area (flag) : 954892M
On-Column Amount (ng) : 10.6514
Integration start scan : 888 Integration stop scan: 929
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

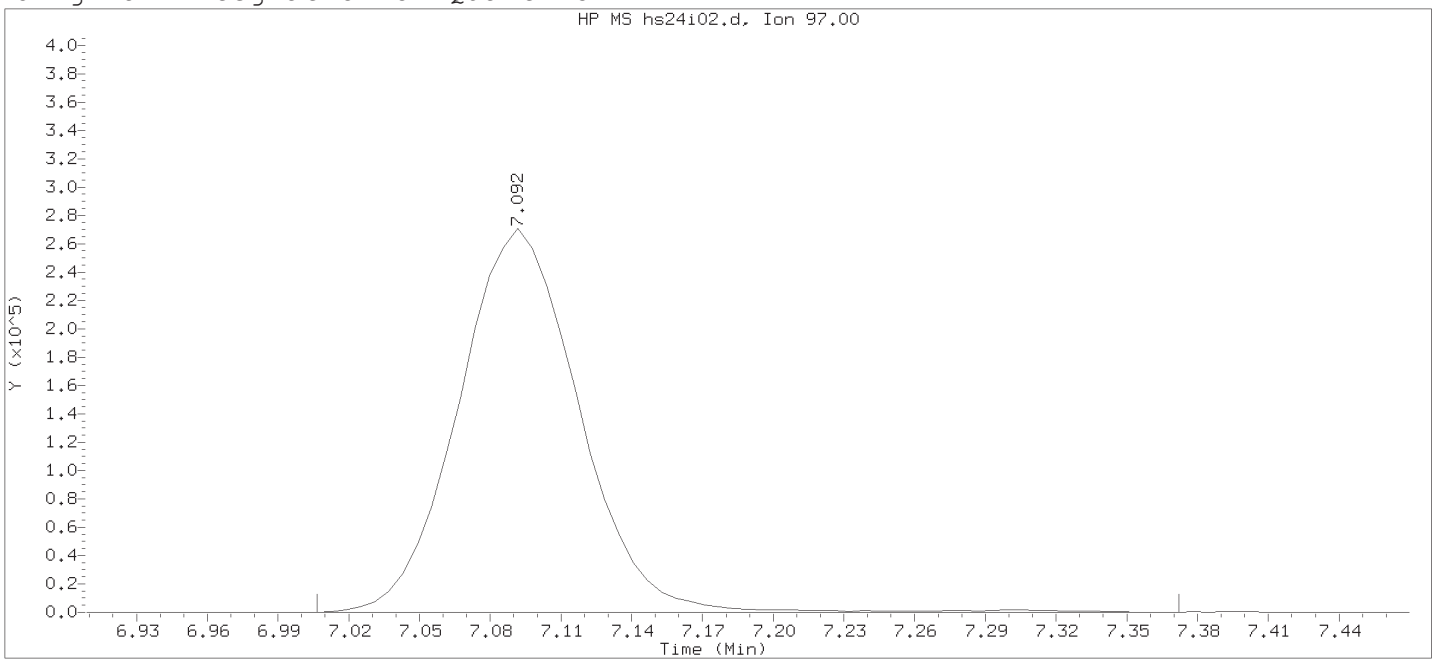
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:50
Date, time and analyst ID of latest file update: 25-Sep-2018 06:50 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 51
Compound Name : 1,1,1-Trichloroethane
Scan Number : 903
Retention Time (minutes): 7.092
Quant Ion : 97.00
Area : 960539
On-column Amount (ng) : 10.0000
Integration start scan : 888 Integration stop scan: 948
Y at integration start : 0 Y at integration end: 0

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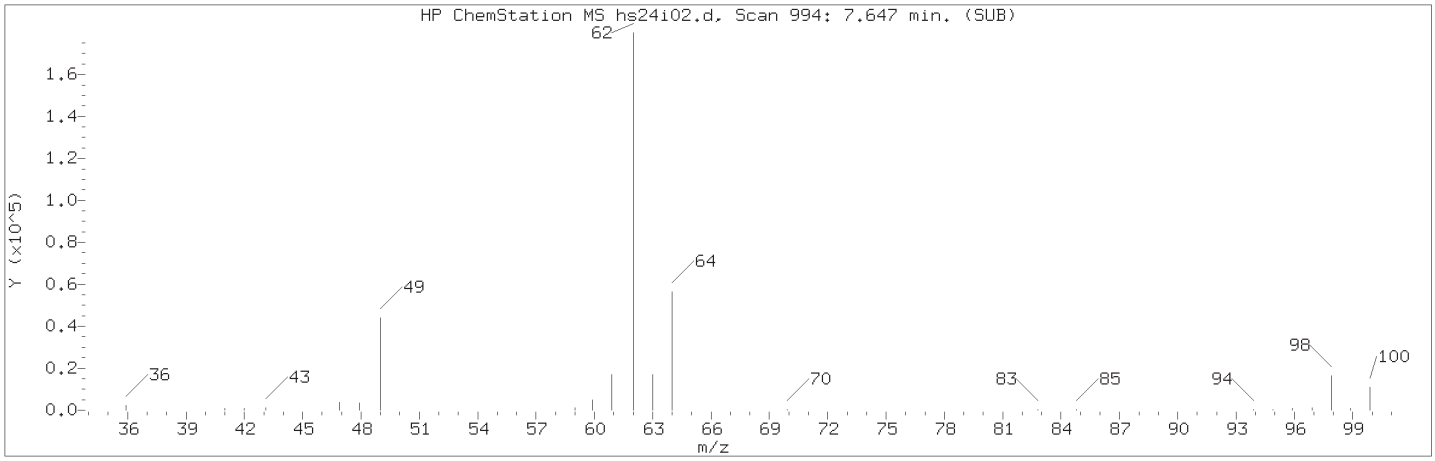
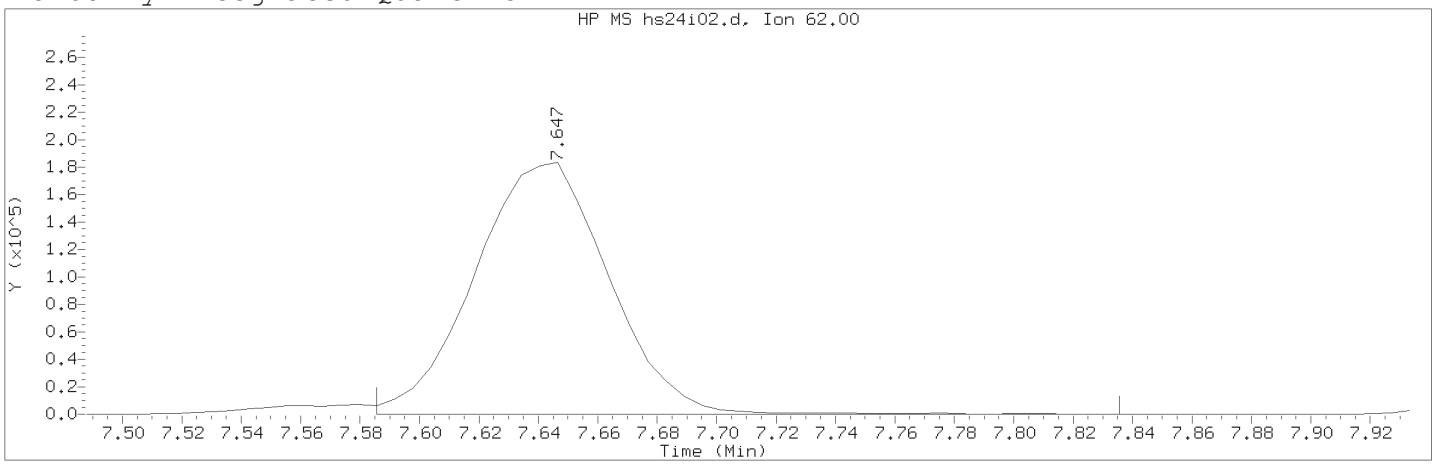
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

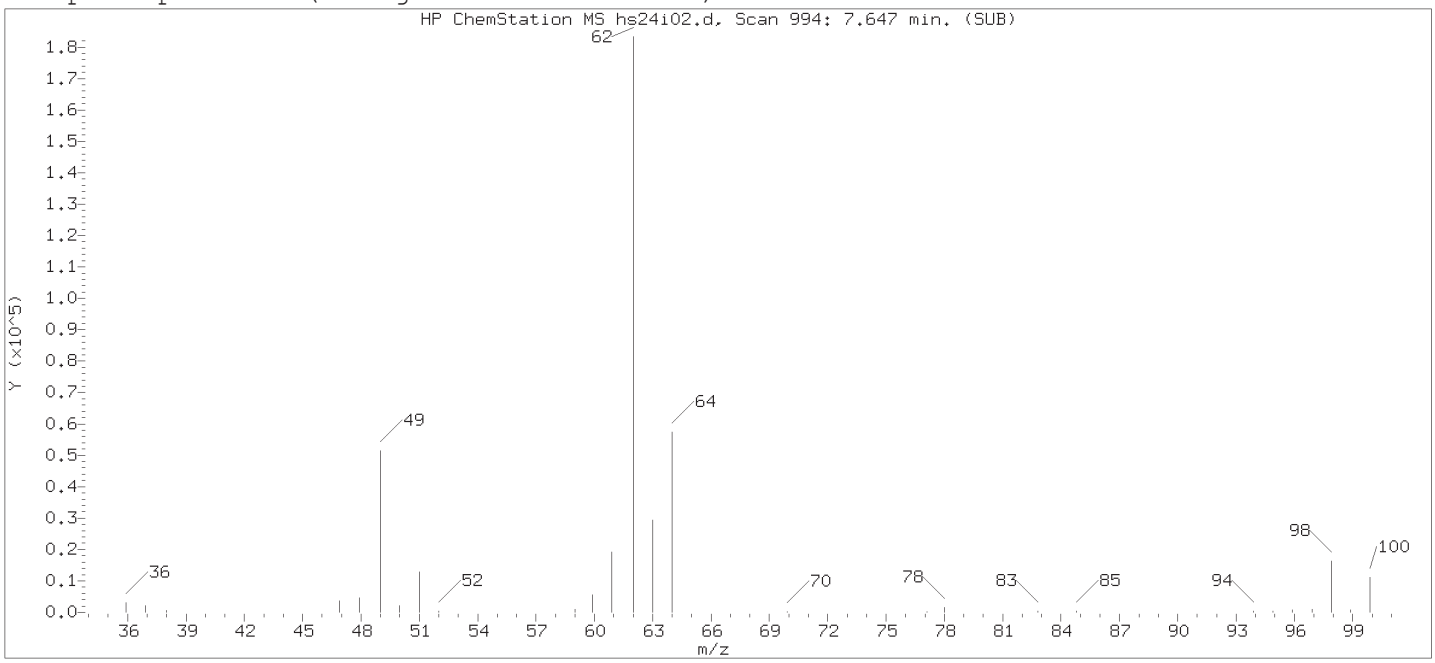
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 994
Retention Time (minutes): 7.647
Quant Ion : 62.00
Area (flag) : 573462M
On-Column Amount (ng) : 9.9220
Integration start scan : 983 Integration stop scan: 1024
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

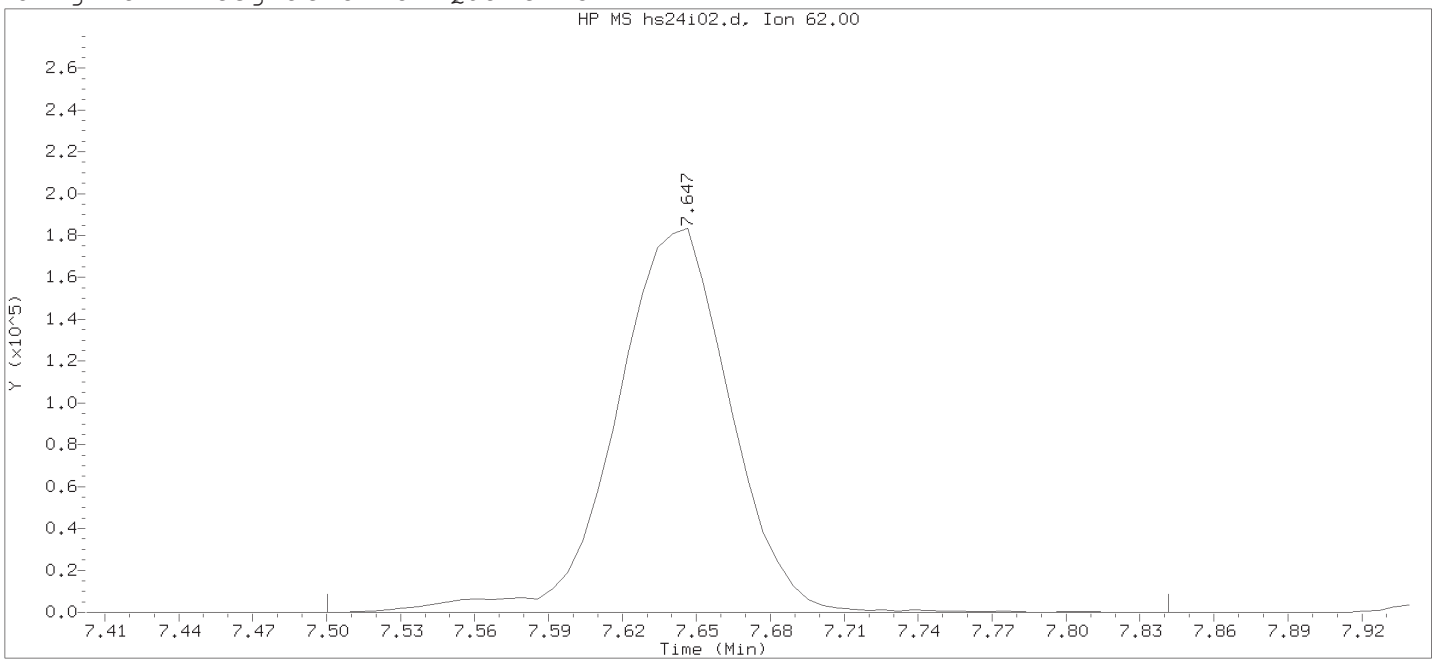
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:50
Date, time and analyst ID of latest file update: 25-Sep-2018 06:50 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 994
Retention Time (minutes): 7.647
Quant Ion : 62.00
Area : 590569
On-column Amount (ng) : 10.0000
Integration start scan : 969 Integration stop scan: 1025
Y at integration start : 0 Y at integration end: 0

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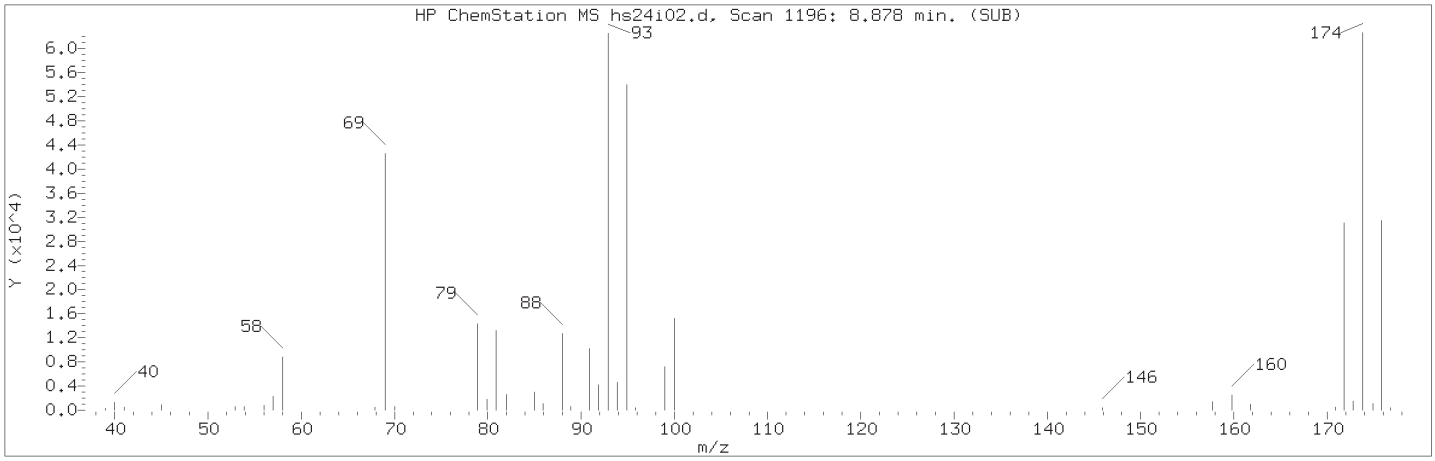
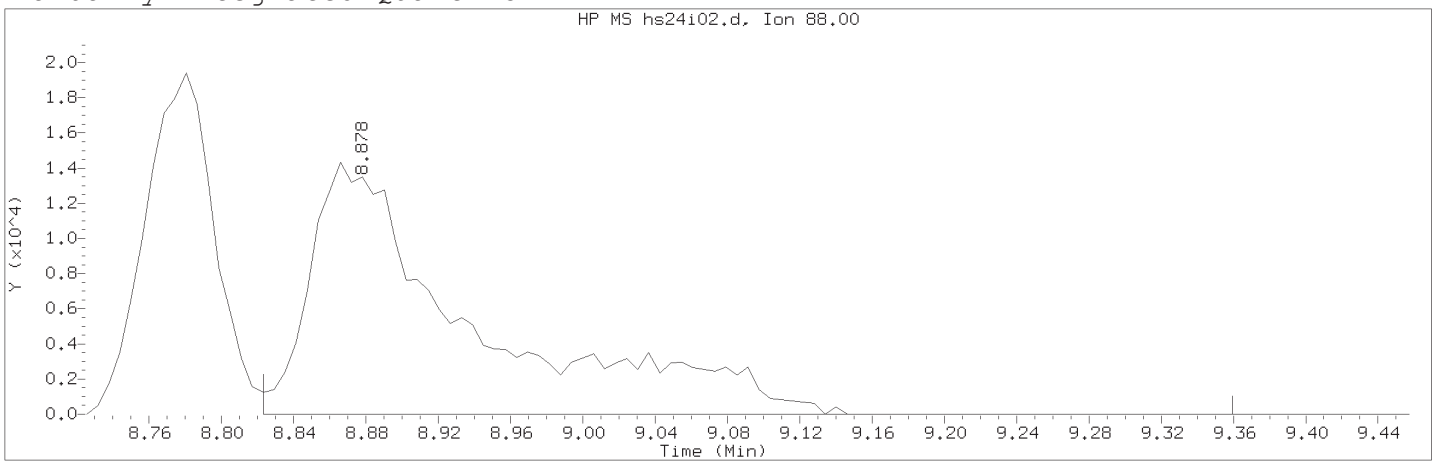
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

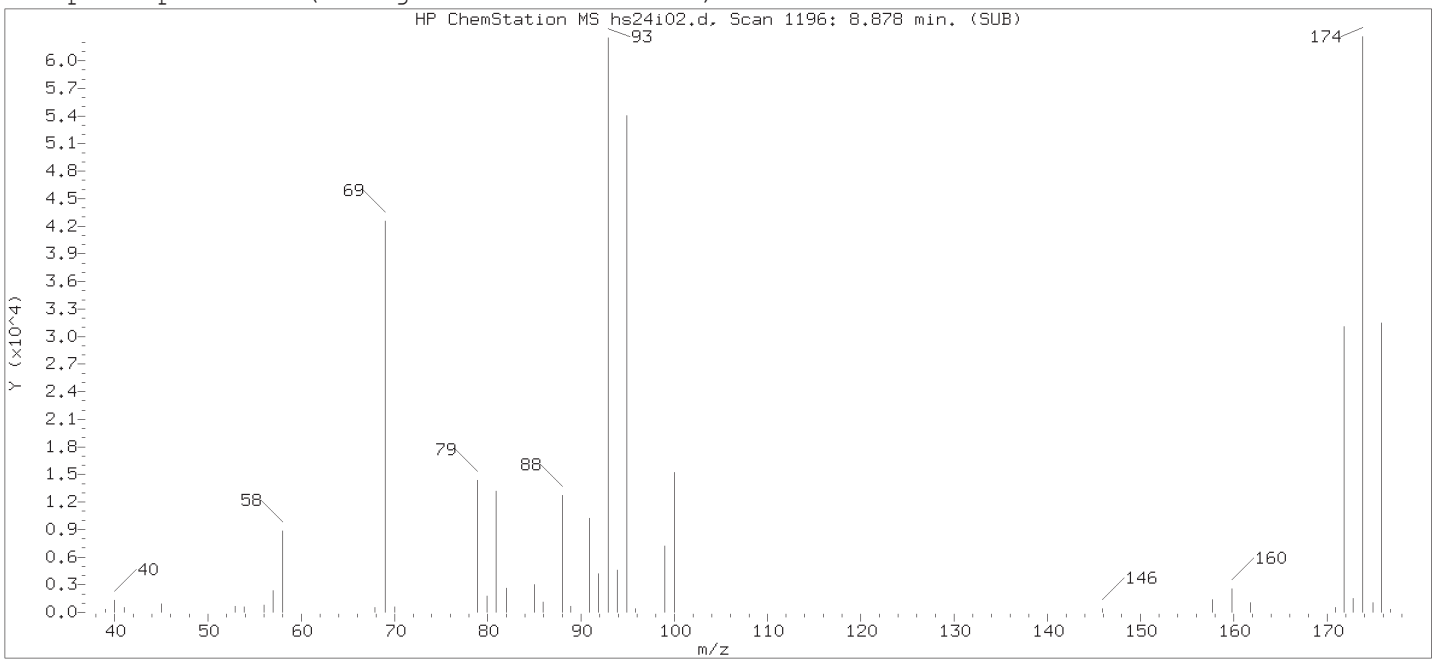
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1196
Retention Time (minutes): 8.878
Quant Ion : 88.00
Area (flag) : 87437M
On-Column Amount (ng) : 514.8766
Integration start scan : 1186 Integration stop scan: 1274
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

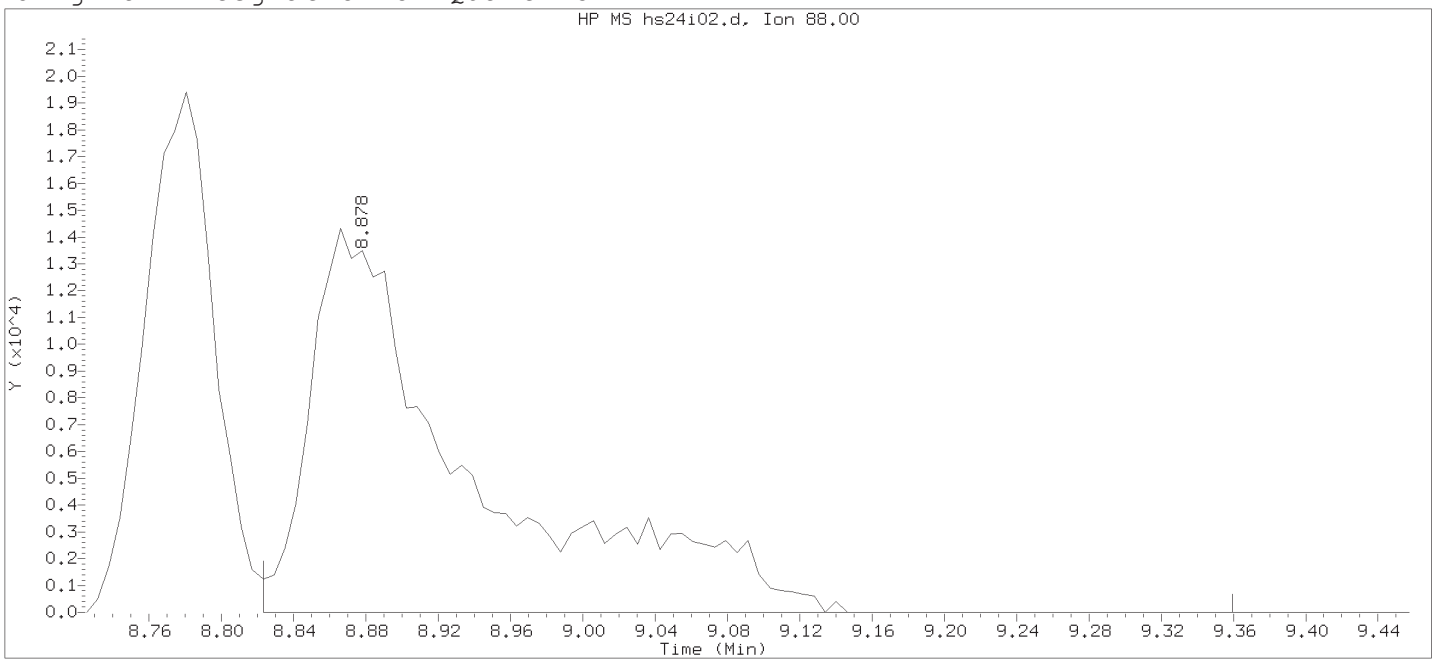
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

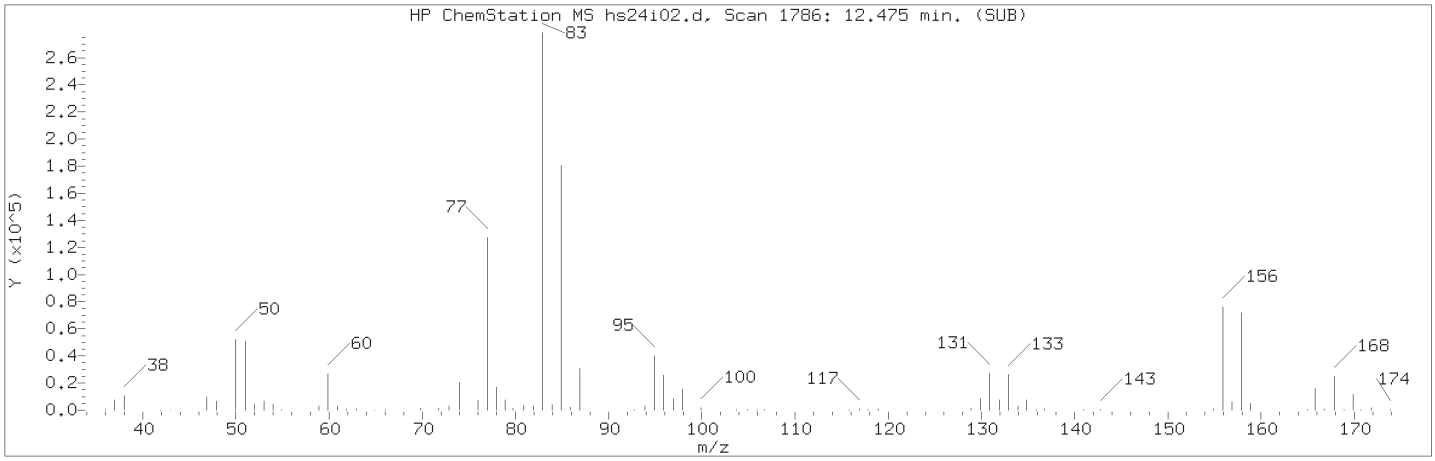
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:50
Date, time and analyst ID of latest file update: 25-Sep-2018 06:50 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

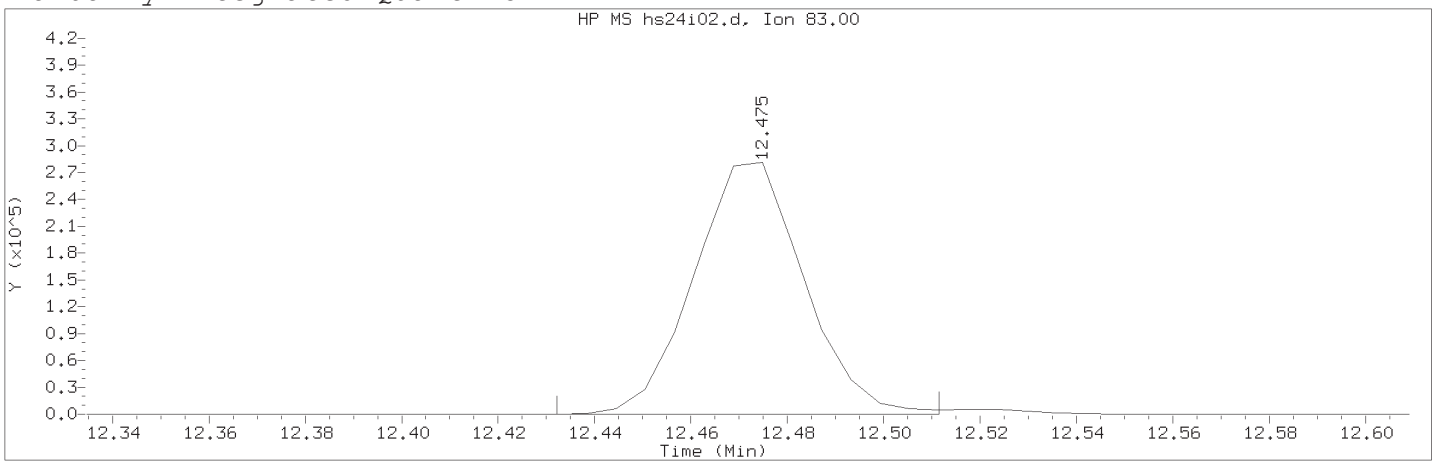
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1196
Retention Time (minutes): 8.878
Quant Ion : 88.00
Area : 87437
On-column Amount (ng) : 500.0000
Integration start scan : 1186 Integration stop scan: 1274
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

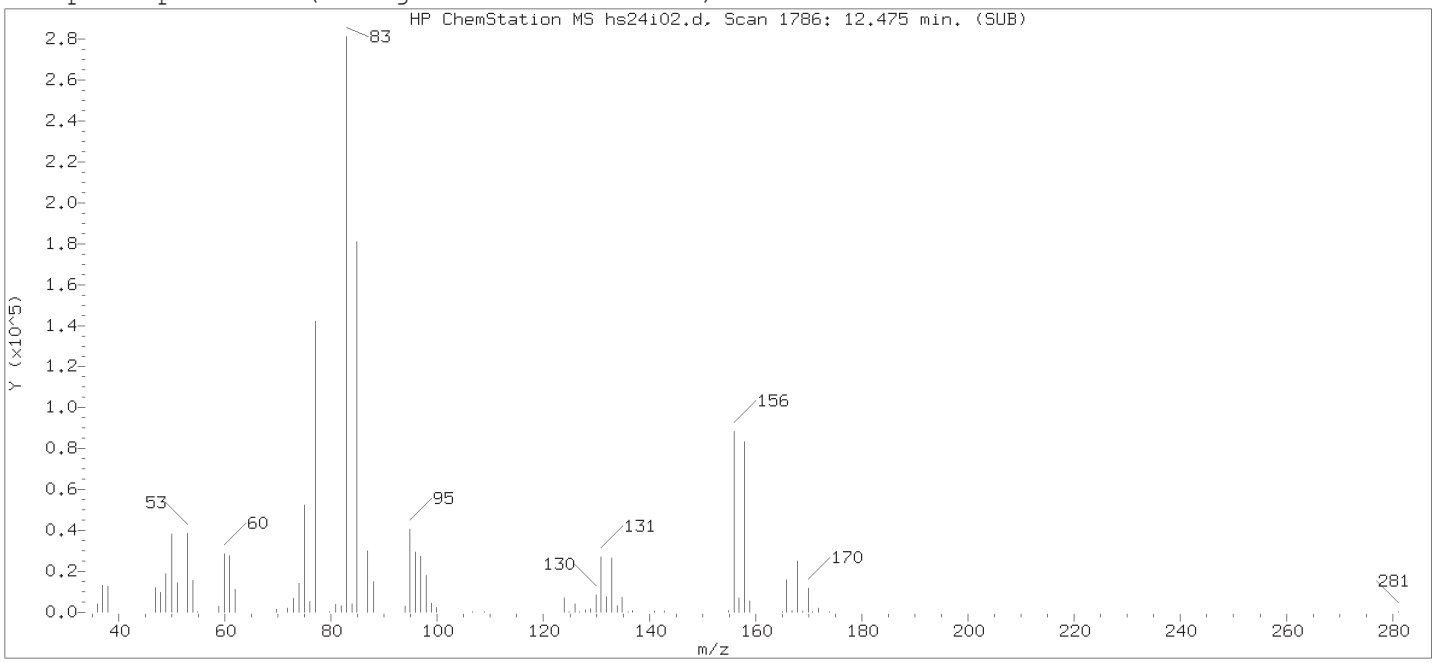
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area (flag) : 446396M
On-Column Amount (ng) : 10.4466
Integration start scan : 1778 Integration stop scan: 1791
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

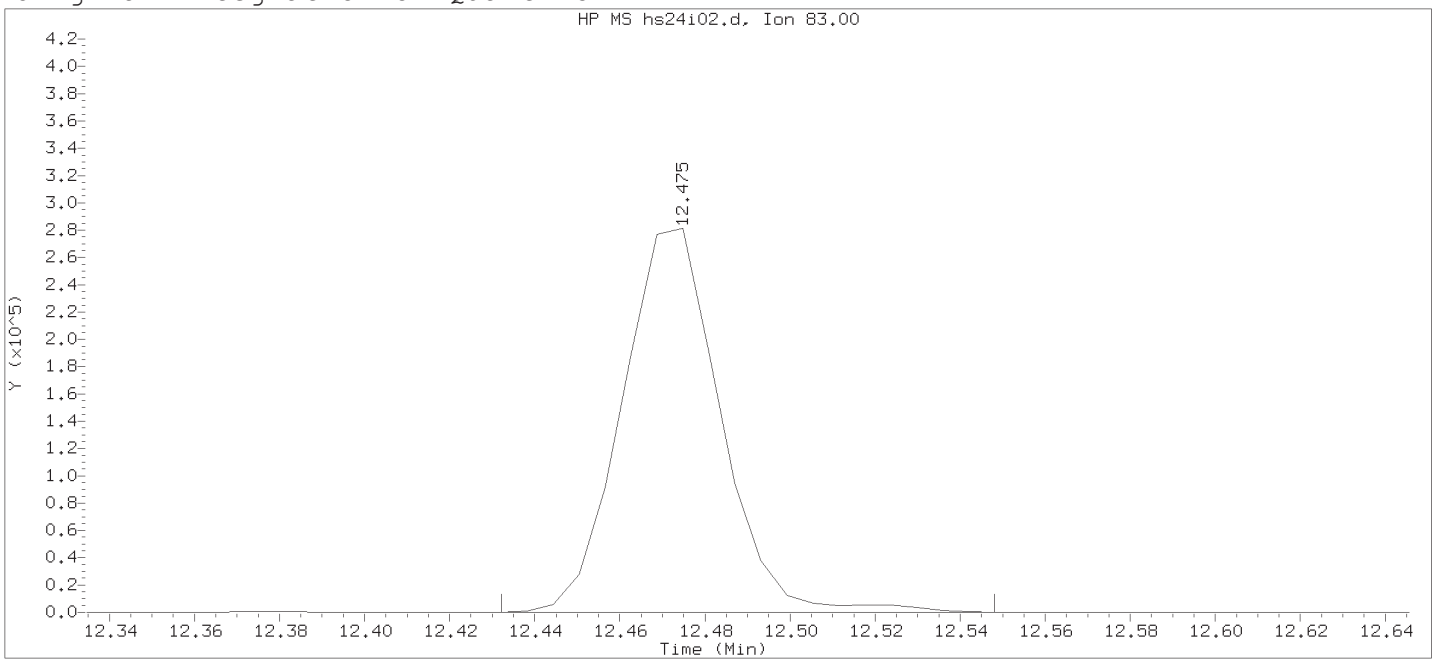
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

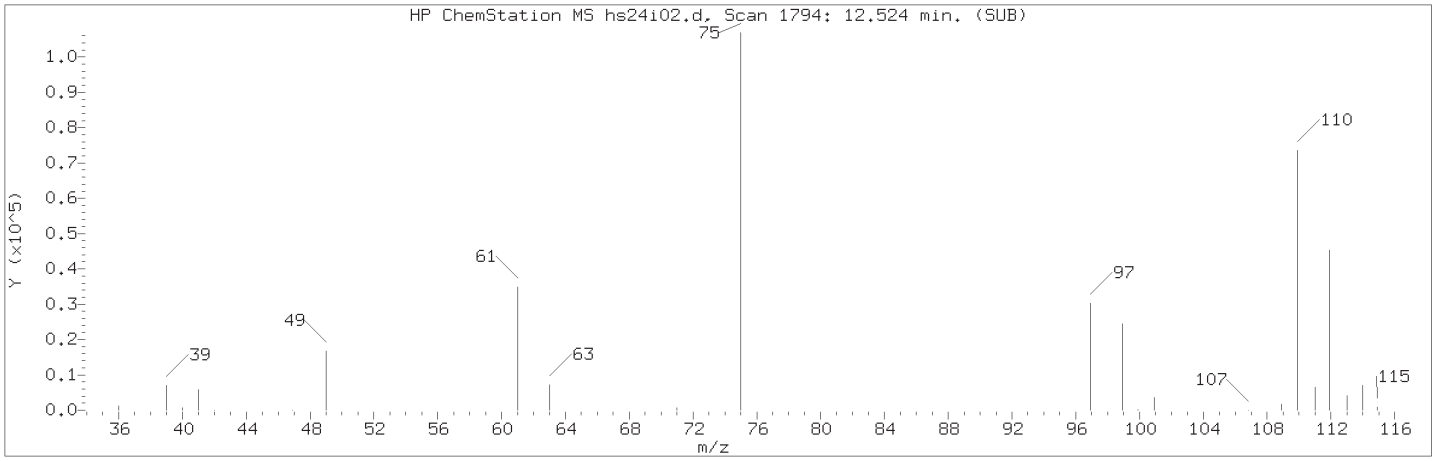
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:50
Date, time and analyst ID of latest file update: 25-Sep-2018 06:50 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

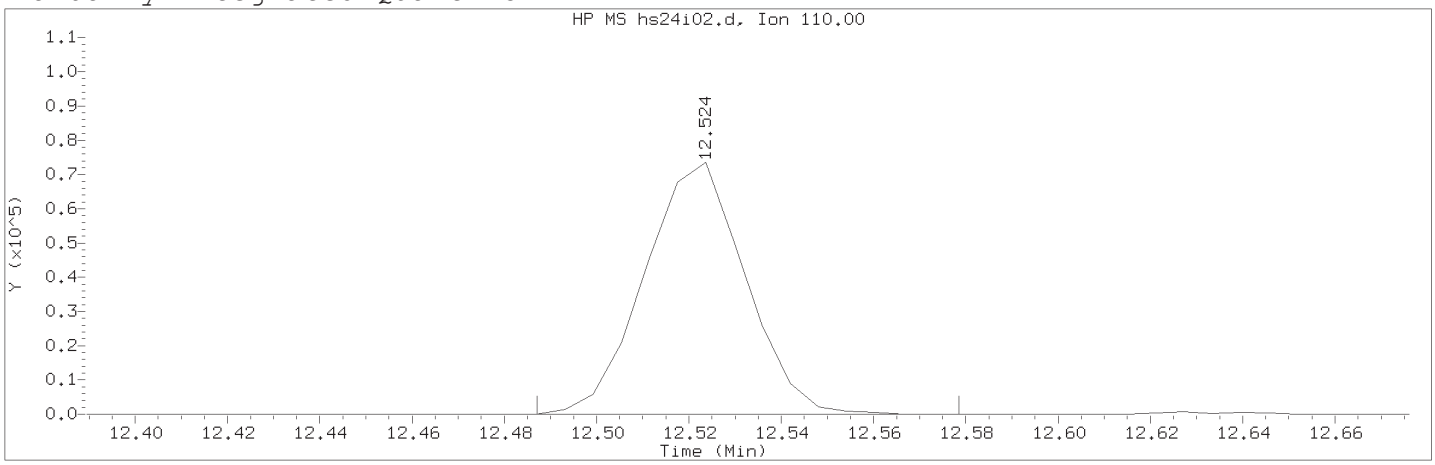
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area : 452299
On-column Amount (ng) : 10.0000
Integration start scan : 1778 Integration stop scan: 1797
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

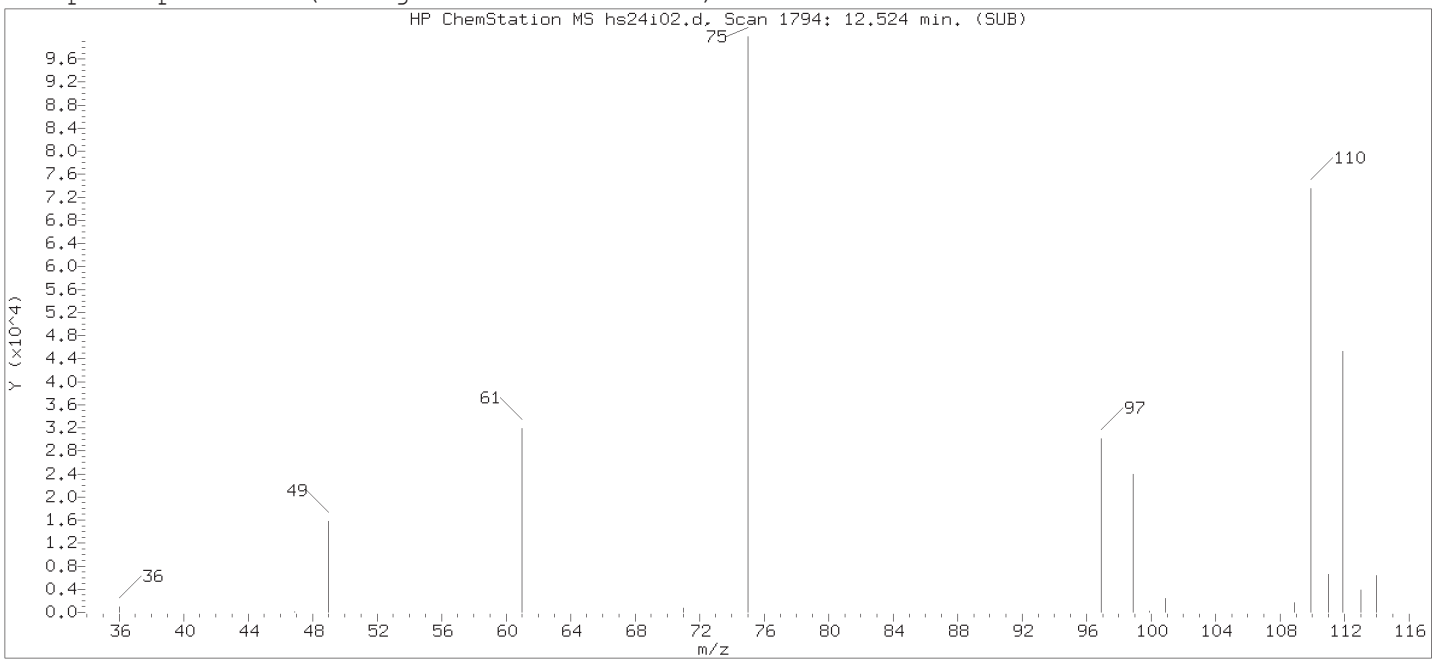
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1794
Retention Time (minutes): 12.524
Quant Ion : 110.00
Area (flag) : 111265M
On-Column Amount (ng) : 10.0716
Integration start scan : 1787 Integration stop scan: 1802
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

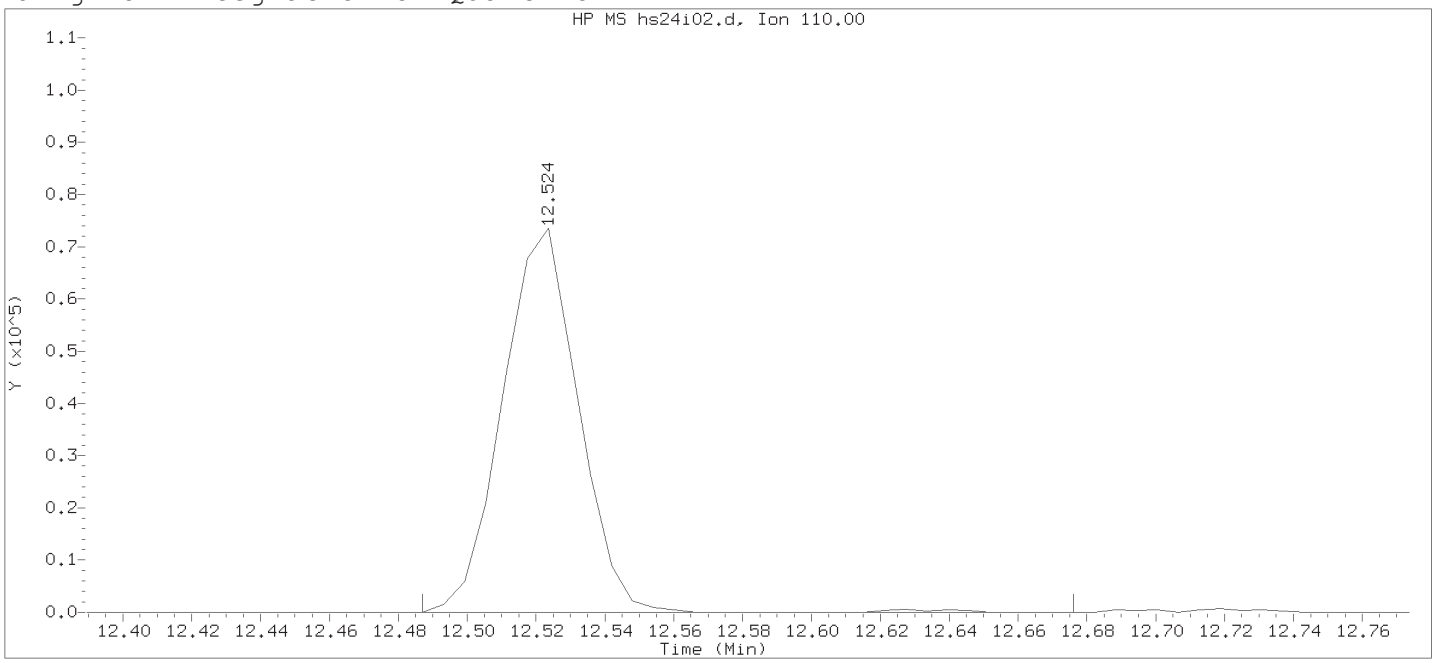
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:29.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



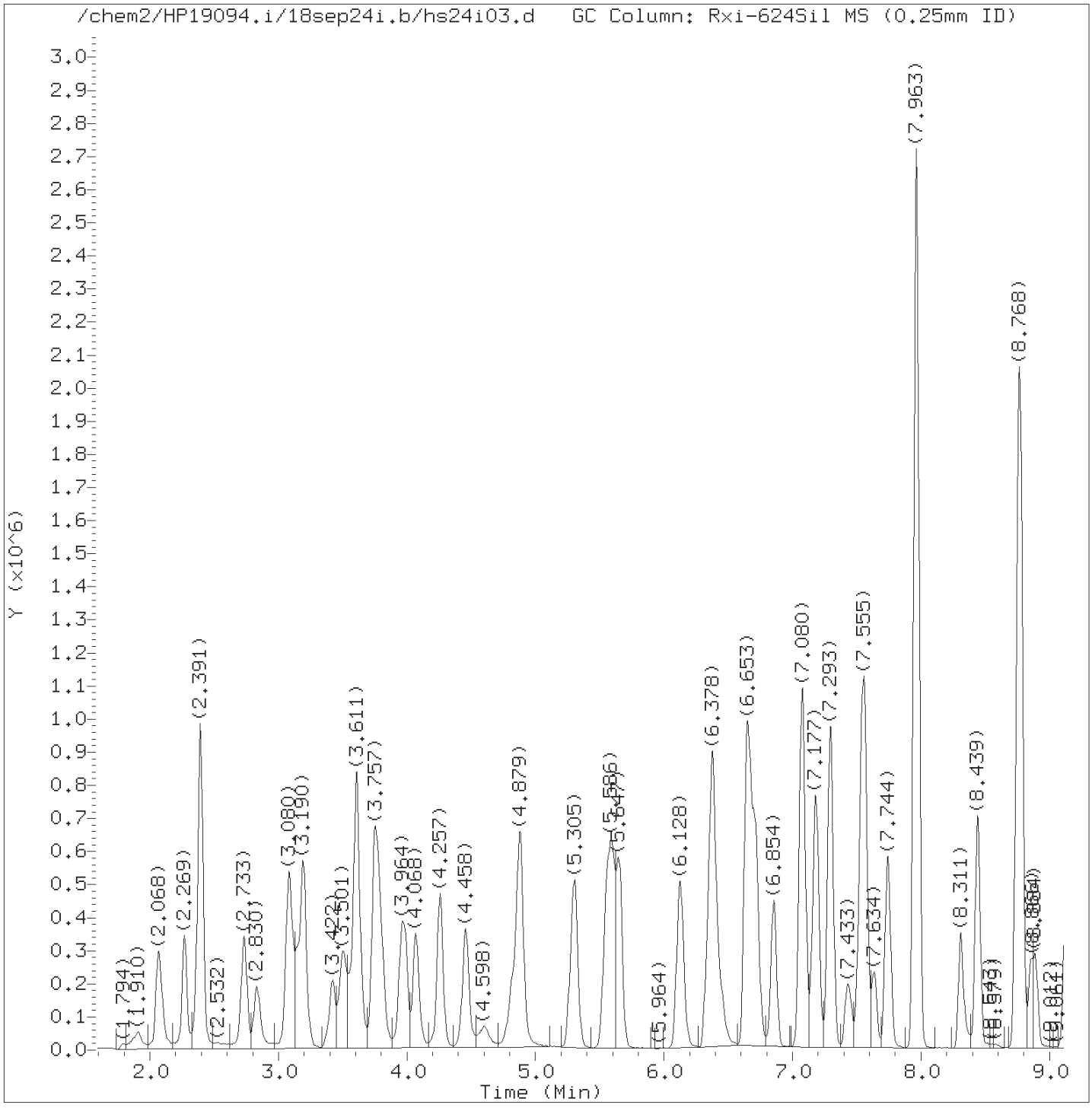
Data File: /chem2/HP19094.i/18sep24i.b/hs24i02.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 18:50 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:50
Date, time and analyst ID of latest file update: 25-Sep-2018 06:50 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1794
Retention Time (minutes): 12.524
Quant Ion : 110.00
Area : 112033
On-column Amount (ng) : 10.0000
Integration start scan : 1787 Integration stop scan: 1818
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:29.
Target 3.5 esignature user: jkh09052



Total Ion Chromatogram (TIC)

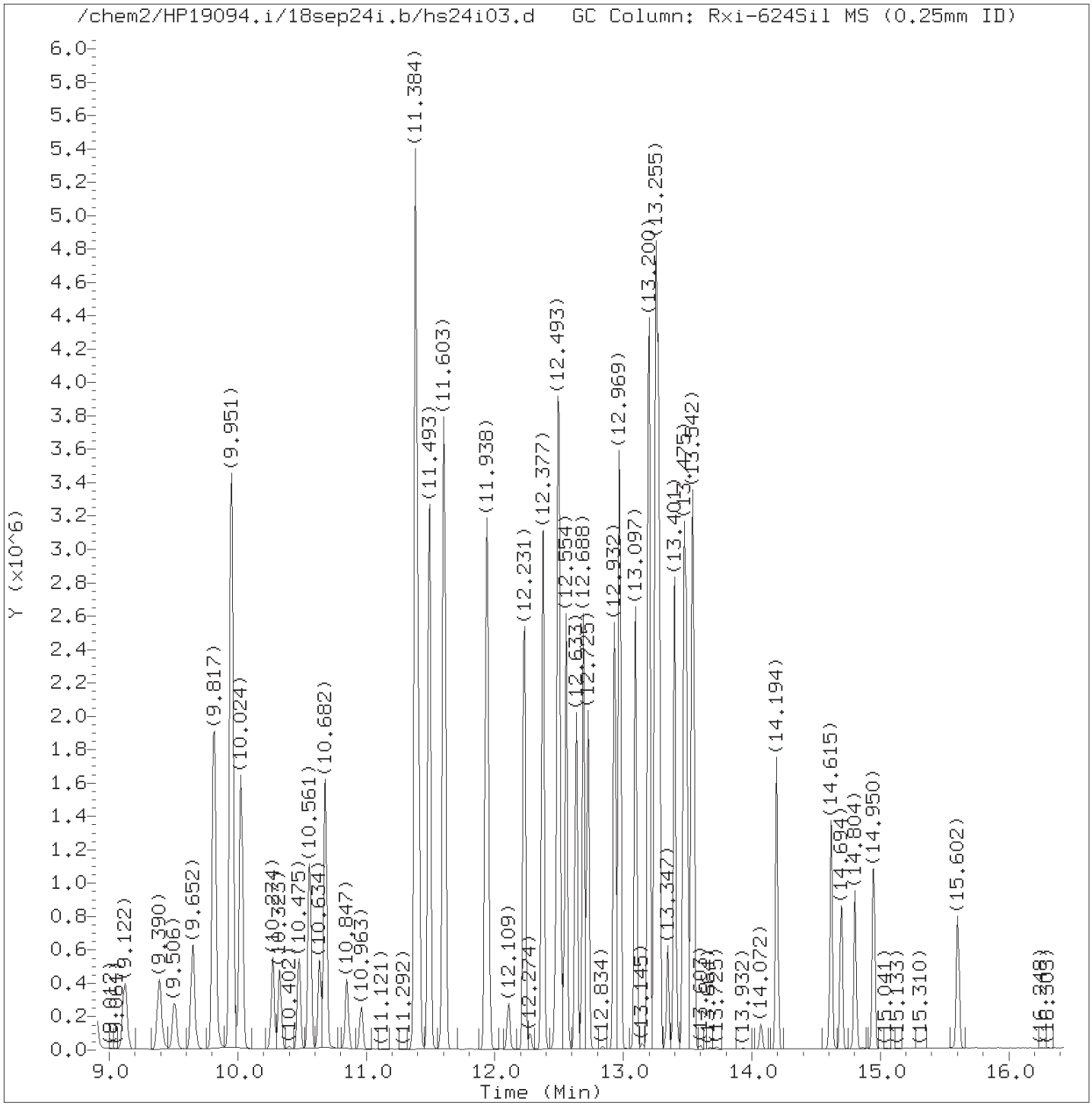
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.068	85	562282	5.241
2) Chloromethane	(2)	2.269	50	535240	5.095
5) Vinyl Chloride	(2)	2.391	62	501670	5.099
6) 1,3-Butadiene	(2)	2.391	39	552344M	4.956
7) Bromomethane	(2)	2.733	94	384528	5.027
8) Chloroethane	(2)	2.830	64	298270	4.998
9) Dichlorofluoromethane	(2)	3.080	67	732855	5.163
10) Trichlorofluoromethane	(2)	3.141	101	647481	5.209
11) Ethyl ether	(2)	3.422	59	212003	5.030
12) Freon 123a	(2)	3.507	67	413759	5.254
13) Acrolein	(1)	3.611	56	1489451	263.916
15) 1,1-Dichloroethene	(2)	3.745	96	285012	5.295
16) Freon 113	(2)	3.775	101	339708	5.355
14) Acetone	(1)	3.787	43	378399M	49.919
17) Methyl Iodide	(2)	3.958	142	580104	5.171
18) Carbon Disulfide	(2)	4.068	76	875498	5.112
21) Methyl Acetate	(1)	4.239	43	107057	5.031
22) Allyl Chloride	(2)	4.257	41	525571	5.137
23) Methylene Chloride	(2)	4.452	84	294254	4.846
26)*t-Butyl Alcohol-d10	(1)	4.482	65	127180M	50.000
28) t-Butyl Alcohol	(1)	4.598	59	218266	100.544
29) Acrylonitrile	(1)	4.812	53	260426	26.603
30) Methyl Tertiary Butyl Ether	(2)	4.860	73	578958	5.230
31) trans-1,2-Dichloroethene	(2)	4.885	96	312820	5.150
32) n-Hexane	(2)	5.305	57	526068	5.446
33) 1,1-Dichloroethane	(2)	5.543	63	603578	5.219
34) di-Isopropyl Ether	(2)	5.592	45	1044288	5.084
35) 2-Chloro-1,3-Butadiene	(2)	5.653	53	558039	5.362
40) 1,2-Dichloroethene (Total)	(2)		96	662378	10.358
37) Ethyl t-butyl ether	(2)	6.128	59	843514	5.178
38) 2-Butanone	(1)	6.342	43	671705	54.133
39) cis-1,2-Dichloroethene	(2)	6.372	96	349558	5.208
41) 2,2-Dichloropropane	(2)	6.391	77	439160	5.316
42) Propionitrile	(1)	6.445	54	368280	109.345
45) Methacrylonitrile	(1)	6.653	67	661065	54.434
47) Bromochloromethane	(2)	6.708	128	145716	5.139
48) Tetrahydrofuran	(1)	6.714	71	177366	53.767
49) Chloroform	(2)	6.854	83	551731	5.131

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.073	113	693943	10.030
50)$Dibromofluoromethane	(2)	7.067	111	707652	9.937
51) 1,1,1-Trichloroethane	(2)	7.086	97	487870	5.304
52) Cyclohexane	(2)	7.183	56	645692	5.378
52) Cyclohexane	(2)	7.183	84	534268	5.397
52) Cyclohexane	(2)	7.177	69	190372	5.380
54) Carbon Tetrachloride	(2)	7.293	117	416126	5.268
55) 1,1-Dichloropropene	(2)	7.299	75	459178	5.265
56) Isobutyl Alcohol	(1)	7.427	41	212923	253.500
57)$1,2-Dichloroethane-d4	(2)	7.537	102	119553M	9.912
57)$1,2-Dichloroethane-d4	(2)	7.531	65	572526	9.814
57)$1,2-Dichloroethane-d4	(2)	7.531	104	76935	9.960
58) Benzene	(2)	7.561	78	1327137	5.151
59) 1,2-Dichloroethane	(2)	7.634	62	288210	4.861
60) t-Amyl methyl ether	(2)	7.744	73	696807	5.159
62) n-Heptane	(2)	7.963	43	544674	5.469
63)*Fluorobenzene	(2)	7.963	96	2745022	10.000
65) n-Butanol	(1)	8.305	56	371428M	523.420
67) Trichloroethene	(2)	8.445	95	342245	5.188
69) Methylcyclohexane	(2)	8.750	83	652245	5.235
70) 1,2-Dichloropropane	(2)	8.780	63	324215	5.186
71) Methyl Methacrylate	(1)	8.854	69	124559	5.541
72) 1,4-Dioxane	(1)	8.872	88	45616M	266.986
73) Dibromomethane	(2)	8.890	93	132300	5.099
74) Bromodichloromethane	(2)	9.122	83	364823	5.191
76) 2-Nitropropane	(1)	9.390	41	351207	55.156
80) cis-1,3-Dichloropropene	(2)	9.646	75	430070	5.256
81) 4-Methyl-2-Pentanone	(1)	9.817	43	1690753	54.779
82)$Toluene-d8	(3)	9.951	98	2759111	10.005
82)$Toluene-d8	(3)	9.951	100	1778973	9.995
83) Toluene	(3)	10.024	92	810475	5.097
85) 1,3-Dichloropropene (total)	(3)		75	750377	10.484
84) trans-1,3-Dichloropropene	(3)	10.274	75	320307	5.228
86) Ethyl Methacrylate	(3)	10.323	69	271825	5.179
88) 1,1,2-Trichloroethane	(3)	10.475	97	183350	5.011
89) Tetrachloroethene	(3)	10.561	166	370654	5.159
90) 1,3-Dichloropropane	(3)	10.640	76	332490	5.127
91) 2-Hexanone	(1)	10.682	43	1145783	54.536

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) Dibromochloromethane	(3)	10.847	129	226639	5.168
95) 1,2-Dibromoethane	(3)	10.963	107	175991	5.132
96) 1-Chlorohexane	(3)	11.384	91	479490	5.056
97)*Chlorobenzene-d5	(3)	11.384	117	2142668	10.000
98) Chlorobenzene	(3)	11.408	112	858660	5.090
99) 1,1,1,2-Tetrachloroethane	(3)	11.487	131	291506	5.236
100) Ethylbenzene	(3)	11.493	91	1605334	5.166
101) m+p-Xylene	(3)	11.603	106	1200436	10.414
105) Xylene (Total)	(3)		106	1775566	15.633
104) o-Xylene	(3)	11.932	106	575130	5.219
106) Styrene	(3)	11.944	104	938150	5.321
107) Bromoform	(3)	12.109	173	125482	5.207
108) Isopropylbenzene	(3)	12.231	105	1586197	5.273
111)$4-Bromofluorobenzene	(3)	12.371	95	995484	9.915
111)$4-Bromofluorobenzene	(3)	12.377	174	860774	9.873
113) 1,1,2,2-Tetrachloroethane	(4)	12.475	83	224515M	5.196
114) Bromobenzene	(4)	12.493	156	342709	5.218
115) trans-1,4-Dichloro-2-butene	(1)	12.499	53	534181	55.258
116) 1,2,3-Trichloropropane	(4)	12.524	110	56735M	5.079
117) n-Propylbenzene	(4)	12.554	91	1883753	5.275
119) 2-Chlorotoluene	(4)	12.633	126	361184	5.214
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	1294691	5.351
122) 4-Chlorotoluene	(4)	12.725	126	365201	5.261
125) tert-Butylbenzene	(4)	12.932	134	275287	5.232
126) Pentachloroethane	(4)	12.969	167	220484	5.369
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	1314436	5.324
128) sec-Butylbenzene	(4)	13.097	105	1675573	5.345
131) 1,3-Dichlorobenzene	(4)	13.194	146	679711	5.208
132) p-Isopropyltoluene	(4)	13.200	119	1399618	5.390
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1089195	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	661942	5.167
135) 1,2,3-Trimethylbenzene	(4)	13.280	120	569393	5.027
136) Benzyl Chloride	(4)	13.347	126	81818	5.238
138) n-Butylbenzene	(4)	13.493	92	687040	5.330
139) 1,2-Dichlorobenzene	(4)	13.529	146	594602	5.164
143) 1,2-Dibromo-3-chloropropane	(1)	14.072	155	29297	5.600
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	502164	5.172
145) 1,2,4-Trichlorobenzene	(4)	14.621	180	407904	5.158

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

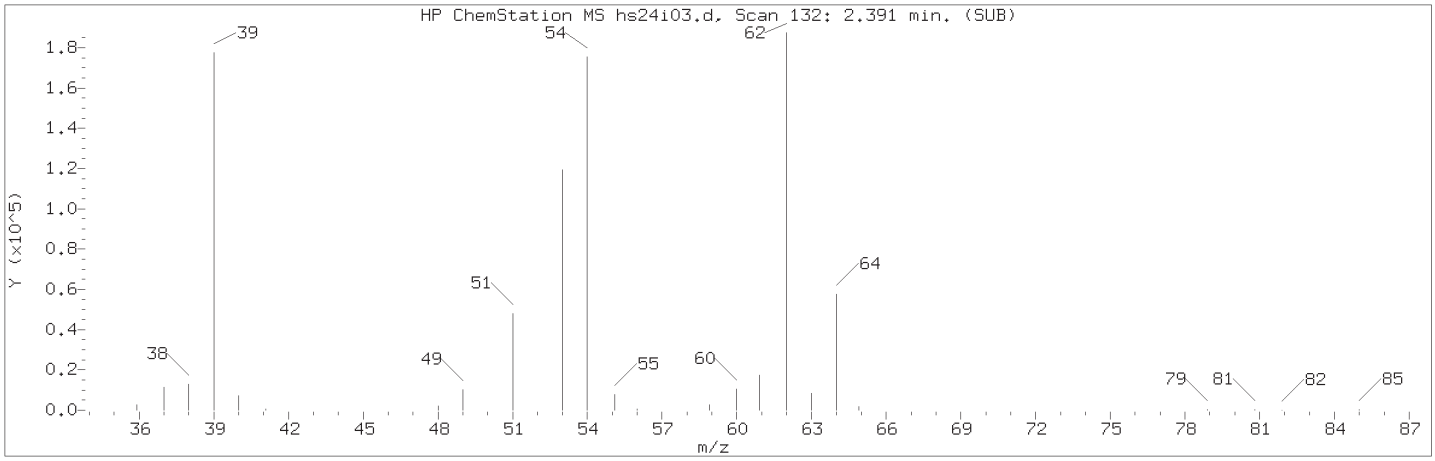
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

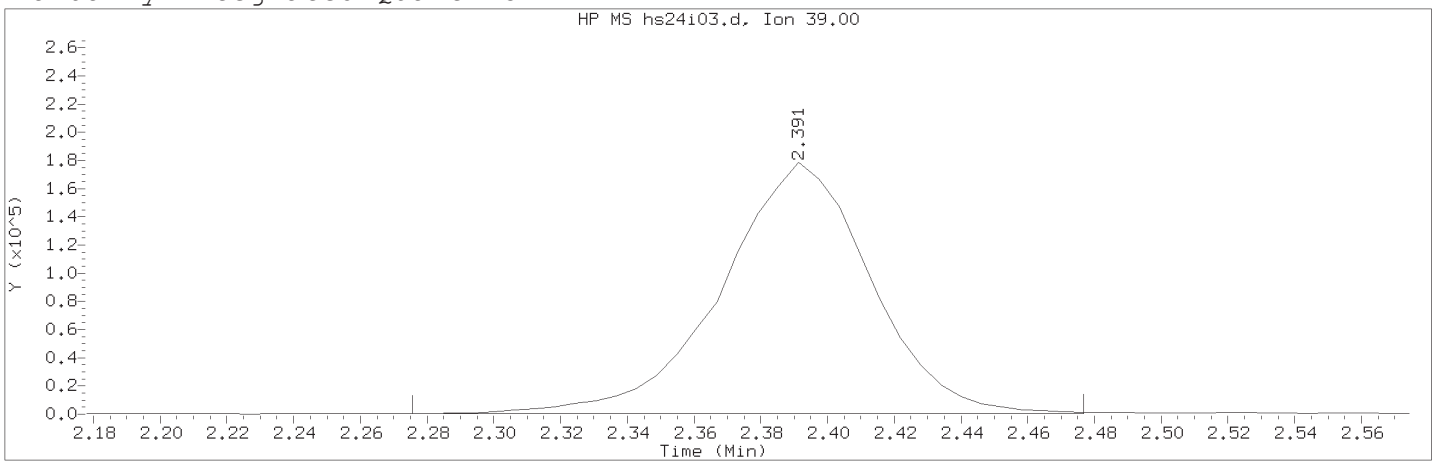
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) Hexachlorobutadiene	(4)	14.700	225	154730	5.177
147) Naphthalene	(4)	14.804	128	665320	5.317
148) 1,2,3-Trichlorobenzene	(4)	14.950	180	336232	5.171

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

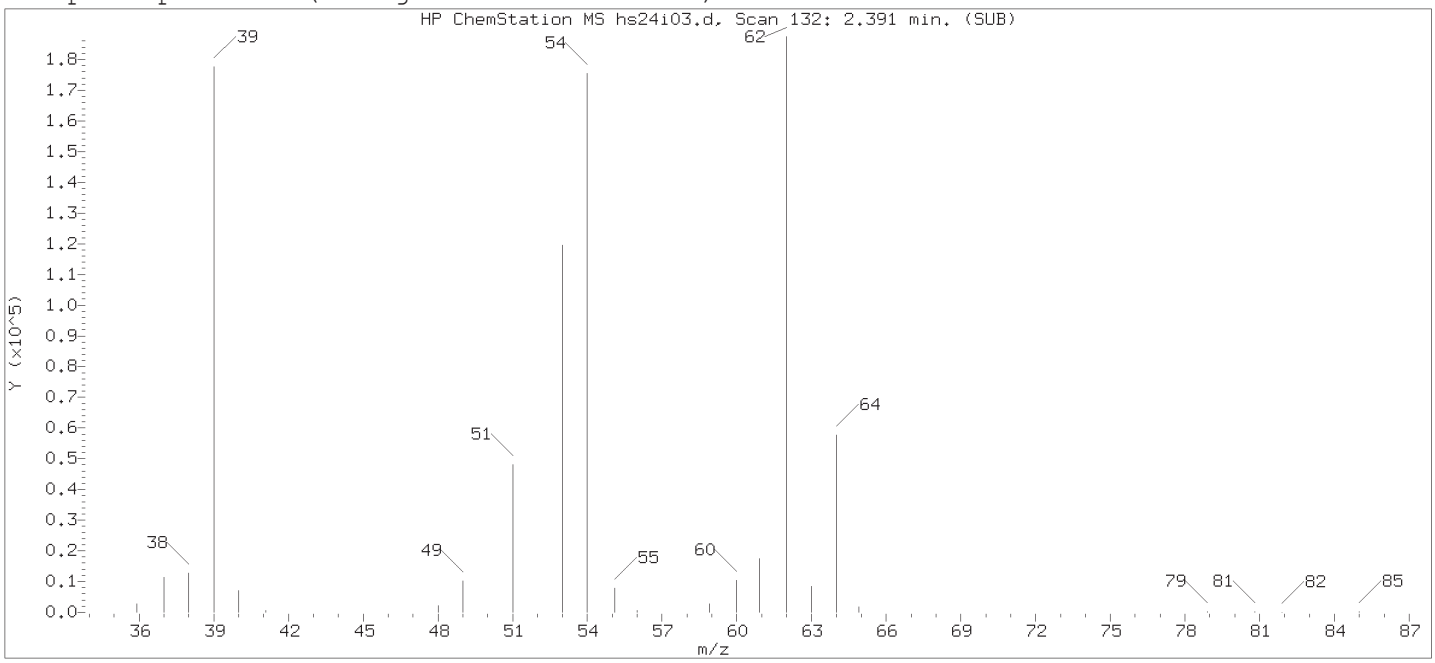
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 132
Retention Time (minutes): 2.391
Quant Ion : 39.00
Area (flag) : 552344M
On-Column Amount (ng) : 4.9561
Integration start scan : 112 Integration stop scan: 145
Y at integration start : 458 Y at integration end: 458

Reason for manual integration: improper integration

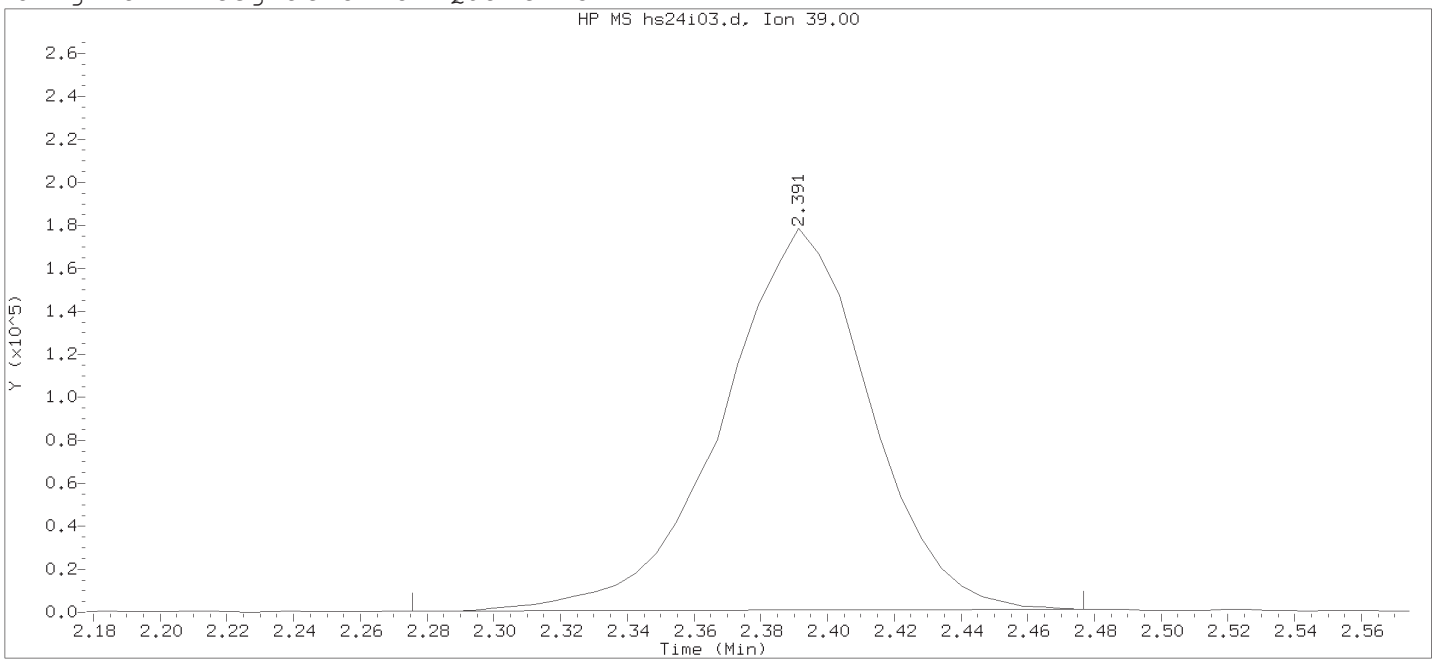
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

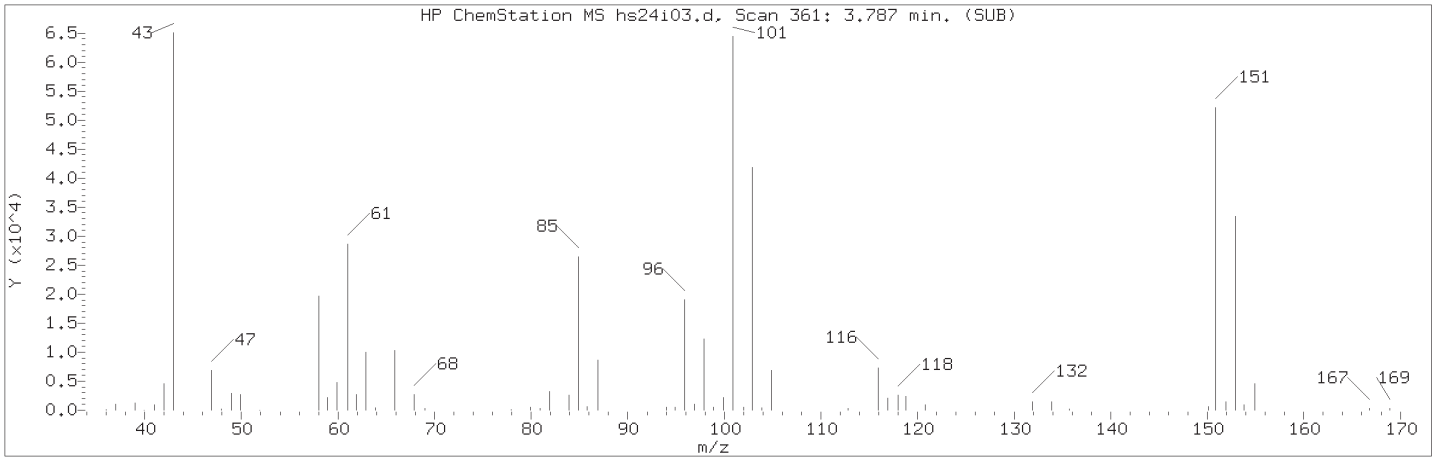
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

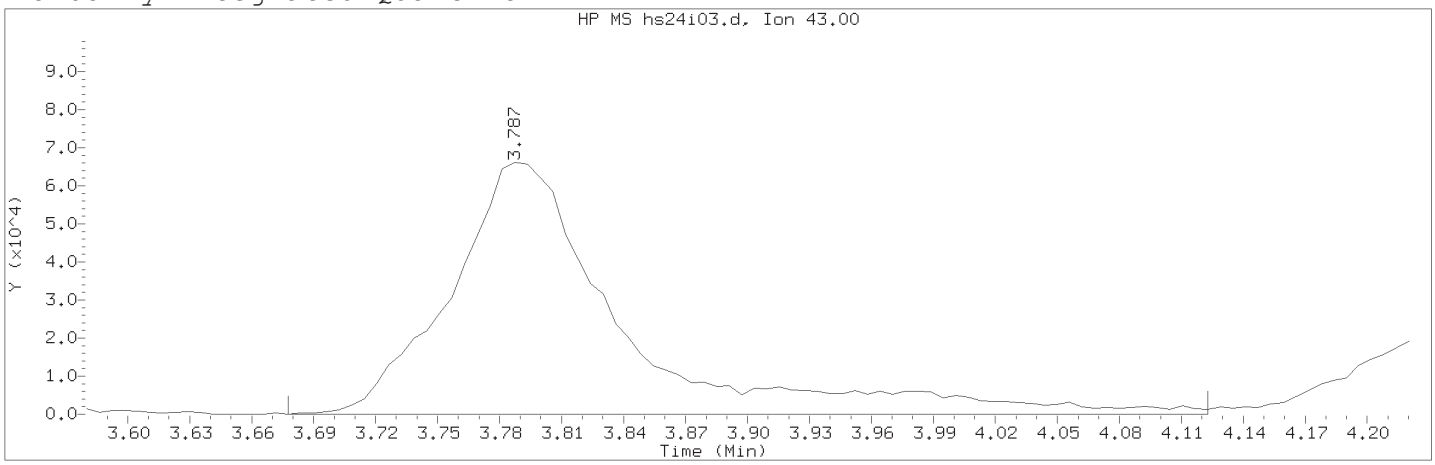
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 132
Retention Time (minutes): 2.391
Quant Ion : 39.00
Area : 547218
On-column Amount (ng) : 4.9849
Integration start scan : 112 Integration stop scan: 145
Y at integration start : 437 Y at integration end: 1303

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

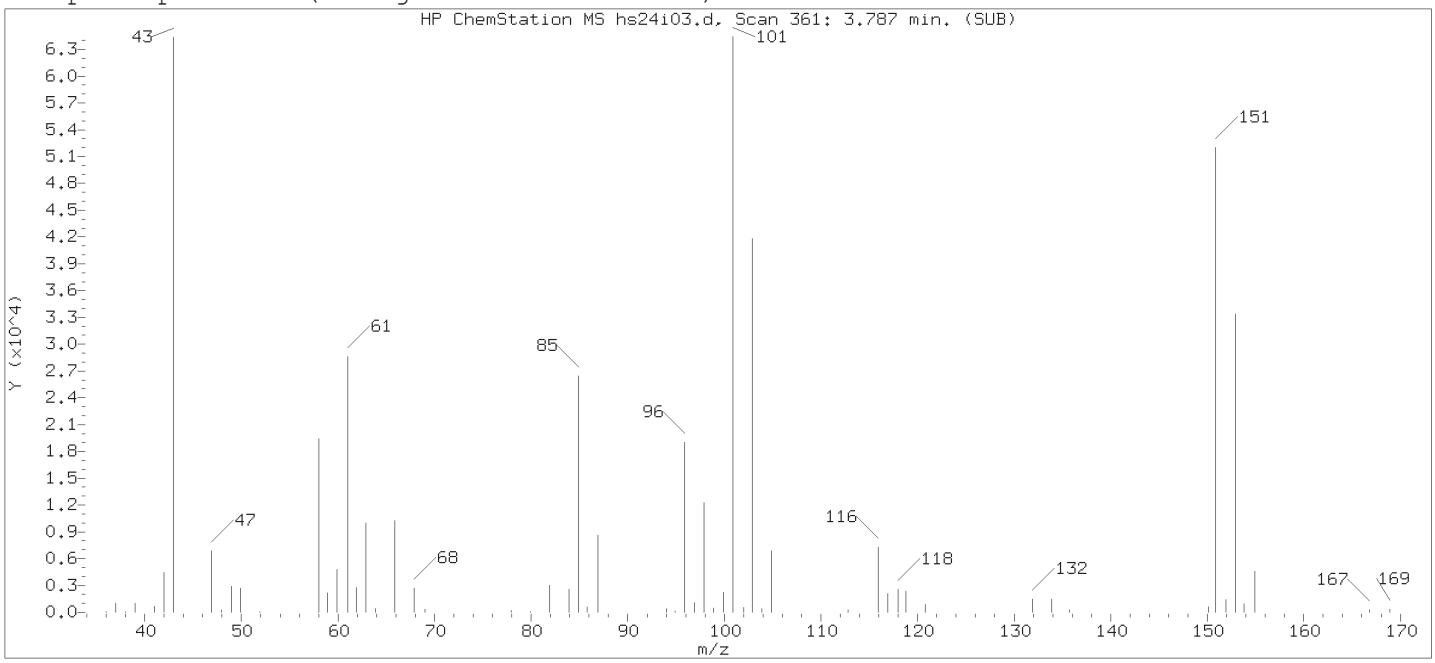
Compound Number : 14
Compound Name : Acetone
Scan Number : 361
Retention Time (minutes): 3.787
Quant Ion : 43.00
Area (flag) : 378399M
On-Column Amount (ng) : 49.9188
Integration start scan : 342 Integration stop scan: 415
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

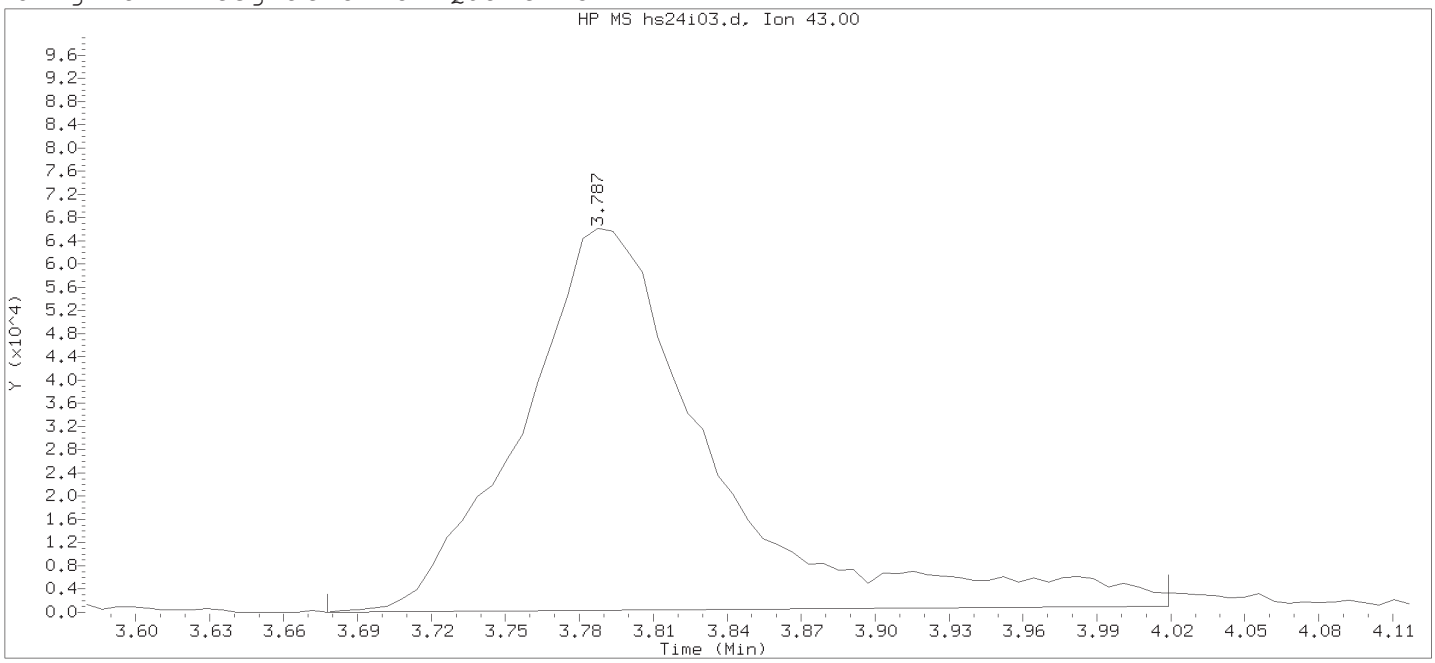
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

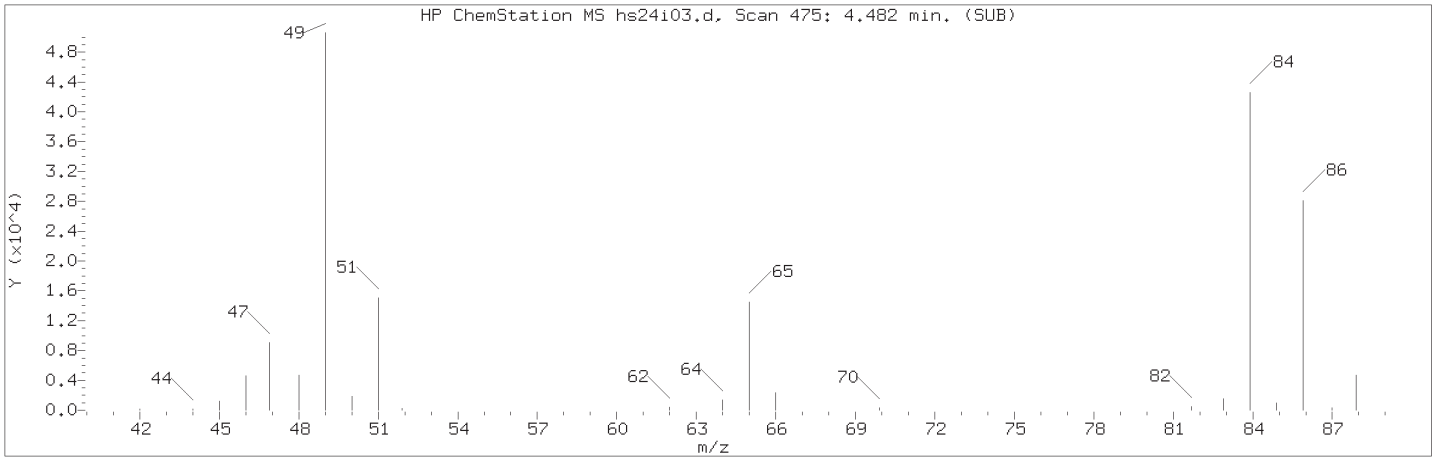
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

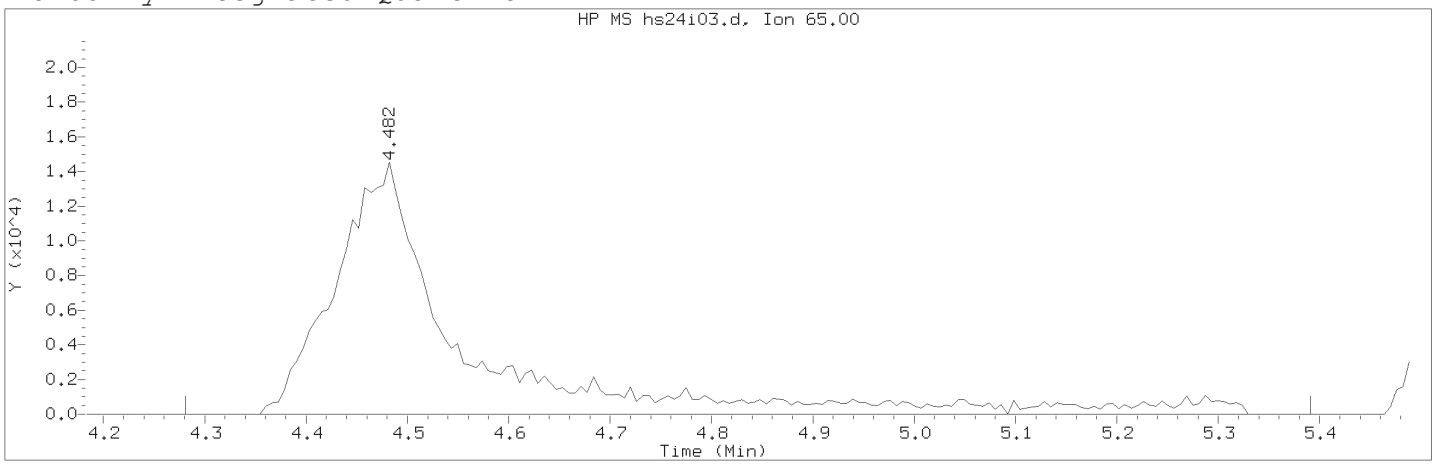
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 361		
Retention Time (minutes)	: 3.787		
Quant Ion	: 43.00		
Area	: 353758		
On-column Amount (ng)	: 50.2605		
Integration start scan	: 342	Integration stop scan:	398
Y at integration start	: 0	Y at integration end:	1061

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

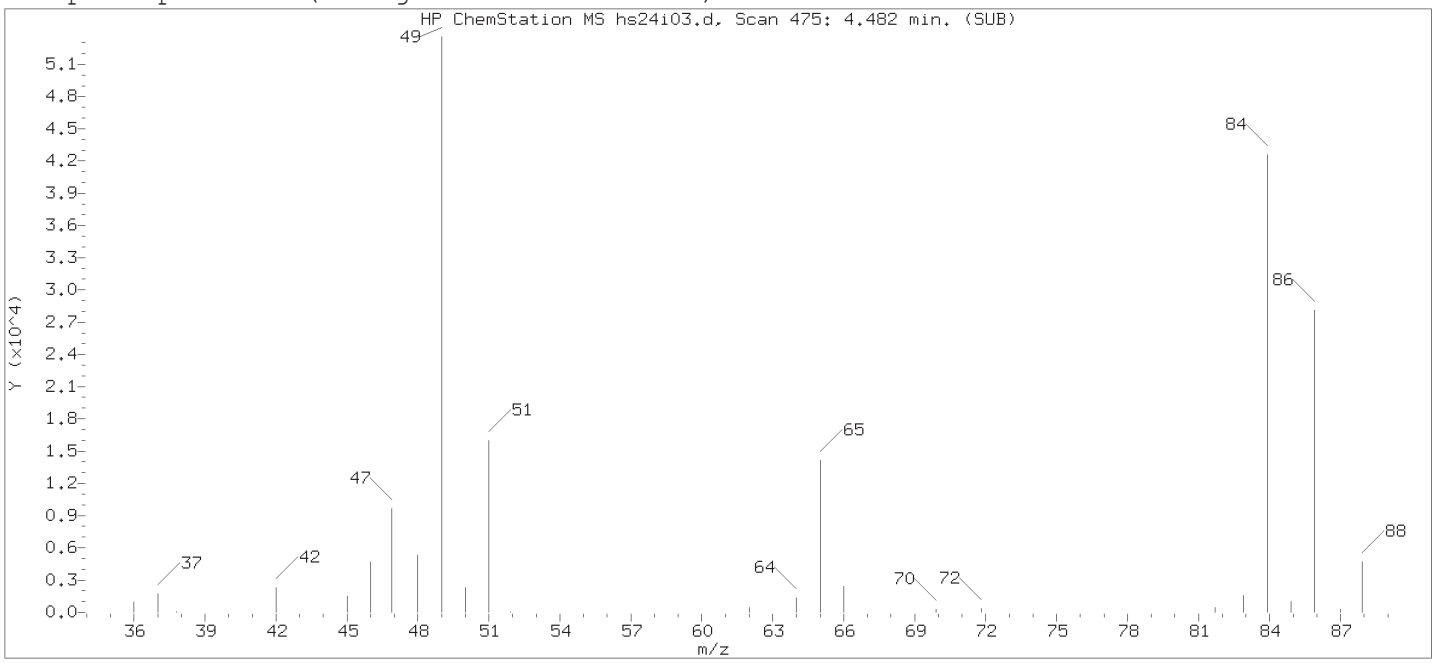
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 475
Retention Time (minutes): 4.482
Quant Ion : 65.00
Area (flag) : 127180M
On-Column Amount (ng) : 50.0000
Integration start scan : 441 Integration stop scan: 623
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

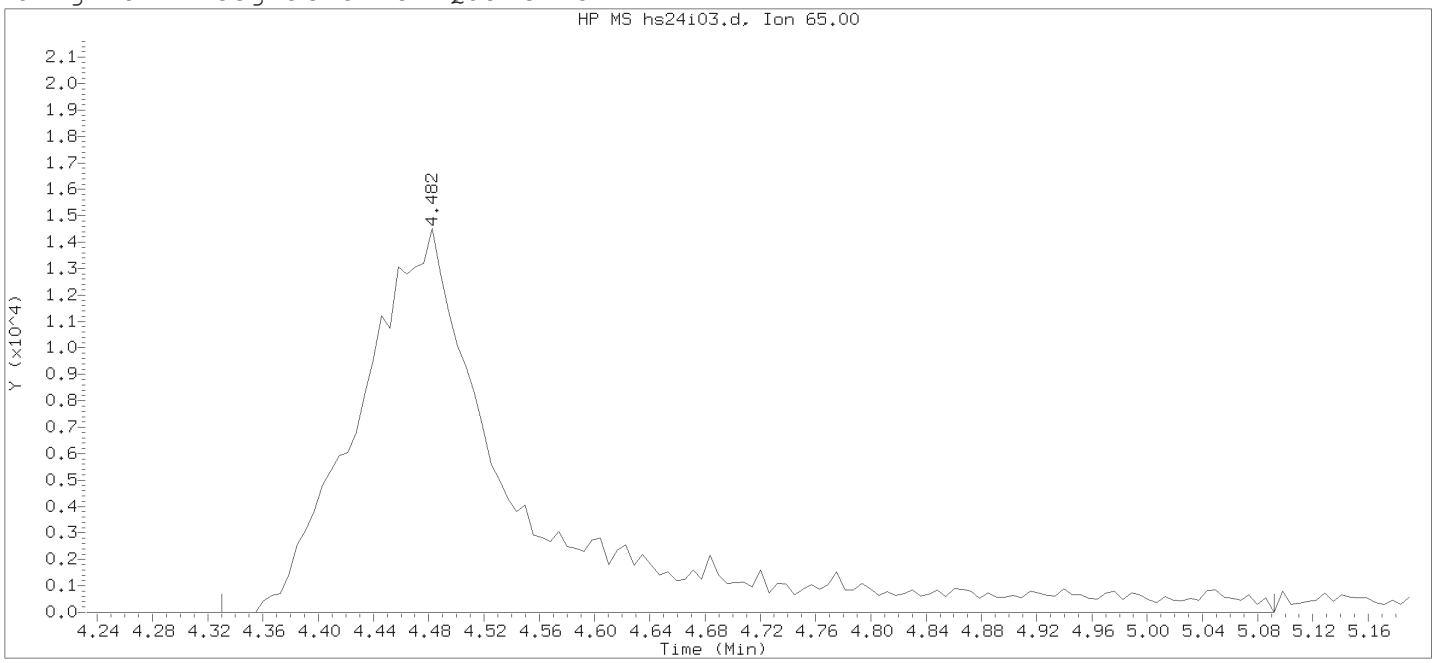
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

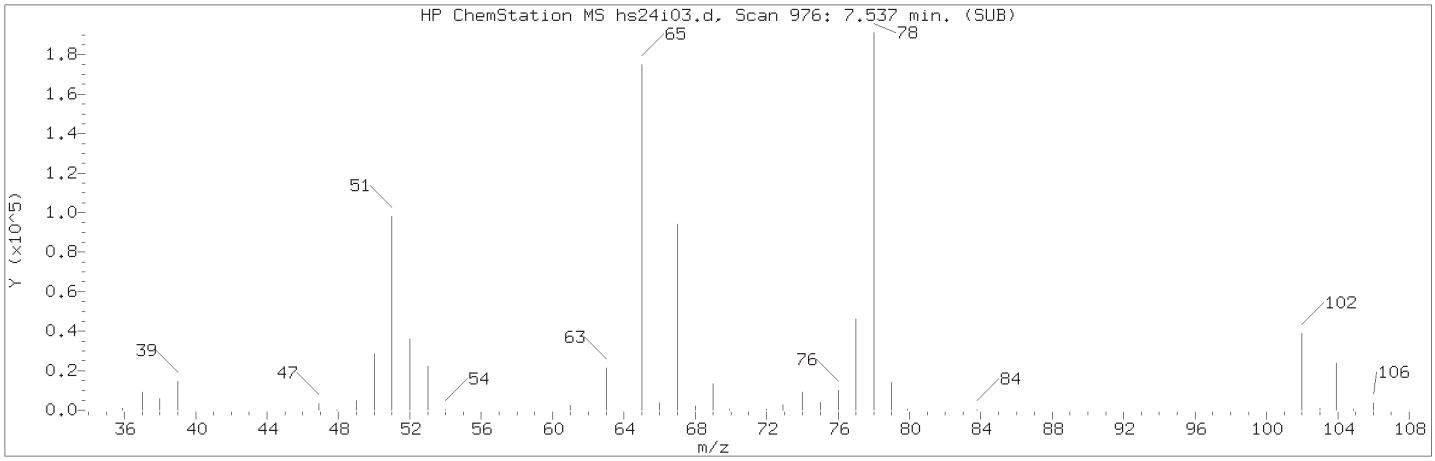
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

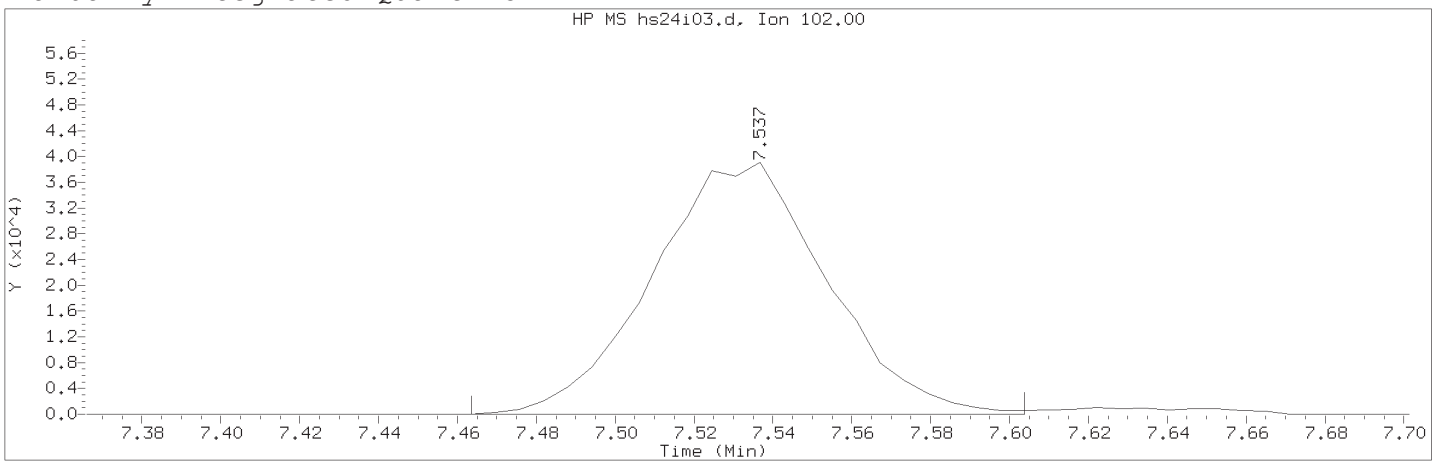
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 475
Retention Time (minutes): 4.482
Quant Ion : 65.00
Area : 119408
On-column Amount (ng) : 50.0000
Integration start scan : 449 Integration stop scan: 574
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

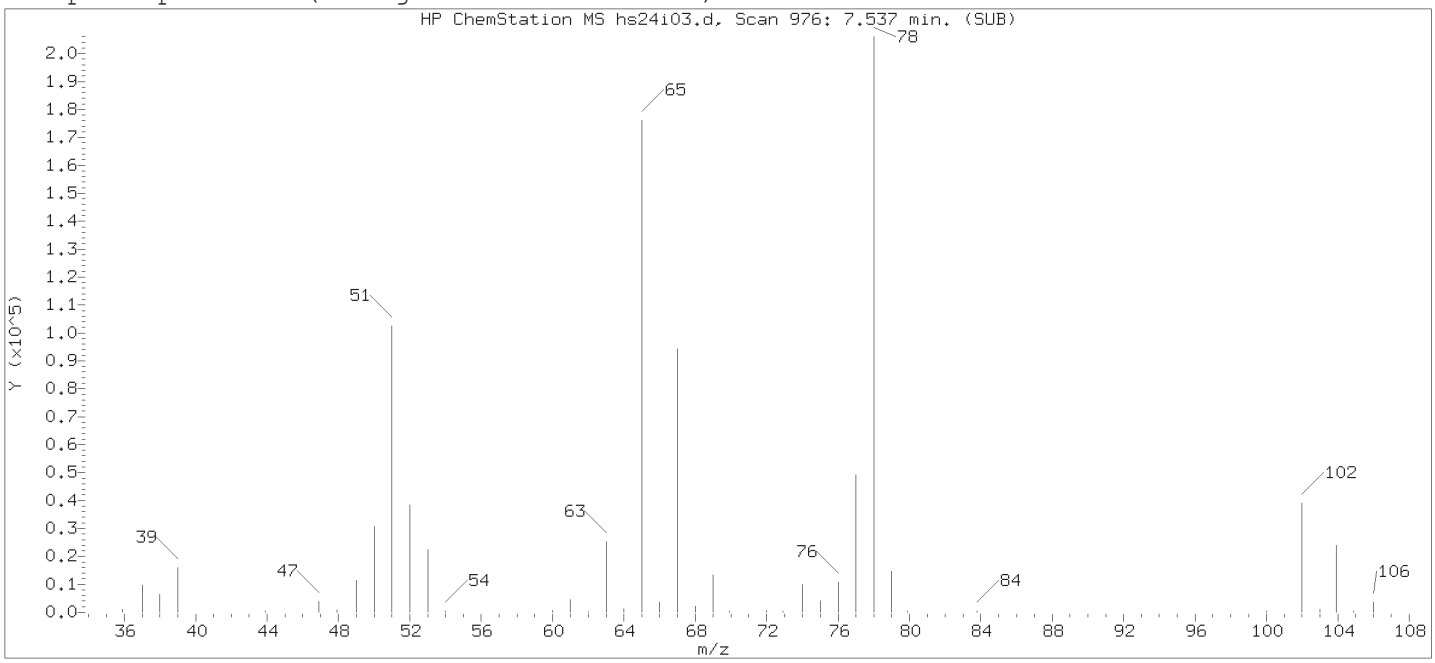
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 976
Retention Time (minutes): 7.537
Quant Ion : 102.00
Area (flag) : 119553M
On-Column Amount (ng) : 9.9122
Integration start scan : 963 Integration stop scan: 986
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

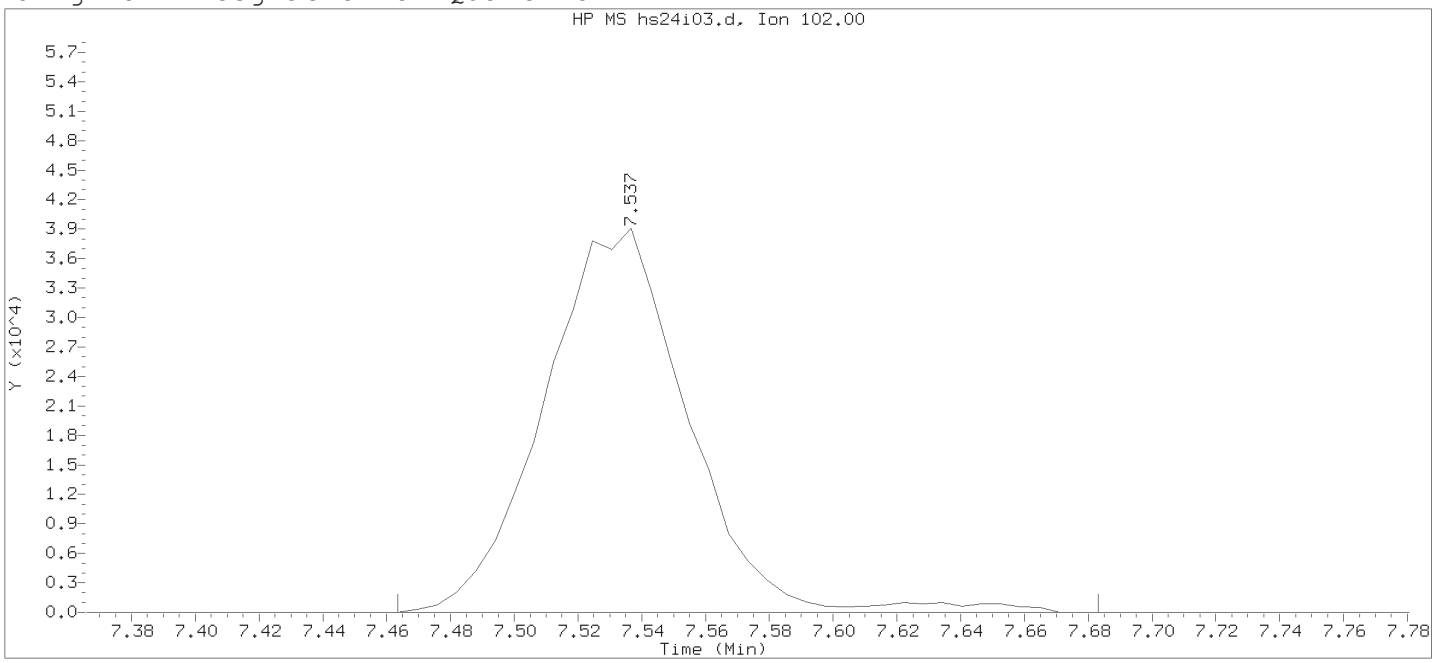
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

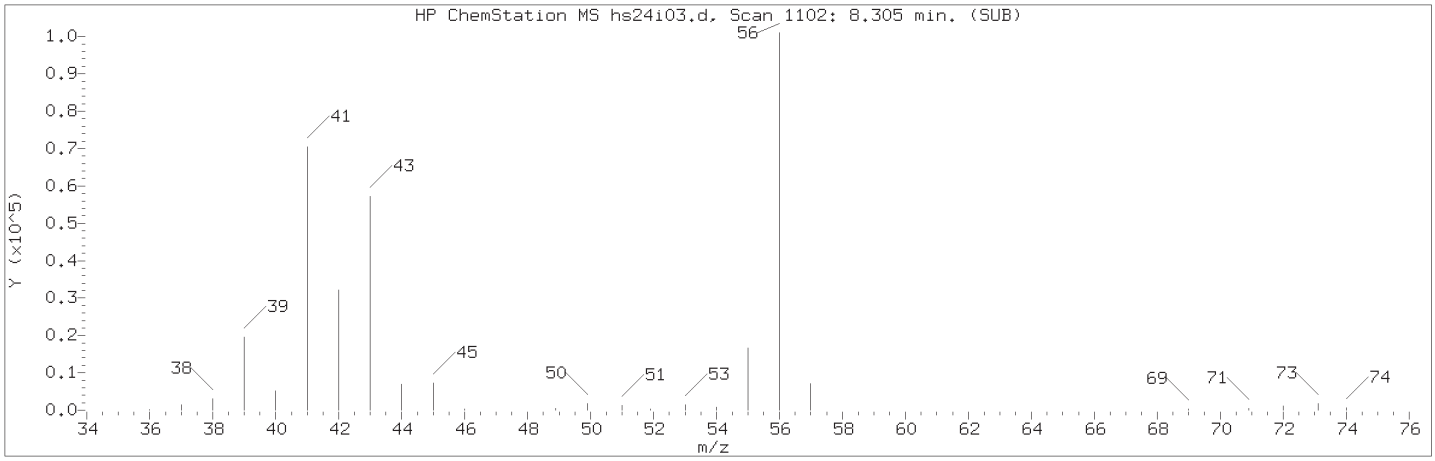
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

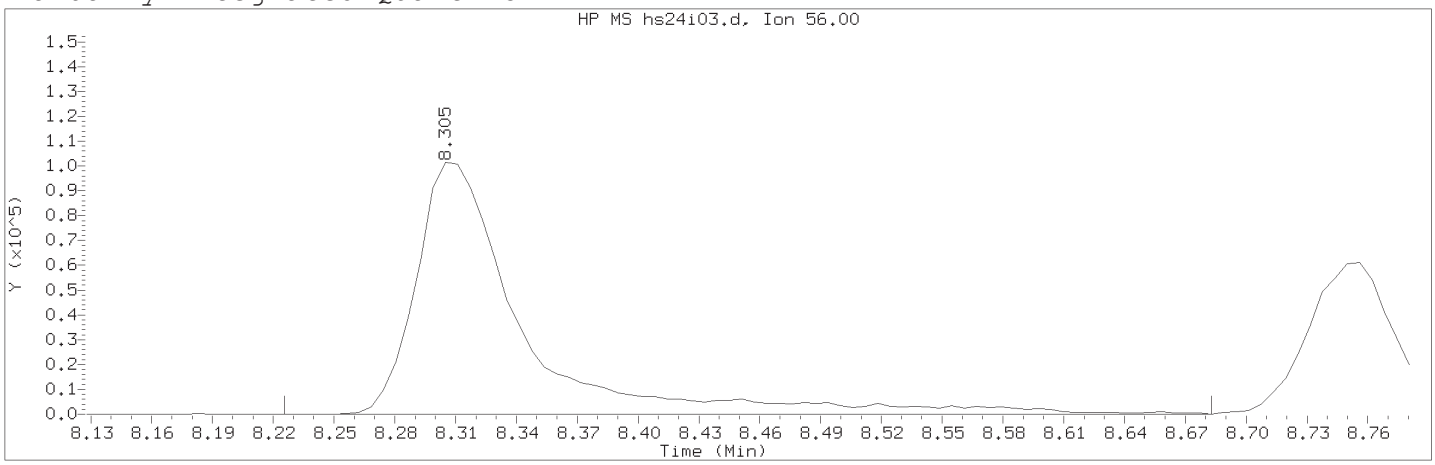
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 976
Retention Time (minutes): 7.537
Quant Ion : 102.00
Area : 122323
On-column Amount (ng) : 10.0921
Integration start scan : 963 Integration stop scan: 999
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

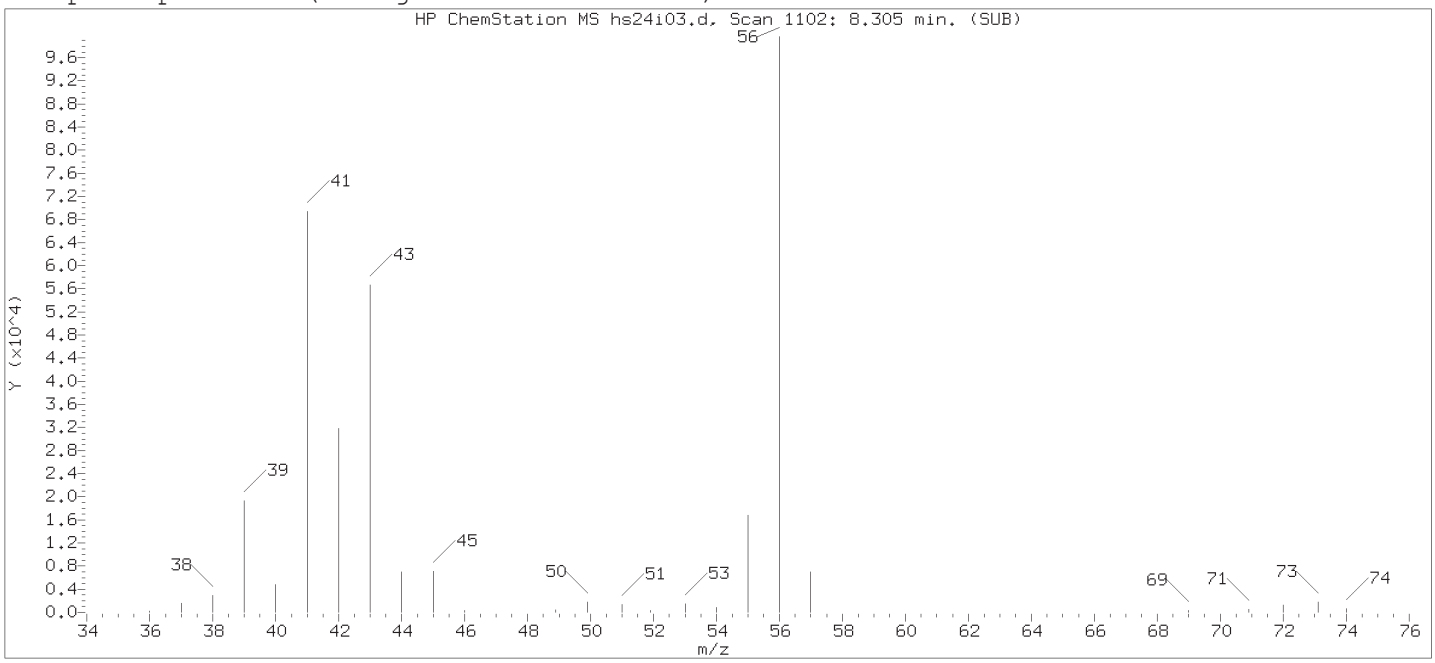
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1102
Retention Time (minutes): 8.305
Quant Ion : 56.00
Area (flag) : 371428M
On-Column Amount (ng) : 523.4201
Integration start scan : 1088 Integration stop scan: 1163
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

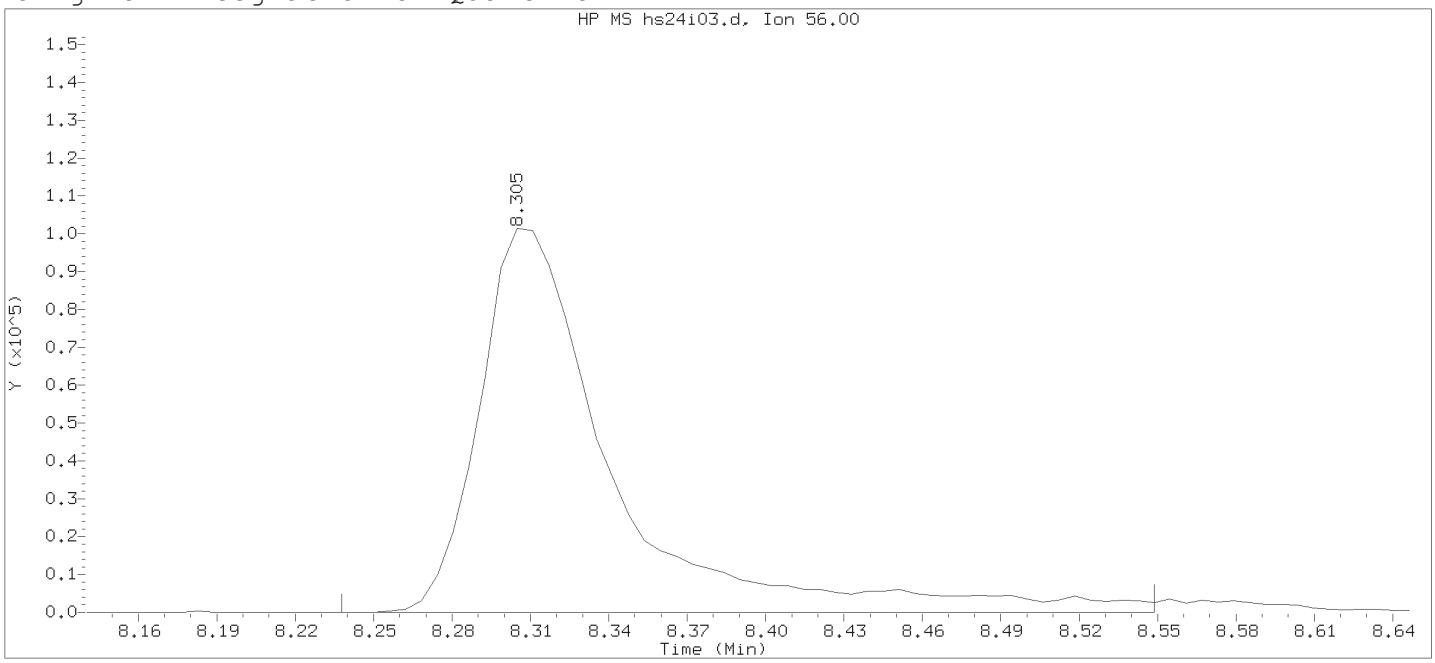
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

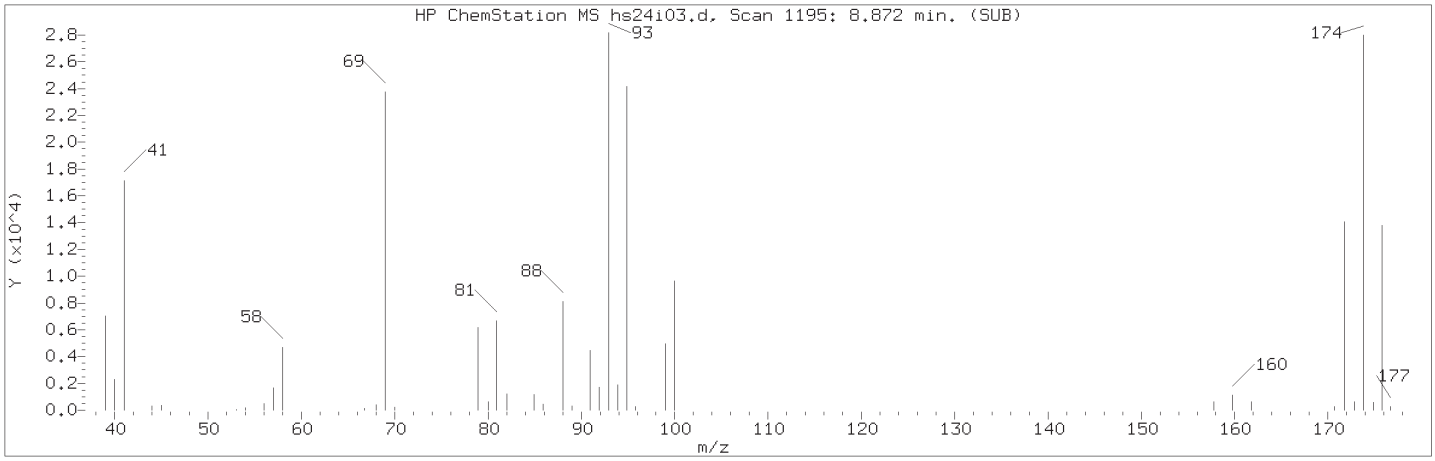
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

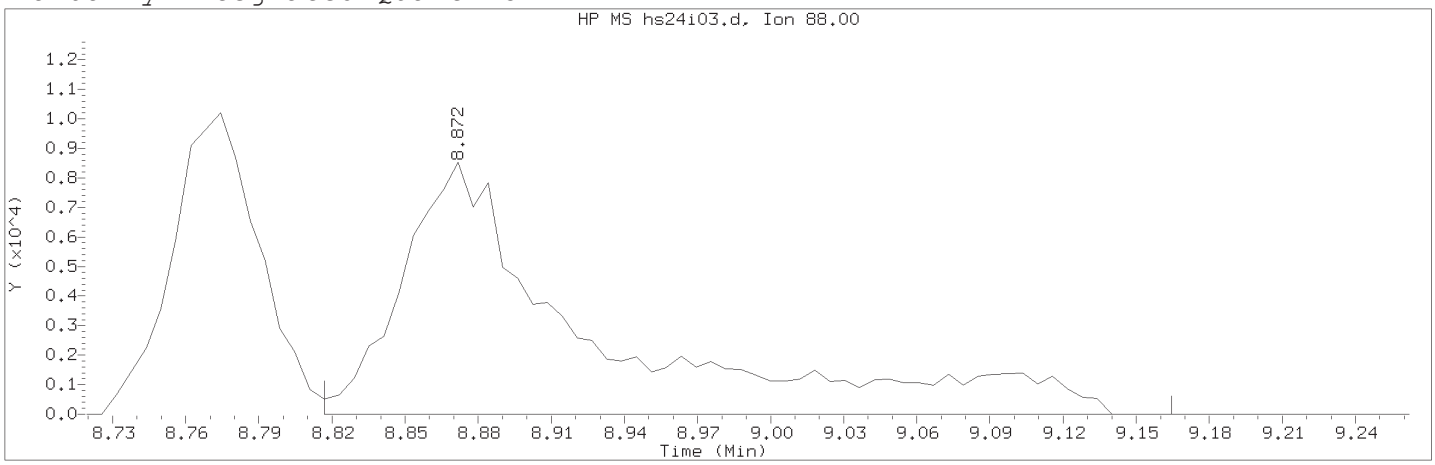
Compound Number	: 65		
Compound Name	: n-Butanol		
Scan Number	: 1102		
Retention Time (minutes)	: 8.305		
Quant Ion	: 56.00		
Area	: 359413		
On-column Amount (ng)	: 483.9616		
Integration start scan	: 1090	Integration stop scan:	1141
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

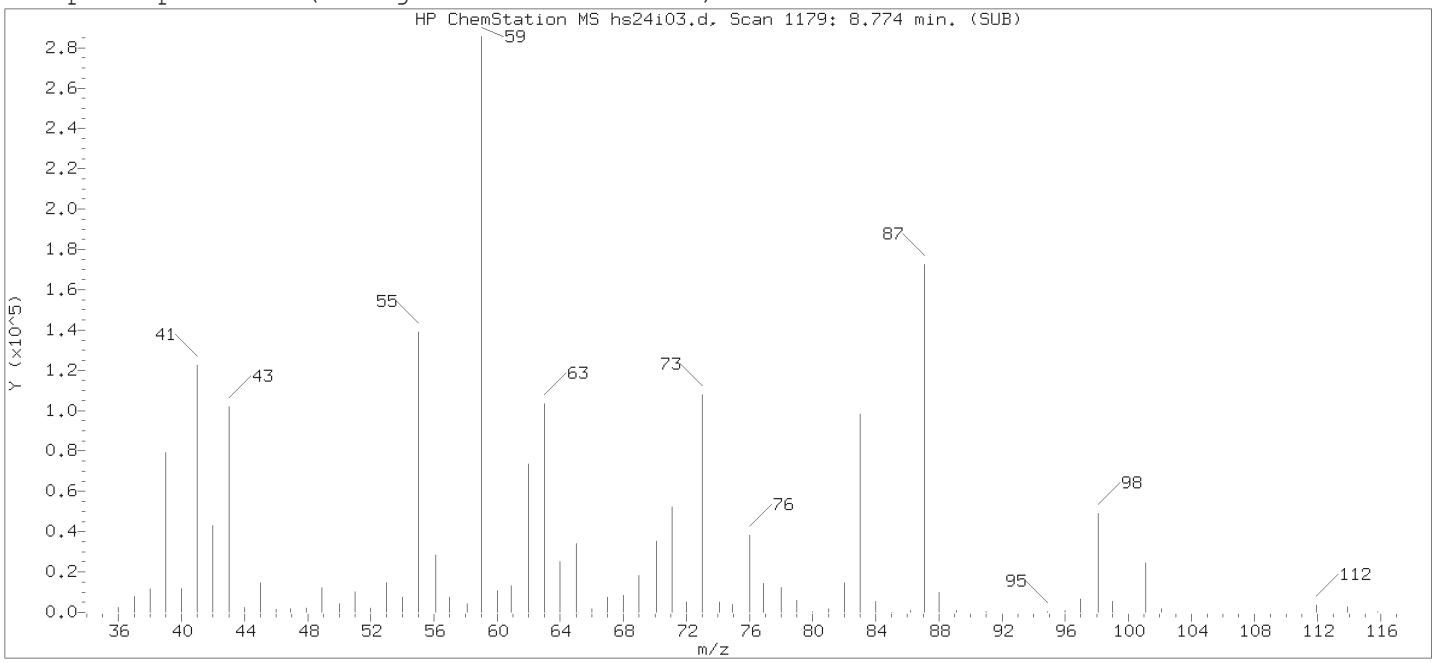
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1195
Retention Time (minutes): 8.872
Quant Ion : 88.00
Area (flag) : 45616M
On-Column Amount (ng) : 266.9855
Integration start scan : 1185 Integration stop scan: 1242
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

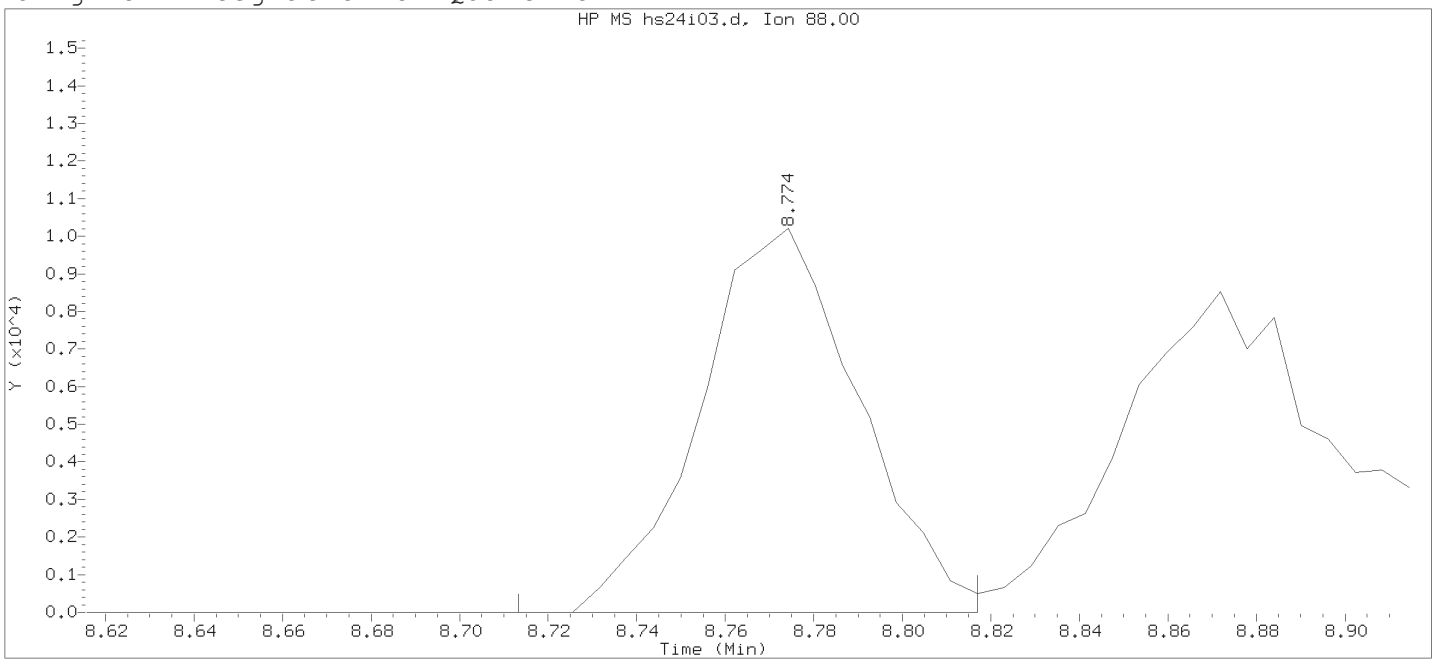
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

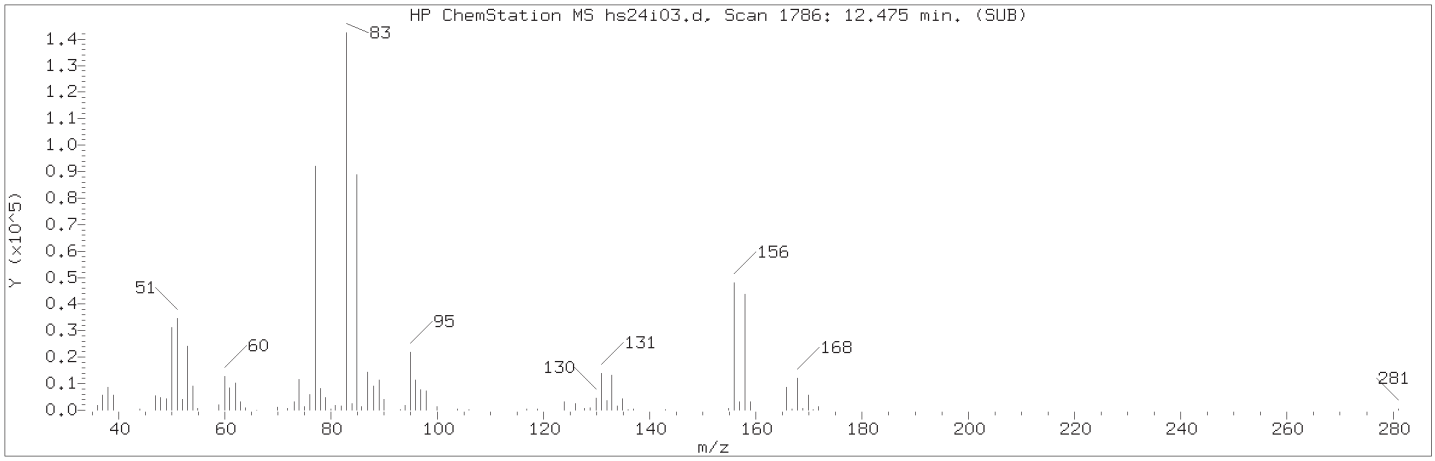
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

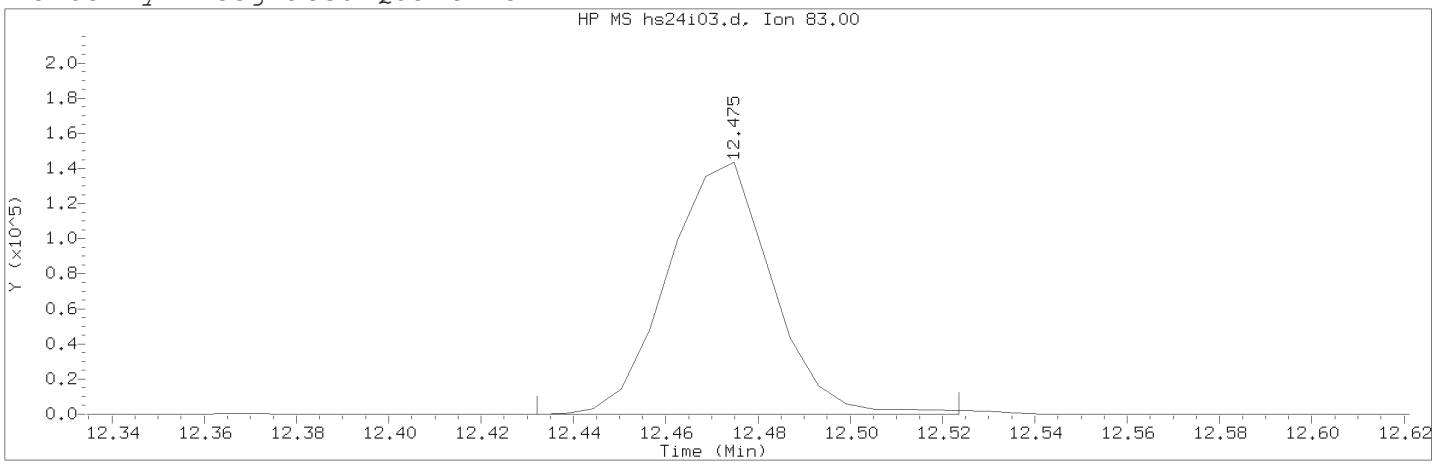
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1179
Retention Time (minutes): 8.774
Quant Ion : 88.00
Area : 25388
On-column Amount (ng) : 205.7756
Integration start scan : 1168 Integration stop scan: 1185
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

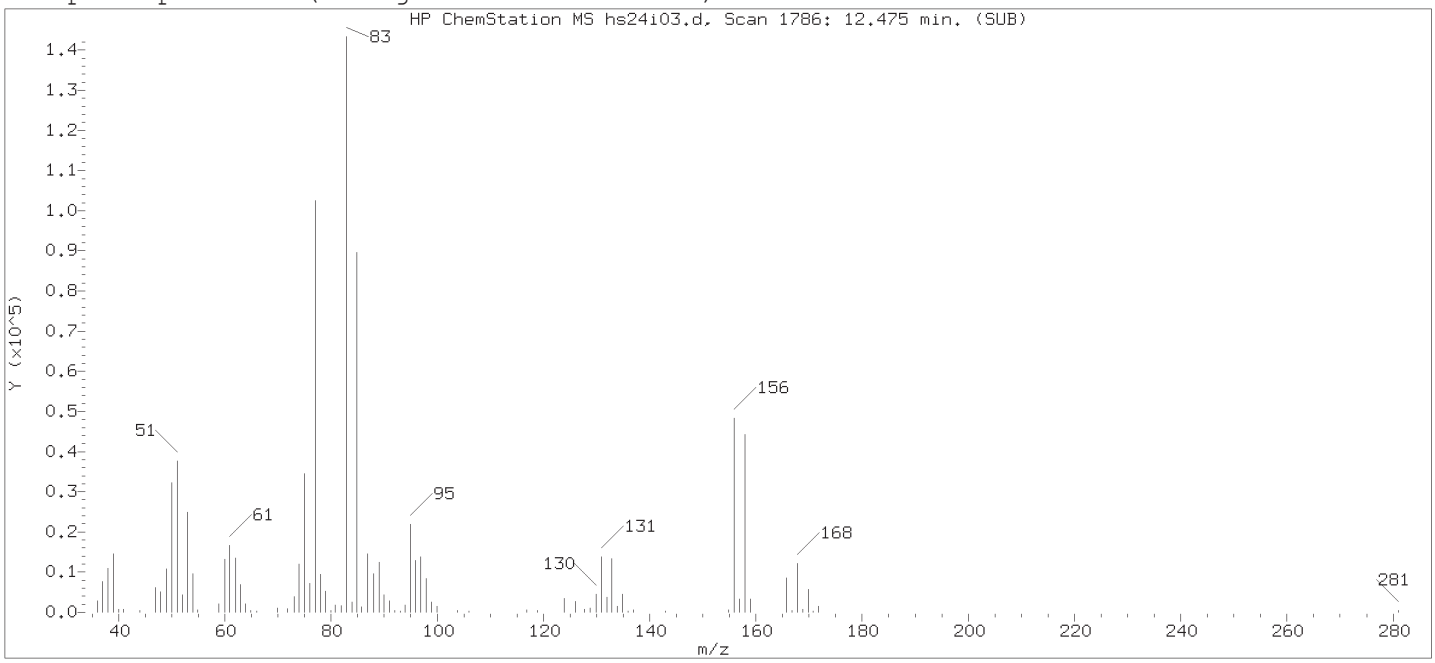
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area (flag) : 224515M
On-Column Amount (ng) : 5.1965
Integration start scan : 1778 Integration stop scan: 1793
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

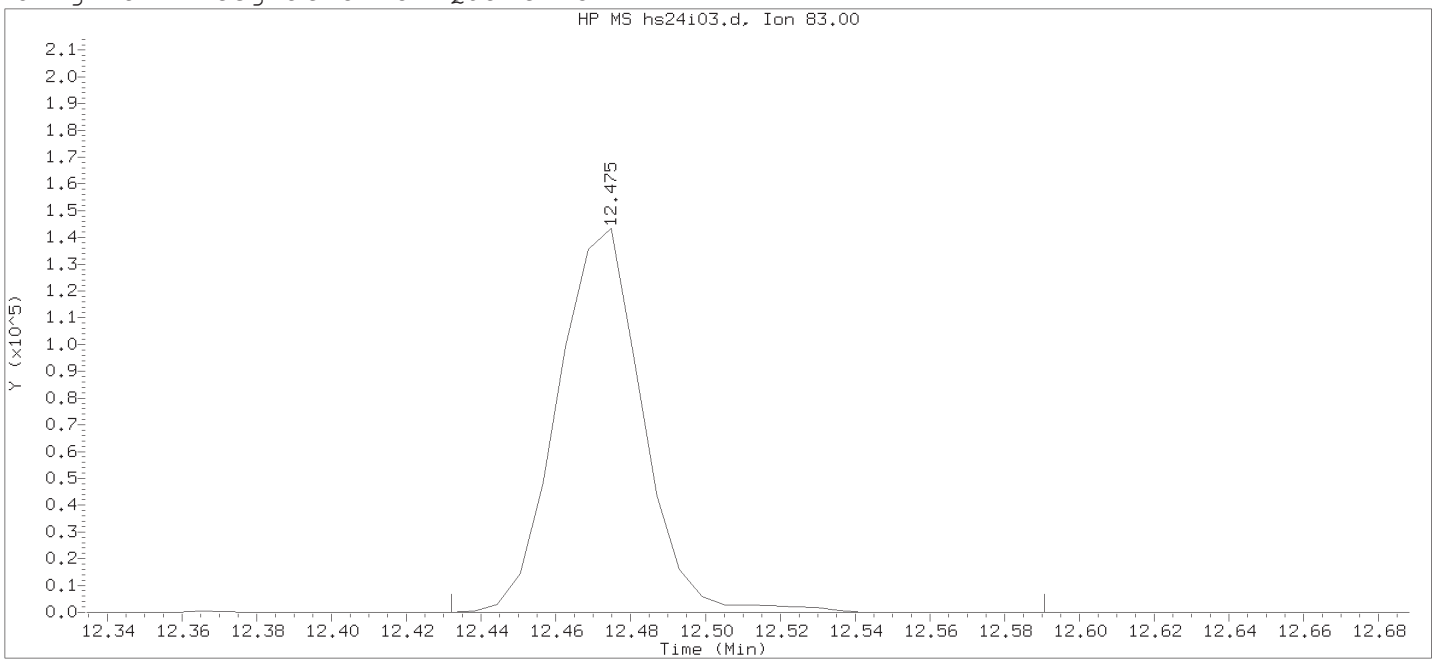
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

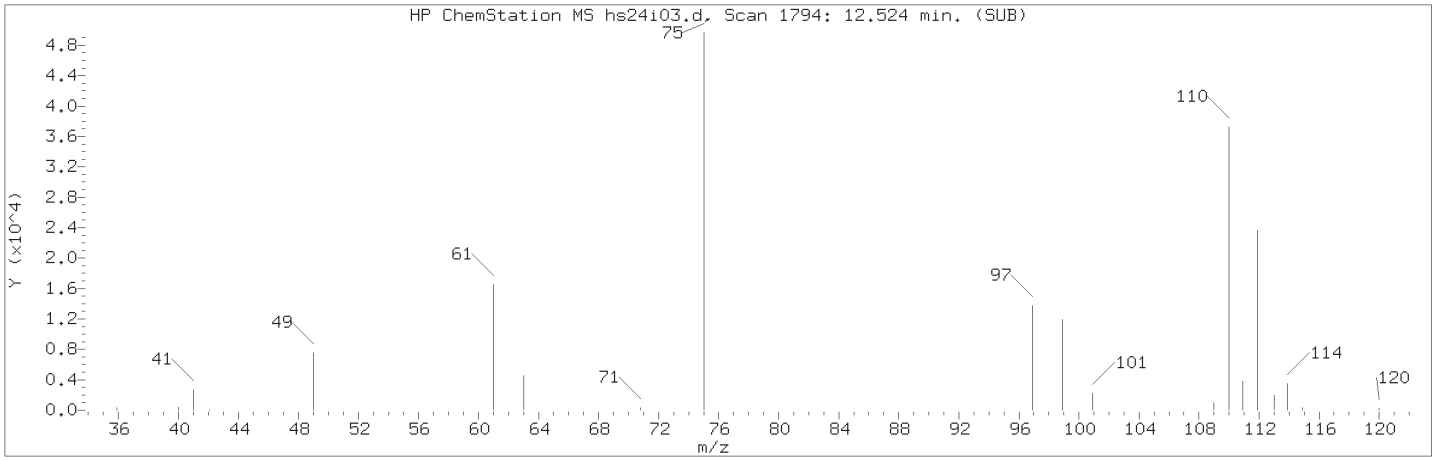
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

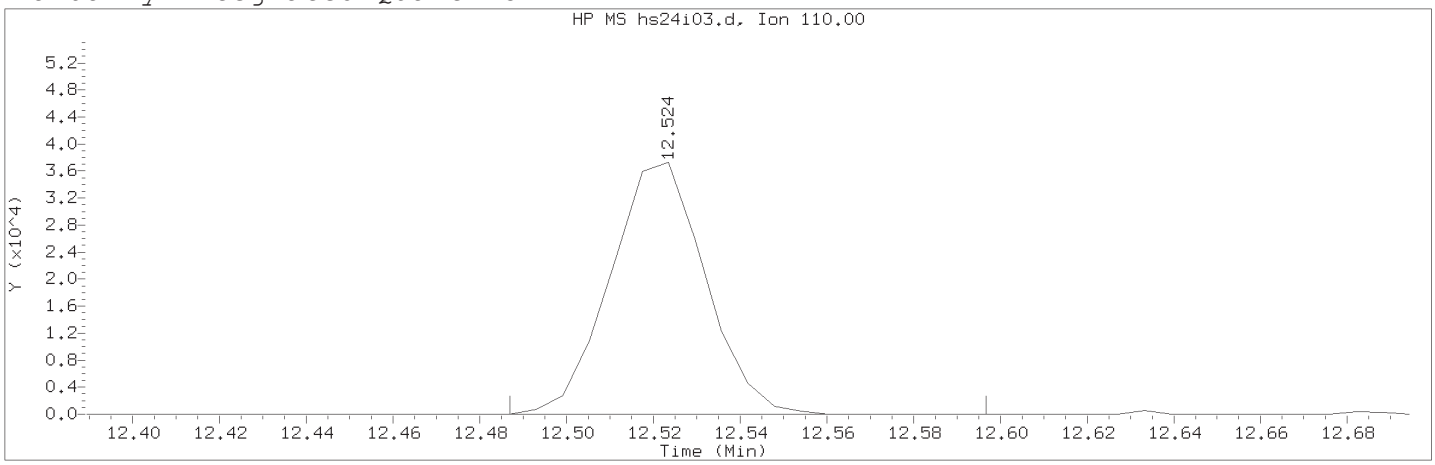
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area : 225435
On-column Amount (ng) : 4.9474
Integration start scan : 1778 Integration stop scan: 1804
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

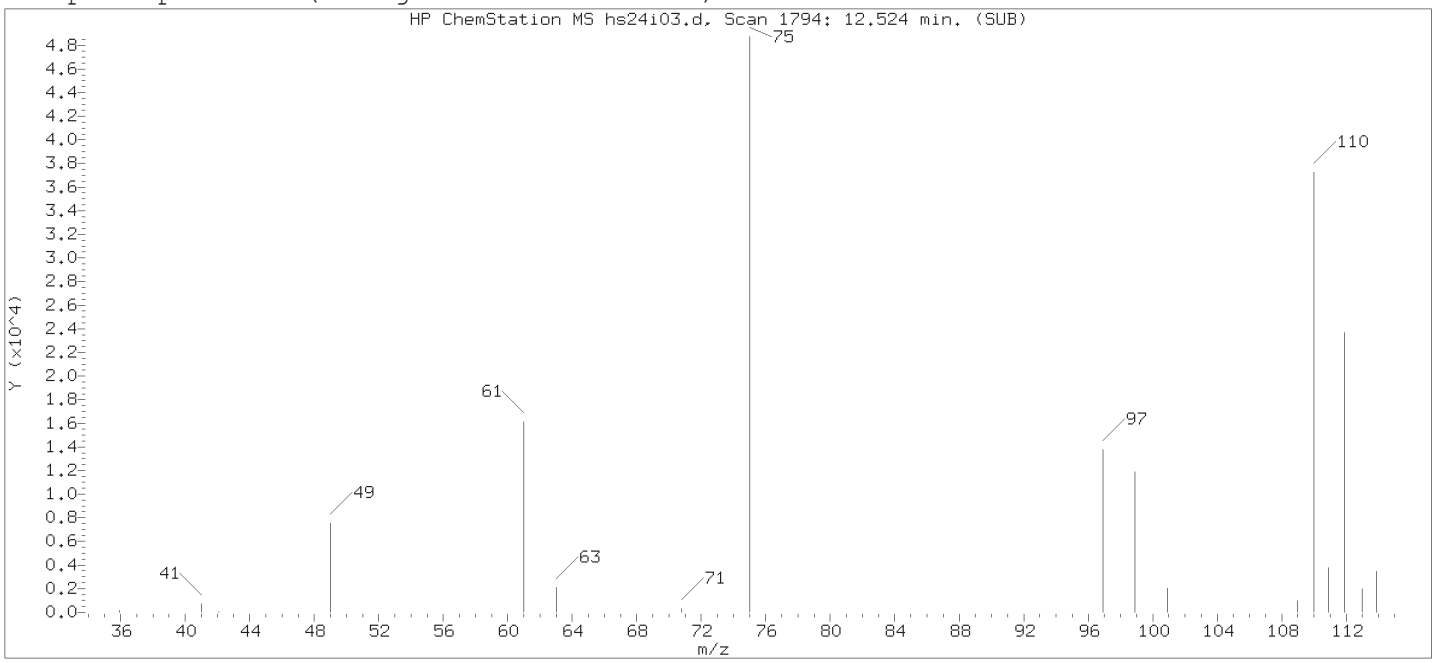
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1794
Retention Time (minutes): 12.524
Quant Ion : 110.00
Area (flag) : 56735M
On-Column Amount (ng) : 5.0793
Integration start scan : 1787 Integration stop scan: 1805
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

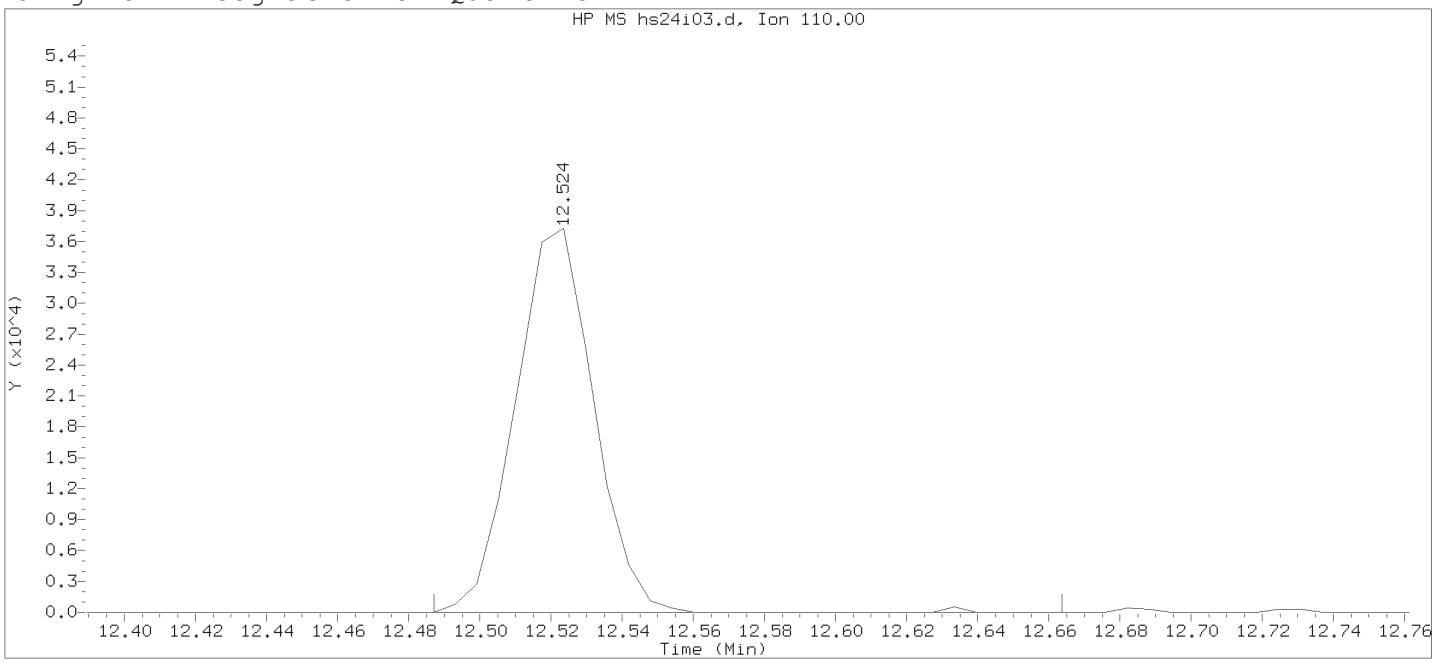
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



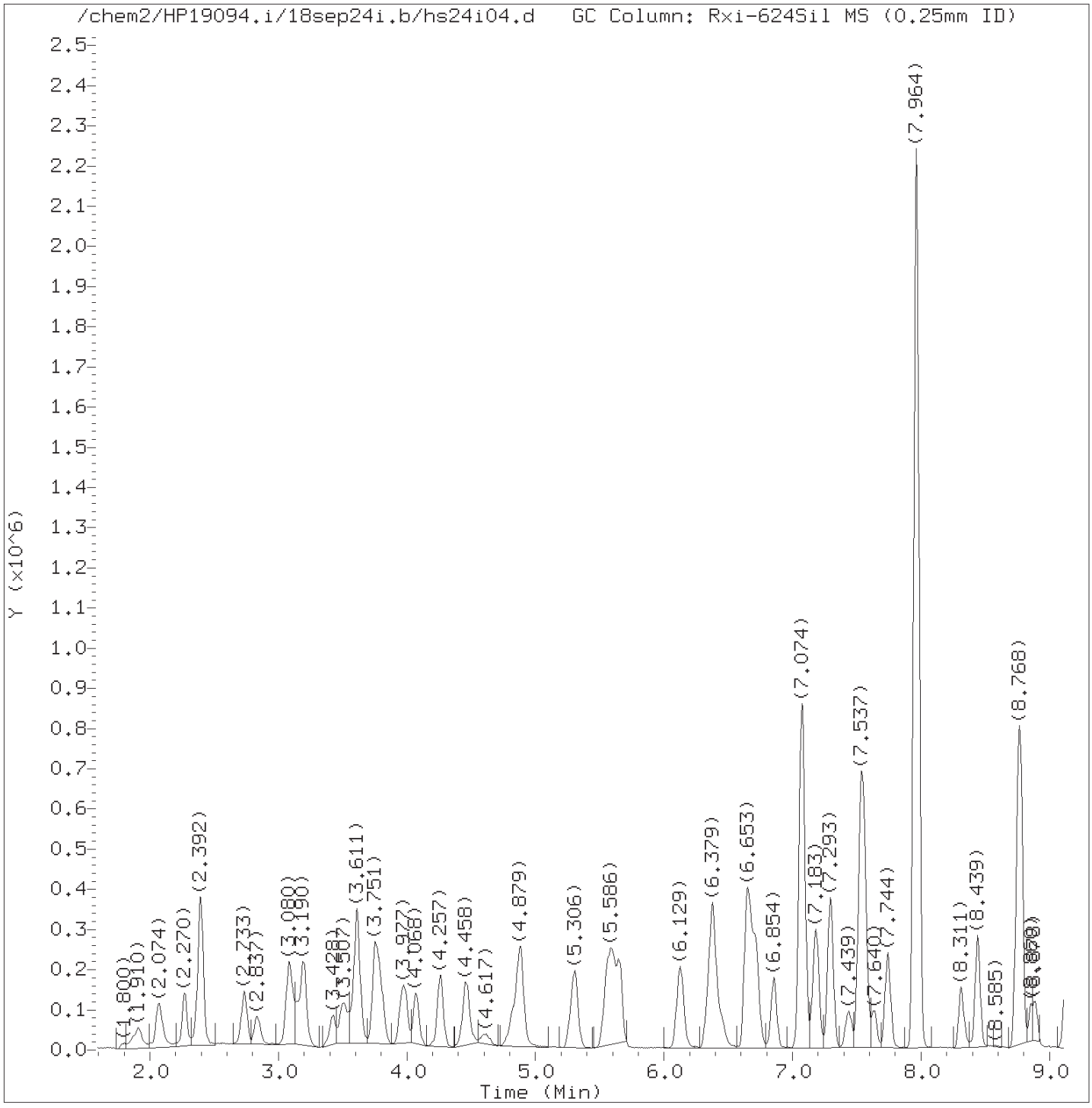
Data File: /chem2/HP19094.i/18sep24i.b/hs24i03.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:11 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1794
Retention Time (minutes): 12.524
Quant Ion : 110.00
Area : 56920
On-column Amount (ng) : 5.0340
Integration start scan : 1787 Integration stop scan: 1816
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

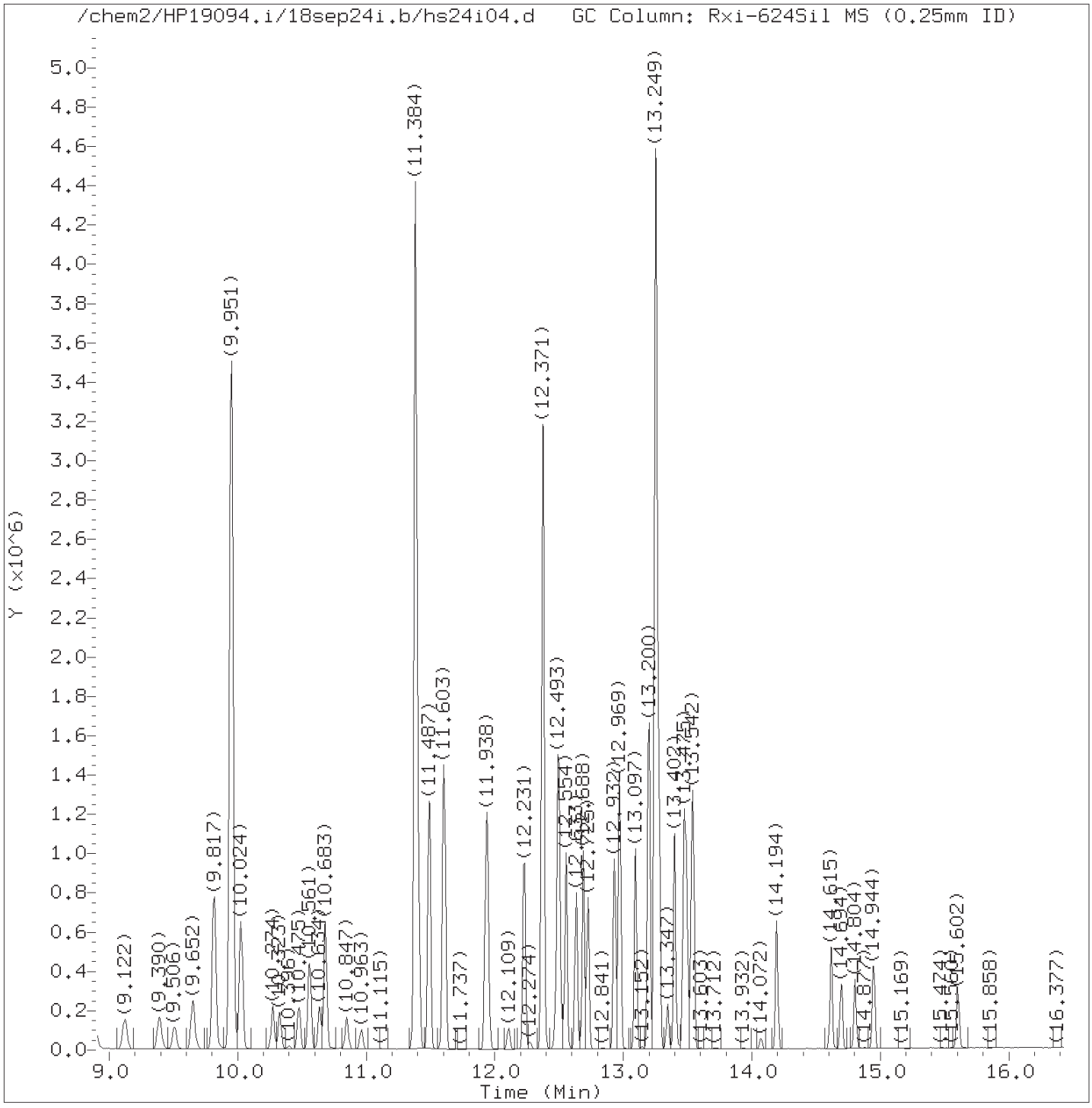
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.068	85	212842	1.965
2) Chloromethane	(2)	2.270	50	206767	1.949
5) Vinyl Chloride	(2)	2.392	62	192690	1.940
6) 1,3-Butadiene	(2)	2.392	39	223122M	1.983
7) Bromomethane	(2)	2.733	94	152532	1.975
8) Chloroethane	(2)	2.830	64	118265	1.963
9) Dichlorofluoromethane	(2)	3.080	67	286031	1.996
10) Trichlorofluoromethane	(2)	3.141	101	245427M	1.956
11) Ethyl ether	(2)	3.416	59	85465M	2.009
12) Freon 123a	(2)	3.507	67	159597	2.007
13) Acrolein	(1)	3.611	56	610220	93.000
15) 1,1-Dichloroethene	(2)	3.751	96	110543	2.034
16) Freon 113	(2)	3.781	101	129533	2.023
14) Acetone	(1)	3.800	43	167715M	19.030
17) Methyl Iodide	(2)	3.958	142	223559	1.974
18) Carbon Disulfide	(2)	4.074	76	335903	1.943
21) Methyl Acetate	(1)	4.233	43	48985	1.980
22) Allyl Chloride	(2)	4.257	41	207468	2.009
23) Methylene Chloride	(2)	4.452	84	117905	1.923
26)*t-Butyl Alcohol-d10	(1)	4.476	65	147863M	50.000
28) t-Butyl Alcohol	(1)	4.604	59	104728M	41.495
29) Acrylonitrile	(1)	4.812	53	105857	9.301
30) Methyl Tertiary Butyl Ether	(2)	4.861	73	226282	2.025
31) trans-1,2-Dichloroethene	(2)	4.885	96	119713	1.952
32) n-Hexane	(2)	5.306	57	193515	1.984
33) 1,1-Dichloroethane	(2)	5.543	63	231472	1.982
34) di-Isopropyl Ether	(2)	5.592	45	415509	2.004
35) 2-Chloro-1,3-Butadiene	(2)	5.659	53	211615	2.014
40) 1,2-Dichloroethene (Total)	(2)		96	253223	3.922
37) Ethyl t-butyl ether	(2)	6.129	59	334132M	2.032
38) 2-Butanone	(1)	6.348	43	265202	18.383
39) cis-1,2-Dichloroethene	(2)	6.379	96	133510	1.970
41) 2,2-Dichloropropane	(2)	6.385	77	170897	2.049
42) Propionitrile	(1)	6.446	54	150231	38.365
45) Methacrylonitrile	(1)	6.647	67	260058	18.418
47) Bromochloromethane	(2)	6.708	128	58062	2.028
48) Tetrahydrofuran	(1)	6.720	71	72155	18.814
49) Chloroform	(2)	6.854	83	215747	1.987

M = Compound was manually integrated.
* = Compound is an internal standard.

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on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.074	113	701118	10.038
50)$Dibromofluoromethane	(2)	7.074	111	720366	10.019
51) 1,1,1-Trichloroethane	(2)	7.086	97	186862	2.012
52) Cyclohexane	(2)	7.189	56	243250	2.007
52) Cyclohexane	(2)	7.183	84	203326	2.034
52) Cyclohexane	(2)	7.183	69	71385	1.998
54) Carbon Tetrachloride	(2)	7.293	117	159920	2.005
55) 1,1-Dichloropropene	(2)	7.293	75	176849	2.008
56) Isobutyl Alcohol	(1)	7.439	41	94332	96.599
57)$1,2-Dichloroethane-d4	(2)	7.537	102	125039M	10.268
57)$1,2-Dichloroethane-d4	(2)	7.531	65	589363	10.006
57)$1,2-Dichloroethane-d4	(2)	7.531	104	76732	9.839
58) Benzene	(2)	7.561	78	506487	1.947
59) 1,2-Dichloroethane	(2)	7.634	62	114381	1.911
60) t-Amyl methyl ether	(2)	7.744	73	274629	2.014
62) n-Heptane	(2)	7.964	43	198879M	1.978
63)*Fluorobenzene	(2)	7.964	96	2771401	10.000
65) n-Butanol	(1)	8.311	56	160778M	194.877
67) Trichloroethene	(2)	8.439	95	134309	2.016
69) Methylcyclohexane	(2)	8.750	83	251052	1.996
70) 1,2-Dichloropropane	(2)	8.787	63	125013	1.981
71) Methyl Methacrylate	(1)	8.854	69	48112	1.841
72) 1,4-Dioxane	(1)	8.866	88	21749M	109.489
73) Dibromomethane	(2)	8.890	93	53023	2.024
74) Bromodichloromethane	(2)	9.122	83	137803	1.942
76) 2-Nitropropane	(1)	9.390	41	134032	18.105
80) cis-1,3-Dichloropropene	(2)	9.652	75	163843	1.983
81) 4-Methyl-2-Pentanone	(1)	9.817	43	659459	18.377
82)$Toluene-d8	(3)	9.951	98	2784763	10.112
82)$Toluene-d8	(3)	9.951	100	1806074	10.161
83) Toluene	(3)	10.024	92	317158	1.997
85) 1,3-Dichloropropene (total)	(3)		75	285594	3.973
84) trans-1,3-Dichloropropene	(3)	10.274	75	121751	1.990
86) Ethyl Methacrylate	(3)	10.323	69	106995	2.041
88) 1,1,2-Trichloroethane	(3)	10.475	97	73815	2.020
89) Tetrachloroethene	(3)	10.561	166	144328	2.012
90) 1,3-Dichloropropane	(3)	10.634	76	132513	2.046
91) 2-Hexanone	(1)	10.683	43	448236	18.350

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) Dibromochloromethane	(3)	10.847	129	88599	2.023
95) 1,2-Dibromoethane	(3)	10.963	107	66850	1.952
96) 1-Chlorohexane	(3)	11.384	91	182251	1.924
97)*Chlorobenzene-d5	(3)	11.384	117	2139668	10.000
98) Chlorobenzene	(3)	11.408	112	334112	1.983
99) 1,1,1,2-Tetrachloroethane	(3)	11.487	131	111074	1.998
100) Ethylbenzene	(3)	11.493	91	618859	1.994
101) m+p-Xylene	(3)	11.603	106	460102	3.997
105) Xylene (Total)	(3)		106	680646	6.001
104) o-Xylene	(3)	11.932	106	220544	2.004
106) Styrene	(3)	11.945	104	354610	2.014
107) Bromoform	(3)	12.109	173	47440	1.971
108) Isopropylbenzene	(3)	12.231	105	599350	1.995
111)$4-Bromofluorobenzene	(3)	12.371	95	1020043	10.174
111)$4-Bromofluorobenzene	(3)	12.377	174	880214	10.110
113) 1,1,2,2-Tetrachloroethane	(4)	12.475	83	85286M	1.938
114) Bromobenzene	(4)	12.493	156	133526	1.995
115) trans-1,4-Dichloro-2-butene	(1)	12.499	53	203595	18.115
116) 1,2,3-Trichloropropane	(4)	12.518	110	22957M	2.017
117) n-Propylbenzene	(4)	12.554	91	721086	1.982
119) 2-Chlorotoluene	(4)	12.633	126	140344	1.989
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	490251	1.989
122) 4-Chlorotoluene	(4)	12.725	126	141279	1.998
125) tert-Butylbenzene	(4)	12.932	134	110083M	2.054
126) Pentachloroethane	(4)	12.969	167	83251	1.990
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	503413	2.001
128) sec-Butylbenzene	(4)	13.097	105	633366	1.983
131) 1,3-Dichlorobenzene	(4)	13.194	146	265730	1.999
132) p-Isopropyltoluene	(4)	13.200	119	529167	2.000
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1109693	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	257515	1.973
135) 1,2,3-Trimethylbenzene	(4)	13.280	120	229342	1.987
136) Benzyl Chloride	(4)	13.347	126	30686M	1.928
138) n-Butylbenzene	(4)	13.493	92	259241	1.974
139) 1,2-Dichlorobenzene	(4)	13.530	146	234578	2.000
143) 1,2-Dibromo-3-chloropropane	(1)	14.072	155	11053	1.817
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	191417	1.935
145) 1,2,4-Trichlorobenzene	(4)	14.621	180	157858	1.959

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

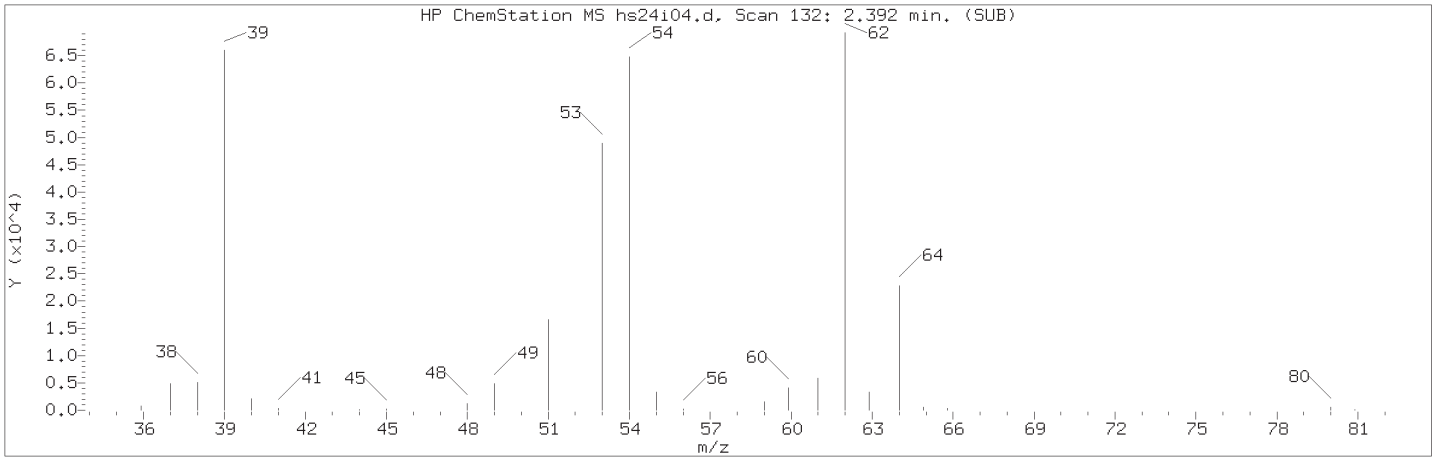
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

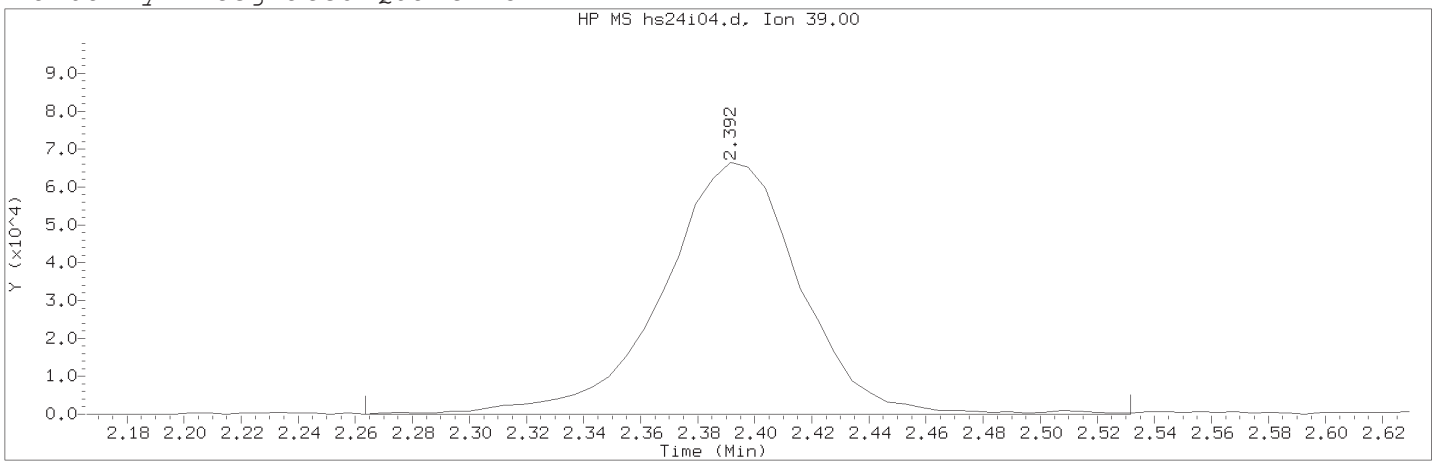
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) Hexachlorobutadiene	(4)	14.700	225	59215	1.945
147) Naphthalene	(4)	14.804	128	252080	1.977
148) 1,2,3-Trichlorobenzene	(4)	14.944	180	128555	1.941

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

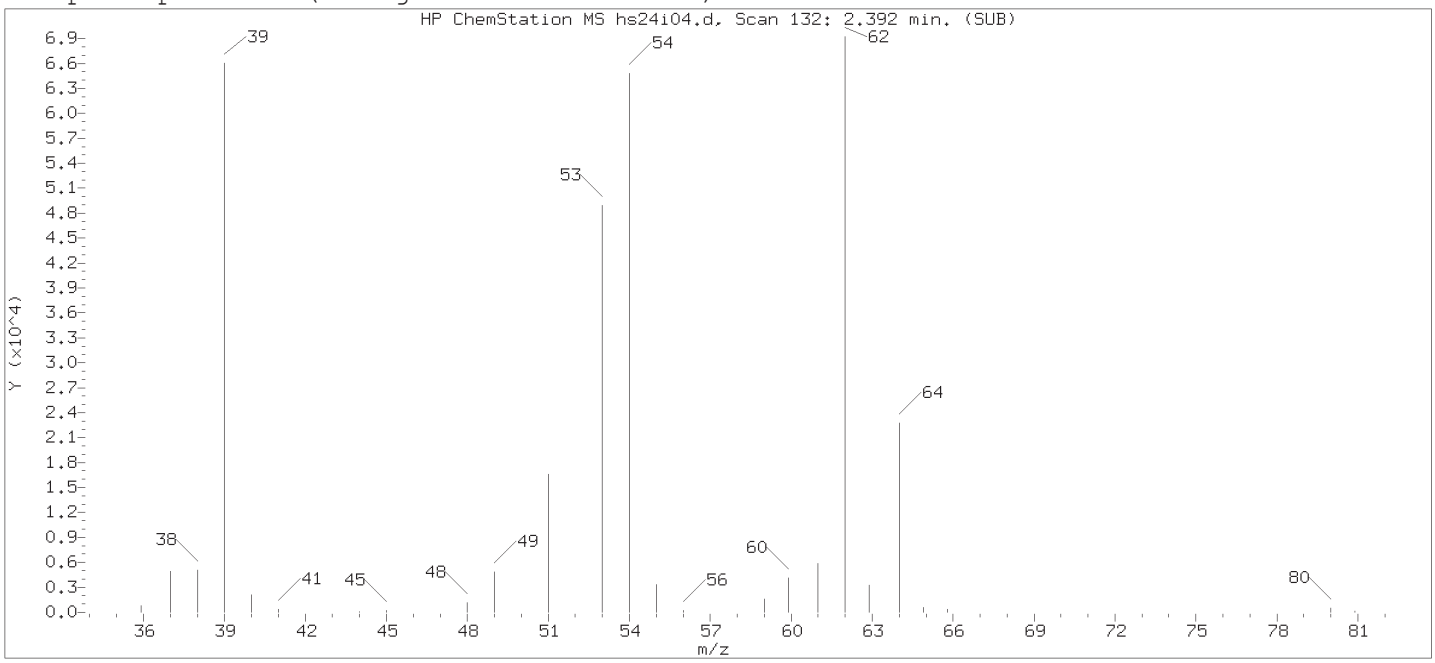
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 132
Retention Time (minutes): 2.392
Quant Ion : 39.00
Area (flag) : 223122M
On-Column Amount (ng) : 1.9830
Integration start scan : 110 Integration stop scan: 154
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

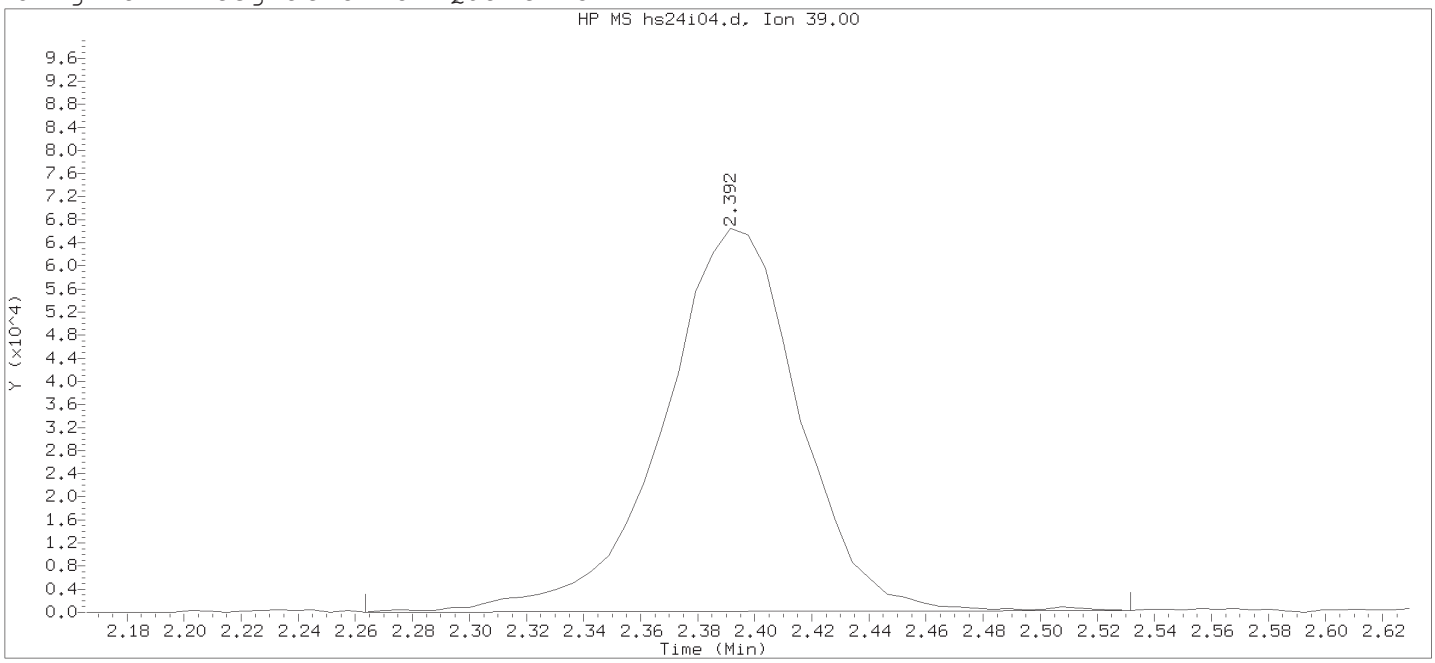
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

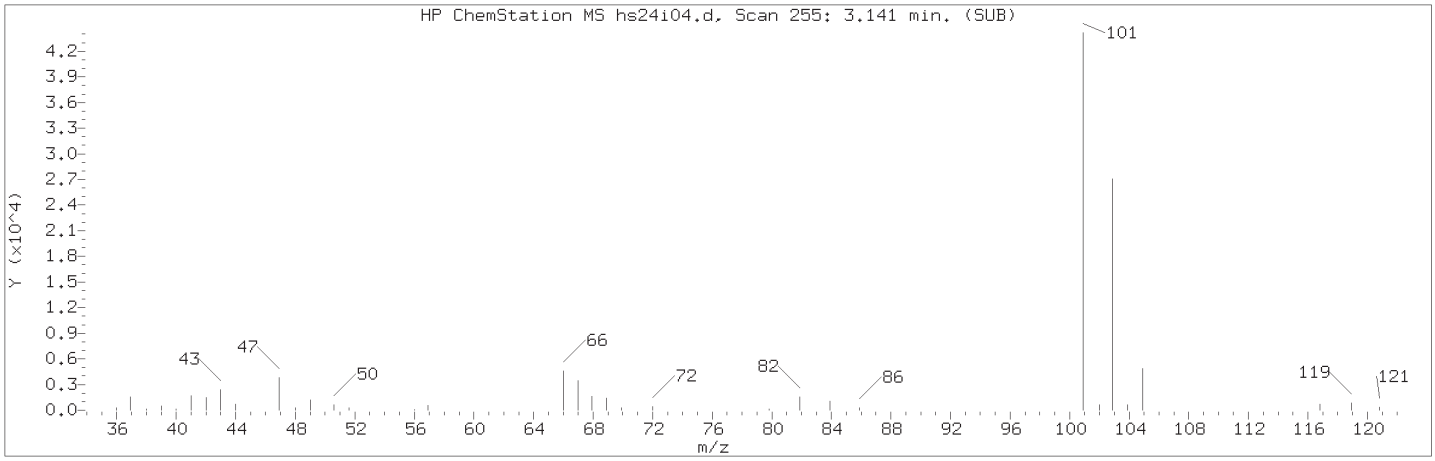
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

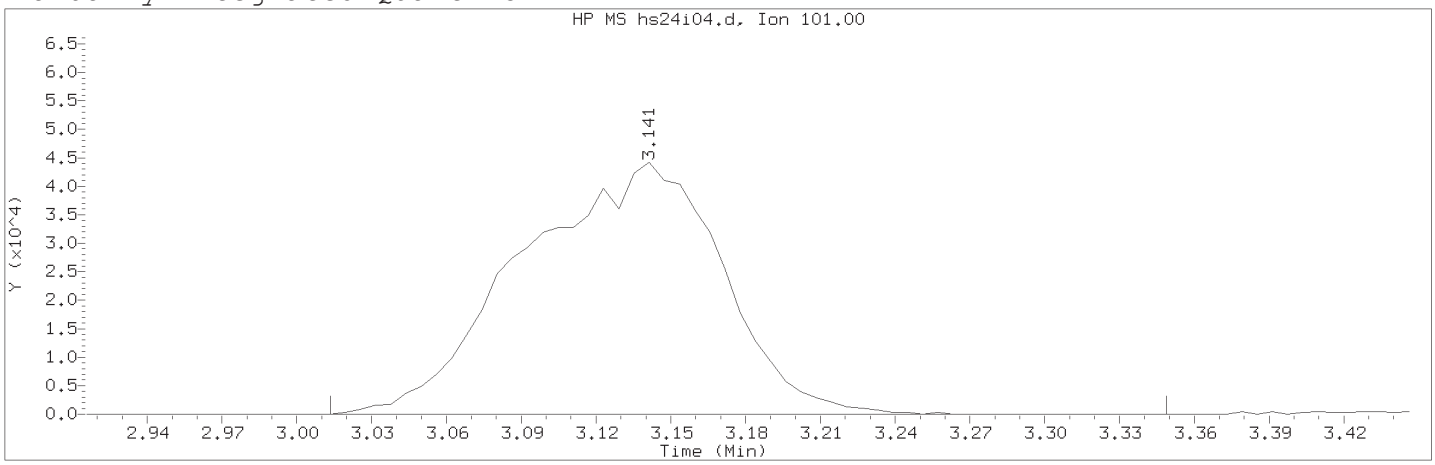
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 132
Retention Time (minutes): 2.392
Quant Ion : 39.00
Area : 220168
On-column Amount (ng) : 1.9899
Integration start scan : 110 Integration stop scan: 154
Y at integration start : 0 Y at integration end: 359

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

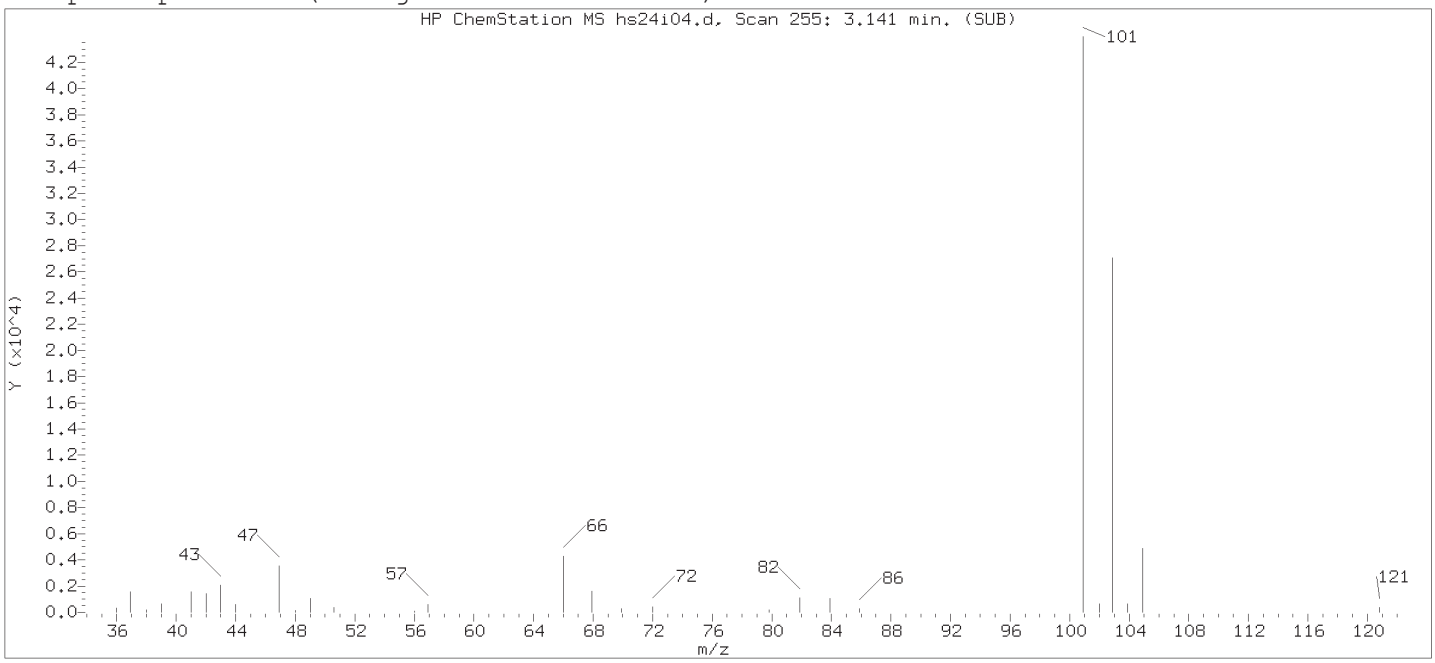
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 255
Retention Time (minutes): 3.141
Quant Ion : 101.00
Area (flag) : 245427M
On-Column Amount (ng) : 1.9558
Integration start scan : 233 Integration stop scan: 288
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

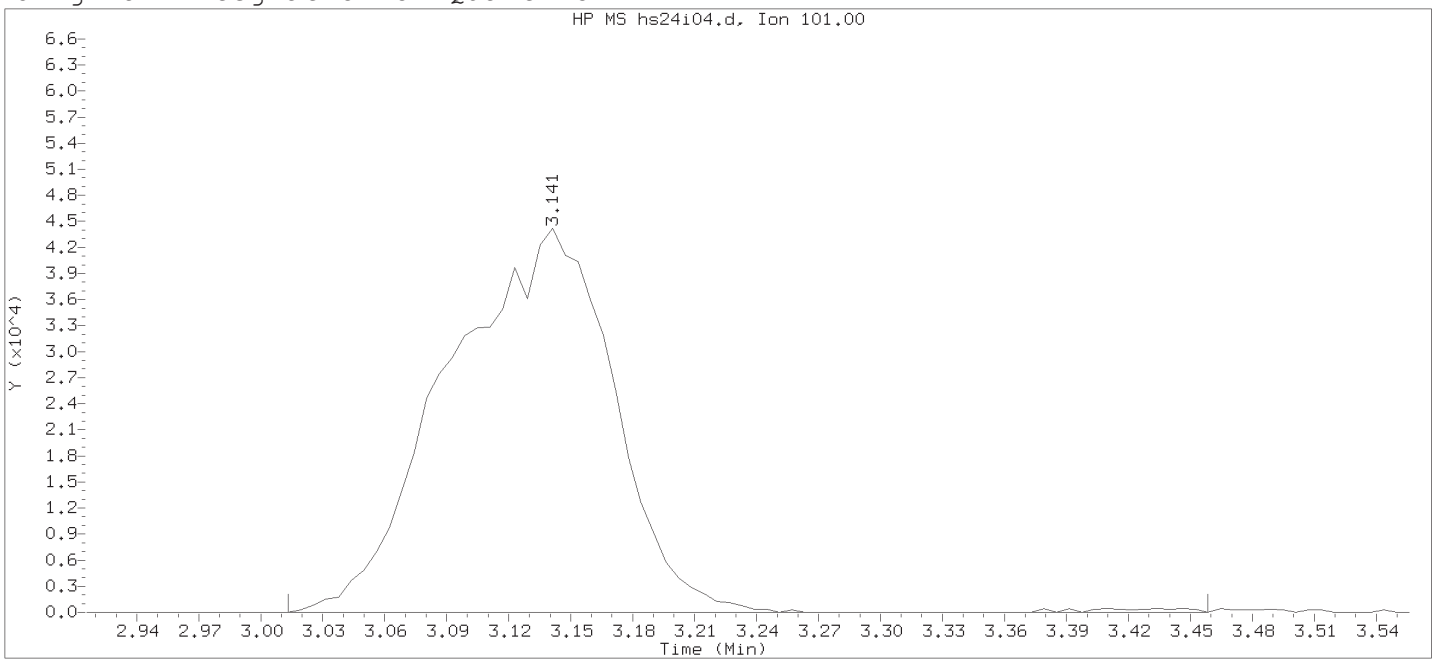
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

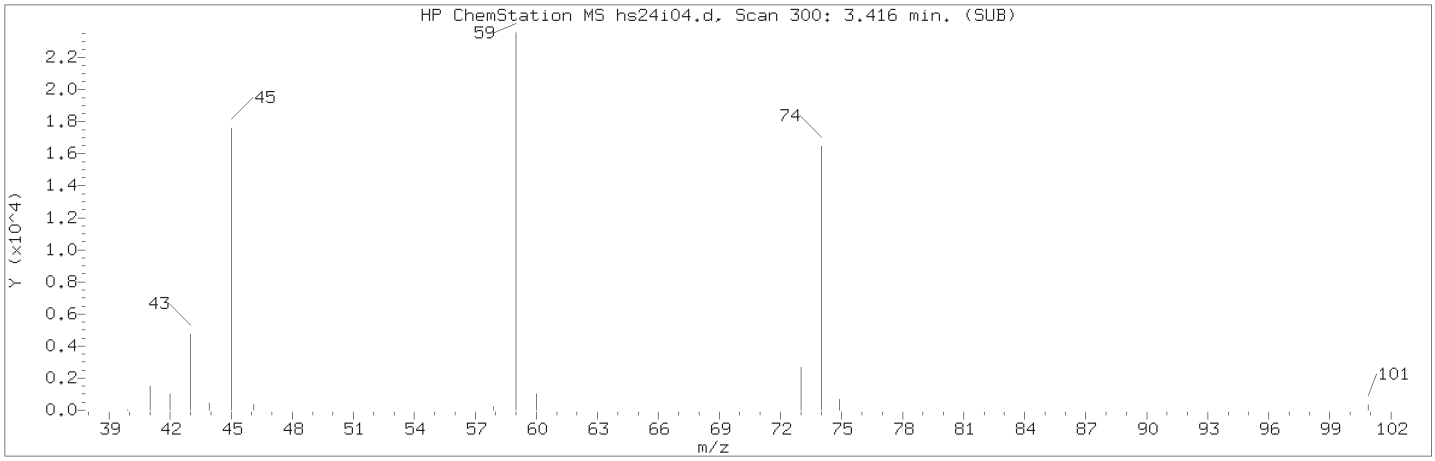
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

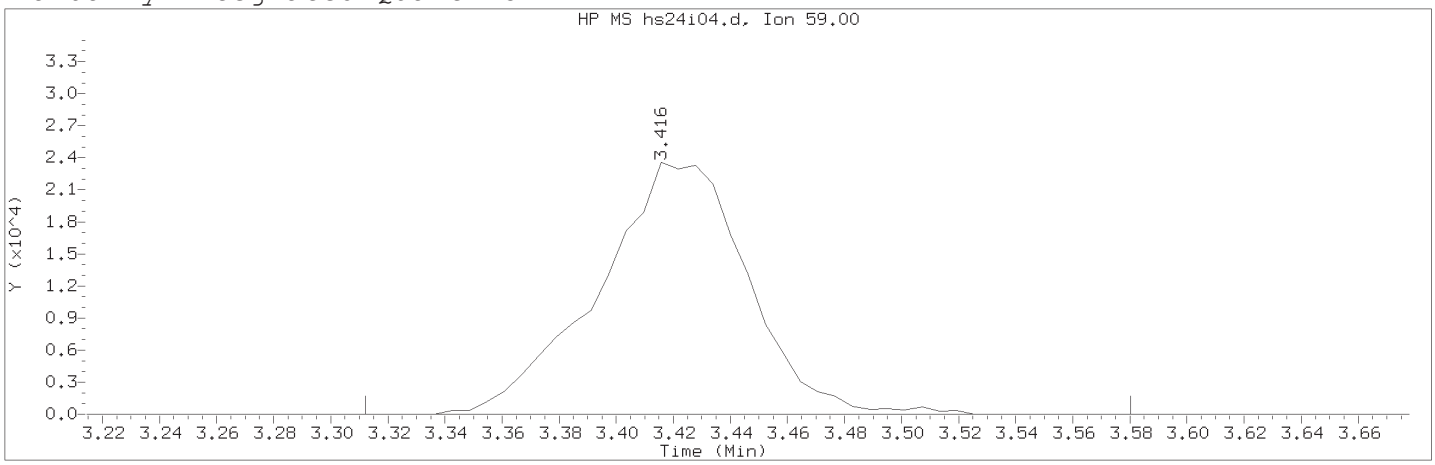
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 255
Retention Time (minutes): 3.141
Quant Ion : 101.00
Area : 246940
On-column Amount (ng) : 1.9182
Integration start scan : 233 Integration stop scan: 306
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

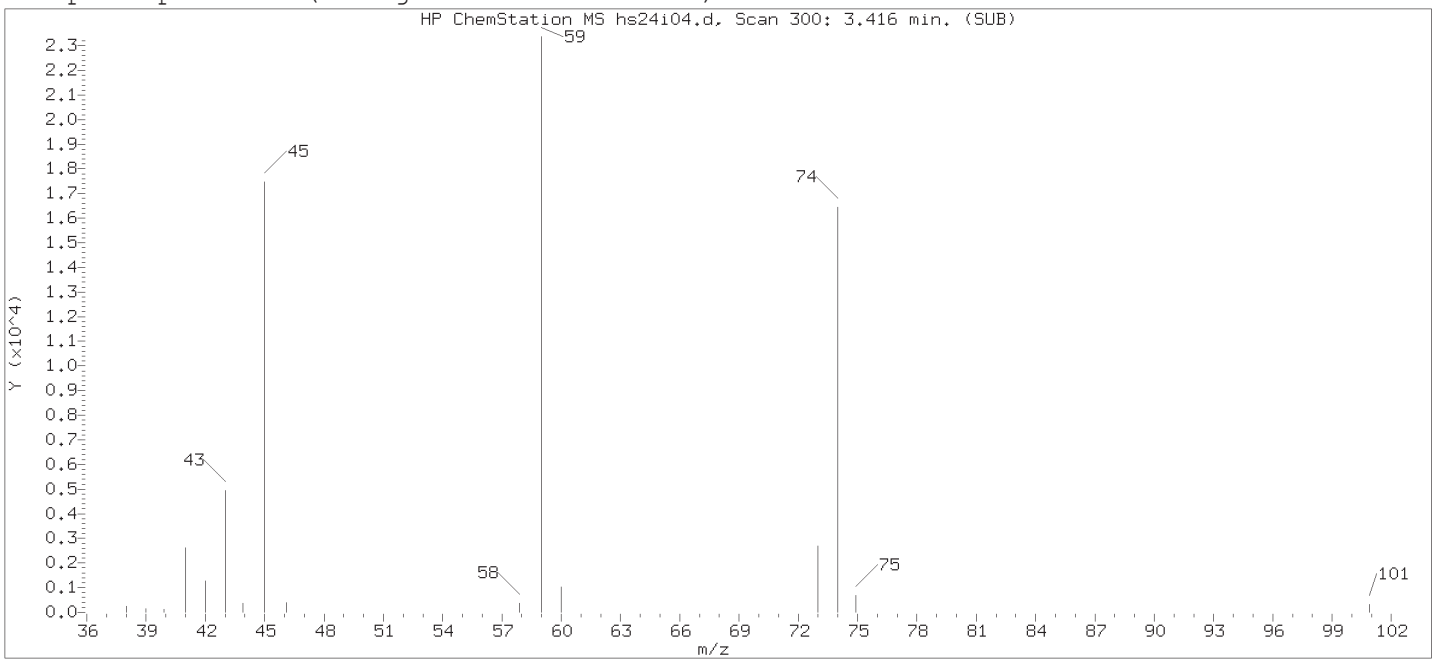
Compound Number : 11
Compound Name : Ethyl ether
Scan Number : 300
Retention Time (minutes): 3.416
Quant Ion : 59.00
Area (flag) : 85465M
On-Column Amount (ng) : 2.0086
Integration start scan : 282 Integration stop scan: 326
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

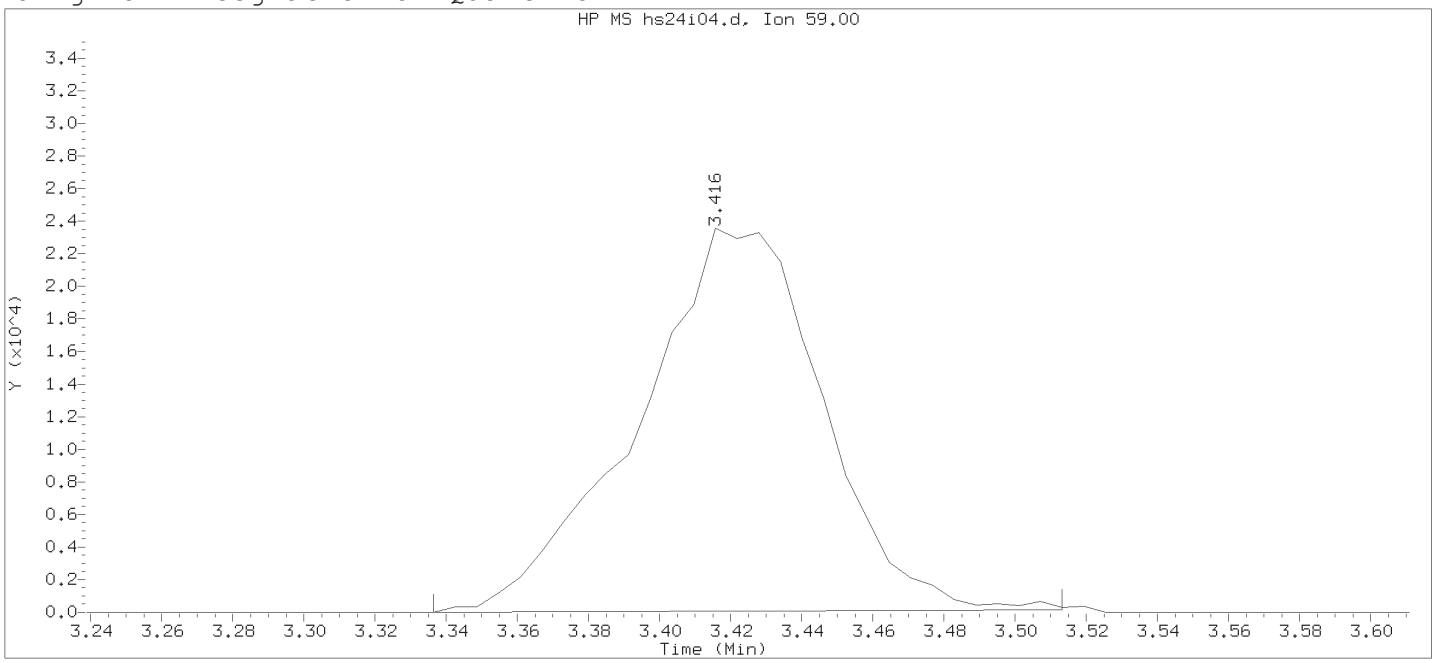
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

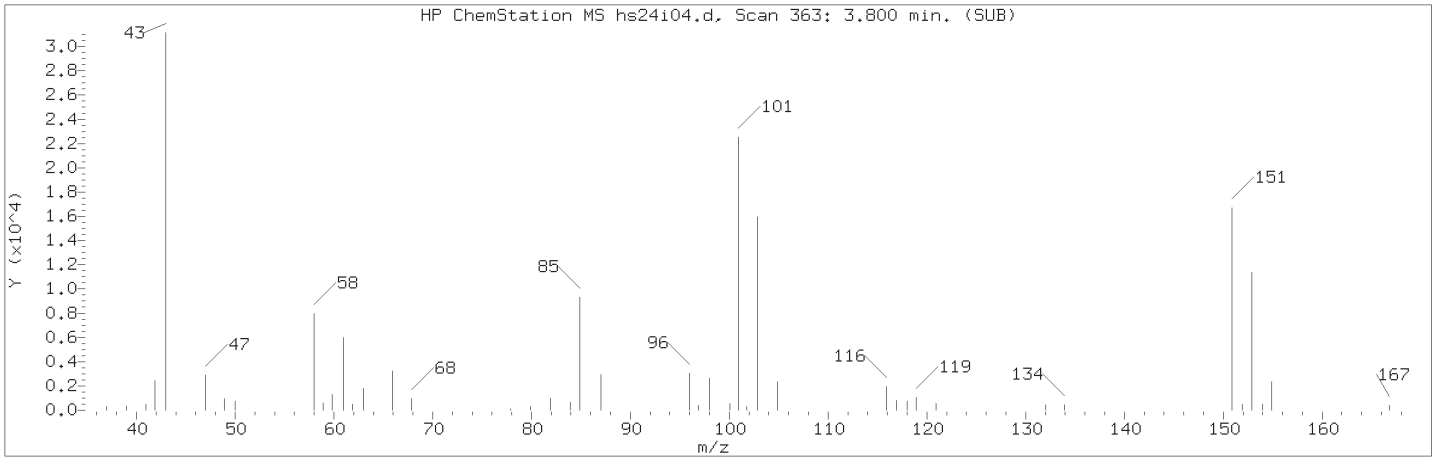
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

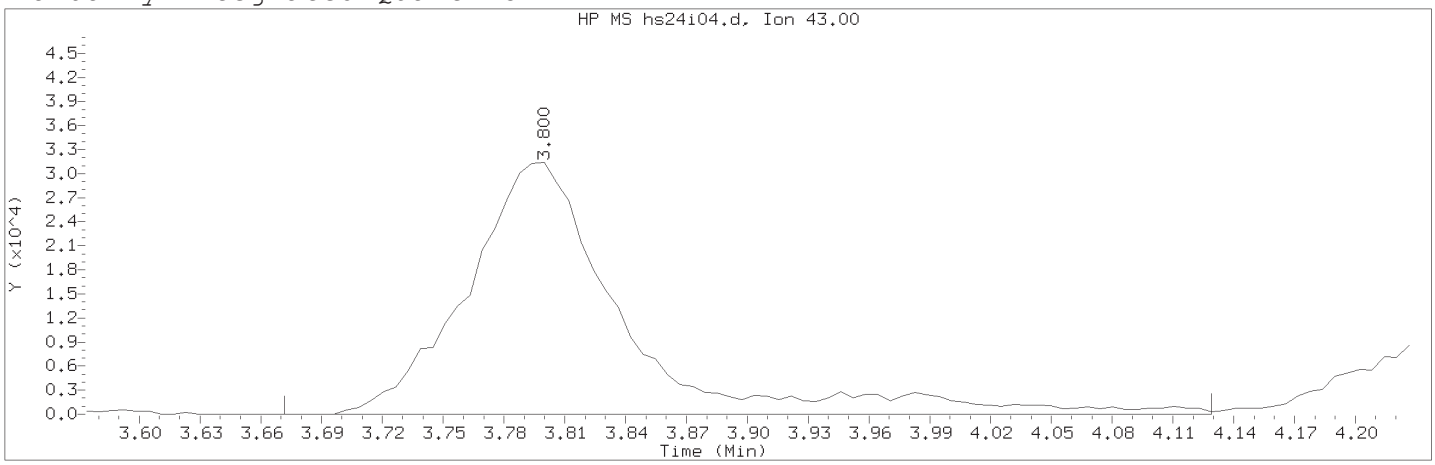
Compound Number : 11
Compound Name : Ethyl ether
Scan Number : 300
Retention Time (minutes): 3.416
Quant Ion : 59.00
Area : 84538
On-column Amount (ng) : 1.9630
Integration start scan : 286 Integration stop scan: 315
Y at integration start : 0 Y at integration end: 140

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

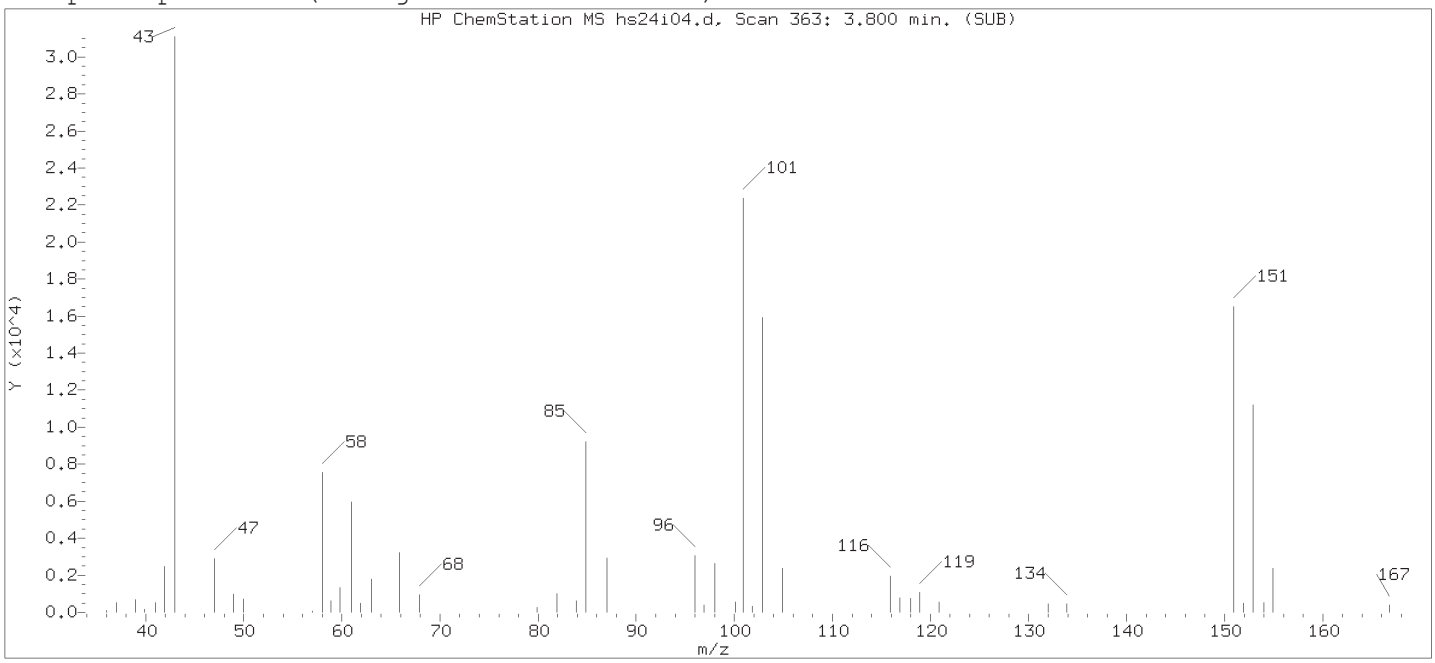
Compound Number : 14
Compound Name : Acetone
Scan Number : 363
Retention Time (minutes): 3.800
Quant Ion : 43.00
Area (flag) : 167715M
On-Column Amount (ng) : 19.0303
Integration start scan : 341 Integration stop scan: 416
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

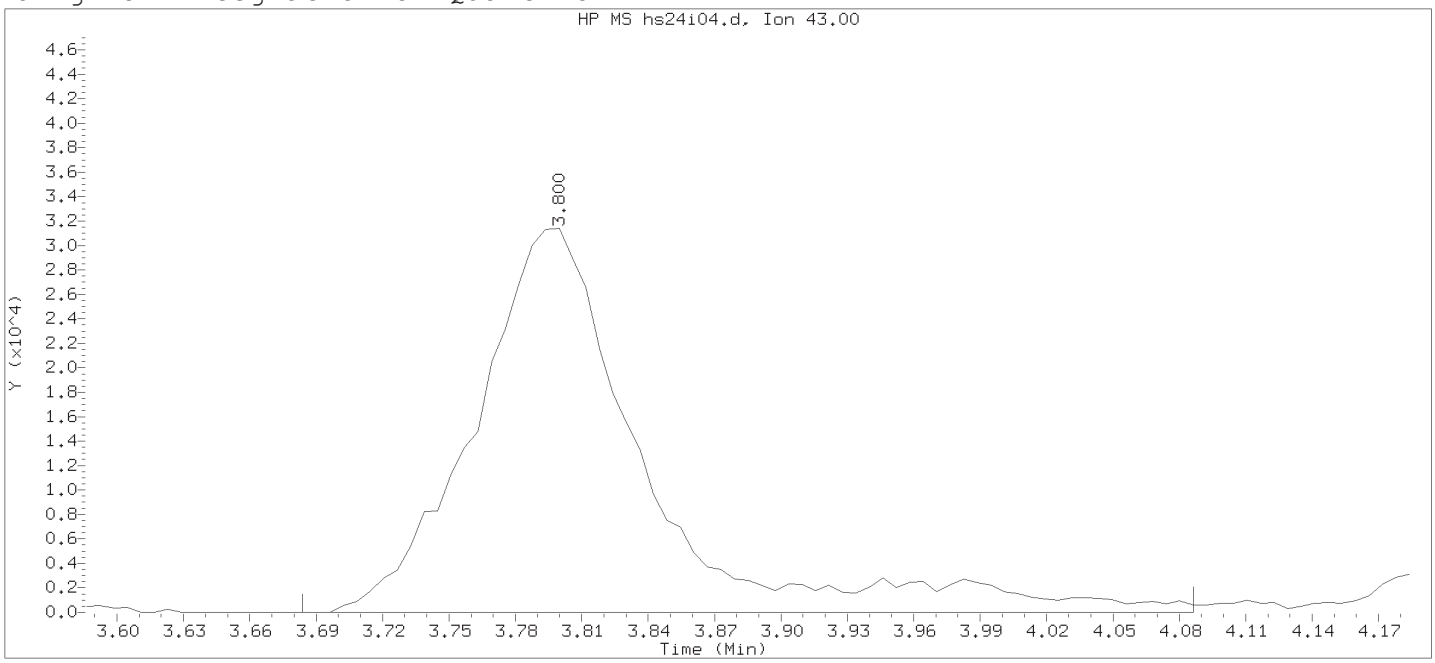
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

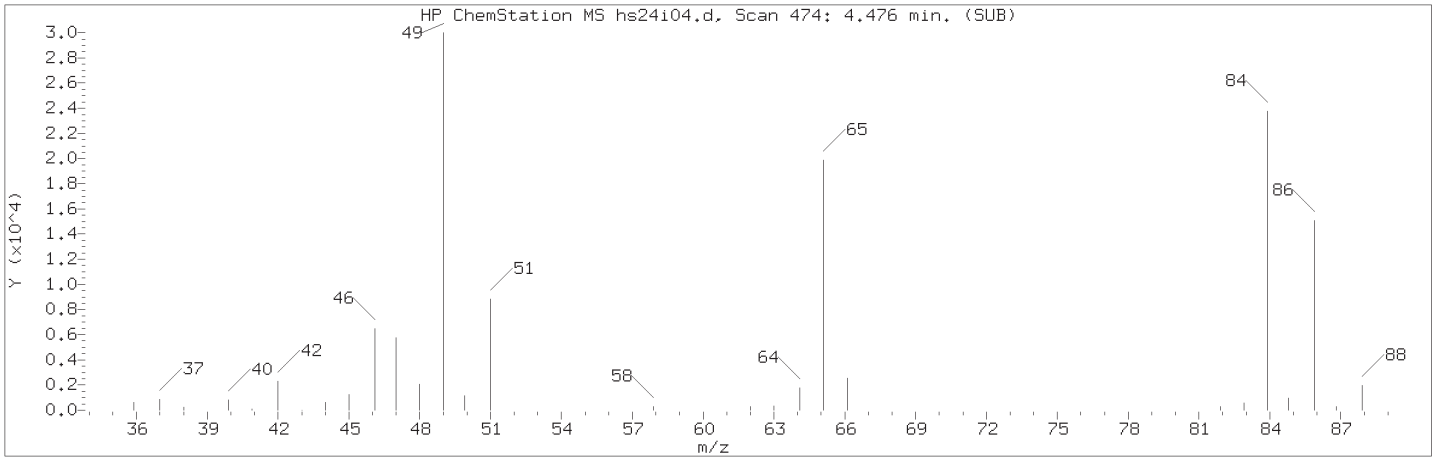
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

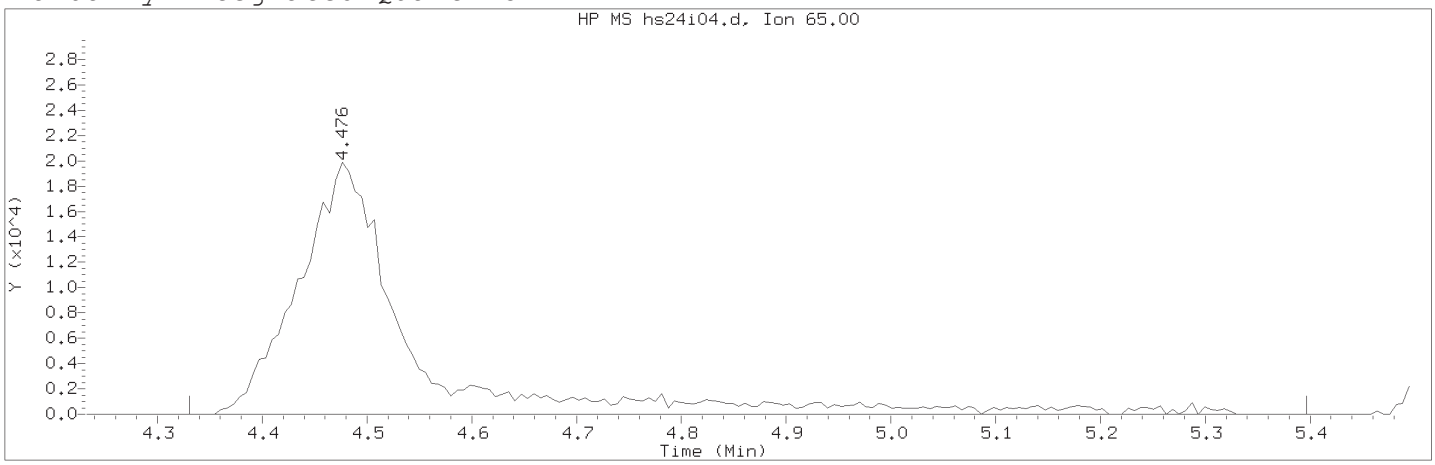
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 363		
Retention Time (minutes)	: 3.800		
Quant Ion	: 43.00		
Area	: 165832		
On-column Amount (ng)	: 19.2516		
Integration start scan	: 343	Integration stop scan:	409
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

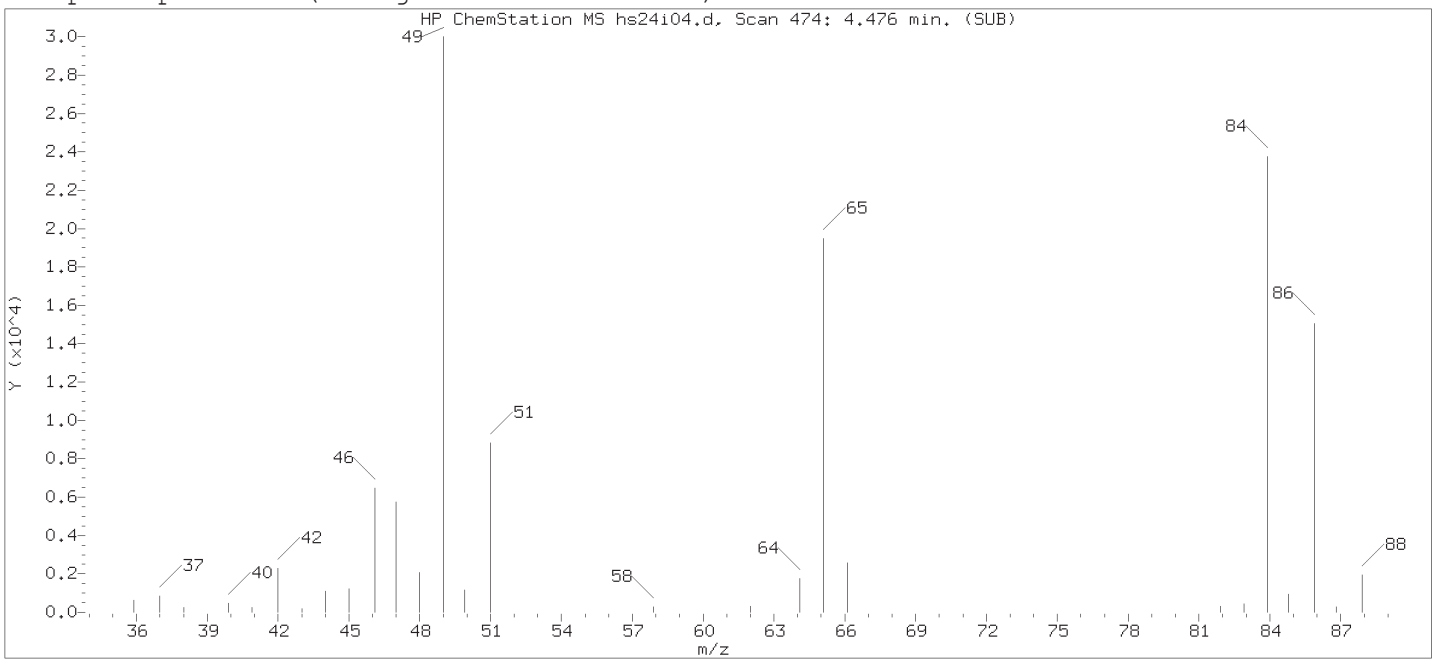
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 474
Retention Time (minutes): 4.476
Quant Ion : 65.00
Area (flag) : 147863M
On-Column Amount (ng) : 50.0000
Integration start scan : 449 Integration stop scan: 624
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

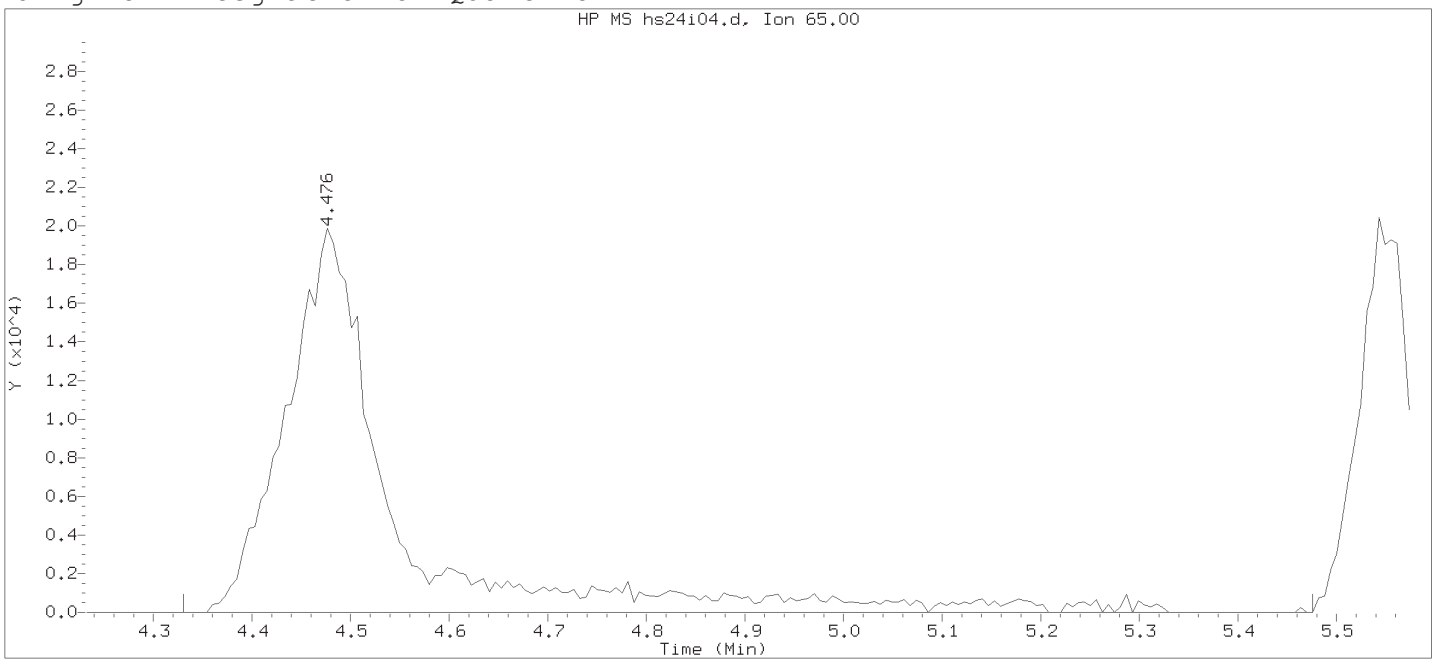
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

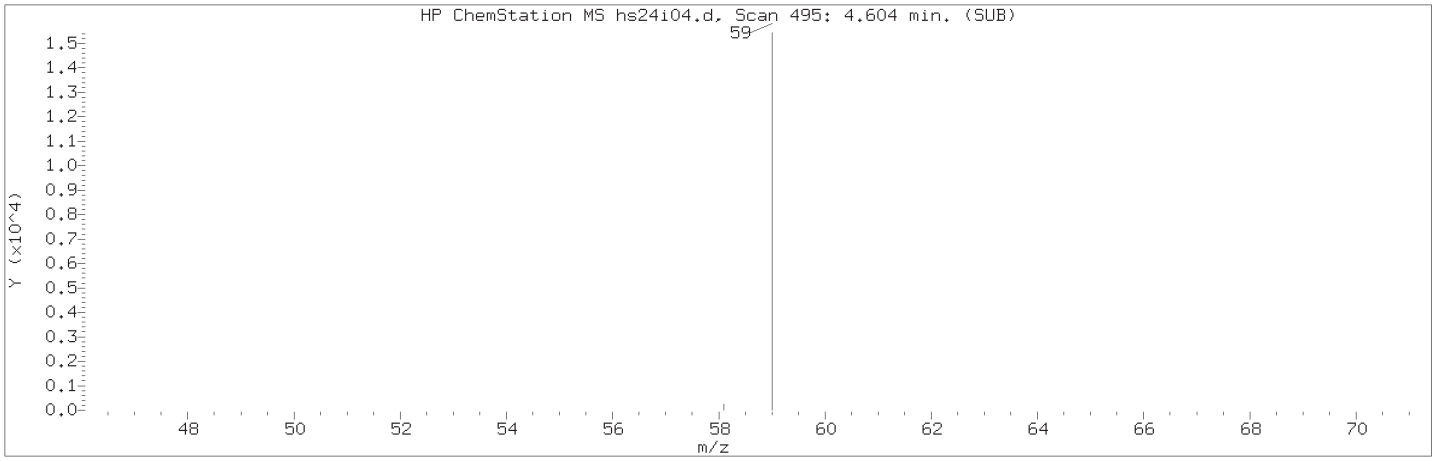
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

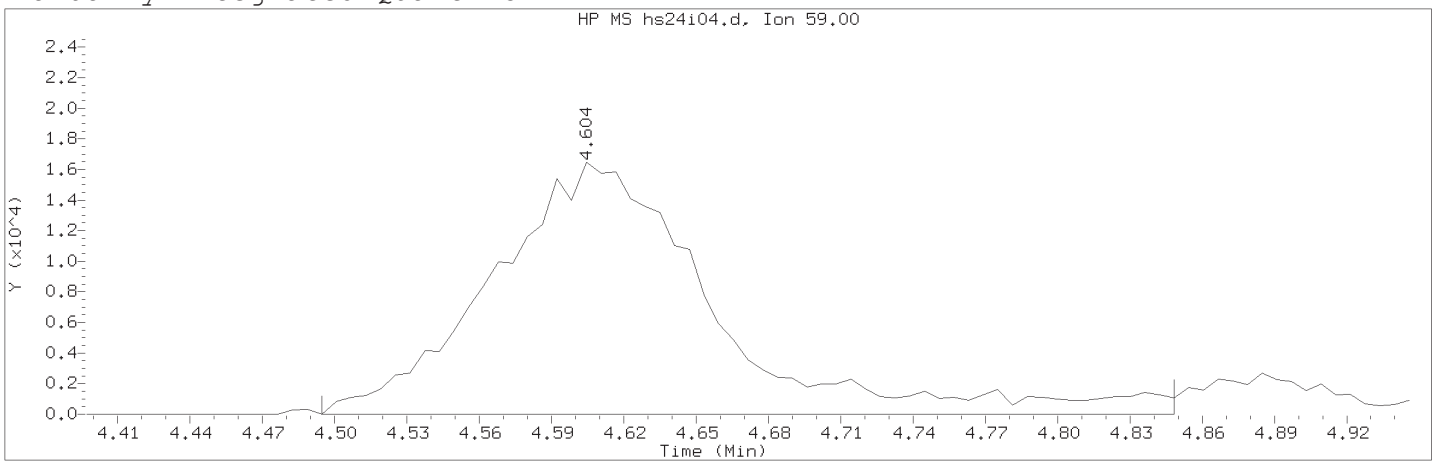
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 474
Retention Time (minutes): 4.476
Quant Ion : 65.00
Area : 147958
On-column Amount (ng) : 50.0000
Integration start scan : 449 Integration stop scan: 637
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

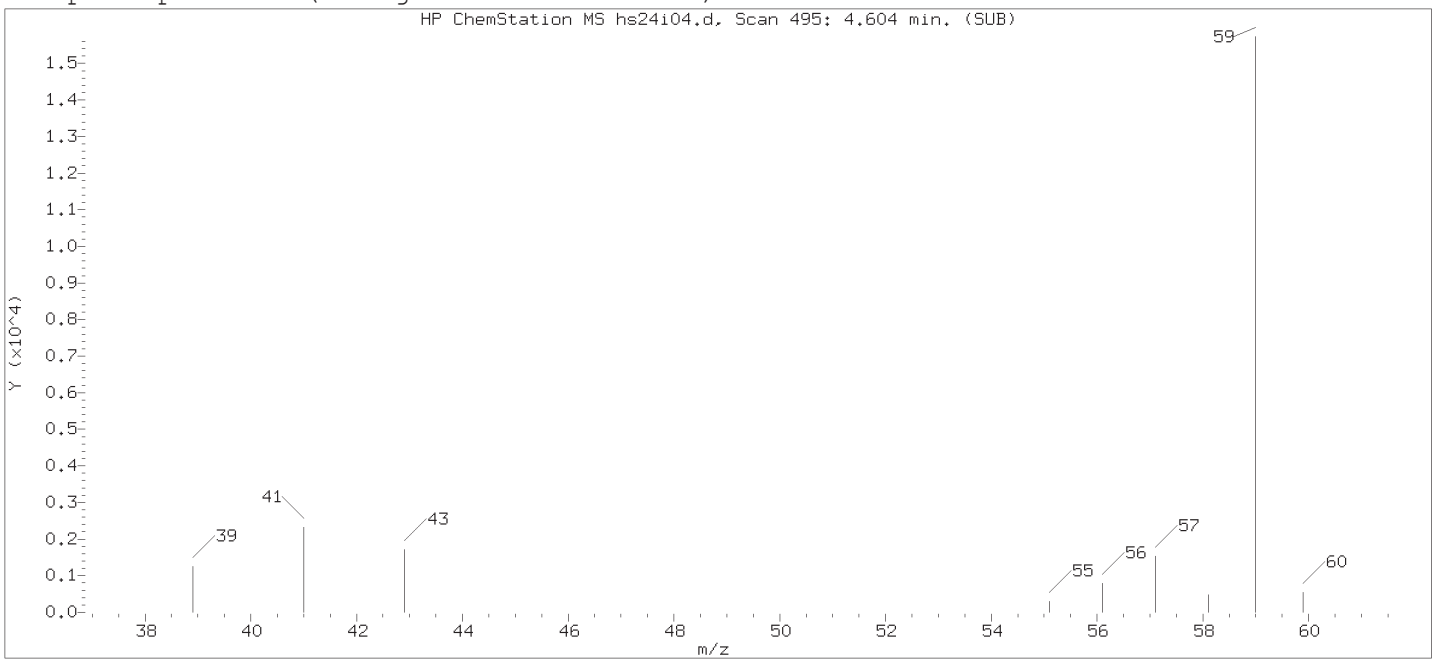
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 495
Retention Time (minutes): 4.604
Quant Ion : 59.00
Area (flag) : 104728M
On-Column Amount (ng) : 41.4946
Integration start scan : 476 Integration stop scan: 534
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

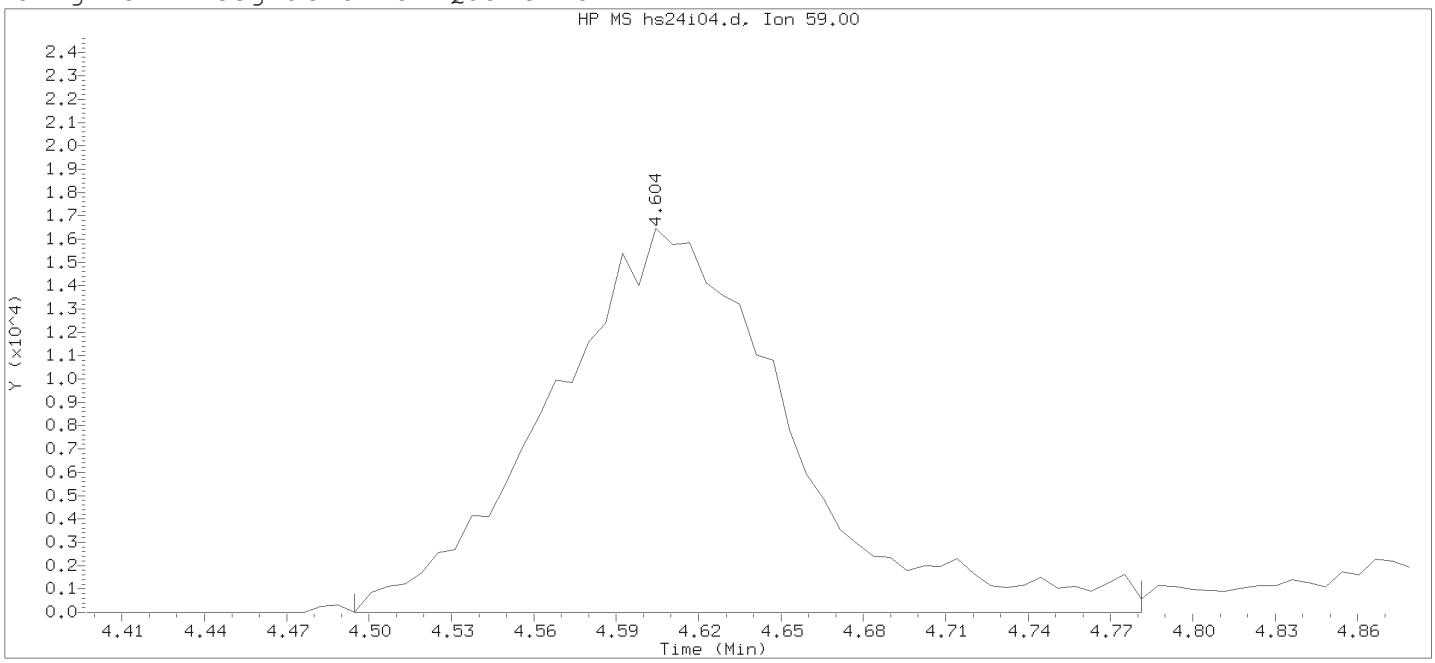
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

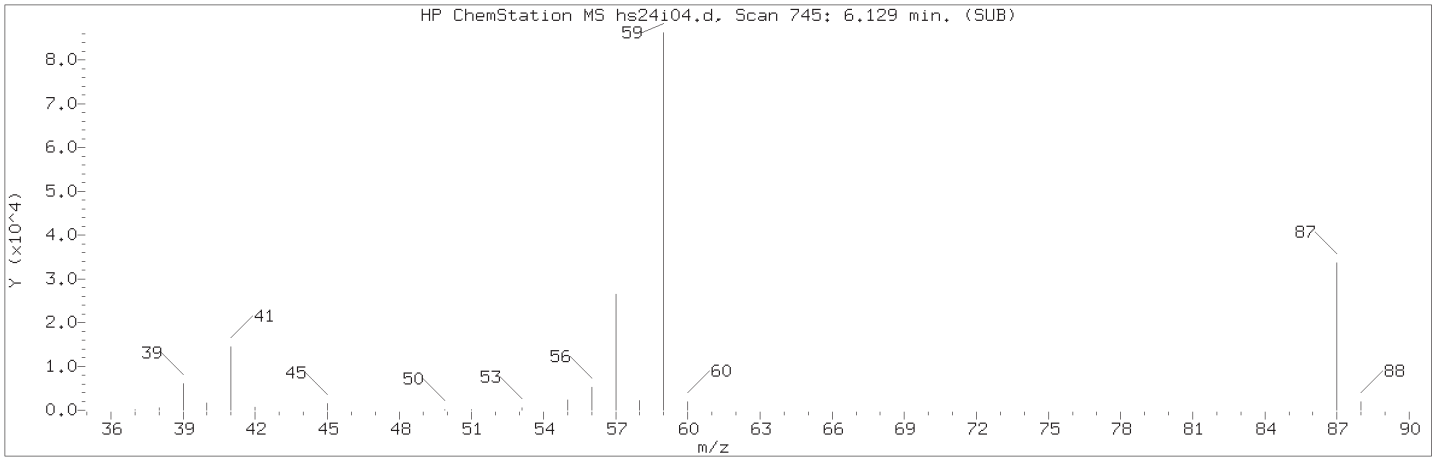
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

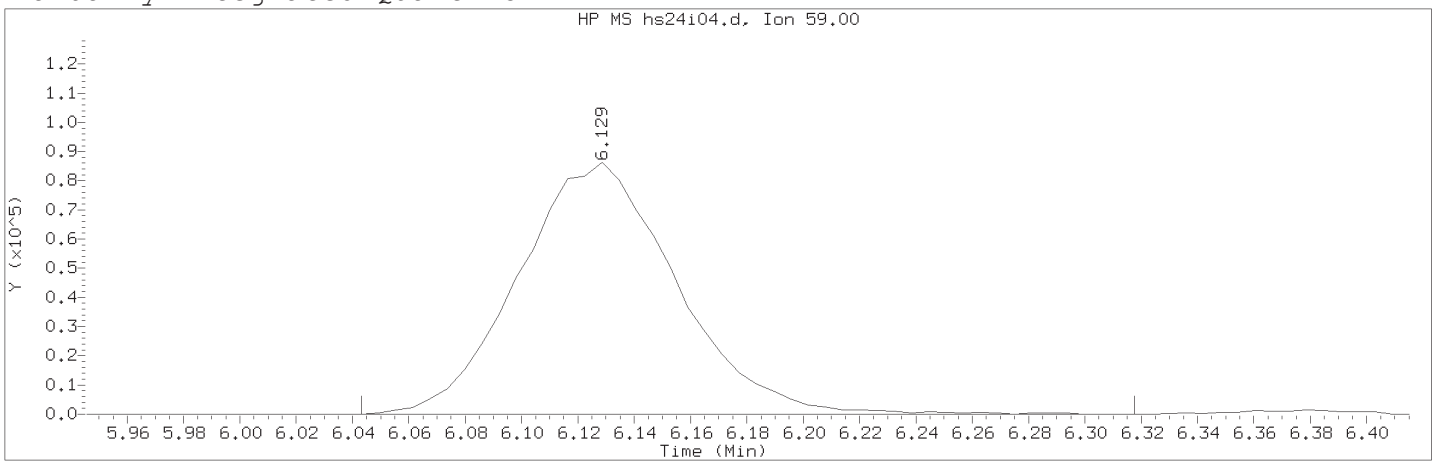
Compound Number	: 28		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 495		
Retention Time (minutes)	: 4.604		
Quant Ion	: 59.00		
Area	: 100186		
On-column Amount (ng)	: 38.4816		
Integration start scan	: 476	Integration stop scan:	523
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

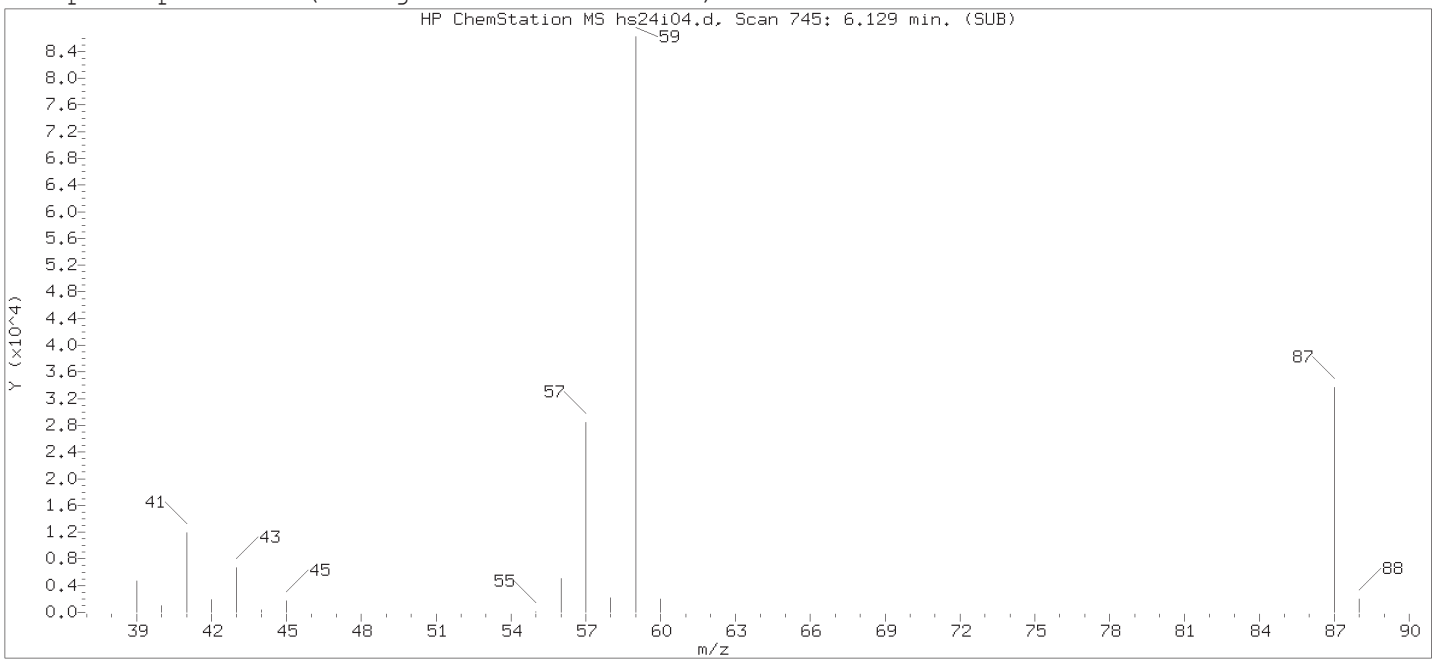
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 745
Retention Time (minutes): 6.129
Quant Ion : 59.00
Area (flag) : 334132M
On-Column Amount (ng) : 2.0315
Integration start scan : 730 Integration stop scan: 775
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

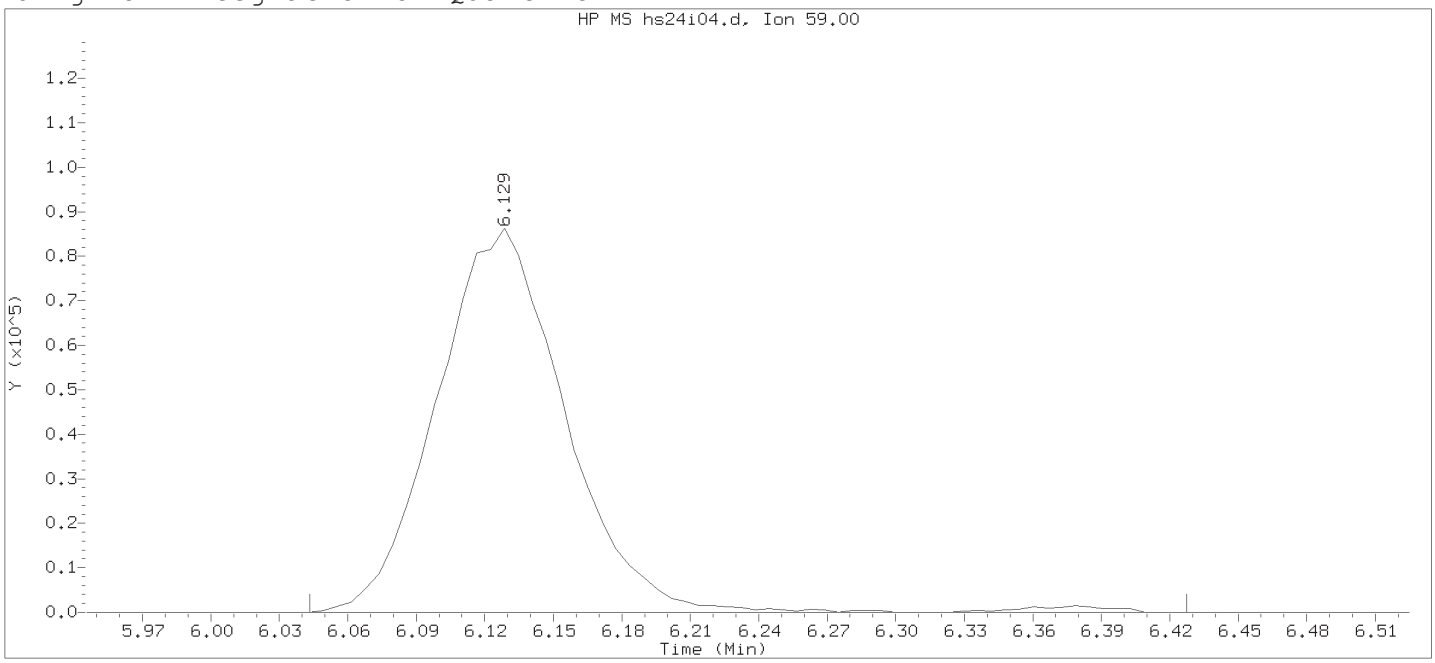
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

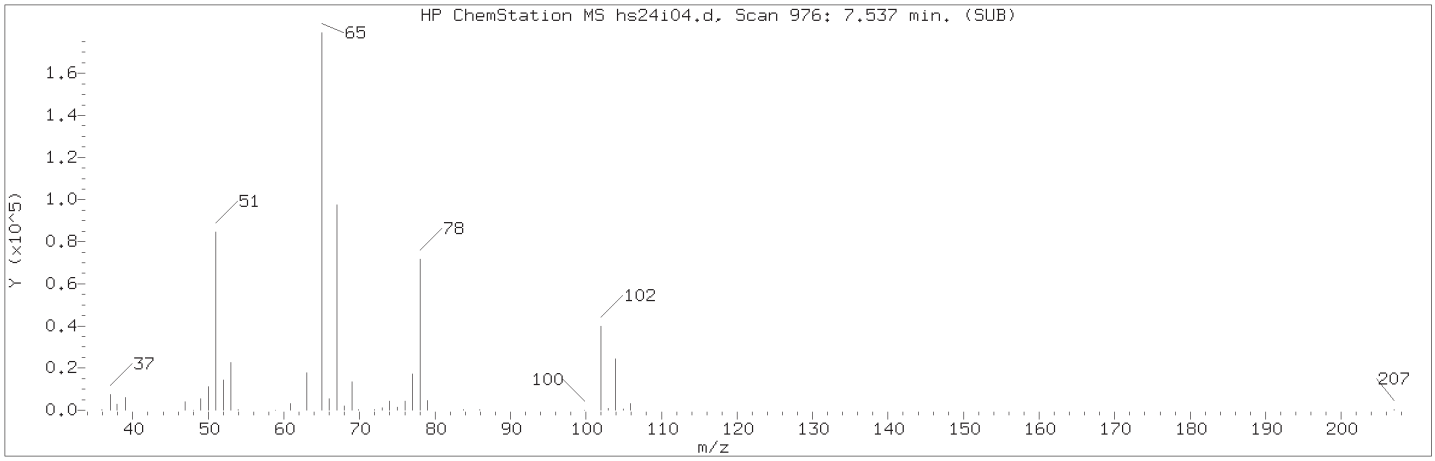
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

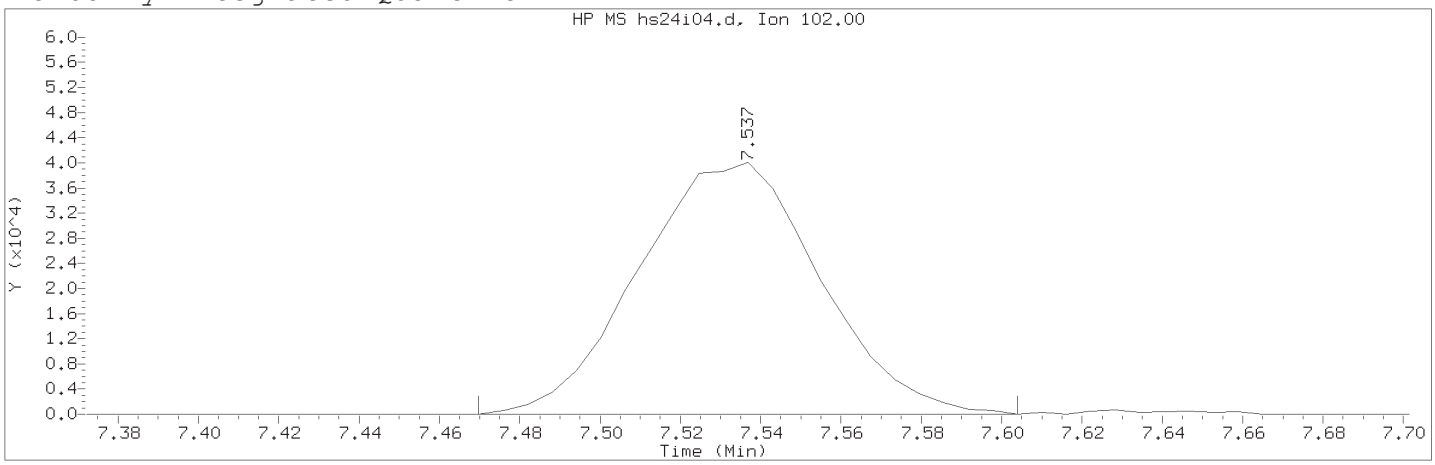
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 745
Retention Time (minutes): 6.129
Quant Ion : 59.00
Area : 338010
On-column Amount (ng) : 1.9953
Integration start scan : 730 Integration stop scan: 793
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

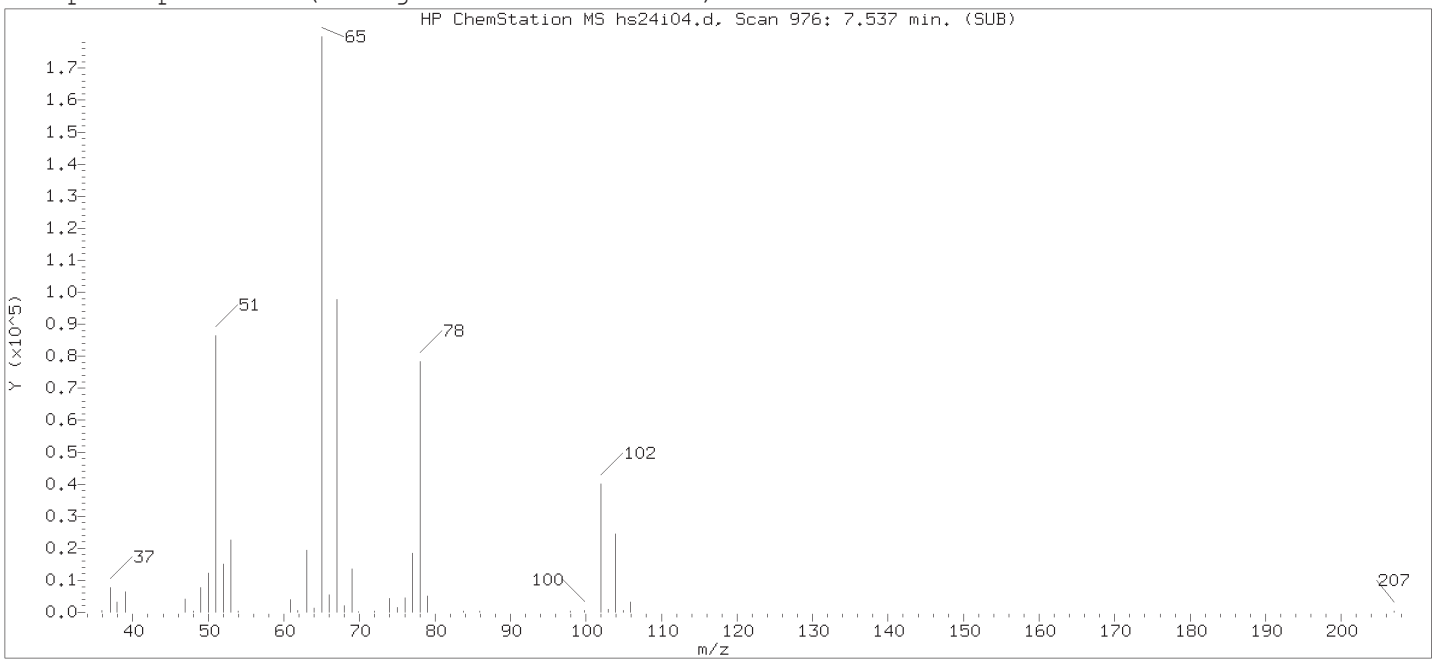
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 976
Retention Time (minutes): 7.537
Quant Ion : 102.00
Area (flag) : 125039M
On-Column Amount (ng) : 10.2684
Integration start scan : 964 Integration stop scan: 986
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

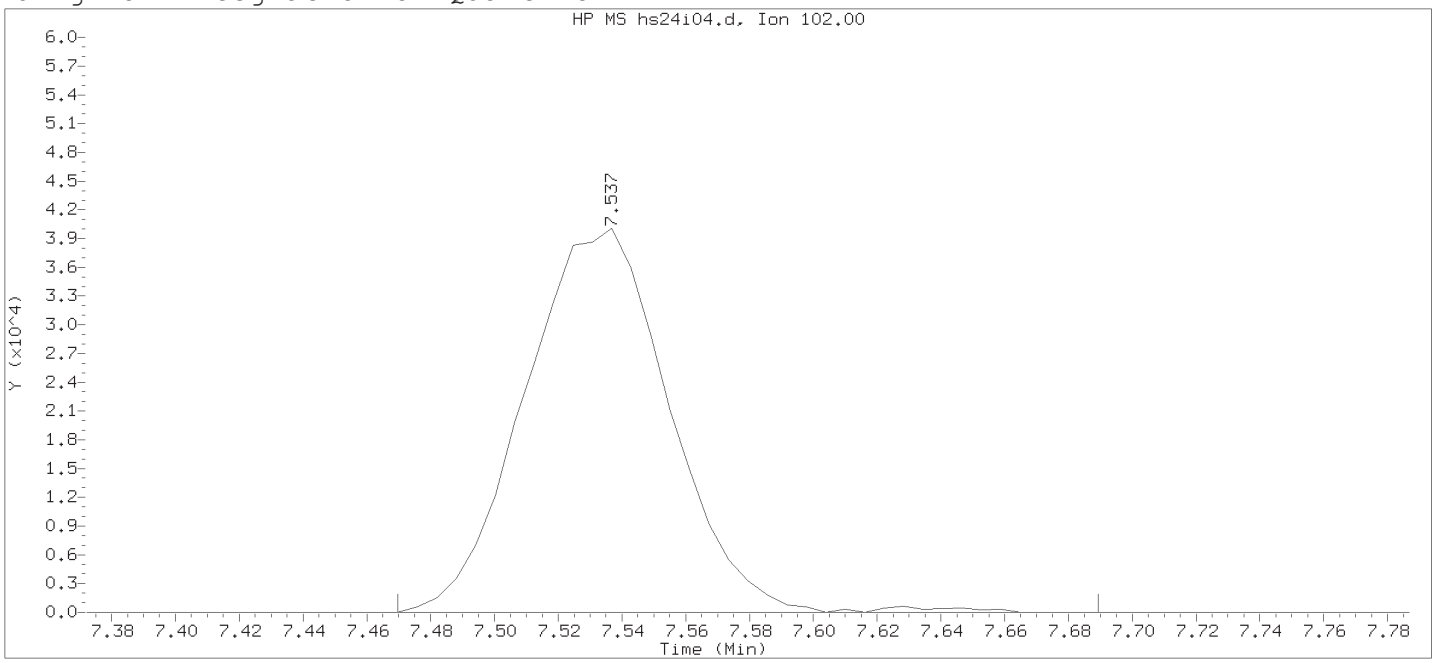
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

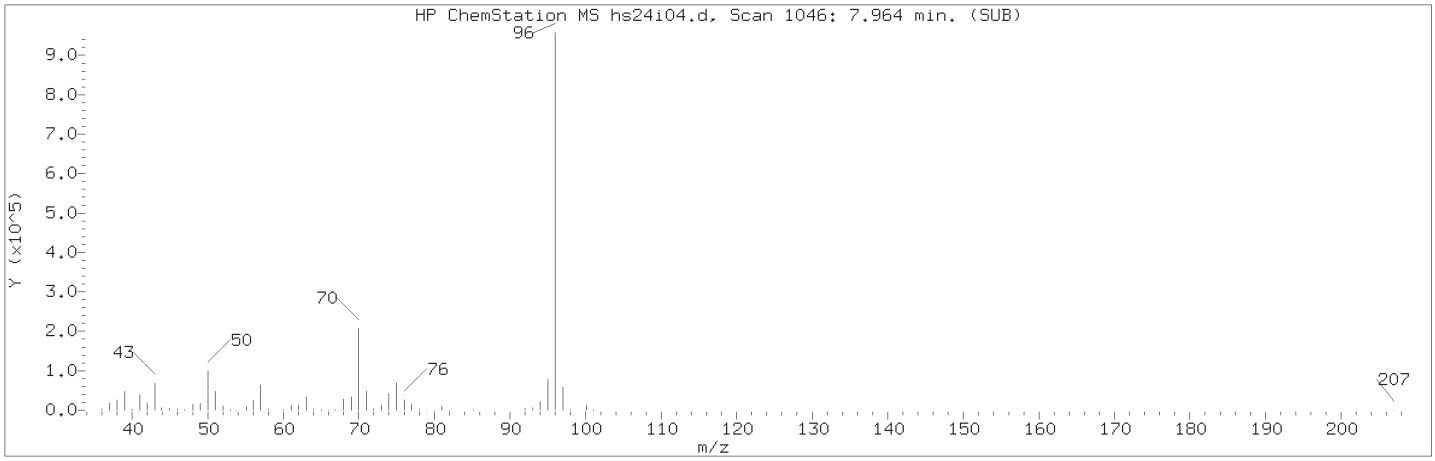
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

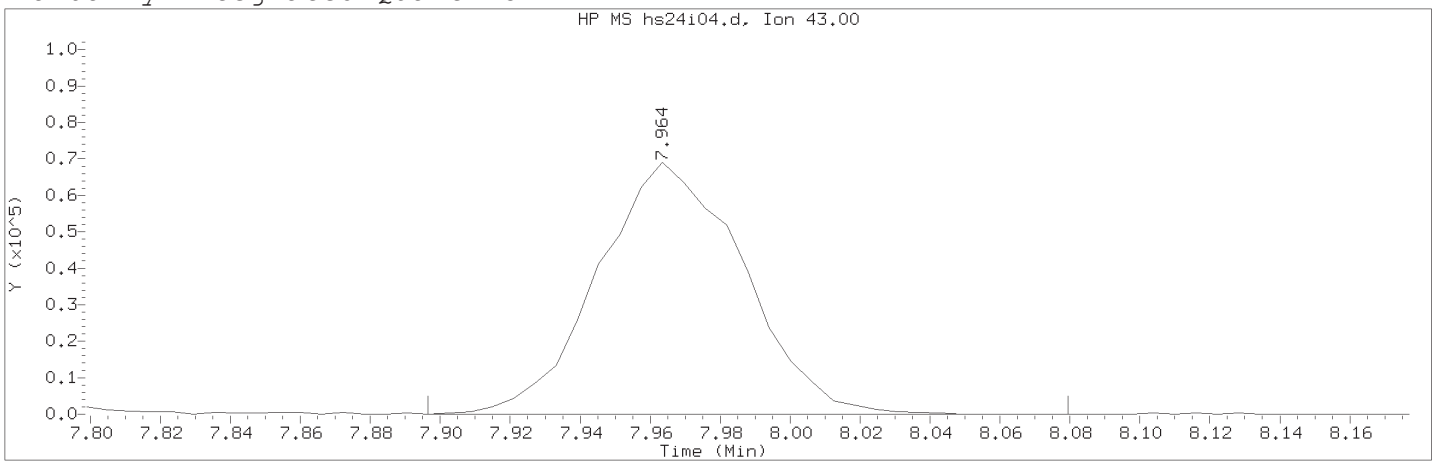
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 976
Retention Time (minutes): 7.537
Quant Ion : 102.00
Area : 126184
On-column Amount (ng) : 10.2319
Integration start scan : 964 Integration stop scan: 1000
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

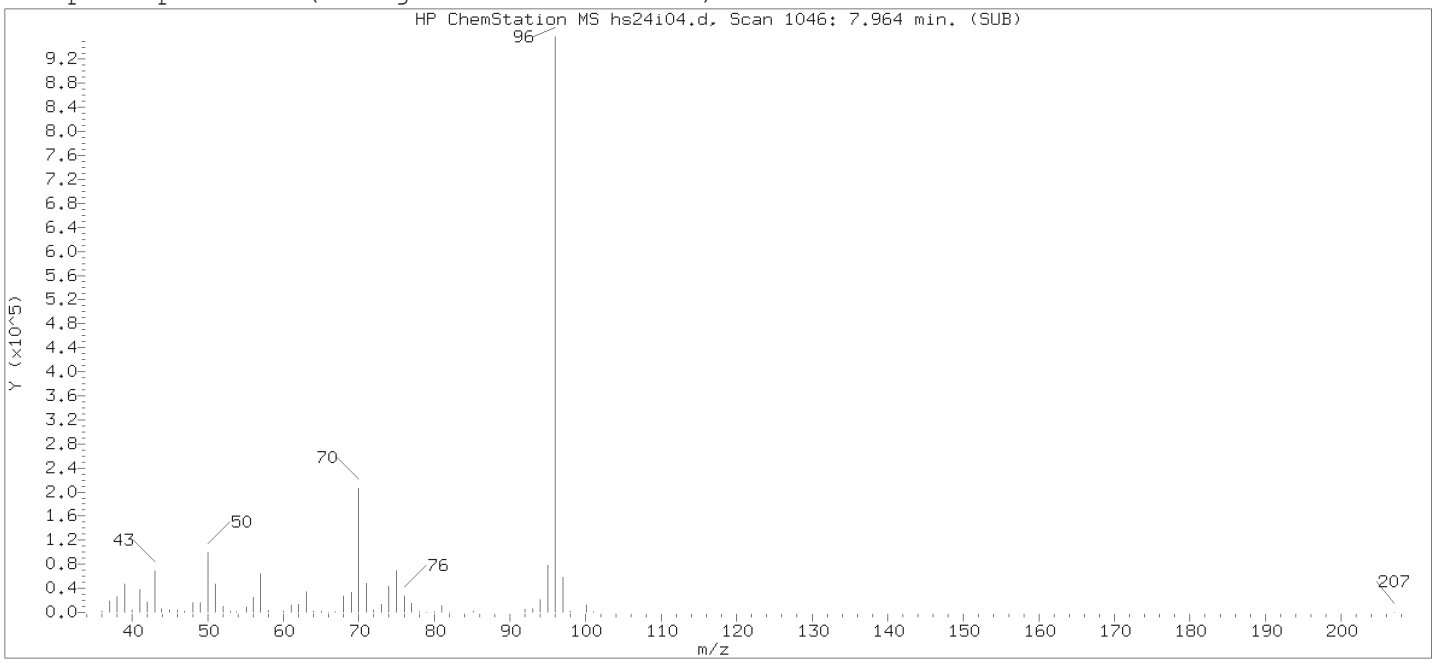
Compound Number : 62
Compound Name : n-Heptane
Scan Number : 1046
Retention Time (minutes): 7.964
Quant Ion : 43.00
Area (flag) : 198879M
On-Column Amount (ng) : 1.9780
Integration start scan : 1034 Integration stop scan: 1064
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

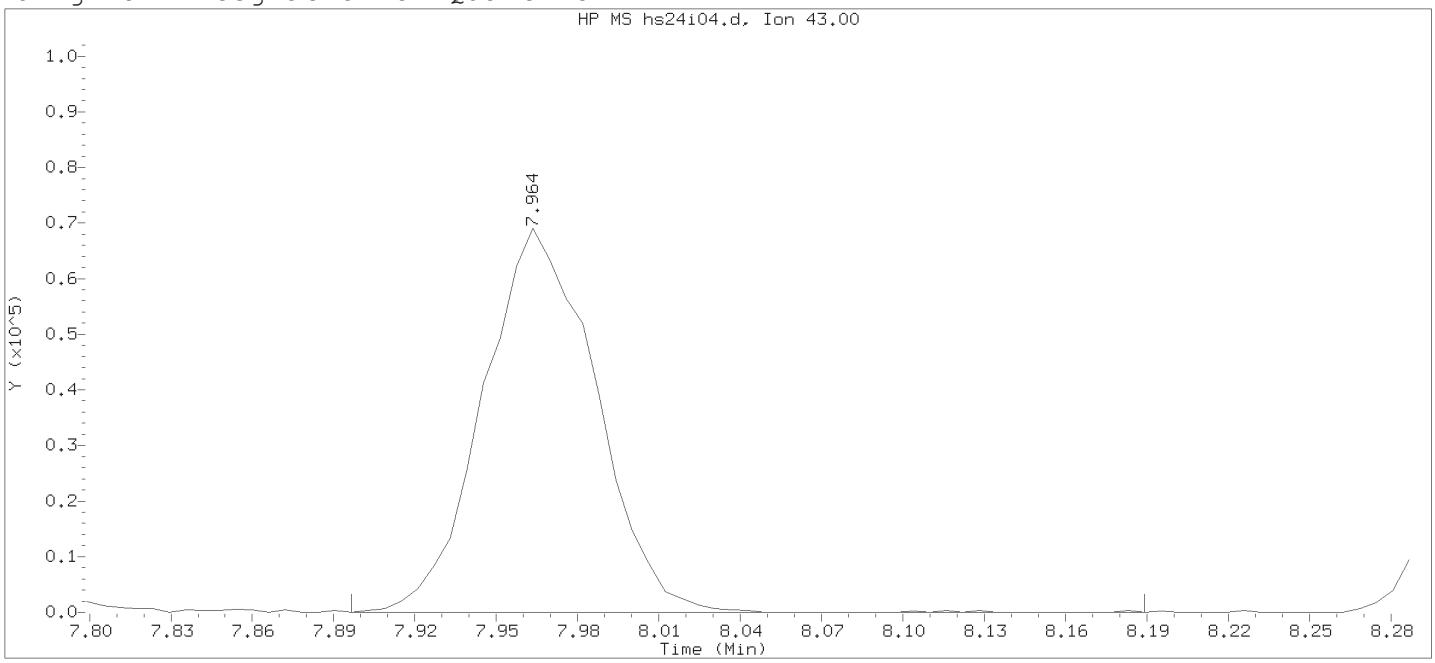
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

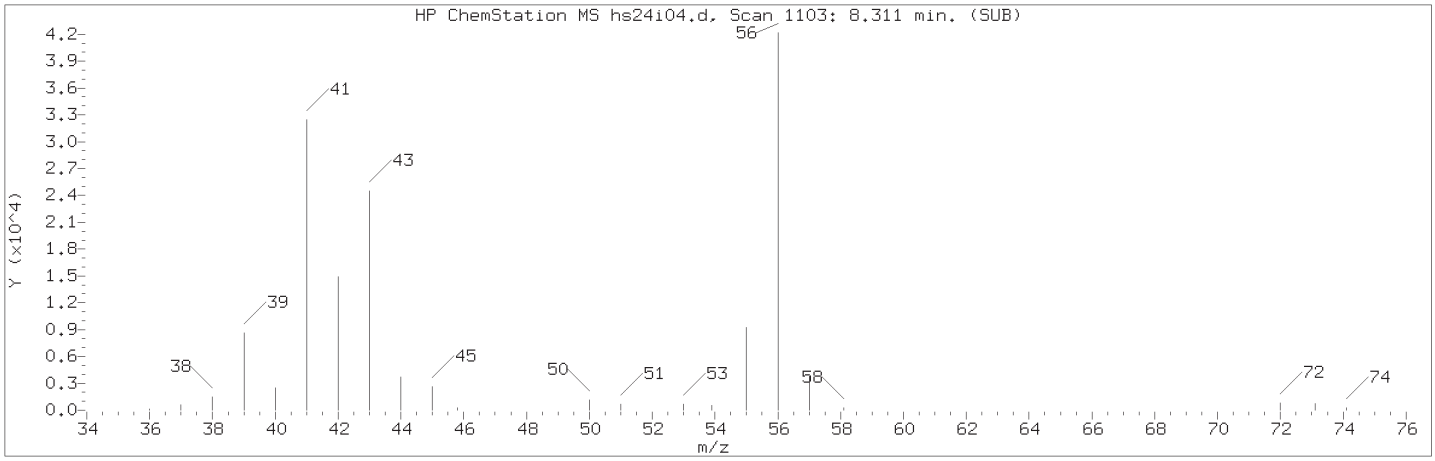
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

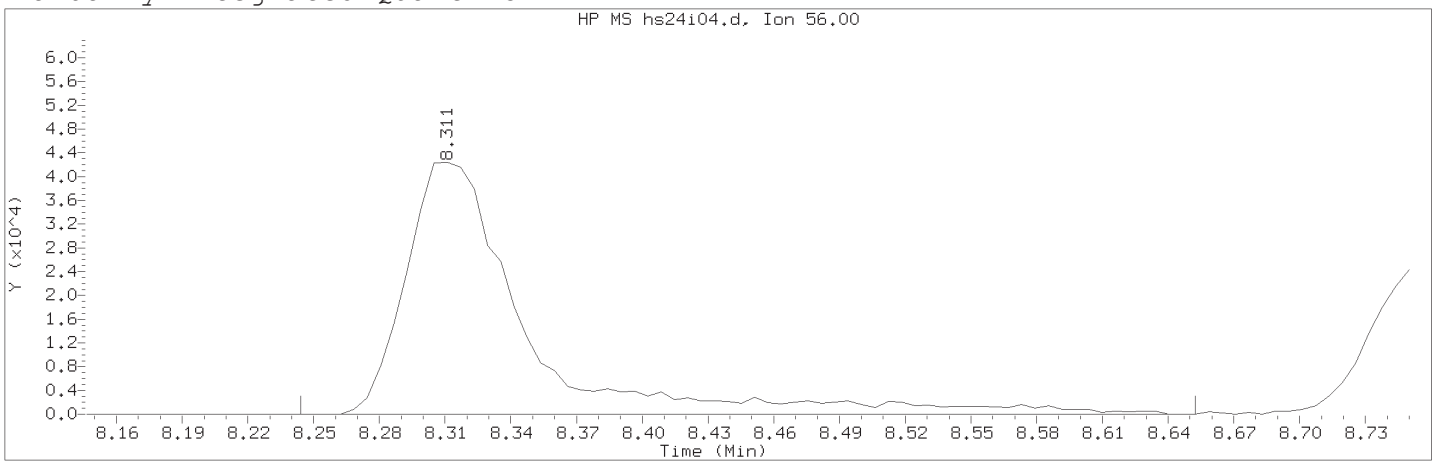
Compound Number : 62
Compound Name : n-Heptane
Scan Number : 1046
Retention Time (minutes): 7.964
Quant Ion : 43.00
Area : 199330
On-column Amount (ng) : 1.8366
Integration start scan : 1034 Integration stop scan: 1082
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

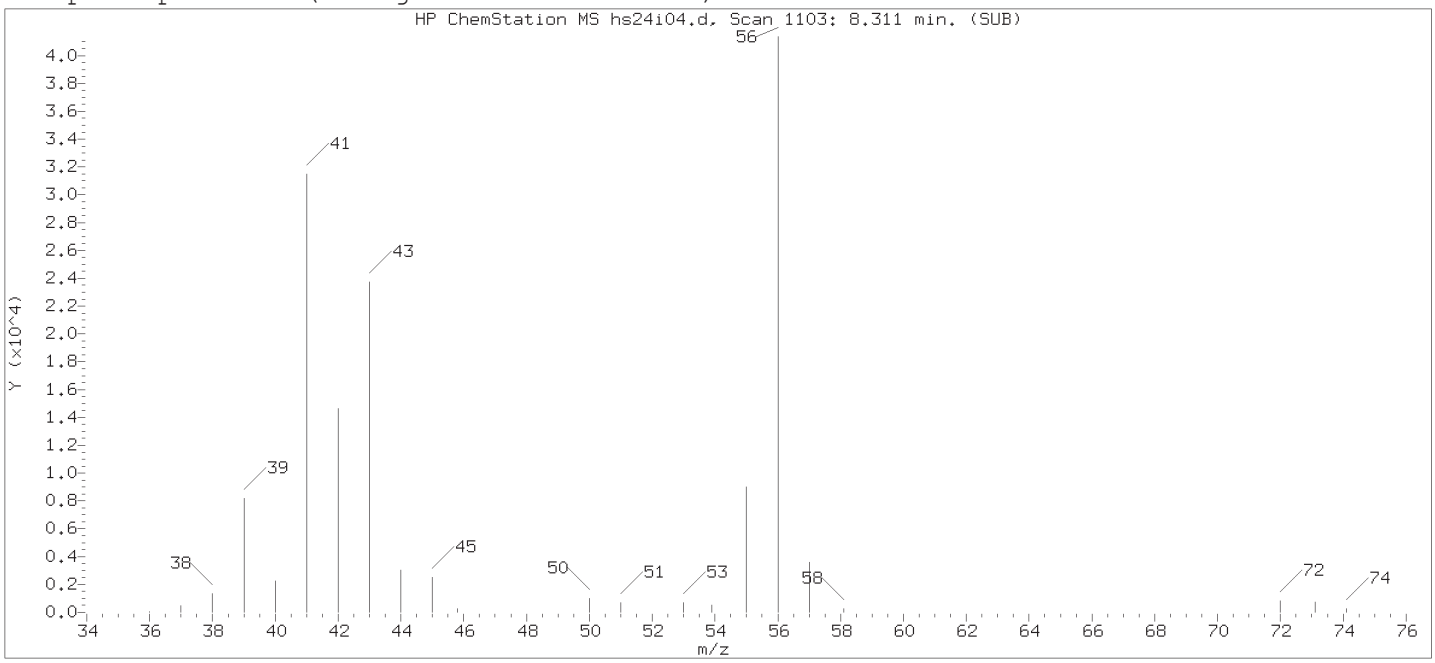
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1103
Retention Time (minutes): 8.311
Quant Ion : 56.00
Area (flag) : 160778M
On-Column Amount (ng) : 194.8775
Integration start scan : 1091 Integration stop scan: 1158
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

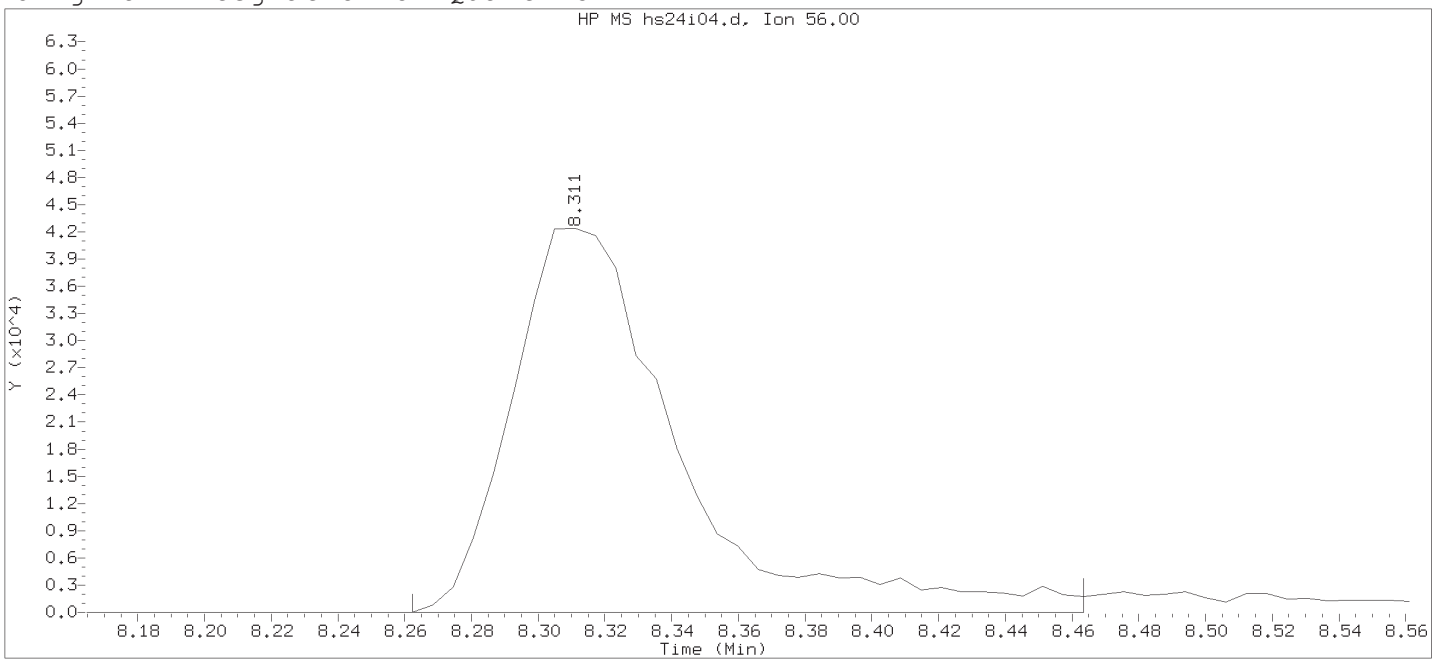
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

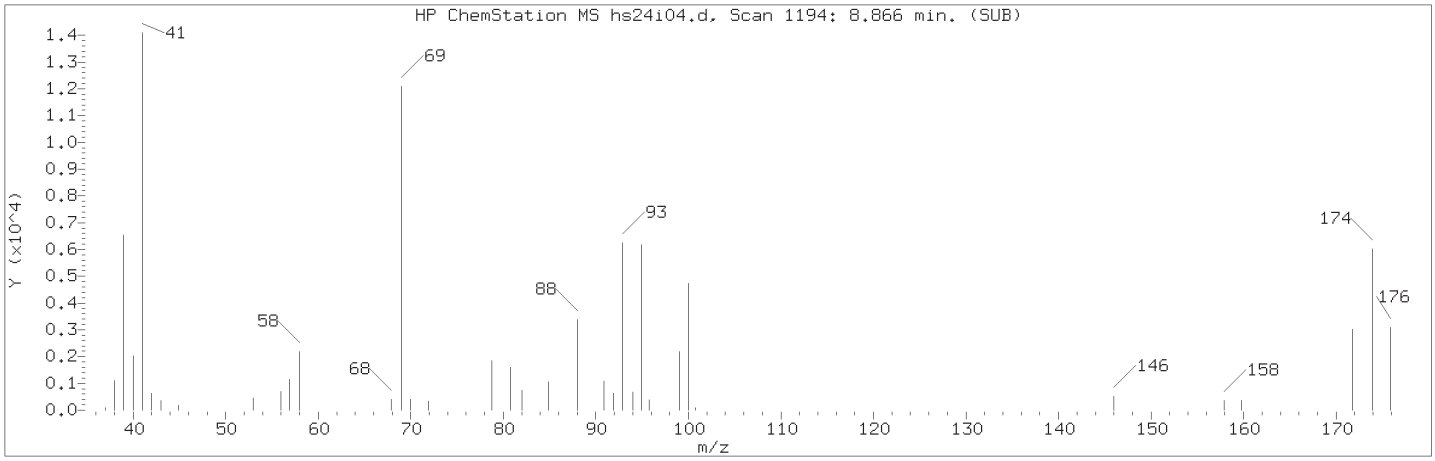
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

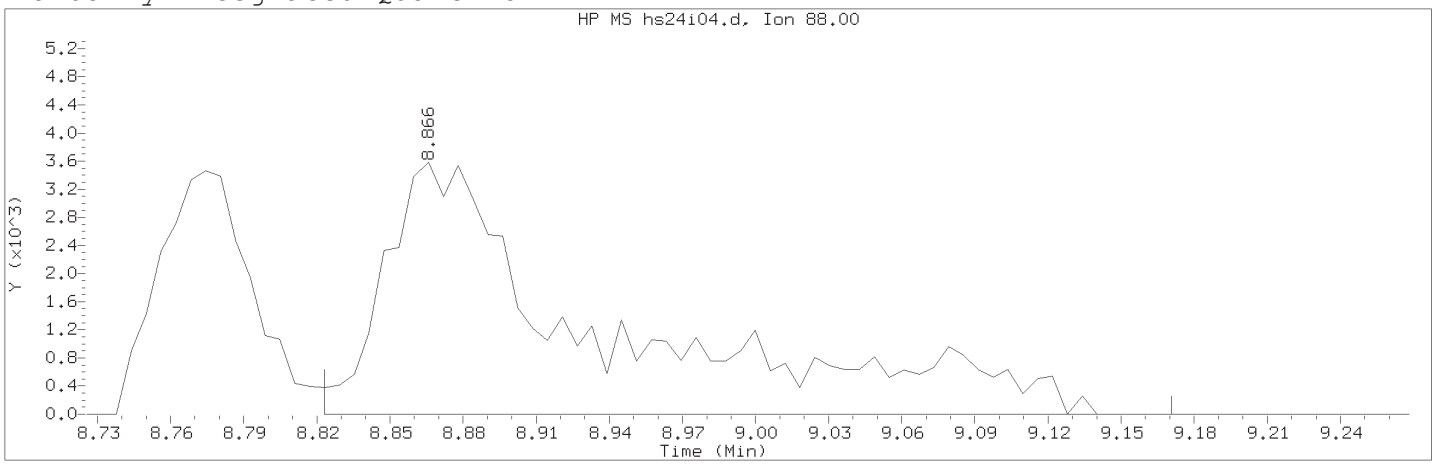
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1103
Retention Time (minutes): 8.311
Quant Ion : 56.00
Area : 147095
On-column Amount (ng) : 168.2954
Integration start scan : 1094 Integration stop scan: 1127
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

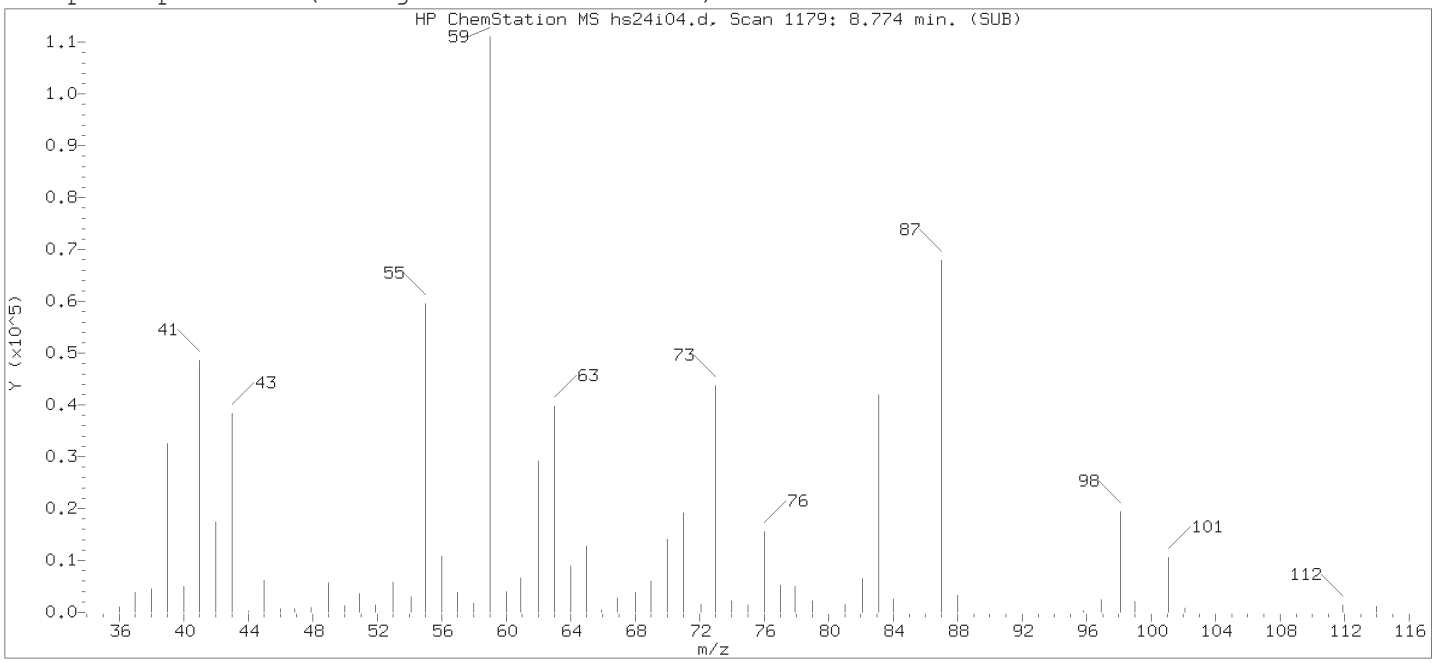
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1194
Retention Time (minutes): 8.866
Quant Ion : 88.00
Area (flag) : 21749M
On-Column Amount (ng) : 109.4886
Integration start scan : 1186 Integration stop scan: 1243
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

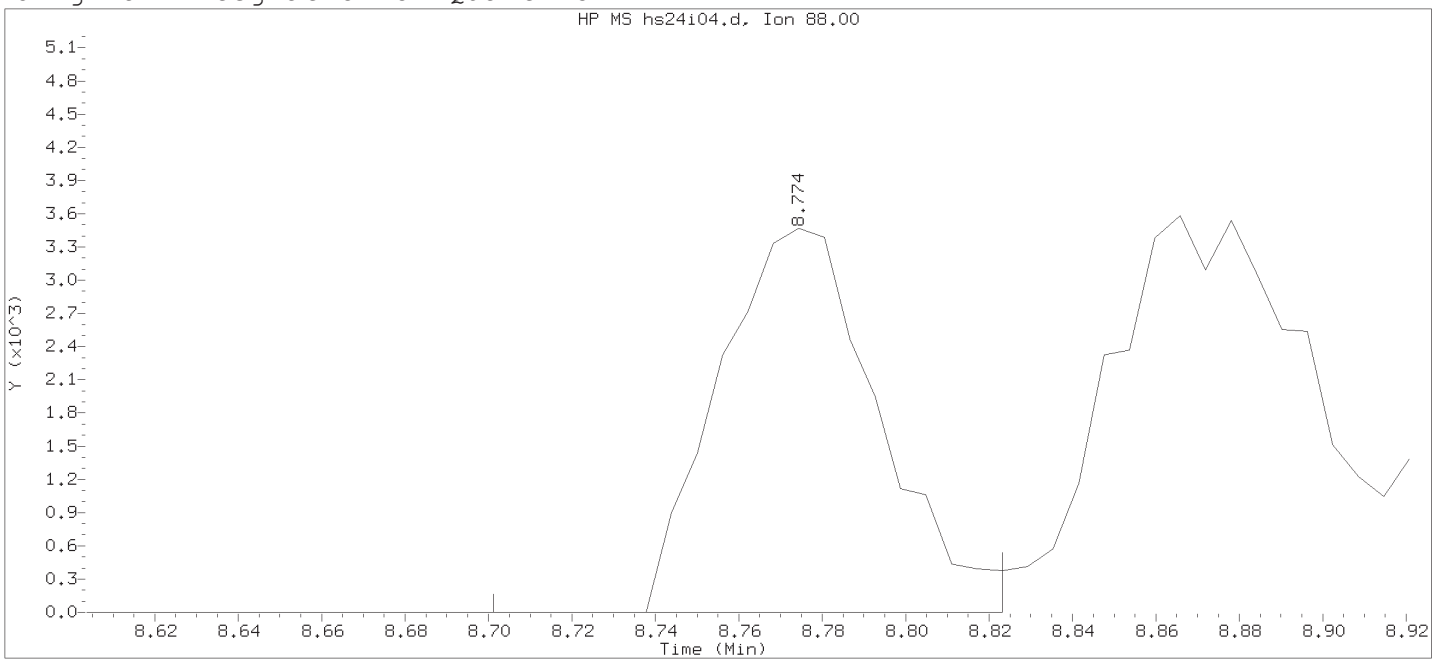
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

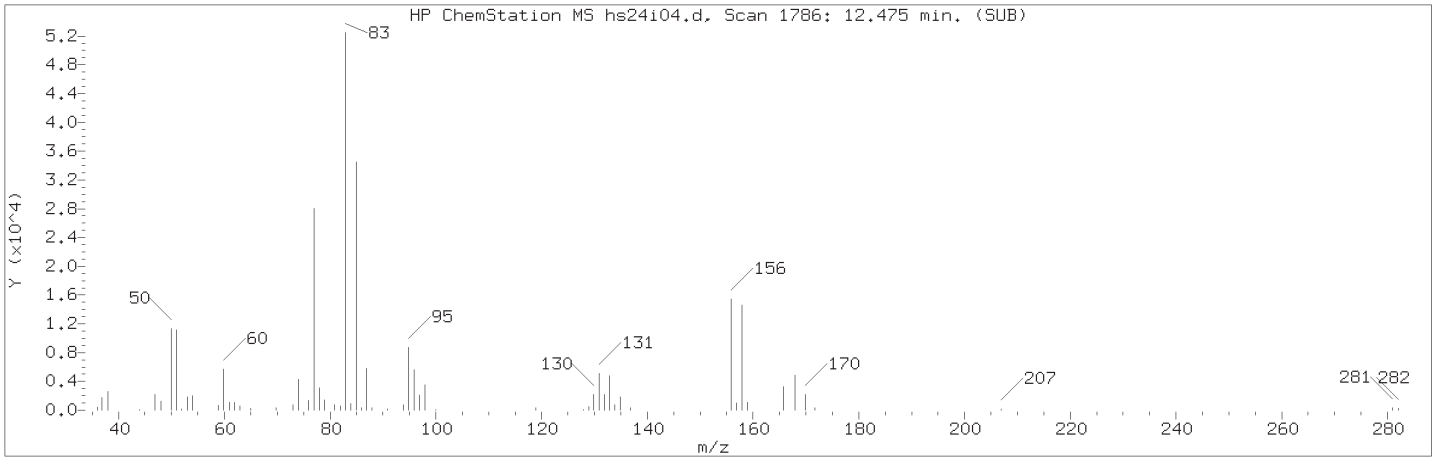
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

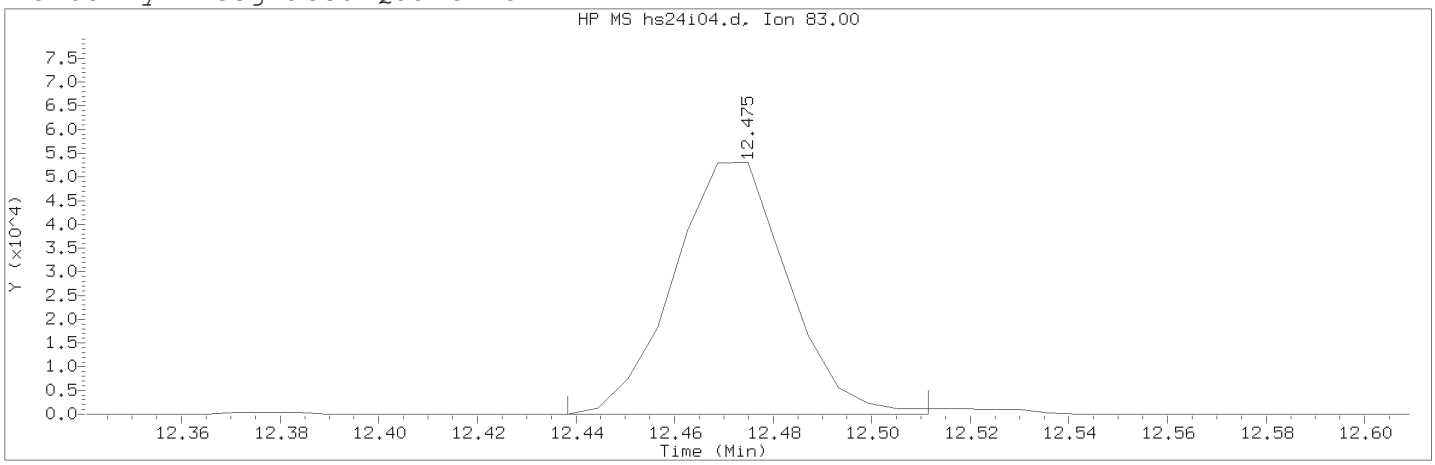
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1179		
Retention Time (minutes)	: 8.774		
Quant Ion	: 88.00		
Area	: 9210		
On-column Amount (ng)	: 66.8956		
Integration start scan	: 1166	Integration stop scan:	1186
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

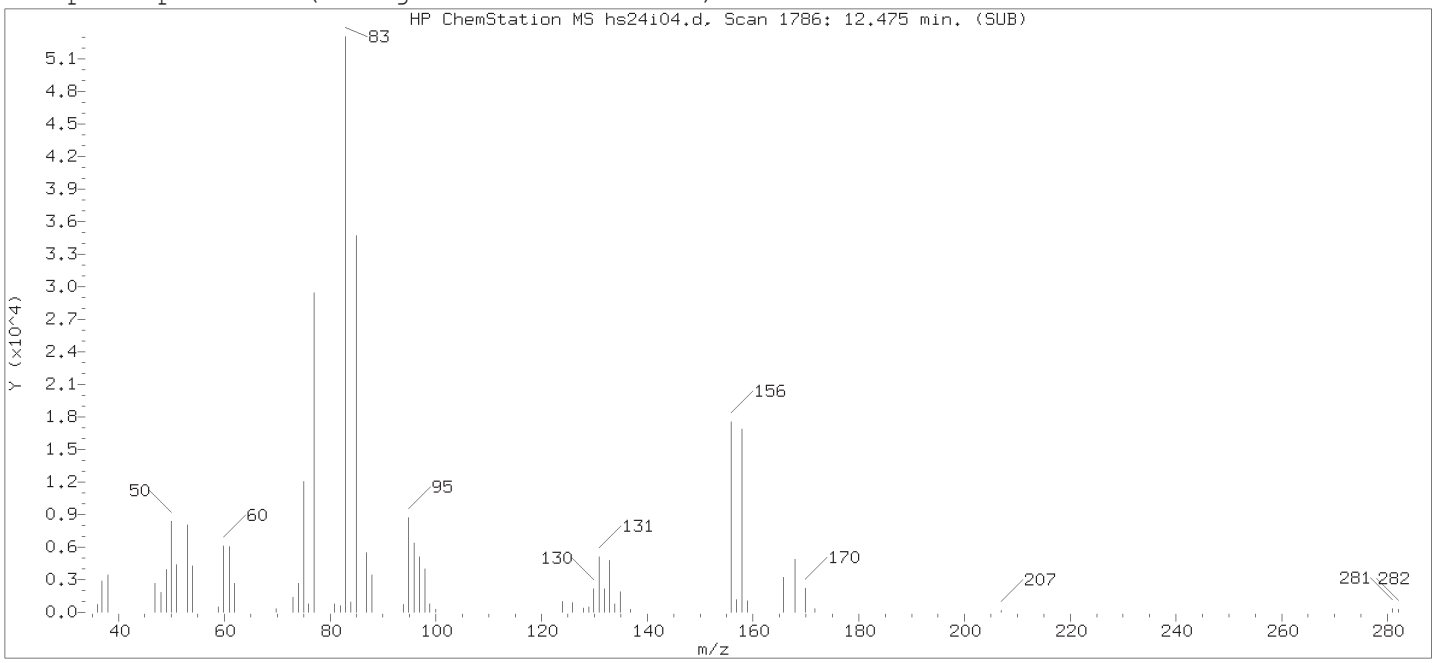
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area (flag) : 85286M
On-Column Amount (ng) : 1.9375
Integration start scan : 1779 Integration stop scan: 1791
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

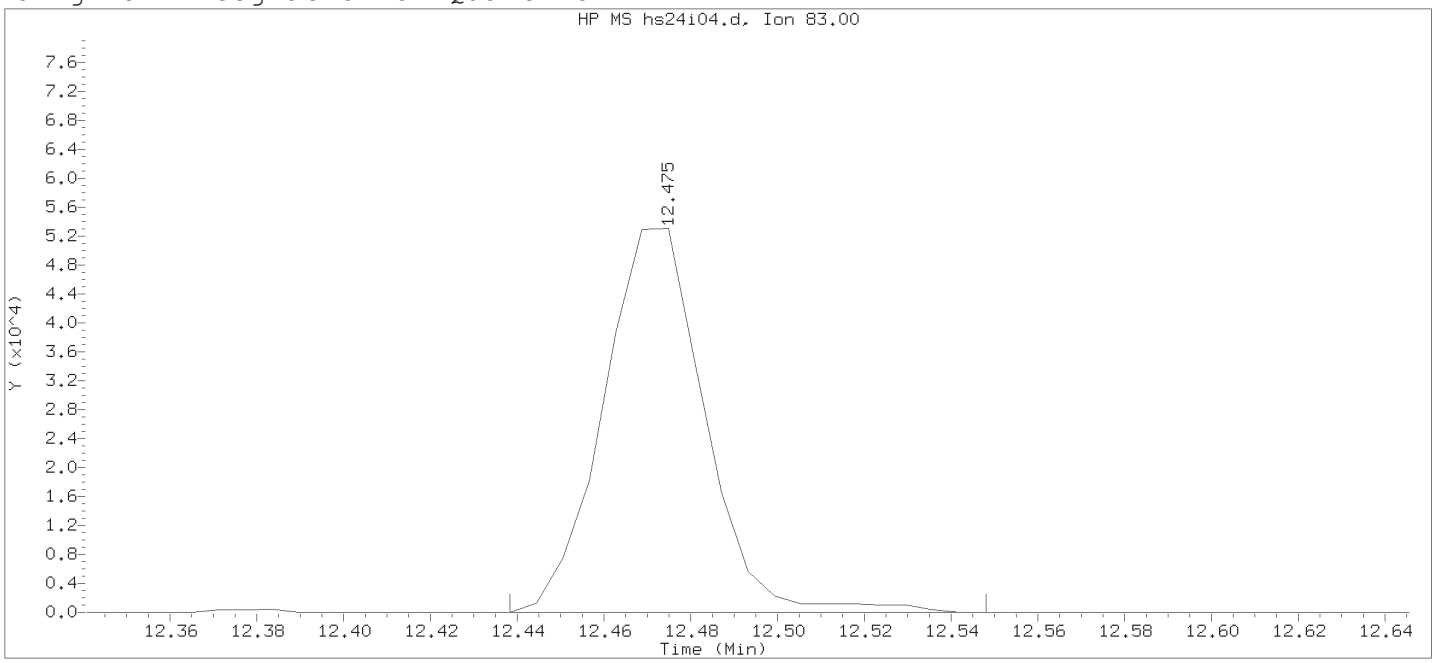
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

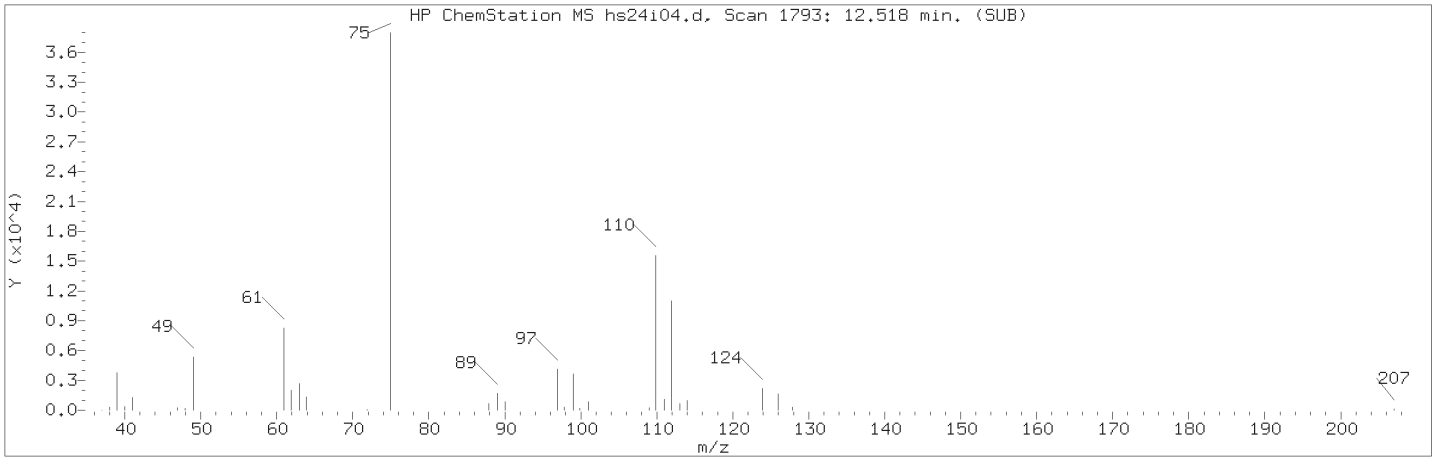
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

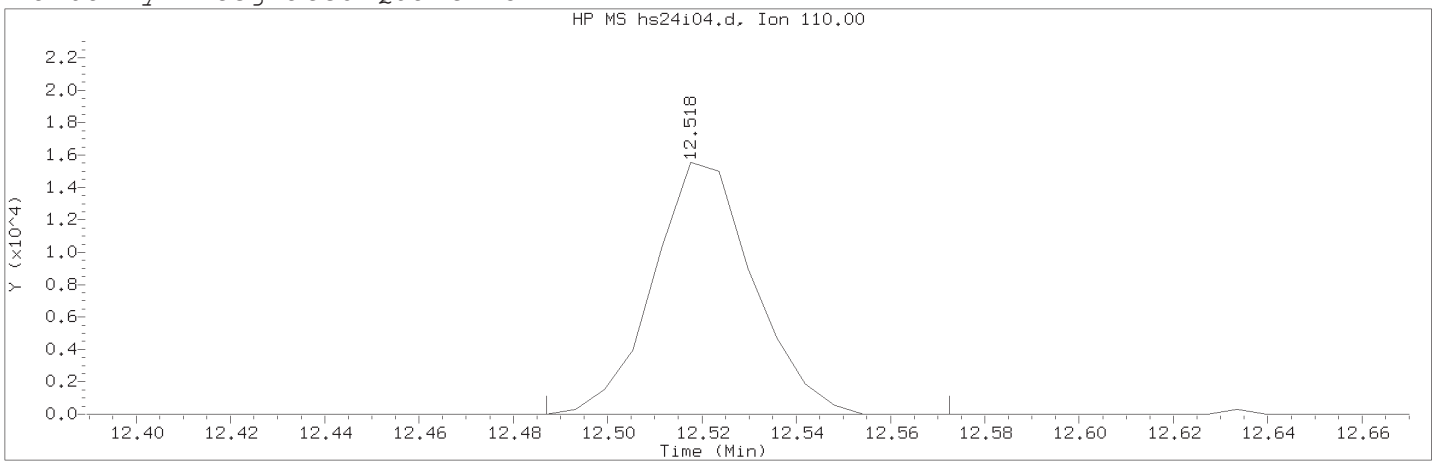
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area : 86557
On-column Amount (ng) : 1.8966
Integration start scan : 1779 Integration stop scan: 1797
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

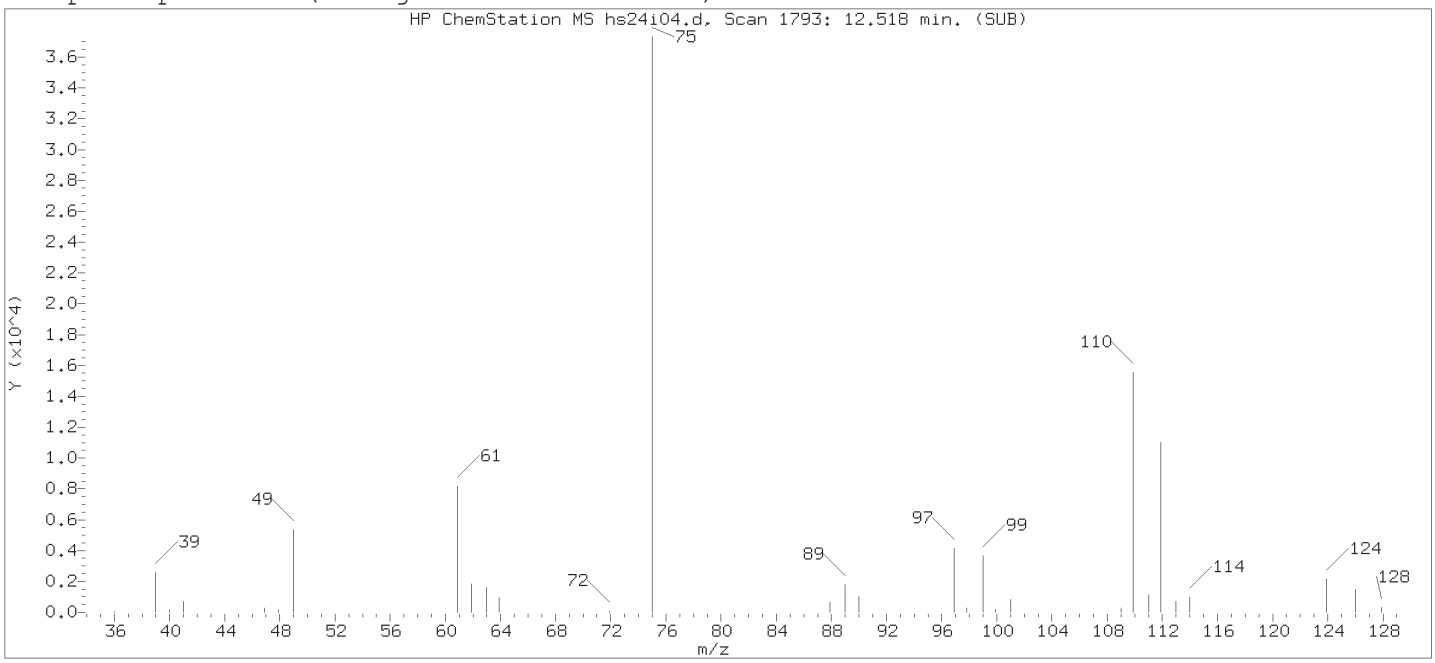
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1793
Retention Time (minutes): 12.518
Quant Ion : 110.00
Area (flag) : 22957M
On-Column Amount (ng) : 2.0173
Integration start scan : 1787 Integration stop scan: 1801
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

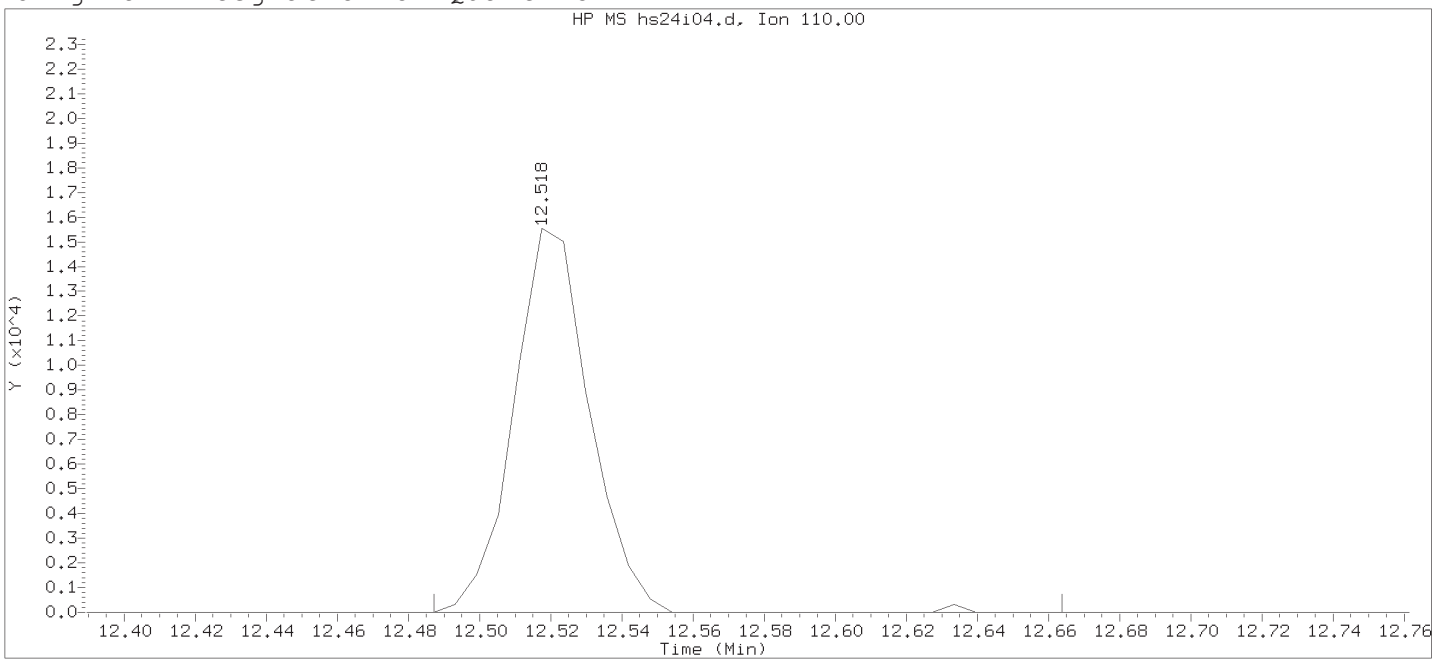
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

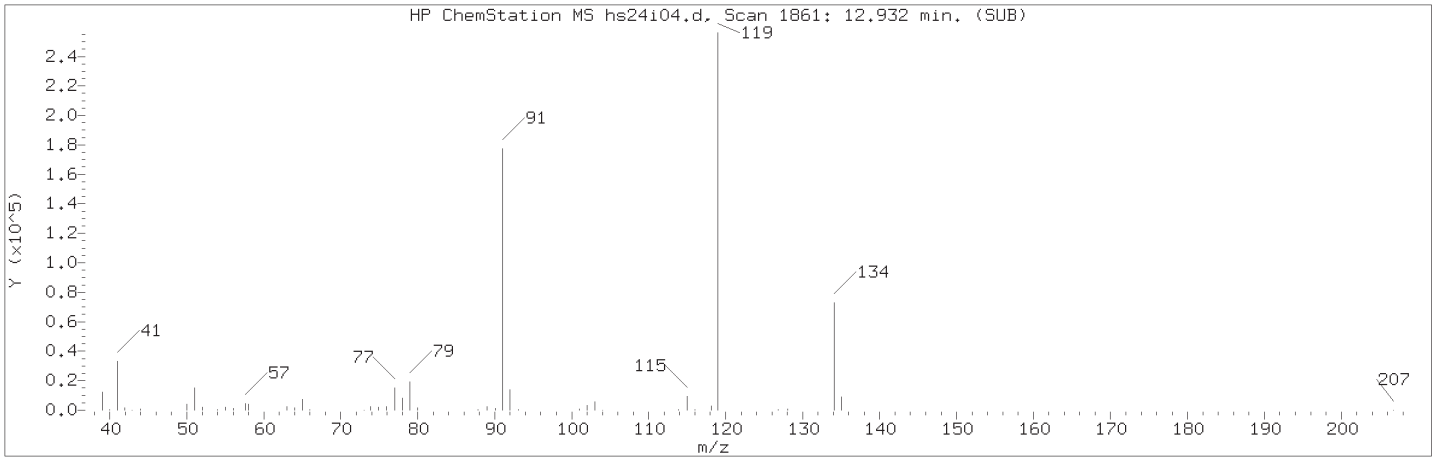
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

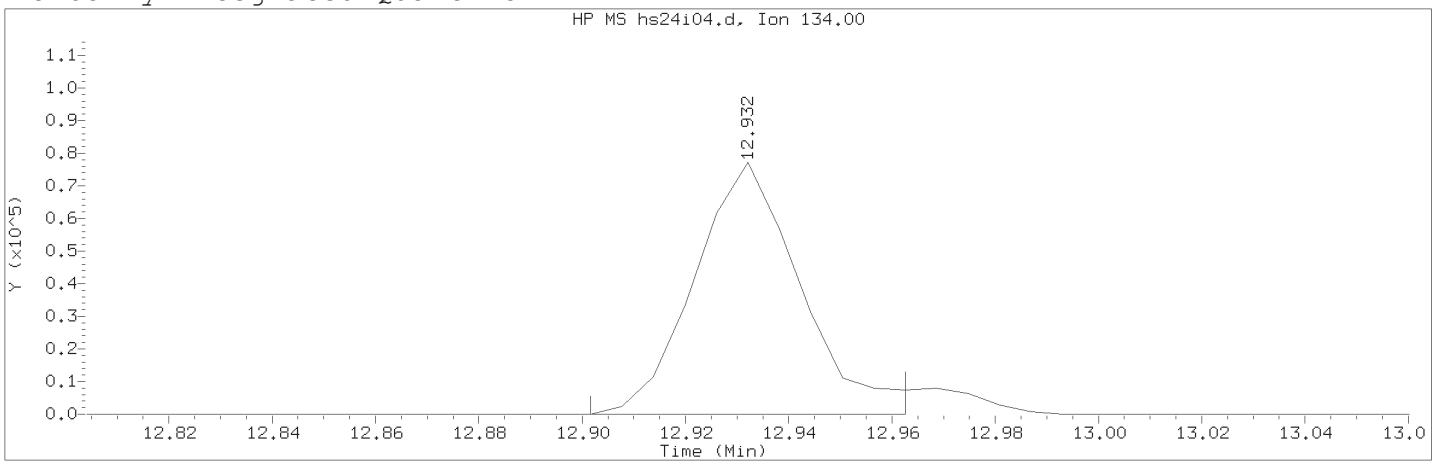
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1793
Retention Time (minutes): 12.518
Quant Ion : 110.00
Area : 23069
On-column Amount (ng) : 2.0019
Integration start scan : 1787 Integration stop scan: 1816
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

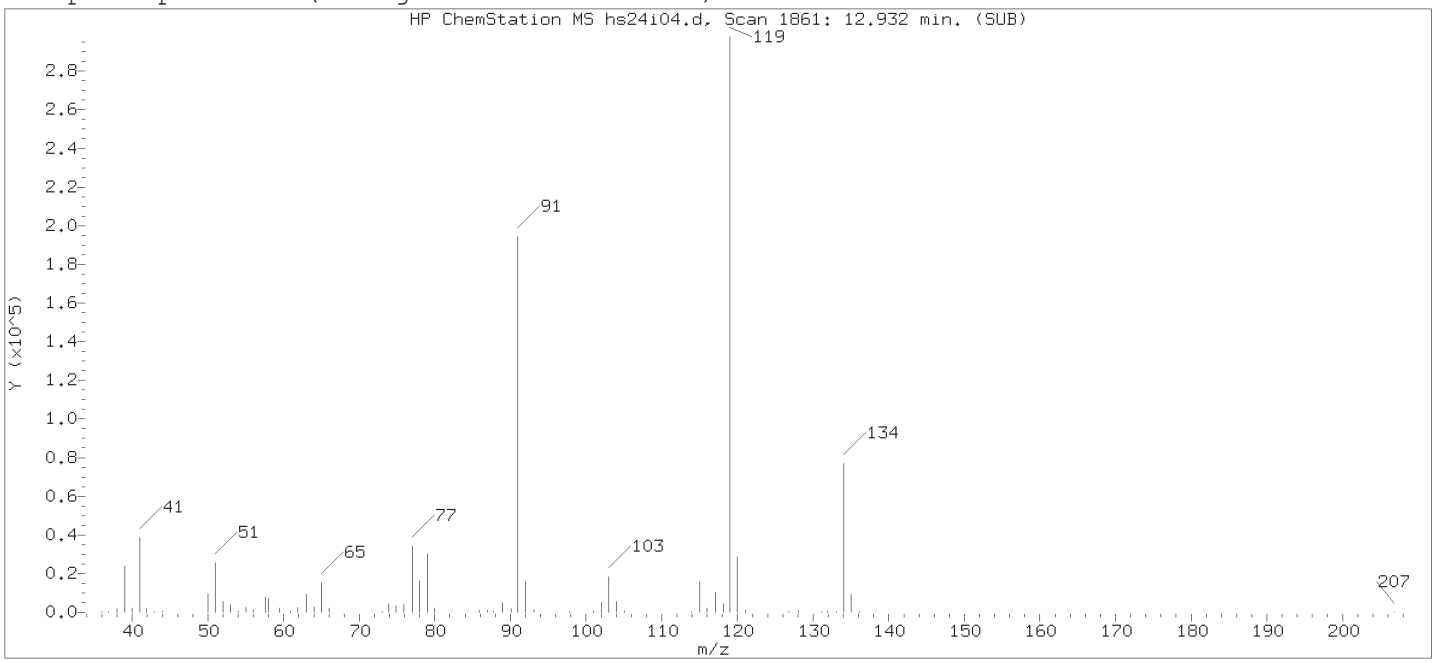
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area (flag) : 110083M
On-Column Amount (ng) : 2.0535
Integration start scan : 1855 Integration stop scan: 1865
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

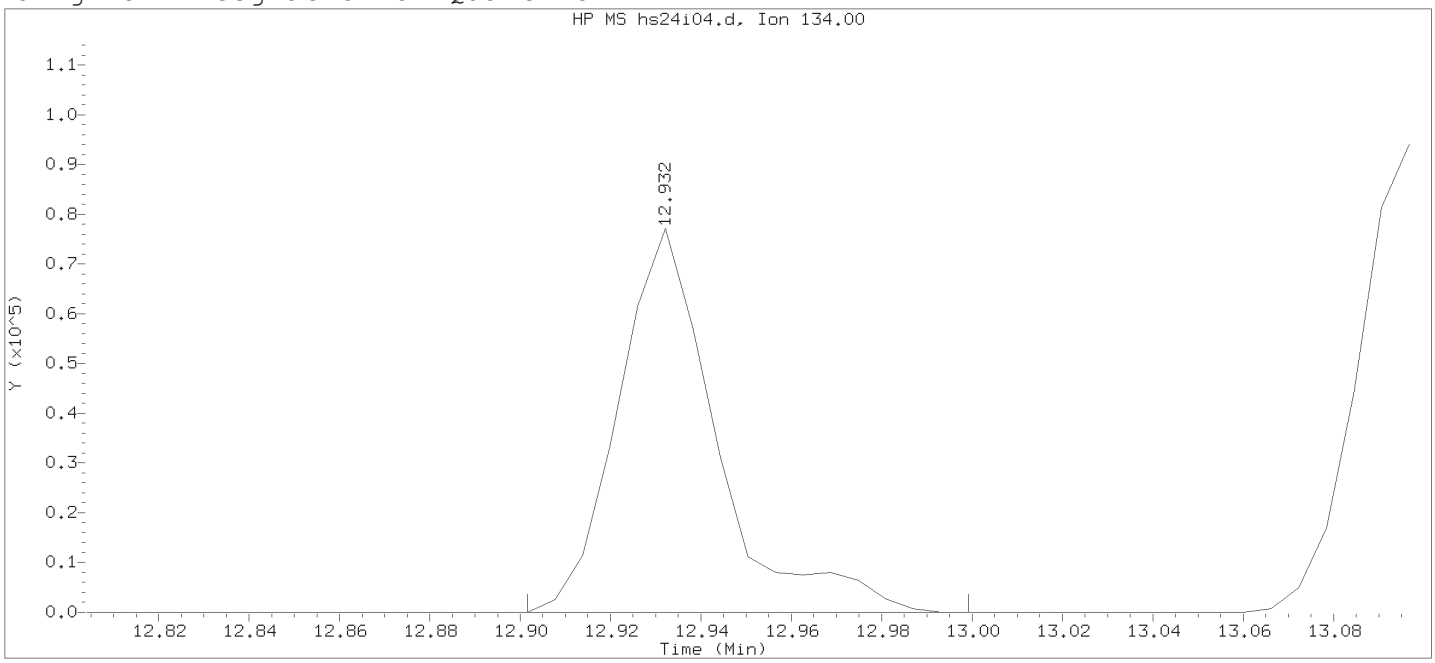
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

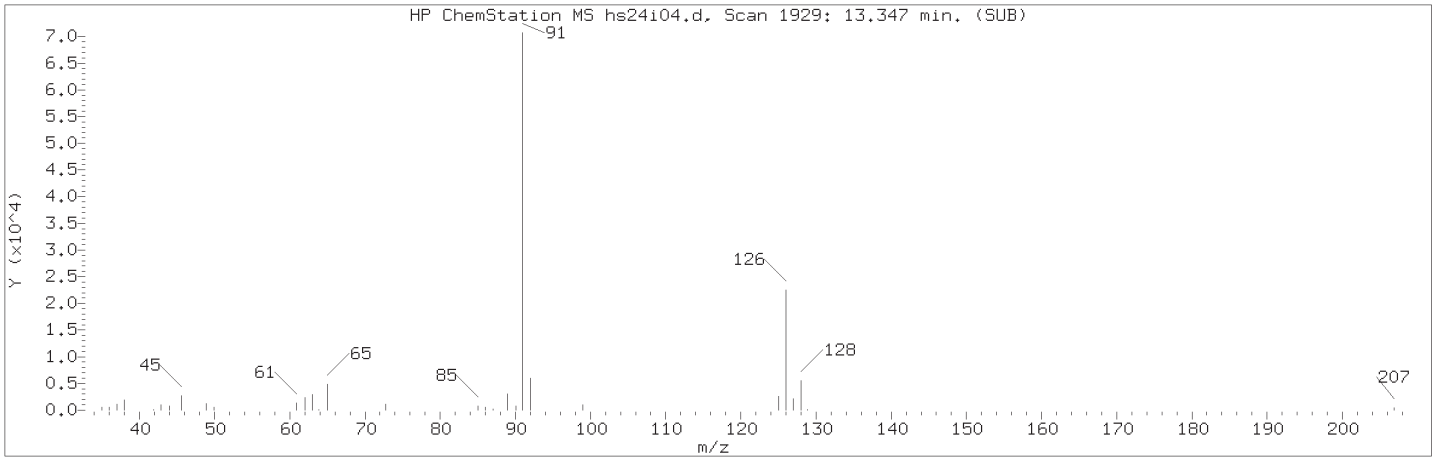
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

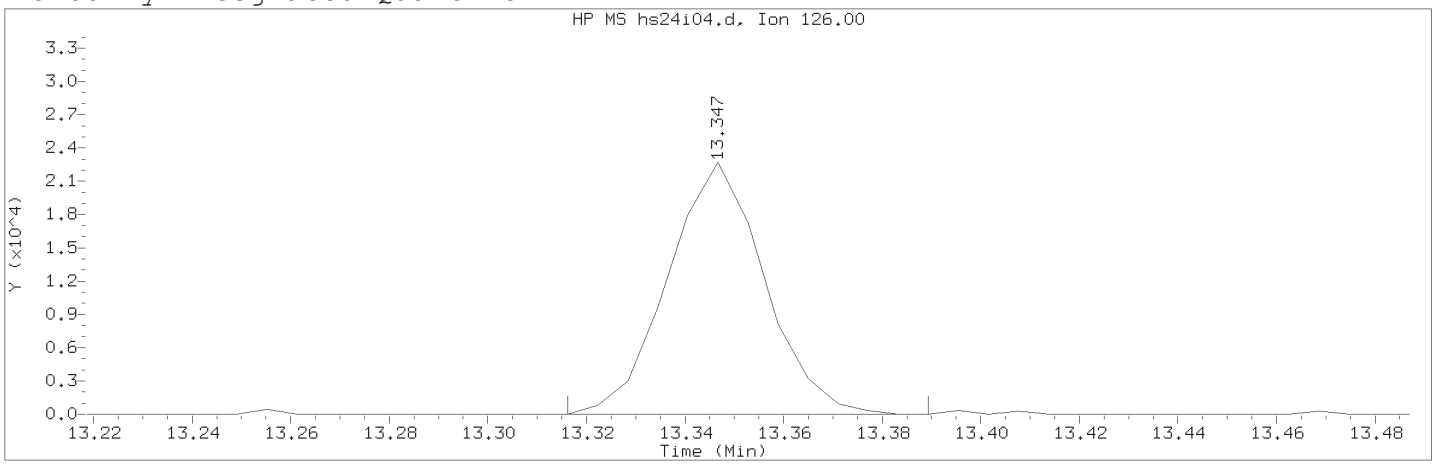
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area : 116606
On-column Amount (ng) : 2.0344
Integration start scan : 1855 Integration stop scan: 1871
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

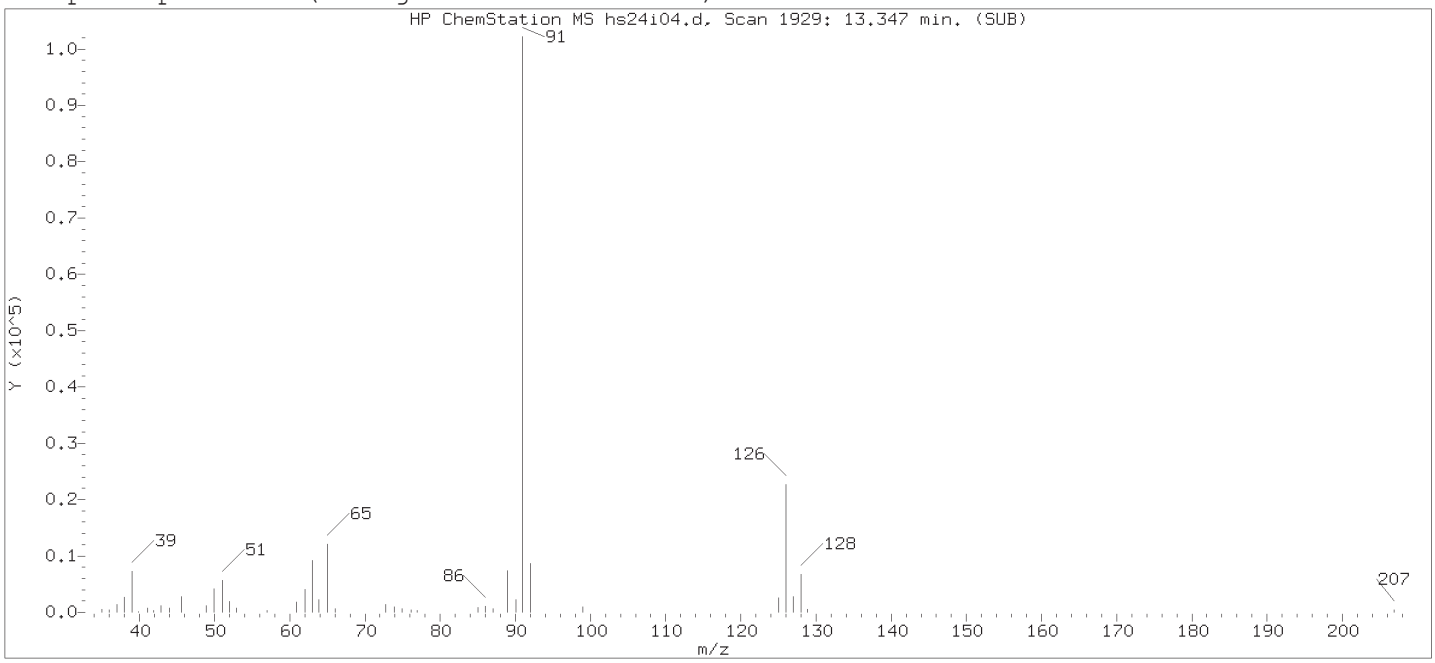
Compound Number : 136
Compound Name : Benzyl Chloride
Scan Number : 1929
Retention Time (minutes): 13.347
Quant Ion : 126.00
Area (flag) : 30686M
On-Column Amount (ng) : 1.9284
Integration start scan : 1923 Integration stop scan: 1935
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

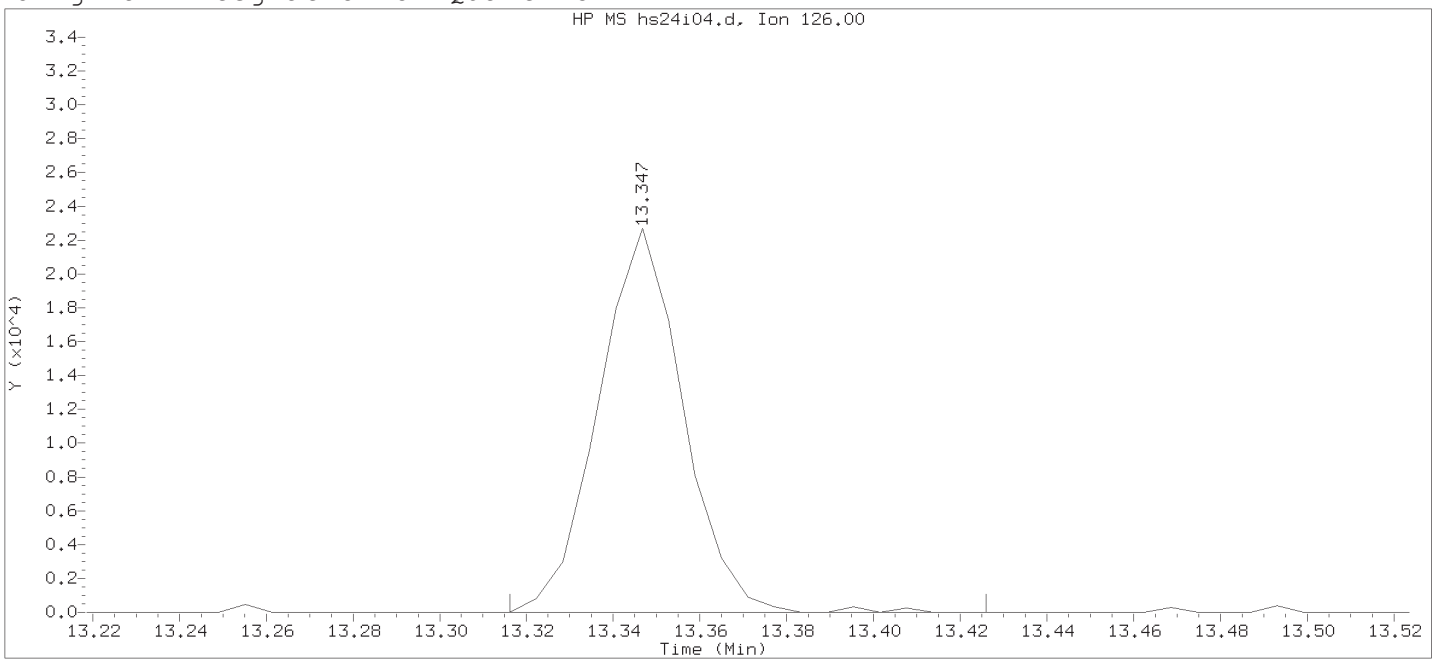
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



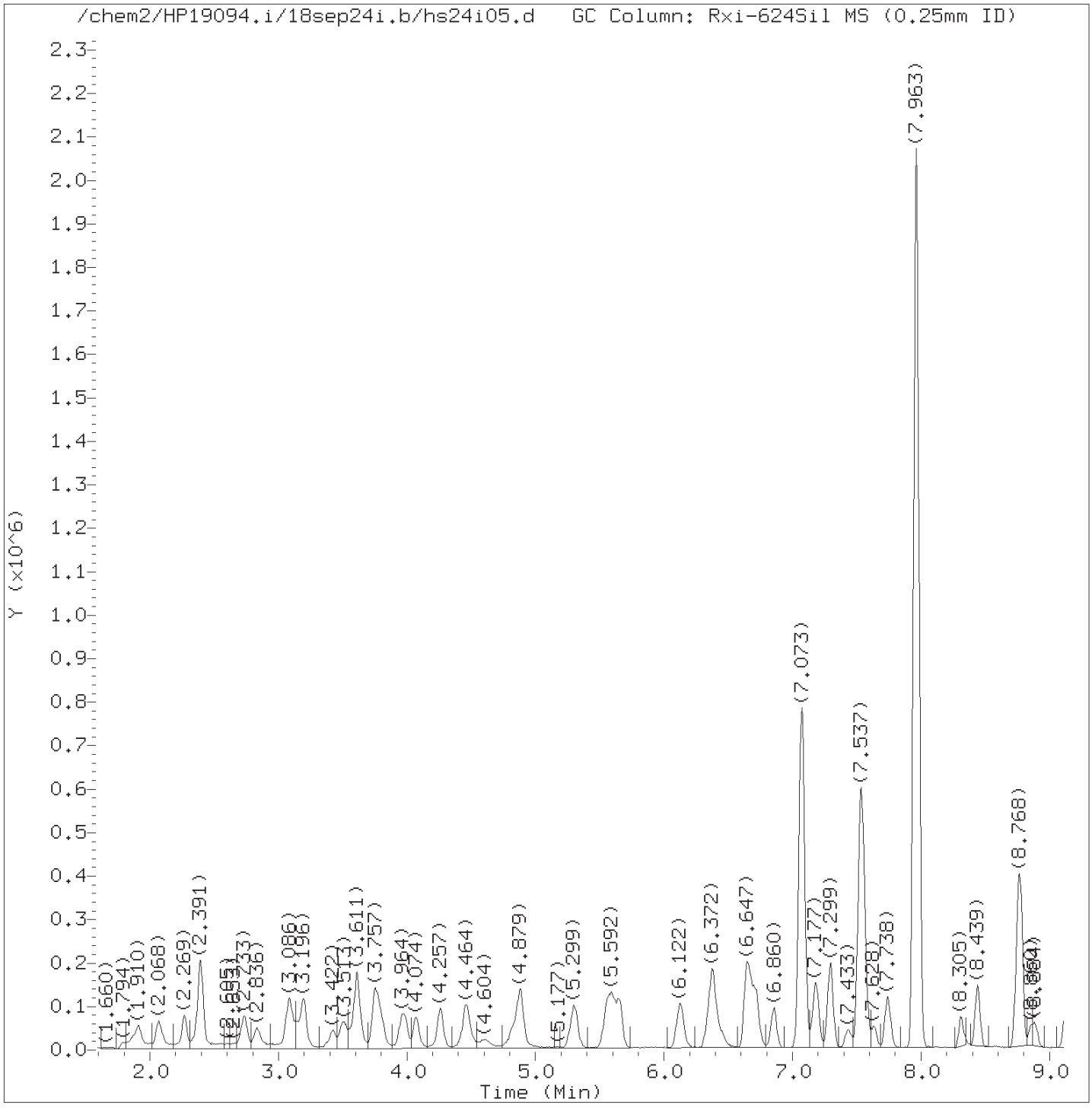
Data File: /chem2/HP19094.i/18sep24i.b/hs24i04.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:33 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 136
Compound Name : Benzyl Chloride
Scan Number : 1929
Retention Time (minutes): 13.347
Quant Ion : 126.00
Area : 30896
On-column Amount (ng) : 1.7699
Integration start scan : 1923 Integration stop scan: 1941
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052



Total Ion Chromatogram (TIC)

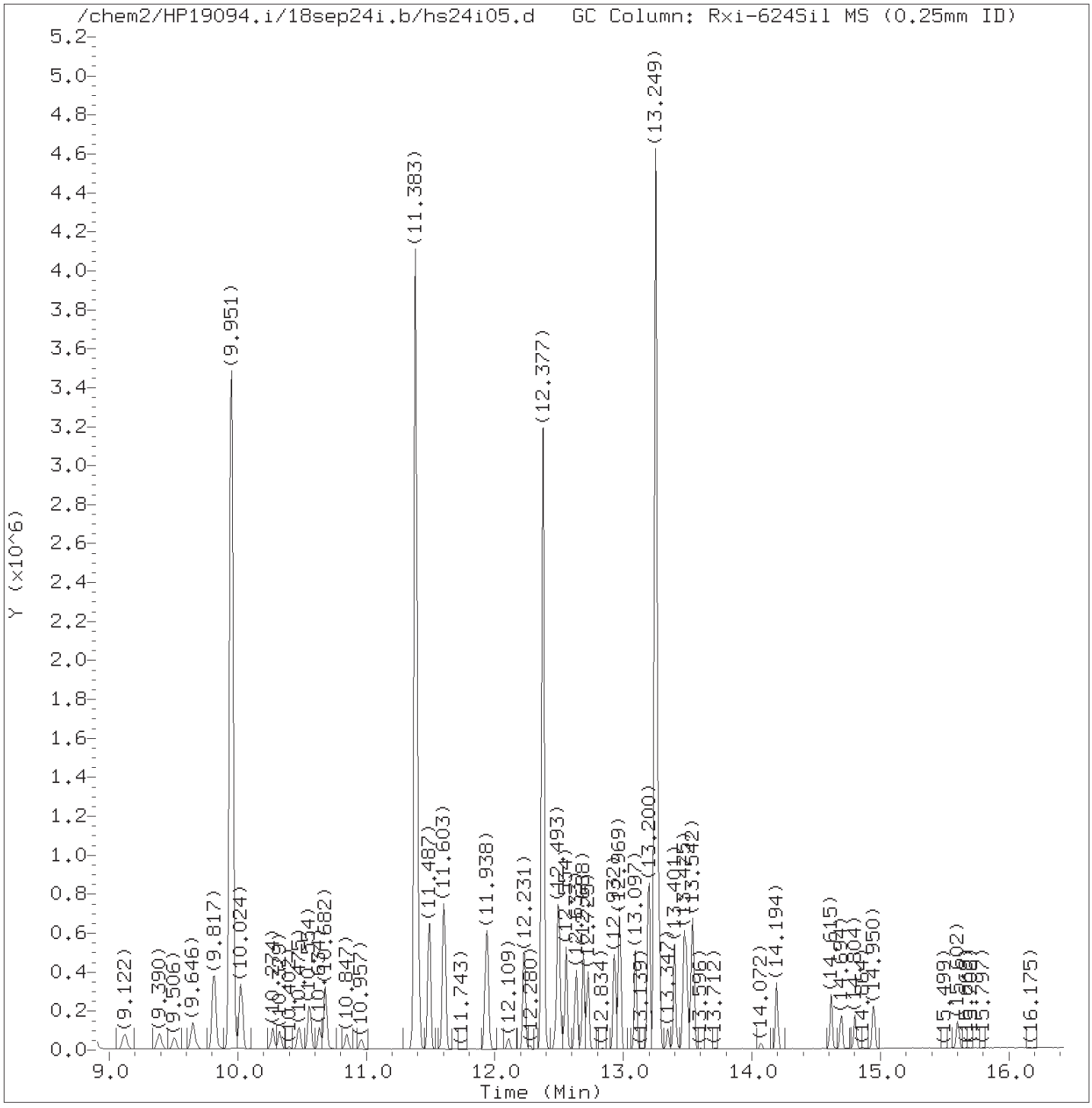
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.068	85	109107	1.012
2) Chloromethane	(2)	2.269	50	106297	1.007
6) 1,3-Butadiene	(2)	2.385	39	118482M	1.058
5) Vinyl Chloride	(2)	2.397	62	100865	1.020
7) Bromomethane	(2)	2.739	94	77295	1.005
8) Chloroethane	(2)	2.836	64	61896	1.032
9) Dichlorofluoromethane	(2)	3.080	67	145968	1.023
10) Trichlorofluoromethane	(2)	3.141	101	127294	1.019
11) Ethyl ether	(2)	3.428	59	41485	0.979
12) Freon 123a	(2)	3.513	67	80944	1.023
13) Acrolein	(1)	3.611	56	300932	49.491
15) 1,1-Dichloroethene	(2)	3.751	96	56220	1.039
16) Freon 113	(2)	3.775	101	65967	1.035
14) Acetone	(1)	3.787	43	80897M	9.905
17) Methyl Iodide	(2)	3.952	142	114085	1.012
18) Carbon Disulfide	(2)	4.074	76	173907	1.010
21) Methyl Acetate	(1)	4.232	43	24438	1.066
22) Allyl Chloride	(2)	4.257	41	102466	0.996
23) Methylene Chloride	(2)	4.452	84	61955	1.015
26)*t-Butyl Alcohol-d10	(1)	4.470	65	137024M	50.000
28) t-Butyl Alcohol	(1)	4.604	59	49275M	21.068
29) Acrylonitrile	(1)	4.824	53	53013	5.026
30) Methyl Tertiary Butyl Ether	(2)	4.854	73	114458	1.029
31) trans-1,2-Dichloroethene	(2)	4.891	96	63184	1.035
32) n-Hexane	(2)	5.299	57	100196	1.032
33) 1,1-Dichloroethane	(2)	5.555	63	119955	1.032
34) di-Isopropyl Ether	(2)	5.592	45	208438	1.010
35) 2-Chloro-1,3-Butadiene	(2)	5.653	53	105930	1.013
40) 1,2-Dichloroethene (Total)	(2)		96	132499	2.062
37) Ethyl t-butyl ether	(2)	6.128	59	168973M	1.032
38) 2-Butanone	(1)	6.336	43	133197	9.963
39) cis-1,2-Dichloroethene	(2)	6.372	96	69315	1.028
41) 2,2-Dichloropropane	(2)	6.391	77	83581	1.007
42) Propionitrile	(1)	6.445	54	75366	20.769
45) Methacrylonitrile	(1)	6.647	67	129937	9.931
47) Bromochloromethane	(2)	6.701	128	28262	0.992
48) Tetrahydrofuran	(1)	6.720	71	35178	9.898
49) Chloroform	(2)	6.860	83	114336	1.058

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.073	113	696307	10.014
50)$Dibromofluoromethane	(2)	7.073	111	721346	10.079
51) 1,1,1-Trichloroethane	(2)	7.086	97	94711	1.025
52) Cyclohexane	(2)	7.177	56	123949	1.027
52) Cyclohexane	(2)	7.183	84	104356	1.049
52) Cyclohexane	(2)	7.183	69	36367	1.023
55) 1,1-Dichloropropene	(2)	7.293	75	90431	1.032
54) Carbon Tetrachloride	(2)	7.299	117	81897	1.032
56) Isobutyl Alcohol	(1)	7.427	41	47053	51.995
57)$1,2-Dichloroethane-d4	(2)	7.524	102	119829	9.885
57)$1,2-Dichloroethane-d4	(2)	7.531	65	593178	10.117
57)$1,2-Dichloroethane-d4	(2)	7.531	104	79680	10.263
58) Benzene	(2)	7.561	78	264658	1.022
59) 1,2-Dichloroethane	(2)	7.628	62	59426M	0.997
60) t-Amyl methyl ether	(2)	7.738	73	139571	1.028
62) n-Heptane	(2)	7.963	43	102958	1.029
63)*Fluorobenzene	(2)	7.963	96	2758903	10.000
65) n-Butanol	(1)	8.305	56	74668M	97.664
67) Trichloroethene	(2)	8.445	95	68161	1.028
69) Methylcyclohexane	(2)	8.750	83	122857	0.981
70) 1,2-Dichloropropane	(2)	8.780	63	63132	1.005
71) Methyl Methacrylate	(1)	8.847	69	23722	0.979
72) 1,4-Dioxane	(1)	8.878	88	9241M	50.201
73) Dibromomethane	(2)	8.884	93	26560	1.019
74) Bromodichloromethane	(2)	9.122	83	69831	0.989
76) 2-Nitropropane	(1)	9.390	41	63314	9.229
80) cis-1,3-Dichloropropene	(2)	9.646	75	80509	0.979
81) 4-Methyl-2-Pentanone	(1)	9.811	43	330202	9.930
82)$Toluene-d8	(3)	9.951	98	2776980	9.936
82)$Toluene-d8	(3)	9.951	100	1802725	9.993
83) Toluene	(3)	10.024	92	162279	1.007
85) 1,3-Dichloropropene (total)	(3)		75	141132	1.955
84) trans-1,3-Dichloropropene	(3)	10.274	75	60623	0.976
86) Ethyl Methacrylate	(3)	10.329	69	51127	0.961
88) 1,1,2-Trichloroethane	(3)	10.475	97	37494	1.011
89) Tetrachloroethene	(3)	10.560	166	73862	1.014
90) 1,3-Dichloropropane	(3)	10.634	76	66150	1.007
91) 2-Hexanone	(1)	10.682	43	223568	9.877

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) Dibromochloromethane	(3)	10.847	129	42278	0.951
95) 1,2-Dibromoethane	(3)	10.963	107	34504	0.993
96) 1-Chlorohexane	(3)	11.383	91	96260	1.002
97)*Chlorobenzene-d5	(3)	11.383	117	2171615	10.000
98) Chlorobenzene	(3)	11.408	112	177295	1.037
100) Ethylbenzene	(3)	11.493	91	320107	1.016
99) 1,1,1,2-Tetrachloroethane	(3)	11.493	131	56567	1.003
101) m+p-Xylene	(3)	11.603	106	234132	2.004
105) Xylene (Total)	(3)		106	347952	3.023
104) o-Xylene	(3)	11.932	106	113820	1.019
106) Styrene	(3)	11.944	104	180005	1.007
107) Bromoform	(3)	12.109	173	24175	0.990
108) Isopropylbenzene	(3)	12.231	105	309640	1.016
111)$4-Bromofluorobenzene	(3)	12.371	95	1017139	9.995
111)$4-Bromofluorobenzene	(3)	12.377	174	881427	9.975
113) 1,1,2,2-Tetrachloroethane	(4)	12.475	83	42904M	0.963
114) Bromobenzene	(4)	12.493	156	68106	1.005
115) trans-1,4-Dichloro-2-butene	(1)	12.499	53	101534	9.749
116) 1,2,3-Trichloropropane	(4)	12.524	110	11546	1.002
117) n-Propylbenzene	(4)	12.554	91	369750	1.004
119) 2-Chlorotoluene	(4)	12.633	126	72571	1.016
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	249772	1.001
122) 4-Chlorotoluene	(4)	12.725	126	73614	1.028
125) tert-Butylbenzene	(4)	12.932	134	55631M	1.025
126) Pentachloroethane	(4)	12.969	167	39799	0.940
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	253402	0.995
128) sec-Butylbenzene	(4)	13.097	105	327784	1.014
131) 1,3-Dichlorobenzene	(4)	13.194	146	137902	1.025
132) p-Isopropyltoluene	(4)	13.200	119	264718	0.988
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1123390	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	134240	1.016
135) 1,2,3-Trimethylbenzene	(4)	13.279	120	114395M	0.979
136) Benzyl Chloride	(4)	13.347	126	13809	0.857
138) n-Butylbenzene	(4)	13.493	92	135142	1.017
139) 1,2-Dichlorobenzene	(4)	13.529	146	119809	1.009
143) 1,2-Dibromo-3-chloropropane	(1)	14.072	155	5939	1.054
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	100961	1.008
145) 1,2,4-Trichlorobenzene	(4)	14.615	180	80077	0.982

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

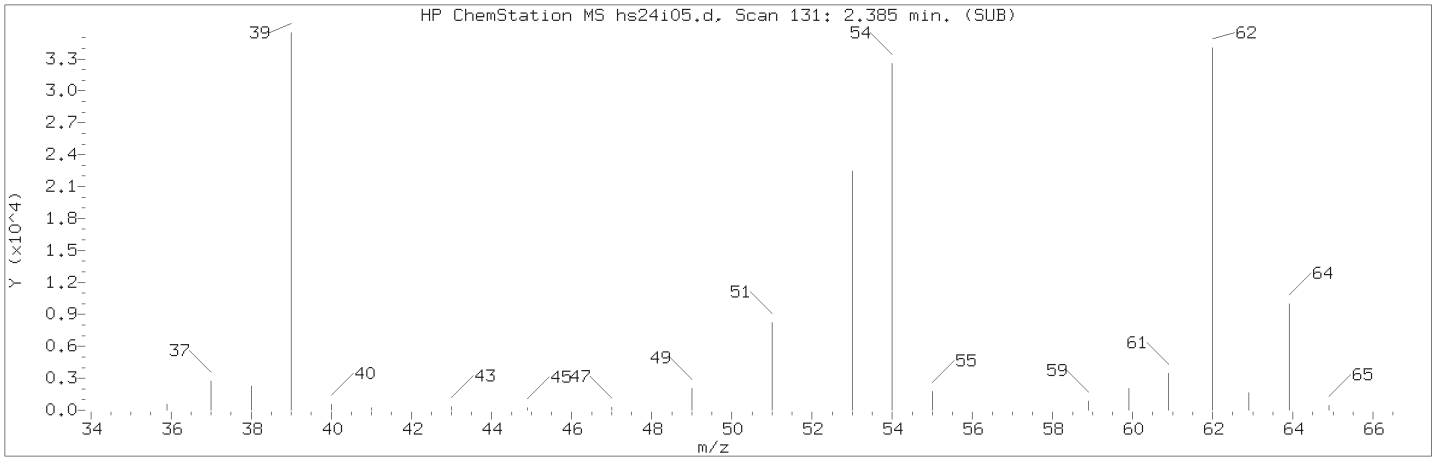
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

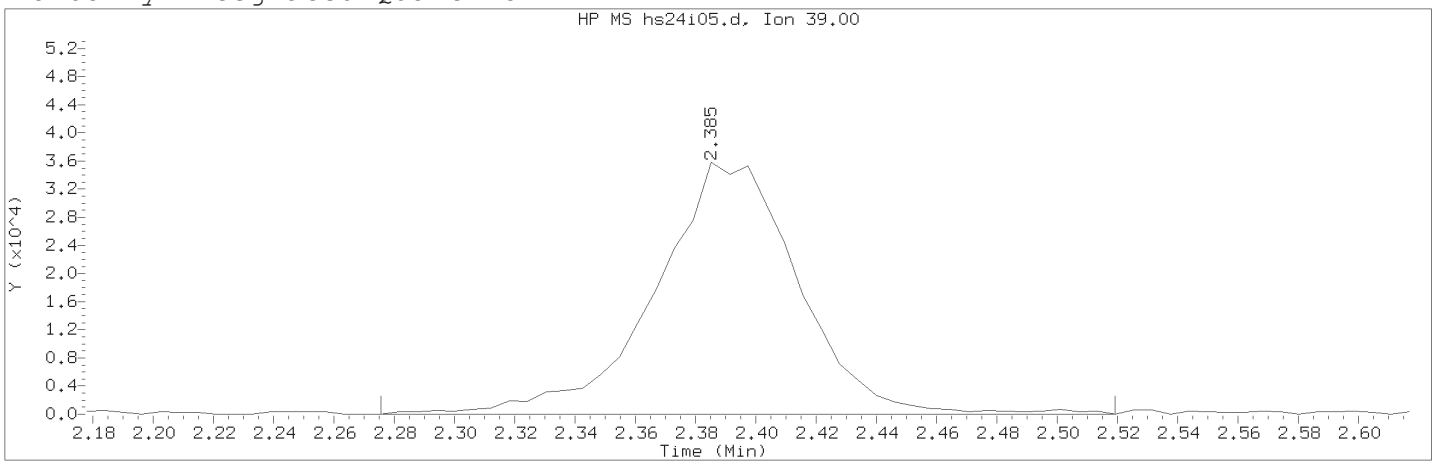
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) Hexachlorobutadiene	(4)	14.700	225	30050	0.975
147) Naphthalene	(4)	14.804	128	125068	0.969
148) 1,2,3-Trichlorobenzene	(4)	14.950	180	66944	0.998

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

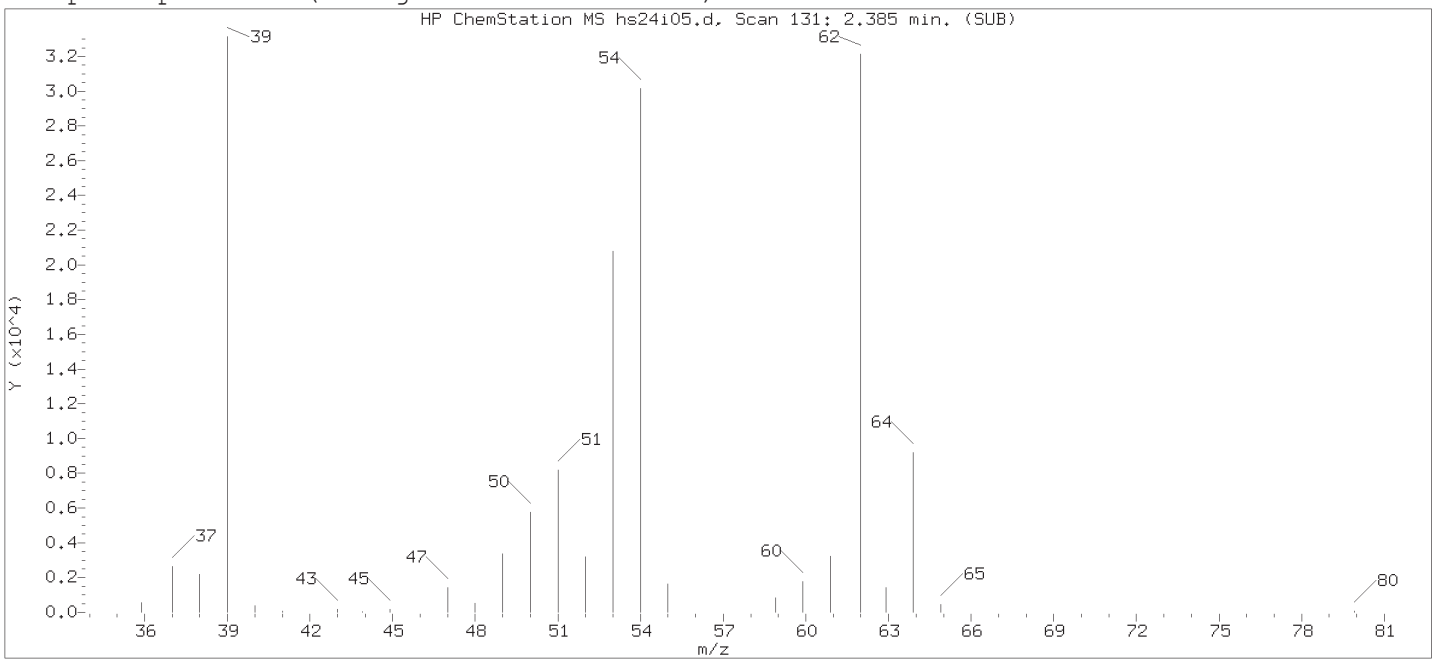
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 131
Retention Time (minutes): 2.385
Quant Ion : 39.00
Area (flag) : 118482M
On-Column Amount (ng) : 1.0578
Integration start scan : 112 Integration stop scan: 152
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

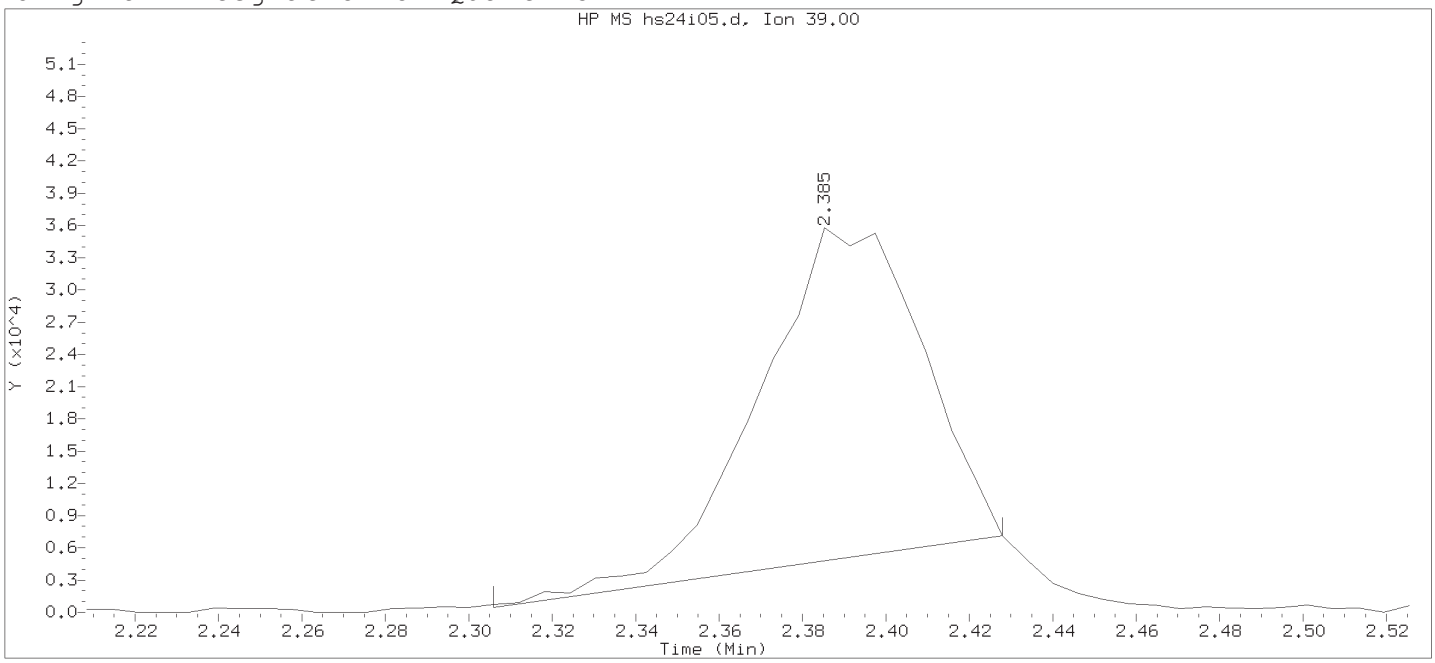
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

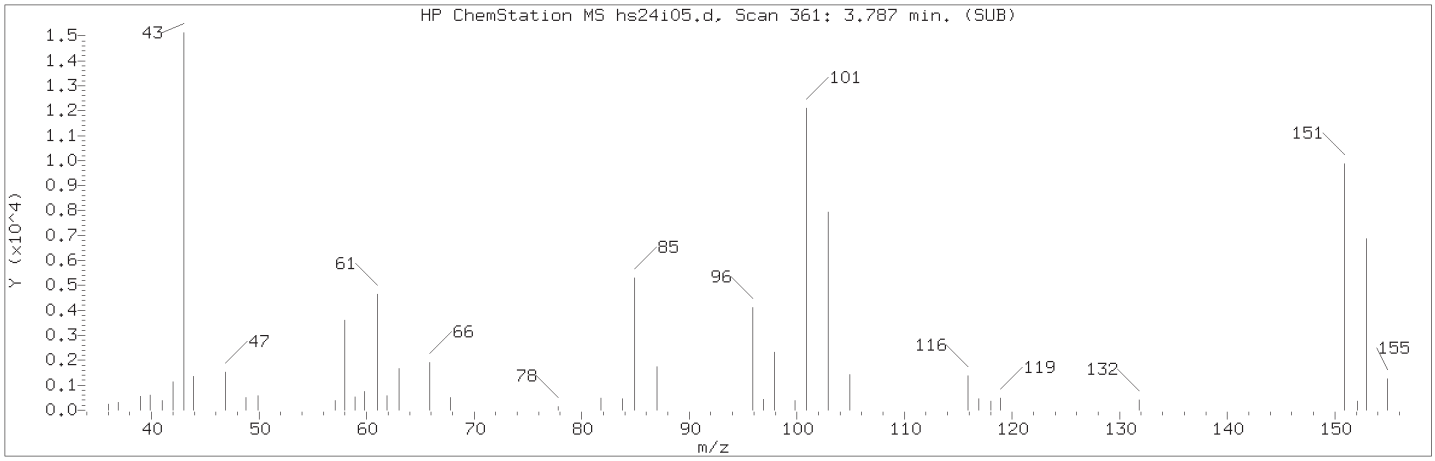
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

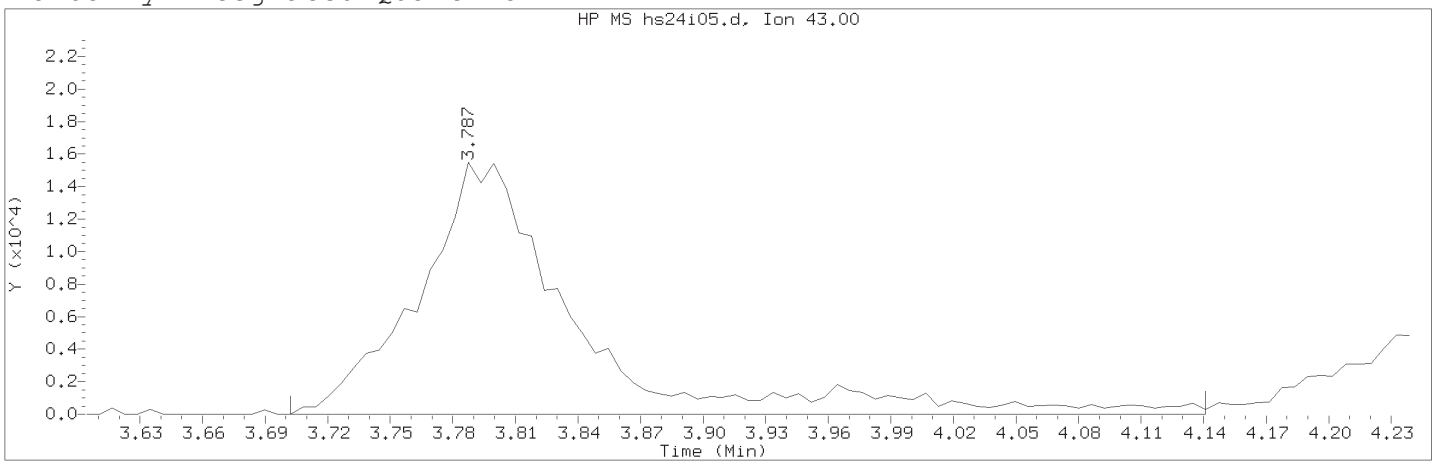
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 131
Retention Time (minutes): 2.385
Quant Ion : 39.00
Area : 83022
On-column Amount (ng) : 0.7928
Integration start scan : 117 Integration stop scan: 137
Y at integration start : 469 Y at integration end: 7133

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

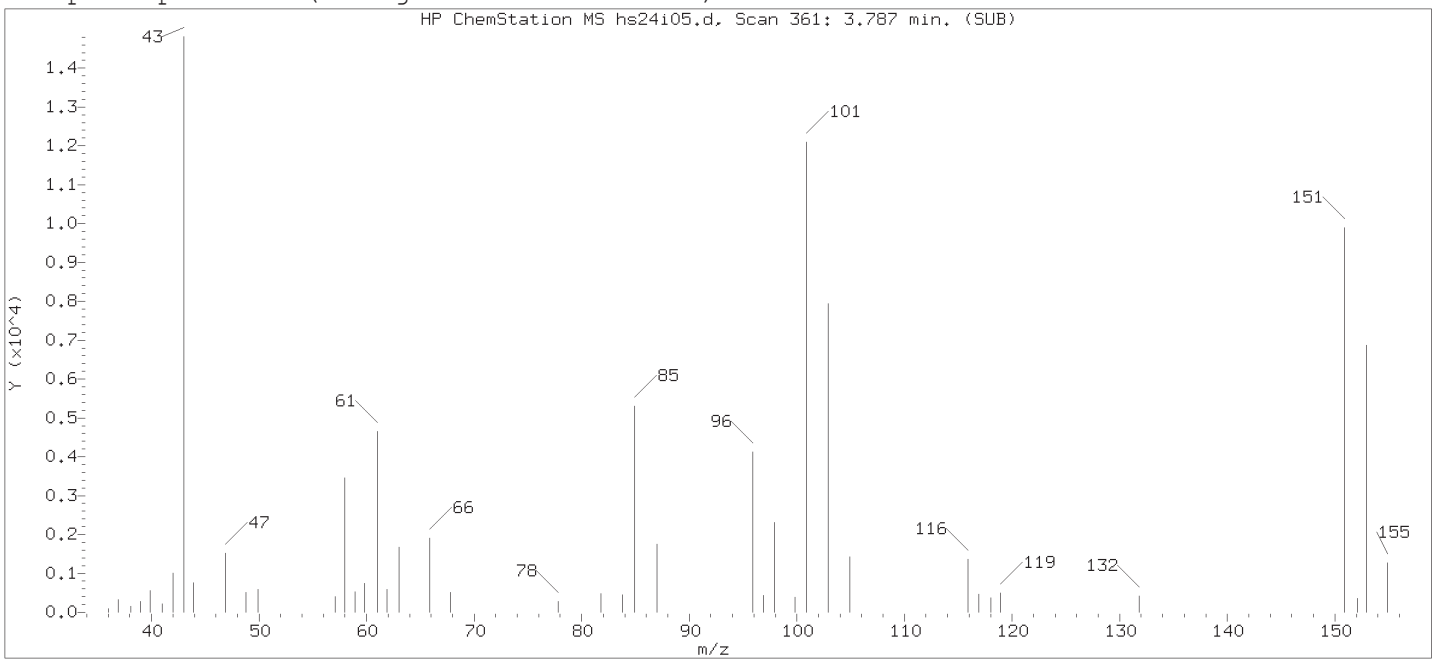
Compound Number : 14
Compound Name : Acetone
Scan Number : 361
Retention Time (minutes): 3.787
Quant Ion : 43.00
Area (flag) : 80897M
On-Column Amount (ng) : 9.9053
Integration start scan : 346 Integration stop scan: 418
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

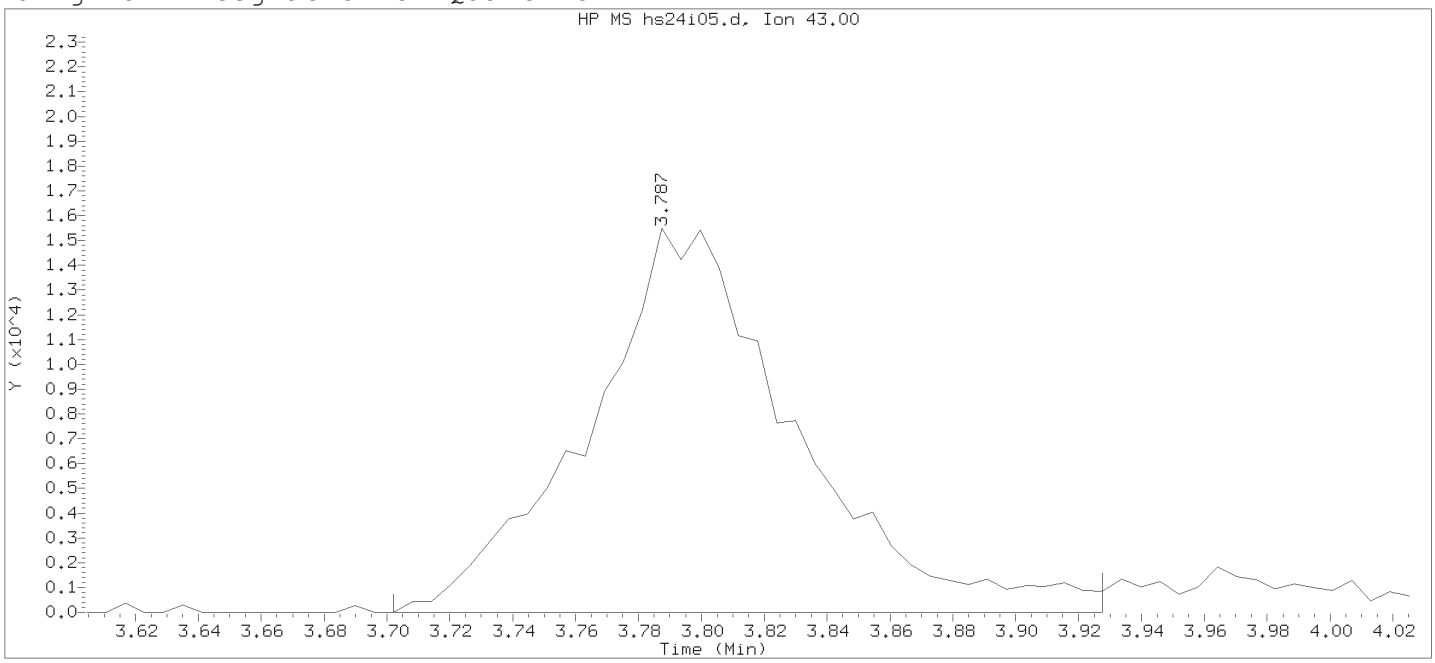
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

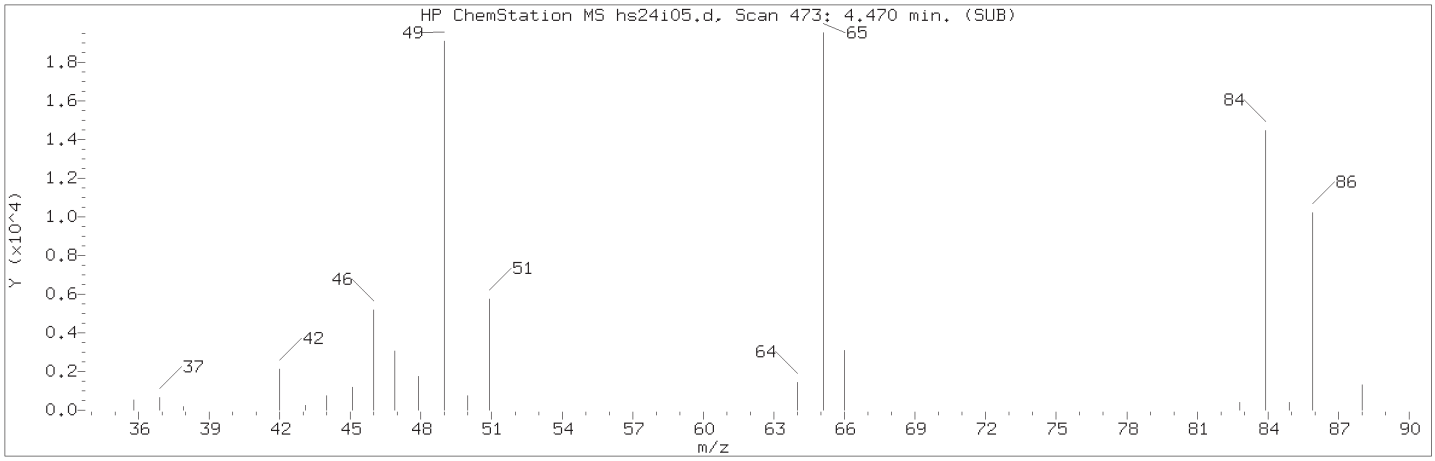
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

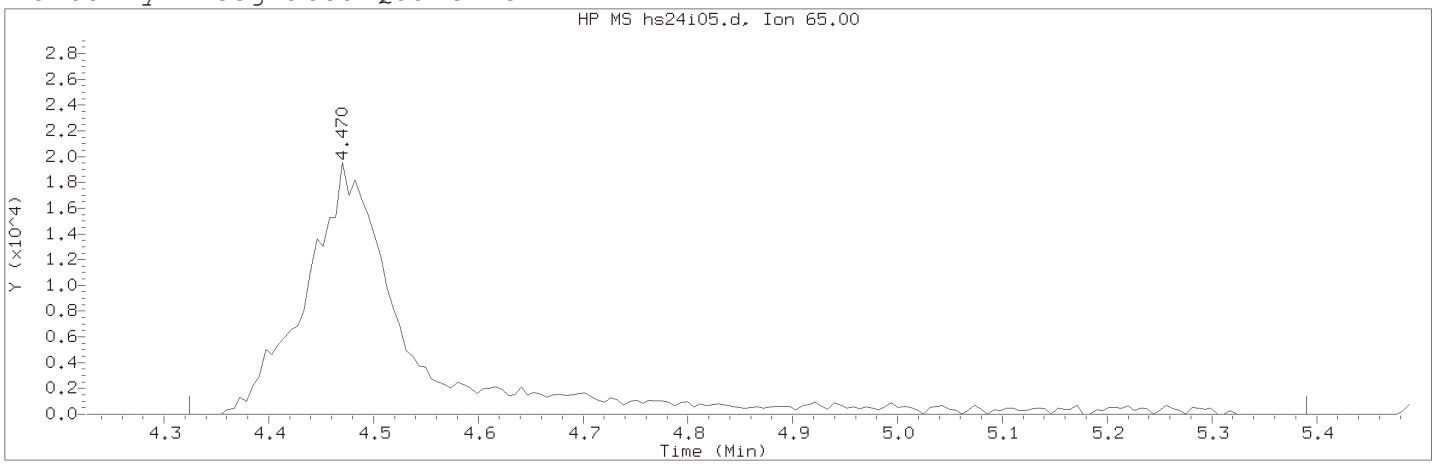
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 361		
Retention Time (minutes)	: 3.787		
Quant Ion	: 43.00		
Area	: 70990		
On-column Amount (ng)	: 9.1768		
Integration start scan	: 346	Integration stop scan:	383
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

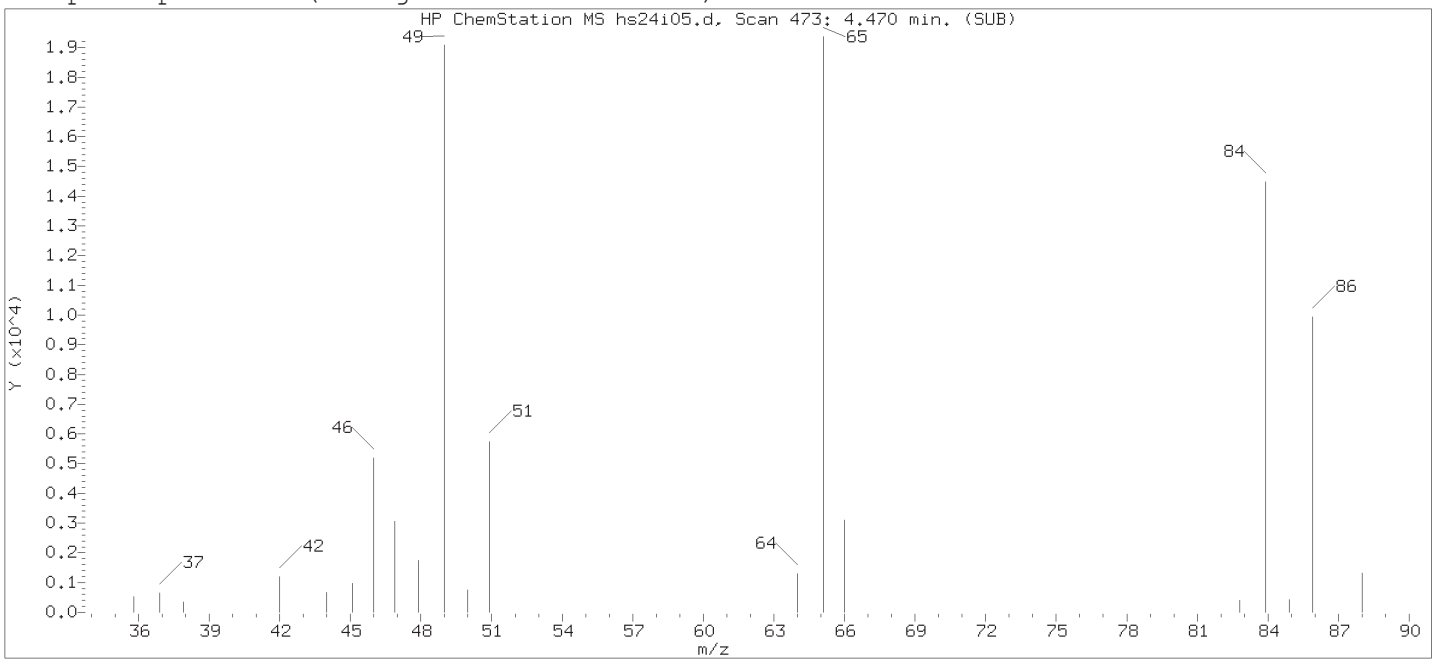
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area (flag) : 137024M
On-Column Amount (ng) : 50.0000
Integration start scan : 448 Integration stop scan: 623
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

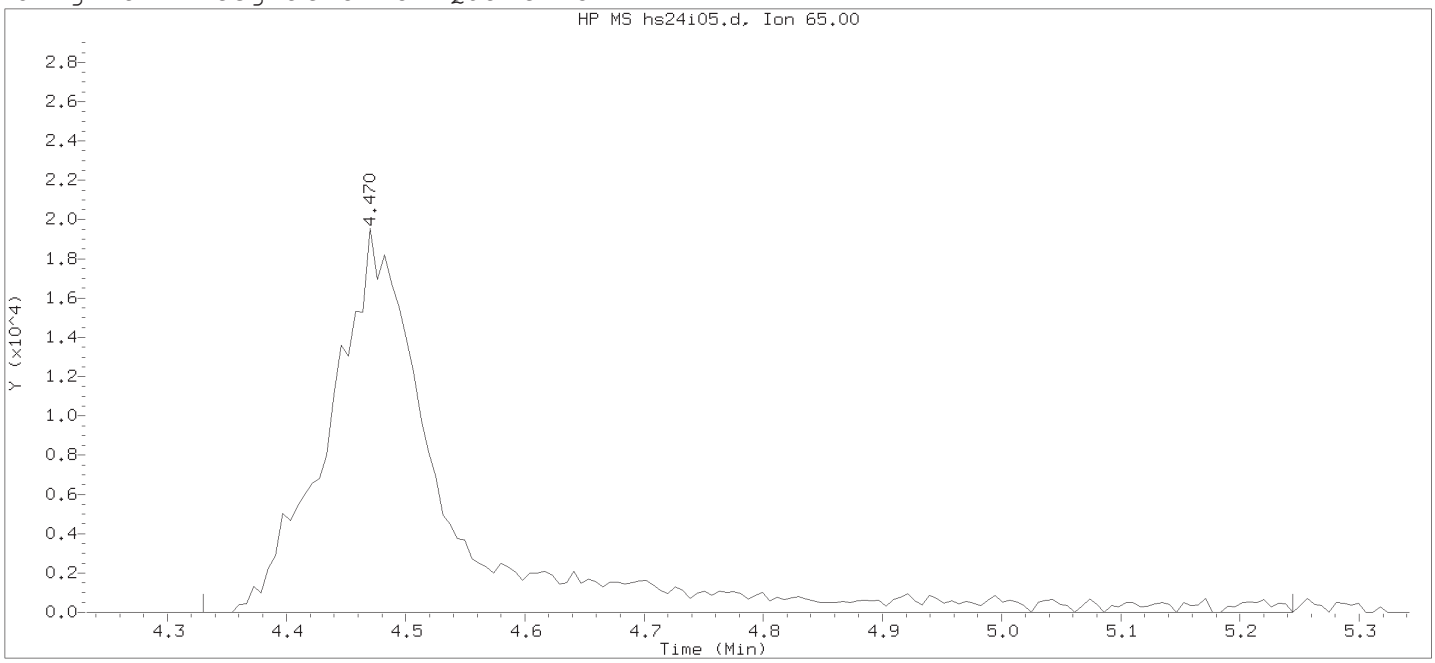
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

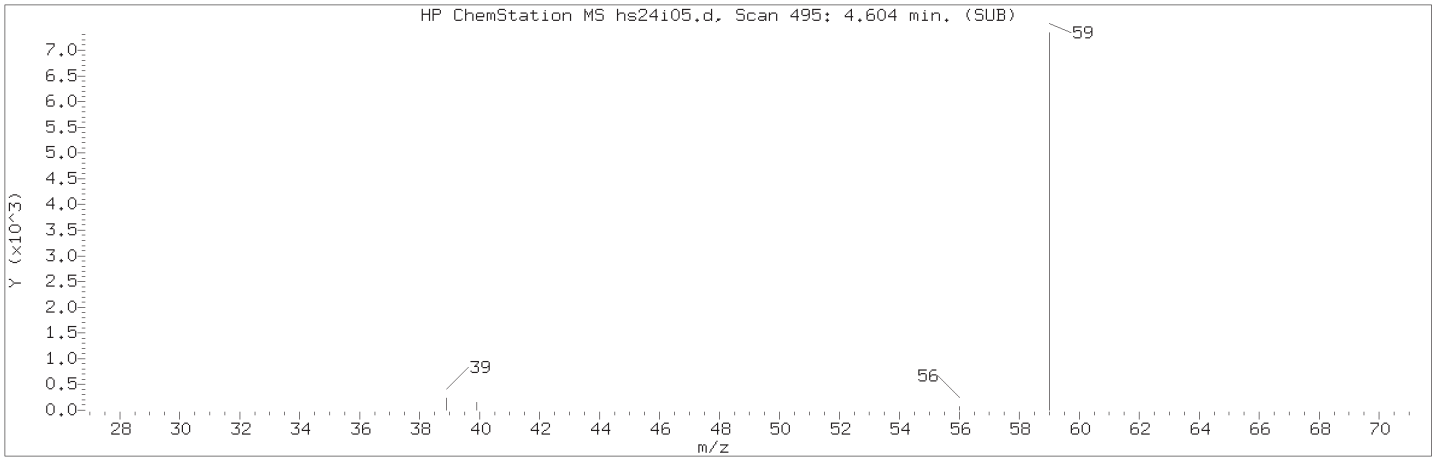
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

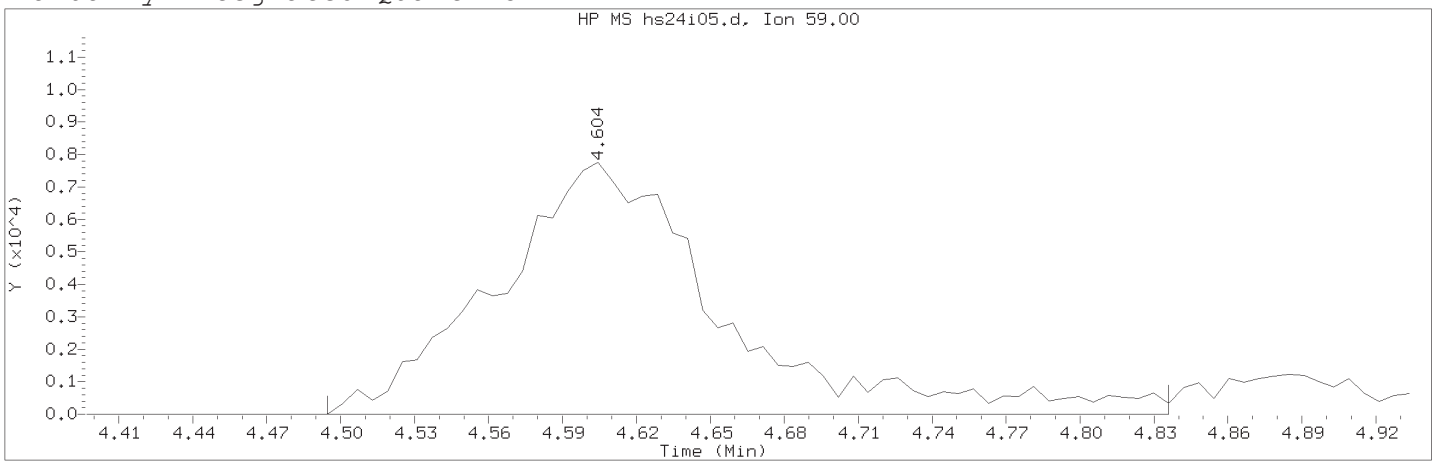
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area : 135610
On-column Amount (ng) : 50.0000
Integration start scan : 449 Integration stop scan: 599
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

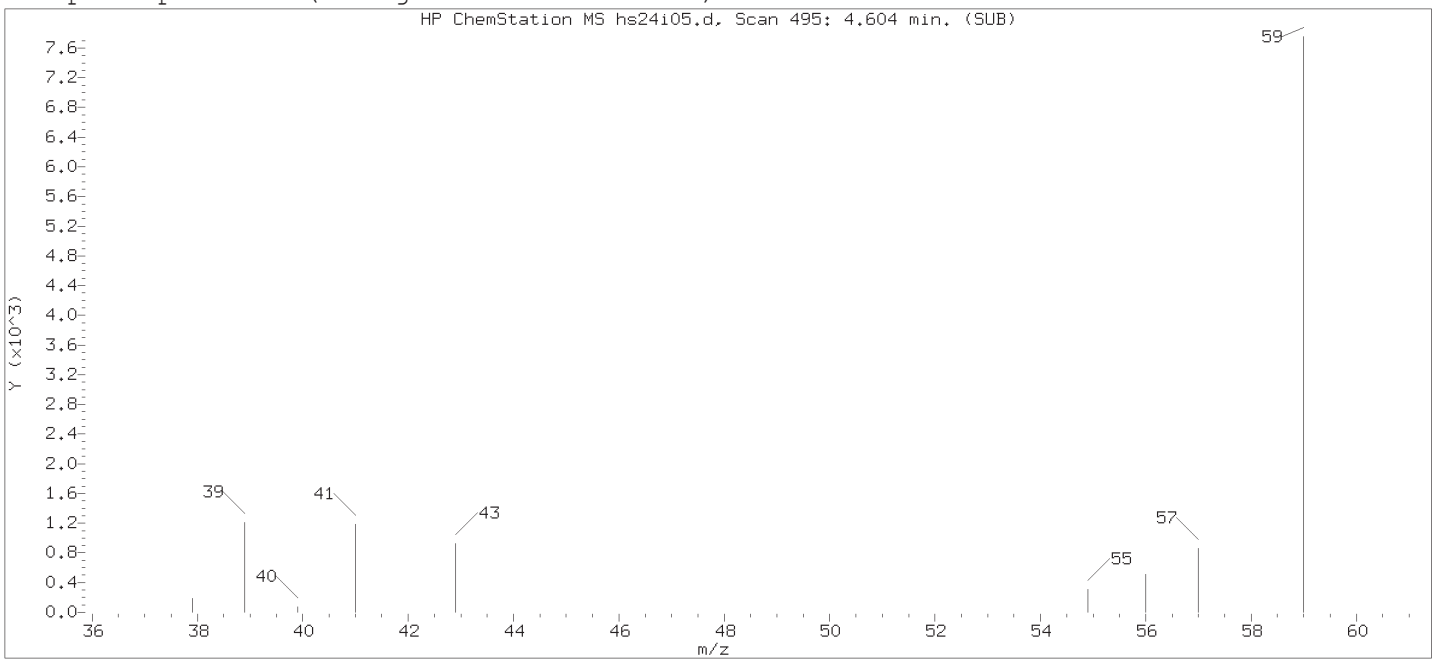
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 495
Retention Time (minutes): 4.604
Quant Ion : 59.00
Area (flag) : 49275M
On-Column Amount (ng) : 21.0678
Integration start scan : 476 Integration stop scan: 532
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

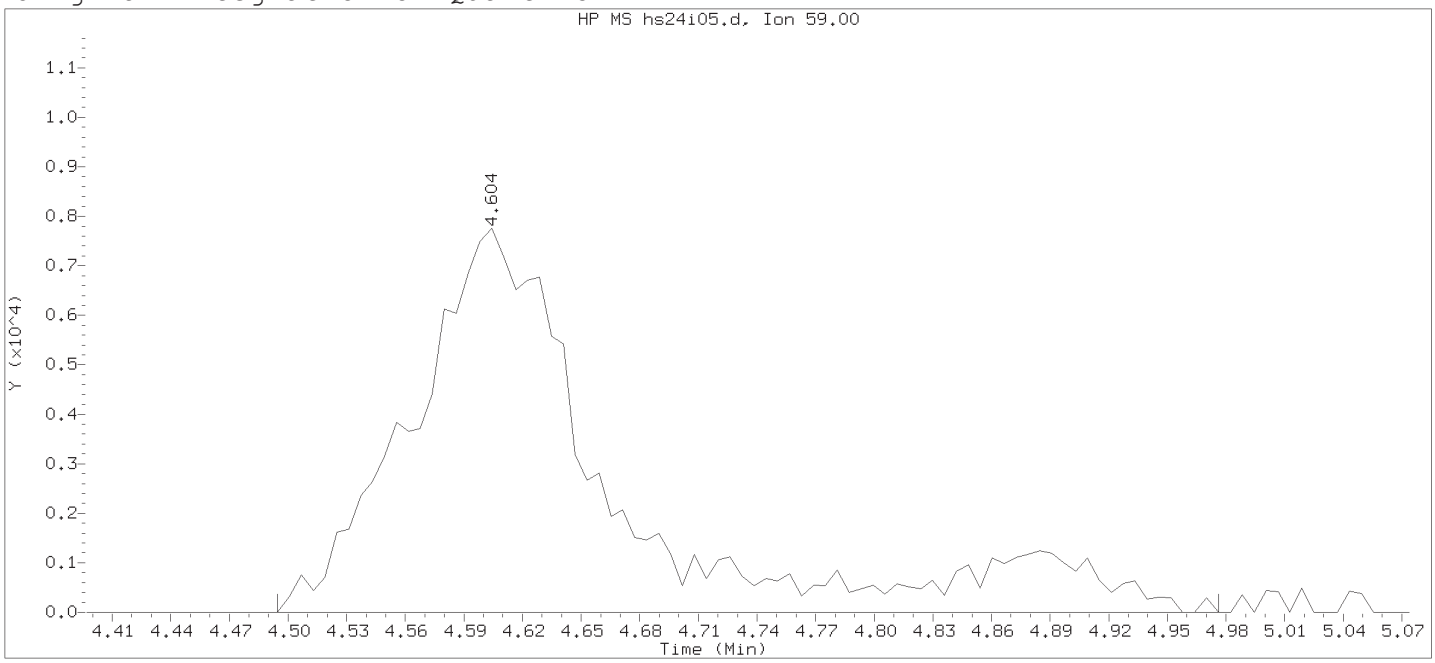
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

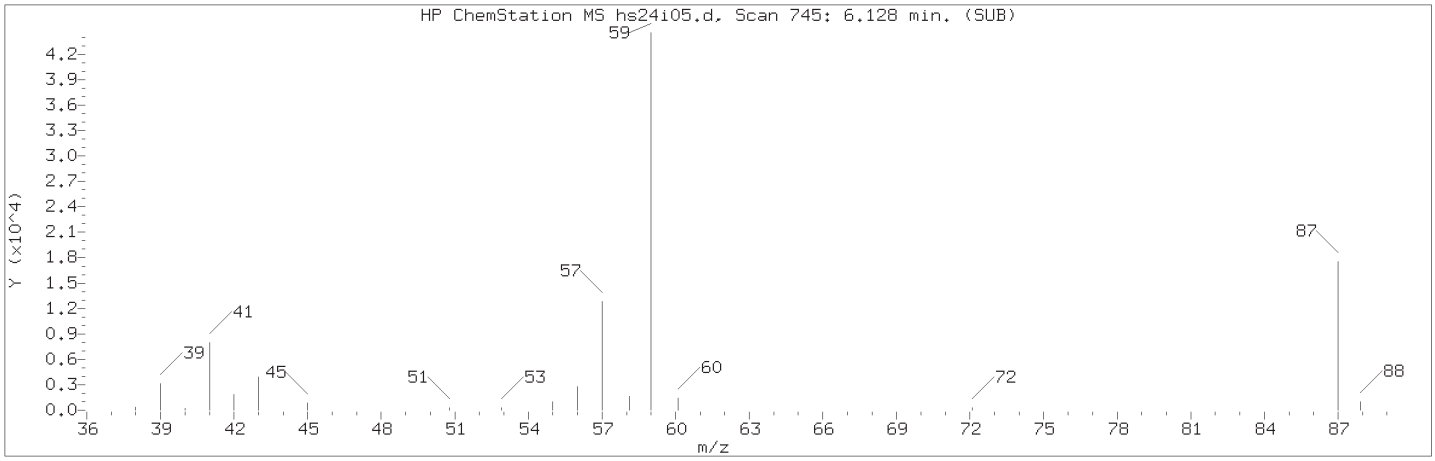
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

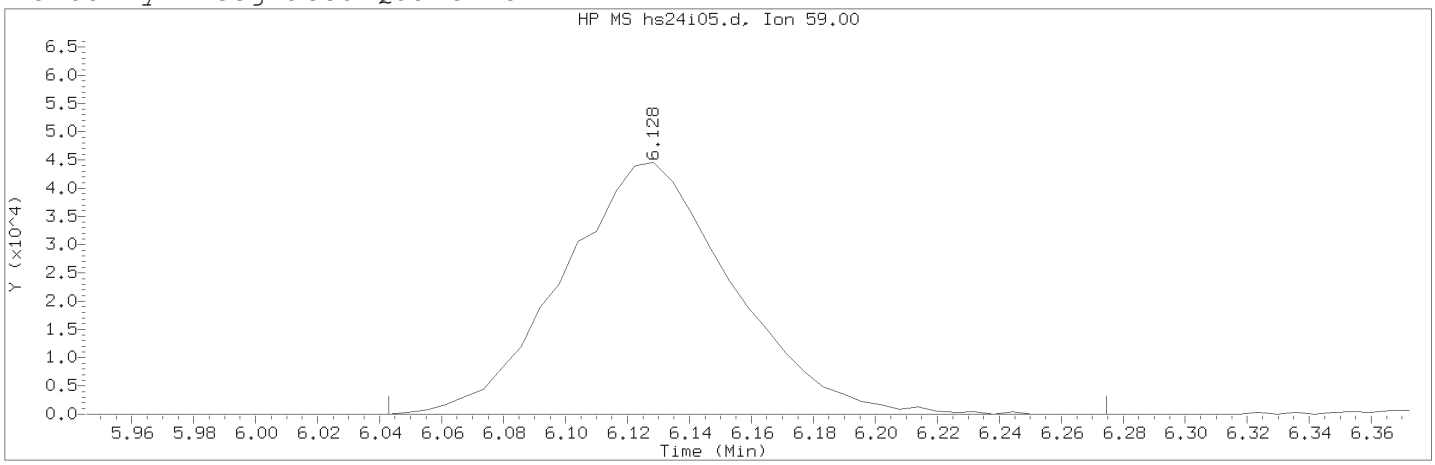
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 495
Retention Time (minutes): 4.604
Quant Ion : 59.00
Area : 54917
On-column Amount (ng) : 22.3410
Integration start scan : 476 Integration stop scan: 555
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

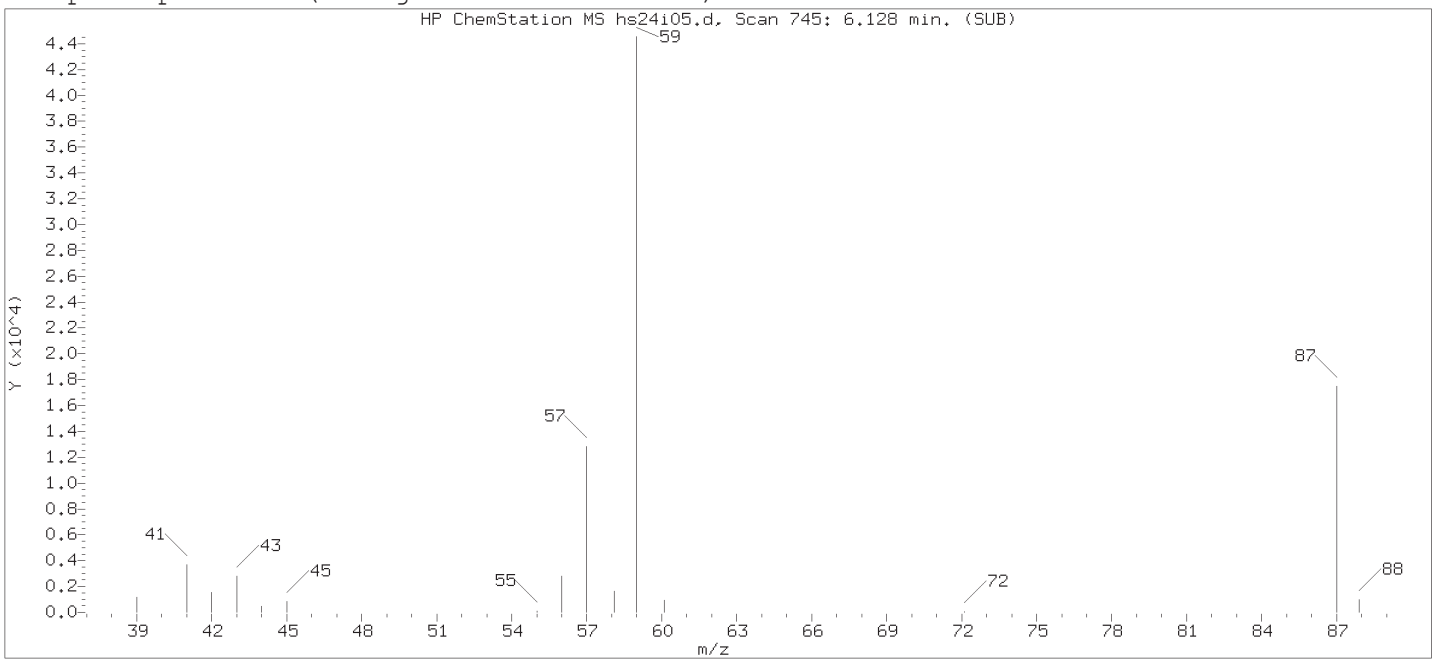
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 745
Retention Time (minutes): 6.128
Quant Ion : 59.00
Area (flag) : 168973M
On-Column Amount (ng) : 1.0320
Integration start scan : 730 Integration stop scan: 768
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

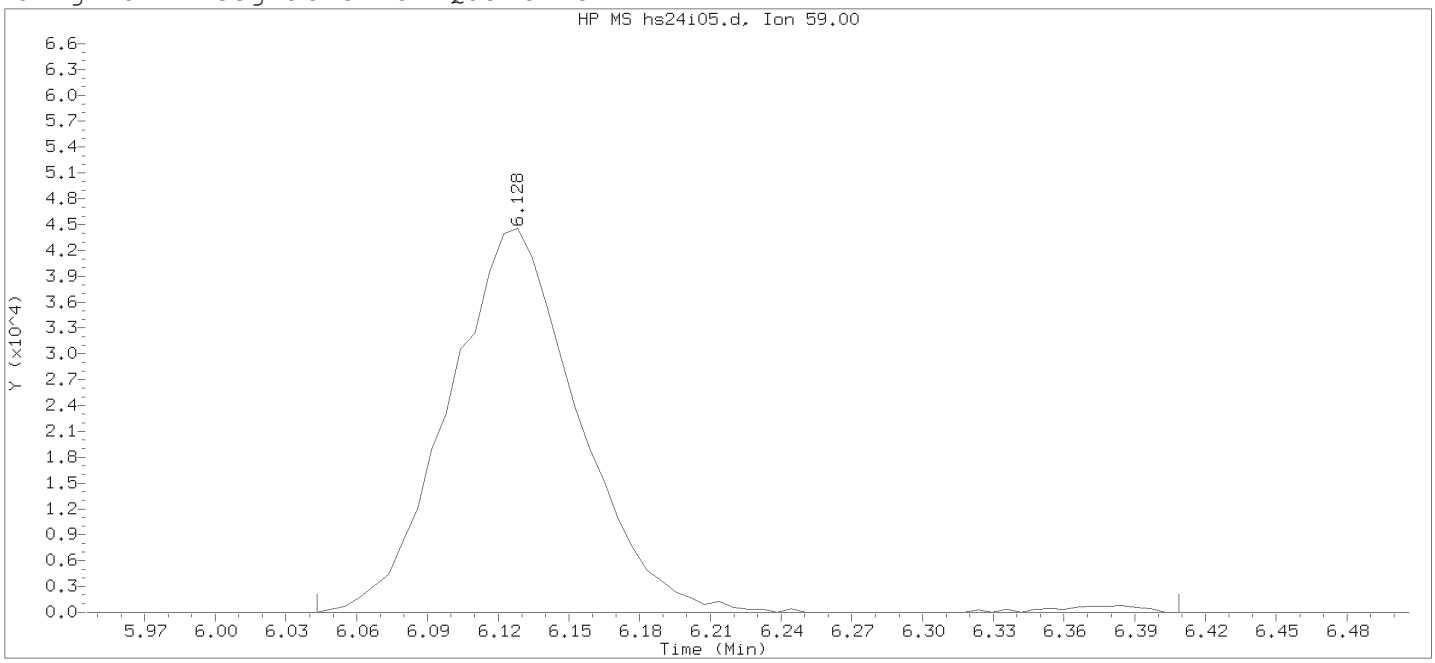
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

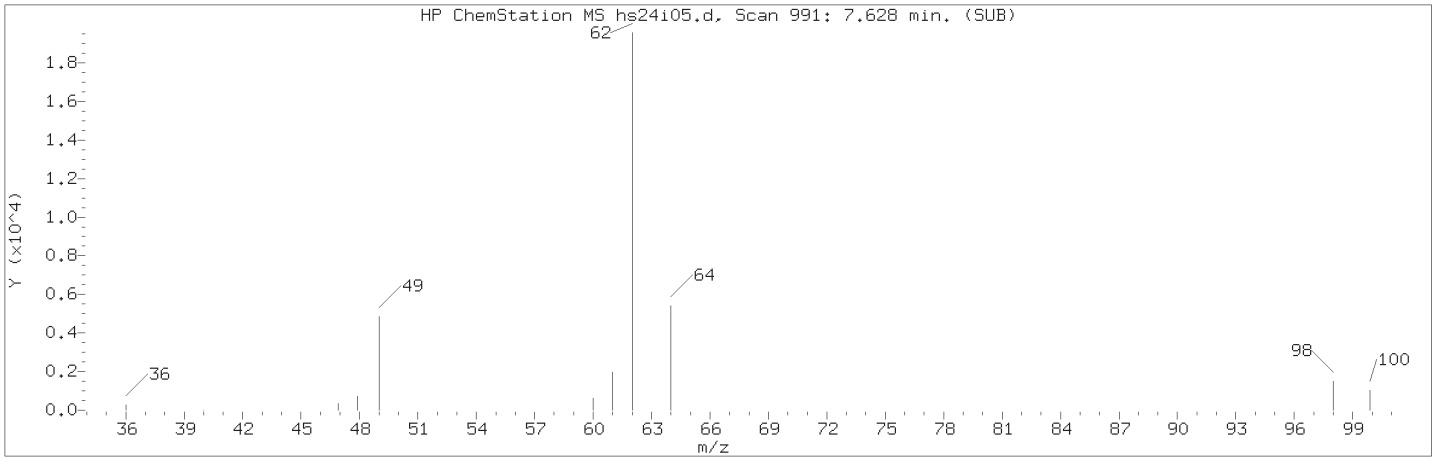
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

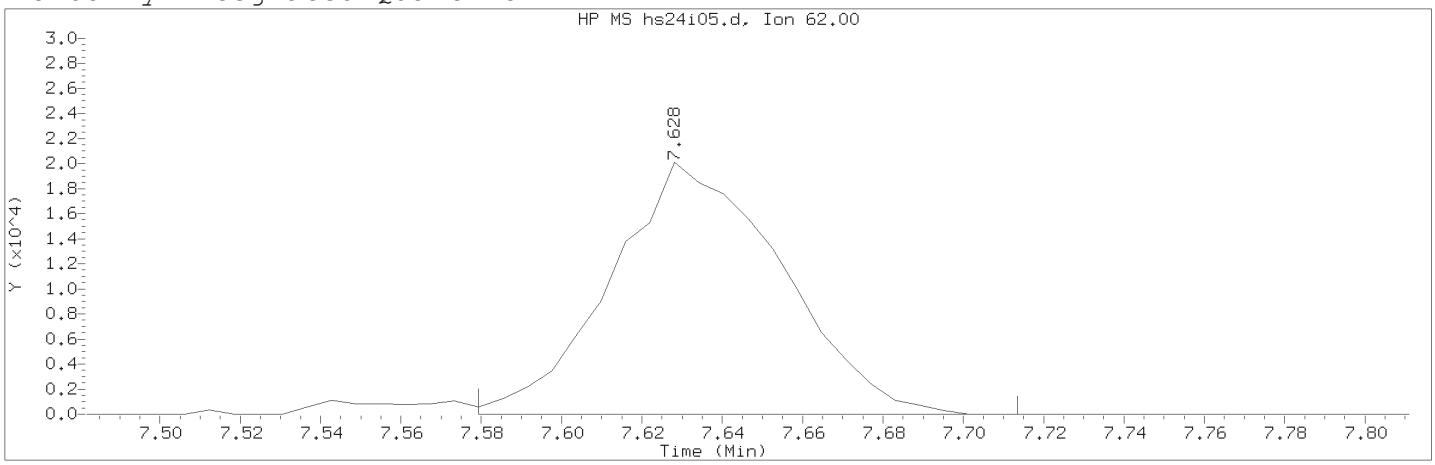
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 745
Retention Time (minutes): 6.128
Quant Ion : 59.00
Area : 170974
On-column Amount (ng) : 1.0111
Integration start scan : 730 Integration stop scan: 790
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

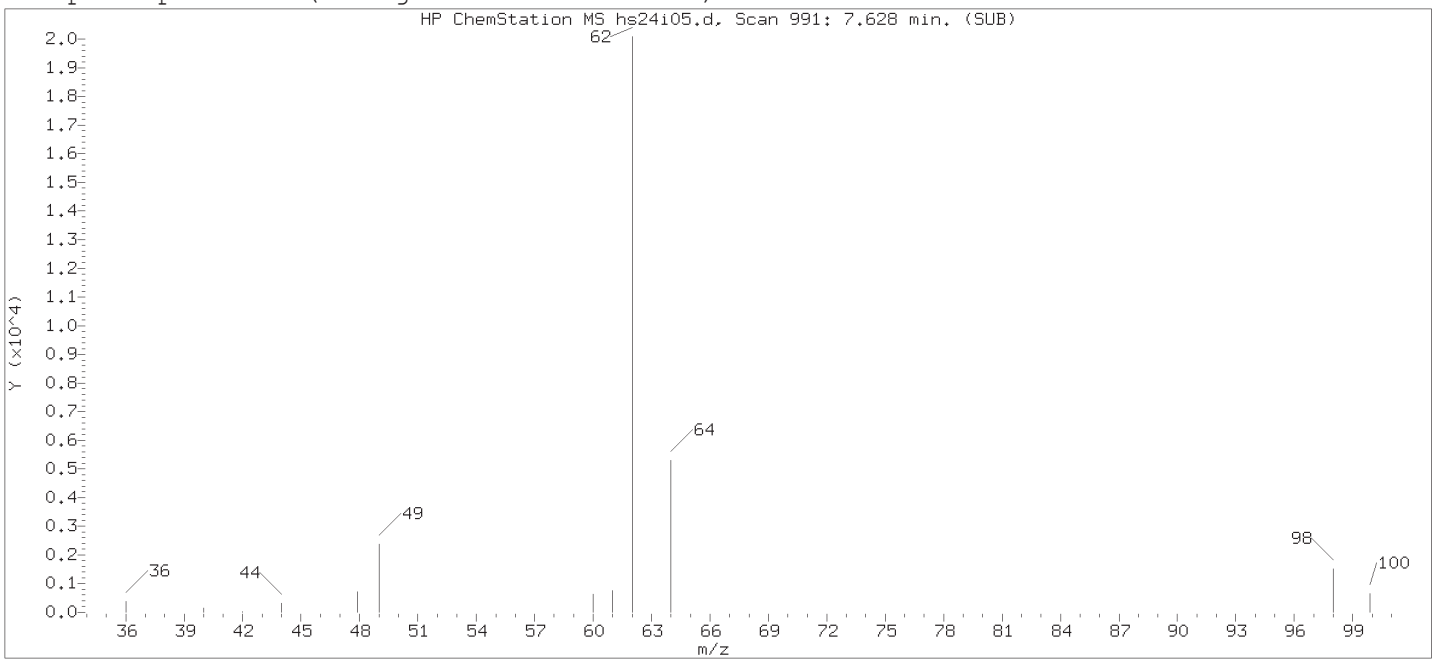
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 991
Retention Time (minutes): 7.628
Quant Ion : 62.00
Area (flag) : 59426M
On-Column Amount (ng) : 0.9971
Integration start scan : 982 Integration stop scan: 1004
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

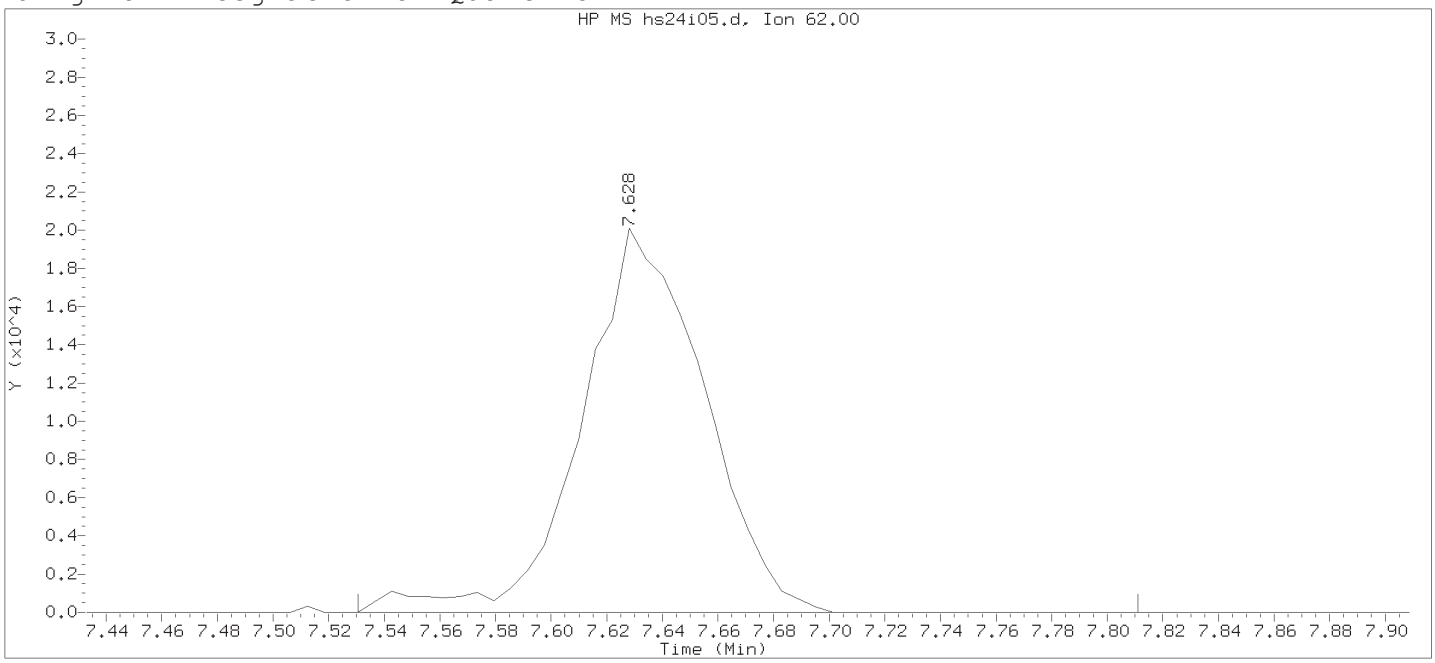
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

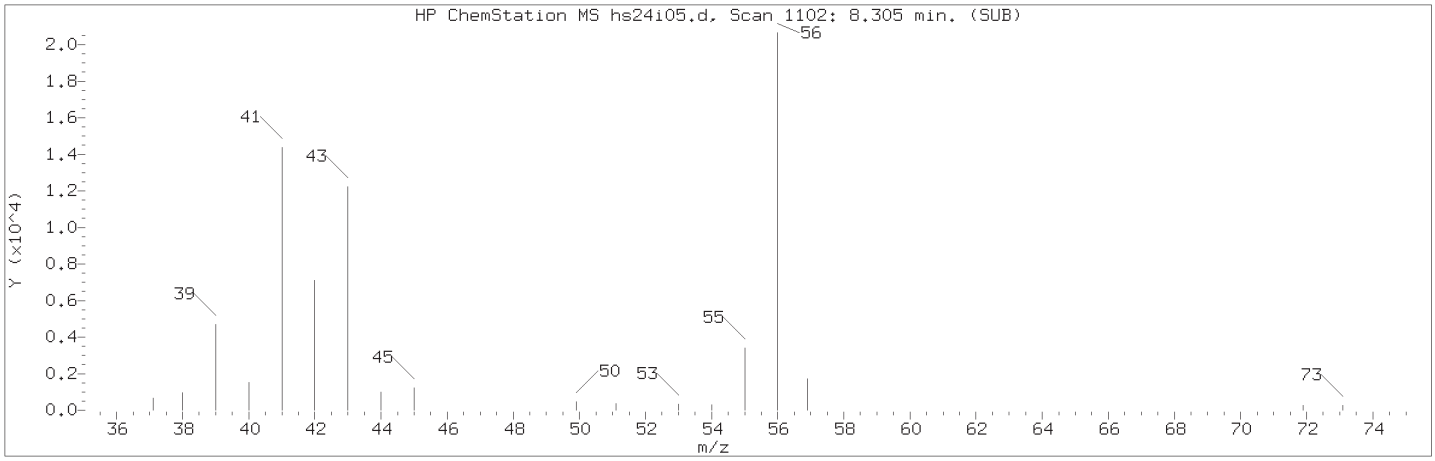
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

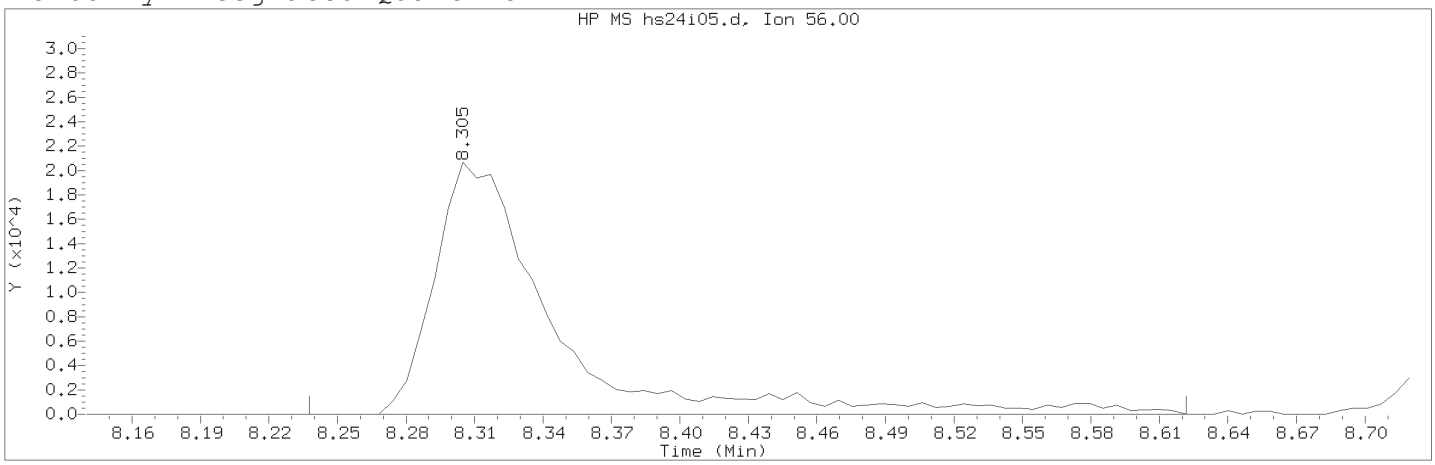
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 991
Retention Time (minutes): 7.628
Quant Ion : 62.00
Area : 61591
On-column Amount (ng) : 1.0425
Integration start scan : 974 Integration stop scan: 1020
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

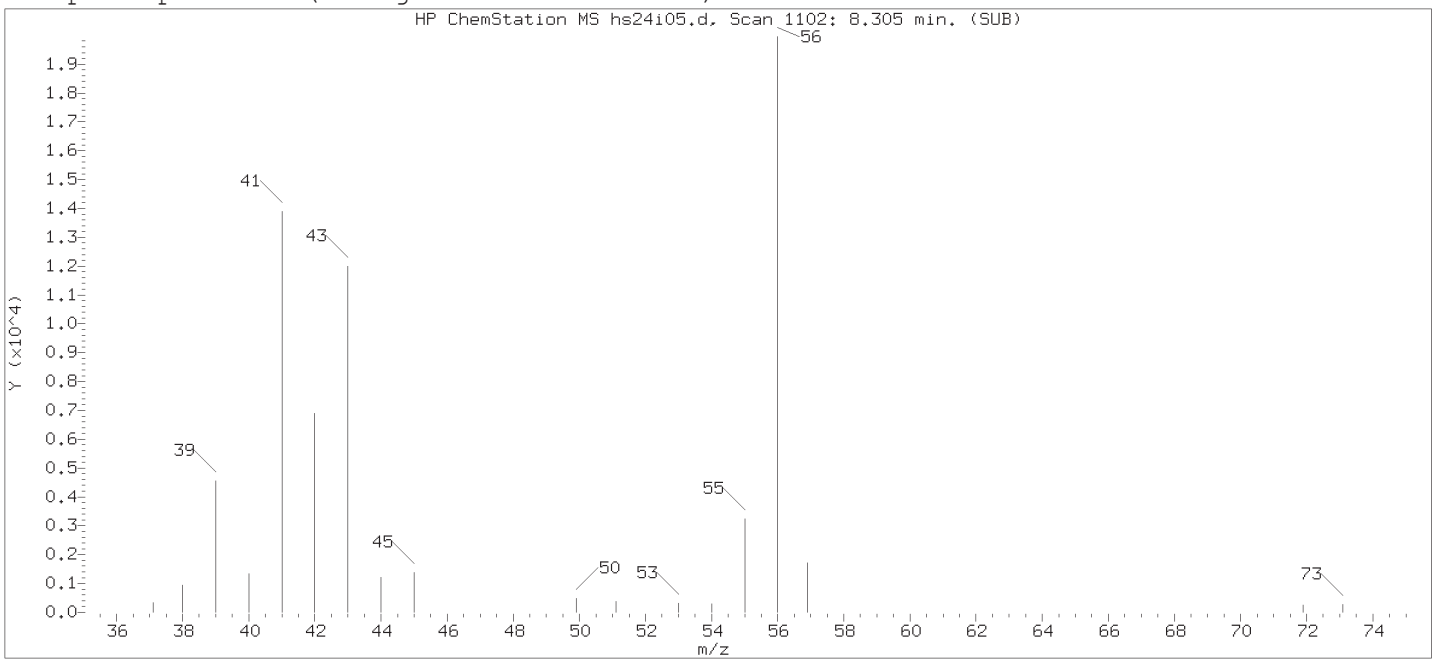
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1102
Retention Time (minutes): 8.305
Quant Ion : 56.00
Area (flag) : 74668M
On-Column Amount (ng) : 97.6635
Integration start scan : 1090 Integration stop scan: 1153
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

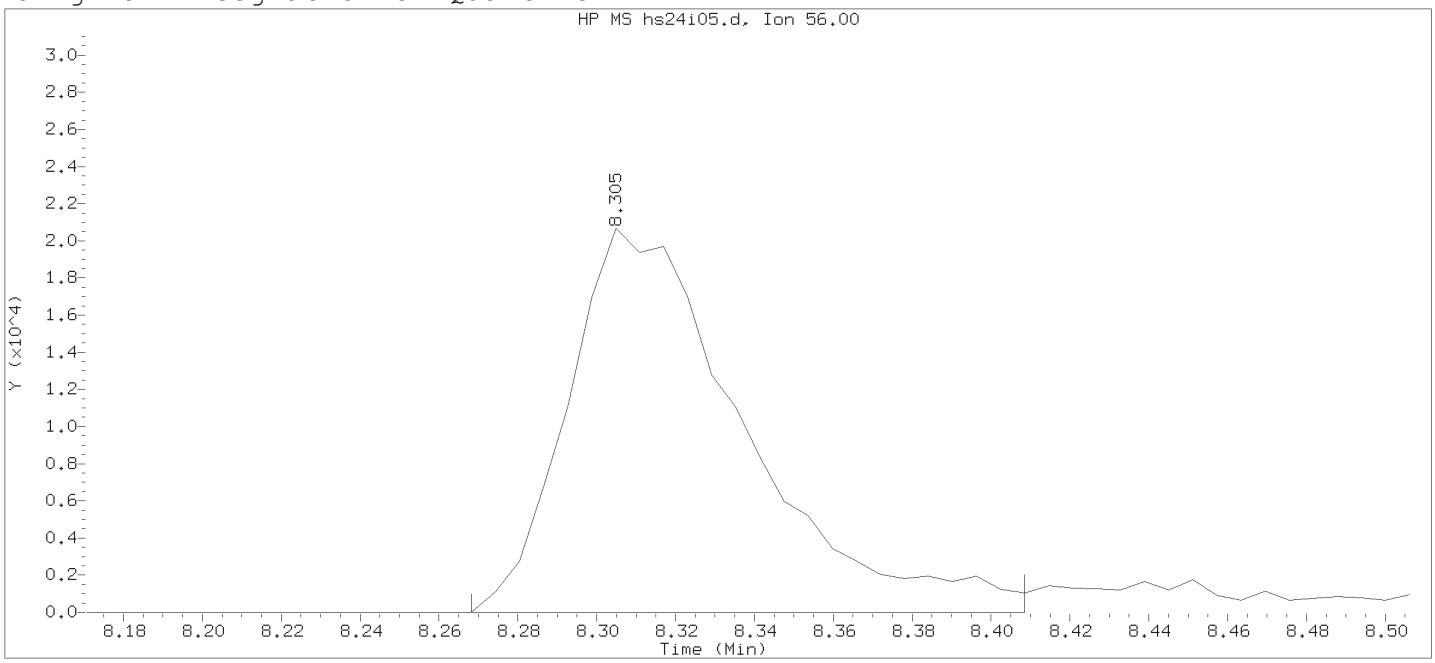
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

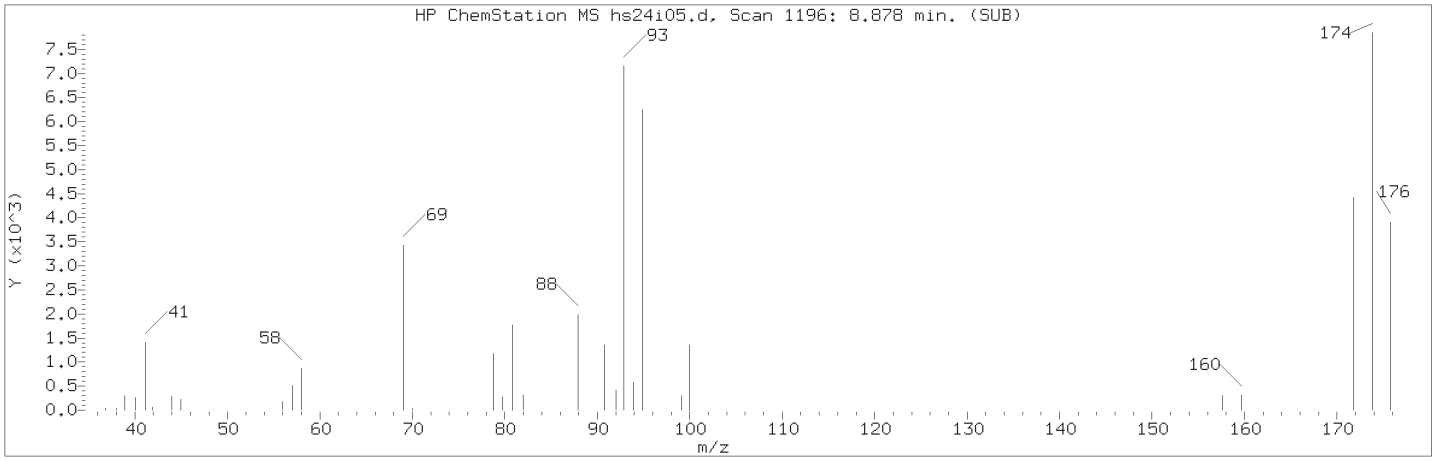
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

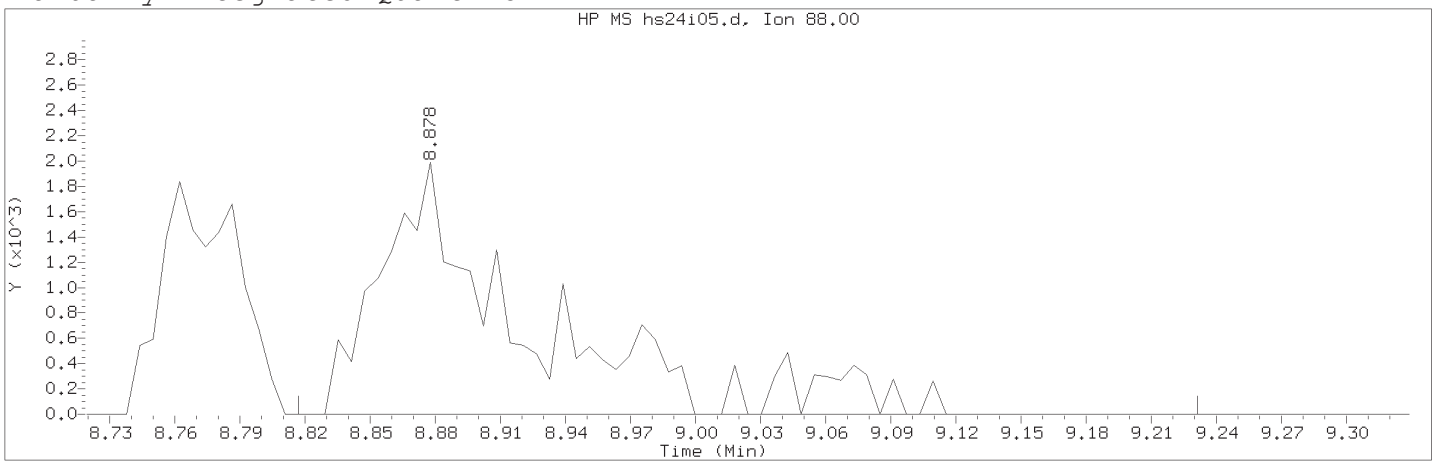
Compound Number	: 65		
Compound Name	: n-Butanol		
Scan Number	: 1102		
Retention Time (minutes)	: 8.305		
Quant Ion	: 56.00		
Area	: 64395		
On-column Amount (ng)	: 83.6678		
Integration start scan	: 1095	Integration stop scan:	1118
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

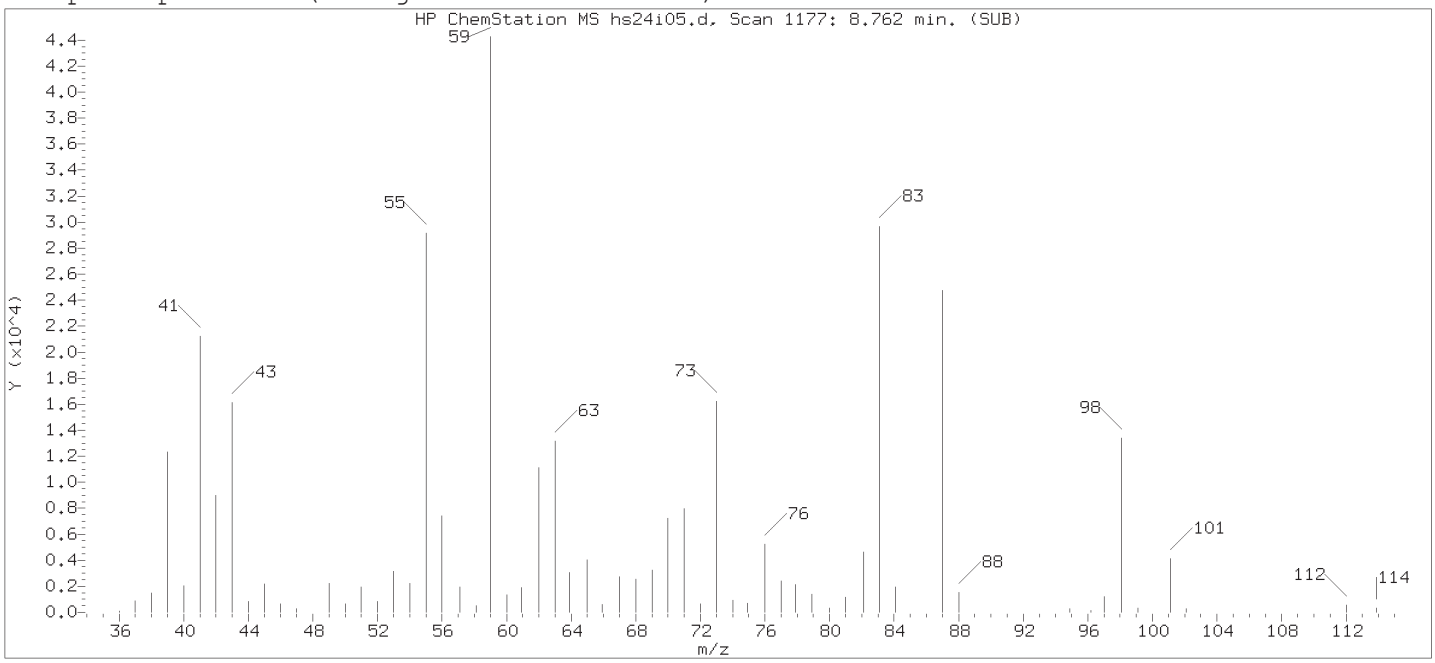
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1196
Retention Time (minutes): 8.878
Quant Ion : 88.00
Area (flag) : 9241M
On-Column Amount (ng) : 50.2009
Integration start scan : 1185 Integration stop scan: 1253
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

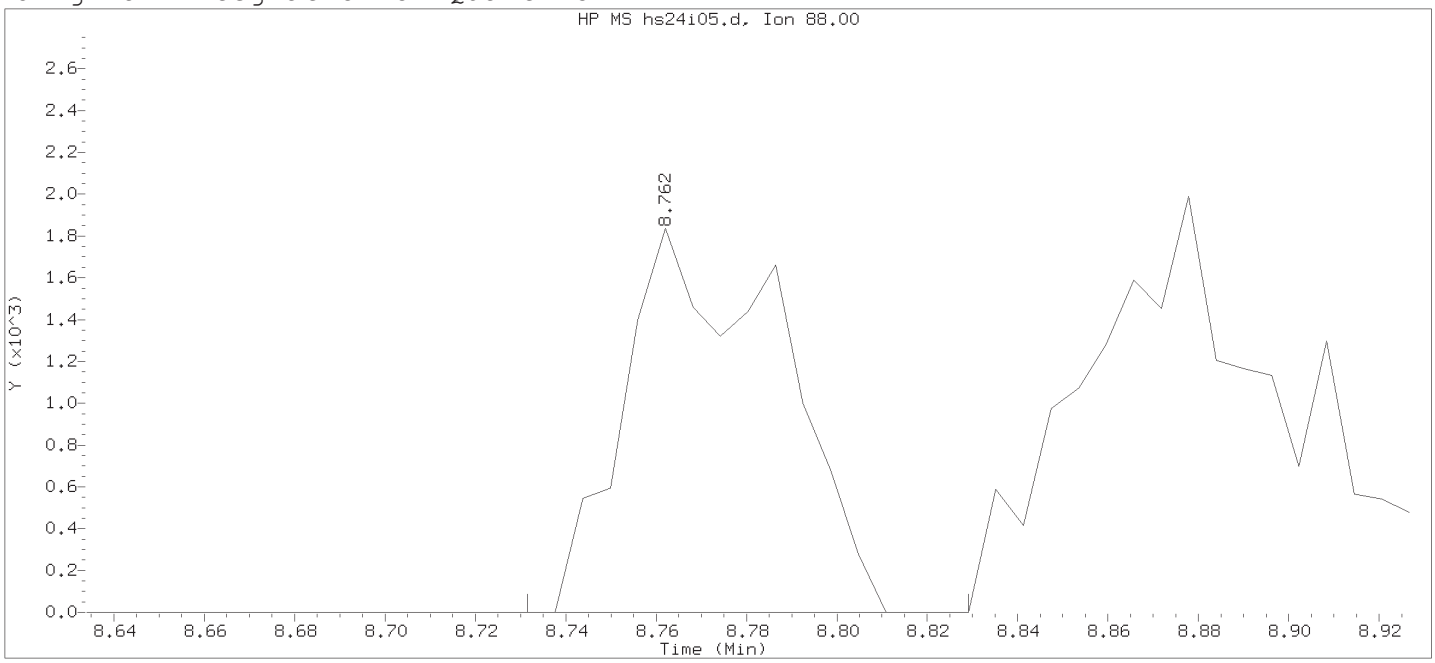
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

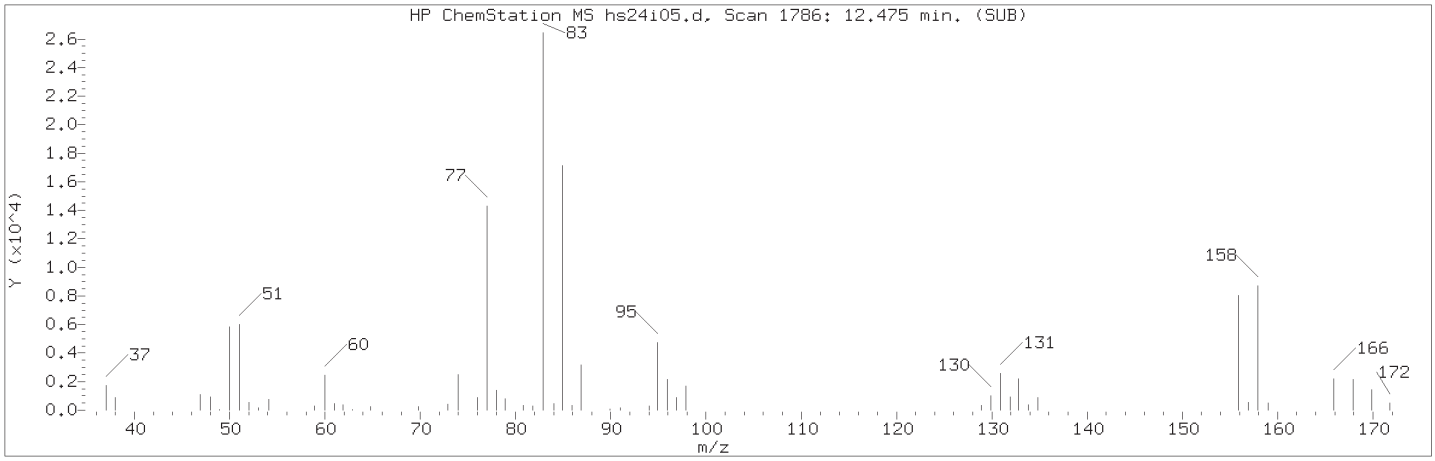
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

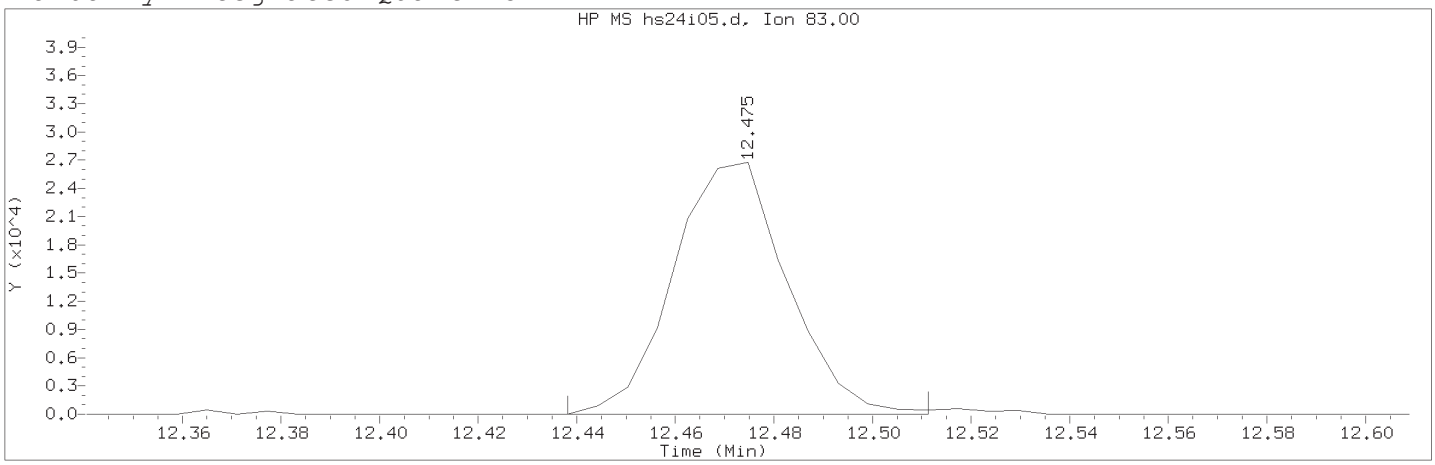
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1177
Retention Time (minutes): 8.762
Quant Ion : 88.00
Area : 4467
On-column Amount (ng) : 37.5984
Integration start scan : 1171 Integration stop scan: 1187
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

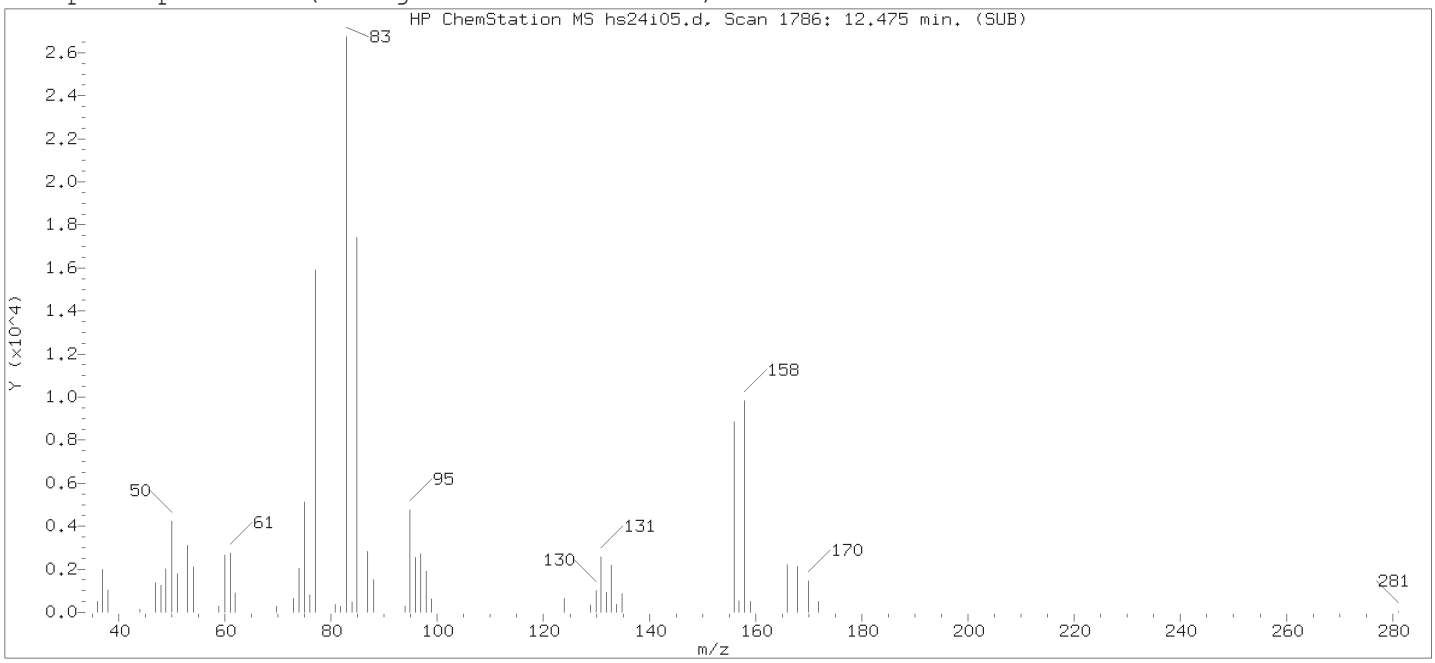
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area (flag) : 42904M
On-Column Amount (ng) : 0.9628
Integration start scan : 1779 Integration stop scan: 1791
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

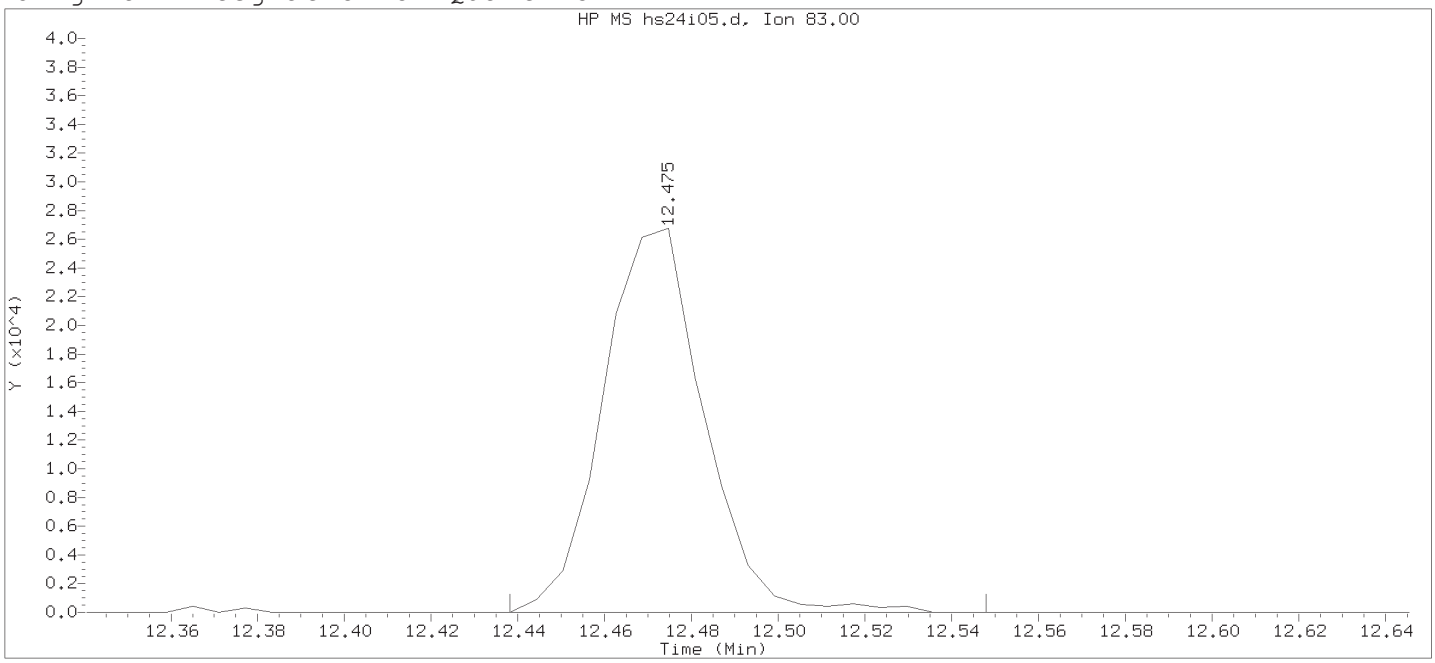
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

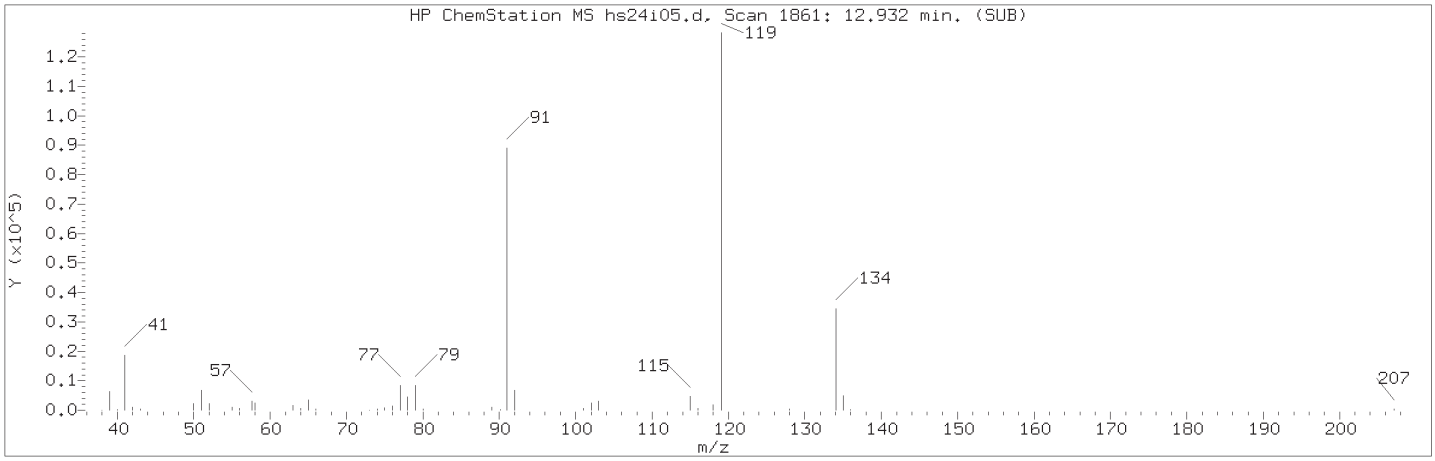
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

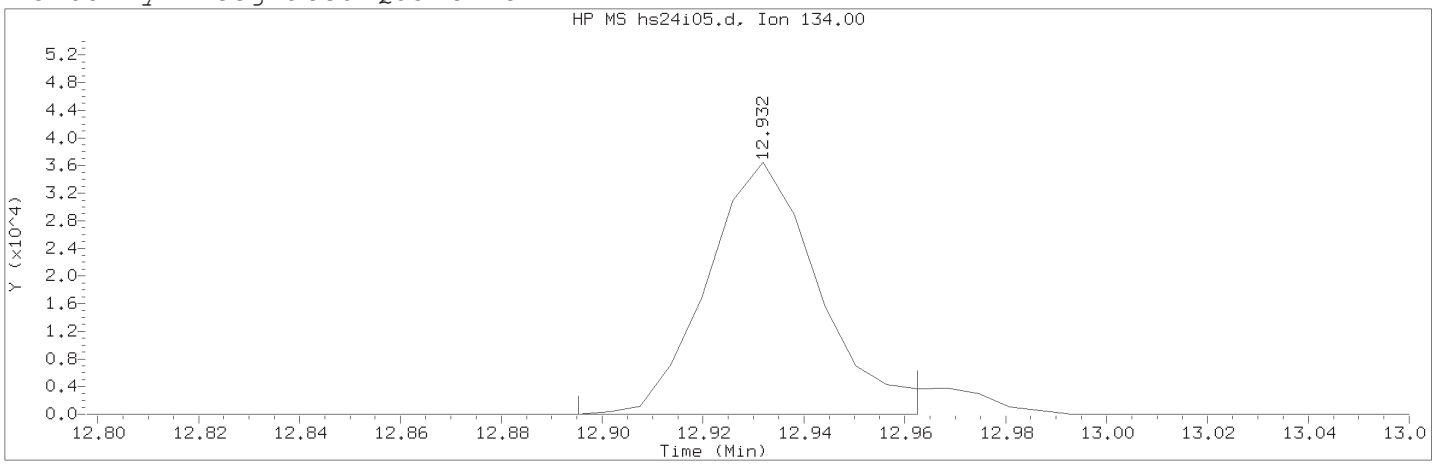
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1786
Retention Time (minutes): 12.475
Quant Ion : 83.00
Area : 43396
On-column Amount (ng) : 0.9508
Integration start scan : 1779 Integration stop scan: 1797
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

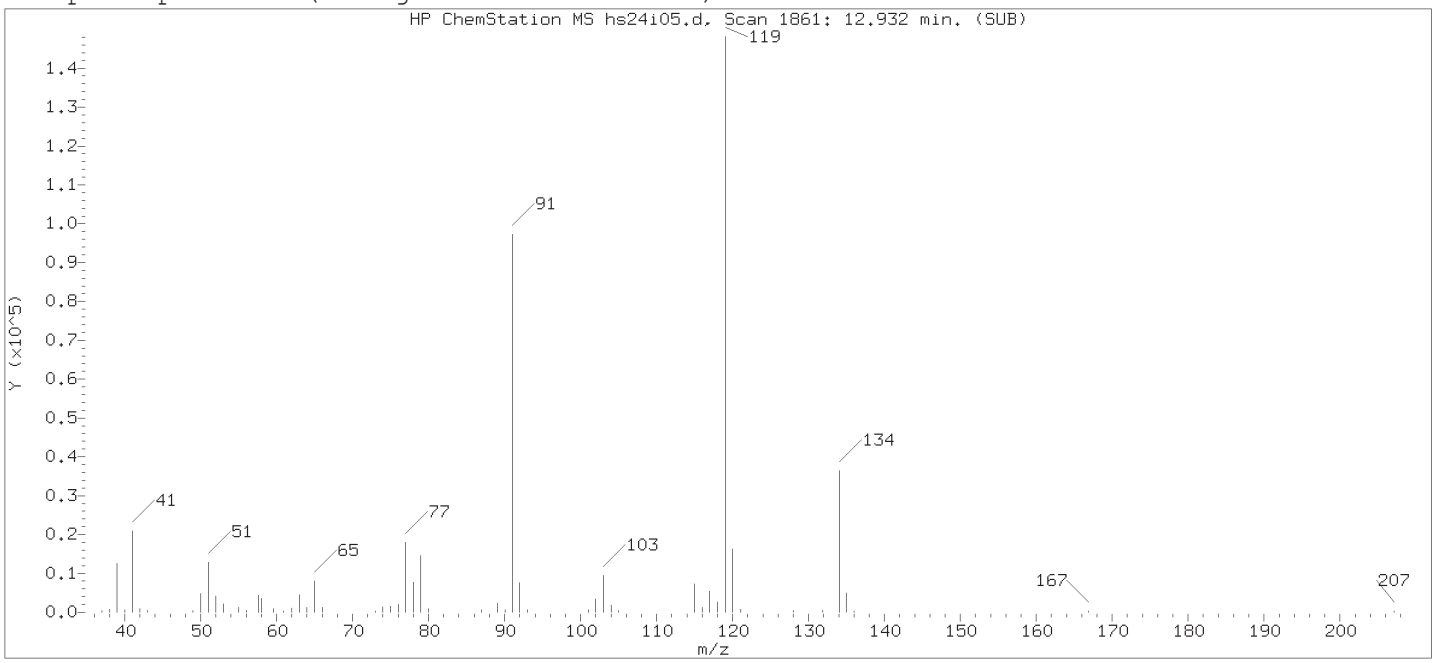
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area (flag) : 55631M
On-Column Amount (ng) : 1.0251
Integration start scan : 1854 Integration stop scan: 1865
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

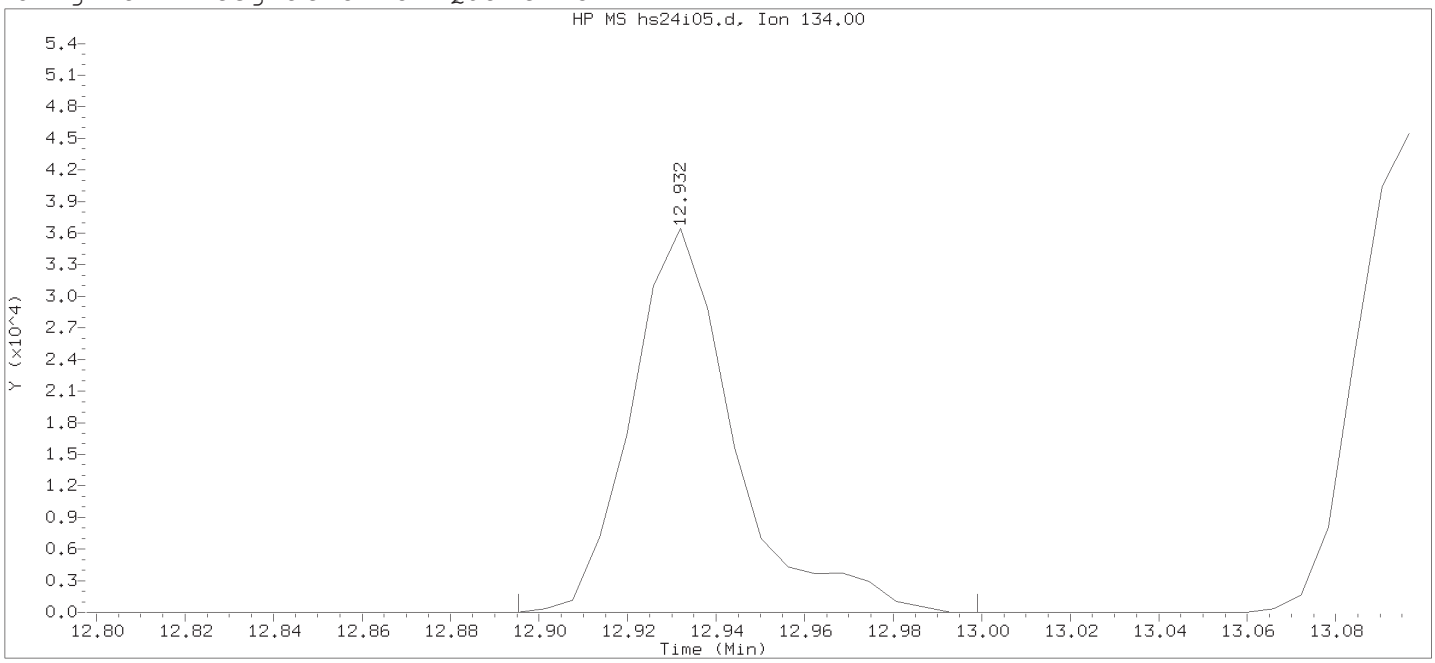
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

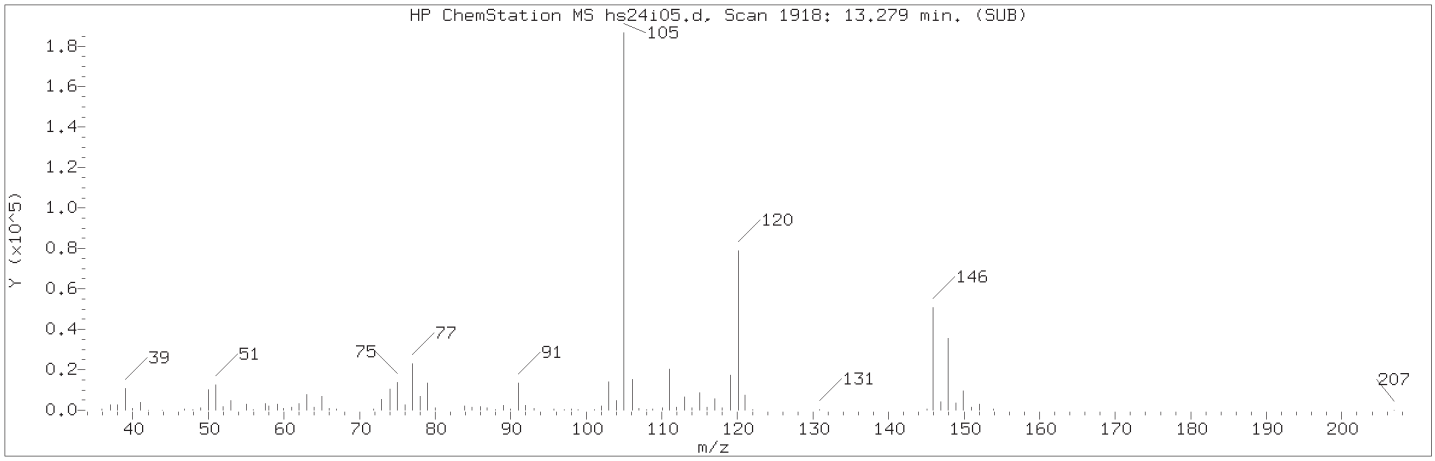
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

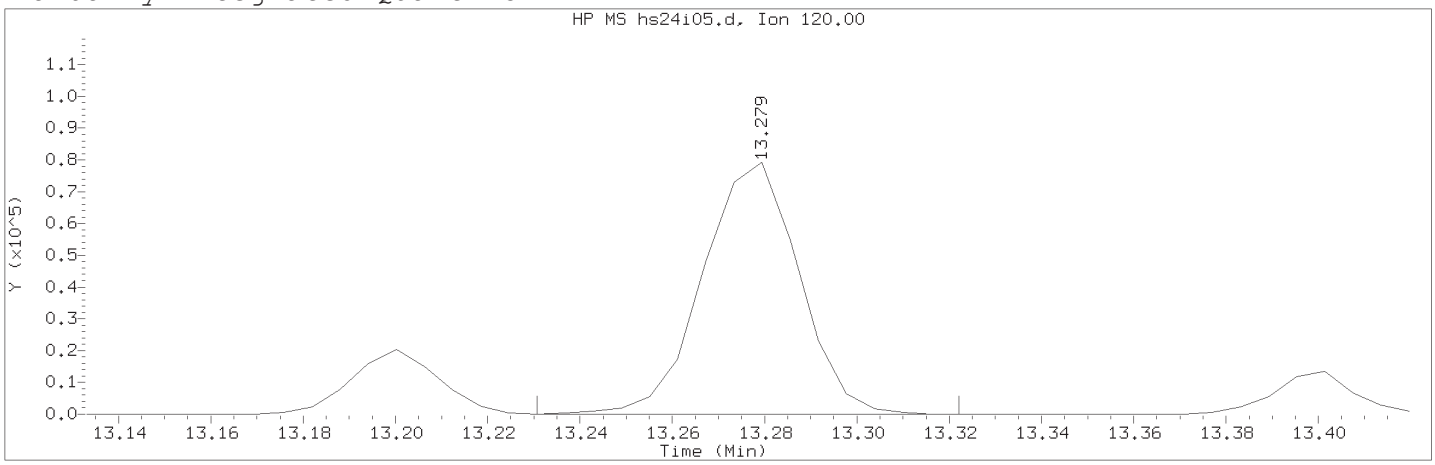
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area : 58647
On-column Amount (ng) : 1.0086
Integration start scan : 1854 Integration stop scan: 1871
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

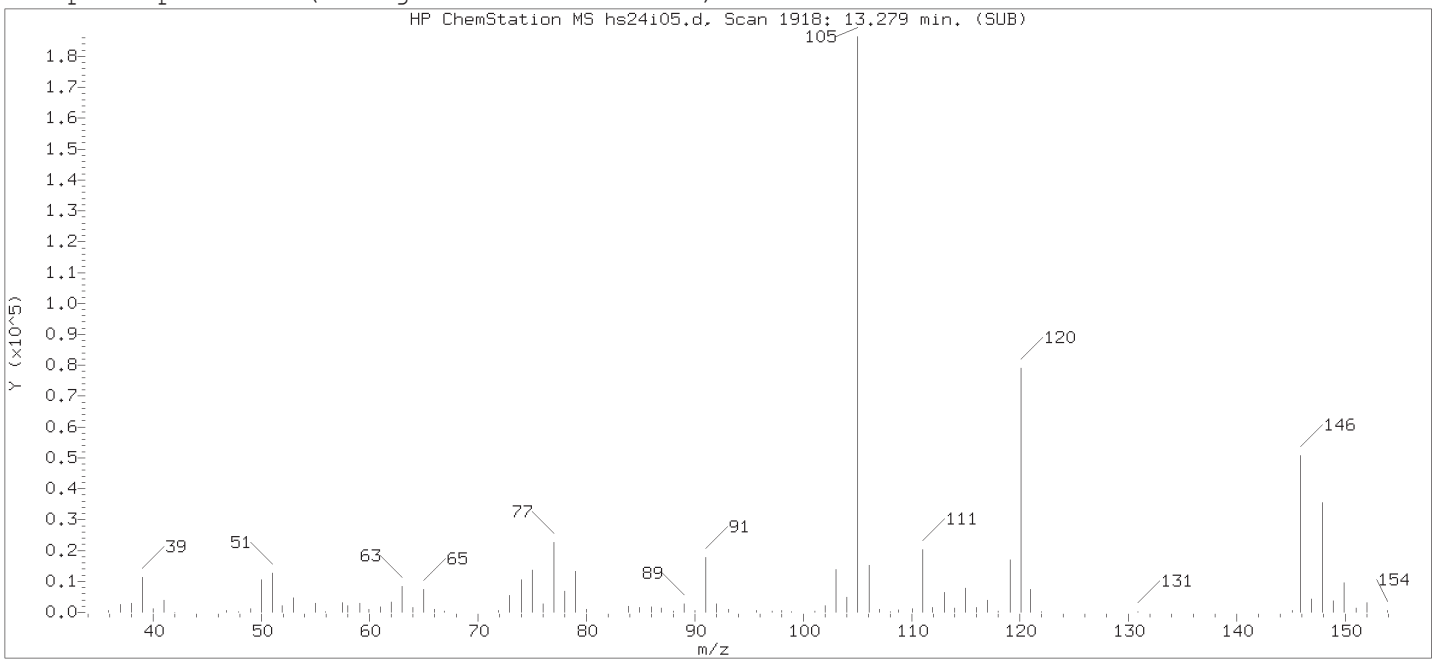
Compound Number : 135
Compound Name : 1,2,3-Trimethylbenzene
Scan Number : 1918
Retention Time (minutes): 13.279
Quant Ion : 120.00
Area (flag) : 114395M
On-Column Amount (ng) : 0.9792
Integration start scan : 1909 Integration stop scan: 1924
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

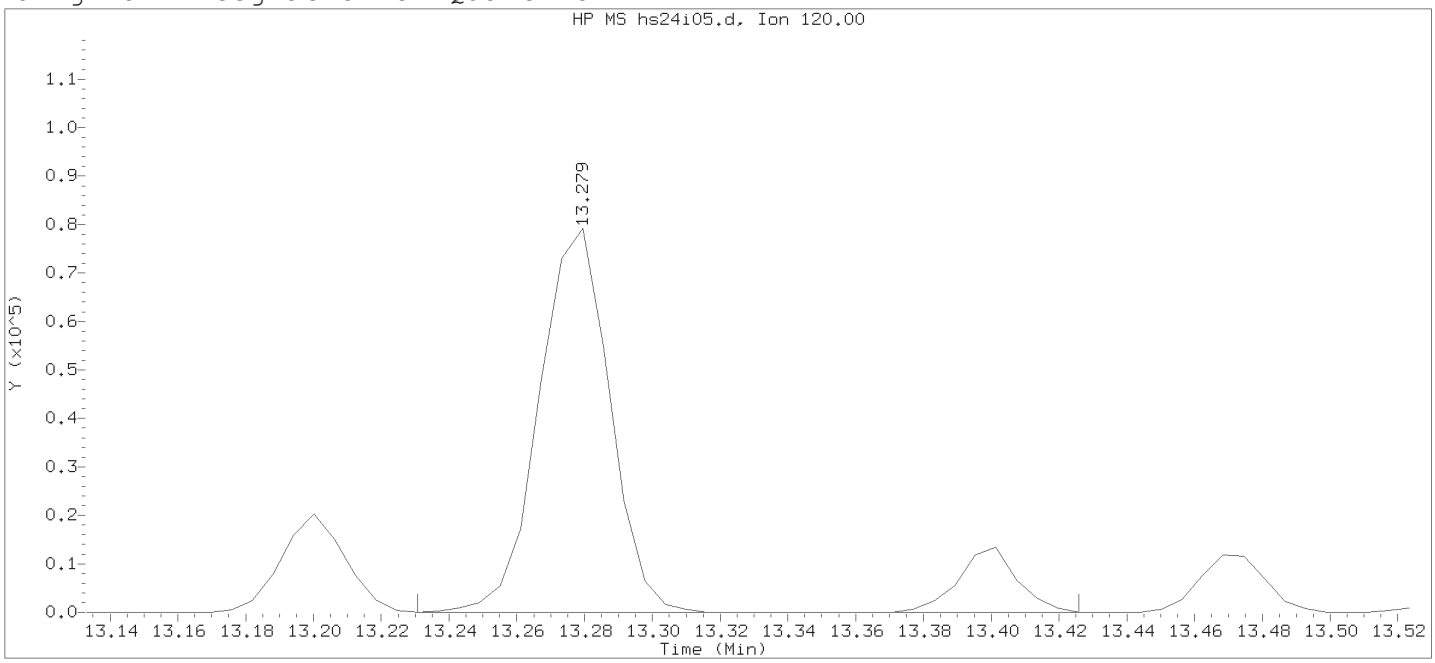
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



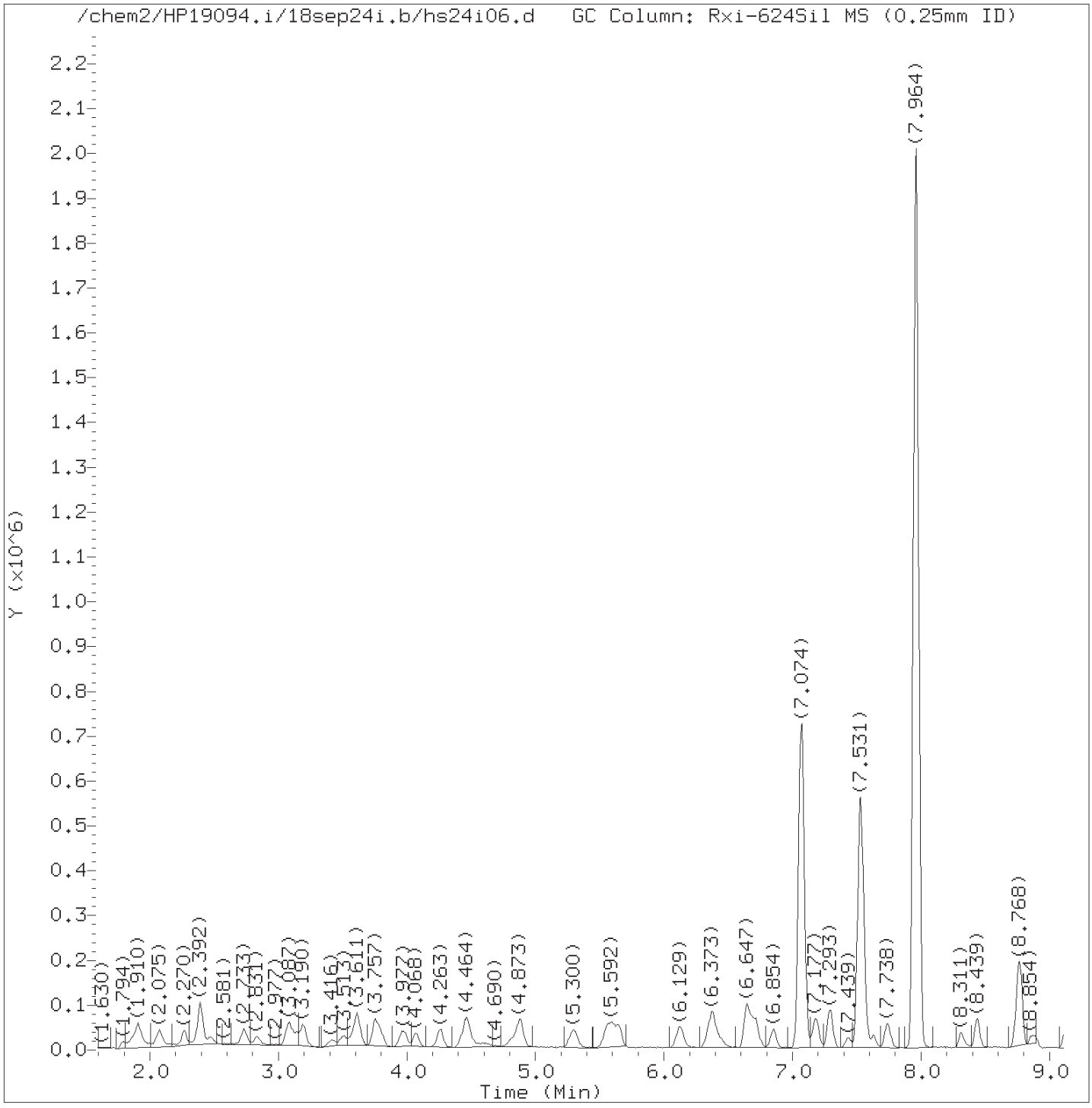
Data File: /chem2/HP19094.i/18sep24i.b/hs24i05.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 19:54 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 135
Compound Name : 1,2,3-Trimethylbenzene
Scan Number : 1918
Retention Time (minutes): 13.279
Quant Ion : 120.00
Area : 130549
On-column Amount (ng) : 1.0710
Integration start scan : 1909 Integration stop scan: 1941
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052



Total Ion Chromatogram (TIC)

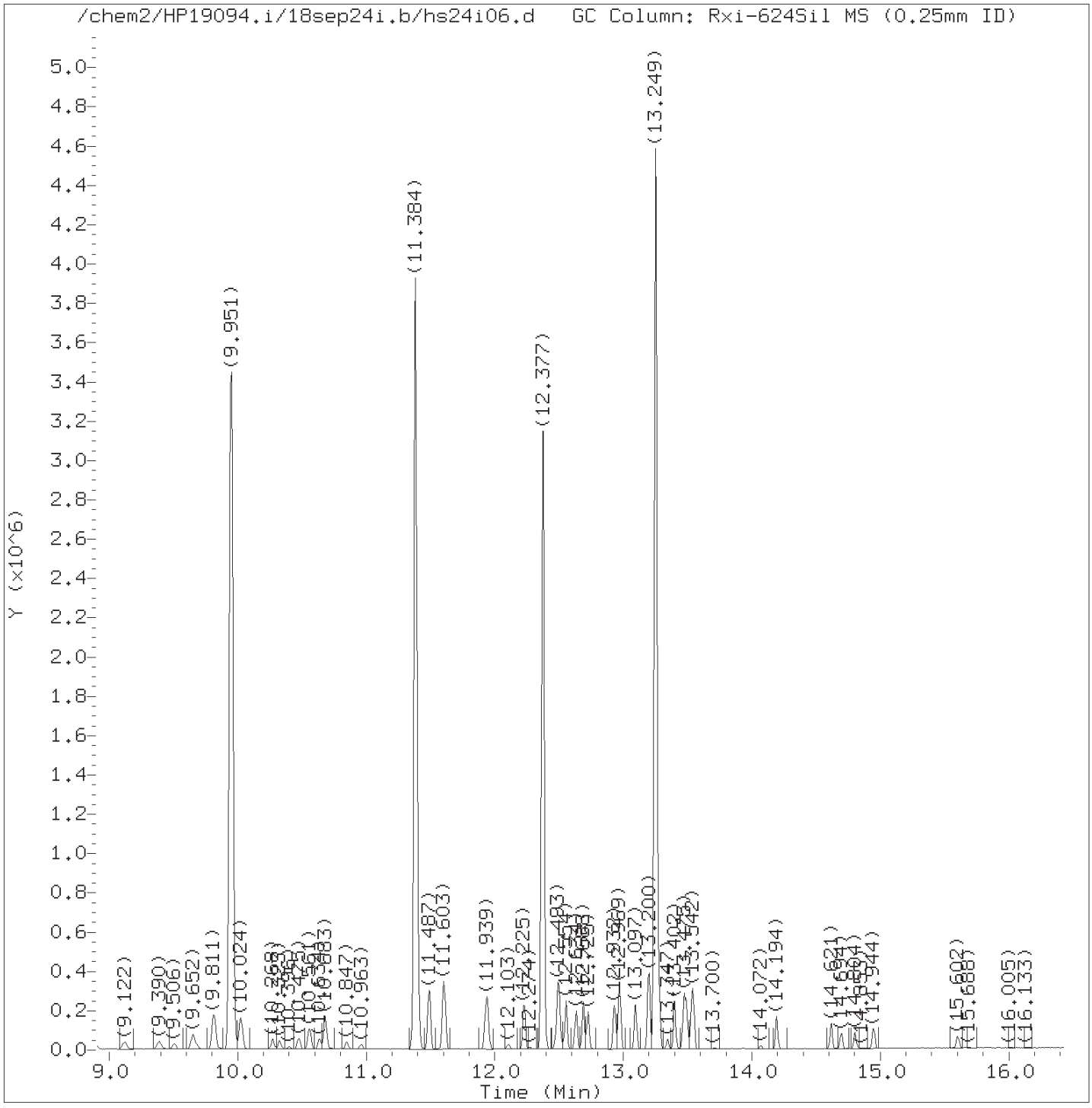
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.062	85	52718	0.492
2) Chloromethane	(2)	2.270	50	52280	0.498
6) 1,3-Butadiene	(2)	2.386	39	54776M	0.492
5) Vinyl Chloride	(2)	2.398	62	47346	0.482
7) Bromomethane	(2)	2.733	94	38272	0.501
8) Chloroethane	(2)	2.831	64	29455	0.494
9) Dichlorofluoromethane	(2)	3.080	67	68125	0.480
10) Trichlorofluoromethane	(2)	3.141	101	61550	0.496
11) Ethyl ether	(2)	3.422	59	20421	0.485
12) Freon 123a	(2)	3.501	67	38697	0.492
13) Acrolein	(1)	3.611	56	144331	23.202
15) 1,1-Dichloroethene	(2)	3.751	96	25447	0.473
16) Freon 113	(2)	3.794	101	29825	0.471
14) Acetone	(1)	3.800	43	39805M	4.764
17) Methyl Iodide	(2)	3.958	142	54798	0.489
18) Carbon Disulfide	(2)	4.068	76	82997	0.485
21) Methyl Acetate	(1)	4.214	43	11281	0.481
22) Allyl Chloride	(2)	4.257	41	48017	0.470
23) Methylene Chloride	(2)	4.452	84	28557	0.471
26)*t-Butyl Alcohol-d10	(1)	4.477	65	140183M	50.000
28) t-Butyl Alcohol	(1)	4.605	59	23242	9.713
29) Acrylonitrile	(1)	4.800	53	25339	2.348
30) Methyl Tertiary Butyl Ether	(2)	4.861	73	53197	0.481
31) trans-1,2-Dichloroethene	(2)	4.891	96	28696	0.473
32) n-Hexane	(2)	5.300	57	44645	0.463
33) 1,1-Dichloroethane	(2)	5.556	63	55167	0.477
34) di-Isopropyl Ether	(2)	5.592	45	97579	0.475
35) 2-Chloro-1,3-Butadiene	(2)	5.647	53	47649	0.458
40) 1,2-Dichloroethene (Total)	(2)		96	60740	0.951
37) Ethyl t-butyl ether	(2)	6.117	59	79009M	0.485
38) 2-Butanone	(1)	6.336	43	62685	4.583
39) cis-1,2-Dichloroethene	(2)	6.366	96	32044	0.478
41) 2,2-Dichloropropane	(2)	6.391	77	37720	0.457
42) Propionitrile	(1)	6.446	54	36555	9.847
45) Methacrylonitrile	(1)	6.647	67	61003	4.557
47) Bromochloromethane	(2)	6.702	128	13020	0.460
48) Tetrahydrofuran	(1)	6.714	71	16511	4.541
49) Chloroform	(2)	6.854	83	51878	0.483

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.068	113	691568	10.003
50)$Dibromofluoromethane	(2)	7.068	111	705727	9.917
51) 1,1,1-Trichloroethane	(2)	7.086	97	43339	0.472
52) Cyclohexane	(2)	7.183	56	55245	0.460
52) Cyclohexane	(2)	7.177	84	43224	0.437
52) Cyclohexane	(2)	7.177	69	16219	0.459
54) Carbon Tetrachloride	(2)	7.293	117	36936	0.468
55) 1,1-Dichloropropene	(2)	7.299	75	39906	0.458
56) Isobutyl Alcohol	(1)	7.433	41	23659	25.555
57)$1,2-Dichloroethane-d4	(2)	7.531	102	118986	9.872
57)$1,2-Dichloroethane-d4	(2)	7.525	65	583630	10.011
57)$1,2-Dichloroethane-d4	(2)	7.531	104	76978	9.972
58) Benzene	(2)	7.555	78	124386	0.483
59) 1,2-Dichloroethane	(2)	7.628	62	29519M	0.498
60) t-Amyl methyl ether	(2)	7.738	73	64107	0.475
63)*Fluorobenzene	(2)	7.964	96	2743076	10.000
62) n-Heptane	(2)	7.976	43	45673	0.459
65) n-Butanol	(1)	8.305	56	35795M	45.764
67) Trichloroethene	(2)	8.439	95	30507	0.463
69) Methylcyclohexane	(2)	8.756	83	57016	0.458
70) 1,2-Dichloropropane	(2)	8.781	63	28744	0.460
71) Methyl Methacrylate	(1)	8.854	69	10601	0.428
72) 1,4-Dioxane	(1)	8.866	88	3592M	19.073
73) Dibromomethane	(2)	8.890	93	12594	0.486
74) Bromodichloromethane	(2)	9.122	83	32561	0.464
76) 2-Nitropropane	(1)	9.390	41	29896	4.260
80) cis-1,3-Dichloropropene	(2)	9.652	75	36712	0.449
81) 4-Methyl-2-Pentanone	(1)	9.811	43	150042	4.410
82)$Toluene-d8	(3)	9.951	98	2759998	9.999
82)$Toluene-d8	(3)	9.951	100	1781368	9.999
83) Toluene	(3)	10.024	92	77148	0.485
85) 1,3-Dichloropropene (total)	(3)		75	65838	0.924
84) trans-1,3-Dichloropropene	(3)	10.274	75	29126	0.475
86) Ethyl Methacrylate	(3)	10.323	69	24760	0.471
88) 1,1,2-Trichloroethane	(3)	10.475	97	16887	0.461
89) Tetrachloroethene	(3)	10.555	166	35437	0.493
90) 1,3-Dichloropropane	(3)	10.634	76	30460	0.469
91) 2-Hexanone	(1)	10.683	43	102566	4.429

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) Dibromochloromethane	(3)	10.847	129	19914	0.454
95) 1,2-Dibromoethane	(3)	10.963	107	16520	0.481
96) 1-Chlorohexane	(3)	11.384	91	45289	0.477
97)*Chlorobenzene-d5	(3)	11.384	117	2144655	10.000
98) Chlorobenzene	(3)	11.408	112	80357	0.476
99) 1,1,1,2-Tetrachloroethane	(3)	11.487	131	26174	0.470
100) Ethylbenzene	(3)	11.493	91	148120	0.476
101) m+p-Xylene	(3)	11.603	106	110361	0.957
105) Xylene (Total)	(3)		106	162876	1.433
104) o-Xylene	(3)	11.932	106	52515	0.476
106) Styrene	(3)	11.945	104	80057M	0.454
107) Bromoform	(3)	12.103	173	11176	0.463
108) Isopropylbenzene	(3)	12.231	105	139927	0.465
111)$4-Bromofluorobenzene	(3)	12.371	95	1008561	10.036
111)$4-Bromofluorobenzene	(3)	12.377	174	881794	10.105
113) 1,1,2,2-Tetrachloroethane	(4)	12.475	83	20751	0.467
114) Bromobenzene	(4)	12.493	156	31936	0.473
115) trans-1,4-Dichloro-2-butene	(1)	12.499	53	45404	4.261
116) 1,2,3-Trichloropropane	(4)	12.524	110	5721	0.499
117) n-Propylbenzene	(4)	12.554	91	170760	0.465
119) 2-Chlorotoluene	(4)	12.634	126	34609	0.486
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	114586	0.461
122) 4-Chlorotoluene	(4)	12.725	126	33813	0.474
125) tert-Butylbenzene	(4)	12.932	134	25726M	0.476
126) Pentachloroethane	(4)	12.969	167	18317	0.434
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	117785	0.464
128) sec-Butylbenzene	(4)	13.097	105	144734	0.449
131) 1,3-Dichlorobenzene	(4)	13.194	146	63877	0.476
132) p-Isopropyltoluene	(4)	13.200	119	119452	0.448
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1119082	10.000
134) 1,4-Dichlorobenzene	(4)	13.268	146	61222	0.465
135) 1,2,3-Trimethylbenzene	(4)	13.274	120	54691	0.470
136) Benzyl Chloride	(4)	13.347	126	6108	0.381
138) n-Butylbenzene	(4)	13.493	92	60346	0.456
139) 1,2-Dichlorobenzene	(4)	13.530	146	57190	0.483
143) 1,2-Dibromo-3-chloropropane	(1)	14.078	155	2354	0.408
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	47093	0.472
145) 1,2,4-Trichlorobenzene	(4)	14.621	180	38351	0.472

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) Hexachlorobutadiene	(4)	14.700	225	14287	0.465
147) Naphthalene	(4)	14.804	128	57089	0.444
148) 1,2,3-Trichlorobenzene	(4)	14.950	180	31271	0.468

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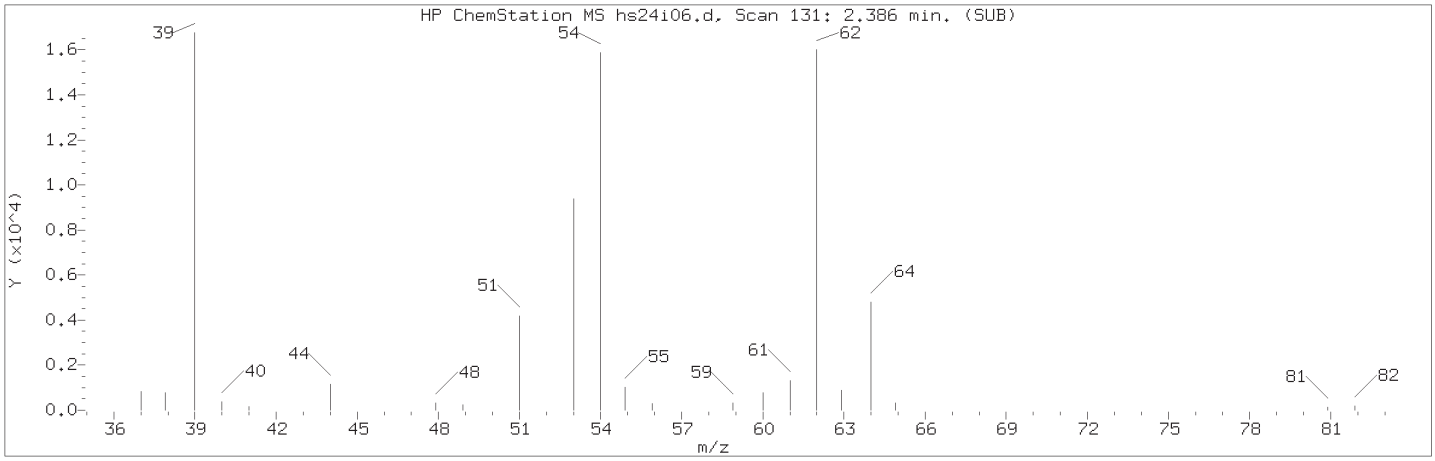
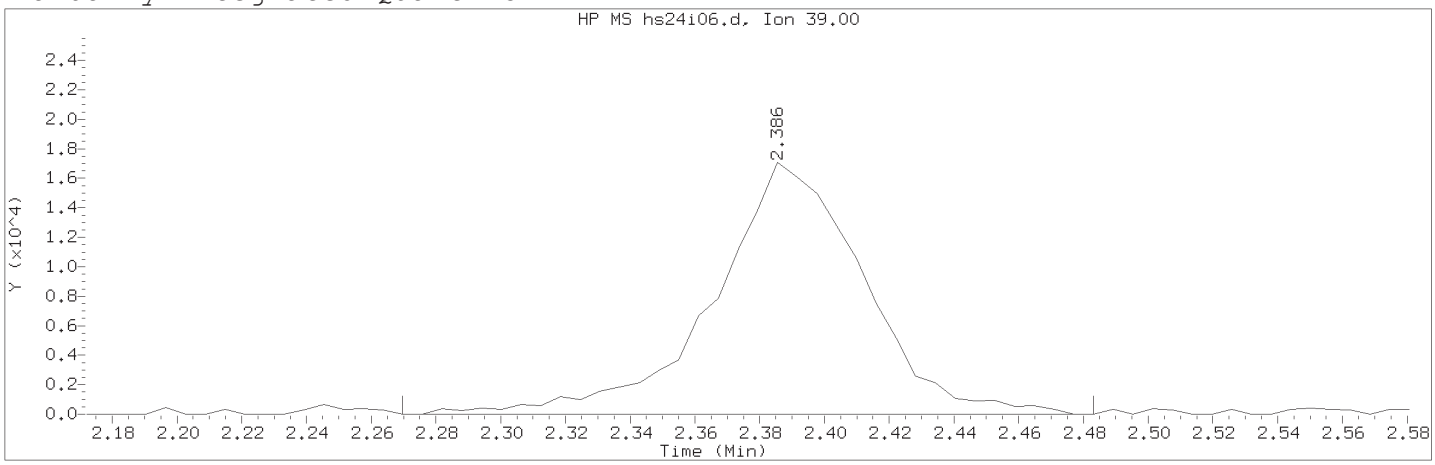
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

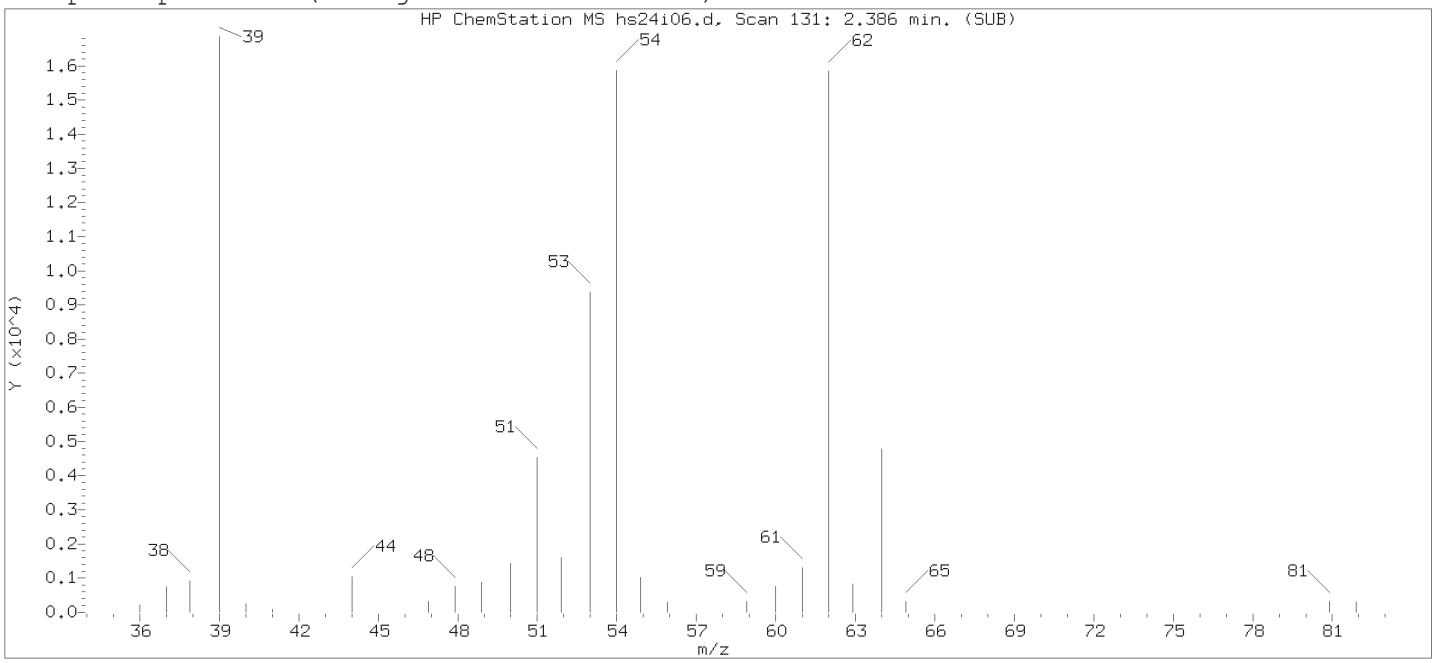
Compound Number	: 6		
Compound Name	: 1,3-Butadiene		
Scan Number	: 131		
Retention Time (minutes)	: 2.386		
Quant Ion	: 39.00		
Area (flag)	: 54776M		
On-Column Amount (ng)	: 0.4918		
Integration start scan	: 111	Integration stop scan:	146
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

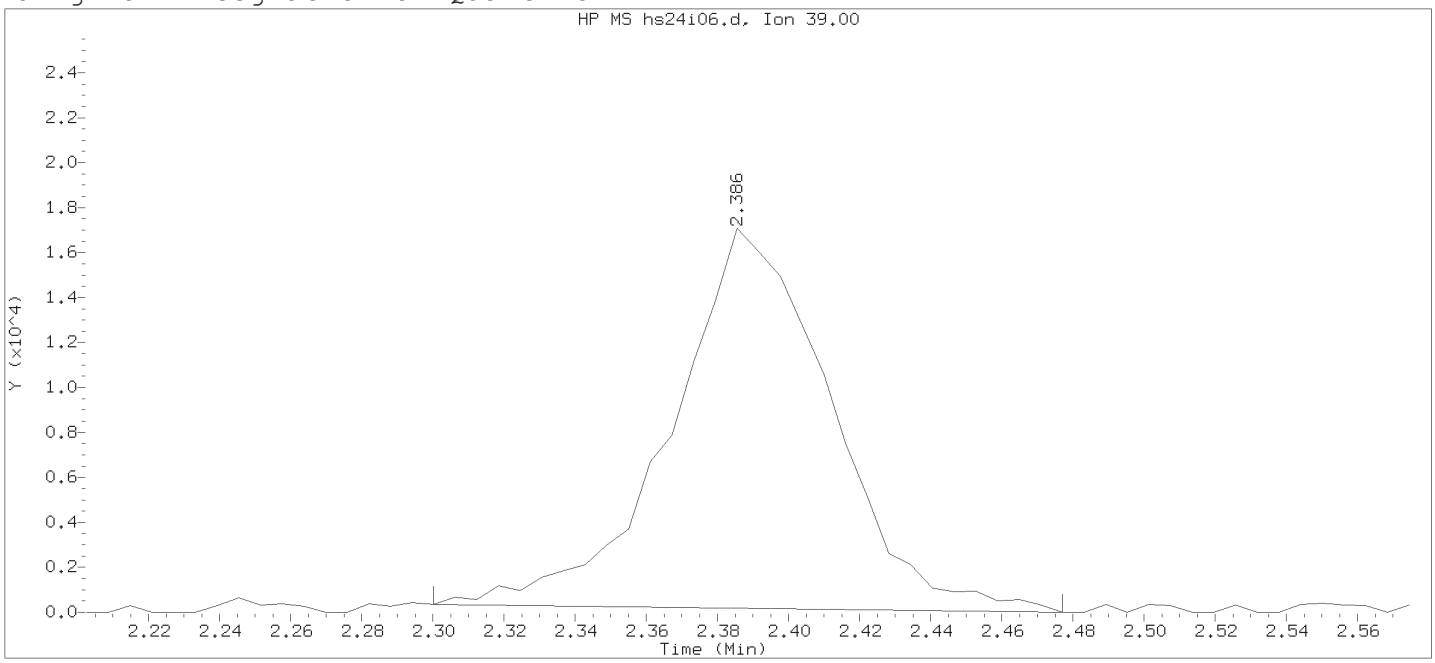
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 131
Retention Time (minutes): 2.386
Quant Ion : 39.00
Area : 52477
On-column Amount (ng) : 0.5033
Integration start scan : 116 Integration stop scan: 145
Y at integration start : 348 Y at integration end: 0

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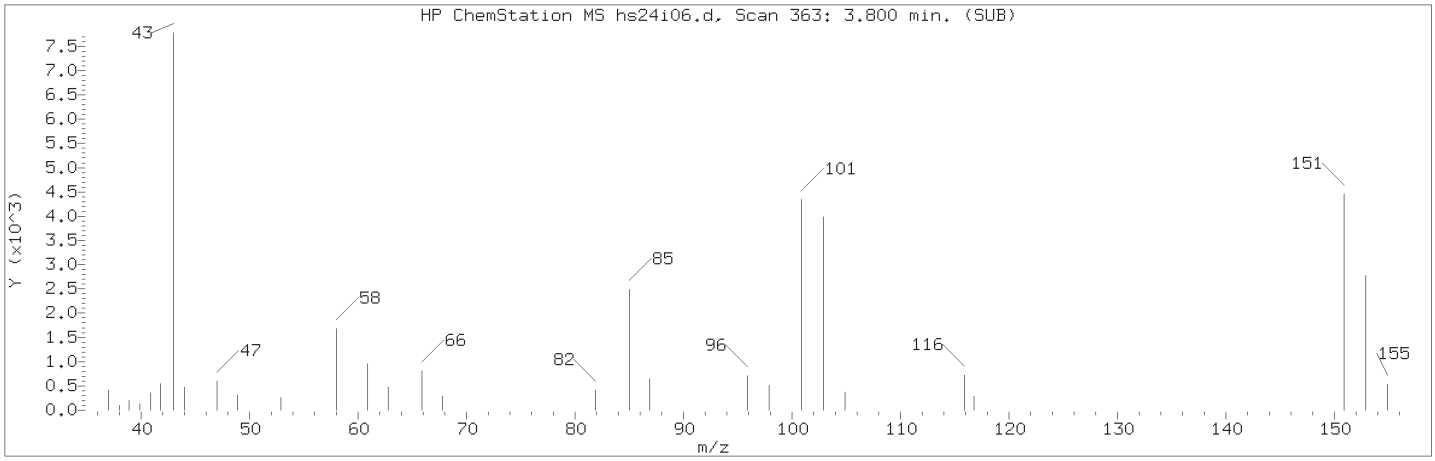
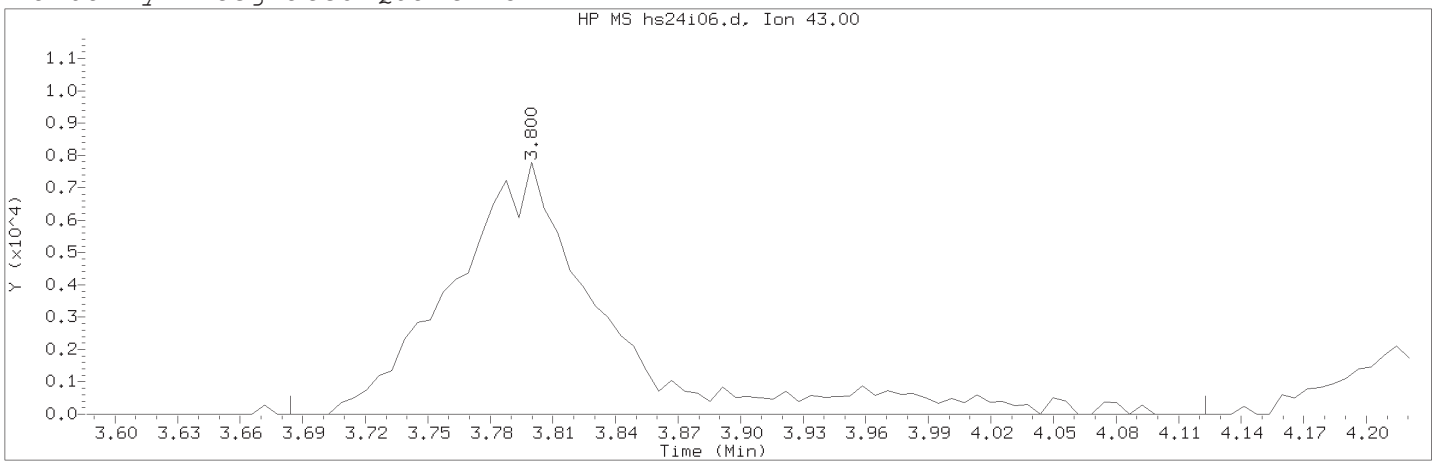
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

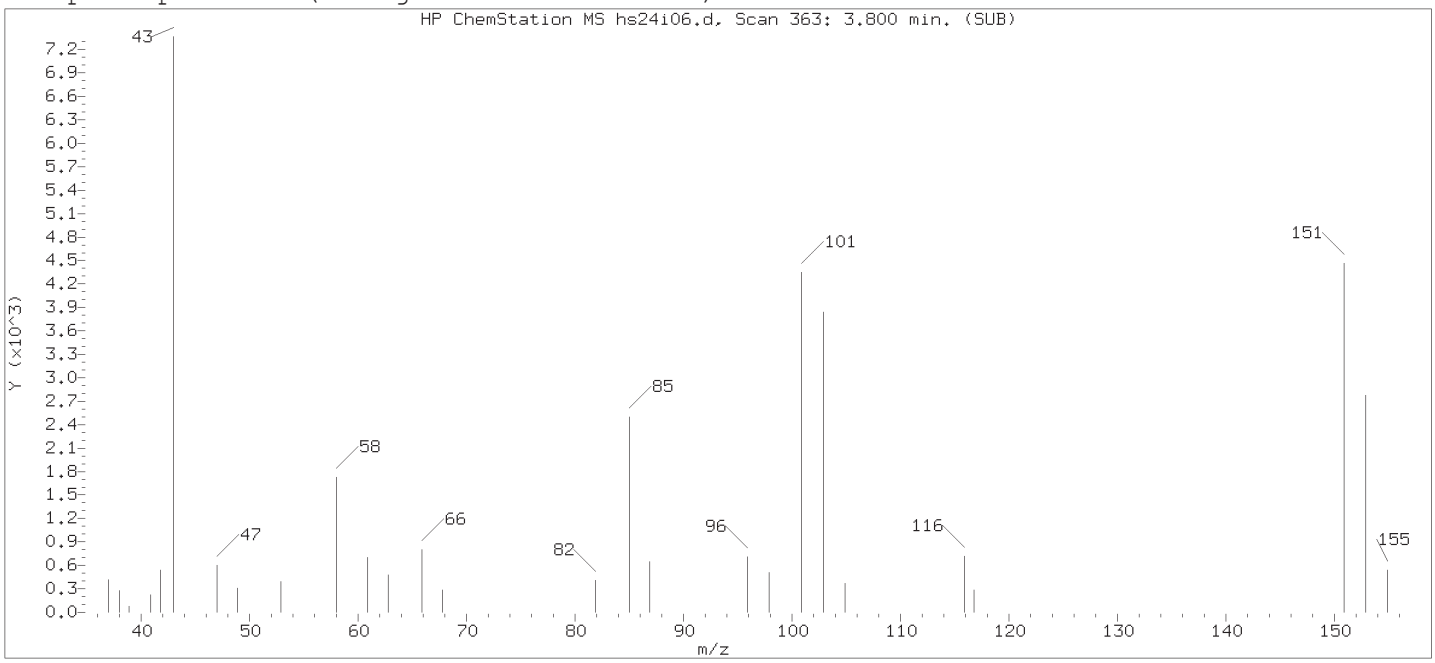
Compound Number : 14
Compound Name : Acetone
Scan Number : 363
Retention Time (minutes): 3.800
Quant Ion : 43.00
Area (flag) : 39805M
On-Column Amount (ng) : 4.7640
Integration start scan : 343 Integration stop scan: 415
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

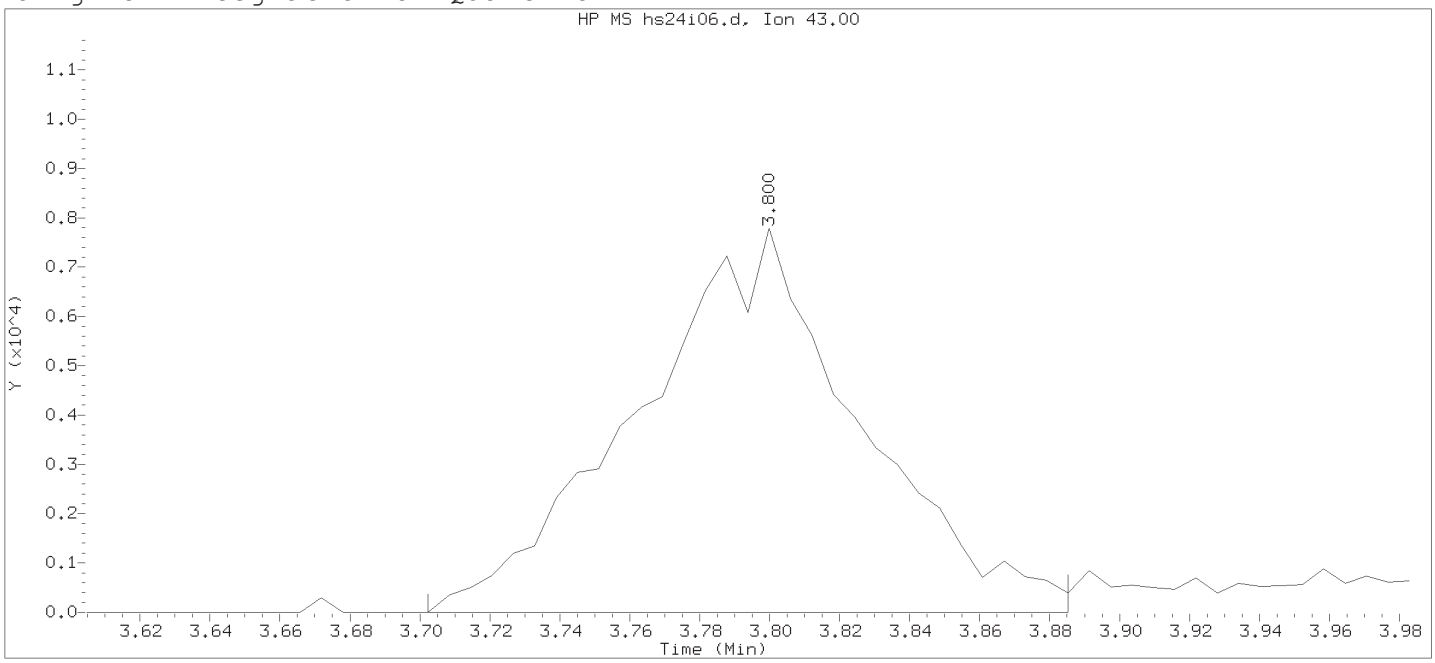
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 14
Compound Name : Acetone
Scan Number : 363
Retention Time (minutes): 3.800
Quant Ion : 43.00
Area : 34206
On-column Amount (ng) : 4.4016
Integration start scan : 346 Integration stop scan: 376
Y at integration start : 0 Y at integration end: 0

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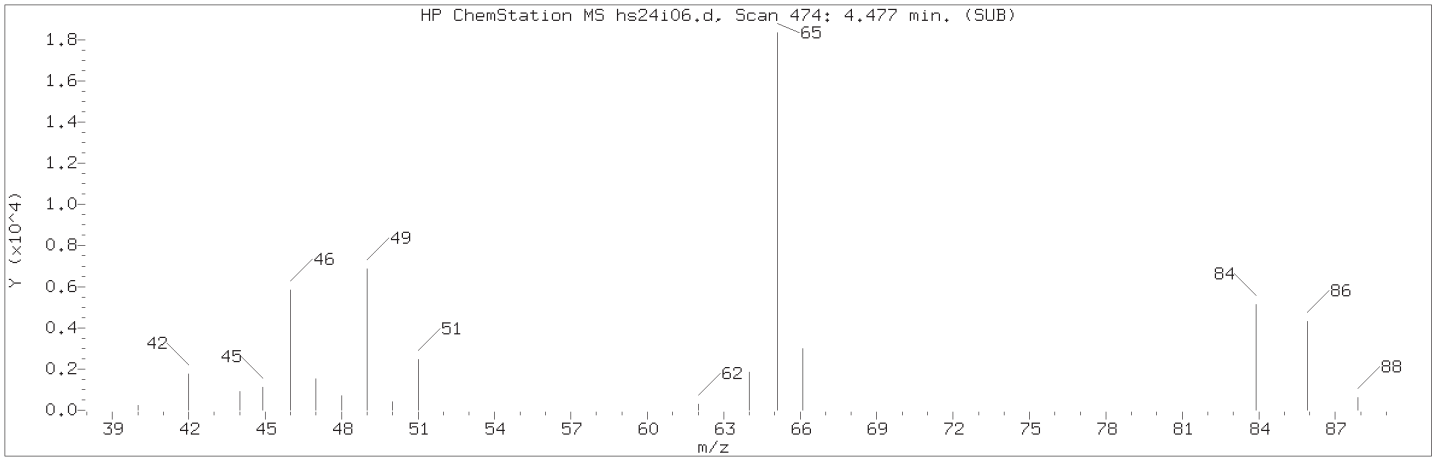
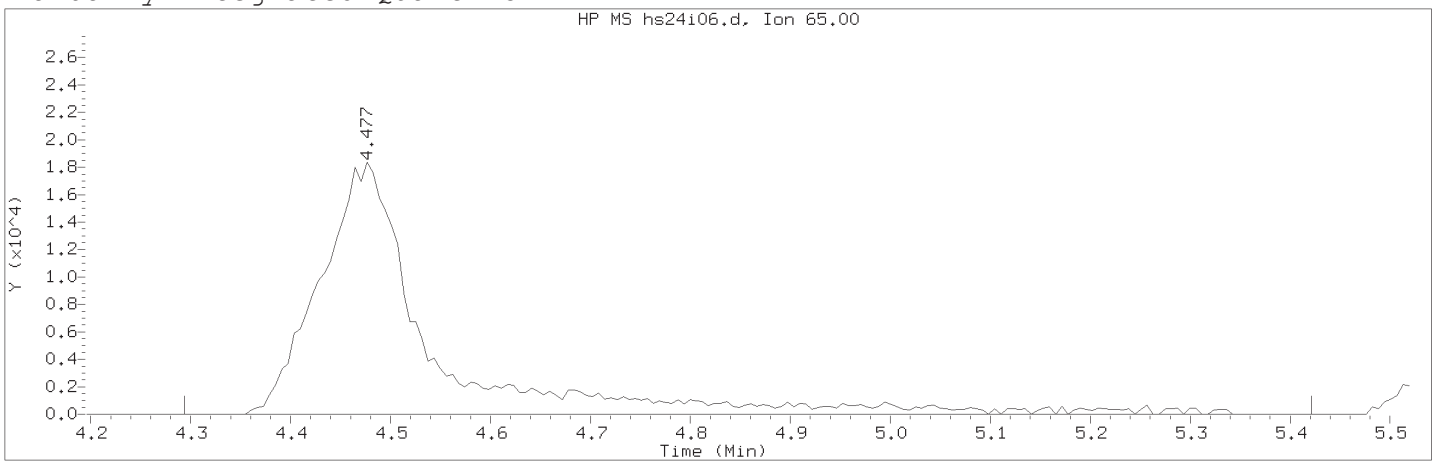
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

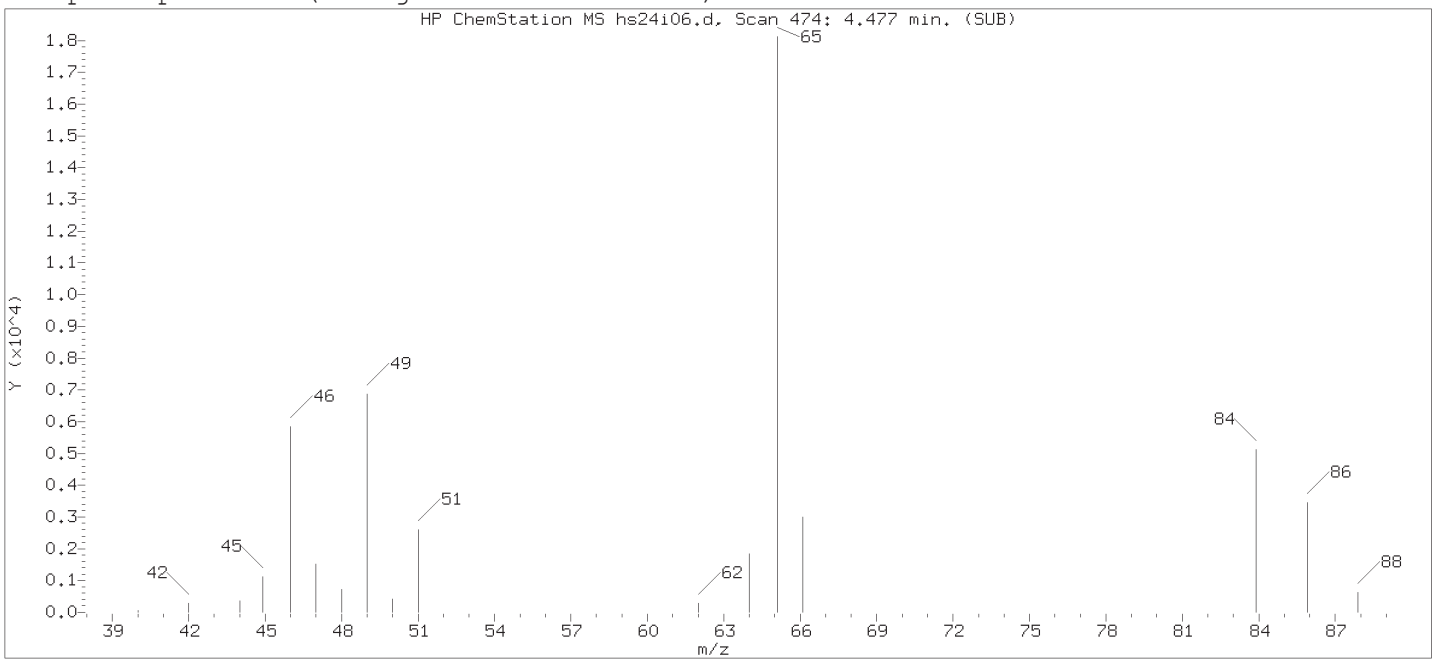
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 474
Retention Time (minutes): 4.477
Quant Ion : 65.00
Area (flag) : 140183M
On-Column Amount (ng) : 50.0000
Integration start scan : 443 Integration stop scan: 628
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

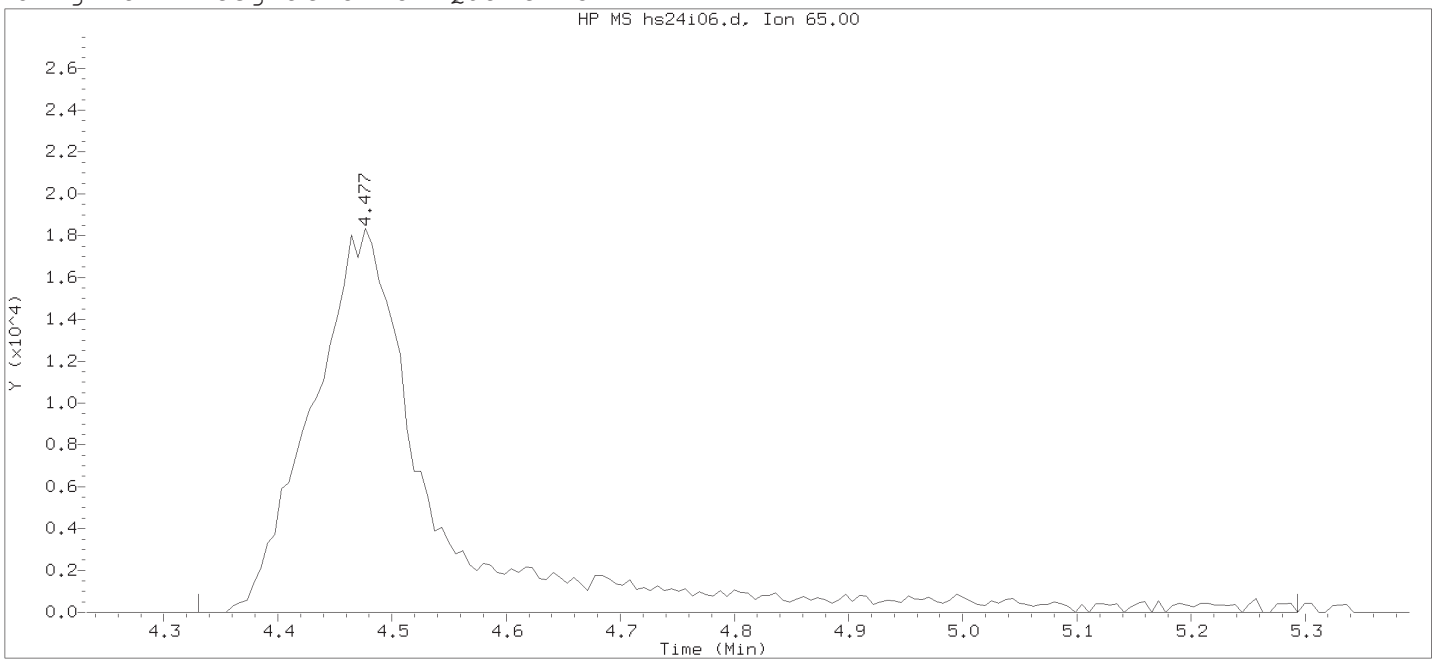
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 474
Retention Time (minutes): 4.477
Quant Ion : 65.00
Area : 139492
On-column Amount (ng) : 50.0000
Integration start scan : 449 Integration stop scan: 607
Y at integration start : 0 Y at integration end: 0

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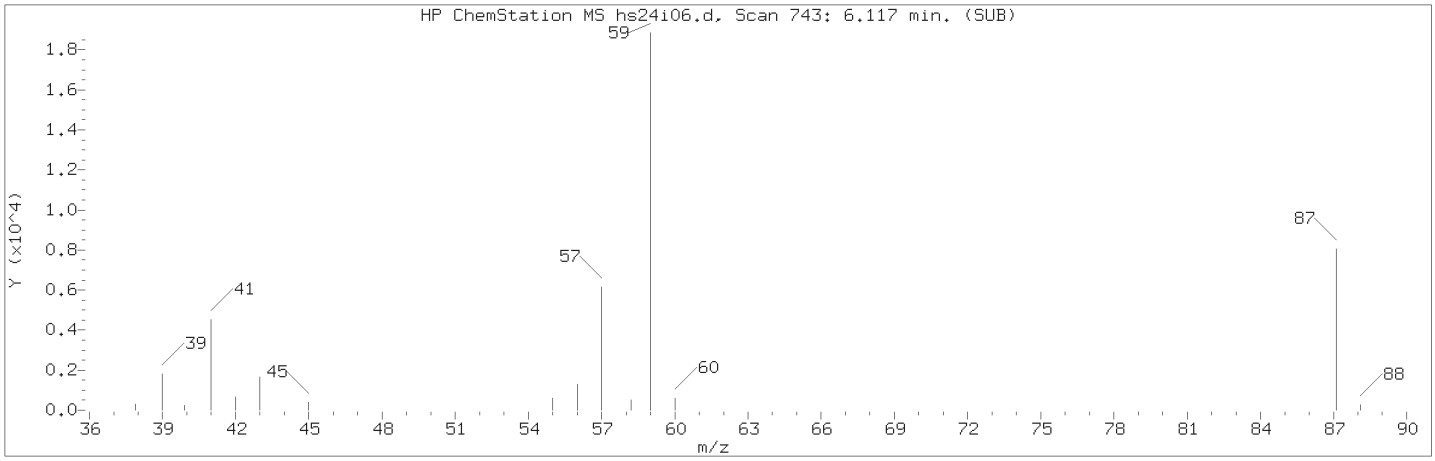
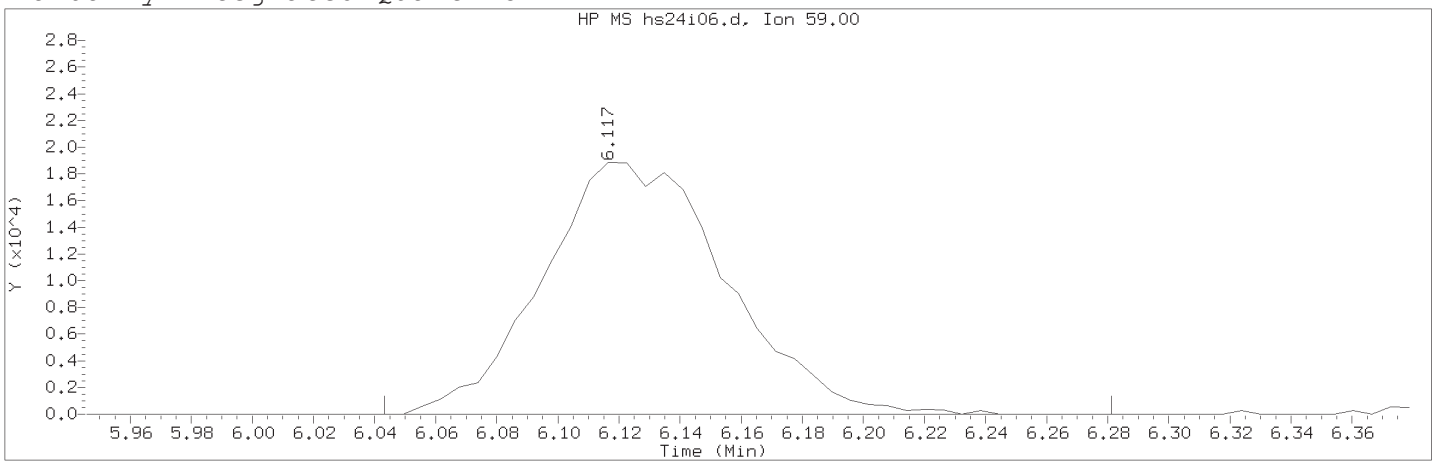
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

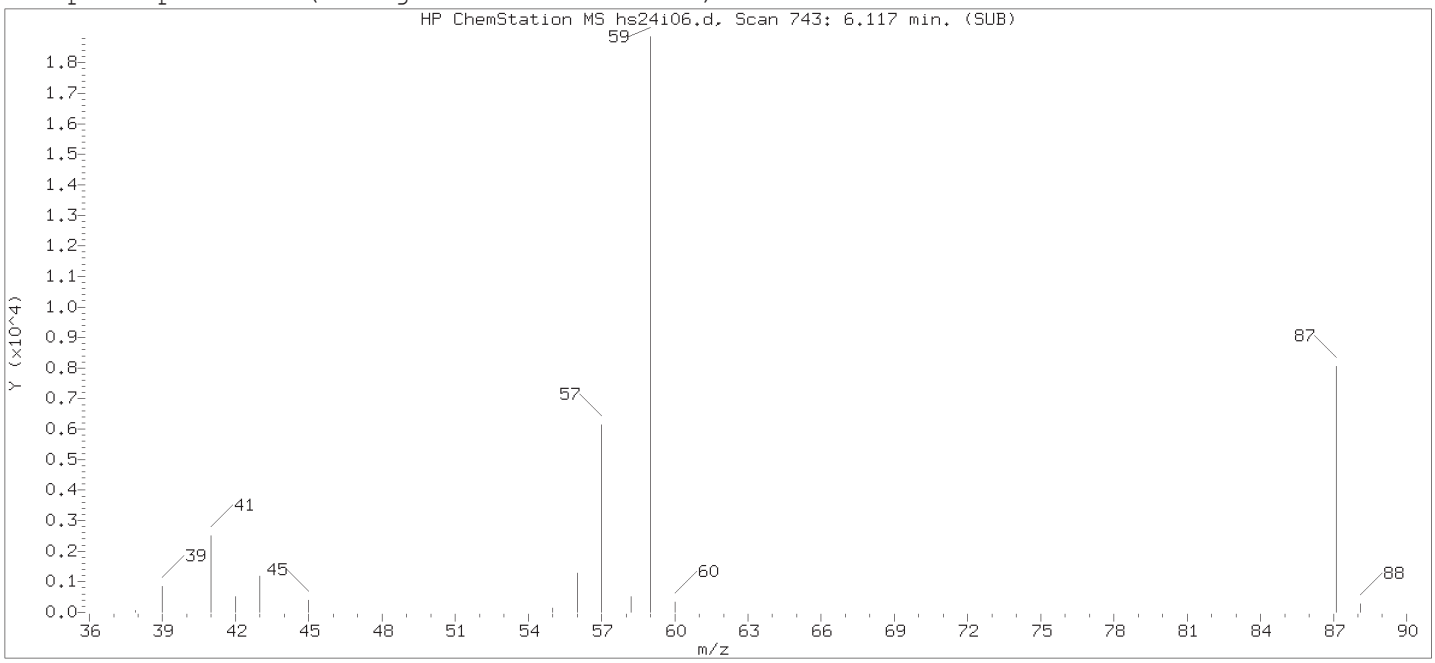
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 743
Retention Time (minutes): 6.117
Quant Ion : 59.00
Area (flag) : 79009M
On-Column Amount (ng) : 0.4853
Integration start scan : 730 Integration stop scan: 769
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

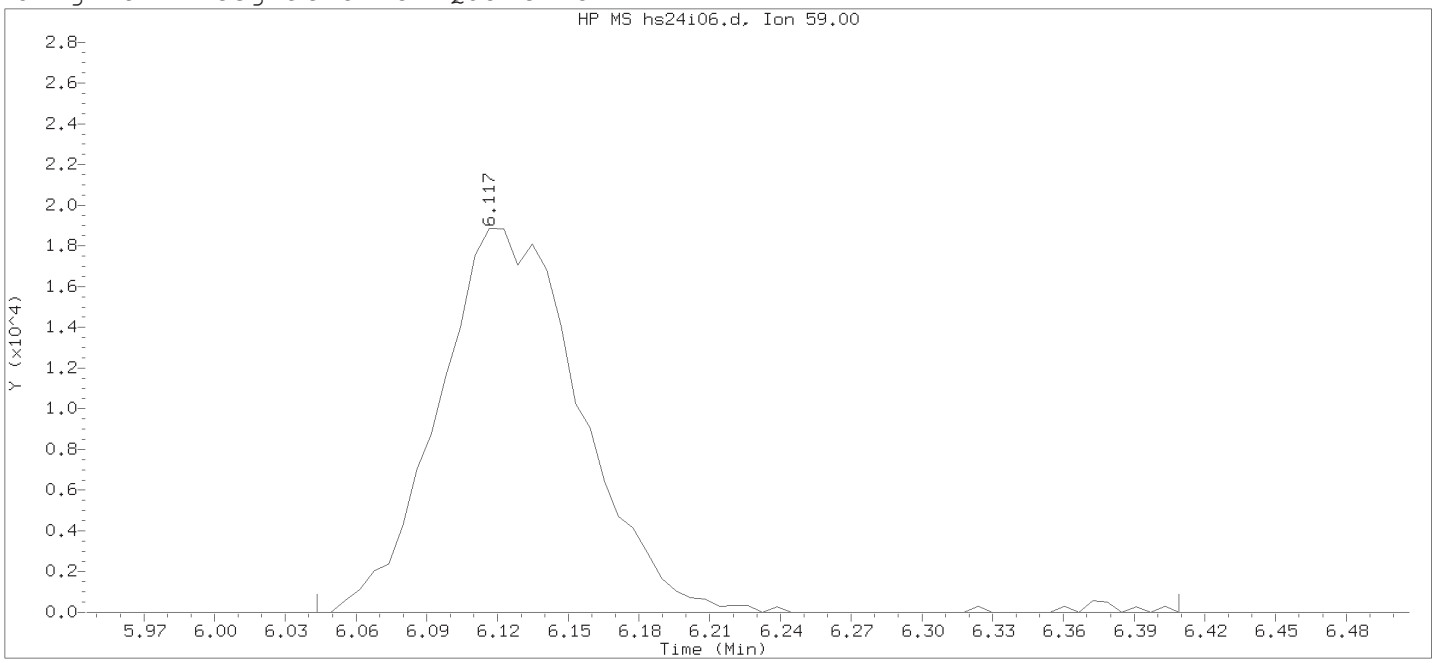
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

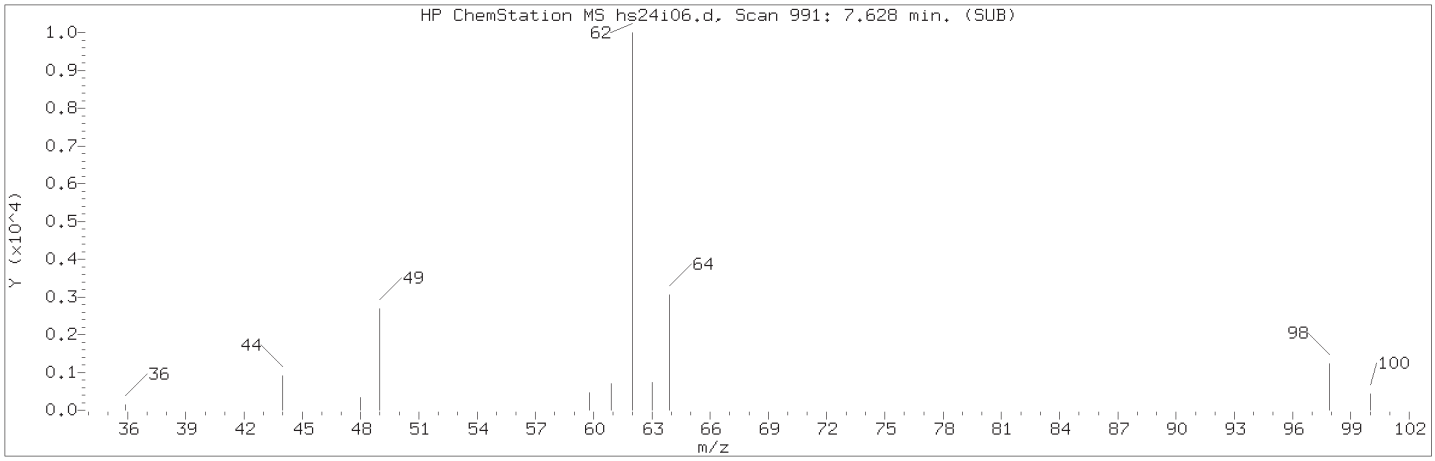
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

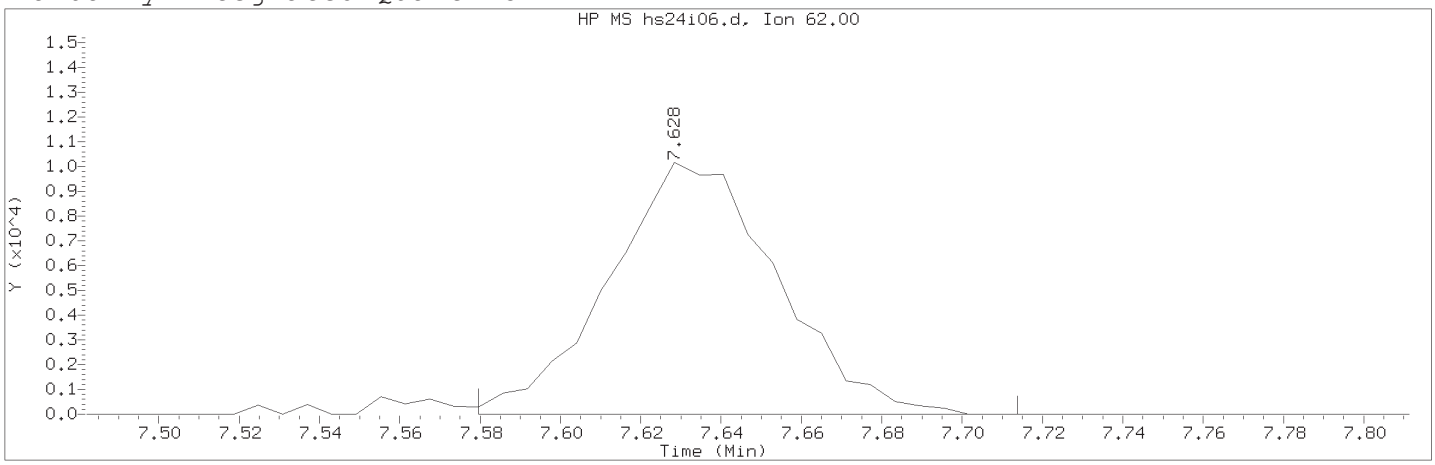
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 743
Retention Time (minutes): 6.117
Quant Ion : 59.00
Area : 79805
On-column Amount (ng) : 0.4787
Integration start scan : 730 Integration stop scan: 790
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

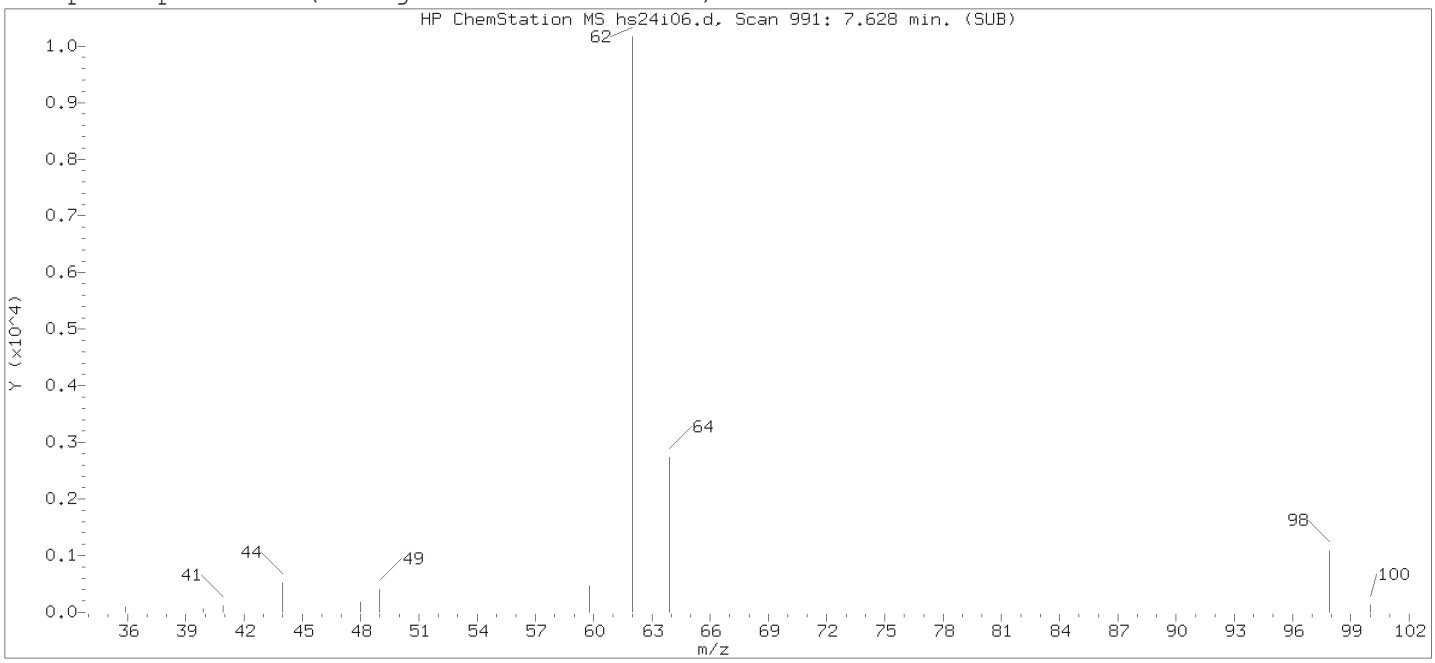
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 991
Retention Time (minutes): 7.628
Quant Ion : 62.00
Area (flag) : 29519M
On-Column Amount (ng) : 0.4982
Integration start scan : 982 Integration stop scan: 1004
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

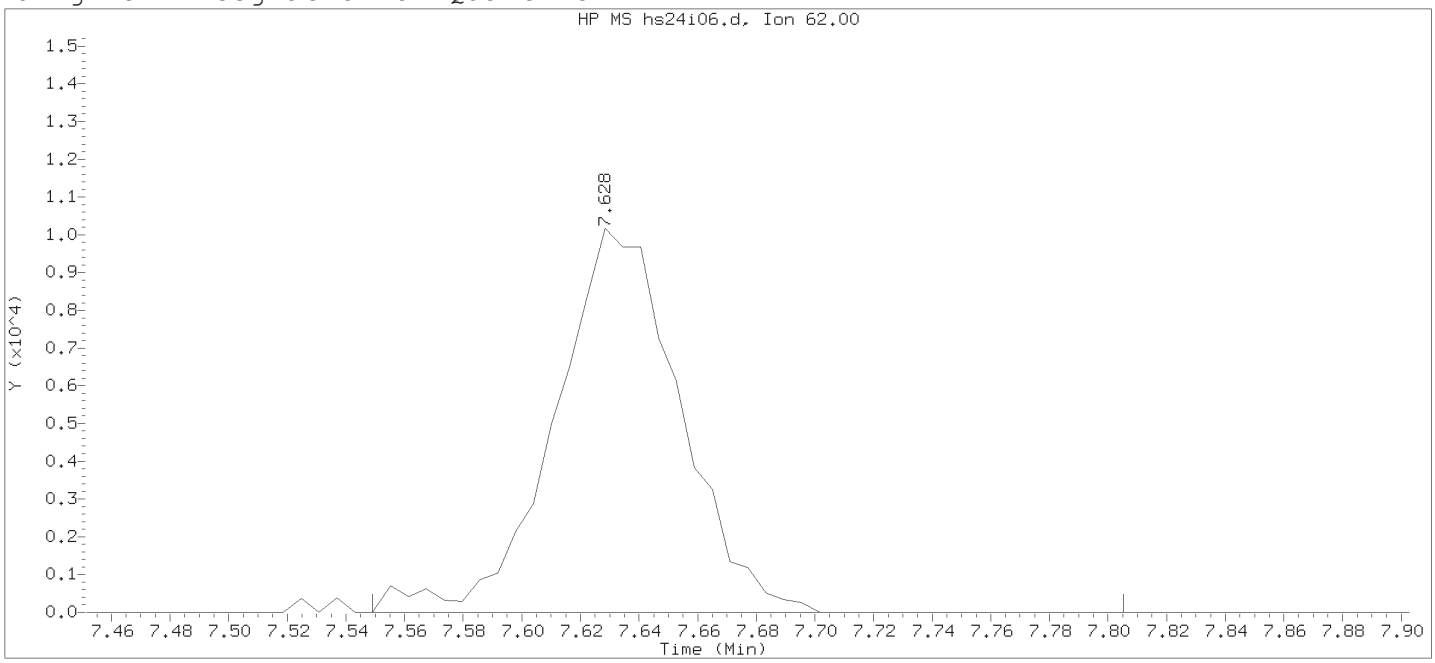
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

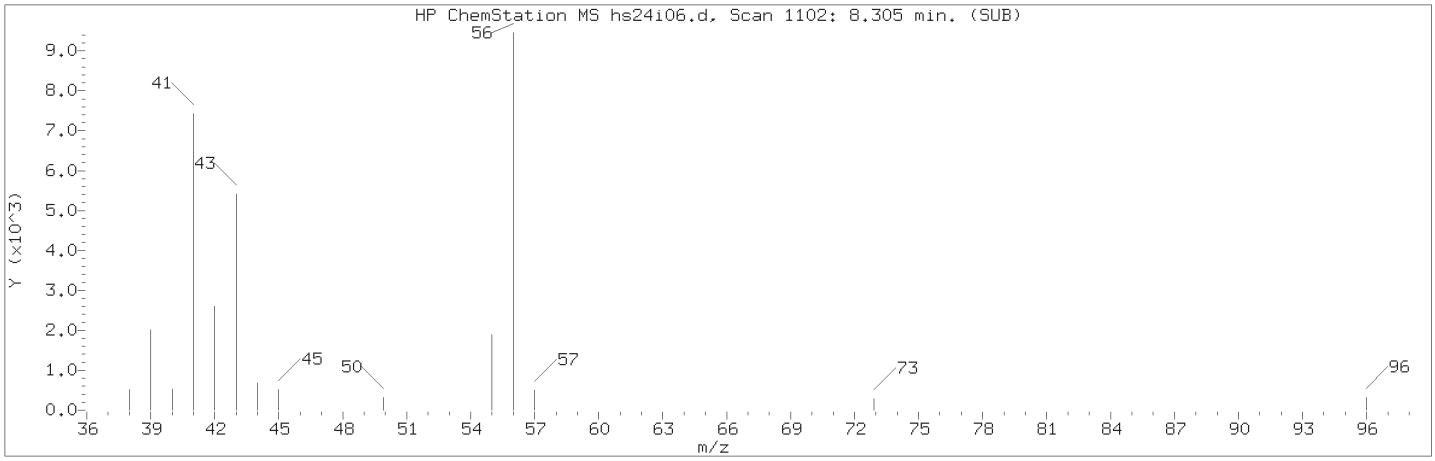
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

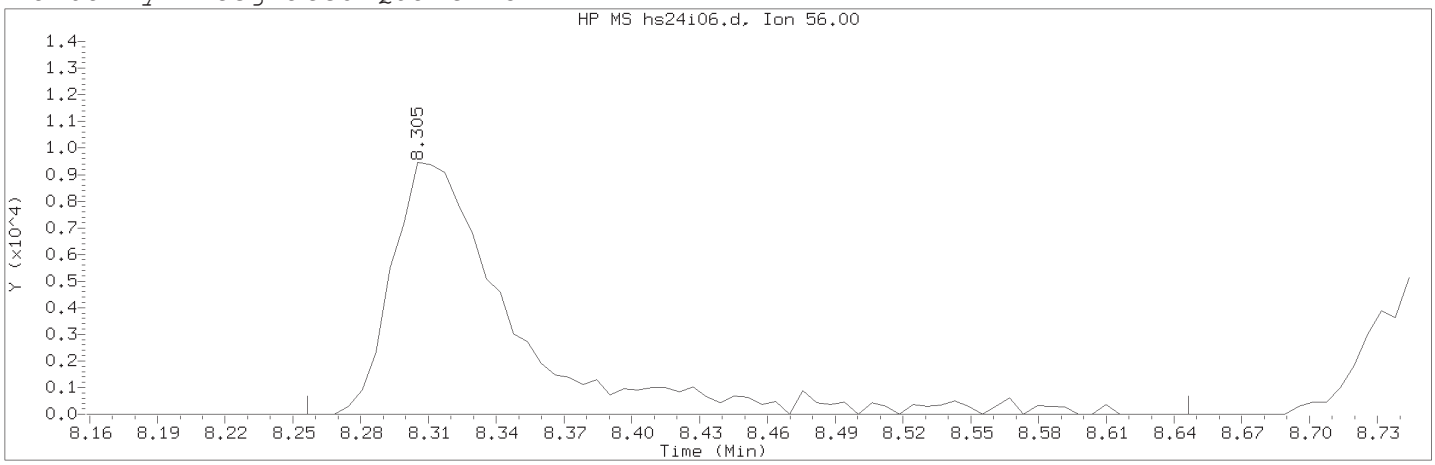
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 991
Retention Time (minutes): 7.628
Quant Ion : 62.00
Area : 30276
On-column Amount (ng) : 0.5128
Integration start scan : 977 Integration stop scan: 1019
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

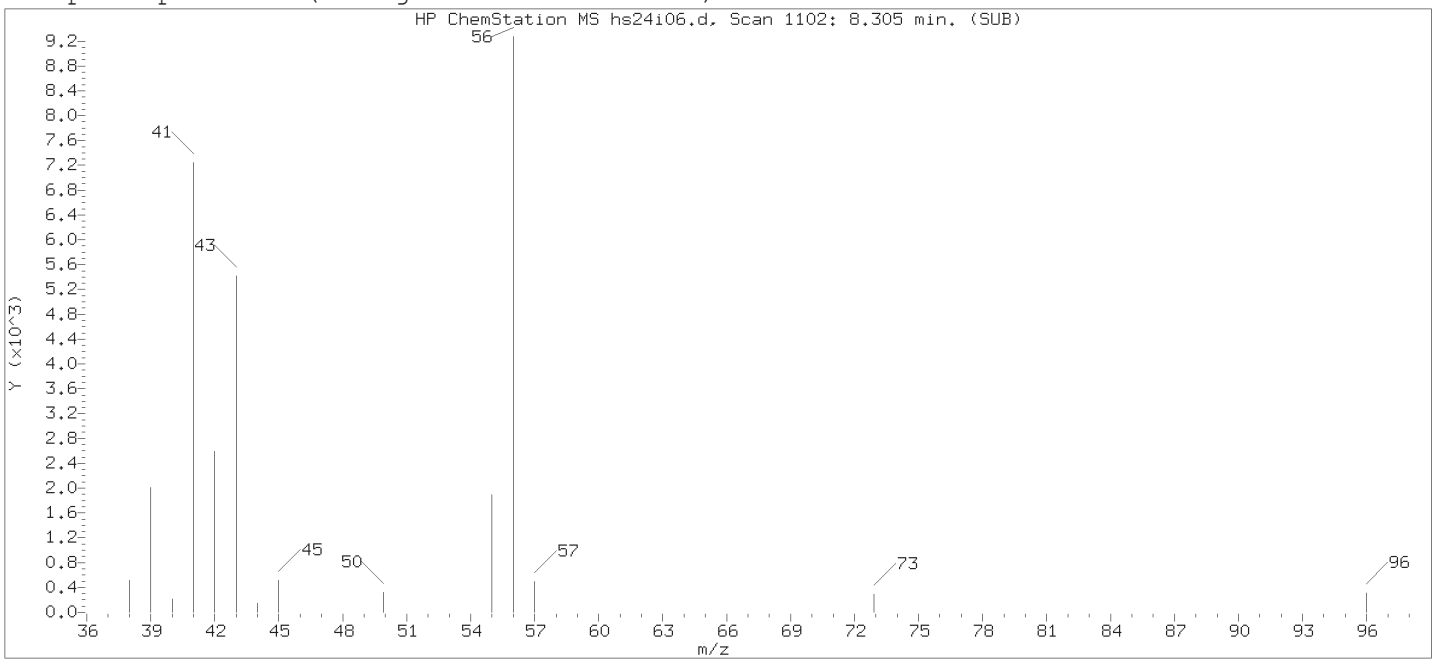
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1102
Retention Time (minutes): 8.305
Quant Ion : 56.00
Area (flag) : 35795M
On-Column Amount (ng) : 45.7637
Integration start scan : 1093 Integration stop scan: 1157
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

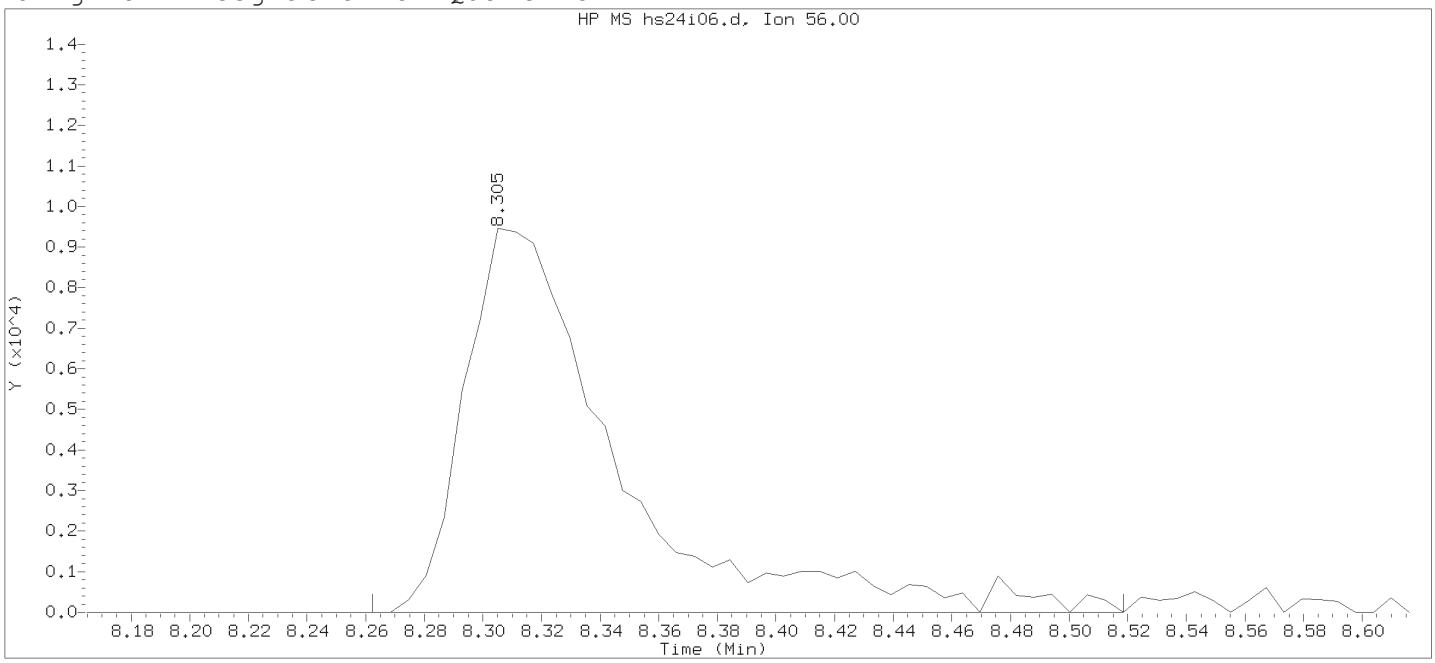
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

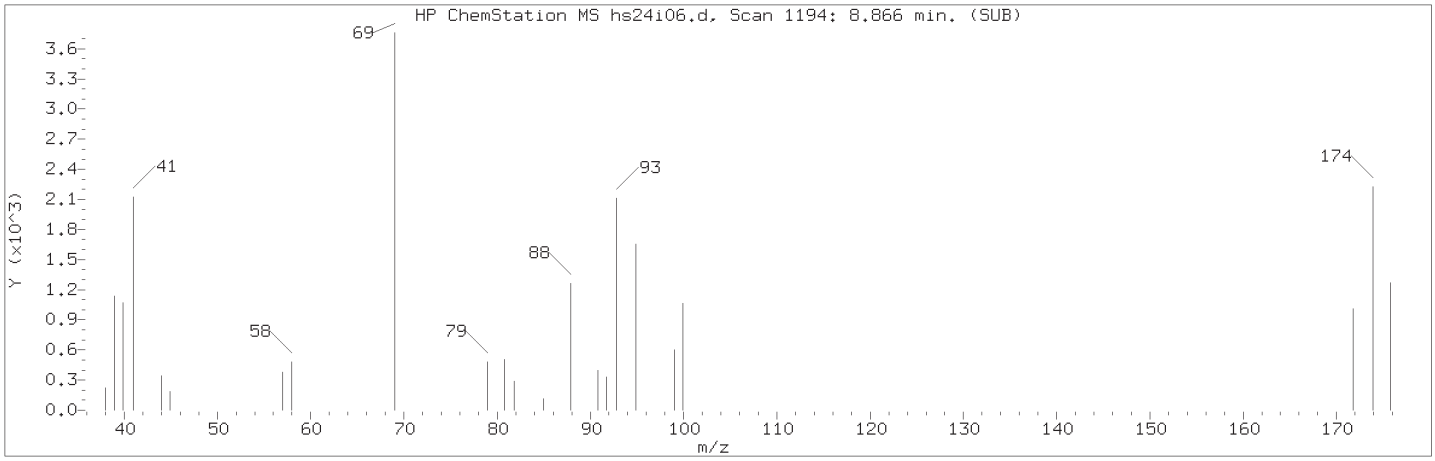
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

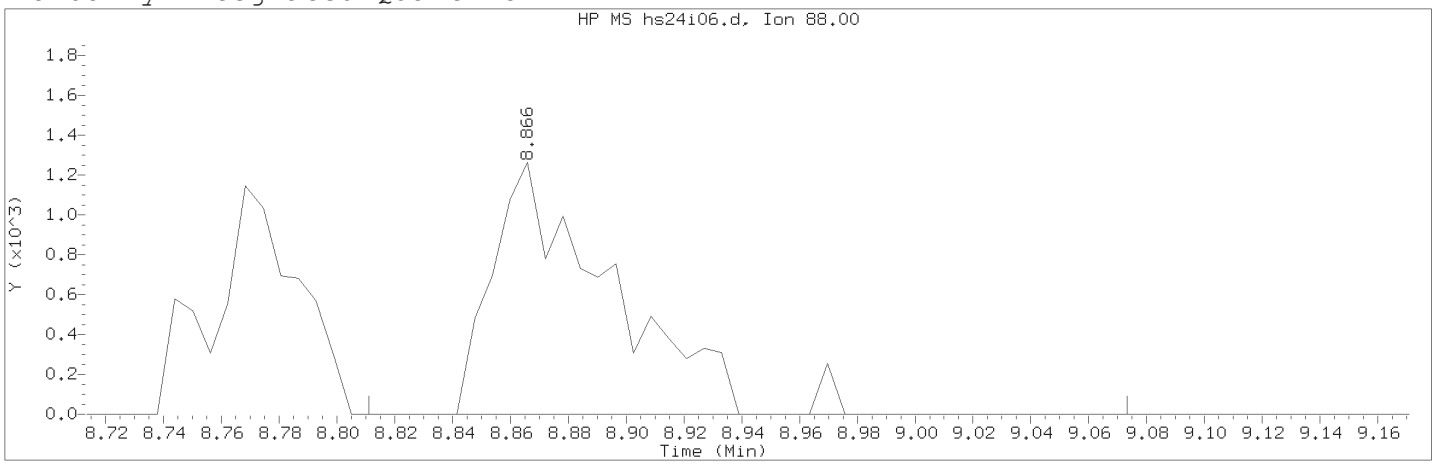
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1102
Retention Time (minutes): 8.305
Quant Ion : 56.00
Area : 34344
On-column Amount (ng) : 44.3600
Integration start scan : 1094 Integration stop scan: 1136
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

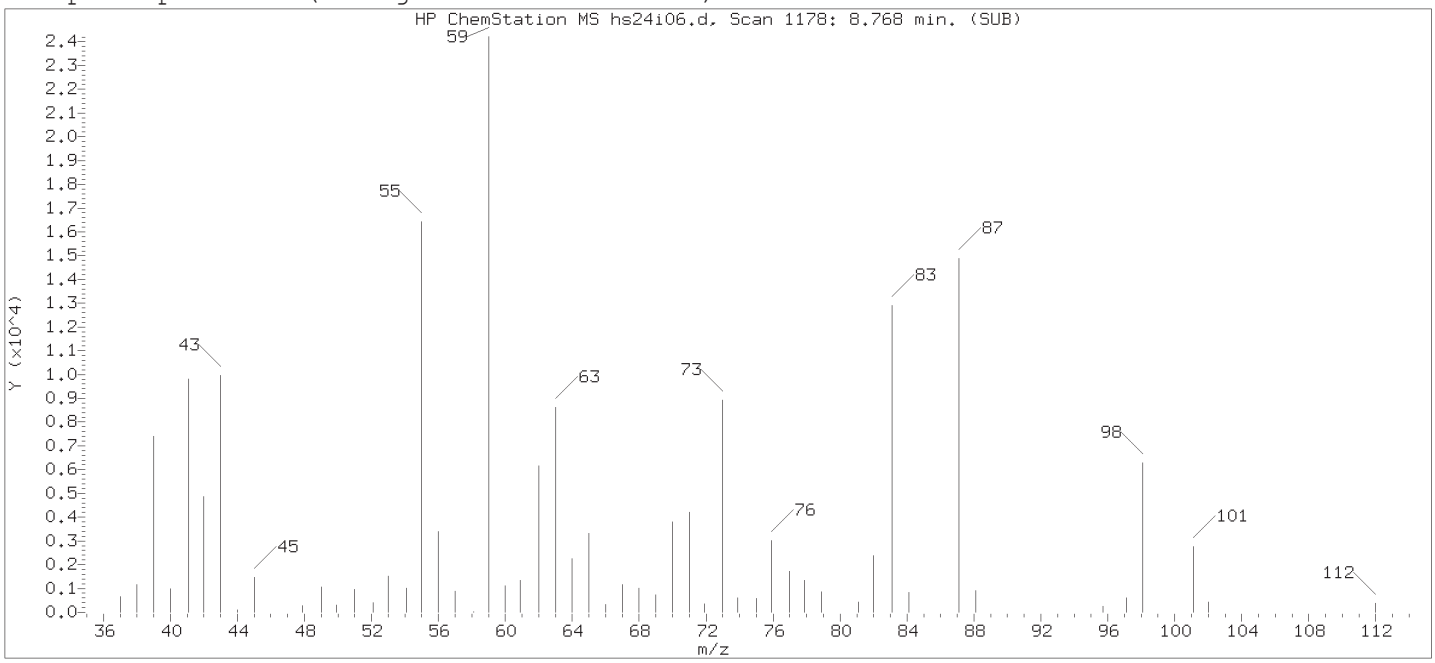
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1194
Retention Time (minutes): 8.866
Quant Ion : 88.00
Area (flag) : 3592M
On-Column Amount (ng) : 19.0735
Integration start scan : 1184 Integration stop scan: 1227
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

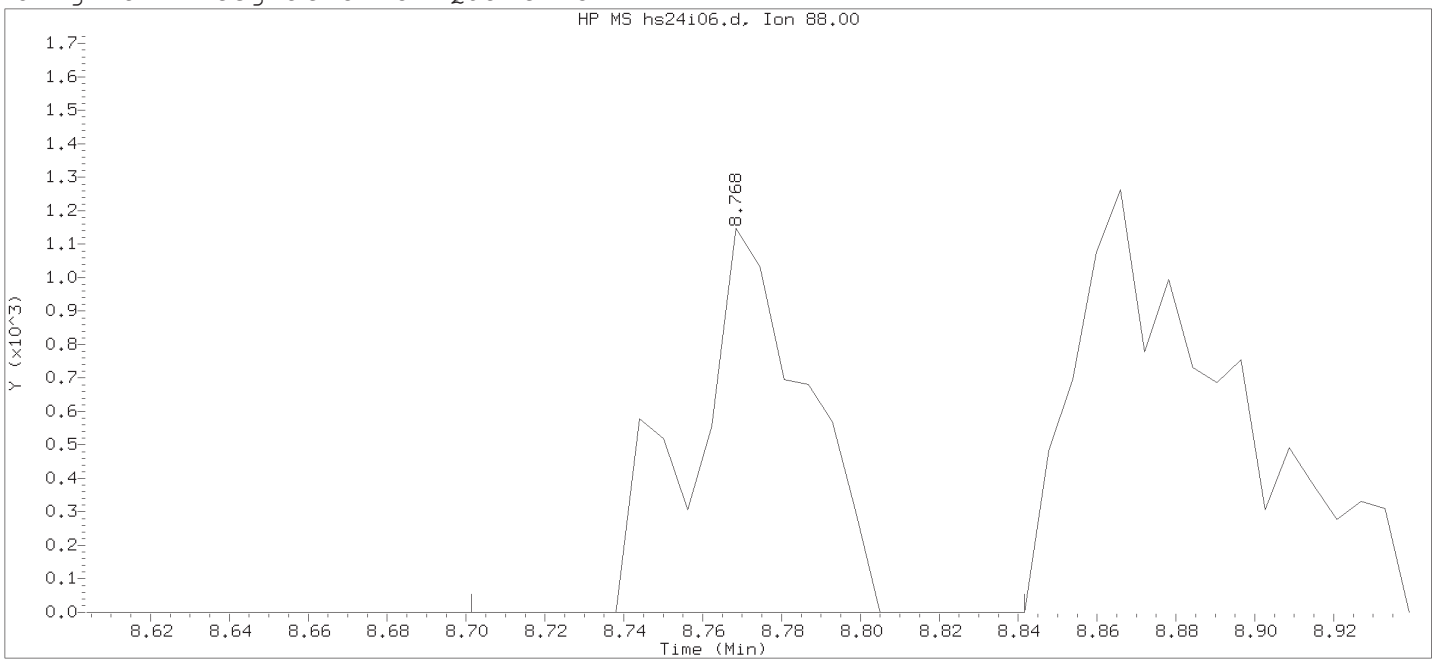
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

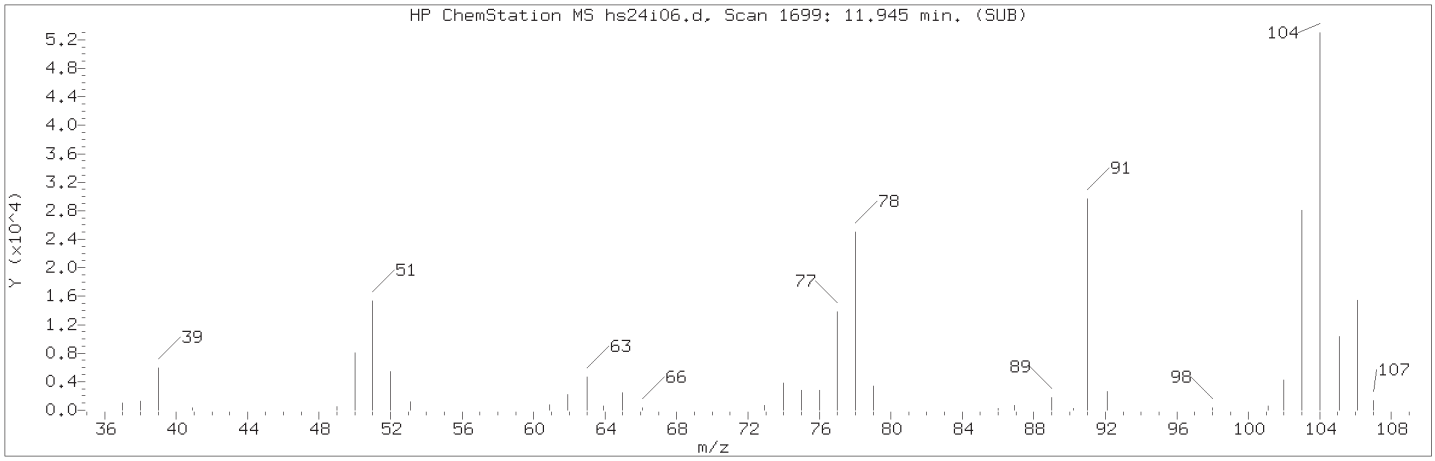
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

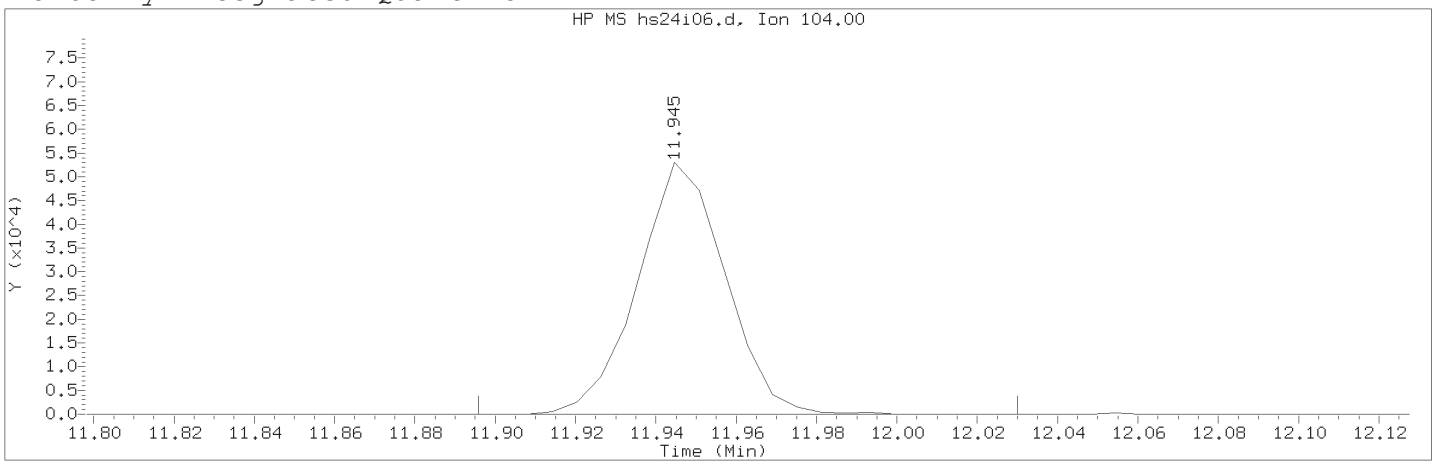
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1178		
Retention Time (minutes)	: 8.768		
Quant Ion	: 88.00		
Area	: 2332		
On-column Amount (ng)	: 19.8680		
Integration start scan	: 1166	Integration stop scan:	1189
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

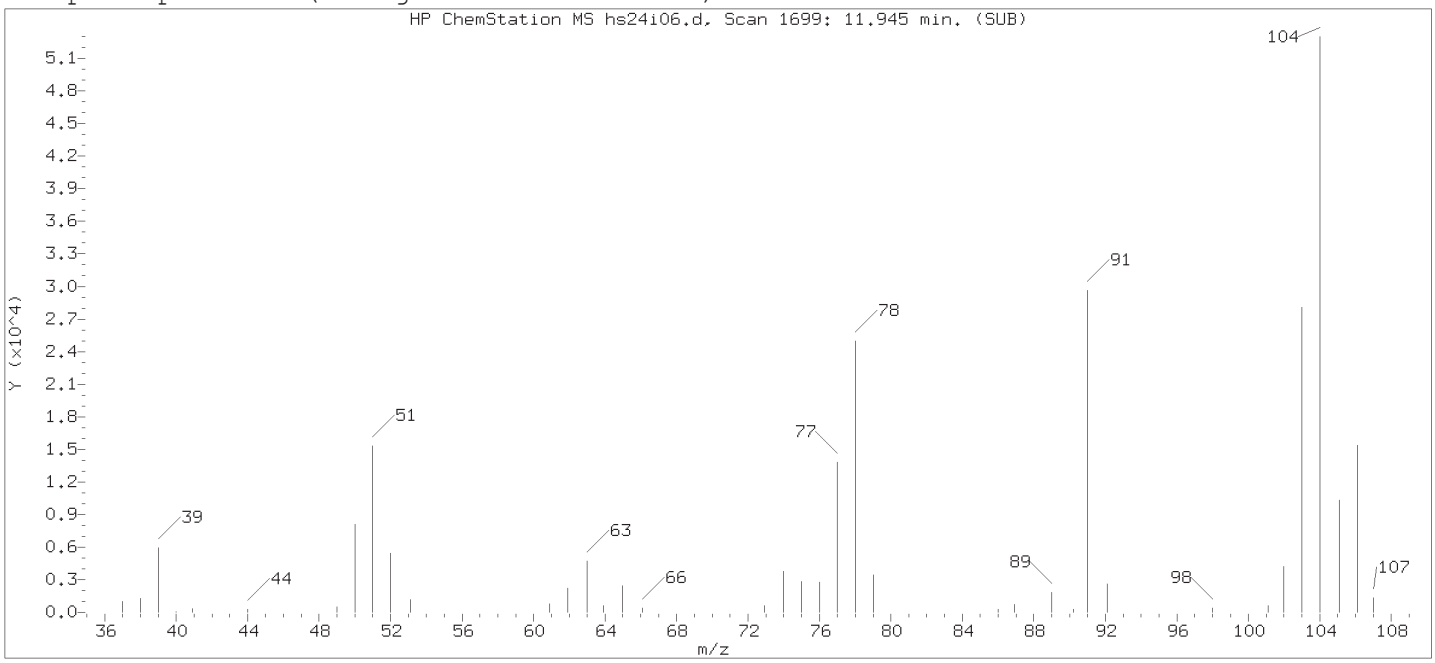
Compound Number : 106
Compound Name : Styrene
Scan Number : 1699
Retention Time (minutes): 11.945
Quant Ion : 104.00
Area (flag) : 80057M
On-Column Amount (ng) : 0.4536
Integration start scan : 1690 Integration stop scan: 1712
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

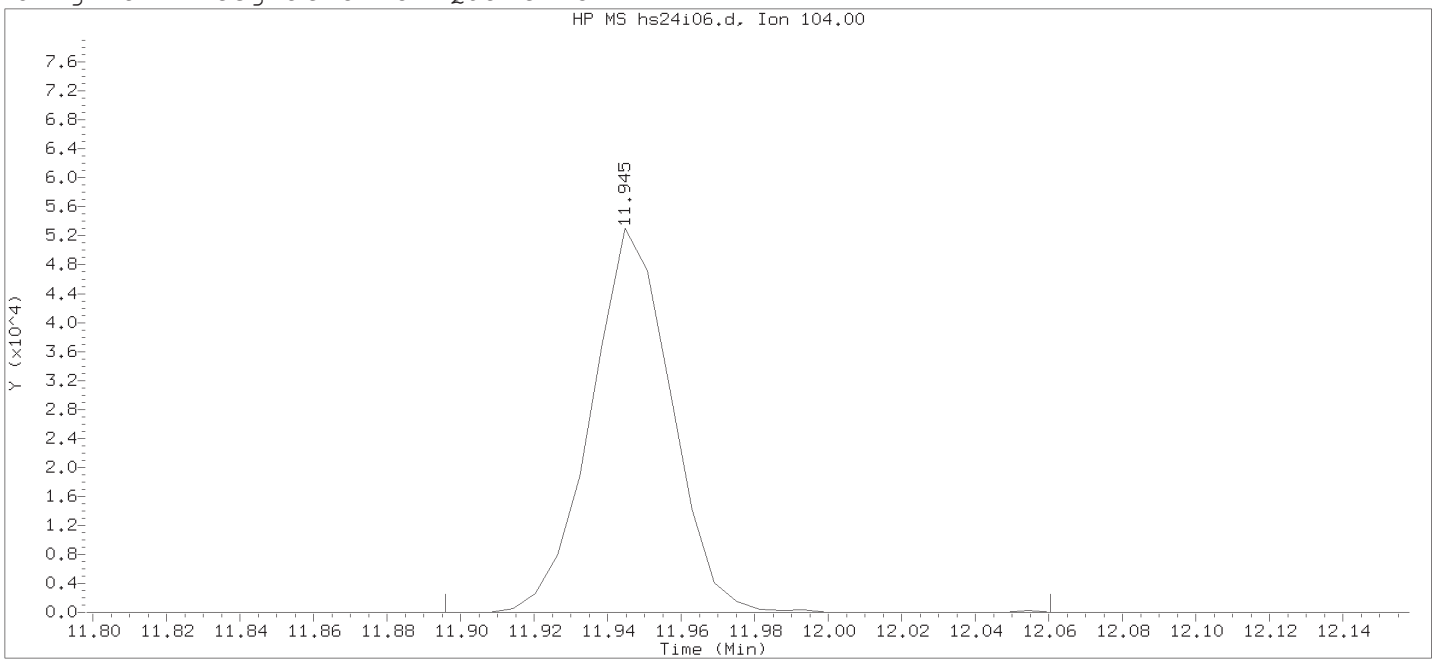
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

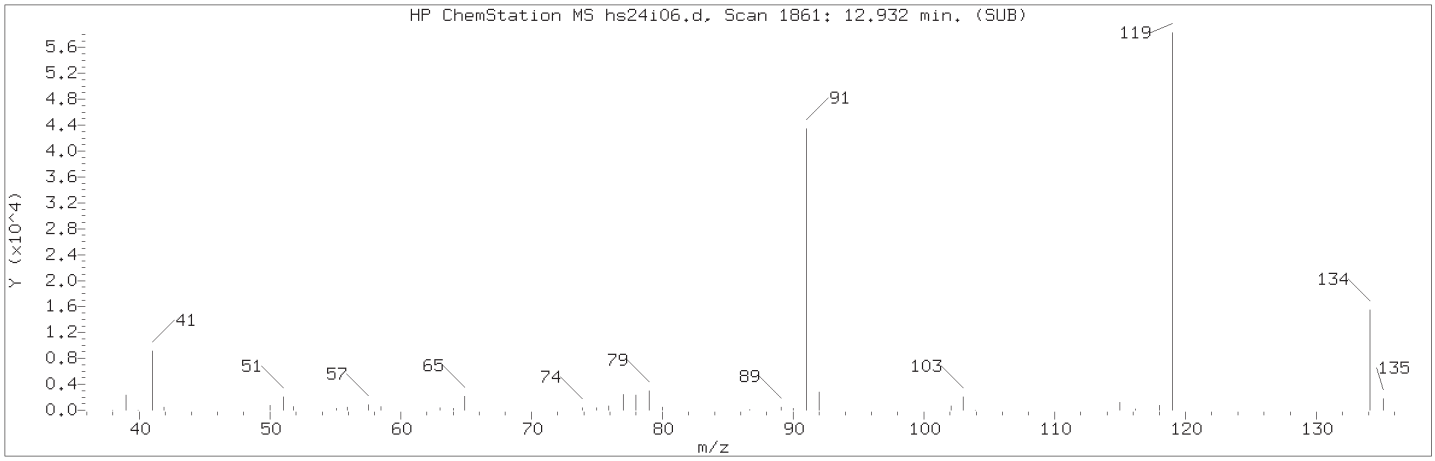
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

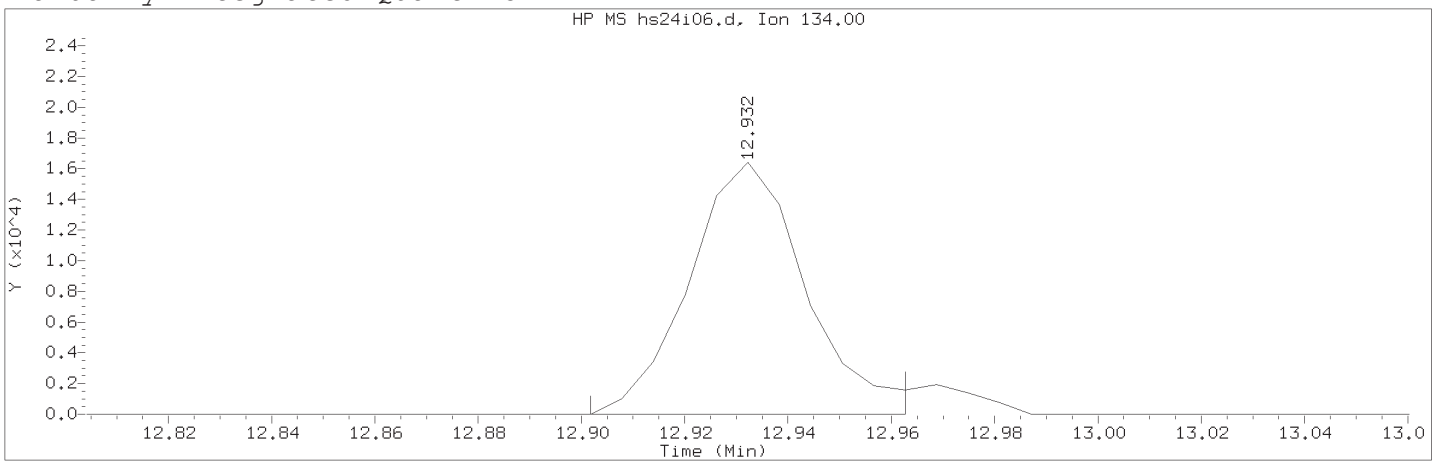
Compound Number : 106
Compound Name : Styrene
Scan Number : 1699
Retention Time (minutes): 11.945
Quant Ion : 104.00
Area : 80151
On-column Amount (ng) : 0.4420
Integration start scan : 1690 Integration stop scan: 1717
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

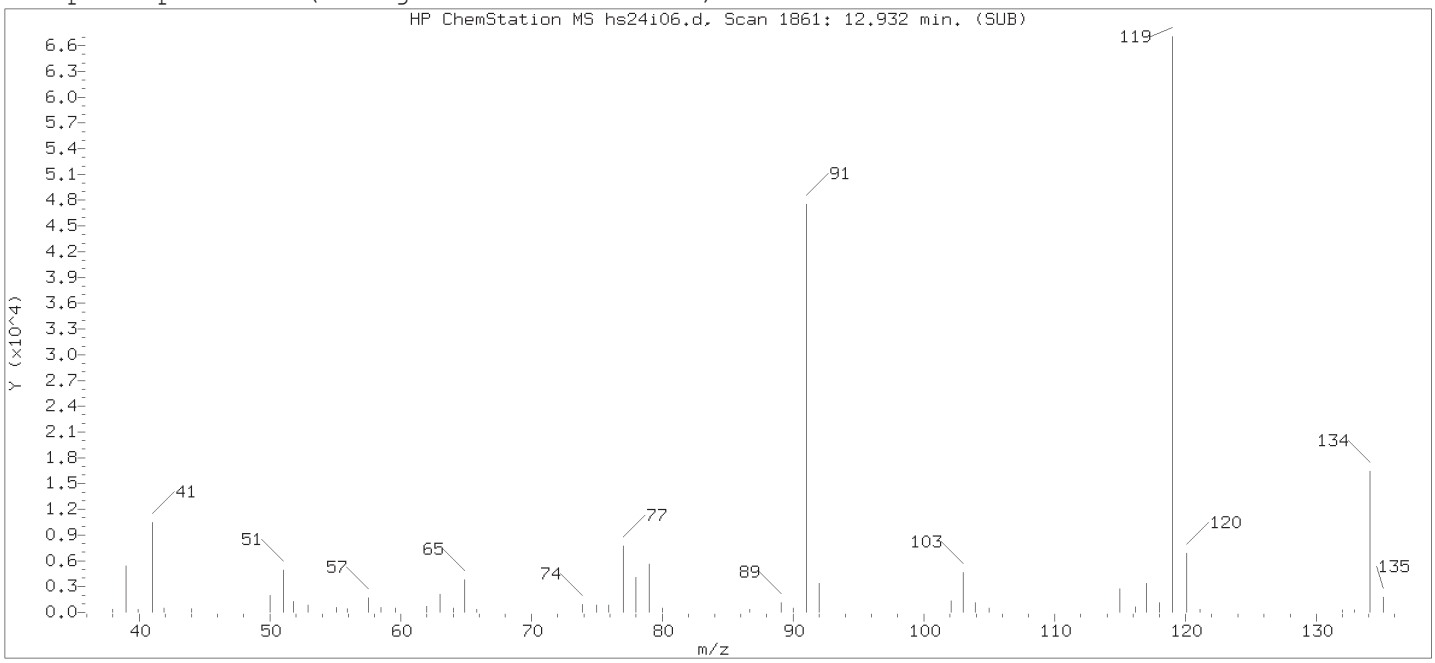
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area (flag) : 25726M
On-Column Amount (ng) : 0.4759
Integration start scan : 1855 Integration stop scan: 1865
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

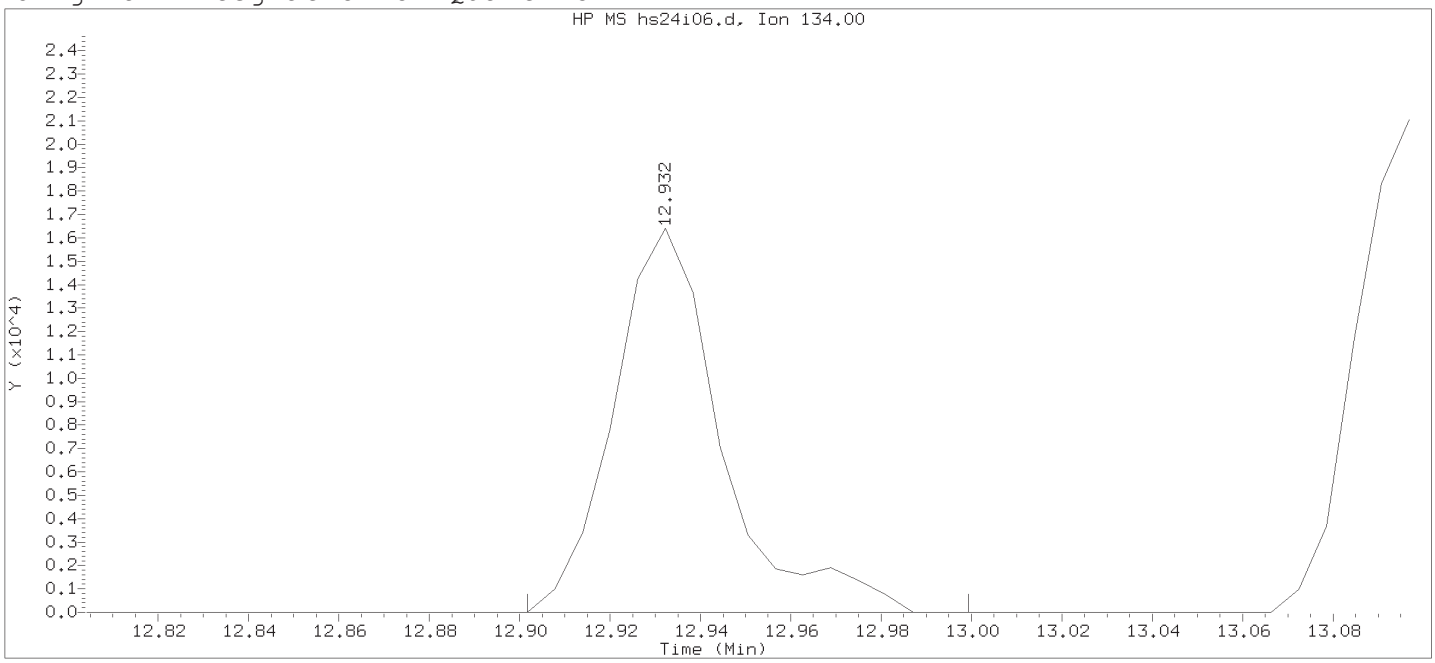
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



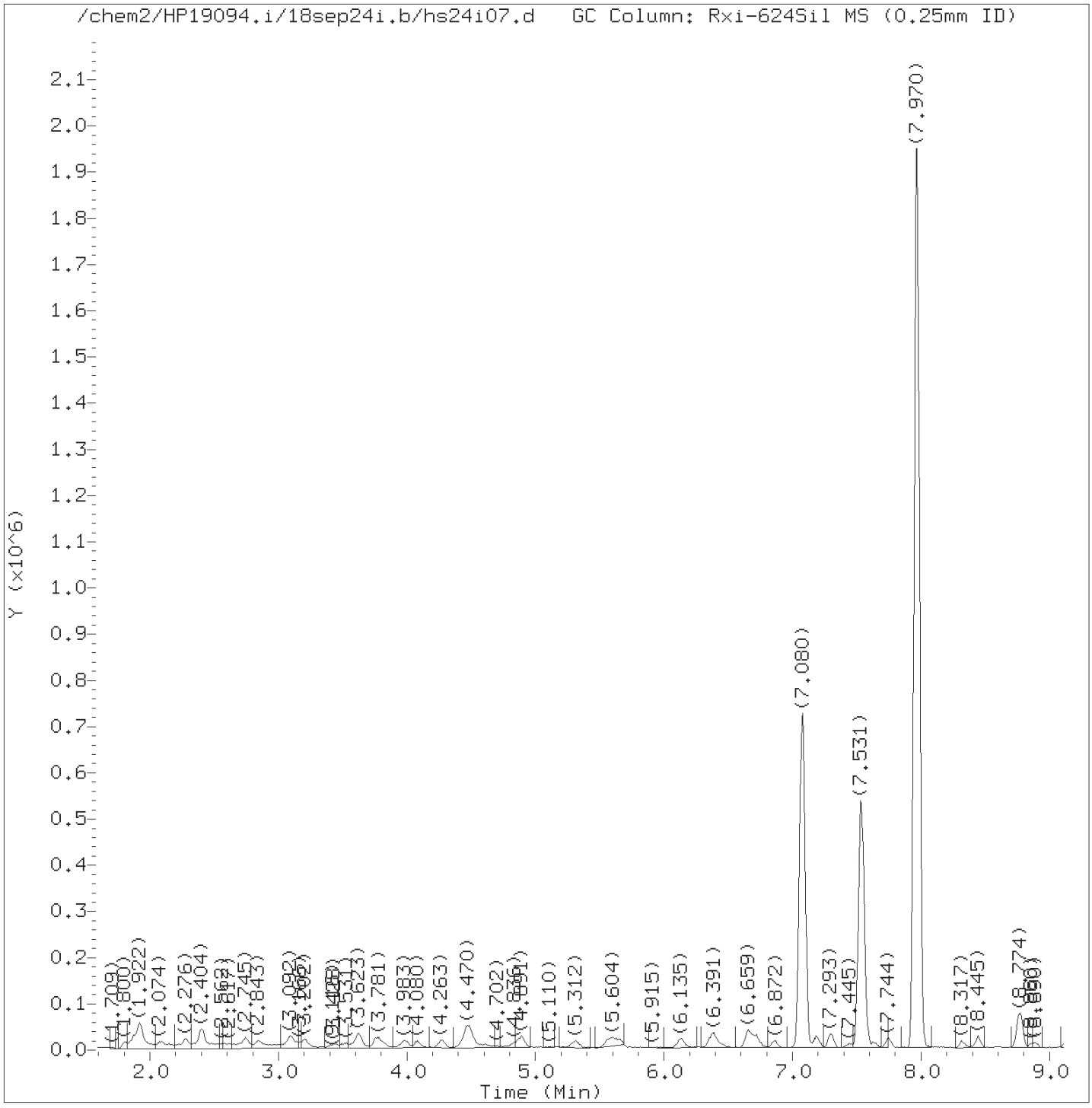
Data File: /chem2/HP19094.i/18sep24i.b/hs24i06.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:16 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area : 27202
On-column Amount (ng) : 0.4744
Integration start scan : 1855 Integration stop scan: 1871
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052



Total Ion Chromatogram (TIC)

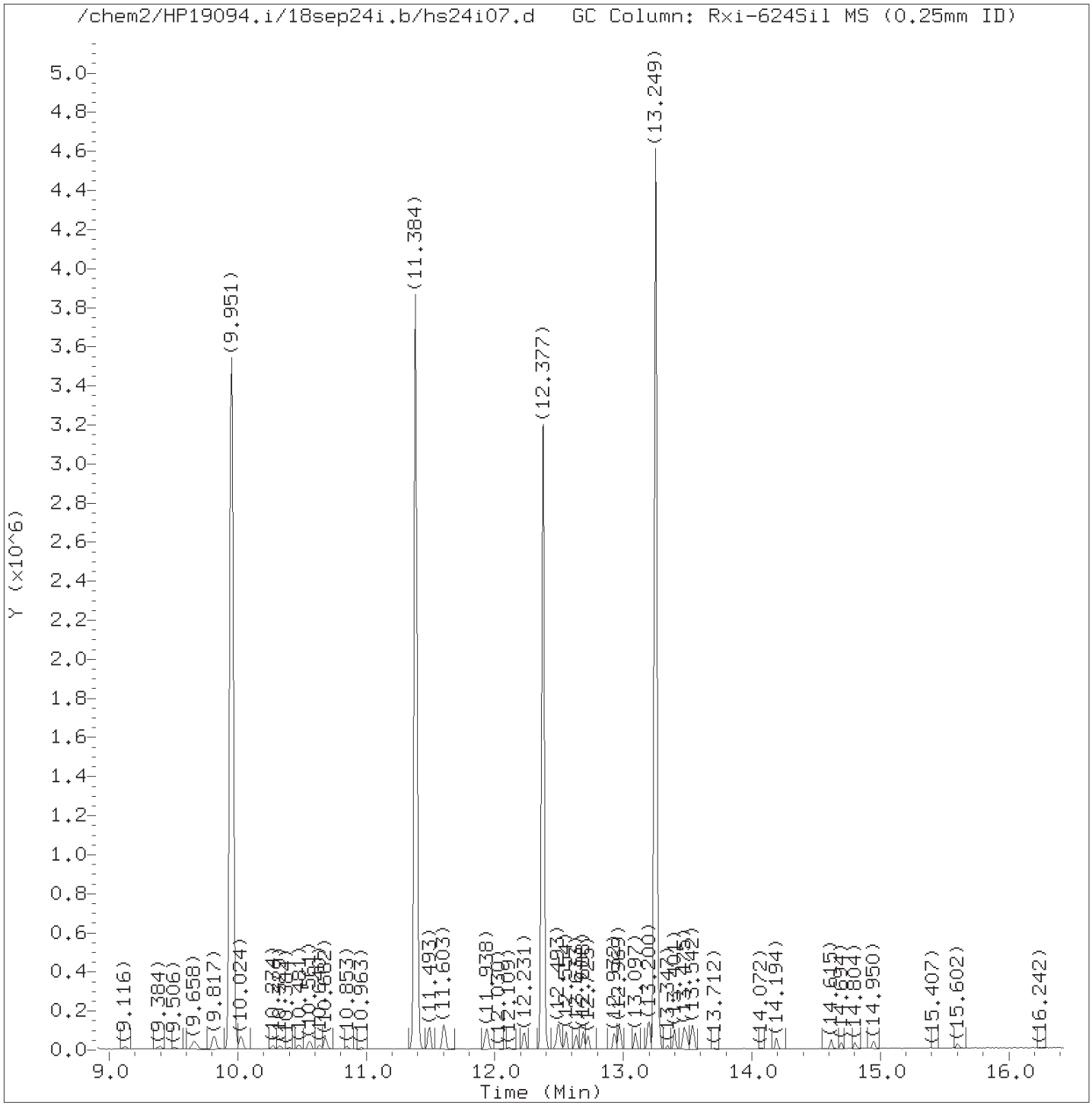
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.074	85	18684	0.173
2) Chloromethane	(2)	2.276	50	20265	0.192
6) 1,3-Butadiene	(2)	2.391	39	22506M	0.201
5) Vinyl Chloride	(2)	2.404	62	19000	0.192
7) Bromomethane	(2)	2.745	94	14696	0.191
8) Chloroethane	(2)	2.855	64	11899	0.198
9) Dichlorofluoromethane	(2)	3.092	67	26880	0.188
10) Trichlorofluoromethane	(2)	3.166	101	22332	0.178
11) Ethyl ether	(2)	3.434	59	8413	0.198
12) Freon 123a	(2)	3.513	67	13528	0.171
13) Acrolein	(1)	3.629	56	57860	9.554
15) 1,1-Dichloroethene	(2)	3.769	96	8847	0.163
16) Freon 113	(2)	3.787	101	9804	0.153
14) Acetone	(1)	3.806	43	17774M	2.185
17) Methyl Iodide	(2)	3.970	142	20605	0.182
18) Carbon Disulfide	(2)	4.080	76	32988	0.191
21) Methyl Acetate	(1)	4.251	43	3885	0.170
22) Allyl Chloride	(2)	4.269	41	19586	0.190
23) Methylene Chloride	(2)	4.464	84	14058	0.230
26)*t-Butyl Alcohol-d10	(1)	4.482	65	136477	50.000
28) t-Butyl Alcohol	(1)	4.604	59	8816	3.784
29) Acrylonitrile	(1)	4.836	53	9839	0.937
30) Methyl Tertiary Butyl Ether	(2)	4.885	73	19485	0.175
31) trans-1,2-Dichloroethene	(2)	4.891	96	11360	0.186
32) n-Hexane	(2)	5.305	57	14177	0.146
33) 1,1-Dichloroethane	(2)	5.549	63	20797	0.179
34) di-Isopropyl Ether	(2)	5.604	45	38755	0.187
35) 2-Chloro-1,3-Butadiene	(2)	5.659	53	17187	0.164
40) 1,2-Dichloroethene (Total)	(2)		96	23470	0.365
37) Ethyl t-butyl ether	(2)	6.122	59	29171	0.178
38) 2-Butanone	(1)	6.354	43	25880	1.944
41) 2,2-Dichloropropane	(2)	6.385	77	13983	0.168
39) cis-1,2-Dichloroethene	(2)	6.391	96	12110	0.179
42) Propionitrile	(1)	6.452	54	12829	3.550
45) Methacrylonitrile	(1)	6.659	67	23810	1.827
47) Bromochloromethane	(2)	6.702	128	5661	0.198
48) Tetrahydrofuran	(1)	6.726	71	6748	1.906
49) Chloroform	(2)	6.860	83	18885	0.174

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.073	113	694305	9.967
50)$Dibromofluoromethane	(2)	7.080	111	718039	10.014
51) 1,1,1-Trichloroethane	(2)	7.080	97	15708	0.170
52) Cyclohexane	(2)	7.183	56	19182	0.159
52) Cyclohexane	(2)	7.183	84	16106	0.162
52) Cyclohexane	(2)	7.201	69	5648	0.159
55) 1,1-Dichloropropene	(2)	7.299	75	15252	0.174
54) Carbon Tetrachloride	(2)	7.305	117	12817	0.161
56) Isobutyl Alcohol	(1)	7.439	41	7908	8.774
57)$1,2-Dichloroethane-d4	(2)	7.537	102	122128	10.056
57)$1,2-Dichloroethane-d4	(2)	7.531	65	592808	10.092
57)$1,2-Dichloroethane-d4	(2)	7.531	104	77943	10.021
58) Benzene	(2)	7.573	78	48910	0.189
59) 1,2-Dichloroethane	(2)	7.640	62	13176	0.221
60) t-Amyl methyl ether	(2)	7.750	73	24932	0.183
62) n-Heptane	(2)	7.963	43	14806	0.148
63)*Fluorobenzene	(2)	7.970	96	2763999	10.000
65) n-Butanol	(1)	8.317	56	13835M	18.168
67) Trichloroethene	(2)	8.451	95	11889	0.179
69) Methylcyclohexane	(2)	8.750	83	22461	0.179
70) 1,2-Dichloropropane	(2)	8.787	63	12025	0.191
71) Methyl Methacrylate	(1)	8.847	69	4087	0.169
72) 1,4-Dioxane	(1)	8.872	88	1041M	5.678
73) Dibromomethane	(2)	8.884	93	4747	0.182
74) Bromodichloromethane	(2)	9.128	83	13129	0.186
76) 2-Nitropropane	(1)	9.396	41	11979	1.753
80) cis-1,3-Dichloropropene	(2)	9.652	75	14627	0.178
81) 4-Methyl-2-Pentanone	(1)	9.811	43	56901M	1.718
82)$Toluene-d8	(3)	9.951	98	2792286	10.141
82)$Toluene-d8	(3)	9.951	100	1785080	10.044
83) Toluene	(3)	10.024	92	29814	0.188
85) 1,3-Dichloropropene (total)	(3)		75	24597	0.341
84) trans-1,3-Dichloropropene	(3)	10.274	75	9970	0.163
86) Ethyl Methacrylate	(3)	10.329	69	8963	0.171
91) 2-Hexanone	(1)	10.335	43	39960	1.772
88) 1,1,2-Trichloroethane	(3)	10.487	97	7236M	0.198
89) Tetrachloroethene	(3)	10.561	166	12649	0.176
90) 1,3-Dichloropropane	(3)	10.640	76	12143	0.188

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) Dibromochloromethane	(3)	10.853	129	8337	0.190
95) 1,2-Dibromoethane	(3)	10.963	107	6295	0.184
96) 1-Chlorohexane	(3)	11.384	91	18987	0.201
97)*Chlorobenzene-d5	(3)	11.384	117	2139400	10.000
98) Chlorobenzene	(3)	11.408	112	31130	0.185
99) 1,1,1,2-Tetrachloroethane	(3)	11.487	131	9192	0.165
100) Ethylbenzene	(3)	11.493	91	54290	0.175
101) m+p-Xylene	(3)	11.603	106	40662	0.353
105) Xylene (Total)	(3)		106	59182	0.522
104) o-Xylene	(3)	11.932	106	18520	0.168
106) Styrene	(3)	11.944	104	29429	0.167
107) Bromoform	(3)	12.109	173	4117	0.171
108) Isopropylbenzene	(3)	12.231	105	51166	0.170
111)$4-Bromofluorobenzene	(3)	12.377	95	1020584	10.180
111)$4-Bromofluorobenzene	(3)	12.377	174	882233	10.135
113) 1,1,2,2-Tetrachloroethane	(4)	12.475	83	8843	0.197
114) Bromobenzene	(4)	12.493	156	11951	0.175
115) trans-1,4-Dichloro-2-butene	(1)	12.493	53	17855M	1.721
116) 1,2,3-Trichloropropane	(4)	12.524	110	2226	0.192
117) n-Propylbenzene	(4)	12.554	91	63816	0.172
119) 2-Chlorotoluene	(4)	12.633	126	12496	0.174
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	41880	0.167
122) 4-Chlorotoluene	(4)	12.725	126	12375	0.172
125) tert-Butylbenzene	(4)	12.932	134	8830M	0.161
126) Pentachloroethane	(4)	12.963	167	7371	0.173
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	42070	0.164
128) sec-Butylbenzene	(4)	13.097	105	52250M	0.160
131) 1,3-Dichlorobenzene	(4)	13.200	146	23099	0.170
132) p-Isopropyltoluene	(4)	13.200	119	42501	0.157
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1132249	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	24681	0.185
135) 1,2,3-Trimethylbenzene	(4)	13.280	120	23113	0.196
136) Benzyl Chloride	(4)	13.341	126	2121	0.131
138) n-Butylbenzene	(4)	13.493	92	21345	0.159
139) 1,2-Dichlorobenzene	(4)	13.529	146	21920	0.183
143) 1,2-Dibromo-3-chloropropane	(1)	14.072	155	880	0.157
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	17490	0.173
145) 1,2,4-Trichlorobenzene	(4)	14.615	180	14330	0.174

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) Hexachlorobutadiene	(4)	14.694	225	5770	0.186
147) Naphthalene	(4)	14.804	128	21320	0.164
148) 1,2,3-Trichlorobenzene	(4)	14.950	180	11734	0.174

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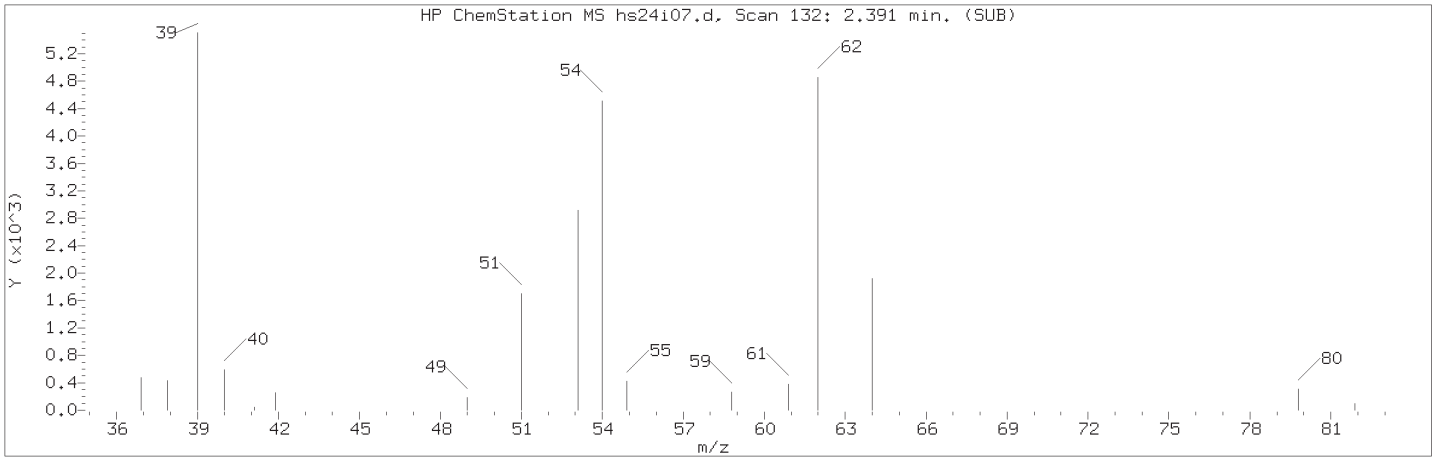
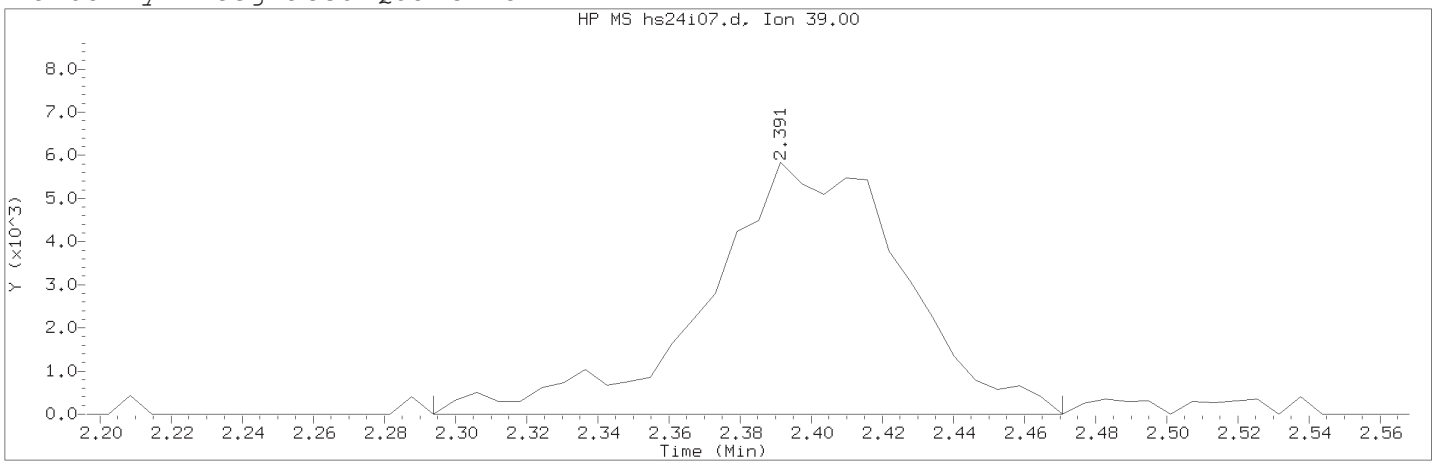
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

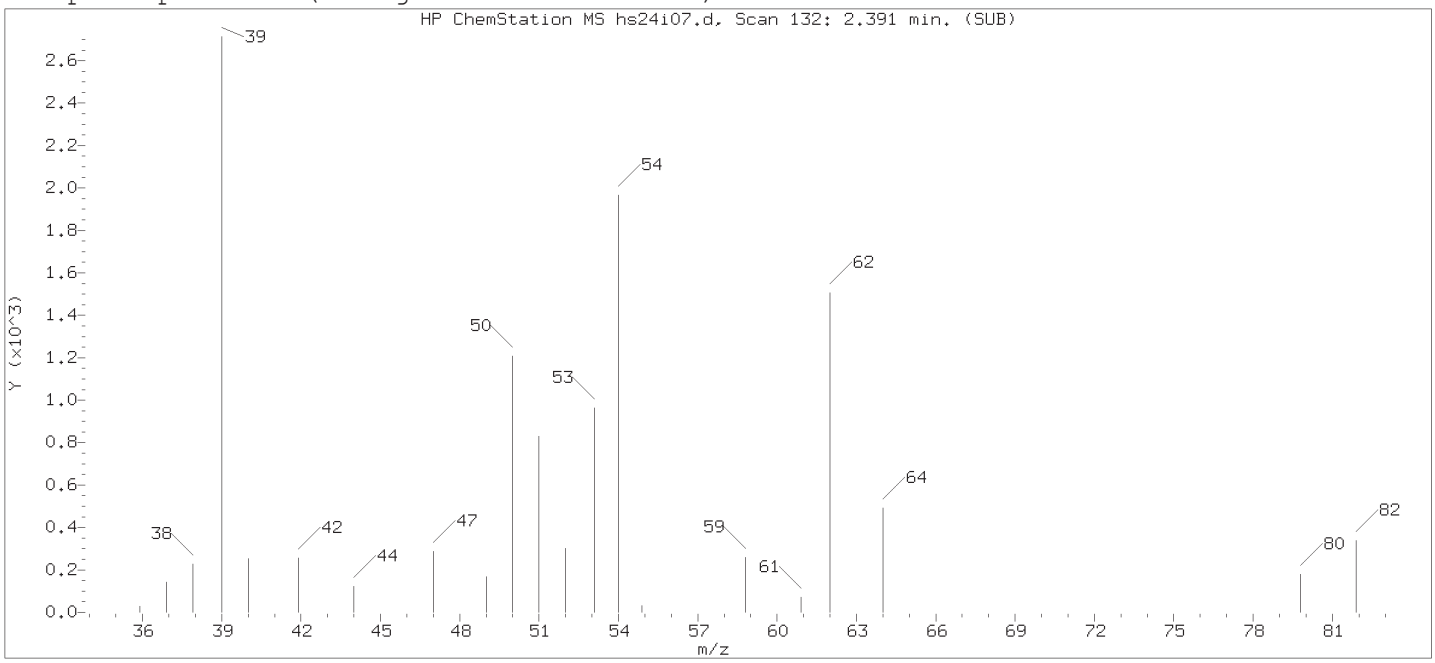
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 132
Retention Time (minutes): 2.391
Quant Ion : 39.00
Area (flag) : 22506M
On-Column Amount (ng) : 0.2006
Integration start scan : 115 Integration stop scan: 144
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

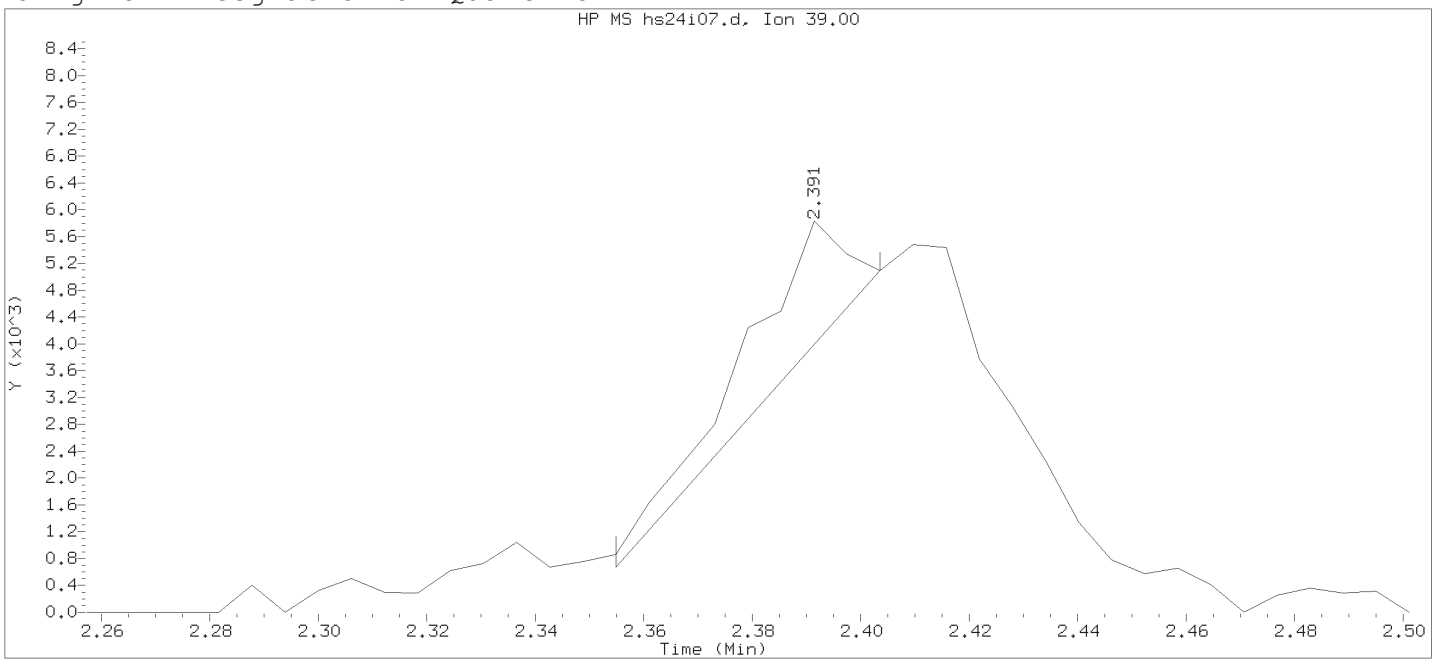
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

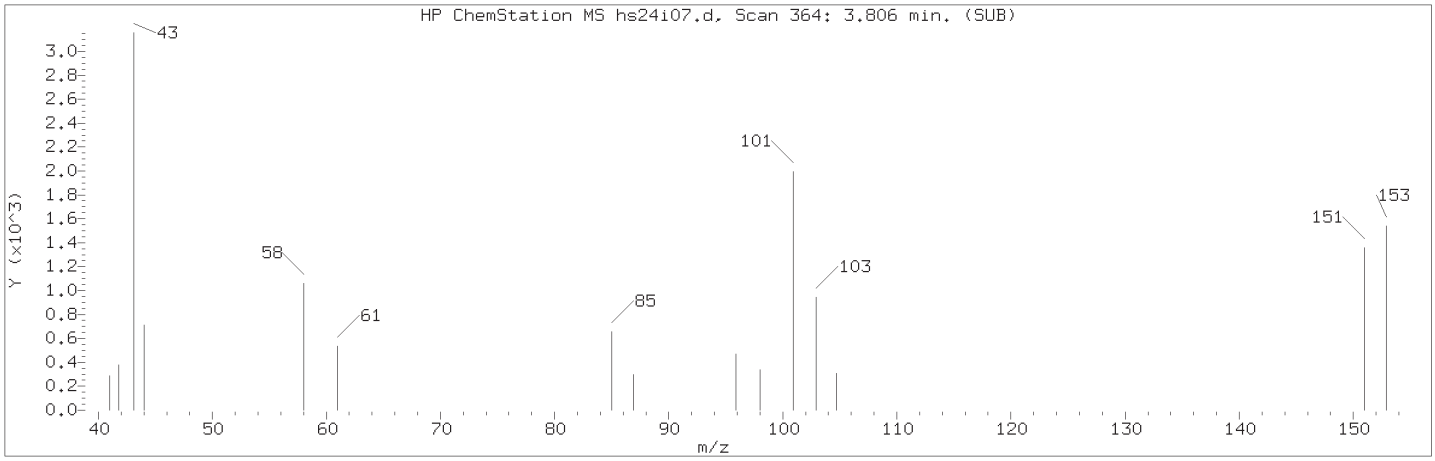
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

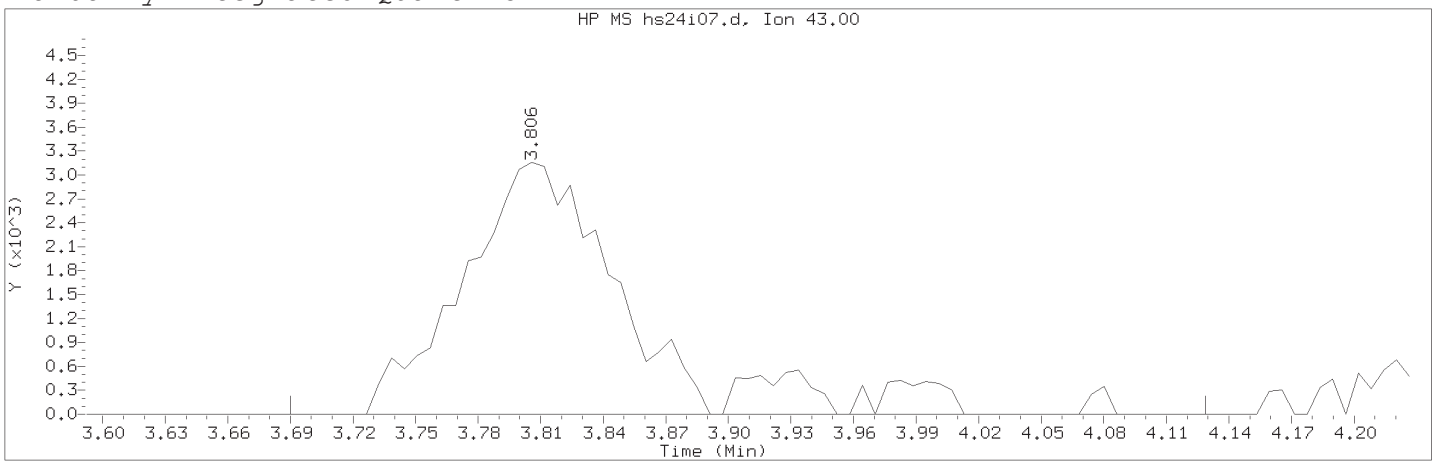
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 132
Retention Time (minutes): 2.391
Quant Ion : 39.00
Area : 2354
On-column Amount (ng) : 0.0257
Integration start scan : 125 Integration stop scan: 133
Y at integration start : 678 Y at integration end: 5096

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

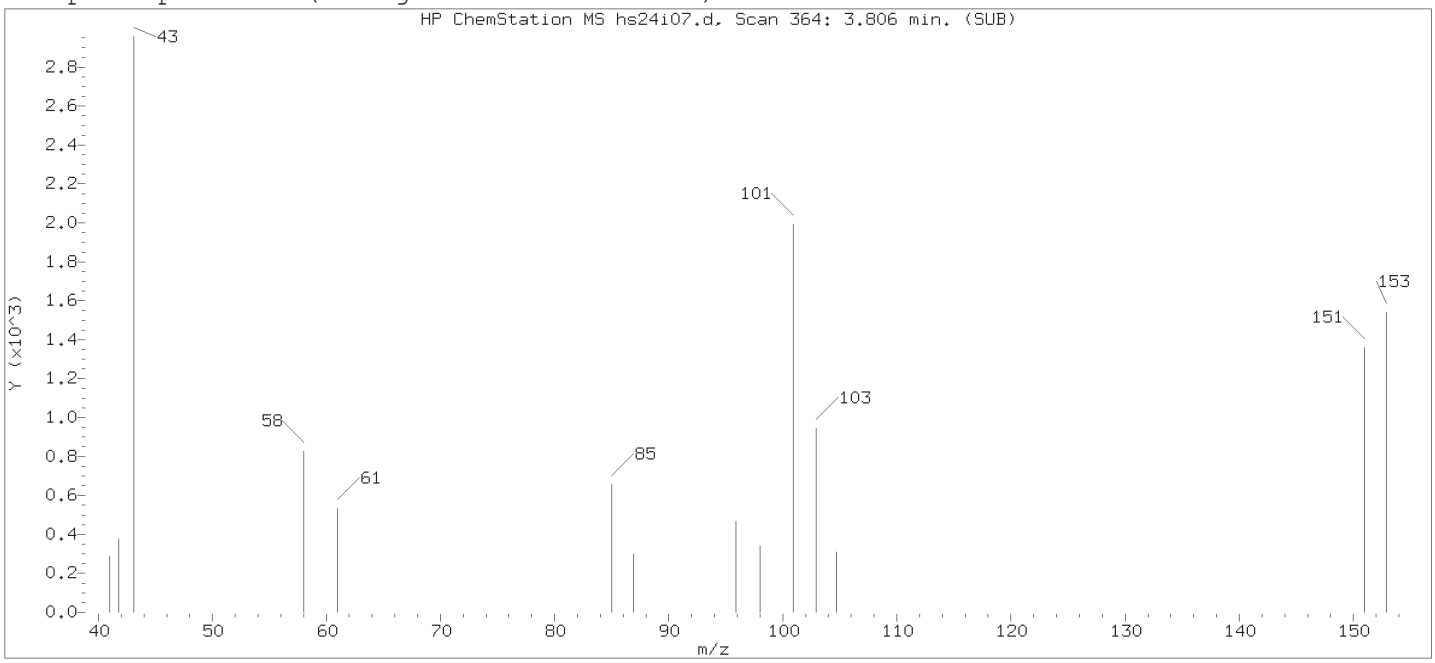
Compound Number : 14
Compound Name : Acetone
Scan Number : 364
Retention Time (minutes): 3.806
Quant Ion : 43.00
Area (flag) : 17774M
On-Column Amount (ng) : 2.1850
Integration start scan : 344 Integration stop scan: 416
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

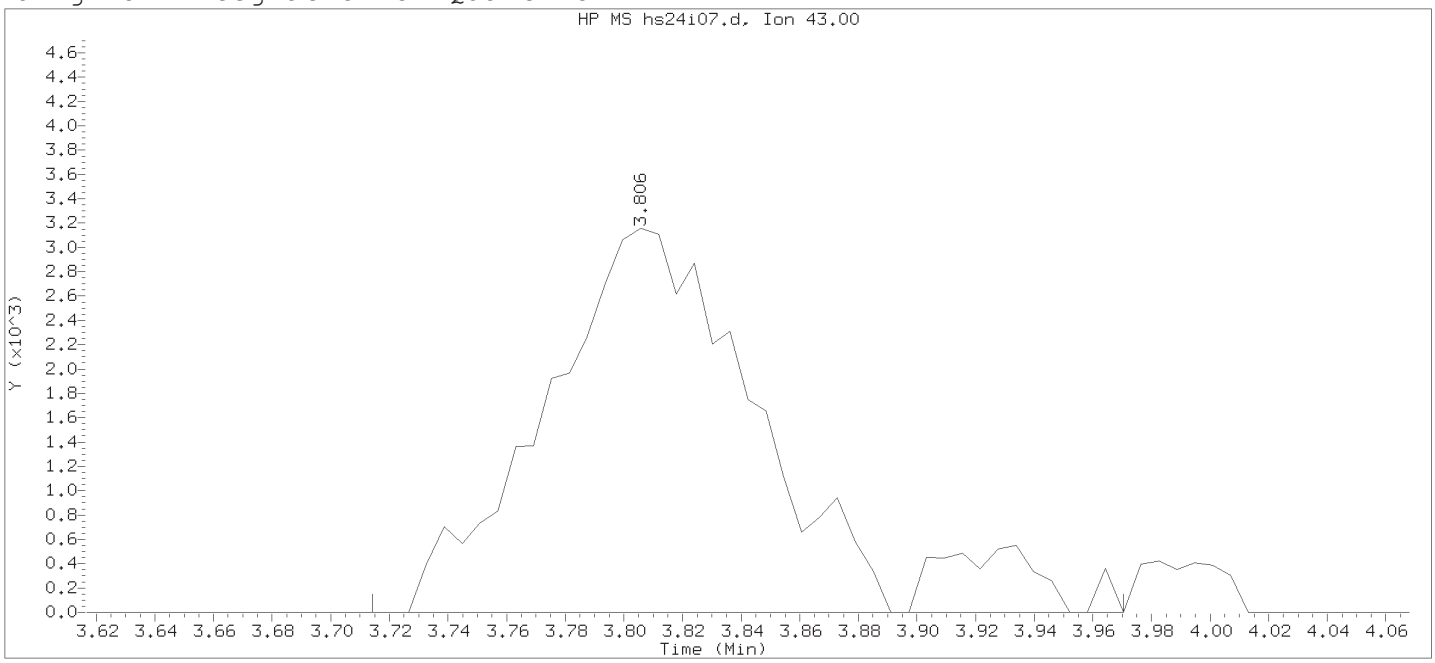
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 364		
Retention Time (minutes)	: 3.806		
Quant Ion	: 43.00		
Area	: 16725		
On-column Amount (ng)	: 2.1688		
Integration start scan	: 348	Integration stop scan:	390
Y at integration start	: 0	Y at integration end:	0

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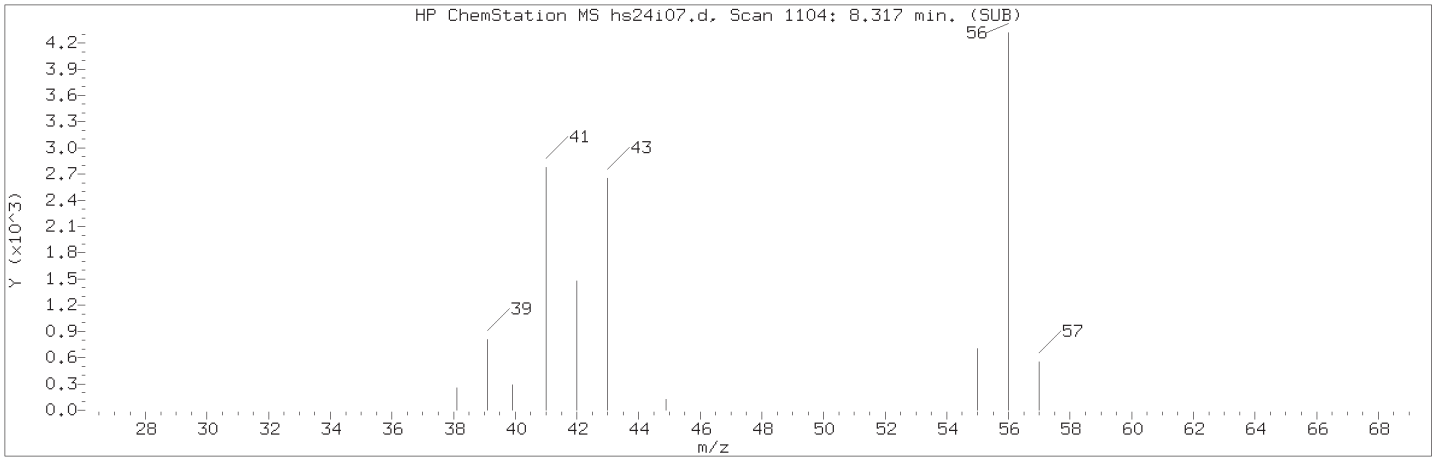
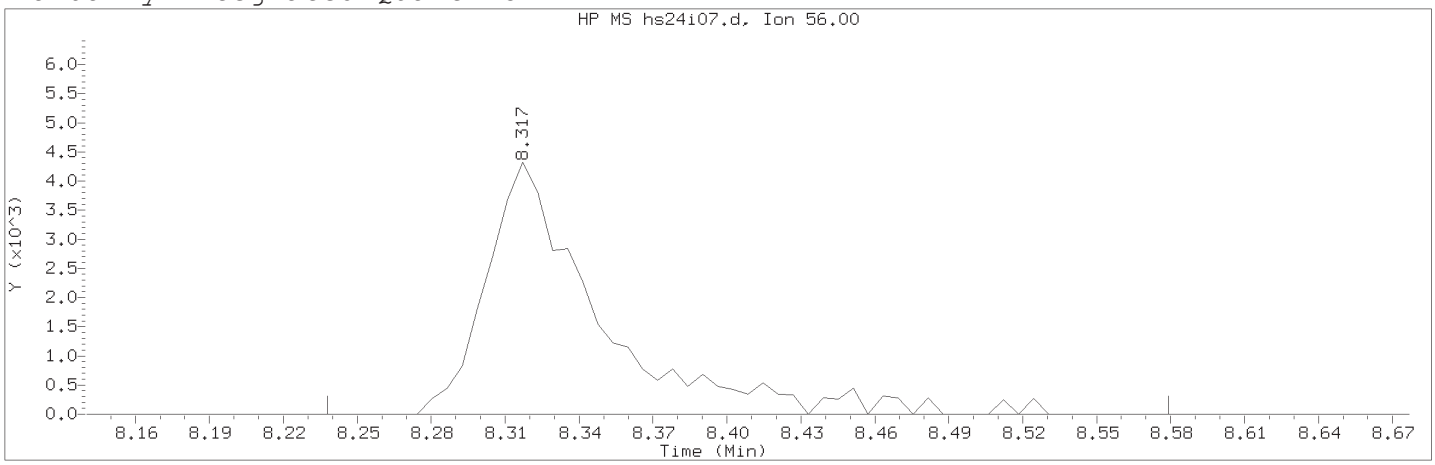
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

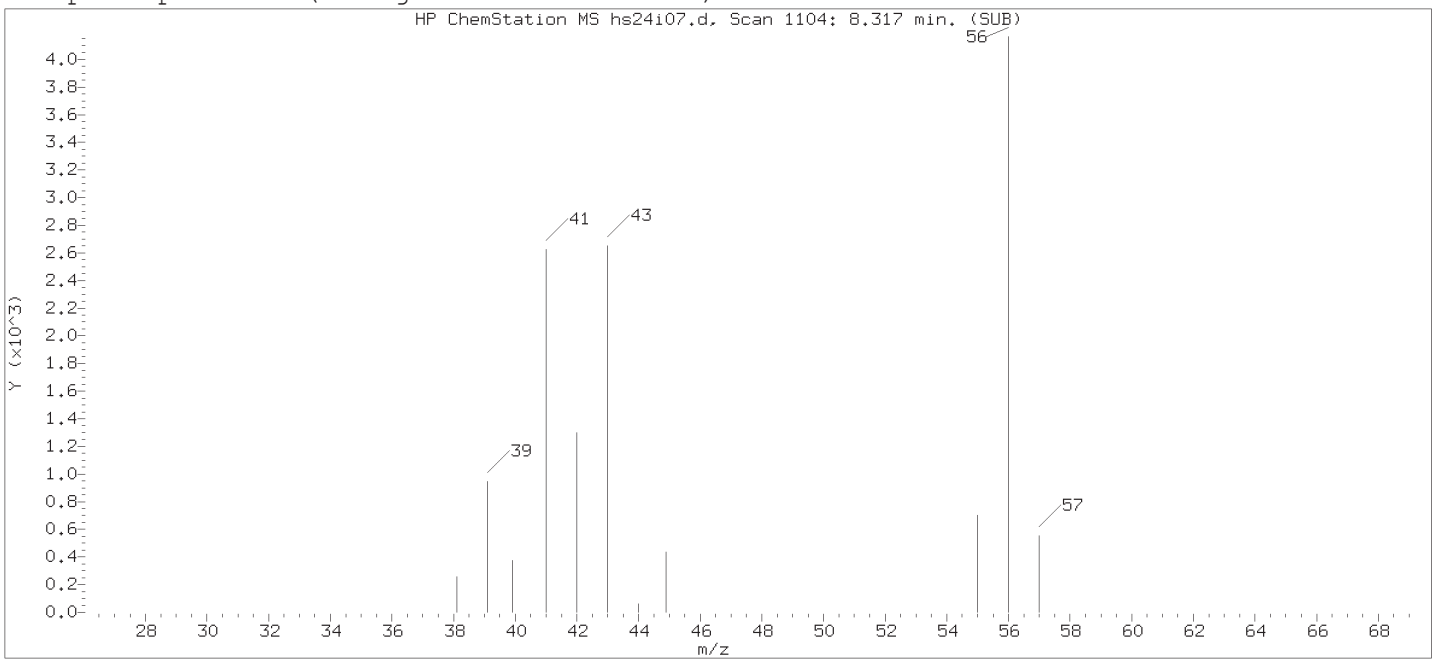
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1104
Retention Time (minutes): 8.317
Quant Ion : 56.00
Area (flag) : 13835M
On-Column Amount (ng) : 18.1683
Integration start scan : 1090 Integration stop scan: 1146
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

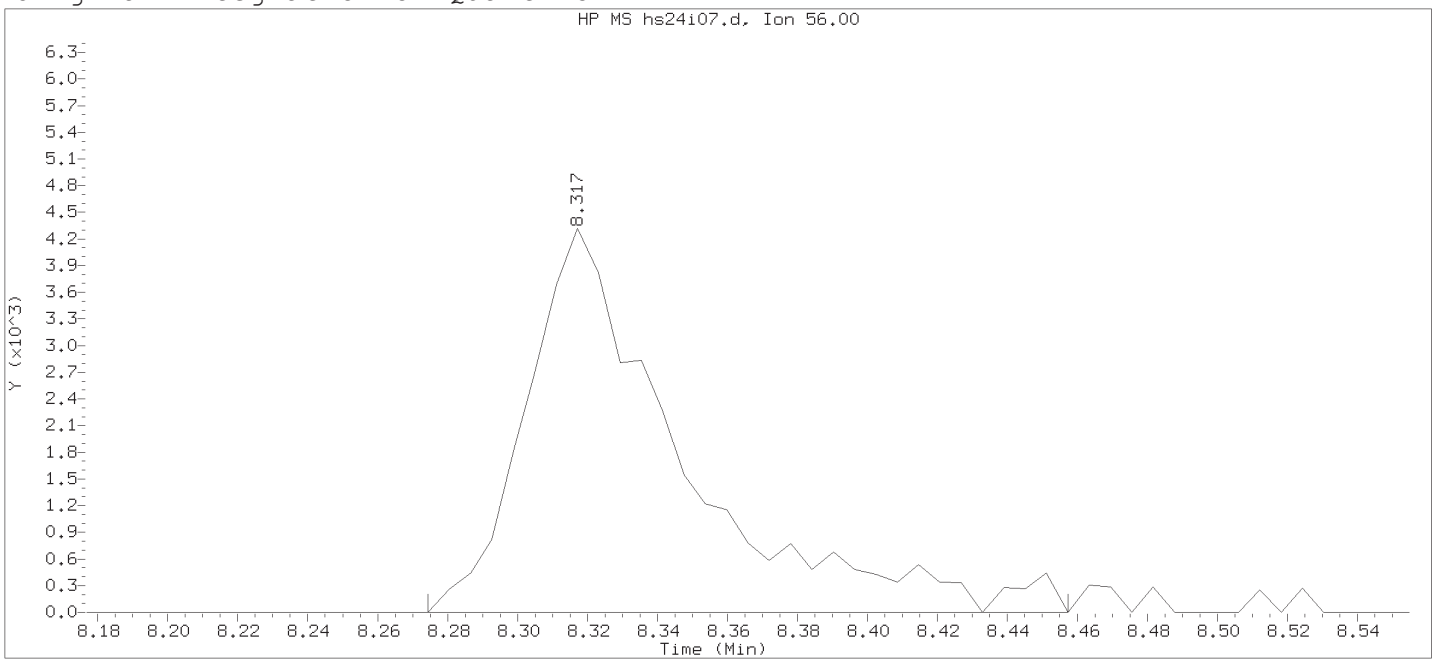
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compound Number	: 65		
Compound Name	: n-Butanol		
Scan Number	: 1104		
Retention Time (minutes)	: 8.317		
Quant Ion	: 56.00		
Area	: 13324		
On-column Amount (ng)	: 17.8982		
Integration start scan	: 1096	Integration stop scan:	1126
Y at integration start	: 0	Y at integration end:	0

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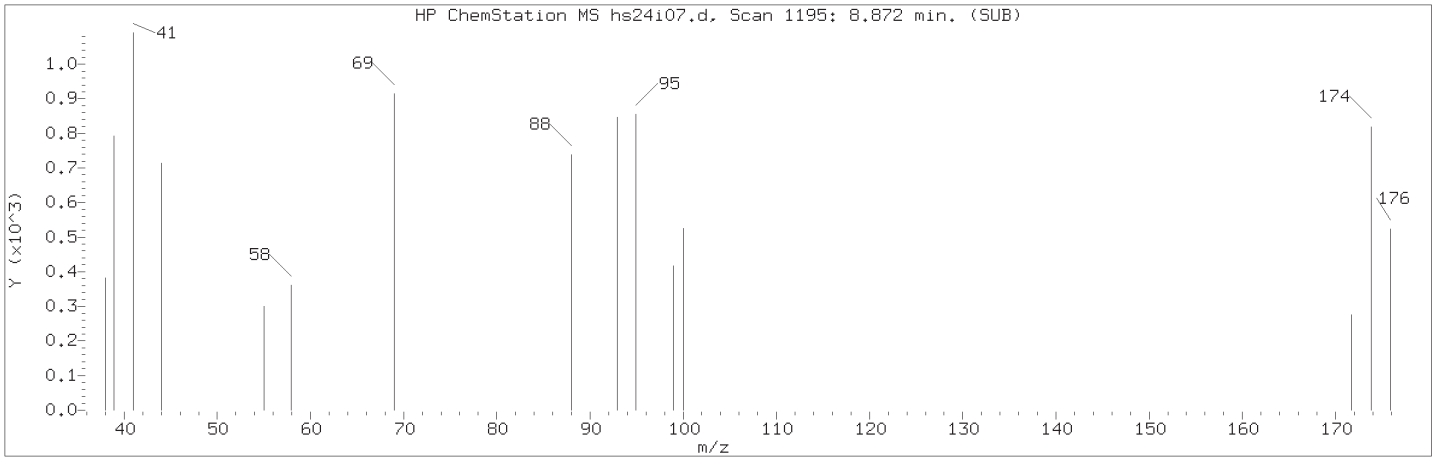
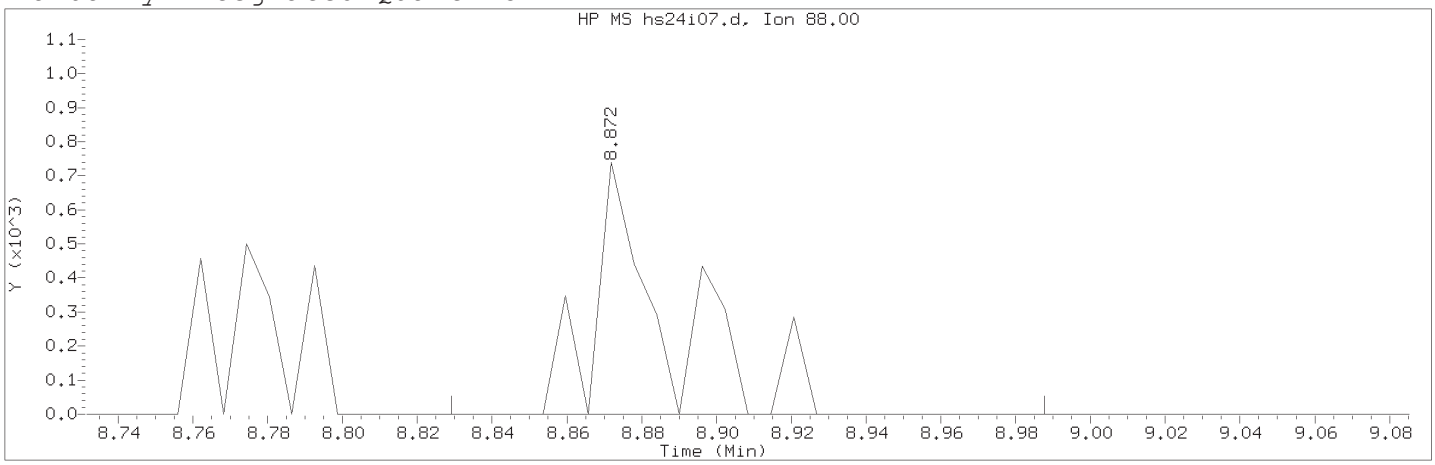
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

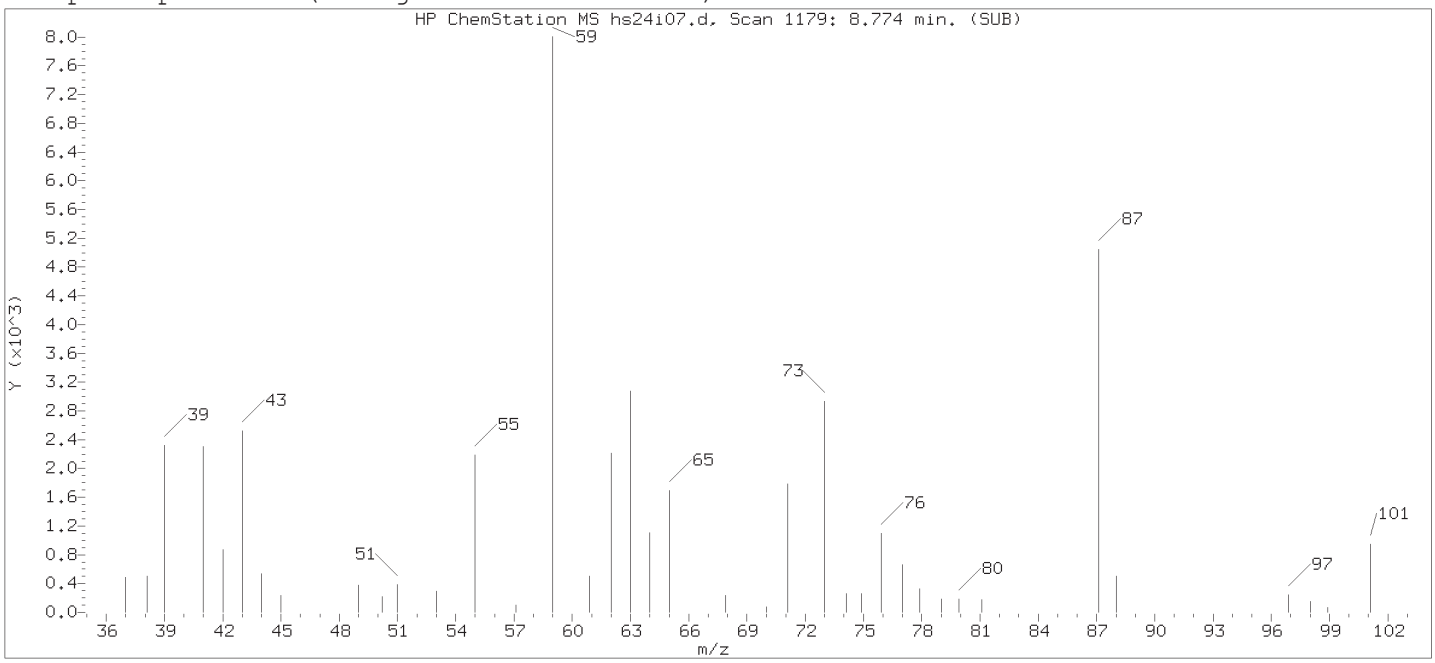
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1195
Retention Time (minutes): 8.872
Quant Ion : 88.00
Area (flag) : 1041M
On-Column Amount (ng) : 5.6778
Integration start scan : 1187 Integration stop scan: 1213
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

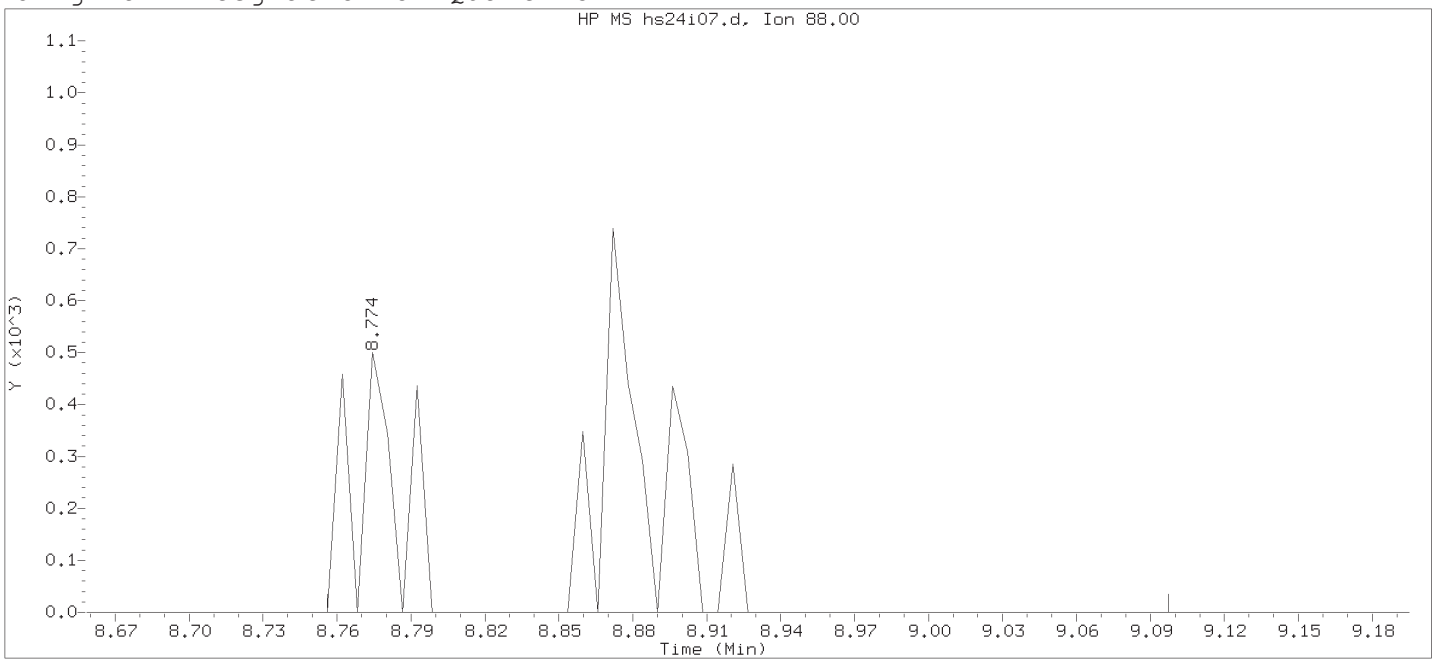
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

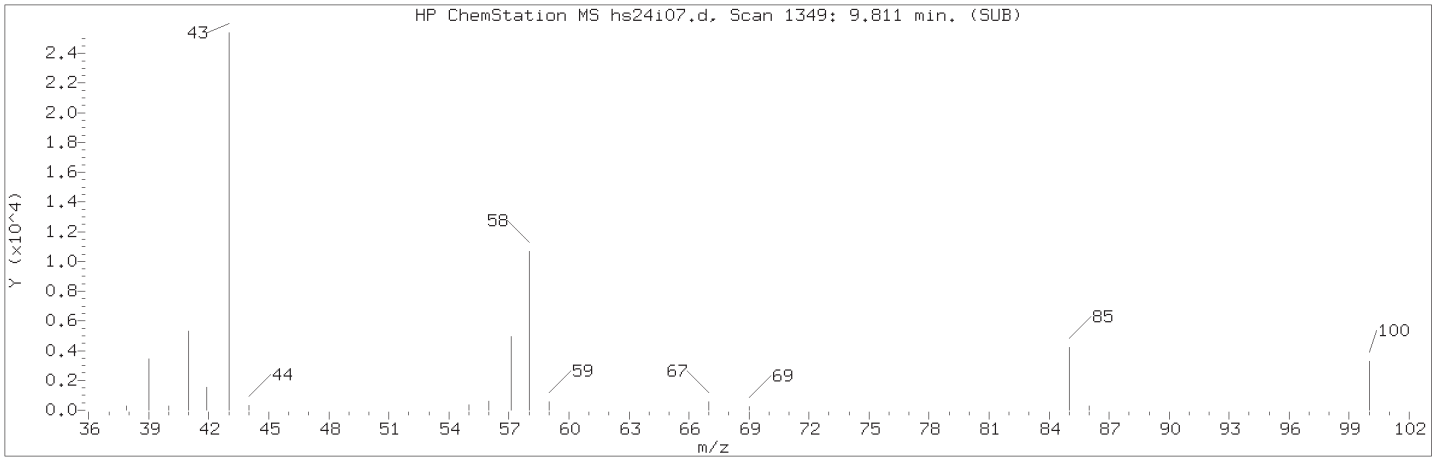
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

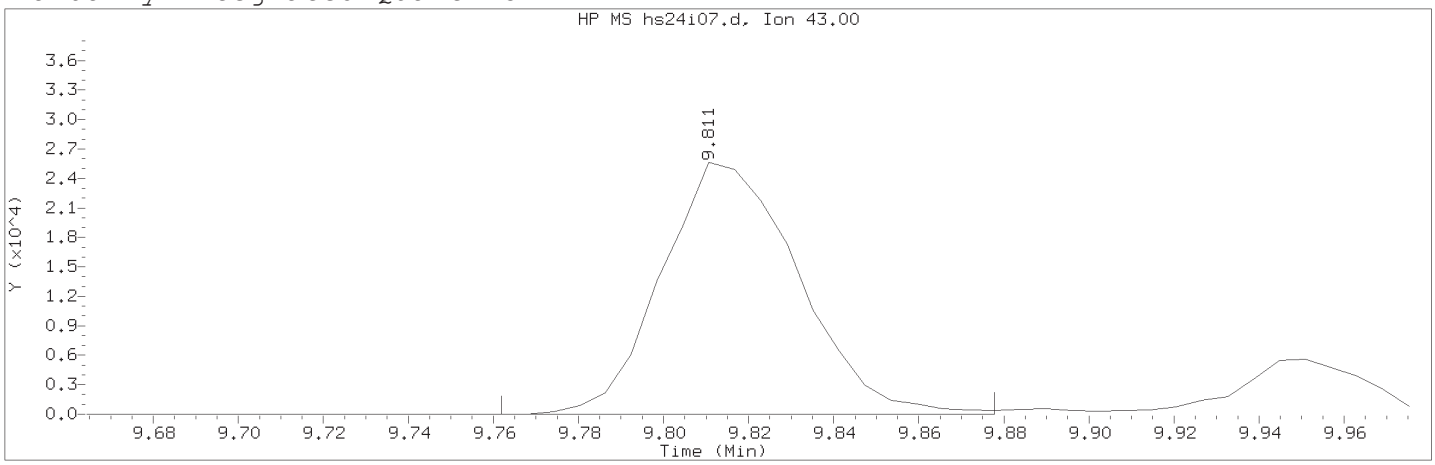
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1179		
Retention Time (minutes)	: 8.774		
Quant Ion	: 88.00		
Area	: 1677		
On-column Amount (ng)	: 13.7029		
Integration start scan	: 1175	Integration stop scan:	1231
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

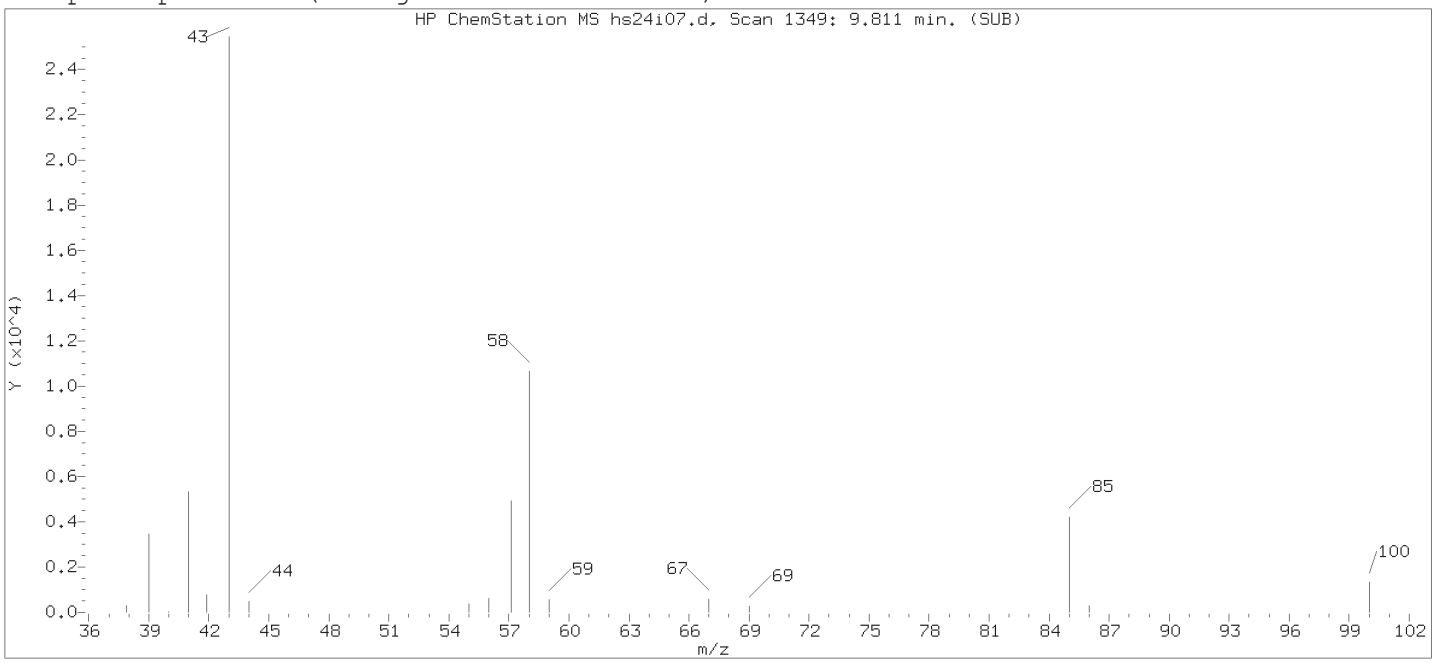
Compound Number : 81
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1349
Retention Time (minutes): 9.811
Quant Ion : 43.00
Area (flag) : 56901M
On-Column Amount (ng) : 1.7180
Integration start scan : 1340 Integration stop scan: 1359
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

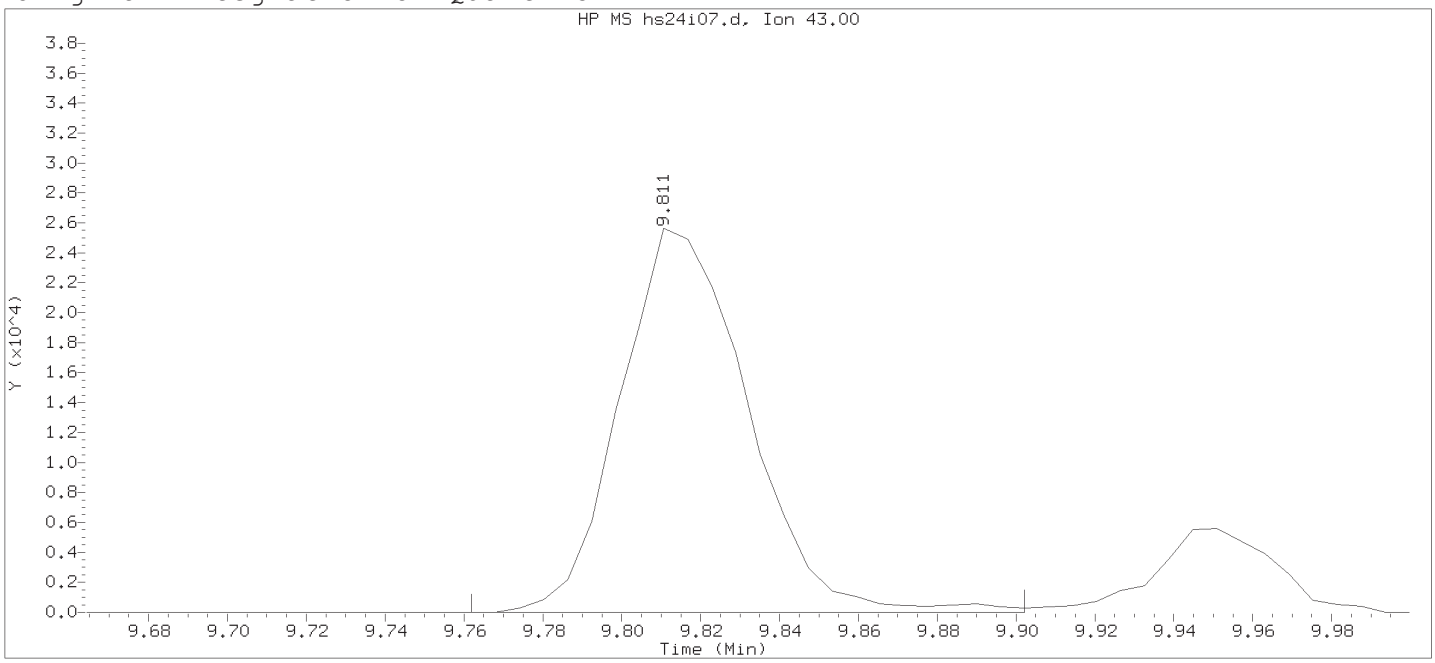
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

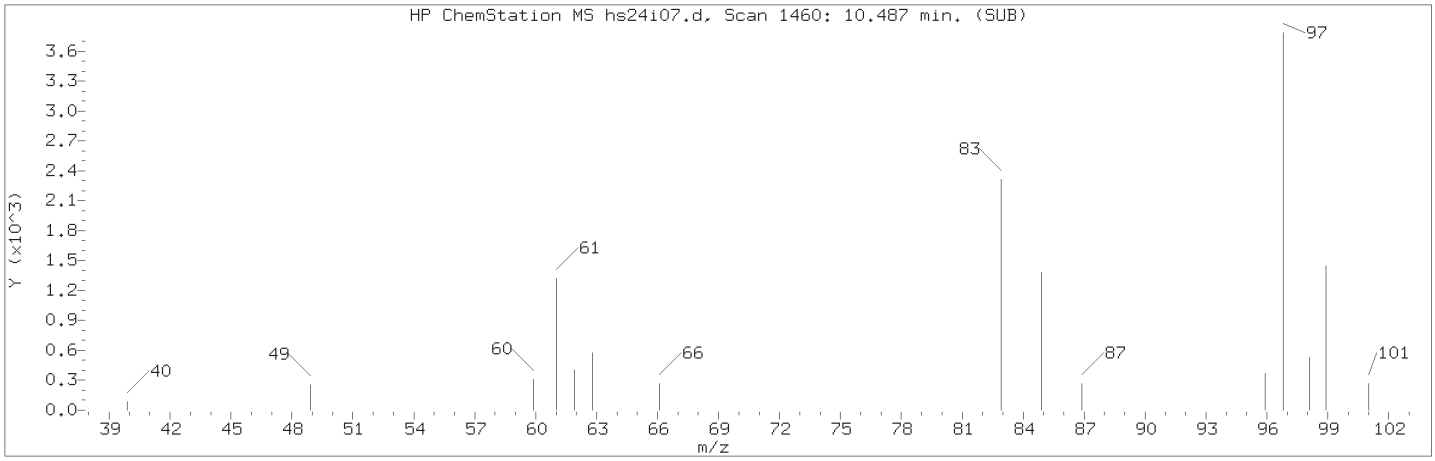
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

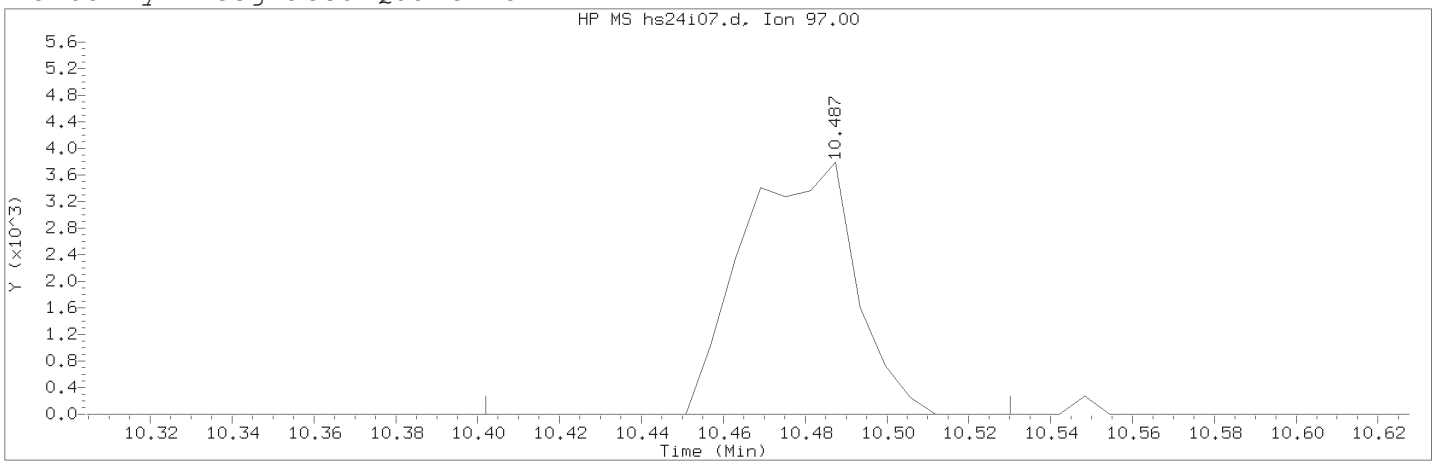
Compound Number : 81
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1349
Retention Time (minutes): 9.811
Quant Ion : 43.00
Area : 57465
On-column Amount (ng) : 1.6906
Integration start scan : 1340 Integration stop scan: 1363
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

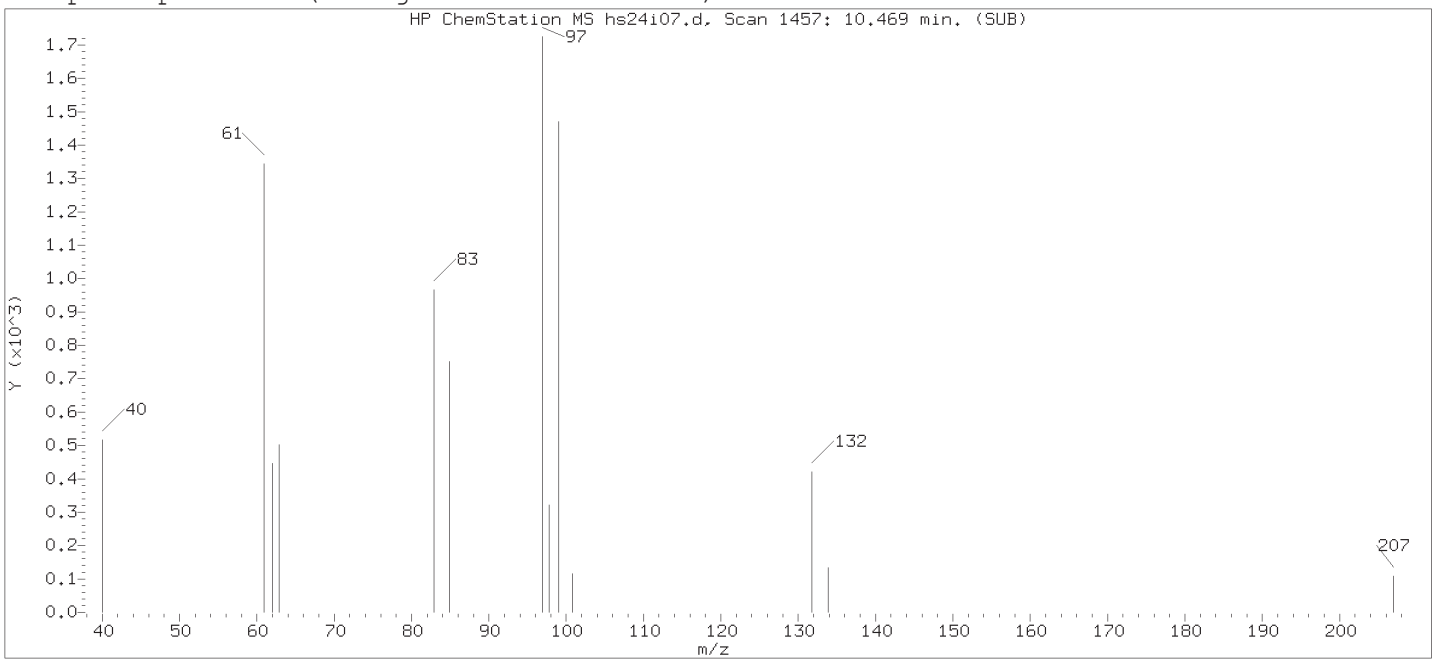
Compound Number : 88
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1460
Retention Time (minutes): 10.487
Quant Ion : 97.00
Area (flag) : 7236M
On-Column Amount (ng) : 0.1981
Integration start scan : 1445 Integration stop scan: 1466
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

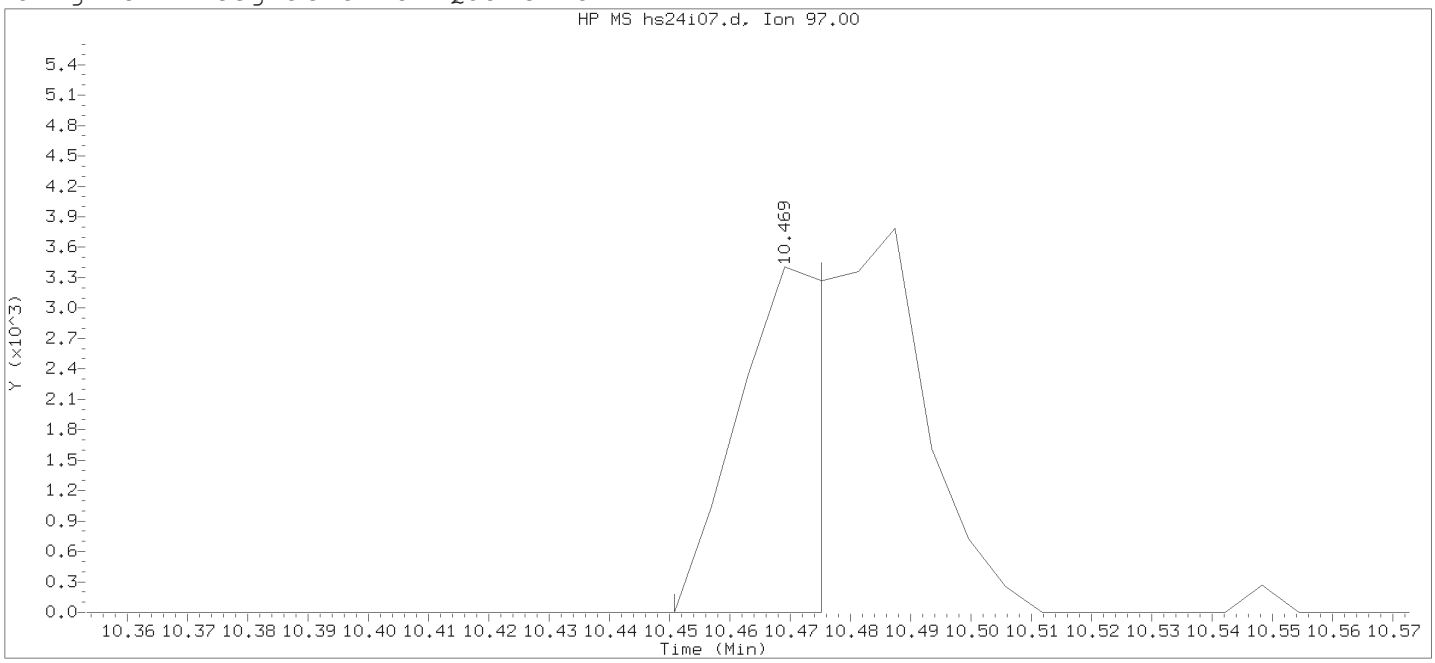
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

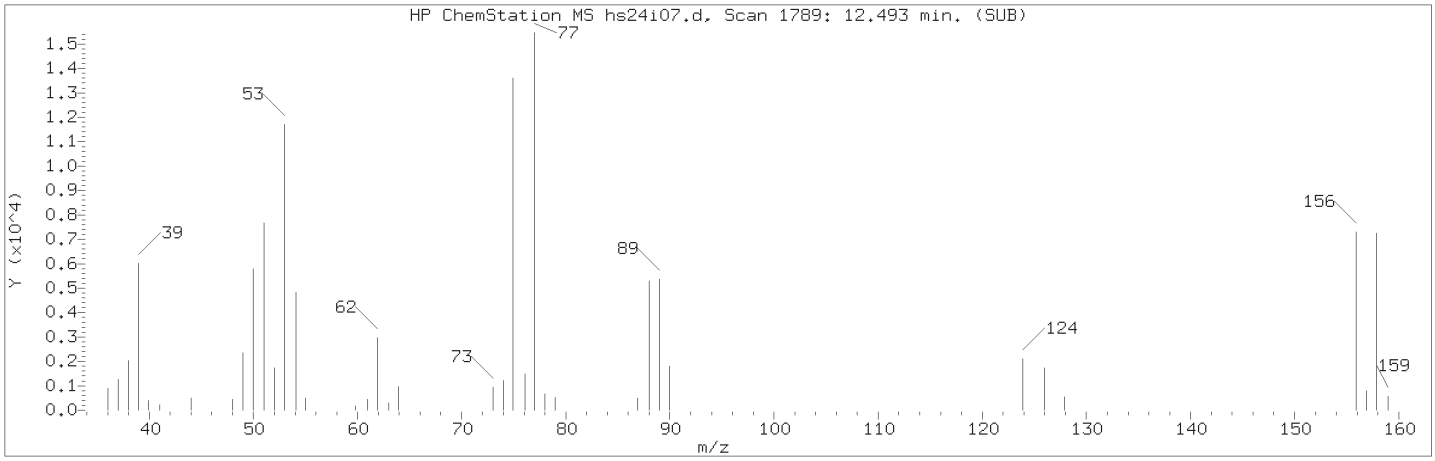
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

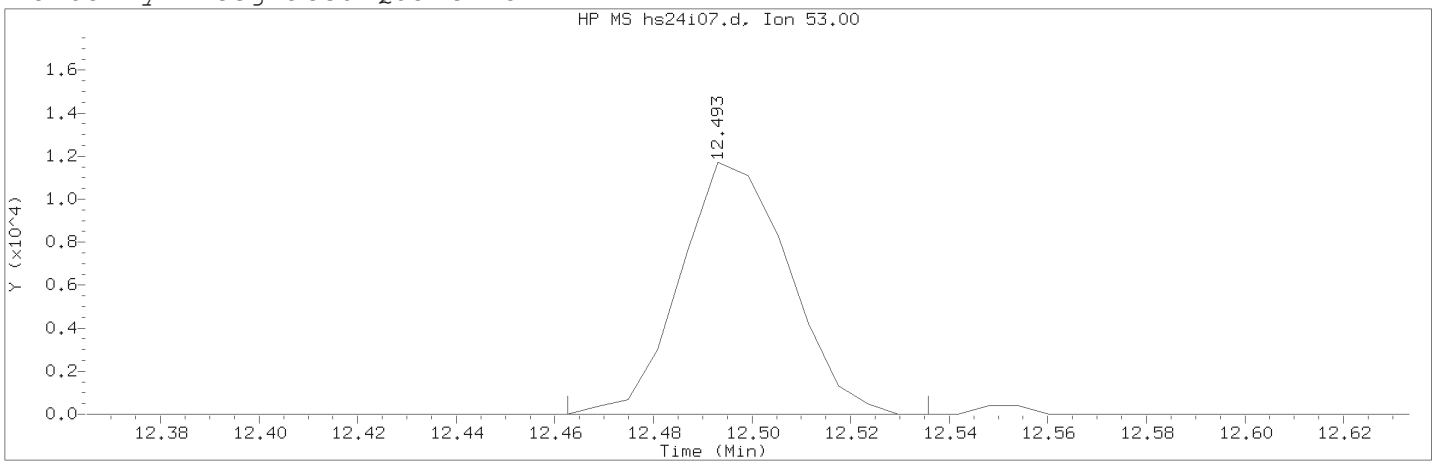
Compound Number : 88
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1457
Retention Time (minutes): 10.469
Quant Ion : 97.00
Area : 3077
On-column Amount (ng) : 0.0917
Integration start scan : 1453 Integration stop scan: 1457
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

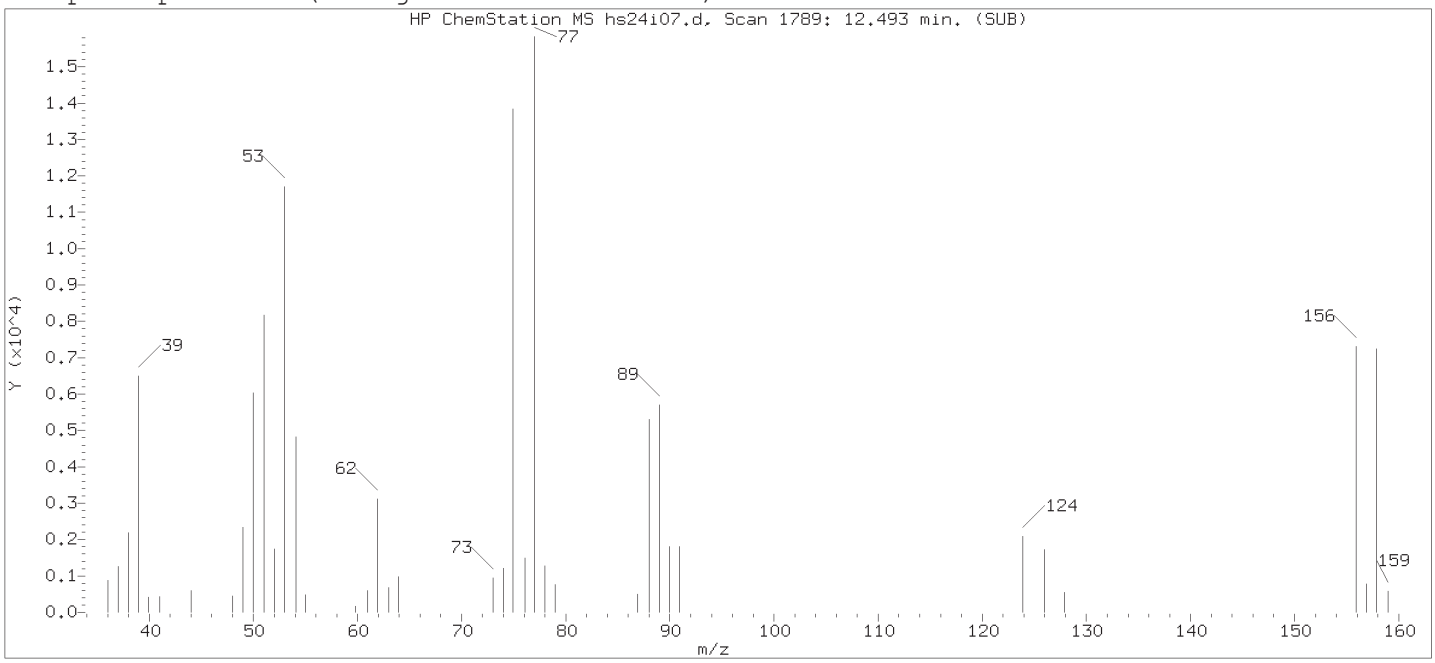
Compound Number : 115
Compound Name : trans-1,4-Dichloro-2-butene
Scan Number : 1789
Retention Time (minutes): 12.493
Quant Ion : 53.00
Area (flag) : 17855M
On-Column Amount (ng) : 1.7212
Integration start scan : 1783 Integration stop scan: 1795
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

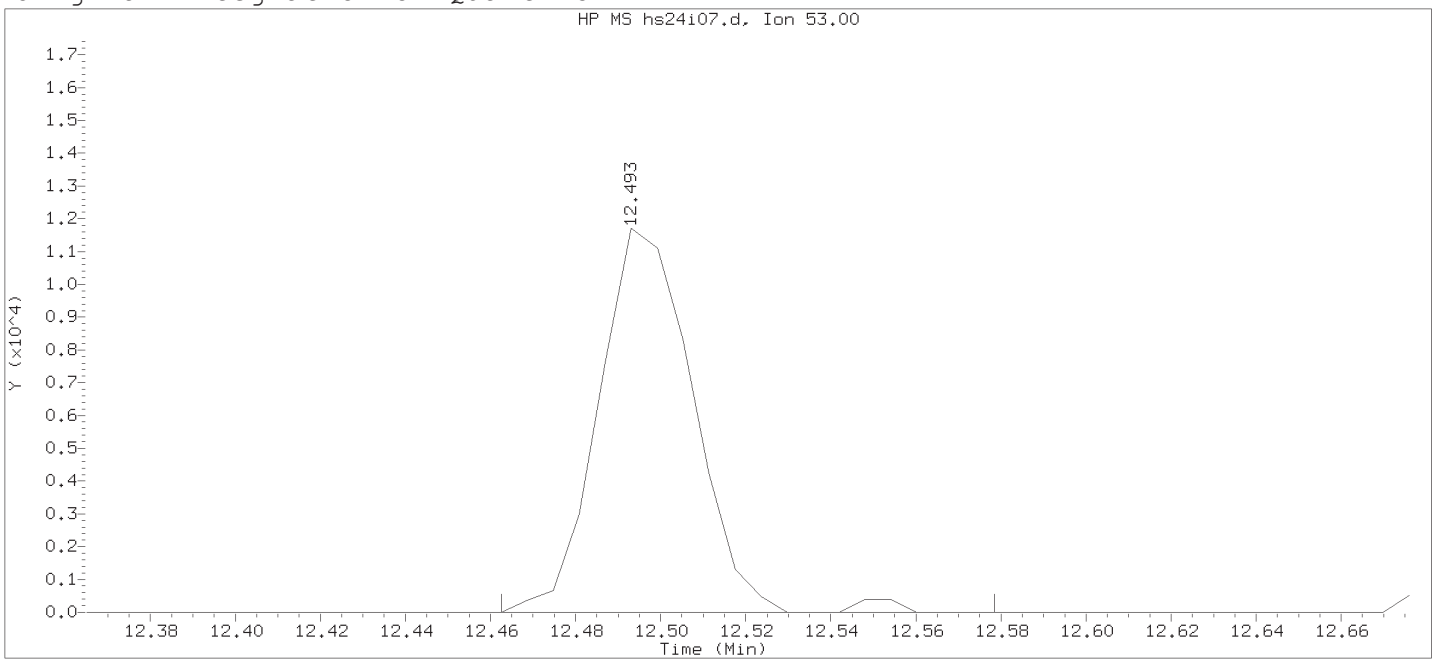
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

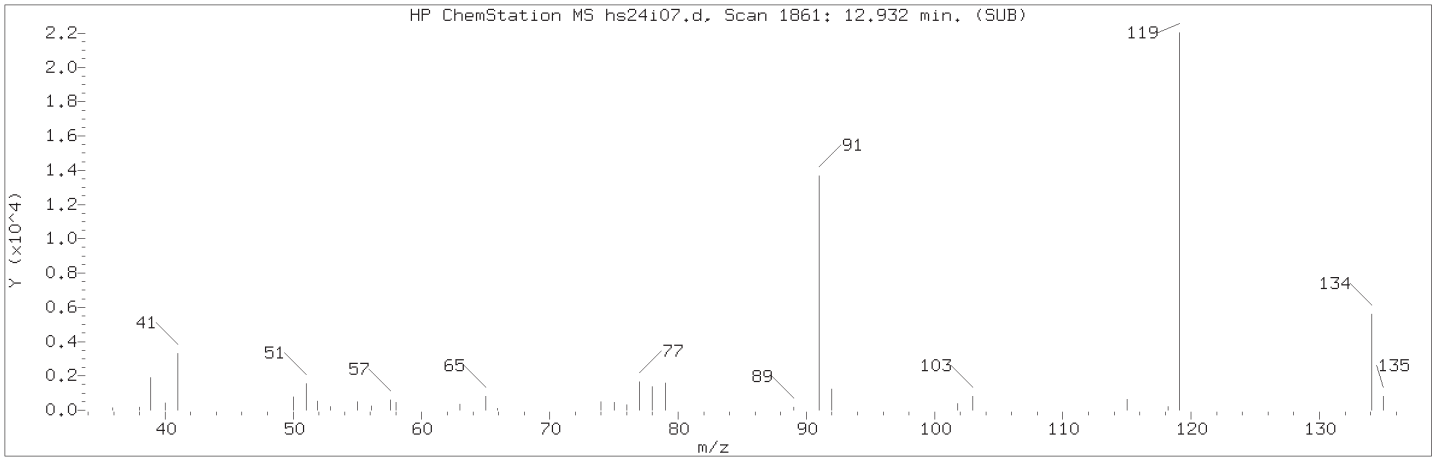
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

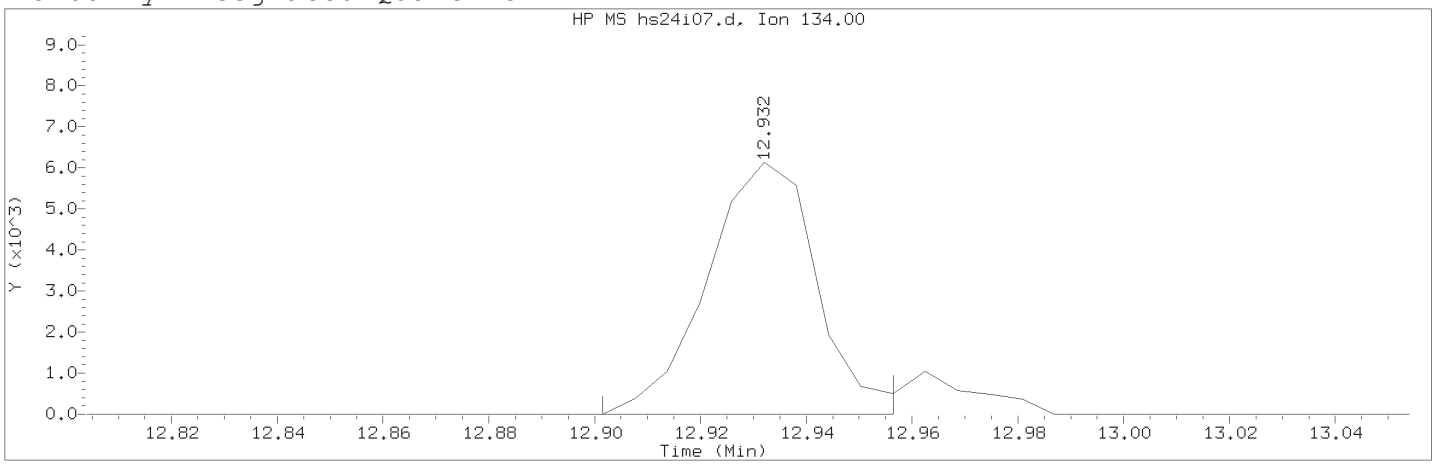
Compound Number : 115
Compound Name : trans-1,4-Dichloro-2-butene
Scan Number : 1789
Retention Time (minutes): 12.493
Quant Ion : 53.00
Area : 18137
On-column Amount (ng) : 1.7018
Integration start scan : 1783 Integration stop scan: 1802
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

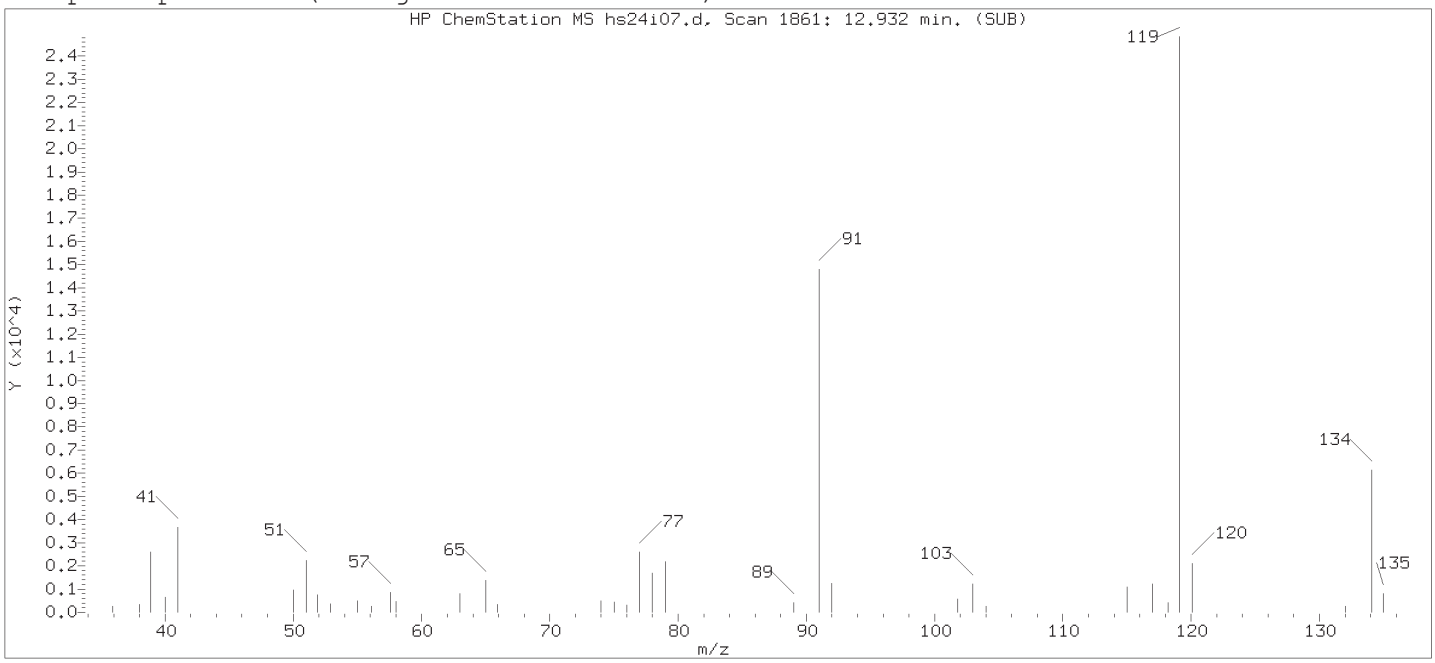
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area (flag) : 8830M
On-Column Amount (ng) : 0.1614
Integration start scan : 1855 Integration stop scan: 1864
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

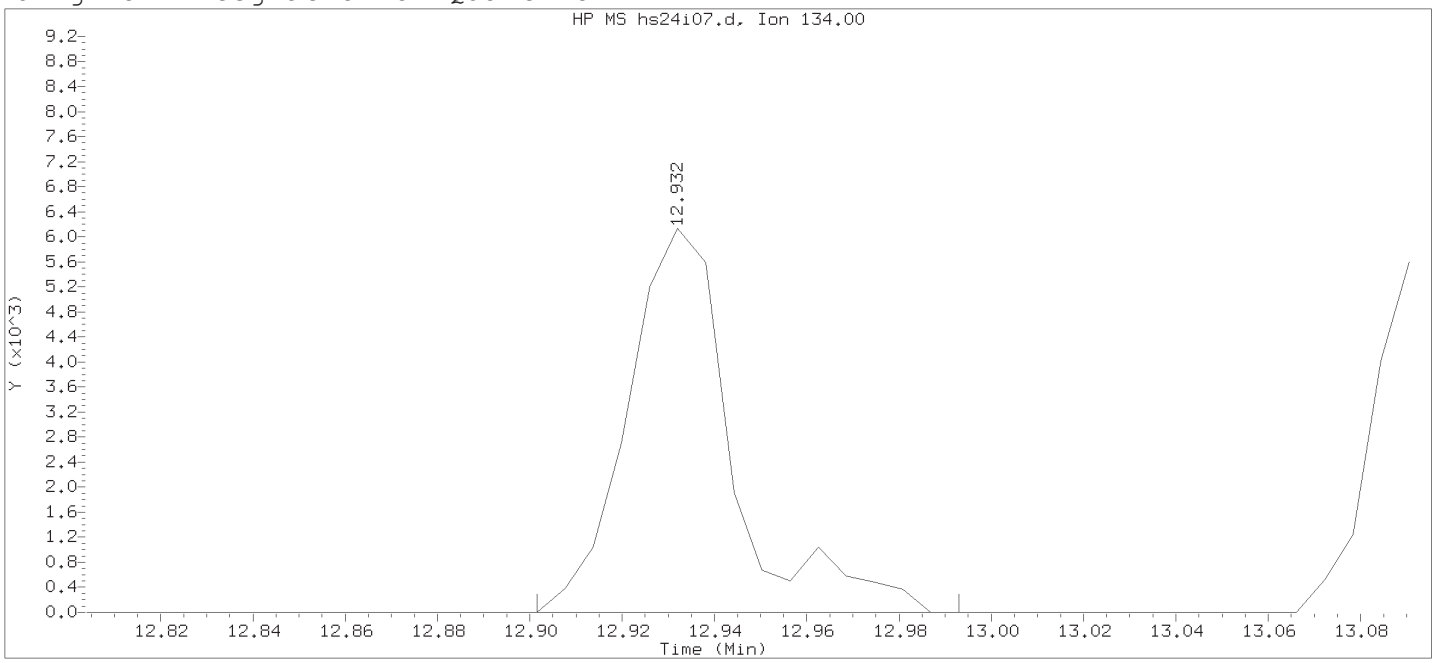
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

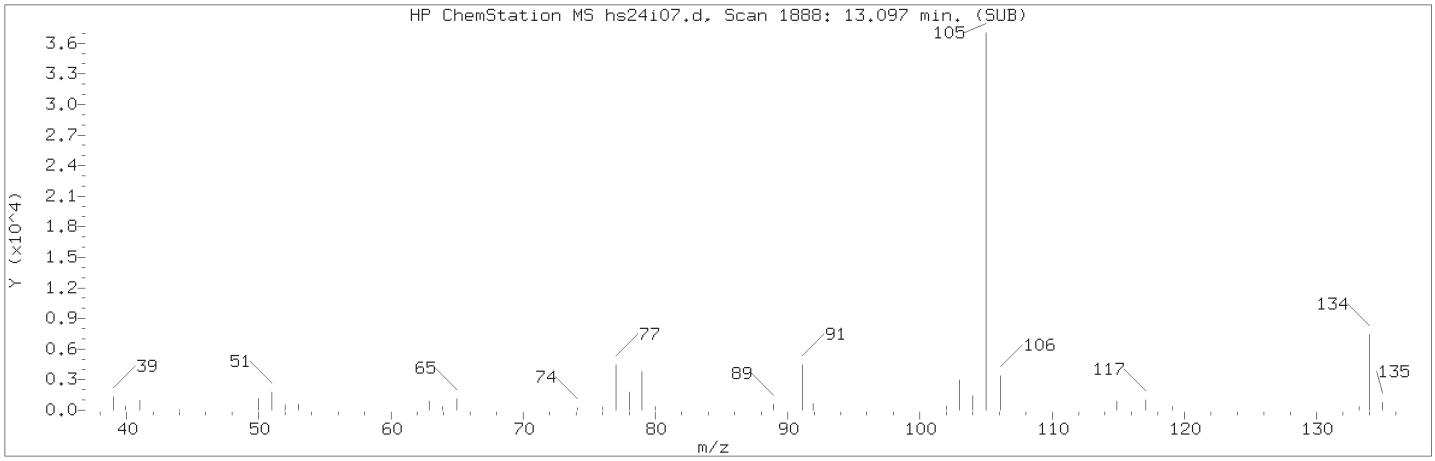
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

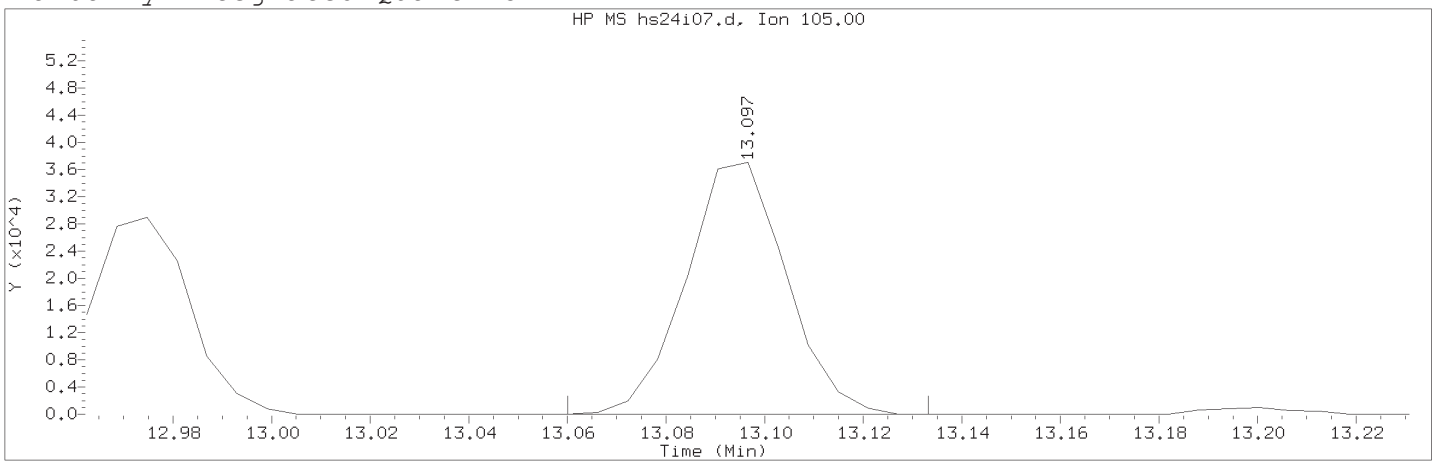
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area : 9731
On-column Amount (ng) : 0.1717
Integration start scan : 1855 Integration stop scan: 1870
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:26 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

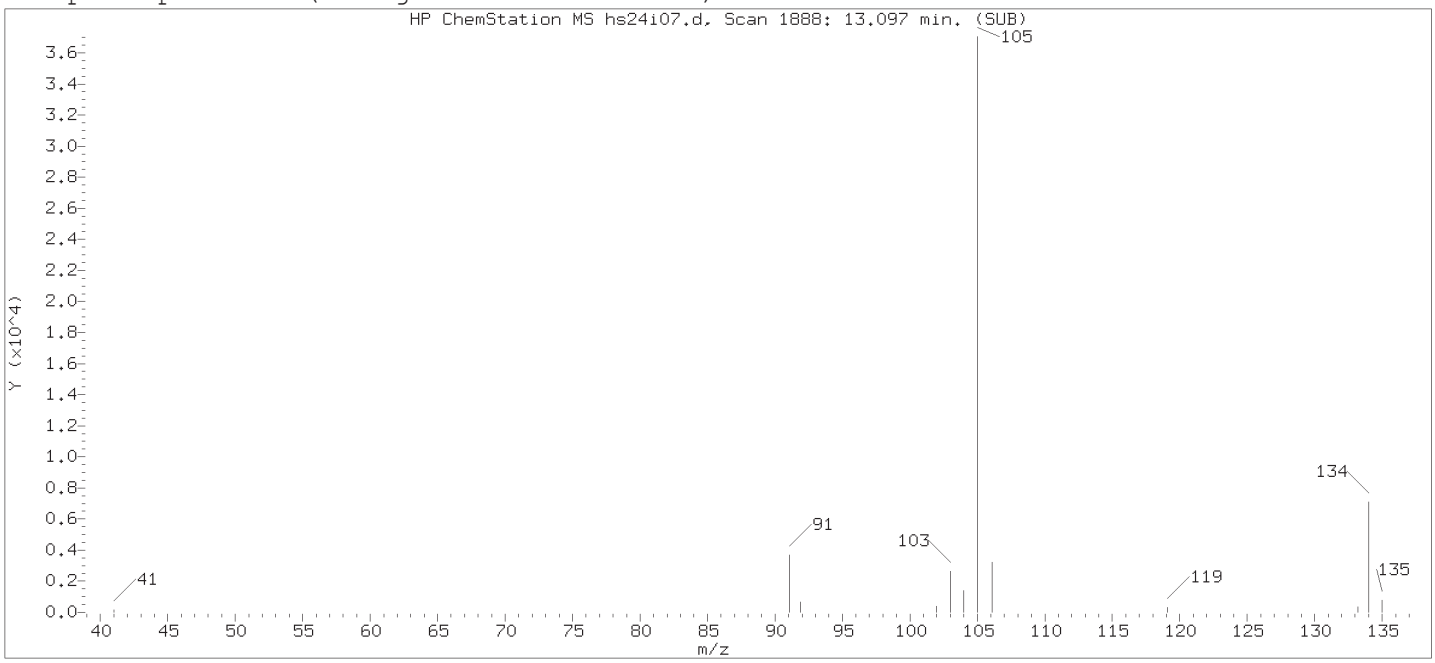
Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1888
Retention Time (minutes): 13.097
Quant Ion : 105.00
Area (flag) : 52250M
On-Column Amount (ng) : 0.1603
Integration start scan : 1881 Integration stop scan: 1893
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

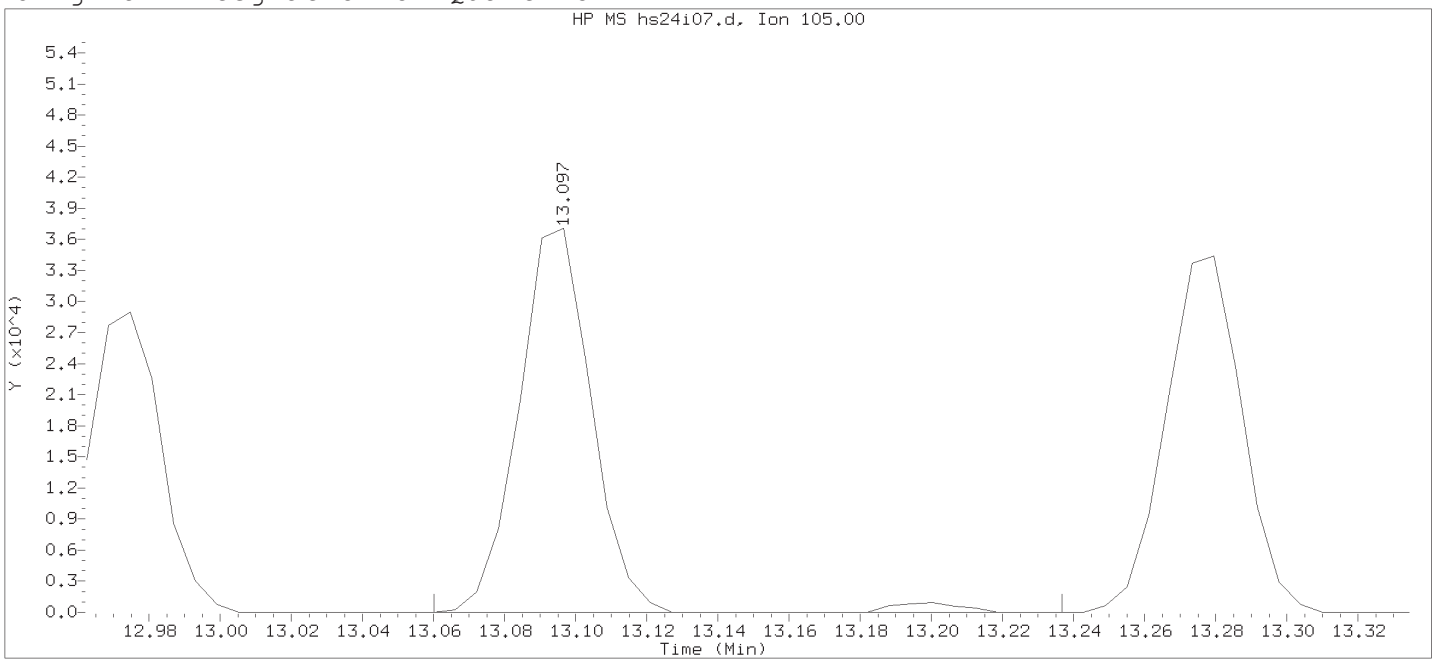
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



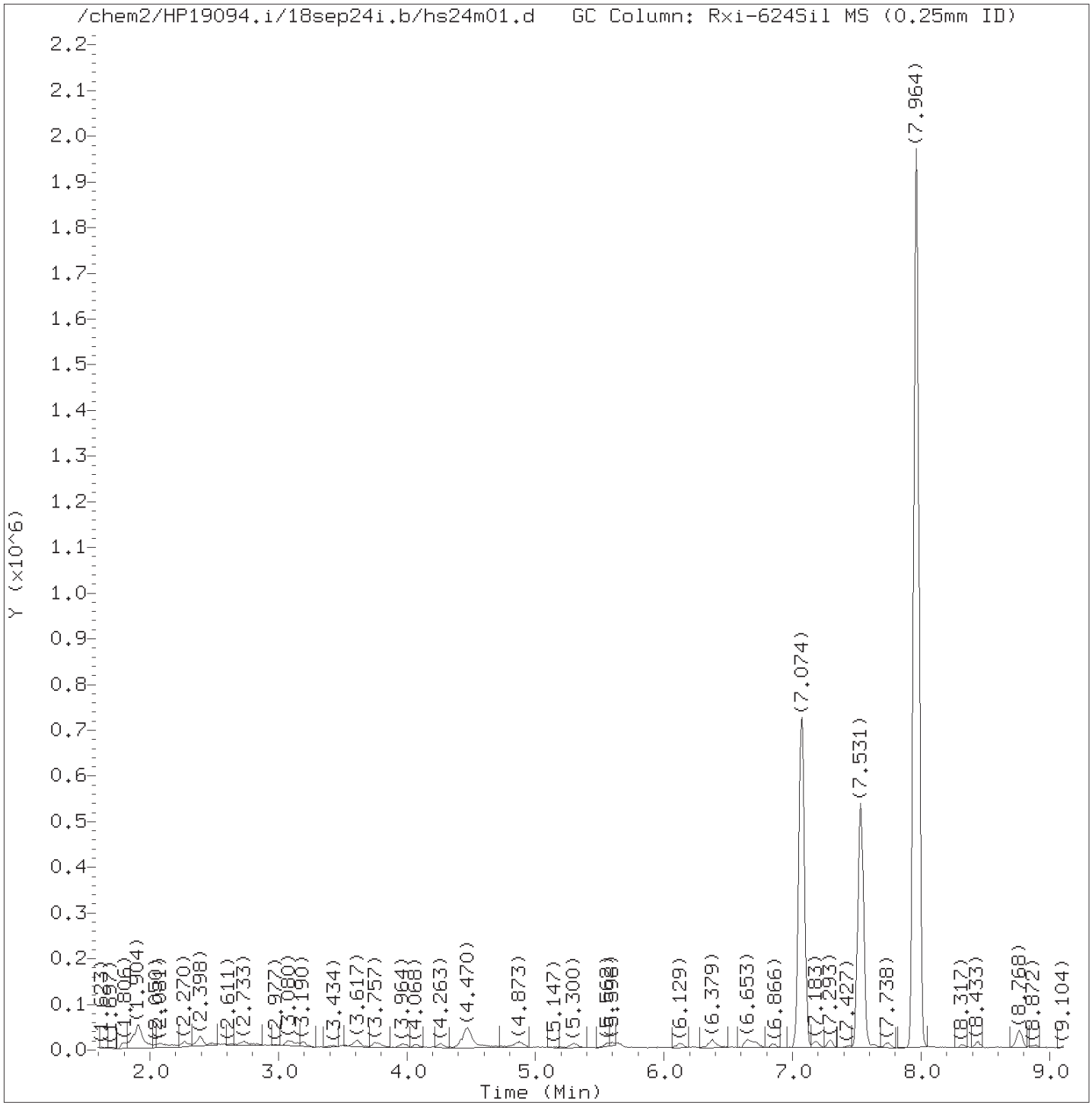
Data File: /chem2/HP19094.i/18sep24i.b/hs24i07.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:37 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 06:53
Date, time and analyst ID of latest file update: 25-Sep-2018 06:53 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1888
Retention Time (minutes): 13.097
Quant Ion : 105.00
Area : 53494
On-column Amount (ng) : 0.1637
Integration start scan : 1881 Integration stop scan: 1910
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052



Total Ion Chromatogram (TIC)

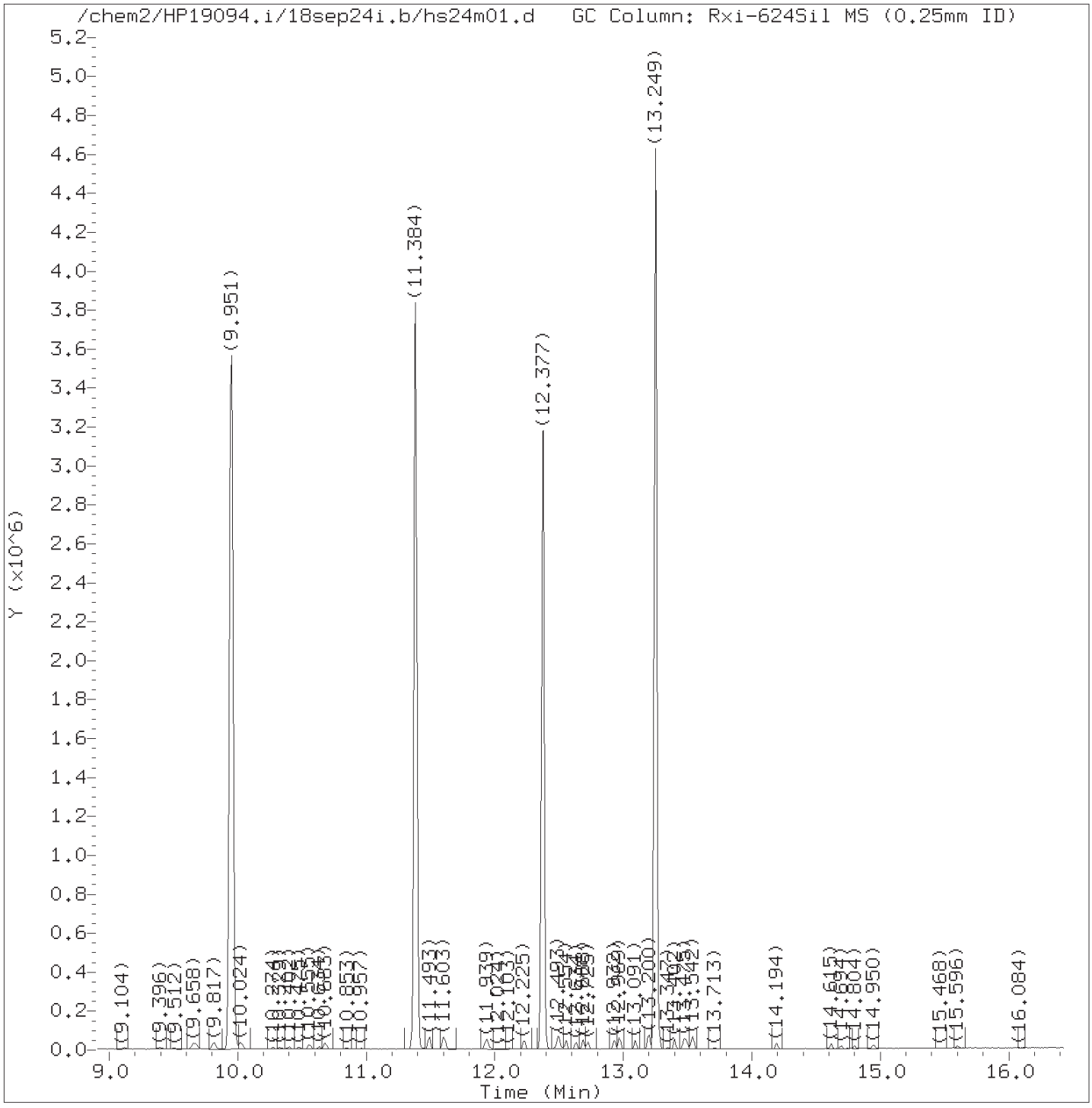
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.062	85	9887	0.091
2) Chloromethane	(2)	2.264	50	11027	0.104
5) Vinyl Chloride	(2)	2.392	62	9705	0.097
6) 1,3-Butadiene	(2)	2.392	39	12302M	0.109
7) Bromomethane	(2)	2.727	94	7190	0.093
8) Chloroethane	(2)	2.837	64	6058	0.100
9) Dichlorofluoromethane	(2)	3.080	67	14390	0.100
10) Trichlorofluoromethane	(2)	3.129	101	12048	0.096
11) Ethyl ether	(2)	3.422	59	3966	0.093
12) Freon 123a	(2)	3.513	67	7745	0.097
13) Acrolein	(1)	3.611	56	30281	4.838
15) 1,1-Dichloroethene	(2)	3.745	96	4892	0.090
16) Freon 113	(2)	3.769	101	5407	0.084
14) Acetone	(1)	3.775	43	9288	1.105
17) Methyl Iodide	(2)	3.964	142	10653	0.094
18) Carbon Disulfide	(2)	4.068	76	16735M	0.096
21) Methyl Acetate	(1)	4.227	43	2044	0.087
22) Allyl Chloride	(2)	4.263	41	9829	0.095
23) Methylene Chloride	(2)	4.452	84	6908	0.112
26)*t-Butyl Alcohol-d10	(1)	4.470	65	141036	50.000
28) t-Butyl Alcohol	(1)	4.605	59	4176	1.735
29) Acrylonitrile	(1)	4.824	53	4124	0.380
30) Methyl Tertiary Butyl Ether	(2)	4.855	73	10117	0.090
31) trans-1,2-Dichloroethene	(2)	4.879	96	5521	0.090
32) n-Hexane	(2)	5.293	57	8152	0.083
33) 1,1-Dichloroethane	(2)	5.556	63	11186	0.095
34) di-Isopropyl Ether	(2)	5.598	45	19224	0.092
35) 2-Chloro-1,3-Butadiene	(2)	5.653	53	9694	0.092
40) 1,2-Dichloroethene (Total)	(2)		96	11674	0.180
37) Ethyl t-butyl ether	(2)	6.123	59	14814	0.090
38) 2-Butanone	(1)	6.342	43	12103	0.880
41) 2,2-Dichloropropane	(2)	6.379	77	6559	0.078
39) cis-1,2-Dichloroethene	(2)	6.379	96	6153	0.090
42) Propionitrile	(1)	6.434	54	6324	1.693
45) Methacrylonitrile	(1)	6.659	67	10750	0.798
47) Bromochloromethane	(2)	6.708	128	2451	0.085
48) Tetrahydrofuran	(1)	6.714	71	2784	0.761
49) Chloroform	(2)	6.866	83	10073	0.092

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.068	113	702027	10.009
51) 1,1,1-Trichloroethane	(2)	7.092	97	7736	0.083
52) Cyclohexane	(2)	7.177	56	9614	0.079
54) Carbon Tetrachloride	(2)	7.293	117	6960	0.087
55) 1,1-Dichloropropene	(2)	7.299	75	8159	0.092
56) Isobutyl Alcohol	(1)	7.452	41	3763	4.040
57)$1,2-Dichloroethane-d4	(2)	7.531	102	123366	10.089
58) Benzene	(2)	7.555	78	24986	0.096
59) 1,2-Dichloroethane	(2)	7.628	62	8132	0.135
60) t-Amyl methyl ether	(2)	7.750	73	12517	0.091
63)*Fluorobenzene	(2)	7.964	96	2783023	10.000
62) n-Heptane	(2)	7.976	43	9564	0.095
65) n-Butanol	(1)	8.323	56	6085	7.733
67) Trichloroethene	(2)	8.439	95	6307	0.094
69) Methylcyclohexane	(2)	8.756	83	11396	0.090
70) 1,2-Dichloropropane	(2)	8.775	63	5902	0.093
71) Methyl Methacrylate	(1)	8.848	69	1661M	0.067
72) 1,4-Dioxane	(1)	8.872	88	538	2.839
73) Dibromomethane	(2)	8.890	93	2312	0.088
74) Bromodichloromethane	(2)	9.128	83	6593	0.093
76) 2-Nitropropane	(1)	9.396	41	5792	0.820
80) cis-1,3-Dichloropropene	(2)	9.652	75	7111	0.086
81) 4-Methyl-2-Pentanone	(1)	9.817	43	27891	0.815
82)$Toluene-d8	(3)	9.951	98	2808841	10.086
83) Toluene	(3)	10.024	92	14540	0.091
85) 1,3-Dichloropropene (total)	(3)		75	11931	0.164
84) trans-1,3-Dichloropropene	(3)	10.268	75	4820	0.078
86) Ethyl Methacrylate	(3)	10.323	69	4465	0.084
91) 2-Hexanone	(1)	10.329	43	19024A	0.817
88) 1,1,2-Trichloroethane	(3)	10.482	97	4082	0.110
89) Tetrachloroethene	(3)	10.555	166	7159	0.099
90) 1,3-Dichloropropane	(3)	10.640	76	6776	0.103
93) Dibromochloromethane	(3)	10.841	129	3771	0.085
95) 1,2-Dibromoethane	(3)	10.957	107	2957	0.085
96) 1-Chlorohexane	(3)	11.384	91	11869M	0.124
97)*Chlorobenzene-d5	(3)	11.384	117	2163745	10.000
98) Chlorobenzene	(3)	11.408	112	17130	0.101
99) 1,1,1,2-Tetrachloroethane	(3)	11.487	131	5306	0.094

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 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

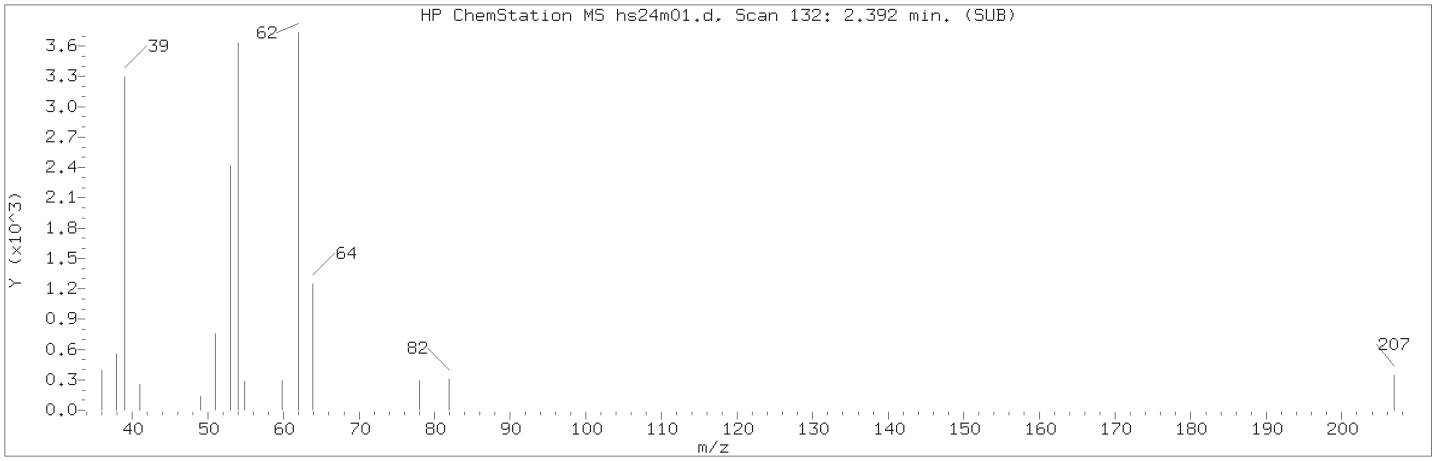
Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
100) Ethylbenzene	(3)	11.493	91	27666	0.088
101) m+p-Xylene	(3)	11.603	106	19688	0.169
105) Xylene (Total)	(3)		106	29552	0.258
104) o-Xylene	(3)	11.926	106	9864	0.089
106) Styrene	(3)	11.945	104	14567	0.082
107) Bromoform	(3)	12.103	173	1566	0.064
108) Isopropylbenzene	(3)	12.231	105	26026	0.086
111)$4-Bromofluorobenzene	(3)	12.371	95	1017301	10.033
113) 1,1,2,2-Tetrachloroethane	(4)	12.469	83	3878	0.086
114) Bromobenzene	(4)	12.487	156	6201	0.091
115) trans-1,4-Dichloro-2-butene	(1)	12.499	53	8928	0.833
116) 1,2,3-Trichloropropane	(4)	12.524	110	1112	0.095
117) n-Propylbenzene	(4)	12.554	91	32379	0.087
119) 2-Chlorotoluene	(4)	12.634	126	6163	0.085
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	20930	0.083
122) 4-Chlorotoluene	(4)	12.725	126	6027	0.083
125) tert-Butylbenzene	(4)	12.932	134	4681M	0.085
126) Pentachloroethane	(4)	12.963	167	3547	0.083
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	22024	0.086
128) sec-Butylbenzene	(4)	13.091	105	27687M	0.085
131) 1,3-Dichlorobenzene	(4)	13.200	146	12534	0.092
132) p-Isopropyltoluene	(4)	13.200	119	22266	0.082
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1136004	10.000
134) 1,4-Dichlorobenzene	(4)	13.268	146	13175	0.099
135) 1,2,3-Trimethylbenzene	(4)	13.280	120	11819M	0.100
136) Benzyl Chloride	(4)	13.341	126	866	0.053
138) n-Butylbenzene	(4)	13.493	92	11478	0.085
139) 1,2-Dichlorobenzene	(4)	13.530	146	10954	0.091
143) 1,2-Dibromo-3-chloropropane	(1)	14.066	155	310M	0.053
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	9149	0.090
145) 1,2,4-Trichlorobenzene	(4)	14.615	180	7379	0.089
146) Hexachlorobutadiene	(4)	14.694	225	2902	0.093
147) Naphthalene	(4)	14.804	128	10099	0.077
148) 1,2,3-Trichlorobenzene	(4)	14.950	180	6064	0.089

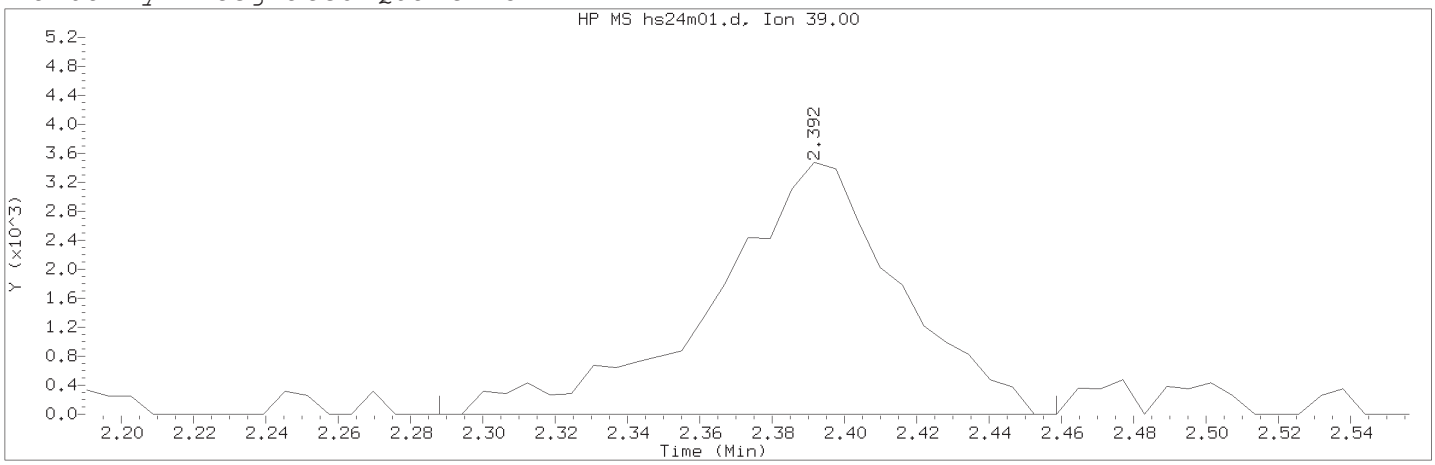
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

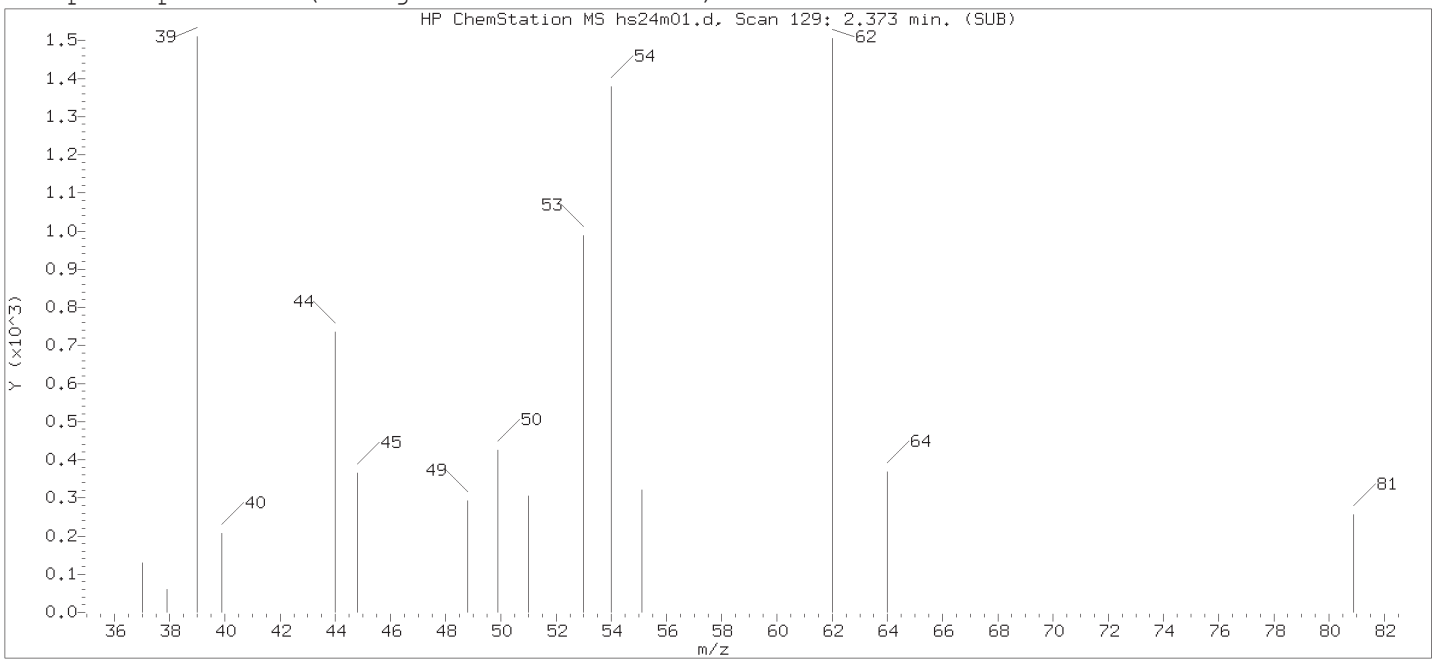
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 132
Retention Time (minutes): 2.392
Quant Ion : 39.00
Area (flag) : 12302M
On-Column Amount (ng) : 0.1089
Integration start scan : 114 Integration stop scan: 142
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

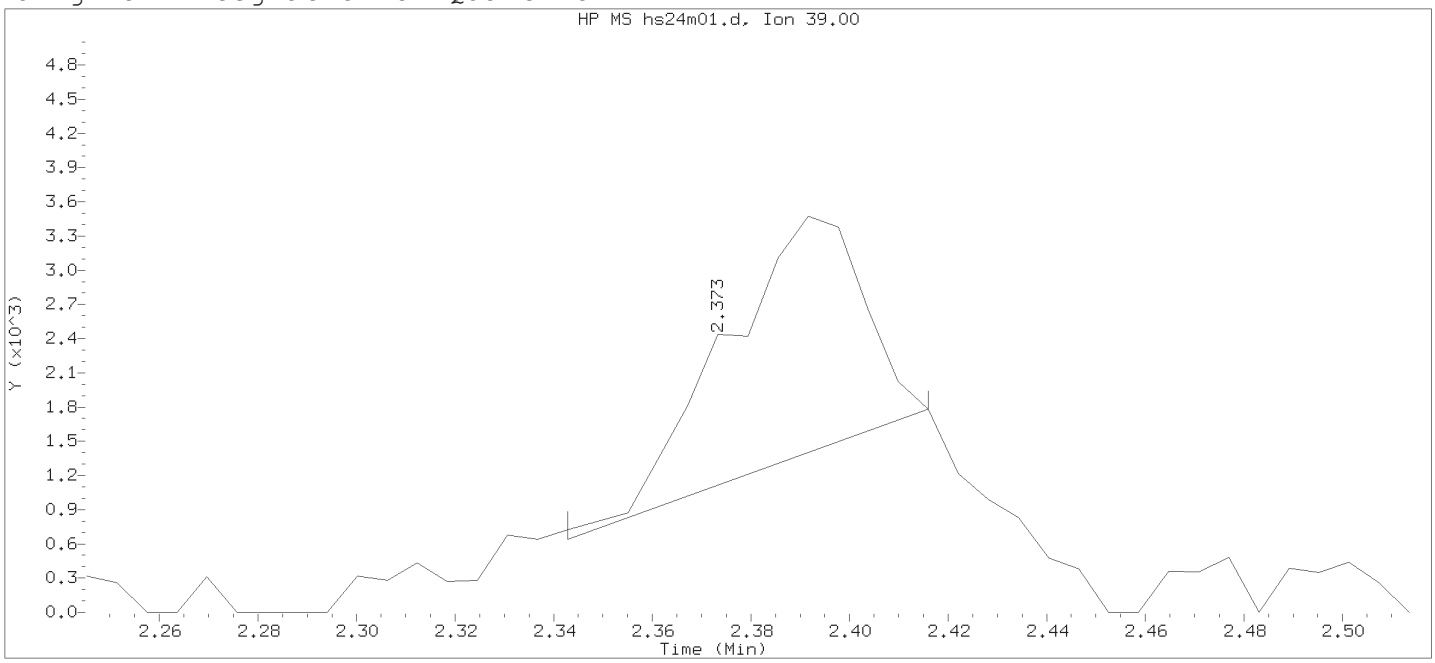
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

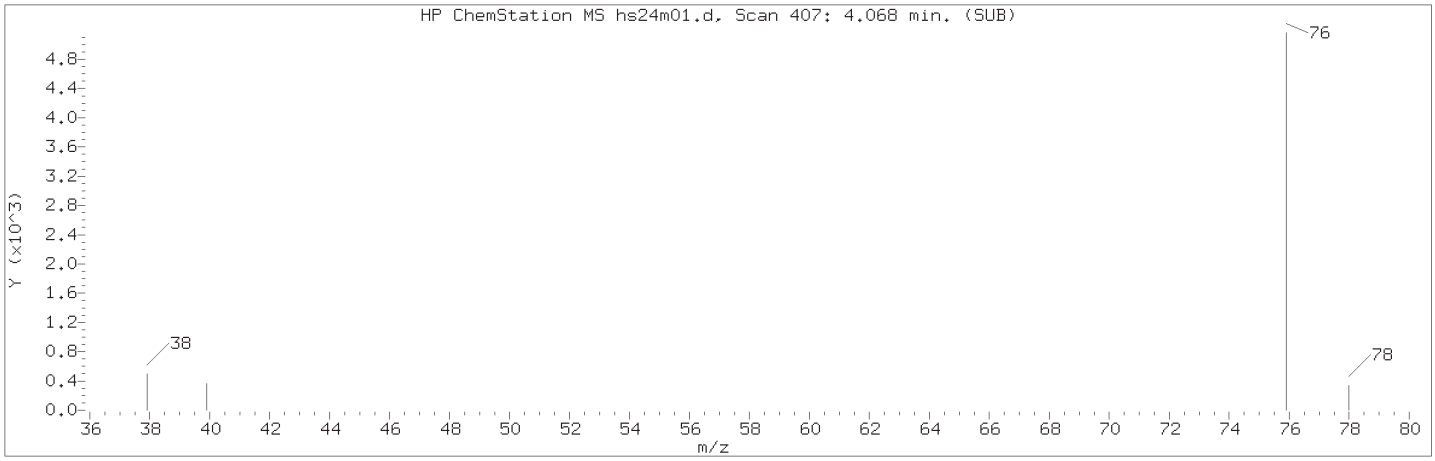
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

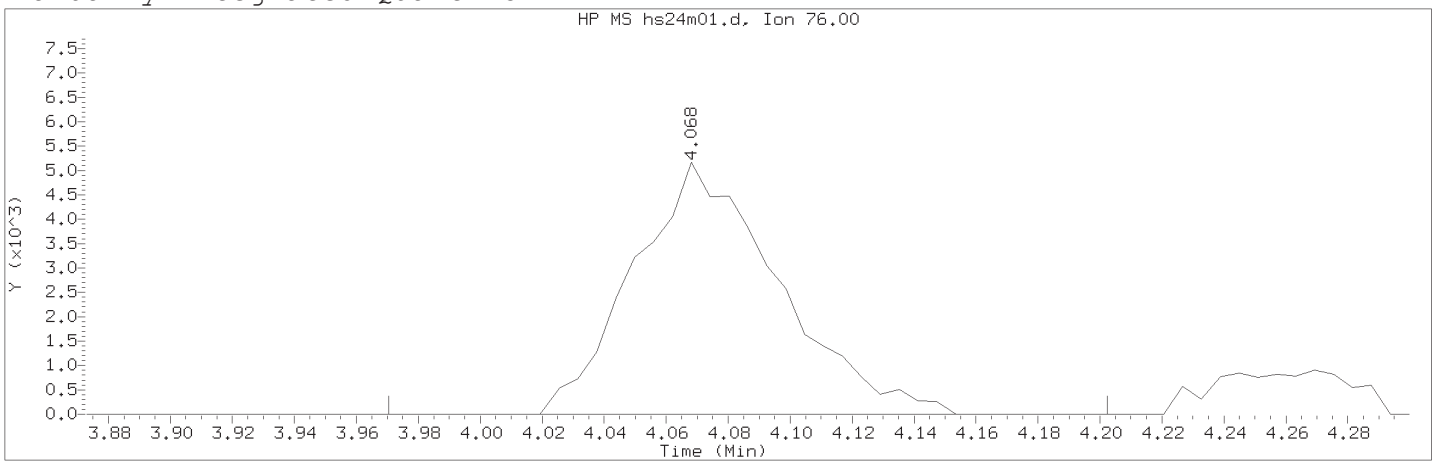
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 129
Retention Time (minutes): 2.373
Quant Ion : 39.00
Area : 4048
On-column Amount (ng) : 0.0438
Integration start scan : 123 Integration stop scan: 135
Y at integration start : 640 Y at integration end: 1780

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

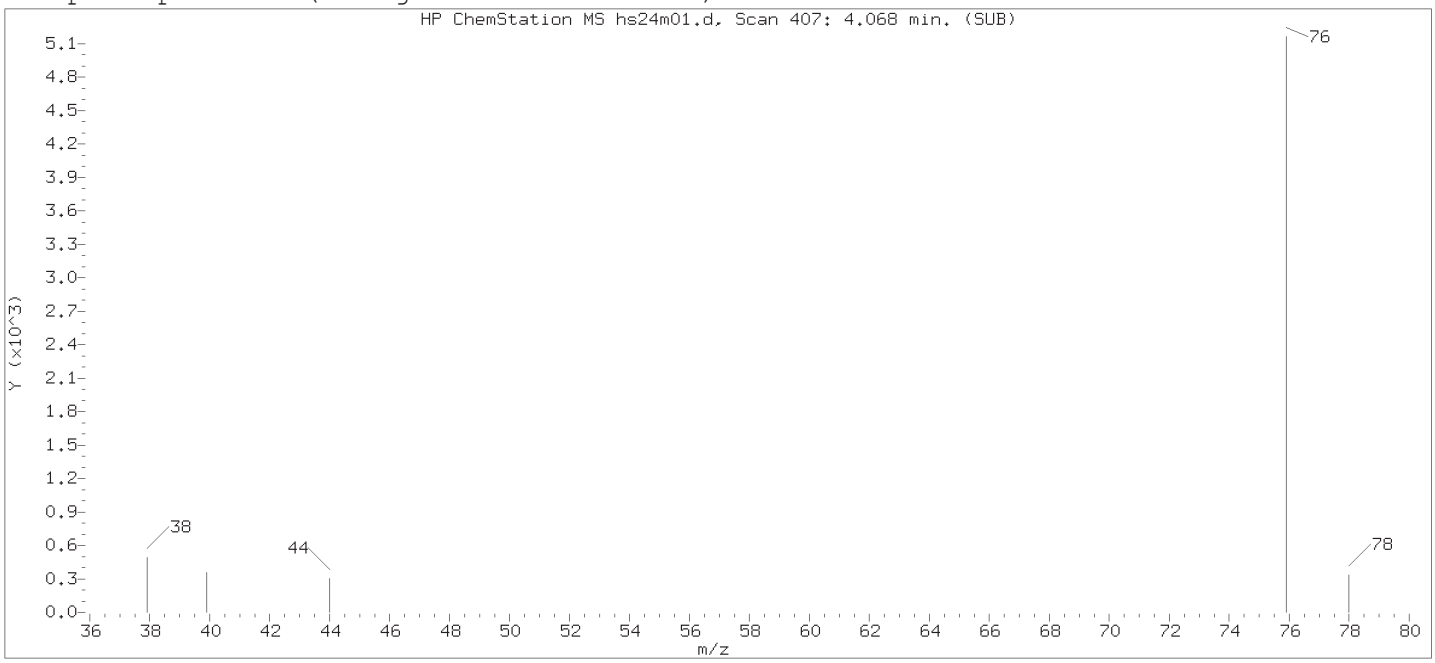
Compound Number : 18
Compound Name : Carbon Disulfide
Scan Number : 407
Retention Time (minutes): 4.068
Quant Ion : 76.00
Area (flag) : 16735M
On-Column Amount (ng) : 0.0964
Integration start scan : 390 Integration stop scan: 428
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

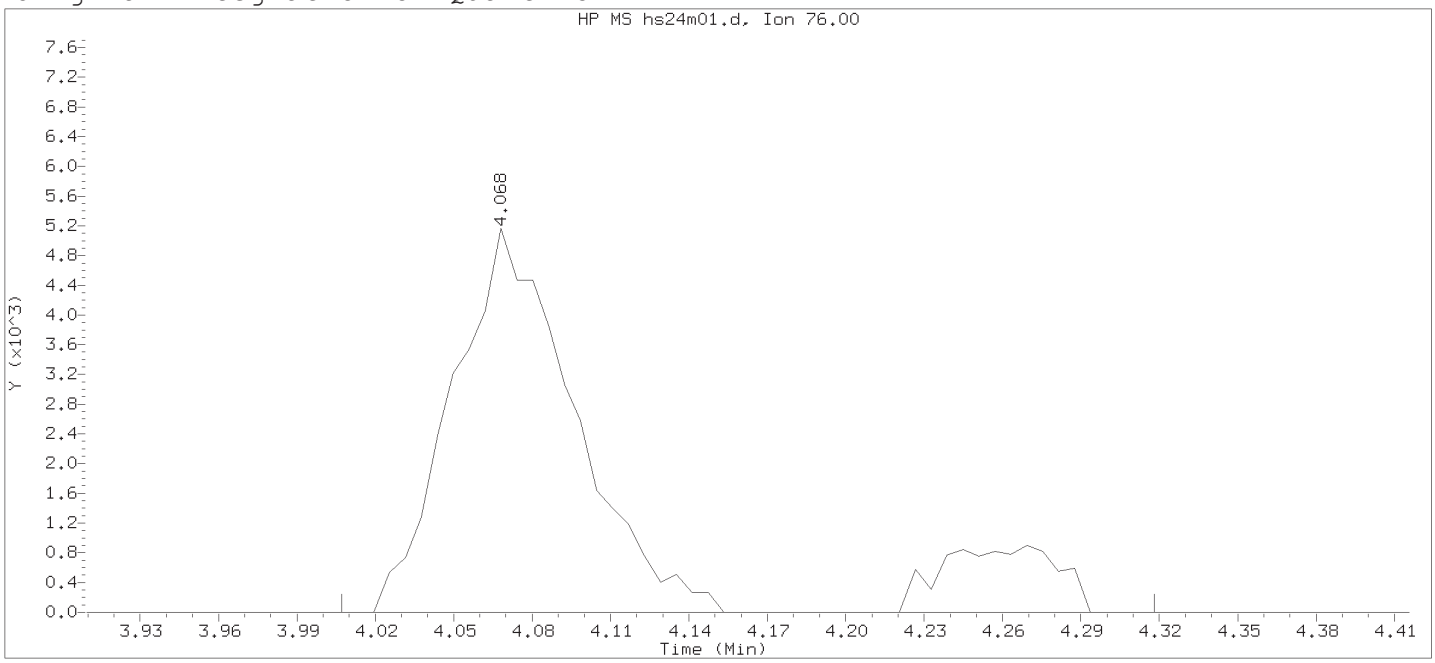
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

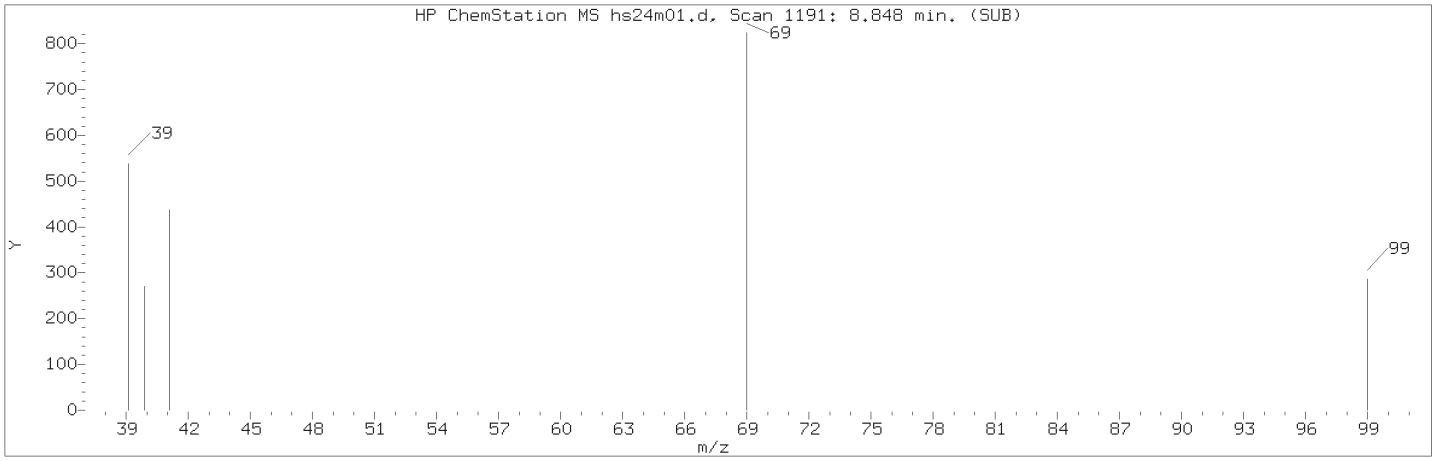
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

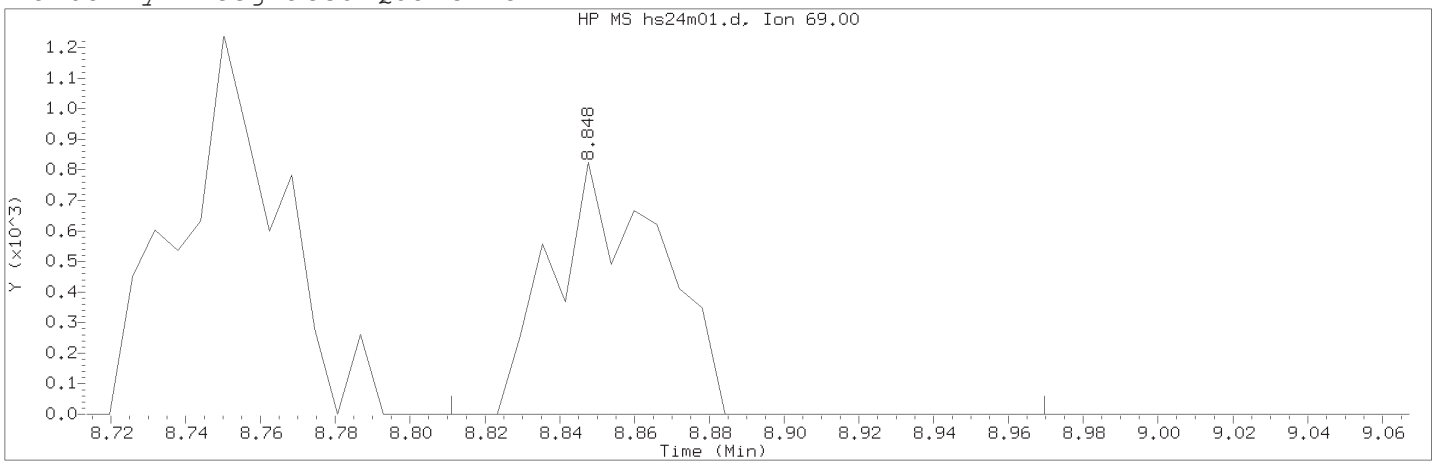
Compound Number	: 18		
Compound Name	: Carbon Disulfide		
Scan Number	: 407		
Retention Time (minutes)	: 4.068		
Quant Ion	: 76.00		
Area	: 19554		
On-column Amount (ng)	: 0.1126		
Integration start scan	: 396	Integration stop scan:	447
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: JKH09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

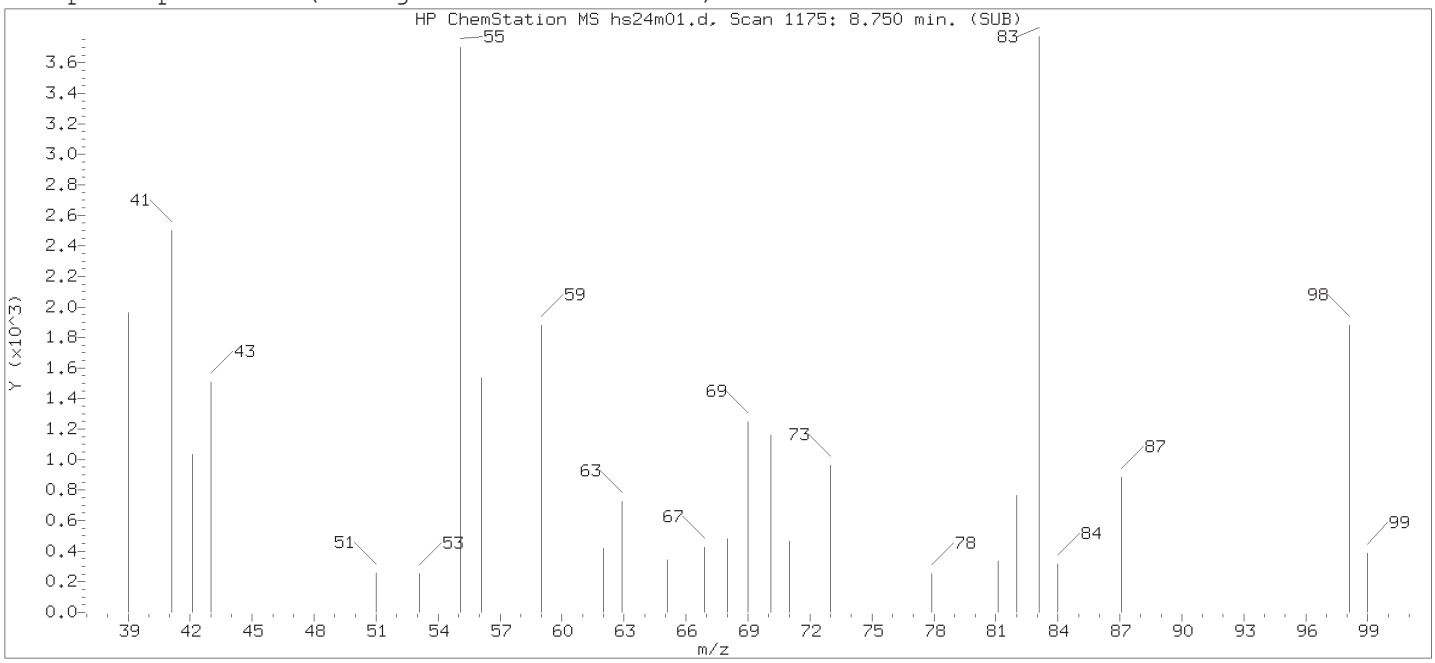
Compound Number : 71
Compound Name : Methyl Methacrylate
Scan Number : 1191
Retention Time (minutes): 8.848
Quant Ion : 69.00
Area (flag) : 1661M
On-Column Amount (ng) : 0.0666
Integration start scan : 1184 Integration stop scan: 1210
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

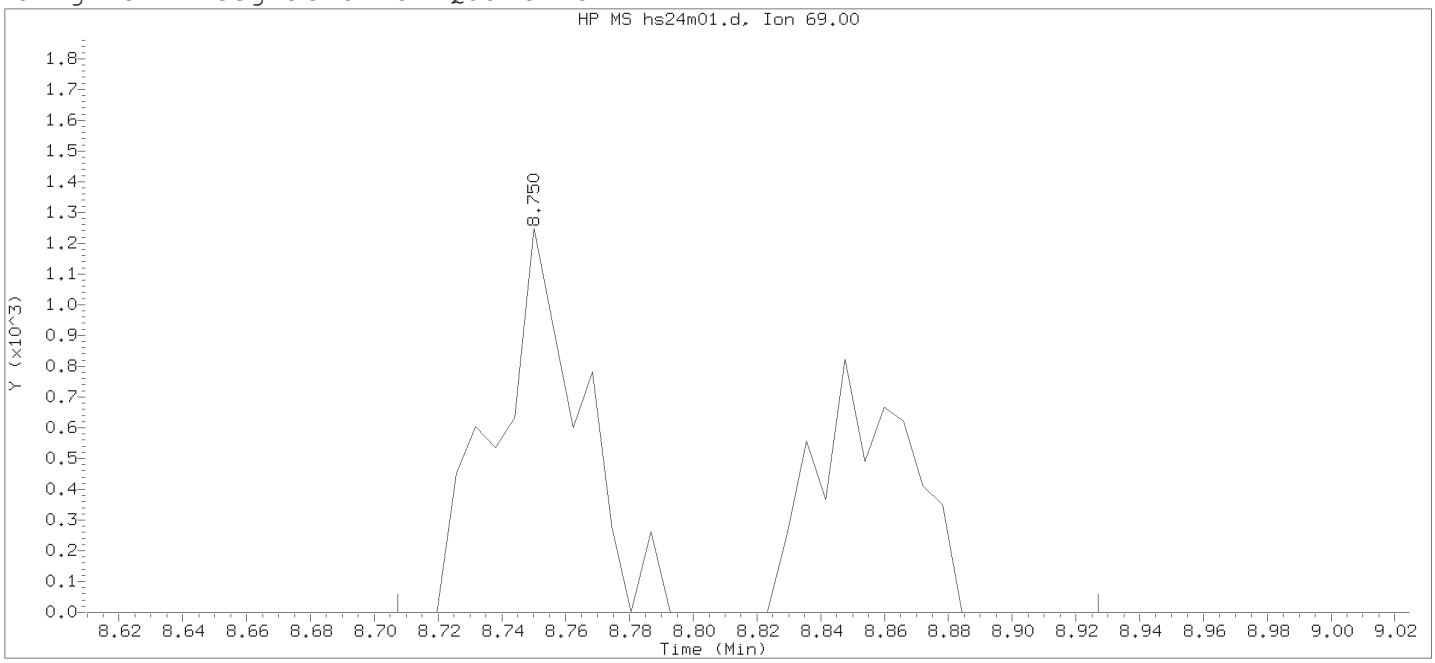
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

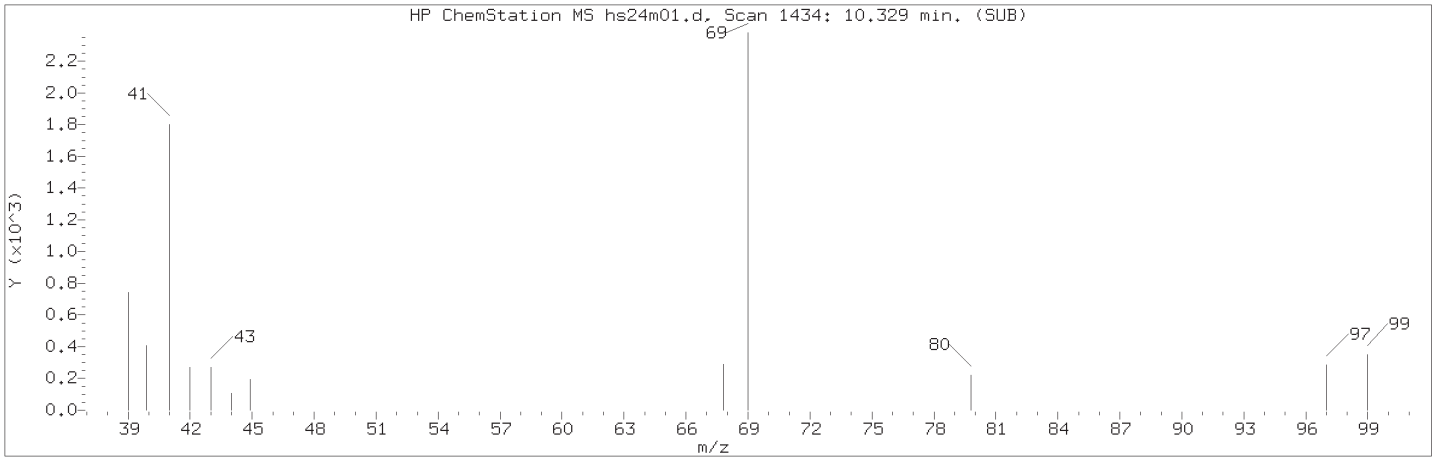
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

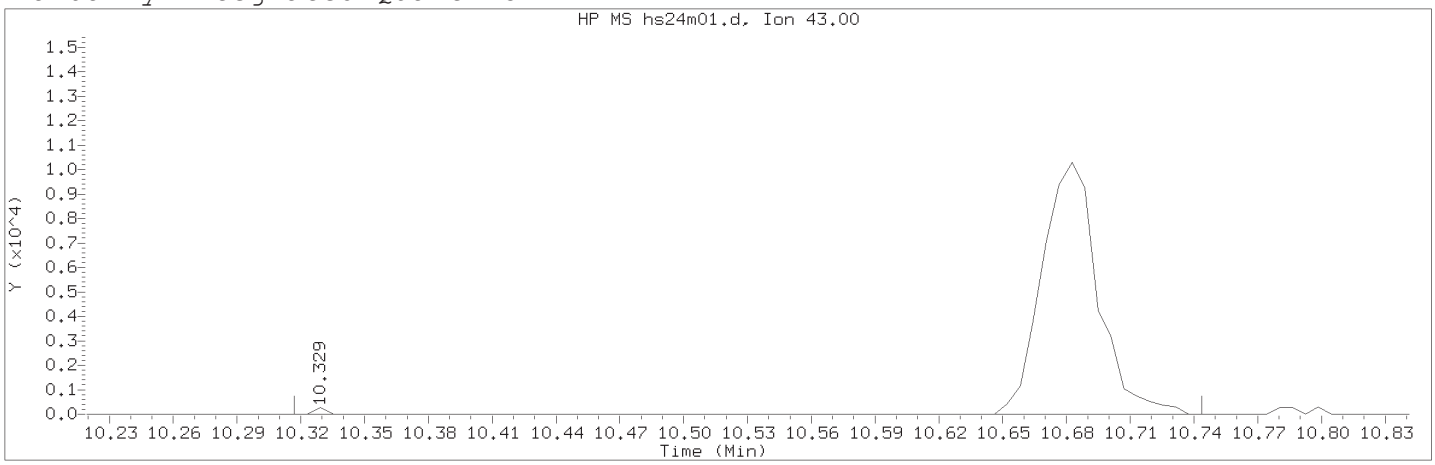
Compound Number	: 71		
Compound Name	: Methyl Methacrylate		
Scan Number	: 1175		
Retention Time (minutes)	: 8.750		
Quant Ion	: 69.00		
Area	: 3973		
On-column Amount (ng)	: 0.1576		
Integration start scan	: 1167	Integration stop scan:	1203
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

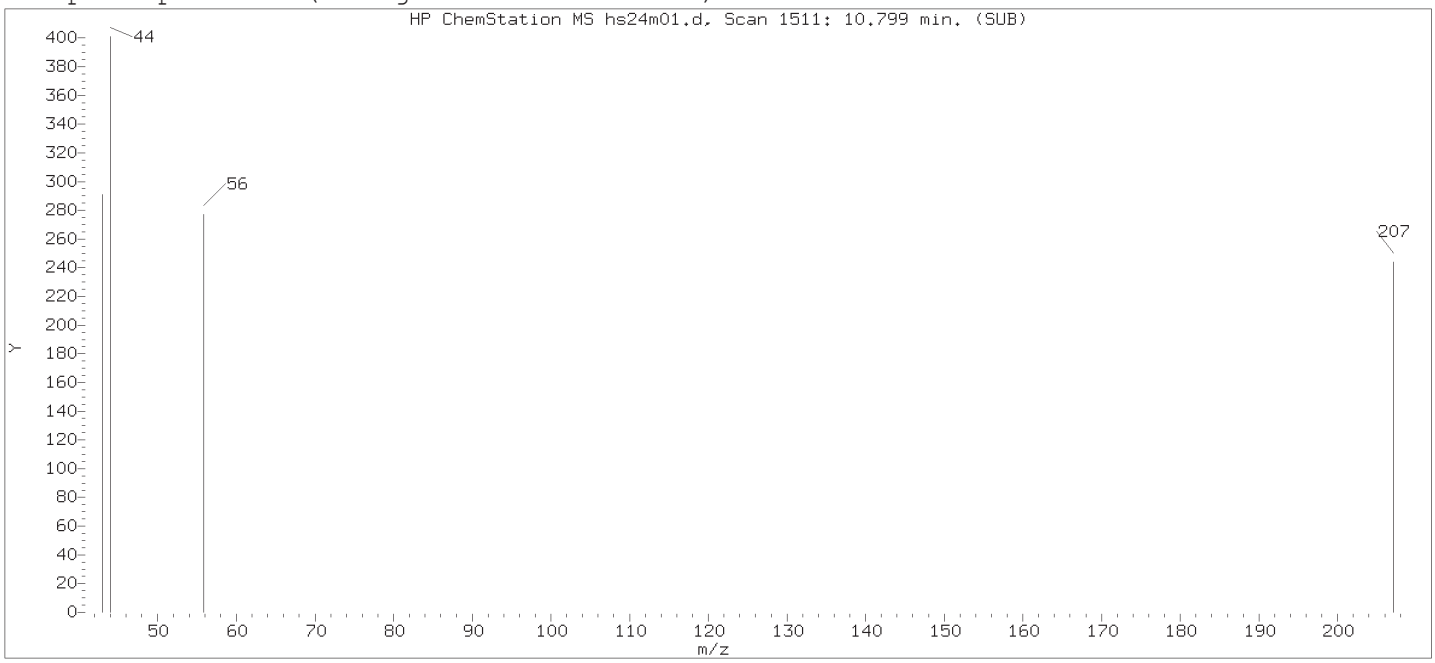
Compound Number : 91
Compound Name : 2-Hexanone
Scan Number : 1434
Retention Time (minutes): 10.329
Quant Ion : 43.00
Area (flag) : 19024A
On-Column Amount (ng) : 0.8165
Integration start scan : 1431 Integration stop scan: 1501
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

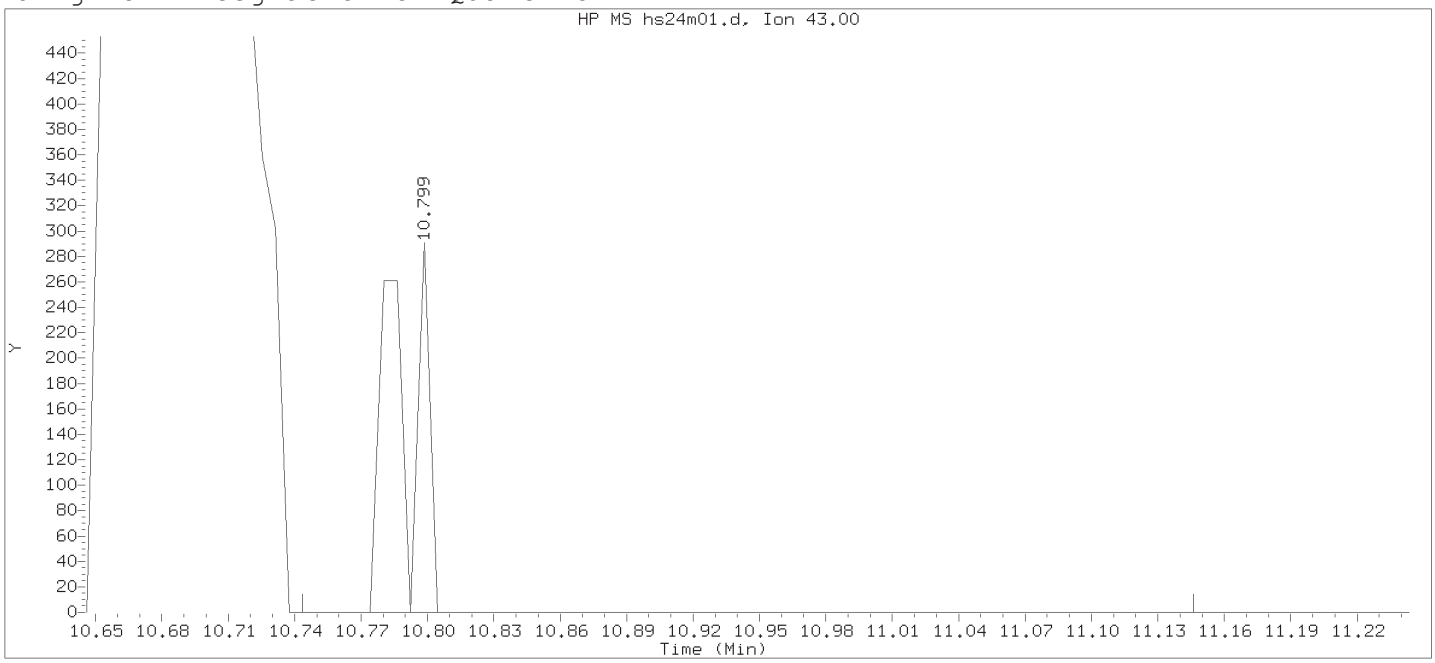
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

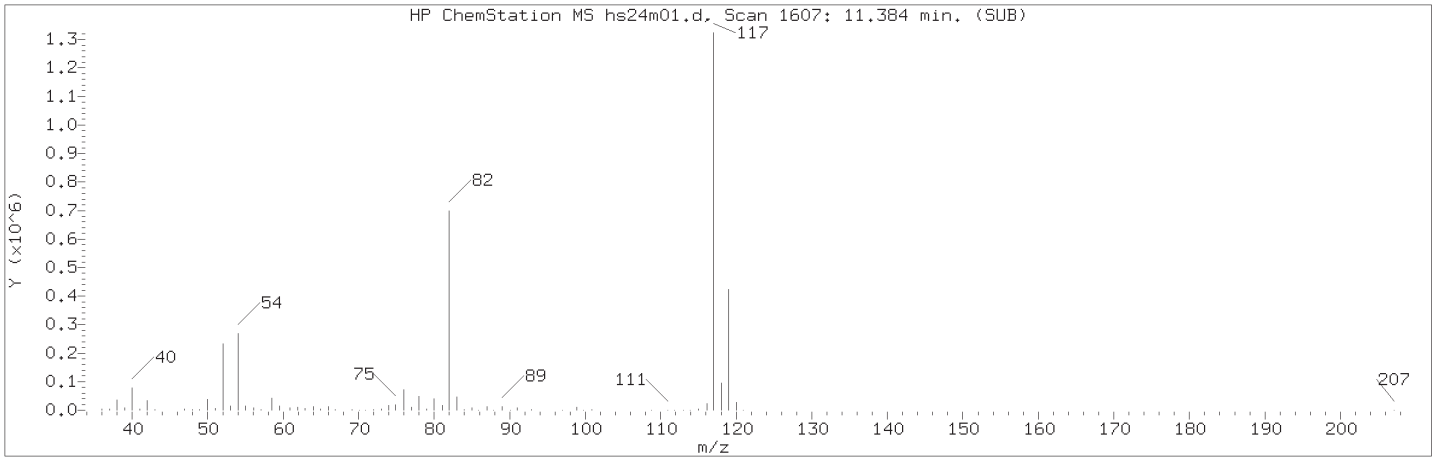
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

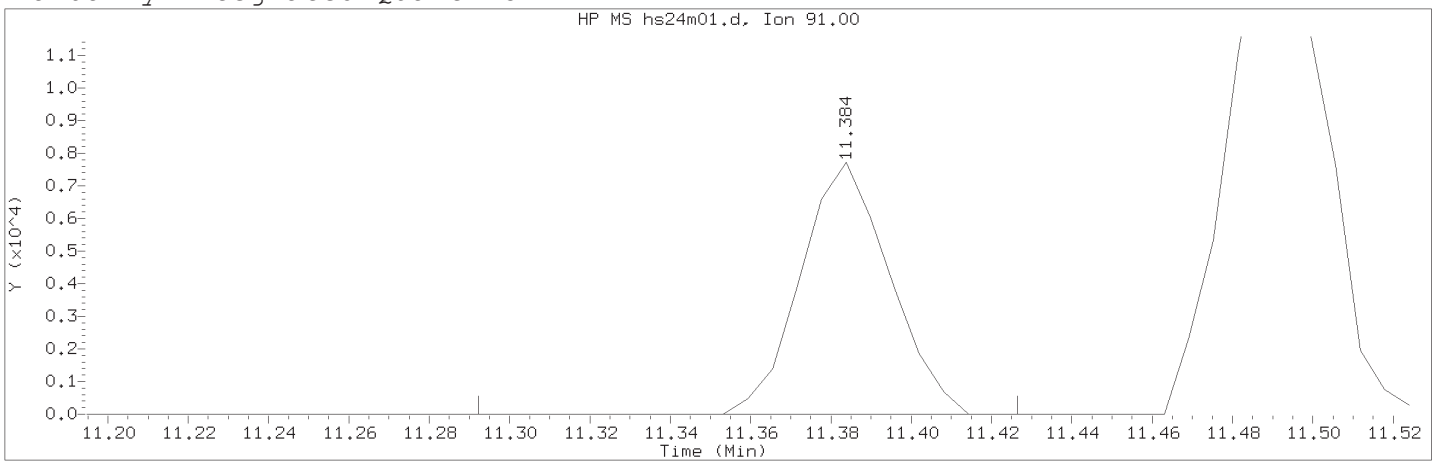
Compound Number : 91
Compound Name : 2-Hexanone
Scan Number : 1511
Retention Time (minutes): 10.799
Quant Ion : 43.00
Area : 297
On-column Amount (ng) : 0.0128
Integration start scan : 1501 Integration stop scan: 1567
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

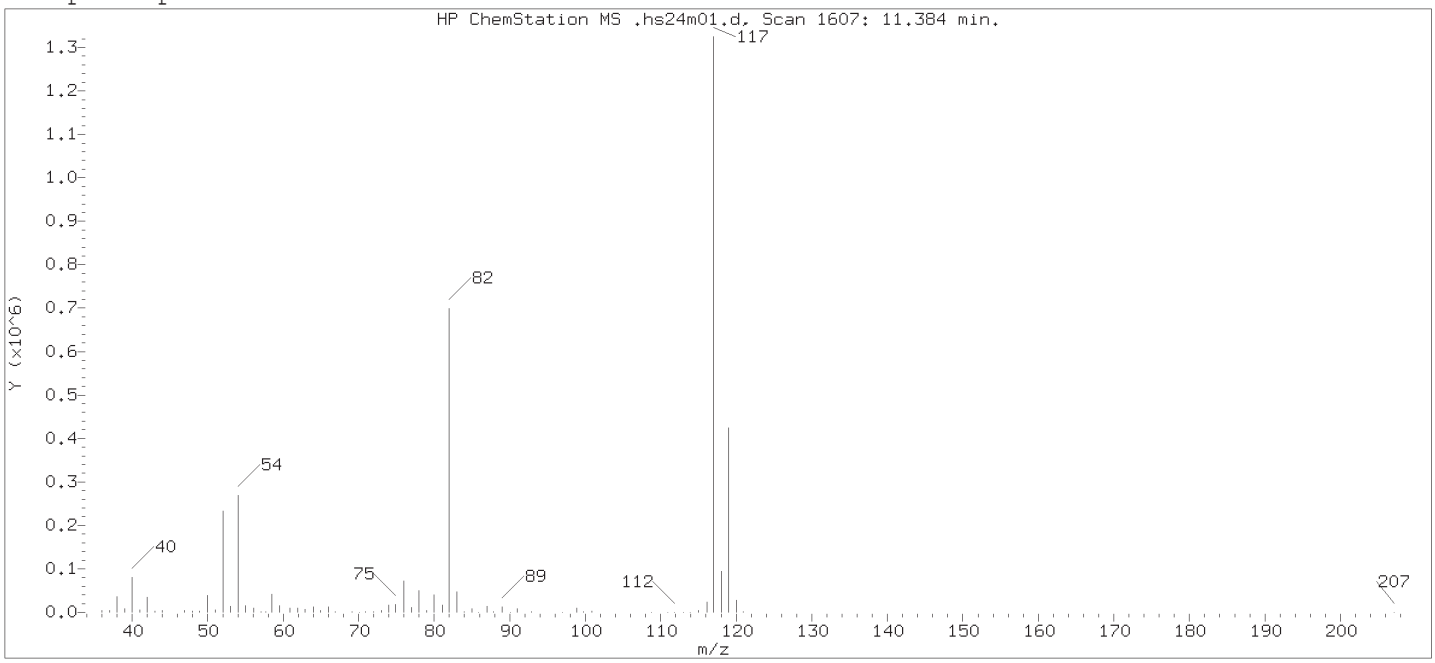
Compound Number : 96
Compound Name : 1-Chlorohexane
Scan Number : 1607
Retention Time (minutes): 11.384
Quant Ion : 91.00
Area (flag) : 11869M
On-Column Amount (ng) : 0.1239
Integration start scan : 1591 Integration stop scan: 1613
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

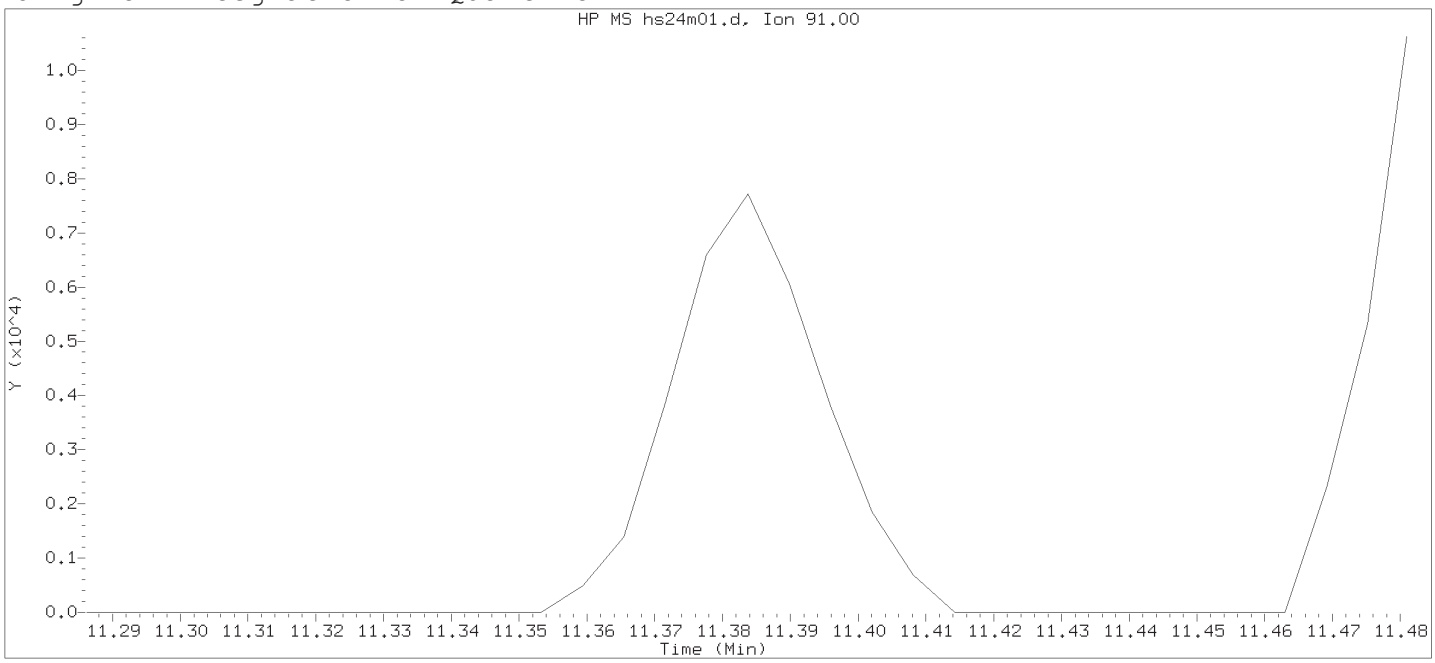
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

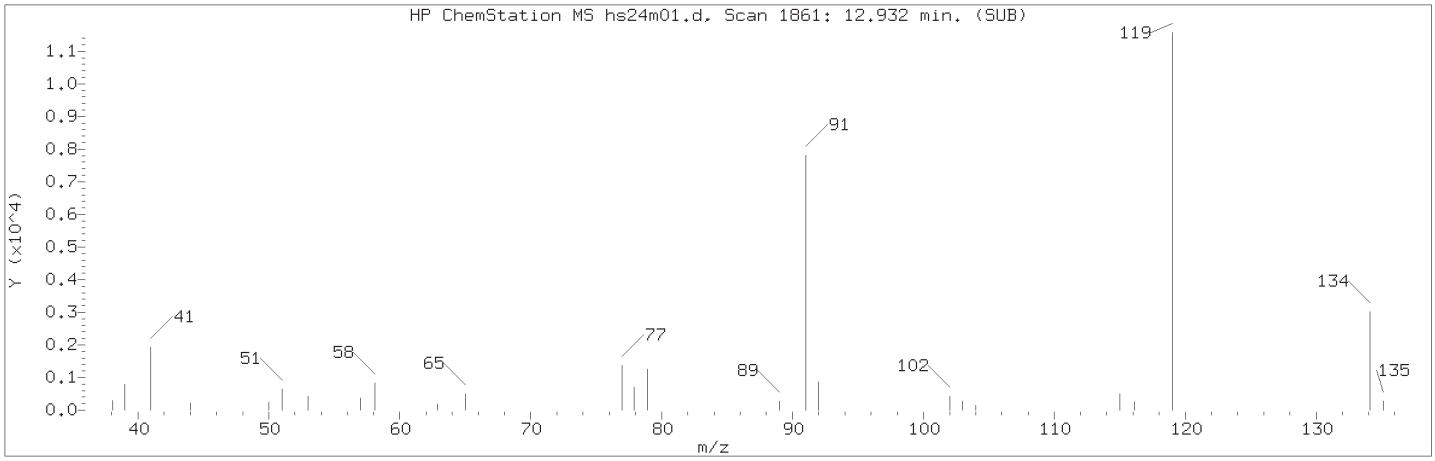
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

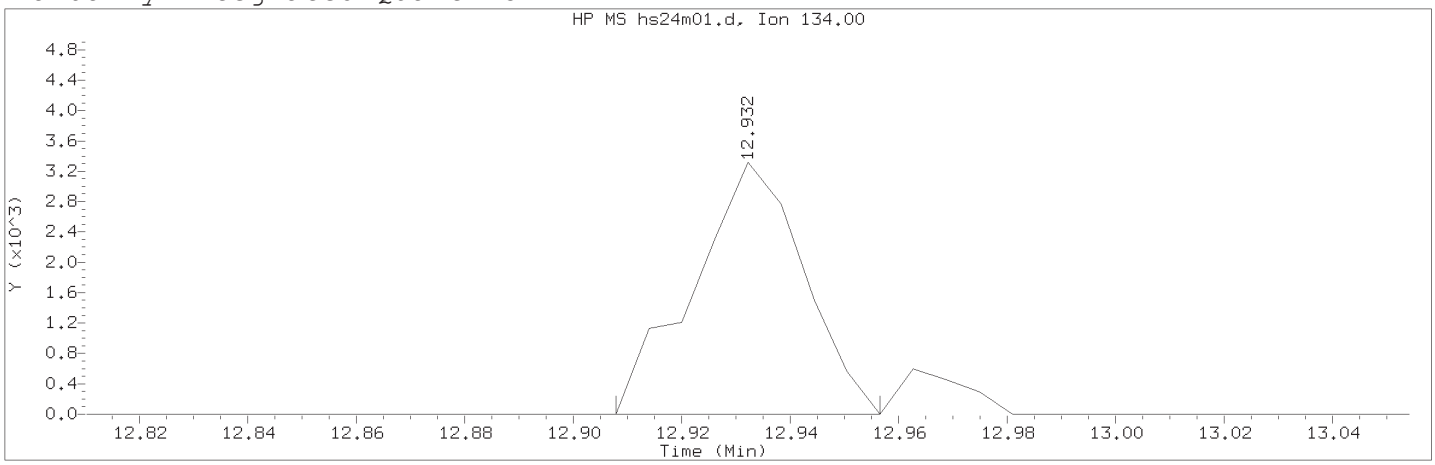
Compound Number : 96
Compound Name : 1-Chlorohexane
Expected RT (minutes) : 11.384
Quant Ion : 91.00

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

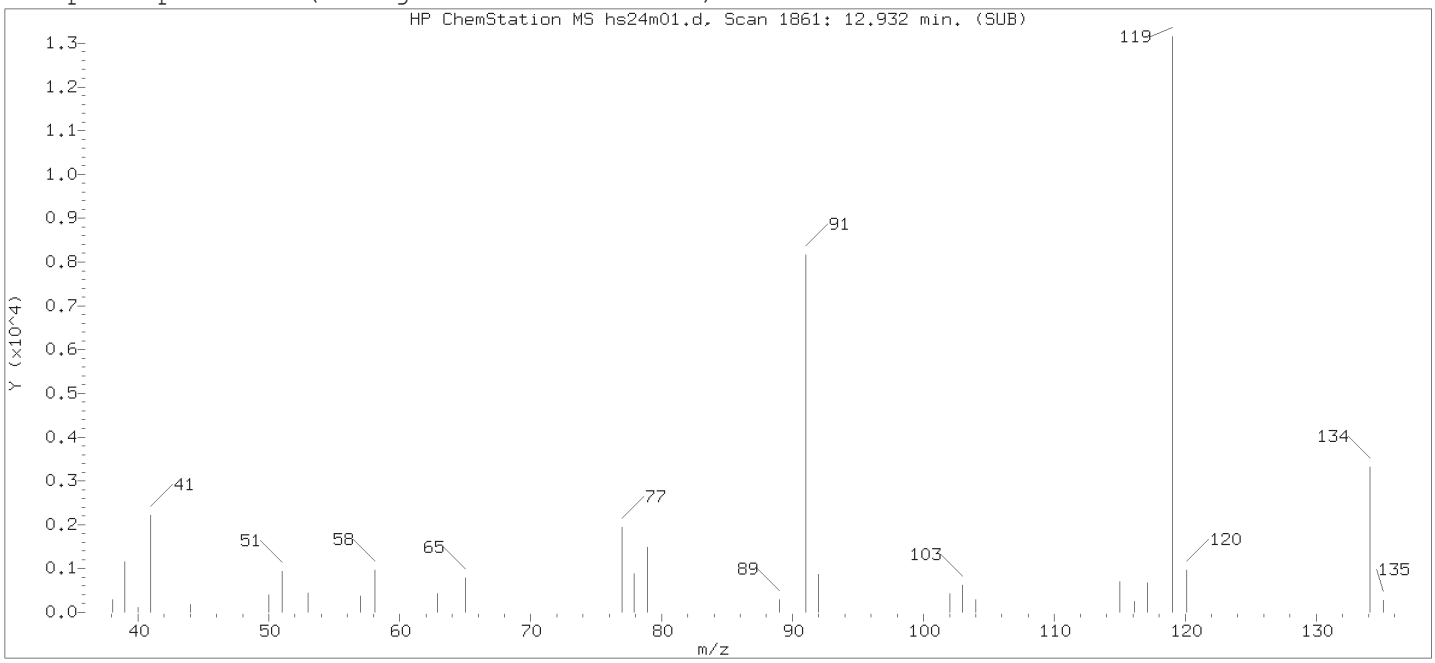
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area (flag) : 4681M
On-Column Amount (ng) : 0.0853
Integration start scan : 1856 Integration stop scan: 1864
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

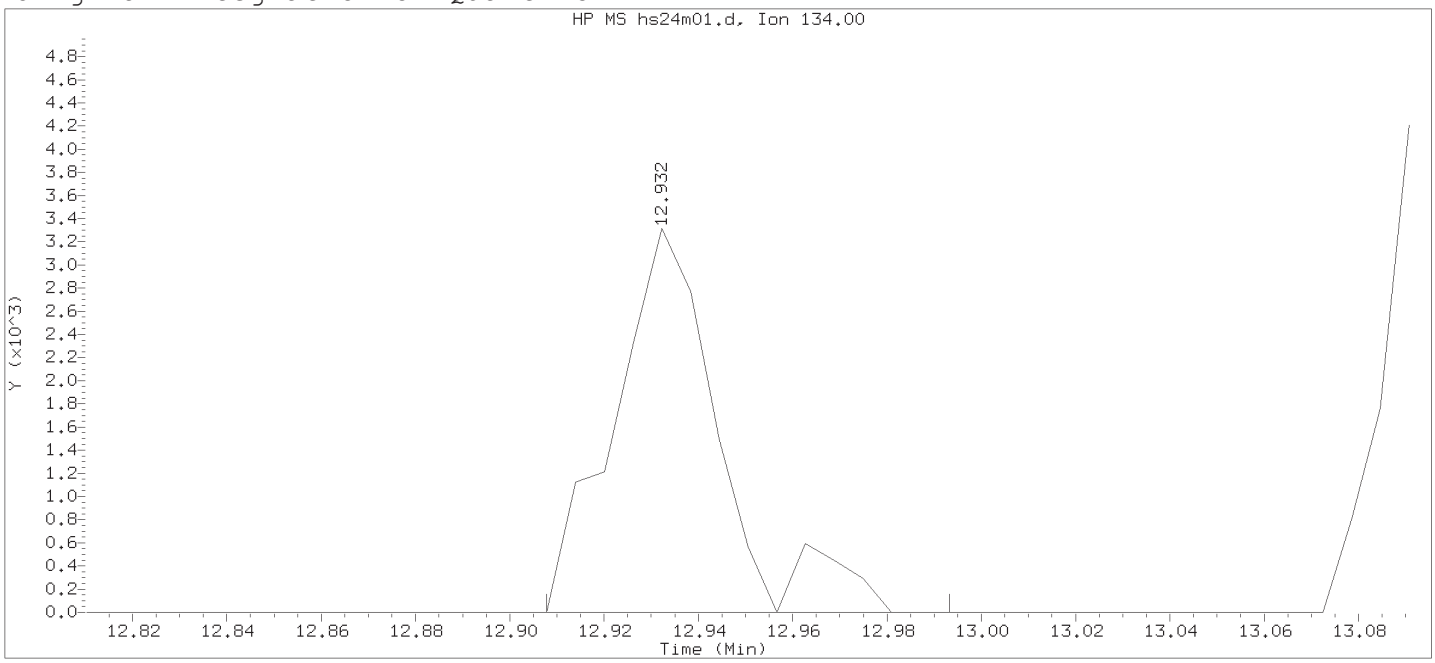
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

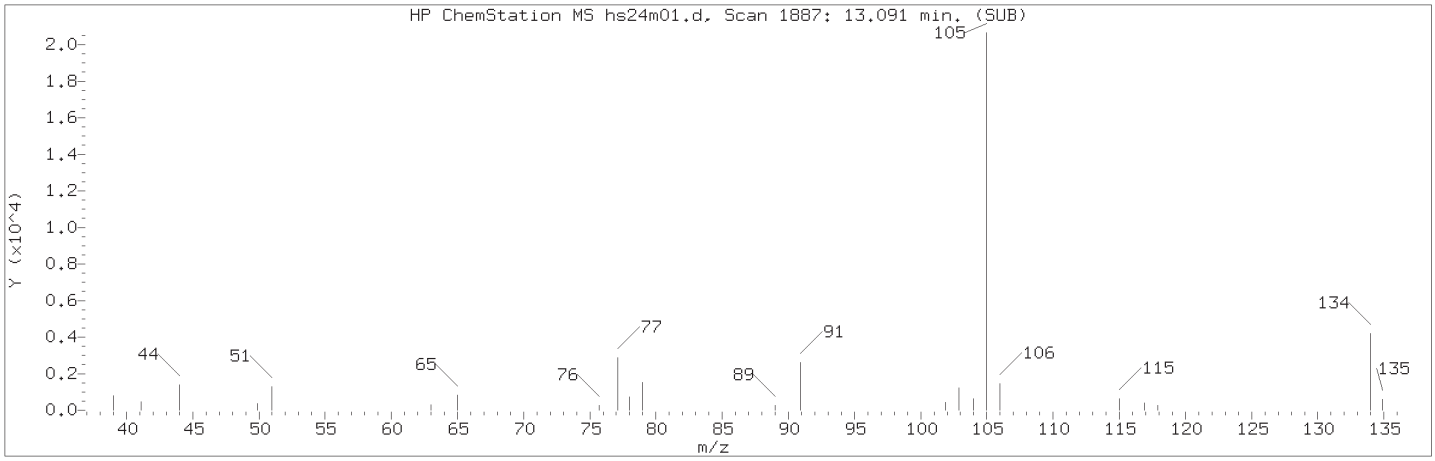
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

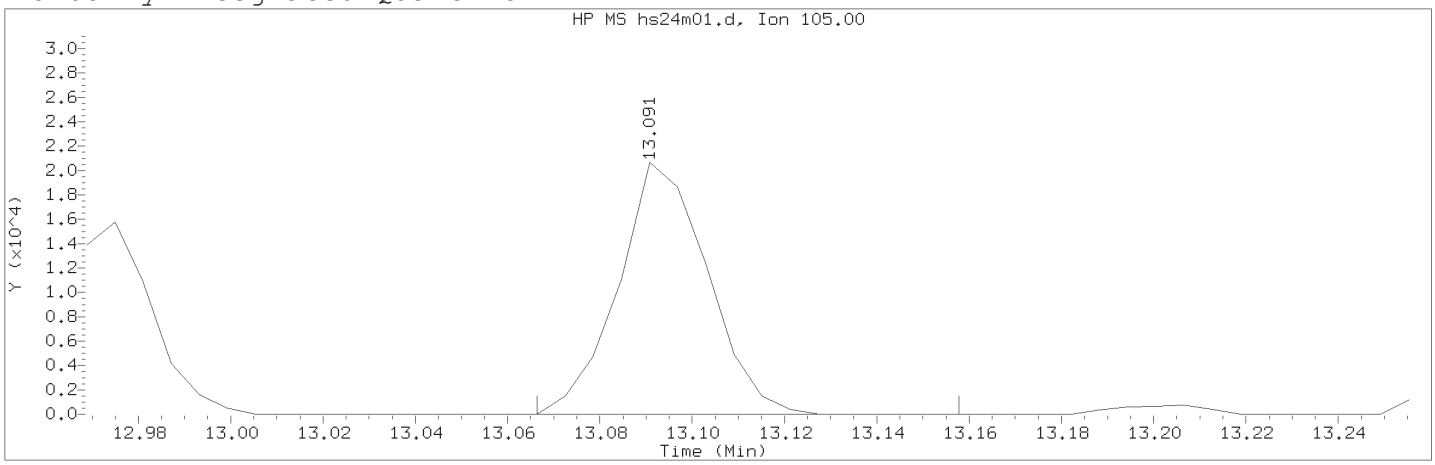
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area : 5170
On-column Amount (ng) : 0.0909
Integration start scan : 1856 Integration stop scan: 1870
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

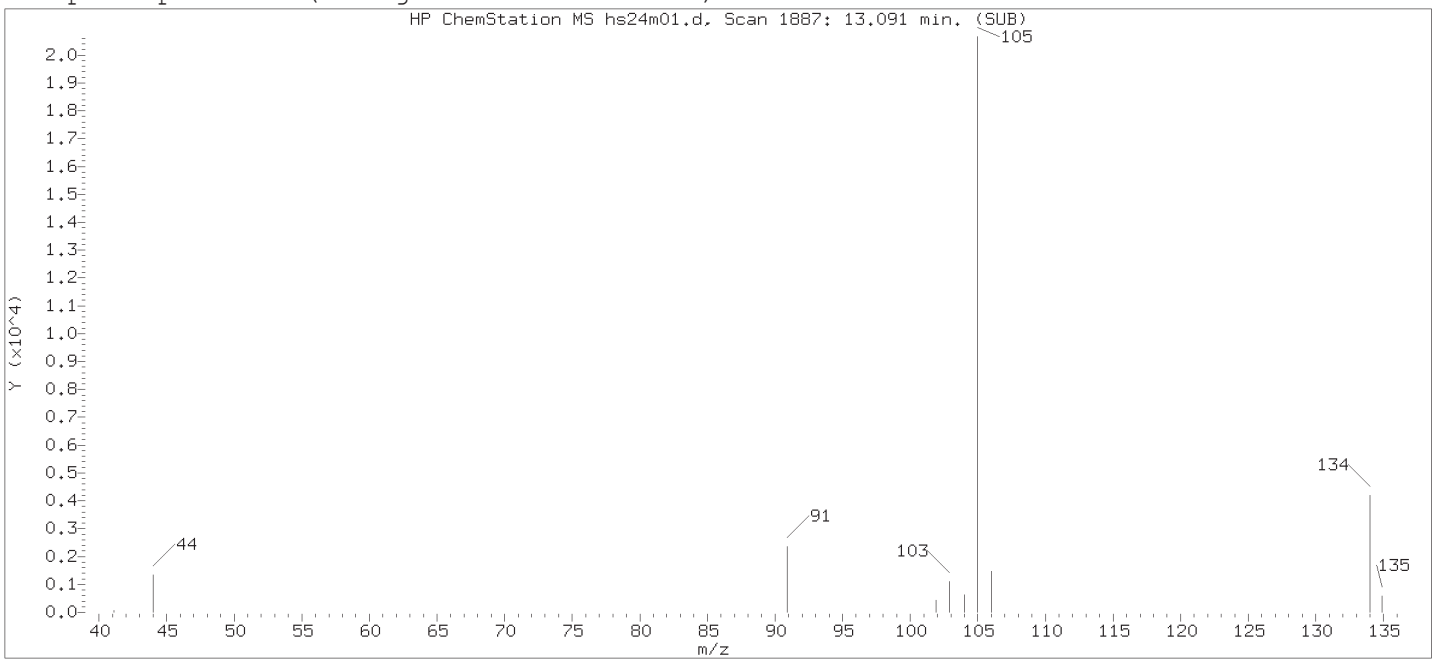
Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1887
Retention Time (minutes): 13.091
Quant Ion : 105.00
Area (flag) : 27687M
On-Column Amount (ng) : 0.0847
Integration start scan : 1882 Integration stop scan: 1897
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

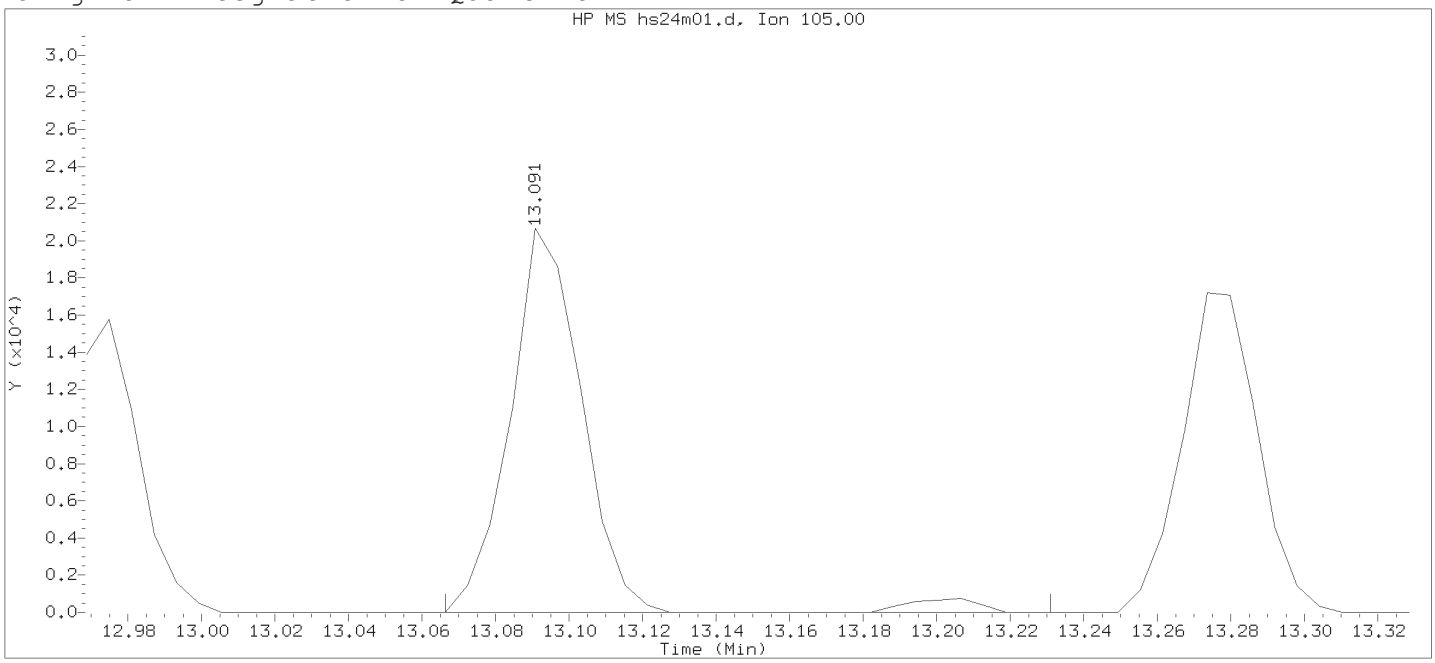
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

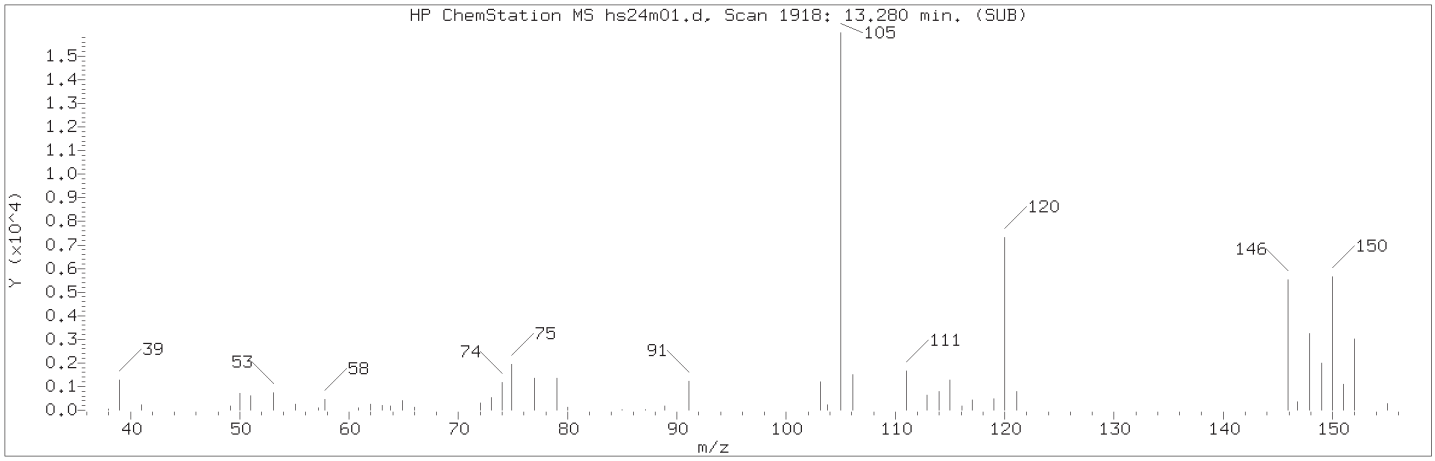
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

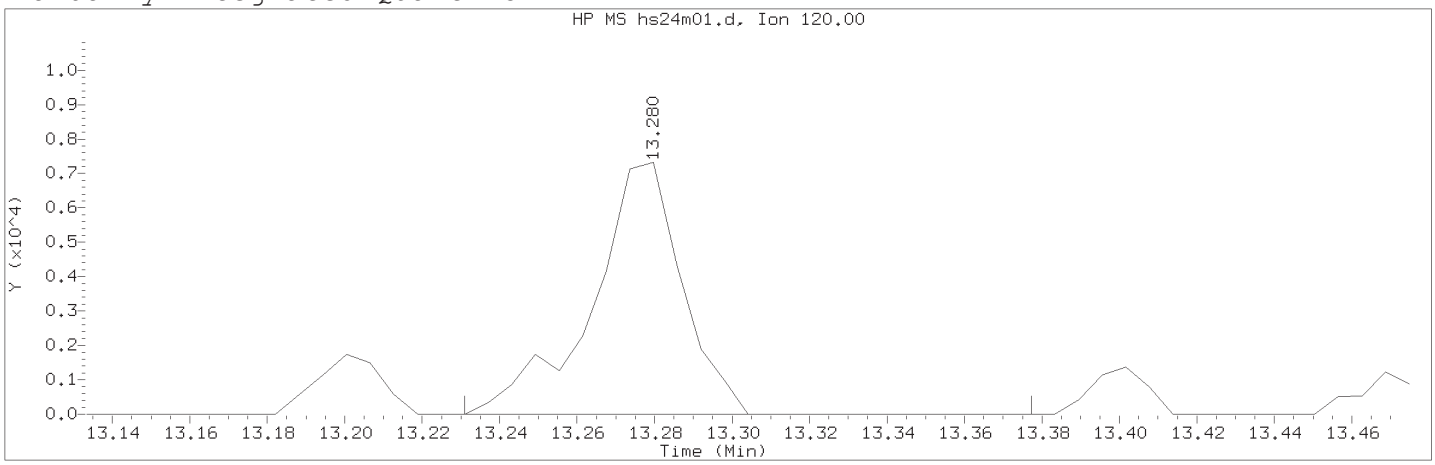
Compound Number	: 128		
Compound Name	: sec-Butylbenzene		
Scan Number	: 1887		
Retention Time (minutes)	: 13.091		
Quant Ion	: 105.00		
Area	: 28686		
On-column Amount (ng)	: 0.0875		
Integration start scan	: 1882	Integration stop scan:	1909
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

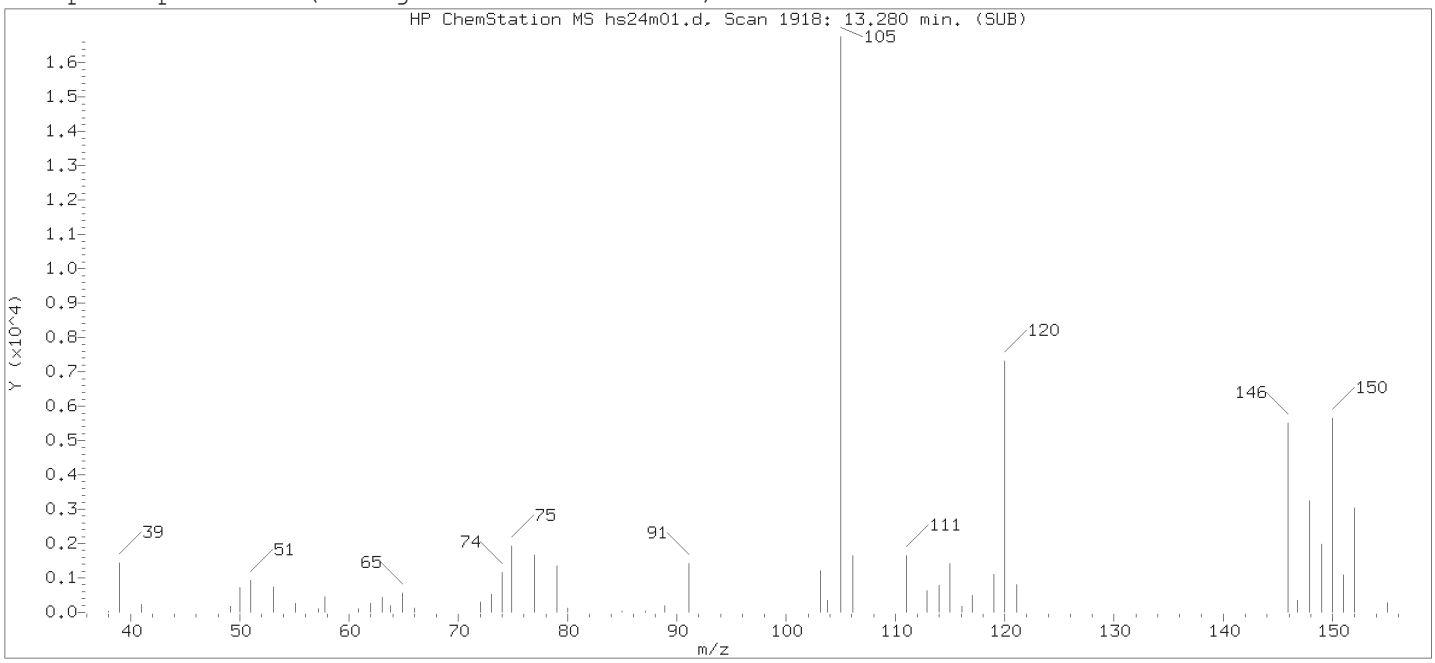
Compound Number : 135
Compound Name : 1,2,3-Trimethylbenzene
Scan Number : 1918
Retention Time (minutes): 13.280
Quant Ion : 120.00
Area (flag) : 11819M
On-Column Amount (ng) : 0.1001
Integration start scan : 1909 Integration stop scan: 1933
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

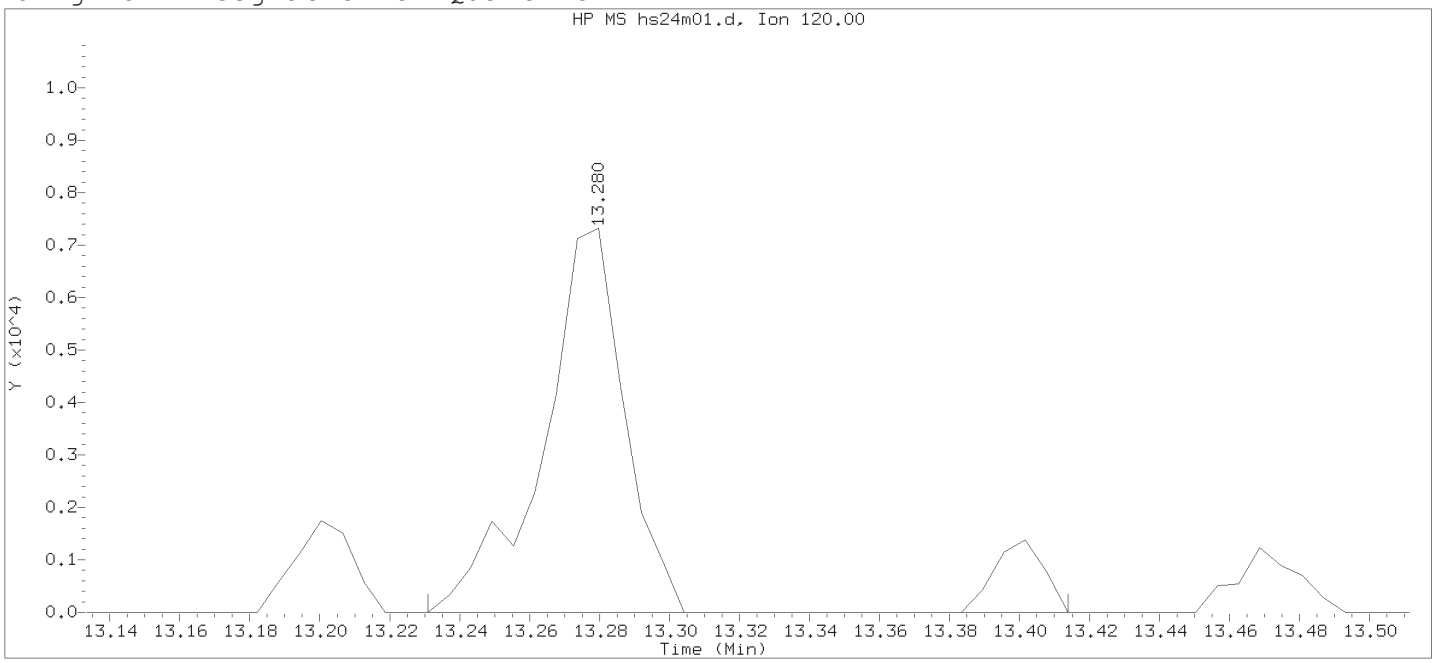
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

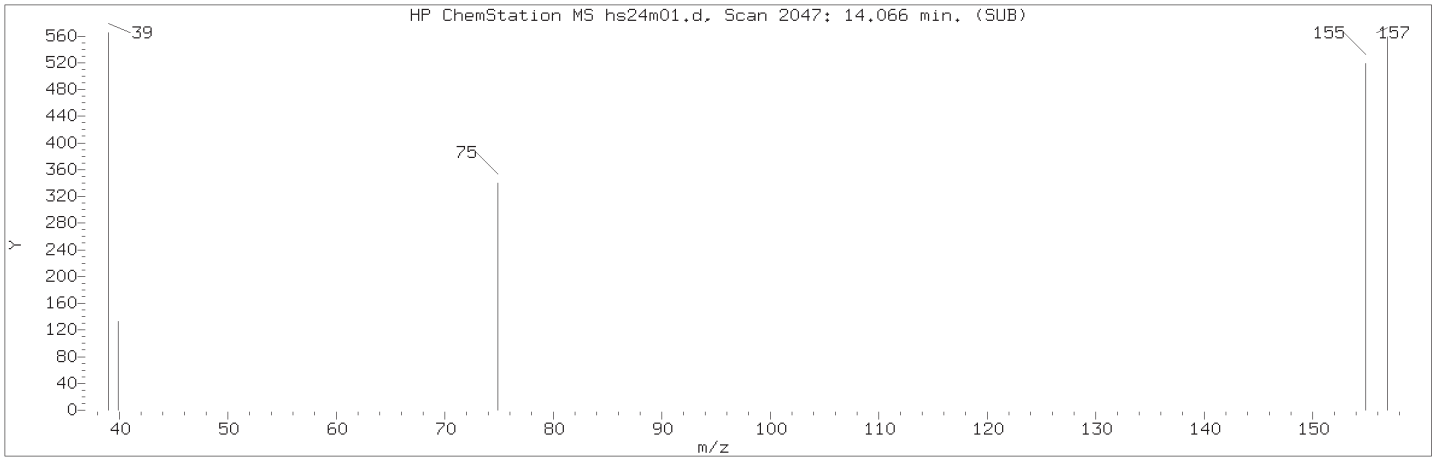
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

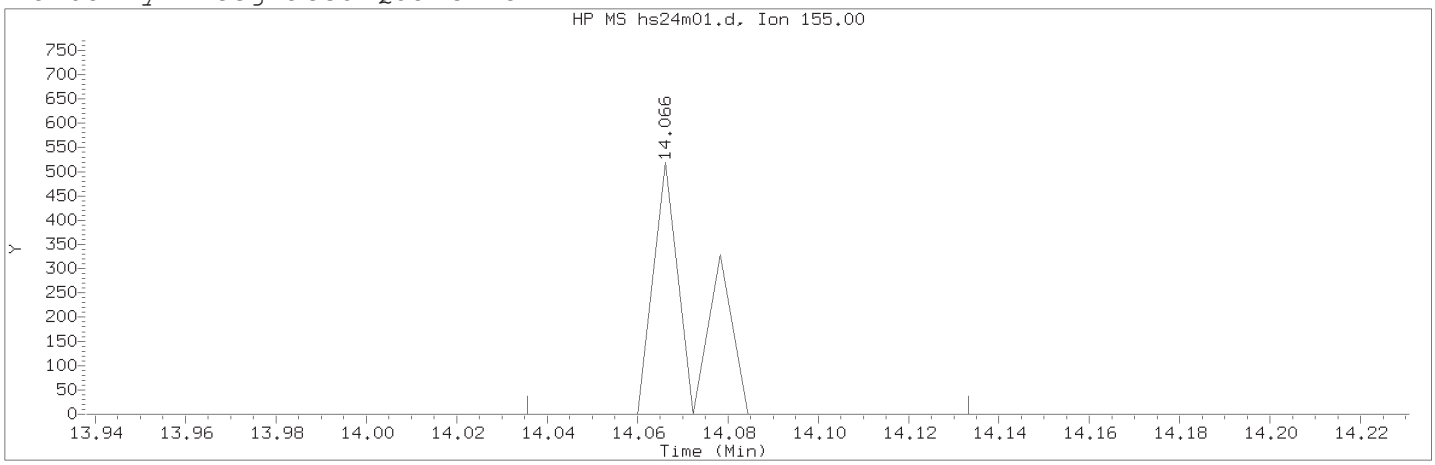
Compound Number : 135
Compound Name : 1,2,3-Trimethylbenzene
Scan Number : 1918
Retention Time (minutes): 13.280
Quant Ion : 120.00
Area : 13186
On-column Amount (ng) : 0.1095
Integration start scan : 1909 Integration stop scan: 1939
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 07:26
Date, time and analyst ID of latest file update: 25-Sep-2018 07:28 jkh09052

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

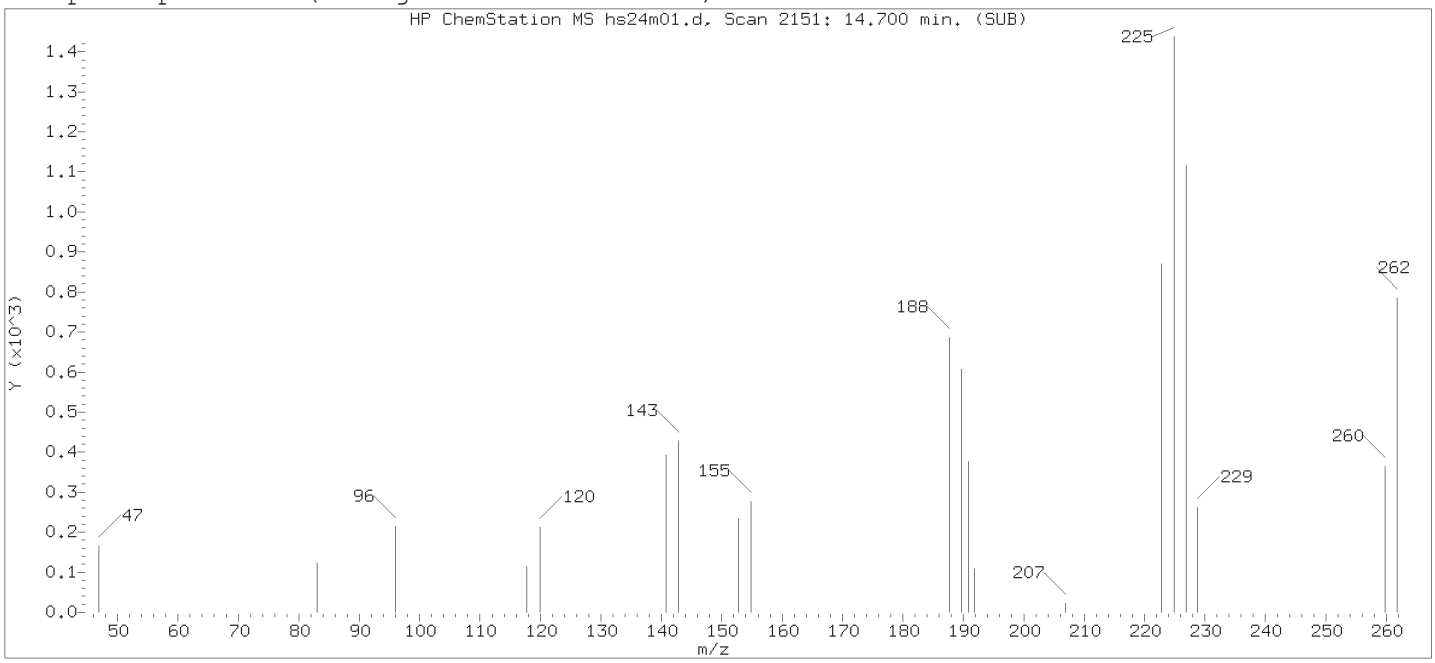
Compound Number : 143
Compound Name : 1,2-Dibromo-3-chloropropane
Scan Number : 2047
Retention Time (minutes): 14.066
Quant Ion : 155.00
Area (flag) : 310M
On-Column Amount (ng) : 0.0535
Integration start scan : 2041 Integration stop scan: 2057
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

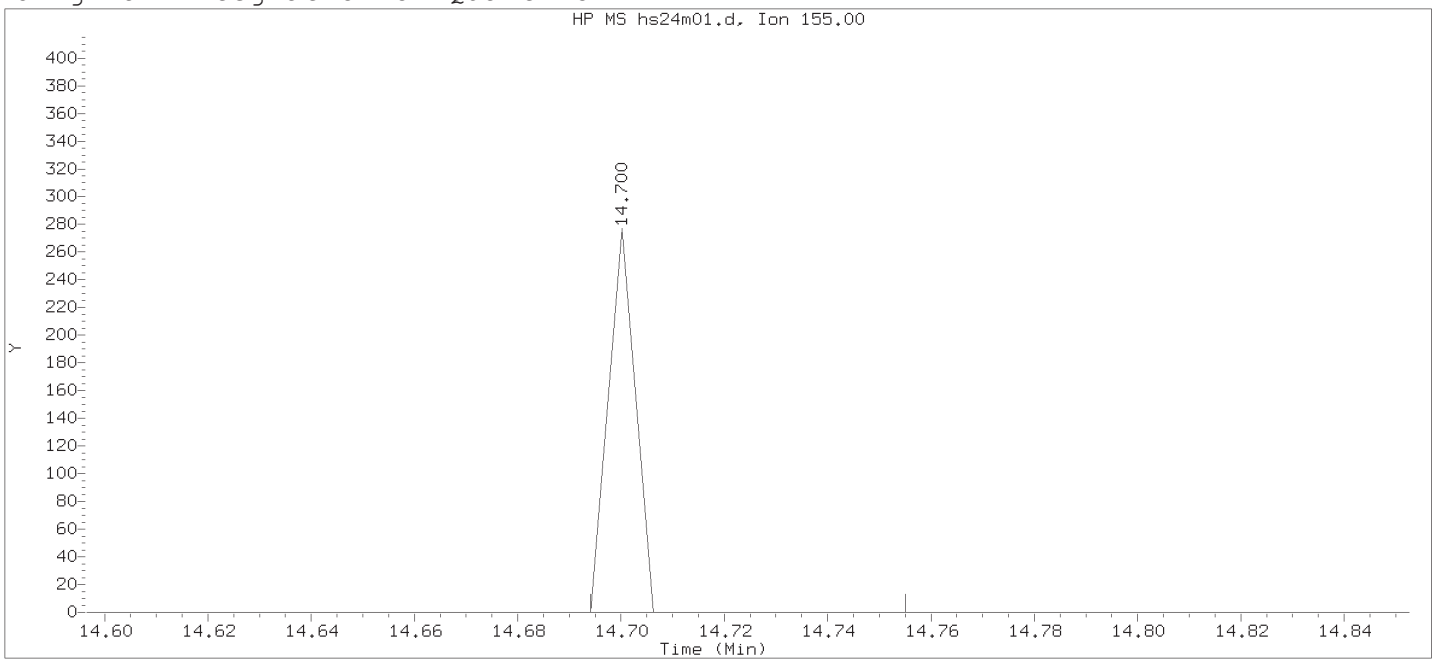
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 07:30.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



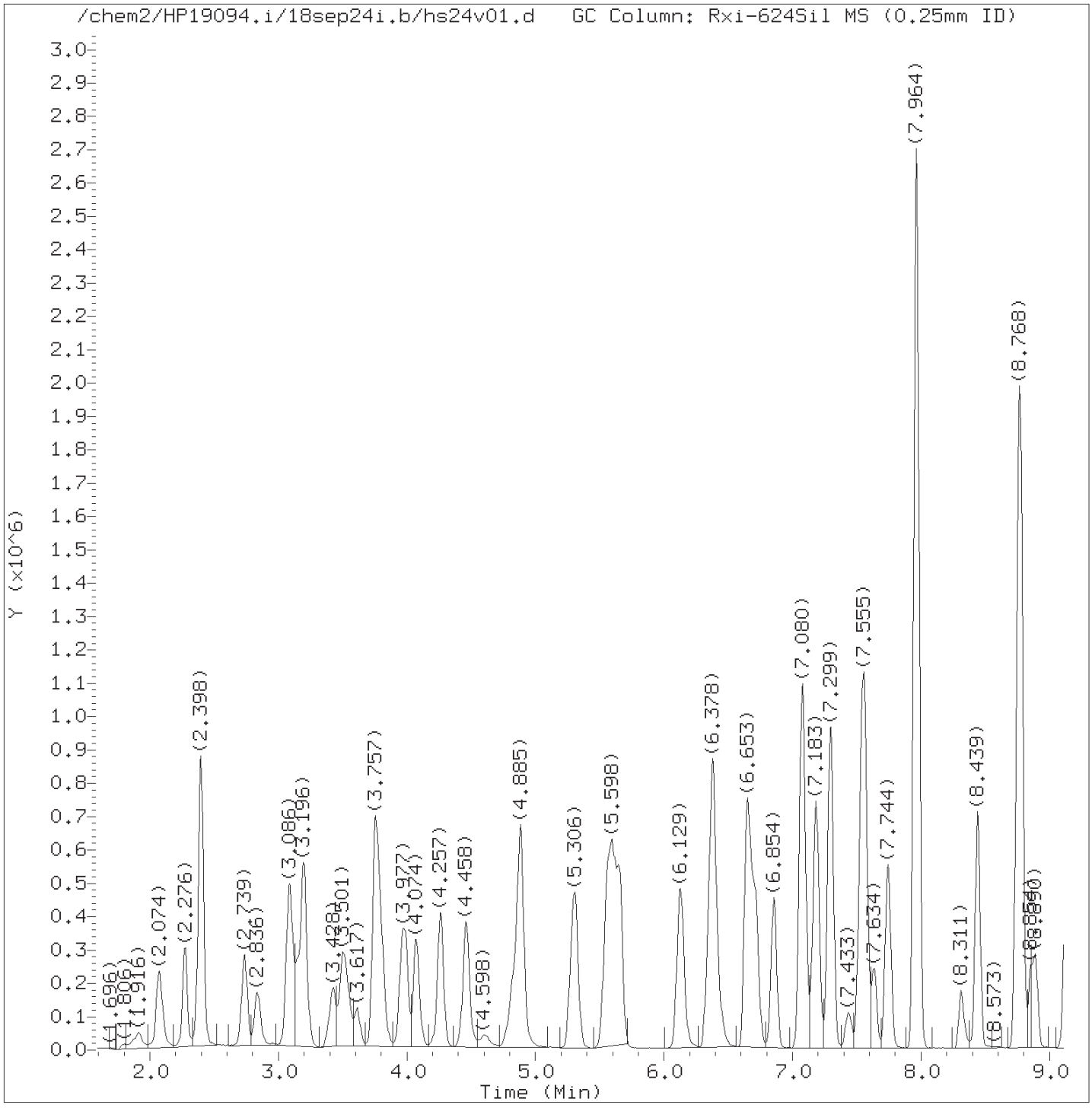
Data File: /chem2/HP19094.i/18sep24i.b/hs24m01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 20:59 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:17 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compound Number : 143
Compound Name : 1,2-Dibromo-3-chloropropane
Scan Number : 2151
Retention Time (minutes): 14.700
Quant Ion : 155.00
Area : 101
On-column Amount (ng) : 0.0343
Integration start scan : 2149 Integration stop scan: 2159
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 07:30.
Target 3.5 esignature user id: jkh09052



Total Ion Chromatogram (TIC)

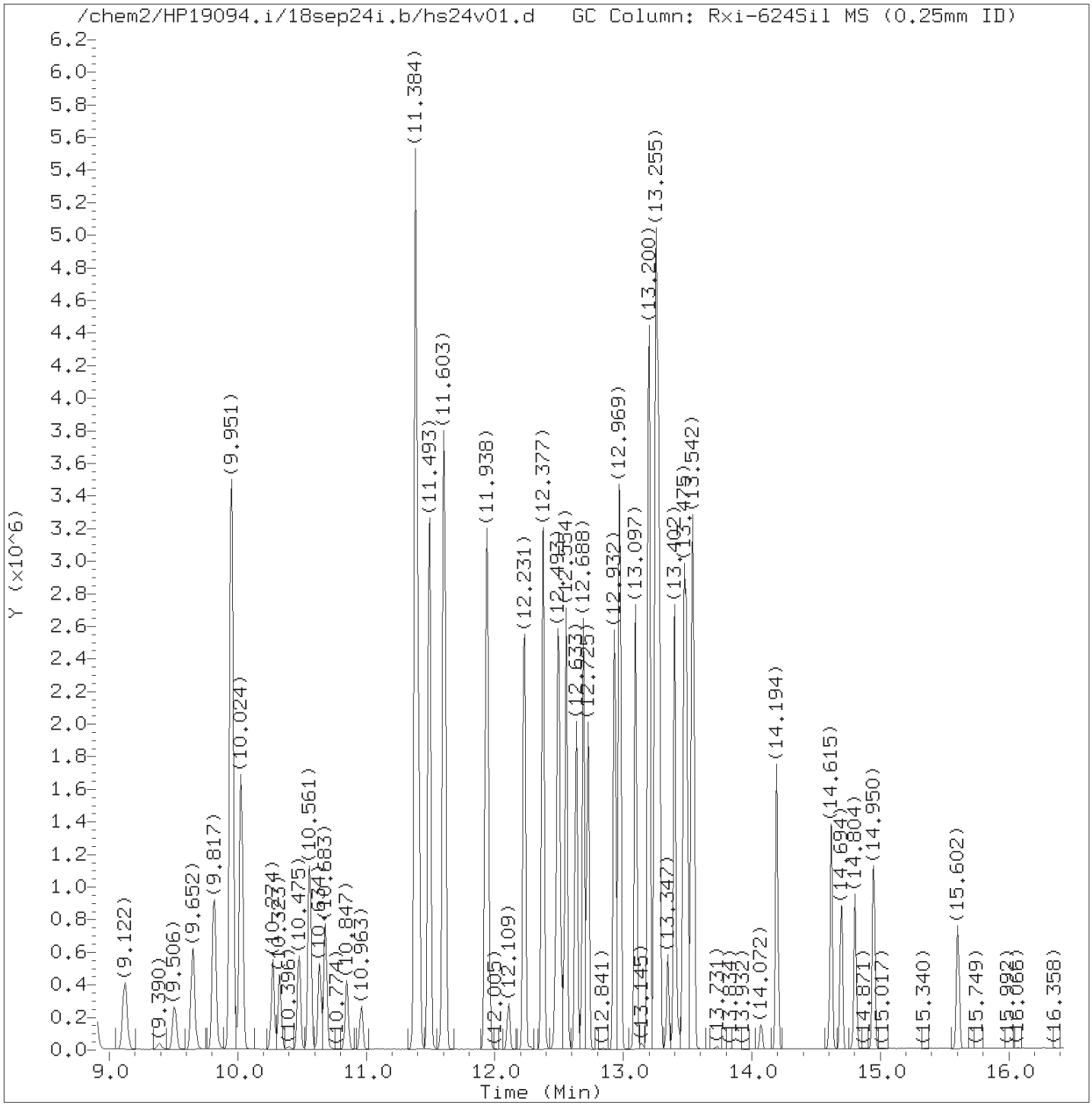
Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.074	85	440976	4.058
2) Chloromethane	(2)	2.270	50	486139	4.568
6) 1,3-Butadiene	(2)	2.391	39	470828M	4.171
5) Vinyl Chloride	(2)	2.398	62	471500	4.731
7) Bromomethane	(2)	2.739	94	321337	4.148
8) Chloroethane	(2)	2.836	64	272329	4.506
9) Dichlorofluoromethane	(2)	3.080	67	691996	4.813
10) Trichlorofluoromethane	(2)	3.147	101	560449	4.452
11) Ethyl ether	(2)	3.422	59	196604	4.606
12) Freon 123a	(2)	3.513	67	411851	5.164
13) Acrolein	(1)	3.617	56	199575	31.768
15) 1,1-Dichloroethene	(2)	3.751	96	307467	5.640
16) Freon 113	(2)	3.781	101	338841	5.274
14) Acetone	(1)	3.794	43	273073M	32.363
17) Methyl Iodide	(2)	3.958	142	551496	4.853
18) Carbon Disulfide	(2)	4.068	76	828724	4.777
21) Methyl Acetate	(1)	4.239	43	101587	4.289
22) Allyl Chloride	(2)	4.263	41	468004	4.516
23) Methylene Chloride	(2)	4.458	84	304627	4.953
26)*t-Butyl Alcohol-d10	(1)	4.489	65	141569	50.000
28) t-Butyl Alcohol	(1)	4.598	59	116690	48.290
29) Acrylonitrile	(1)	4.824	53	251882	23.115
30) Methyl Tertiary Butyl Ether	(2)	4.867	73	551498	4.919
31) trans-1,2-Dichloroethene	(2)	4.885	96	329189	5.350
32) n-Hexane	(2)	5.306	57	503625	5.148
33) 1,1-Dichloroethane	(2)	5.549	63	610622	5.212
34) di-Isopropyl Ether	(2)	5.598	45	1043824	5.017
35) 2-Chloro-1,3-Butadiene	(2)	5.653	53	529192	5.020
40) 1,2-Dichloroethene (Total)	(2)		96	691269	10.676
37) Ethyl t-butyl ether	(2)	6.129	59	800829	4.853
38) 2-Butanone	(1)	6.342	43	487401	35.288
39) cis-1,2-Dichloroethene	(2)	6.378	96	362080	5.326
41) 2,2-Dichloropropane	(2)	6.391	77	445489	5.324
42) Propionitrile	(1)	6.446	54	141875	37.842
45) Methacrylonitrile	(1)	6.653	67	482254	35.674
47) Bromochloromethane	(2)	6.708	128	130394	4.540
48) Tetrahydrofuran	(1)	6.714	71	86737	23.621
49) Chloroform	(2)	6.854	83	582593	5.349

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.073	113	703609	10.041
51) 1,1,1-Trichloroethane	(2)	7.086	97	494400	5.307
52) Cyclohexane	(2)	7.183	56	614255	5.051
55) 1,1-Dichloropropene	(2)	7.293	75	459498	5.201
54) Carbon Tetrachloride	(2)	7.299	117	423304	5.290
56) Isobutyl Alcohol	(1)	7.439	41	113054	120.918
57)$1,2-Dichloroethane-d4	(2)	7.531	102	123305	10.093
58) Benzene	(2)	7.561	78	1335484	5.117
59) 1,2-Dichloroethane	(2)	7.634	62	300394	5.002
60) t-Amyl methyl ether	(2)	7.744	73	666761	4.874
62) n-Heptane	(2)	7.964	43	519392	5.149
63)*Fluorobenzene	(2)	7.964	96	2780415	10.000
65) n-Butanol	(1)	8.311	56	183017	231.696
67) Trichloroethene	(2)	8.439	95	348659	5.218
69) Methylcyclohexane	(2)	8.756	83	590929	4.683
70) 1,2-Dichloropropane	(2)	8.780	63	327981	5.180
71) Methyl Methacrylate	(1)	8.854	69	118997	4.756
72) 1,4-Dioxane	(1)	8.878	88	23983M	126.103
73) Dibromomethane	(2)	8.890	93	135470	5.155
74) Bromodichloromethane	(2)	9.122	83	375174	5.270
76) 2-Nitropropane	(1)	9.390	41	29112	4.107
80) cis-1,3-Dichloropropene	(2)	9.652	75	421726	5.089
81) 4-Methyl-2-Pentanone	(1)	9.817	43	797497	23.212
82)$Toluene-d8	(3)	9.951	98	2812308	10.016
83) Toluene	(3)	10.024	92	831326	5.135
85) 1,3-Dichloropropene (total)	(3)		75	738103	10.160
84) trans-1,3-Dichloropropene	(3)	10.274	75	316377	5.072
86) Ethyl Methacrylate	(3)	10.329	69	258646	4.840
88) 1,1,2-Trichloroethane	(3)	10.475	97	194331	5.216
89) Tetrachloroethene	(3)	10.561	166	376715	5.150
90) 1,3-Dichloropropane	(3)	10.634	76	329045	4.984
91) 2-Hexanone	(1)	10.683	43	532351	22.763
93) Dibromochloromethane	(3)	10.847	129	230894	5.171
95) 1,2-Dibromoethane	(3)	10.963	107	179555	5.142
96) 1-Chlorohexane	(3)	11.384	91	476940M	4.939
97)*Chlorobenzene-d5	(3)	11.384	117	2181583	10.000
98) Chlorobenzene	(3)	11.408	112	870508	5.068
99) 1,1,1,2-Tetrachloroethane	(3)	11.487	131	291823	5.148

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

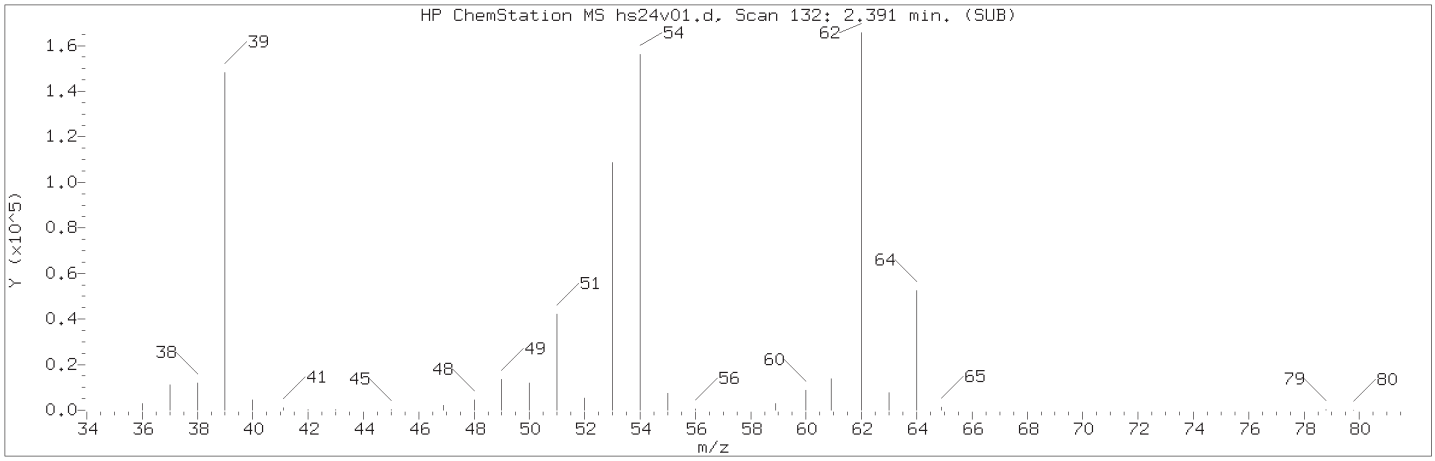
Sample Name: ICVHLG Lab Sample ID: ICVHLG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
100) Ethylbenzene	(3)	11.493	91	1615822	5.107
101) m+p-Xylene	(3)	11.603	106	1211106	10.320
105) Xylene (Total)	(3)		106	1782147	15.409
104) o-Xylene	(3)	11.932	106	571041	5.089
106) Styrene	(3)	11.944	104	940841	5.241
107) Bromoform	(3)	12.109	173	123890	5.049
108) Isopropylbenzene	(3)	12.231	105	1599849	5.223
111)$4-Bromofluorobenzene	(3)	12.371	95	1014976	9.929
113) 1,1,2,2-Tetrachloroethane	(4)	12.469	83	224147	4.994
114) Bromobenzene	(4)	12.493	156	351229	5.148
115) trans-1,4-Dichloro-2-butene	(1)	12.499	53	259900	24.153
116) 1,2,3-Trichloropropane	(4)	12.524	110	57126M	4.923
117) n-Propylbenzene	(4)	12.554	91	1935469	5.217
119) 2-Chlorotoluene	(4)	12.633	126	367412	5.106
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	1293562	5.147
122) 4-Chlorotoluene	(4)	12.725	126	368733	5.114
125) tert-Butylbenzene	(4)	12.932	134	278567M	5.097
126) Pentachloroethane	(4)	12.969	167	207735	4.870
127) 1,2,4-Trimethylbenzene	(4)	12.975	105	1301652	5.076
128) sec-Butylbenzene	(4)	13.097	105	1707856	5.244
131) 1,3-Dichlorobenzene	(4)	13.194	146	680593	5.021
132) p-Isopropyltoluene	(4)	13.200	119	1416458	5.251
133)*1,4-Dichlorobenzene-d4	(4)	13.255	152	1131416	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	676511	5.084
135) 1,2,3-Trimethylbenzene	(4)	13.280	120	562245	4.779
136) Benzyl Chloride	(4)	13.347	126	76709M	4.728
138) n-Butylbenzene	(4)	13.493	92	700126	5.229
139) 1,2-Dichlorobenzene	(4)	13.530	146	599568	5.013
143) 1,2-Dibromo-3-chloropropane	(1)	14.072	155	30890M	5.304
144) 1,3,5-Trichlorobenzene	(4)	14.194	180	509846	5.056
145) 1,2,4-Trichlorobenzene	(4)	14.621	180	415513	5.058
146) Hexachlorobutadiene	(4)	14.700	225	160319	5.164
147) Naphthalene	(4)	14.804	128	675168	5.194
148) 1,2,3-Trichlorobenzene	(4)	14.950	180	346080	5.124

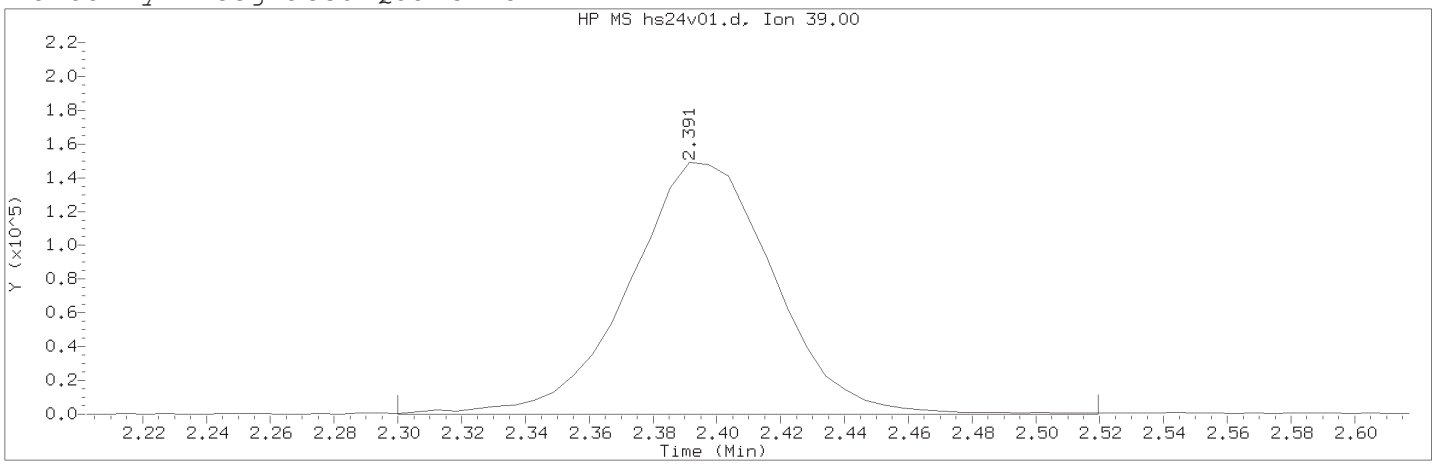
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

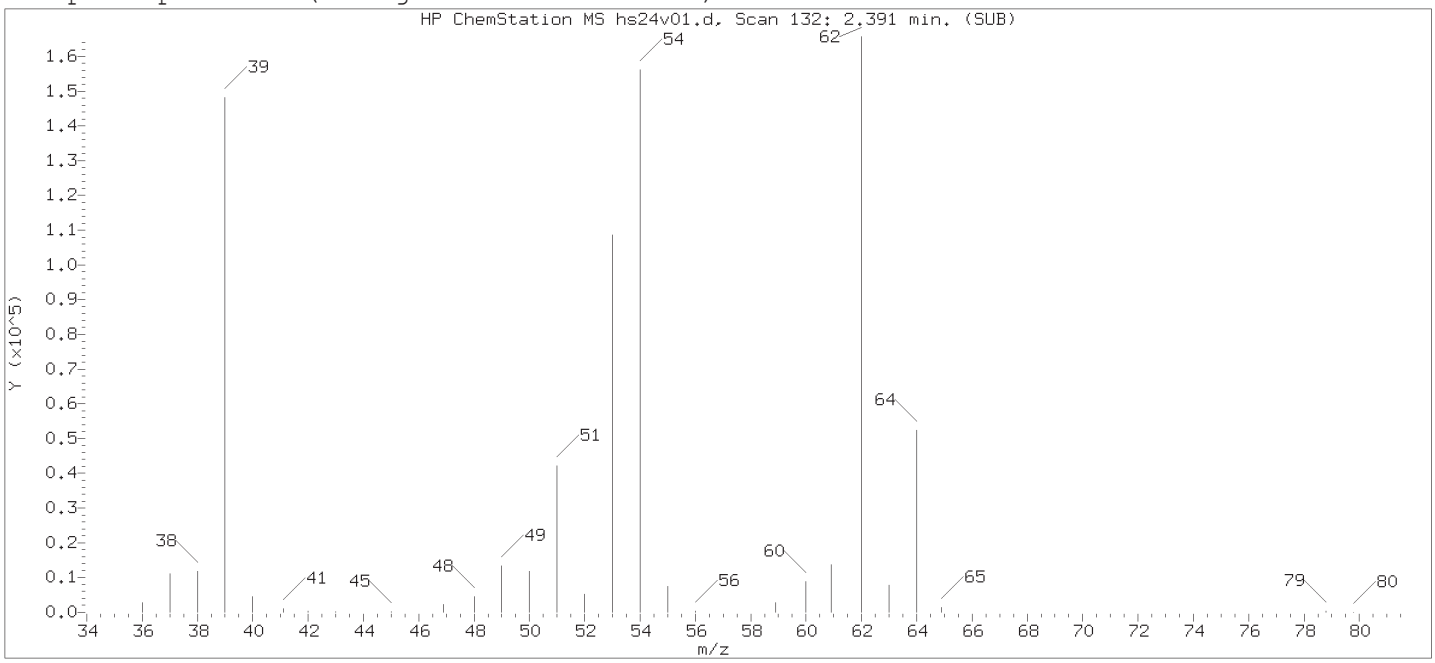
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 132
Retention Time (minutes): 2.391
Quant Ion : 39.00
Area (flag) : 470828M
On-Column Amount (ng) : 4.1709
Integration start scan : 116 Integration stop scan: 152
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

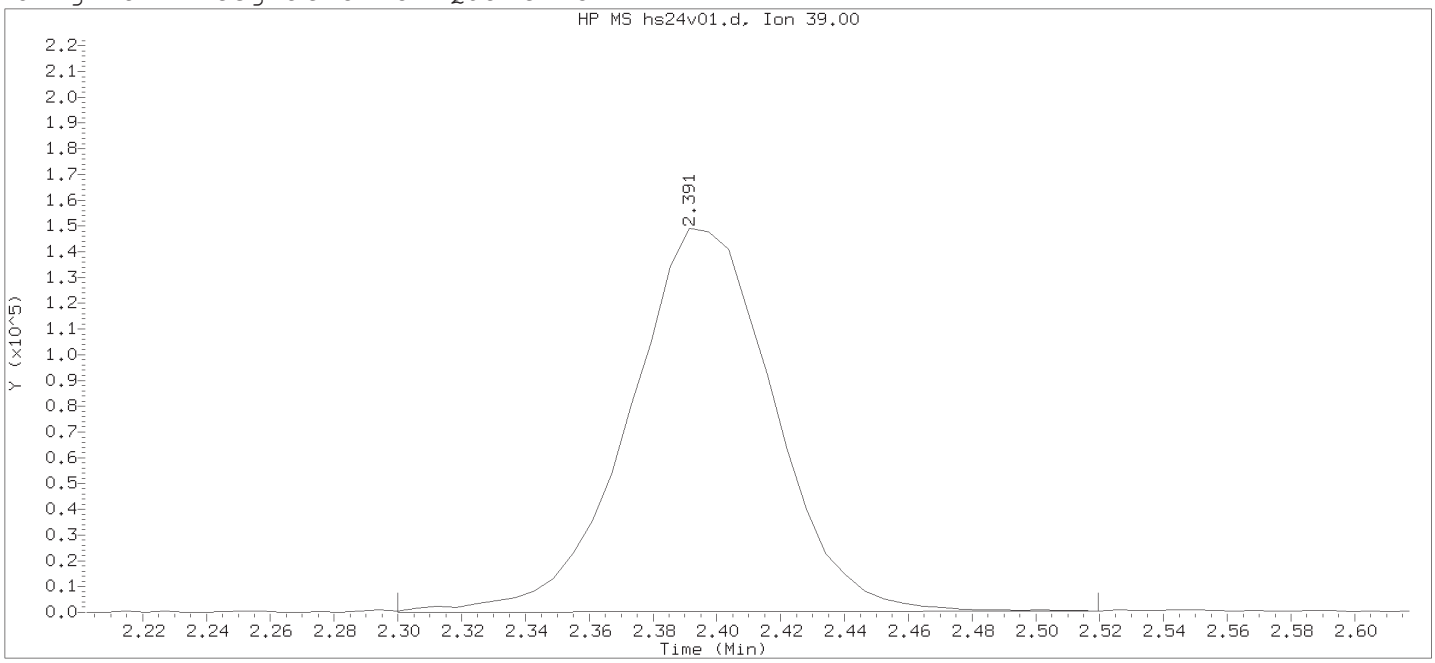
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

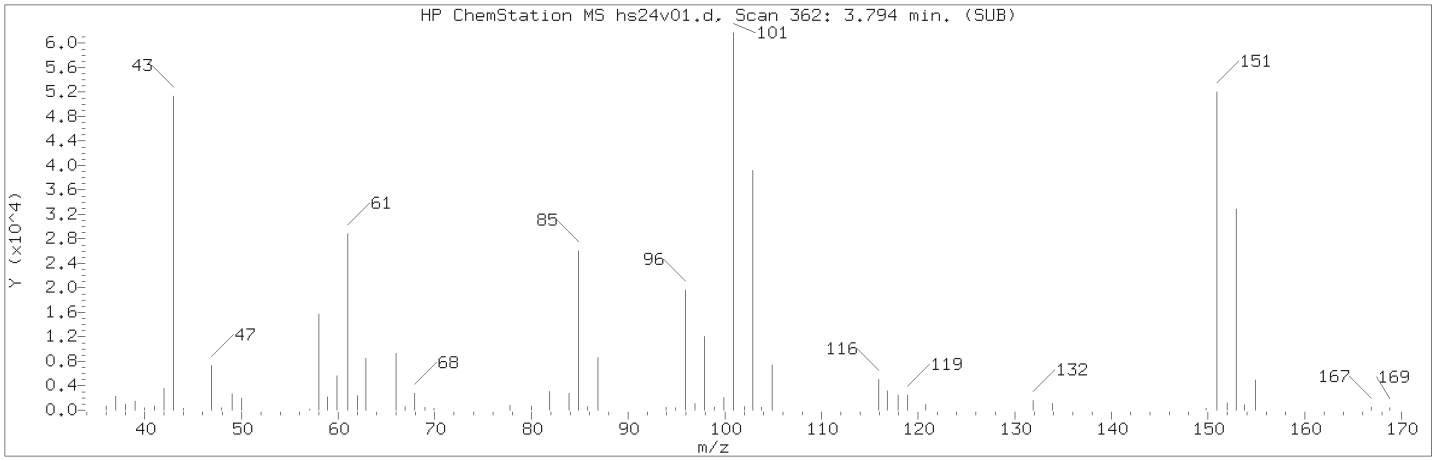
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:38 Automation

Sample Name: ICVHLG Lab Sample ID: ICVHLG

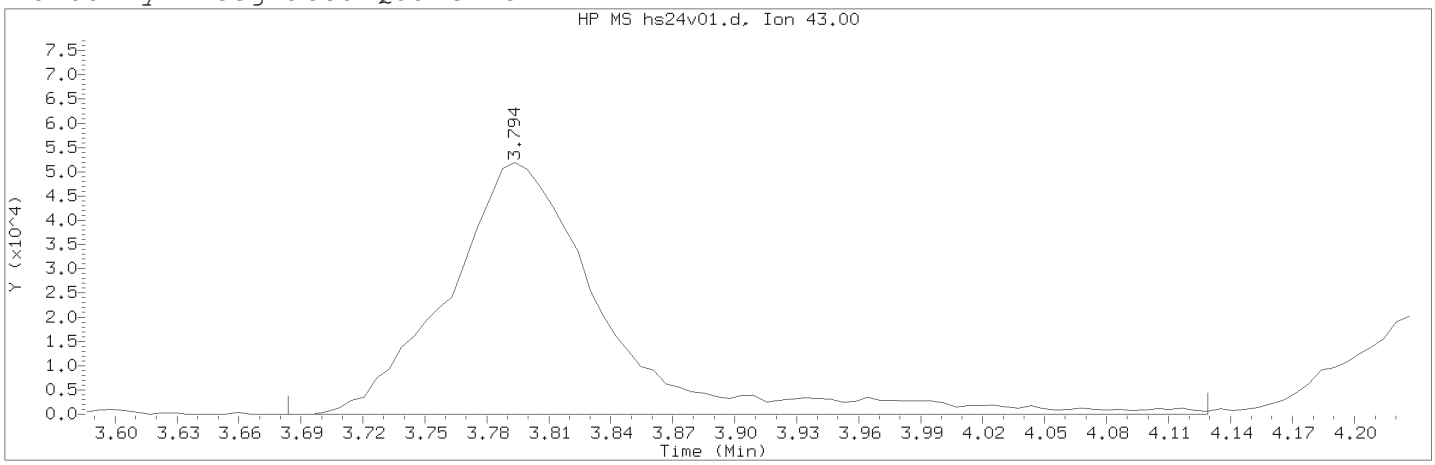
Compound Number	: 6		
Compound Name	: 1,3-Butadiene		
Scan Number	: 132		
Retention Time (minutes)	: 2.391		
Quant Ion	: 39.00		
Area	: 466594		
On-column Amount (ng)	: 5.0567		
Integration start scan	: 116	Integration stop scan:	152
Y at integration start	: 43	Y at integration end:	572

Digitally signed by Jennifer K. Howe on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: JKH09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

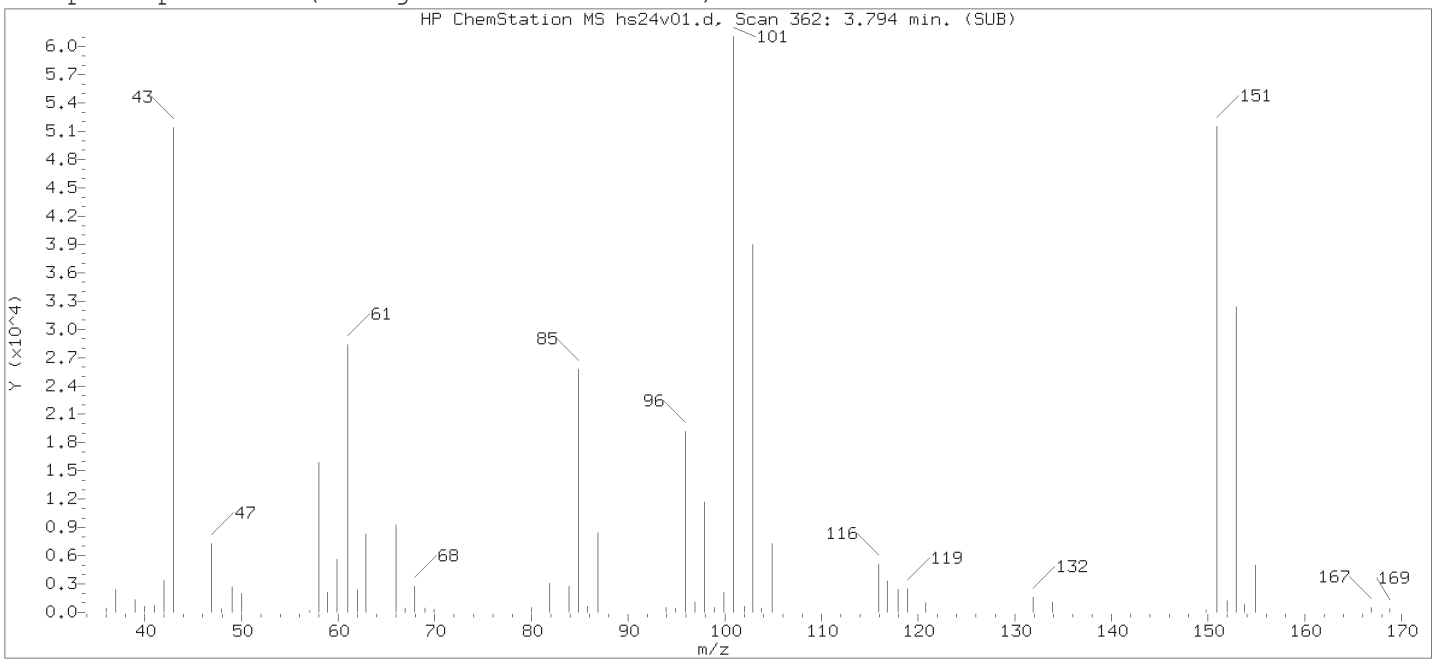
Compound Number : 14
Compound Name : Acetone
Scan Number : 362
Retention Time (minutes): 3.794
Quant Ion : 43.00
Area (flag) : 273073M
On-Column Amount (ng) : 32.3626
Integration start scan : 343 Integration stop scan: 416
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

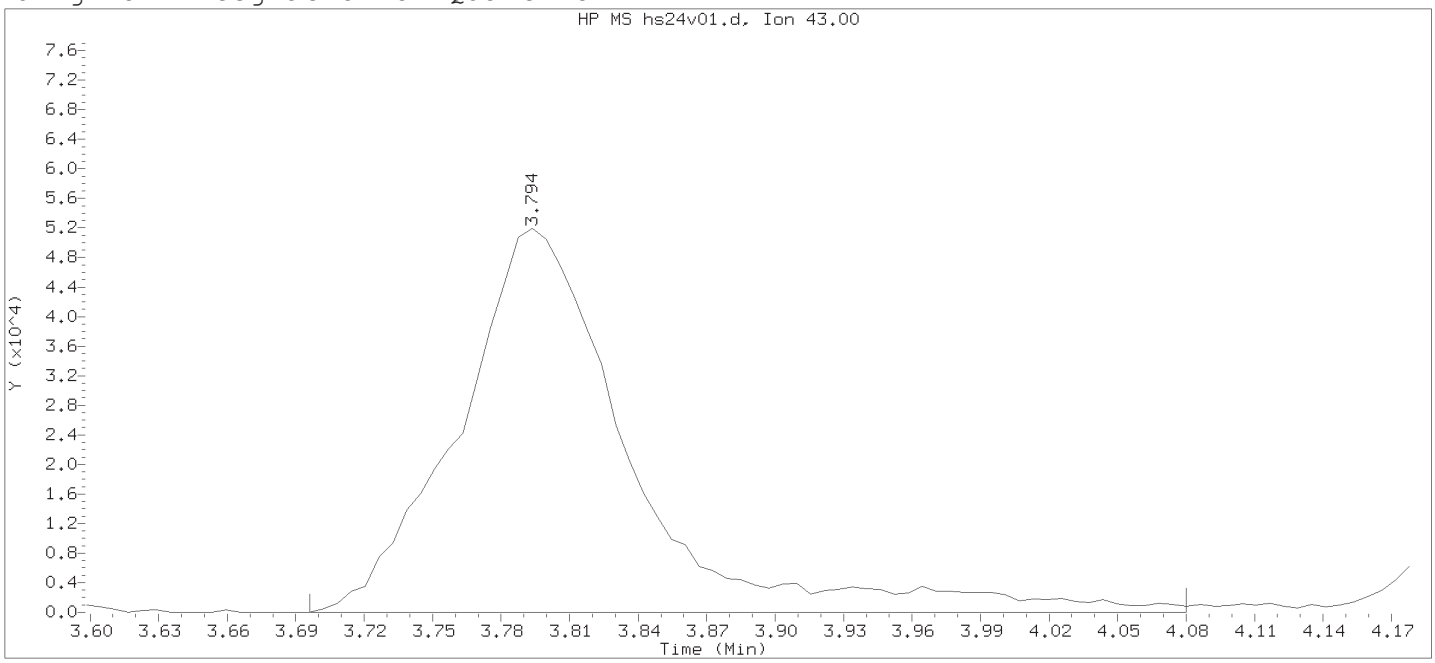
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

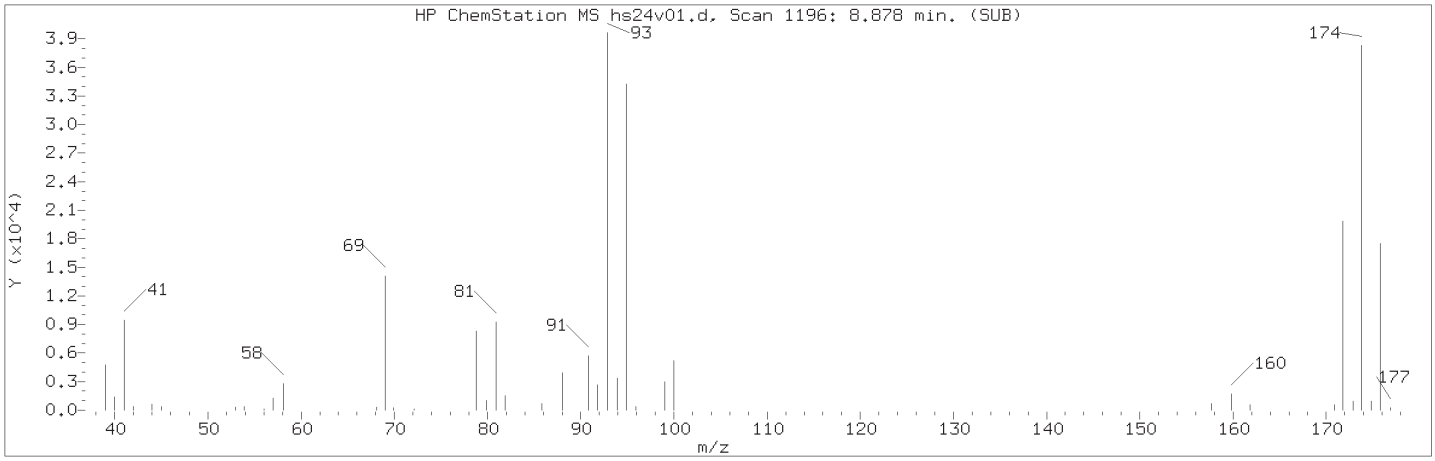
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:38 Automation

Sample Name: ICVHLG Lab Sample ID: ICVHLG

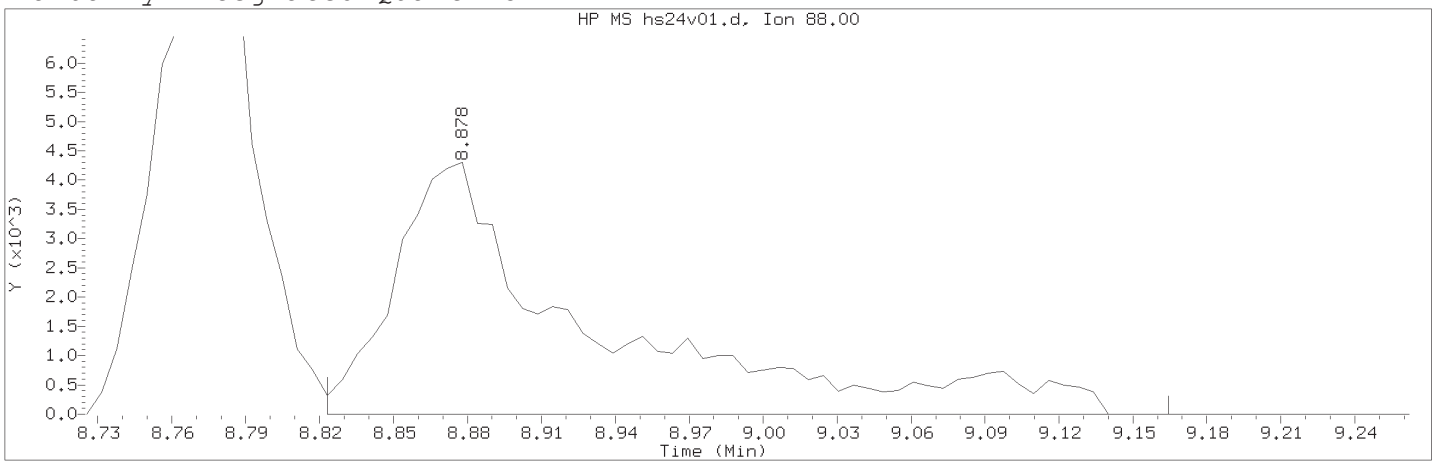
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 362		
Retention Time (minutes)	: 3.794		
Quant Ion	: 43.00		
Area	: 270202		
On-column Amount (ng)	: 34.6600		
Integration start scan	: 345	Integration stop scan:	408
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: JKH09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

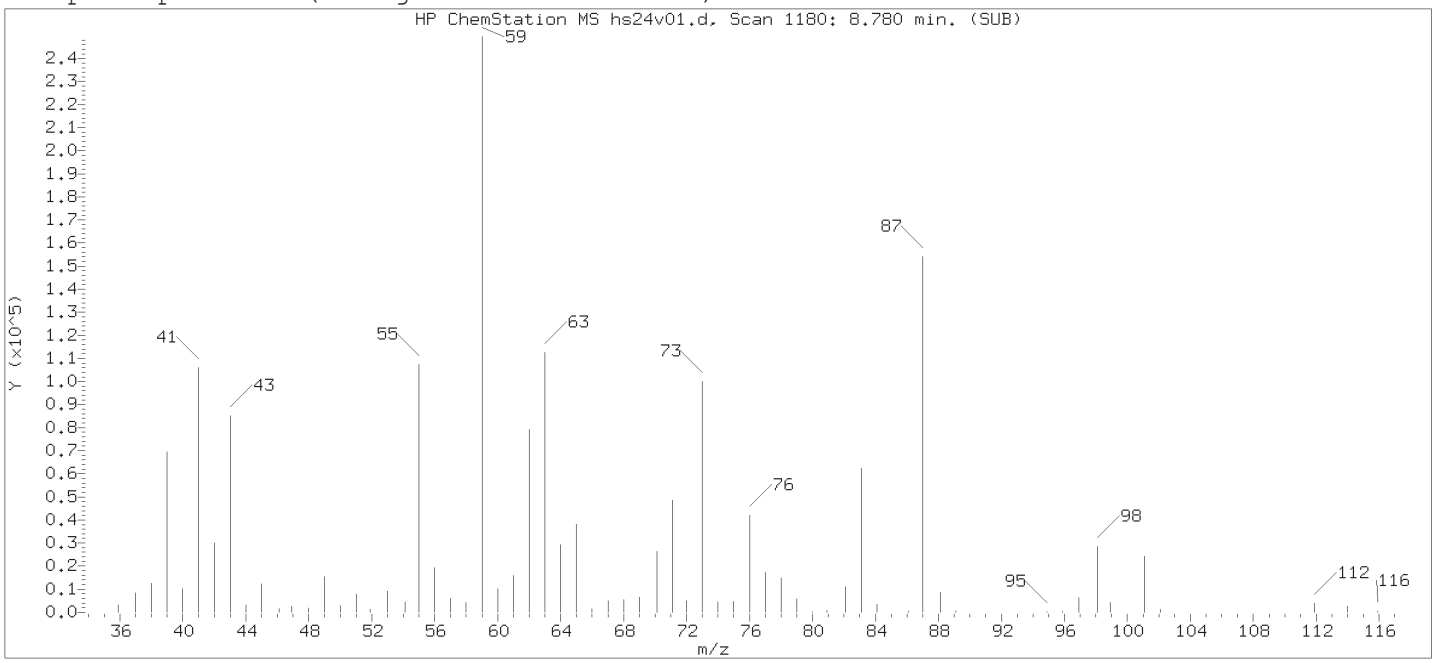
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1196
Retention Time (minutes): 8.878
Quant Ion : 88.00
Area (flag) : 23983M
On-Column Amount (ng) : 126.1028
Integration start scan : 1186 Integration stop scan: 1242
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

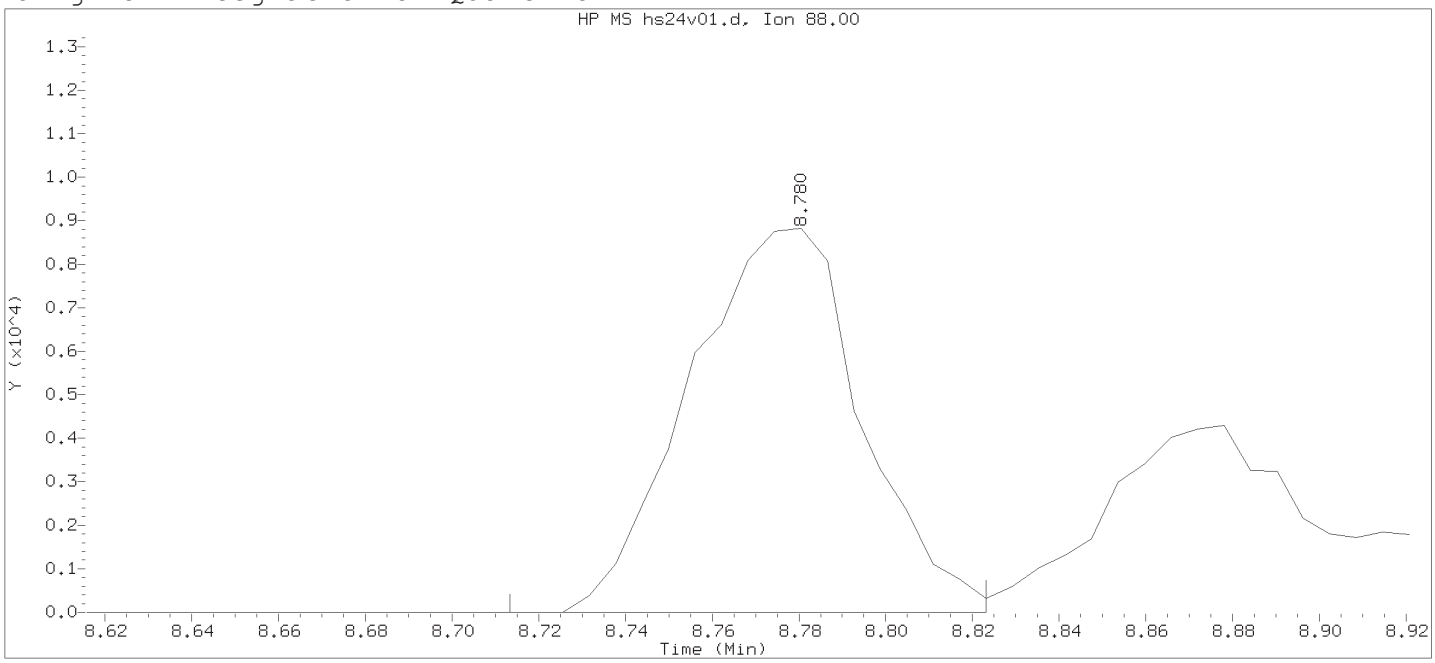
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

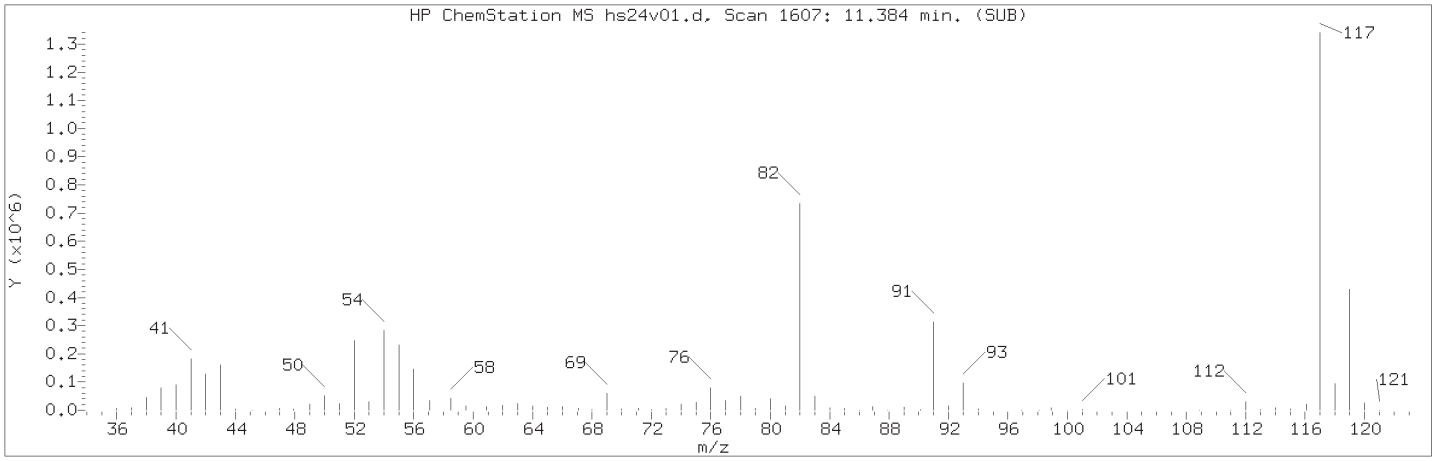
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:38 Automation

Sample Name: ICVHLG Lab Sample ID: ICVHLG

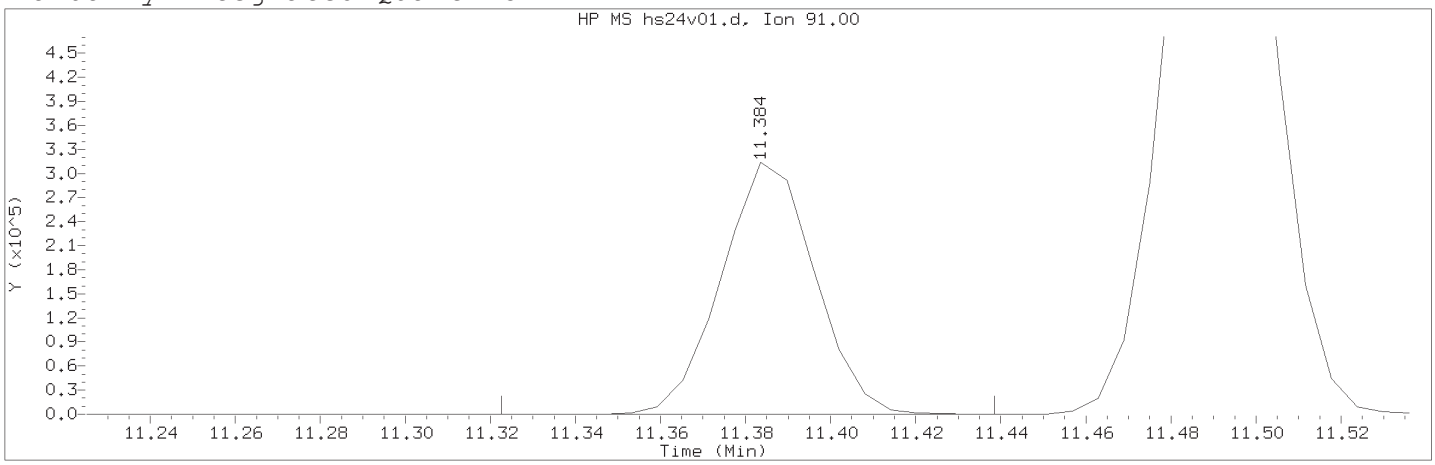
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1180
Retention Time (minutes): 8.780
Quant Ion : 88.00
Area : 24295
On-column Amount (ng) : 144.0216
Integration start scan : 1168 Integration stop scan: 1186
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 13:21.
Target 3.5 esignature user: JKH09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

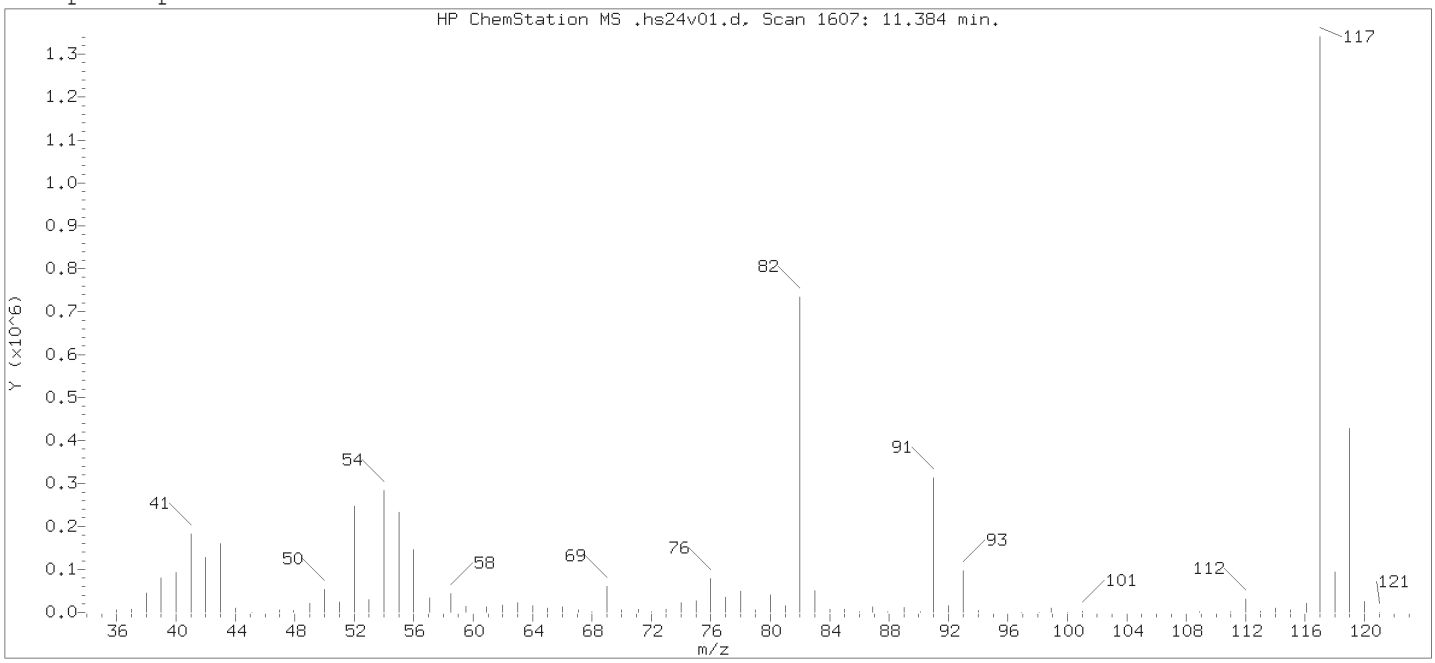
Compound Number : 96
Compound Name : 1-Chlorohexane
Scan Number : 1607
Retention Time (minutes): 11.384
Quant Ion : 91.00
Area (flag) : 476940M
On-Column Amount (ng) : 4.9395
Integration start scan : 1596 Integration stop scan: 1615
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

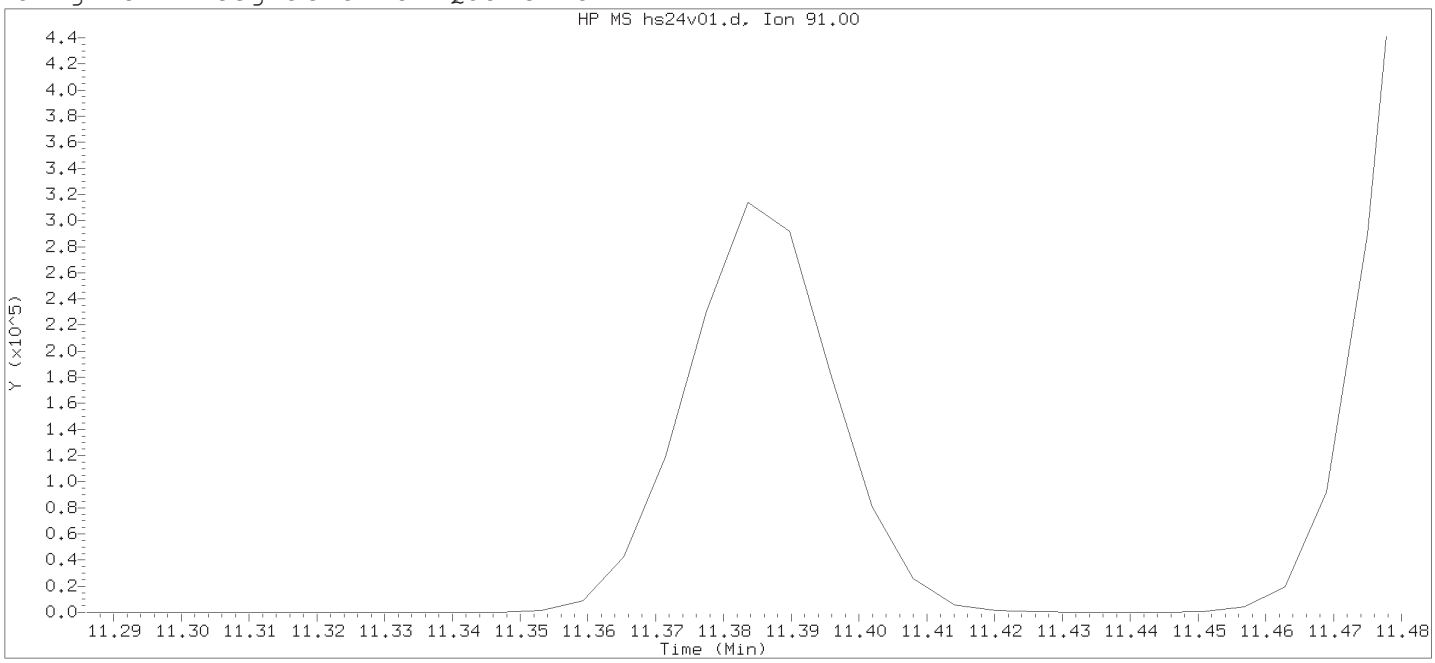
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

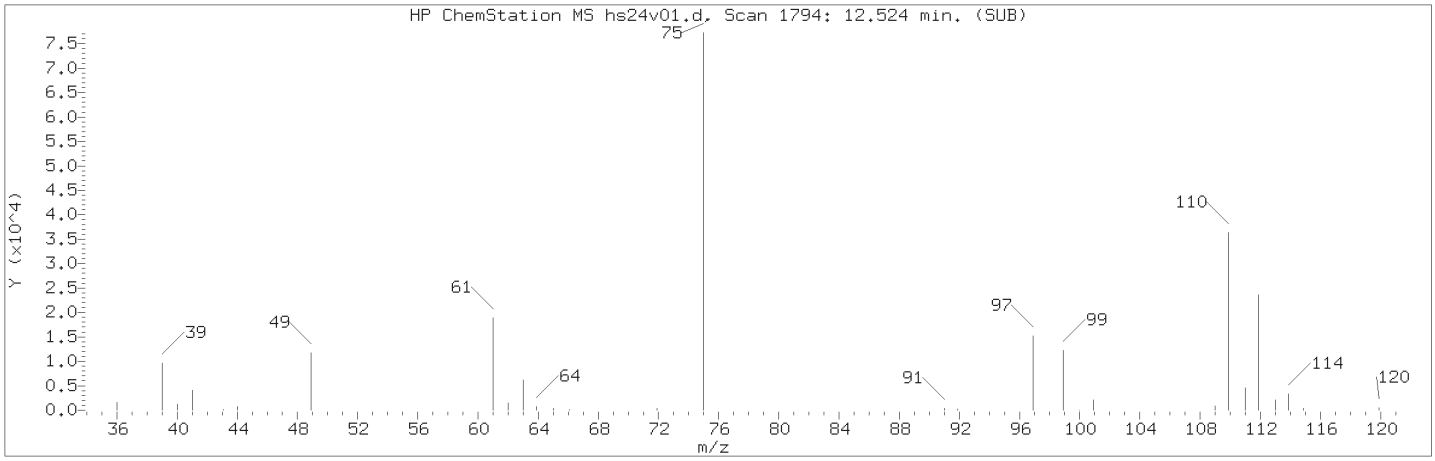
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:38 Automation

Sample Name: ICVHLG Lab Sample ID: ICVHLG

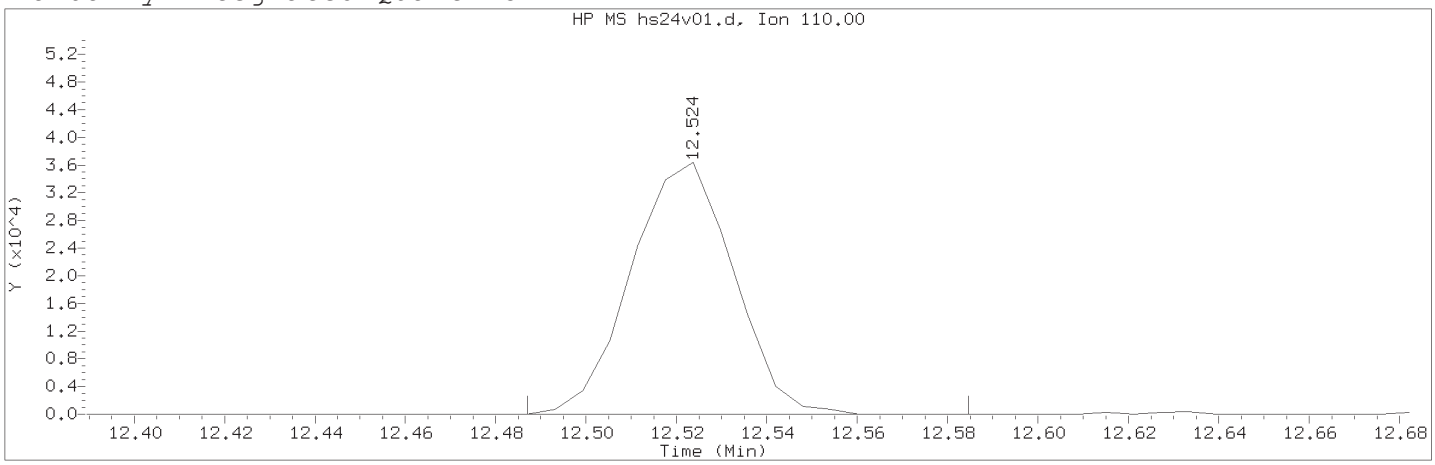
Compound Number : 96
Compound Name : 1-Chlorohexane
Expected RT (minutes) : 11.384
Quant Ion : 91.00

Digitally signed by Jennifer K. Howe on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

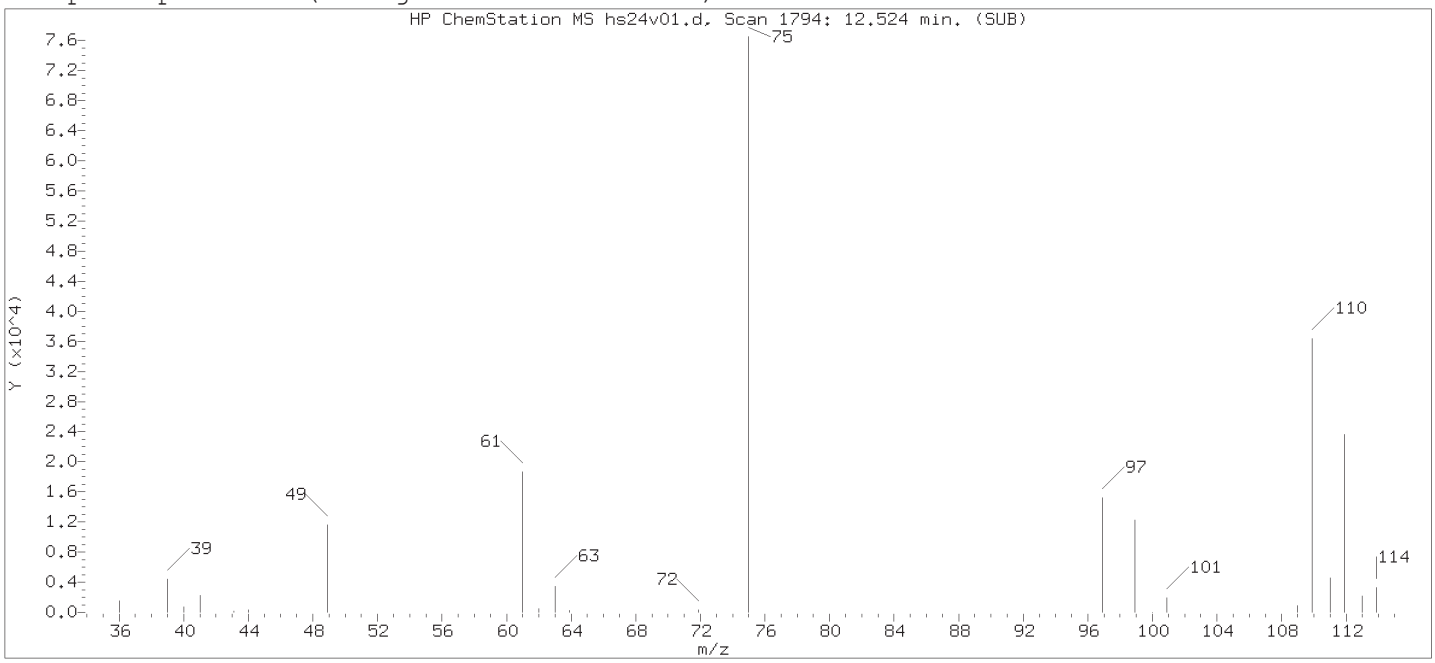
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1794
Retention Time (minutes): 12.524
Quant Ion : 110.00
Area (flag) : 57126M
On-Column Amount (ng) : 4.9234
Integration start scan : 1787 Integration stop scan: 1803
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

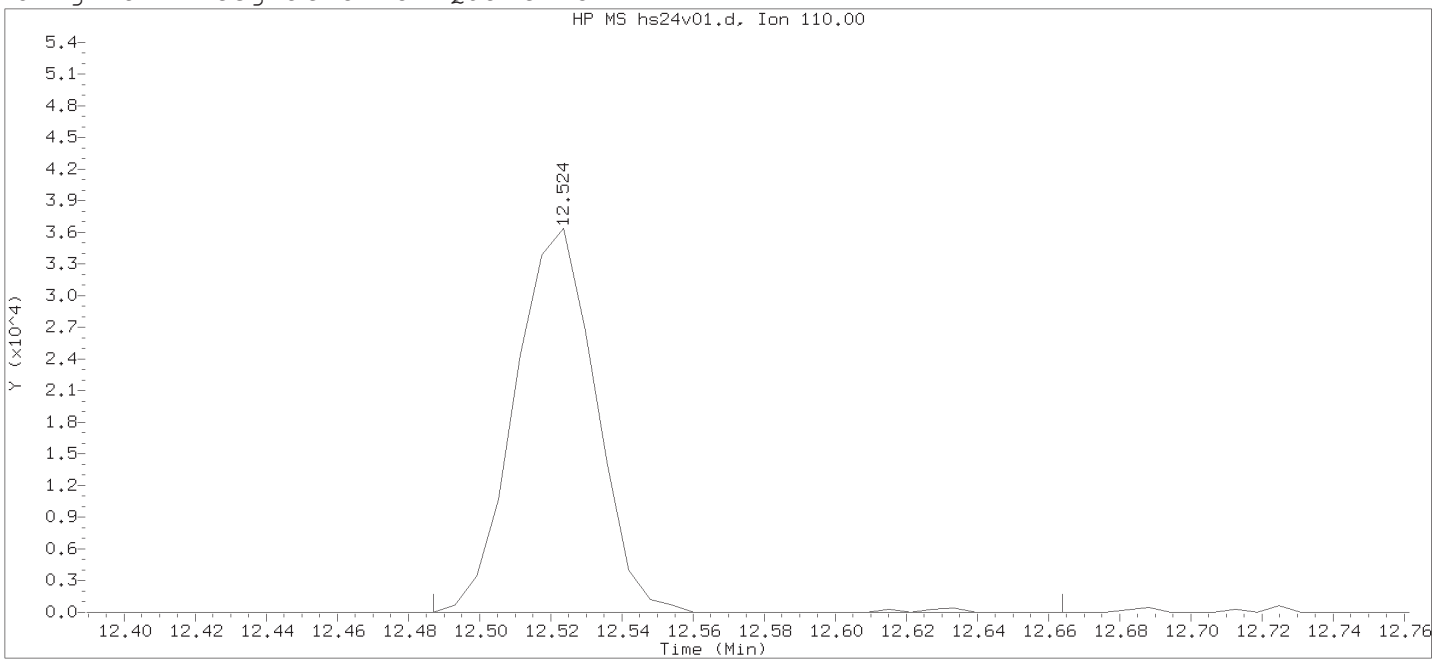
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

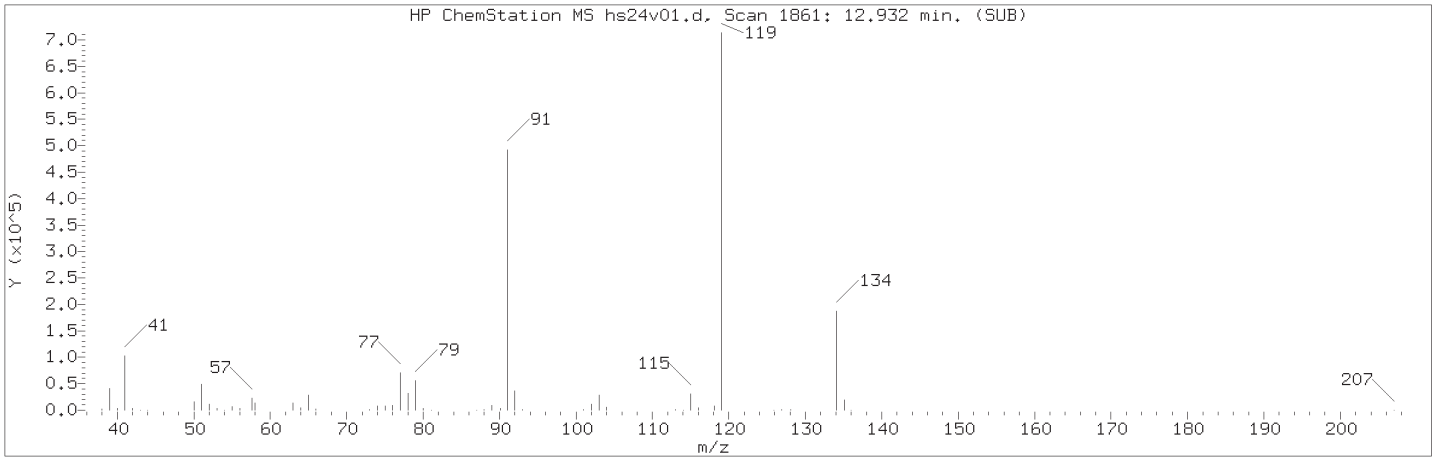
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:38 Automation

Sample Name: ICVHLG Lab Sample ID: ICVHLG

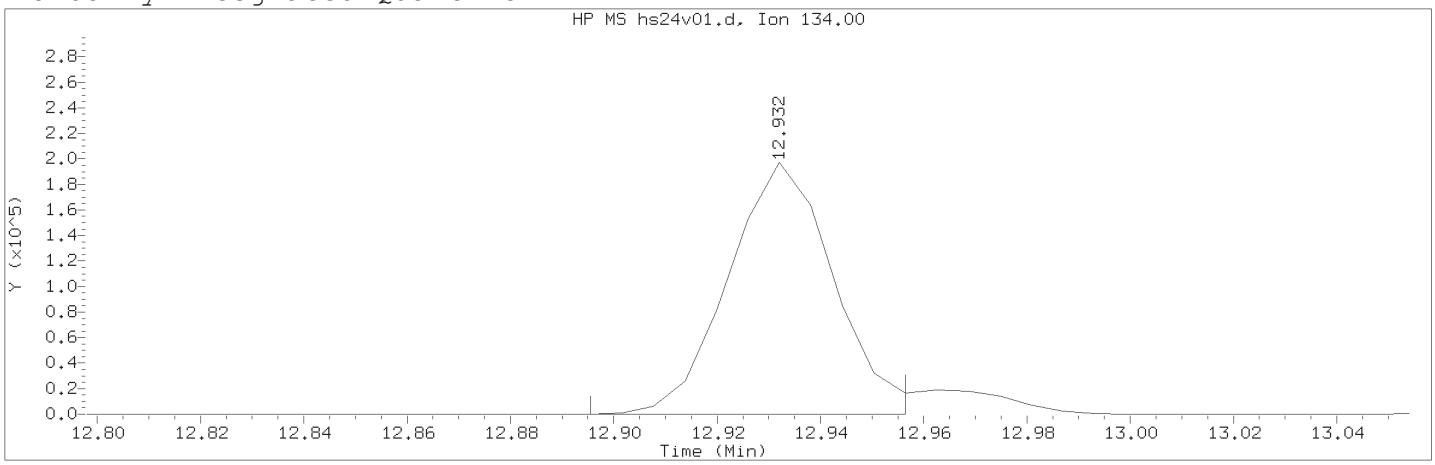
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1794
Retention Time (minutes): 12.524
Quant Ion : 110.00
Area : 57467
On-column Amount (ng) : 4.9421
Integration start scan : 1787 Integration stop scan: 1816
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

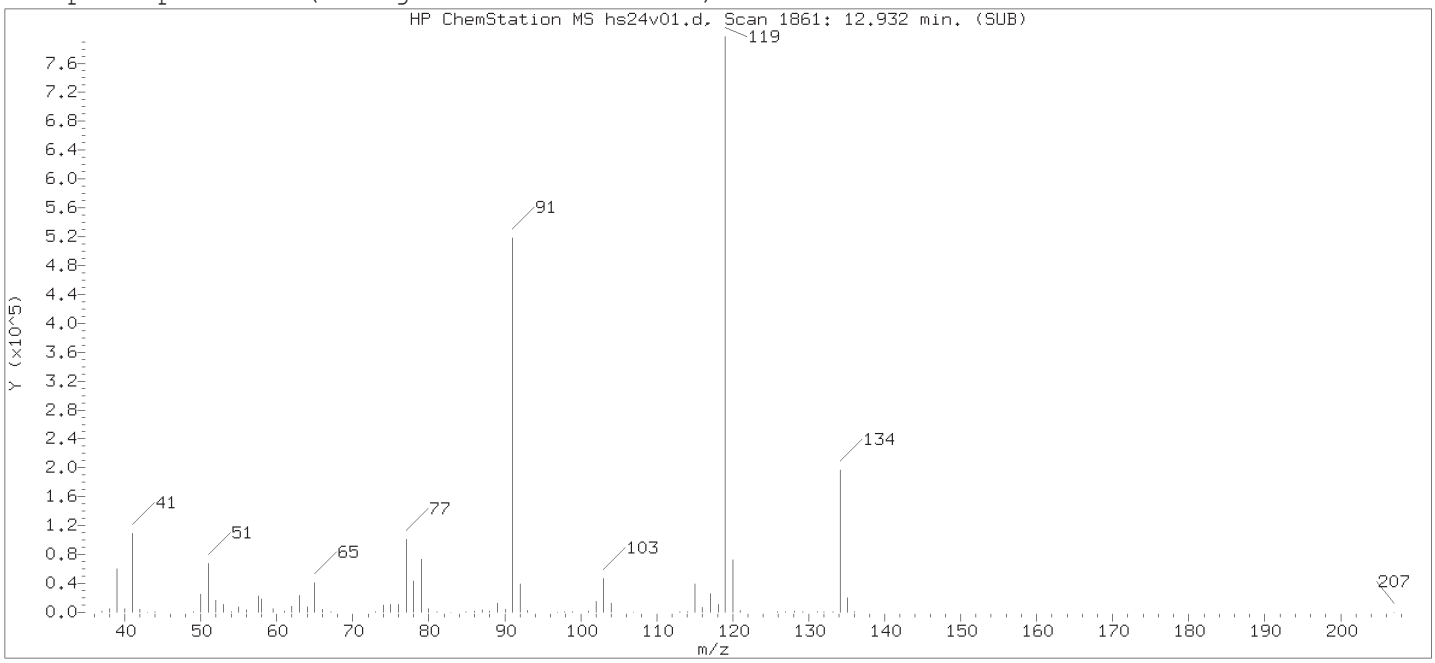
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1861
Retention Time (minutes): 12.932
Quant Ion : 134.00
Area (flag) : 278567M
On-Column Amount (ng) : 5.0967
Integration start scan : 1854 Integration stop scan: 1864
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

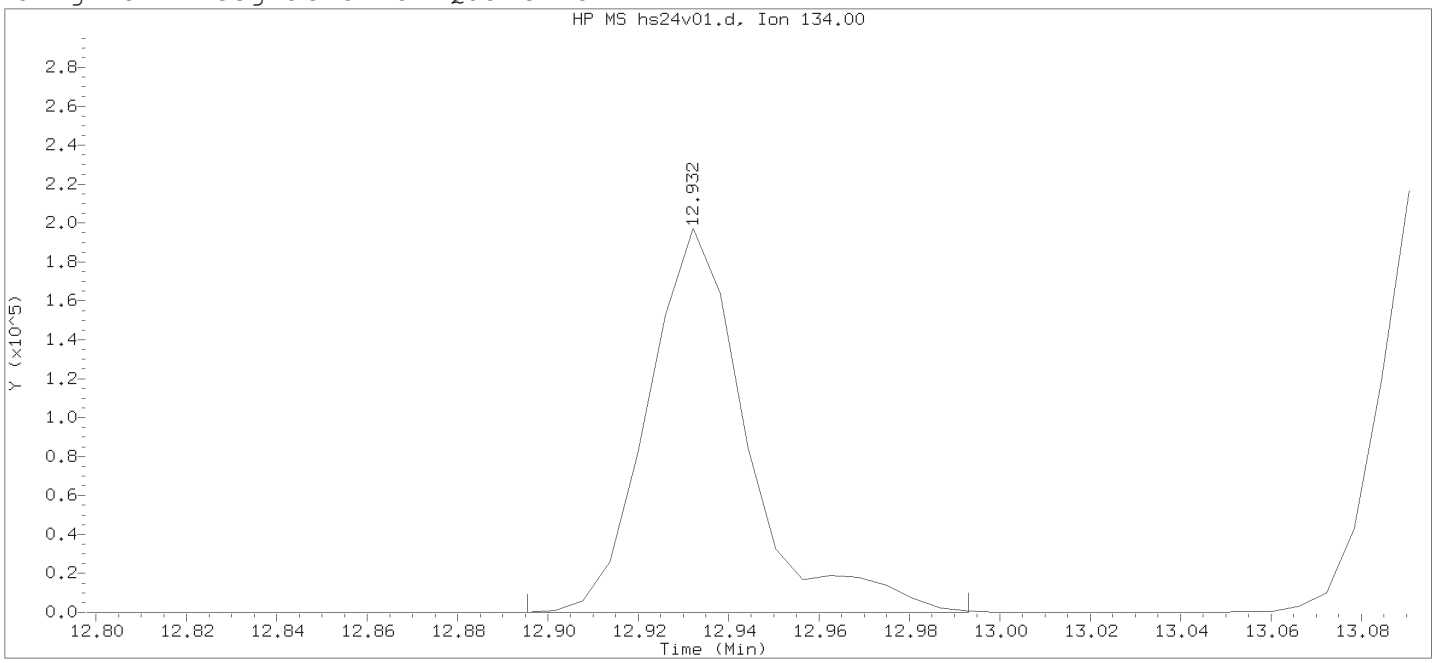
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

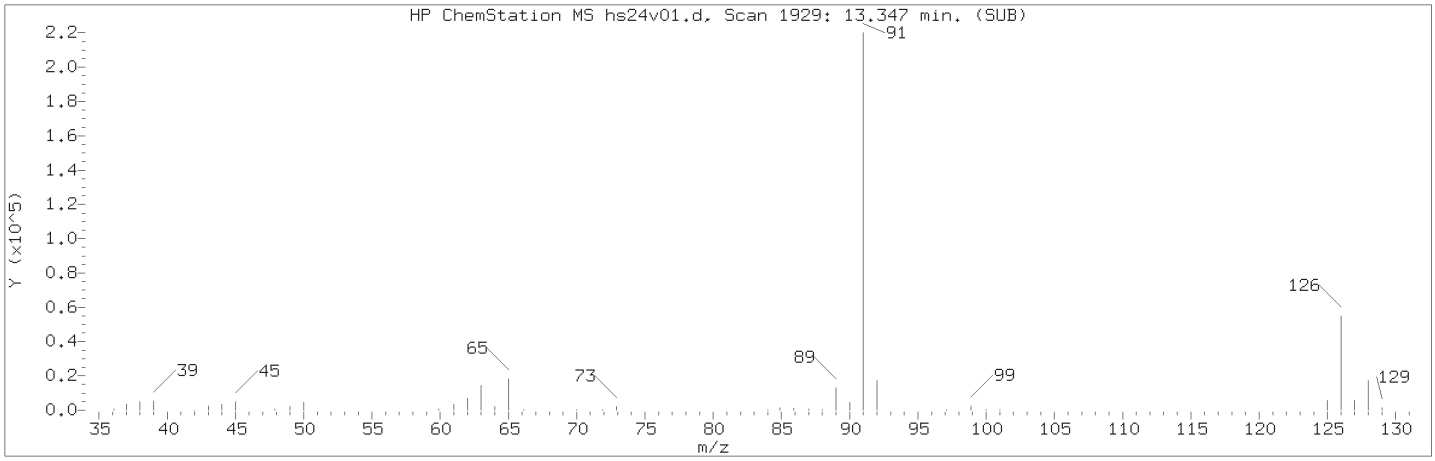
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:38 Automation

Sample Name: ICVHLG Lab Sample ID: ICVHLG

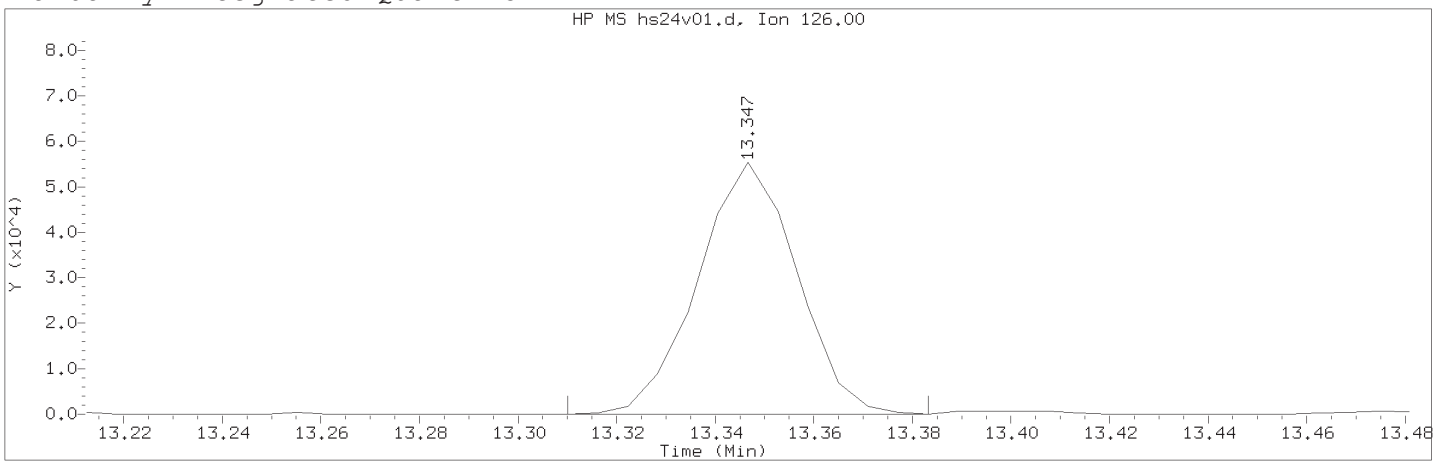
Compound Number	: 125
Compound Name	: tert-Butylbenzene
Scan Number	: 1861
Retention Time (minutes)	: 12.932
Quant Ion	: 134.00
Area	: 300676
On-column Amount (ng)	: 5.3090
Integration start scan	: 1854 Integration stop scan: 1870
Y at integration start	: 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

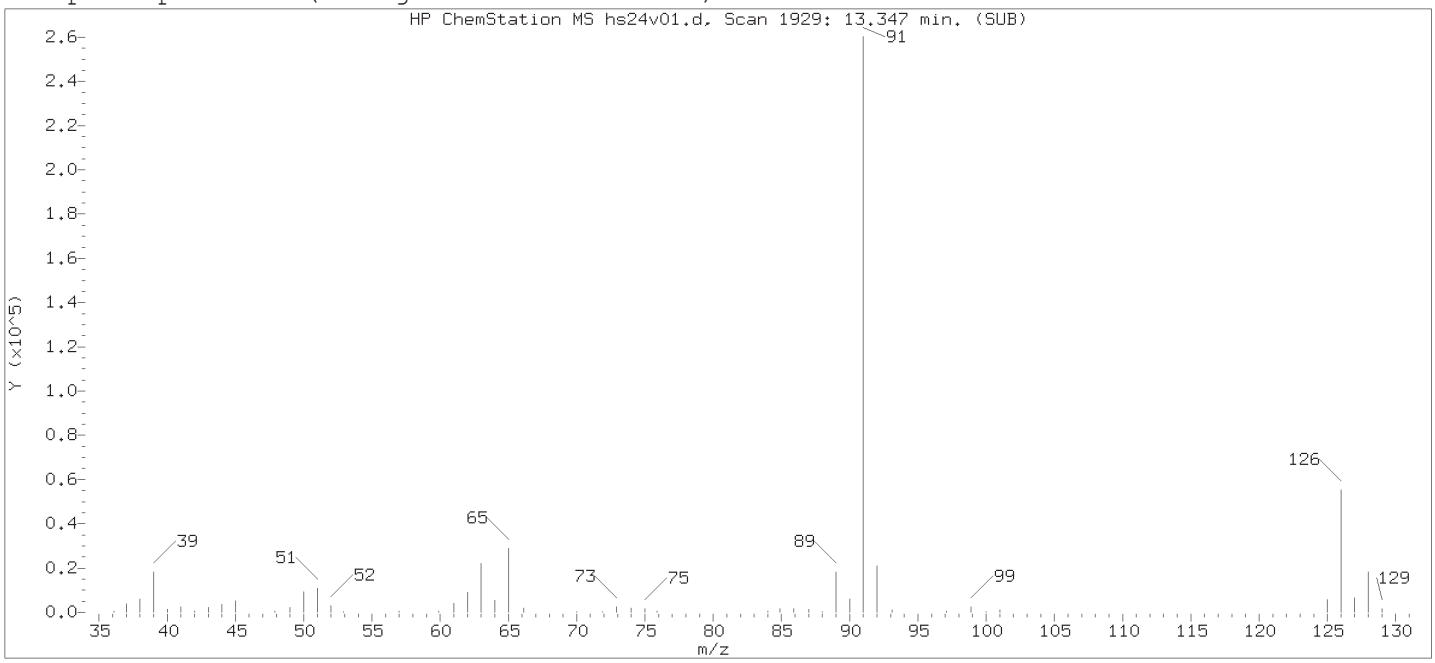
Compound Number : 136
Compound Name : Benzyl Chloride
Scan Number : 1929
Retention Time (minutes): 13.347
Quant Ion : 126.00
Area (flag) : 76709M
On-Column Amount (ng) : 4.7280
Integration start scan : 1922 Integration stop scan: 1934
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

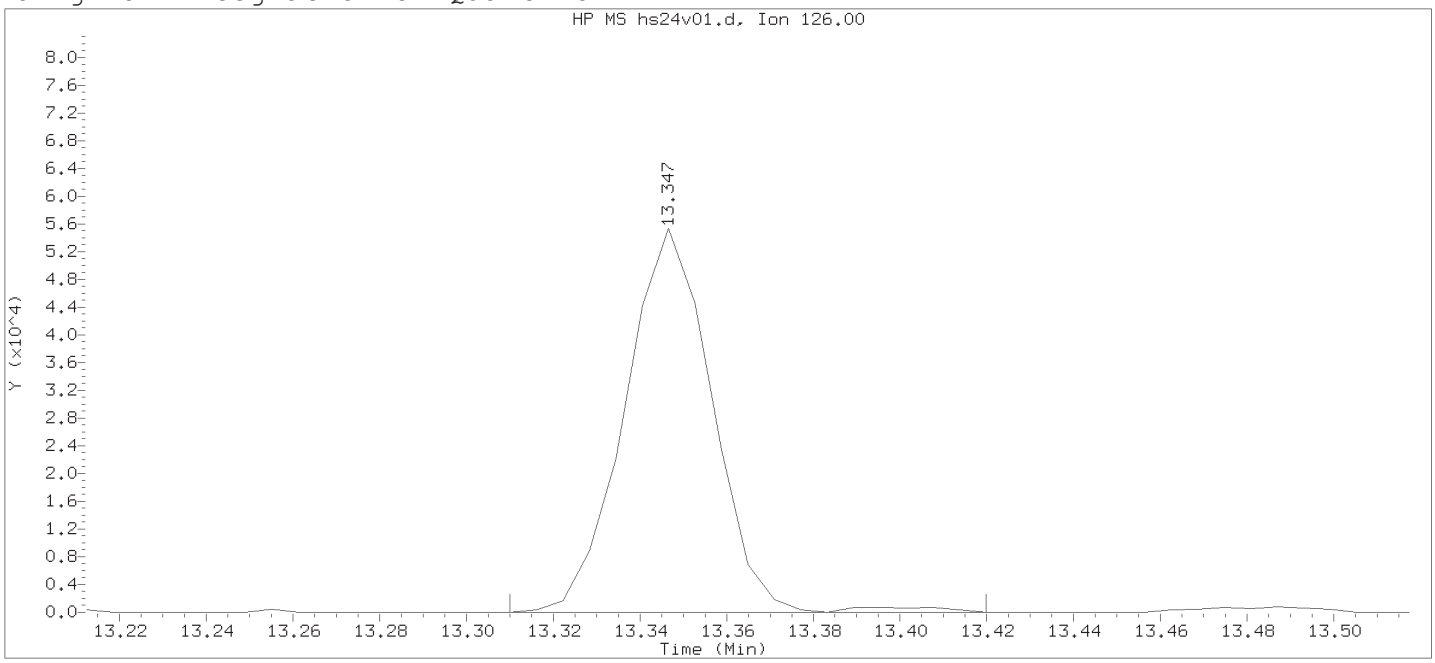
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

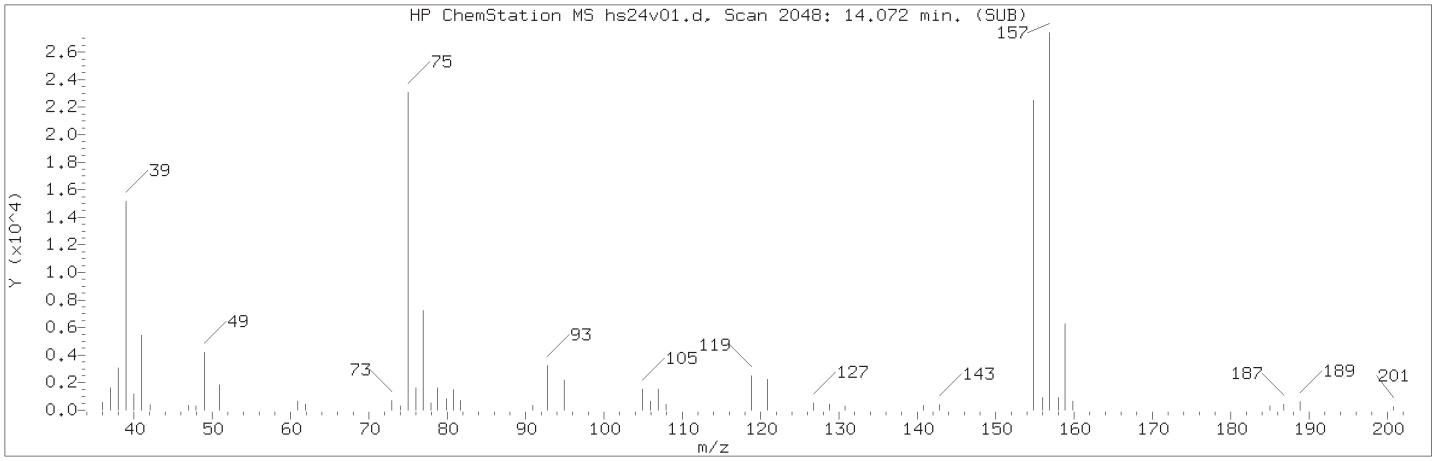
Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:38 Automation

Sample Name: ICVHLG Lab Sample ID: ICVHLG

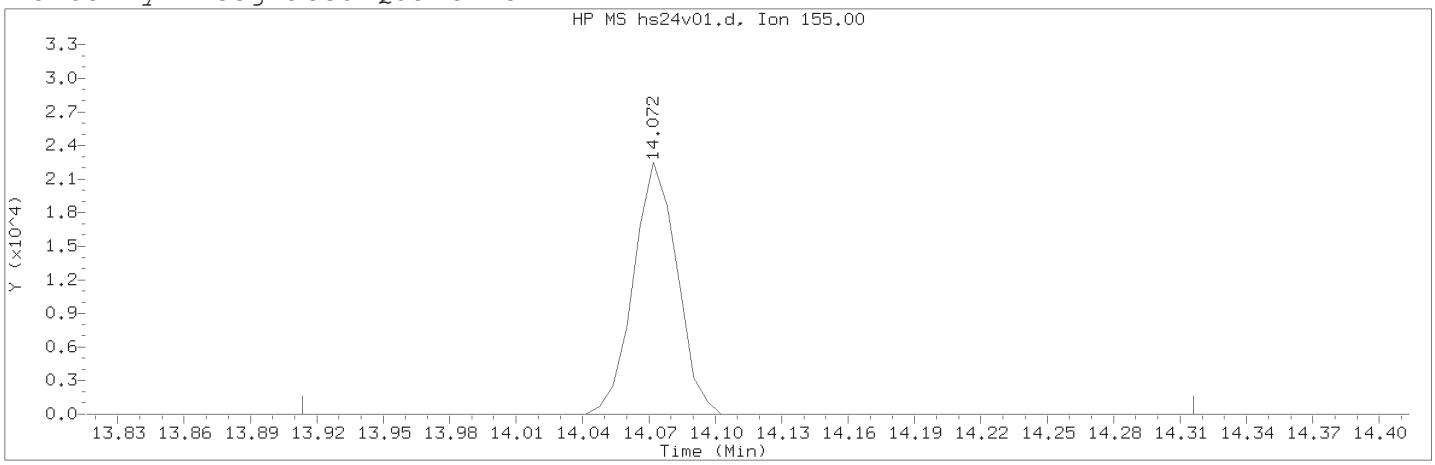
Compound Number : 136
Compound Name : Benzyl Chloride
Scan Number : 1929
Retention Time (minutes): 13.347
Quant Ion : 126.00
Area : 77799
On-column Amount (ng) : 5.0401
Integration start scan : 1922 Integration stop scan: 1940
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 13:21.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 25-SEP-2018 09:09
Date, time and analyst ID of latest file update: 25-Sep-2018 13:21 jkh09052

Sample Name: ICVHLG Lab Sample ID: ICVHLG

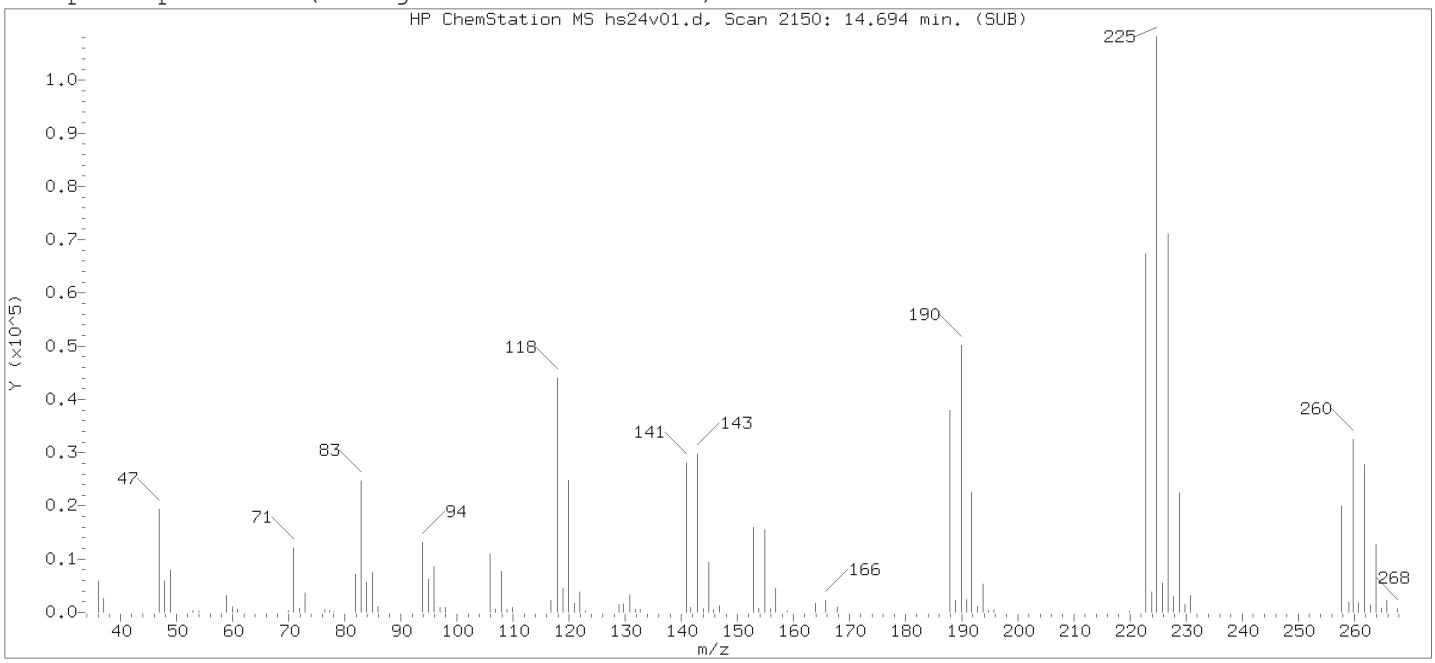
Compound Number : 143
Compound Name : 1,2-Dibromo-3-chloropropane
Scan Number : 2048
Retention Time (minutes): 14.072
Quant Ion : 155.00
Area (flag) : 30890M
On-Column Amount (ng) : 5.3040
Integration start scan : 2021 Integration stop scan: 2087
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

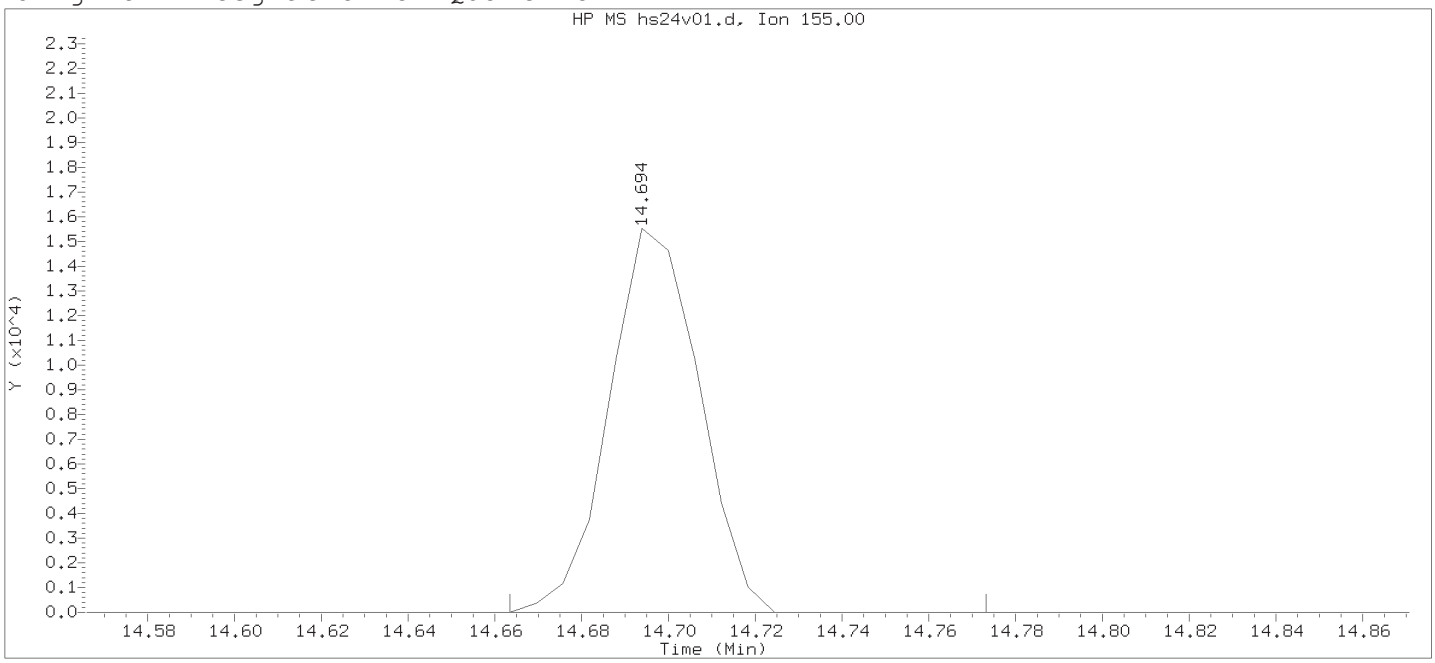
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 09/25/2018 at 13:21.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 09/26/2018 at 16:35.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18sep24i.b/hs24v01.d Instrument ID: HP19094.i
Injection date and time: 24-SEP-2018 21:20 Analyst ID: JKH09052

Method used: /chem2/HP19094.i/18sep24i.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 24-SEP-2018 20:55
Date, time and analyst ID of latest file update: 24-Sep-2018 21:38 Automation

Sample Name: ICVHLG Lab Sample ID: ICVHLG

Compound Number : 143
Compound Name : 1,2-Dibromo-3-chloropropane
Scan Number : 2150
Retention Time (minutes): 14.694
Quant Ion : 155.00
Area : 22433
On-column Amount (ng) : 7.5577
Integration start scan : 2144 Integration stop scan: 2162
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 09/25/2018 at 13:21.
Target 3.5 esignature user: jkhowe

Data File: /chem2/HP19094.i/18oct31a.b/hc31t01.d

Date : 31-OCT-2018 07:29

Client ID: BFB 50ng

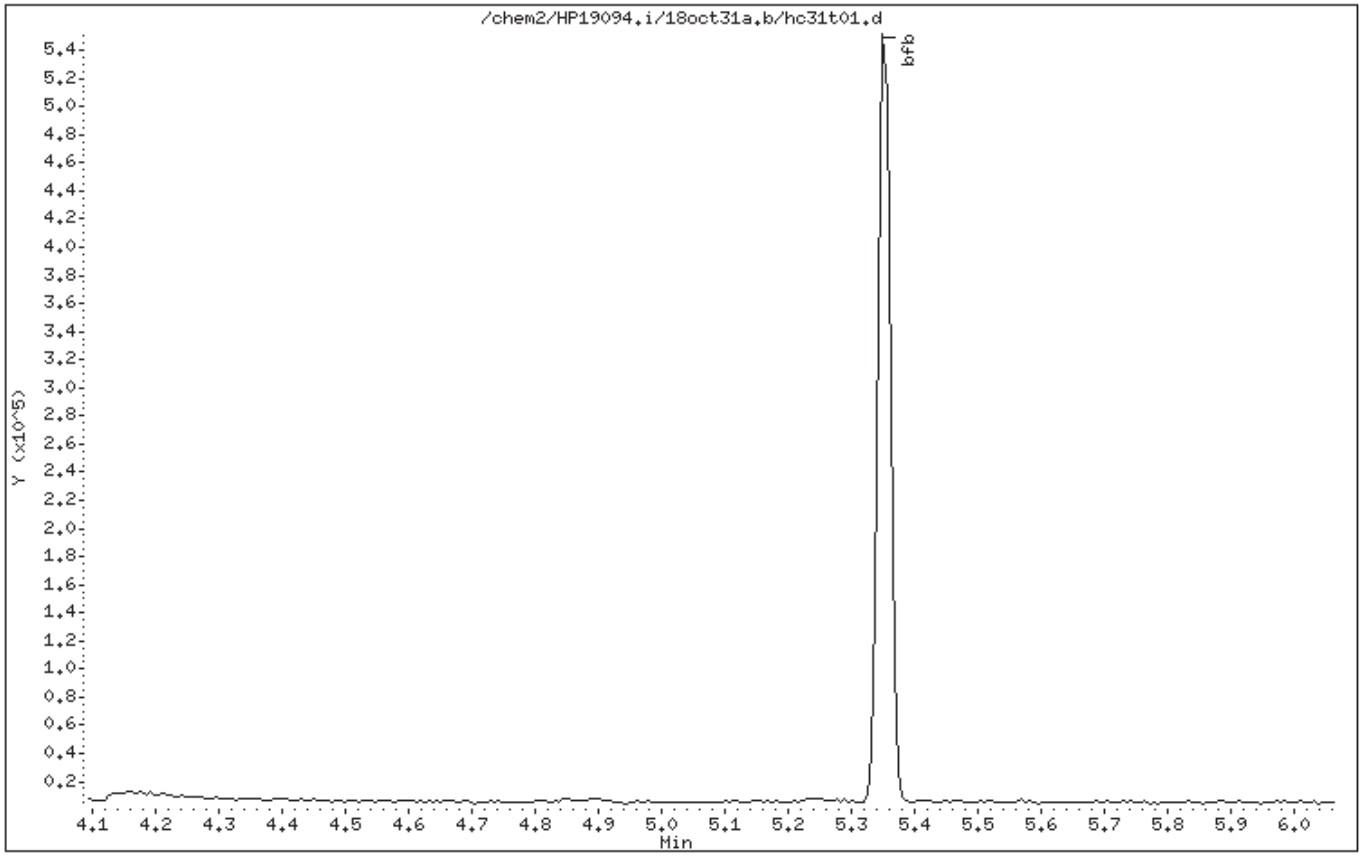
Instrument: HP19094.i

Sample Info: BFB 50ng;BFB AUG07-18;1;3;;;;;

Operator: KEL01973

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Kerri E. Koch Legerlotz on 10/31/2018 at 07:35.
Target 3.5 esignature user ID: kel01973

Data File: /chem2/HP19094.i/18oct31a.b/hc31t01.d

Date : 31-OCT-2018 07:29

Client ID: BFB 50ng

Instrument: HP19094.i

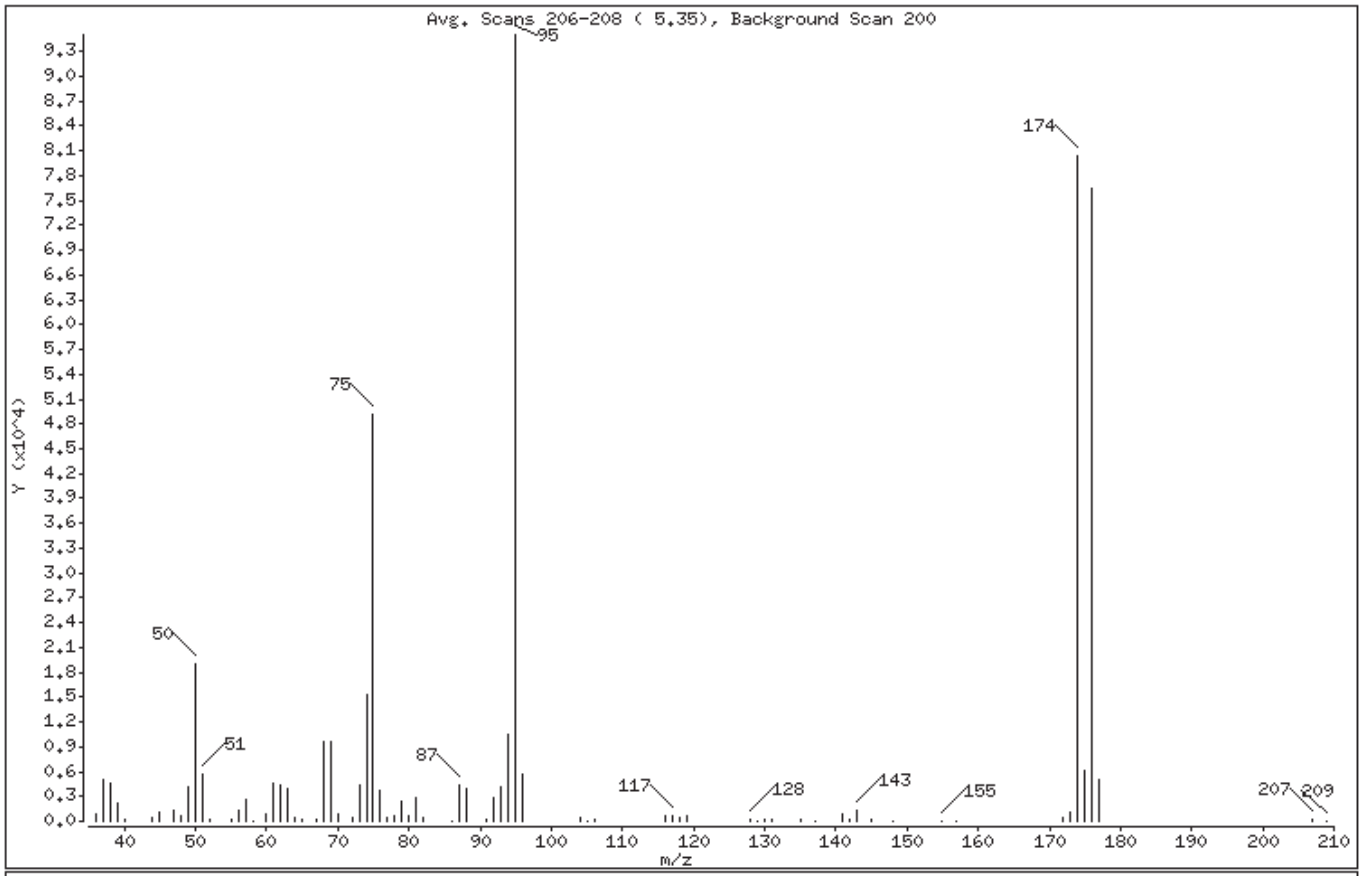
Sample Info: BFB 50ng;BFB AUG07-18;1;3;;;;;

Operator: KEL01973

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	19.97
75	30.00 - 60.00% of mass 95	51.75
96	5.00 - 9.00% of mass 95	6.07
173	Less than 2.00% of mass 174	1.26 (1.49)
174	50.00 - 100.00% of mass 95	84.55
175	5.00 - 9.00% of mass 174	6.34 (7.49)
176	95.00 - 101.00% of mass 174	80.38 (95.07)
177	5.00 - 9.00% of mass 176	5.17 (6.44)

Digitally signed by Kerri E. Koch Legerlotz on 10/31/2018 at 07:35.
Target 3.5 esignature user ID: kel01973

Date : 31-OCT-2018 07:29

Client ID: BFB 50ng Instrument: HP19094.i

Sample Info: BFB 50ng;BFB AUG07-18;1;3;;;;;

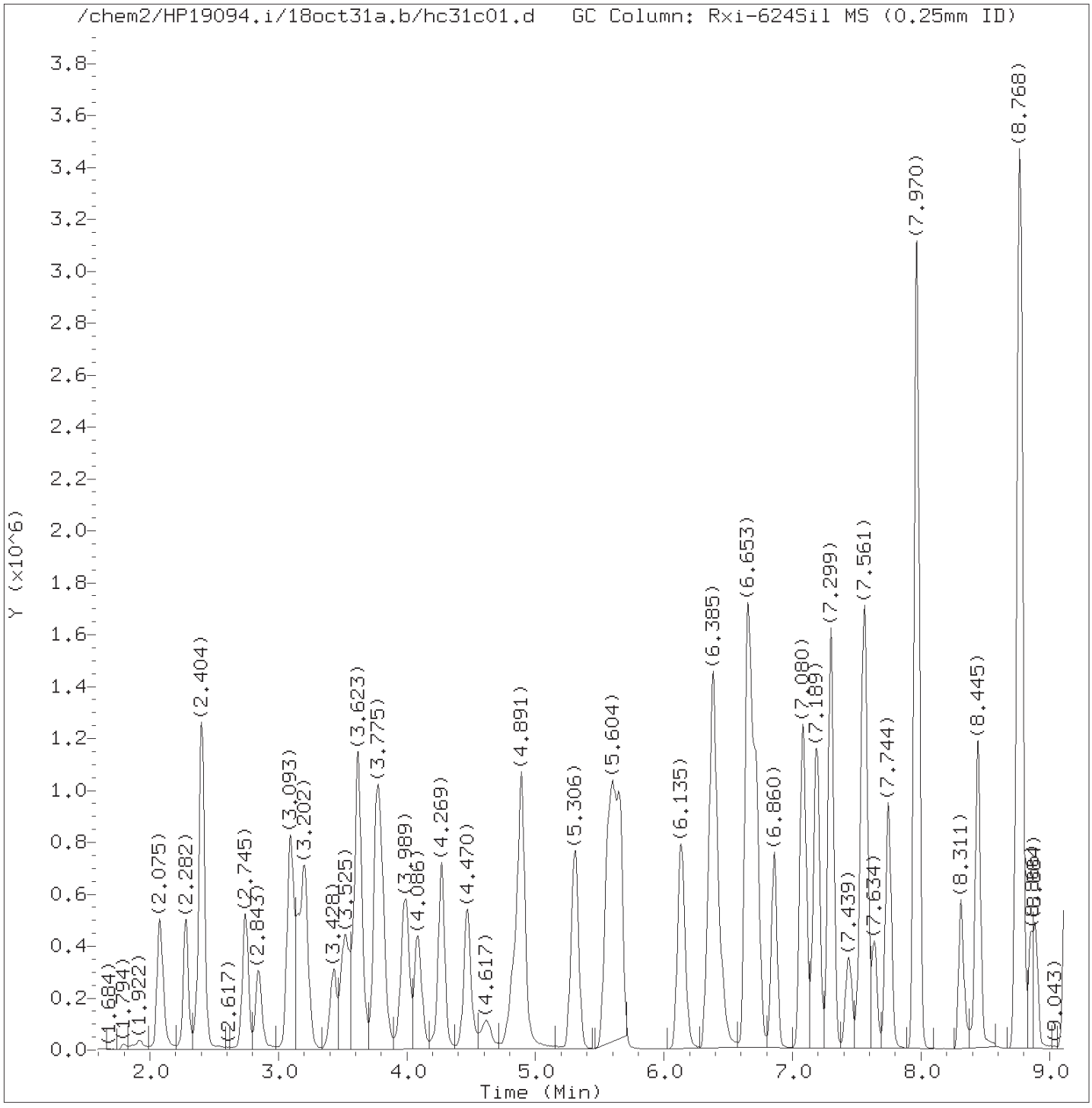
Operator: KEL01973

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: hc31t01.d
Spectrum: Avg. Scans 206-208 (5.35), Background Scan 200
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	931	62.00	4477	86.00	109	131.00	124
37.00	4972	63.00	3914	87.00	4267	135.00	277
38.00	4531	64.00	403	88.00	3883	137.00	86
39.00	2134	65.00	116	91.00	214	141.00	926
40.00	169	67.00	296	92.00	2880	142.00	127
44.00	339	68.00	9593	93.00	4226	143.00	1209
45.00	1187	69.00	9506	94.00	10564	145.00	134
47.00	1258	70.00	827	95.00	95032	148.00	99
48.00	642	72.00	515	96.00	5769	155.00	108
49.00	4127	73.00	4287	104.00	429	157.00	100
50.00	18976	74.00	15238	105.00	99	172.00	390
51.00	5783	75.00	49184	106.00	299	173.00	1199
52.00	145	76.00	3665	116.00	548	174.00	80352
55.00	249	77.00	542	117.00	667	175.00	6022
56.00	1278	78.00	552	118.00	371	176.00	76392
57.00	2516	79.00	2419	119.00	657	177.00	4917
58.00	88	80.00	600	128.00	303	207.00	273
60.00	907	81.00	2816	129.00	108	209.00	92
61.00	4628	82.00	505	130.00	193		

Digitally signed by Kerri E. Koch Legerlotz on 10/31/2018 at 07:35.
Target 3.5 esignature user ID: kel01973



Total Ion Chromatogram (TIC)

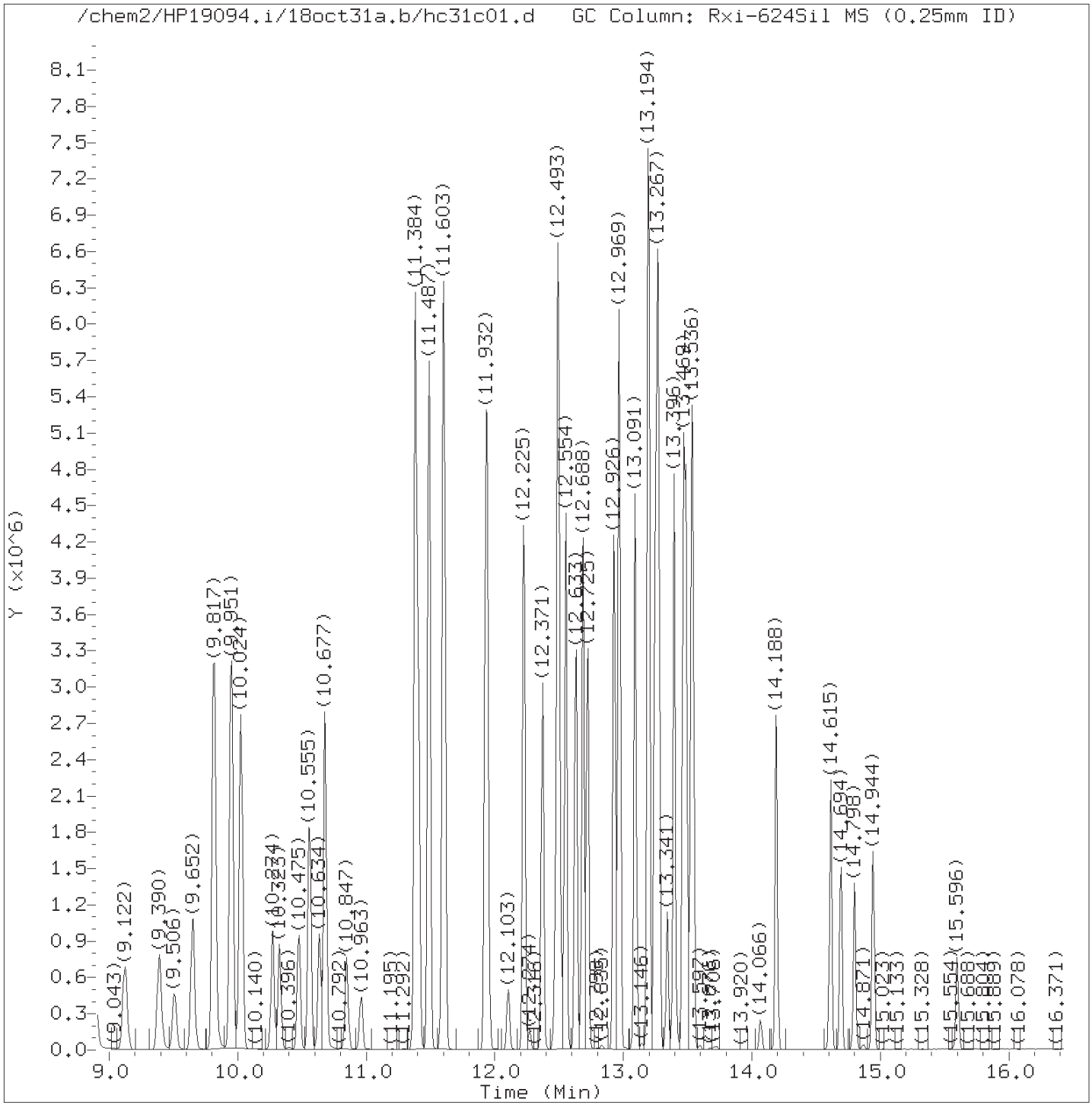
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.075	85	950112	9.538
2) Chloromethane	(2)	2.276	50	868667	8.905
6) 1,3-Butadiene	(2)	2.398	39	708832	6.850
5) Vinyl Chloride	(2)	2.404	62	824194	9.022
7) Bromomethane	(2)	2.739	94	630804	8.882
8) Chloroethane	(2)	2.843	64	490965	8.861
9) Dichlorofluoromethane	(2)	3.087	67	1185865	8.998
10) Trichlorofluoromethane	(2)	3.154	101	1091766	9.460
11) Ethyl ether	(2)	3.428	59	338188	8.642
12) Freon 123a	(2)	3.519	67	656220	8.975
13) Acrolein	(1)	3.623	56	2240215	403.028
15) 1,1-Dichloroethene	(2)	3.763	96	428178	8.568
16) Freon 113	(2)	3.794	101	508173	8.628
14) Acetone	(1)	3.800	43	537966	72.057
17) Methyl Iodide	(2)	3.971	142	869516	8.347
18) Carbon Disulfide	(2)	4.086	76	1234081	7.761
21) Methyl Acetate	(1)	4.245	43	183440	8.752
22) Allyl Chloride	(2)	4.275	41	812757	8.555
23) Methylene Chloride	(2)	4.470	84	475599	8.436
26)*t-Butyl Alcohol-d10	(1)	4.489	65	125260	50.000
28) t-Butyl Alcohol	(1)	4.617	59	334335	156.372
29) Acrylonitrile	(1)	4.824	53	424238	44.001
30) Methyl Tertiary Butyl Ether	(2)	4.879	73	948942	9.233
31) trans-1,2-Dichloroethene	(2)	4.897	96	488542	8.661
32) n-Hexane	(2)	5.306	57	799698	8.916
33) 1,1-Dichloroethane	(2)	5.549	63	980508	9.130
34) di-Isopropyl Ether	(2)	5.604	45	1750300	9.178
35) 2-Chloro-1,3-Butadiene	(2)	5.659	53	897146	9.284
40) 1,2-Dichloroethene (Total)	(2)		96	1050883	17.685
37) Ethyl t-butyl ether	(2)	6.135	59	1368564	9.048
38) 2-Butanone	(1)	6.342	43	1111852	90.979
39) cis-1,2-Dichloroethene	(2)	6.379	96	562341	9.023
41) 2,2-Dichloropropane	(2)	6.397	77	721642	9.408
42) Propionitrile	(1)	6.452	54	636794	191.967
45) Methacrylonitrile	(1)	6.653	67	1069124	89.384
47) Bromochloromethane	(2)	6.714	128	228983	8.698
48) Tetrahydrofuran	(1)	6.720	71	288596	88.826
49) Chloroform	(2)	6.860	83	940338	9.418

* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	7.074	113	638308	9.936
50)$Dibromofluoromethane	(2)	7.074	111	656802	9.933
51) 1,1,1-Trichloroethane	(2)	7.092	97	781268	9.148
52) Cyclohexane	(2)	7.183	56	977884	8.771
52) Cyclohexane	(2)	7.189	84	808552	8.797
52) Cyclohexane	(2)	7.189	69	291763	8.880
54) Carbon Tetrachloride	(2)	7.299	117	697225	9.506
55) 1,1-Dichloropropene	(2)	7.299	75	740805	9.148
56) Isobutyl Alcohol	(1)	7.439	41	405156	489.760
57)$1,2-Dichloroethane-d4	(2)	7.531	102	114848	10.255
57)$1,2-Dichloroethane-d4	(2)	7.531	65	578080	10.672
57)$1,2-Dichloroethane-d4	(2)	7.537	104	72649	10.129
58) Benzene	(2)	7.567	78	2141227	8.950
59) 1,2-Dichloroethane	(2)	7.634	62	510613	9.274
60) t-Amyl methyl ether	(2)	7.744	73	1138030	9.074
62) n-Heptane	(2)	7.970	43	876024	9.473
63)*Fluorobenzene	(2)	7.970	96	2548841	10.000
65) n-Butanol	(1)	8.311	56	649597	929.450
67) Trichloroethene	(2)	8.445	95	554174	9.047
69) Methylcyclohexane	(2)	8.750	83	1003456	8.674
70) 1,2-Dichloropropane	(2)	8.781	63	539078	9.287
71) Methyl Methacrylate	(1)	8.854	69	211245M	9.541
72) 1,4-Dioxane	(1)	8.872	88	76325	453.569
73) Dibromomethane	(2)	8.890	93	226511	9.402
74) Bromodichloromethane	(2)	9.122	83	630993	9.670
76) 2-Nitropropane	(1)	9.390	41	661626M	105.499
80) cis-1,3-Dichloropropene	(2)	9.646	75	731326	9.626
81) 4-Methyl-2-Pentanone	(1)	9.811	43	2825053M	92.933
82)$Toluene-d8	(3)	9.951	98	2525272	10.195
82)$Toluene-d8	(3)	9.951	100	1622457	10.148
83) Toluene	(3)	10.024	92	1334074	9.341
85) 1,3-Dichloropropene (total)	(3)		75	1299164	19.944
84) trans-1,3-Dichloropropene	(3)	10.274	75	567838	10.318
86) Ethyl Methacrylate	(3)	10.323	69	469637	9.961
88) 1,1,2-Trichloroethane	(3)	10.475	97	308595	9.390
89) Tetrachloroethene	(3)	10.561	166	610164	9.455
90) 1,3-Dichloropropane	(3)	10.634	76	562422	9.656
91) 2-Hexanone	(1)	10.677	43	1923042M	92.934

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) Dibromochloromethane	(3)	10.847	129	395110	10.031
95) 1,2-Dibromoethane	(3)	10.957	107	302583	9.823
96) 1-Chlorohexane	(3)	11.384	91	787849	9.249
97)*Chlorobenzene-d5	(3)	11.384	117	1924638	10.000
98) Chlorobenzene	(3)	11.408	112	1439875	9.502
100) Ethylbenzene	(3)	11.487	91	2680771	9.604
99) 1,1,1,2-Tetrachloroethane	(3)	11.487	131	502185	10.042
101) m+p-Xylene	(3)	11.603	106	1985607	19.178
105) Xylene (Total)	(3)		106	2934207	28.761
104) o-Xylene	(3)	11.932	106	948600	9.583
106) Styrene	(3)	11.945	104	1559549	9.847
107) Bromoform	(3)	12.103	173	216913	10.020
108) Isopropylbenzene	(3)	12.225	105	2613167	9.670
111)$4-Bromofluorobenzene	(3)	12.371	95	890784	9.877
111)$4-Bromofluorobenzene	(3)	12.371	174	774330	9.888
113) 1,1,2,2-Tetrachloroethane	(4)	12.469	83	381466M	9.820
114) Bromobenzene	(4)	12.487	156	577632	9.781
115) trans-1,4-Dichloro-2-butene	(1)	12.493	53	861280M	90.461
116) 1,2,3-Trichloropropane	(4)	12.518	110	94858M	9.446
117) n-Propylbenzene	(4)	12.554	91	3160093	9.841
119) 2-Chlorotoluene	(4)	12.633	126	605904	9.729
121) 1,3,5-Trimethylbenzene	(4)	12.688	105	2135375	9.817
122) 4-Chlorotoluene	(4)	12.725	126	606756	9.722
125) tert-Butylbenzene	(4)	12.926	134	468766M	9.909
126) Pentachloroethane	(4)	12.963	167	362392	9.815
127) 1,2,4-Trimethylbenzene	(4)	12.969	105	2151848	9.694
128) sec-Butylbenzene	(4)	13.091	105	2778896	9.859
131) 1,3-Dichlorobenzene	(4)	13.194	146	1124886	9.587
132) p-Isopropyltoluene	(4)	13.200	119	2355215	10.087
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	979276	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	1096199	9.518
135) 1,2,3-Trimethylbenzene	(4)	13.274	120	904755	8.884
136) Benzyl Chloride	(4)	13.341	126	148711	10.590
138) n-Butylbenzene	(4)	13.487	92	1164981	10.053
139) 1,2-Dichlorobenzene	(4)	13.530	146	963957	9.312
144) 1,3,5-Trichlorobenzene	(4)	14.188	180	807928	9.256
145) 1,2,4-Trichlorobenzene	(4)	14.615	180	628882	8.845
146) Hexachlorobutadiene	(4)	14.694	225	254745	9.480

M = Compound was manually integrated.
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Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
143) 1,2-Dibromo-3-chloropropane	(1)	14.694	155	37052	7.190
147) Naphthalene	(4)	14.798	128	974436	8.661
148) 1,2,3-Trichlorobenzene	(4)	14.944	180	483992	8.279

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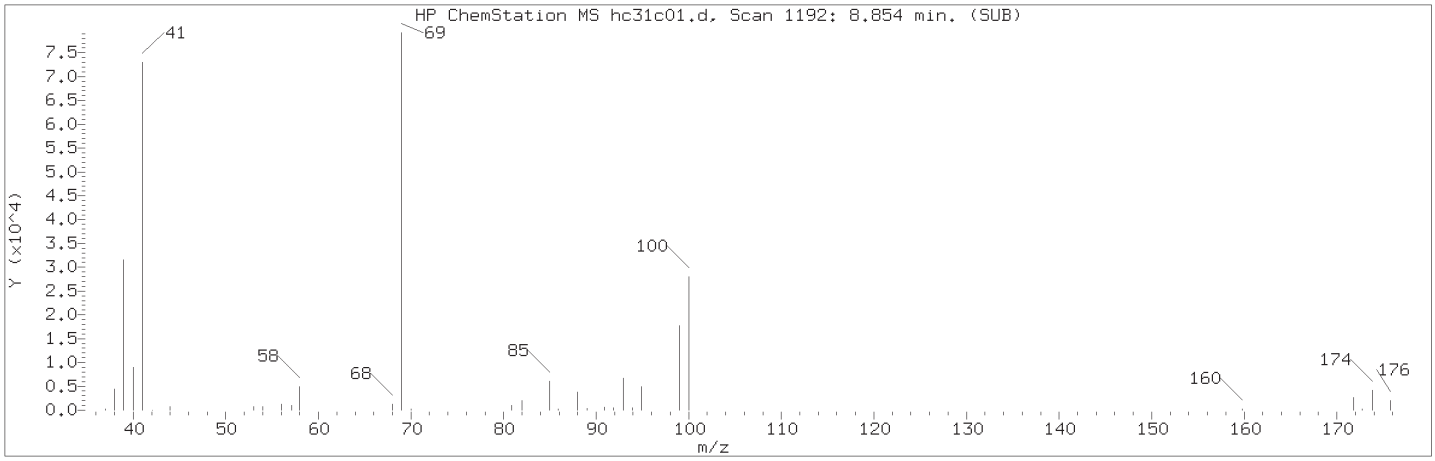
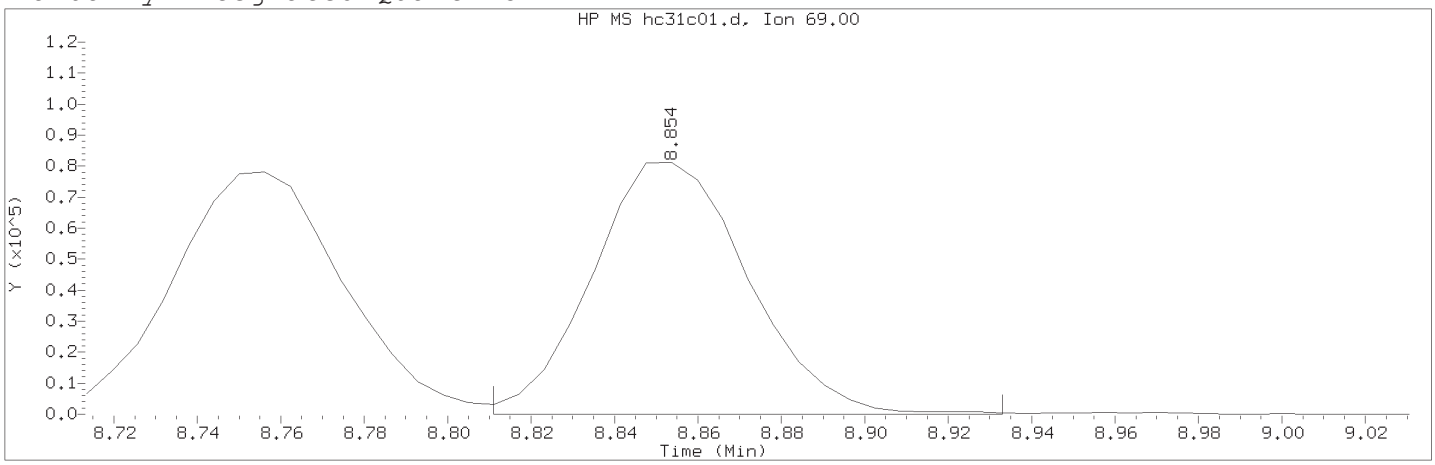
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

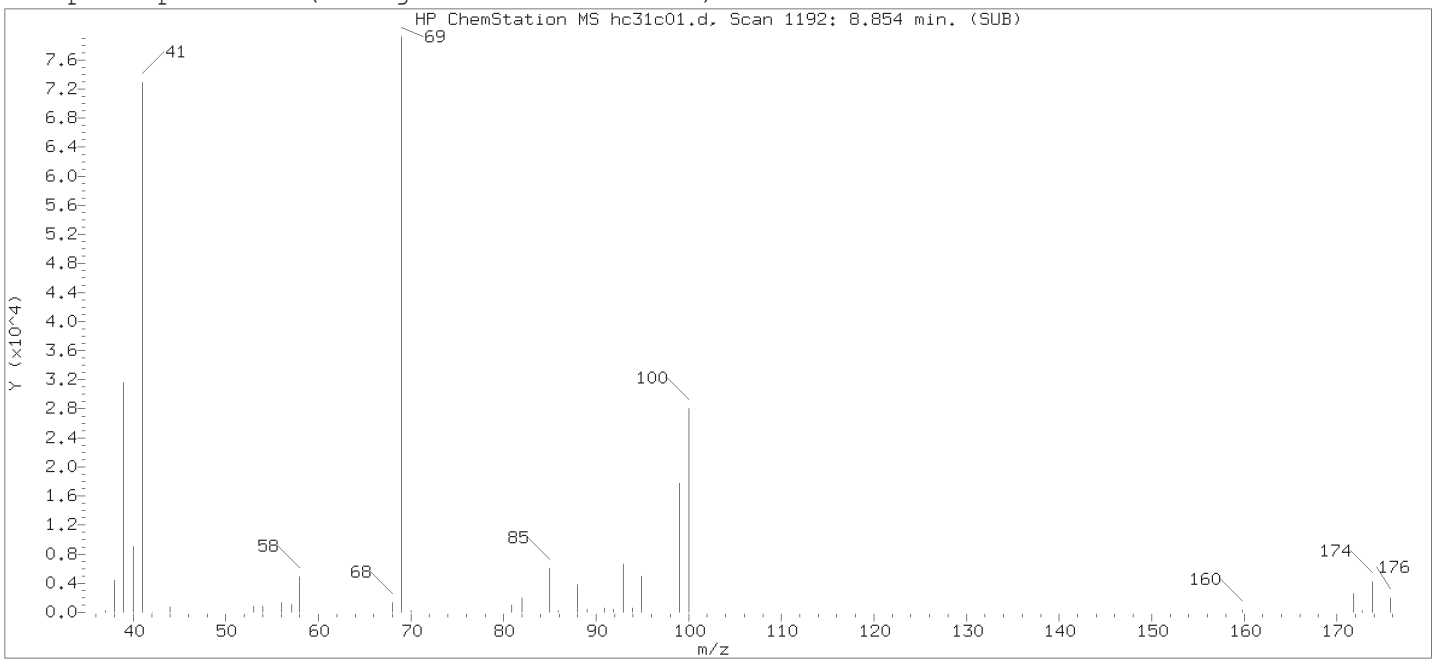
Compound Number : 71
Compound Name : Methyl Methacrylate
Scan Number : 1192
Retention Time (minutes): 8.854
Quant Ion : 69.00
Area (flag) : 211245M
On-Column Amount (ng) : 9.5415
Integration start scan : 1184 Integration stop scan: 1204
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

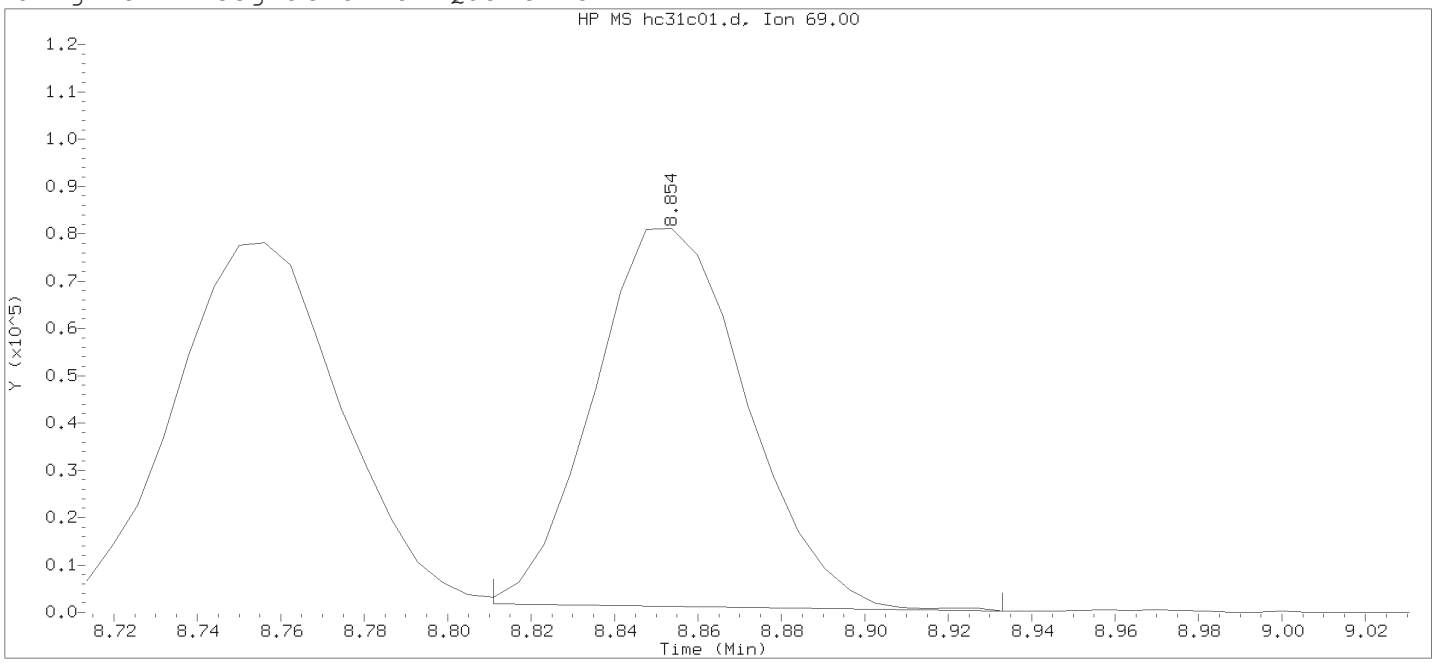
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

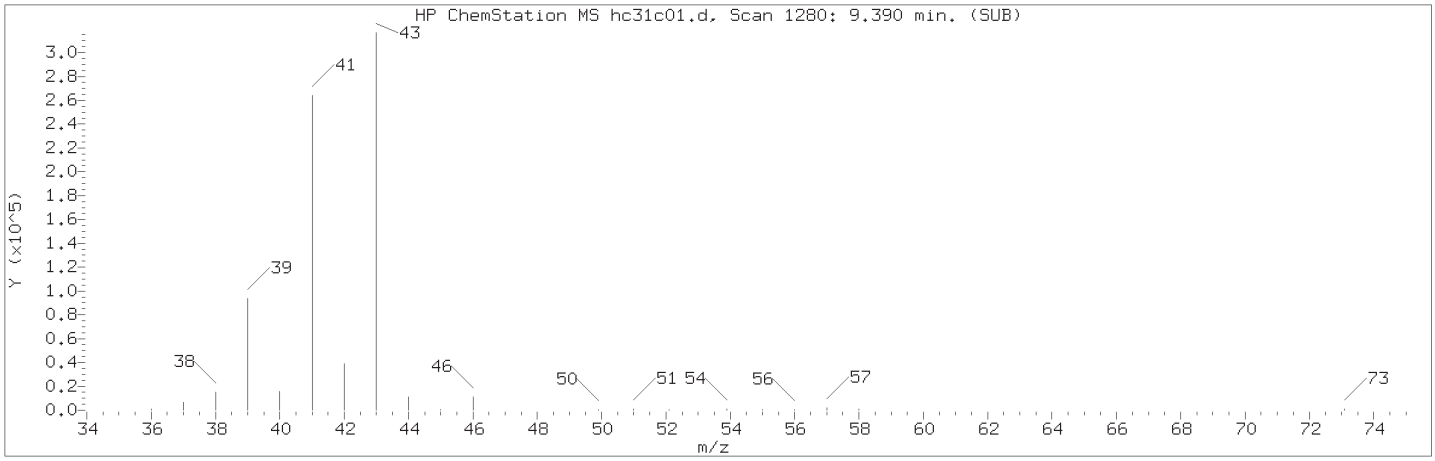
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 08:45
Date, time and analyst ID of latest file update: 31-Oct-2018 08:45 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

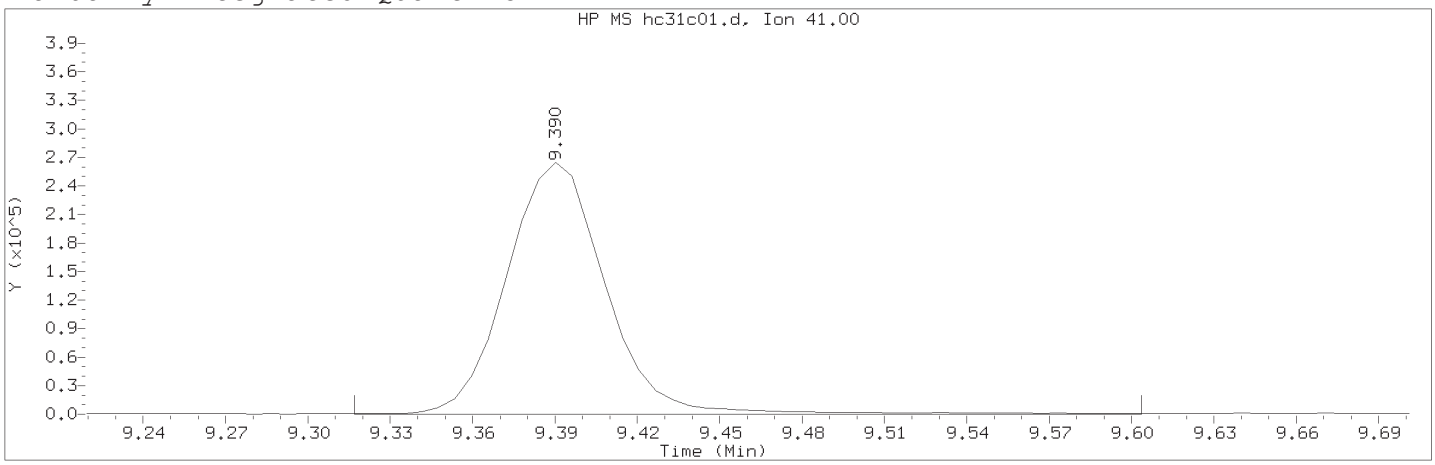
Compound Number : 71
Compound Name : Methyl Methacrylate
Scan Number : 1192
Retention Time (minutes): 8.854
Quant Ion : 69.00
Area : 203358
On-column Amount (ng) : 9.1852
Integration start scan : 1184 Integration stop scan: 1204
Y at integration start : 1726 Y at integration end: 256

Digitally signed by Don V. Viray on 11/02/2018 at 22:15.
Target 3.5 esignature user id: DVIRAY

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

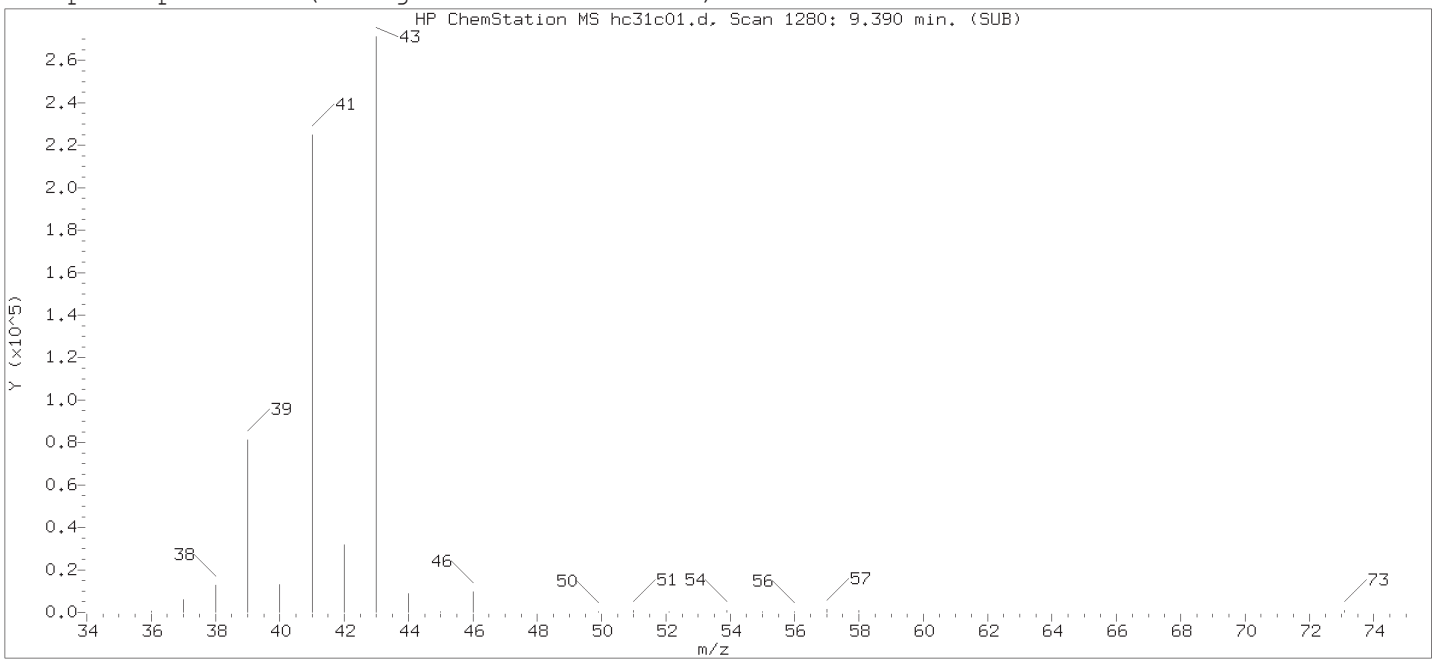
Compound Number : 76
Compound Name : 2-Nitropropane
Scan Number : 1280
Retention Time (minutes): 9.390
Quant Ion : 41.00
Area (flag) : 661626M
On-Column Amount (ng) : 105.4986
Integration start scan : 1267 Integration stop scan: 1314
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

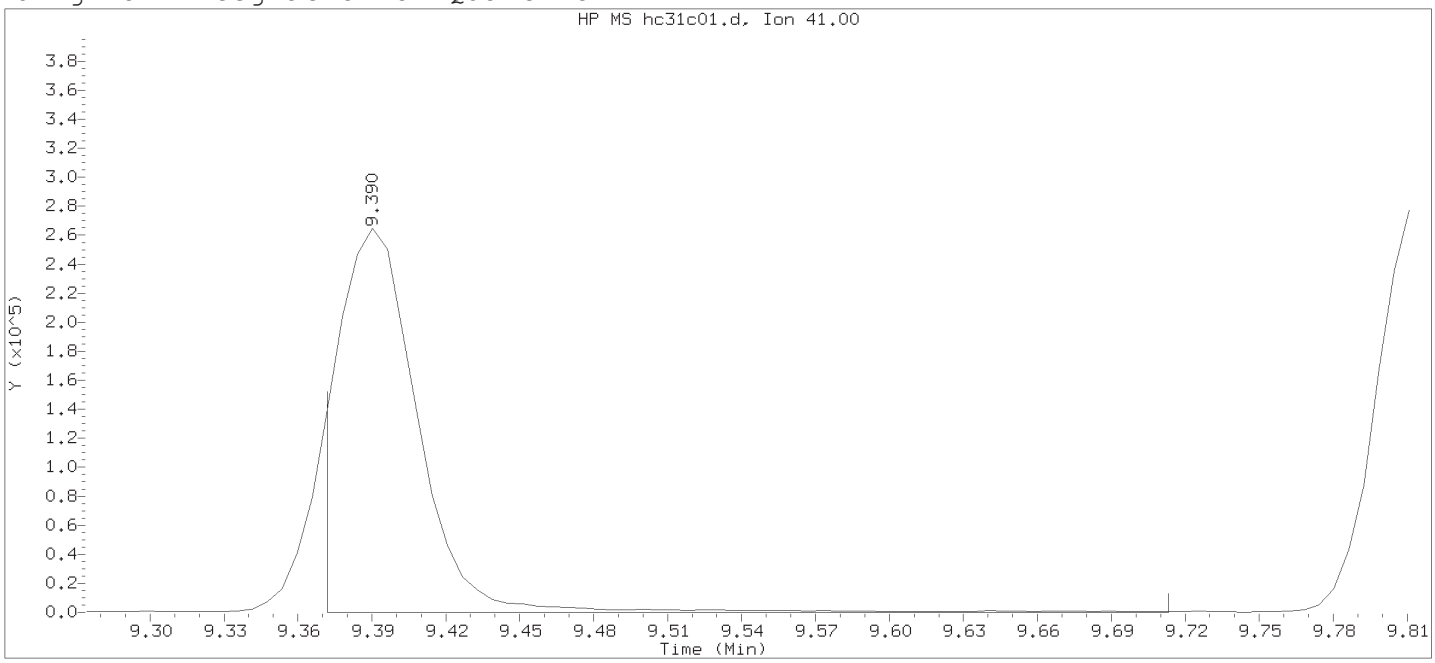
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

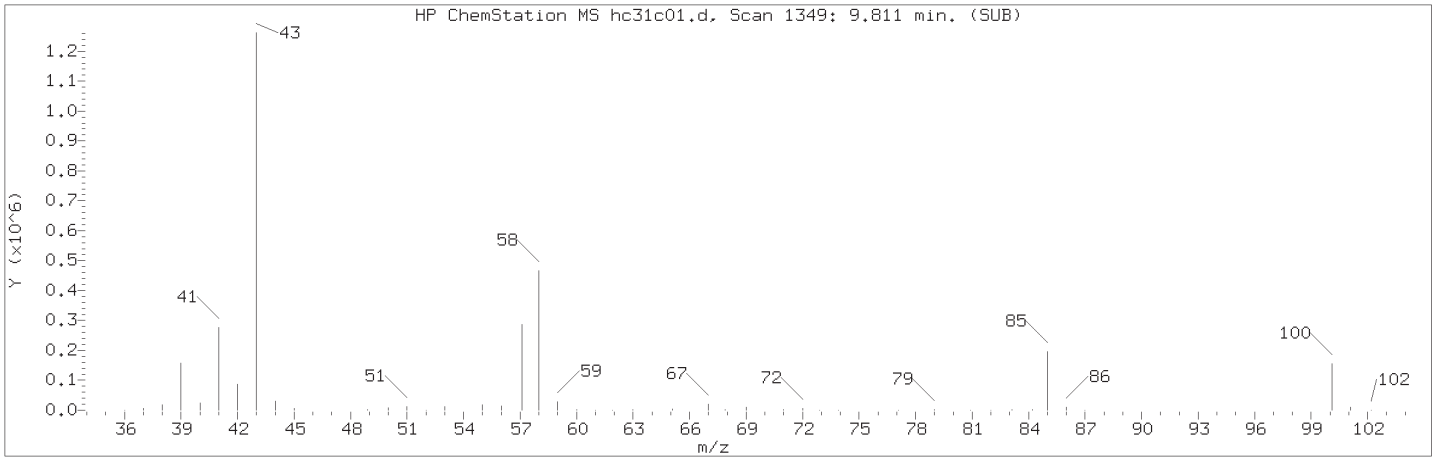
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 08:45
Date, time and analyst ID of latest file update: 31-Oct-2018 08:45 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

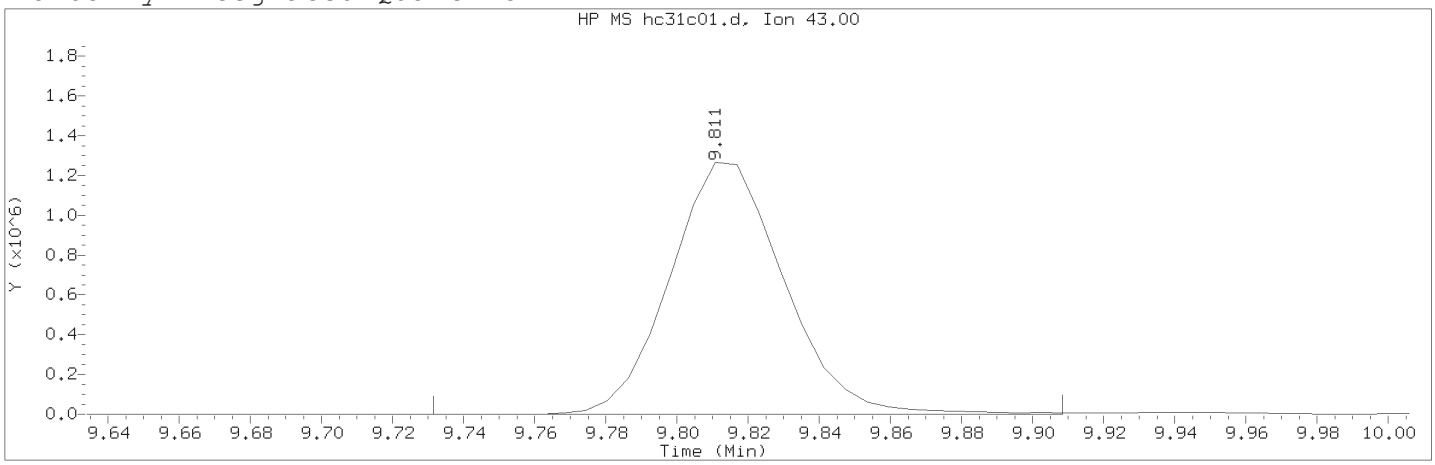
Compound Number : 76
Compound Name : 2-Nitropropane
Scan Number : 1280
Retention Time (minutes): 9.390
Quant Ion : 41.00
Area : 586448
On-column Amount (ng) : 93.5107
Integration start scan : 1276 Integration stop scan: 1332
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/02/2018 at 22:15.
Target 3.5 esignature user id: DVIRAY

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

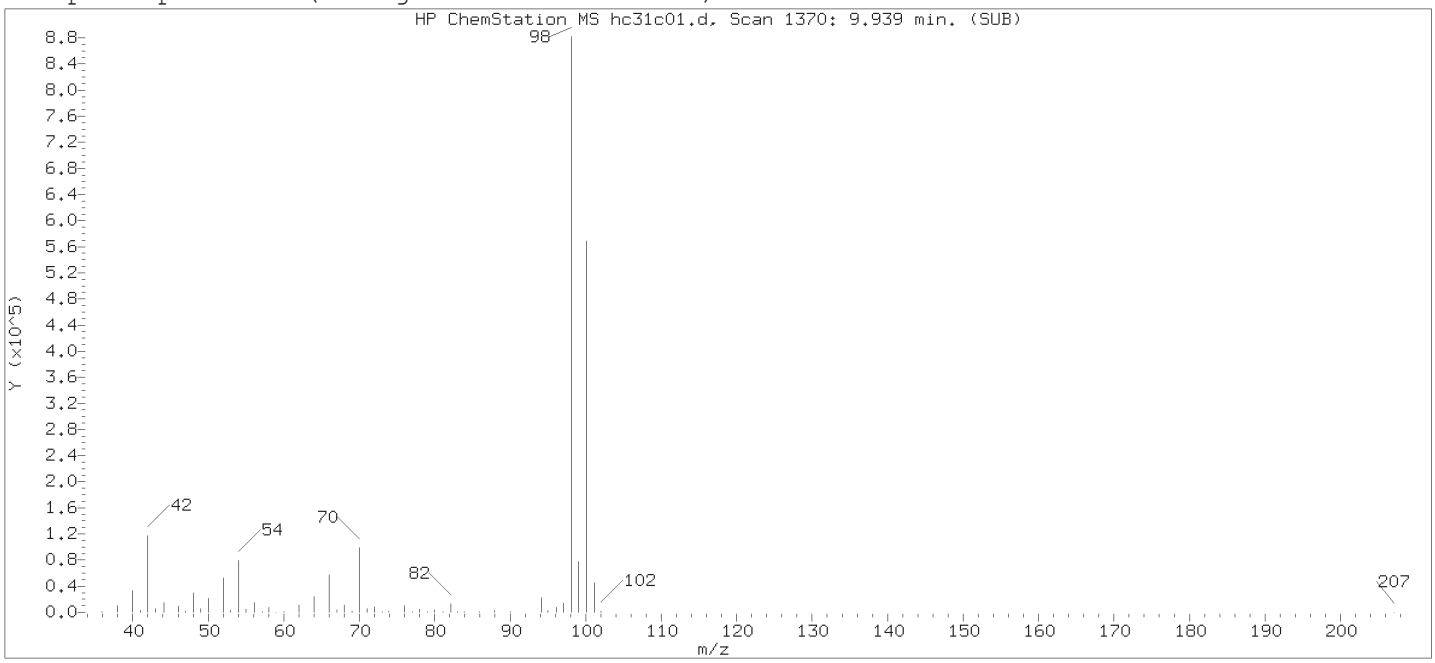
Compound Number : 81
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1349
Retention Time (minutes): 9.811
Quant Ion : 43.00
Area (flag) : 2825053M
On-Column Amount (ng) : 92.9325
Integration start scan : 1335 Integration stop scan: 1364
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

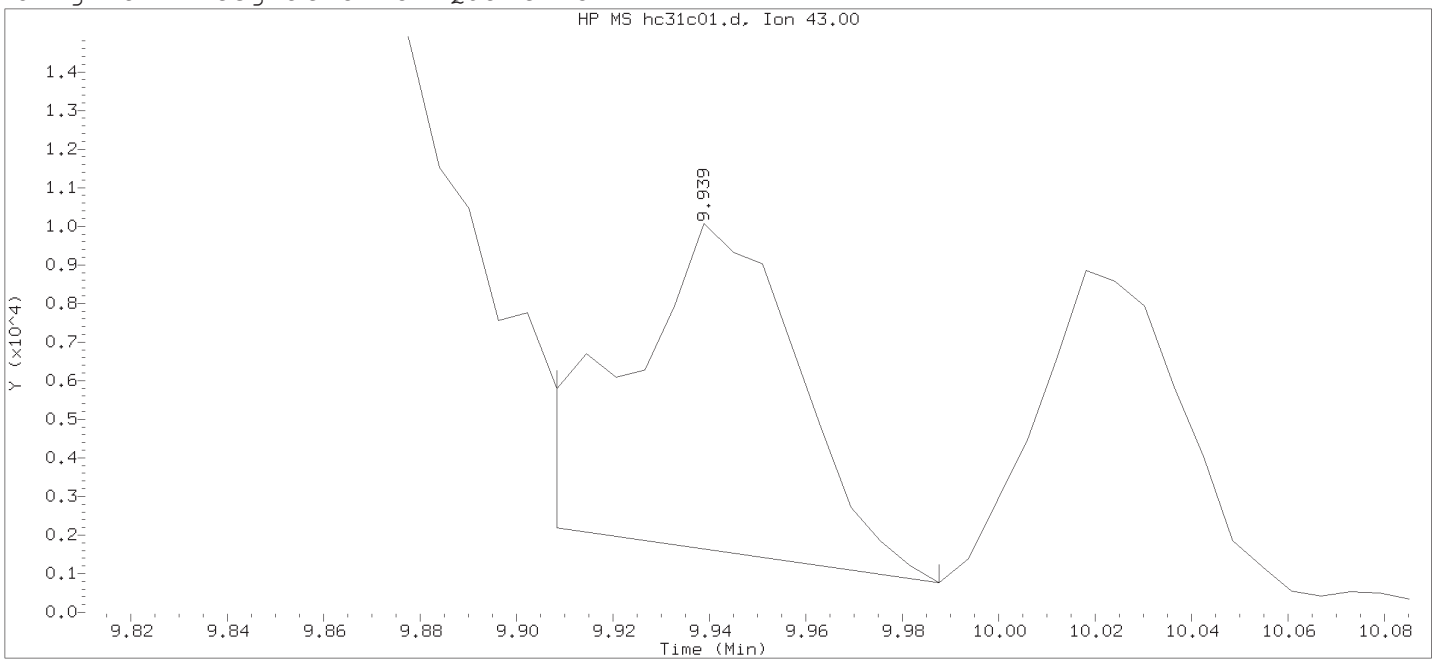
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

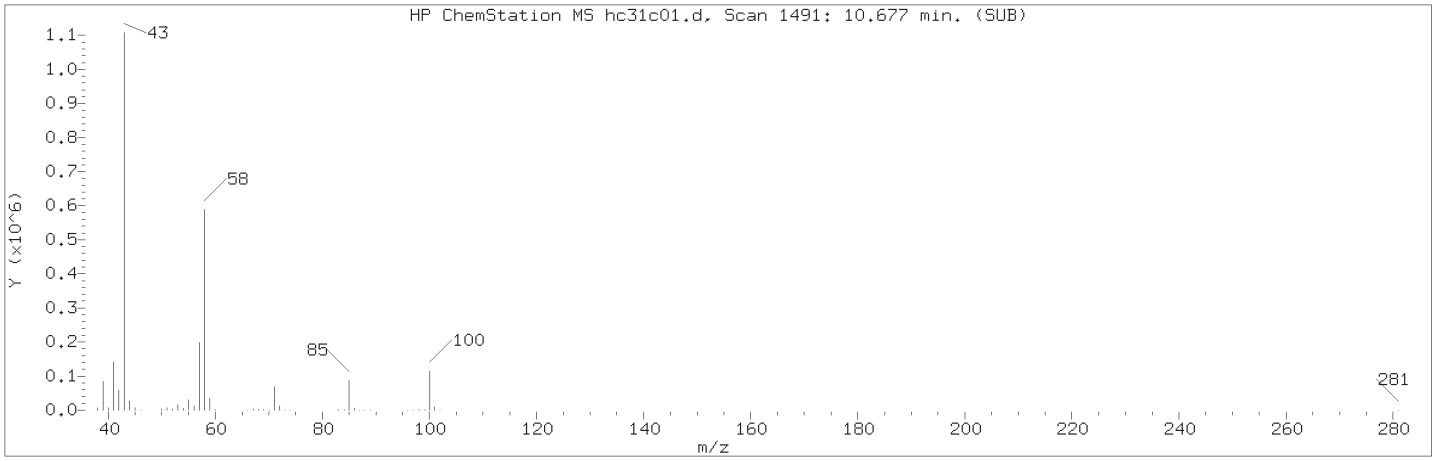
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 08:45
Date, time and analyst ID of latest file update: 31-Oct-2018 08:45 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

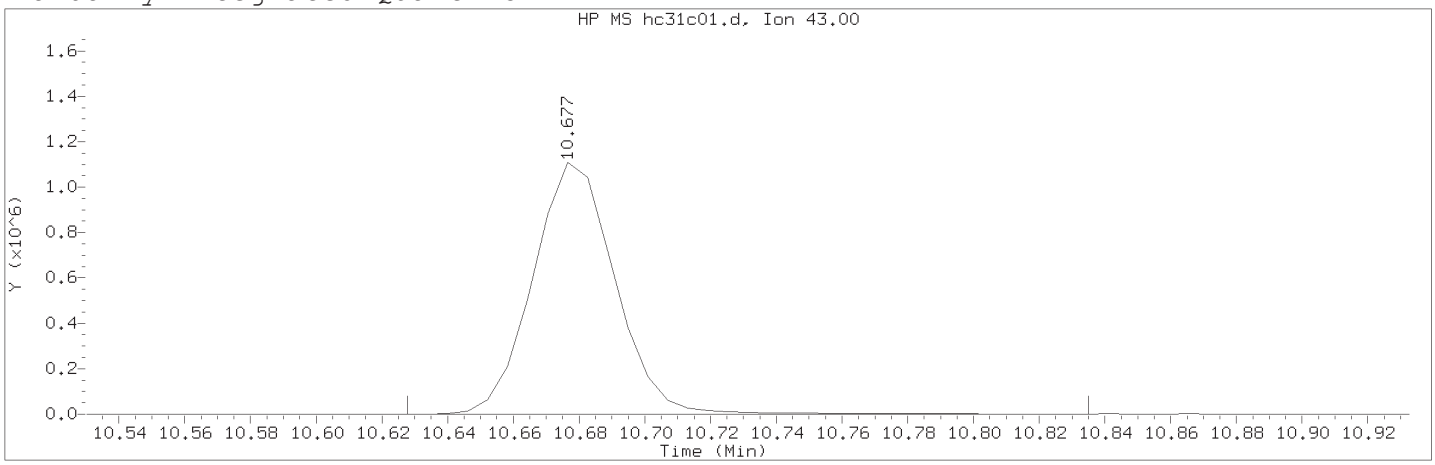
Compound Number	: 81		
Compound Name	: 4-Methyl-2-Pentanone		
Scan Number	: 1370		
Retention Time (minutes)	: 9.939		
Quant Ion	: 43.00		
Area	: 20849		
On-column Amount (ng)	: 0.6859		
Integration start scan	: 1364	Integration stop scan:	1377
Y at integration start	: 2187	Y at integration end:	759

Digitally signed by Don V. Viray on 11/02/2018 at 22:15.
Target 3.5 esignature user id: DVIRAY

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

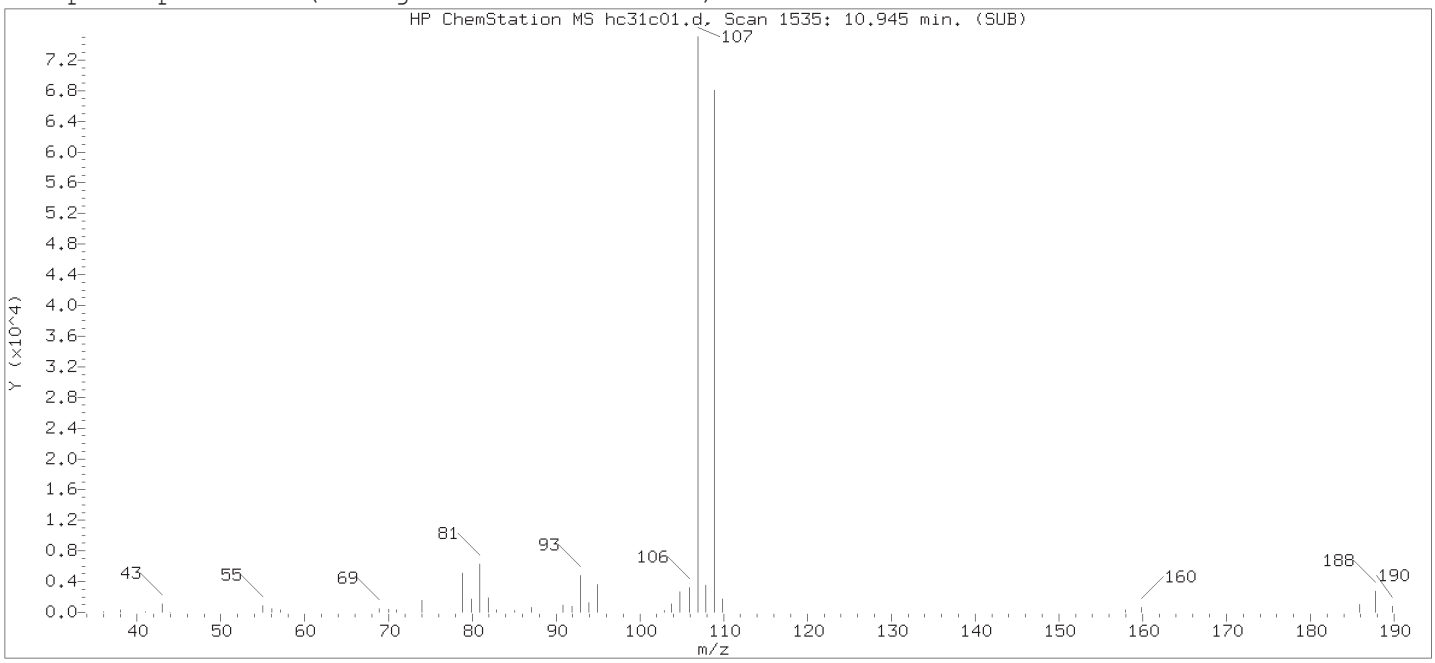
Compound Number : 91
Compound Name : 2-Hexanone
Scan Number : 1491
Retention Time (minutes): 10.677
Quant Ion : 43.00
Area (flag) : 1923042M
On-Column Amount (ng) : 92.9345
Integration start scan : 1482 Integration stop scan: 1516
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

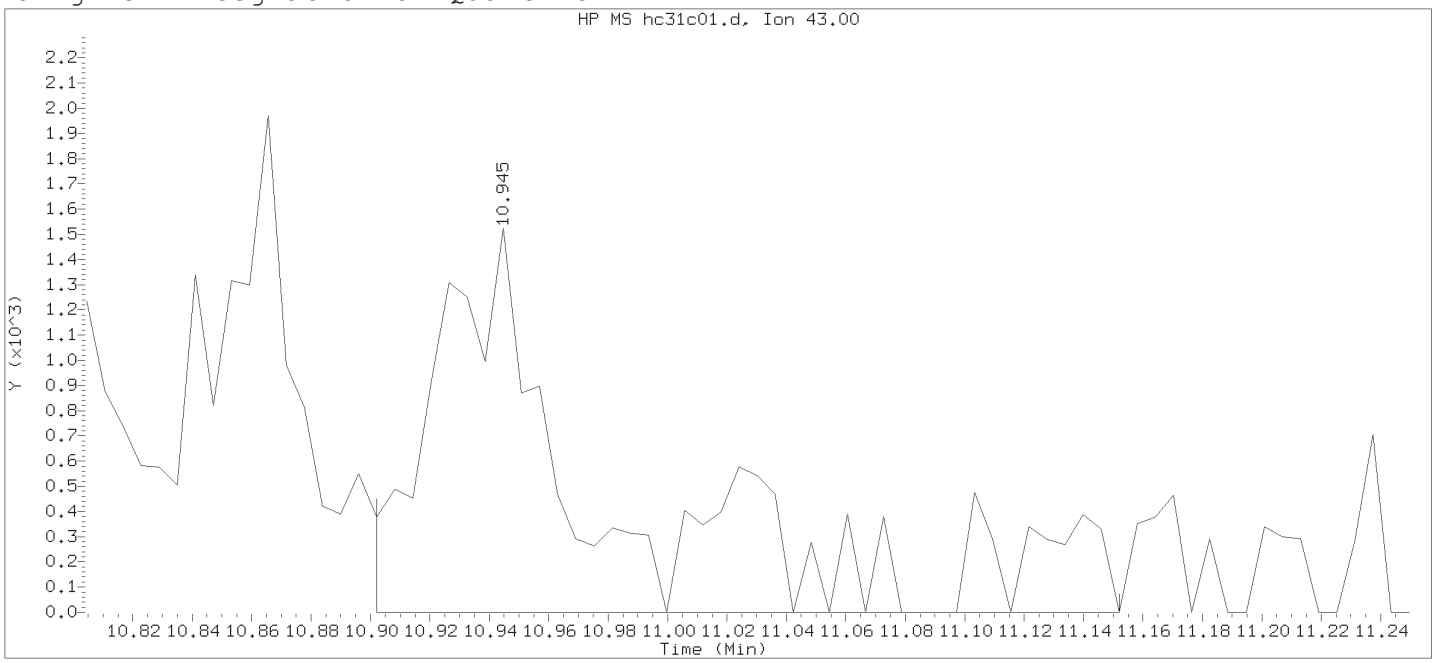
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

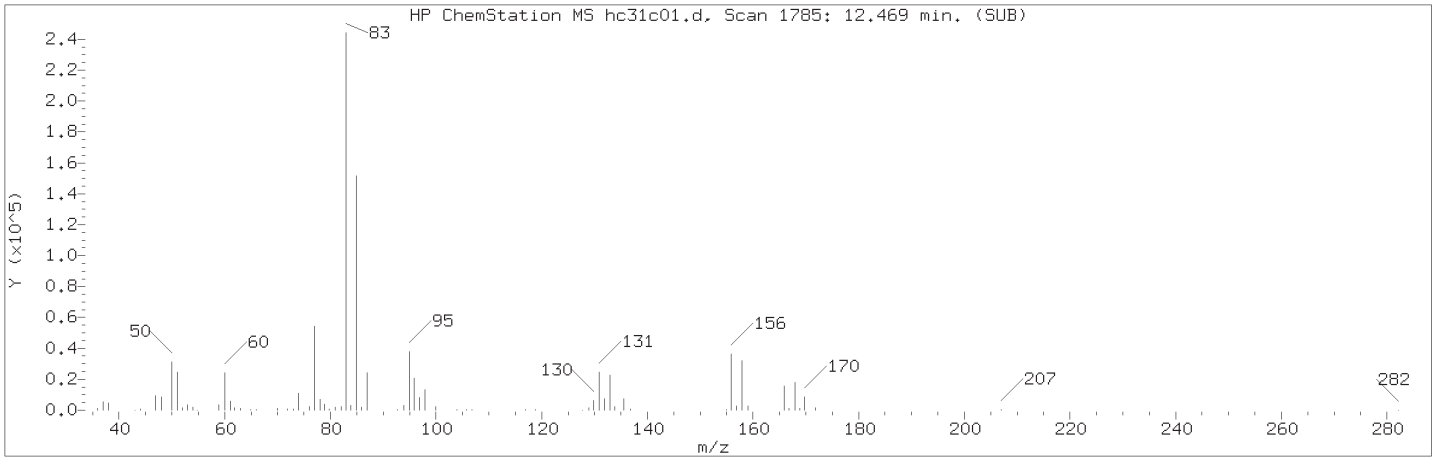
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 08:45
Date, time and analyst ID of latest file update: 31-Oct-2018 08:45 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

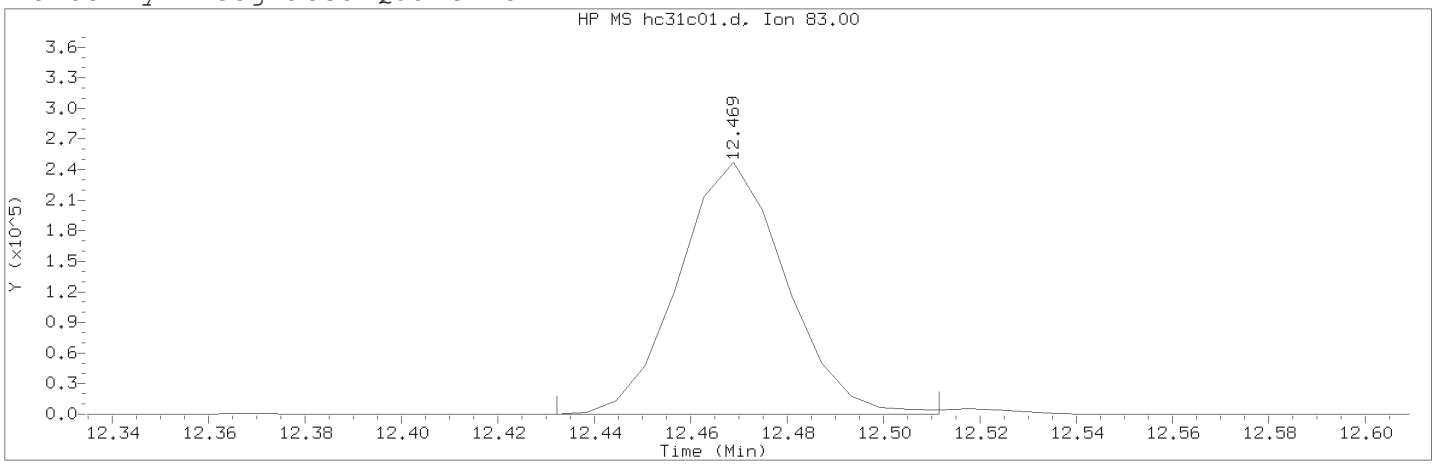
Compound Number	: 91		
Compound Name	: 2-Hexanone		
Scan Number	: 1535		
Retention Time (minutes)	: 10.945		
Quant Ion	: 43.00		
Area	: 6229		
On-column Amount (ng)	: 0.3010		
Integration start scan	: 1527	Integration stop scan:	1568
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 11/02/2018 at 22:15.
Target 3.5 esignature user id: DVIRAY

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

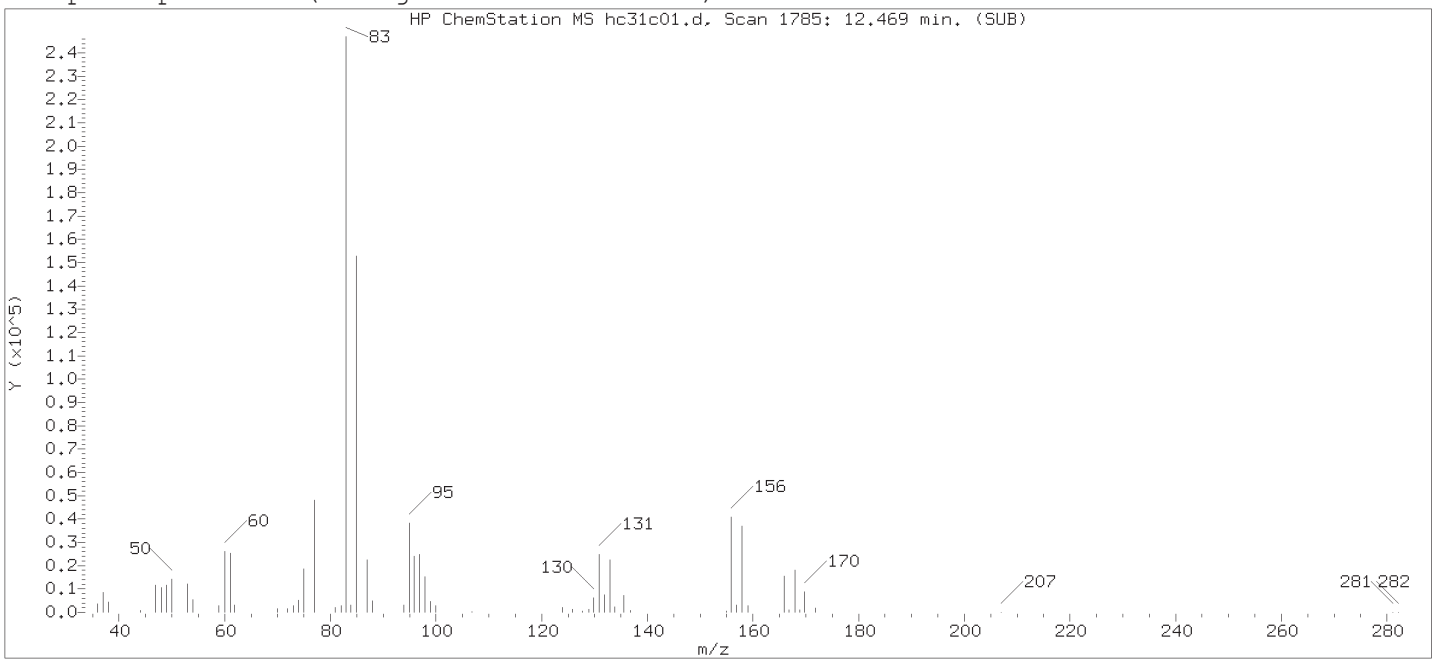
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1785
Retention Time (minutes): 12.469
Quant Ion : 83.00
Area (flag) : 381466M
On-Column Amount (ng) : 9.8202
Integration start scan : 1778 Integration stop scan: 1791
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

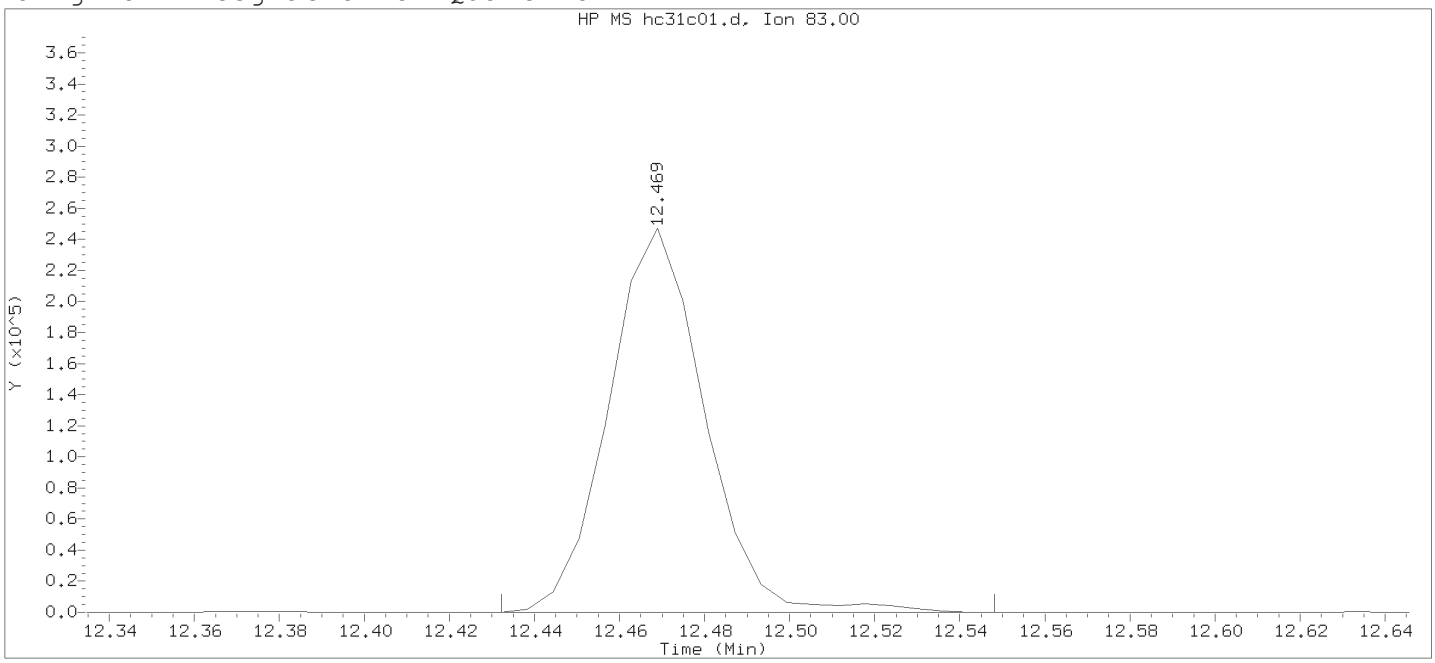
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

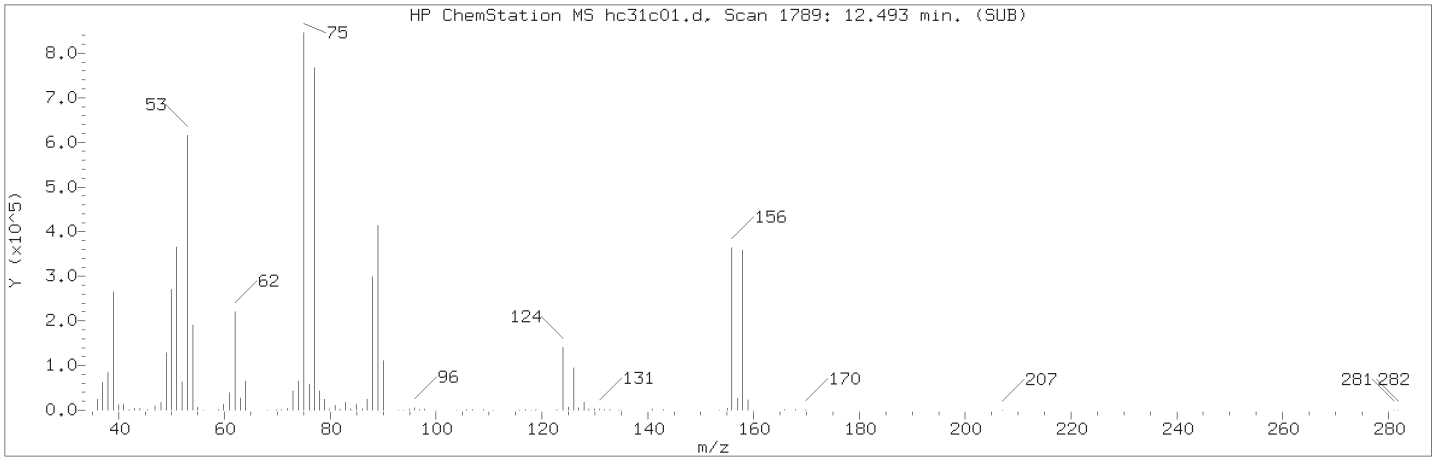
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 08:45
Date, time and analyst ID of latest file update: 31-Oct-2018 08:45 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

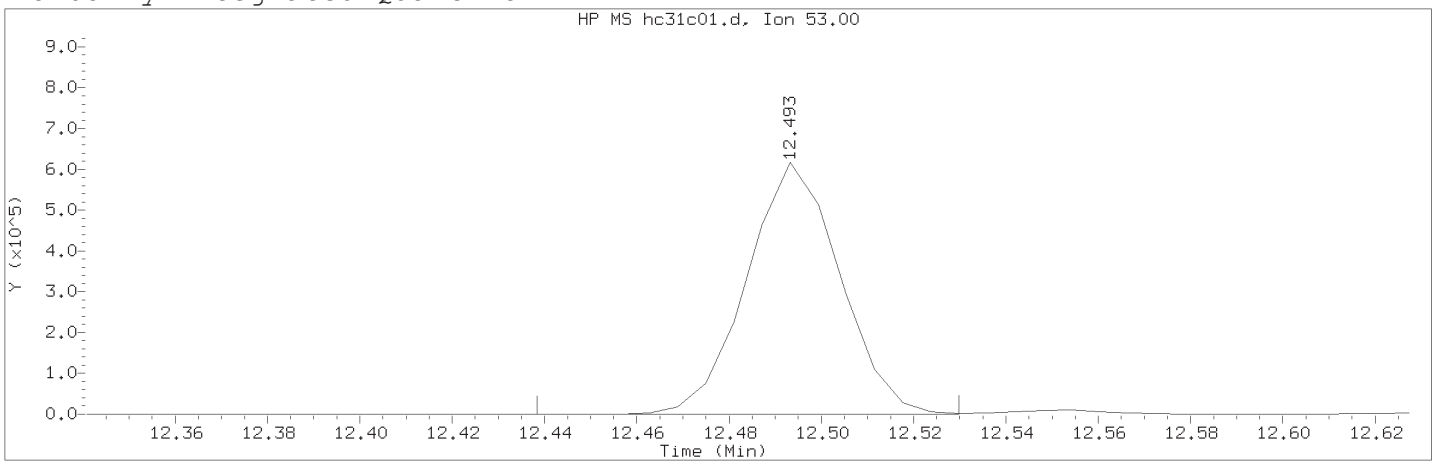
Compound Number	: 113		
Compound Name	: 1,1,2,2-Tetrachloroethane		
Scan Number	: 1785		
Retention Time (minutes)	: 12.469		
Quant Ion	: 83.00		
Area	: 386235		
On-column Amount (ng)	: 9.9430		
Integration start scan	: 1778	Integration stop scan:	1797
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 11/02/2018 at 22:15.
Target 3.5 esignature user id: DVIRAY

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

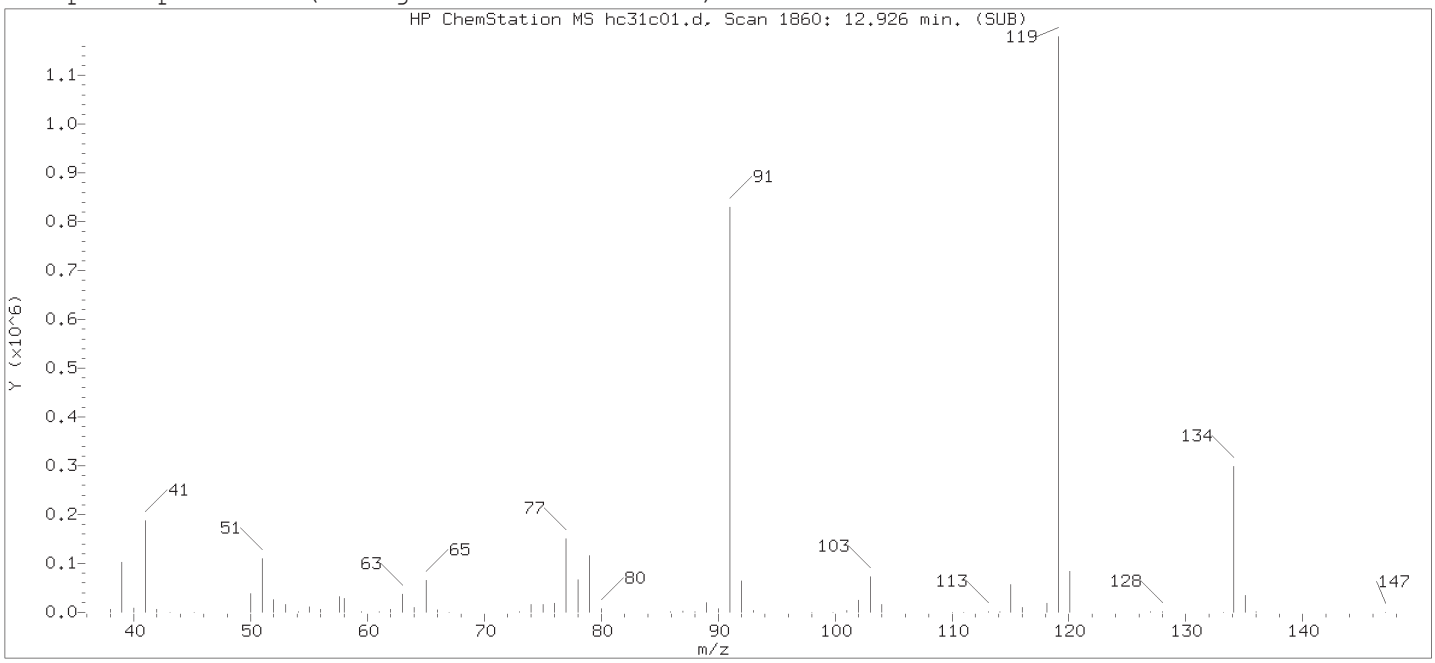
Compound Number : 115
Compound Name : trans-1,4-Dichloro-2-butene
Scan Number : 1789
Retention Time (minutes): 12.493
Quant Ion : 53.00
Area (flag) : 861280M
On-Column Amount (ng) : 90.4609
Integration start scan : 1779 Integration stop scan: 1794
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

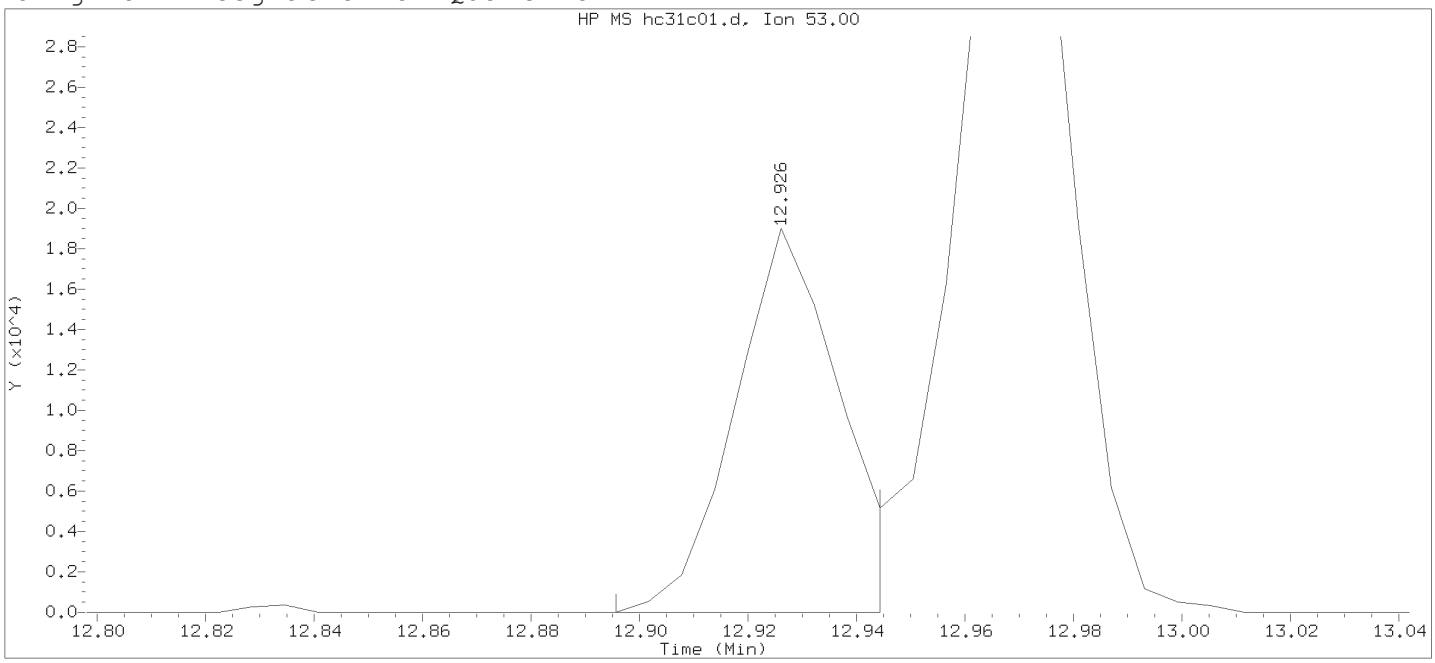
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

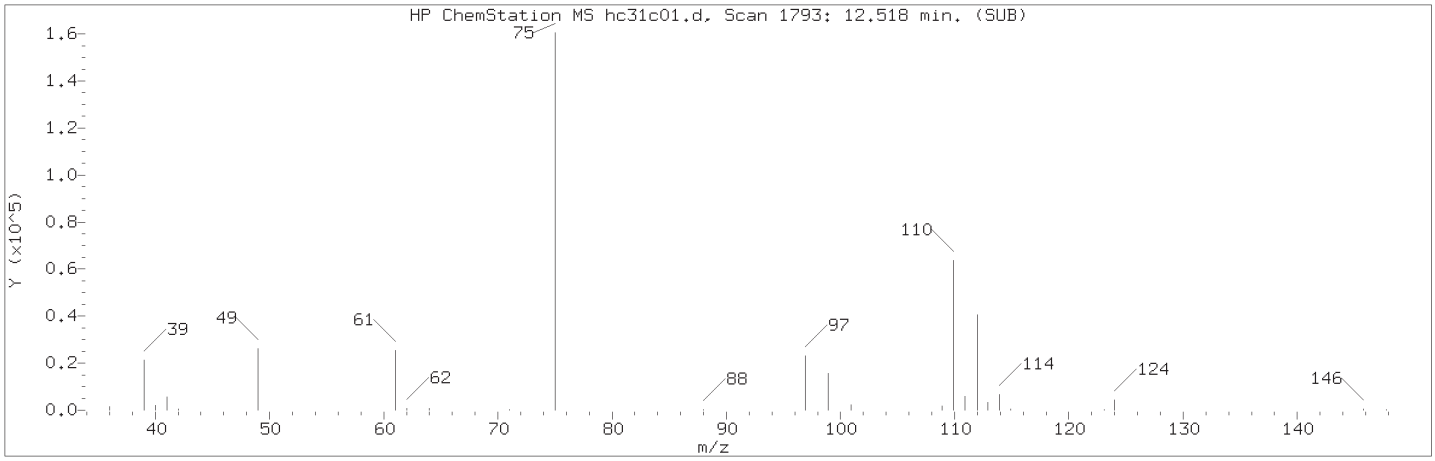
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 08:45
Date, time and analyst ID of latest file update: 31-Oct-2018 08:45 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

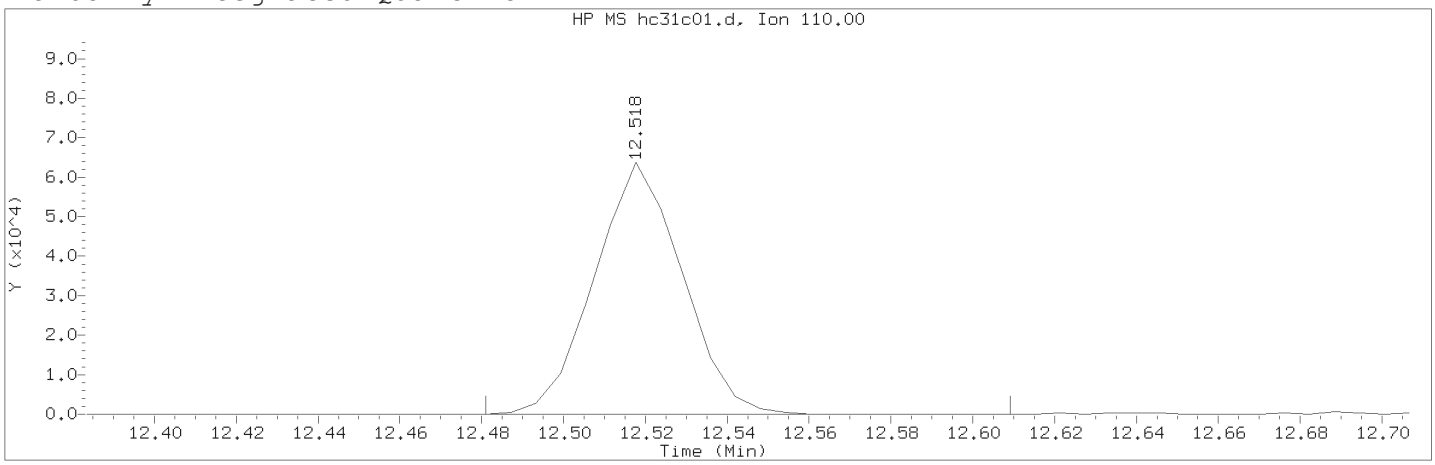
Compound Number : 115
Compound Name : trans-1,4-Dichloro-2-butene
Scan Number : 1860
Retention Time (minutes): 12.926
Quant Ion : 53.00
Area : 24803
On-column Amount (ng) : 2.6051
Integration start scan : 1854 Integration stop scan: 1862
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/02/2018 at 22:15.
Target 3.5 esignature user id: DVIRAY

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

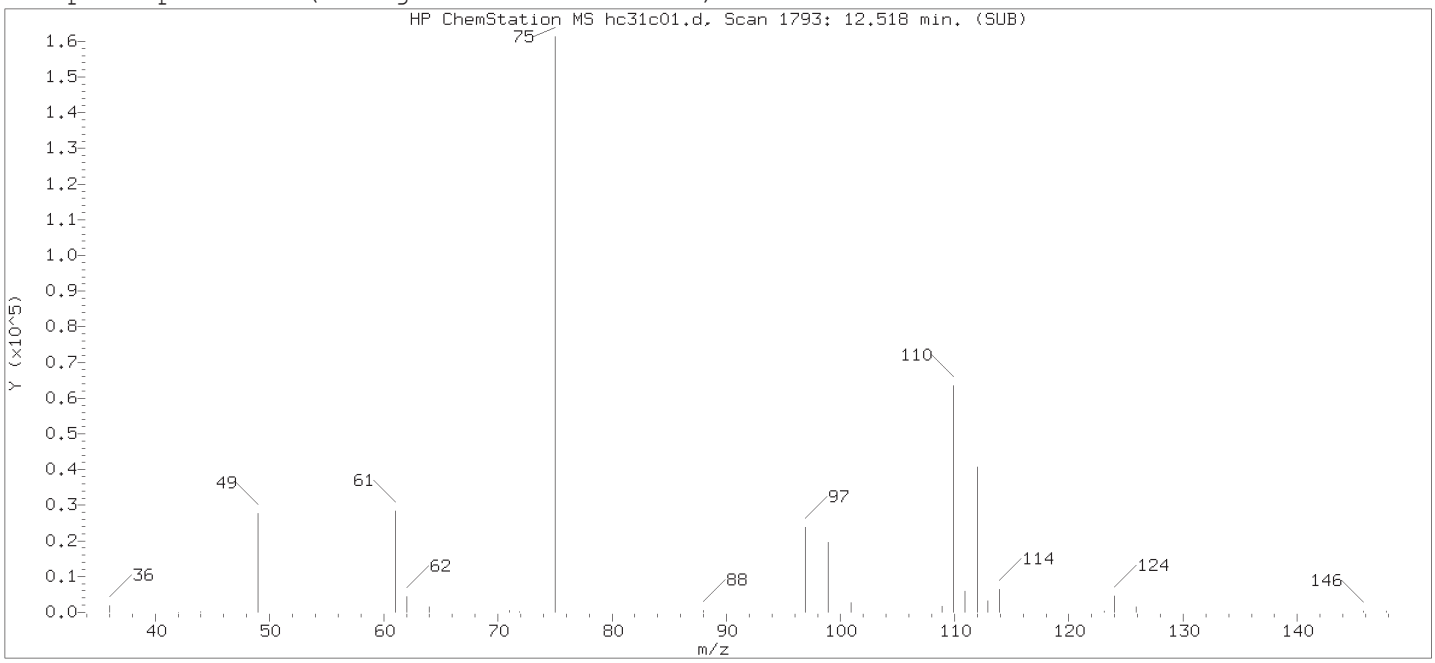
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1793
Retention Time (minutes): 12.518
Quant Ion : 110.00
Area (flag) : 94858M
On-Column Amount (ng) : 9.4455
Integration start scan : 1786 Integration stop scan: 1807
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

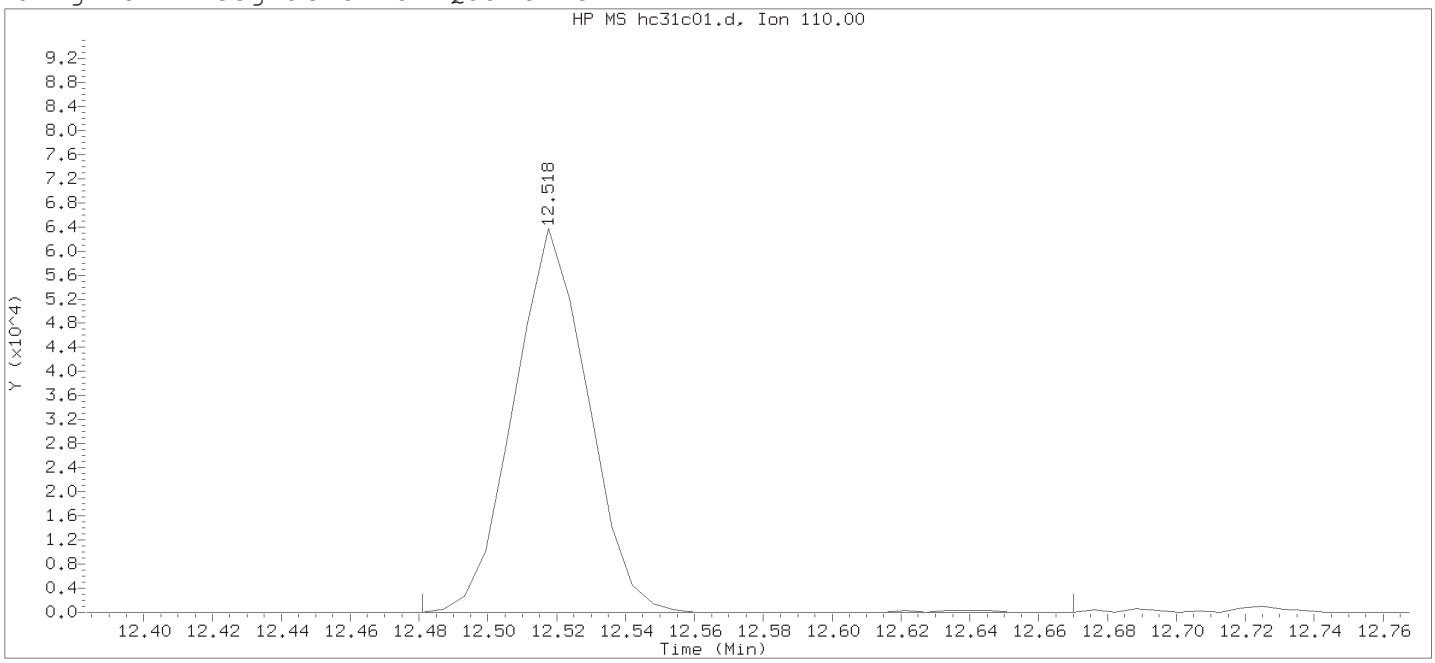
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

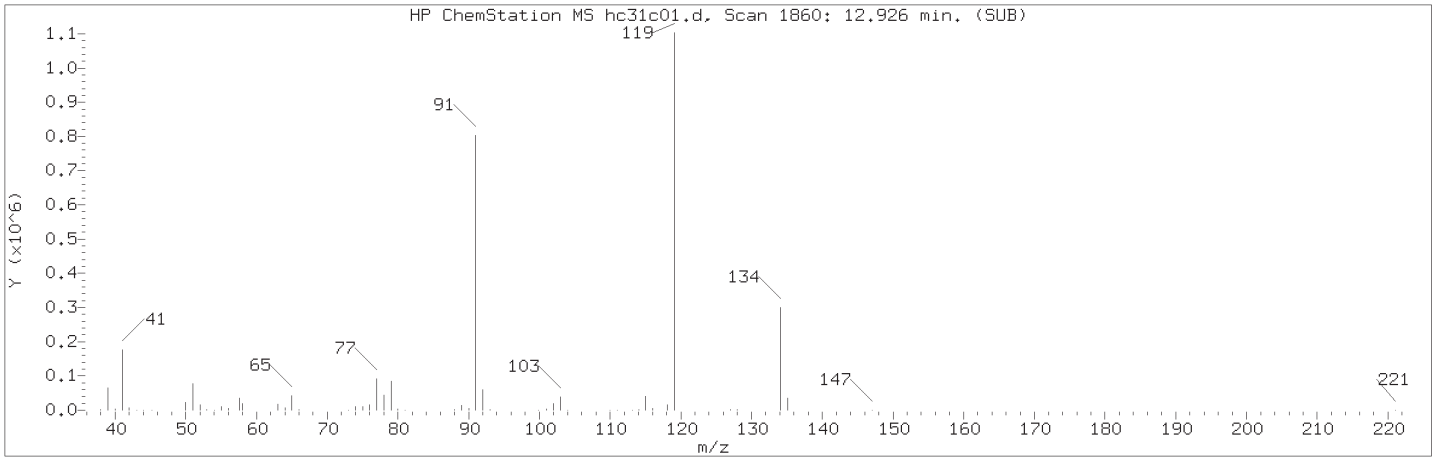
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 08:45
Date, time and analyst ID of latest file update: 31-Oct-2018 08:45 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

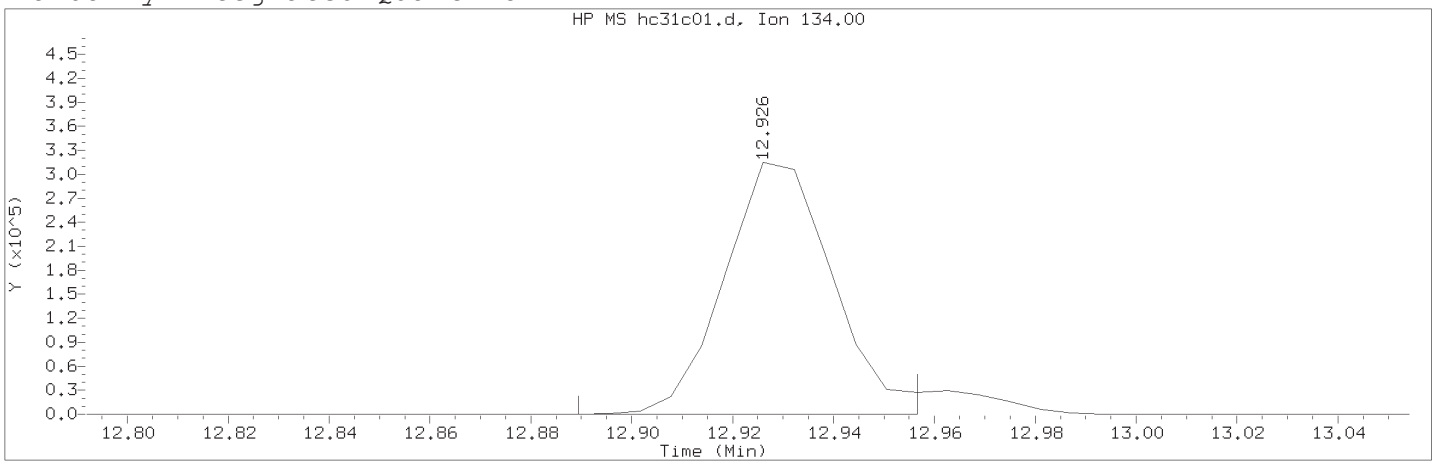
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1793
Retention Time (minutes): 12.518
Quant Ion : 110.00
Area : 95293
On-column Amount (ng) : 9.4889
Integration start scan : 1786 Integration stop scan: 1817
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/02/2018 at 22:15.
Target 3.5 esignature user id: DVIRAY

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:20 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

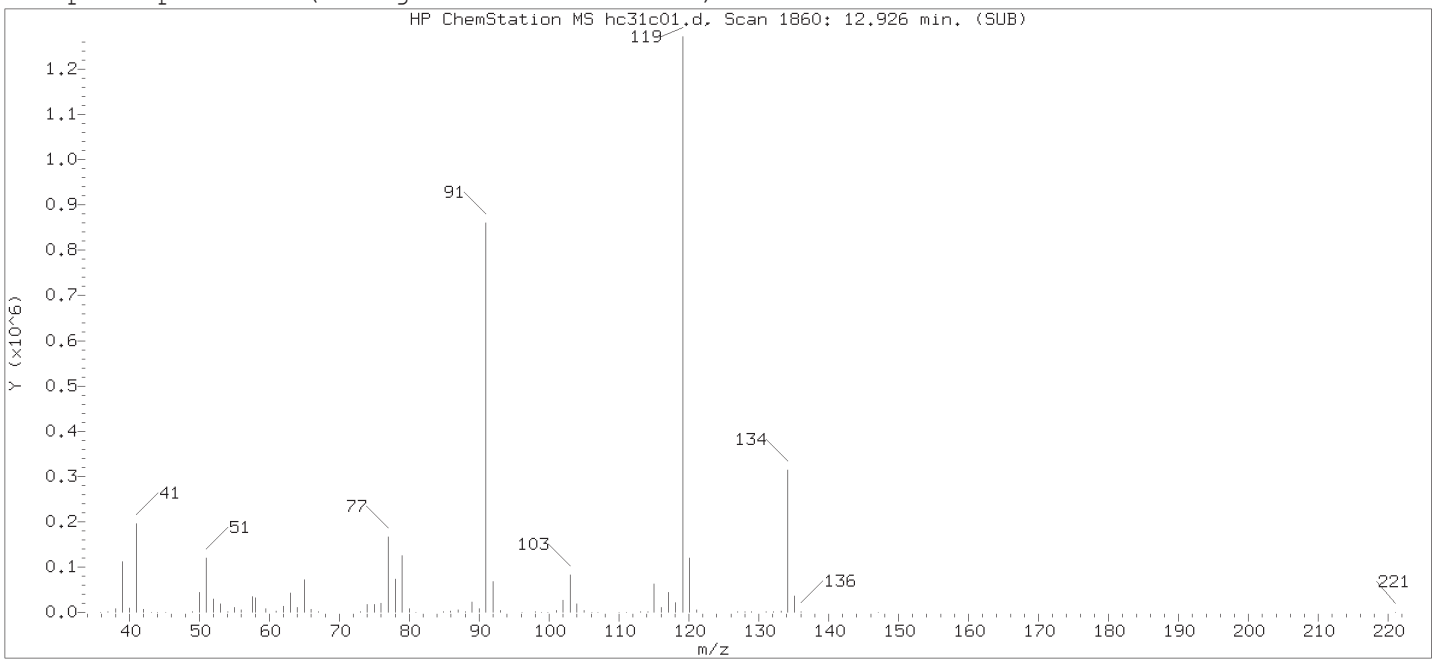
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1860
Retention Time (minutes): 12.926
Quant Ion : 134.00
Area (flag) : 468766M
On-Column Amount (ng) : 9.9091
Integration start scan : 1853 Integration stop scan: 1864
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

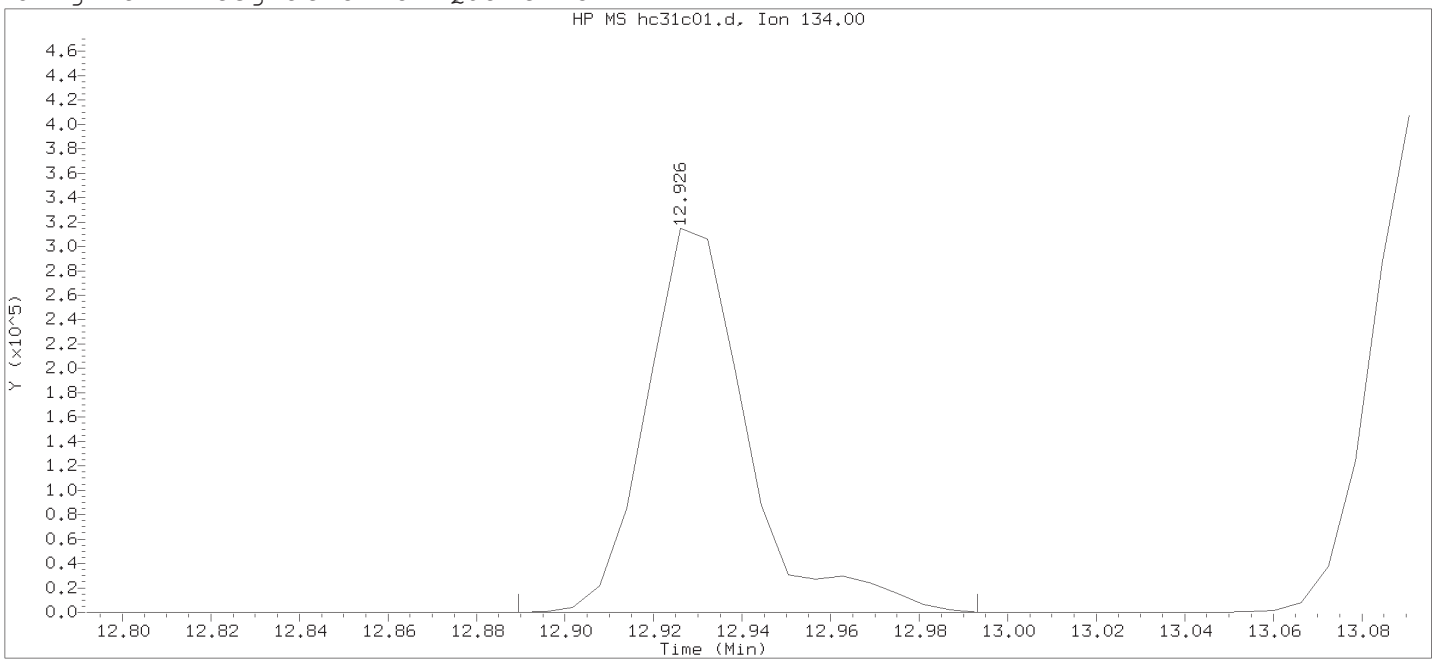
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:27 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 31-OCT-2018 08:45
Date, time and analyst ID of latest file update: 31-Oct-2018 08:45 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1860
Retention Time (minutes): 12.926
Quant Ion : 134.00
Area : 497280
On-column Amount (ng) : 10.5118
Integration start scan : 1853 Integration stop scan: 1870
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/02/2018 at 22:15.
Target 3.5 esignature user ID: DVIRAY

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s09.d Injection date and time: **31-OCT-2018 18:49**
Data file Sample Info. Line: SECC010;SECC010;1;3;LCS;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:07 Automation

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789-SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.476	(0.012)	474	65	115171	(-8)	50.00	
63) Fluorobenzene	7.964	(0.006)	1046	96	2658785	(4)	10.00	
97) Chlorobenzene-d5	11.378	(0.006)	1606	117	1947414	(1)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249	(0.000)	1913	152	975532	(0)	10.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074	(-0.001)	113	647932	9.669	97%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.531	(-0.001)	102	118892	10.177	102%		81 - 118
82) Toluene-d8	(3)	9.951	(0.000)	98	2578264	10.287	103%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371	(-0.001)	95	882682	9.673	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)	2.068	(0.000)	85	852183	8.201	8.20			0.05	0.5
2) Chloromethane	(2)	2.276	(-0.000)	50	823712	8.095	8.09			0.06	0.5
5) Vinyl Chloride	(2)	2.398	(0.000)	62	786044	8.249	8.25			0.1	0.5
7) Bromomethane	(2)	2.739	(-0.000)	94	620330	8.373	8.37			0.07	0.5
8) Chloroethane	(2)	2.836	(0.000)	64	473645	8.195	8.19			0.07	0.5
10) Trichlorofluoromethane	(2)	3.141	(0.001)	101	1028174	8.541	8.54			0.05	0.5
15) 1,1-Dichloroethene	(2)	3.757	(0.000)	96	403847	7.747	7.75			0.06	0.5
16) Freon 113	(2)	3.788	(0.000)	101	474096	7.716	7.72			0.06	0.5
14) Acetone	(1)	3.800	(-0.002)	43	526911	76.759	76.76			0.9	5
18) Carbon Disulfide	(2)	4.074	(0.001)	76	1145626	6.906	6.91			0.06	1
21) Methyl Acetate	(1)	4.233	(0.000)	43	164707	8.547	8.55			0.1	1
23) Methylene Chloride	(2)	4.464	(0.000)	84	458480	7.796	7.80			0.07	0.5
31) trans-1,2-Dichloroethene	(2)	4.885	(0.001)	96	471859	8.020	8.02			0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)	4.873	(0.000)	73	908985	8.478	8.48			0.05	0.5
33) 1,1-Dichloroethane	(2)	5.549	(-0.000)	63	955255	8.527	8.53			0.07	0.5
39) cis-1,2-Dichloroethene	(2)	6.378	(-0.000)	96	549893	8.459	8.46			0.05	0.5
38) 2-Butanone	(1)	6.348	(-0.005)	43	1058404	94.192	94.19			0.6	5
49) Chloroform	(2)	6.860	(-0.000)	83	917528	8.810	8.81			0.09	0.5
51) 1,1,1-Trichloroethane	(2)	7.092	(-0.000)	97	753605	8.459	8.46			0.06	0.5
52) Cyclohexane	(2)	7.183	(-0.000)	56	914053	7.860	7.86			0.05	0.5
54) Carbon Tetrachloride	(2)	7.299	(-0.000)	117	657230	8.590	8.59			0.07	0.5
58) Benzene	(2)	7.561	(0.000)	78	2086099	8.359	8.36			0.05	0.5
59) 1,2-Dichloroethane	(2)	7.634	(-0.000)	62	483997	8.427	8.43			0.05	0.5
67) Trichloroethene	(2)	8.445	(-0.000)	95	546289	8.549	8.55			0.06	0.5
69) Methylcyclohexane	(2)	8.750	(-0.000)	83	948047	7.856	7.86			0.05	0.5
70) 1,2-Dichloropropane	(2)	8.780	(-0.000)	63	528217	8.724	8.72			0.06	0.5
74) Bromodichloromethane	(2)	9.122	(-0.000)	83	607758	8.928	8.93			0.05	0.5
80) cis-1,3-Dichloropropene	(2)	9.652	(-0.001)	75	694917	8.768	8.77			0.05	0.5
81) 4-Methyl-2-Pentanone	(1)	9.811	(-0.005)	43	2732382	97.758	97.76			0.7	5
83) Toluene	(3)	10.024	(-0.000)	92	1301530	9.006	9.01			0.07	0.5
84) trans-1,3-Dichloropropene	(3)	10.274	(-0.000)	75	538218	9.666	9.67			0.06	0.5

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:33. Target 3.5 esignature user ID: jgc14951

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31s09.d Injection date and time: **31-OCT-2018 18:49**
Data file Sample Info. Line: SECC010;SECC010;1;3;LCS;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:07 Automation

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789-SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

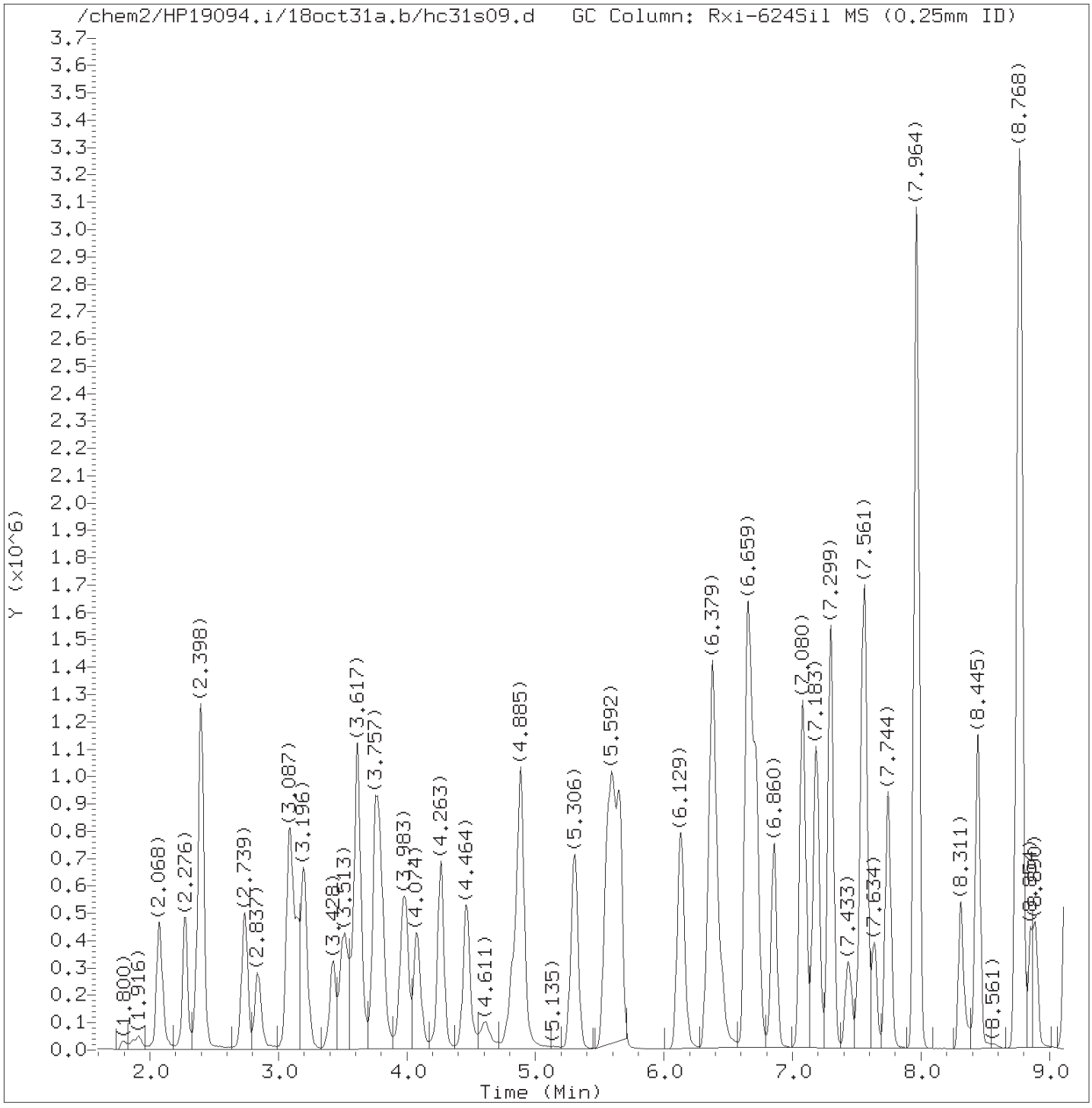
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
88) 1,1,2-Trichloroethane	(3)	10.475(-0.000)	97	305358	9.182	9.18			0.06	0.5
89) Tetrachloroethene	(3)	10.561(-0.000)	166	581598	8.907	8.91			0.06	0.5
91) 2-Hexanone	(1)	10.676(-0.006)	43	1849732	97.222	97.22			0.6	5
93) Dibromochloromethane	(3)	10.847(-0.000)	129	383770	9.629	9.63			0.07	0.5
95) 1,2-Dibromoethane	(3)	10.957(-0.000)	107	298166	9.566	9.57			0.06	0.5
98) Chlorobenzene	(3)	11.408(-0.000)	112	1410403	9.199	9.20			0.06	0.5
100) Ethylbenzene	(3)	11.487(-0.000)	91	2626704	9.300	9.30			0.06	0.5
101) m+p-Xylene	(3)	11.603(-0.000)	106	1945945	18.575	18.57			0.1	0.5
104) o-Xylene	(3)	11.926(-0.000)	106	933991	9.325	9.33			0.05	0.5
105) Xylene (Total)	(3)		106	2879936	27.900	27.90			0.1	0.5
106) Styrene	(3)	11.944(-0.000)	104	1524485	9.513	9.51			0.05	0.5
107) Bromoform	(3)	12.103(-0.000)	173	209008	9.542	9.54			0.3	1
108) Isopropylbenzene	(3)	12.225(-0.000)	105	2510127	9.180	9.18			0.05	0.5
113) 1,1,2,2-Tetrachloroethane	(4)	12.469(0.000)	83	366606	9.474	9.47			0.07	0.5
131) 1,3-Dichlorobenzene	(4)	13.194(0.000)	146	1110251	9.499	9.50			0.06	0.5
134) 1,4-Dichlorobenzene	(4)	13.267(-0.000)	146	1073365	9.355	9.36			0.07	0.5
139) 1,2-Dichlorobenzene	(4)	13.524(0.000)	146	945802	9.171	9.17			0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)	14.694(-0.008)	155	32910	6.946	6.95			0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)	14.615(-0.000)	180	606396	8.562	8.56			0.06	0.5

Total number of targets = 50

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:33. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

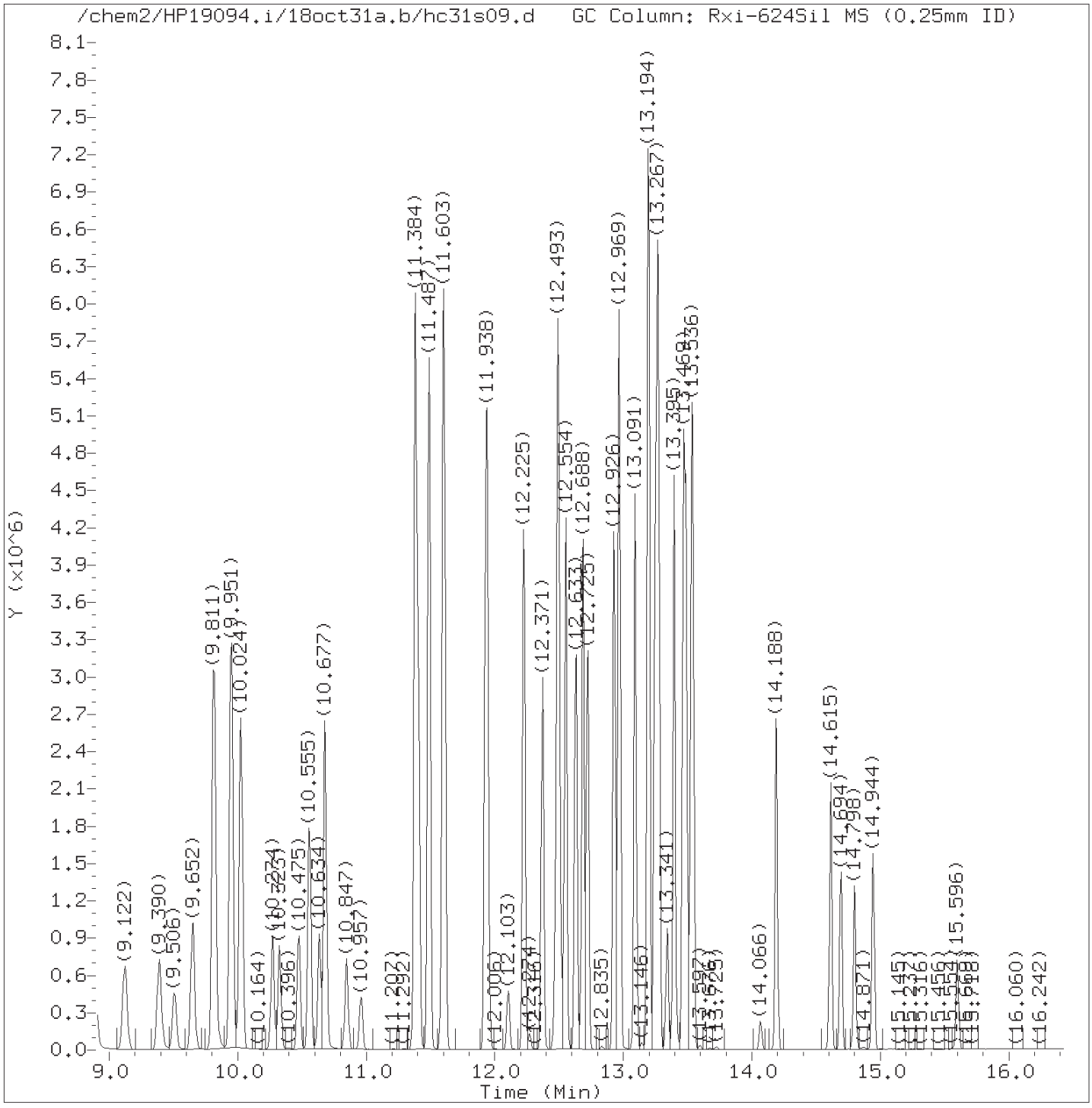
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s09.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 18:49 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 19:07 Automation

Sample Name: SECC010 Lab Sample ID: SECC010

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s09.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 18:49 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 19:07 Automation

Sample Name: SECC010 Lab Sample ID: SECC010

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s09.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 18:49 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 19:07 Automation

Sample Name: SECC010 Lab Sample ID: SECC010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.068	85	852183	8.201
2) Chloromethane	(2)	2.276	50	823712	8.095
5) Vinyl Chloride	(2)	2.398	62	786044	8.249
7) Bromomethane	(2)	2.739	94	620330	8.373
8) Chloroethane	(2)	2.837	64	473645	8.195
10) Trichlorofluoromethane	(2)	3.141	101	1028174	8.541
15) 1,1-Dichloroethene	(2)	3.757	96	403847	7.747
16) Freon 113	(2)	3.788	101	474096	7.716
14) Acetone	(1)	3.800	43	526911	76.759
18) Carbon Disulfide	(2)	4.074	76	1145626	6.906
21) Methyl Acetate	(1)	4.233	43	164707	8.547
23) Methylene Chloride	(2)	4.464	84	458480	7.796
26)*t-Butyl Alcohol-d10	(1)	4.476	65	115171	50.000
30) Methyl Tertiary Butyl Ether	(2)	4.873	73	908985	8.478
31) trans-1,2-Dichloroethene	(2)	4.885	96	471859	8.020
33) 1,1-Dichloroethane	(2)	5.549	63	955255	8.527
38) 2-Butanone	(1)	6.348	43	1058404	94.192
39) cis-1,2-Dichloroethene	(2)	6.379	96	549893	8.459
49) Chloroform	(2)	6.860	83	917528	8.810
50)$Dibromofluoromethane	(2)	7.074	113	647932	9.669
51) 1,1,1-Trichloroethane	(2)	7.092	97	753605	8.459
52) Cyclohexane	(2)	7.183	56	914053	7.860
54) Carbon Tetrachloride	(2)	7.299	117	657230	8.590
57)$1,2-Dichloroethane-d4	(2)	7.531	102	118892	10.177
58) Benzene	(2)	7.561	78	2086099	8.359
59) 1,2-Dichloroethane	(2)	7.634	62	483997	8.427
63)*Fluorobenzene	(2)	7.964	96	2658785	10.000
67) Trichloroethene	(2)	8.445	95	546289	8.549
69) Methylcyclohexane	(2)	8.750	83	948047	7.856
70) 1,2-Dichloropropane	(2)	8.781	63	528217	8.724
74) Bromodichloromethane	(2)	9.122	83	607758	8.928
80) cis-1,3-Dichloropropene	(2)	9.652	75	694917	8.768
81) 4-Methyl-2-Pentanone	(1)	9.811	43	2732382	97.758
82)$Toluene-d8	(3)	9.951	98	2578264	10.287
83) Toluene	(3)	10.024	92	1301530	9.006
84) trans-1,3-Dichloropropene	(3)	10.274	75	538218	9.666
88) 1,1,2-Trichloroethane	(3)	10.475	97	305358	9.182
89) Tetrachloroethene	(3)	10.561	166	581598	8.907

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s09.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 18:49 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 19:07 Automation

Sample Name: SECC010 Lab Sample ID: SECC010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
91) 2-Hexanone	(1)	10.677	43	1849732	97.222
93) Dibromochloromethane	(3)	10.847	129	383770	9.629
95) 1,2-Dibromoethane	(3)	10.957	107	298166	9.566
97)*Chlorobenzene-d5	(3)	11.378	117	1947414	10.000
98) Chlorobenzene	(3)	11.408	112	1410403	9.199
100) Ethylbenzene	(3)	11.487	91	2626704	9.300
101) m+p-Xylene	(3)	11.603	106	1945945	18.575
105) Xylene (Total)	(3)		106	2879936	27.900
104) o-Xylene	(3)	11.926	106	933991	9.325
106) Styrene	(3)	11.945	104	1524485	9.513
107) Bromoform	(3)	12.103	173	209008	9.542
108) Isopropylbenzene	(3)	12.225	105	2510127	9.180
111)$4-Bromofluorobenzene	(3)	12.371	95	882682	9.673
113) 1,1,2,2-Tetrachloroethane	(4)	12.469	83	366606	9.474
131) 1,3-Dichlorobenzene	(4)	13.194	146	1110251	9.499
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	975532	10.000
134) 1,4-Dichlorobenzene	(4)	13.267	146	1073365	9.355
139) 1,2-Dichlorobenzene	(4)	13.524	146	945802	9.171
145) 1,2,4-Trichlorobenzene	(4)	14.615	180	606396	8.562
143) 1,2-Dibromo-3-chloropropane	(1)	14.694	155	32910	6.946

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

Data File: /chem2/HP19094.i/18may02b.b/hy02t07.d

Page 1

Date : 02-MAY-2018 18:32

Client ID: BFB 50ng

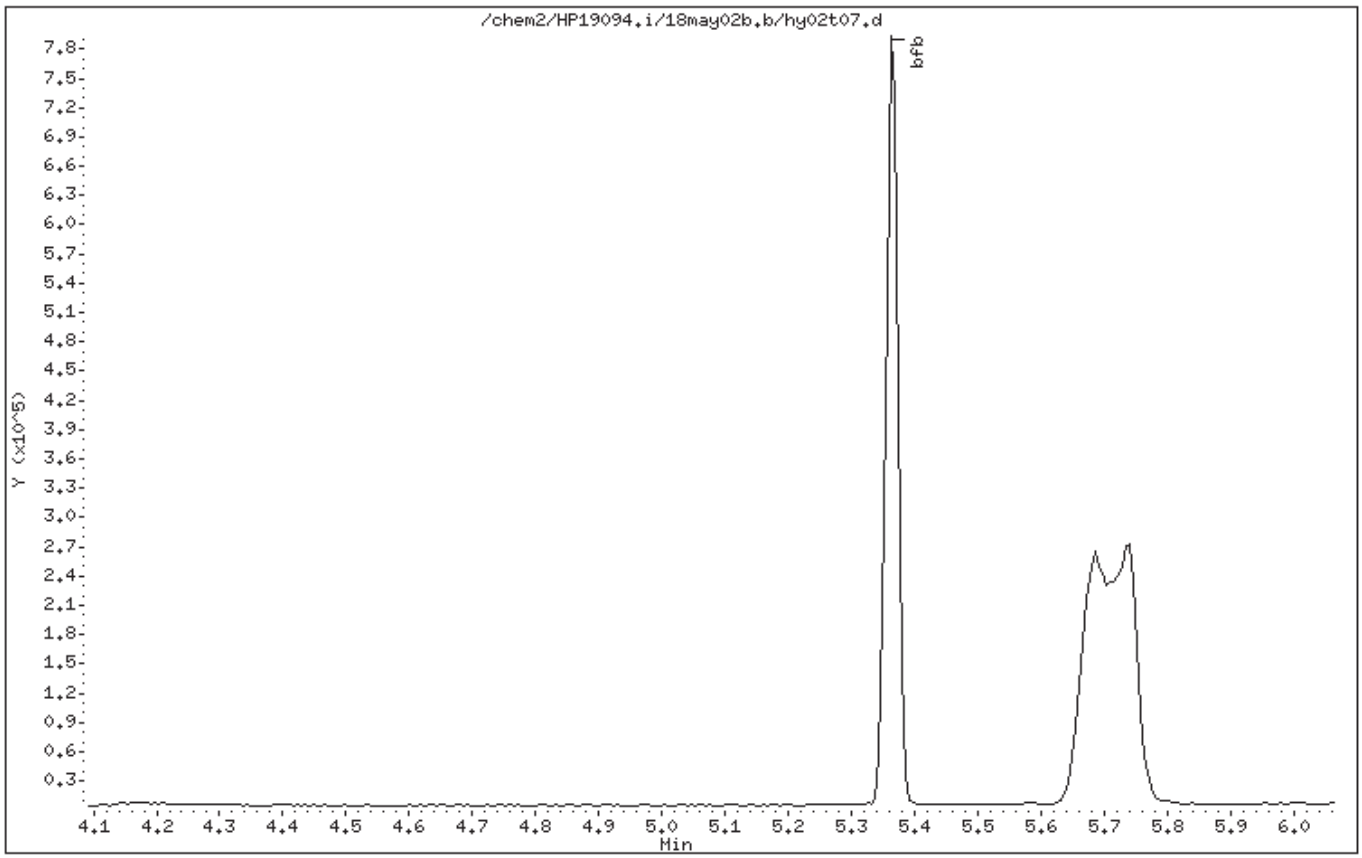
Instrument: HP19094.i

Sample Info: BFB 50ng;BFB FEB13-18;1;3;;;;;

Operator: DVV10203

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Don V. Viray on 05/02/2018 at 18:38.
Target 3.5 esignature user ID: dvv10203

Data File: /chem2/HP19094.i/18may02b.b/hy02t07.d

Date : 02-MAY-2018 18:32

Client ID: BFB 50ng

Instrument: HP19094.i

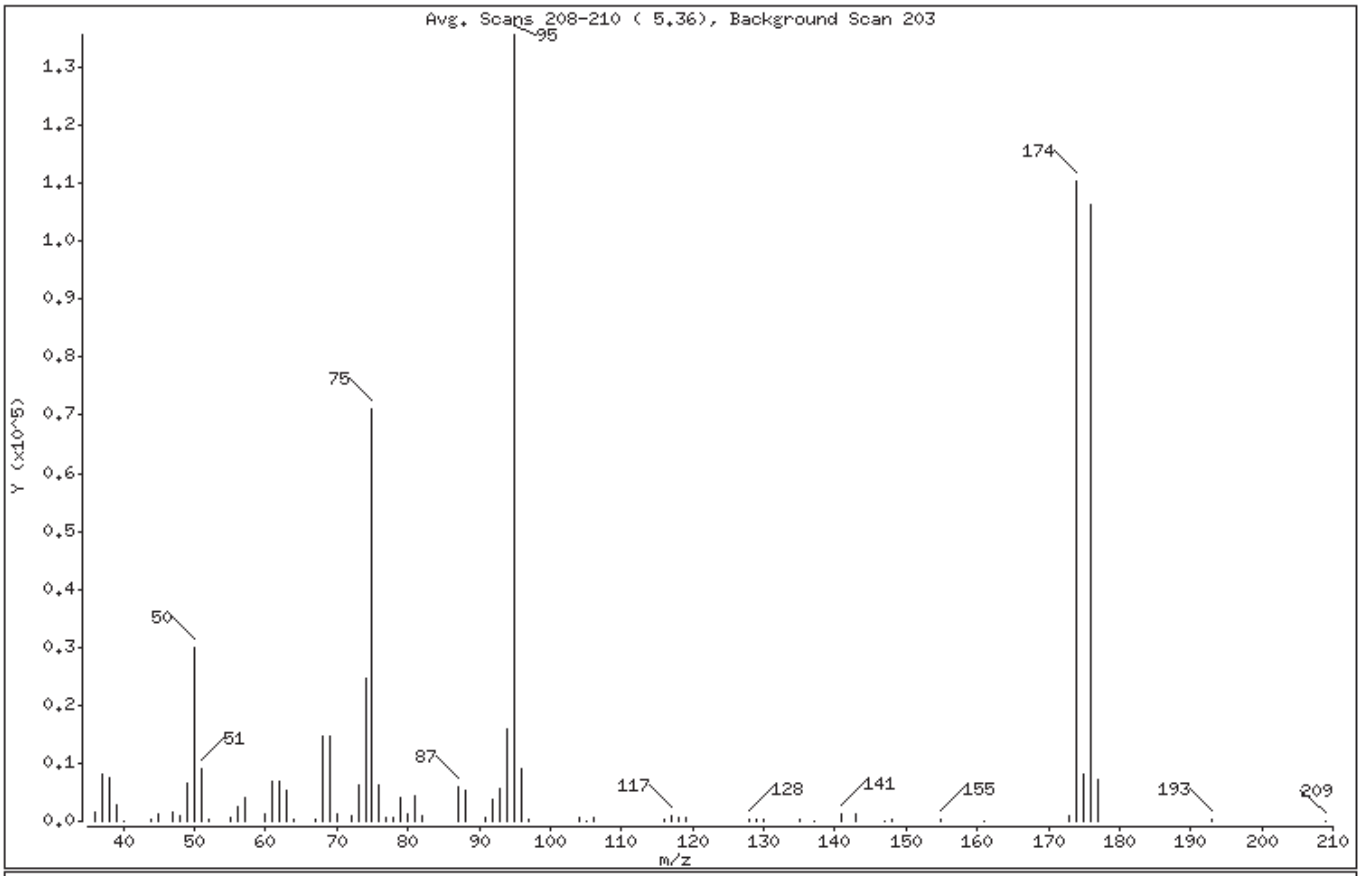
Sample Info: BFB 50ng;BFB FEB13-18;1;3;;;;;

Operator: DVV10203

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	22.13
75	30.00 - 60.00% of mass 95	52.51
96	5.00 - 9.00% of mass 95	6.69
173	Less than 2.00% of mass 174	0.74 (0.91)
174	50.00 - 100.00% of mass 95	81.35
175	5.00 - 9.00% of mass 174	6.02 (7.39)
176	95.00 - 101.00% of mass 174	78.44 (96.43)
177	5.00 - 9.00% of mass 176	5.34 (6.81)

Digitally signed by Don V. Viray on 05/02/2018 at 18:38.
Target 3.5 esignature user ID: dvv10203

Date : 02-MAY-2018 18:32

Client ID: BFB 50ng Instrument: HP19094.i

Sample Info: BFB 50ng;BFB FEB13-18;1;3;;;;;

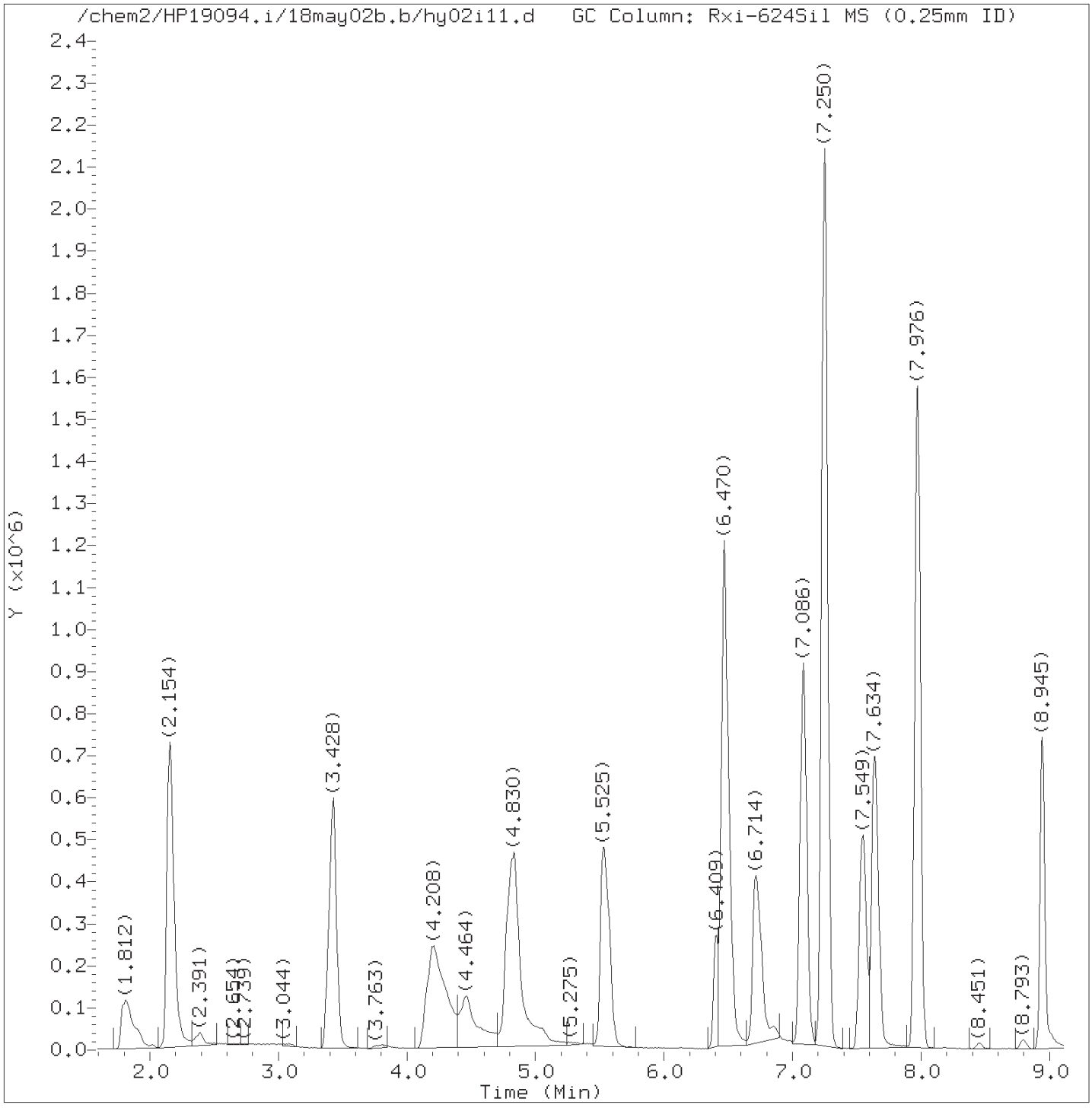
Operator: DVV10203

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: hy02t07.d
Spectrum: Avg. Scans 208-210 (5.36), Background Scan 203
Location of Maximum: 95.00
Number of points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1470	62.00	6734	87.00	5881	130.00	433
37.00	8118	63.00	5366	88.00	5267	135.00	242
38.00	7563	64.00	344	91.00	509	137.00	100
39.00	2730	67.00	437	92.00	3621	141.00	1337
40.00	63	68.00	14675	93.00	5521	143.00	1332
44.00	285	69.00	14780	94.00	15980	147.00	90
45.00	1328	70.00	1336	95.00	135616	148.00	267
47.00	1648	72.00	799	96.00	9072	155.00	234
48.00	966	73.00	6302	97.00	295	161.00	98
49.00	6556	74.00	24648	104.00	568	173.00	1005
50.00	30024	75.00	71232	105.00	133	174.00	110368
51.00	9082	76.00	6135	106.00	520	175.00	8161
52.00	462	77.00	713	116.00	465	176.00	106424
55.00	540	78.00	701	117.00	851	177.00	7246
56.00	2506	79.00	4126	118.00	543	193.00	227
57.00	3993	80.00	1277	119.00	727	209.00	128
60.00	1270	81.00	4251	128.00	453		
61.00	6851	82.00	901	129.00	243		

Digitally signed by Don V. Viray on 05/02/2018 at 18:38.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

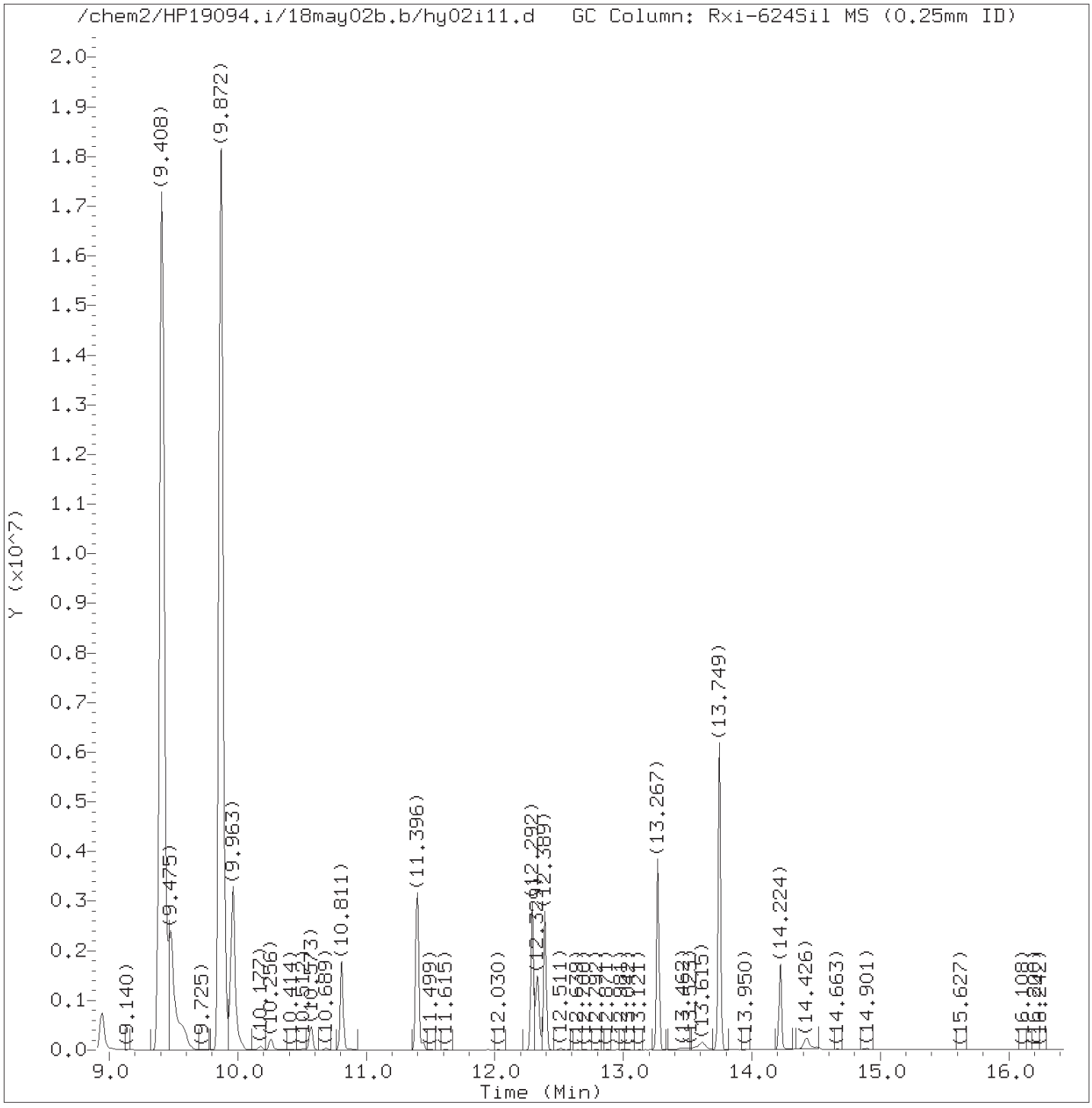
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

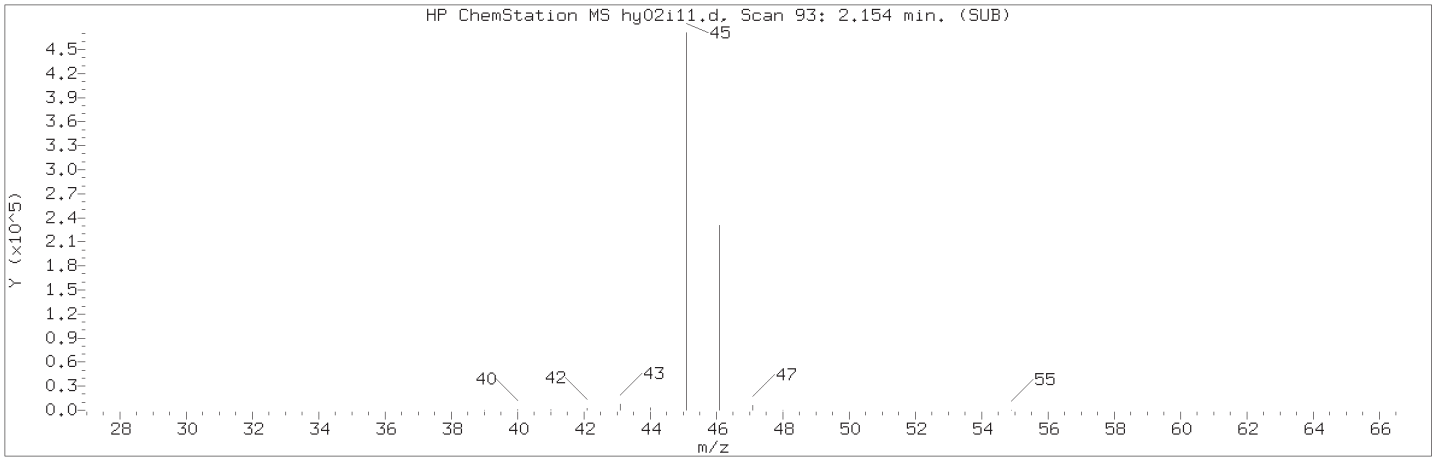
Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.154	45	1873450M	25.332
25) Acetonitrile	(1)	4.196	41	2114112M	889.435
26)*t-Butyl Alcohol-d10	(1)	4.458	65	98437M	50.000
36) Vinyl Acetate	(2)	5.531	43	1821283	25.848
43) Methyl Acrylate	(2)	6.470	55	2806876	129.110
53) 1-Chlorobutane	(2)	7.250	56	2820529	27.109
63)*Fluorobenzene	(2)	7.970	96	2303816	10.000
77) Chloroacetonitrile	(2)	9.463	75	1310379	1512.419
78) 2-Chloroethyl vinyl ether	(2)	9.482	63	567006	27.220
97)*Chlorobenzene-d5	(3)	11.396	117	1683927	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	653577M	51.268
112) Cyclohexanone	(1)	12.335	55	752493M	1160.656
133)*1,4-Dichlorobenzene-d4	(4)	13.267	152	883503	10.000
142) Hexachloroethane	(4)	13.749	117	1117191	30.036

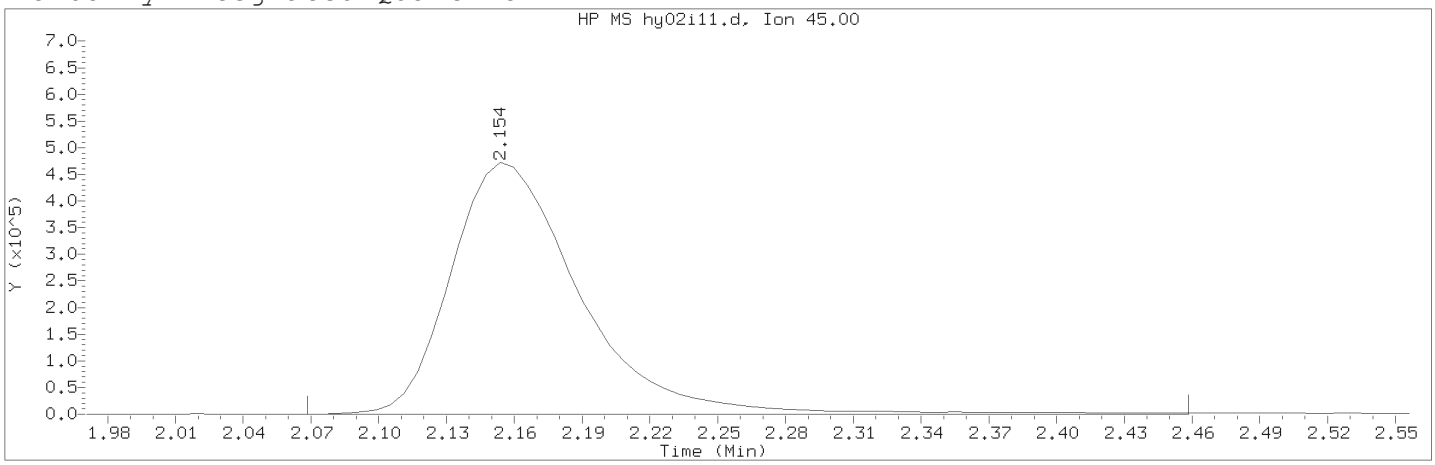
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD025 Lab Sample ID: VSTD025

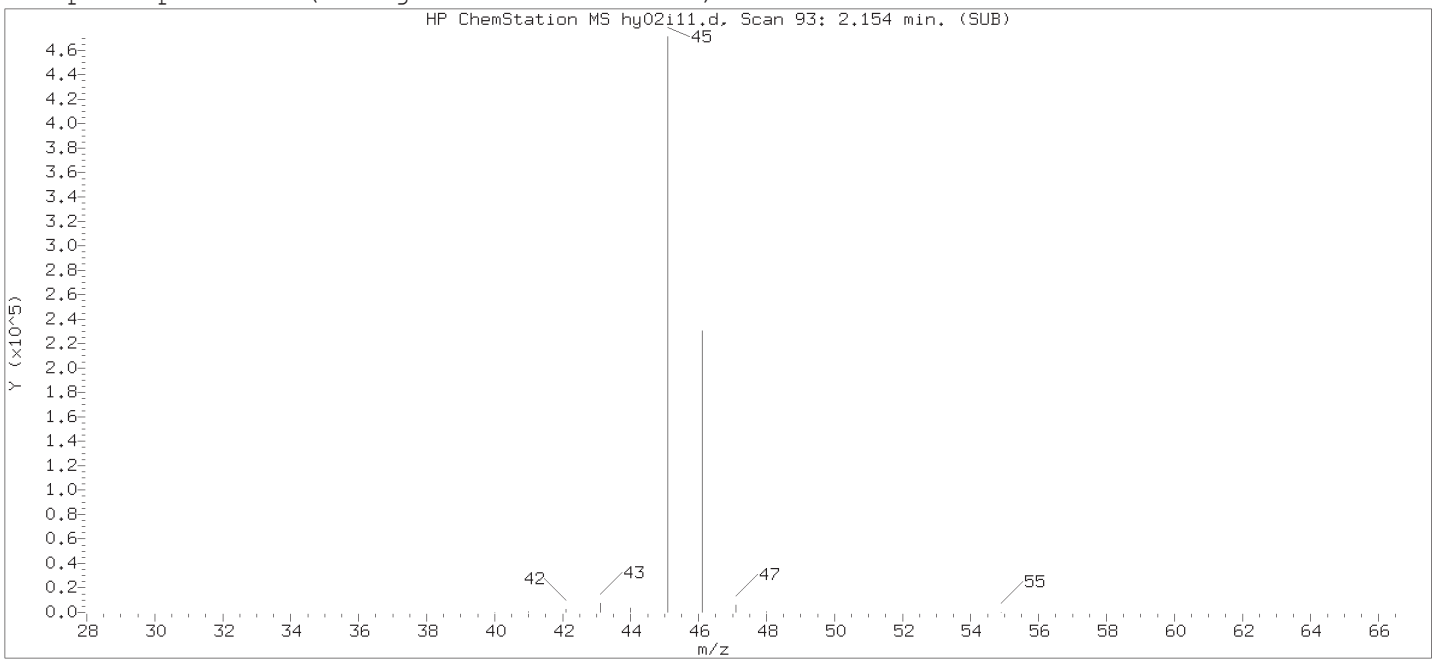
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 93
Retention Time (minutes): 2.154
Quant Ion : 45.00
Area (flag) : 1873450M
On-Column Amount (ng) : 25.3318
Integration start scan : 78 Integration stop scan: 142
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

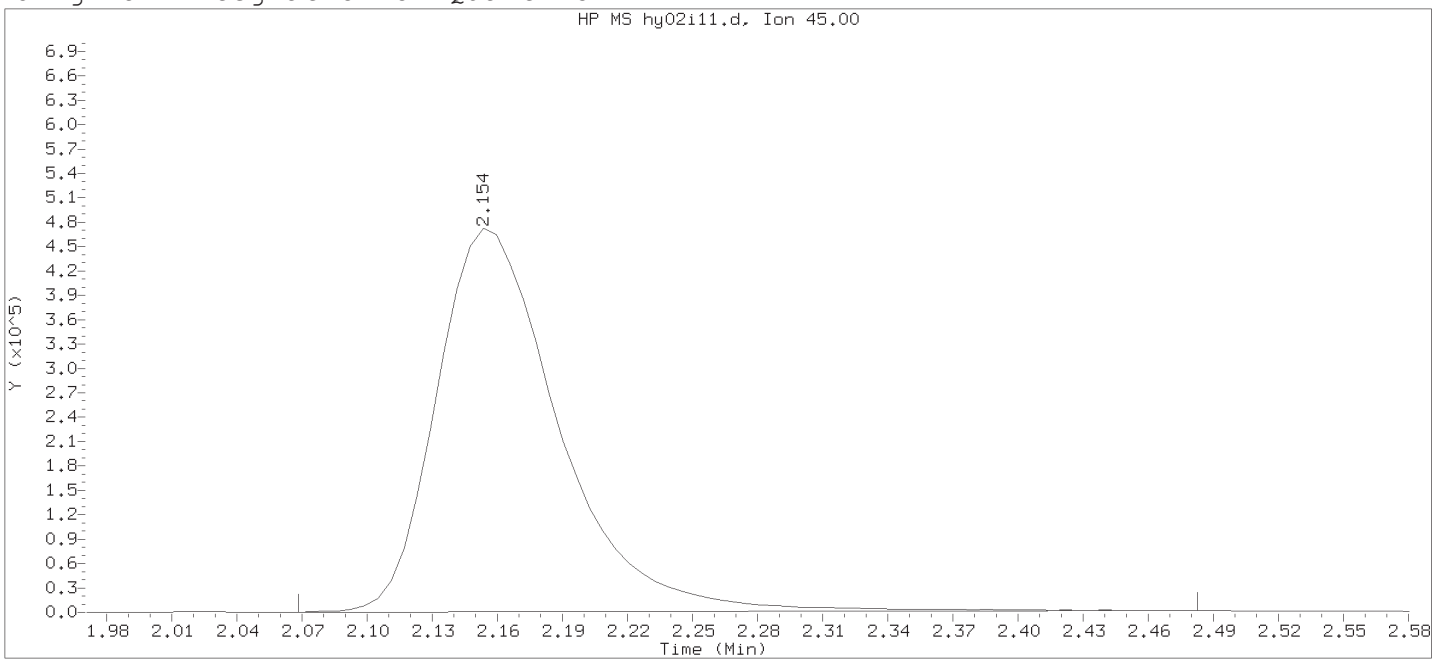
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

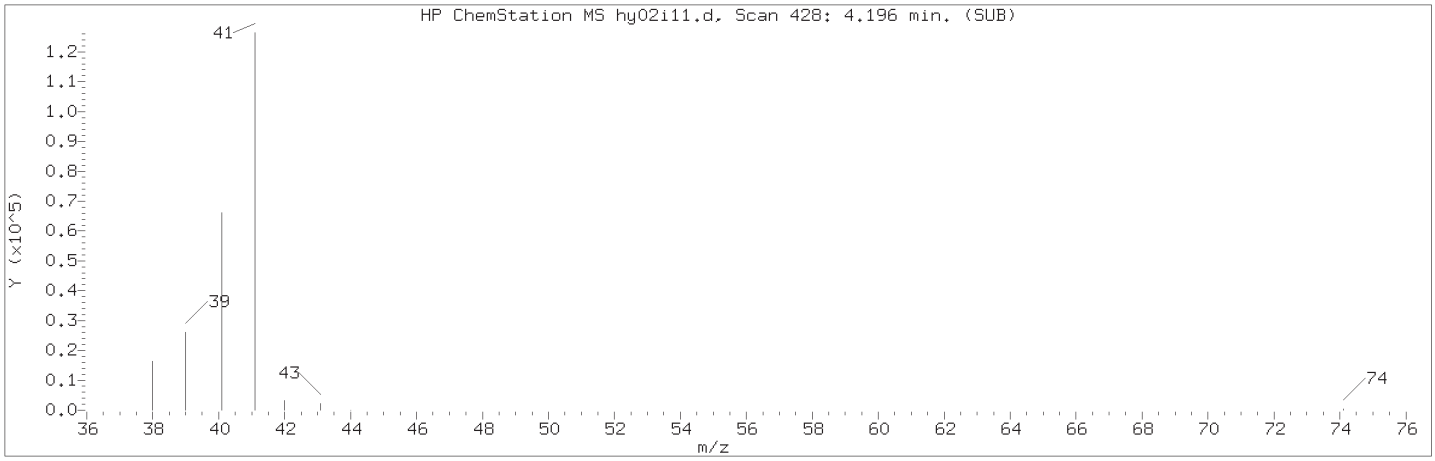
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:33
Date, time and analyst ID of latest file update: 02-May-2018 19:33 Automation

Sample Name: VSTD025 Lab Sample ID: VSTD025

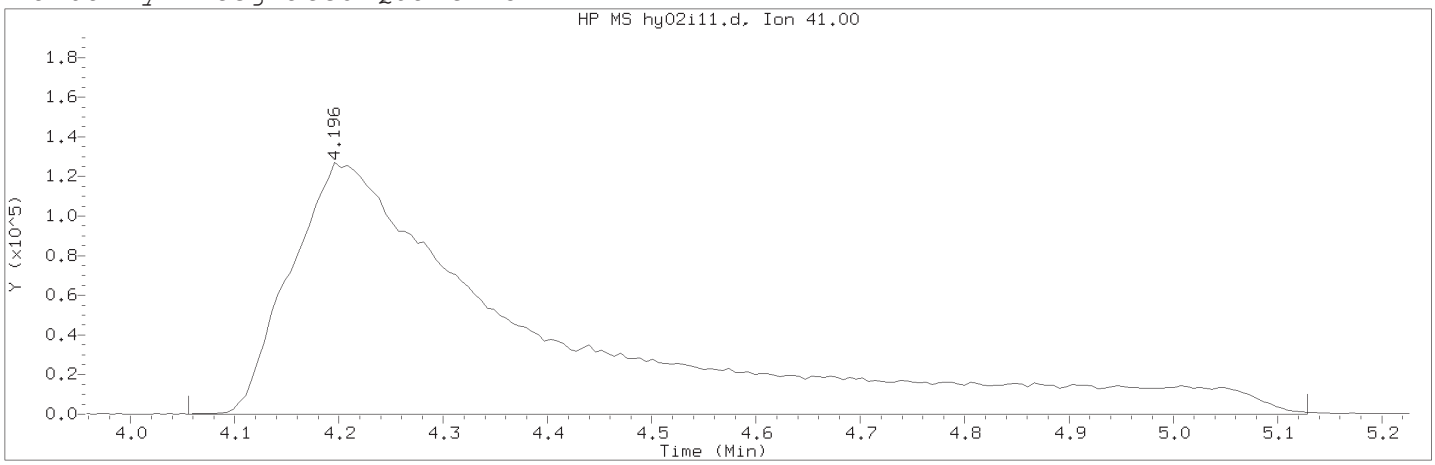
Compound Number	: 4		
Compound Name	: Dimethyl ether		
Scan Number	: 93		
Retention Time (minutes)	: 2.154		
Quant Ion	: 45.00		
Area	: 1849760		
On-column Amount (ng)	: 24.0567		
Integration start scan	: 78	Integration stop scan:	146
Y at integration start	: 0	Y at integration end:	2143

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD025 Lab Sample ID: VSTD025

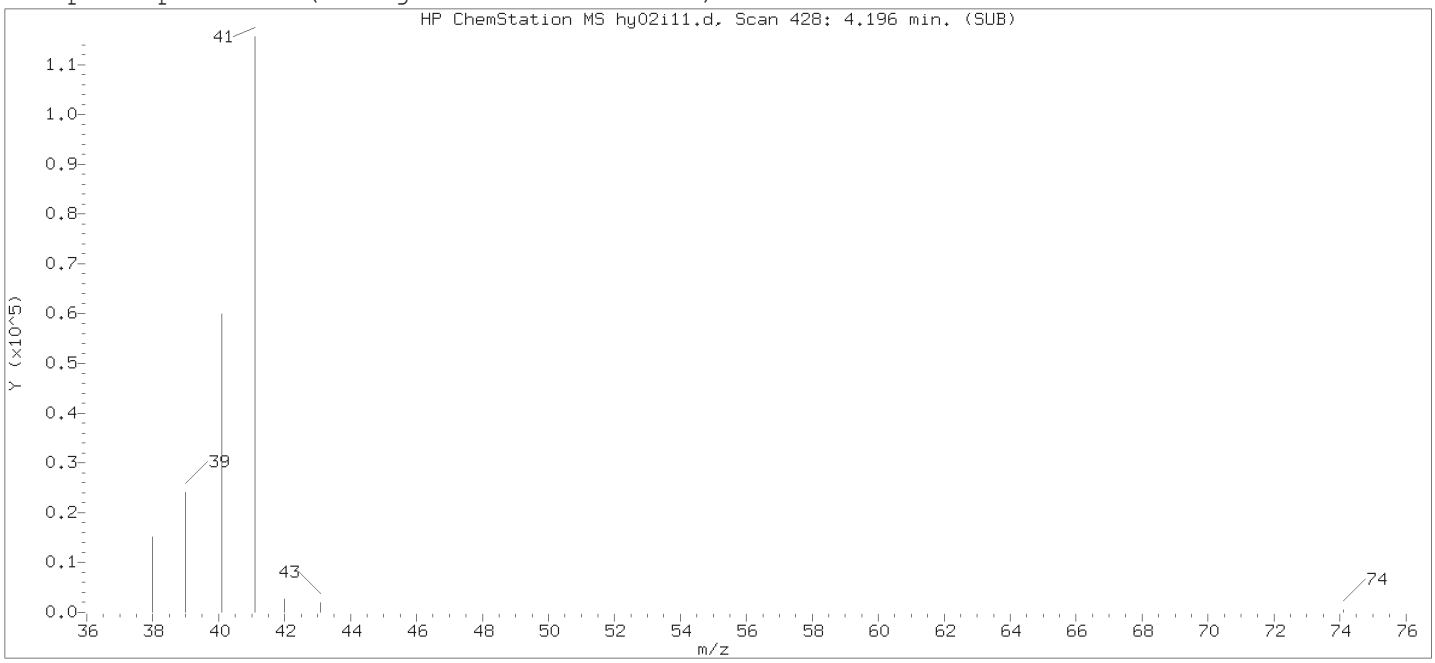
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 428
Retention Time (minutes): 4.196
Quant Ion : 41.00
Area (flag) : 2114112M
On-Column Amount (ng) : 889.4345
Integration start scan : 404 Integration stop scan: 580
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

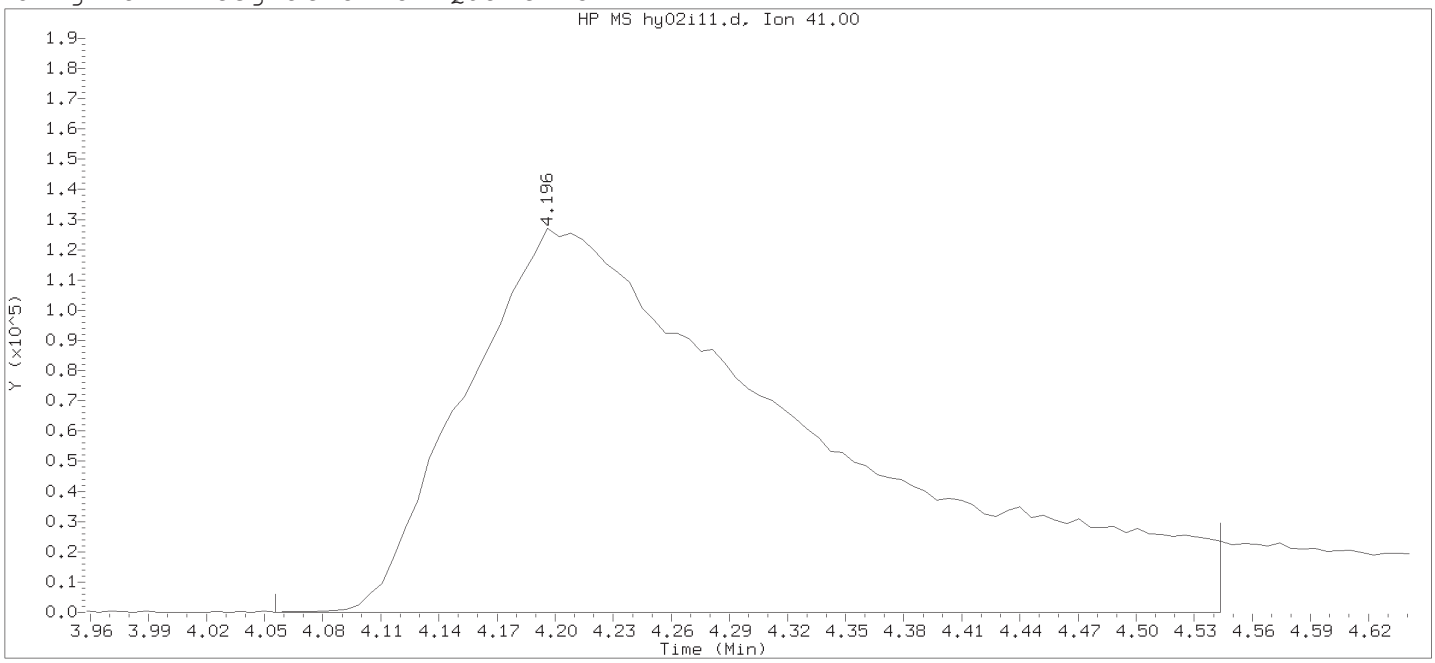
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

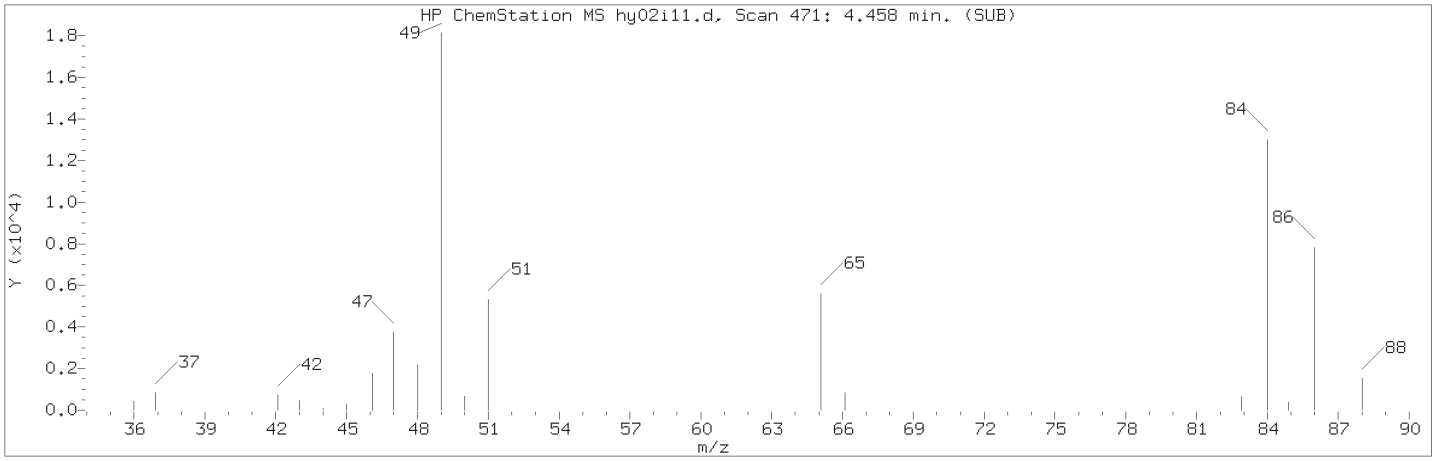
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:33
Date, time and analyst ID of latest file update: 02-May-2018 19:33 Automation

Sample Name: VSTD025 Lab Sample ID: VSTD025

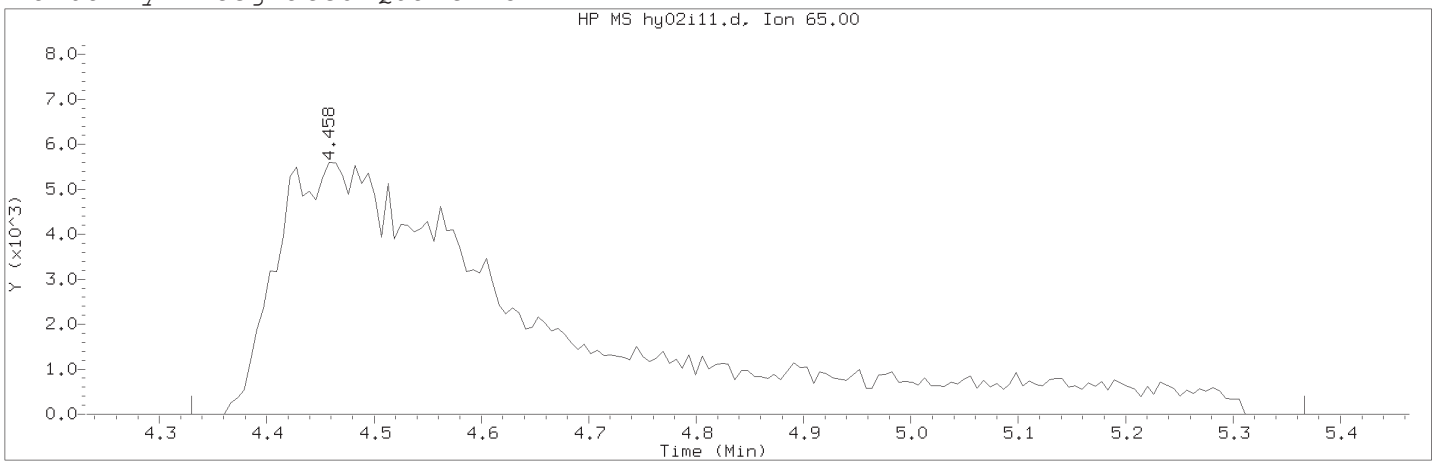
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 428
Retention Time (minutes): 4.196
Quant Ion : 41.00
Area : 1586970
On-column Amount (ng) : 557.8895
Integration start scan : 404 Integration stop scan: 484
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD025 Lab Sample ID: VSTD025

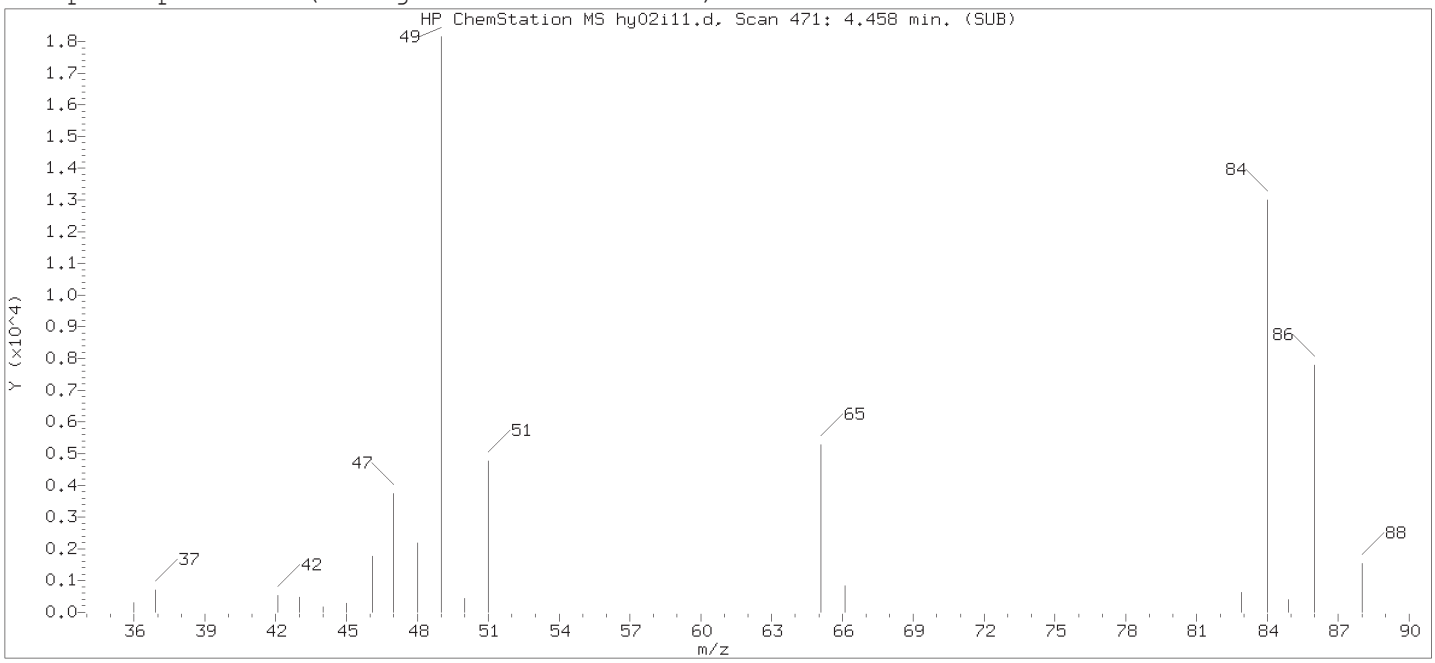
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 471
Retention Time (minutes): 4.458
Quant Ion : 65.00
Area (flag) : 98437M
On-Column Amount (ng) : 50.0000
Integration start scan : 449 Integration stop scan: 619
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

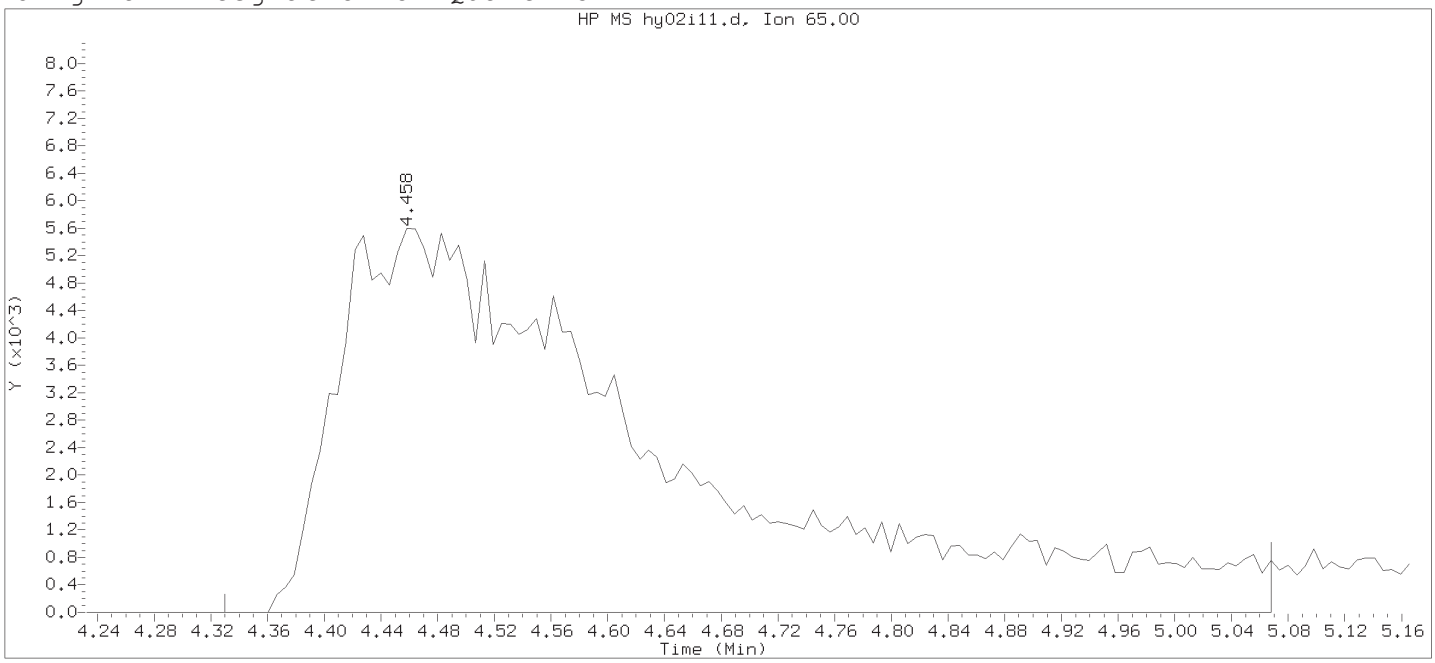
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

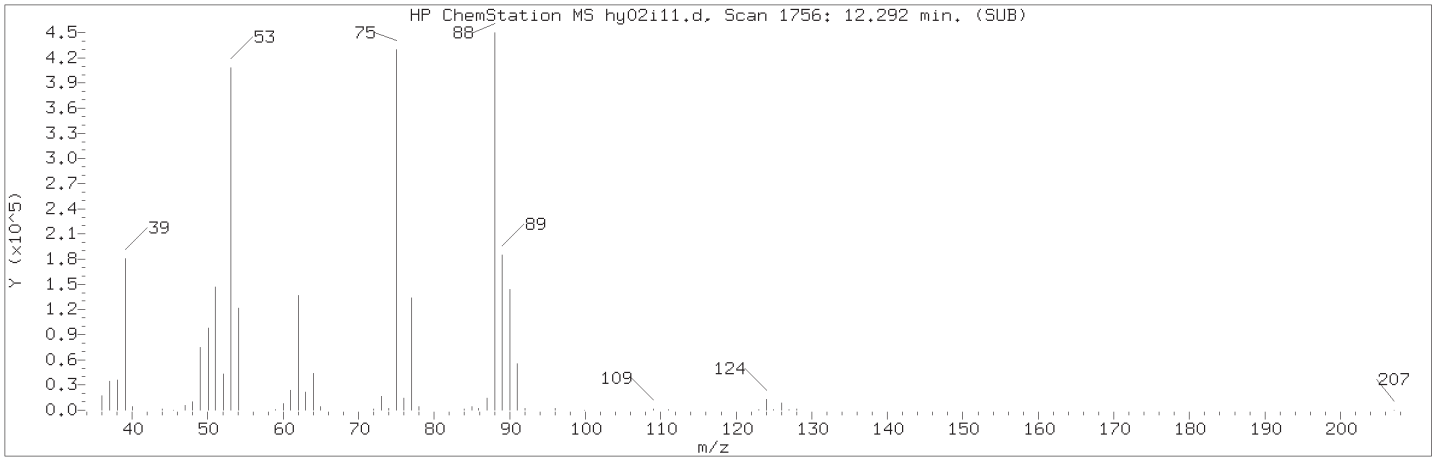
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:33
Date, time and analyst ID of latest file update: 02-May-2018 19:33 Automation

Sample Name: VSTD025 Lab Sample ID: VSTD025

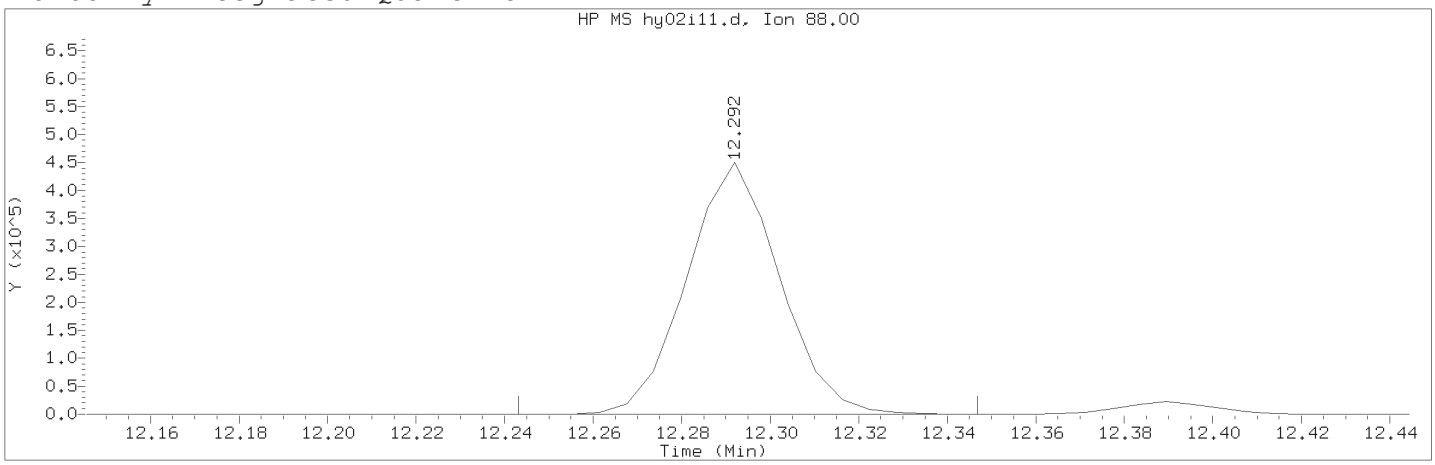
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 471
Retention Time (minutes): 4.458
Quant Ion : 65.00
Area : 89717
On-column Amount (ng) : 50.0000
Integration start scan : 449 Integration stop scan: 570
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD025 Lab Sample ID: VSTD025

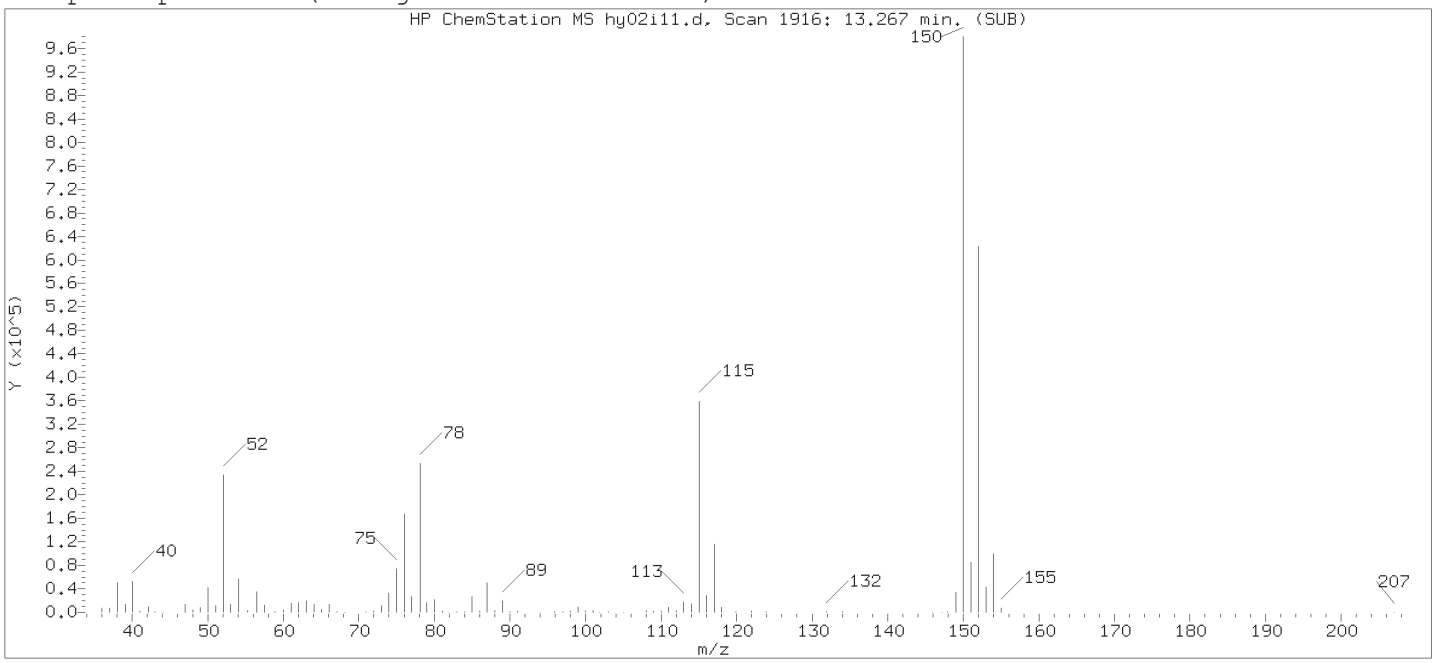
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 653577M
On-Column Amount (ng) : 51.2675
Integration start scan : 1747 Integration stop scan: 1764
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

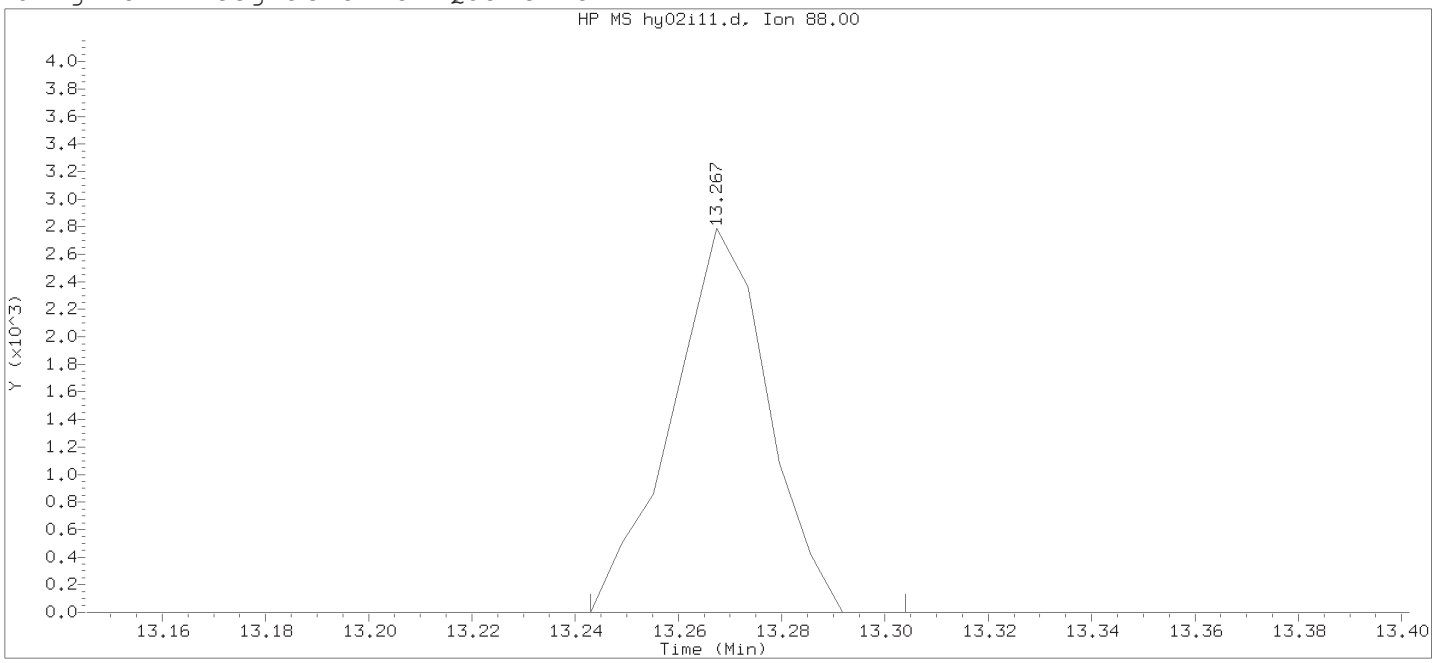
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

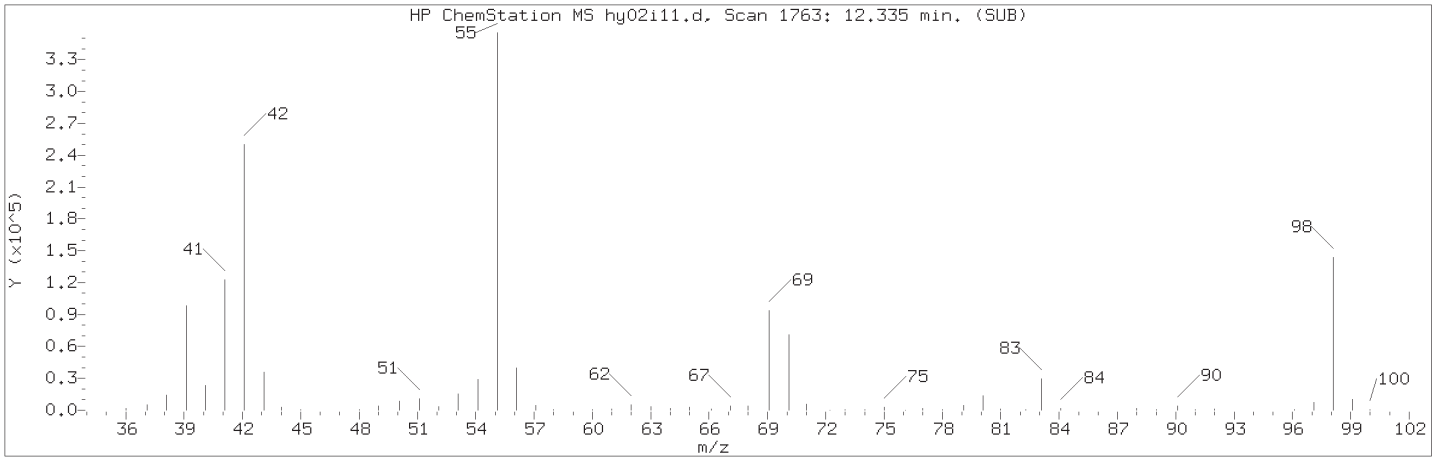
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:33
Date, time and analyst ID of latest file update: 02-May-2018 19:33 Automation

Sample Name: VSTD025 Lab Sample ID: VSTD025

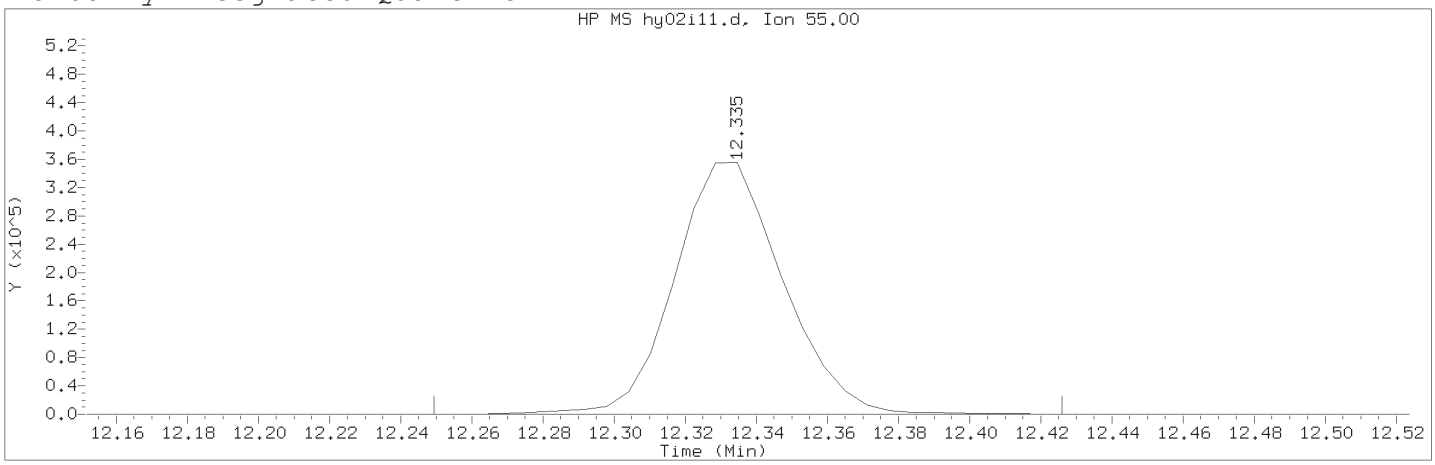
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1916
Retention Time (minutes): 13.267
Quant Ion : 88.00
Area : 3604
On-column Amount (ng) : 0.2776
Integration start scan : 1911 Integration stop scan: 1921
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD025 Lab Sample ID: VSTD025

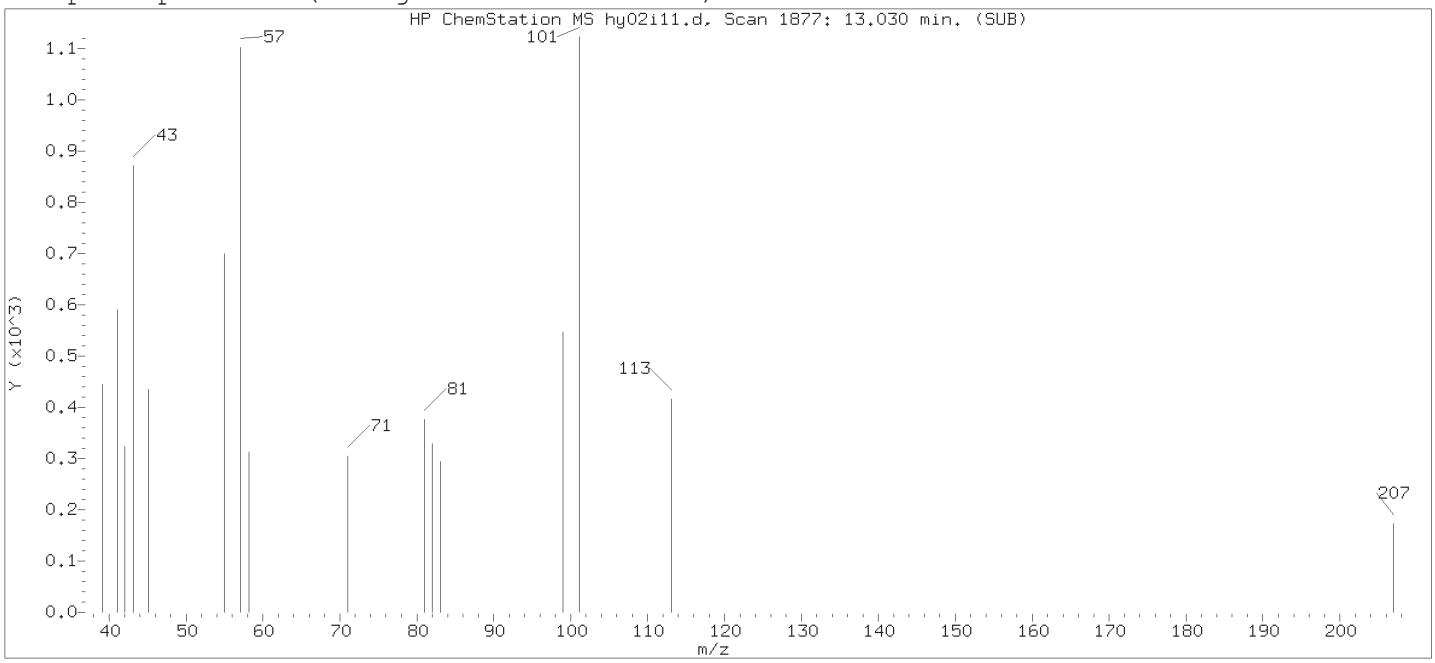
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1763
Retention Time (minutes): 12.335
Quant Ion : 55.00
Area (flag) : 752493M
On-Column Amount (ng) : 1160.6564
Integration start scan : 1748 Integration stop scan: 1777
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

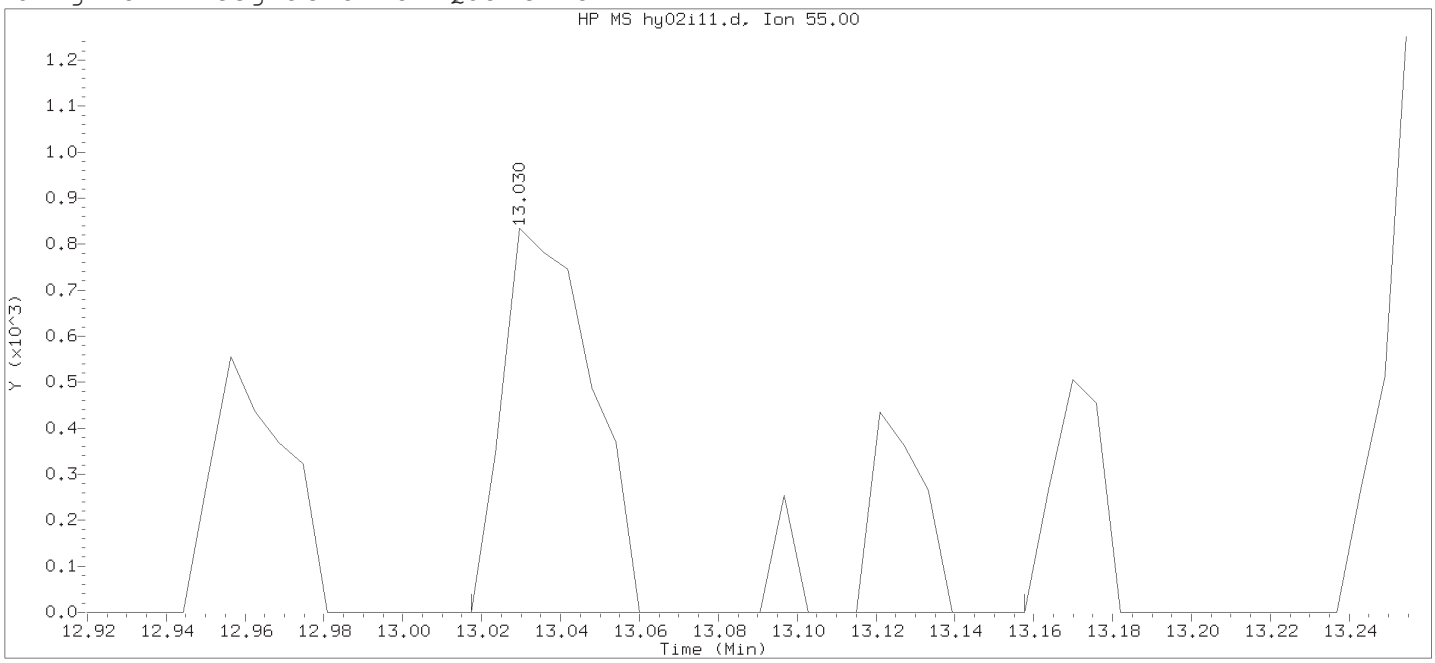
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



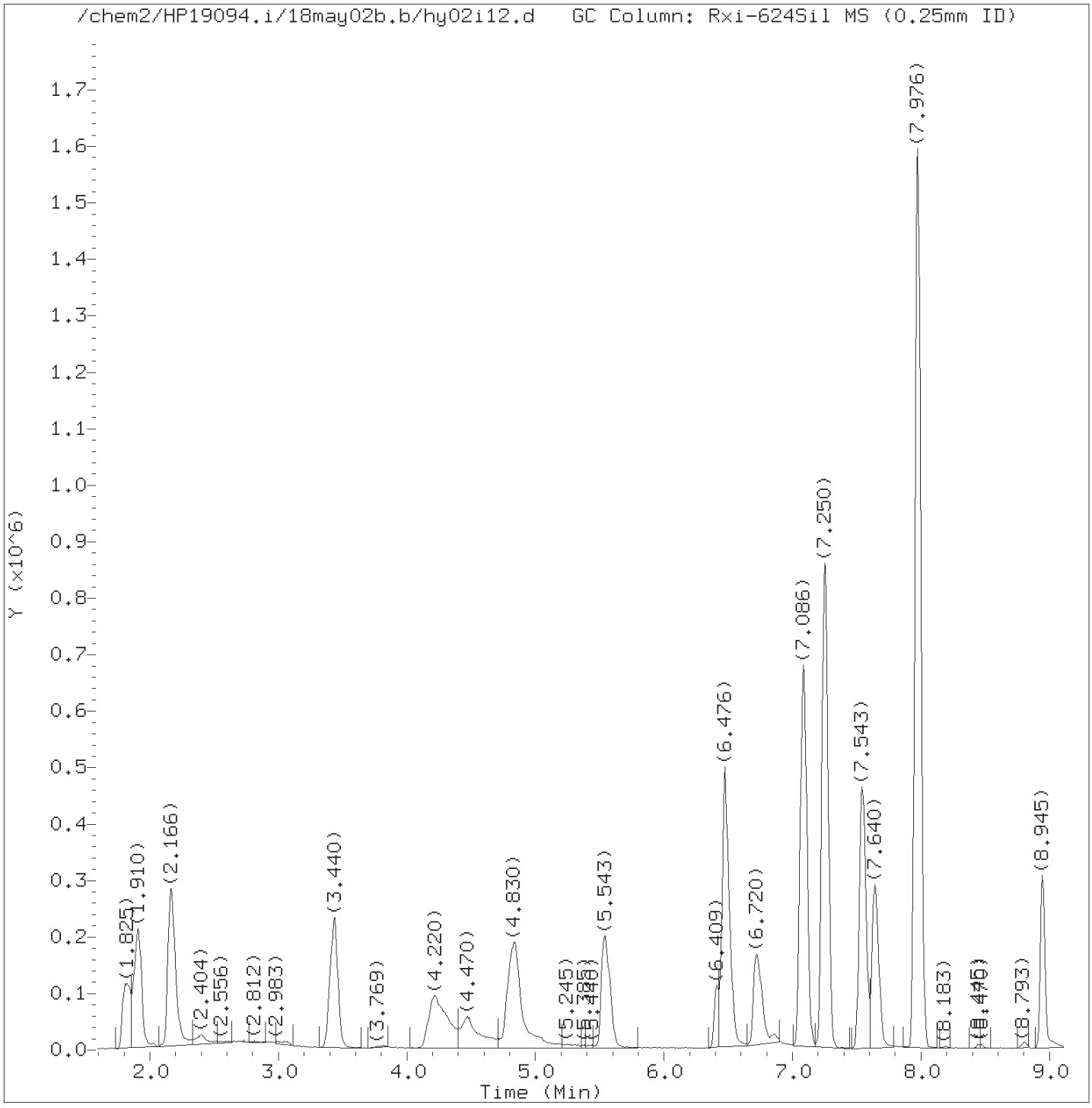
Data File: /chem2/HP19094.i/18may02b.b/hy02i11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:15 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:33
Date, time and analyst ID of latest file update: 02-May-2018 19:33 Automation

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1877
Retention Time (minutes): 13.030
Quant Ion : 55.00
Area : 1786
On-column Amount (ng) : 2.0320
Integration start scan : 1874 Integration stop scan: 1897
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user id: DVV10203



Total Ion Chromatogram (TIC)

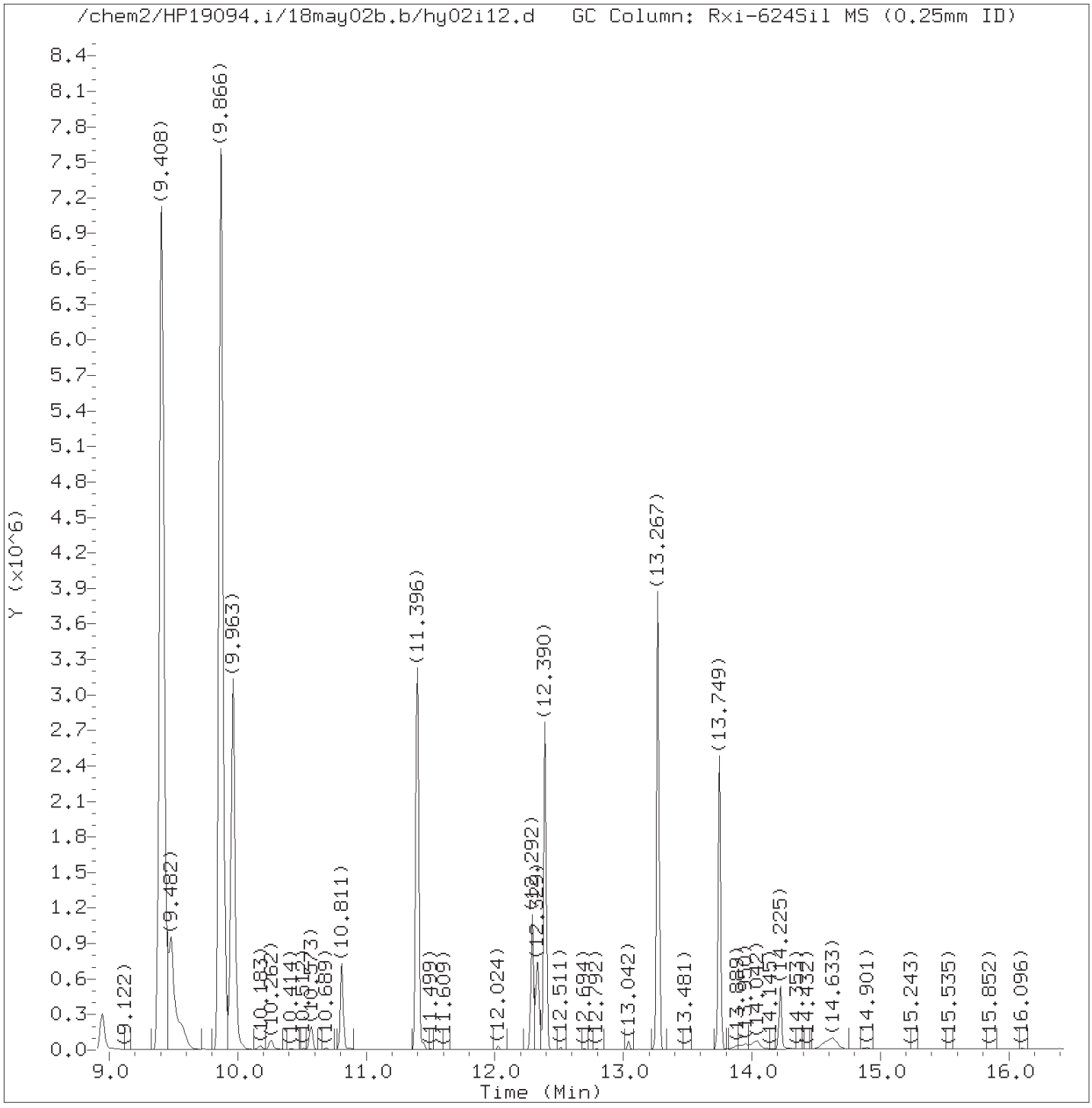
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

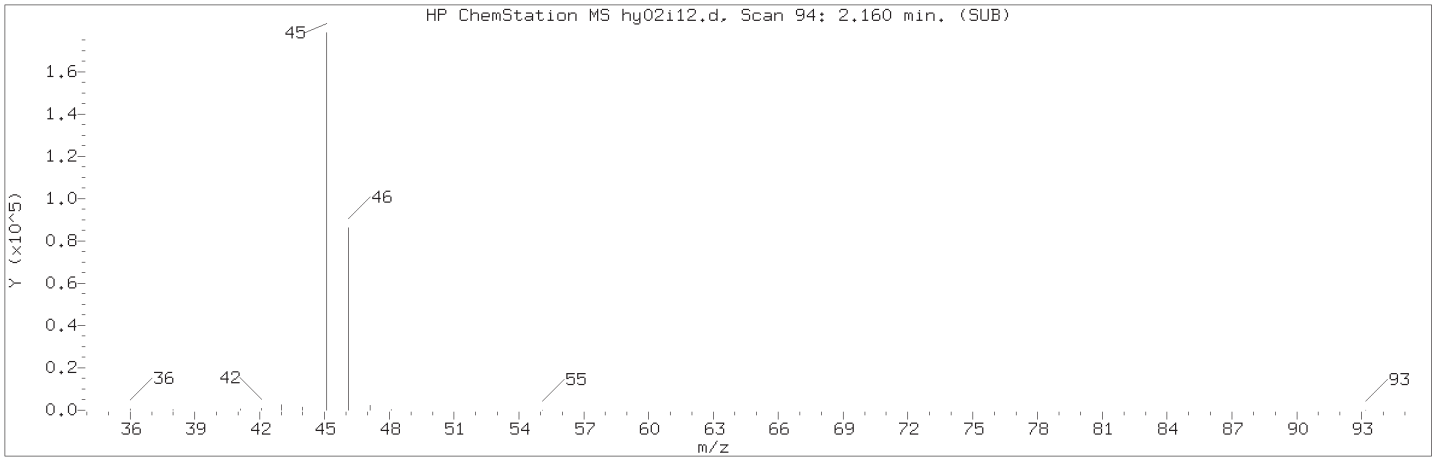
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.160	45	730585M	9.805
25) Acetonitrile	(1)	4.208	41	800300M	361.911
26)*t-Butyl Alcohol-d10	(1)	4.489	65	91579M	50.000
36) Vinyl Acetate	(2)	5.543	43	736143A	10.370
43) Methyl Acrylate	(2)	6.476	55	1106987	50.541
53) 1-Chlorobutane	(2)	7.256	56	1150342	10.974
63)*Fluorobenzene	(2)	7.976	96	2321054	10.000
77) Chloroacetonitrile	(2)	9.469	75	480074	549.979
78) 2-Chloroethyl vinyl ether	(2)	9.482	63	226026	10.770
97)*Chlorobenzene-d5	(3)	11.396	117	1697976	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	244920M	20.651
112) Cyclohexanone	(1)	12.335	55	365686M	606.278
133)*1,4-Dichlorobenzene-d4	(4)	13.267	152	883093	10.000
142) Hexachloroethane	(4)	13.749	117	434603	11.690

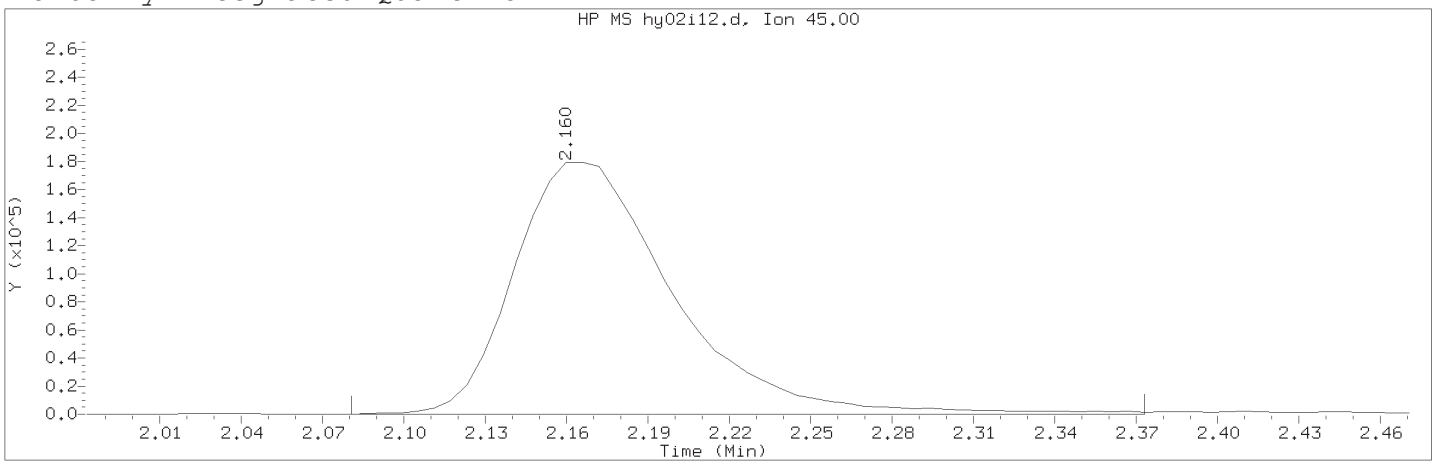
M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

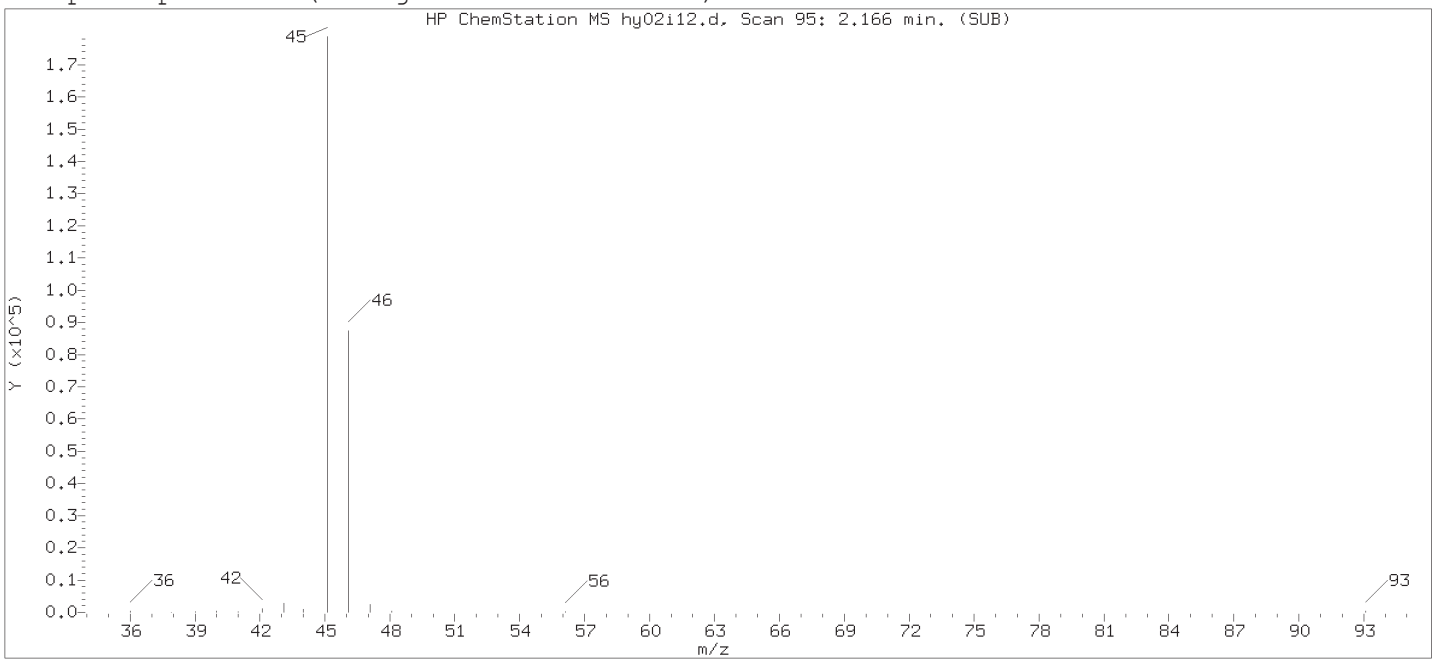
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 94
Retention Time (minutes): 2.160
Quant Ion : 45.00
Area (flag) : 730585M
On-Column Amount (ng) : 9.8052
Integration start scan : 80 Integration stop scan: 128
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

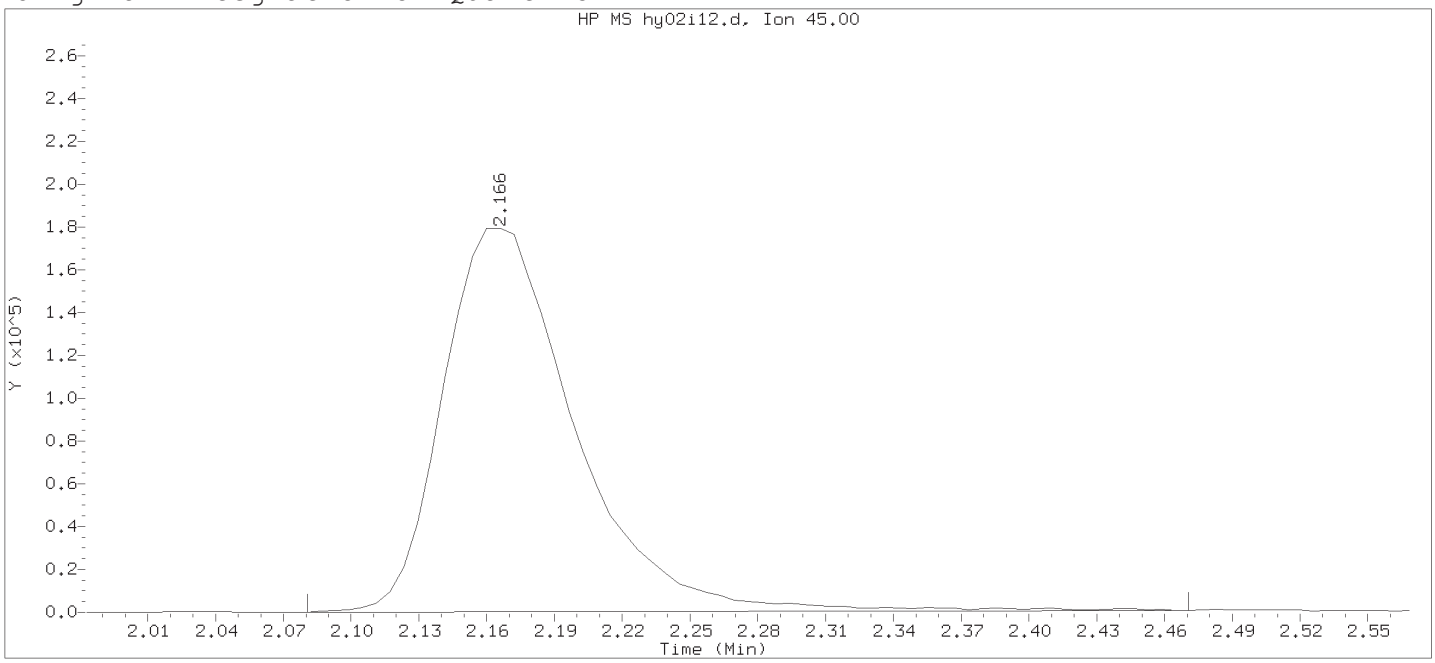
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

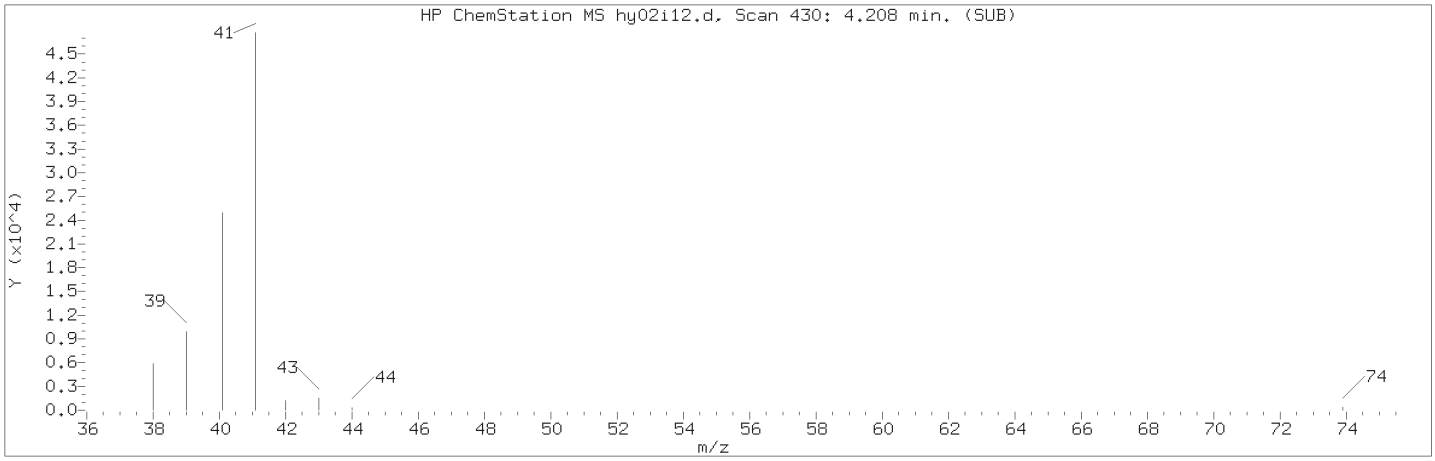
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:54
Date, time and analyst ID of latest file update: 02-May-2018 19:54 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

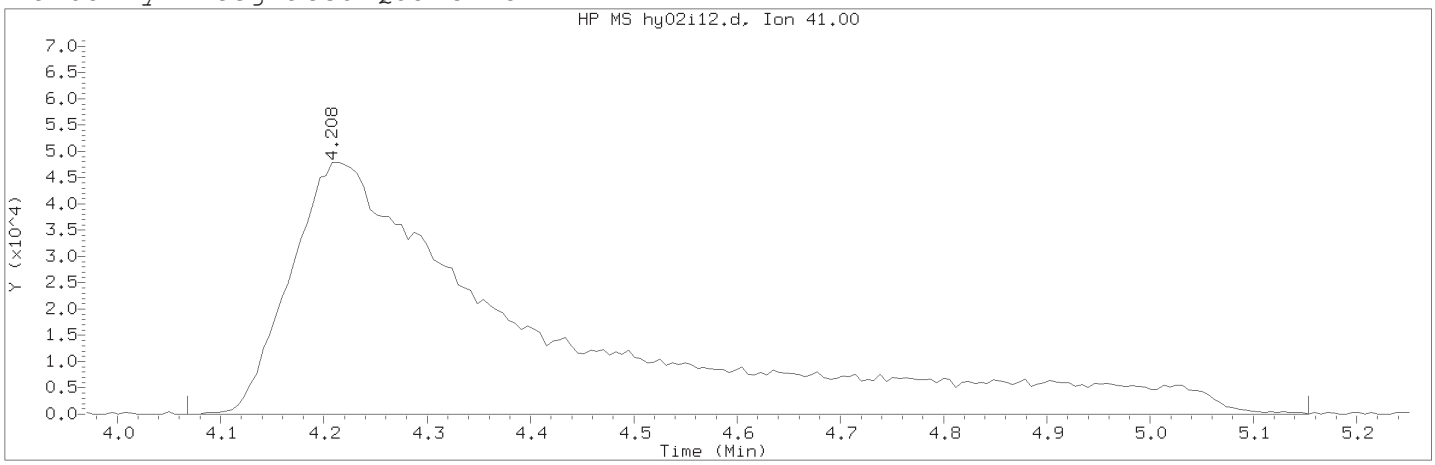
Compound Number	: 4		
Compound Name	: Dimethyl ether		
Scan Number	: 95		
Retention Time (minutes)	: 2.166		
Quant Ion	: 45.00		
Area	: 728833		
On-column Amount (ng)	: 9.4714		
Integration start scan	: 80	Integration stop scan:	144
Y at integration start	: 0	Y at integration end:	872

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

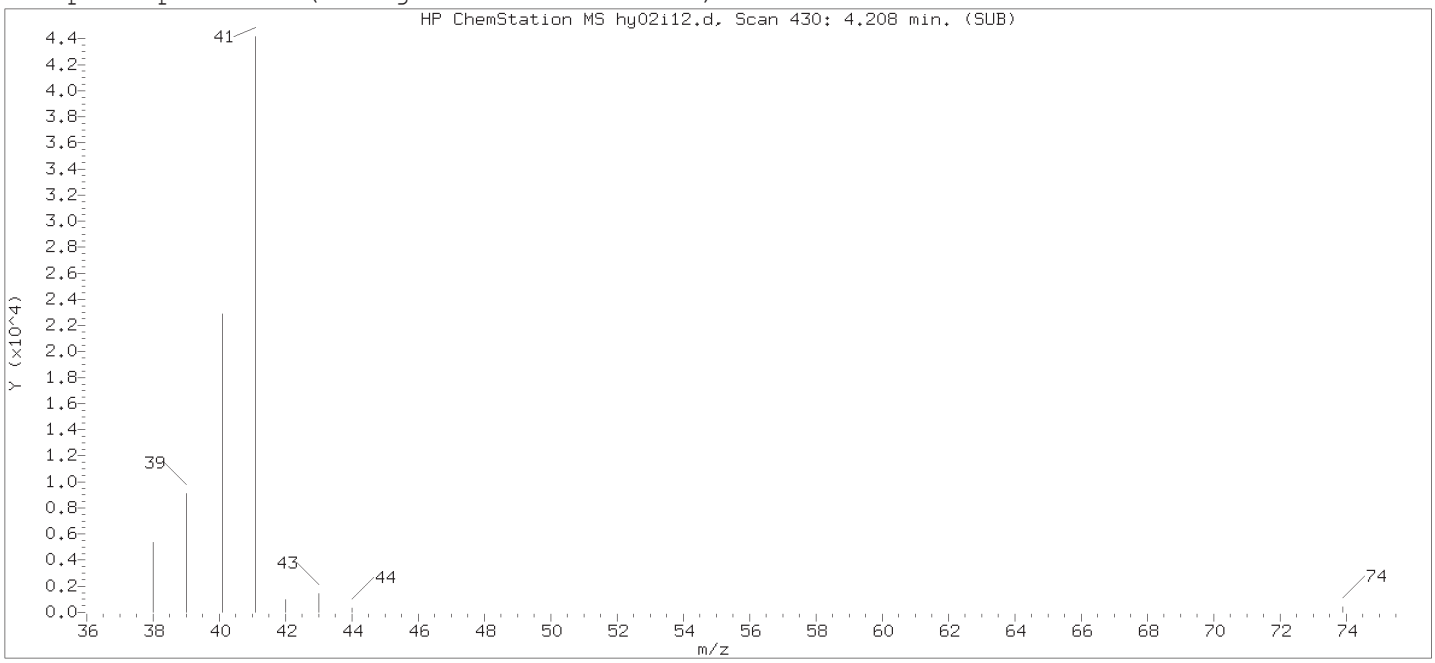
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 430
Retention Time (minutes): 4.208
Quant Ion : 41.00
Area (flag) : 800300M
On-Column Amount (ng) : 361.9106
Integration start scan : 406 Integration stop scan: 584
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

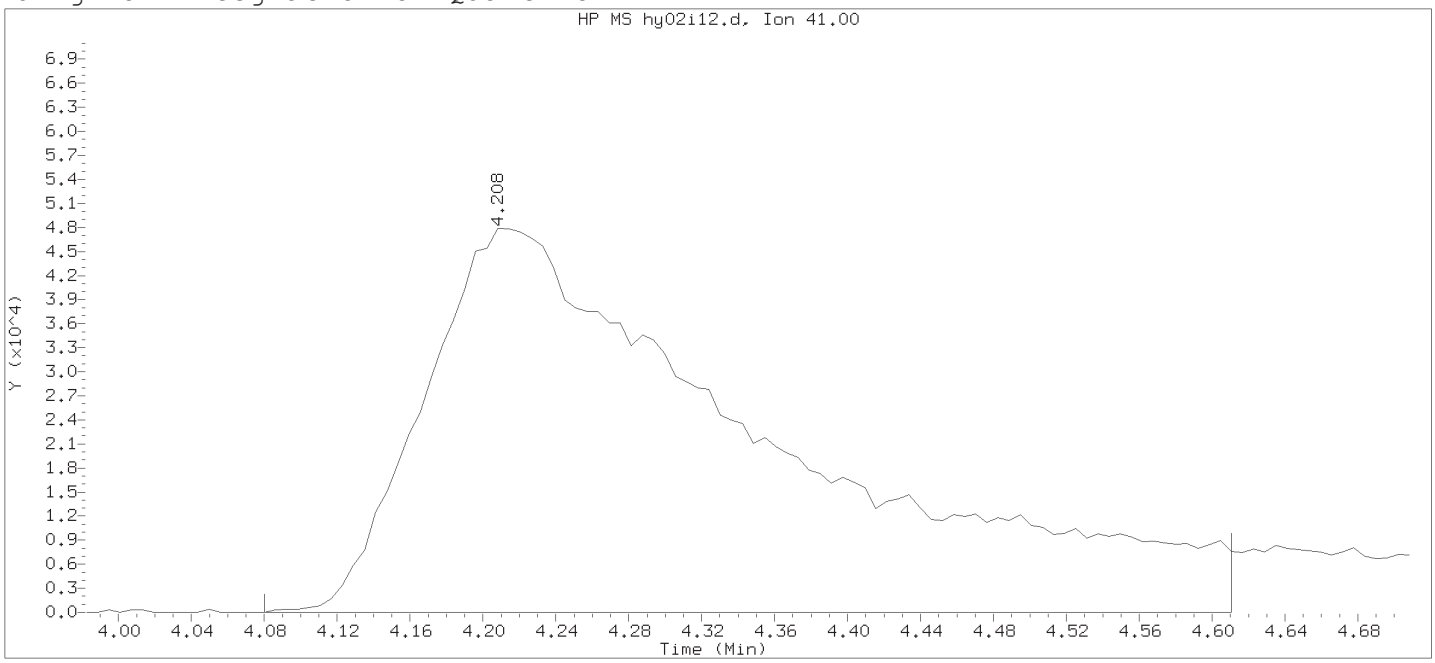
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

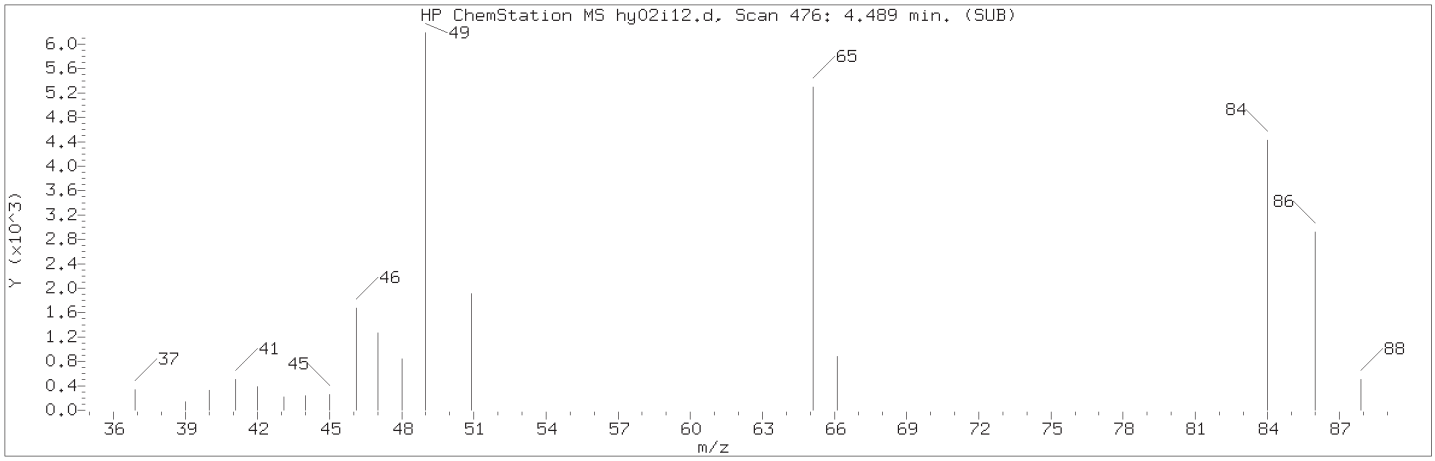
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:54
Date, time and analyst ID of latest file update: 02-May-2018 19:54 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

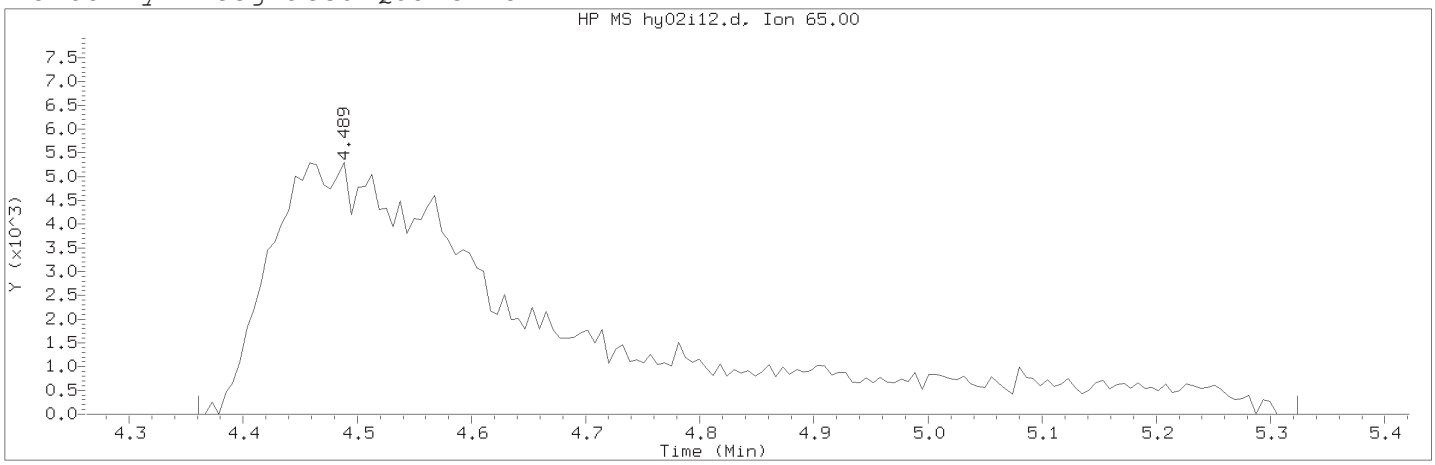
Compound Number	: 25
Compound Name	: Acetonitrile
Scan Number	: 430
Retention Time (minutes)	: 4.208
Quant Ion	: 41.00
Area	: 627768
On-column Amount (ng)	: 250.5418
Integration start scan	: 408 Integration stop scan: 495
Y at integration start	: 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

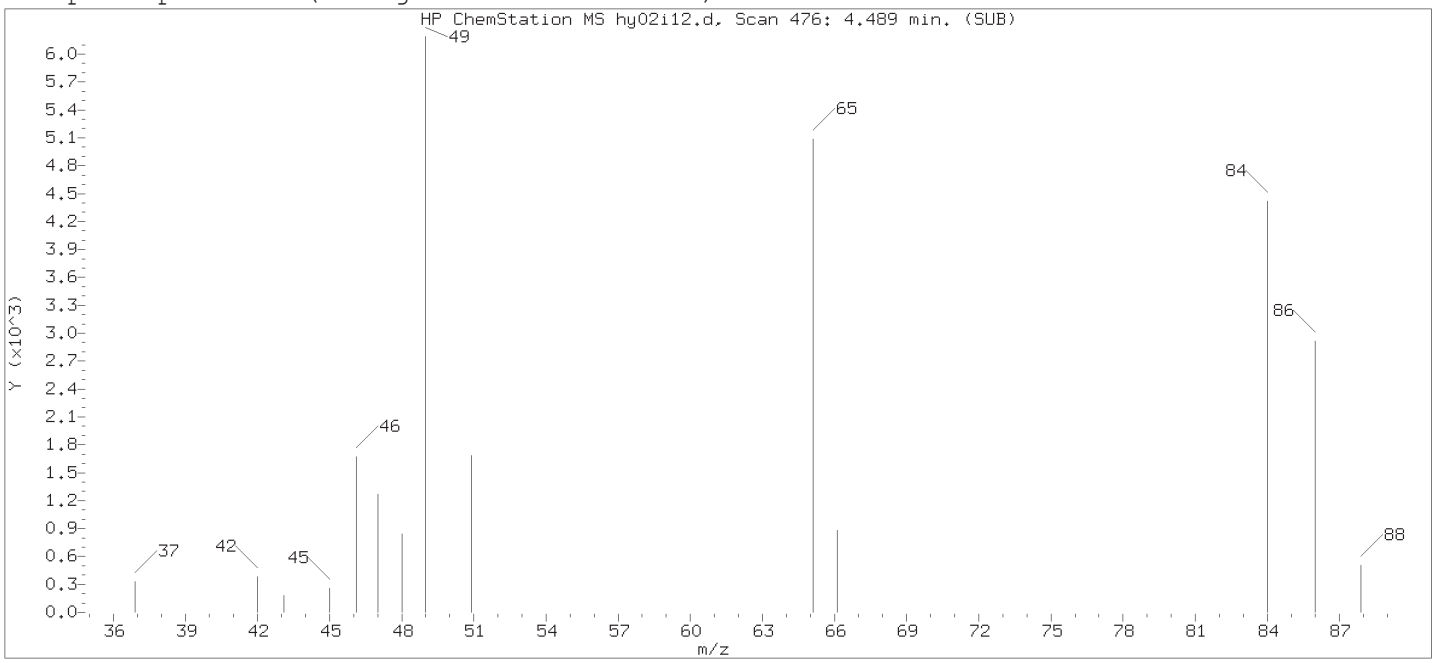
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 476
Retention Time (minutes): 4.489
Quant Ion : 65.00
Area (flag) : 91579M
On-Column Amount (ng) : 50.0000
Integration start scan : 454 Integration stop scan: 612
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

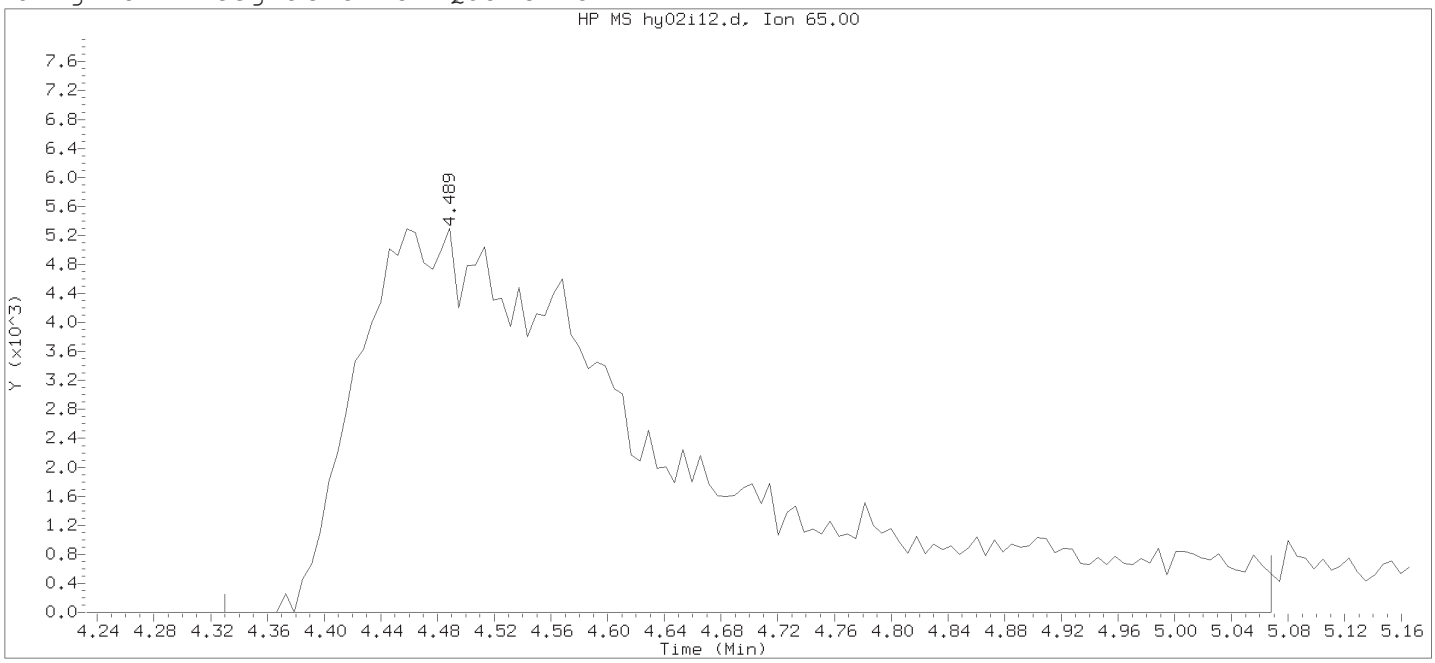
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

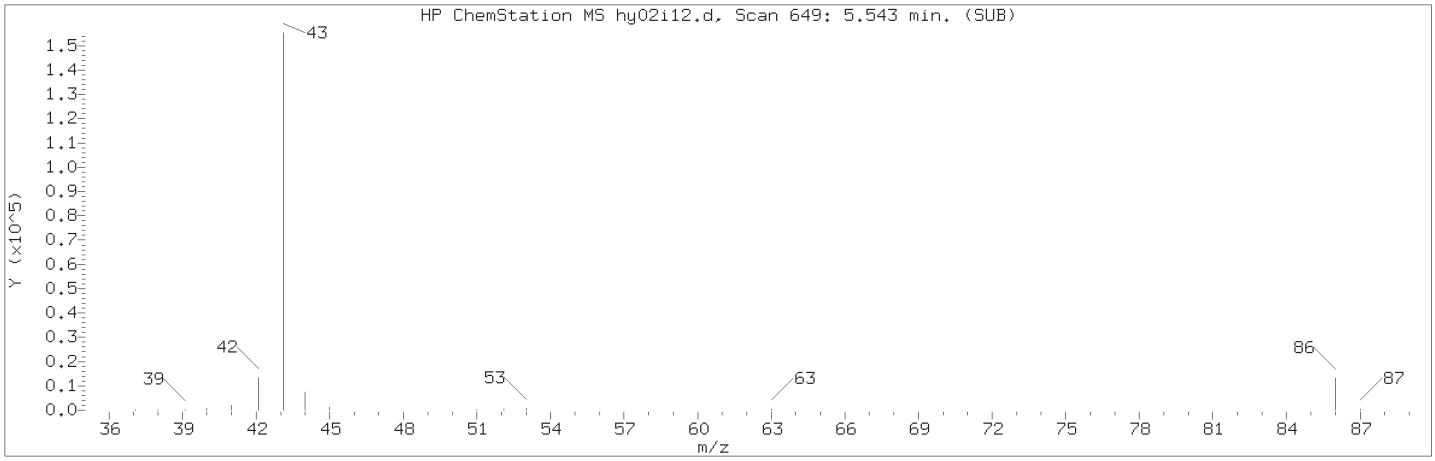
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:54
Date, time and analyst ID of latest file update: 02-May-2018 19:54 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

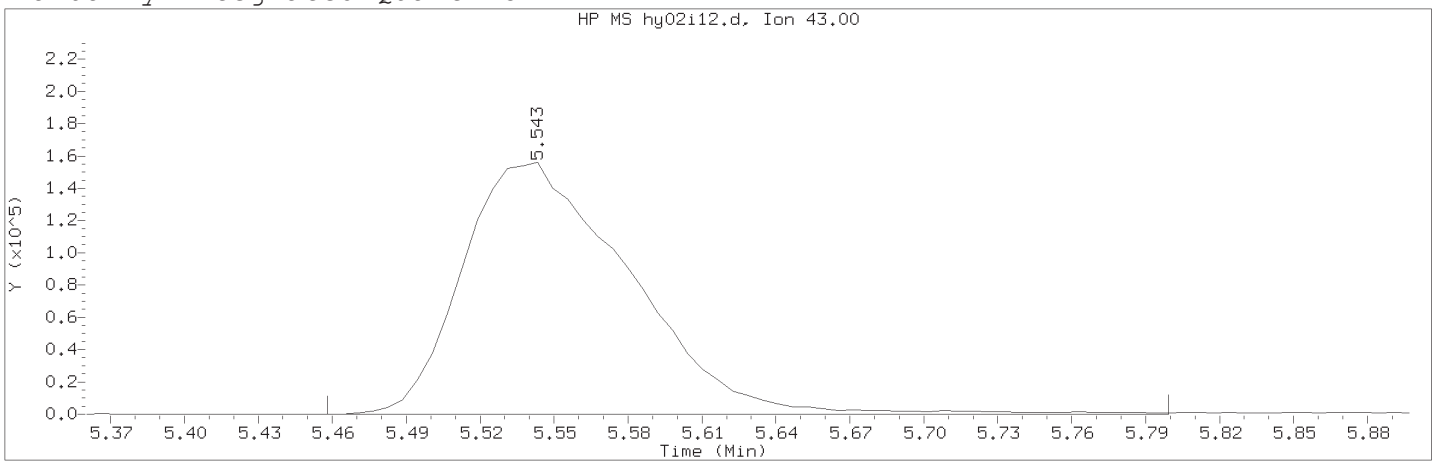
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 476
Retention Time (minutes): 4.489
Quant Ion : 65.00
Area : 83894
On-column Amount (ng) : 50.0000
Integration start scan : 449 Integration stop scan: 570
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

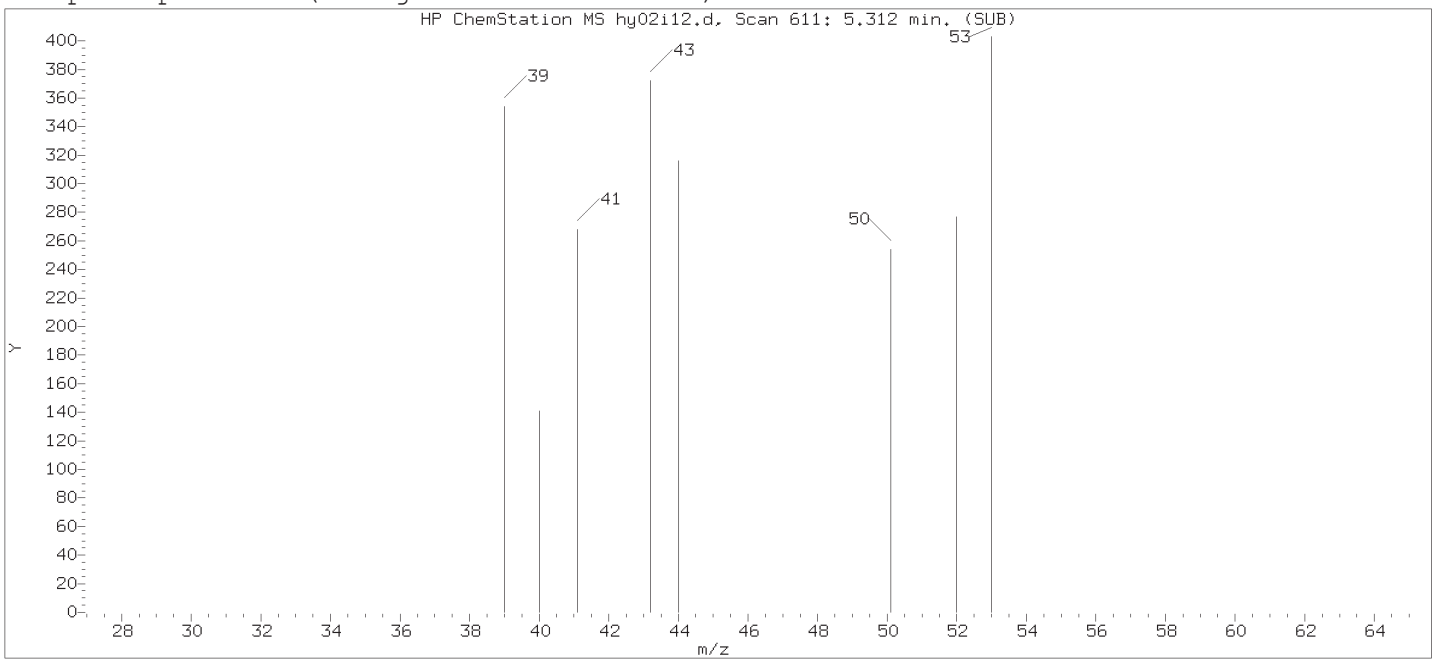
Compound Number : 36
Compound Name : Vinyl Acetate
Scan Number : 649
Retention Time (minutes): 5.543
Quant Ion : 43.00
Area (flag) : 736143A
On-Column Amount (ng) : 10.3701
Integration start scan : 634 Integration stop scan: 690
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

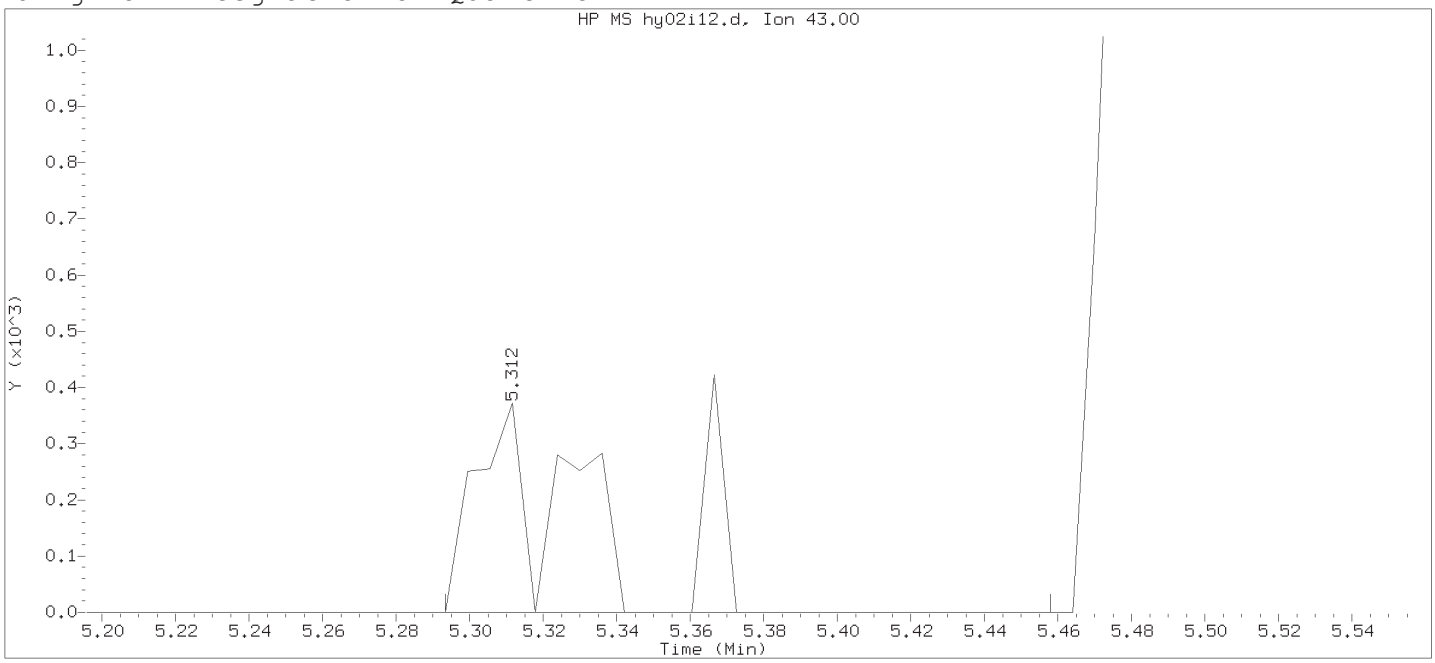
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

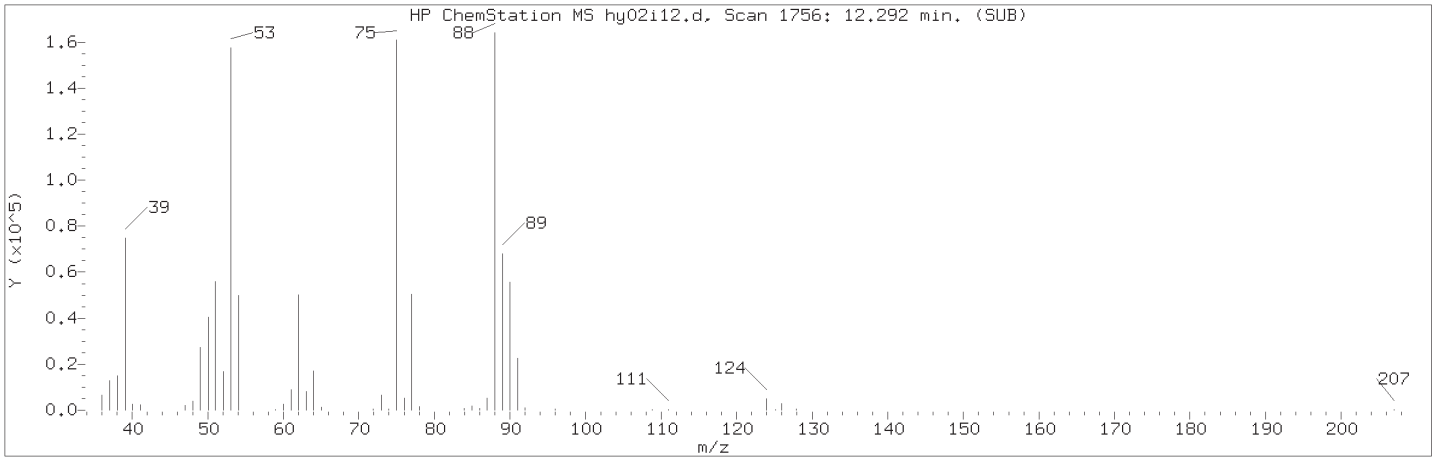
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:54
Date, time and analyst ID of latest file update: 02-May-2018 19:54 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

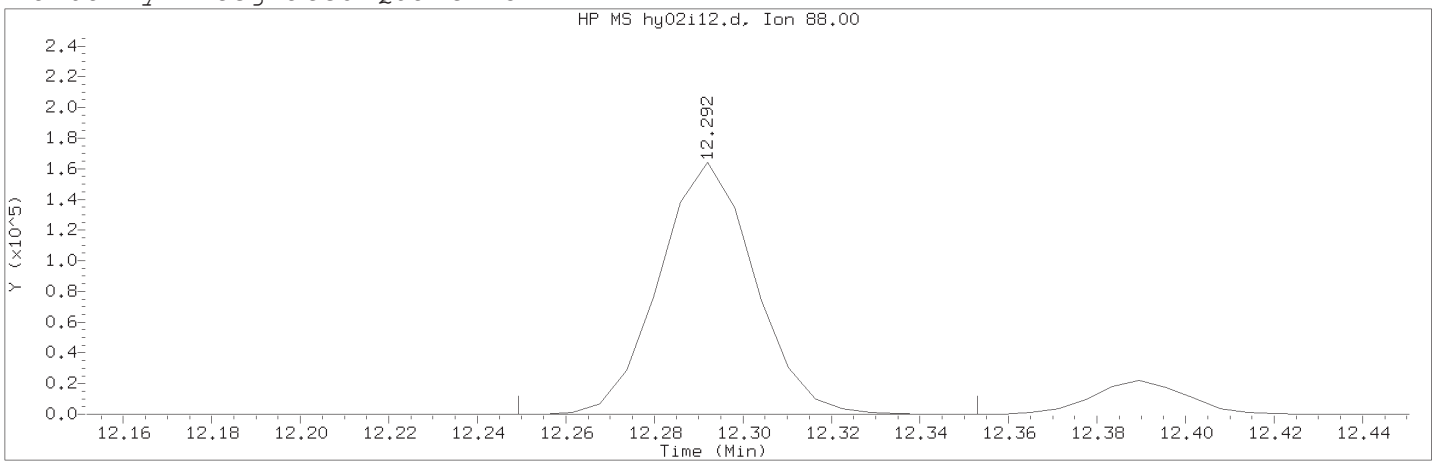
Compound Number	: 36
Compound Name	: Vinyl Acetate
Scan Number	: 611
Retention Time (minutes)	: 5.312
Quant Ion	: 43.00
Area	: 774
On-column Amount (ng)	: 0.0131
Integration start scan	: 607 Integration stop scan: 634
Y at integration start	: 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

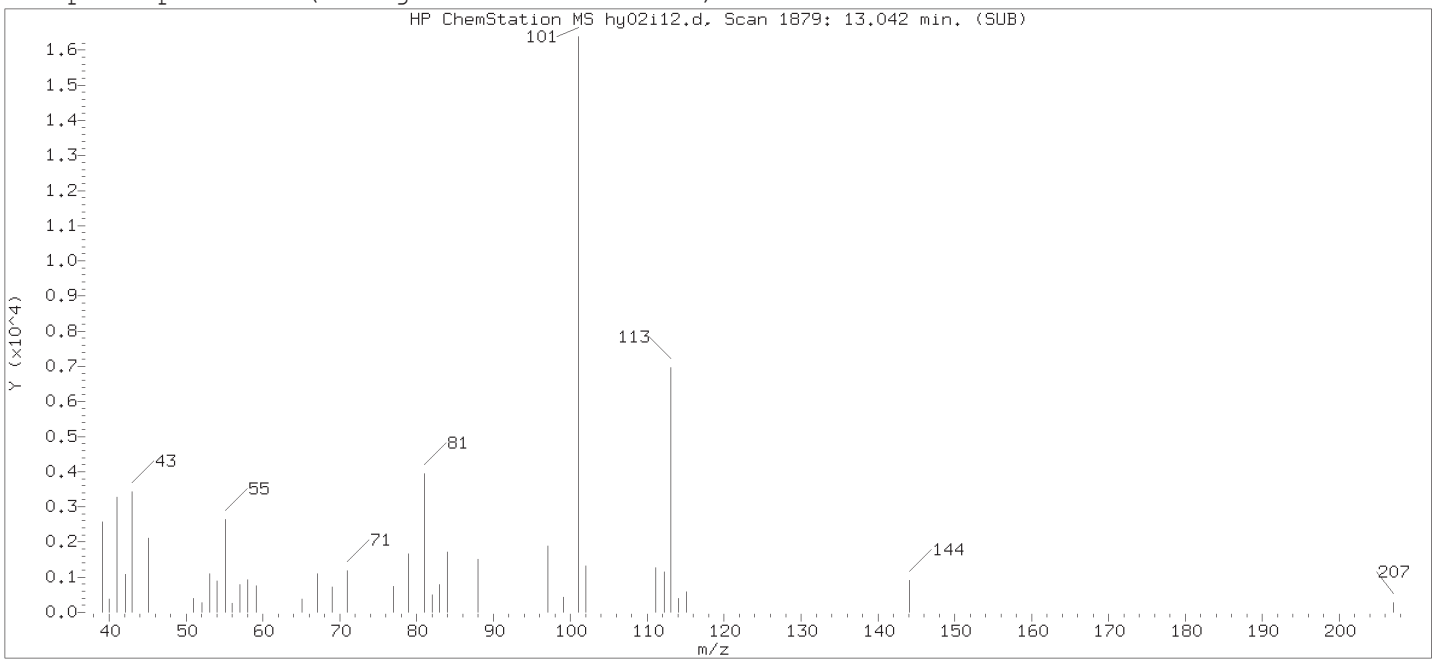
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 244920M
On-Column Amount (ng) : 20.6506
Integration start scan : 1748 Integration stop scan: 1765
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

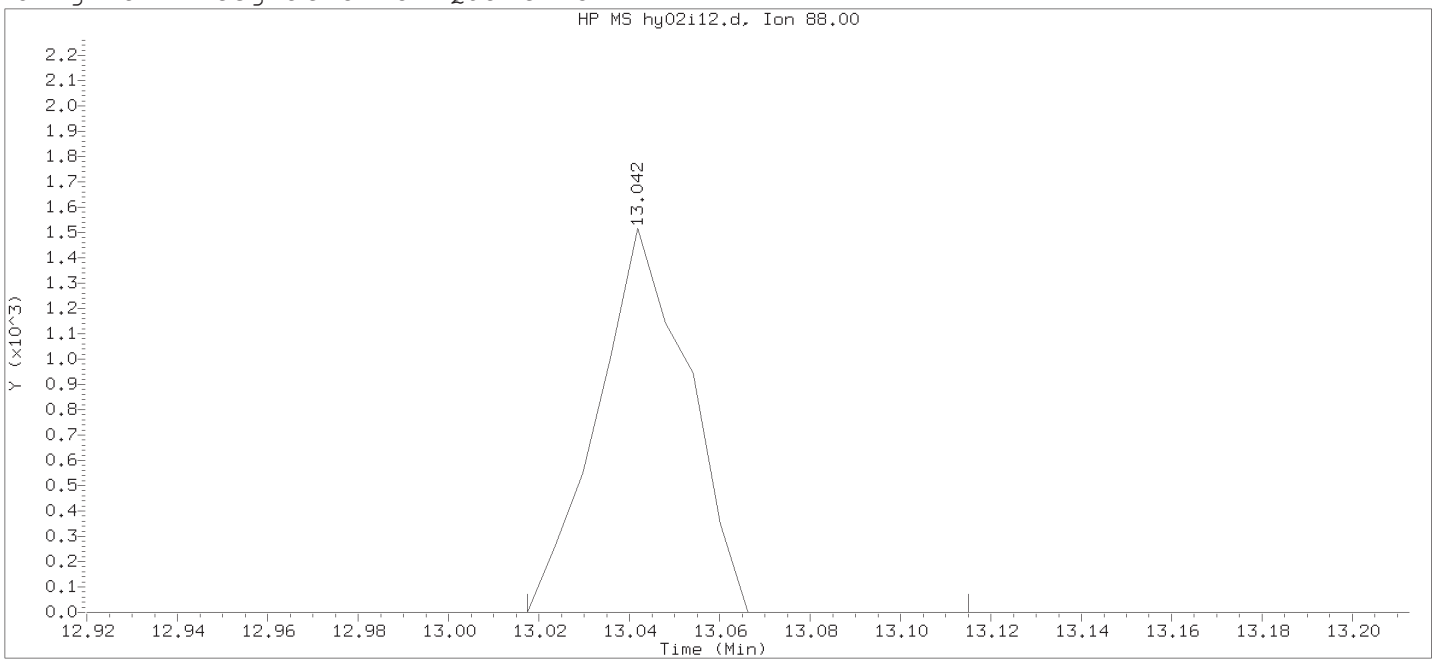
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

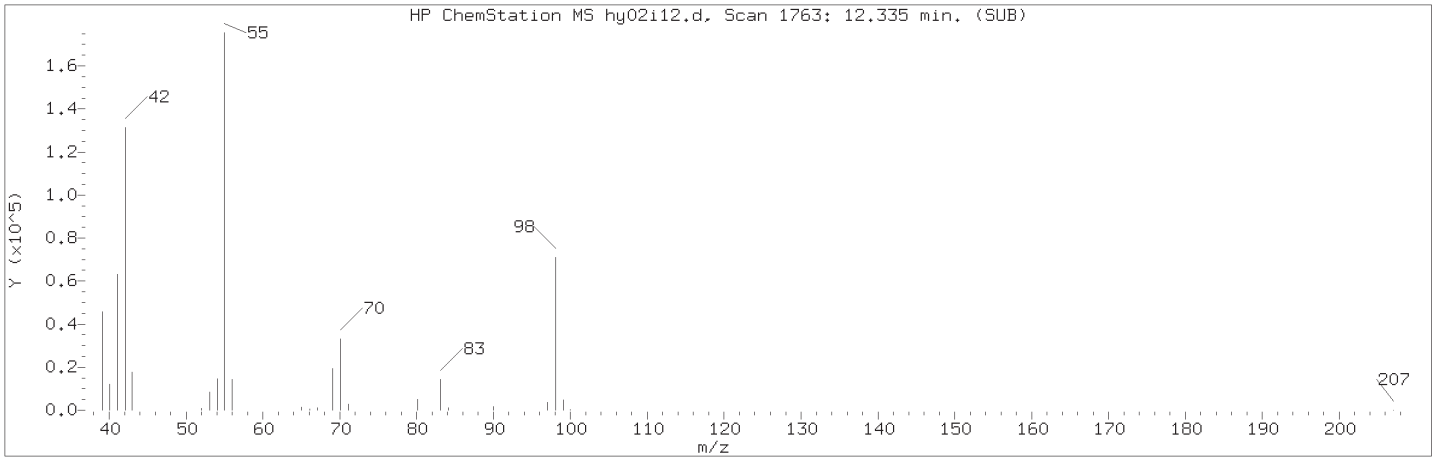
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:54
Date, time and analyst ID of latest file update: 02-May-2018 19:54 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

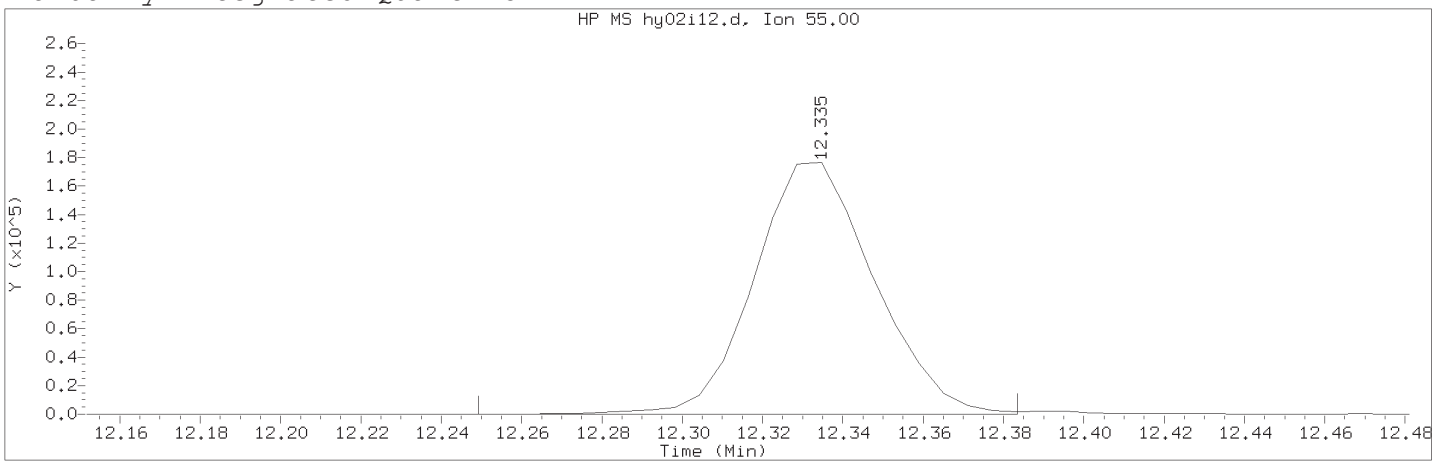
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1879
Retention Time (minutes): 13.042
Quant Ion : 88.00
Area : 2111
On-column Amount (ng) : 0.2156
Integration start scan : 1874 Integration stop scan: 1890
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

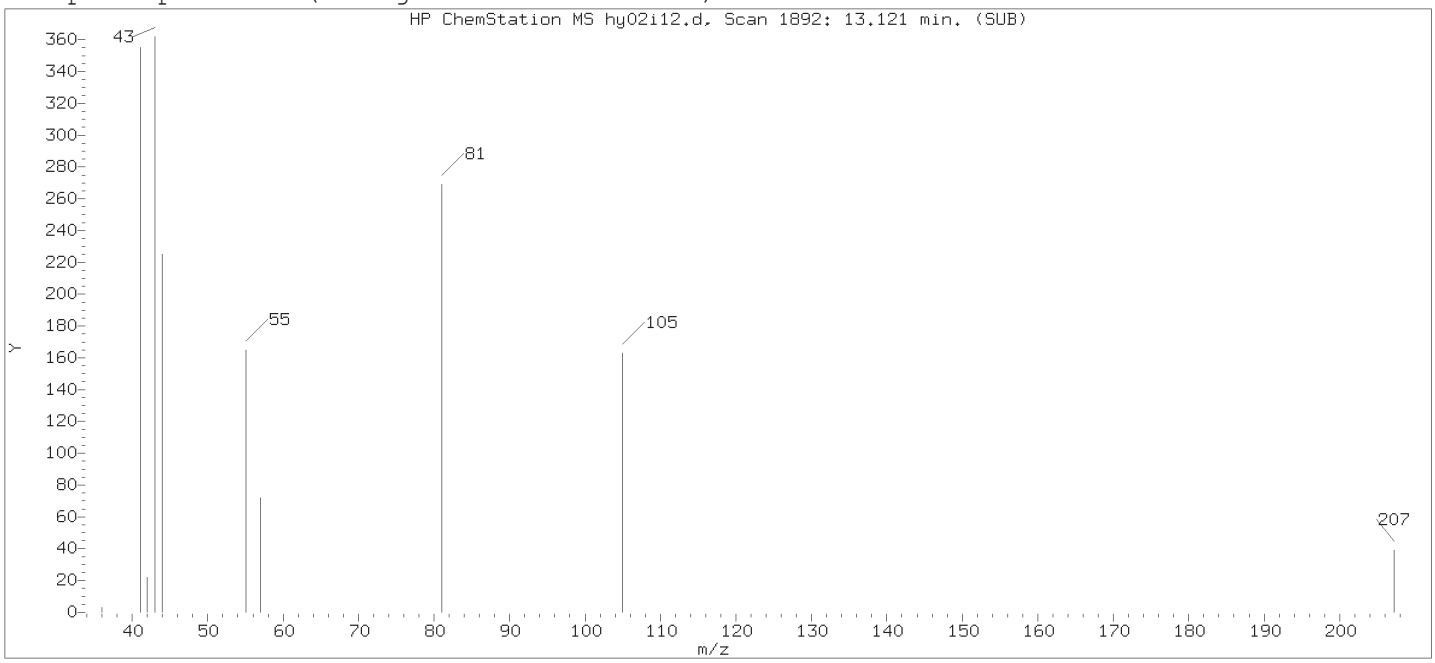
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1763
Retention Time (minutes): 12.335
Quant Ion : 55.00
Area (flag) : 365686M
On-Column Amount (ng) : 606.2783
Integration start scan : 1748 Integration stop scan: 1770
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

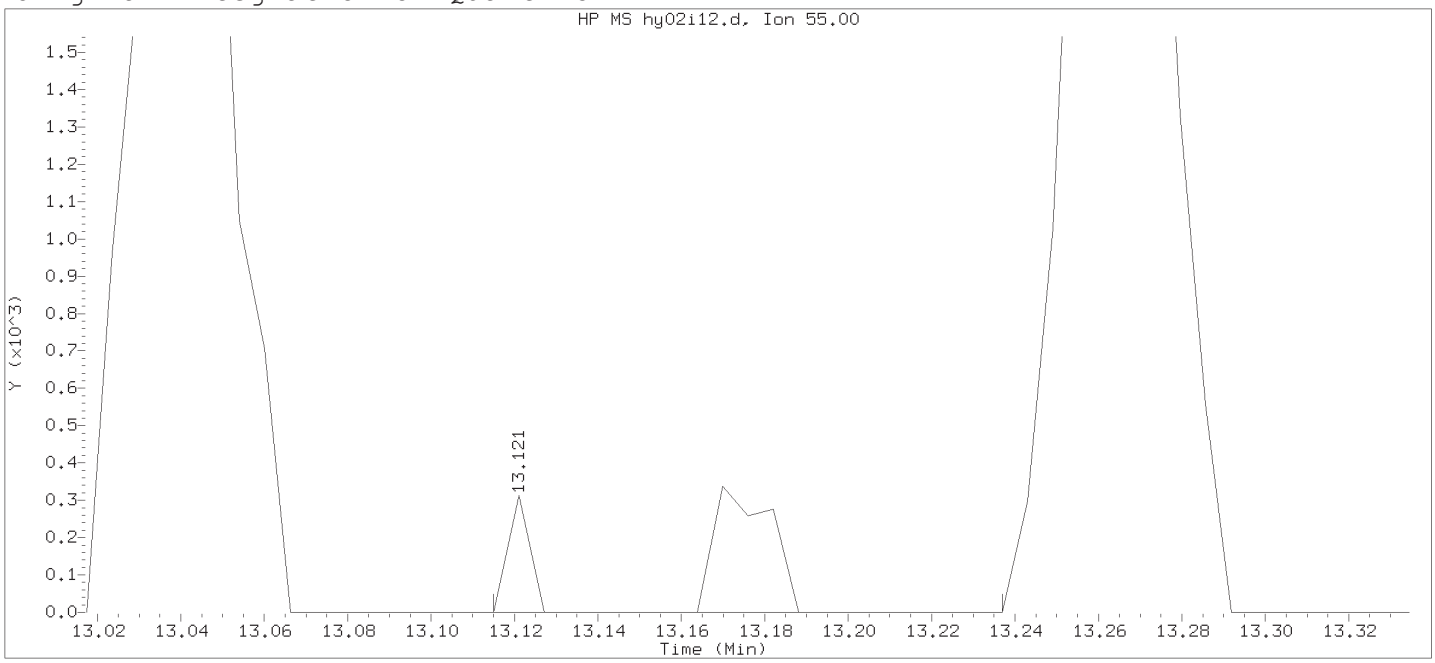
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



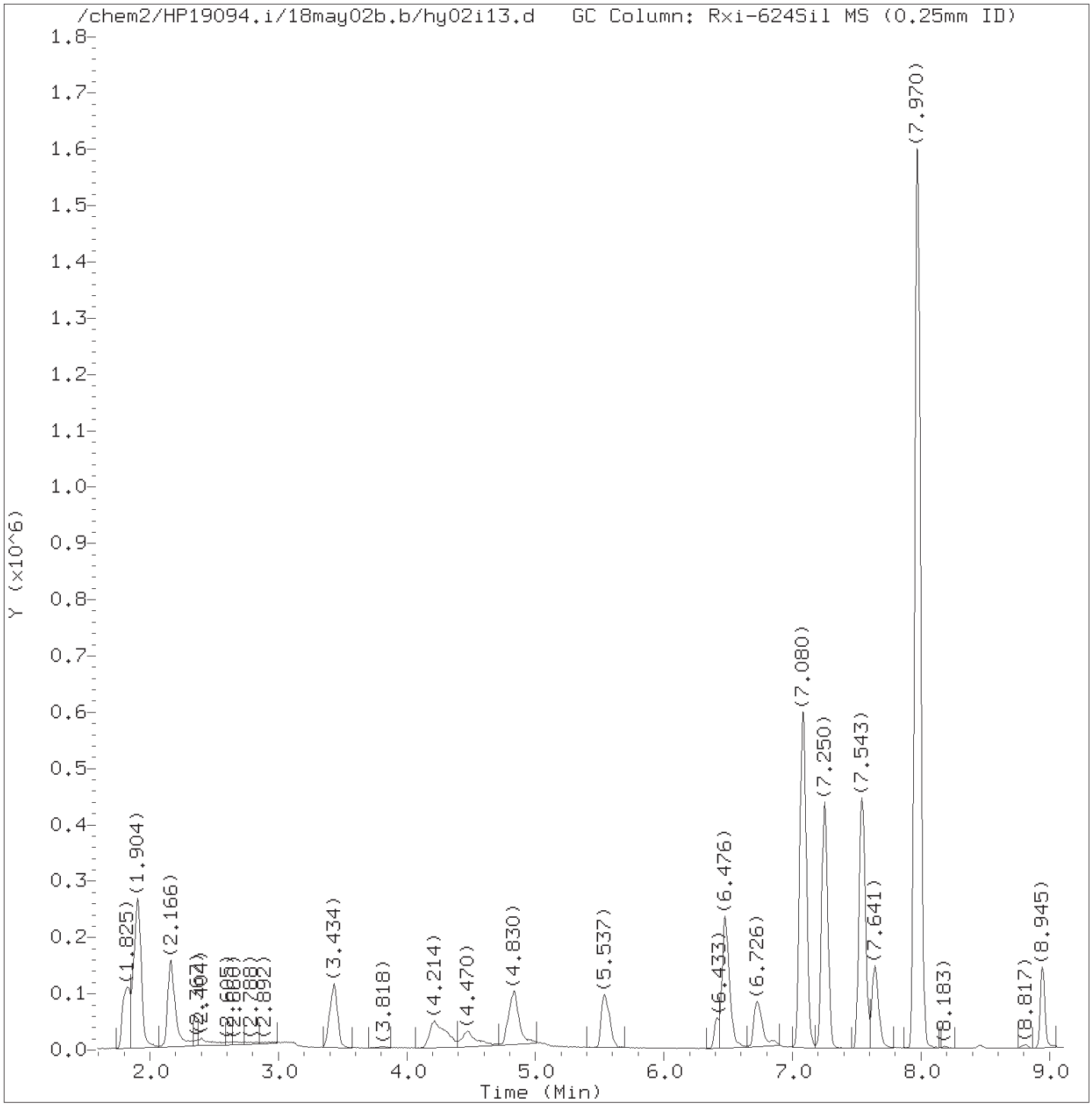
Data File: /chem2/HP19094.i/18may02b.b/hy02i12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:36 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 19:54
Date, time and analyst ID of latest file update: 02-May-2018 19:54 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 112		
Compound Name	: Cyclohexanone		
Scan Number	: 1892		
Retention Time (minutes)	: 13.121		
Quant Ion	: 55.00		
Area	: 434		
On-column Amount (ng)	: 0.6361		
Integration start scan	: 1890	Integration stop scan:	1910
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: DVV



Total Ion Chromatogram (TIC)

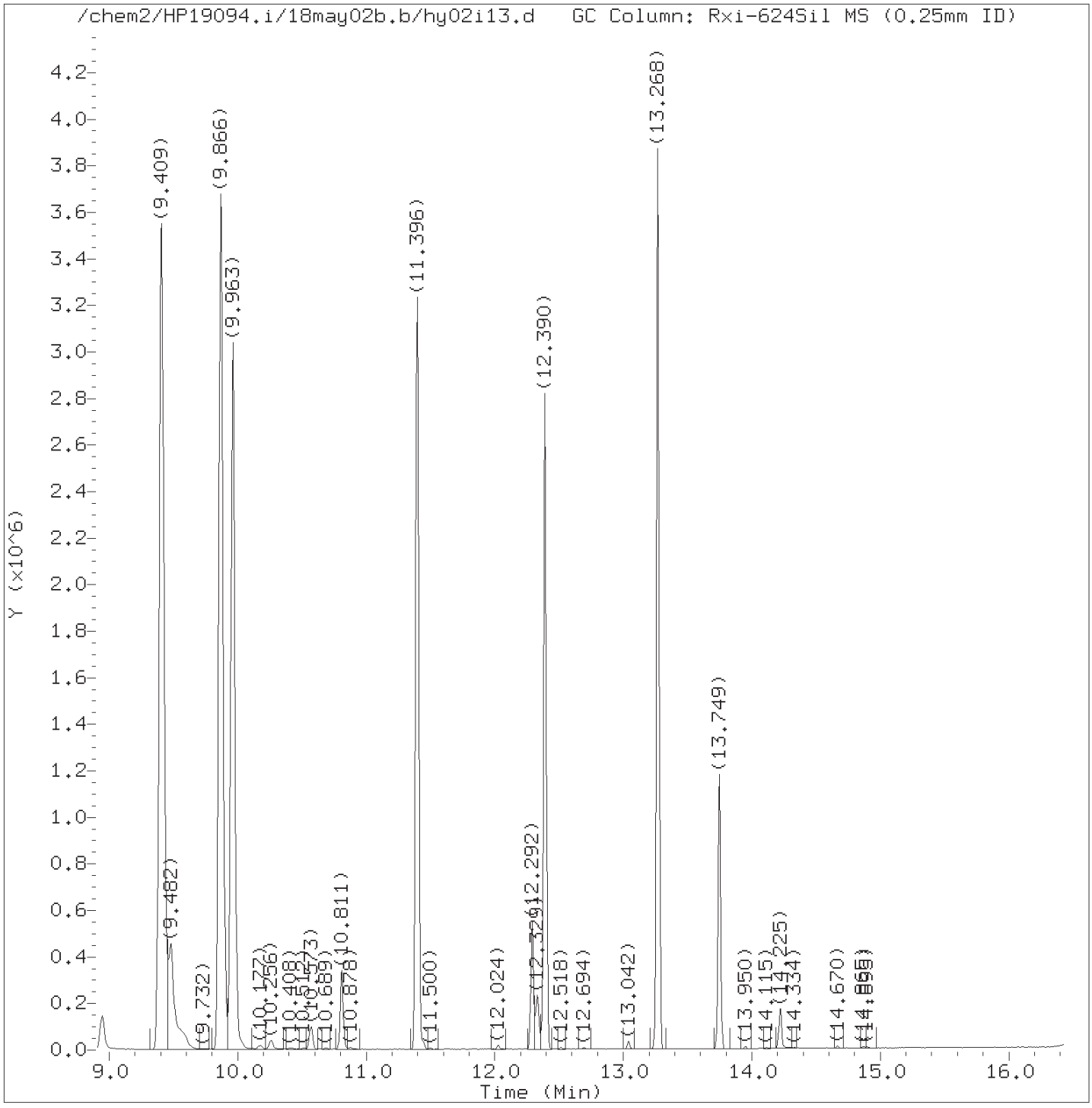
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

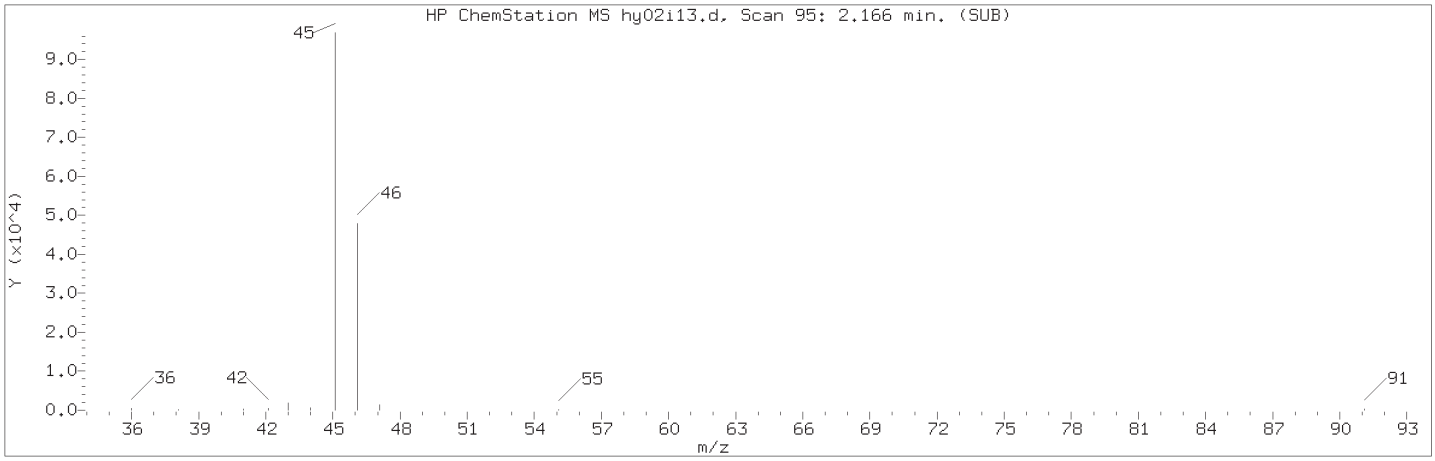
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.166	45	376311M	5.039
25) Acetonitrile	(1)	4.214	41	346001M	192.762
26)*t-Butyl Alcohol-d10	(1)	4.495	65	74336	50.000
36) Vinyl Acetate	(2)	5.537	43	346883	4.875
43) Methyl Acrylate	(2)	6.476	55	550131	25.059
53) 1-Chlorobutane	(2)	7.250	56	571057	5.435
63)*Fluorobenzene	(2)	7.976	96	2326423	10.000
77) Chloroacetonitrile	(2)	9.476	75	181895	207.900
78) 2-Chloroethyl vinyl ether	(2)	9.482	63	110899	5.272
97)*Chlorobenzene-d5	(3)	11.396	117	1698280	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	118032M	12.260
112) Cyclohexanone	(1)	12.329	55	116048M	237.027
133)*1,4-Dichlorobenzene-d4	(4)	13.268	152	890934	10.000
142) Hexachloroethane	(4)	13.749	117	203238	5.419

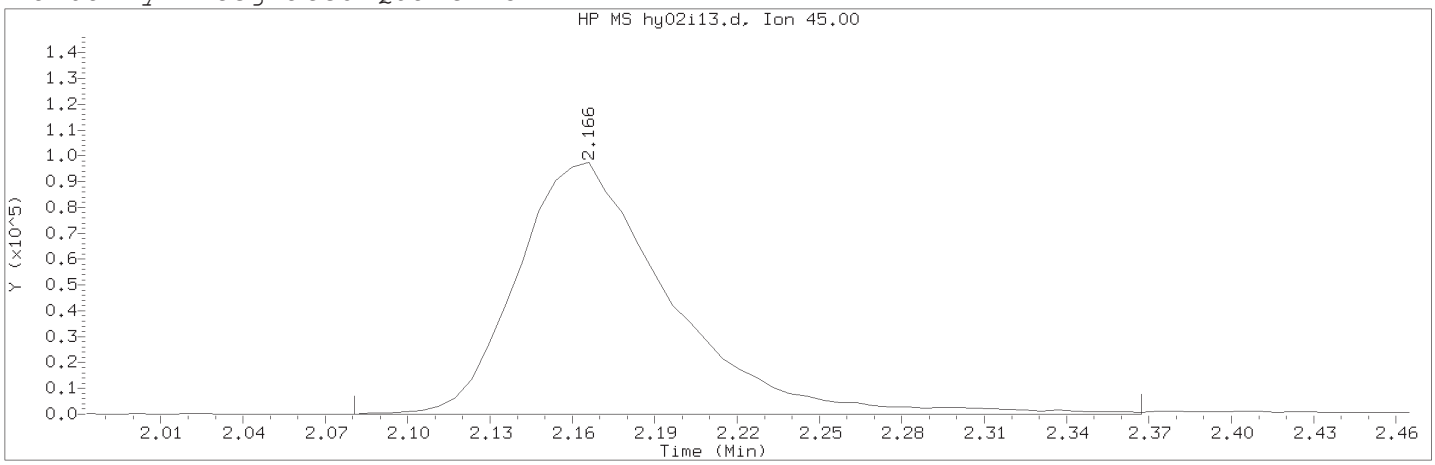
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD005 Lab Sample ID: VSTD005

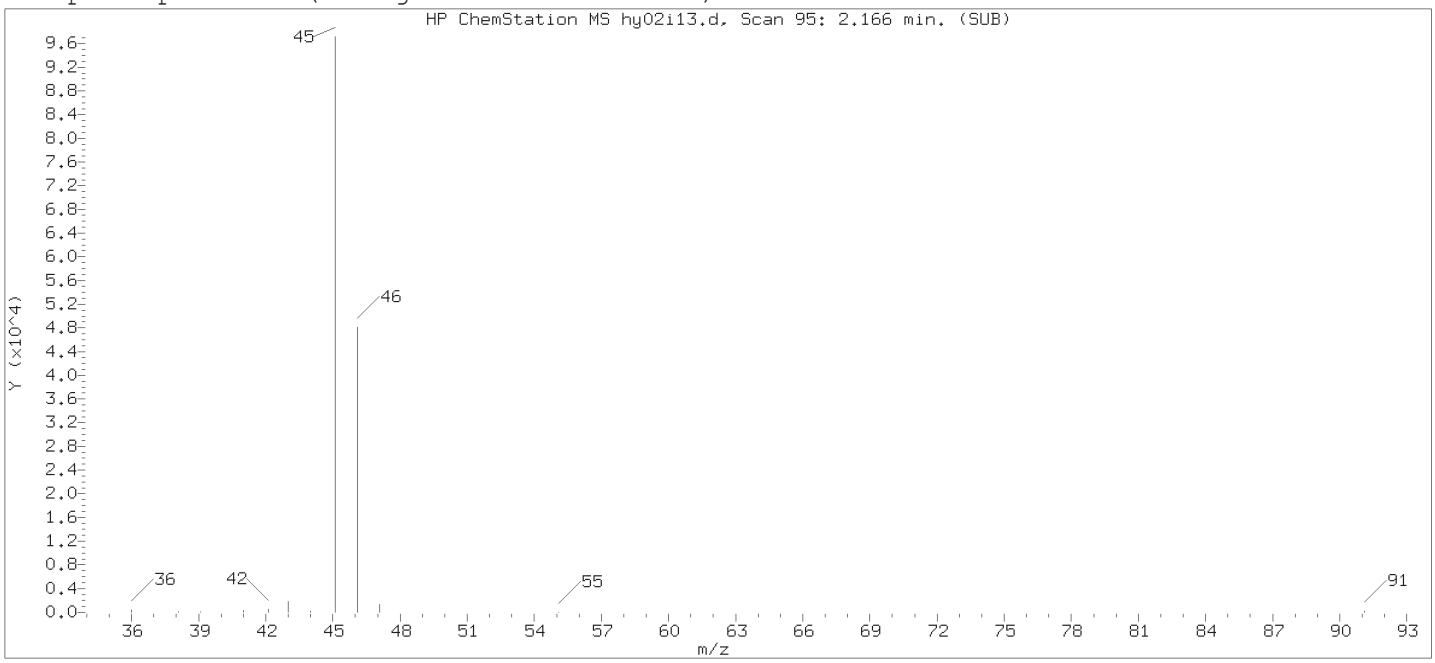
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 95
Retention Time (minutes): 2.166
Quant Ion : 45.00
Area (flag) : 376311M
On-Column Amount (ng) : 5.0388
Integration start scan : 80 Integration stop scan: 127
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

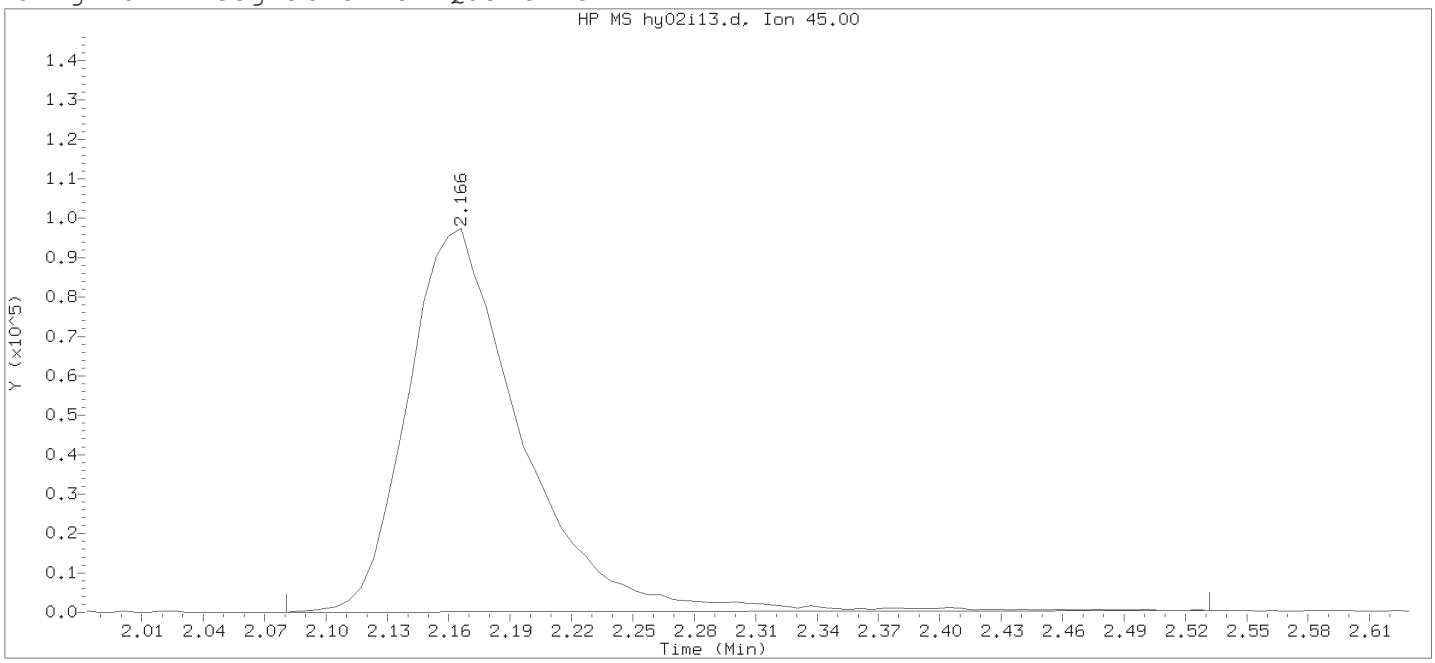
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

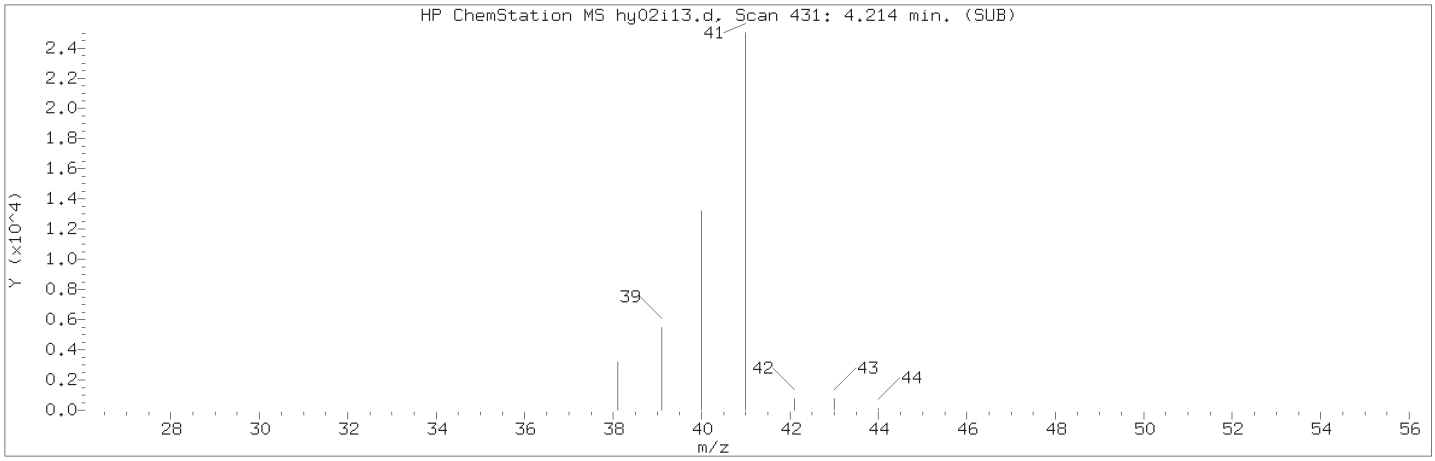
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:16
Date, time and analyst ID of latest file update: 02-May-2018 20:16 Automation

Sample Name: VSTD005 Lab Sample ID: VSTD005

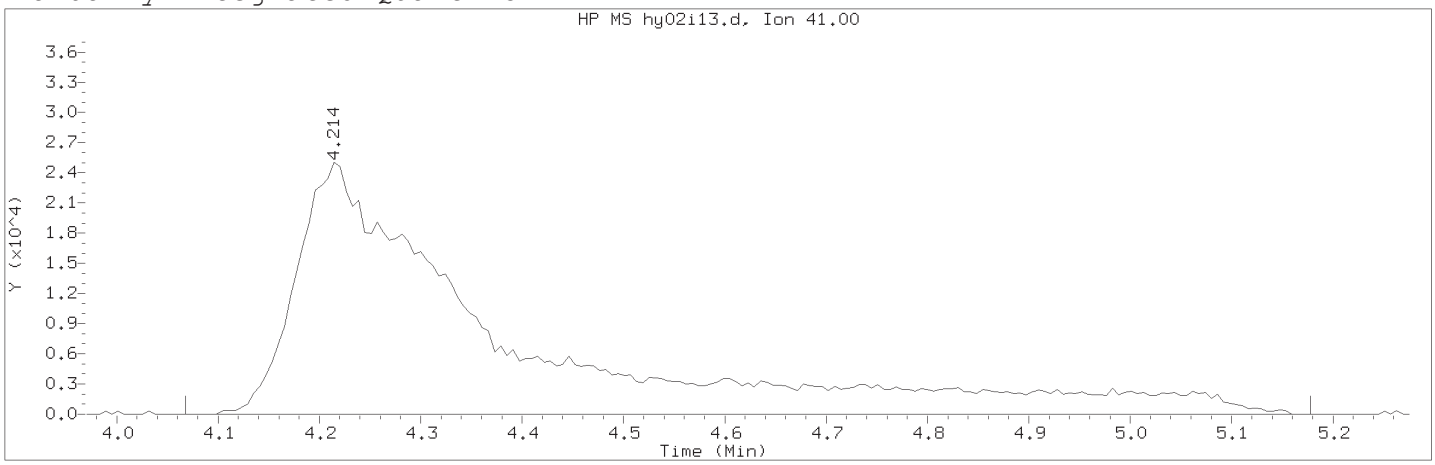
Compound Number	: 4		
Compound Name	: Dimethyl ether		
Scan Number	: 95		
Retention Time (minutes)	: 2.166		
Quant Ion	: 45.00		
Area	: 377915		
On-column Amount (ng)	: 4.9207		
Integration start scan	: 80	Integration stop scan:	154
Y at integration start	: 0	Y at integration end:	409

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user name: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD005 Lab Sample ID: VSTD005

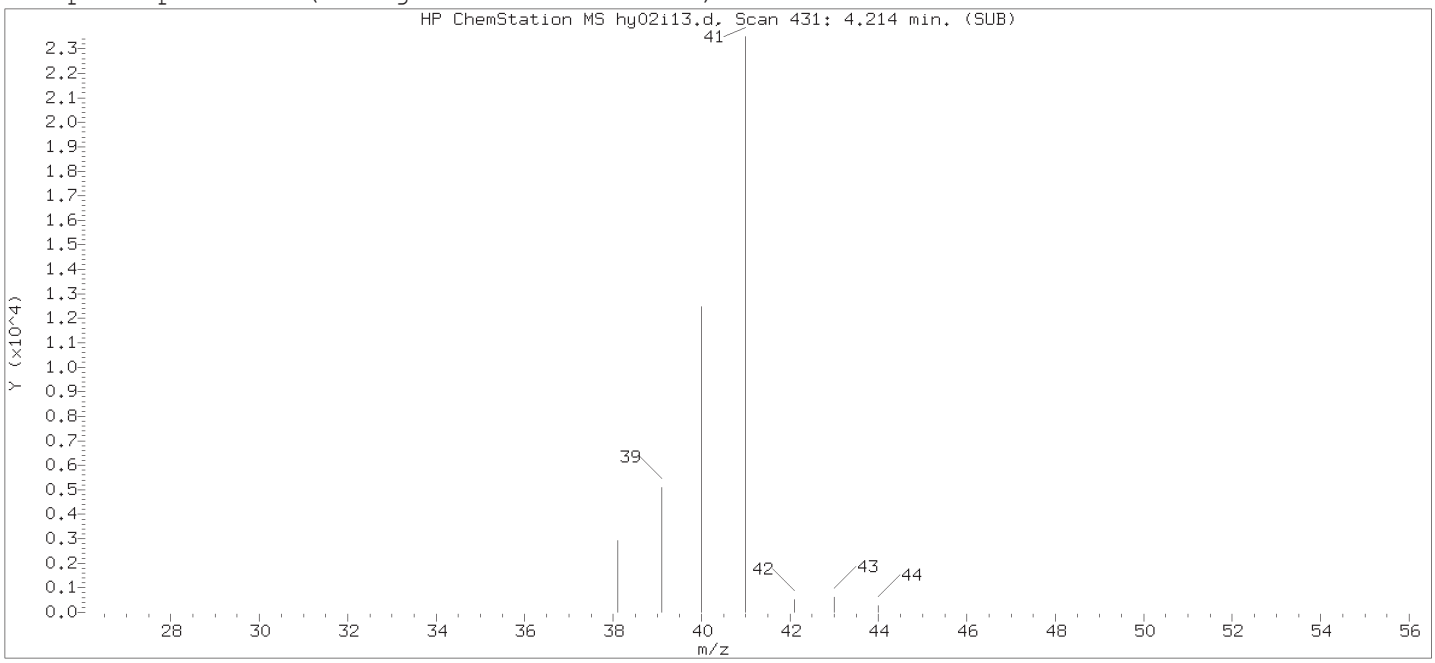
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 431
Retention Time (minutes): 4.214
Quant Ion : 41.00
Area (flag) : 346001M
On-Column Amount (ng) : 192.7625
Integration start scan : 406 Integration stop scan: 588
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

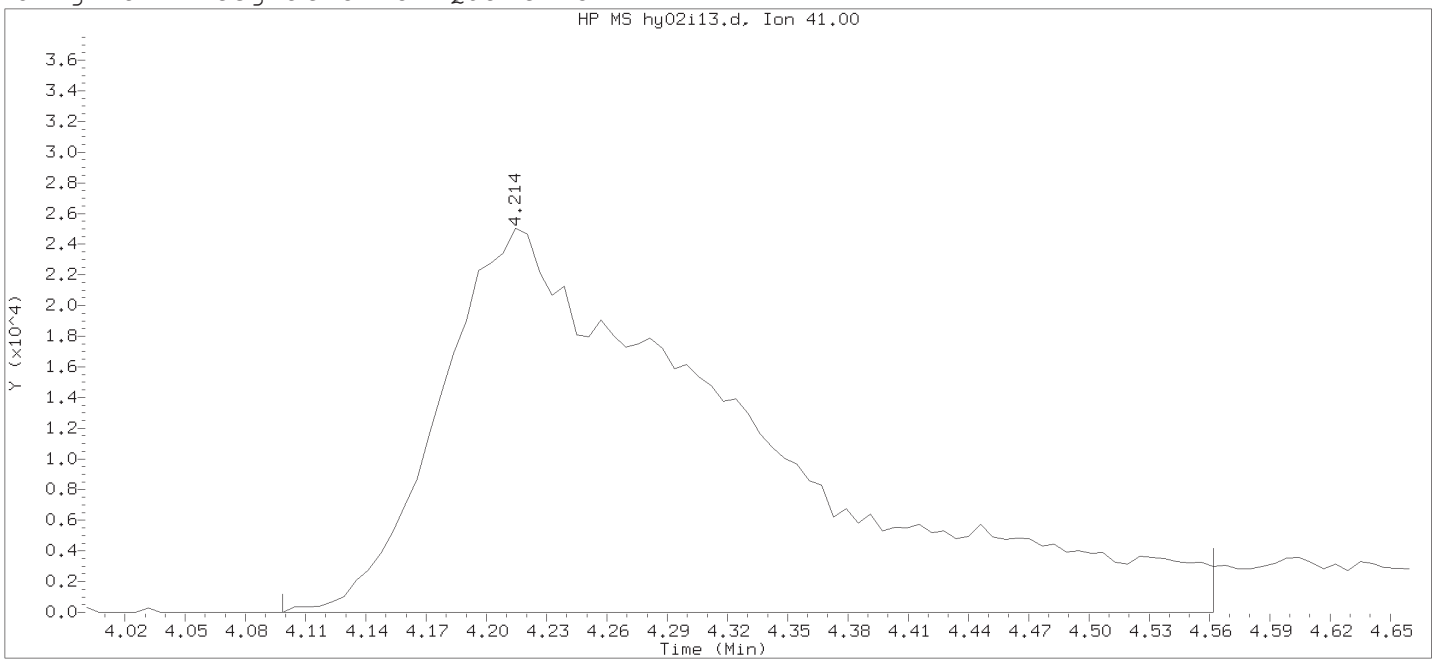
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

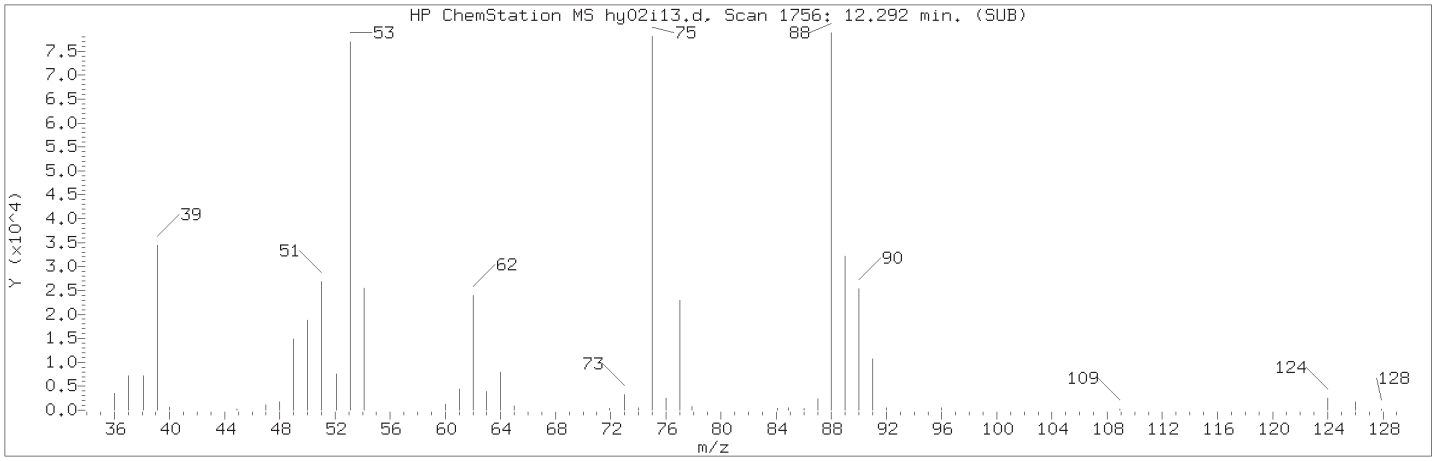
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:16
Date, time and analyst ID of latest file update: 02-May-2018 20:16 Automation

Sample Name: VSTD005 Lab Sample ID: VSTD005

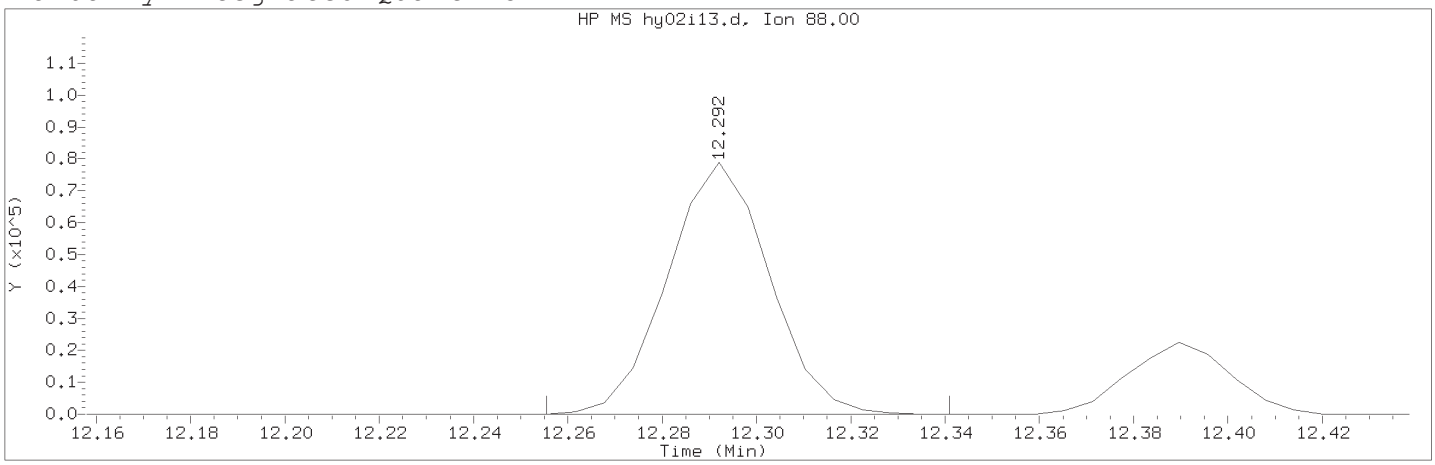
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 431
Retention Time (minutes): 4.214
Quant Ion : 41.00
Area : 265890
On-column Amount (ng) : 127.0548
Integration start scan : 411 Integration stop scan: 487
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD005 Lab Sample ID: VSTD005

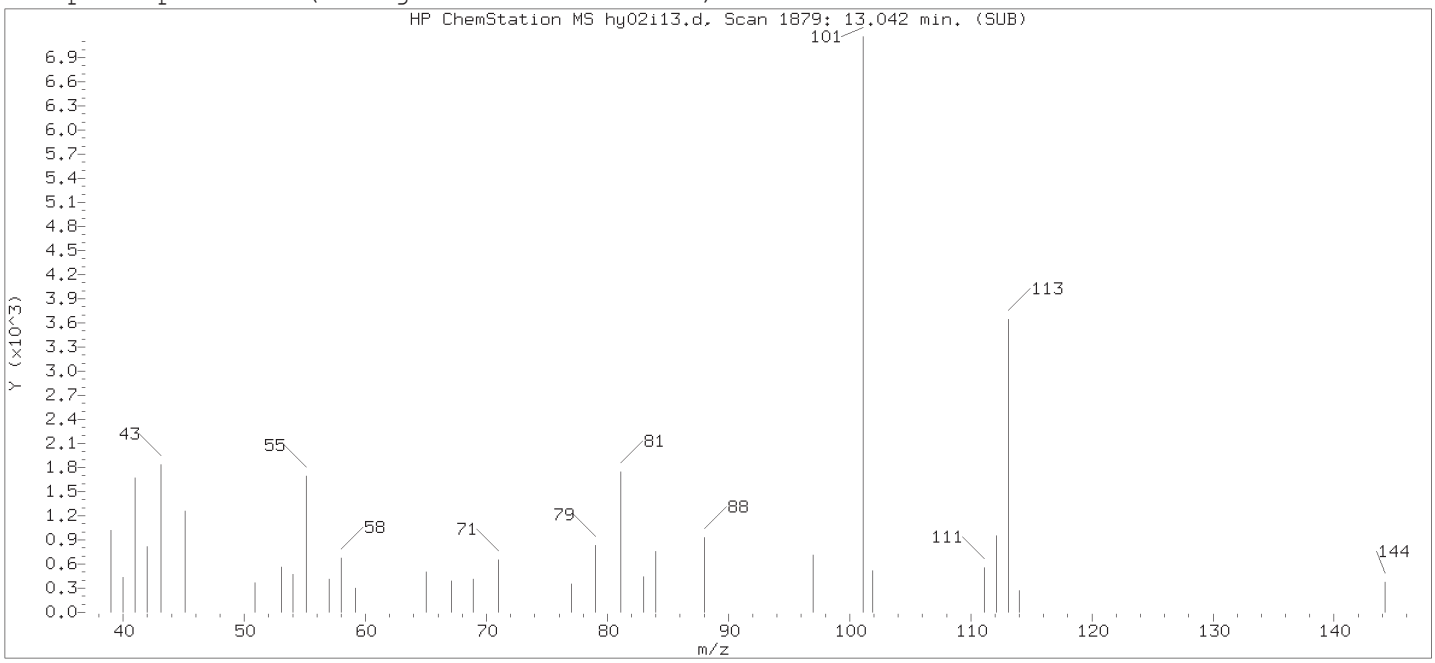
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 118032M
On-Column Amount (ng) : 12.2604
Integration start scan : 1749 Integration stop scan: 1763
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

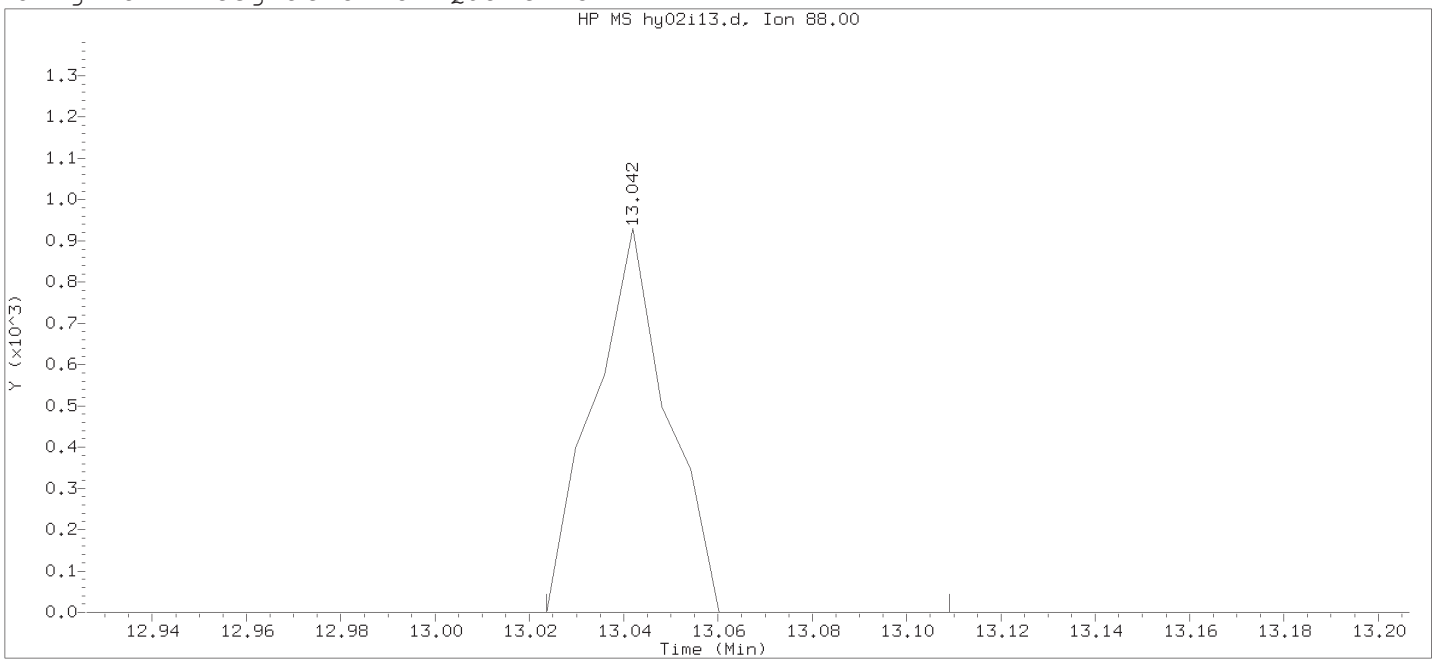
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

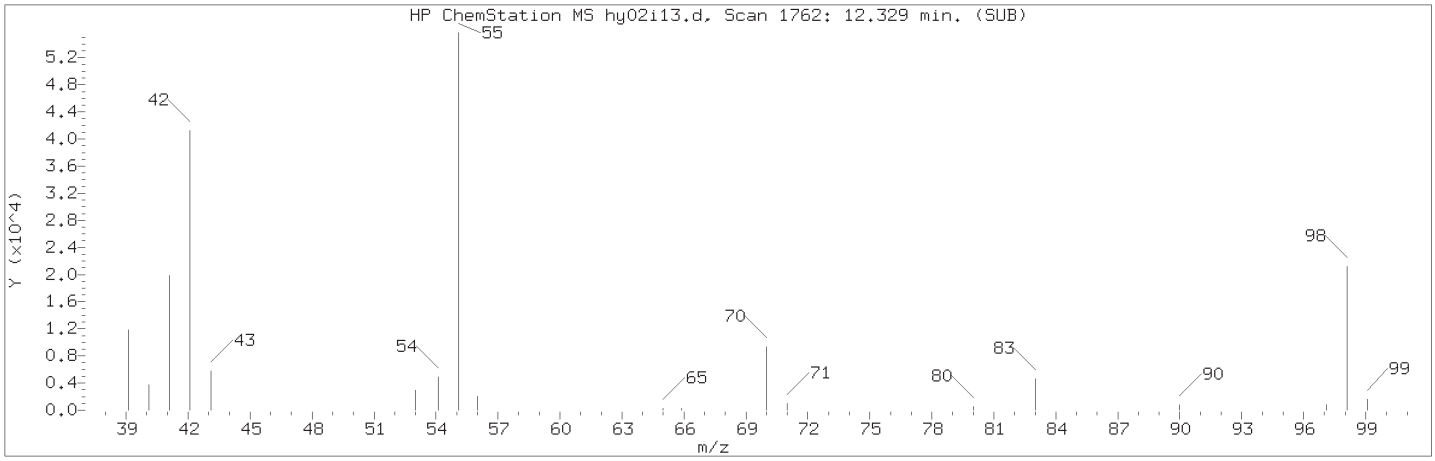
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:16
Date, time and analyst ID of latest file update: 02-May-2018 20:16 Automation

Sample Name: VSTD005 Lab Sample ID: VSTD005

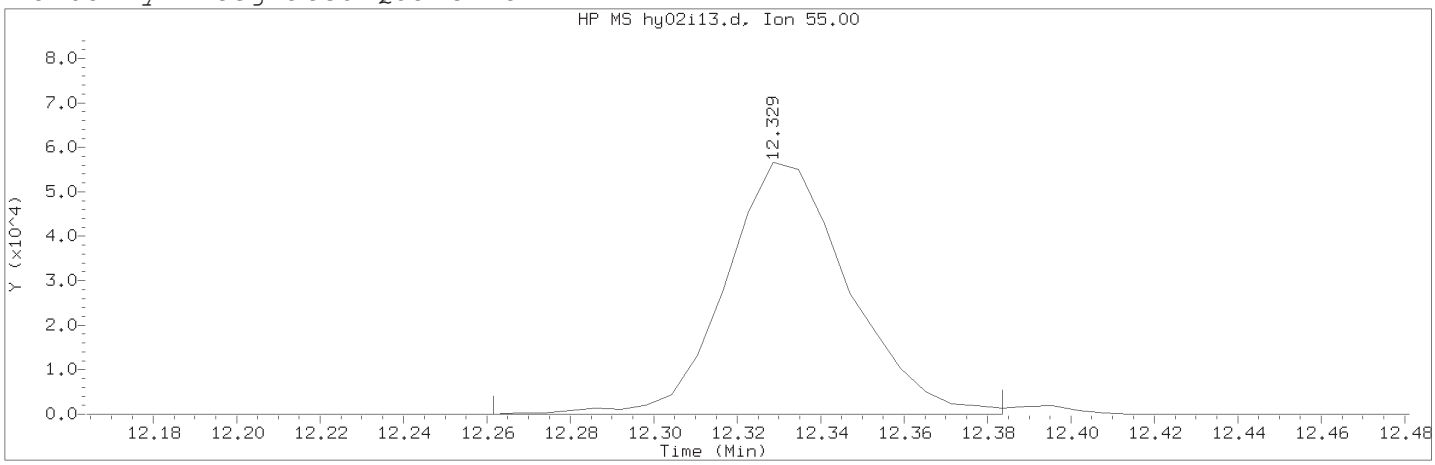
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1879
Retention Time (minutes): 13.042
Quant Ion : 88.00
Area : 1005
On-column Amount (ng) : 0.1485
Integration start scan : 1875 Integration stop scan: 1889
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD005 Lab Sample ID: VSTD005

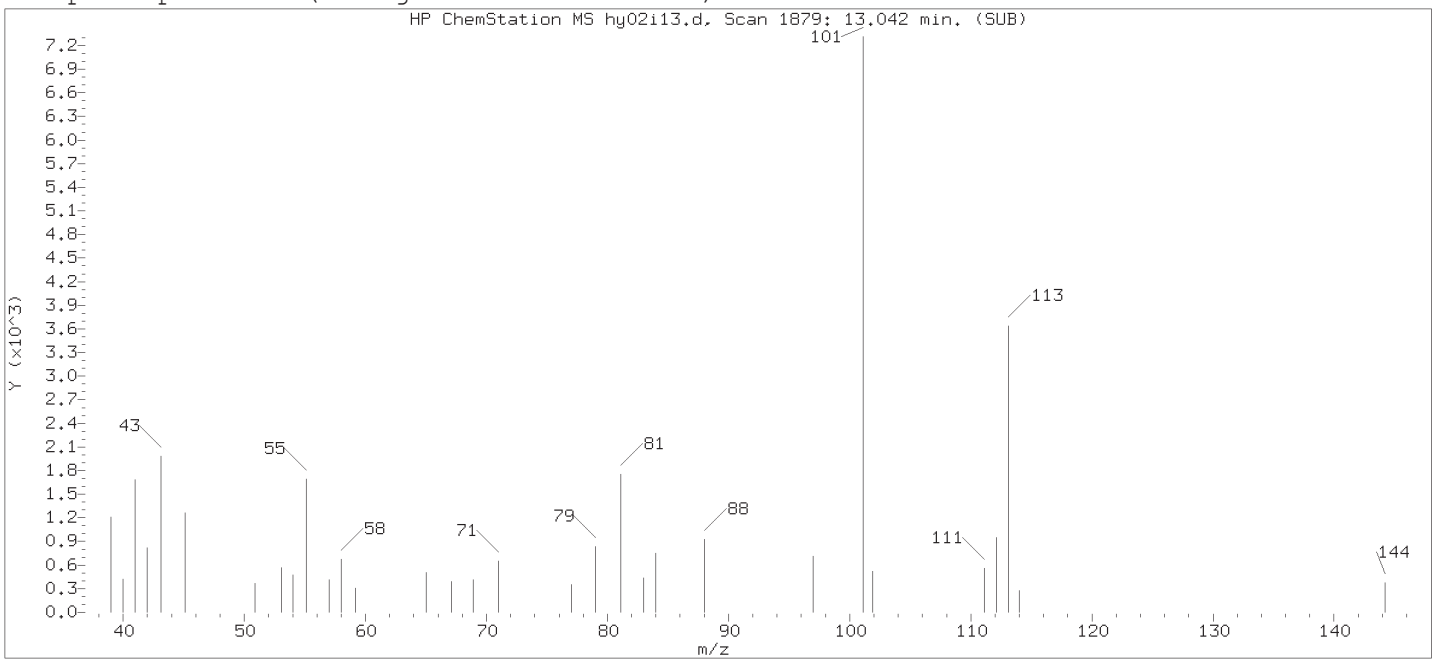
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1762
Retention Time (minutes): 12.329
Quant Ion : 55.00
Area (flag) : 116048M
On-Column Amount (ng) : 237.0271
Integration start scan : 1750 Integration stop scan: 1770
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

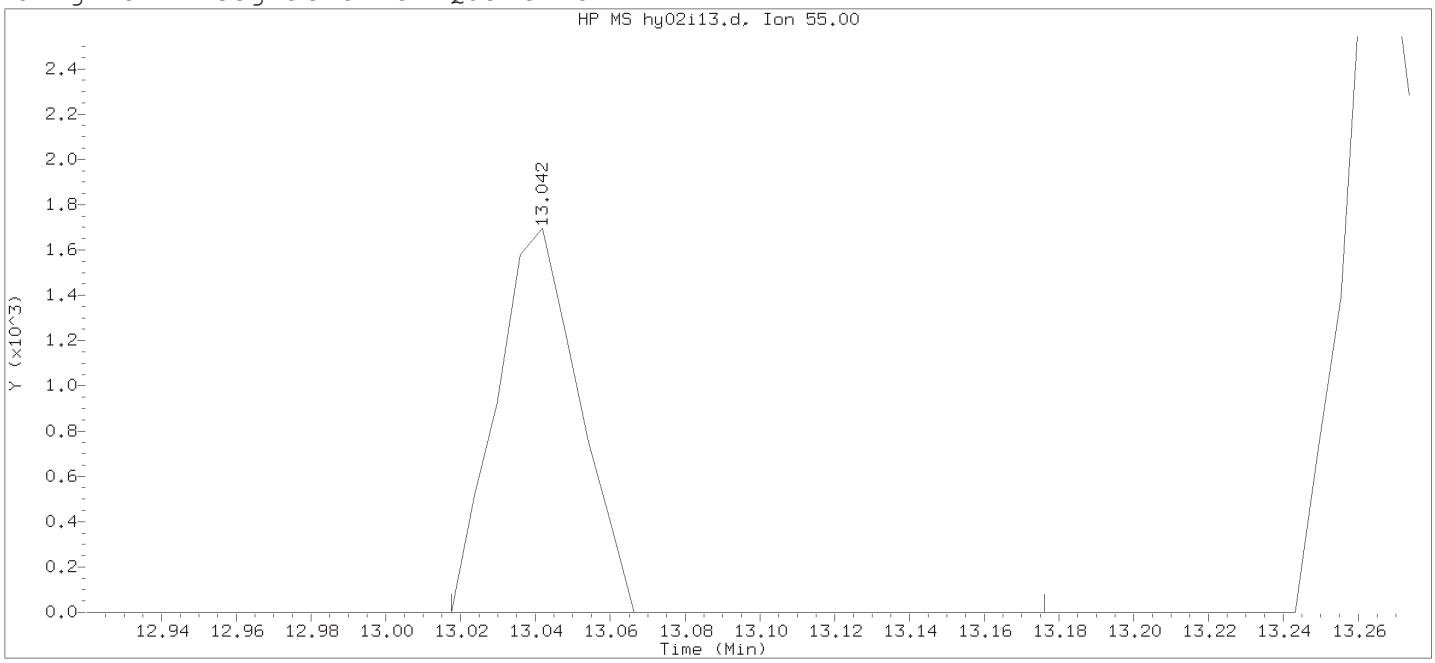
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



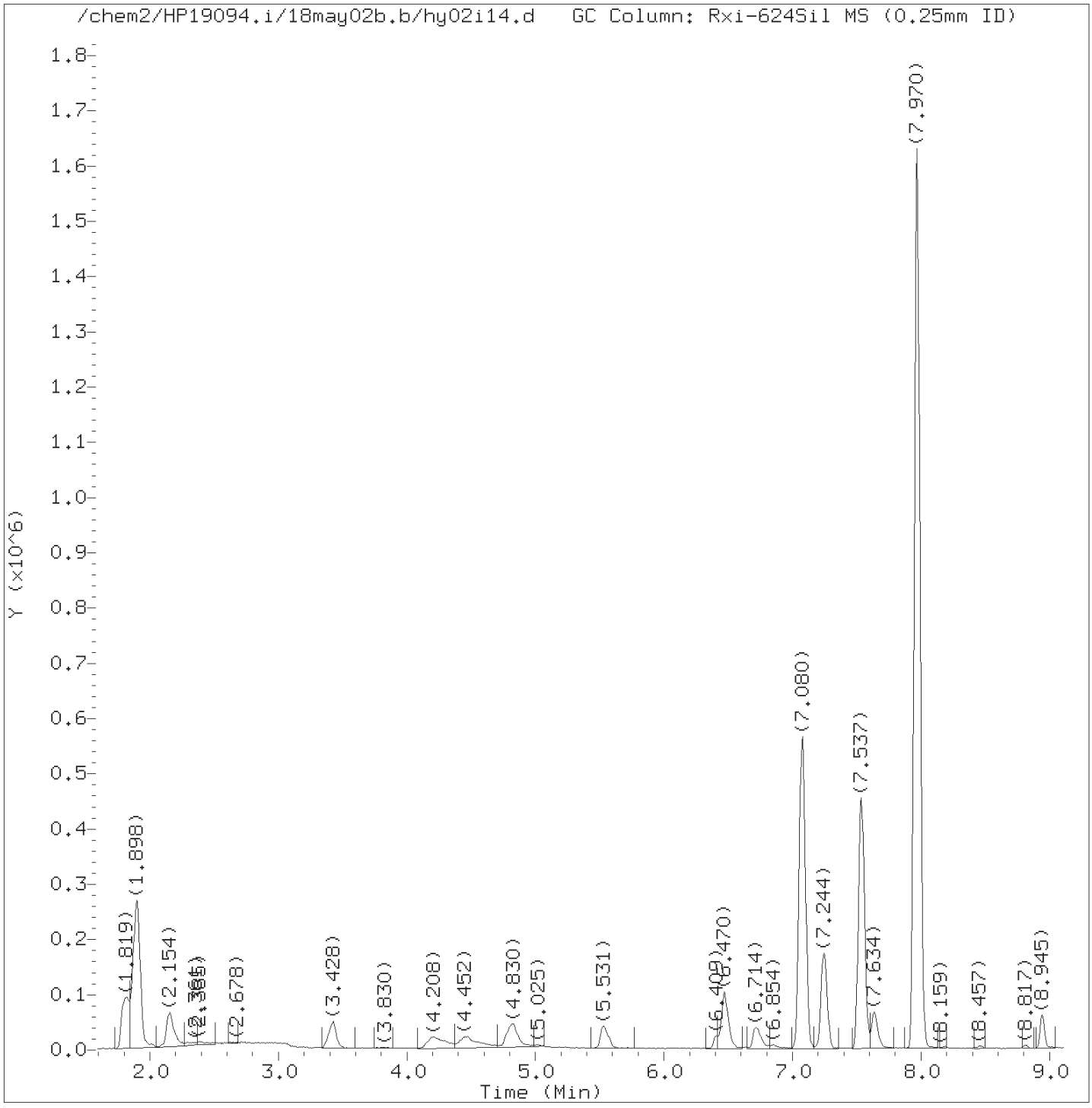
Data File: /chem2/HP19094.i/18may02b.b/hy02i13.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 19:58 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:16
Date, time and analyst ID of latest file update: 02-May-2018 20:16 Automation

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1879
Retention Time (minutes): 13.042
Quant Ion : 55.00
Area : 2596
On-column Amount (ng) : 5.5293
Integration start scan : 1874 Integration stop scan: 1900
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user id: DVV10203



Total Ion Chromatogram (TIC)

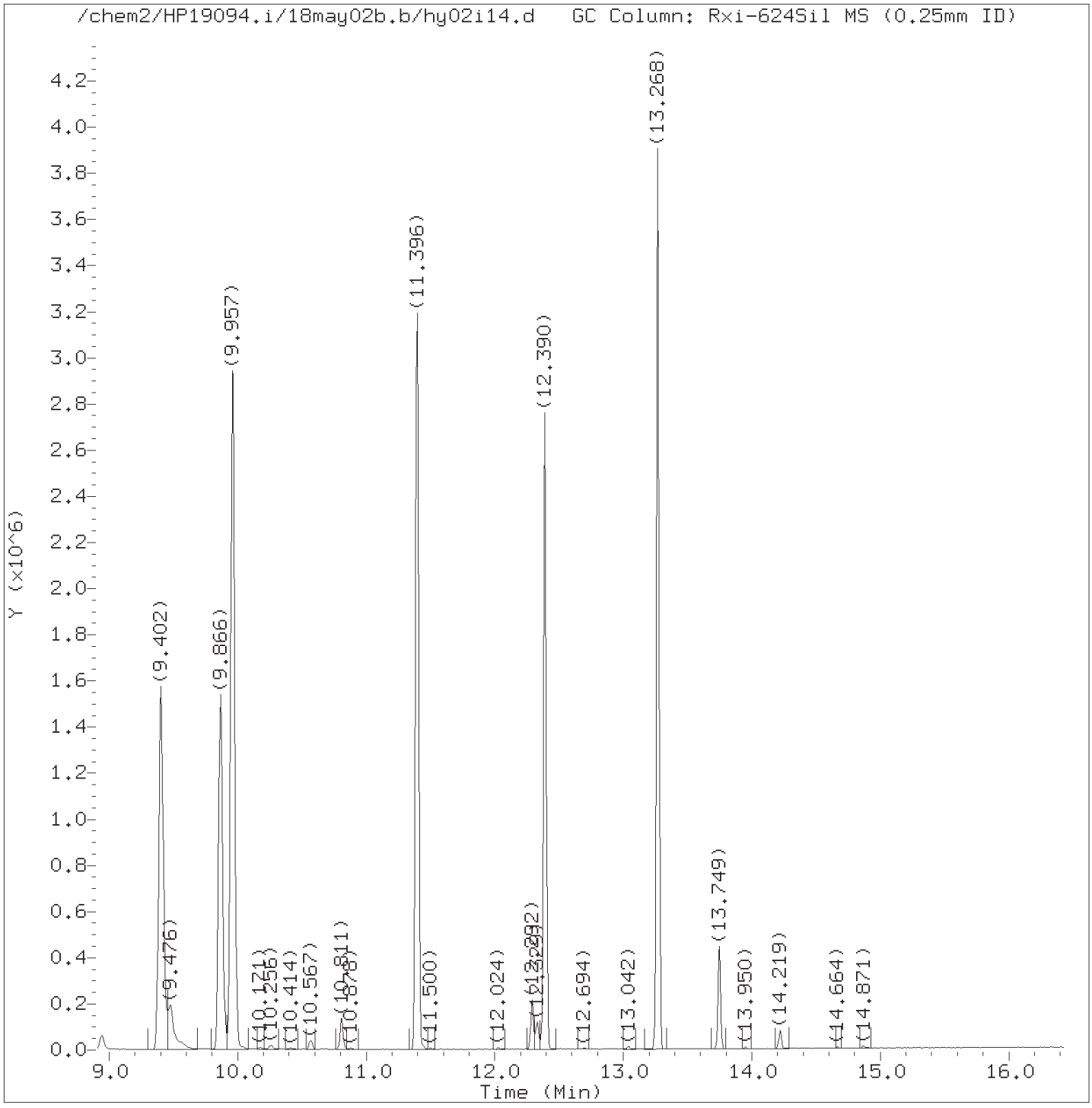
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

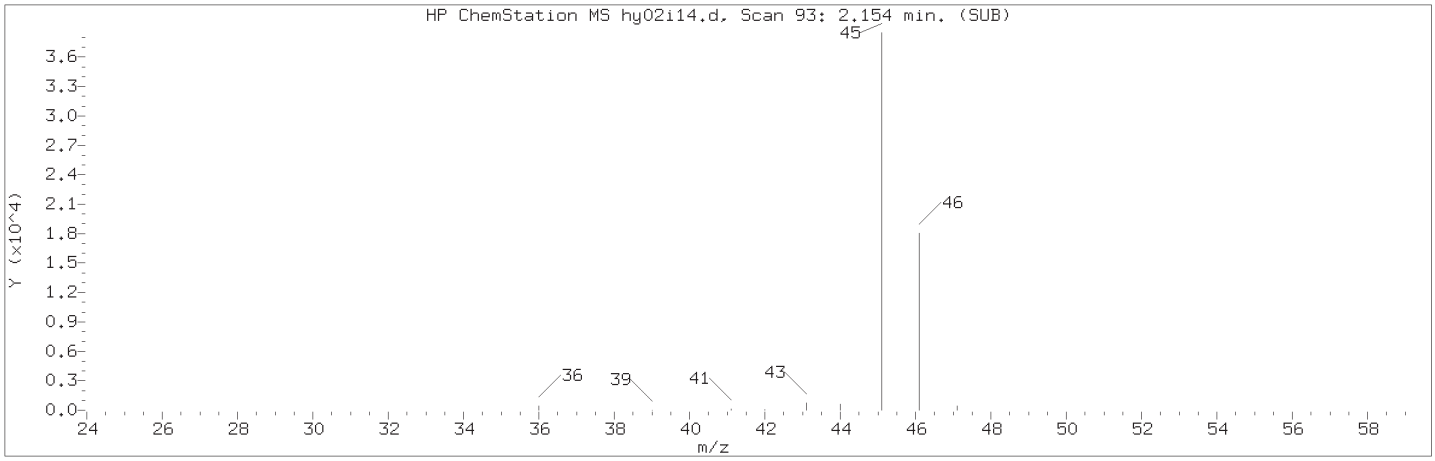
Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.154	45	145626M	1.971
25) Acetonitrile	(1)	4.208	41	174320M	78.221
26)*t-Butyl Alcohol-d10	(1)	4.470	65	92293M	50.000
36) Vinyl Acetate	(2)	5.531	43	143775	2.043
43) Methyl Acrylate	(2)	6.470	55	214639M	9.882
53) 1-Chlorobutane	(2)	7.244	56	224469	2.160
63)*Fluorobenzene	(2)	7.970	96	2301576	10.000
77) Chloroacetonitrile	(2)	9.463	75	91318	105.500
78) 2-Chloroethyl vinyl ether	(2)	9.482	63	42627	2.048
97)*Chlorobenzene-d5	(3)	11.396	117	1681083	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	45666M	3.821
112) Cyclohexanone	(1)	12.329	55	57098M	93.932
133)*1,4-Dichlorobenzene-d4	(4)	13.268	152	885161	10.000
142) Hexachloroethane	(4)	13.749	117	77231	2.073

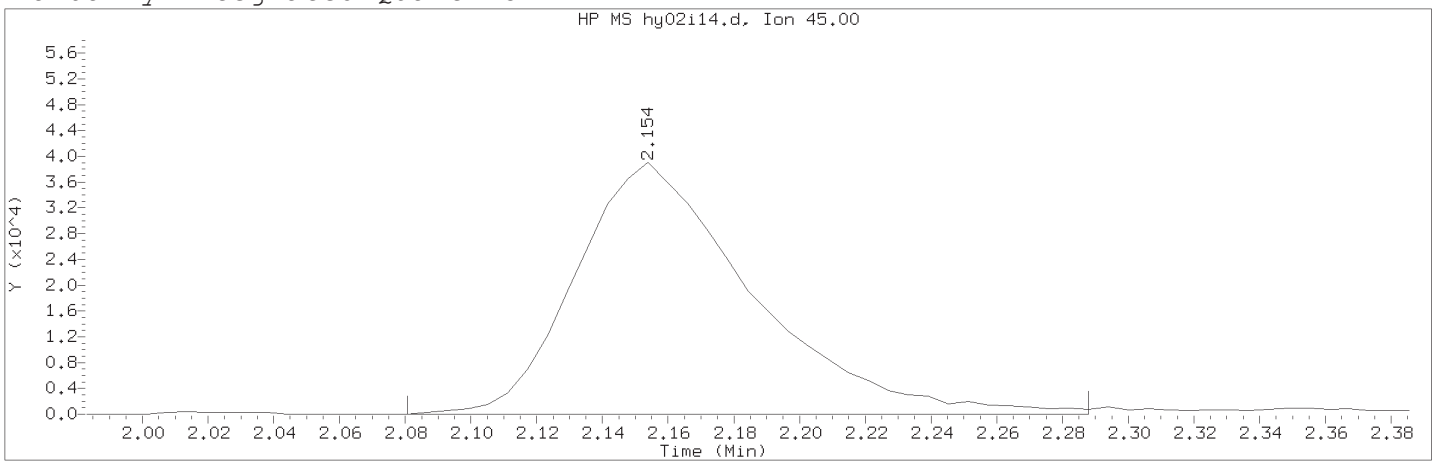
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD002 Lab Sample ID: VSTD002

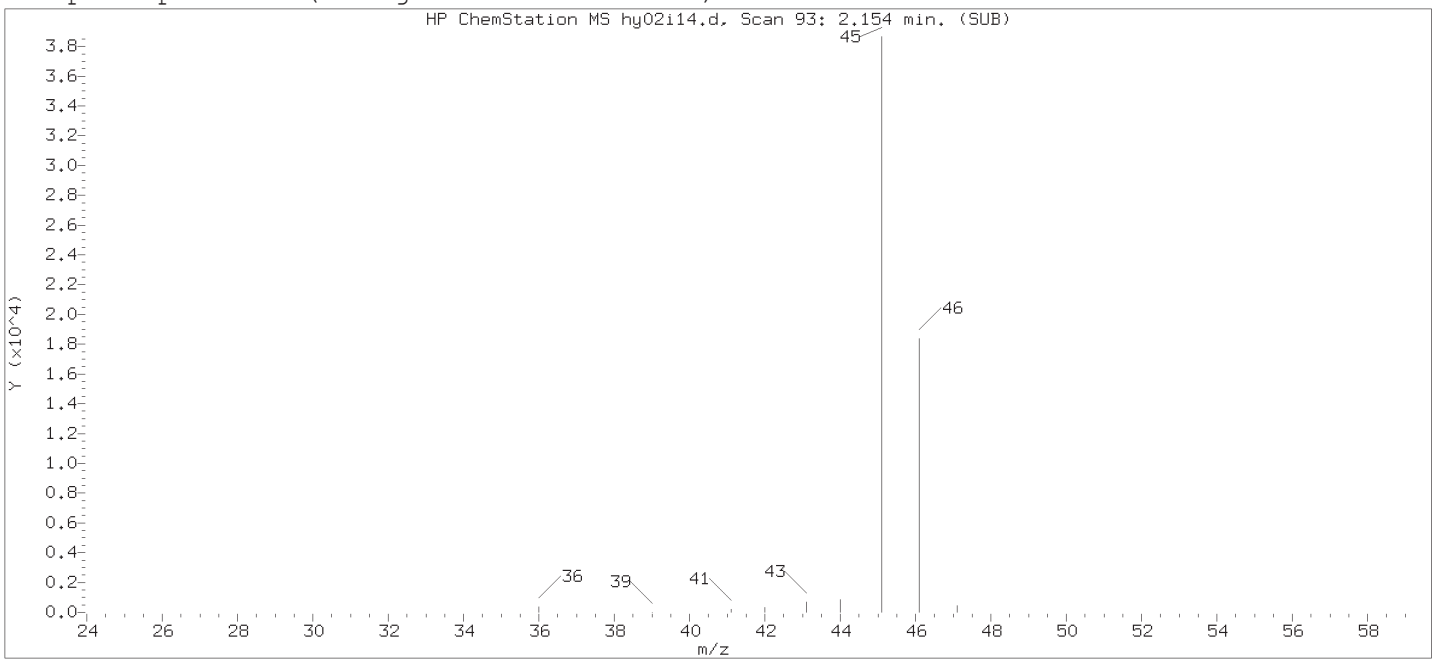
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 93
Retention Time (minutes): 2.154
Quant Ion : 45.00
Area (flag) : 145626M
On-Column Amount (ng) : 1.9710
Integration start scan : 80 Integration stop scan: 114
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

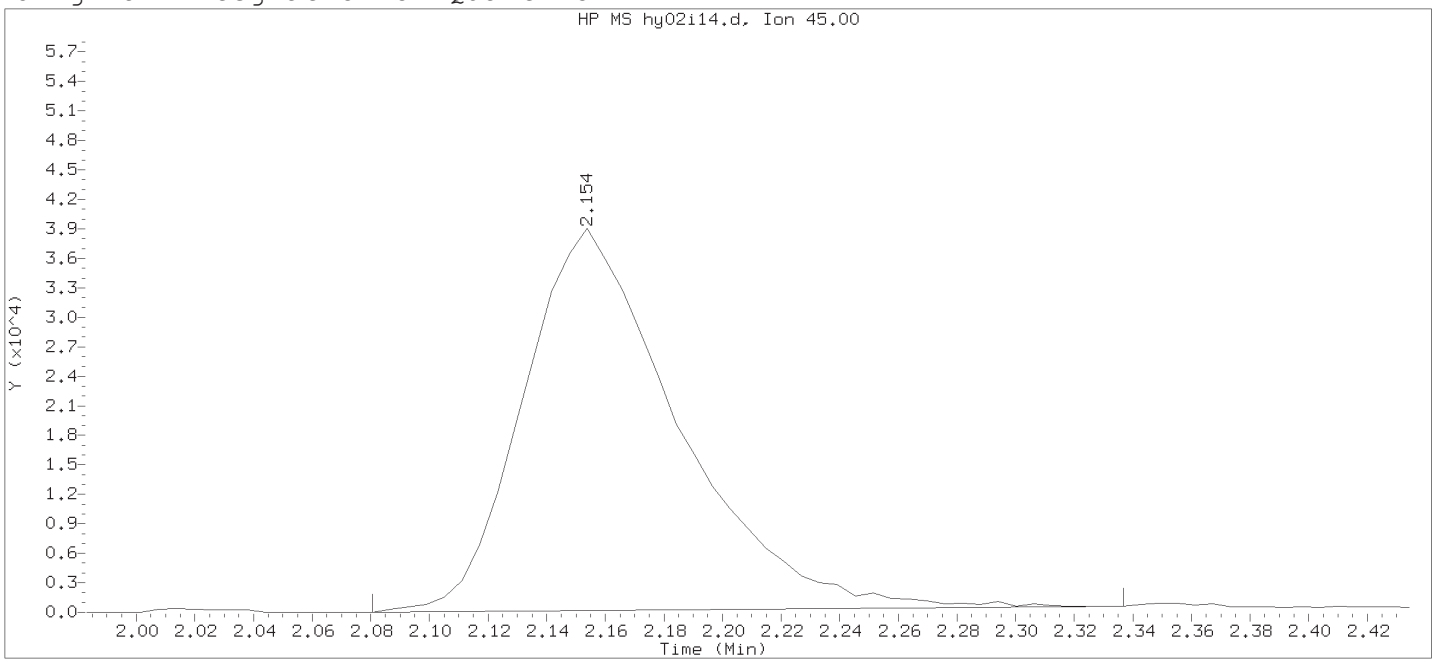
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

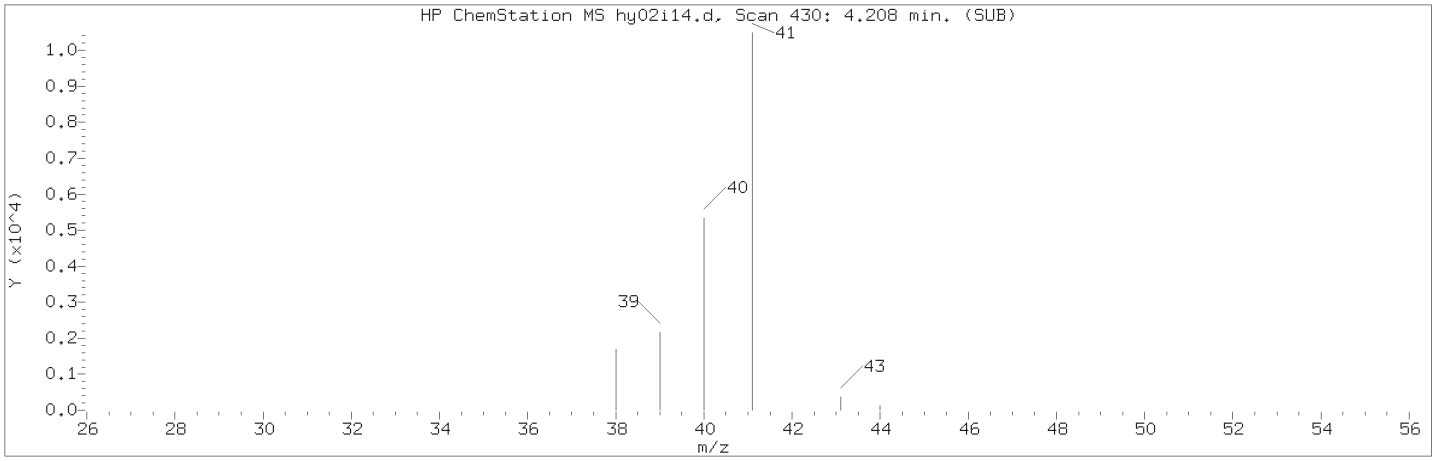
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:37
Date, time and analyst ID of latest file update: 02-May-2018 20:37 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

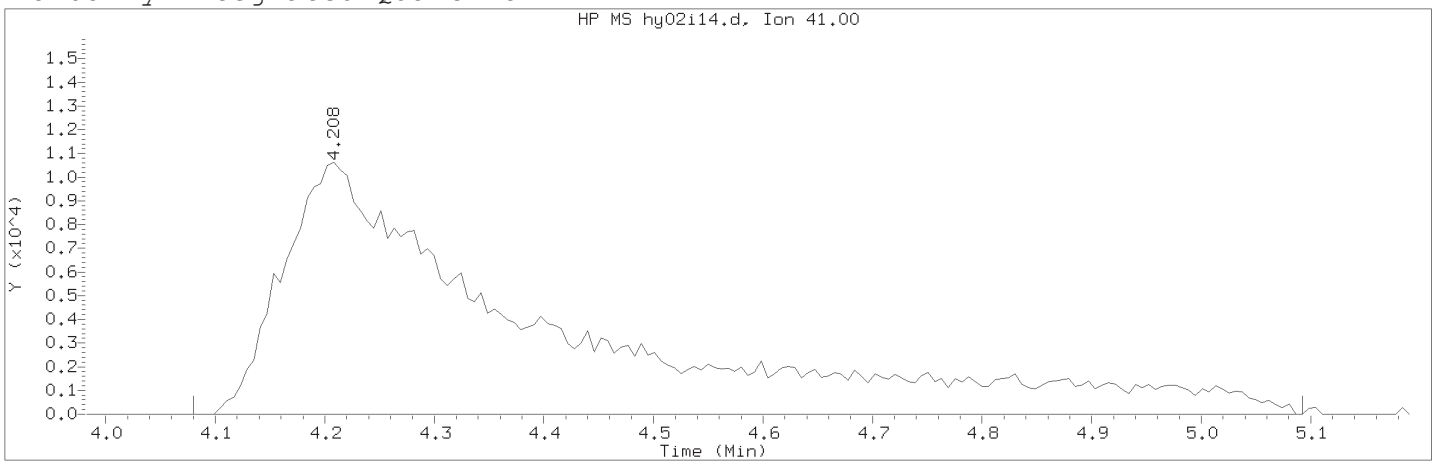
Compound Number	: 4		
Compound Name	: Dimethyl ether		
Scan Number	: 93		
Retention Time (minutes)	: 2.154		
Quant Ion	: 45.00		
Area	: 143014		
On-column Amount (ng)	: 1.8848		
Integration start scan	: 80	Integration stop scan:	122
Y at integration start	: 0	Y at integration end:	597

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD002 Lab Sample ID: VSTD002

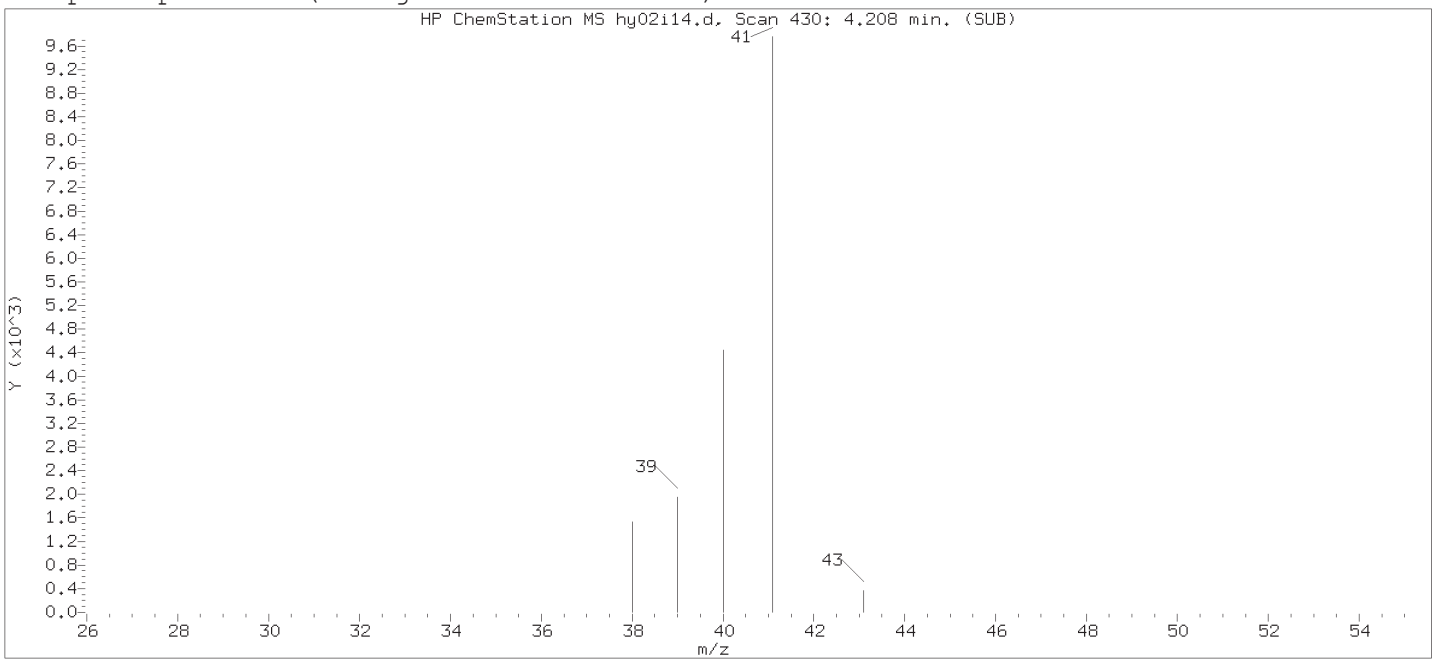
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 430
Retention Time (minutes): 4.208
Quant Ion : 41.00
Area (flag) : 174320M
On-Column Amount (ng) : 78.2209
Integration start scan : 408 Integration stop scan: 574
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

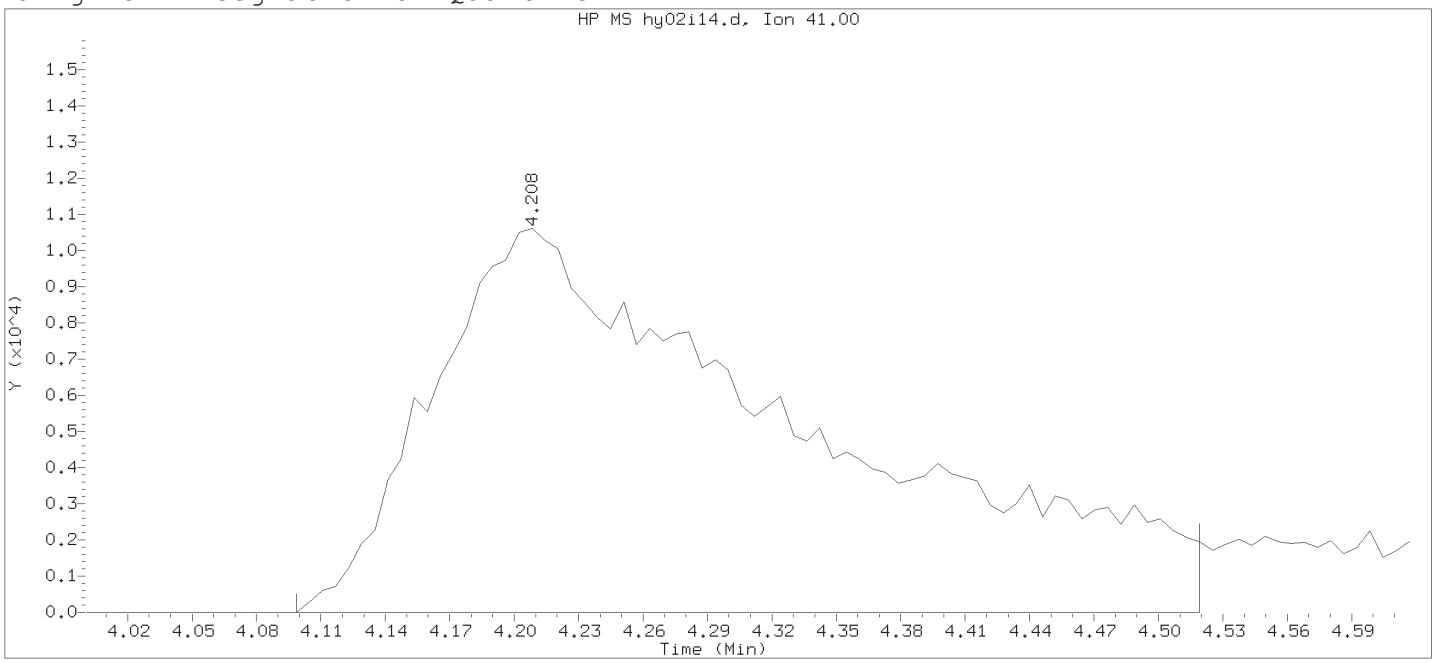
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

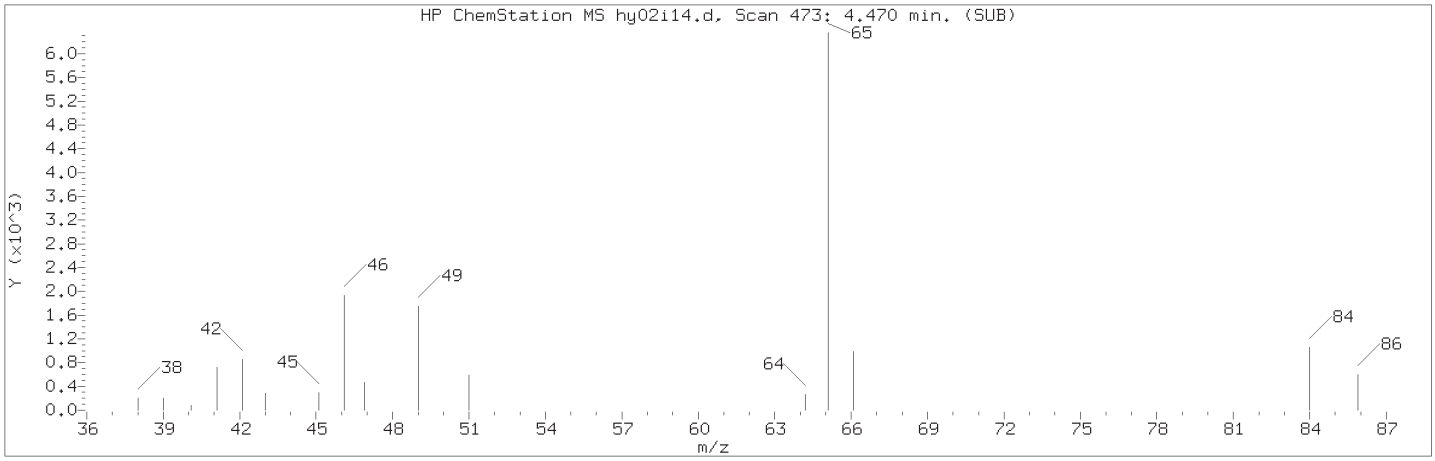
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:37
Date, time and analyst ID of latest file update: 02-May-2018 20:37 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

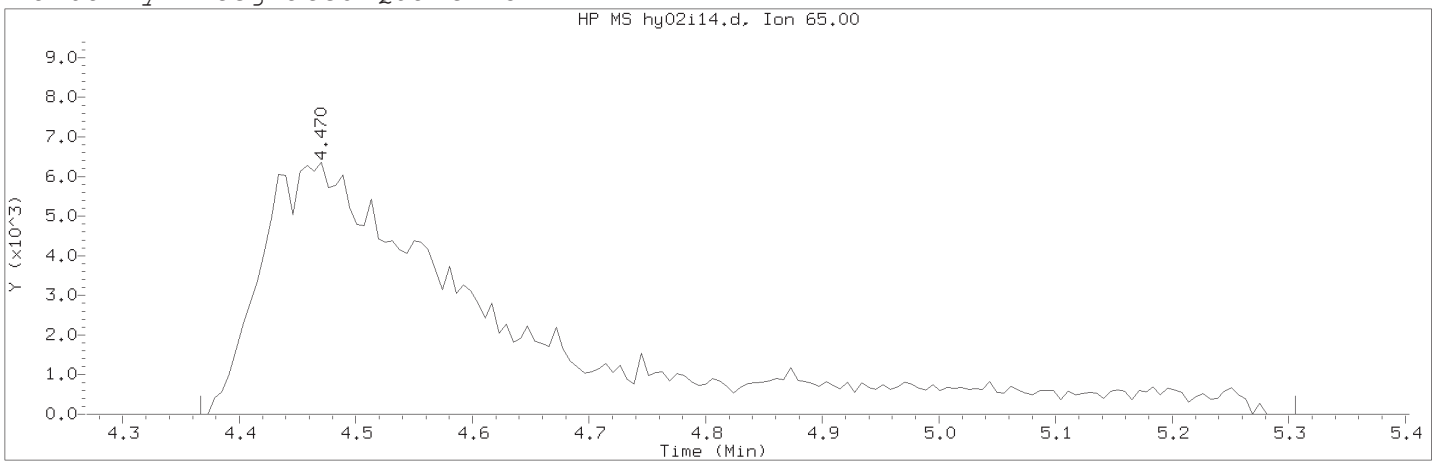
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 430
Retention Time (minutes): 4.208
Quant Ion : 41.00
Area : 127478
On-column Amount (ng) : 55.3756
Integration start scan : 411 Integration stop scan: 480
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user name: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD002 Lab Sample ID: VSTD002

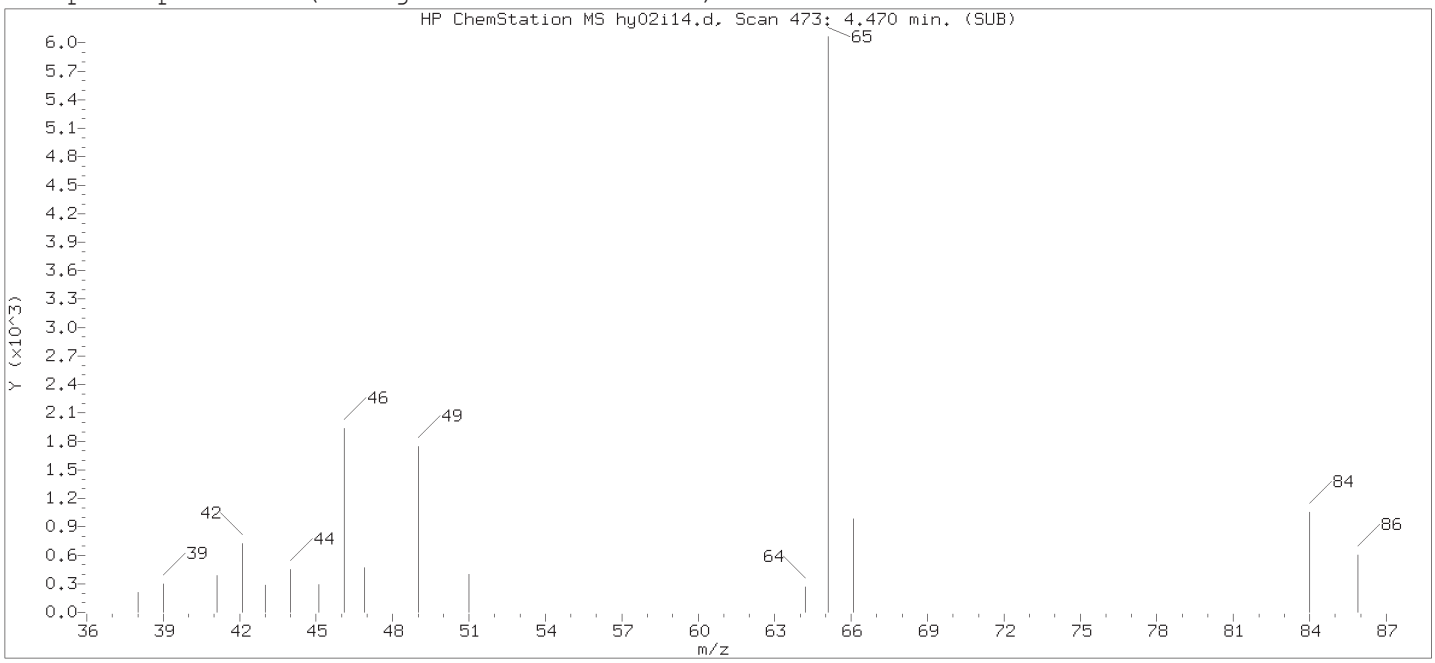
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area (flag) : 92293M
On-Column Amount (ng) : 50.0000
Integration start scan : 455 Integration stop scan: 609
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

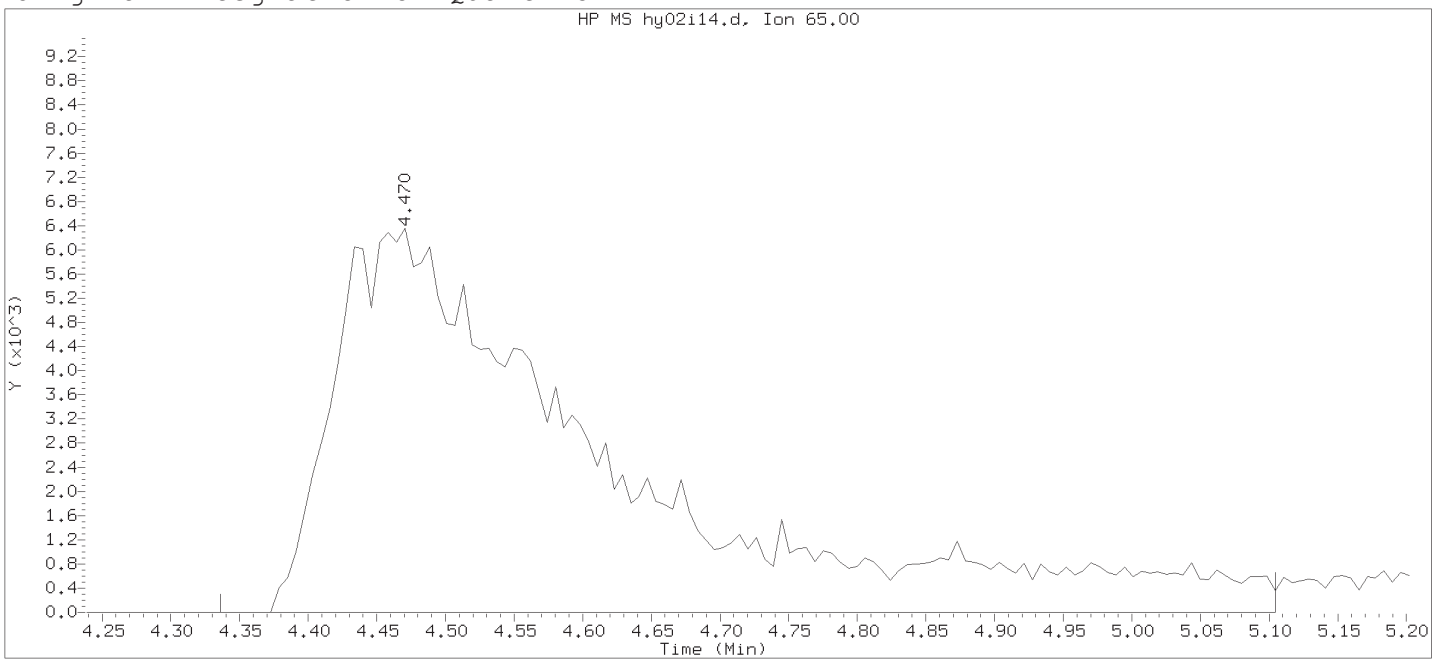
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

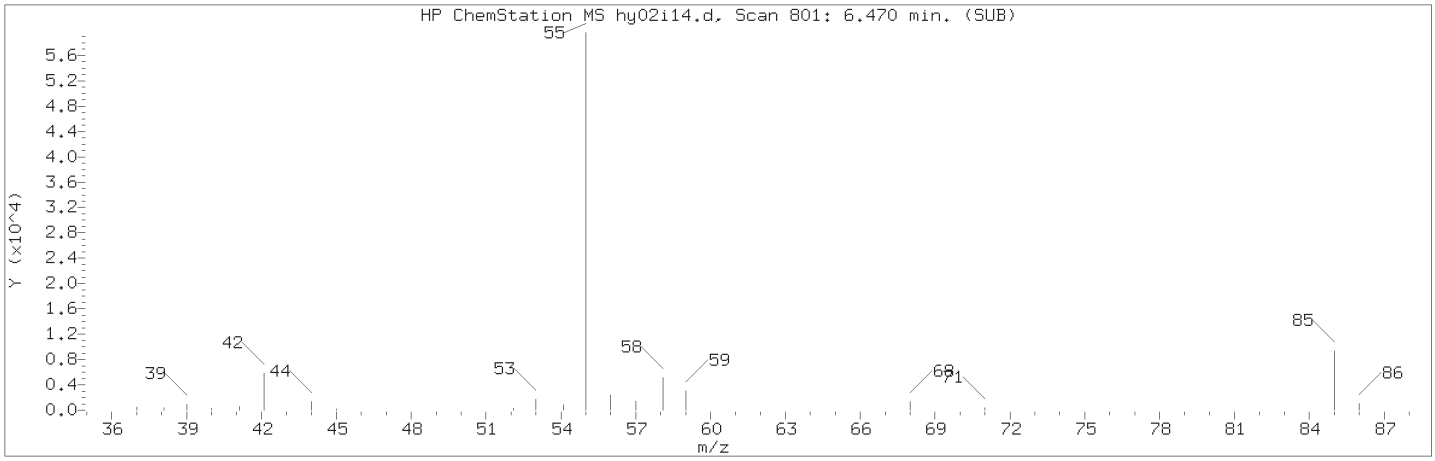
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:37
Date, time and analyst ID of latest file update: 02-May-2018 20:37 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

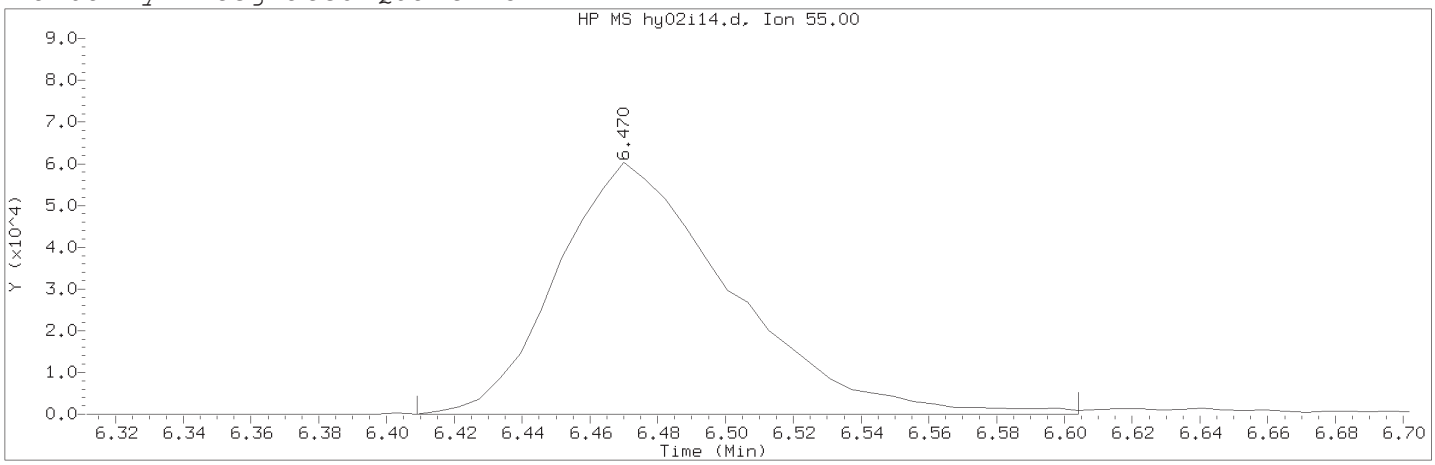
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area : 87182
On-column Amount (ng) : 50.0000
Integration start scan : 450 Integration stop scan: 576
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD002 Lab Sample ID: VSTD002

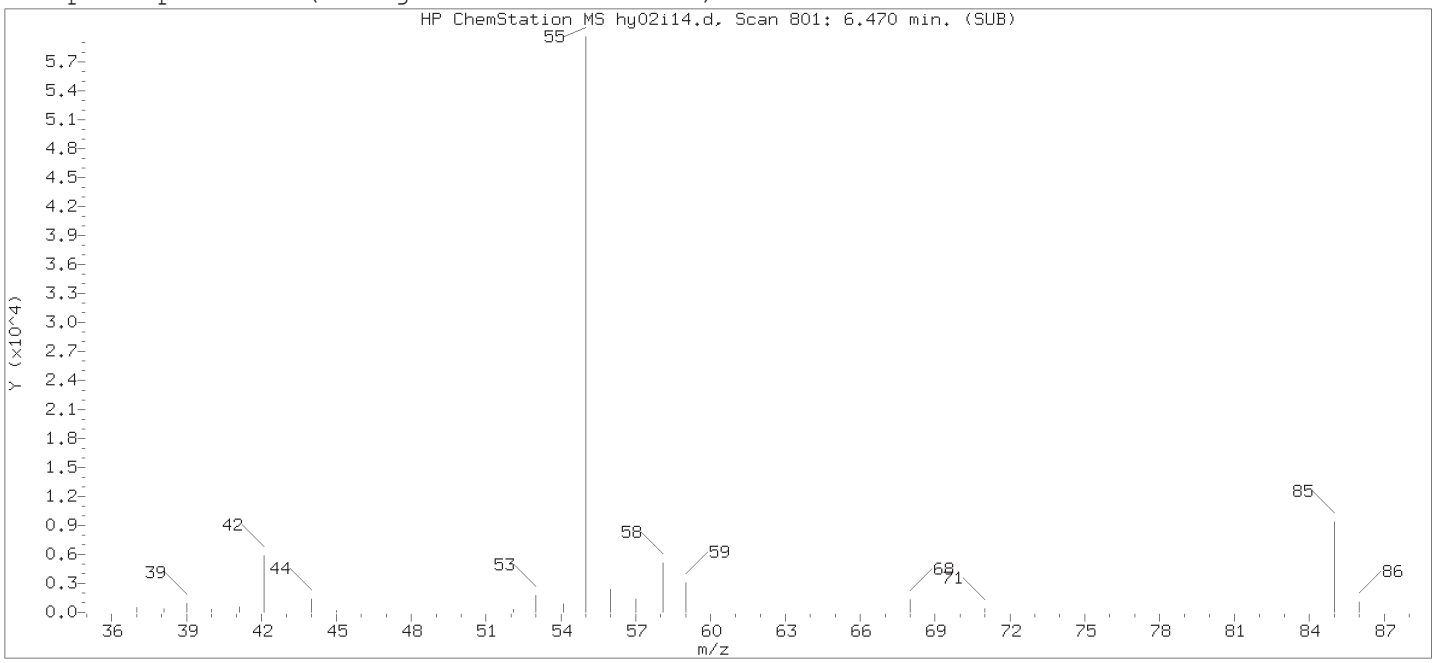
Compound Number : 43
Compound Name : Methyl Acrylate
Scan Number : 801
Retention Time (minutes): 6.470
Quant Ion : 55.00
Area (flag) : 214639M
On-Column Amount (ng) : 9.8825
Integration start scan : 790 Integration stop scan: 822
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

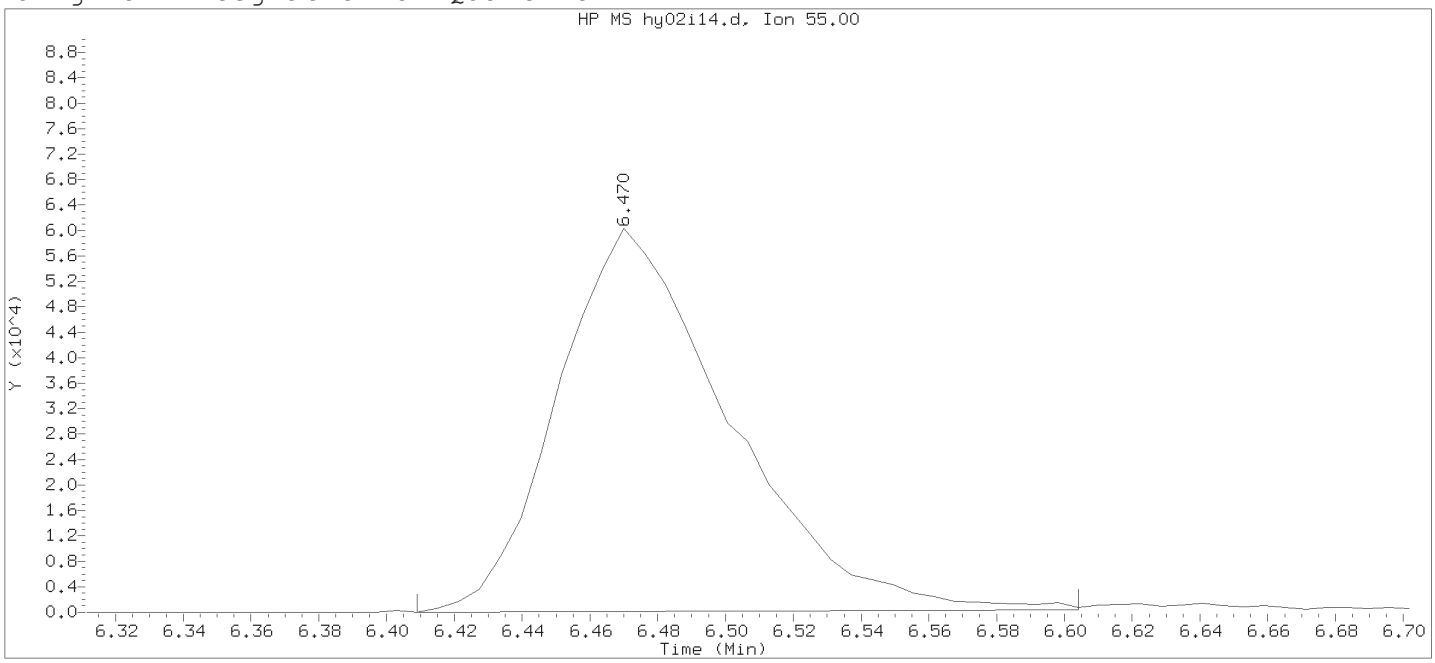
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

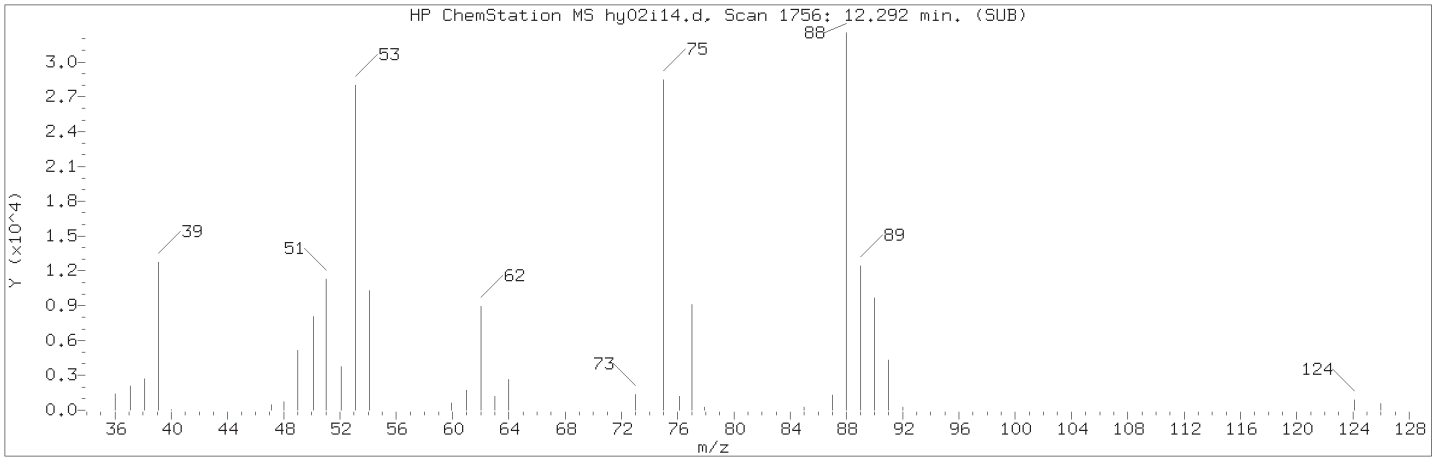
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:37
Date, time and analyst ID of latest file update: 02-May-2018 20:37 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

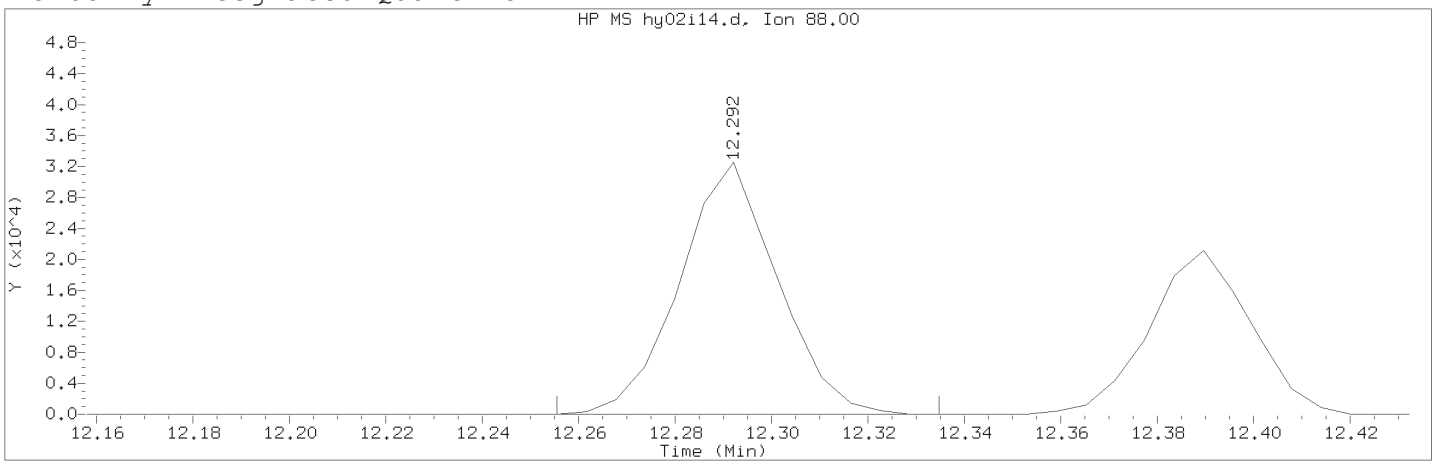
Compound Number : 43
Compound Name : Methyl Acrylate
Scan Number : 801
Retention Time (minutes): 6.470
Quant Ion : 55.00
Area : 212156
On-column Amount (ng) : 9.7793
Integration start scan : 790 Integration stop scan: 822
Y at integration start : 0 Y at integration end: 400

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD002 Lab Sample ID: VSTD002

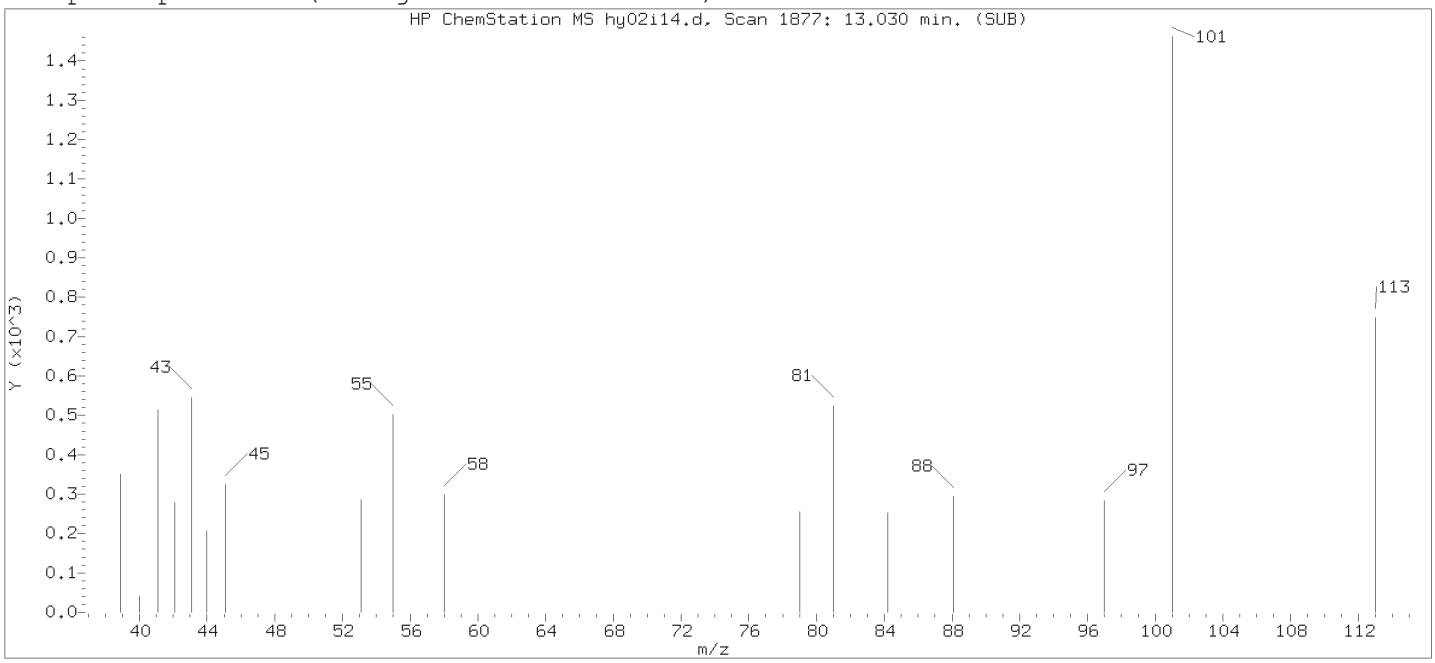
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 45666M
On-Column Amount (ng) : 3.8206
Integration start scan : 1749 Integration stop scan: 1762
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

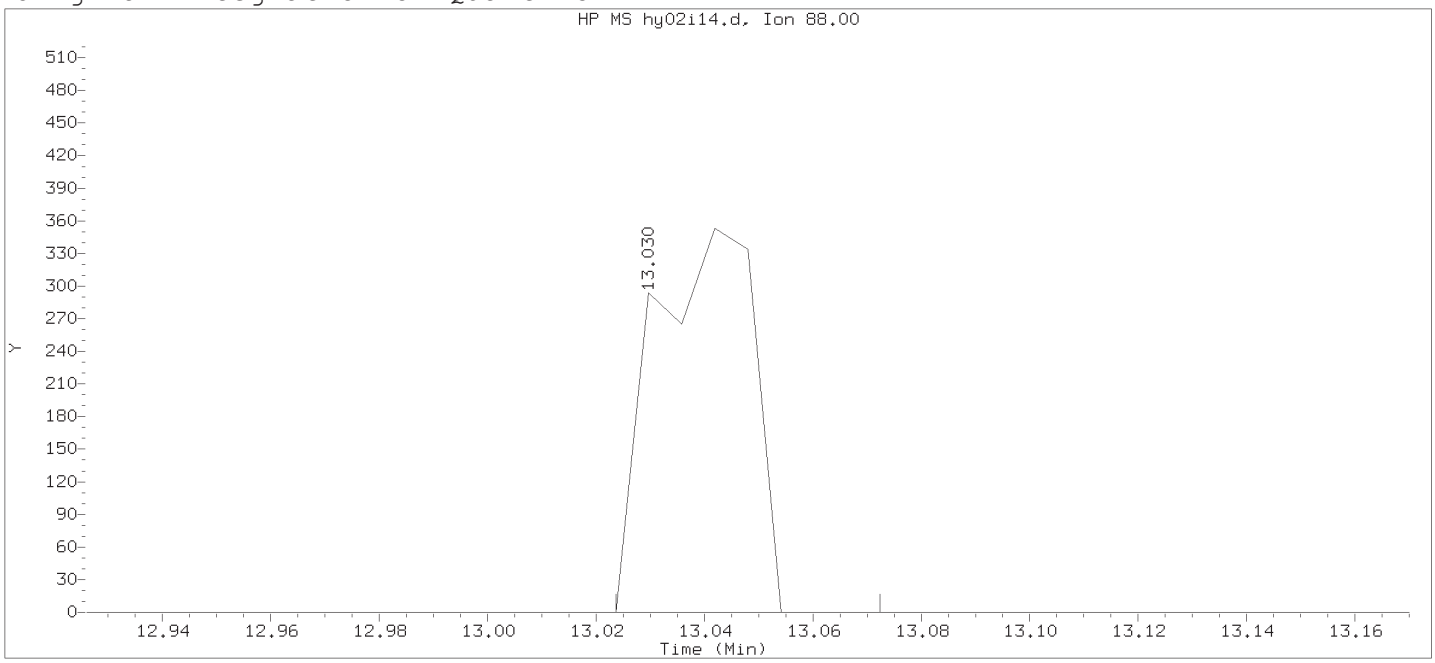
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

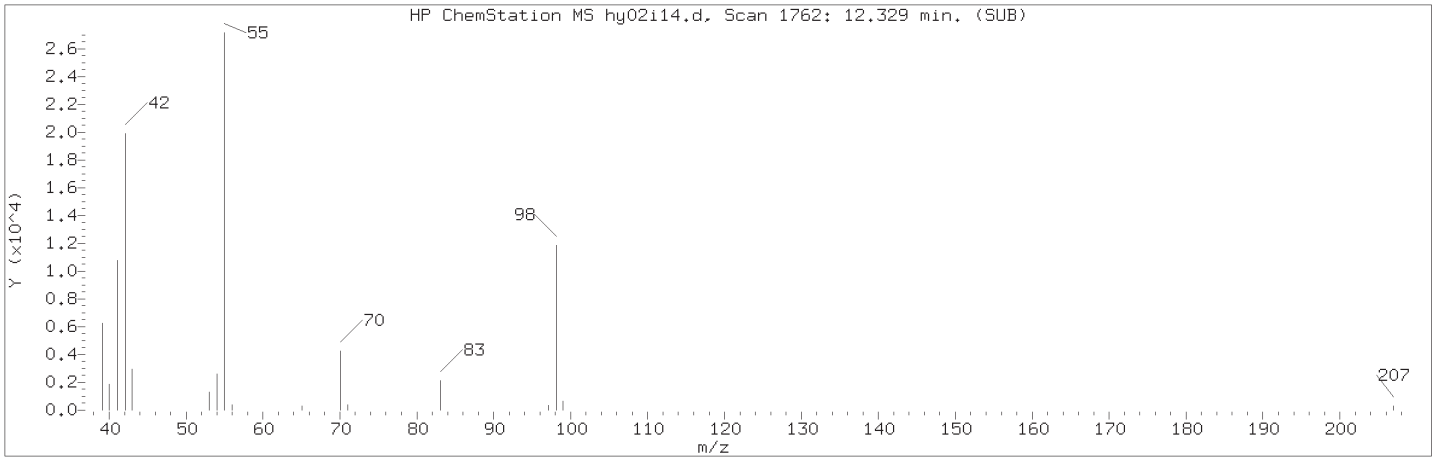
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:37
Date, time and analyst ID of latest file update: 02-May-2018 20:37 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

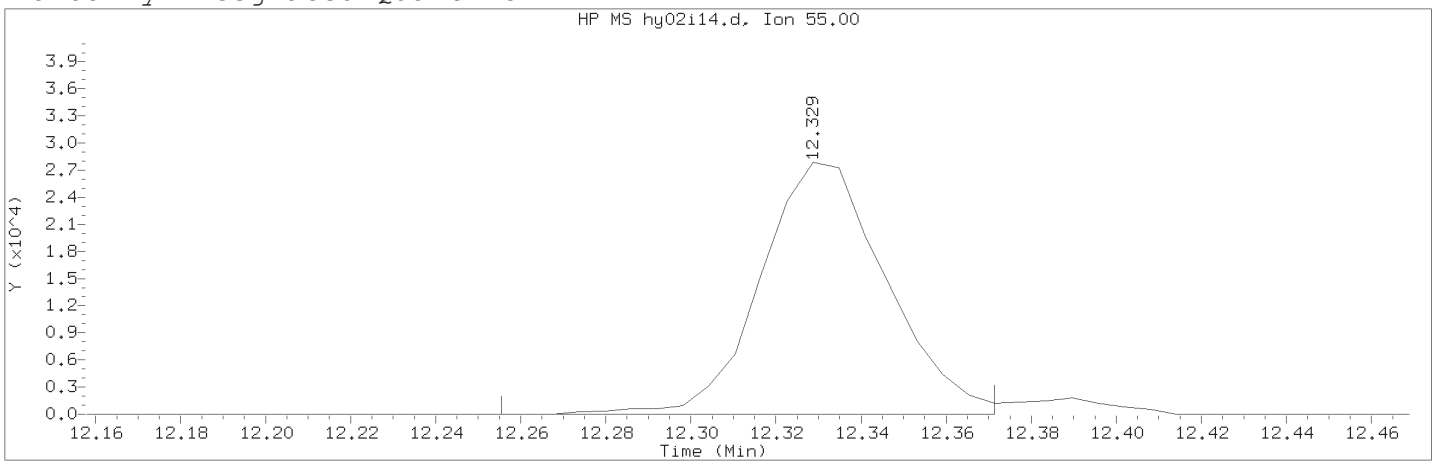
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1877
Retention Time (minutes): 13.030
Quant Ion : 88.00
Area : 455
On-column Amount (ng) : 0.0756
Integration start scan : 1875 Integration stop scan: 1883
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:20
Date, time and analyst ID of latest file update: 02-May-2018 22:20 dvv10203

Sample Name: VSTD002 Lab Sample ID: VSTD002

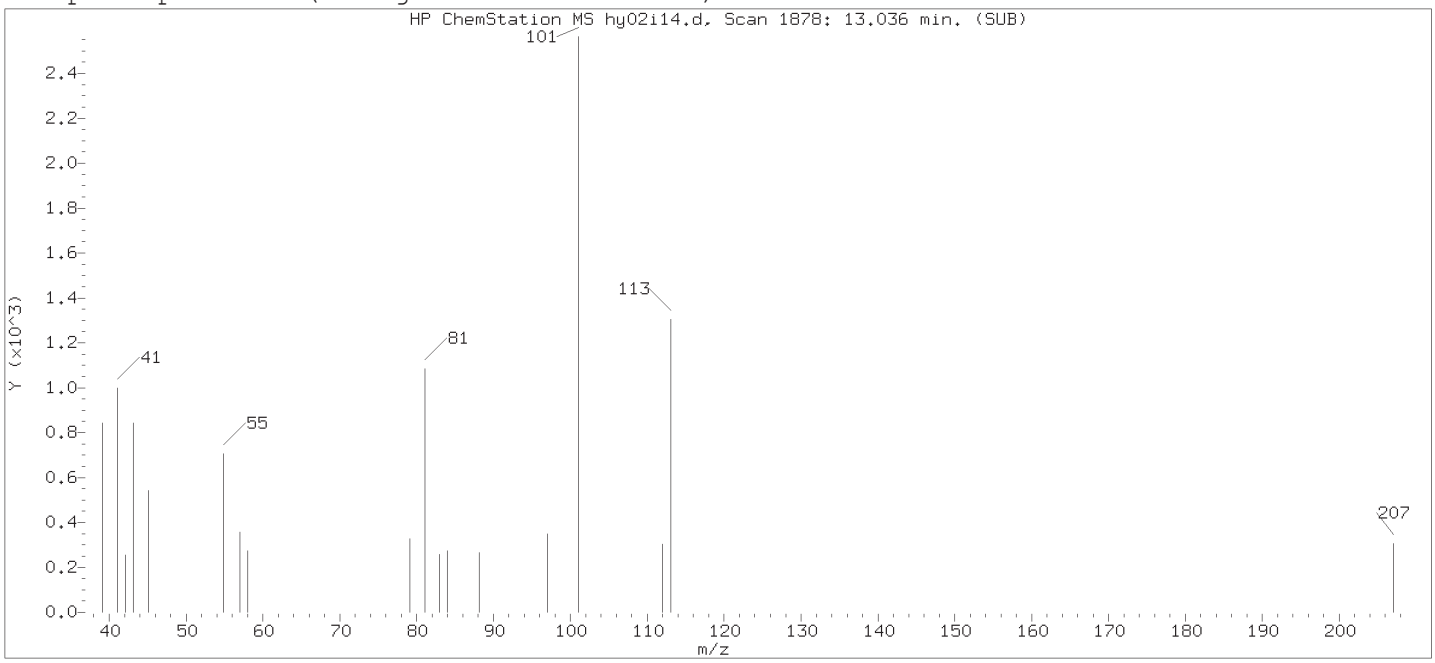
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1762
Retention Time (minutes): 12.329
Quant Ion : 55.00
Area (flag) : 57098M
On-Column Amount (ng) : 93.9316
Integration start scan : 1749 Integration stop scan: 1768
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

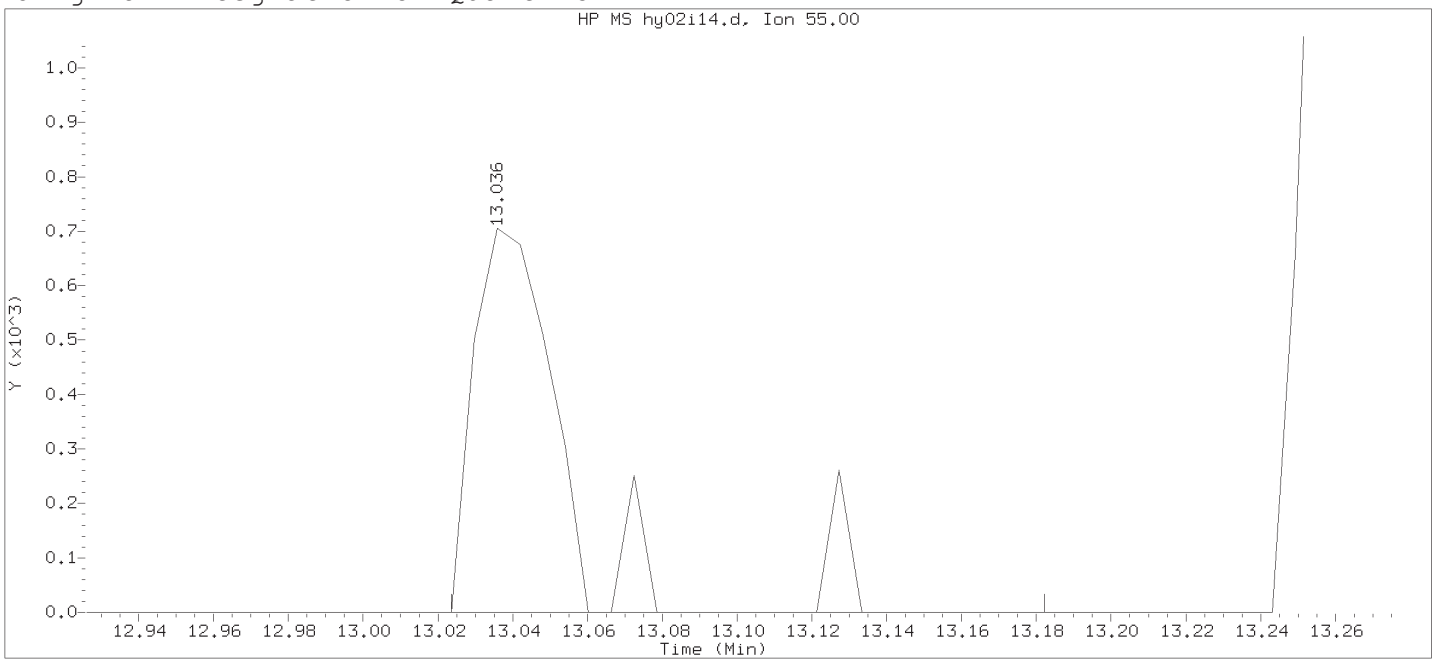
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:21.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



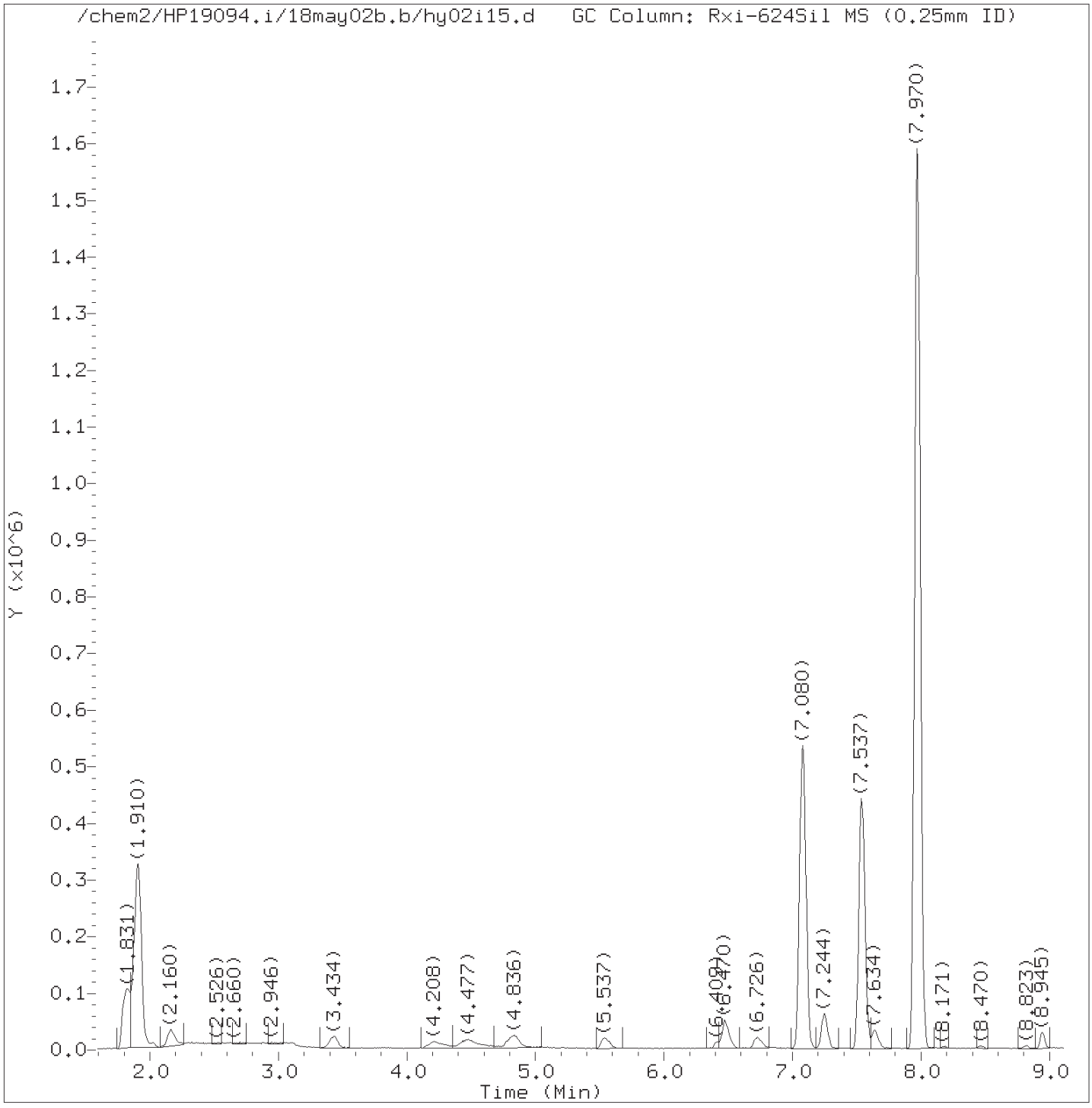
Data File: /chem2/HP19094.i/18may02b.b/hy02i14.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:19 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:37
Date, time and analyst ID of latest file update: 02-May-2018 20:37 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1878
Retention Time (minutes): 13.036
Quant Ion : 55.00
Area : 1174
On-column Amount (ng) : 3.0474
Integration start scan : 1875 Integration stop scan: 1901
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:21.
Target 3.5 esignature user name: DVV10203



Total Ion Chromatogram (TIC)

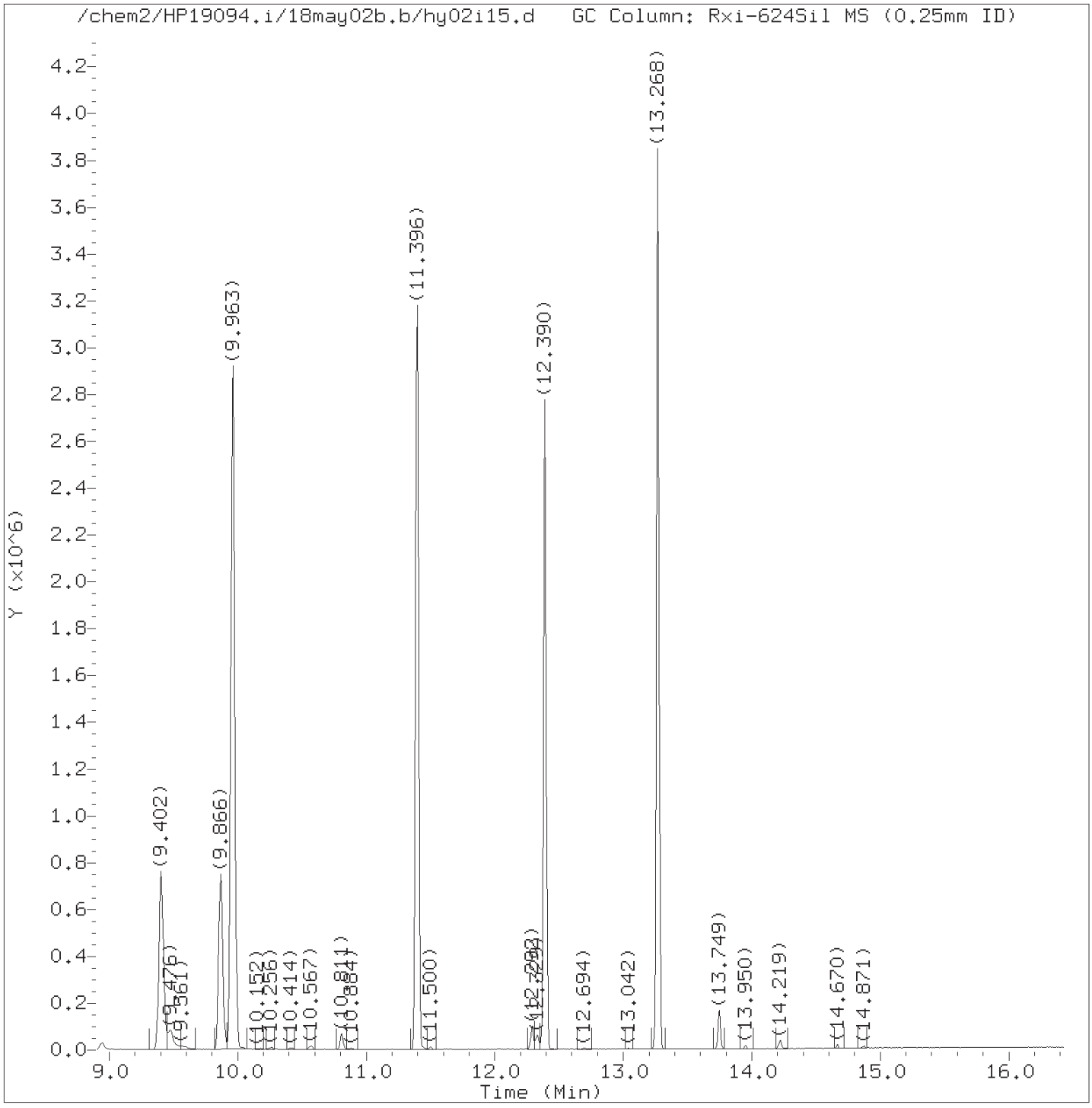
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

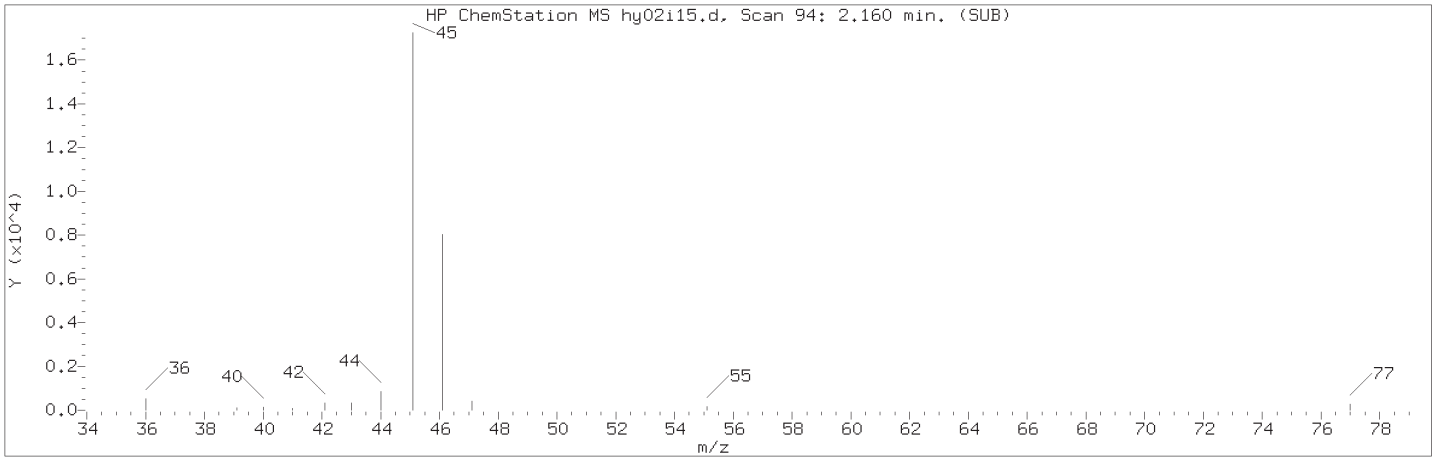
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.160	45	66497M	0.914
25) Acetonitrile	(1)	4.239	41	91043M	41.604
26)*t-Butyl Alcohol-d10	(1)	4.483	65	90627M	50.000
36) Vinyl Acetate	(2)	5.525	43	66540	0.960
43) Methyl Acrylate	(2)	6.476	55	109424	5.115
53) 1-Chlorobutane	(2)	7.244	56	80289	0.784
63)*Fluorobenzene	(2)	7.970	96	2267030	10.000
77) Chloroacetonitrile	(2)	9.463	75	44327	51.992
78) 2-Chloroethyl vinyl ether	(2)	9.482	63	19766	0.964
97)*Chlorobenzene-d5	(3)	11.396	117	1663736	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	20531M	1.749
112) Cyclohexanone	(1)	12.329	55	29836M	49.985
133)*1,4-Dichlorobenzene-d4	(4)	13.268	152	872428	10.000
142) Hexachloroethane	(4)	13.749	117	28244	0.769

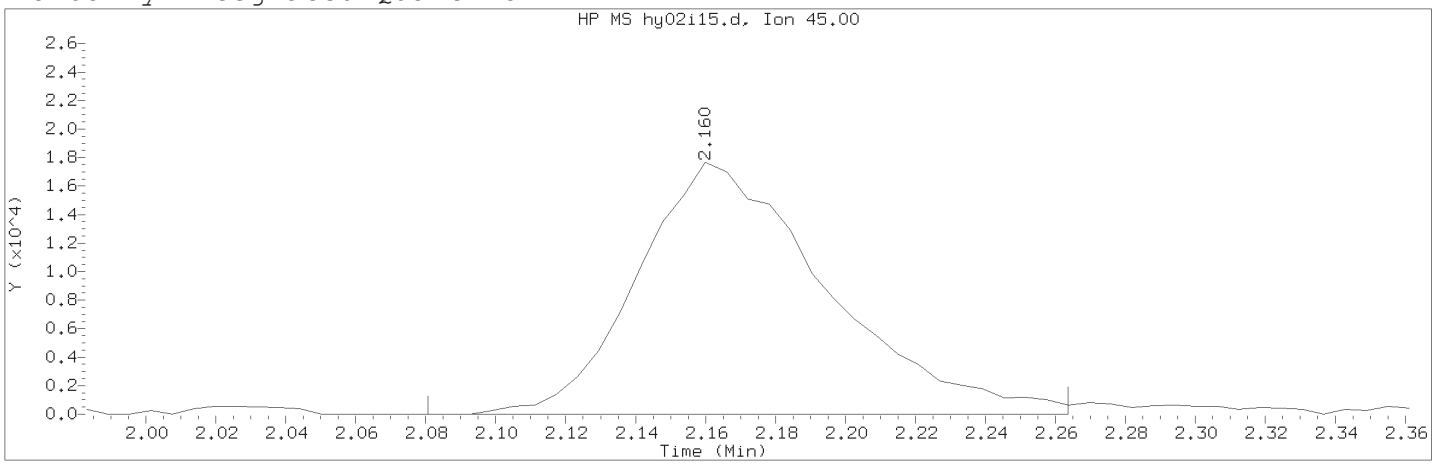
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

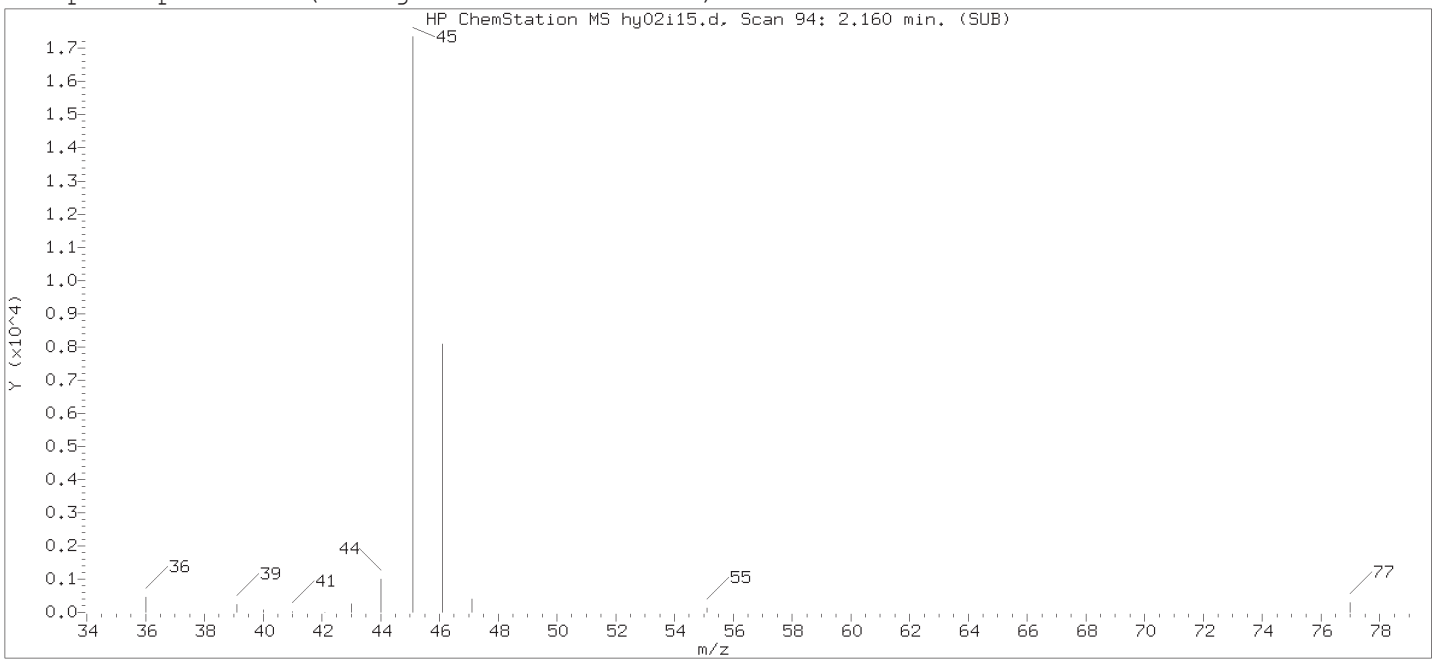
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 94
Retention Time (minutes): 2.160
Quant Ion : 45.00
Area (flag) : 66497M
On-Column Amount (ng) : 0.9137
Integration start scan : 80 Integration stop scan: 110
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

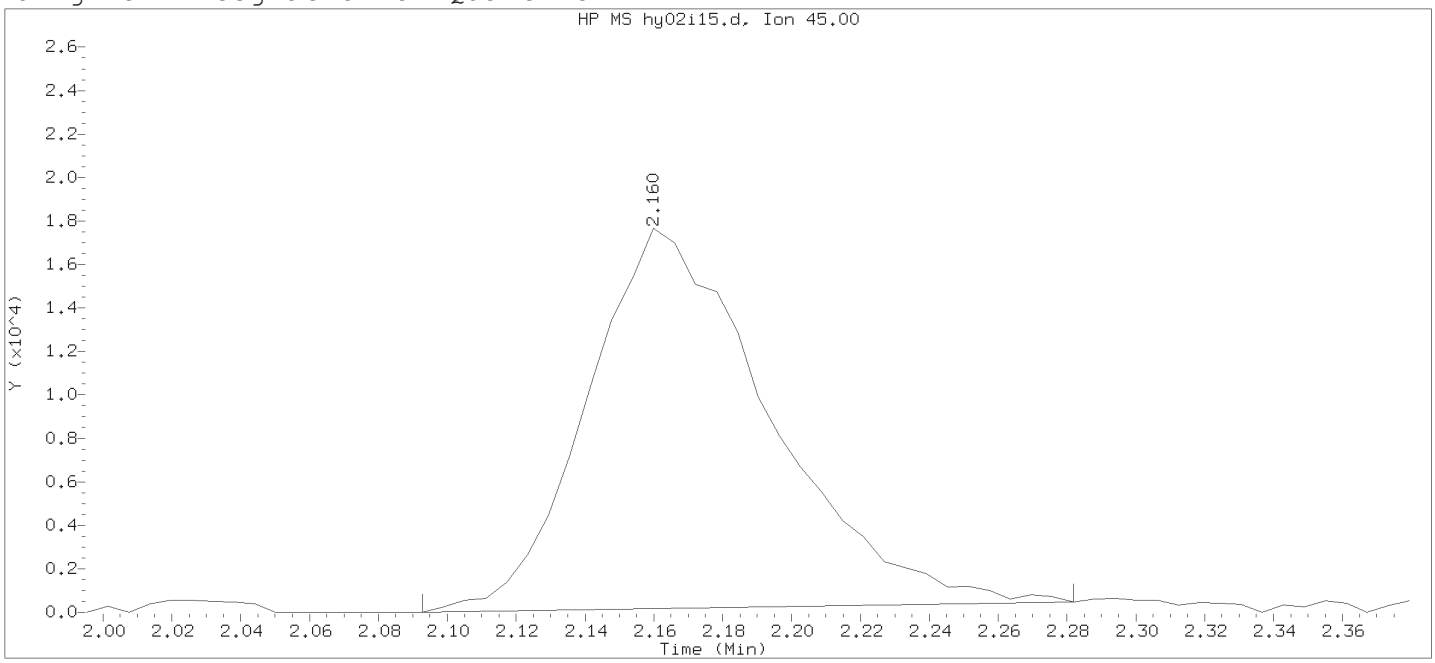
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

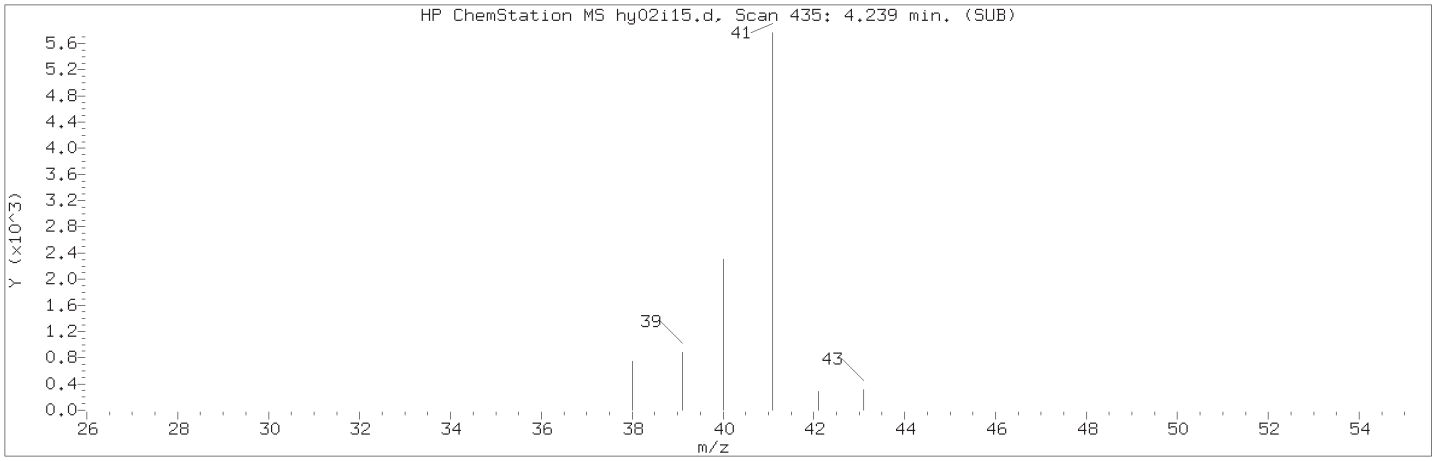
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:58
Date, time and analyst ID of latest file update: 02-May-2018 20:58 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

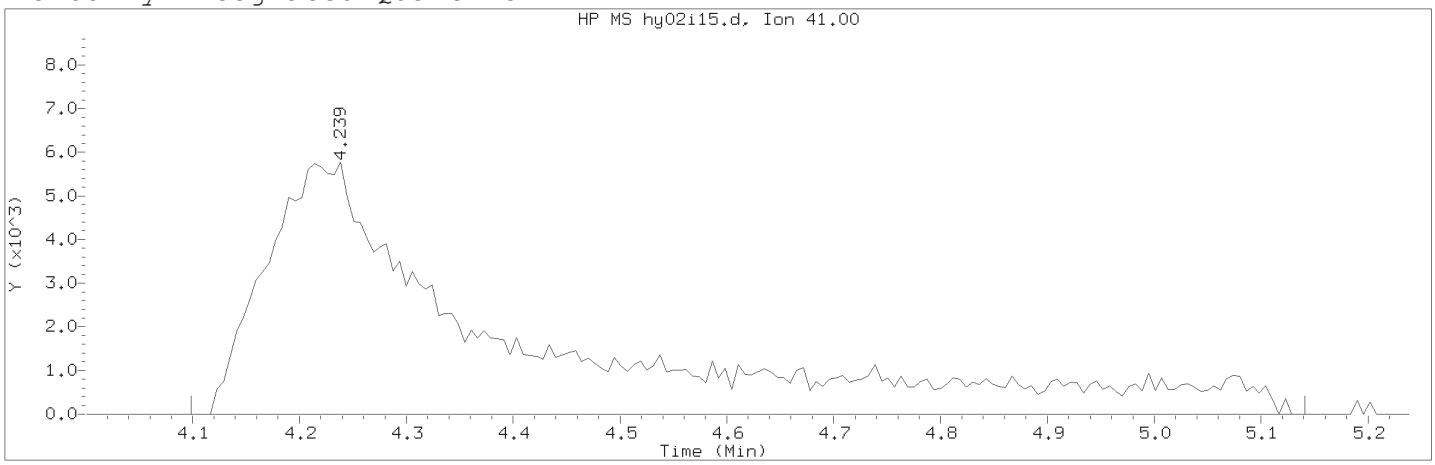
Compound Number	: 4		
Compound Name	: Dimethyl ether		
Scan Number	: 94		
Retention Time (minutes)	: 2.160		
Quant Ion	: 45.00		
Area	: 64528		
On-column Amount (ng)	: 0.8809		
Integration start scan	: 82	Integration stop scan:	113
Y at integration start	: 0	Y at integration end:	461

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

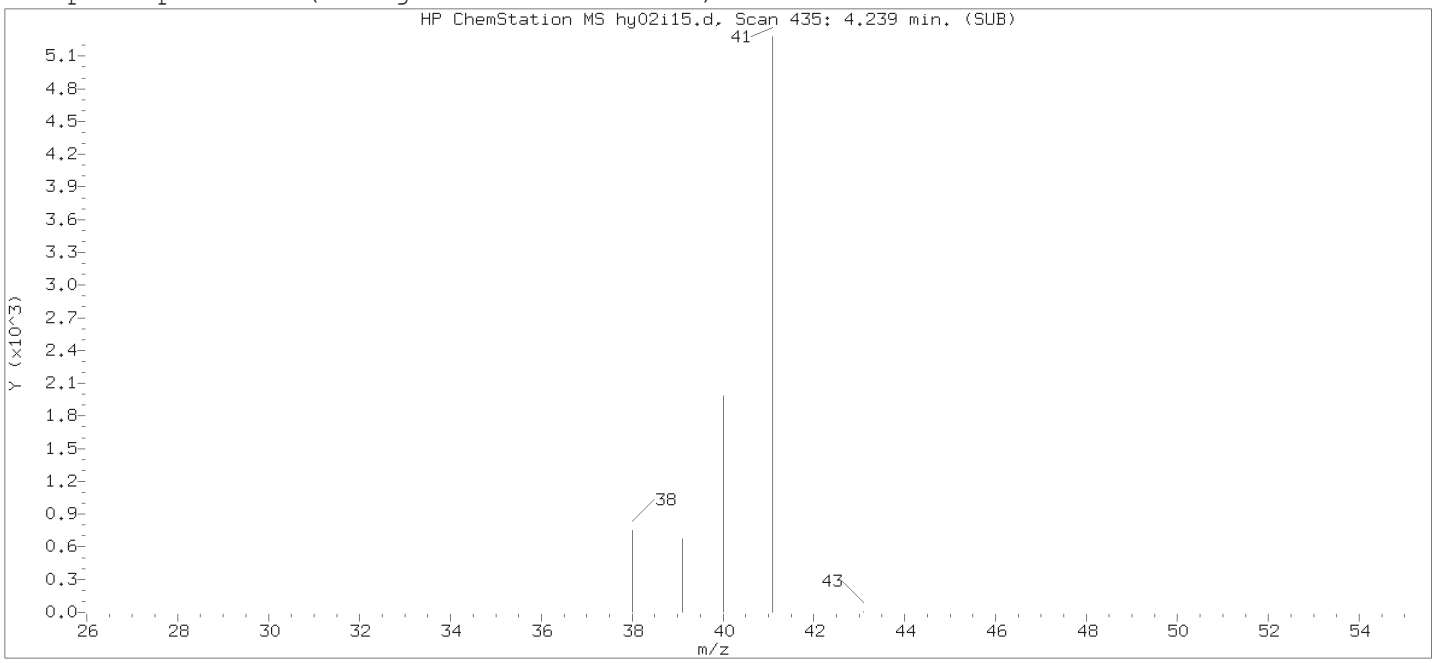
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 435
Retention Time (minutes): 4.239
Quant Ion : 41.00
Area (flag) : 91043M
On-Column Amount (ng) : 41.6038
Integration start scan : 411 Integration stop scan: 582
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

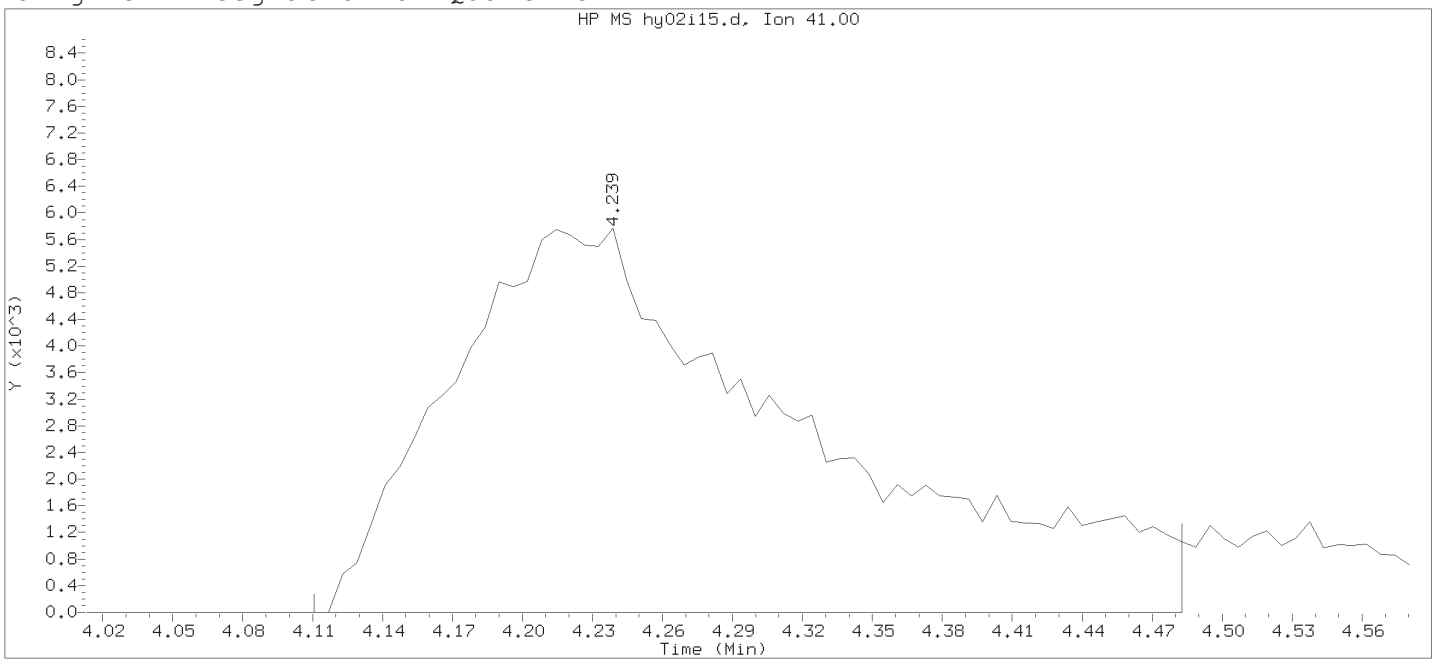
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

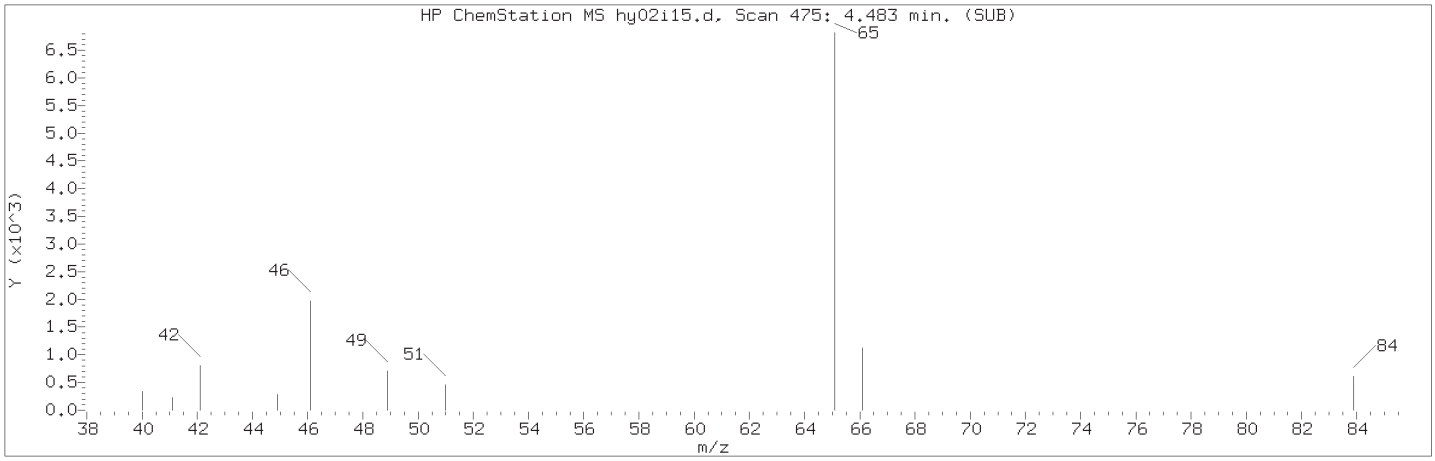
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:58
Date, time and analyst ID of latest file update: 02-May-2018 20:58 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

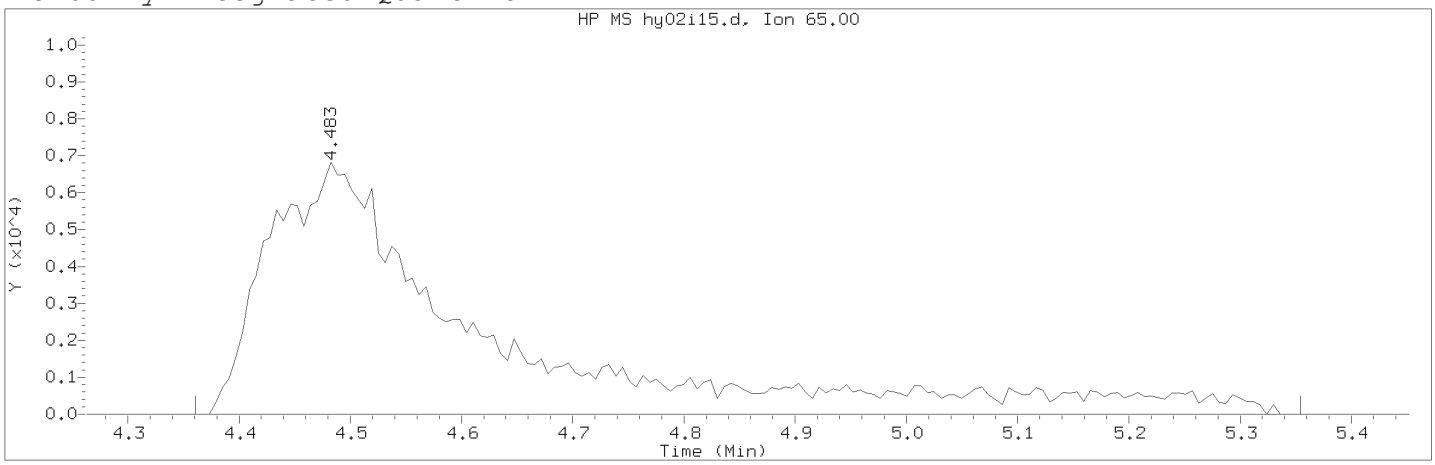
Compound Number	: 25		
Compound Name	: Acetonitrile		
Scan Number	: 435		
Retention Time (minutes)	: 4.239		
Quant Ion	: 41.00		
Area	: 61510		
On-column Amount (ng)	: 30.2073		
Integration start scan	: 413	Integration stop scan:	474
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

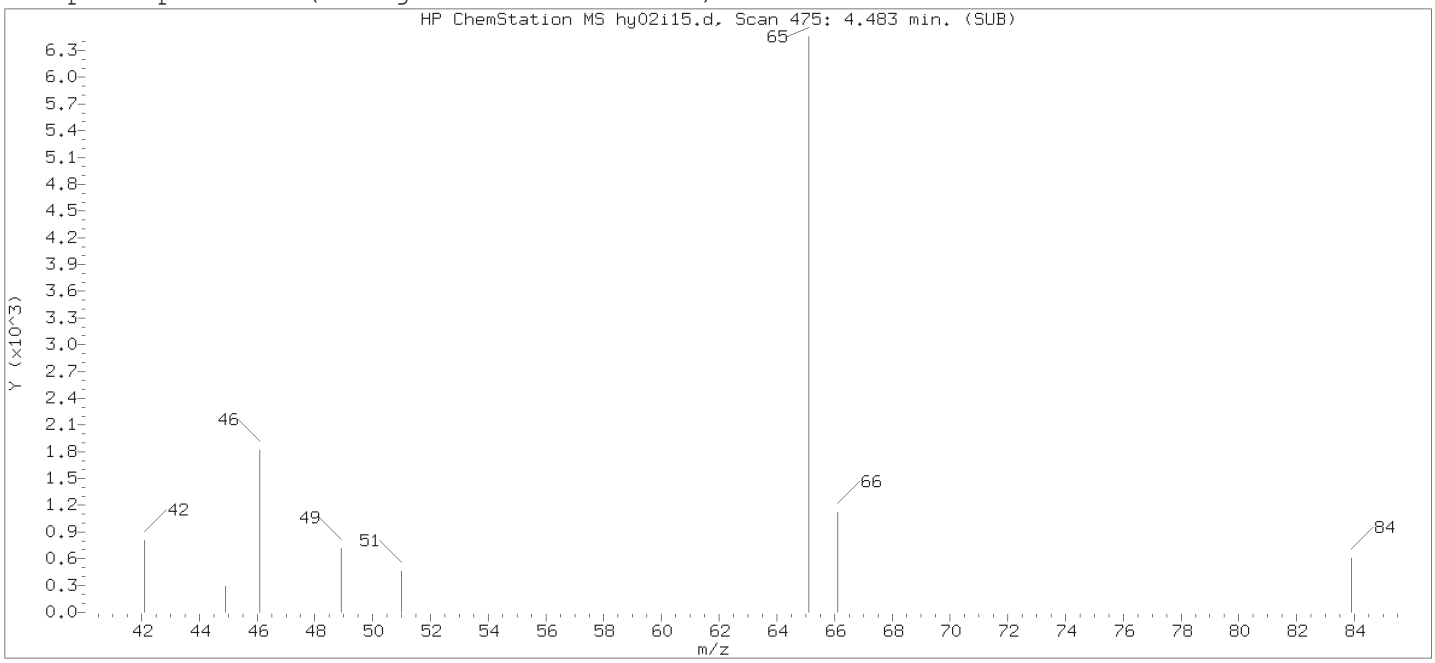
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 475
Retention Time (minutes): 4.483
Quant Ion : 65.00
Area (flag) : 90627M
On-Column Amount (ng) : 50.0000
Integration start scan : 454 Integration stop scan: 617
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

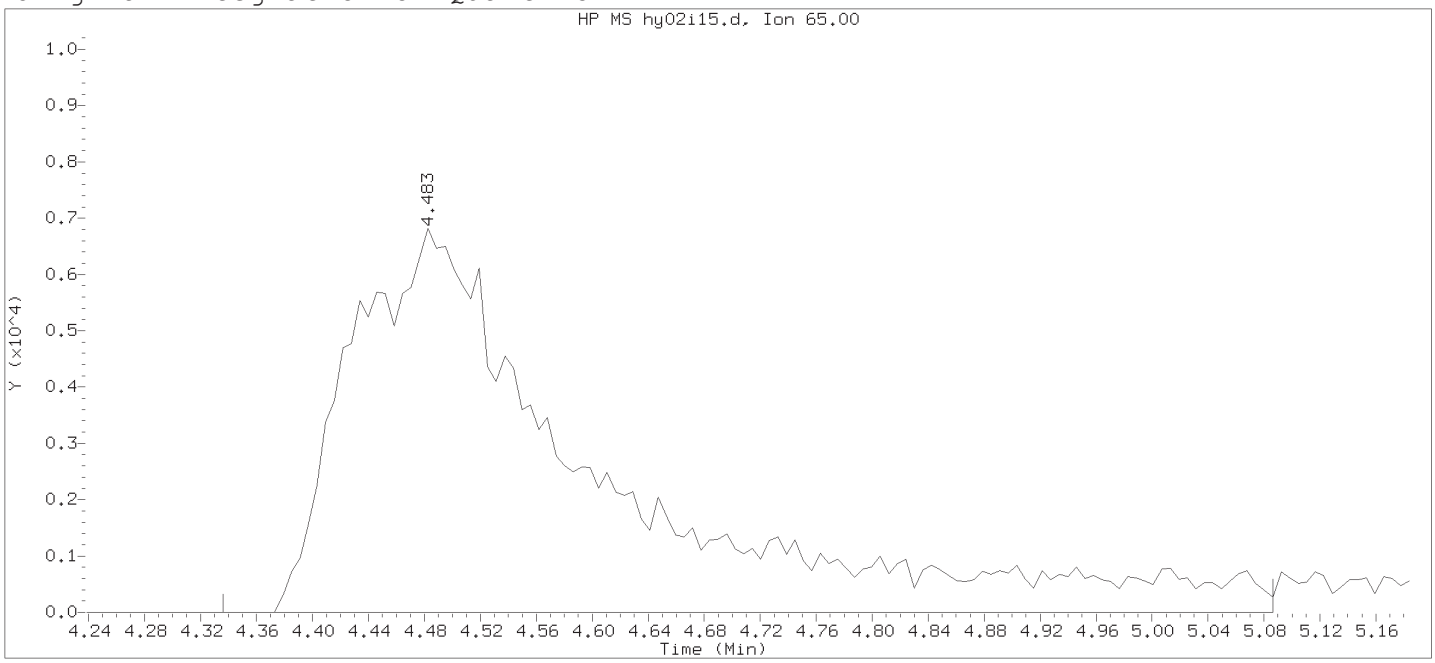
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

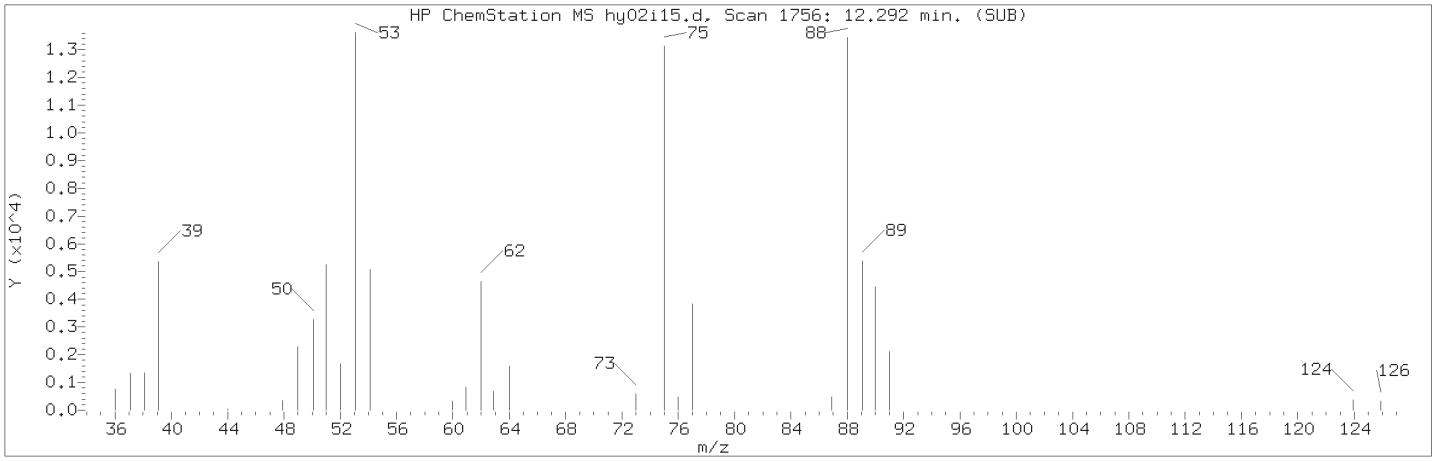
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:58
Date, time and analyst ID of latest file update: 02-May-2018 20:58 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

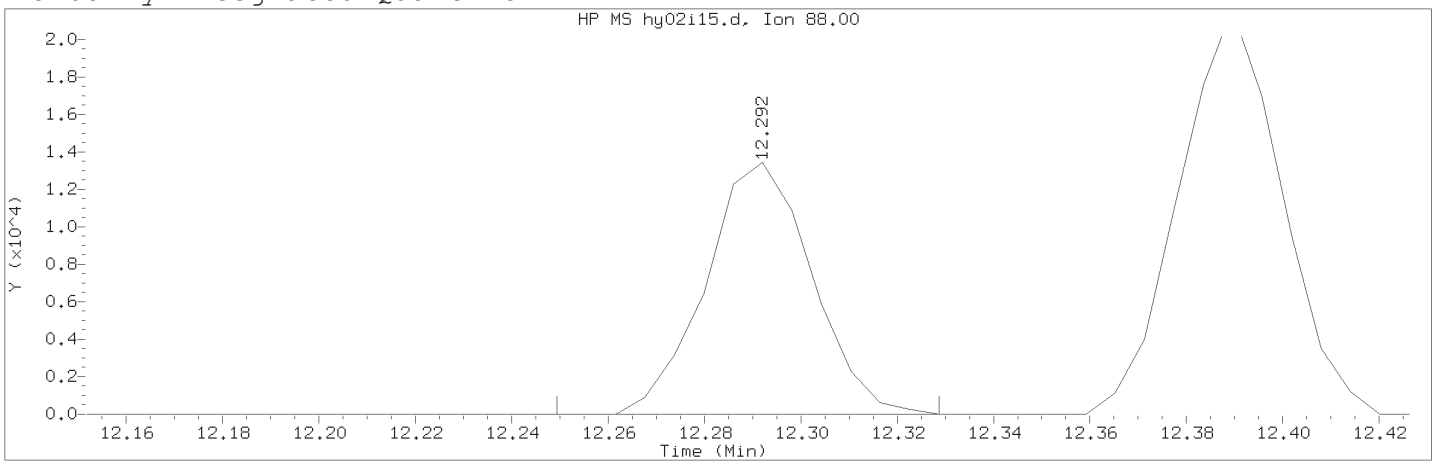
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 475
Retention Time (minutes): 4.483
Quant Ion : 65.00
Area : 83546
On-column Amount (ng) : 50.0000
Integration start scan : 450 Integration stop scan: 573
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user: Don Viray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

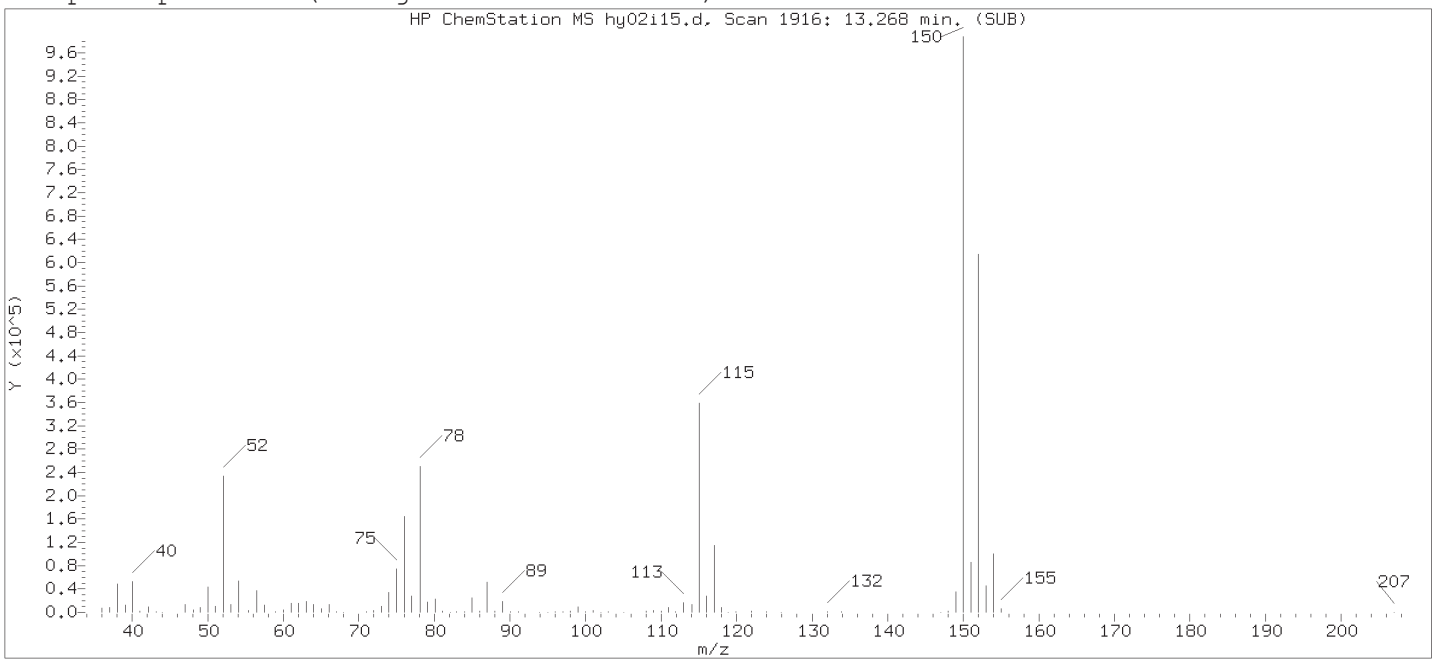
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 20531M
On-Column Amount (ng) : 1.7493
Integration start scan : 1748 Integration stop scan: 1761
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

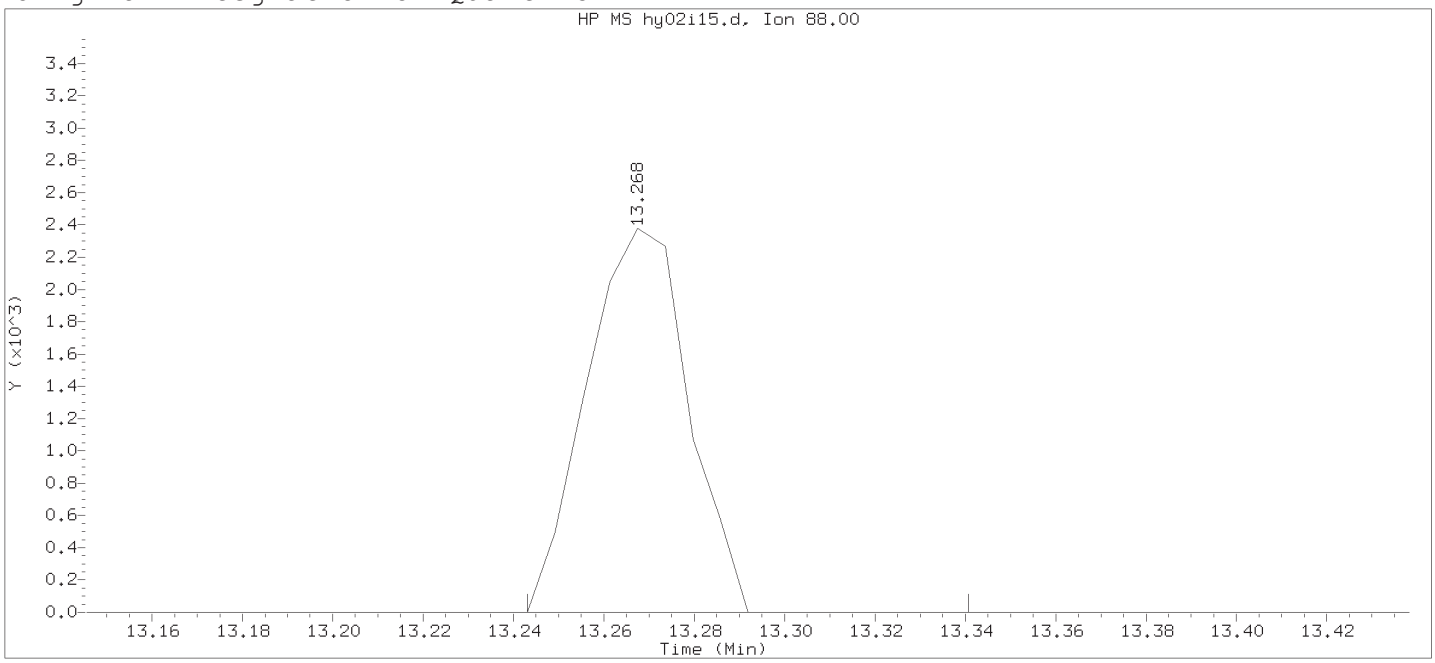
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

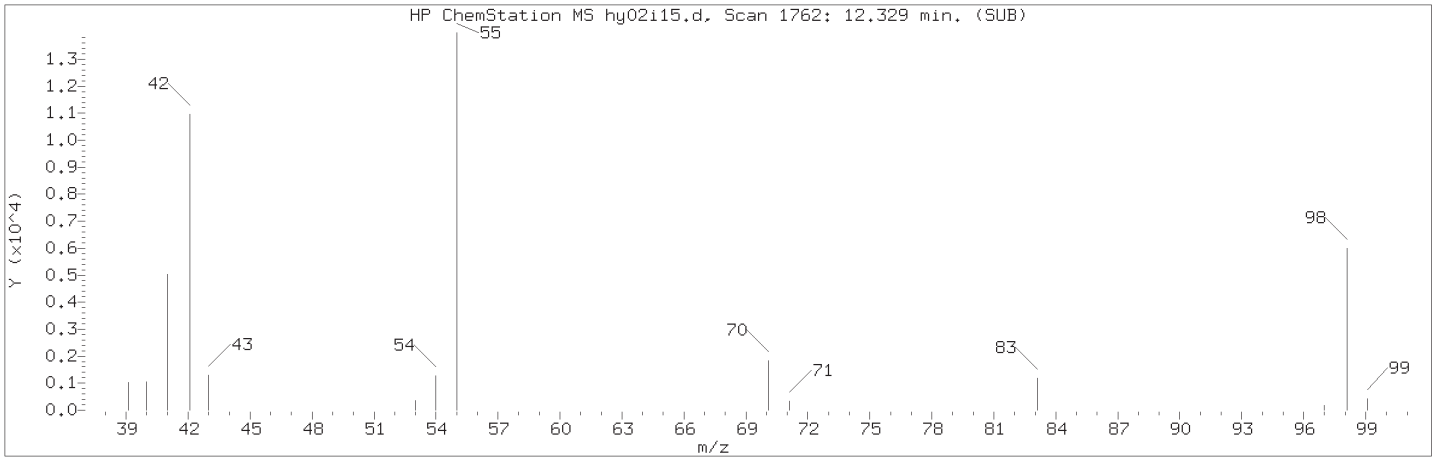
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:58
Date, time and analyst ID of latest file update: 02-May-2018 20:58 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

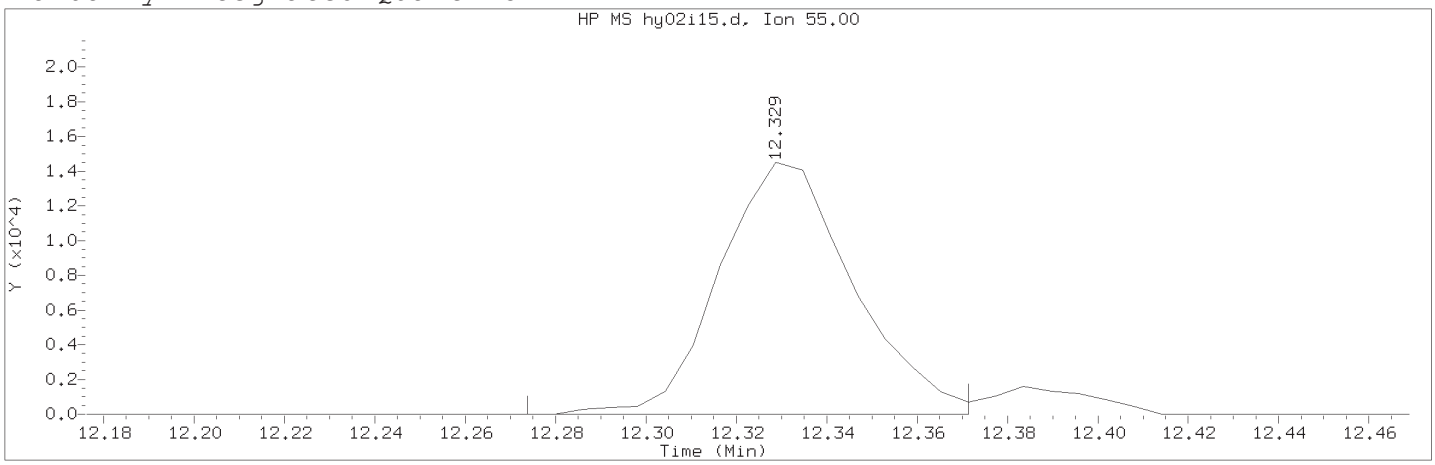
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1916
Retention Time (minutes): 13.268
Quant Ion : 88.00
Area : 3717
On-column Amount (ng) : 0.8719
Integration start scan : 1911 Integration stop scan: 1927
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

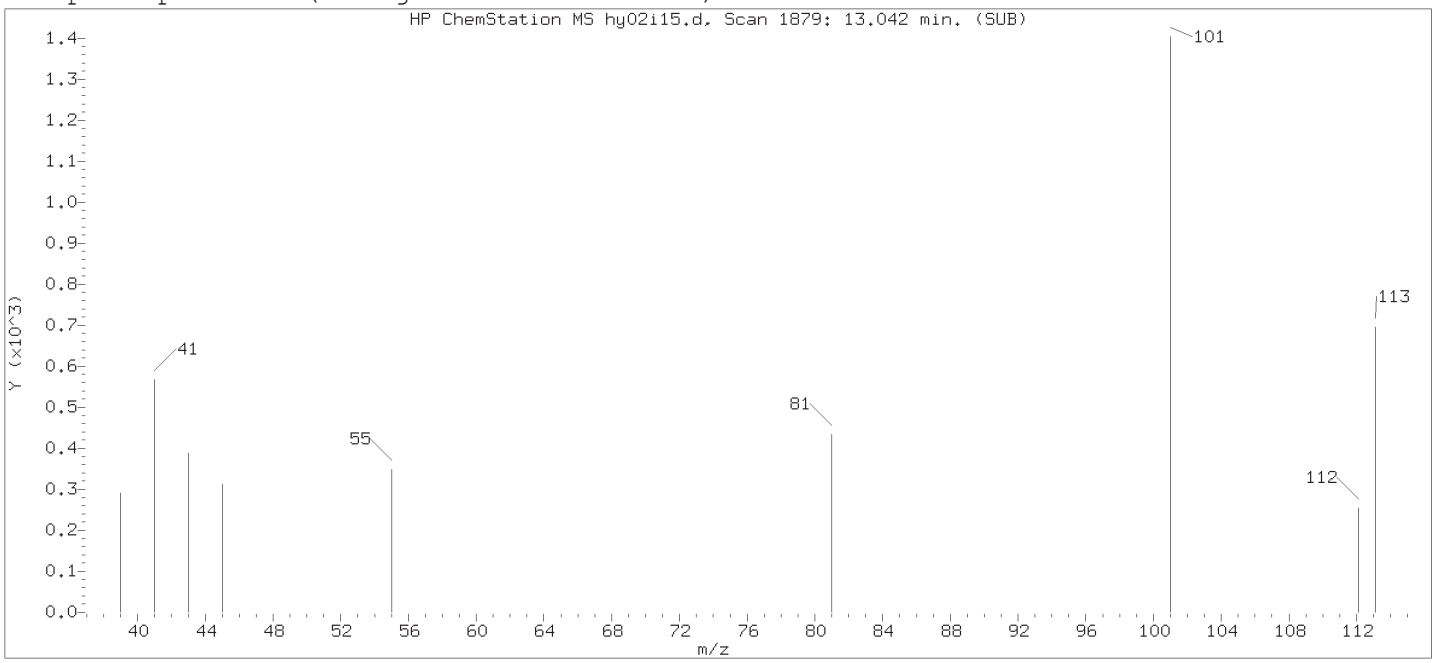
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1762
Retention Time (minutes): 12.329
Quant Ion : 55.00
Area (flag) : 29836M
On-Column Amount (ng) : 49.9853
Integration start scan : 1752 Integration stop scan: 1768
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

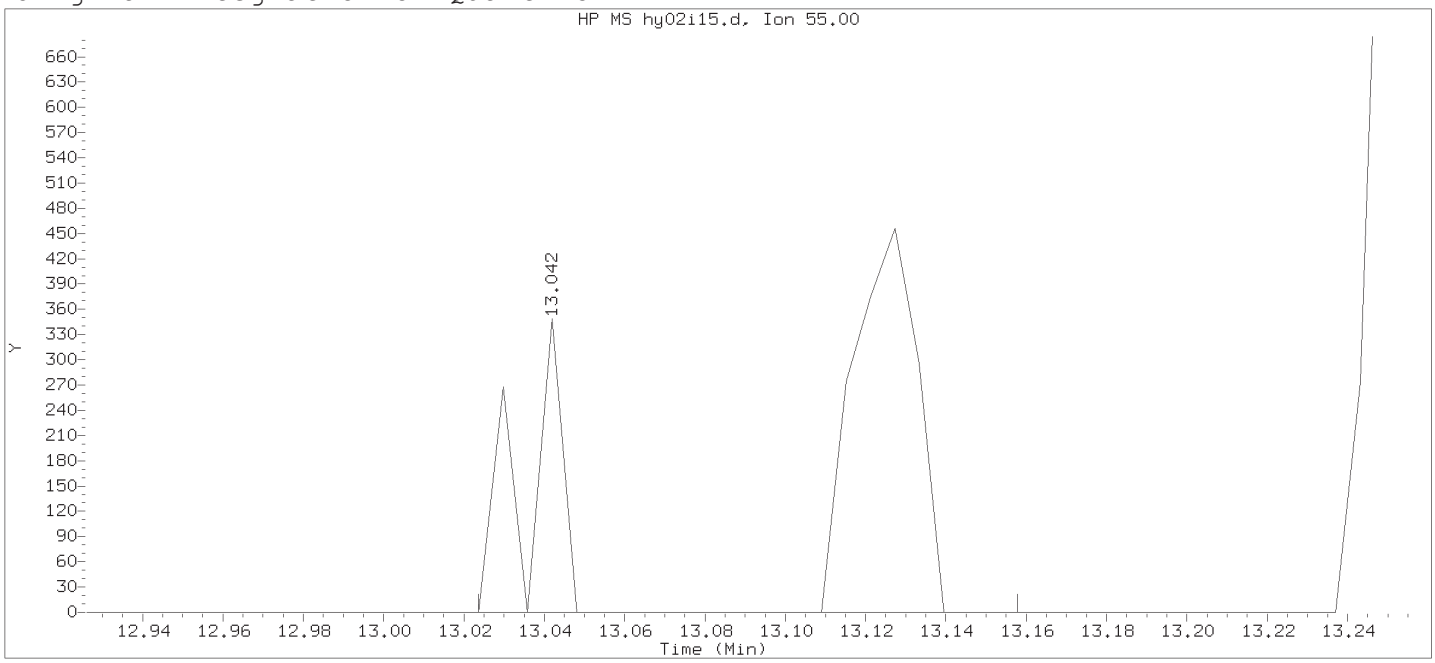
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



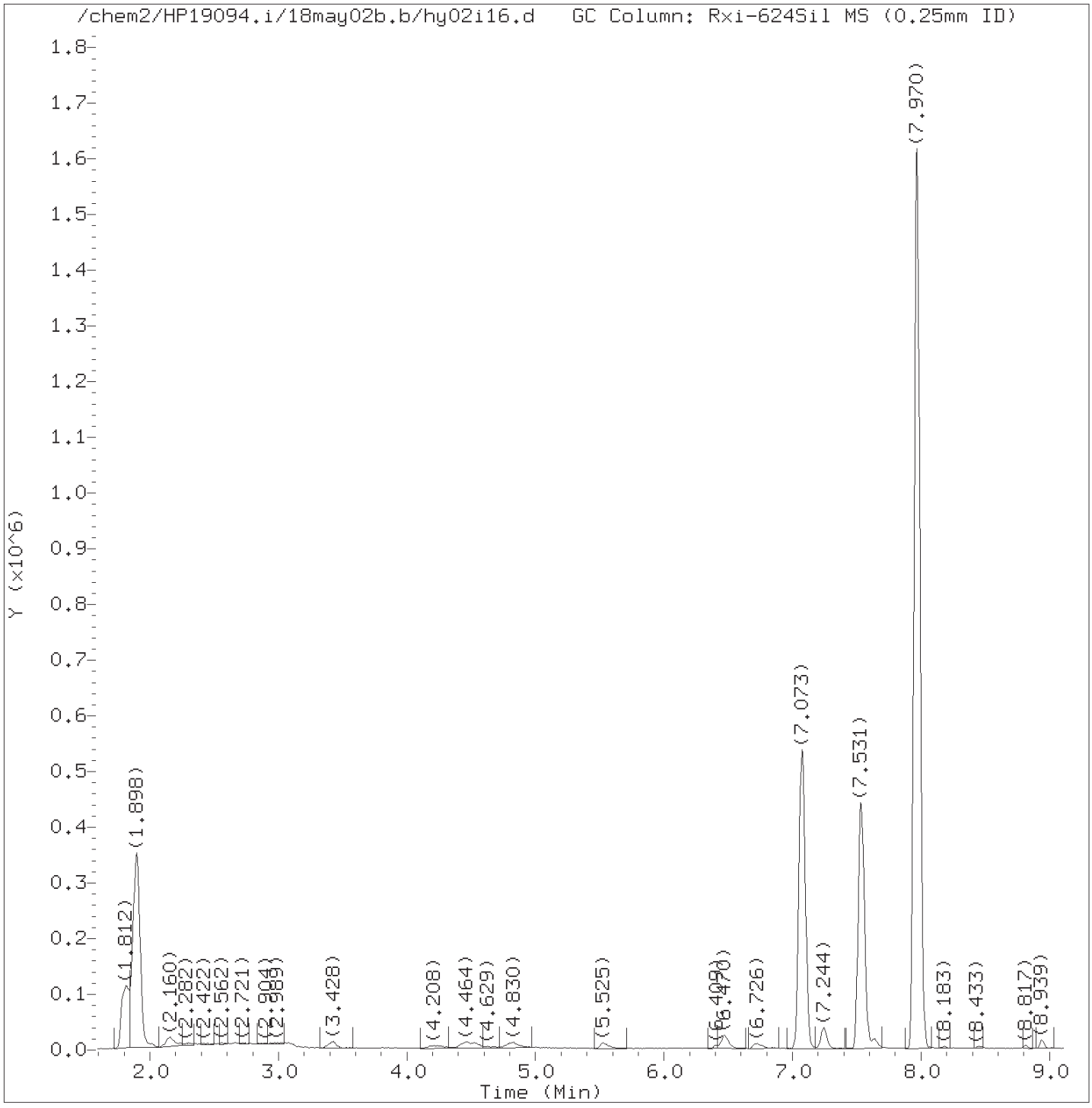
Data File: /chem2/HP19094.i/18may02b.b/hy02i15.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 20:40 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 20:58
Date, time and analyst ID of latest file update: 02-May-2018 20:58 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1879
Retention Time (minutes): 13.042
Quant Ion : 55.00
Area : 737
On-column Amount (ng) : 3.0063
Integration start scan : 1875 Integration stop scan: 1897
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: DVV10203



Total Ion Chromatogram (TIC)

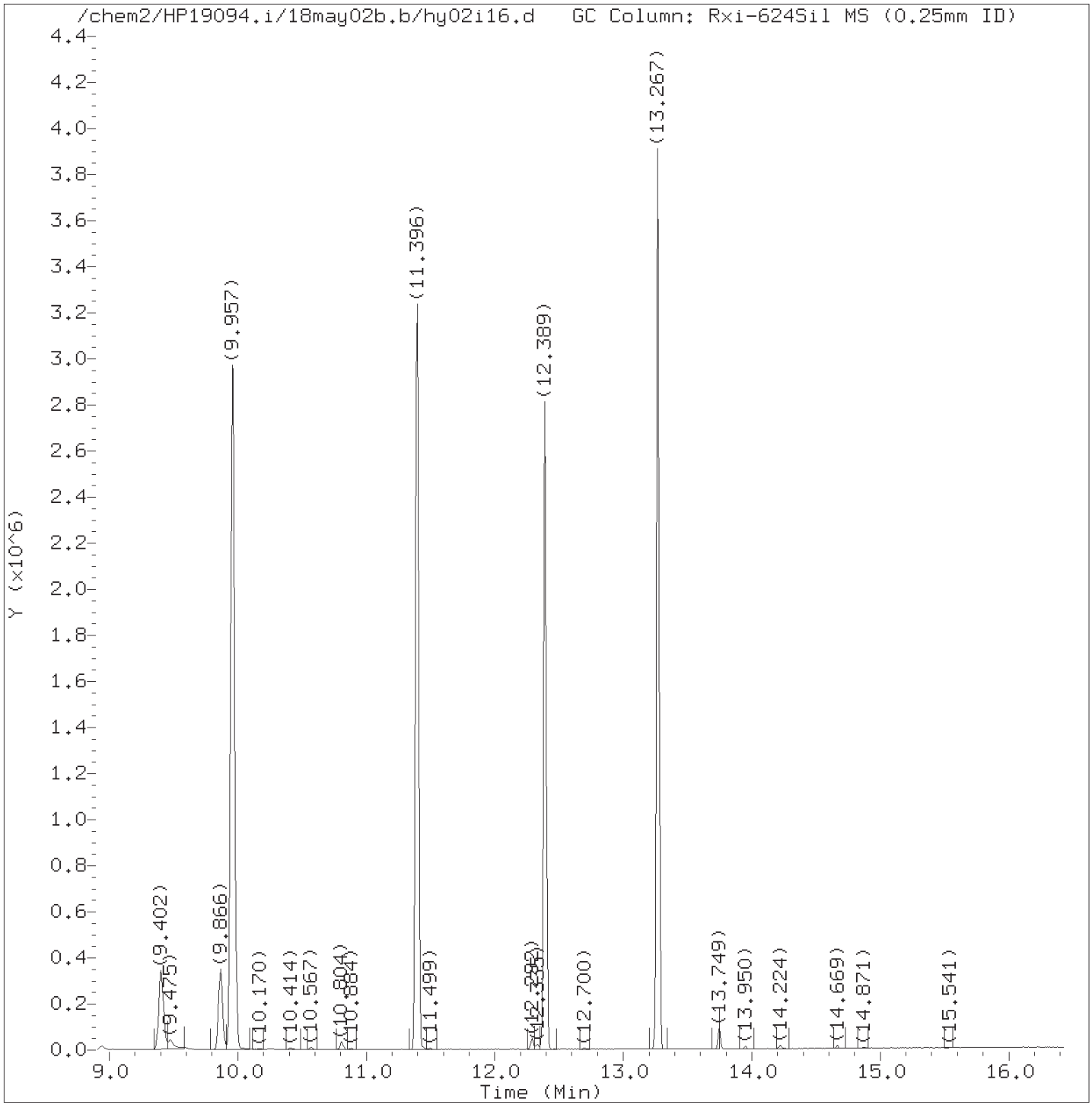
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

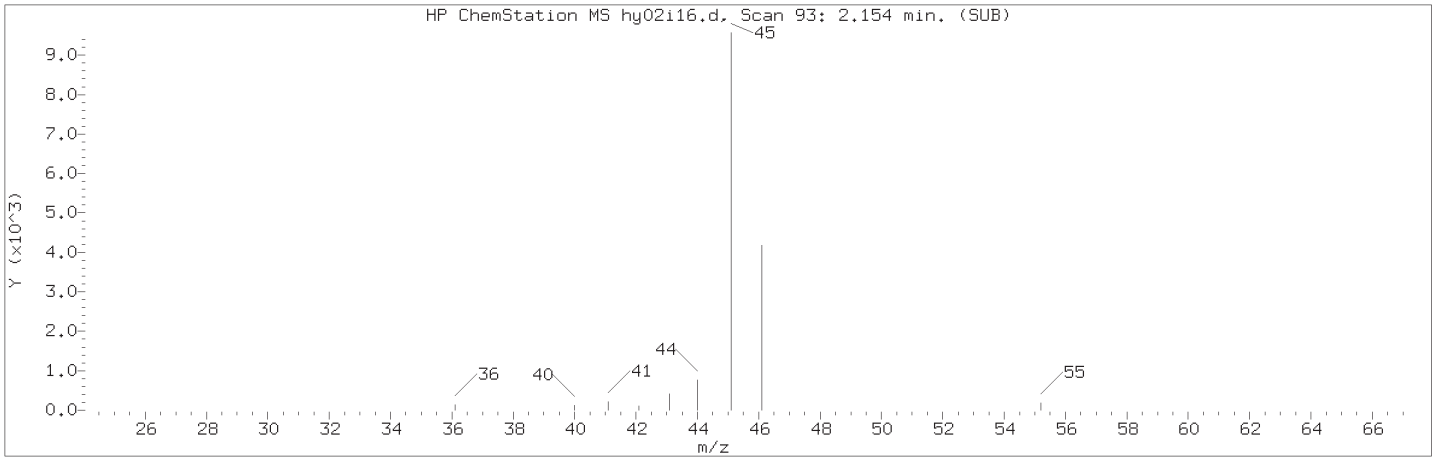
Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.154	45	39145M	0.522
25) Acetonitrile	(1)	4.202	41	43595M	22.874
26)*t-Butyl Alcohol-d10	(1)	4.464	65	78931M	50.000
36) Vinyl Acetate	(2)	5.525	43	33612	0.471
43) Methyl Acrylate	(2)	6.470	55	53484	2.427
53) 1-Chlorobutane	(2)	7.238	56	46395	0.440
63)*Fluorobenzene	(2)	7.970	96	2334989	10.000
77) Chloroacetonitrile	(2)	9.469	75	17578	20.017
78) 2-Chloroethyl vinyl ether	(2)	9.481	63	10015	0.474
97)*Chlorobenzene-d5	(3)	11.396	117	1693467	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	10342M	1.012
112) Cyclohexanone	(1)	12.328	55	11242M	21.625
133)*1,4-Dichlorobenzene-d4	(4)	13.267	152	891691	10.000
142) Hexachloroethane	(4)	13.749	117	15983	0.426

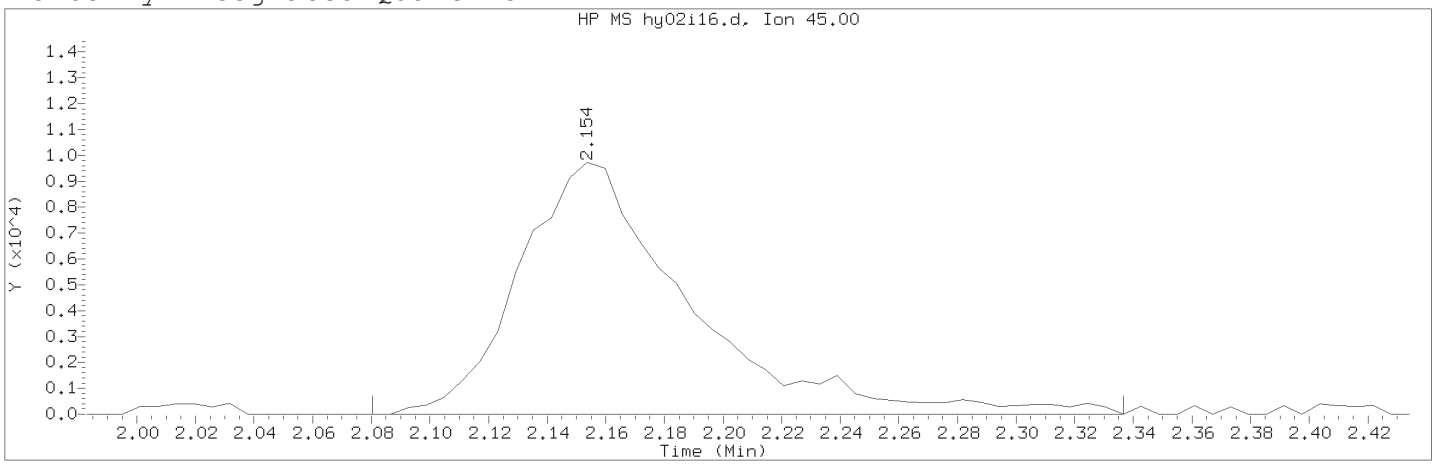
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

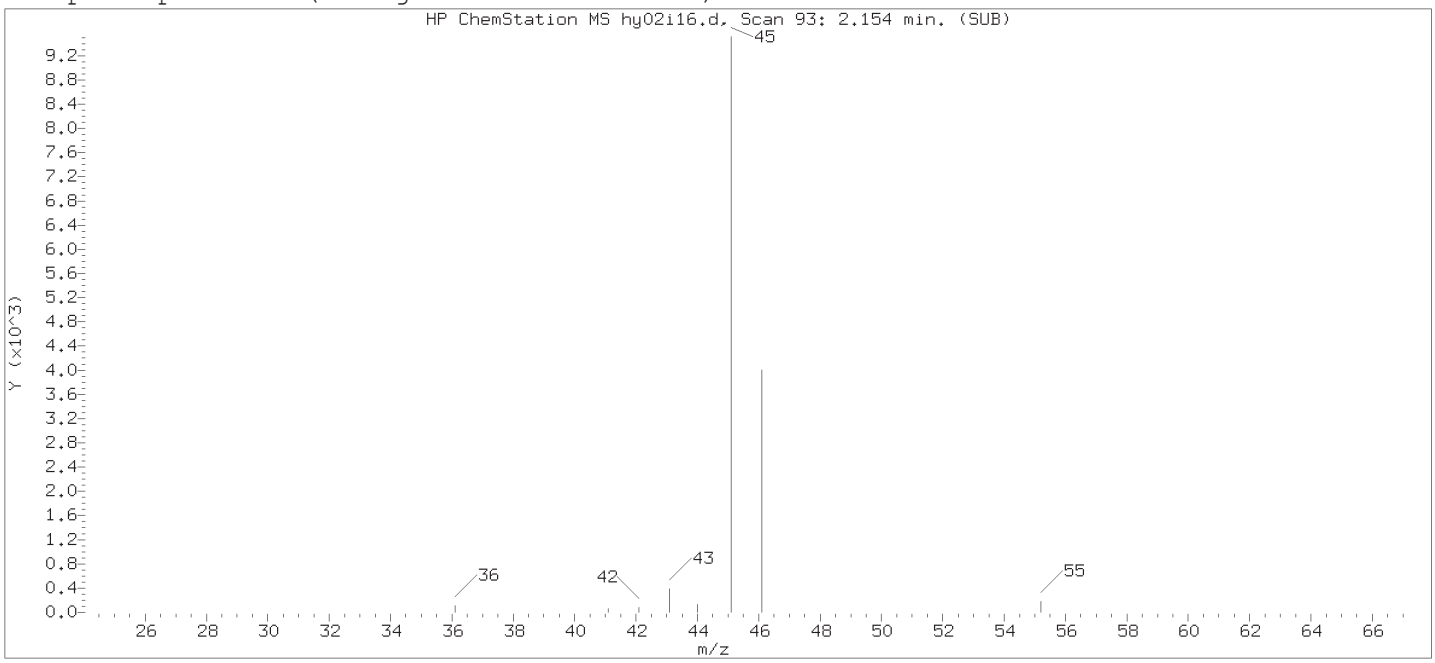
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 93
Retention Time (minutes): 2.154
Quant Ion : 45.00
Area (flag) : 39145M
On-Column Amount (ng) : 0.5222
Integration start scan : 80 Integration stop scan: 122
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

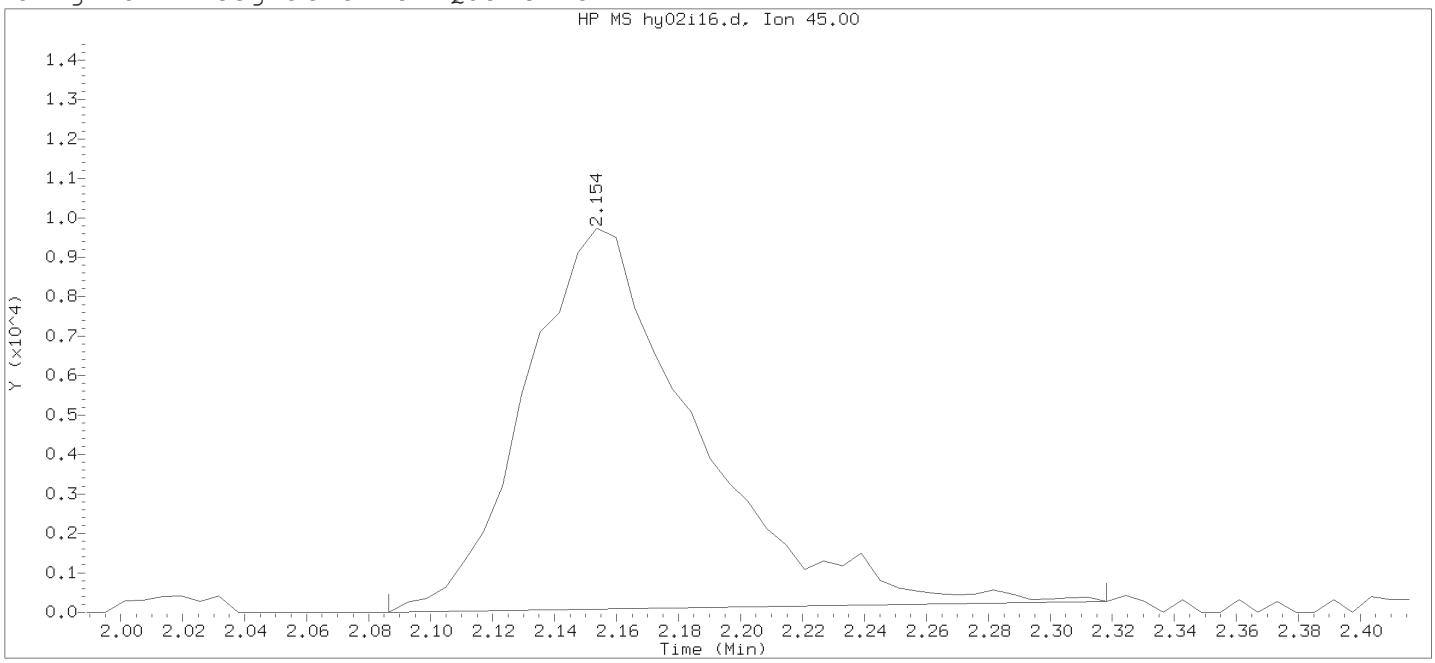
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

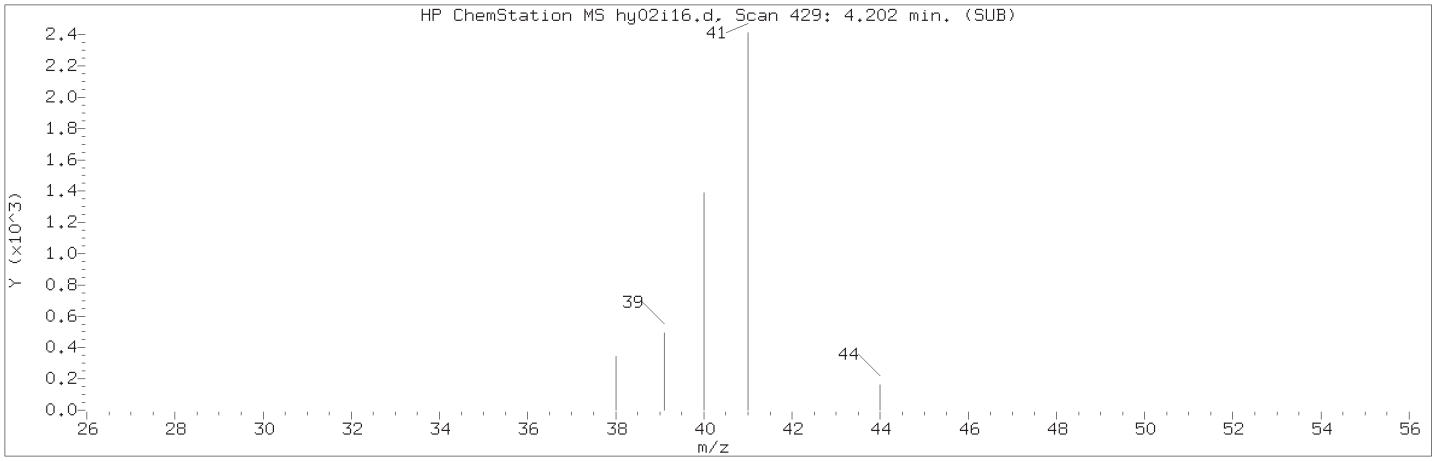
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:20
Date, time and analyst ID of latest file update: 02-May-2018 21:20 Automation

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

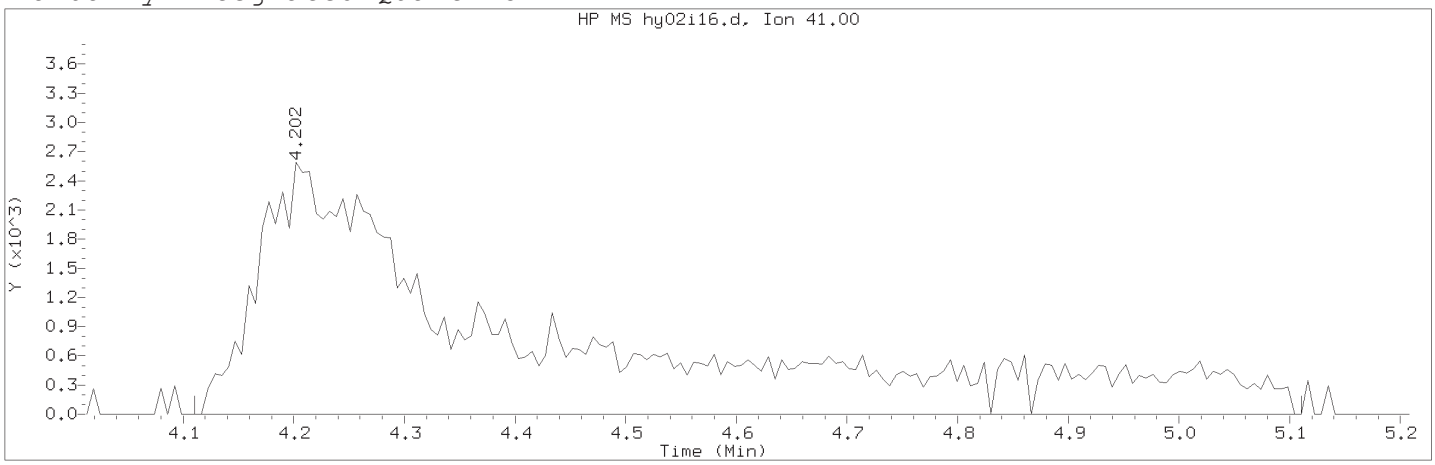
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 93
Retention Time (minutes): 2.154
Quant Ion : 45.00
Area : 36886
On-column Amount (ng) : 0.4905
Integration start scan : 81 Integration stop scan: 119
Y at integration start : 0 Y at integration end: 281

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

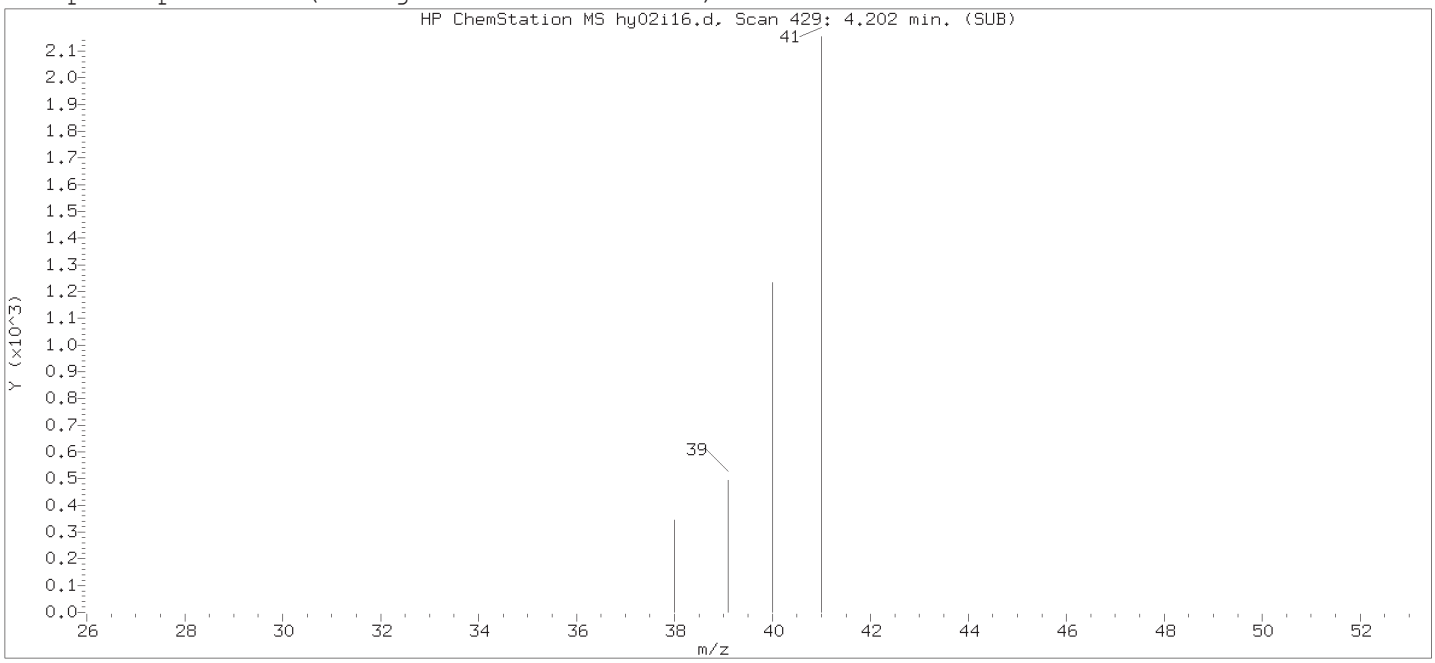
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 429
Retention Time (minutes): 4.202
Quant Ion : 41.00
Area (flag) : 43595M
On-Column Amount (ng) : 22.8735
Integration start scan : 413 Integration stop scan: 577
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

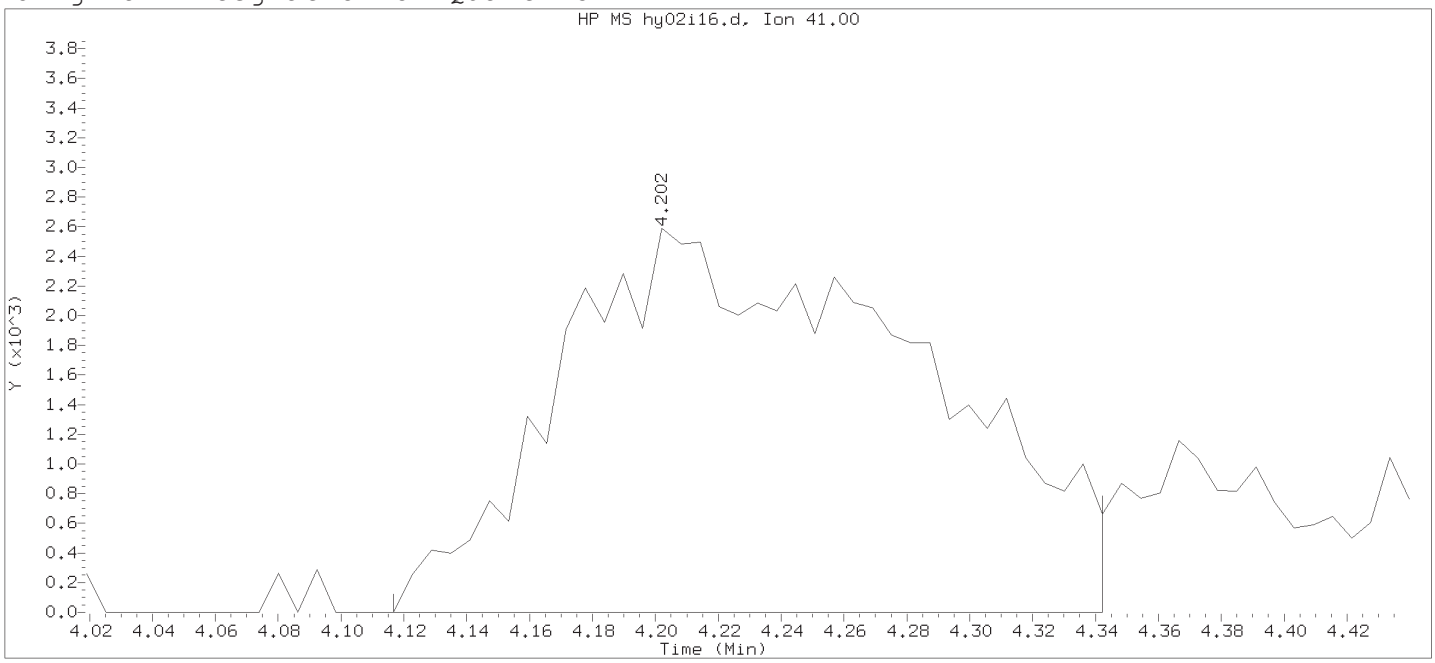
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

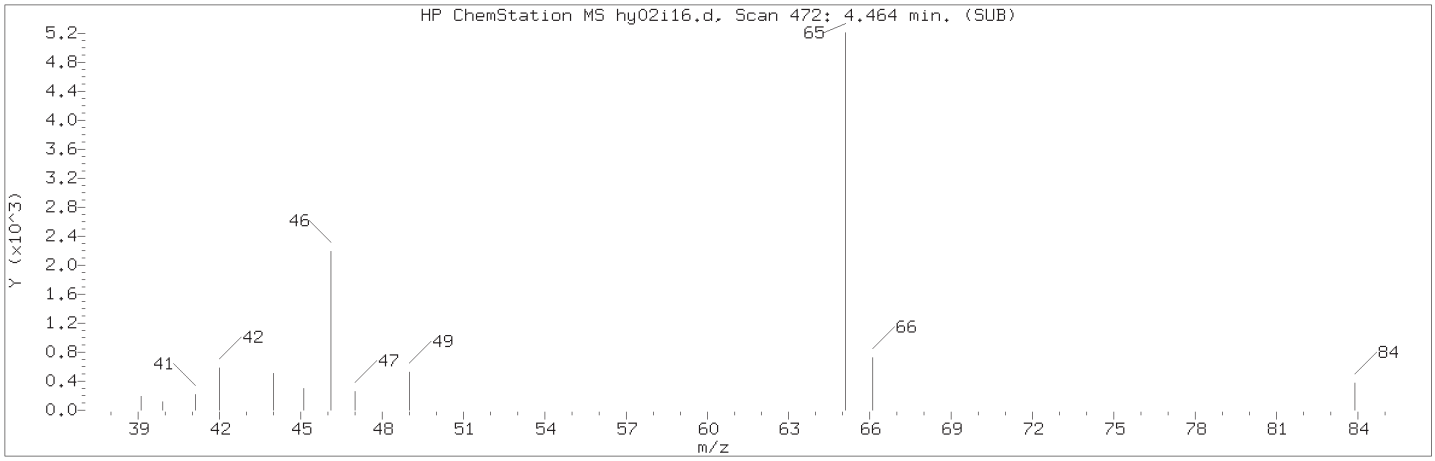
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:20
Date, time and analyst ID of latest file update: 02-May-2018 21:20 Automation

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

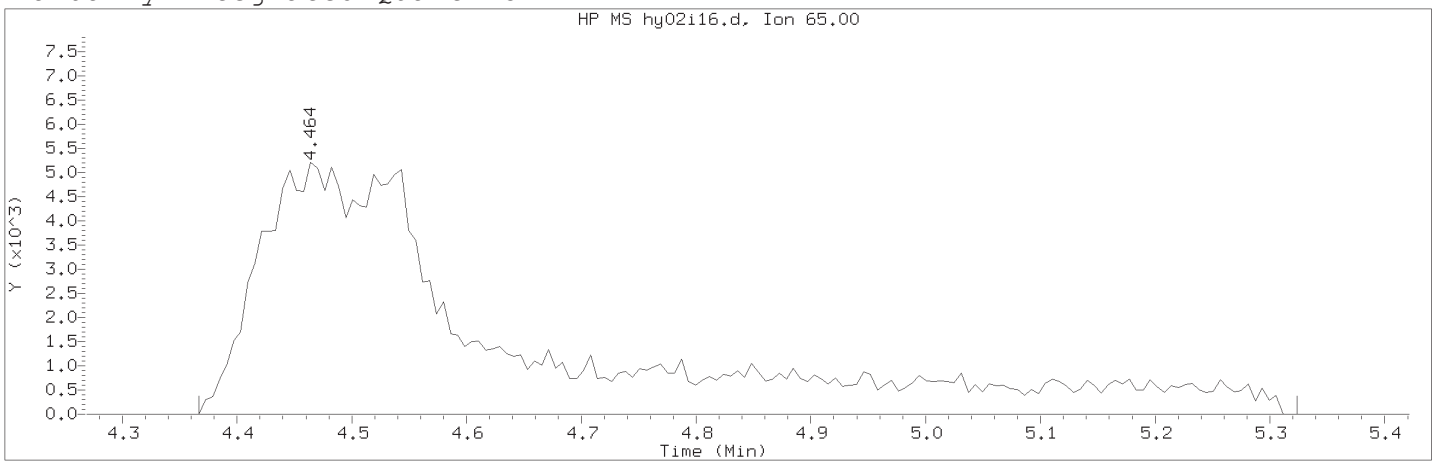
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 429
Retention Time (minutes): 4.202
Quant Ion : 41.00
Area : 20787
On-column Amount (ng) : 11.9110
Integration start scan : 414 Integration stop scan: 451
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

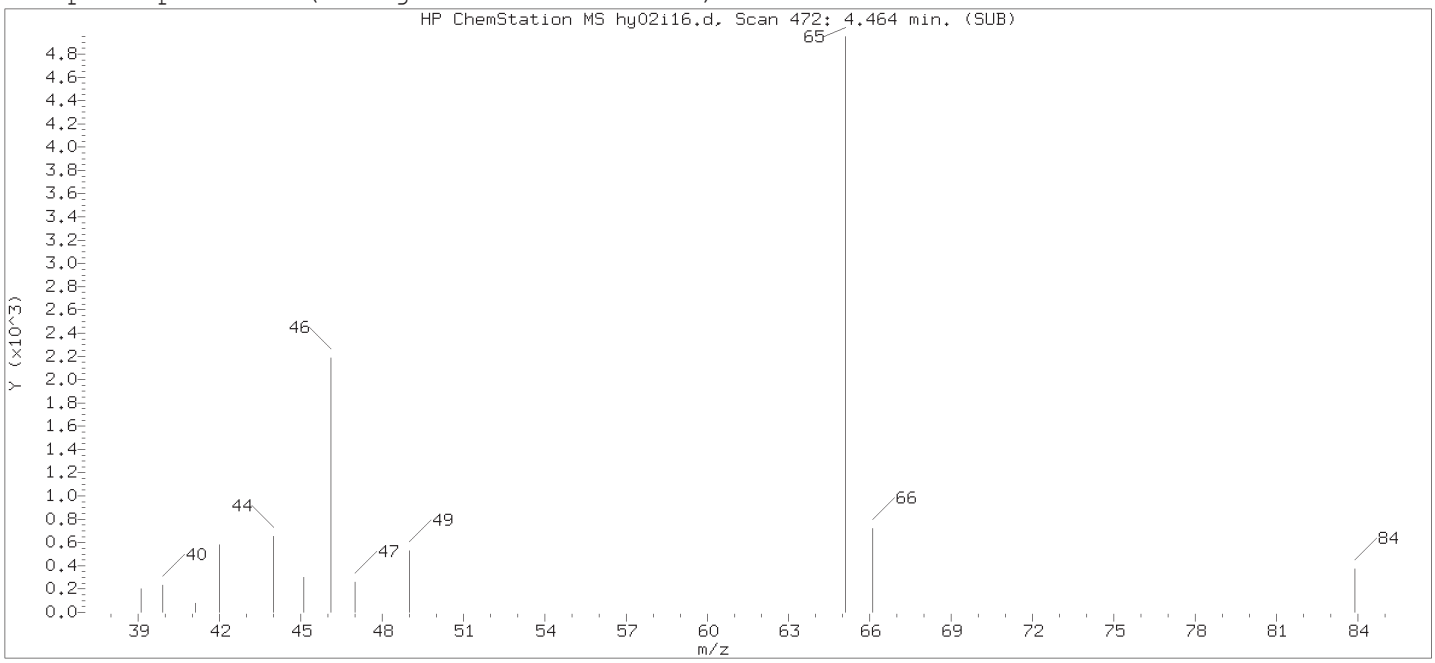
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 472
Retention Time (minutes): 4.464
Quant Ion : 65.00
Area (flag) : 78931M
On-Column Amount (ng) : 50.0000
Integration start scan : 455 Integration stop scan: 612
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

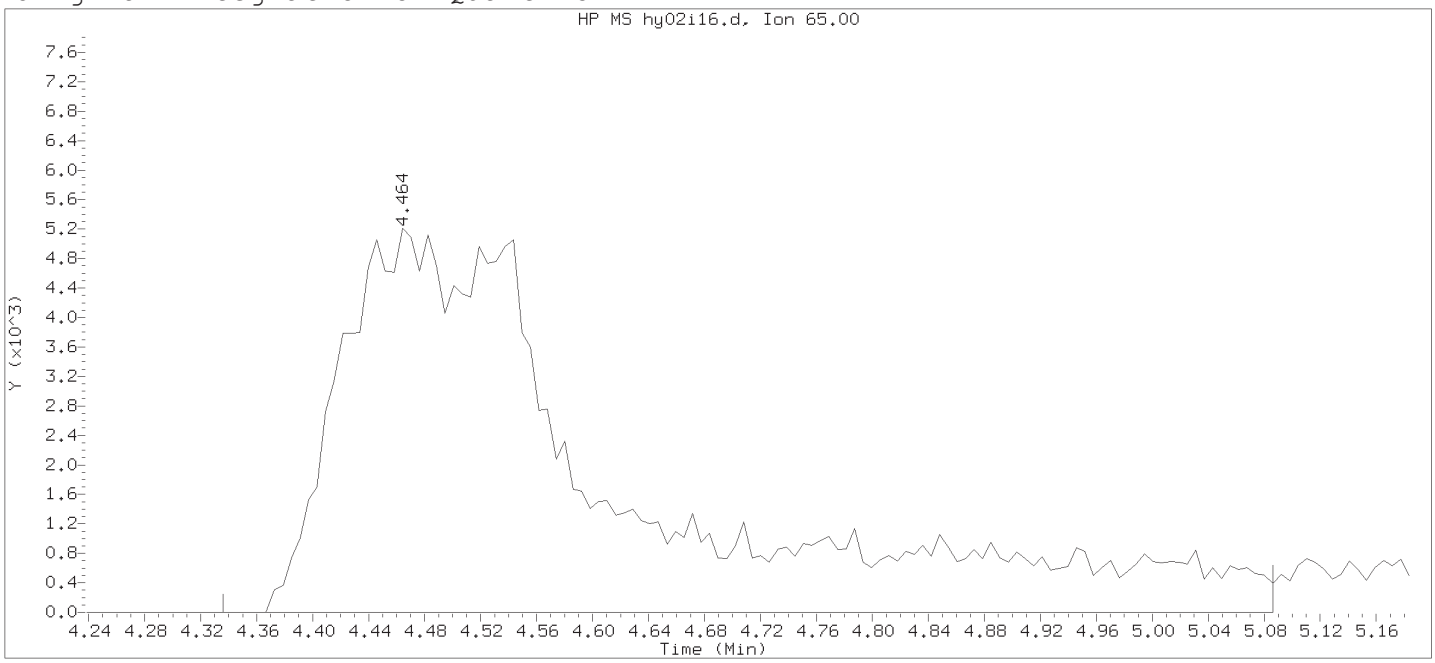
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

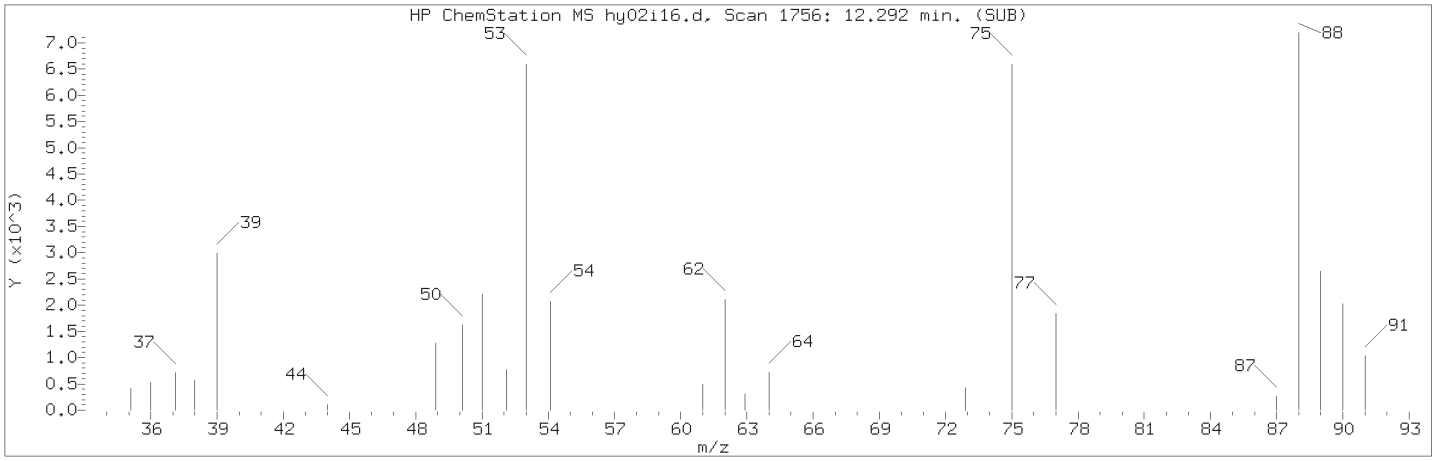
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:20
Date, time and analyst ID of latest file update: 02-May-2018 21:20 Automation

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

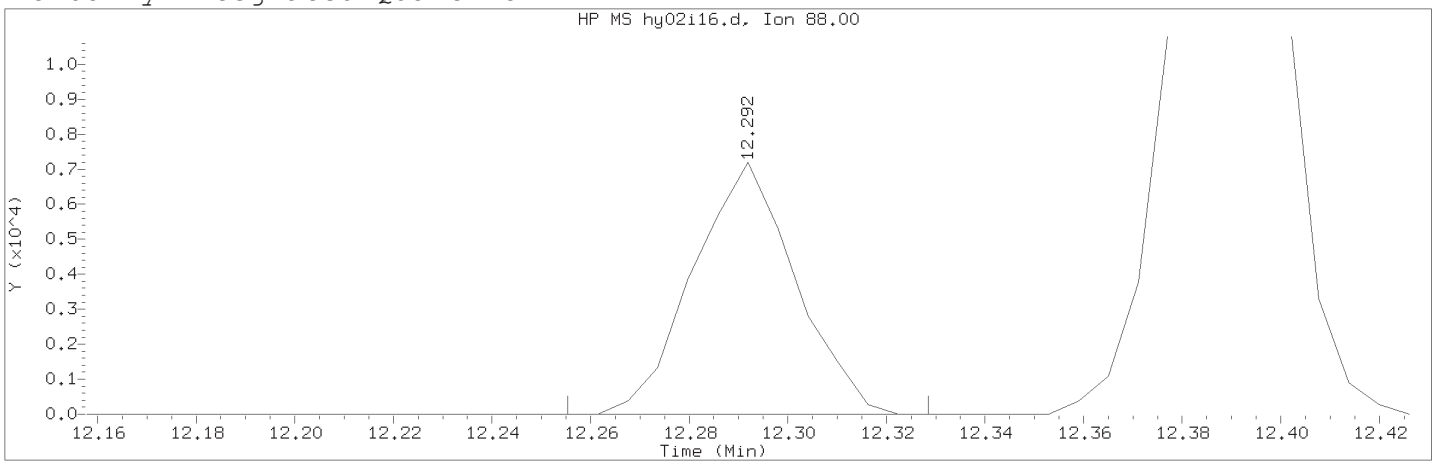
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 472
Retention Time (minutes): 4.464
Quant Ion : 65.00
Area : 71620
On-column Amount (ng) : 50.0000
Integration start scan : 450 Integration stop scan: 573
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user name: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

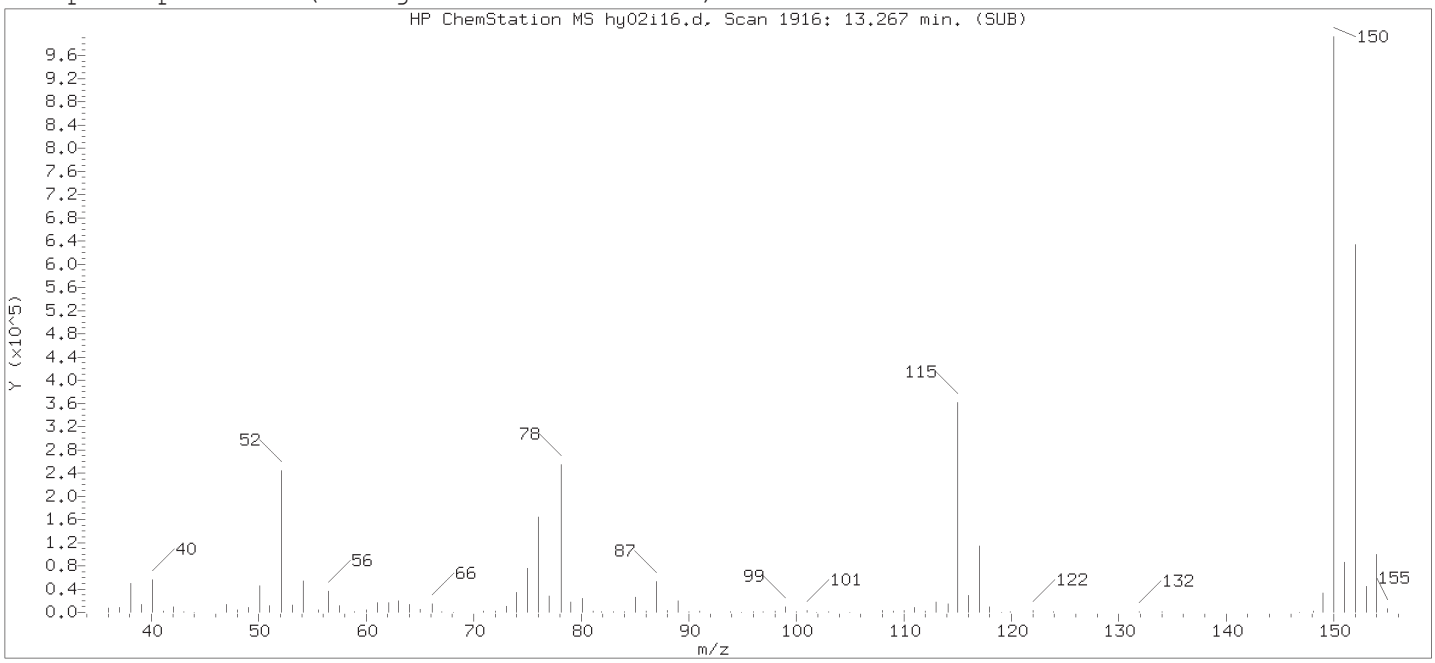
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 10342M
On-Column Amount (ng) : 1.0117
Integration start scan : 1749 Integration stop scan: 1761
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

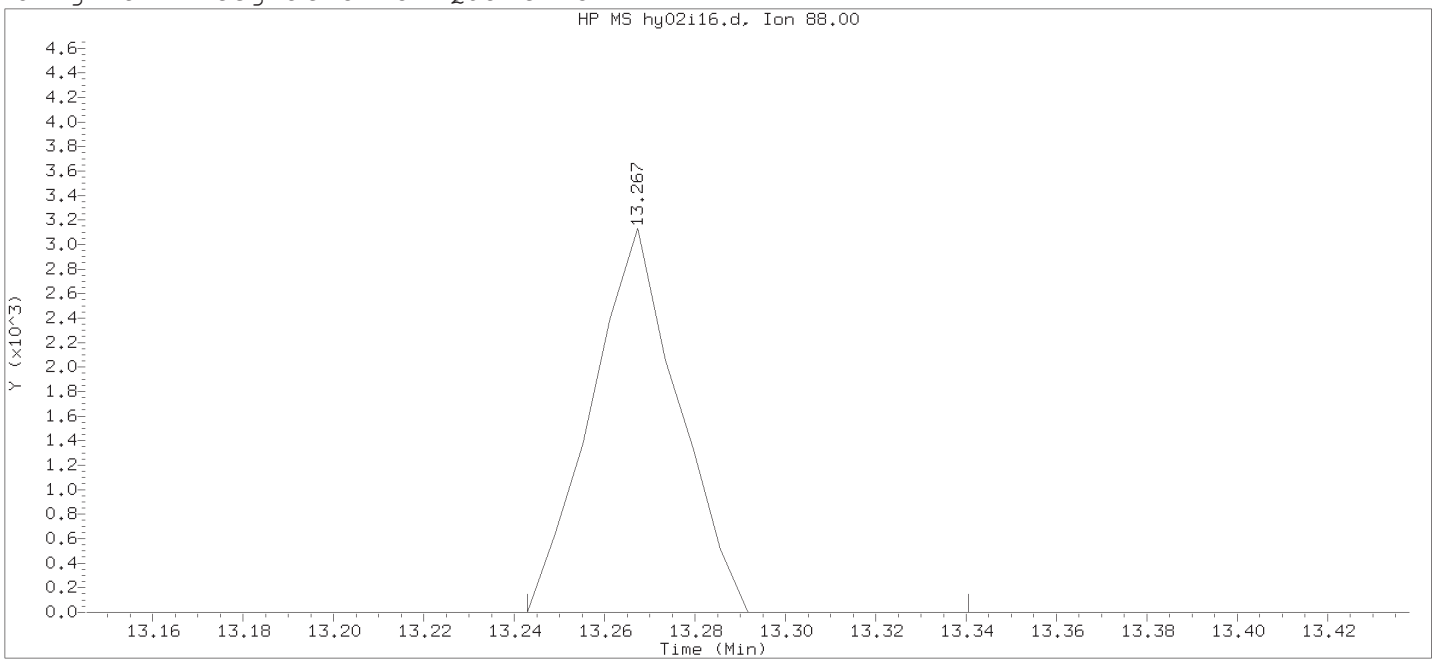
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

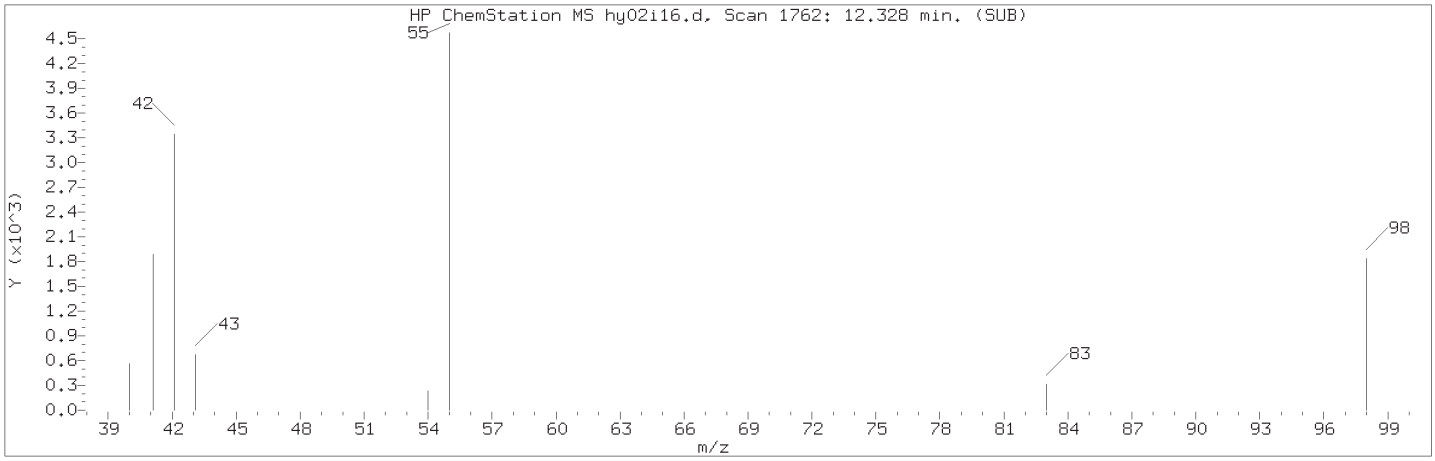
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:20
Date, time and analyst ID of latest file update: 02-May-2018 21:20 Automation

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

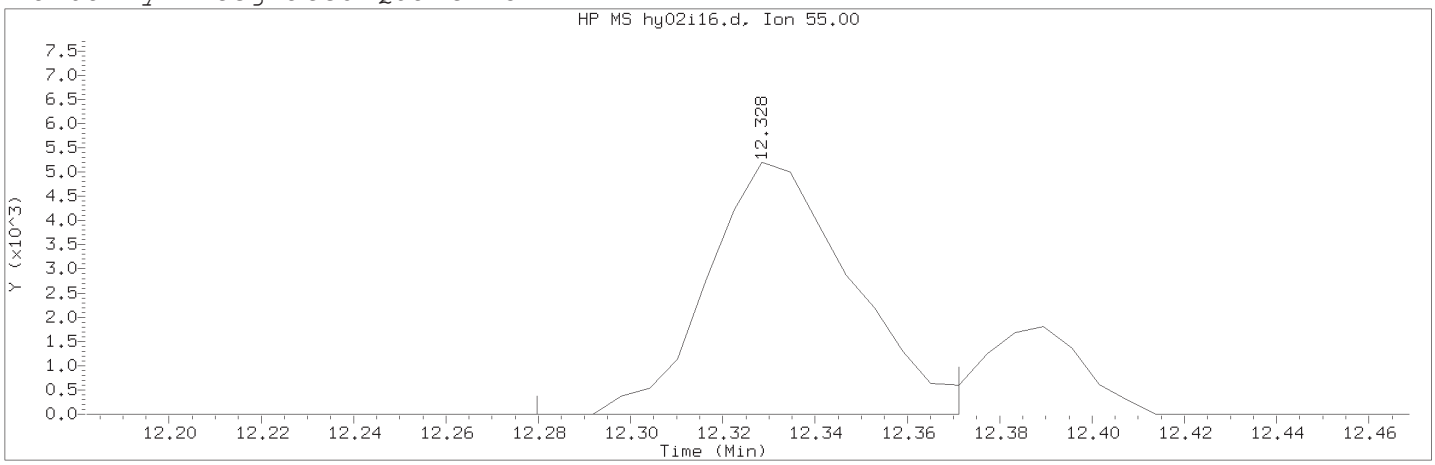
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1916
Retention Time (minutes): 13.267
Quant Ion : 88.00
Area : 4184
On-column Amount (ng) : 0.4845
Integration start scan : 1911 Integration stop scan: 1927
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user id: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

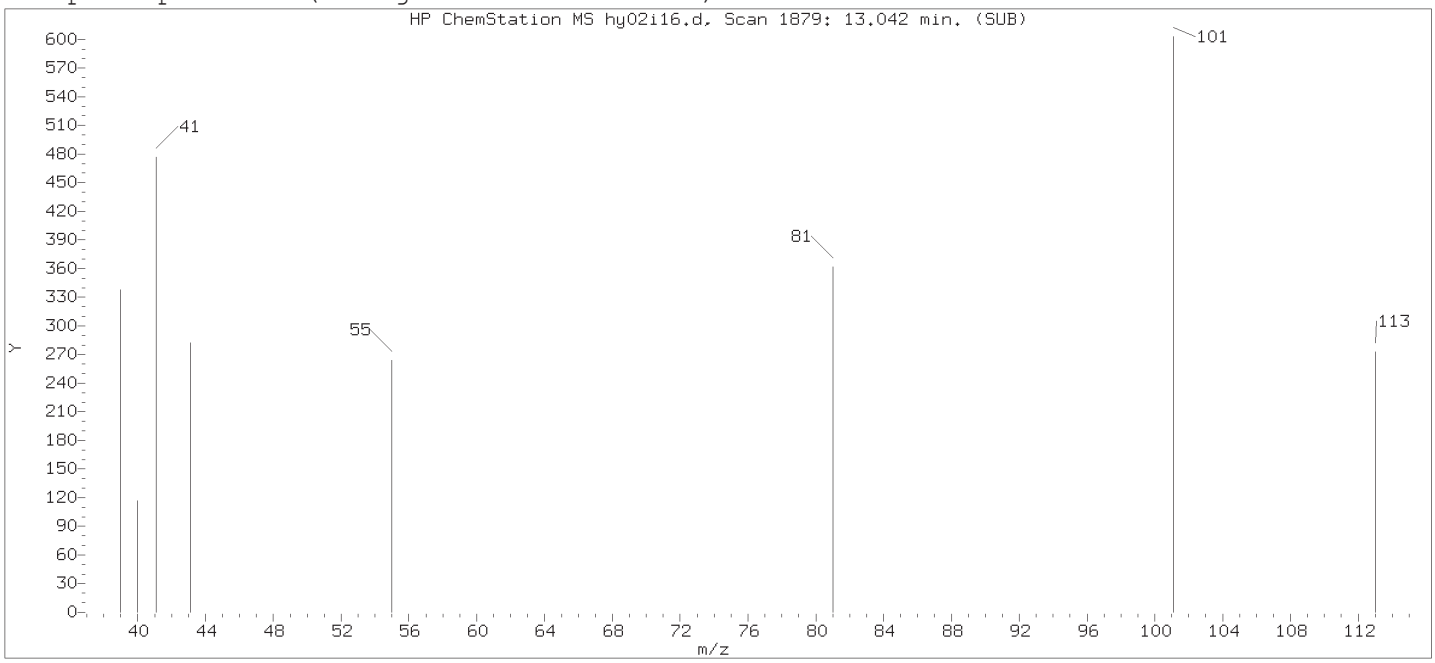
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1762
Retention Time (minutes): 12.328
Quant Ion : 55.00
Area (flag) : 11242M
On-Column Amount (ng) : 21.6250
Integration start scan : 1753 Integration stop scan: 1768
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

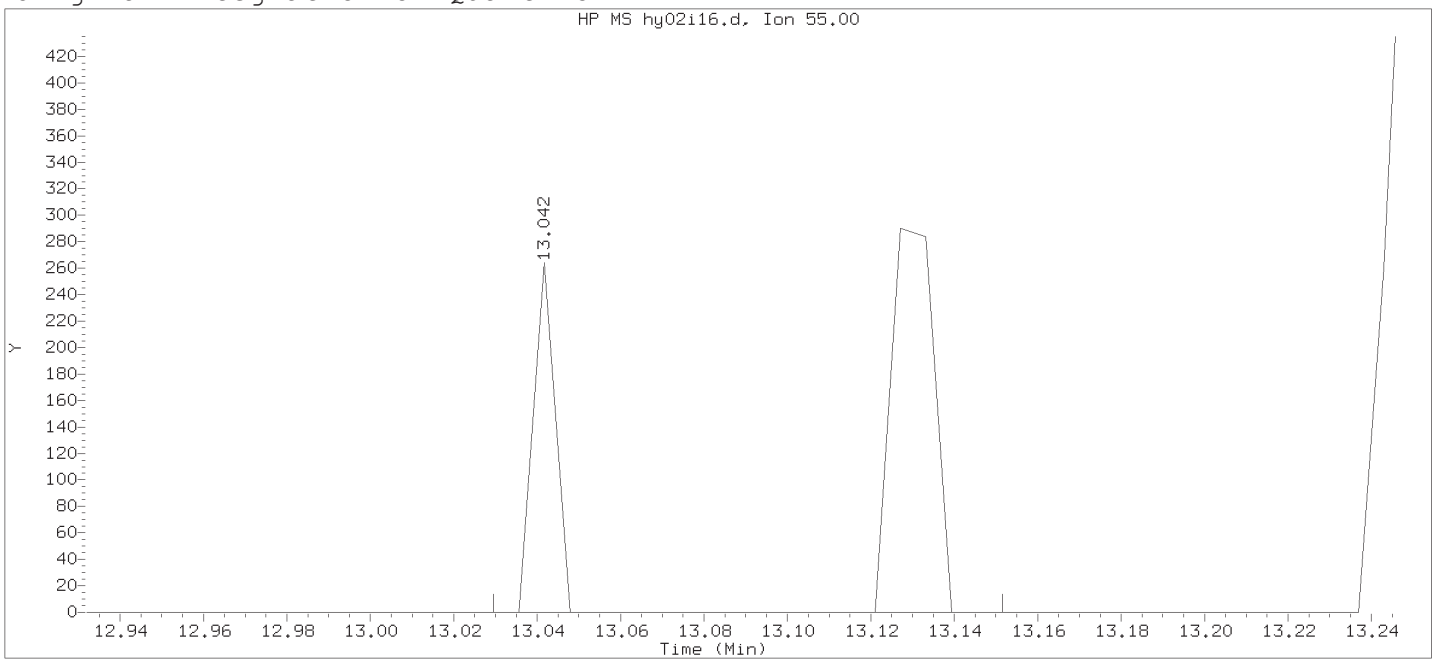
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



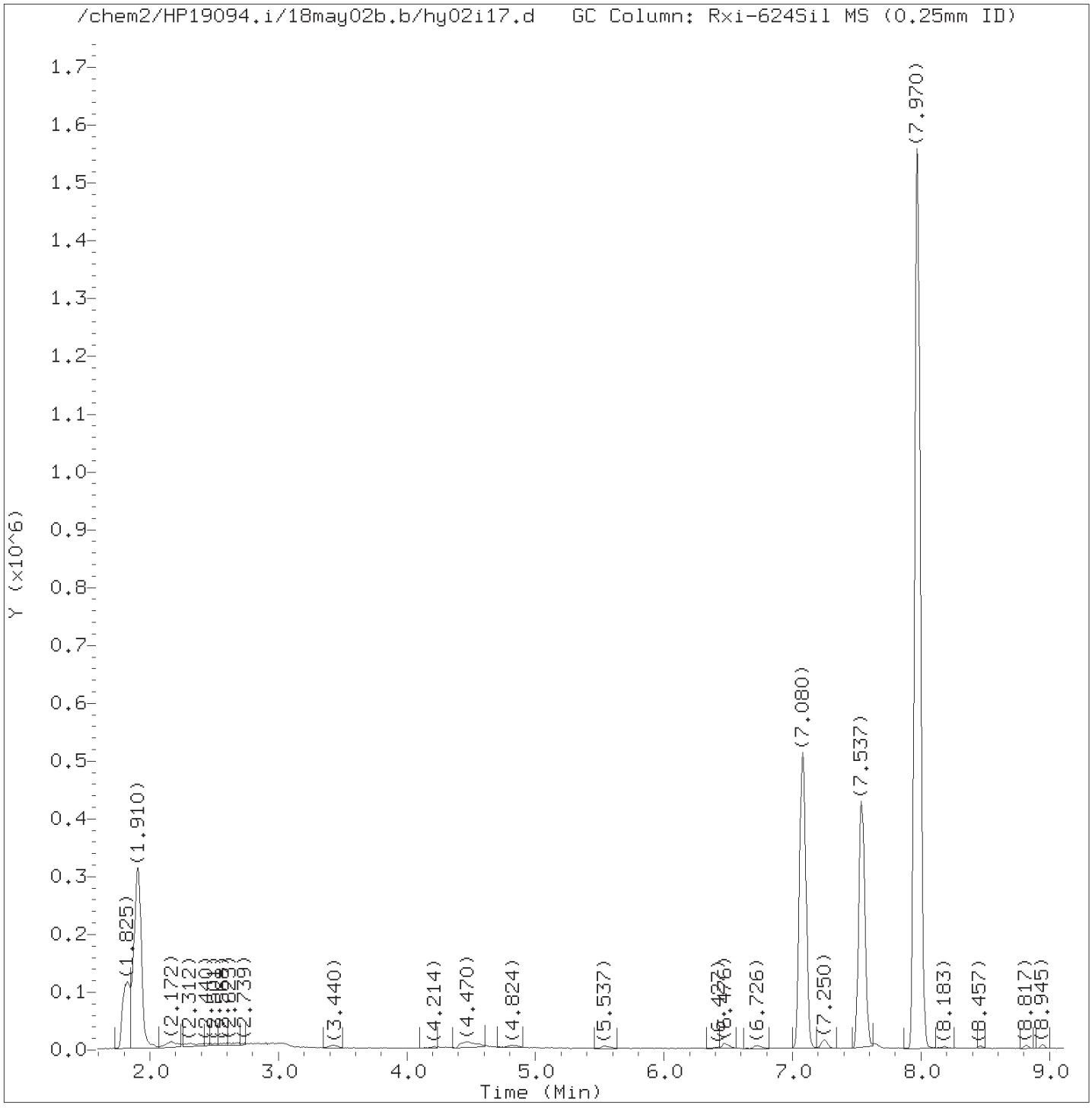
Data File: /chem2/HP19094.i/18may02b.b/hy02i16.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:02 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:20
Date, time and analyst ID of latest file update: 02-May-2018 21:20 Automation

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1879
Retention Time (minutes): 13.042
Quant Ion : 55.00
Area : 306
On-column Amount (ng) : 0.6844
Integration start scan : 1876 Integration stop scan: 1896
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: DVV10203



Total Ion Chromatogram (TIC)

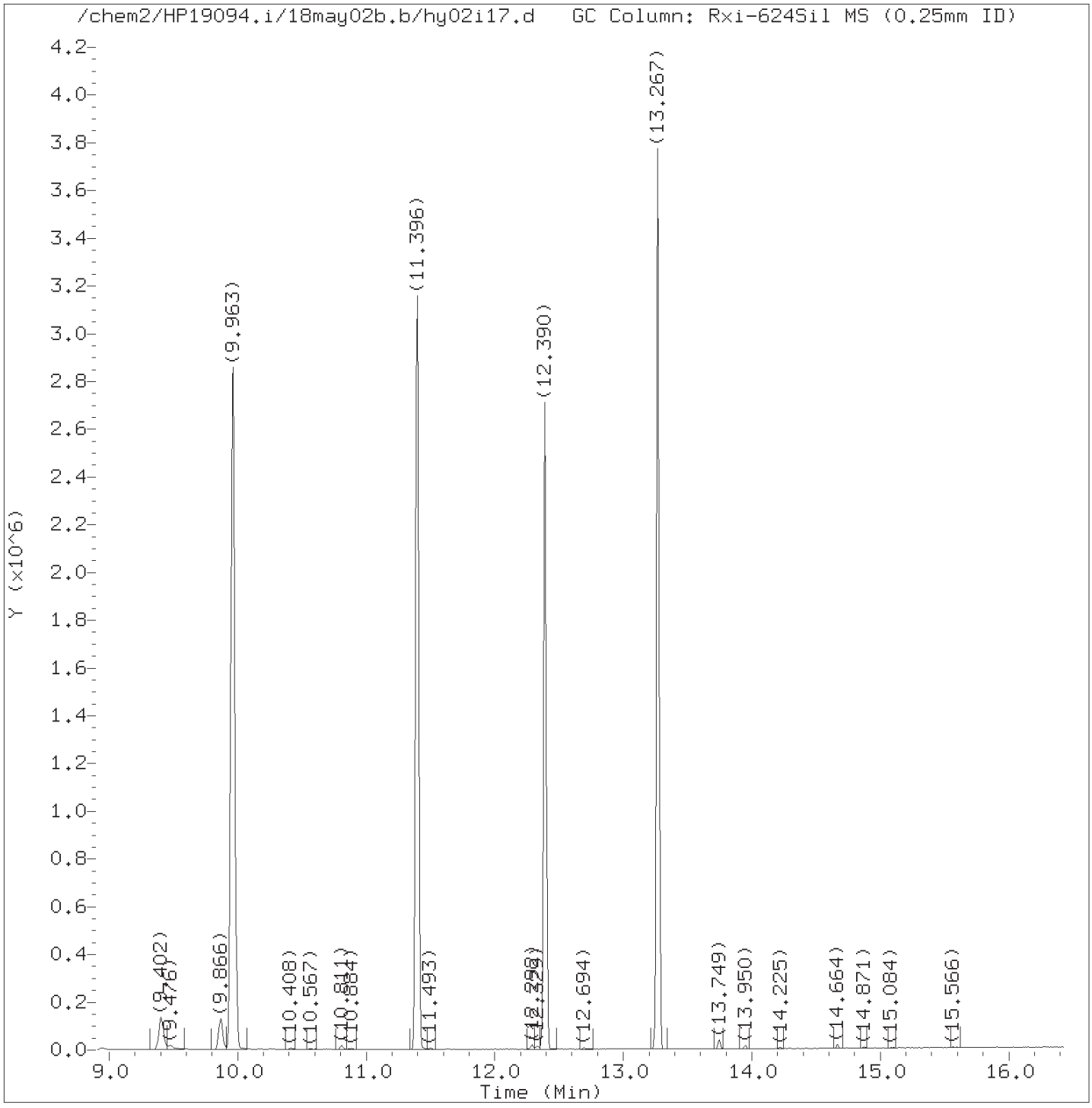
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

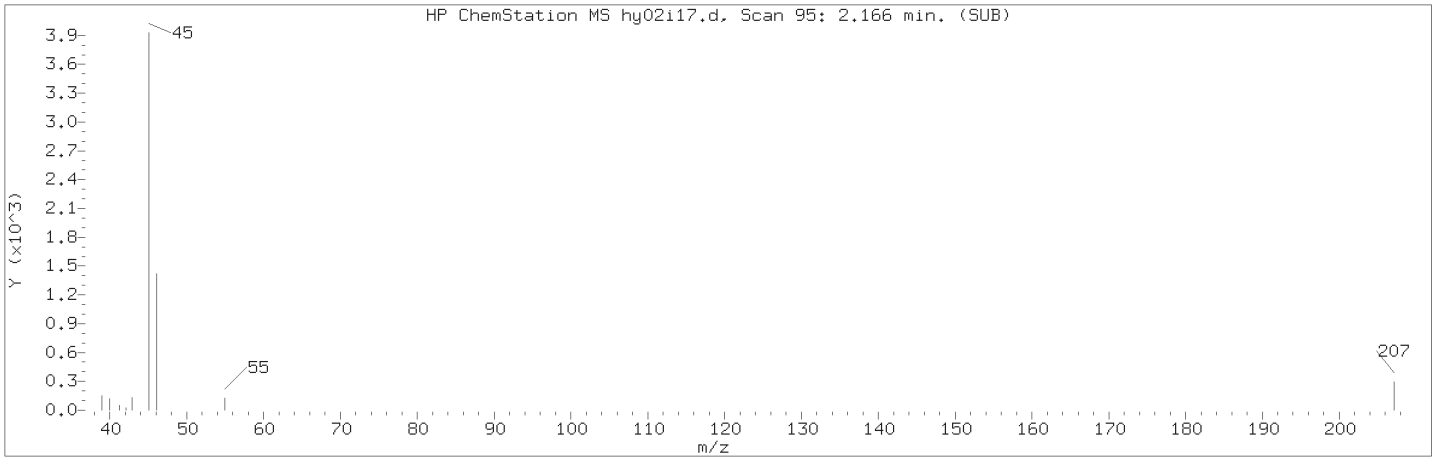
Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.166	45	15219M	0.211
25) Acetonitrile	(1)	4.214	41	18284M	8.644
26)*t-Butyl Alcohol-d10	(1)	4.476	65	87604	50.000
36) Vinyl Acetate	(2)	5.537	43	14183	0.206
43) Methyl Acrylate	(2)	6.476	55	20610	0.972
53) 1-Chlorobutane	(2)	7.256	56	20042	0.197
63)*Fluorobenzene	(2)	7.970	96	2247400	10.000
77) Chloroacetonitrile	(2)	9.476	75	8139	9.630
78) 2-Chloroethyl vinyl ether	(2)	9.476	63	3424	0.169
97)*Chlorobenzene-d5	(3)	11.396	117	1641487	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	3969M	0.350
112) Cyclohexanone	(1)	12.329	55	6386M	11.068
133)*1,4-Dichlorobenzene-d4	(4)	13.267	152	866486	10.000
142) Hexachloroethane	(4)	13.749	117	6486	0.178

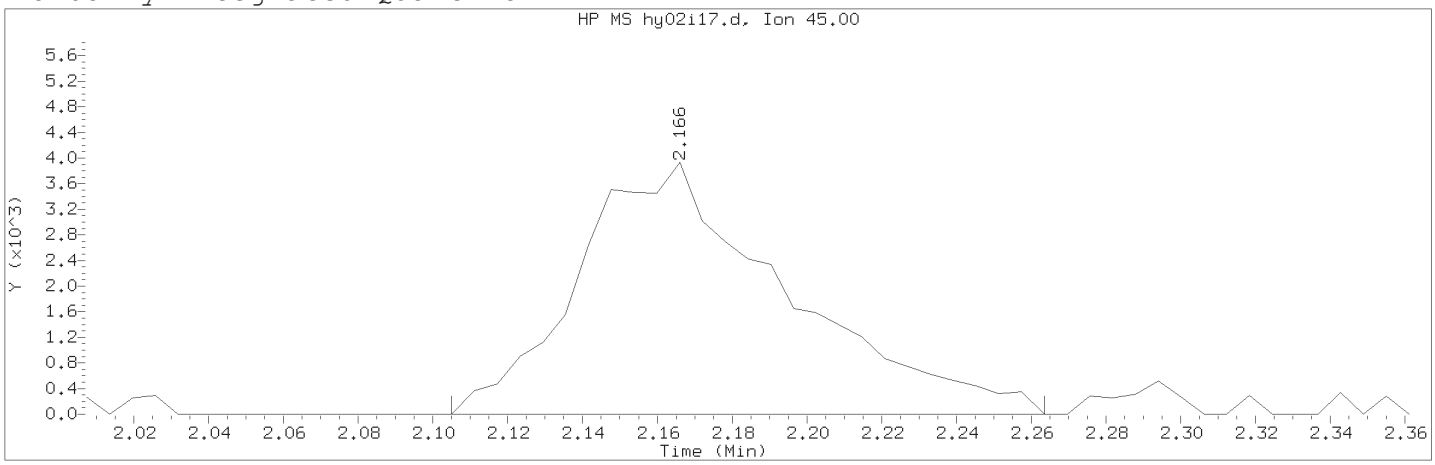
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

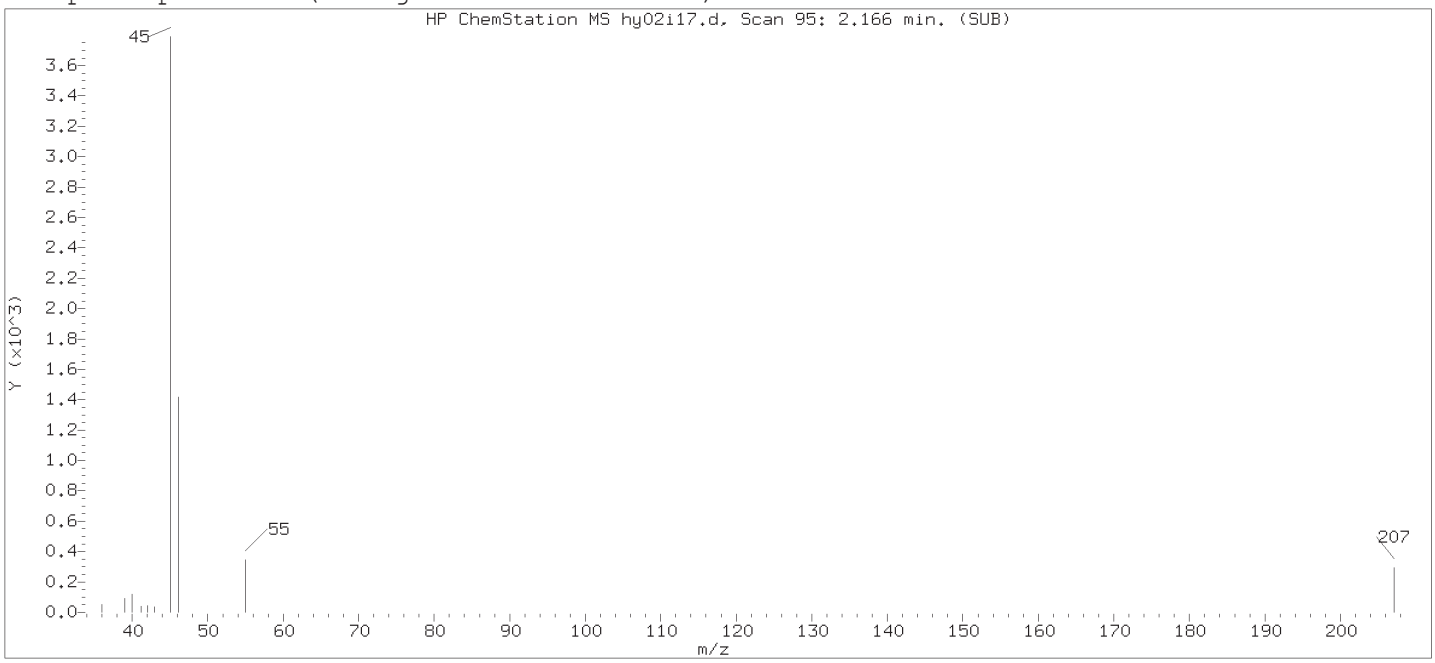
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 95
Retention Time (minutes): 2.166
Quant Ion : 45.00
Area (flag) : 15219M
On-Column Amount (ng) : 0.2109
Integration start scan : 84 Integration stop scan: 110
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

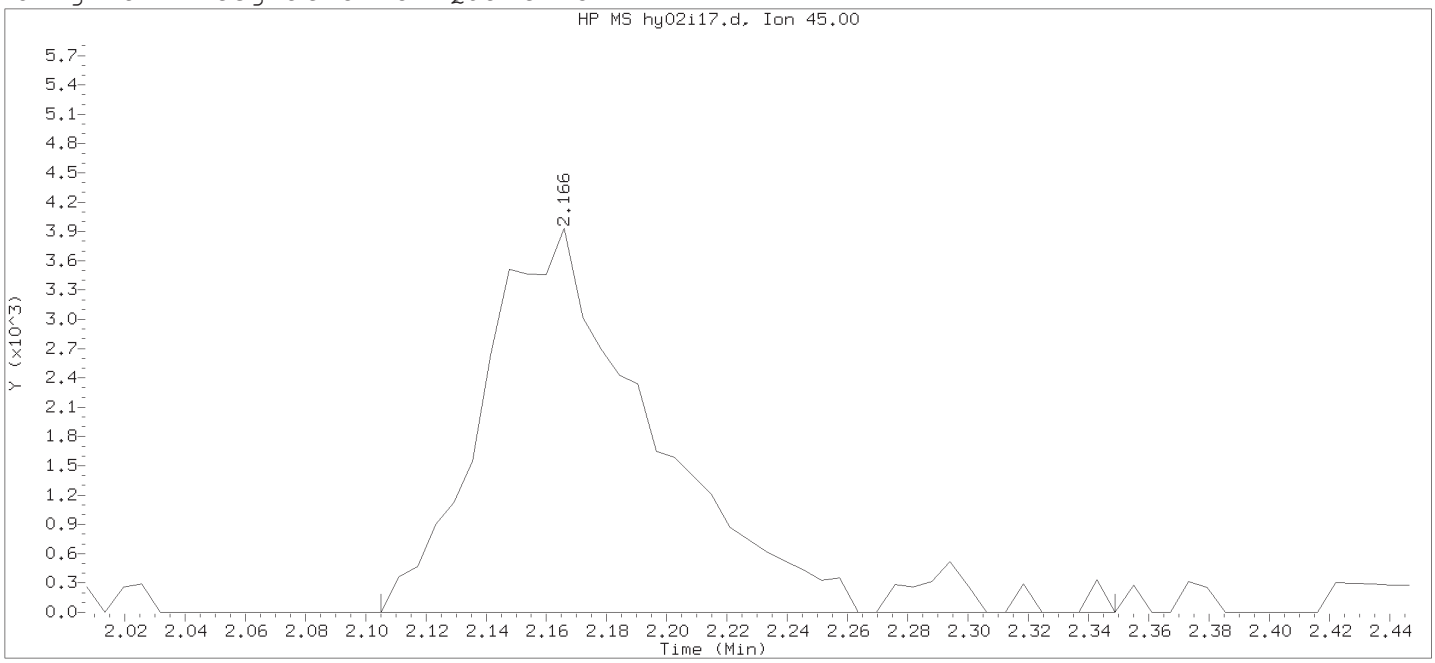
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

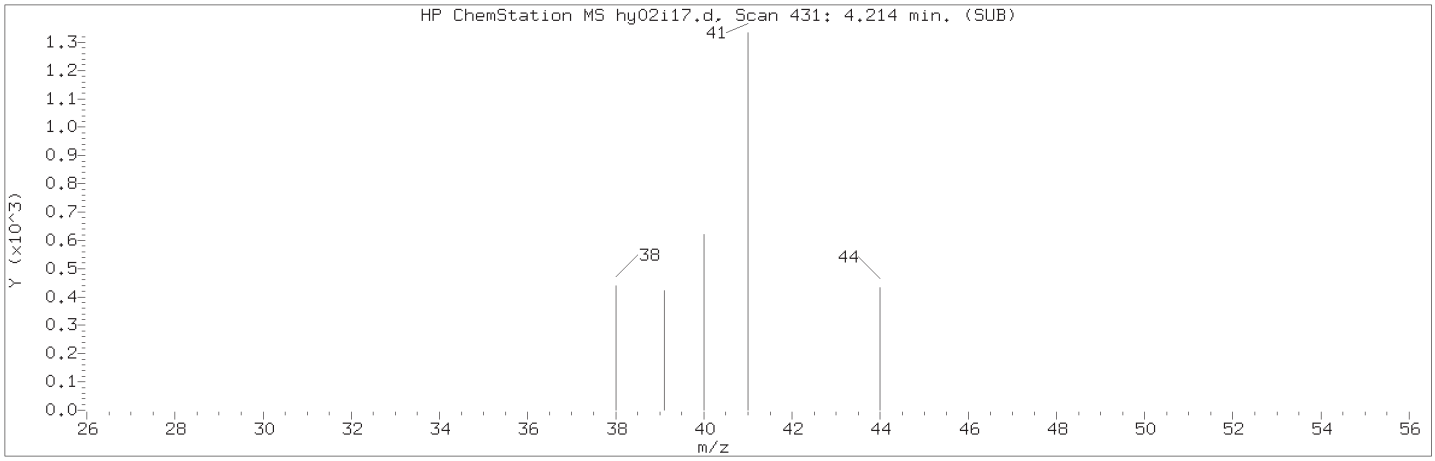
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:41
Date, time and analyst ID of latest file update: 02-May-2018 21:41 Automation

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

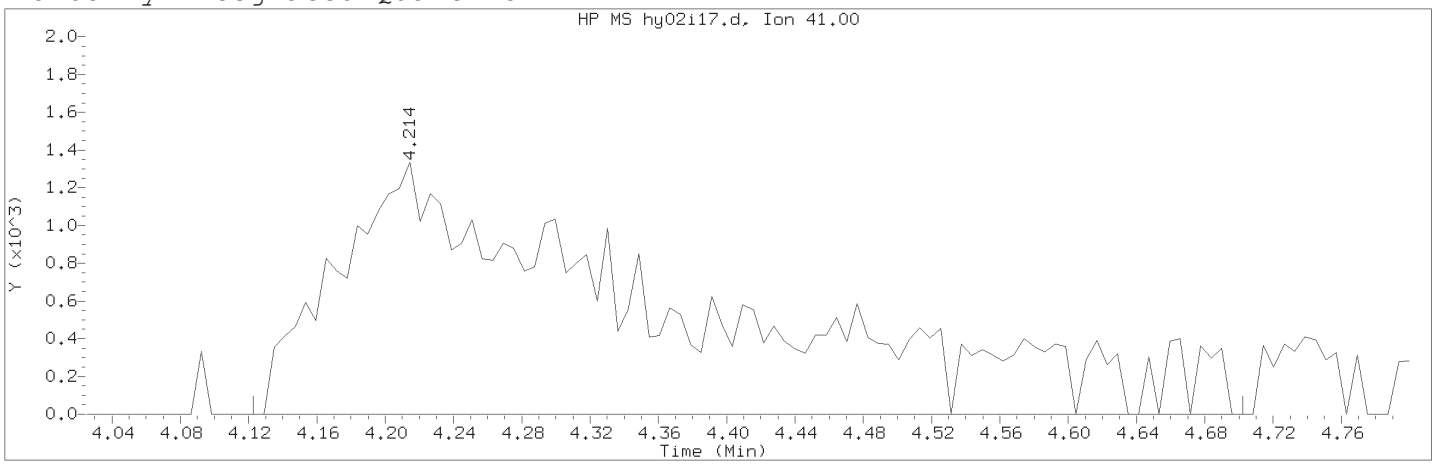
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 95
Retention Time (minutes): 2.166
Quant Ion : 45.00
Area : 16050
On-column Amount (ng) : 0.2226
Integration start scan : 84 Integration stop scan: 124
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

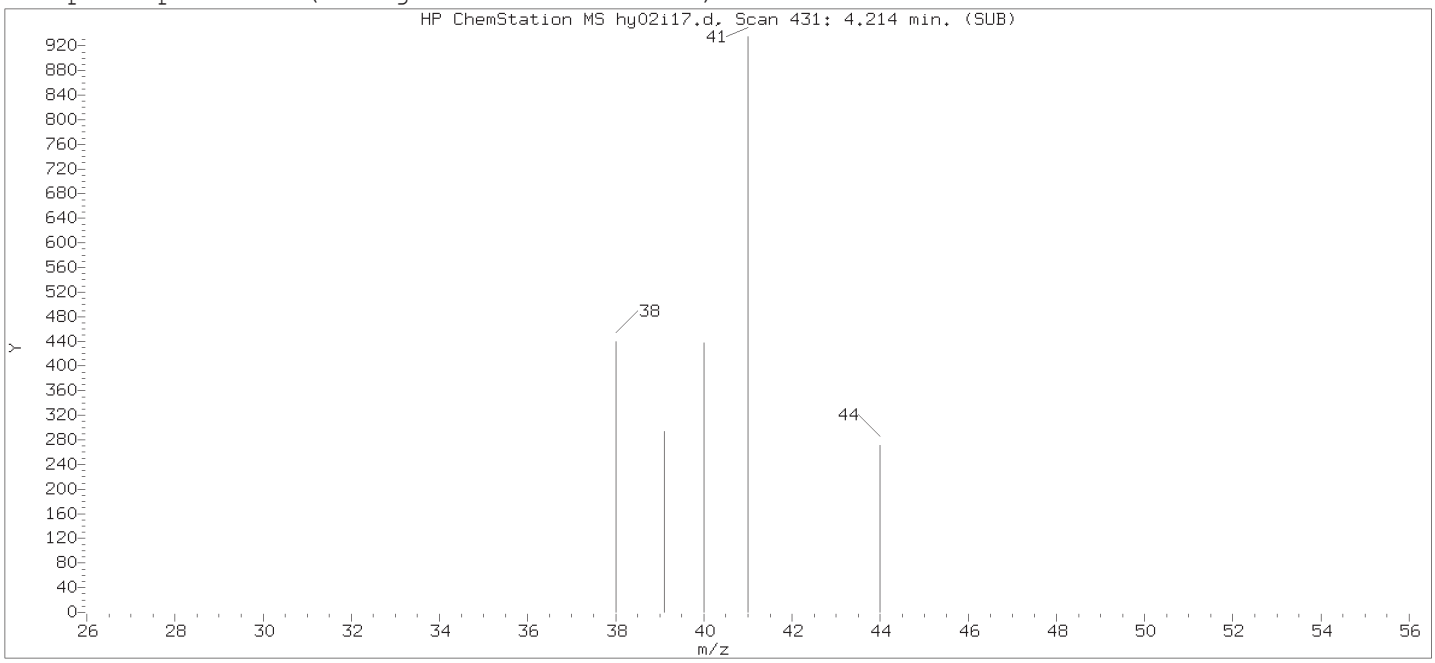
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 431
Retention Time (minutes): 4.214
Quant Ion : 41.00
Area (flag) : 18284M
On-Column Amount (ng) : 8.6435
Integration start scan : 415 Integration stop scan: 510
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

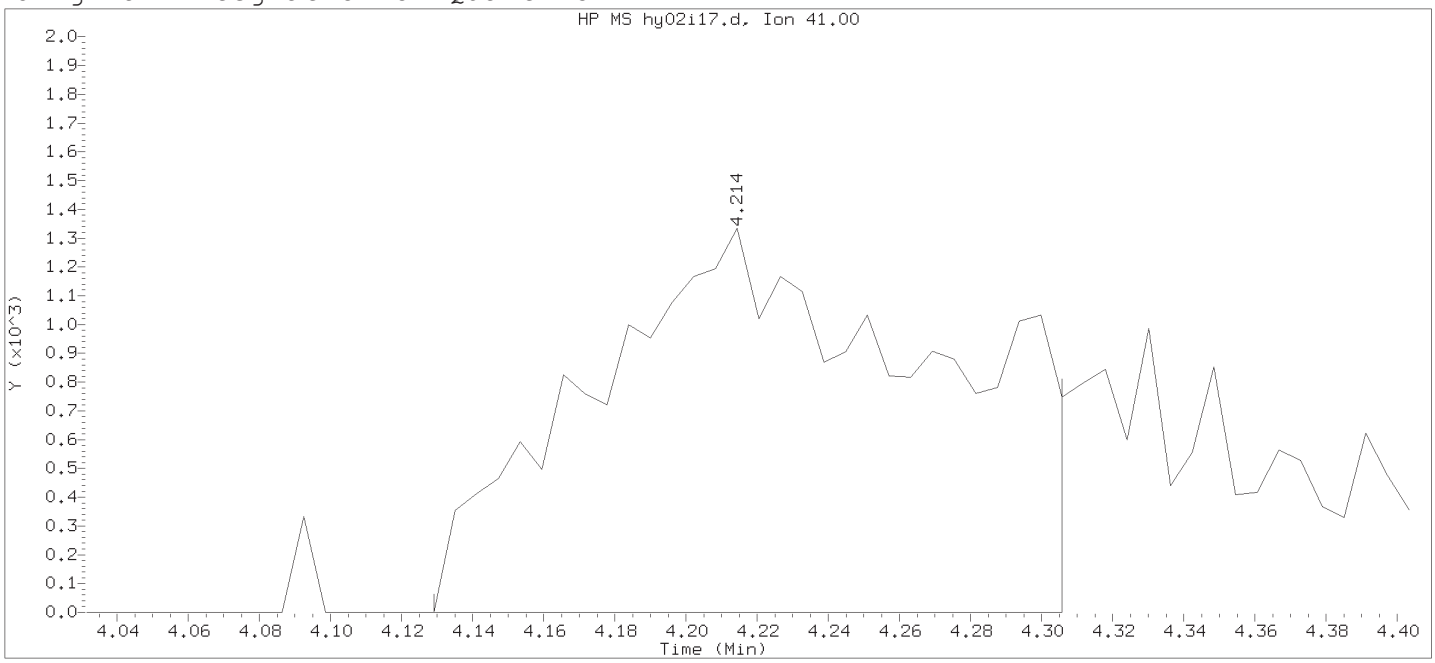
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

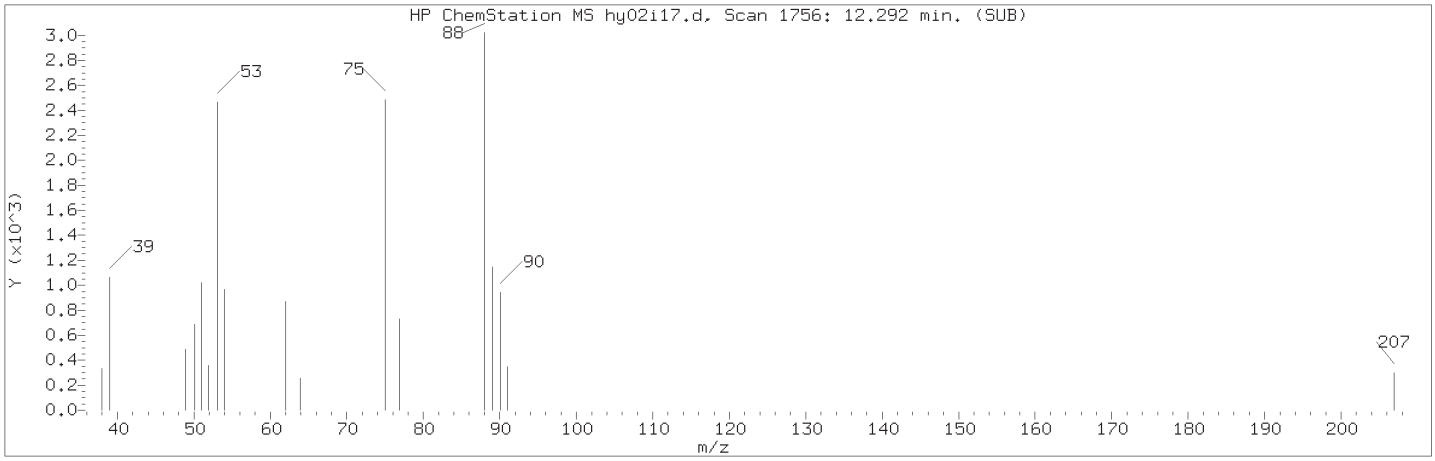
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:41
Date, time and analyst ID of latest file update: 02-May-2018 21:41 Automation

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

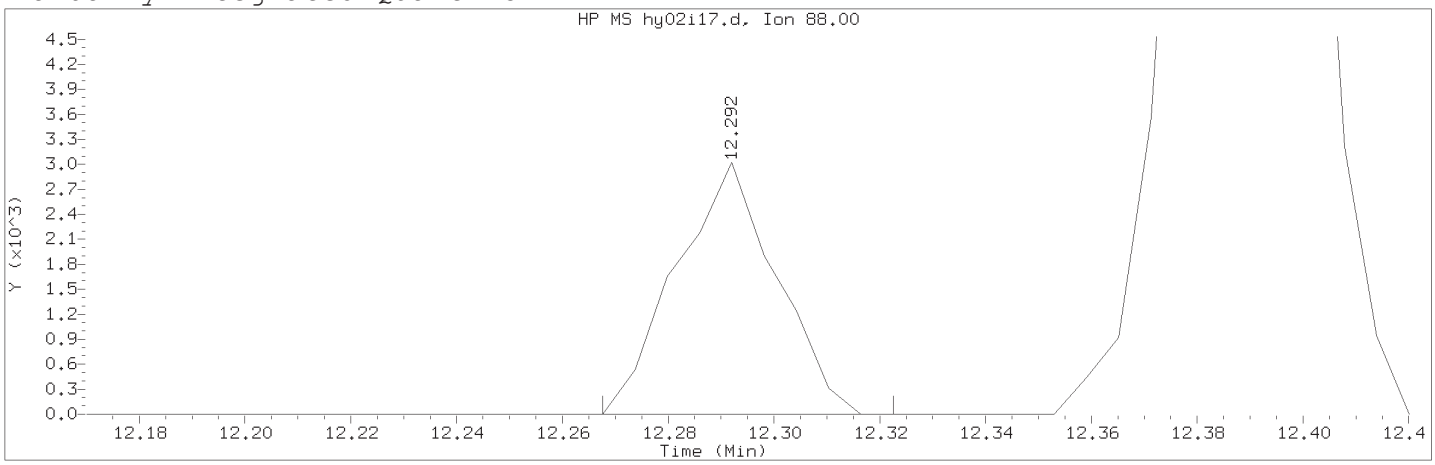
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 431
Retention Time (minutes): 4.214
Quant Ion : 41.00
Area : 9088
On-column Amount (ng) : 5.0856
Integration start scan : 416 Integration stop scan: 445
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

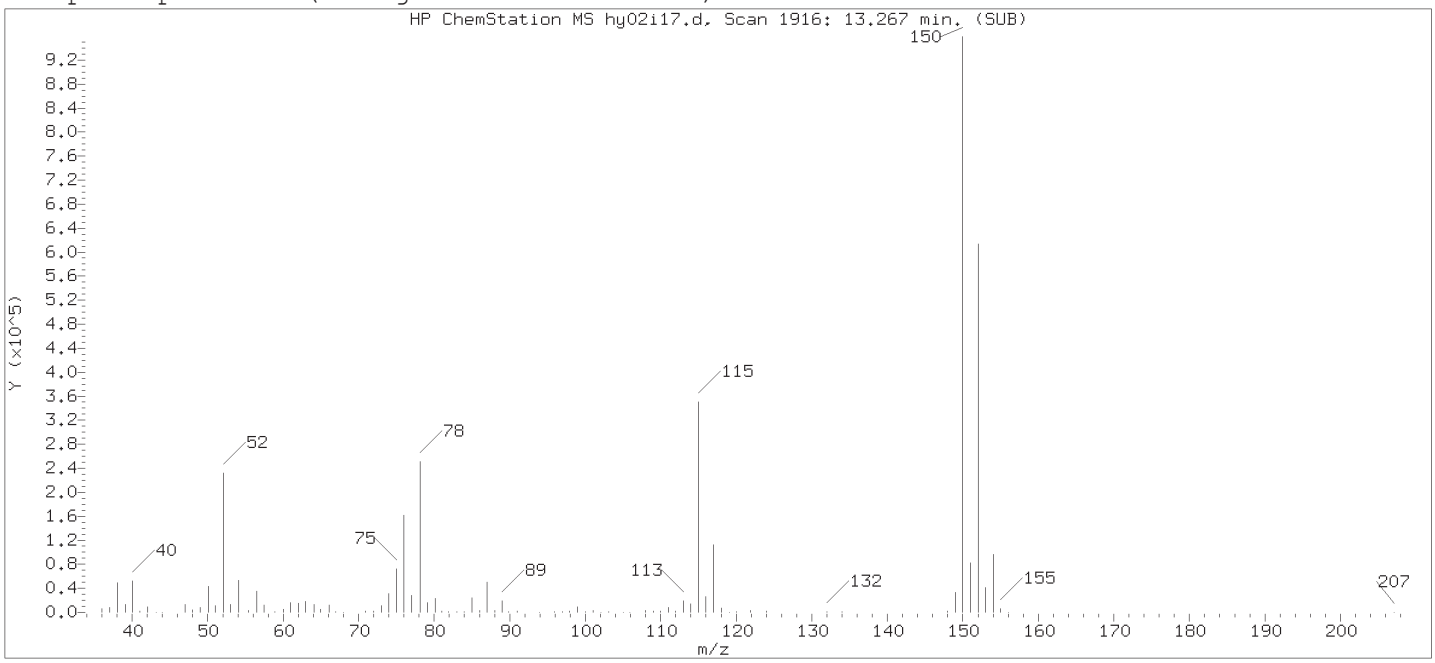
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 3969M
On-Column Amount (ng) : 0.3498
Integration start scan : 1751 Integration stop scan: 1760
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

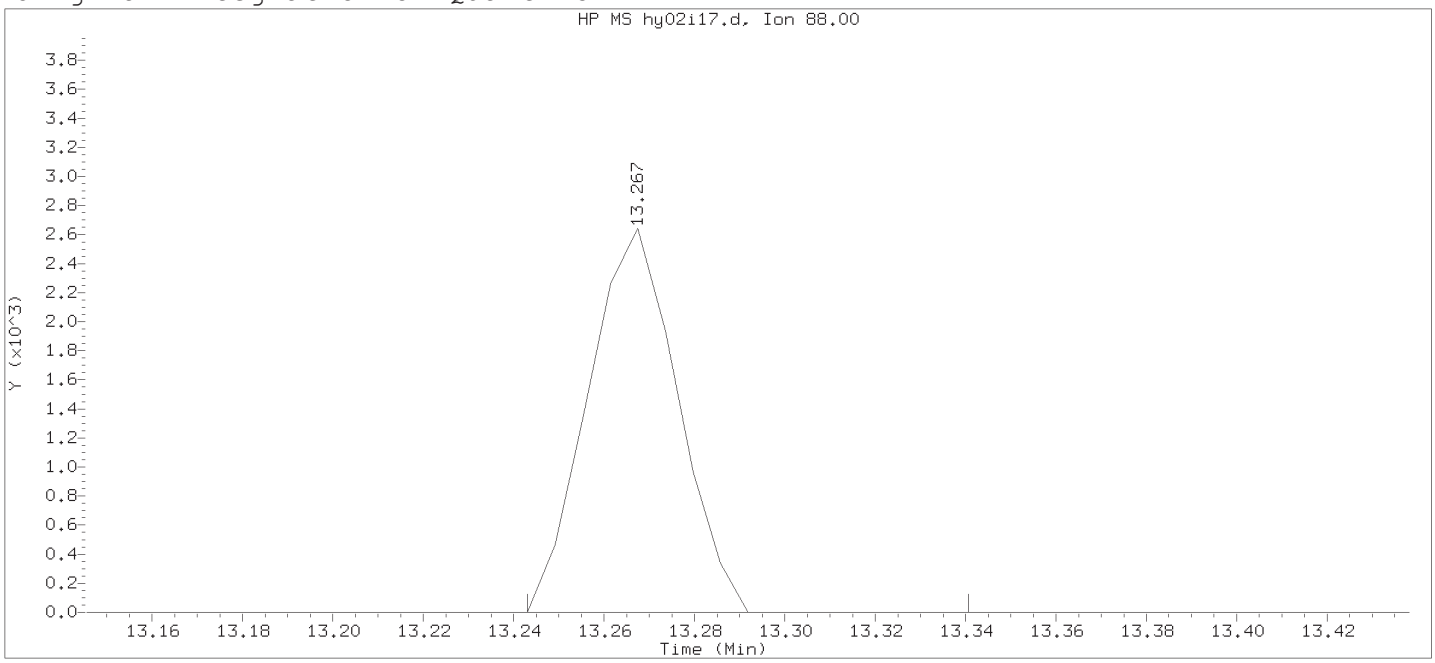
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

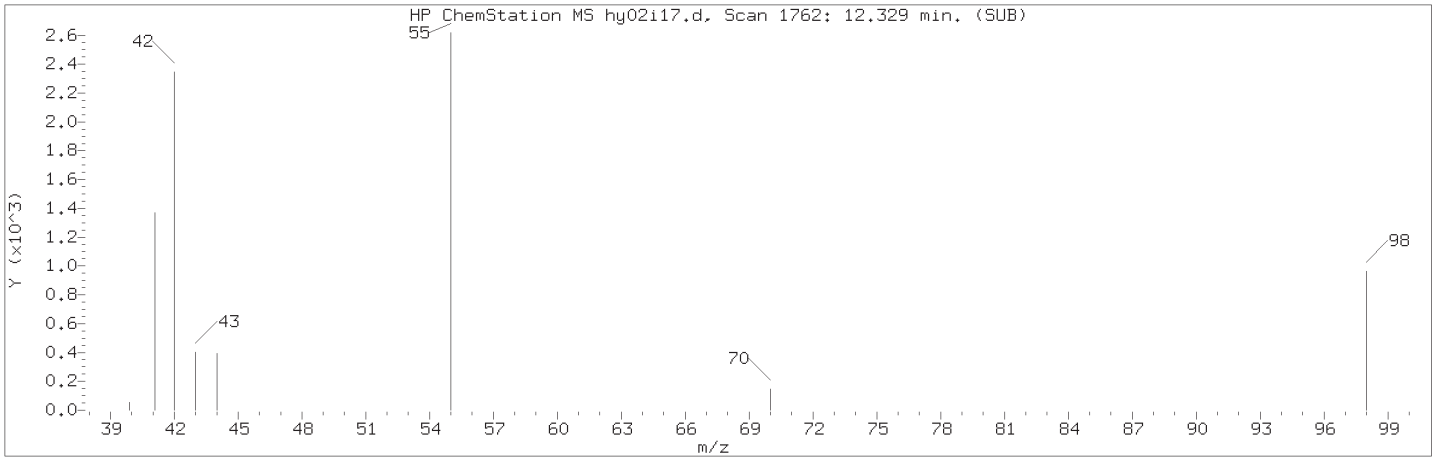
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:41
Date, time and analyst ID of latest file update: 02-May-2018 21:41 Automation

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

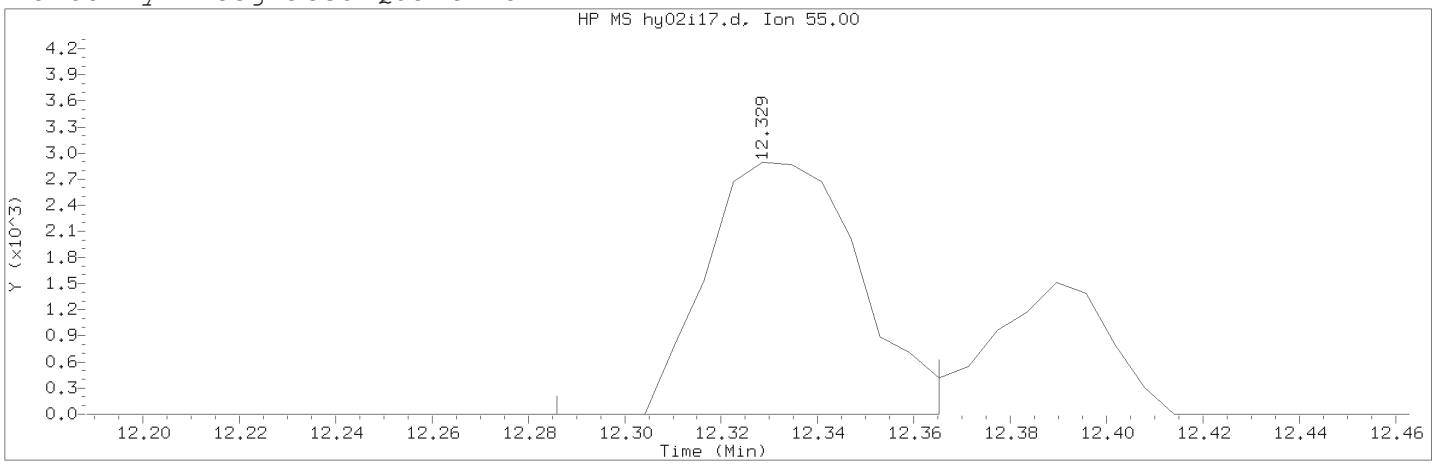
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1916
Retention Time (minutes): 13.267
Quant Ion : 88.00
Area : 3639
On-column Amount (ng) : 0.3604
Integration start scan : 1911 Integration stop scan: 1927
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:21 dvv10203

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

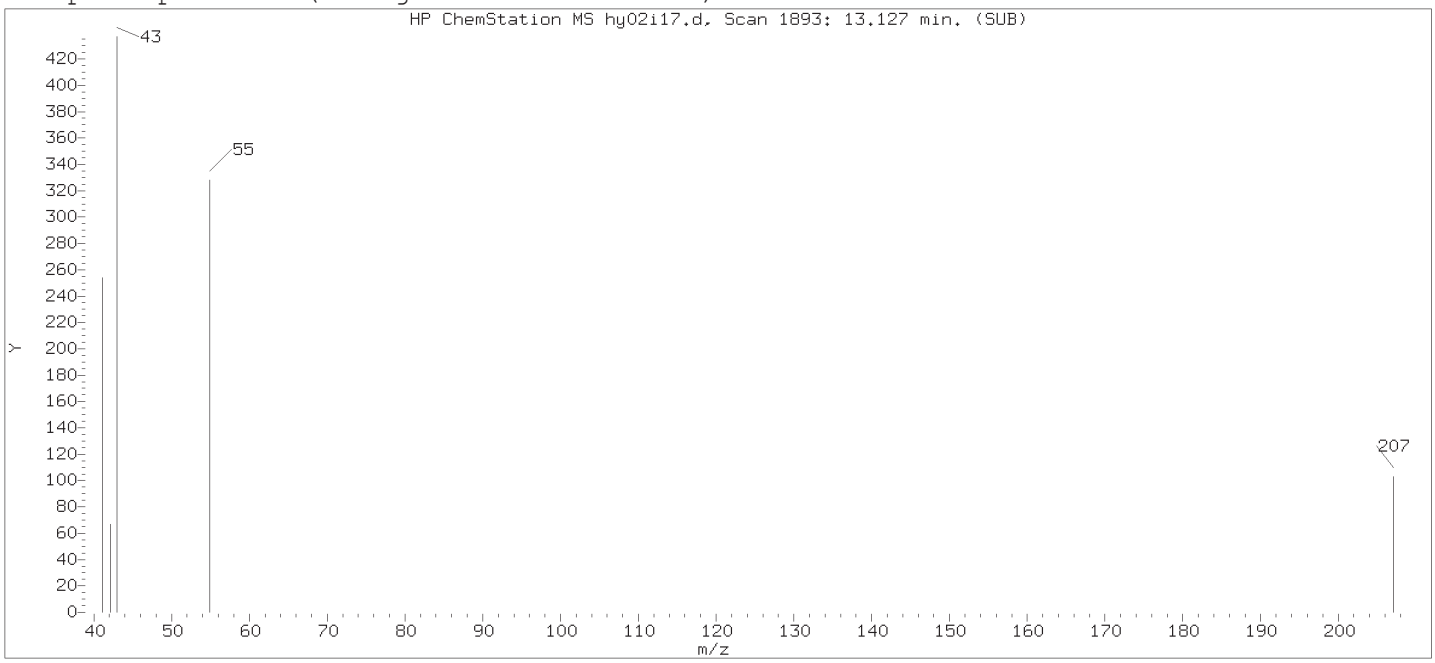
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1762
Retention Time (minutes): 12.329
Quant Ion : 55.00
Area (flag) : 6386M
On-Column Amount (ng) : 11.0679
Integration start scan : 1754 Integration stop scan: 1767
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

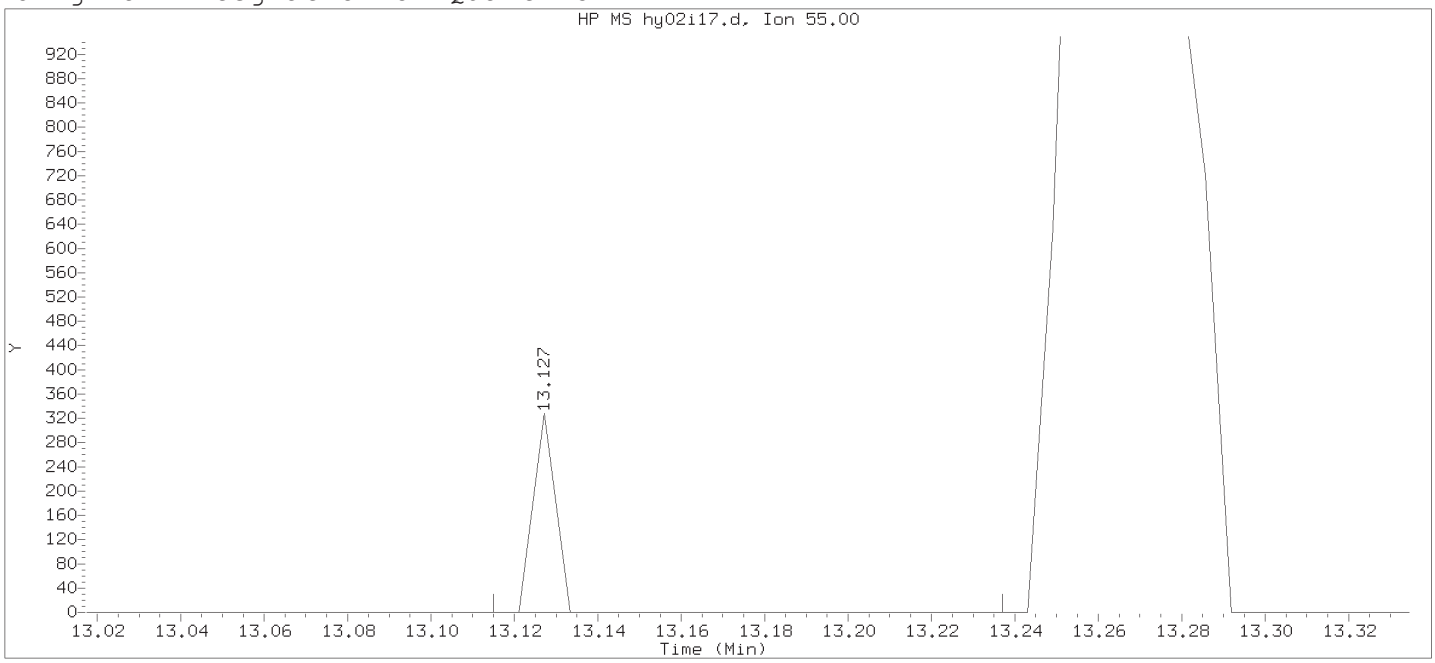
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:22.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



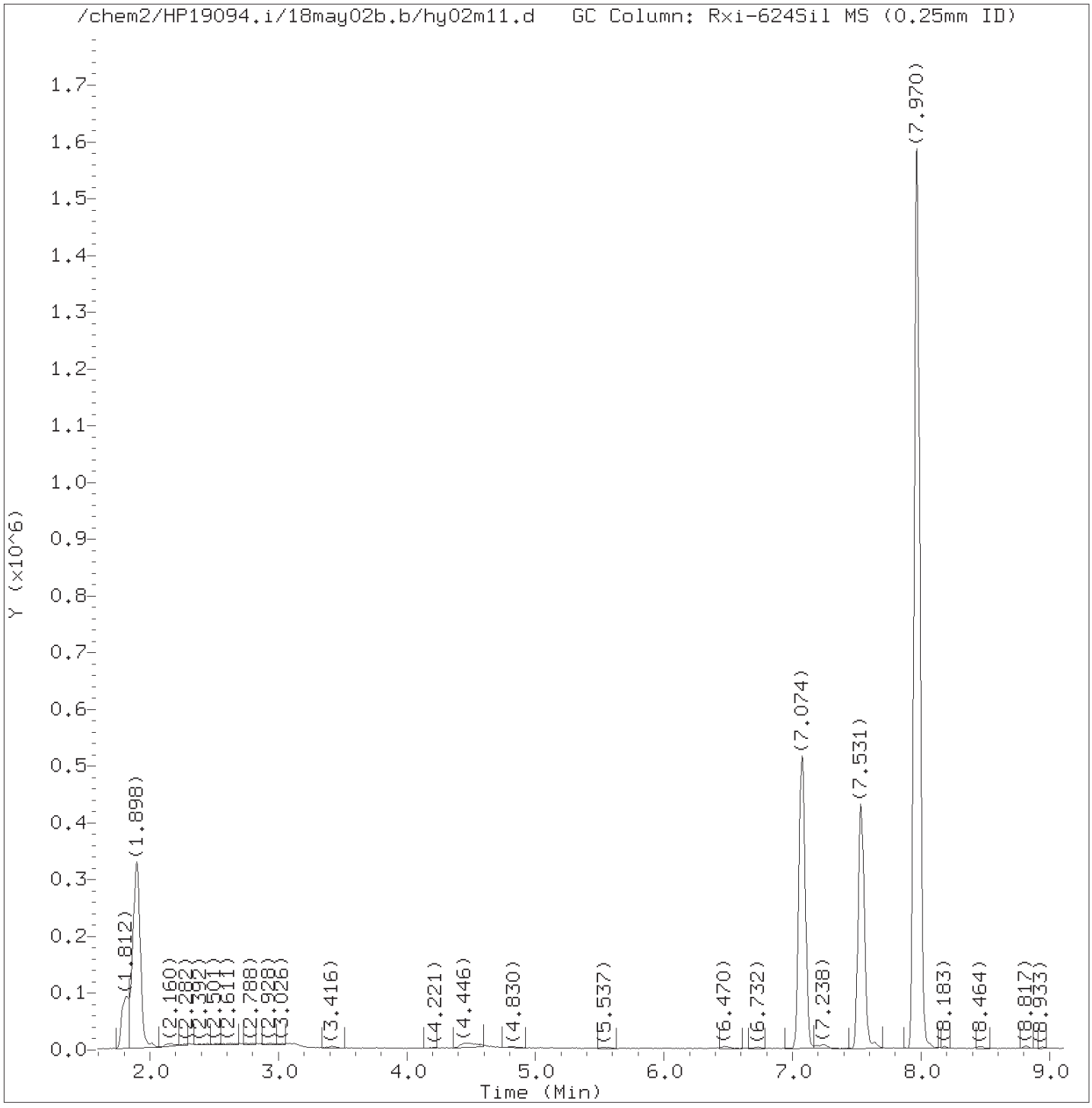
Data File: /chem2/HP19094.i/18may02b.b/hy02i17.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:23 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 02-MAY-2018 21:41
Date, time and analyst ID of latest file update: 02-May-2018 21:41 Automation

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compound Number	: 112		
Compound Name	: Cyclohexanone		
Scan Number	: 1893		
Retention Time (minutes)	: 13.127		
Quant Ion	: 55.00		
Area	: 119		
On-column Amount (ng)	: 0.2868		
Integration start scan	: 1890	Integration stop scan:	1910
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 05/02/2018 at 22:22.
Target 3.5 esignature user id: DVV10203



Total Ion Chromatogram (TIC)

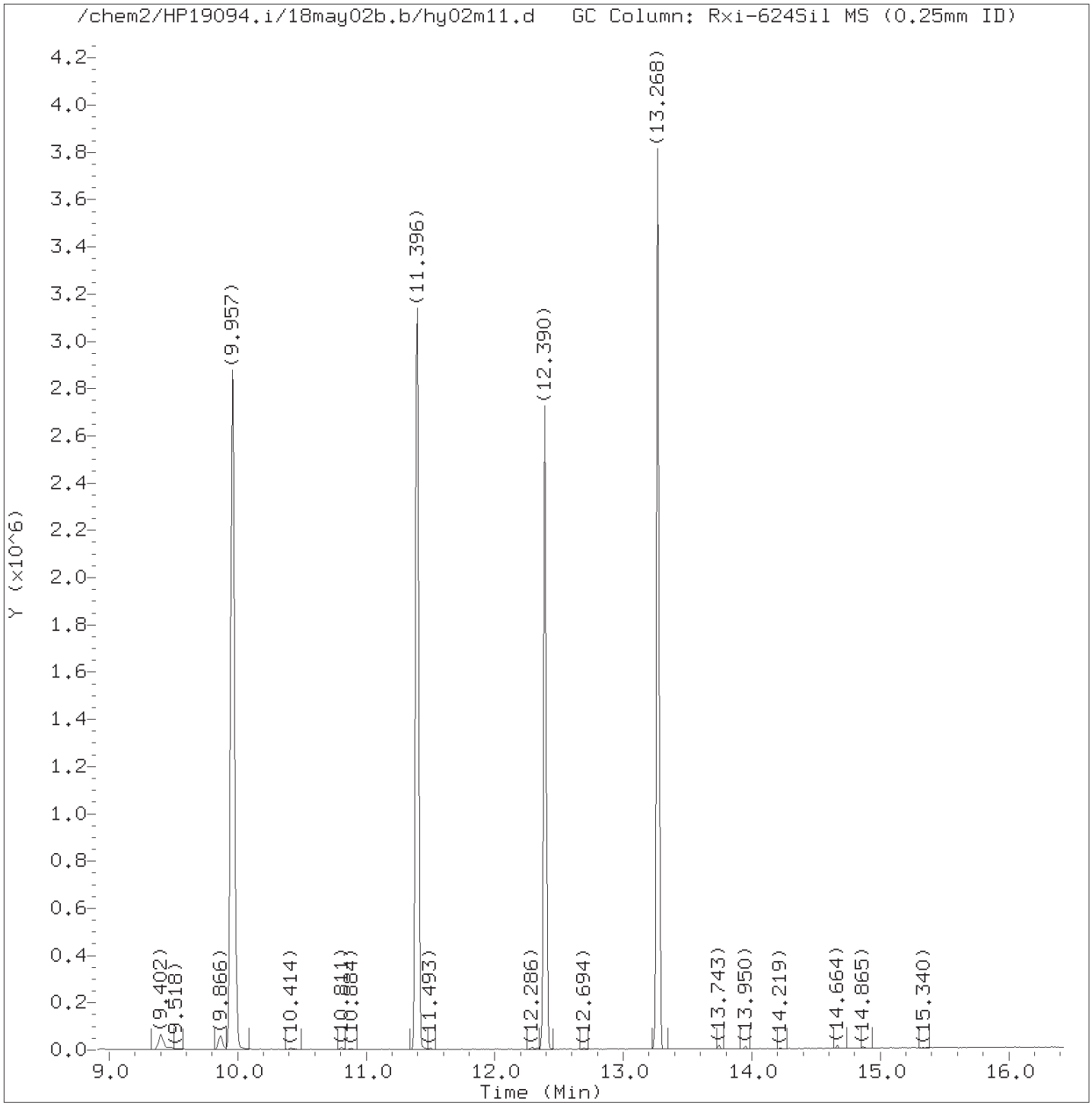
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

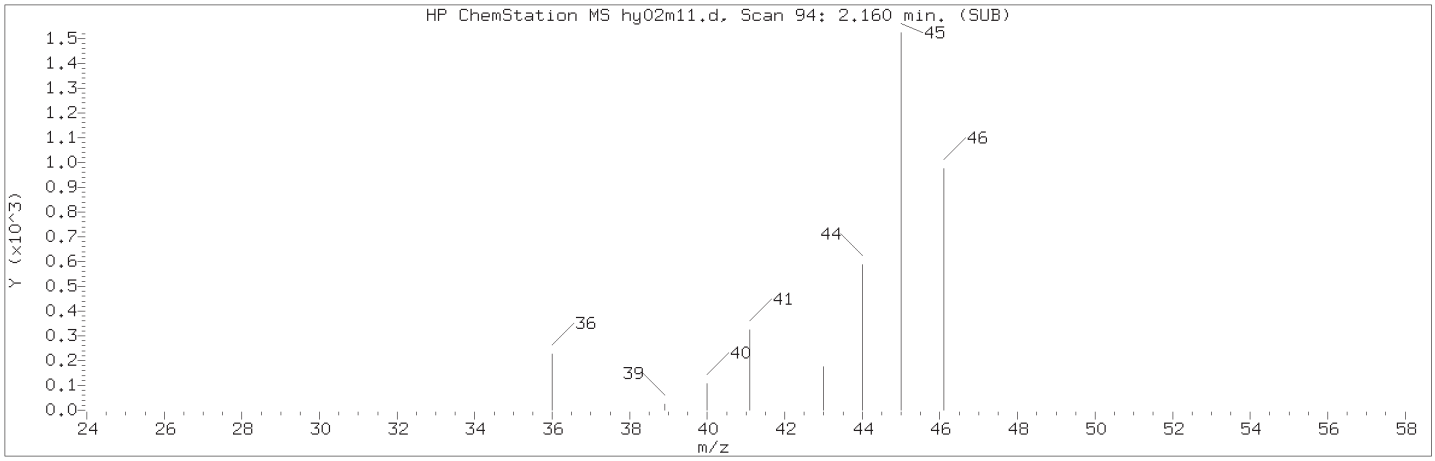
Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.160	45	7839M	0.107
25) Acetonitrile	(1)	4.208	41	8867M	4.300
26)*t-Butyl Alcohol-d10	(1)	4.458	65	85408M	50.000
36) Vinyl Acetate	(2)	5.525	43	6614	0.095
43) Methyl Acrylate	(2)	6.476	55	9556M	0.444
50)$Dibromofluoromethane	(2)	7.074	113	541631	9.601
53) 1-Chlorobutane	(2)	7.238	56	8275	0.080
57)$1,2-Dichloroethane-d4	(2)	7.537	102	99600	10.012
63)*Fluorobenzene	(2)	7.970	96	2283251	10.000
77) Chloroacetonitrile	(2)	9.476	75	2884	3.359
78) 2-Chloroethyl vinyl ether	(2)	9.482	63	1644	0.080
82)$Toluene-d8	(3)	9.957	98	2300054	10.082
97)*Chlorobenzene-d5	(3)	11.396	117	1651612	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	1506M	0.136
112) Cyclohexanone	(1)	12.341	55	2470M	4.391
111)$4-Bromofluorobenzene	(3)	12.390	95	809970	10.008
133)*1,4-Dichlorobenzene-d4	(4)	13.268	152	873882	10.000
142) Hexachloroethane	(4)	13.749	117	2414	0.066

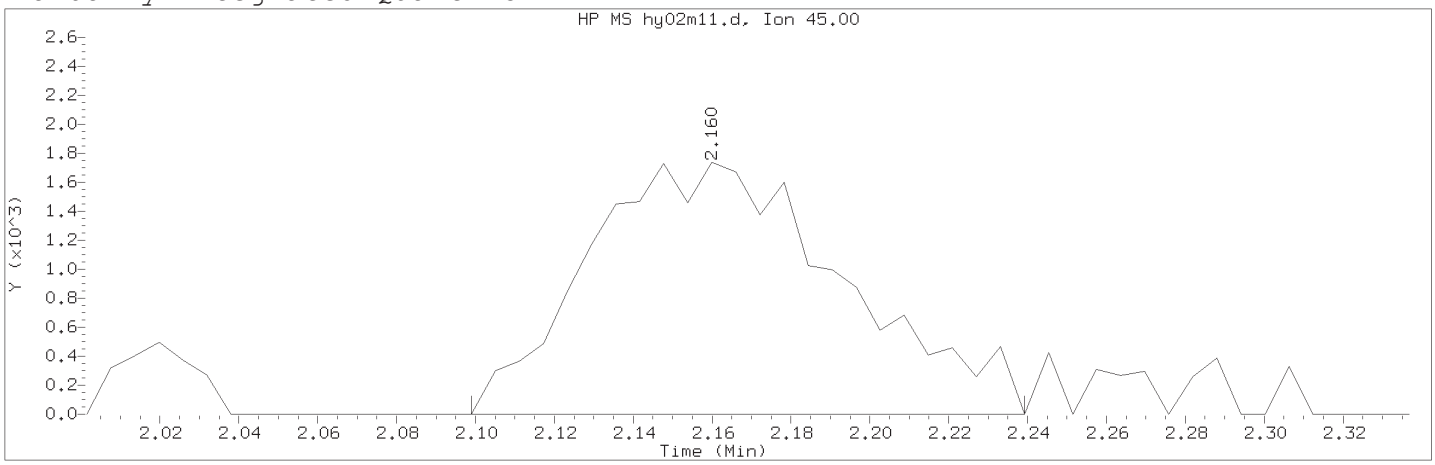
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

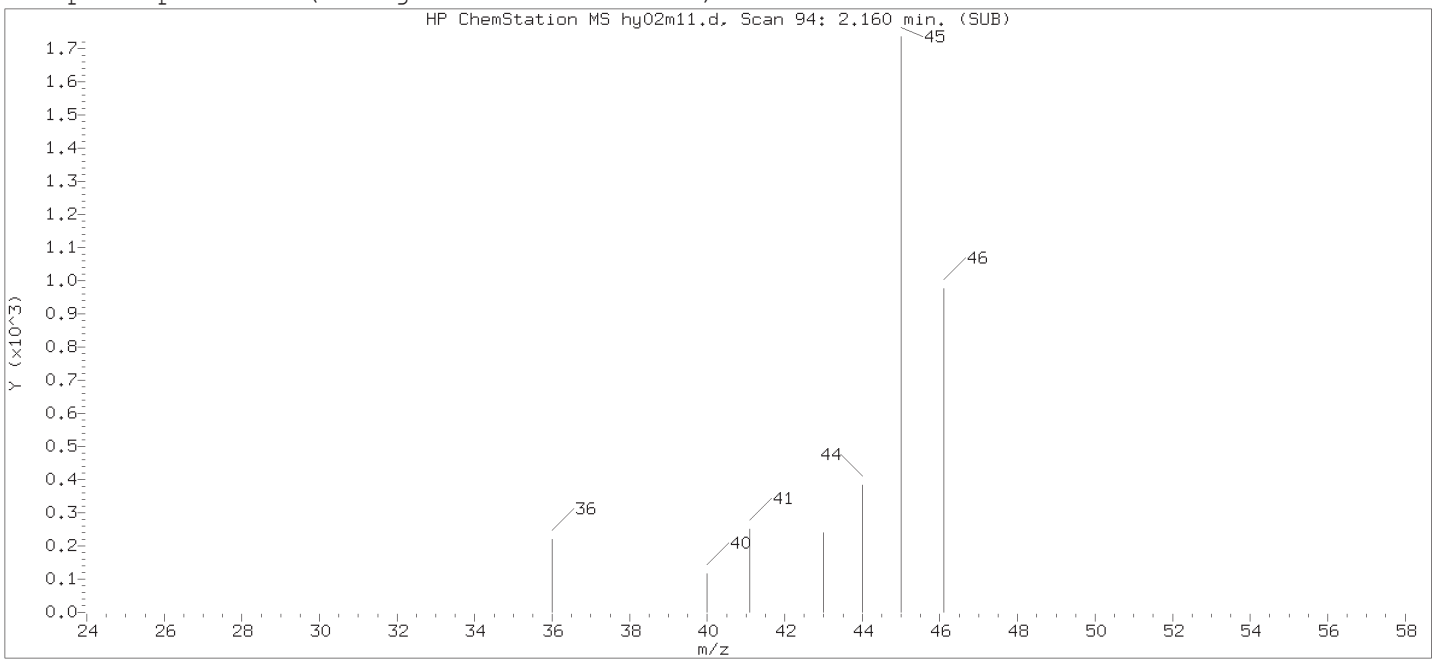
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 94
Retention Time (minutes): 2.160
Quant Ion : 45.00
Area (flag) : 7839M
On-Column Amount (ng) : 0.1069
Integration start scan : 83 Integration stop scan: 106
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

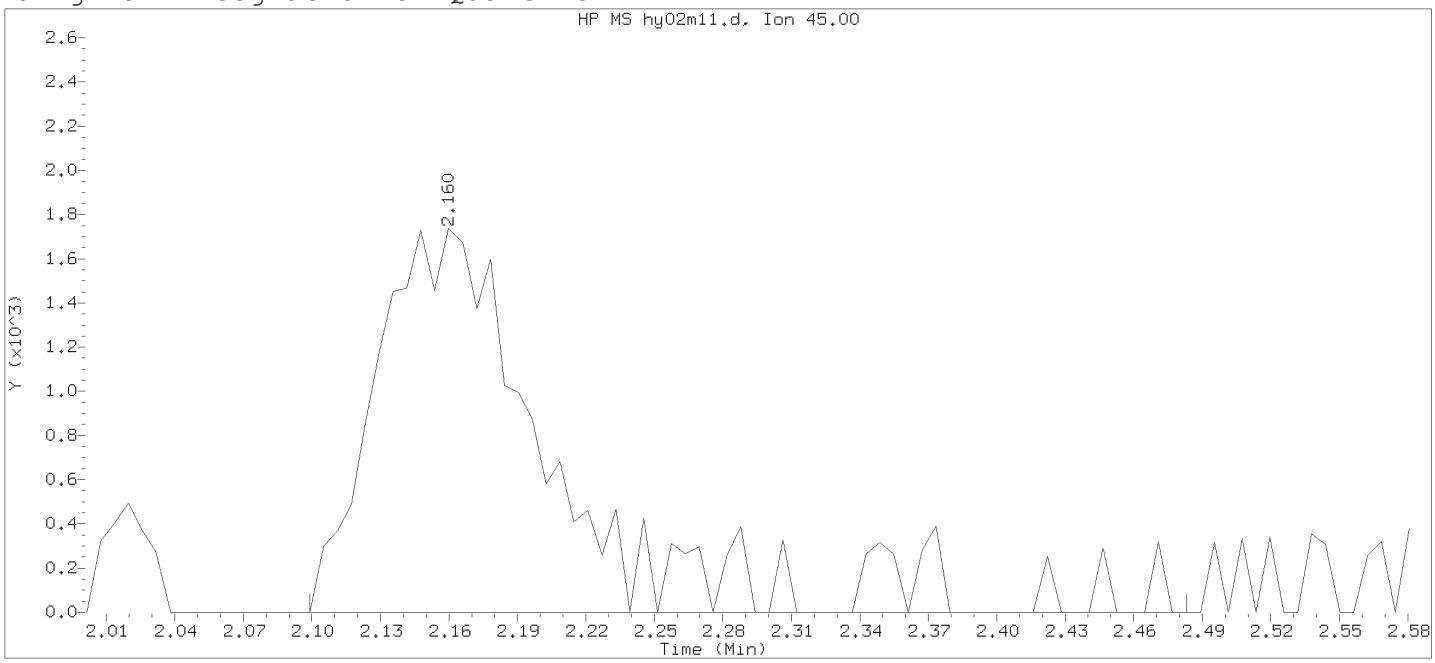
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

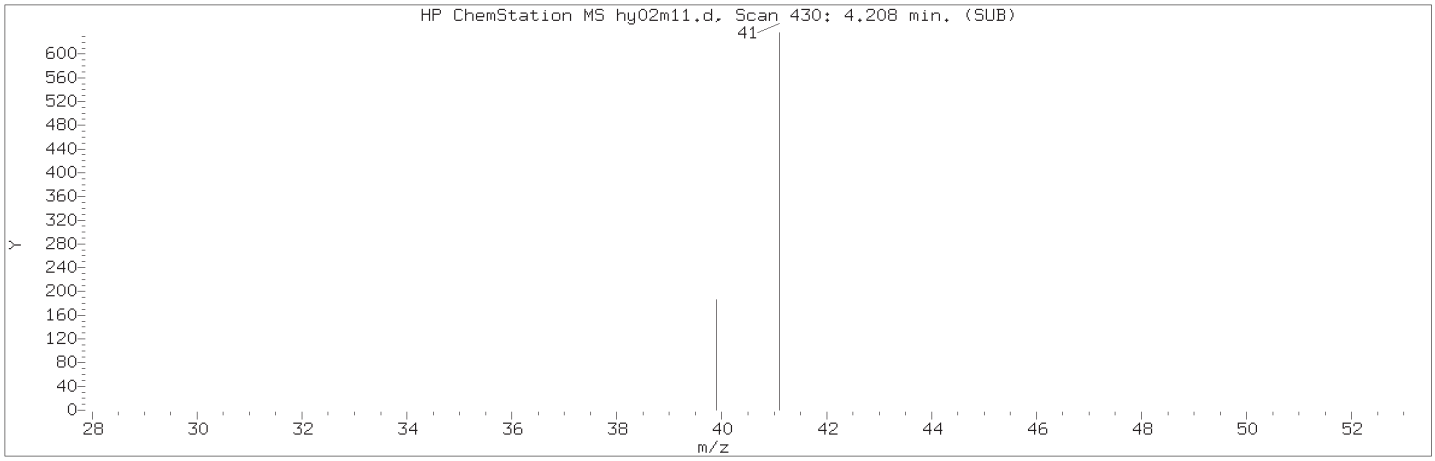
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 21:49
Date, time and analyst ID of latest file update: 02-May-2018 22:03 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

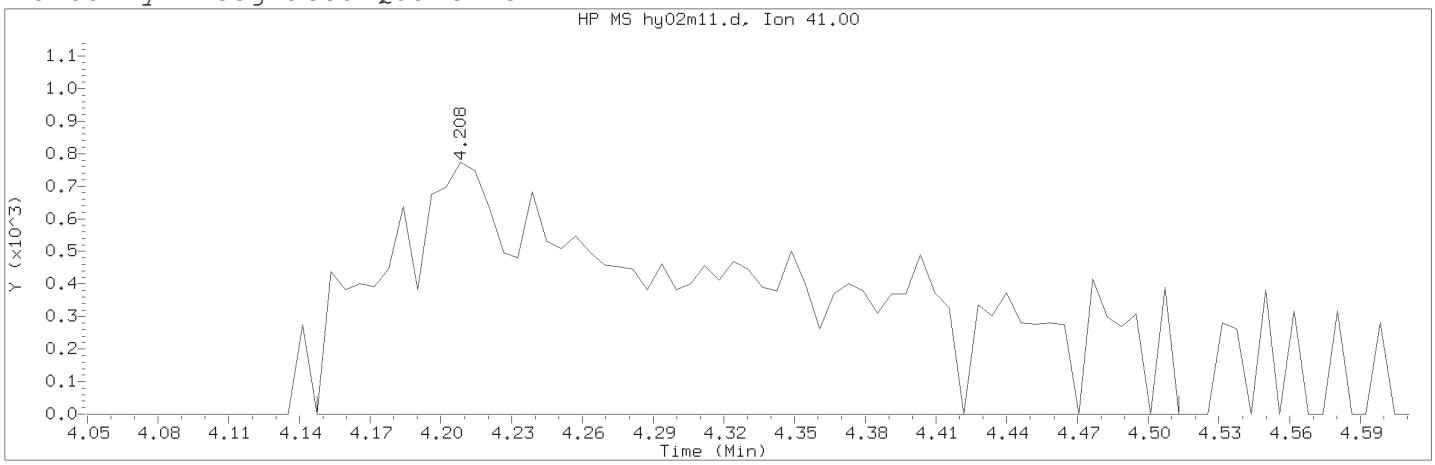
Compound Number	: 4		
Compound Name	: Dimethyl ether		
Scan Number	: 94		
Retention Time (minutes)	: 2.160		
Quant Ion	: 45.00		
Area	: 9539		
On-column Amount (ng)	: 0.1302		
Integration start scan	: 83	Integration stop scan:	146
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 05/02/2018 at 22:39.
Target 3.5 esignature user name: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

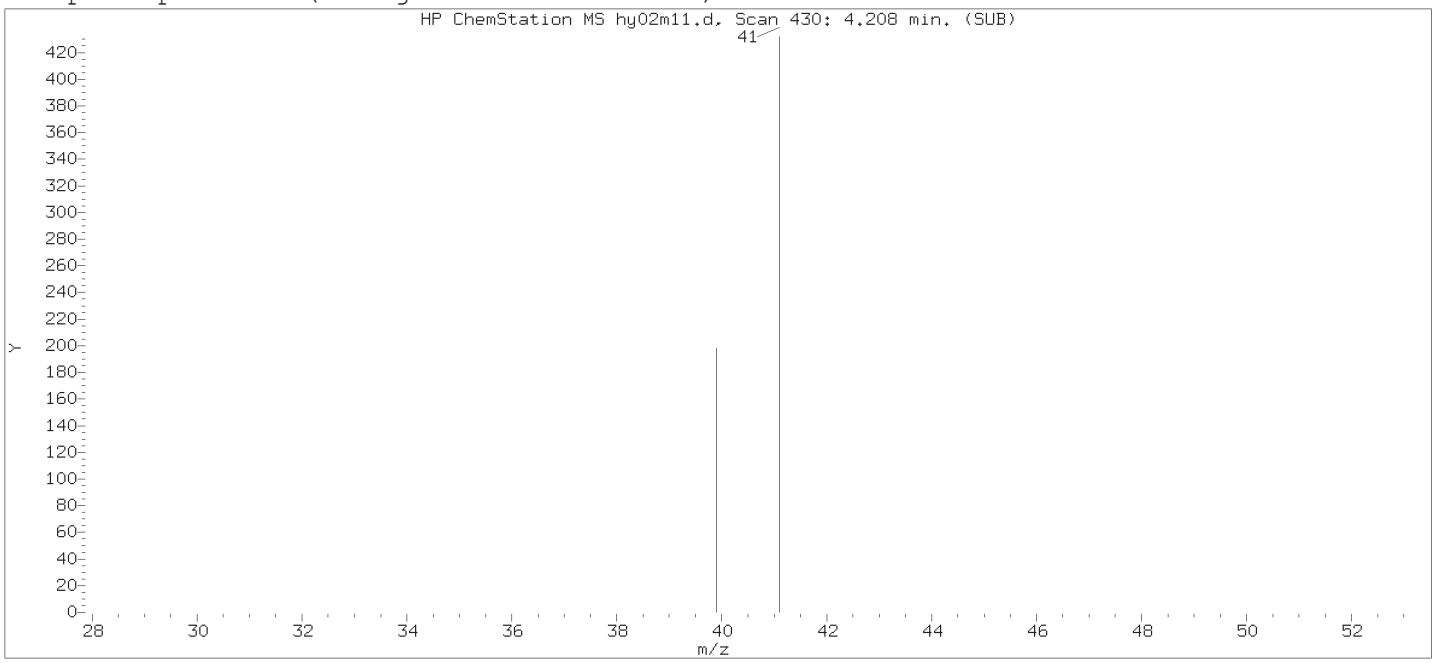
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 430
Retention Time (minutes): 4.208
Quant Ion : 41.00
Area (flag) : 8867M
On-Column Amount (ng) : 4.2995
Integration start scan : 419 Integration stop scan: 479
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

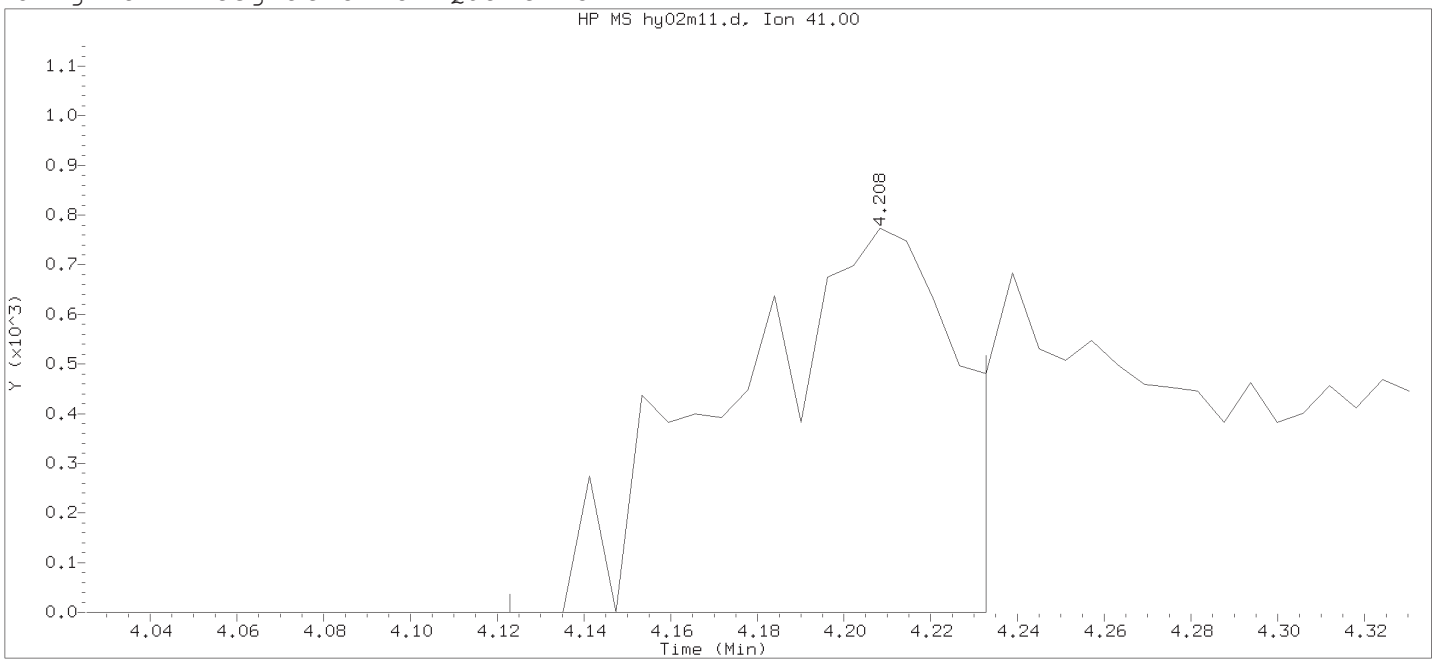
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

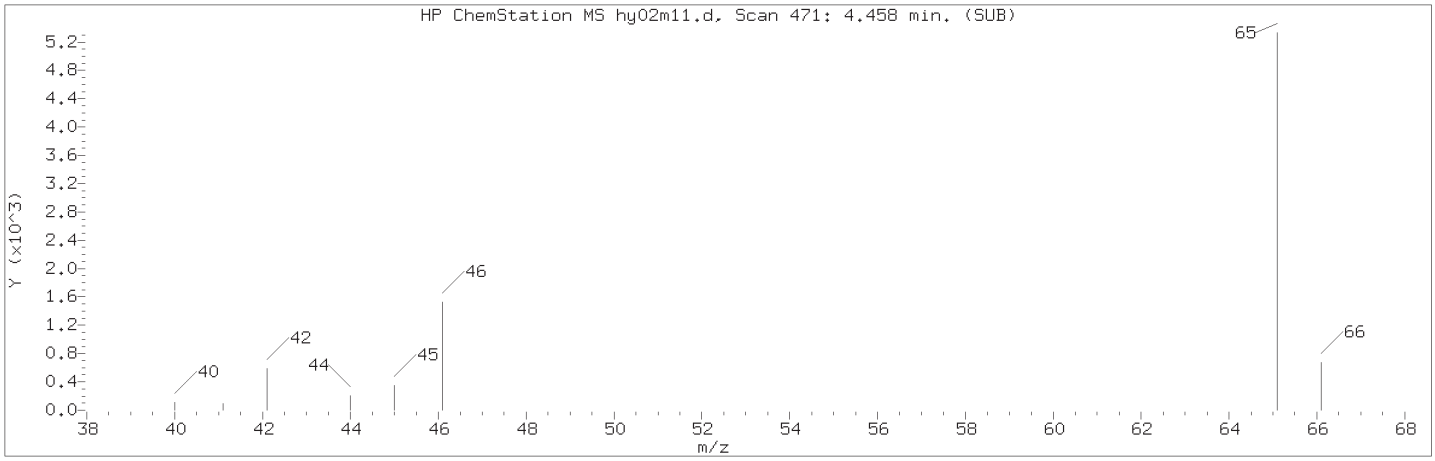
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 21:49
Date, time and analyst ID of latest file update: 02-May-2018 22:03 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

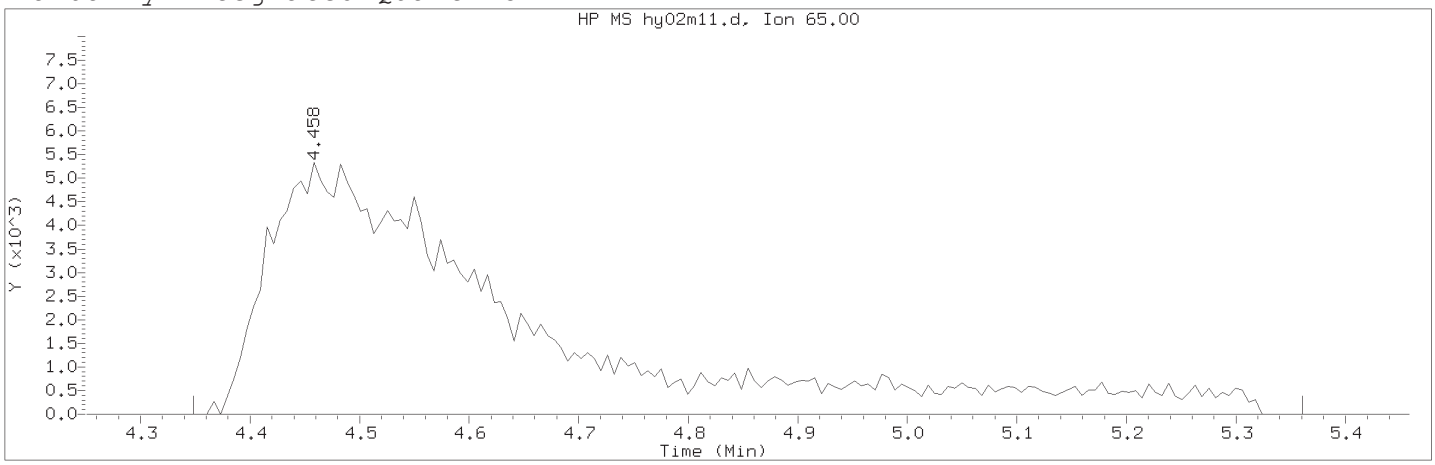
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 430
Retention Time (minutes): 4.208
Quant Ion : 41.00
Area : 2786
On-column Amount (ng) : 1.5113
Integration start scan : 415 Integration stop scan: 433
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

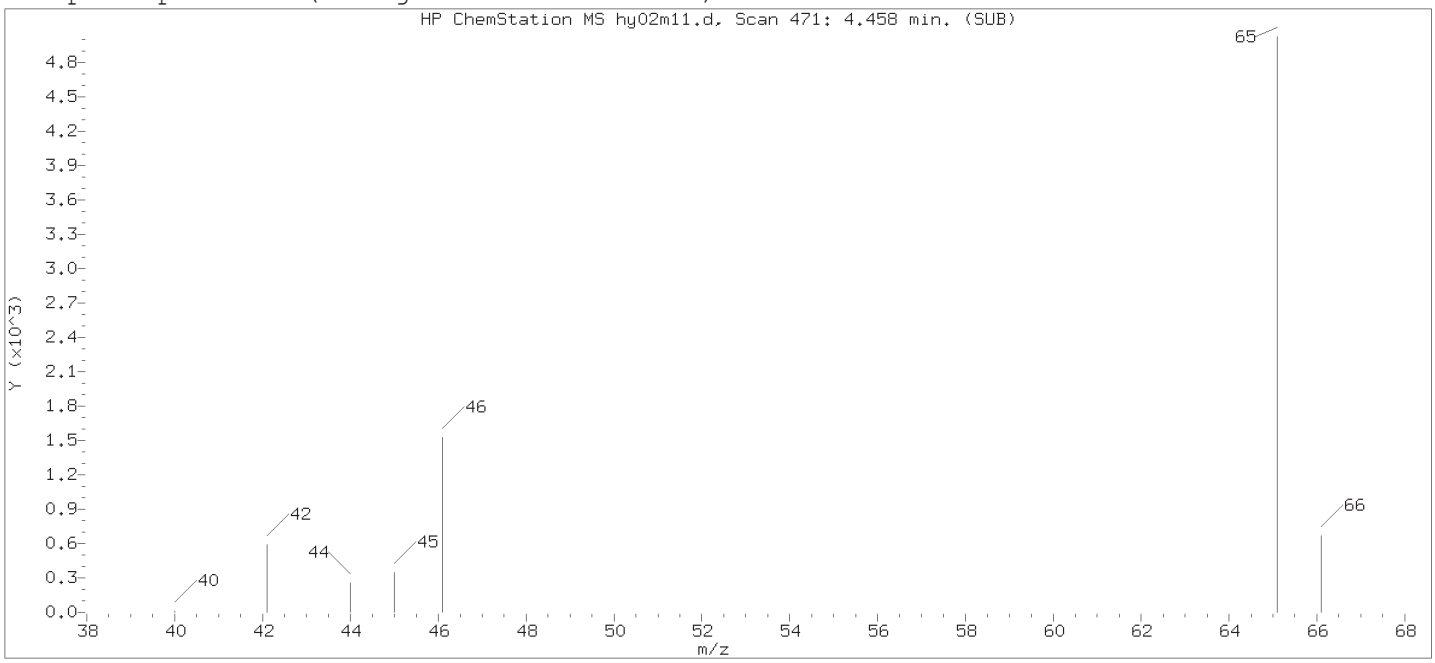
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 471
Retention Time (minutes): 4.458
Quant Ion : 65.00
Area (flag) : 85408M
On-Column Amount (ng) : 50.0000
Integration start scan : 452 Integration stop scan: 618
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

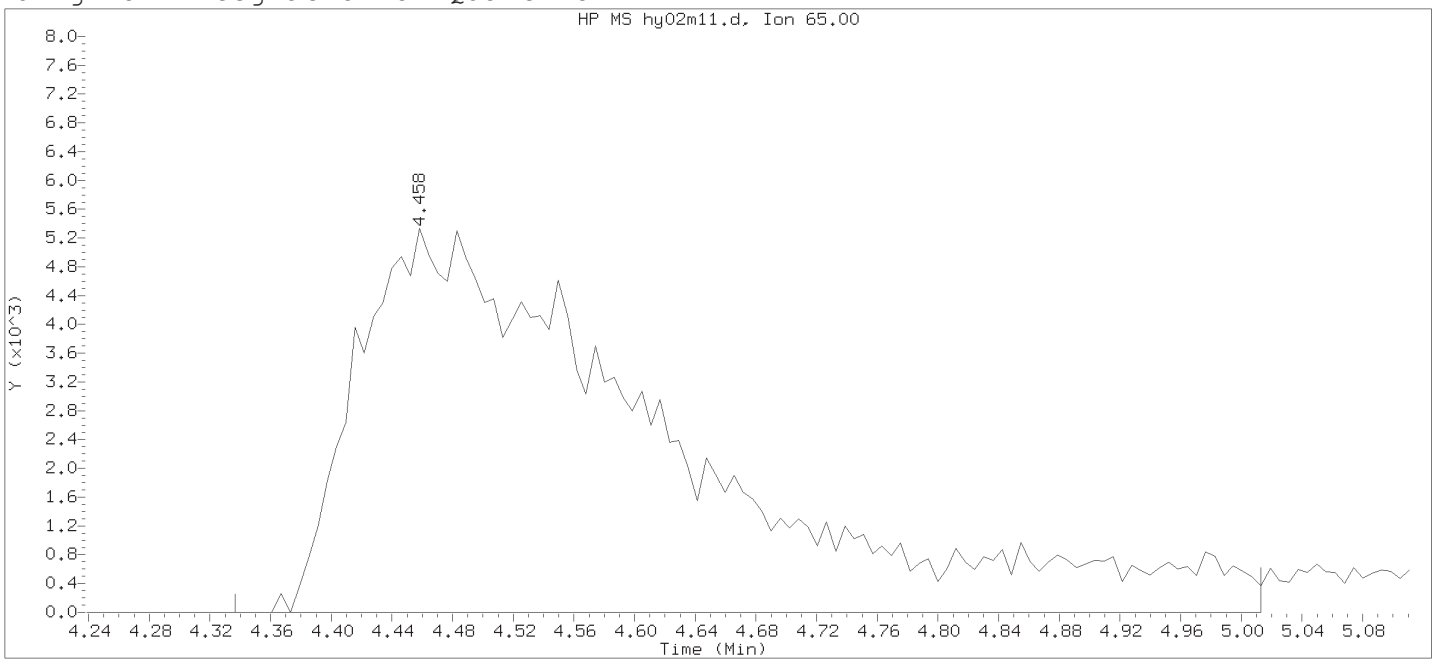
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

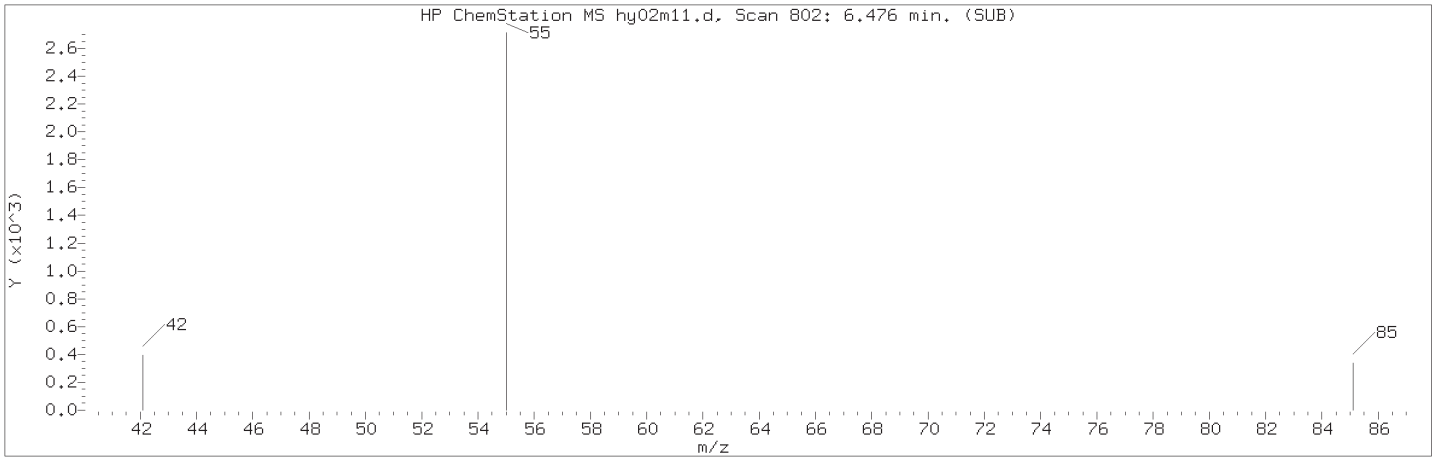
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 21:49
Date, time and analyst ID of latest file update: 02-May-2018 22:03 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

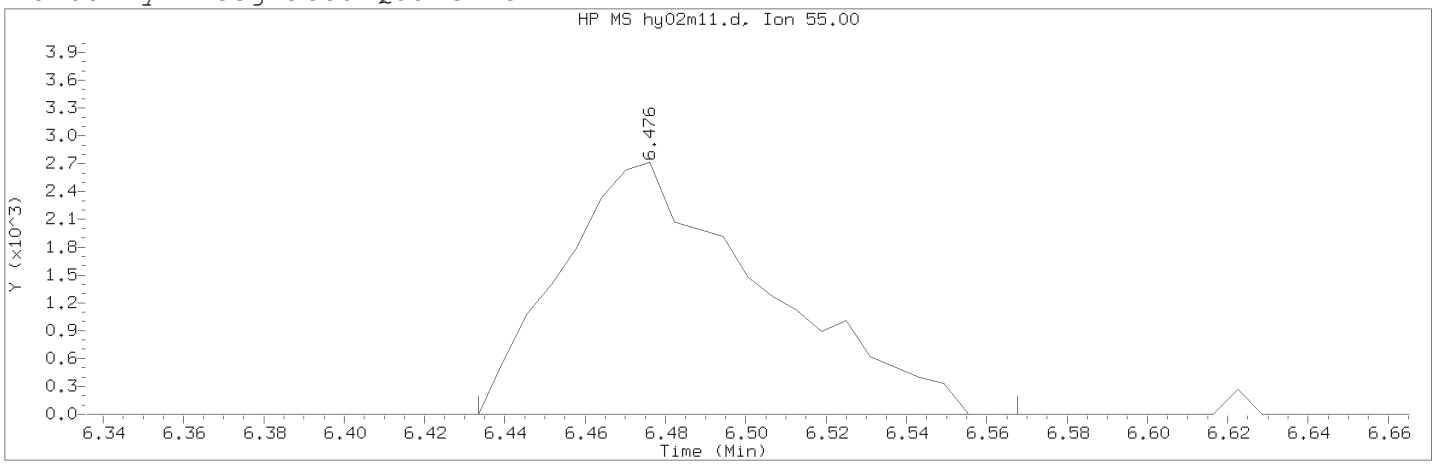
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 471
Retention Time (minutes): 4.458
Quant Ion : 65.00
Area : 76364
On-column Amount (ng) : 50.0000
Integration start scan : 450 Integration stop scan: 561
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:39.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

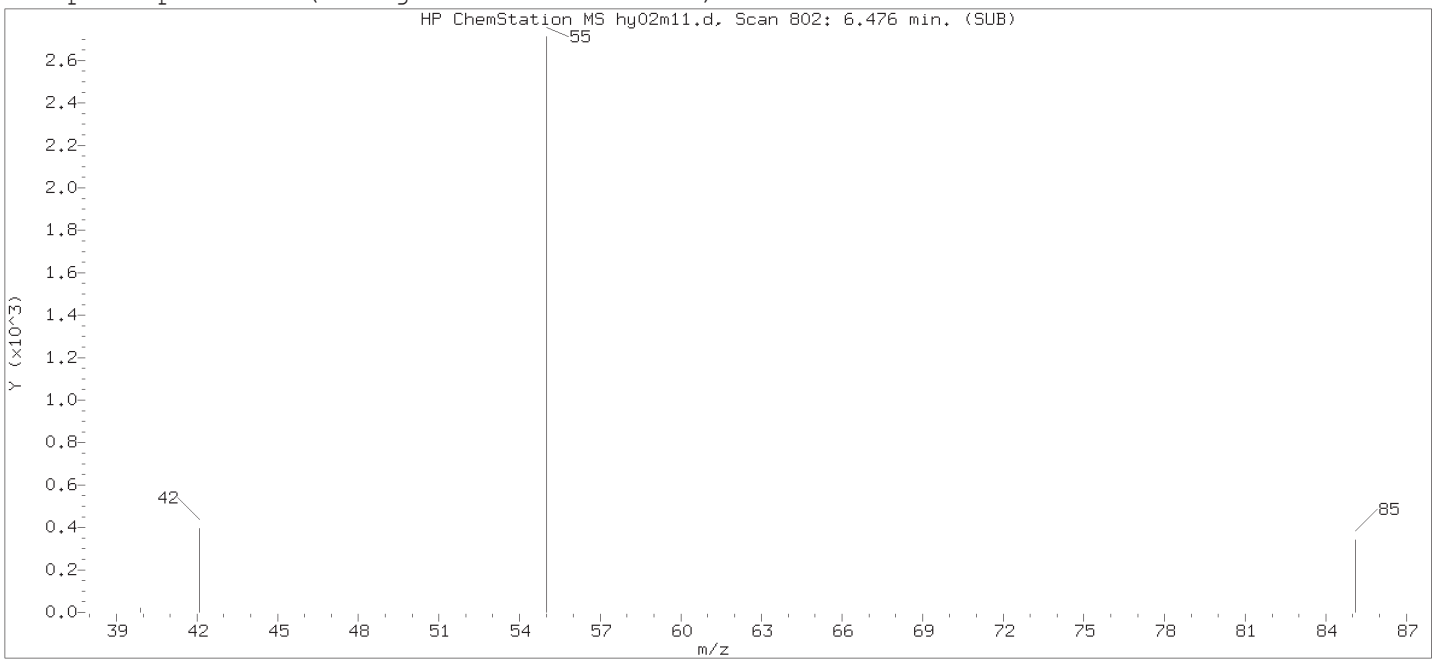
Compound Number : 43
Compound Name : Methyl Acrylate
Scan Number : 802
Retention Time (minutes): 6.476
Quant Ion : 55.00
Area (flag) : 9556M
On-Column Amount (ng) : 0.4435
Integration start scan : 794 Integration stop scan: 816
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

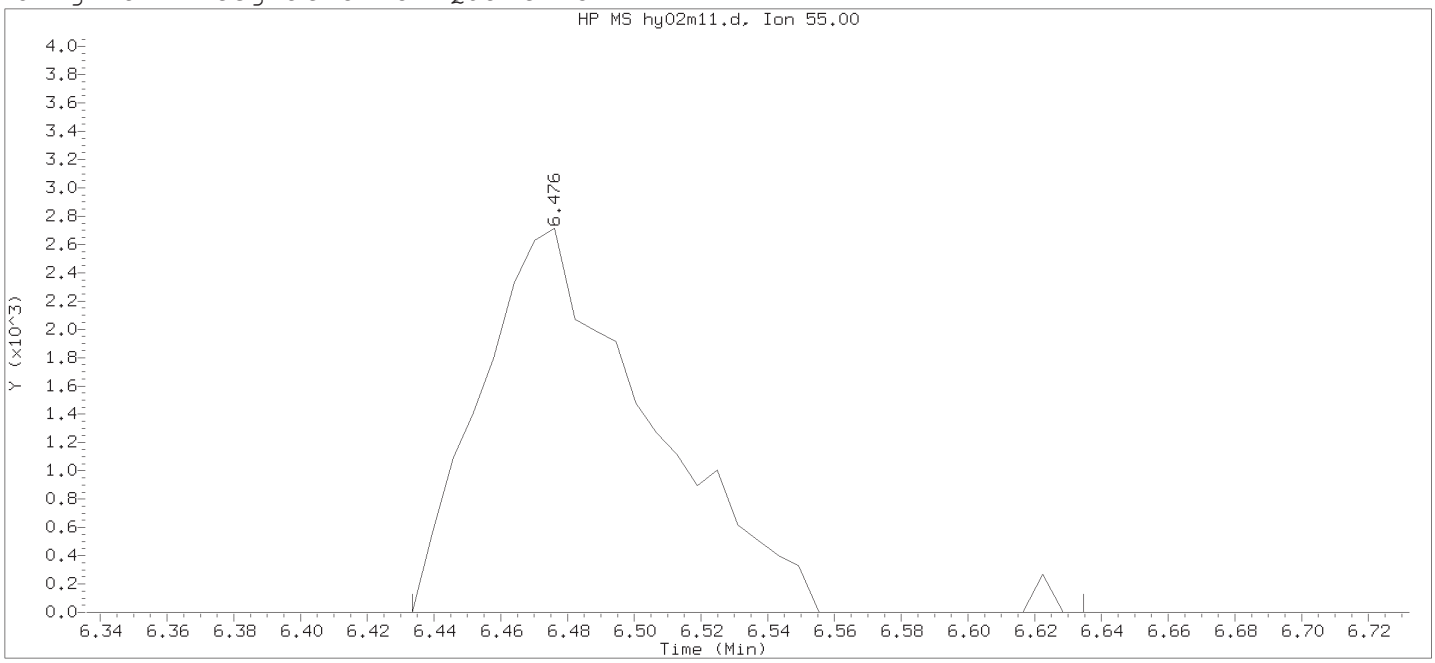
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

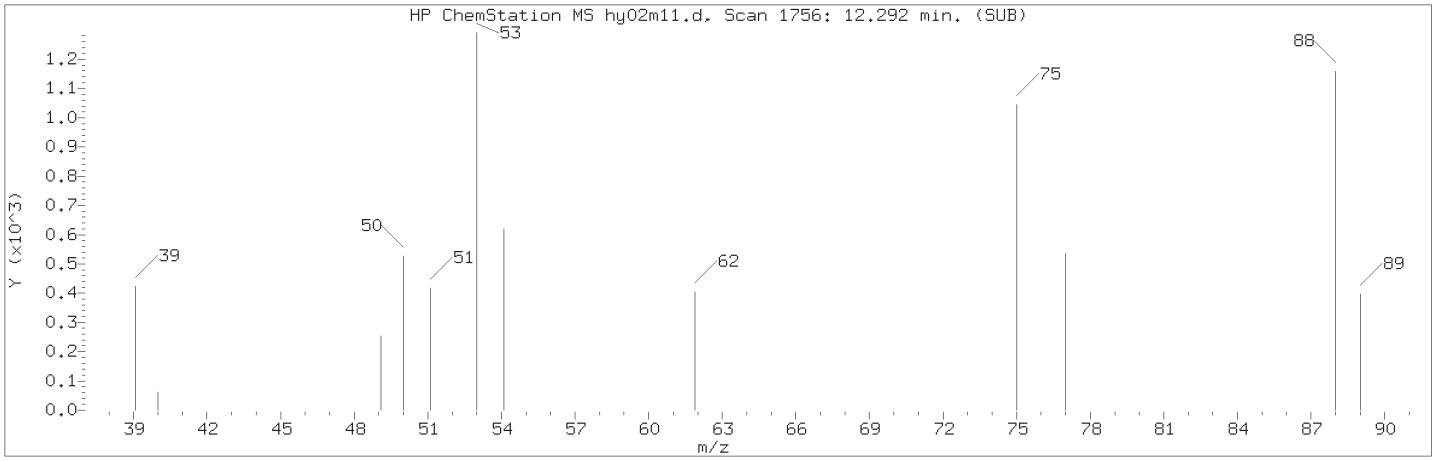
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 21:49
Date, time and analyst ID of latest file update: 02-May-2018 22:03 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

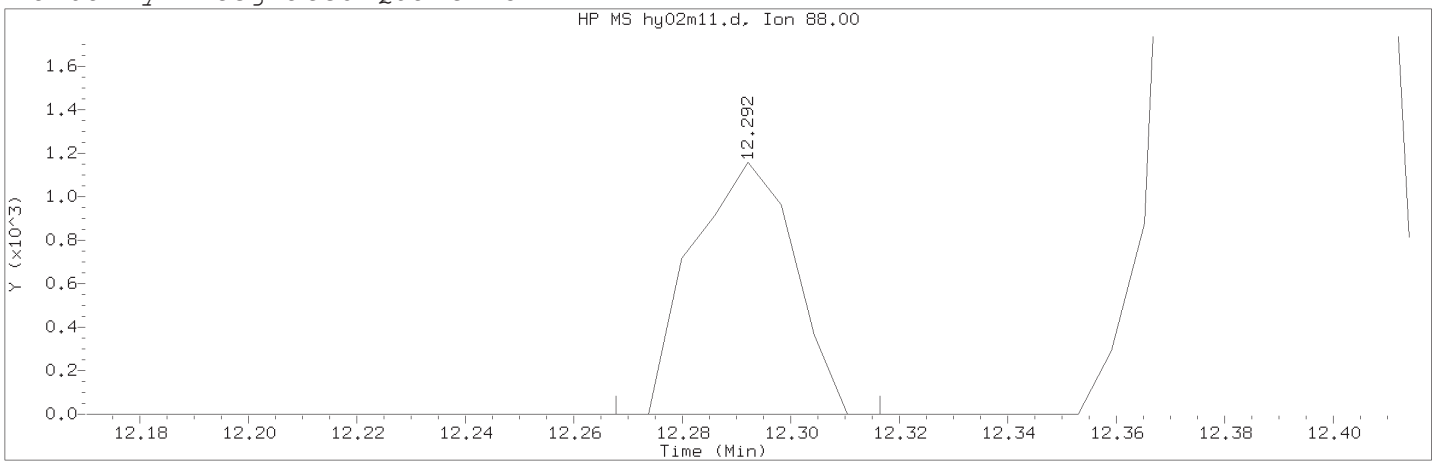
Compound Number : 43
Compound Name : Methyl Acrylate
Scan Number : 802
Retention Time (minutes): 6.476
Quant Ion : 55.00
Area : 9654
On-column Amount (ng) : 0.4481
Integration start scan : 794 Integration stop scan: 827
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:39.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

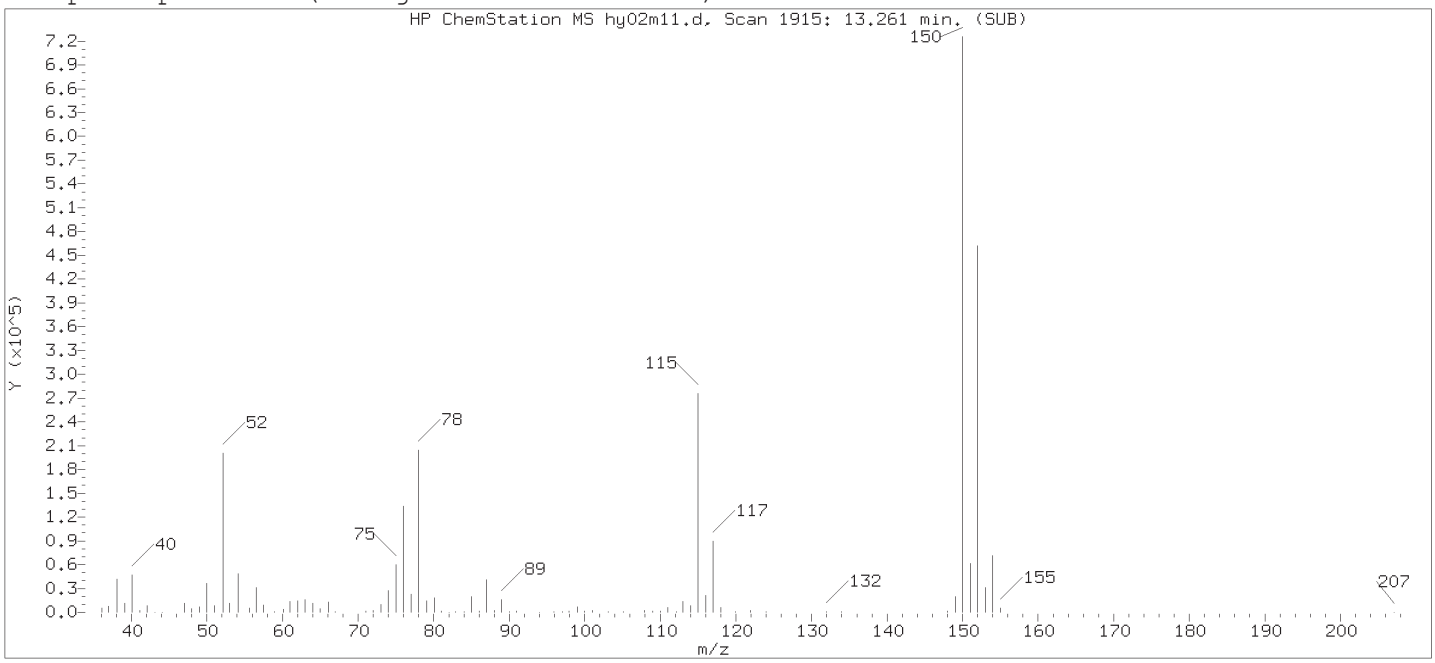
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 1506M
On-Column Amount (ng) : 0.1362
Integration start scan : 1751 Integration stop scan: 1759
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

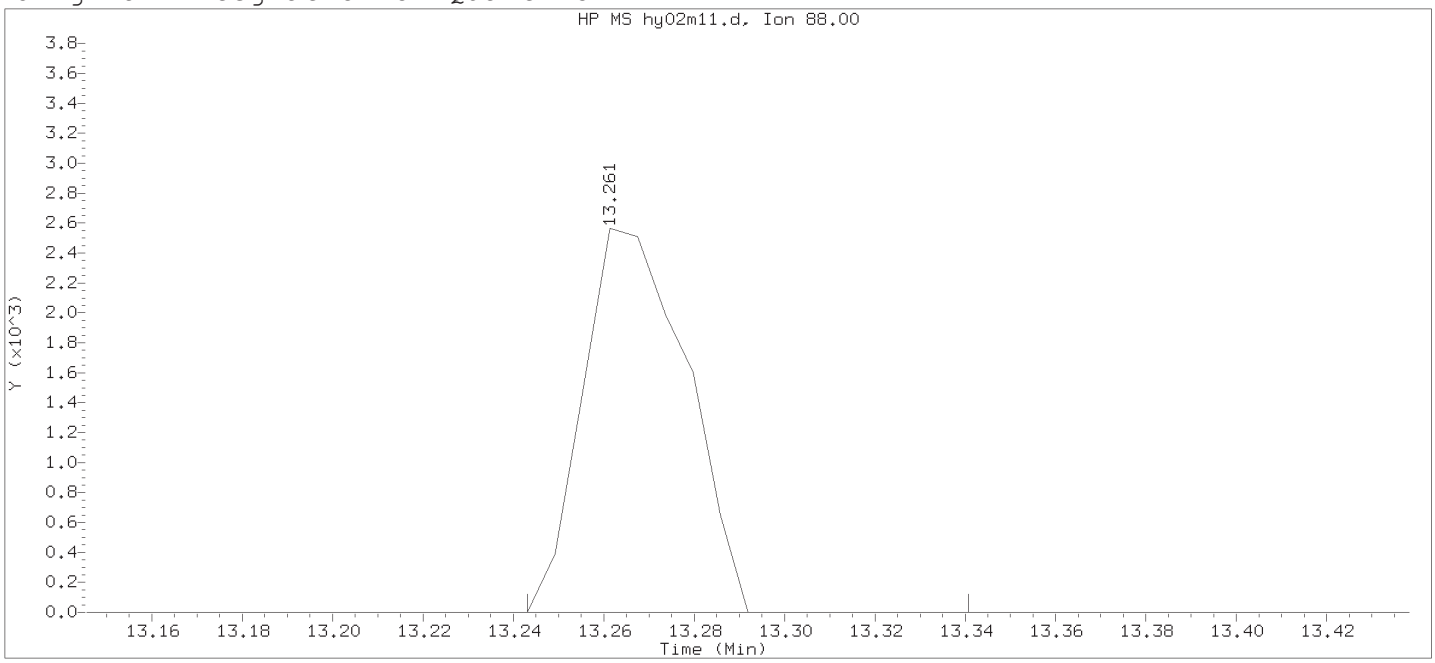
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

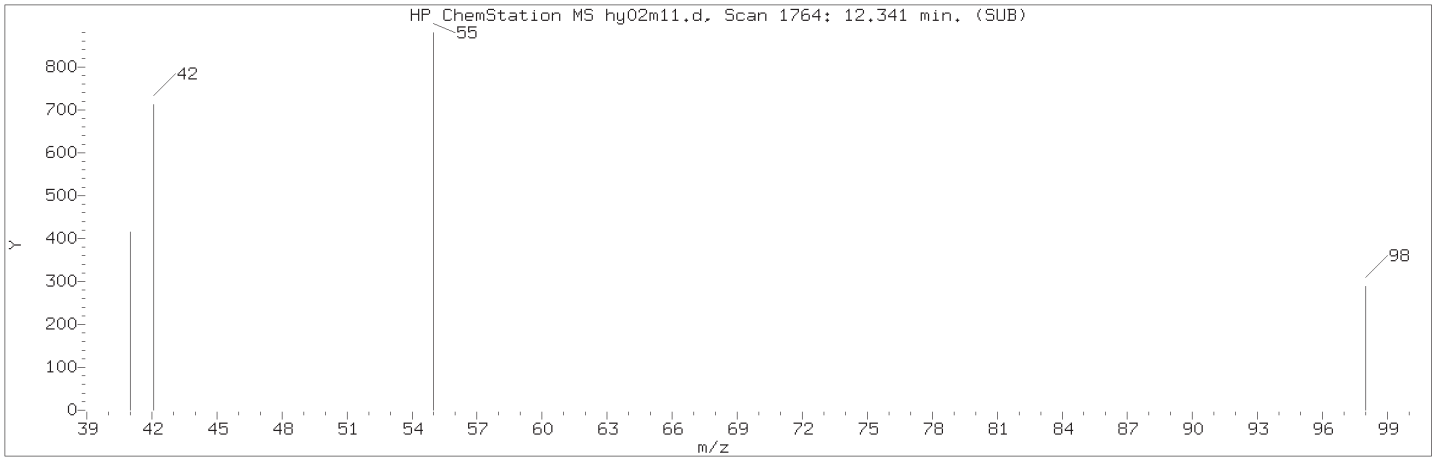
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 21:49
Date, time and analyst ID of latest file update: 02-May-2018 22:03 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

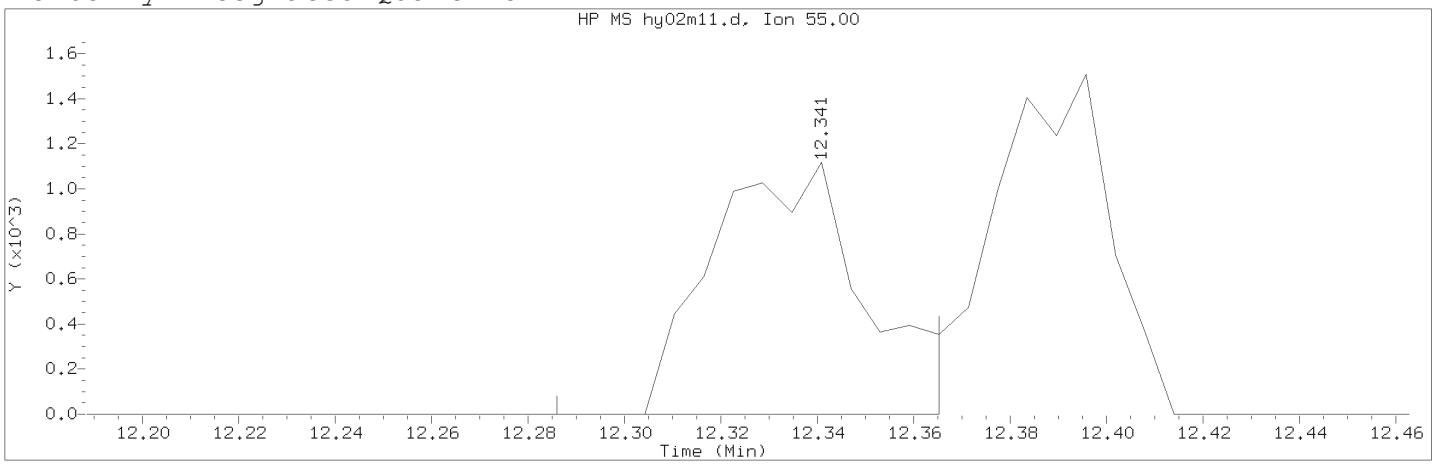
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1915
Retention Time (minutes): 13.261
Quant Ion : 88.00
Area : 4090
On-column Amount (ng) : 0.4136
Integration start scan : 1911 Integration stop scan: 1927
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:39.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:37 dvv10203

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

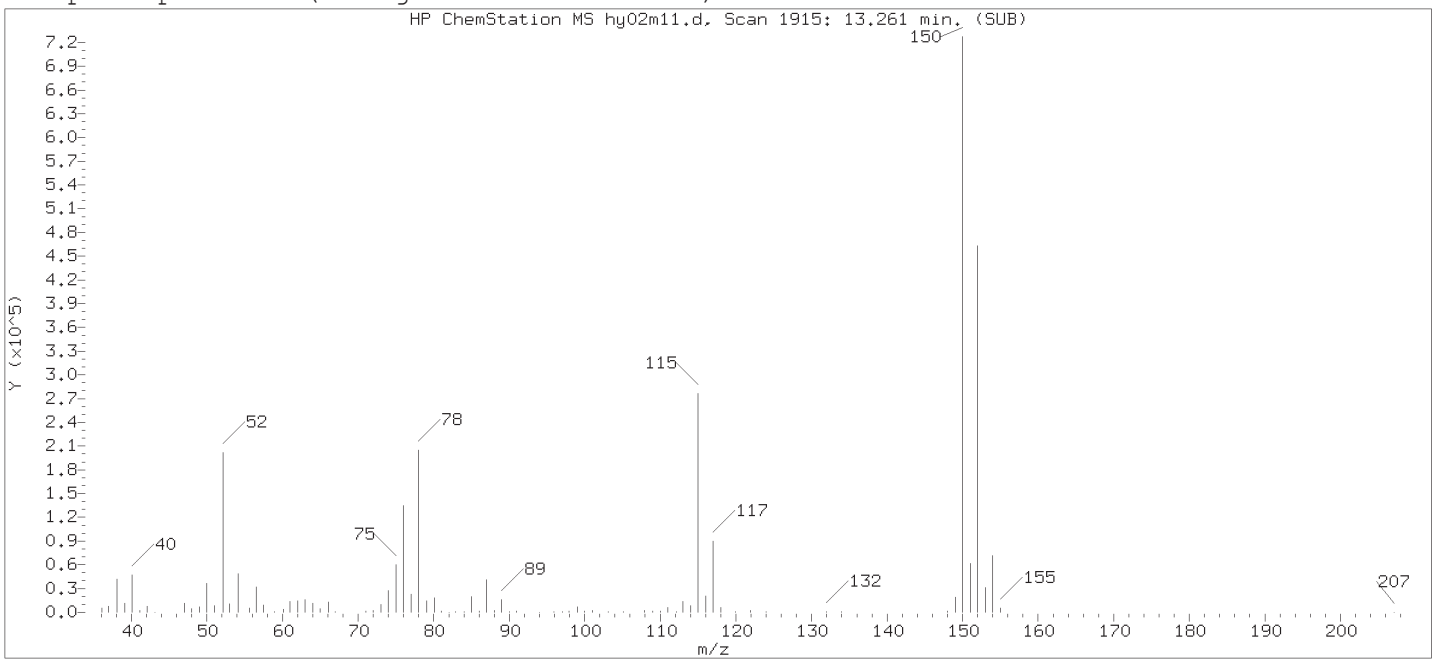
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1764
Retention Time (minutes): 12.341
Quant Ion : 55.00
Area (flag) : 2470M
On-Column Amount (ng) : 4.3909
Integration start scan : 1754 Integration stop scan: 1767
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

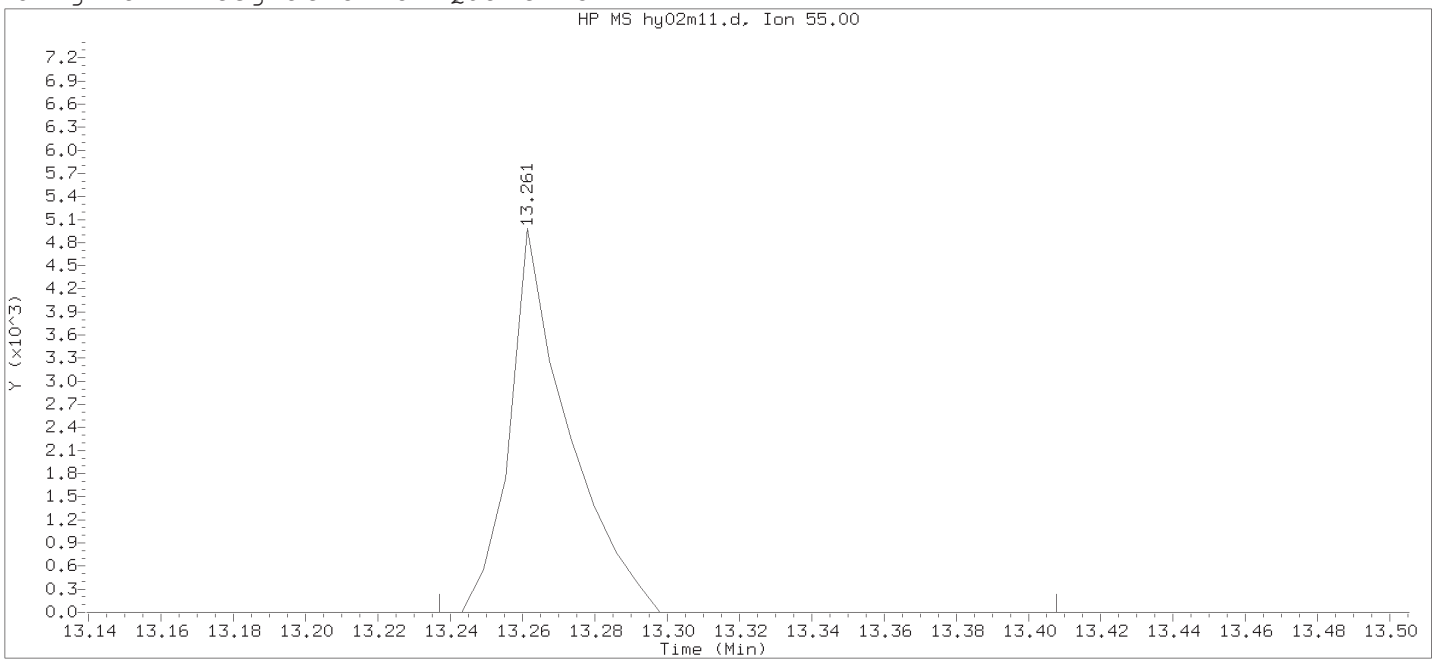
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/02/2018 at 22:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



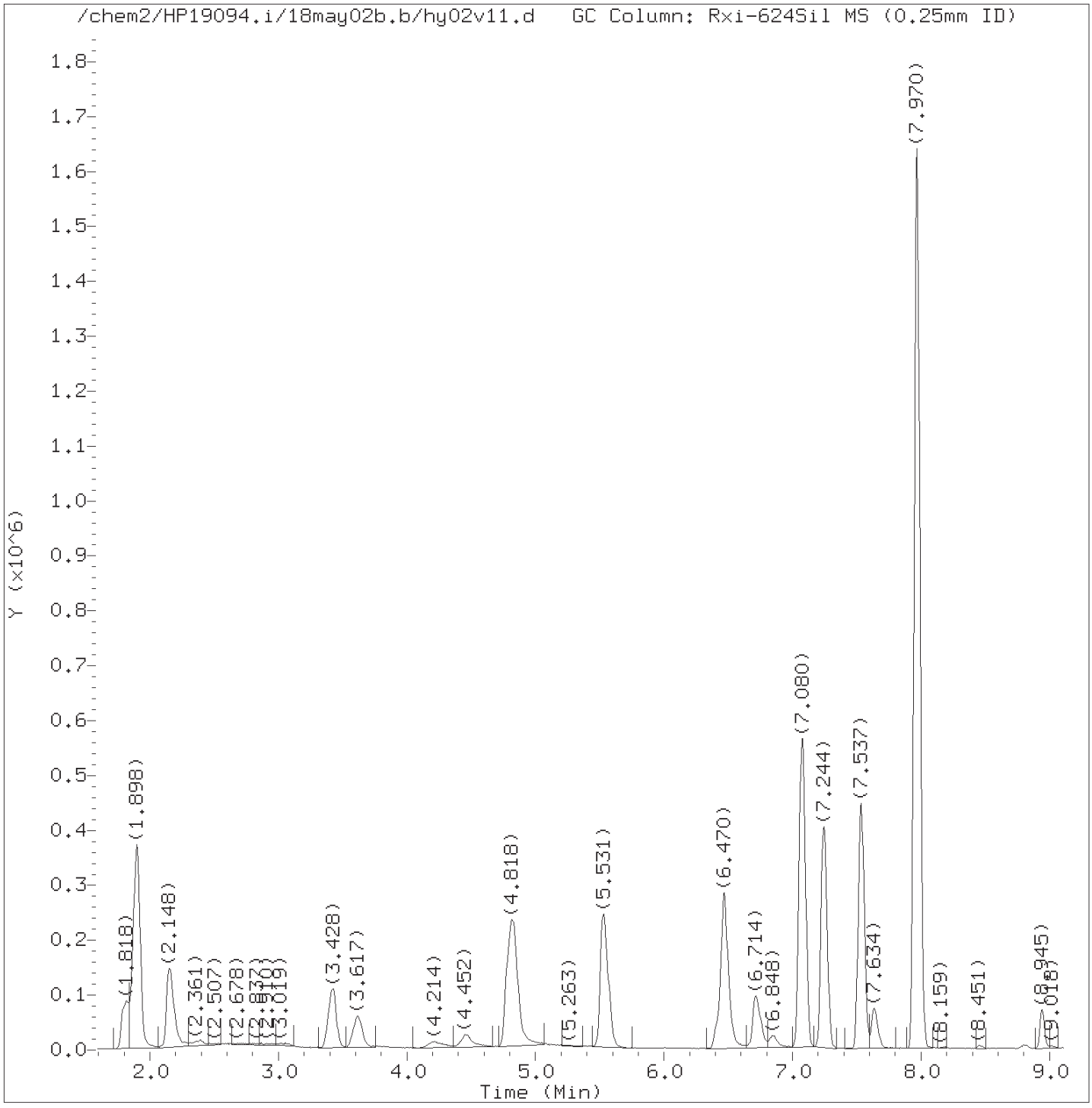
Data File: /chem2/HP19094.i/18may02b.b/hy02m11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 21:45 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 21:49
Date, time and analyst ID of latest file update: 02-May-2018 22:03 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1915
Retention Time (minutes): 13.261
Quant Ion : 55.00
Area : 5604
On-column Amount (ng) : 11.1430
Integration start scan : 1910 Integration stop scan: 1938
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/02/2018 at 22:39.
Target 3.5 esignature user name: DVV10203



Total Ion Chromatogram (TIC)

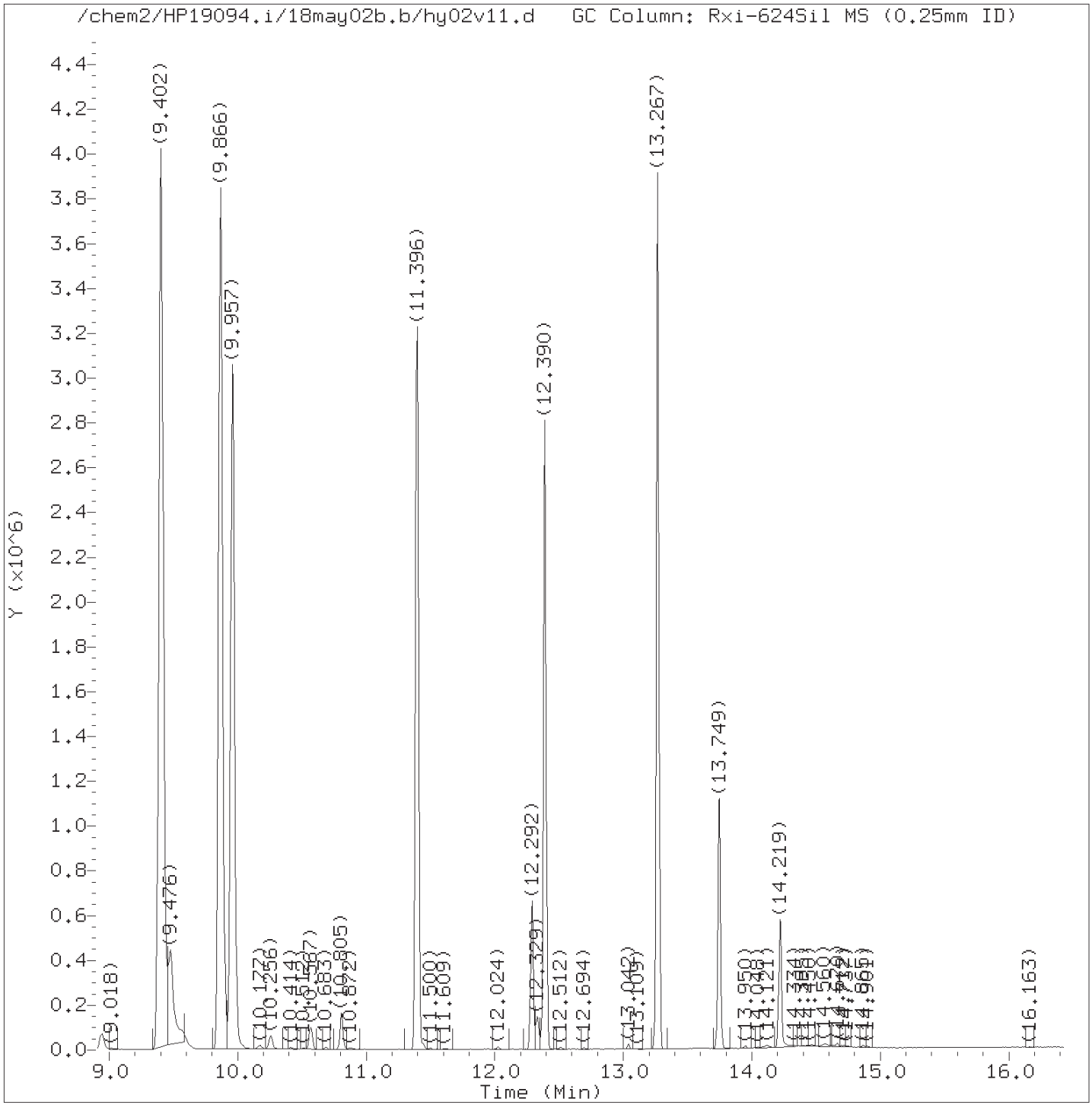
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

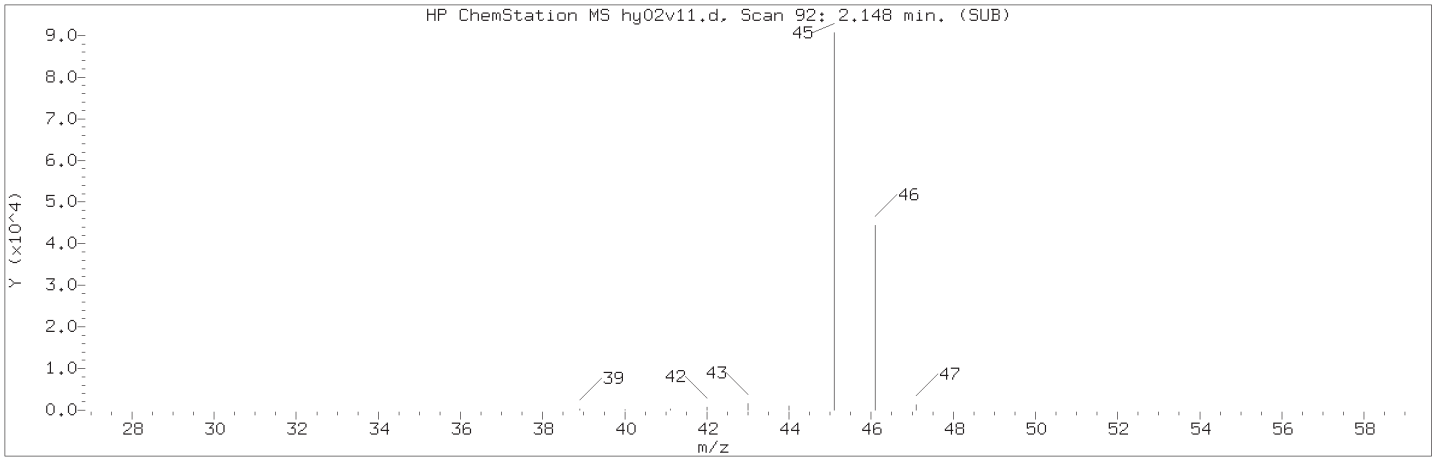
Sample Name: LCSH88 Lab Sample ID: LCSH88

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.148	45	368555M	4.907
25) Acetonitrile	(1)	4.214	41	82341M	40.799
26)*t-Butyl Alcohol-d10	(1)	4.470	65	83582M	50.000
36) Vinyl Acetate	(2)	5.531	43	844654	11.805
43) Methyl Acrylate	(2)	6.470	55	584105	26.458
50)$Dibromofluoromethane	(2)	7.074	113	565872	9.789
53) 1-Chlorobutane	(2)	7.244	56	535230	5.066
57)$1,2-Dichloroethane-d4	(2)	7.531	102	101751	9.983
63)*Fluorobenzene	(2)	7.970	96	2339478	10.000
77) Chloroacetonitrile	(2)	9.463	75	217752	247.495
78) 2-Chloroethyl vinyl ether	(2)	9.482	63	107445	5.079
82)$Toluene-d8	(3)	9.957	98	2378040	10.120
97)*Chlorobenzene-d5	(3)	11.396	117	1701187	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	141422M	13.065
112) Cyclohexanone	(1)	12.329	55	72992M	132.593
111)$4-Bromofluorobenzene	(3)	12.390	95	830464	9.962
133)*1,4-Dichlorobenzene-d4	(4)	13.267	152	891015	10.000
142) Hexachloroethane	(4)	13.743	117	197454	5.264

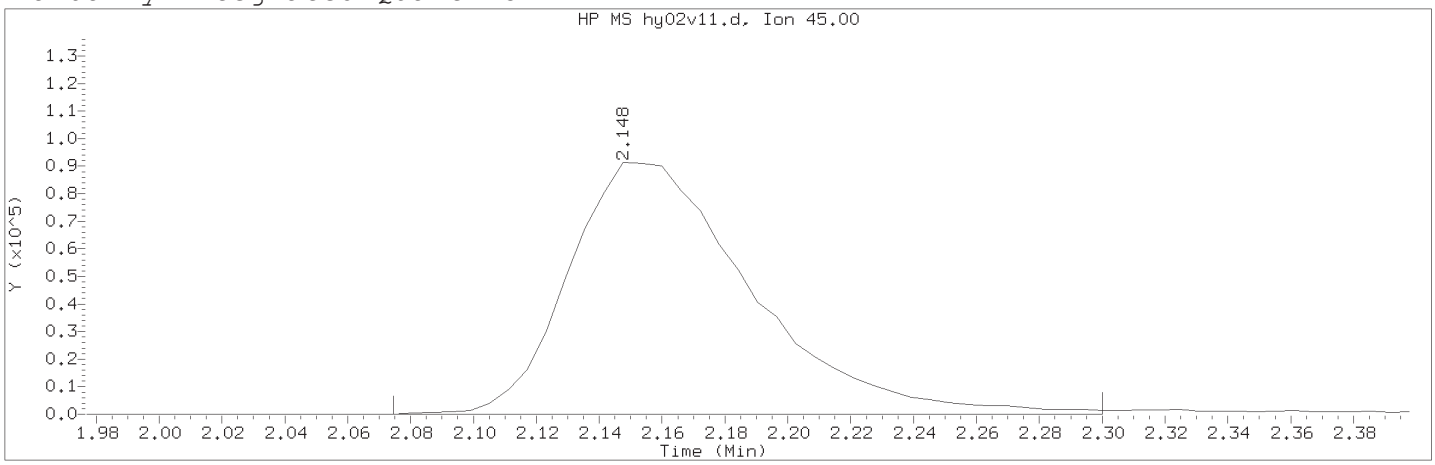
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

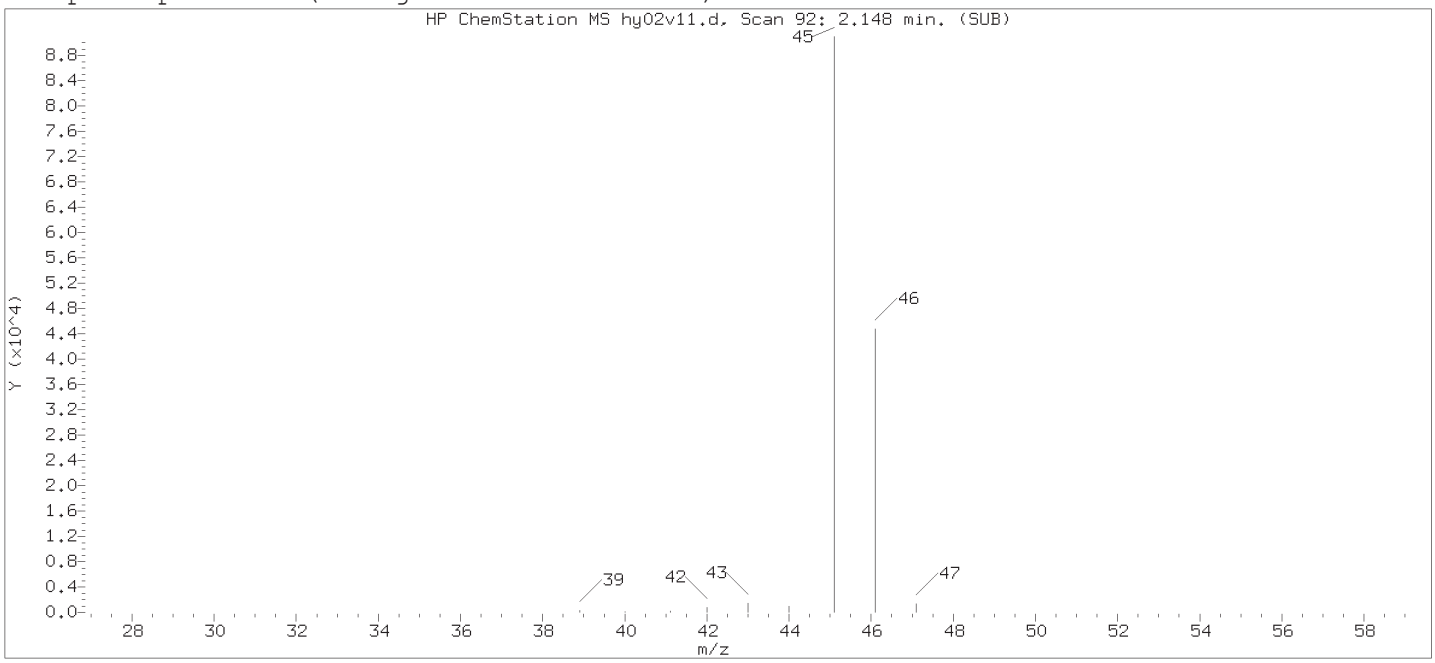
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 92
Retention Time (minutes): 2.148
Quant Ion : 45.00
Area (flag) : 368555M
On-Column Amount (ng) : 4.9074
Integration start scan : 79 Integration stop scan: 116
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

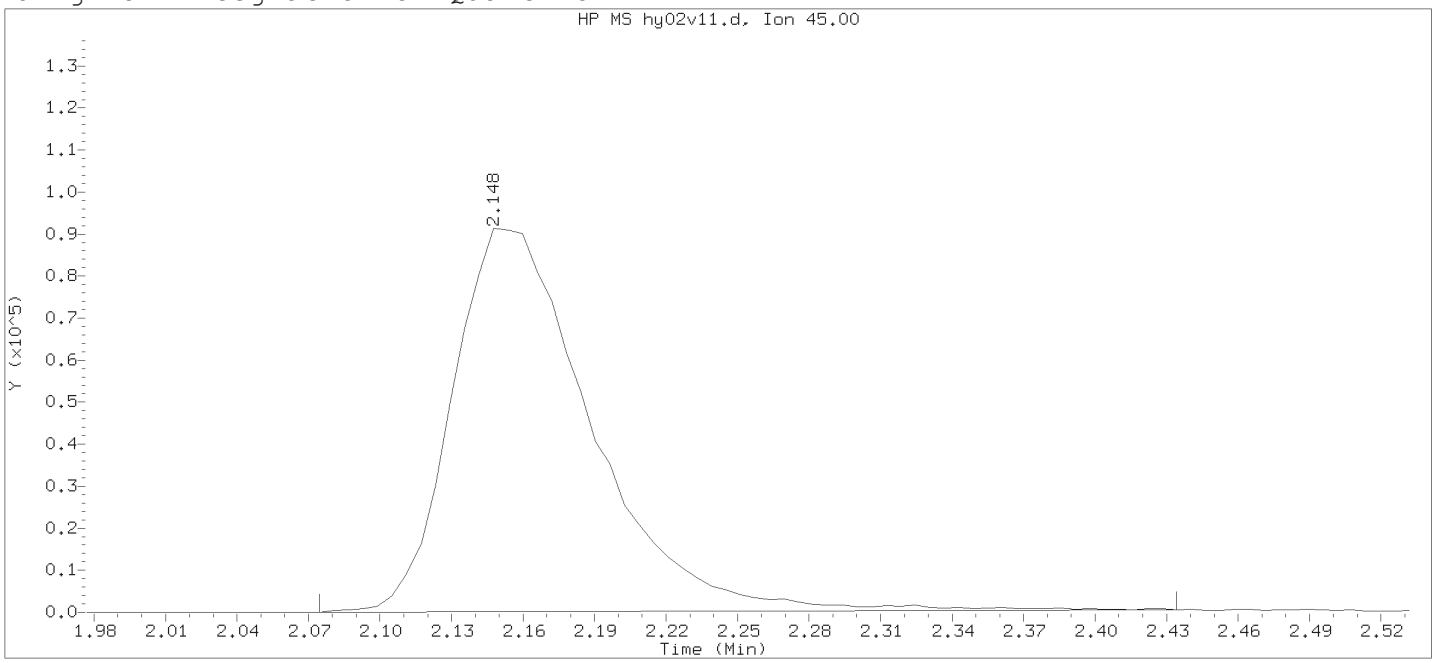
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

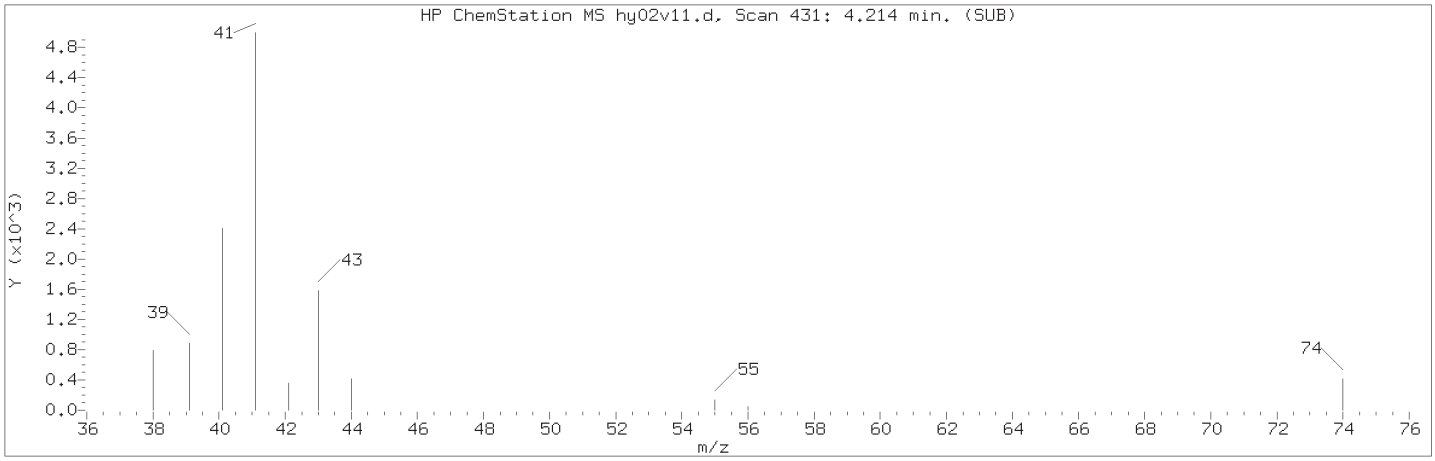
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:24 Automation

Sample Name: LCSH88 Lab Sample ID: LCSH88

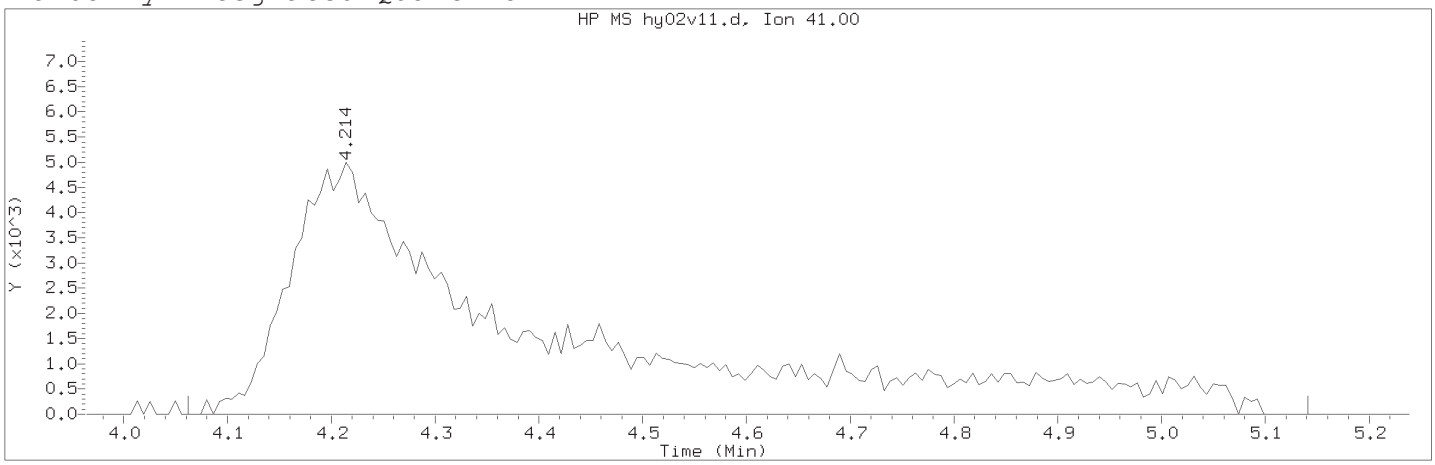
Compound Number	: 4		
Compound Name	: Dimethyl ether		
Scan Number	: 92		
Retention Time (minutes)	: 2.148		
Quant Ion	: 45.00		
Area	: 369928		
On-column Amount (ng)	: 4.9257		
Integration start scan	: 79	Integration stop scan:	138
Y at integration start	: 0	Y at integration end:	605

Digitally signed by Don V. Viray on 05/03/2018 at 00:38.
Target 3.5 esignature user name: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

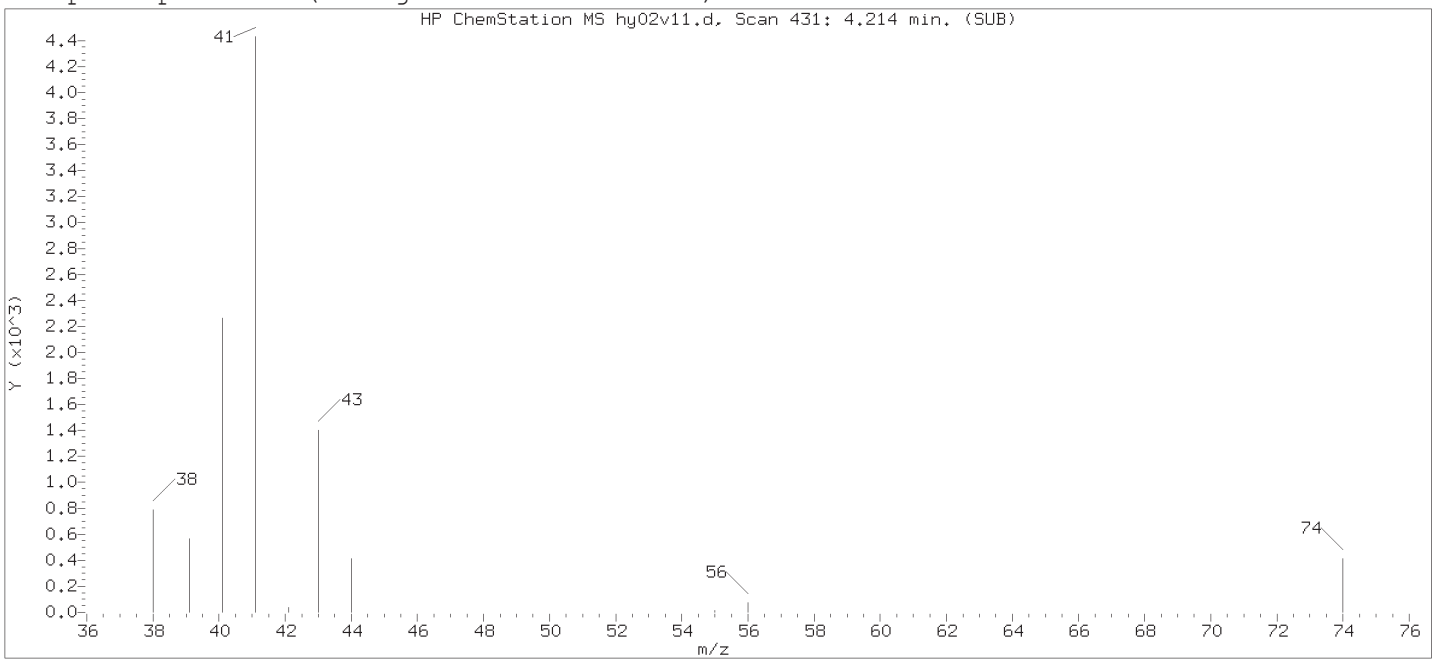
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 431
Retention Time (minutes): 4.214
Quant Ion : 41.00
Area (flag) : 82341M
On-Column Amount (ng) : 40.7988
Integration start scan : 405 Integration stop scan: 582
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

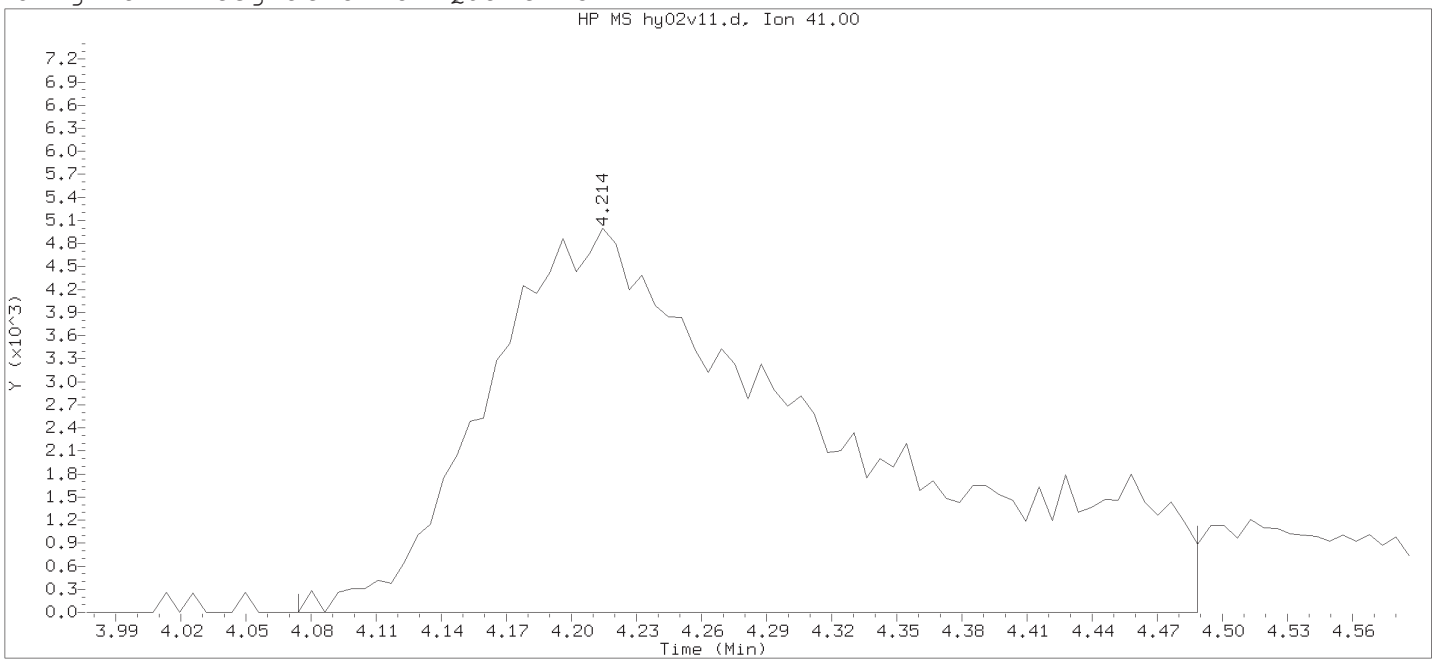
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

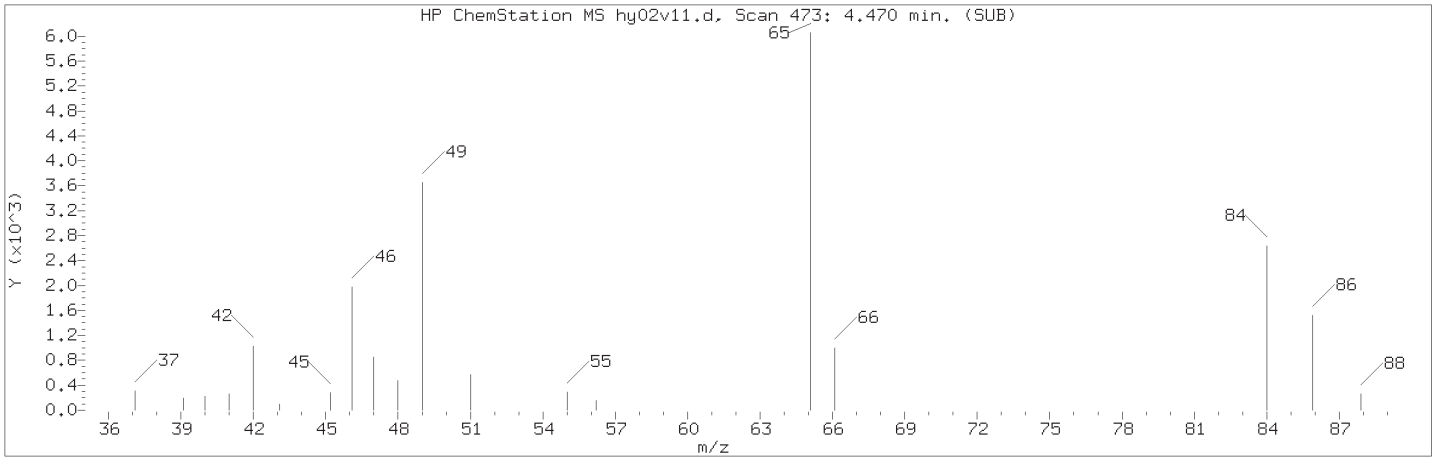
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:24 Automation

Sample Name: LCSH88 Lab Sample ID: LCSH88

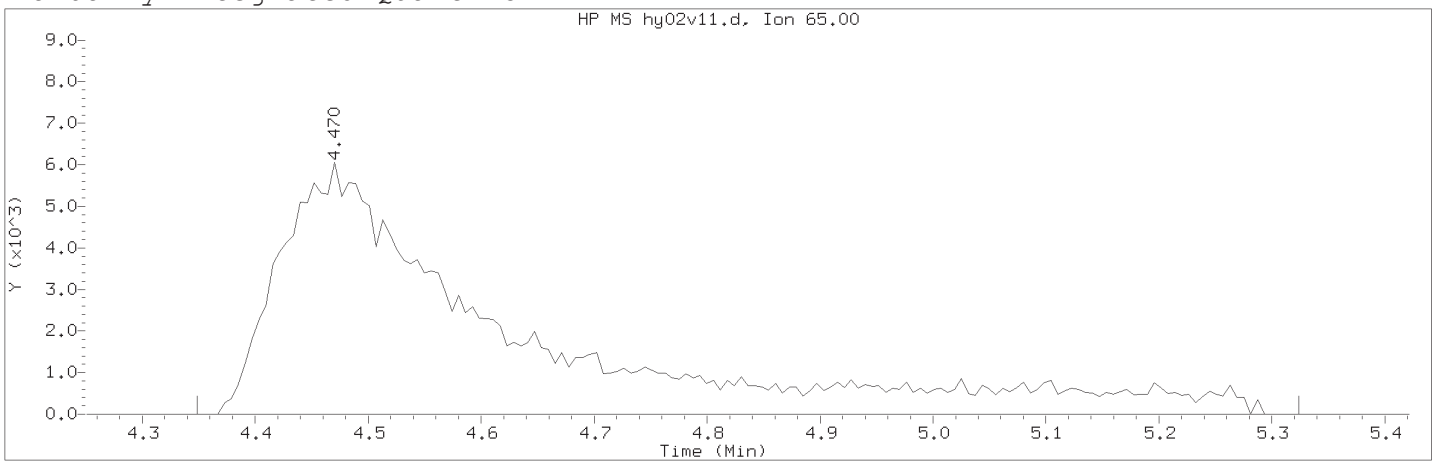
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 431
Retention Time (minutes): 4.214
Quant Ion : 41.00
Area : 56012
On-column Amount (ng) : 28.2326
Integration start scan : 407 Integration stop scan: 475
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

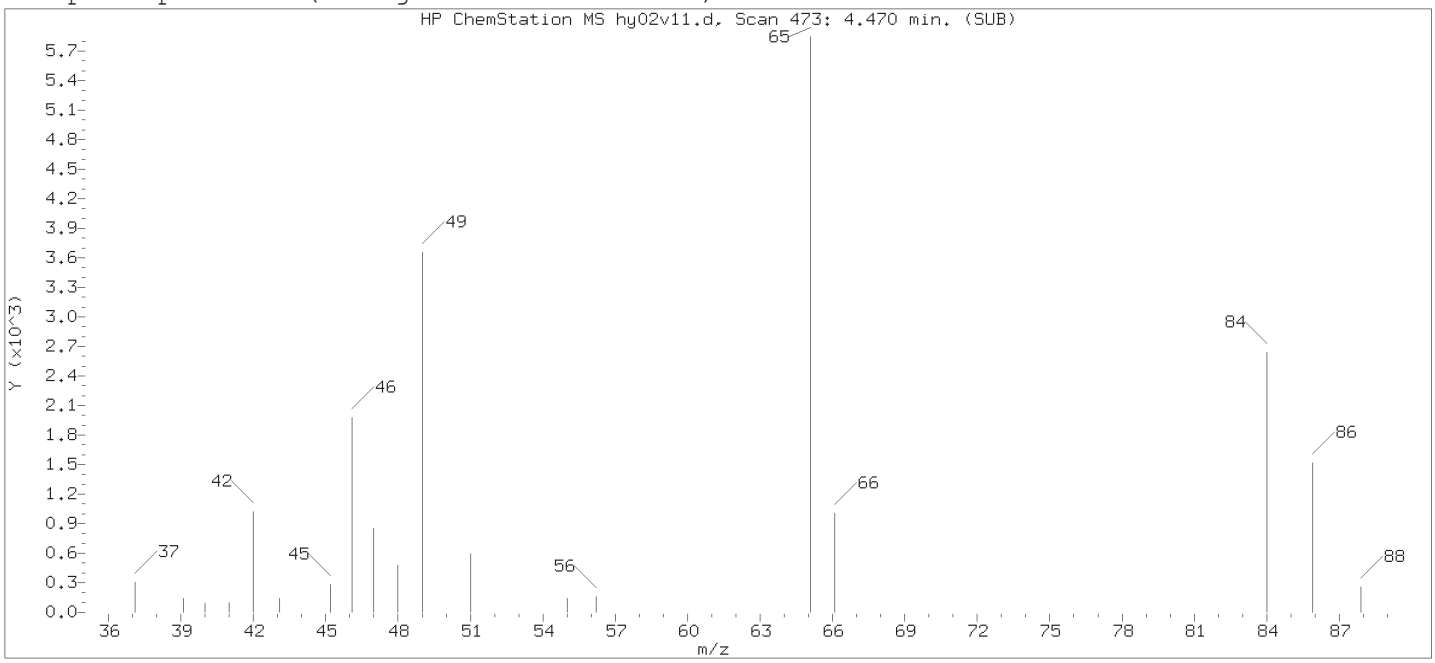
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area (flag) : 83582M
On-Column Amount (ng) : 50.0000
Integration start scan : 452 Integration stop scan: 612
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

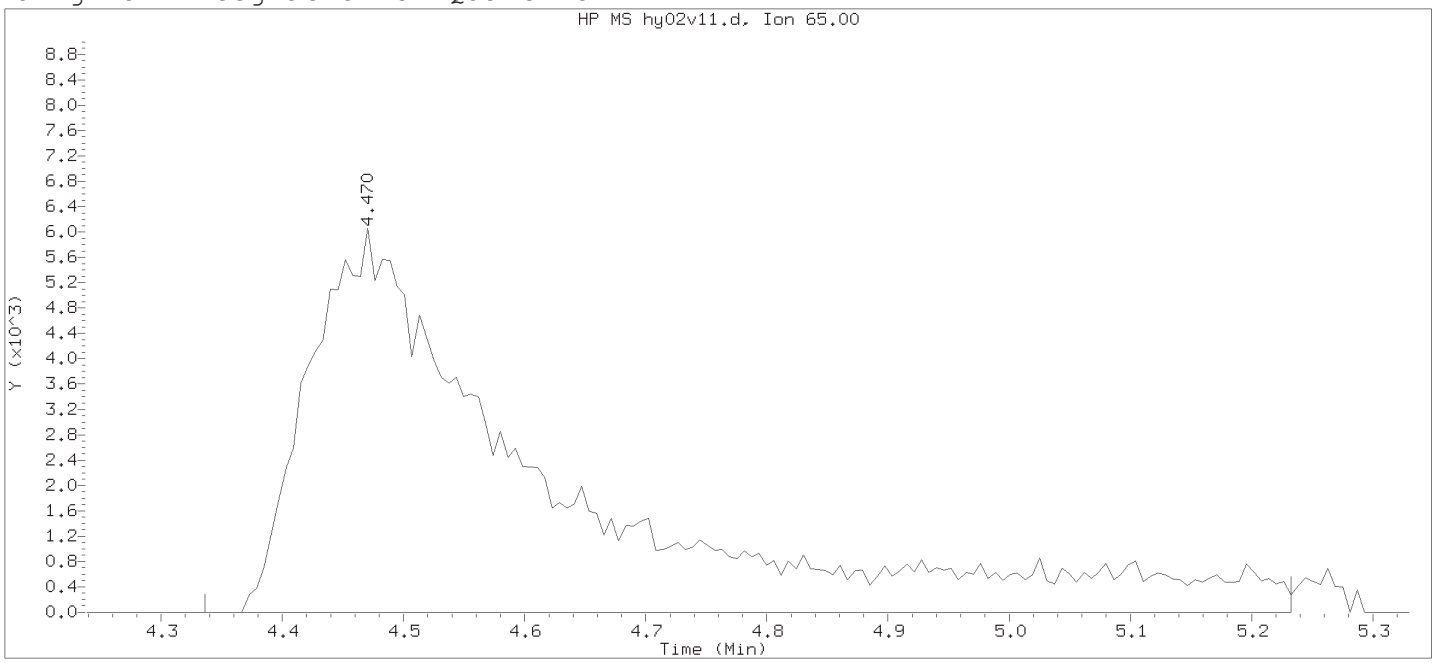
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

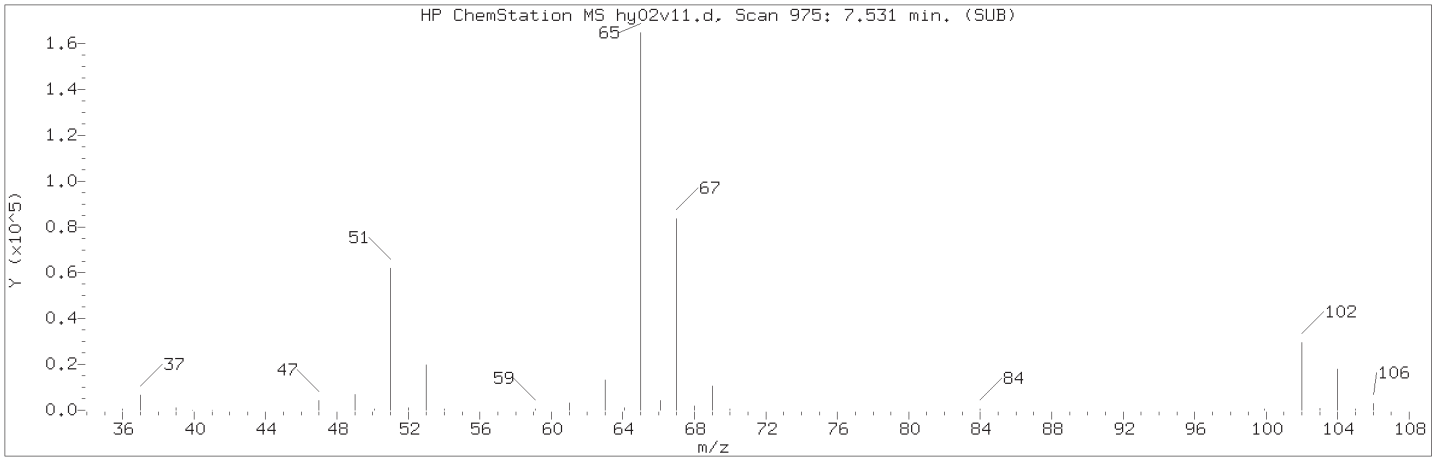
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:24 Automation

Sample Name: LCSH88 Lab Sample ID: LCSH88

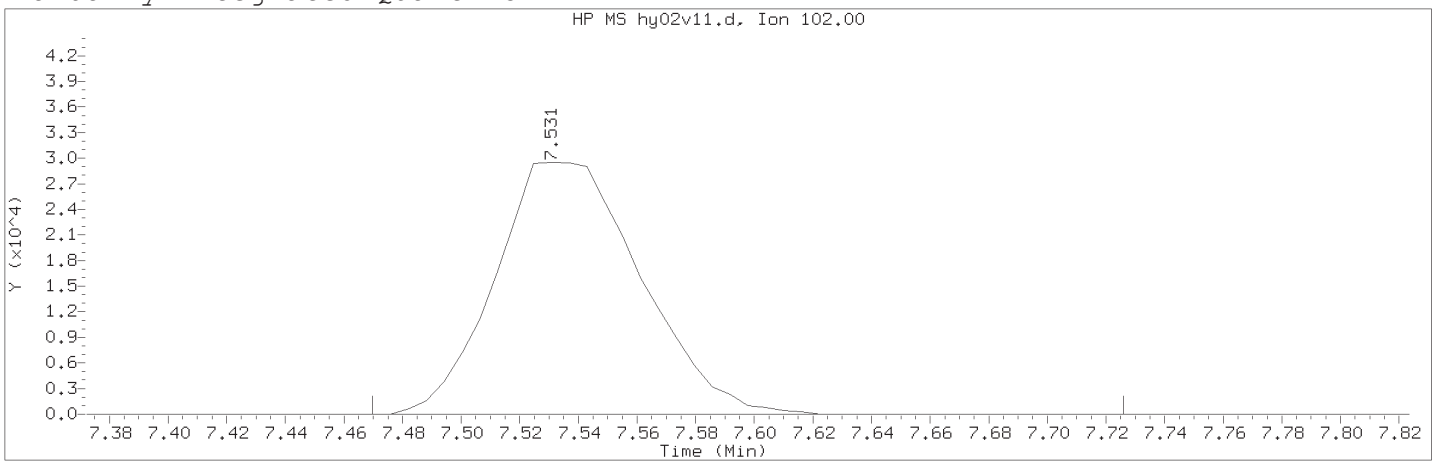
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area : 82163
On-column Amount (ng) : 50.0000
Integration start scan : 450 Integration stop scan: 597
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:38.
Target 3.5 esignature user name: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

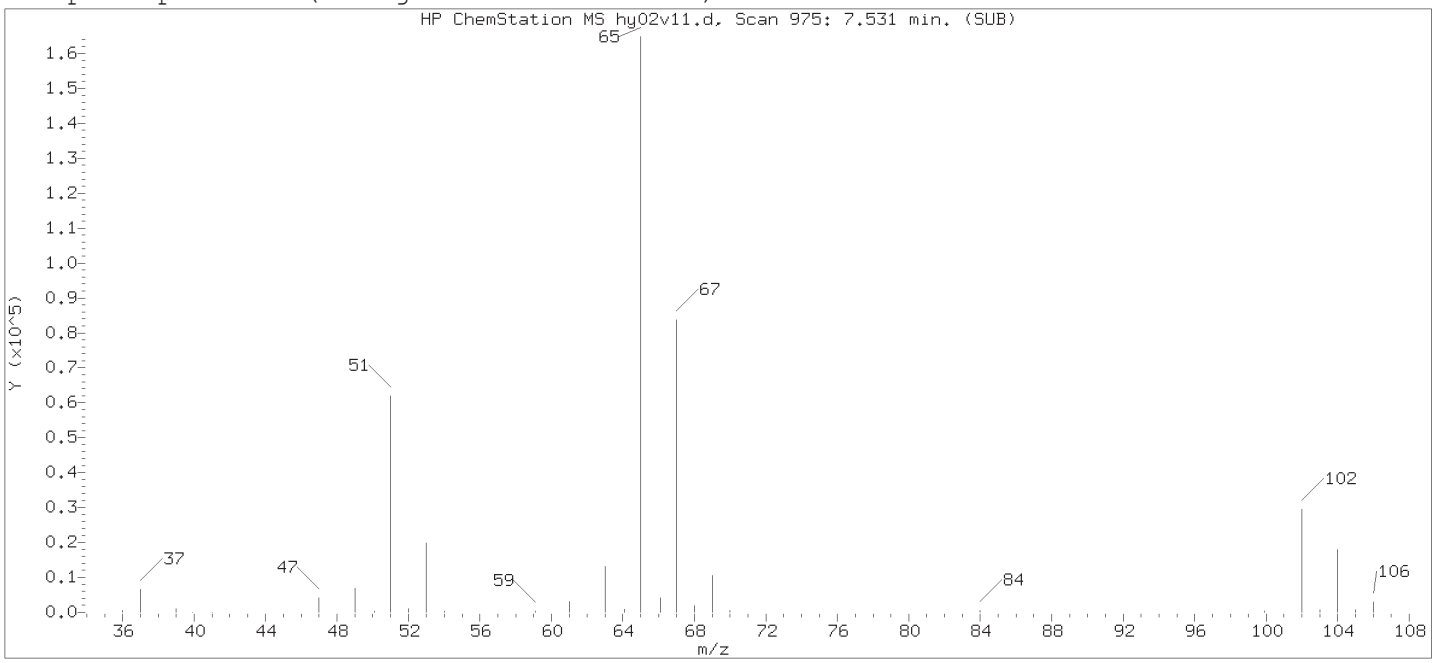
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 975
Retention Time (minutes): 7.531
Quant Ion : 102.00
Area (flag) : 101751M
On-Column Amount (ng) : 9.9826
Integration start scan : 964 Integration stop scan: 1006
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

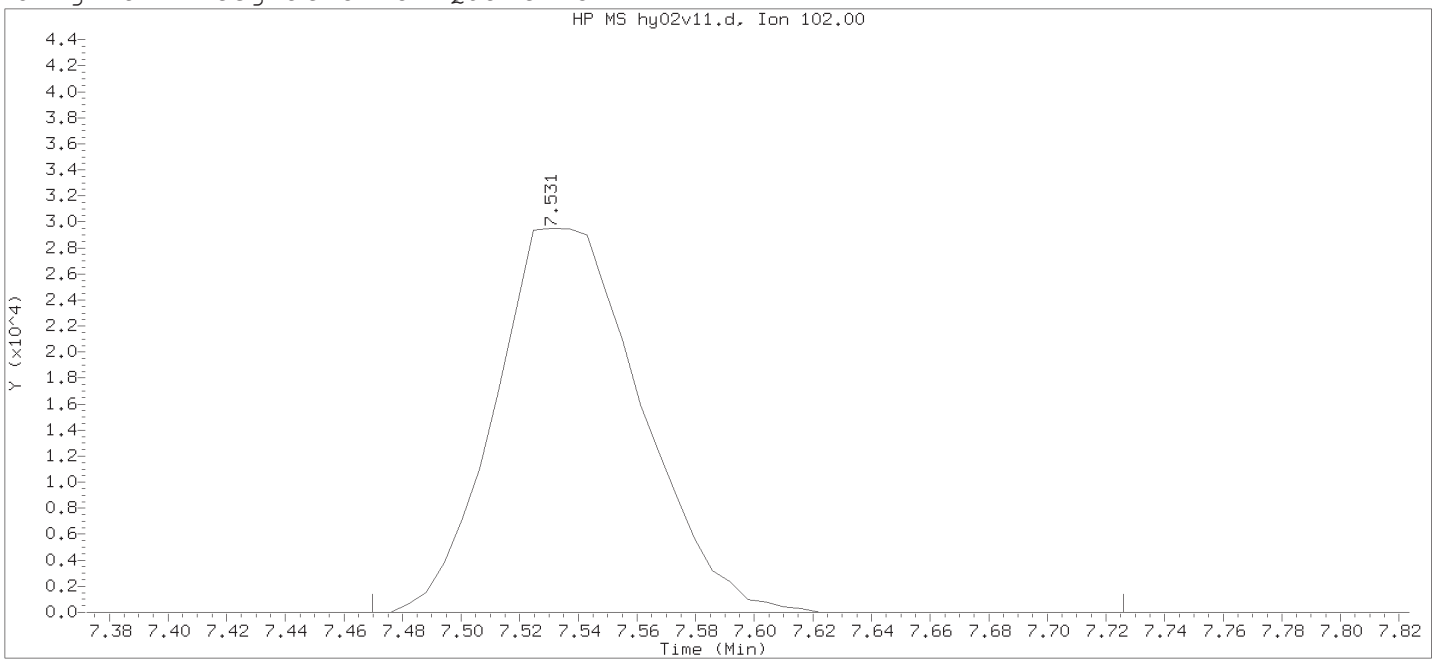
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

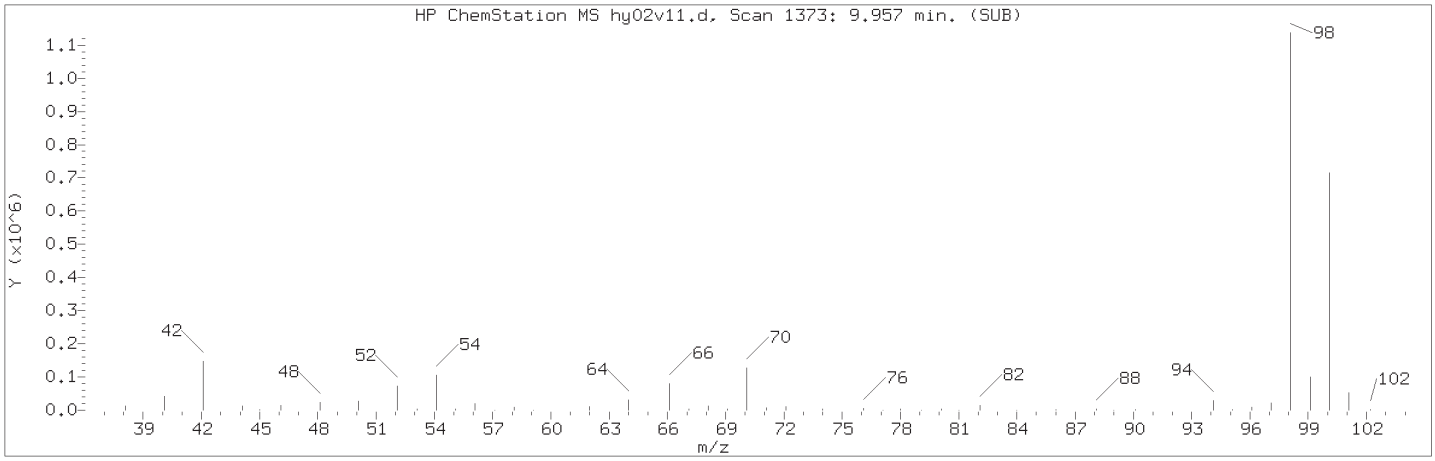
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:24 Automation

Sample Name: LCSH88 Lab Sample ID: LCSH88

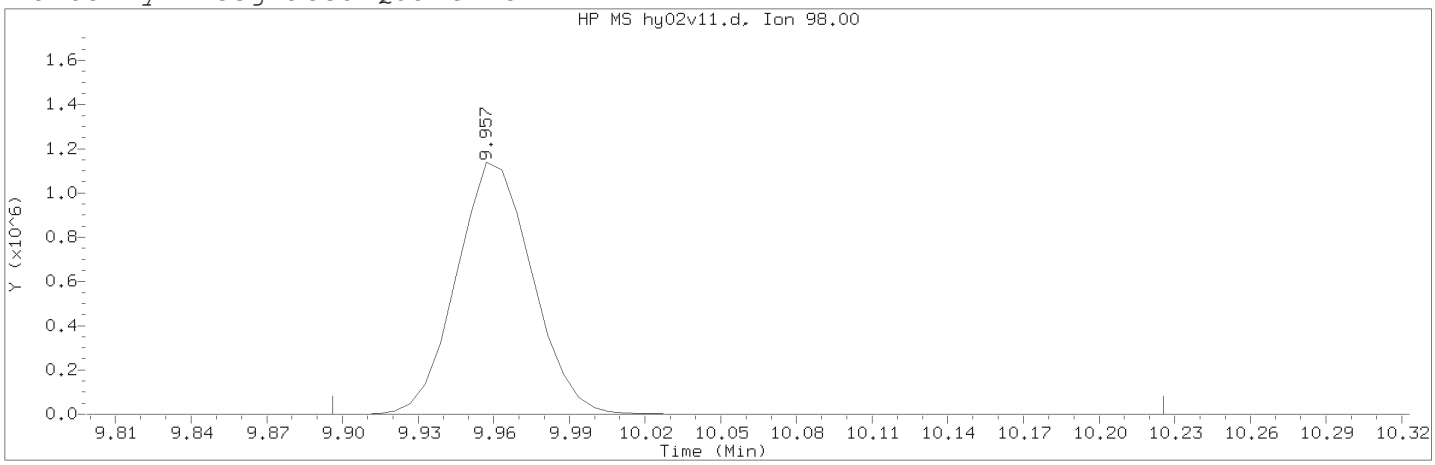
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 975
Retention Time (minutes): 7.531
Quant Ion : 102.00
Area : 101751
On-column Amount (ng) : 0.0000
Integration start scan : 964 Integration stop scan: 1006
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:38.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

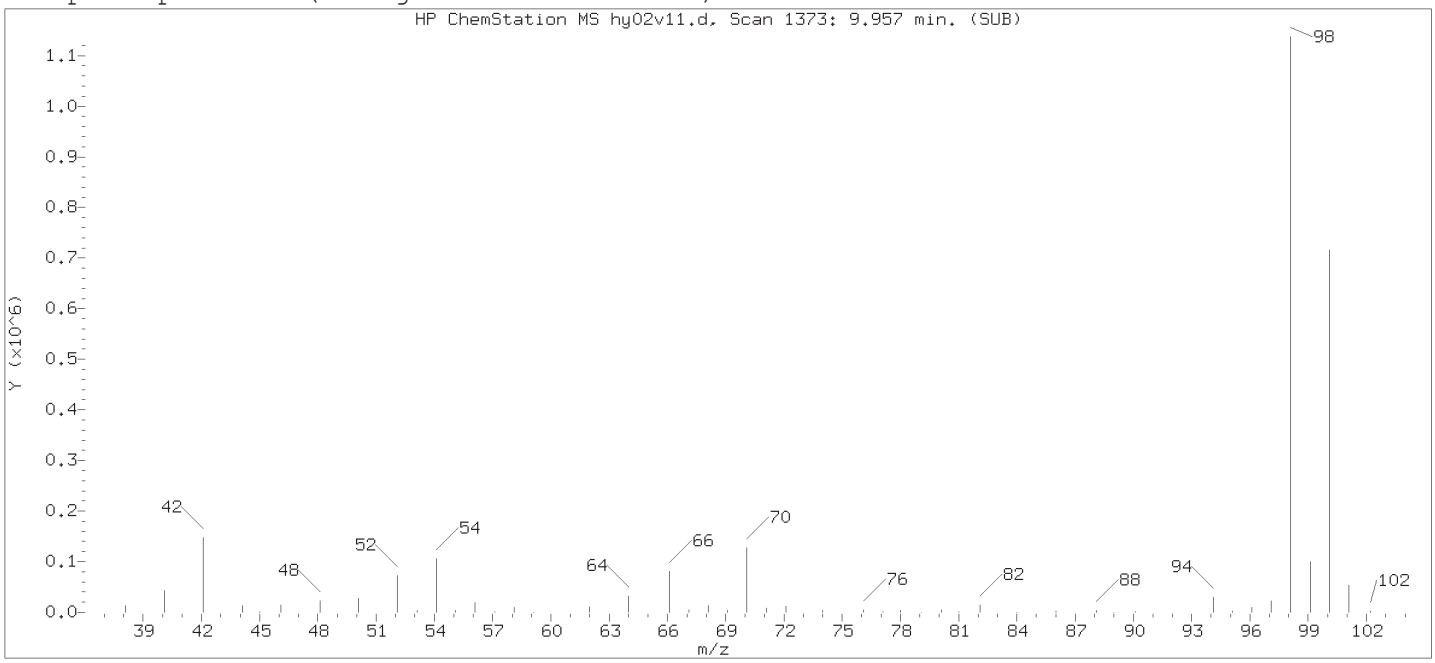
Compound Number : 82
Compound Name : Toluene-d8
Scan Number : 1373
Retention Time (minutes): 9.957
Quant Ion : 98.00
Area (flag) : 2378040M
On-Column Amount (ng) : 10.1199
Integration start scan : 1362 Integration stop scan: 1416
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

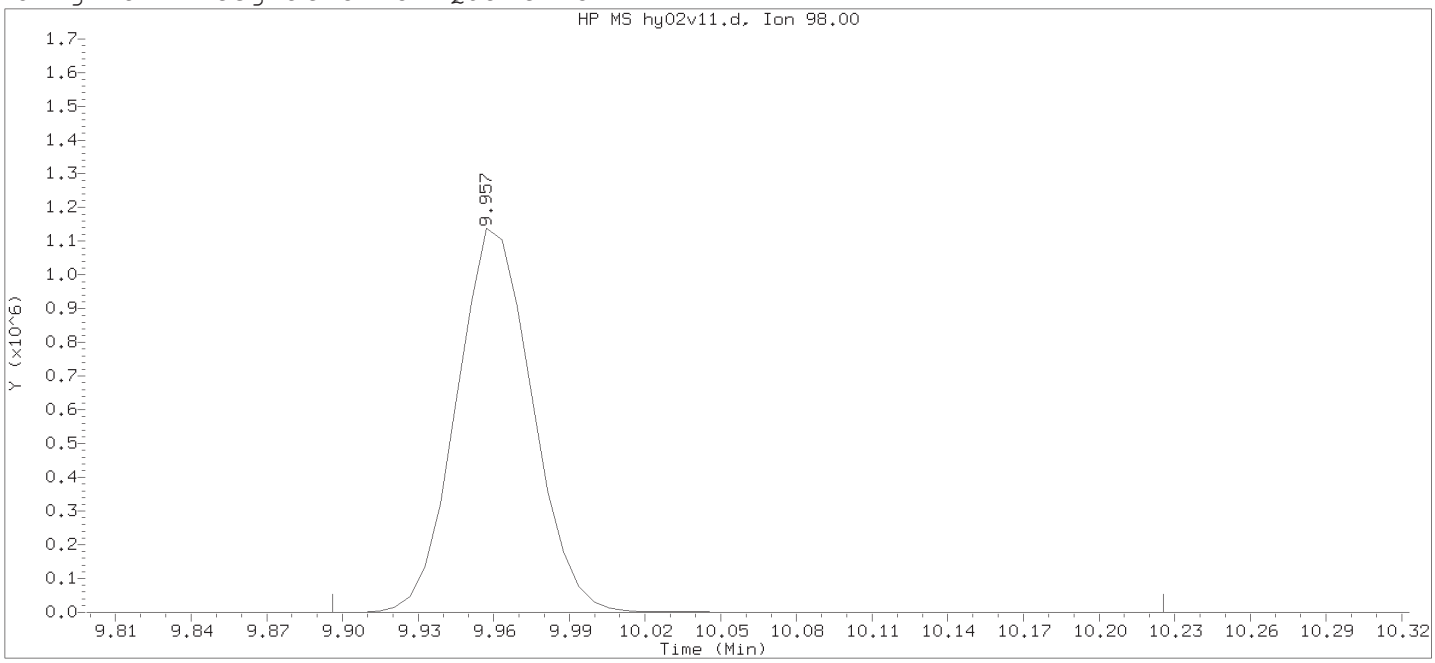
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

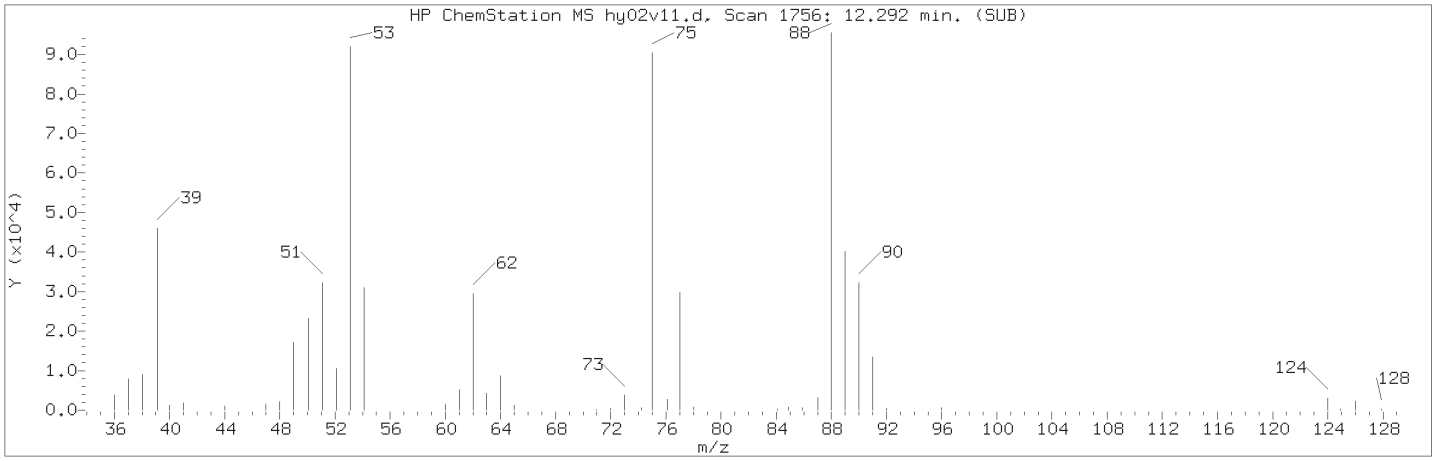
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:24 Automation

Sample Name: LCSH88 Lab Sample ID: LCSH88

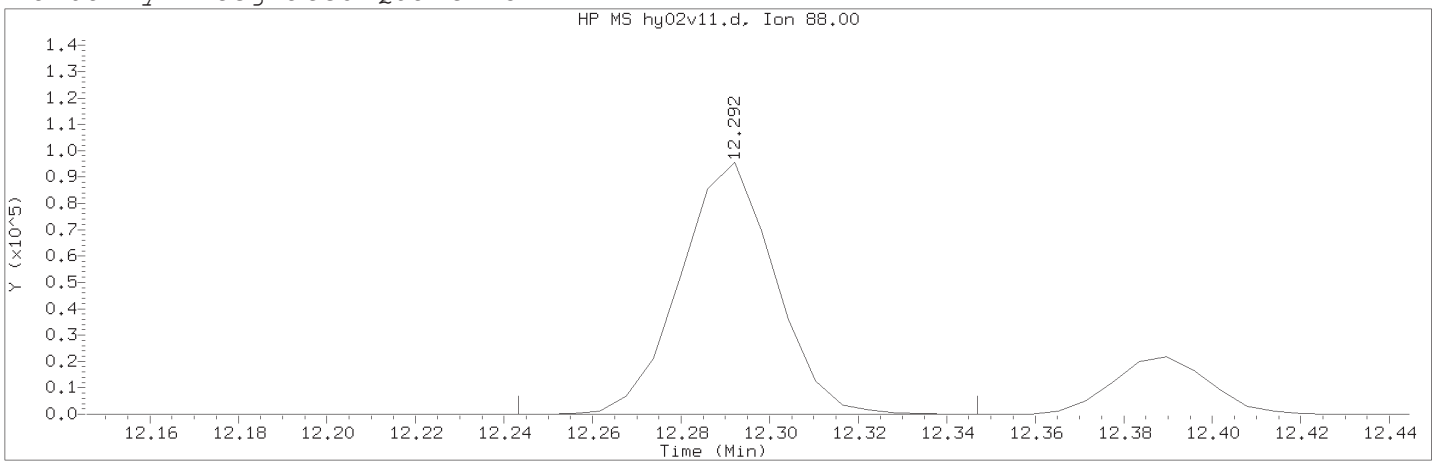
Compound Number : 82
Compound Name : Toluene-d8
Scan Number : 1373
Retention Time (minutes): 9.957
Quant Ion : 98.00
Area : 2378040
On-column Amount (ng) : 0.0000
Integration start scan : 1362 Integration stop scan: 1416
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:38.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

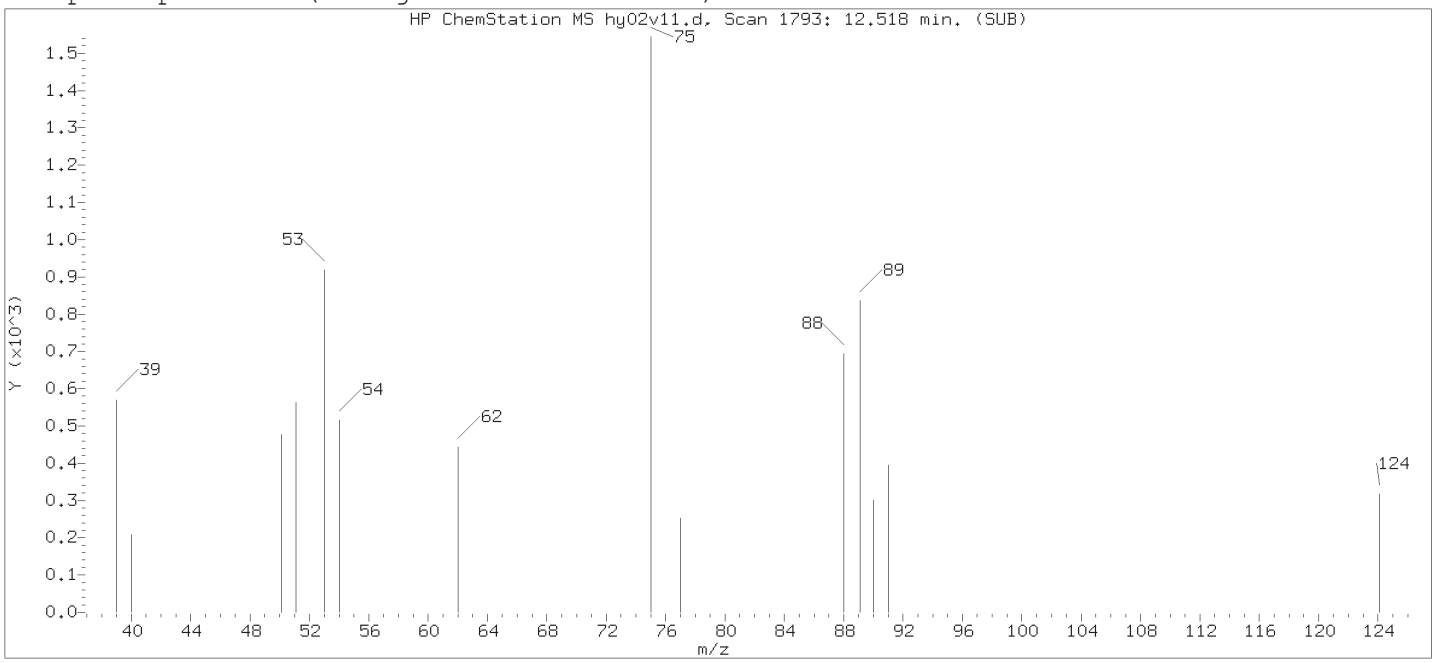
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 141422M
On-Column Amount (ng) : 13.0650
Integration start scan : 1747 Integration stop scan: 1764
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

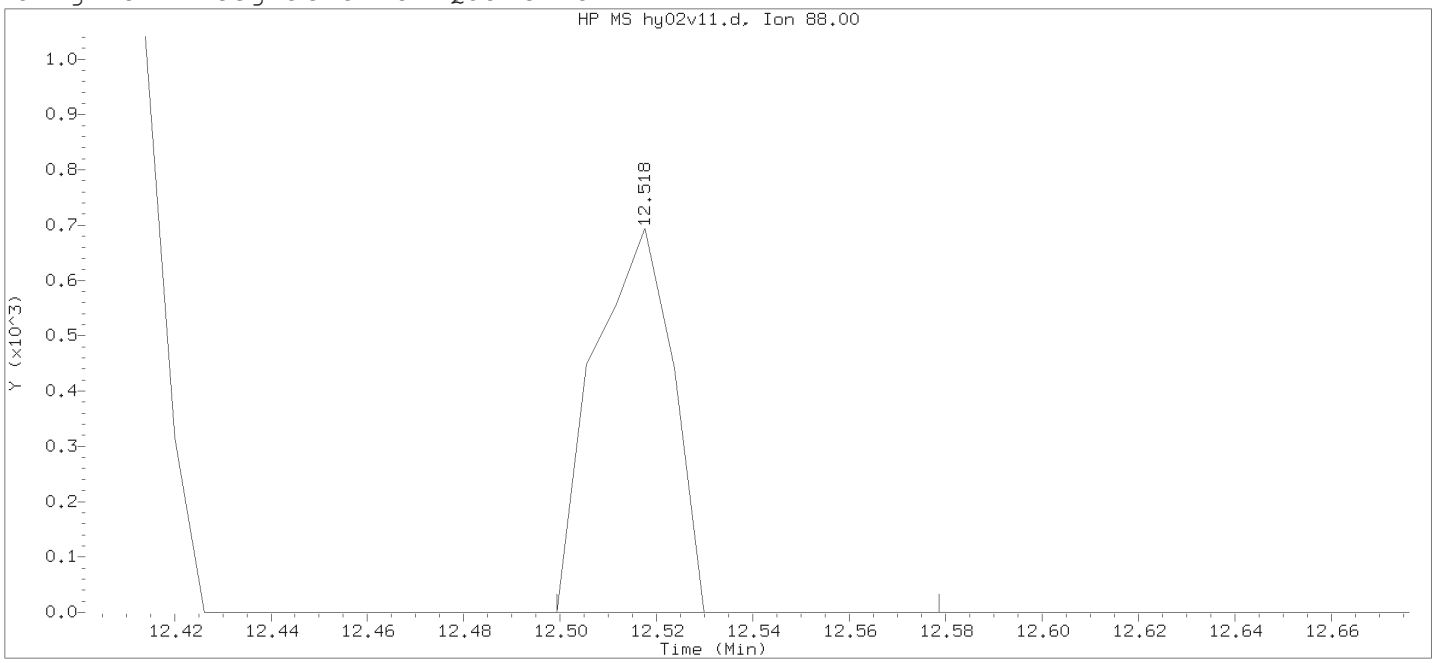
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

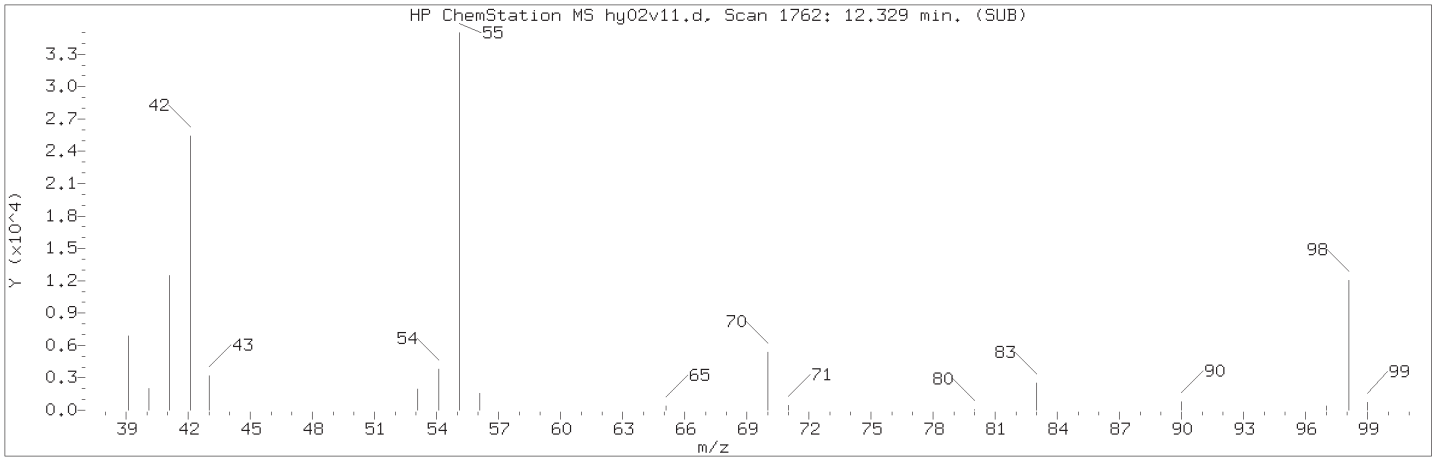
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:24 Automation

Sample Name: LCSH88 Lab Sample ID: LCSH88

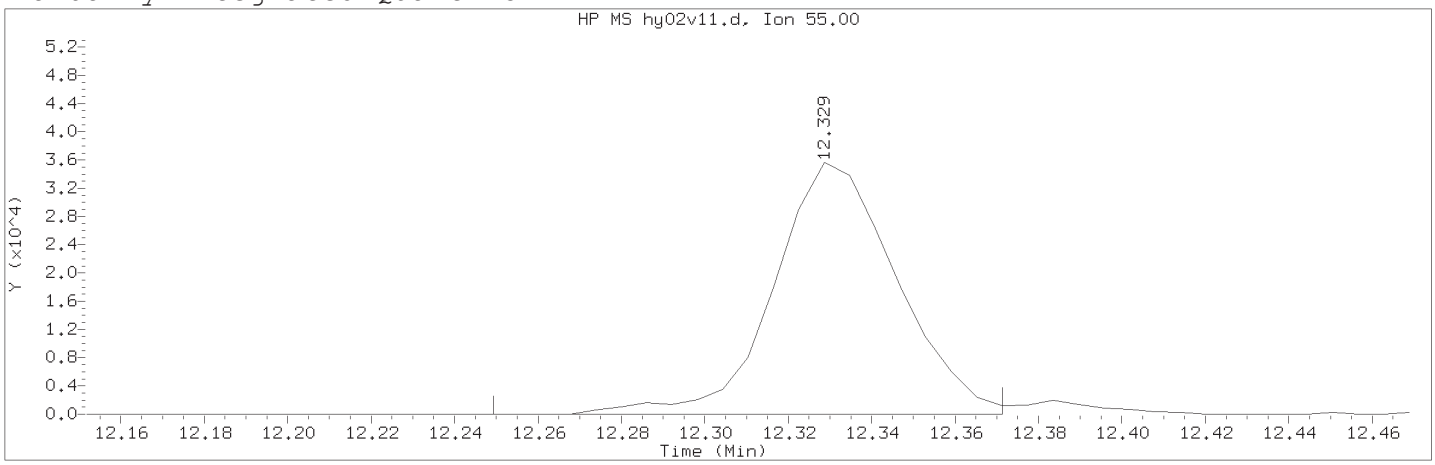
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1793
Retention Time (minutes): 12.518
Quant Ion : 88.00
Area : 782
On-column Amount (ng) : 0.0735
Integration start scan : 1789 Integration stop scan: 1802
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCSH88 Lab Sample ID: LCSH88

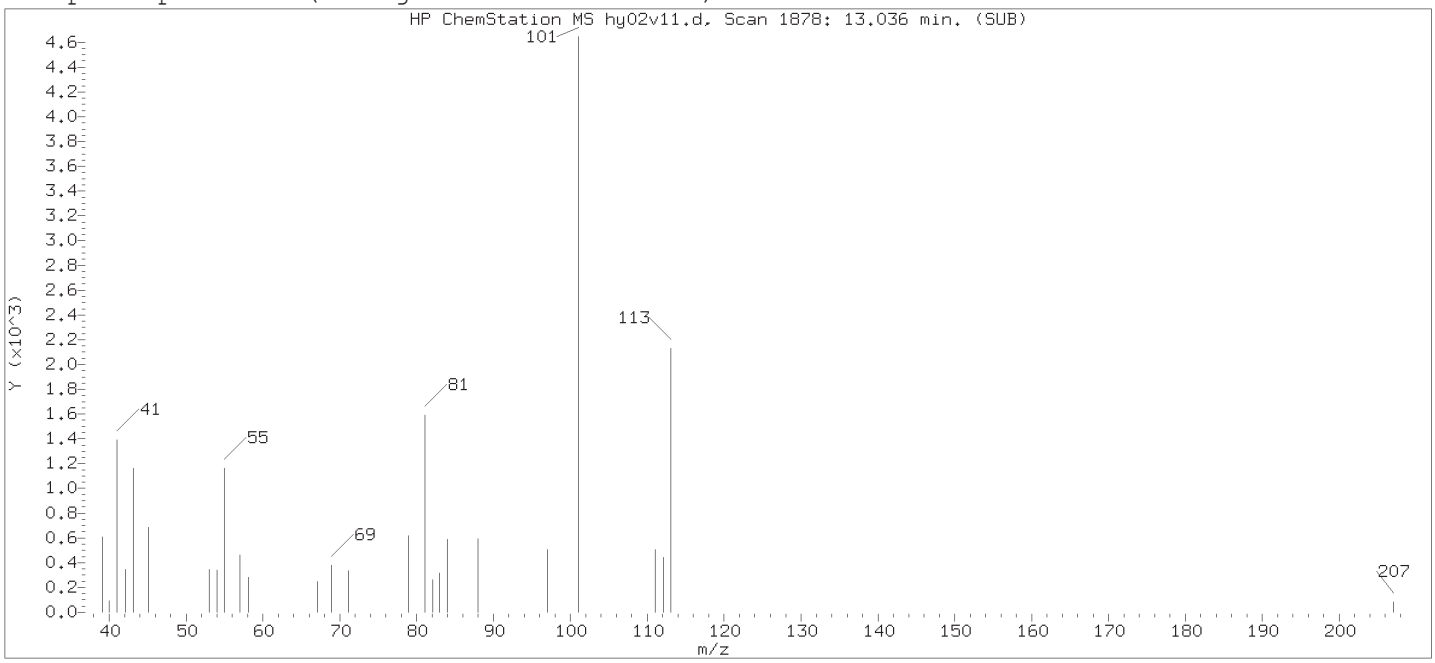
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1762
Retention Time (minutes): 12.329
Quant Ion : 55.00
Area (flag) : 72992M
On-Column Amount (ng) : 132.5935
Integration start scan : 1748 Integration stop scan: 1768
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

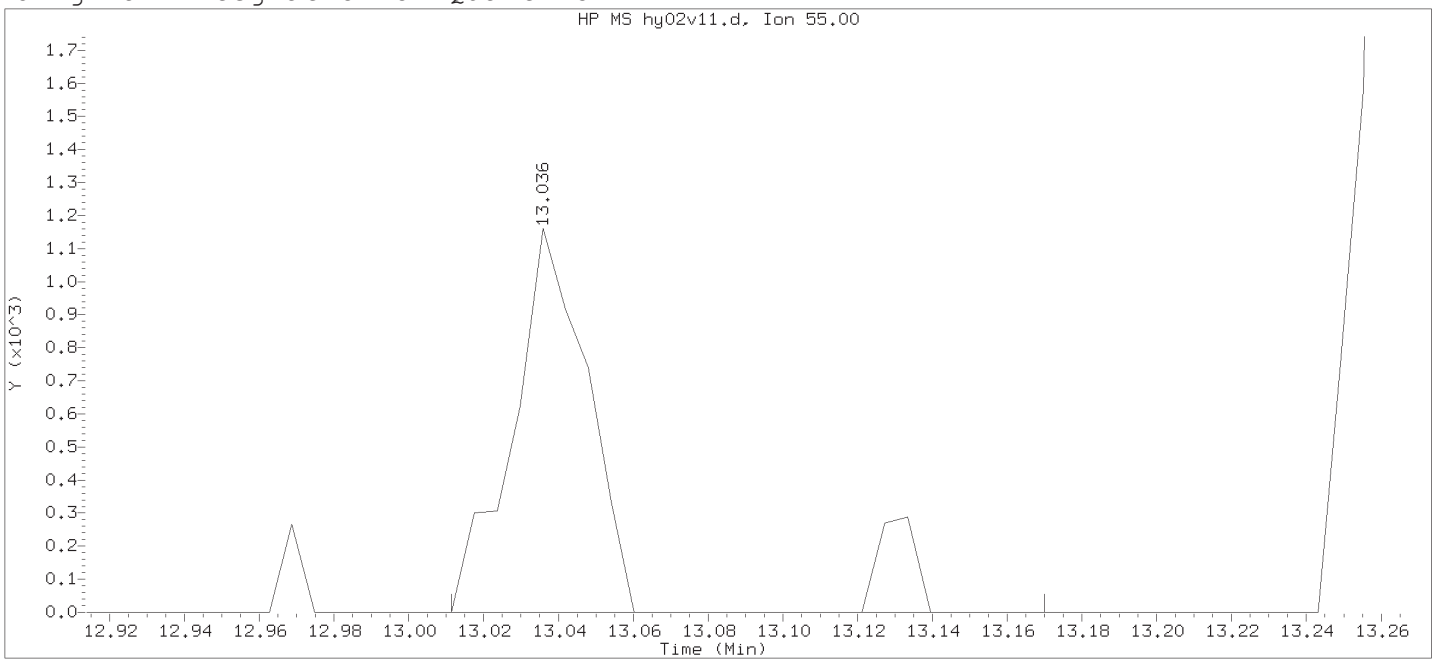
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Paul R. Cormier on 05/03/2018 at 10:09.
PARALLAX ID: prc00685

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



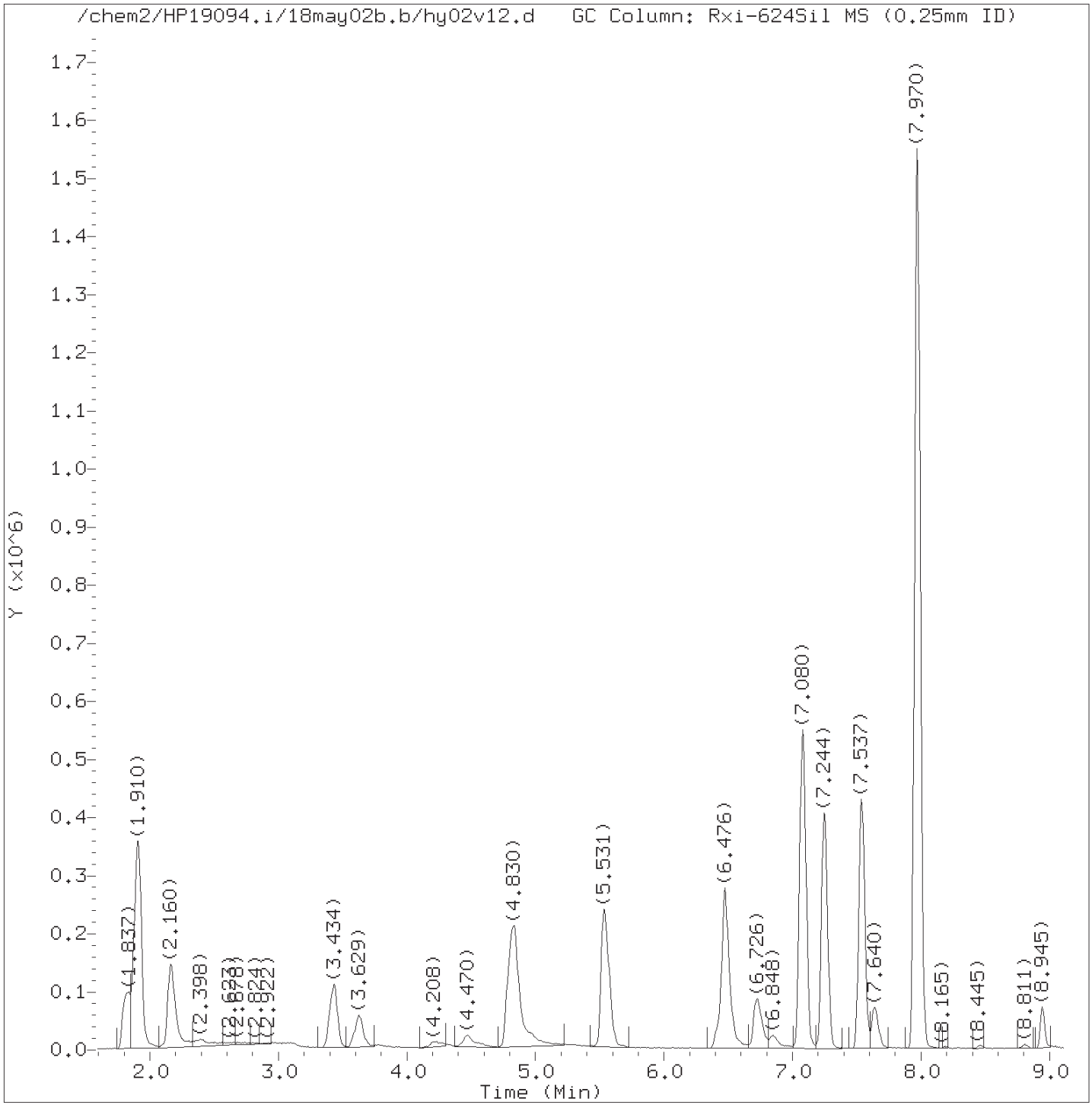
Data File: /chem2/HP19094.i/18may02b.b/hy02v11.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:21
Date, time and analyst ID of latest file update: 02-May-2018 22:24 Automation

Sample Name: LCSH88 Lab Sample ID: LCSH88

Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1878
Retention Time (minutes): 13.036
Quant Ion : 55.00
Area : 1809
On-column Amount (ng) : 3.3432
Integration start scan : 1873 Integration stop scan: 1899
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:38.
Target 3.5 esignature user ID: DVV10203



Total Ion Chromatogram (TIC)

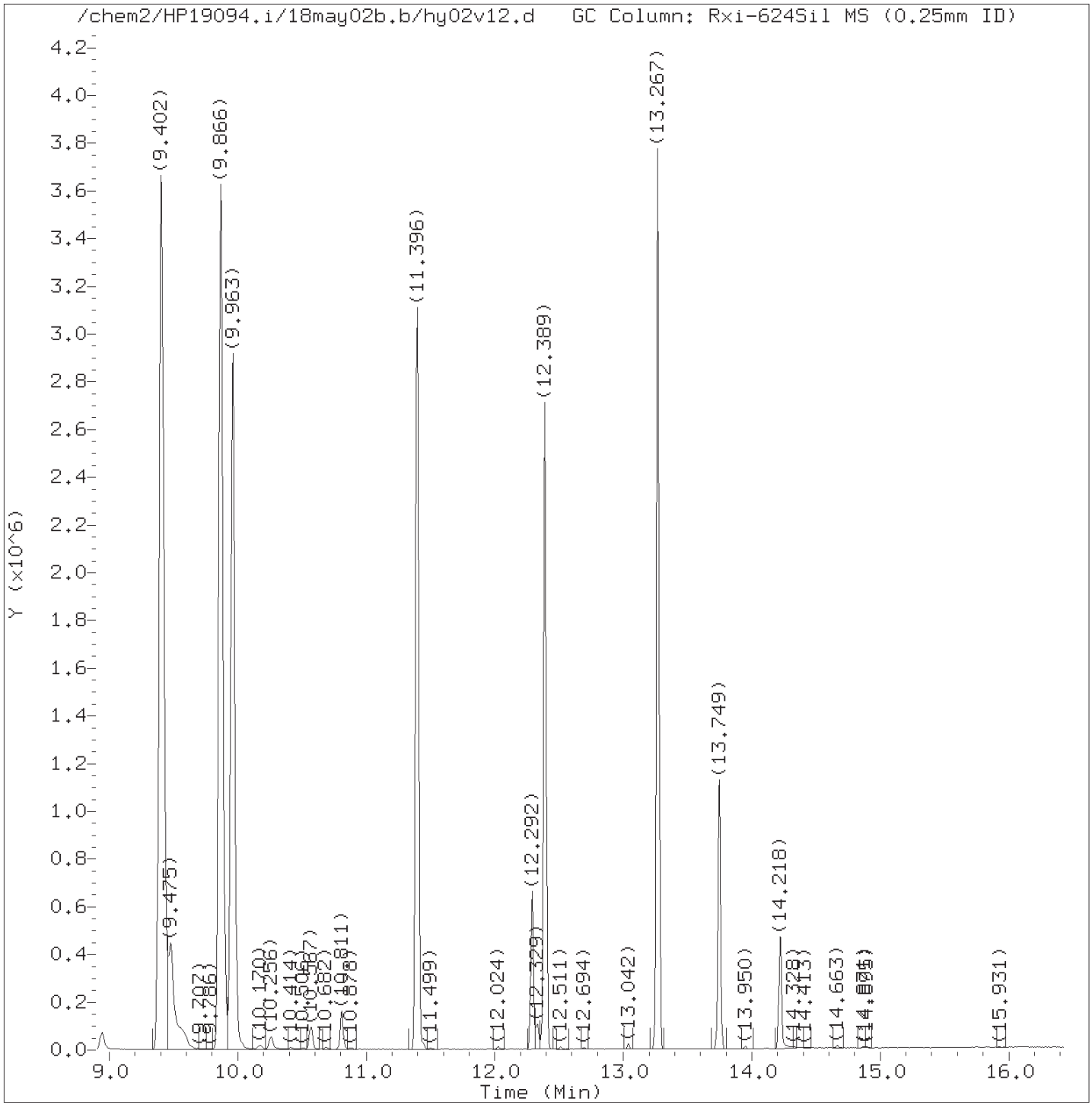
Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCDH88 Lab Sample ID: LCDH88

Digitally signed by Don V. Viray
on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCDH88 Lab Sample ID: LCDH88

Digitally signed by Don V. Viray
on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

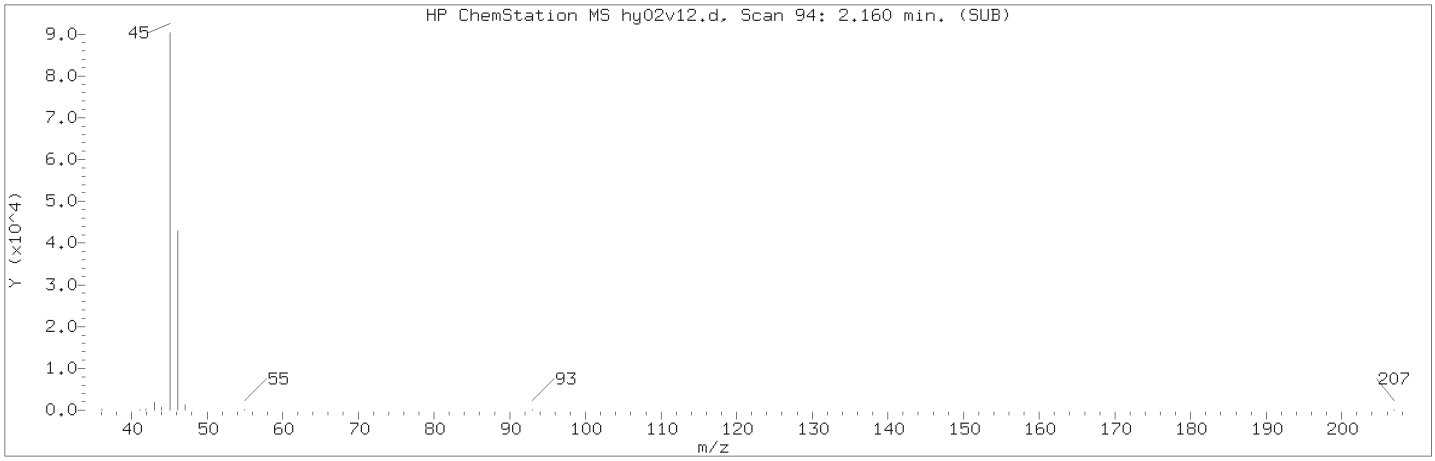
Sample Name: LCDH88 Lab Sample ID: LCDH88

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.160	45	367108M	5.115
25) Acetonitrile	(1)	4.208	41	76036M	44.742
26)*t-Butyl Alcohol-d10	(1)	4.470	65	70380M	50.000
36) Vinyl Acetate	(2)	5.531	43	844612	12.351
43) Methyl Acrylate	(2)	6.476	55	568762	26.957
50)$Dibromofluoromethane	(2)	7.080	113	548216	9.924
53) 1-Chlorobutane	(2)	7.244	56	532521	5.274
57)$1,2-Dichloroethane-d4	(2)	7.543	102	99061	10.169
63)*Fluorobenzene	(2)	7.970	96	2235850	10.000
77) Chloroacetonitrile	(2)	9.475	75	176428	209.820
78) 2-Chloroethyl vinyl ether	(2)	9.482	63	106420	5.264
82)$Toluene-d8	(3)	9.963	98	2273416	10.021
97)*Chlorobenzene-d5	(3)	11.396	117	1642381	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.292	88	141379M	15.511
112) Cyclohexanone	(1)	12.329	55	53752M	115.959
111)$4-Bromofluorobenzene	(3)	12.389	95	800571	9.947
133)*1,4-Dichlorobenzene-d4	(4)	13.267	152	870448	10.000
142) Hexachloroethane	(4)	13.749	117	200862	5.481

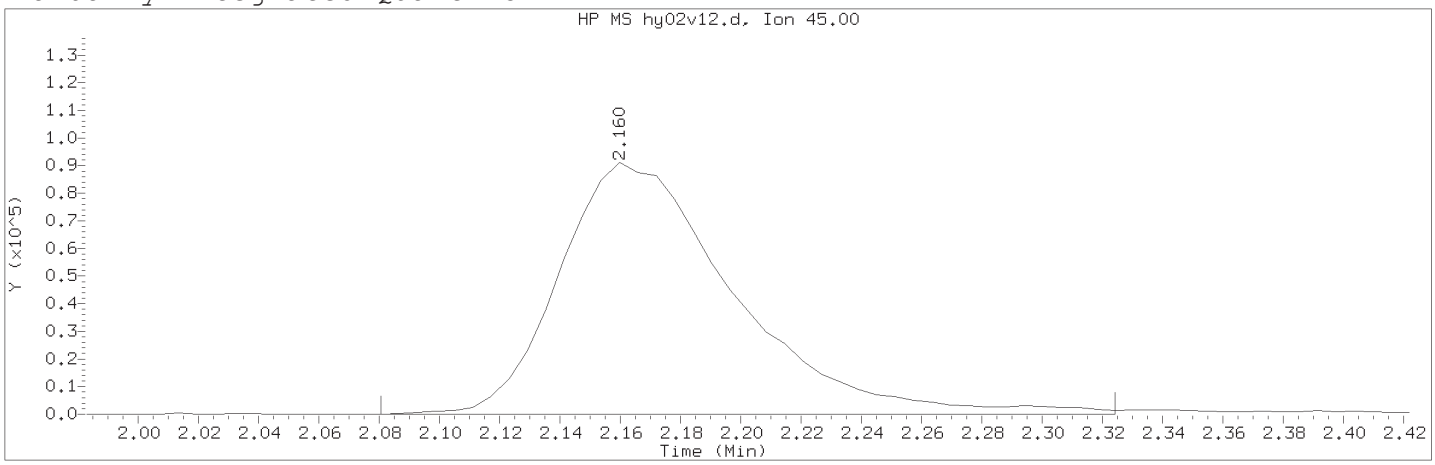
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCDH88 Lab Sample ID: LCDH88

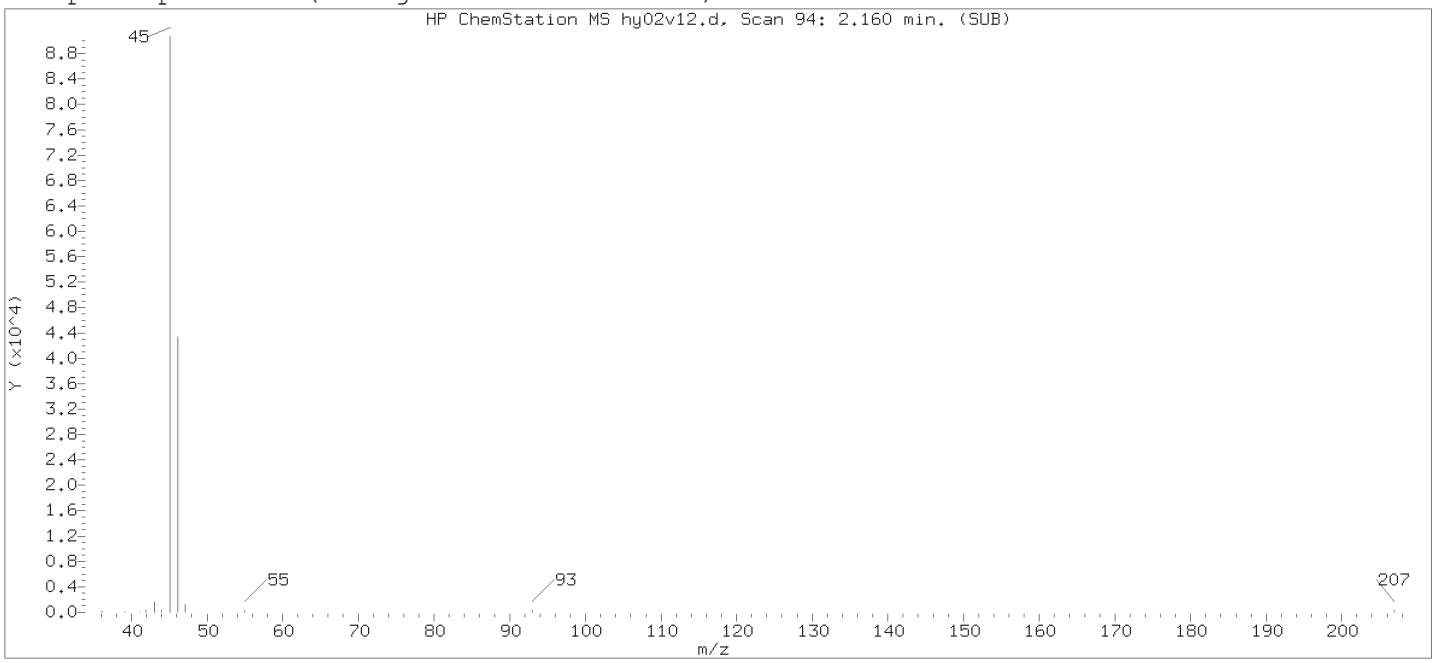
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 94
Retention Time (minutes): 2.160
Quant Ion : 45.00
Area (flag) : 367108M
On-Column Amount (ng) : 5.1147
Integration start scan : 80 Integration stop scan: 120
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

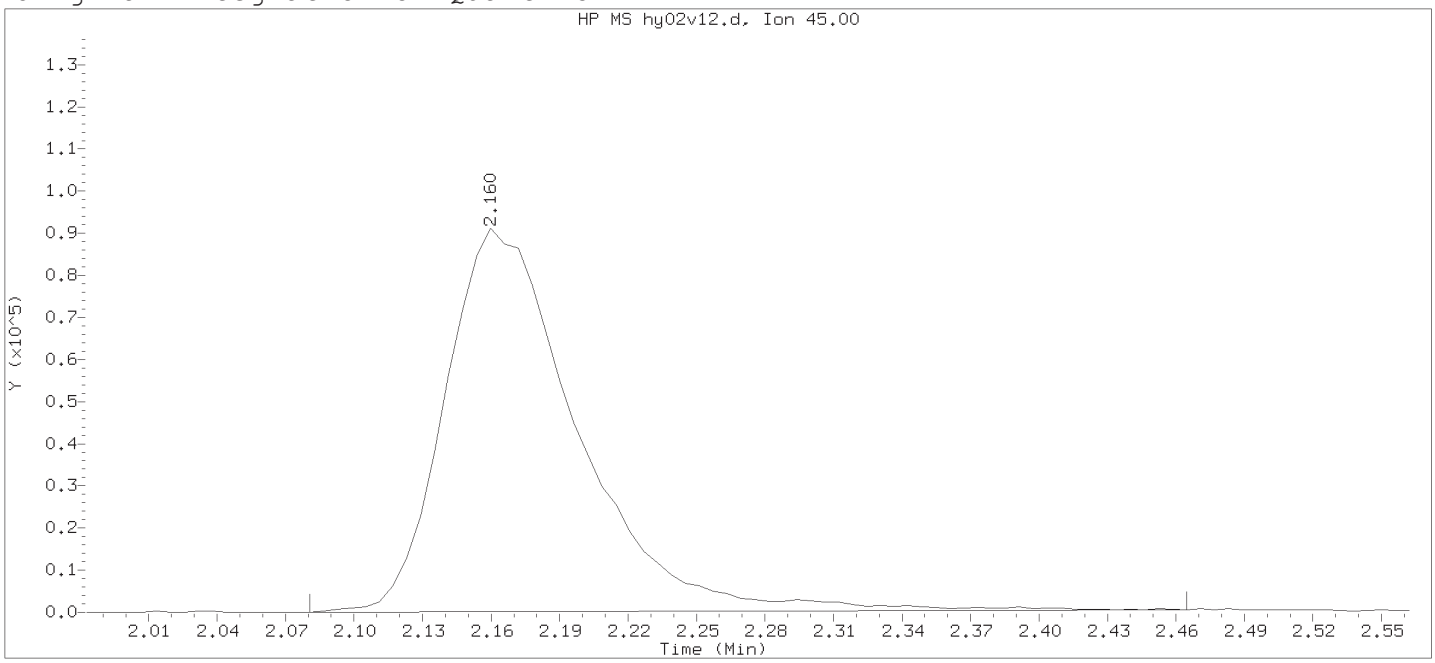
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 05/03/2018 at 16:36.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

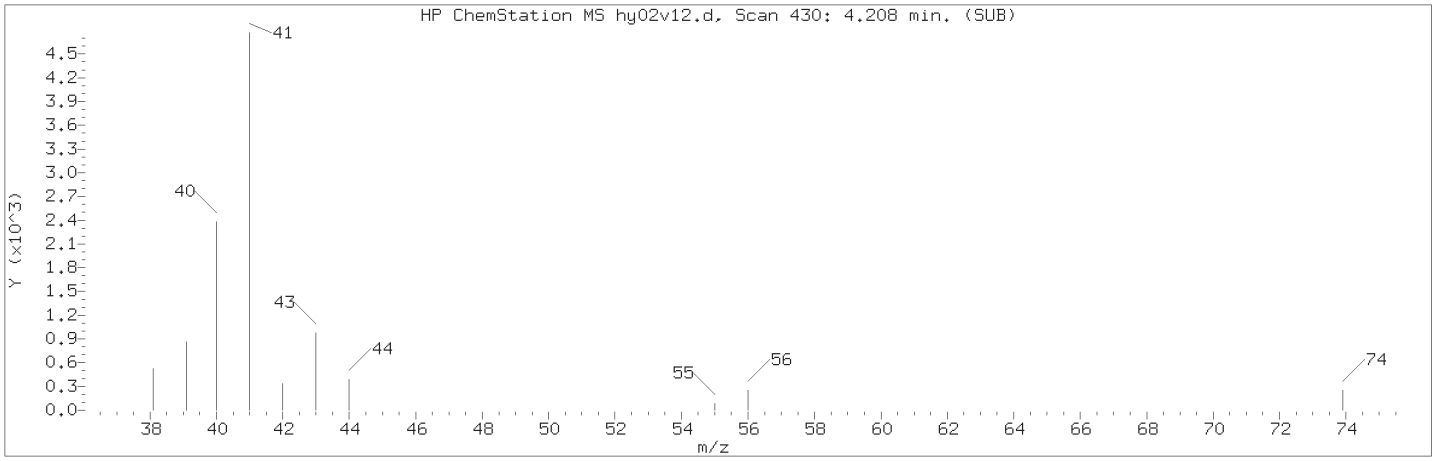
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:46 Automation

Sample Name: LCDH88 Lab Sample ID: LCDH88

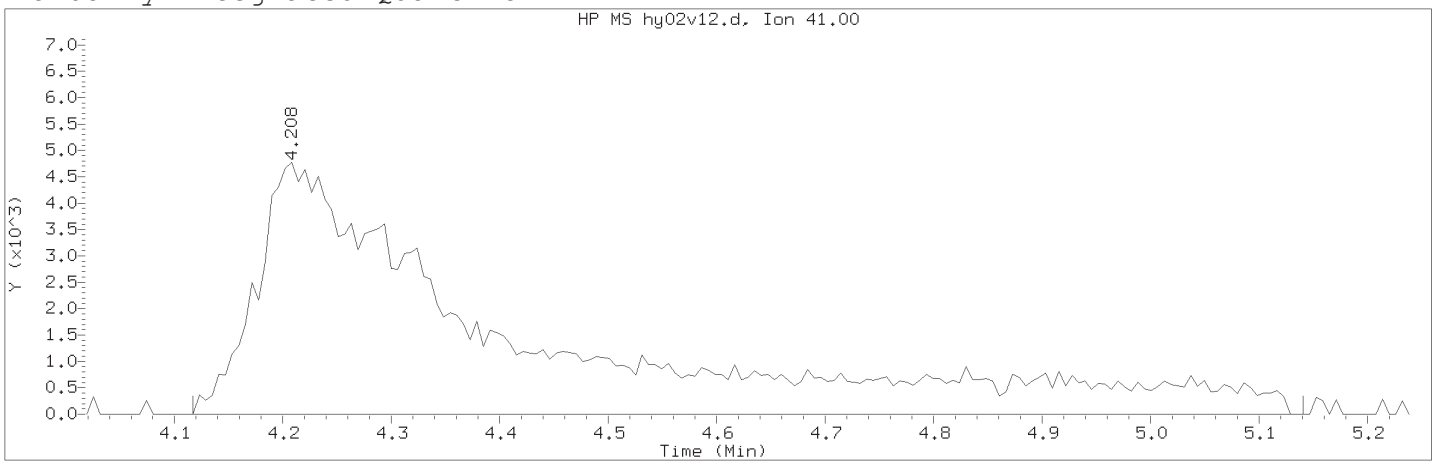
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 94
Retention Time (minutes): 2.160
Quant Ion : 45.00
Area : 368442
On-column Amount (ng) : 5.1333
Integration start scan : 80 Integration stop scan: 143
Y at integration start : 0 Y at integration end: 584

Digitally signed by Don V. Viray on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCDH88 Lab Sample ID: LCDH88

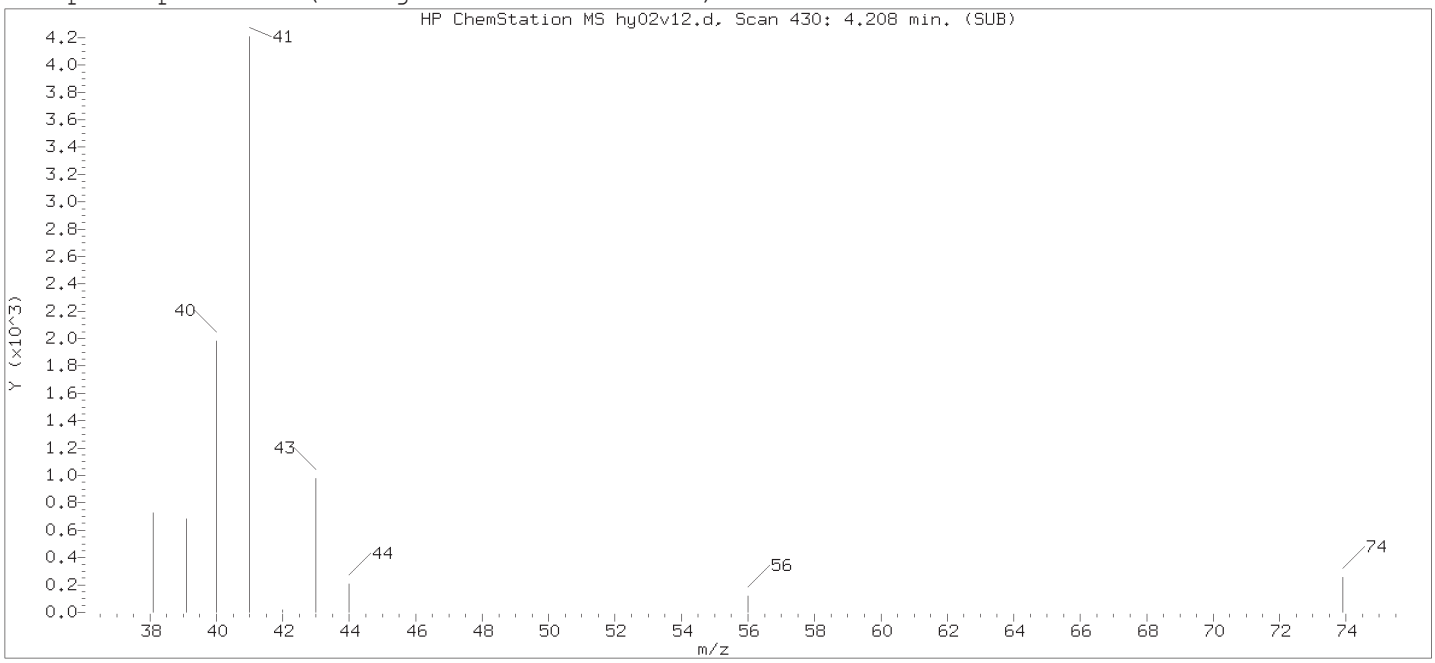
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 430
Retention Time (minutes): 4.208
Quant Ion : 41.00
Area (flag) : 76036M
On-Column Amount (ng) : 44.7419
Integration start scan : 414 Integration stop scan: 582
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

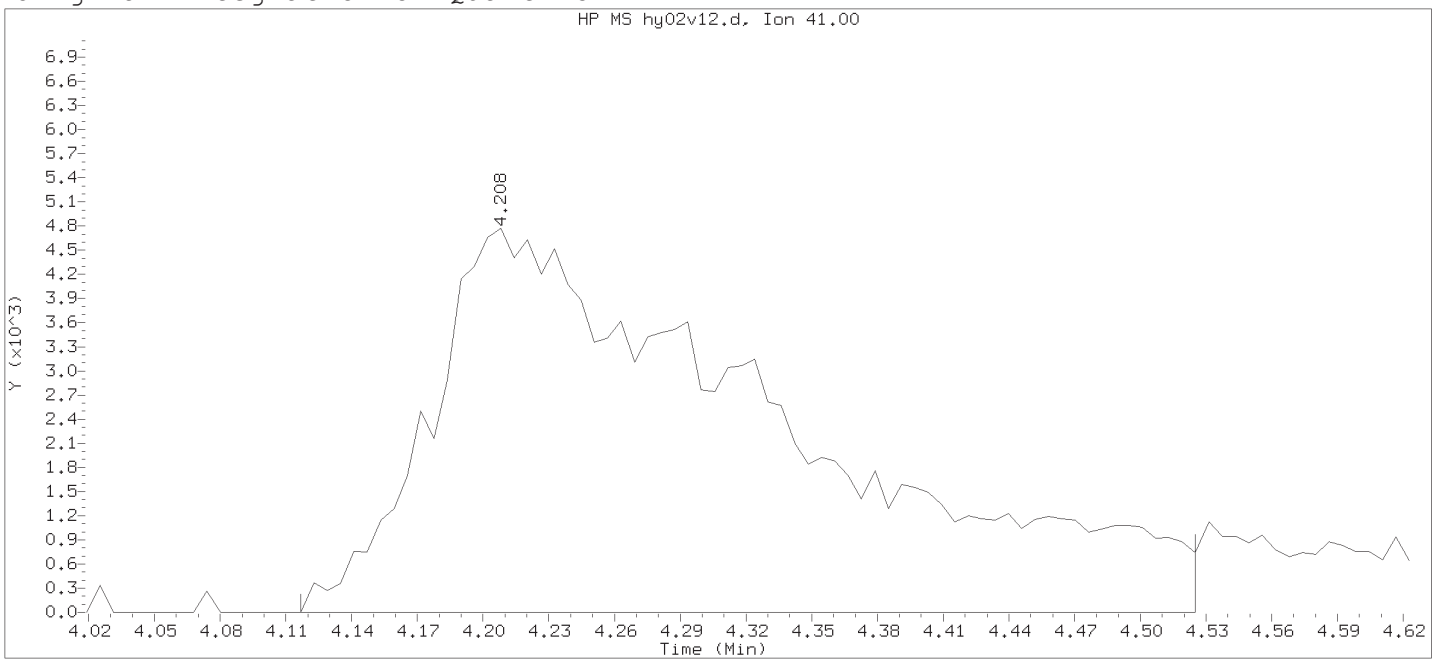
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 05/03/2018 at 16:36.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

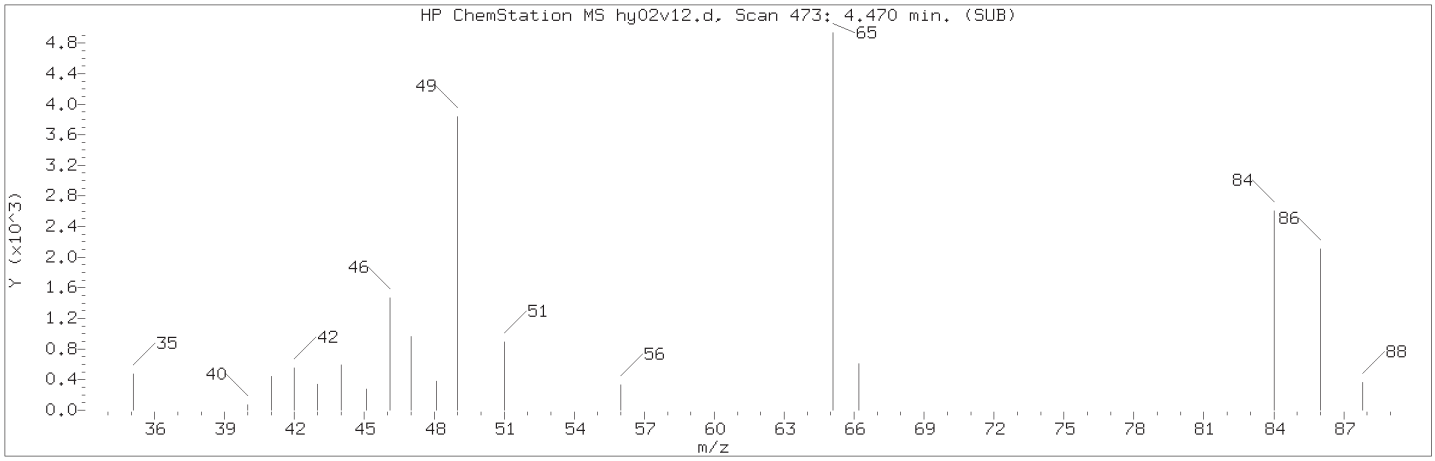
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:46 Automation

Sample Name: LCDH88 Lab Sample ID: LCDH88

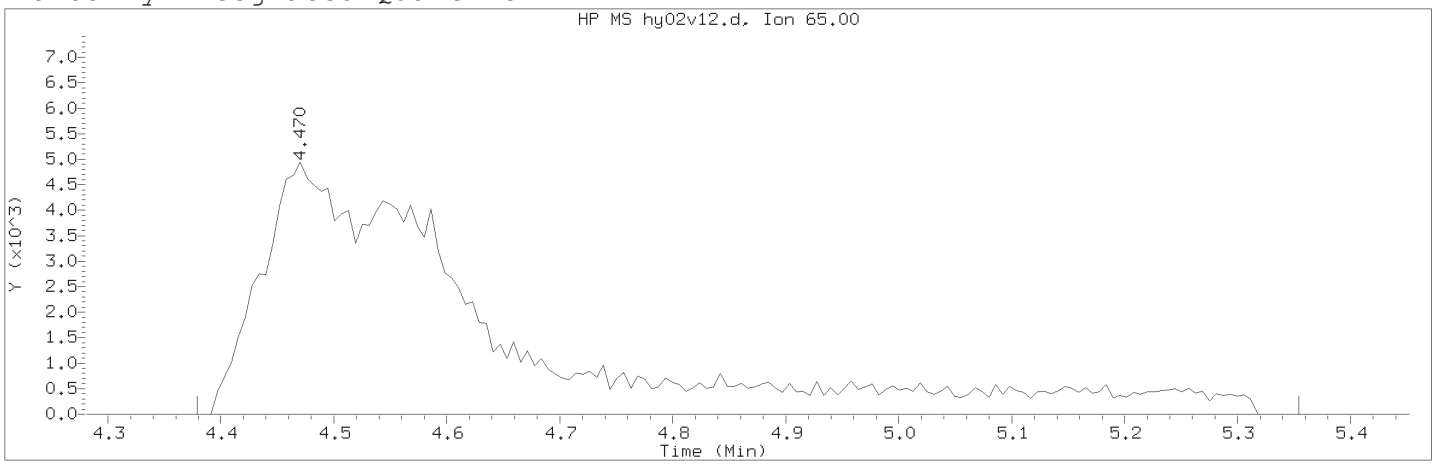
Compound Number : 25
Compound Name : Acetonitrile
Scan Number : 430
Retention Time (minutes): 4.208
Quant Ion : 41.00
Area : 53034
On-column Amount (ng) : 31.5863
Integration start scan : 414 Integration stop scan: 481
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:39.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCDH88 Lab Sample ID: LCDH88

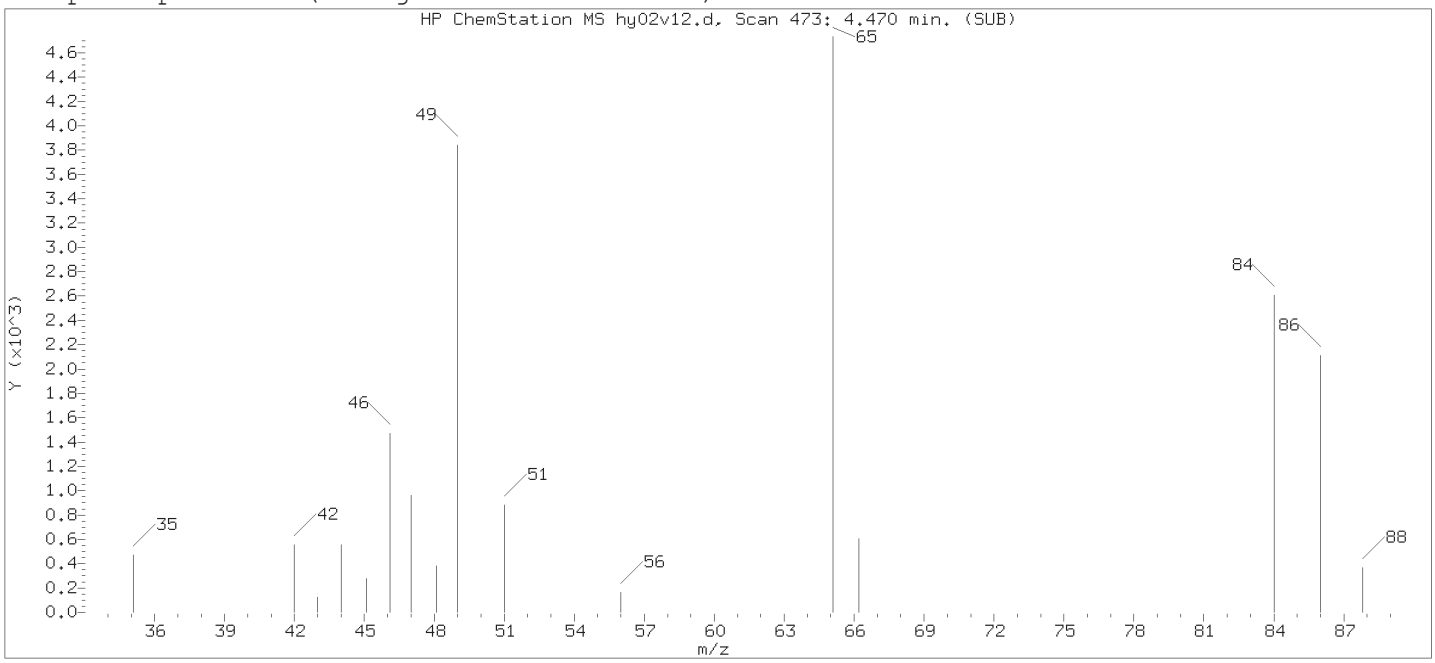
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area (flag) : 70380M
On-Column Amount (ng) : 50.0000
Integration start scan : 457 Integration stop scan: 617
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

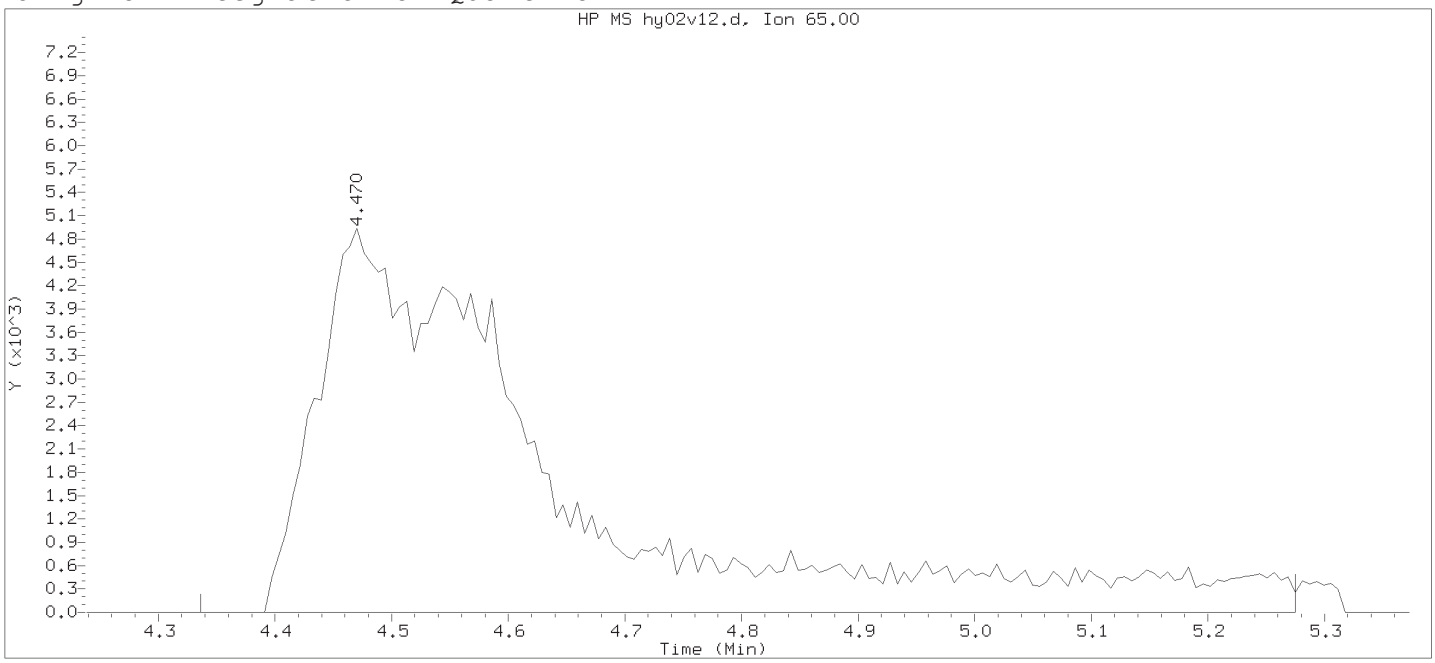
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 05/03/2018 at 16:36.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

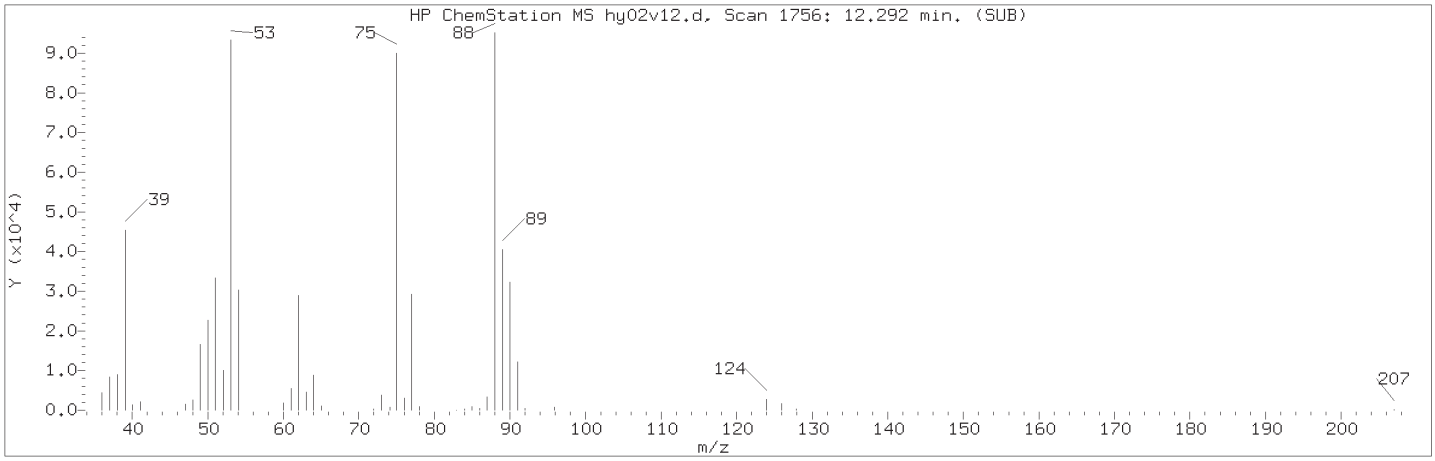
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:46 Automation

Sample Name: LCDH88 Lab Sample ID: LCDH88

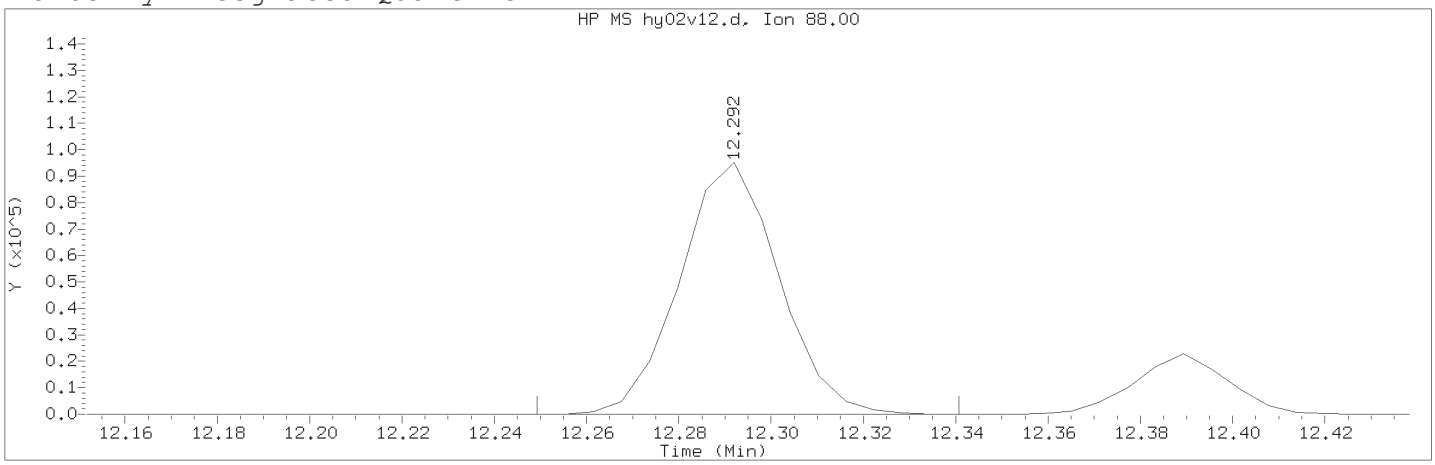
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 473
Retention Time (minutes): 4.470
Quant Ion : 65.00
Area : 69535
On-column Amount (ng) : 50.0000
Integration start scan : 450 Integration stop scan: 604
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:39.
Target 3.5 esignature user name: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCDH88 Lab Sample ID: LCDH88

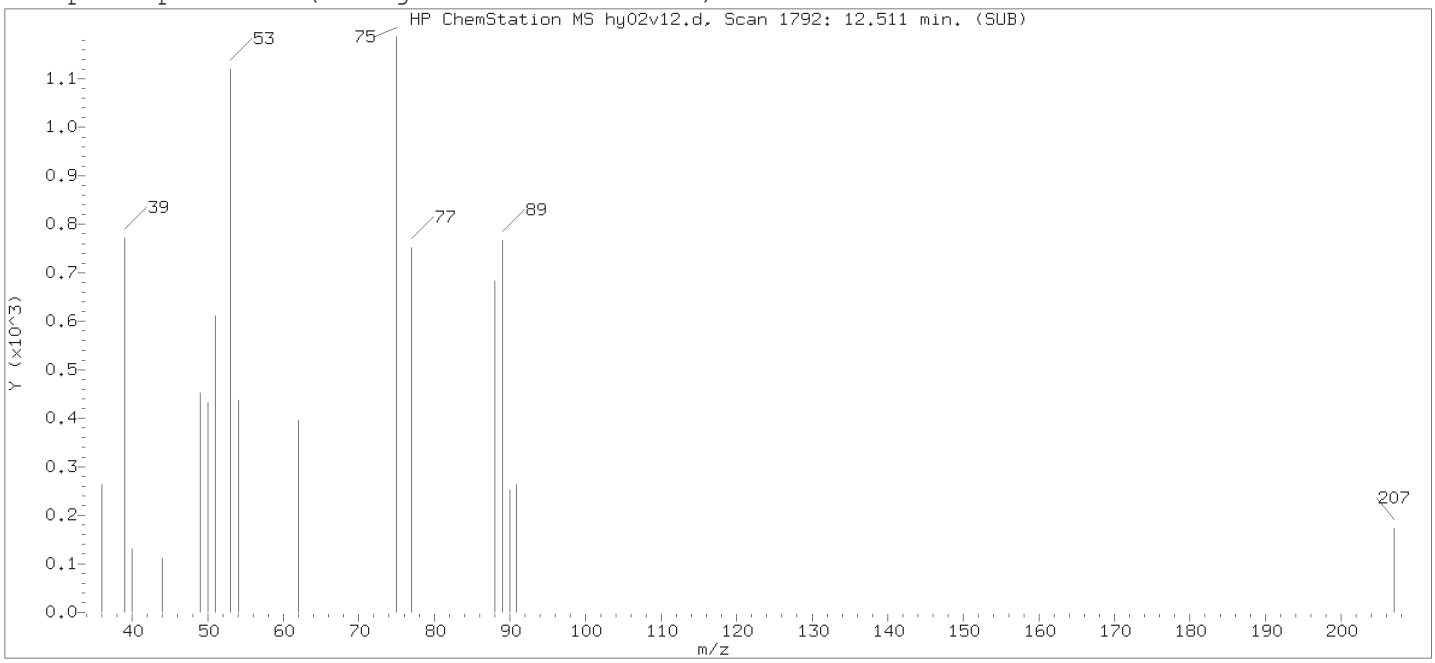
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1756
Retention Time (minutes): 12.292
Quant Ion : 88.00
Area (flag) : 141379M
On-Column Amount (ng) : 15.5110
Integration start scan : 1748 Integration stop scan: 1763
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

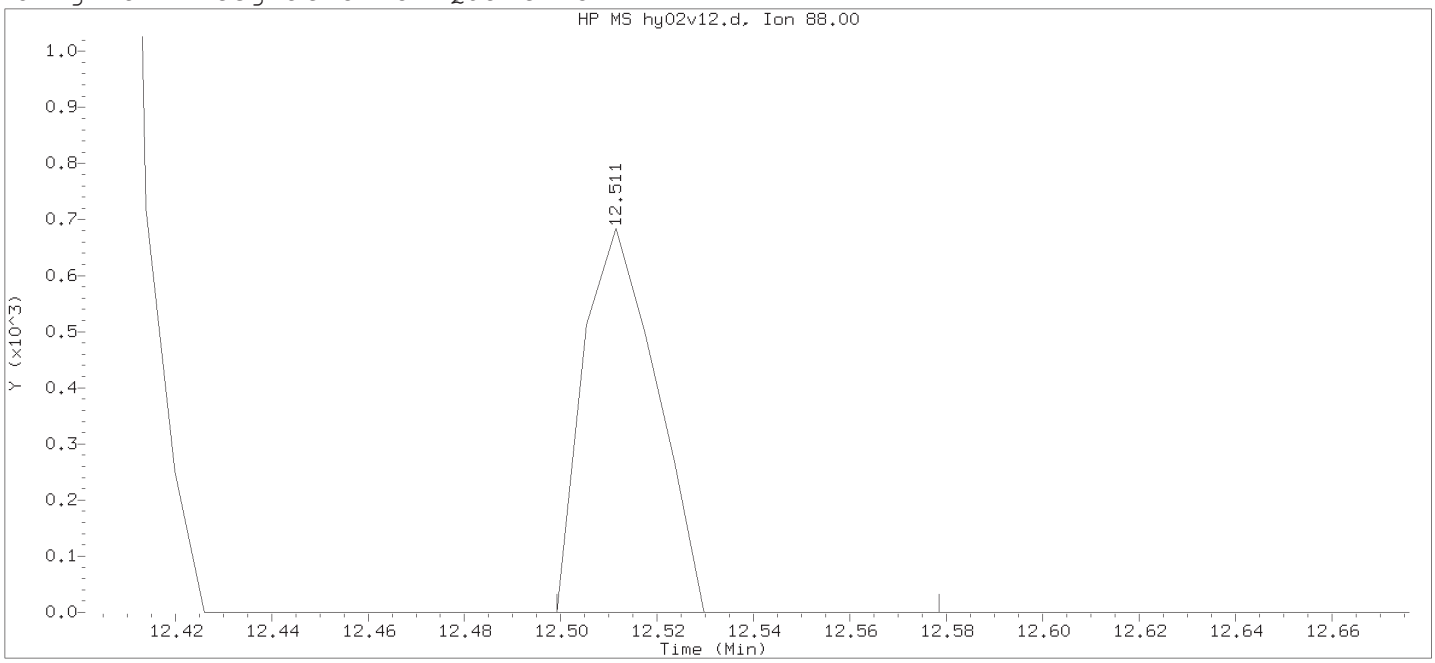
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 05/03/2018 at 16:36.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

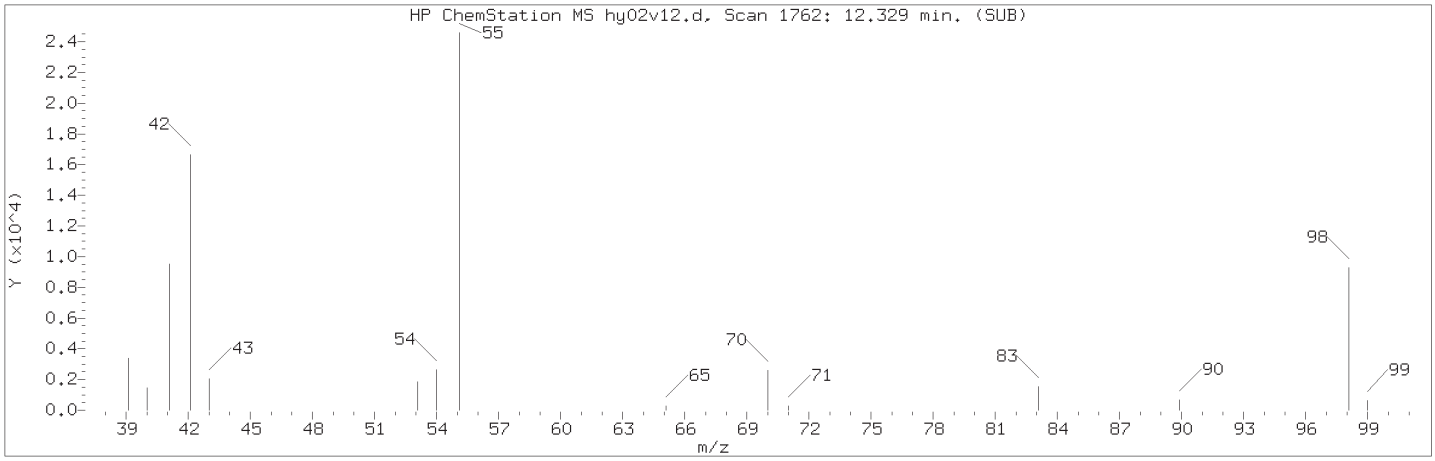
Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:46 Automation

Sample Name: LCDH88 Lab Sample ID: LCDH88

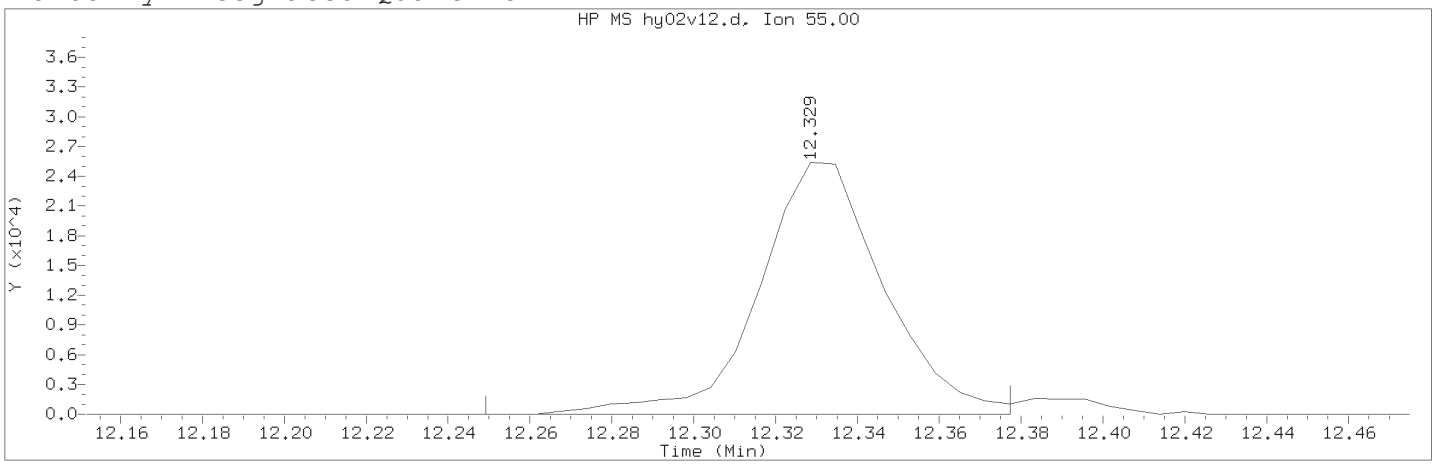
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1792
Retention Time (minutes): 12.511
Quant Ion : 88.00
Area : 718
On-column Amount (ng) : 0.0798
Integration start scan : 1789 Integration stop scan: 1802
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:39.
Target 3.5 esignature user name: DVV

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 23:07
Date, time and analyst ID of latest file update: 03-May-2018 00:35 dvv10203

Sample Name: LCDH88 Lab Sample ID: LCDH88

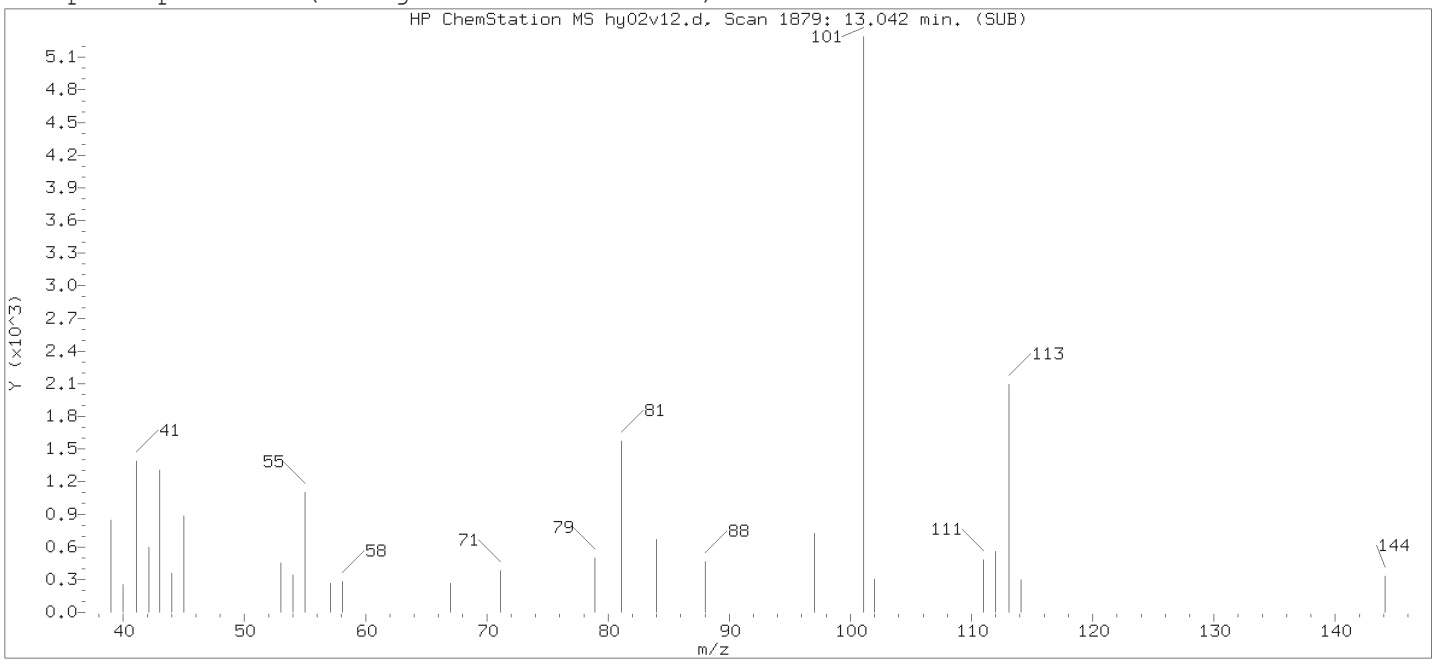
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1762
Retention Time (minutes): 12.329
Quant Ion : 55.00
Area (flag) : 53752M
On-Column Amount (ng) : 115.9591
Integration start scan : 1748 Integration stop scan: 1769
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

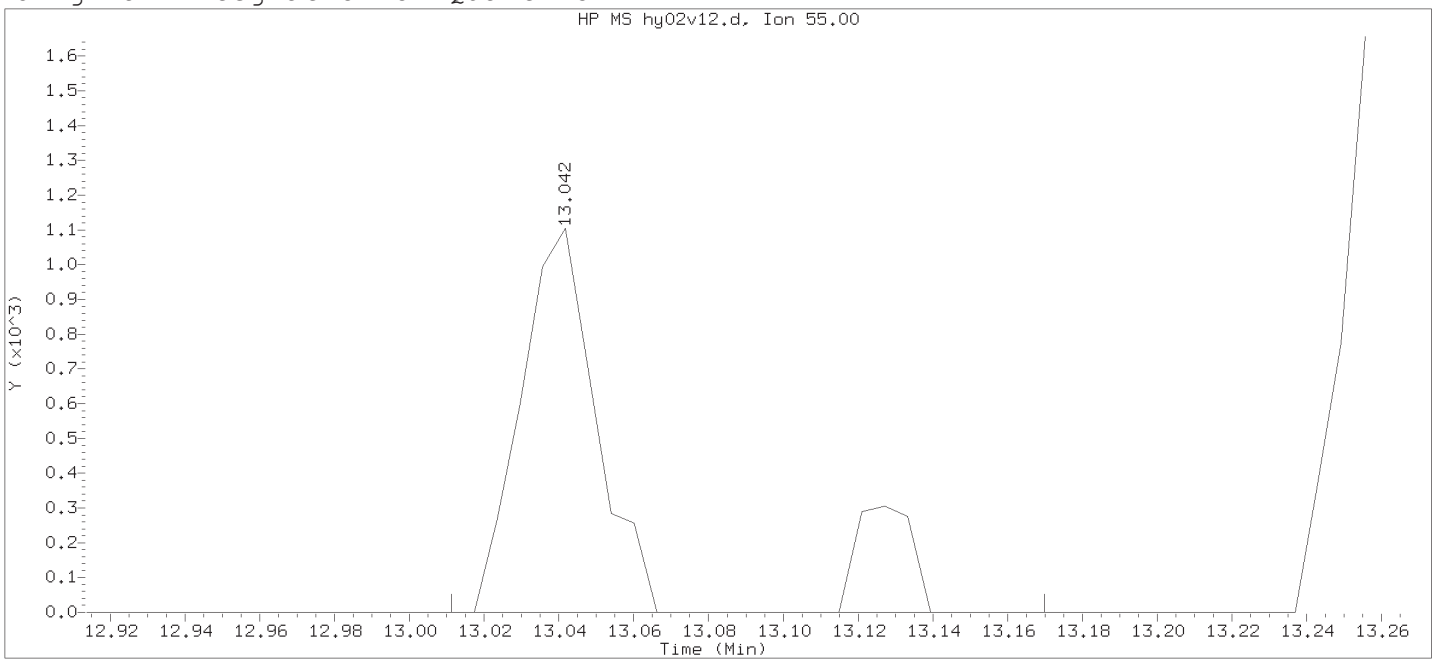
Analyst responsible for change: Digitally signed by Don V. Viray
on 05/03/2018 at 00:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 05/03/2018 at 16:36.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



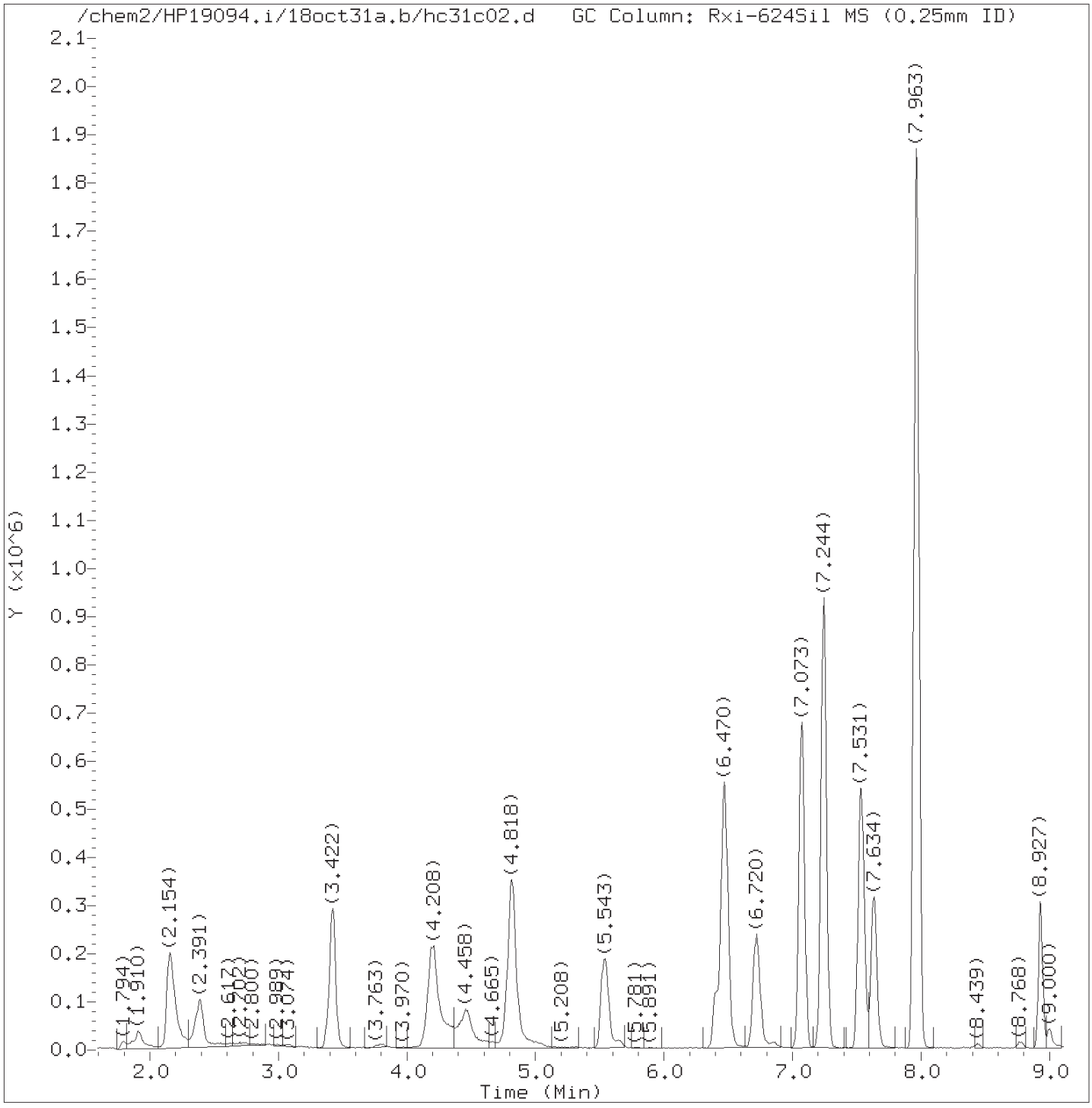
Data File: /chem2/HP19094.i/18may02b.b/hy02v12.d Instrument ID: HP19094.i
Injection date and time: 02-MAY-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP19094.i/18may02b.b/m8260c25.m Sublist used: SMQC
Calibration date and time: 02-MAY-2018 22:37
Date, time and analyst ID of latest file update: 02-May-2018 22:46 Automation

Sample Name: LCDH88 Lab Sample ID: LCDH88

Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1879
Retention Time (minutes): 13.042
Quant Ion : 55.00
Area : 1857
On-column Amount (ng) : 4.0549
Integration start scan : 1873 Integration stop scan: 1899
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 05/03/2018 at 00:39.
Target 3.5 esignature user name: DVV



Total Ion Chromatogram (TIC)

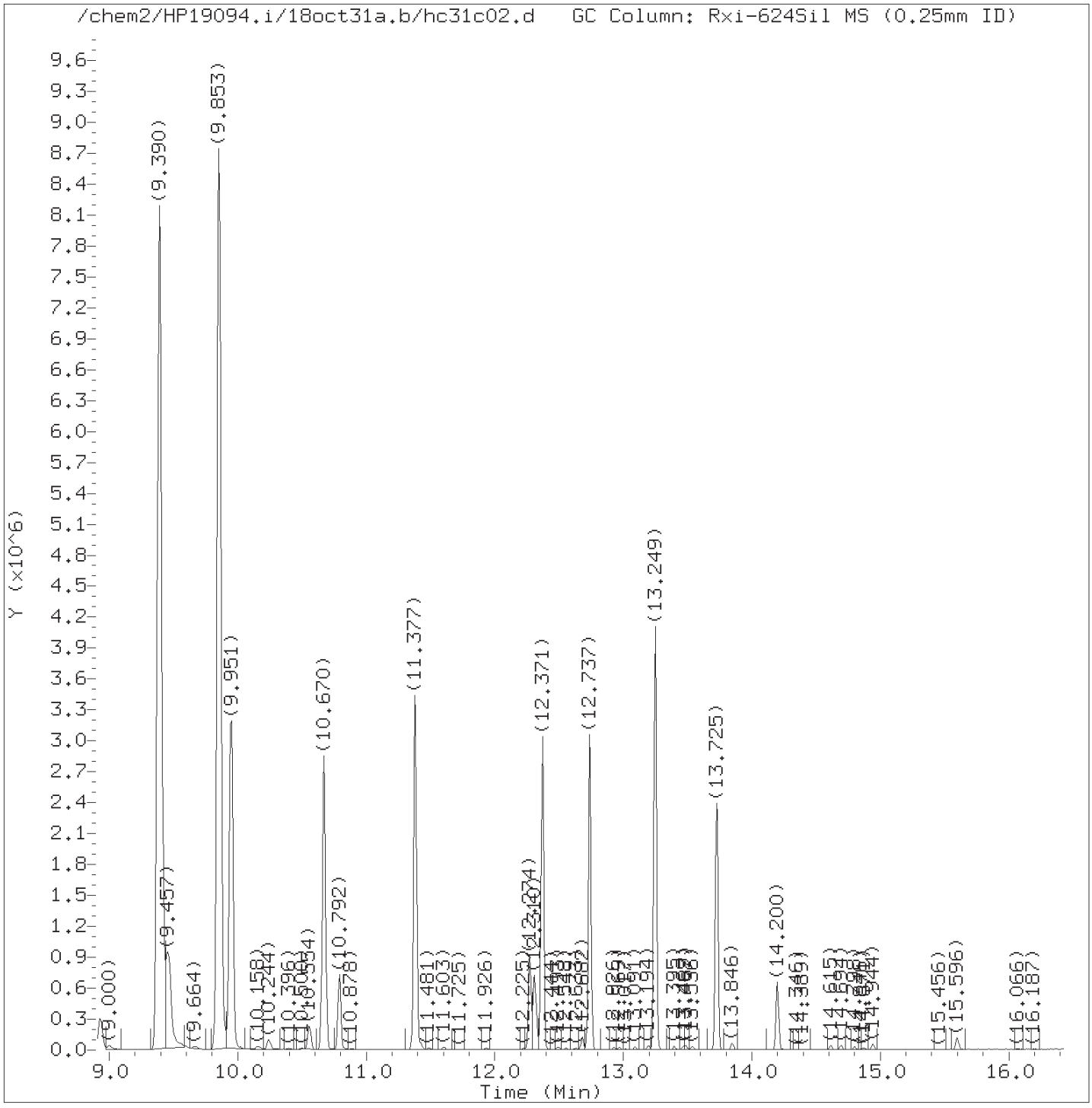
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:31
Date, time and analyst ID of latest file update: 31-Oct-2018 09:31 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:27.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:31
Date, time and analyst ID of latest file update: 31-Oct-2018 09:31 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:27.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:31
Date, time and analyst ID of latest file update: 31-Oct-2018 09:31 kel01973

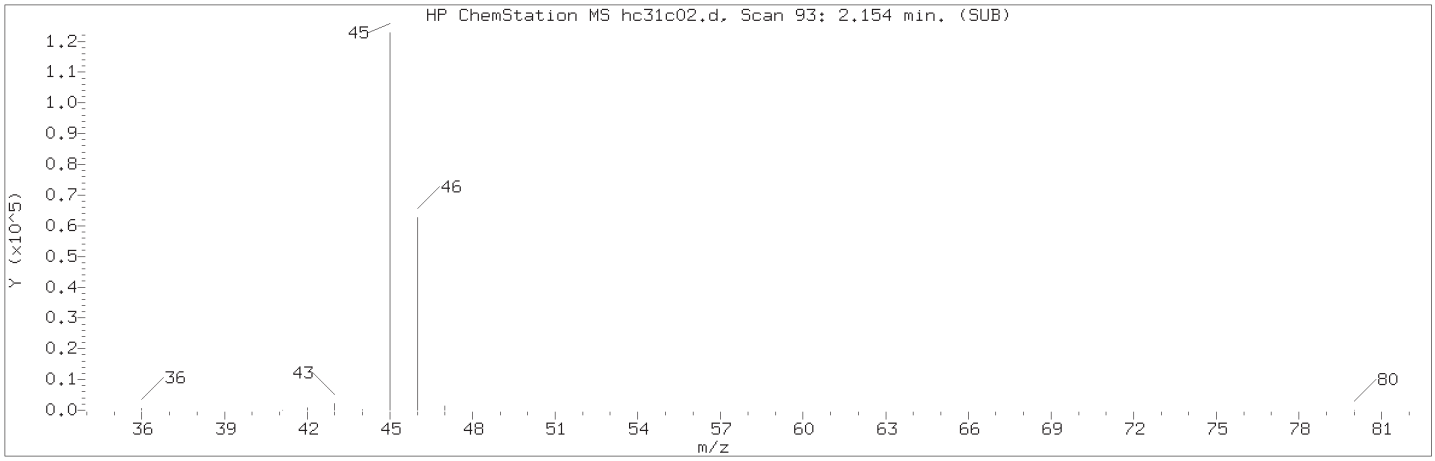
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Dimethyl ether	(2)	2.154	45	594764M	7.151
25) Acetonitrile	(1)	4.208	41	942843	361.643
26)*t-Butyl Alcohol-d10	(1)	4.482	65	107970	50.000
36) Vinyl Acetate	(2)	5.537	43	625551	7.894
43) Methyl Acrylate	(2)	6.470	55	1213497	49.630
53) 1-Chlorobutane	(2)	7.244	56	1130549	9.661
63)*Fluorobenzene	(2)	7.963	96	2591048	10.000
77) Chloroacetonitrile	(2)	9.445	75	622969	639.314
78) 2-Chloroethyl vinyl ether	(2)	9.469	63	229924	9.814
97)*Chlorobenzene-d5	(3)	11.377	117	1914691	10.000
109) cis-1,4-Dichloro-2-butene	(1)	12.274	88	190353M	13.613
112) Cyclohexanone	(1)	12.310	55	350444M	492.805
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	978667	10.000
142) Hexachloroethane	(4)	13.725	117	438235	10.637

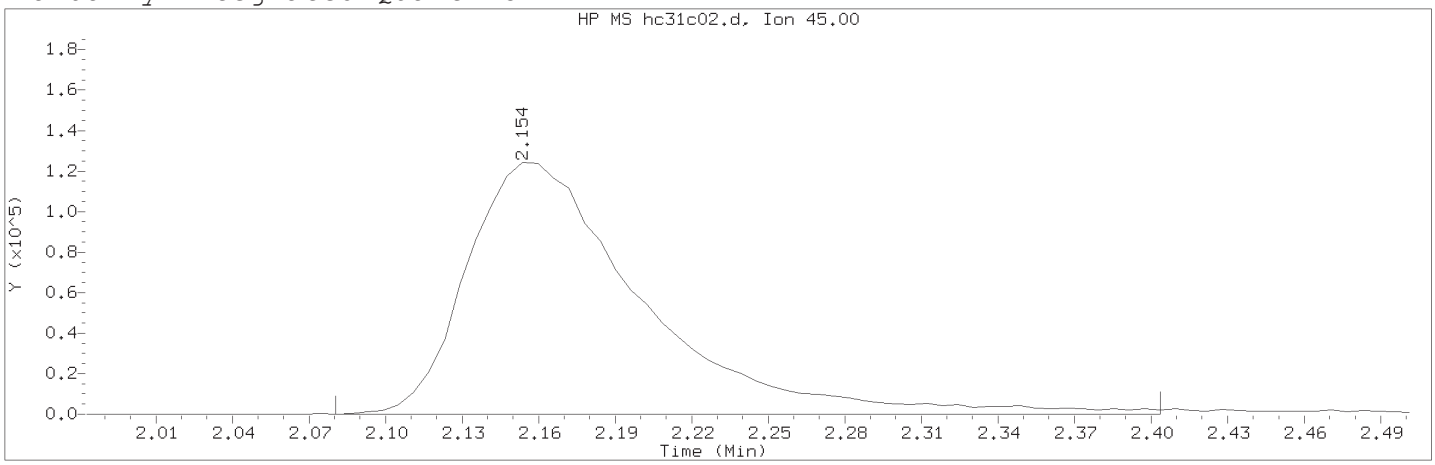
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:27.
Target 3.5 esignature user ID: jgc14951

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:31
Date, time and analyst ID of latest file update: 31-Oct-2018 09:31 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

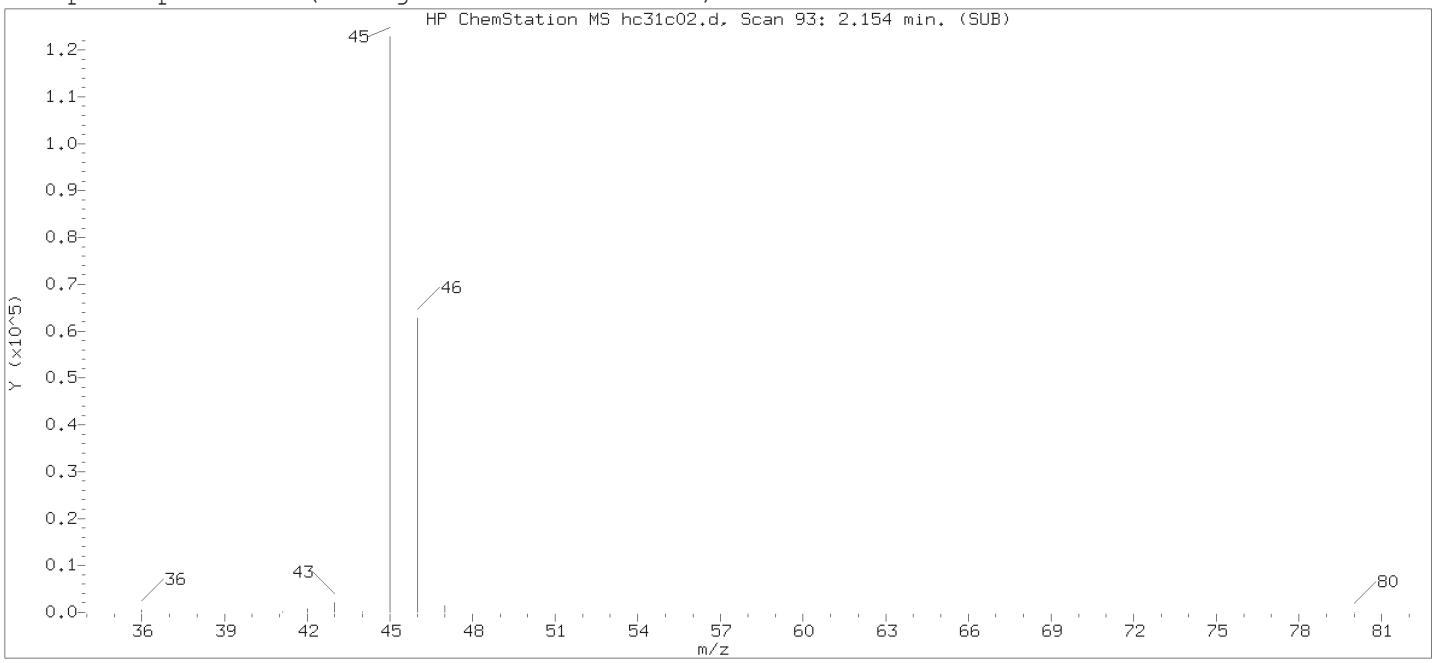
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 93
Retention Time (minutes): 2.154
Quant Ion : 45.00
Area (flag) : 594764M
On-Column Amount (ng) : 7.1506
Integration start scan : 80 Integration stop scan: 133
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

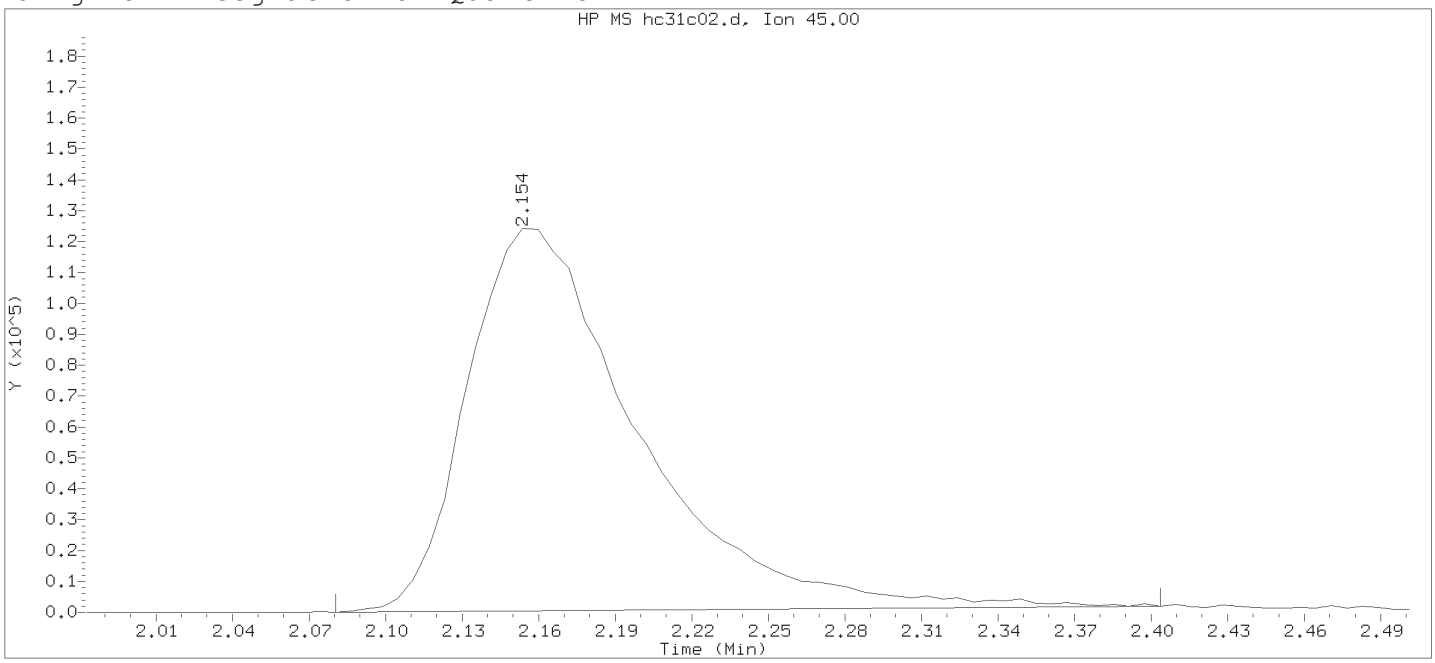
Analyst responsible for change: Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:27.
Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

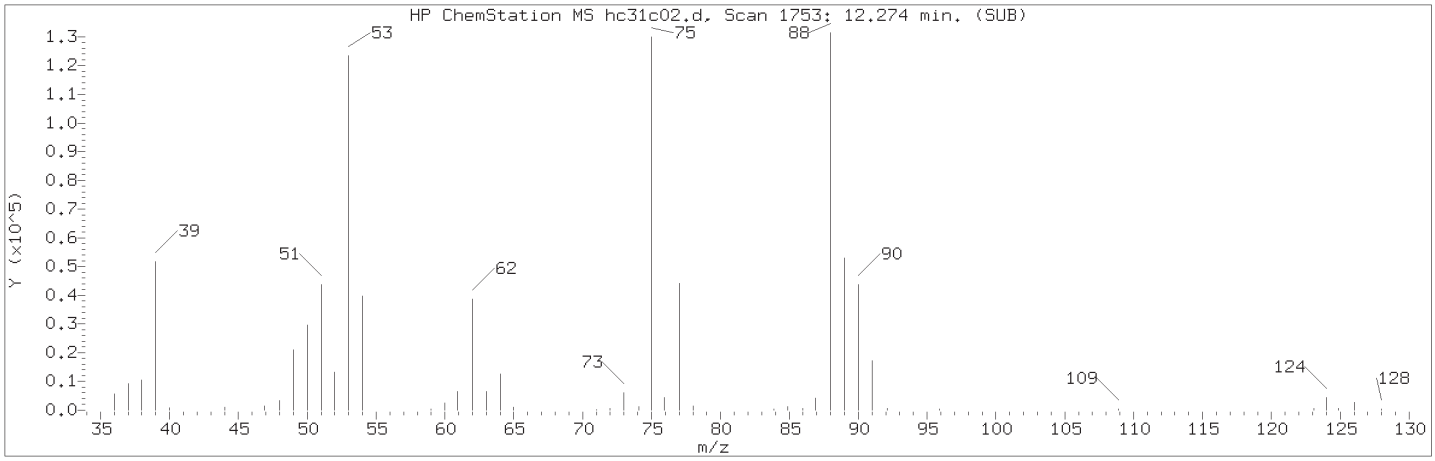
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:06
Date, time and analyst ID of latest file update: 31-Oct-2018 09:06 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

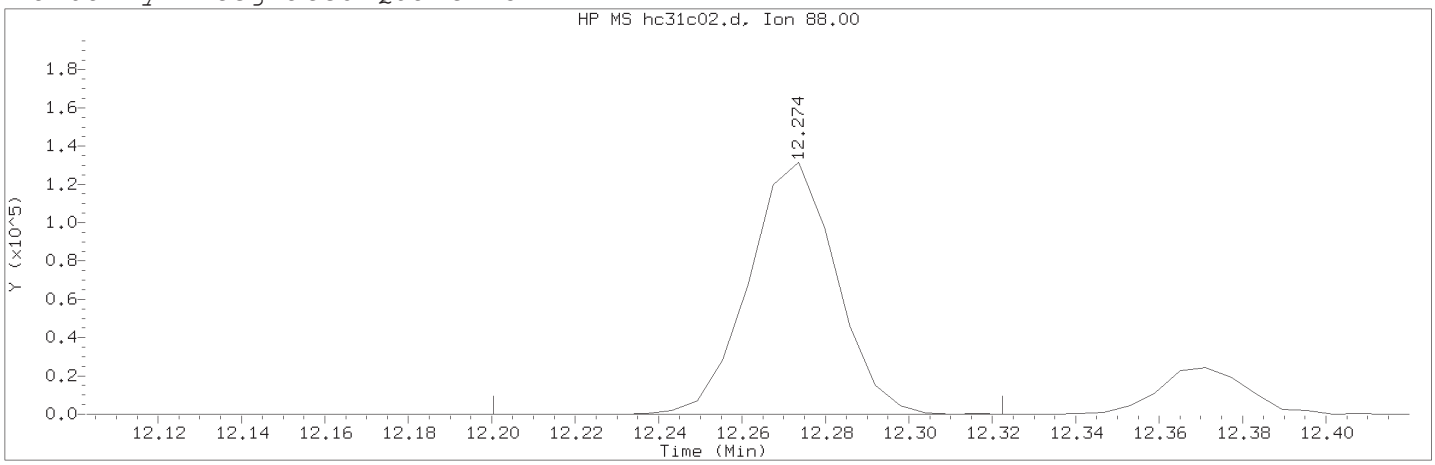
Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 93
Retention Time (minutes): 2.154
Quant Ion : 45.00
Area : 575565
On-column Amount (ng) : 6.9198
Integration start scan : 80 Integration stop scan: 133
Y at integration start : 0 Y at integration end: 1944

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:27.
Target 3.5 esignature user ID: JGC01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:31
Date, time and analyst ID of latest file update: 31-Oct-2018 09:31 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

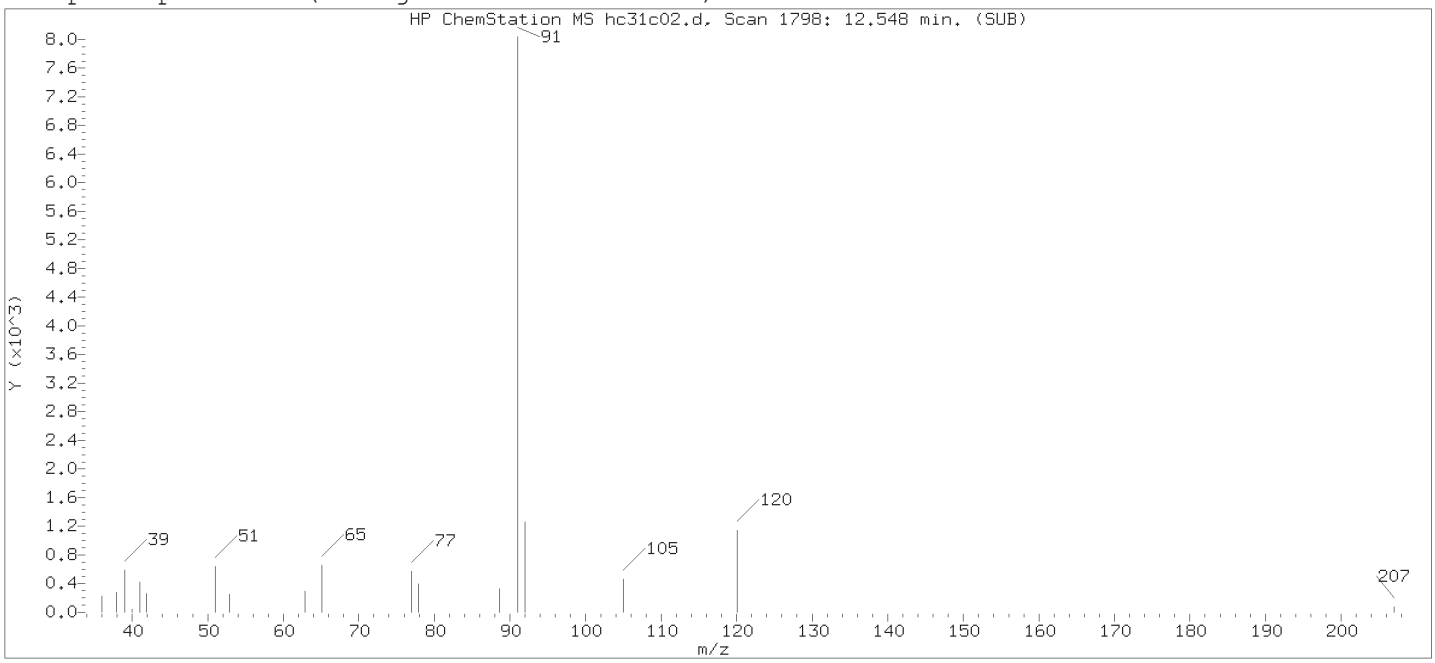
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1753
Retention Time (minutes): 12.274
Quant Ion : 88.00
Area (flag) : 190353M
On-Column Amount (ng) : 13.6132
Integration start scan : 1740 Integration stop scan: 1760
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

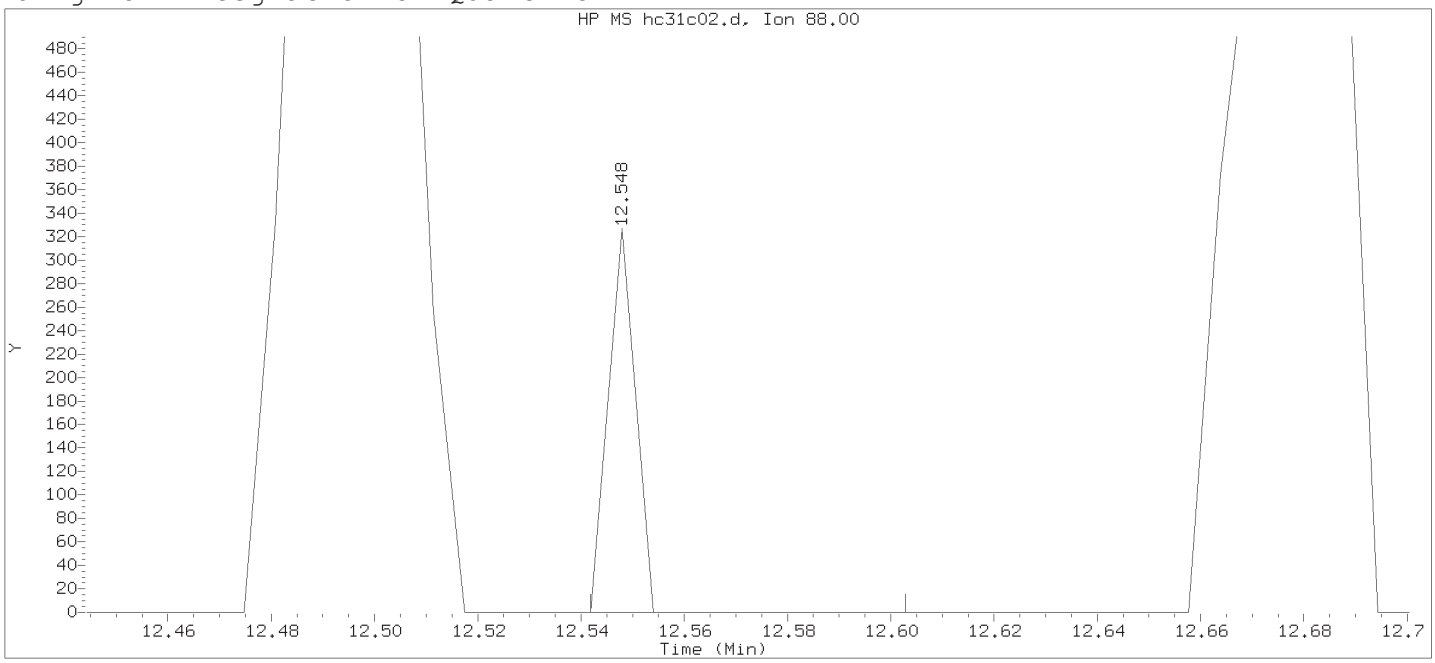
Analyst responsible for change: Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:27.
Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

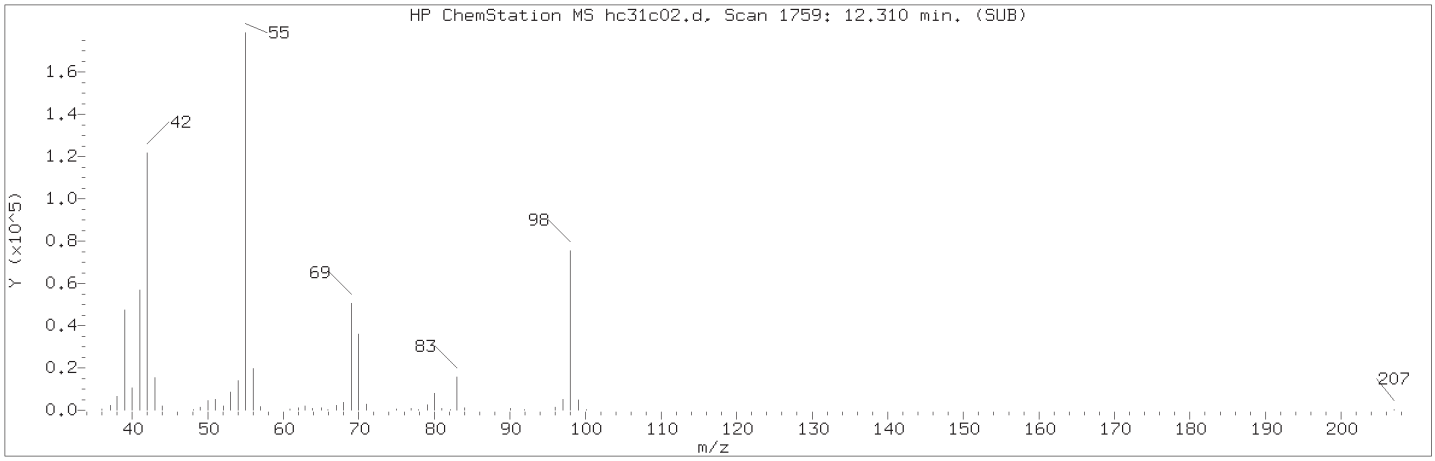
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:06
Date, time and analyst ID of latest file update: 31-Oct-2018 09:06 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

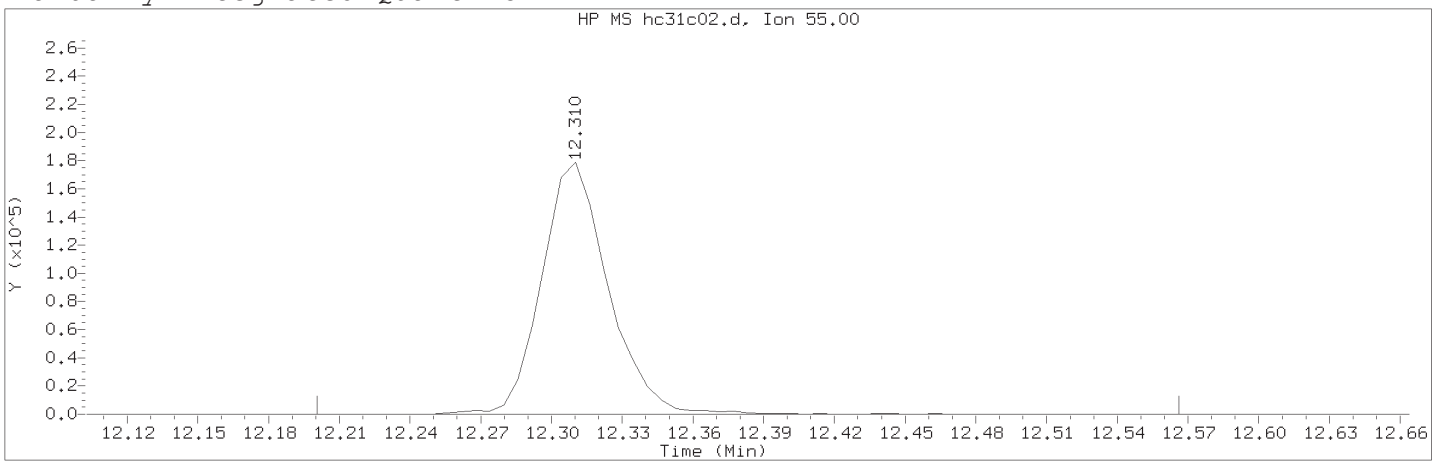
Compound Number : 109
Compound Name : cis-1,4-Dichloro-2-butene
Scan Number : 1798
Retention Time (minutes): 12.548
Quant Ion : 88.00
Area : 119
On-column Amount (ng) : 0.0086
Integration start scan : 1796 Integration stop scan: 1806
Y at integration start : 0 Y at integration end: 0

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:27.
Target 3.5 esignature user id: jgchachapoya

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:31
Date, time and analyst ID of latest file update: 31-Oct-2018 09:31 kel01973

Sample Name: VSTD010 Lab Sample ID: VSTD010

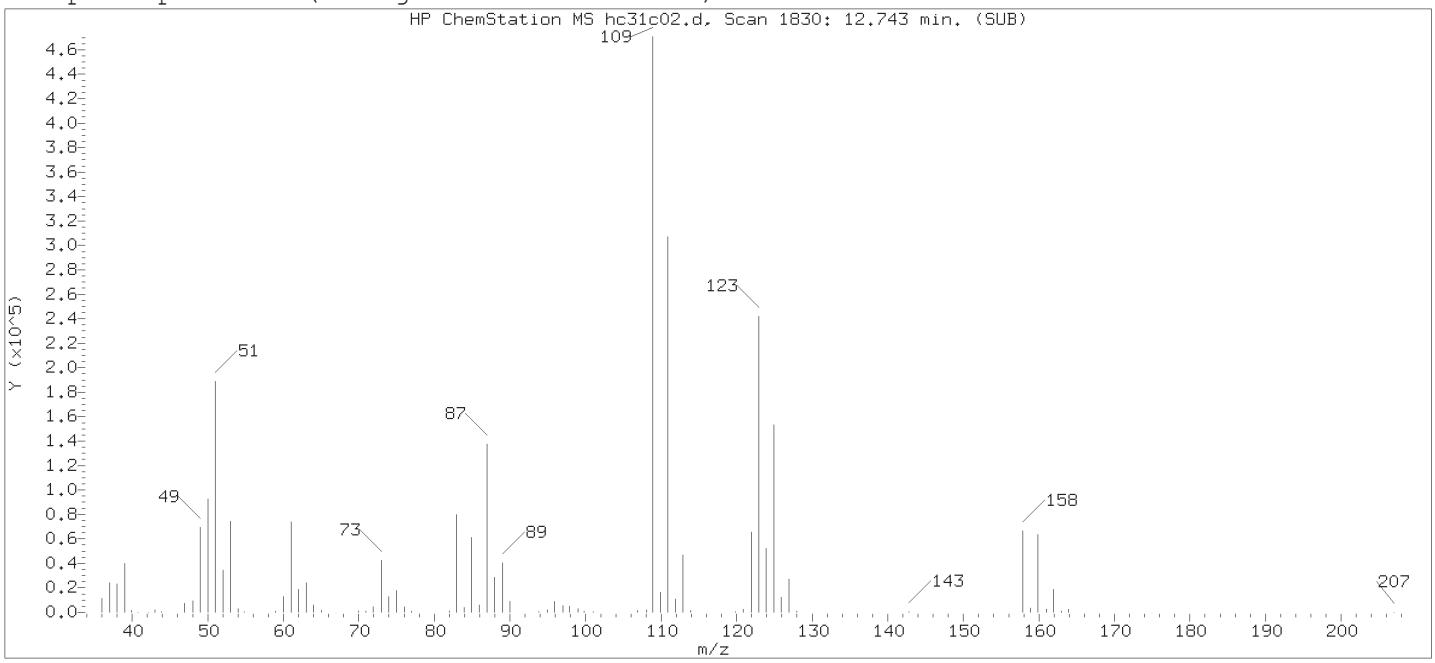
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1759
Retention Time (minutes): 12.310
Quant Ion : 55.00
Area (flag) : 350444M
On-Column Amount (ng) : 492.8050
Integration start scan : 1740 Integration stop scan: 1800
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

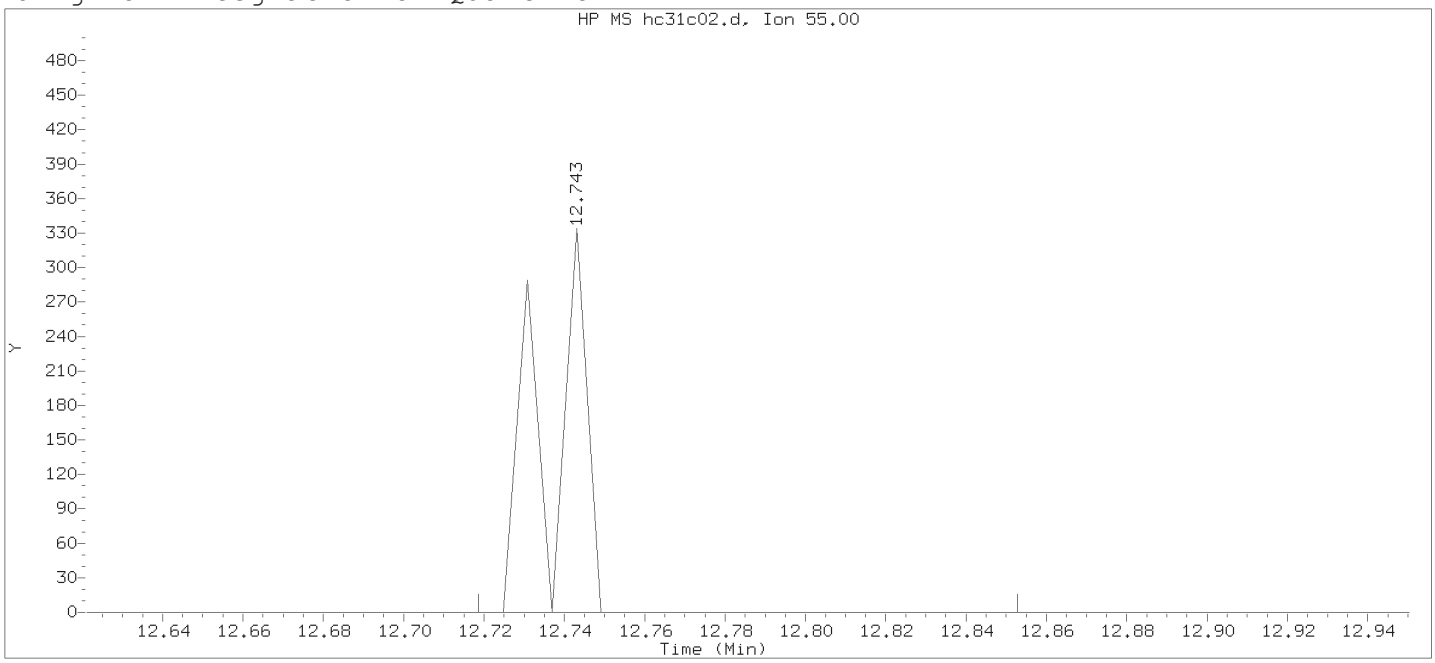
Analyst responsible for change: Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:27.
Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31c02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 08:48 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: SMICAL
Calibration date and time: 31-OCT-2018 09:06
Date, time and analyst ID of latest file update: 31-Oct-2018 09:06 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 112		
Compound Name	: Cyclohexanone		
Scan Number	: 1830		
Retention Time (minutes)	: 12.743		
Quant Ion	: 55.00		
Area	: 227		
On-column Amount (ng)	: 0.3205		
Integration start scan	: 1825	Integration stop scan:	1847
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:27.
Target 3.5 esignature user ID: jgchachapoya

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

SECB010

Data file: /chem2/HP19094.i/18oct31a.b/hc31s10.d Injection date and time: **31-OCT-2018 19:11**
Data file Sample Info. Line: SECB010;SECB010;1;3;LCS;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:29 Automation

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:57
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.477	(0.012)	474	65	123227	(-2)	50.00	
63) Fluorobenzene	7.970	(0.000)	1047	96	2652099	(4)	10.00	
97) Chlorobenzene-d5	11.378	(0.006)	1606	117	1898522	(-1)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249	(0.000)	1913	152	972859	(-1)	10.00	

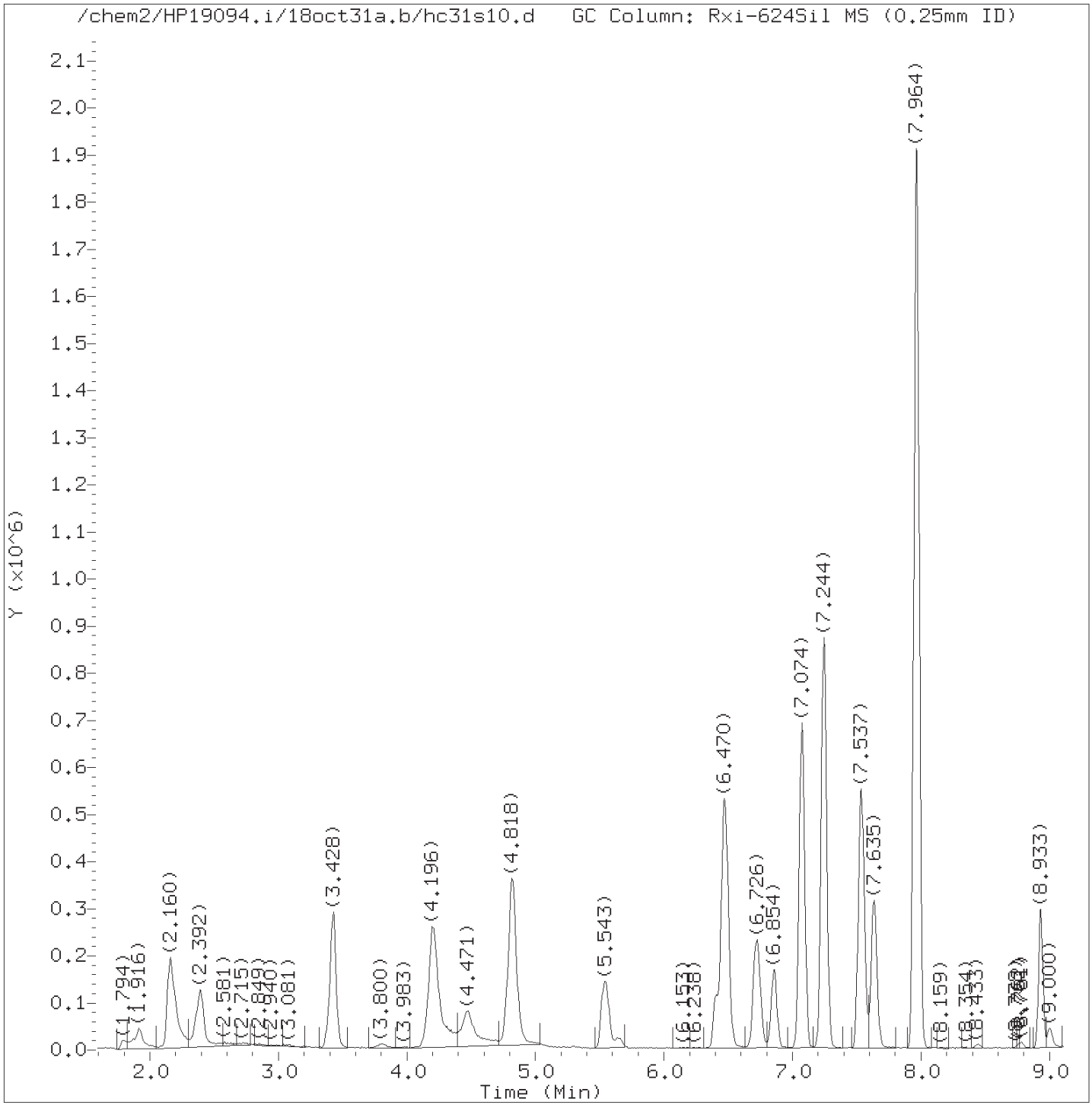
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074	(0.000)	113	647674	9.690	97%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.531	(0.000)	102	117097	10.049	100%		81 - 118
82) Toluene-d8	(3)	9.951	(0.000)	98	2548964	10.432	104%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371	(-0.001)	95	892935	10.037	100%		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
112) Cyclohexanone	(1)	12.310	(-0.007)	55	398635	491.166	491.17			2	25

Total number of targets = 1

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:33. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 12:57. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

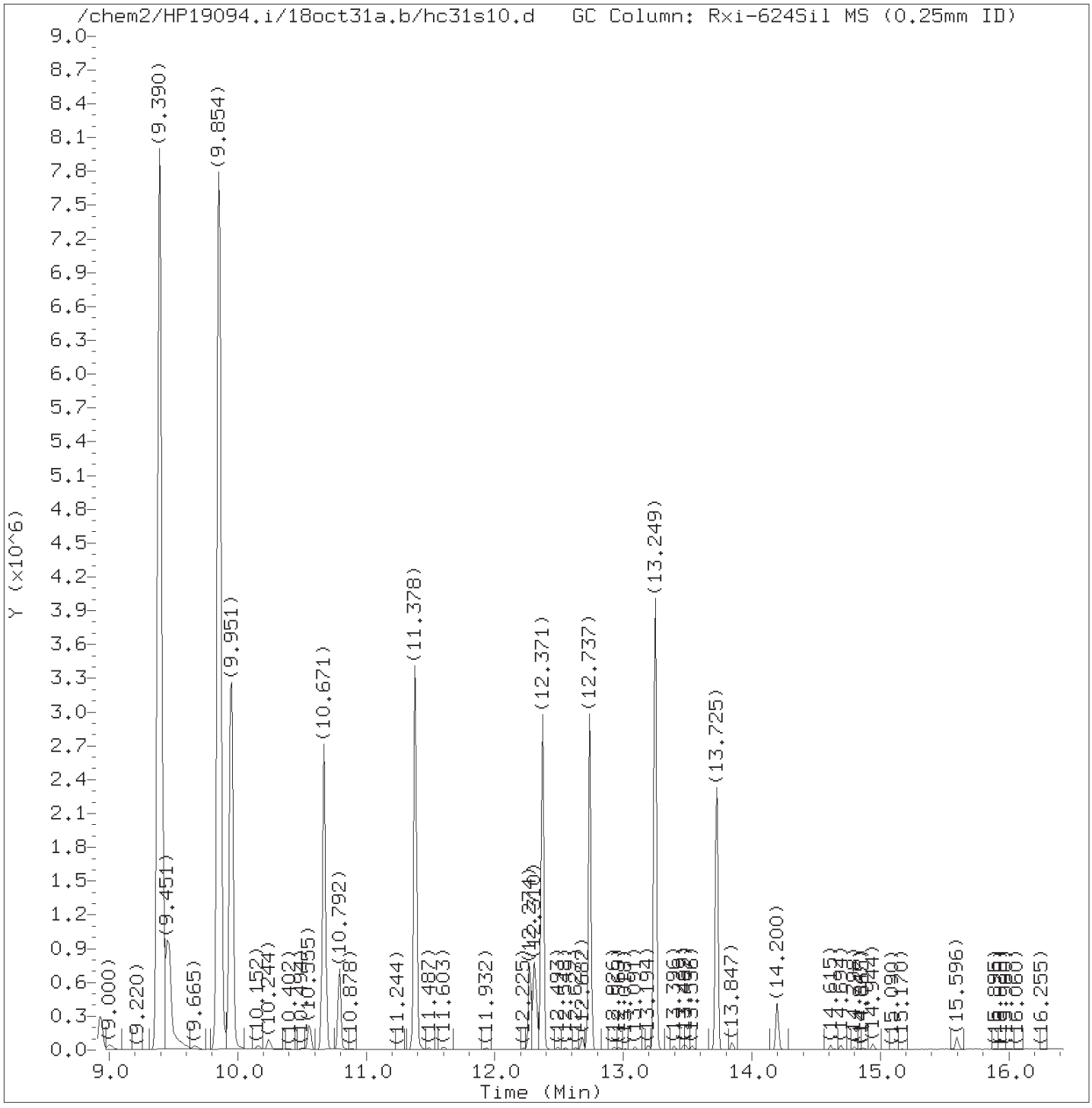
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s10.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 19:11 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 19:29 Automation

Sample Name: SECB010 Lab Sample ID: SECB010

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s10.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 19:11 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 19:29 Automation

Sample Name: SECB010 Lab Sample ID: SECB010

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31s10.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 19:11 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:57
Date, time and analyst ID of latest file update: 31-Oct-2018 19:29 Automation

Sample Name: SECB010 Lab Sample ID: SECB010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.477	65	123227	50.000
50)$Dibromofluoromethane	(2)	7.074	113	647674	9.690
57)$1,2-Dichloroethane-d4	(2)	7.531	102	117097	10.049
63)*Fluorobenzene	(2)	7.970	96	2652099	10.000
82)$Toluene-d8	(3)	9.951	98	2548964	10.432
97)*Chlorobenzene-d5	(3)	11.378	117	1898522	10.000
112) Cyclohexanone	(1)	12.310	55	398635	491.166
111)$4-Bromofluorobenzene	(3)	12.371	95	892935	10.037
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	972859	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:33.
Target 3.5 esignature user ID: jgc14951

Raw QC Data

Volatiles by GC/MS

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31b01.d Injection date and time: **31-OCT-2018 10:57**
Data file Sample Info. Line: VBLKH80;VBLKH80;1;3;;;DOD25;;; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 11:21 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:20
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.489	(0.000)	476	65	117137	(-6)	50.00	
63) Fluorobenzene	7.964	(0.006)	1046	96	2608598	(2)	10.00	
97) Chlorobenzene-d5	11.378	(0.006)	1606	117	1932277	(0)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249	(0.000)	1913	152	989266	(1)	10.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074	(-0.001)	113	642613	9.774	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.531	(-0.001)	102	117620	10.262	103%		81 - 118
82) Toluene-d8	(3)	9.945	(0.000)	98	2557573	10.284	103%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371	(-0.001)	95	889132	9.820	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)				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

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:29. Target 3.5 esignature user ID: jgc14951

Data file: /chem2/HP19094.i/18oct31a.b/hc31b01.d Injection date and time: **31-OCT-2018 10:57**
Data file Sample Info. Line: VBLKH80;VBLKH80;1;3;;;DOD25;;; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 11:21 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:20
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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**

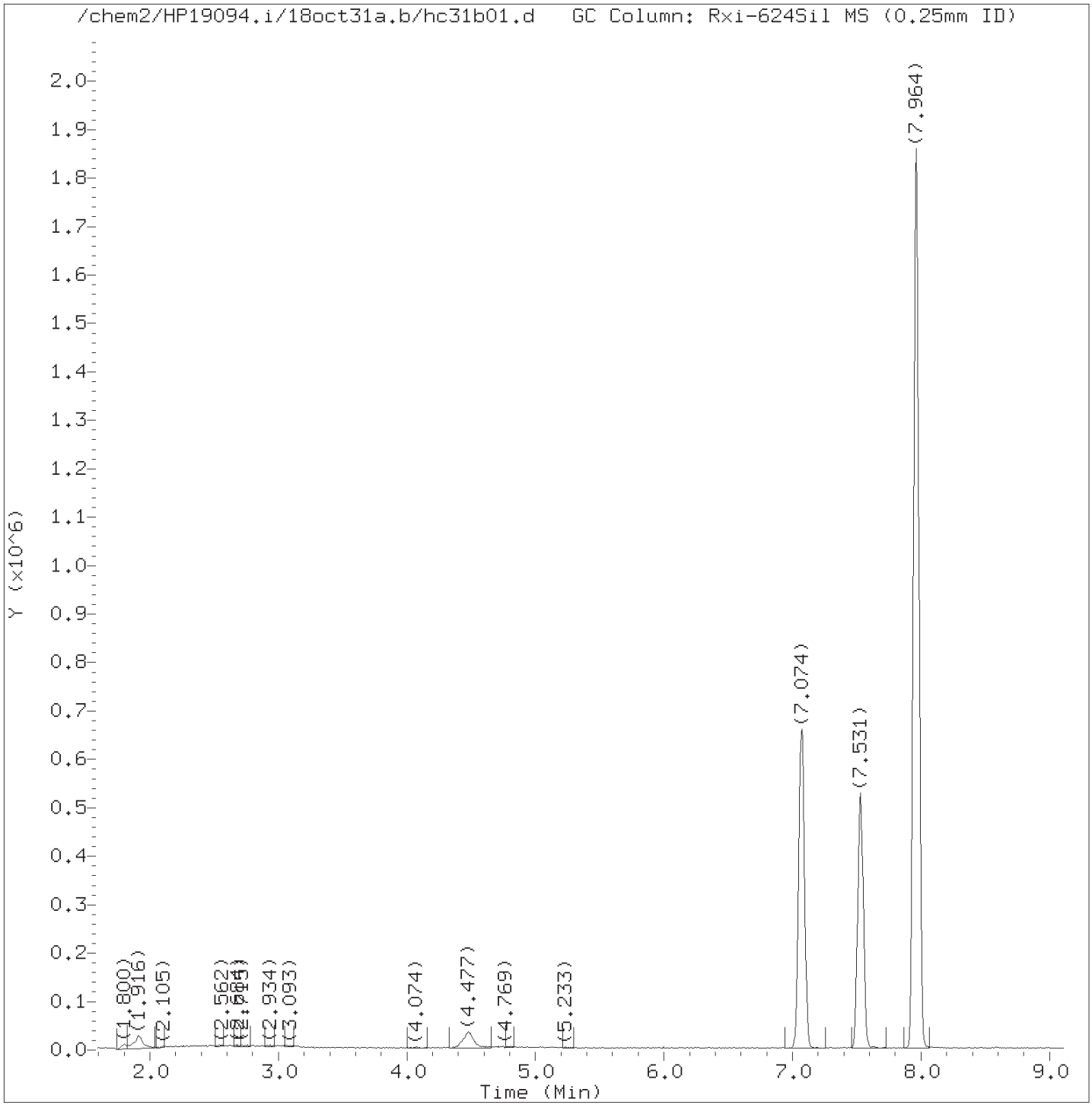
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
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 Joel G. Chachapoya on 10/31/2018 at 20:29. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

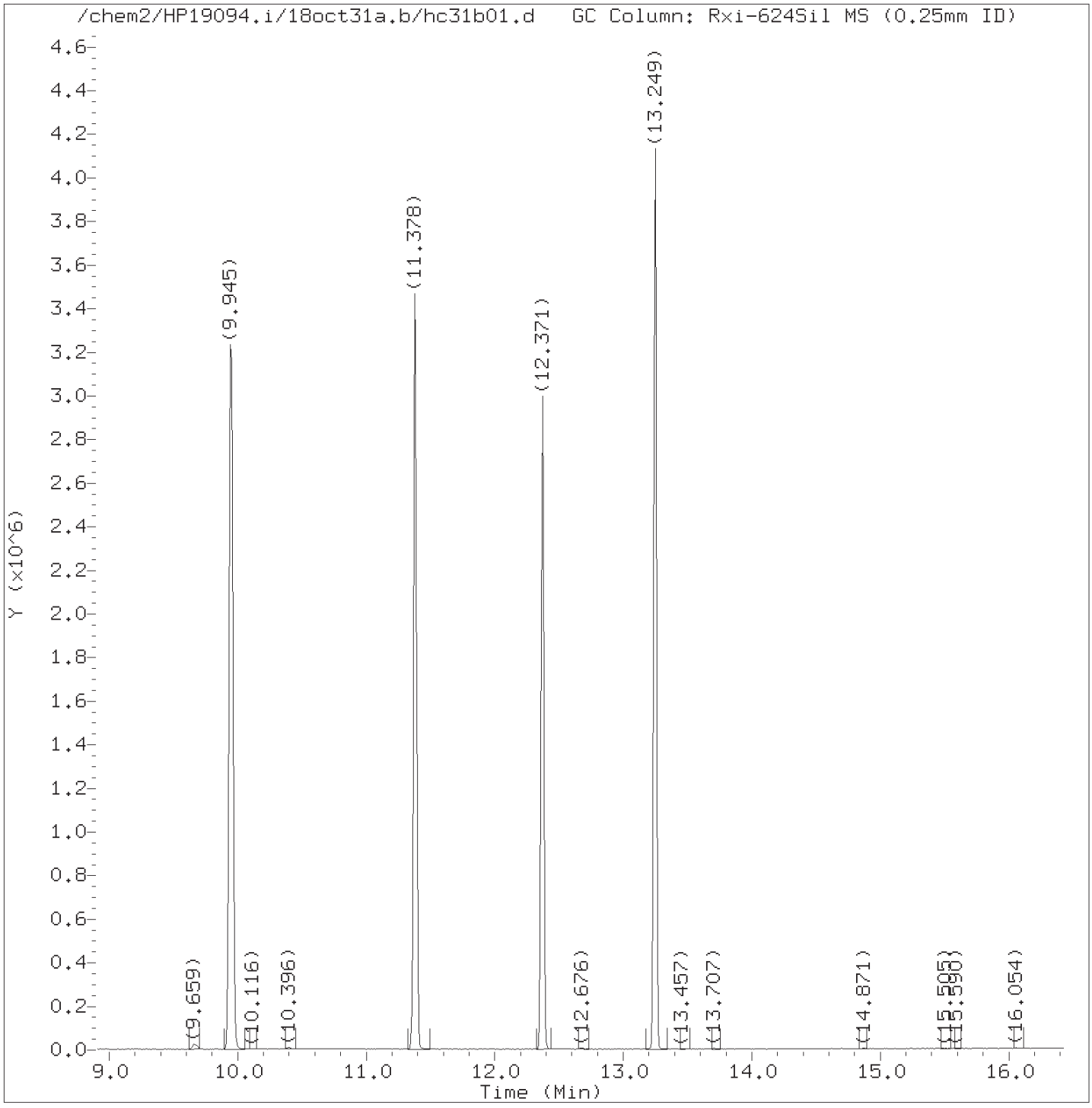
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31b01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 10:57 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:21 kel01973

Sample Name: VBLKH80 Lab Sample ID: VBLKH80

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:29.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31b01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 10:57 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:21 kel01973

Sample Name: VBLKH80 Lab Sample ID: VBLKH80

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:29.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31b01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 10:57 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:21 kel01973

Sample Name: VBLKH80 Lab Sample ID: VBLKH80

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.489	65	117137	50.000
50)$Dibromofluoromethane	(2)	7.074	113	642613	9.774
57)$1,2-Dichloroethane-d4	(2)	7.531	102	117620	10.262
63)*Fluorobenzene	(2)	7.964	96	2608598	10.000
82)$Toluene-d8	(3)	9.945	98	2557573	10.284
97)*Chlorobenzene-d5	(3)	11.378	117	1932277	10.000
111)$4-Bromofluorobenzene	(3)	12.371	95	889132	9.820
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	989266	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:29.
Target 3.5 esignature user ID: jgc14951

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31l03.d Injection date and time: **31-OCT-2018 09:52**
Data file Sample Info. Line: LCSH81;LCSH81;1;3;LCS;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:20
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.501	(-0.012)	478	65	125603	(0)	50.00	
63) Fluorobenzene	7.970	(0.000)	1047	96	2628340	(3)	10.00	
97) Chlorobenzene-d5	11.377	(0.006)	1606	117	1946762	(1)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249	(0.000)	1913	152	1003336	(2)	10.00	

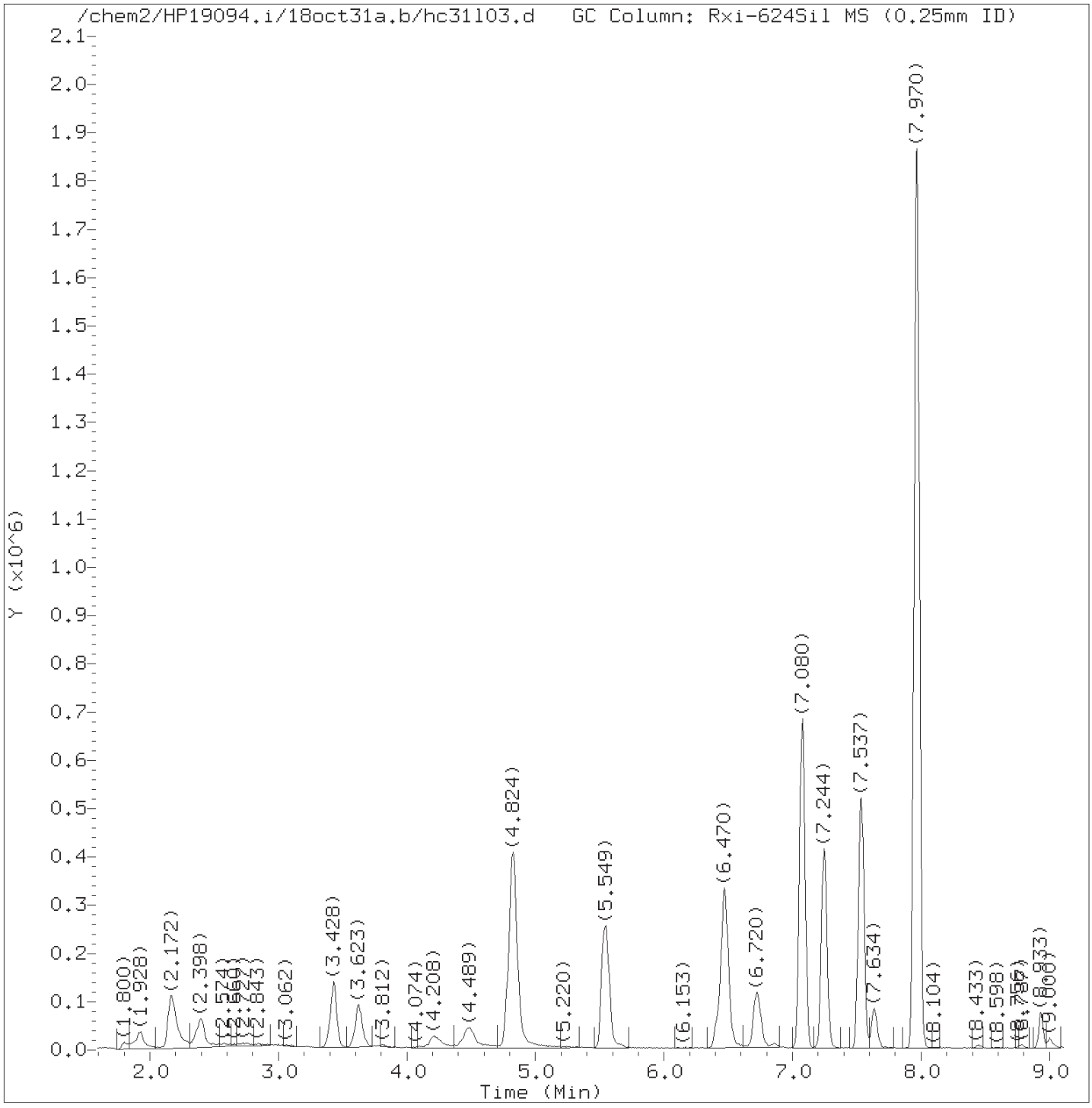
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.073	(0.000)	113	651395	9.833	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.537	(-0.001)	102	117635	10.186	102%		81 - 118
82) Toluene-d8	(3)	9.951	(0.000)	98	2568643	10.252	103%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371	(-0.001)	95	911065	9.987	100%		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
112) Cyclohexanone	(1)	12.310	(0.007)	55	96684	116.873	116.87			2	25

Total number of targets = 1

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

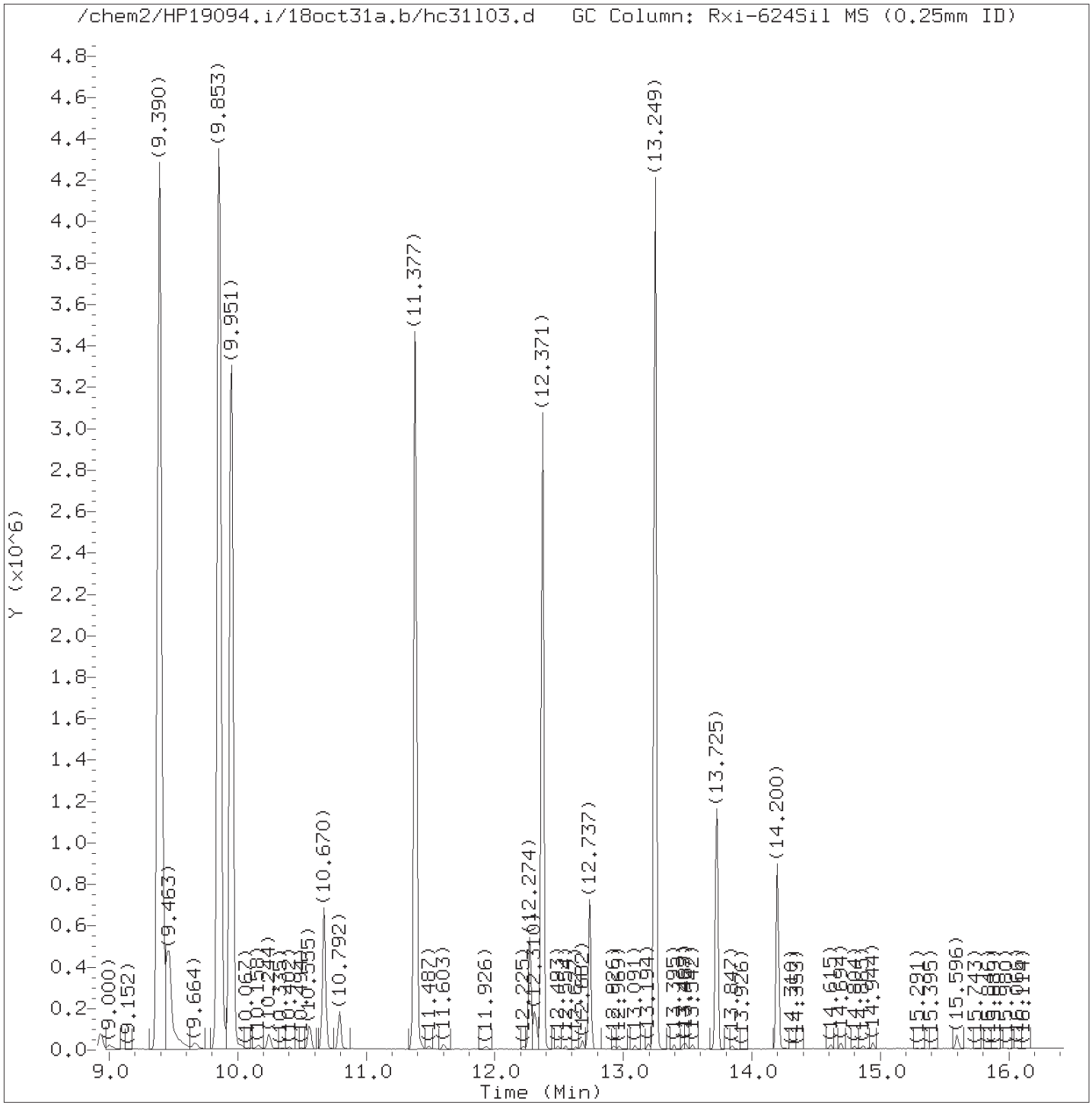
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l03.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:52 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCSH81 Lab Sample ID: LCSH81

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l03.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:52 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCSH81 Lab Sample ID: LCSH81

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l03.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:52 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCSH81 Lab Sample ID: LCSH81

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.501	65	125603	50.000
50)$Dibromofluoromethane	(2)	7.073	113	651395	9.833
57)$1,2-Dichloroethane-d4	(2)	7.537	102	117635	10.186
63)*Fluorobenzene	(2)	7.970	96	2628340	10.000
82)$Toluene-d8	(3)	9.951	98	2568643	10.252
97)*Chlorobenzene-d5	(3)	11.377	117	1946762	10.000
112) Cyclohexanone	(1)	12.310	55	96684	116.873
111)$4-Bromofluorobenzene	(3)	12.371	95	911065	9.987
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	1003336	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31l04.d Injection date and time: **31-OCT-2018 10:14**
Data file Sample Info. Line: LCDH81;LCDH81;1;3;LCSD;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:20
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.489	(0.000)	476	65	134481	(7)	50.00	
63) Fluorobenzene	7.970	(0.000)	1047	96	2633165	(3)	10.00	
97) Chlorobenzene-d5	11.378	(0.006)	1606	117	1946411	(1)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249	(0.000)	1913	152	993474	(1)	10.00	

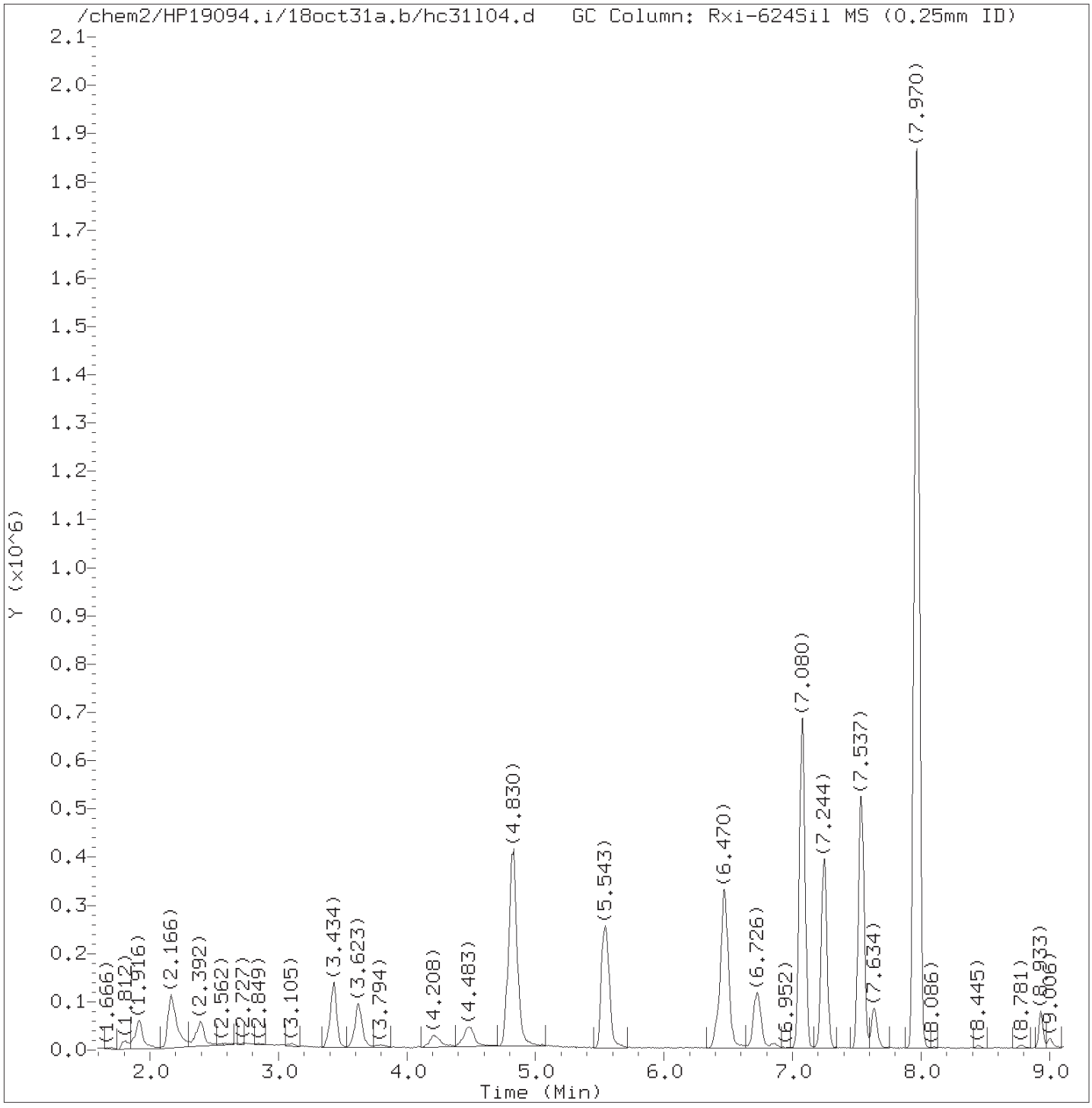
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074	(0.000)	113	651172	9.812	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.531	(0.000)	102	120257	10.394	104%		81 - 118
82) Toluene-d8	(3)	9.951	(0.000)	98	2564083	10.235	102%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371	(-0.001)	95	909820	9.975	100%		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
112) Cyclohexanone	(1)	12.310	(-0.000)	55	103407	116.748	116.75			2	25

Total number of targets = 1

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

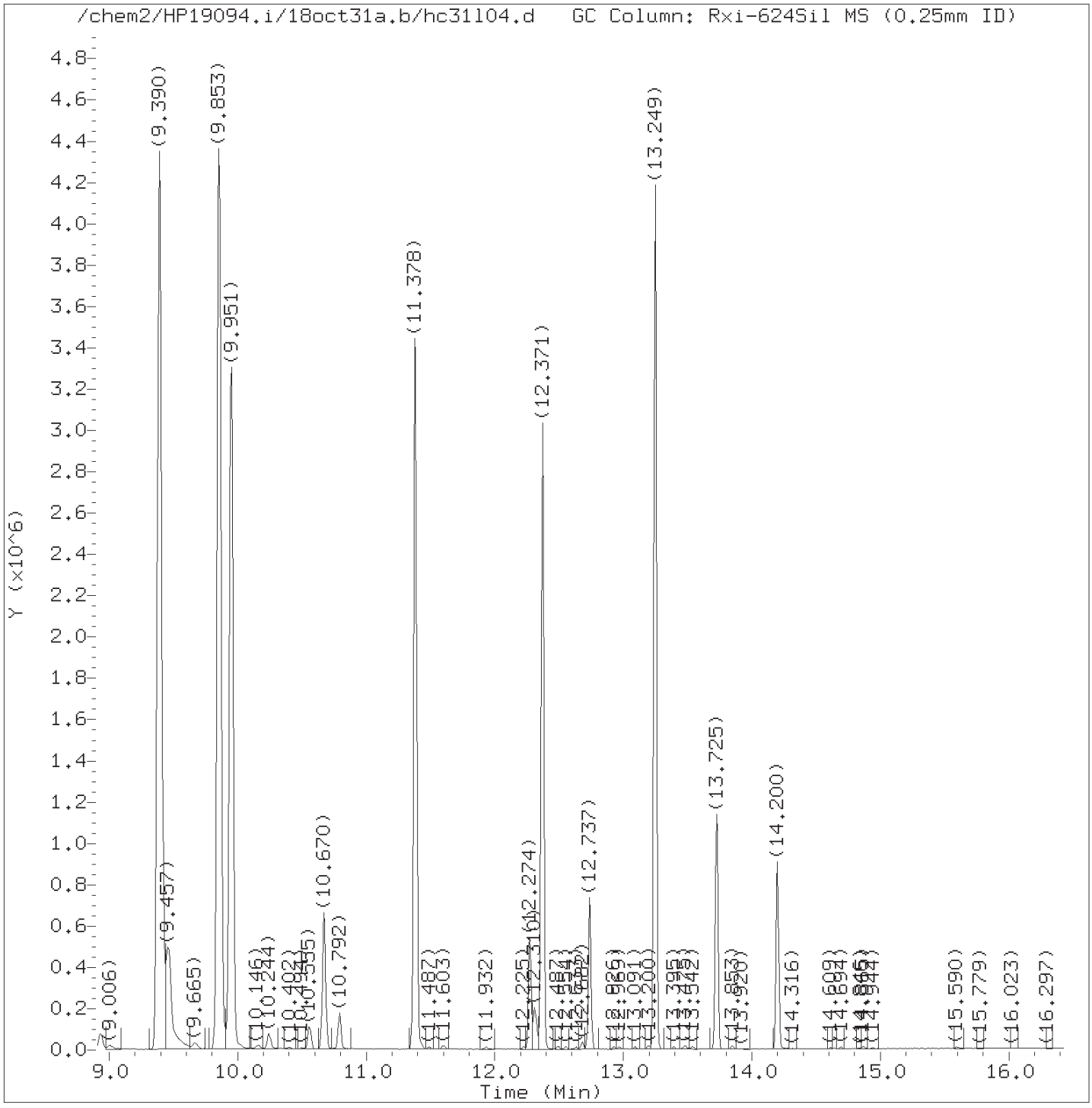
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l04.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 10:14 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCDH81 Lab Sample ID: LCDH81

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l04.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 10:14 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCDH81 Lab Sample ID: LCDH81

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l04.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 10:14 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCDH81 Lab Sample ID: LCDH81

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.489	65	134481	50.000
50)$Dibromofluoromethane	(2)	7.074	113	651172	9.812
57)$1,2-Dichloroethane-d4	(2)	7.531	102	120257	10.394
63)*Fluorobenzene	(2)	7.970	96	2633165	10.000
82)$Toluene-d8	(3)	9.951	98	2564083	10.235
97)*Chlorobenzene-d5	(3)	11.378	117	1946411	10.000
112) Cyclohexanone	(1)	12.310	55	103407	116.748
111)$4-Bromofluorobenzene	(3)	12.371	95	909820	9.975
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	993474	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31l01.d Injection date and time: **31-OCT-2018 09:09**
Data file Sample Info. Line: LCSH80;LCSH80;1;3;LCS;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789-SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:20
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.483	(0.006)	475	65	136054	(9)	50.00	
63) Fluorobenzene	7.964	(0.006)	1046	96	2628996	(3)	10.00	
97) Chlorobenzene-d5	11.378	(0.006)	1606	117	1964705	(2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249	(0.000)	1913	152	998821	(2)	10.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.080	(-0.001)	113	652467	9.847	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.537	(-0.001)	102	116494	10.085	101%		81 - 118
82) Toluene-d8	(3)	9.951	(0.000)	98	2572471	10.173	102%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371	(-0.001)	95	904205	9.821	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)	2.075	(-0.000)	85	326594	3.179	3.18			0.05	0.5
2) Chloromethane	(2)	2.276	(-0.000)	50	390076	3.877	3.88			0.06	0.5
5) Vinyl Chloride	(2)	2.404	(-0.000)	62	380896	4.042	4.04			0.1	0.5
7) Bromomethane	(2)	2.745	(-0.001)	94	270620	3.694	3.69			0.07	0.5
8) Chloroethane	(2)	2.843	(-0.000)	64	226975	3.971	3.97			0.07	0.5
10) Trichlorofluoromethane	(2)	3.154	(-0.000)	101	462105	3.882	3.88			0.05	0.5
15) 1,1-Dichloroethene	(2)	3.757	(0.000)	96	271725	5.271	5.27			0.06	0.5
16) Freon 113	(2)	3.794	(-0.000)	101	277894	4.574	4.57			0.06	0.5
14) Acetone	(1)	3.800	(-0.001)	43	246595	30.409	30.41			0.9	5
18) Carbon Disulfide	(2)	4.086	(-0.000)	76	746070	4.549	4.55			0.06	1
21) Methyl Acetate	(1)	4.245	(-0.001)	43	92379	4.058	4.06			0.1	1
23) Methylene Chloride	(2)	4.470	(-0.000)	84	277421	4.771	4.77			0.07	0.5
31) trans-1,2-Dichloroethene	(2)	4.891	(0.000)	96	295458	5.078	5.08			0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)	4.873	(0.000)	73	497353	4.691	4.69			0.05	0.5
33) 1,1-Dichloroethane	(2)	5.550	(-0.000)	63	551309	4.977	4.98			0.07	0.5
39) cis-1,2-Dichloroethene	(2)	6.379	(-0.000)	96	323225	5.028	5.03			0.05	0.5
38) 2-Butanone	(1)	6.342	(-0.001)	43	443211	33.389	33.39			0.6	5
49) Chloroform	(2)	6.860	(-0.000)	83	516798	5.018	5.02			0.09	0.5
51) 1,1,1-Trichloroethane	(2)	7.086	(0.000)	97	441042	5.007	5.01			0.06	0.5
52) Cyclohexane	(2)	7.183	(-0.000)	56	524184	4.558	4.56			0.05	0.5
54) Carbon Tetrachloride	(2)	7.299	(-0.000)	117	386621	5.110	5.11			0.07	0.5
58) Benzene	(2)	7.567	(-0.000)	78	1189295	4.820	4.82			0.05	0.5
59) 1,2-Dichloroethane	(2)	7.634	(-0.000)	62	285923	5.035	5.03			0.05	0.5
67) Trichloroethene	(2)	8.445	(-0.000)	95	307685	4.870	4.87			0.06	0.5
69) Methylcyclohexane	(2)	8.750	(-0.000)	83	491587	4.120	4.12			0.05	0.5
70) 1,2-Dichloropropane	(2)	8.781	(-0.000)	63	299139	4.996	5.00			0.06	0.5
74) Bromodichloromethane	(2)	9.122	(-0.000)	83	342279	5.085	5.09			0.05	0.5
80) cis-1,3-Dichloropropene	(2)	9.652	(-0.001)	75	386080	4.927	4.93			0.05	0.5
81) 4-Methyl-2-Pentanone	(1)	9.817	(-0.004)	43	717142	21.719	21.72			0.7	5
83) Toluene	(3)	10.024	(-0.000)	92	727554	4.990	4.99			0.07	0.5
84) trans-1,3-Dichloropropene	(3)	10.268	(0.000)	75	301278	5.363	5.36			0.06	0.5

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28. Target 3.5 esignature user ID: jgc14951

Data file: /chem2/HP19094.i/18oct31a.b/hc31l01.d Injection date and time: **31-OCT-2018 09:09**
Data file Sample Info. Line: LCSH80;LCSH80;1;3;LCS;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789-SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:20
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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

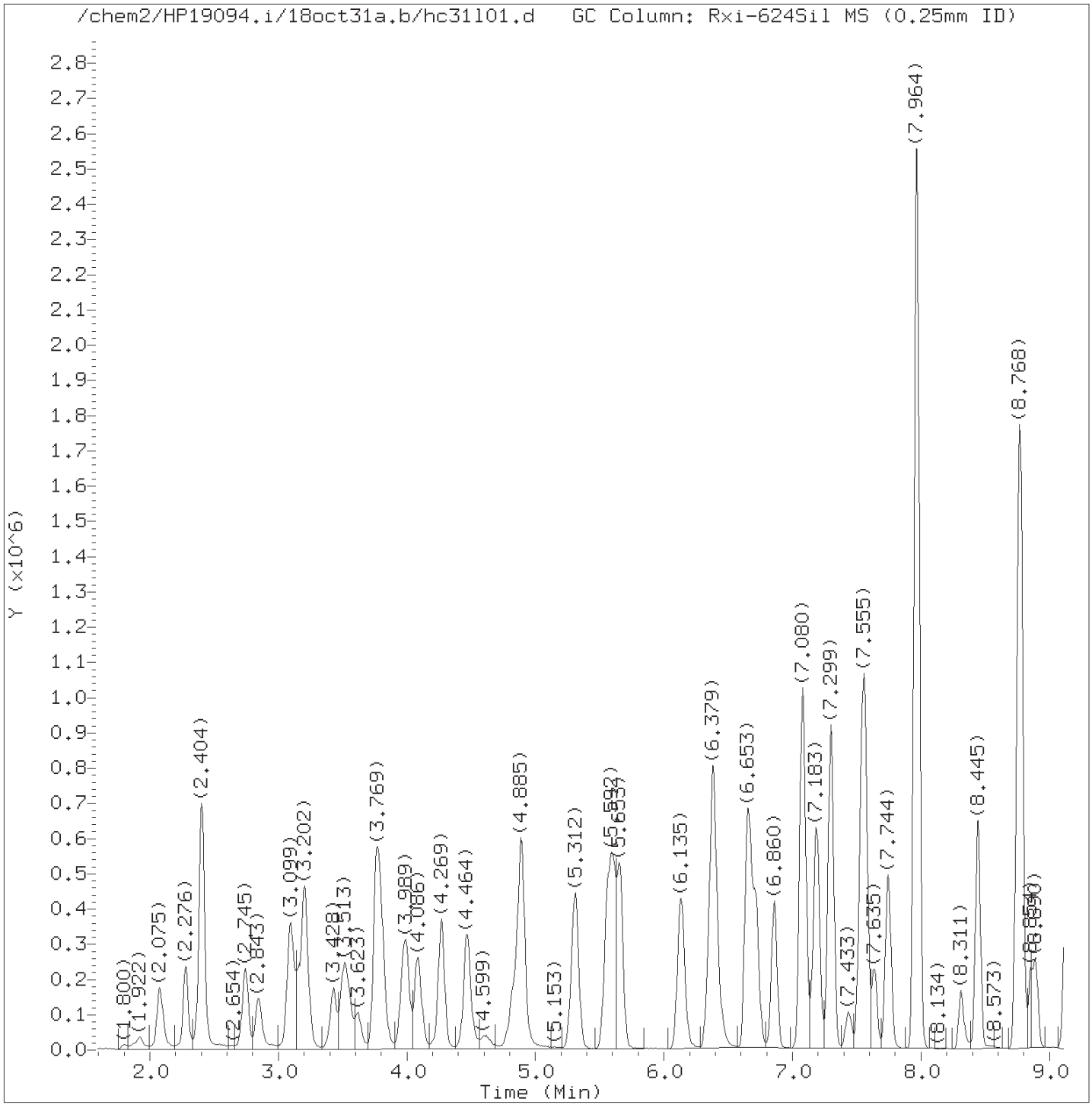
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
88) 1,1,2-Trichloroethane	(3)	10.475(-0.000)	97	176438	5.259	5.26			0.06	0.5
89) Tetrachloroethene	(3)	10.555(0.000)	166	337820	5.128	5.13			0.06	0.5
91) 2-Hexanone	(1)	10.677(-0.003)	43	493709	21.966	21.97			0.6	5
93) Dibromochloromethane	(3)	10.847(-0.000)	129	209149	5.202	5.20			0.07	0.5
95) 1,2-Dibromoethane	(3)	10.957(-0.000)	107	163520	5.200	5.20			0.06	0.5
98) Chlorobenzene	(3)	11.408(-0.000)	112	785061	5.075	5.08			0.06	0.5
100) Ethylbenzene	(3)	11.487(-0.000)	91	1441213	5.058	5.06			0.06	0.5
101) m+p-Xylene	(3)	11.603(-0.000)	106	1086142	10.276	10.28			0.1	0.5
104) o-Xylene	(3)	11.926(-0.000)	106	507142	5.019	5.02			0.05	0.5
105) Xylene (Total)	(3)		106	1593284	15.295	15.30			0.1	0.5
106) Styrene	(3)	11.945(-0.000)	104	839314	5.192	5.19			0.05	0.5
107) Bromoform	(3)	12.103(-0.000)	173	112830	5.106	5.11			0.3	1
108) Isopropylbenzene	(3)	12.225(-0.000)	105	1398272	5.069	5.07			0.05	0.5
113) 1,1,2,2-Tetrachloroethane	(4)	12.469(-0.000)	83	199101M	5.025	5.03			0.07	0.5
131) 1,3-Dichlorobenzene	(4)	13.194(-0.000)	146	605710	5.061	5.06			0.06	0.5
134) 1,4-Dichlorobenzene	(4)	13.268(-0.000)	146	596659	5.079	5.08			0.07	0.5
139) 1,2-Dichlorobenzene	(4)	13.524(0.000)	146	527777	4.998	5.00			0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)	14.694(-0.004)	155	19105	3.413	3.41			0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)	14.615(-0.000)	180	333673	4.601	4.60			0.06	0.5

M = Compound was manually integrated.

Total number of targets = 50

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

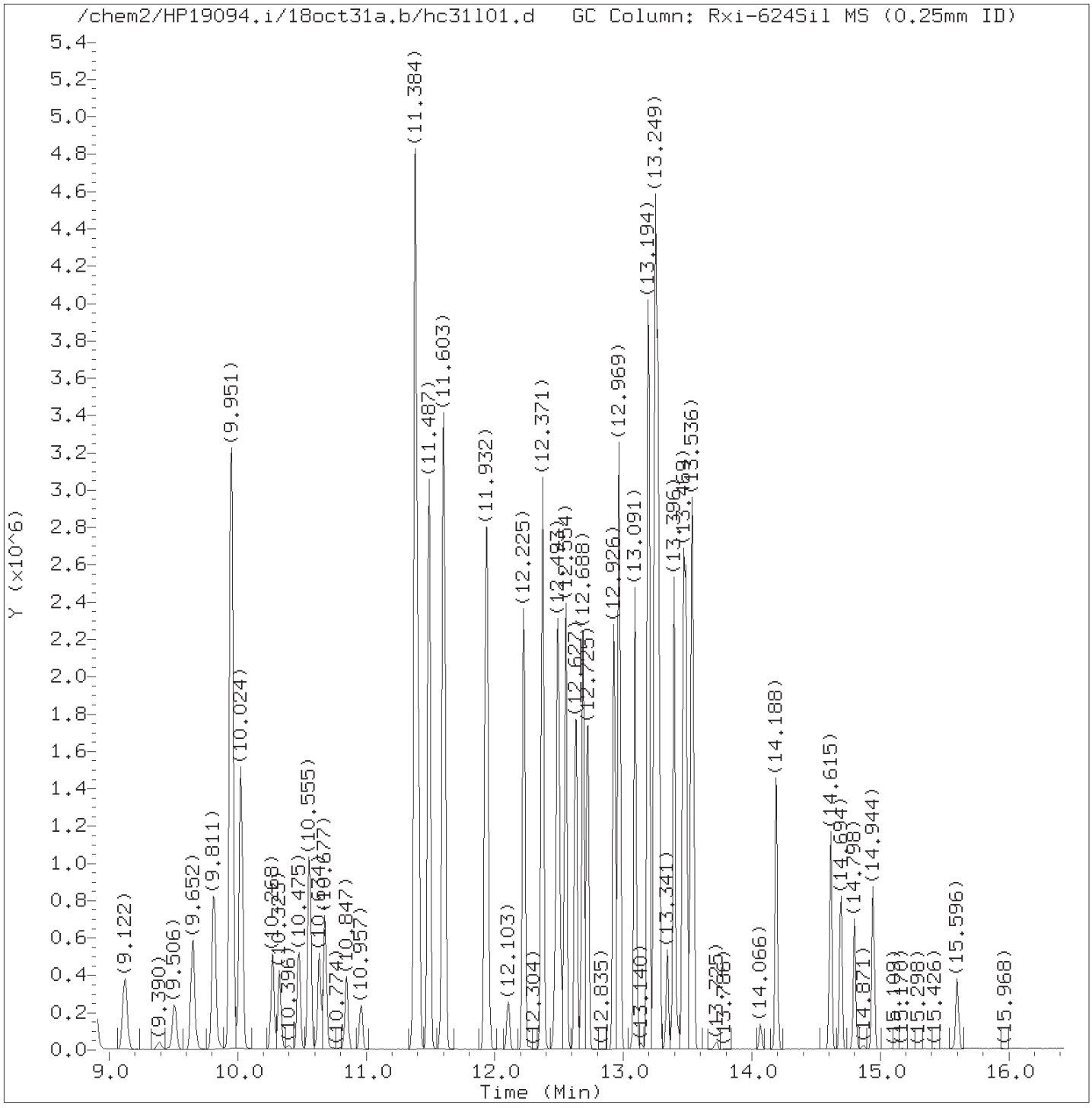
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:09 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCSH80 Lab Sample ID: LCSH80

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:09 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCSH80 Lab Sample ID: LCSH80

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:09 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCSH80 Lab Sample ID: LCSH80

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.075	85	326594	3.179
2) Chloromethane	(2)	2.276	50	390076	3.877
5) Vinyl Chloride	(2)	2.404	62	380896	4.042
7) Bromomethane	(2)	2.745	94	270620	3.694
8) Chloroethane	(2)	2.843	64	226975	3.971
10) Trichlorofluoromethane	(2)	3.154	101	462105	3.882
15) 1,1-Dichloroethene	(2)	3.757	96	271725	5.271
16) Freon 113	(2)	3.794	101	277894	4.574
14) Acetone	(1)	3.800	43	246595	30.409
18) Carbon Disulfide	(2)	4.086	76	746070	4.549
21) Methyl Acetate	(1)	4.245	43	92379	4.058
23) Methylene Chloride	(2)	4.471	84	277421	4.771
26)*t-Butyl Alcohol-d10	(1)	4.483	65	136054	50.000
30) Methyl Tertiary Butyl Ether	(2)	4.873	73	497353	4.691
31) trans-1,2-Dichloroethene	(2)	4.891	96	295458	5.078
33) 1,1-Dichloroethane	(2)	5.550	63	551309	4.977
38) 2-Butanone	(1)	6.342	43	443211	33.389
39) cis-1,2-Dichloroethene	(2)	6.379	96	323225	5.028
49) Chloroform	(2)	6.860	83	516798	5.018
50)$Dibromofluoromethane	(2)	7.080	113	652467	9.847
51) 1,1,1-Trichloroethane	(2)	7.086	97	441042	5.007
52) Cyclohexane	(2)	7.183	56	524184	4.558
54) Carbon Tetrachloride	(2)	7.299	117	386621	5.110
57)$1,2-Dichloroethane-d4	(2)	7.537	102	116494	10.085
58) Benzene	(2)	7.567	78	1189295	4.820
59) 1,2-Dichloroethane	(2)	7.635	62	285923	5.035
63)*Fluorobenzene	(2)	7.964	96	2628996	10.000
67) Trichloroethene	(2)	8.445	95	307685	4.870
69) Methylcyclohexane	(2)	8.750	83	491587	4.120
70) 1,2-Dichloropropane	(2)	8.781	63	299139	4.996
74) Bromodichloromethane	(2)	9.122	83	342279	5.085
80) cis-1,3-Dichloropropene	(2)	9.652	75	386080	4.927
81) 4-Methyl-2-Pentanone	(1)	9.817	43	717142	21.719
82)$Toluene-d8	(3)	9.951	98	2572471	10.173
83) Toluene	(3)	10.024	92	727554	4.990
84) trans-1,3-Dichloropropene	(3)	10.268	75	301278	5.363
88) 1,1,2-Trichloroethane	(3)	10.475	97	176438	5.259
89) Tetrachloroethene	(3)	10.555	166	337820	5.128

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:09 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

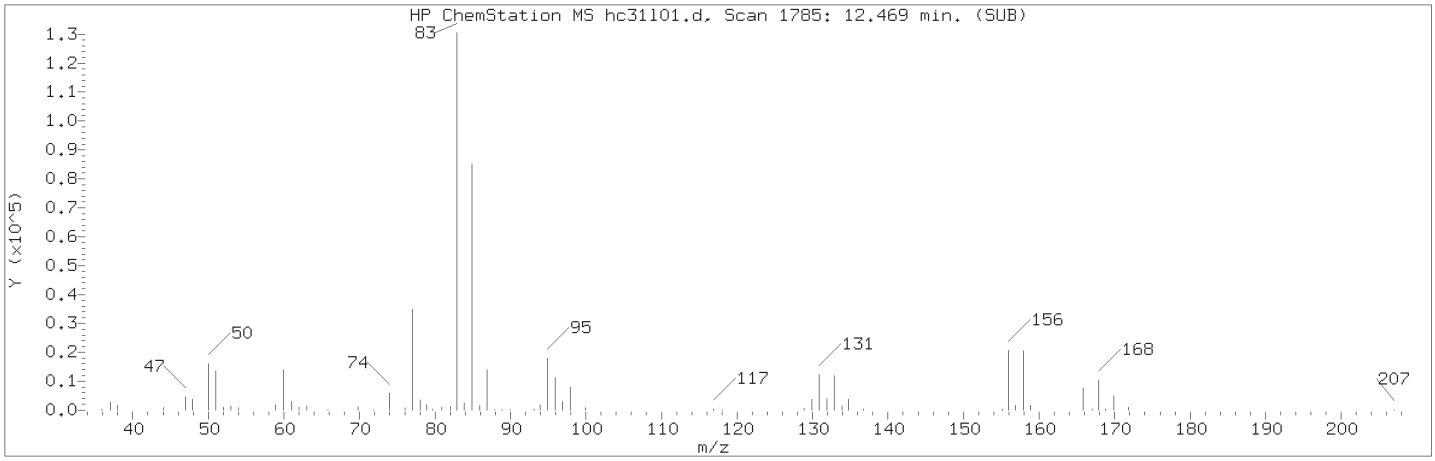
Sample Name: LCSH80 Lab Sample ID: LCSH80

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
91) 2-Hexanone	(1)	10.677	43	493709	21.966
93) Dibromochloromethane	(3)	10.847	129	209149	5.202
95) 1,2-Dibromoethane	(3)	10.957	107	163520	5.200
97)*Chlorobenzene-d5	(3)	11.378	117	1964705	10.000
98) Chlorobenzene	(3)	11.408	112	785061	5.075
100) Ethylbenzene	(3)	11.487	91	1441213	5.058
101) m+p-Xylene	(3)	11.603	106	1086142	10.276
105) Xylene (Total)	(3)		106	1593284	15.295
104) o-Xylene	(3)	11.926	106	507142	5.019
106) Styrene	(3)	11.945	104	839314	5.192
107) Bromoform	(3)	12.103	173	112830	5.106
108) Isopropylbenzene	(3)	12.225	105	1398272	5.069
111)$4-Bromofluorobenzene	(3)	12.371	95	904205	9.821
113) 1,1,2,2-Tetrachloroethane	(4)	12.469	83	199101M	5.025
131) 1,3-Dichlorobenzene	(4)	13.194	146	605710	5.061
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	998821	10.000
134) 1,4-Dichlorobenzene	(4)	13.268	146	596659	5.079
139) 1,2-Dichlorobenzene	(4)	13.524	146	527777	4.998
145) 1,2,4-Trichlorobenzene	(4)	14.615	180	333673	4.601
143) 1,2-Dibromo-3-chloropropane	(1)	14.694	155	19105	3.413

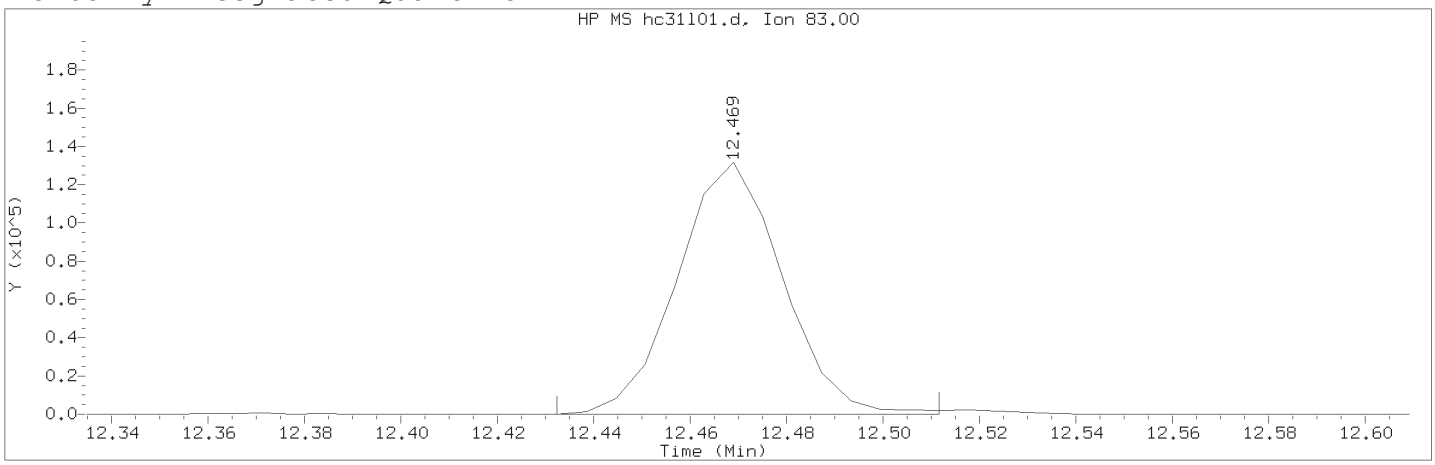
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31l01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:09 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCSH80 Lab Sample ID: LCSH80

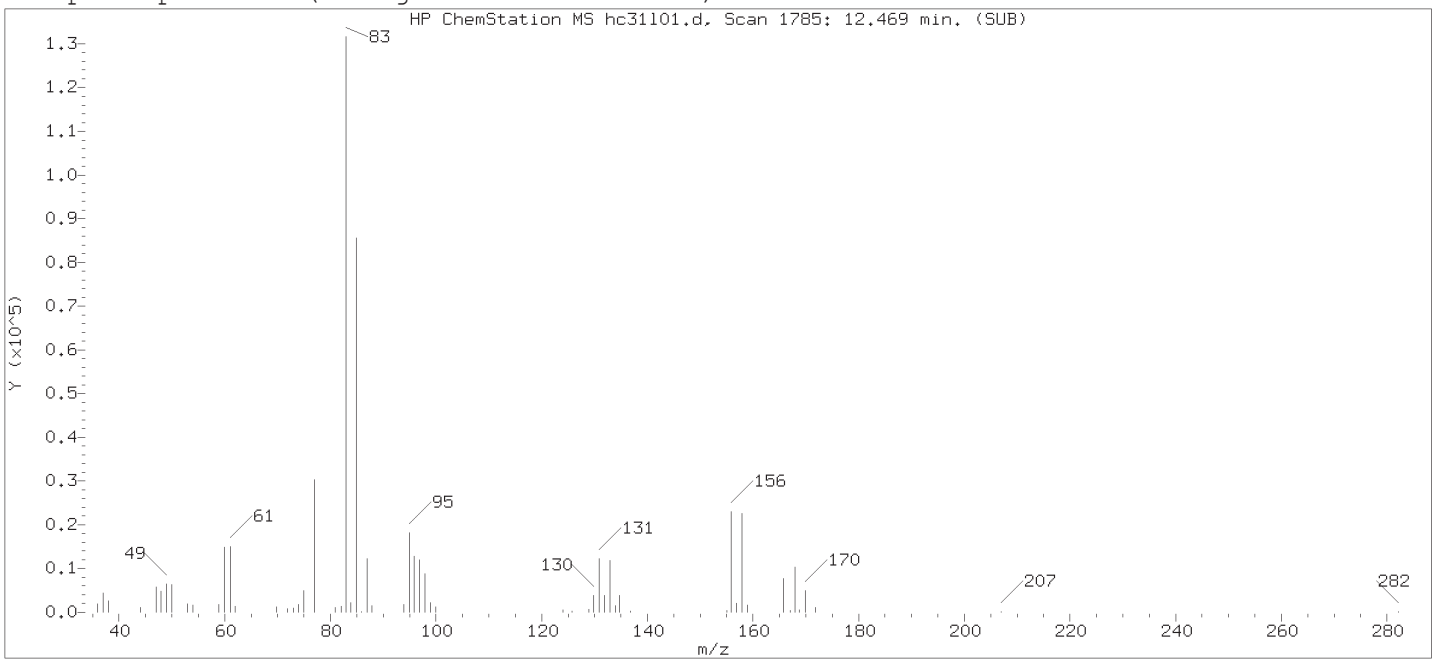
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1785
Retention Time (minutes): 12.469
Quant Ion : 83.00
Area (flag) : 199101M
On-Column Amount (ng) : 5.0252
Integration start scan : 1778 Integration stop scan: 1791
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

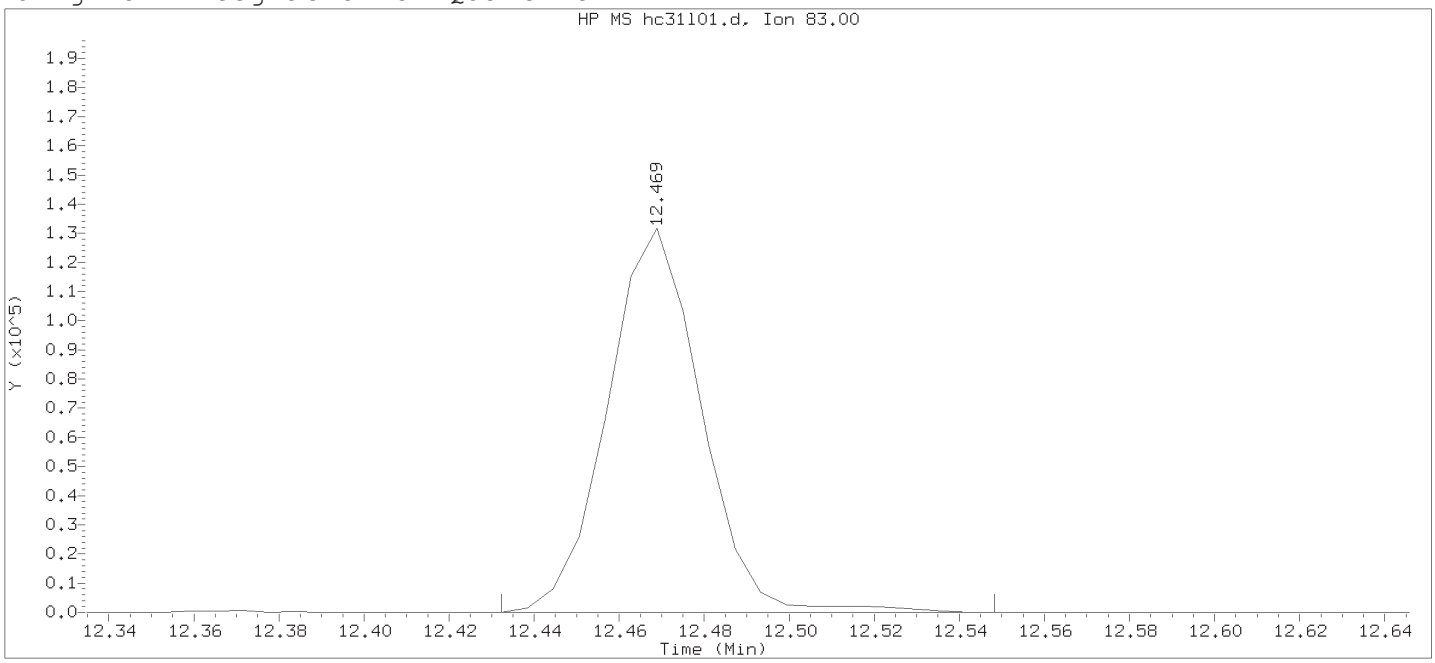
Analyst responsible for change: Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31l01.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:09 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 10:25
Date, time and analyst ID of latest file update: 31-Oct-2018 10:25 kel01973

Sample Name: LCSH80 Lab Sample ID: LCSH80

Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1785
Retention Time (minutes): 12.469
Quant Ion : 83.00
Area : 201051
On-column Amount (ng) : 5.0745
Integration start scan : 1778 Integration stop scan: 1797
Y at integration start : 0 Y at integration end: 0

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: JGC0401

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31l02.d Injection date and time: **31-OCT-2018 09:31**
Data file Sample Info. Line: LCDH80;LCDH80;1;3;LCSD;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789-SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:20
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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	4.489	(0.000)	476	65	121933	(-3)	50.00	
63) Fluorobenzene	7.964	(0.006)	1046	96	2621176	(3)	10.00	
97) Chlorobenzene-d5	11.378	(0.006)	1606	117	1932681	(0)	10.00	
133) 1,4-Dichlorobenzene-d4	13.249	(0.000)	1913	152	997911	(2)	10.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	7.074	(-0.001)	113	648029	9.809	98%		80 - 119
57) 1,2-Dichloroethane-d4	(2)	7.537	(-0.001)	102	116164	10.086	101%		81 - 118
82) Toluene-d8	(3)	9.951	(0.000)	98	2575550	10.354	104%		89 - 112
111) 4-Bromofluorobenzene	(3)	12.371	(-0.001)	95	907315	10.018	100%		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)	2.075	(-0.000)	85	320529	3.129	3.13			0.05	0.5
2) Chloromethane	(2)	2.276	(-0.000)	50	382566	3.813	3.81			0.06	0.5
5) Vinyl Chloride	(2)	2.404	(-0.000)	62	372735	3.968	3.97			0.1	0.5
7) Bromomethane	(2)	2.745	(-0.001)	94	264835	3.626	3.63			0.07	0.5
8) Chloroethane	(2)	2.843	(-0.000)	64	225078	3.950	3.95			0.07	0.5
10) Trichlorofluoromethane	(2)	3.148	(0.000)	101	453709	3.823	3.82			0.05	0.5
15) 1,1-Dichloroethene	(2)	3.757	(0.000)	96	262583	5.109	5.11			0.06	0.5
16) Freon 113	(2)	3.794	(-0.000)	101	268909	4.439	4.44			0.06	0.5
14) Acetone	(1)	3.806	(-0.001)	43	221161	30.431	30.43			0.9	5
18) Carbon Disulfide	(2)	4.086	(-0.000)	76	726716	4.444	4.44			0.06	1
21) Methyl Acetate	(1)	4.239	(0.001)	43	91066	4.463	4.46			0.1	1
23) Methylene Chloride	(2)	4.464	(0.000)	84	276249	4.765	4.76			0.07	0.5
31) trans-1,2-Dichloroethene	(2)	4.891	(0.000)	96	289079	4.984	4.98			0.06	0.5
30) Methyl Tertiary Butyl Ether	(2)	4.885	(-0.001)	73	487559	4.613	4.61			0.05	0.5
33) 1,1-Dichloroethane	(2)	5.550	(-0.000)	63	538787	4.879	4.88			0.07	0.5
39) cis-1,2-Dichloroethene	(2)	6.379	(-0.000)	96	319087	4.979	4.98			0.05	0.5
38) 2-Butanone	(1)	6.348	(-0.001)	43	428045	35.981	35.98			0.6	5
49) Chloroform	(2)	6.860	(-0.000)	83	517148	5.037	5.04			0.09	0.5
51) 1,1,1-Trichloroethane	(2)	7.092	(-0.000)	97	437819	4.985	4.99			0.06	0.5
52) Cyclohexane	(2)	7.196	(-0.002)	56	514500	4.487	4.49			0.05	0.5
54) Carbon Tetrachloride	(2)	7.299	(-0.000)	117	380639	5.046	5.05			0.07	0.5
58) Benzene	(2)	7.567	(-0.000)	78	1180156	4.797	4.80			0.05	0.5
59) 1,2-Dichloroethane	(2)	7.634	(-0.000)	62	276813	4.889	4.89			0.05	0.5
67) Trichloroethene	(2)	8.445	(-0.000)	95	304262	4.830	4.83			0.06	0.5
69) Methylcyclohexane	(2)	8.750	(-0.000)	83	478676	4.024	4.02			0.05	0.5
70) 1,2-Dichloropropane	(2)	8.787	(-0.001)	63	297388	4.982	4.98			0.06	0.5
74) Bromodichloromethane	(2)	9.122	(-0.000)	83	335288	4.996	5.00			0.05	0.5
80) cis-1,3-Dichloropropene	(2)	9.652	(-0.001)	75	378290	4.842	4.84			0.05	0.5
81) 4-Methyl-2-Pentanone	(1)	9.811	(0.000)	43	692639M	23.407	23.41			0.7	5
83) Toluene	(3)	10.024	(-0.000)	92	722503	5.038	5.04			0.07	0.5
84) trans-1,3-Dichloropropene	(3)	10.268	(0.000)	75	286263	5.180	5.18			0.06	0.5

M = Compound was manually integrated.

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28. Target 3.5 esignature user ID: jgc14951

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19094.i/18oct31a.b/hc31l02.d Injection date and time: **31-OCT-2018 09:31**
Data file Sample Info. Line: LCDH80;LCDH80;1;3;LCSD;;DOD25;;hc31b01; Instrument ID: **HP19094.i** Batch: **H183041AA**
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Blank Data file reference: **/chem2/HP19094.i/18oct31a.b/hc31b01.d**

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: **25789-SM**
Calibration date and time (Last Method Edit): 31-OCT-2018 11:20
Mid Level Daily Calibration Standard Reference: **/chem2/HP19094.i/18oct31a.b/hc31c01.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

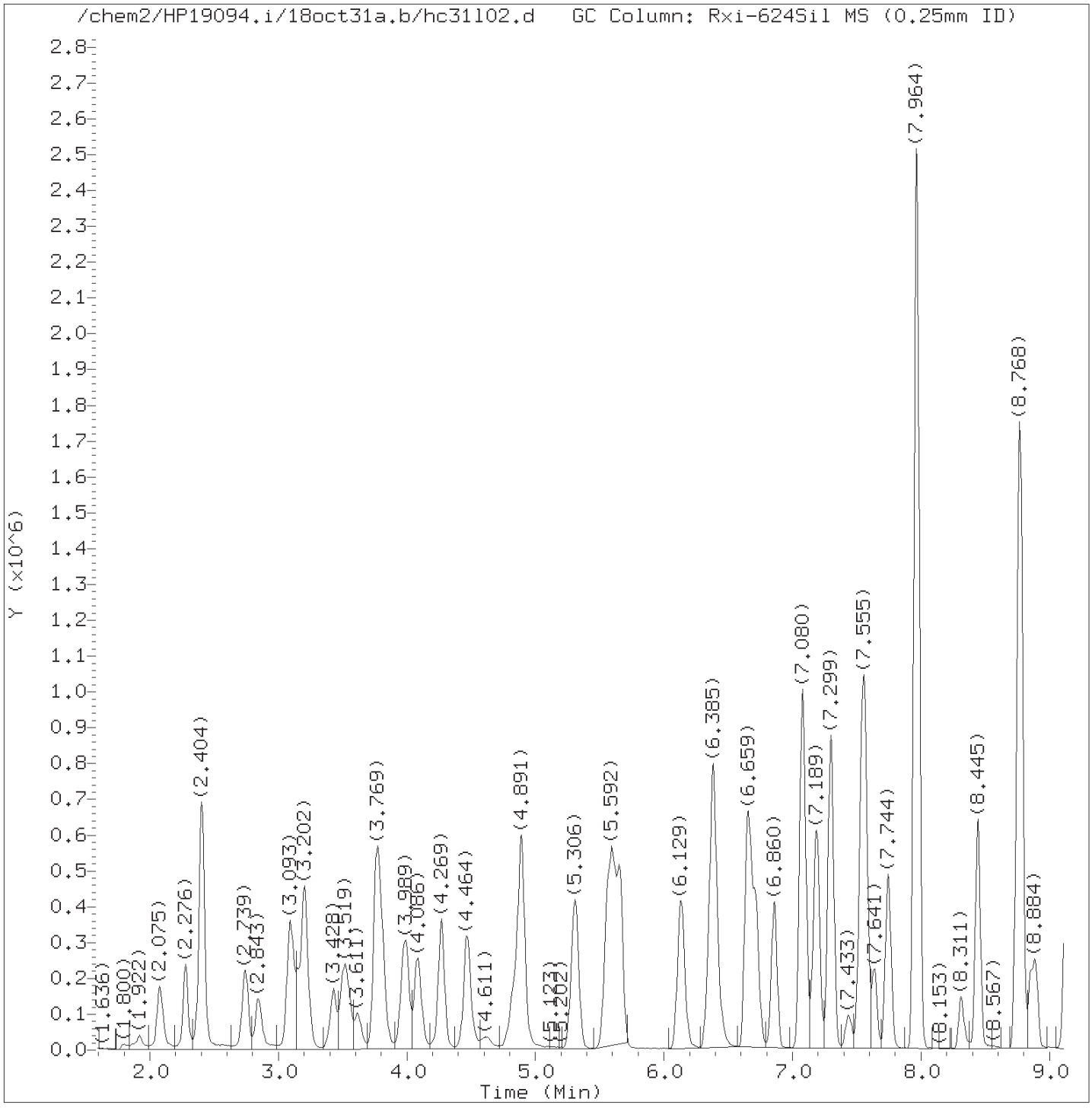
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
88) 1,1,2-Trichloroethane	(3)	10.475(-0.000)	97	171562	5.198	5.20			0.06	0.5
89) Tetrachloroethene	(3)	10.561(-0.000)	166	328745	5.073	5.07			0.06	0.5
91) 2-Hexanone	(1)	10.676(0.000)	43	472896	23.477	23.48			0.6	5
93) Dibromochloromethane	(3)	10.847(-0.000)	129	201780	5.101	5.10			0.07	0.5
95) 1,2-Dibromoethane	(3)	10.957(-0.000)	107	160219	5.180	5.18			0.06	0.5
98) Chlorobenzene	(3)	11.408(-0.000)	112	770204	5.062	5.06			0.06	0.5
100) Ethylbenzene	(3)	11.487(-0.000)	91	1409570	5.029	5.03			0.06	0.5
101) m+p-Xylene	(3)	11.603(-0.000)	106	1070211	10.293	10.29			0.1	0.5
104) o-Xylene	(3)	11.926(-0.000)	106	507608	5.107	5.11			0.05	0.5
105) Xylene (Total)	(3)		106	1577819	15.400	15.40			0.1	0.5
106) Styrene	(3)	11.945(-0.000)	104	820493	5.159	5.16			0.05	0.5
107) Bromoform	(3)	12.103(-0.000)	173	109358	5.031	5.03			0.3	1
108) Isopropylbenzene	(3)	12.225(-0.000)	105	1377723	5.077	5.08			0.05	0.5
113) 1,1,2,2-Tetrachloroethane	(4)	12.469(0.000)	83	191050M	4.826	4.83			0.07	0.5
131) 1,3-Dichlorobenzene	(4)	13.194(-0.000)	146	588583	4.923	4.92			0.06	0.5
134) 1,4-Dichlorobenzene	(4)	13.268(0.000)	146	589494	5.023	5.02			0.07	0.5
139) 1,2-Dichlorobenzene	(4)	13.524(0.000)	146	513006	4.863	4.86			0.06	0.5
143) 1,2-Dibromo-3-chloropropane	(1)	14.694(0.000)	155	18943	3.776	3.78			0.1	0.5
145) 1,2,4-Trichlorobenzene	(4)	14.615(0.000)	180	325313	4.490	4.49			0.06	0.5

M = Compound was manually integrated.

Total number of targets = 50

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28. Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17. PARALLAX ID: kek01027



Total Ion Chromatogram (TIC)

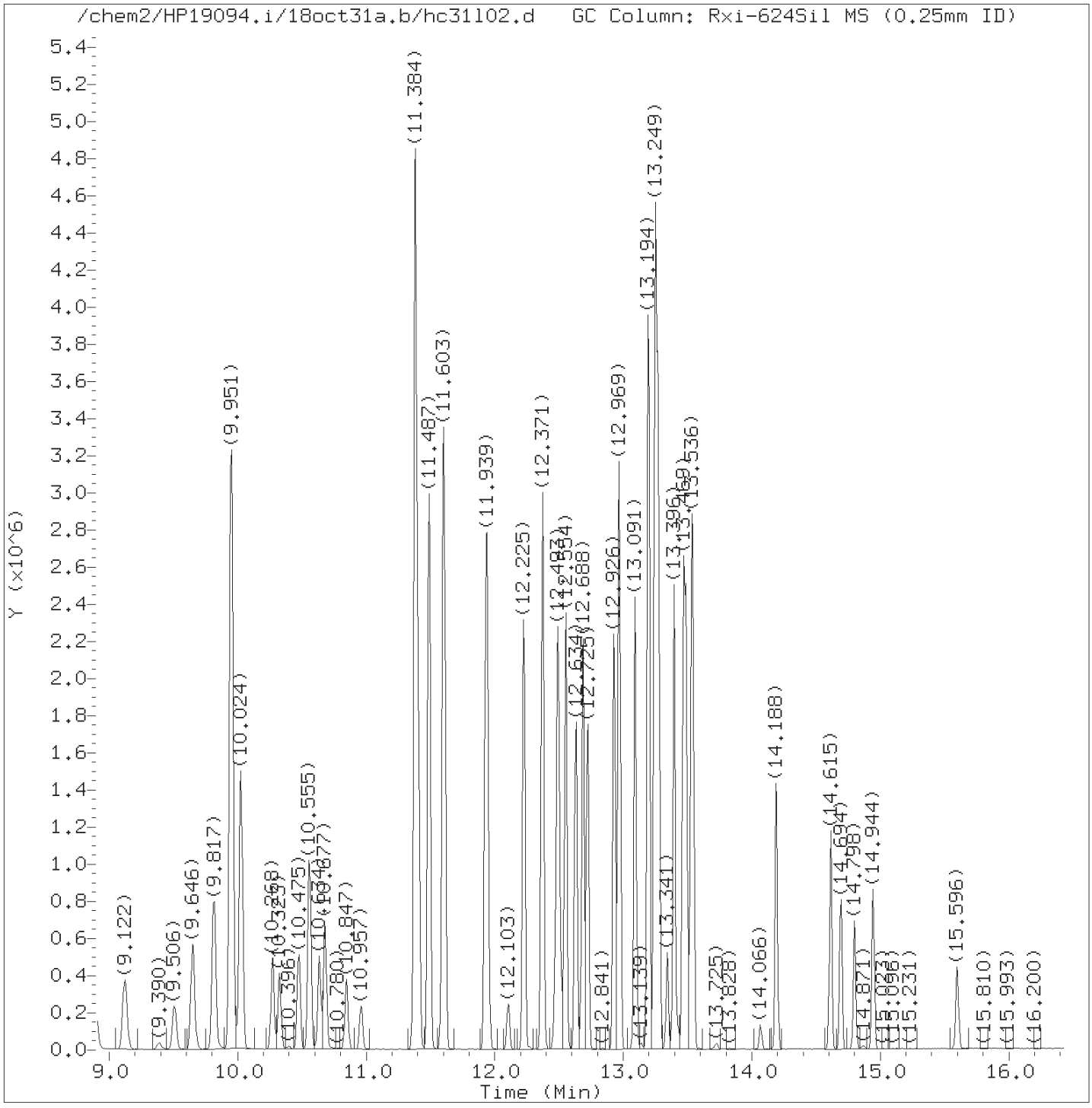
Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:31 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCDH80 Lab Sample ID: LCDH80

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:31 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCDH80 Lab Sample ID: LCDH80

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:31 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCDH80 Lab Sample ID: LCDH80

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.075	85	320529	3.129
2) Chloromethane	(2)	2.276	50	382566	3.813
5) Vinyl Chloride	(2)	2.404	62	372735	3.968
7) Bromomethane	(2)	2.745	94	264835	3.626
8) Chloroethane	(2)	2.843	64	225078	3.950
10) Trichlorofluoromethane	(2)	3.148	101	453709	3.823
15) 1,1-Dichloroethene	(2)	3.757	96	262583	5.109
16) Freon 113	(2)	3.794	101	268909	4.439
14) Acetone	(1)	3.806	43	221161	30.431
18) Carbon Disulfide	(2)	4.086	76	726716	4.444
21) Methyl Acetate	(1)	4.239	43	91066	4.463
23) Methylene Chloride	(2)	4.464	84	276249	4.765
26)*t-Butyl Alcohol-d10	(1)	4.489	65	121933	50.000
30) Methyl Tertiary Butyl Ether	(2)	4.885	73	487559	4.613
31) trans-1,2-Dichloroethene	(2)	4.891	96	289079	4.984
33) 1,1-Dichloroethane	(2)	5.550	63	538787	4.879
38) 2-Butanone	(1)	6.348	43	428045	35.981
39) cis-1,2-Dichloroethene	(2)	6.379	96	319087	4.979
49) Chloroform	(2)	6.860	83	517148	5.037
50)$Dibromofluoromethane	(2)	7.074	113	648029	9.809
51) 1,1,1-Trichloroethane	(2)	7.092	97	437819	4.985
52) Cyclohexane	(2)	7.196	56	514500	4.487
54) Carbon Tetrachloride	(2)	7.299	117	380639	5.046
57)$1,2-Dichloroethane-d4	(2)	7.537	102	116164	10.086
58) Benzene	(2)	7.567	78	1180156	4.797
59) 1,2-Dichloroethane	(2)	7.634	62	276813	4.889
63)*Fluorobenzene	(2)	7.964	96	2621176	10.000
67) Trichloroethene	(2)	8.445	95	304262	4.830
69) Methylcyclohexane	(2)	8.750	83	478676	4.024
70) 1,2-Dichloropropane	(2)	8.787	63	297388	4.982
74) Bromodichloromethane	(2)	9.122	83	335288	4.996
80) cis-1,3-Dichloropropene	(2)	9.652	75	378290	4.842
81) 4-Methyl-2-Pentanone	(1)	9.811	43	692639M	23.407
82)$Toluene-d8	(3)	9.951	98	2575550	10.354
83) Toluene	(3)	10.024	92	722503	5.038
84) trans-1,3-Dichloropropene	(3)	10.268	75	286263	5.180
88) 1,1,2-Trichloroethane	(3)	10.475	97	171562	5.198
89) Tetrachloroethene	(3)	10.561	166	328745	5.073

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Quant Report

Target Revision 3.5

Data File: /chem2/HP19094.i/18oct31a.b/hc31l02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:31 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

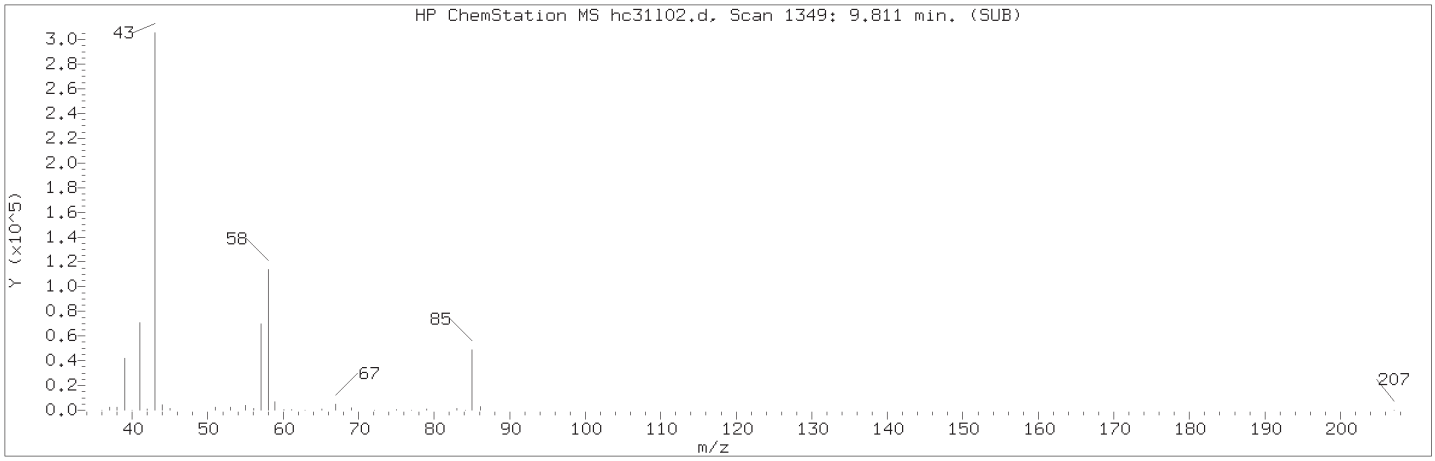
Sample Name: LCDH80 Lab Sample ID: LCDH80

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
91) 2-Hexanone	(1)	10.677	43	472896	23.477
93) Dibromochloromethane	(3)	10.847	129	201780	5.101
95) 1,2-Dibromoethane	(3)	10.957	107	160219	5.180
97)*Chlorobenzene-d5	(3)	11.378	117	1932681	10.000
98) Chlorobenzene	(3)	11.408	112	770204	5.062
100) Ethylbenzene	(3)	11.487	91	1409570	5.029
101) m+p-Xylene	(3)	11.603	106	1070211	10.293
105) Xylene (Total)	(3)		106	1577819	15.400
104) o-Xylene	(3)	11.926	106	507608	5.107
106) Styrene	(3)	11.945	104	820493	5.159
107) Bromoform	(3)	12.103	173	109358	5.031
108) Isopropylbenzene	(3)	12.225	105	1377723	5.077
111)$4-Bromofluorobenzene	(3)	12.371	95	907315	10.018
113) 1,1,2,2-Tetrachloroethane	(4)	12.469	83	191050M	4.826
131) 1,3-Dichlorobenzene	(4)	13.194	146	588583	4.923
133)*1,4-Dichlorobenzene-d4	(4)	13.249	152	997911	10.000
134) 1,4-Dichlorobenzene	(4)	13.268	146	589494	5.023
139) 1,2-Dichlorobenzene	(4)	13.524	146	513006	4.863
145) 1,2,4-Trichlorobenzene	(4)	14.615	180	325313	4.490
143) 1,2-Dibromo-3-chloropropane	(1)	14.694	155	18943	3.776

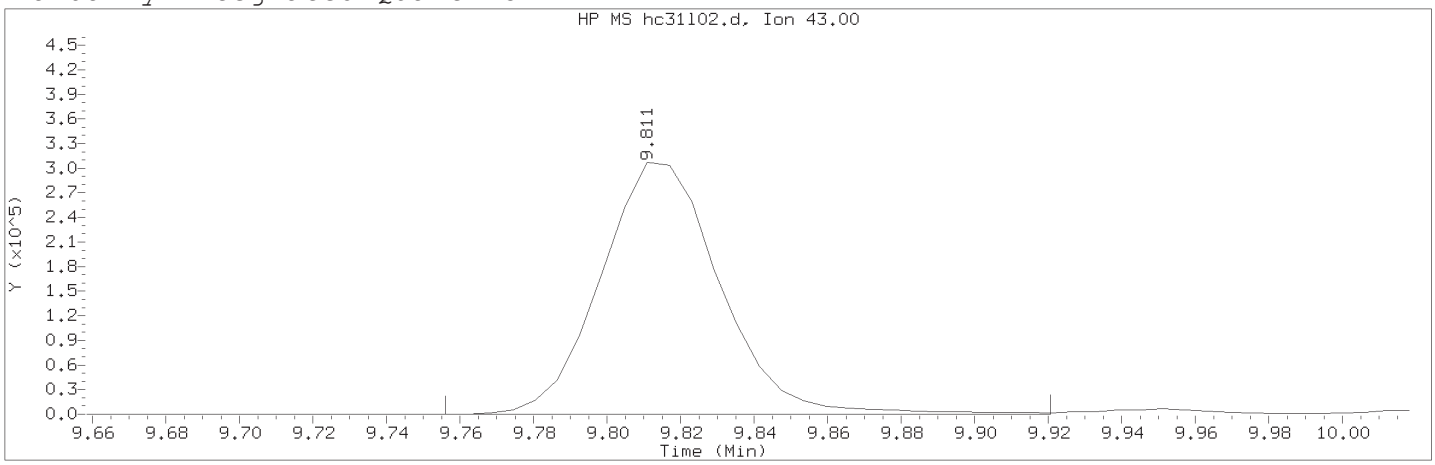
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31l02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:31 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCDH80 Lab Sample ID: LCDH80

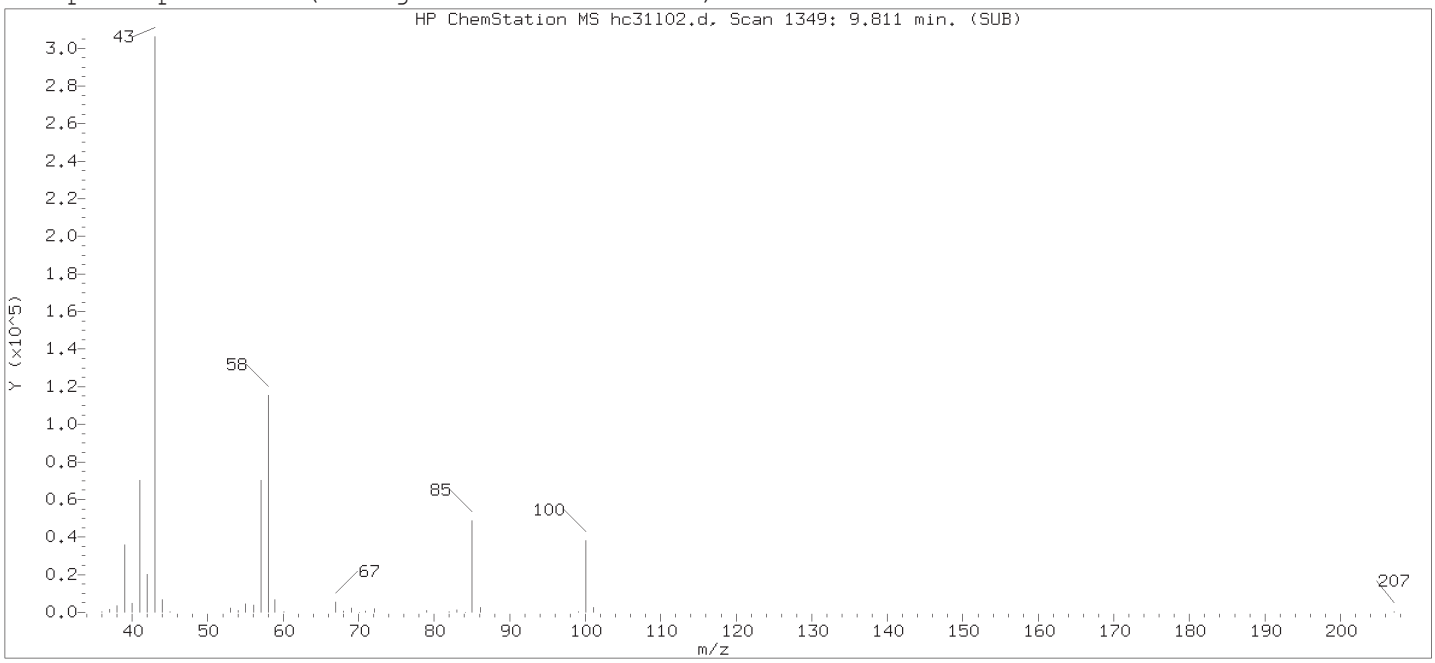
Compound Number : 81
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1349
Retention Time (minutes): 9.811
Quant Ion : 43.00
Area (flag) : 692639M
On-Column Amount (ng) : 23.4066
Integration start scan : 1339 Integration stop scan: 1366
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

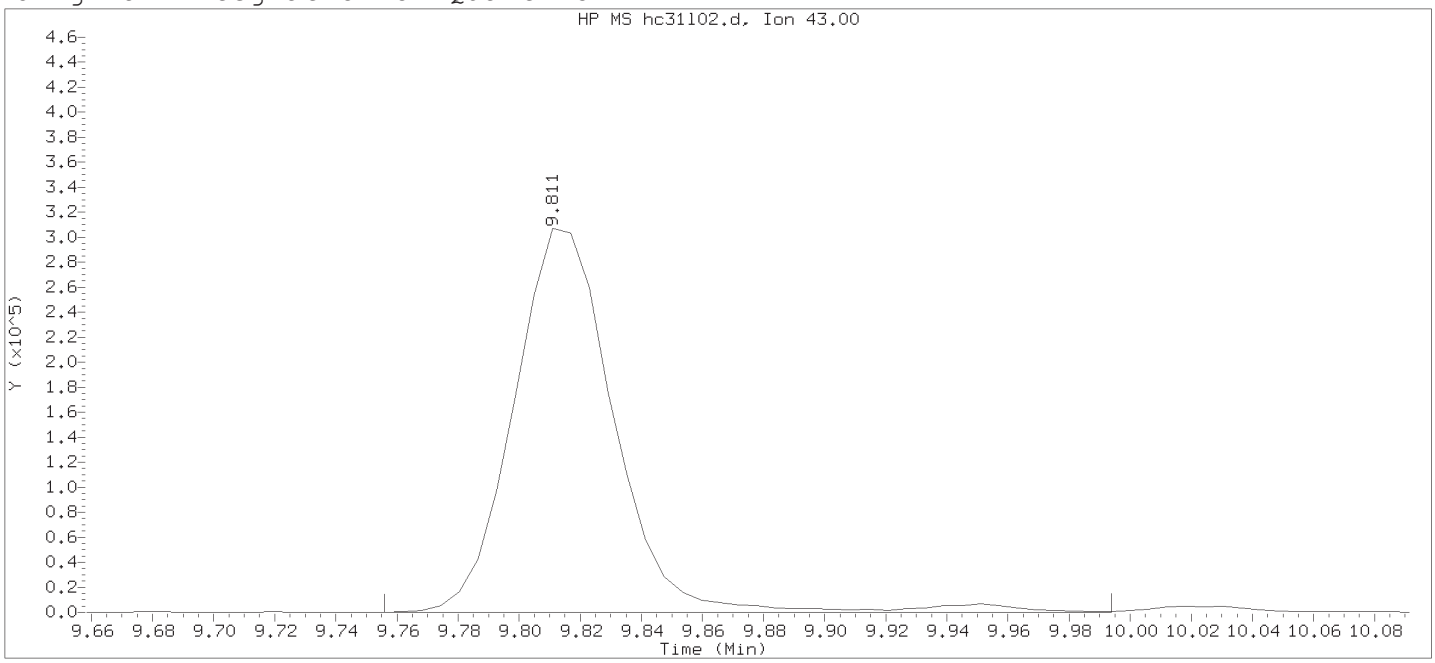
Analyst responsible for change: Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31102.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:31 Analyst ID: KEL01973

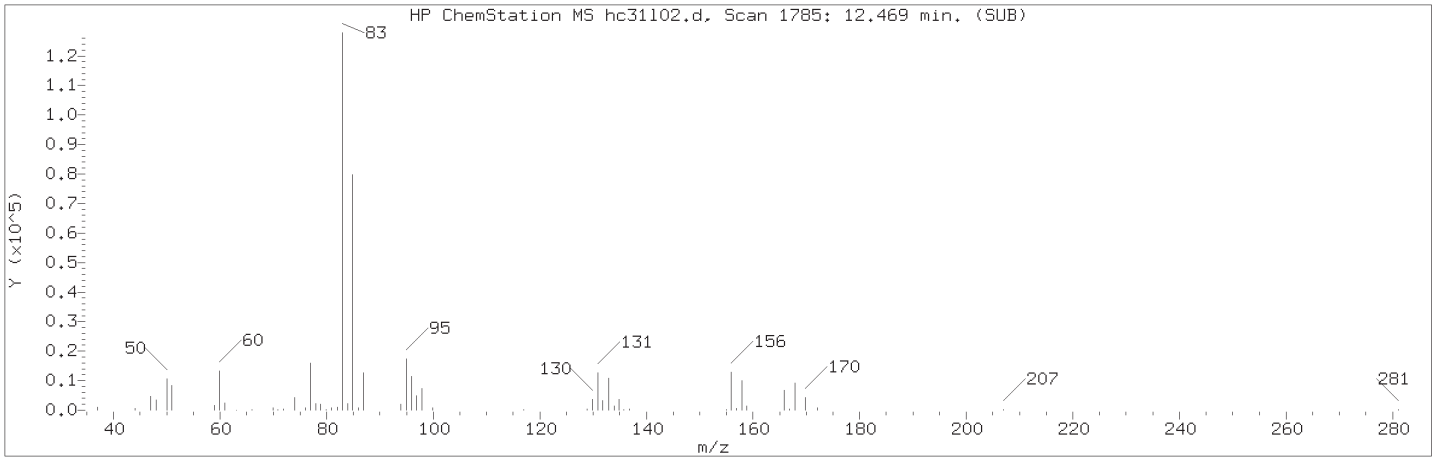
Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 10:25
Date, time and analyst ID of latest file update: 31-Oct-2018 10:26 kel01973

Sample Name: LCDH80 Lab Sample ID: LCDH80

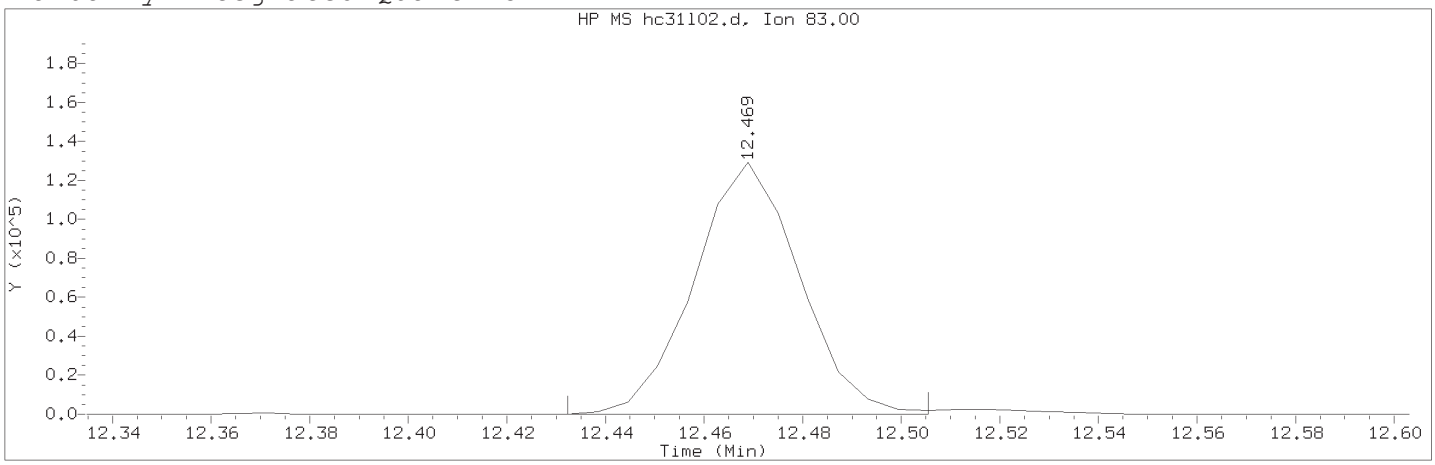
Compound Number : 81
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1349
Retention Time (minutes): 9.811
Quant Ion : 43.00
Area : 706431
On-column Amount (ng) : 23.8726
Integration start scan : 1339 Integration stop scan: 1378
Y at integration start : 0 Y at integration end: 0

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: JGCHACHA

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31l02.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:31 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 11:20
Date, time and analyst ID of latest file update: 31-Oct-2018 11:22 kel01973

Sample Name: LCDH80 Lab Sample ID: LCDH80

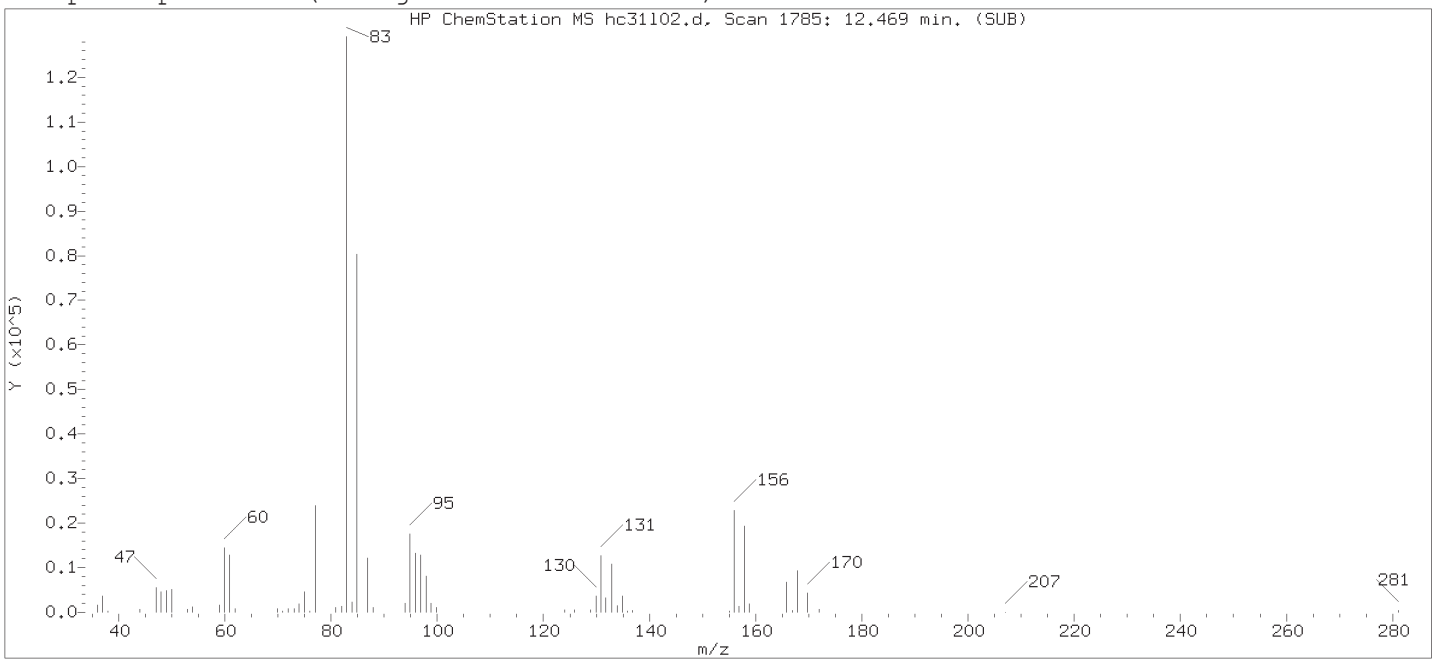
Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1785
Retention Time (minutes): 12.469
Quant Ion : 83.00
Area (flag) : 191050M
On-Column Amount (ng) : 4.8264
Integration start scan : 1778 Integration stop scan: 1790
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

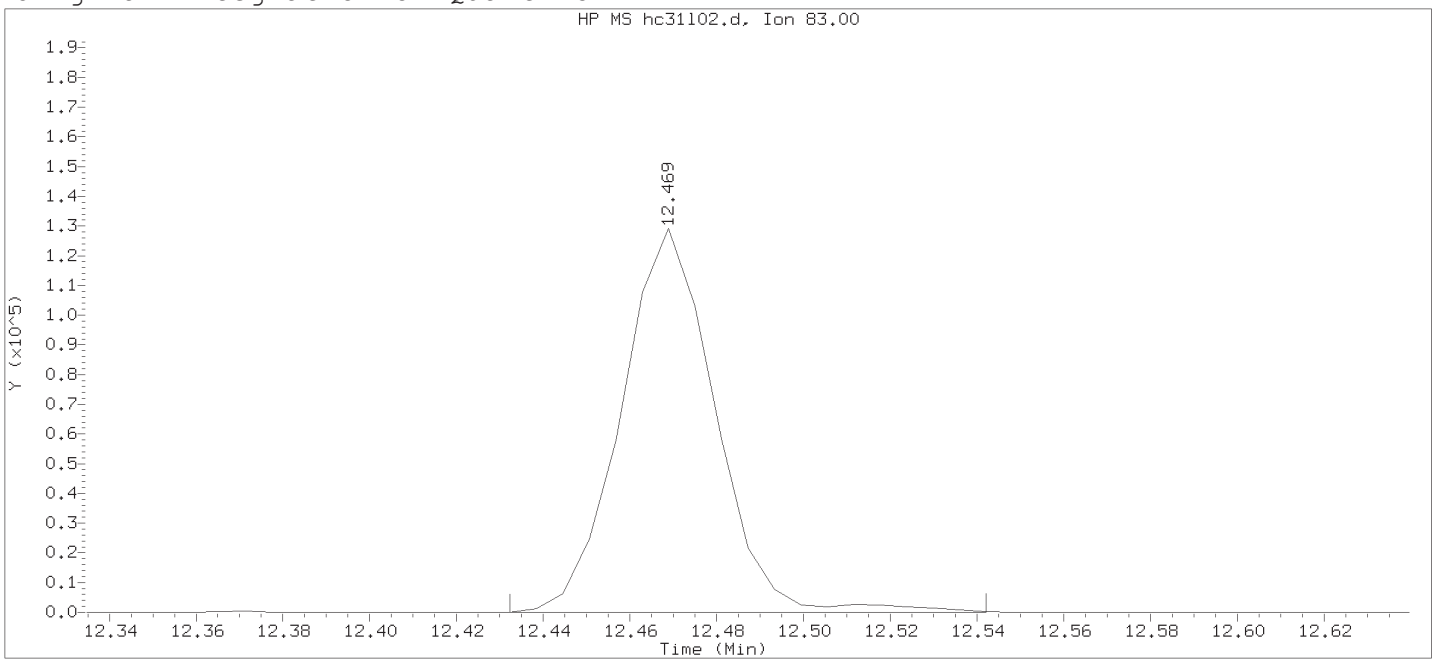
Analyst responsible for change: Digitally signed by Joel G. Chachapoya
on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgc14951

Secondary review performed and digitally signed by Kelly E. Keller on 11/06/2018 at 13:17.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19094.i/18oct31a.b/hc31102.d Instrument ID: HP19094.i
Injection date and time: 31-OCT-2018 09:31 Analyst ID: KEL01973

Method used: /chem2/HP19094.i/18oct31a.b/m8260c25.m Sublist used: 25789-SM
Calibration date and time: 31-OCT-2018 10:25
Date, time and analyst ID of latest file update: 31-Oct-2018 10:26 kel01973

Sample Name: LCDH80 Lab Sample ID: LCDH80

Compound Number : 113
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1785
Retention Time (minutes): 12.469
Quant Ion : 83.00
Area : 194022
On-column Amount (ng) : 4.9015
Integration start scan : 1778 Integration stop scan: 1796
Y at integration start : 0 Y at integration end: 87

Digitally signed by Joel G. Chachapoya on 10/31/2018 at 20:28.
Target 3.5 esignature user ID: jgchachapoya

Semivolatiles by GC/MS Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9861917	OU2-1-SW001	X		1	
9861918	OU2-1-SW003	X		1	
9861919	OU2-1-SW004	X		1	
9861920	REF-1-SW001	X		1	
9861921	OU1-1-SW005	X		1	
9861922	OU2-1-SW002	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): 9861917-9861922: Analysis: 14241)
The response for a target analyte in the initial calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection, the data is reported.

The response in the continuing calibration verification marginally exceeds the DoD acceptance criteria. Due to the marginal nature of the outlier(s) and the high bias without a detection, the data is reported.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

LCS/LCSD

Batch#: 18297WAE026 (Sample number(s): 9861917-9861922)
The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: Hexachlorocyclopentadiene

Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

(Sample number(s): 9861917-9861922: Analysis: 14241)
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

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.

Batch#: 18297WAE026 (Sample number(s): 9861917-9861922)
The recovery(ies) for the following surrogate(s) were below the acceptance window: 2,4,6-Tribromophenol (9861921), 2-Fluorobiphenyl (9861921), 2-Fluorophenol (9861921), Nitrobenzene-d5 (9861921), Terphenyl-d14 (9861921)

(Sample number(s): 9861921: Analysis: 14241)
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

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

Semivolatiles by GC/MS

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Quality Control Reference List
GC/MS Semivolatiles

CLIENT: Tidewater, Inc.
SDG: TID07

Fraction: Semivolatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
SVOAs 8270D MINI	18297WAE026	SBLKWE297	10/31/2018 15:31
		297WELCS	10/31/2018 15:58
		297WELCSD	10/31/2018 16:26
		9861917	10/31/2018 16:53
		9861918	10/31/2018 17:20
		9861919	10/31/2018 17:48
		9861920	10/31/2018 18:15
		9861921	10/31/2018 18:42
		9861922	10/31/2018 19:10
SVOAs 8270D MINI	18304WAH026	SBLKWH304	11/02/2018 00:02
		304WHLCS	11/02/2018 00:31
		304WHLCSD	11/02/2018 01:00
		9861917RE	11/02/2018 01:28
		9861918RE	11/02/2018 01:57
		9861919RE	11/02/2018 02:26
		9861920RE	11/02/2018 02:55
		9861921RE	11/02/2018 03:24
		9861922RE	11/02/2018 03:53

Fraction: Semivolatiles by GC/MS

18297WAE026 / SBLKWE297 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Pyridine	10/31/18	N.D.	ug/l	2	4	5
Phenol	10/31/18	N.D.	ug/l	0.5	1	2
Aniline	10/31/18	N.D.	ug/l	3	9	10
2-Chlorophenol	10/31/18	N.D.	ug/l	0.5	1	2
1,3-Dichlorobenzene	10/31/18	N.D.	ug/l	0.5	1	2
1,4-Dichlorobenzene	10/31/18	N.D.	ug/l	0.5	1	2
Benzyl alcohol	10/31/18	N.D.	ug/l	10	20	30
1,2-Dichlorobenzene	10/31/18	N.D.	ug/l	0.5	1	2
2-Methylphenol	10/31/18	N.D.	ug/l	0.5	1	2
2,2'-oxybis(1-Chloropropane)	10/31/18	N.D.	ug/l	0.5	1	2
2,4-Dichlorophenol	10/31/18	N.D.	ug/l	0.5	1	2
4-Methylphenol	10/31/18	N.D.	ug/l	0.5	1	2
N-Nitroso-di-n-propylamine	10/31/18	N.D.	ug/l	0.7	2	3
Hexachloroethane	10/31/18	N.D.	ug/l	1	2	5
Nitrobenzene	10/31/18	N.D.	ug/l	0.5	1	2
Isophorone	10/31/18	N.D.	ug/l	0.5	1	2
2-Nitrophenol	10/31/18	N.D.	ug/l	3	9	10
2,4-Dimethylphenol	10/31/18	N.D.	ug/l	3	9	10
bis(2-Chloroethoxy)methane	10/31/18	N.D.	ug/l	0.5	1	2
1,2,4-Trichlorobenzene	10/31/18	N.D.	ug/l	0.5	1	2
4-Chloroaniline	10/31/18	N.D.	ug/l	4	9	10
Hexachlorobutadiene	10/31/18	N.D.	ug/l	0.5	1	2
4-Chloro-3-methylphenol	10/31/18	N.D.	ug/l	0.5	1	2
2-Methylnaphthalene	10/31/18	N.D.	ug/l	0.1	0.2	0.5
Hexachlorocyclopentadiene	10/31/18	N.D.	ug/l	5	10	11
2,4,6-Trichlorophenol	10/31/18	N.D.	ug/l	0.5	1	2
2,4,5-Trichlorophenol	10/31/18	N.D.	ug/l	0.5	1	2
2-Chloronaphthalene	10/31/18	N.D.	ug/l	0.4	0.8	1
2-Nitroaniline	10/31/18	N.D.	ug/l	2	6	7
Dimethylphthalate	10/31/18	N.D.	ug/l	2	4	5
2,6-Dinitrotoluene	10/31/18	N.D.	ug/l	0.5	1	2
3-Nitroaniline	10/31/18	N.D.	ug/l	3	6	7
2,4-Dinitrophenol	10/31/18	N.D.	ug/l	14	28	30
4-Nitrophenol	10/31/18	N.D.	ug/l	10	20	30
2,4-Dinitrotoluene	10/31/18	N.D.	ug/l	1	2	5
Dibenzofuran	10/31/18	N.D.	ug/l	0.5	1	2
Diethylphthalate	10/31/18	N.D.	ug/l	2	4	5
4-Chlorophenyl-phenylether	10/31/18	N.D.	ug/l	0.5	1	2
4-Nitroaniline	10/31/18	N.D.	ug/l	0.9	2	3
4,6-Dinitro-2-methylphenol	10/31/18	N.D.	ug/l	8	20	21
N-Nitrosodiphenylamine	10/31/18	N.D.	ug/l	0.7	2	3
4-Bromophenyl-phenylether	10/31/18	N.D.	ug/l	0.5	1	2
Pentachlorophenol	10/31/18	N.D.	ug/l	1	4	5
Carbazole	10/31/18	N.D.	ug/l	0.5	1	2
3,3'-Dichlorobenzidine	10/31/18	N.D.	ug/l	3	9	10

Fraction: Semivolatiles by GC/MS

18297WAE026 / SBLKWE297 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Di-n-octylphthalate	10/31/18	N.D.	ug/l	5	10	11

18304WAH026 / SBLKWH304 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Pyridine	11/02/18	N.D.	ug/l	2	4	5
Phenol	11/02/18	N.D.	ug/l	0.5	1	2
Aniline	11/02/18	N.D.	ug/l	3	9	10
2-Chlorophenol	11/02/18	N.D.	ug/l	0.5	1	2
1,3-Dichlorobenzene	11/02/18	N.D.	ug/l	0.5	1	2
1,4-Dichlorobenzene	11/02/18	N.D.	ug/l	0.5	1	2
Benzyl alcohol	11/02/18	N.D.	ug/l	10	20	30
1,2-Dichlorobenzene	11/02/18	N.D.	ug/l	0.5	1	2
2-Methylphenol	11/02/18	N.D.	ug/l	0.5	1	2
2,2'-oxybis(1-Chloropropane)	11/02/18	N.D.	ug/l	0.5	1	2
2,4-Dichlorophenol	11/02/18	N.D.	ug/l	0.5	1	2
4-Methylphenol	11/02/18	N.D.	ug/l	0.5	1	2
N-Nitroso-di-n-propylamine	11/02/18	N.D.	ug/l	0.7	2	3
Hexachloroethane	11/02/18	N.D.	ug/l	1	2	5
Nitrobenzene	11/02/18	N.D.	ug/l	0.5	1	2
Isophorone	11/02/18	N.D.	ug/l	0.5	1	2
2-Nitrophenol	11/02/18	N.D.	ug/l	3	9	10
2,4-Dimethylphenol	11/02/18	N.D.	ug/l	3	9	10
bis(2-Chloroethoxy)methane	11/02/18	N.D.	ug/l	0.5	1	2
1,2,4-Trichlorobenzene	11/02/18	N.D.	ug/l	0.5	1	2
4-Chloroaniline	11/02/18	N.D.	ug/l	4	9	10
Hexachlorobutadiene	11/02/18	N.D.	ug/l	0.5	1	2
4-Chloro-3-methylphenol	11/02/18	N.D.	ug/l	0.5	1	2
2-Methylnaphthalene	11/02/18	N.D.	ug/l	0.1	0.2	0.5
Hexachlorocyclopentadiene	11/02/18	N.D.	ug/l	5	10	11
2,4,6-Trichlorophenol	11/02/18	N.D.	ug/l	0.5	1	2
2,4,5-Trichlorophenol	11/02/18	N.D.	ug/l	0.5	1	2
2-Chloronaphthalene	11/02/18	N.D.	ug/l	0.4	0.8	1
2-Nitroaniline	11/02/18	N.D.	ug/l	2	6	7
Dimethylphthalate	11/02/18	N.D.	ug/l	2	4	5
2,6-Dinitrotoluene	11/02/18	N.D.	ug/l	0.5	1	2
3-Nitroaniline	11/02/18	N.D.	ug/l	3	6	7
2,4-Dinitrophenol	11/02/18	N.D.	ug/l	14	28	30
4-Nitrophenol	11/02/18	N.D.	ug/l	10	20	30
2,4-Dinitrotoluene	11/02/18	N.D.	ug/l	1	2	5
Dibenzofuran	11/02/18	N.D.	ug/l	0.5	1	2
Diethylphthalate	11/02/18	N.D.	ug/l	2	4	5
4-Chlorophenyl-phenylether	11/02/18	N.D.	ug/l	0.5	1	2
4-Nitroaniline	11/02/18	N.D.	ug/l	0.9	2	3
4,6-Dinitro-2-methylphenol	11/02/18	N.D.	ug/l	8	20	21
N-Nitrosodiphenylamine	11/02/18	N.D.	ug/l	0.7	2	3

Fraction: Semivolatiles by GC/MS

18304WAH026 / SBLKWH304 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
4-Bromophenyl-phenylether	11/02/18	N.D.	ug/l	0.5	1	2
Pentachlorophenol	11/02/18	N.D.	ug/l	1	4	5
Carbazole	11/02/18	N.D.	ug/l	0.5	1	2
3,3'-Dichlorobenzidine	11/02/18	N.D.	ug/l	3	9	10
Di-n-octylphthalate	11/02/18	N.D.	ug/l	5	10	11

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Quality Control Summary
Surrogates
GC/MS Semivolatiles
SDG: TID07
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

18297WAE026	2,4,6-Tribromophenol		2-Fluorobiphenyl		2-Fluorophenol		Nitrobenzene-d5		Phenol-d6		Terphenyl-d14	
	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWE297	76	43 - 140	51	44 - 119	30	19 - 119	56	44 - 120	21	10 - 72	76	50 - 134
297WELCS	89	43 - 140	61	44 - 119	50	19 - 119	71	44 - 120	38	10 - 72	92	50 - 134
297WELCSD	92	43 - 140	64	44 - 119	50	19 - 119	74	44 - 120	41	10 - 72	91	50 - 134
9861917	75	43 - 140	60	44 - 119	37	19 - 119	59	44 - 120	28	10 - 72	69	50 - 134
9861918	82	43 - 140	56	44 - 119	40	19 - 119	62	44 - 120	38	10 - 72	76	50 - 134
9861919	80	43 - 140	53	44 - 119	33	19 - 119	54	44 - 120	25	10 - 72	53	50 - 134
9861920	62	43 - 140	49	44 - 119	27	19 - 119	52	44 - 120	21	10 - 72	71	50 - 134
9861921	41 *	43 - 140	29 *	44 - 119	18 *	19 - 119	30 *	44 - 120	14	10 - 72	40 *	50 - 134
9861922	75	43 - 140	53	44 - 119	31	19 - 119	53	44 - 120	29	10 - 72	66	50 - 134

18304WAH026	2,4,6-Tribromophenol		2-Fluorobiphenyl		2-Fluorophenol		Nitrobenzene-d5		Phenol-d6		Terphenyl-d14	
	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWH304	96	29 - 133	72	39 - 105	44	10 - 85	71	30 - 111	30	10 - 72	90	27 - 126
304WHLCS	100	29 - 133	81	39 - 105	52	10 - 85	78	30 - 111	36	10 - 72	89	27 - 126
304WHLCSD	92	29 - 133	82	39 - 105	53	10 - 85	78	30 - 111	38	10 - 72	90	27 - 126
9861917RE	96	43 - 140	76	44 - 119	49	19 - 119	75	44 - 120	35	10 - 72	86	50 - 134
9861918RE	96	43 - 140	78	44 - 119	43	19 - 119	75	44 - 120	34	10 - 72	83	50 - 134
9861919RE	92	43 - 140	67	44 - 119	41	19 - 119	64	44 - 120	31	10 - 72	71	50 - 134
9861920RE	89	43 - 140	77	44 - 119	42	19 - 119	73	44 - 120	31	10 - 72	88	50 - 134
9861921RE	102	43 - 140	76	44 - 119	42	19 - 119	68	44 - 120	31	10 - 72	89	50 - 134
9861922RE	88	43 - 140	75	44 - 119	36	19 - 119	69	44 - 120	29	10 - 72	84	50 - 134

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 297WELCS LCSD: 297WELCSD **Analyte**	Batch: **18297WAE026** (Sample number(s): 9861917-9861922)							
	Spike Added ug/l	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Pyridine	50	16.52	15.97	33	32	13-83	3	30
Phenol	50	19.16	20.03	38	40	23-82	4	30
Aniline	50	22	22.82	44	46	29-101	4	30
2-Chlorophenol	50	37.22	40.05	74	80	38-117	7	20
1,3-Dichlorobenzene	50	26.36	28.55	53	57	28-110	8	20
1,4-Dichlorobenzene	50	26.73	29.5	53	59	29-112	10	20
Benzyl alcohol	50	37.89	37.75	76	75	31-112	0	20
1,2-Dichlorobenzene	50	28.32	30.47	57	61	32-111	7	20
2-Methylphenol	50	35.98	39.09	72	78	30-117	8	20
2,2'-oxybis(1-Chloropropane)	50	32.46	34.81	65	70	48-118	7	30
2,4-Dichlorophenol	50	37.86	41.11	76	82	47-121	8	20
4-Methylphenol	50	33.49	35.96	67	72	25-120	7	20
N-Nitroso-di-n-propylamine	50	37.68	41.02	75	82	49-119	9	20
Hexachloroethane	50	24.68	26.44	49	53	21-115	7	20
Nitrobenzene	50	35.87	37.49	72	75	45-121	4	20
Isophorone	50	39.68	42.61	79	85	42-124	7	20
2-Nitrophenol	50	40.4	44.65	81	89	47-123	10	20
2,4-Dimethylphenol	50	32.03	33.89	64	68	31-124	6	20
bis(2-Chloroethoxy)methane	50	37.36	39.6	75	79	48-120	6	20
1,2,4-Trichlorobenzene	50	27.72	29.93	55	60	29-116	8	20
4-Chloroaniline	50	30.47	29.98	61	60	33-117	2	20
Hexachlorobutadiene	50	24.29	26.2	49	52	22-124	8	20
4-Chloro-3-methylphenol	50	41.04	45.15	82	90	52-119	10	20
2-Methylnaphthalene	50	32.16	34.58	64	69	40-121	7	20
Hexachlorocyclopentadiene	100	8.57 J	11.03	9 *	11	10-117	25	30
2,4,6-Trichlorophenol	50	42.64	46.81	85	94	50-125	9	20
2,4,5-Trichlorophenol	50	42.46	46.42	85	93	53-123	9	20
2-Chloronaphthalene	50	34.17	36.72	68	73	40-116	7	20
2-Nitroaniline	50	47.82	50.19	96	100	55-127	5	20
Dimethylphthalate	50	36.44	41.11	73	82	45-127	12	20
2,6-Dinitrotoluene	50	44.63	47.13	89	94	57-124	5	20
3-Nitroaniline	50	42.71	41.51	85	83	41-128	3	20
2,4-Dinitrophenol	100	109.09	119.81	109	120	23-143	9	20
4-Nitrophenol	50	25.24 J	23.24 J	50	46	28-88	8	30
2,4-Dinitrotoluene	50	44.43	45.12	89	90	57-128	2	20
Dibenzofuran	50	36.72	38.63	73	77	53-118	5	20
Diethylphthalate	50	41.28	42.76	83	86	56-125	4	20
4-Chlorophenyl-phenylether	50	34.85	36.37	70	73	53-121	4	20
4-Nitroaniline	50	38.33	36.53	77	73	53-111	5	30
4,6-Dinitro-2-methylphenol	50	51.46	55.43	103	111	44-137	7	20
N-Nitrosodiphenylamine	50	44.73	47.56	89	95	51-123	6	20
4-Bromophenyl-phenylether	50	37.27	39.16	75	78	55-124	5	20

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 297WELCS LCSD: 297WELCSD **Analyte**	Batch: **18297WAE026** (Sample number(s): 9861917-9861922) **Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Pentachlorophenol	50	49.17	55.8	98	112	35-138	13	20
Carbazole	50	44.43	46.59	89	93	60-122	5	20
3,3'-Dichlorobenzidine	50	37.04	38.31	74	77	27-129	3	20
Di-n-octylphthalate	50	43.66	45.25	87	90	51-140	4	20

LCS: 304WHLCS LCSD: 304WHLCSD **Analyte**	Batch: **18304WAH026** (Sample number(s): 9861917-9861922) **Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Pyridine	50	20.11	21.33	40	43	13-83	6	30
Phenol	50	21.28	22.23	43	44	23-82	4	30
Aniline	50	27.87	27.68	56	55	29-101	1	30
2-Chlorophenol	50	40.9	38.55	82	77	58-108	6	30
1,3-Dichlorobenzene	50	37.26	36.06	75	72	31-110	3	30
1,4-Dichlorobenzene	50	37.64	36.81	75	74	30-109	2	30
Benzyl alcohol	50	44.36	43.52	89	87	59-120	2	30
1,2-Dichlorobenzene	50	37.7	36.64	75	73	43-108	3	30
2-Methylphenol	50	38.94	36.91	78	74	59-109	5	30
2,2'-oxybis(1-Chloropropane)	50	36.26	35.2	73	70	48-118	3	30
2,4-Dichlorophenol	50	45.5	42	91	84	65-117	8	30
4-Methylphenol	50	40.05	37.89	80	76	56-108	6	30
N-Nitroso-di-n-propylamine	50	41.84	40.67	84	81	61-118	3	30
Hexachloroethane	50	34.27	33.51	69	67	24-100	2	30
Nitrobenzene	50	39.17	40.47	78	81	59-117	3	30
Isophorone	50	42.51	42.71	85	85	65-123	0	30
2-Nitrophenol	50	46.11	42.53	92	85	63-121	8	30
2,4-Dimethylphenol	50	35.19	33.42	70	67	52-106	5	30
bis(2-Chloroethoxy)methane	50	42.15	42.11	84	84	64-119	0	30
1,2,4-Trichlorobenzene	50	39	38.96	78	78	38-116	0	30
4-Chloroaniline	50	33.05	33.27	66	67	42-110	1	30
Hexachlorobutadiene	50	41.27	39.08	83	78	21-114	5	30
4-Chloro-3-methylphenol	50	46.55	42.56	93	85	65-122	9	30
2-Methylnaphthalene	50	41.9	41.7	84	83	51-112	0	30
Hexachlorocyclopentadiene	100	40.14	39.01	40	39	10-117	3	30
2,4,6-Trichlorophenol	50	50.3	46.71	101	93	69-122	7	30
2,4,5-Trichlorophenol	50	48.43	44.22	97	88	73-124	9	30
2-Chloronaphthalene	50	40.54	40.22	81	80	51-114	1	30
2-Nitroaniline	50	47.68	49.17	95	98	66-126	3	30
Dimethylphthalate	50	31.1	28.62	62	57	37-116	8	30
2,6-Dinitrotoluene	50	50.04	48.58	100	97	69-122	3	30
3-Nitroaniline	50	38.35	37.71	77	75	51-120	2	30
2,4-Dinitrophenol	100	97.25	88.31	97	88	26-141	10	30

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 304WHLCS LCSD: 304WHLCSD **Analyte**	Batch: **18304WAH026** (Sample number(s): 9861917-9861922) **Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
4-Nitrophenol	50	20.85 J	21.6 J	42	43	28-88	4	30
2,4-Dinitrotoluene	50	43.89	44.51	88	89	69-117	1	30
Dibenzofuran	50	43.31	42.92	87	86	63-117	1	30
Diethylphthalate	50	39.6	37.55	79	75	61-111	5	30
4-Chlorophenyl-phenylether	50	42.21	42.47	84	85	58-115	1	30
4-Nitroaniline	50	37.7	35.08	75	70	53-111	7	30
4,6-Dinitro-2-methylphenol	50	48.42	45.43	97	91	63-129	6	30
N-Nitrosodiphenylamine	50	44.89	44.79	90	90	68-122	0	30
4-Bromophenyl-phenylether	50	44.41	42.99	89	86	64-119	3	30
Pentachlorophenol	50	51.15	47.33	102	95	64-130	8	30
Carbazole	50	44.81	45.51	90	91	71-128	2	30
3,3'-Dichlorobenzidine	50	37.07	39.76	74	80	36-116	7	30
Di-n-octylphthalate	50	44.45	41.52	89	83	67-120	7	30

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Lab File ID: di1300a.d DFTPP Injection Date: 09/21/18

Instrument ID: HP19760 DFTPP Injection Time: 17:04

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	37.2
68	Less than 2.0% of mass 69	0.78 (1.81)1
69	Mass 69 relative abundance	43.1
70	Less than 2.0% of mass 69	0.28 (0.65)1
127	10.0 - 80.00% of mass 198	45.0
197	Less than 2.0% of mass 198	1.49
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.78
275	10.0 - 60.0% of mass 198	22.1
365	Greater than 1.00% of mass 198	2.46
441	Present, and less than mass 443	8.57
442	Greater than 50.00% of mass 198	58.7
443	15.00 - 24.00% of mass 442	11.8 (20.1)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	di1301.d	09/21/18	17:33
02	rvSTD2648 - SSTD.125	di1302.d	09/21/18	18:19
03	rvSTD2648 - SSTD30	di1303.d	09/21/18	18:47
04	rvSTD2648 - SSTD20	di1304.d	09/21/18	19:16
05	rvSTD2648 - SSTD12.5	di1305.d	09/21/18	19:45
06	rvSTD2648 - SSTD3.75	di1306.d	09/21/18	20:13
07	rvSTD2648 - SSTD1.25	di1307.d	09/21/18	20:42
08	rvSTD2648 - SSTD.25	di1308.d	09/21/18	21:11
09	rvMDL2648 - SSTD0.125	di1309.d	09/21/18	21:39
10	PAHMDL2648 - SSTD0.025	di1310.d	09/21/18	22:08
11	rvICV2628 - SSTD12.5	di1311.d	09/21/18	22:37
12	rvBASICV2578 - SSTD12.5	di1312.d	09/21/18	23:05
13	rv4ABPICV2258 - SSTD12.5	di1314.d	09/22/18	00:03
14	rvICV2608 - SSTD12.5	di1315.d	09/22/18	00:31

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: dj2720b.d DFTPP Injection Date: 10/31/18

Instrument ID: HP19760 DFTPP Injection Time: 13:13

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	40.8
68	Less than 2.0% of mass 69	0.9 (1.82)1
69	Mass 69 relative abundance	49.5
70	Less than 2.0% of mass 69	0.21 (0.42)1
127	10.0 - 80.00% of mass 198	50.6
197	Less than 2.0% of mass 198	0.4
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	7.17
275	10.0 - 60.0% of mass 198	22.0
365	Greater than 1.00% of mass 198	2.88
441	Present, and less than mass 443	11.1
442	Greater than 50.00% of mass 198	72.7
443	15.00 - 24.00% of mass 442	13.2 (18.2)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	RVSTD2648 - SSTD7.5	dj2721b.d	10/31/18	14:49
02	SBLKWE297	dj2722.d	10/31/18	15:31
03	297WELCS	dj2723.d	10/31/18	15:58
04	297WELCSD	dj2724.d	10/31/18	16:26
05	9861917	dj2725.d	10/31/18	16:53
06	9861918	dj2726.d	10/31/18	17:20
07	9861919	dj2727.d	10/31/18	17:48
08	9861920	dj2728.d	10/31/18	18:15
09	9861921	dj2729.d	10/31/18	18:42
10	9861922	dj2730.d	10/31/18	19:10
11	rvSTD2648	dj2731.d	10/31/18	19:37

FORM V SV

5B

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: lk0100c.d DFTPP Injection Date: 11/01/18

Instrument ID: HP20296 DFTPP Injection Time: 21:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	44.7
68	Less than 2.0% of mass 69	0.96 (1.79)1
69	Mass 69 relative abundance	53.7
70	Less than 2.0% of mass 69	0.35 (0.66)1
127	10.0 - 80.00% of mass 198	44.6
197	Less than 2.0% of mass 198	0.78
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.61
275	10.0 - 60.0% of mass 198	22.1
365	Greater than 1.00% of mass 198	3.0
441	Present, and less than mass 443	11.7
442	Greater than 50.00% of mass 198	73.7
443	15.00 - 24.00% of mass 442	14.1 (19.2)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	RVSTD2648 - SSTD7.5	lk0101.d	11/01/18	22:02
02	SBLKWK297	lk0102.d	11/01/18	23:04
03	297WKLCS	lk0103.d	11/01/18	23:33
04	SBLKWH304	lk0104.d	11/02/18	00:02
05	304WHLCS	lk0105.d	11/02/18	00:31
06	304WHLCSD	lk0106.d	11/02/18	01:00
07	9861917RE	lk0107.d	11/02/18	01:28
08	9861918RE	lk0108.d	11/02/18	01:57
09	9861919RE	lk0109.d	11/02/18	02:26
10	9861920RE	lk0110.d	11/02/18	02:55
11	9861921RE	lk0111.d	11/02/18	03:24
12	9861922RE	lk0112.d	11/02/18	03:53
13	RVSTD2648	lk0133.d	11/02/18	04:21
14	9863102	lk0113.d	11/02/18	04:50
15	9863103	lk0114.d	11/02/18	05:19
16	9863104	lk0115.d	11/02/18	05:48

FORM V SV

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 09/21/18 09/21/18

Calibration Times: 17:33 21:11

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = di1302.d RRF0.25 = di1308.d RRF1.25 = di1307.d RRF3.75 = di1306.d
RRF7.5 = di1301.d RRF12.5 = di1305.d RRF20 = di1304.d RRF30 = di1303.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD	
1,4-Dioxane			0.818	0.770	0.835	0.764	0.782	0.801	0.795	4	AVG	
N-Nitrosodimethylamine			0.993	1.044	1.175	1.119	1.151	1.149	1.105	6	AVG	
Pyridine			1.838	1.784	2.136	1.855	1.941	1.995	1.925	7	AVG	
2-Picoline			1.854	1.910	2.039	1.947	1.990	1.977	1.953	3	AVG	
N-Nitrosomethylethylamine			0.845	0.847	0.871	0.854	0.873	0.857	0.858	1	AVG	
Methyl methanesulfonate			0.879	0.896	0.970	0.944	0.945	0.933	0.928	4	AVG	
N-Nitrosodiethylamine		0.648	0.737	0.792	0.822	0.836	0.850	0.826	0.787	9	AVG	
Ethyl methanesulfonate		0.722	0.739	0.760	0.800	0.794	0.817	0.785	0.774	4	AVG	
Benzaldehyde			1.291	1.386	1.433	1.418	1.415	1.370	1.386	4	AVG	
Phenol		2.136	2.253	2.327	2.455	2.392	2.421	2.375	2.337	5	AVG	
Aniline		2.693	2.606	2.743	2.844	2.831	2.868	2.793	2.768	3	AVG	
a-methylstyrene			0.151	0.147	0.160	0.159	0.161	0.155	0.155	4	AVG	
bis(2-Chloroethyl)ether		1.676	1.719	1.678	1.815	1.761	1.771	1.729	1.735	3	AVG	
2-Chlorophenol		1.323	1.359	1.432	1.508	1.523	1.538	1.494	1.454	6	AVG	
1,3-Dichlorobenzene		1.598	1.590	1.634	1.720	1.673	1.682	1.657	1.651	3	AVG	
1,4-Dichlorobenzene		1.747	1.617	1.654	1.733	1.675	1.692	1.668	1.684	3	AVG	
Benzyl alcohol			0.883	0.903	1.015	1.065	1.060	1.025	0.992	8	AVG	
1,2-Dichlorobenzene		1.616	1.504	1.548	1.632	1.594	1.611	1.569	1.582	3	AVG	
Indene			1.544	1.525	1.697	1.711	1.701	1.666	1.641	5	AVG	
2-Methylphenol		1.180	1.322	1.440	1.539	1.538	1.568	1.517	1.444	10	AVG	
2,2'-oxybis(1-Chloropropane)		1.886	1.951	1.939	2.163	2.052	2.052	2.015	2.008	5	AVG	
bis(2-Chloroisopropyl)ether		1.886	1.951	1.939	2.163	2.052	2.052	2.015	2.008	5	AVG	
N-Nitrosopyrrolidine		0.671	0.738	0.809	0.846	0.905	0.930	0.884	0.826	11	AVG	
Acetophenone		1.755	1.917	2.082	2.106	2.189	2.173	2.112	2.048	8	AVG	
4-Methylphenol		1.558	1.558	1.630	1.729	1.758	1.759	1.678	1.667	5	AVG	
Total Cresols		1.369	1.440	1.535	1.634	1.648	1.664	1.598	1.555	7	AVG	
N-Nitroso-di-n-propylamine		1.127	1.112	1.159	1.285	1.281	1.292	1.249	1.215	7	AVG	
N-Nitrosomorpholine			0.857	0.894	0.973	0.952	0.951	0.918	0.924	5	AVG	
o-Toluidine		2.234	2.450	2.535	2.658	2.669	2.687	2.573	2.544	6	AVG	
Hexachloroethane			0.655	0.671	0.697	0.694	0.699	0.681	0.683	3	AVG	
Nitrobenzene		0.451	0.452	0.483	0.513	0.499	0.499	0.495	0.484	5	AVG	
N-Nitrosopiperidine		0.169	0.184	0.196	0.200	0.213	0.215	0.209	0.198	8	AVG	
Isophorone		0.674	0.714	0.792	0.838	0.880	0.892	0.875	0.809	11	AVG	
2-Nitrophenol			0.144	0.182	0.185	0.201	0.207	0.201	0.186	12	AVG	
2,4-Dimethylphenol		0.342	0.387	0.411	0.433	0.444	0.447	0.439	0.415	9	AVG	
O,O,O-Triethylphosphorothioat			0.167	0.174	0.178	0.188	0.187	0.182	0.179	4	AVG	
bis(2-Chloroethoxy)methane		0.496	0.515	0.526	0.554	0.544	0.563	0.497	0.528	5	AVG	
Benzoic acid			0.153	0.195	0.216	0.254	0.266	0.259	0.224	20	AVG	+
2,4-Dichlorophenol		0.253	0.282	0.308	0.313	0.326	0.327	0.327	0.305	9	AVG	
1,2,4-Trichlorobenzene		0.317	0.336	0.341	0.345	0.345	0.345	0.342	0.339	3	AVG	
Naphthalene	1.169	1.128	1.140	1.158	1.170	1.187	1.186	1.167	1.163	2	AVG	
4-Chloroaniline		0.383	0.401	0.435	0.444	0.469	0.470	0.460	0.437	8	AVG	
2,6-Dichlorophenol		0.236	0.275	0.300	0.308	0.322	0.321	0.312	0.296	10	AVG	
Hexachloropropene			0.201	0.210	0.215	0.220	0.224	0.220	0.215	4	AVG	
Hexachlorobutadiene		0.182	0.193	0.188	0.193	0.194	0.194	0.191	0.191	2	AVG	
Quinoline			0.616	0.638	0.648	0.700	0.711	0.699	0.669	6	AVG	
Caprolactam			0.086	0.105	0.113	0.131	0.133	0.131	0.117	16	AVG	
N-Nitrosodi-n-butylamine			0.245	0.276	0.291	0.317	0.396	0.389	0.319	19	AVG	
4-Chloro-3-methylphenol		0.255	0.291	0.326	0.346	0.375	0.381	0.376	0.336	14	AVG	
Safrole			0.248	0.274	0.288	0.304	0.304	0.298	0.286	8	AVG	
2-Methylnaphthalene	0.677	0.655	0.692	0.722	0.742	0.765	0.761	0.747	0.720	6	AVG	
1-Methylnaphthalene	0.615	0.651	0.660	0.688	0.706	0.730	0.731	0.721	0.688	6	AVG	

+ %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.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 09/21/18 09/21/18

Calibration Times: 17:33 21:11

Min $\overline{\text{RRF}}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = di1302.d RRF0.25 = di1308.d RRF1.25 = di1307.d RRF3.75 = di1306.d
RRF7.5 = di1301.d RRF12.5 = di1305.d RRF20 = di1304.d RRF30 = di1303.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{\text{RRF}}$	% RSD	CAL. METHOD
Hexachlorocyclopentadiene			0.373	0.411	0.429	0.432	0.433	0.424	0.417	5	AVG
1,2,4,5-Tetrachlorobenzene		0.657	0.682	0.692	0.693	0.670	0.670	0.647	0.673	3	AVG
cis-Isosafrole			0.558	0.580	0.603	0.632	0.627	0.614	0.602	5	AVG
2,4,6-Trichlorophenol		0.304	0.348	0.400	0.416	0.434	0.441	0.445	0.398	13	AVG
2,4,5-Trichlorophenol		0.306	0.386	0.432	0.453	0.472	0.482	0.443	0.425	14	AVG
trans-Isosafrole			0.595	0.637	0.652	0.666	0.680	0.685	0.653	5	AVG
Isosafrole			0.589	0.628	0.644	0.660	0.671	0.673	0.644	5	AVG
1,1'-Biphenyl		1.617	1.695	1.811	1.774	1.793	1.751	1.682	1.732	4	AVG
2-Chloronaphthalene		1.336	1.414	1.444	1.489	1.453	1.375	1.439	1.421	4	AVG
1-Chloronaphthalene		1.366	1.310	1.366	1.340	1.308	1.353	1.177	1.317	5	AVG
Diphenyl ether		0.929	0.952	0.979	0.992	0.984	0.975	0.945	0.965	2	AVG
2-Nitroaniline		0.270	0.345	0.401	0.429	0.473	0.482	0.458	0.408	19	AVG
1,4-Naphthoquinone			0.399	0.467	0.502	0.559	0.563	0.532	0.503	12	AVG
1,4-Dinitrobenzene			0.170	0.197	0.215	0.237	0.243	0.235	0.216	13	AVG
Dimethylphthalate			1.428	1.462	1.537	1.557	1.557	1.458	1.500	4	AVG
1,3-Dinitrobenzene			0.187	0.234	0.260	0.273	0.281	0.266	0.250	14	AVG
2,6-Dinitrotoluene		0.260	0.289	0.347	0.357	0.370	0.372	0.353	0.335	13	AVG
Acenaphthylene	1.618	1.596	1.804	1.948	2.004	2.053	2.051	1.987	1.883	10	AVG
3-Nitroaniline		0.256	0.307	0.356	0.375	0.408	0.421	0.412	0.362	17	AVG
Acenaphthene	1.466	1.366	1.370	1.386	1.450	1.435	1.440	1.357	1.409	3	AVG
2,4-Dinitrophenol				0.141	0.159	0.184	0.205	0.201	0.178	16	AVG
4-Nitrophenol				0.220	0.237	0.255	0.261	0.261	0.247	7	AVG
Pentachlorobenzene		0.527	0.544	0.549	0.564	0.568	0.557	0.539	0.550	3	AVG
2,4-Dinitrotoluene			0.359	0.424	0.451	0.486	0.506	0.489	0.452	12	AVG
2,4_2,6-Dinitrotoluenes		0.283	0.324	0.386	0.404	0.428	0.439	0.421	0.384	15	AVG
Dibenzofuran		1.934	1.911	1.941	1.987	1.981	1.968	1.863	1.941	2	AVG
1-Naphthylamine				1.399	1.484	1.510	1.550	1.497	1.488	4	AVG
2,3,4,6-Tetrachlorophenol			0.278	0.308	0.326	0.351	0.372	0.353	0.331	10	AVG
2-Naphthylamine				1.423	1.484	1.539	1.560	1.511	1.503	4	AVG
Diethylphthalate			1.211	1.331	1.409	1.524	1.547	1.485	1.418	9	AVG
Thionazin			0.243	0.272	0.303	0.320	0.320	0.311	0.295	11	AVG
Fluorene	1.338	1.363	1.415	1.497	1.583	1.577	1.577	1.492	1.480	7	AVG
4-Chlorophenyl-phenylether		0.682	0.717	0.726	0.754	0.746	0.743	0.700	0.724	4	AVG
5-Nitro-o-toluidine		0.288	0.385	0.418	0.451	0.469	0.483	0.473	0.424	16	AVG
4-Nitroaniline		0.253	0.357	0.417	0.434	0.443	0.446	0.445	0.399	18	AVG
4,6-Dinitro-2-methylphenol				0.108	0.121	0.141	0.148	0.149	0.133	14	AVG
N-Nitrosodiphenylamine (1)		0.598	0.641	0.682	0.713	0.690	0.702	0.676	0.672	6	AVG
NDPA as diphenylamine		0.598	0.641	0.682	0.713	0.690	0.702	0.676	0.672	6	AVG
1,2-Diphenylhydrazine		0.811	0.908	0.980	1.038	1.007	0.990	0.968	0.957	8	AVG
Tetraethyldithiopyrophosphate			0.129	0.137	0.151	0.156	0.155	0.151	0.147	7	AVG
1,3,5-Trinitrobenzene				0.070	0.081	0.095	0.103	0.106	0.091	17	AVG
Diallate (peak 1)			0.397	0.447	0.483	0.480	0.475	0.464	0.458	7	AVG
Phorate		0.429	0.485	0.543	0.596	0.605	0.593	0.591	0.549	12	AVG
Phenacetin			0.323	0.413	0.447	0.458	0.463	0.479	0.430	13	AVG
4-Bromophenyl-phenylether		0.212	0.213	0.231	0.228	0.228	0.225	0.217	0.222	4	AVG
Diallate (peak 2)			0.357	0.363	0.370	0.369	0.375	0.367	0.367	2	AVG
Diallate trans/cis			0.390	0.433	0.464	0.461	0.458	0.447	0.442	6	AVG
Hexachlorobenzene	0.254	0.225	0.228	0.225	0.228	0.225	0.224	0.214	0.228	5	AVG
Dimethoate			0.272	0.345	0.374	0.381	0.381	0.391	0.357	13	AVG
Atrazine			0.193	0.213	0.220	0.216	0.210	0.208	0.210	5	AVG
Pentachlorophenol			0.096	0.121	0.134	0.147	0.152	0.153	0.134	17	AVG
4-Aminobiphenyl		0.411	0.506	0.572	0.604	0.621	0.618	0.613	0.564	14	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: HP19760 Calibration Date(s): 09/21/18 09/21/18

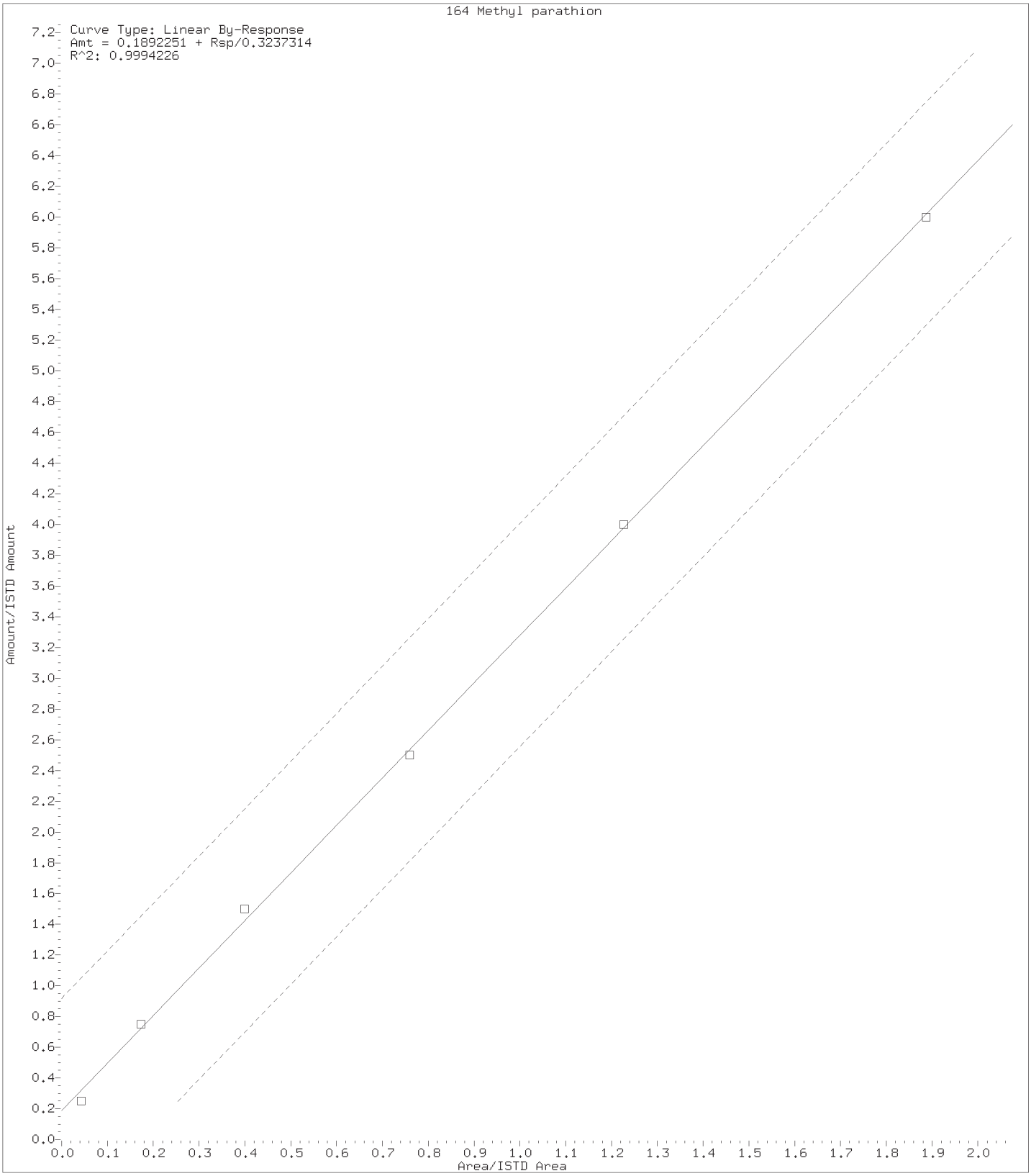
Calibration Times: 17:33 21:11

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

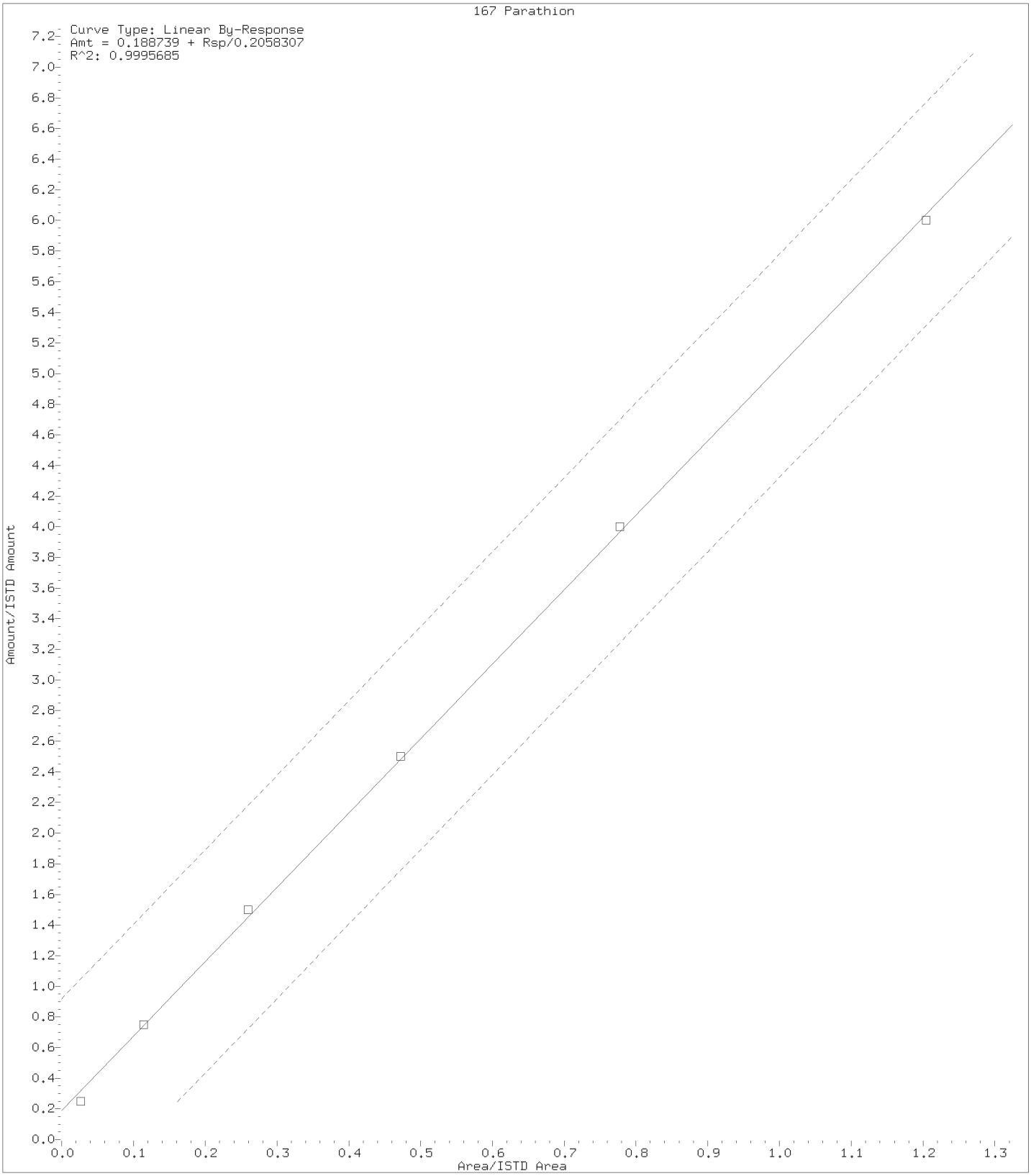
LAB FILE ID:RRF0.125 = di1302.d RRF0.25 = di1308.d RRF1.25 = di1307.d RRF3.75 = di1306.d
RRF7.5 = di1301.d RRF12.5 = di1305.d RRF20 = di1304.d RRF30 = di1303.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
Pentachloronitrobenzene			0.084	0.095	0.099	0.105	0.105	0.103	0.098	8	AVG
Pronamide			0.263	0.315	0.349	0.369	0.372	0.375	0.341	13	AVG
Dinoseb				0.142	0.170	0.202	0.217	0.219	0.190	17	AVG
Phenanthrene	1.291	1.265	1.236	1.251	1.281	1.254	1.242	1.247	1.258	2	AVG
Anthracene	1.104	1.049	1.134	1.236	1.280	1.268	1.273	1.272	1.202	8	AVG
Carbazole		0.882	1.018	1.124	1.174	1.166	1.162	1.193	1.103	10	AVG
Methyl parathion			0.172	0.231	0.266	0.304	0.307	0.314	0.266	21	1STDEG
Di-n-butylphthalate			1.026	1.216	1.348	1.414	1.426	1.456	1.314	13	AVG
Parathion			0.107	0.152	0.173	0.189	0.194	0.201	0.169	21	1STDEG
4-Nitroquinoline-1-oxide				0.083	0.104	0.128	0.141	0.158	0.123	24	1STDEG
Octachlorostyrene			0.079	0.079	0.087	0.090	0.089	0.089	0.086	6	AVG
Isodrin		0.138	0.131	0.138	0.142	0.145	0.144	0.147	0.141	4	AVG
Fluoranthene	1.098	1.011	1.156	1.250	1.364	1.356	1.358	1.417	1.251	12	AVG
Benzidine				0.896	0.975	0.936	0.944	0.925	0.935	3	AVG
Pyrene	1.474	1.382	1.308	1.344	1.372	1.370	1.393	1.354	1.375	4	AVG
p-Dimethylaminoazobenzene			0.146	0.193	0.218	0.233	0.249	0.251	0.215	19	AVG
Chlorobenzilate			0.267	0.337	0.385	0.399	0.413	0.408	0.368	15	AVG
3,3'-Dimethylbenzidine			0.598	0.793	0.873	0.868	0.869	0.919	0.820	14	AVG
Butylbenzylphthalate			0.442	0.562	0.625	0.612	0.617	0.630	0.581	12	AVG
2-Acetylaminofluorene				0.393	0.442	0.430	0.479	0.519	0.452	11	AVG
3,3'-Dichlorobenzidine			0.372	0.450	0.488	0.454	0.466	0.491	0.454	10	AVG
4,4'-Methylenebis(2-chloroani				0.246	0.270	0.249	0.252	0.262	0.256	4	AVG
Benzo(a)anthracene	0.828	0.922	1.045	1.236	1.308	1.241	1.235	1.254	1.134	16	AVG
Chrysene	0.986	1.065	1.184	1.286	1.314	1.201	1.191	1.208	1.179	9	AVG
bis(2-Ethylhexyl)phthalate			0.557	0.751	0.843	0.786	0.822	0.864	0.771	15	AVG
6-Methylchrysene			0.708	0.813	0.870	0.792	0.814	0.857	0.809	7	AVG
Di-n-octylphthalate			0.824	1.139	1.312	1.500	1.592	1.612	1.330	23	1STDEG
Benzo(b)fluoranthene	0.918	0.978	1.092	1.218	1.270	1.342	1.380	1.361	1.195	15	AVG
7,12-Dimethylbenz[a]anthracen			0.475	0.549	0.606	0.648	0.653	0.639	0.595	12	AVG
Benzo(k)fluoranthene	1.031	1.063	1.208	1.265	1.349	1.350	1.338	1.300	1.238	10	AVG
Benzo(a)pyrene	0.828	0.835	1.037	1.153	1.172	1.246	1.278	1.259	1.101	17	AVG
3-Methylcholanthrene		0.391	0.453	0.526	0.558	0.584	0.609	0.603	0.532	15	AVG
Dibenz(a,h)acridine			0.764	0.851	0.888	0.933	0.966	0.952	0.892	9	AVG
Dibenz(a,j)acridine			0.895	0.944	0.983	1.026	1.049	1.021	0.986	6	AVG
Indeno(1,2,3-cd)pyrene	0.868	0.871	0.993	1.028	1.085	1.096	1.133	1.107	1.023	10	AVG
Dibenz(a,h)anthracene	0.977	0.993	1.098	1.113	1.182	1.193	1.202	1.175	1.117	8	AVG
Benzo(g,h,i)perylene	1.113	1.094	1.152	1.155	1.187	1.188	1.200	1.157	1.156	3	AVG
Total PAHs	1.080	1.052	1.083	1.097	1.133	1.270	1.278	1.184	1.147	8	AVG
2-Fluorophenol			1.345	1.441	1.488	1.585	1.546	1.572	1.562	1.505	6	AVG
Phenol-d6			1.789	1.904	2.033	2.169	2.116	2.179	2.110	2.043	7	AVG
Nitrobenzene-d5			0.428	0.449	0.471	0.488	0.494	0.495	0.489	0.474	5	AVG
2-Fluorobiphenyl			1.521	1.593	1.627	1.652	1.626	1.616	1.545	1.597	3	AVG
2,4,6-Tribromophenol			0.116	0.137	0.164	0.176	0.187	0.191	0.186	0.165	17	AVG
Terphenyl-d14			0.785	0.787	0.816	0.860	0.867	0.865	0.843	0.832	4	AVG
								Average %RSD		9	

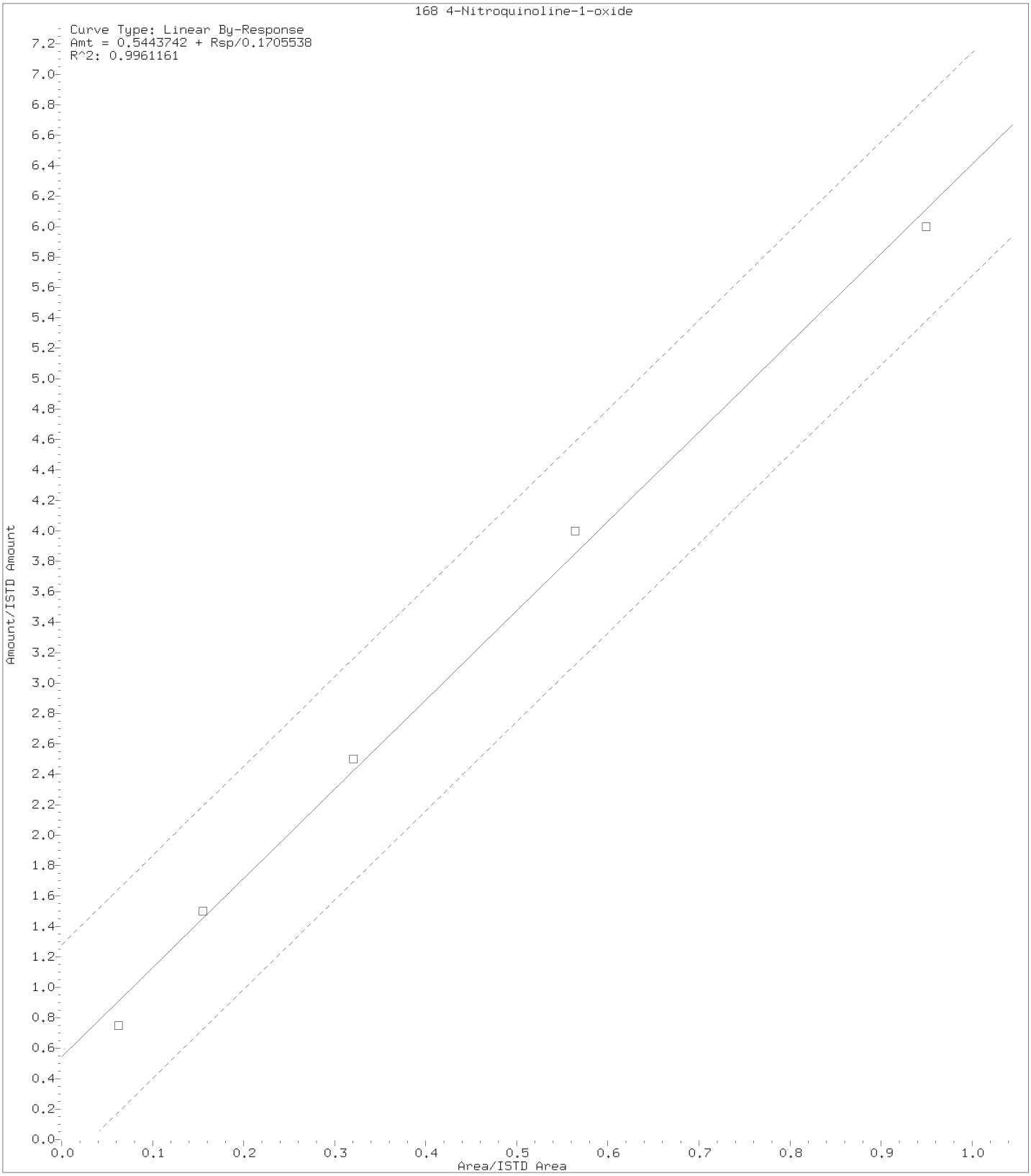
4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.
Benzidine Levels in the 5,15,30,50,80,120 standards are 15,45,90,150,240,360 ng/ul, respectively.
Benzoic acid and 2,4-Dinitrophenol are at 15 ng/ul, 30 ng/ul,40 ng/ul in the 5,15,30 standards.



Digitally signed by Edward Monborne on 09/25/2018 at 08:19.
Target 3.5 esignature user ID: em10340



Digitally signed by Edward Monborne on 09/25/2018 at 08:19.
Target 3.5 esignature user ID: em10340



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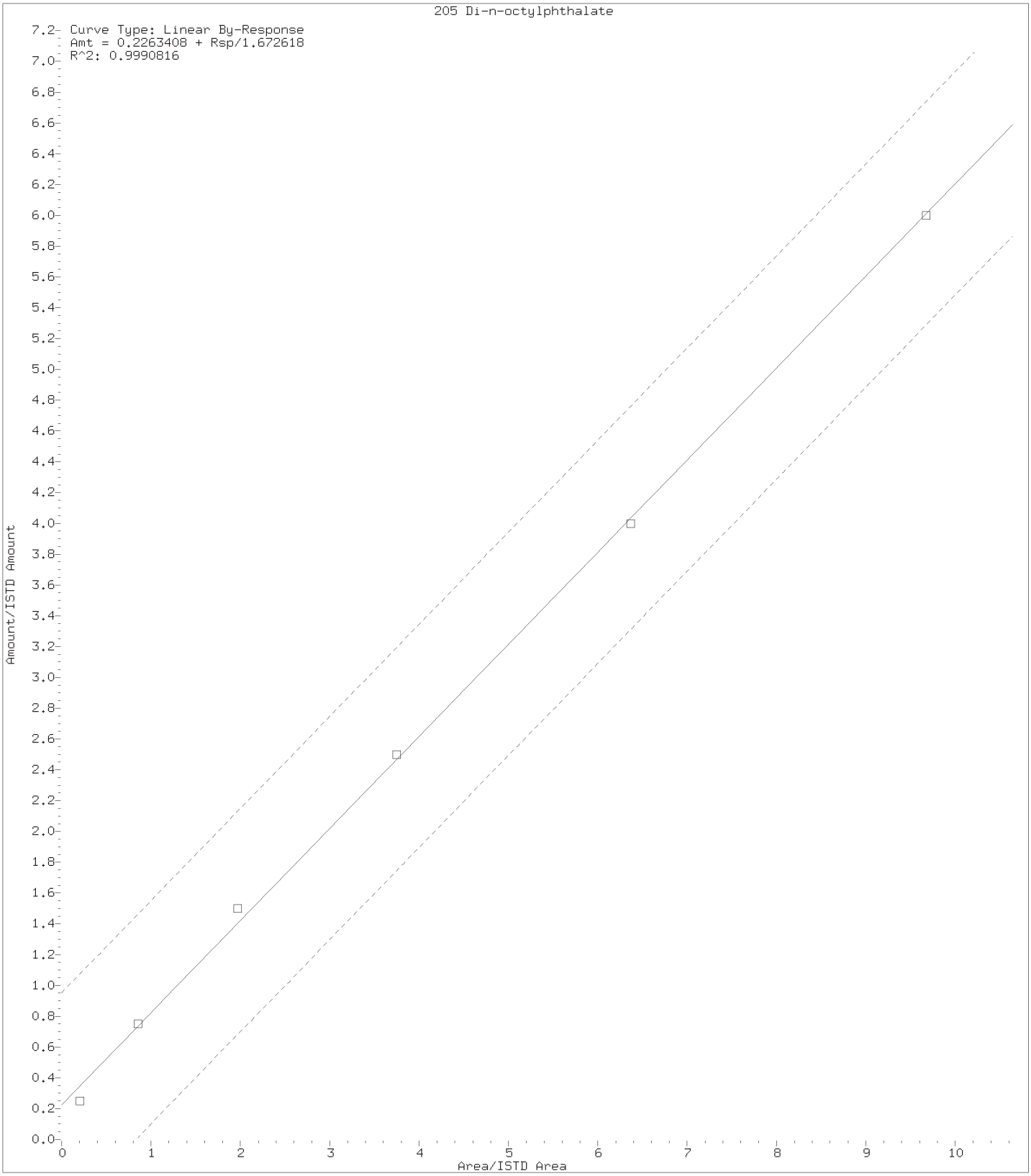
Target 3.5 esignature user ID: em10340



Digitally signed by Edward Monborne on 09/25/2018 at 08:19.
Target 3.5 esignature user ID: em10340

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP19760.i/18sep21.b/di1301.d SSTD7.5
/chem/HP19760.i/18sep21.b/di1302.d SSTD0.125
/chem/HP19760.i/18sep21.b/di1303.d SSTD30
/chem/HP19760.i/18sep21.b/di1304.d SSTD20
/chem/HP19760.i/18sep21.b/di1305.d SSTD12.5
/chem/HP19760.i/18sep21.b/di1306.d SSTD3.75
/chem/HP19760.i/18sep21.b/di1307.d SSTD1.25
/chem/HP19760.i/18sep21.b/di1308.d SSTD0.25

Area Summary

	File ID:										
Internal Standard Name	di1301.d	di1302.d	di1303.d	di1304.d	di1305.d	di1306.d	di1307.d	di1308.d	Avg. Area	%RSD	In Spec
1,4-Dichlorobenzene-d4	181644	191968	193821	207858	205984	199584	193342	189046	195406	4	Yes
Naphthalene-d8	678309	706468	712147	784074	771931	725140	704134	702663	723108	5	Yes
Acenaphthene-d10	318311	318852	360283	391720	386217	335922	323345	325875	345066	9	Yes
Phenanthrene-d10	573202	521787	673033	740347	719914	587436	567264	576849	619979	13	Yes
Pyrene-d10	595163	504273	700816	724414	717962	603838	573058	566795	623290	13	Yes
Perylene-d12	608816	483590	640506	628287	618703	625557	562340	530080	587235	10	Yes

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

RT Summary

	File ID:								
Internal Standard Name	di1301.d	di1302.d	di1303.d	di1304.d	di1305.d	di1306.d	di1307.d	di1308.d	Avg. RT
1,4-Dichlorobenzene-d4	6.801	6.801	6.801	6.801	6.801	6.801	6.801	6.801	6.801
Naphthalene-d8	8.736	8.736	8.736	8.736	8.736	8.737	8.736	8.736	8.736
Acenaphthene-d10	11.528	11.523	11.528	11.528	11.528	11.523	11.523	11.522	11.525
Phenanthrene-d10	13.411	13.411	13.417	13.411	13.411	13.411	13.411	13.411	13.412
Pyrene-d10	15.381	15.375	15.381	15.381	15.375	15.375	15.375	15.375	15.377
Perylene-d12	19.852	19.852	19.858	19.857	19.852	19.852	19.852	19.852	19.853

Comments:_____

_____

Page 1 of 1

Report generated on 09/23/2018 at 07:49

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: di1311.d

ICV SAMPLE ID: rvICV2628 BATCH: 18SEP21026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,4-Dioxane	12.50	11.43	-9	30	YES
N-Nitrosodimethylamine	12.50	14.09	13	30	YES
Pyridine	12.50	12.89	3	30	YES
2-Picoline	12.50	13.53	8	30	YES
N-Nitrosomethylethylamine	12.50	11.85	-5	30	YES
Methyl methanesulfonate	12.50	12.82	3	30	YES
N-Nitrosodiethylamine	12.50	12.55	0	30	YES
Ethyl methanesulfonate	12.50	12.42	-1	30	YES
Phenol	12.50	13.55	8	30	YES
Aniline	12.50	12.91	3	30	YES
bis(2-Chloroethyl)ether	12.50	13.64	9	30	YES
2-Chlorophenol	12.50	14.03	12	30	YES
1,3-Dichlorobenzene	12.50	13.60	9	30	YES
1,4-Dichlorobenzene	12.50	13.77	10	30	YES
Benzyl alcohol	12.50	14.90	19	30	YES
1,2-Dichlorobenzene	12.50	13.83	11	30	YES
Indene	12.50	20.32	63	30	NO*
2-Methylphenol	12.50	14.19	14	30	YES
2,2'-oxybis(1-Chloropropane	12.50	13.57	9	30	YES
bis(2-Chloroisopropyl)ether	12.50	13.57	9	30	YES
N-Nitrosopyrrolidine	12.50	12.98	4	30	YES
Acetophenone	12.50	14.96	20	30	YES
4-Methylphenol	12.50	14.32	15	30	YES
N-Nitroso-di-n-propylamine	12.50	14.72	18	30	YES
N-Nitrosomorpholine	12.50	12.87	3	30	YES
o-Toluidine	12.50	13.97	12	30	YES
Total Cresols	25.00	28.51	14	30	YES
Hexachloroethane	12.50	13.39	7	30	YES
Nitrobenzene	12.50	13.31	6	30	YES
N-Nitrosopiperidine	12.50	12.15	-3	30	YES
Isophorone	12.50	14.63	17	30	YES
2-Nitrophenol	12.50	13.37	7	30	YES
2,4-Dimethylphenol	12.50	11.48	-8	30	YES
bis(2-Chloroethoxy)methane	12.50	13.83	11	30	YES
Benzoic acid	25.00	24.44	-2	30	YES
O,O,O-Triethylphosphorothio	12.50	12.60	1	30	YES
2,4-Dichlorophenol	12.50	14.09	13	30	YES

NC = Could not calculate

Comments: ____*Run hits under valid ICV - ECM10340 9/23/18_____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: di1311.d

ICV SAMPLE ID: rvICV2628 BATCH: 18SEP21026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,2,4-Trichlorobenzene	12.50	13.43	7	30	YES
Naphthalene	12.50	13.40	7	30	YES
4-Chloroaniline	12.50	14.63	17	30	YES
2,6-Dichlorophenol	12.50	12.42	-1	30	YES
Hexachloropropene	12.50	13.22	6	30	YES
Hexachlorobutadiene	12.50	13.46	8	30	YES
Quinoline	12.50	12.75	2	30	YES
N-Nitrosodi-n-butylamine	12.50	11.32	-9	30	YES
4-Chloro-3-methylphenol	12.50	14.63	17	30	YES
Safrole	12.50	12.25	-2	30	YES
2-Methylnaphthalene	12.50	14.18	13	30	YES
1-Methylnaphthalene	12.50	13.72	10	30	YES
Hexachlorocyclopentadiene	25.00	25.99	4	30	YES
1,2,4,5-Tetrachlorobenzene	12.50	13.19	6	30	YES
cis-Isosafrole	1.50	1.52	2	30	YES
2,4,6-Trichlorophenol	12.50	14.30	14	30	YES
2,4,5-Trichlorophenol	12.50	14.88	19	30	YES
trans-Isosafrole	11.00	11.19	2	30	YES
1,1'-Biphenyl	12.50	14.16	13	30	YES
2-Chloronaphthalene	12.50	13.52	8	30	YES
Isosafrole	12.50	12.76	2	30	YES
1-Chloronaphthalene	12.50	11.73	-6	30	YES
Diphenyl ether	12.50	11.88	-5	30	YES
2-Nitroaniline	12.50	15.02	20	30	YES
1,4-Naphthoquinone	15.63	16.50	6	30	YES
1,4-Dinitrobenzene	12.50	14.24	14	30	YES
Dimethylphthalate	12.50	13.59	9	30	YES
1,3-Dinitrobenzene	12.50	14.50	16	30	YES
2,6-Dinitrotoluene	12.50	14.58	17	30	YES
Acenaphthylene	12.50	15.82	27	30	YES
3-Nitroaniline	12.50	14.95	20	30	YES
Acenaphthene	12.50	13.72	10	30	YES
2,4-Dinitrophenol	25.00	29.57	18	30	YES
4-Nitrophenol	12.50	13.50	8	30	YES
Pentachlorobenzene	12.50	12.23	-2	30	YES
2,4-Dinitrotoluene	12.50	14.20	14	30	YES
Dibenzofuran	12.50	13.76	10	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: di1311.d

ICV SAMPLE ID: rvICV2628 BATCH: 18SEP21026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
2,4_2,6-Dinitrotoluenes	25.00	29.51	18	30	YES
1-Naphthylamine	25.00	25.53	2	30	YES
2,3,4,6-Tetrachlorophenol	12.50	13.39	7	30	YES
2-Naphthylamine	25.00	24.71	-1	30	YES
Diethylphthalate	12.50	14.26	14	30	YES
Thionazin	12.50	13.60	9	30	YES
Fluorene	12.50	14.36	15	30	YES
4-Chlorophenyl-phenylether	12.50	13.54	8	30	YES
5-Nitro-o-toluidine	12.50	13.01	4	30	YES
4-Nitroaniline	12.50	14.40	15	30	YES
4,6-Dinitro-2-methylphenol	12.50	14.37	15	30	YES
N-Nitrosodiphenylamine	12.50	14.92	19	30	YES
NDPA as diphenylamine	12.50	14.92	19	30	YES
1,2-Diphenylhydrazine	12.50	14.82	19	30	YES
Tetraethyldithiopyrophospha	12.50	13.13	5	30	YES
1,3,5-Trinitrobenzene	12.50	12.64	1	30	YES
Diallate (peak 1)	9.38	9.08	-3	30	YES
Phorate	12.50	13.99	12	30	YES
Phenacetin	12.50	12.30	-2	30	YES
4-Bromophenyl-phenylether	12.50	13.67	9	30	YES
Diallate (peak 2)	3.13	3.49	12	30	YES
Hexachlorobenzene	12.50	13.17	5	30	YES
Diallate trans/cis	12.50	12.29	-2	30	YES
Dimethoate	12.50	13.56	9	30	YES
Pentachlorophenol	12.50	15.67	25	30	YES
Pentachloronitrobenzene	12.50	12.91	3	30	YES
Pronamide	12.50	12.56	0	30	YES
Dinoseb	12.50	12.14	-3	30	YES
Phenanthrene	12.50	13.74	10	30	YES
Anthracene	12.50	14.52	16	30	YES
Carbazole	12.50	14.88	19	30	YES
Methyl parathion	12.50	13.14	5	30	YES
Di-n-butylphthalate	12.50	14.72	18	30	YES
Parathion	12.50	13.47	8	30	YES
4-Nitroquinoline-1-oxide	150.00	154.87	3	30	YES
Isodrin	12.50	12.92	3	30	YES
Fluoranthene	12.50	14.72	18	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS | LAB CODE: LANCAS | INSTRUMENT: HP19760

Method: SW-846 8270D MINI | File ID: di1311.d

ICV SAMPLE ID: rvICV2628 | BATCH: 18SEP21026 | Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Benzidine	62.50	53.01	-15	30	YES
Pyrene	12.50	13.51	8	30	YES
p-Dimethylaminoazobenzene	12.50	14.97	20	30	YES
Chlorobenzilate	12.50	13.64	9	30	YES
3,3'-Dimethylbenzidine	25.00	23.30	-7	30	YES
Butylbenzylphthalate	12.50	14.07	13	30	YES
2-Acetylaminofluorene	12.50	10.96	-12	30	YES
3,3'-Dichlorobenzidine	12.50	11.67	-7	30	YES
Benzo(a)anthracene	12.50	14.21	14	30	YES
Chrysene	12.50	13.46	8	30	YES
4,4'-Methylenebis(2-chloroa	12.50	11.38	-9	30	YES
bis(2-Ethylhexyl)phthalate	12.50	13.82	11	30	YES
6-Methylchrysene	12.50	11.52	-8	30	YES
Di-n-octylphthalate	12.50	13.00	4	30	YES
Benzo(b)fluoranthene	12.50	14.97	20	30	YES
7,12-Dimethylbenz[a]anthrac	12.50	14.46	16	30	YES
Benzo(k)fluoranthene	12.50	14.68	17	30	YES
Benzo(a)pyrene	12.50	15.18	21	30	YES
3-Methylcholanthrene	12.50	14.66	17	30	YES
Dibenz(a,h)acridine	12.50	12.28	-2	30	YES
Dibenz(a,j)acridine	12.50	12.32	-1	30	YES
Indeno(1,2,3-cd)pyrene	12.50	13.85	11	30	YES
Dibenz(a,h)anthracene	12.50	14.42	15	30	YES
Benzo(g,h,i)perylene	12.50	13.31	7	30	YES
Total PAHs	225.00	267.51	19	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: di1312.d

ICV SAMPLE ID: rvBASICV2578 BATCH: 18SEP21026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Benzaldehyde	1.25	1.18	-6	30	YES
Atrazine	1.25	1.03	-17	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: di1314.d

ICV SAMPLE ID: rv4ABPICV2258 BATCH: 18SEP21026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
4-Aminobiphenyl	12.50	17.30	38	30	NO*

NC = Could not calculate

Comments: ____*Run hits under valid ICV - ECM10340 9/23/18_____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS | LAB CODE: LANCAS | INSTRUMENT: HP19760

Method: SW-846 8270D MINI | File ID: di1315.d

ICV SAMPLE ID: rvICV2608 | BATCH: 18SEP21026 | Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Caprolactam	12.50	11.02	-12	30	YES

NC = Could not calculate

Comments: _____

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 $\overline{RRF}$ 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

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. 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	0.455	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.

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 $\overline{RRF}$ 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

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% 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_2,6-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
Tetraethyldithiopyrophosphate			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 $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

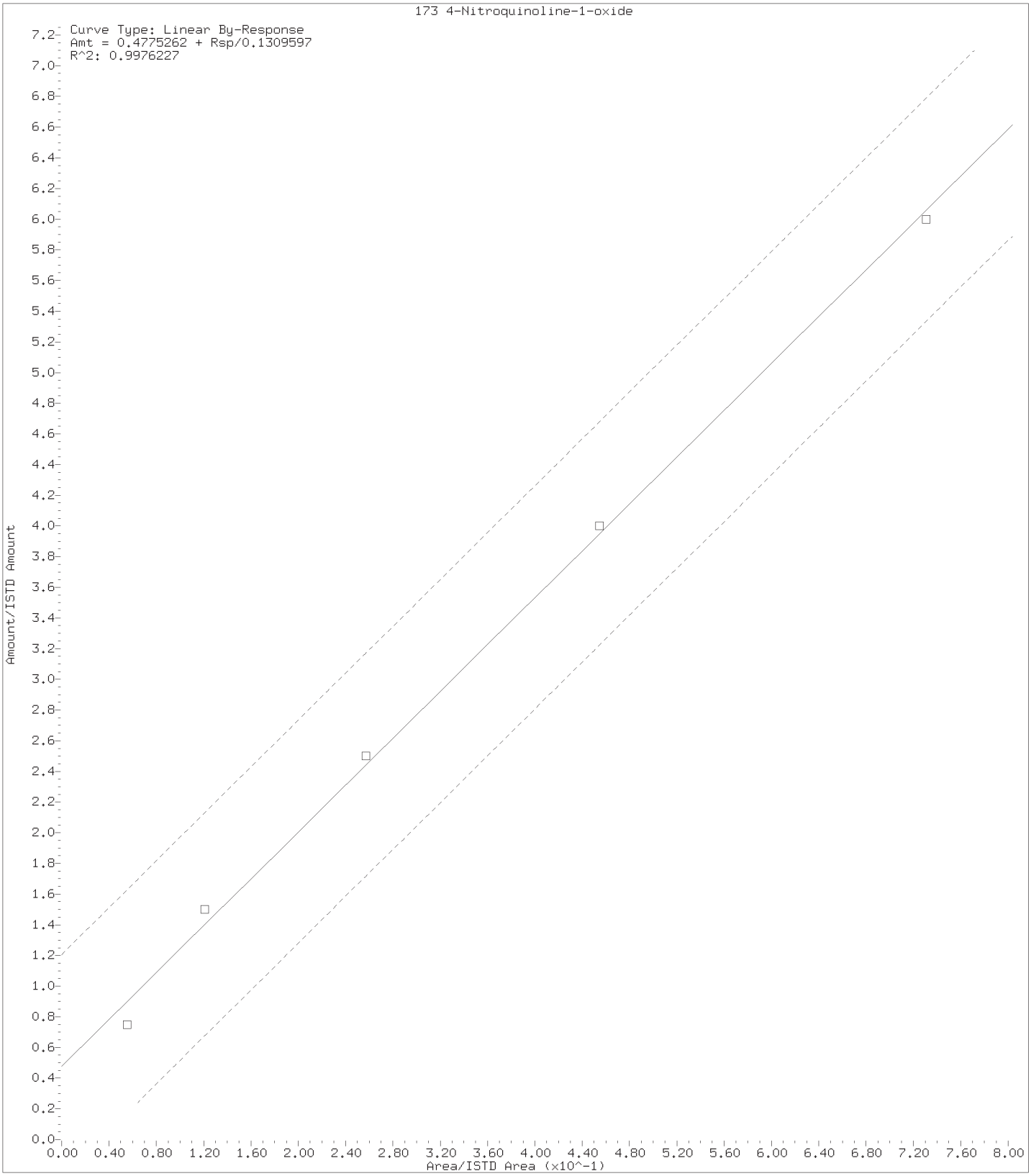
LAB FILE ID:RRF0.125 = lj1742.d RRF0.25 = lj1748.d RRF1.25 = lj1747.d RRF3.75 = lj1746.d
RRF7.5 = lj1741.d RRF12.5 = lj1745.d RRF20 = lj1744.d RRF30 = lj1743.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% 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	1.197	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	1STDEG
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:

/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

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:_____

_____

Report generated on 10/29/2018 at 18:54

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_2,6-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: _____

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 10/31/18 Time: 14:49

Lab File ID: dj2721b.d Init. Calib. Date(s): 09/21/18 09/21/18

Init. Calib. Times(s): 17:33 21:11

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.795	0.807	7.610	7.5	1
N-Nitrosodimethylamine	1.105	1.179	8.000	7.5	7
Pyridine	1.925	1.870	7.290	7.5	-3
2-Picoline	1.953	1.992	7.650	7.5	2
N-Nitrosomethylethylamine	0.858	0.866	7.570	7.5	1
Methyl methanesulfonate	0.928	0.946	7.650	7.5	2
N-Nitrosodiethylamine	0.787	0.823	7.840	7.5	5
Ethyl methanesulfonate	0.774	0.805	7.800	7.5	4
Benzaldehyde	1.386	1.361	7.370	7.5	-2
Phenol	2.337	2.329	7.470	7.5	0
Aniline	2.768	2.777	7.520	7.5	0
a-methylstyrene	0.155	0.155	7.490	7.5	0
bis(2-Chloroethyl)ether	1.735	1.770	7.650	7.5	2
2-Chlorophenol	1.454	1.583	8.170	7.5	9
1,3-Dichlorobenzene	1.651	1.683	7.650	7.5	2
1,4-Dichlorobenzene	1.684	1.685	7.510	7.5	0
Benzyl alcohol	0.992	0.965	7.300	7.5	-3
1,2-Dichlorobenzene	1.582	1.602	7.600	7.5	1
Indene	1.641	1.682	7.690	7.5	3
2-Methylphenol	1.444	1.516	7.880	7.5	5
2,2'-oxybis(1-Chloropropane)	2.009	1.992	7.440	7.5	-1
bis(2-Chloroisopropyl)ether	2.009	1.992	7.440	7.5	-1
N-Nitrosopyrrolidine	0.826	0.845	7.680	7.5	2
Acetophenone	2.048	2.090	7.650	7.5	2
4-Methylphenol	1.667	1.706	7.680	7.5	2
Total Cresols	1.555	1.611	15.540	15.0	4
N-Nitroso-di-n-propylamine	1.215	1.218	7.520	7.5	0
N-Nitrosomorpholine	0.924	0.933	7.570	7.5	1
o-Toluidine	2.544	2.635	7.770	7.5	4
Hexachloroethane	0.683	0.716	7.870	7.5	5
Nitrobenzene	0.484	0.481	7.450	7.5	-1
N-Nitrosopiperidine	0.198	0.206	7.830	7.5	4
Isophorone	0.809	0.820	7.600	7.5	1
2-Nitrophenol	0.186	0.209	8.410	7.5	12
2,4-Dimethylphenol	0.415	0.431	7.790	7.5	4
O,O,O-Triethylphosphorothioate	0.179	0.172	7.190	7.5	-4

FORM VII SV-1

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 10/31/18 Time: 14:49

Lab File ID: dj2721b.d Init. Calib. Date(s): 09/21/18 09/21/18

Init. Calib. Times(s): 17:33 21:11

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
bis(2-Chloroethoxy)methane	0.528	0.527	7.490	7.5	0
Benzoic acid	0.224	0.286	12.780	10.0	28
2,4-Dichlorophenol	0.305	0.316	7.770	7.5	4
1,2,4-Trichlorobenzene	0.339	0.333	7.380	7.5	-2
Naphthalene	1.163	1.154	7.440	7.5	-1
4-Chloroaniline	0.437	0.450	7.710	7.5	3
2,6-Dichlorophenol	0.296	0.307	7.770	7.5	4
Hexachloropropene	0.215	0.212	7.380	7.5	-2
Hexachlorobutadiene	0.191	0.183	7.210	7.5	-4
Quinoline	0.669	0.676	7.590	7.5	1
Caprolactam	0.117	0.120	7.700	7.5	3
N-Nitrosodi-n-butylamine	0.319	0.286	6.730	7.5	-10
4-Chloro-3-methylphenol	0.336	0.357	7.970	7.5	6
Safrole	0.286	0.276	7.220	7.5	-4
2-Methylnaphthalene	0.720	0.730	7.600	7.5	1
1-Methylnaphthalene	0.688	0.697	7.600	7.5	1
Hexachlorocyclopentadiene	0.417	0.401	7.200	7.5	-4
1,2,4,5-Tetrachlorobenzene	0.673	0.662	7.380	7.5	-2
cis-Isosafrole	0.602	0.595	1.260	1.3	-1
2,4,6-Trichlorophenol	0.398	0.432	8.140	7.5	9
2,4,5-Trichlorophenol	0.425	0.465	8.210	7.5	10
trans-Isosafrole	0.653	0.846	8.070	6.2	30
Isosafrole	0.644	0.804	9.360	7.5	25
1,1'-Biphenyl	1.732	1.781	7.710	7.5	3
2-Chloronaphthalene	1.421	1.566	8.260	7.5	10
1-Chloronaphthalene	1.317	1.342	7.640	7.5	2
Diphenyl ether	0.965	0.975	7.580	7.5	1
2-Nitroaniline	0.408	0.481	8.830	7.5	18
1,4-Naphthoquinone	0.503	0.540	8.050	7.5	7
1,4-Dinitrobenzene	0.216	0.247	8.560	7.5	14
Dimethylphthalate	1.500	1.565	7.830	7.5	4
1,3-Dinitrobenzene	0.250	0.278	8.330	7.5	11
2,6-Dinitrotoluene	0.335	0.366	8.190	7.5	9
Acenaphthylene	1.883	2.000	7.970	7.5	6
3-Nitroaniline	0.362	0.421	8.720	7.5	16
Acenaphthene	1.409	1.470	7.830	7.5	4

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: HP19760 Calibration Date: 10/31/18 Time: 14:49

Lab File ID: dj2721b.d Init. Calib. Date(s): 09/21/18 09/21/18

Init. Calib. Times(s): 17:33 21:11

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
2,4-Dinitrophenol	0.178	0.233	13.110	10.0	31
4-Nitrophenol	0.247	0.238	7.230	7.5	-4
Pentachlorobenzene	0.550	0.550	7.510	7.5	0
2,4-Dinitrotoluene	0.452	0.493	8.160	7.5	9
2,4_2,6-Dinitrotoluenes	0.384	0.429	16.790	15.0	12
Dibenzofuran	1.941	1.986	7.670	7.5	2
1-Naphthylamine	1.488	1.534	7.730	7.5	3
2,3,4,6-Tetrachlorophenol	0.331	0.369	8.350	7.5	11
2-Naphthylamine	1.503	1.533	7.650	7.5	2
Diethylphthalate	1.418	1.481	7.840	7.5	4
Thionazin	0.295	0.314	7.980	7.5	6
Fluorene	1.480	1.589	8.050	7.5	7
4-Chlorophenyl-phenylether	0.724	0.741	7.680	7.5	2
5-Nitro-o-toluidine	0.424	0.453	8.010	7.5	7
4-Nitroaniline	0.399	0.438	8.220	7.5	10
4,6-Dinitro-2-methylphenol	0.133	0.159	8.910	7.5	19
N-Nitrosodiphenylamine (1)	0.672	0.714	7.970	7.5	6
NDPA as diphenylamine	0.672	0.714	7.970	7.5	6
1,2-Diphenylhydrazine	0.957	1.003	7.860	7.5	5
Tetraethyldithiopyrophosphate	0.147	0.153	7.850	7.5	5
1,3,5-Trinitrobenzene	0.091	0.090	7.440	7.5	-1
Diallate (peak 1)	0.458	0.481	6.540	6.2	5
Phorate	0.549	0.601	8.210	7.5	9
Phenacetin	0.430	0.442	7.700	7.5	3
4-Bromophenyl-phenylether	0.222	0.234	7.900	7.5	5
Diallate (peak 2)	0.367	0.375	1.300	1.3	2
Diallate trans/cis	0.442	0.463	7.850	7.5	5
Hexachlorobenzene	0.228	0.222	7.300	7.5	-3
Dimethoate	0.357	0.379	7.950	7.5	6
Atrazine	0.210	0.219	7.820	7.5	4
Pentachlorophenol	0.134	0.151	8.480	7.5	13
4-Aminobiphenyl	0.564	0.612	8.140	7.5	9
Pentachloronitrobenzene	0.098	0.101	7.710	7.5	3
Pronamide	0.341	0.346	7.620	7.5	2
Dinoseb	0.190	0.216	8.520	7.5	14
Phenanthrene	1.258	1.258	7.500	7.5	0

(1) Cannot be Separated from Diphenylamine

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 10/31/18 Time: 14:49

Lab File ID: dj2721b.d Init. Calib. Date(s): 09/21/18 09/21/18

Init. Calib. Times(s): 17:33 21:11

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Anthracene	1.202	1.272	7.930	7.5	6
Carbazole	1.103	1.129	7.680	7.5	2
Methyl parathion	0.266	0.297	7.820	7.5	4
Di-n-butylphthalate	1.314	1.345	7.670	7.5	2
Parathion	0.169	0.187	7.770	7.5	4
4-Nitroquinoline-1-oxide	0.123	0.105	7.340	7.5	-2
Octachlorostyrene	0.086	0.083	7.250	7.5	-3
Isodrin	0.141	0.139	7.390	7.5	-2
Fluoranthene	1.251	1.296	7.770	7.5	4
Benzidine	0.935	0.980	23.580	22.5	5
Pyrene	1.375	1.395	7.610	7.5	2
p-Dimethylaminoazobenzene	0.215	0.224	7.830	7.5	4
Chlorobenzilate	0.368	0.435	8.850	7.5	18
3,3'-Dimethylbenzidine	0.820	0.878	8.030	7.5	7
Butylbenzylphthalate	0.581	0.669	8.640	7.5	15
2-Acetylaminofluorene	0.452	0.569	9.440	7.5	26
3,3'-Dichlorobenzidine	0.454	0.505	8.350	7.5	11
4,4'-Methylenebis(2-chloroanil	0.256	0.279	8.170	7.5	9
Benzo(a)anthracene	1.133	1.260	8.340	7.5	11
Chrysene	1.179	1.315	8.360	7.5	12
bis(2-Ethylhexyl)phthalate	0.771	0.935	9.100	7.5	21
6-Methylchrysene	0.809	0.889	8.240	7.5	10
Di-n-octylphthalate	1.330	1.534	8.010	7.5	7
Benzo(b)fluoranthene	1.195	1.272	7.980	7.5	6
7,12-Dimethylbenz[a]anthracene	0.595	0.567	7.150	7.5	-5
Benzo(k)fluoranthene	1.238	1.331	8.070	7.5	8
Benzo(a)pyrene	1.101	1.209	8.240	7.5	10
3-Methylcholanthrene	0.532	0.520	7.320	7.5	-2
Dibenz(a,h)acridine	0.892	0.862	7.250	7.5	-3
Dibenz(a,j)acridine	0.986	0.938	7.140	7.5	-5
Indeno(1,2,3-cd)pyrene	1.023	1.030	7.550	7.5	1
Dibenz(a,h)anthracene	1.117	1.089	7.310	7.5	-3
Benzo(g,h,i)perylene	1.156	1.149	7.460	7.5	-1
Total PAHs	1.147	1.128	132.780	135.0	-2
2-Fluorophenol	1.505	1.603	15.980	15.0	7

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: HP19760 Calibration Date: 10/31/18 Time: 14:49

Lab File ID: dj2721b.d Init. Calib. Date(s): 09/21/18 09/21/18

Init. Calib. Times(s): 17:33 21:11

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Phenol-d6	2.043	2.203	16.170	15.0	8
Nitrobenzene-d5	0.474	0.474	15.010	15.0	0
2-Fluorobiphenyl	1.597	1.601	15.030	15.0	0
2,4,6-Tribromophenol	0.165	0.187	16.950	15.0	13
Terphenyl-d14	0.832	0.857	15.450	15.0	3
			Average %Drift:		6

Continuing Calibration
Internal Standard Area and Retention Time
Summary

Initial Calibration Standards:

/chem/HP19760.i/18sep21.b/di1301.d **
/chem/HP19760.i/18sep21.b/di1302.d
/chem/HP19760.i/18sep21.b/di1303.d
/chem/HP19760.i/18sep21.b/di1304.d
/chem/HP19760.i/18sep21.b/di1305.d
/chem/HP19760.i/18sep21.b/di1306.d
/chem/HP19760.i/18sep21.b/di1307.d
/chem/HP19760.i/18sep21.b/di1308.d

** indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

/chem/HP19760.i/18oct31.b/dj2721b.d

Area Summary

File ID:

Internal Standard Name	dj2721b.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	155966	181644	90822	363288	Yes
Naphthalene-d8	588329	678309	339154	1356618	Yes
Acenaphthene-d10	273090	318311	159156	636622	Yes
Phenanthrene-d10	500890	573202	286601	1146404	Yes
Pyrene-d10	481065	595163	297582	1190326	Yes
Perylene-d12	508333	608816	304408	1217632	Yes

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

RT Summary

File ID:

Internal Standard Name	dj2721b.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	5.852	6.801	No
Naphthalene-d8	7.793	8.736	No
Acenaphthene-d10	10.561	11.528	No
Phenanthrene-d10	12.596	13.411	No
Pyrene-d10	14.368	15.381	No
Perylene-d12	18.628	19.852	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.

Report generated on 10/31/2018 at 15:31

Data File: /chem/HP19760.i/18oct31.b/dj2731.d
Report Date: 10/31/2018 20:06

Lancaster Laboratories, Inc.
Shift Ending Continuing Calibration Check Report

21 sep 2018

Instrument ID: HP19760.i
Client ID: SECC12.5
Lab Sample ID: rvSTD2648
Sublist used: 25788M.sub

Injection Date and Time: 31-OCT-2018 19:37
Initial Calibration Date(s): 21-SEP-2018 ~~20-OCT-2018~~
Initial Calibration Time(s): 17:33 ~~14:28~~ 21:4
Method used: /chem/HP19760.i/18oct31.b/rv8270d.m

③ AM2405 10/31/18

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Pyridine	1.92478	1.82792	0.010	5.0	20.0
Phenol	2.33716	2.22479	0.010	4.8	20.0
Aniline	2.76841	2.75599	0.010	0.4	20.0
2-Chlorophenol	1.45371	1.57564	0.010	-8.4	20.0
1,3-Dichlorobenzene	1.65074	1.66190	0.010	-0.7	20.0
1,4-Dichlorobenzene	1.68370	1.66991	0.010	0.8	20.0
Benzyl alcohol	0.99188	0.97254	0.010	1.9	20.0
1,2-Dichlorobenzene	1.58209	1.58498	0.010	-0.2	20.0
2-Methylphenol	1.44355	1.47526	0.010	-2.2	20.0
2,2'-oxybis(1-Chloropropane)	2.00850	1.89420	0.010	5.7	20.0
4-Methylphenol	1.66718	1.65705	0.010	0.6	20.0
N-Nitroso-di-n-propylamine	1.21506	1.19071	0.010	2.0	20.0
Hexachloroethane	0.68285	0.70919	0.010	-3.9	20.0
Nitrobenzene	0.48455	0.47948	0.010	1.0	20.0
Isophorone	0.80924	0.82496	0.010	-1.9	20.0
2-Nitrophenol	0.18649	0.21272	0.010	-14.1	20.0
2,4-Dimethylphenol	0.41482	0.43232	0.010	-4.2	20.0
bis(2-Chloroethoxy)methane	0.52806	0.52278	0.010	1.0	20.0
2,4-Dichlorophenol	0.30501	0.31483	0.010	-3.2	20.0
1,2,4-Trichlorobenzene	0.33888	0.33456	0.010	1.3	20.0
4-Chloroaniline	0.43733	0.44988	0.010	-2.9	20.0
Hexachlorobutadiene	0.19085	0.18604	0.010	2.5	20.0
4-Chloro-3-methylphenol	0.33581	0.36108	0.010	-7.5	20.0
2-Methylnaphthalene	0.72014	0.72430	0.010	-0.6	20.0
Hexachlorocyclopentadiene	0.41721	0.40542	0.010	2.8	20.0
2,4,6-Trichlorophenol	0.39822	0.43201	0.010	-8.5	20.0
2,4,5-Trichlorophenol	0.42496	0.45077	0.010	-6.1	20.0
2-Chloronaphthalene	1.42136	1.90458	0.010	-34.0	20.0
2-Nitroaniline	0.40836	0.48803	0.010	-19.5	20.0
Dimethylphthalate	1.49967	1.49355	0.010	0.4	20.0
2,6-Dinitrotoluene	0.33542	0.36287	0.010	-8.2	20.0
3-Nitroaniline	0.36234	0.40546	0.010	-11.9	20.0
2,4-Dinitrophenol	0.17787	0.23154	0.010	-30.2	20.0
4-Nitrophenol	0.24661	0.23242	0.010	5.8	20.0
2,4-Dinitrotoluene	0.45254	0.48201	0.010	-6.5	20.0
Dibenzofuran	1.94059	1.93555	0.010	0.3	20.0
Diethylphthalate	1.41800	1.43293	0.010	-1.1	20.0
4-Chlorophenyl-phenylether	0.72383	0.72376	0.010	0.0	20.0
4-Nitroaniline	0.39932	0.42477	0.010	-6.4	20.0
4,6-Dinitro-2-methylphenol	0.13345	0.16410	0.010	-23.0	20.0
N-Nitrosodiphenylamine	0.67162	0.71255	0.010	-6.1	20.0
4-Bromophenyl-phenylether	0.22214	0.22773	0.010	-2.5	20.0
Pentachlorophenol	0.13382	0.16029	0.010	-19.8	20.0
Carbazole	1.10269	1.14269	0.010	-3.6	20.0
3,3'-Dichlorobenzidine	0.45346	0.52522	0.010	-15.8	20.0
Di-n-octylphthalate	12.500	12.713	0.010	-1.7	20.0
Surrogate Standards	**ICAL Avg. RRF**	**SECC RRF**	**Min. RRF**	**% Diff.**	**Max. %Diff.**
2-Fluorophenol	1.50540	1.60010	0.010	-6.3	20.0
Phenol-d6	2.04272	2.15635	0.010	-5.6	20.0
Nitrobenzene-d5	0.47349	0.47714	0.010	-0.8	20.0
2-Fluorobiphenyl	1.59728	1.53821	0.010	3.7	20.0
2,4,6-Tribromophenol	0.16508	0.18412	0.010	-11.5	20.0
Terphenyl-d14	0.83183	0.85894	0.010	-3.3	20.0

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/01/18 Time: 22:02

Lab File ID: lk0101.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	0.668	6.700	7.5	-11
N-Nitrosodimethylamine	1.124	1.158	7.720	7.5	3
Pyridine	1.913	1.668	6.540	7.5	-13
2-Picoline	1.997	1.826	6.860	7.5	-9
N-Nitrosomethylethylamine	0.816	0.842	7.740	7.5	3
Methyl methanesulfonate	1.043	1.038	7.470	7.5	0
N-Nitrosodiethylamine	0.705	0.777	8.270	7.5	10
Ethyl methanesulfonate	0.800	0.837	7.850	7.5	5
Benzaldehyde	1.433	1.546	8.090	7.5	8
Phenol	2.450	2.531	7.750	7.5	3
Aniline	2.879	2.901	7.560	7.5	1
a-methylstyrene	0.151	0.159	7.910	7.5	6
bis(2-Chloroethyl)ether	1.843	1.873	7.620	7.5	2
2-Chlorophenol	1.443	1.536	7.980	7.5	6
1,3-Dichlorobenzene	1.618	1.669	7.740	7.5	3
1,4-Dichlorobenzene	1.626	1.695	7.820	7.5	4
Benzyl alcohol	0.990	1.014	7.680	7.5	2
1,2-Dichlorobenzene	1.580	1.640	7.780	7.5	4
Indene	1.737	1.752	7.560	7.5	1
2-Methylphenol	1.518	1.603	7.920	7.5	6
2,2'-oxybis(1-Chloropropane)	2.325	2.262	7.300	7.5	-3
bis(2-Chloroisopropyl)ether	2.325	2.262	7.300	7.5	-3
N-Nitrosopyrrolidine	0.775	0.873	8.450	7.5	13
Acetophenone	2.339	2.438	7.820	7.5	4
4-Methylphenol	1.584	1.783	8.440	7.5	13
Total Cresols	1.551	1.693	16.360	15.0	9
N-Nitroso-di-n-propylamine	1.414	1.461	7.750	7.5	3
N-Nitrosomorpholine	1.027	1.083	7.910	7.5	5
o-Toluidine	2.647	2.812	7.970	7.5	6
Hexachloroethane	0.738	0.766	7.780	7.5	4
Nitrobenzene	0.558	0.547	7.350	7.5	-2
N-Nitrosopiperidine	0.196	0.206	7.890	7.5	5
Isophorone	0.941	0.954	7.600	7.5	1
2-Nitrophenol	0.183	0.196	8.020	7.5	7
2,4-Dimethylphenol	0.448	0.458	7.670	7.5	2
O,O,O-Triethylphosphorothioate	0.192	0.212	8.290	7.5	10

FORM VII SV-1

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/01/18 Time: 22:02

Lab File ID: lk0101.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	0.611	7.640	7.5	2
Benzoic acid	0.292	0.201	6.880	10.0	-31
2,4-Dichlorophenol	0.322	0.338	7.890	7.5	5
1,2,4-Trichlorobenzene	0.371	0.387	7.830	7.5	4
Naphthalene	1.129	1.123	7.460	7.5	-1
4-Chloroaniline	0.455	0.461	7.600	7.5	1
2,6-Dichlorophenol	0.313	0.333	7.990	7.5	7
Hexachloropropene	0.239	0.251	7.870	7.5	5
Hexachlorobutadiene	0.219	0.242	8.310	7.5	11
Quinoline	0.672	0.680	7.580	7.5	1
Caprolactam	0.099	0.111	8.400	7.5	12
N-Nitrosodi-n-butylamine	0.374	0.357	7.150	7.5	-5
4-Chloro-3-methylphenol	0.382	0.406	7.970	7.5	6
Safrole	0.284	0.301	7.940	7.5	6
2-Methylnaphthalene	0.725	0.754	7.810	7.5	4
1-Methylnaphthalene	0.693	0.720	7.790	7.5	4
Hexachlorocyclopentadiene	0.445	0.436	7.340	7.5	-2
1,2,4,5-Tetrachlorobenzene	0.772	0.778	7.560	7.5	1
cis-Isosafrole	0.639	0.622	1.240	1.3	-3
2,4,6-Trichlorophenol	0.452	0.509	8.440	7.5	13
2,4,5-Trichlorophenol	0.498	0.536	8.070	7.5	8
trans-Isosafrole	0.642	0.663	6.430	6.2	3
Isosafrole	0.642	0.656	7.670	7.5	2
1,1'-Biphenyl	1.716	1.756	7.670	7.5	2
2-Chloronaphthalene	1.526	1.494	7.350	7.5	-2
1-Chloronaphthalene	1.320	1.309	7.430	7.5	-1
Diphenyl ether	0.957	0.991	7.760	7.5	4
2-Nitroaniline	0.384	0.438	8.560	7.5	14
1,4-Naphthoquinone	0.558	0.556	7.470	7.5	0
1,4-Dinitrobenzene	0.205	0.227	8.300	7.5	11
Dimethylphthalate	1.585	1.643	7.770	7.5	4
1,3-Dinitrobenzene	0.233	0.252	8.110	7.5	8
2,6-Dinitrotoluene	0.321	0.366	8.550	7.5	14
Acenaphthylene	1.902	2.025	7.980	7.5	6
3-Nitroaniline	0.368	0.379	7.720	7.5	3
Acenaphthene	1.468	1.440	7.360	7.5	-2

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: 11/01/18 Time: 22:02

Lab File ID: lk0101.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	0.198	10.200	10.0	2
4-Nitrophenol	0.308	0.297	7.220	7.5	-4
Pentachlorobenzene	0.616	0.664	8.090	7.5	8
2,4-Dinitrotoluene	0.461	0.509	8.270	7.5	10
2,4_2,6-Dinitrotoluenes	0.375	0.438	16.820	15.0	12
Dibenzofuran	1.990	2.025	7.630	7.5	2
1-Naphthylamine	1.435	1.349	7.050	7.5	-6
2,3,4,6-Tetrachlorophenol	0.391	0.439	8.410	7.5	12
2-Naphthylamine	1.428	1.241	6.520	7.5	-13
Diethylphthalate	1.560	1.615	7.760	7.5	4
Thionazin	0.306	0.324	7.940	7.5	6
Fluorene	1.576	1.618	7.700	7.5	3
4-Chlorophenyl-phenylether	0.807	0.850	7.890	7.5	5
5-Nitro-o-toluidine	0.401	0.451	8.420	7.5	12
4-Nitroaniline	0.353	0.393	8.350	7.5	11
4,6-Dinitro-2-methylphenol	0.132	0.137	7.790	7.5	4
N-Nitrosodiphenylamine (1)	0.640	0.645	7.570	7.5	1
NDPA as diphenylamine	0.640	0.645	7.570	7.5	1
1,2-Diphenylhydrazine	1.132	1.055	6.990	7.5	-7
Tetraethyldithiopyrophosphate	0.169	0.163	7.220	7.5	-4
1,3,5-Trinitrobenzene	0.080	0.084	7.900	7.5	5
Diallate (peak 1)	0.455	0.436	5.960	6.2	-4
Phorate	0.591	0.622	7.890	7.5	5
Phenacetin	0.448	0.455	7.610	7.5	1
4-Bromophenyl-phenylether	0.223	0.234	7.880	7.5	5
Diallate (peak 2)	0.373	0.357	1.220	1.3	-4
Diallate trans/cis	0.441	0.423	7.180	7.5	-4
Hexachlorobenzene	0.227	0.240	7.920	7.5	6
Dimethoate	0.375	0.380	7.590	7.5	1
Atrazine	0.203	0.220	8.110	7.5	8
Pentachlorophenol	0.144	0.155	8.100	7.5	8
4-Aminobiphenyl	0.556	0.561	7.560	7.5	1
Pentachloronitrobenzene	0.108	0.109	7.610	7.5	1
Pronamide	0.347	0.386	8.360	7.5	11
Dinoseb	0.200	0.221	8.300	7.5	11
Phenanthrene	1.197	1.196	7.490	7.5	0

(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: 11/01/18 Time: 22:02

Lab File ID: lk0101.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
Anthracene	1.174	1.216	7.770	7.5	4
Carbazole	1.052	1.060	7.550	7.5	1
Methyl parathion	0.282	0.303	8.070	7.5	8
Di-n-butylphthalate	1.361	1.383	7.620	7.5	2
Parathion	0.177	0.192	8.100	7.5	8
4-Nitroquinoline-1-oxide	0.099	0.094	7.140	7.5	-5
Octachlorostyrene	0.084	0.091	8.080	7.5	8
Isodrin	0.141	0.150	7.990	7.5	7
Fluoranthene	1.312	1.412	8.070	7.5	8
Benzidine	0.797	0.755	21.310	22.5	-5
Pyrene	1.319	1.343	7.640	7.5	2
p-Dimethylaminoazobenzene	0.203	0.216	7.970	7.5	6
Chlorobenzilate	0.390	0.396	7.610	7.5	1
3,3'-Dimethylbenzidine	0.763	0.837	8.220	7.5	10
Butylbenzylphthalate	0.586	0.602	7.710	7.5	3
2-Acetylaminofluorene	0.483	0.486	7.540	7.5	1
3,3'-Dichlorobenzidine	0.441	0.460	7.810	7.5	4
4,4'-Methylenebis(2-chloroanil	0.247	0.265	8.060	7.5	8
Benzo(a)anthracene	1.200	1.291	8.070	7.5	8
Chrysene	1.186	1.243	7.860	7.5	5
bis(2-Ethylhexyl)phthalate	0.844	0.851	7.570	7.5	1
6-Methylchrysene	0.800	0.830	7.790	7.5	4
Di-n-octylphthalate	1.599	1.624	7.610	7.5	2
Benzo(b)fluoranthene	1.302	1.356	7.810	7.5	4
7,12-Dimethylbenz[a]anthracene	0.534	0.590	8.300	7.5	11
Benzo(k)fluoranthene	1.312	1.320	7.540	7.5	1
Benzo(a)pyrene	1.164	1.265	8.150	7.5	9
3-Methylcholanthrene	0.531	0.570	8.050	7.5	7
Dibenz(a,h)acridine	0.966	0.957	7.430	7.5	-1
Dibenz(a,j)acridine	1.018	1.018	7.500	7.5	0
Indeno(1,2,3-cd)pyrene	1.129	1.139	7.570	7.5	1
Dibenz(a,h)anthracene	1.175	1.190	7.590	7.5	1
Benzo(g,h,i)perylene	1.197	1.199	7.520	7.5	0
Total PAHs	1.161	1.149	139.170	135.0	3
2-Fluorophenol	1.548	1.587	15.380	15.0	3

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: 11/01/18 Time: 22:02

Lab File ID: lk0101.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	2.164	15.540	15.0	4
Nitrobenzene-d5	0.524	0.532	15.230	15.0	2
2-Fluorobiphenyl	1.671	1.695	15.210	15.0	1
2,4,6-Tribromophenol	0.196	0.231	17.700	15.0	18
Terphenyl-d14	0.803	0.840	15.700	15.0	5
			Average %Drift:		5

FORM VII SV-1

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/18nov01a.b/lk0101.d

Area Summary

Internal Standard Name	File ID: lk0101.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	185353	174707	87354	349414	Yes
Naphthalene-d8	720449	672447	336224	1344894	Yes
Acenaphthene-d10	377017	328644	164322	657288	Yes
Phenanthrene-d10	777681	678703	339352	1357406	Yes
Pyrene-d10	833693	704349	352174	1408698	Yes
Perylene-d12	756230	642558	321279	1285116	Yes

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

RT Summary

Internal Standard Name	File ID: lk0101.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.881	6.951	Yes
Naphthalene-d8	8.860	8.935	Yes
Acenaphthene-d10	11.700	11.770	Yes
Phenanthrene-d10	13.626	13.701	Yes
Pyrene-d10	15.658	15.738	Yes
Perylene-d12	20.231	20.322	Yes

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

Comments: _____

Data File: /chem/HP20296.i/18nov01a.b/lk0133.d
Report Date: 11/02/2018 07:14

Lancaster Laboratories, Inc.
Shift Ending Continuing Calibration Check Report

Instrument ID: HP20296.i
Client ID: SECC12.5
Lab Sample ID: RVSTD2648
Sublist used: 25788M.sub

Injection Date and Time: 02-NOV-2018 04:21
Initial Calibration Date(s): 29-OCT-2018 29-OCT-2018
Initial Calibration Time(s): 00:23 03:49
Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
Pyridine	1.91301	1.80489	0.010	5.7	20.0
Phenol	2.44998	2.42659	0.010	1.0	20.0
Aniline	2.87917	2.84284	0.010	1.3	20.0
2-Chlorophenol	1.44304	1.48882	0.010	-3.2	20.0
1,3-Dichlorobenzene	1.61803	1.66306	0.010	-2.8	20.0
1,4-Dichlorobenzene	1.62583	1.67484	0.010	-3.0	20.0
Benzyl alcohol	0.99037	1.03377	0.010	-4.4	20.0
1,2-Dichlorobenzene	1.58004	1.58588	0.010	-0.4	20.0
2-Methylphenol	1.51788	1.54864	0.010	-2.0	20.0
2,2'-oxybis(1-Chloropropane)	2.32472	2.17848	0.010	6.3	20.0
4-Methylphenol	1.58436	1.74193	0.010	-9.9	20.0
N-Nitroso-di-n-propylamine	1.41416	1.42776	0.010	-1.0	20.0
Hexachloroethane	0.73836	0.73333	0.010	0.7	20.0
Nitrobenzene	0.55786	0.55242	0.010	1.0	20.0
Isophorone	0.94142	0.95536	0.010	-1.5	20.0
2-Nitrophenol	0.18323	0.20380	0.010	-11.2	20.0
2,4-Dimethylphenol	0.44812	0.45912	0.010	-2.5	20.0
bis(2-Chloroethoxy)methane	0.60020	0.59835	0.010	0.3	20.0
2,4-Dichlorophenol	0.32153	0.34046	0.010	-5.9	20.0
1,2,4-Trichlorobenzene	0.37105	0.38251	0.010	-3.1	20.0
4-Chloroaniline	0.45534	0.46433	0.010	-2.0	20.0
Hexachlorobutadiene	0.21869	0.23261	0.010	-6.4	20.0
4-Chloro-3-methylphenol	0.38164	0.39813	0.010	-4.3	20.0
2-Methylnaphthalene	0.72457	0.76438	0.010	-5.5	20.0
Hexachlorocyclopentadiene	0.44505	0.45337	0.010	-1.9	20.0
2,4,6-Trichlorophenol	0.45196	0.50171	0.010	-11.0	20.0
2,4,5-Trichlorophenol	0.49831	0.52084	0.010	-4.5	20.0
2-Chloronaphthalene	1.52570	1.52445	0.010	0.1	20.0
2-Nitroaniline	0.38375	0.43356	0.010	-13.0	20.0
Dimethylphthalate	1.58536	1.60704	0.010	-1.4	20.0
2,6-Dinitrotoluene	0.32139	0.37271	0.010	-16.0	20.0
3-Nitroaniline	0.36844	0.37221	0.010	-1.0	20.0
2,4-Dinitrophenol	0.19379	0.21288	0.010	-9.8	20.0
4-Nitrophenol	0.30852	0.31009	0.010	-0.5	20.0
2,4-Dinitrotoluene	0.46136	0.48915	0.010	-6.0	20.0
Dibenzofuran	1.98970	2.01064	0.010	-1.1	20.0
Diethylphthalate	1.56011	1.51596	0.010	2.8	20.0
4-Chlorophenyl-phenylether	0.80727	0.83024	0.010	-2.8	20.0
4-Nitroaniline	0.35271	0.37479	0.010	-6.3	20.0
4,6-Dinitro-2-methylphenol	0.13156	0.13950	0.010	-6.0	20.0
N-Nitrosodiphenylamine	0.63965	0.61471	0.010	3.9	20.0
4-Bromophenyl-phenylether	0.22297	0.23046	0.010	-3.4	20.0
Pentachlorophenol	0.14401	0.15504	0.010	-7.7	20.0
Carbazole	1.05219	1.04285	0.010	0.9	20.0
3,3'-Dichlorobenzidine	0.44126	0.47508	0.010	-7.7	20.0
Di-n-octylphthalate	1.59926	1.71336	0.010	-7.1	20.0

Surrogate Standards	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
2-Fluorophenol	1.54781	1.53583	0.010	0.8	20.0
Phenol-d6	2.08882	2.12502	0.010	-1.7	20.0
Nitrobenzene-d5	0.52348	0.52171	0.010	0.3	20.0
2-Fluorobiphenyl	1.67109	1.68621	0.010	-0.9	20.0
2,4,6-Tribromophenol	0.19591	0.23175	0.010	-18.3	20.0
Terphenyl-d14	0.80260	0.84182	0.010	-4.9	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): dj2721b.d Date Analyzed: 10/31/18

Instrument ID: HP19760 Time Analyzed: 14:49

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	155966	5.852	588329	7.793	273090	10.561
UPPER LIMIT	311932	6.352	1176658	8.293	546180	11.061
LOWER LIMIT	77983	5.352	294165	7.293	136545	10.061
LLI SAMPLE NO.						
01 SBLKWE297	173409	5.852	663233	7.793	296177	10.561
02 297WELCS	144284	5.852	540653	7.793	247924	10.561
03 297WELCSD	135918	5.852	516146	7.793	240003	10.562
04 9861917	188829	5.852	711165	7.787	325612	10.556
05 9861918	179786	5.852	674777	7.787	307886	10.562
06 9861919	166070	5.852	623451	7.787	278995	10.562
07 9861920	182749	5.852	681610	7.787	306826	10.556
08 9861921	200050	5.852	747092	7.787	331069	10.556
09 9861922	194214	5.852	736513	7.787	324741	10.561
10 rvSTD2648	154610	5.852	572236	7.793	269379	10.561

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): dj2721b.d Date Analyzed: 10/31/18

Instrument ID: HP19760 Time Analyzed: 14:49

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	500890	12.596	481065	14.368	508333	18.628
UPPER LIMIT	1001780	13.096	962130	14.868	1016666	19.128
LOWER LIMIT	250445	12.096	240533	13.868	254167	18.128
LLI SAMPLE NO.						
01 SBLKWE297	527838	12.590	481080	14.362	473841	18.622
02 297WELCS	438864	12.590	421475	14.362	448333	18.622
03 297WELCSD	410271	12.590	409336	14.362	438324	18.623
04 9861917	585008	12.590	542985	14.362	558872	18.623
05 9861918	547308	12.590	501634	14.356	533621	18.623
06 9861919	494708	12.590	456097	14.362	485607	18.623
07 9861920	555383	12.590	504983	14.362	535370	18.622
08 9861921	598038	12.590	549433	14.362	582953	18.623
09 9861922	593899	12.590	545980	14.362	573009	18.622
10 rvSTD2648	475571	12.590	462673	14.362	506498	18.622

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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): lk0101.d Date Analyzed: 11/01/18

Instrument ID: HP20296 Time Analyzed: 22:02

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	185353	6.881	720449	8.860	377017	11.700
UPPER LIMIT	370706	7.381	1440898	9.360	754034	12.200
LOWER LIMIT	92677	6.381	360225	8.360	188509	11.200
LLI SAMPLE NO.						
01 SBLKWK297	161146	6.881	604090	8.860	302044	11.700
02 297WKLCS	168622	6.881	646323	8.860	342185	11.700
03 SBLKWH304	166895	6.876	624959	8.860	335654	11.695
04 304WHLCS	149485	6.881	574797	8.860	302020	11.700
05 304WHLCSD	167138	6.881	622316	8.860	329916	11.700
06 9861917RE	168876	6.881	616626	8.860	327668	11.700
07 9861918RE	173494	6.881	634747	8.860	337775	11.700
08 9861919RE	170635	6.876	620754	8.860	329163	11.700
09 9861920RE	174362	6.881	647043	8.860	335333	11.700
10 9861921RE	165706	6.881	638538	8.860	327736	11.700
11 9861922RE	162193	6.881	618152	8.860	325936	11.700
12 RVSTD2648	198155	6.881	752027	8.866	399452	11.700
13 9863102	169794	6.881	624352	8.860	325561	11.700
14 9863103	221346	6.881	848347	8.860	433030	11.700
15 9863104	265780	6.881	1018239	8.860	521710	11.700

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): lk0101.d Date Analyzed: 11/01/18

Instrument ID: HP20296 Time Analyzed: 22:02

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	777681	13.626	833693	15.658	756230	20.231
UPPER LIMIT	1555362	14.126	1667386	16.158	1512460	20.731
LOWER LIMIT	388841	13.126	416847	15.158	378115	19.731
LLI SAMPLE NO.						
01 SBLKWK297	612726	13.626	629768	15.653	581312	20.231
02 297WKLCS	692858	13.626	713634	15.653	669555	20.226
03 SBLKWH304	653158	13.626	687268	15.653	635885	20.231
04 304WHLCS	604653	13.626	660158	15.653	597035	20.231
05 304WHLCSD	651321	13.626	697567	15.653	641715	20.231
06 9861917RE	651290	13.626	676547	15.653	621061	20.231
07 9861918RE	672415	13.626	711234	15.653	621785	20.231
08 9861919RE	641152	13.626	680607	15.653	608402	20.231
09 9861920RE	665016	13.626	711920	15.653	619738	20.231
10 9861921RE	677882	13.626	684127	15.653	614168	20.231
11 9861922RE	659862	13.626	684246	15.653	603250	20.231
12 RVSTD2648	835521	13.631	887168	15.658	790458	20.237
13 9863102	665063	13.626	685741	15.658	599930	20.231
14 9863103	881904	13.626	932075	15.658	821229	20.231
15 9863104	1070795	13.626	1108172	15.658	1009883	20.231

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

GKP01 Lancaster Laboratories, Inc. Analysis Summary for GC/MS Semivolatiles 9861917

Data file: /chem/HP19760.i/18oct31.b/dj2725.d Injection date and time: **31-OCT-2018 16:53**
Data file Sample Info. Line: GKP01;9861917;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:23 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 240 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852	(0.000)	869	152	188829	(21)	5.00	
65) Naphthalene-d8	7.787	(0.006)	1201	136	711165	(21)	5.00	
113) Acenaphthene-d10	10.556	(0.006)	1676	164	325612	(19)	5.00	
153) Phenanthrene-d10	12.590	(0.006)	2025	188	585008	(17)	5.00	
175) Pyrene-d10	14.362	(0.006)	2329	212	542985	(13)	5.00	
213) Perylene-d12	18.623	(0.006)	3060	264	558872	(10)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	3.905	(-0.001)	112	1055229	18.561	37%		19 - 119
17) Phenol-d6	(1)	5.386	(0.001)	99	1071786	13.893	28%		10 - 72
44) Nitrobenzene-d5	(2)	6.691	(0.000)	82	990750	14.711	59%		44 - 120
93) 2-Fluorobiphenyl	(3)	9.547	(0.000)	172	1549527	14.897	60%		44 - 119
135) 2,4,6-Tribromophenol	(3)	11.780	(-0.001)	330	403615	37.545	75%		43 - 140
179) Terphenyl-d14	(5)	14.688	(0.000)	244	1551491	17.175	69%		50 - 134

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)				Not Detected					0.5
18) Phenol	(1)				Not Detected					0.1
19) Aniline	(1)				Not Detected					0.8
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
27) Benzyl alcohol	(1)				Not Detected					3
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18oct31.b/dj2725.d Injection date and time: **31-OCT-2018 16:53**
Data file Sample Info. Line: GKP01;9861917;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:23 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

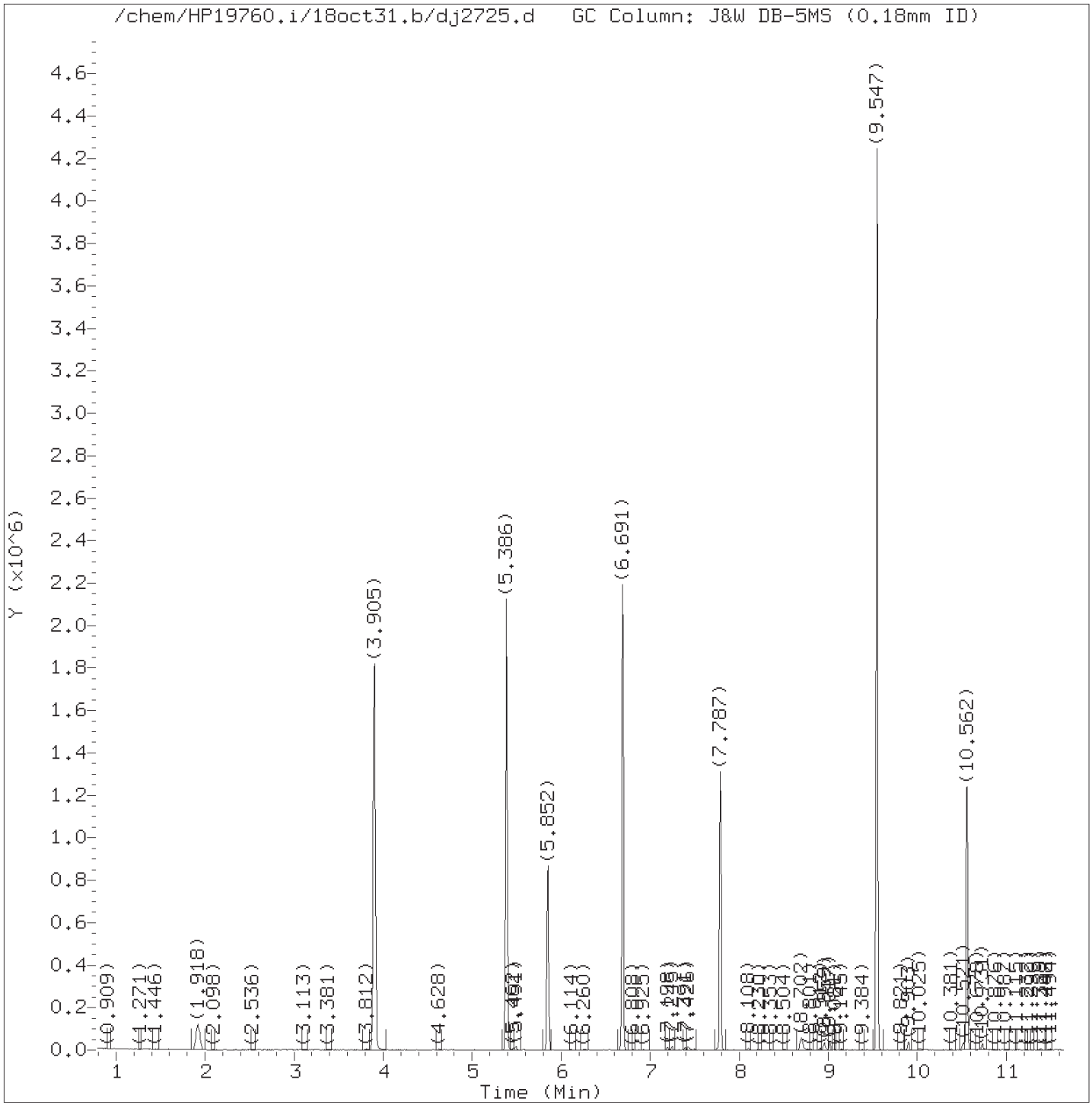
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 240 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
96) 2-Chloronaphthalene	(3)				Not Detected					0.1
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
112) 3-Nitroaniline	(3)				Not Detected					0.8
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
149) Pentachlorophenol	(4)				Not Detected					0.3
163) Carbazole	(4)				Not Detected					0.1
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
205) Di-n-octylphthalate	(6)				Not Detected					1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

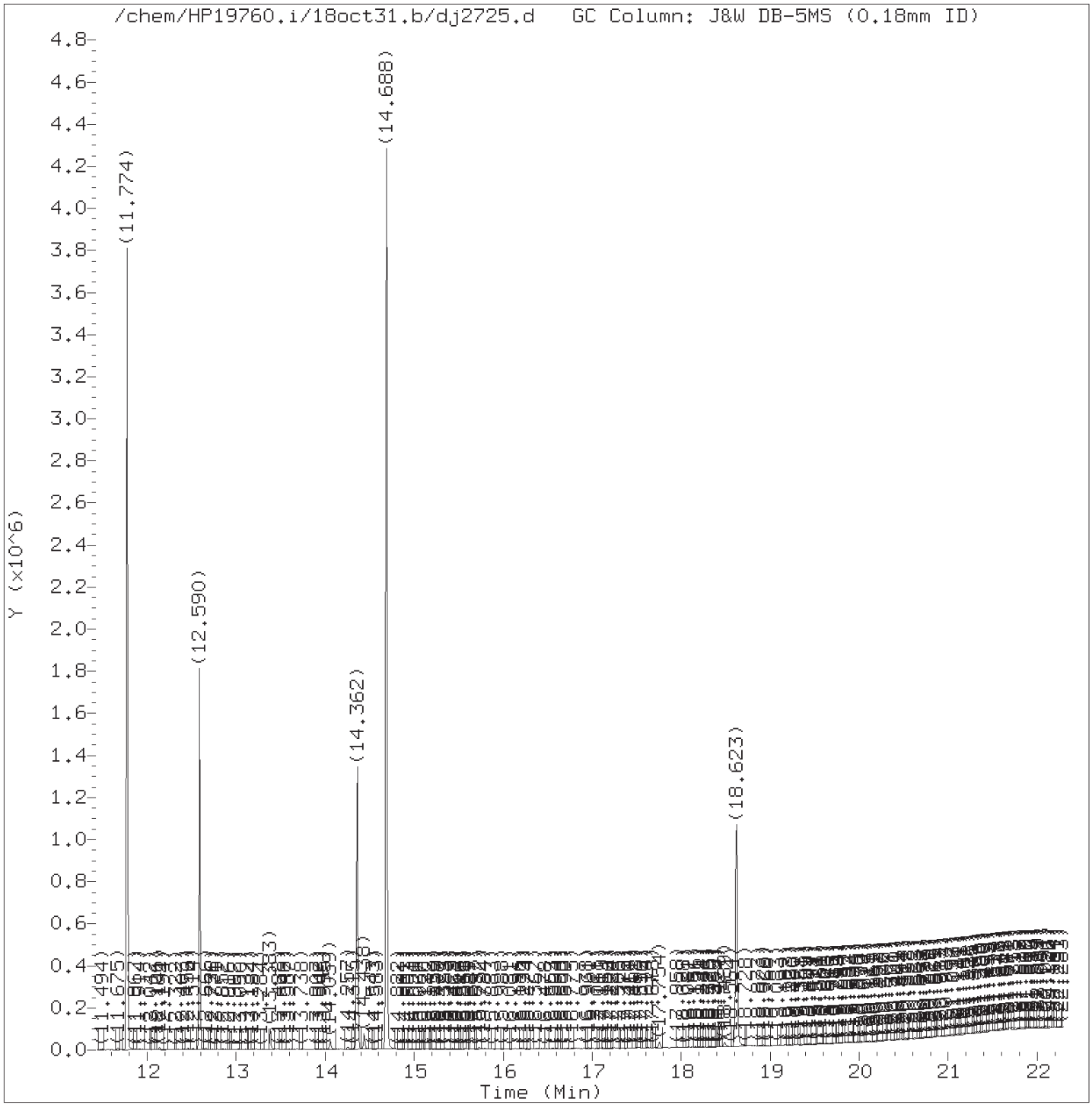
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2725.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 16:53 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:23 art12405

Sample Name: GKP01 Lab Sample ID: 9861917

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2725.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 16:53 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:23 art12405

Sample Name: GKP01 Lab Sample ID: 9861917

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2725.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 16:53 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:23 art12405

Sample Name: GKP01 Lab Sample ID: 9861917

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	3.905	112	1055229	18.561
17)$Phenol-d6	(1)	5.386	99	1071786	13.893
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	188829	5.000
44)$Nitrobenzene-d5	(2)	6.691	82	990750	14.711
65)*Naphthalene-d8	(2)	7.787	136	711165	5.000
93)$2-Fluorobiphenyl	(3)	9.547	172	1549527	14.897
113)*Acenaphthene-d10	(3)	10.556	164	325612	5.000
135)$2,4,6-Tribromophenol	(3)	11.780	330	403615	37.545
153)*Phenanthrene-d10	(4)	12.590	188	585008	5.000
175)*Pyrene-d10	(5)	14.362	212	542985	5.000
179)$Terphenyl-d14	(5)	14.688	244	1551491	17.175
213)*Perylene-d12	(6)	18.623	264	558872	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0107.d Injection date and time: **02-NOV-2018 01:28**
Data file Sample Info. Line: GKP01RE;9861917RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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): 232 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	6.881(0.000)	1102	152	168876 (-9)	5.00	
68) Naphthalene-d8	8.860(0.000)	1472	136	616626 (-14)	5.00	
118) Acenaphthene-d10	11.700(0.000)	2003	164	327668 (-13)	5.00	
158) Phenanthrene-d10	13.626(0.000)	2363	188	651290 (-16)	5.00	
180) Pyrene-d10	15.653(0.006)	2742	212	676547 (-19)	5.00	
218) Perylene-d12	20.231(0.000)	3598	264	621061 (-18)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.950(0.000)	112	1292522	24.724	49%		19 - 119
18) Phenol-d6	(1)	6.351(0.001)	99	1222264	17.325	35%		10 - 72
45) Nitrobenzene-d5	(2)	7.737(0.000)	82	1211101	18.760	75%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.646(0.000)	172	2089752	19.082	76%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.748(0.000)	330	615761	47.960	96%		43 - 140
184) Terphenyl-d14	(5)	15.974(-0.001)	244	2331211	21.466	86%		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

Digitally signed by Kira N. Beck on 11/02/2018 at 07:20. Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov01a.b/lk0107.d Injection date and time: **02-NOV-2018 01:28**
Data file Sample Info. Line: GKP01RE;9861917RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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))

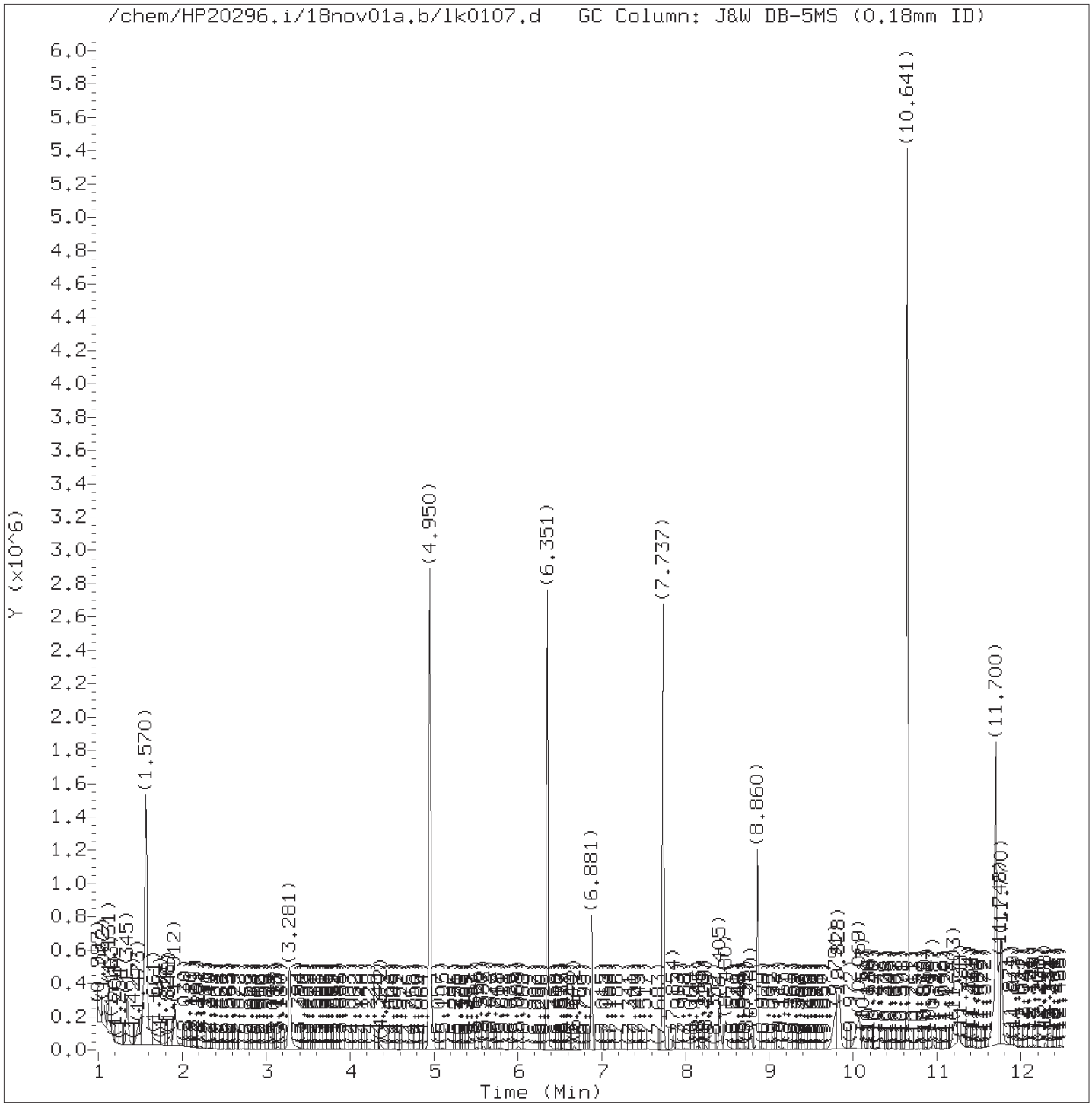
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 232 ml Volume Injected (Vi): 1 ul

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 11/02/2018 at 07:20. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

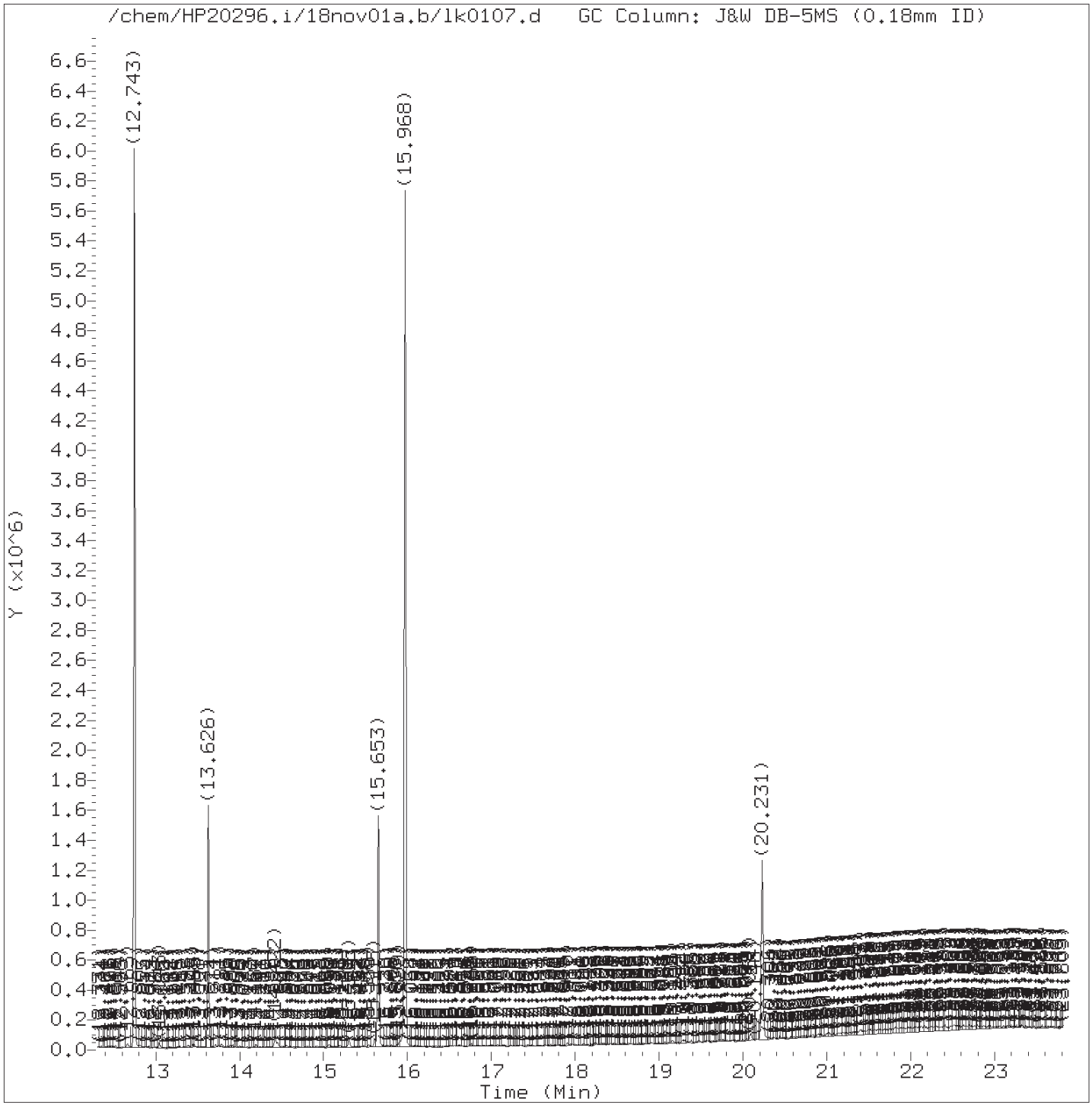
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0107.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:28 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP01RE Lab Sample ID: 9861917RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0107.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:28 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP01RE Lab Sample ID: 9861917RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0107.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:28 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP01RE Lab Sample ID: 9861917RE

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.950	112	1292522	24.724
18)$Phenol-d6	(1)	6.351	99	1222264	17.325
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	168876	5.000
45)$Nitrobenzene-d5	(2)	7.737	82	1211101	18.760
68)*Naphthalene-d8	(2)	8.860	136	616626	5.000
96)$2-Fluorobiphenyl	(3)	10.646	172	2089752	19.082
118)*Acenaphthene-d10	(3)	11.700	164	327668	5.000
140)$2,4,6-Tribromophenol	(3)	12.748	330	615761	47.960
158)*Phenanthrene-d10	(4)	13.626	188	651290	5.000
180)*Pyrene-d10	(5)	15.653	212	676547	5.000
184)$Terphenyl-d14	(5)	15.974	244	2331211	21.466
218)*Perylene-d12	(6)	20.231	264	621061	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316

GKP03 Lancaster Laboratories, Inc. 9861918
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18oct31.b/dj2726.d Injection date and time: **31-OCT-2018 17:20**
Data file Sample Info. Line: GKP03;9861918;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:24 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 227 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852(0.000)	869	152	179786 (15)	5.00	
65) Naphthalene-d8	7.787(0.006)	1201	136	674777 (15)	5.00	
113) Acenaphthene-d10	10.562(0.000)	1677	164	307886 (13)	5.00	
153) Phenanthrene-d10	12.590(0.006)	2025	188	547308 (9)	5.00	
175) Pyrene-d10	14.356(0.012)	2328	212	501634 (4)	5.00	
213) Perylene-d12	18.623(0.006)	3060	264	533621 (5)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	3.899(0.000)	112	1093636	20.204	40%		19 - 119
17) Phenol-d6	(1)	5.386(0.001)	99	1400651	19.069	38%		10 - 72
44) Nitrobenzene-d5	(2)	6.691(0.000)	82	983301	15.388	62%		44 - 120
93) 2-Fluorobiphenyl	(3)	9.547(0.001)	172	1384834	14.080	56%		44 - 119
135) 2,4,6-Tribromophenol	(3)	11.780(0.000)	330	418942	41.214	82%		43 - 140
179) Terphenyl-d14	(5)	14.688(0.000)	244	1596016	19.124	76%		50 - 134

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)			Not Detected					0.5
18) Phenol	(1)			Not Detected					0.1
19) Aniline	(1)			Not Detected					0.8
23) 2-Chlorophenol	(1)			Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)			Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)			Not Detected					0.1
27) Benzyl alcohol	(1)			Not Detected					3
28) 1,2-Dichlorobenzene	(1)			Not Detected					0.1
31) 2-Methylphenol	(1)			Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)			Not Detected					0.1
37) 4-Methylphenol	(1)			Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)			Not Detected					0.2
43) Hexachloroethane	(1)			Not Detected					0.3
45) Nitrobenzene	(2)			Not Detected					0.1
50) Isophorone	(2)			Not Detected					0.1
51) 2-Nitrophenol	(2)			Not Detected					0.8
53) 2,4-Dimethylphenol	(2)			Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)			Not Detected					0.1
60) 2,4-Dichlorophenol	(2)			Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)			Not Detected					0.1
67) 4-Chloroaniline	(2)			Not Detected					1
71) Hexachlorobutadiene	(2)			Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)			Not Detected					0.1
83) 2-Methylnaphthalene	(2)			Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)			Not Detected					1
90) 2,4,6-Trichlorophenol	(3)			Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)			Not Detected					0.1

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18oct31.b/dj2726.d Injection date and time: **31-OCT-2018 17:20**
Data file Sample Info. Line: GKP03;9861918;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:24 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

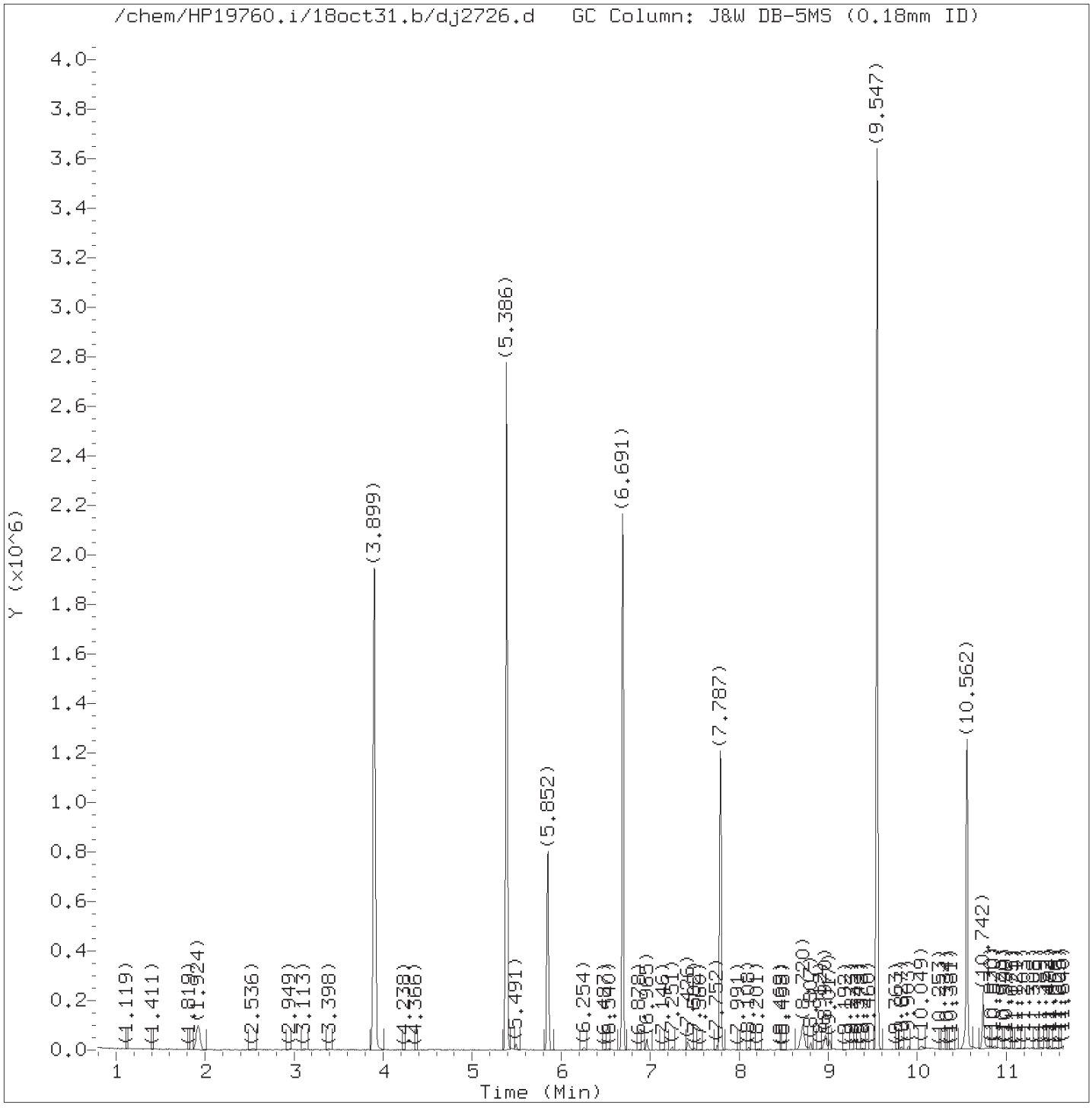
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 227 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
96) 2-Chloronaphthalene	(3)				Not Detected					0.1
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
112) 3-Nitroaniline	(3)				Not Detected					0.8
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
149) Pentachlorophenol	(4)				Not Detected					0.3
163) Carbazole	(4)				Not Detected					0.1
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
205) Di-n-octylphthalate	(6)				Not Detected					1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

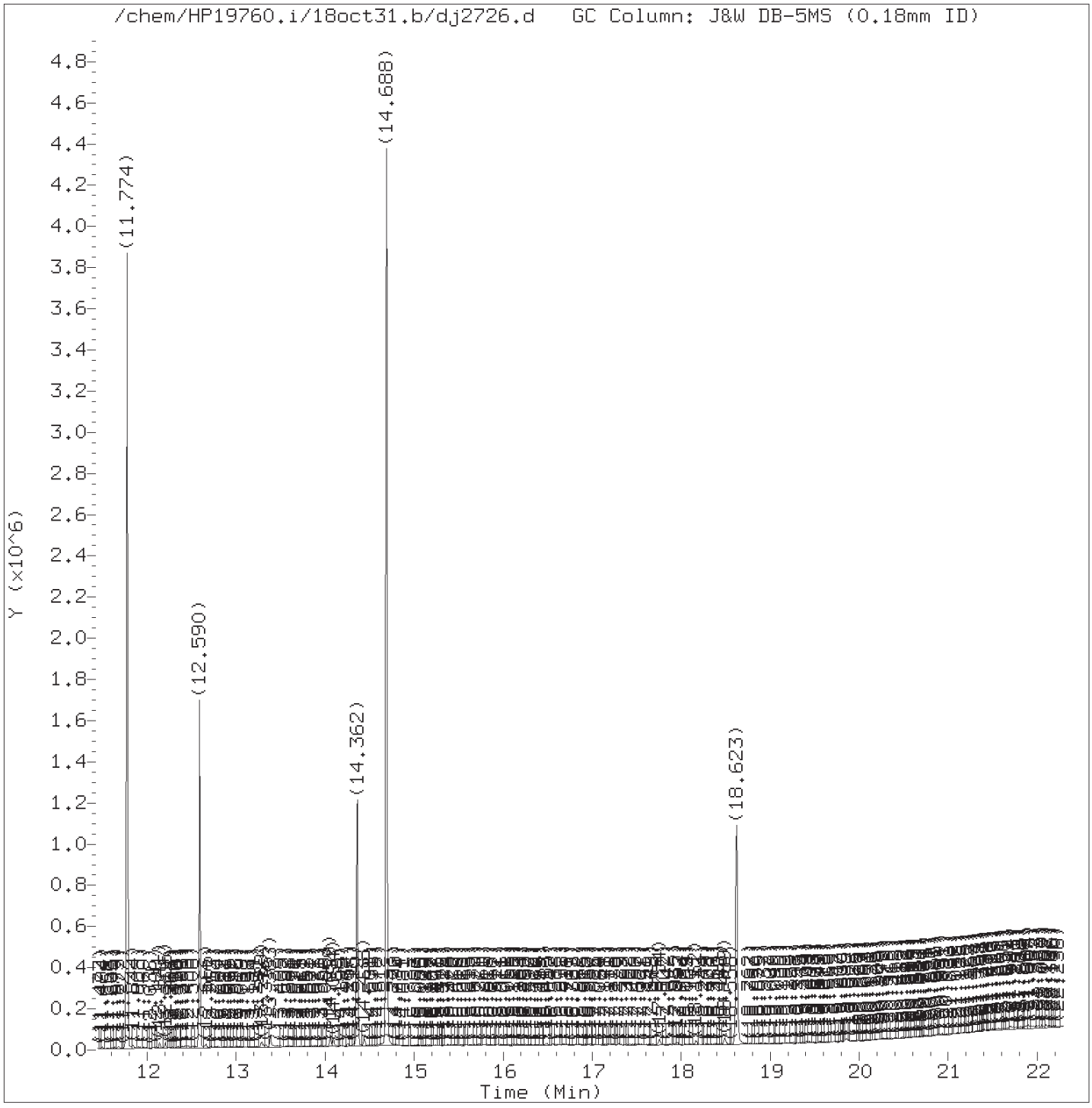
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2726.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 17:20 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:24 art12405

Sample Name: GKP03 Lab Sample ID: 9861918

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2726.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 17:20 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:24 art12405

Sample Name: GKP03 Lab Sample ID: 9861918

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2726.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 17:20 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:24 art12405

Sample Name: GKP03 Lab Sample ID: 9861918

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	3.899	112	1093636	20.204
17)$Phenol-d6	(1)	5.386	99	1400651	19.069
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	179786	5.000
44)$Nitrobenzene-d5	(2)	6.691	82	983301	15.388
65)*Naphthalene-d8	(2)	7.787	136	674777	5.000
93)$2-Fluorobiphenyl	(3)	9.547	172	1384834	14.080
113)*Acenaphthene-d10	(3)	10.562	164	307886	5.000
135)$2,4,6-Tribromophenol	(3)	11.780	330	418942	41.214
153)*Phenanthrene-d10	(4)	12.590	188	547308	5.000
175)*Pyrene-d10	(5)	14.356	212	501634	5.000
179)$Terphenyl-d14	(5)	14.688	244	1596016	19.124
213)*Perylene-d12	(6)	18.623	264	533621	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0108.d Injection date and time: **02-NOV-2018 01:57**
Data file Sample Info. Line: GKP03RE;9861918RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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): 239 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	6.881(0.000)	1102	152	173494 (-6)	5.00	
68) Naphthalene-d8	8.860(0.000)	1472	136	634747 (-12)	5.00	
118) Acenaphthene-d10	11.700(0.000)	2003	164	337775 (-10)	5.00	
158) Phenanthrene-d10	13.626(0.000)	2363	188	672415 (-14)	5.00	
180) Pyrene-d10	15.653(0.005)	2742	212	711234 (-15)	5.00	
218) Perylene-d12	20.231(0.000)	3598	264	621785 (-18)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.950(0.000)	112	1158270	21.566	43%		19 - 119
18) Phenol-d6	(1)	6.352(0.001)	99	1229252	16.960	34%		10 - 72
45) Nitrobenzene-d5	(2)	7.737(0.000)	82	1240873	18.672	75%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.646(0.000)	172	2204134	19.525	78%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.748(0.000)	330	635449	48.013	96%		43 - 140
184) Terphenyl-d14	(5)	15.974(-0.001)	244	2379740	20.844	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

Digitally signed by Kira N. Beck on 11/02/2018 at 07:20. Target 3.5 esignature user ID: knb25316

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0108.d Injection date and time: **02-NOV-2018 01:57**
Data file Sample Info. Line: GKP03RE;9861918RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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))

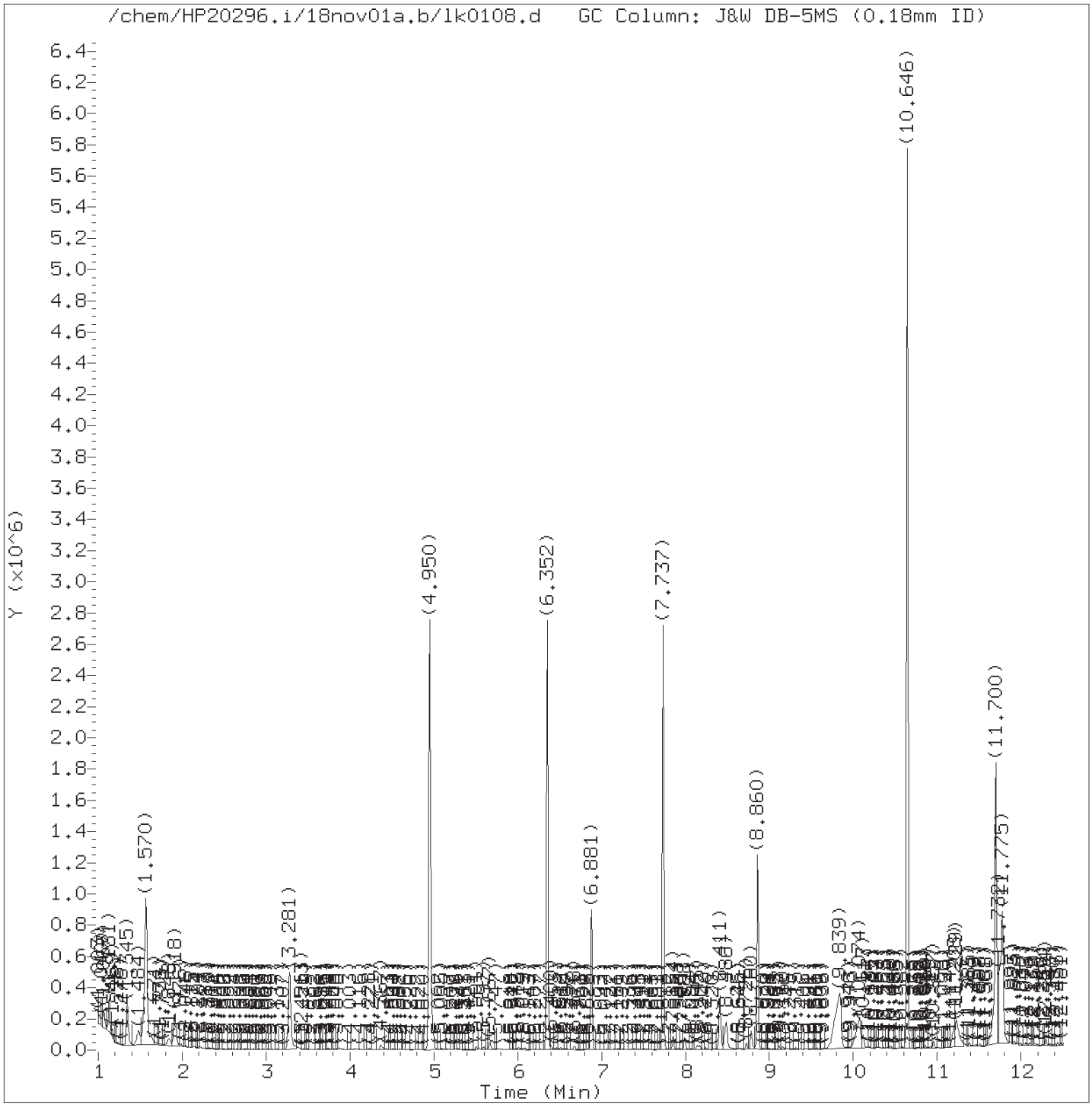
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 1 ul

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 11/02/2018 at 07:20. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

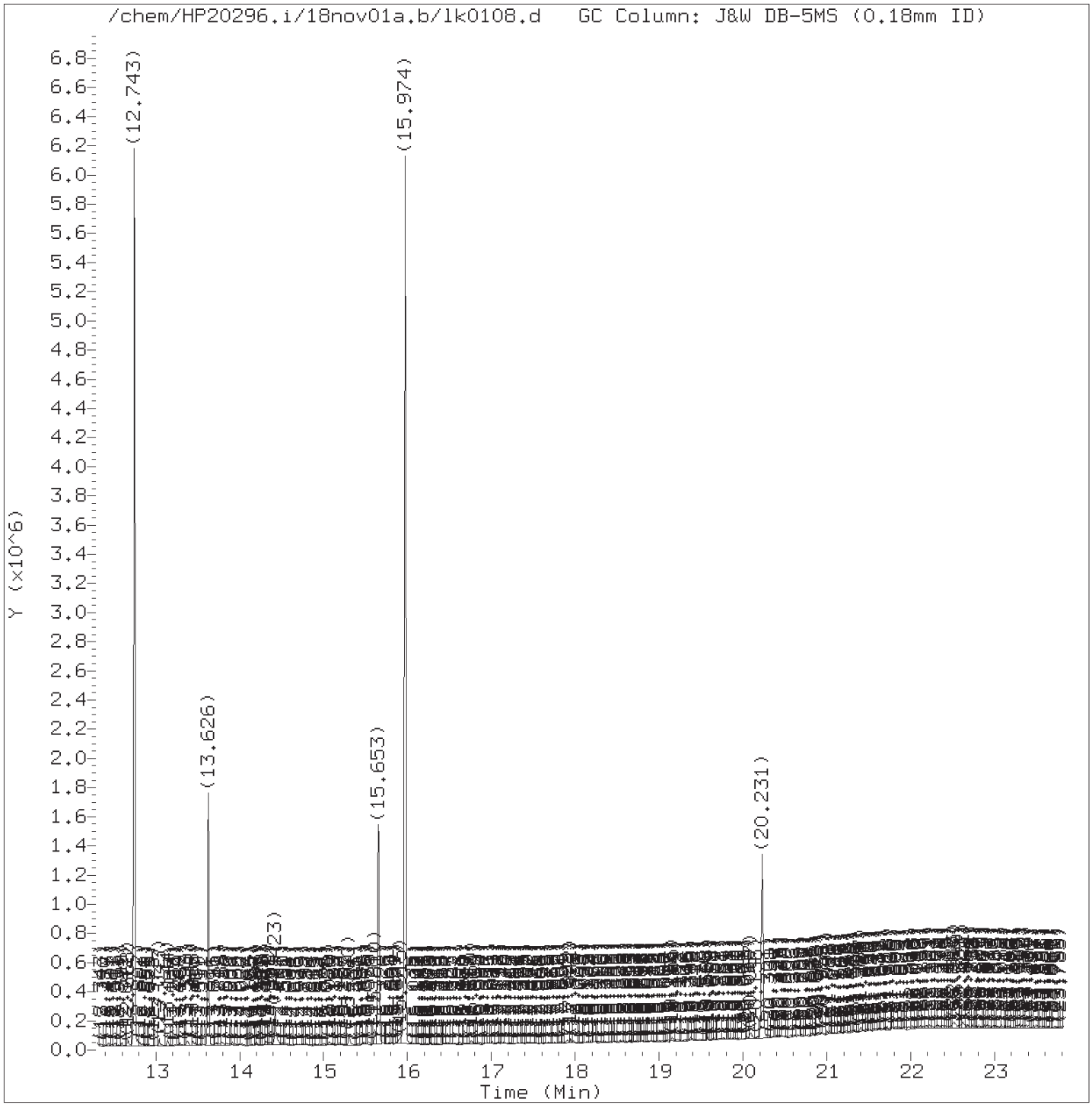
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0108.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:57 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP03RE Lab Sample ID: 9861918RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0108.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:57 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP03RE Lab Sample ID: 9861918RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0108.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:57 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP03RE Lab Sample ID: 9861918RE

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.950	112	1158270	21.566
18)$Phenol-d6	(1)	6.352	99	1229252	16.960
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	173494	5.000
45)$Nitrobenzene-d5	(2)	7.737	82	1240873	18.672
68)*Naphthalene-d8	(2)	8.860	136	634747	5.000
96)$2-Fluorobiphenyl	(3)	10.646	172	2204134	19.525
118)*Acenaphthene-d10	(3)	11.700	164	337775	5.000
140)$2,4,6-Tribromophenol	(3)	12.748	330	635449	48.013
158)*Phenanthrene-d10	(4)	13.626	188	672415	5.000
180)*Pyrene-d10	(5)	15.653	212	711234	5.000
184)$Terphenyl-d14	(5)	15.974	244	2379740	20.844
218)*Perylene-d12	(6)	20.231	264	621785	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316

GKP04 Lancaster Laboratories, Inc. 9861919
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18oct31.b/dj2727.d Injection date and time: **31-OCT-2018 17:48**
Data file Sample Info. Line: GKP04;9861919;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:26 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 227 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852	(0.000)	869	152	166070	(6)	5.00	
65) Naphthalene-d8	7.787	(0.006)	1201	136	623451	(6)	5.00	
113) Acenaphthene-d10	10.562	(0.000)	1677	164	278995	(2)	5.00	
153) Phenanthrene-d10	12.590	(0.006)	2025	188	494708	(-1)	5.00	
175) Pyrene-d10	14.362	(0.006)	2329	212	456097	(-5)	5.00	
213) Perylene-d12	18.623	(0.006)	3060	264	485607	(-4)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	3.899	(0.000)	112	816897	16.338	33%		19 - 119
17) Phenol-d6	(1)	5.386	(0.001)	99	832455	12.270	25%		10 - 72
44) Nitrobenzene-d5	(2)	6.691	(0.000)	82	803666	13.612	54%		44 - 120
93) 2-Fluorobiphenyl	(3)	9.547	(0.001)	172	1183423	13.278	53%		44 - 119
135) 2,4,6-Tribromophenol	(3)	11.780	(0.000)	330	370351	40.207	80%		43 - 140
179) Terphenyl-d14	(5)	14.688	(0.000)	244	1007362	13.276	53%		50 - 134

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)				Not Detected					0.5
18) Phenol	(1)				Not Detected					0.1
19) Aniline	(1)				Not Detected					0.8
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
27) Benzyl alcohol	(1)				Not Detected					3
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18oct31.b/dj2727.d Injection date and time: **31-OCT-2018 17:48**
Data file Sample Info. Line: GKP04;9861919;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:26 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

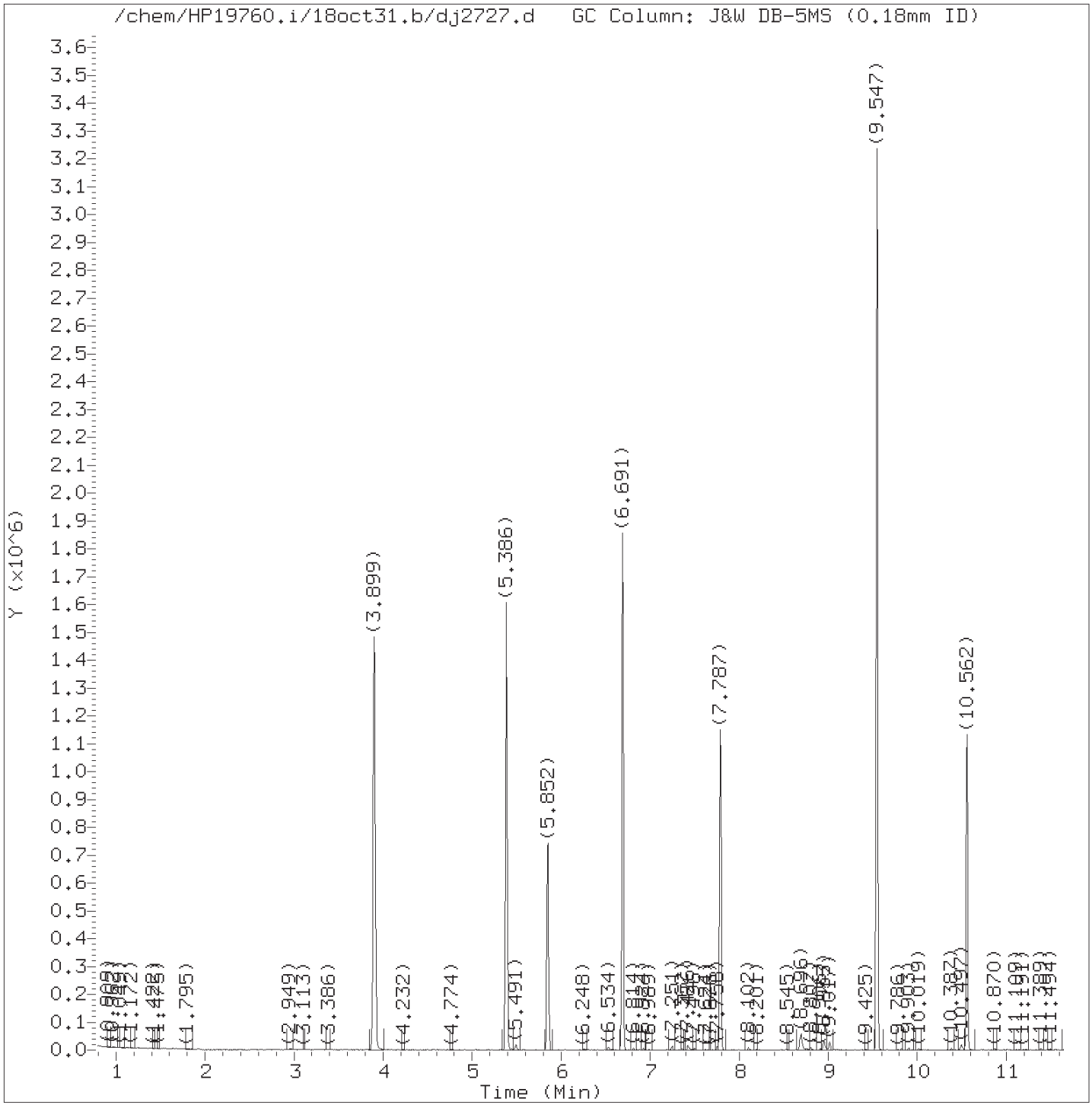
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 227 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
96) 2-Chloronaphthalene	(3)				Not Detected					0.1
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
112) 3-Nitroaniline	(3)				Not Detected					0.8
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
149) Pentachlorophenol	(4)				Not Detected					0.3
163) Carbazole	(4)				Not Detected					0.1
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
205) Di-n-octylphthalate	(6)				Not Detected					1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

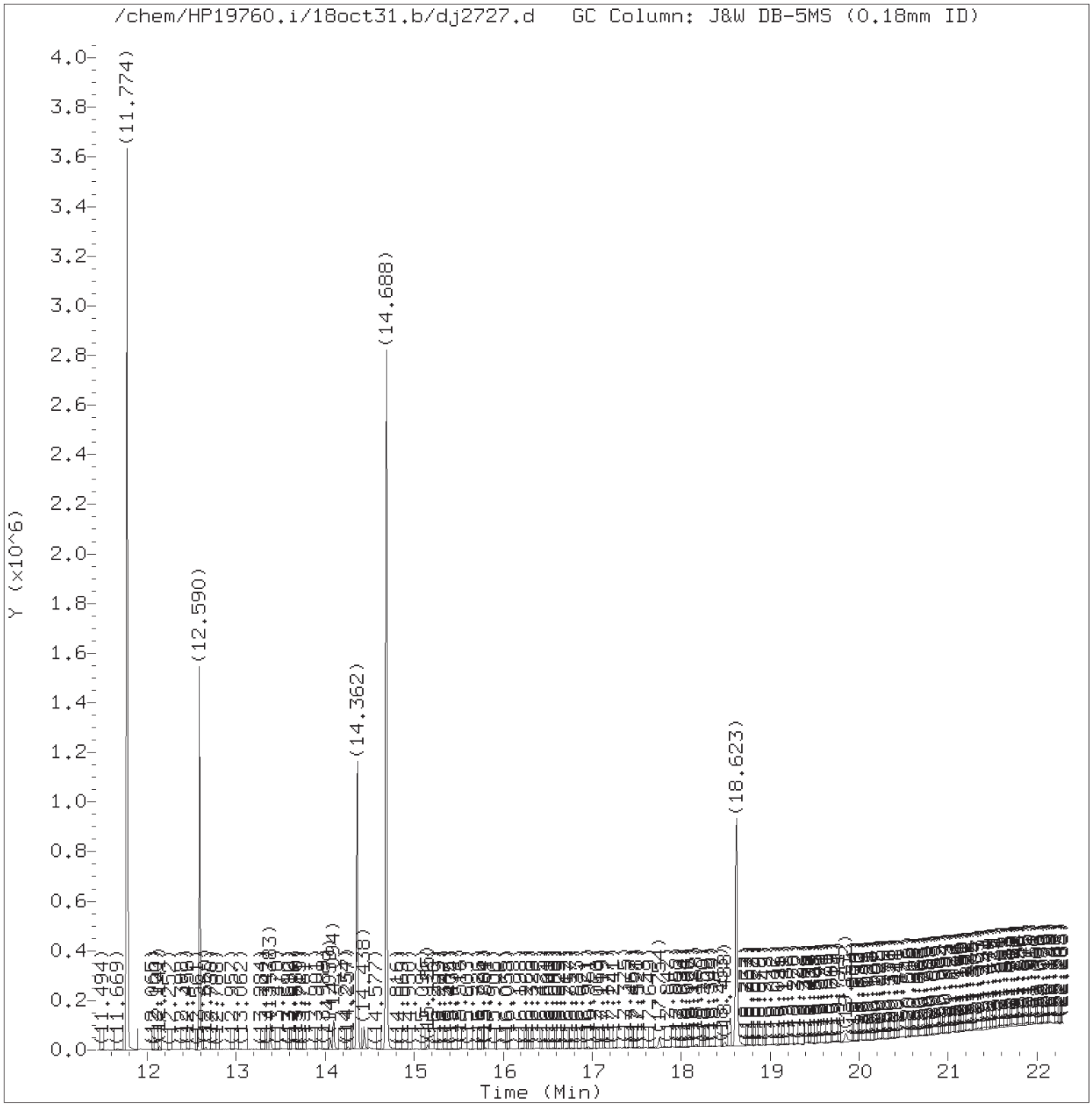
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2727.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 17:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:26 art12405

Sample Name: GKP04 Lab Sample ID: 9861919

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2727.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 17:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:26 art12405

Sample Name: GKP04 Lab Sample ID: 9861919

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2727.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 17:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:26 art12405

Sample Name: GKP04 Lab Sample ID: 9861919

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	3.899	112	816897	16.338
17)$Phenol-d6	(1)	5.386	99	832455	12.270
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	166070	5.000
44)$Nitrobenzene-d5	(2)	6.691	82	803666	13.612
65)*Naphthalene-d8	(2)	7.787	136	623451	5.000
93)$2-Fluorobiphenyl	(3)	9.547	172	1183423	13.278
113)*Acenaphthene-d10	(3)	10.562	164	278995	5.000
135)$2,4,6-Tribromophenol	(3)	11.780	330	370351	40.207
153)*Phenanthrene-d10	(4)	12.590	188	494708	5.000
175)*Pyrene-d10	(5)	14.362	212	456097	5.000
179)$Terphenyl-d14	(5)	14.688	244	1007362	13.276
213)*Perylene-d12	(6)	18.623	264	485607	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0109.d Injection date and time: **02-NOV-2018 02:26**
Data file Sample Info. Line: GKP04RE;9861919RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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): 236 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	6.876	(0.006)	1101	152	170635	(-8)	5.00	
68) Naphthalene-d8	8.860	(0.000)	1472	136	620754	(-14)	5.00	
118) Acenaphthene-d10	11.700	(0.000)	2003	164	329163	(-13)	5.00	
158) Phenanthrene-d10	13.626	(0.000)	2363	188	641152	(-18)	5.00	
180) Pyrene-d10	15.653	(0.006)	2742	212	680607	(-18)	5.00	
218) Perylene-d12	20.231	(0.000)	3598	264	608402	(-20)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.950	(-0.001)	112	1089012	20.617	41%		19 - 119
18) Phenol-d6	(1)	6.351	(0.000)	99	1106514	15.522	31%		10 - 72
45) Nitrobenzene-d5	(2)	7.737	(0.000)	82	1033132	15.897	64%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.646	(0.000)	172	1847871	16.797	67%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.748	(0.000)	330	591213	45.839	92%		43 - 140
184) Terphenyl-d14	(5)	15.968	(0.000)	244	1941851	17.774	71%		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

Digitally signed by Kira N. Beck on 11/02/2018 at 07:20. Target 3.5 esignature user ID: knb25316

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0109.d Injection date and time: **02-NOV-2018 02:26**
Data file Sample Info. Line: GKP04RE;9861919RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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))

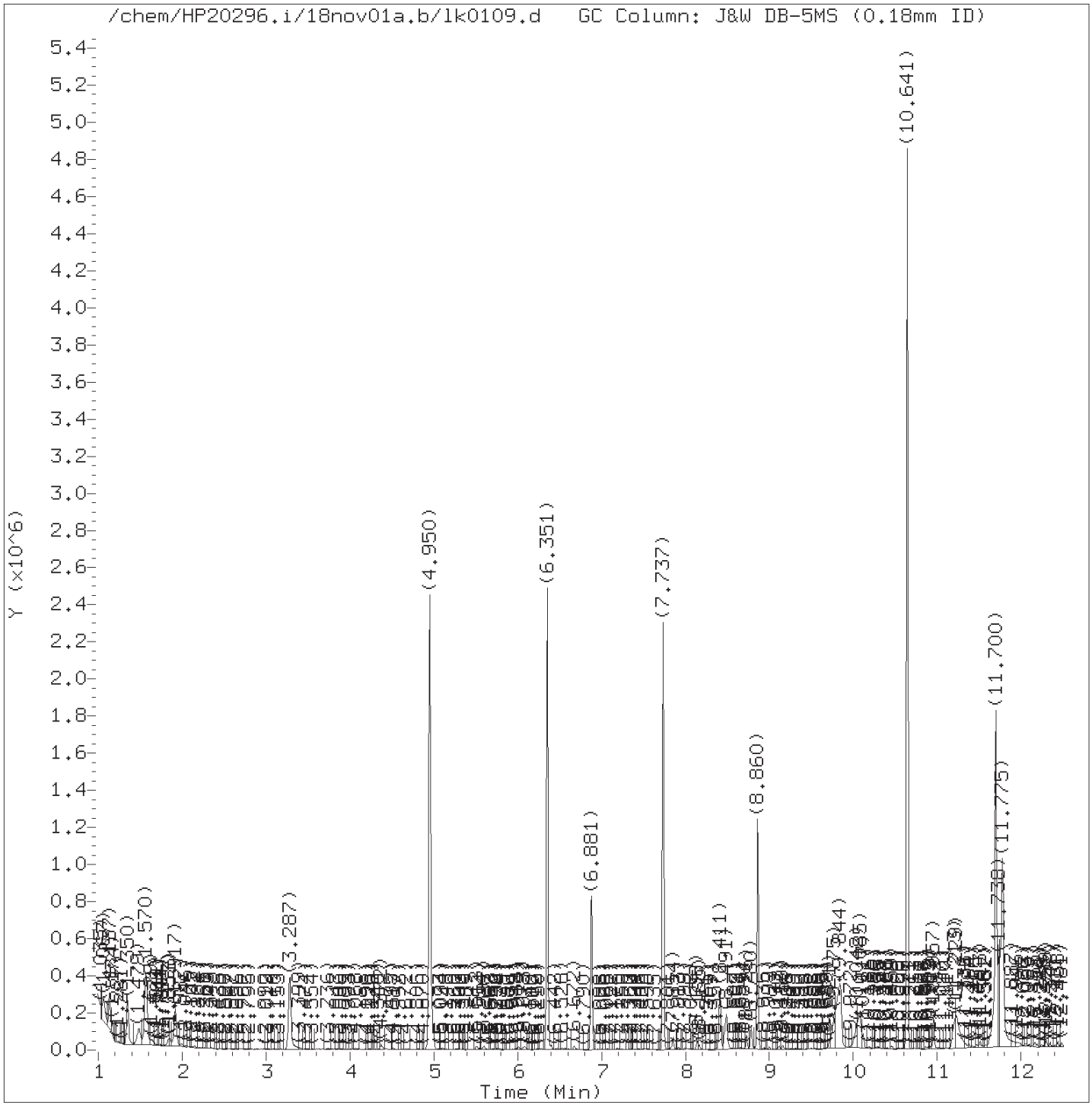
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 236 ml Volume Injected (Vi): 1 ul

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 11/02/2018 at 07:20. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

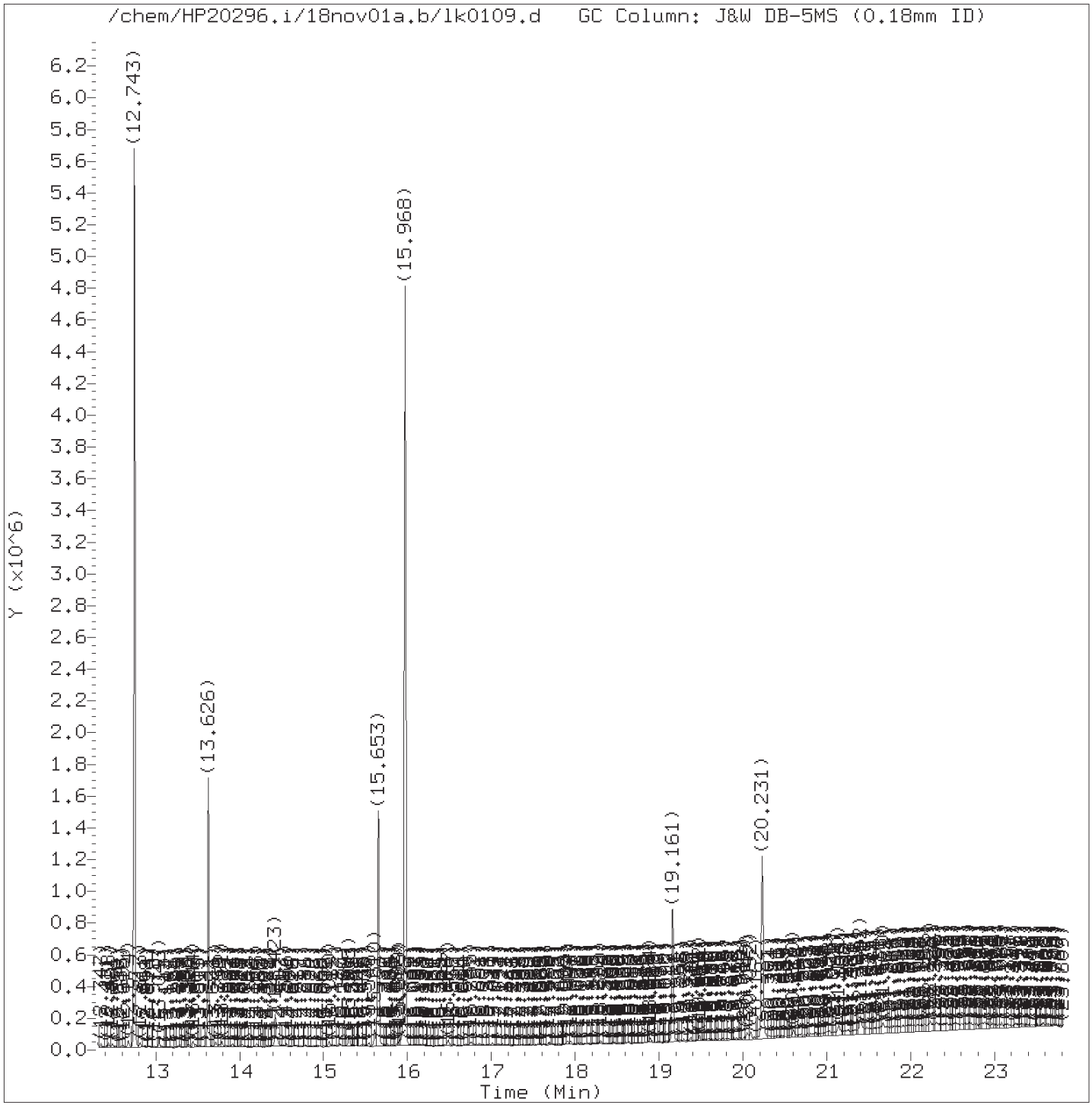
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0109.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 02:26 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP04RE Lab Sample ID: 9861919RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0109.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 02:26 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP04RE Lab Sample ID: 9861919RE

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on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0109.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 02:26 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: GKP04RE Lab Sample ID: 9861919RE

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.950	112	1089012	20.617
18)$Phenol-d6	(1)	6.351	99	1106514	15.522
26)*1,4-Dichlorobenzene-d4	(1)	6.876	152	170635	5.000
45)$Nitrobenzene-d5	(2)	7.737	82	1033132	15.897
68)*Naphthalene-d8	(2)	8.860	136	620754	5.000
96)$2-Fluorobiphenyl	(3)	10.646	172	1847871	16.797
118)*Acenaphthene-d10	(3)	11.700	164	329163	5.000
140)$2,4,6-Tribromophenol	(3)	12.748	330	591213	45.839
158)*Phenanthrene-d10	(4)	13.626	188	641152	5.000
180)*Pyrene-d10	(5)	15.653	212	680607	5.000
184)$Terphenyl-d14	(5)	15.968	244	1941851	17.774
218)*Perylene-d12	(6)	20.231	264	608402	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:20.
Target 3.5 esignature user ID: knb25316

GKPR1 Lancaster Laboratories, Inc. 9861920
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18oct31.b/dj2728.d Injection date and time: **31-OCT-2018 18:15**
Data file Sample Info. Line: GKPR1;9861920;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:25 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 223 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852	(0.000)	869	152	182749	(17)	5.00	
65) Naphthalene-d8	7.787	(0.006)	1201	136	681610	(16)	5.00	
113) Acenaphthene-d10	10.556	(0.006)	1676	164	306826	(12)	5.00	
153) Phenanthrene-d10	12.590	(0.006)	2025	188	555383	(11)	5.00	
175) Pyrene-d10	14.362	(0.006)	2329	212	504983	(5)	5.00	
213) Perylene-d12	18.622	(0.006)	3060	264	535370	(5)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	3.899	(0.000)	112	752203	13.671	27%		19 - 119
17) Phenol-d6	(1)	5.386	(0.001)	99	799419	10.707	21%		10 - 72
44) Nitrobenzene-d5	(2)	6.691	(0.000)	82	839832	13.011	52%		44 - 120
93) 2-Fluorobiphenyl	(3)	9.547	(0.000)	172	1207608	12.320	49%		44 - 119
135) 2,4,6-Tribromophenol	(3)	11.780	(-0.001)	330	313088	30.907	62%		43 - 140
179) Terphenyl-d14	(5)	14.688	(0.000)	244	1489563	17.730	71%		50 - 134

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)				Not Detected					0.5
18) Phenol	(1)				Not Detected					0.1
19) Aniline	(1)				Not Detected					0.8
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
27) Benzyl alcohol	(1)				Not Detected					3
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18oct31.b/dj2728.d Injection date and time: **31-OCT-2018 18:15**
Data file Sample Info. Line: GKPR1;9861920;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:25 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

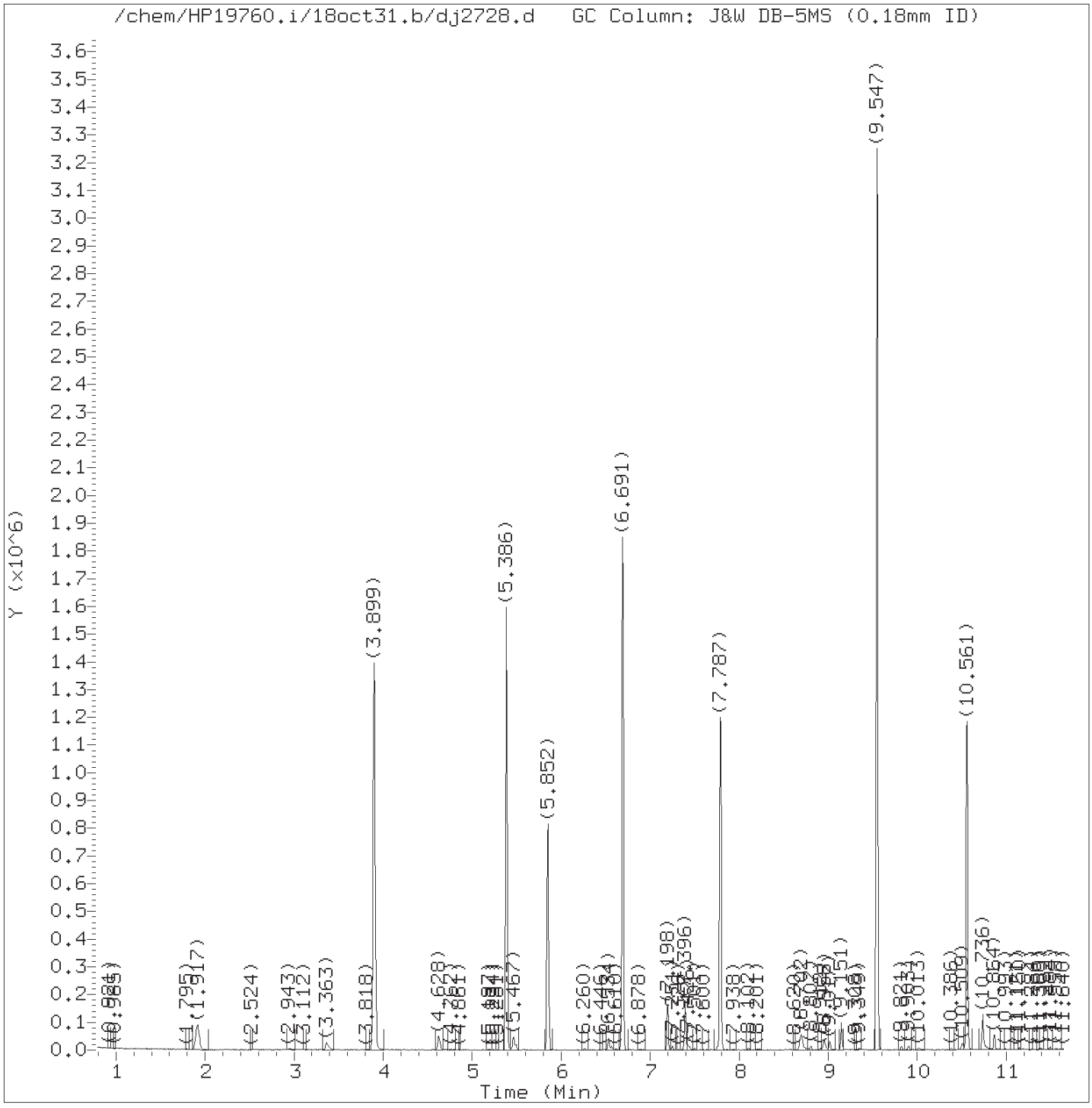
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 223 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
96) 2-Chloronaphthalene	(3)				Not Detected					0.1
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
112) 3-Nitroaniline	(3)				Not Detected					0.8
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
149) Pentachlorophenol	(4)				Not Detected					0.3
163) Carbazole	(4)				Not Detected					0.1
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
205) Di-n-octylphthalate	(6)				Not Detected					1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

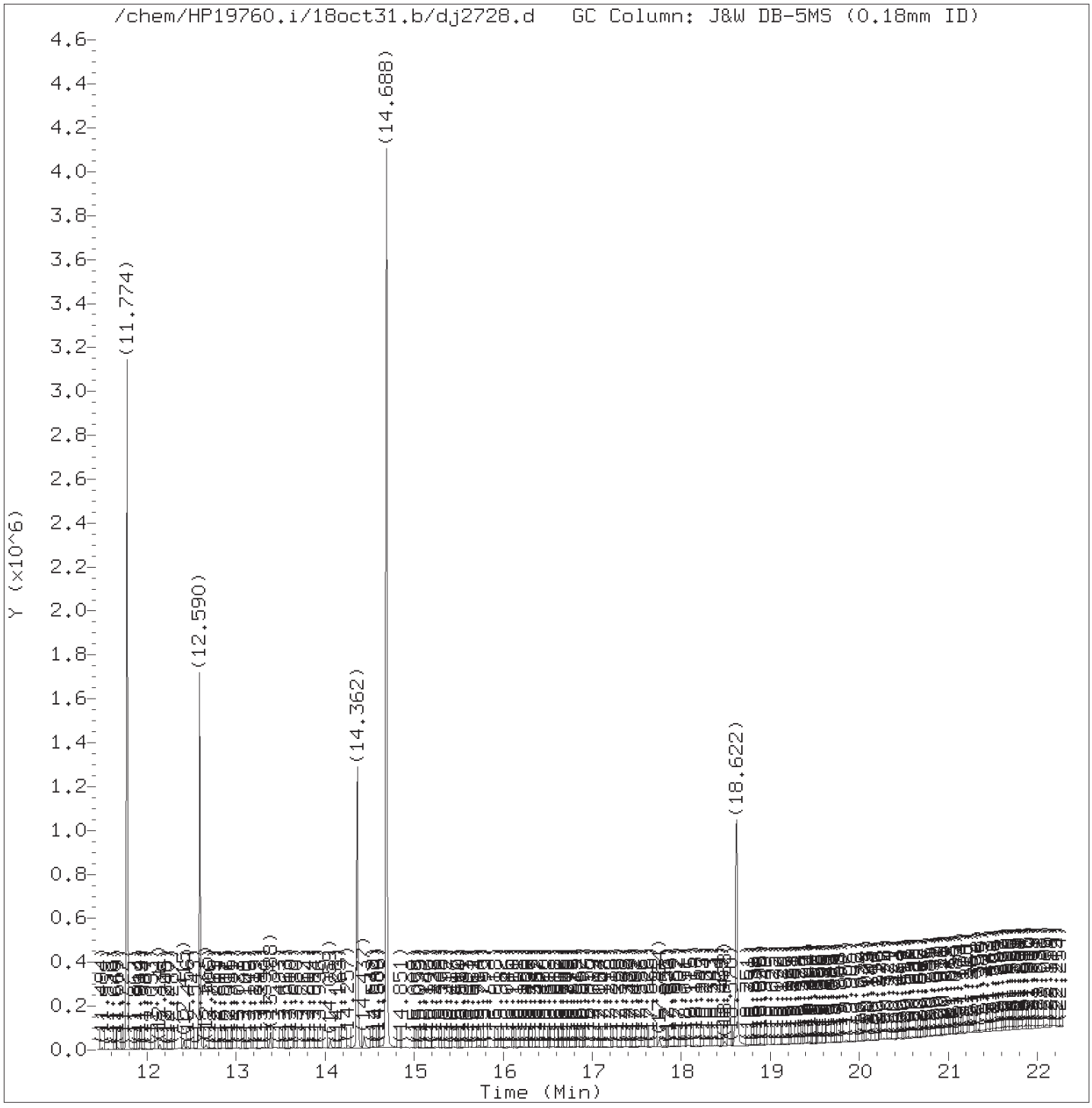
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2728.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 18:15 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:25 art12405

Sample Name: GKPR1 Lab Sample ID: 9861920

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2728.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 18:15 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:25 art12405

Sample Name: GKPR1 Lab Sample ID: 9861920

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2728.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 18:15 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:25 art12405

Sample Name: GKPR1 Lab Sample ID: 9861920

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	3.899	112	752203	13.671
17)$Phenol-d6	(1)	5.386	99	799419	10.707
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	182749	5.000
44)$Nitrobenzene-d5	(2)	6.691	82	839832	13.011
65)*Naphthalene-d8	(2)	7.787	136	681610	5.000
93)$2-Fluorobiphenyl	(3)	9.547	172	1207608	12.320
113)*Acenaphthene-d10	(3)	10.556	164	306826	5.000
135)$2,4,6-Tribromophenol	(3)	11.780	330	313088	30.907
153)*Phenanthrene-d10	(4)	12.590	188	555383	5.000
175)*Pyrene-d10	(5)	14.362	212	504983	5.000
179)$Terphenyl-d14	(5)	14.688	244	1489563	17.730
213)*Perylene-d12	(6)	18.622	264	535370	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0110.d Injection date and time: **02-NOV-2018 02:55**
Data file Sample Info. Line: GKPR1RE;9861920RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:19 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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): 227 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	6.881(0.000)	1102	152	174362	(-6)	5.00	
68) Naphthalene-d8	8.860(0.000)	1472	136	647043	(-10)	5.00	
118) Acenaphthene-d10	11.700(0.000)	2003	164	335333	(-11)	5.00	
158) Phenanthrene-d10	13.626(0.000)	2363	188	665016	(-14)	5.00	
180) Pyrene-d10	15.653(0.005)	2742	212	711920	(-15)	5.00	
218) Perylene-d12	20.231(0.000)	3598	264	619738	(-18)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.950(0.000)	112	1132243	20.977	42%		19 - 119
18) Phenol-d6	(1)	6.351(0.001)	99	1124998	15.444	31%		10 - 72
45) Nitrobenzene-d5	(2)	7.737(0.000)	82	1232500	18.194	73%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.646(0.000)	172	2170100	19.363	77%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.748(0.000)	330	587358	44.702	89%		43 - 140
184) Terphenyl-d14	(5)	15.974(-0.001)	244	2503076	21.903	88%		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

Digitally signed by Kira N. Beck on 11/02/2018 at 07:21. Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov01a.b/lk0110.d Injection date and time: **02-NOV-2018 02:55**
Data file Sample Info. Line: GKPR1RE;9861920RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:19 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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))

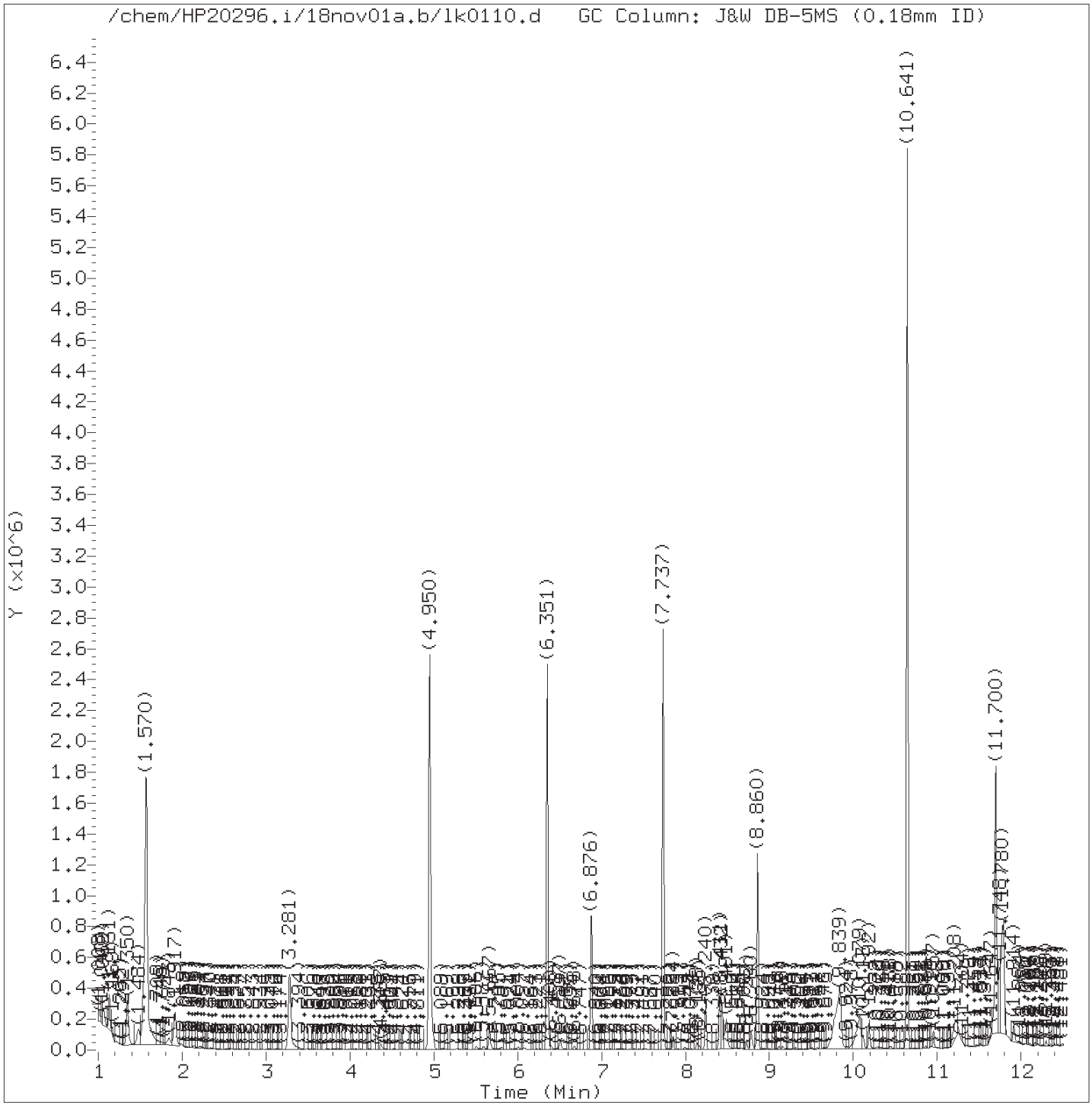
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 227 ml Volume Injected (Vi): 1 ul

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 11/02/2018 at 07:21. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

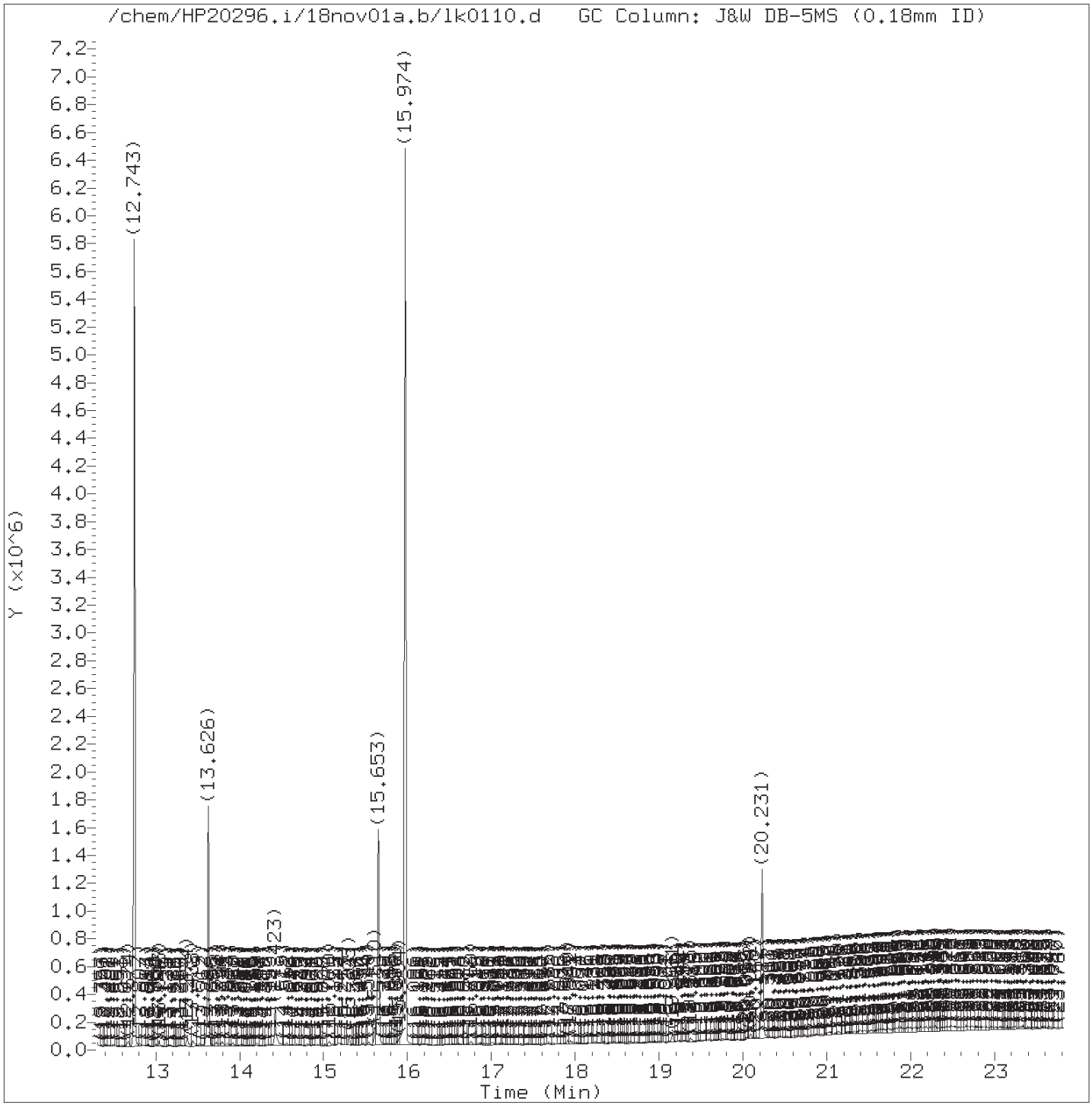
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0110.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 02:55 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:19 knb25316

Sample Name: GKPR1RE Lab Sample ID: 9861920RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0110.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 02:55 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:19 knb25316

Sample Name: GKPR1RE Lab Sample ID: 9861920RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0110.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 02:55 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:19 knb25316

Sample Name: GKPR1RE Lab Sample ID: 9861920RE

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.950	112	1132243	20.977
18)$Phenol-d6	(1)	6.351	99	1124998	15.444
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	174362	5.000
45)$Nitrobenzene-d5	(2)	7.737	82	1232500	18.194
68)*Naphthalene-d8	(2)	8.860	136	647043	5.000
96)$2-Fluorobiphenyl	(3)	10.646	172	2170100	19.363
118)*Acenaphthene-d10	(3)	11.700	164	335333	5.000
140)$2,4,6-Tribromophenol	(3)	12.748	330	587358	44.702
158)*Phenanthrene-d10	(4)	13.626	188	665016	5.000
180)*Pyrene-d10	(5)	15.653	212	711920	5.000
184)$Terphenyl-d14	(5)	15.974	244	2503076	21.903
218)*Perylene-d12	(6)	20.231	264	619738	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316

GKP05 Lancaster Laboratories, Inc. Analysis Summary for GC/MS Semivolatiles 9861921

Data file: /chem/HP19760.i/18oct31.b/dj2729.d Injection date and time: **31-OCT-2018 18:42**
Data file Sample Info. Line: GKP05;9861921;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 20:12 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 229 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852	(0.000)	869	152	200050	(28)	5.00	
65) Naphthalene-d8	7.787	(0.006)	1201	136	747092	(27)	5.00	
113) Acenaphthene-d10	10.556	(0.006)	1676	164	331069	(21)	5.00	
153) Phenanthrene-d10	12.590	(0.006)	2025	188	598038	(19)	5.00	
175) Pyrene-d10	14.362	(0.006)	2329	212	549433	(14)	5.00	
213) Perylene-d12	18.623	(0.006)	3060	264	582953	(15)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	3.899	(0.000)	112	527738	8.762	18%	*	19 - 119
17) Phenol-d6	(1)	5.386	(0.001)	99	587579	7.189	14%		10 - 72
44) Nitrobenzene-d5	(2)	6.691	(0.000)	82	530639	7.500	30%	*	44 - 120
93) 2-Fluorobiphenyl	(3)	9.547	(0.000)	172	774363	7.322	29%	*	44 - 119
135) 2,4,6-Tribromophenol	(3)	11.774	(0.000)	330	224410	20.531	41%	*	43 - 140
179) Terphenyl-d14	(5)	14.688	(0.000)	244	916786	10.030	40%	*	50 - 134

*** = Surrogate Standard % recovery outside QC limits.**

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)				Not Detected					0.5
18) Phenol	(1)				Not Detected					0.1
19) Aniline	(1)				Not Detected					0.8
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
27) Benzyl alcohol	(1)				Not Detected					3
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1

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Data file: /chem/HP19760.i/18oct31.b/dj2729.d Injection date and time: **31-OCT-2018 18:42**
Data file Sample Info. Line: GKP05;9861921;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 20:12 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

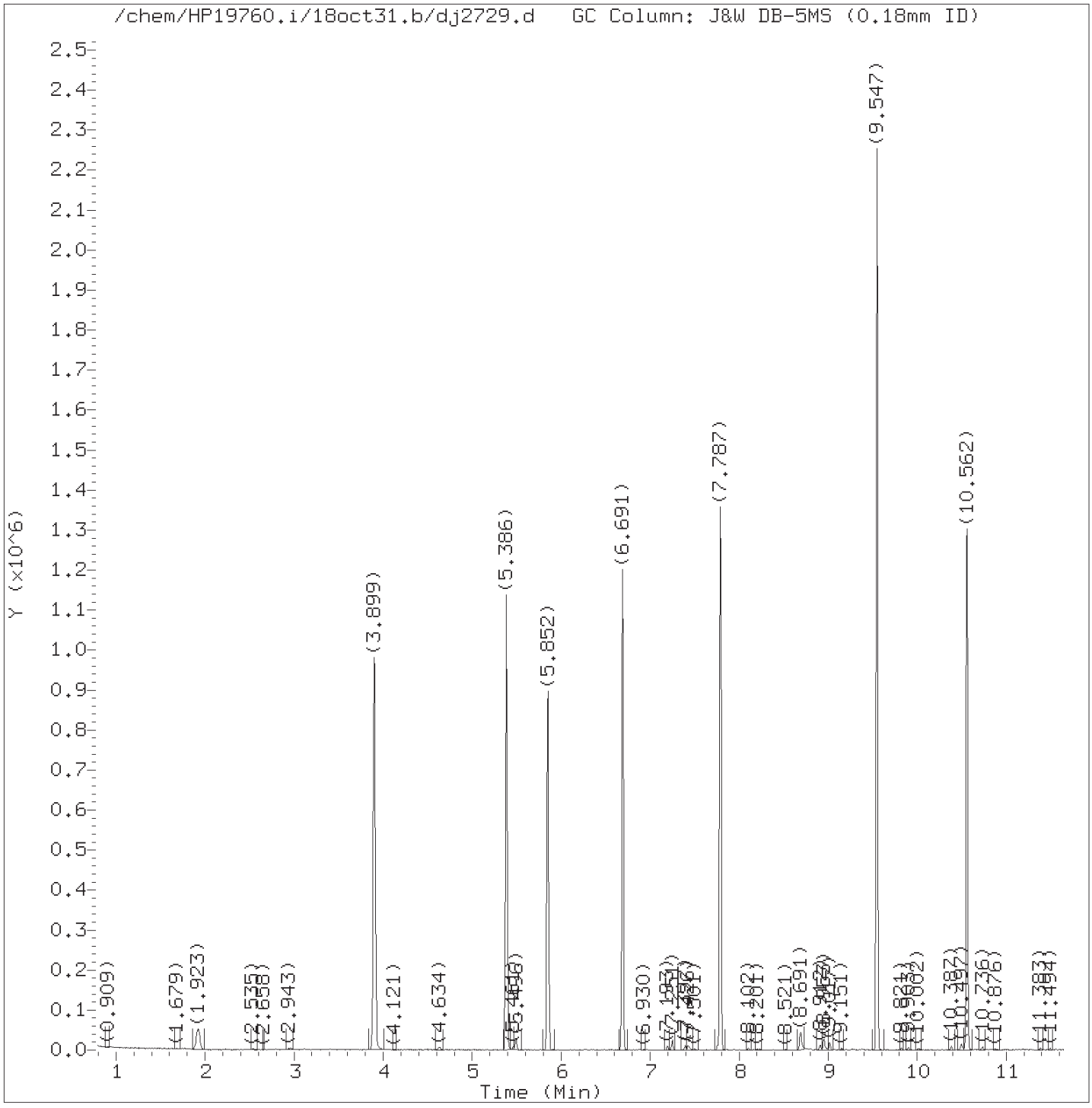
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 229 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
92) 2,4,5-Trichlorophenol	(3)			Not Detected					0.1
96) 2-Chloronaphthalene	(3)			Not Detected					0.1
100) 2-Nitroaniline	(3)			Not Detected					0.5
106) Dimethylphthalate	(3)			Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
112) 3-Nitroaniline	(3)			Not Detected					0.8
115) 2,4-Dinitrophenol	(3)			Not Detected					4
116) 4-Nitrophenol	(3)			Not Detected					3
118) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
119) Dibenzofuran	(3)			Not Detected					0.1
124) Diethylphthalate	(3)			Not Detected					0.5
127) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
129) 4-Nitroaniline	(3)			Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
131) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
149) Pentachlorophenol	(4)			Not Detected					0.3
163) Carbazole	(4)			Not Detected					0.1
193) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
205) Di-n-octylphthalate	(6)			Not Detected					1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:43. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

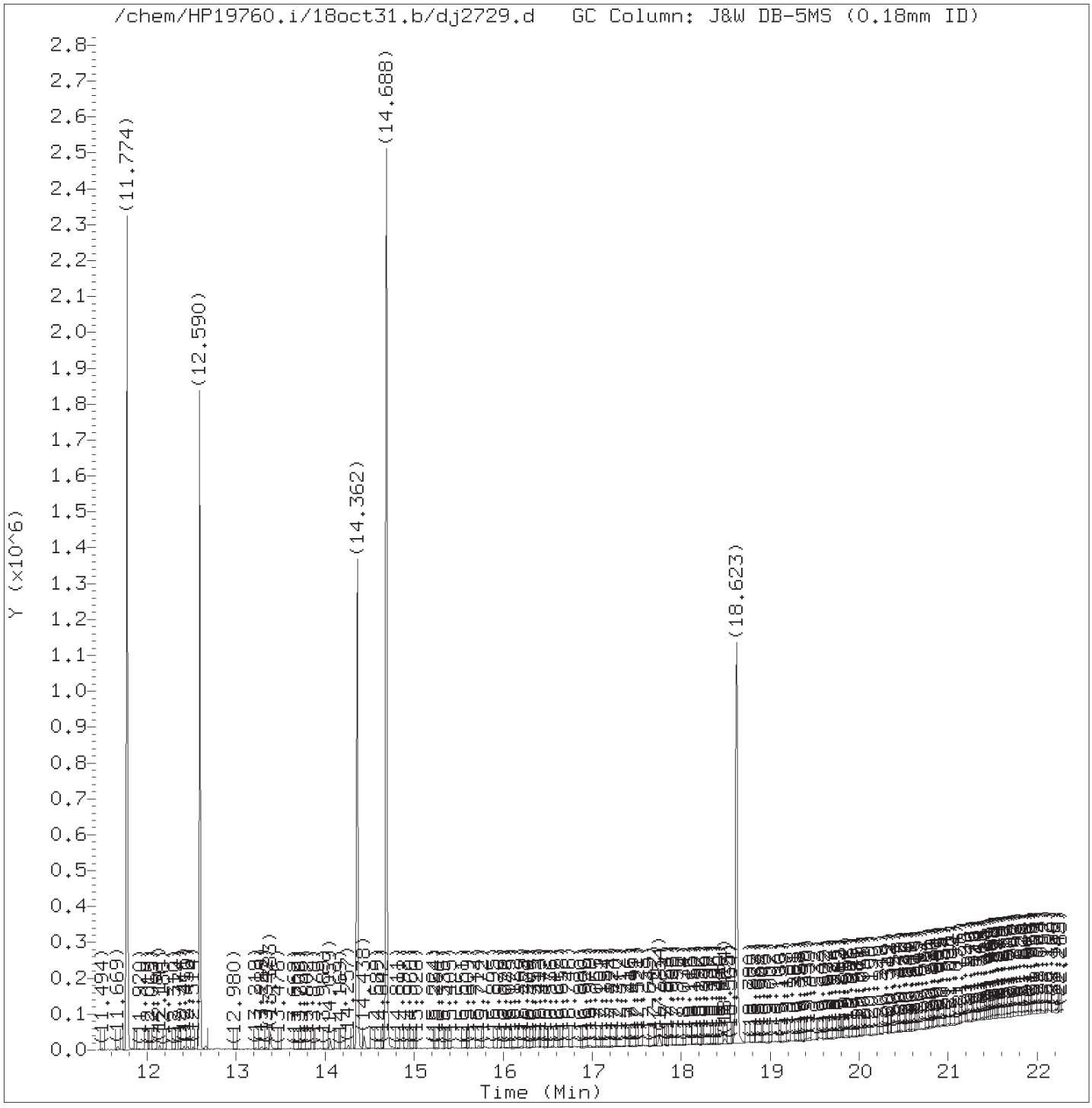
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2729.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 18:42 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 20:12 art12405

Sample Name: GKP05 Lab Sample ID: 9861921

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2729.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 18:42 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 20:12 art12405

Sample Name: GKP05 Lab Sample ID: 9861921

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2729.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 18:42 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 20:12 art12405

Sample Name: GKP05 Lab Sample ID: 9861921

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	3.899	112	527738	8.762
17)$Phenol-d6	(1)	5.386	99	587579	7.189
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	200050	5.000
44)$Nitrobenzene-d5	(2)	6.691	82	530639	7.500
65)*Naphthalene-d8	(2)	7.787	136	747092	5.000
93)$2-Fluorobiphenyl	(3)	9.547	172	774363	7.322
113)*Acenaphthene-d10	(3)	10.556	164	331069	5.000
135)$2,4,6-Tribromophenol	(3)	11.774	330	224410	20.531
153)*Phenanthrene-d10	(4)	12.590	188	598038	5.000
175)*Pyrene-d10	(5)	14.362	212	549433	5.000
179)$Terphenyl-d14	(5)	14.688	244	916786	10.030
213)*Perylene-d12	(6)	18.623	264	582953	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:43.
Target 3.5 esignature user ID: art12405

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0111.d Injection date and time: **02-NOV-2018 03:24**
Data file Sample Info. Line: GKP05RE;9861921RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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	6.881(0.000)	1102	152	165706 (-11)	5.00	
68) Naphthalene-d8	8.860(0.000)	1472	136	638538 (-11)	5.00	
118) Acenaphthene-d10	11.700(0.000)	2003	164	327736 (-13)	5.00	
158) Phenanthrene-d10	13.626(0.000)	2363	188	677882 (-13)	5.00	
180) Pyrene-d10	15.653(0.005)	2742	212	684127 (-18)	5.00	
218) Perylene-d12	20.231(0.000)	3598	264	614168 (-19)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.950(0.000)	112	1087547	21.201	42%		19 - 119
18) Phenol-d6	(1)	6.351(0.001)	99	1088850	15.729	31%		10 - 72
45) Nitrobenzene-d5	(2)	7.731(0.001)	82	1129842	16.900	68%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.646(0.000)	172	2070208	18.900	76%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.748(0.000)	330	658019	51.241	102%		43 - 140
184) Terphenyl-d14	(5)	15.974(-0.001)	244	2437951	22.200	89%		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

Digitally signed by Kira N. Beck on 11/02/2018 at 07:21. Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov01a.b/lk0111.d Injection date and time: **02-NOV-2018 03:24**
Data file Sample Info. Line: GKP05RE;9861921RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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))

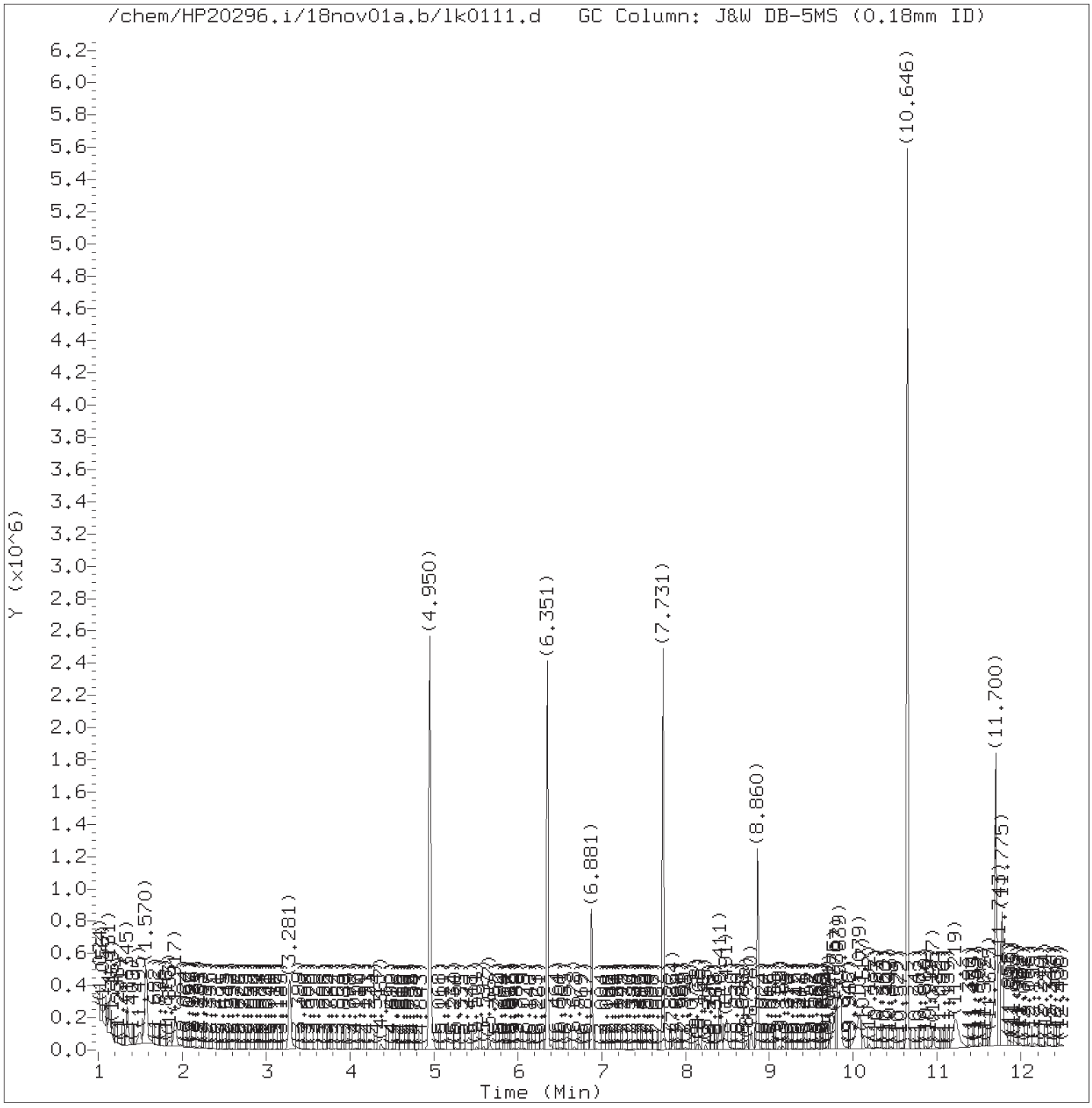
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

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 11/02/2018 at 07:21. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

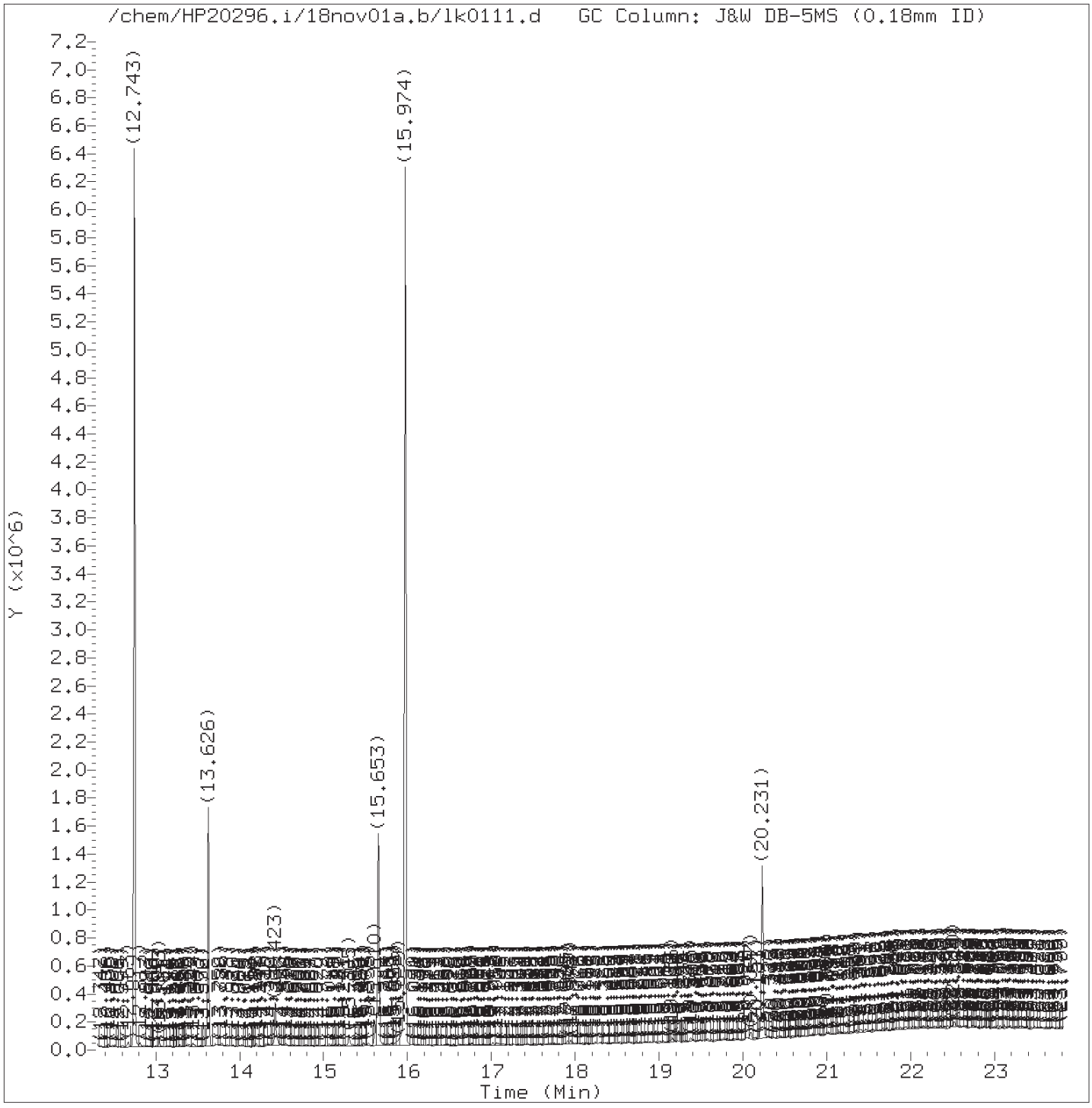
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0111.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 03:24 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Sample Name: GKP05RE Lab Sample ID: 9861921RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0111.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 03:24 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Sample Name: GKP05RE Lab Sample ID: 9861921RE

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on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0111.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 03:24 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Sample Name: GKP05RE Lab Sample ID: 9861921RE

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.950	112	1087547	21.201
18)$Phenol-d6	(1)	6.351	99	1088850	15.729
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	165706	5.000
45)$Nitrobenzene-d5	(2)	7.731	82	1129842	16.900
68)*Naphthalene-d8	(2)	8.860	136	638538	5.000
96)$2-Fluorobiphenyl	(3)	10.646	172	2070208	18.900
118)*Acenaphthene-d10	(3)	11.700	164	327736	5.000
140)$2,4,6-Tribromophenol	(3)	12.748	330	658019	51.241
158)*Phenanthrene-d10	(4)	13.626	188	677882	5.000
180)*Pyrene-d10	(5)	15.653	212	684127	5.000
184)$Terphenyl-d14	(5)	15.974	244	2437951	22.200
218)*Perylene-d12	(6)	20.231	264	614168	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18oct31.b/dj2730.d
Data file Sample Info. Line: GKP02;9861922;1;0;SAMPLE;;DOD26;
Date, time and analyst ID of latest file update: 31-Oct-2018 19:58 art12405

Injection date and time: **31-OCT-2018 19:10**
Instrument ID: **HP19760.i** Batch: **18297WAE**

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 237 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852	(0.000)	869	152	194214	(25)	5.00	
65) Naphthalene-d8	7.787	(0.006)	1201	136	736513	(25)	5.00	
113) Acenaphthene-d10	10.561	(0.000)	1677	164	324741	(19)	5.00	
153) Phenanthrene-d10	12.590	(0.006)	2025	188	593899	(19)	5.00	
175) Pyrene-d10	14.362	(0.006)	2329	212	545980	(13)	5.00	
213) Perylene-d12	18.622	(0.006)	3060	264	573009	(13)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	3.899	(0.000)	112	911754	15.592	31%		19 - 119
17) Phenol-d6	(1)	5.386	(0.001)	99	1156938	14.581	29%		10 - 72
44) Nitrobenzene-d5	(2)	6.691	(0.000)	82	923757	13.245	53%		44 - 120
93) 2-Fluorobiphenyl	(3)	9.547	(0.001)	172	1363789	13.146	53%		44 - 119
135) 2,4,6-Tribromophenol	(3)	11.780	(0.000)	330	400049	37.313	75%		43 - 140
179) Terphenyl-d14	(5)	14.688	(0.000)	244	1496504	16.475	66%		50 - 134

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)				Not Detected					0.5
18) Phenol	(1)				Not Detected					0.1
19) Aniline	(1)				Not Detected					0.8
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
27) Benzyl alcohol	(1)				Not Detected					3
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1

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Data file: /chem/HP19760.i/18oct31.b/dj2730.d Injection date and time: **31-OCT-2018 19:10**
Data file Sample Info. Line: GKP02;9861922;1;0;SAMPLE;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 19:58 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

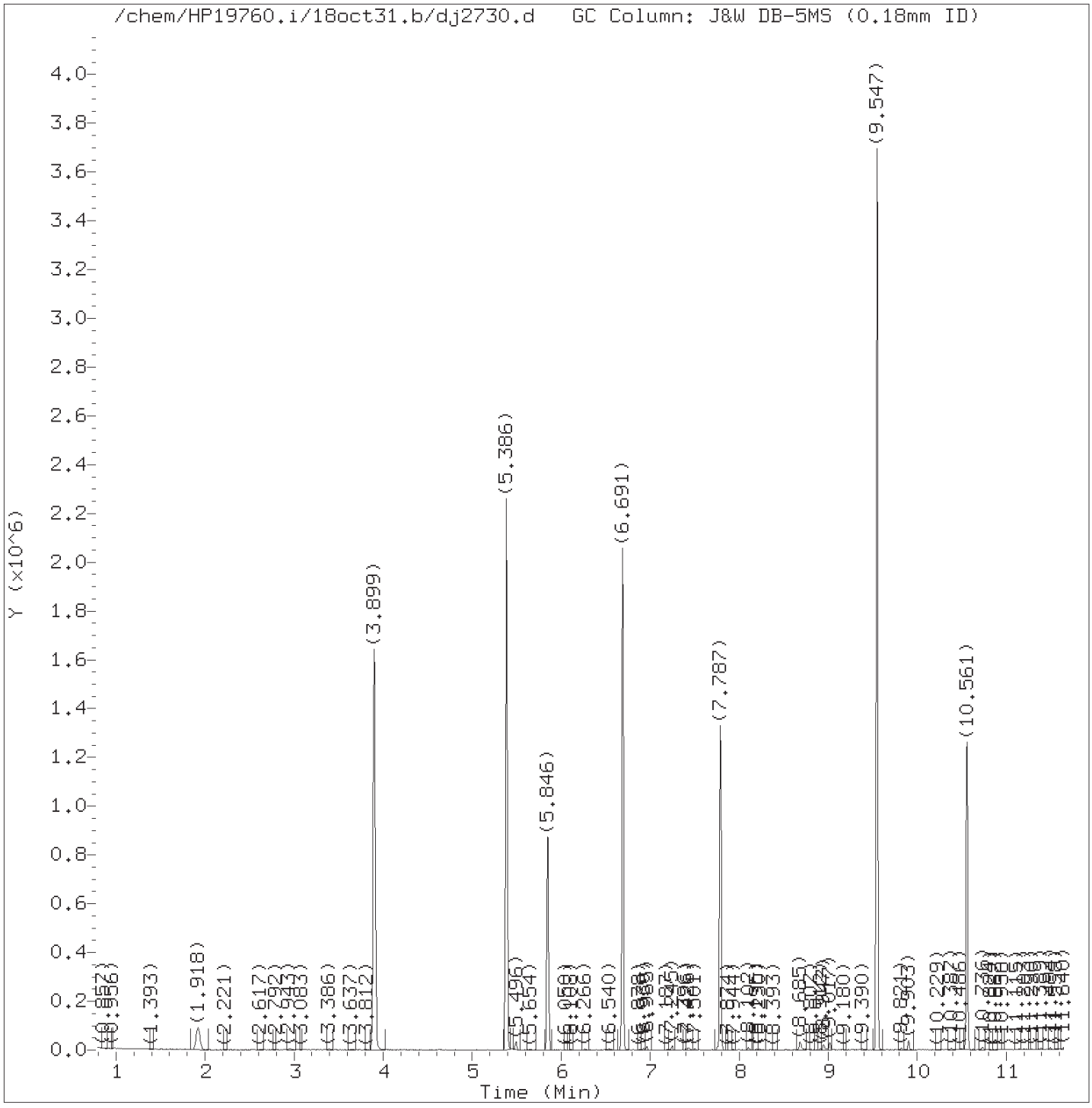
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 237 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
96) 2-Chloronaphthalene	(3)				Not Detected					0.1
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
112) 3-Nitroaniline	(3)				Not Detected					0.8
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
149) Pentachlorophenol	(4)				Not Detected					0.3
163) Carbazole	(4)				Not Detected					0.1
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
205) Di-n-octylphthalate	(6)				Not Detected					1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 20:44. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

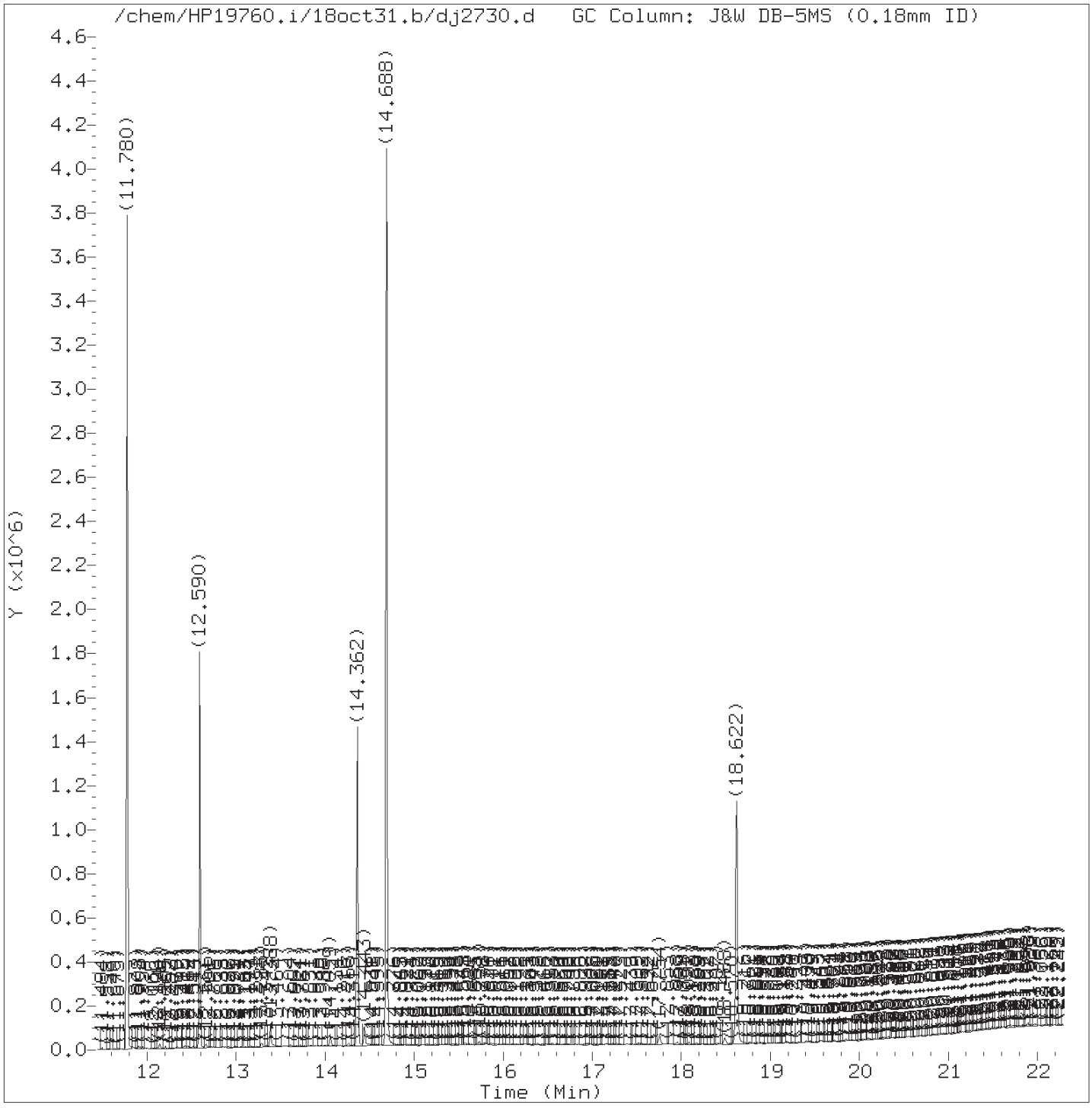
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2730.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 19:10 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:58 art12405

Sample Name: GKP02 Lab Sample ID: 9861922

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:44.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2730.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 19:10 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:58 art12405

Sample Name: GKP02 Lab Sample ID: 9861922

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:44.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2730.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 19:10 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 19:58 art12405

Sample Name: GKP02 Lab Sample ID: 9861922

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	3.899	112	911754	15.592
17)$Phenol-d6	(1)	5.386	99	1156938	14.581
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	194214	5.000
44)$Nitrobenzene-d5	(2)	6.691	82	923757	13.245
65)*Naphthalene-d8	(2)	7.787	136	736513	5.000
93)$2-Fluorobiphenyl	(3)	9.547	172	1363789	13.146
113)*Acenaphthene-d10	(3)	10.561	164	324741	5.000
135)$2,4,6-Tribromophenol	(3)	11.780	330	400049	37.313
153)*Phenanthrene-d10	(4)	12.590	188	593899	5.000
175)*Pyrene-d10	(5)	14.362	212	545980	5.000
179)$Terphenyl-d14	(5)	14.688	244	1496504	16.475
213)*Perylene-d12	(6)	18.622	264	573009	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:44.
Target 3.5 esignature user ID: art12405

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0112.d Injection date and time: **02-NOV-2018 03:53**
Data file Sample Info. Line: GKP02RE;9861922RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:20 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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	6.881	(0.000)	1102	152	162193	(-12)	5.00	
68) Naphthalene-d8	8.860	(0.000)	1472	136	618152	(-14)	5.00	
118) Acenaphthene-d10	11.700	(0.000)	2003	164	325936	(-14)	5.00	
158) Phenanthrene-d10	13.626	(0.000)	2363	188	659862	(-15)	5.00	
180) Pyrene-d10	15.653	(0.006)	2742	212	684246	(-18)	5.00	
218) Perylene-d12	20.231	(0.000)	3598	264	603250	(-20)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.955	(-0.001)	112	913015	18.184	36%		19 - 119
18) Phenol-d6	(1)	6.351	(0.001)	99	982651	14.502	29%		10 - 72
45) Nitrobenzene-d5	(2)	7.737	(0.000)	82	1123035	17.353	69%		44 - 120
96) 2-Fluorobiphenyl	(3)	10.646	(0.000)	172	2029359	18.629	75%		44 - 119
140) 2,4,6-Tribromophenol	(3)	12.748	(0.000)	330	563040	44.087	88%		43 - 140
184) Terphenyl-d14	(5)	15.974	(-0.001)	244	2309846	21.030	84%		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

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0112.d Injection date and time: **02-NOV-2018 03:53**
Data file Sample Info. Line: GKP02RE;9861922RE;1;0;SAMPLE;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:20 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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))

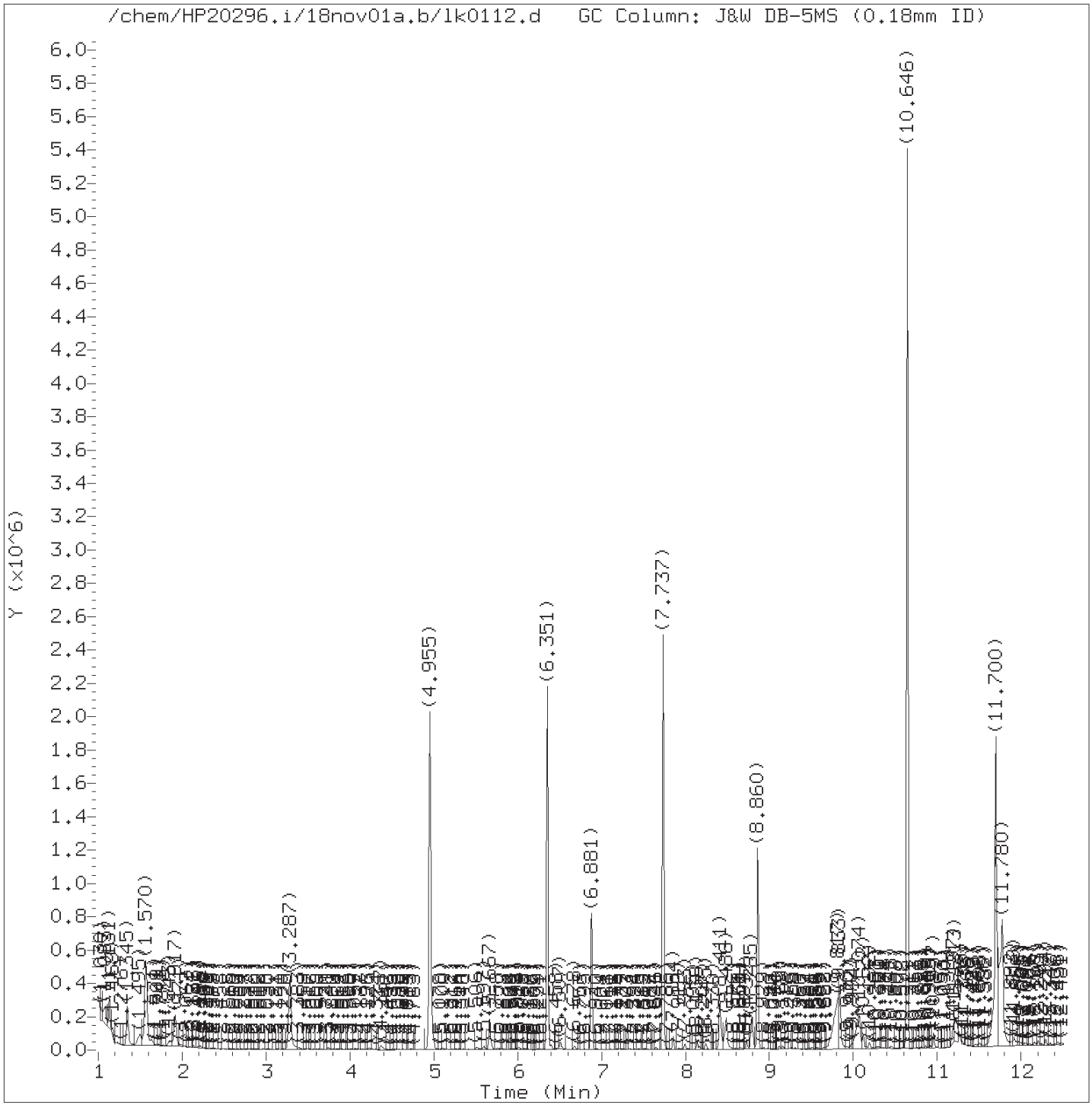
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

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 11/02/2018 at 07:21. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

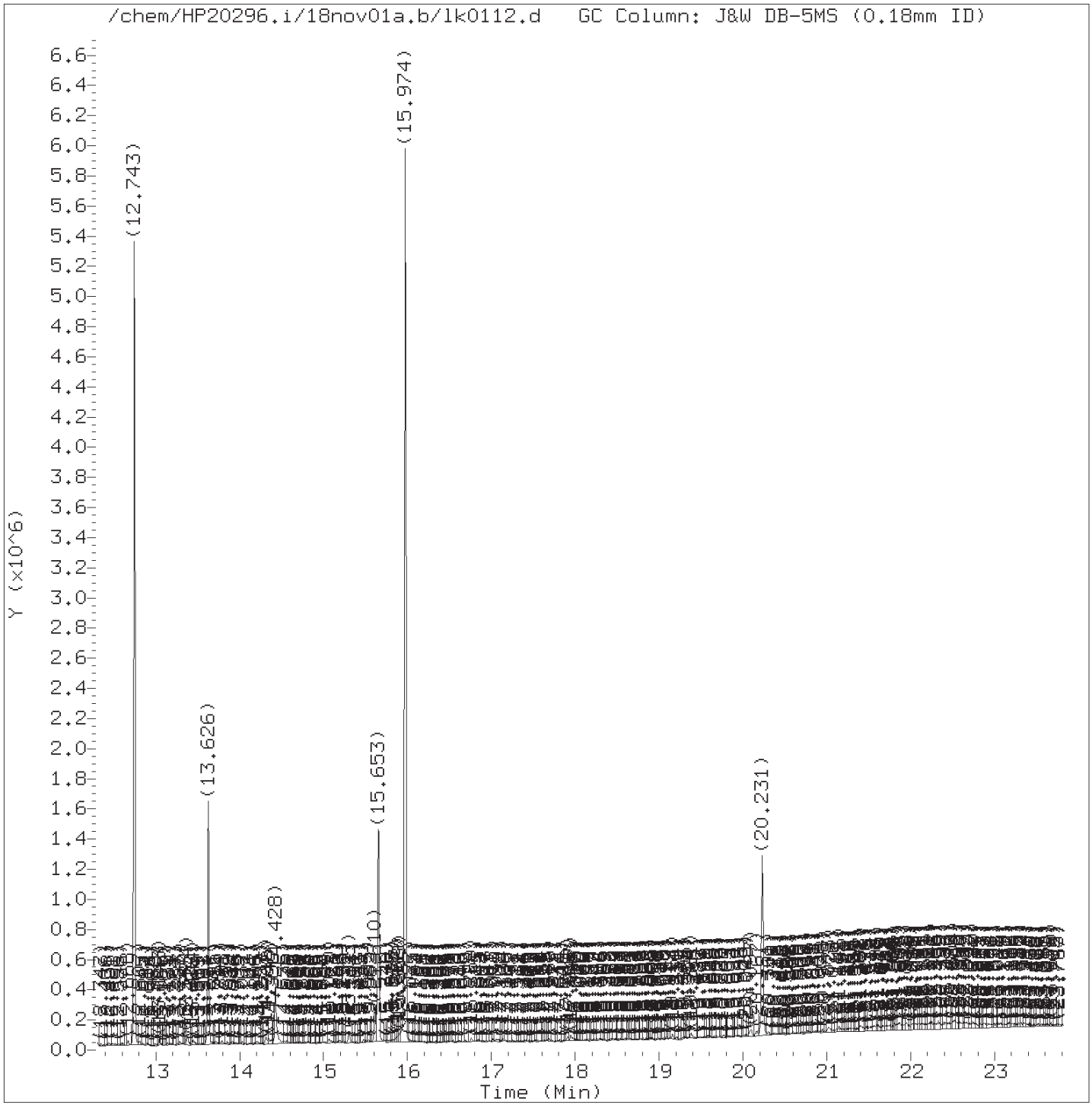
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0112.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 03:53 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:20 knb25316

Sample Name: GKP02RE Lab Sample ID: 9861922RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0112.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 03:53 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:20 knb25316

Sample Name: GKP02RE Lab Sample ID: 9861922RE

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0112.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 03:53 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:20 knb25316

Sample Name: GKP02RE Lab Sample ID: 9861922RE

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.955	112	913015	18.184
18)$Phenol-d6	(1)	6.351	99	982651	14.502
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	162193	5.000
45)$Nitrobenzene-d5	(2)	7.737	82	1123035	17.353
68)*Naphthalene-d8	(2)	8.860	136	618152	5.000
96)$2-Fluorobiphenyl	(3)	10.646	172	2029359	18.629
118)*Acenaphthene-d10	(3)	11.700	164	325936	5.000
140)$2,4,6-Tribromophenol	(3)	12.748	330	563040	44.087
158)*Phenanthrene-d10	(4)	13.626	188	659862	5.000
180)*Pyrene-d10	(5)	15.653	212	684246	5.000
184)$Terphenyl-d14	(5)	15.974	244	2309846	21.030
218)*Perylene-d12	(6)	20.231	264	603250	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:21.
Target 3.5 esignature user ID: knb25316

Standards Data

Semivolatiles by GC/MS

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP19760 **HP #04**

Data Directory Path is - D:\data\18sep21\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
art12405	DI1300.D	rvDFTPP2388	09/21/2018	16:51		
art12405	DI1300a.D	rvDFTPP2388	09/21/2018	17:04		
art12405	DI1301.D	rvSTD2648	09/21/2018	17:33		
art12405	DI1302.D	rvSTD2648	09/21/2018	18:19		
art12405	DI1303.D	rvSTD2648	09/21/2018	18:47		
art12405	DI1304.D	rvSTD2648	09/21/2018	19:16		
art12405	DI1305.D	rvSTD2648	09/21/2018	19:45		
art12405	DI1306.D	rvSTD2648	09/21/2018	20:13		
art12405	DI1307.D	rvSTD2648	09/21/2018	20:42		
art12405	DI1308.D	rvSTD2648	09/21/2018	21:11		

SAMPLE INFORMATION SUMMARY

BATCH: /chem/HP19760.i/18oct31.b

Data File	Injection Date	Sample Type	Dil Factor	Inst ID	Method	Method Batch
dj2700.d	31-OCT-2018 09:53	DFTPP	1.00	HP19760	rvdftpp8270d.m	18oct31.b
dj2701.d	31-OCT-2018 10:10	Continuing Cal	1.00	HP19760	rv8270d.m	18oct31.b
dj2710.d	31-OCT-2018 12:01	DFTPP	1.00	HP19760	rvdftpp8270d.m	18oct31.b
dj2720a.d	31-OCT-2018 12:20	DFTPP	1.00	HP19760	rvdftpp8270d.m	18oct31.b
dj2720b.d	31-OCT-2018 13:13	DFTPP	1.00	HP19760	rvdftpp8270d.m	18oct31.b
dj2721b.d	31-OCT-2018 14:49	Continuing Cal	1.00	HP19760	rv8270d.m	18oct31.b
dj2722.d	31-OCT-2018 15:31	BLANK	1.00	HP19760	rv8270d.m	18oct31.b
dj2723.d	31-OCT-2018 15:58	LCS	1.00	HP19760	rv8270d.m	18oct31.b
dj2724.d	31-OCT-2018 16:26	LCSD	1.00	HP19760	rv8270d.m	18oct31.b
dj2725.d	31-OCT-2018 16:53	Unknown	1.00	HP19760	rv8270d.m	18oct31.b
dj2726.d	31-OCT-2018 17:20	Unknown	1.00	HP19760	rv8270d.m	18oct31.b
dj2727.d	31-OCT-2018 17:48	Unknown	1.00	HP19760	rv8270d.m	18oct31.b
dj2728.d	31-OCT-2018 18:15	Unknown	1.00	HP19760	rv8270d.m	18oct31.b
dj2729.d	31-OCT-2018 18:42	Unknown	1.00	HP19760	rv8270d.m	18oct31.b

Data File	Matrix	Fraction	Lab Sample ID	Lab Prep Batch	Client Sample ID	Client Sample Group
dj2700.d	LIQUID	SV	RVDFTPP2878	18oct31	DFTPP	18oct31
dj2701.d	LIQUID	SV	RVSTD2648	18oct31	SSTD7.5	18oct31
dj2710.d	LIQUID	SV	RVDFTPP2878	18oct31	DFTPP	18oct31
dj2720a.d	LIQUID	SV	RVDFTPP2878	18oct31	DFTPP	18oct31
dj2720b.d	LIQUID	SV	RVDFTPP2878	18oct31	DFTPP	18oct31
dj2721b.d	LIQUID	SV	RVSTD2648	18oct31	SSTD7.5	18oct31
dj2722.d	LIQUID	SV	SBLKWE297	18297WAE	SBLKWE297	18oct31
dj2723.d	LIQUID	SV	297WELCS	18297WAE	297WELCS	18oct31
dj2724.d	LIQUID	SV	297WELCSD	18297WAE	297WELCSD	18oct31
dj2725.d	LIQUID	SV	9861917	18297WAE	GKP01	18oct31
dj2726.d	LIQUID	SV	9861918	18297WAE	GKP03	18oct31
dj2727.d	LIQUID	SV	9861919	18297WAE	GKP04	18oct31
dj2728.d	LIQUID	SV	9861920	18297WAE	GKPR1	18oct31
dj2729.d	LIQUID	SV	9861921	18297WAE	GKP05	18oct31

Data File	Compound Sublist	Spike List File	Sample Ref #	QC Group Ref #	Init Cal Ref #	Batch Ref #
dj2700.d	all.sub		202542184	202542185	200002637	202542183
dj2701.d	all1.sub		202542225	202542185	202493605	202542224
dj2710.d	all.sub		202542310	202542311	200002637	202542183
dj2720a.d	all.sub		202542343	202542344	200002637	202542183
dj2720b.d	all.sub		202542395	202542396	200002637	202542183
dj2721b.d	all1.sub		202542476	202542396	202493605	202542224
dj2722.d	25788M.sub		202542513	202542396	202493605	202542224
dj2723.d	25788M.sub		202542534	202542396	202493605	202542224
dj2724.d	25788M.sub		202542559	202542396	202493605	202542224
dj2725.d	25788M.sub		202542586	202542396	202493605	202542224
dj2726.d	25788M.sub		202542644	202542396	202493605	202542224
dj2727.d	25788M.sub		202542680	202542396	202493605	202542224
dj2728.d	25788M.sub		202542697	202542396	202493605	202542224
dj2729.d	25788M.sub		202542723	202542396	202493605	202542224

SAMPLE INFORMATION SUMMARY

BATCH: /chem/HP19760.i/18oct31.b

Data File	Injection Date	Sample Type	Dil Factor	Inst ID	Method	Method Batch
dj2730.d	31-OCT-2018 19:10	Unknown	1.00	HP19760	rv8270d.m	18oct31.b
dj2731.d	31-OCT-2018 19:37	LCS	1.00	HP19760	rv8270d.m	18oct31.b

Data File	Matrix	Fraction	Lab Sample ID	Lab Prep Batch	Client Sample ID	Client Sample Group
dj2730.d	LIQUID	SV	9861922	18297WAE	GKP02	18oct31
dj2731.d	LIQUID	SV	rvSTD2648	18oct31	SECC12.5	18oct31

Data File	Compound Sublist	Spike List File	Sample Ref #	QC Group Ref #	Init Cal Ref #	Batch Ref #
dj2730.d	25788M.sub		202542738	202542396	202493605	202542224
dj2731.d	25788M.sub		202542778	202542396	202493605	202542224

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\18nov01a\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
art12405	LK0100.D	RVDFTPP2878	11/01/2018	20:44		
art12405	LK0100a.D	RVDFTPP2878	11/01/2018	20:59		
art12405	LK0100b.D	RVDFTPP2878	11/01/2018	21:28		
art12405	LK0100c.D	RVDFTPP2878	11/01/2018	21:41		
art12405	LK0101.D	RVSTD2648	11/01/2018	22:02		
art12405	LK0102.D	SBLKWK297	11/01/2018	23:04	18297WAK	
art12405	LK0103.D	297WKLCS	11/01/2018	23:33	18297WAK	
art12405	LK0104.D	SBLKWH304	11/02/2018	00:02	18304WAH	
art12405	LK0105.D	304WHLCS	11/02/2018	00:31	18304WAH	
art12405	LK0106.D	304WHLCSD	11/02/2018	01:00	18304WAH	
art12405	LK0107.D	9861917RE	11/02/2018	01:28	18304WAH	
art12405	LK0108.D	9861918RE	11/02/2018	01:57	18304WAH	
art12405	LK0109.D	9861919RE	11/02/2018	02:26	18304WAH	
art12405	LK0110.D	9861920RE	11/02/2018	02:55	18304WAH	
art12405	LK0111.D	9861921RE	11/02/2018	03:24	18304WAH	
art12405	LK0112.D	9861922RE	11/02/2018	03:53	18304WAH	
art12405	LK0133.D	RVSTD2648	11/02/2018	04:21		
art12405	LK0113.D	9863102	11/02/2018	04:50	18297WAM	
art12405	LK0114.D	9863103	11/02/2018	05:19	18297WAM	
art12405	LK0115.D	9863104	11/02/2018	05:48	18297WAM	

Data File: /chem/HP19760.i/18sep21.b/di1300a.d

Date : 21-SEP-2018 17:04

Client ID: DFTPP12.5

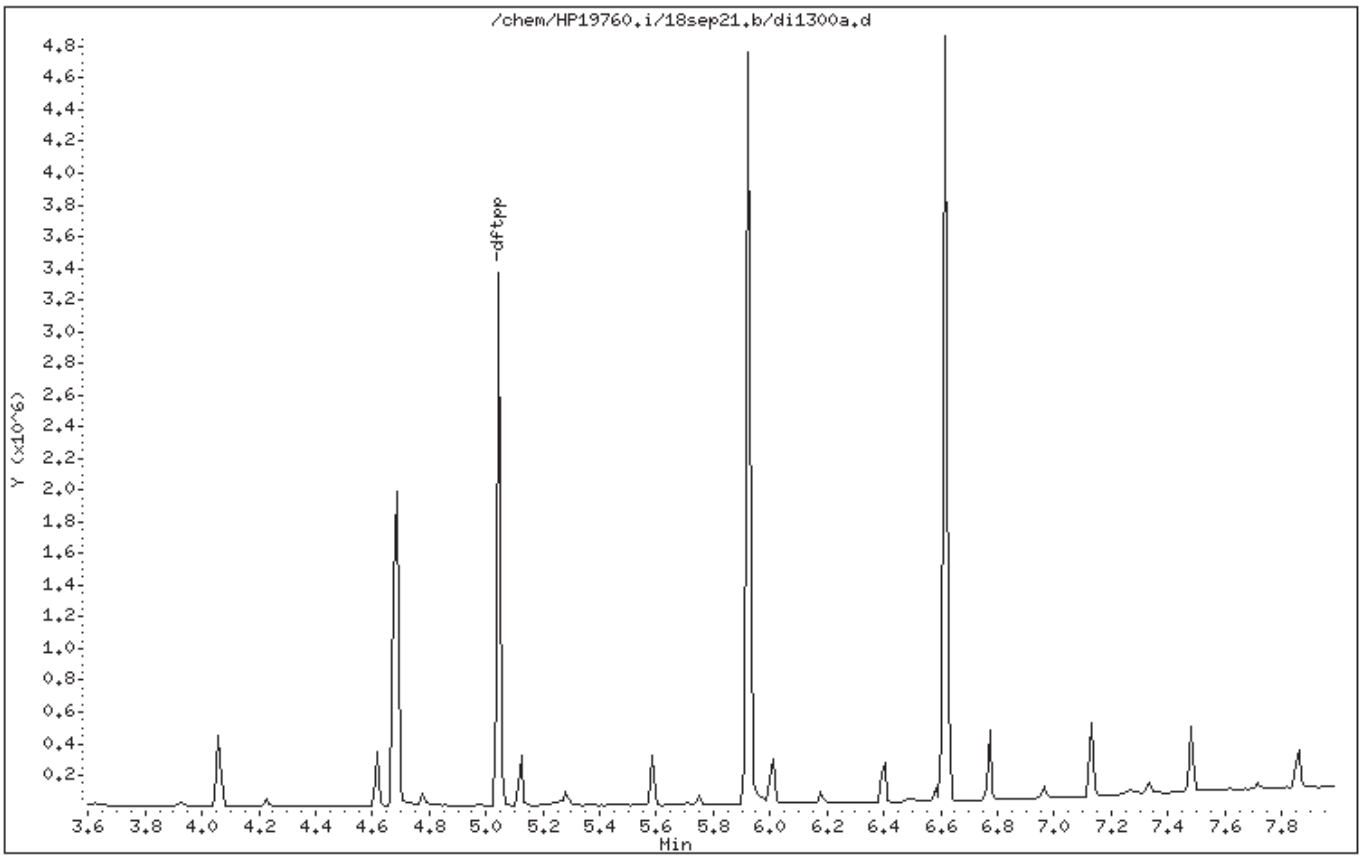
Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2388;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Edward Monborne on 09/23/2018 at 07:57.
Target 3.5 esignature user ID: em10340

Data File: /chem/HP19760.i/18sep21.b/di1300a.d

Date : 21-SEP-2018 17:04

Client ID: DFTPP12.5

Instrument: HP19760.i

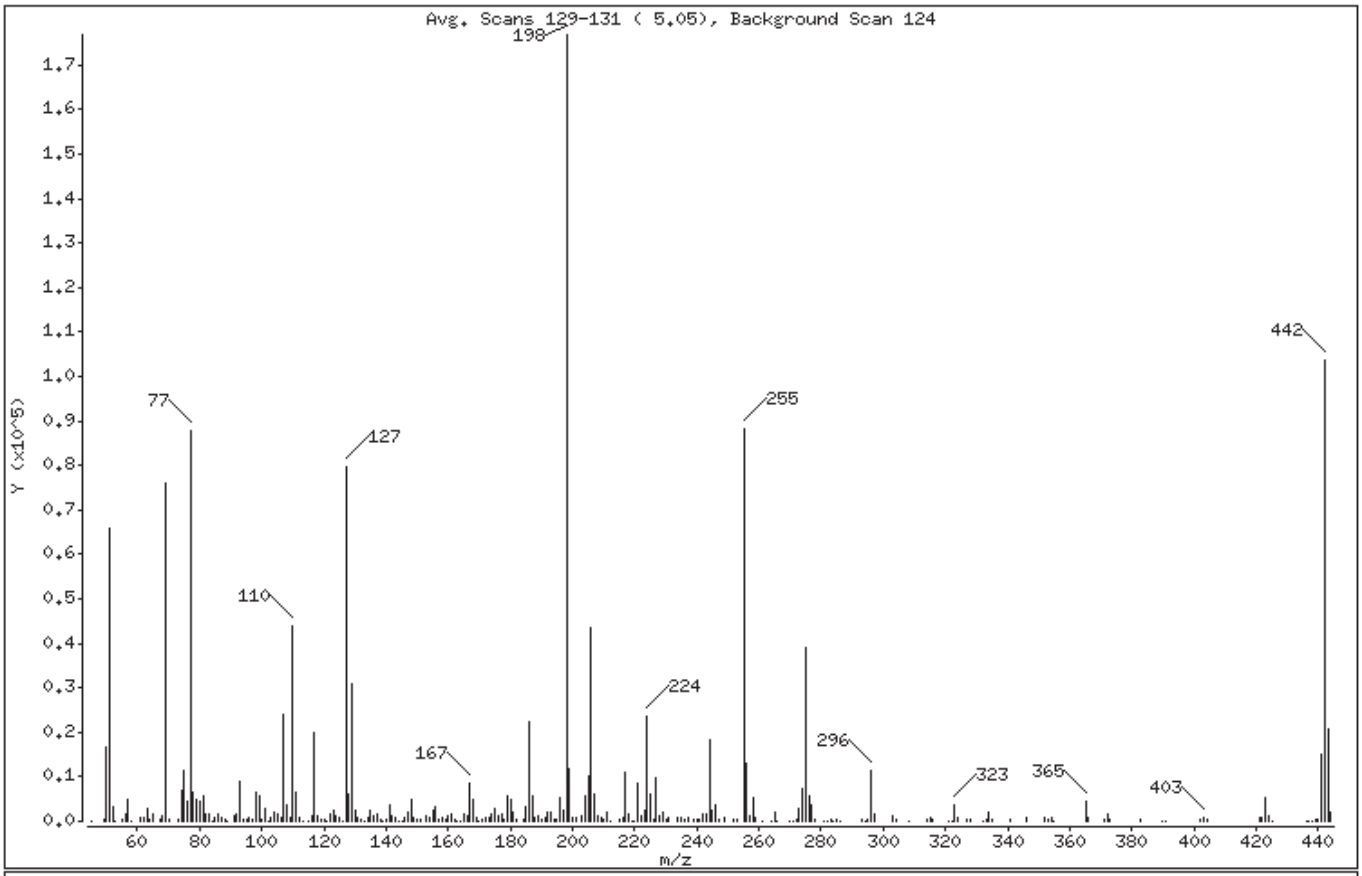
Sample Info: DFTPP12.5;rvDFTPP2388;1;3;DFTPP;

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	37.16
68	Less than 2.00% of mass 69	0.78 (1.81)
69	Mass 69 relative abundance	43.06
70	Less than 2.00% of mass 69	0.28 (0.65)
127	10.00 - 80.00% of mass 198	45.05
197	Less than 2.00% of mass 198	1.49
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	22.09
365	Greater than 1.00% of mass 198	2.46
441	0.01 - 24.00% of mass 442	8.57 (14.61)
442	50.00 - 99.99% of mass 198	58.65
443	15.00 - 24.00% of mass 442	11.77 (20.08)

Digitally signed by Edward Monborne on 09/23/2018 at 07:57.
Target 3.5 esignature user ID: em10340

Date : 21-SEP-2018 17:04

Client ID: DFTPP12.5 Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2388;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: di1300a.d
Spectrum: Avg. Scans 129-131 (5.05), Background Scan 124
Location of Maximum: 198.00
Number of points: 263

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	111	122.00	1537	190.00	242	272.00	269
49.00	397	123.00	2428	191.00	776	273.00	2848
50.00	16856	124.00	1155	192.00	2026	274.00	7504
51.00	65712	125.00	933	193.00	2149	275.00	39064
52.00	3362	126.00	102	194.00	436	276.00	5628
53.00	193	127.00	79664	195.00	289	277.00	3527
55.00	602	128.00	6049	196.00	5141	278.00	455
56.00	1691	129.00	30968	197.00	2635	281.00	79
57.00	4682	130.00	2641	198.00	176832	282.00	138
58.00	141	131.00	732	199.00	11982	283.00	493
61.00	750	132.00	296	200.00	946	284.00	159
62.00	967	133.00	66	201.00	890	285.00	470
63.00	2669	134.00	882	203.00	1148	286.00	121
64.00	407	135.00	2500	204.00	5880	293.00	563
65.00	1672	136.00	1106	205.00	10246	294.00	138
67.00	231	137.00	1524	206.00	43312	295.00	350
68.00	1378	138.00	251	207.00	6122	296.00	11485
69.00	76152	139.00	113	208.00	1204	297.00	1566
70.00	496	140.00	349	209.00	623	303.00	1151
73.00	281	141.00	3789	210.00	585	304.00	314
74.00	7047	142.00	1154	211.00	1862	308.00	127
75.00	11440	143.00	825	212.00	151	314.00	400
76.00	4390	144.00	180	215.00	466	315.00	966
77.00	87872	145.00	193	216.00	789	316.00	513
78.00	6401	146.00	664	217.00	11029	321.00	168
79.00	5016	147.00	2149	218.00	1551	322.00	106
80.00	4356	148.00	5071	219.00	178	323.00	3552
81.00	5868	149.00	984	220.00	133	324.00	613
82.00	1535	150.00	212	221.00	8496	327.00	509
83.00	1693	151.00	600	222.00	1205	328.00	286
84.00	112	153.00	1249	223.00	2505	332.00	148
85.00	923	154.00	927	224.00	23464	333.00	205
86.00	1569	155.00	2287	225.00	6023	334.00	2141
87.00	761	156.00	3161	226.00	581	335.00	502
88.00	385	157.00	588	227.00	9869	341.00	283

Date : 21-SEP-2018 17:04

Client ID: DFTPP12.5 Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2388;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

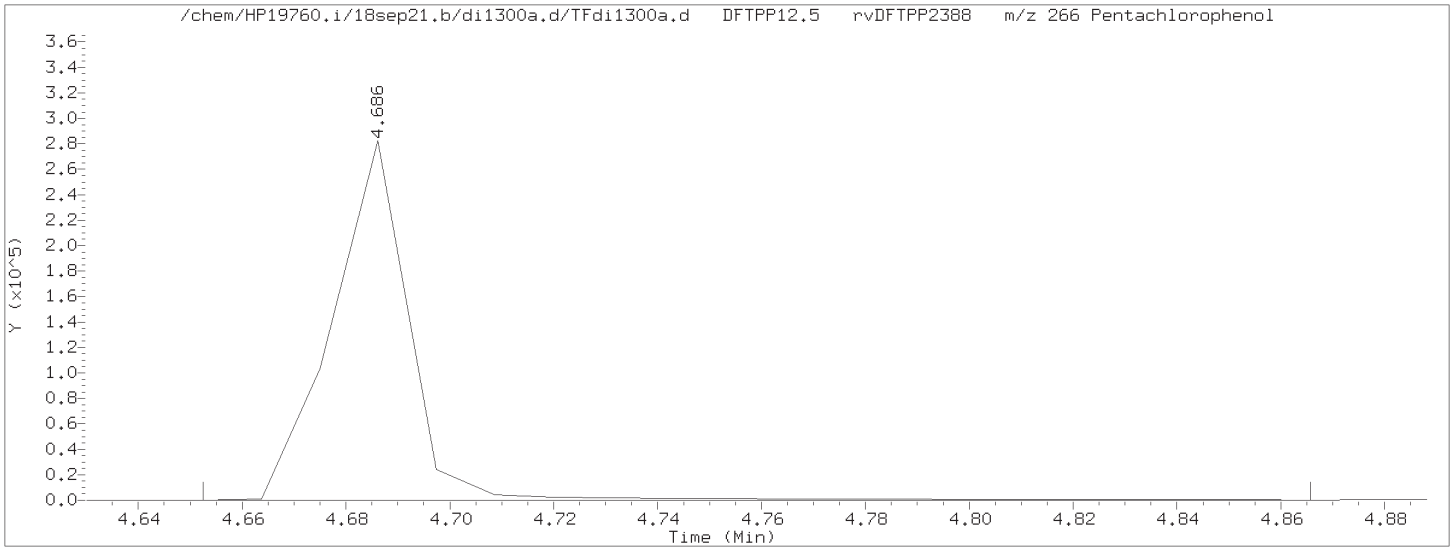
Data File: di1300a.d
Spectrum: Avg. Scans 129-131 (5.05), Background Scan 124
Location of Maximum: 198.00
Number of points: 263

m/z	Y	m/z	Y	m/z	Y	m/z	Y
89.00	105	158.00	694	228.00	1275	346.00	727
91.00	1393	159.00	503	229.00	1888	352.00	927
92.00	1506	160.00	1350	230.00	271	353.00	518
93.00	8792	161.00	1783	231.00	618	354.00	914
94.00	555	162.00	525	234.00	643	355.00	157
95.00	227	163.00	89	235.00	778	365.00	4354
96.00	612	164.00	115	236.00	347	366.00	689
97.00	320	165.00	1501	237.00	834	371.00	261
98.00	6548	166.00	1037	239.00	251	372.00	1600
99.00	5859	167.00	8711	240.00	288	373.00	267
100.00	570	168.00	5036	241.00	386	383.00	305
101.00	2857	169.00	853	242.00	1464	390.00	110
102.00	169	170.00	165	243.00	1433	391.00	103
103.00	894	171.00	327	244.00	18296	402.00	564
104.00	1963	172.00	695	245.00	2463	403.00	930
105.00	1724	173.00	907	246.00	3516	404.00	321
106.00	696	174.00	1781	247.00	593	421.00	800
107.00	23792	175.00	2975	249.00	651	422.00	810
108.00	3734	176.00	1031	252.00	213	423.00	5140
109.00	692	177.00	1600	253.00	488	424.00	1327
110.00	43864	178.00	373	255.00	88384	425.00	129
111.00	6353	179.00	5688	256.00	13068	436.00	97
112.00	809	180.00	4855	257.00	1023	437.00	186
113.00	146	181.00	1902	258.00	5205	438.00	161
115.00	132	182.00	312	259.00	645	439.00	323
116.00	1064	184.00	574	261.00	126	440.00	545
117.00	19856	185.00	3264	264.00	119	441.00	15152
118.00	1392	186.00	22168	265.00	2136	442.00	103712
119.00	216	187.00	5891	266.00	149	443.00	20816
120.00	396	188.00	775	270.00	118	444.00	1871
121.00	171	189.00	1272	271.00	90		

Digitally signed by Edward Monborne on 09/23/2018 at 07:57.
Target 3.5 esignature user ID: em10340

Assessment of GC Column Performance and Injection Port Inertness for

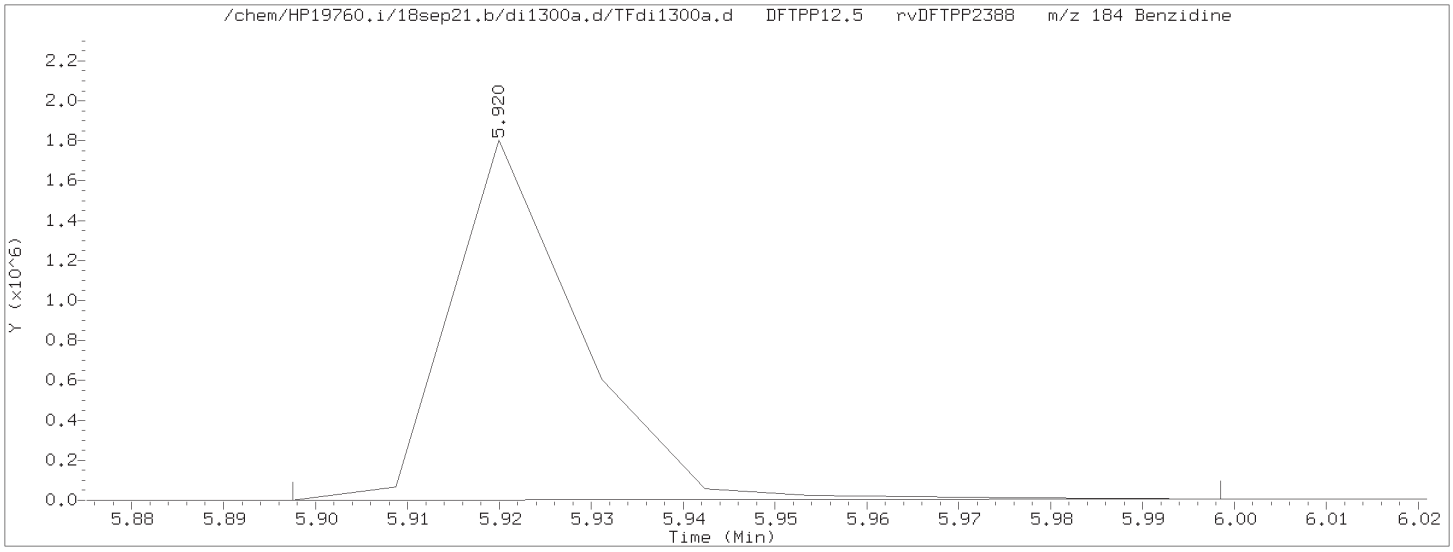
Instrument ID: HP19760.i Injection Date: 21-SEP-2018 17:04 Operator: art12405



Pentachlorophenol EICP peak height = 282560 EICP peak height at 10% = 28256 Pentachlorophenol EICP area = 288215

Pentachlorophenol EICP peak apex (min.) = 4.686
RT at 5% of front half of EICP (min.) = 4.665 'Front' peak width (min.) = 0.0209666667
RT at 5% of back half of EICP (min.) = 4.703 'Tailing' peak width (min.) = 0.0169166667

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0169166667}{0.0209666667} = 0.807$



Benzidine EICP peak height = 1801318 EICP peak height at 10% = 180132 Benzidine EICP area = 1727343

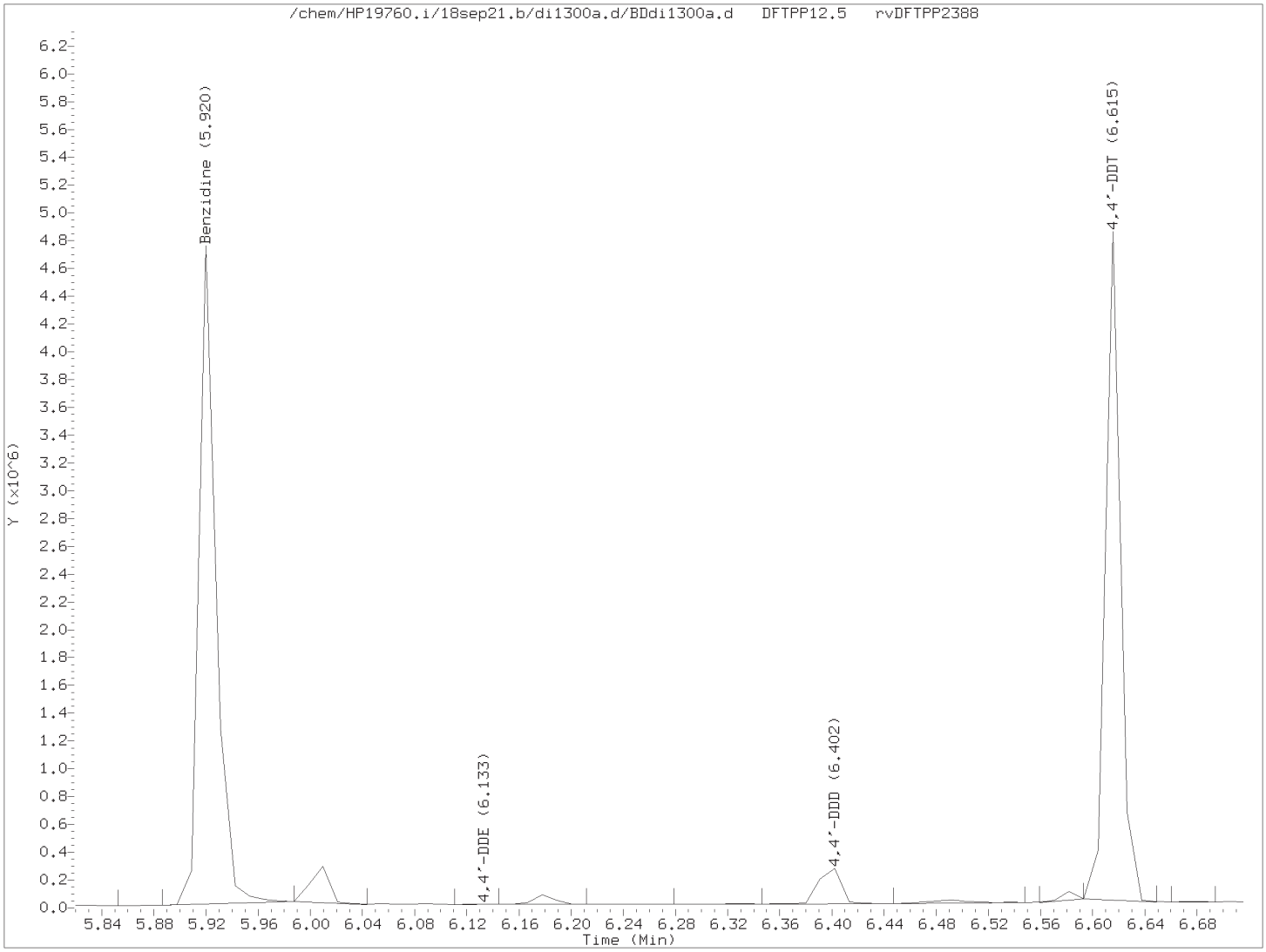
Benzidine EICP peak apex (min.) = 5.920
RT at 10% of front half of EICP (min.) = 5.910 'Front' peak width (min.) = 0.0104666667
RT at 10% of back half of EICP (min.) = 5.940 'Tailing' peak width (min.) = 0.0198833333

Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0198833333}{0.0104666667} = 1.900$

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02. PARALLAX ID: reb00745

Assessment of GC Column Performance and Injection Port Inertness for

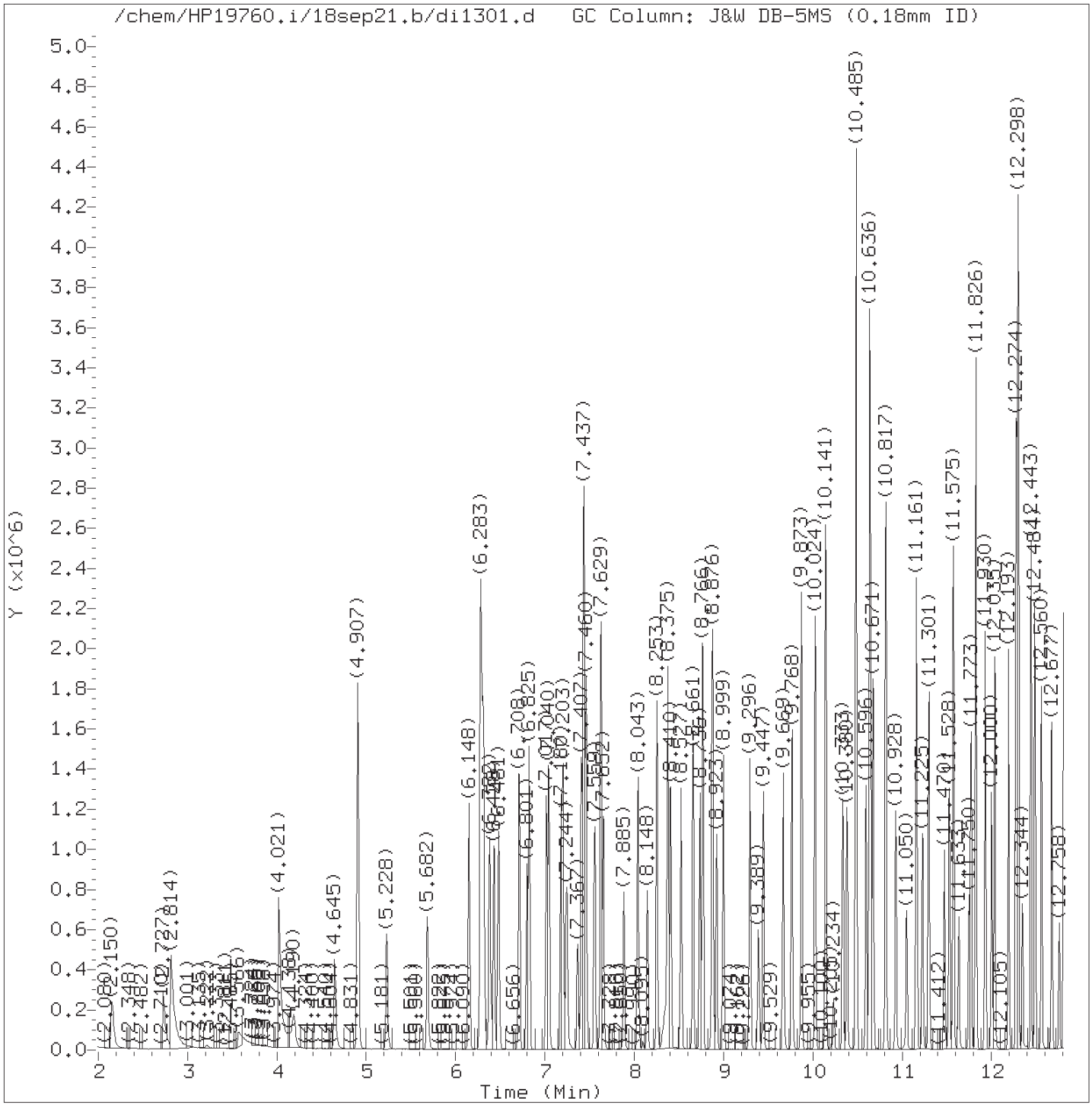
Instrument ID: HP19760.i Injection Date: 21-SEP-2018 17:04 Operator: art12405



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{2003 + 309787}{2003 + 309787 + 3907666} \times 100 = 7.4$$

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

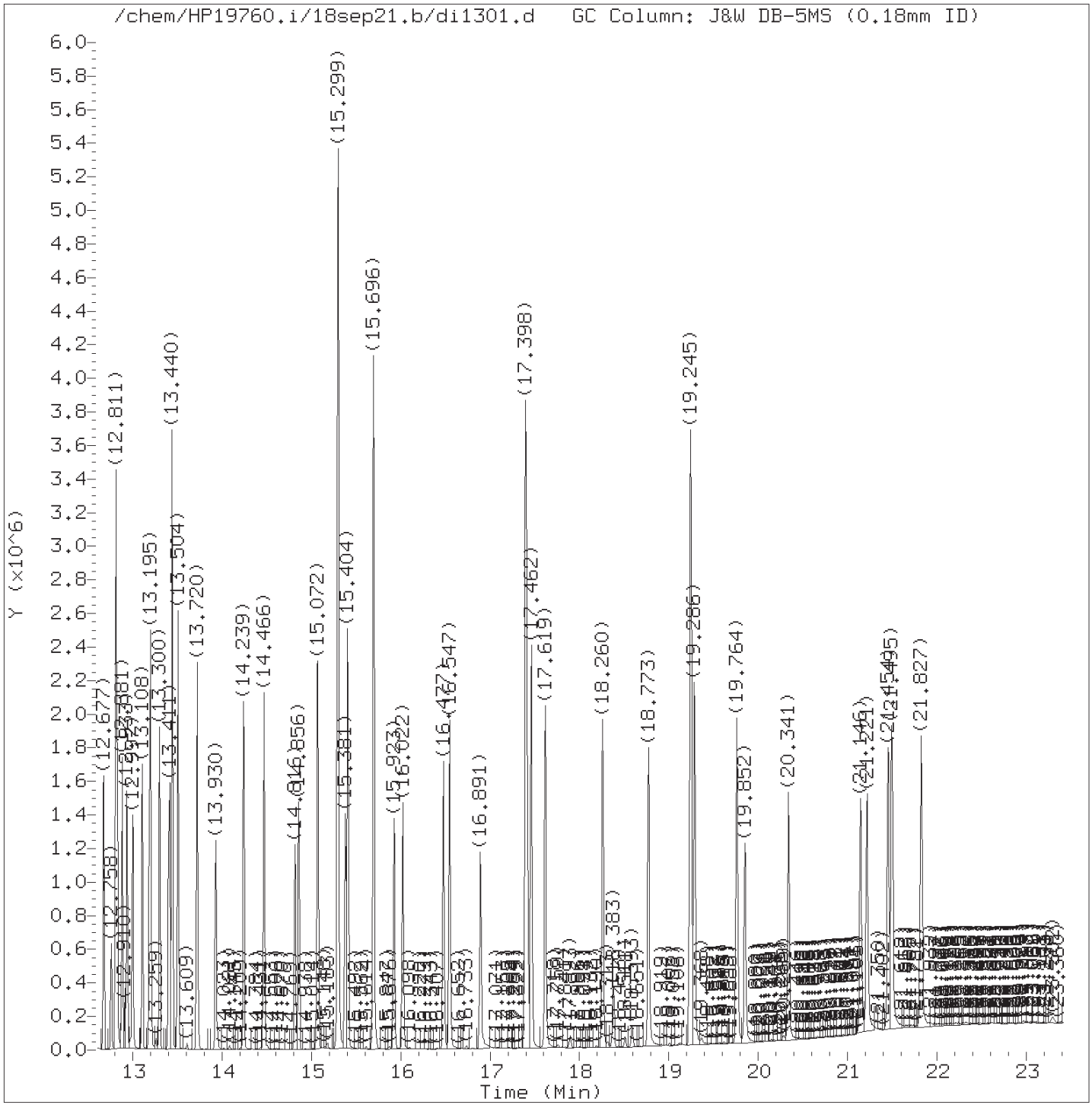
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

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)	2.150	88	227612	7.500
4) N-Nitrosodimethylamine	(1)	2.727	74	320246	7.500
5) Pyridine	(1)	2.814	79	581931	7.500
7) 2-Picoline	(1)	4.021	93	555585	7.500
8) N-Nitrosomethylethylamine	(1)	4.190	88	237196	7.500
9) Methyl methanesulfonate	(1)	4.645	80	264301	7.500
11)$2-Fluorophenol	(1)	4.907	112	863491	15.000
13) N-Nitrosodiethylamine	(1)	5.228	102	223836	7.500
42) Total Cresols	(1)			890434	15.000
15) Ethyl methanesulfonate	(1)	5.682	109	218105	7.500
16) Benzaldehyde	(1)	6.148	77	390562	7.500
17)$Phenol-d6	(1)	6.283	99	1182229	15.000
18) Phenol	(1)	6.300	94	668980	7.500
19) Aniline	(1)	6.312	93	774979	7.500
20) a-methylstyrene	(1)	6.399	118	43532	7.500
22) bis(2-Chloroethyl)ether	(1)	6.428	93	494484	7.500
23) 2-Chlorophenol	(1)	6.481	128	410830	7.500
24) 1,3-Dichlorobenzene	(1)	6.714	146	468700	7.500
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	181644	5.000
26) 1,4-Dichlorobenzene	(1)	6.825	146	472259	7.500
27) Benzyl alcohol	(1)	7.017	108	276442	7.500
28) 1,2-Dichlorobenzene	(1)	7.046	146	444639	7.500
30) Indene	(1)	7.180	115	462246	7.500
31) 2-Methylphenol	(1)	7.203	108	419399	7.500
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.244	45	589444	7.500
34) bis(2-Chloroisopropyl)ether	(1)	7.244	45	589444	7.500
35) N-Nitrosopyrrolidine	(1)	7.367	100	230538	7.500
97) Isosafrole	(3)			307252	7.500
36) Acetophenone	(1)	7.407	105	573856	7.500
38) N-Nitroso-di-n-propylamine	(1)	7.431	70	349989	7.500
37) 4-Methylphenol	(1)	7.437	108	471035	7.500
39) N-Nitrosomorpholine	(1)	7.437	56	265148	7.500
40) o-Toluidine	(1)	7.460	106	724322	7.500
43) Hexachloroethane	(1)	7.559	117	190009	7.500
44)$Nitrobenzene-d5	(2)	7.629	82	993811	15.000
45) Nitrobenzene	(2)	7.652	77	521739	7.500
48) N-Nitrosopiperidine	(2)	7.885	114	203511	7.500
50) Isophorone	(2)	8.043	82	853129	7.500
120) 2,4_2,6-Dinitrotoluenes	(3)			385698	15.000
51) 2-Nitrophenol	(2)	8.148	139	188373	7.500

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.253	107	440802	7.500
56) Benzoic acid	(2)	8.375	105	292626M	10.000
57) O,O,O-Triethylphosphorothioate	(2)	8.381	198	181207	7.500
55) bis(2-Chloroethoxy)methane	(2)	8.410	93	563962	7.500
60) 2,4-Dichlorophenol	(2)	8.527	162	318414	7.500
62) 1,2,4-Trichlorobenzene	(2)	8.661	180	350903	7.500
65)*Naphthalene-d8	(2)	8.736	136	678309	5.000
66) Naphthalene	(2)	8.771	128	1190623	7.500
146) Diallate trans/cis	(4)			398736	7.500
67) 4-Chloroaniline	(2)	8.870	127	451604	7.500
68) 2,6-Dichlorophenol	(2)	8.882	162	313119	7.500
69) Hexachloropropene	(2)	8.923	213	218645	7.500
71) Hexachlorobutadiene	(2)	8.999	225	196388	7.500
75) Quinoline	(2)	9.296	129	659745	7.500
76) Caprolactam	(2)	9.389	113	114845	7.500
77) N-Nitrosodi-n-butylamine	(2)	9.447	84	296007	7.500
80) 4-Chloro-3-methylphenol	(2)	9.669	107	352388	7.500
82) Safrole	(2)	9.768	162	293313	7.500
83) 2-Methylnaphthalene	(2)	9.873	142	754890	7.500
84) 1-Methylnaphthalene	(2)	10.024	142	718391	7.500
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.141	216	330770	7.500
85) Hexachlorocyclopentadiene	(3)	10.147	237	204999	7.500
88) cis-Isosafrole	(3)	10.234	162	48980	1.275
90) 2,4,6-Trichlorophenol	(3)	10.333	196	198531	7.500
92) 2,4,5-Trichlorophenol	(3)	10.380	196	216375	7.500
93)$2-Fluorobiphenyl	(3)	10.485	172	1577687	15.000
94) trans-Isosafrole	(3)	10.596	162	258272	6.225
95) 1,1'-Biphenyl	(3)	10.636	154	847136	7.500
96) 2-Chloronaphthalene	(3)	10.642	162	710848	7.500
98) 1-Chloronaphthalene	(3)	10.677	162	639573	7.500
99) Diphenyl ether	(3)	10.817	170	473713	7.500
100) 2-Nitroaniline	(3)	10.817	138	204818	7.500
104) 1,4-Naphthoquinone	(3)	10.928	158	239764	7.500
105) 1,4-Dinitrobenzene	(3)	11.050	168	102785	7.500
106) Dimethylphthalate	(3)	11.161	163	733658	7.500
107) 1,3-Dinitrobenzene	(3)	11.161	168	124298	7.500
108) 2,6-Dinitrotoluene	(3)	11.231	165	170269	7.500
109) Acenaphthylene	(3)	11.301	152	957027	7.500
112) 3-Nitroaniline	(3)	11.470	138	179140	7.500
113)*Acenaphthene-d10	(3)	11.528	164	318311	5.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.575	153	692236	7.500
115) 2,4-Dinitrophenol	(3)	11.633	184	101041	10.000
116) 4-Nitrophenol	(3)	11.750	109	112963	7.500
117) Pentachlorobenzene	(3)	11.773	250	269455	7.500
118) 2,4-Dinitrotoluene	(3)	11.826	165	215429	7.500
119) Dibenzofuran	(3)	11.826	168	948696	7.500
121) 1-Naphthylamine	(3)	11.930	143	708446	7.500
122) 2,3,4,6-Tetrachlorophenol	(3)	12.000	232	155649	7.500
123) 2-Naphthylamine	(3)	12.035	143	708410	7.500
124) Diethylphthalate	(3)	12.193	149	672789	7.500
126) Fluorene	(3)	12.274	166	755800	7.500
125) Thionazin	(3)	12.286	107	144777	7.500
128) 5-Nitro-o-toluidine	(3)	12.298	152	215328	7.500
129) 4-Nitroaniline	(3)	12.298	138	207290	7.500
127) 4-Chlorophenyl-phenylether	(3)	12.303	204	360233	7.500
130) 4,6-Dinitro-2-methylphenol	(4)	12.350	198	103925	7.500
131) N-Nitrosodiphenylamine	(4)	12.443	169	613277	7.500
132) NDPA as diphenylamine	(4)	12.443	169	613277	7.500
134) 1,2-Diphenylhydrazine	(4)	12.484	77	892437	7.500
135)$2,4,6-Tribromophenol	(3)	12.560	330	167710	15.000
137) Tetraethyldithiopyrophosphate	(4)	12.671	97	129973	7.500
139) 1,3,5-Trinitrobenzene	(4)	12.758	213	69405	7.500
141) Phorate	(4)	12.811	75	512656	7.500
140) Diallate (peak 1)	(4)	12.811	86	344726	6.225
142) Phenacetin	(4)	12.828	108	384285	7.500
143) 4-Bromophenyl-phenylether	(4)	12.886	248	195928	7.500
144) Diallate (peak 2)	(4)	12.910	86	54010	1.275
145) Hexachlorobenzene	(4)	12.939	284	195724	7.500
147) Dimethoate	(4)	12.997	87	321954	7.500
148) Atrazine	(4)	13.108	200	189251	7.500
149) Pentachlorophenol	(4)	13.184	266	115196	7.500
150) 4-Aminobiphenyl	(4)	13.195	169	519348	7.500
151) Pentachloronitrobenzene	(4)	13.201	237	85327	7.500
152) Pronamide	(4)	13.300	173	300452	7.500
153)*Phenanthrene-d10	(4)	13.411	188	573202	5.000
155) Phenanthrene	(4)	13.440	178	1101600	7.500
154) Dinoseb	(4)	13.440	211	146555	7.500
157) Anthracene	(4)	13.504	178	1100833	7.500
163) Carbazole	(4)	13.720	167	1009319	7.500
164) Methyl parathion	(4)	13.930	109	228968	7.500

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

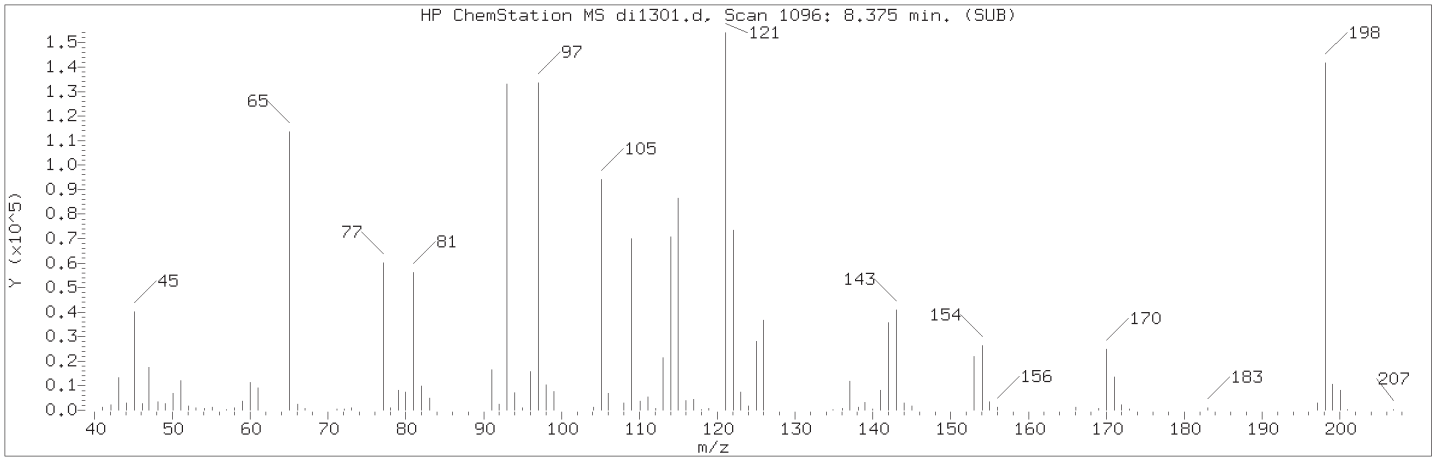
Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.239	149	1158762	7.500
168) 4-Nitroquinoline-1-oxide	(4)	14.466	190	89006	7.500
167) Parathion	(4)	14.472	109	148867	7.500
169) Octachlorostyrene	(4)	14.816	308	75010	7.500
171) Isodrin	(4)	14.856	193	122329	7.500
222) Total PAHs	(6)			18625782	135.000
173) Fluoranthene	(4)	15.072	202	1173199	7.500
174) Benzidine	(5)	15.299	184	2611287	22.500
175)*Pyrene-d10	(5)	15.381	212	595163	5.000
177) Pyrene	(5)	15.404	202	1224767	7.500
179)$Terphenyl-d14	(5)	15.696	244	1535150	15.000
182) p-Dimethylaminoazobenzene	(5)	15.923	225	194892	7.500
185) Chlorobenzilate	(5)	16.022	139	343423	7.500
187) 3,3'-Dimethylbenzidine	(5)	16.477	212	779032	7.500
188) Butylbenzylphthalate	(5)	16.547	149	558047	7.500
191) 2-Acetylaminofluorene	(5)	16.891	181	394793	7.500
193) 3,3'-Dichlorobenzidine	(5)	17.398	252	435259	7.500
195) Benzo(a)anthracene	(5)	17.398	228	1167296	7.500
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.415	231	240960	7.500
196) Chrysene	(5)	17.462	228	1173323	7.500
199) bis(2-Ethylhexyl)phthalate	(5)	17.619	149	752910	7.500
203) 6-Methylchrysene	(5)	18.260	242	777055	7.500
205) Di-n-octylphthalate	(6)	18.773	149	1198263	7.500
206) Benzo(b)fluoranthene	(6)	19.240	252	1159925	7.500
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.251	256	553694	7.500
208) Benzo(k)fluoranthene	(6)	19.286	252	1231635	7.500
211) Benzo(a)pyrene	(6)	19.764	252	1070258	7.500
213)*Perylene-d12	(6)	19.852	264	608816	5.000
215) 3-Methylcholanthrene	(6)	20.341	268	509988	7.500
217) Dibenz(a,h)acridine	(6)	21.146	279	811019	7.500
218) Dibenz(a,j)acridine	(6)	21.221	279	897789	7.500
219) Indeno(1,2,3-cd)pyrene	(6)	21.460	276	990834M	7.500
220) Dibenz(a,h)anthracene	(6)	21.495	278	1079259	7.500
221) Benzo(g,h,i)perylene	(6)	21.827	276	1083886	7.500

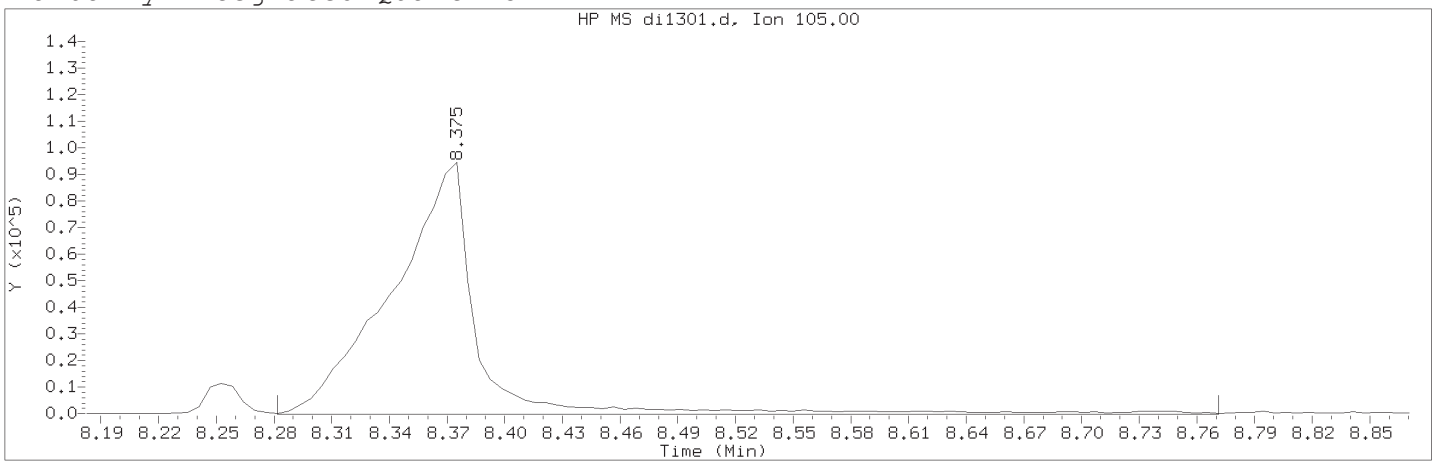
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

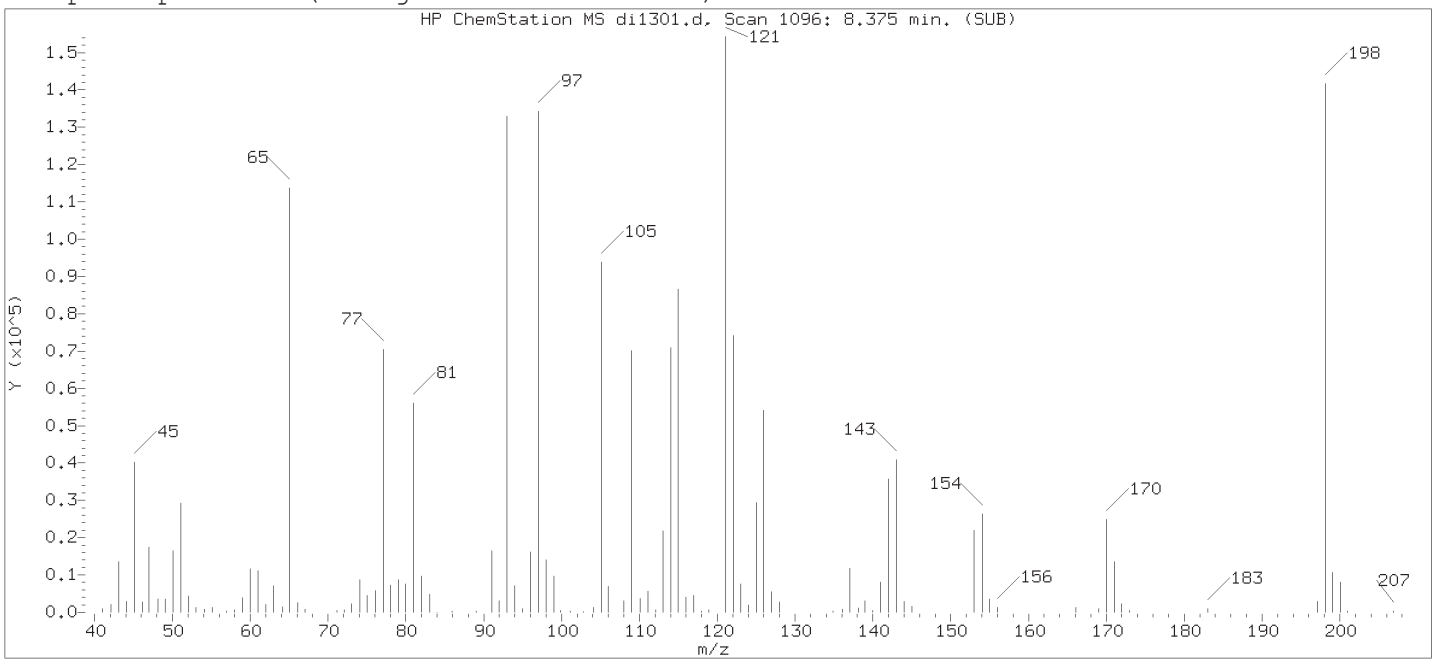
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1096
Retention Time (minutes) : 8.375
Quant Ion : 105.00
Area (flag) : 292626M
On-Column Amount (ng/ul) : 10.0000
Integration start scan : 1079 Integration stop scan: 1163
Y at integration start : -158 Y at integration end: -158

Reason for manual integration: improper integration

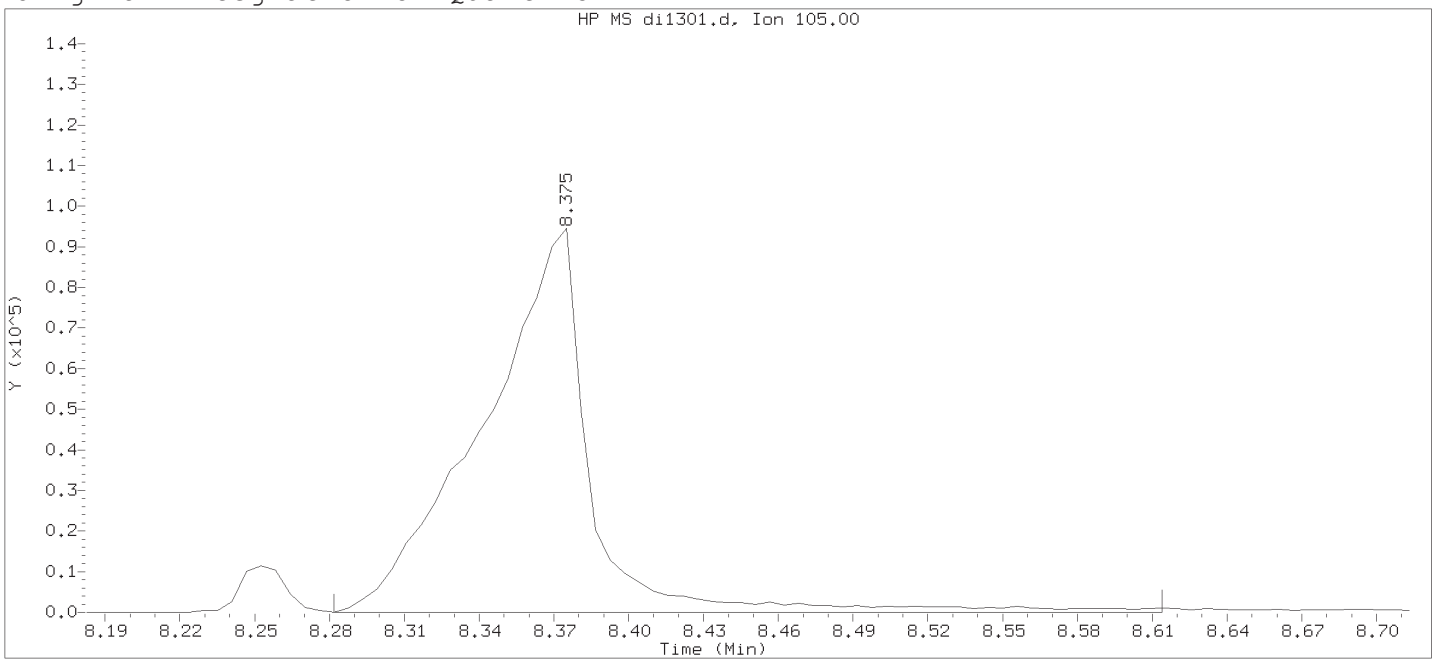
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

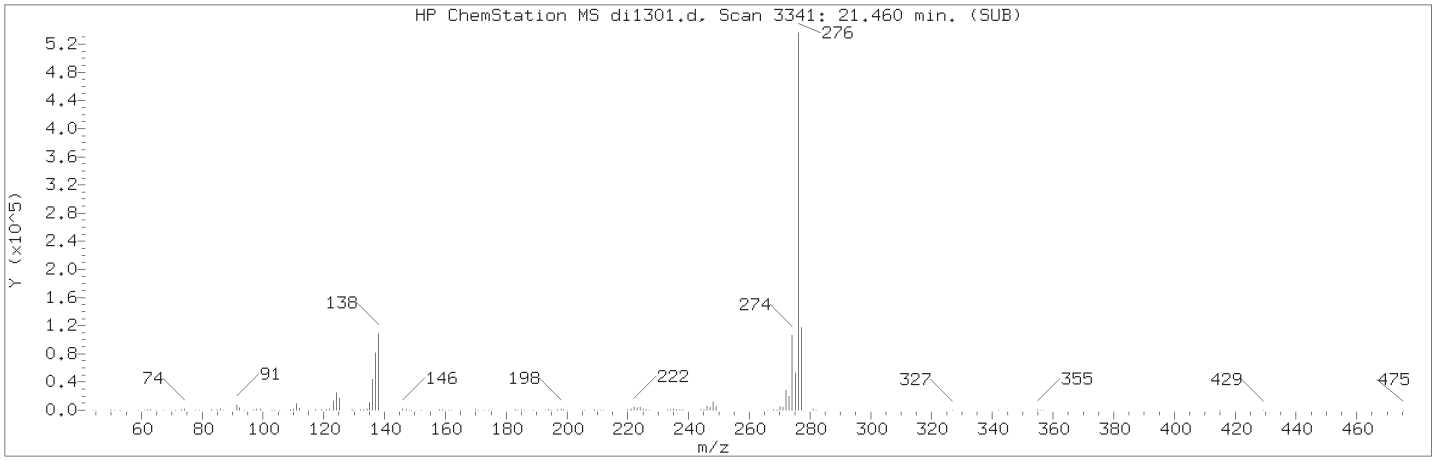
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:01
Date, time and analyst ID of latest file update: 21-Sep-2018 18:01 Automation

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

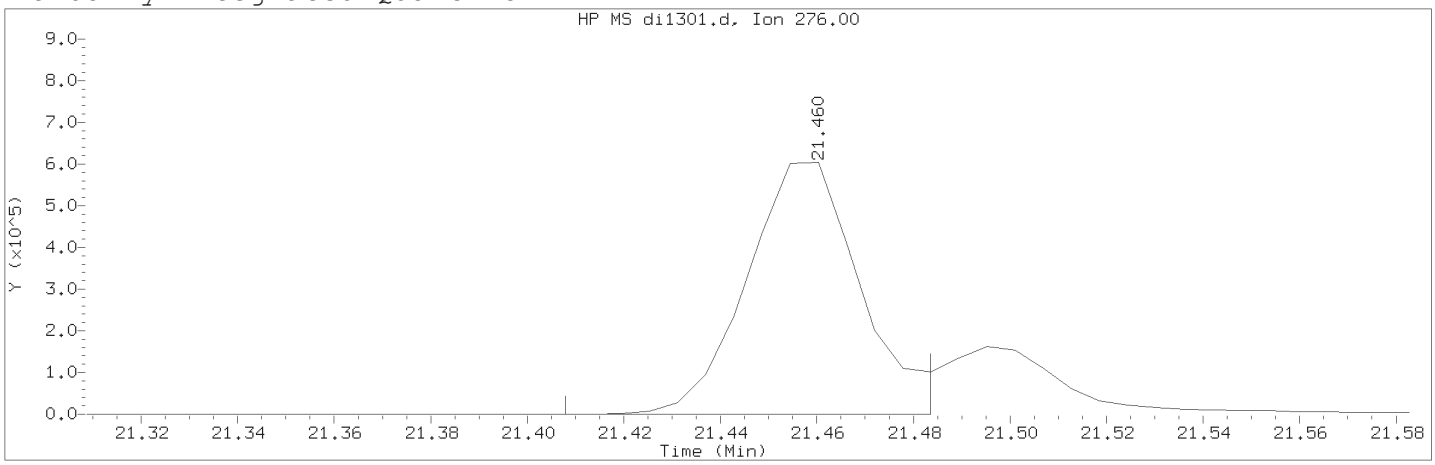
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1096		
Retention Time (minutes)	: 8.375		
Quant Ion	: 105.00		
Area	: 281708		
On-column Amount (ng/ul)	: 11.0512		
Integration start scan	: 1079	Integration stop scan:	1136
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

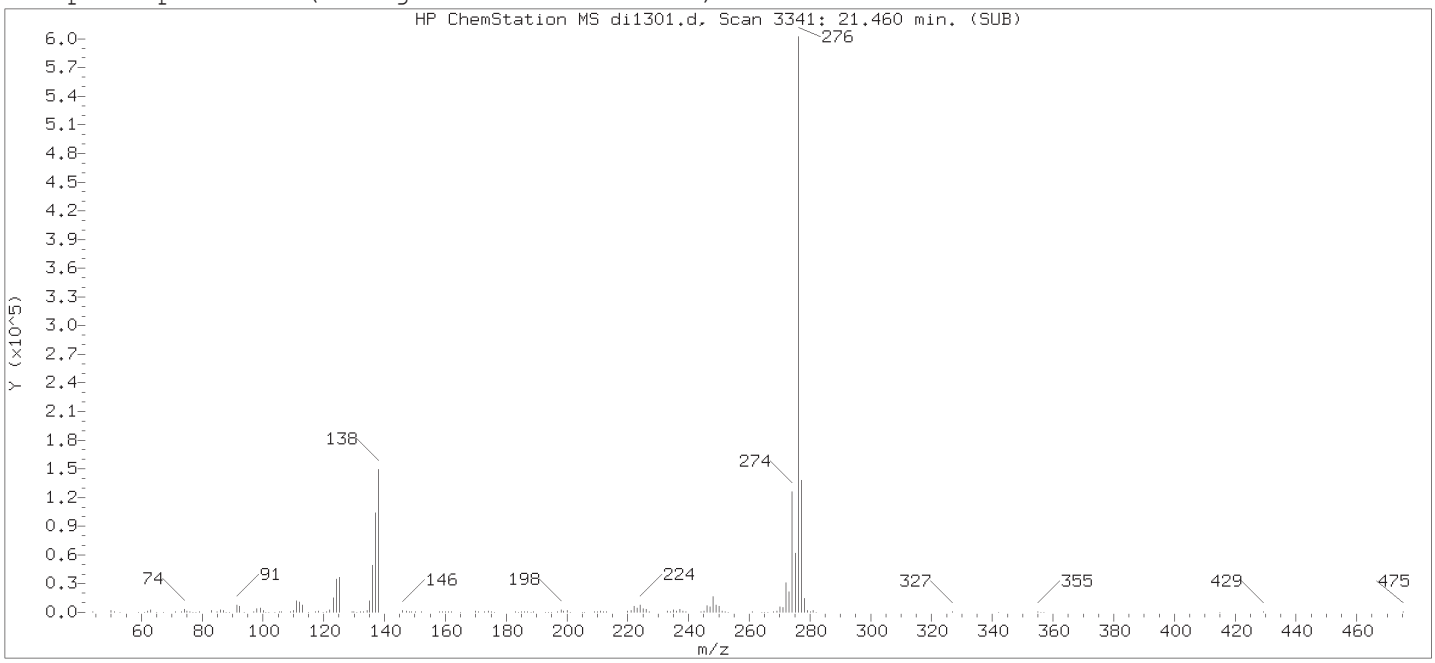
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3341		
Retention Time (minutes)	: 21.460		
Quant Ion	: 276.00		
Area (flag)	: 990834M		
On-Column Amount (ng/ul)	: 7.5000		
Integration start scan	: 3331	Integration stop scan:	3344
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

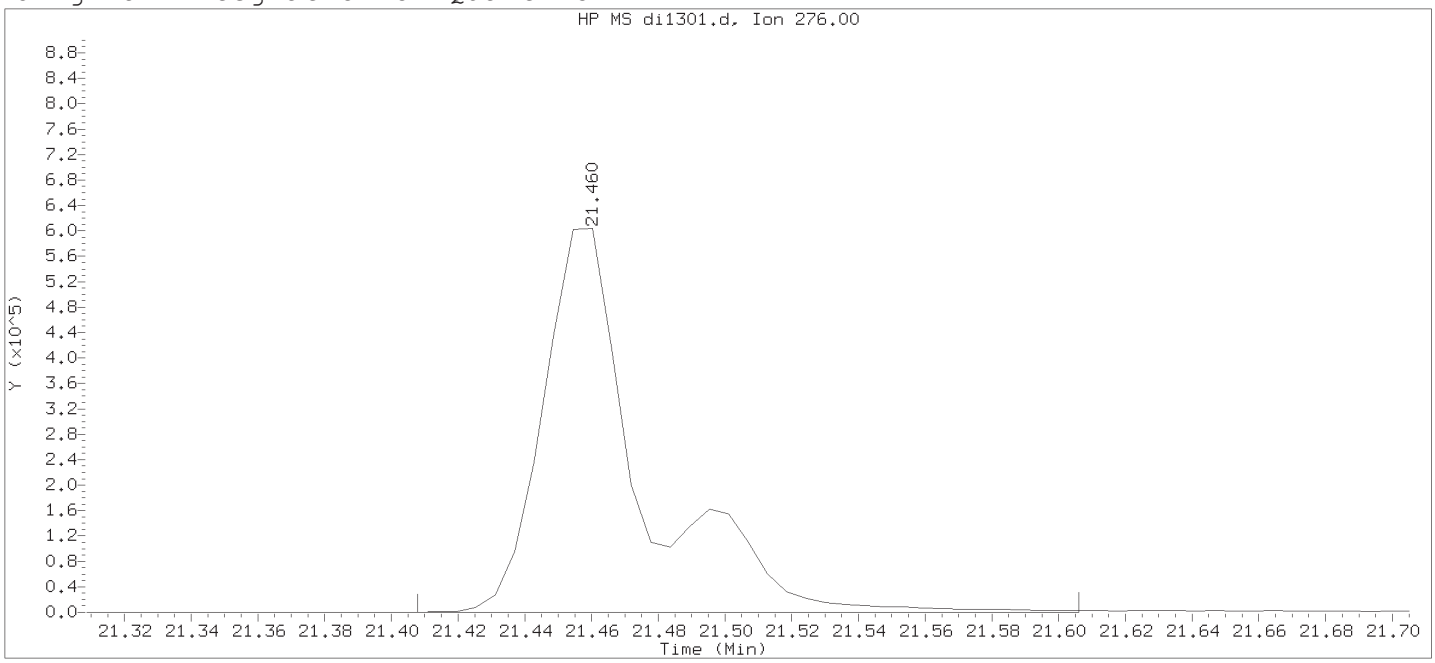
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1301.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 17:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:01
Date, time and analyst ID of latest file update: 21-Sep-2018 18:01 Automation

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3341		
Retention Time (minutes)	: 21.460		
Quant Ion	: 276.00		
Area	: 1259388		
On-column Amount (ng/ul)	: 10.7632		
Integration start scan	: 3331	Integration stop scan:	3365
Y at integration start	: 0	Y at integration end:	0

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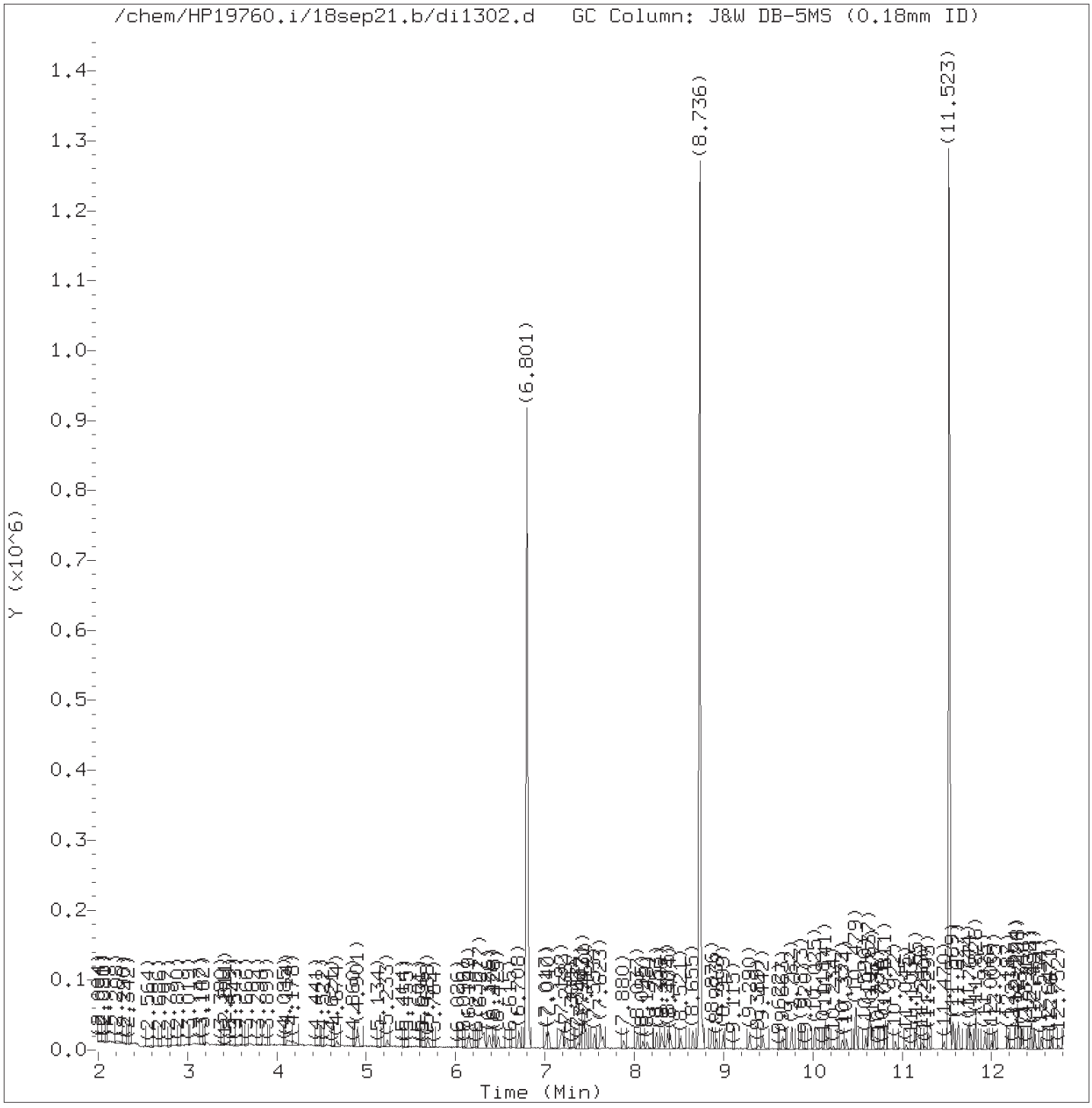
Target 3.5 esignature user ID: 3774



Total Ion Chromatogram (TIC)

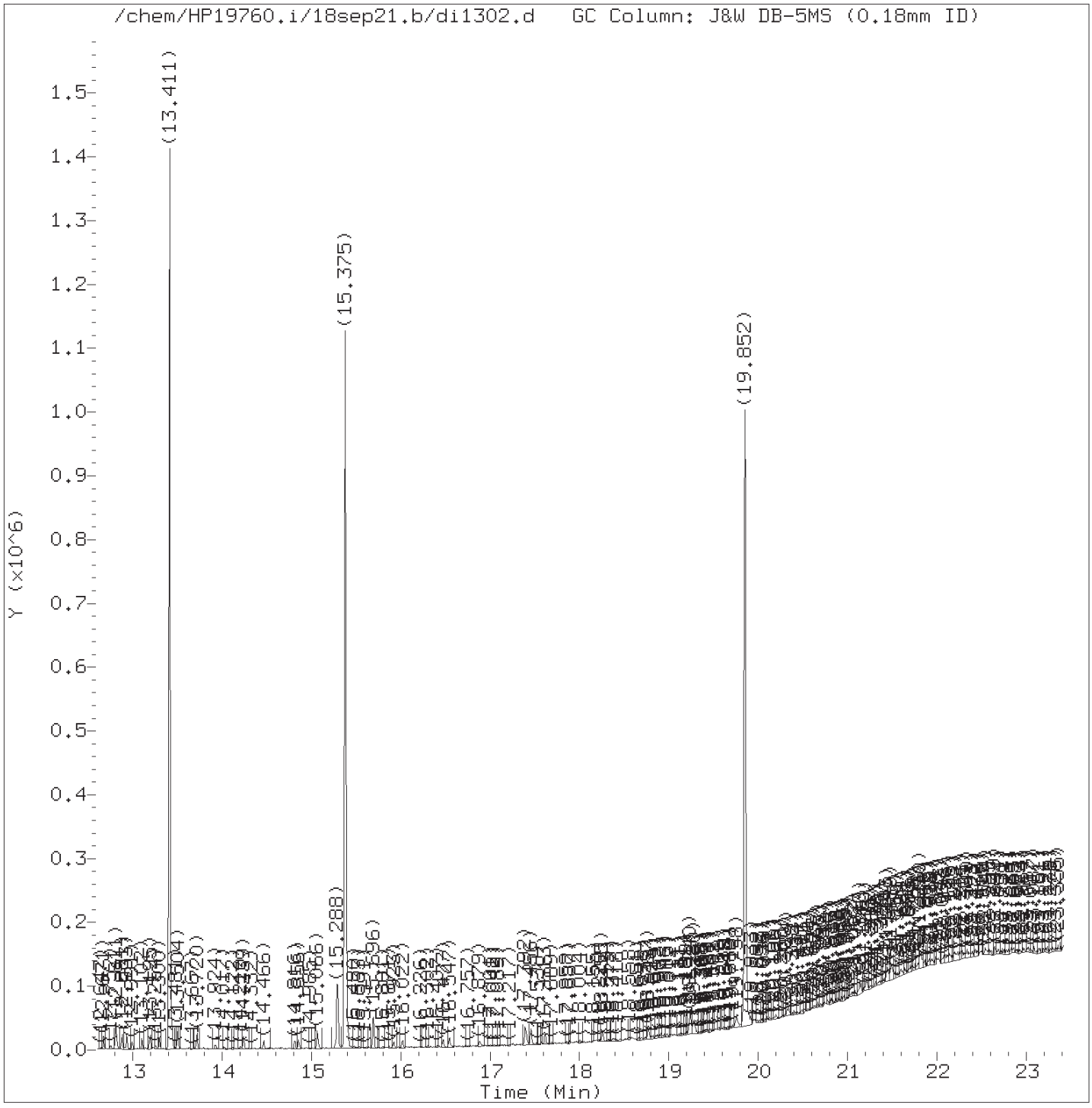
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

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)	2.203	88	7069M	0.220
4) N-Nitrosodimethylamine	(1)	2.873	74	3486M	0.077
5) Pyridine	(1)	3.077	79	9444M	0.115
7) 2-Picoline	(1)	4.126	93	9087	0.116
8) N-Nitrosomethylethylamine	(1)	4.219	88	6464M	0.193
9) Methyl methanesulfonate	(1)	4.674	80	4051	0.109
11)$2-Fluorophenol	(1)	4.901	112	12711	0.209
13) N-Nitrosodiethylamine	(1)	5.233	102	3476	0.110
42) Total Cresols	(1)			13559	0.216
15) Ethyl methanesulfonate	(1)	5.688	109	3697	0.120
16) Benzaldehyde	(1)	6.149	77	6710	0.122
17)$Phenol-d6	(1)	6.277	99	18403	0.221
18) Phenol	(1)	6.294	94	10637	0.113
19) Aniline	(1)	6.318	93	12868	0.118
20) a-methylstyrene	(1)	6.393	118	589M	0.096
22) bis(2-Chloroethyl)ether	(1)	6.428	93	8616	0.124
23) 2-Chlorophenol	(1)	6.475	128	6298	0.109
24) 1,3-Dichlorobenzene	(1)	6.708	146	7465	0.113
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	191968	5.000
26) 1,4-Dichlorobenzene	(1)	6.825	146	8273	0.124
27) Benzyl alcohol	(1)	7.017	108	4114	0.106
28) 1,2-Dichlorobenzene	(1)	7.040	146	7910	0.126
30) Indene	(1)	7.180	115	7430	0.114
31) 2-Methylphenol	(1)	7.198	108	6205	0.105
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.244	45	9549	0.115
34) bis(2-Chloroisopropyl)ether	(1)	7.244	45	9549	0.115
35) N-Nitrosopyrrolidine	(1)	7.367	100	2839	0.087
97) Isosafrole	(3)			4596	0.112
36) Acetophenone	(1)	7.407	105	9237	0.114
38) N-Nitroso-di-n-propylamine	(1)	7.425	70	5129	0.104
39) N-Nitrosomorpholine	(1)	7.431	56	4022	0.108
37) 4-Methylphenol	(1)	7.437	108	7354	0.111
40) o-Toluidine	(1)	7.460	106	11005	0.108
43) Hexachloroethane	(1)	7.553	117	3240	0.121
44)$Nitrobenzene-d5	(2)	7.623	82	14935	0.216
45) Nitrobenzene	(2)	7.652	77	7834	0.108
48) N-Nitrosopiperidine	(2)	7.891	114	3152	0.112
50) Isophorone	(2)	8.037	82	12842	0.108
120) 2,4_2,6-Dinitrotoluenes	(3)			3914	0.152
51) 2-Nitrophenol	(2)	8.148	139	2268	0.087

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.253	107	6513	0.106
56) Benzoic acid	(2)	8.305	105	11007M	0.361
57) O,O,O-Triethylphosphorothioate	(2)	8.375	198	3121	0.124
55) bis(2-Chloroethoxy)methane	(2)	8.404	93	8951	0.114
60) 2,4-Dichlorophenol	(2)	8.521	162	4673	0.106
62) 1,2,4-Trichlorobenzene	(2)	8.661	180	6053	0.124
65)*Naphthalene-d8	(2)	8.736	136	706468	5.000
66) Naphthalene	(2)	8.766	128	20655	0.125
146) Diallate trans/cis	(4)			4829	0.100
67) 4-Chloroaniline	(2)	8.870	127	6941	0.111
68) 2,6-Dichlorophenol	(2)	8.882	162	4284	0.099
69) Hexachloropropene	(2)	8.917	213	2824	0.093
71) Hexachlorobutadiene	(2)	8.999	225	3174	0.116
75) Quinoline	(2)	9.296	129	10167	0.111
76) Caprolactam	(2)	9.383	113	1247M	0.078
77) N-Nitrosodi-n-butylamine	(2)	9.442	84	4905	0.119
80) 4-Chloro-3-methylphenol	(2)	9.663	107	4919	0.101
82) Safrole	(2)	9.762	162	4224	0.104
83) 2-Methylnaphthalene	(2)	9.873	142	11957	0.119
84) 1-Methylnaphthalene	(2)	10.025	142	10861	0.116
85) Hexachlorocyclopentadiene	(3)	10.141	237	2619	0.096
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.141	216	6121	0.139
88) cis-Isosafrole	(3)	10.229	162	627	0.016
90) 2,4,6-Trichlorophenol	(3)	10.333	196	2033	0.077
92) 2,4,5-Trichlorophenol	(3)	10.380	196	2445	0.085
93)$2-Fluorobiphenyl	(3)	10.479	172	25002	0.237
94) trans-Isosafrole	(3)	10.590	162	3969	0.096
95) 1,1'-Biphenyl	(3)	10.631	154	13409	0.119
96) 2-Chloronaphthalene	(3)	10.637	162	10822	0.114
98) 1-Chloronaphthalene	(3)	10.672	162	10713	0.125
99) Diphenyl ether	(3)	10.811	170	7492	0.118
100) 2-Nitroaniline	(3)	10.811	138	2061	0.075
104) 1,4-Naphthoquinone	(3)	10.922	158	2532	0.079
105) 1,4-Dinitrobenzene	(3)	11.045	168	1111M	0.081
106) Dimethylphthalate	(3)	11.155	163	10010	0.102
107) 1,3-Dinitrobenzene	(3)	11.155	168	1293M	0.078
108) 2,6-Dinitrotoluene	(3)	11.219	165	1740	0.077
109) Acenaphthylene	(3)	11.295	152	12898	0.112
112) 3-Nitroaniline	(3)	11.470	138	2036	0.085
113)*Acenaphthene-d10	(3)	11.523	164	318852	5.000

M = Compound was manually integrated.
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on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.569	153	11683	0.126
115) 2,4-Dinitrophenol	(3)	11.627	184	6452	0.637
116) 4-Nitrophenol	(3)	11.744	109	4808	0.319
117) Pentachlorobenzene	(3)	11.773	250	4328	0.120
118) 2,4-Dinitrotoluene	(3)	11.826	165	2174	0.076
119) Dibenzofuran	(3)	11.826	168	15942	0.126
121) 1-Naphthylamine	(3)	11.925	143	8917	0.094
122) 2,3,4,6-Tetrachlorophenol	(3)	12.000	232	1717	0.083
123) 2-Naphthylamine	(3)	12.035	143	9565	0.101
124) Diethylphthalate	(3)	12.187	149	8047	0.090
126) Fluorene	(3)	12.269	166	10665	0.115
125) Thionazin	(3)	12.280	107	1276	0.066
128) 5-Nitro-o-toluidine	(3)	12.292	152	1818	0.063
129) 4-Nitroaniline	(3)	12.292	138	1957	0.071
127) 4-Chlorophenyl-phenylether	(3)	12.298	204	6033	0.125
130) 4,6-Dinitro-2-methylphenol	(4)	12.344	198	4327	0.343
131) N-Nitrosodiphenylamine	(4)	12.438	169	7445	0.100
132) NDPA as diphenylamine	(4)	12.438	169	7445	0.100
134) 1,2-Diphenylhydrazine	(4)	12.484	77	11259	0.104
135)$2,4,6-Tribromophenol	(3)	12.554	330	1749	0.156
137) Tetraethyldithiopyrophosphate	(4)	12.671	97	1463	0.093
139) 1,3,5-Trinitrobenzene	(4)	12.752	213	499M	0.059
140) Diallate (peak 1)	(4)	12.805	86	4071	0.081
141) Phorate	(4)	12.811	75	5344	0.086
142) Phenacetin	(4)	12.816	108	3393	0.073
143) 4-Bromophenyl-phenylether	(4)	12.881	248	2680	0.113
144) Diallate (peak 2)	(4)	12.904	86	758M	0.020
145) Hexachlorobenzene	(4)	12.933	284	3307	0.132
147) Dimethoate	(4)	12.997	87	2589	0.066
148) Atrazine	(4)	13.102	200	2081	0.091
149) Pentachlorophenol	(4)	13.184	266	1094	0.078
150) 4-Aminobiphenyl	(4)	13.195	169	5691	0.090
151) Pentachloronitrobenzene	(4)	13.201	237	701	0.068
152) Pronamide	(4)	13.294	173	2753	0.075
153)*Phenanthrene-d10	(4)	13.411	188	521787	5.000
154) Dinoseb	(4)	13.434	211	1105M	0.062
155) Phenanthrene	(4)	13.440	178	16836	0.125
157) Anthracene	(4)	13.504	178	14404	0.116
163) Carbazole	(4)	13.720	167	11733	0.096
164) Methyl parathion	(4)	13.924	109	2031	0.073

M = Compound was manually integrated.
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Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.239	149	10596	0.075
168) 4-Nitroquinoline-1-oxide	(4)	14.460	190	790	0.073
167) Parathion	(4)	14.472	109	749	0.041
169) Octachlorostyrene	(4)	14.816	308	970	0.107
171) Isodrin	(4)	14.856	193	2314	0.156
222) Total PAHs	(6)			235059	2.196
173) Fluoranthene	(4)	15.066	202	14317	0.111
174) Benzidine	(5)	15.288	184	54252	0.552
175)*Pyrene-d10	(5)	15.375	212	504273	5.000
177) Pyrene	(5)	15.404	202	18586	0.129
179)$Terphenyl-d14	(5)	15.696	244	20097	0.232
182) p-Dimethylaminoazobenzene	(5)	15.923	225	1435M	0.065
185) Chlorobenzilate	(5)	16.022	139	3234	0.083
187) 3,3'-Dimethylbenzidine	(5)	16.471	212	6533	0.074
188) Butylbenzylphthalate	(5)	16.547	149	4068	0.065
191) 2-Acetylaminofluorene	(5)	16.879	181	2521	0.057
193) 3,3'-Dichlorobenzidine	(5)	17.392	252	4149	0.084
195) Benzo(a)anthracene	(5)	17.398	228	10433	0.097
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.415	231	1824	0.067
196) Chrysene	(5)	17.456	228	12431	0.107
199) bis(2-Ethylhexyl)phthalate	(5)	17.619	149	5893	0.069
203) 6-Methylchrysene	(5)	18.260	242	7595	0.087
205) Di-n-octylphthalate	(6)	18.773	149	8416	0.066
206) Benzo(b)fluoranthene	(6)	19.234	252	11094	0.105
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.245	256	4446	0.076
208) Benzo(k)fluoranthene	(6)	19.280	252	12462	0.108
211) Benzo(a)pyrene	(6)	19.758	252	10010	0.104
213)*Perylene-d12	(6)	19.852	264	483590	5.000
215) 3-Methylcholanthrene	(6)	20.341	268	5489	0.102
217) Dibenz(a,h)acridine	(6)	21.140	279	8425	0.098
218) Dibenz(a,j)acridine	(6)	21.210	279	8664	0.091
219) Indeno(1,2,3-cd)pyrene	(6)	21.449	276	10499M	0.111
220) Dibenz(a,h)anthracene	(6)	21.495	278	11807	0.113
221) Benzo(g,h,i)perylene	(6)	21.816	276	13461	0.121

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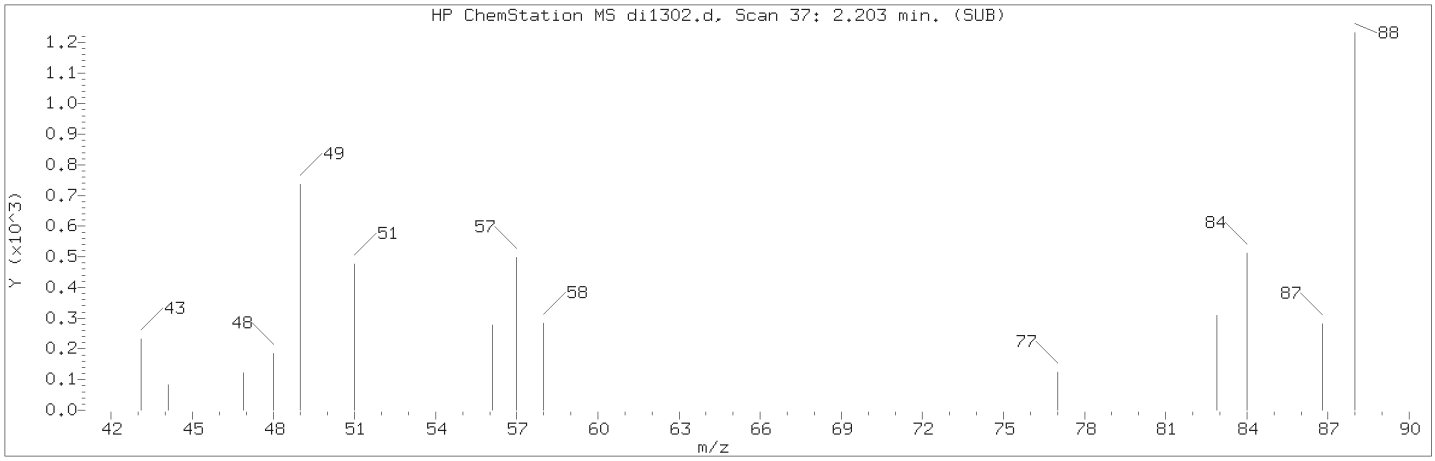
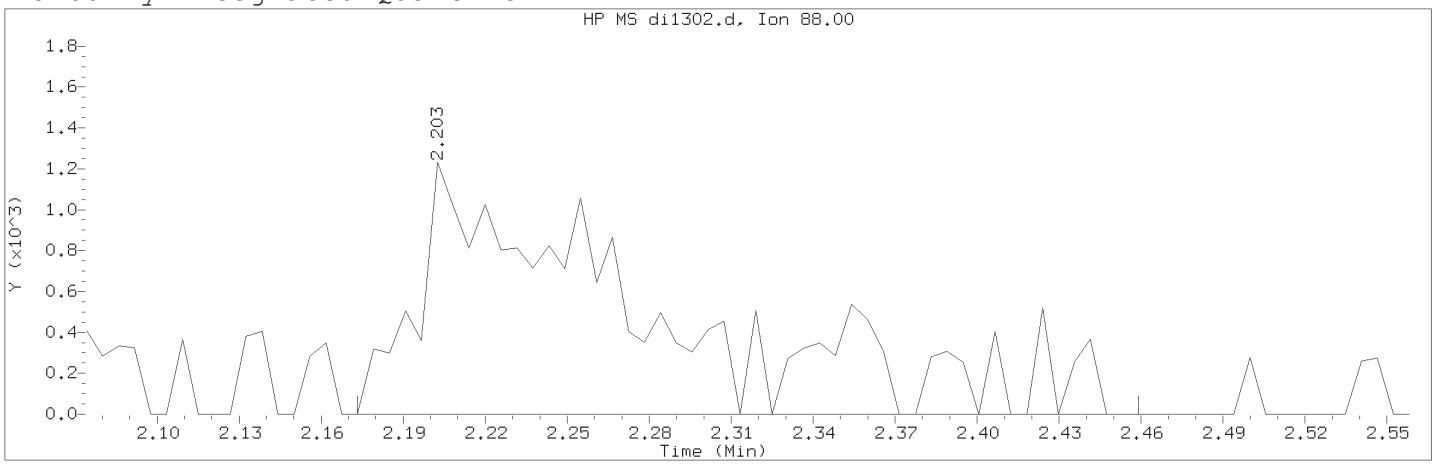
Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

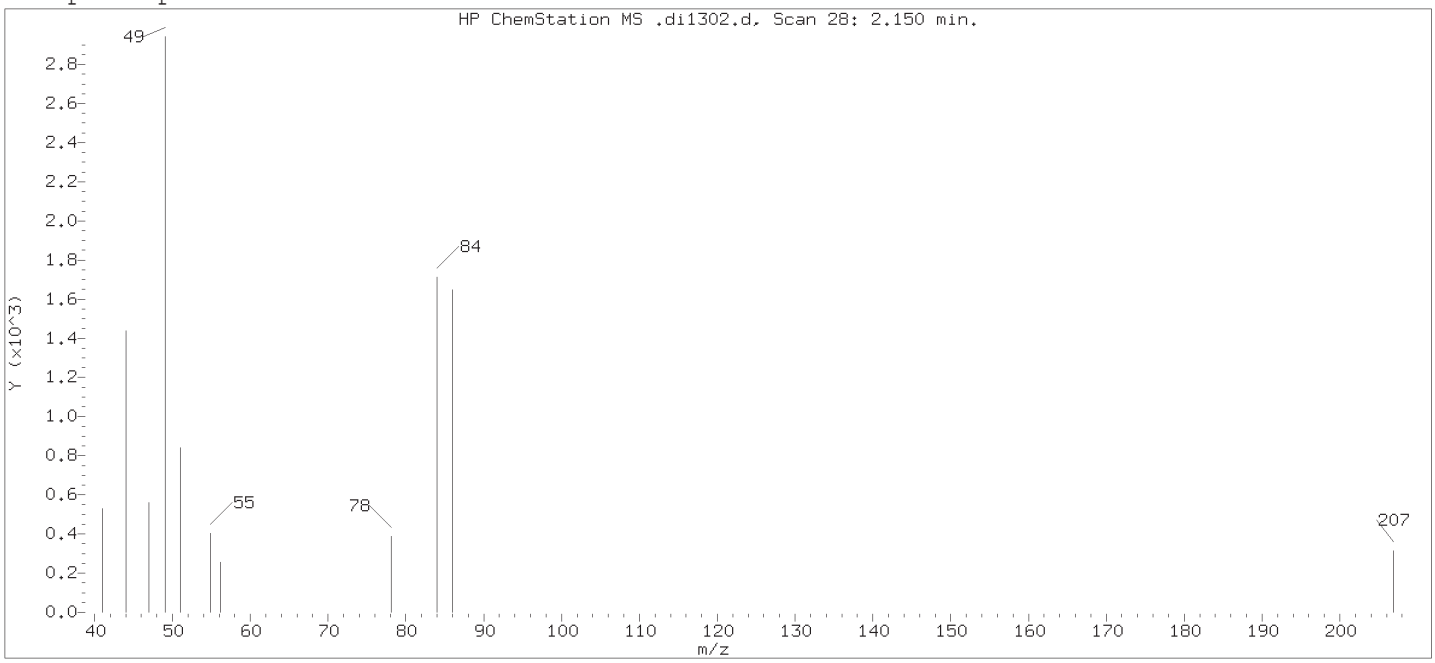
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 37		
Retention Time (minutes)	: 2.203		
Quant Ion	: 88.00		
Area (flag)	: 7069M		
On-Column Amount (ng/ul)	: 0.2204		
Integration start scan	: 31	Integration stop scan:	80
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

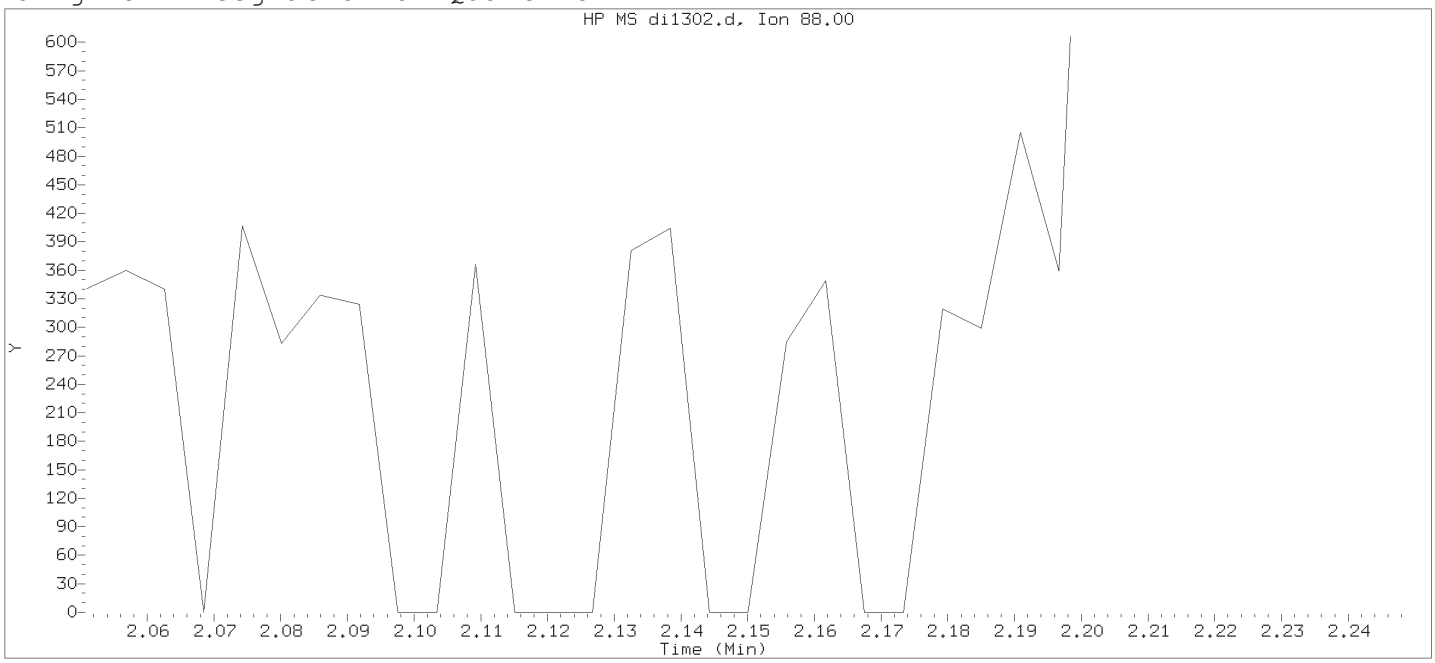
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

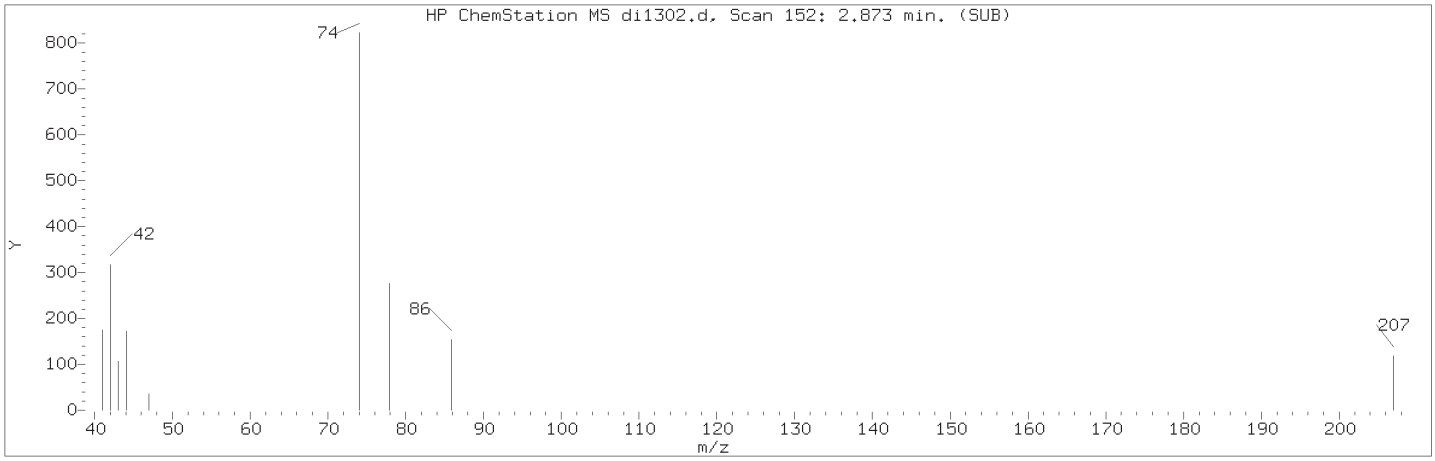
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

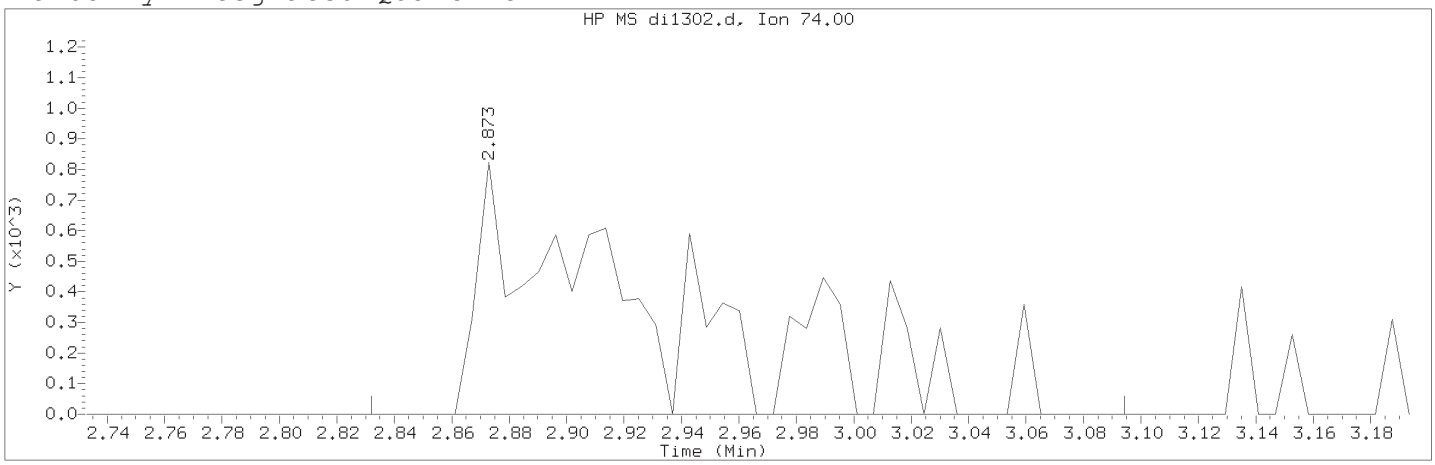
Compound Number : 1
Compound Name : 1,4-Dioxane
Expected RT (minutes) : 2.150
Quant Ion : 88.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

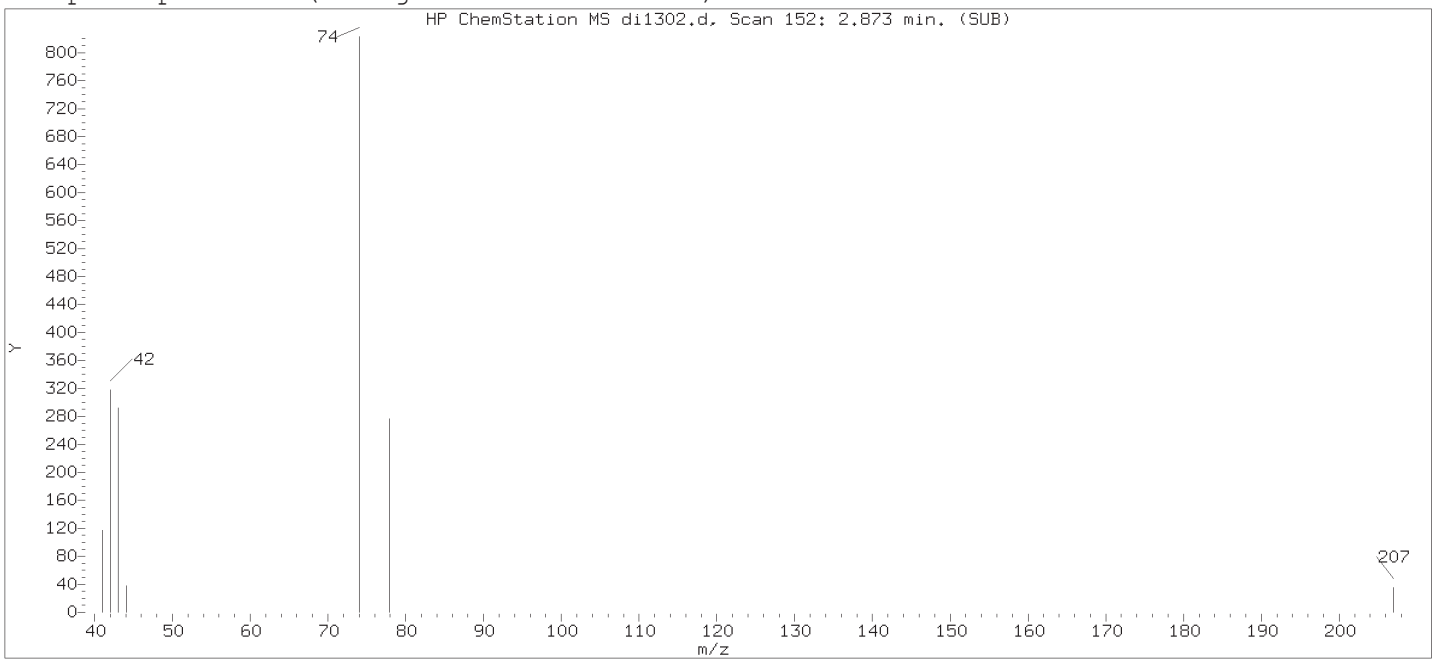
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 152		
Retention Time (minutes)	: 2.873		
Quant Ion	: 74.00		
Area (flag)	: 3486M		
On-Column Amount (ng/ul)	: 0.0772		
Integration start scan	: 144	Integration stop scan:	189
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

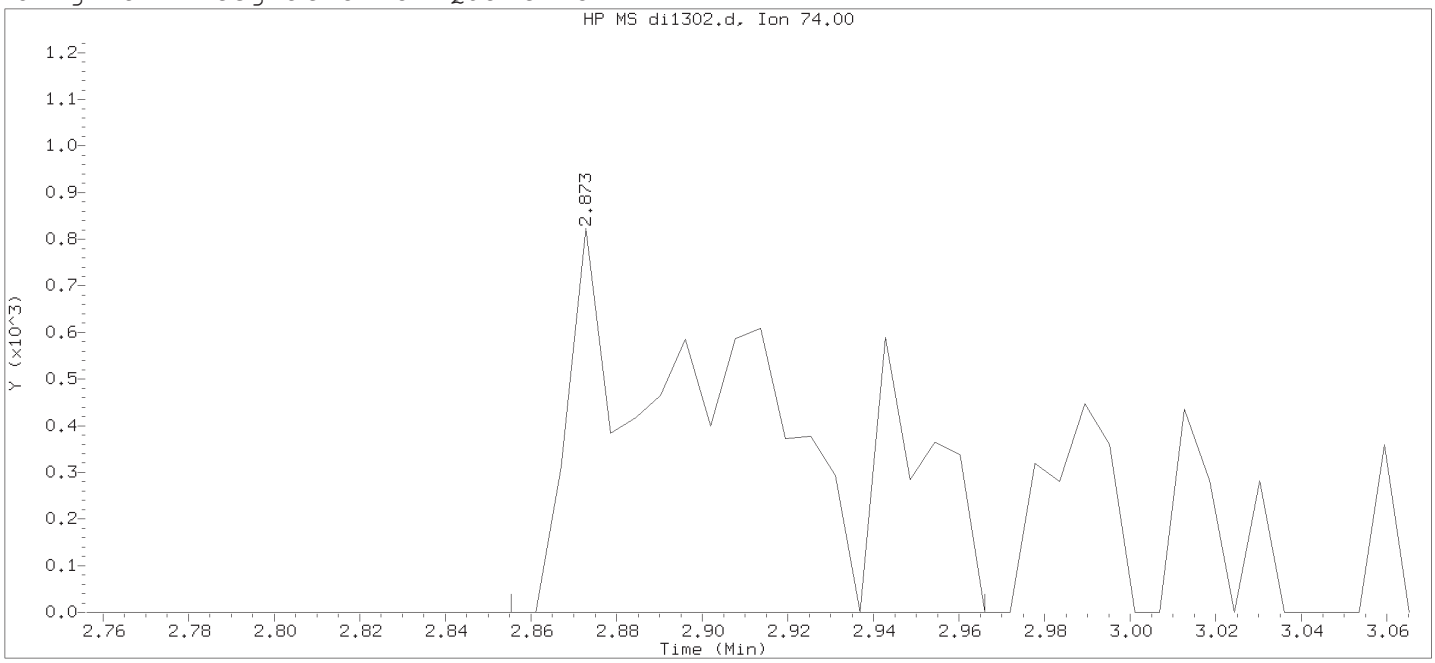
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

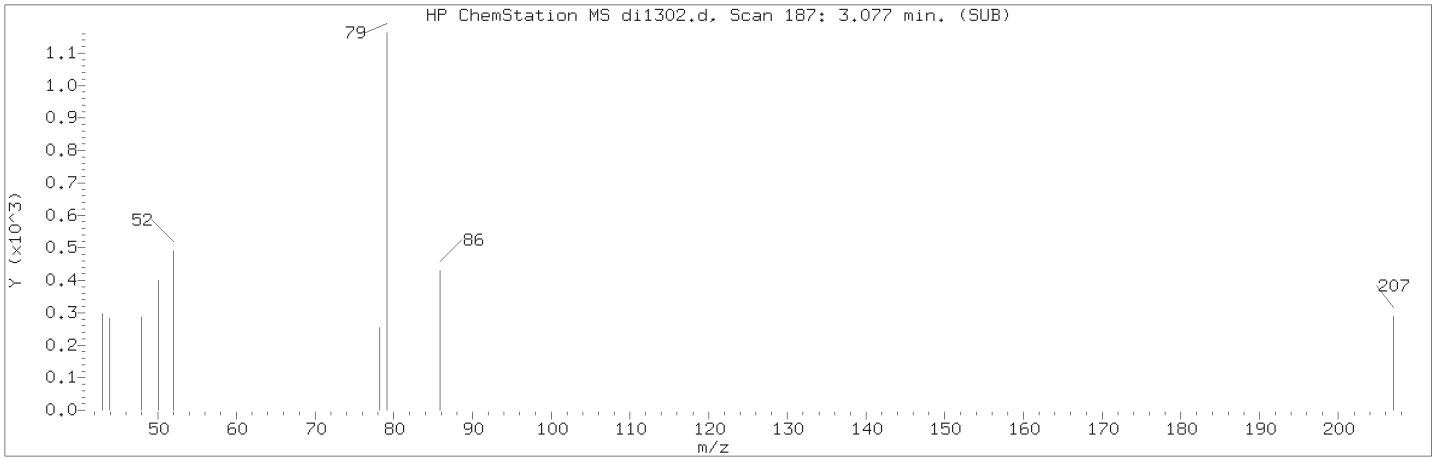
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

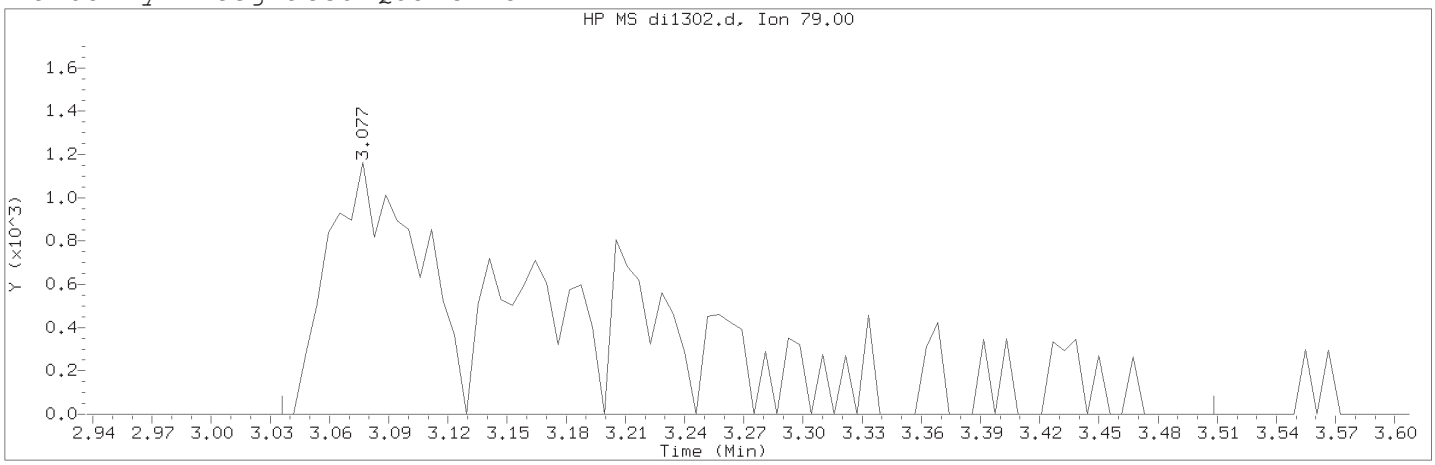
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 152		
Retention Time (minutes)	: 2.873		
Quant Ion	: 74.00		
Area	: 2518		
On-column Amount (ng/ul)	: 0.0546		
Integration start scan	: 148	Integration stop scan:	167
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

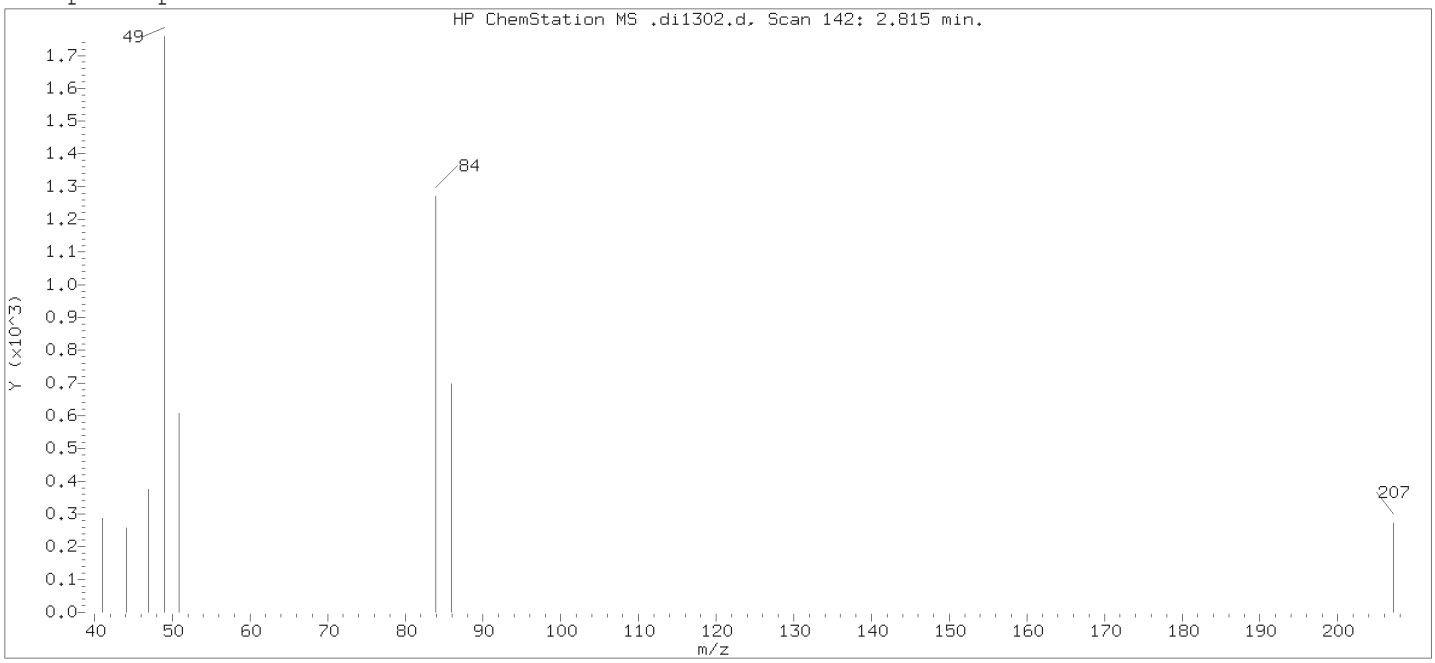
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 187		
Retention Time (minutes)	: 3.077		
Quant Ion	: 79.00		
Area (flag)	: 9444M		
On-Column Amount (ng/ul)	: 0.1152		
Integration start scan	: 179	Integration stop scan:	260
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

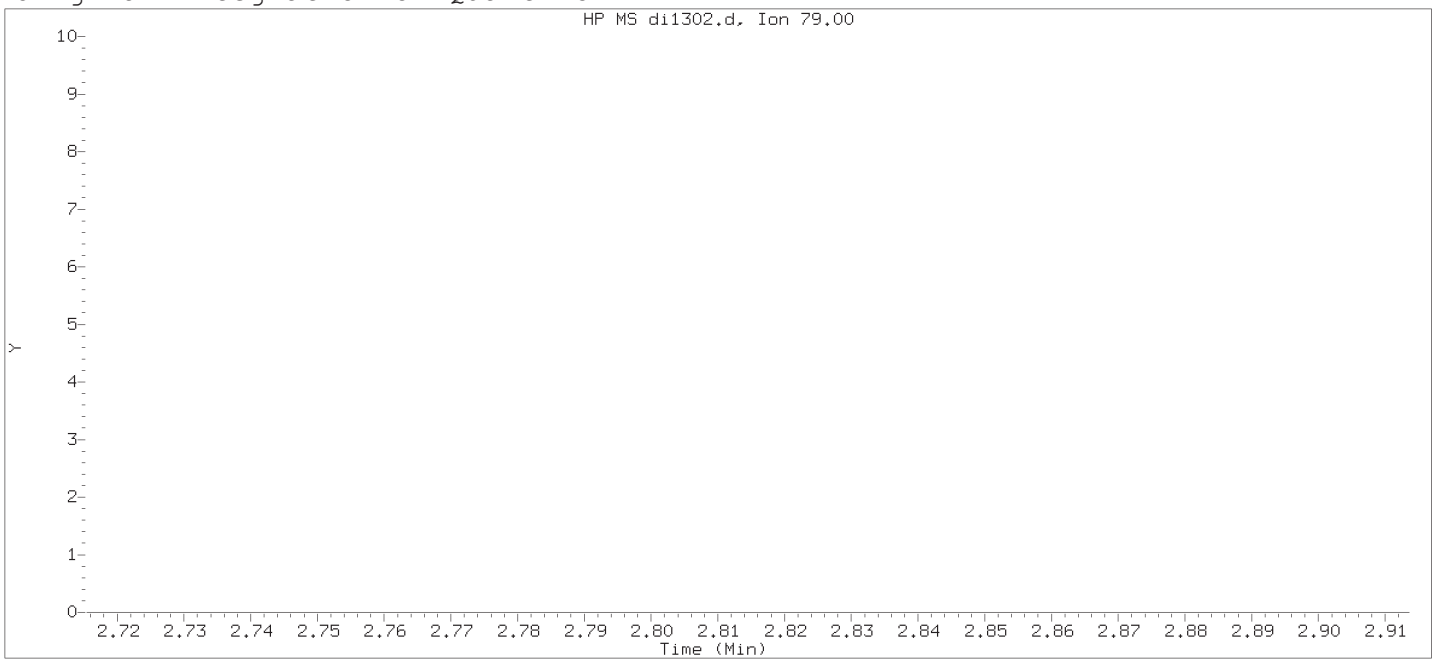
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

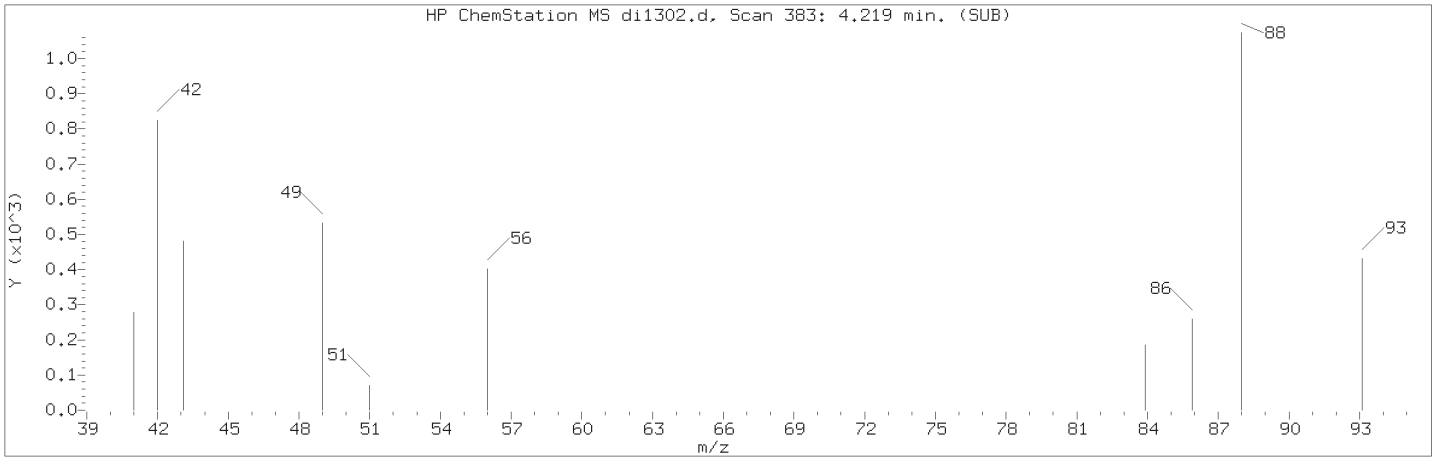
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

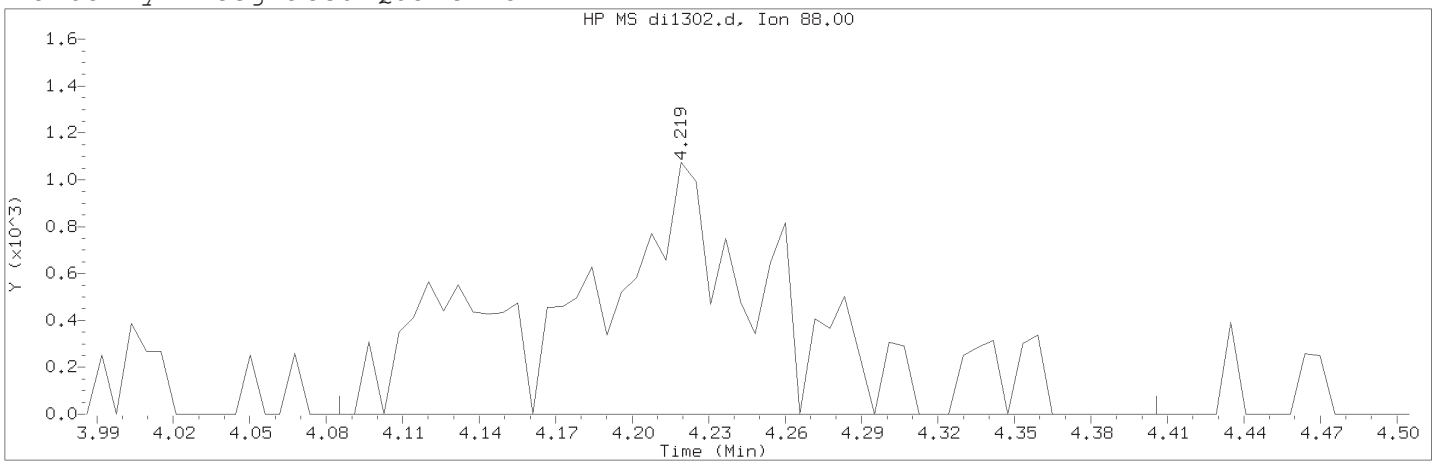
Compound Number : 5
Compound Name : Pyridine
Expected RT (minutes) : 2.814
Quant Ion : 79.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: 37

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

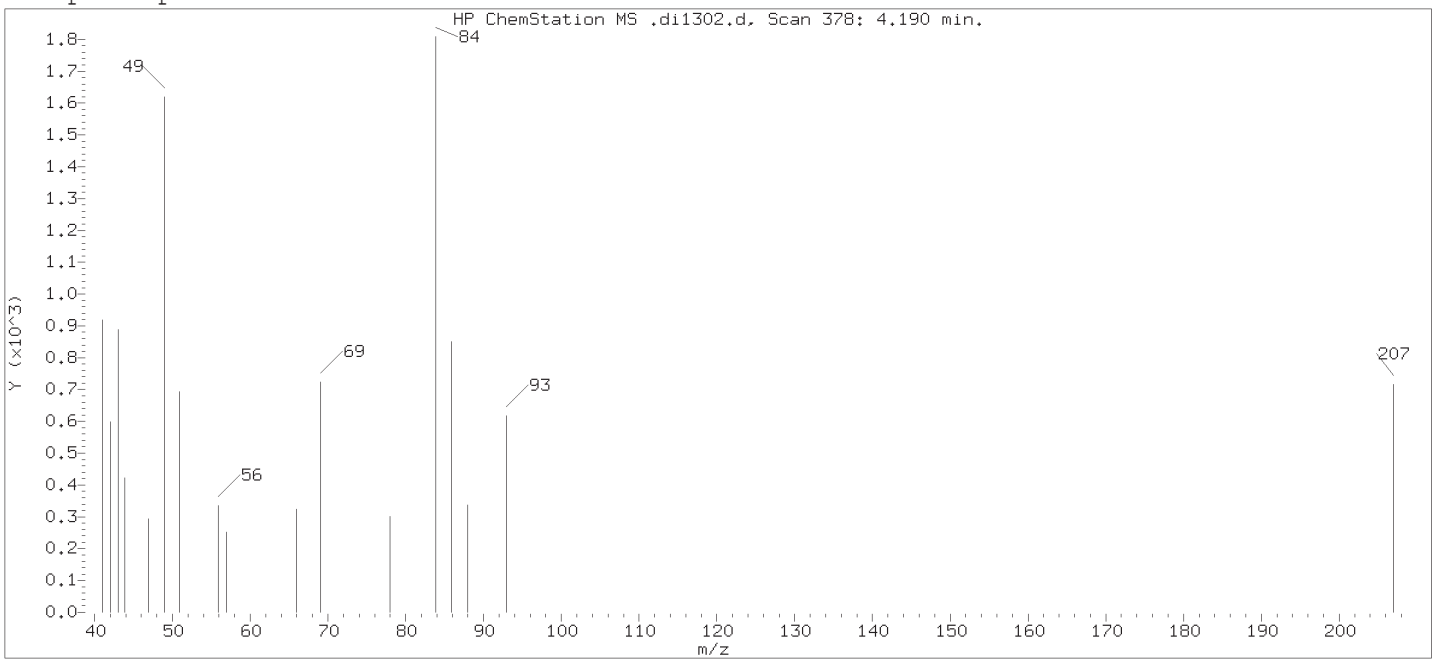
Compound Number	: 8		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 383		
Retention Time (minutes)	: 4.219		
Quant Ion	: 88.00		
Area (flag)	: 6464M		
On-Column Amount (ng/ul)	: 0.1934		
Integration start scan	: 359	Integration stop scan:	414
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

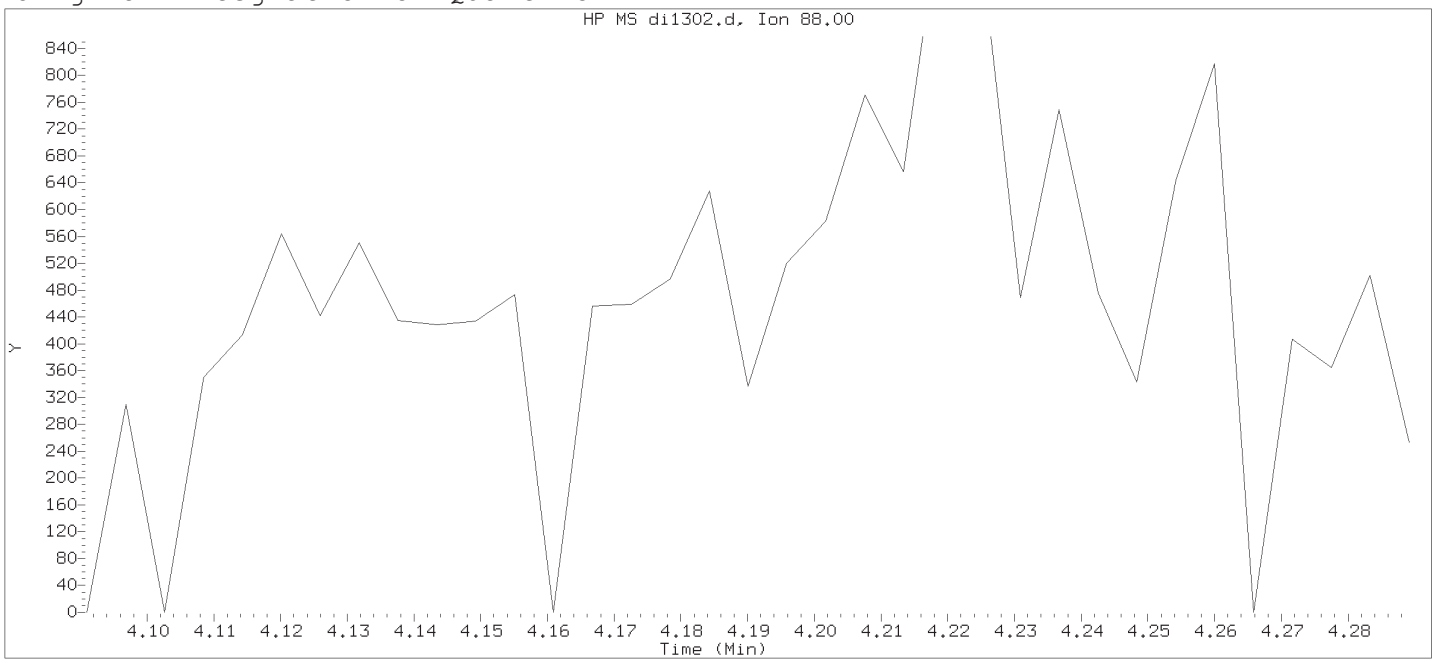
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

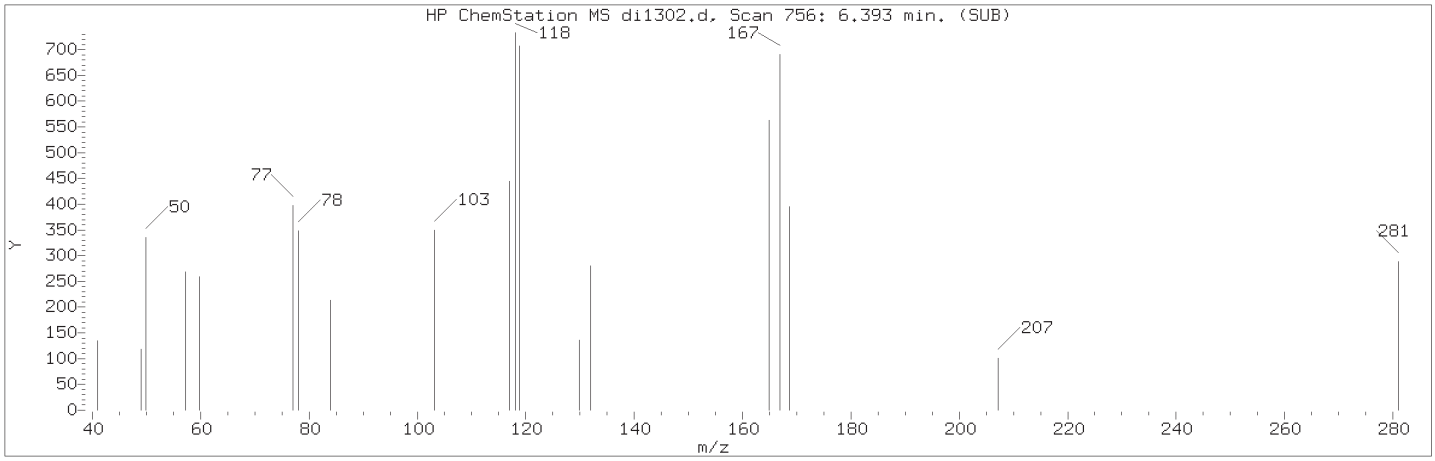
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

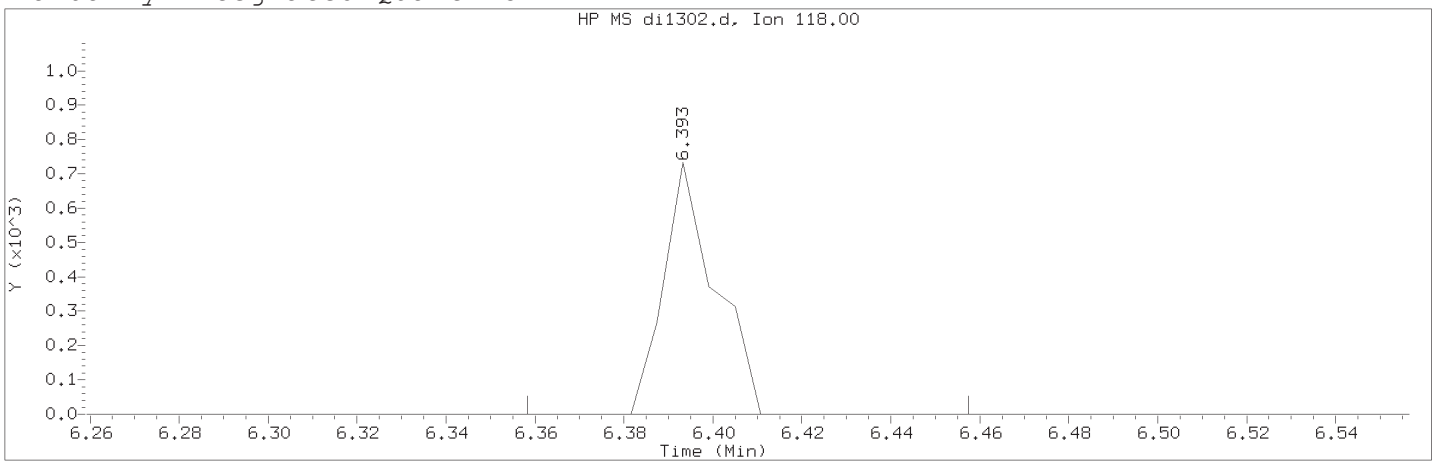
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.190
Quant Ion : 88.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: 378

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

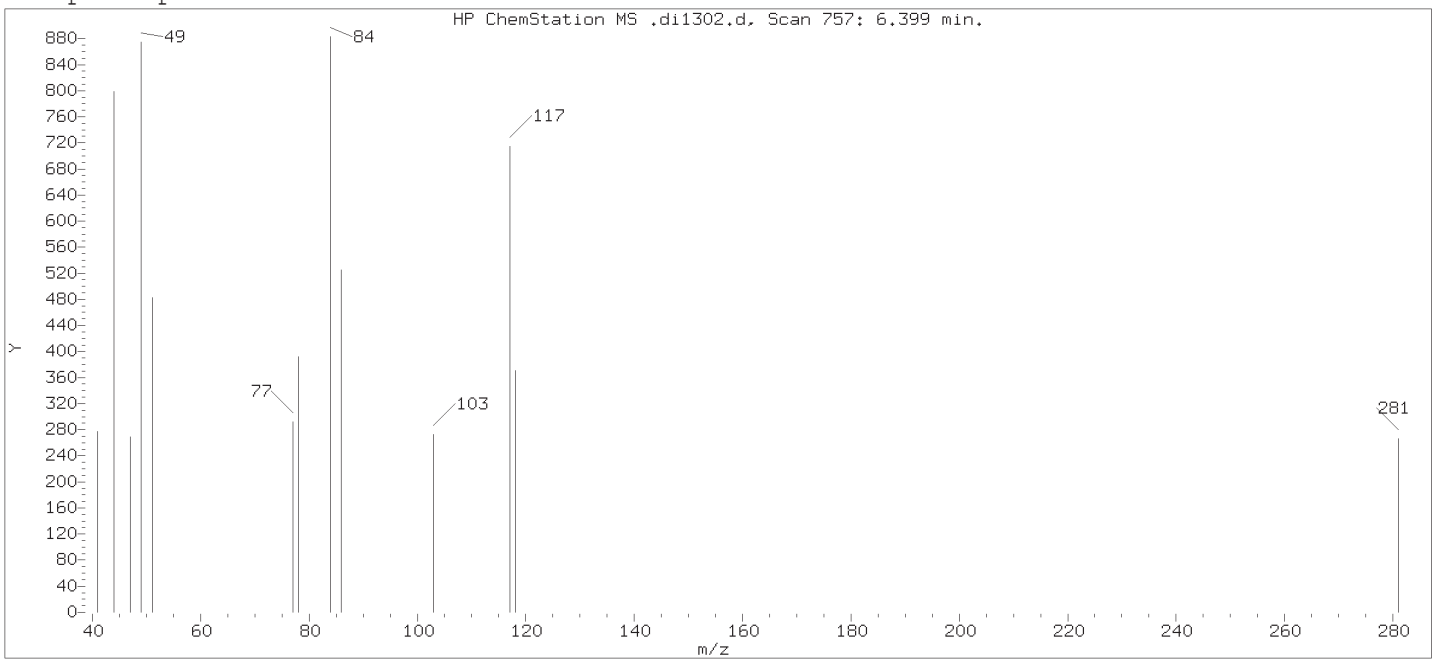
Compound Number	: 20		
Compound Name	: a-methylstyrene		
Scan Number	: 756		
Retention Time (minutes)	: 6.393		
Quant Ion	: 118.00		
Area (flag)	: 589M		
On-Column Amount (ng/ul)	: 0.0960		
Integration start scan	: 749	Integration stop scan:	766
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

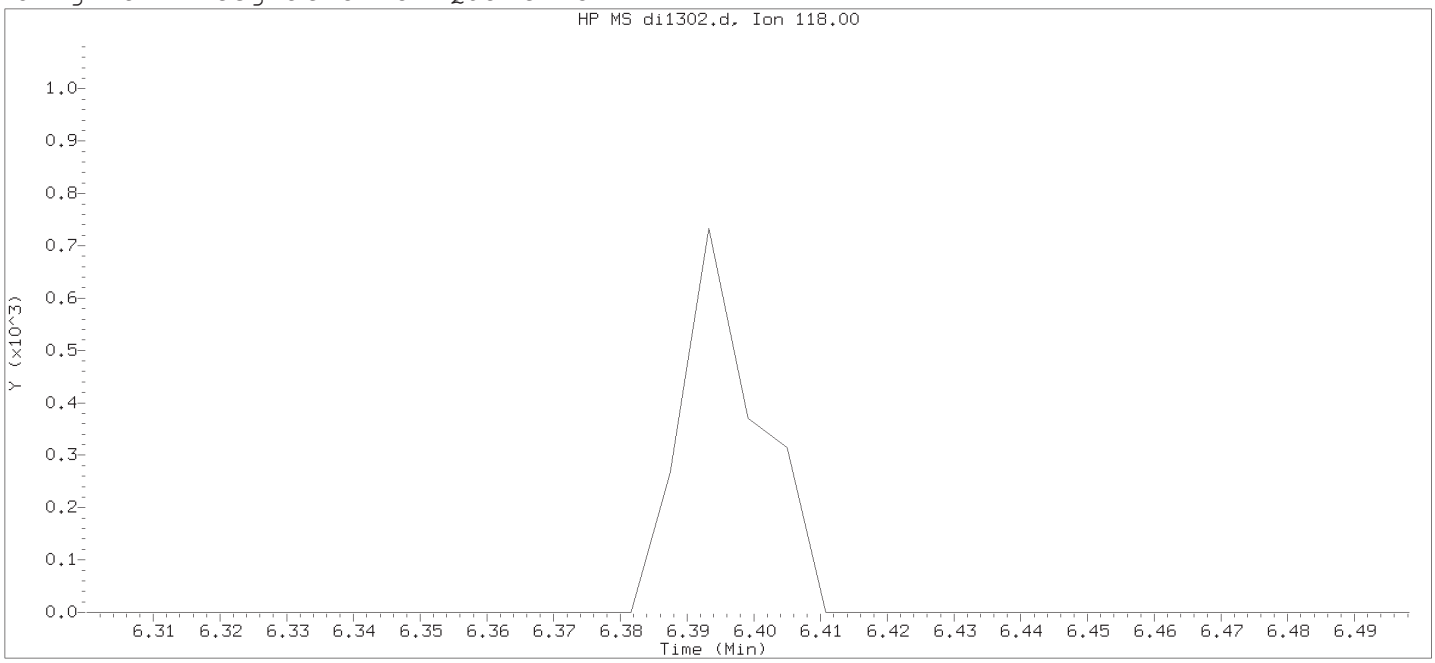
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

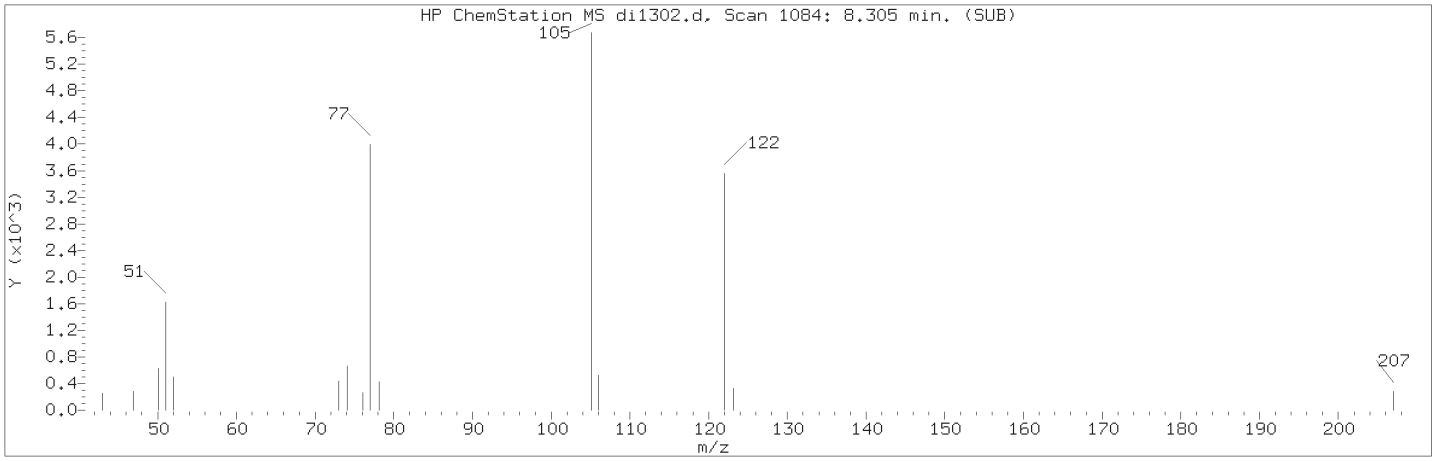
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

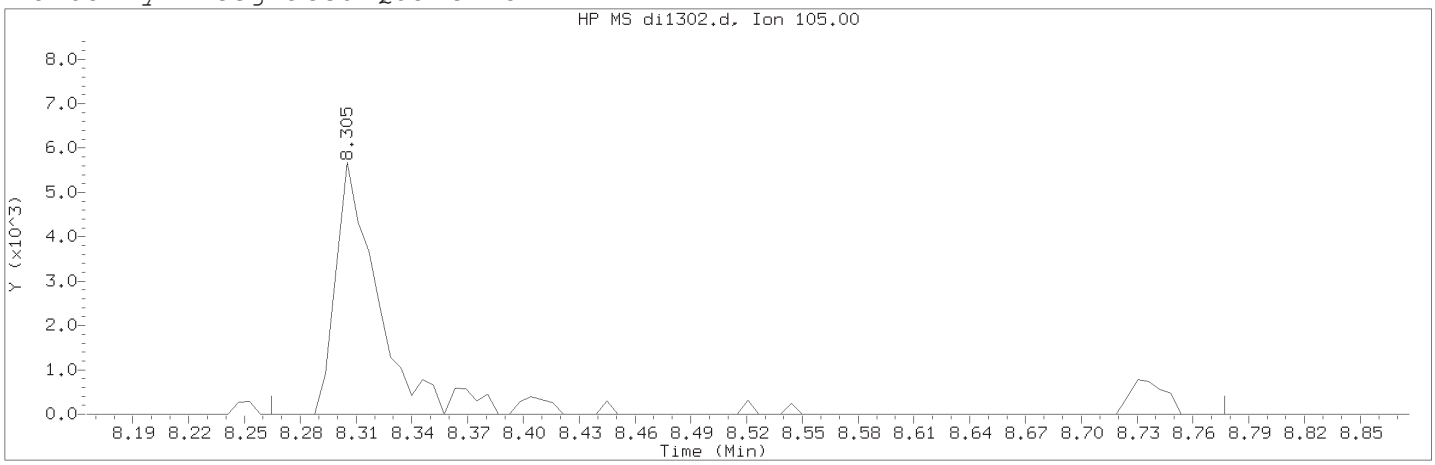
Compound Number : 20
Compound Name : a-methylstyrene
Expected RT (minutes) : 6.399
Quant Ion : 118.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: 3790

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

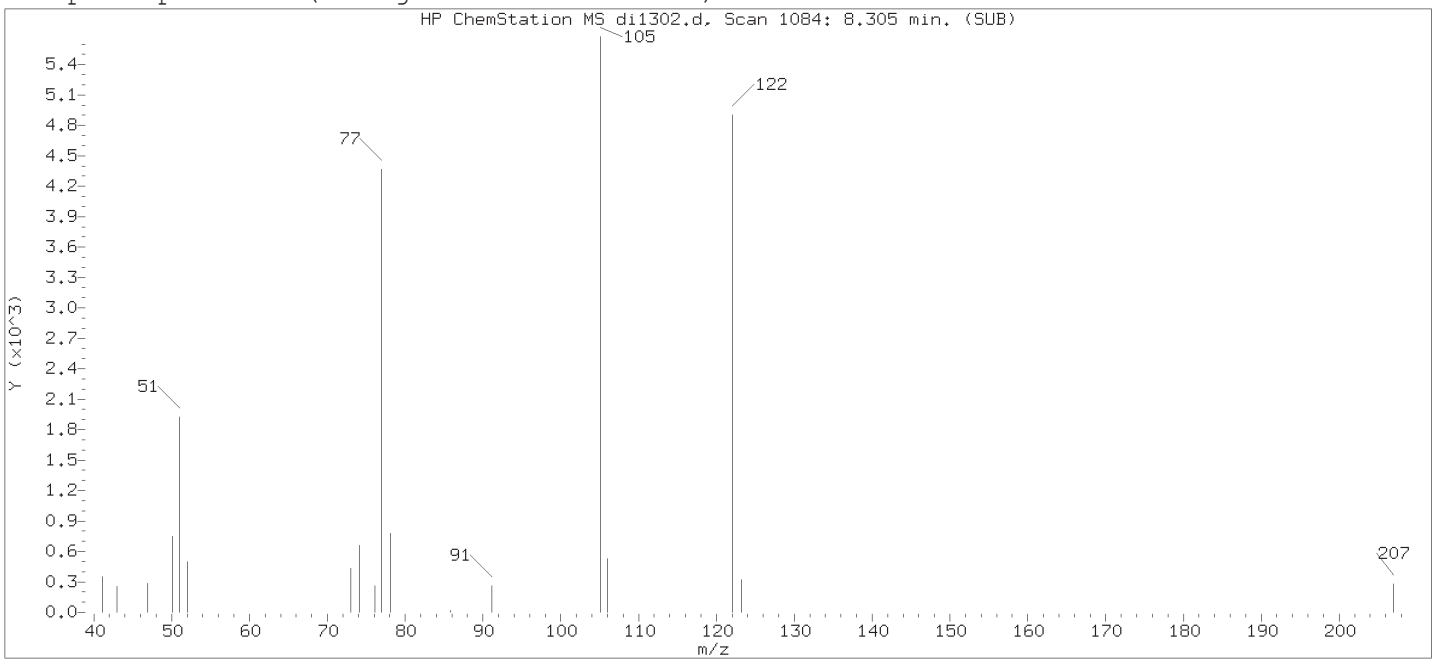
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1084		
Retention Time (minutes)	: 8.305		
Quant Ion	: 105.00		
Area (flag)	: 11007M		
On-Column Amount (ng/ul)	: 0.3612		
Integration start scan	: 1076	Integration stop scan:	1164
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

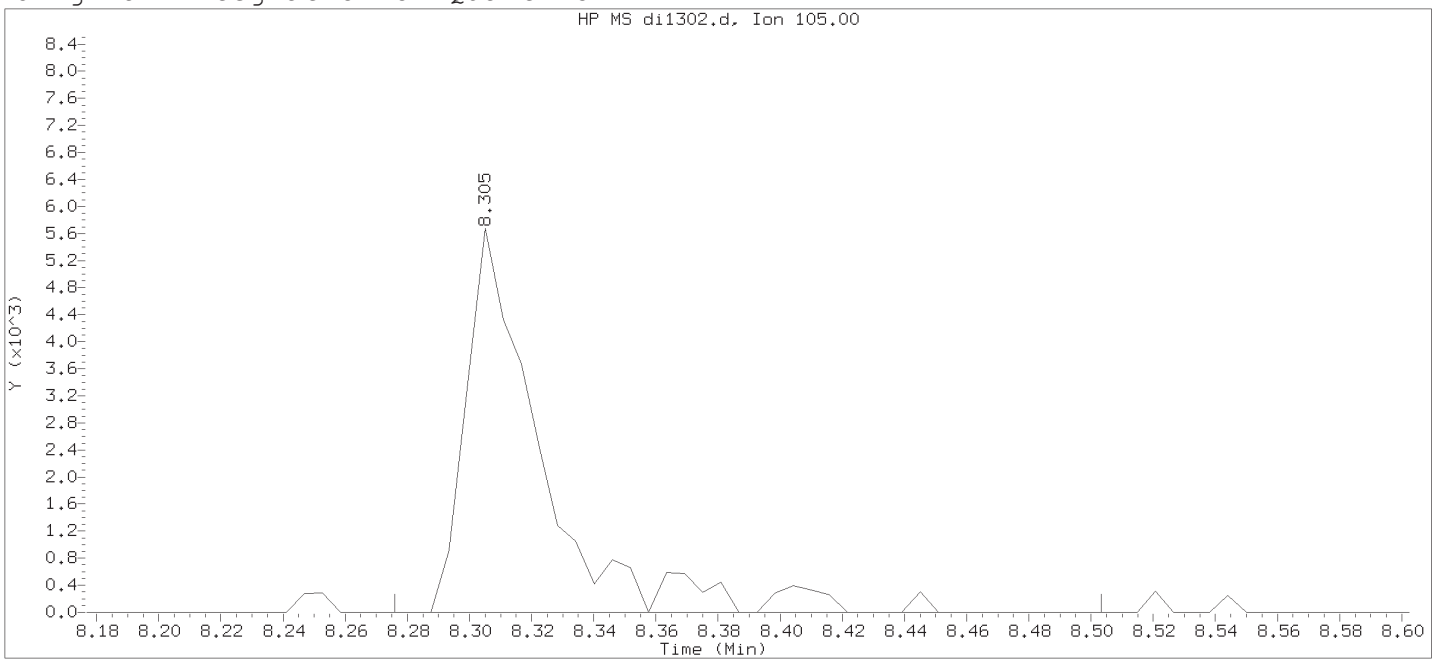
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

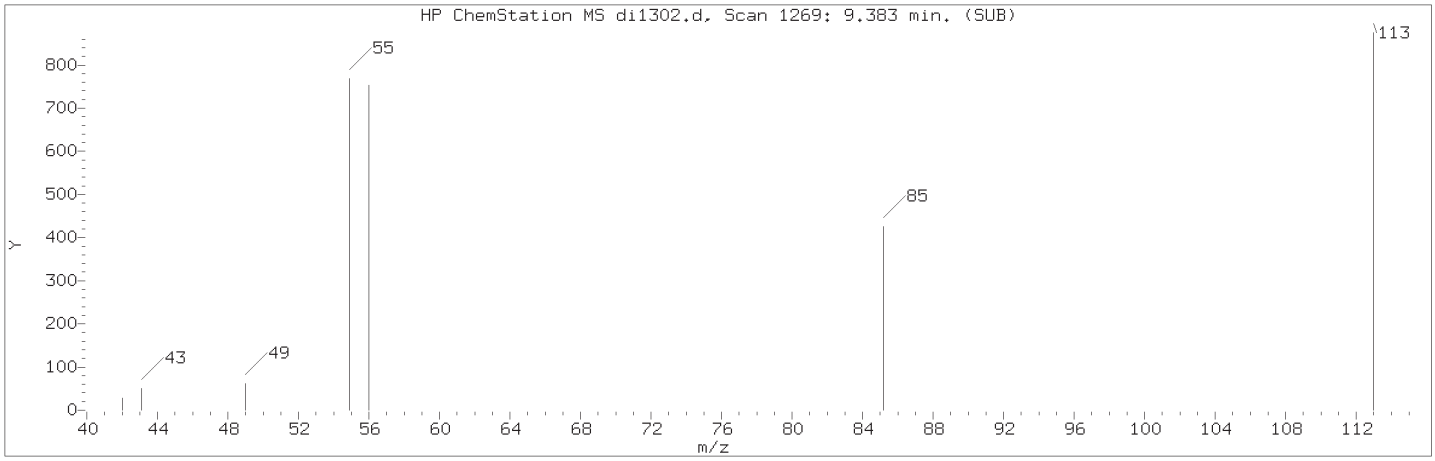
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

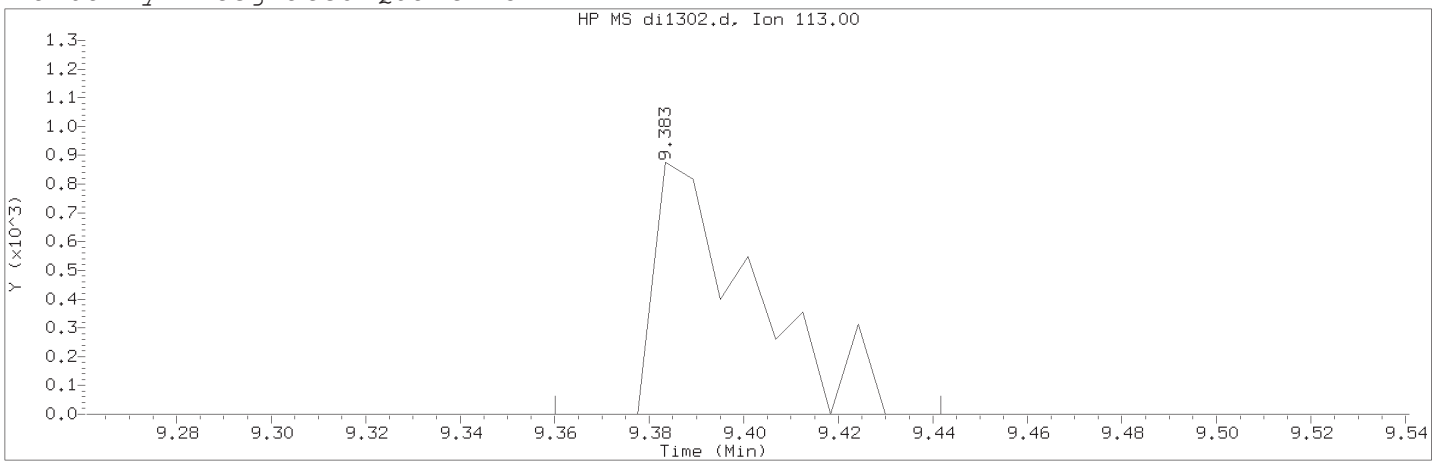
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1084		
Retention Time (minutes)	: 8.305		
Quant Ion	: 105.00		
Area	: 9787		
On-column Amount (ng/ul)	: 0.3687		
Integration start scan	: 1078	Integration stop scan:	1117
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: 37

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

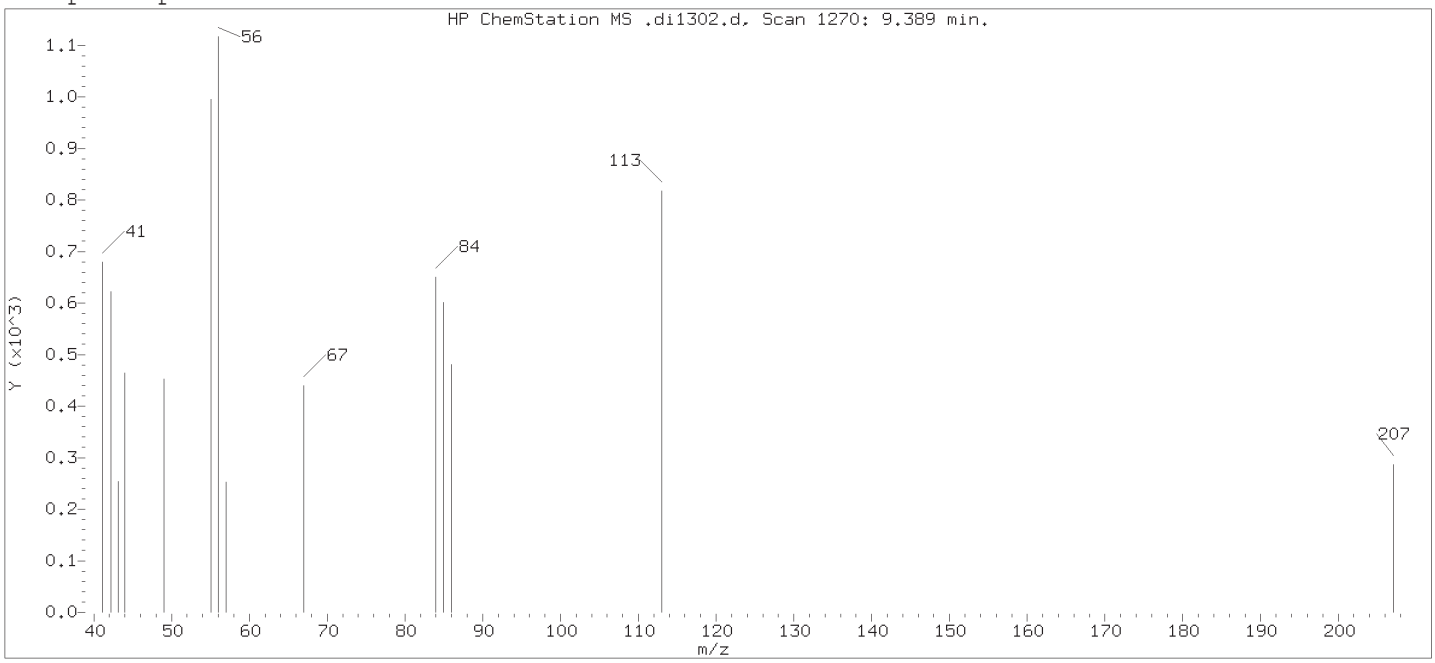
Compound Number : 76
Compound Name : Caprolactam
Scan Number : 1269
Retention Time (minutes) : 9.383
Quant Ion : 113.00
Area (flag) : 1247M
On-Column Amount (ng/ul) : 0.0782
Integration start scan : 1264 Integration stop scan: 1278
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

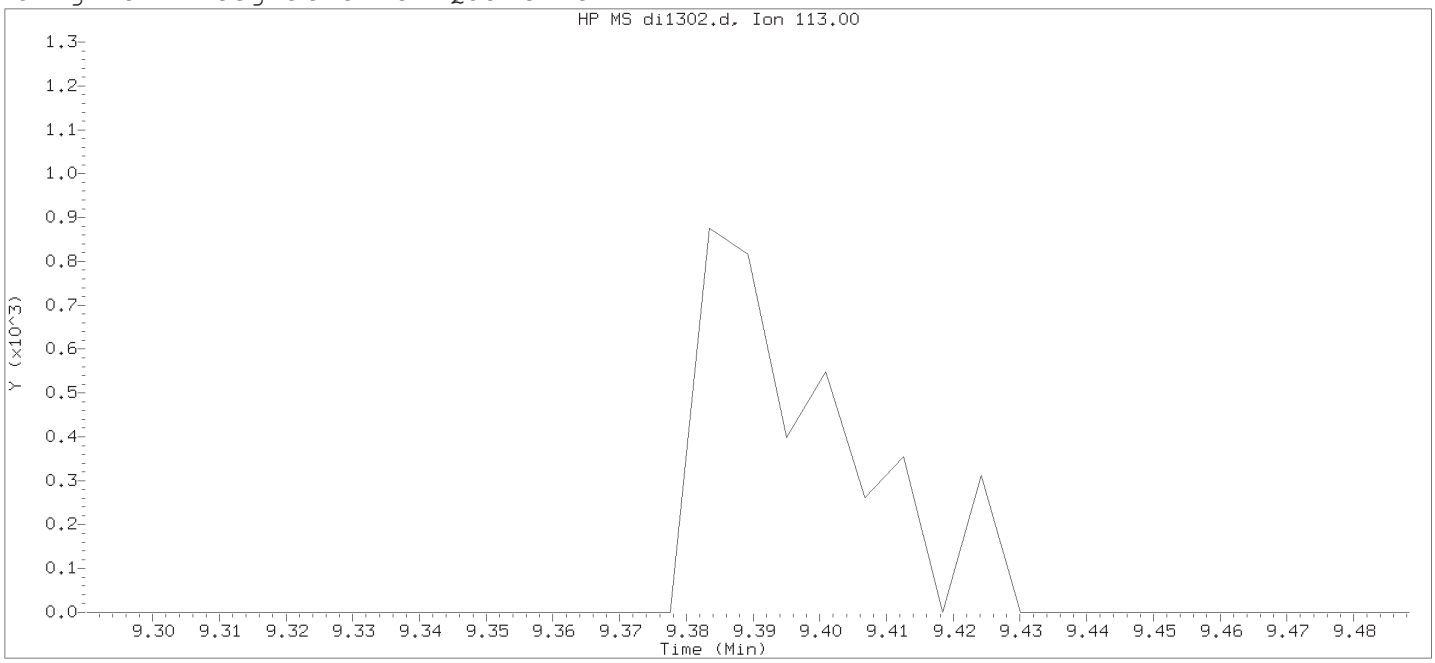
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

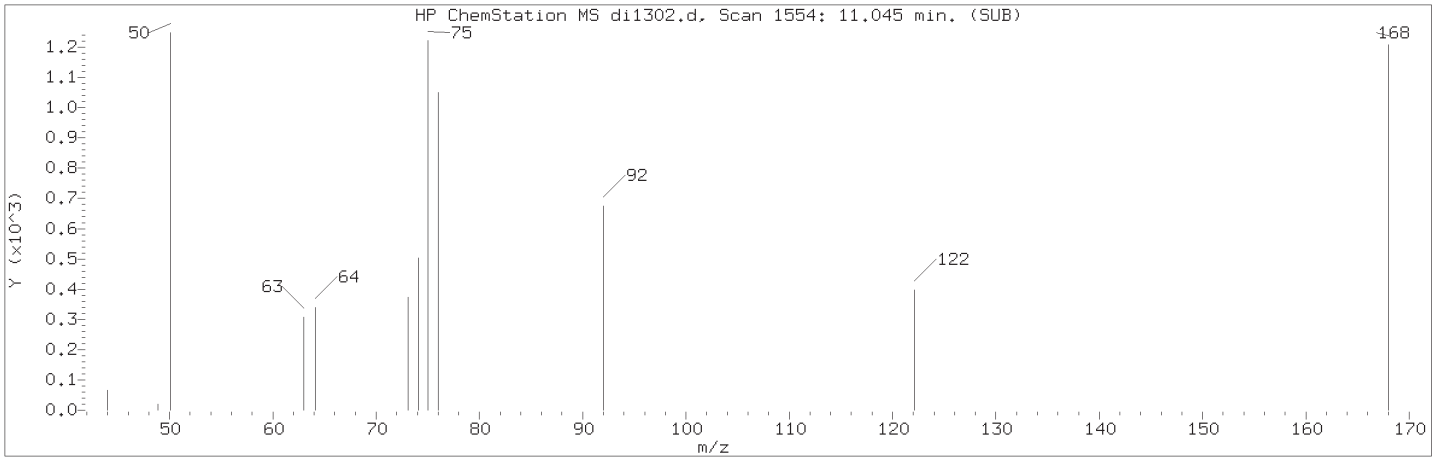
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

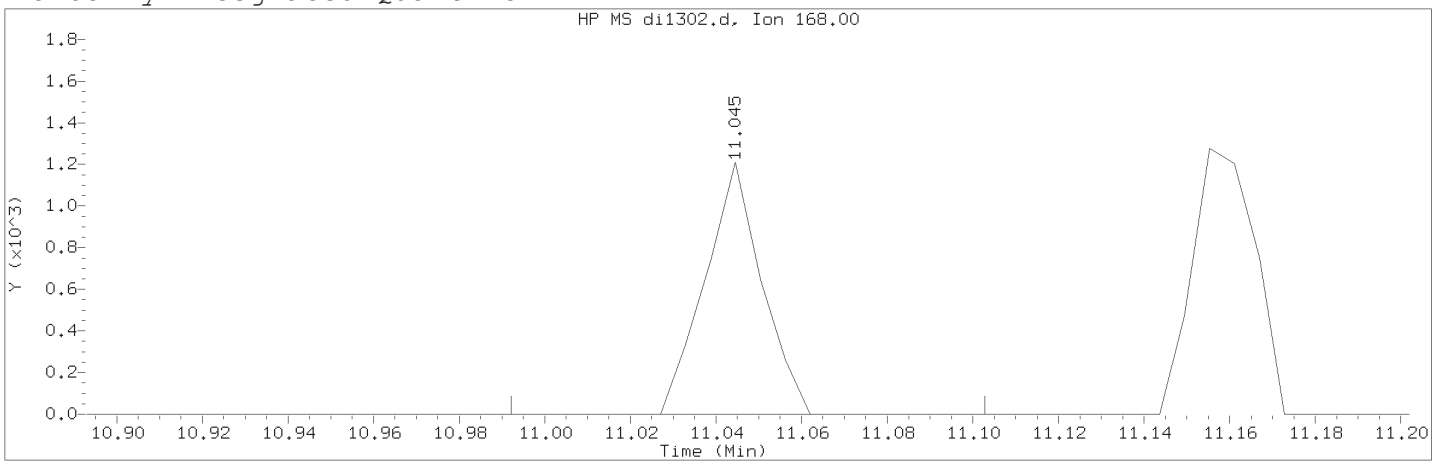
Compound Number : 76
Compound Name : Caprolactam
Expected RT (minutes) : 9.389
Quant Ion : 113.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: EMONBORNE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

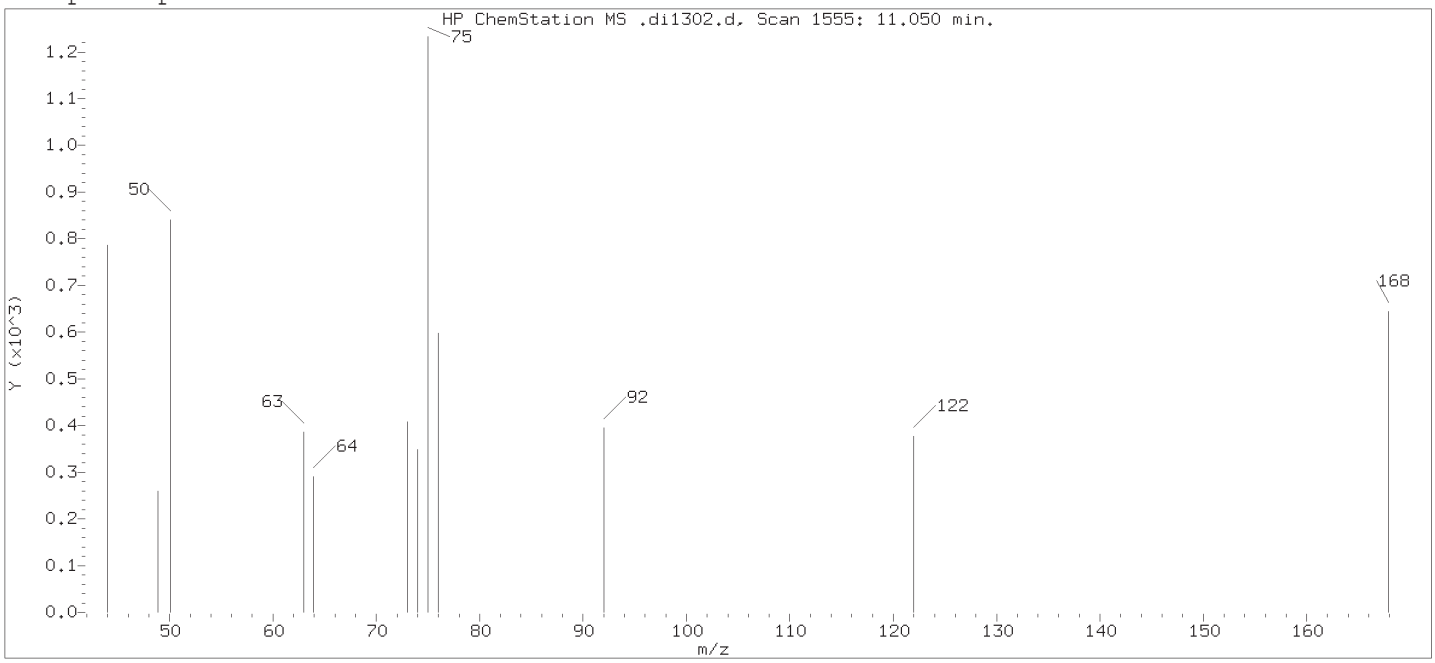
Compound Number : 105
Compound Name : 1,4-Dinitrobenzene
Scan Number : 1554
Retention Time (minutes) : 11.045
Quant Ion : 168.00
Area (flag) : 1111M
On-Column Amount (ng/ul) : 0.0809
Integration start scan : 1544 Integration stop scan: 1563
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

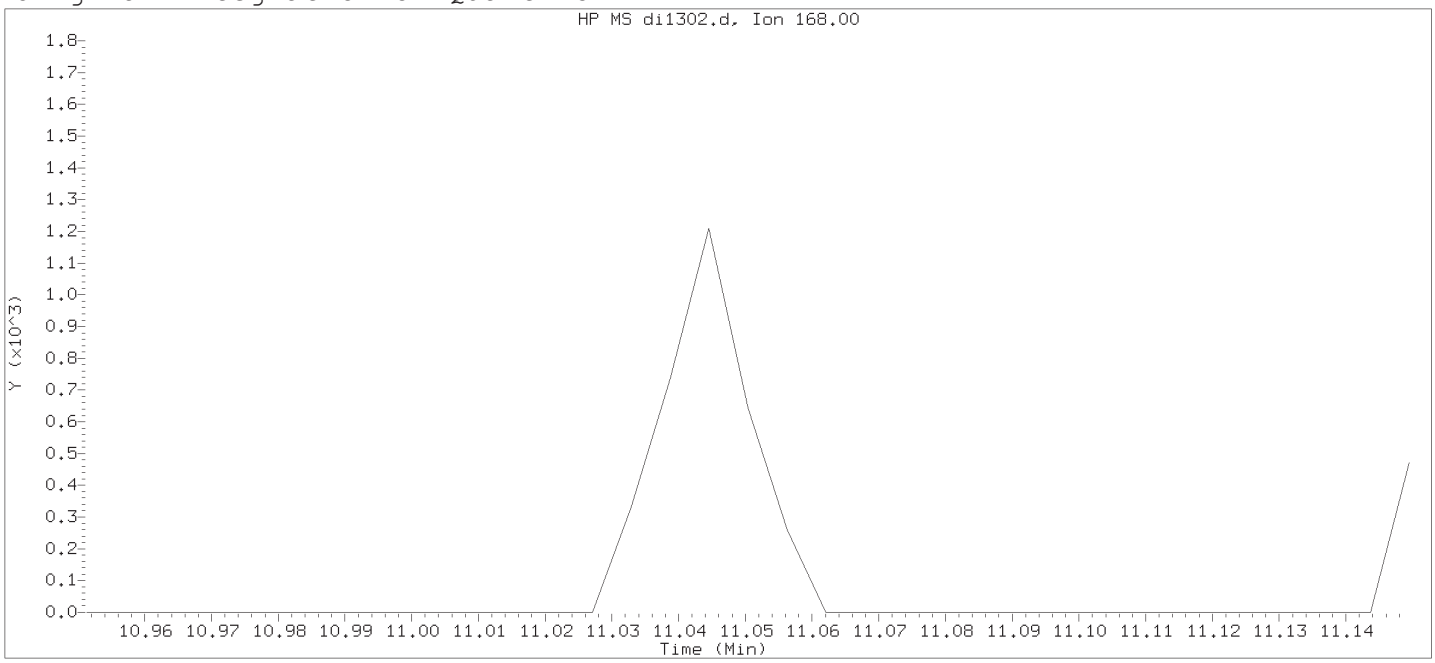
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

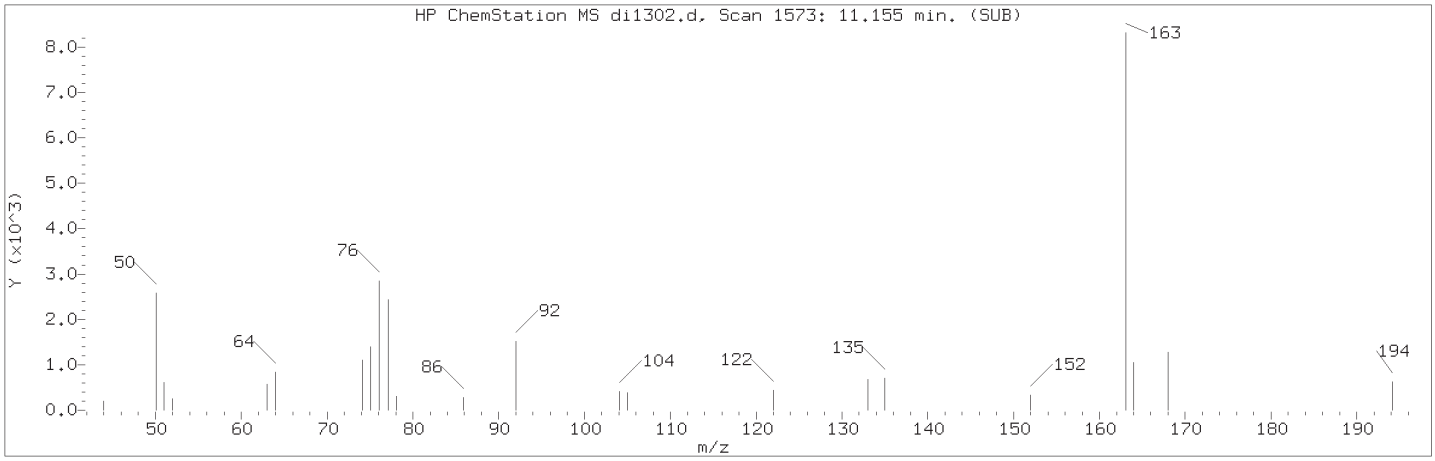
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

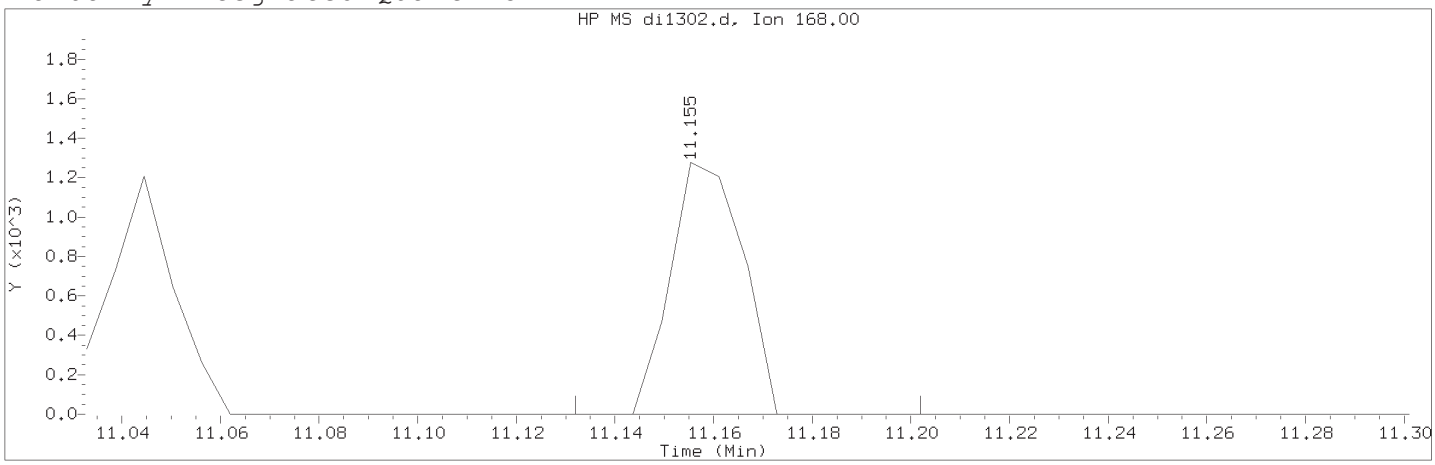
Compound Number : 105
Compound Name : 1,4-Dinitrobenzene
Expected RT (minutes) : 11.050
Quant Ion : 168.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: 37

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

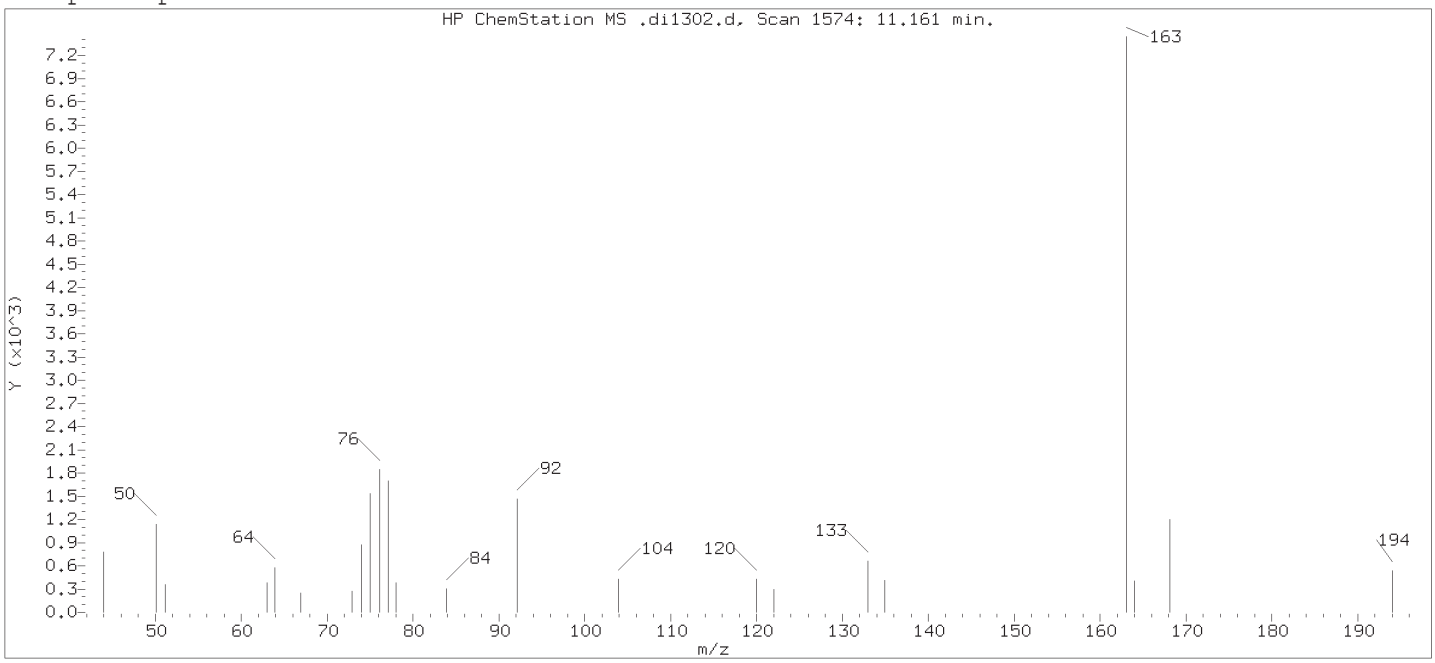
Compound Number	: 107		
Compound Name	: 1,3-Dinitrobenzene		
Scan Number	: 1573		
Retention Time (minutes)	: 11.155		
Quant Ion	: 168.00		
Area (flag)	: 1293M		
On-Column Amount (ng/ul)	: 0.0779		
Integration start scan	: 1568	Integration stop scan:	1580
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

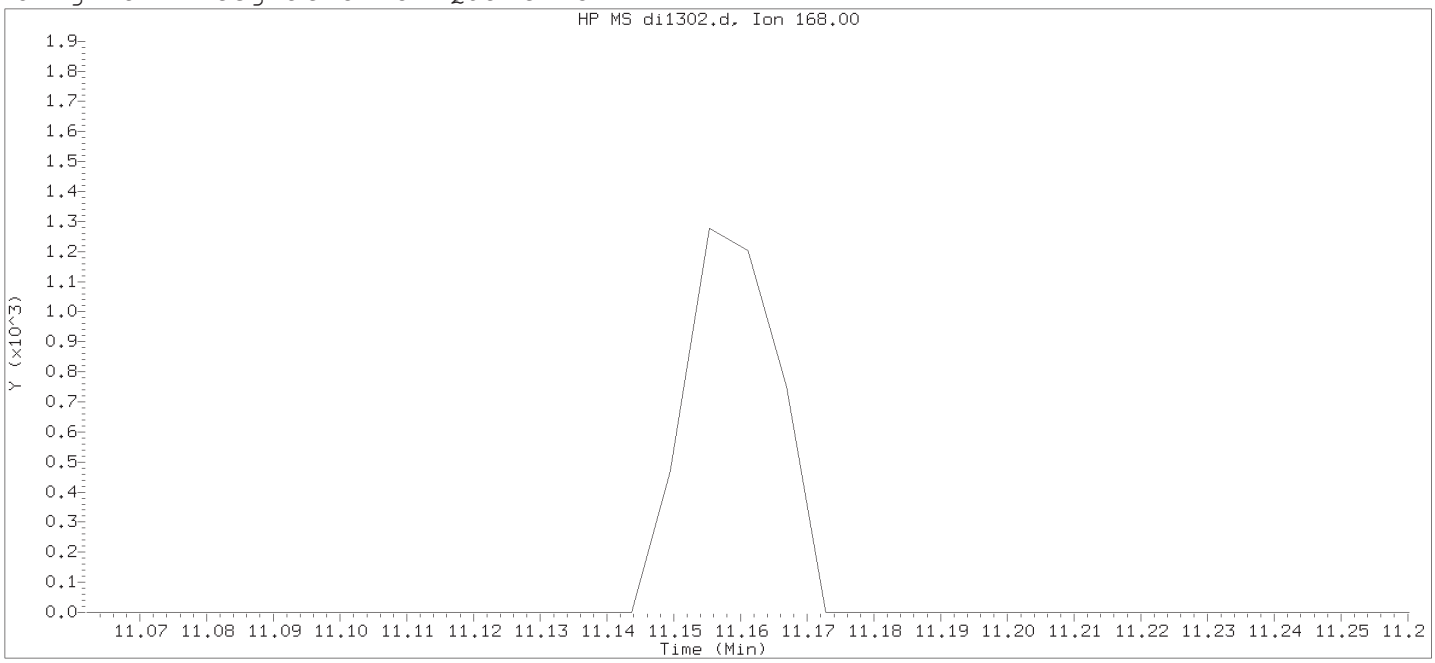
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

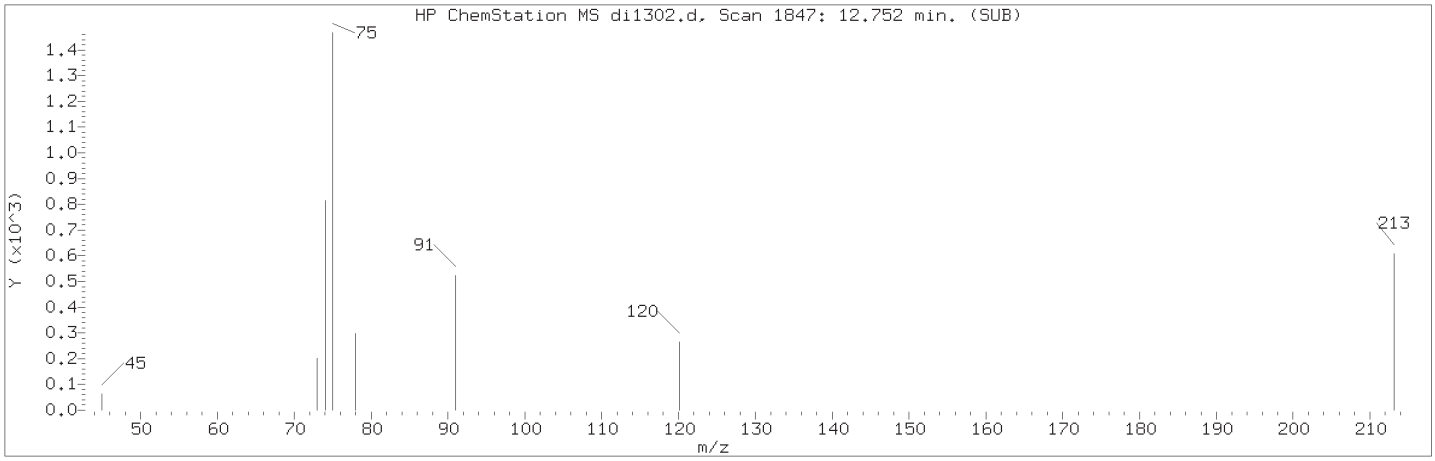
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

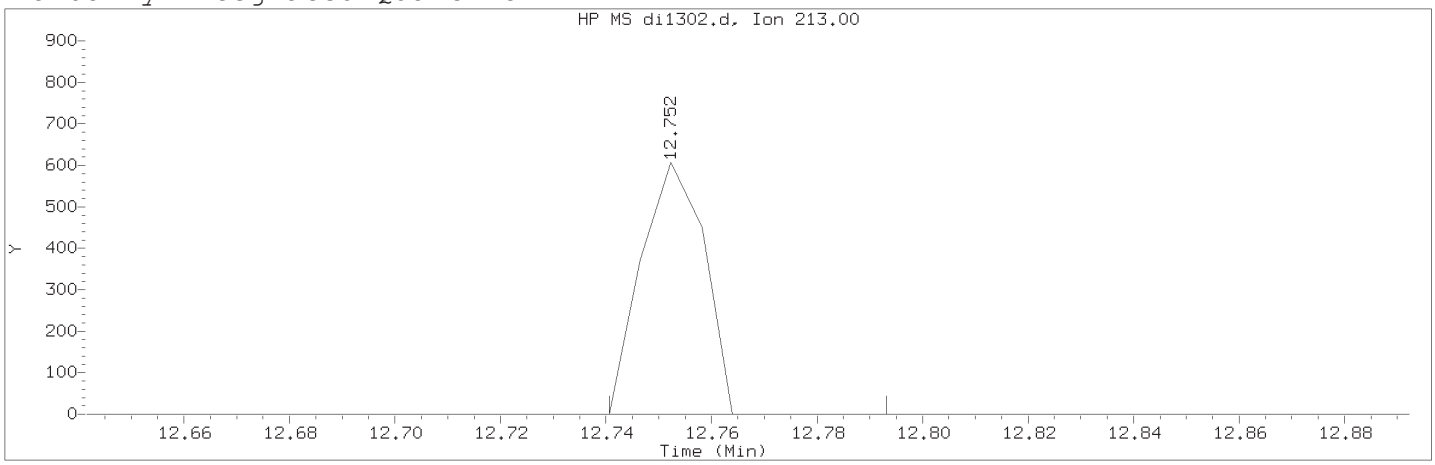
Compound Number : 107
Compound Name : 1,3-Dinitrobenzene
Expected RT (minutes) : 11.161
Quant Ion : 168.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: 3798

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

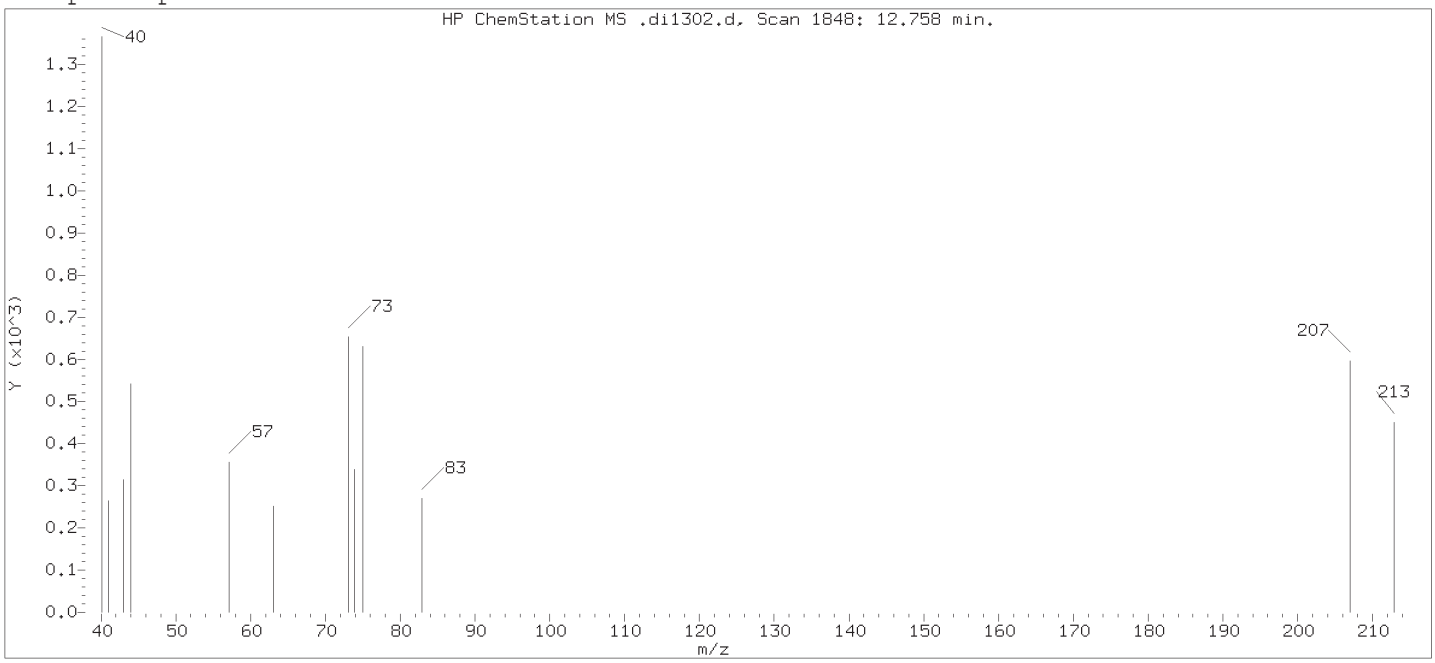
Compound Number	: 139		
Compound Name	: 1,3,5-Trinitrobenzene		
Scan Number	: 1847		
Retention Time (minutes)	: 12.752		
Quant Ion	: 213.00		
Area (flag)	: 499M		
On-Column Amount (ng/ul)	: 0.0592		
Integration start scan	: 1844	Integration stop scan:	1853
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

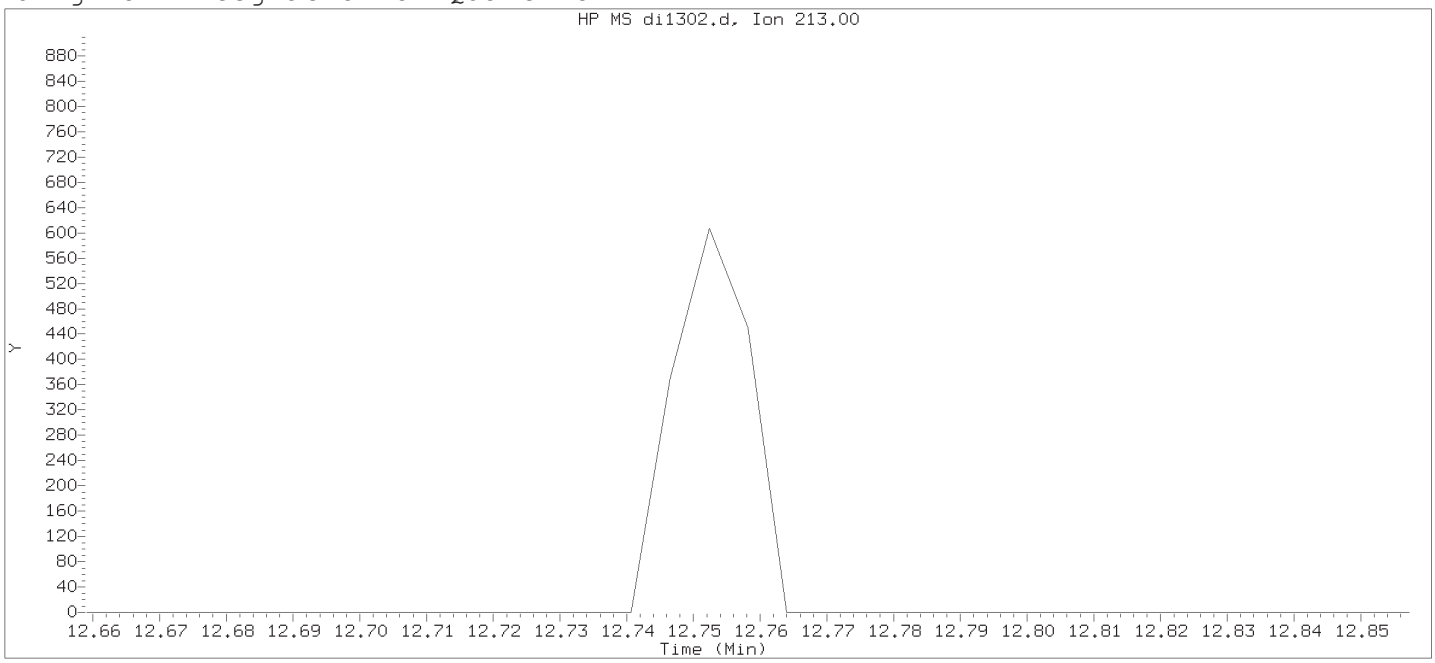
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



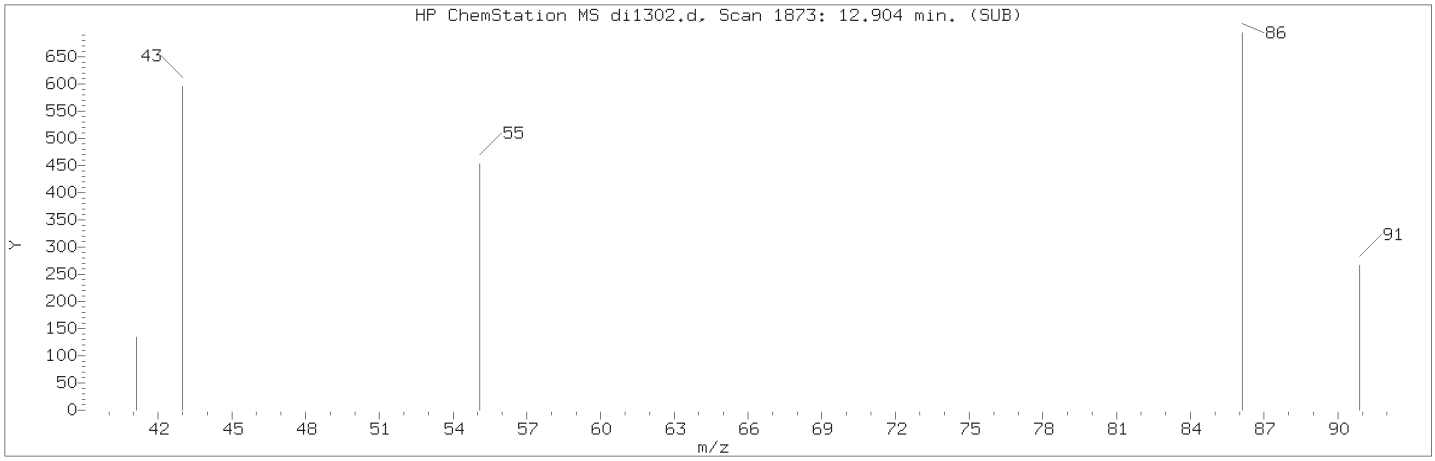
Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

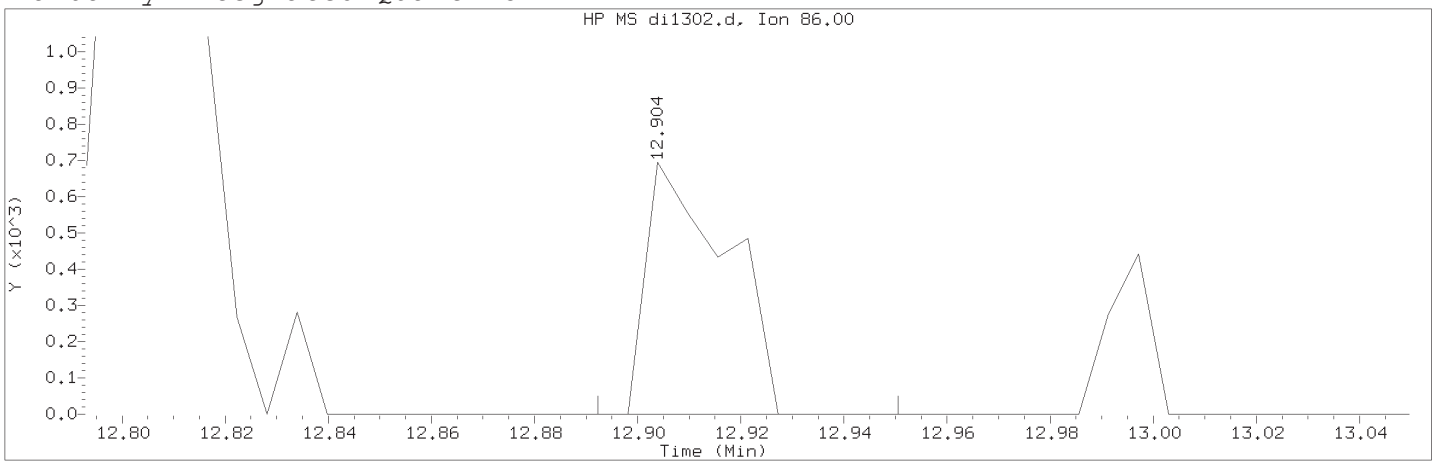
Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 12.758
Quant Ion : 213.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

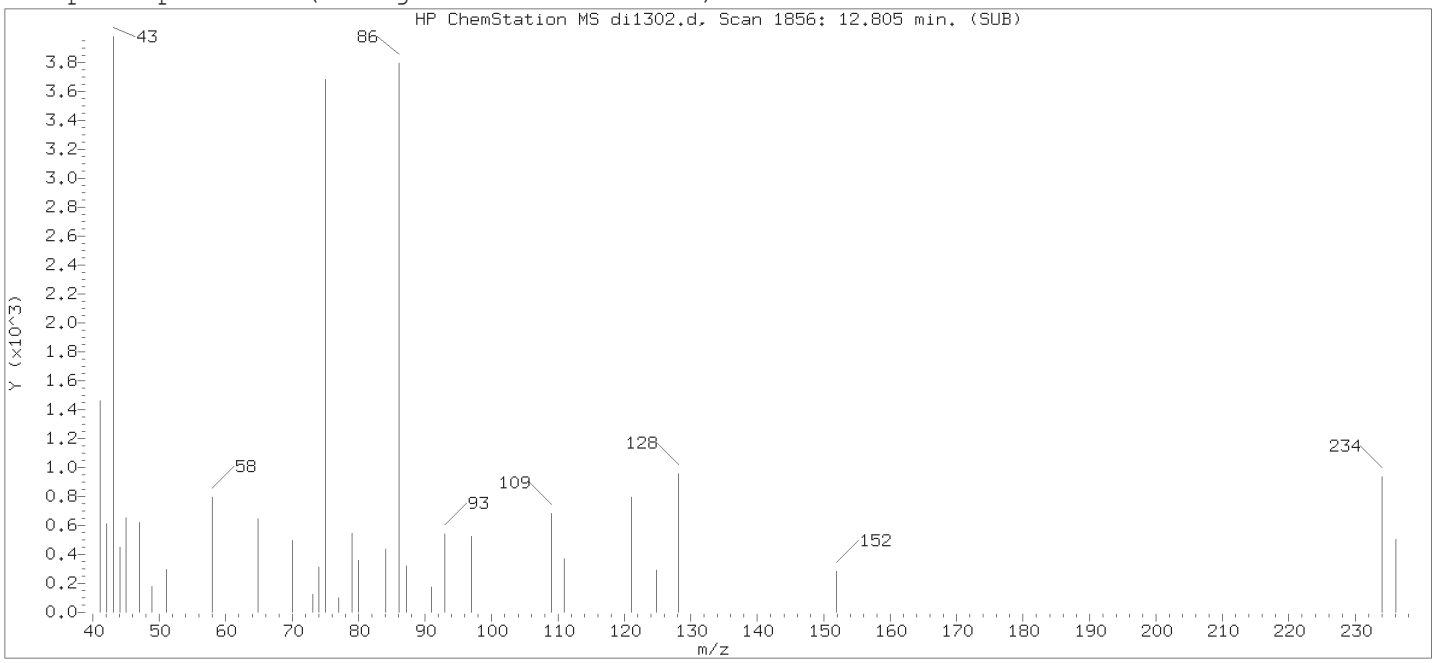
Compound Number	: 144		
Compound Name	: Diallate (peak 2)		
Scan Number	: 1873		
Retention Time (minutes)	: 12.904		
Quant Ion	: 86.00		
Area (flag)	: 758M		
On-Column Amount (ng/ul)	: 0.0197		
Integration start scan	: 1870	Integration stop scan:	1880
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

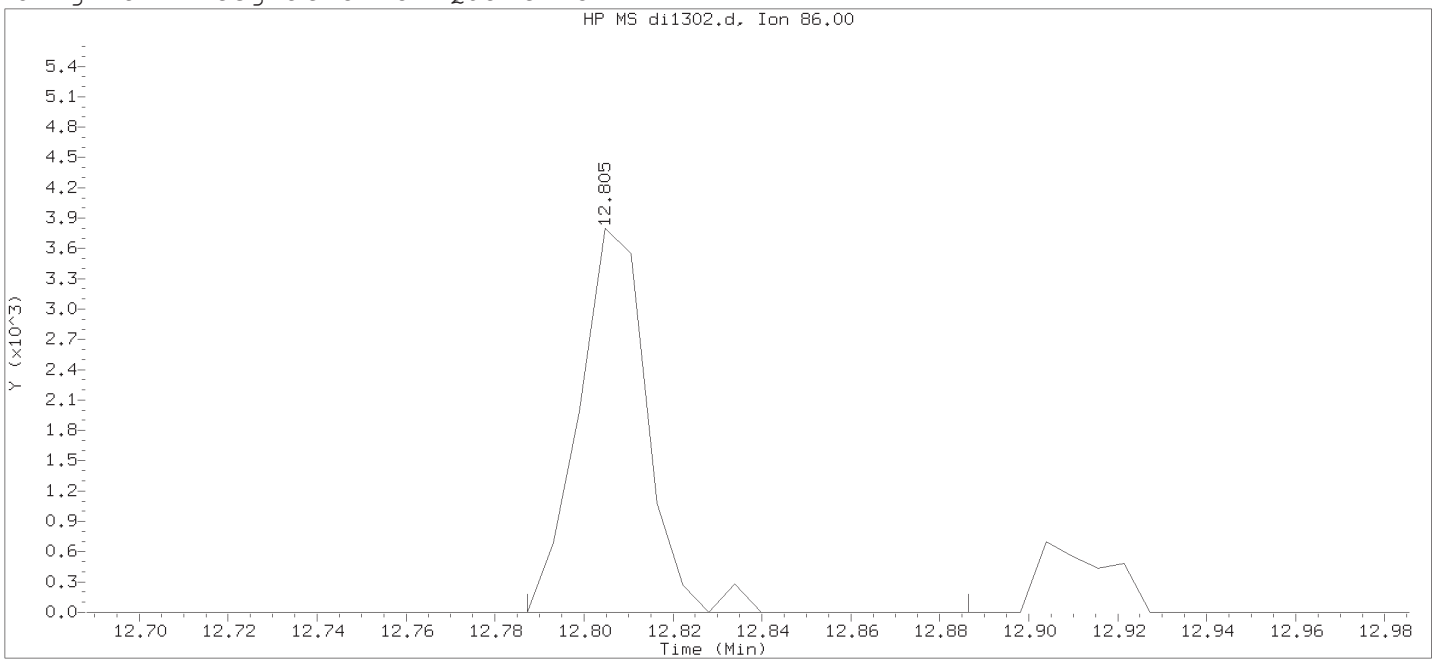
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

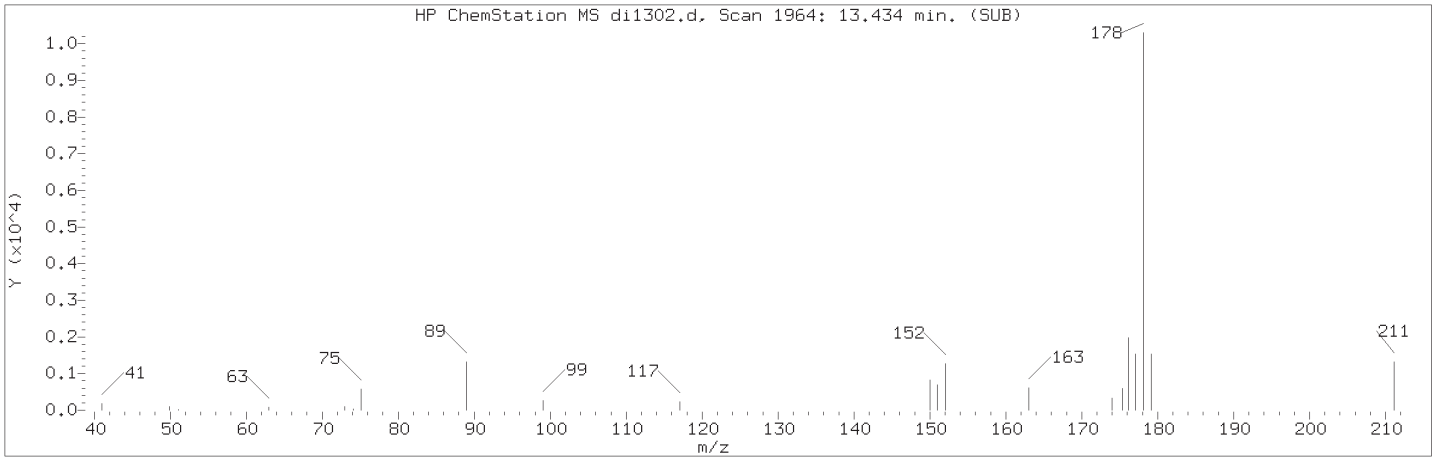
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

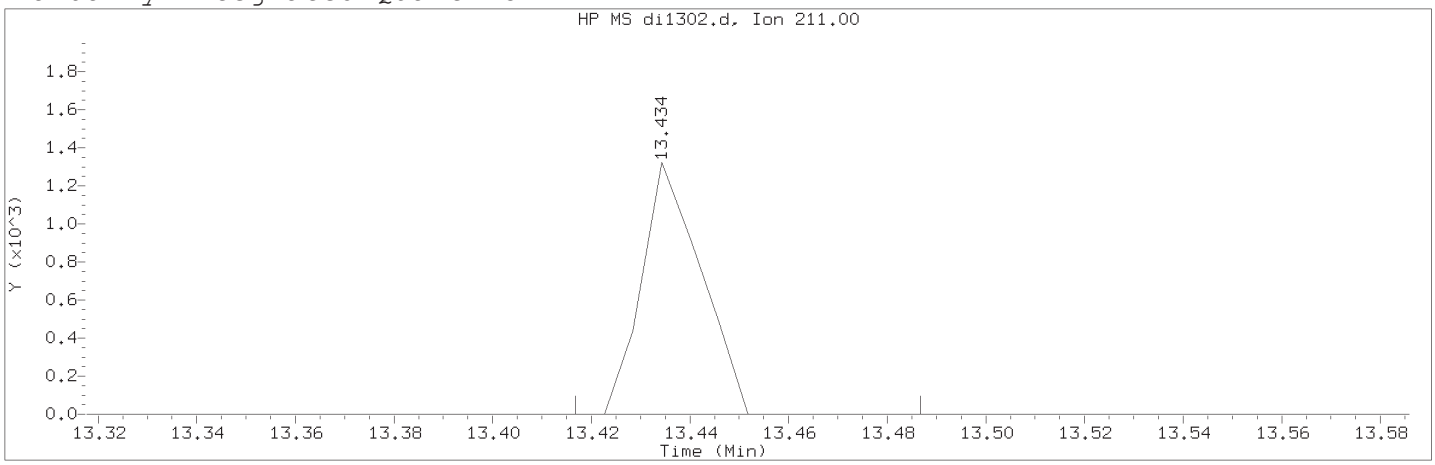
Compound Number	: 144		
Compound Name	: Diallate (peak 2)		
Scan Number	: 1856		
Retention Time (minutes)	: 12.805		
Quant Ion	: 86.00		
Area	: 4071		
On-column Amount (ng/ul)	: 0.0797		
Integration start scan	: 1852	Integration stop scan:	1869
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

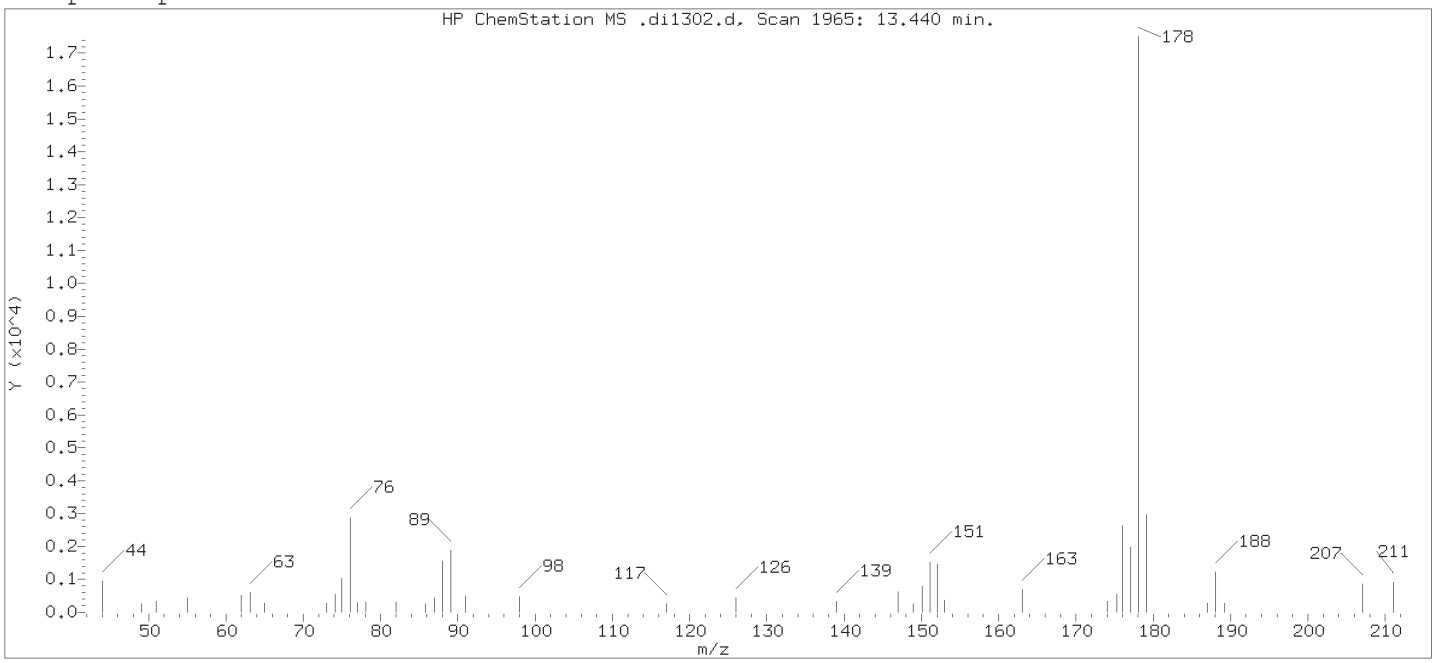
Compound Number	: 154		
Compound Name	: Dinoseb		
Scan Number	: 1964		
Retention Time (minutes)	: 13.434		
Quant Ion	: 211.00		
Area (flag)	: 1105M		
On-Column Amount (ng/ul)	: 0.0621		
Integration start scan	: 1960	Integration stop scan:	1972
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

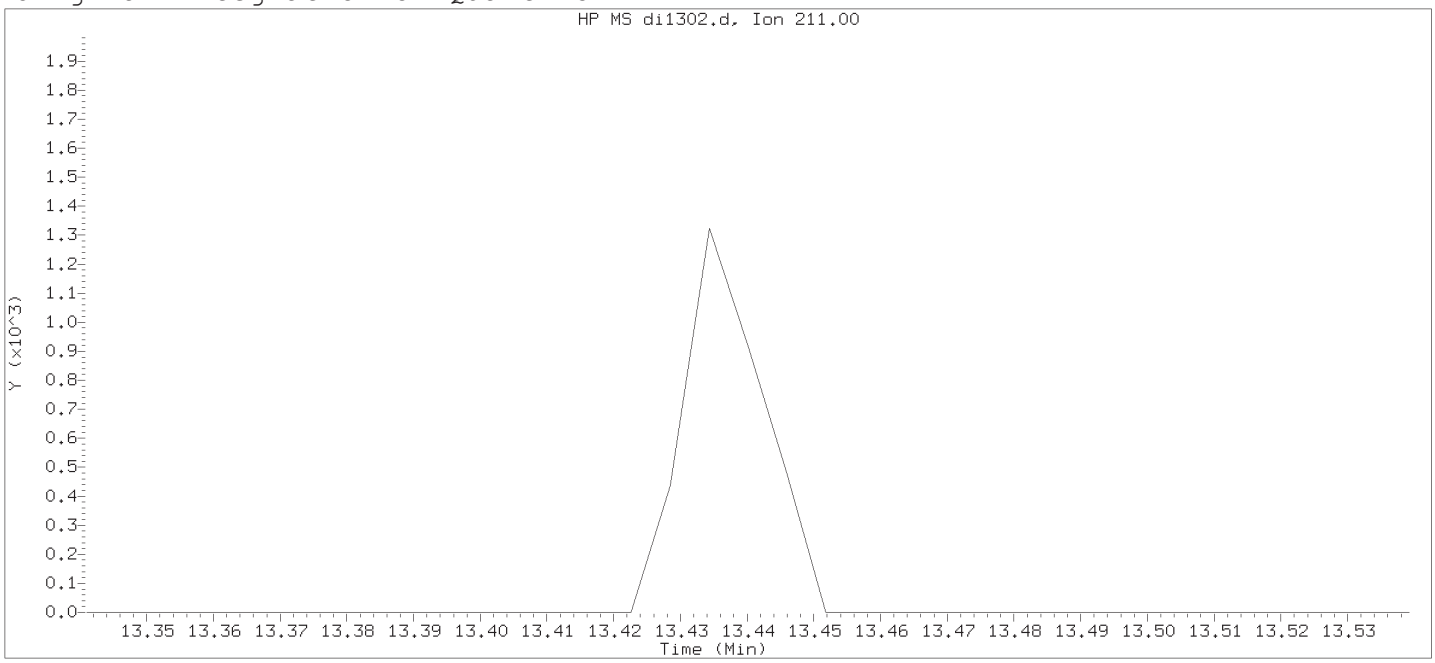
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

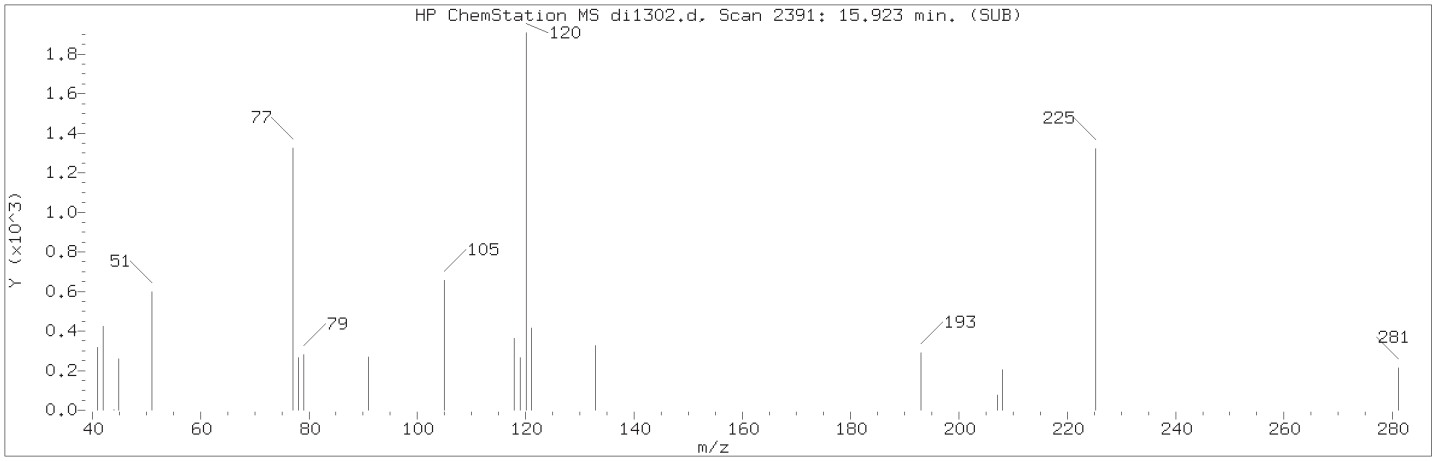
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

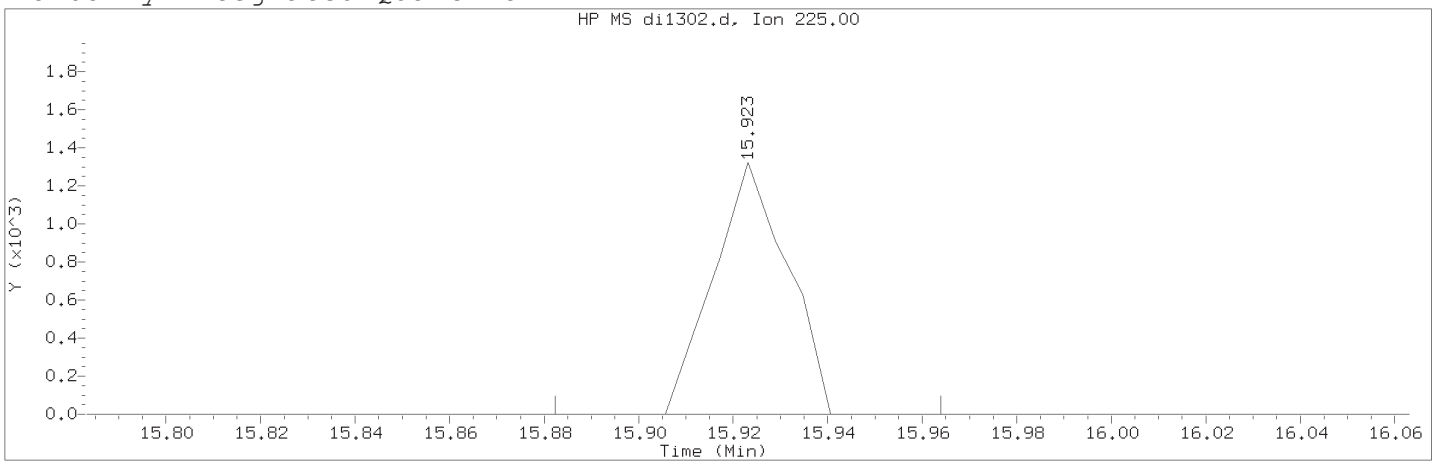
Compound Number : 154
Compound Name : Dinoseb
Expected RT (minutes) : 13.440
Quant Ion : 211.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

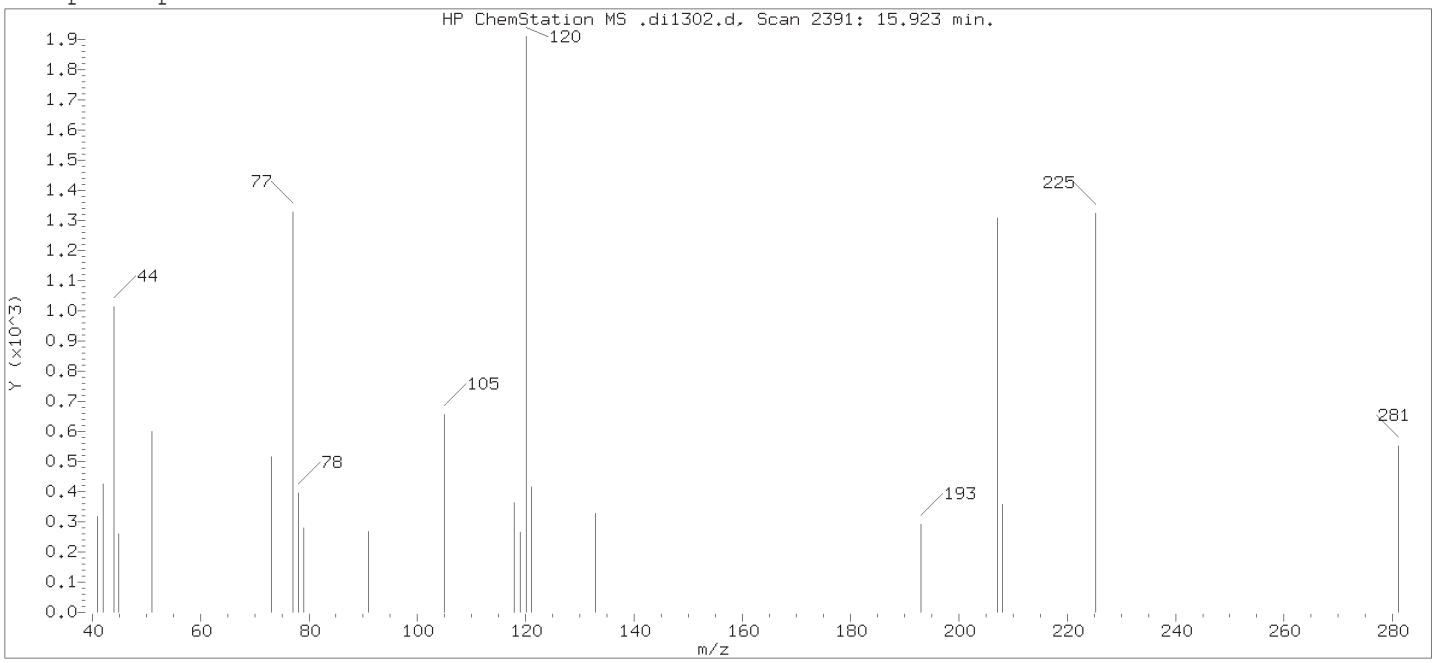
Compound Number : 182
Compound Name : p-Dimethylaminoazobenzene
Scan Number : 2391
Retention Time (minutes) : 15.923
Quant Ion : 225.00
Area (flag) : 1435M
On-Column Amount (ng/ul) : 0.0652
Integration start scan : 2383 Integration stop scan: 2397
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

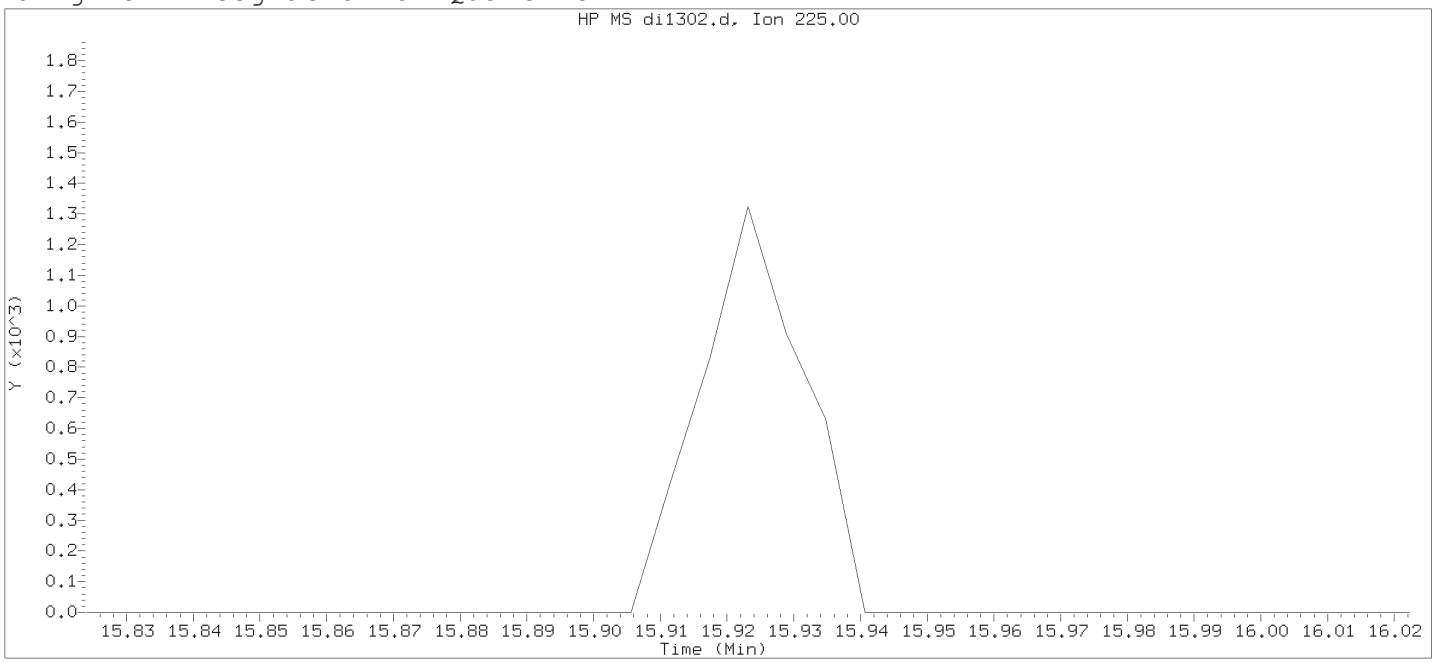
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

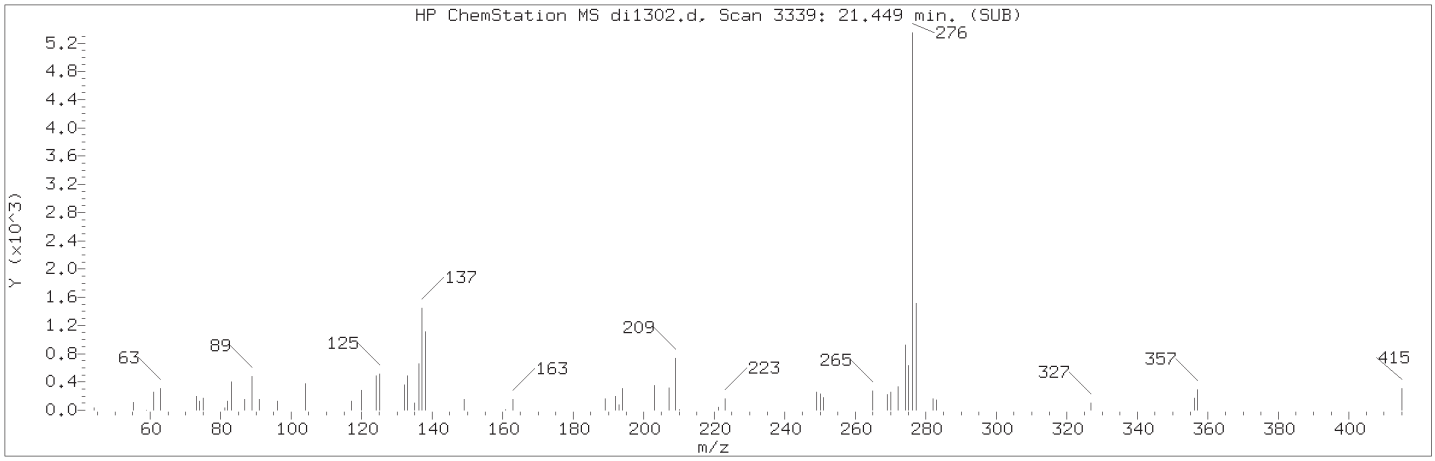
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

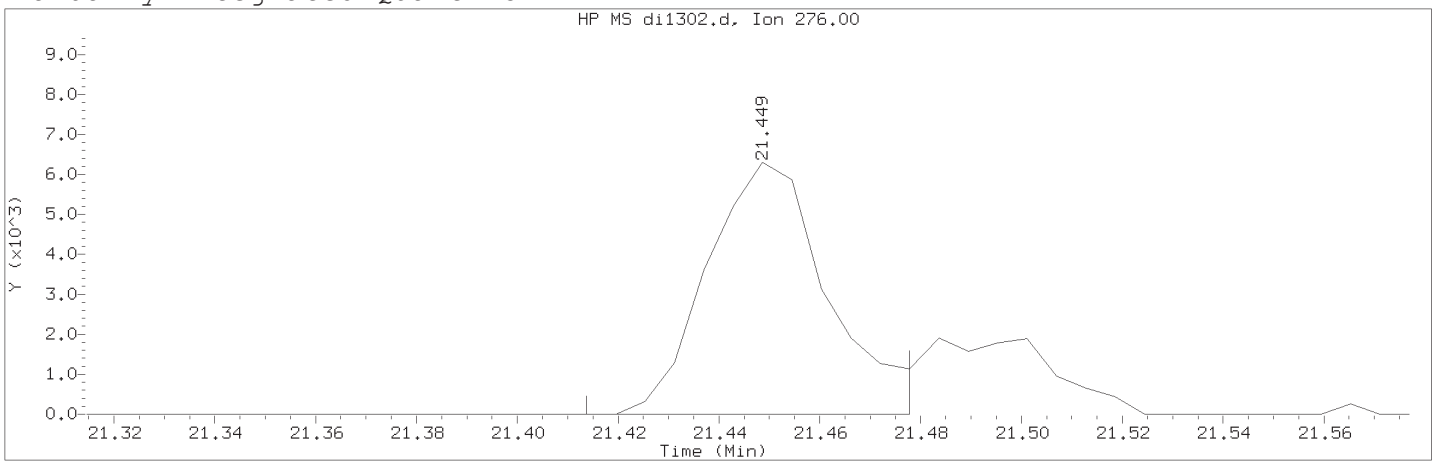
Compound Number : 182
Compound Name : p-Dimethylaminoazobenzene
Expected RT (minutes) : 15.923
Quant Ion : 225.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

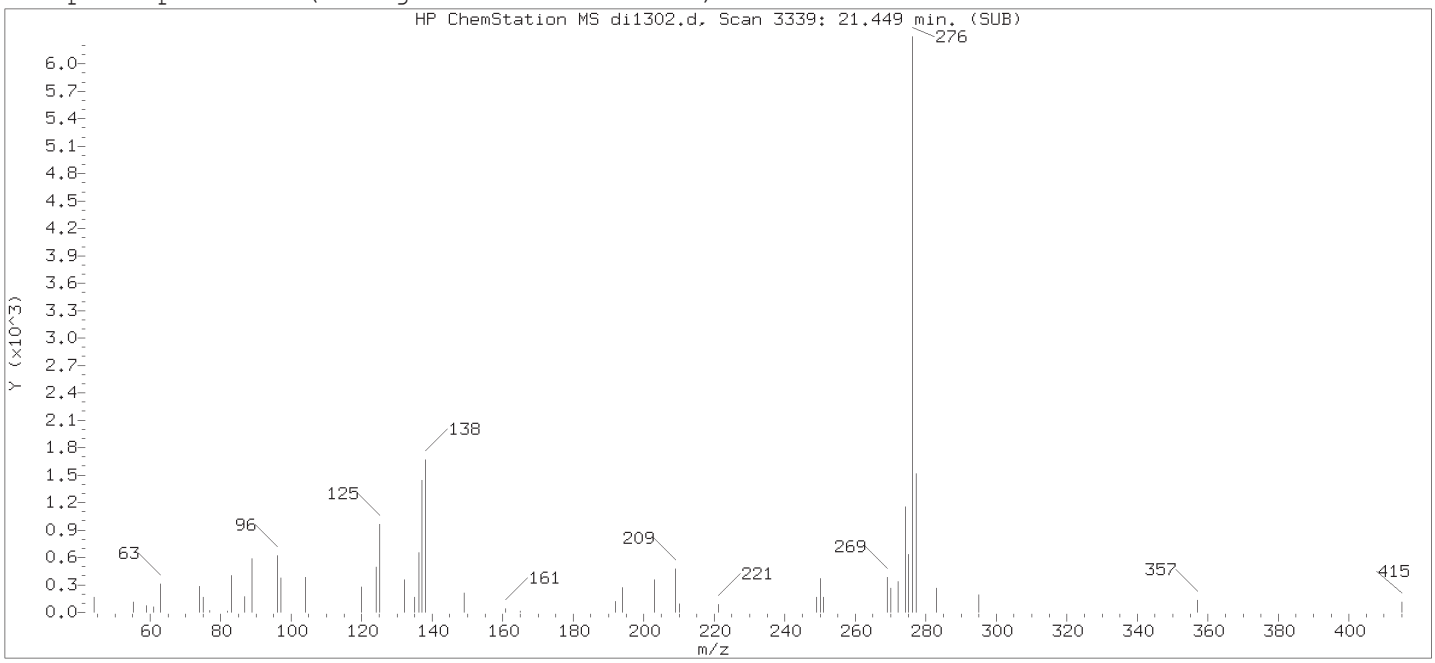
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3339		
Retention Time (minutes)	: 21.449		
Quant Ion	: 276.00		
Area (flag)	: 10499M		
On-Column Amount (ng/ul)	: 0.1111		
Integration start scan	: 3332	Integration stop scan:	3343
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

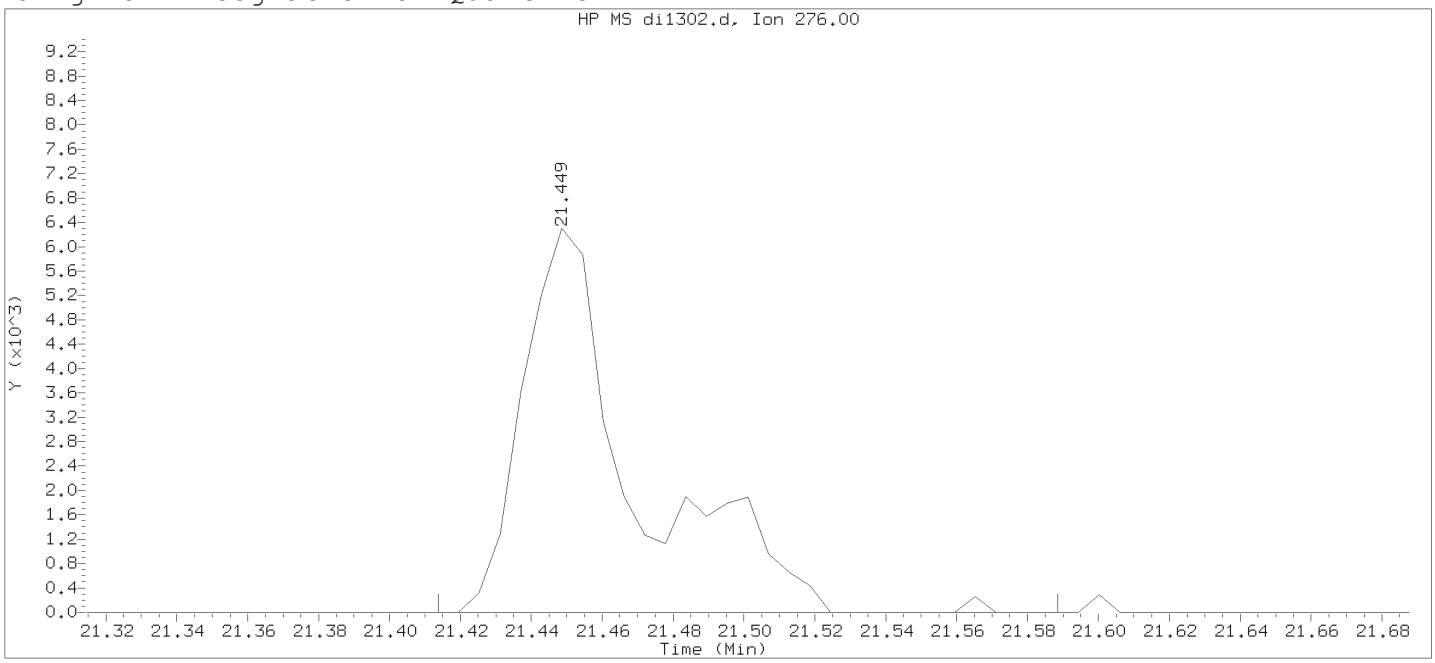
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



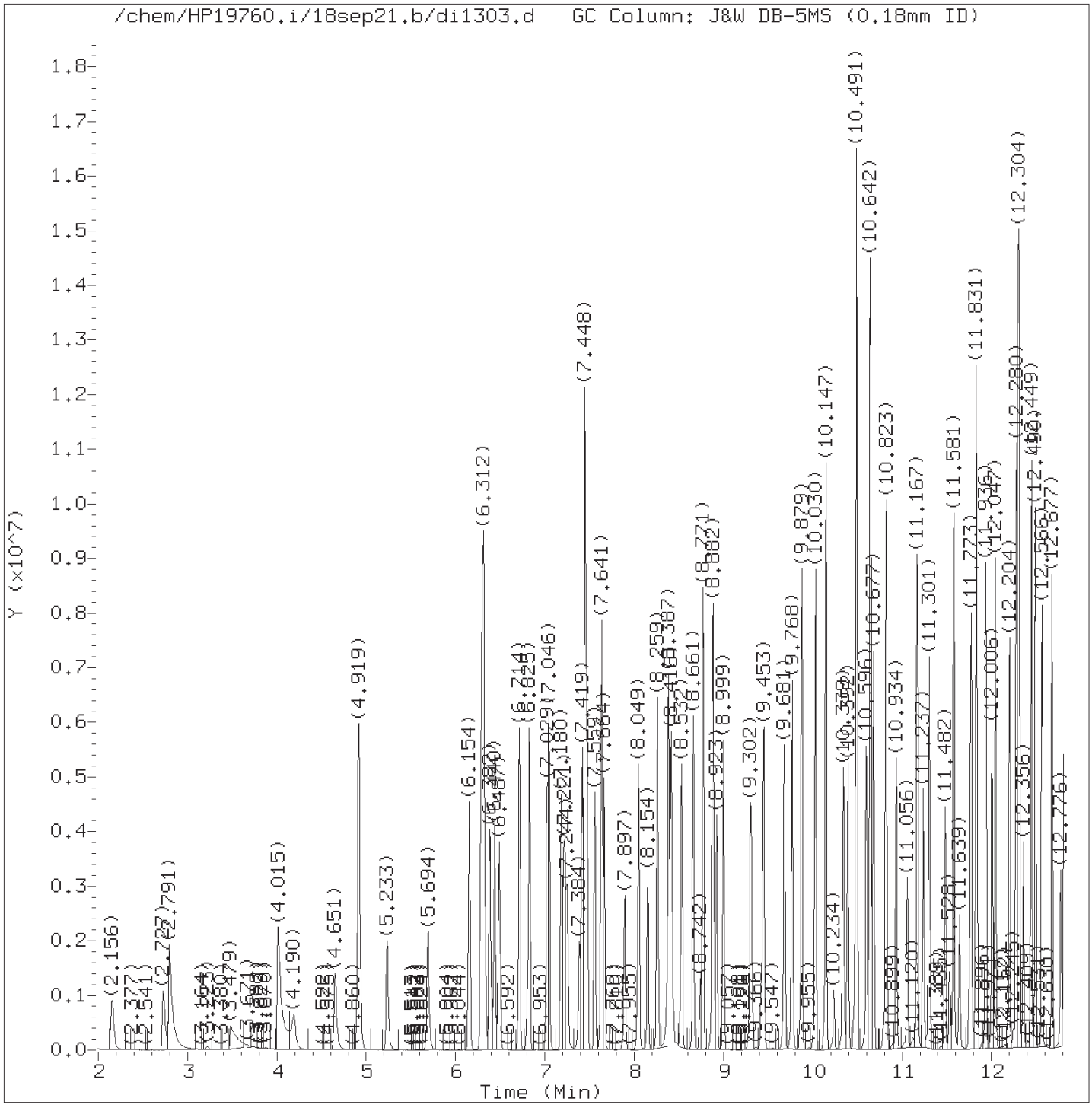
Data File: /chem/HP19760.i/18sep21.b/di1302.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:19 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 18:46
Date, time and analyst ID of latest file update: 21-Sep-2018 18:47 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3339		
Retention Time (minutes)	: 21.449		
Quant Ion	: 276.00		
Area	: 13805		
On-column Amount (ng/ul)	: 0.1422		
Integration start scan	: 3332	Integration stop scan:	3362
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user: Edward Monborne



Total Ion Chromatogram (TIC)

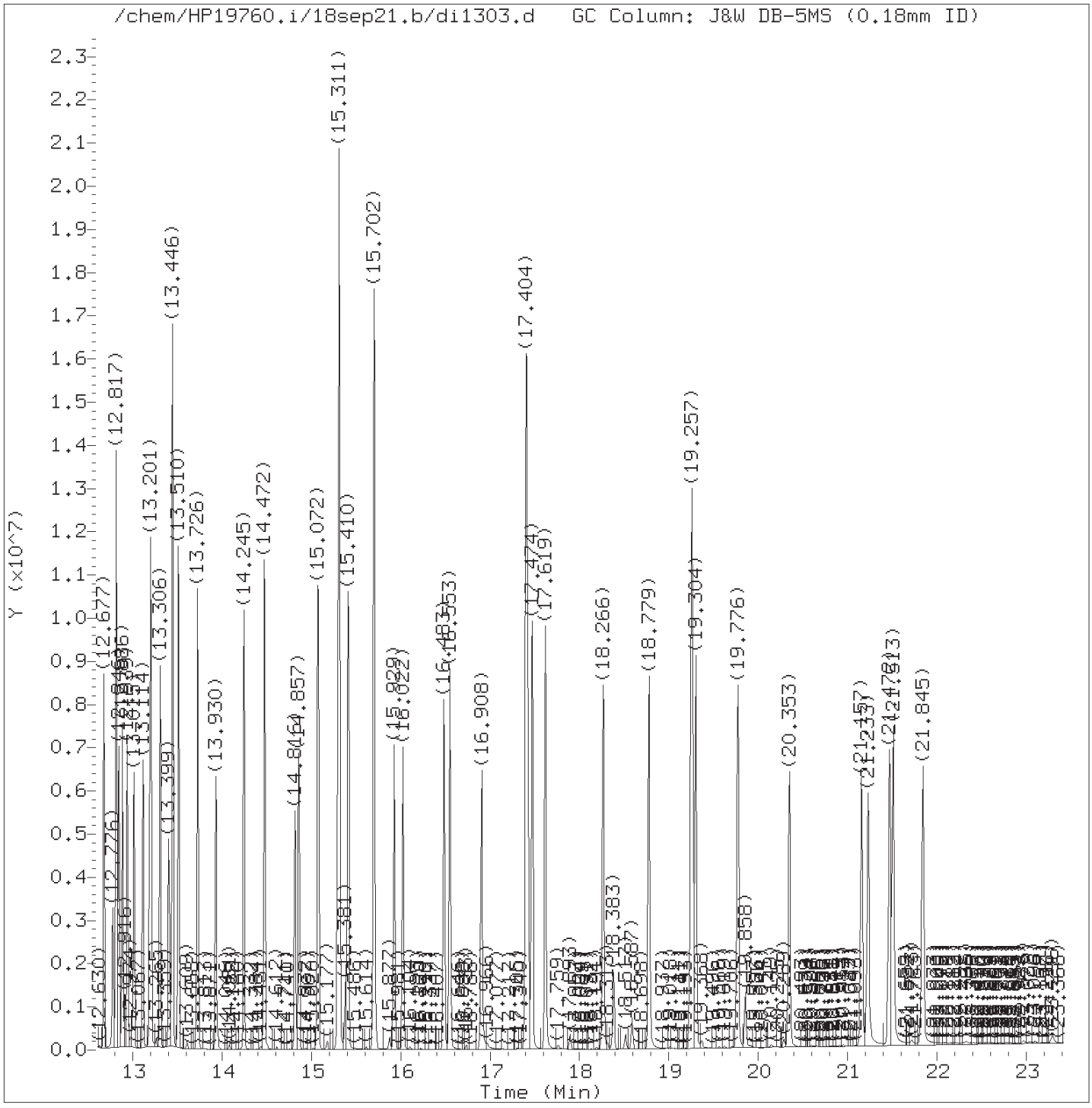
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.156	88	931630	29.372
4) N-Nitrosodimethylamine	(1)	2.727	74	1336412	29.662
5) Pyridine	(1)	2.797	79	2320441	28.980
7) 2-Picoline	(1)	4.015	93	2299183	29.537
8) N-Nitrosomethylethylamine	(1)	4.190	88	997070	29.771
9) Methyl methanesulfonate	(1)	4.651	80	1084565	29.410
11)$2-Fluorophenol	(1)	4.919	112	3632535	59.566
13) N-Nitrosodiethylamine	(1)	5.233	102	960946	30.087
42) Total Cresols	(1)			3715634	59.322
15) Ethyl methanesulfonate	(1)	5.694	109	913446	29.716
16) Benzaldehyde	(1)	6.154	77	1593509	29.324
17)$Phenol-d6	(1)	6.294	99	4908624	59.172
18) Phenol	(1)	6.312	94	2762049	29.502
19) Aniline	(1)	6.318	93	3248306	29.728
20) a-methylstyrene	(1)	6.399	118	180294	29.549
22) bis(2-Chloroethyl)ether	(1)	6.440	93	2010161	29.269
23) 2-Chlorophenol	(1)	6.487	128	1736962	29.858
24) 1,3-Dichlorobenzene	(1)	6.714	146	1927521	29.443
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	193821	5.000
26) 1,4-Dichlorobenzene	(1)	6.825	146	1939483	29.422
27) Benzyl alcohol	(1)	7.023	108	1191713	30.149
28) 1,2-Dichlorobenzene	(1)	7.046	146	1824462	29.409
30) Indene	(1)	7.180	115	1937983	29.732
31) 2-Methylphenol	(1)	7.215	108	1764180	29.782
34) bis(2-Chloroisopropyl)ether	(1)	7.250	45	2343211	28.934
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.250	45	2343211	28.934
97) Isosafrole	(3)			1454314	30.667
35) N-Nitrosopyrrolidine	(1)	7.384	100	1027515	30.649
36) Acetophenone	(1)	7.419	105	2456017	30.041
37) 4-Methylphenol	(1)	7.448	108	1951454	29.553
38) N-Nitroso-di-n-propylamine	(1)	7.448	70	1452643	29.581
39) N-Nitrosomorpholine	(1)	7.448	56	1067870	29.130
40) o-Toluidine	(1)	7.472	106	2992168	29.510
43) Hexachloroethane	(1)	7.559	117	791511	29.635
44)$Nitrobenzene-d5	(2)	7.641	82	4176683	60.022
45) Nitrobenzene	(2)	7.664	77	2115377	29.473
48) N-Nitrosopiperidine	(2)	7.897	114	891071	30.626
50) Isophorone	(2)	8.049	82	3737925	30.636
120) 2,4_2,6-Dinitrotoluenes	(3)			1820231	61.245
51) 2-Nitrophenol	(2)	8.154	139	857653	31.211

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.259	107	1875723	30.198
57) O,O,O-Triethylphosphorothioate	(2)	8.387	198	779113	30.353
55) bis(2-Chloroethoxy)methane	(2)	8.416	93	2124339	28.370
56) Benzoic acid	(2)	8.439	105	1105579M	32.722
60) 2,4-Dichlorophenol	(2)	8.532	162	1396623	30.652
62) 1,2,4-Trichlorobenzene	(2)	8.661	180	1462867	29.890
65)*Naphthalene-d8	(2)	8.736	136	712147	5.000
66) Naphthalene	(2)	8.771	128	4984660	29.944
146) Diallate trans/cis	(4)			1805922	29.455
67) 4-Chloroaniline	(2)	8.876	127	1964808	30.530
68) 2,6-Dichlorophenol	(2)	8.888	162	1334676	30.223
69) Hexachloropropene	(2)	8.923	213	941130	30.370
71) Hexachlorobutadiene	(2)	8.999	225	817765	29.873
75) Quinoline	(2)	9.302	129	2985144	31.118
76) Caprolactam	(2)	9.442	113	561666M	32.281
77) N-Nitrosodi-n-butylamine	(2)	9.453	84	1662573	34.331
80) 4-Chloro-3-methylphenol	(2)	9.681	107	1604862	31.216
82) Safrole	(2)	9.768	162	1272997	30.494
83) 2-Methylnaphthalene	(2)	9.879	142	3193277	31.049
84) 1-Methylnaphthalene	(2)	10.030	142	3082272	31.788
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.147	216	1399489	28.985
85) Hexachlorocyclopentadiene	(3)	10.147	237	917356	29.825
88) cis-Isosafrole	(3)	10.234	162	225546	5.143
90) 2,4,6-Trichlorophenol	(3)	10.339	196	962151	31.021
92) 2,4,5-Trichlorophenol	(3)	10.392	196	958119	29.667
93)$2-Fluorobiphenyl	(3)	10.491	172	6681659	57.998
94) trans-Isosafrole	(3)	10.596	162	1228768	25.517
95) 1,1'-Biphenyl	(3)	10.637	154	3636971	29.204
96) 2-Chloronaphthalene	(3)	10.648	162	3109673	29.485
98) 1-Chloronaphthalene	(3)	10.677	162	2545013	28.067
99) Diphenyl ether	(3)	10.817	170	2042077	29.265
100) 2-Nitroaniline	(3)	10.829	138	989145	30.968
104) 1,4-Naphthoquinone	(3)	10.934	158	1149815	30.863
105) 1,4-Dinitrobenzene	(3)	11.056	168	507522	31.300
106) Dimethylphthalate	(3)	11.167	163	3150726	29.208
107) 1,3-Dinitrobenzene	(3)	11.173	168	576003	30.349
108) 2,6-Dinitrotoluene	(3)	11.237	165	763355	29.853
109) Acenaphthylene	(3)	11.307	152	4294410	31.876
112) 3-Nitroaniline	(3)	11.482	138	891619	31.420
113)*Acenaphthene-d10	(3)	11.528	164	360283	5.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.581	153	2932568	28.580
115) 2,4-Dinitrophenol	(3)	11.645	184	435384	33.557
116) 4-Nitrophenol	(3)	11.762	109	563849	31.462
117) Pentachlorobenzene	(3)	11.773	250	1165829	29.320
119) Dibenzofuran	(3)	11.831	168	4026178	29.030
118) 2,4-Dinitrotoluene	(3)	11.837	165	1056876	31.204
121) 1-Naphthylamine	(3)	11.936	143	3236293	30.134
122) 2,3,4,6-Tetrachlorophenol	(3)	12.006	232	762465	31.181
123) 2-Naphthylamine	(3)	12.047	143	3266832	30.276
124) Diethylphthalate	(3)	12.204	149	3210004	30.786
126) Fluorene	(3)	12.280	166	3226156	30.435
125) Thionazin	(3)	12.292	107	671683	30.367
127) 4-Chlorophenyl-phenylether	(3)	12.304	204	1513345	28.878
128) 5-Nitro-o-toluidine	(3)	12.309	152	1023489	30.730
129) 4-Nitroaniline	(3)	12.315	138	962104	30.373
130) 4,6-Dinitro-2-methylphenol	(4)	12.356	198	601704	33.127
131) N-Nitrosodiphenylamine	(4)	12.449	169	2728506	29.188
132) NDPA as diphenylamine	(4)	12.449	169	2728506	29.188
134) 1,2-Diphenylhydrazine	(4)	12.490	77	3907113	28.947
135)$2,4,6-Tribromophenol	(3)	12.566	330	803075	61.681
137) Tetraethyldithiopyrophosphate	(4)	12.677	97	611549	30.027
139) 1,3,5-Trinitrobenzene	(4)	12.776	213	428912	34.091
140) Diallate (peak 1)	(4)	12.811	86	1553999	24.389
141) Phorate	(4)	12.817	75	2385949	29.863
142) Phenacetin	(4)	12.846	108	1932833	31.027
143) 4-Bromophenyl-phenylether	(4)	12.886	248	876275	29.266
144) Diallate (peak 2)	(4)	12.916	86	251923	5.082
145) Hexachlorobenzene	(4)	12.939	284	862452	27.668
147) Dimethoate	(4)	13.015	87	1577799	30.638
148) Atrazine	(4)	13.114	200	839551	29.144
149) Pentachlorophenol	(4)	13.190	266	617154	31.972
150) 4-Aminobiphenyl	(4)	13.201	169	2477303	30.233
151) Pentachloronitrobenzene	(4)	13.207	237	417172	30.602
152) Pronamide	(4)	13.306	173	1513581	31.051
153)*Phenanthrene-d10	(4)	13.417	188	673033	5.000
155) Phenanthrene	(4)	13.446	178	5035829	29.389
154) Dinoseb	(4)	13.446	211	882409	33.707
157) Anthracene	(4)	13.510	178	5135265	31.303
163) Carbazole	(4)	13.726	167	4817164	30.241
164) Methyl parathion	(4)	13.930	109	1269717	32.486

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.245	149	5880416	31.161
167) Parathion	(4)	14.472	109	810389	32.210
168) 4-Nitroquinoline-1-oxide	(4)	14.478	190	639009	36.272
169) Octachlorostyrene	(4)	14.816	308	360105	30.329
171) Isodrin	(4)	14.857	193	593230	30.480
222) Total PAHs	(6)			81930677	564.723
173) Fluoranthene	(4)	15.078	202	5720159	32.870
174) Benzidine	(5)	15.311	184	11667417	87.627
175)*Pyrene-d10	(5)	15.381	212	700816	5.000
177) Pyrene	(5)	15.410	202	5691882	29.008
179)$Terphenyl-d14	(5)	15.702	244	7089453	59.408
182) p-Dimethylaminoazobenzene	(5)	15.929	225	1055733	32.094
185) Chlorobenzilate	(5)	16.022	139	1716106	30.887
187) 3,3'-Dimethylbenzidine	(5)	16.483	212	3862363	30.769
188) Butylbenzylphthalate	(5)	16.553	149	2647299	30.107
191) 2-Acetylaminofluorene	(5)	16.908	181	2182801	32.399
193) 3,3'-Dichlorobenzidine	(5)	17.404	252	2064950	30.108
195) Benzo(a)anthracene	(5)	17.409	228	5274859	33.308
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.421	231	1101702	29.554
196) Chrysene	(5)	17.474	228	5078046	30.983
199) bis(2-Ethylhexyl)phthalate	(5)	17.619	149	3632898	30.362
203) 6-Methylchrysene	(5)	18.266	242	3604109	29.769
205) Di-n-octylphthalate	(6)	18.779	149	6195224	33.077
206) Benzo(b)fluoranthene	(6)	19.251	252	5231705	34.522
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.263	256	2455172	30.784
208) Benzo(k)fluoranthene	(6)	19.304	252	4995140	31.795
211) Benzo(a)pyrene	(6)	19.776	252	4839387	34.774
213)*Perylene-d12	(6)	19.858	264	640506	5.000
215) 3-Methylcholanthrene	(6)	20.353	268	2317029	31.149
217) Dibenz(a,h)acridine	(6)	21.157	279	3657181	31.036
218) Dibenz(a,j)acridine	(6)	21.233	279	3924150	30.569
219) Indeno(1,2,3-cd)pyrene	(6)	21.472	276	4253419M	32.550
220) Dibenz(a,h)anthracene	(6)	21.513	278	4515556	31.724
221) Benzo(g,h,i)perylene	(6)	21.845	276	4446087	30.117

M = Compound was manually integrated.
* = Compound is an internal standard.
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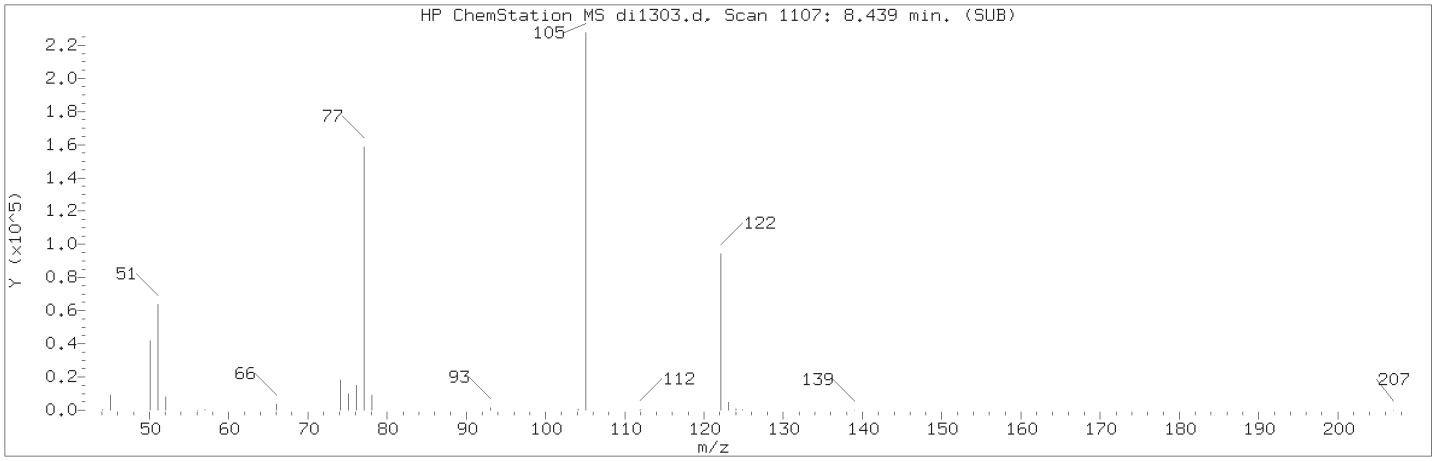
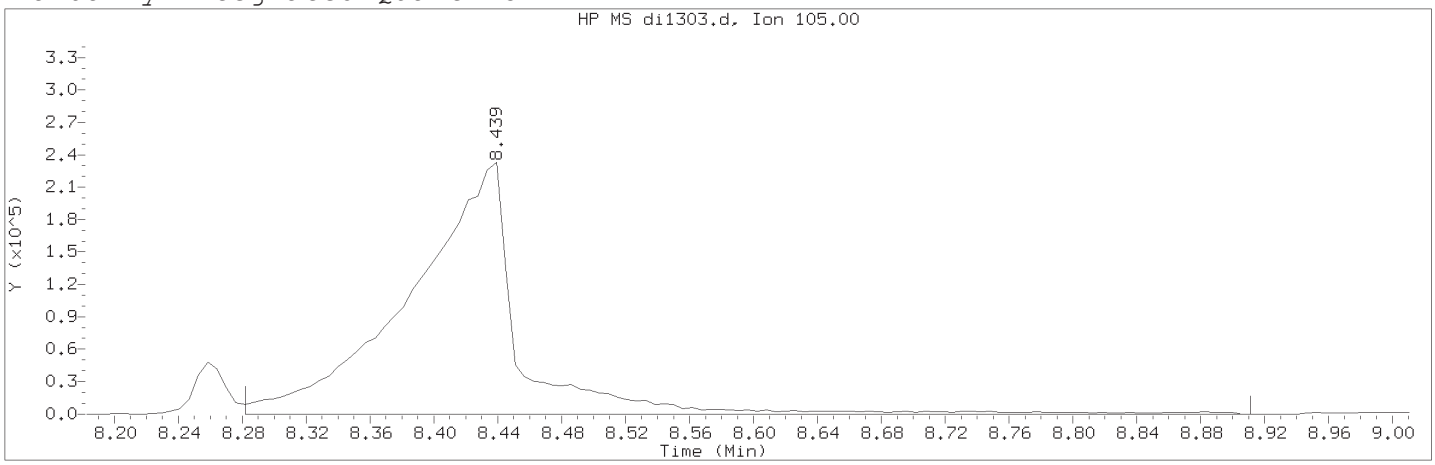
Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

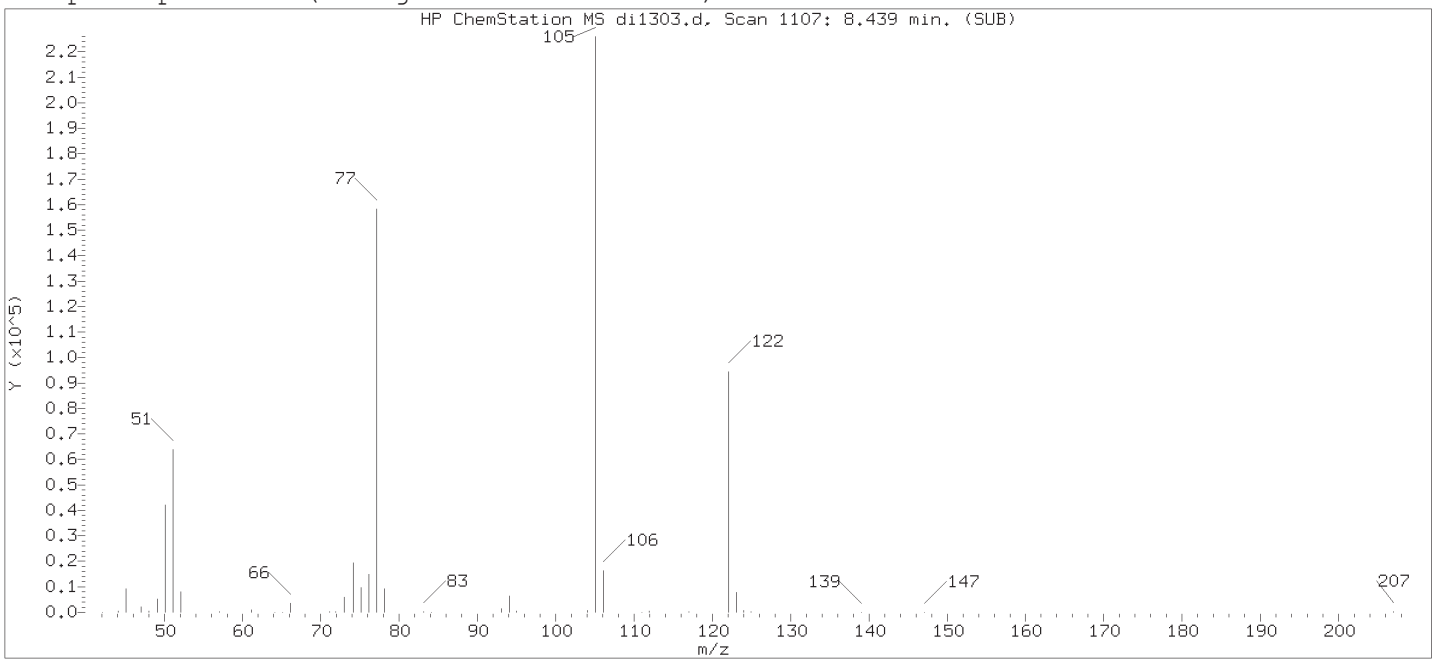
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1107
Retention Time (minutes) : 8.439
Quant Ion : 105.00
Area (flag) : 1105579M
On-Column Amount (ng/ul) : 32.7215
Integration start scan : 1079 Integration stop scan: 1187
Y at integration start : -242 Y at integration end: -242

Reason for manual integration: improper integration

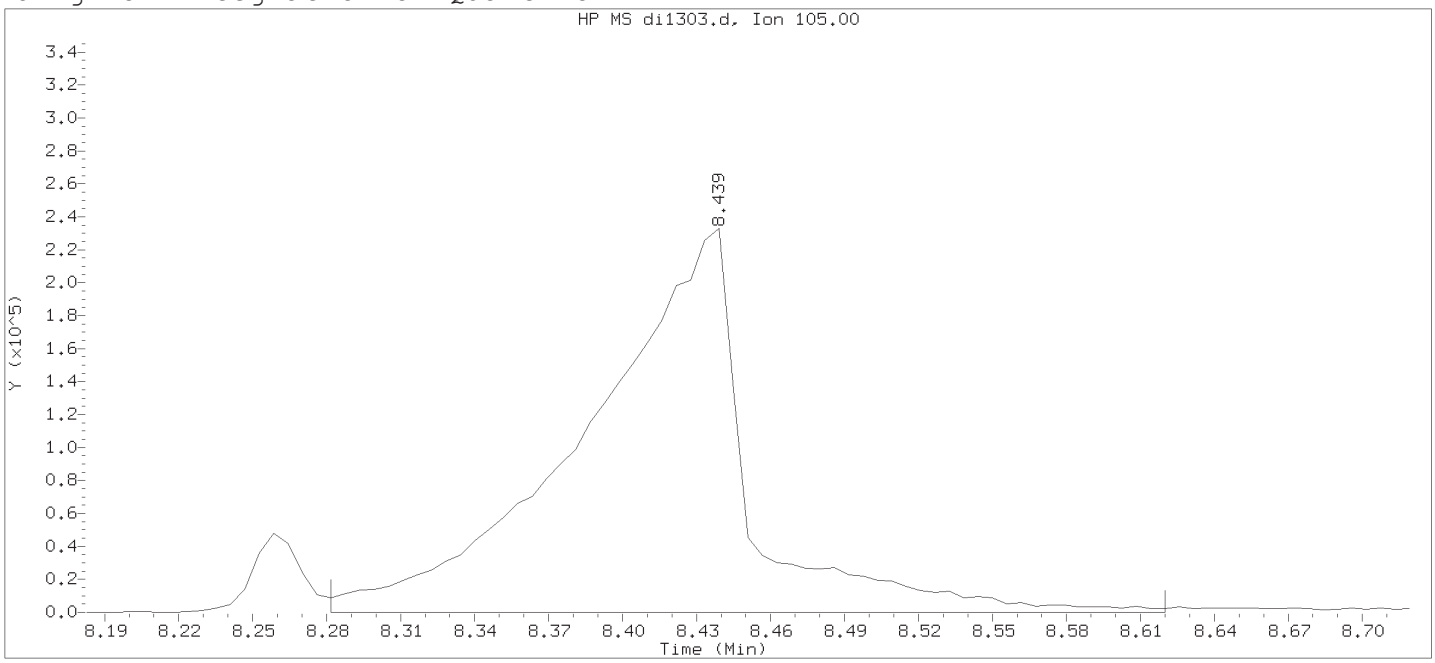
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 19:15
Date, time and analyst ID of latest file update: 21-Sep-2018 19:15 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1107		
Retention Time (minutes)	: 8.439		
Quant Ion	: 105.00		
Area	: 1064427		
On-column Amount (ng/ul)	: 39.1095		
Integration start scan	: 1079	Integration stop scan:	1137
Y at integration start	: 0	Y at integration end:	0

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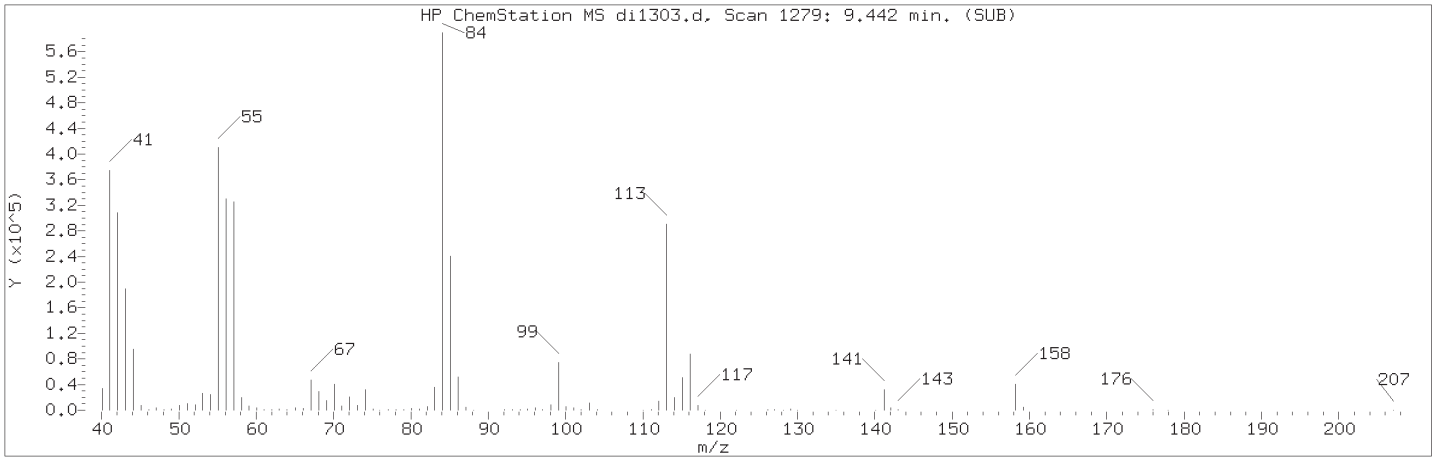
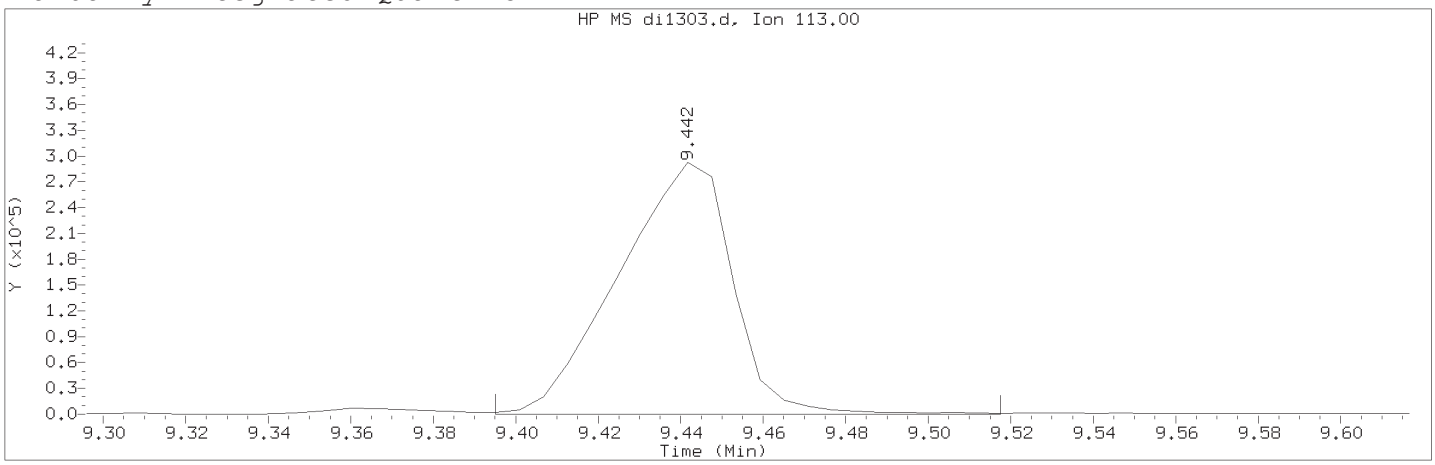
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

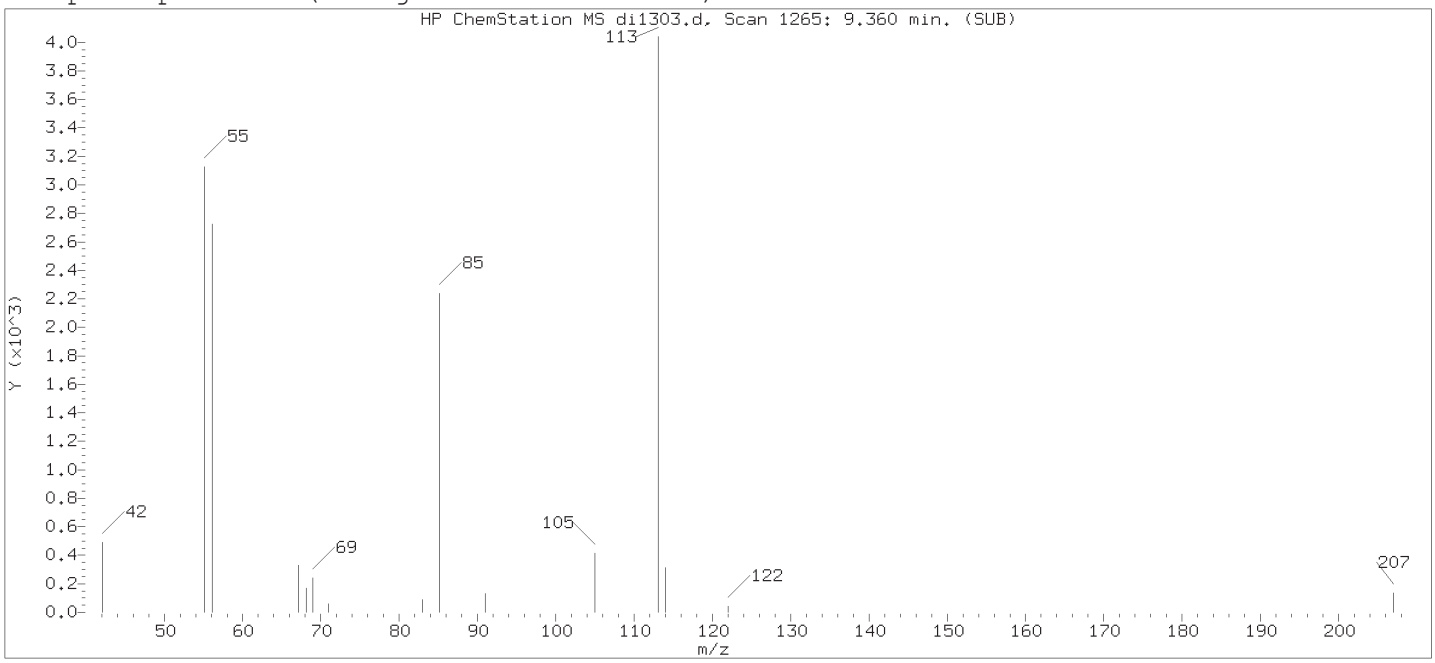
Compound Number	: 76		
Compound Name	: Caprolactam		
Scan Number	: 1279		
Retention Time (minutes)	: 9.442		
Quant Ion	: 113.00		
Area (flag)	: 561666M		
On-Column Amount (ng/ul)	: 32.2808		
Integration start scan	: 1270	Integration stop scan:	1291
Y at integration start	: -76	Y at integration end:	-76

Reason for manual integration: improper integration

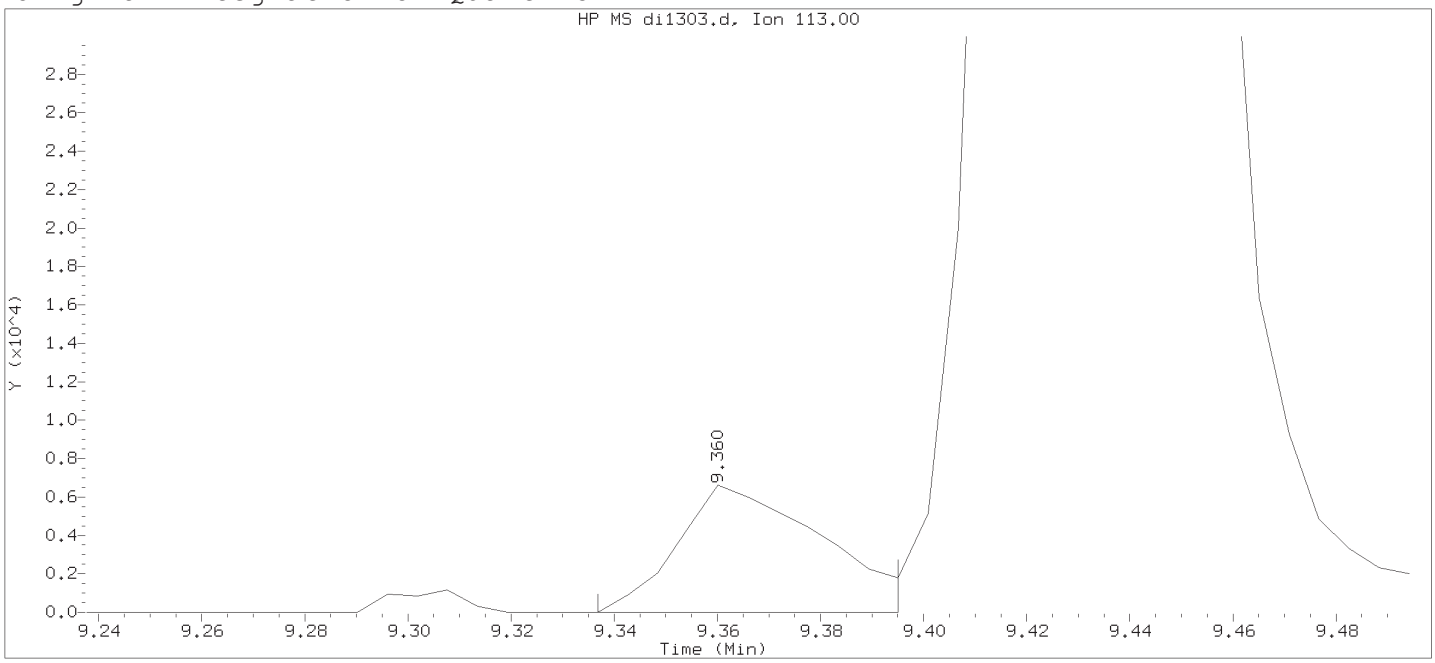
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

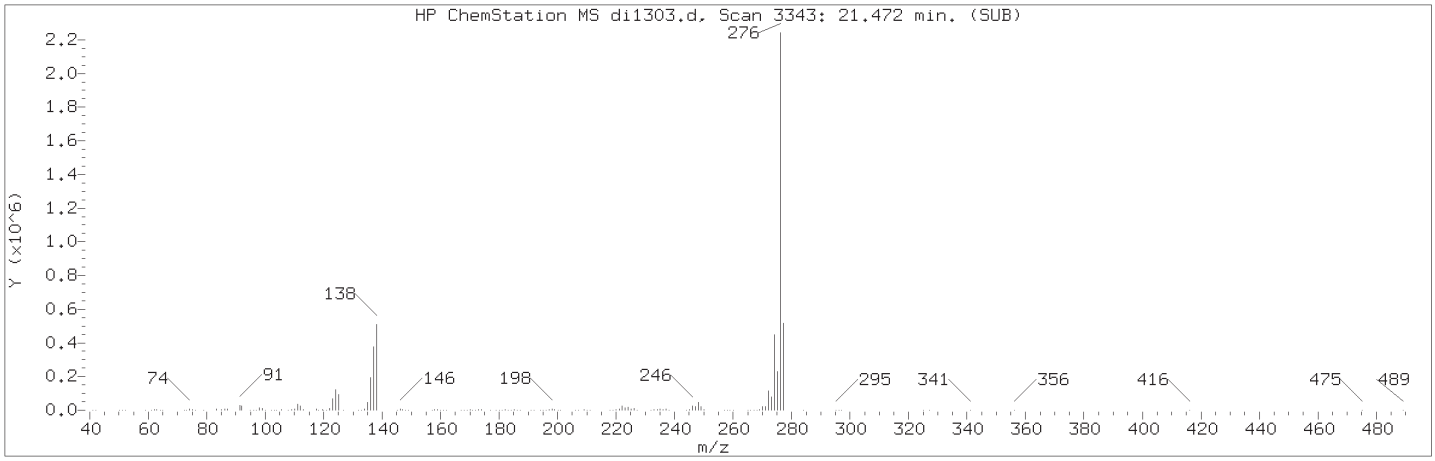
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 19:15
Date, time and analyst ID of latest file update: 21-Sep-2018 19:15 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

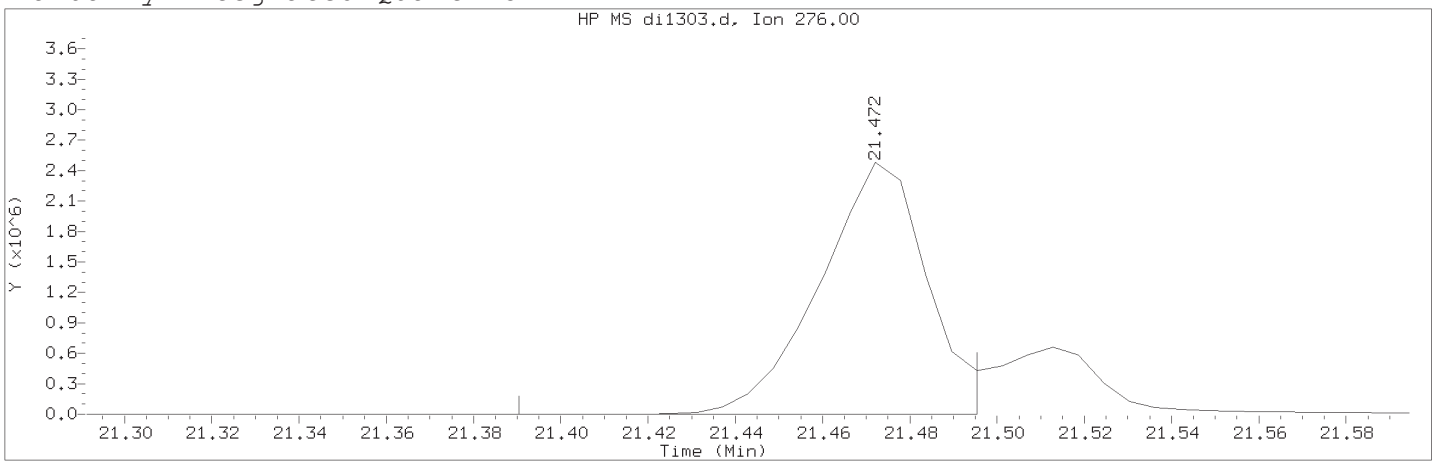
Compound Number	: 76		
Compound Name	: Caprolactam		
Scan Number	: 1265		
Retention Time (minutes)	: 9.360		
Quant Ion	: 113.00		
Area	: 12660		
On-column Amount (ng/ul)	: 0.9032		
Integration start scan	: 1260	Integration stop scan:	1270
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

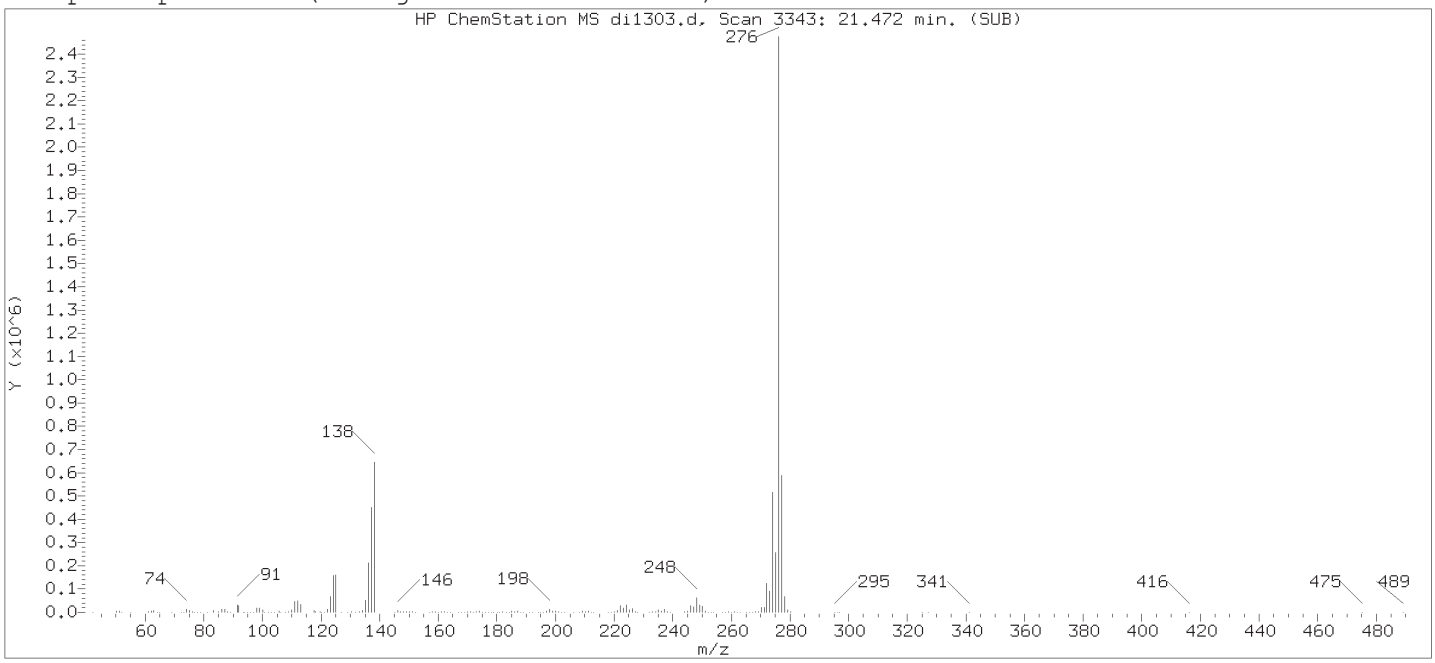
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3343
Retention Time (minutes) : 21.472
Quant Ion : 276.00
Area (flag) : 4253419M
On-Column Amount (ng/ul) : 32.5505
Integration start scan : 3328 Integration stop scan: 3346
Y at integration start : 348 Y at integration end: 348

Reason for manual integration: improper integration

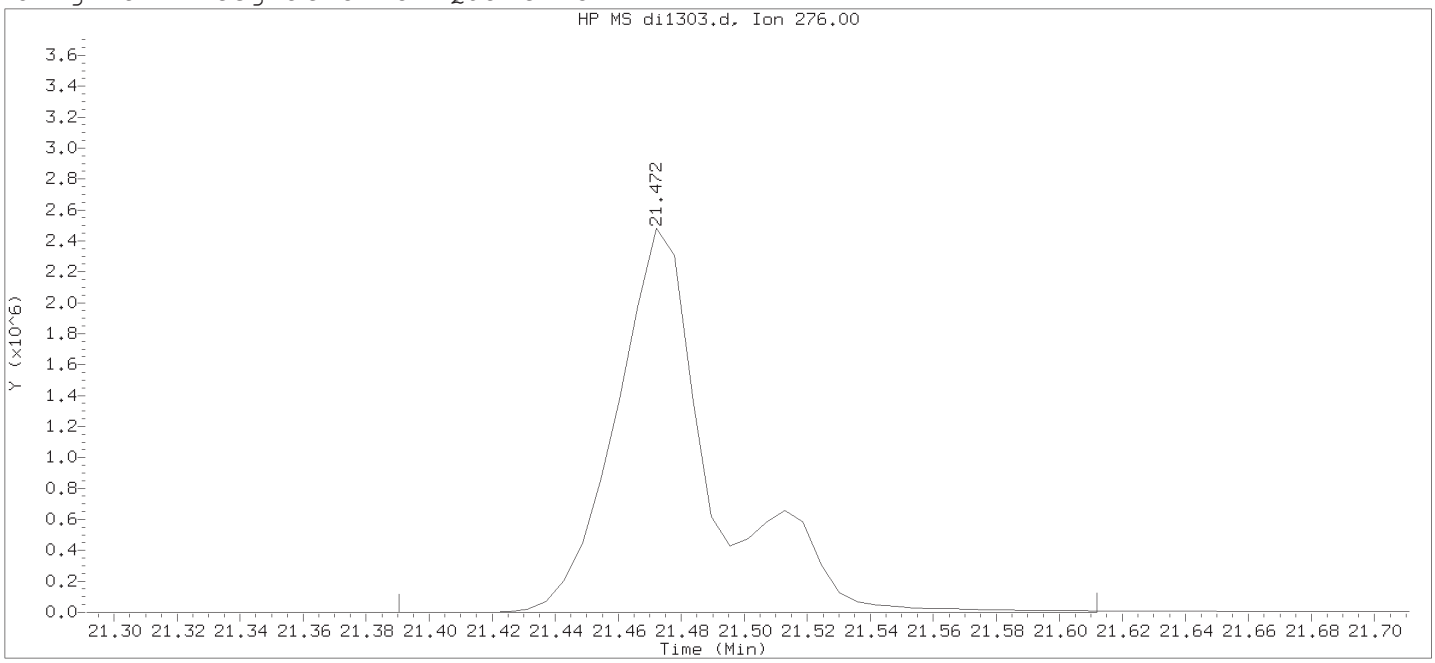
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:54.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



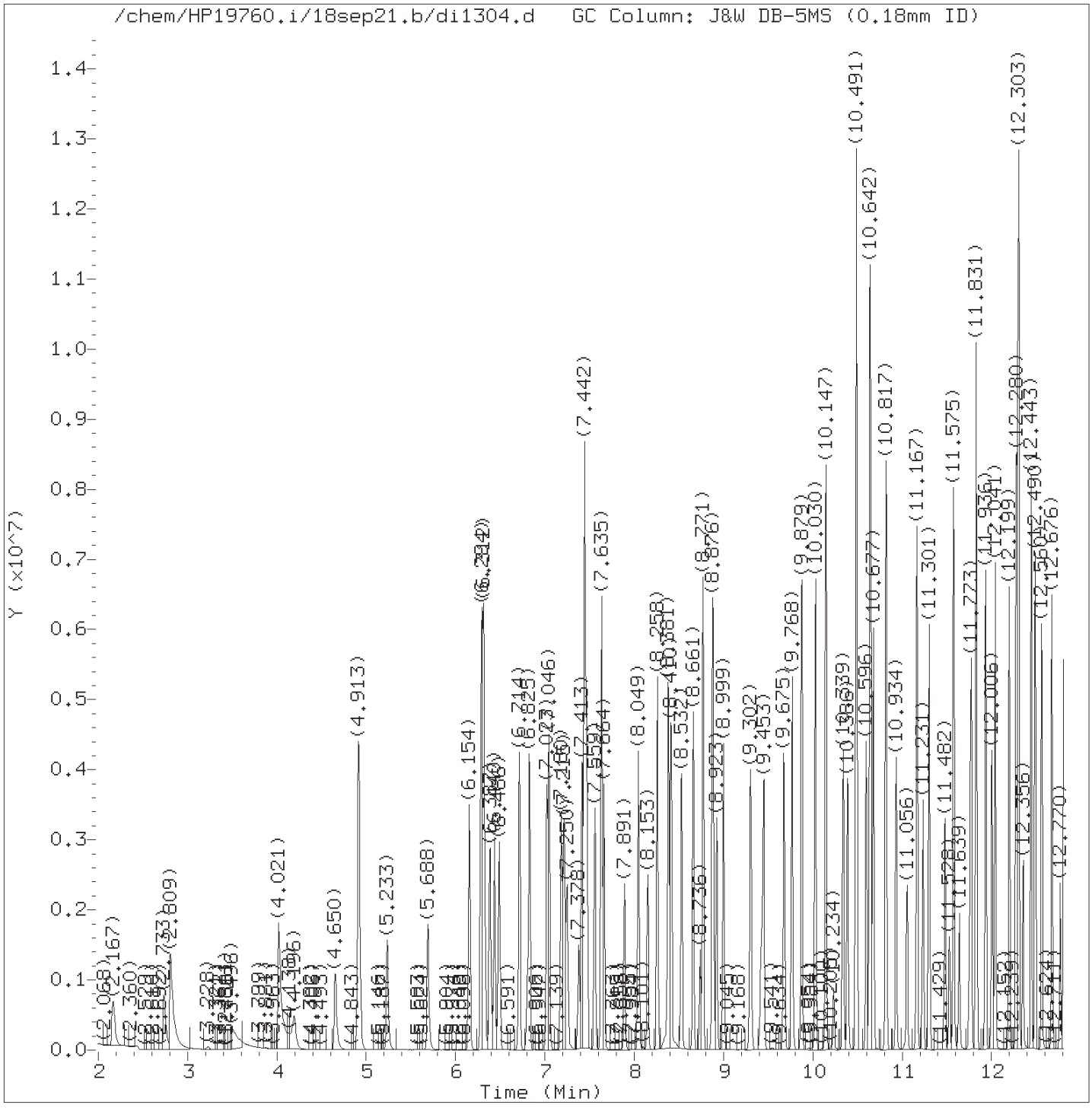
Data File: /chem/HP19760.i/18sep21.b/di1303.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 18:47 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 19:15
Date, time and analyst ID of latest file update: 21-Sep-2018 19:15 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3343		
Retention Time (minutes)	: 21.472		
Quant Ion	: 276.00		
Area	: 5319586		
On-column Amount (ng/ul)	: 39.7156		
Integration start scan	: 3328	Integration stop scan:	3366
Y at integration start	: 348	Y at integration end:	348

Digitally signed by Edward Monborne on 09/25/2018 at 07:54.
Target 3.5 esignature user: Edward Monborne



Total Ion Chromatogram (TIC)

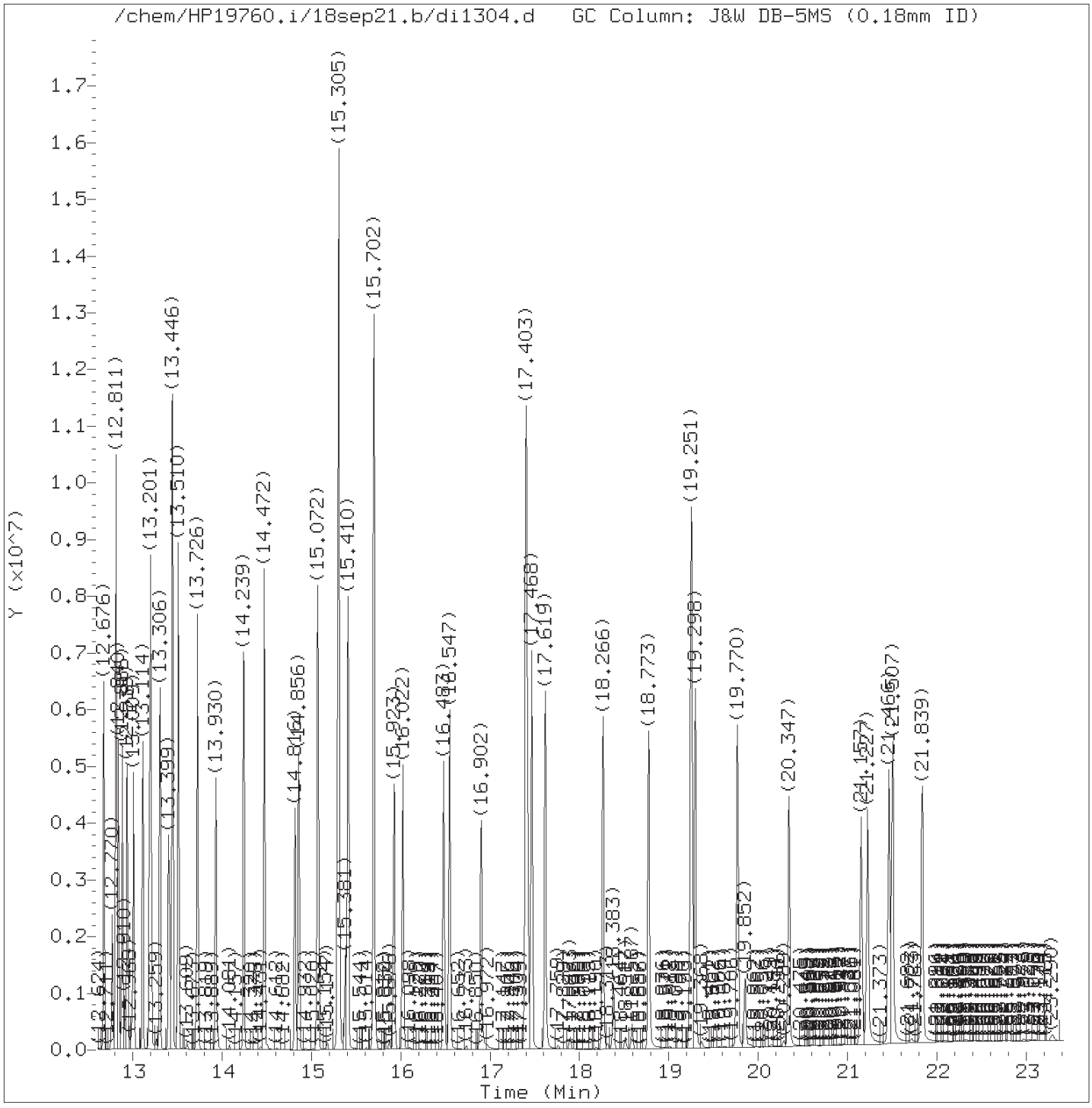
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.167	88	650372	19.404
4) N-Nitrosodimethylamine	(1)	2.733	74	957102	19.872
5) Pyridine	(1)	2.809	79	1613794	19.179
7) 2-Picoline	(1)	4.021	93	1654511	19.879
8) N-Nitrosomethylethylamine	(1)	4.196	88	725760	20.137
9) Methyl methanesulfonate	(1)	4.650	80	785317	19.905
11)$2-Fluorophenol	(1)	4.919	112	2613614	39.976
13) N-Nitrosodiethylamine	(1)	5.233	102	707035	20.424
42) Total Cresols	(1)			2766219	40.780
15) Ethyl methanesulfonate	(1)	5.688	109	678918	20.393
16) Benzaldehyde	(1)	6.154	77	1176568	20.126
17)$Phenol-d6	(1)	6.288	99	3622773	40.479
18) Phenol	(1)	6.306	94	2012999	20.033
19) Aniline	(1)	6.317	93	2384223	20.230
20) a-methylstyrene	(1)	6.399	118	133585	20.275
22) bis(2-Chloroethyl)ether	(1)	6.440	93	1472086	19.991
23) 2-Chlorophenol	(1)	6.486	128	1278530	20.326
24) 1,3-Dichlorobenzene	(1)	6.714	146	1398582	19.947
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	207858	5.000
26) 1,4-Dichlorobenzene	(1)	6.825	146	1406705	19.932
27) Benzyl alcohol	(1)	7.023	108	881534	20.524
28) 1,2-Dichlorobenzene	(1)	7.046	146	1339666	20.091
30) Indene	(1)	7.180	115	1414575	20.157
31) 2-Methylphenol	(1)	7.215	108	1304078	20.349
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.250	45	1706508	19.765
34) bis(2-Chloroisopropyl)ether	(1)	7.250	45	1706508	19.765
35) N-Nitrosopyrrolidine	(1)	7.378	100	773207	20.980
97) Isosafrole	(3)			1051251	20.257
36) Acetophenone	(1)	7.413	105	1806921	20.402
38) N-Nitroso-di-n-propylamine	(1)	7.442	70	1074239	20.264
37) 4-Methylphenol	(1)	7.448	108	1462141	20.427
39) N-Nitrosomorpholine	(1)	7.448	56	790887	20.078
40) o-Toluidine	(1)	7.466	106	2233768	20.359
43) Hexachloroethane	(1)	7.559	117	581579	20.202
44)$Nitrobenzene-d5	(2)	7.635	82	3105748	40.357
45) Nitrobenzene	(2)	7.664	77	1564300	19.863
48) N-Nitrosopiperidine	(2)	7.891	114	672918	20.660
50) Isophorone	(2)	8.049	82	2796433	20.537
120) 2,4_2,6-Dinitrotoluenes	(3)			1374904	41.664
51) 2-Nitrophenol	(2)	8.153	139	648135	20.927

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.258	107	1403073	20.341
57) O,O,O-Triethylphosphorothioate	(2)	8.387	198	585793	20.480
55) bis(2-Chloroethoxy)methane	(2)	8.410	93	1765661	20.923
56) Benzoic acid	(2)	8.422	105	833469M	21.542
60) 2,4-Dichlorophenol	(2)	8.532	162	1024563	20.280
62) 1,2,4-Trichlorobenzene	(2)	8.661	180	1082200	20.056
65)*Naphthalene-d8	(2)	8.736	136	784074	5.000
66) Naphthalene	(2)	8.771	128	3718789	20.217
146) Diallate trans/cis	(4)			1357194	20.082
67) 4-Chloroaniline	(2)	8.876	127	1474614	20.534
68) 2,6-Dichlorophenol	(2)	8.888	162	1007459	20.475
69) Hexachloropropene	(2)	8.923	213	703262	20.404
71) Hexachlorobutadiene	(2)	8.999	225	608859	20.134
75) Quinoline	(2)	9.302	129	2228896	20.722
76) Caprolactam	(2)	9.430	113	417634	21.166
77) N-Nitrosodi-n-butylamine	(2)	9.453	84	1243384	22.097
80) 4-Chloro-3-methylphenol	(2)	9.675	107	1194730	20.724
82) Safrole	(2)	9.768	162	954572	20.506
83) 2-Methylnaphthalene	(2)	9.879	142	2387853	20.805
84) 1-Methylnaphthalene	(2)	10.030	142	2293604	21.093
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.147	216	1050042	20.001
85) Hexachlorocyclopentadiene	(3)	10.147	237	678250	20.187
88) cis-Isosafrole	(3)	10.234	162	166994	3.468
90) 2,4,6-Trichlorophenol	(3)	10.339	196	690231	20.309
92) 2,4,5-Trichlorophenol	(3)	10.392	196	755328	20.983
93)$2-Fluorobiphenyl	(3)	10.491	172	5063009	40.280
94) trans-Isosafrole	(3)	10.596	162	884257	16.792
95) 1,1'-Biphenyl	(3)	10.636	154	2743732	20.175
96) 2-Chloronaphthalene	(3)	10.648	162	2154485	19.176
98) 1-Chloronaphthalene	(3)	10.677	162	2120135	20.979
99) Diphenyl ether	(3)	10.817	170	1527646	20.090
100) 2-Nitroaniline	(3)	10.823	138	755998	21.146
104) 1,4-Naphthoquinone	(3)	10.934	158	881873	21.147
105) 1,4-Dinitrobenzene	(3)	11.056	168	381313	21.058
106) Dimethylphthalate	(3)	11.167	163	2439447	20.526
107) 1,3-Dinitrobenzene	(3)	11.167	168	440702	20.884
108) 2,6-Dinitrotoluene	(3)	11.231	165	582625	20.628
109) Acenaphthylene	(3)	11.301	152	3213774	21.421
112) 3-Nitroaniline	(3)	11.482	138	659623	20.899
113)*Acenaphthene-d10	(3)	11.528	164	391720	5.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.575	153	2255836	20.165
115) 2,4-Dinitrophenol	(3)	11.639	184	320840	21.749
116) 4-Nitrophenol	(3)	11.761	109	409471	20.665
117) Pentachlorobenzene	(3)	11.773	250	872288	20.117
118) 2,4-Dinitrotoluene	(3)	11.831	165	792279	20.985
119) Dibenzofuran	(3)	11.831	168	3083357	20.296
121) 1-Naphthylamine	(3)	11.936	143	2428389	20.524
122) 2,3,4,6-Tetrachlorophenol	(3)	12.006	232	582836	21.242
123) 2-Naphthylamine	(3)	12.041	143	2444123	20.548
124) Diethylphthalate	(3)	12.199	149	2424628	20.904
126) Fluorene	(3)	12.274	166	2471730	21.066
125) Thionazin	(3)	12.292	107	501661	20.565
128) 5-Nitro-o-toluidine	(3)	12.303	152	756035	20.577
127) 4-Chlorophenyl-phenylether	(3)	12.303	204	1163471	20.278
129) 4-Nitroaniline	(3)	12.309	138	699462	20.205
130) 4,6-Dinitro-2-methylphenol	(4)	12.356	198	439039	21.274
131) N-Nitrosodiphenylamine	(4)	12.443	169	2078005	20.138
132) NDPA as diphenylamine	(4)	12.443	169	2078005	20.138
134) 1,2-Diphenylhydrazine	(4)	12.490	77	2932375	19.833
135)$2,4,6-Tribromophenol	(3)	12.566	330	598567	41.494
137) Tetraethyldithiopyrophosphate	(4)	12.676	97	459608	20.340
139) 1,3,5-Trinitrobenzene	(4)	12.770	213	304691	21.300
140) Diallate (peak 1)	(4)	12.811	86	1168355	16.646
141) Phorate	(4)	12.816	75	1756529	19.991
142) Phenacetin	(4)	12.840	108	1370787	20.003
143) 4-Bromophenyl-phenylether	(4)	12.886	248	666818	20.163
144) Diallate (peak 2)	(4)	12.910	86	188839	3.442
145) Hexachlorobenzene	(4)	12.939	284	663188	19.502
147) Dimethoate	(4)	13.009	87	1129396	19.958
148) Atrazine	(4)	13.114	200	621650	19.744
149) Pentachlorophenol	(4)	13.189	266	449912	20.777
151) Pentachloronitrobenzene	(4)	13.201	237	309982	20.443
150) 4-Aminobiphenyl	(4)	13.201	169	1829560	20.197
152) Pronamide	(4)	13.306	173	1102704	20.373
153)*Phenanthrene-d10	(4)	13.411	188	740347	5.000
154) Dinoseb	(4)	13.440	211	642729	21.489
155) Phenanthrene	(4)	13.446	178	3677796	19.632
157) Anthracene	(4)	13.510	178	3768582	20.655
163) Carbazole	(4)	13.726	167	3442216	19.762
164) Methyl parathion	(4)	13.930	109	908232	20.736

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

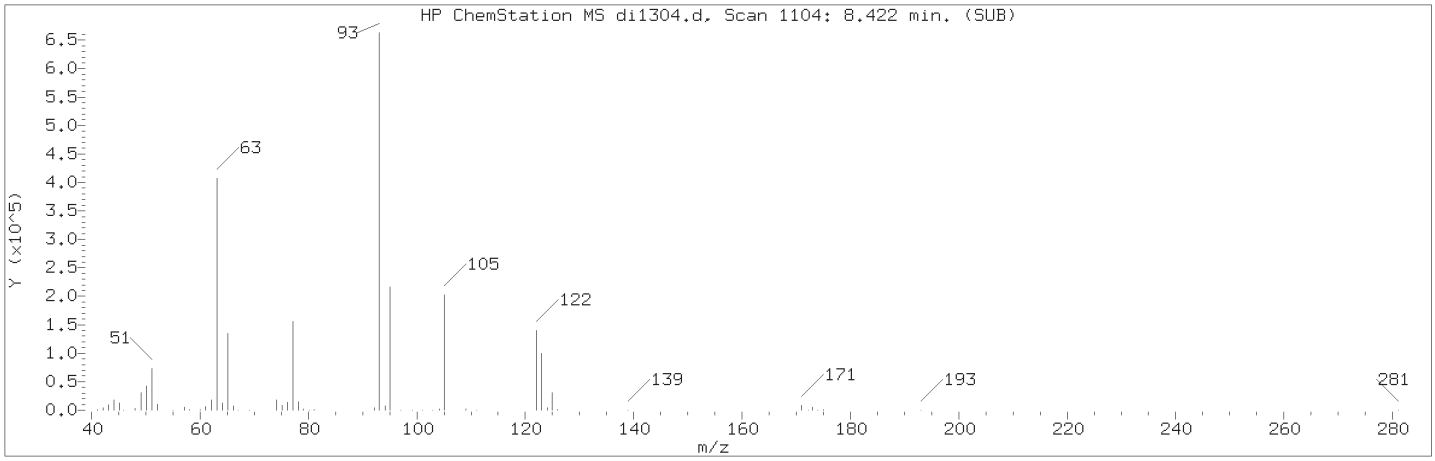
Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.239	149	4223761	20.230
168) 4-Nitroquinoline-1-oxide	(4)	14.472	190	417646	21.008
167) Parathion	(4)	14.472	109	575582	20.525
169) Octachlorostyrene	(4)	14.816	308	263387	20.110
171) Isodrin	(4)	14.856	193	425588	19.919
222) Total PAHs	(6)			57802743	393.548
173) Fluoranthene	(4)	15.072	202	4022740	20.751
174) Benzidine	(5)	15.305	184	8205165	59.744
175)*Pyrene-d10	(5)	15.381	212	724414	5.000
177) Pyrene	(5)	15.410	202	4036373	19.925
179)$Terphenyl-d14	(5)	15.702	244	5014386	40.432
182) p-Dimethylaminoazobenzene	(5)	15.929	225	722599	20.817
185) Chlorobenzilate	(5)	16.022	139	1196124	20.544
187) 3,3'-Dimethylbenzidine	(5)	16.483	212	2516945	19.594
188) Butylbenzylphthalate	(5)	16.547	149	1787631	19.778
191) 2-Acetylaminofluorene	(5)	16.902	181	1388002	19.954
193) 3,3'-Dichlorobenzidine	(5)	17.398	252	1350655	19.358
195) Benzo(a)anthracene	(5)	17.403	228	3578932	21.366
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.421	231	730316	19.290
196) Chrysene	(5)	17.468	228	3450305	20.273
199) bis(2-Ethylhexyl)phthalate	(5)	17.619	149	2382802	19.504
203) 6-Methylchrysene	(5)	18.266	242	2359972	19.224
205) Di-n-octylphthalate	(6)	18.773	149	4000901	21.150
206) Benzo(b)fluoranthene	(6)	19.251	252	3467989	22.397
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.257	256	1640231	20.634
208) Benzo(k)fluoranthene	(6)	19.298	252	3362745	21.335
211) Benzo(a)pyrene	(6)	19.770	252	3211494	22.532
213)*Perylene-d12	(6)	19.857	264	628287	5.000
215) 3-Methylcholanthrene	(6)	20.347	268	1529482	20.631
217) Dibenz(a,h)acridine	(6)	21.157	279	2428571	20.663
218) Dibenz(a,j)acridine	(6)	21.227	279	2635536	20.611
219) Indeno(1,2,3-cd)pyrene	(6)	21.466	276	2847761M	21.618
220) Dibenz(a,h)anthracene	(6)	21.507	278	3021345	21.205
221) Benzo(g,h,i)perylene	(6)	21.839	276	3015095	20.610

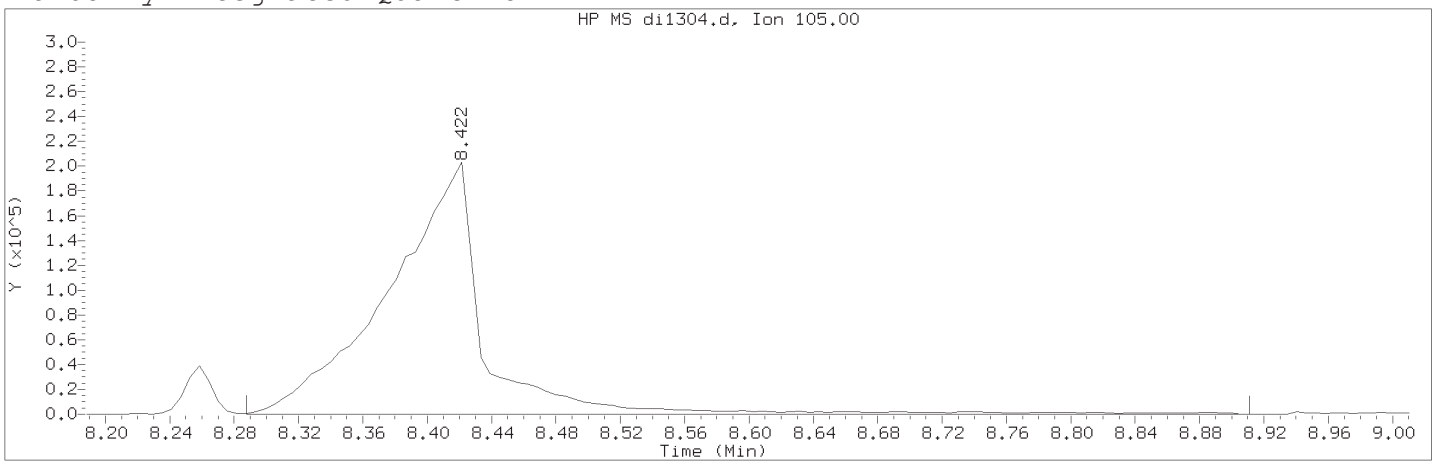
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

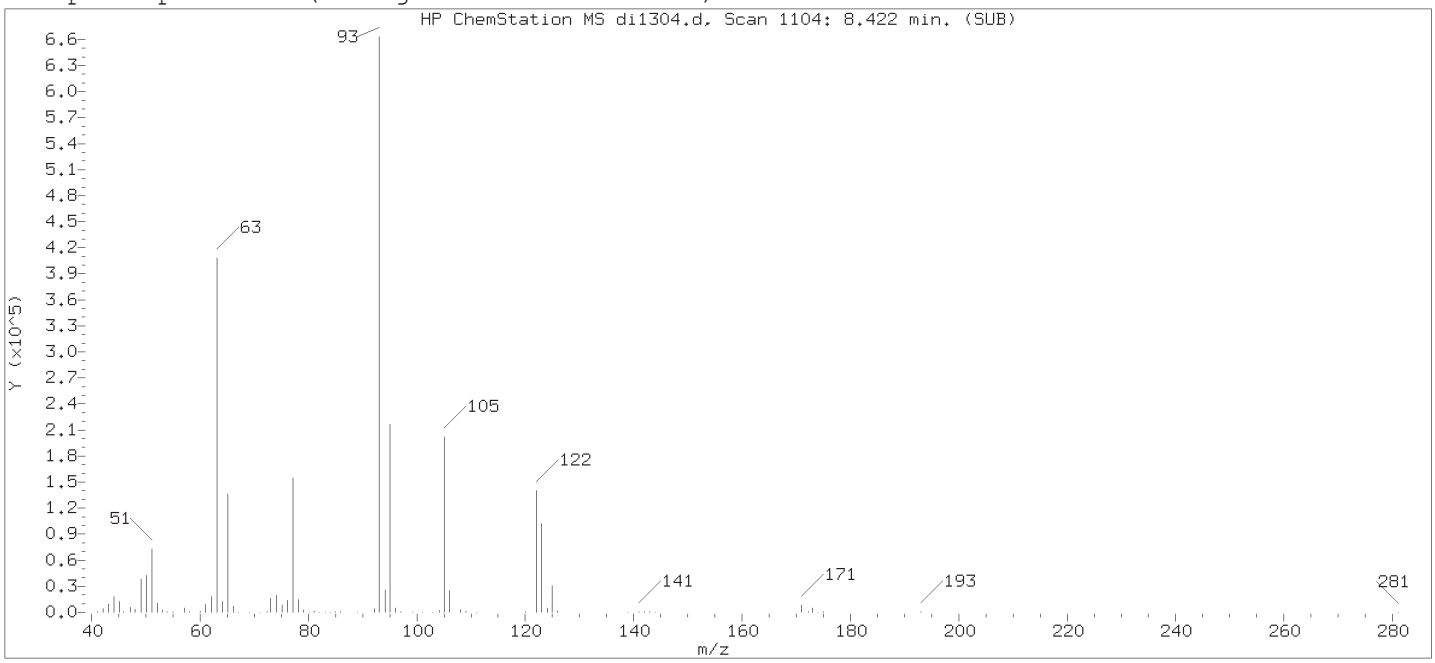
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1104
Retention Time (minutes) : 8.422
Quant Ion : 105.00
Area (flag) : 833469M
On-Column Amount (ng/ul) : 21.5416
Integration start scan : 1080 Integration stop scan: 1187
Y at integration start : 145 Y at integration end: 145

Reason for manual integration: improper integration

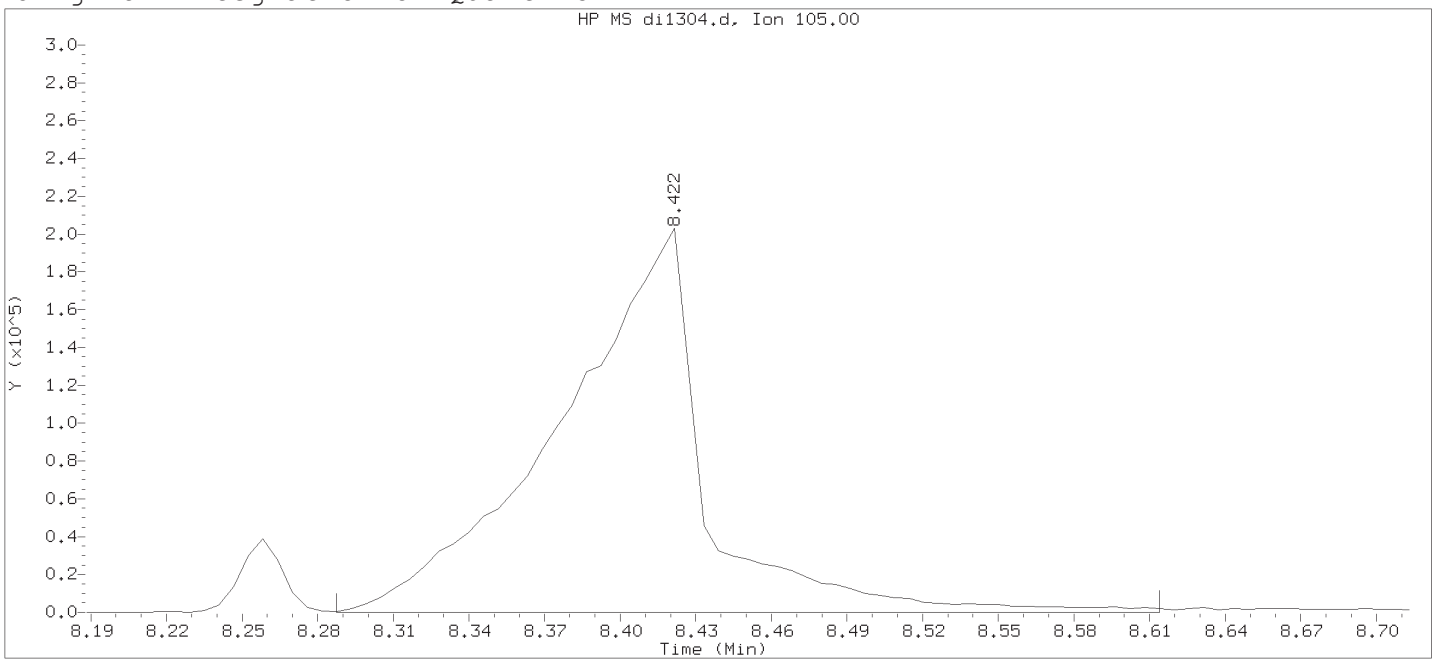
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

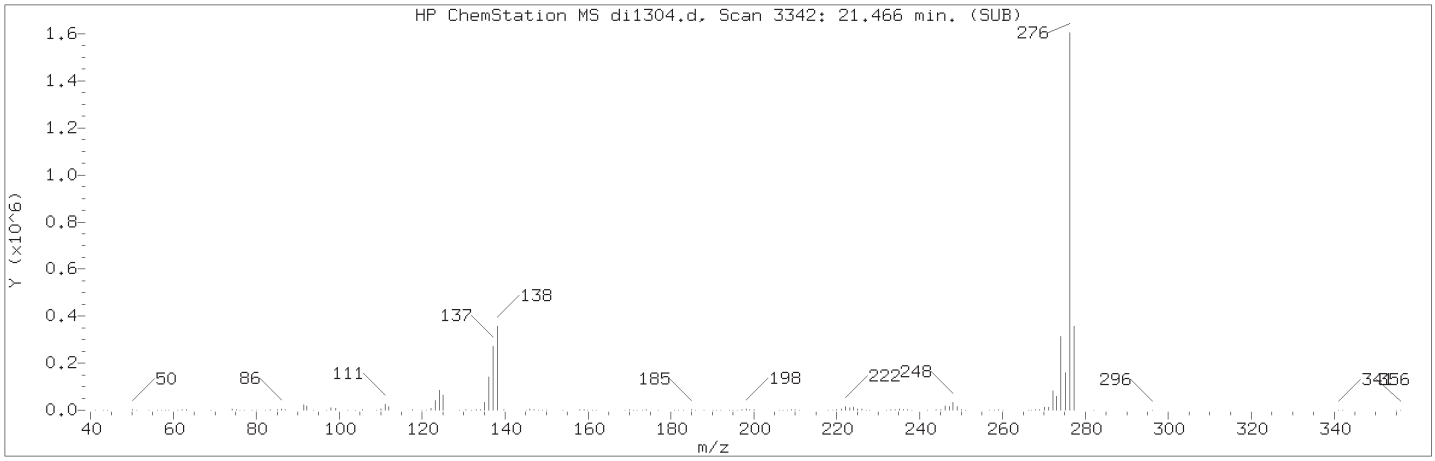
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 19:44
Date, time and analyst ID of latest file update: 21-Sep-2018 19:44 Automation

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

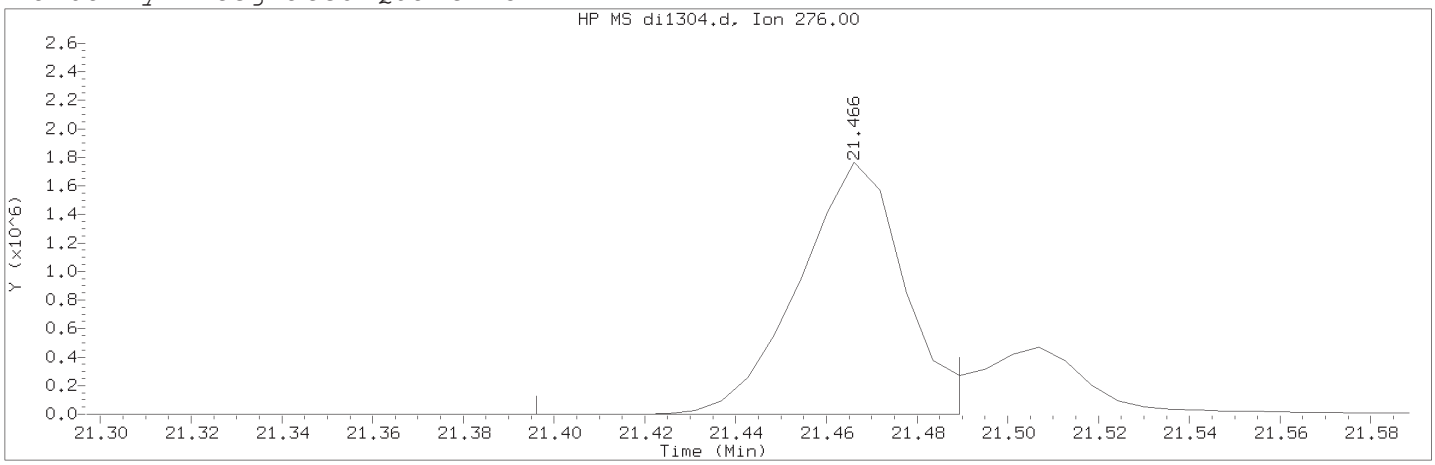
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1104		
Retention Time (minutes)	: 8.422		
Quant Ion	: 105.00		
Area	: 814737		
On-column Amount (ng/ul)	: 26.1359		
Integration start scan	: 1080	Integration stop scan:	1136
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

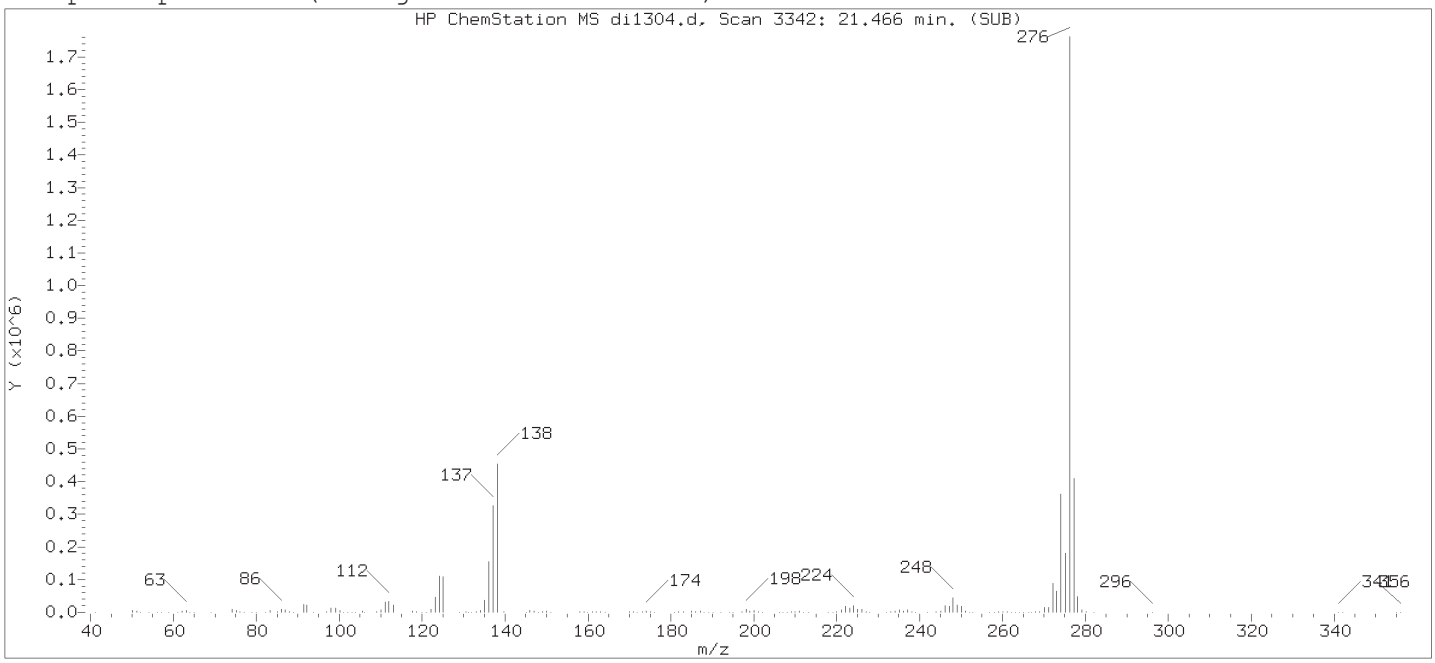
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3342
Retention Time (minutes) : 21.466
Quant Ion : 276.00
Area (flag) : 2847761M
On-Column Amount (ng/ul) : 21.6180
Integration start scan : 3329 Integration stop scan: 3345
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

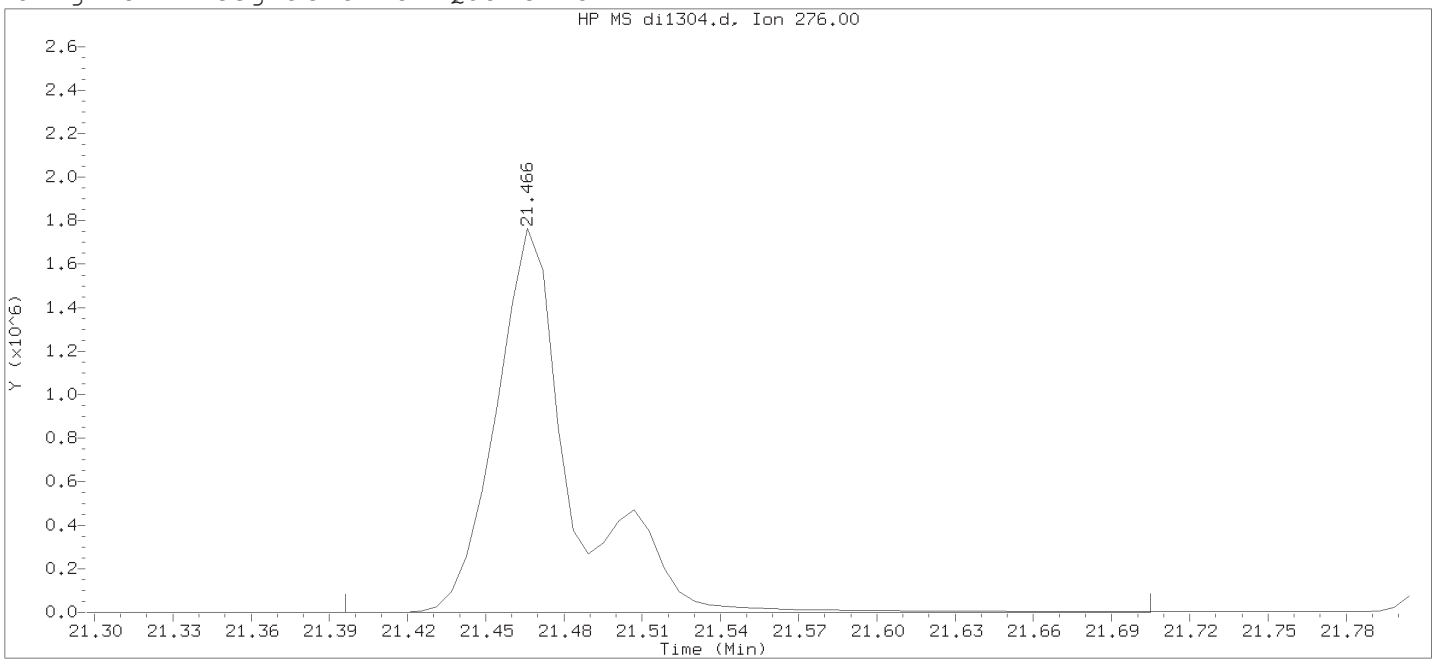
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



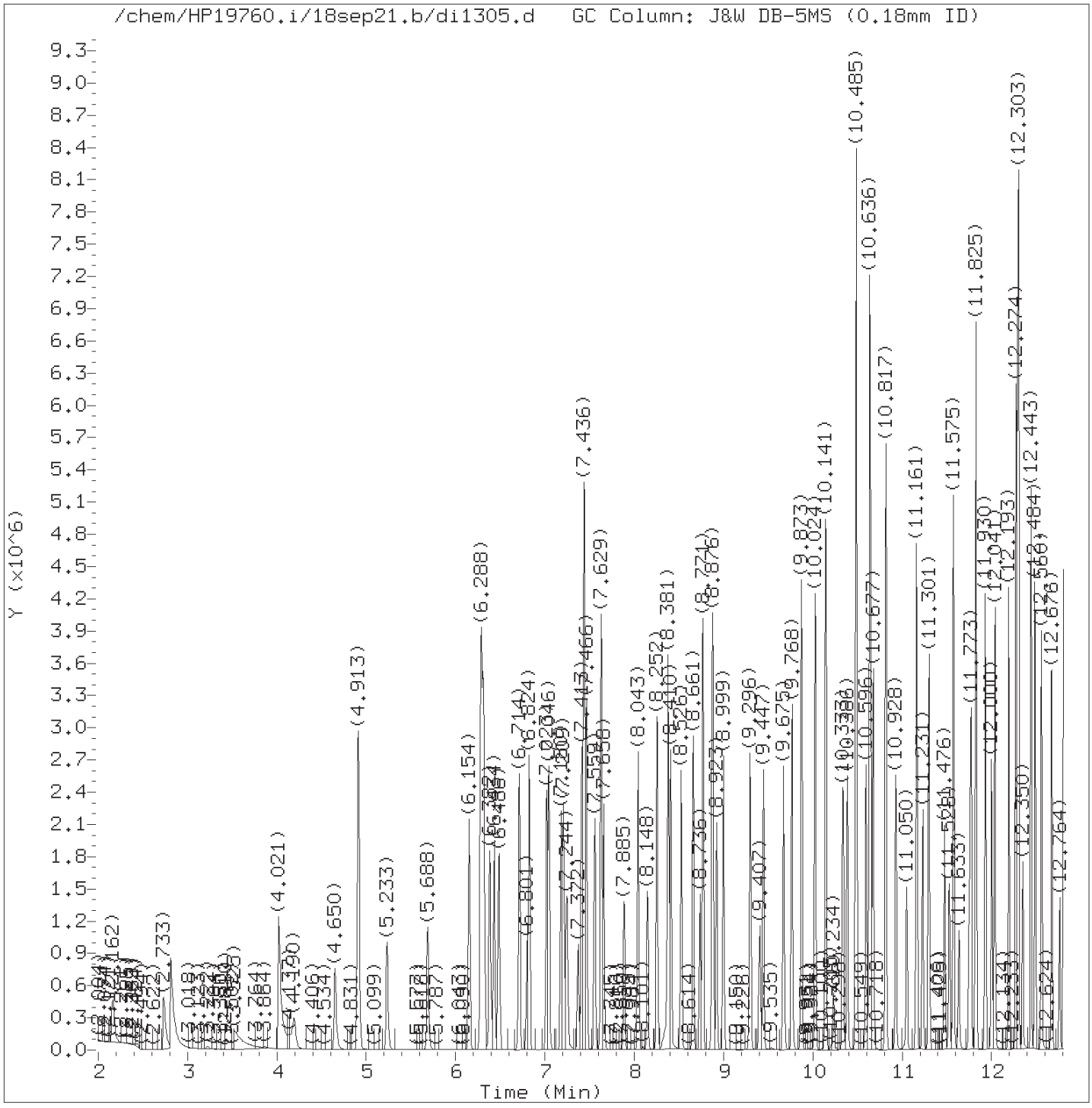
Data File: /chem/HP19760.i/18sep21.b/di1304.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:16 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 19:44
Date, time and analyst ID of latest file update: 21-Sep-2018 19:44 Automation

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3342		
Retention Time (minutes)	: 21.466		
Quant Ion	: 276.00		
Area	: 3615248		
On-column Amount (ng/ul)	: 26.4676		
Integration start scan	: 3329	Integration stop scan:	3382
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne



Total Ion Chromatogram (TIC)

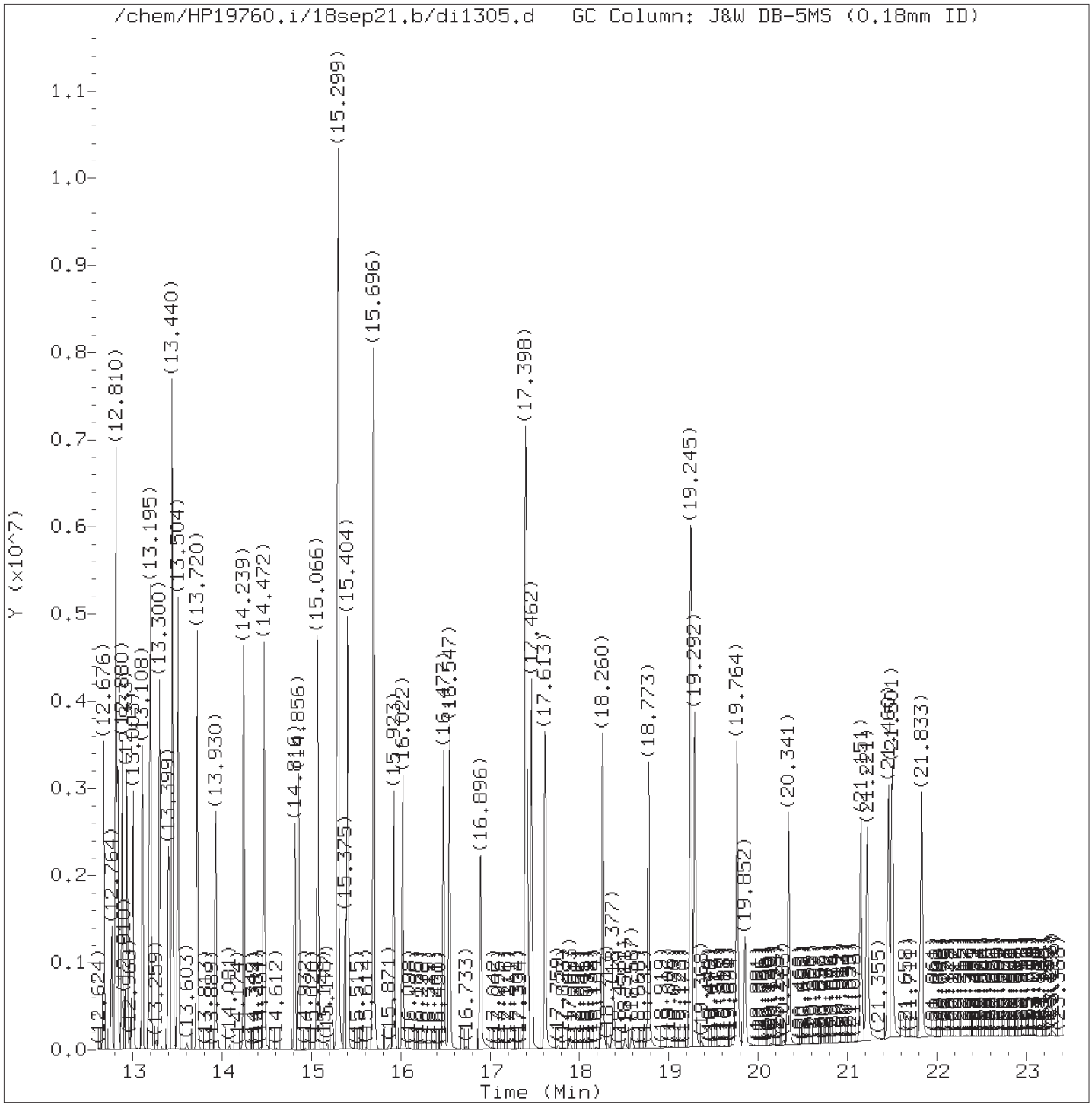
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

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)	2.162	88	393394	12.002
4) N-Nitrosodimethylamine	(1)	2.733	74	576063	12.174
5) Pyridine	(1)	2.809	79	955378	11.702
7) 2-Picoline	(1)	4.021	93	1002644	12.241
8) N-Nitrosomethylethylamine	(1)	4.190	88	440018	12.365
9) Methyl methanesulfonate	(1)	4.650	80	486266	12.453
11)$2-Fluorophenol	(1)	4.913	112	1591880	24.676
13) N-Nitrosodiethylamine	(1)	5.233	102	430544	12.537
42) Total Cresols	(1)			1697320	25.187
15) Ethyl methanesulfonate	(1)	5.688	109	408851	12.419
16) Benzaldehyde	(1)	6.154	77	730090	12.576
17)$Phenol-d6	(1)	6.282	99	2178856	24.674
18) Phenol	(1)	6.306	94	1232005	12.404
19) Aniline	(1)	6.317	93	1457991	12.488
20) a-methylstyrene	(1)	6.399	118	81999	12.544
22) bis(2-Chloroethyl)ether	(1)	6.434	93	906905	12.446
23) 2-Chlorophenol	(1)	6.486	128	784488	12.564
24) 1,3-Dichlorobenzene	(1)	6.714	146	861394	12.423
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	205984	5.000
26) 1,4-Dichlorobenzene	(1)	6.824	146	862748	12.377
27) Benzyl alcohol	(1)	7.023	108	548465	12.787
28) 1,2-Dichlorobenzene	(1)	7.046	146	820909	12.442
30) Indene	(1)	7.180	115	880909	12.625
31) 2-Methylphenol	(1)	7.209	108	791834	12.476
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.244	45	1056854	12.389
34) bis(2-Chloroisopropyl)ether	(1)	7.244	45	1056854	12.389
35) N-Nitrosopyrrolidine	(1)	7.372	100	465906	12.691
97) Isosafrole	(3)			637574	12.471
36) Acetophenone	(1)	7.413	105	1127387	12.757
38) N-Nitroso-di-n-propylamine	(1)	7.436	70	659453	12.539
37) 4-Methylphenol	(1)	7.442	108	905486	12.698
39) N-Nitrosomorpholine	(1)	7.442	56	490300	12.545
40) o-Toluidine	(1)	7.466	106	1374490	12.605
43) Hexachloroethane	(1)	7.559	117	357217	12.516
44)$Nitrobenzene-d5	(2)	7.629	82	1905399	25.111
45) Nitrobenzene	(2)	7.658	77	962846	12.439
48) N-Nitrosopiperidine	(2)	7.891	114	411350	12.744
50) Isophorone	(2)	8.043	82	1697510	12.622
120) 2,4_2,6-Dinitrotoluenes	(3)			826667	25.304
51) 2-Nitrophenol	(2)	8.153	139	387163	12.647

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.252	107	856286	12.582
57) O,O,O-Triethylphosphorothioate	(2)	8.381	198	362069	12.766
56) Benzoic acid	(2)	8.392	105	489708M	12.765
55) bis(2-Chloroethoxy)methane	(2)	8.410	93	1050016	12.603
60) 2,4-Dichlorophenol	(2)	8.526	162	628408	12.601
62) 1,2,4-Trichlorobenzene	(2)	8.661	180	666121	12.529
65)*Naphthalene-d8	(2)	8.736	136	771931	5.000
66) Naphthalene	(2)	8.771	128	2290148	12.617
146) Diallate trans/cis	(4)			830431	12.602
67) 4-Chloroaniline	(2)	8.870	127	904665	12.720
68) 2,6-Dichlorophenol	(2)	8.882	162	620486	12.730
69) Hexachloropropene	(2)	8.923	213	424933	12.517
71) Hexachlorobutadiene	(2)	8.999	225	374336	12.555
75) Quinoline	(2)	9.296	129	1350021	12.686
76) Caprolactam	(2)	9.407	113	252311	12.863
77) N-Nitrosodi-n-butylamine	(2)	9.447	84	611130	11.365
80) 4-Chloro-3-methylphenol	(2)	9.675	107	724621	12.699
82) Safrole	(2)	9.768	162	587489	12.738
83) 2-Methylnaphthalene	(2)	9.873	142	1476213	12.947
84) 1-Methylnaphthalene	(2)	10.024	142	1409524	13.028
85) Hexachlorocyclopentadiene	(3)	10.147	237	417380	12.574
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.147	216	647265	12.504
88) cis-Isosafrole	(3)	10.234	162	103699	2.169
90) 2,4,6-Trichlorophenol	(3)	10.339	196	418847	12.500
92) 2,4,5-Trichlorophenol	(3)	10.386	196	455563	12.750
93)$2-Fluorobiphenyl	(3)	10.485	172	3139618	25.249
94) trans-Isosafrole	(3)	10.596	162	533875	10.306
95) 1,1'-Biphenyl	(3)	10.636	154	1730848	12.804
96) 2-Chloronaphthalene	(3)	10.642	162	1402633	12.621
98) 1-Chloronaphthalene	(3)	10.677	162	1262513	12.627
99) Diphenyl ether	(3)	10.817	170	949783	12.626
100) 2-Nitroaniline	(3)	10.817	138	456924	12.844
104) 1,4-Naphthoquinone	(3)	10.928	158	539388	12.958
105) 1,4-Dinitrobenzene	(3)	11.050	168	229011	12.744
106) Dimethylphthalate	(3)	11.161	163	1503589	12.747
107) 1,3-Dinitrobenzene	(3)	11.167	168	263775	12.633
108) 2,6-Dinitrotoluene	(3)	11.231	165	357455	12.750
109) Acenaphthylene	(3)	11.301	152	1981887	13.208
112) 3-Nitroaniline	(3)	11.476	138	393848	12.617
113)*Acenaphthene-d10	(3)	11.528	164	386217	5.000

M = Compound was manually integrated.
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Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.575	153	1385323	12.548
115) 2,4-Dinitrophenol	(3)	11.633	184	177373	12.270
116) 4-Nitrophenol	(3)	11.750	109	245735	12.559
117) Pentachlorobenzene	(3)	11.773	250	548384	12.744
119) Dibenzofuran	(3)	11.825	168	1912954	12.703
118) 2,4-Dinitrotoluene	(3)	11.831	165	469212	12.578
121) 1-Naphthylamine	(3)	11.930	143	1458152	12.500
122) 2,3,4,6-Tetrachlorophenol	(3)	12.000	232	338707	12.515
123) 2-Naphthylamine	(3)	12.041	143	1486229	12.629
124) Diethylphthalate	(3)	12.193	149	1471912	12.776
126) Fluorene	(3)	12.274	166	1522287	13.021
125) Thionazin	(3)	12.286	107	308899	12.756
128) 5-Nitro-o-toluidine	(3)	12.298	152	452613	12.496
129) 4-Nitroaniline	(3)	12.303	138	428180	12.534
127) 4-Chlorophenyl-phenylether	(3)	12.303	204	719953	12.669
130) 4,6-Dinitro-2-methylphenol	(4)	12.350	198	253292	12.591
131) N-Nitrosodiphenylamine	(4)	12.443	169	1241446	12.404
132) NDPA as diphenylamine	(4)	12.443	169	1241446	12.404
134) 1,2-Diphenylhydrazine	(4)	12.484	77	1811945	12.577
135)$2,4,6-Tribromophenol	(3)	12.560	330	360377	25.253
137) Tetraethyldithiopyrophosphate	(4)	12.671	97	280238	12.690
139) 1,3,5-Trinitrobenzene	(4)	12.764	213	170783	12.333
141) Phorate	(4)	12.810	75	1088788	12.681
140) Diallate (peak 1)	(4)	12.810	86	717617	10.479
142) Phenacetin	(4)	12.834	108	823888	12.397
143) 4-Bromophenyl-phenylether	(4)	12.880	248	410965	12.708
144) Diallate (peak 2)	(4)	12.910	86	112814	2.117
145) Hexachlorobenzene	(4)	12.933	284	405793	12.316
147) Dimethoate	(4)	13.003	87	685315	12.466
148) Atrazine	(4)	13.108	200	389243	12.659
149) Pentachlorophenol	(4)	13.184	266	264511	12.546
150) 4-Aminobiphenyl	(4)	13.195	169	1118240	12.646
151) Pentachloronitrobenzene	(4)	13.201	237	188289	12.701
152) Pronamide	(4)	13.300	173	664301	12.591
153)*Phenanthrene-d10	(4)	13.411	188	719914	5.000
154) Dinoseb	(4)	13.440	211	362814	12.481
155) Phenanthrene	(4)	13.440	178	2256907	12.411
157) Anthracene	(4)	13.504	178	2282211	12.789
163) Carbazole	(4)	13.720	167	2097999	12.415
164) Methyl parathion	(4)	13.930	109	546684	12.750

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$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.239	149	2544609	12.525
168) 4-Nitroquinoline-1-oxide	(4)	14.472	190	230504	12.063
167) Parathion	(4)	14.472	109	339903	12.473
169) Octachlorostyrene	(4)	14.816	308	162016	12.665
171) Isodrin	(4)	14.856	193	261218	12.555
222) Total PAHs	(6)			35356824	240.299
173) Fluoranthene	(4)	15.072	202	2439923	12.852
174) Benzidine	(5)	15.299	184	5041809	37.154
175)*Pyrene-d10	(5)	15.375	212	717962	5.000
177) Pyrene	(5)	15.404	202	2459193	12.298
179)$Terphenyl-d14	(5)	15.696	244	3112525	25.241
182) p-Dimethylaminoazobenzene	(5)	15.923	225	417730	12.230
185) Chlorobenzilate	(5)	16.022	139	716554	12.438
187) 3,3'-Dimethylbenzidine	(5)	16.477	212	1557306	12.298
188) Butylbenzylphthalate	(5)	16.547	149	1098956	12.325
191) 2-Acetylaminofluorene	(5)	16.896	181	771147	11.488
193) 3,3'-Dichlorobenzidine	(5)	17.398	252	815433	11.961
195) Benzo(a)anthracene	(5)	17.398	228	2227128	13.221
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.415	231	446891	12.052
196) Chrysene	(5)	17.462	228	2155739	12.723
199) bis(2-Ethylhexyl)phthalate	(5)	17.619	149	1411090	11.855
203) 6-Methylchrysene	(5)	18.260	242	1422426	11.883
205) Di-n-octylphthalate	(6)	18.773	149	2319730	12.465
206) Benzo(b)fluoranthene	(6)	19.245	252	2076096	13.377
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.251	256	1002452	12.728
208) Benzo(k)fluoranthene	(6)	19.292	252	2088266	13.252
211) Benzo(a)pyrene	(6)	19.764	252	1927537	13.468
213)*Perylene-d12	(6)	19.852	264	618703	5.000
215) 3-Methylcholanthrene	(6)	20.341	268	903505	12.407
217) Dibenz(a,h)acridine	(6)	21.151	279	1443181	12.477
218) Dibenz(a,j)acridine	(6)	21.221	279	1587059	12.577
219) Indeno(1,2,3-cd)pyrene	(6)	21.460	276	1695566M	12.953
220) Dibenz(a,h)anthracene	(6)	21.501	278	1844681	13.012
221) Benzo(g,h,i)perylene	(6)	21.833	276	1838195	12.707

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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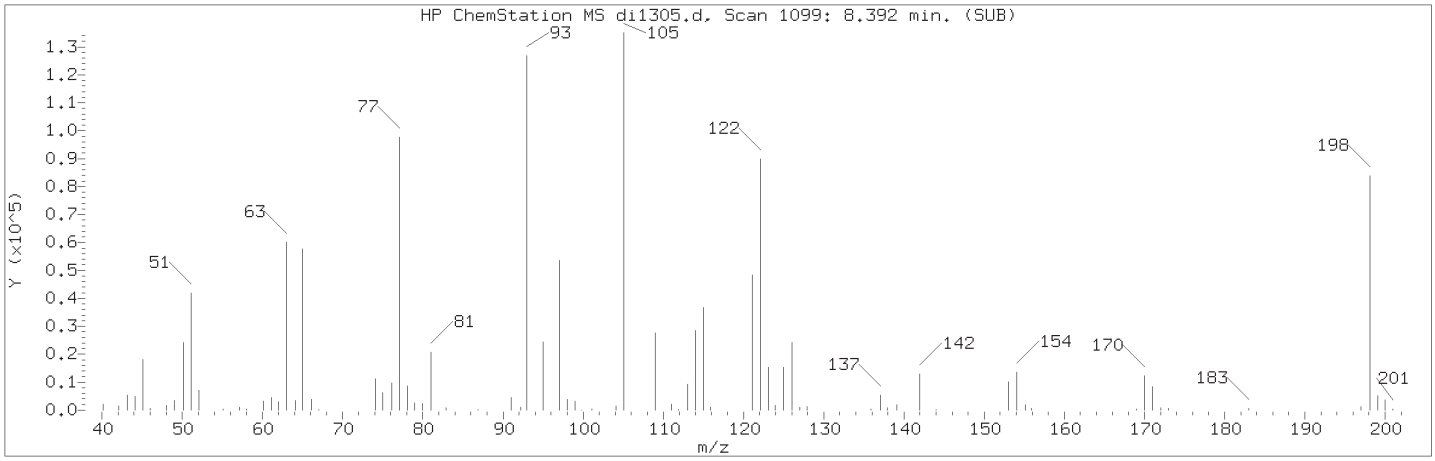
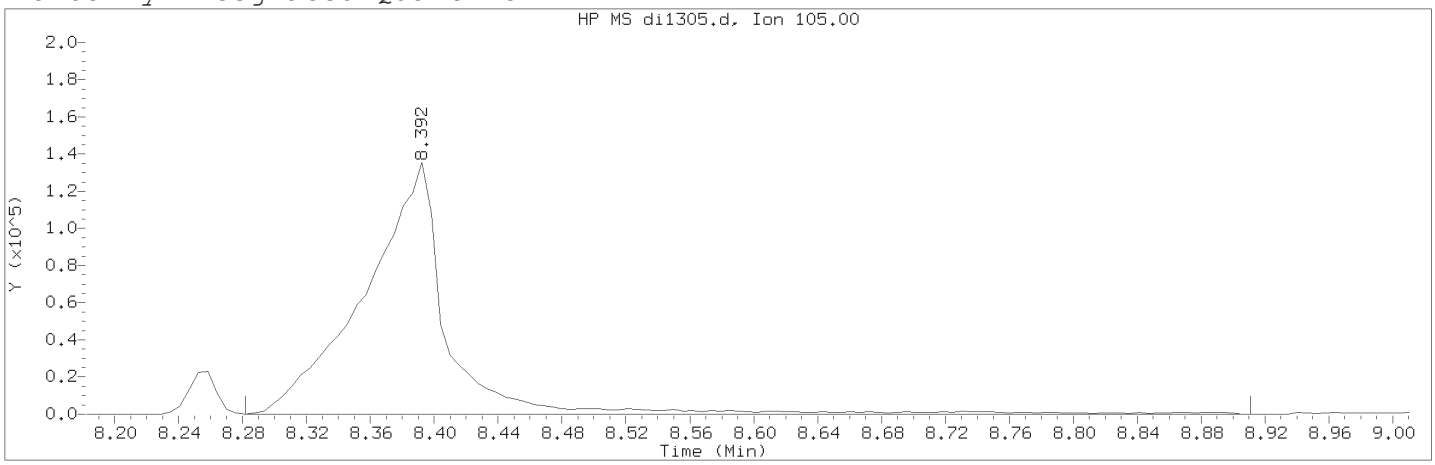
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

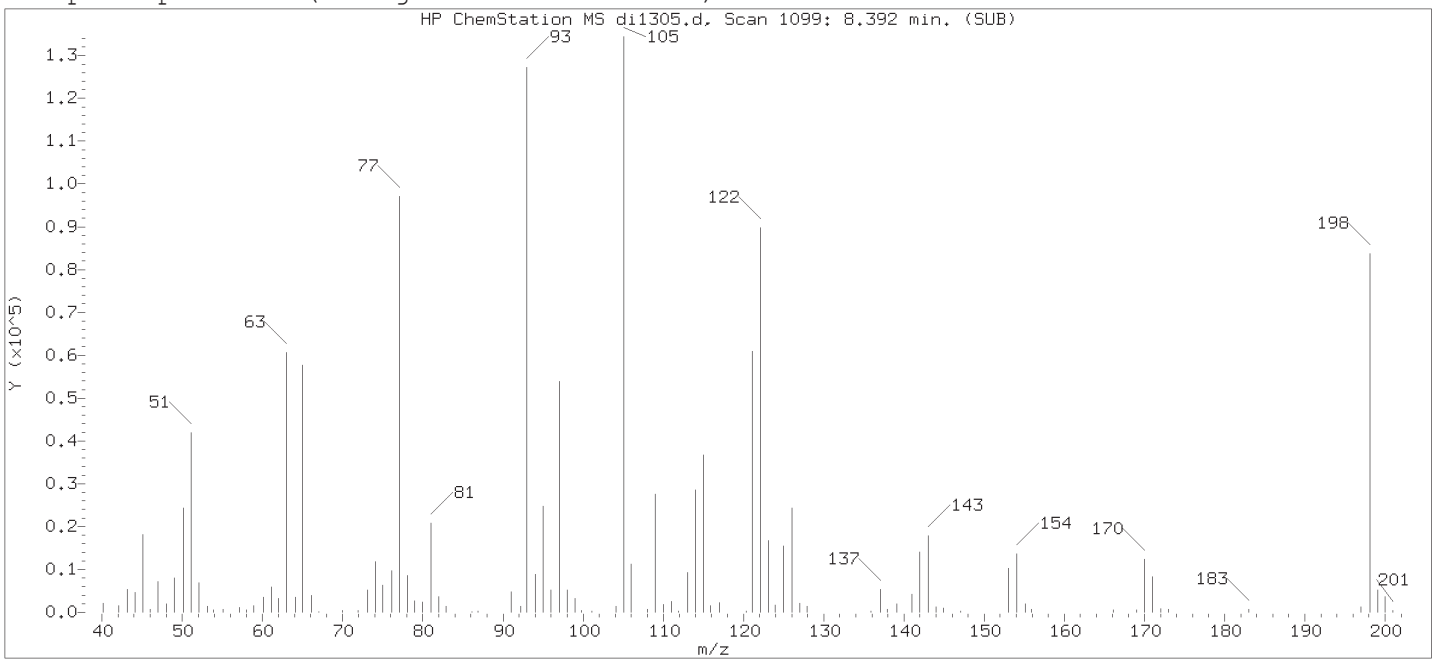
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1099
Retention Time (minutes) : 8.392
Quant Ion : 105.00
Area (flag) : 489708M
On-Column Amount (ng/ul) : 12.7651
Integration start scan : 1079 Integration stop scan: 1187
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

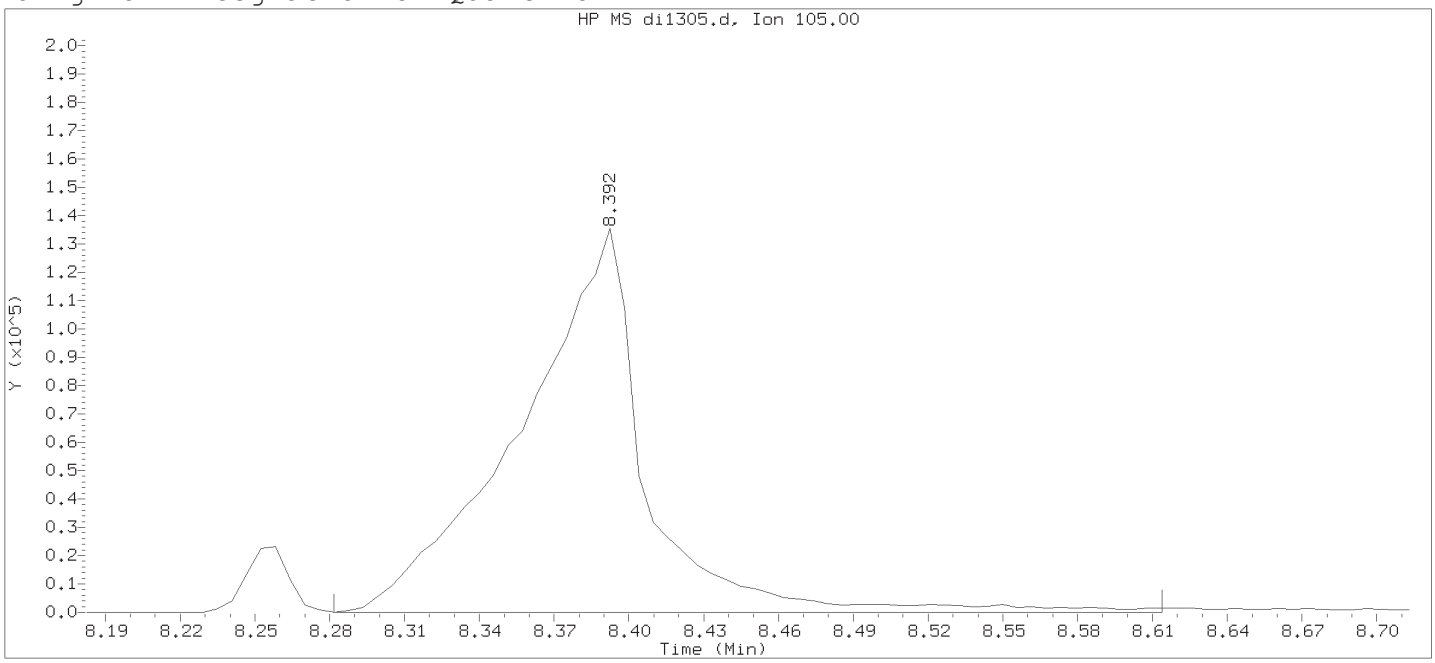
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

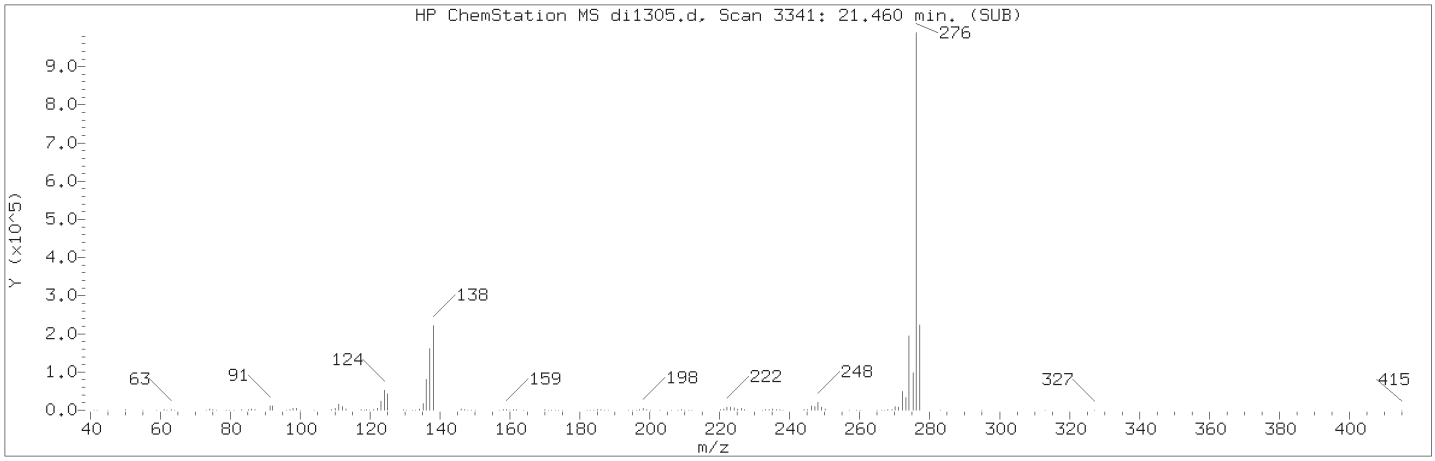
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 20:13
Date, time and analyst ID of latest file update: 21-Sep-2018 20:13 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

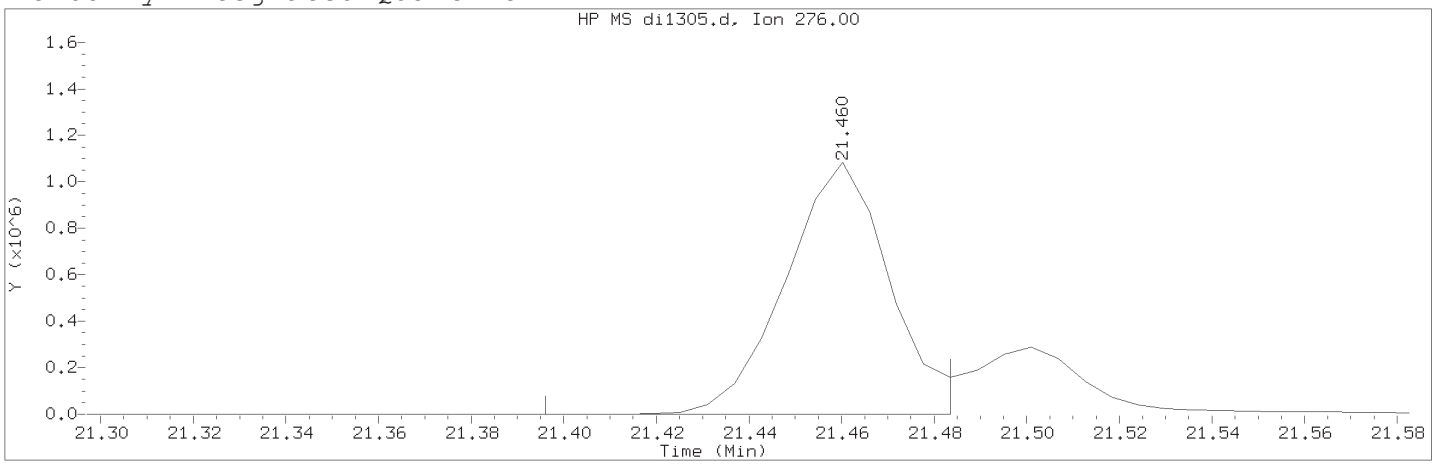
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1099		
Retention Time (minutes)	: 8.392		
Quant Ion	: 105.00		
Area	: 473187		
On-column Amount (ng/ul)	: 14.9022		
Integration start scan	: 1079	Integration stop scan:	1136
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: emonborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

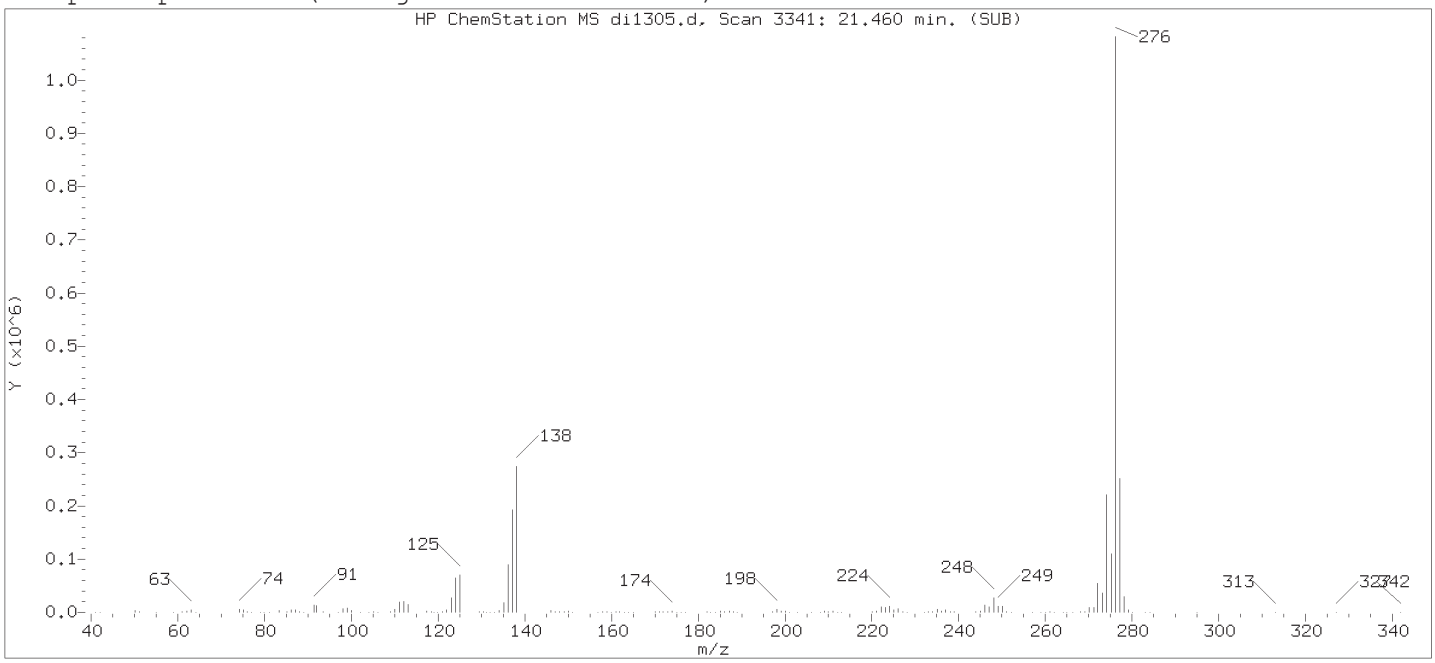
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3341
Retention Time (minutes) : 21.460
Quant Ion : 276.00
Area (flag) : 1695566M
On-Column Amount (ng/ul) : 12.9525
Integration start scan : 3329 Integration stop scan: 3344
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

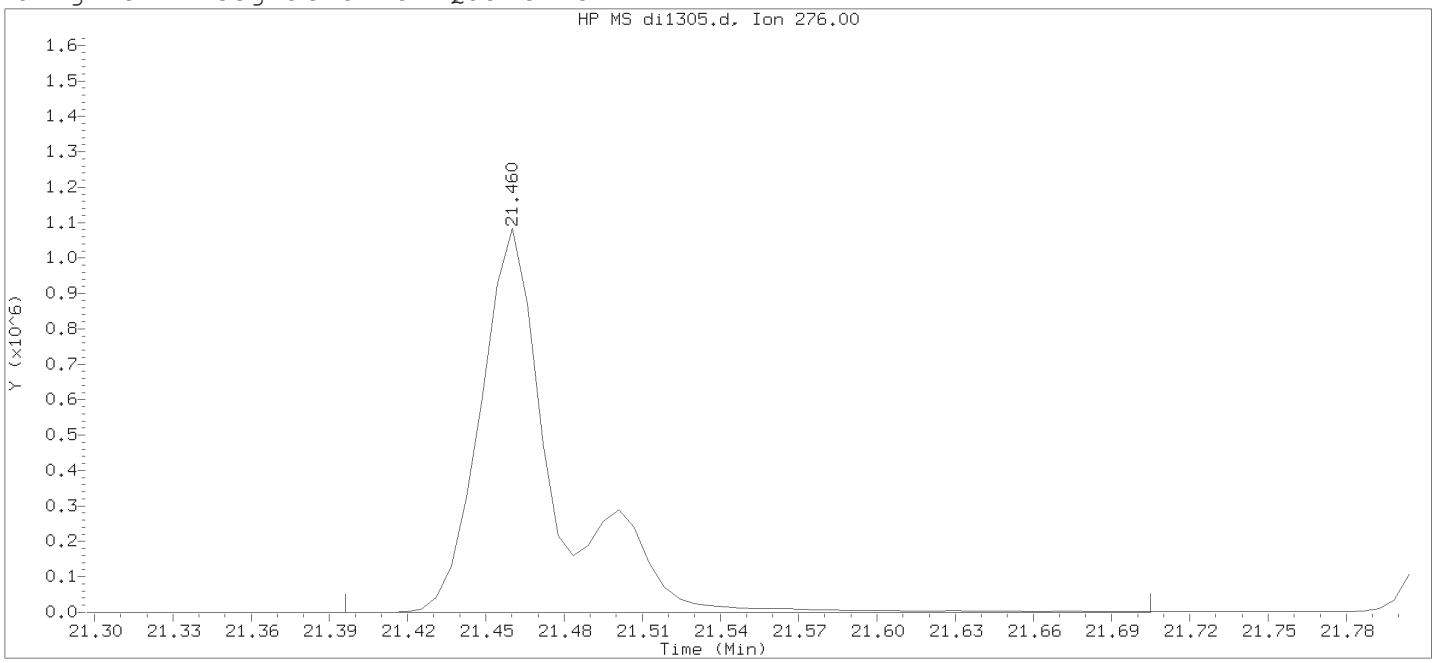
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



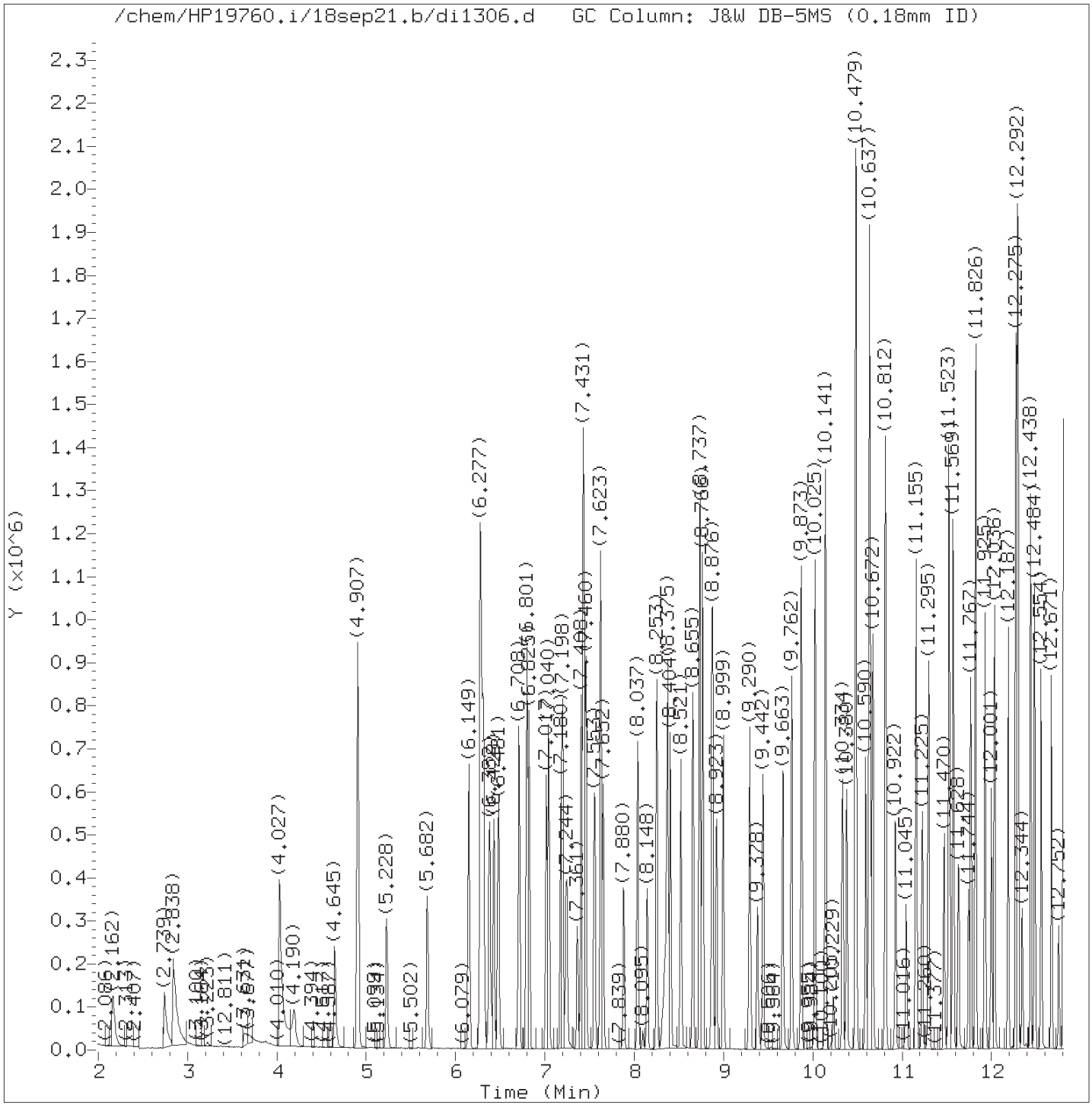
Data File: /chem/HP19760.i/18sep21.b/di1305.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 19:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 20:13
Date, time and analyst ID of latest file update: 21-Sep-2018 20:13 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3341		
Retention Time (minutes)	: 21.460		
Quant Ion	: 276.00		
Area	: 2190631		
On-column Amount (ng/ul)	: 15.6229		
Integration start scan	: 3329	Integration stop scan:	3382
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne



Total Ion Chromatogram (TIC)

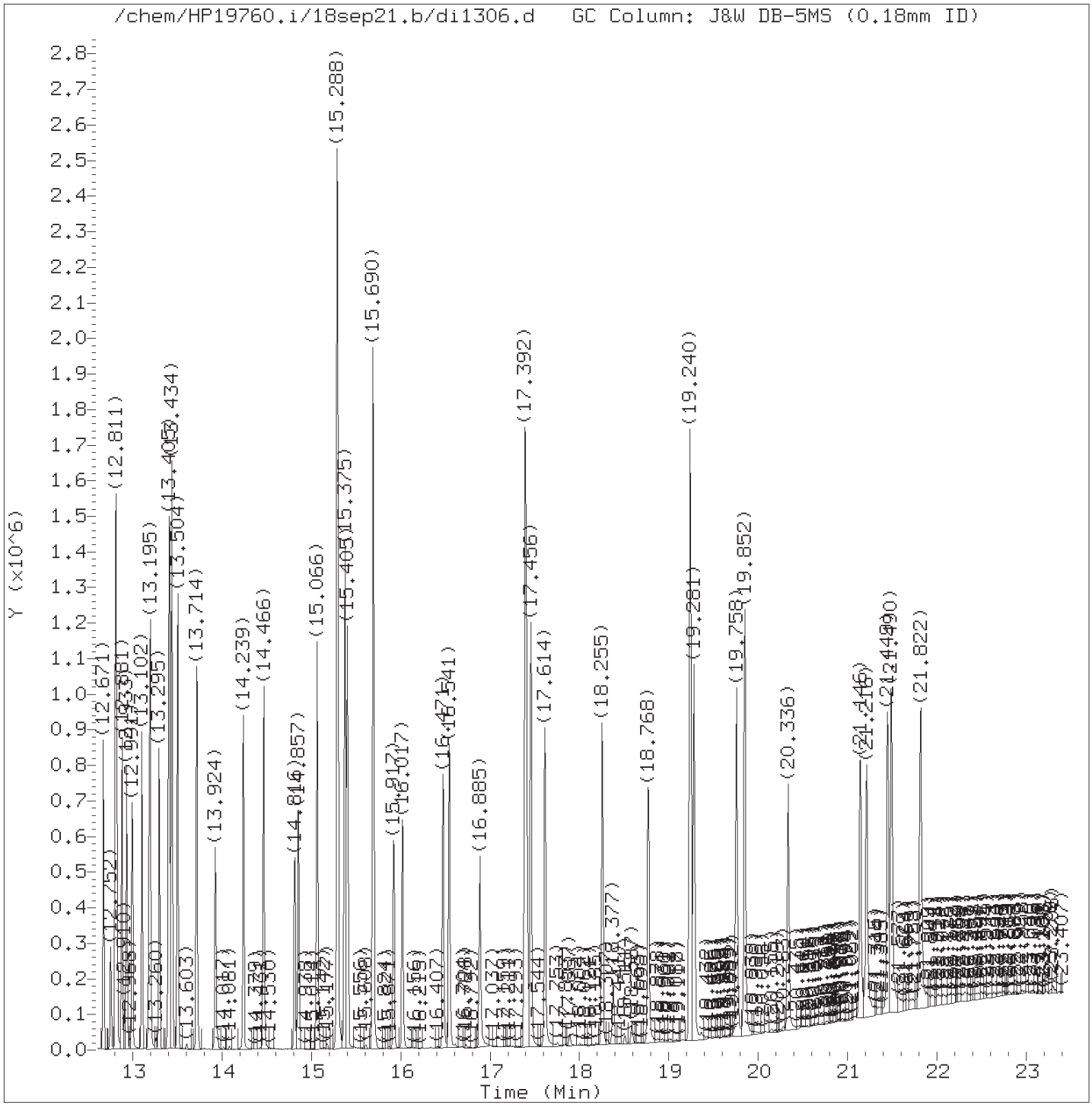
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

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)	2.168	88	115281	3.653
4) N-Nitrosodimethylamine	(1)	2.739	74	156212	3.471
5) Pyridine	(1)	2.838	79	266987	3.444
7) 2-Picoline	(1)	4.027	93	285940	3.631
8) N-Nitrosomethylethylamine	(1)	4.196	88	126854	3.693
9) Methyl methanesulfonate	(1)	4.645	80	134057	3.583
11)$2-Fluorophenol	(1)	4.907	112	445573	7.200
13) N-Nitrosodiethylamine	(1)	5.228	102	118528	3.598
42) Total Cresols	(1)			459671	7.127
15) Ethyl methanesulfonate	(1)	5.682	109	113697	3.600
16) Benzaldehyde	(1)	6.149	77	207525	3.701
17)$Phenol-d6	(1)	6.277	99	608529	7.186
18) Phenol	(1)	6.294	94	348378	3.645
19) Aniline	(1)	6.312	93	410616	3.653
20) a-methylstyrene	(1)	6.399	118	21997	3.525
22) bis(2-Chloroethyl)ether	(1)	6.428	93	251225	3.595
23) 2-Chlorophenol	(1)	6.481	128	214301	3.582
24) 1,3-Dichlorobenzene	(1)	6.708	146	244656	3.663
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	199584	5.000
26) 1,4-Dichlorobenzene	(1)	6.825	146	247513	3.681
27) Benzyl alcohol	(1)	7.017	108	135187	3.341
28) 1,2-Dichlorobenzene	(1)	7.040	146	231752	3.649
30) Indene	(1)	7.180	115	228255	3.445
31) 2-Methylphenol	(1)	7.198	108	215620	3.552
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.244	45	290291	3.557
34) bis(2-Chloroisopropyl)ether	(1)	7.244	45	290291	3.557
35) N-Nitrosopyrrolidine	(1)	7.361	100	121047	3.467
97) Isosafrole	(3)			158133	3.593
36) Acetophenone	(1)	7.408	105	311722	3.662
38) N-Nitroso-di-n-propylamine	(1)	7.431	70	173517	3.469
39) N-Nitrosomorpholine	(1)	7.431	56	133872	3.576
37) 4-Methylphenol	(1)	7.437	108	244051	3.574
40) o-Toluidine	(1)	7.460	106	379402	3.622
43) Hexachloroethane	(1)	7.553	117	100466	3.656
44)$Nitrobenzene-d5	(2)	7.623	82	512435	7.249
45) Nitrobenzene	(2)	7.652	77	262658	3.639
48) N-Nitrosopiperidine	(2)	7.886	114	106427	3.556
50) Isophorone	(2)	8.037	82	430756	3.473
120) 2,4_2,6-Dinitrotoluenes	(3)			194351	6.962
51) 2-Nitrophenol	(2)	8.148	139	98767	3.493

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.253	107	223333	3.542
56) Benzoic acid	(2)	8.358	105	212216	6.153
57) O,O,O-Triethylphosphorothioate	(2)	8.375	198	94526	3.587
55) bis(2-Chloroethoxy)methane	(2)	8.404	93	286120	3.674
60) 2,4-Dichlorophenol	(2)	8.521	162	167561	3.610
62) 1,2,4-Trichlorobenzene	(2)	8.655	180	185355	3.719
65)*Naphthalene-d8	(2)	8.737	136	725140	5.000
66) Naphthalene	(2)	8.766	128	629897	3.703
146) Diallate trans/cis	(4)			190828	3.587
67) 4-Chloroaniline	(2)	8.871	127	236546	3.581
68) 2,6-Dichlorophenol	(2)	8.876	162	163342	3.602
69) Hexachloropropene	(2)	8.923	213	114031	3.609
71) Hexachlorobutadiene	(2)	8.999	225	102398	3.674
75) Quinoline	(2)	9.290	129	346844	3.522
76) Caprolactam	(2)	9.378	113	57038	3.207
77) N-Nitrosodi-n-butylamine	(2)	9.442	84	150023	3.099
80) 4-Chloro-3-methylphenol	(2)	9.663	107	177432	3.390
82) Safrole	(2)	9.762	162	149057	3.498
83) 2-Methylnaphthalene	(2)	9.873	142	392455	3.678
84) 1-Methylnaphthalene	(2)	10.025	142	374151	3.693
85) Hexachlorocyclopentadiene	(3)	10.141	237	103539	3.618
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.141	216	174338	3.847
88) cis-Isosafrole	(3)	10.235	162	24841	0.605
90) 2,4,6-Trichlorophenol	(3)	10.334	196	100851	3.515
92) 2,4,5-Trichlorophenol	(3)	10.380	196	108926	3.551
93)$2-Fluorobiphenyl	(3)	10.479	172	819910	7.565
94) trans-Isosafrole	(3)	10.590	162	133292	2.988
95) 1,1'-Biphenyl	(3)	10.631	154	456160	3.853
96) 2-Chloronaphthalene	(3)	10.643	162	363860	3.761
98) 1-Chloronaphthalene	(3)	10.672	162	344075	3.913
99) Diphenyl ether	(3)	10.812	170	246604	3.765
100) 2-Nitroaniline	(3)	10.812	138	101006	3.351
104) 1,4-Naphthoquinone	(3)	10.928	158	117532	3.336
105) 1,4-Dinitrobenzene	(3)	11.045	168	49583	3.273
106) Dimethylphthalate	(3)	11.155	163	368383	3.621
107) 1,3-Dinitrobenzene	(3)	11.161	168	59060	3.341
108) 2,6-Dinitrotoluene	(3)	11.225	165	87509	3.620
109) Acenaphthylene	(3)	11.295	152	490841	3.759
112) 3-Nitroaniline	(3)	11.470	138	89765	3.386
113)*Acenaphthene-d10	(3)	11.523	164	335922	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.569	153	349249	3.655
115) 2,4-Dinitrophenol	(3)	11.633	184	70935	5.936
116) 4-Nitrophenol	(3)	11.744	109	55380	3.342
117) Pentachlorobenzene	(3)	11.767	250	138252	3.705
118) 2,4-Dinitrotoluene	(3)	11.826	165	106842	3.375
119) Dibenzofuran	(3)	11.826	168	489012	3.737
121) 1-Naphthylamine	(3)	11.925	143	352553	3.526
122) 2,3,4,6-Tetrachlorophenol	(3)	12.001	232	77514	3.375
123) 2-Naphthylamine	(3)	12.036	143	358470	3.549
124) Diethylphthalate	(3)	12.187	149	335319	3.420
126) Fluorene	(3)	12.275	166	377246	3.717
125) Thionazin	(3)	12.280	107	68521M	3.342
128) 5-Nitro-o-toluidine	(3)	12.292	152	105281	3.416
129) 4-Nitroaniline	(3)	12.292	138	105058	3.577
127) 4-Chlorophenyl-phenylether	(3)	12.298	204	182837	3.709
130) 4,6-Dinitro-2-methylphenol	(4)	12.344	198	47751	3.046
131) N-Nitrosodiphenylamine	(4)	12.438	169	300552	3.694
132) NDPA as diphenylamine	(4)	12.438	169	300552	3.694
134) 1,2-Diphenylhydrazine	(4)	12.484	77	431568	3.687
135)$2,4,6-Tribromophenol	(3)	12.554	330	82614	6.809
137) Tetraethyldithiopyrophosphate	(4)	12.671	97	60411	3.425
139) 1,3,5-Trinitrobenzene	(4)	12.752	213	30670	2.873
140) Diallate (peak 1)	(4)	12.805	86	163608	2.963
141) Phorate	(4)	12.811	75	239041	3.475
142) Phenacetin	(4)	12.822	108	181796	3.425
143) 4-Bromophenyl-phenylether	(4)	12.881	248	101966	3.841
144) Diallate (peak 2)	(4)	12.910	86	27220	0.628
145) Hexachlorobenzene	(4)	12.933	284	98912	3.691
147) Dimethoate	(4)	12.991	87	152070	3.456
148) Atrazine	(4)	13.102	200	94030	3.748
149) Pentachlorophenol	(4)	13.178	266	53380	3.214
150) 4-Aminobiphenyl	(4)	13.190	169	251975	3.541
151) Pentachloronitrobenzene	(4)	13.195	237	41673	3.502
152) Pronamide	(4)	13.295	173	138908	3.319
153)*Phenanthrene-d10	(4)	13.411	188	587436	5.000
154) Dinoseb	(4)	13.434	211	62735	2.810
155) Phenanthrene	(4)	13.440	178	551000	3.719
157) Anthracene	(4)	13.504	178	544673	3.742
163) Carbazole	(4)	13.714	167	495339	3.623
164) Methyl parathion	(4)	13.924	109	101850	3.047

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.239	149	535638	3.323
168) 4-Nitroquinoline-1-oxide	(4)	14.466	190	36664	2.541
167) Parathion	(4)	14.466	109	67083	3.140
169) Octachlorostyrene	(4)	14.816	308	34940	3.421
171) Isodrin	(4)	14.857	193	60986	3.623
222) Total PAHs	(6)			9263005	63.081
173) Fluoranthene	(4)	15.066	202	550913	3.587
174) Benzidine	(5)	15.288	184	1216664	10.773
175)*Pyrene-d10	(5)	15.375	212	603838	5.000
177) Pyrene	(5)	15.405	202	608444	3.639
179)$Terphenyl-d14	(5)	15.690	244	738695	7.195
182) p-Dimethylaminoazobenzene	(5)	15.923	225	87182	3.155
185) Chlorobenzilate	(5)	16.017	139	152763	3.257
187) 3,3'-Dimethylbenzidine	(5)	16.471	212	359355	3.443
188) Butylbenzylphthalate	(5)	16.541	149	254369	3.458
191) 2-Acetylaminofluorene	(5)	16.885	181	177861	3.254
193) 3,3'-Dichlorobenzidine	(5)	17.392	252	203626	3.589
195) Benzo(a)anthracene	(5)	17.398	228	559687	3.916
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.410	231	111203	3.601
196) Chrysene	(5)	17.456	228	582300	4.026
199) bis(2-Ethylhexyl)phthalate	(5)	17.614	149	340187	3.463
203) 6-Methylchrysene	(5)	18.255	242	368282	3.676
205) Di-n-octylphthalate	(6)	18.773	149	534206	2.984
206) Benzo(b)fluoranthene	(6)	19.234	252	571225	3.658
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.246	256	257602	3.326
208) Benzo(k)fluoranthene	(6)	19.281	252	593634	3.730
211) Benzo(a)pyrene	(6)	19.758	252	541170	3.741
213)*Perylene-d12	(6)	19.852	264	625557	5.000
215) 3-Methylcholanthrene	(6)	20.336	268	246999	3.427
217) Dibenz(a,h)acridine	(6)	21.146	279	399139	3.475
218) Dibenz(a,j)acridine	(6)	21.216	279	443123	3.525
219) Indeno(1,2,3-cd)pyrene	(6)	21.449	276	482173M	3.660
220) Dibenz(a,h)anthracene	(6)	21.495	278	522065	3.660
221) Benzo(g,h,i)perylene	(6)	21.822	276	541882	3.712

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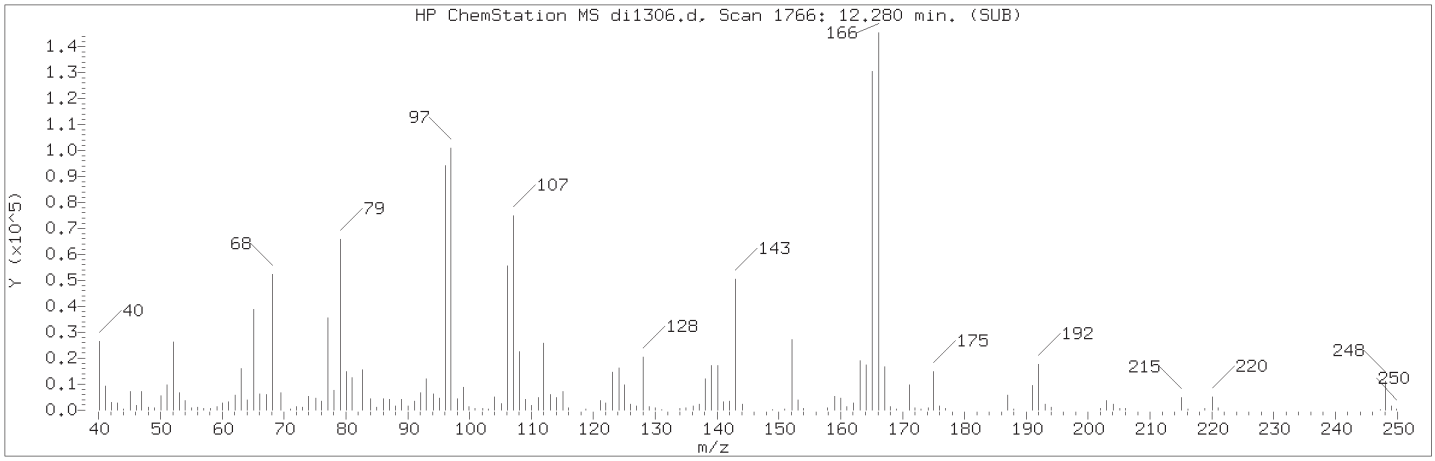
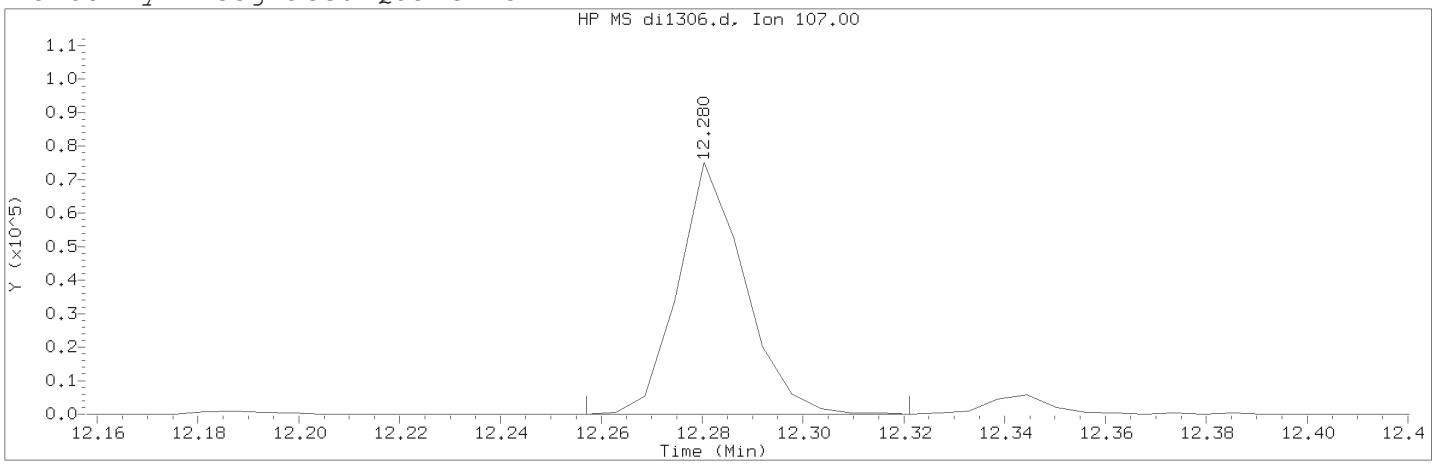
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

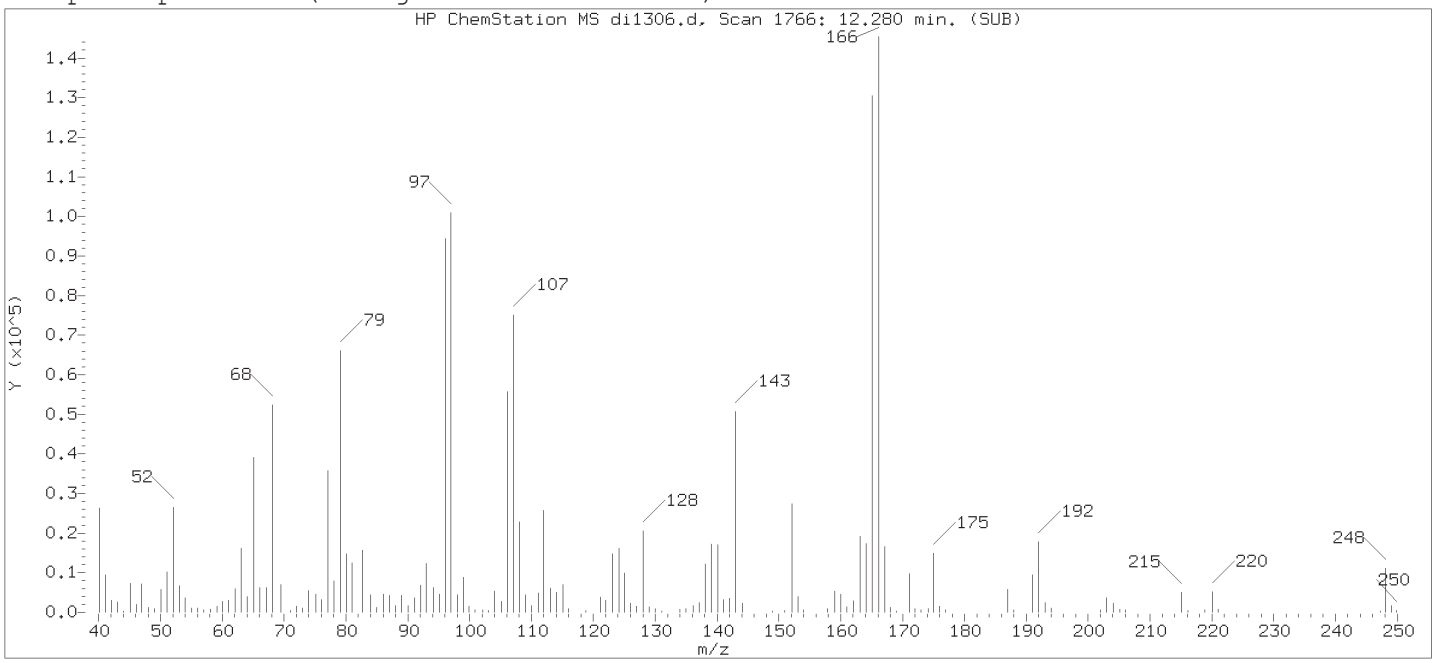
Compound Number : 125
Compound Name : Thionazin
Scan Number : 1766
Retention Time (minutes) : 12.280
Quant Ion : 107.00
Area (flag) : 68521M
On-Column Amount (ng/ul) : 3.3417
Integration start scan : 1761 Integration stop scan: 1772
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

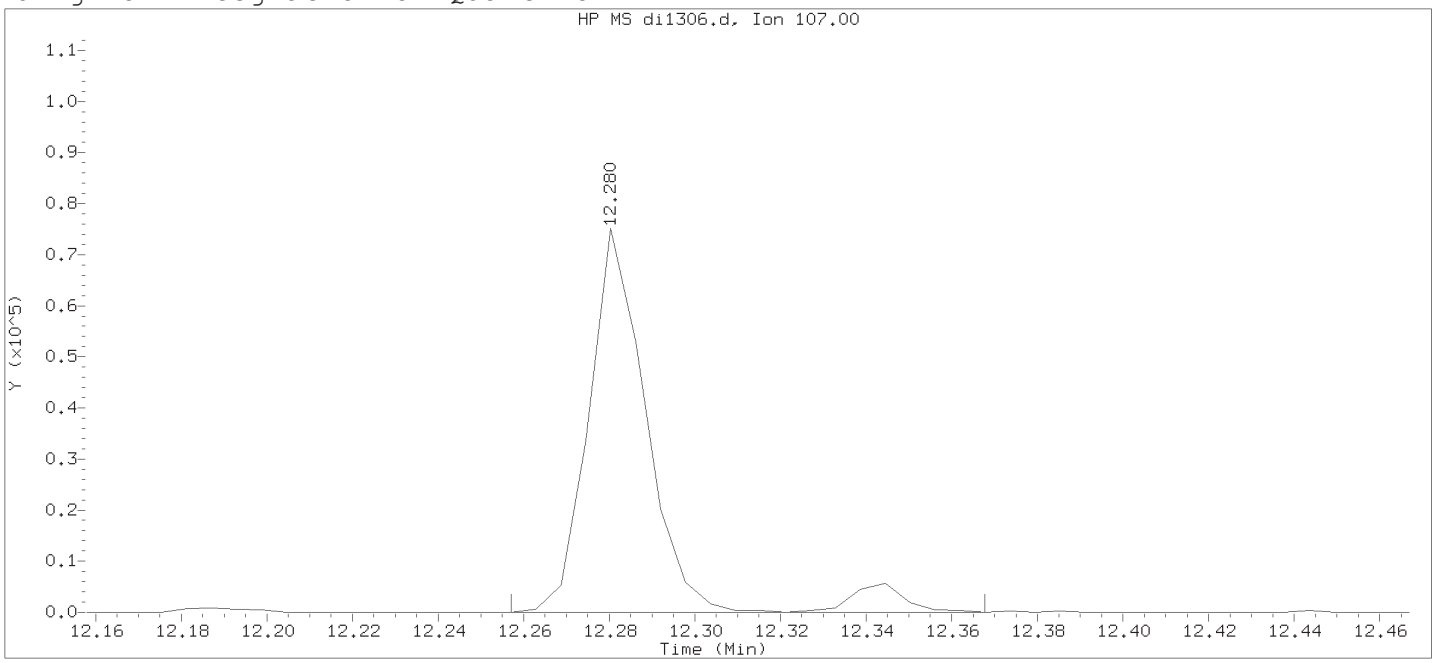
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

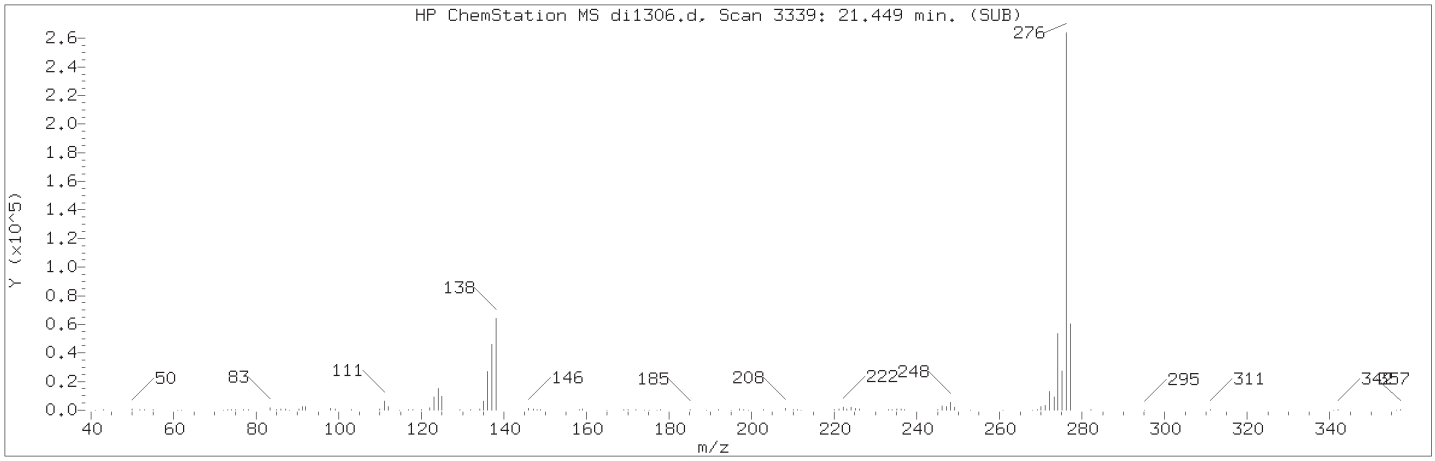
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 20:41
Date, time and analyst ID of latest file update: 21-Sep-2018 20:41 Automation

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

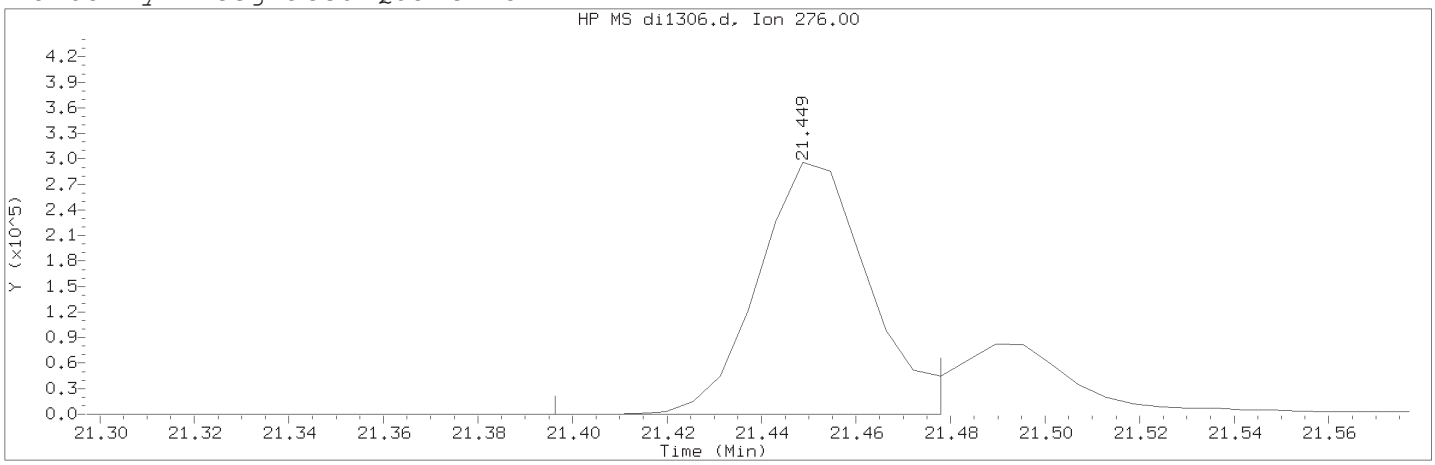
Compound Number	: 125		
Compound Name	: Thionazin		
Scan Number	: 1766		
Retention Time (minutes)	: 12.280		
Quant Ion	: 107.00		
Area	: 73468		
On-column Amount (ng/ul)	: 3.4785		
Integration start scan	: 1761	Integration stop scan:	1780
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

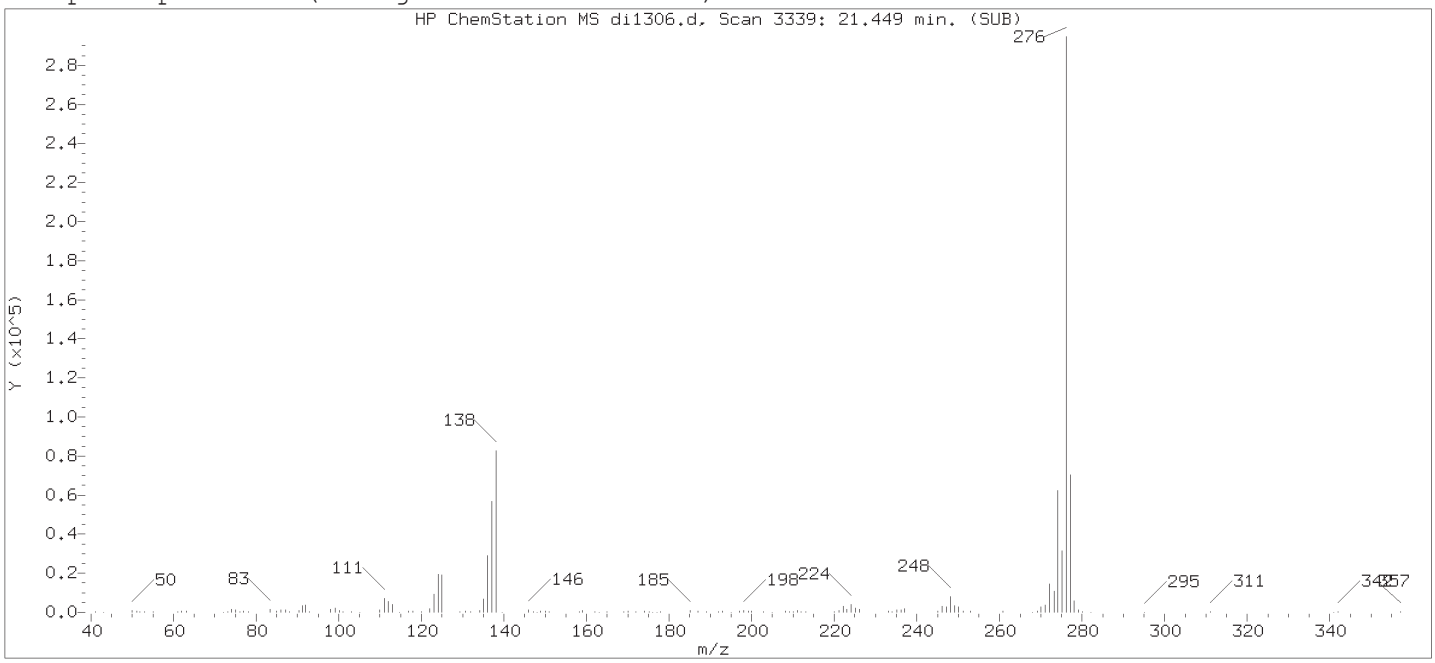
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3339
Retention Time (minutes) : 21.449
Quant Ion : 276.00
Area (flag) : 482173M
On-Column Amount (ng/ul) : 3.6604
Integration start scan : 3329 Integration stop scan: 3343
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

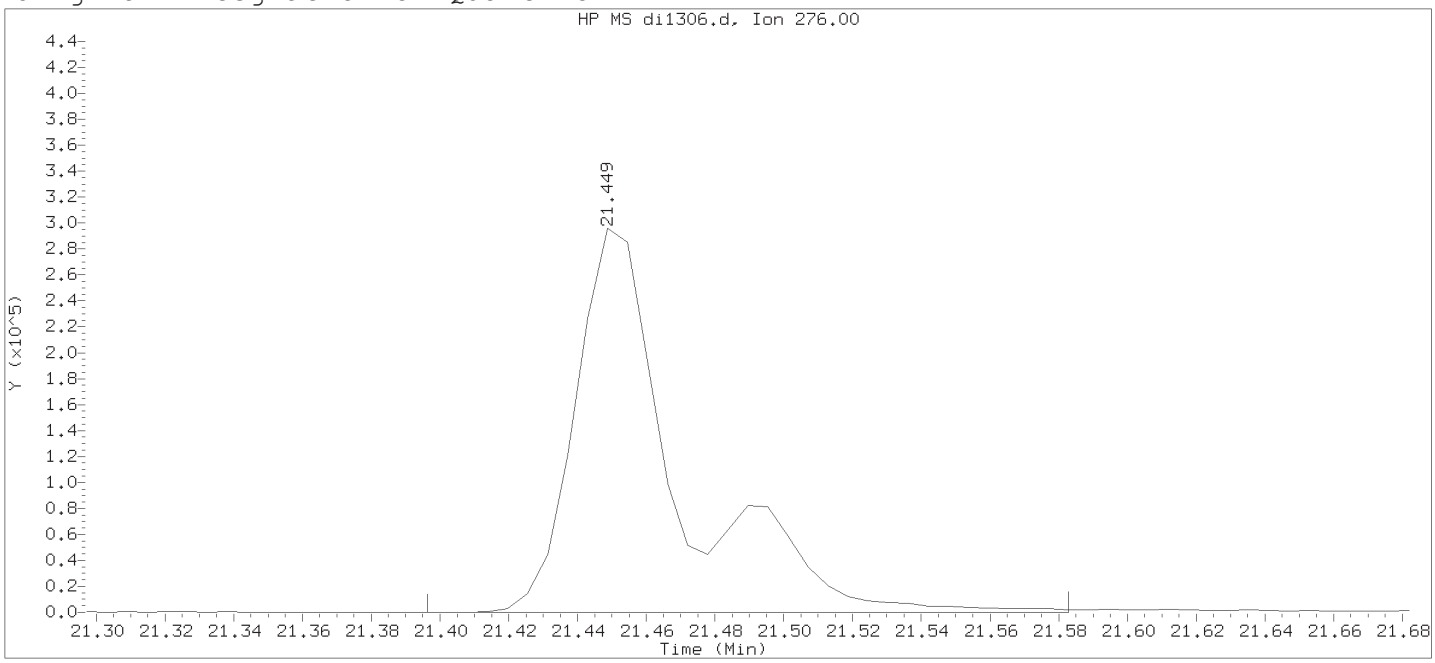
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



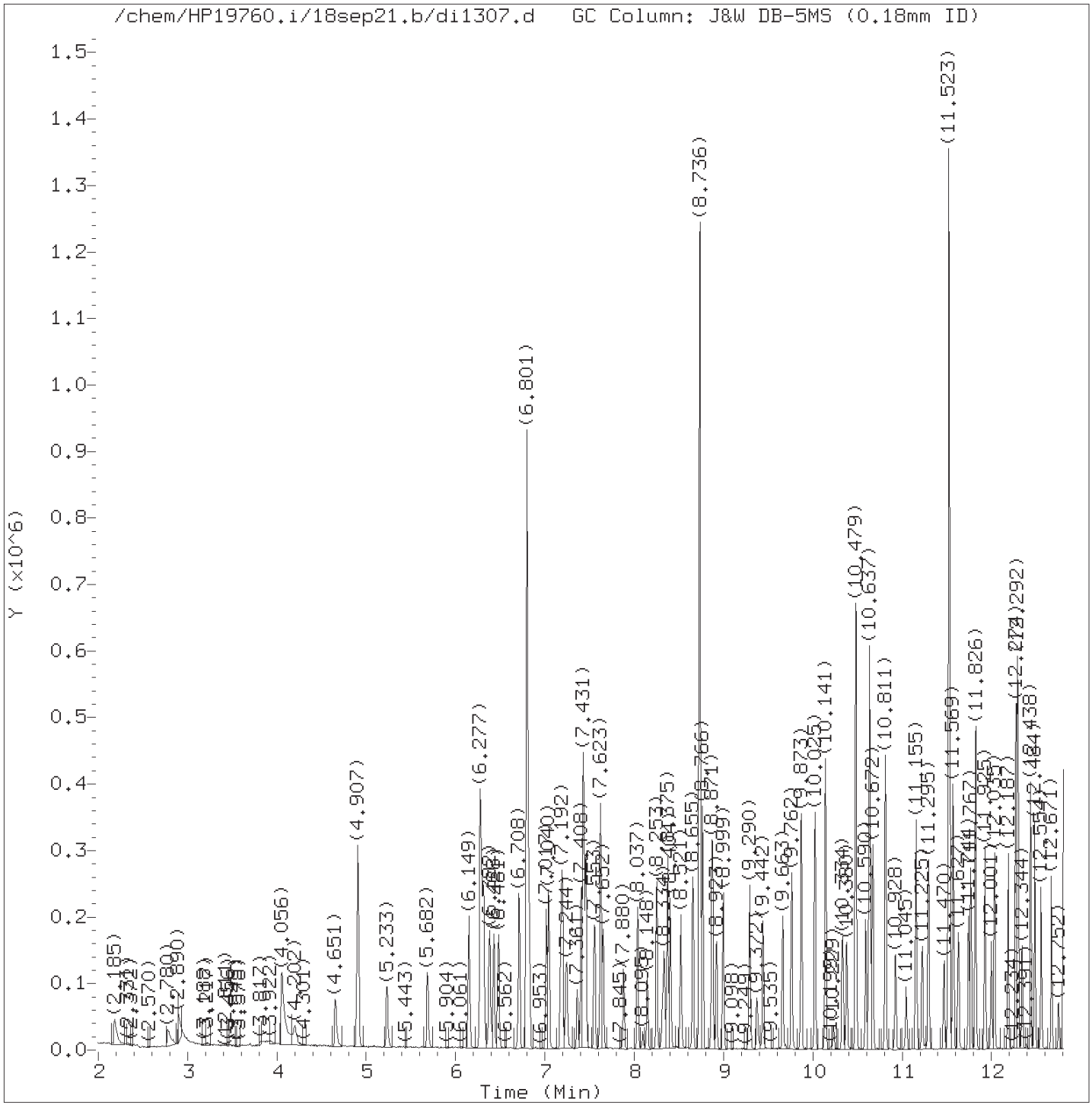
Data File: /chem/HP19760.i/18sep21.b/di1306.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 20:41
Date, time and analyst ID of latest file update: 21-Sep-2018 20:41 Automation

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3339		
Retention Time (minutes)	: 21.449		
Quant Ion	: 276.00		
Area	: 622699		
On-column Amount (ng/ul)	: 4.2345		
Integration start scan	: 3329	Integration stop scan:	3361
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: EMONBORNE



Total Ion Chromatogram (TIC)

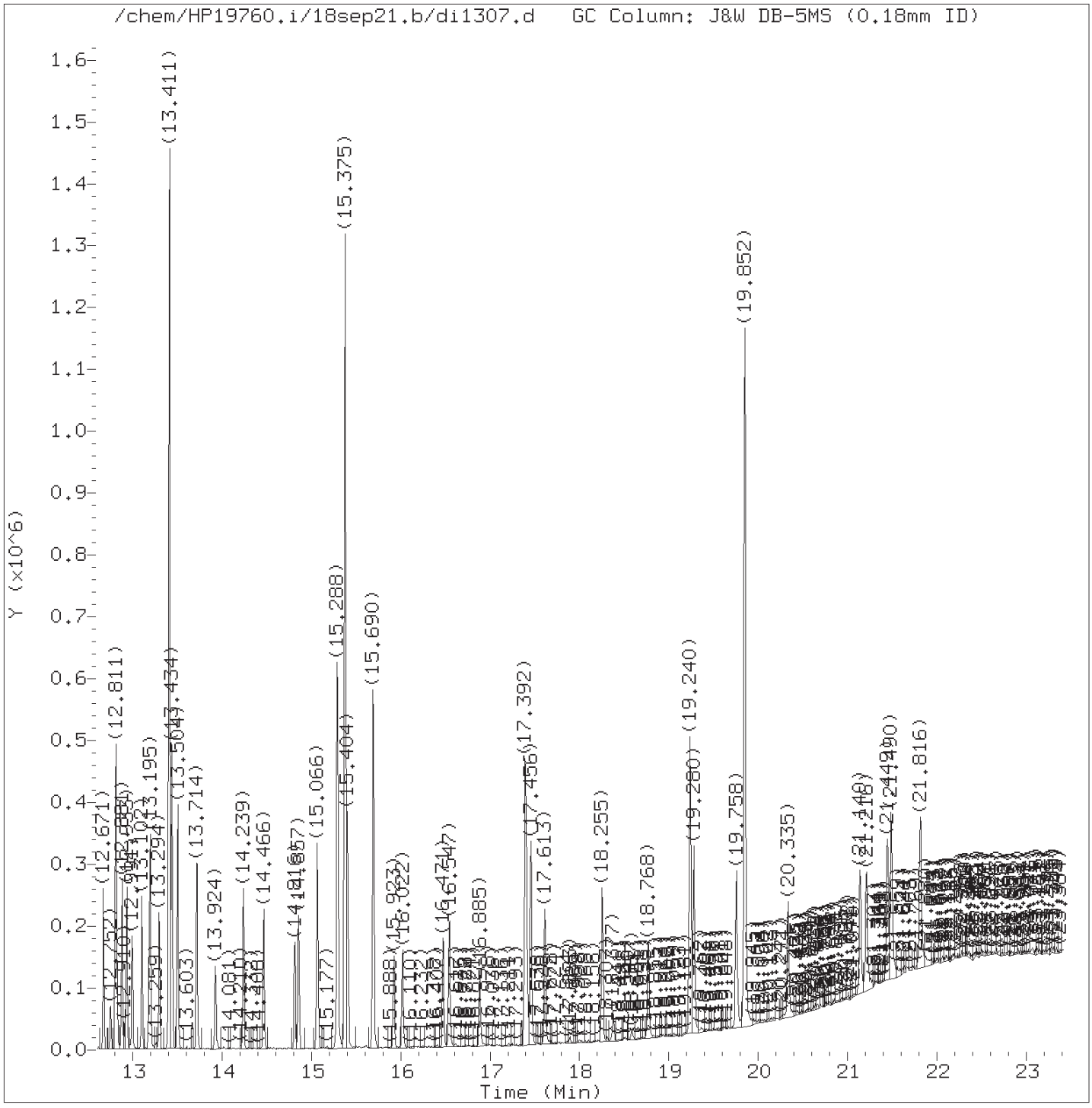
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

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)	2.185	88	39552	1.286
4) N-Nitrosodimethylamine	(1)	2.780	74	48002M	1.123
5) Pyridine	(1)	2.902	79	88826M	1.193
7) 2-Picoline	(1)	4.056	93	89590	1.186
8) N-Nitrosomethylethylamine	(1)	4.202	88	40843	1.231
9) Methyl methanesulfonate	(1)	4.651	80	42474	1.184
11)$2-Fluorophenol	(1)	4.907	112	139302	2.351
13) N-Nitrosodiethylamine	(1)	5.228	102	35634	1.137
42) Total Cresols	(1)			139219	2.269
15) Ethyl methanesulfonate	(1)	5.682	109	35744	1.181
16) Benzaldehyde	(1)	6.149	77	62386	1.164
17)$Phenol-d6	(1)	6.277	99	184014	2.282
18) Phenol	(1)	6.294	94	108889	1.188
19) Aniline	(1)	6.312	93	125961	1.171
20) a-methylstyrene	(1)	6.399	118	7307	1.215
22) bis(2-Chloroethyl)ether	(1)	6.428	93	83073	1.231
23) 2-Chlorophenol	(1)	6.481	128	65673	1.151
24) 1,3-Dichlorobenzene	(1)	6.708	146	76866	1.198
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	193342	5.000
26) 1,4-Dichlorobenzene	(1)	6.825	146	78162	1.208
27) Benzyl alcohol	(1)	7.017	108	42703	1.113
28) 1,2-Dichlorobenzene	(1)	7.046	146	72712	1.193
30) Indene	(1)	7.180	115	74624	1.176
31) 2-Methylphenol	(1)	7.198	108	63916	1.111
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.244	45	94287	1.202
34) bis(2-Chloroisopropyl)ether	(1)	7.244	45	94287	1.202
35) N-Nitrosopyrrolidine	(1)	7.361	100	35665	1.083
97) Isosafrole	(3)			47616	1.143
36) Acetophenone	(1)	7.408	105	92669	1.143
38) N-Nitroso-di-n-propylamine	(1)	7.425	70	53772	1.131
37) 4-Methylphenol	(1)	7.431	108	75303	1.155
39) N-Nitrosomorpholine	(1)	7.431	56	41434	1.159
40) o-Toluidine	(1)	7.460	106	118428	1.180
43) Hexachloroethane	(1)	7.559	117	31650	1.199
44)$Nitrobenzene-d5	(2)	7.623	82	158094	2.334
45) Nitrobenzene	(2)	7.652	77	79574	1.153
48) N-Nitrosopiperidine	(2)	7.880	114	32312	1.133
50) Isophorone	(2)	8.037	82	125709	1.073
120) 2,4_2,6-Dinitrotoluenes	(3)			52404	2.025
51) 2-Nitrophenol	(2)	8.148	139	25385	0.967

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on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.253	107	68202	1.134
56) Benzoic acid	(2)	8.334	105	80840	2.566
57) O,O,O-Triethylphosphorothioate	(2)	8.375	198	29376	1.164
55) bis(2-Chloroethoxy)methane	(2)	8.404	93	90722	1.208
60) 2,4-Dichlorophenol	(2)	8.521	162	49686	1.125
62) 1,2,4-Trichlorobenzene	(2)	8.655	180	59224	1.228
65)*Naphthalene-d8	(2)	8.736	136	704134	5.000
66) Naphthalene	(2)	8.766	128	200759	1.220
146) Diallate trans/cis	(4)			55299	1.102
67) 4-Chloroaniline	(2)	8.871	127	70572	1.123
68) 2,6-Dichlorophenol	(2)	8.876	162	48438	1.123
69) Hexachloropropene	(2)	8.923	213	35407	1.169
71) Hexachlorobutadiene	(2)	8.999	225	33957	1.254
75) Quinoline	(2)	9.290	129	108427	1.152
76) Caprolactam	(2)	9.372	113	15212	0.927
77) N-Nitrosodi-n-butylamine	(2)	9.442	84	43128	0.960
80) 4-Chloro-3-methylphenol	(2)	9.663	107	51298	1.043
82) Safrole	(2)	9.762	162	43642	1.083
83) 2-Methylnaphthalene	(2)	9.873	142	121804	1.186
84) 1-Methylnaphthalene	(2)	10.025	142	116151	1.190
85) Hexachlorocyclopentadiene	(3)	10.141	237	30185	1.119
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.141	216	55141	1.262
88) cis-Isosafrole	(3)	10.234	162	7674	0.197
90) 2,4,6-Trichlorophenol	(3)	10.334	196	28141	1.051
92) 2,4,5-Trichlorophenol	(3)	10.380	196	31173	1.084
93)$2-Fluorobiphenyl	(3)	10.485	172	257591	2.474
94) trans-Isosafrole	(3)	10.590	162	39942	0.946
95) 1,1'-Biphenyl	(3)	10.631	154	137024	1.210
96) 2-Chloronaphthalene	(3)	10.637	162	114323	1.231
98) 1-Chloronaphthalene	(3)	10.672	162	105928	1.251
99) Diphenyl ether	(3)	10.811	170	76958	1.226
100) 2-Nitroaniline	(3)	10.811	138	27924	1.001
104) 1,4-Naphthoquinone	(3)	10.928	158	32225	0.990
105) 1,4-Dinitrobenzene	(3)	11.045	168	13719	0.981
106) Dimethylphthalate	(3)	11.155	163	115402	1.190
107) 1,3-Dinitrobenzene	(3)	11.161	168	15081	0.931
108) 2,6-Dinitrotoluene	(3)	11.225	165	23346	1.037
109) Acenaphthylene	(3)	11.295	152	145810	1.172
112) 3-Nitroaniline	(3)	11.470	138	24837	1.011
113)*Acenaphthene-d10	(3)	11.523	164	323345	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.569	153	110713	1.210
115) 2,4-Dinitrophenol	(3)	11.627	184	27257	2.370
116) 4-Nitrophenol	(3)	11.744	109	28070	1.760
117) Pentachlorobenzene	(3)	11.767	250	43961	1.228
118) 2,4-Dinitrotoluene	(3)	11.826	165	29058	0.993
119) Dibenzofuran	(3)	11.826	168	154476	1.230
121) 1-Naphthylamine	(3)	11.925	143	103902	1.080
122) 2,3,4,6-Tetrachlorophenol	(3)	12.001	232	22449	1.048
123) 2-Naphthylamine	(3)	12.035	143	105271	1.083
124) Diethylphthalate	(3)	12.187	149	97907	1.068
126) Fluorene	(3)	12.274	166	114344	1.181
125) Thionazin	(3)	12.280	107	19620	1.029
128) 5-Nitro-o-toluidine	(3)	12.292	152	31137	1.078
129) 4-Nitroaniline	(3)	12.292	138	28823	1.052
127) 4-Chlorophenyl-phenylether	(3)	12.298	204	57925	1.226
130) 4,6-Dinitro-2-methylphenol	(4)	12.344	198	23394	1.545
131) N-Nitrosodiphenylamine	(4)	12.438	169	90909	1.172
132) NDPA as diphenylamine	(4)	12.438	169	90909	1.172
134) 1,2-Diphenylhydrazine	(4)	12.484	77	128822	1.157
135)$2,4,6-Tribromophenol	(3)	12.554	330	22108	1.973
137) Tetraethyldithiopyrophosphate	(4)	12.671	97	18302	1.100
139) 1,3,5-Trinitrobenzene	(4)	12.752	213	7547	0.732
140) Diallate (peak 1)	(4)	12.805	86	46687	0.899
141) Phorate	(4)	12.811	75	68754	1.065
142) Phenacetin	(4)	12.816	108	45834	0.939
143) 4-Bromophenyl-phenylether	(4)	12.881	248	30173	1.189
144) Diallate (peak 2)	(4)	12.910	86	8612	0.207
145) Hexachlorobenzene	(4)	12.933	284	32339	1.250
147) Dimethoate	(4)	12.991	87	38532	0.950
148) Atrazine	(4)	13.102	200	27301	1.146
149) Pentachlorophenol	(4)	13.178	266	13620	0.897
151) Pentachloronitrobenzene	(4)	13.195	237	11947	1.070
150) 4-Aminobiphenyl	(4)	13.195	169	71710	1.073
152) Pronamide	(4)	13.294	173	37273	0.964
153)*Phenanthrene-d10	(4)	13.411	188	567264	5.000
154) Dinoseb	(4)	13.434	211	14789	0.686
155) Phenanthrene	(4)	13.440	178	175303	1.229
157) Anthracene	(4)	13.504	178	160883	1.159
163) Carbazole	(4)	13.720	167	144329	1.116
164) Methyl parathion	(4)	13.924	109	24329	0.807

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.239	149	145535	0.976
168) 4-Nitroquinoline-1-oxide	(4)	14.466	190	9496	0.682
167) Parathion	(4)	14.466	109	15194	0.791
169) Octachlorostyrene	(4)	14.810	308	11188	1.152
171) Isodrin	(4)	14.857	193	18568	1.159
222) Total PAHs	(6)			2741251	20.998
173) Fluoranthene	(4)	15.066	202	163941	1.124
174) Benzidine	(5)	15.288	184	314011	2.930
175)*Pyrene-d10	(5)	15.375	212	573058	5.000
177) Pyrene	(5)	15.404	202	187335	1.190
179)$Terphenyl-d14	(5)	15.690	244	225475	2.343
182) p-Dimethylaminoazobenzene	(5)	15.923	225	20947	0.850
185) Chlorobenzilate	(5)	16.022	139	38188	0.905
187) 3,3'-Dimethylbenzidine	(5)	16.477	212	85666	0.912
188) Butylbenzylphthalate	(5)	16.547	149	63322	0.951
191) 2-Acetylaminofluorene	(5)	16.885	181	39657	0.765
193) 3,3'-Dichlorobenzidine	(5)	17.392	252	53302	1.026
195) Benzo(a)anthracene	(5)	17.398	228	149720	1.122
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.409	231	28289	0.965
196) Chrysene	(5)	17.456	228	169585	1.238
199) bis(2-Ethylhexyl)phthalate	(5)	17.613	149	79861	0.904
203) 6-Methylchrysene	(5)	18.255	242	101485	1.094
205) Di-n-octylphthalate	(6)	18.768	149	115807	0.774
206) Benzo(b)fluoranthene	(6)	19.240	252	153545	1.114
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.245	256	66738	0.997
208) Benzo(k)fluoranthene	(6)	19.280	252	169782	1.195
211) Benzo(a)pyrene	(6)	19.758	252	145793	1.138
213)*Perylene-d12	(6)	19.852	264	562340	5.000
215) 3-Methylcholanthrene	(6)	20.335	268	63641	1.019
217) Dibenz(a,h)acridine	(6)	21.140	279	107443	1.071
218) Dibenz(a,j)acridine	(6)	21.216	279	125785	1.134
219) Indeno(1,2,3-cd)pyrene	(6)	21.449	276	139538M	1.188
220) Dibenz(a,h)anthracene	(6)	21.490	278	154351	1.210
221) Benzo(g,h,i)perylene	(6)	21.822	276	161894	1.236

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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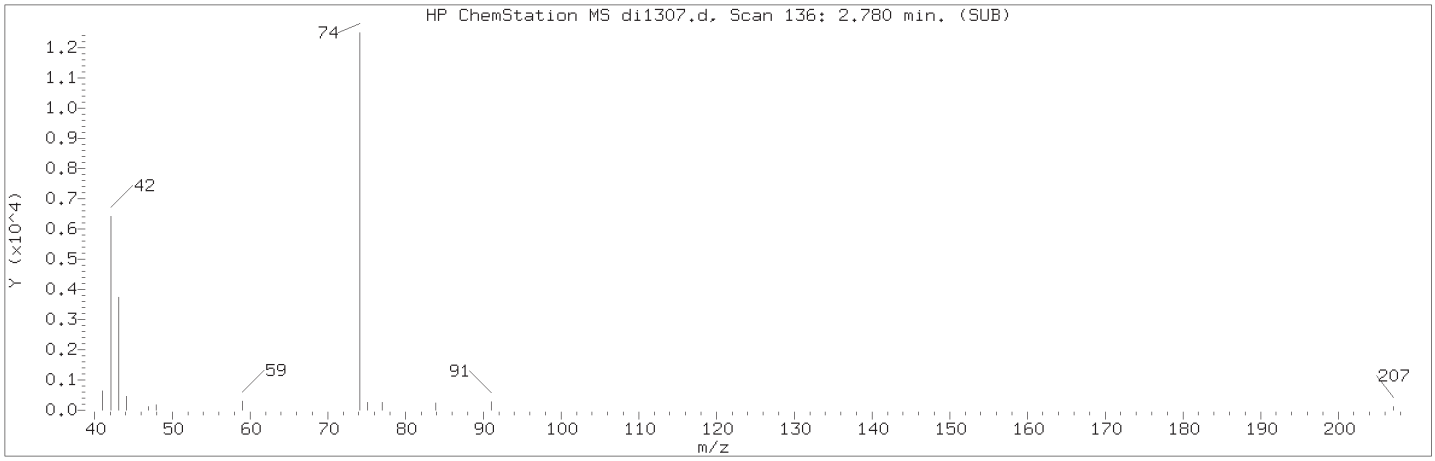
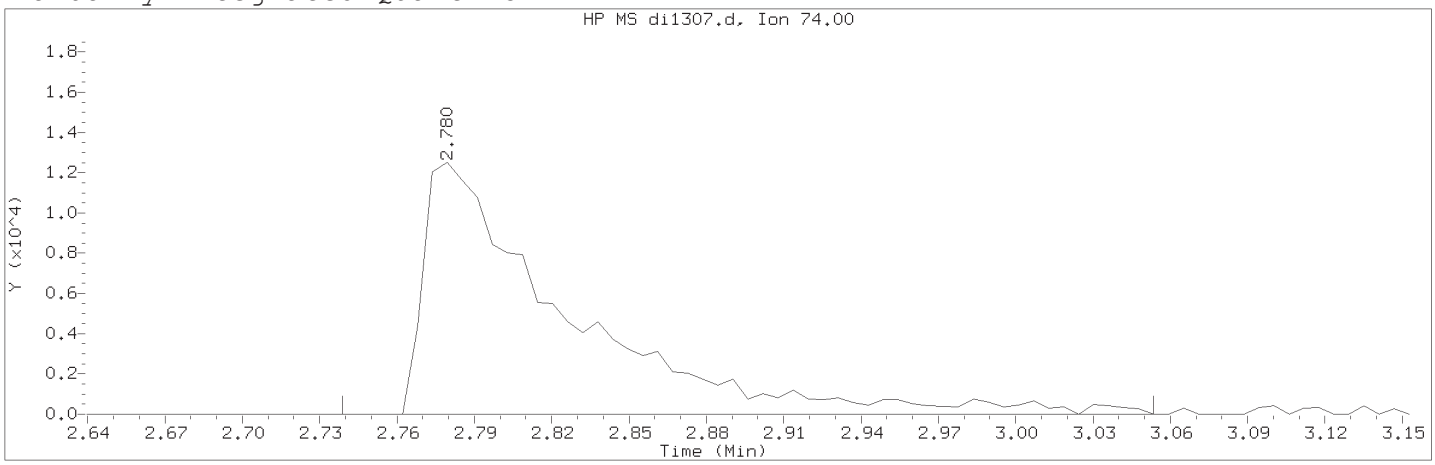
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

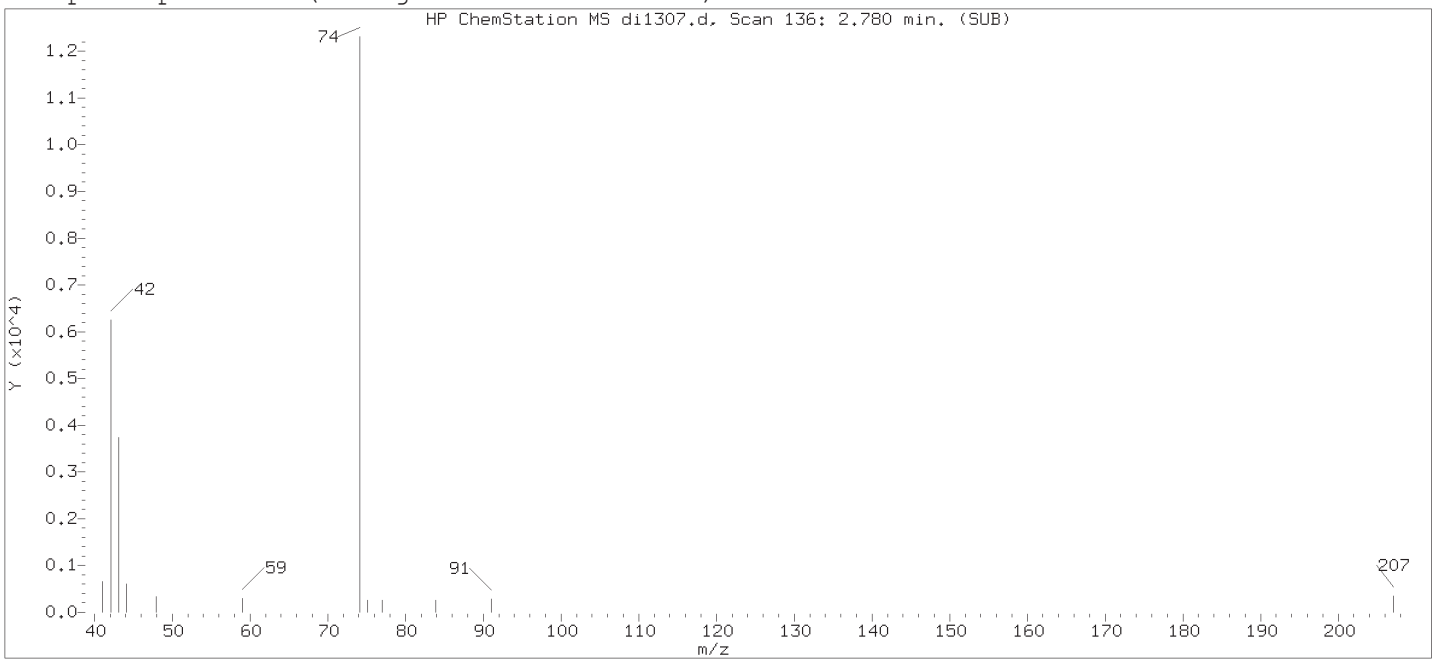
Compound Number : 4
Compound Name : N-Nitrosodimethylamine
Scan Number : 136
Retention Time (minutes) : 2.780
Quant Ion : 74.00
Area (flag) : 48002M
On-Column Amount (ng/ul) : 1.1232
Integration start scan : 128 Integration stop scan: 182
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

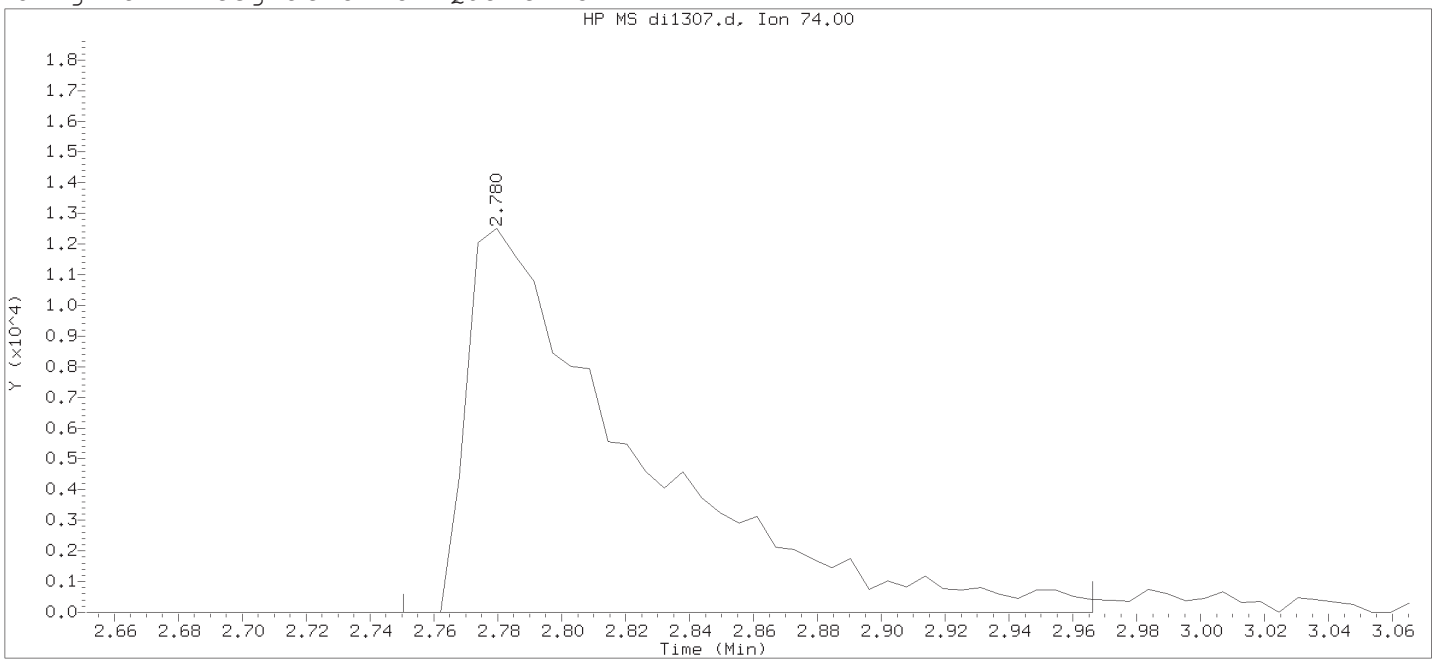
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

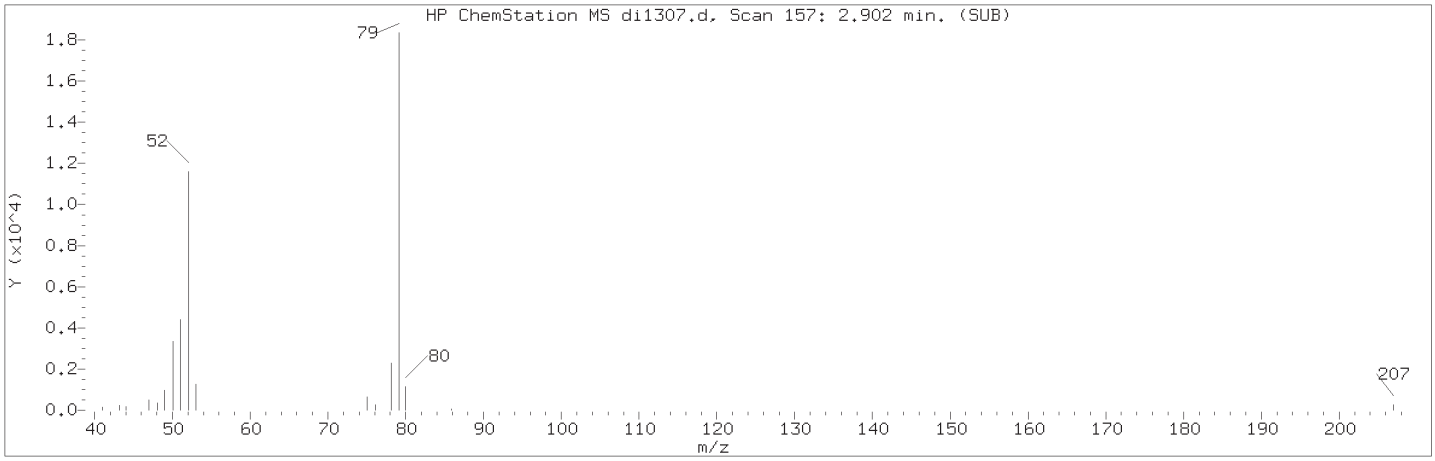
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:10
Date, time and analyst ID of latest file update: 21-Sep-2018 21:10 Automation

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

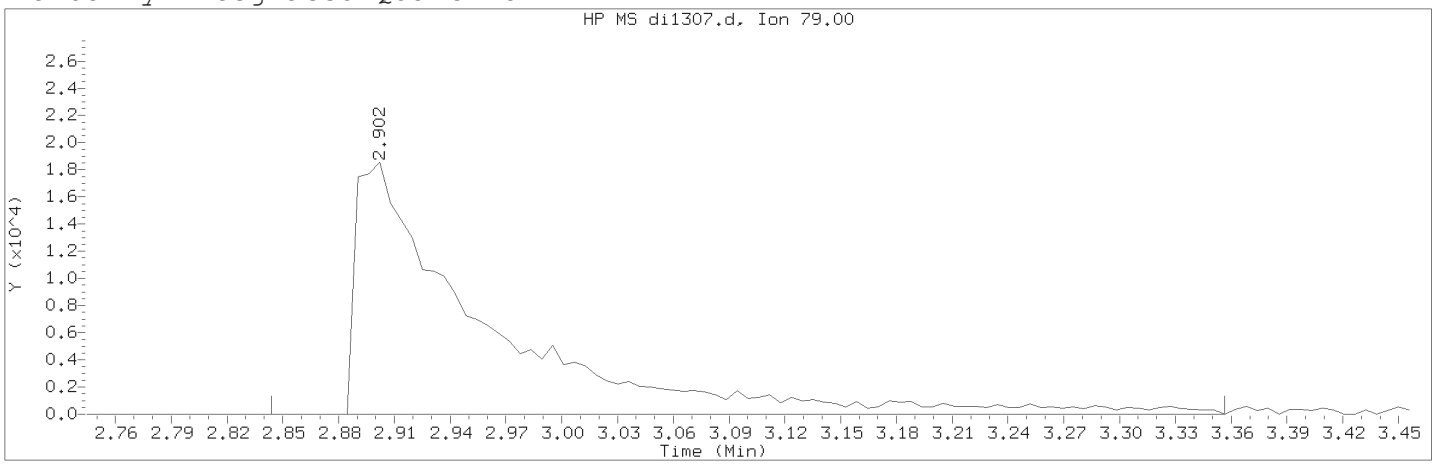
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 136		
Retention Time (minutes)	: 2.780		
Quant Ion	: 74.00		
Area	: 45925		
On-column Amount (ng/ul)	: 1.0715		
Integration start scan	: 130	Integration stop scan:	167
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

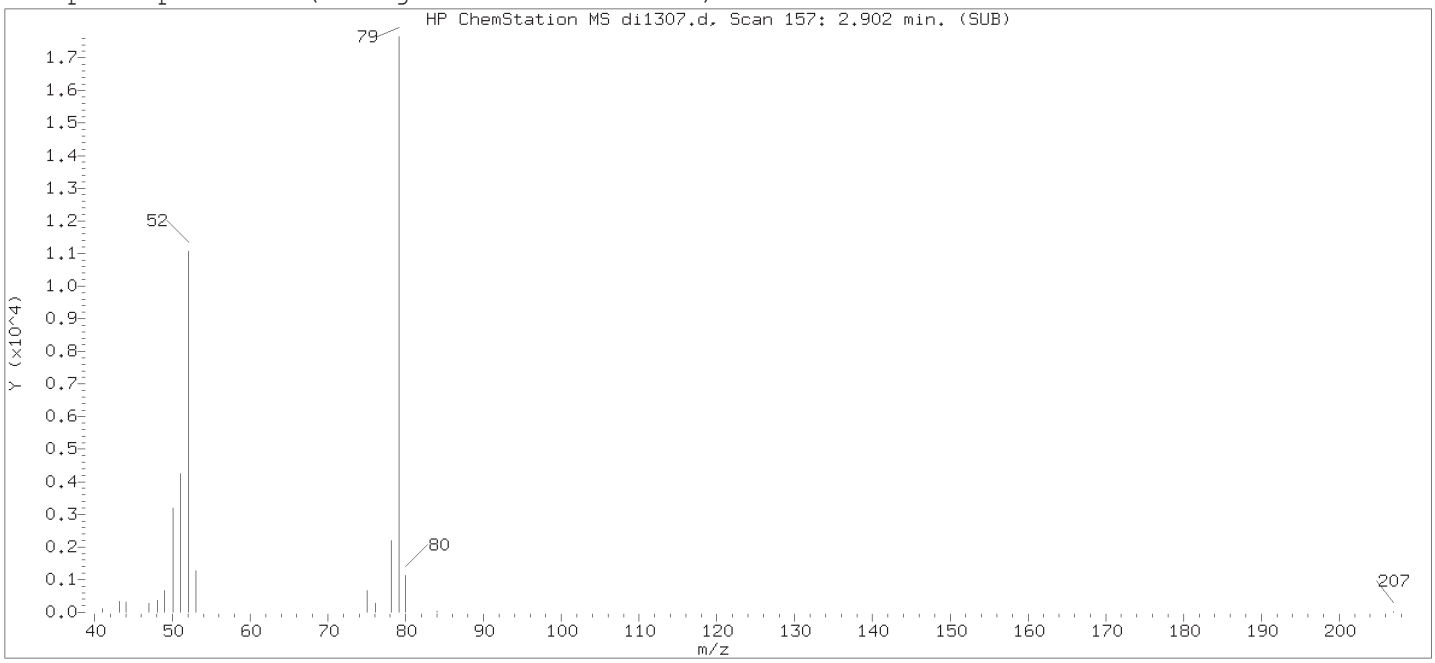
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 157		
Retention Time (minutes)	: 2.902		
Quant Ion	: 79.00		
Area (flag)	: 88826M		
On-Column Amount (ng/ul)	: 1.1934		
Integration start scan	: 146	Integration stop scan:	234
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

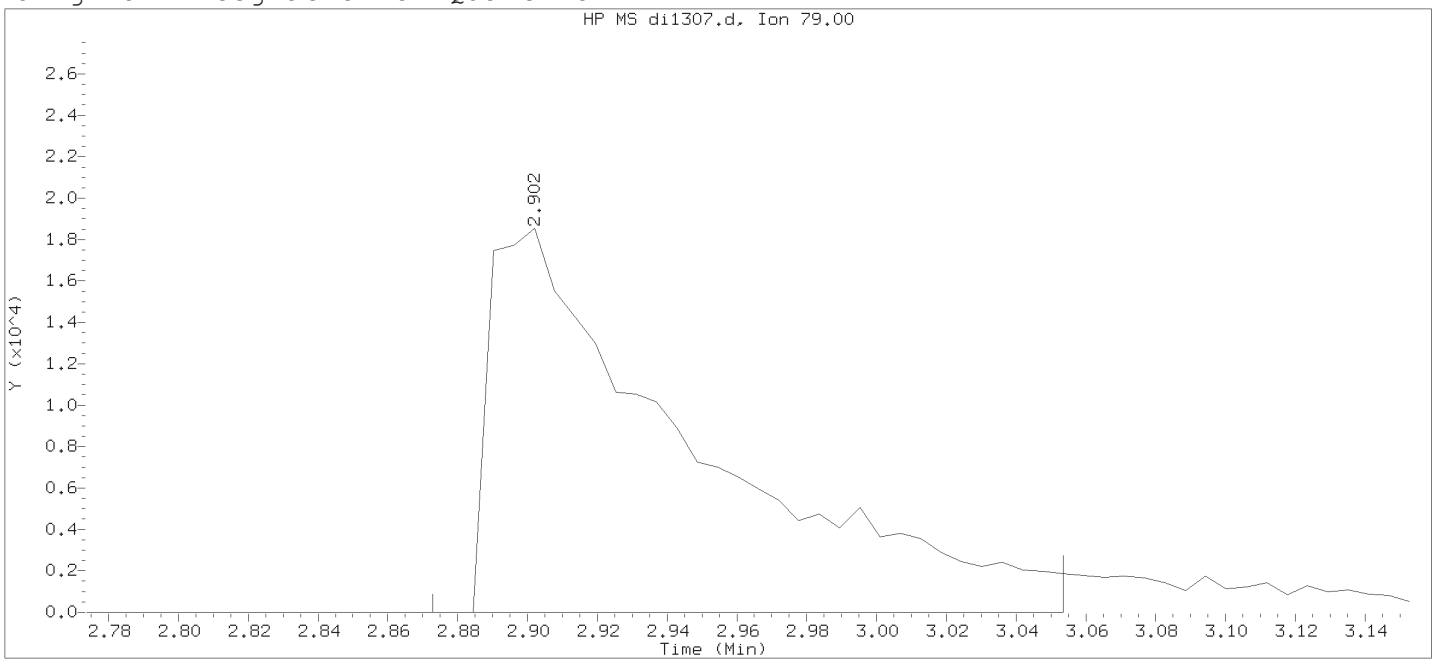
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:10
Date, time and analyst ID of latest file update: 21-Sep-2018 21:10 Automation

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 157		
Retention Time (minutes)	: 2.902		
Quant Ion	: 79.00		
Area	: 74521		
On-column Amount (ng/ul)	: 1.0347		
Integration start scan	: 151	Integration stop scan:	182
Y at integration start	: 0	Y at integration end:	0

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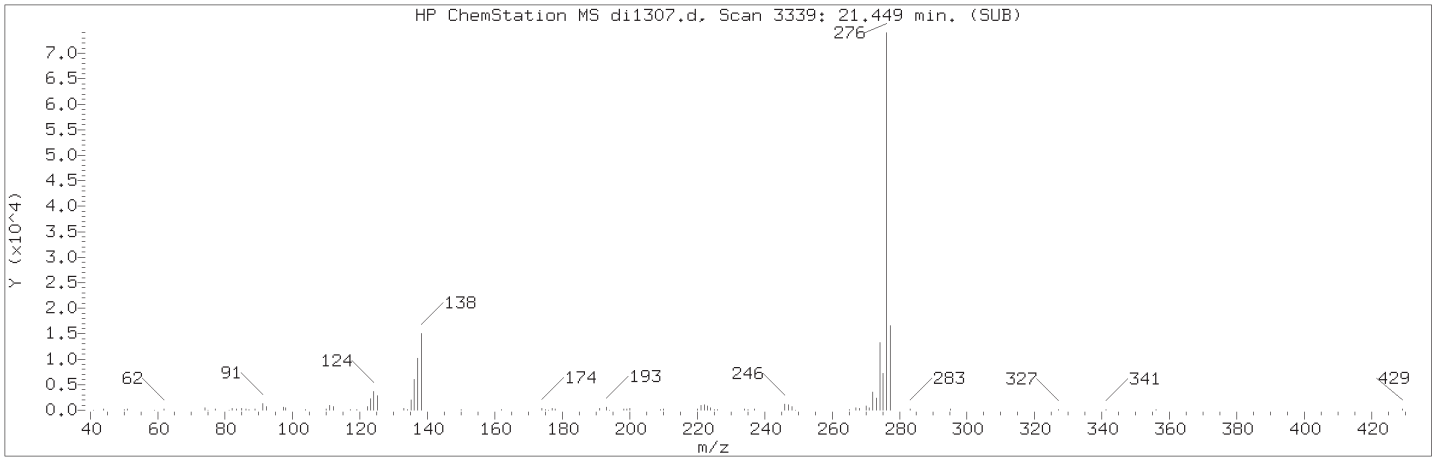
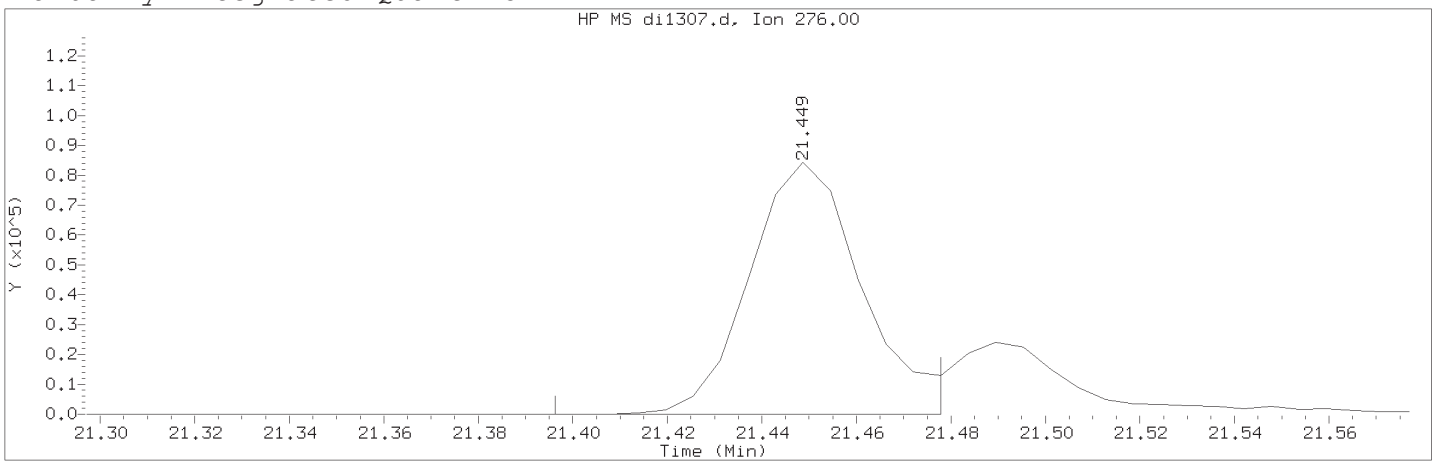
Target 3.5 esignature user Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:34 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

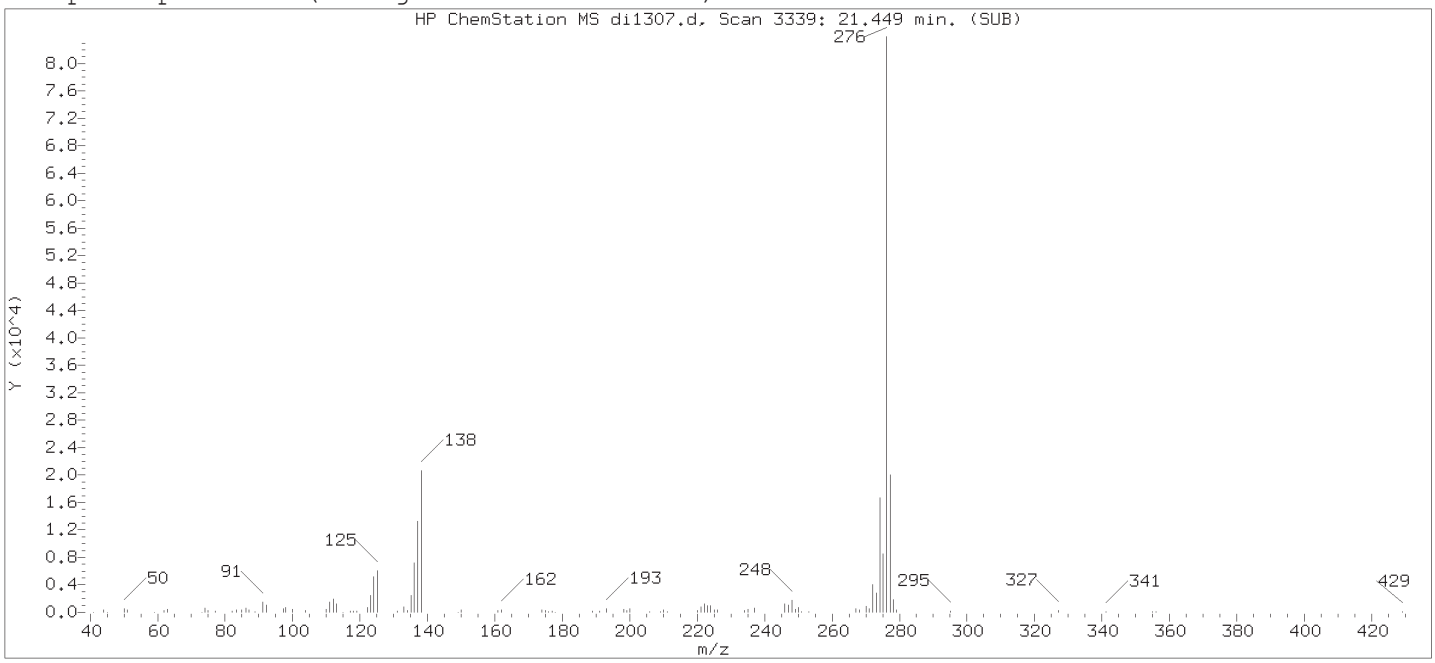
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3339
Retention Time (minutes) : 21.449
Quant Ion : 276.00
Area (flag) : 139538M
On-Column Amount (ng/ul) : 1.1881
Integration start scan : 3329 Integration stop scan: 3343
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

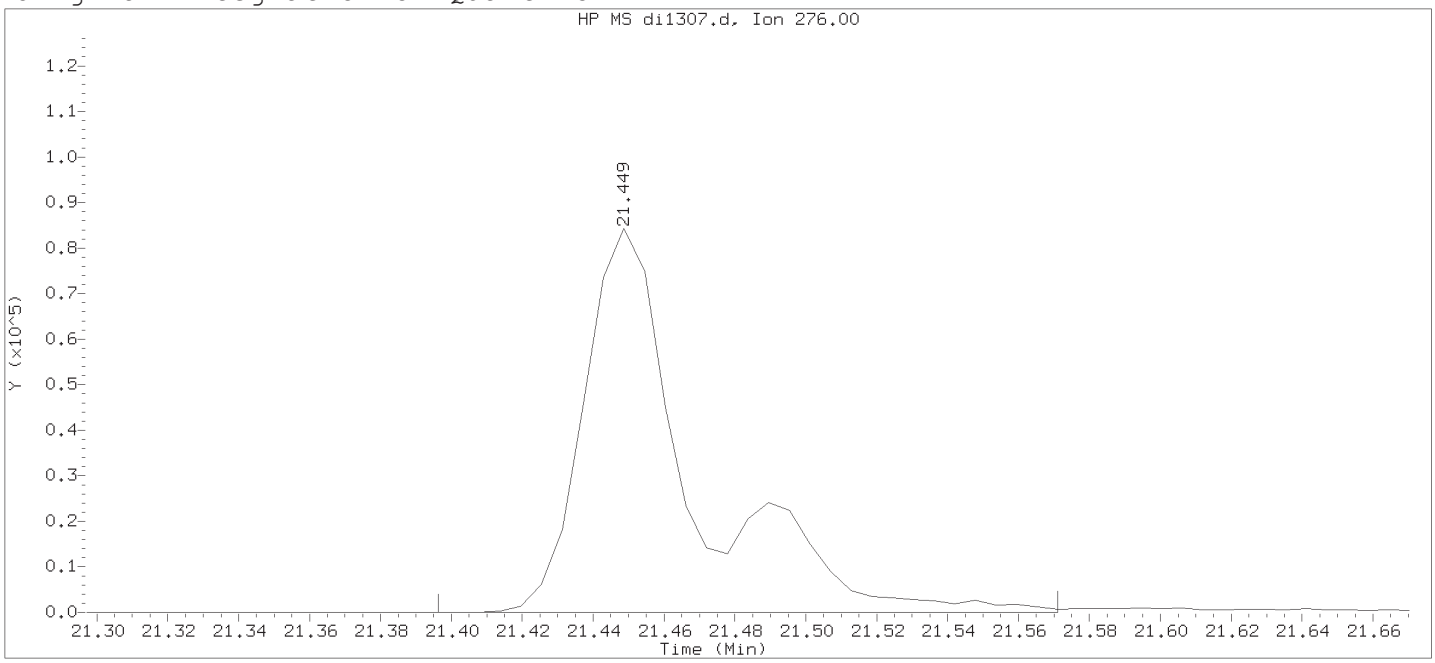
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



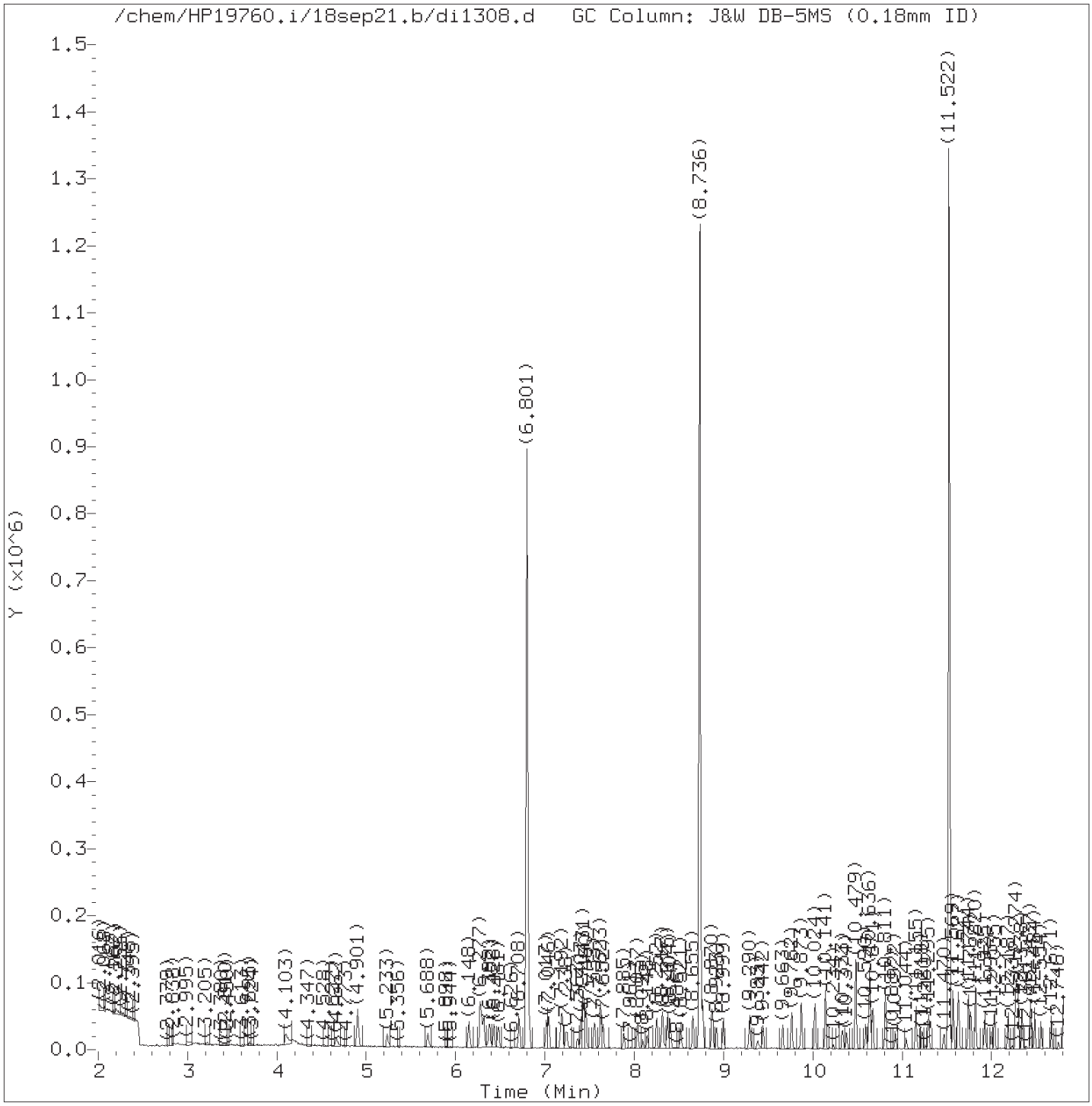
Data File: /chem/HP19760.i/18sep21.b/di1307.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 20:42 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:10
Date, time and analyst ID of latest file update: 21-Sep-2018 21:10 Automation

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3339		
Retention Time (minutes)	: 21.449		
Quant Ion	: 276.00		
Area	: 180471		
On-column Amount (ng/ul)	: 1.3110		
Integration start scan	: 3329	Integration stop scan:	3359
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne



Total Ion Chromatogram (TIC)

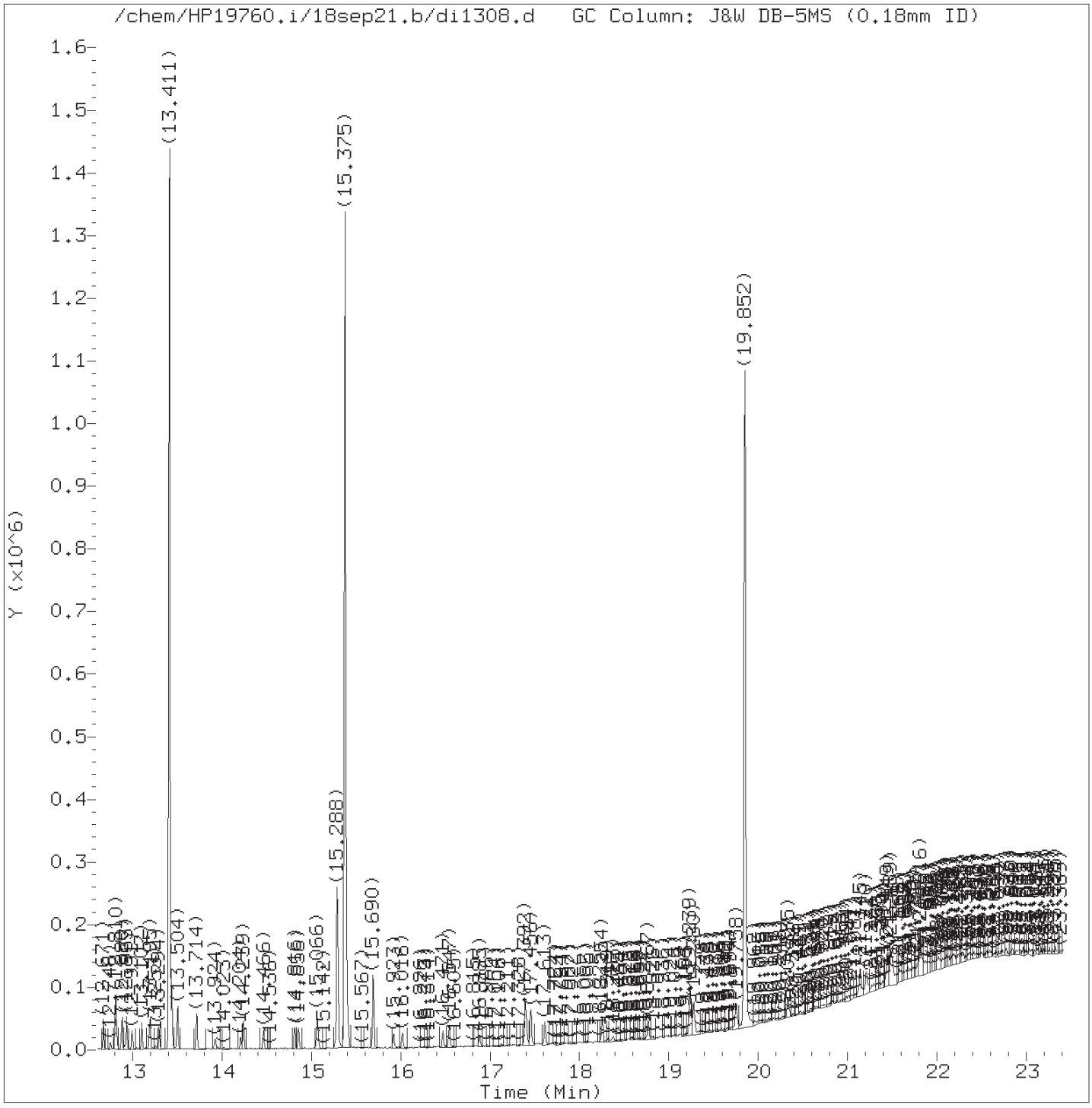
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

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)	2.208	88	10126	0.337
4) N-Nitrosodimethylamine	(1)	2.855	74	8104M	0.194
5) Pyridine	(1)	3.018	79	15486M	0.213
7) 2-Picoline	(1)	4.091	93	16212	0.220
8) N-Nitrosomethylethylamine	(1)	4.207	88	9518M	0.293
9) Methyl methanesulfonate	(1)	4.662	80	7870	0.224
11)$2-Fluorophenol	(1)	4.901	112	25421	0.447
13) N-Nitrosodiethylamine	(1)	5.233	102	6126	0.206
42) Total Cresols	(1)			25878	0.440
15) Ethyl methanesulfonate	(1)	5.688	109	6827	0.233
16) Benzaldehyde	(1)	6.148	77	13382	0.255
17)$Phenol-d6	(1)	6.277	99	33815	0.438
18) Phenol	(1)	6.300	94	20191	0.228
19) Aniline	(1)	6.317	93	25458	0.243
20) a-methylstyrene	(1)	6.399	118	1313M	0.223
22) bis(2-Chloroethyl)ether	(1)	6.428	93	15843	0.241
23) 2-Chlorophenol	(1)	6.481	128	12506	0.228
24) 1,3-Dichlorobenzene	(1)	6.708	146	15104	0.242
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	189046	5.000
26) 1,4-Dichlorobenzene	(1)	6.824	146	16513	0.259
27) Benzyl alcohol	(1)	7.017	108	7672	0.205
28) 1,2-Dichlorobenzene	(1)	7.040	146	15274	0.255
30) Indene	(1)	7.180	115	15398	0.248
31) 2-Methylphenol	(1)	7.192	108	11150	0.204
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.238	45	17831	0.235
34) bis(2-Chloroisopropyl)ether	(1)	7.238	45	17831	0.235
35) N-Nitrosopyrrolidine	(1)	7.367	100	6344	0.203
97) Isosafrole	(3)			9403	0.224
36) Acetophenone	(1)	7.407	105	16590	0.214
38) N-Nitroso-di-n-propylamine	(1)	7.425	70	10657	0.232
39) N-Nitrosomorpholine	(1)	7.431	56	7935	0.227
37) 4-Methylphenol	(1)	7.436	108	14728	0.234
40) o-Toluidine	(1)	7.460	106	21116	0.220
43) Hexachloroethane	(1)	7.553	117	6276	0.243
44)$Nitrobenzene-d5	(2)	7.623	82	30099	0.452
45) Nitrobenzene	(2)	7.652	77	15855	0.233
48) N-Nitrosopiperidine	(2)	7.879	114	5952	0.214
50) Isophorone	(2)	8.037	82	23678	0.208
120) 2,4_2,6-Dinitrotoluenes	(3)			9235	0.369
51) 2-Nitrophenol	(2)	8.148	139	4815	0.184

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.252	107	12029	0.206
56) Benzoic acid	(2)	8.317	105	24911	0.792
57) O,O,O-Triethylphosphorothioate	(2)	8.375	198	5614	0.223
55) bis(2-Chloroethoxy)methane	(2)	8.404	93	17442	0.235
60) 2,4-Dichlorophenol	(2)	8.521	162	8875	0.207
62) 1,2,4-Trichlorobenzene	(2)	8.655	180	11153	0.234
65)*Naphthalene-d8	(2)	8.736	136	702663	5.000
66) Naphthalene	(2)	8.765	128	39638	0.242
146) Diallate trans/cis	(4)			10117	0.198
67) 4-Chloroaniline	(2)	8.865	127	13450	0.219
68) 2,6-Dichlorophenol	(2)	8.882	162	8285	0.199
69) Hexachloropropene	(2)	8.923	213	6326	0.209
71) Hexachlorobutadiene	(2)	8.999	225	6403	0.239
75) Quinoline	(2)	9.290	129	19988	0.213
76) Caprolactam	(2)	9.377	113	2740	0.167
77) N-Nitrosodi-n-butylamine	(2)	9.442	84	8486	0.189
80) 4-Chloro-3-methylphenol	(2)	9.663	107	8947	0.190
82) Safrole	(2)	9.762	162	8007	0.199
83) 2-Methylnaphthalene	(2)	9.873	142	23011	0.227
84) 1-Methylnaphthalene	(2)	10.024	142	22860	0.236
85) Hexachlorocyclopentadiene	(3)	10.141	237	5878	0.216
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.141	216	10702	0.244
88) cis-Isosafrole	(3)	10.234	162	1360	0.035
90) 2,4,6-Trichlorophenol	(3)	10.333	196	4952	0.191
92) 2,4,5-Trichlorophenol	(3)	10.374	196	4994	0.180
93)$2-Fluorobiphenyl	(3)	10.479	172	49578	0.476
94) trans-Isosafrole	(3)	10.590	162	8043	0.189
95) 1,1'-Biphenyl	(3)	10.631	154	26351	0.233
96) 2-Chloronaphthalene	(3)	10.636	162	21769	0.235
98) 1-Chloronaphthalene	(3)	10.671	162	22251	0.259
99) Diphenyl ether	(3)	10.811	170	15136	0.241
100) 2-Nitroaniline	(3)	10.811	138	4398	0.165
104) 1,4-Naphthoquinone	(3)	10.928	158	5500	0.168
105) 1,4-Dinitrobenzene	(3)	11.044	168	1876	0.133
106) Dimethylphthalate	(3)	11.155	163	21673	0.222
107) 1,3-Dinitrobenzene	(3)	11.155	168	2613	0.160
108) 2,6-Dinitrotoluene	(3)	11.225	165	4236	0.194
109) Acenaphthylene	(3)	11.295	152	26005	0.212
112) 3-Nitroaniline	(3)	11.464	138	4176	0.177
113)*Acenaphthene-d10	(3)	11.522	164	325875	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.569	153	22263	0.243
115) 2,4-Dinitrophenol	(3)	11.627	184	12211	1.053
116) 4-Nitrophenol	(3)	11.744	109	10136	0.631
117) Pentachlorobenzene	(3)	11.767	250	8583	0.240
118) 2,4-Dinitrotoluene	(3)	11.820	165	4999	0.169
119) Dibenzofuran	(3)	11.820	168	31507	0.249
121) 1-Naphthylamine	(3)	11.925	143	19013	0.196
122) 2,3,4,6-Tetrachlorophenol	(3)	12.000	232	3641	0.169
123) 2-Naphthylamine	(3)	12.035	143	19638	0.200
124) Diethylphthalate	(3)	12.187	149	18931	0.205
126) Fluorene	(3)	12.274	166	22209	0.230
125) Thionazin	(3)	12.280	107	3070	0.160
128) 5-Nitro-o-toluidine	(3)	12.286	152	4693	0.170
129) 4-Nitroaniline	(3)	12.286	138	4116	0.158
127) 4-Chlorophenyl-phenylether	(3)	12.298	204	11109	0.235
130) 4,6-Dinitro-2-methylphenol	(4)	12.344	198	8609	0.559
131) N-Nitrosodiphenylamine	(4)	12.437	169	17239	0.222
132) NDPA as diphenylamine	(4)	12.437	169	17239	0.222
134) 1,2-Diphenylhydrazine	(4)	12.484	77	23388	0.212
135)$2,4,6-Tribromophenol	(3)	12.554	330	3775	0.351
137) Tetraethyldithiopyrophosphate	(4)	12.671	97	3709	0.219
139) 1,3,5-Trinitrobenzene	(4)	12.752	213	1135	0.108
140) Diallate (peak 1)	(4)	12.805	86	8804	0.167
141) Phorate	(4)	12.810	75	12380	0.196
142) Phenacetin	(4)	12.816	108	7531	0.152
143) 4-Bromophenyl-phenylether	(4)	12.880	248	6126	0.239
144) Diallate (peak 2)	(4)	12.910	86	1313	0.031
145) Hexachlorobenzene	(4)	12.933	284	6481	0.247
147) Dimethoate	(4)	12.991	87	6679	0.162
148) Atrazine	(4)	13.102	200	5200	0.215
149) Pentachlorophenol	(4)	13.178	266	1987	0.129
150) 4-Aminobiphenyl	(4)	13.195	169	11849	0.182
151) Pentachloronitrobenzene	(4)	13.195	237	1899	0.167
152) Pronamide	(4)	13.294	173	5694	0.154
153)*Phenanthrene-d10	(4)	13.411	188	576849	5.000
154) Dinoseb	(4)	13.434	211	2299	0.105
155) Phenanthrene	(4)	13.440	178	36481	0.251
157) Anthracene	(4)	13.504	178	30266	0.218
163) Carbazole	(4)	13.714	167	25437	0.200
164) Methyl parathion	(4)	13.924	109	3678	0.120

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

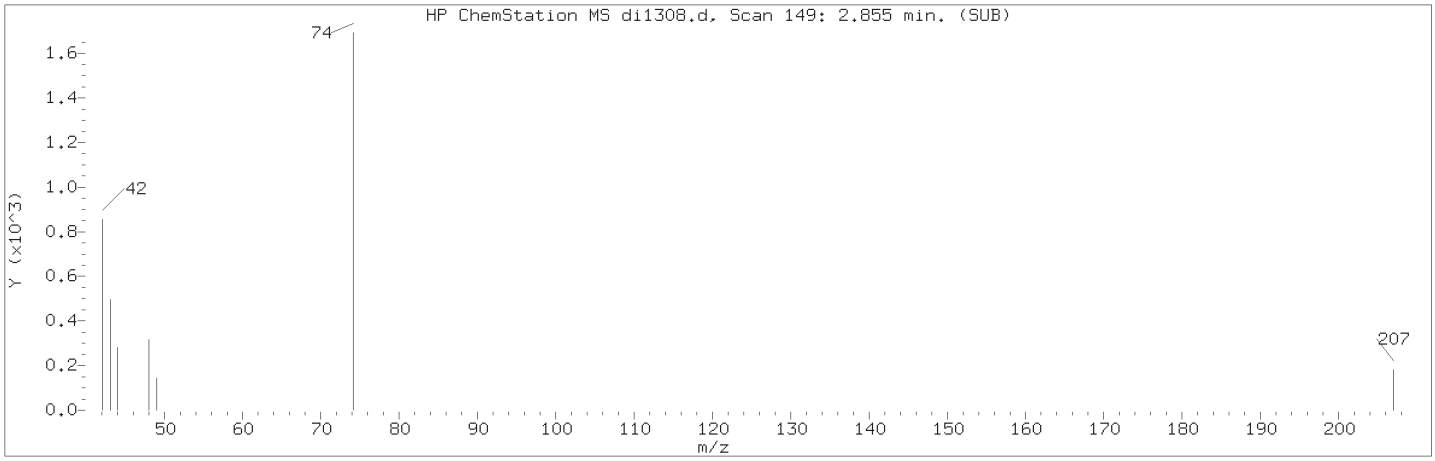
Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.239	149	26603	0.175
168) 4-Nitroquinoline-1-oxide	(4)	14.454	190	1371	0.097
167) Parathion	(4)	14.466	109	1945	0.100
169) Octachlorostyrene	(4)	14.810	308	2400	0.243
171) Isodrin	(4)	14.856	193	3987	0.245
222) Total PAHs	(6)			502013	4.128
173) Fluoranthene	(4)	15.066	202	29169	0.202
174) Benzidine	(5)	15.288	184	129537	1.222
175)*Pyrene-d10	(5)	15.375	212	566795	5.000
177) Pyrene	(5)	15.404	202	39167	0.251
179)$Terphenyl-d14	(5)	15.690	244	44509	0.472
182) p-Dimethylaminoazobenzene	(5)	15.923	225	3324	0.136
185) Chlorobenzilate	(5)	16.016	139	5850	0.140
187) 3,3'-Dimethylbenzidine	(5)	16.471	212	14155	0.152
188) Butylbenzylphthalate	(5)	16.541	149	10545	0.160
191) 2-Acetylaminofluorene	(5)	16.885	181	5758	0.112
193) 3,3'-Dichlorobenzidine	(5)	17.392	252	7842	0.153
195) Benzo(a)anthracene	(5)	17.398	228	26122	0.203
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.409	231	4394	0.152
196) Chrysene	(5)	17.456	228	30189	0.226
199) bis(2-Ethylhexyl)phthalate	(5)	17.613	149	11940	0.137
203) 6-Methylchrysene	(5)	18.254	242	17522	0.191
205) Di-n-octylphthalate	(6)	18.767	149	18072	0.128
206) Benzo(b)fluoranthene	(6)	19.234	252	25919	0.205
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.245	256	10317	0.164
208) Benzo(k)fluoranthene	(6)	19.280	252	28183	0.215
211) Benzo(a)pyrene	(6)	19.758	252	22126	0.190
213)*Perylene-d12	(6)	19.852	264	530080	5.000
215) 3-Methylcholanthrene	(6)	20.335	268	10374M	0.184
217) Dibenz(a,h)acridine	(6)	21.140	279	17879	0.189
218) Dibenz(a,j)acridine	(6)	21.215	279	19086	0.183
219) Indeno(1,2,3-cd)pyrene	(6)	21.449	276	23084M	0.213
220) Dibenz(a,h)anthracene	(6)	21.489	278	26321	0.222
221) Benzo(g,h,i)perylene	(6)	21.816	276	29000	0.237

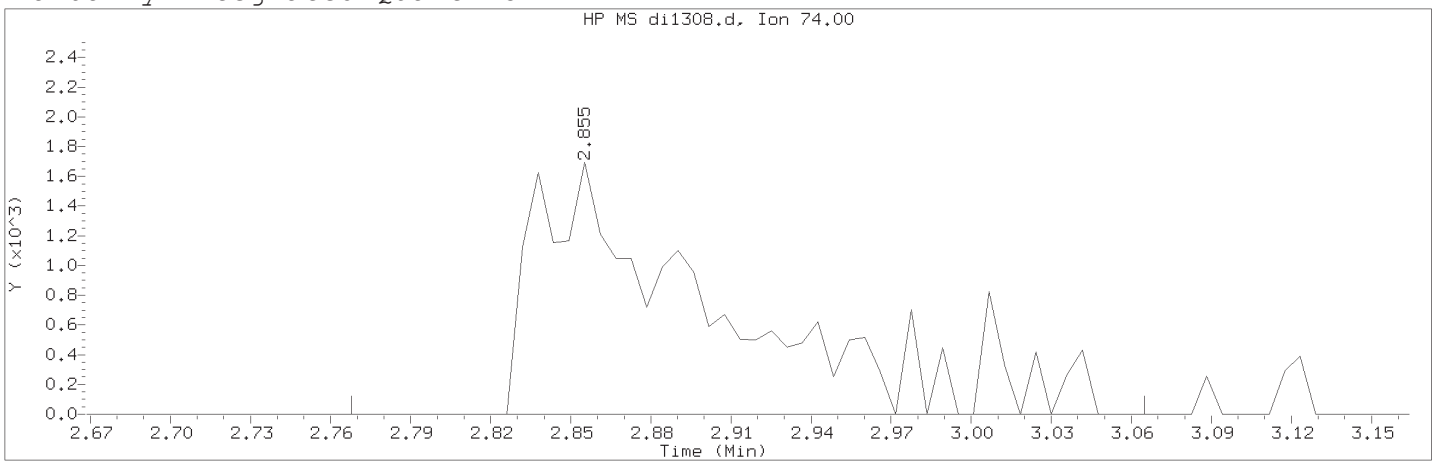
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

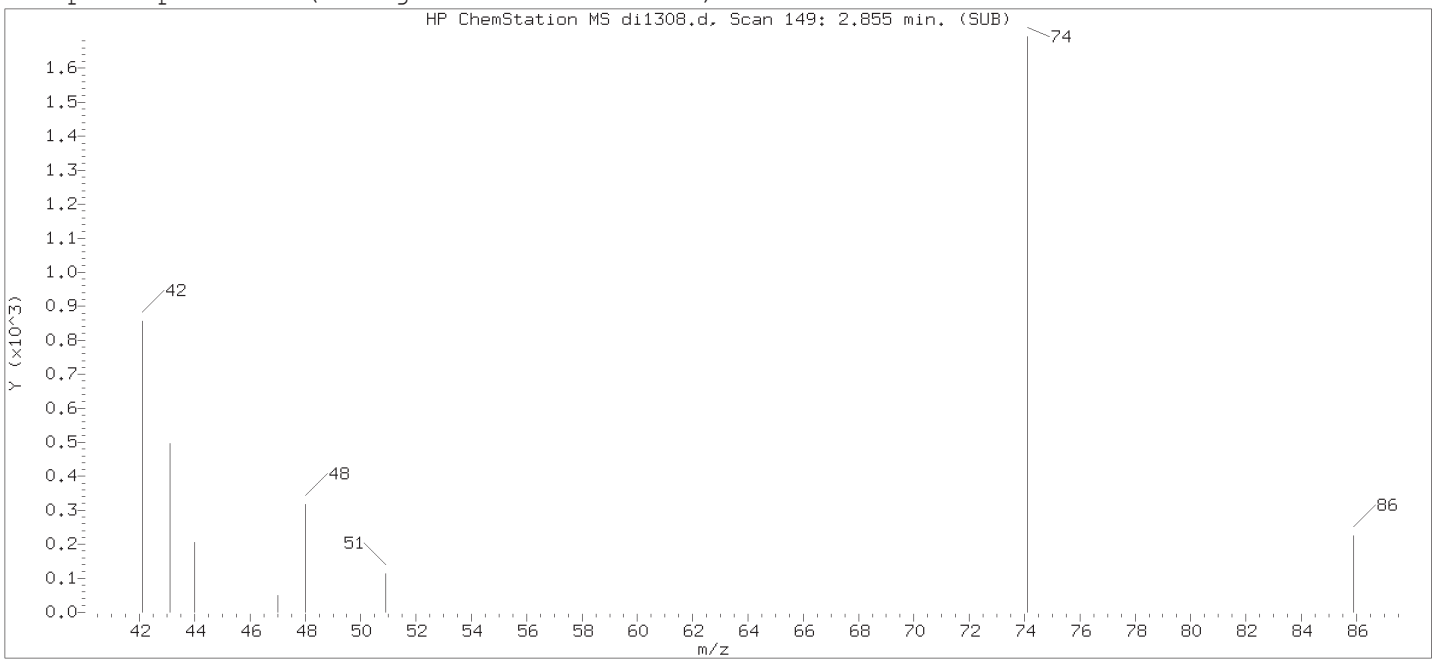
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 149		
Retention Time (minutes)	: 2.855		
Quant Ion	: 74.00		
Area (flag)	: 8104M		
On-Column Amount (ng/ul)	: 0.1939		
Integration start scan	: 133	Integration stop scan:	184
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

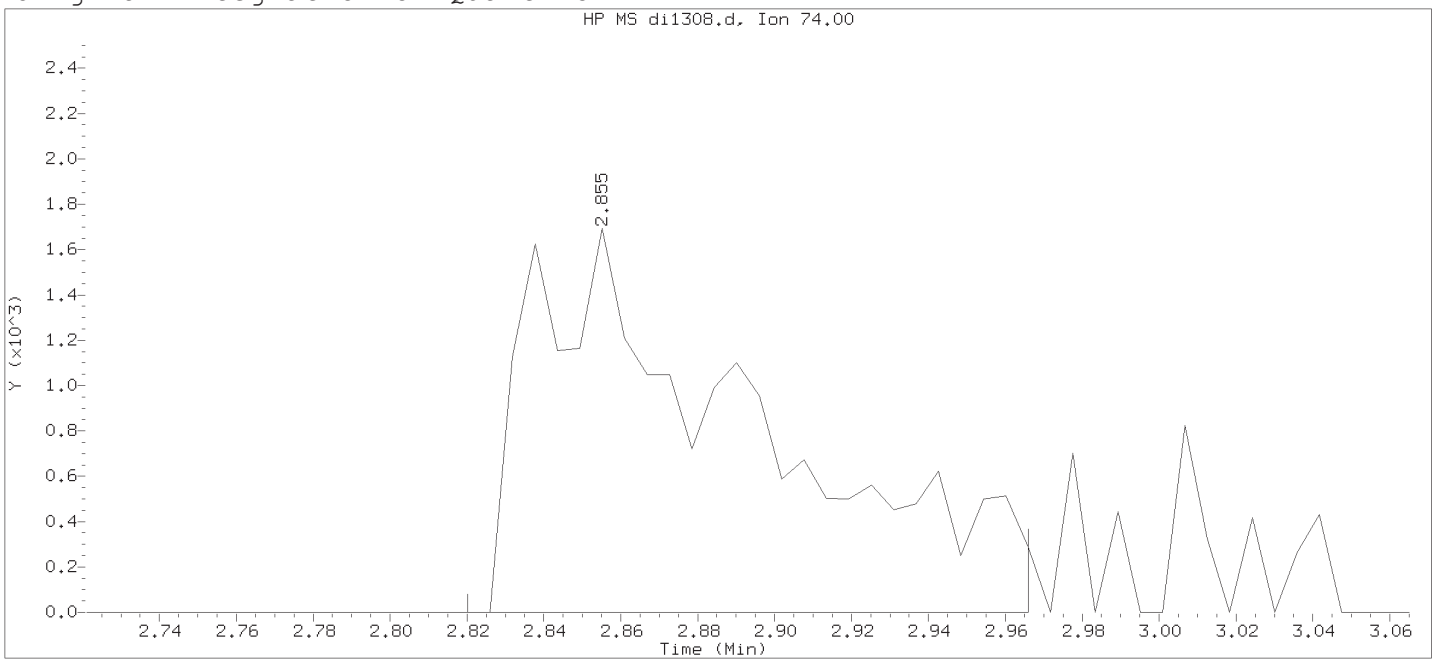
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

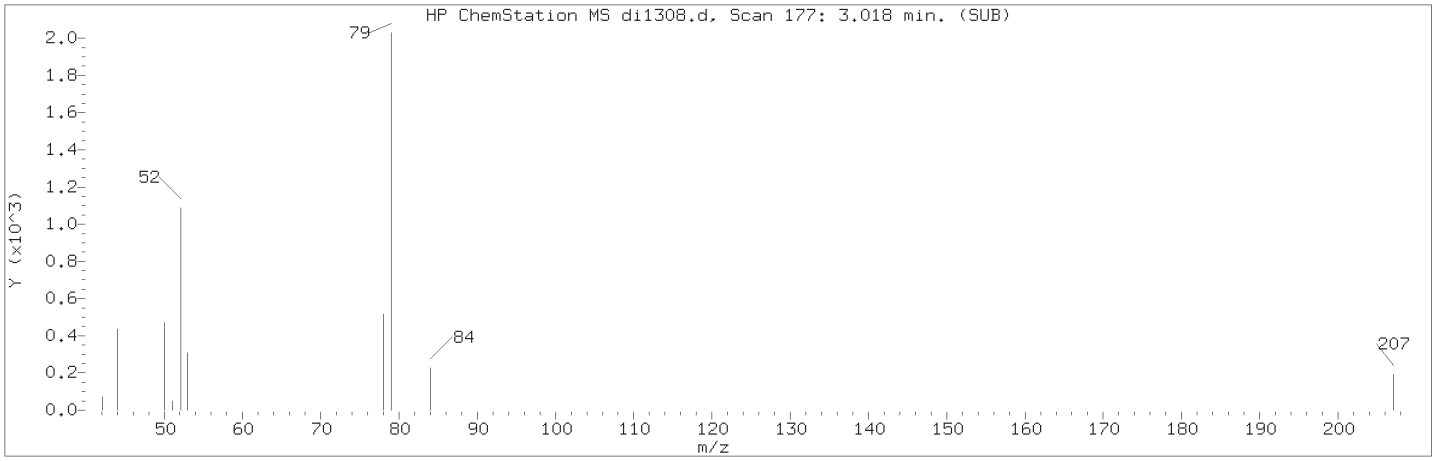
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 21:39 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

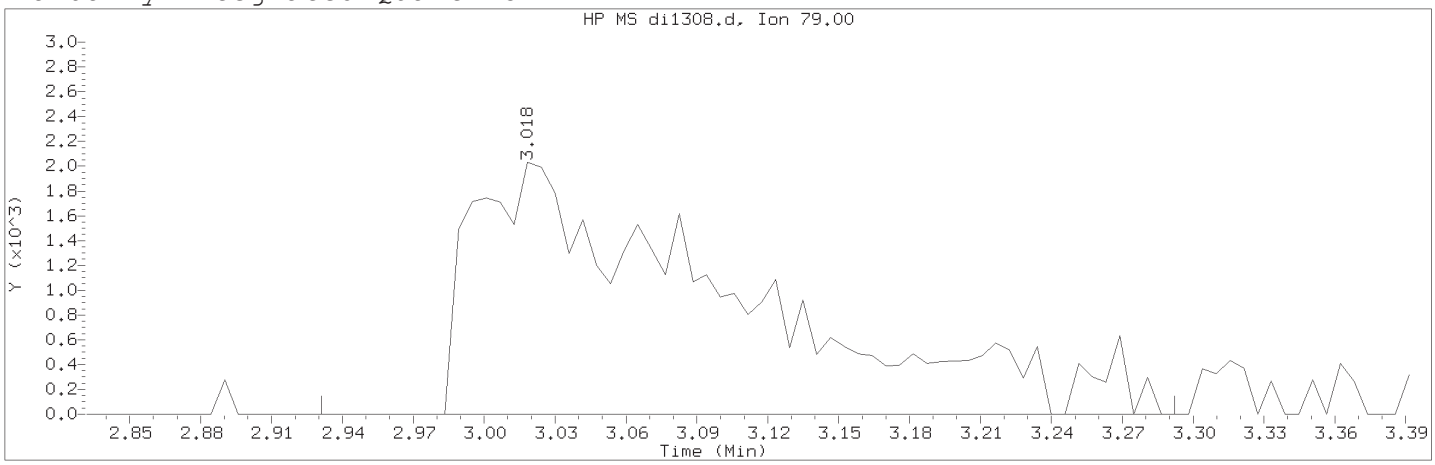
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 149		
Retention Time (minutes)	: 2.855		
Quant Ion	: 74.00		
Area	: 6861		
On-column Amount (ng/ul)	: 0.1637		
Integration start scan	: 142	Integration stop scan:	167
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

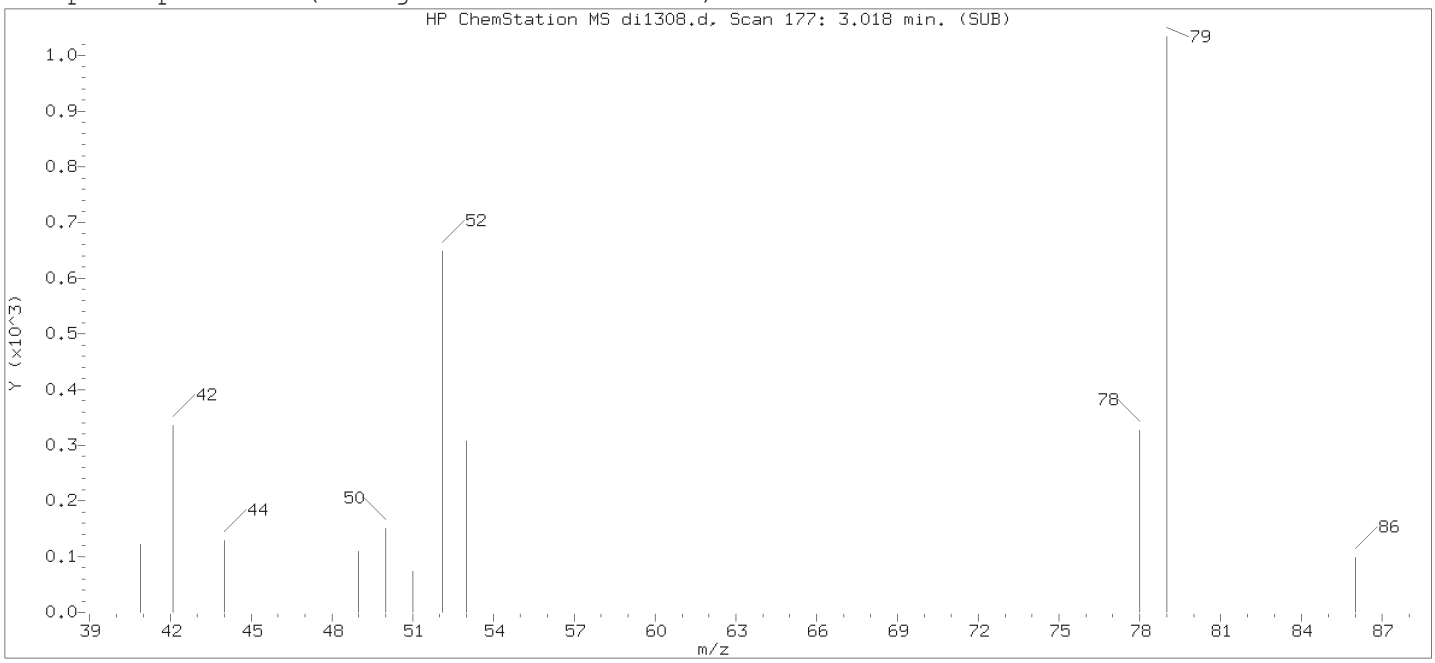
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 177		
Retention Time (minutes)	: 3.018		
Quant Ion	: 79.00		
Area (flag)	: 15486M		
On-Column Amount (ng/ul)	: 0.2128		
Integration start scan	: 161	Integration stop scan:	223
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

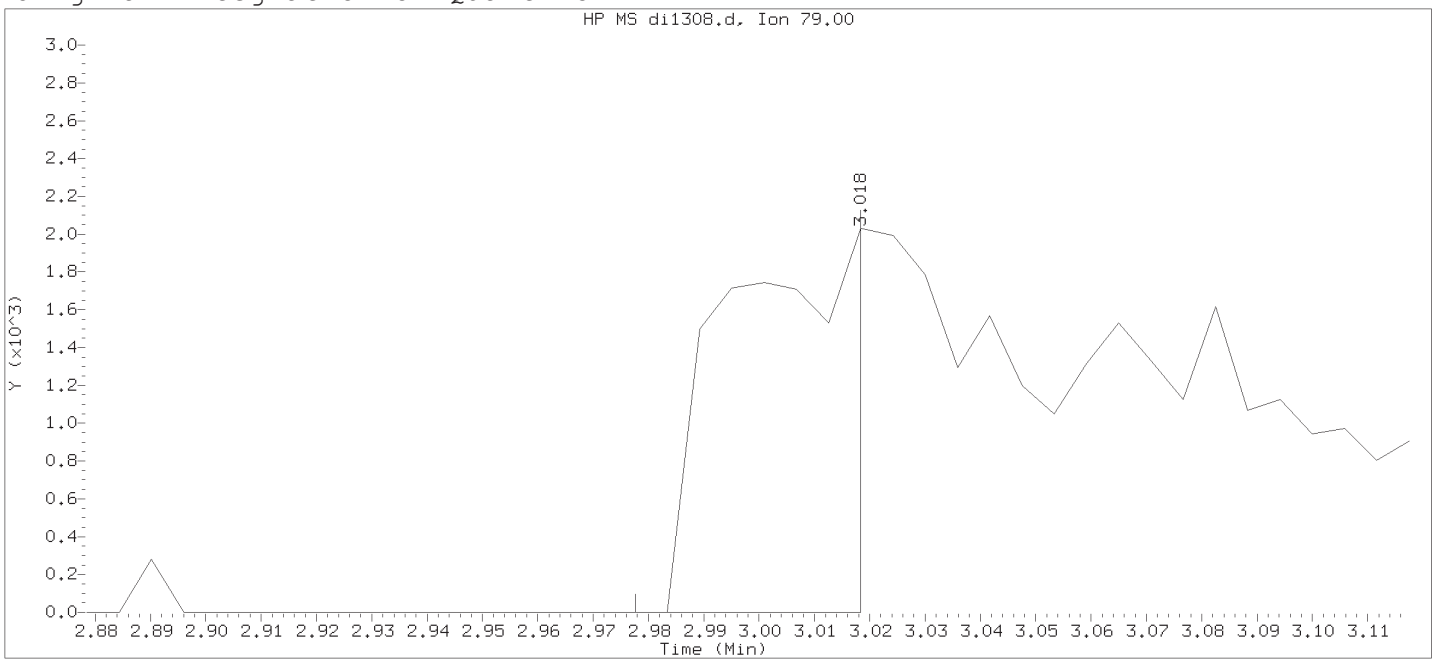
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

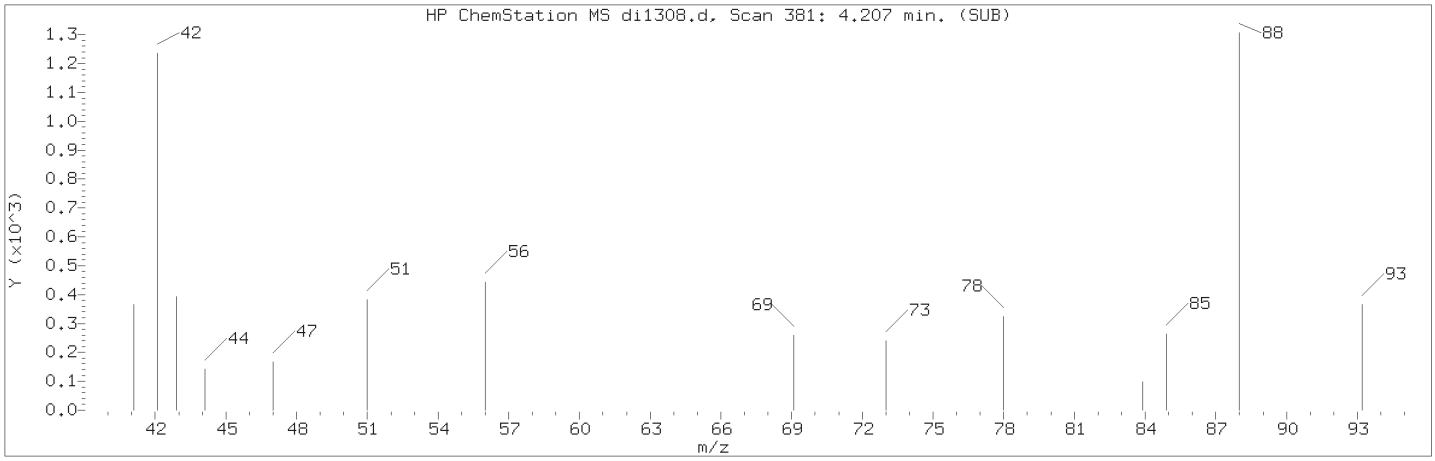
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 21:39 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

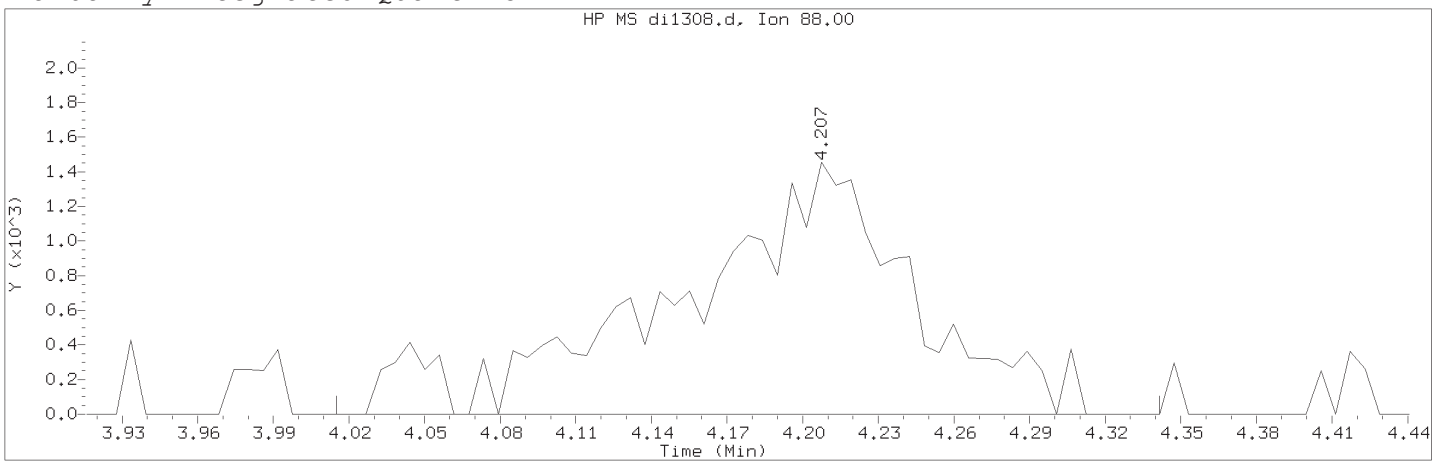
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 177		
Retention Time (minutes)	: 3.018		
Quant Ion	: 79.00		
Area	: 3221		
On-column Amount (ng/ul)	: 0.0457		
Integration start scan	: 169	Integration stop scan:	176
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

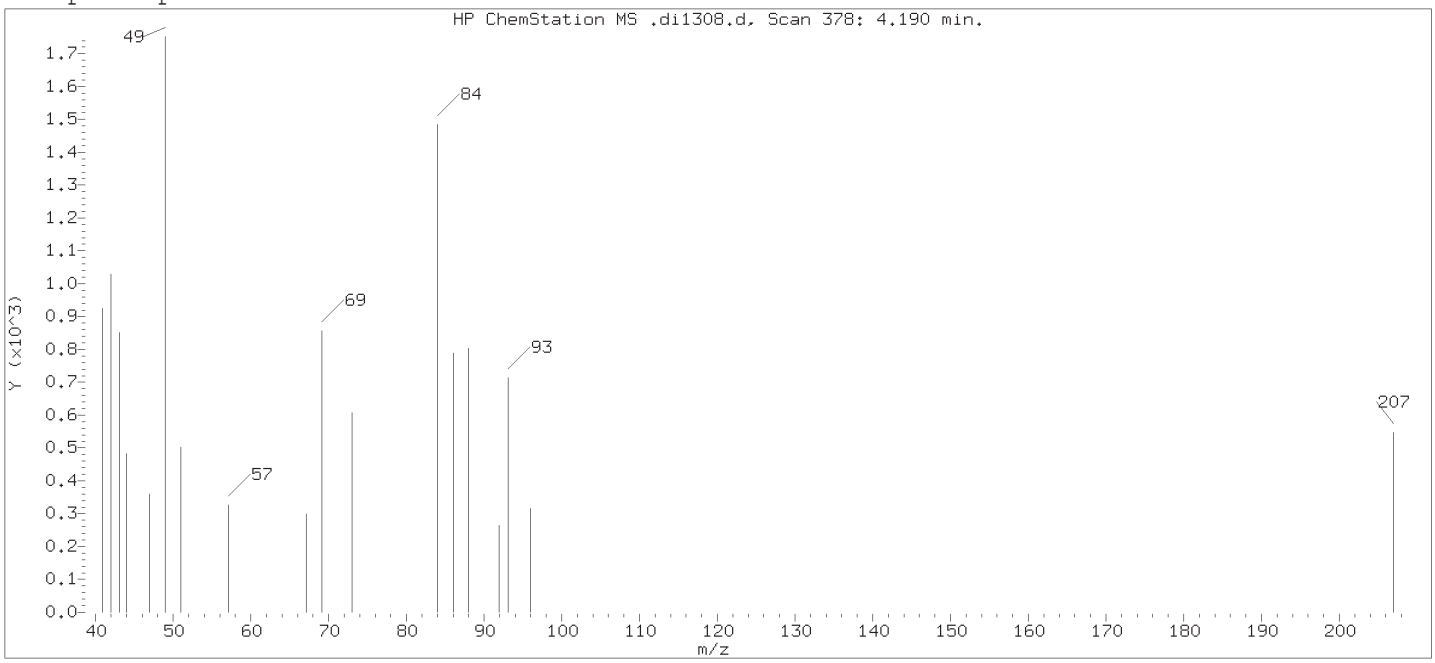
Compound Number	: 8		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 381		
Retention Time (minutes)	: 4.207		
Quant Ion	: 88.00		
Area (flag)	: 9518M		
On-Column Amount (ng/ul)	: 0.2934		
Integration start scan	: 347	Integration stop scan:	403
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

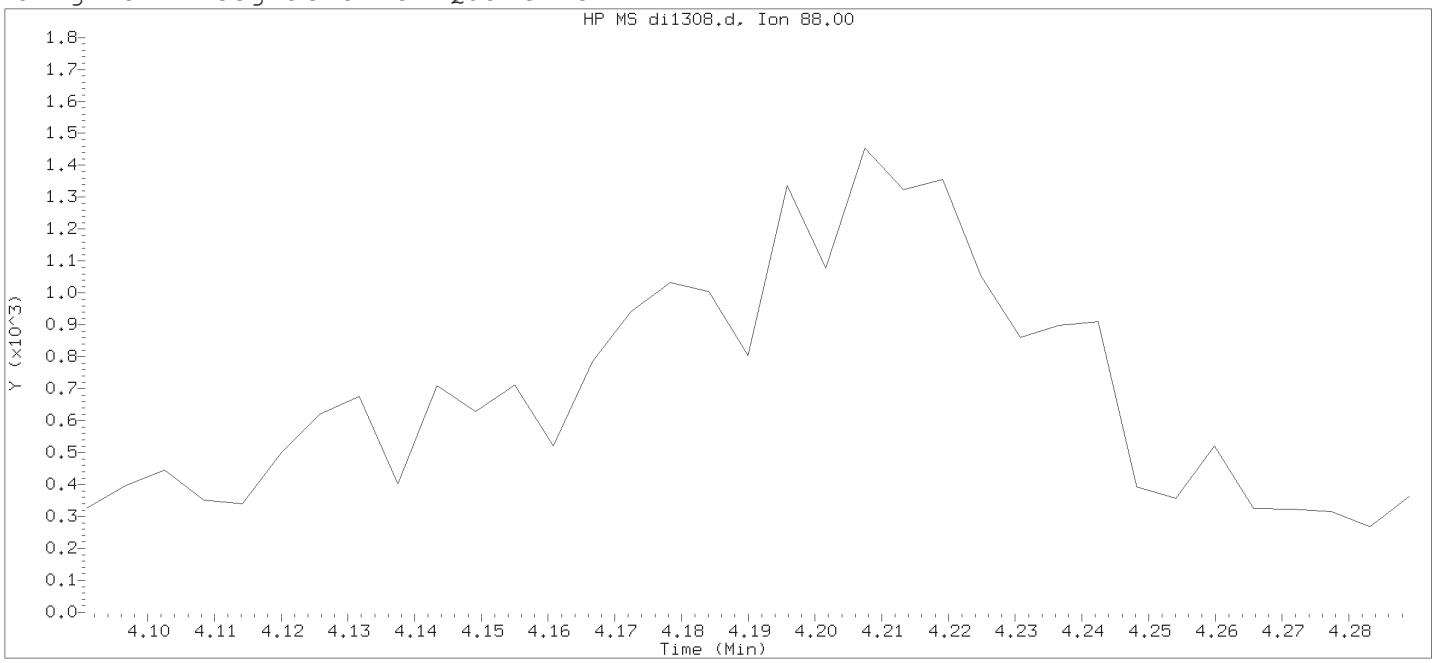
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

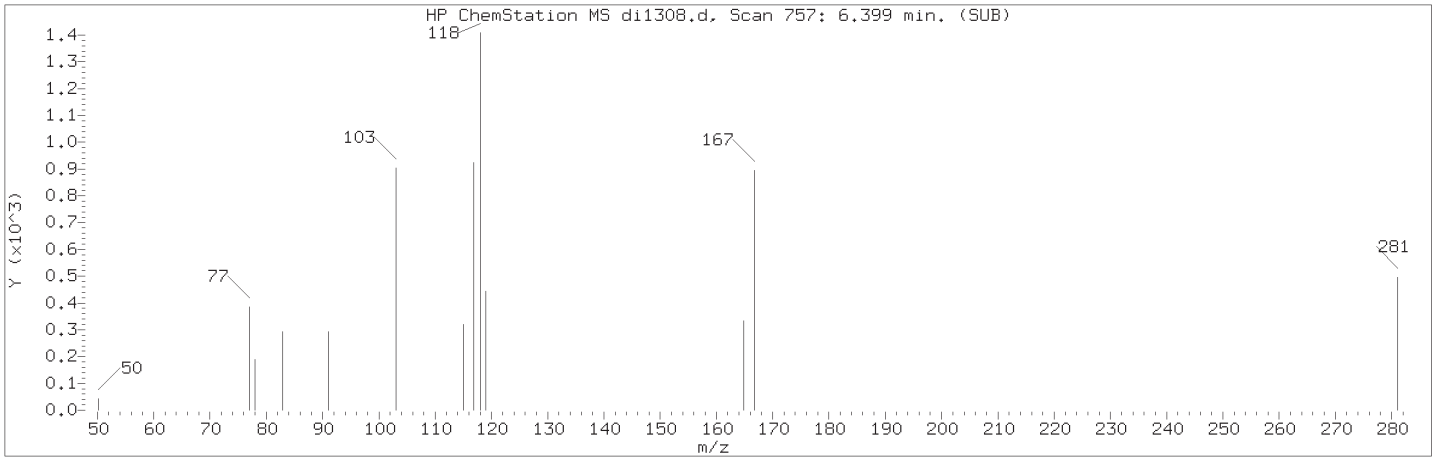
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 21:39 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

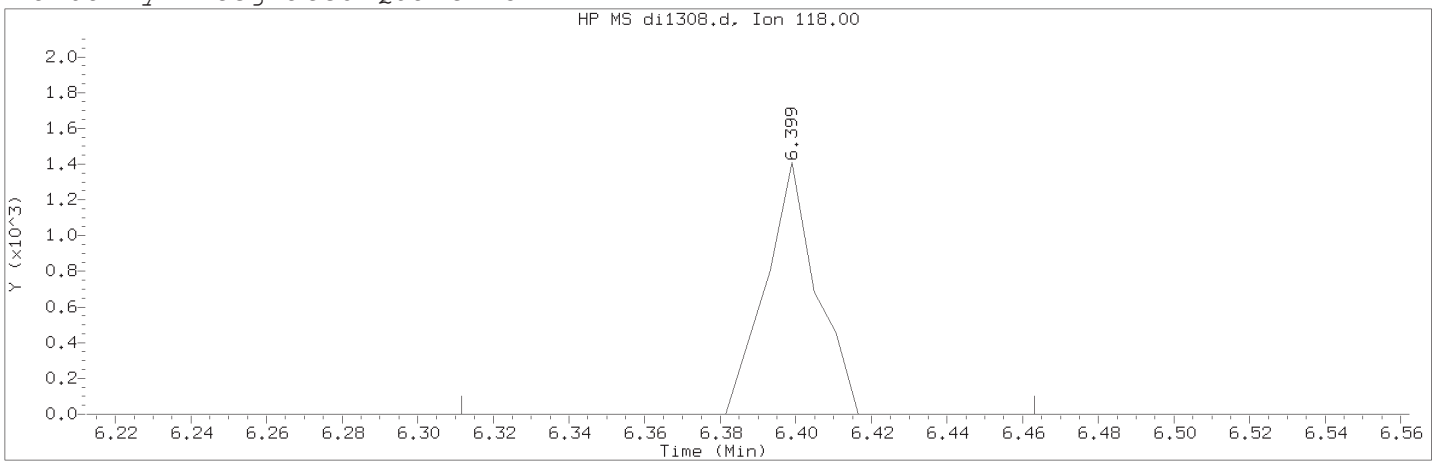
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.190
Quant Ion : 88.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: EMONBORNE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

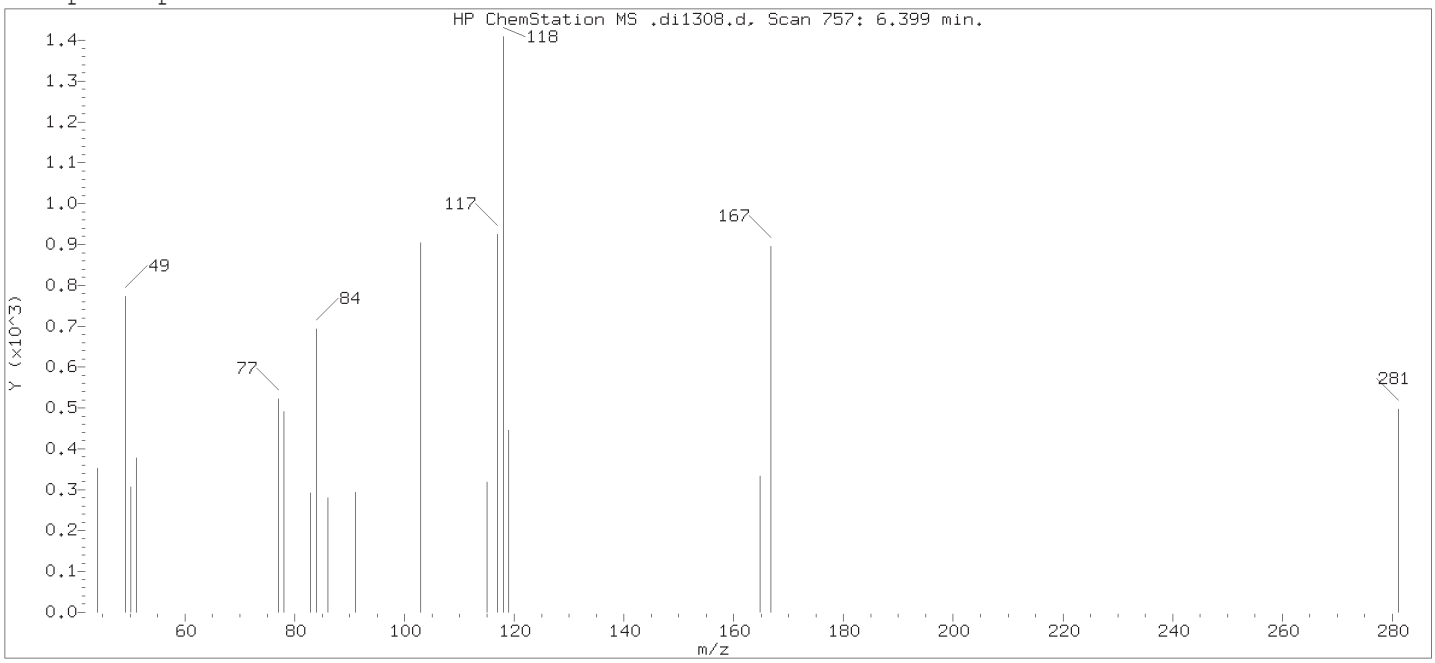
Compound Number	: 20		
Compound Name	: a-methylstyrene		
Scan Number	: 757		
Retention Time (minutes)	: 6.399		
Quant Ion	: 118.00		
Area (flag)	: 1313M		
On-Column Amount (ng/ul)	: 0.2234		
Integration start scan	: 741	Integration stop scan:	767
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

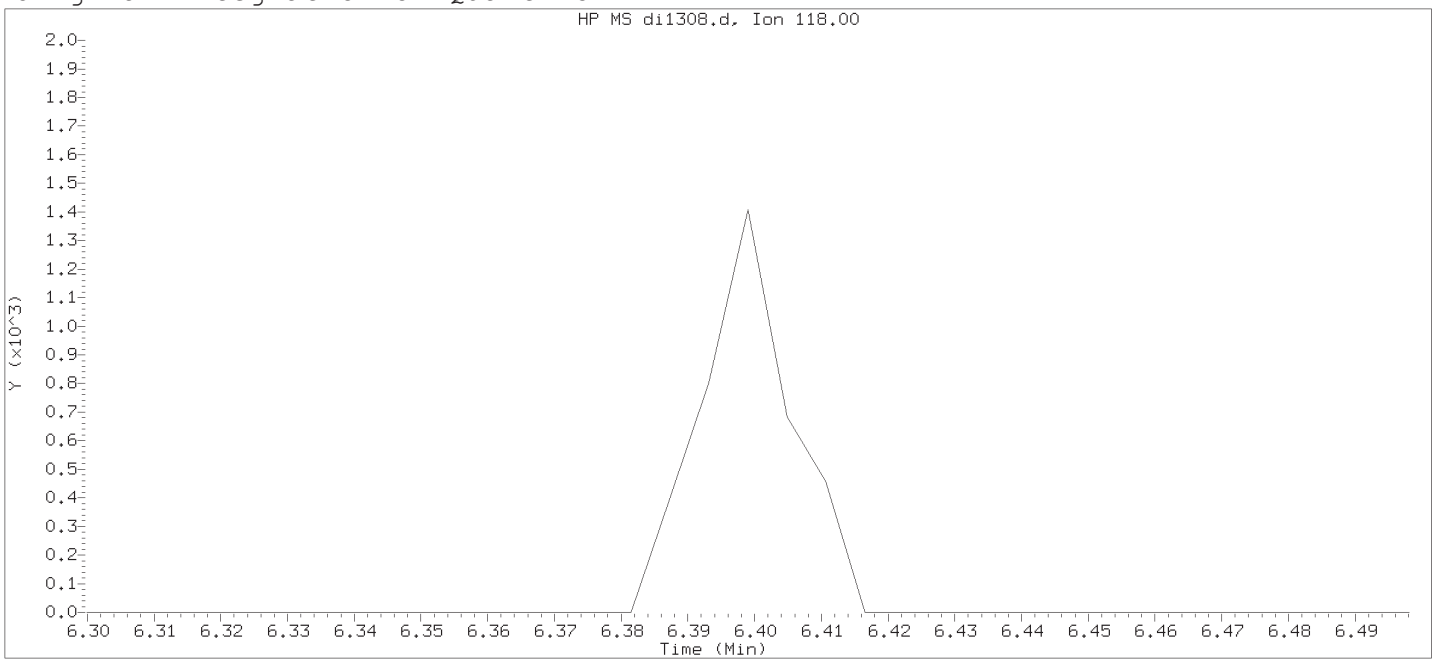
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

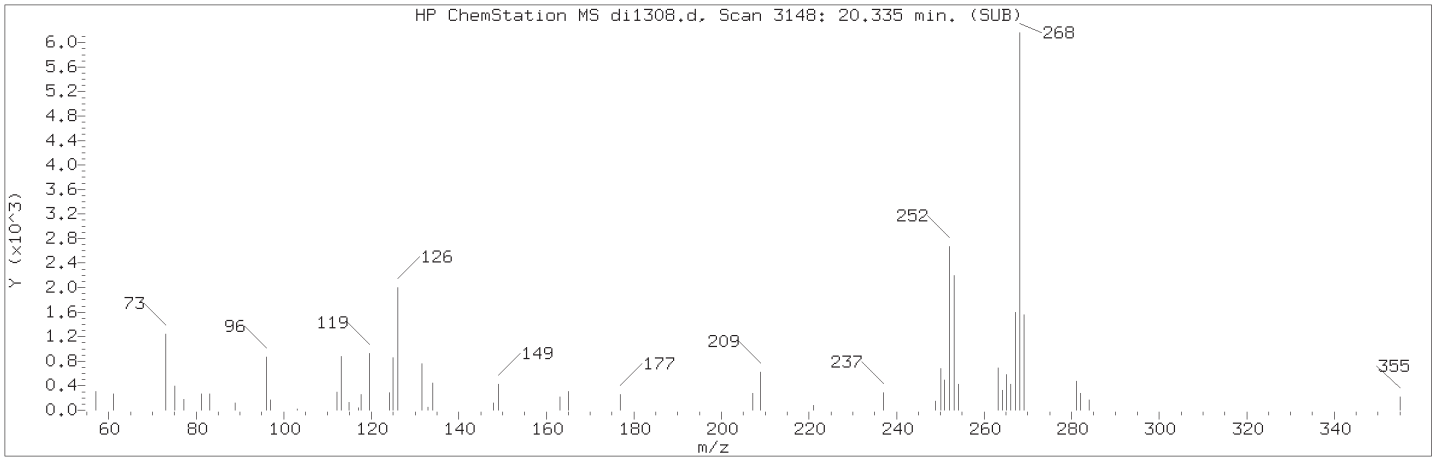
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 21:39 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

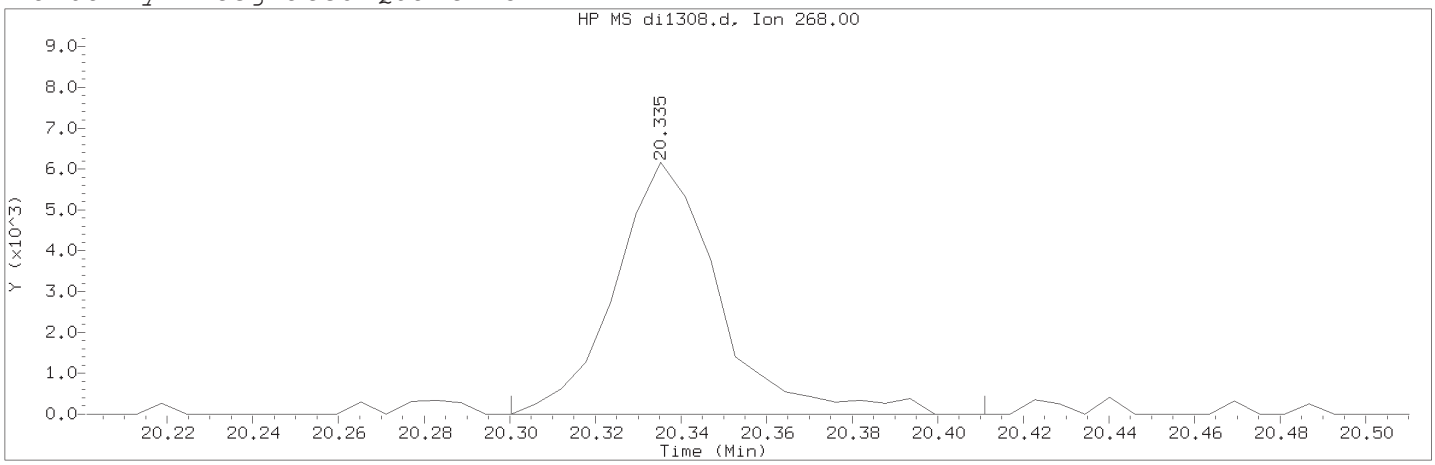
Compound Number : 20
Compound Name : a-methylstyrene
Expected RT (minutes) : 6.399
Quant Ion : 118.00

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: EMonborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

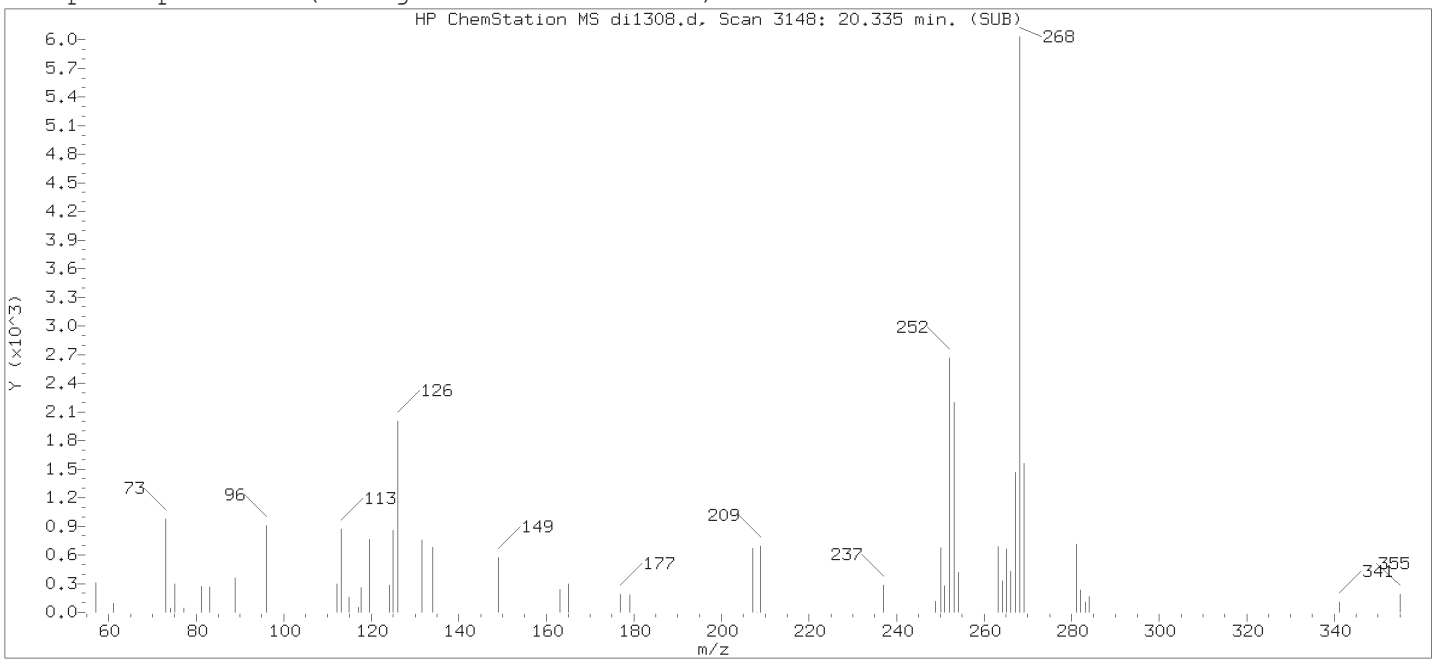
Compound Number : 215
Compound Name : 3-Methylcholanthrene
Scan Number : 3148
Retention Time (minutes) : 20.335
Quant Ion : 268.00
Area (flag) : 10374M
On-Column Amount (ng/ul) : 0.1839
Integration start scan : 3141 Integration stop scan: 3160
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

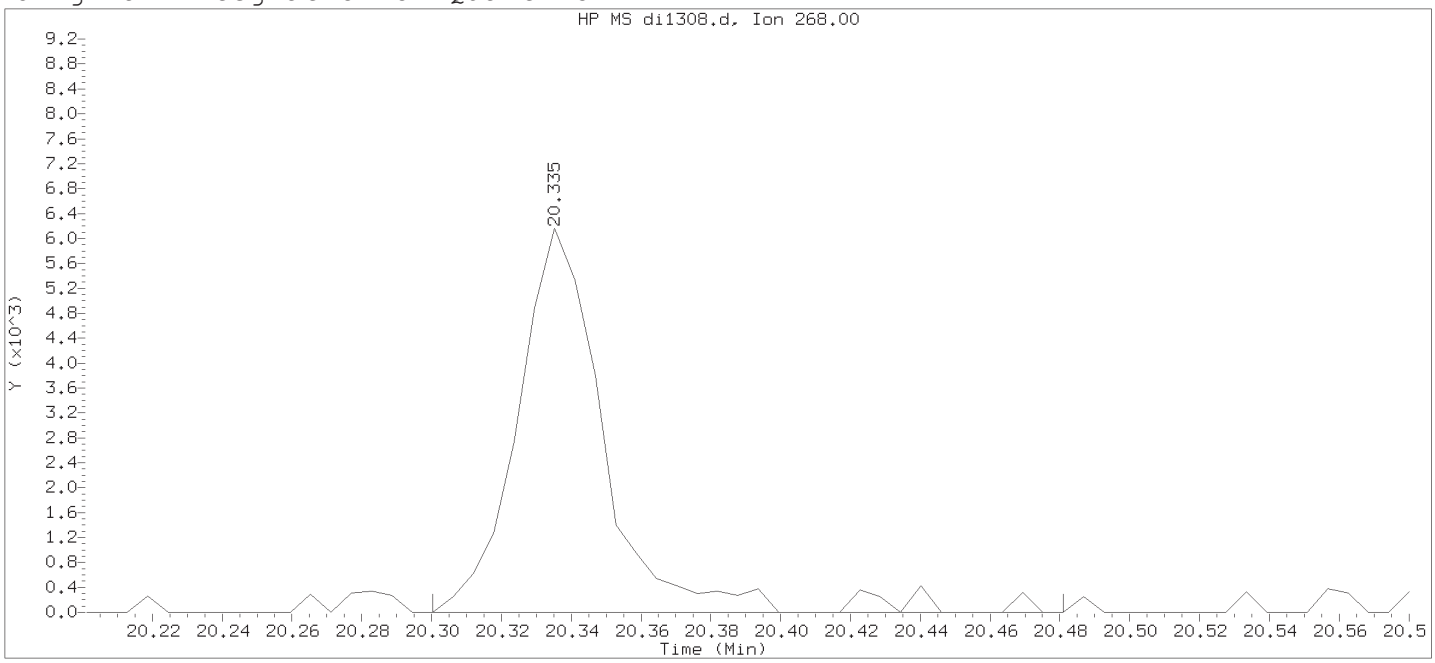
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 21:39 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compound Number	: 215		
Compound Name	: 3-Methylcholanthrene		
Scan Number	: 3148		
Retention Time (minutes)	: 20.335		
Quant Ion	: 268.00		
Area	: 10849		
On-column Amount (ng/ul)	: 0.1909		
Integration start scan	: 3141	Integration stop scan:	3172
Y at integration start	: 0	Y at integration end:	0

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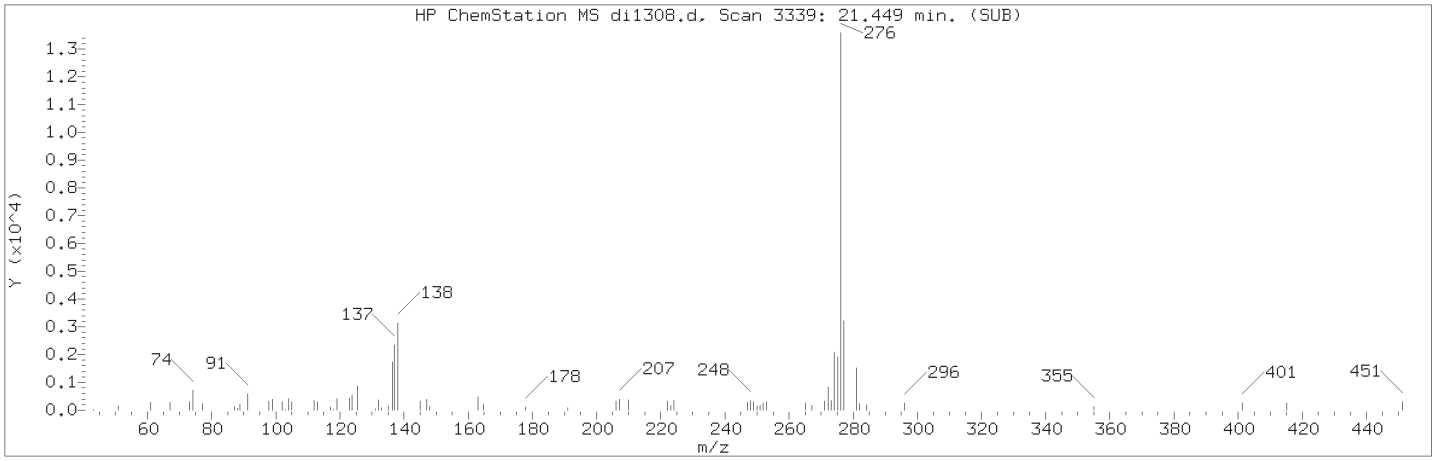
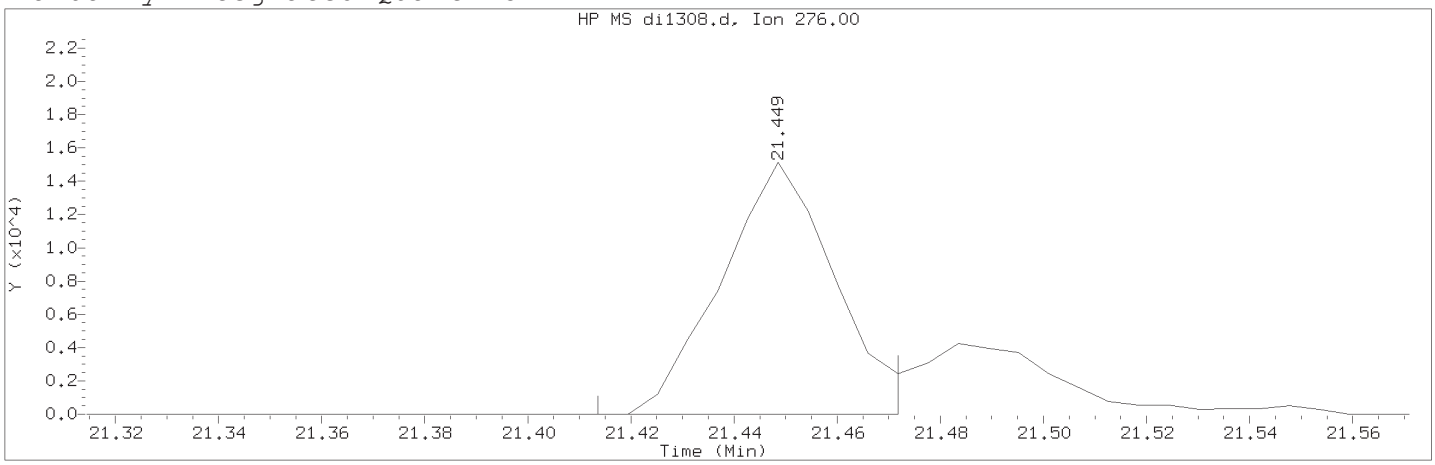
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 23-SEP-2018 07:34
Date, time and analyst ID of latest file update: 23-Sep-2018 07:35 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

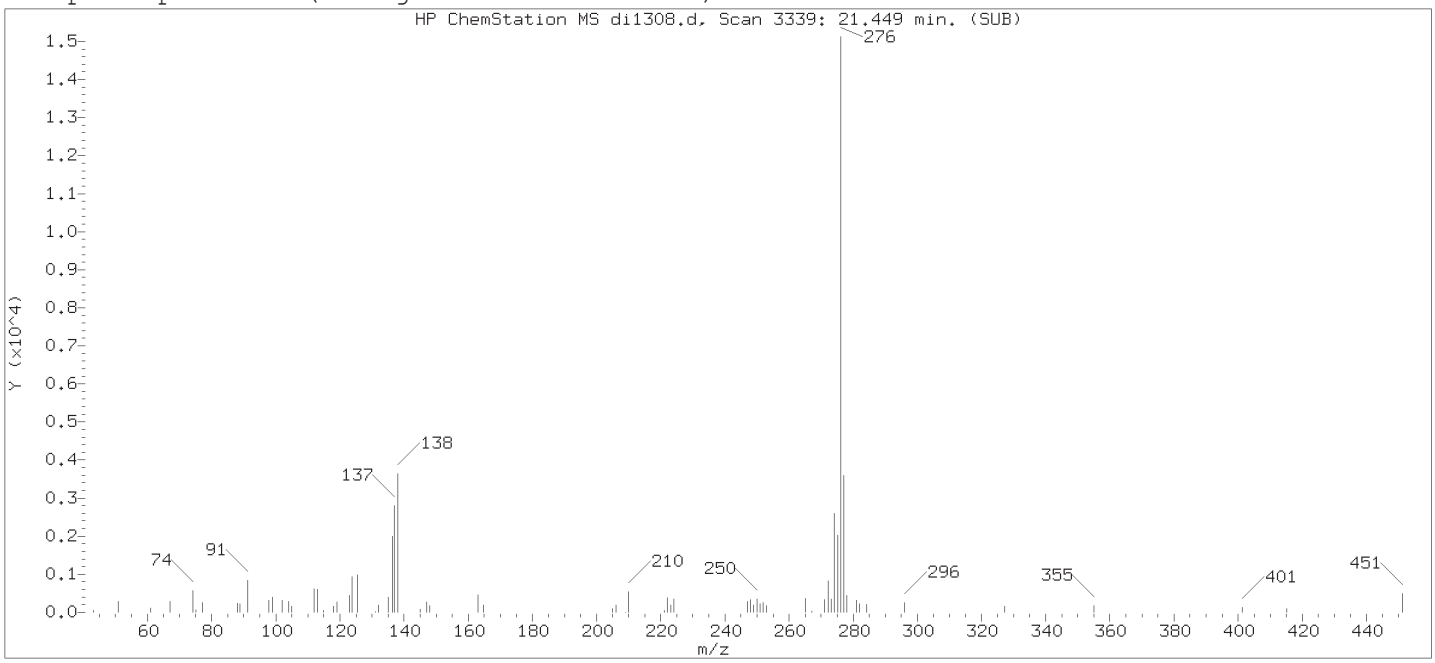
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3339
Retention Time (minutes) : 21.449
Quant Ion : 276.00
Area (flag) : 23084M
On-Column Amount (ng/ul) : 0.2129
Integration start scan : 3332 Integration stop scan: 3342
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

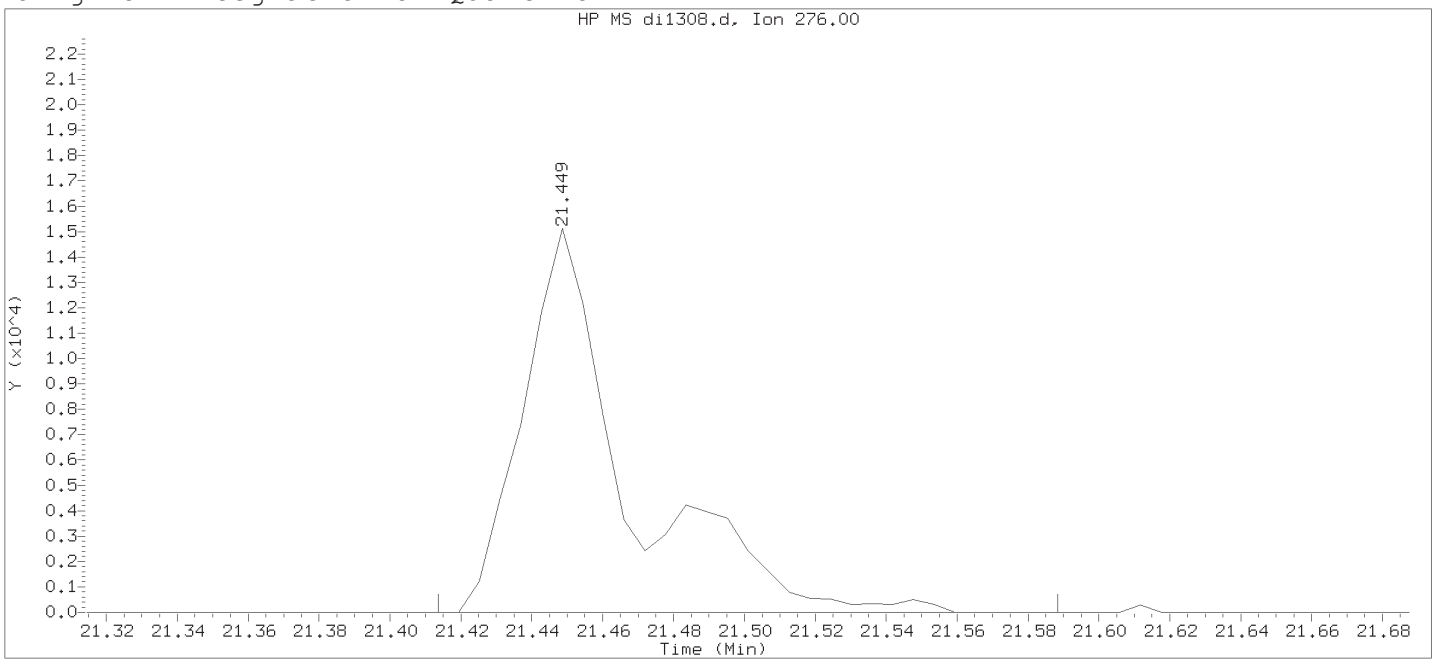
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/25/2018 at 07:55.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/25/2018 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



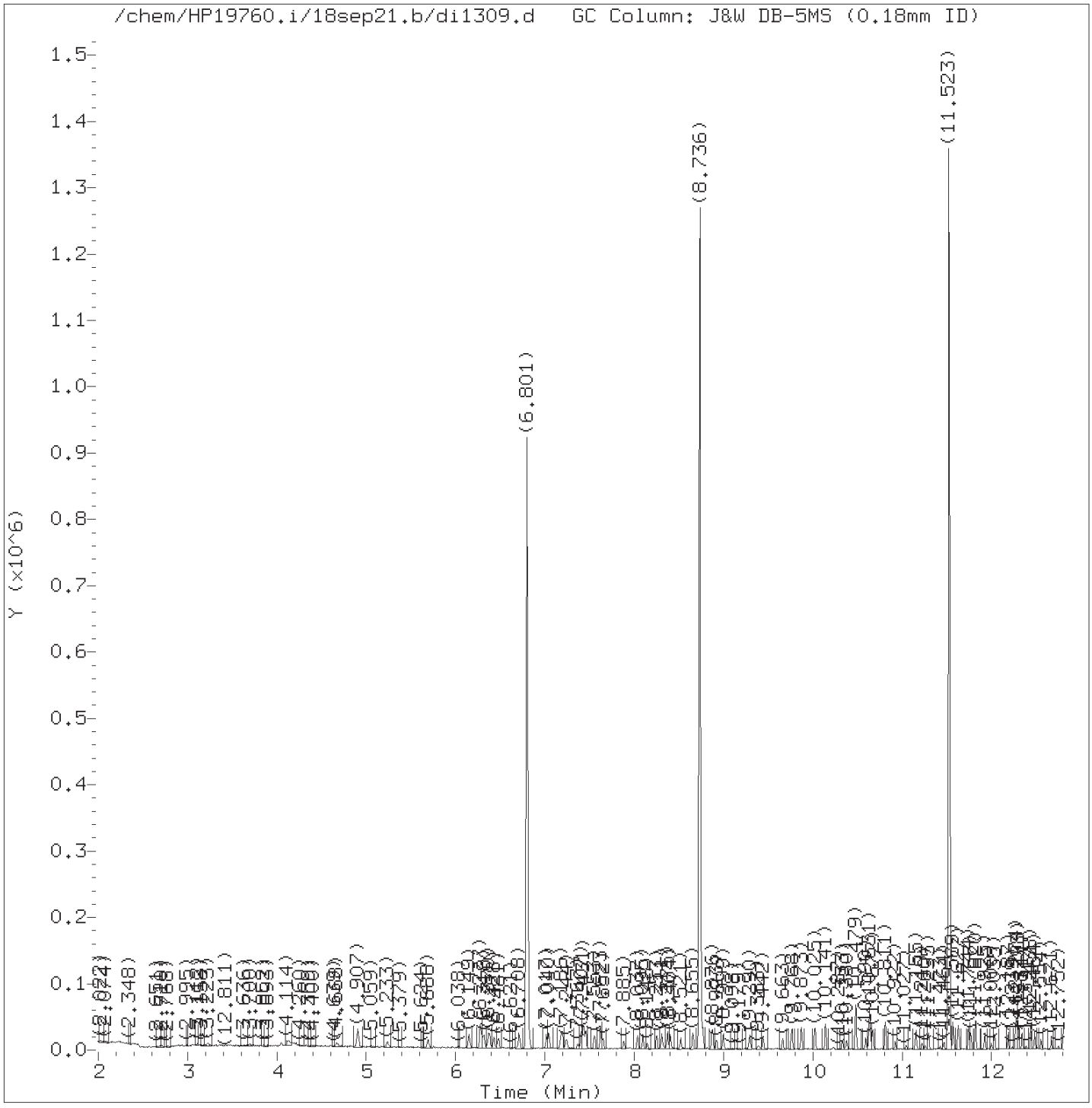
Data File: /chem/HP19760.i/18sep21.b/di1308.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:11 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: all1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 21:39 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3339		
Retention Time (minutes)	: 21.449		
Quant Ion	: 276.00		
Area	: 31001		
On-column Amount (ng/ul)	: 0.2293		
Integration start scan	: 3332	Integration stop scan:	3362
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/25/2018 at 07:55.
Target 3.5 esignature user: Edward Monborne



Total Ion Chromatogram (TIC)

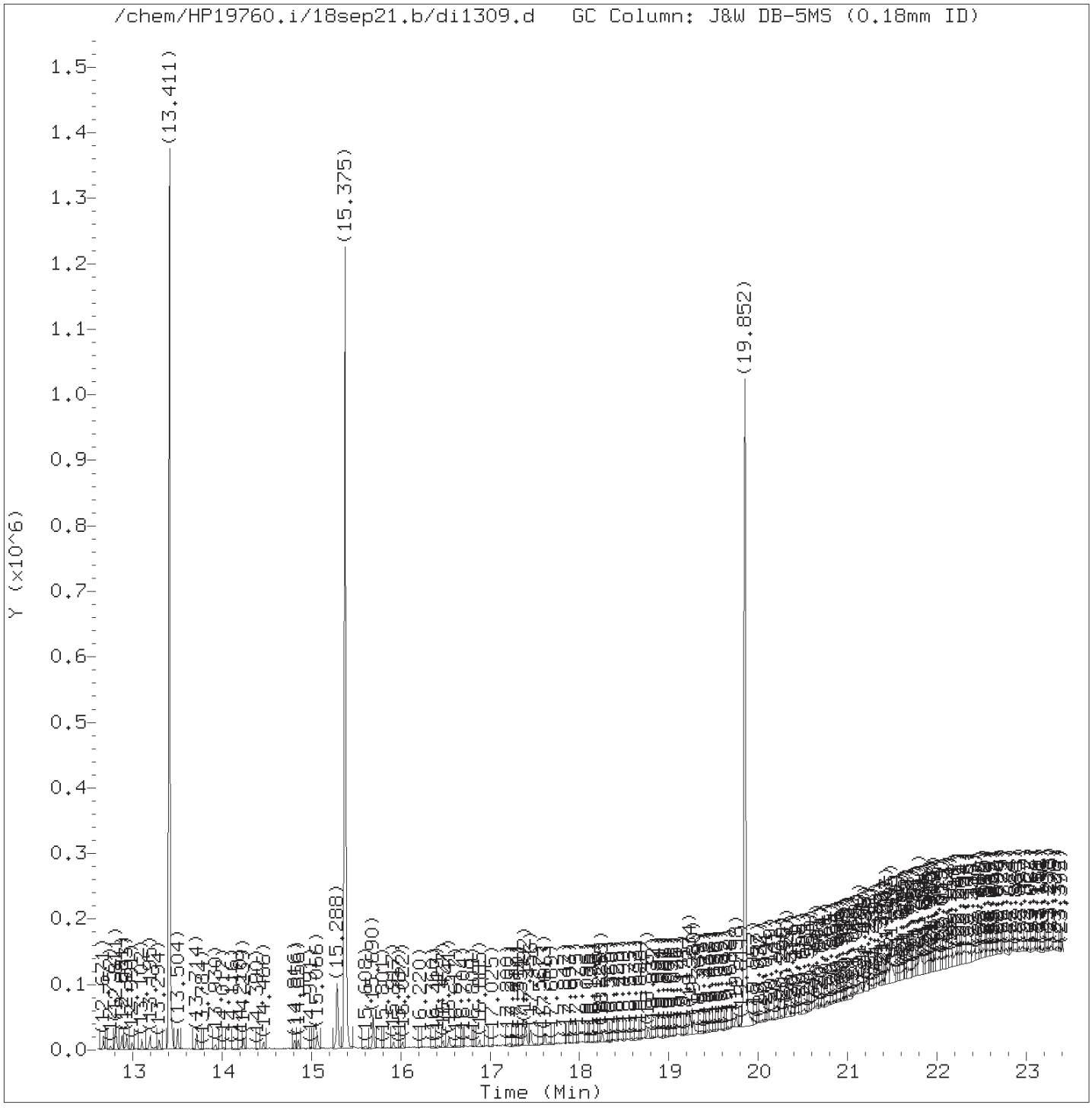
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.232	88	7890M	0.258
4) N-Nitrosodimethylamine	(1)	2.879	74	3568M	0.084
5) Pyridine	(1)	3.059	79	7769M	0.105
7) 2-Picoline	(1)	4.120	93	8064	0.107
8) N-Nitrosomethylethylamine	(1)	4.219	88	5178M	0.157
9) Methyl methanesulfonate	(1)	4.668	80	4264M	0.119
11)$2-Fluorophenol	(1)	4.907	112	12366	0.213
13) N-Nitrosodiethylamine	(1)	5.233	102	3297	0.109
42) Total Cresols	(1)			12640	0.211
15) Ethyl methanesulfonate	(1)	5.688	109	3288	0.110
16) Benzaldehyde	(1)	6.149	77	6718	0.126
17)$Phenol-d6	(1)	6.277	99	16724	0.213
18) Phenol	(1)	6.294	94	8670	0.096
19) Aniline	(1)	6.318	93	11557	0.108
20) a-methylstyrene	(1)	6.399	118	412M	0.069
22) bis(2-Chloroethyl)ether	(1)	6.428	93	8657	0.130
23) 2-Chlorophenol	(1)	6.481	128	5904	0.105
24) 1,3-Dichlorobenzene	(1)	6.708	146	7648	0.120
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	192492	5.000
26) 1,4-Dichlorobenzene	(1)	6.825	146	8408	0.130
27) Benzyl alcohol	(1)	7.017	108	4175	0.109
28) 1,2-Dichlorobenzene	(1)	7.040	146	7491	0.123
30) Indene	(1)	7.180	115	8123	0.129
31) 2-Methylphenol	(1)	7.198	108	5997	0.108
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.238	45	9841	0.127
34) bis(2-Chloroisopropyl)ether	(1)	7.238	45	9841	0.127
35) N-Nitrosopyrrolidine	(1)	7.367	100	3281	0.103
97) Isosafrole	(3)			3997	0.099
36) Acetophenone	(1)	7.407	105	9024	0.114
38) N-Nitroso-di-n-propylamine	(1)	7.425	70	4526	0.097
37) 4-Methylphenol	(1)	7.431	108	6643	0.103
39) N-Nitrosomorpholine	(1)	7.437	56	3915	0.110
40) o-Toluidine	(1)	7.460	106	9756	0.100
43) Hexachloroethane	(1)	7.553	117	3354	0.128
44)$Nitrobenzene-d5	(2)	7.623	82	14376	0.215
45) Nitrobenzene	(2)	7.652	77	7412	0.108
48) N-Nitrosopiperidine	(2)	7.880	114	2650	0.095
50) Isophorone	(2)	8.037	82	11774	0.103
120) 2,4_2,6-Dinitrotoluenes	(3)			3469	0.139
51) 2-Nitrophenol	(2)	8.148	139	2041	0.078

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.247	107	5837	0.100
56) Benzoic acid	(2)	8.311	105	9784	0.310
57) O,O,O-Triethylphosphorothioate	(2)	8.375	198	3032	0.120
55) bis(2-Chloroethoxy)methane	(2)	8.404	93	8882	0.119
60) 2,4-Dichlorophenol	(2)	8.527	162	4193	0.097
62) 1,2,4-Trichlorobenzene	(2)	8.655	180	5558	0.116
65)*Naphthalene-d8	(2)	8.736	136	705460	5.000
146) Diallate trans/cis	(4)			4970	0.104
67) 4-Chloroaniline	(2)	8.870	127	7263	0.118
68) 2,6-Dichlorophenol	(2)	8.876	162	4436	0.106
69) Hexachloropropene	(2)	8.917	213	2943	0.097
71) Hexachlorobutadiene	(2)	8.999	225	3418	0.127
75) Quinoline	(2)	9.296	129	9933	0.105
76) Caprolactam	(2)	9.389	113	876M	0.053
77) N-Nitrosodi-n-butylamine	(2)	9.442	84	3662	0.081
80) 4-Chloro-3-methylphenol	(2)	9.663	107	4322	0.091
82) Safrole	(2)	9.762	162	3510	0.087
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.141	216	5548	0.131
85) Hexachlorocyclopentadiene	(3)	10.141	237	2763	0.105
88) cis-Isosafrole	(3)	10.234	162	747	0.020
90) 2,4,6-Trichlorophenol	(3)	10.333	196	2260	0.090
92) 2,4,5-Trichlorophenol	(3)	10.380	196	2584	0.097
93)$2-Fluorobiphenyl	(3)	10.479	172	25289	0.252
94) trans-Isosafrole	(3)	10.596	162	3250	0.079
95) 1,1'-Biphenyl	(3)	10.631	154	13928	0.128
98) 1-Chloronaphthalene	(3)	10.672	162	10636	0.128
100) 2-Nitroaniline	(3)	10.806	138	2366	0.092
99) Diphenyl ether	(3)	10.811	170	7596	0.125
104) 1,4-Naphthoquinone	(3)	10.928	158	1896	0.060
105) 1,4-Dinitrobenzene	(3)	11.045	168	884M	0.065
106) Dimethylphthalate	(3)	11.155	163	10997	0.117
107) 1,3-Dinitrobenzene	(3)	11.155	168	1041	0.066
108) 2,6-Dinitrotoluene	(3)	11.219	165	1372	0.065
112) 3-Nitroaniline	(3)	11.470	138	1694	0.074
113)*Acenaphthene-d10	(3)	11.523	164	314574	5.000
115) 2,4-Dinitrophenol	(3)	11.627	184	5658	0.506
116) 4-Nitrophenol	(3)	11.744	109	4601	0.297
117) Pentachlorobenzene	(3)	11.767	250	3884	0.112
118) 2,4-Dinitrotoluene	(3)	11.820	165	2097	0.074
119) Dibenzofuran	(3)	11.820	168	15058	0.123

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
121) 1-Naphthylamine	(3)	11.925	143	8954	0.096
122) 2,3,4,6-Tetrachlorophenol	(3)	11.995	232	1932	0.093
123) 2-Naphthylamine	(3)	12.035	143	8254	0.087
124) Diethylphthalate	(3)	12.187	149	8812	0.099
125) Thionazin	(3)	12.280	107	1743	0.094
129) 4-Nitroaniline	(3)	12.286	138	1833	0.073
128) 5-Nitro-o-toluidine	(3)	12.286	152	1895	0.071
127) 4-Chlorophenyl-phenylether	(3)	12.298	204	5245	0.115
130) 4,6-Dinitro-2-methylphenol	(4)	12.344	198	3558	0.245
131) N-Nitrosodiphenylamine	(4)	12.438	169	7960	0.109
132) NDPA as diphenylamine	(4)	12.438	169	7960	0.109
134) 1,2-Diphenylhydrazine	(4)	12.484	77	11330	0.109
135)$2,4,6-Tribromophenol	(3)	12.554	330	1667	0.161
137) Tetraethyldithiopyrophosphate	(4)	12.671	97	1315	0.082
139) 1,3,5-Trinitrobenzene	(4)	12.747	213	523M	0.053
140) Diallate (peak 1)	(4)	12.805	86	4188	0.084
141) Phorate	(4)	12.811	75	5173	0.087
142) Phenacetin	(4)	12.816	108	3221	0.069
143) 4-Bromophenyl-phenylether	(4)	12.881	248	2575	0.106
144) Diallate (peak 2)	(4)	12.916	86	782M	0.020
147) Dimethoate	(4)	12.991	87	2572	0.066
148) Atrazine	(4)	13.102	200	2068	0.090
149) Pentachlorophenol	(4)	13.184	266	809	0.055
150) 4-Aminobiphenyl	(4)	13.190	169	5514	0.090
151) Pentachloronitrobenzene	(4)	13.195	237	616M	0.057
152) Pronamide	(4)	13.294	173	2535	0.584
153)*Phenanthrene-d10	(4)	13.411	188	544726	5.000
154) Dinoseb	(4)	13.434	211	1064	0.051
163) Carbazole	(4)	13.714	167	11978	0.100
164) Methyl parathion	(4)	13.924	109	1511	0.989
165) Di-n-butylphthalate	(4)	14.239	149	11932	0.083
168) 4-Nitroquinoline-1-oxide	(4)	14.460	190	552	2.752
167) Parathion	(4)	14.466	109	869M	0.982
169) Octachlorostyrene	(4)	14.816	308	958M	0.103
171) Isodrin	(4)	14.856	193	2002	0.131
174) Benzidine	(5)	15.288	184	51101	0.522
175)*Pyrene-d10	(5)	15.375	212	523891	5.000
179)$Terphenyl-d14	(5)	15.690	244	19327	0.222
182) p-Dimethylaminoazobenzene	(5)	15.929	225	1064M	0.047
185) Chlorobenzilate	(5)	16.022	139	2822	0.073

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

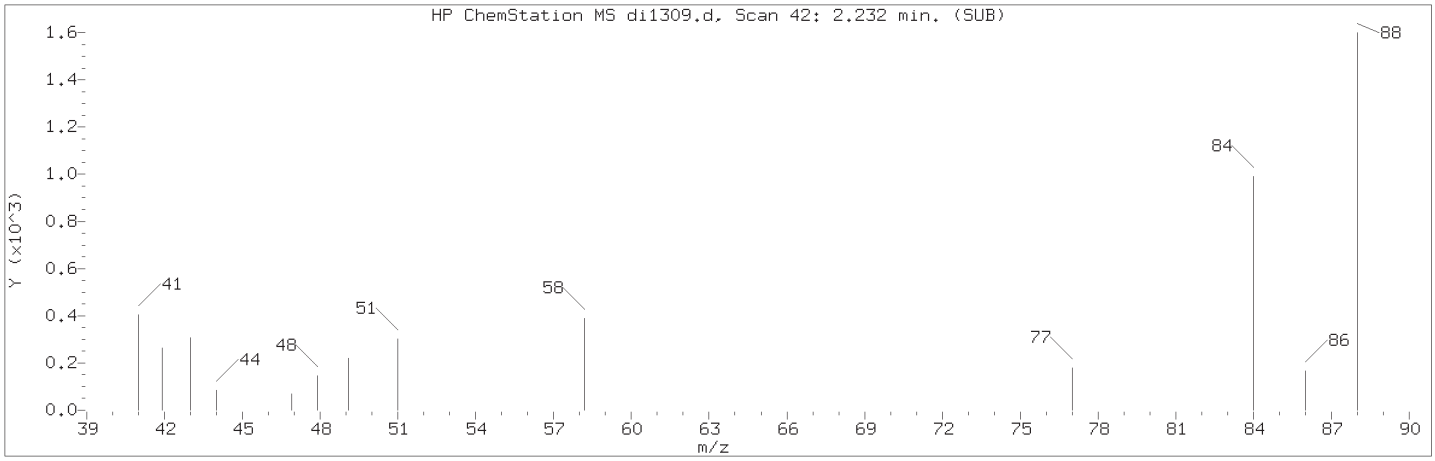
Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
187) 3,3'-Dimethylbenzidine	(5)	16.471	212	5065	0.059
188) Butylbenzylphthalate	(5)	16.541	149	3792	0.062
191) 2-Acetylaminofluorene	(5)	16.885	181	2723	0.057
193) 3,3'-Dichlorobenzidine	(5)	17.392	252	3752	0.079
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.409	231	1965	0.073
199) bis(2-Ethylhexyl)phthalate	(5)	17.613	149	5158	0.064
203) 6-Methylchrysene	(5)	18.255	242	8124	0.096
205) Di-n-octylphthalate	(6)	18.767	149	8070	1.180
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.245	256	4351	0.073
213)*Perylene-d12	(6)	19.852	264	499729	5.000
215) 3-Methylcholanthrene	(6)	20.330	268	5213	0.098
217) Dibenz(a,h)acridine	(6)	21.140	279	8316	0.093
218) Dibenz(a,j)acridine	(6)	21.210	279	8437	0.086

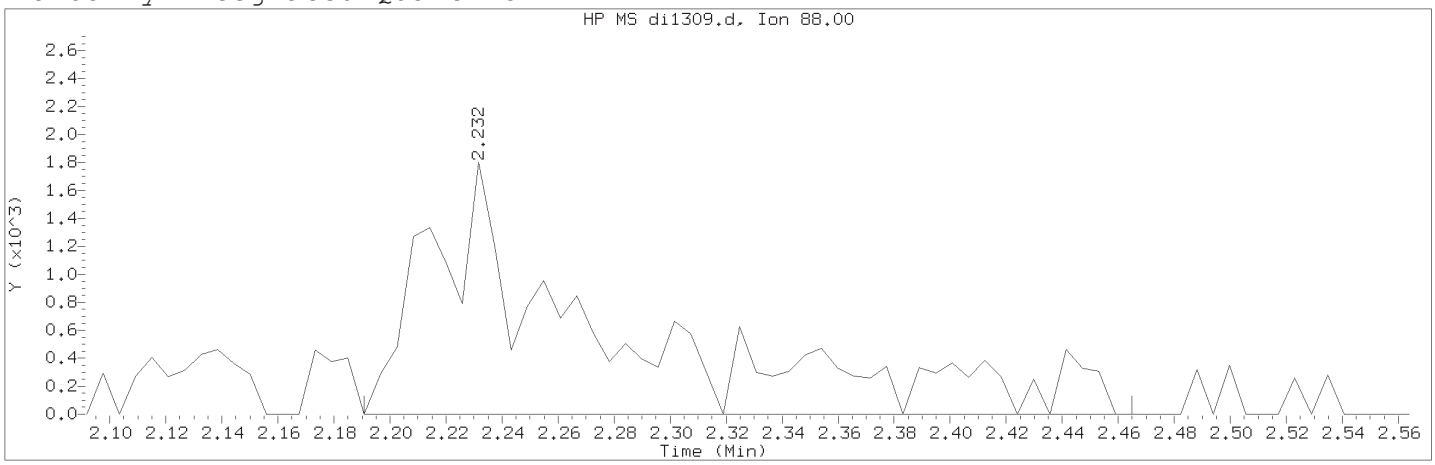
* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

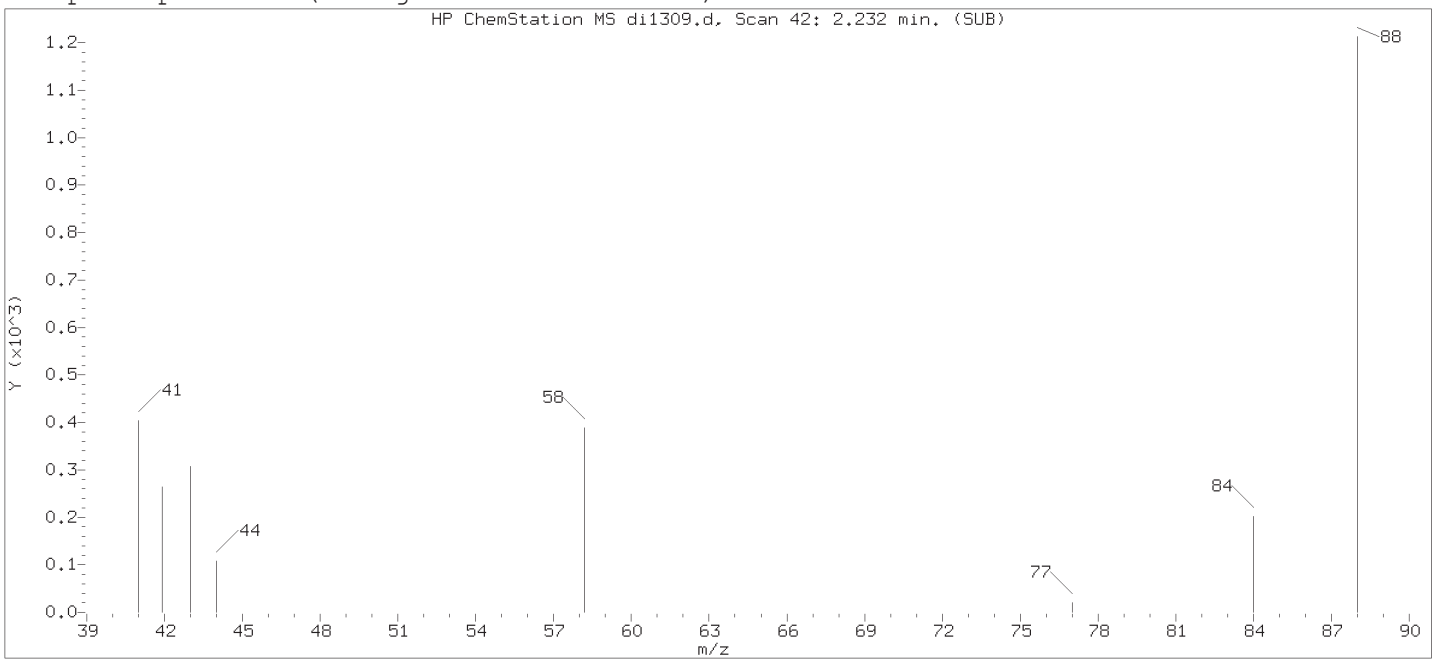
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 42		
Retention Time (minutes)	: 2.232		
Quant Ion	: 88.00		
Area (flag)	: 7890M		
On-Column Amount (ng/ul)	: 0.2577		
Integration start scan	: 34	Integration stop scan:	81
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

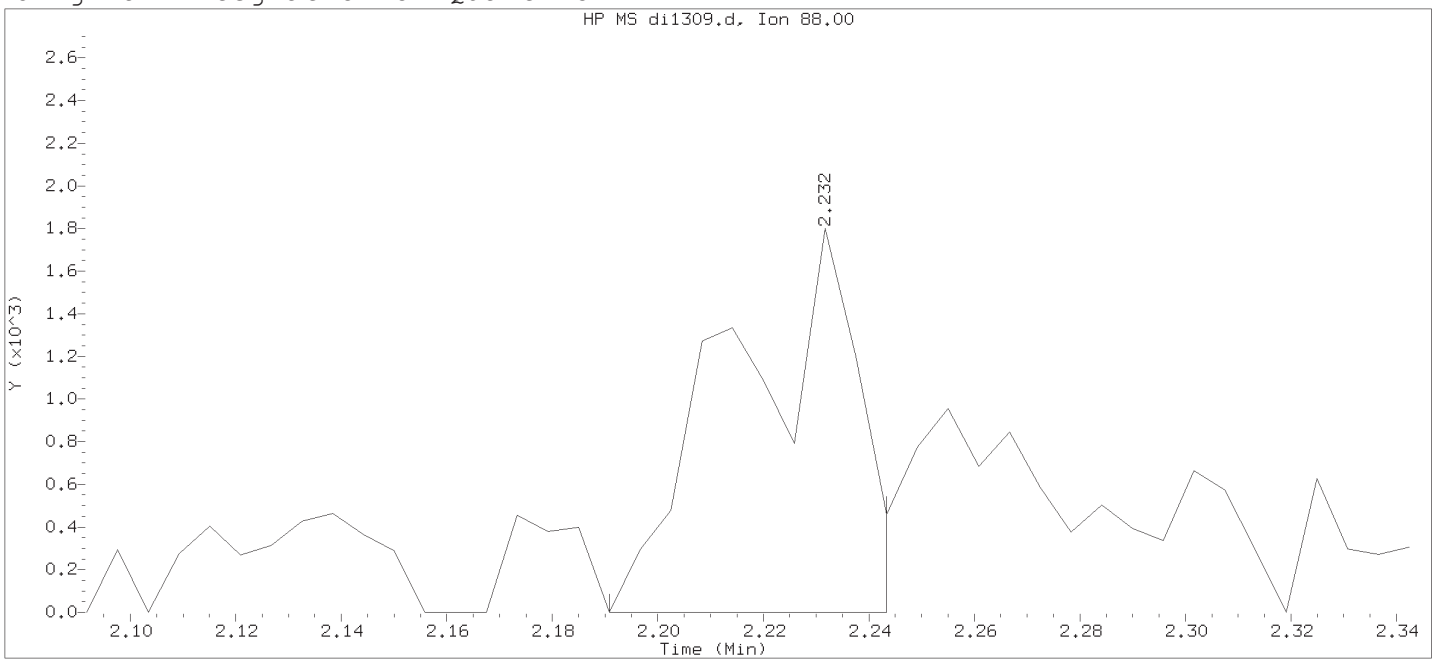
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

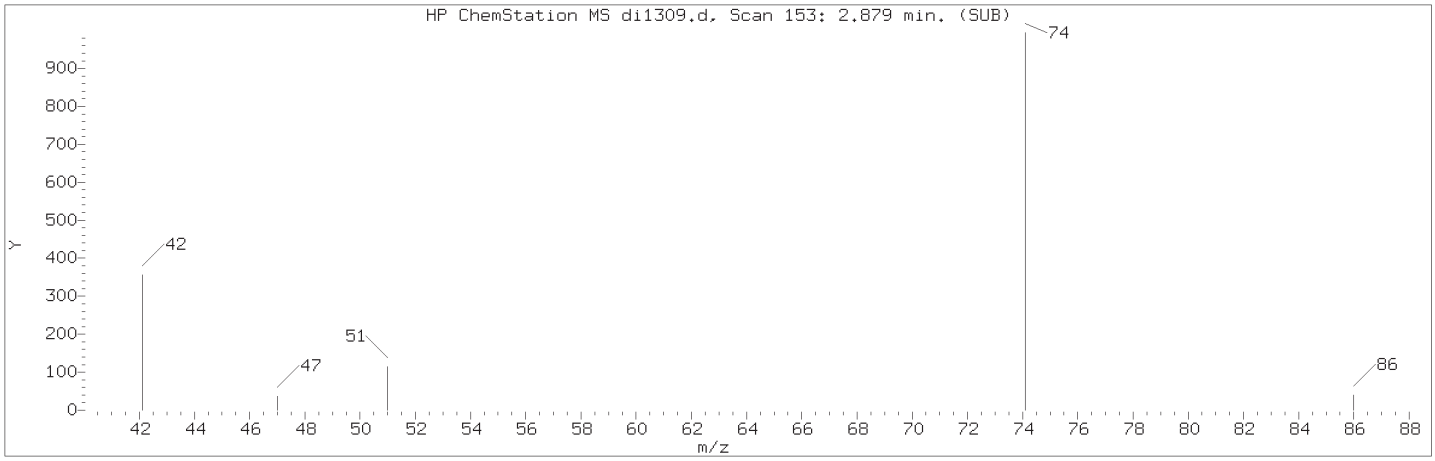
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

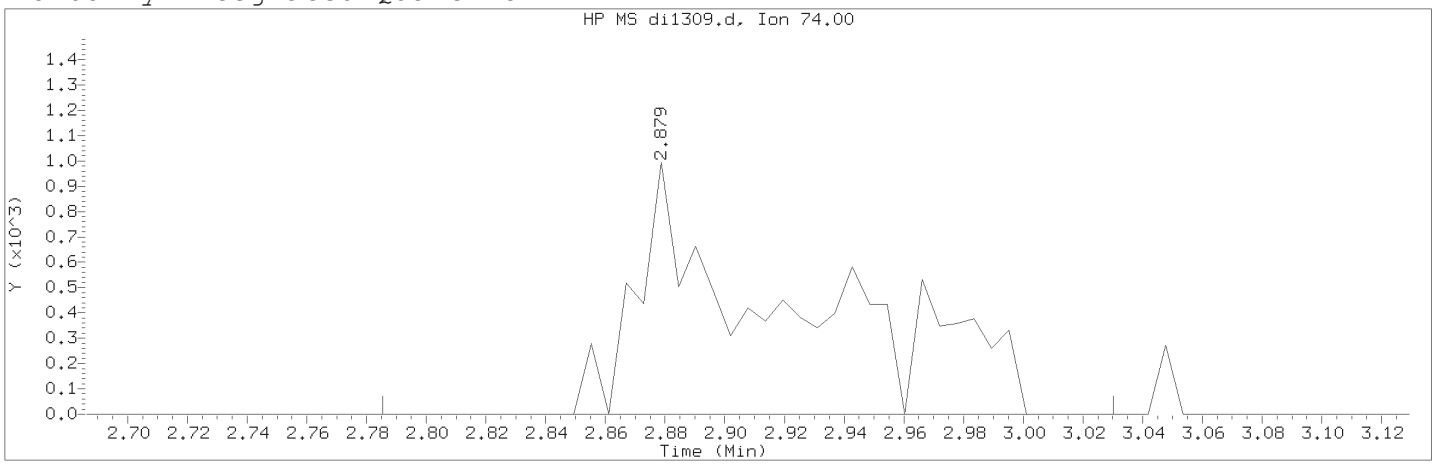
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 42		
Retention Time (minutes)	: 2.232		
Quant Ion	: 88.00		
Area	: 2966		
On-column Amount (ng/ul)	: 0.0977		
Integration start scan	: 34	Integration stop scan:	43
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

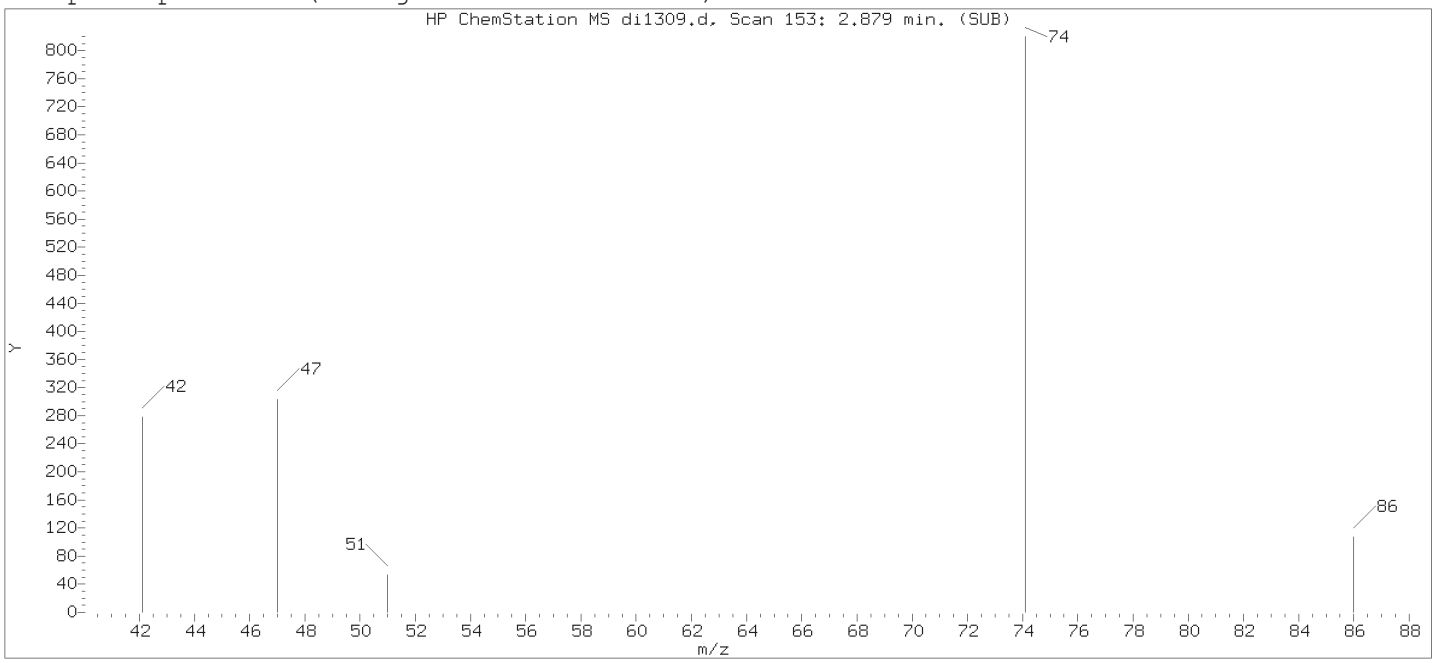
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 153		
Retention Time (minutes)	: 2.879		
Quant Ion	: 74.00		
Area (flag)	: 3568M		
On-Column Amount (ng/ul)	: 0.0839		
Integration start scan	: 136	Integration stop scan:	178
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

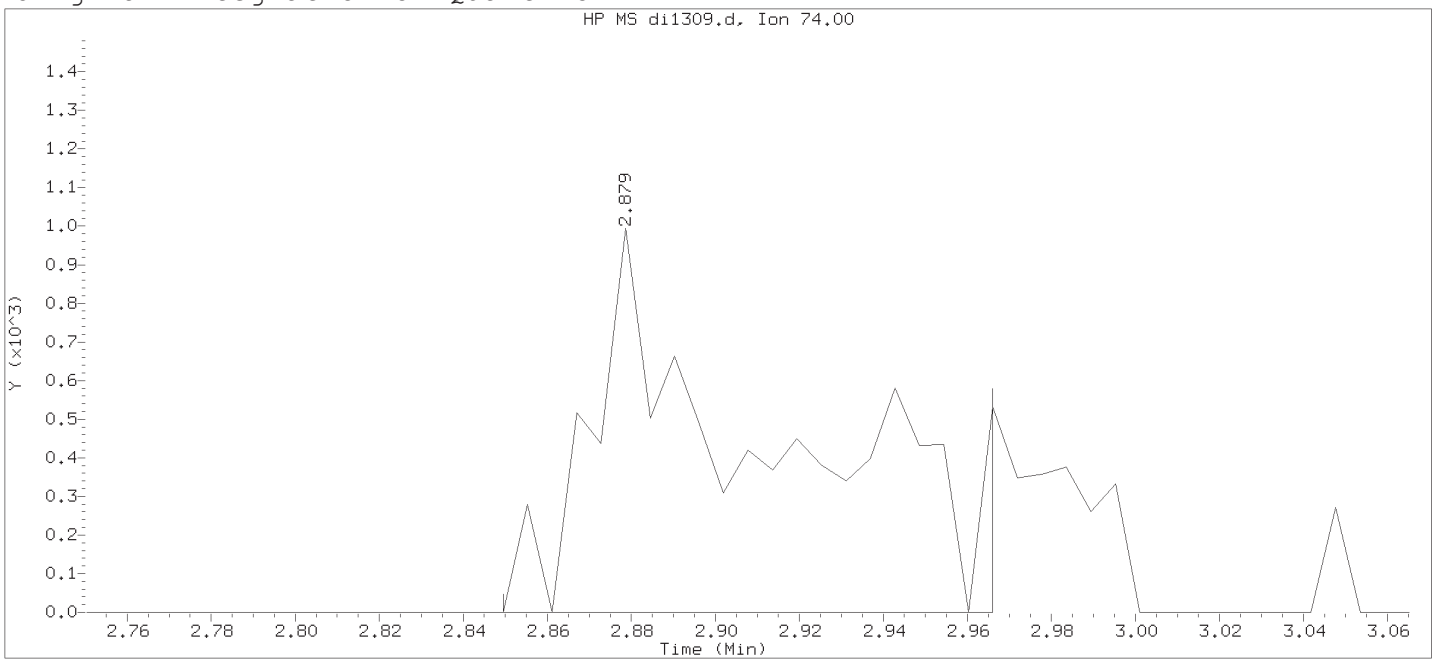
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

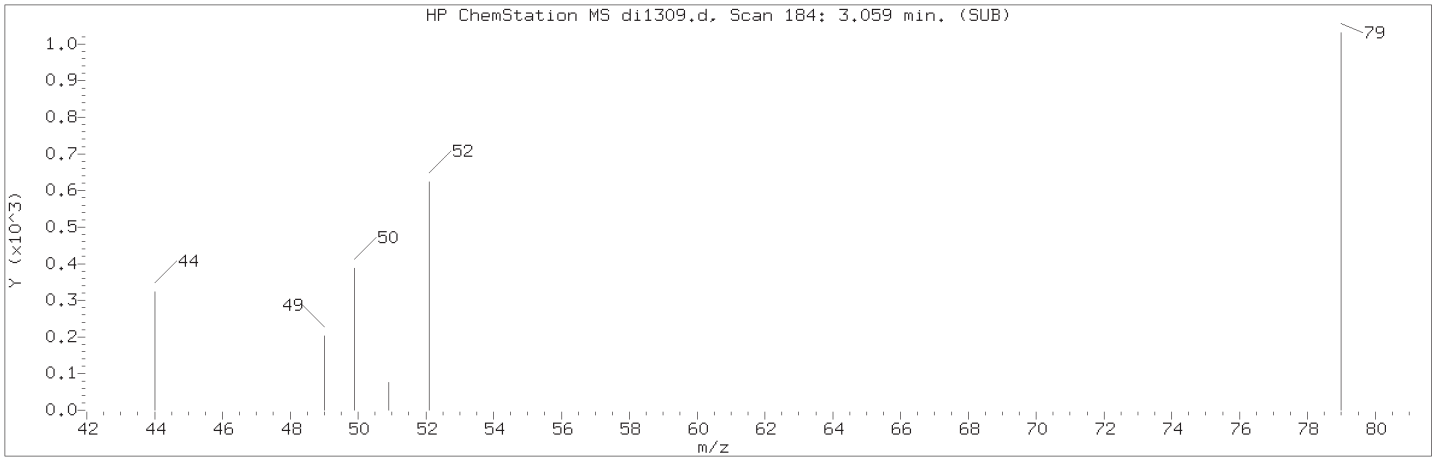
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

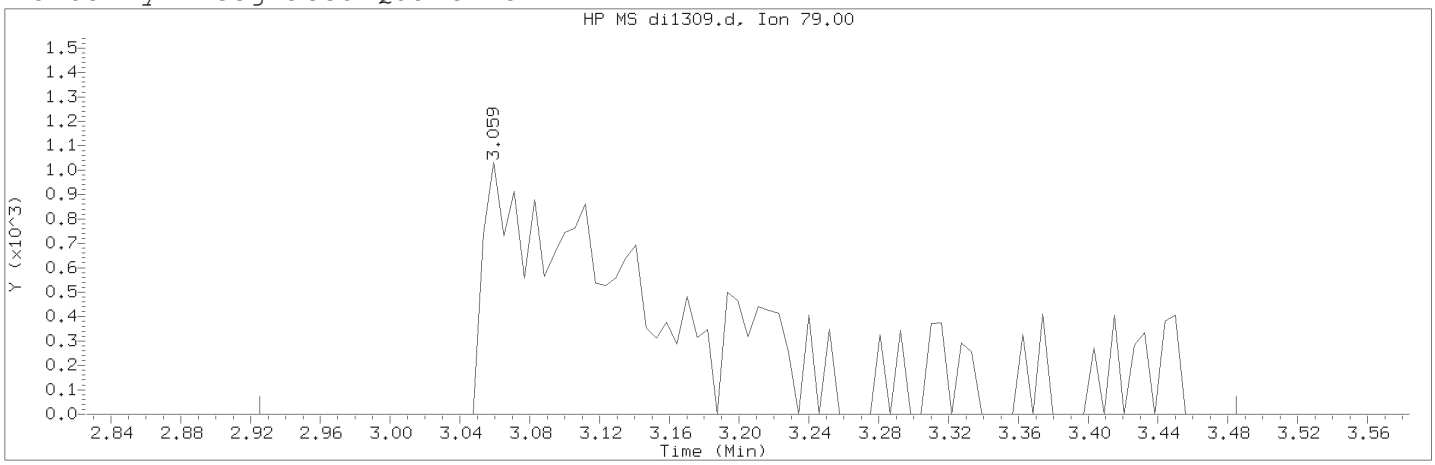
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 153		
Retention Time (minutes)	: 2.879		
Quant Ion	: 74.00		
Area	: 2889		
On-column Amount (ng/ul)	: 0.0677		
Integration start scan	: 147	Integration stop scan:	167
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user name: emonborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

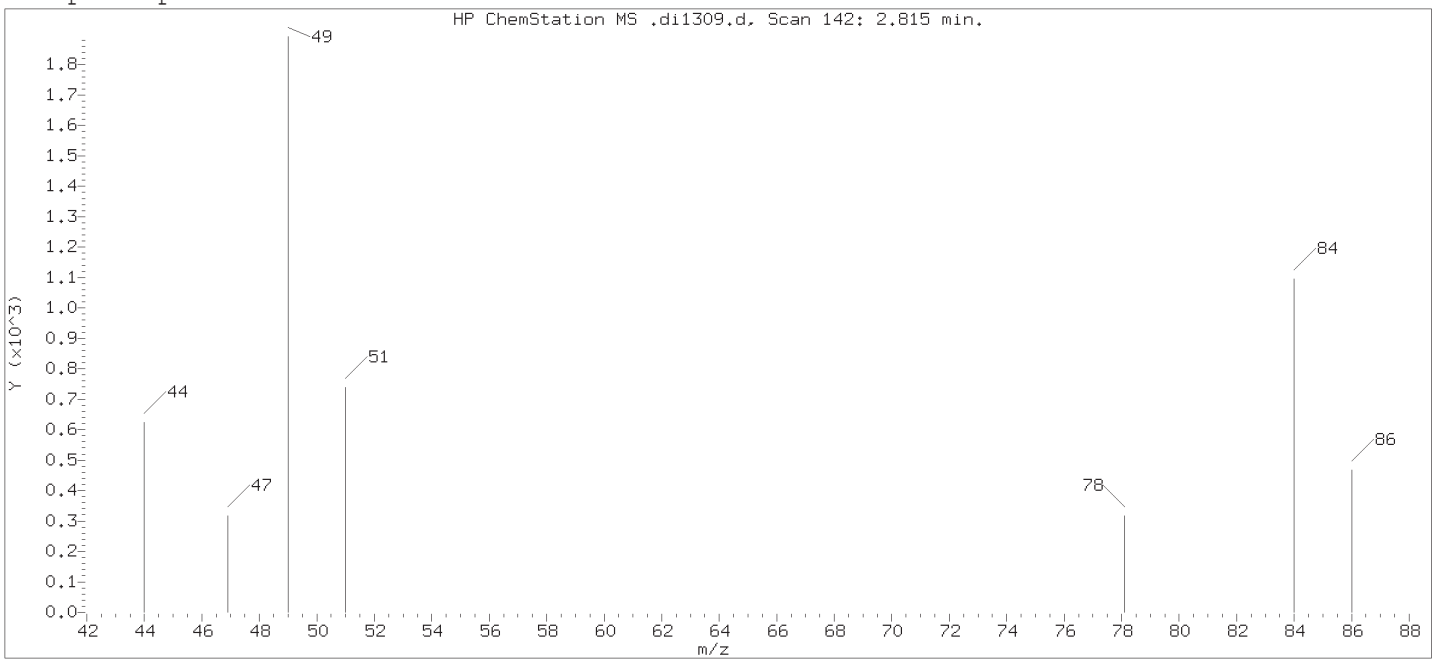
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 184		
Retention Time (minutes)	: 3.059		
Quant Ion	: 79.00		
Area (flag)	: 7769M		
On-Column Amount (ng/ul)	: 0.1048		
Integration start scan	: 160	Integration stop scan:	256
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

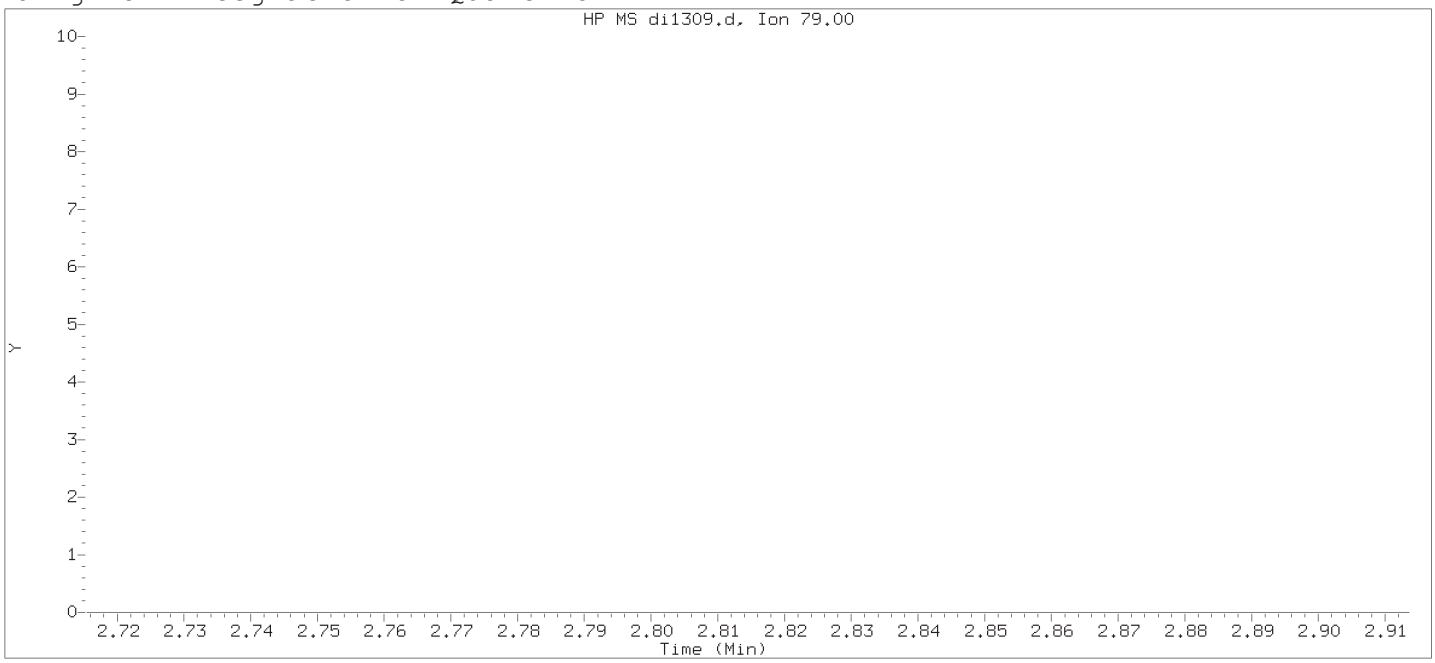
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



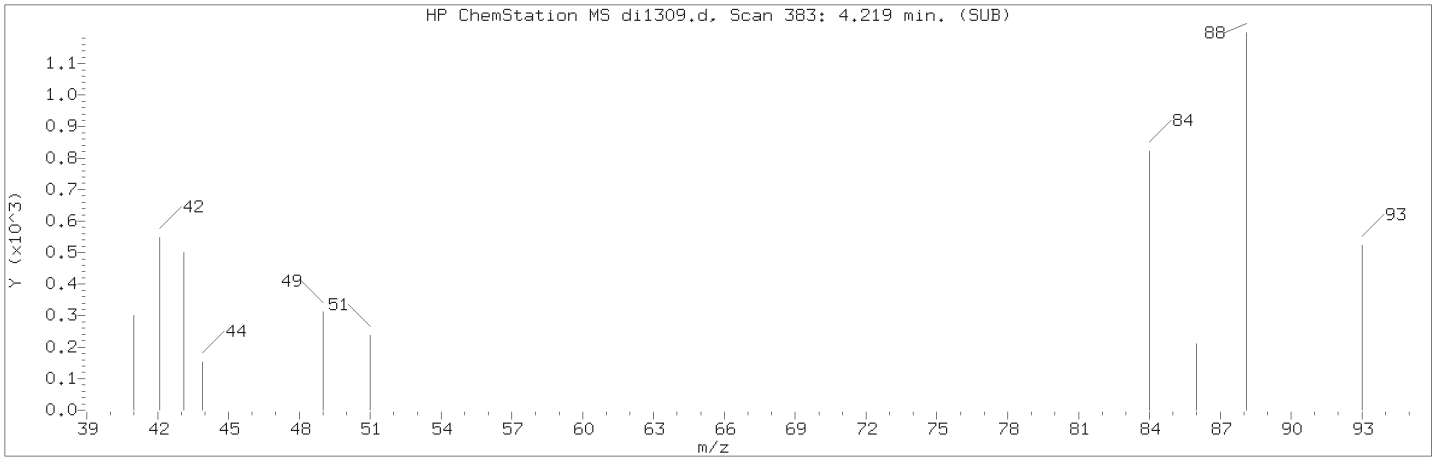
Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

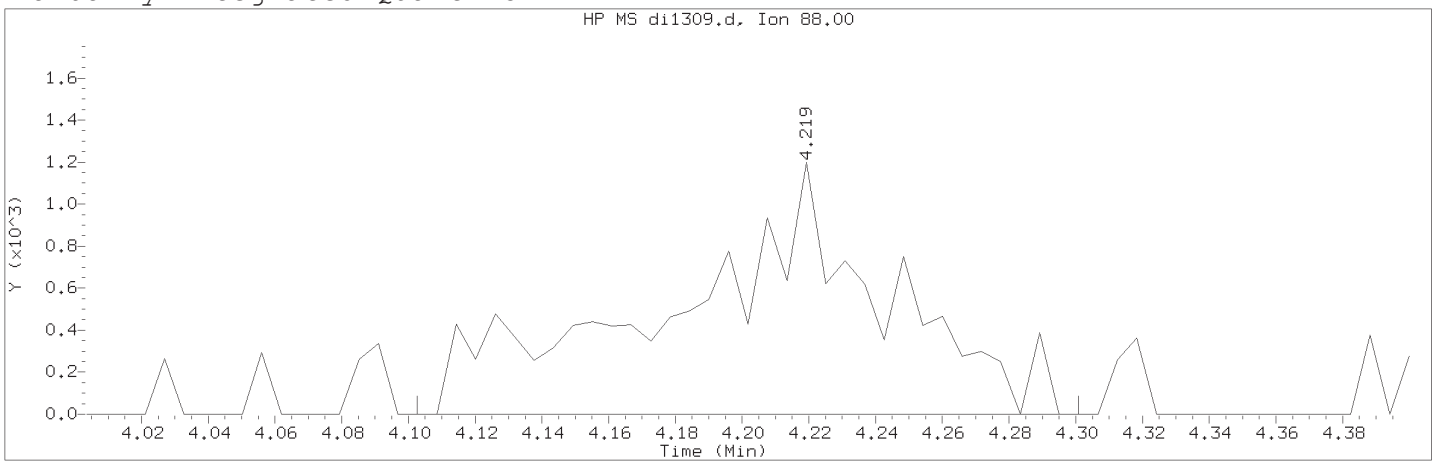
Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compound Number : 5
Compound Name : Pyridine
Expected RT (minutes) : 2.814
Quant Ion : 79.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

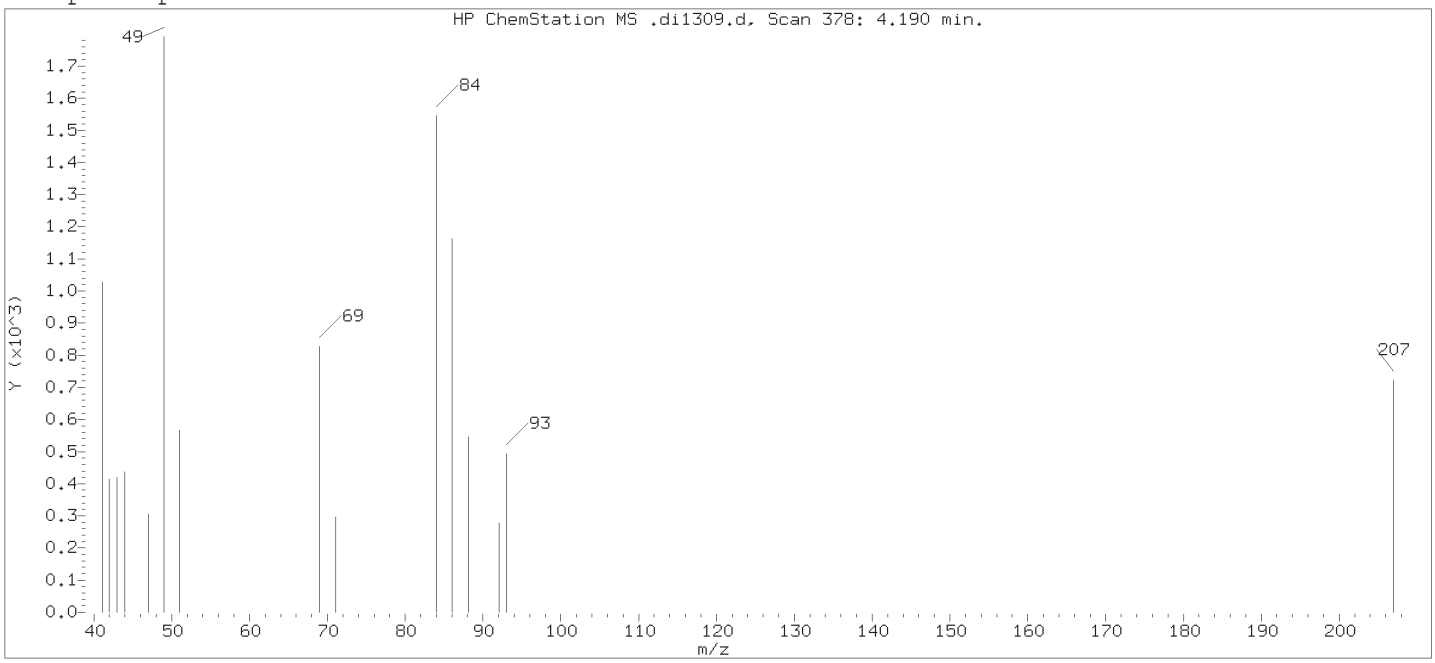
Compound Number	: 8		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 383		
Retention Time (minutes)	: 4.219		
Quant Ion	: 88.00		
Area (flag)	: 5178M		
On-Column Amount (ng/ul)	: 0.1568		
Integration start scan	: 362	Integration stop scan:	396
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

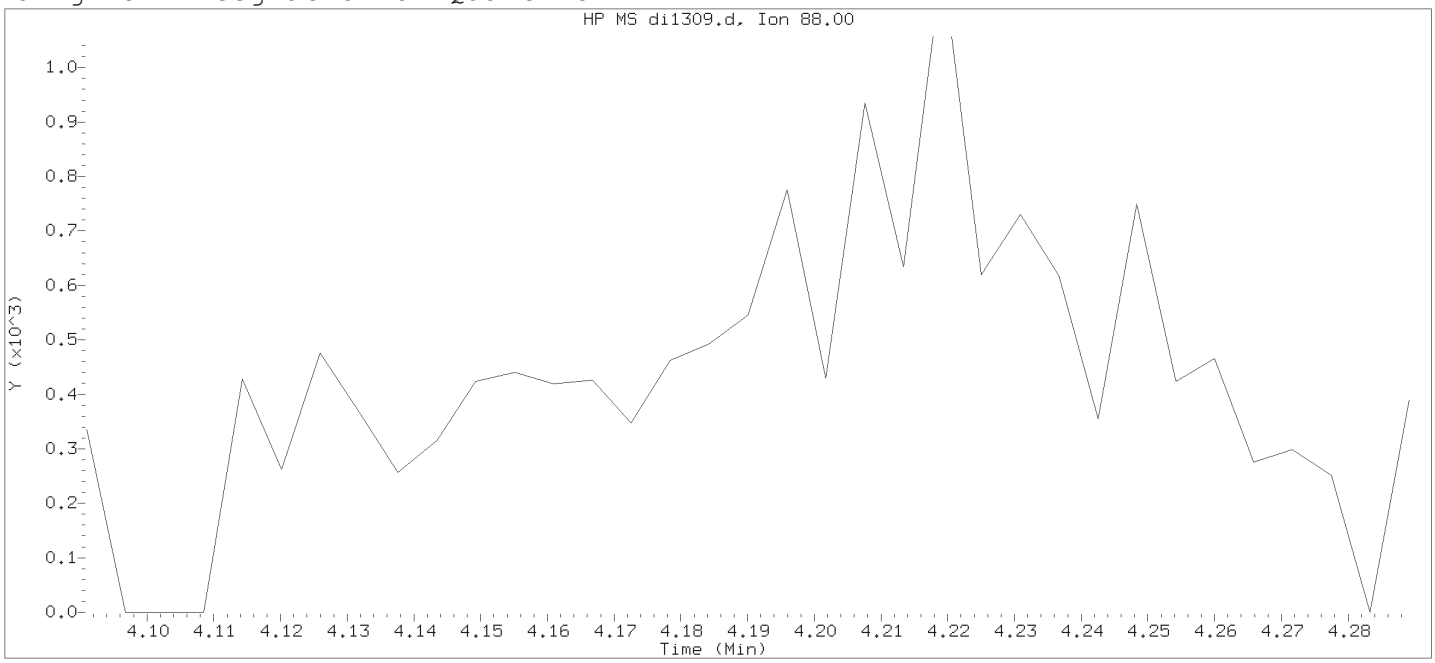
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

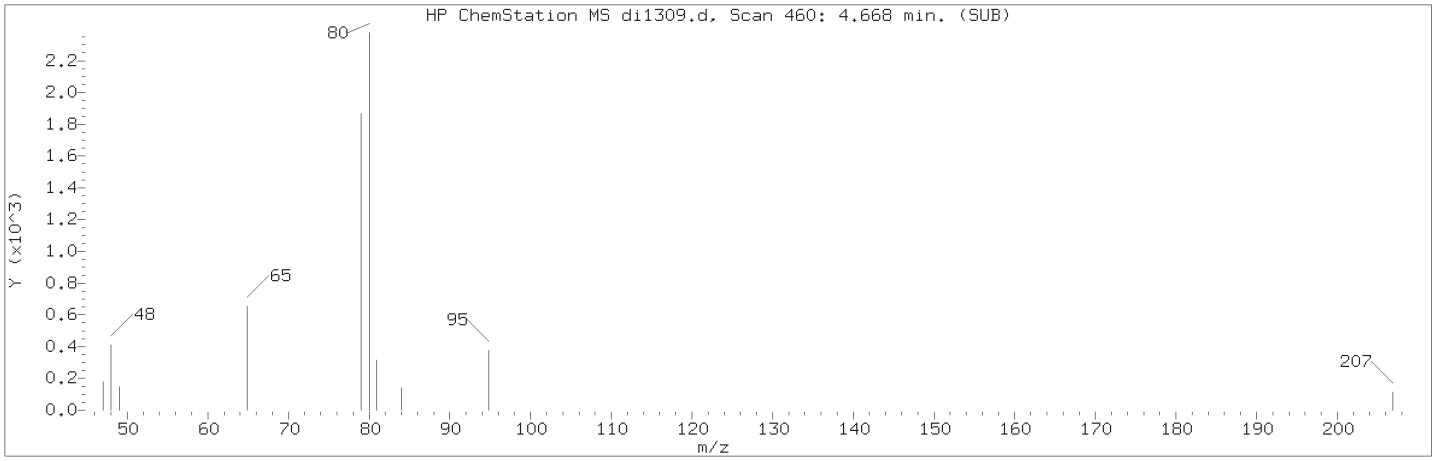
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

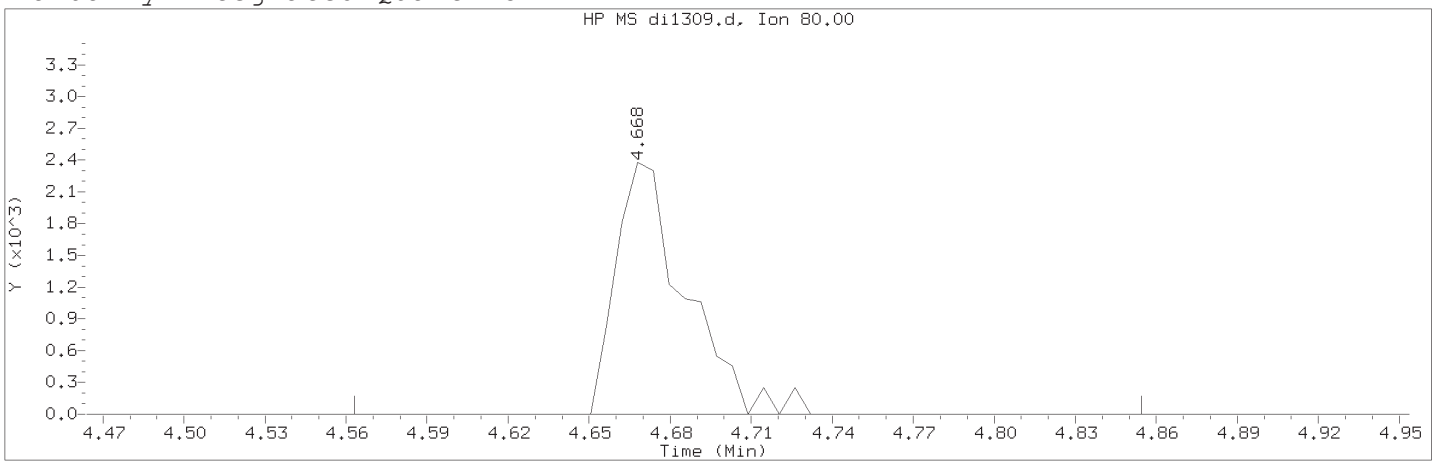
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.190
Quant Ion : 88.00

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: emonborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

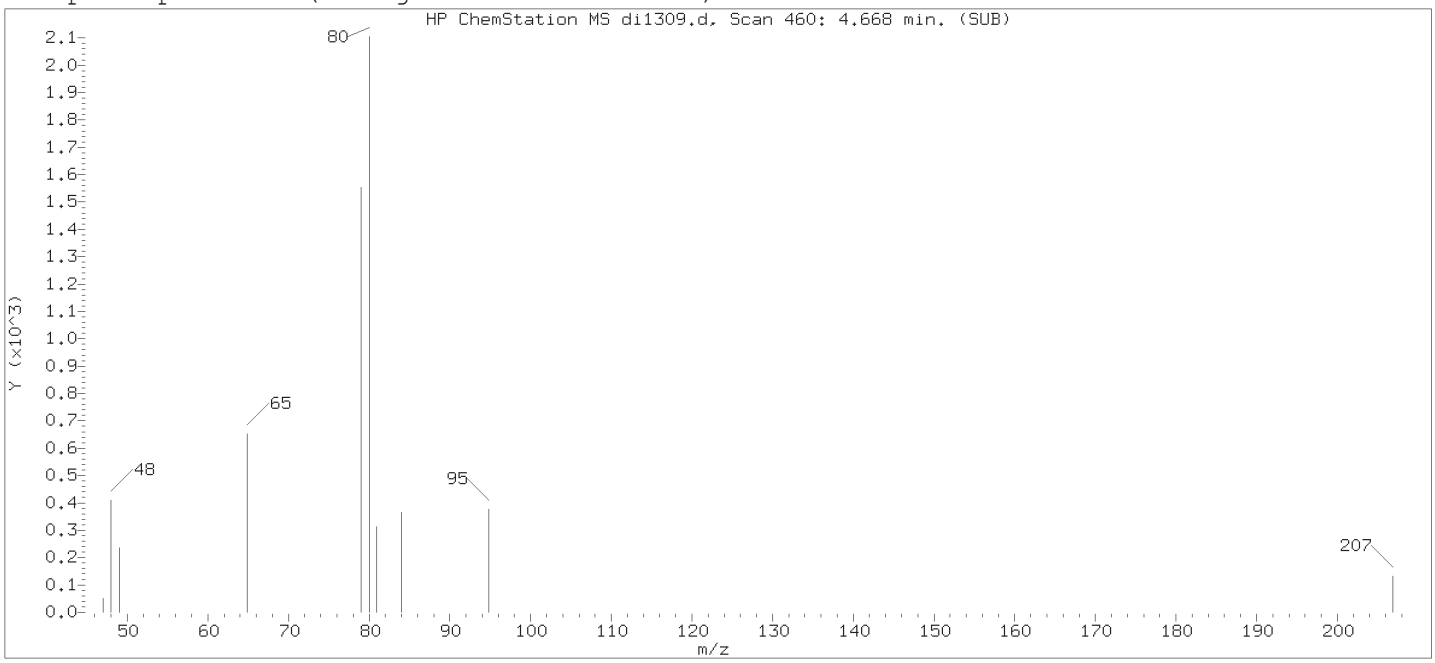
Compound Number : 9
Compound Name : Methyl methanesulfonate
Scan Number : 460
Retention Time (minutes) : 4.668
Quant Ion : 80.00
Area (flag) : 4264M
On-Column Amount (ng/ul) : 0.1194
Integration start scan : 441 Integration stop scan: 491
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

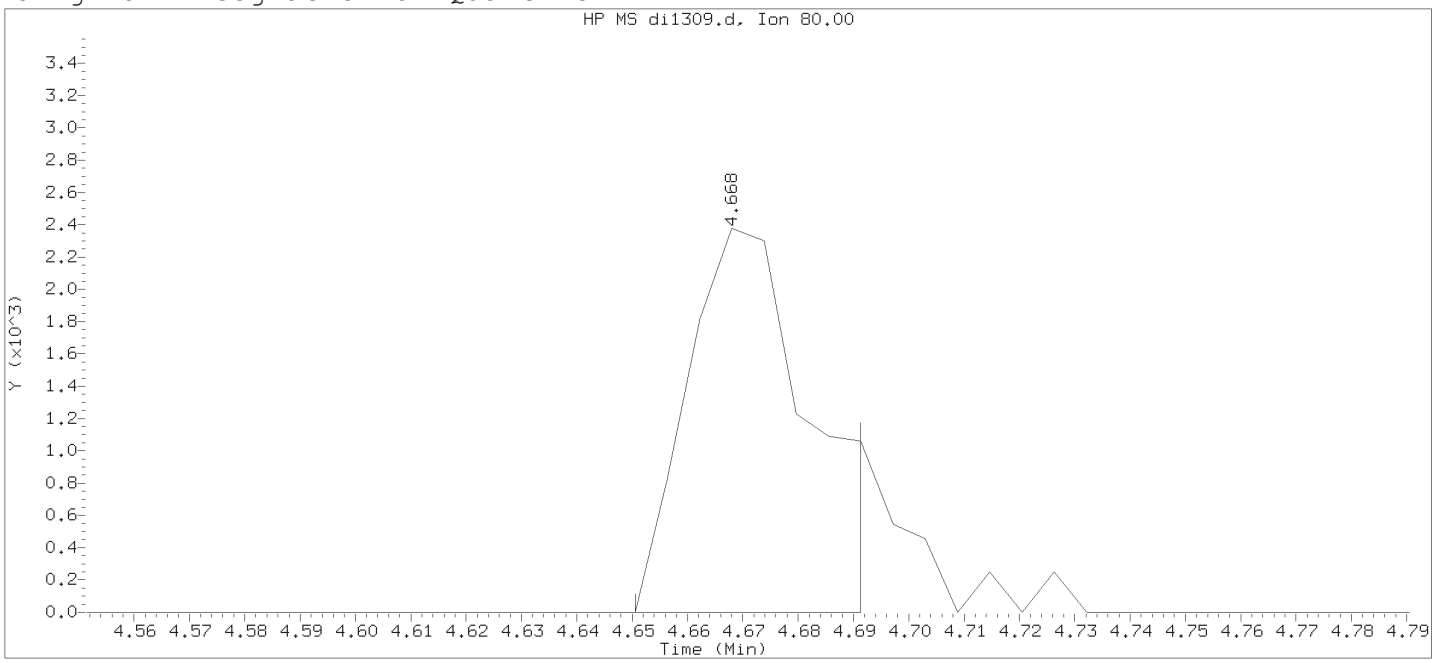
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

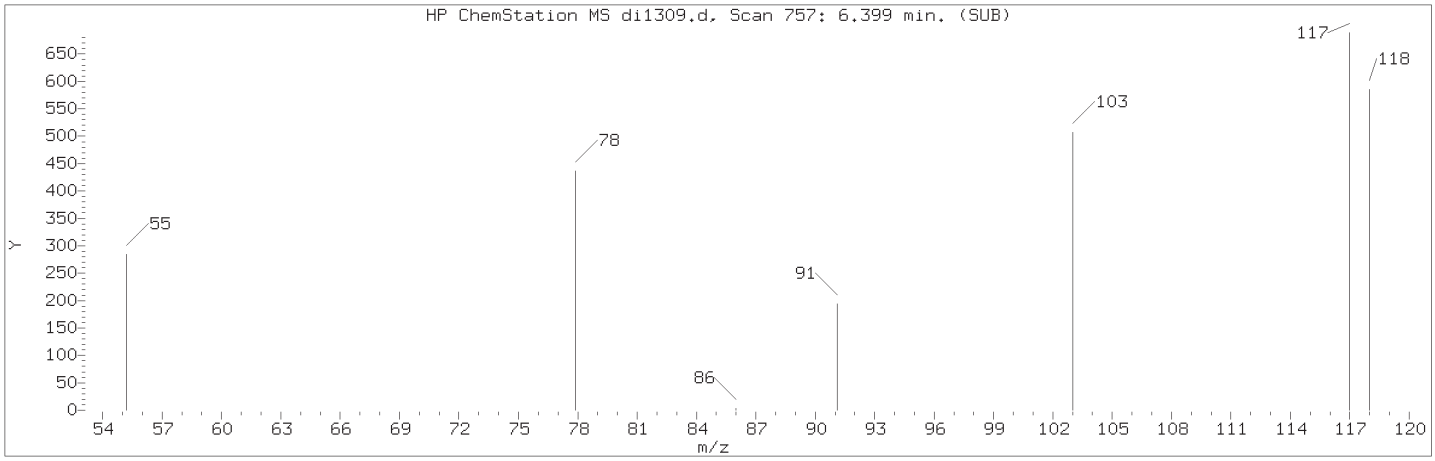
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

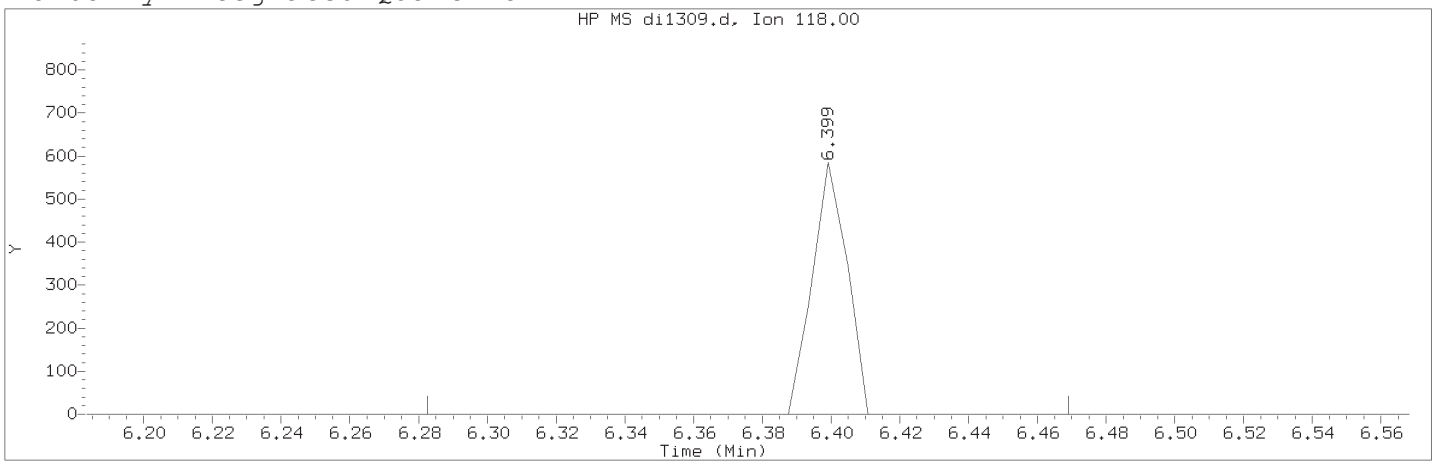
Compound Number	: 9		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 460		
Retention Time (minutes)	: 4.668		
Quant Ion	: 80.00		
Area	: 3553		
On-column Amount (ng/ul)	: 0.0972		
Integration start scan	: 456	Integration stop scan:	463
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

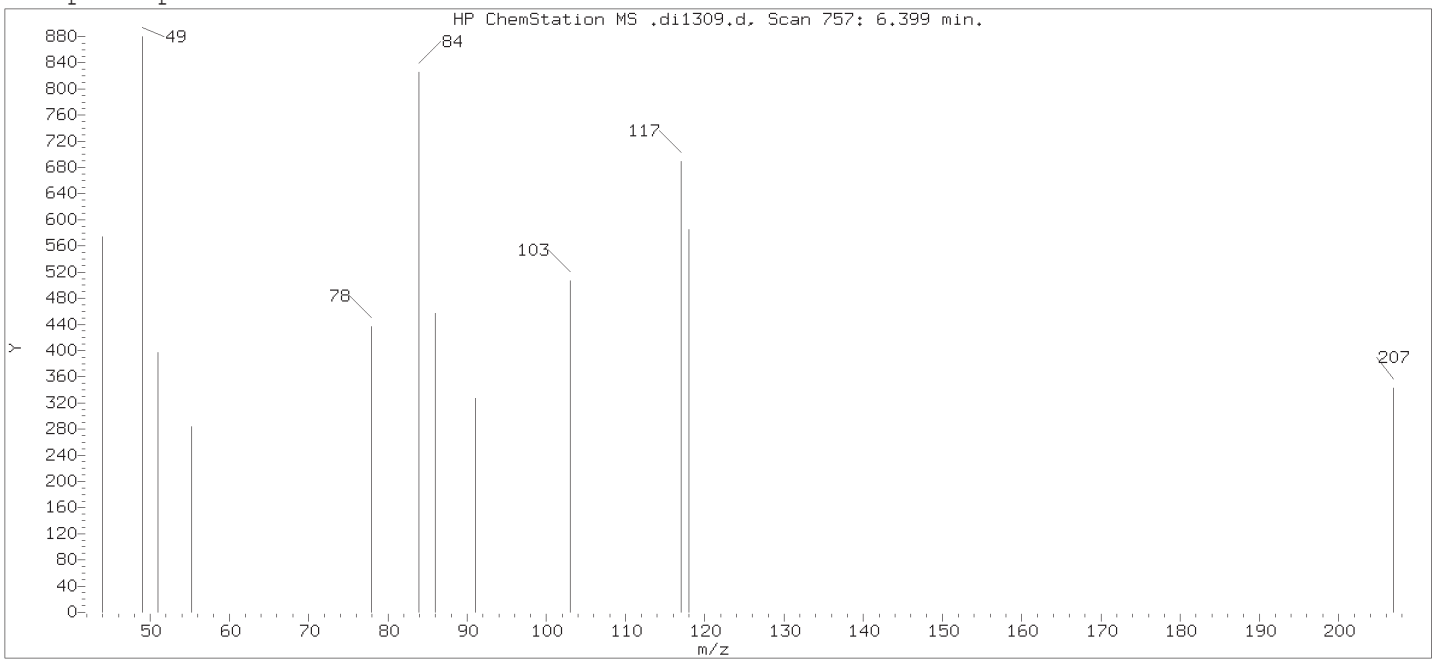
Compound Number	: 20		
Compound Name	: a-methylstyrene		
Scan Number	: 757		
Retention Time (minutes)	: 6.399		
Quant Ion	: 118.00		
Area (flag)	: 412M		
On-Column Amount (ng/ul)	: 0.0689		
Integration start scan	: 736	Integration stop scan:	768
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

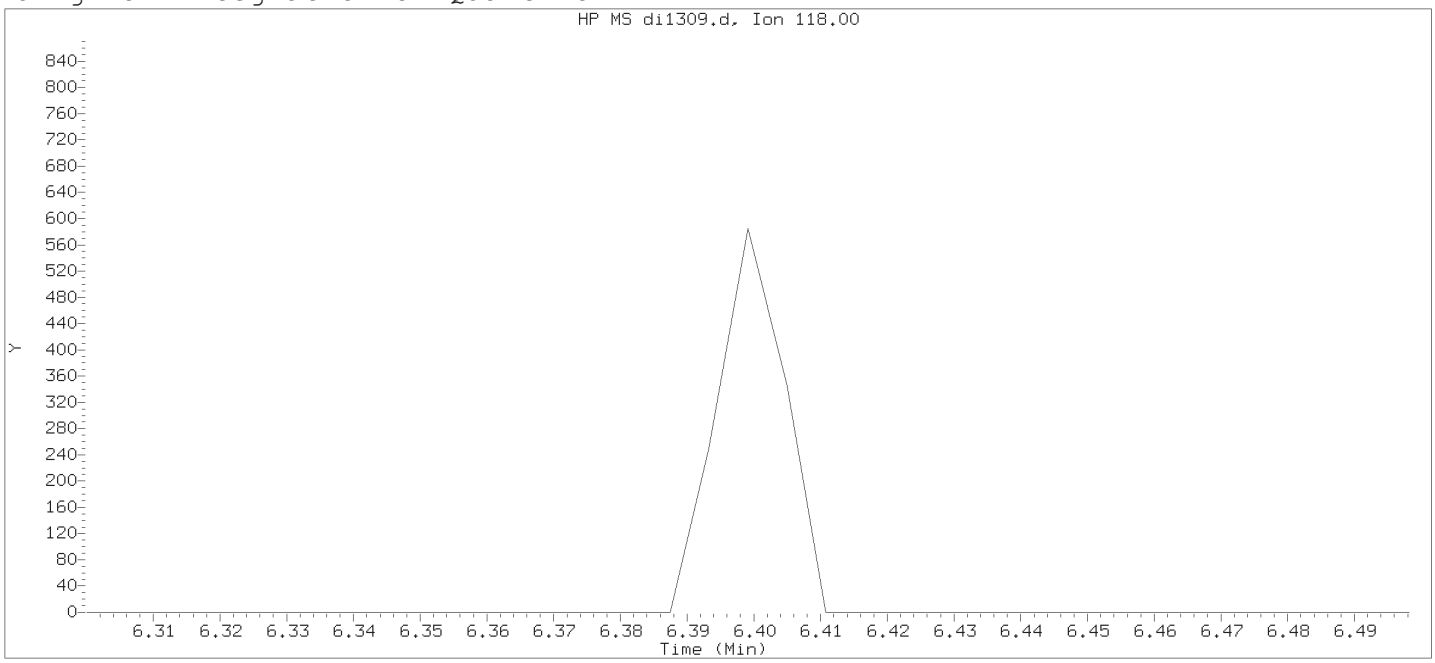
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

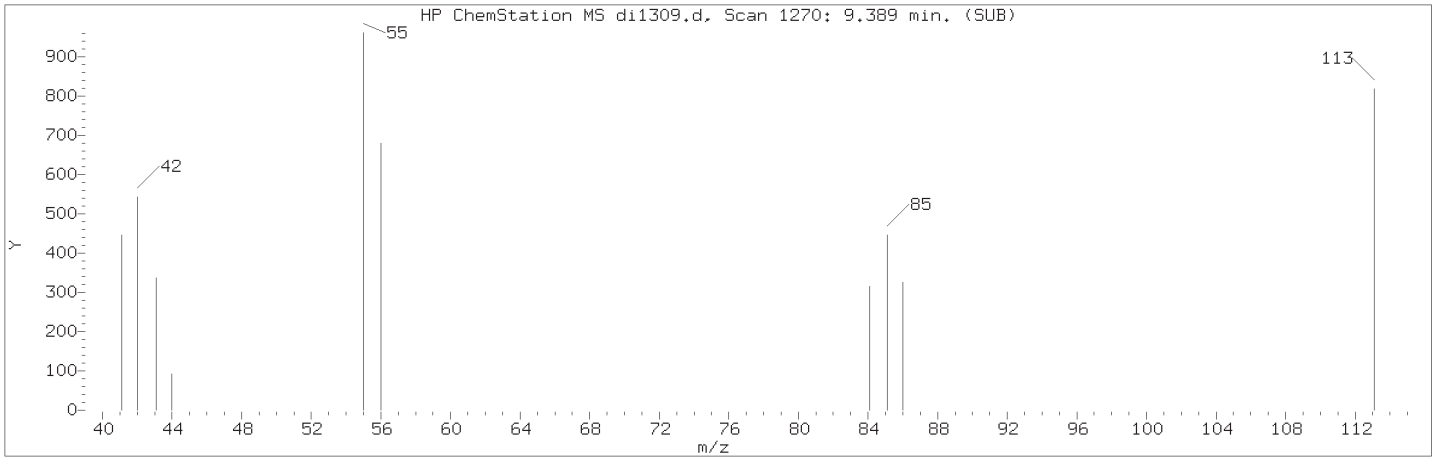
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

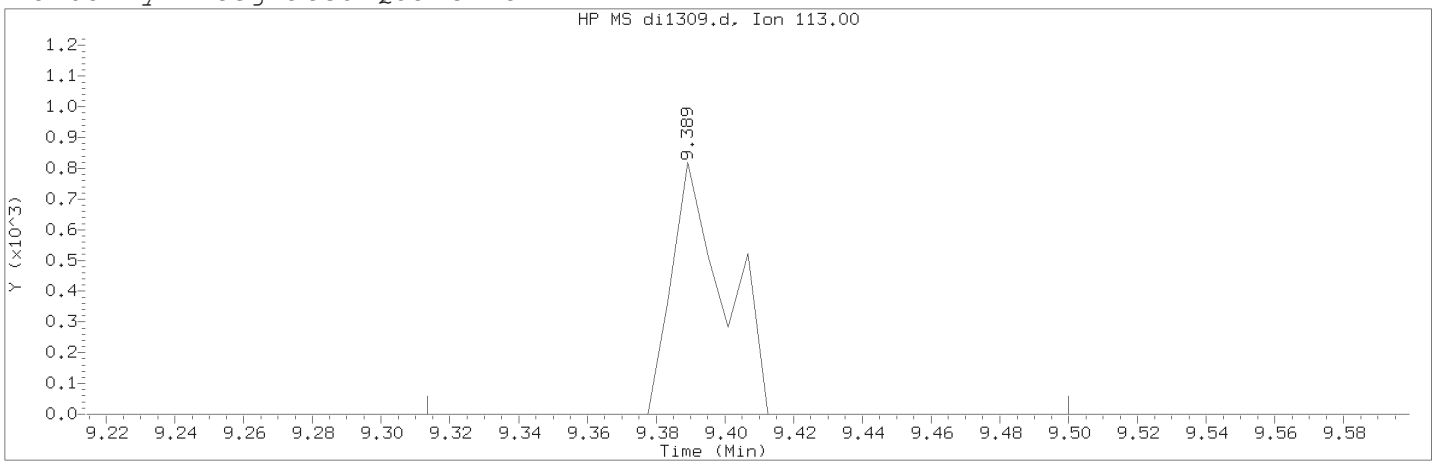
Compound Number : 20
Compound Name : a-methylstyrene
Expected RT (minutes) : 6.399
Quant Ion : 118.00

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

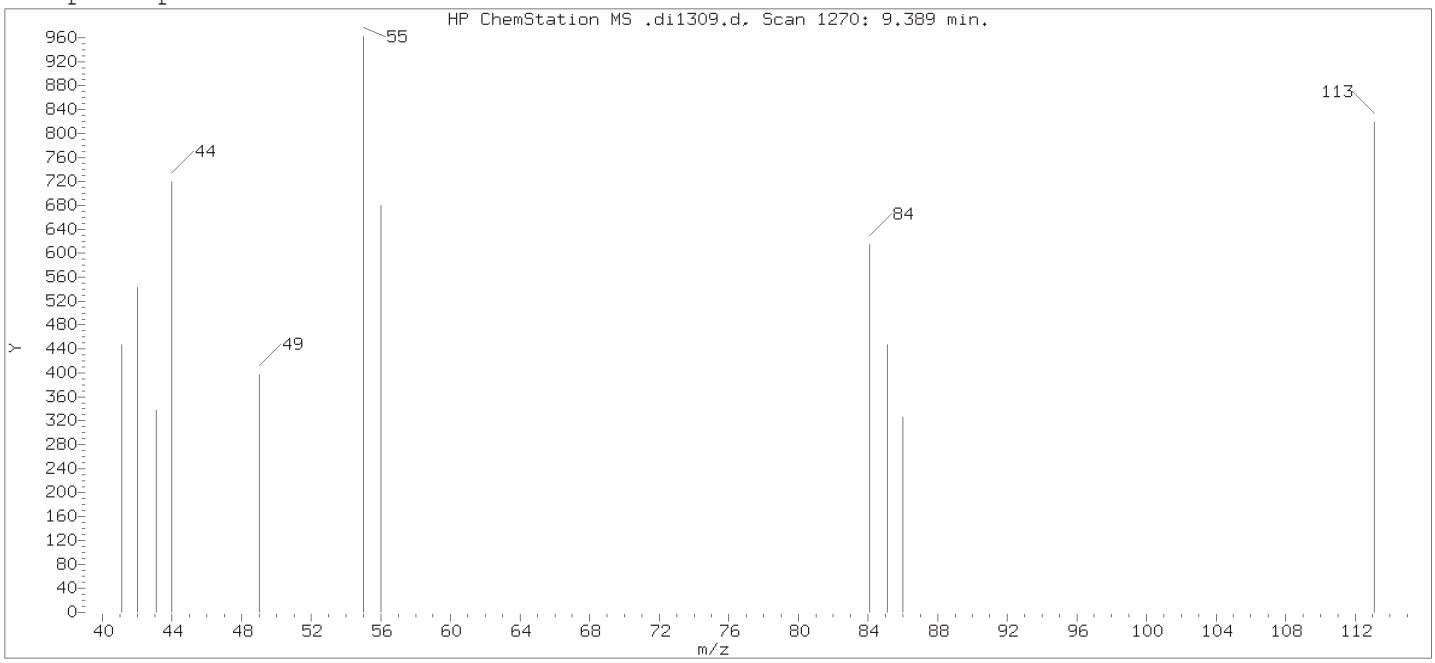
Compound Number	: 76		
Compound Name	: Caprolactam		
Scan Number	: 1270		
Retention Time (minutes)	: 9.389		
Quant Ion	: 113.00		
Area (flag)	: 876M		
On-Column Amount (ng/ul)	: 0.0533		
Integration start scan	: 1256	Integration stop scan:	1288
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

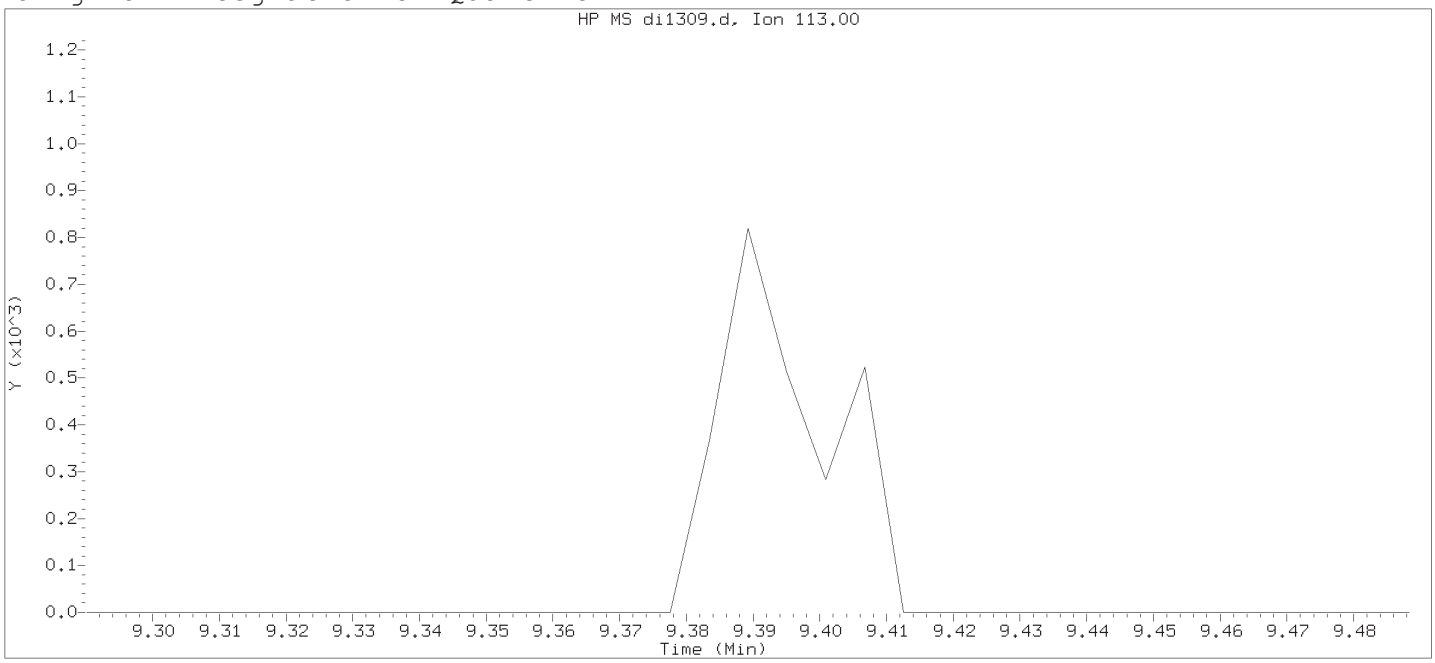
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



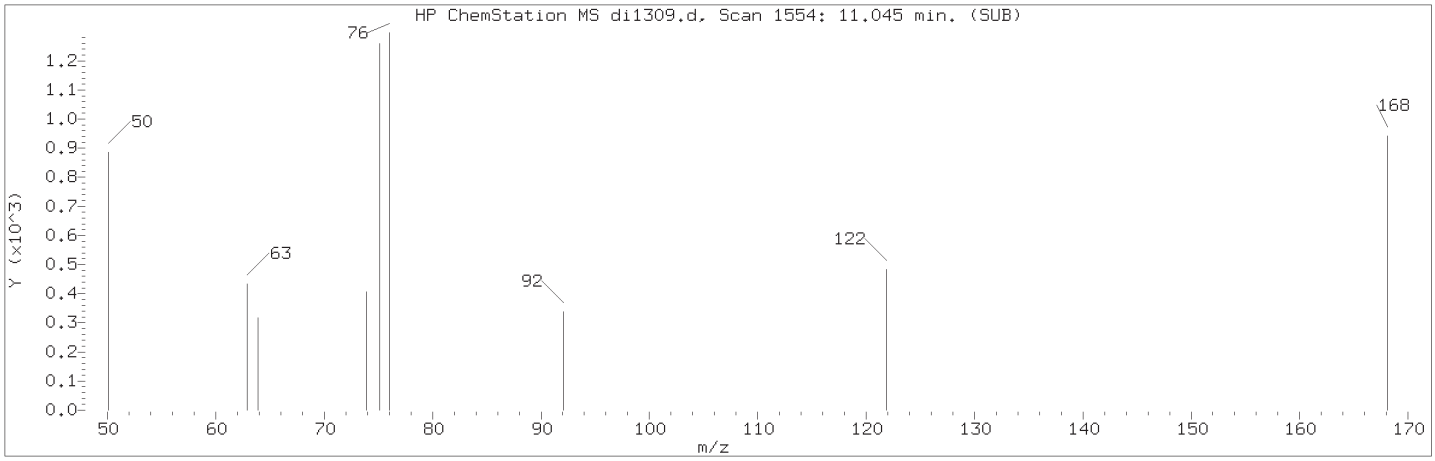
Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

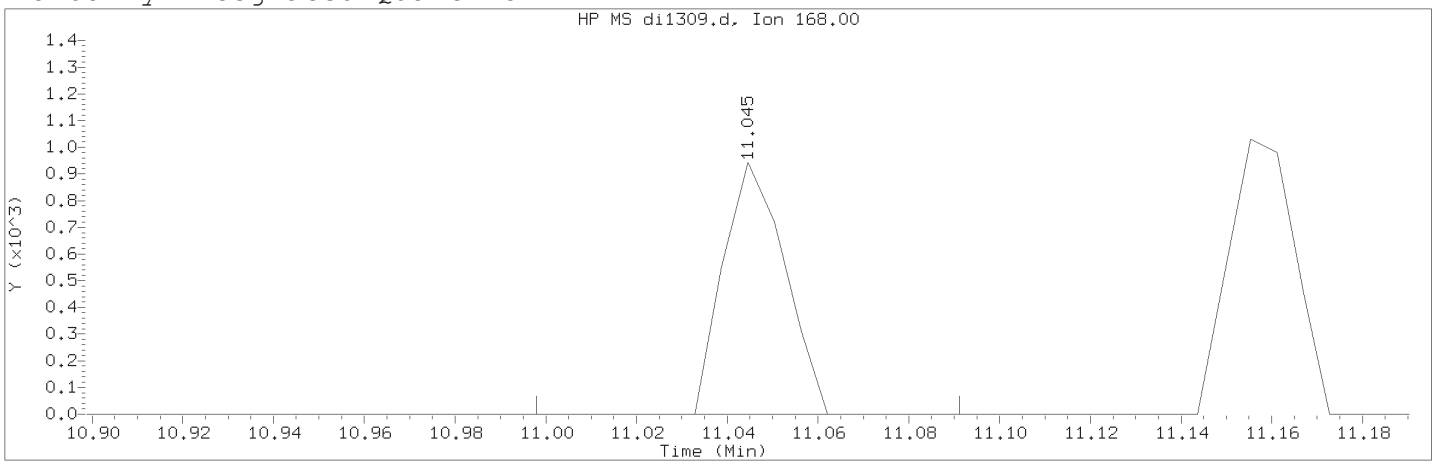
Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compound Number : 76
Compound Name : Caprolactam
Expected RT (minutes) : 9.389
Quant Ion : 113.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

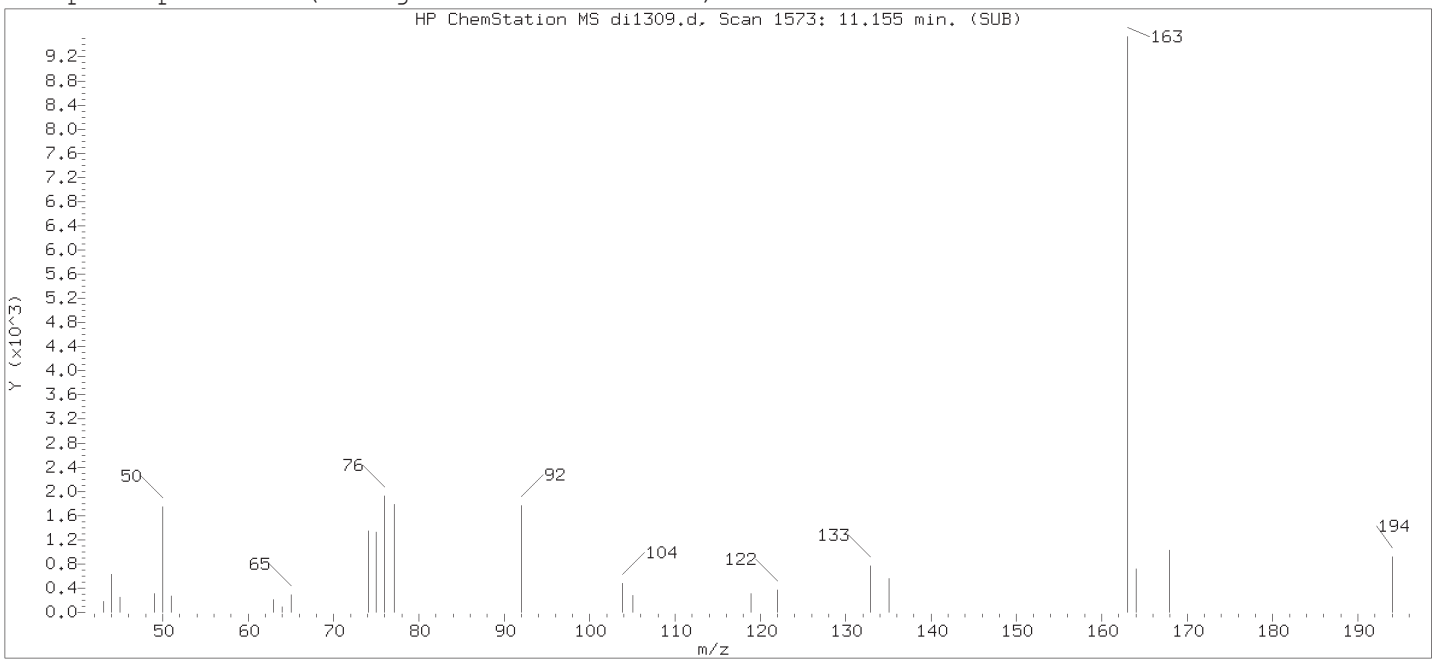
Compound Number : 105
Compound Name : 1,4-Dinitrobenzene
Scan Number : 1554
Retention Time (minutes) : 11.045
Quant Ion : 168.00
Area (flag) : 884M
On-Column Amount (ng/ul) : 0.0650
Integration start scan : 1545 Integration stop scan: 1561
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

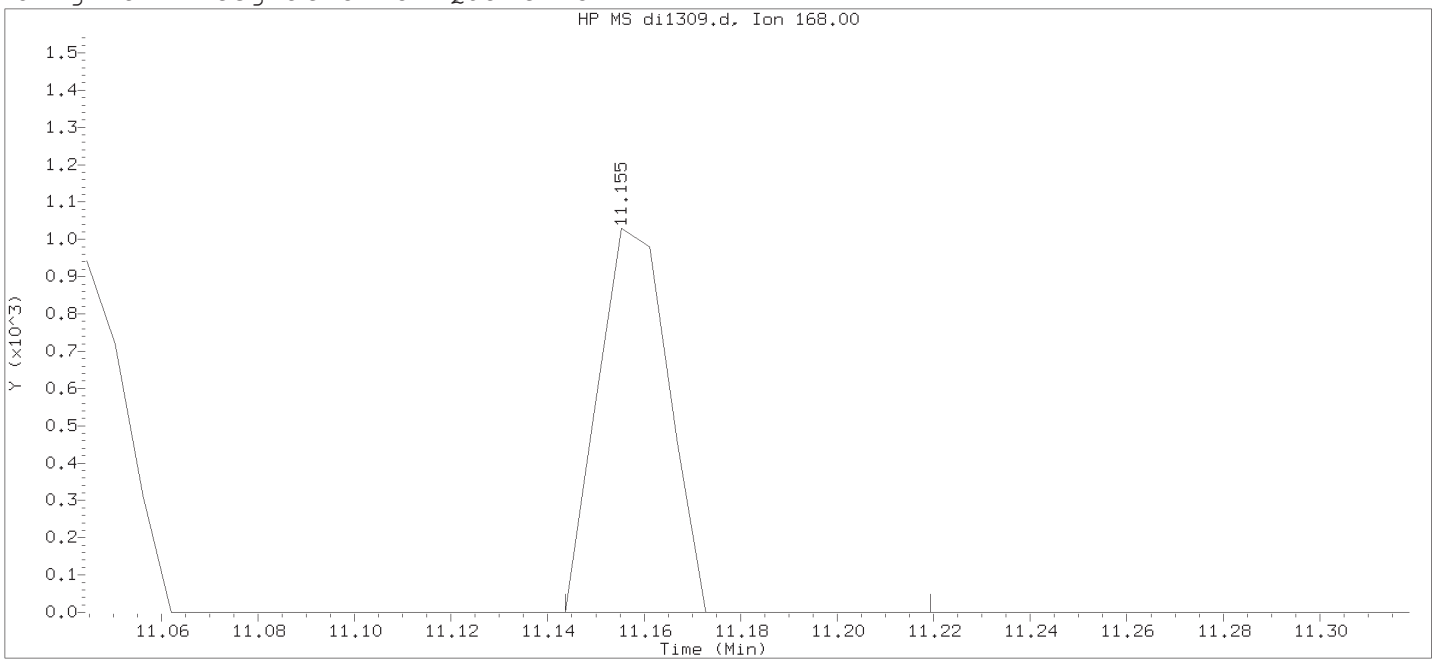
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

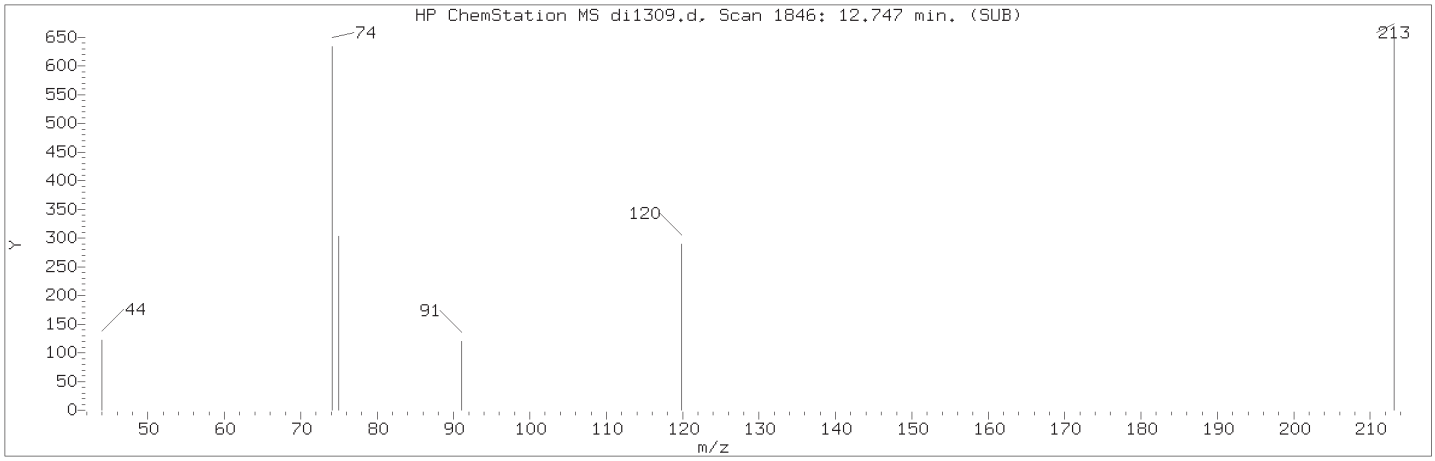
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

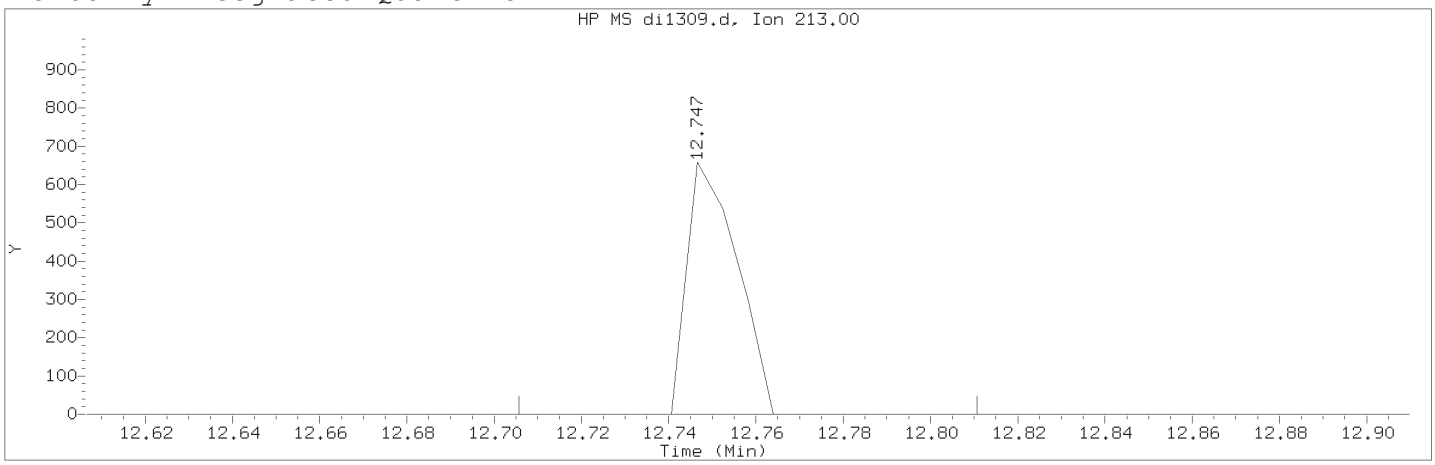
Compound Number	: 105		
Compound Name	: 1,4-Dinitrobenzene		
Scan Number	: 1573		
Retention Time (minutes)	: 11.155		
Quant Ion	: 168.00		
Area	: 1041		
On-column Amount (ng/ul)	: 0.0748		
Integration start scan	: 1570	Integration stop scan:	1583
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user: Edward Monborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

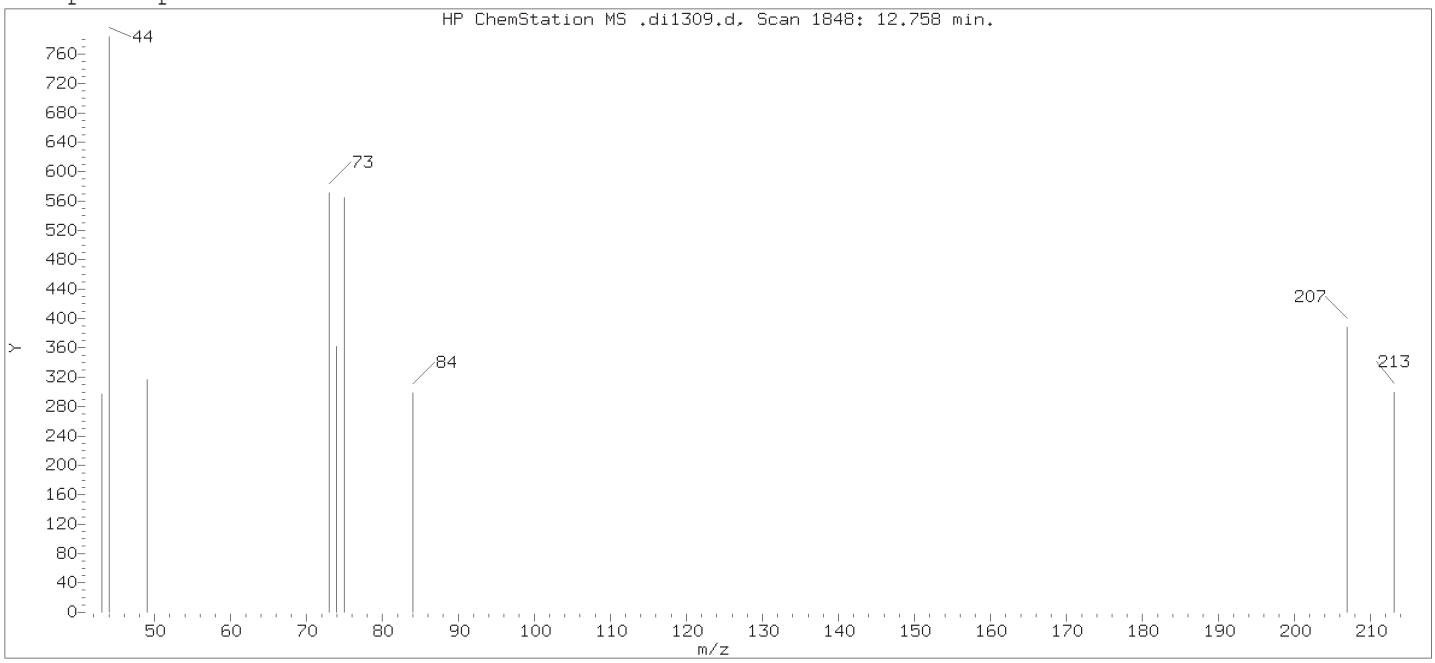
Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 1846
Retention Time (minutes) : 12.747
Quant Ion : 213.00
Area (flag) : 523M
On-Column Amount (ng/ul) : 0.0529
Integration start scan : 1838 Integration stop scan: 1856
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

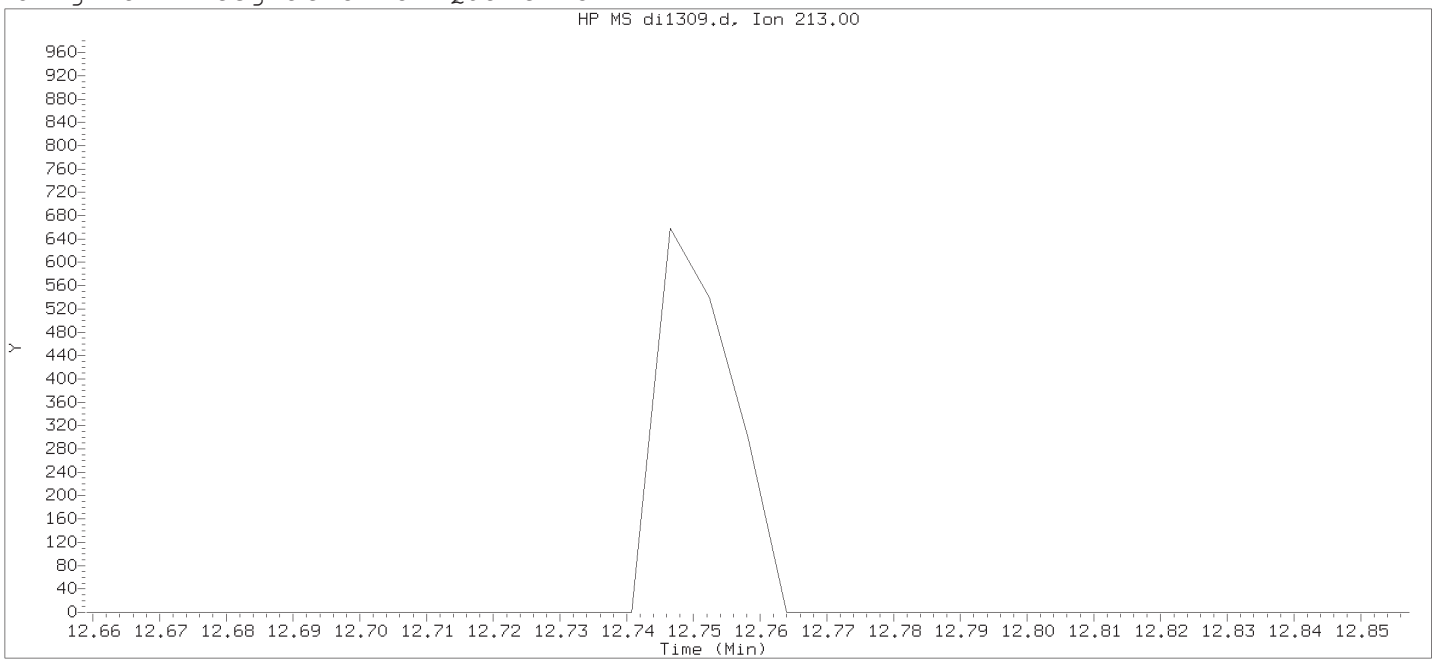
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



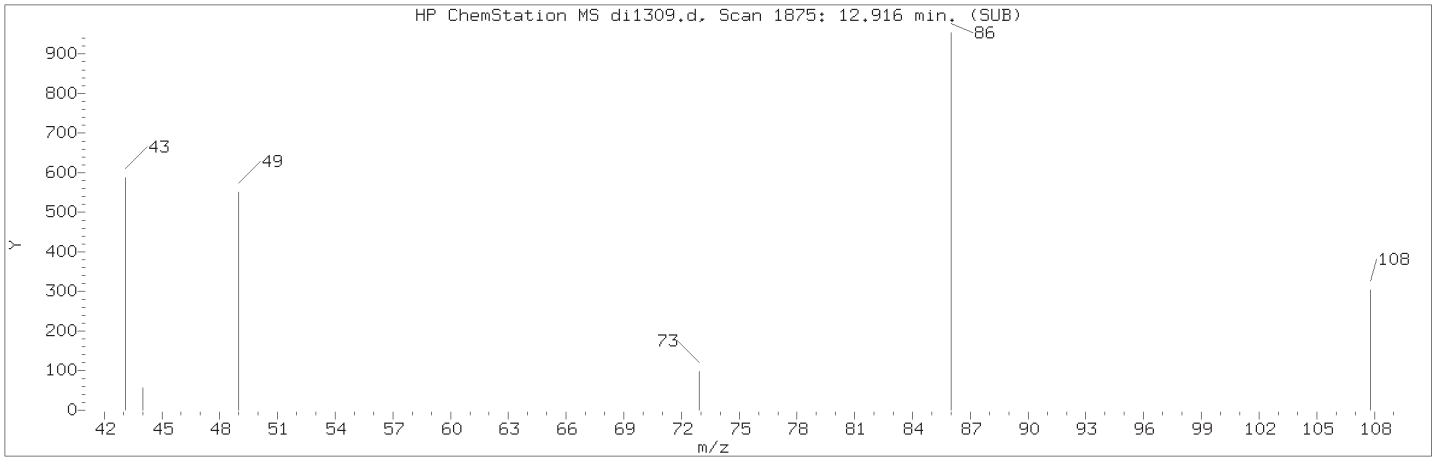
Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

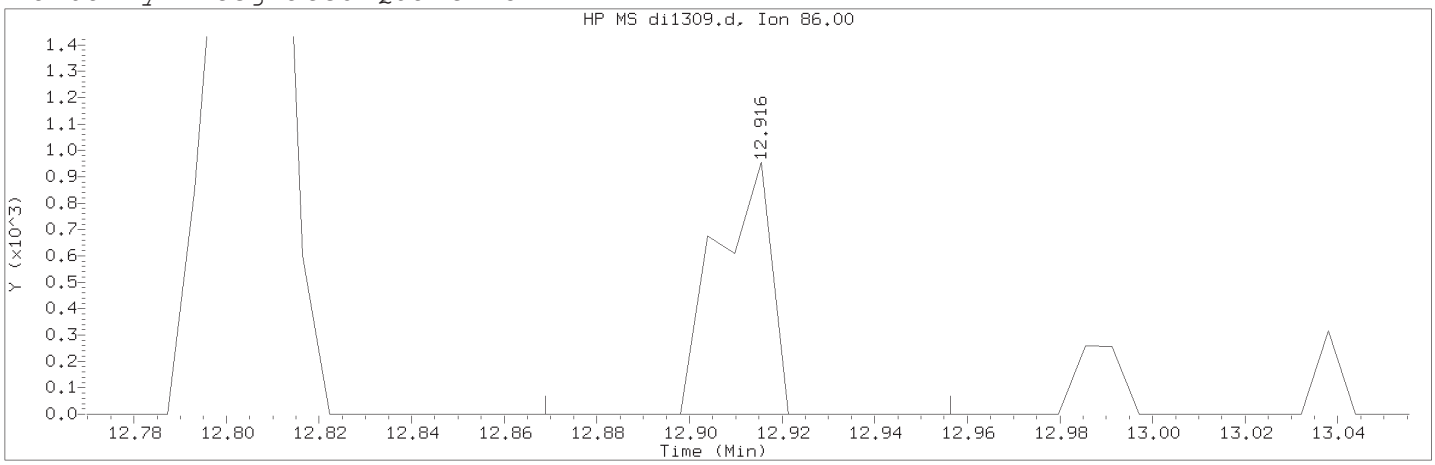
Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 12.758
Quant Ion : 213.00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

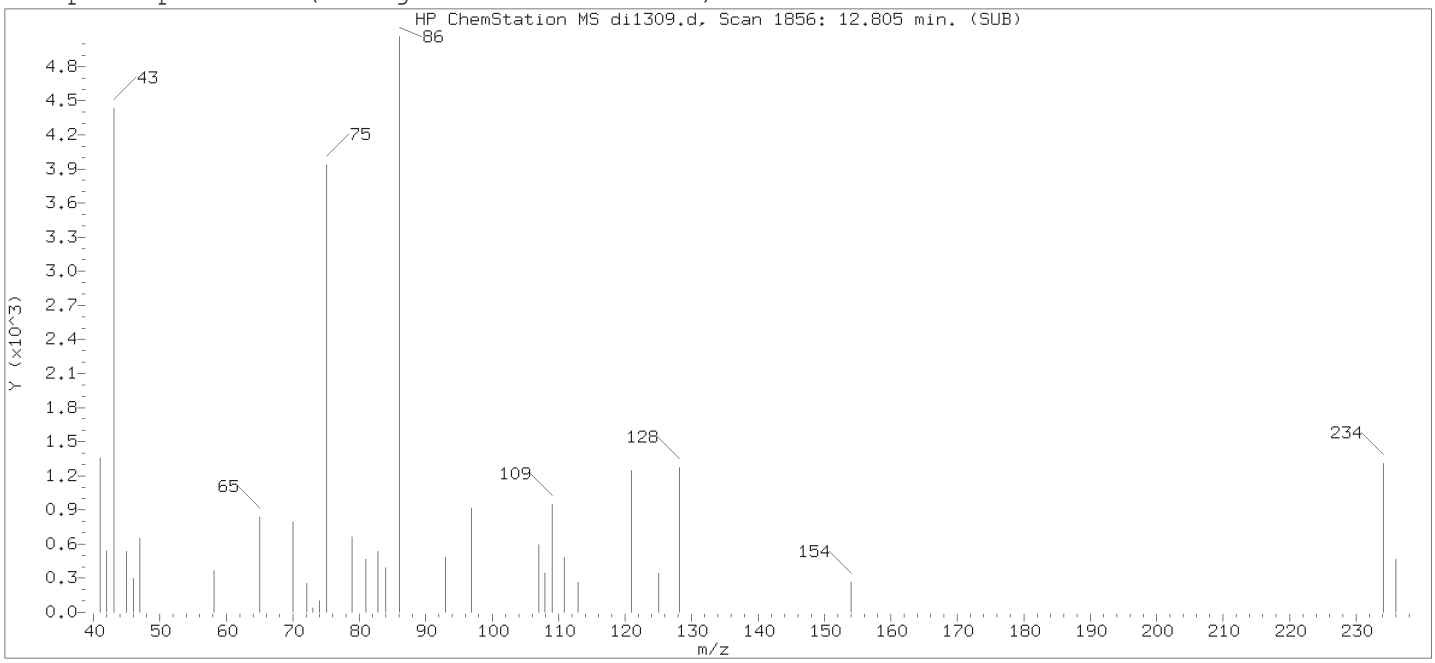
Compound Number	: 144		
Compound Name	: Diallate (peak 2)		
Scan Number	: 1875		
Retention Time (minutes)	: 12.916		
Quant Ion	: 86.00		
Area (flag)	: 782M		
On-Column Amount (ng/ul)	: 0.0196		
Integration start scan	: 1866	Integration stop scan:	1881
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

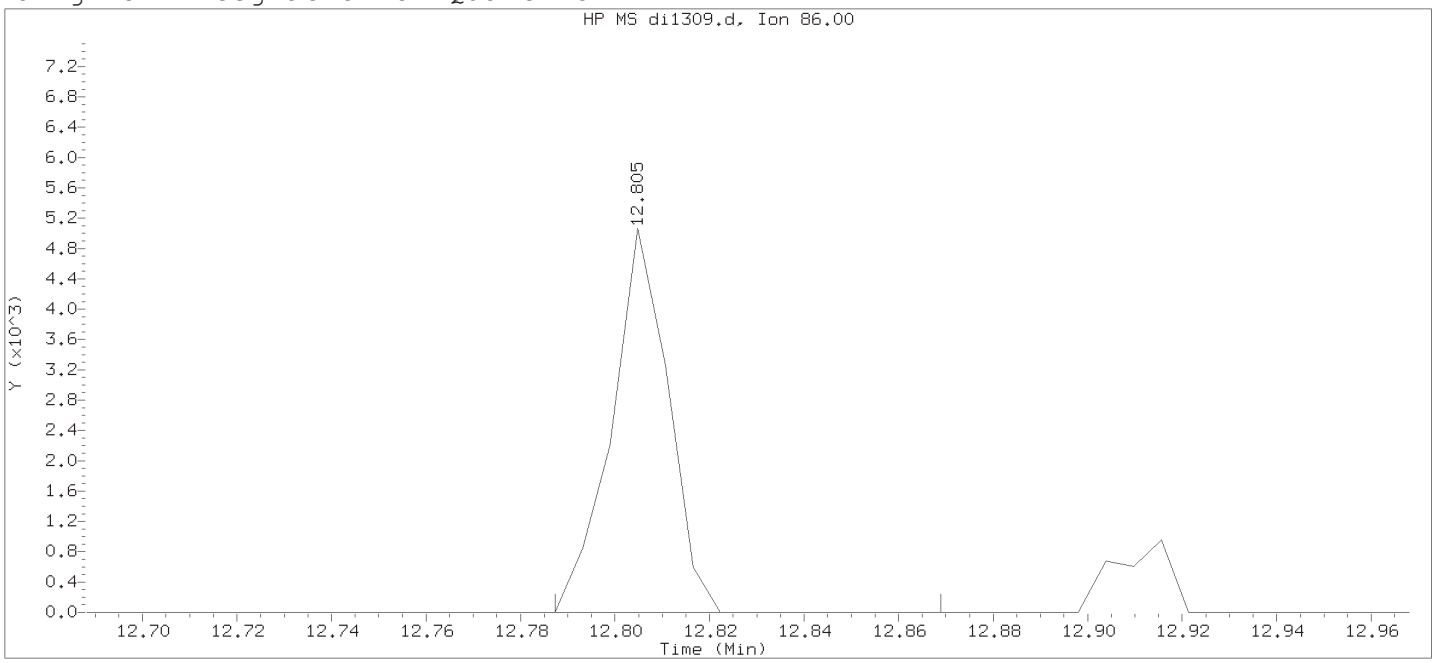
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

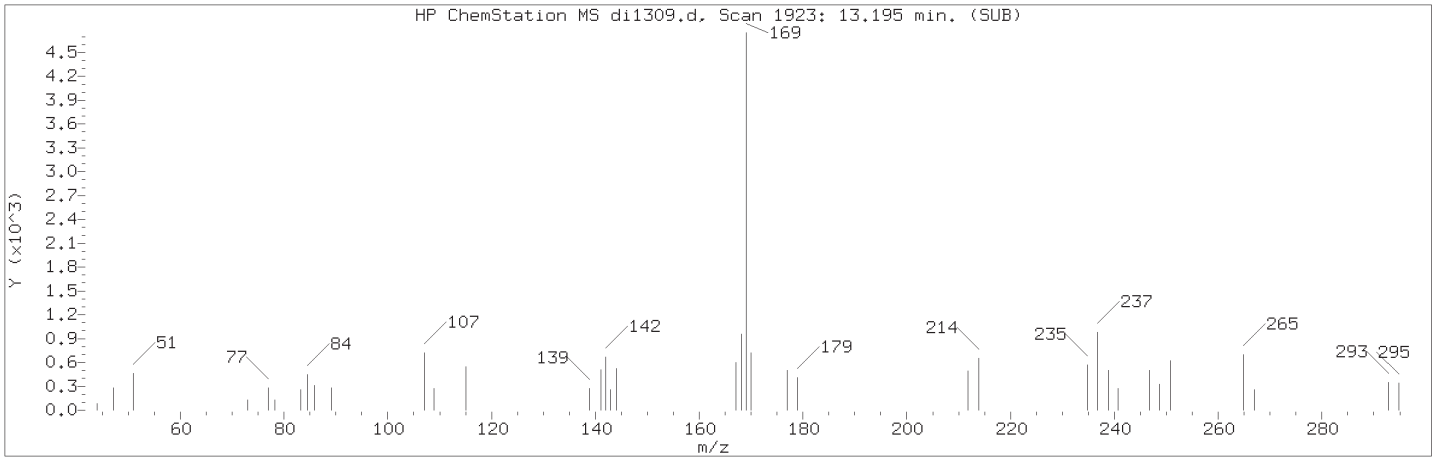
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

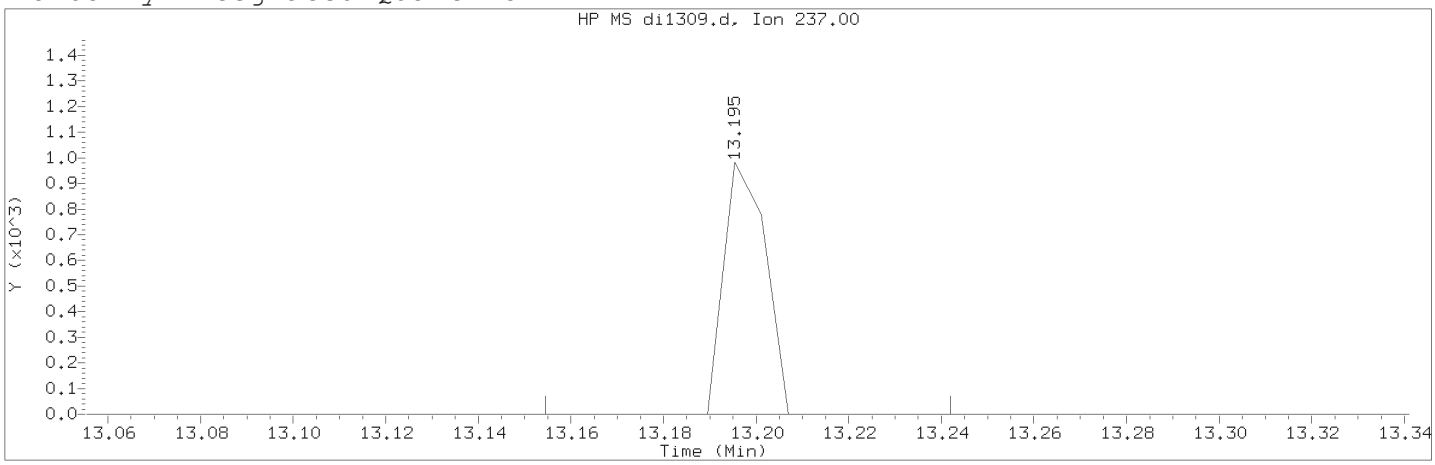
Compound Number	: 144		
Compound Name	: Diallate (peak 2)		
Scan Number	: 1856		
Retention Time (minutes)	: 12.805		
Quant Ion	: 86.00		
Area	: 4188		
On-column Amount (ng/ul)	: 0.0994		
Integration start scan	: 1852	Integration stop scan:	1866
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user name: emonborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

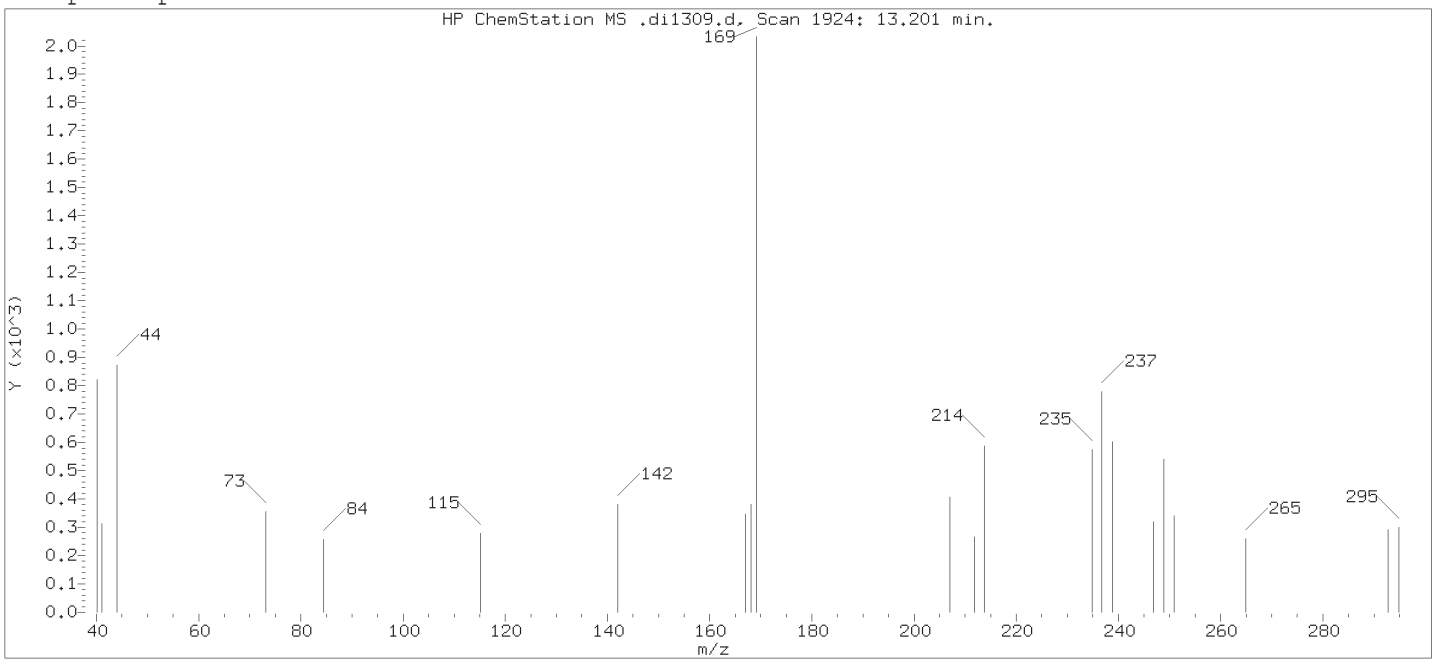
Compound Number : 151
Compound Name : Pentachloronitrobenzene
Scan Number : 1923
Retention Time (minutes) : 13.195
Quant Ion : 237.00
Area (flag) : 616M
On-Column Amount (ng/ul) : 0.0575
Integration start scan : 1915 Integration stop scan: 1930
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

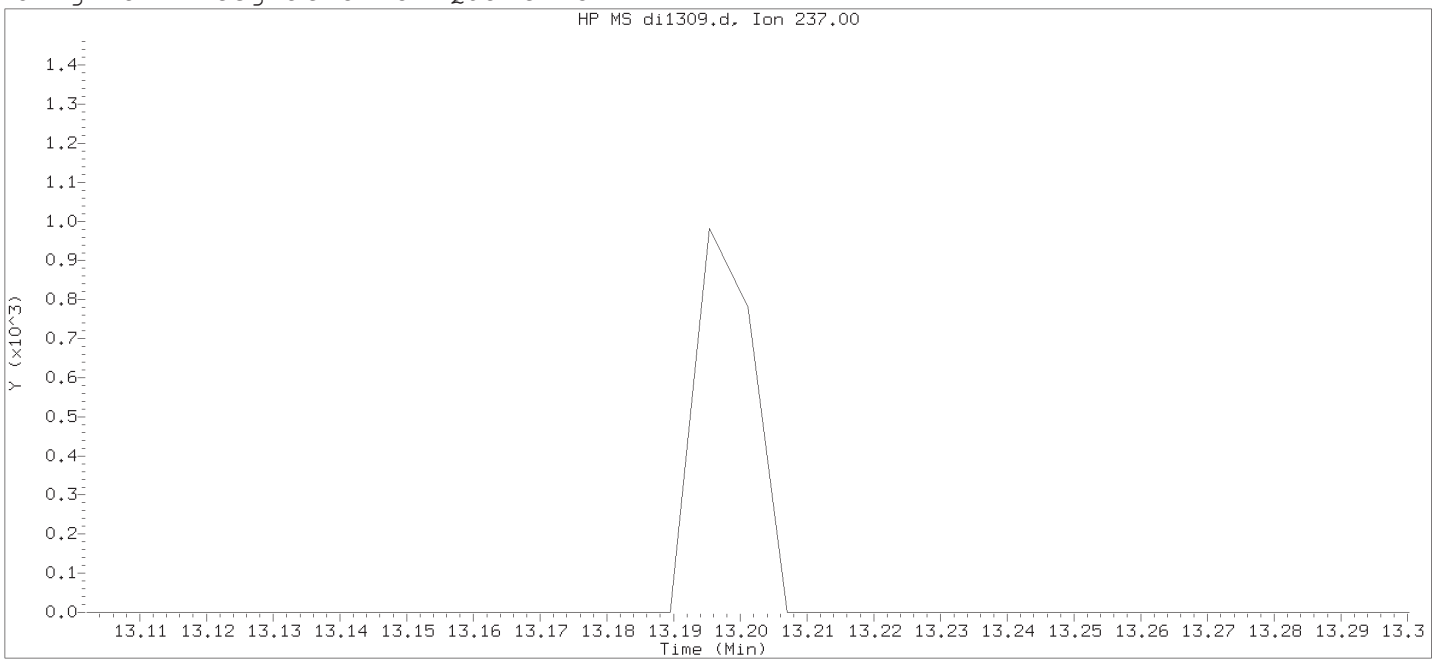
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

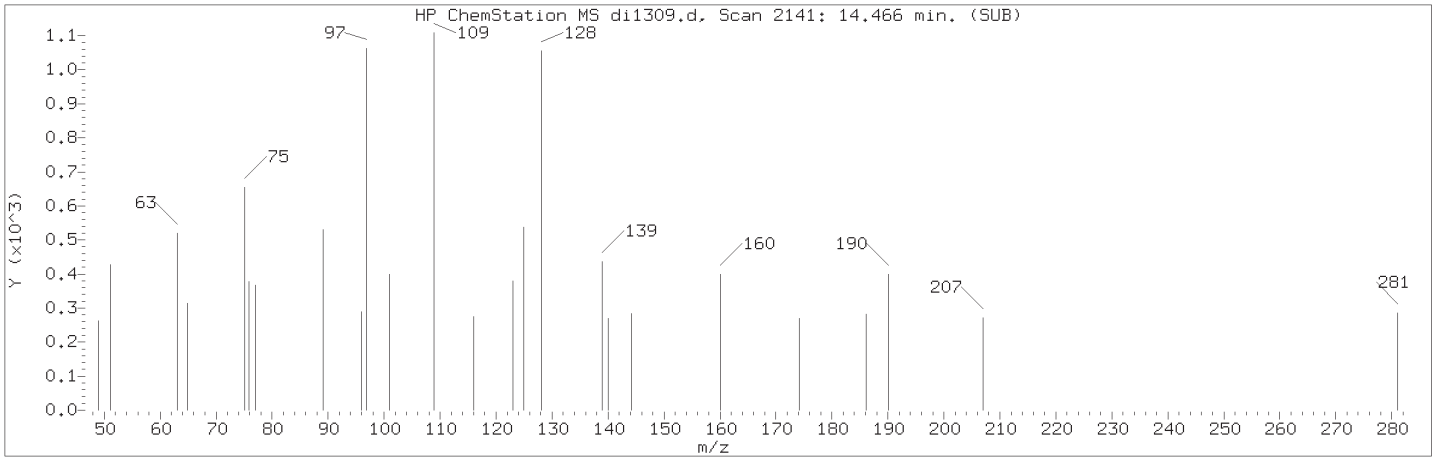
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

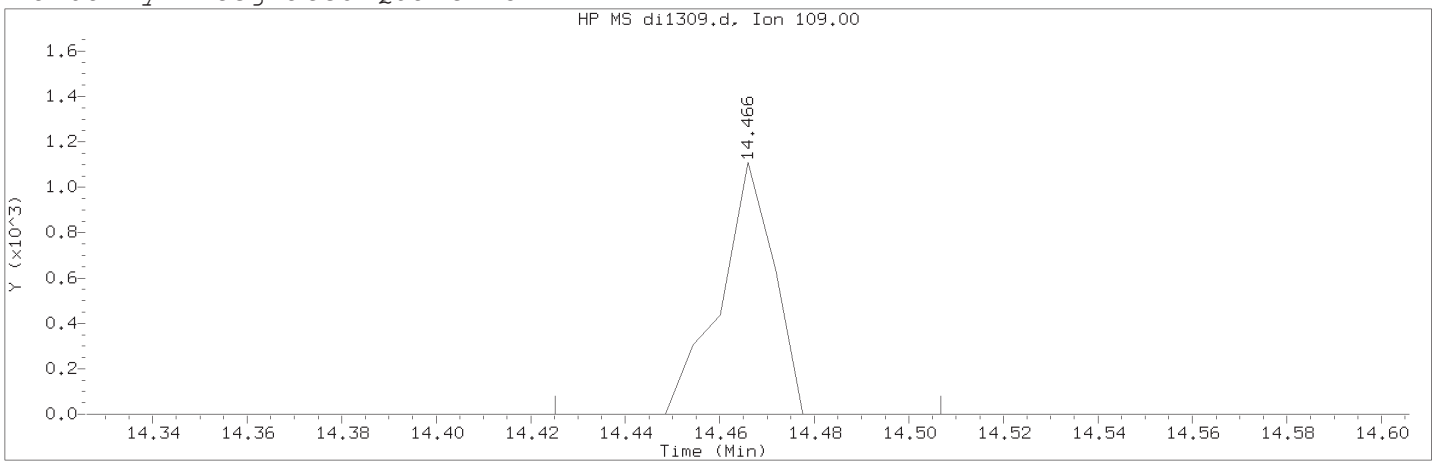
Compound Number : 151
Compound Name : Pentachloronitrobenzene
Expected RT (minutes) : 13.201
Quant Ion : 237.00

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: EMonborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

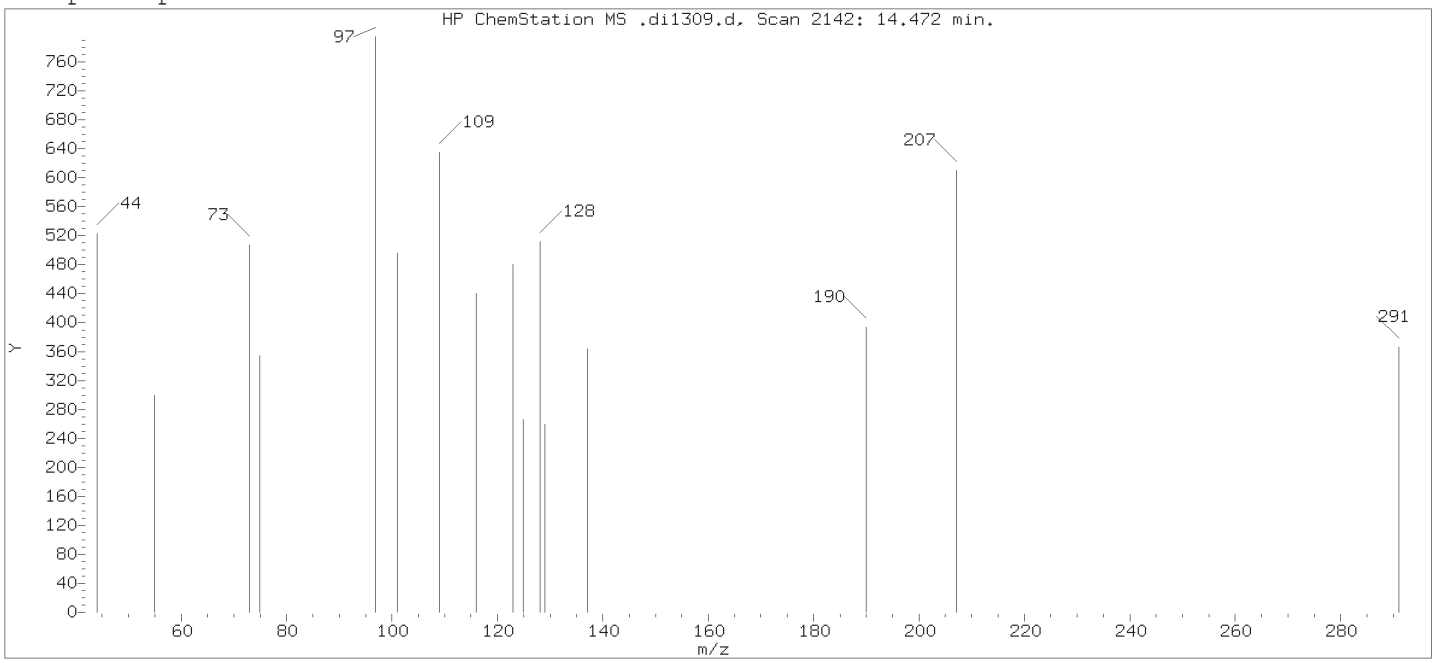
Compound Number	: 167		
Compound Name	: Parathion		
Scan Number	: 2141		
Retention Time (minutes)	: 14.466		
Quant Ion	: 109.00		
Area (flag)	: 869M		
On-Column Amount (ng/ul)	: 0.9825		
Integration start scan	: 2133	Integration stop scan:	2147
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

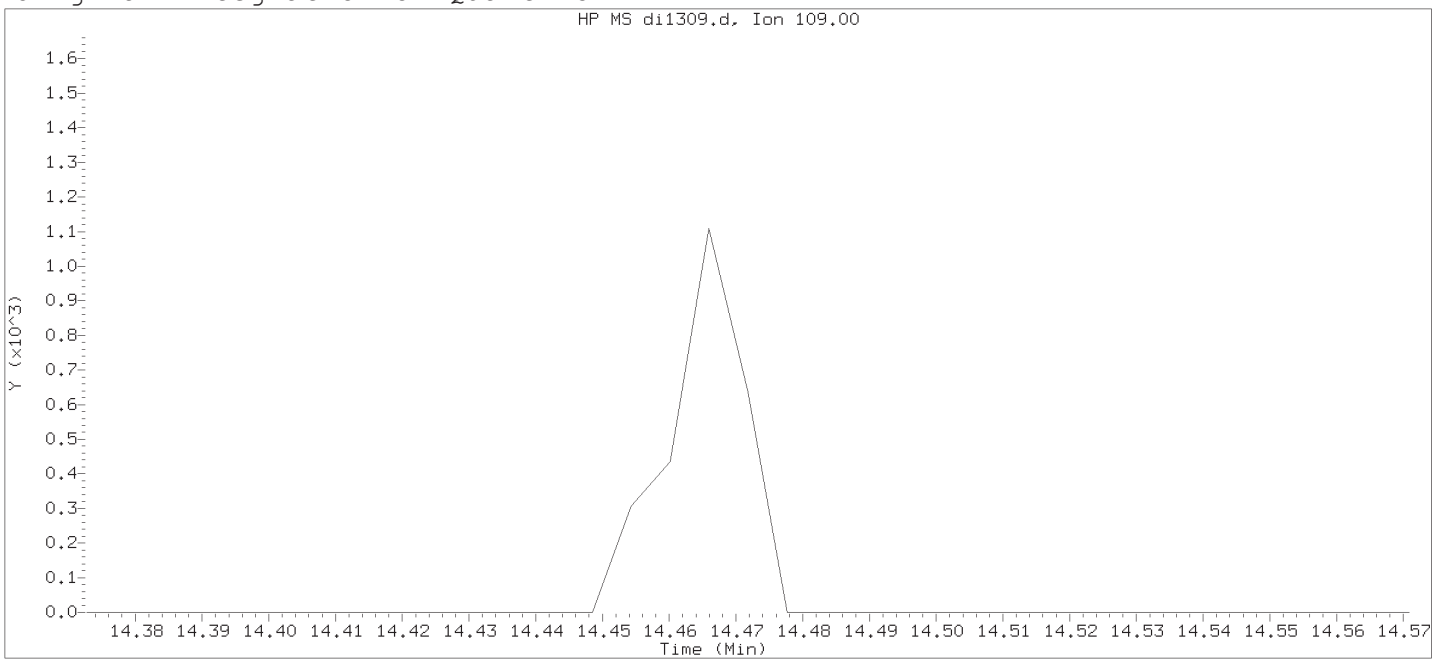
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

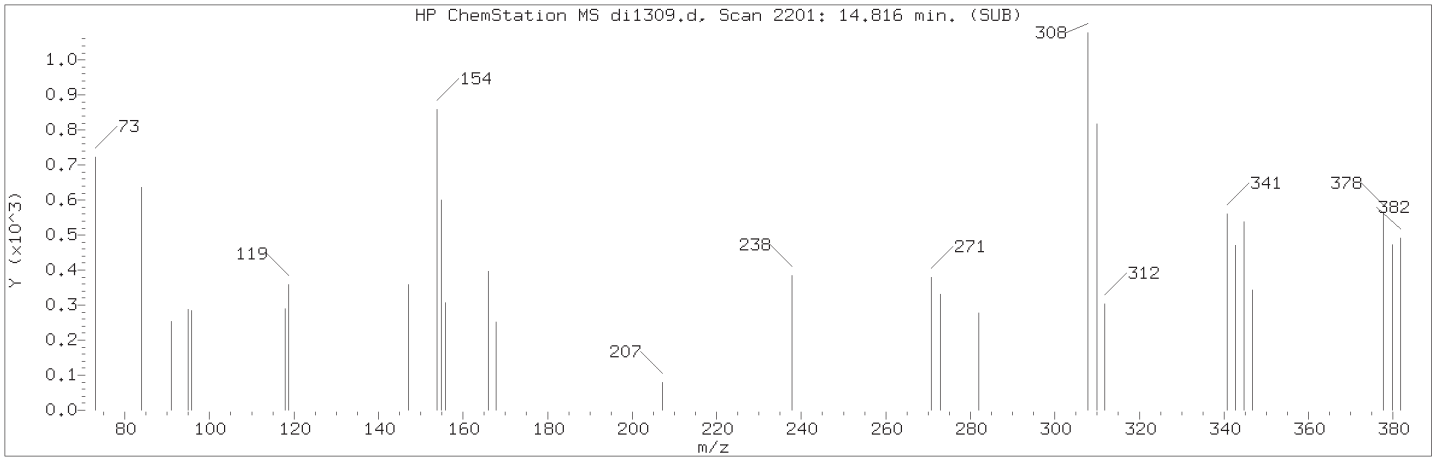
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

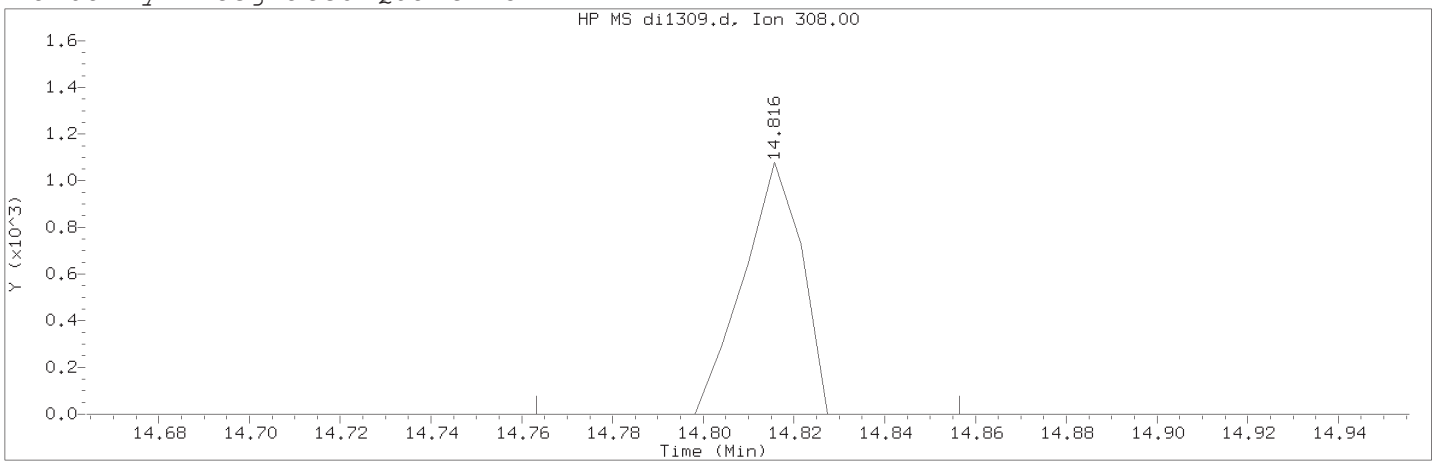
Compound Number : 167
Compound Name : Parathion
Expected RT (minutes) : 14.472
Quant Ion : 109.00

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: EMONBORNE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

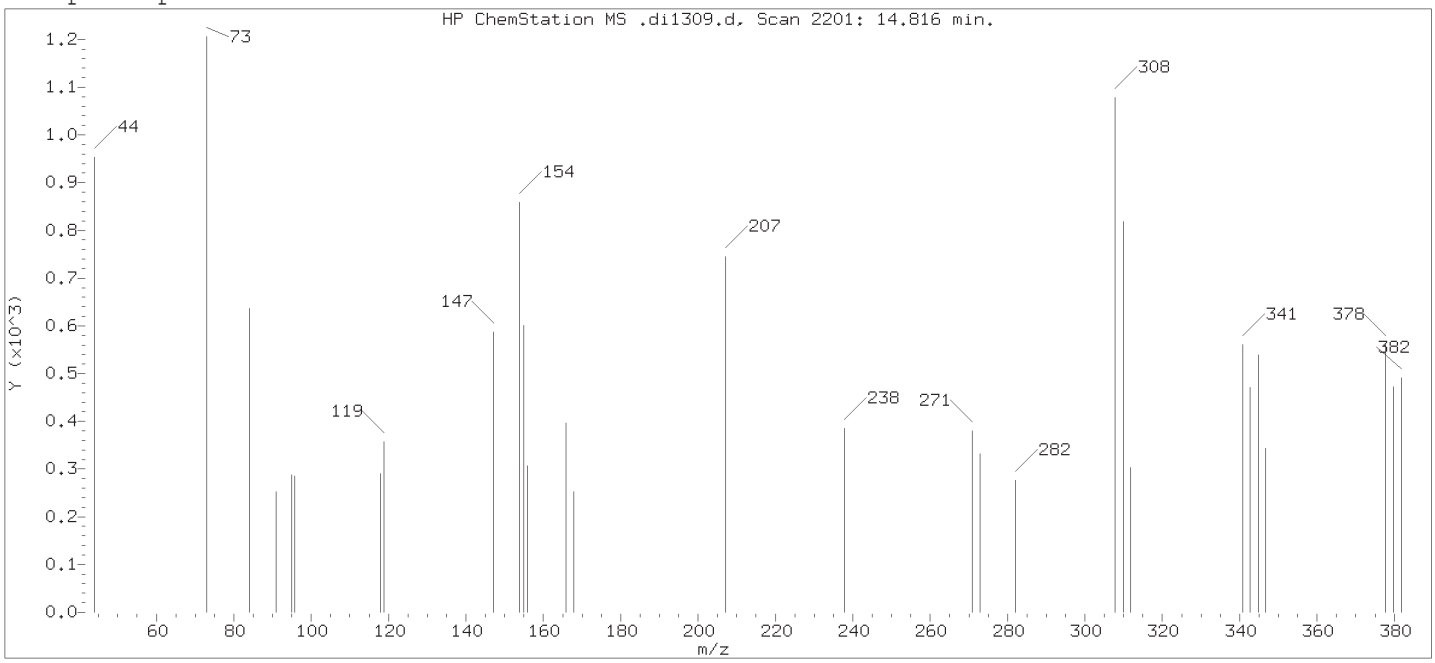
Compound Number : 169
Compound Name : Octachlorostyrene
Scan Number : 2201
Retention Time (minutes) : 14.816
Quant Ion : 308.00
Area (flag) : 958M
On-Column Amount (ng/ul) : 0.1028
Integration start scan : 2191 Integration stop scan: 2207
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

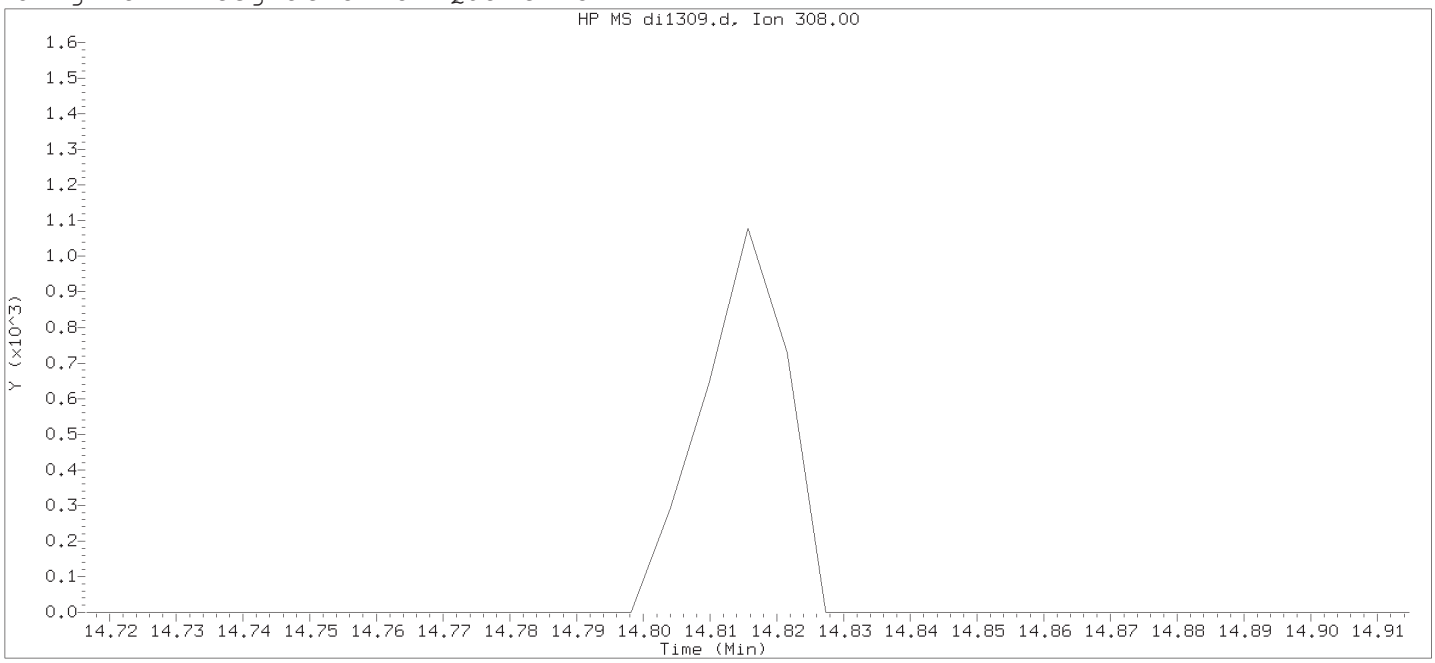
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

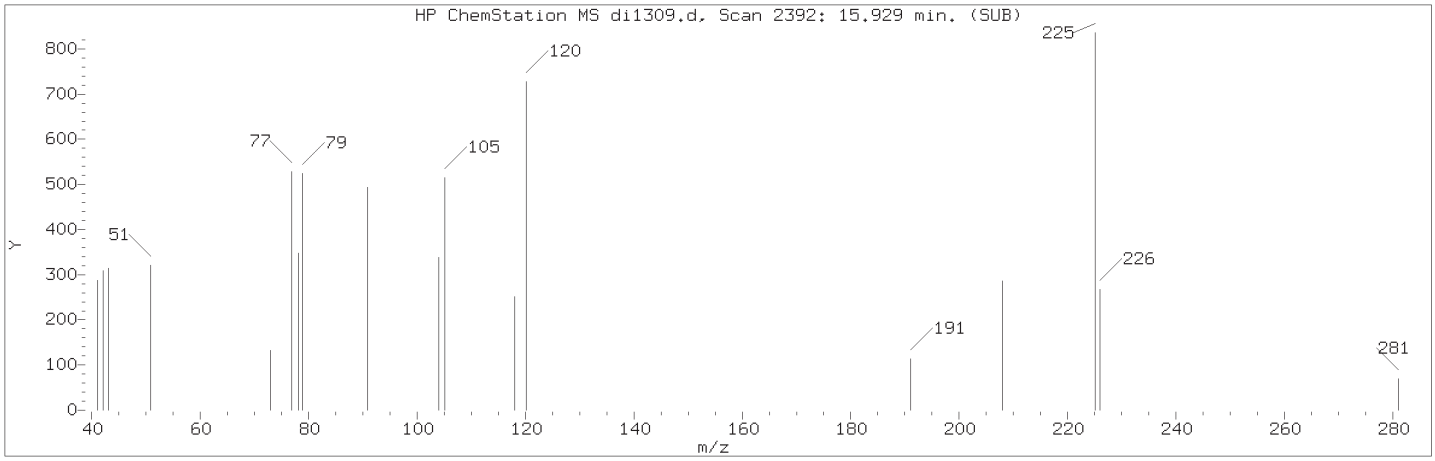
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

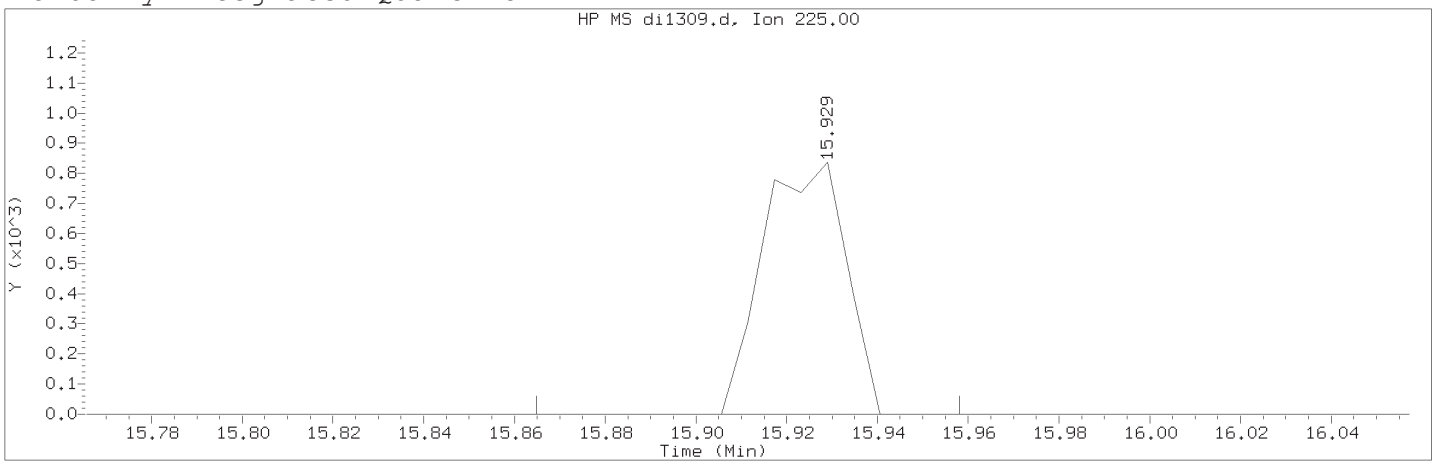
Compound Number : 169
Compound Name : Octachlorostyrene
Expected RT (minutes) : 14.816
Quant Ion : 308.00

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: EMONBORNE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:52 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

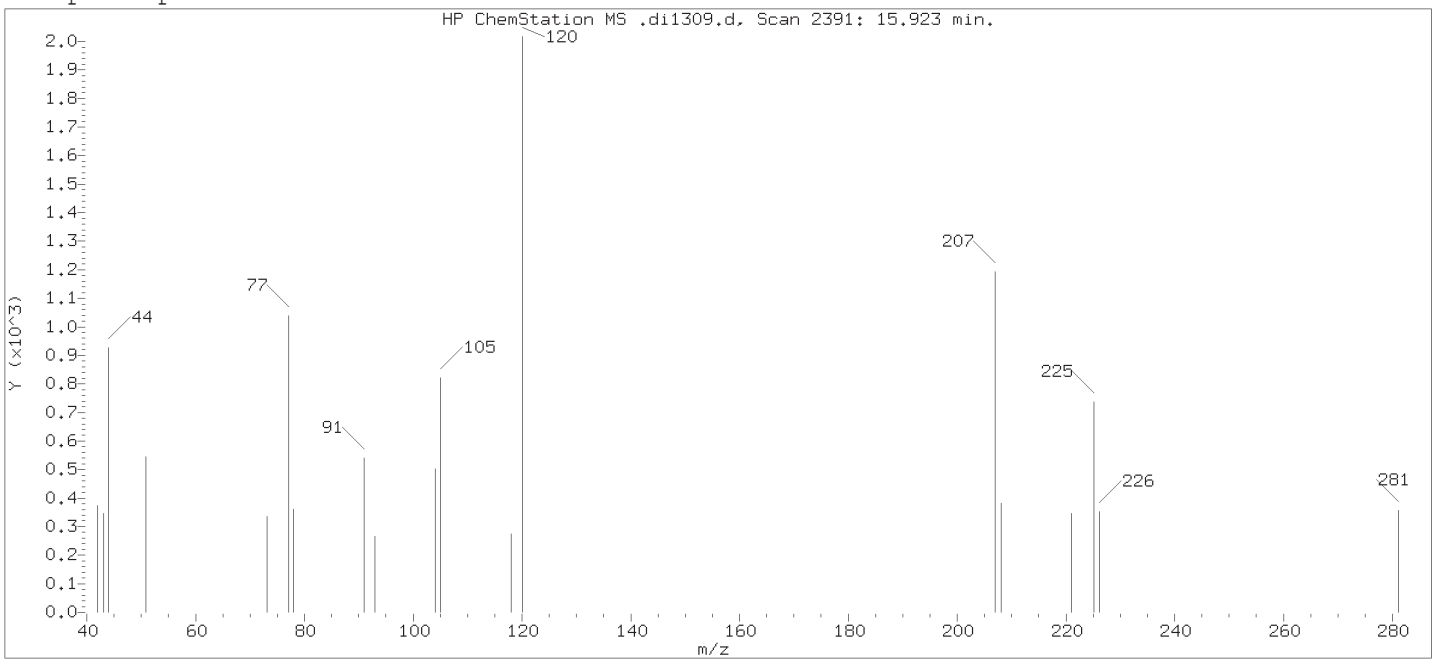
Compound Number : 182
Compound Name : p-Dimethylaminoazobenzene
Scan Number : 2392
Retention Time (minutes) : 15.929
Quant Ion : 225.00
Area (flag) : 1064M
On-Column Amount (ng/ul) : 0.0473
Integration start scan : 2380 Integration stop scan: 2396
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

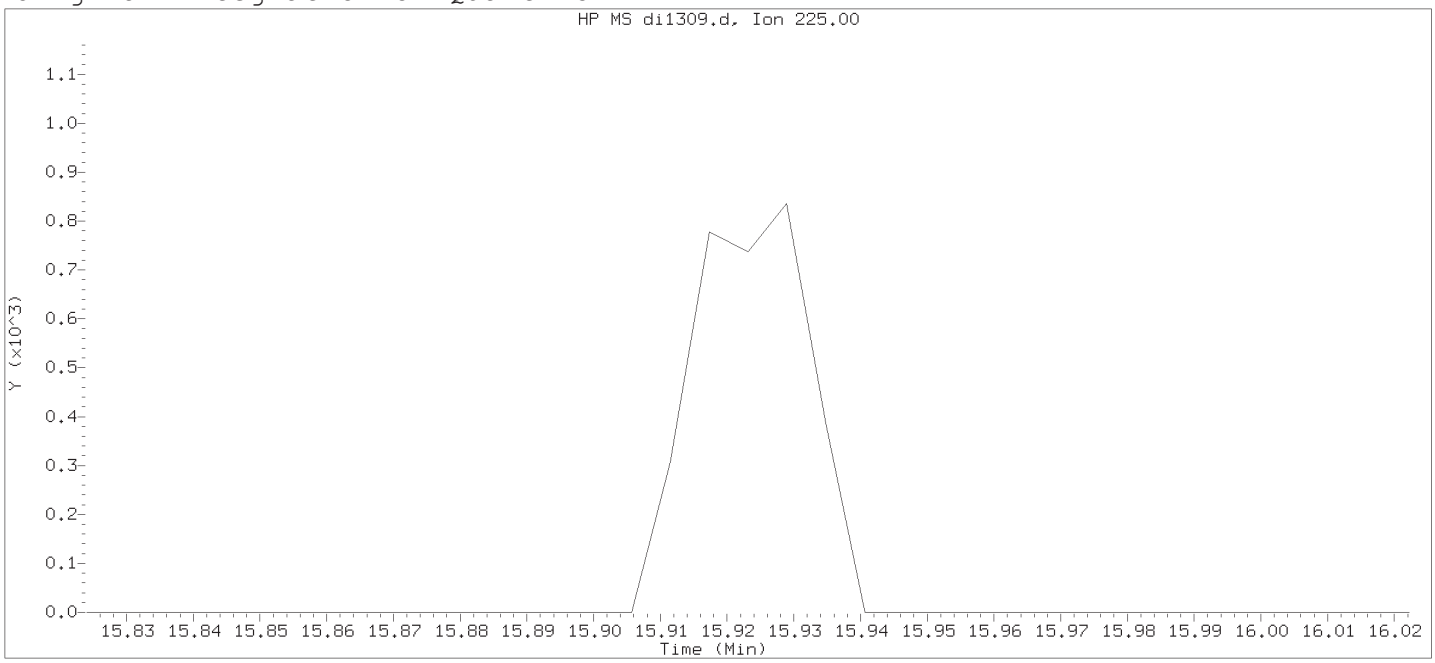
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



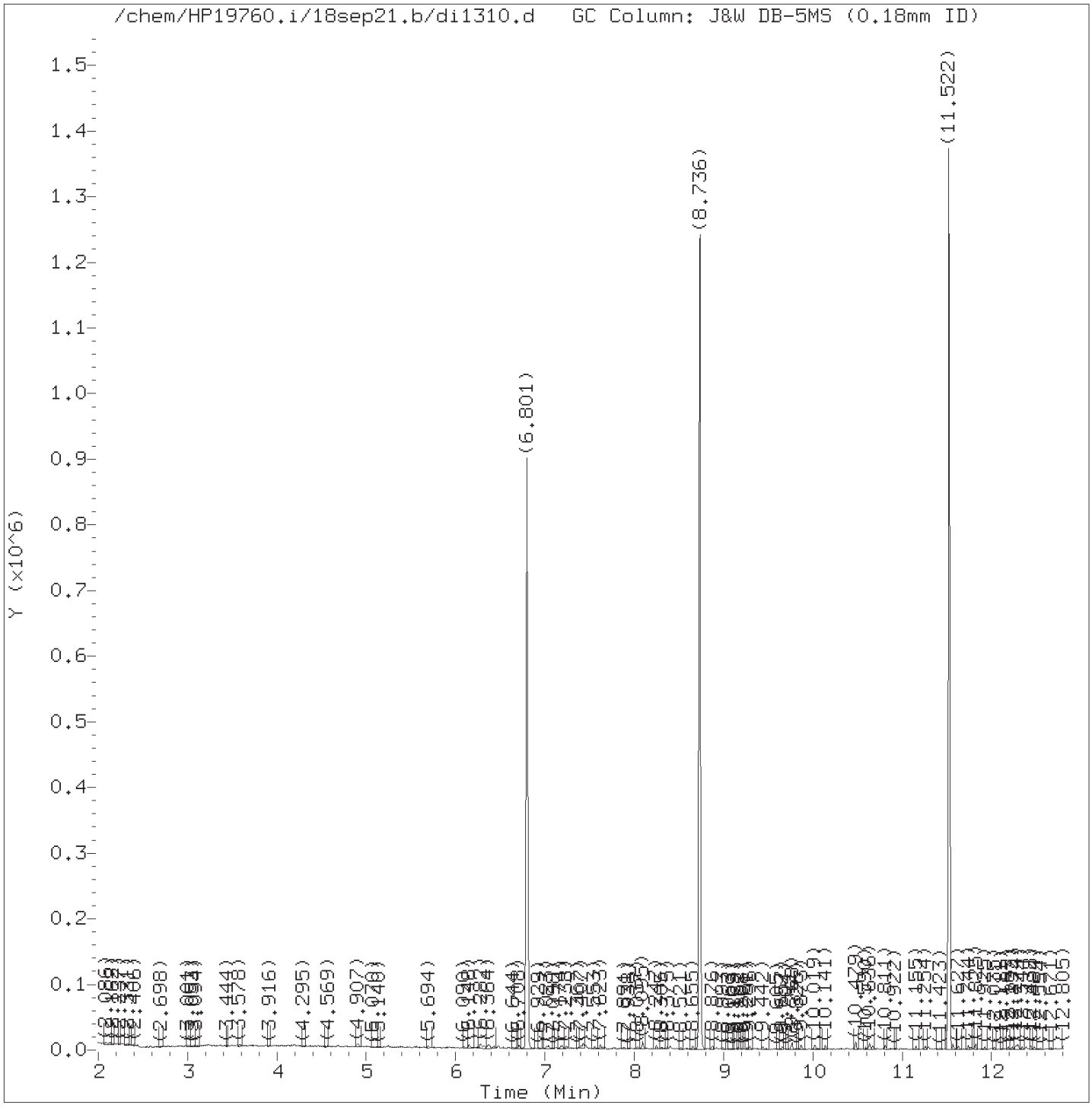
Data File: /chem/HP19760.i/18sep21.b/di1309.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 21:39 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:07 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compound Number : 182
Compound Name : p-Dimethylaminoazobenzene
Expected RT (minutes) : 15.923
Quant Ion : 225.00

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

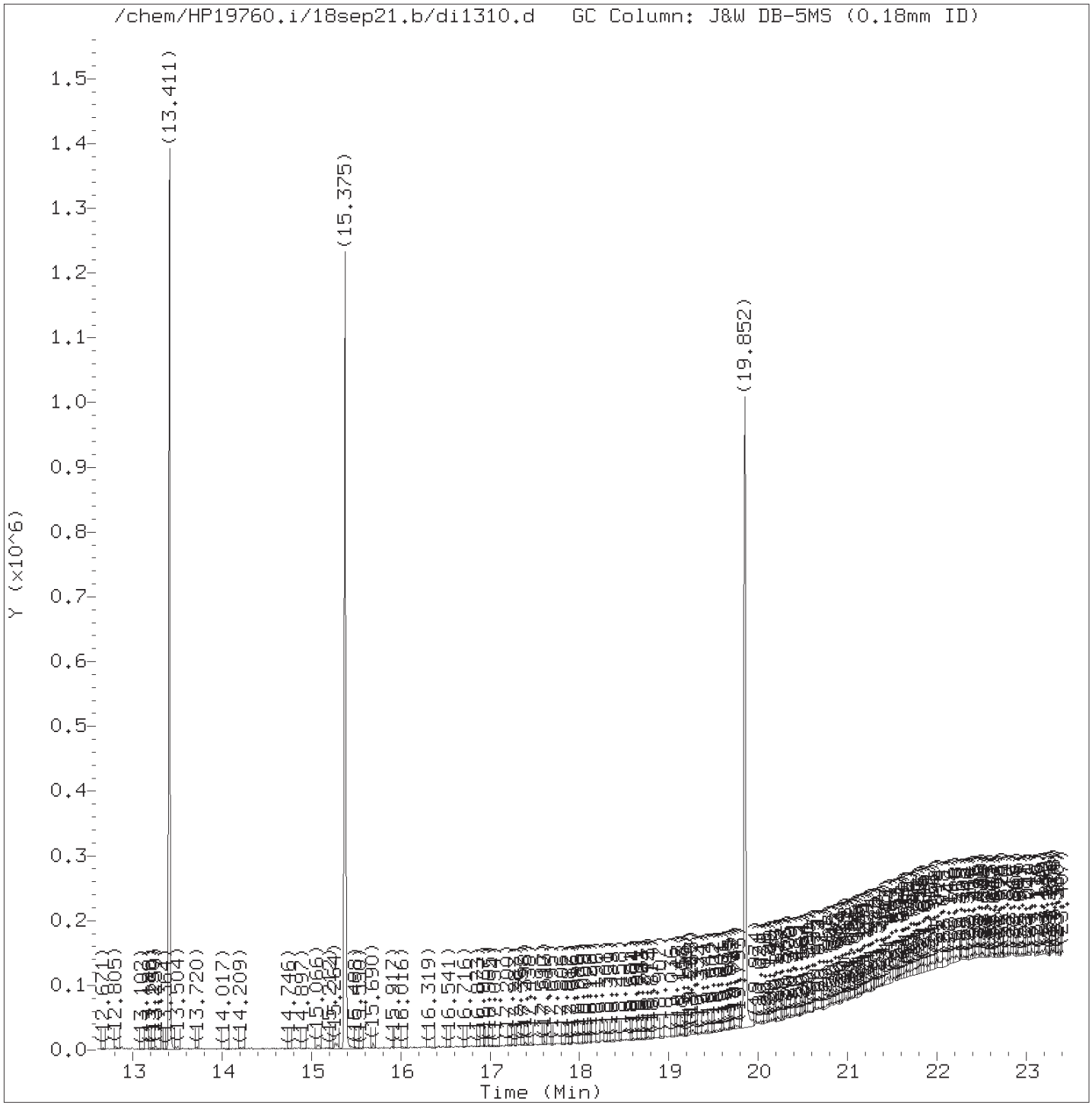
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:53 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:53 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:53 em10340

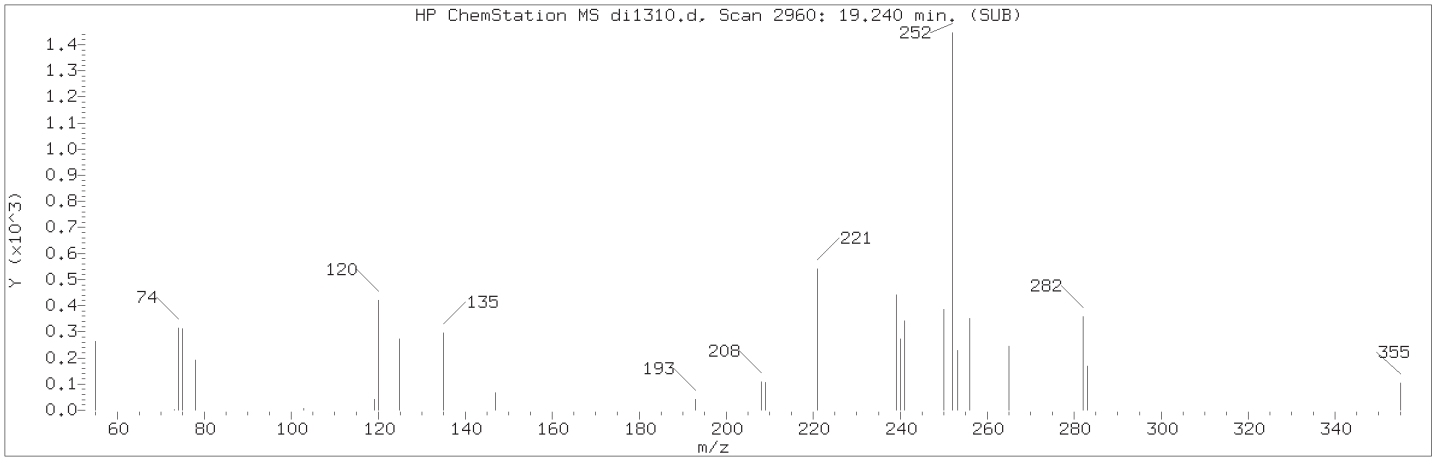
Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	189614	5.000
44)$Nitrobenzene-d5	(2)	7.623	82	2951	0.044
65)*Naphthalene-d8	(2)	8.736	136	704583	5.000
66) Naphthalene	(2)	8.765	128	4567	0.028
83) 2-Methylnaphthalene	(2)	9.873	142	2636	0.026
84) 1-Methylnaphthalene	(2)	10.019	142	2150	0.022
93)$2-Fluorobiphenyl	(3)	10.479	172	5037	0.050
96) 2-Chloronaphthalene	(3)	10.642	162	1830	0.020
109) Acenaphthylene	(3)	11.295	152	2233	0.019
113)*Acenaphthene-d10	(3)	11.522	164	315549	5.000
114) Acenaphthene	(3)	11.569	153	2051	0.023
126) Fluorene	(3)	12.274	166	1909	0.020
145) Hexachlorobenzene	(4)	12.927	284	534	0.021
153)*Phenanthrene-d10	(4)	13.411	188	551165	5.000
155) Phenanthrene	(4)	13.440	178	3449	0.025
157) Anthracene	(4)	13.504	178	2419	0.018
222) Total PAHs	(6)			45605	0.380
173) Fluoranthene	(4)	15.066	202	2884	0.021
175)*Pyrene-d10	(5)	15.375	212	527680	5.000
177) Pyrene	(5)	15.404	202	4235	0.029
179)$Terphenyl-d14	(5)	15.696	244	3960	0.045
195) Benzo(a)anthracene	(5)	17.392	228	2120	0.018
196) Chrysene	(5)	17.456	228	2221	0.018
206) Benzo(b)fluoranthene	(6)	19.240	252	1969M	0.017
208) Benzo(k)fluoranthene	(6)	19.286	252	1945M	0.016
211) Benzo(a)pyrene	(6)	19.758	252	2067M	0.019
213)*Perylene-d12	(6)	19.852	264	496069	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.449	276	2055	0.020
220) Dibenz(a,h)anthracene	(6)	21.489	278	1931	0.017
221) Benzo(g,h,i)perylene	(6)	21.822	276	2764	0.024

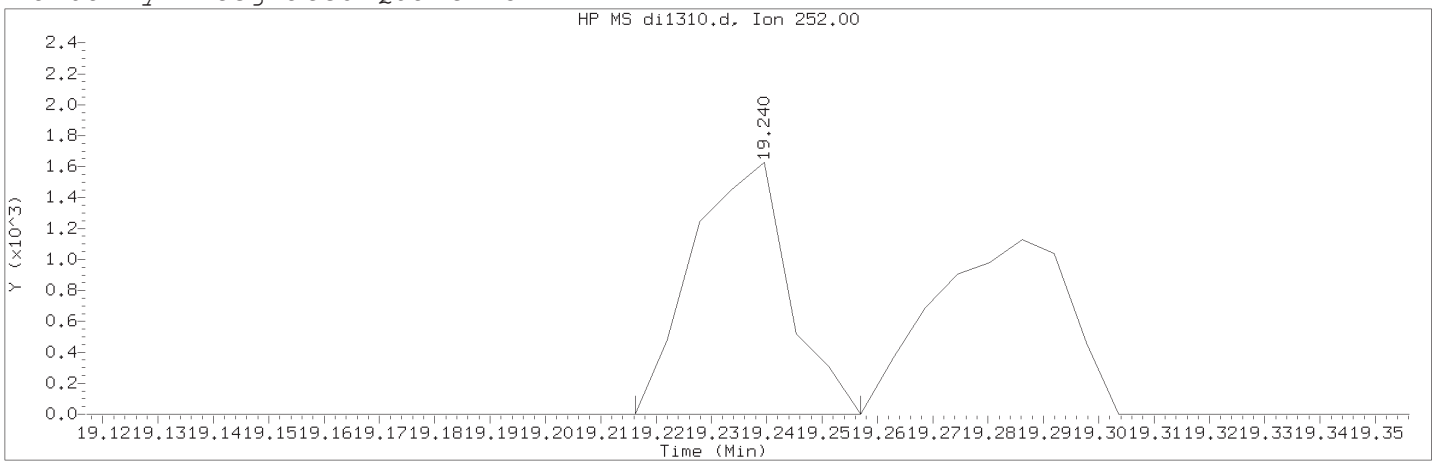
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:53 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

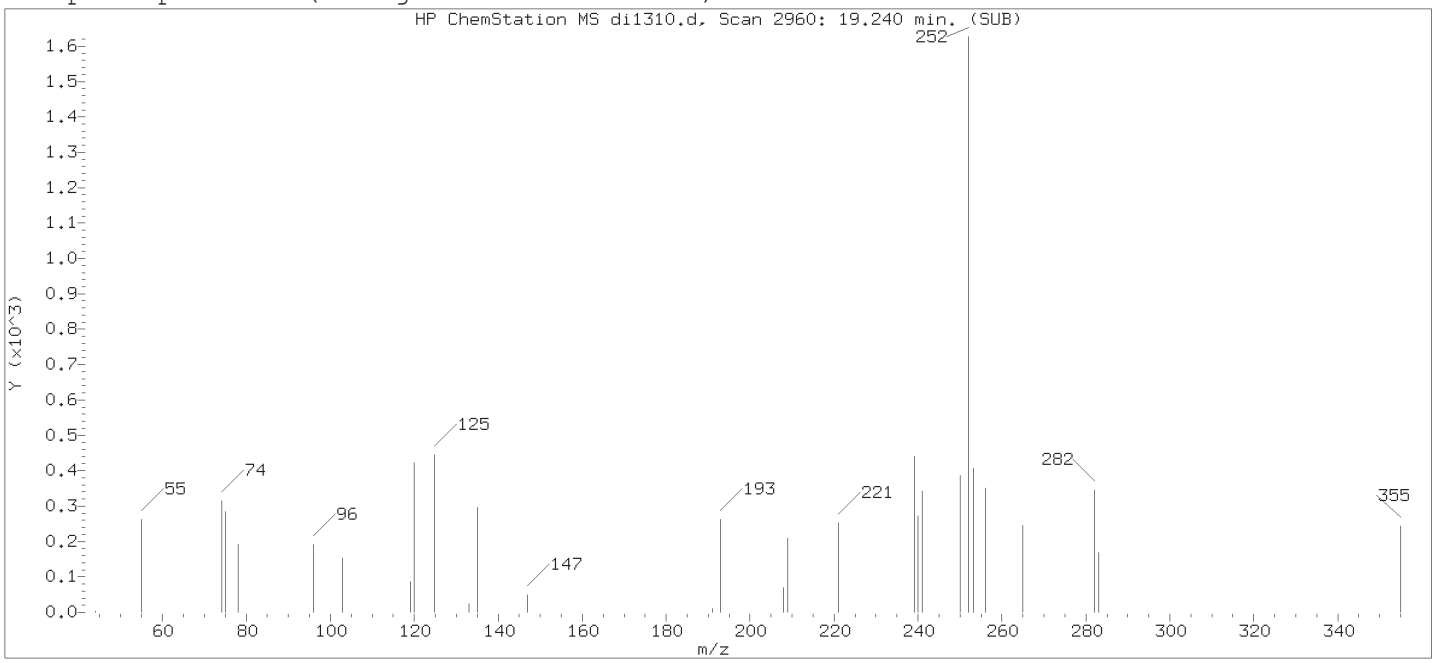
Compound Number	: 206		
Compound Name	: Benzo(b)fluoranthene		
Scan Number	: 2960		
Retention Time (minutes)	: 19.240		
Quant Ion	: 252.00		
Area (flag)	: 1969M		
On-Column Amount (ng/ul)	: 0.0166		
Integration start scan	: 2955	Integration stop scan:	2962
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

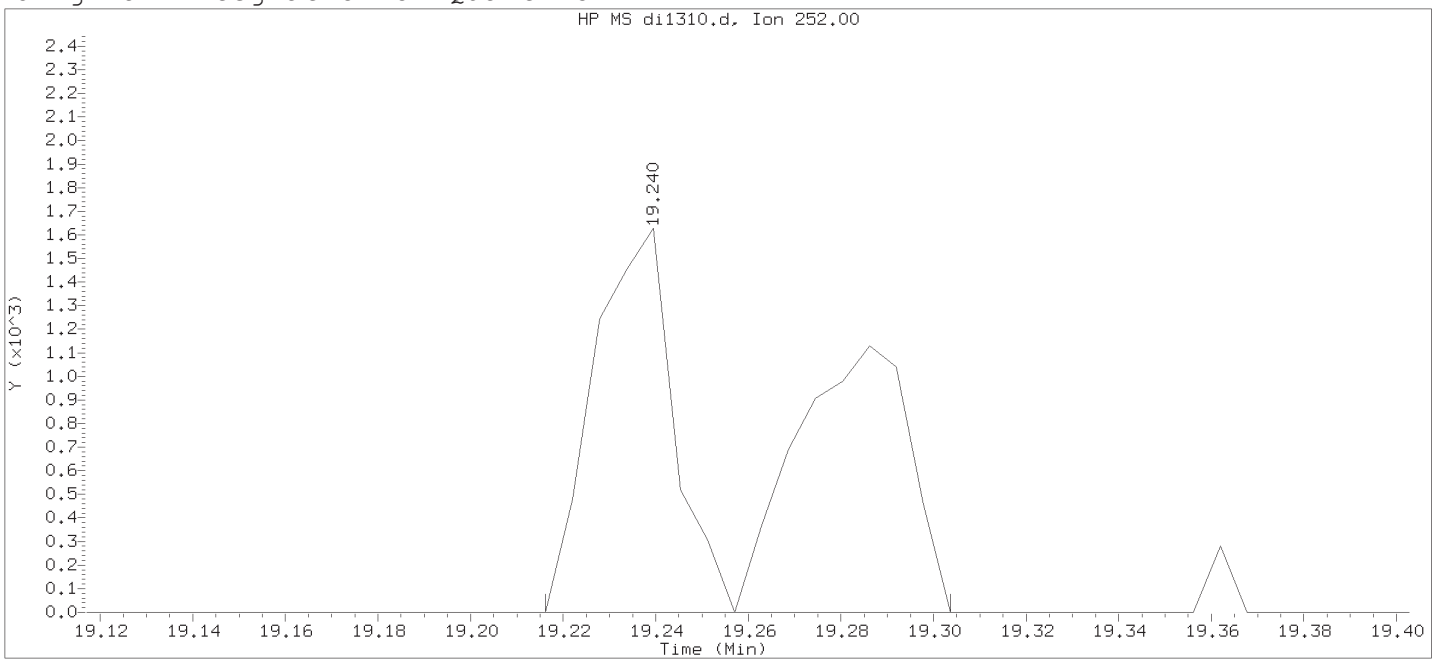
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

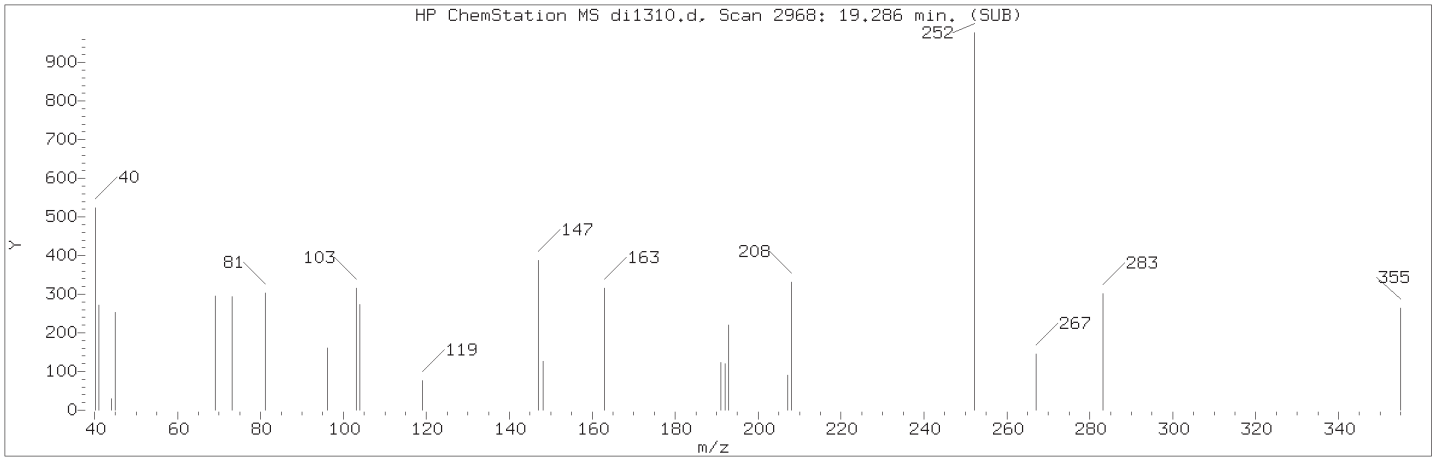
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:36 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

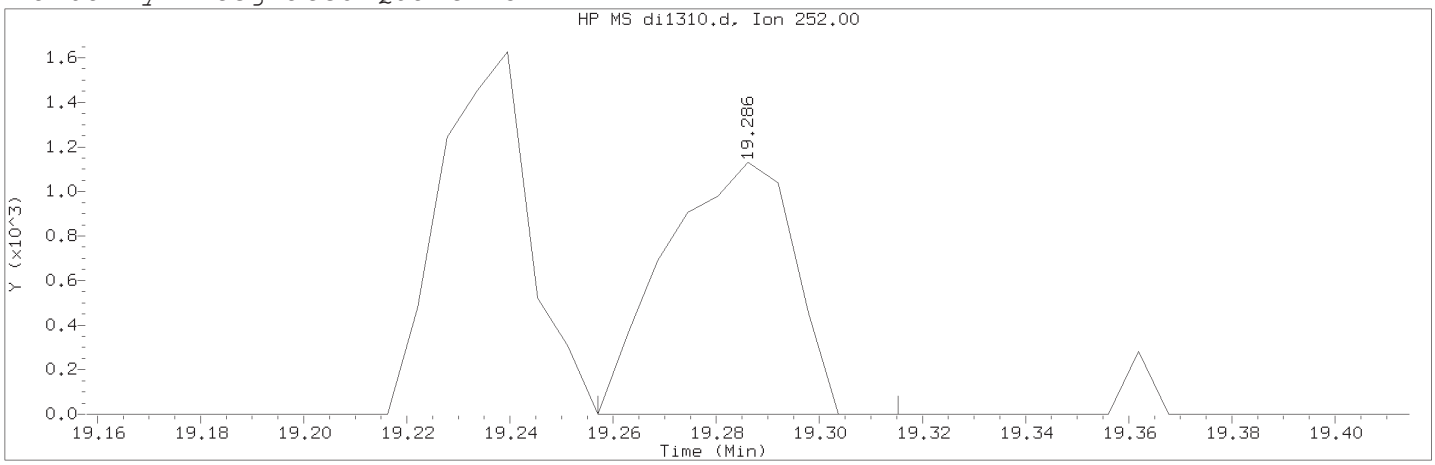
Compound Number	: 206		
Compound Name	: Benzo(b)fluoranthene		
Scan Number	: 2960		
Retention Time (minutes)	: 19.240		
Quant Ion	: 252.00		
Area	: 3915		
On-column Amount (ng/ul)	: 0.0329		
Integration start scan	: 2955	Integration stop scan:	2970
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:53 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

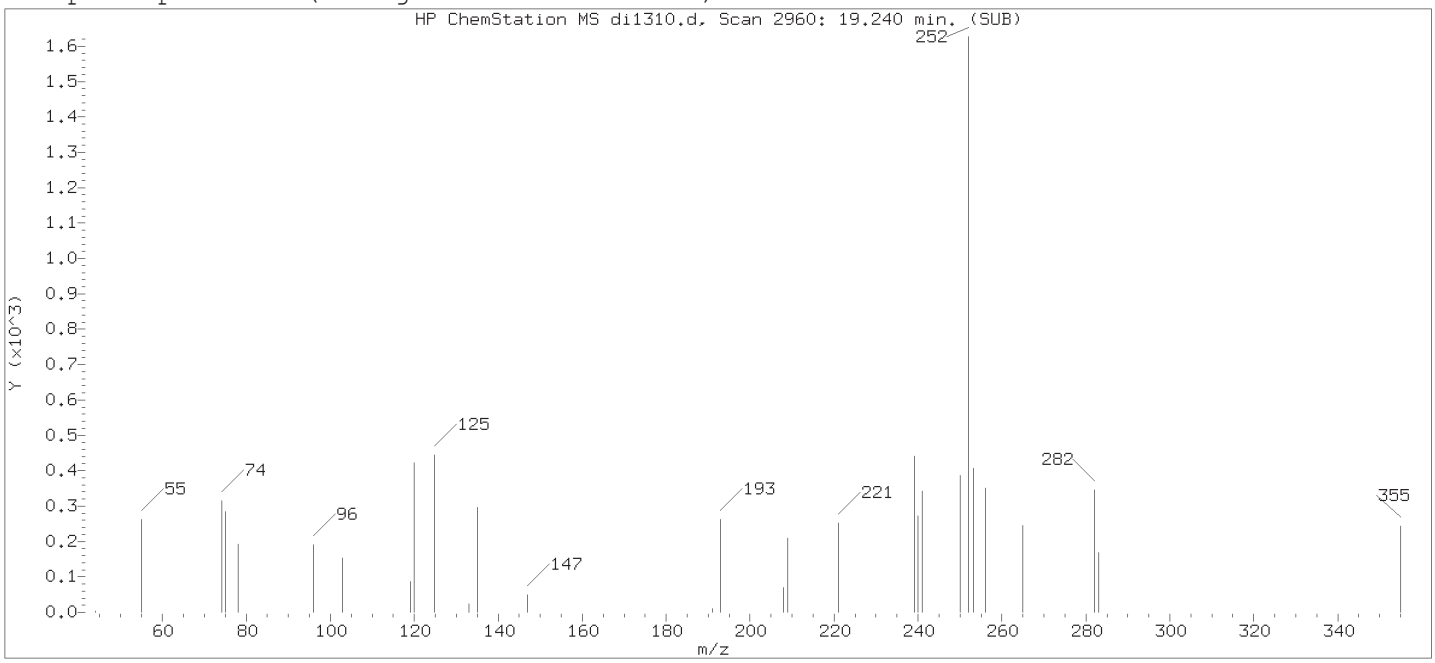
Compound Number : 208
Compound Name : Benzo(k)fluoranthene
Scan Number : 2968
Retention Time (minutes) : 19.286
Quant Ion : 252.00
Area (flag) : 1945M
On-Column Amount (ng/ul) : 0.0158
Integration start scan : 2962 Integration stop scan: 2972
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

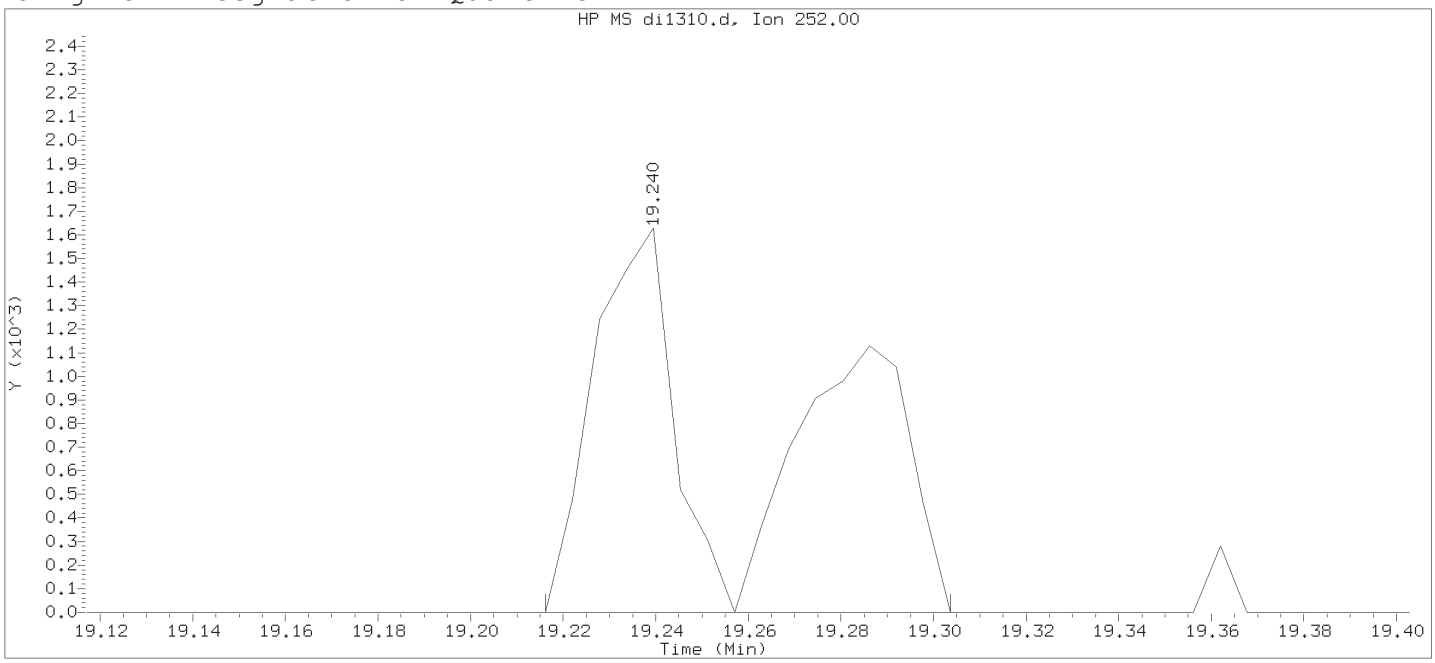
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

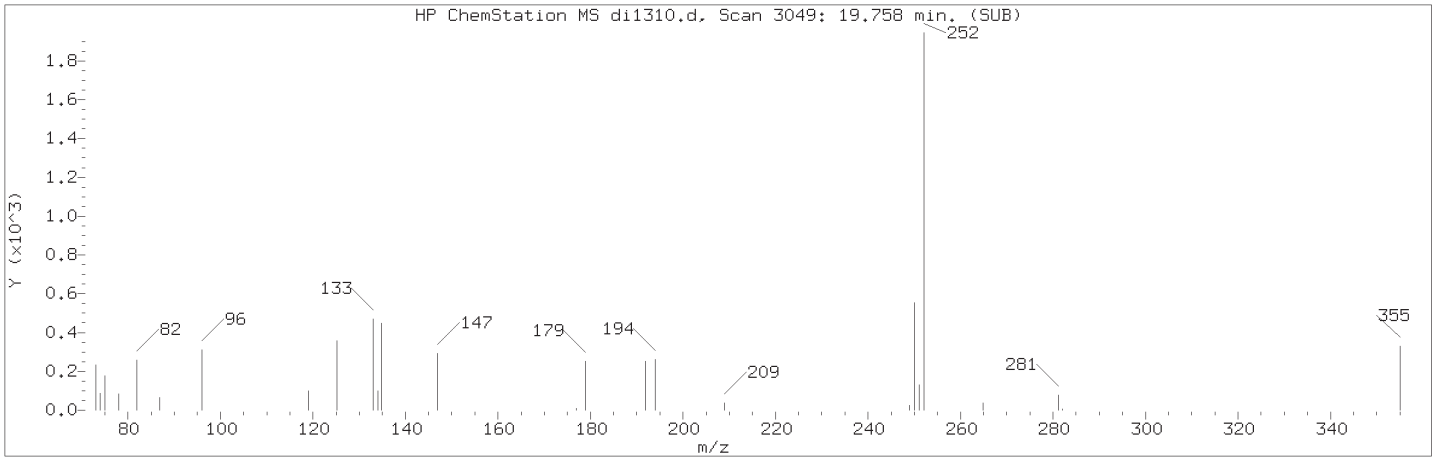
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:36 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

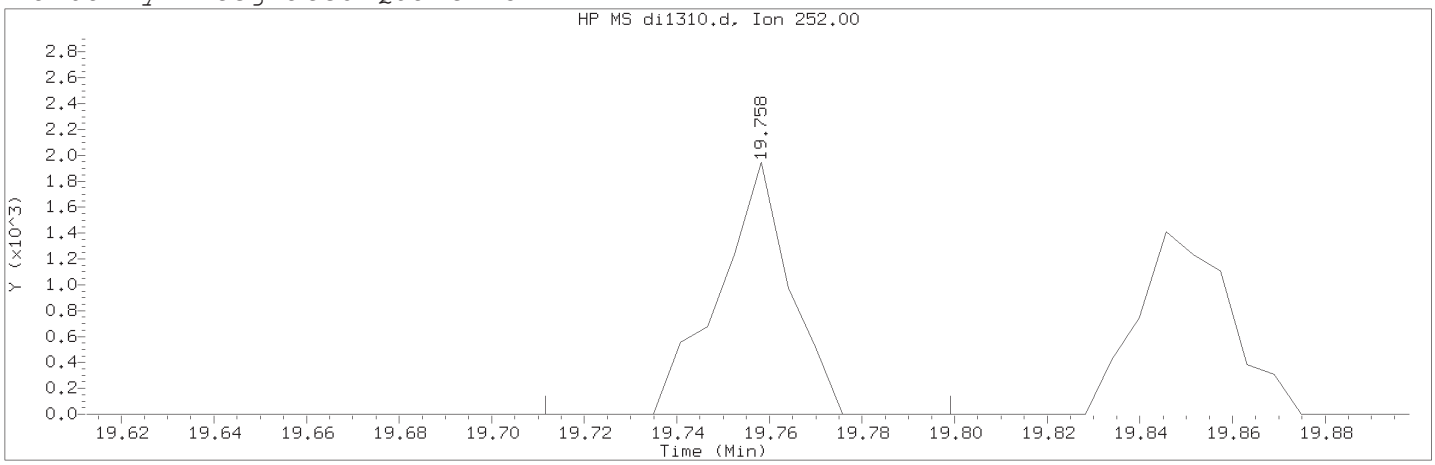
Compound Number	: 208		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 2960		
Retention Time (minutes)	: 19.240		
Quant Ion	: 252.00		
Area	: 3915		
On-column Amount (ng/ul)	: 0.0319		
Integration start scan	: 2955	Integration stop scan:	2970
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user: emonborne

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 23-Sep-2018 07:53 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

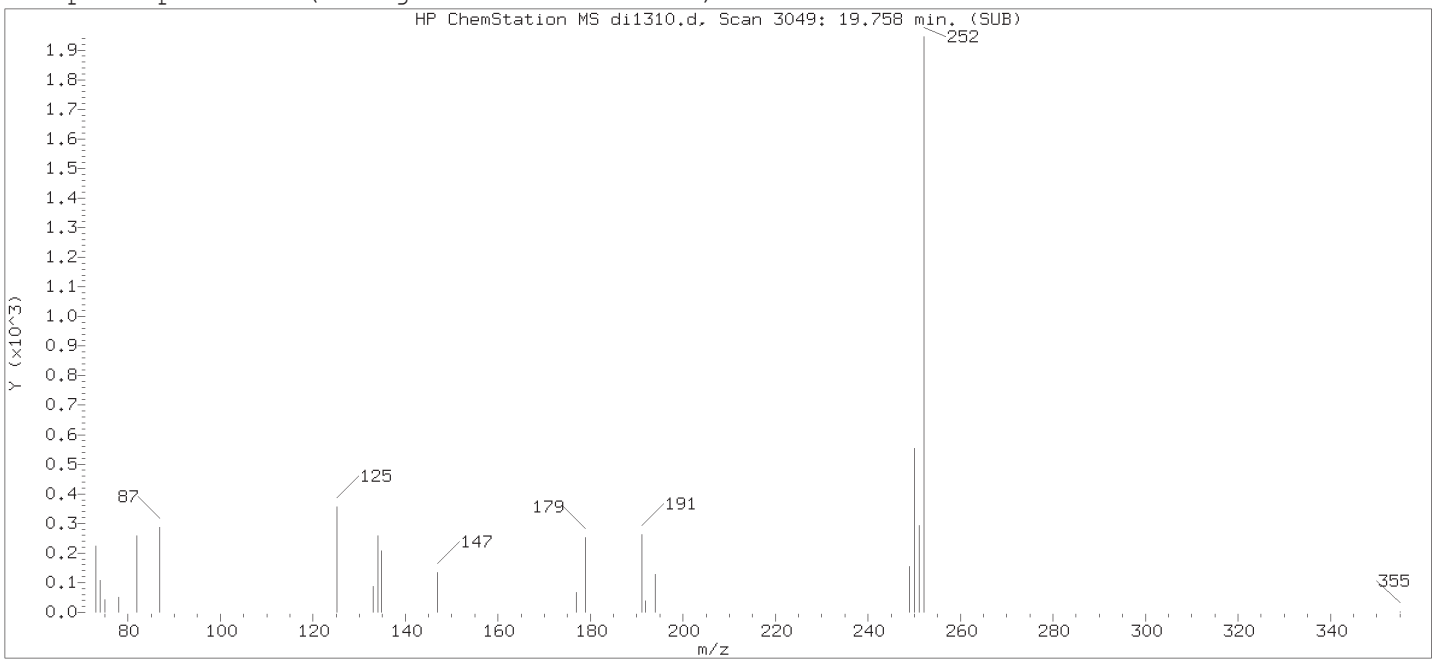
Compound Number : 211
Compound Name : Benzo(a)pyrene
Scan Number : 3049
Retention Time (minutes) : 19.758
Quant Ion : 252.00
Area (flag) : 2067M
On-Column Amount (ng/ul) : 0.0189
Integration start scan : 3040 Integration stop scan: 3055
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

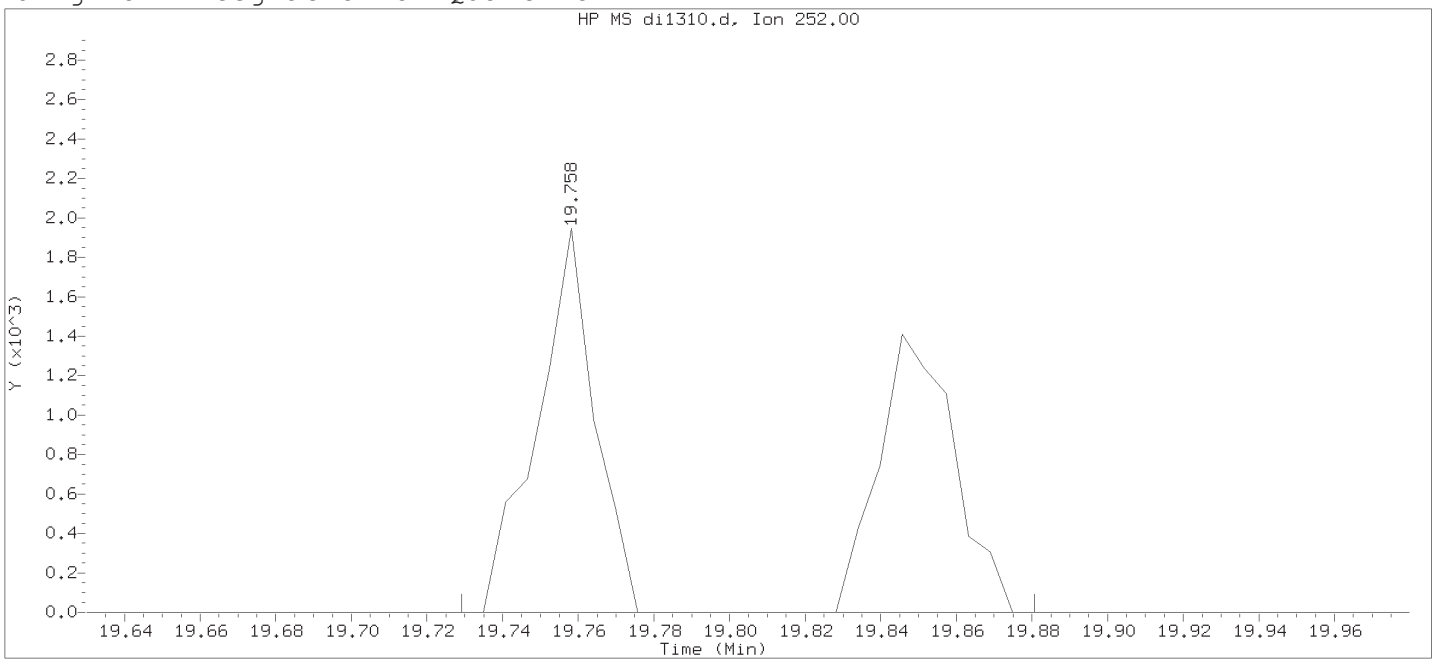
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



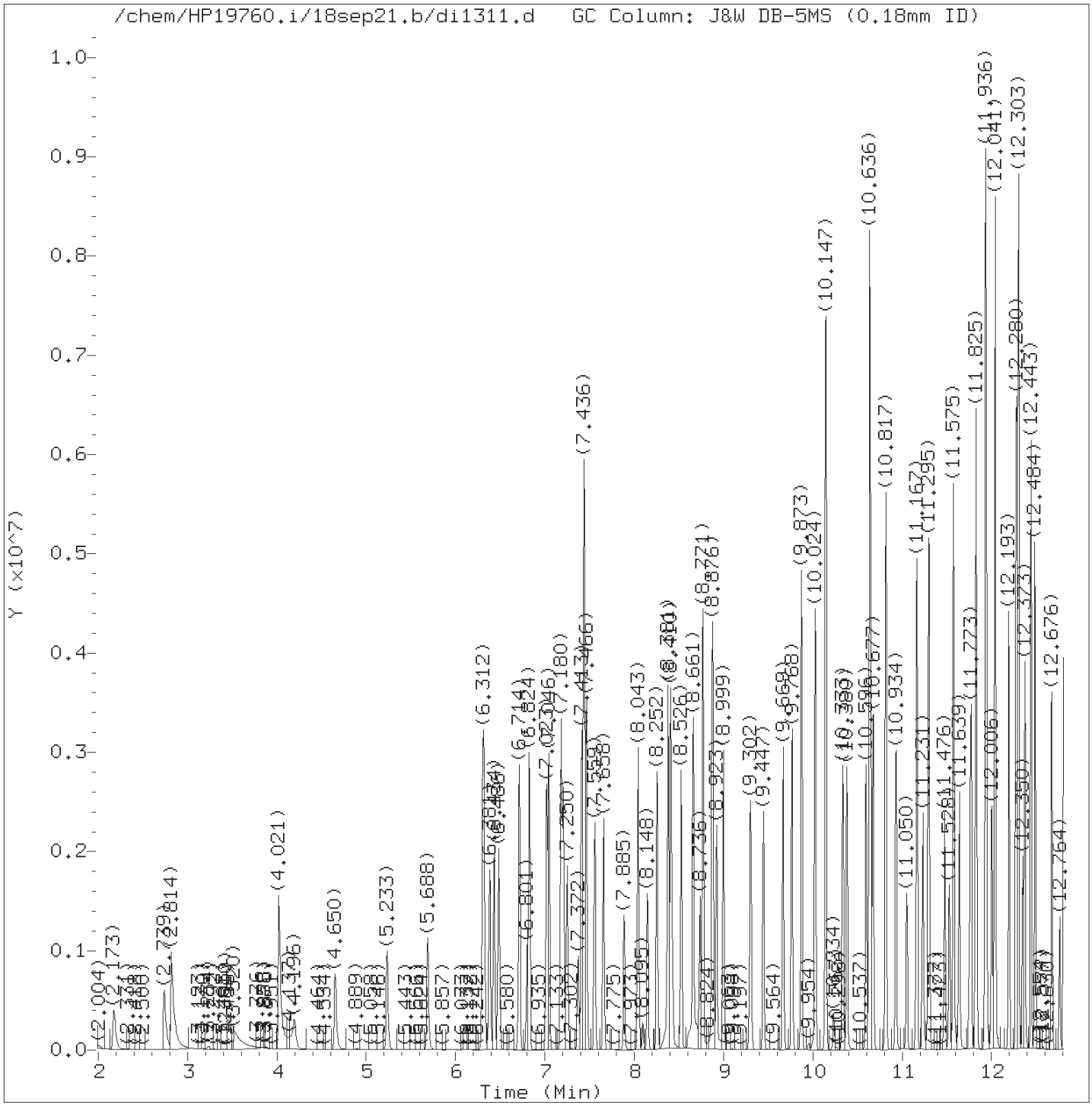
Data File: /chem/HP19760.i/18sep21.b/di1310.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:08 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 22:36 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Compound Number	: 211		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3049		
Retention Time (minutes)	: 19.758		
Quant Ion	: 252.00		
Area	: 4030		
On-column Amount (ng/ul)	: 0.0369		
Integration start scan	: 3043	Integration stop scan:	3069
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 07:59.
Target 3.5 esignature user ID: EMonborne



Total Ion Chromatogram (TIC)

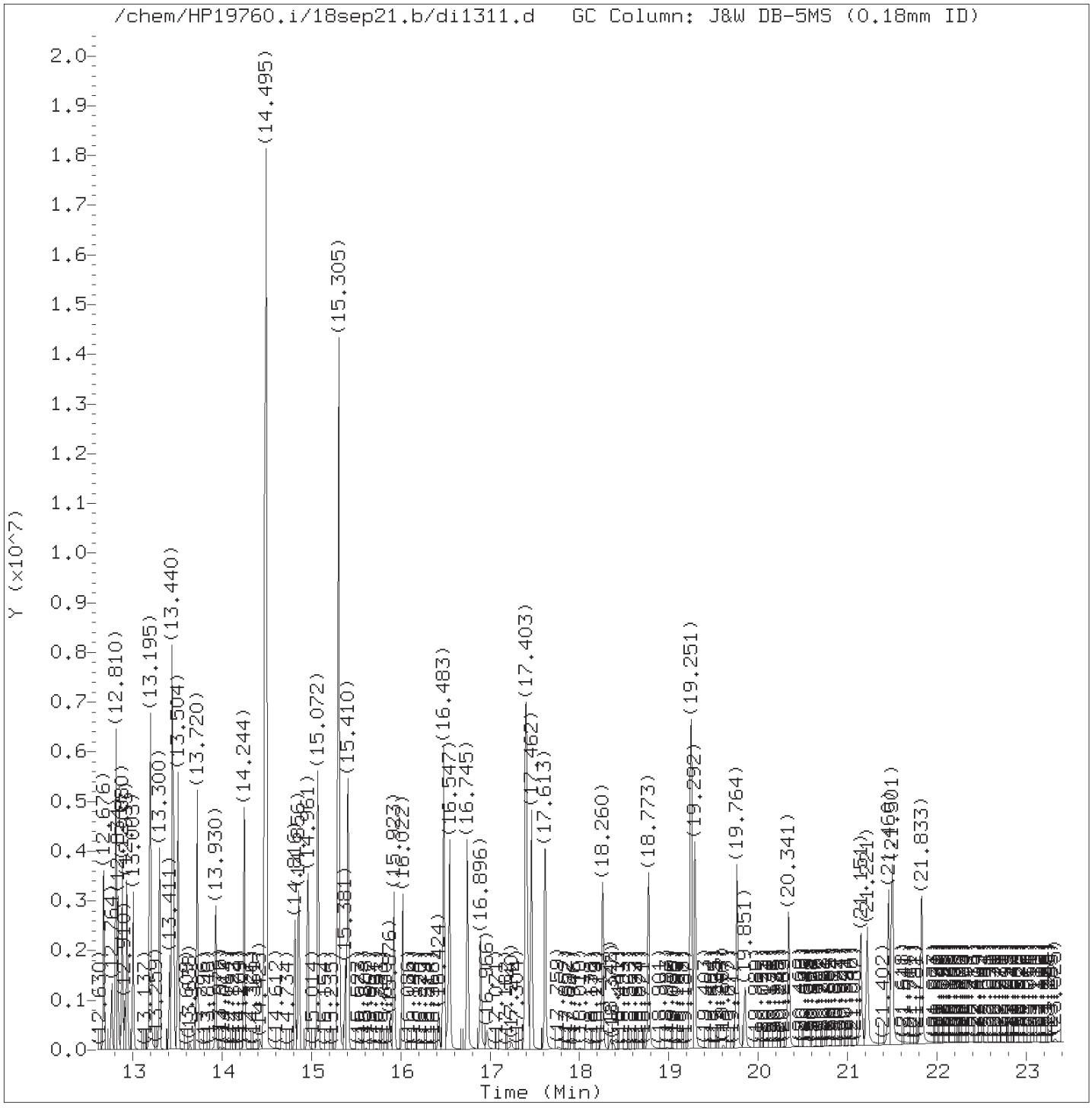
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1311.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1311.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1311.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

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)	2.173	88	376187	11.425
4) N-Nitrosodimethylamine	(1)	2.739	74	644929	14.093
5) Pyridine	(1)	2.814	79	1027100	12.887
7) 2-Picoline	(1)	4.021	93	1094108	13.531
8) N-Nitrosomethylethylamine	(1)	4.196	88	420853	11.847
9) Methyl methanesulfonate	(1)	4.650	80	492606	12.825
13) N-Nitrosodiethylamine	(1)	5.233	102	409128	12.549
42) Total Cresols	(1)	5.660	100	1836247	28.512
15) Ethyl methanesulfonate	(1)	5.688	109	397900	12.416
18) Phenol	(1)	6.300	94	1310823	13.545
19) Aniline	(1)	6.317	93	1480318	12.914
22) bis(2-Chloroethyl)ether	(1)	6.434	93	980505	13.645
23) 2-Chlorophenol	(1)	6.486	128	844253	14.026
24) 1,3-Dichlorobenzene	(1)	6.714	146	929377	13.597
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	207035	5.000
26) 1,4-Dichlorobenzene	(1)	6.824	146	960175	13.772
27) Benzyl alcohol	(1)	7.023	108	611834	14.897
28) 1,2-Dichlorobenzene	(1)	7.046	146	906042	13.831
30) Indene	(1)	7.180	115	1380144	20.316
31) 2-Methylphenol	(1)	7.209	108	847995	14.187
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.250	45	1128943	13.575
34) bis(2-Chloroisopropyl)ether	(1)	7.250	45	1128943	13.575
35) N-Nitrosopyrrolidine	(1)	7.372	100	444087	12.984
97) Isosafrole	(3)	7.383	162	654923	12.763
36) Acetophenone	(1)	7.413	105	1268950	14.964
38) N-Nitroso-di-n-propylamine	(1)	7.436	70	740635	14.721
39) N-Nitrosomorpholine	(1)	7.436	56	492486	12.867
37) 4-Methylphenol	(1)	7.442	108	988252	14.316
40) o-Toluidine	(1)	7.466	106	1471076	13.967
43) Hexachloroethane	(1)	7.559	117	378684	13.393
45) Nitrobenzene	(2)	7.658	77	1026336	13.306
48) N-Nitrosopiperidine	(2)	7.885	114	382511	12.145
50) Isophorone	(2)	8.043	82	1885018	14.633
120) 2,4_2,6-Dinitrotoluenes	(3)	8.050	165	901748	29.507
51) 2-Nitrophenol	(2)	8.148	139	397054	13.374
53) 2,4-Dimethylphenol	(2)	8.252	107	758316	11.483
57) O,O,O-Triethylphosphorothioate	(2)	8.381	198	359467	12.597
55) bis(2-Chloroethoxy)methane	(2)	8.410	93	1162856	13.833
56) Benzoic acid	(2)	8.433	105	870138	24.436
60) 2,4-Dichlorophenol	(2)	8.526	162	683905	14.085

* = Compound is an internal standard.

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on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1311.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
62) 1,2,4-Trichlorobenzene	(2)	8.661	180	724572	13.431
65)*Naphthalene-d8	(2)	8.736	136	795948	5.000
66) Naphthalene	(2)	8.771	128	2480541	13.396
146) Diallate trans/cis	(4)	8.775	86	783876	12.287
67) 4-Chloroaniline	(2)	8.870	127	1018702	14.633
68) 2,6-Dichlorophenol	(2)	8.882	162	586018	12.424
69) Hexachloropropene	(2)	8.923	213	452446	13.216
71) Hexachlorobutadiene	(2)	8.999	225	409007	13.463
75) Quinoline	(2)	9.302	129	1356505	12.747
77) N-Nitrosodi-n-butylamine	(2)	9.447	84	574782	11.319
80) 4-Chloro-3-methylphenol	(2)	9.669	107	782152	14.631
82) Safrole	(2)	9.768	162	558137	12.252
83) 2-Methylnaphthalene	(2)	9.873	142	1625530	14.180
84) 1-Methylnaphthalene	(2)	10.024	142	1501749	13.715
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.147	216	707379	13.191
85) Hexachlorocyclopentadiene	(3)	10.147	237	863825	25.987
88) cis-Isosafrole	(3)	10.234	162	73100	1.523
90) 2,4,6-Trichlorophenol	(3)	10.333	196	453595	14.297
92) 2,4,5-Trichlorophenol	(3)	10.380	196	503694	14.876
94) trans-Isosafrole	(3)	10.596	162	581823	11.191
95) 1,1'-Biphenyl	(3)	10.636	154	1953669	14.158
96) 2-Chloronaphthalene	(3)	10.642	162	1530629	13.516
98) 1-Chloronaphthalene	(3)	10.677	162	1230937	11.731
99) Diphenyl ether	(3)	10.817	170	913490	11.881
100) 2-Nitroaniline	(3)	10.817	138	488826	15.024
104) 1,4-Naphthoquinone	(3)	10.934	158	662030	16.505
105) 1,4-Dinitrobenzene	(3)	11.050	168	245194	14.235
106) Dimethylphthalate	(3)	11.167	163	1624057	13.592
107) 1,3-Dinitrobenzene	(3)	11.167	168	289162	14.496
108) 2,6-Dinitrotoluene	(3)	11.231	165	389595	14.579
109) Acenaphthylene	(3)	11.301	152	2372726	15.819
112) 3-Nitroaniline	(3)	11.476	138	431500	14.947
113)*Acenaphthene-d10	(3)	11.528	164	398369	5.000
114) Acenaphthene	(3)	11.575	153	1539682	13.719
115) 2,4-Dinitrophenol	(3)	11.639	184	419091	29.572
116) 4-Nitrophenol	(3)	11.756	109	265317	13.503
117) Pentachlorobenzene	(3)	11.773	250	535575	12.229
119) Dibenzofuran	(3)	11.825	168	2127681	13.761
118) 2,4-Dinitrotoluene	(3)	11.831	165	512153	14.205
121) 1-Naphthylamine	(3)	11.936	143	3026245	25.525

* = Compound is an internal standard.

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on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1311.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
122) 2,3,4,6-Tetrachlorophenol	(3)	12.006	232	353181	13.387
123) 2-Naphthylamine	(3)	12.041	143	2960336	24.715
124) Diethylphthalate	(3)	12.193	149	1611150	14.261
126) Fluorene	(3)	12.274	166	1693934	14.363
125) Thionazin	(3)	12.286	107	319510	13.604
128) 5-Nitro-o-toluidine	(3)	12.298	152	439275	13.009
129) 4-Nitroaniline	(3)	12.303	138	457987	14.395
127) 4-Chlorophenyl-phenylether	(3)	12.303	204	781025	13.543
130) 4,6-Dinitro-2-methylphenol	(4)	12.350	198	276603	14.370
131) N-Nitrosodiphenylamine	(4)	12.443	169	1445274	14.919
132) NDPA as diphenylamine	(4)	12.443	169	1445274	14.919
134) 1,2-Diphenylhydrazine	(4)	12.484	77	2046429	14.820
137) Tetraethyldithiopyrophosphate	(4)	12.671	97	277776	13.135
139) 1,3,5-Trinitrobenzene	(4)	12.764	213	165708	12.643
141) Phorate	(4)	12.810	75	1107512	13.990
140) Diallate (peak 1)	(4)	12.810	86	599286	9.076
142) Phenacetin	(4)	12.834	108	763644	12.302
143) 4-Bromophenyl-phenylether	(4)	12.880	248	437921	13.667
144) Diallate (peak 2)	(4)	12.910	86	184590	3.489
145) Hexachlorobenzene	(4)	12.933	284	432439	13.168
147) Dimethoate	(4)	13.003	87	699081	13.562
149) Pentachlorophenol	(4)	13.184	266	302531	15.673
151) Pentachloronitrobenzene	(4)	13.201	237	183357	12.913
152) Pronamide	(4)	13.300	173	662661	12.556
153)*Phenanthrene-d10	(4)	13.411	188	721212	5.000
154) Dinoseb	(4)	13.440	211	332648	12.138
155) Phenanthrene	(4)	13.440	178	2494429	13.743
157) Anthracene	(4)	13.510	178	2518287	14.523
163) Carbazole	(4)	13.720	167	2366822	14.881
164) Methyl parathion	(4)	13.930	109	569413	13.140
165) Di-n-butylphthalate	(4)	14.244	149	2790534	14.719
167) Parathion	(4)	14.472	109	371765	13.465
168) 4-Nitroquinoline-1-oxide	(4)	14.495	190	3742892	154.865
171) Isodrin	(4)	14.856	193	262432	12.922
222) Total PAHs	(6)	15.000	100	38705371	267.512
173) Fluoranthene	(4)	15.072	202	2657289	14.723
174) Benzidine	(5)	15.305	184	7261697	53.008
175)*Pyrene-d10	(5)	15.381	212	732484	5.000
177) Pyrene	(5)	15.410	202	2721343	13.515
182) p-Dimethylaminoazobenzene	(5)	15.923	225	471653	14.972

* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1311.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

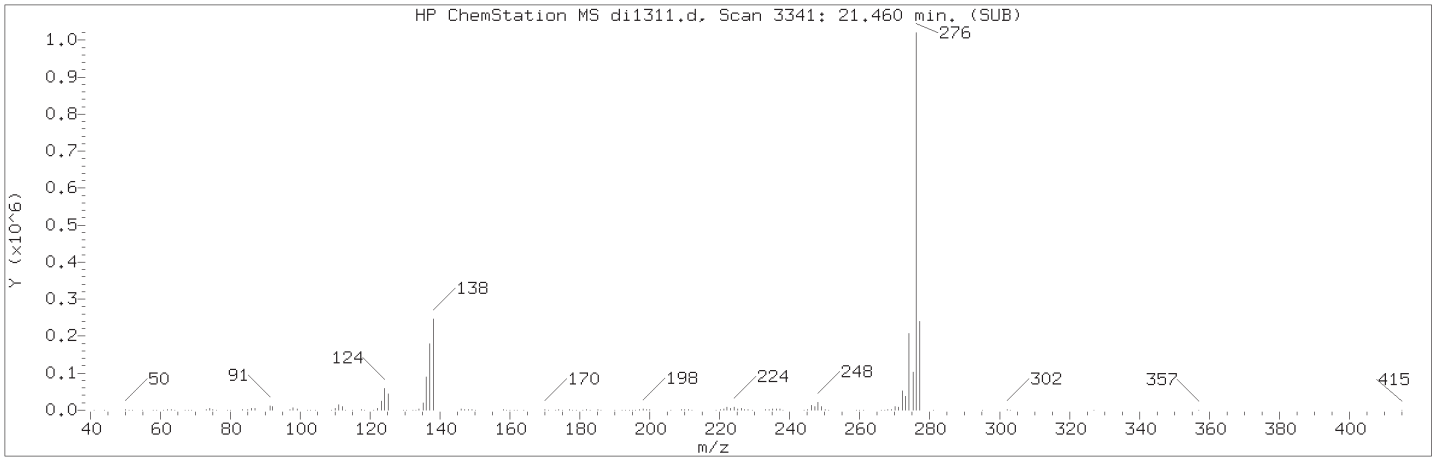
Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
185) Chlorobenzilate	(5)	16.022	139	735530	13.639
187) 3,3'-Dimethylbenzidine	(5)	16.483	212	2798484	23.301
188) Butylbenzylphthalate	(5)	16.547	149	1198189	14.071
191) 2-Acetylaminofluorene	(5)	16.896	181	726466	10.958
193) 3,3'-Dichlorobenzidine	(5)	17.398	252	775256	11.670
195) Benzo(a)anthracene	(5)	17.403	228	2359216	14.207
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.415	231	426460	11.385
196) Chrysene	(5)	17.462	228	2325920	13.463
199) bis(2-Ethylhexyl)phthalate	(5)	17.619	149	1560633	13.822
203) 6-Methylchrysene	(5)	18.260	242	1366285	11.523
205) Di-n-octylphthalate	(6)	18.773	149	2504198	13.003
206) Benzo(b)fluoranthene	(6)	19.245	252	2256651	14.975
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.251	256	1085225	14.463
208) Benzo(k)fluoranthene	(6)	19.292	252	2291973	14.680
211) Benzo(a)pyrene	(6)	19.764	252	2108504	15.184
213)*Perylene-d12	(6)	19.851	264	630595	5.000
215) 3-Methylcholanthrene	(6)	20.341	268	983577	14.657
217) Dibenz(a,h)acridine	(6)	21.151	279	1382454	12.284
218) Dibenz(a,j)acridine	(6)	21.221	279	1532163	12.317
219) Indeno(1,2,3-cd)pyrene	(6)	21.460	276	1786615M	13.853
220) Dibenz(a,h)anthracene	(6)	21.501	278	2030411	14.419
221) Benzo(g,h,i)perylene	(6)	21.833	276	1940571	13.313

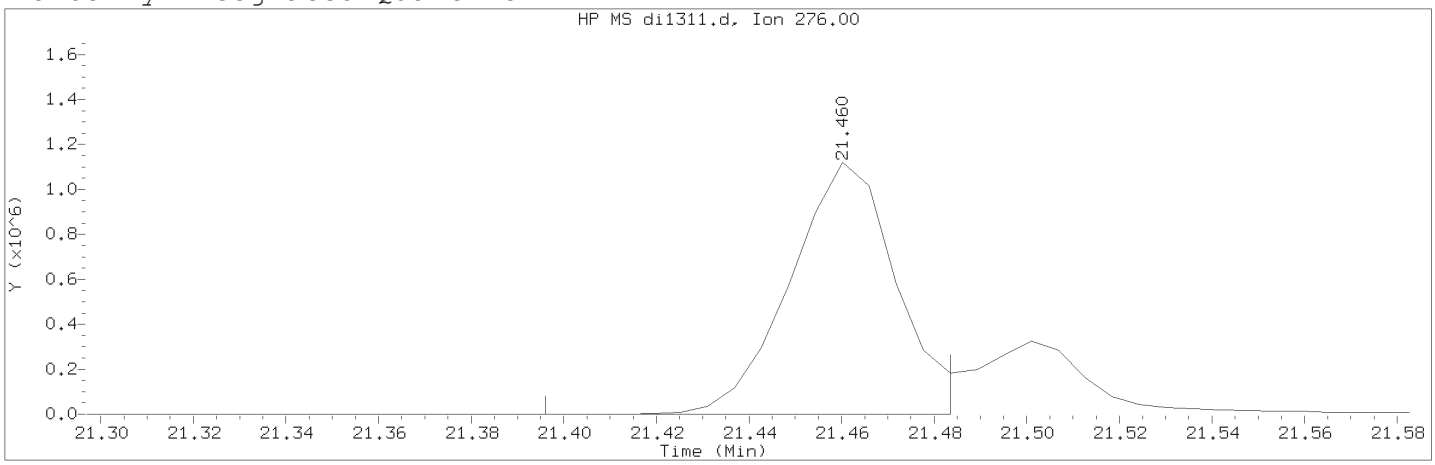
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18sep21.b/di1311.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

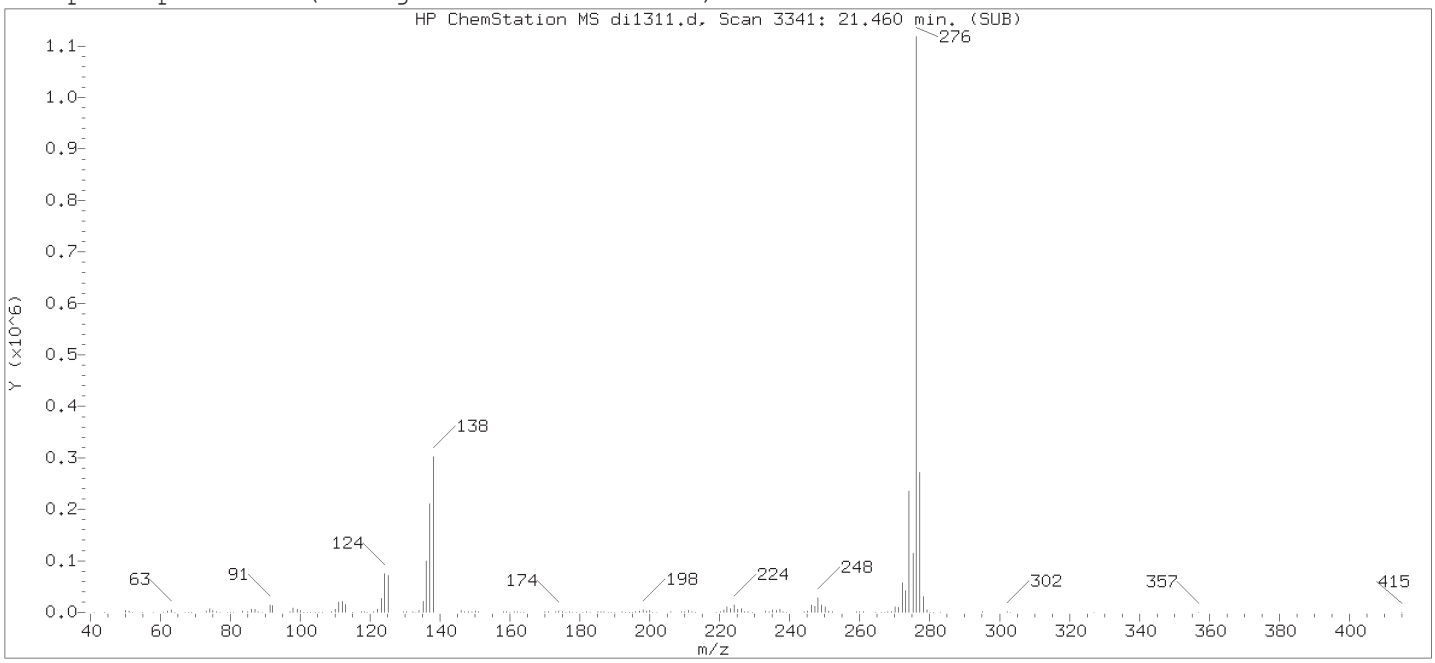
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3341
Retention Time (minutes) : 21.460
Quant Ion : 276.00
Area (flag) : 1786615M
On-Column Amount (ng/ul) : 13.8531
Integration start scan : 3329 Integration stop scan: 3344
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

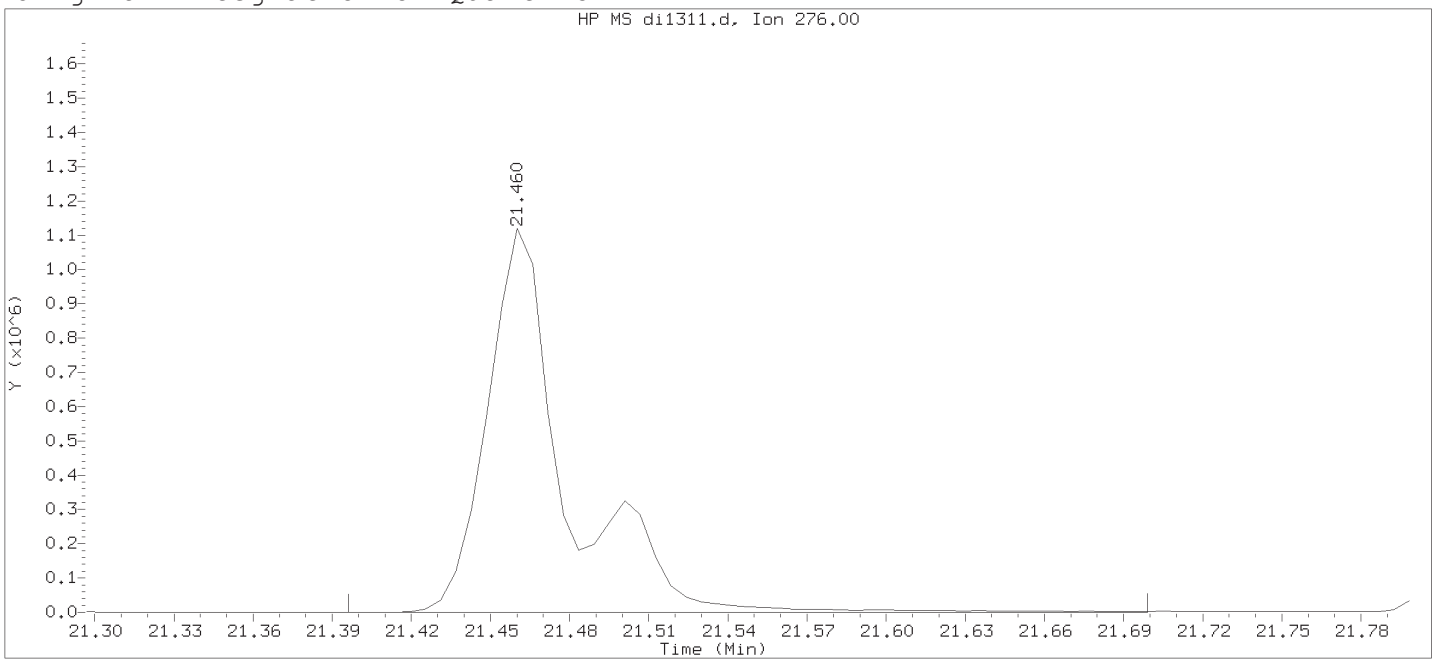
Analyst responsible for change: Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 09/24/2018 at 13:02.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



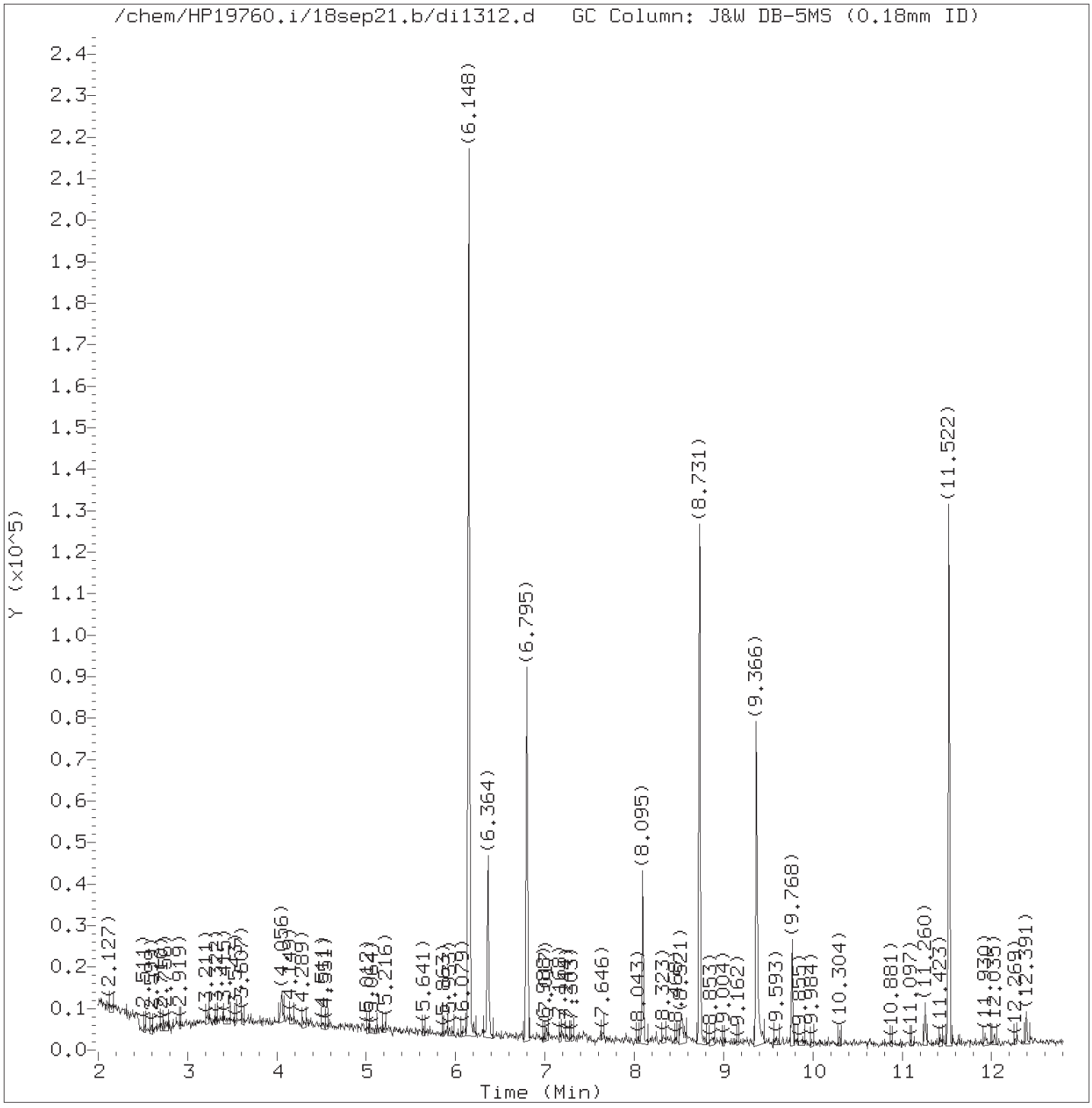
Data File: /chem/HP19760.i/18sep21.b/di1311.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 22:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 21-SEP-2018 21:39
Date, time and analyst ID of latest file update: 21-Sep-2018 23:05 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3341		
Retention Time (minutes)	: 21.460		
Quant Ion	: 276.00		
Area	: 2338546		
On-column Amount (ng/ul)	: 16.4355		
Integration start scan	: 3329	Integration stop scan:	3381
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 09/23/2018 at 09:15.
Target 3.5 esignature user: Edward Monborne



Total Ion Chromatogram (TIC)

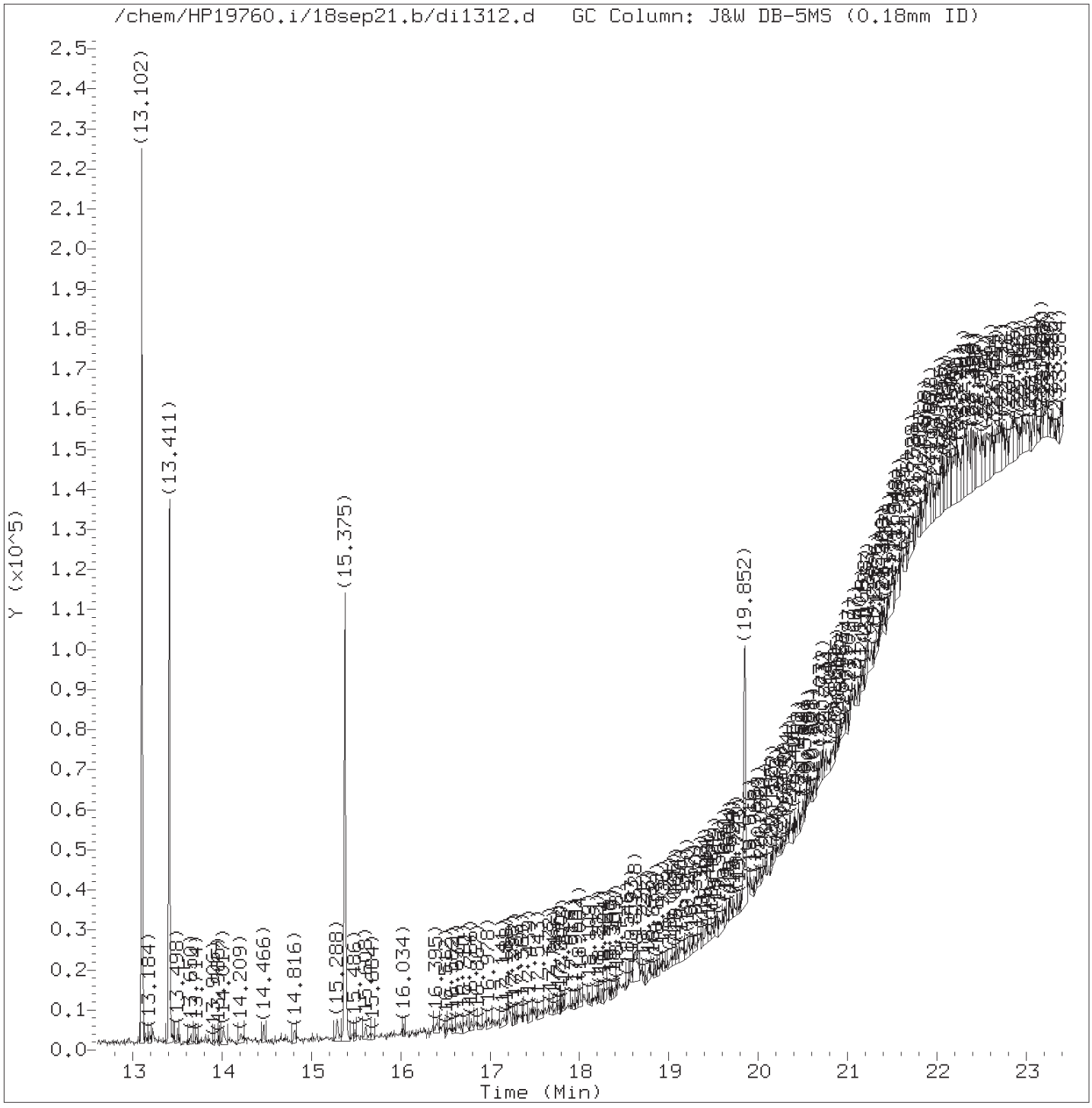
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1312.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 23:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV2578

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1312.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 23:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV2578

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1312.d Instrument ID: HP19760.i
Injection date and time: 21-SEP-2018 23:05 Analyst ID: art12405

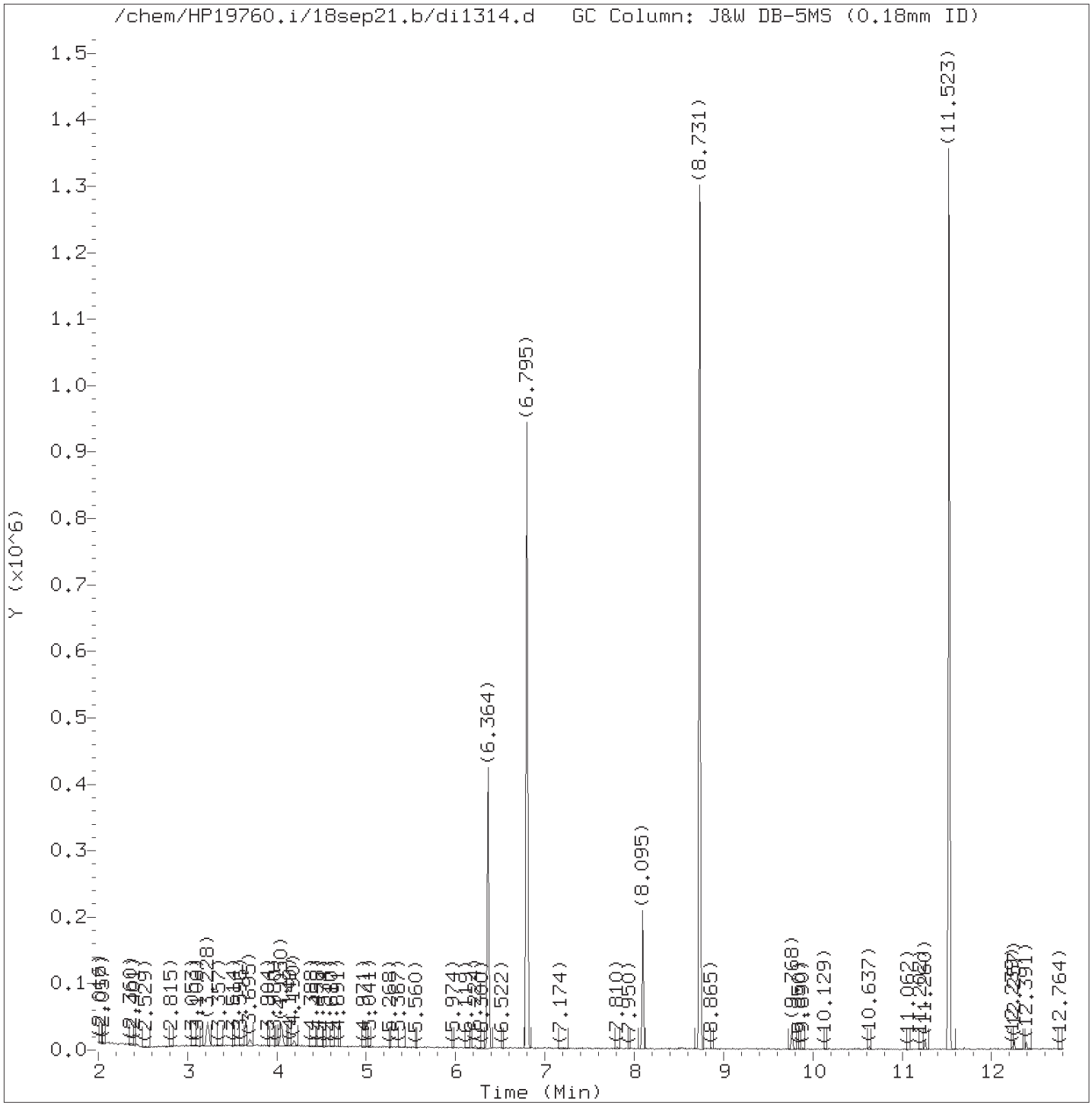
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV2578

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
16) Benzaldehyde	(1)	6.148	77	63998	11.770
25)*1,4-Dichlorobenzene-d4	(1)	6.795	152	19621	5.000
65)*Naphthalene-d8	(2)	8.731	136	68723	5.000
113)*Acenaphthene-d10	(3)	11.522	164	30774	5.000
148) Atrazine	(4)	13.102	200	24174	10.326
153)*Phenanthrene-d10	(4)	13.411	188	55734	5.000
175)*Pyrene-d10	(5)	15.375	212	49271	5.000
213)*Perylene-d12	(6)	19.852	264	36423	5.000

* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

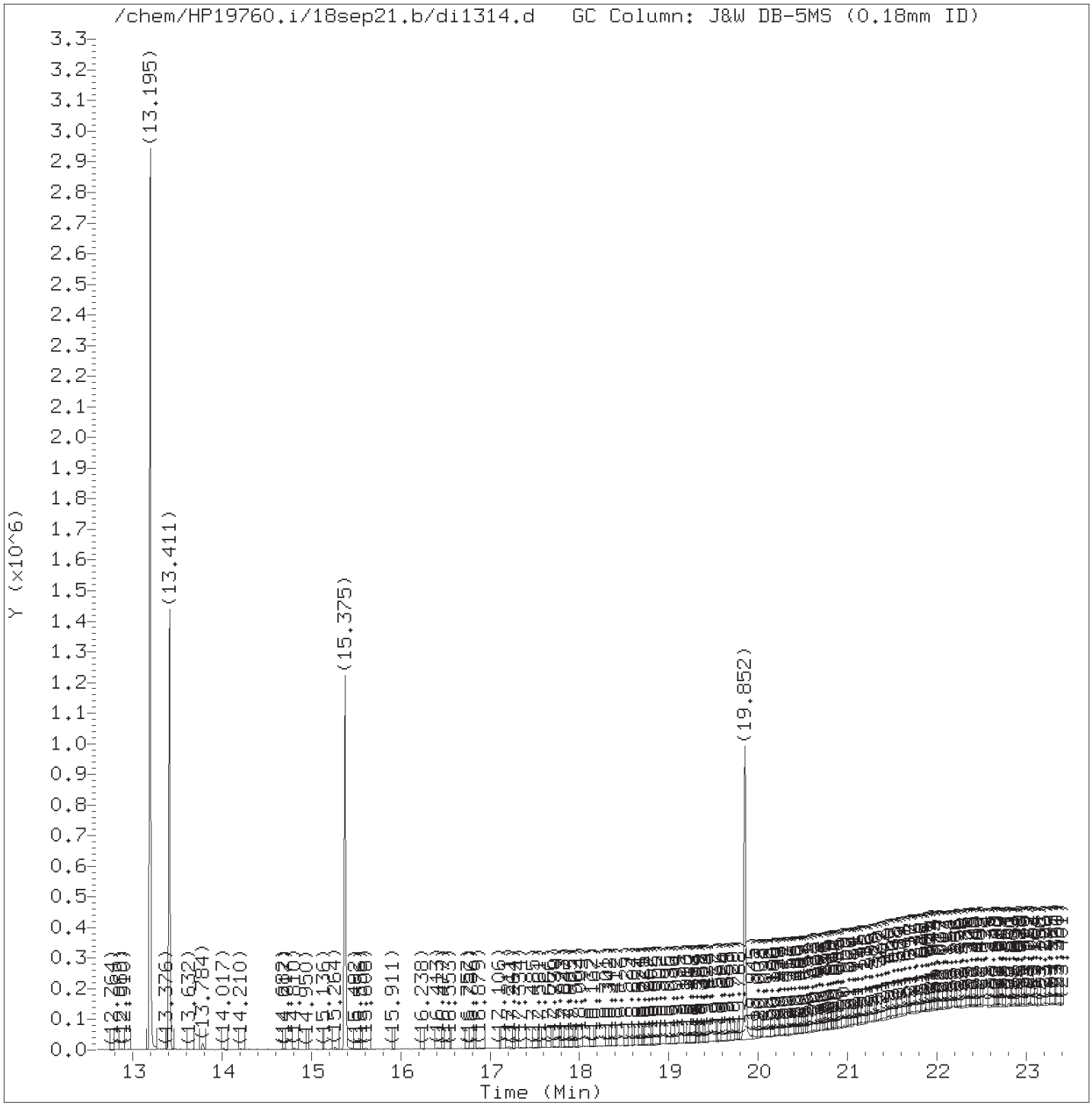
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1314.d Instrument ID: HP19760.i
Injection date and time: 22-SEP-2018 00:03 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: 4abp
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rv4ABPICV2258

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1314.d Instrument ID: HP19760.i
Injection date and time: 22-SEP-2018 00:03 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: 4abp
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rv4ABPICV2258

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1314.d Instrument ID: HP19760.i
Injection date and time: 22-SEP-2018 00:03 Analyst ID: art12405

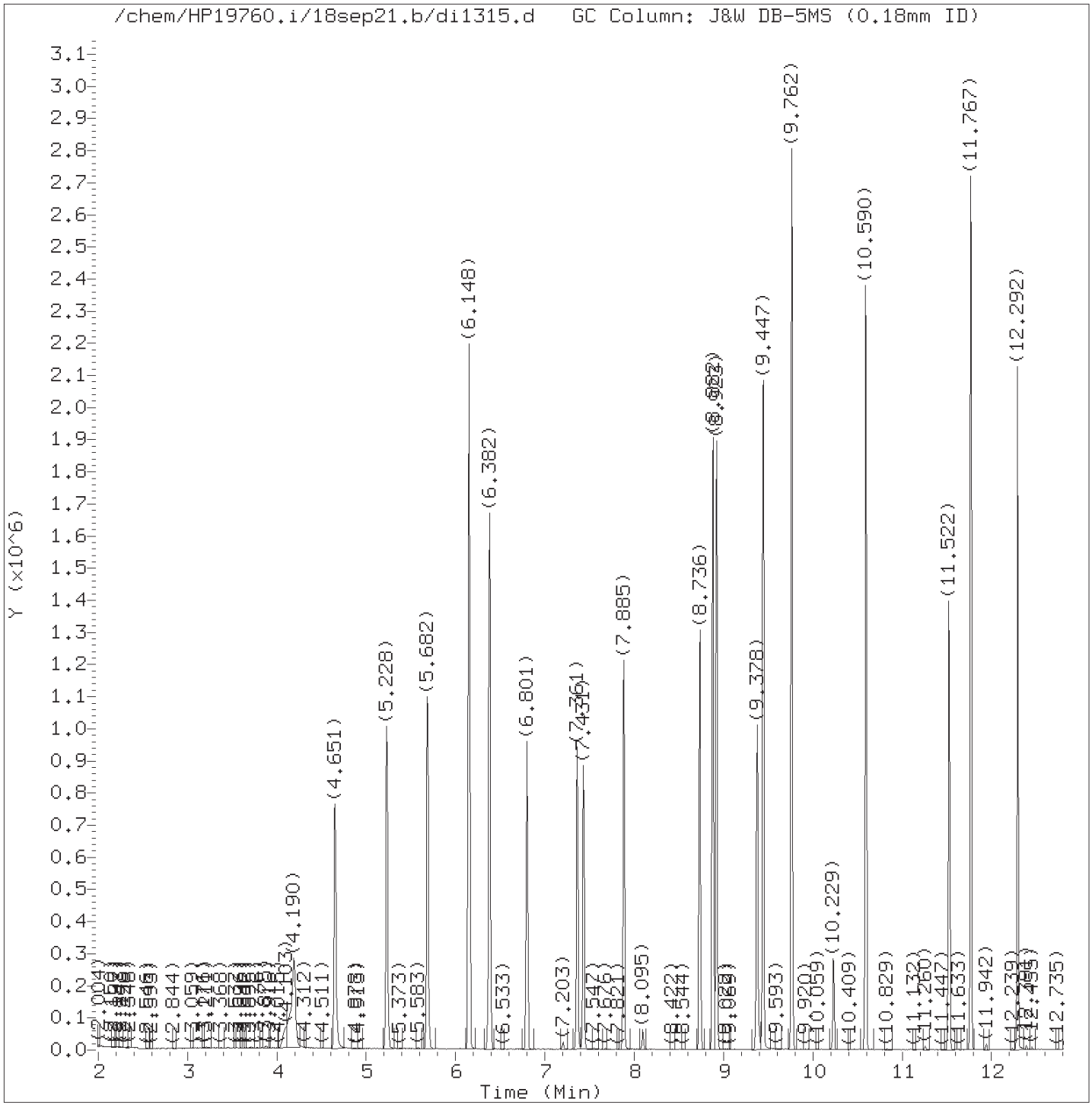
Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: 4abp
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rv4ABPICV2258

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
25)*1,4-Dichlorobenzene-d4	(1)	6.795	152	198605	5.000
65)*Naphthalene-d8	(2)	8.731	136	734789	5.000
113)*Acenaphthene-d10	(3)	11.523	164	327694	5.000
150) 4-Aminobiphenyl	(4)	13.195	169	1123710	17.301
153)*Phenanthrene-d10	(4)	13.411	188	576226	5.000
175)*Pyrene-d10	(5)	15.375	212	526883	5.000
213)*Perylene-d12	(6)	19.852	264	499905	5.000

* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

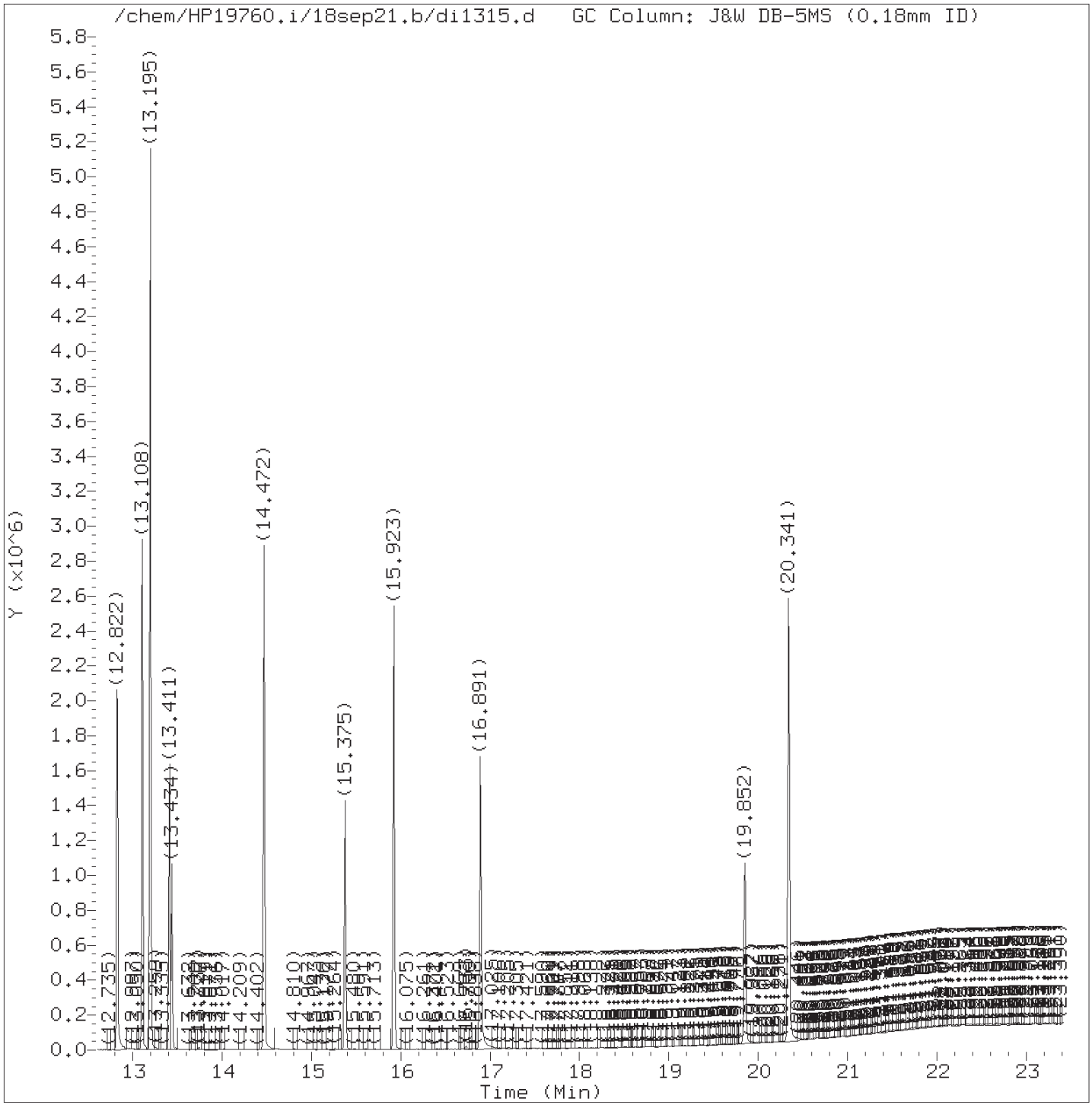
Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1315.d Instrument ID: HP19760.i
Injection date and time: 22-SEP-2018 00:31 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: capicvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV2608

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1315.d Instrument ID: HP19760.i
Injection date and time: 22-SEP-2018 00:31 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: capicvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV2608

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18sep21.b/di1315.d Instrument ID: HP19760.i
Injection date and time: 22-SEP-2018 00:31 Analyst ID: art12405

Method used: /chem/HP19760.i/18sep21.b/rv8270d.m Sublist used: capicvall1
Calibration date and time: 23-SEP-2018 09:08
Date, time and analyst ID of latest file update: 23-Sep-2018 09:09 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV2608

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
25)*1,4-Dichlorobenzene-d4	(1)	6.801	152	195843	5.000
65)*Naphthalene-d8	(2)	8.736	136	726424	5.000
76) Caprolactam	(2)	9.378	113	186621	11.018
113)*Acenaphthene-d10	(3)	11.522	164	343047	5.000
153)*Phenanthrene-d10	(4)	13.411	188	629191	5.000
175)*Pyrene-d10	(5)	15.375	212	596915	5.000
213)*Perylene-d12	(6)	19.852	264	541584	5.000

* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 09/23/2018 at 09:15.
Target 3.5 esignature user ID: em10340

Data File: /chem/HP19760.i/18oct31.b/dj2720b.d

Date : 31-OCT-2018 13:13

Client ID: DFTPP

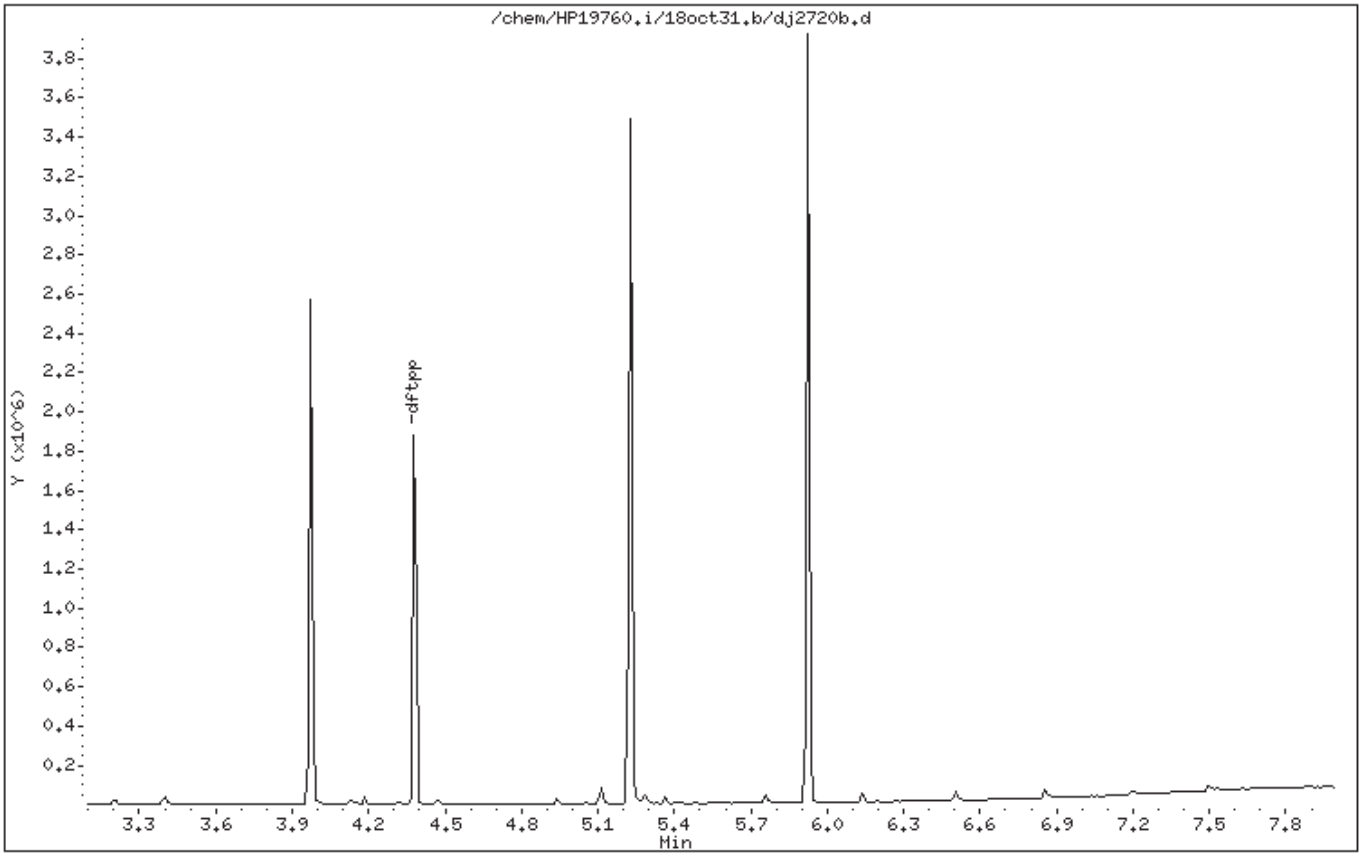
Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Edward Monborne on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Data File: /chem/HP19760.i/18oct31.b/dj2720b.d

Date : 31-OCT-2018 13:13

Client ID: DFTPP

Instrument: HP19760.i

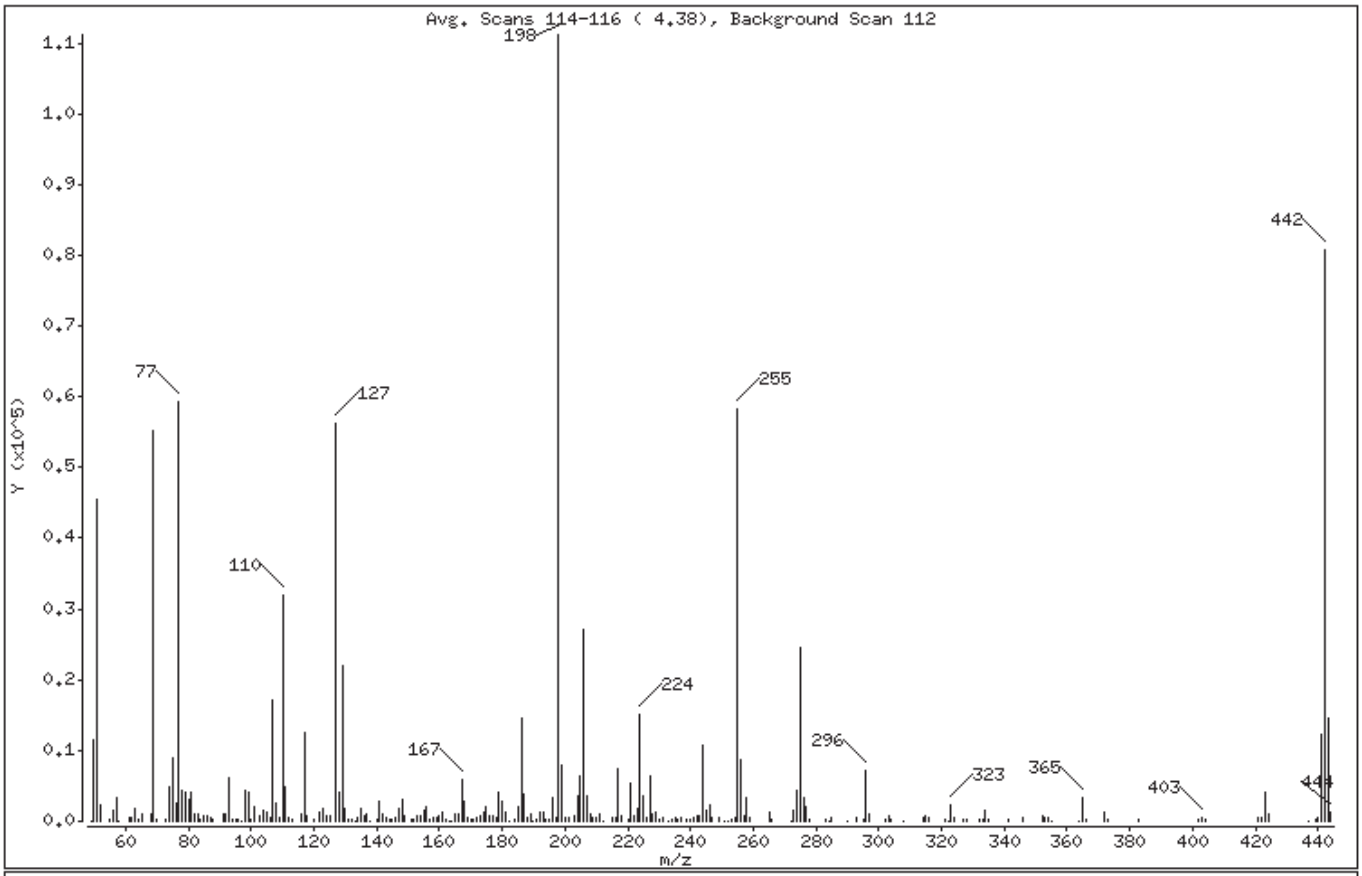
Sample Info: DFTPP;RVDFTPP2878;1;3;DFTPP;

Operator: em10340

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	40.85
68	Less than 2.00% of mass 69	0.90 (1.82)
69	Mass 69 relative abundance	49.55
70	Less than 2.00% of mass 69	0.21 (0.42)
127	10.00 - 80.00% of mass 198	50.57
197	Less than 2.00% of mass 198	0.40
199	5.00 - 9.00% of mass 198	7.17
275	10.00 - 60.00% of mass 198	21.96
365	Greater than 1.00% of mass 198	2.88
441	0.01 - 24.00% of mass 442	11.11 (15.29)
442	50.00 - 99.99% of mass 198	72.68
443	15.00 - 24.00% of mass 442	13.20 (18.16)

Digitally signed by Edward Monborne on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Date : 31-OCT-2018 13:13

Client ID: DFTPP Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS Column diameter: 0.18

Data File: dj2720b.d
Spectrum: Avg. Scans 114-116 (4.38), Background Scan 112
Location of Maximum: 198.00
Number of points: 244

m/z	Y	m/z	Y	m/z	Y	m/z	Y
49.00	85	127.00	56224	192.00	1405	272.00	107
50.00	11507	128.00	3968	193.00	1291	273.00	1630
51.00	45408	129.00	22104	194.00	283	274.00	4430
52.00	2326	130.00	1842	195.00	174	275.00	24416
55.00	215	131.00	276	196.00	3407	276.00	3251
56.00	1409	132.00	194	197.00	441	277.00	2156
57.00	3366	133.00	97	198.00	111168	278.00	343
58.00	106	134.00	601	199.00	7971	283.00	261
61.00	456	135.00	1767	200.00	537	284.00	87
62.00	519	136.00	822	201.00	499	285.00	426
63.00	1786	137.00	907	203.00	812	290.00	87
64.00	195	138.00	111	204.00	3495	293.00	530
65.00	900	140.00	240	205.00	6441	295.00	273
68.00	1005	141.00	2740	206.00	27176	296.00	7171
69.00	55080	142.00	925	207.00	3564	297.00	993
70.00	230	143.00	584	208.00	964	302.00	131
73.00	317	144.00	173	209.00	390	303.00	865
74.00	4870	145.00	152	210.00	400	304.00	210
75.00	9021	146.00	425	211.00	1032	308.00	110
76.00	2626	147.00	1675	212.00	88	314.00	404
77.00	59168	148.00	3088	215.00	433	315.00	780
78.00	4282	149.00	675	216.00	577	316.00	388
79.00	3988	151.00	360	217.00	7529	321.00	255
80.00	2984	152.00	183	218.00	803	322.00	119
81.00	4077	153.00	814	220.00	234	323.00	2235
82.00	1007	154.00	698	221.00	5324	324.00	427
83.00	1025	155.00	1430	222.00	744	327.00	373
84.00	271	156.00	2155	223.00	1803	328.00	249
85.00	716	157.00	255	224.00	15122	332.00	128
86.00	886	158.00	522	225.00	3627	333.00	224
87.00	594	159.00	421	226.00	514	334.00	1450
88.00	129	160.00	651	227.00	6465	335.00	279
91.00	992	161.00	1339	228.00	950	341.00	242
92.00	929	162.00	369	229.00	1306	346.00	402
93.00	6086	163.00	119	230.00	192	352.00	674

Date : 31-OCT-2018 13:13

Client ID: DFTPP Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS Column diameter: 0.18

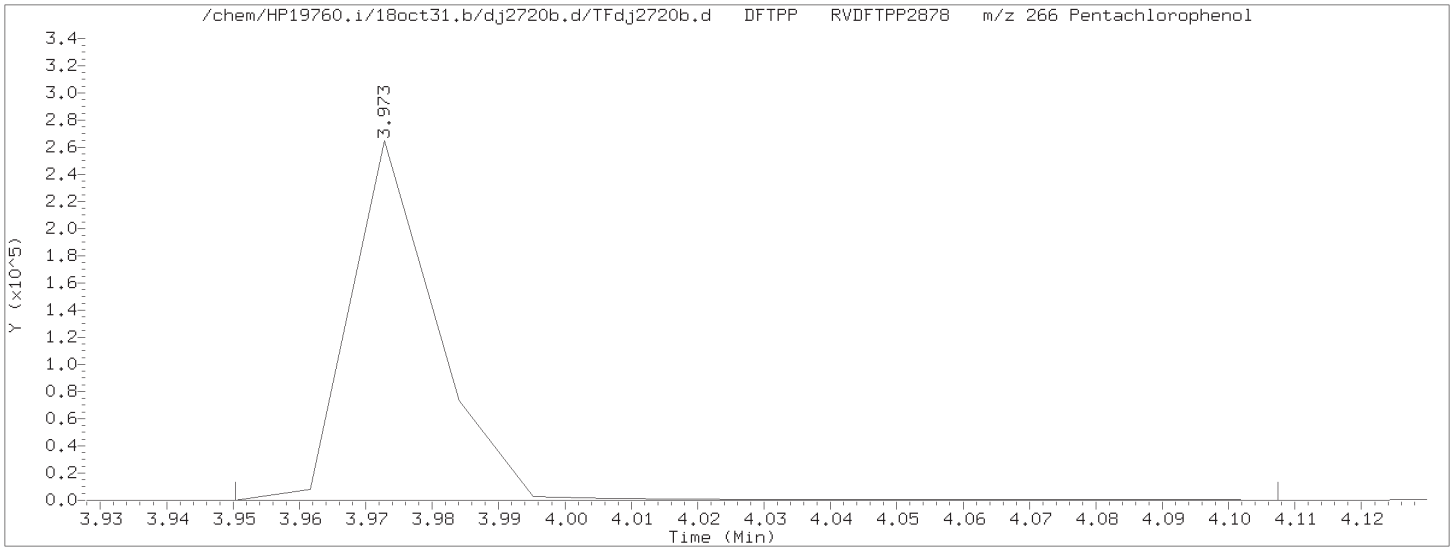
Data File: dj2720b.d
Spectrum: Avg. Scans 114-116 (4.38), Background Scan 112
Location of Maximum: 198.00
Number of points: 244

m/z	Y	m/z	Y	m/z	Y	m/z	Y
94.00	265	164.00	83	231.00	530	353.00	428
95.00	151	165.00	1071	233.00	91	354.00	594
96.00	328	166.00	1111	234.00	381	355.00	87
97.00	113	167.00	5771	235.00	416	364.00	90
98.00	4448	168.00	2928	236.00	363	365.00	3202
99.00	4040	169.00	518	237.00	631	366.00	281
100.00	361	170.00	200	239.00	256	372.00	1182
101.00	2136	171.00	192	240.00	245	373.00	217
103.00	753	172.00	467	241.00	433	383.00	206
104.00	1406	173.00	665	242.00	694	402.00	305
105.00	1219	174.00	1168	243.00	779	403.00	502
106.00	494	175.00	2117	244.00	10643	404.00	190
107.00	17216	176.00	645	245.00	1590	421.00	583
108.00	2464	177.00	810	246.00	2303	422.00	475
109.00	477	178.00	400	247.00	537	423.00	4157
110.00	32000	179.00	4063	249.00	396	424.00	971
111.00	4778	180.00	2848	251.00	91	437.00	101
112.00	518	181.00	1299	252.00	91	439.00	266
113.00	148	182.00	101	253.00	290	440.00	477
116.00	940	184.00	332	254.00	422	441.00	12351
117.00	12618	185.00	1931	255.00	58344	442.00	80792
118.00	849	186.00	14552	256.00	8711	443.00	14671
120.00	130	187.00	3902	257.00	669	444.00	1383
122.00	1181	188.00	485	258.00	3276		
123.00	1716	189.00	992	259.00	547		
124.00	787	190.00	124	265.00	1199		
125.00	754	191.00	335	266.00	257		

Digitally signed by Edward Monborne on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Assessment of GC Column Performance and Injection Port Inertness for

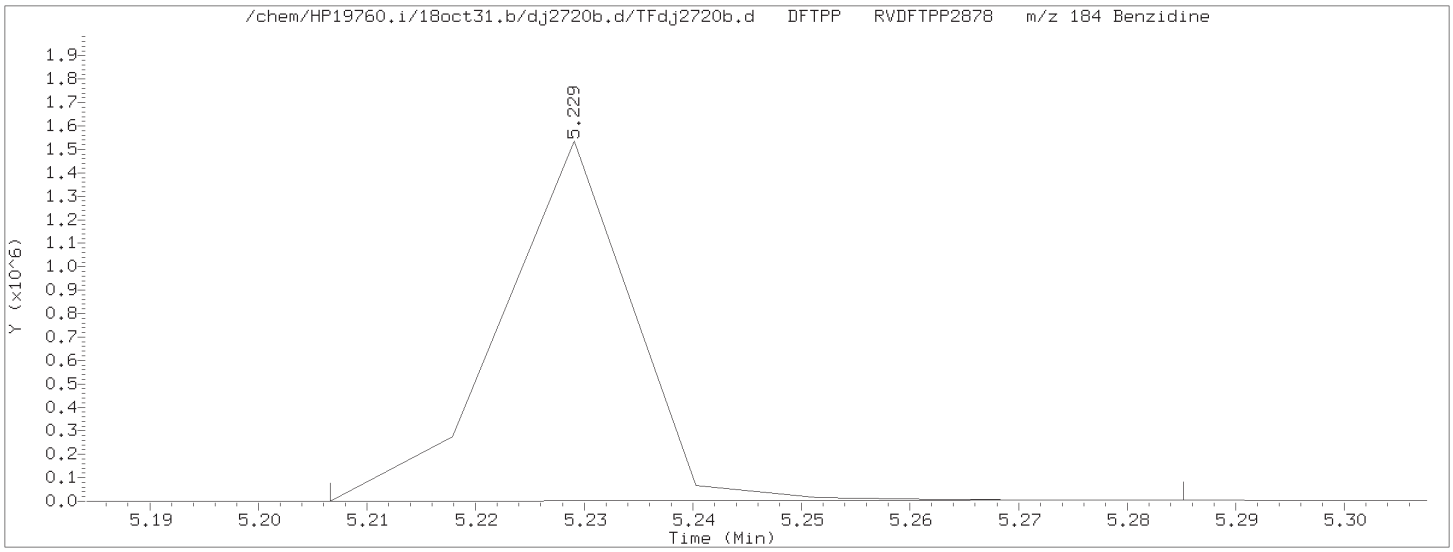
Instrument ID: HP19760.i Injection Date: 31-OCT-2018 13:13 Operator: em10340



Pentachlorophenol EICP peak height = 264896 EICP peak height at 10% = 26490 Pentachlorophenol EICP area = 238156

Pentachlorophenol EICP peak apex (min.) = 3.973
RT at 10% of front half of EICP (min.) = 3.962 'Front' peak width (min.) = 0.0104000000
RT at 10% of back half of EICP (min.) = 3.991 'Tailing' peak width (min.) = 0.0186500000

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0186500000}{0.0104000000} = 1.793$



Benzidine EICP peak height = 1533701 EICP peak height at 2.5% = 38343 Benzidine EICP area = 1274626

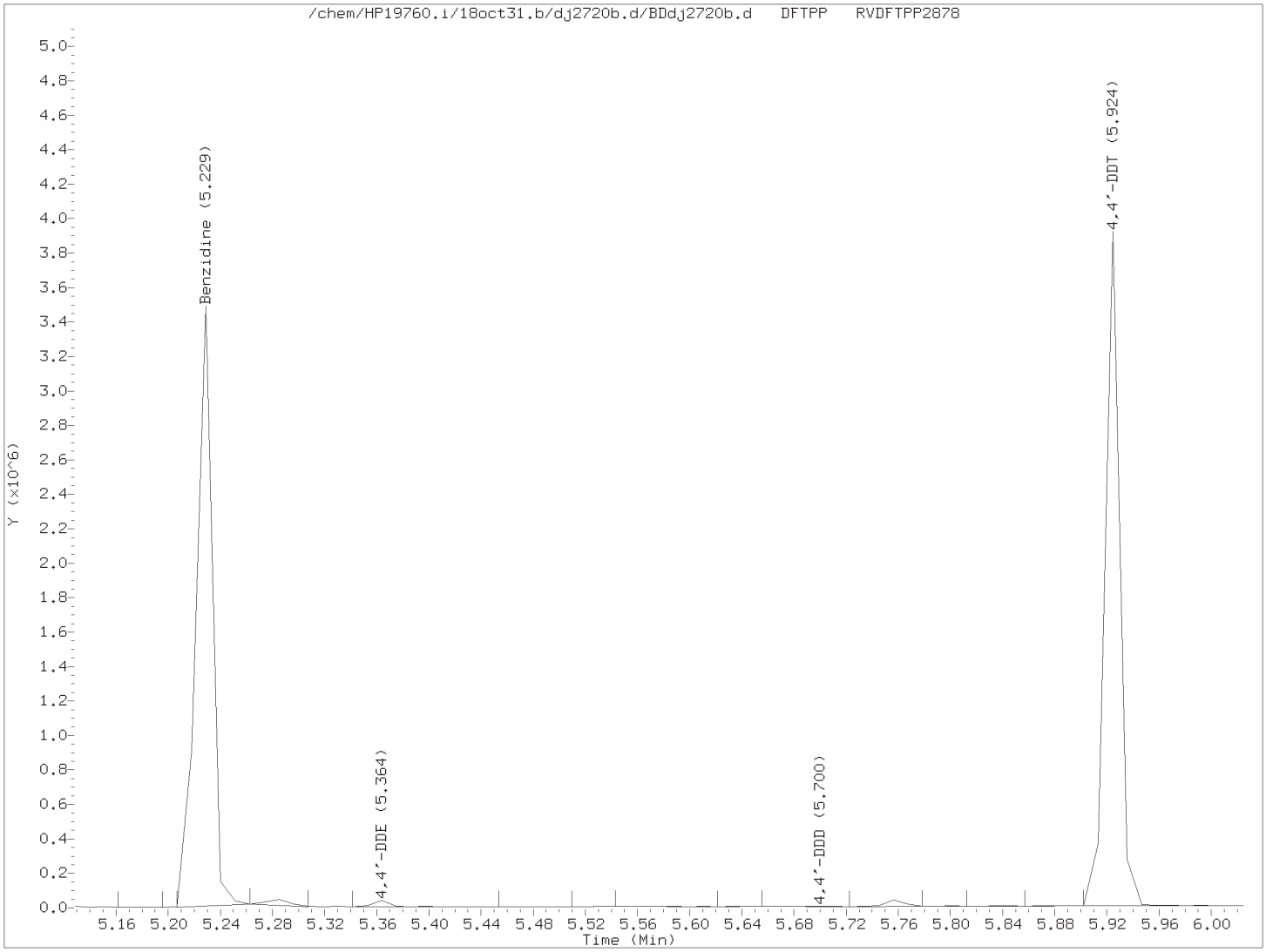
Benzidine EICP peak apex (min.) = 5.229
RT at 2.5% of front half of EICP (min.) = 5.208 'Front' peak width (min.) = 0.0208166667
RT at 2.5% of back half of EICP (min.) = 5.246 'Tailing' peak width (min.) = 0.0171333333

Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0171333333}{0.0208166667} = 0.823$

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996

Assessment of GC Column Performance and Injection Port Inertness for

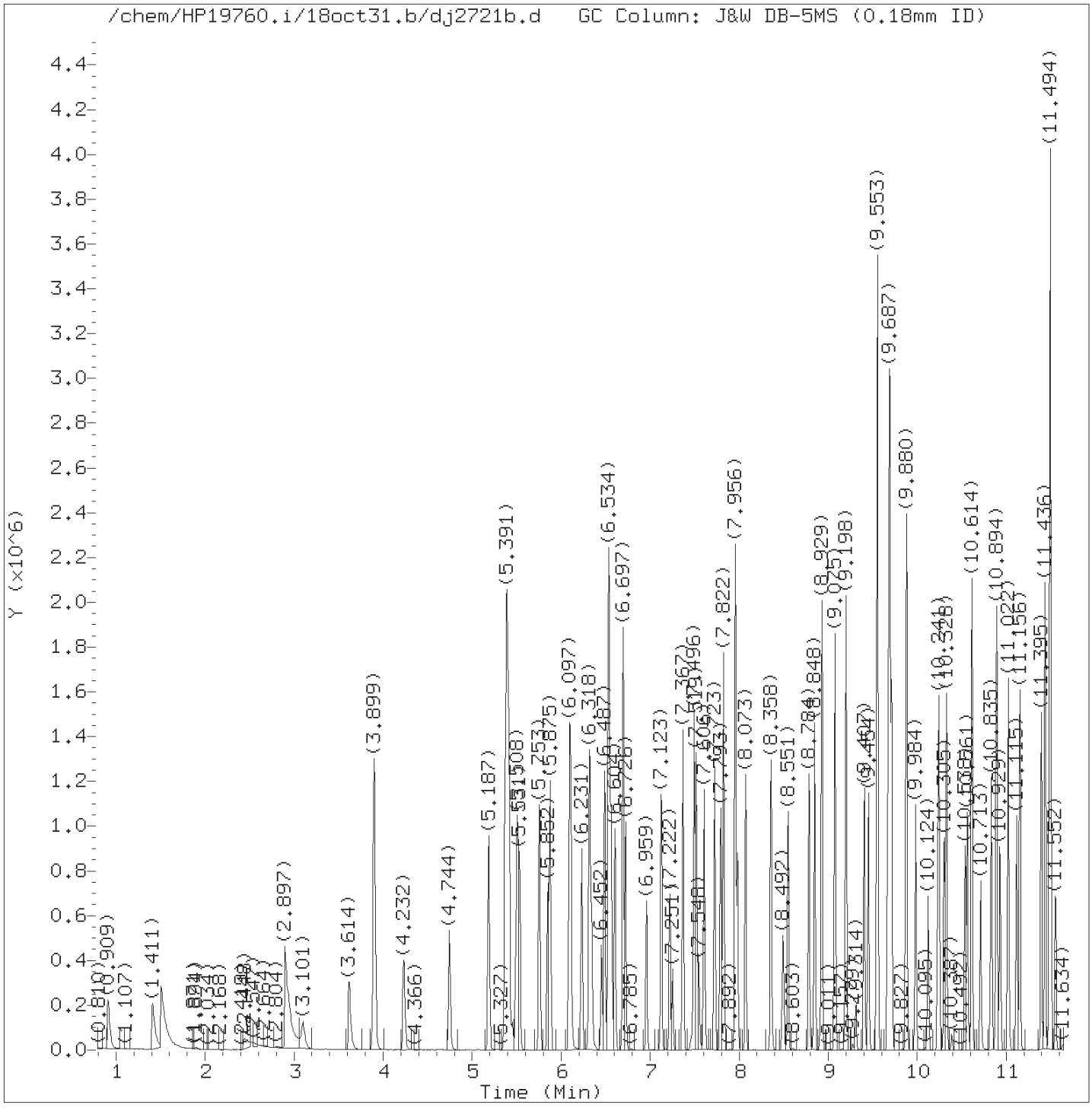
Instrument ID: HP19760.i Injection Date: 31-OCT-2018 13:13 Operator: em10340



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{36883 + 4411}{36883 + 4411 + 3073196} \times 100 = 1.3$$

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

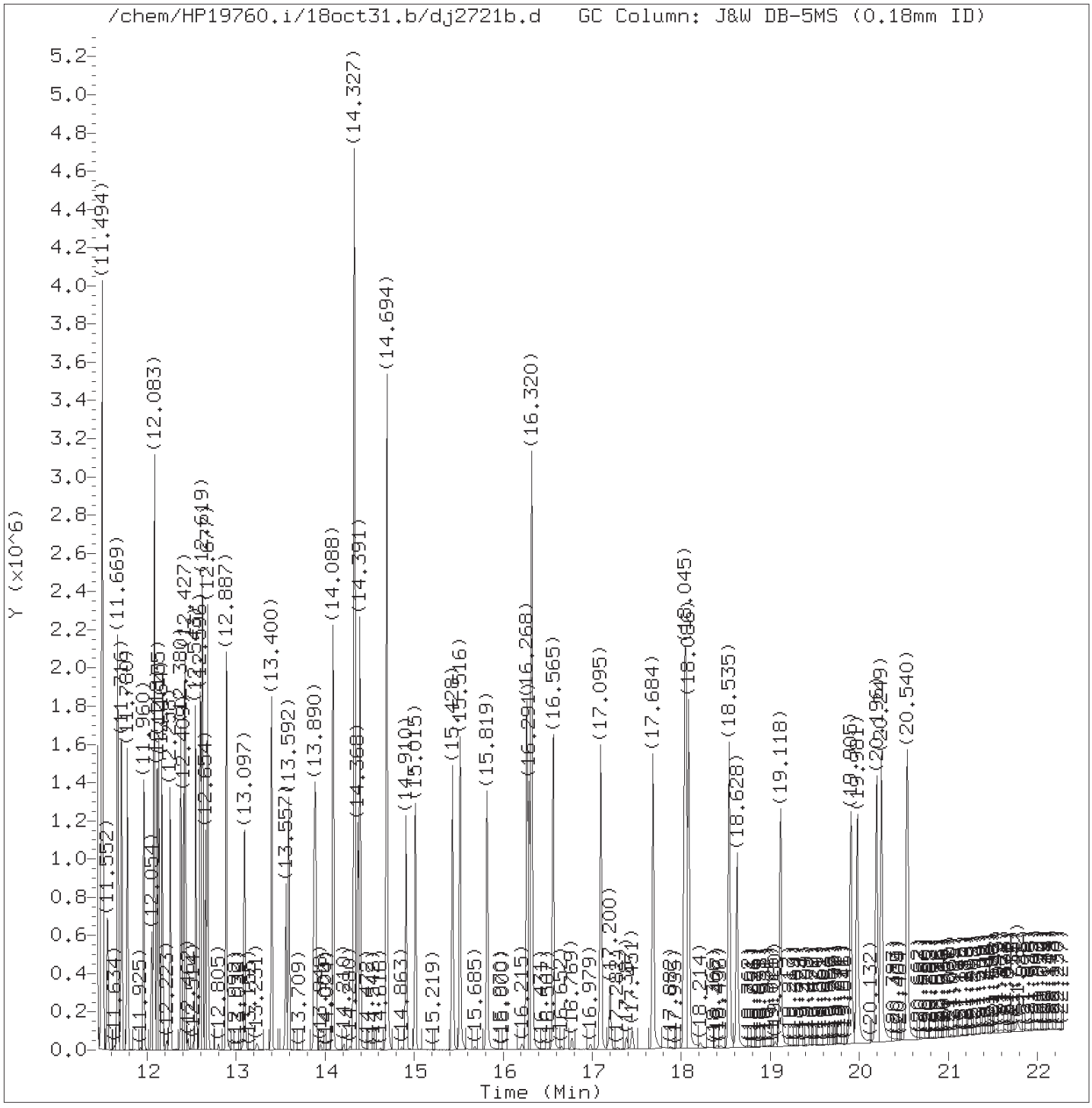
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Edward Monborne
on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Edward Monborne
on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

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)	0.909	88	188709	7.608
4) N-Nitrosodimethylamine	(1)	1.411	74	275936	8.004
5) Pyridine	(1)	1.504	79	437416	7.285
7) 2-Picoline	(1)	2.897	93	465960	7.649
8) N-Nitrosomethylethylamine	(1)	3.101	88	202582M	7.570
9) Methyl methanesulfonate	(1)	3.614	80	221404	7.652
11)$2-Fluorophenol	(1)	3.899	112	750206	15.976
13) N-Nitrosodiethylamine	(1)	4.237	102	192652	7.844
15) Ethyl methanesulfonate	(1)	4.744	109	188323	7.800
16) Benzaldehyde	(1)	5.187	77	318433	7.367
19) Aniline	(1)	5.368	93	649659	7.523
17)$Phenol-d6	(1)	5.391	99	1030643	16.175
18) Phenol	(1)	5.409	94	544943	7.475
20) a-methylstyrene	(1)	5.456	118	36323	7.490
22) bis(2-Chloroethyl)ether	(1)	5.508	93	414093	7.649
23) 2-Chlorophenol	(1)	5.531	128	370350	8.167
42) Total Cresols	(1)			753897	15.539
24) 1,3-Dichlorobenzene	(1)	5.753	146	393788	7.648
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	155966	5.000
26) 1,4-Dichlorobenzene	(1)	5.875	146	394270	7.507
28) 1,2-Dichlorobenzene	(1)	6.091	146	374850	7.596
27) Benzyl alcohol	(1)	6.108	108	225786	7.298
30) Indene	(1)	6.231	115	393530	7.690
31) 2-Methylphenol	(1)	6.318	108	354742	7.878
34) bis(2-Chloroisopropyl)ether	(1)	6.336	45	466089	7.439
33) 2,2'-oxybis(1-Chloropropane)	(1)	6.336	45	466089	7.439
35) N-Nitrosopyrrolidine	(1)	6.452	100	197803	7.677
36) Acetophenone	(1)	6.487	105	488987	7.655
39) N-Nitrosomorpholine	(1)	6.528	56	218352	7.573
38) N-Nitroso-di-n-propylamine	(1)	6.528	70	285045	7.521
40) o-Toluidine	(1)	6.540	106	616488	7.770
37) 4-Methylphenol	(1)	6.563	108	399155	7.675
43) Hexachloroethane	(1)	6.604	117	167603	7.869
44)$Nitrobenzene-d5	(2)	6.697	82	836476	15.014
45) Nitrobenzene	(2)	6.726	77	424501	7.445
48) N-Nitrosopiperidine	(2)	6.959	114	182202	7.827
50) Isophorone	(2)	7.123	82	723283	7.596
51) 2-Nitrophenol	(2)	7.222	139	184633	8.414
53) 2,4-Dimethylphenol	(2)	7.367	107	380090	7.787
97) Isosafrole	(3)			329197	9.359

M = Compound was manually integrated.
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on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
57) O,O,O-Triethylphosphorothioate	(2)	7.496	198	151755	7.195
55) bis(2-Chloroethoxy)methane	(2)	7.519	93	465166	7.486
56) Benzoic acid	(2)	7.548	105	336422	12.782
60) 2,4-Dichlorophenol	(2)	7.606	162	278901	7.771
62) 1,2,4-Trichlorobenzene	(2)	7.723	180	294081	7.375
65)*Naphthalene-d8	(2)	7.793	136	588329	5.000
66) Naphthalene	(2)	7.822	128	1018098	7.439
67) 4-Chloroaniline	(2)	7.956	127	396886	7.713
68) 2,6-Dichlorophenol	(2)	7.956	162	270817	7.767
69) Hexachloropropene	(2)	7.979	213	186826	7.383
120) 2,4_2,6-Dinitrotoluenes	(3)			351720	16.789
71) Hexachlorobutadiene	(2)	8.073	225	161813	7.206
75) Quinoline	(2)	8.358	129	596649	7.585
76) Caprolactam	(2)	8.492	113	105633	7.700
77) N-Nitrosodi-n-butylamine	(2)	8.551	84	252450	6.726
146) Diallate trans/cis	(4)			347675	7.847
80) 4-Chloro-3-methylphenol	(2)	8.784	107	314879	7.969
82) Safrole	(2)	8.848	162	243164	7.222
83) 2-Methylnaphthalene	(2)	8.929	142	643792	7.598
84) 1-Methylnaphthalene	(2)	9.075	142	614977	7.599
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.198	216	271151	7.376
85) Hexachlorocyclopentadiene	(3)	9.203	237	164168	7.204
88) cis-Isosafrole	(3)	9.314	162	41452	1.260
90) 2,4,6-Trichlorophenol	(3)	9.407	196	177044	8.140
92) 2,4,5-Trichlorophenol	(3)	9.454	196	190631	8.213
93)$2-Fluorobiphenyl	(3)	9.553	172	1311552	15.034
94) trans-Isosafrole	(3)	9.675	162	287745M	8.073
96) 2-Chloronaphthalene	(3)	9.687	162	641360M	8.262
95) 1,1'-Biphenyl	(3)	9.693	154	729506	7.712
98) 1-Chloronaphthalene	(3)	9.710	162	549743	7.642
100) 2-Nitroaniline	(3)	9.880	138	196848	8.826
99) Diphenyl ether	(3)	9.880	170	399342	7.576
104) 1,4-Naphthoquinone	(3)	9.984	158	221242	8.046
105) 1,4-Dinitrobenzene	(3)	10.124	168	101069	8.560
107) 1,3-Dinitrobenzene	(3)	10.235	168	113965	8.334
106) Dimethylphthalate	(3)	10.247	163	641156	7.828
108) 2,6-Dinitrotoluene	(3)	10.305	165	149965	8.186
109) Acenaphthylene	(3)	10.328	152	819122	7.966
112) 3-Nitroaniline	(3)	10.538	138	172570	8.720
113)*Acenaphthene-d10	(3)	10.561	164	273090	5.000

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on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	10.614	153	602061	7.826
115) 2,4-Dinitrophenol	(3)	10.713	184	127395	13.113
117) Pentachlorobenzene	(3)	10.835	250	225460	7.510
116) 4-Nitrophenol	(3)	10.882	109	97318	7.225
119) Dibenzofuran	(3)	10.894	168	813341	7.674
118) 2,4-Dinitrotoluene	(3)	10.934	165	201755	8.163
121) 1-Naphthylamine	(3)	11.022	143	628502	7.733
122) 2,3,4,6-Tetrachlorophenol	(3)	11.115	232	151045	8.351
123) 2-Naphthylamine	(3)	11.156	143	628015	7.648
124) Diethylphthalate	(3)	11.395	149	606822	7.835
126) Fluorene	(3)	11.436	166	650858	8.050
128) 5-Nitro-o-toluidine	(3)	11.488	152	185465	8.012
127) 4-Chlorophenyl-phenylether	(3)	11.494	204	303694	7.682
129) 4-Nitroaniline	(3)	11.494	138	179258	8.219
125) Thionazin	(3)	11.500	107	128558	7.985
130) 4,6-Dinitro-2-methylphenol	(4)	11.558	198	119173	8.914
132) NDPA as diphenylamine	(4)	11.669	169	536238	7.970
131) N-Nitrosodiphenylamine	(4)	11.669	169	536238	7.970
134) 1,2-Diphenylhydrazine	(4)	11.710	77	753566	7.858
135)$2,4,6-Tribromophenol	(3)	11.780	330	152806	16.948
137) Tetraethyldithiopyrophosphate	(4)	11.960	97	115314	7.851
139) 1,3,5-Trinitrobenzene	(4)	12.054	213	67757	7.444
140) Diallate (peak 1)	(4)	12.083	86	299810	6.538
141) Phorate	(4)	12.083	75	451239	8.207
142) Phenacetin	(4)	12.112	108	332067	7.703
143) 4-Bromophenyl-phenylether	(4)	12.135	248	175783	7.899
145) Hexachlorobenzene	(4)	12.164	284	166608	7.305
144) Diallate (peak 2)	(4)	12.176	86	47865	1.303
147) Dimethoate	(4)	12.258	87	284752	7.954
148) Atrazine	(4)	12.380	200	164630	7.825
149) Pentachlorophenol	(4)	12.409	266	113680	8.480
151) Pentachloronitrobenzene	(4)	12.421	237	76048	7.711
150) 4-Aminobiphenyl	(4)	12.432	169	459711	8.143
152) Pronamide	(4)	12.543	173	259975	7.618
153)*Phenanthrene-d10	(4)	12.596	188	500890	5.000
155) Phenanthrene	(4)	12.619	178	945216	7.498
154) Dinoseb	(4)	12.660	211	162240	8.524
157) Anthracene	(4)	12.683	178	955423	7.934
163) Carbazole	(4)	12.887	167	848379	7.680
164) Methyl parathion	(4)	13.091	109	222977	7.822

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	13.400	149	1010380	7.674
168) 4-Nitroquinoline-1-oxide	(4)	13.563	190	78875	7.338
167) Parathion	(4)	13.592	109	140773	7.771
169) Octachlorostyrene	(4)	13.878	308	62205	7.254
171) Isodrin	(4)	13.895	193	104197	7.387
173) Fluoranthene	(4)	14.088	202	973841	7.769
174) Benzidine	(5)	14.327	184	2121812	23.583
175)*Pyrene-d10	(5)	14.368	212	481065	5.000
177) Pyrene	(5)	14.391	202	1006976	7.614
179)$Terphenyl-d14	(5)	14.694	244	1236169	15.446
182) p-Dimethylaminoazobenzene	(5)	14.910	225	161946	7.828
222) Total PAHs	(6)			15487067	132.783
185) Chlorobenzilate	(5)	15.015	139	313551	8.853
187) 3,3'-Dimethylbenzidine	(5)	15.428	212	633291	8.029
188) Butylbenzylphthalate	(5)	15.516	149	483028	8.637
191) 2-Acetylaminofluorene	(5)	15.819	181	410804	9.435
195) Benzo(a)anthracene	(5)	16.268	228	909259	8.337
193) 3,3'-Dichlorobenzidine	(5)	16.291	252	364417	8.353
196) Chrysene	(5)	16.320	228	948890	8.363
198) 4,4'-Methylenebis(2-chloroanil	(5)	16.320	231	201019	8.171
199) bis(2-Ethylhexyl)phthalate	(5)	16.565	149	674959	9.102
203) 6-Methylchrysene	(5)	17.095	242	641706	8.241
205) Di-n-octylphthalate	(6)	17.684	149	1169333	8.008
206) Benzo(b)fluoranthene	(6)	18.040	252	969719	7.983
207) 7,12-Dimethylbenz[a]anthracene	(6)	18.057	256	432690	7.153
208) Benzo(k)fluoranthene	(6)	18.086	252	1015120	8.065
211) Benzo(a)pyrene	(6)	18.535	252	922116	8.237
213)*Perylene-d12	(6)	18.628	264	508333	5.000
215) 3-Methylcholanthrene	(6)	19.118	268	396148	7.323
217) Dibenz(a,h)acridine	(6)	19.905	279	657524	7.248
218) Dibenz(a,j)acridine	(6)	19.981	279	715536	7.135
219) Indeno(1,2,3-cd)pyrene	(6)	20.196	276	785354M	7.554
220) Dibenz(a,h)anthracene	(6)	20.249	278	830029	7.312
221) Benzo(g,h,i)perylene	(6)	20.540	276	876216	7.457

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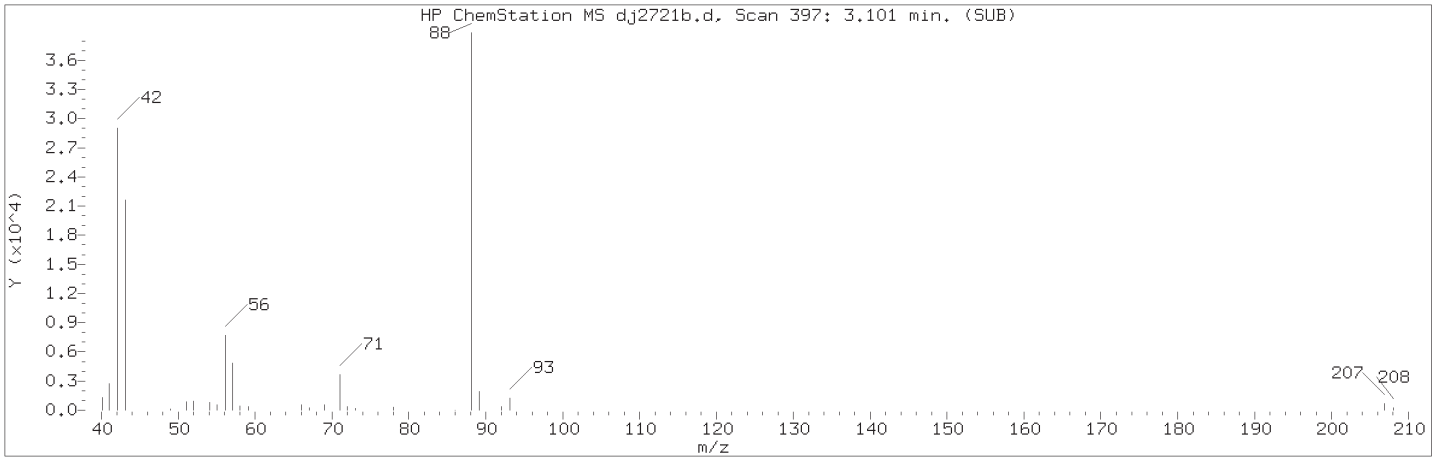
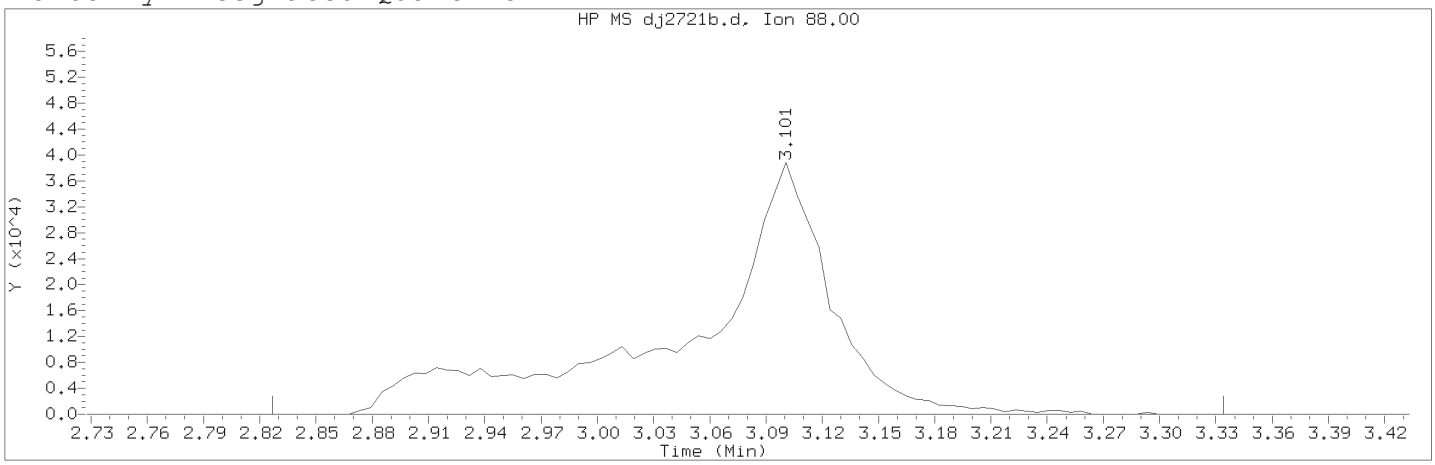
Digitally signed by Edward Monborne
on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

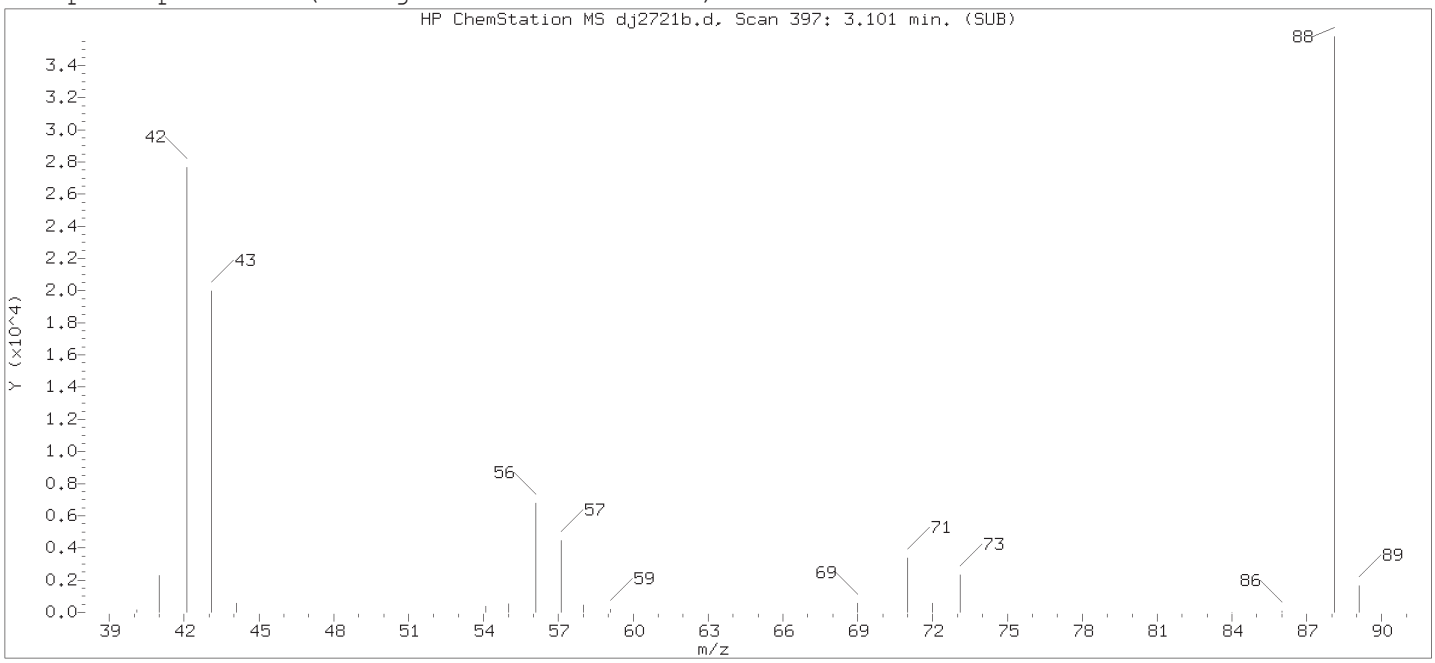
Compound Number	: 8		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 397		
Retention Time (minutes)	: 3.101		
Quant Ion	: 88.00		
Area (flag)	: 202582M		
On-Column Amount (ng/ul)	: 7.5696		
Integration start scan	: 349	Integration stop scan:	436
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

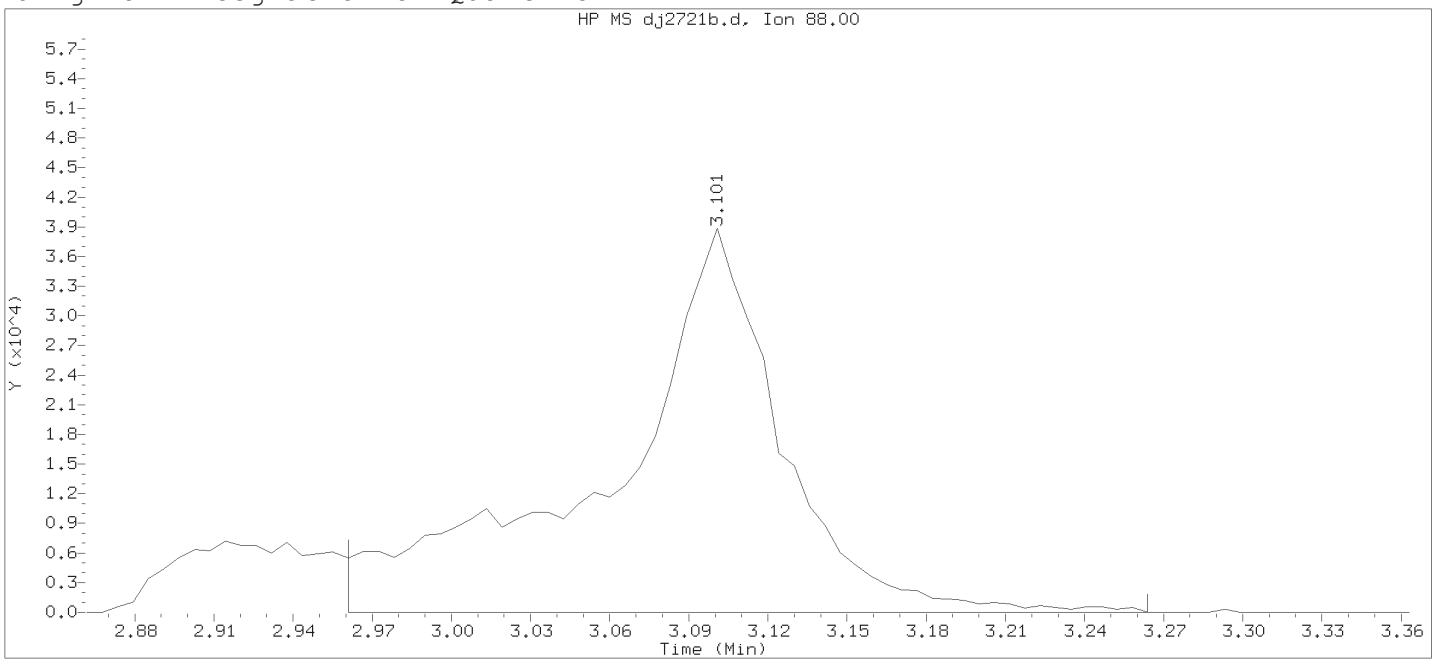
Analyst responsible for change: Digitally signed by Edward Monborne
on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

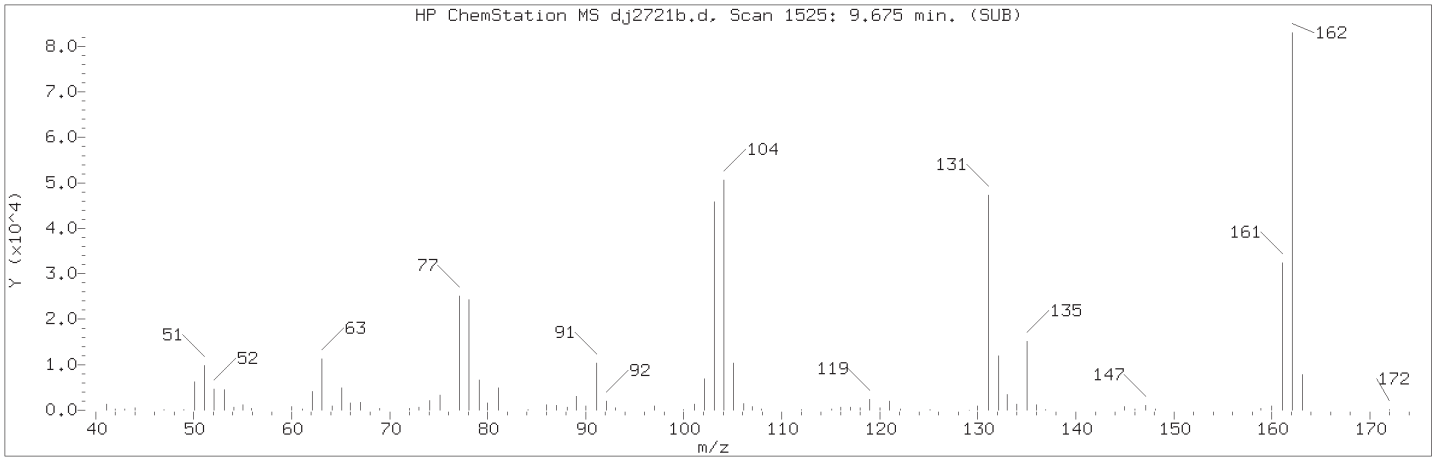
Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:24
Date, time and analyst ID of latest file update: 31-Oct-2018 15:24 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

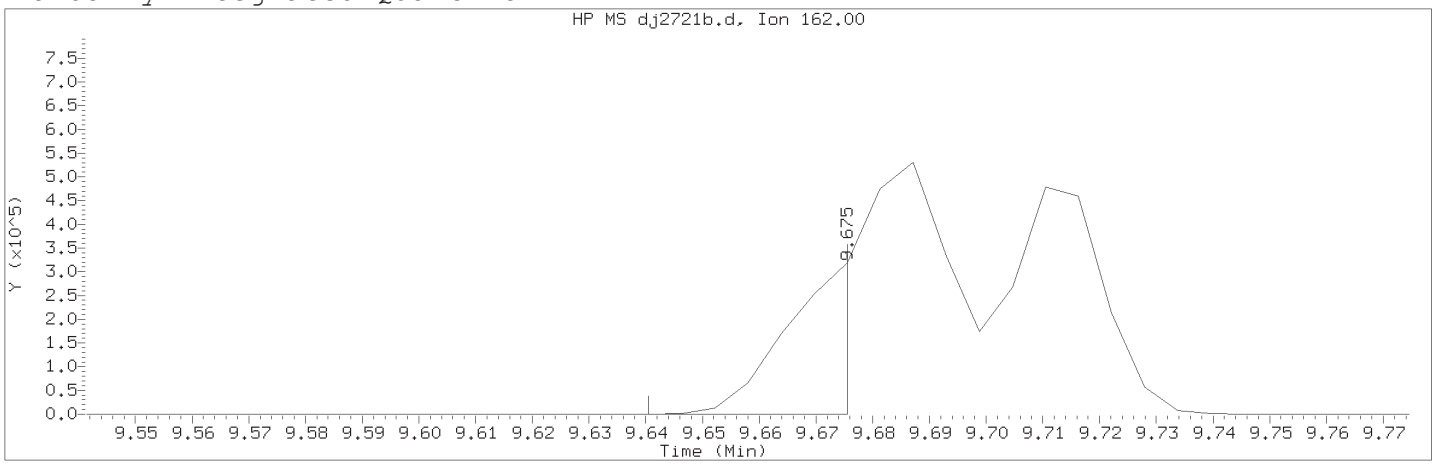
Compound Number	: 8		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 397		
Retention Time (minutes)	: 3.101		
Quant Ion	: 88.00		
Area	: 173825		
On-column Amount (ng/ul)	: 6.4951		
Integration start scan	: 372	Integration stop scan:	424
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 10/31/2018 at 15:32.
Target 3.5 esignature user id: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

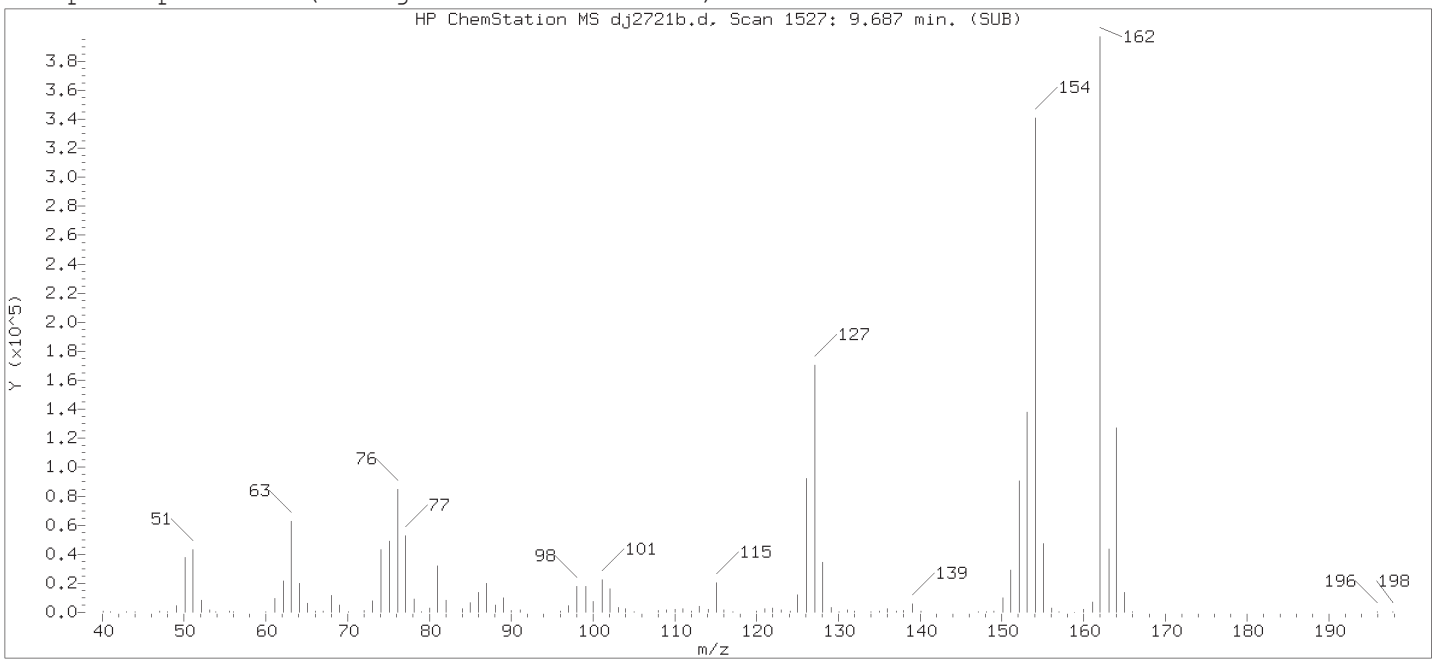
Compound Number : 94
Compound Name : trans-Isosafrole
Scan Number : 1525
Retention Time (minutes) : 9.675
Quant Ion : 162.00
Area (flag) : 287745M
On-Column Amount (ng/ul) : 8.0732
Integration start scan : 1518 Integration stop scan: 1524
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

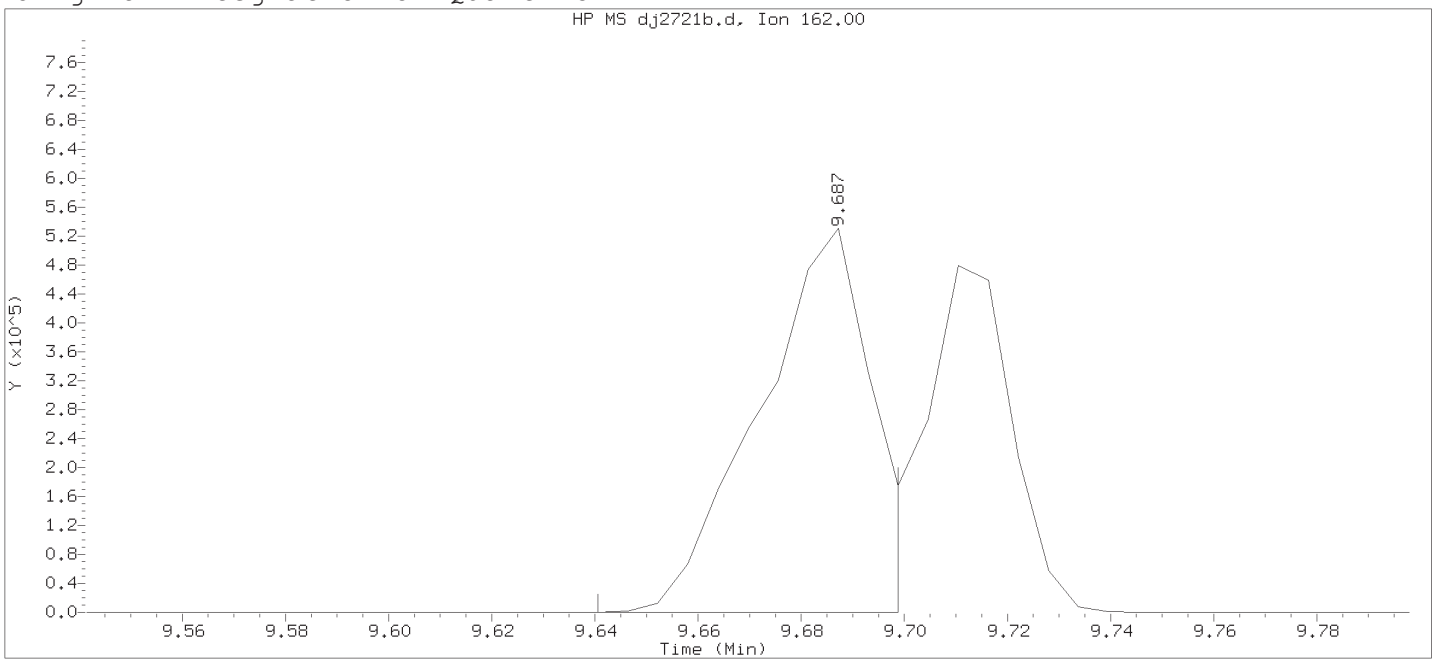
Analyst responsible for change: Digitally signed by Edward Monborne
on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

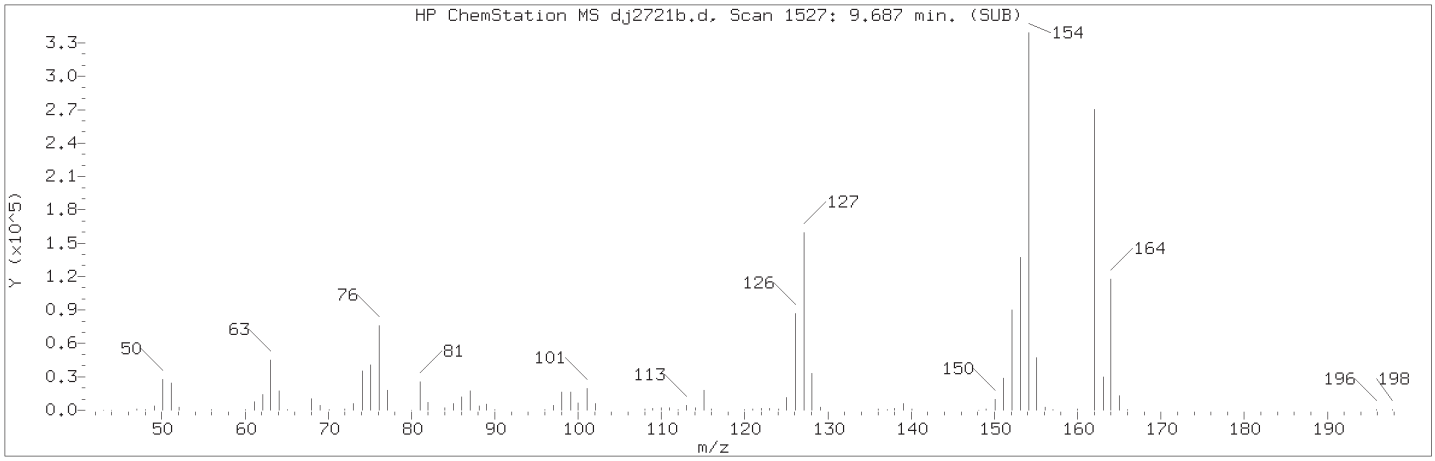
Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:24
Date, time and analyst ID of latest file update: 31-Oct-2018 15:24 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

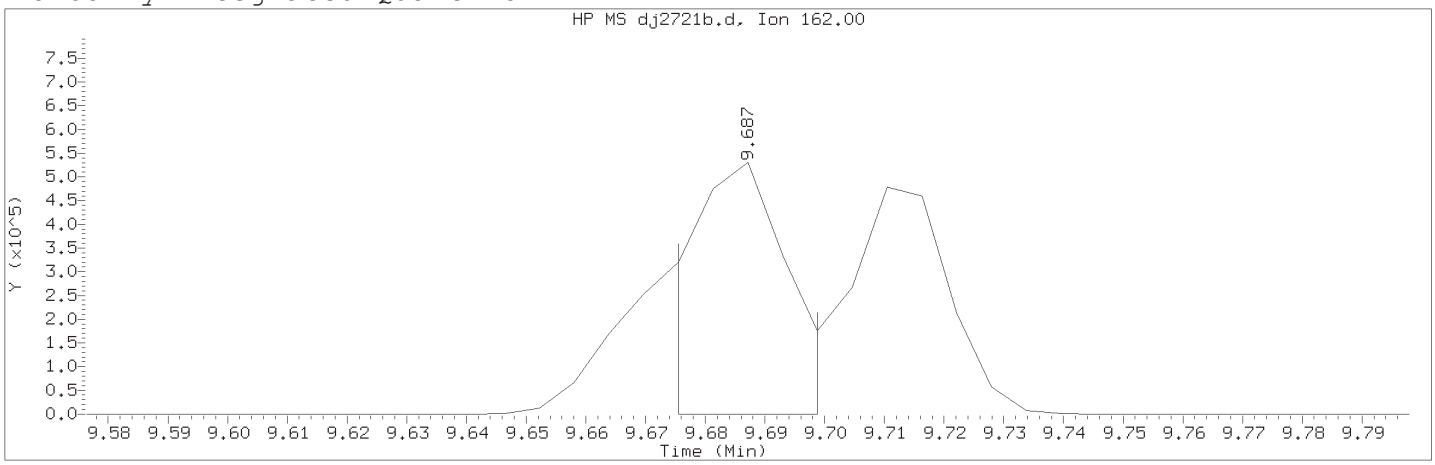
Compound Number	: 94		
Compound Name	: trans-Isosafrole		
Scan Number	: 1527		
Retention Time (minutes)	: 9.687		
Quant Ion	: 162.00		
Area	: 786242		
On-column Amount (ng/ul)	: 22.0595		
Integration start scan	: 1518	Integration stop scan:	1528
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 10/31/2018 at 15:32.
Target 3.5 esignature user: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

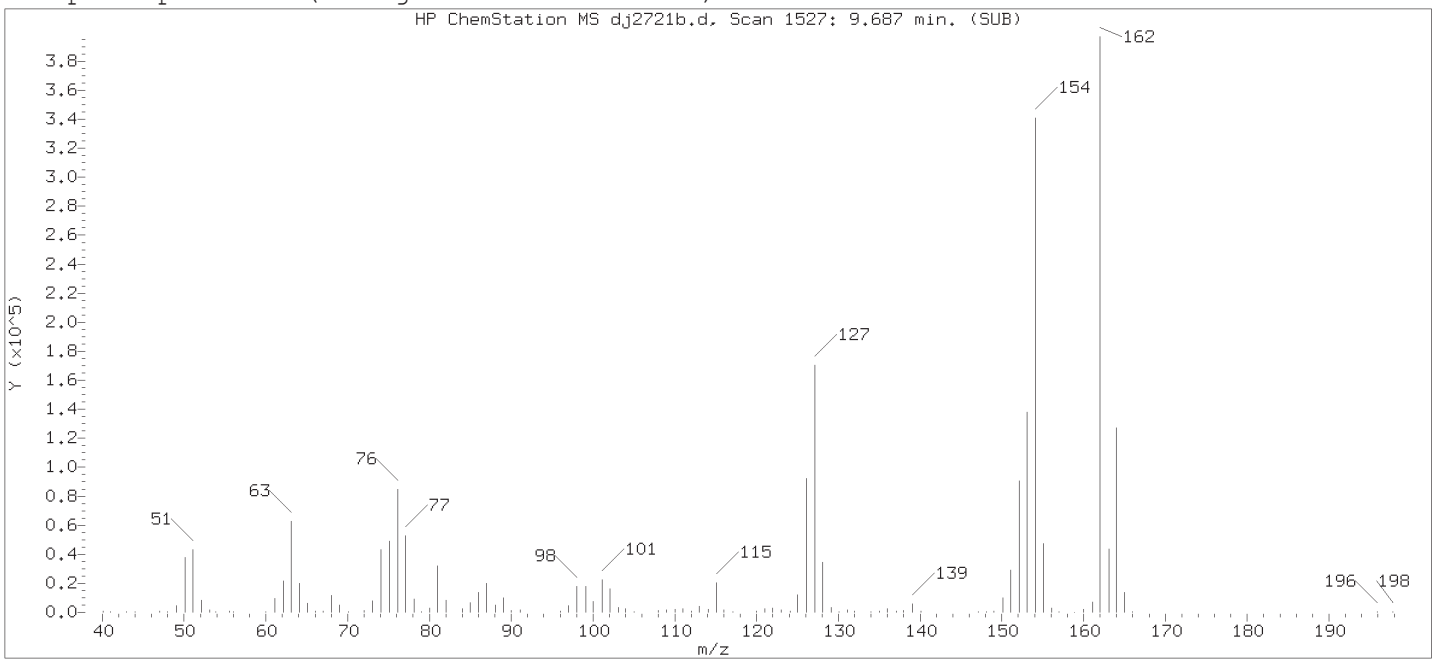
Compound Number	: 96		
Compound Name	: 2-Chloronaphthalene		
Scan Number	: 1527		
Retention Time (minutes)	: 9.687		
Quant Ion	: 162.00		
Area (flag)	: 641360M		
On-Column Amount (ng/ul)	: 8.2615		
Integration start scan	: 1524	Integration stop scan:	1528
Y at integration start	: -181	Y at integration end:	-181

Reason for manual integration: improper integration

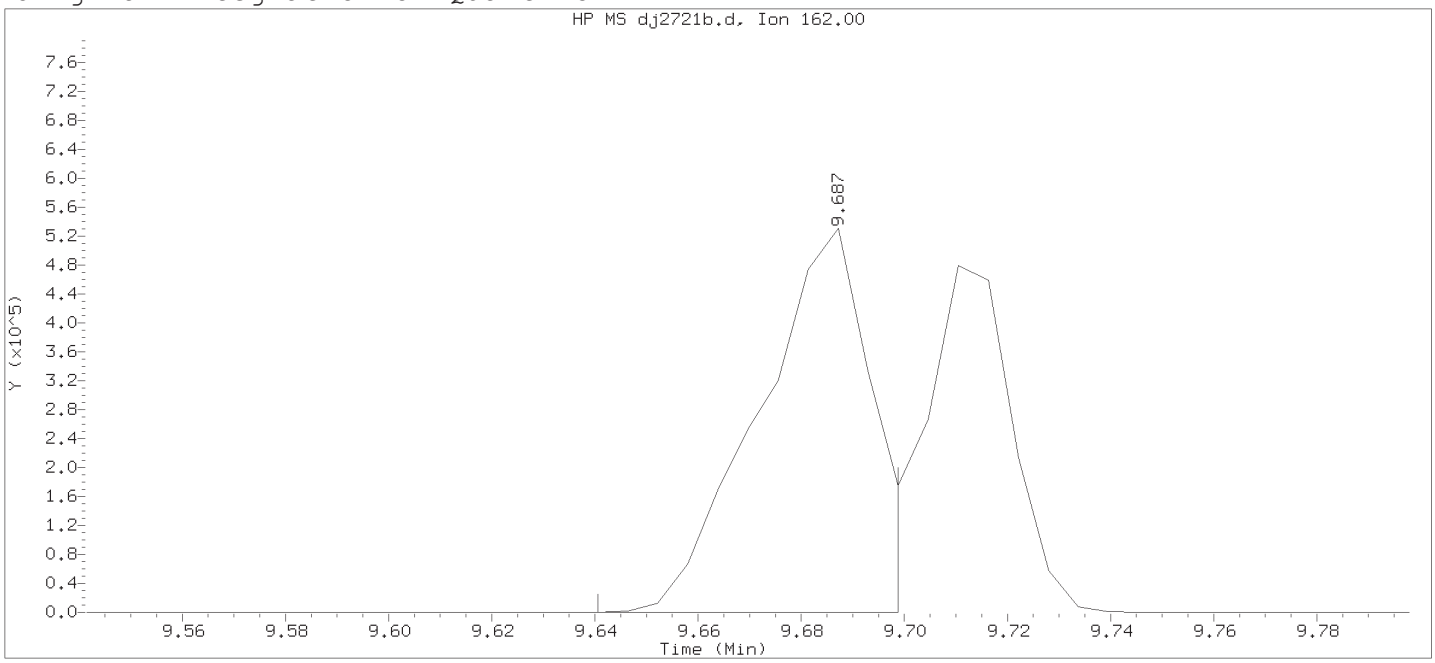
Analyst responsible for change: Digitally signed by Edward Monborne
on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

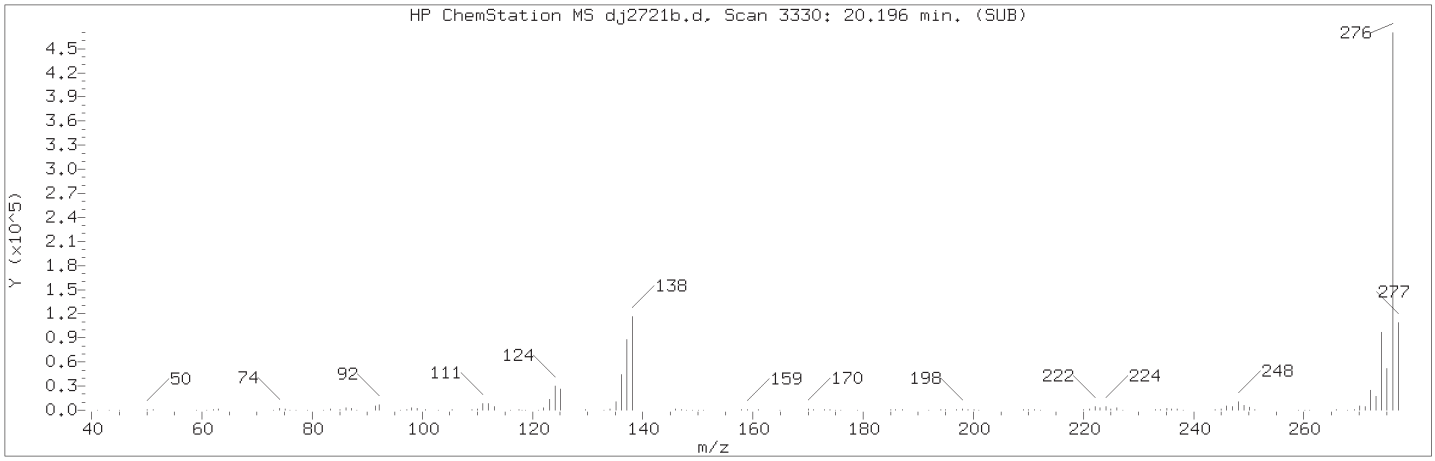
Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:24
Date, time and analyst ID of latest file update: 31-Oct-2018 15:24 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

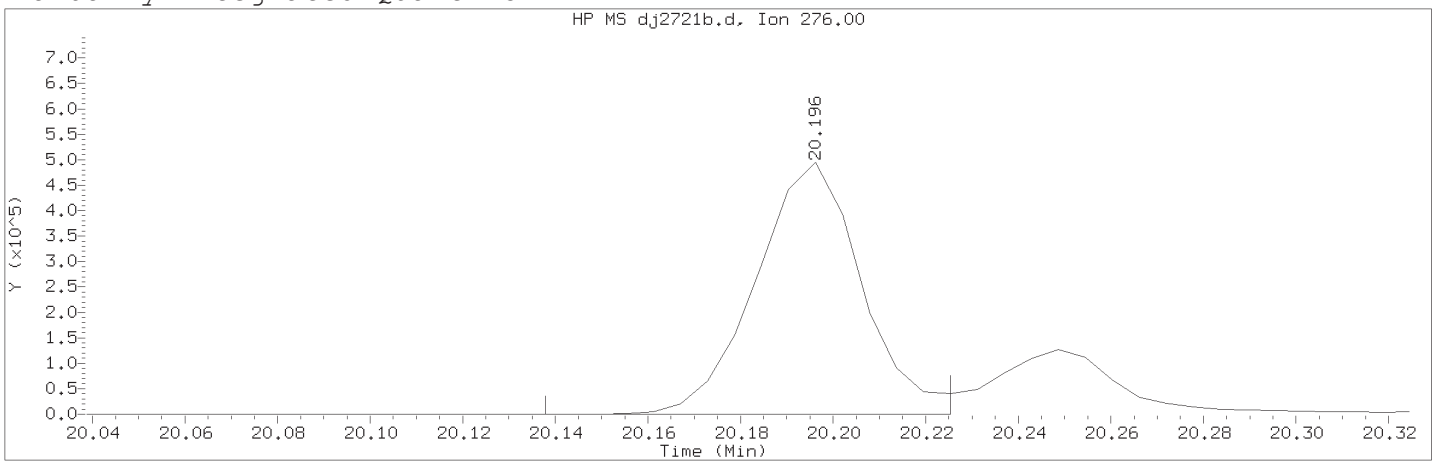
Compound Number	: 96		
Compound Name	: 2-Chloronaphthalene		
Scan Number	: 1527		
Retention Time (minutes)	: 9.687		
Quant Ion	: 162.00		
Area	: 786216		
On-column Amount (ng/ul)	: 10.1275		
Integration start scan	: 1518	Integration stop scan:	1528
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 15:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

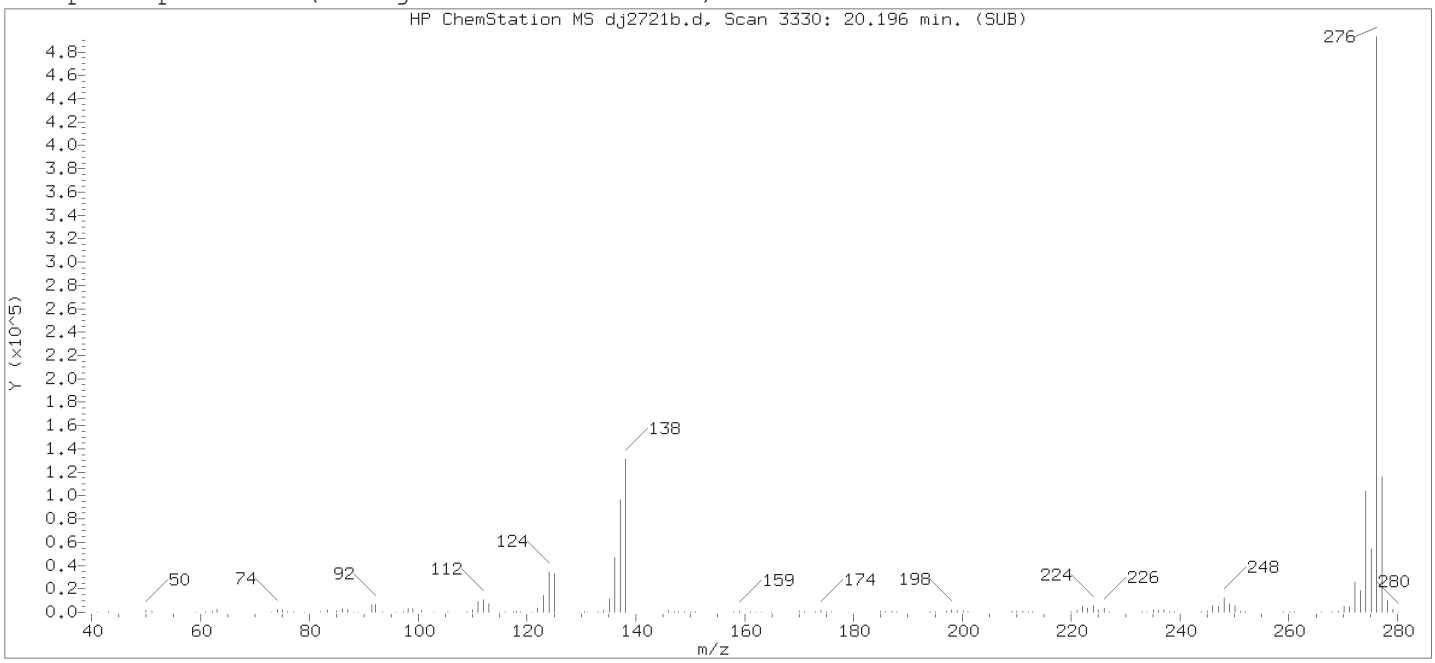
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3330		
Retention Time (minutes)	: 20.196		
Quant Ion	: 276.00		
Area (flag)	: 785354M		
On-Column Amount (ng/ul)	: 7.5541		
Integration start scan	: 3319	Integration stop scan:	3334
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

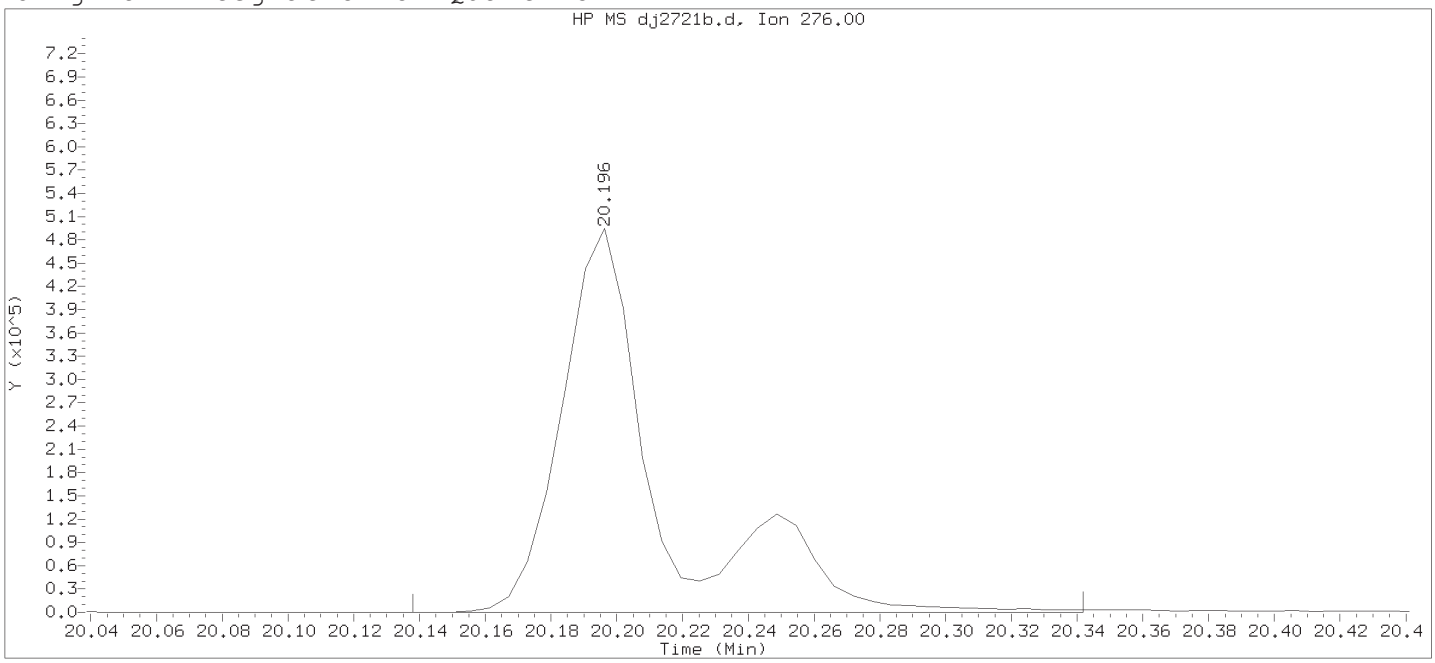
Analyst responsible for change: Digitally signed by Edward Monborne
on 10/31/2018 at 15:32.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



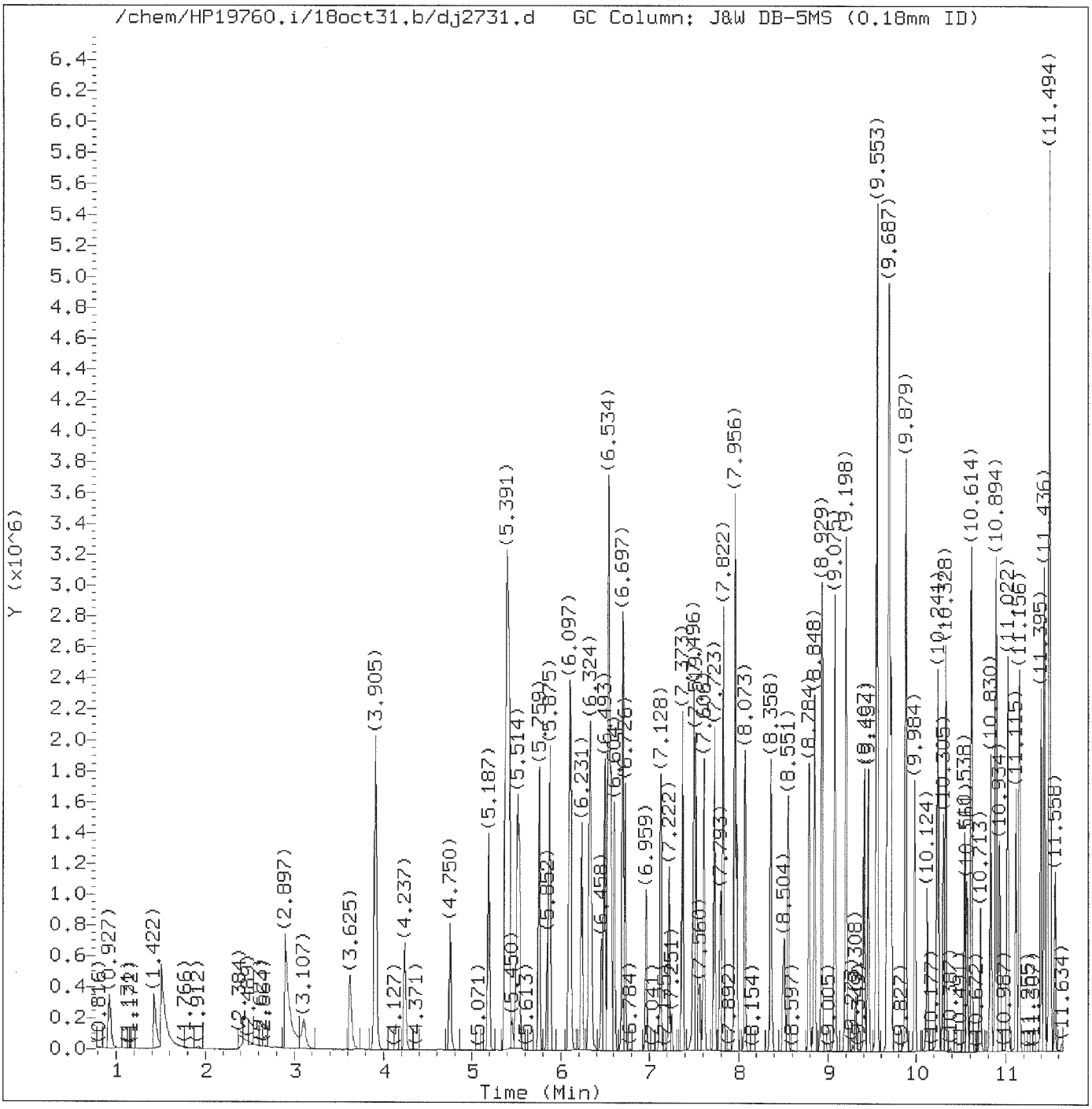
Data File: /chem/HP19760.i/18oct31.b/dj2721b.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 14:49 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: all1
Calibration date and time: 31-OCT-2018 15:24
Date, time and analyst ID of latest file update: 31-Oct-2018 15:24 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3330		
Retention Time (minutes)	: 20.196		
Quant Ion	: 276.00		
Area	: 1019739		
On-column Amount (ng/ul)	: 9.8086		
Integration start scan	: 3319	Integration stop scan:	3354
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 10/31/2018 at 15:32.
Target 3.5 esignature user em10340



Total Ion Chromatogram (TIC)

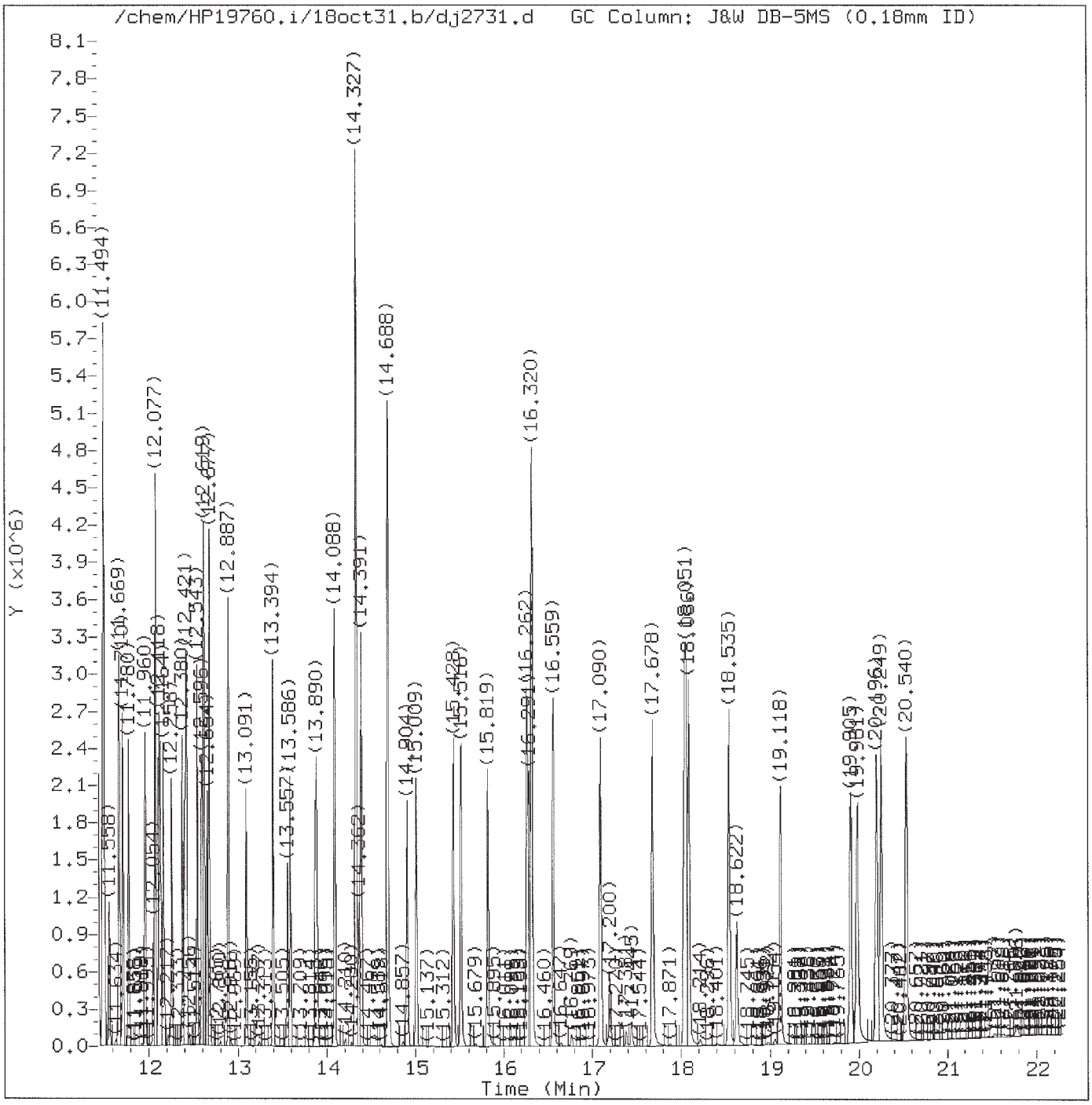
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2731.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 19:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 20:04 art12405

Sample Name: SECC12.5 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:06.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2731.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 19:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 20:04 art12405

Sample Name: SECC12.5 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:06.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2731.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 19:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 20:04 art12405

Sample Name: SECC12.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
5) Pyridine	(1)	1.504	79	706535	11.871
11)$2-Fluorophenol	(1)	3.905	112	1236956	26.573
19) Aniline	(1)	5.368	93	1065259	12.444
17)$Phenol-d6	(1)	5.391	99	1666964	26.391
18) Phenol	(1)	5.409	94	859937	11.899
23) 2-Chlorophenol	(1)	5.531	128	609025	13.548
24) 1,3-Dichlorobenzene	(1)	5.759	146	642365	12.584
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	154610	5.000
26) 1,4-Dichlorobenzene	(1)	5.875	146	645463	12.398
28) 1,2-Dichlorobenzene	(1)	6.091	146	612633	12.523
27) Benzyl alcohol	(1)	6.108	108	375912	12.256
31) 2-Methylphenol	(1)	6.324	108	570224	12.775
33) 2,2'-oxybis(1-Chloropropane)	(1)	6.341	45	732156	11.789
38) N-Nitroso-di-n-propylamine	(1)	6.534	70	460241	12.250
37) 4-Methylphenol	(1)	6.563	108	640491	12.424
43) Hexachloroethane	(1)	6.604	117	274121	12.982
44)$Nitrobenzene-d5	(2)	6.697	82	1365174	25.193
45) Nitrobenzene	(2)	6.726	77	685935	12.369
50) Isophorone	(2)	7.123	82	1180178	12.743
51) 2-Nitrophenol	(2)	7.222	139	304314	14.258
53) 2,4-Dimethylphenol	(2)	7.373	107	618478	13.027
55) bis(2-Chloroethoxy)methane	(2)	7.519	93	747890	12.375
60) 2,4-Dichlorophenol	(2)	7.606	162	450391	12.902
62) 1,2,4-Trichlorobenzene	(2)	7.723	180	478621	12.341
65)*Naphthalene-d8	(2)	7.793	136	572236	5.000
67) 4-Chloroaniline	(2)	7.956	127	643596	12.859
71) Hexachlorobutadiene	(2)	8.073	225	266140	12.185
80) 4-Chloro-3-methylphenol	(2)	8.784	107	516559	13.441
83) 2-Methylnaphthalene	(2)	8.929	142	1036180	12.572
85) Hexachlorocyclopentadiene	(3)	9.203	237	273029	12.147
90) 2,4,6-Trichlorophenol	(3)	9.407	196	290934	13.561
92) 2,4,5-Trichlorophenol	(3)	9.454	196	303571	13.259
93)$2-Fluorobiphenyl	(3)	9.553	172	2071812	24.076
96) 2-Chloronaphthalene	(3)	9.687	162	1282636	16.750
100) 2-Nitroaniline	(3)	9.879	138	328663	14.939
106) Dimethylphthalate	(3)	10.247	163	1005828	12.449
108) 2,6-Dinitrotoluene	(3)	10.305	165	244371	13.523
112) 3-Nitroaniline	(3)	10.538	138	273058	13.988
113)*Acenaphthene-d10	(3)	10.561	164	269379	5.000
115) 2,4-Dinitrophenol	(3)	10.713	184	155932	16.272

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:06.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2731.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 19:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 20:04 art12405

Sample Name: SECC12.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
116) 4-Nitrophenol	(3)	10.888	109	156523	11.781
119) Dibenzofuran	(3)	10.894	168	1303488	12.468
118) 2,4-Dinitrotoluene	(3)	10.934	165	324608	13.314
124) Diethylphthalate	(3)	11.395	149	965000	12.632
127) 4-Chlorophenyl-phenylether	(3)	11.494	204	487414	12.499
129) 4-Nitroaniline	(3)	11.500	138	286058	13.297
130) 4,6-Dinitro-2-methylphenol	(4)	11.558	198	195101	15.371
131) N-Nitrosodiphenylamine	(4)	11.669	169	847173	13.262
135)$2,4,6-Tribromophenol	(3)	11.780	330	247993	27.884
143) 4-Bromophenyl-phenylether	(4)	12.135	248	270754	12.815
149) Pentachlorophenol	(4)	12.409	266	190572	14.973
153)*Phenanthrene-d10	(4)	12.590	188	475571	5.000
163) Carbazole	(4)	12.887	167	1358577	12.953
175)*Pyrene-d10	(5)	14.362	212	462673	5.000
179)$Terphenyl-d14	(5)	14.688	244	1987033	25.815
193) 3,3'-Dichlorobenzidine	(5)	16.291	252	607508	14.478
205) Di-n-octylphthalate	(6)	17.678	149	1962335	12.713
213)*Perylene-d12	(6)	18.622	264	506498	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 20:06.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP20296.i/18oct28.b/lj1740b.d

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

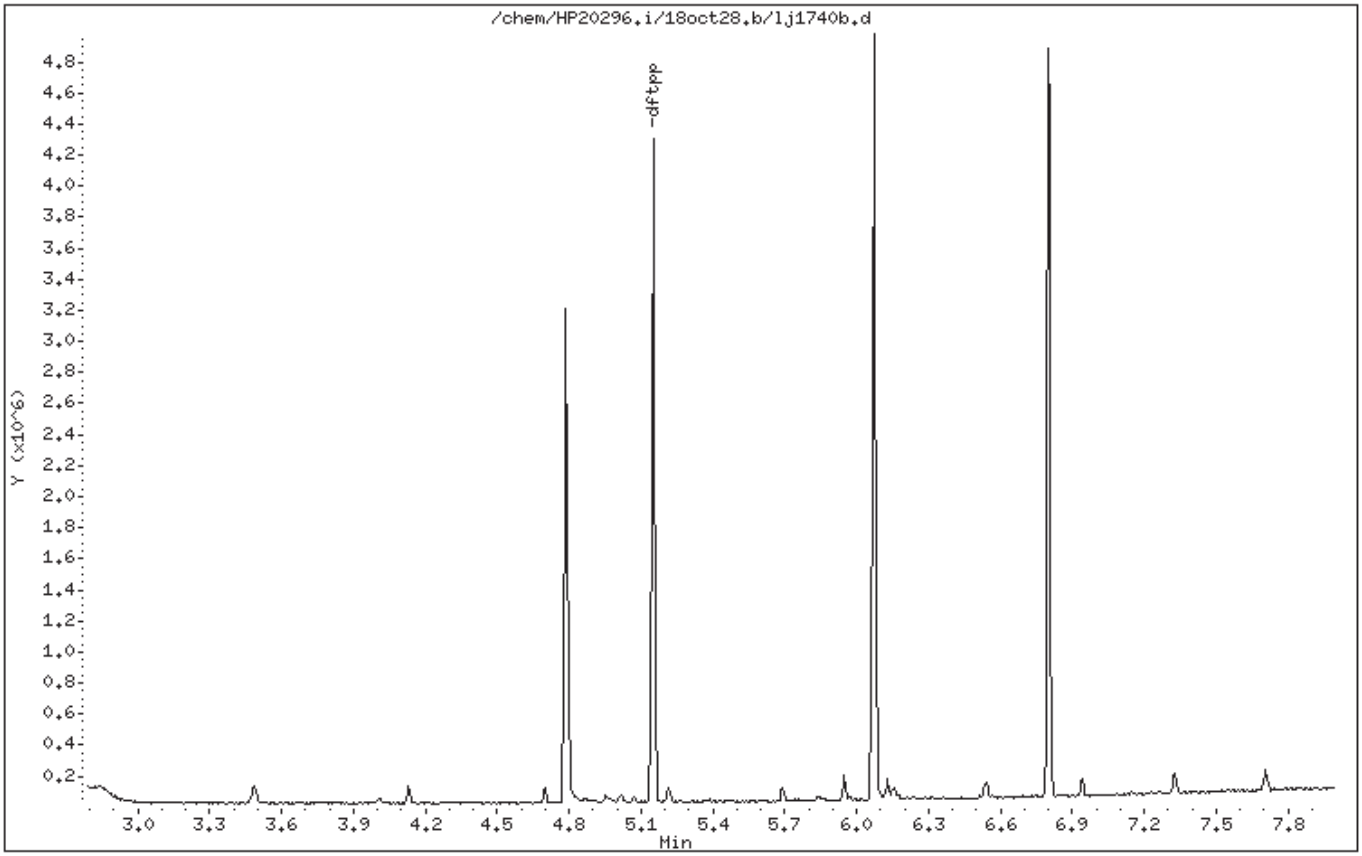
Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 10/30/2018 at 17:14.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP20296.i/18oct28.b/lj1740b.d

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

Instrument: HP20296.i

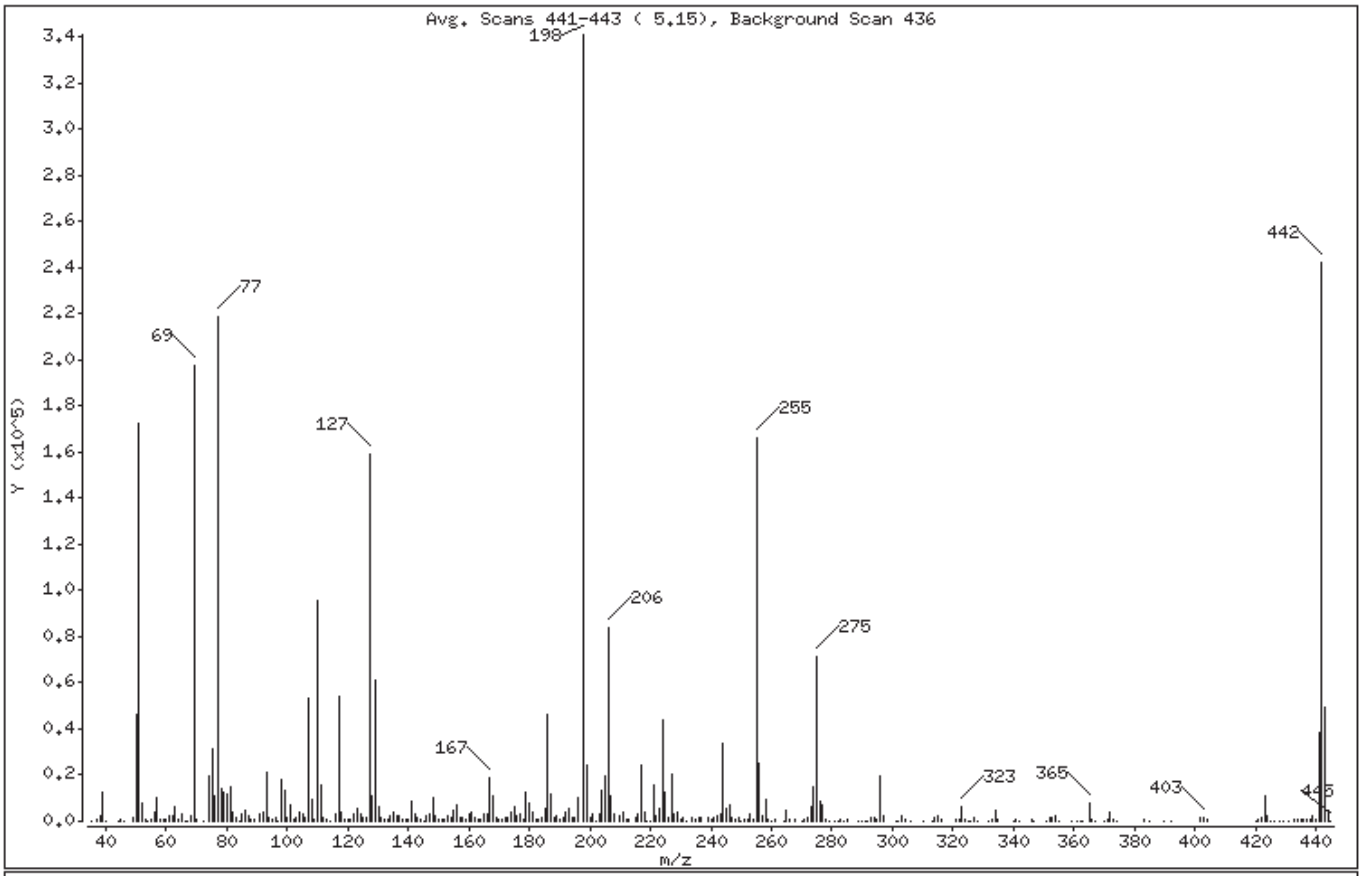
Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

Column diameter: 0.18

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;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
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

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

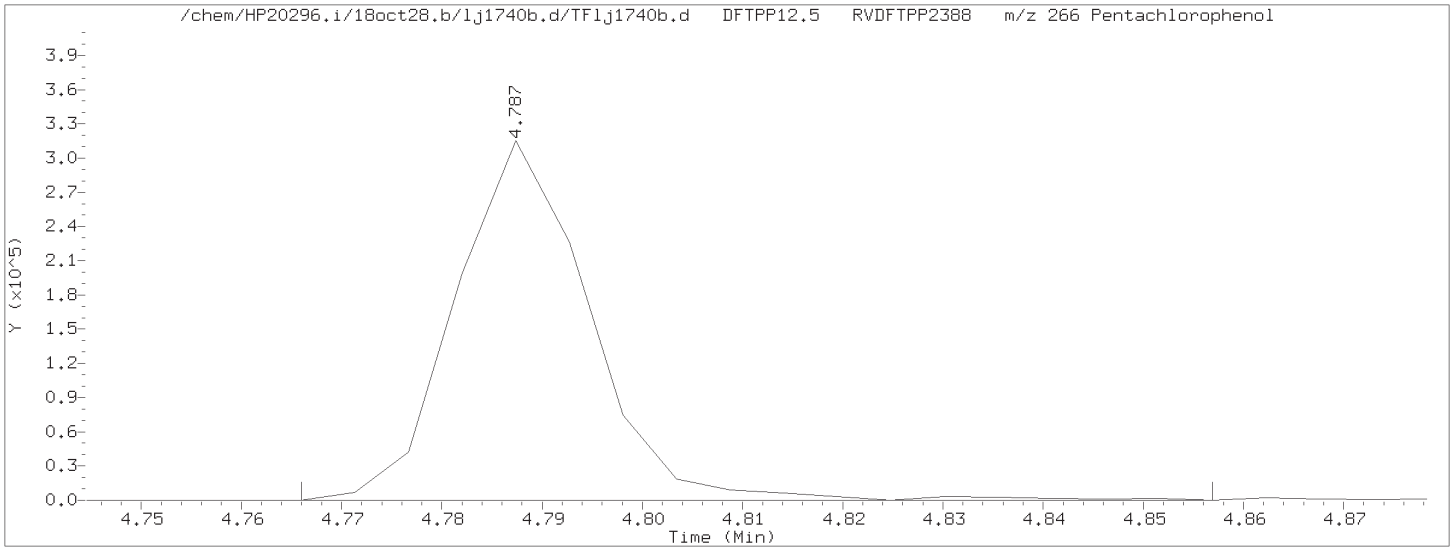
Data File: lj1740b.d
Spectrum: Avg. Scans 441-443 (5.15), Background Scan 436
Location of Maximum: 198.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
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		

Digitally signed by Ashley R. Transue on 10/30/2018 at 17:14.
Target 3.5 esignature user ID: art12405

Assessment of GC Column Performance and Injection Port Inertness for

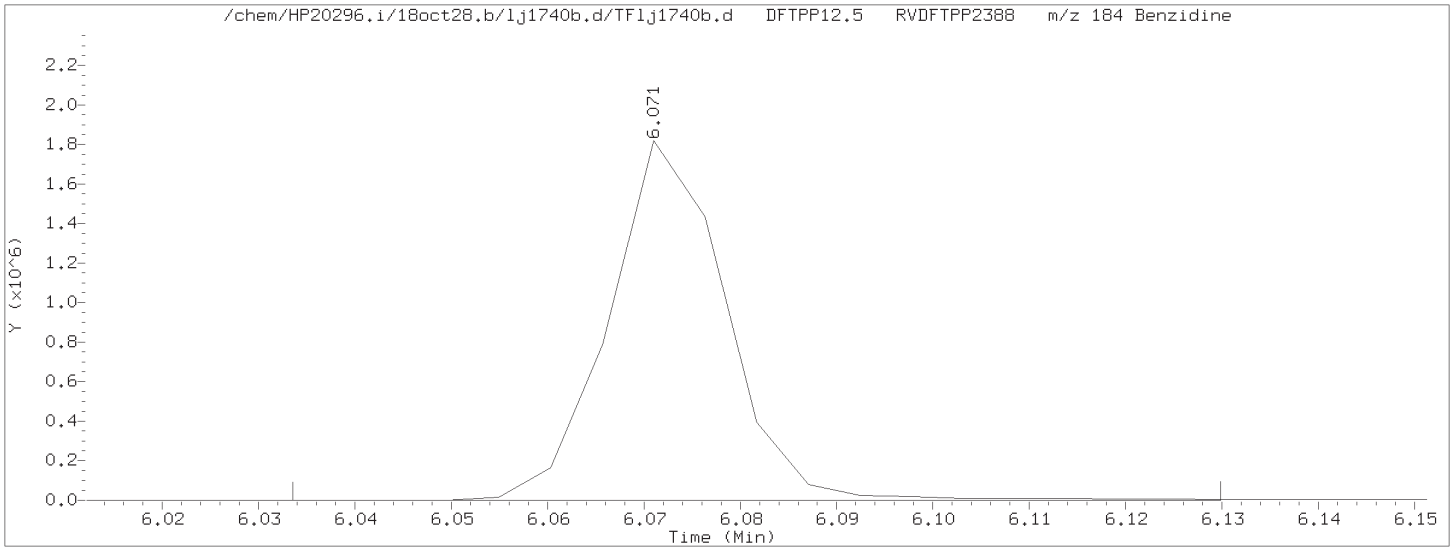
Instrument ID: HP20296.i Injection Date: 29-OCT-2018 00:09 Operator: whs02991



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 'Front' peak width (min.) = 0.0123166667
RT at 10% of back half of EICP (min.) = 4.802 'Tailing' peak width (min.) = 0.0148000000

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

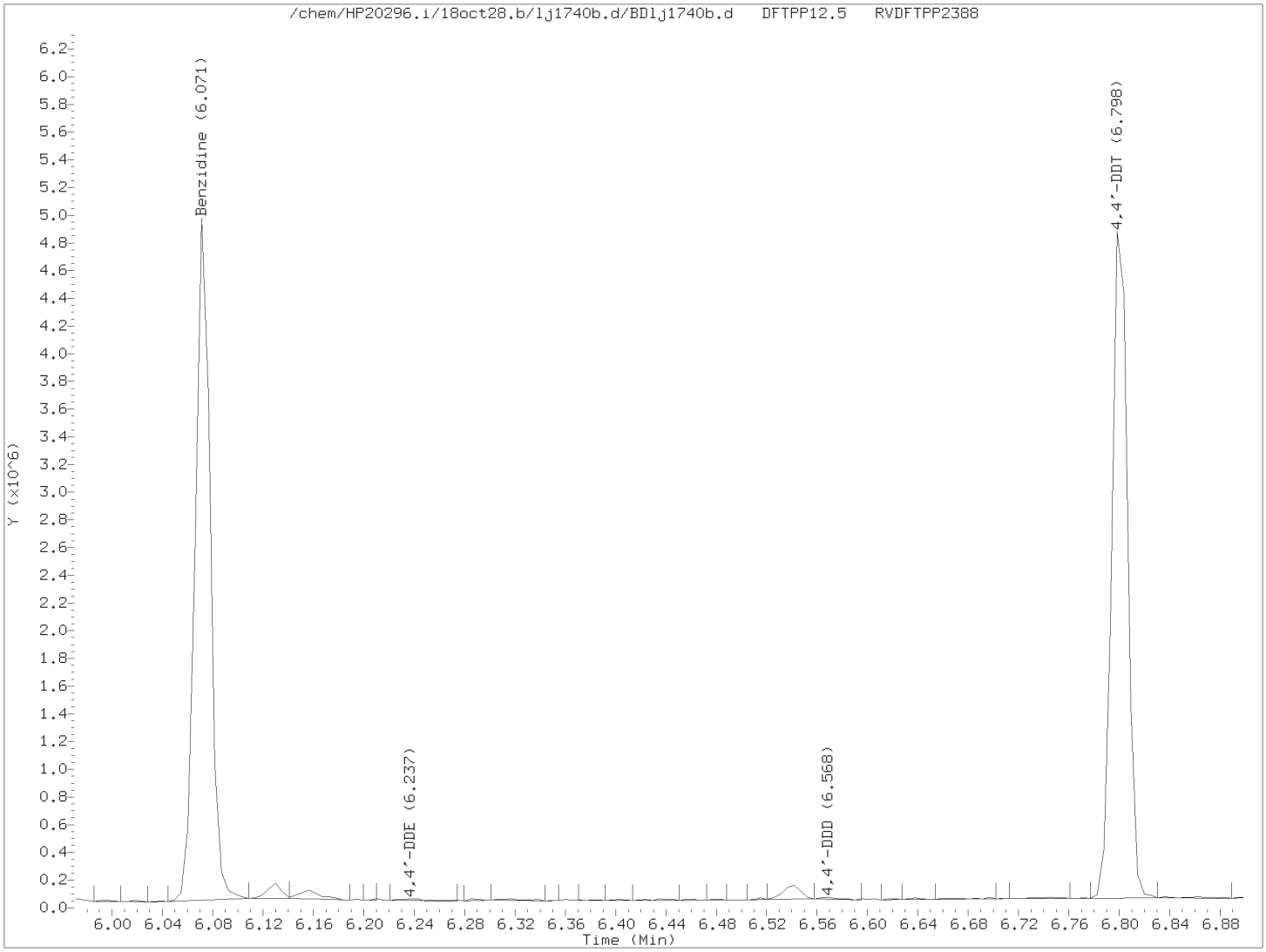
Benzidine EICP peak apex (min.) = 6.071
RT at 10% of front half of EICP (min.) = 6.061 'Front' peak width (min.) = 0.0105166667
RT at 10% of back half of EICP (min.) = 6.085 'Tailing' peak width (min.) = 0.0142666667

Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0142666667}{0.0105166667} = 1.357$

Secondary review performed and digitally signed by Holly B. Ziegler on 10/31/2018 at 07:47. PARALLAX ID: hb01996

Assessment of GC Column Performance and Injection Port Inertness for

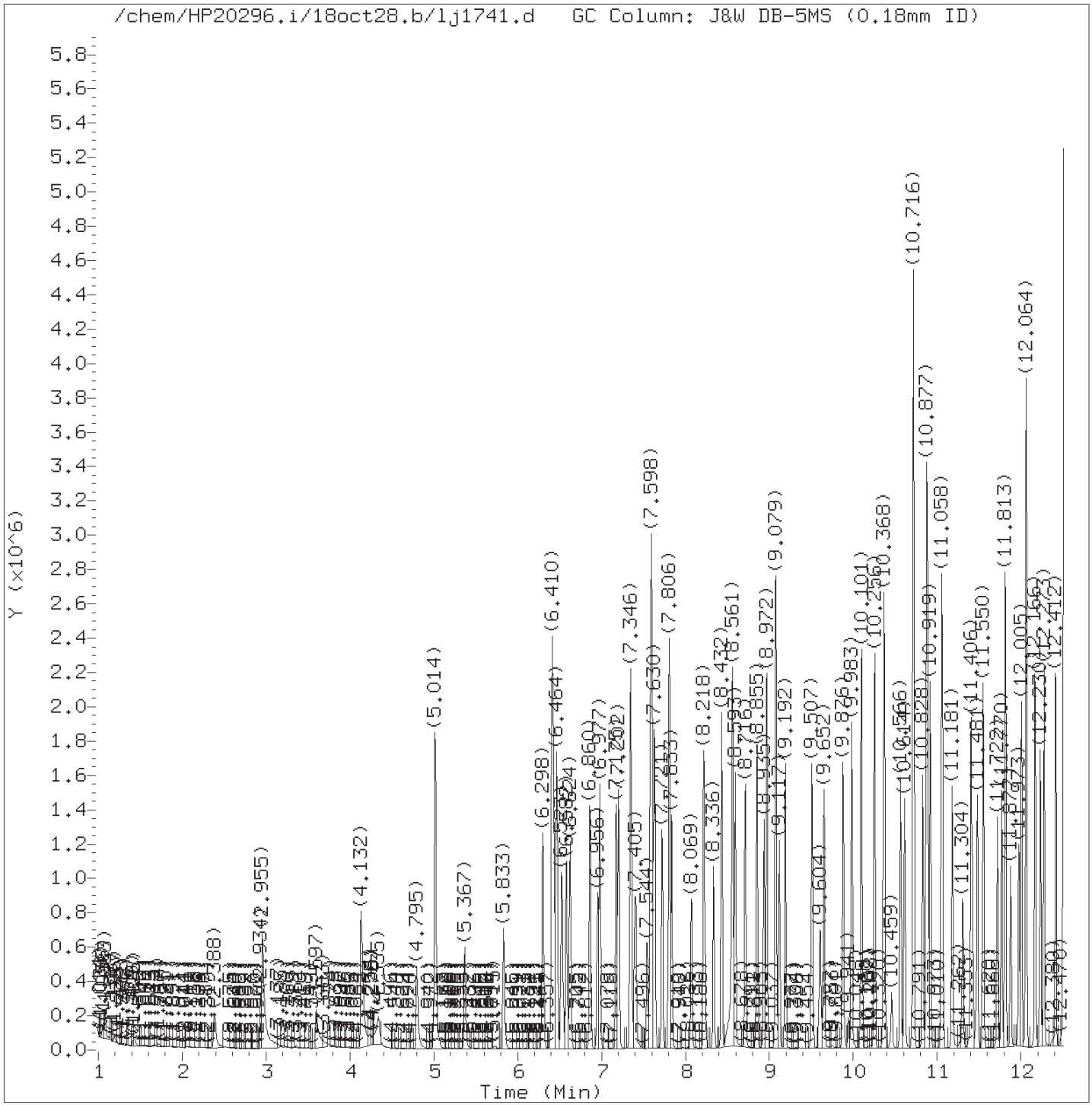
Instrument ID: HP20296.i Injection Date: 29-OCT-2018 00:09 Operator: whs02991



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{18519 + 12285}{18519 + 12285 + 4209519} \times 100 = 0.7$$

Secondary review performed and digitally signed by Holly B. Ziegler on 10/31/2018 at 07:47. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

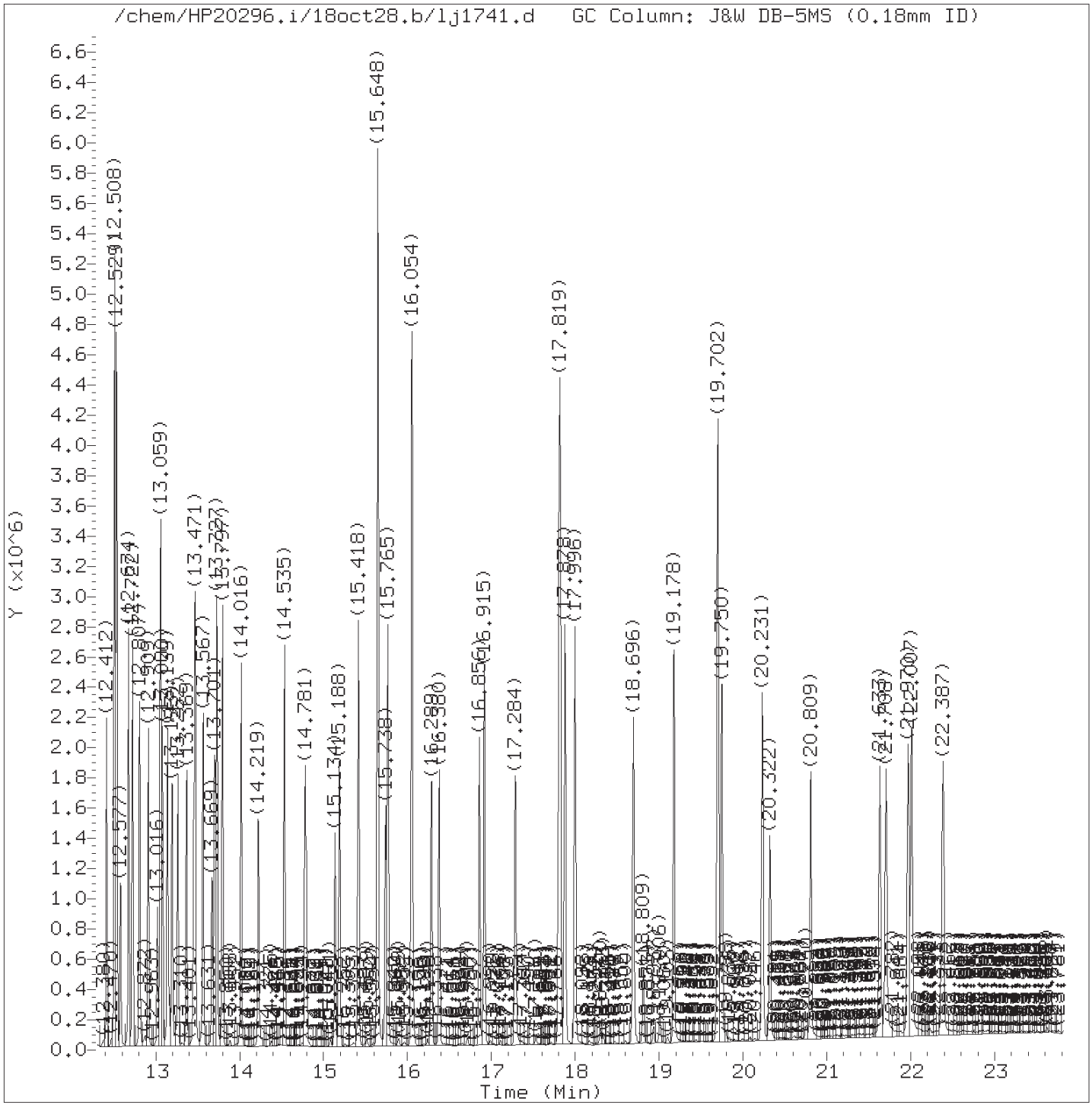
Target Revision 3.5

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

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 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

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 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

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 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

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.

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 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

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.

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 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

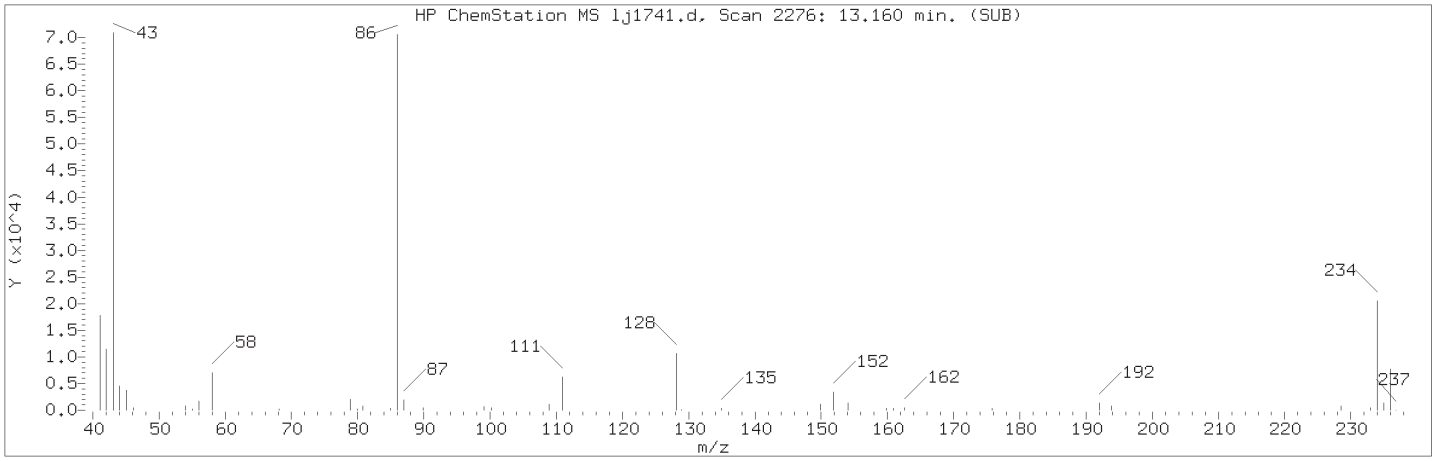
Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

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

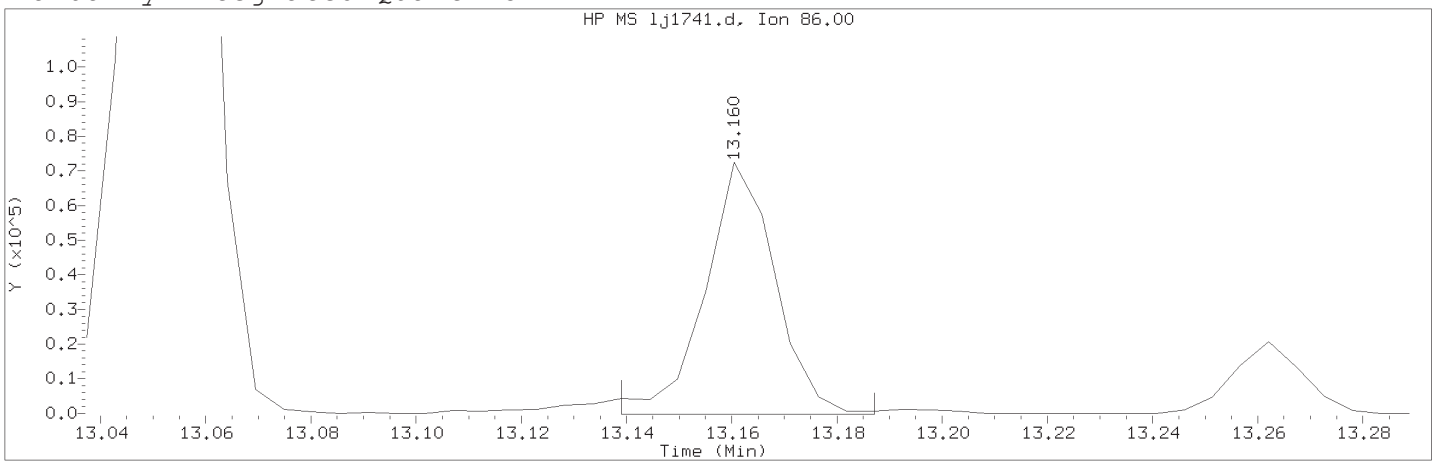
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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

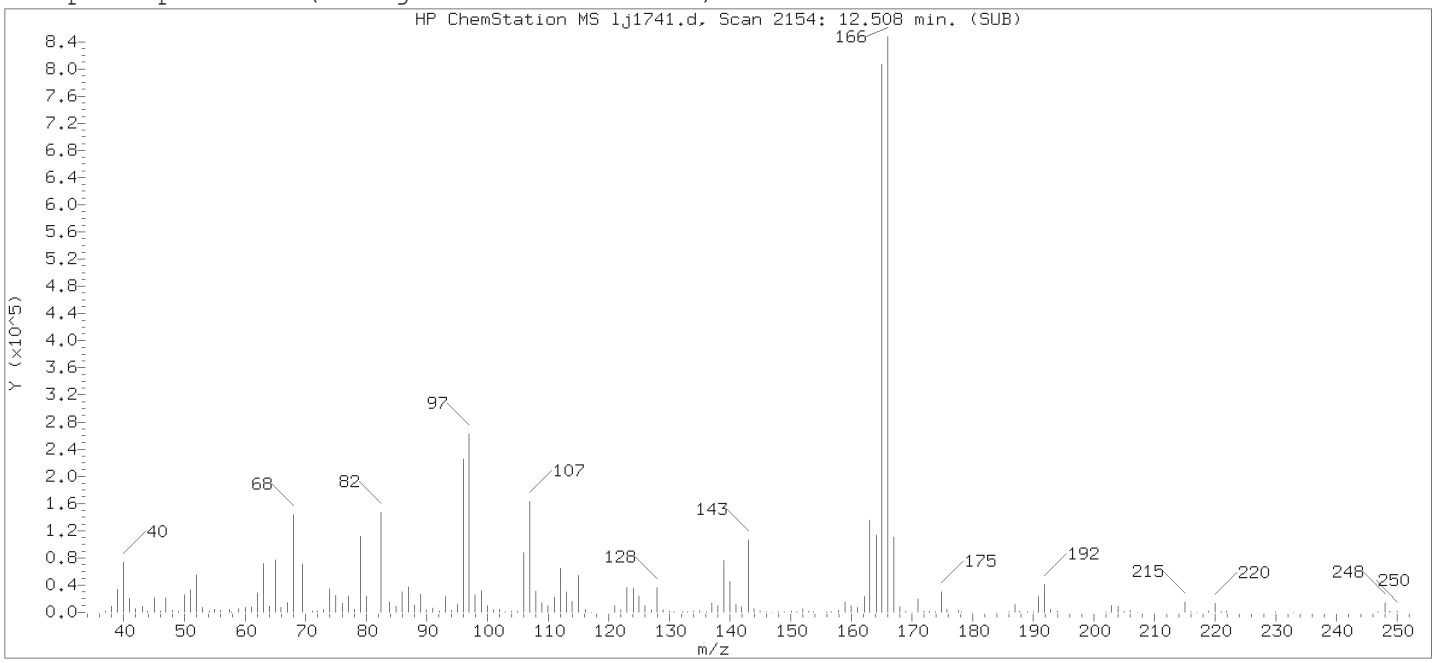
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2276		
Retention Time (minutes)	: 13.160		
Quant Ion	: 86.00		
Area (flag)	: 68022M		
On-Column Amount (ng/ul)	: 1.2750		
Integration start scan	: 2271	Integration stop scan:	2280
Y at integration start	: -230	Y at integration end:	-230

Reason for manual integration: improper integration

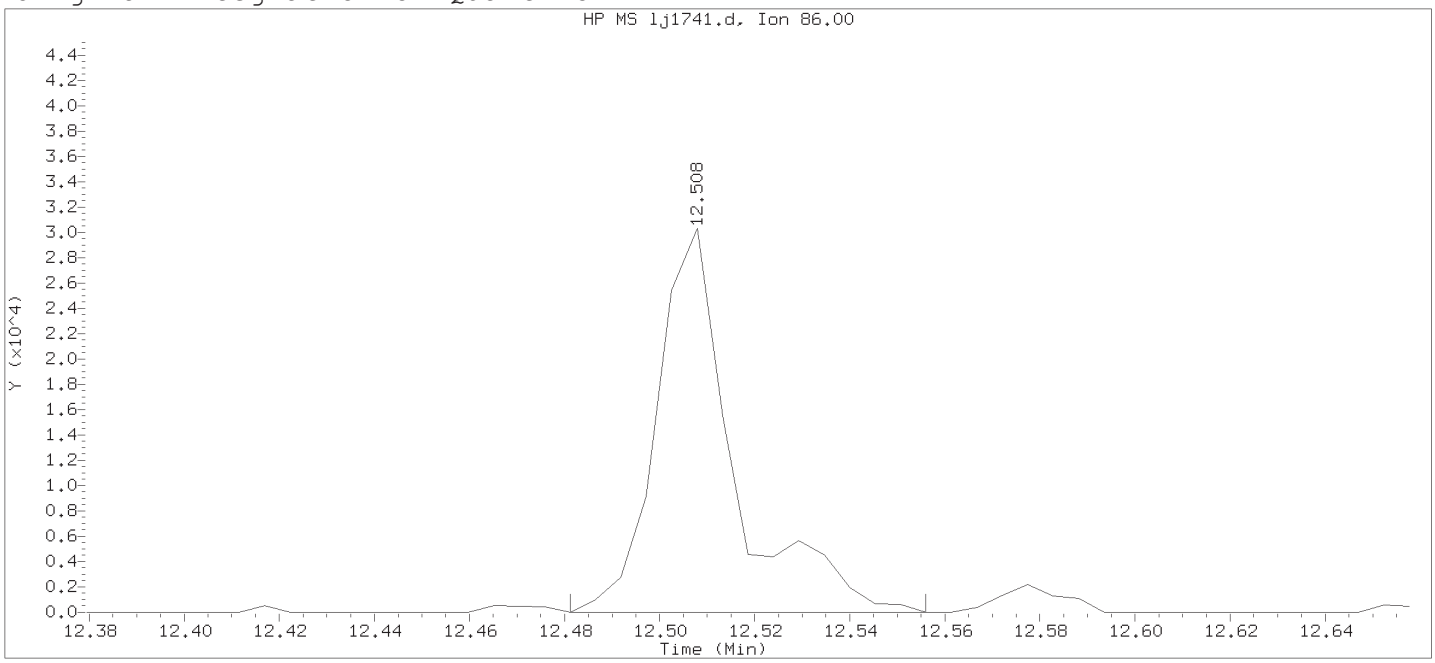
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

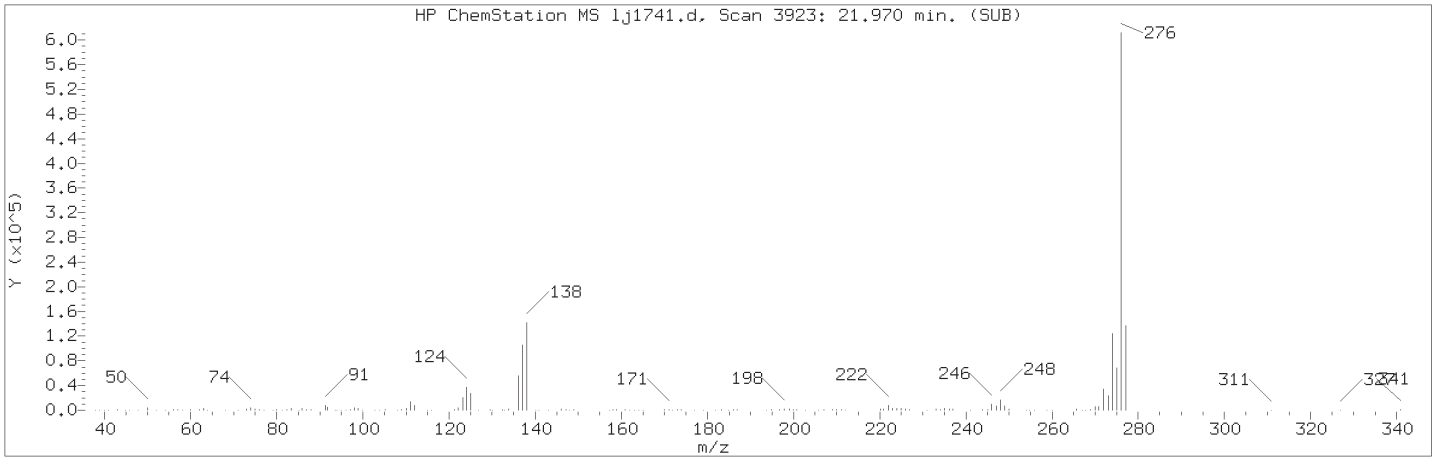
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 00:52
Date, time and analyst ID of latest file update: 29-Oct-2018 00:52 Unknown

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

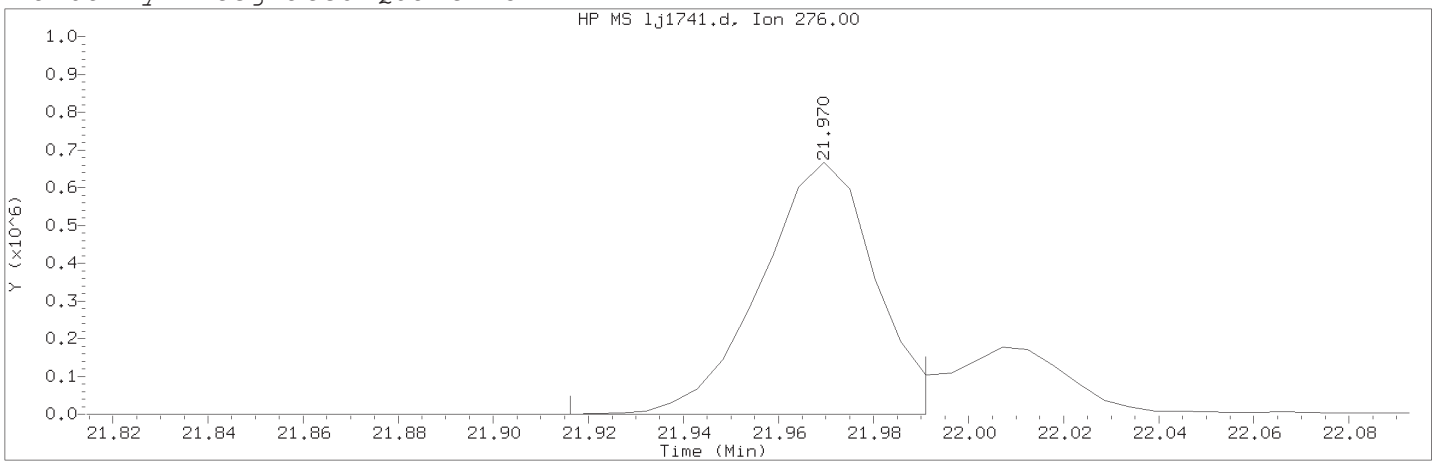
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2154		
Retention Time (minutes)	: 12.508		
Quant Ion	: 86.00		
Area	: 34206		
On-column Amount (ng/ul)	: 353.5652		
Integration start scan	: 2148	Integration stop scan:	2162
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ashley.transue

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

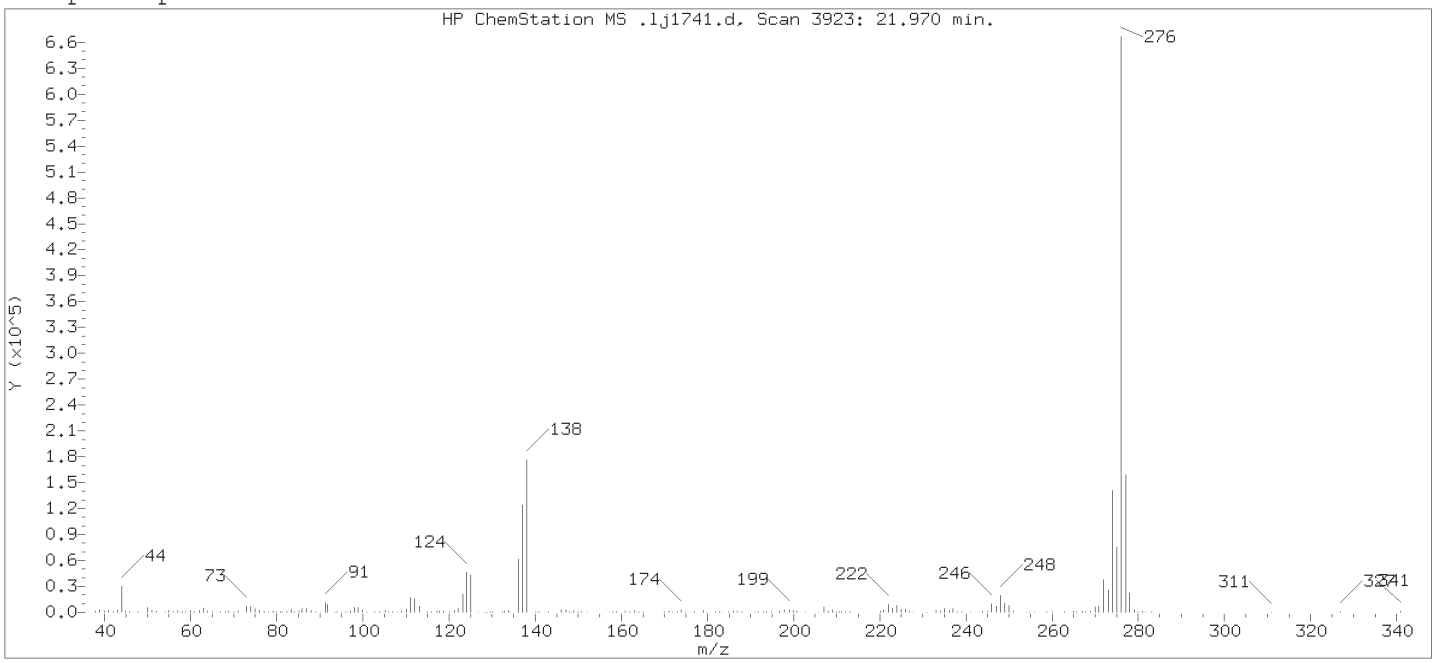
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3923		
Retention Time (minutes)	: 21.970		
Quant Ion	: 276.00		
Area (flag)	: 1113820M		
On-Column Amount (ng/ul)	: 7.5000		
Integration start scan	: 3912	Integration stop scan:	3926
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

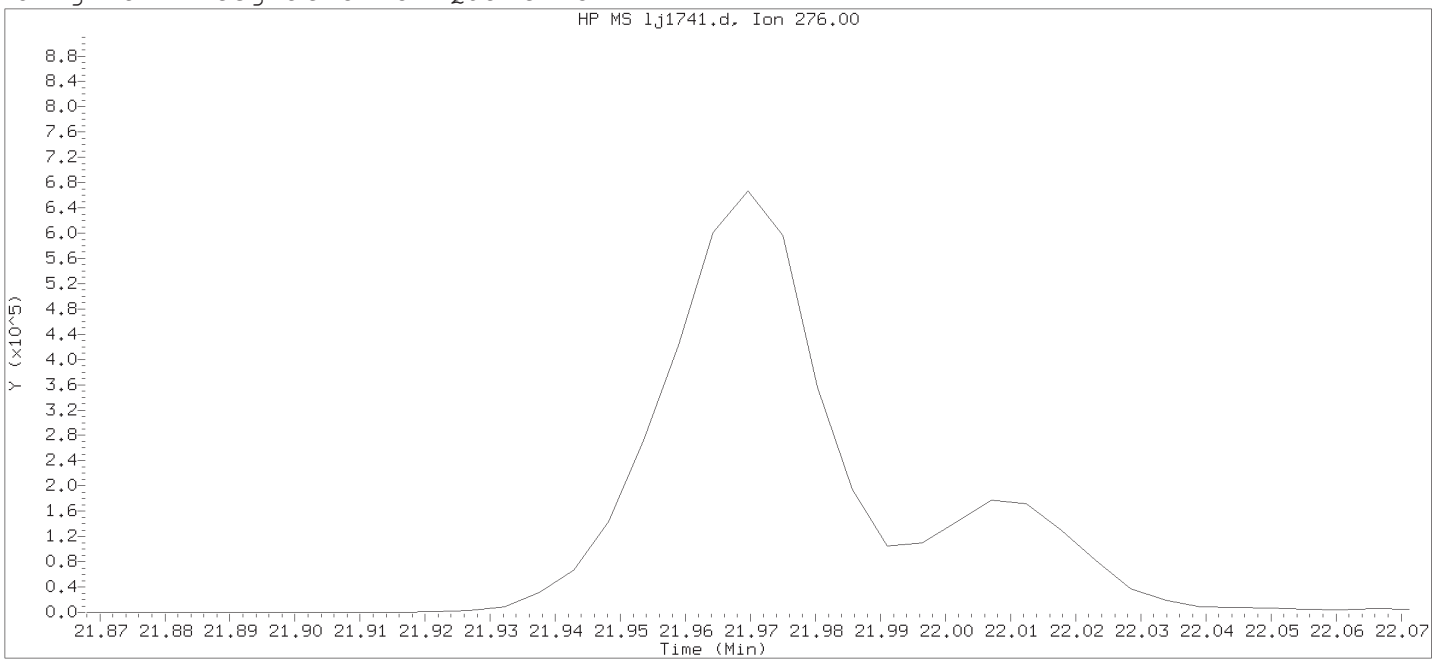
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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



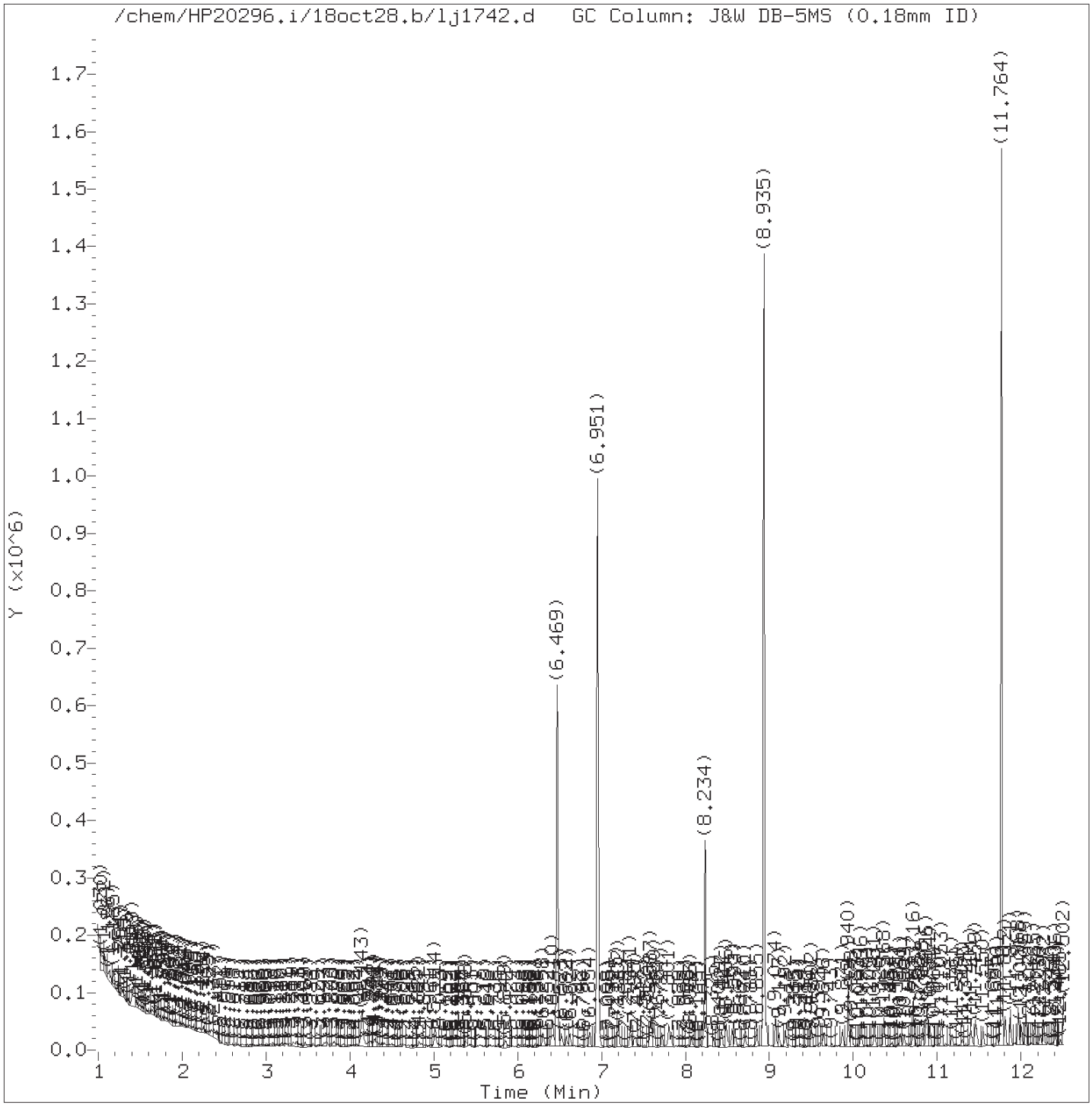
Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 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 : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Expected RT (minutes) : 21.970
Quant Ion : 276.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: 2215



Total Ion Chromatogram (TIC)

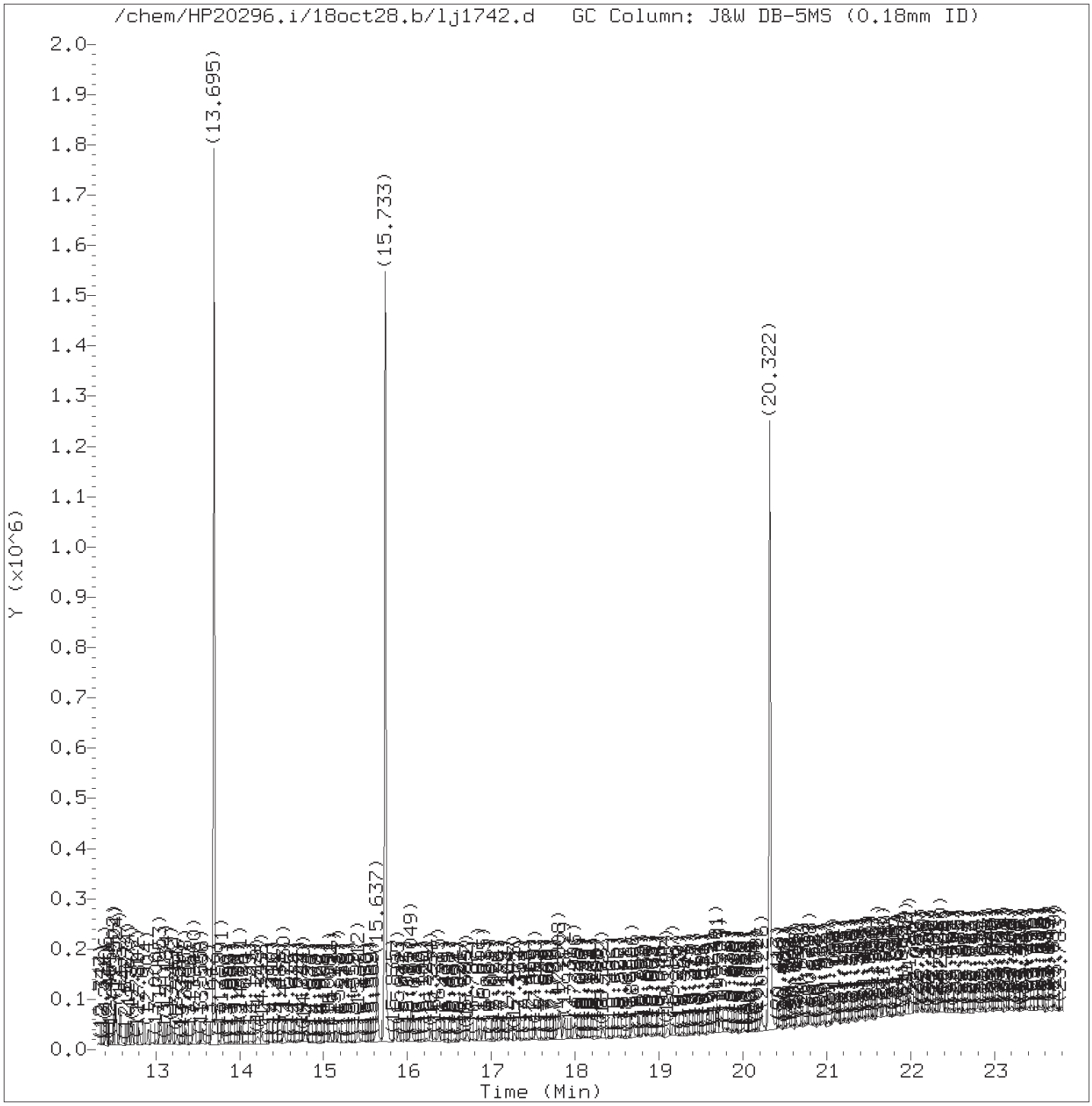
Target Revision 3.5

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

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 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

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 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

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 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

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.
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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 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

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 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

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

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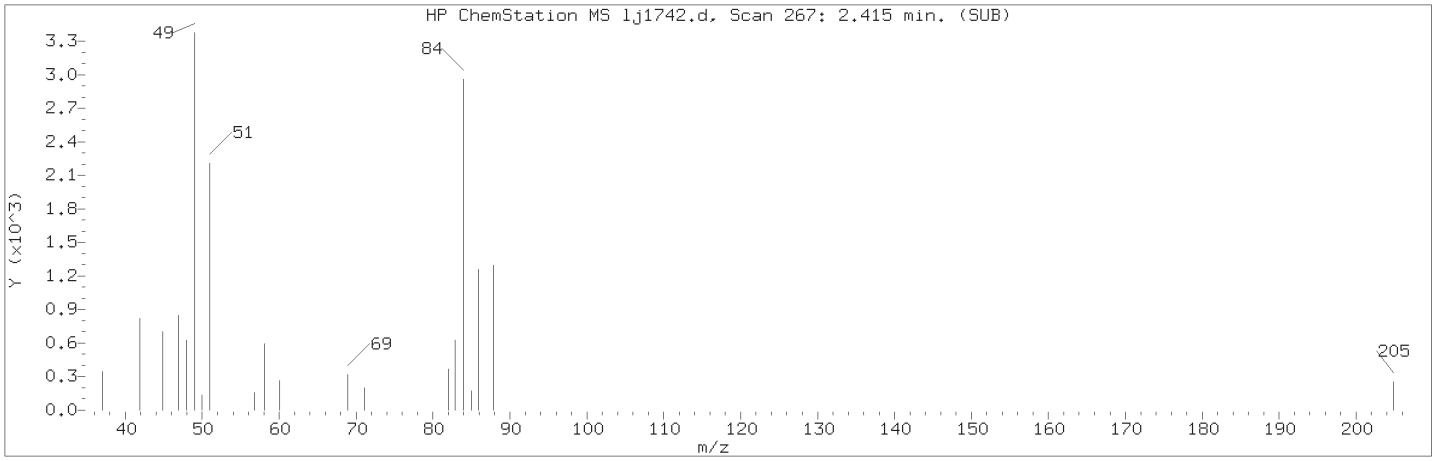
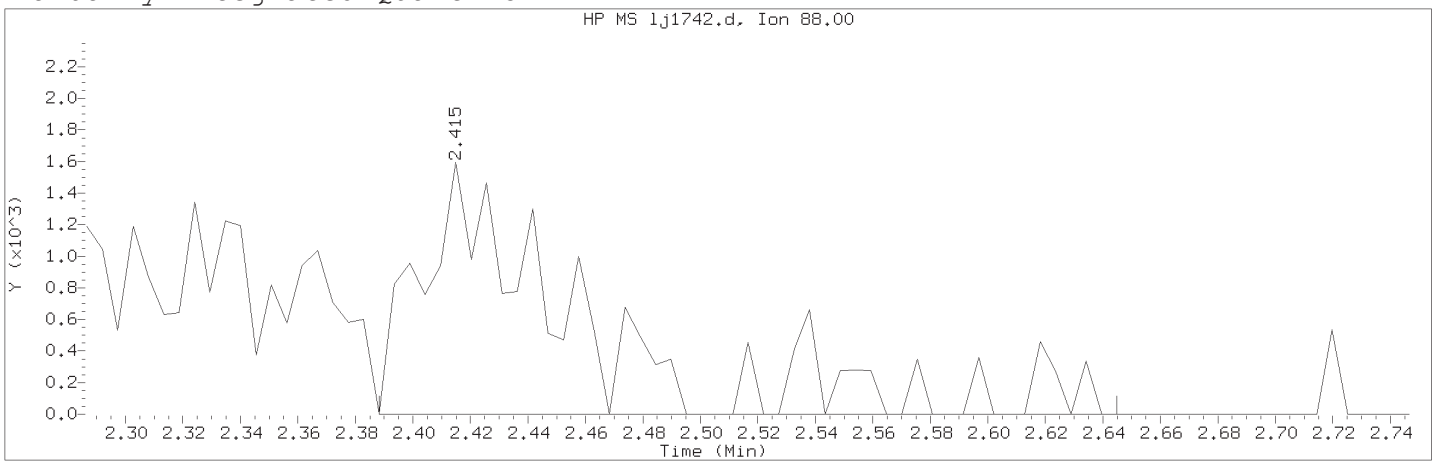
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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

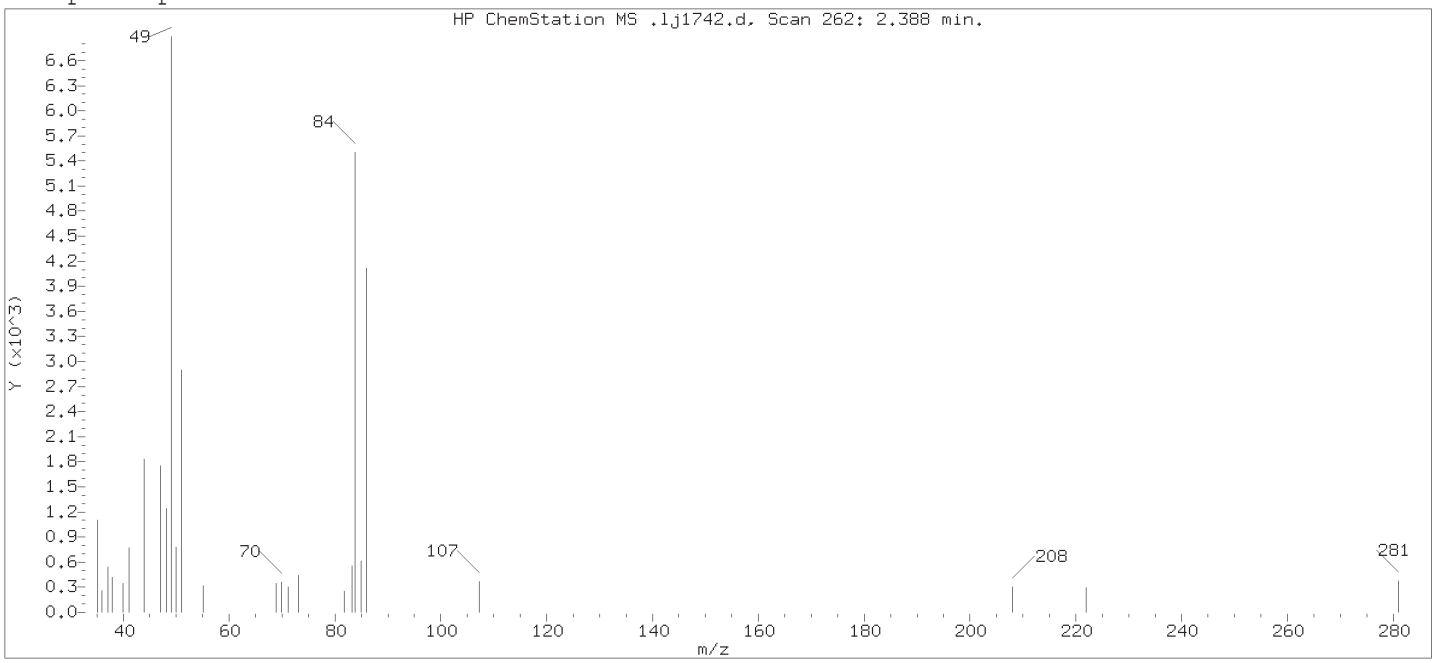
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 267		
Retention Time (minutes)	: 2.415		
Quant Ion	: 88.00		
Area (flag)	: 6046M		
On-Column Amount (ng/ul)	: 0.2287		
Integration start scan	: 261	Integration stop scan:	309
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

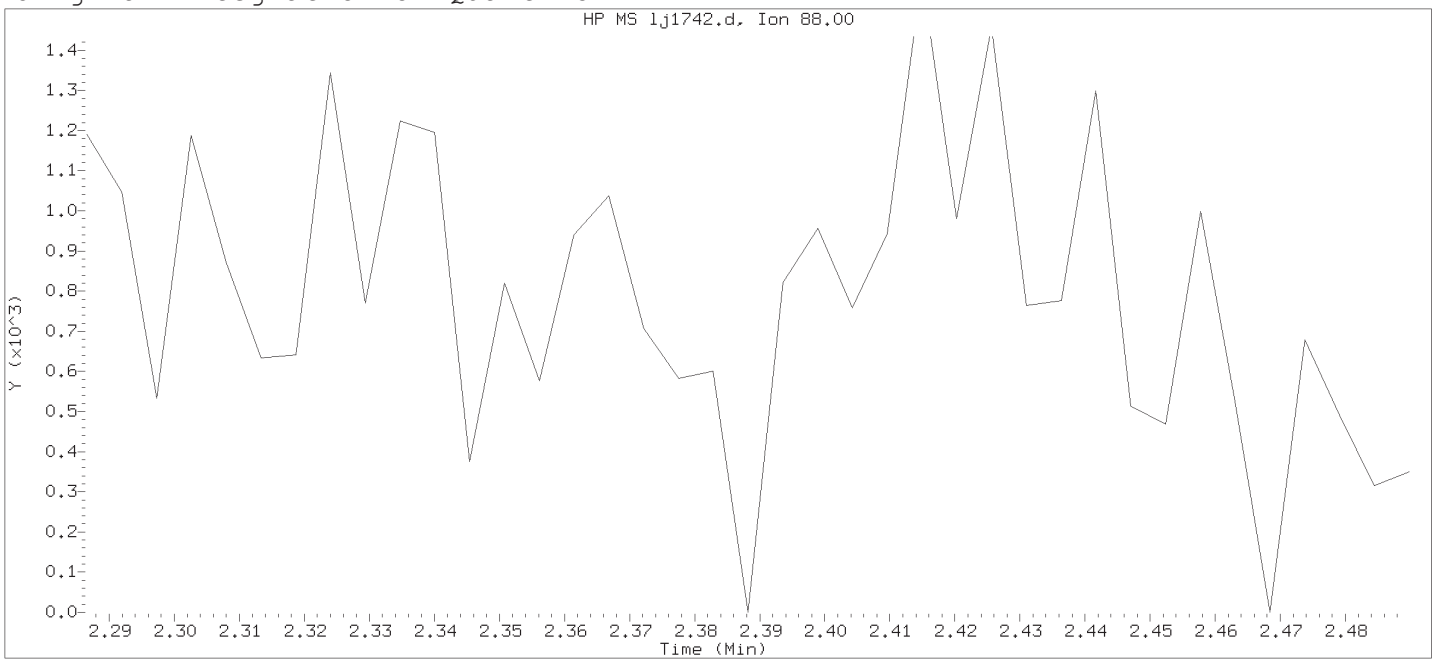
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

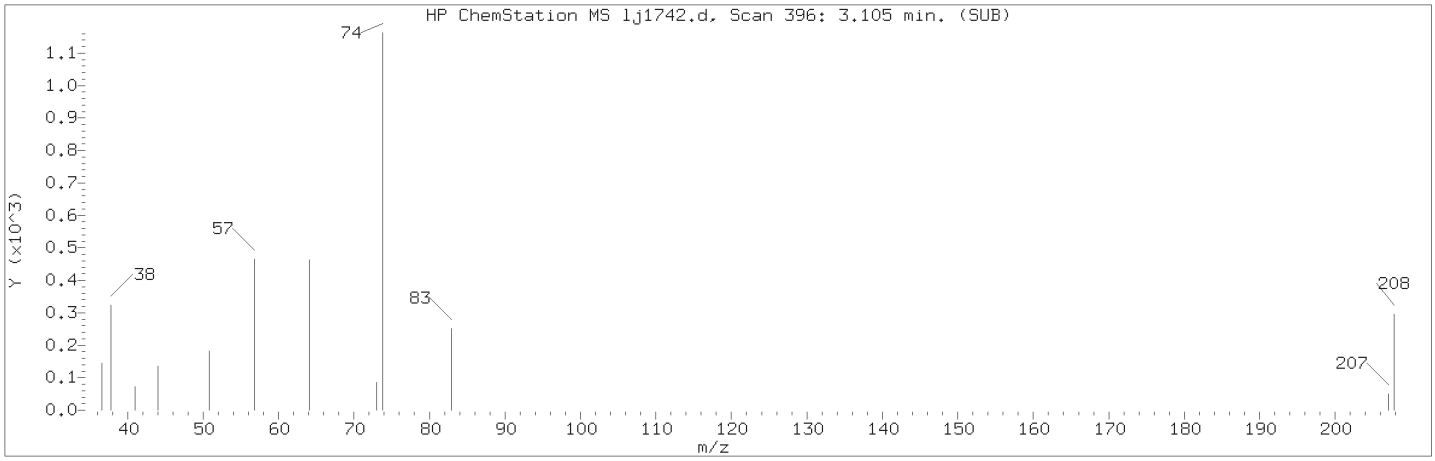
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

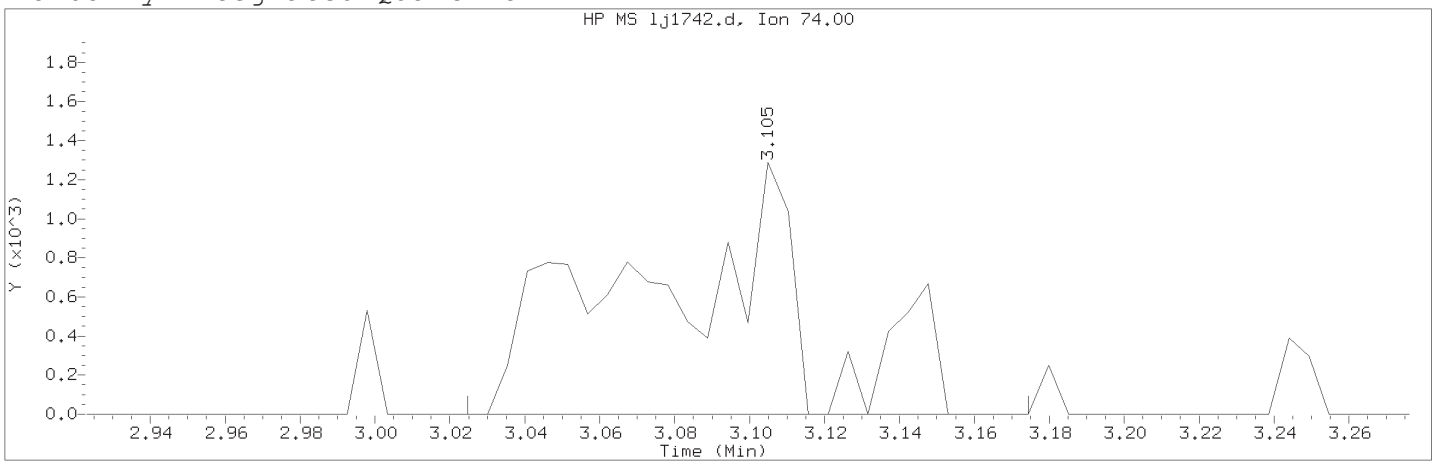
Compound Number : 1
Compound Name : 1,4-Dioxane
Expected RT (minutes) : 2.388
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ashley.transue

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

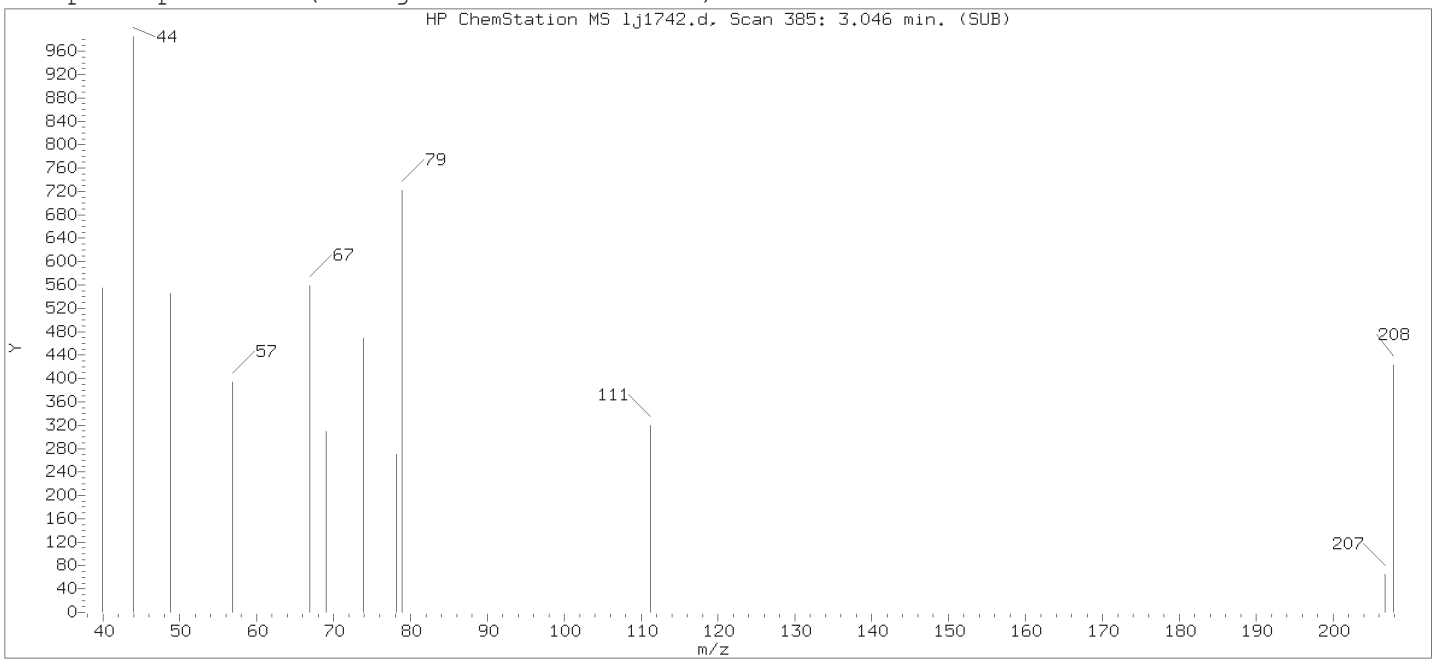
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 396		
Retention Time (minutes)	: 3.105		
Quant Ion	: 74.00		
Area (flag)	: 3925M		
On-Column Amount (ng/ul)	: 0.0953		
Integration start scan	: 380	Integration stop scan:	408
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

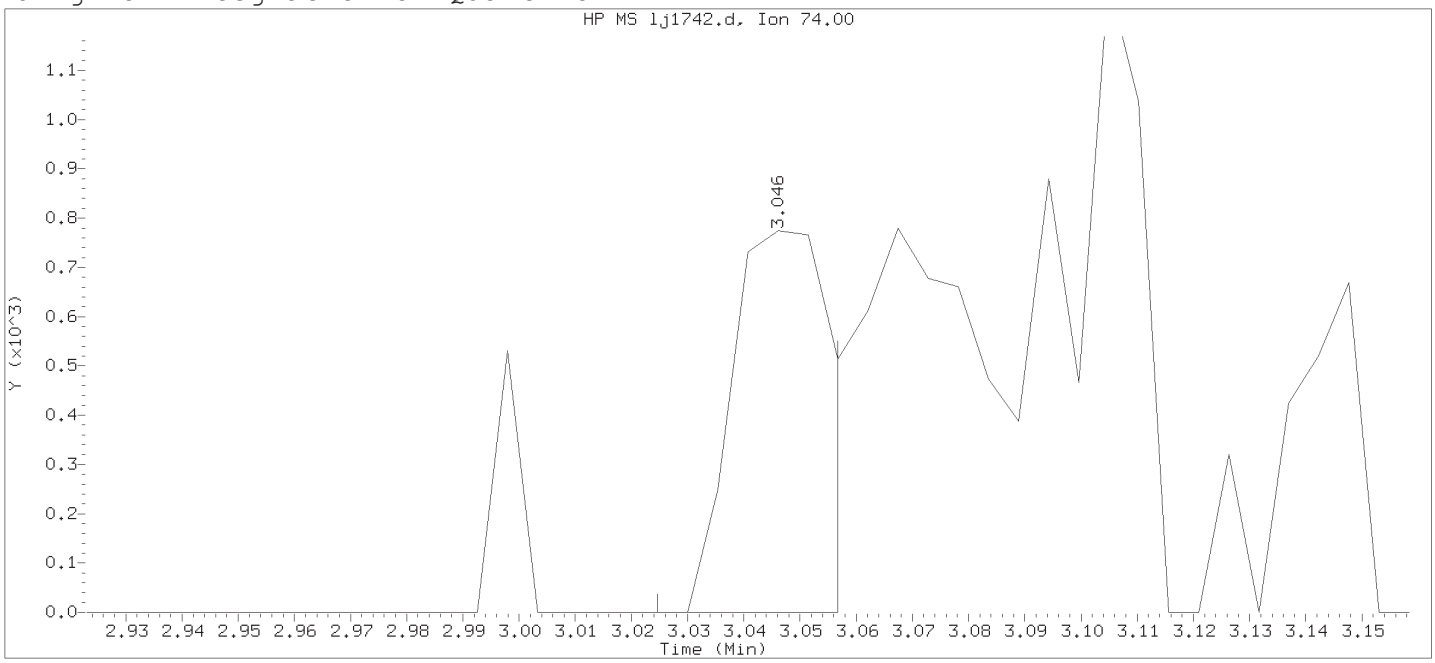
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

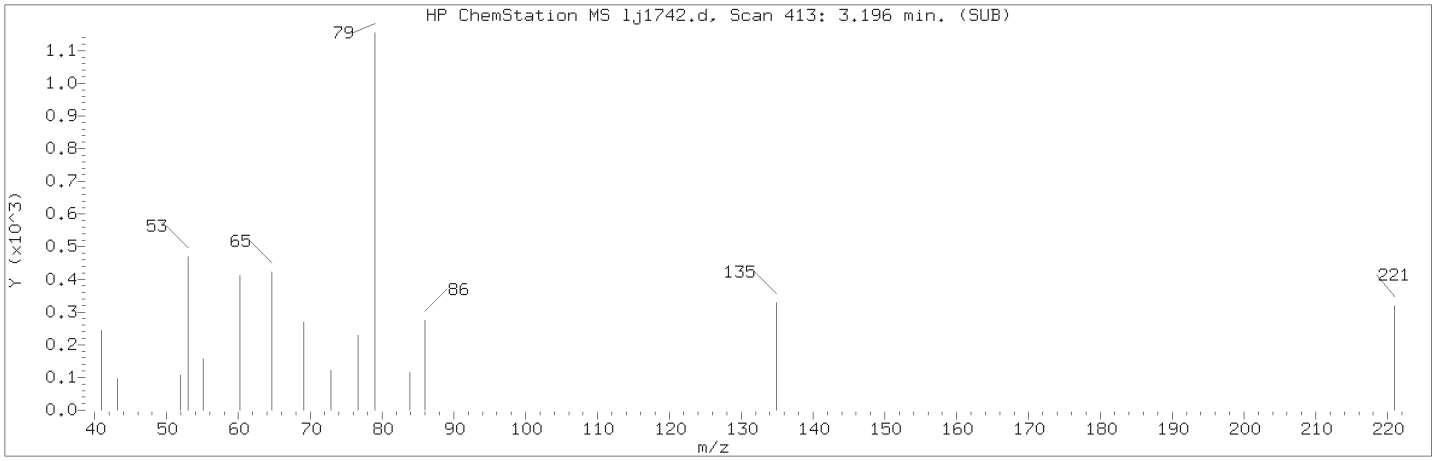
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

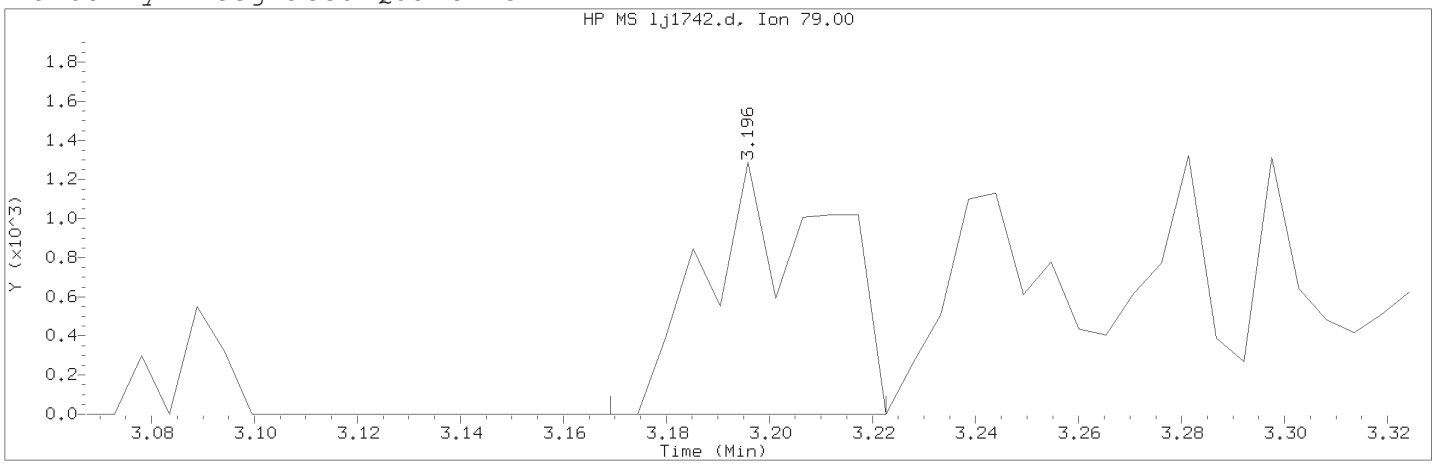
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 385		
Retention Time (minutes)	: 3.046		
Quant Ion	: 74.00		
Area	: 892		
On-column Amount (ng/ul)	: 0.0221		
Integration start scan	: 380	Integration stop scan:	386
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ashley.transue

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

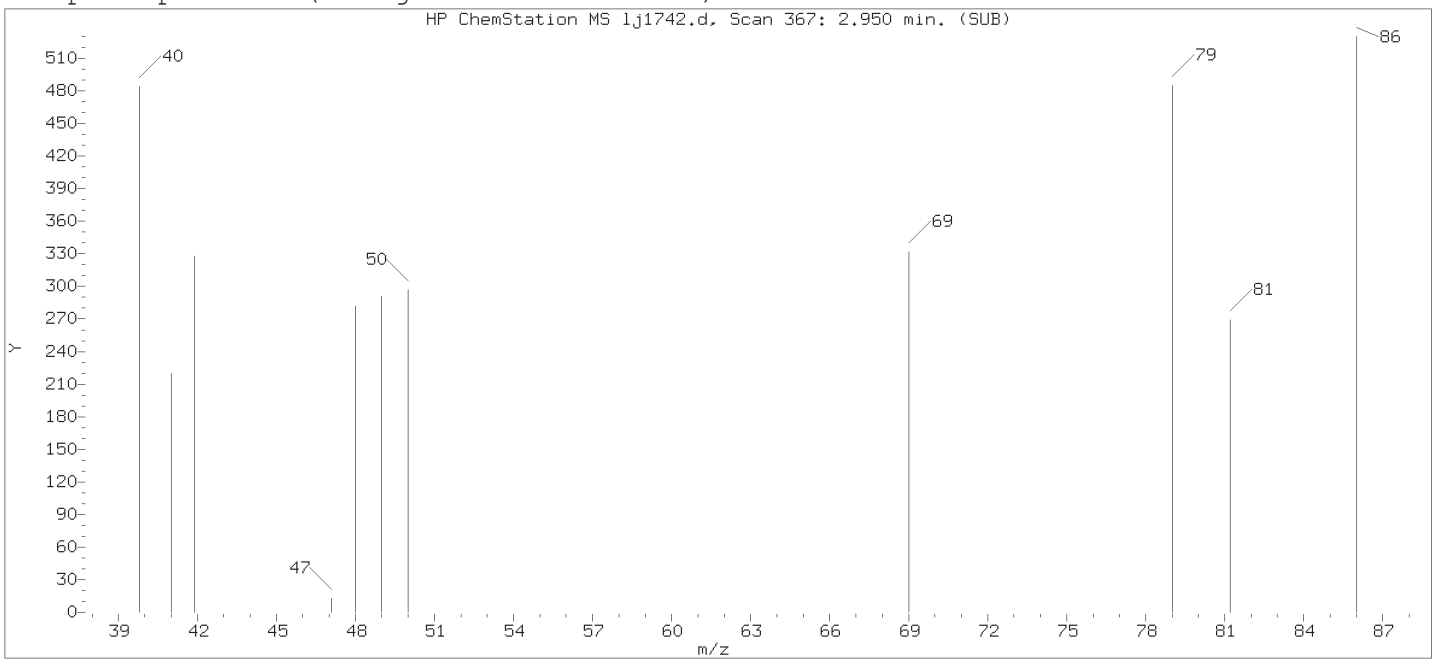
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 413		
Retention Time (minutes)	: 3.196		
Quant Ion	: 79.00		
Area (flag)	: 2153M		
On-Column Amount (ng/ul)	: 0.0300		
Integration start scan	: 407	Integration stop scan:	417
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

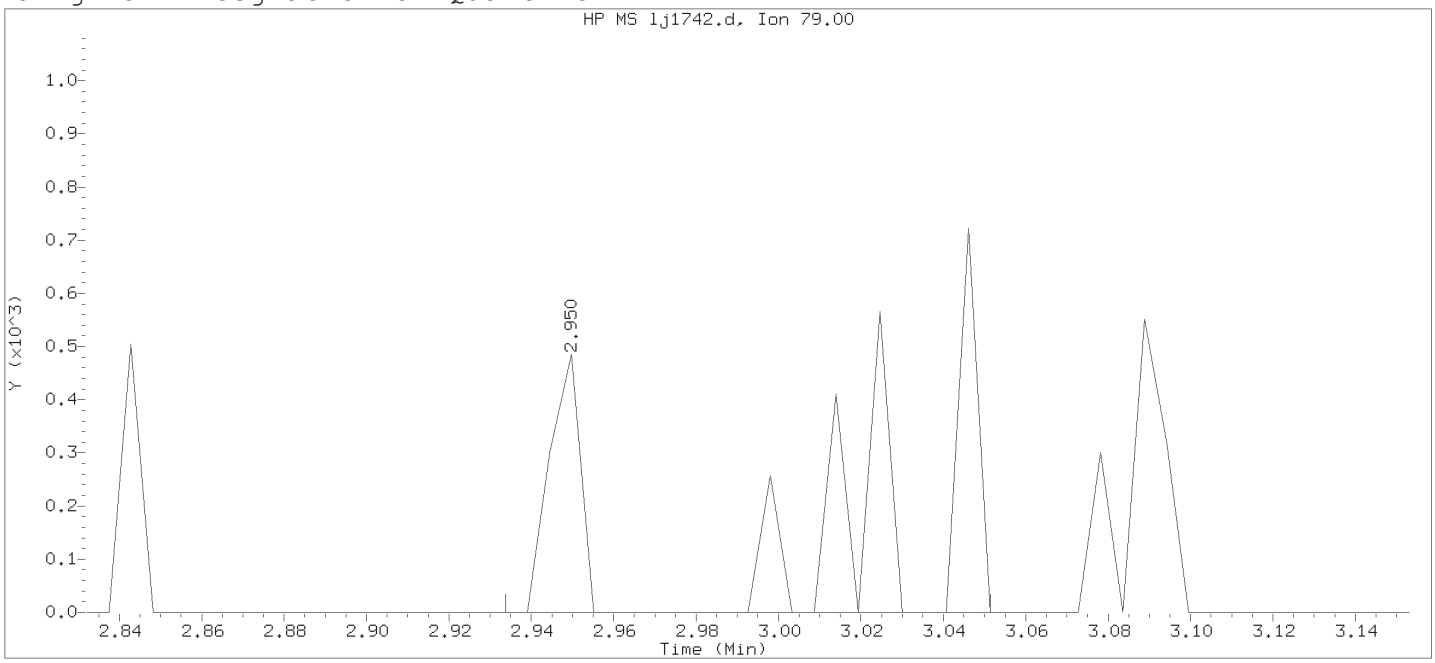
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

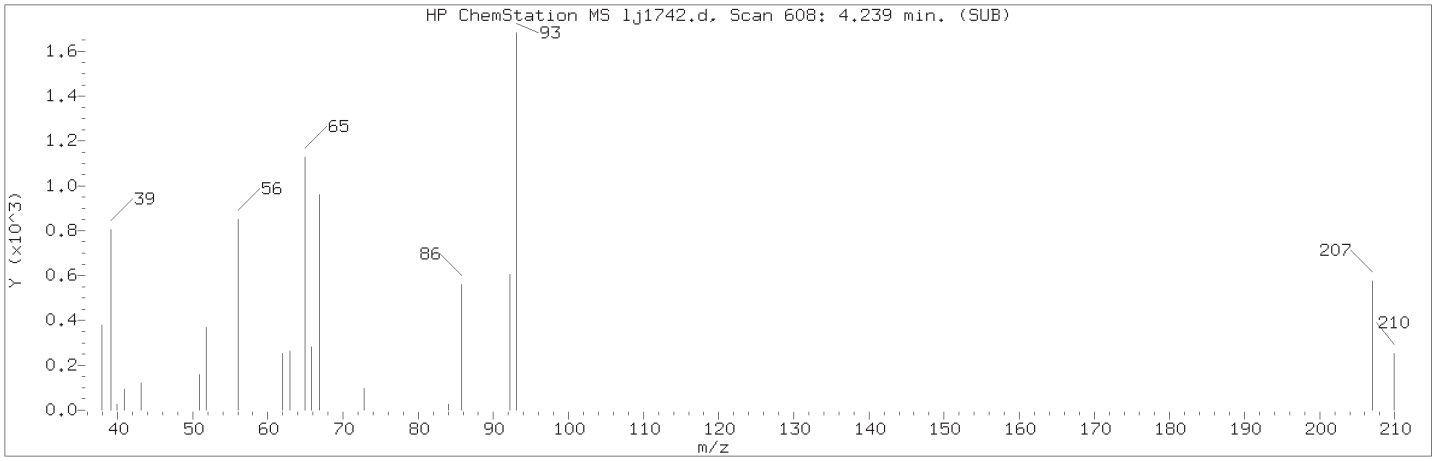
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

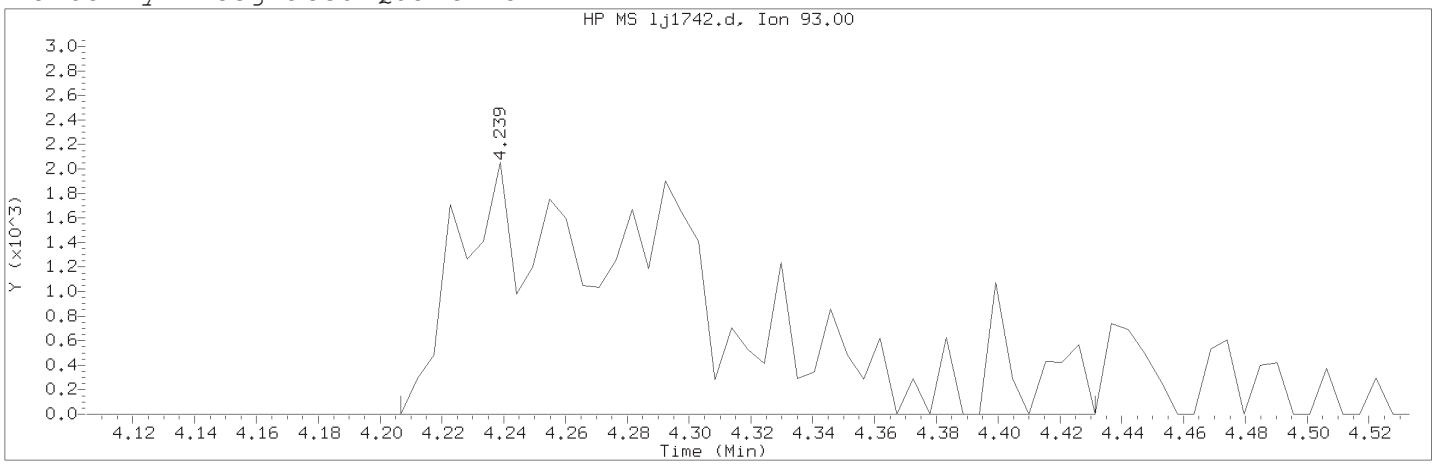
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 367		
Retention Time (minutes)	: 2.950		
Quant Ion	: 79.00		
Area	: 879		
On-column Amount (ng/ul)	: 0.0124		
Integration start scan	: 363	Integration stop scan:	385
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ashley.transue

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

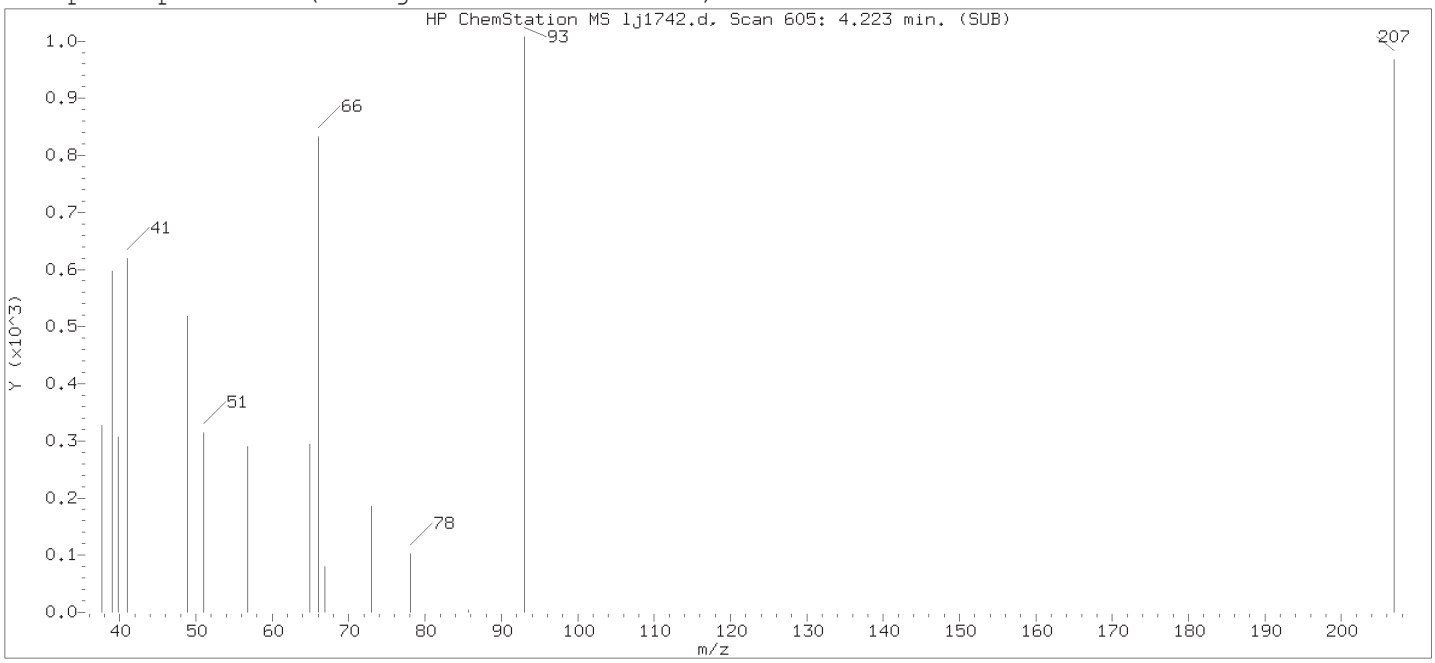
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 608		
Retention Time (minutes)	: 4.239		
Quant Ion	: 93.00		
Area (flag)	: 10800M		
On-Column Amount (ng/ul)	: 0.1495		
Integration start scan	: 601	Integration stop scan:	643
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

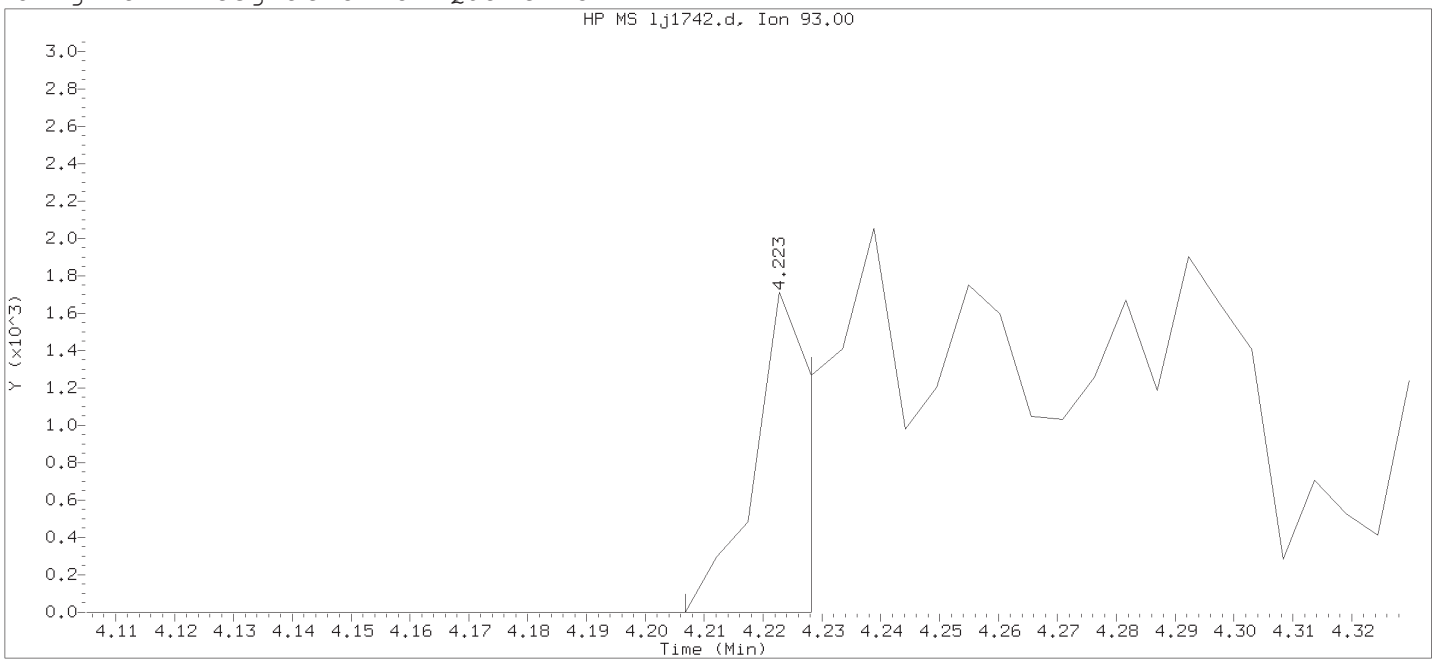
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

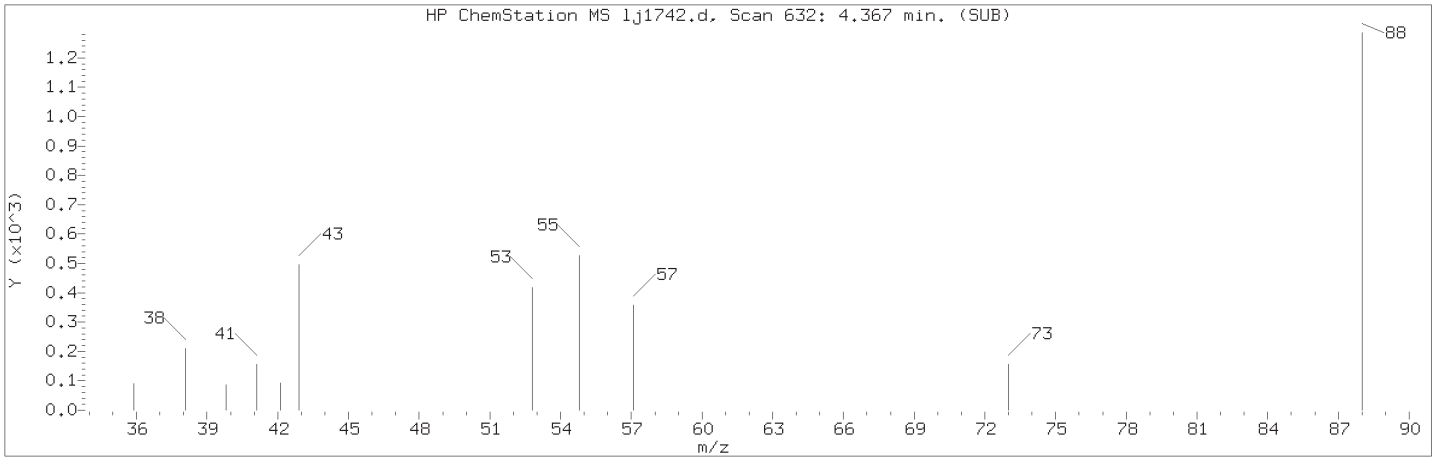
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

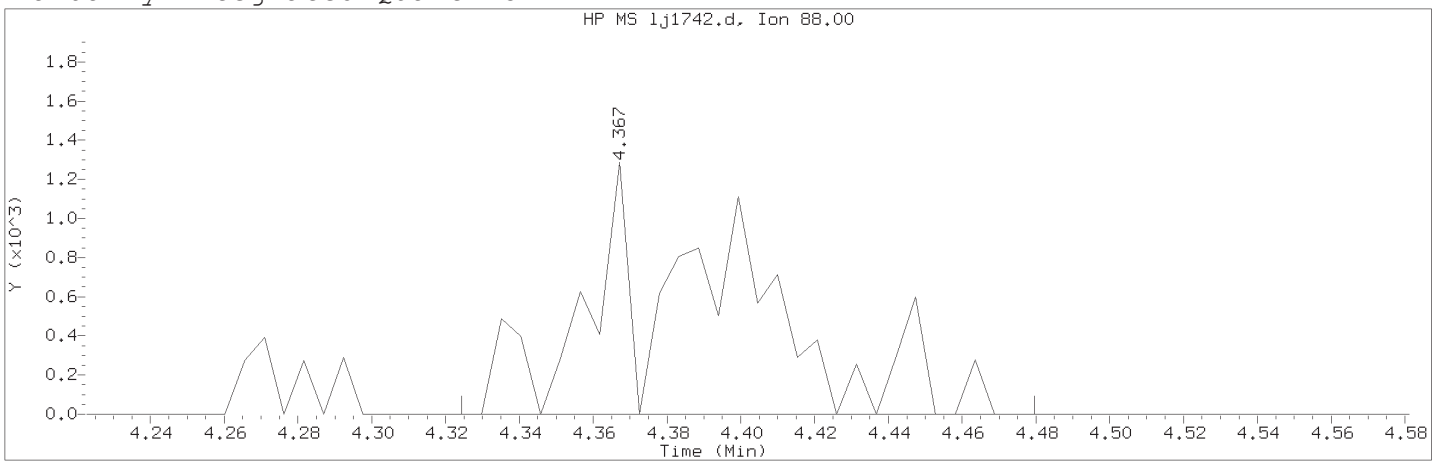
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 605		
Retention Time (minutes)	: 4.223		
Quant Ion	: 93.00		
Area	: 1002		
On-column Amount (ng/ul)	: 0.0141		
Integration start scan	: 601	Integration stop scan:	605
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ashley.transue

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

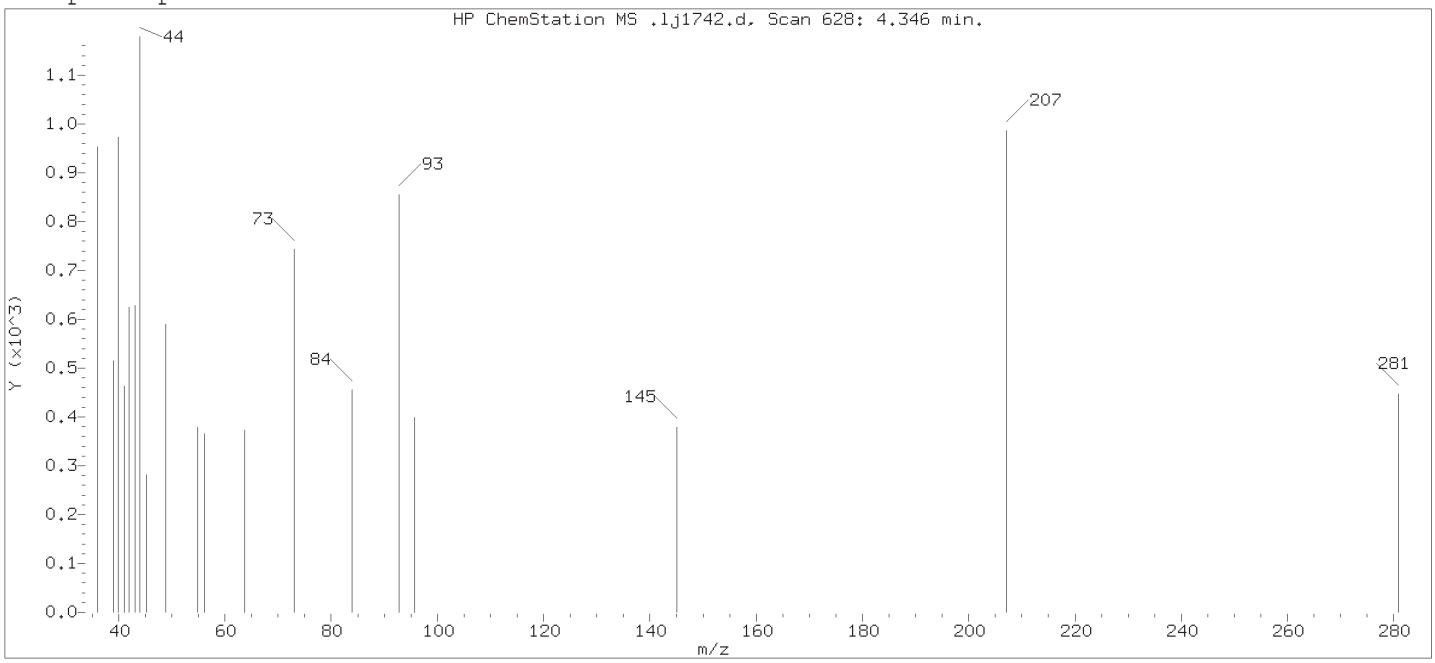
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 632
Retention Time (minutes) : 4.367
Quant Ion : 88.00
Area (flag) : 3454M
On-Column Amount (ng/ul) : 0.1130
Integration start scan : 623 Integration stop scan: 652
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

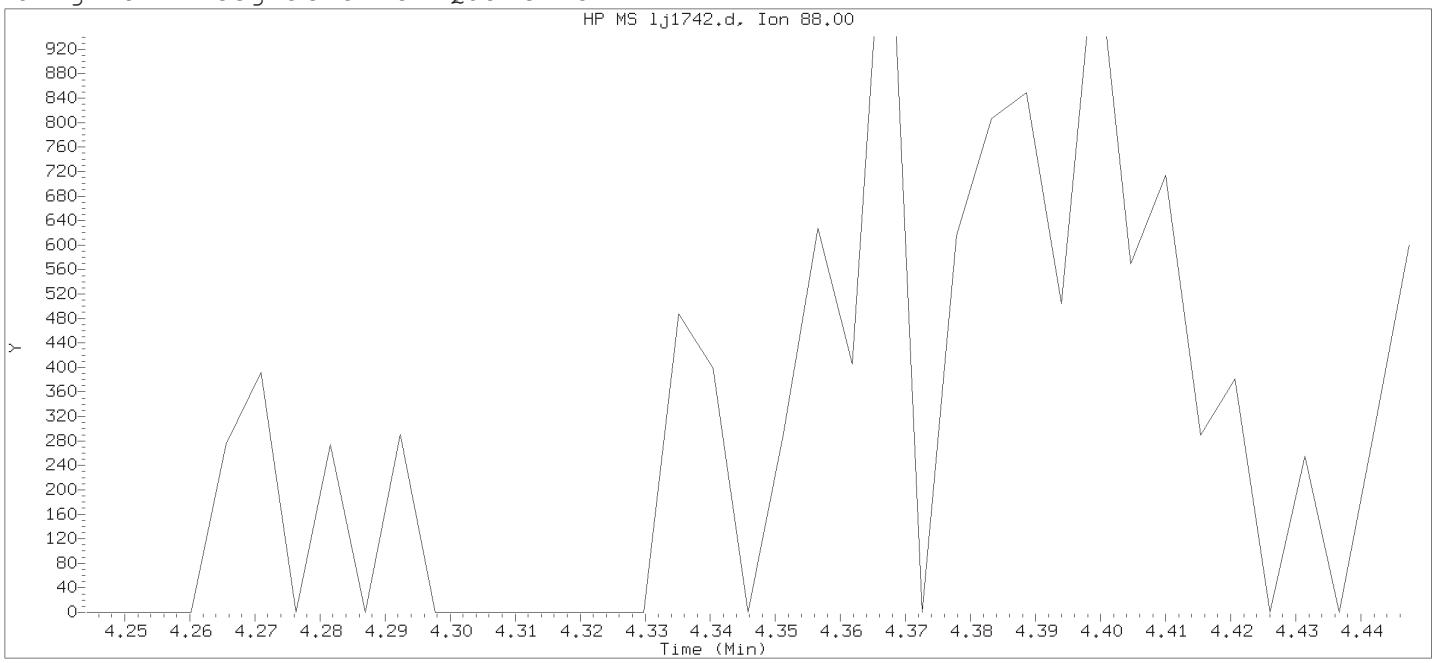
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

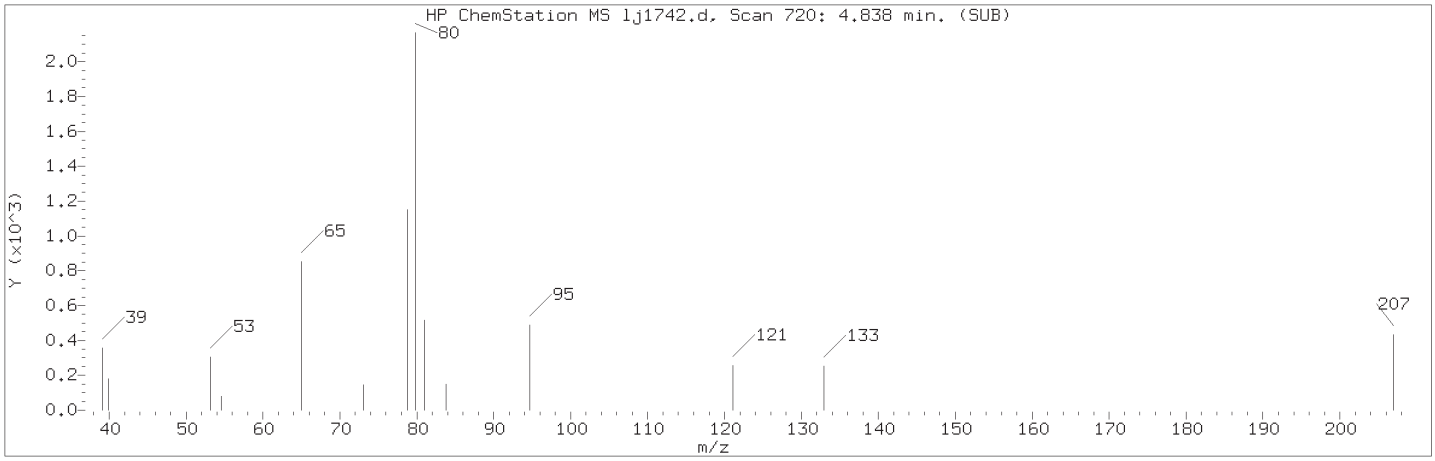
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

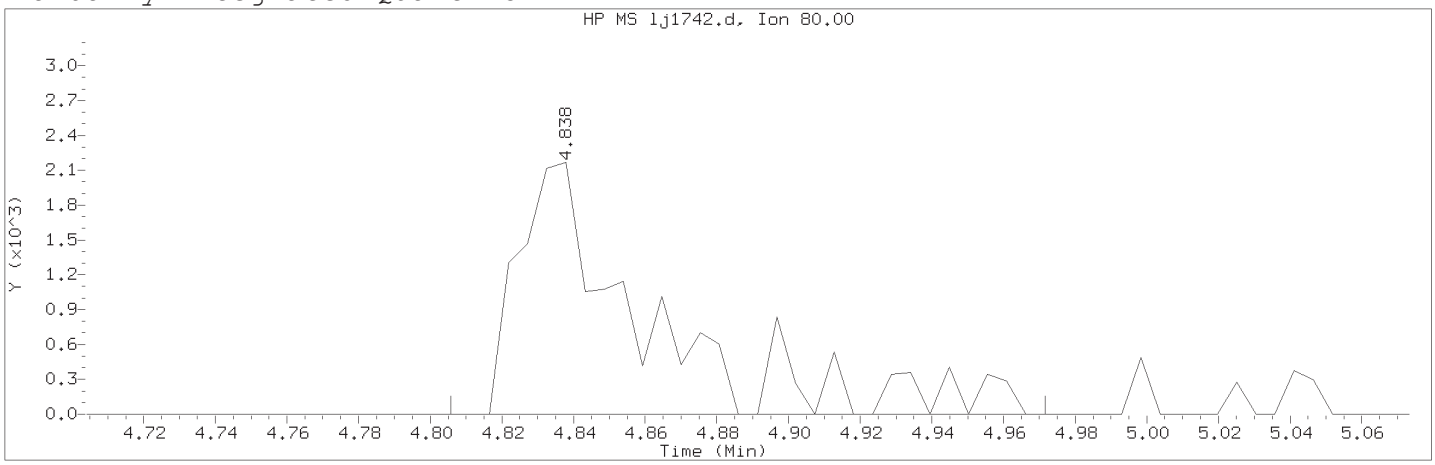
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.346
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: ARTransue

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

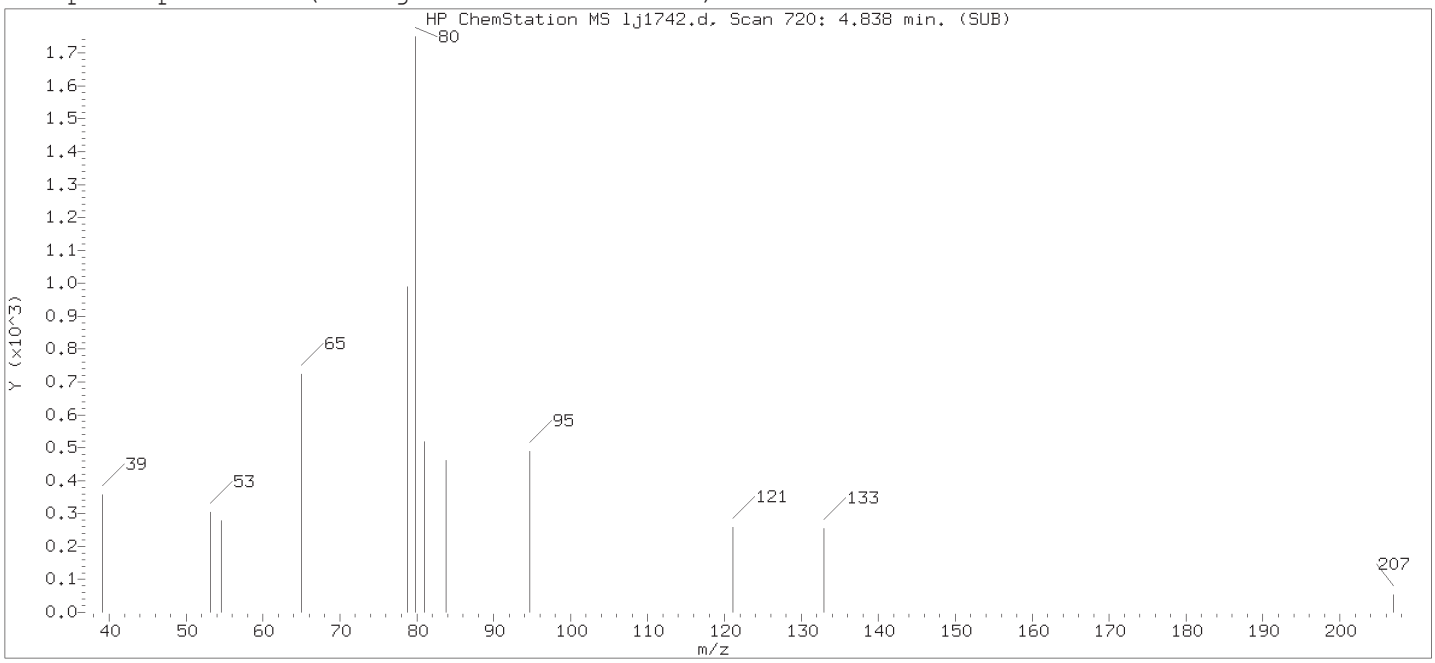
Compound Number : 10
Compound Name : Methyl methanesulfonate
Scan Number : 720
Retention Time (minutes) : 4.838
Quant Ion : 80.00
Area (flag) : 5410M
On-Column Amount (ng/ul) : 0.1401
Integration start scan : 713 Integration stop scan: 744
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

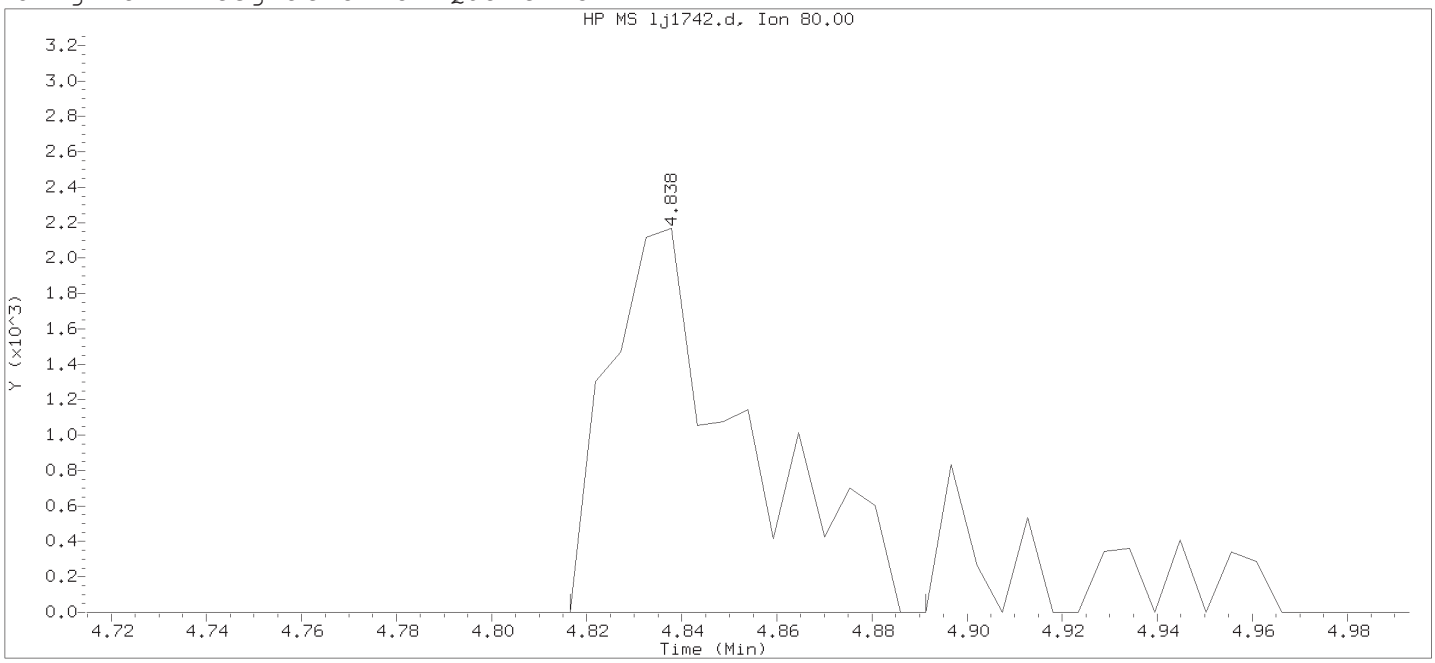
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

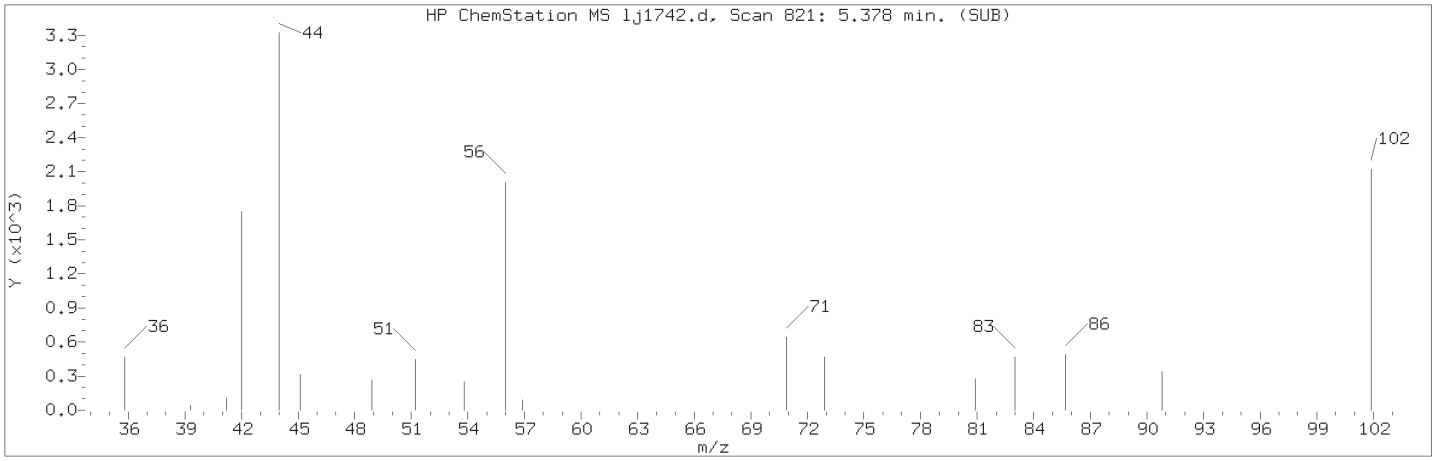
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

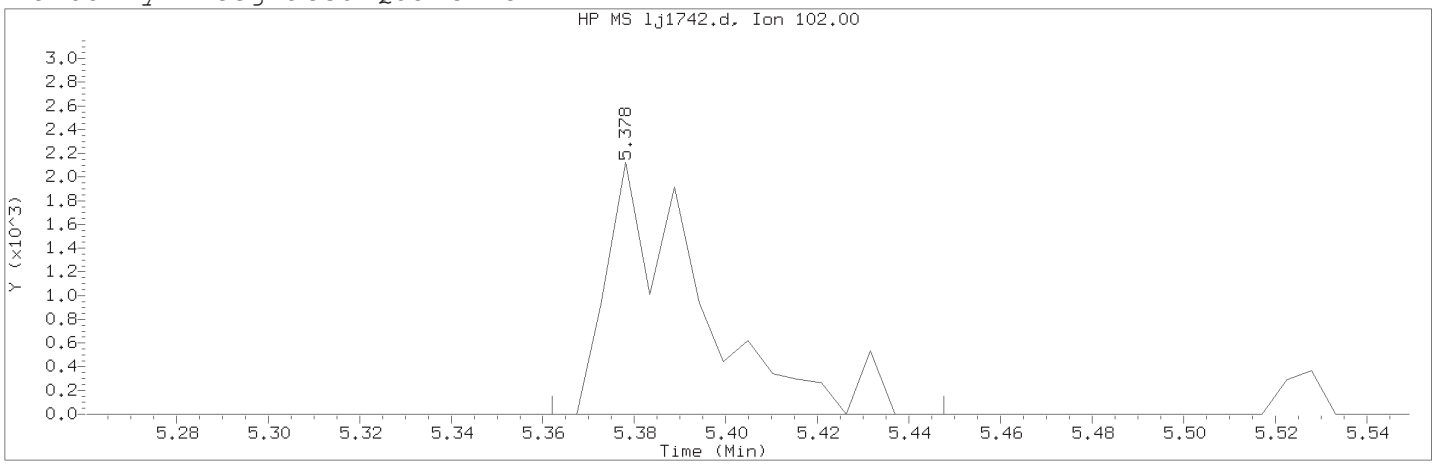
Compound Number	: 10		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 720		
Retention Time (minutes)	: 4.838		
Quant Ion	: 80.00		
Area	: 4327		
On-column Amount (ng/ul)	: 0.1151		
Integration start scan	: 715	Integration stop scan:	729
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ARTransue

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

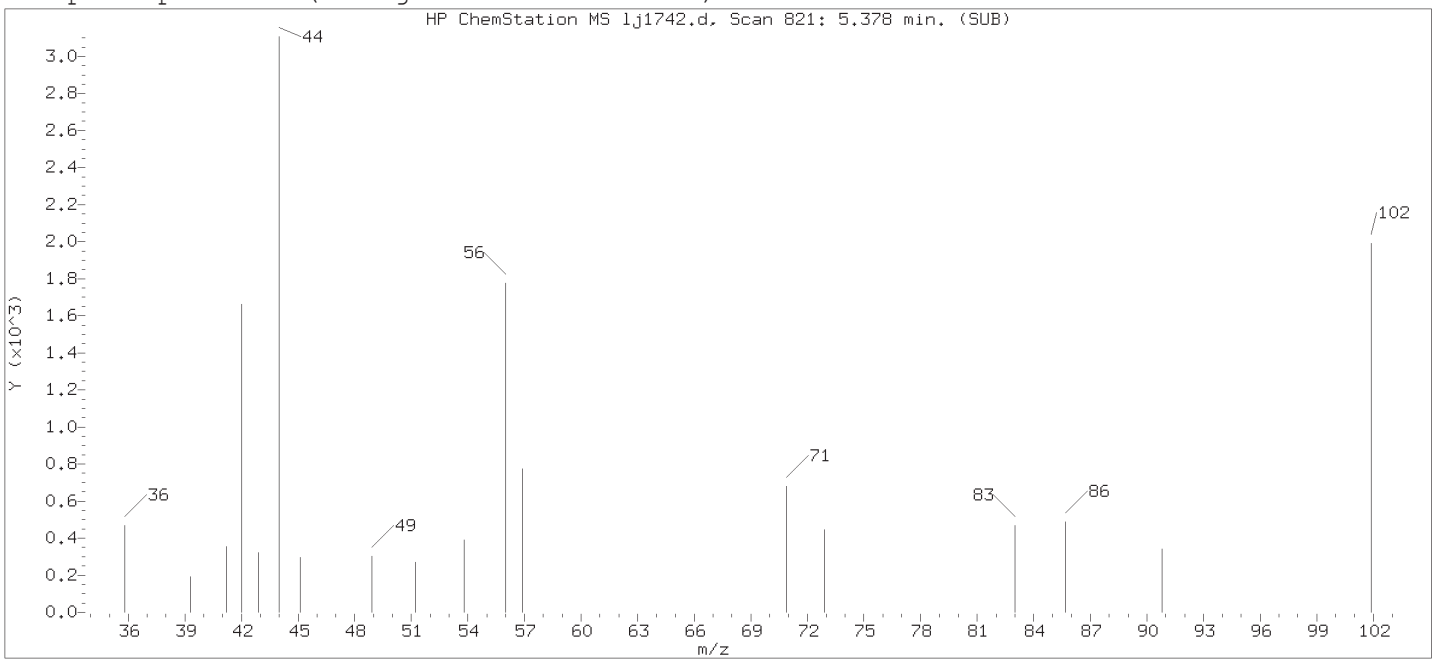
Compound Number : 14
Compound Name : N-Nitrosodiethylamine
Scan Number : 821
Retention Time (minutes) : 5.378
Quant Ion : 102.00
Area (flag) : 3020M
On-Column Amount (ng/ul) : 0.1080
Integration start scan : 817 Integration stop scan: 833
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

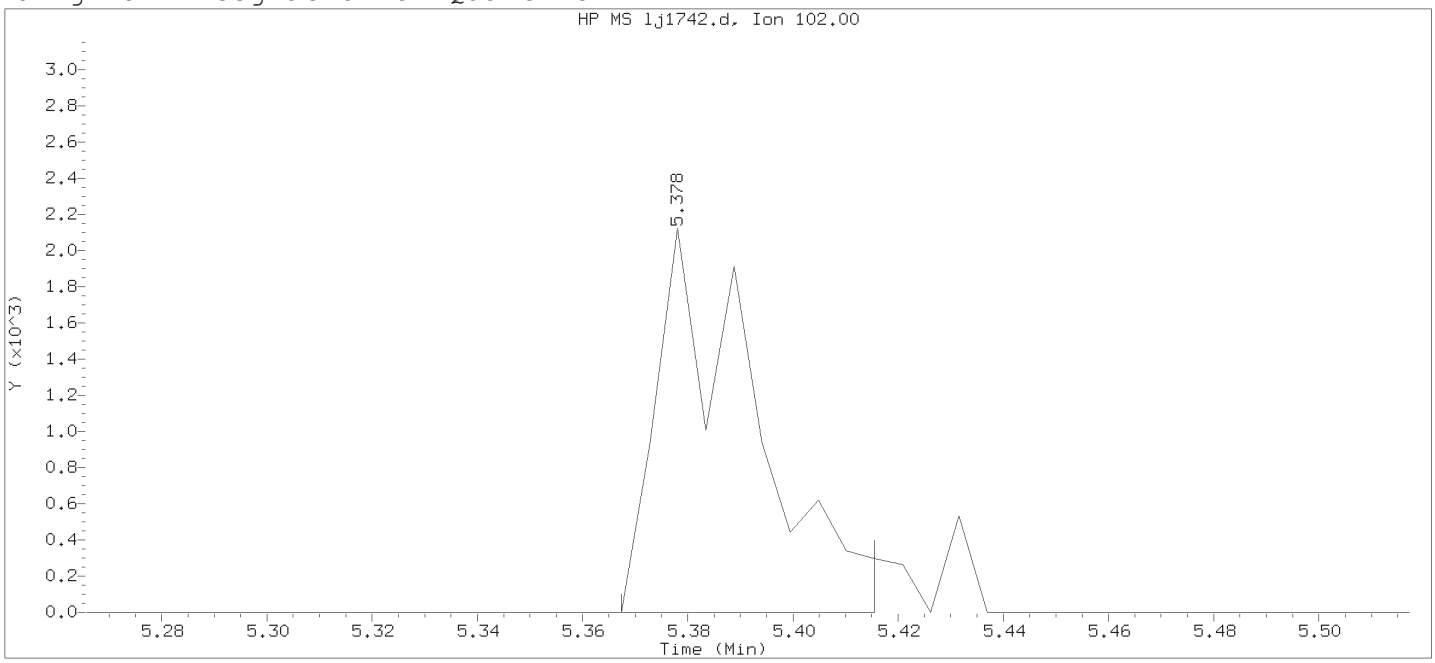
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

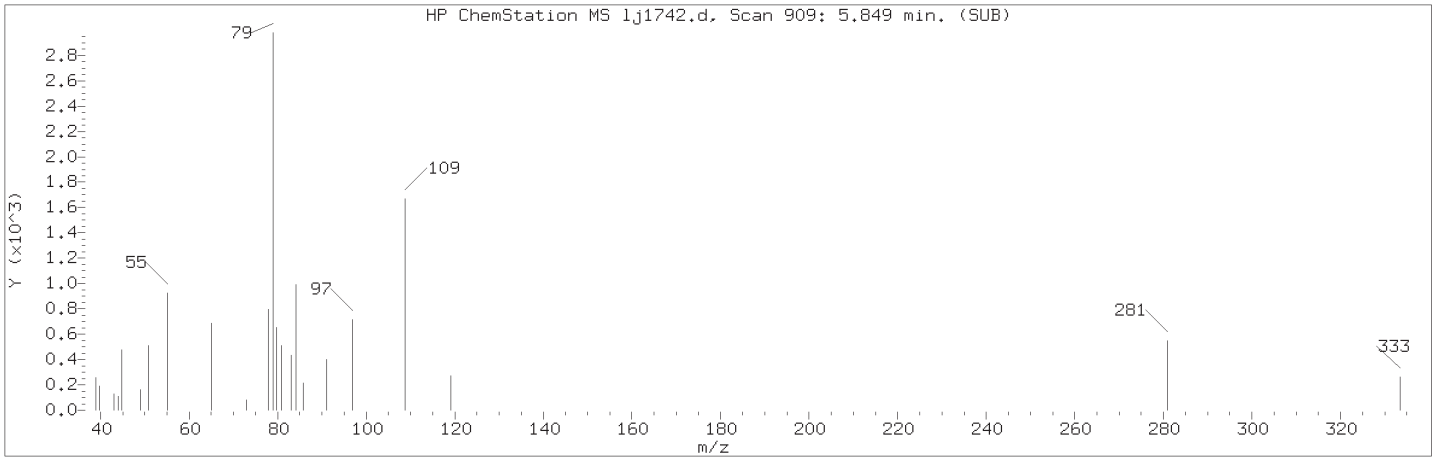
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

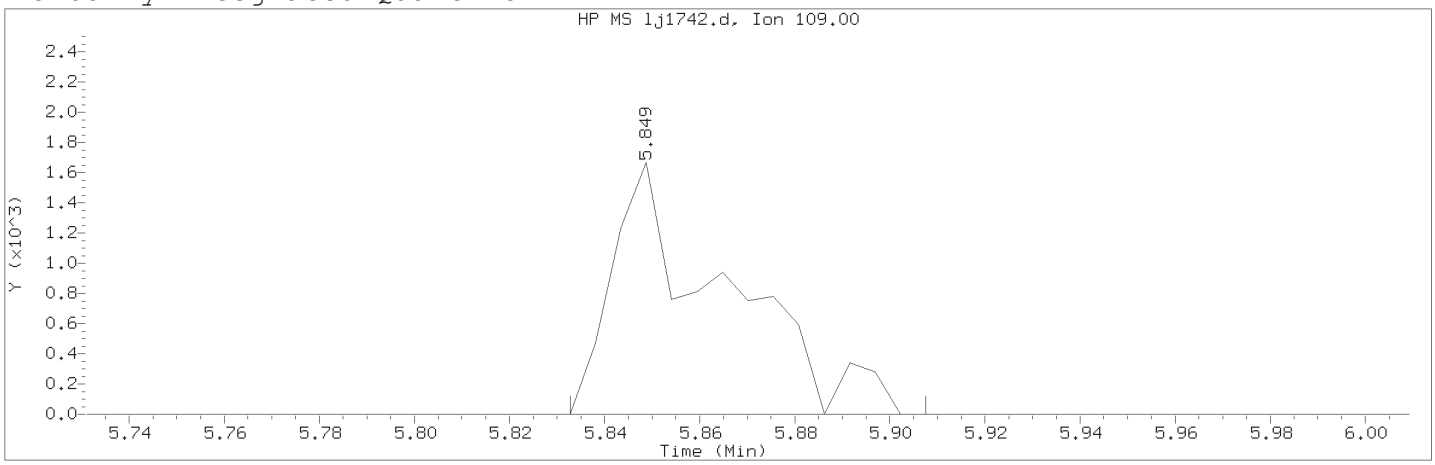
Compound Number	: 14		
Compound Name	: N-Nitrosodiethylamine		
Scan Number	: 821		
Retention Time (minutes)	: 5.378		
Quant Ion	: 102.00		
Area	: 2716		
On-column Amount (ng/ul)	: 0.0978		
Integration start scan	: 818	Integration stop scan:	827
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: 25363

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

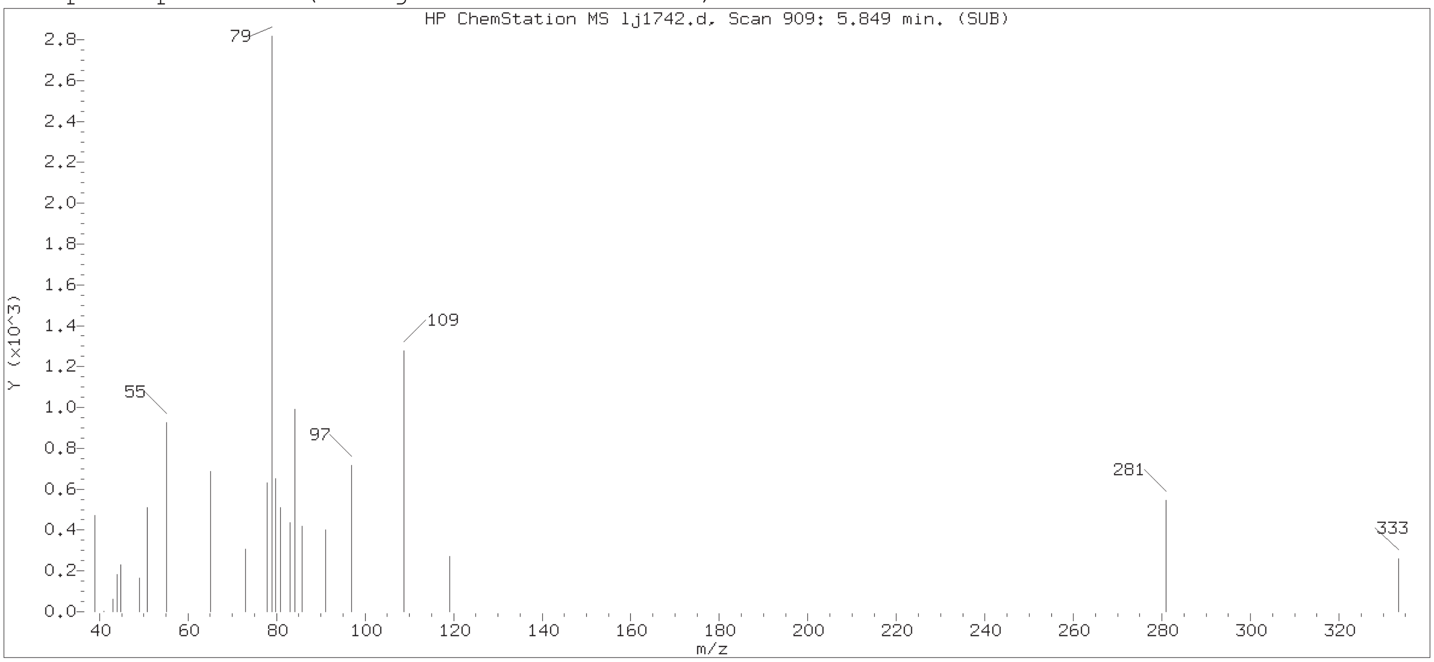
Compound Number	: 16		
Compound Name	: Ethyl methanesulfonate		
Scan Number	: 909		
Retention Time (minutes)	: 5.849		
Quant Ion	: 109.00		
Area (flag)	: 2769M		
On-Column Amount (ng/ul)	: 0.0912		
Integration start scan	: 905	Integration stop scan:	919
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

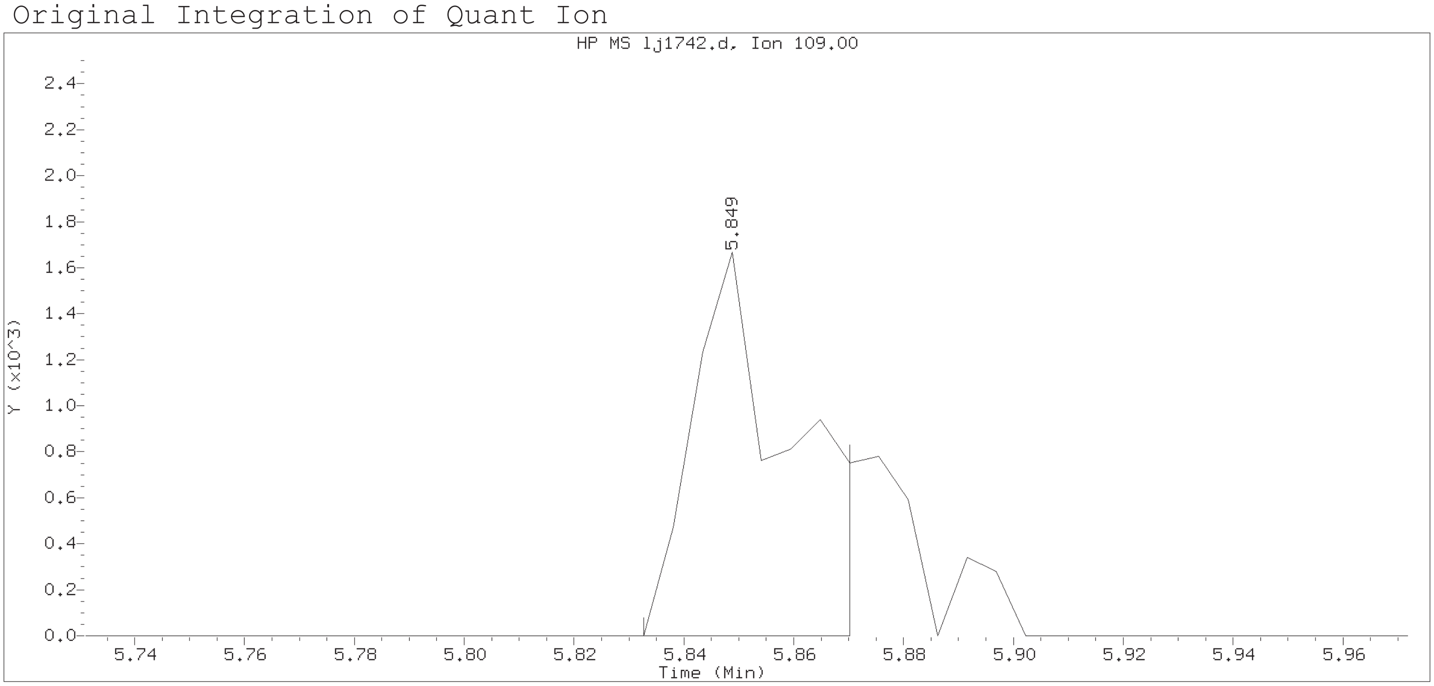
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

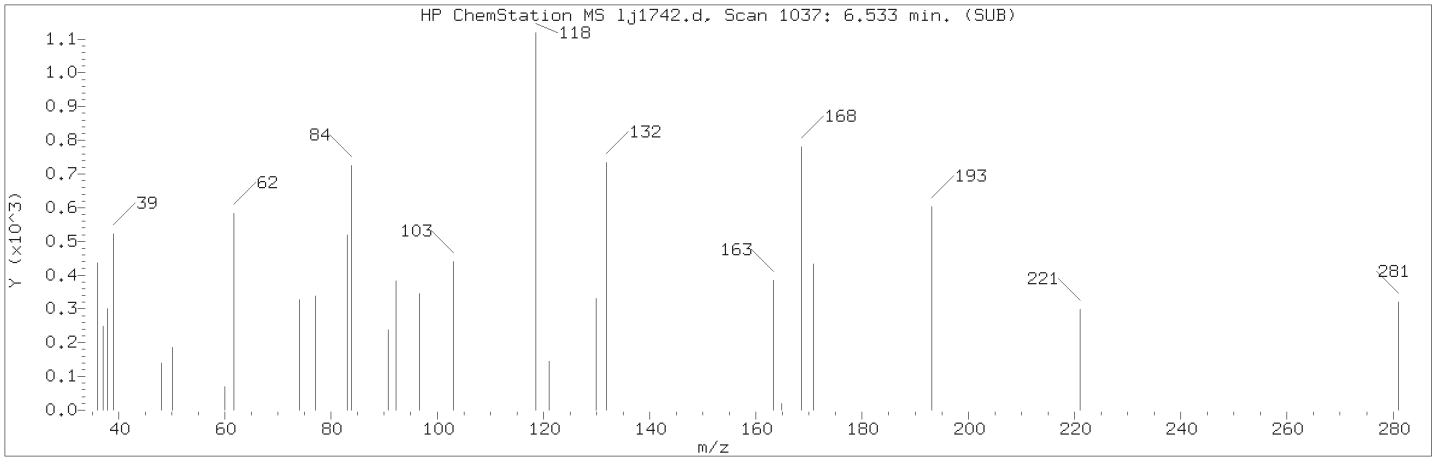
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

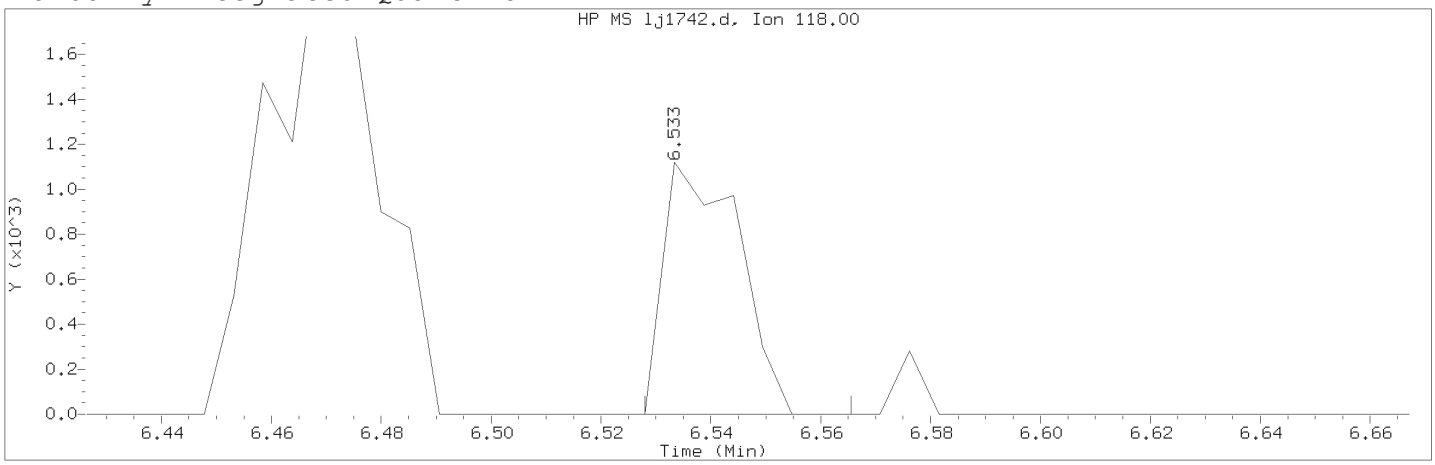
Compound Number : 16
Compound Name : Ethyl methanesulfonate
Scan Number : 909
Retention Time (minutes) : 5.849
Quant Ion : 109.00
Area : 2008
On-column Amount (ng/ul) : 0.0695
Integration start scan : 905 Integration stop scan: 912
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user

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

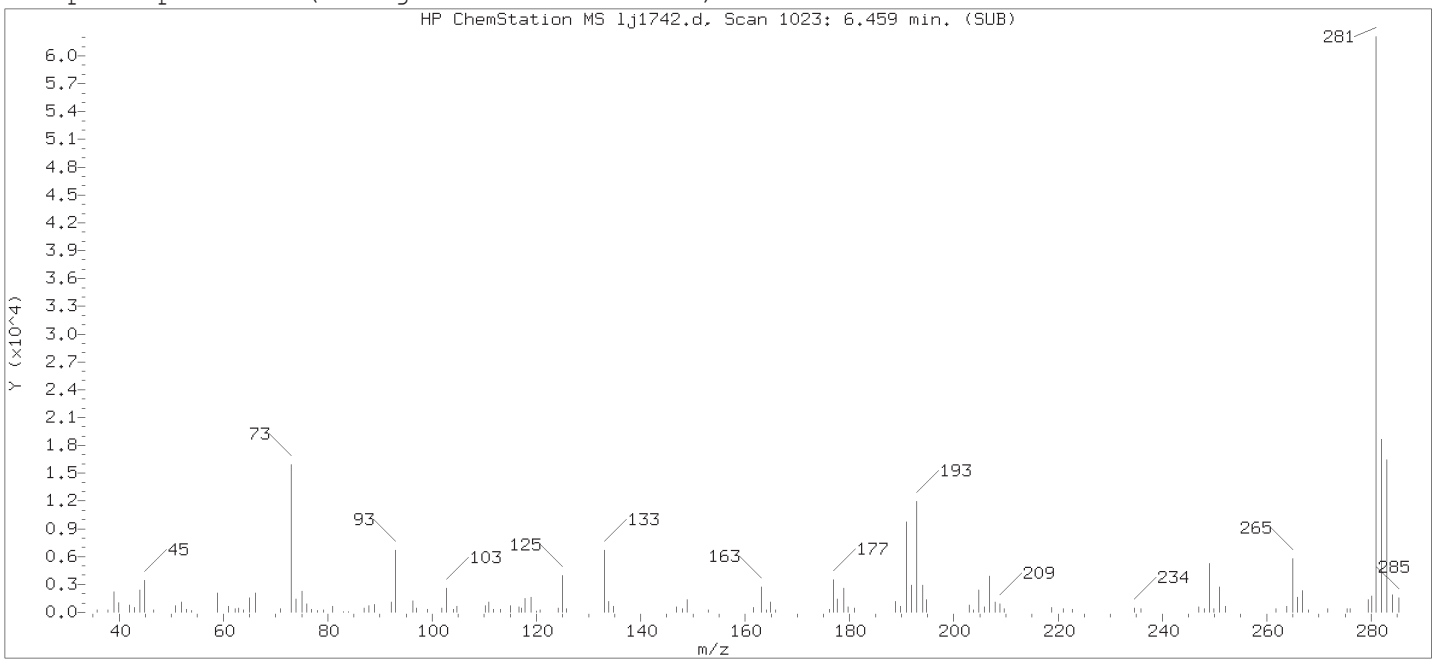
Compound Number	: 21		
Compound Name	: a-methylstyrene		
Scan Number	: 1037		
Retention Time (minutes)	: 6.533		
Quant Ion	: 118.00		
Area (flag)	: 1066M		
On-Column Amount (ng/ul)	: 0.1887		
Integration start scan	: 1035	Integration stop scan:	1042
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

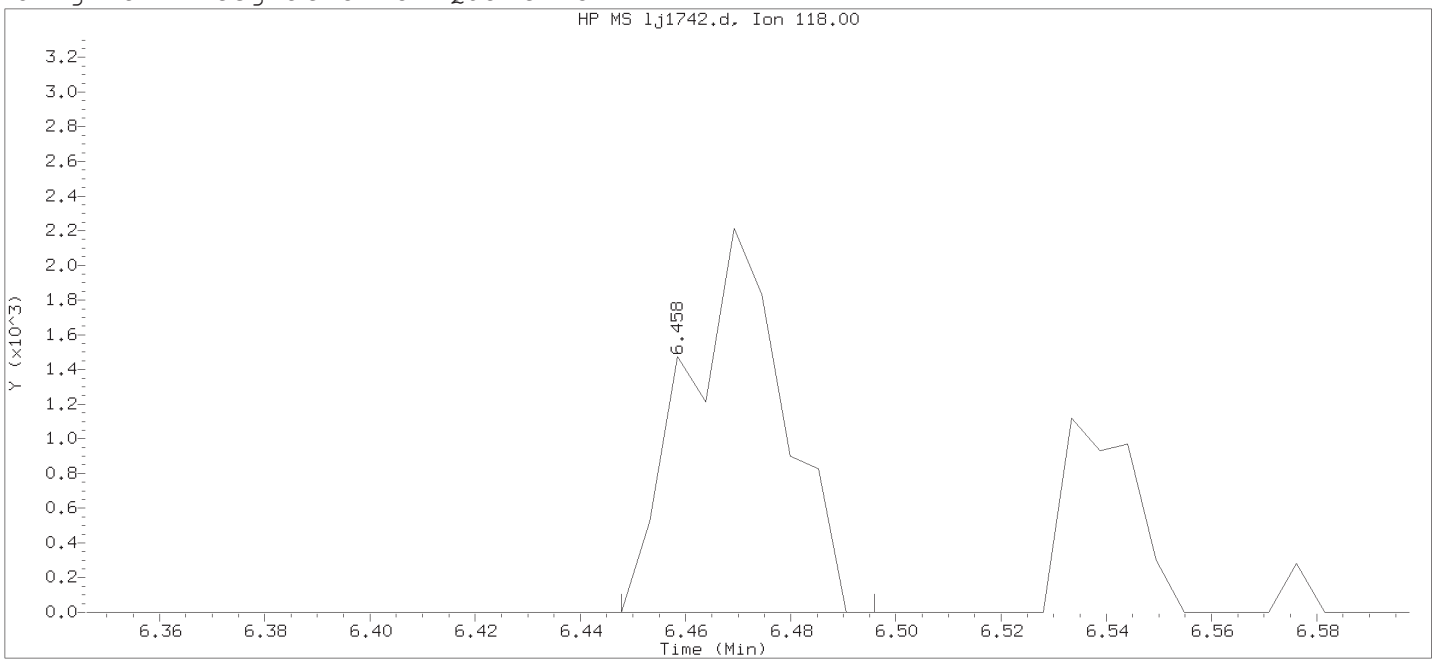
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

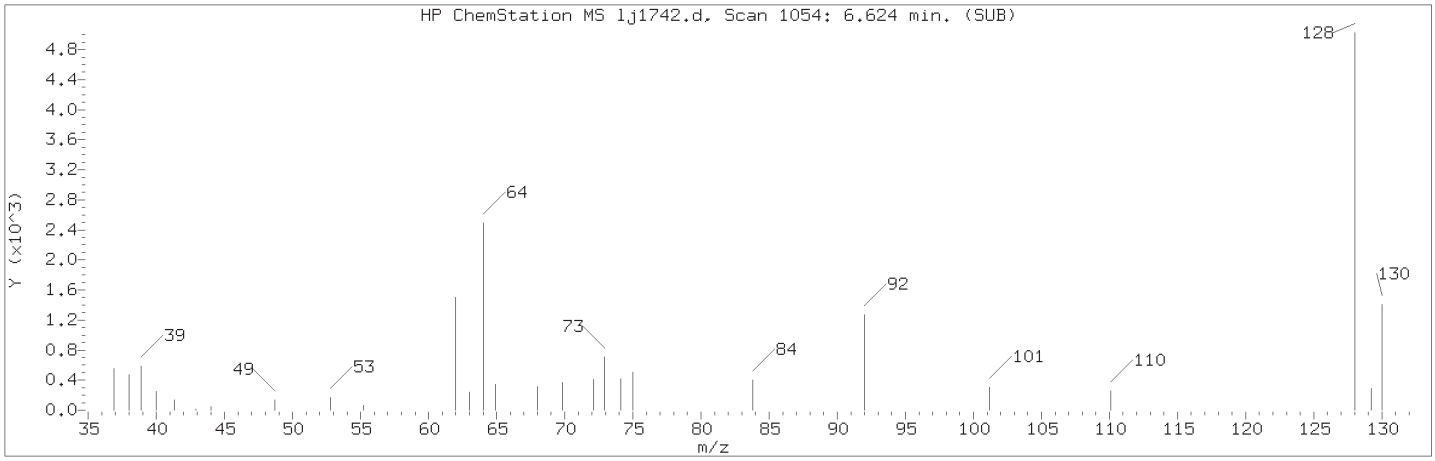
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

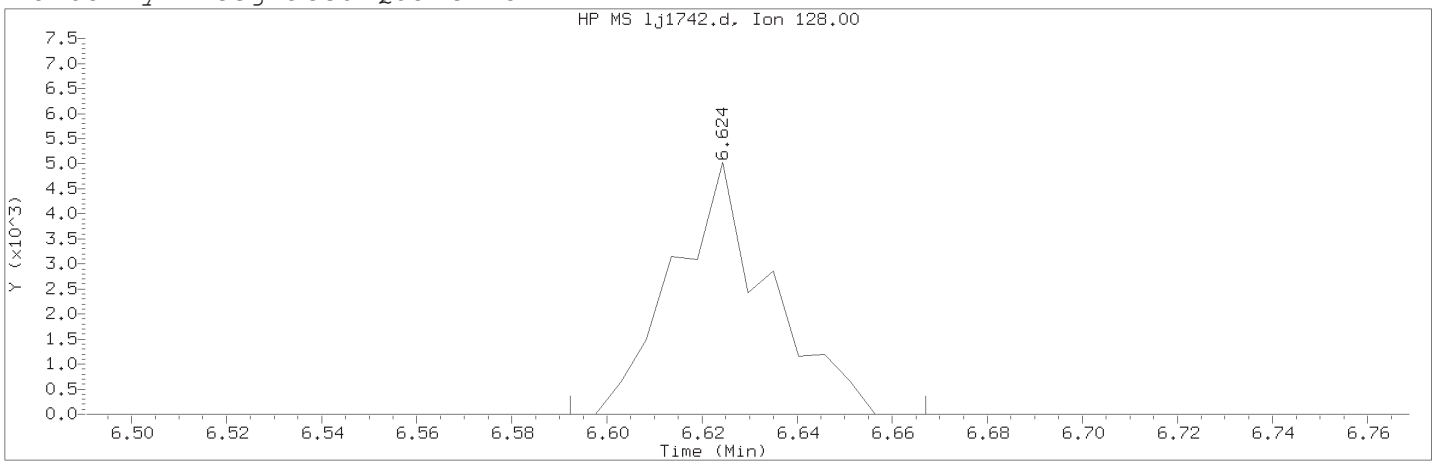
Compound Number	: 21		
Compound Name	: a-methylstyrene		
Scan Number	: 1023		
Retention Time (minutes)	: 6.458		
Quant Ion	: 118.00		
Area	: 2883		
On-column Amount (ng/ul)	: 0.5107		
Integration start scan	: 1020	Integration stop scan:	1029
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: 7 Page 1005 of 4595

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

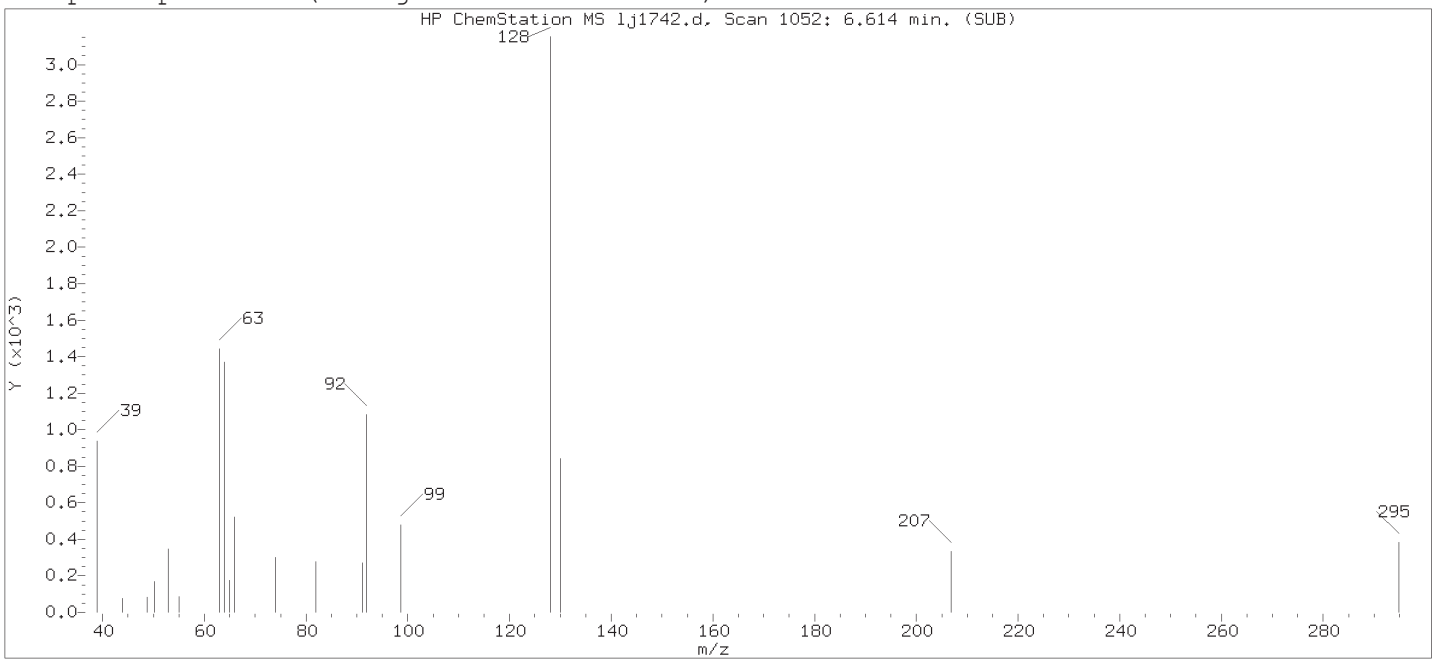
Compound Number	: 24		
Compound Name	: 2-Chlorophenol		
Scan Number	: 1054		
Retention Time (minutes)	: 6.624		
Quant Ion	: 128.00		
Area (flag)	: 6955M		
On-Column Amount (ng/ul)	: 0.1259		
Integration start scan	: 1047	Integration stop scan:	1061
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

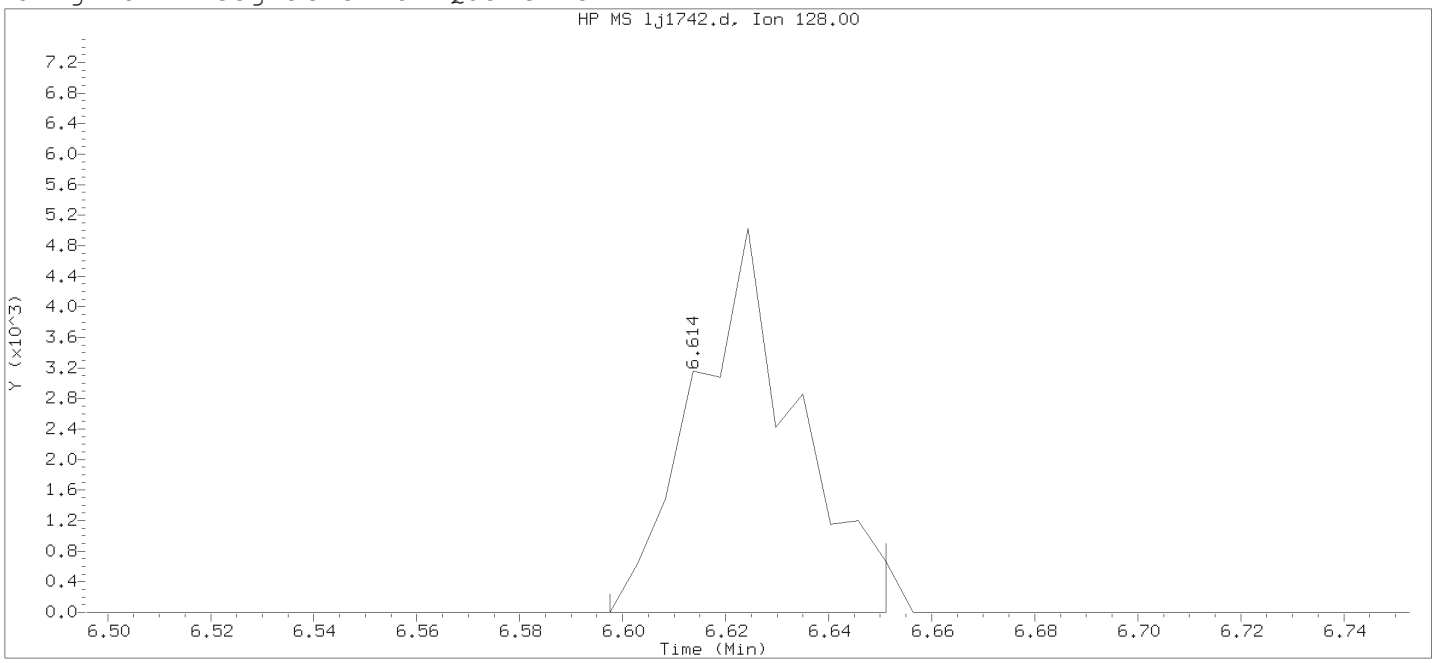
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

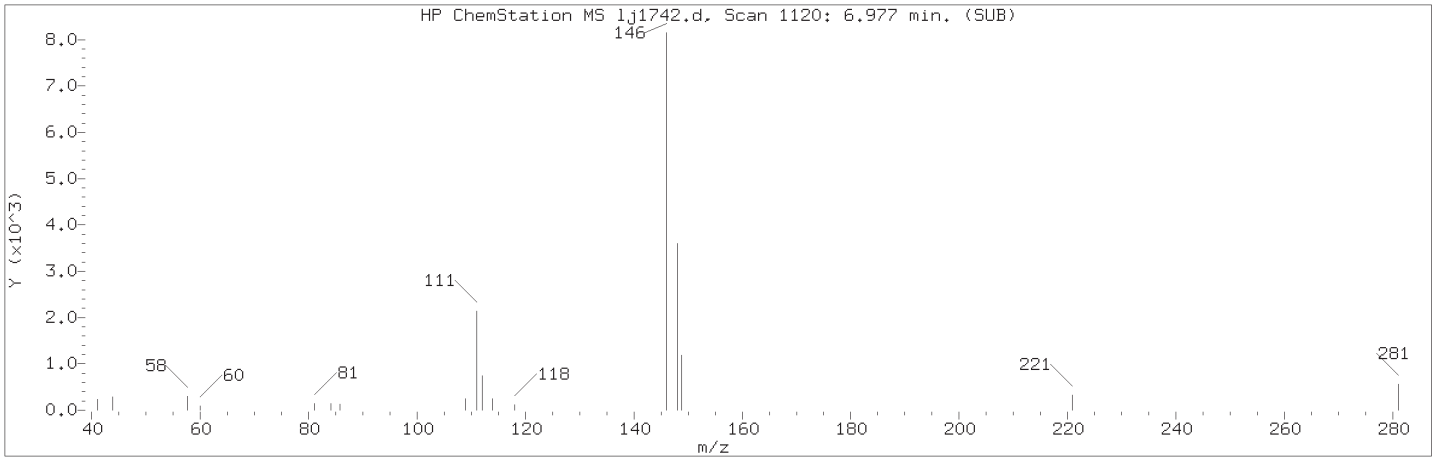
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

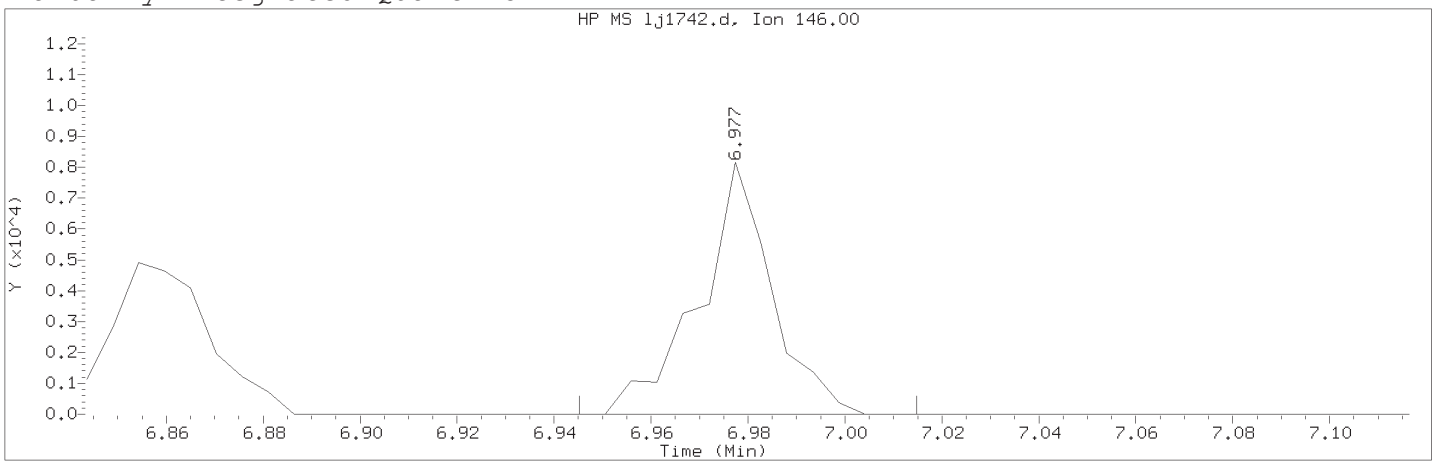
Compound Number	: 24		
Compound Name	: 2-Chlorophenol		
Scan Number	: 1052		
Retention Time (minutes)	: 6.614		
Quant Ion	: 128.00		
Area	: 6848		
On-column Amount (ng/ul)	: 0.1267		
Integration start scan	: 1048	Integration stop scan:	1058
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used for TID07.

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

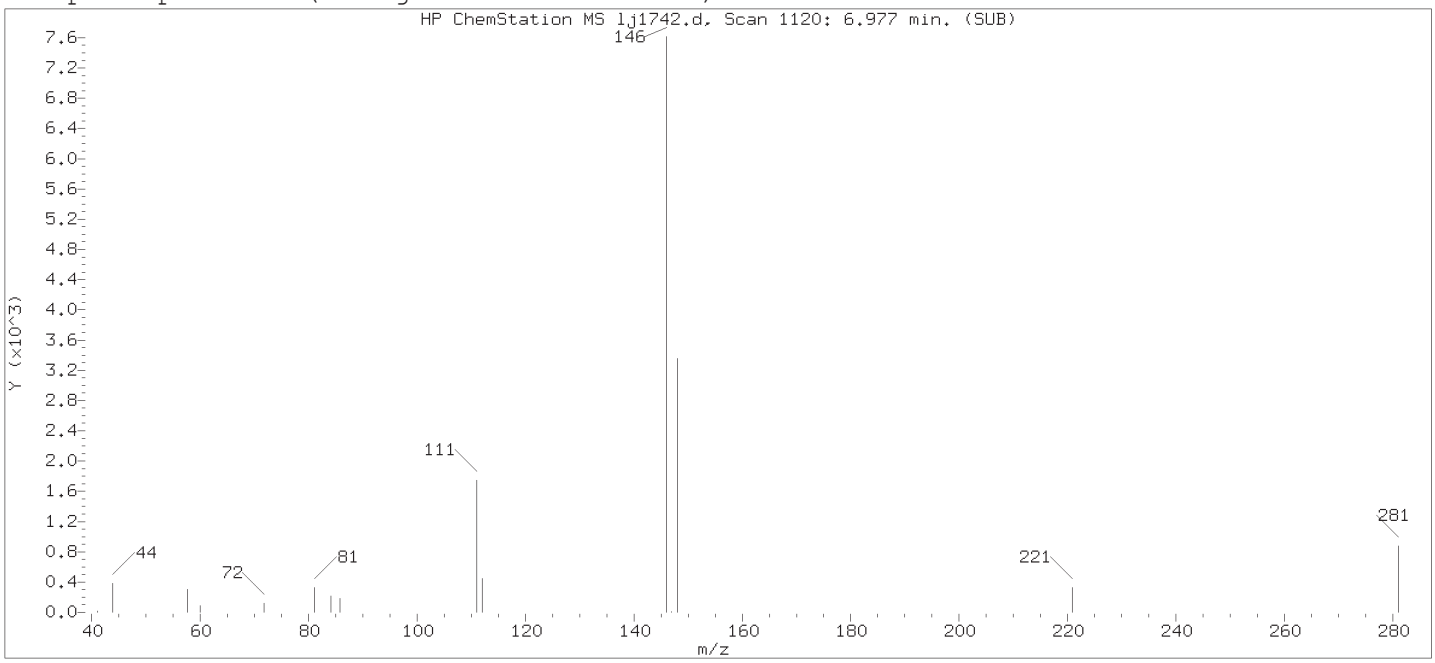
Compound Number : 27
Compound Name : 1,4-Dichlorobenzene
Scan Number : 1120
Retention Time (minutes) : 6.977
Quant Ion : 146.00
Area (flag) : 8475M
On-Column Amount (ng/ul) : 0.1378
Integration start scan : 1113 Integration stop scan: 1126
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

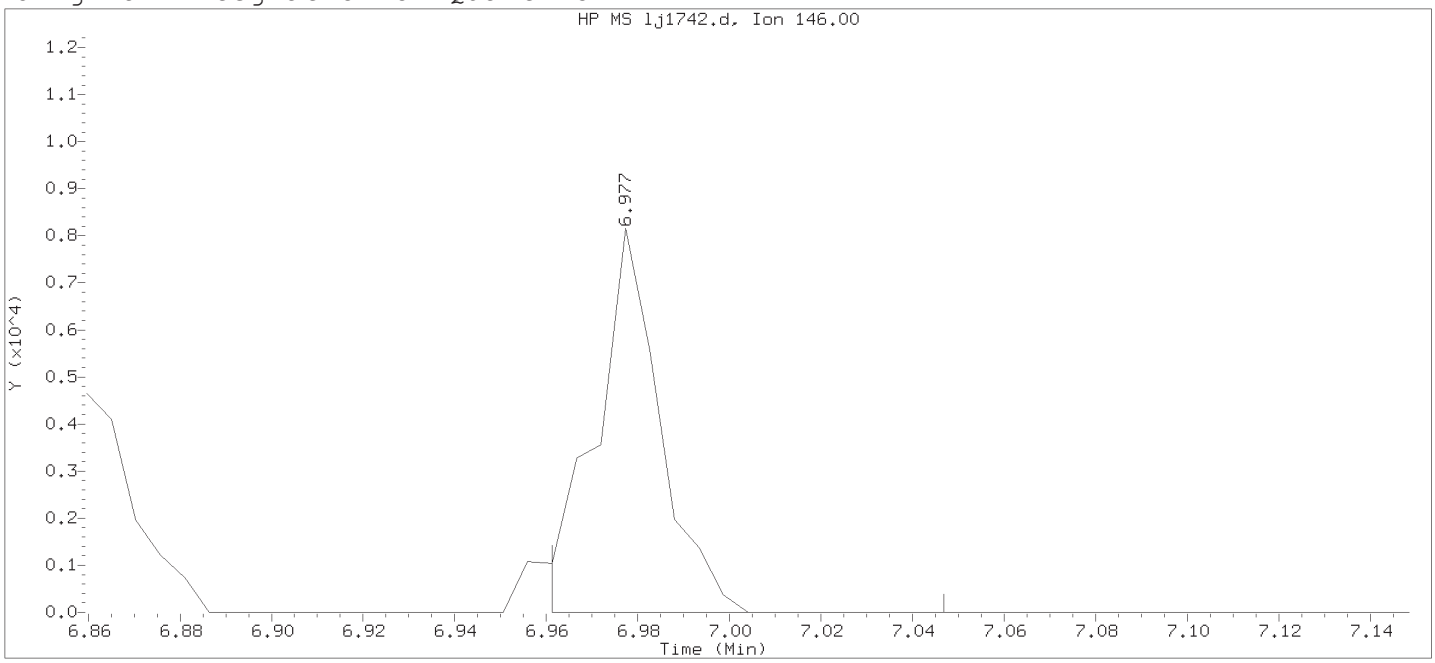
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

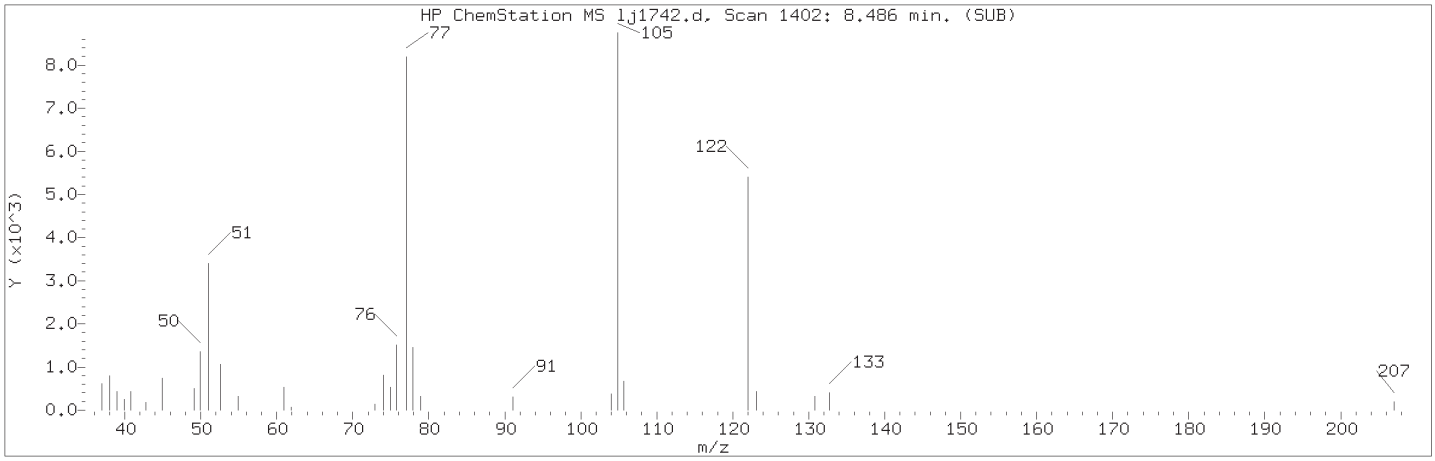
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

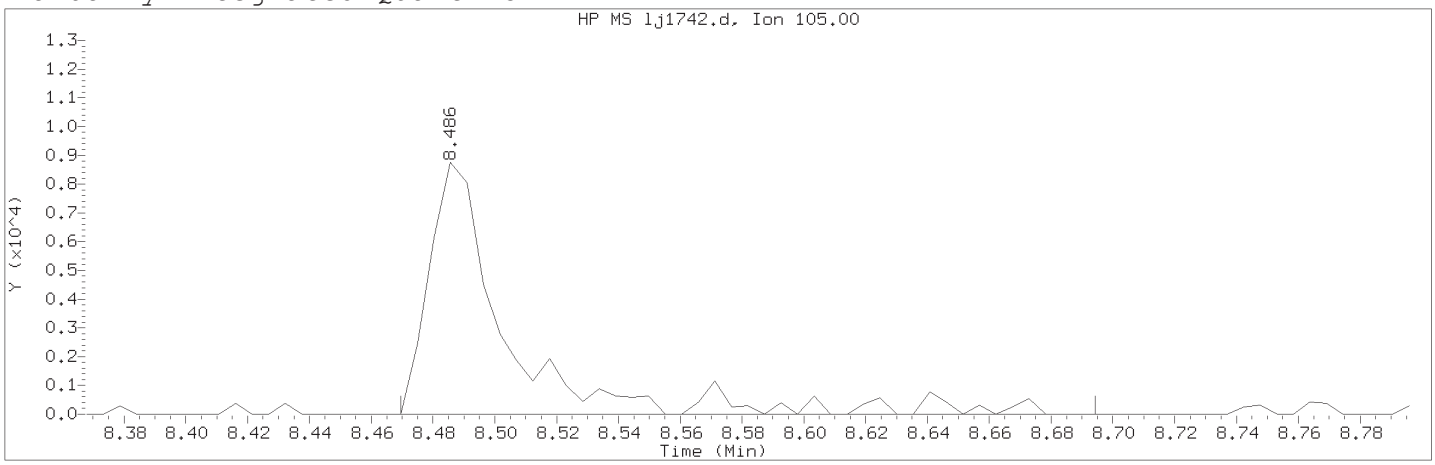
Compound Number	: 27		
Compound Name	: 1,4-Dichlorobenzene		
Scan Number	: 1120		
Retention Time (minutes)	: 6.977		
Quant Ion	: 146.00		
Area	: 7962		
On-column Amount (ng/ul)	: 0.1338		
Integration start scan	: 1116	Integration stop scan:	1132
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used: 1007

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

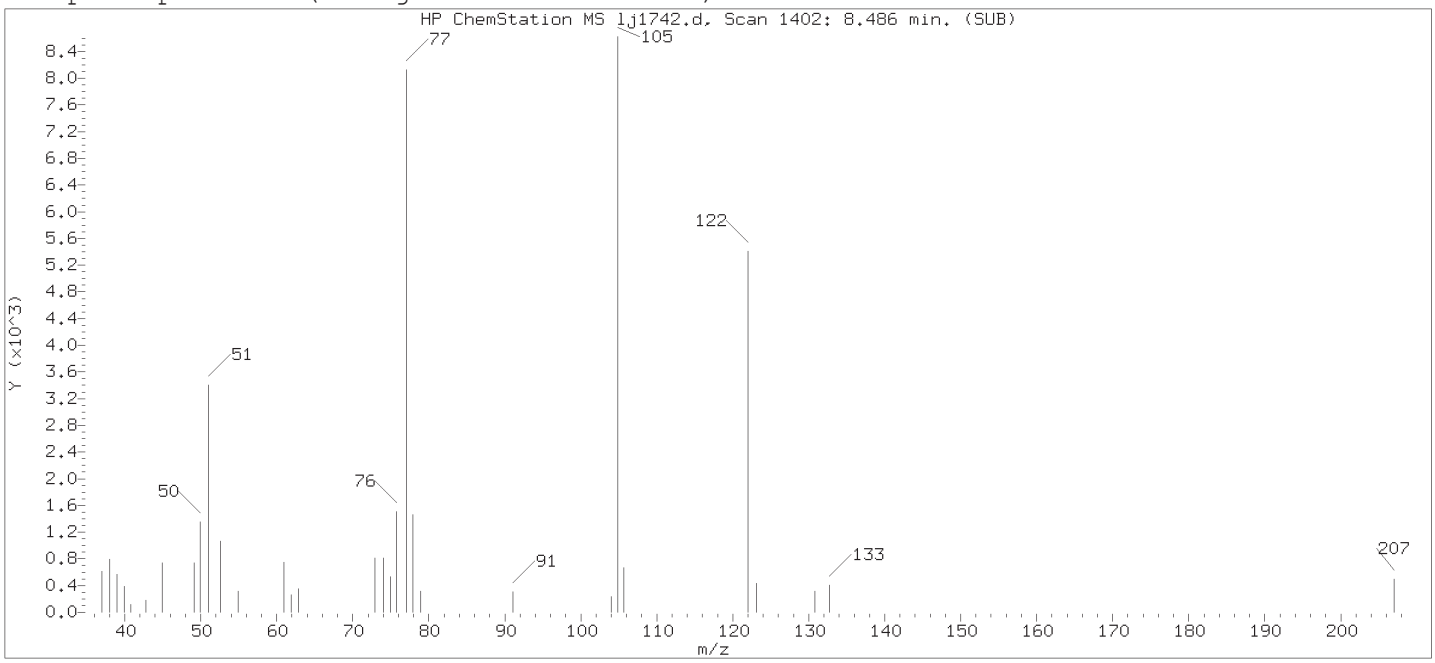
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1402		
Retention Time (minutes)	: 8.486		
Quant Ion	: 105.00		
Area (flag)	: 15488M		
On-Column Amount (ng/ul)	: 0.3834		
Integration start scan	: 1398	Integration stop scan:	1440
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

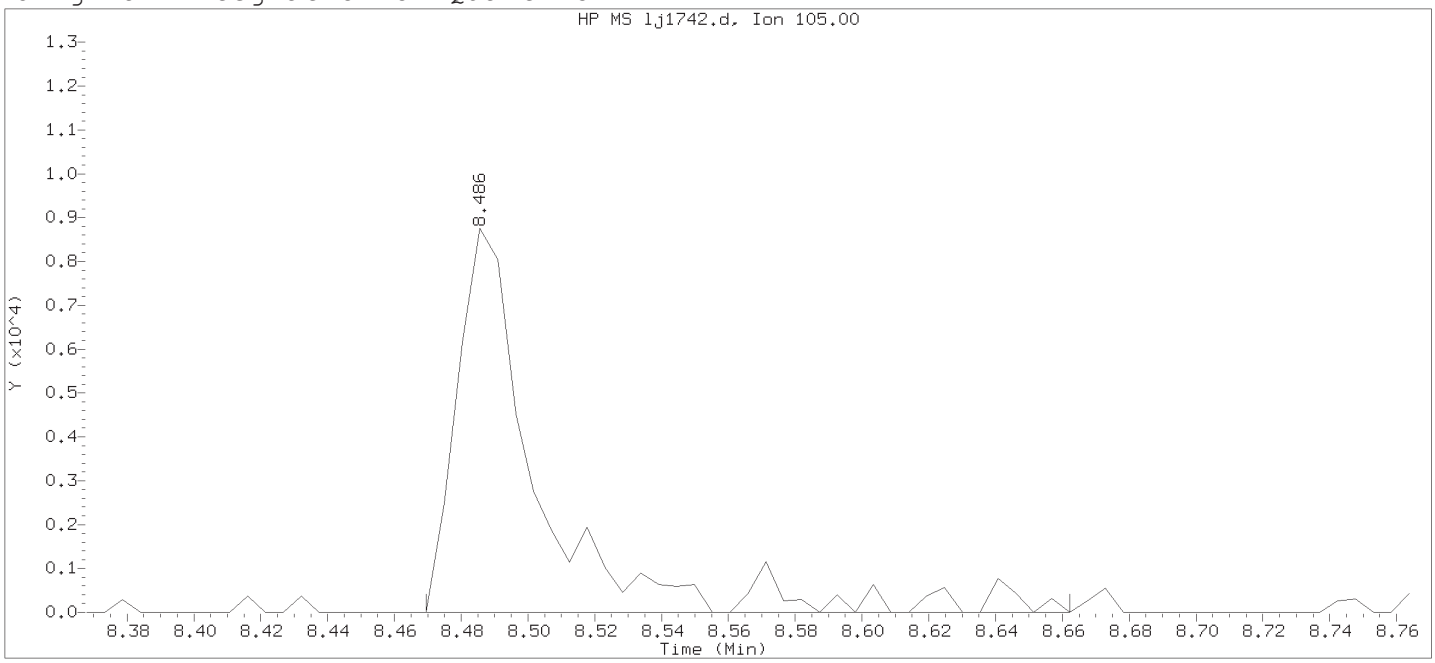
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

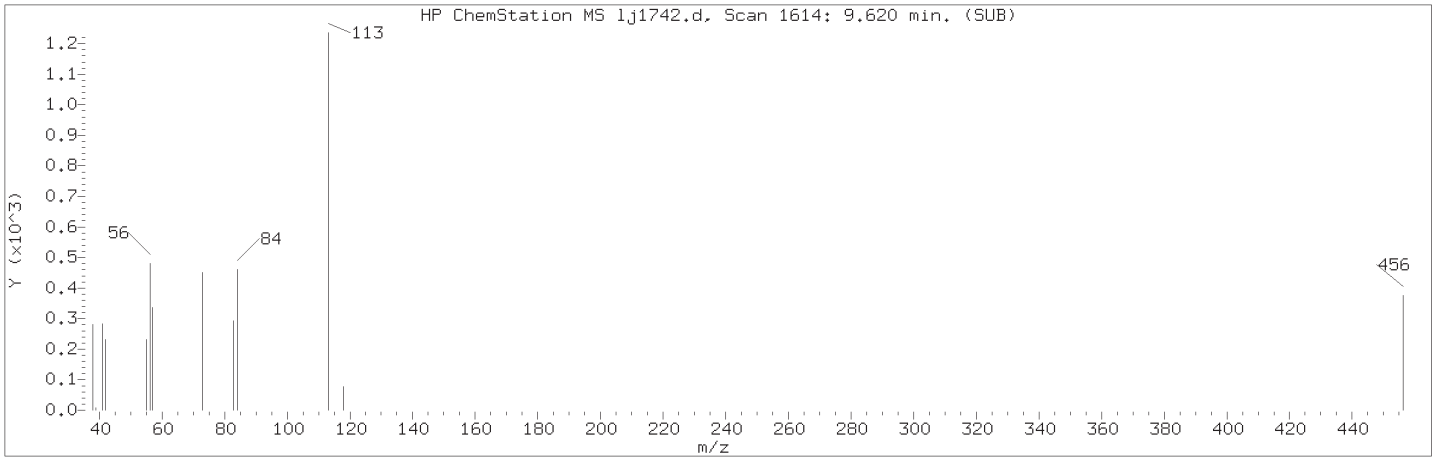
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

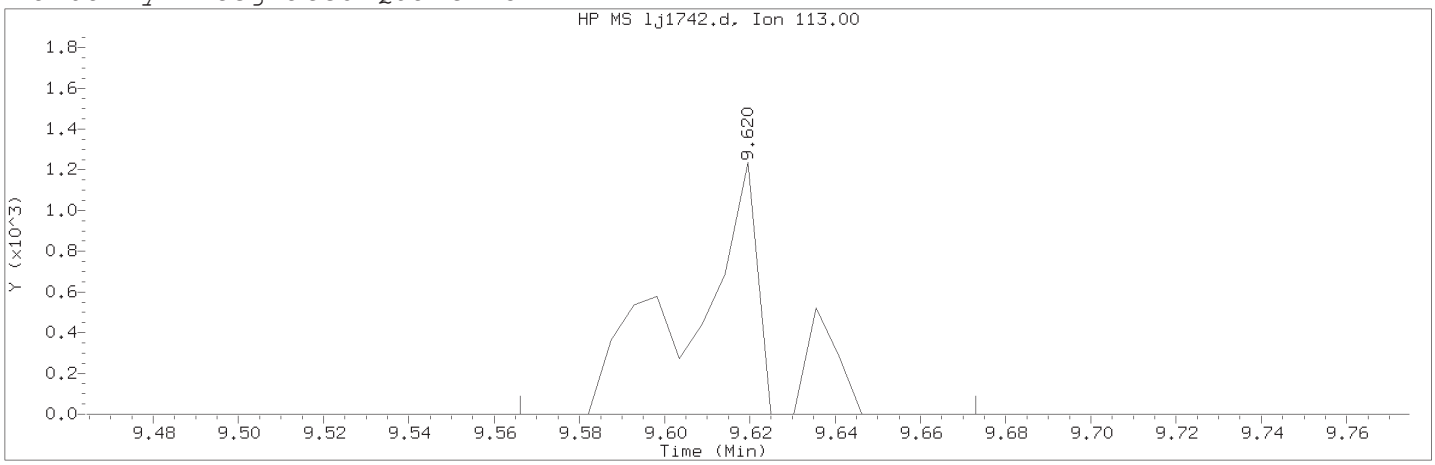
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1402		
Retention Time (minutes)	: 8.486		
Quant Ion	: 105.00		
Area	: 15230		
On-column Amount (ng/ul)	: 0.4039		
Integration start scan	: 1398	Integration stop scan:	1434
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used for this report.

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

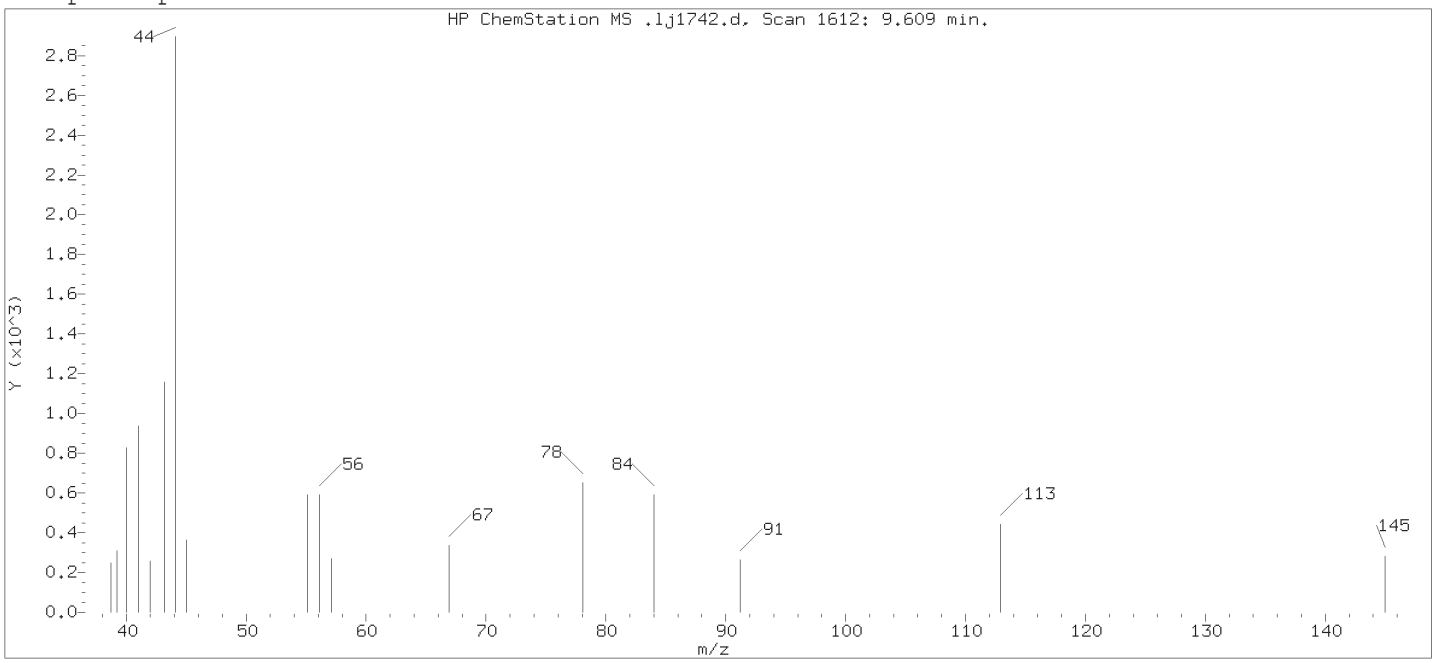
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1614		
Retention Time (minutes)	: 9.620		
Quant Ion	: 113.00		
Area (flag)	: 1580M		
On-Column Amount (ng/ul)	: 0.1115		
Integration start scan	: 1603	Integration stop scan:	1623
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

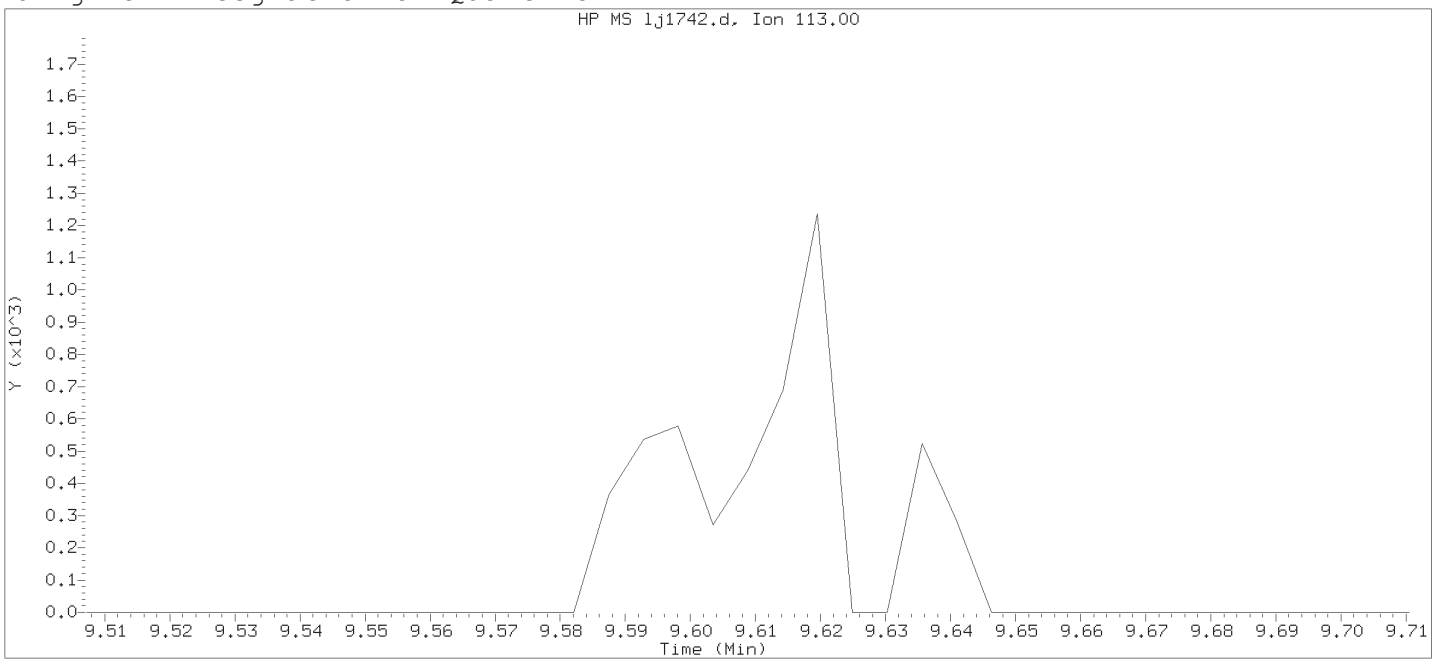
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

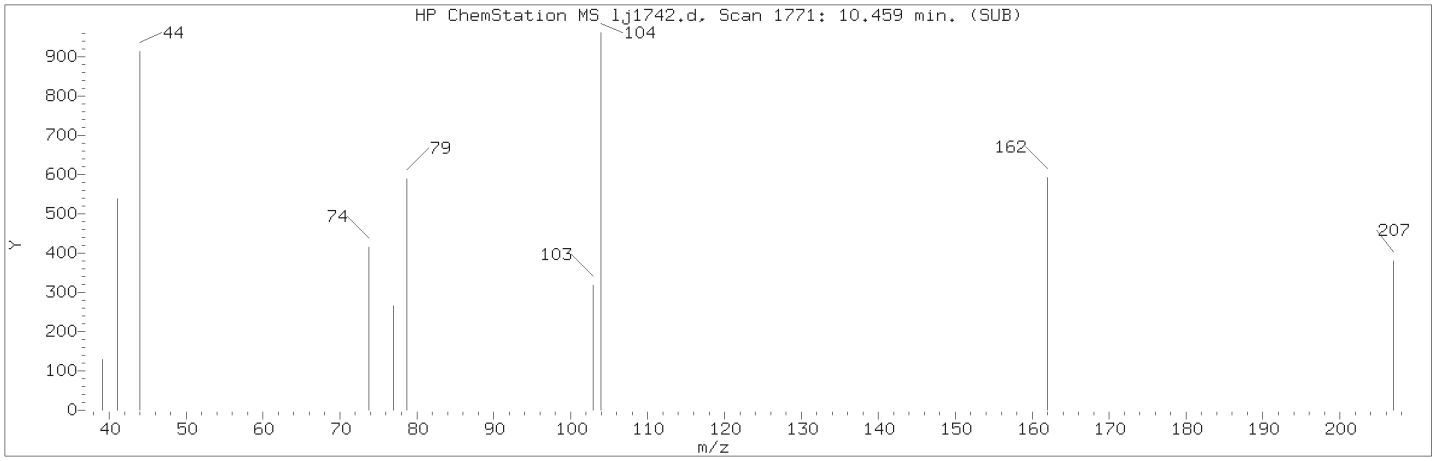
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

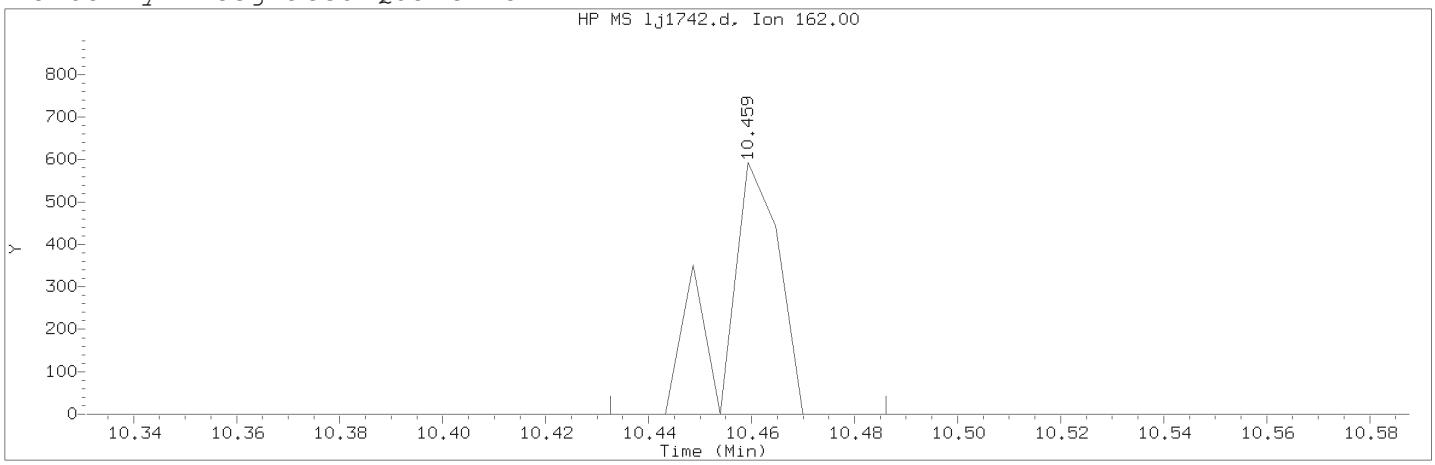
Compound Number : 79
Compound Name : Caprolactam
Expected RT (minutes) : 9.609
Quant Ion : 113.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used.

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

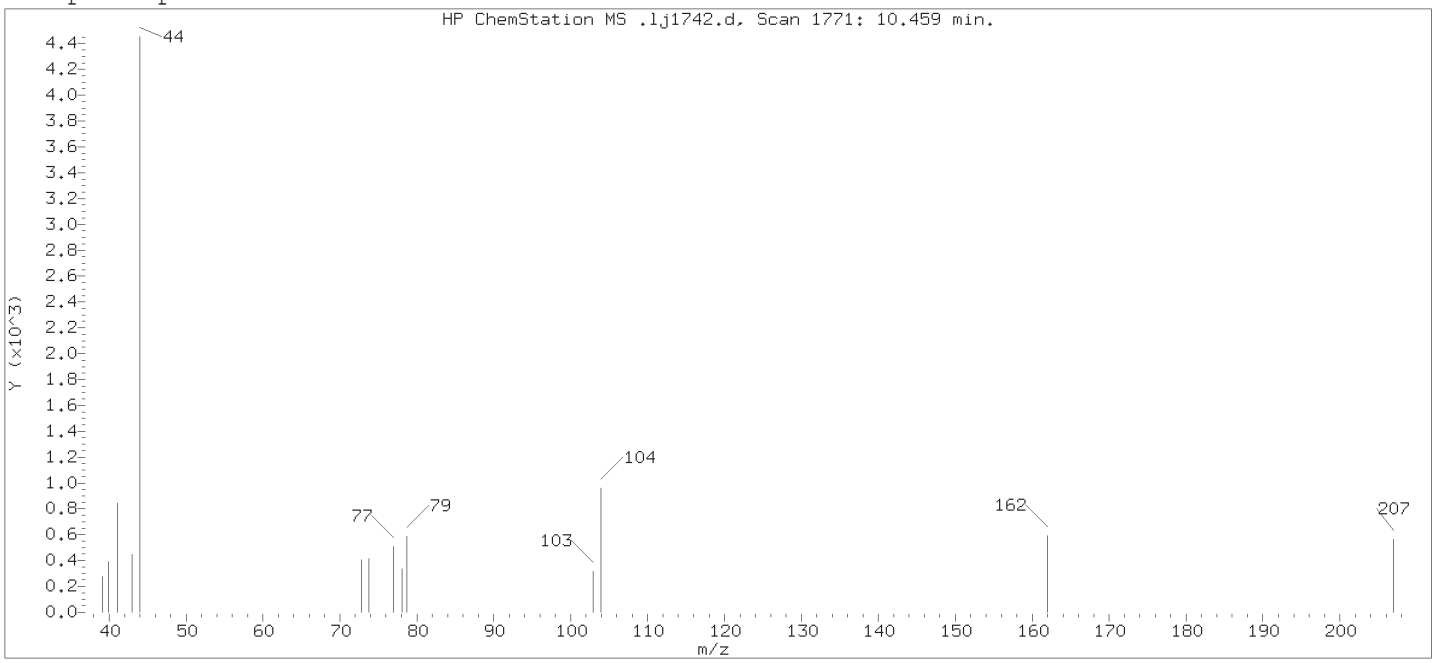
Compound Number	: 91		
Compound Name	: cis-Isosafrole		
Scan Number	: 1771		
Retention Time (minutes)	: 10.459		
Quant Ion	: 162.00		
Area (flag)	: 445M		
On-Column Amount (ng/ul)	: 0.0101		
Integration start scan	: 1765	Integration stop scan:	1775
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

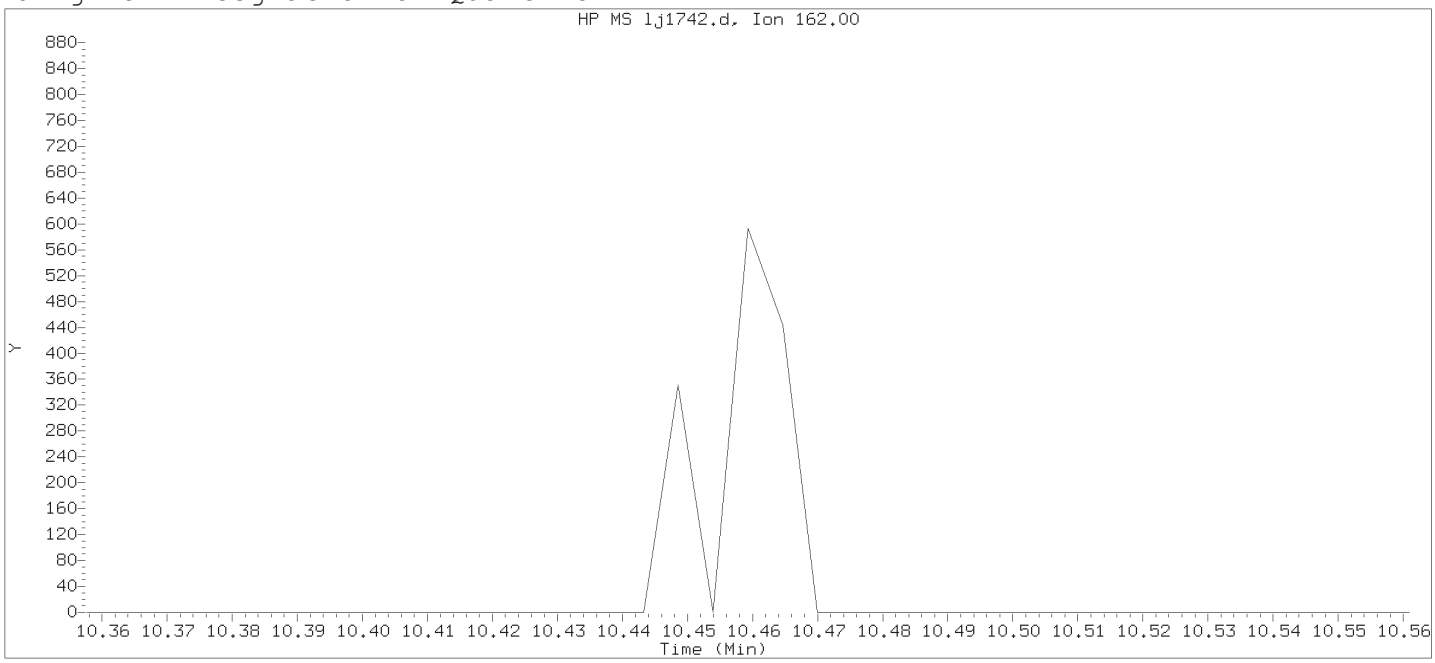
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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

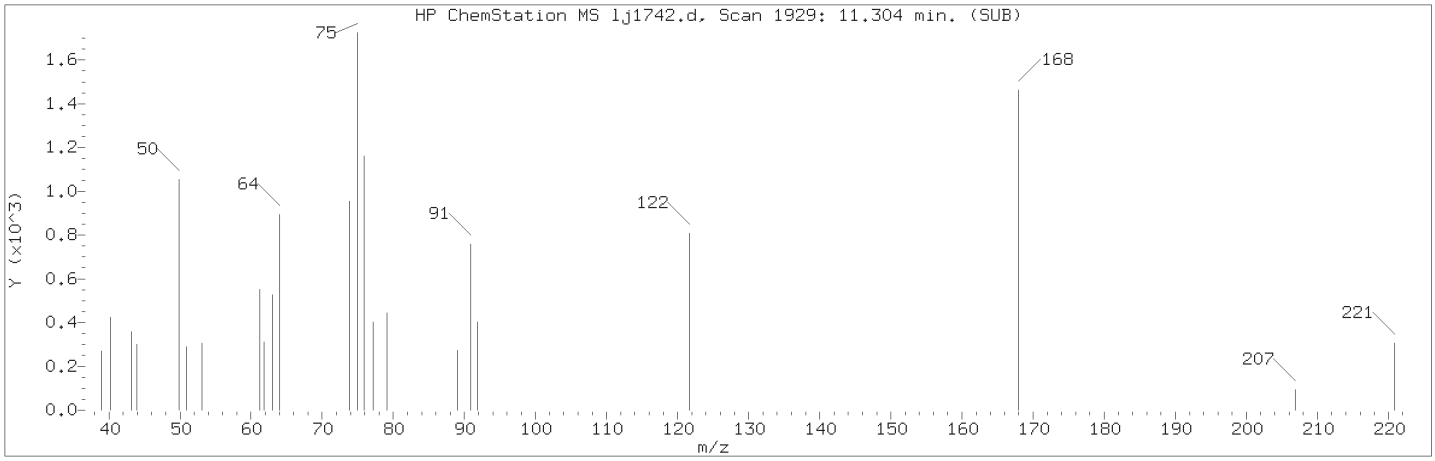
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

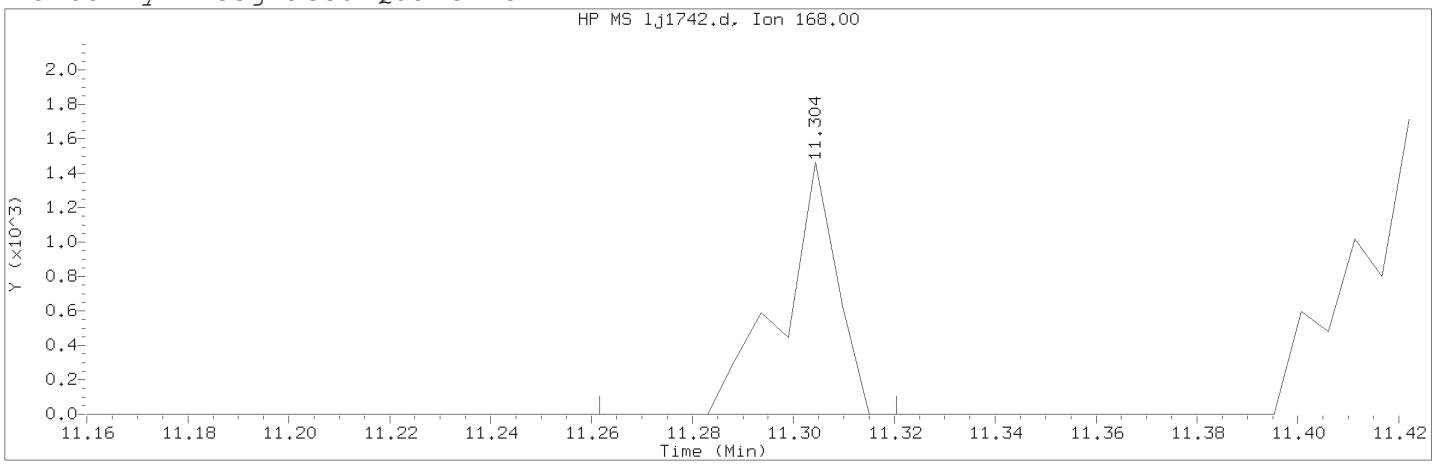
Compound Number : 91
Compound Name : cis-Isosafrole
Expected RT (minutes) : 10.459
Quant Ion : 162.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used for this report.

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

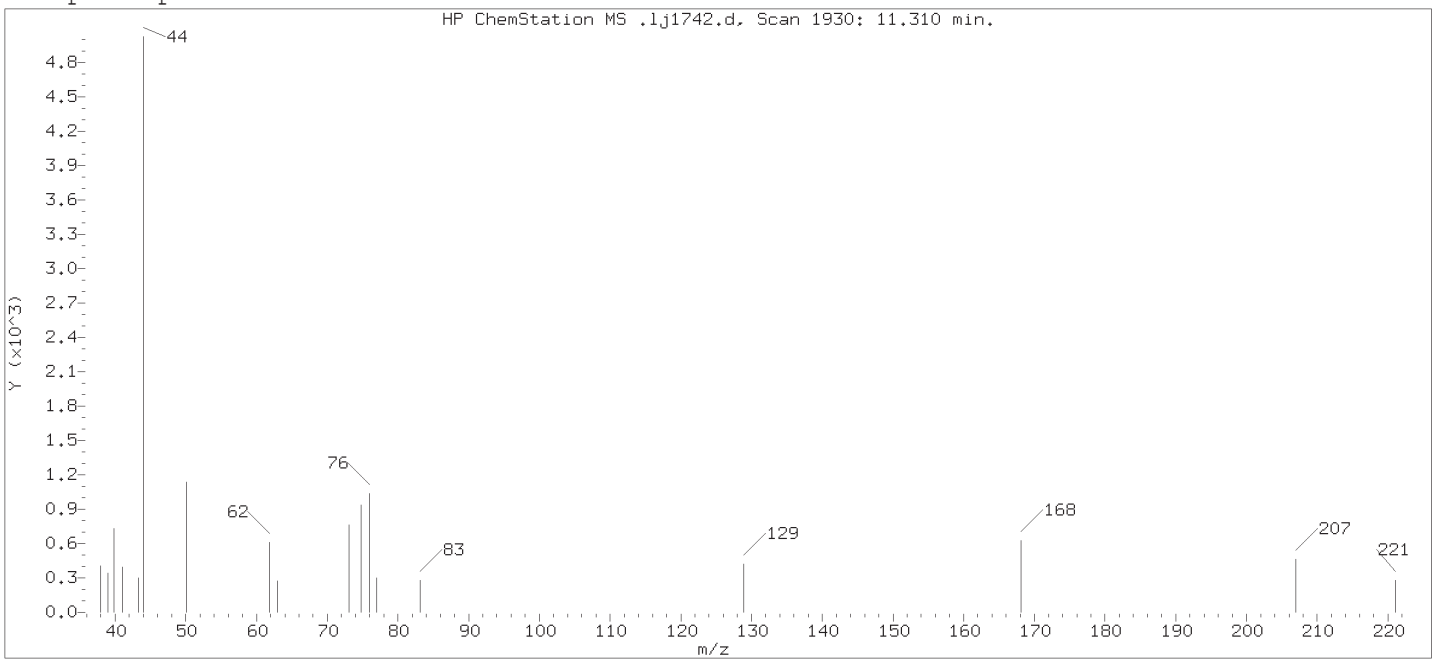
Compound Number : 109
Compound Name : 1,4-Dinitrobenzene
Scan Number : 1929
Retention Time (minutes) : 11.304
Quant Ion : 168.00
Area (flag) : 1102M
On-Column Amount (ng/ul) : 0.0801
Integration start scan : 1920 Integration stop scan: 1931
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

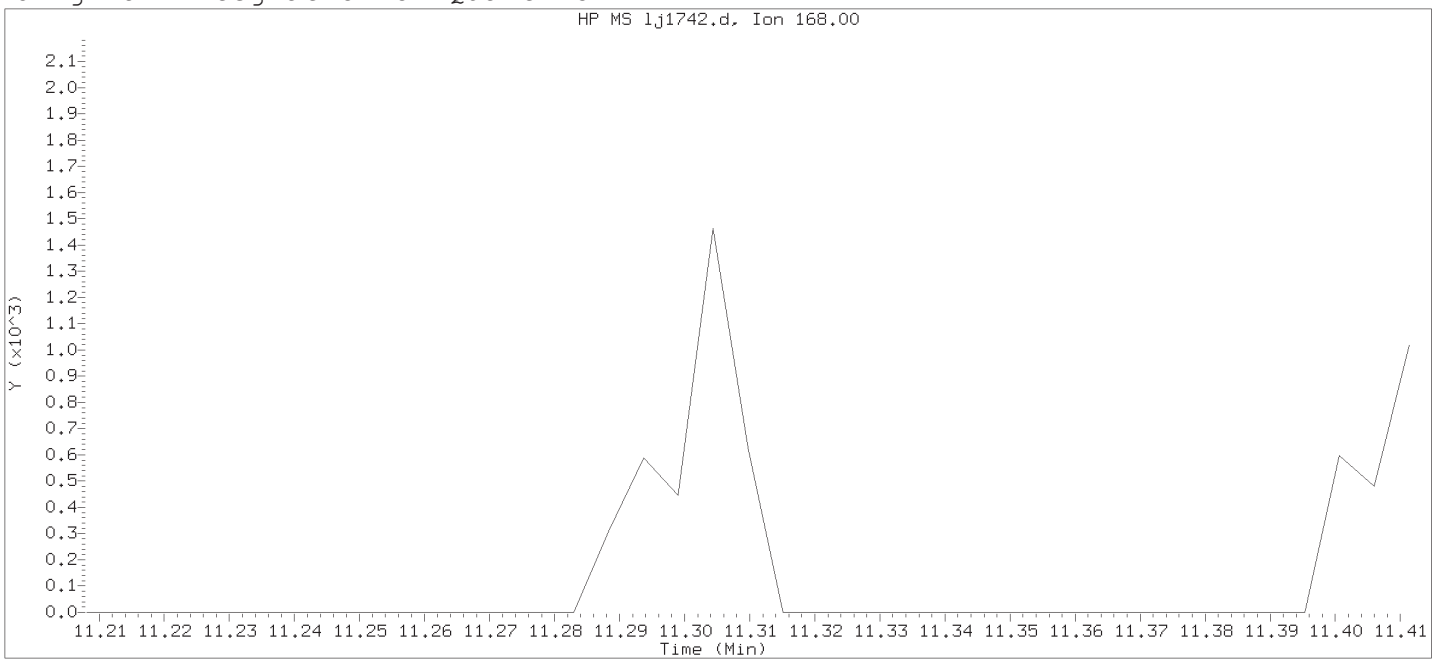
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

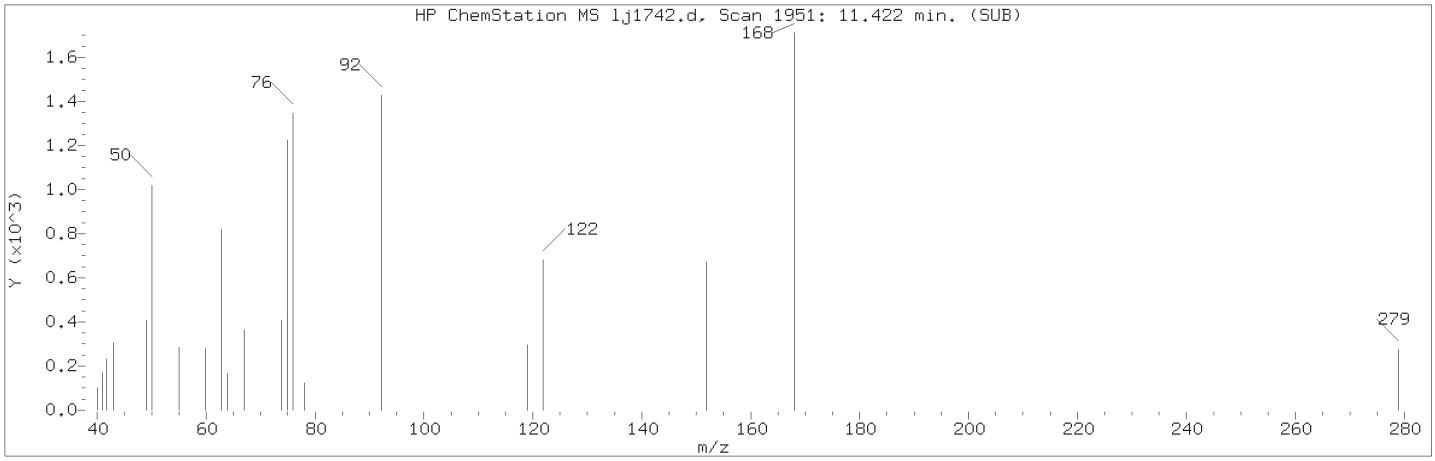
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

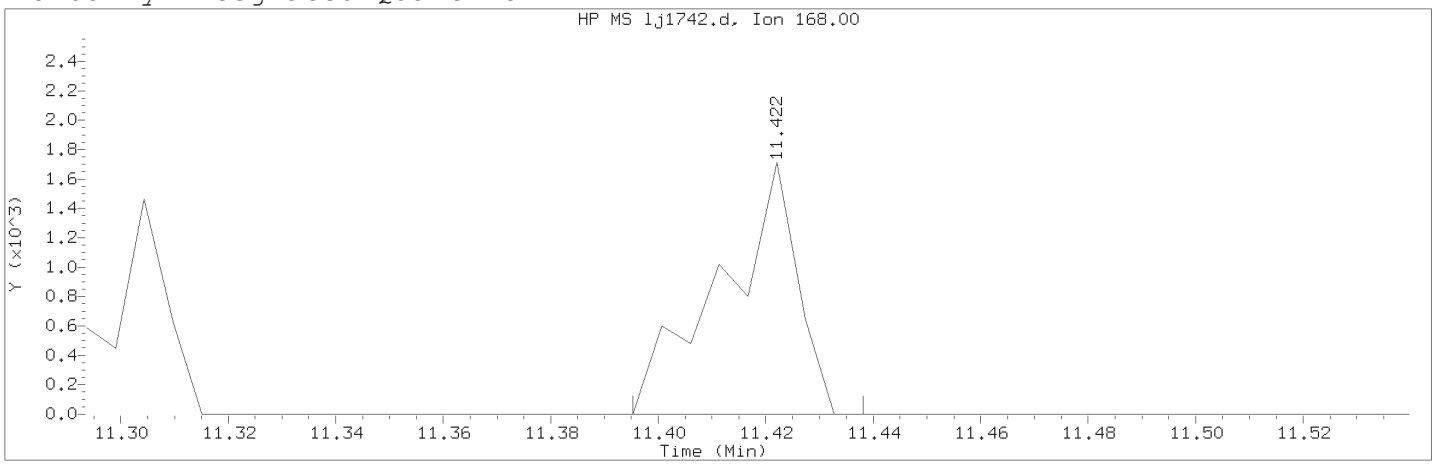
Compound Number : 109
Compound Name : 1,4-Dinitrobenzene
Expected RT (minutes) : 11.310
Quant Ion : 168.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used.

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

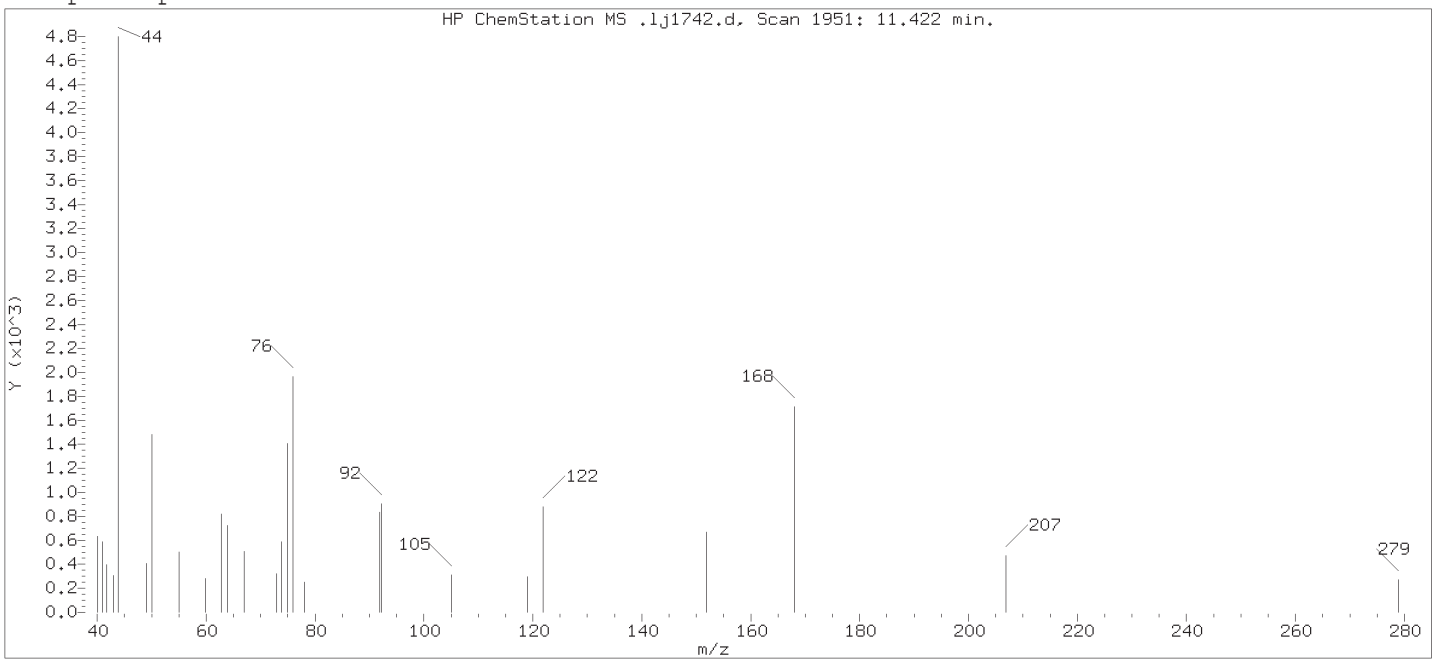
Compound Number : 111
Compound Name : 1,3-Dinitrobenzene
Scan Number : 1951
Retention Time (minutes) : 11.422
Quant Ion : 168.00
Area (flag) : 1687M
On-Column Amount (ng/ul) : 0.0997
Integration start scan : 1945 Integration stop scan: 1953
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

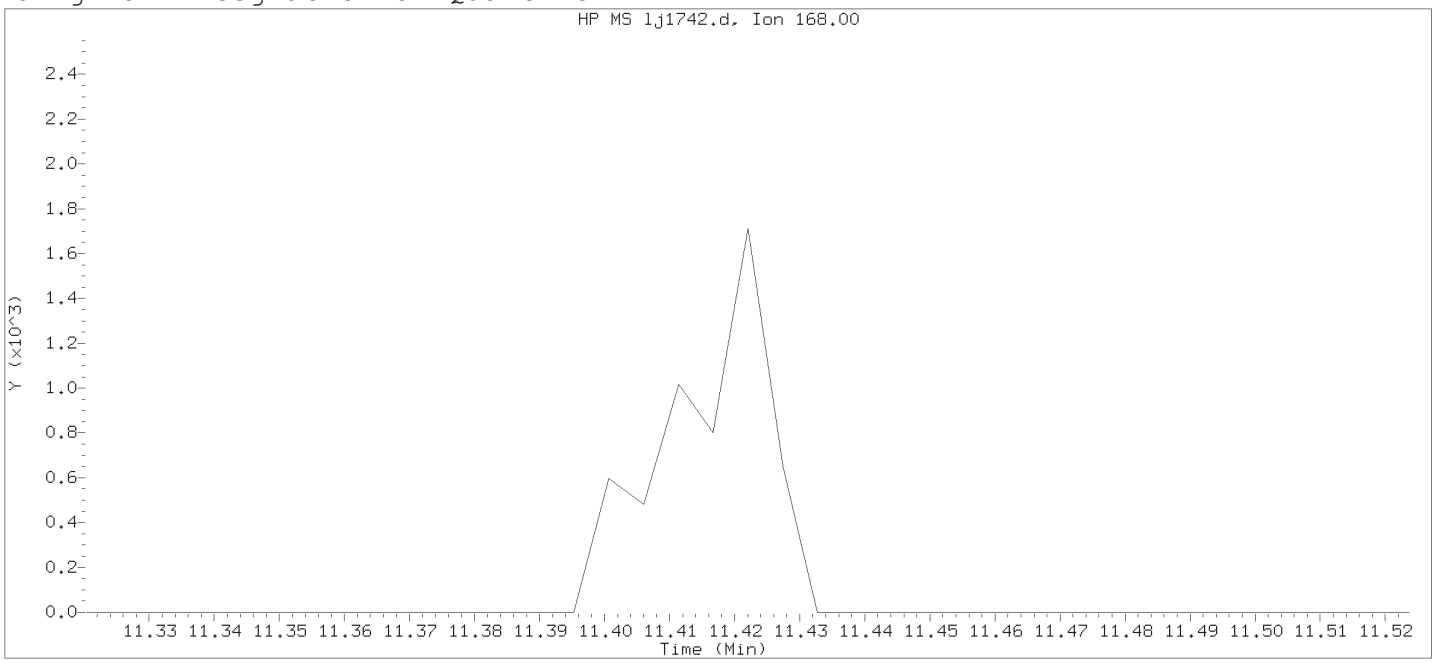
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

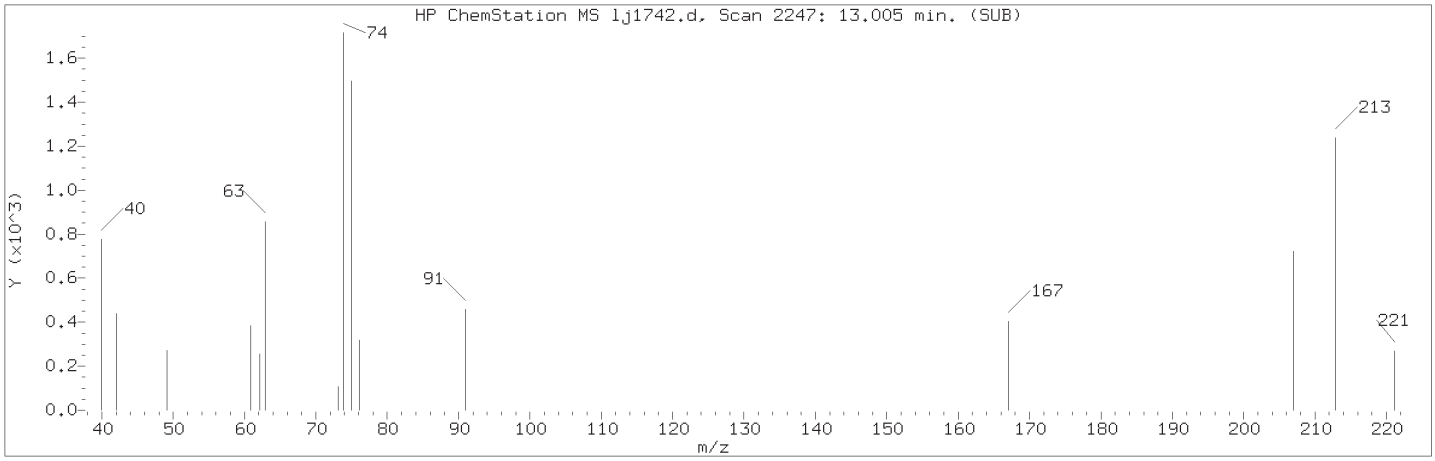
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

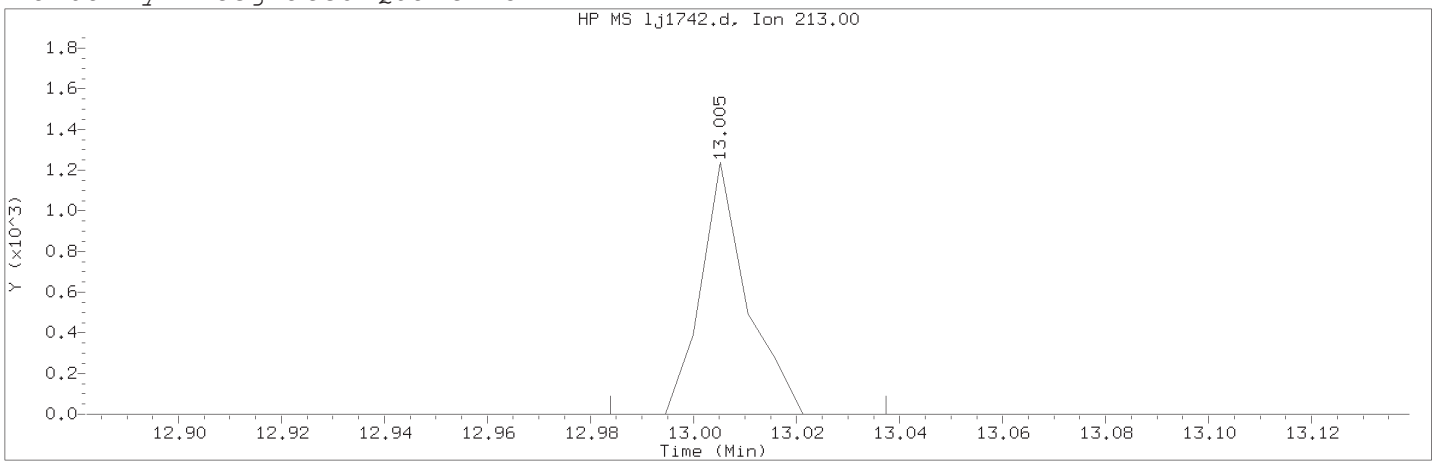
Compound Number : 111
Compound Name : 1,3-Dinitrobenzene
Expected RT (minutes) : 11.422
Quant Ion : 168.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used.

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

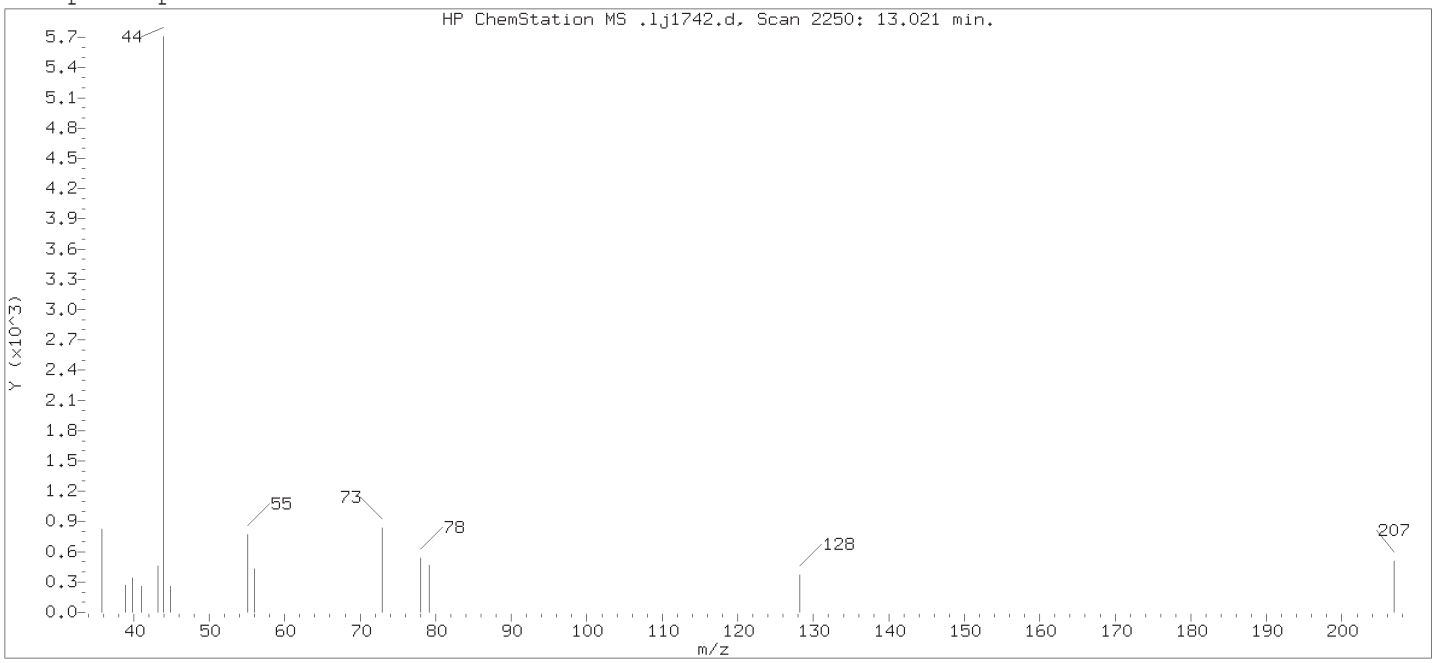
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 2247
Retention Time (minutes) : 13.005
Quant Ion : 213.00
Area (flag) : 767M
On-Column Amount (ng/ul) : 0.0779
Integration start scan : 2242 Integration stop scan: 2252
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

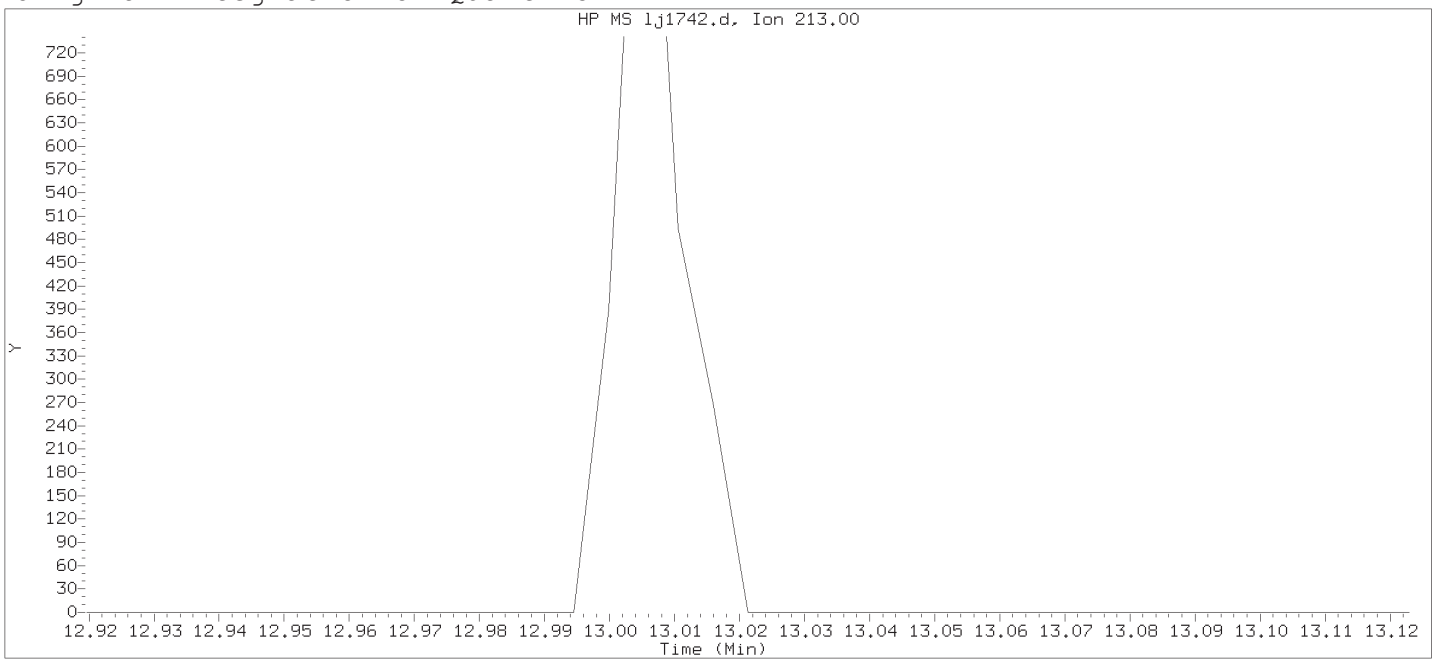
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

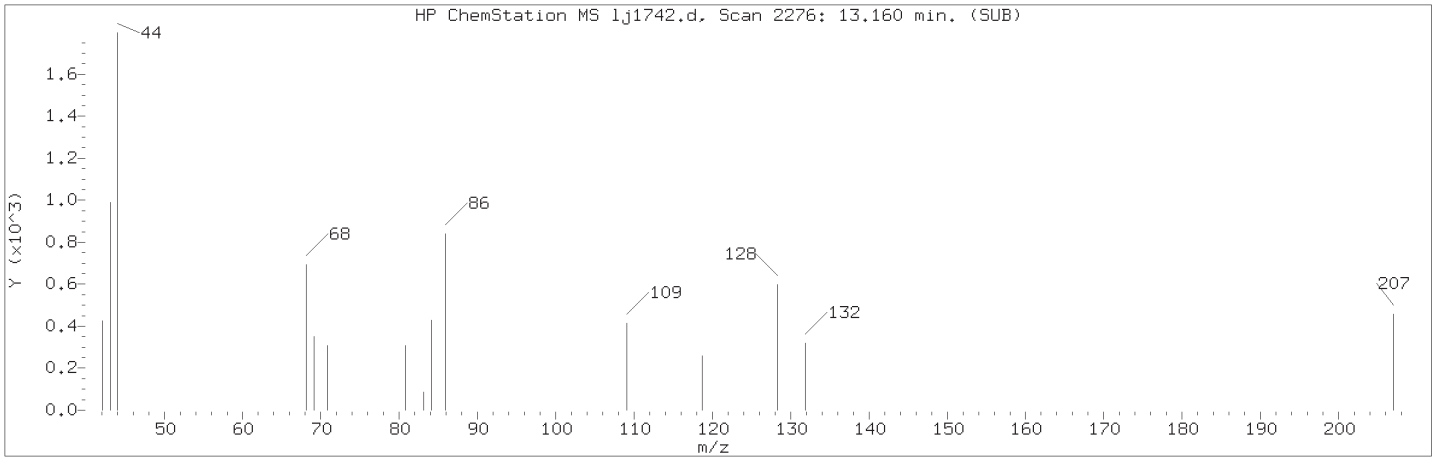
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

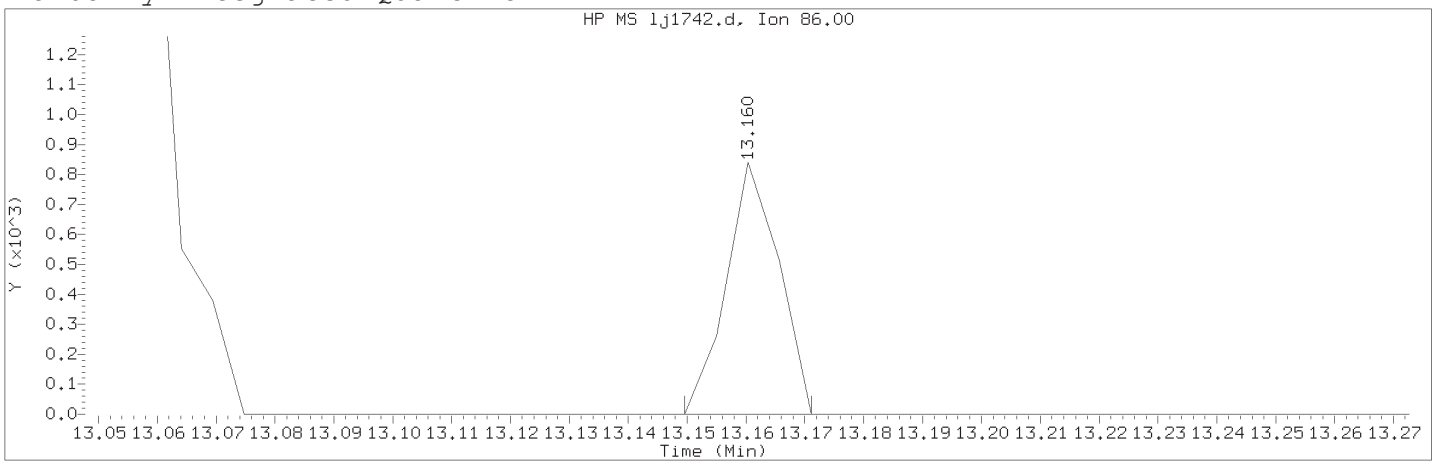
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 13.021
Quant Ion : 213.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used to sign this file.

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

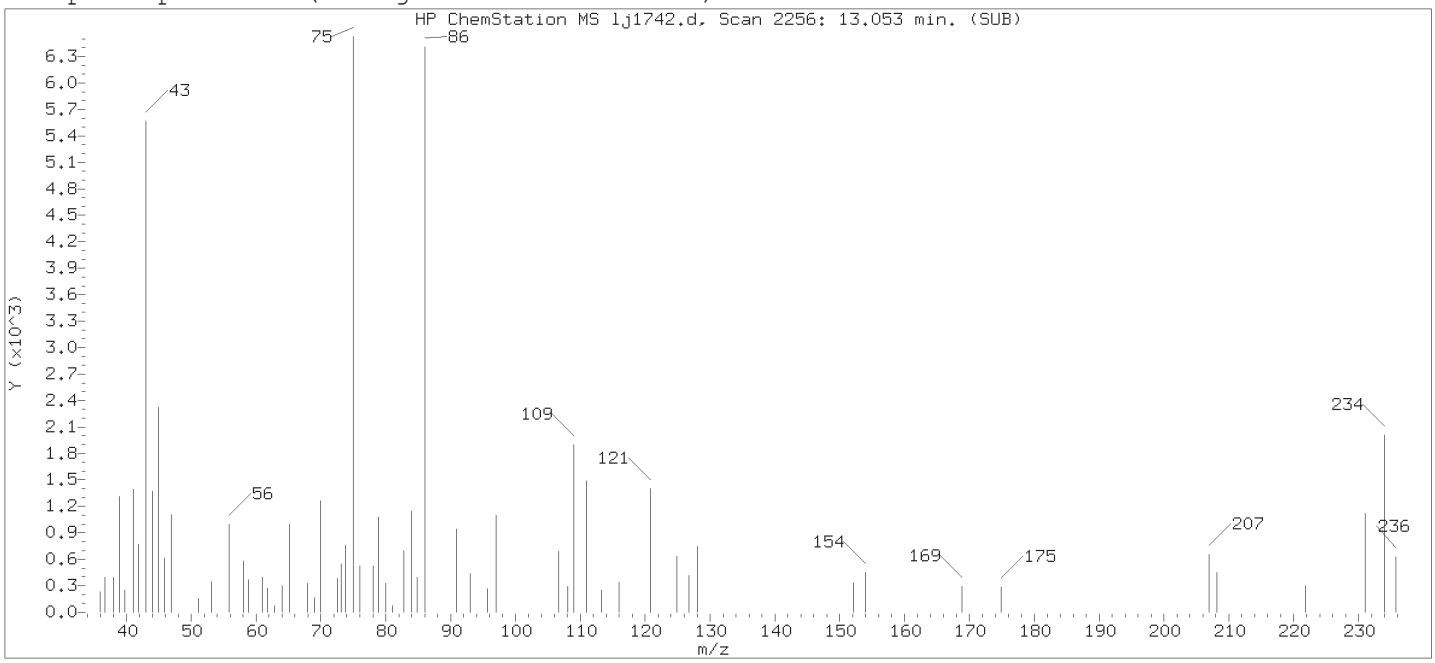
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2276		
Retention Time (minutes)	: 13.160		
Quant Ion	: 86.00		
Area (flag)	: 518M		
On-Column Amount (ng/ul)	: 0.0100		
Integration start scan	: 2273	Integration stop scan:	2277
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

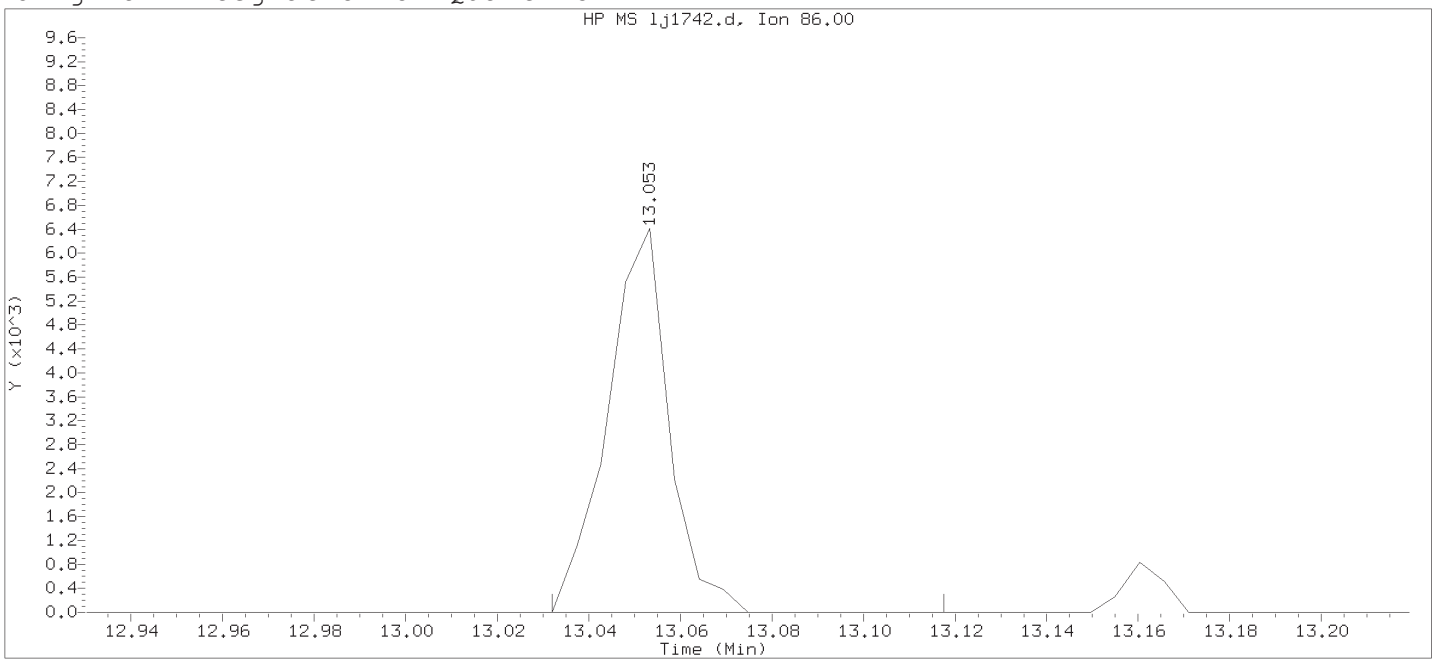
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

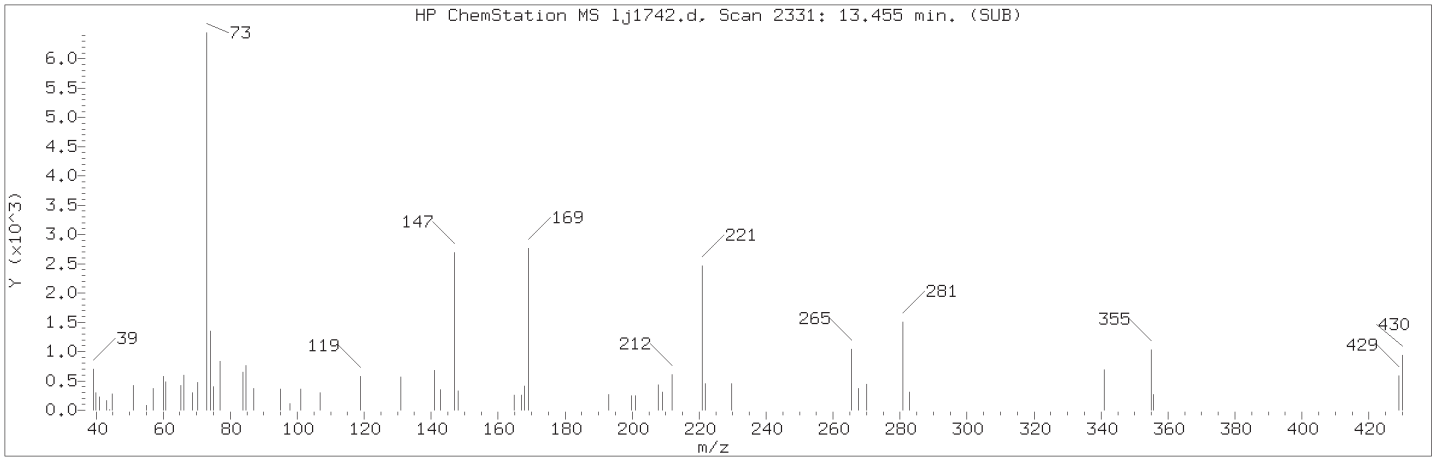
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

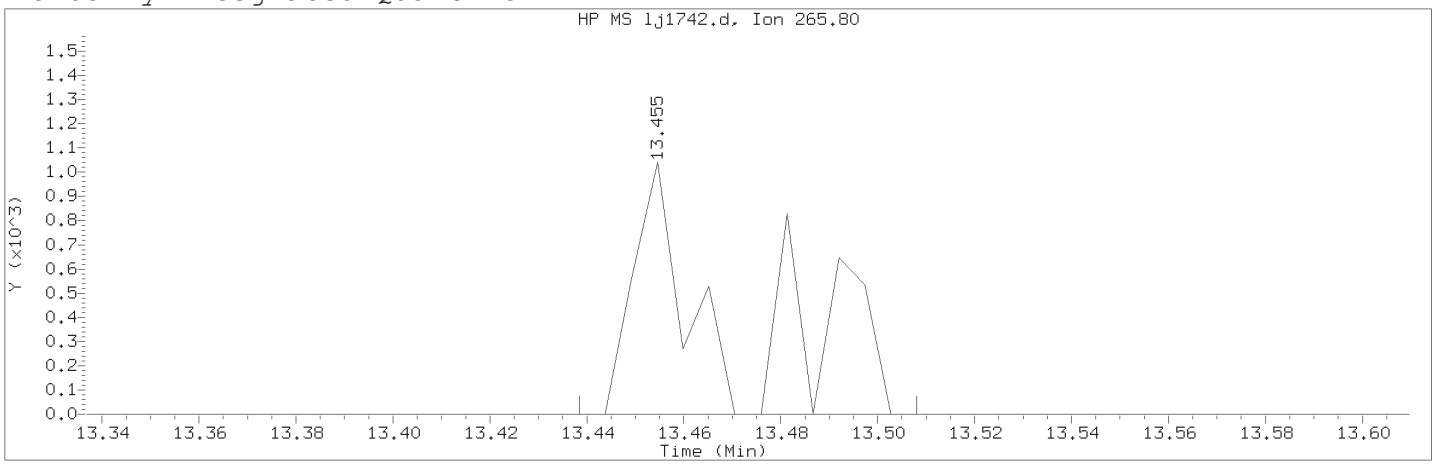
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2256		
Retention Time (minutes)	: 13.053		
Quant Ion	: 86.00		
Area	: 5987		
On-column Amount (ng/ul)	: 0.1208		
Integration start scan	: 2251	Integration stop scan:	2267
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: Ashley Transue

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

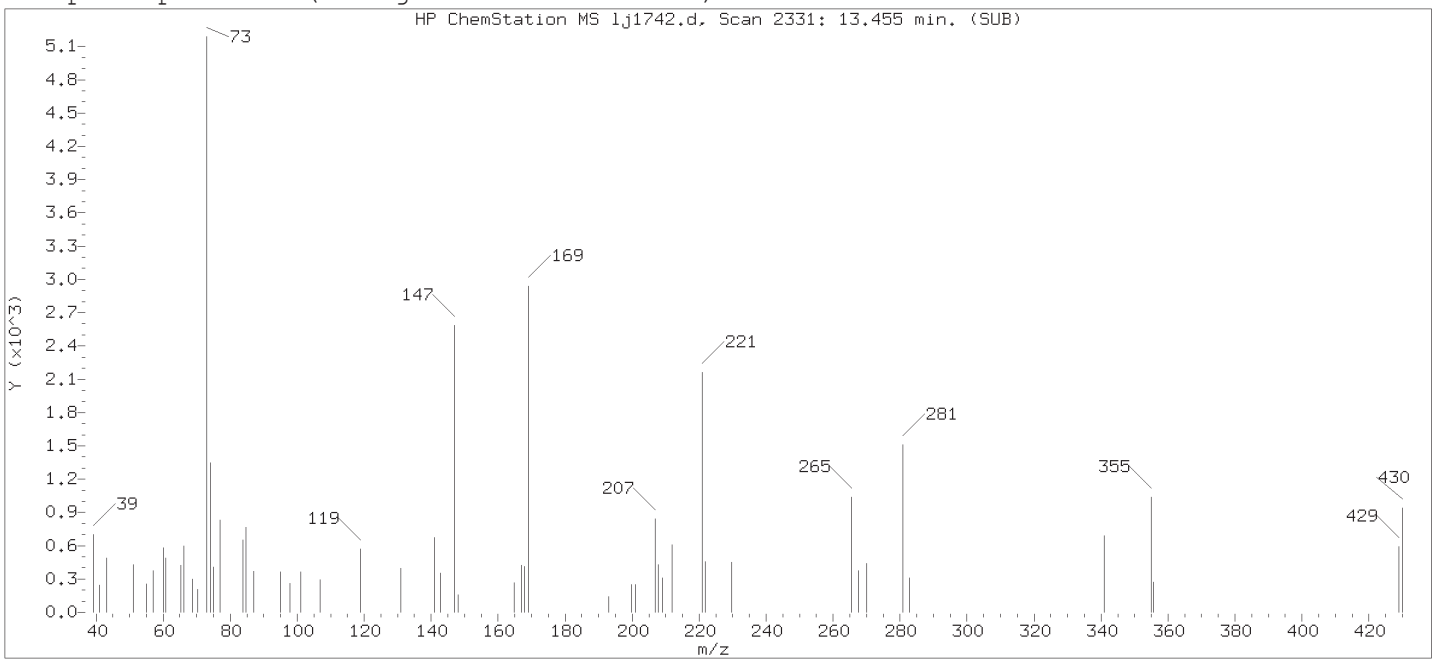
Compound Number : 154
Compound Name : Pentachlorophenol
Scan Number : 2331
Retention Time (minutes) : 13.455
Quant Ion : 266.00
Area (flag) : 1412M
On-Column Amount (ng/ul) : 0.0746
Integration start scan : 2327 Integration stop scan: 2340
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

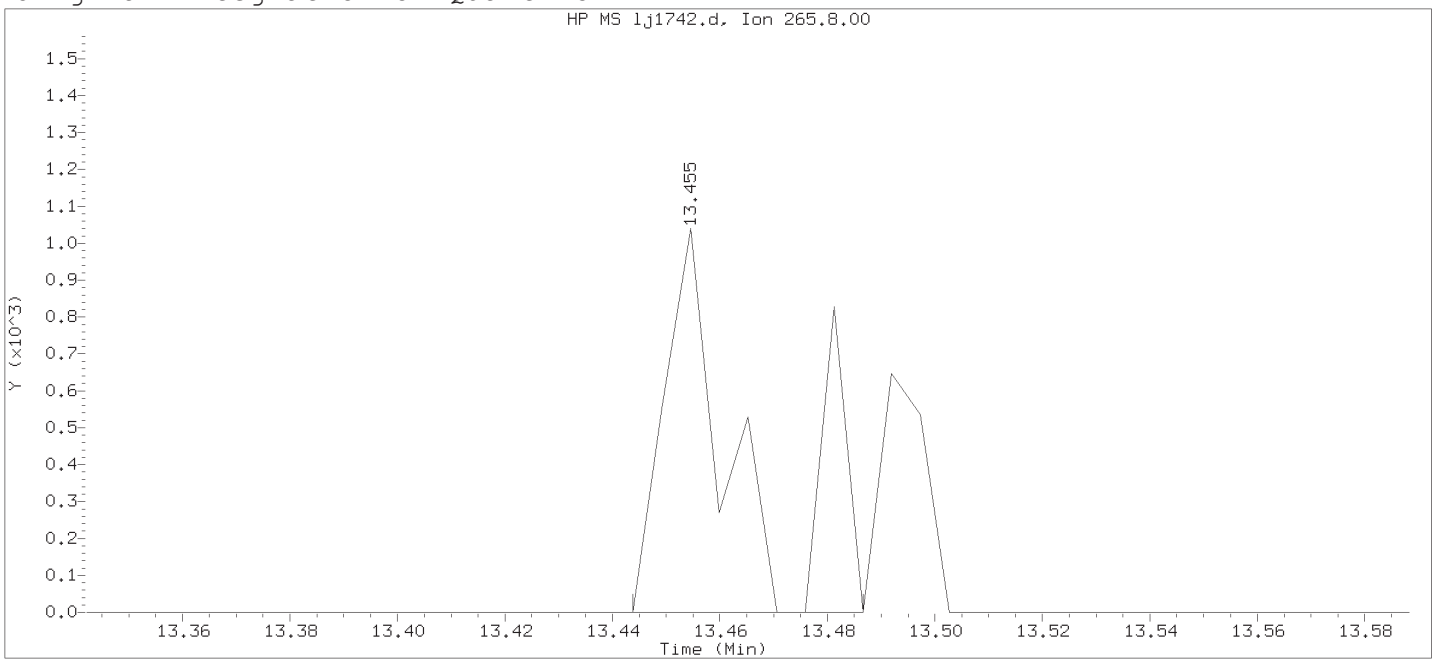
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

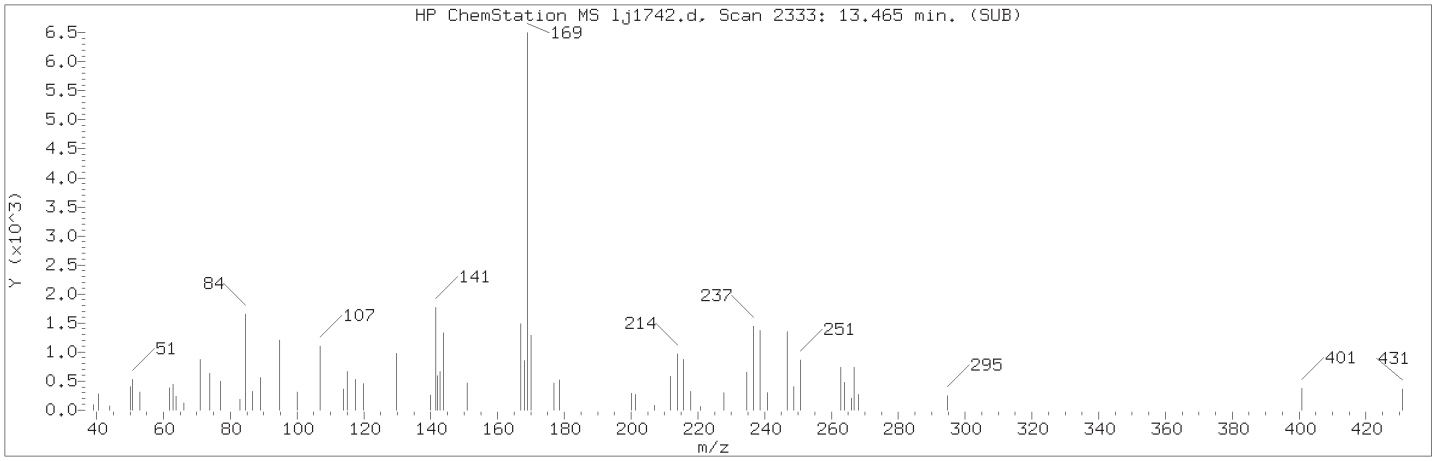
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

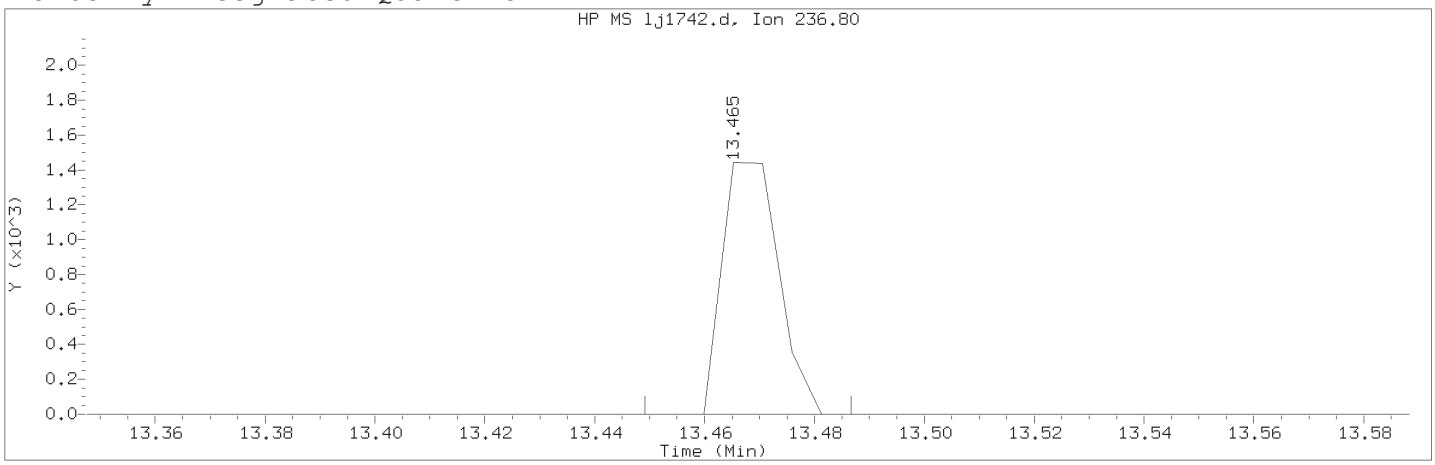
Compound Number	: 154		
Compound Name	: Pentachlorophenol		
Scan Number	: 2331		
Retention Time (minutes)	: 13.455		
Quant Ion	: 266.00		
Area	: 1033		
On-column Amount (ng/ul)	: 0.0581		
Integration start scan	: 2328	Integration stop scan:	2336
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used: 1007

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

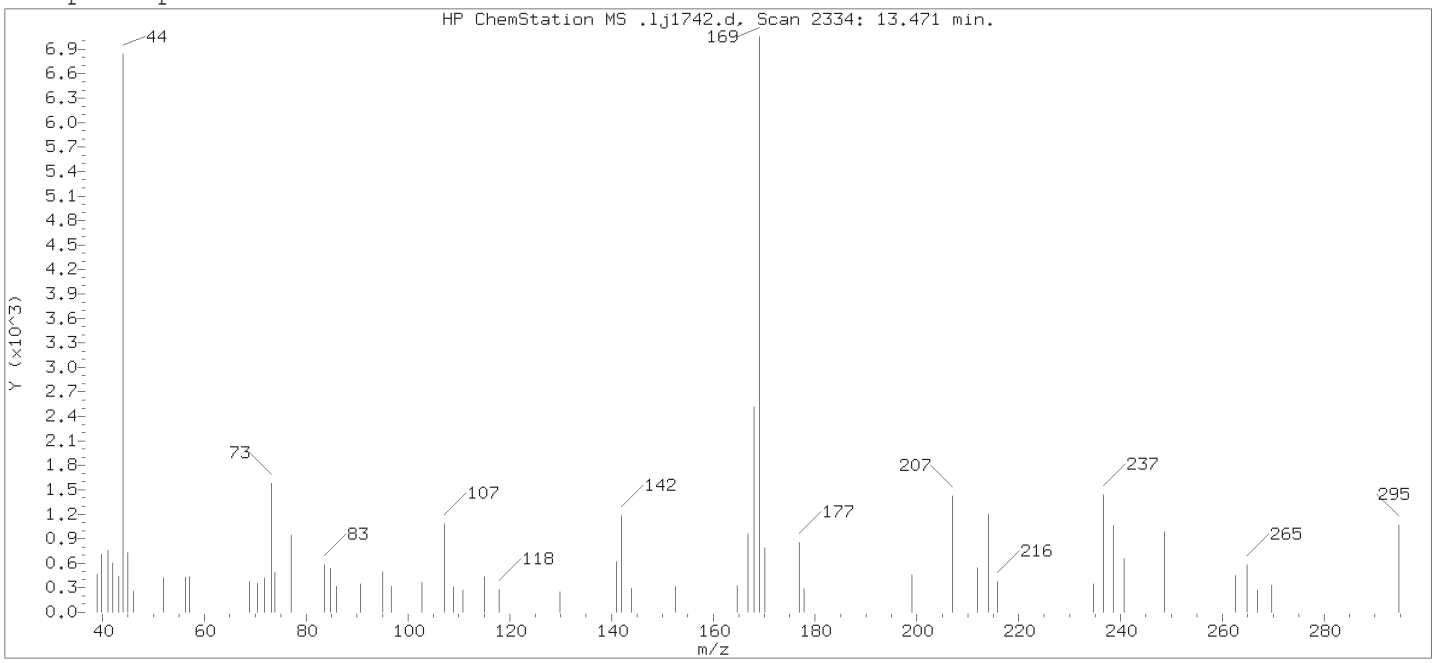
Compound Number	: 156		
Compound Name	: Pentachloronitrobenzene		
Scan Number	: 2333		
Retention Time (minutes)	: 13.465		
Quant Ion	: 237.00		
Area (flag)	: 1038M		
On-Column Amount (ng/ul)	: 0.0720		
Integration start scan	: 2329	Integration stop scan:	2336
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

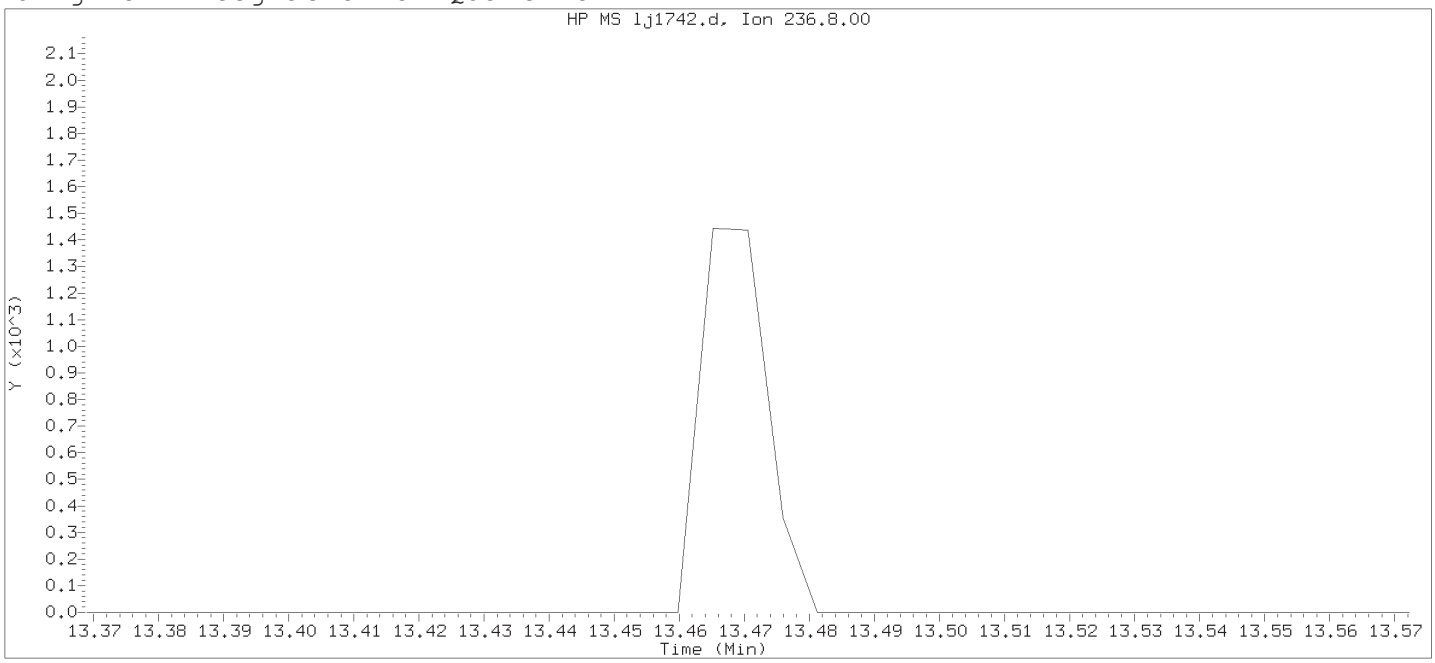
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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

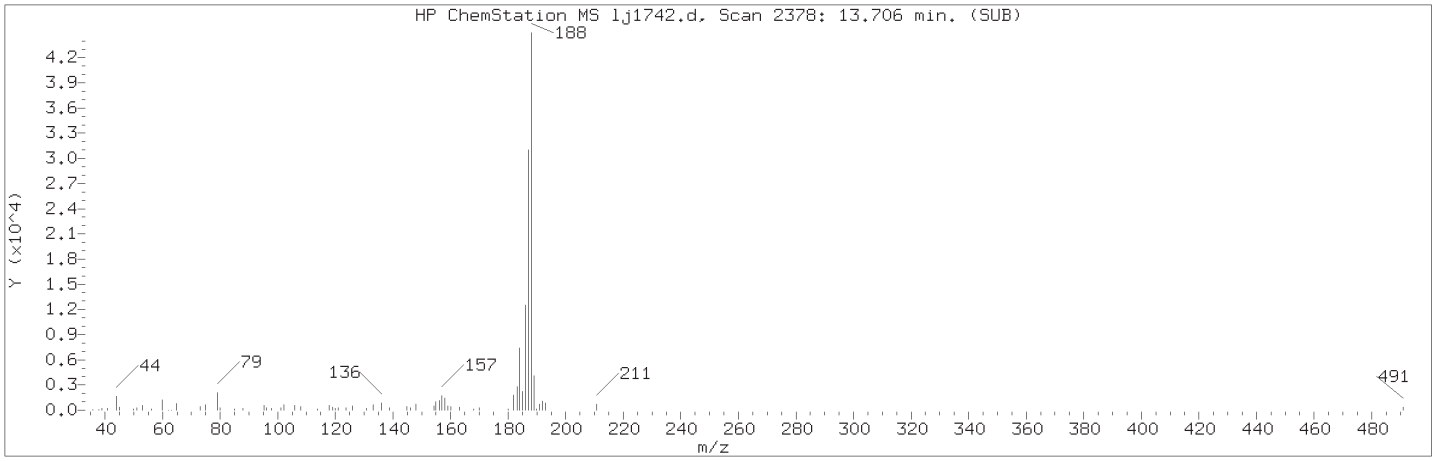
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

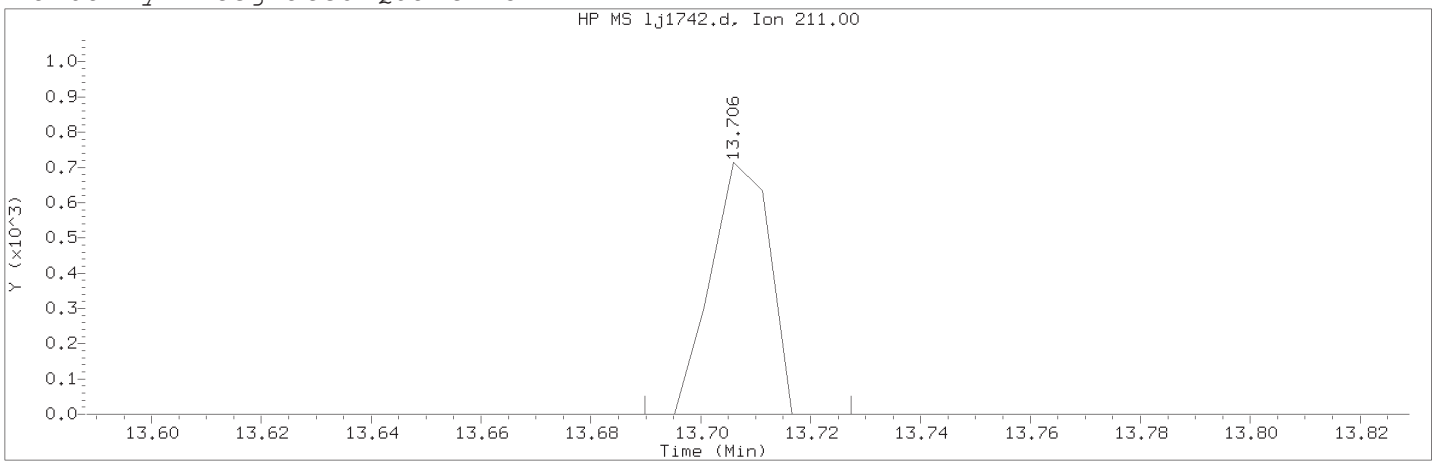
Compound Number : 156
Compound Name : Pentachloronitrobenzene
Expected RT (minutes) : 13.471
Quant Ion : 237.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used to [illegible]

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

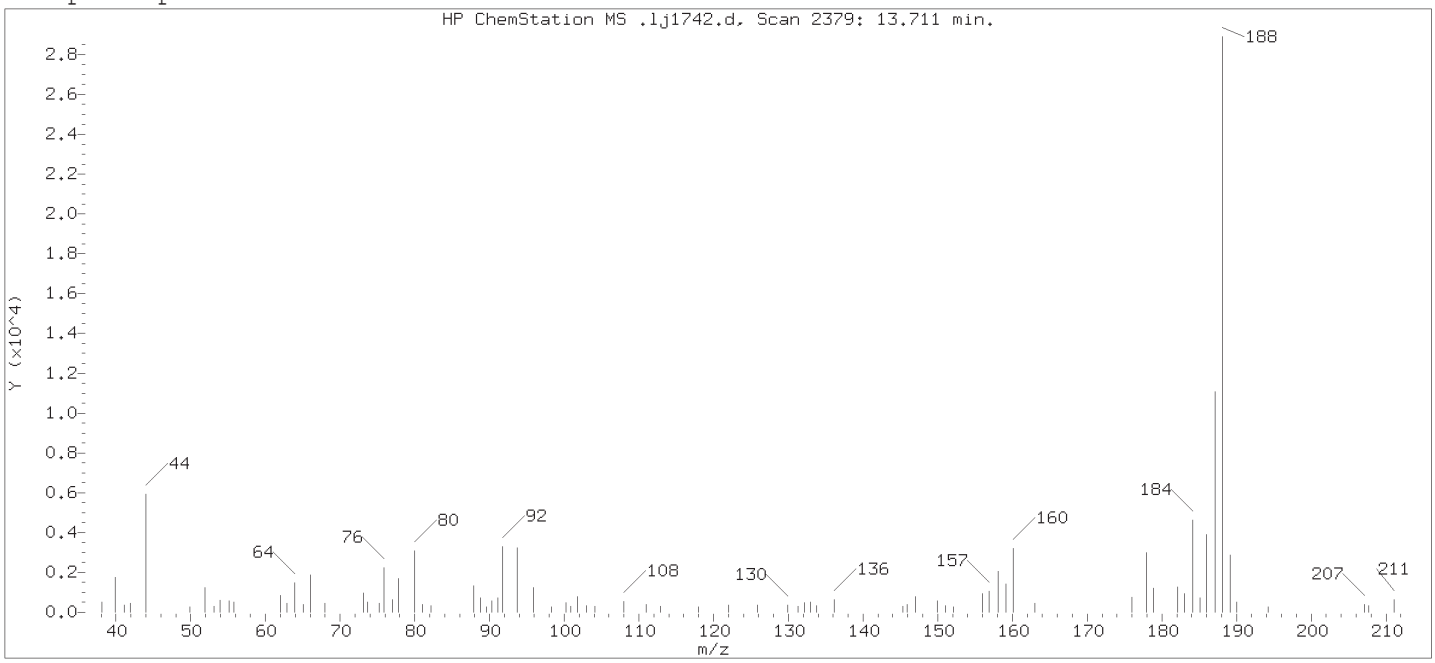
Compound Number	: 159		
Compound Name	: Dinoseb		
Scan Number	: 2378		
Retention Time (minutes)	: 13.706		
Quant Ion	: 211.00		
Area (flag)	: 529M		
On-Column Amount (ng/ul)	: 0.0216		
Integration start scan	: 2374	Integration stop scan:	2381
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

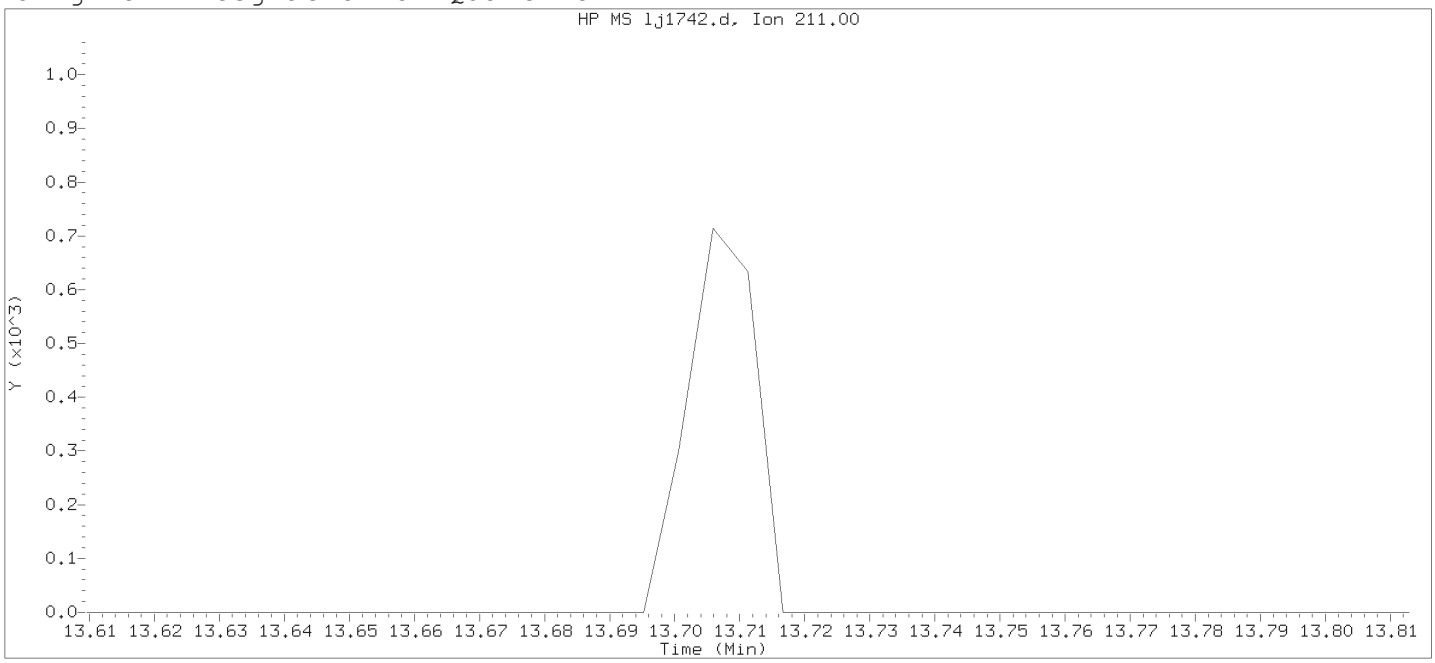
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

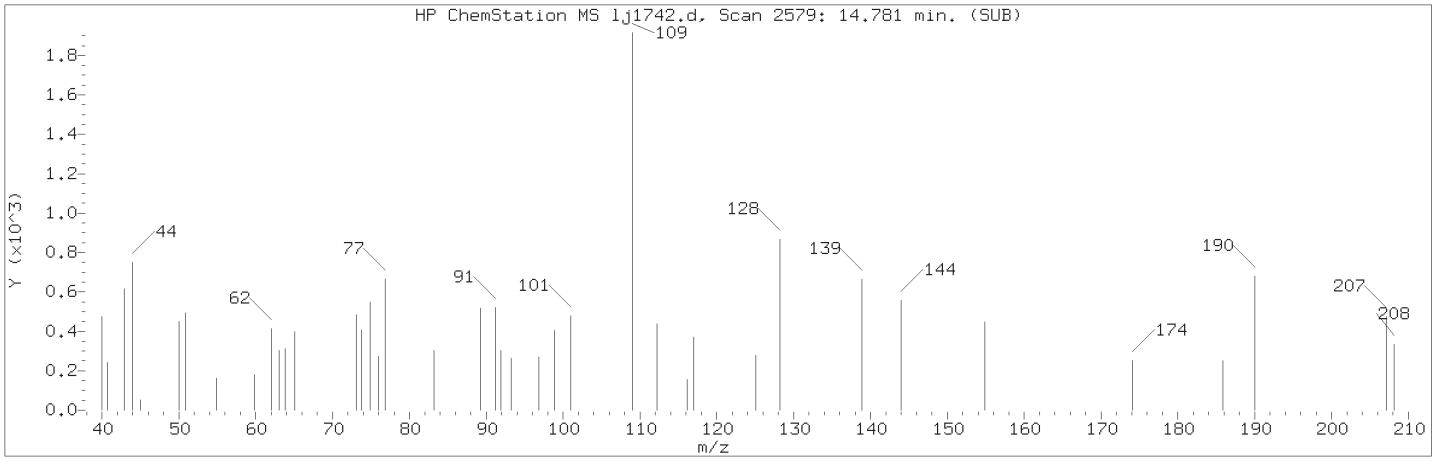
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

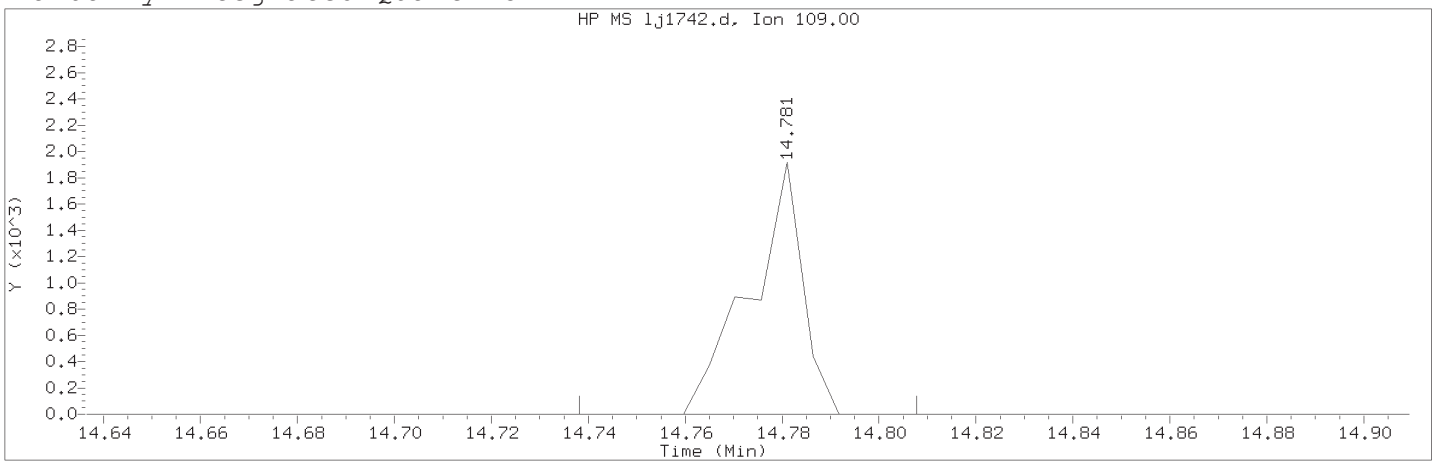
Compound Number : 159
Compound Name : Dinoseb
Expected RT (minutes) : 13.711
Quant Ion : 211.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used for this page.

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

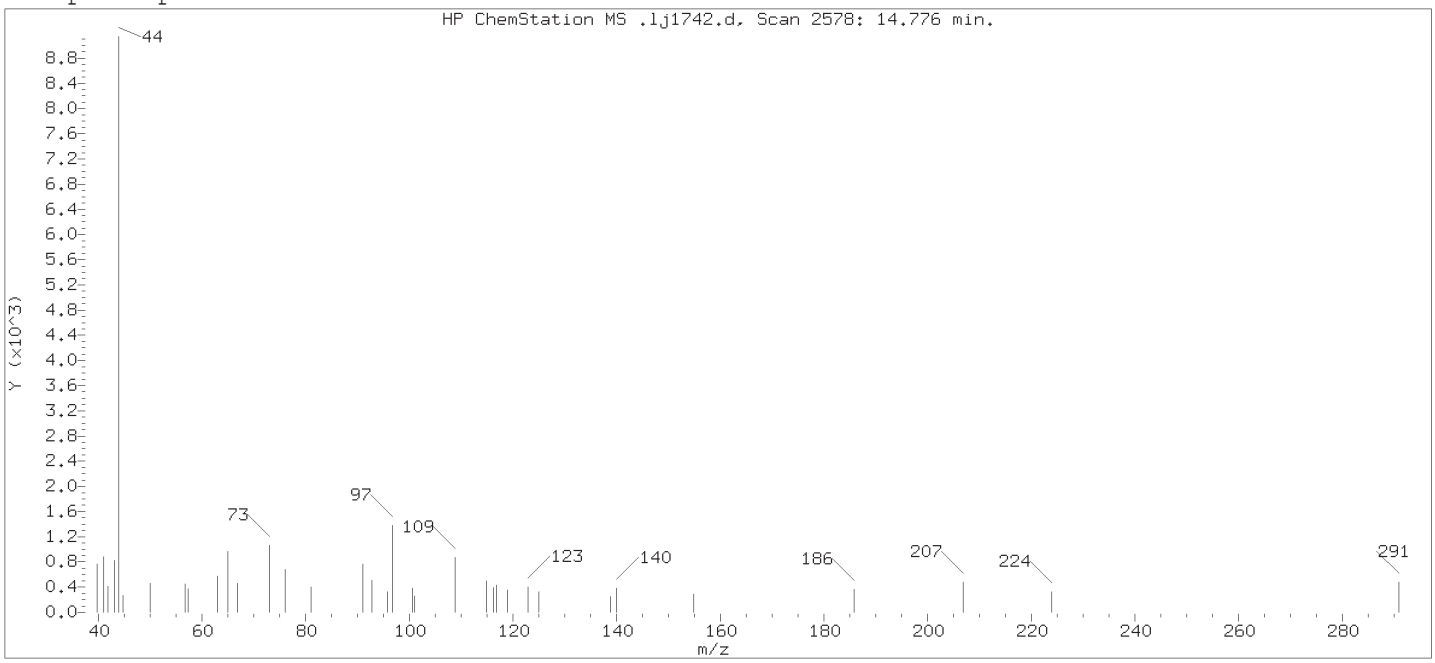
Compound Number : 172
Compound Name : Parathion
Scan Number : 2579
Retention Time (minutes) : 14.781
Quant Ion : 109.00
Area (flag) : 1441M
On-Column Amount (ng/ul) : 0.0601
Integration start scan : 2570 Integration stop scan: 2583
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

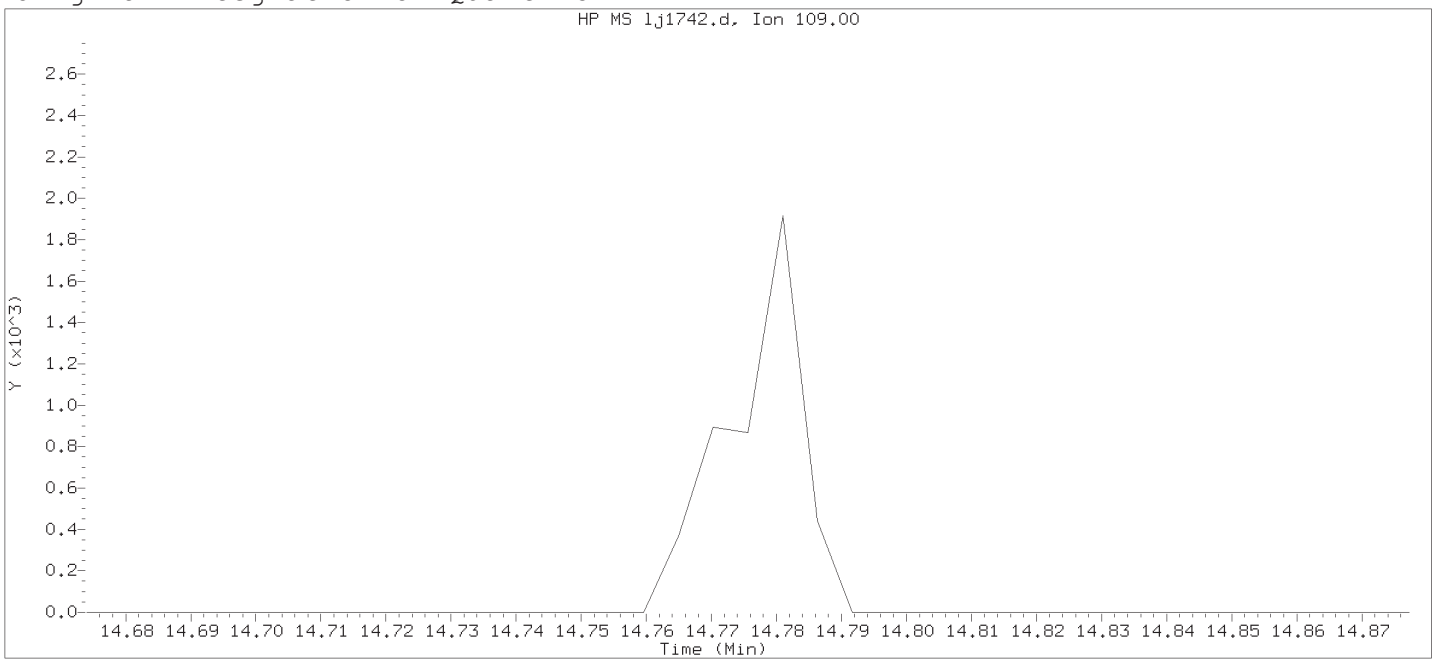
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

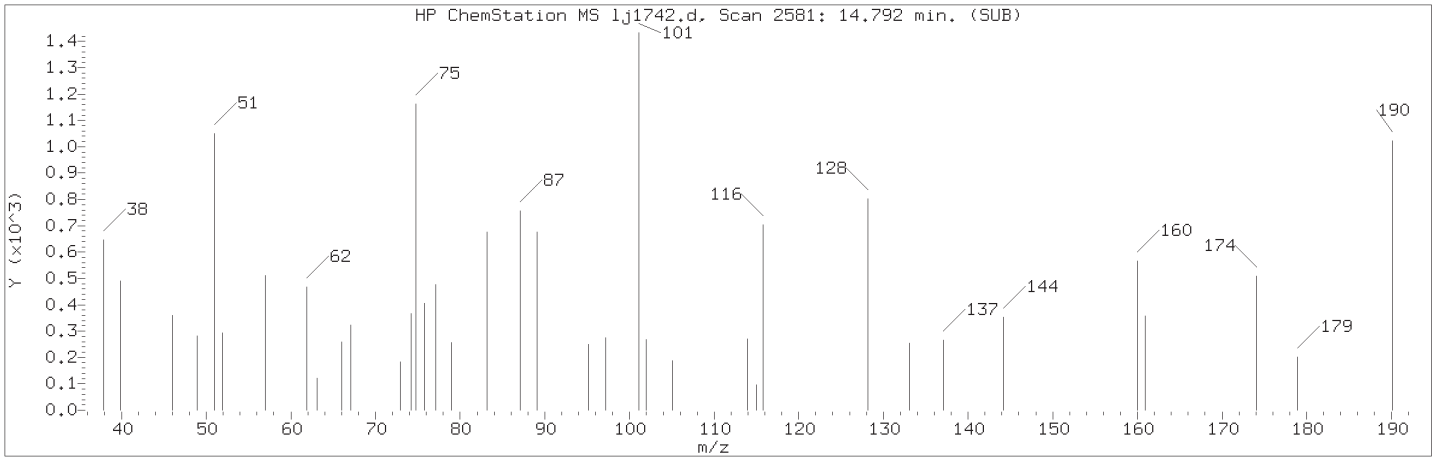
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

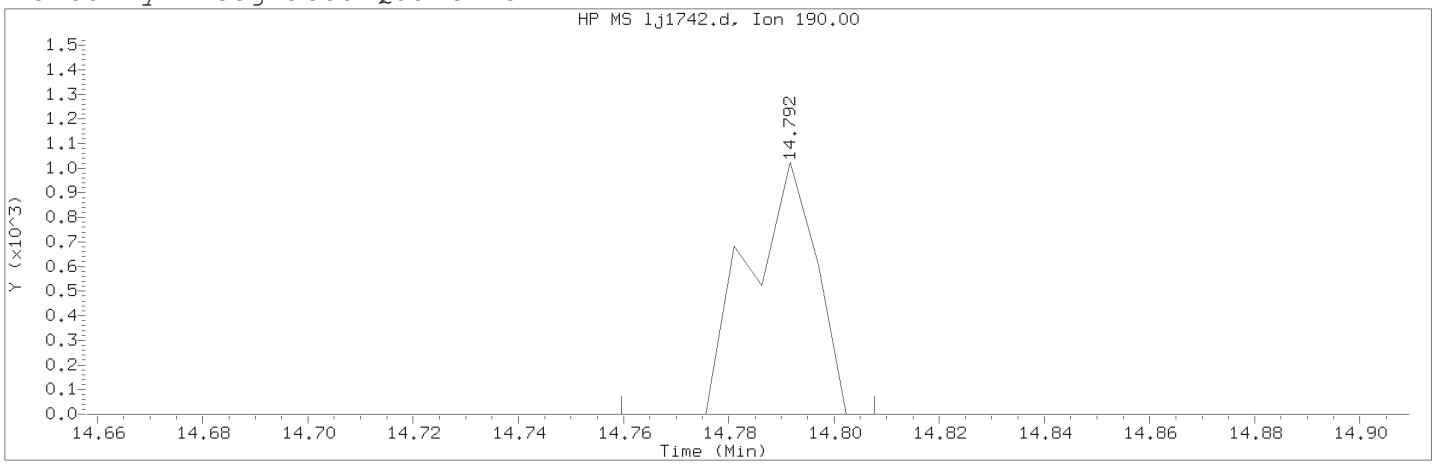
Compound Number : 172
Compound Name : Parathion
Expected RT (minutes) : 14.776
Quant Ion : 109.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used for this report.

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

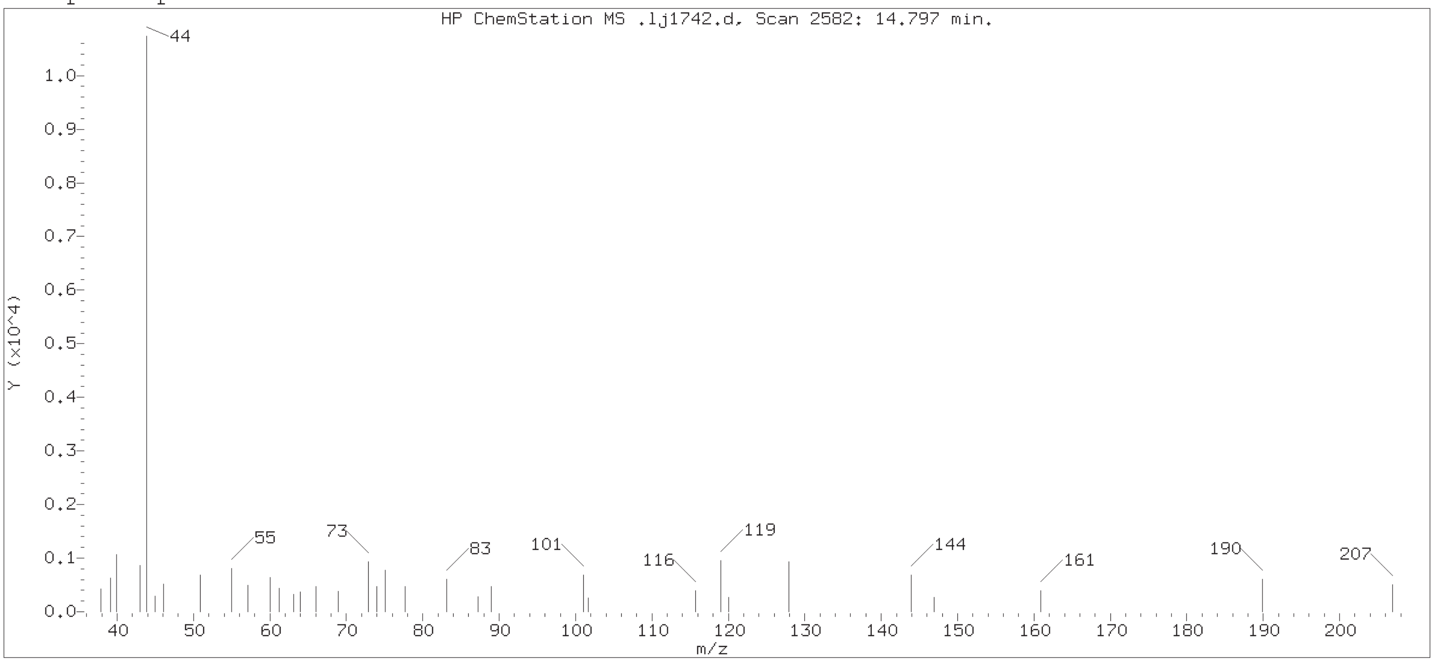
Compound Number	: 173		
Compound Name	: 4-Nitroquinoline-1-oxide		
Scan Number	: 2581		
Retention Time (minutes)	: 14.792		
Quant Ion	: 190.00		
Area (flag)	: 909M		
On-Column Amount (ng/ul)	: 0.0853		
Integration start scan	: 2574	Integration stop scan:	2583
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

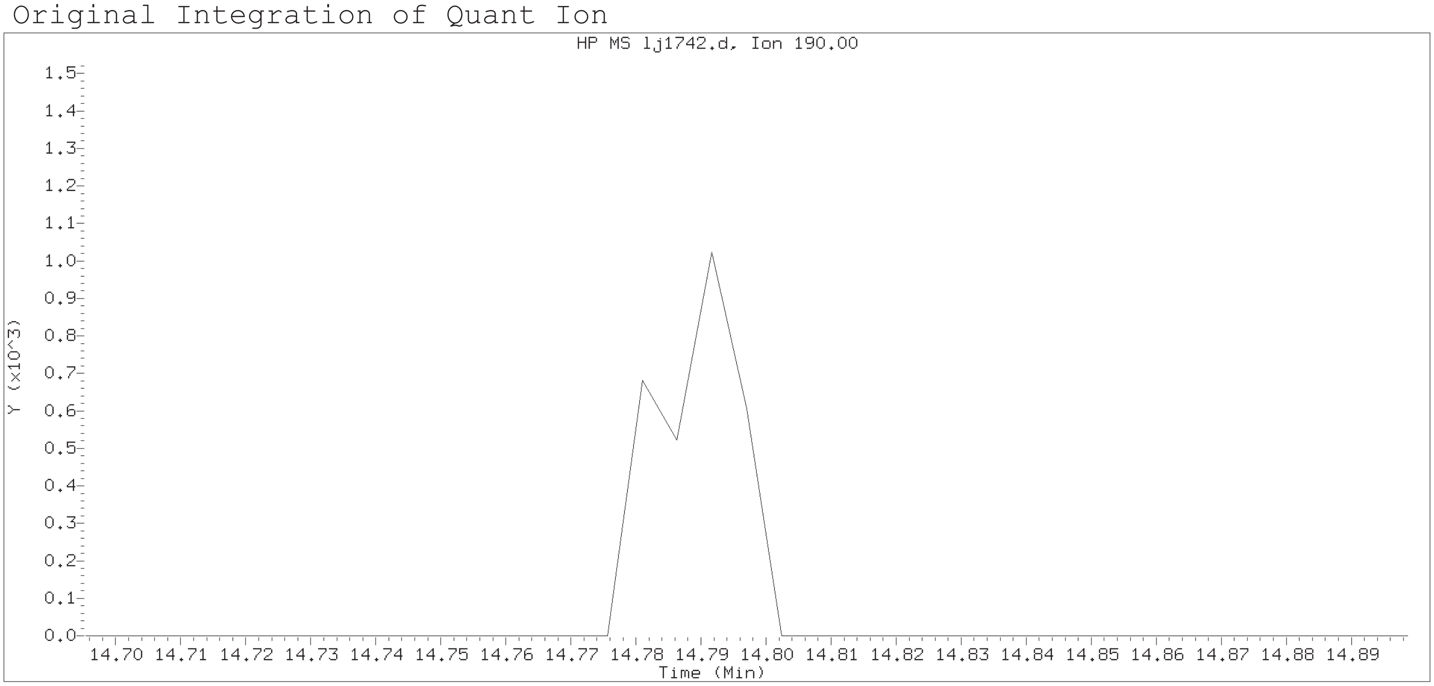
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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   Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56   Analyst ID: whs02991

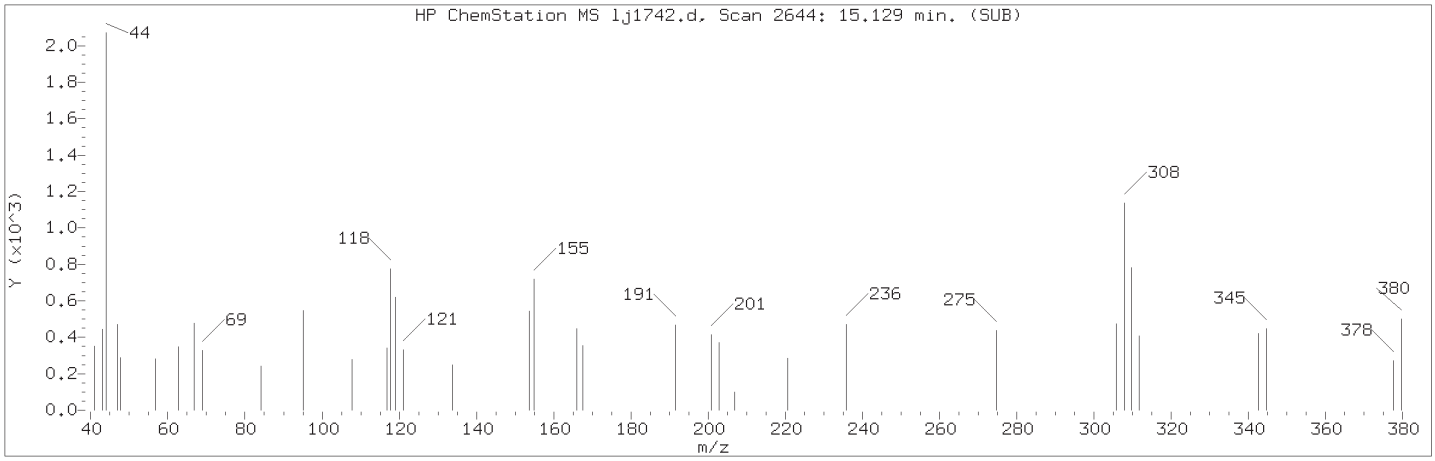
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m   Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125   Lab Sample ID: RVSTD2648

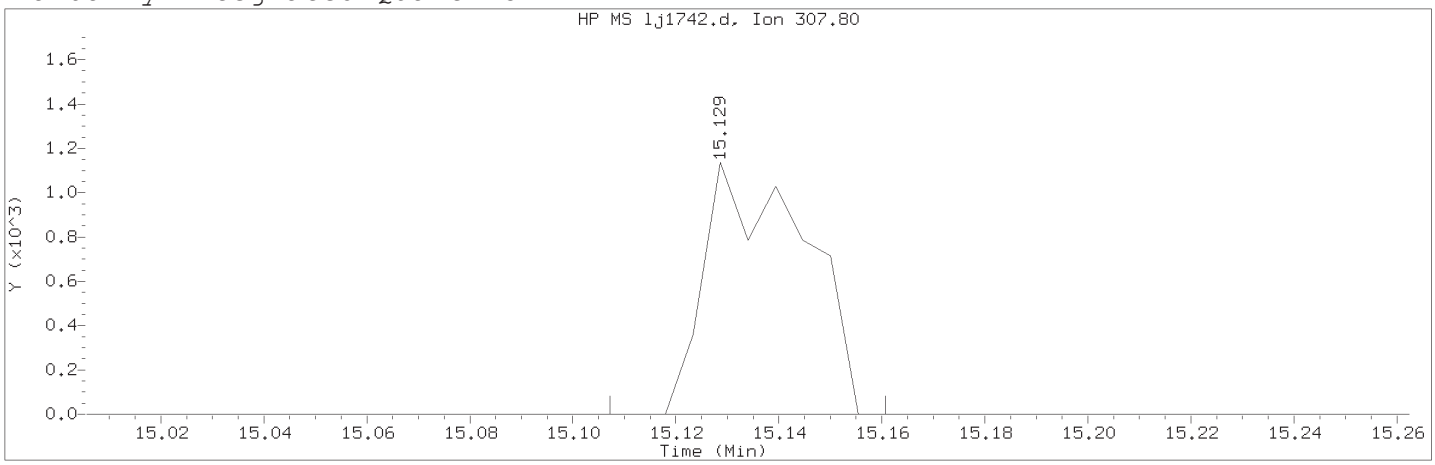
Compound Number : 173
Compound Name : 4-Nitroquinoline-1-oxide
Expected RT (minutes) : 14.797
Quant Ion : 190.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user

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

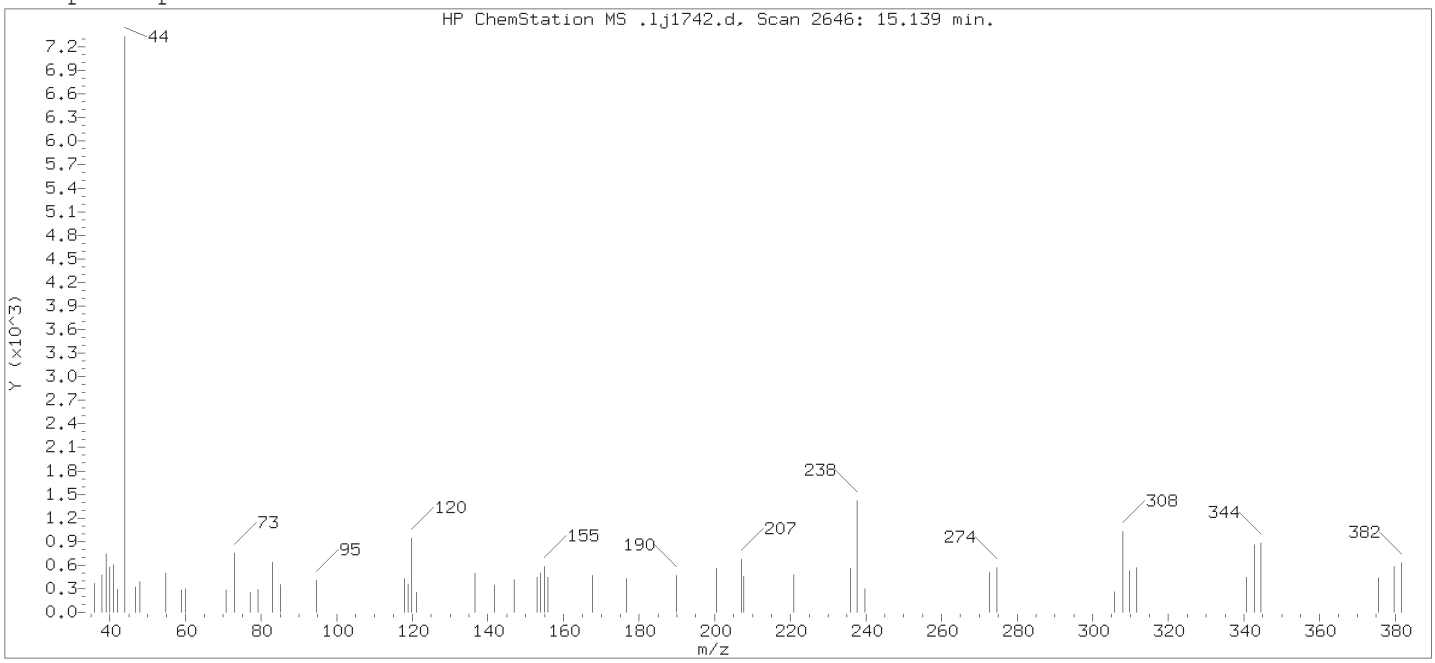
Compound Number : 174
Compound Name : Octachlorostyrene
Scan Number : 2644
Retention Time (minutes) : 15.129
Quant Ion : 308.00
Area (flag) : 1543M
On-Column Amount (ng/ul) : 0.1395
Integration start scan : 2639 Integration stop scan: 2649
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

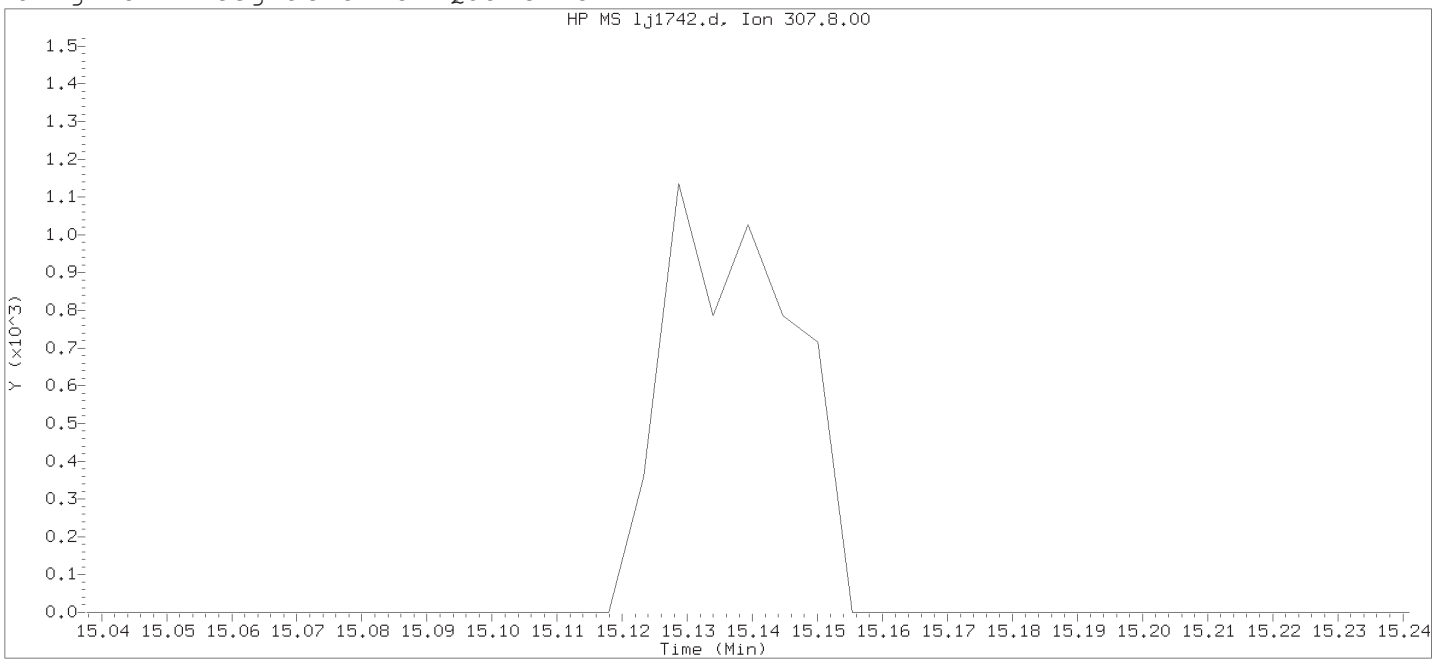
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

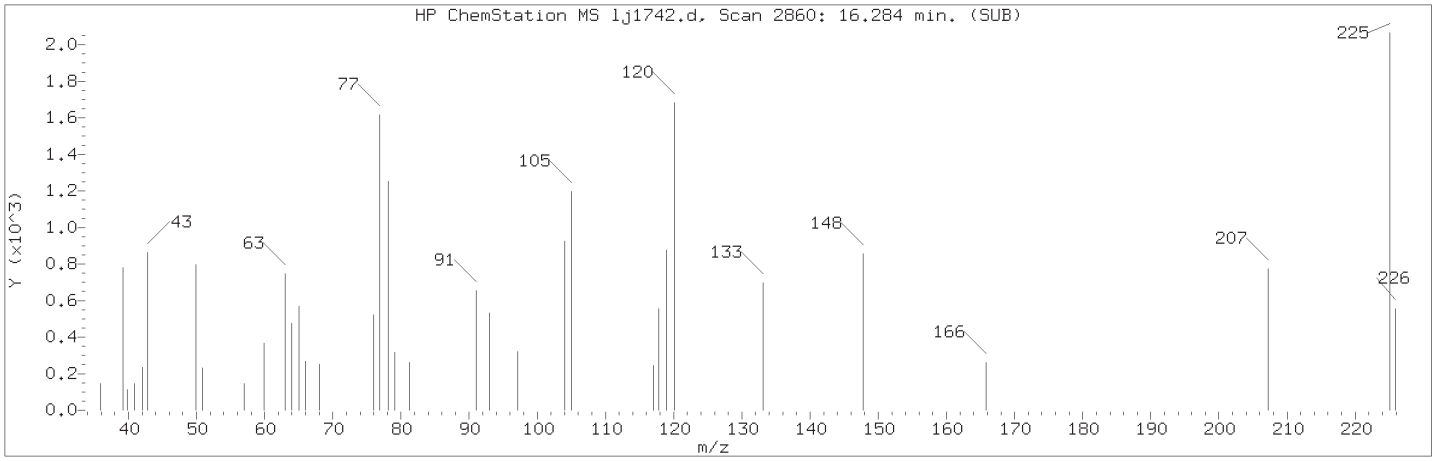
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

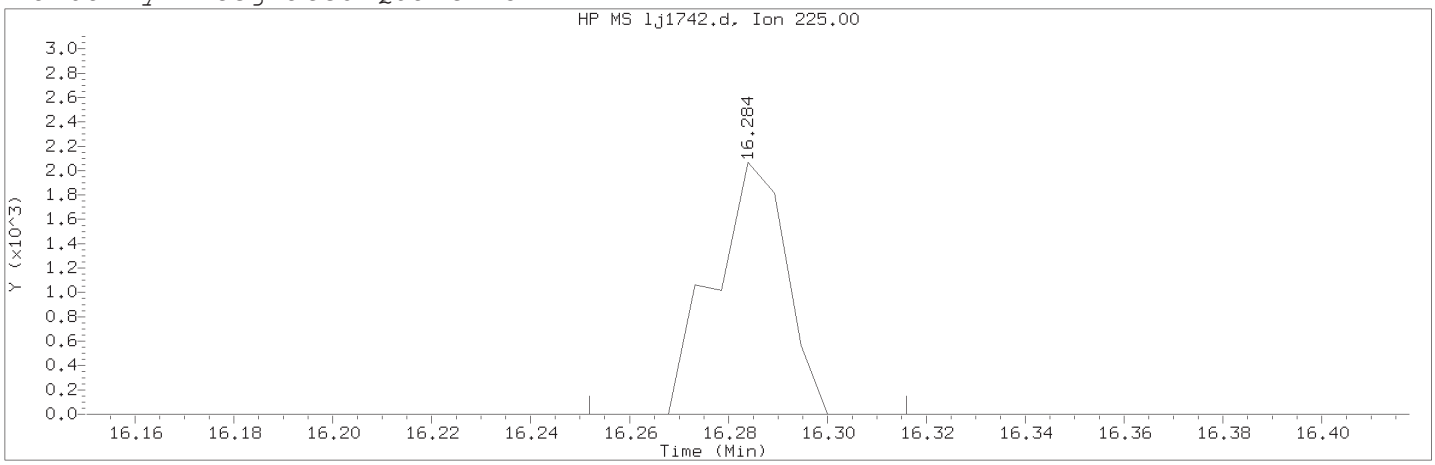
Compound Number : 174
Compound Name : Octachlorostyrene
Expected RT (minutes) : 15.139
Quant Ion : 308.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used for this report.

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

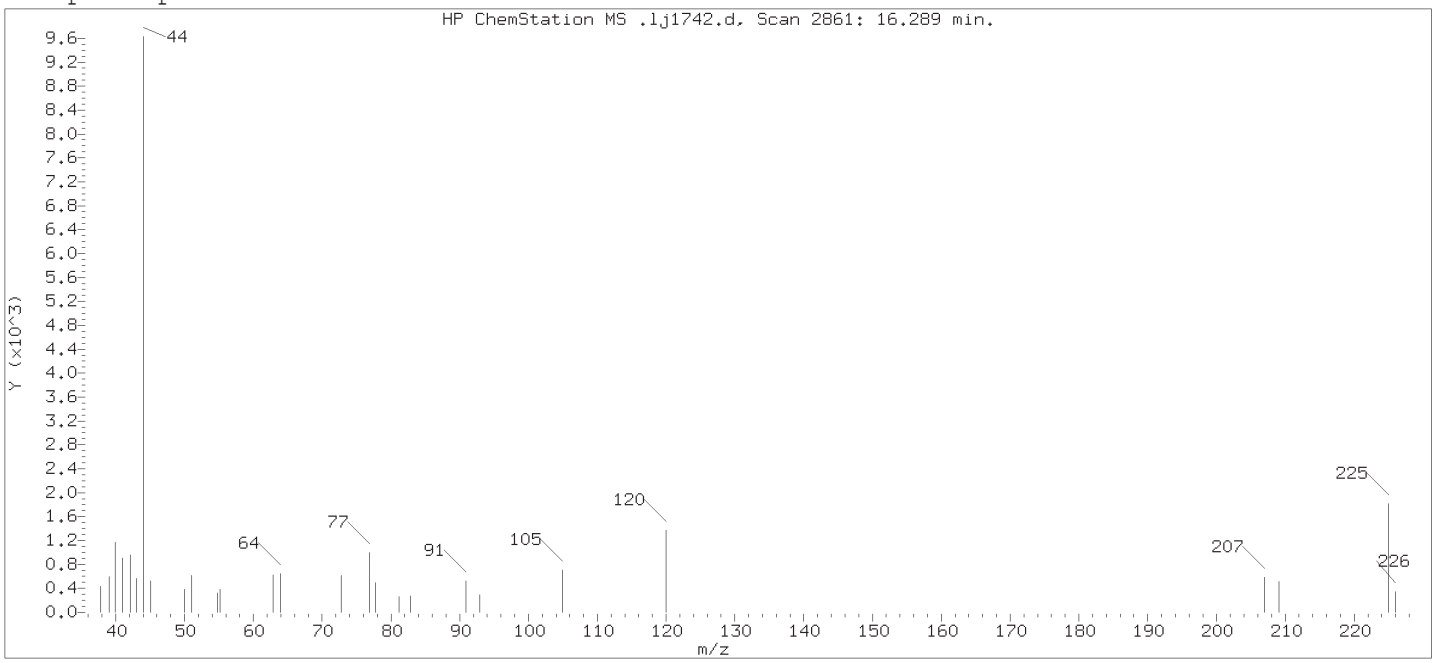
Compound Number : 187
Compound Name : p-Dimethylaminoazobenzene
Scan Number : 2860
Retention Time (minutes) : 16.284
Quant Ion : 225.00
Area (flag) : 2093M
On-Column Amount (ng/ul) : 0.0743
Integration start scan : 2853 Integration stop scan: 2865
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

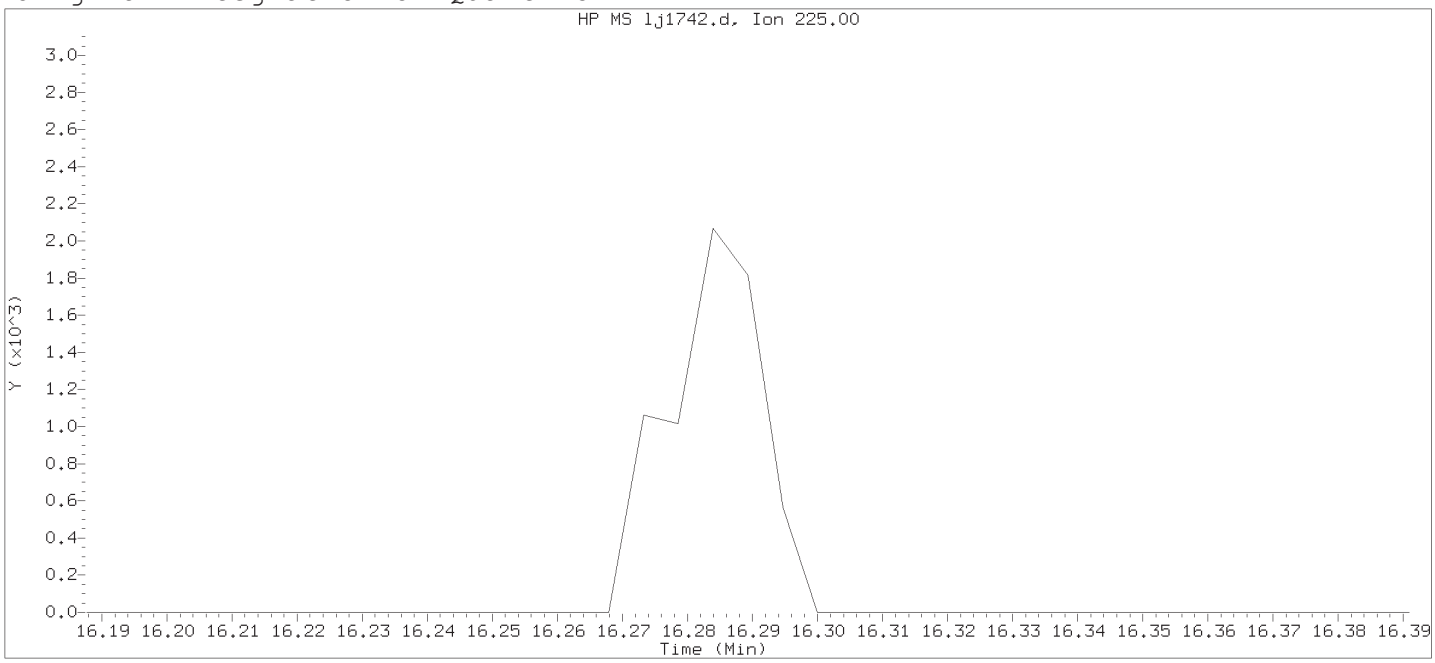
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

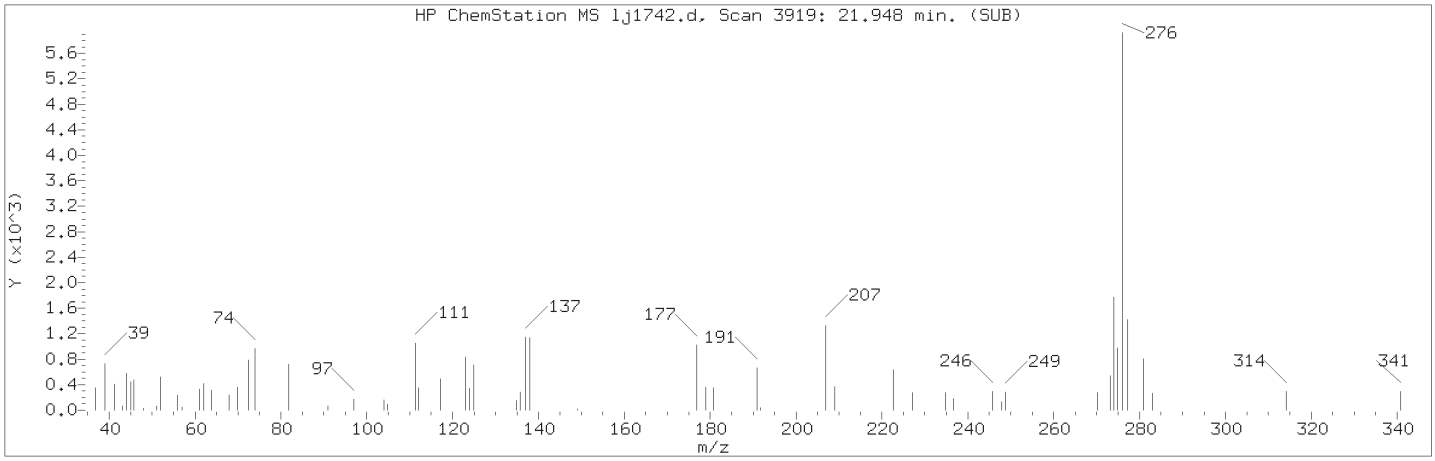
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

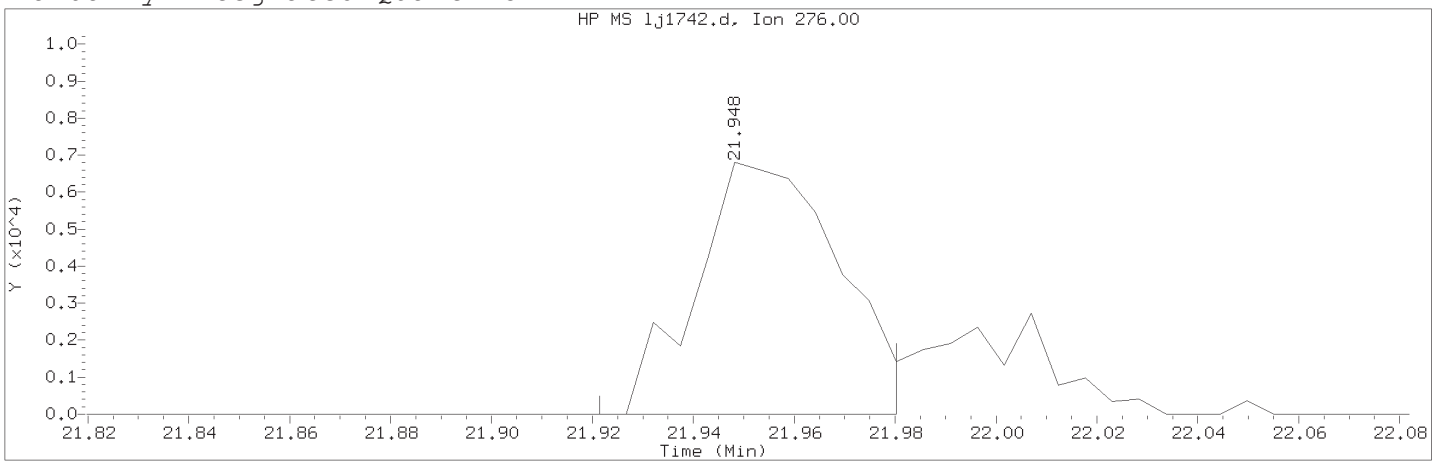
Compound Number : 187
Compound Name : p-Dimethylaminoazobenzene
Expected RT (minutes) : 16.289
Quant Ion : 225.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature used to [illegible]

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

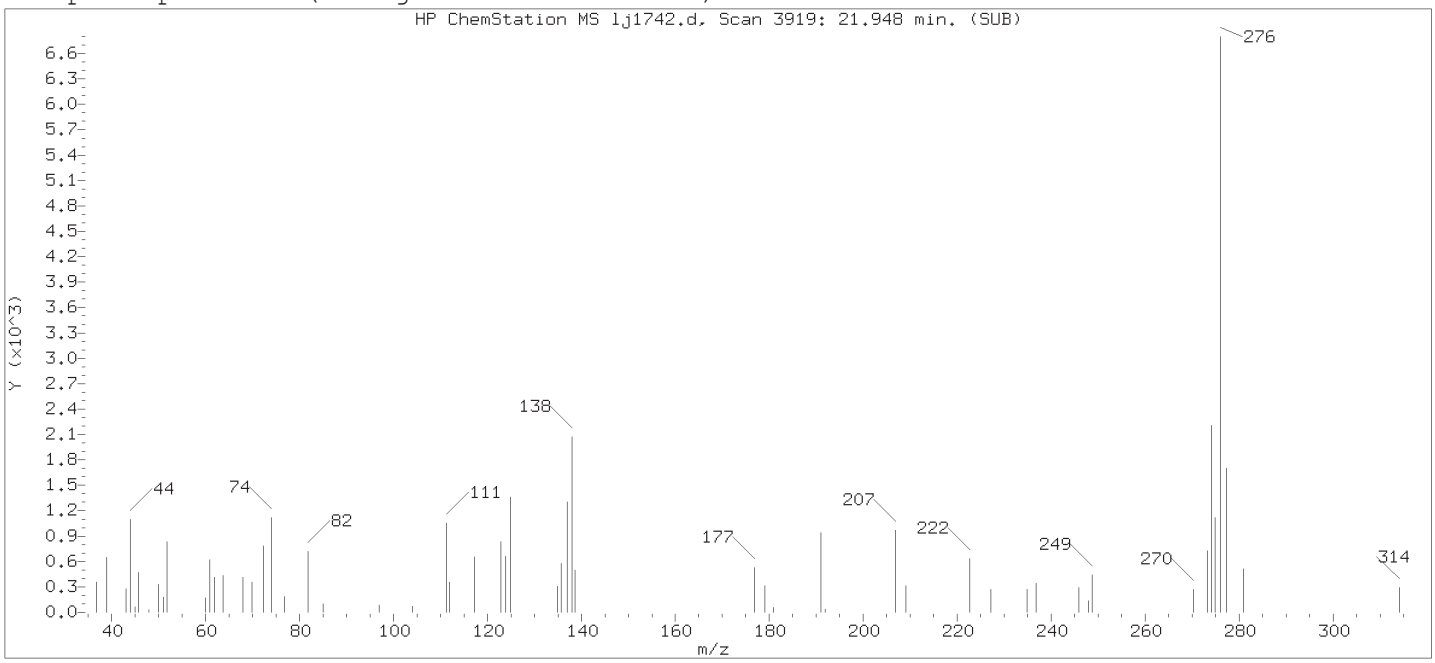
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3919		
Retention Time (minutes)	: 21.948		
Quant Ion	: 276.00		
Area (flag)	: 13468M		
On-Column Amount (ng/ul)	: 0.1134		
Integration start scan	: 3913	Integration stop scan:	3924
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

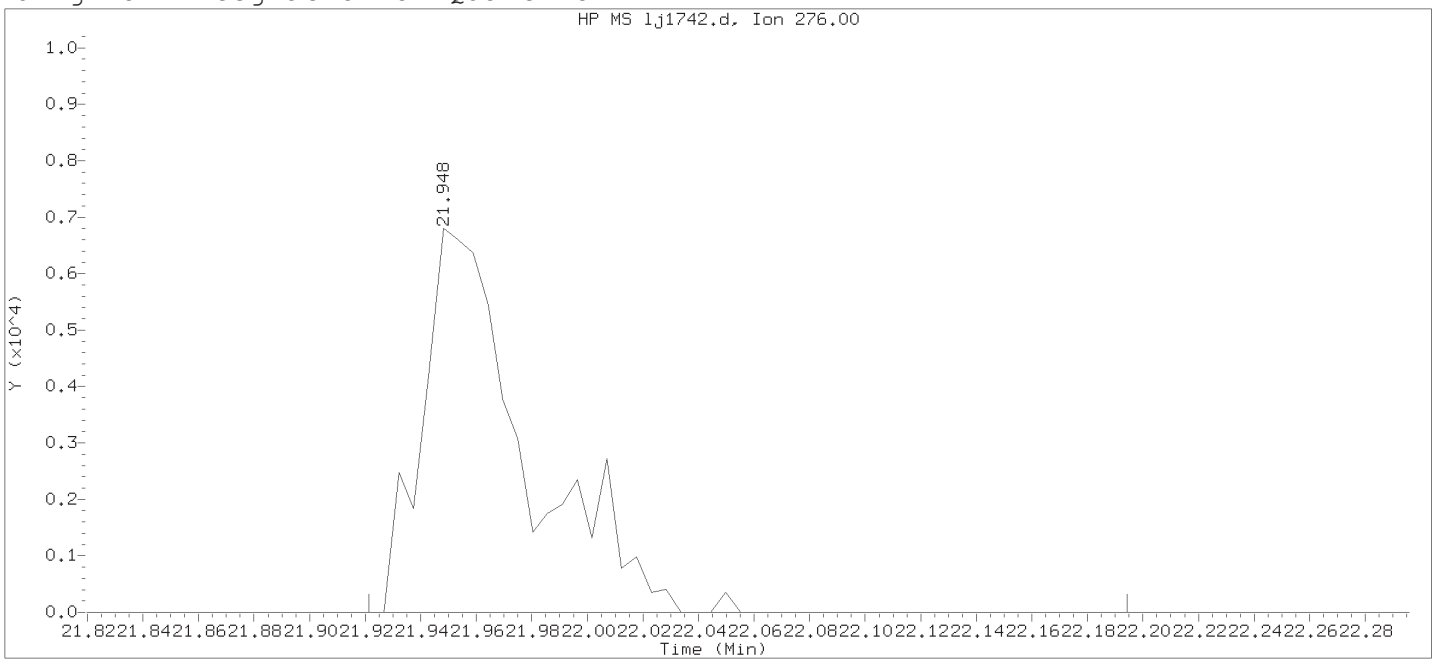
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

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



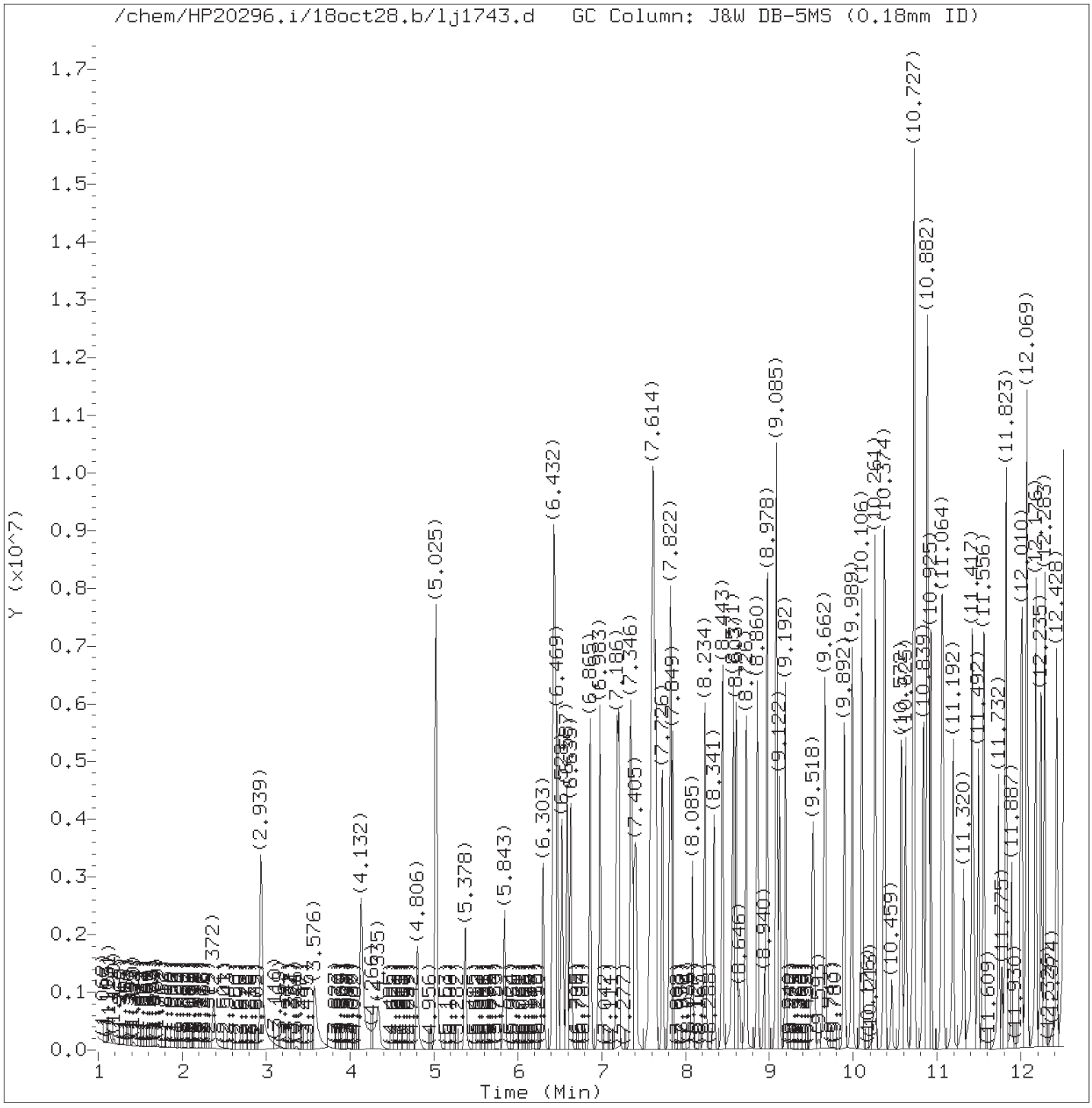
Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

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

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: 1039



Total Ion Chromatogram (TIC)

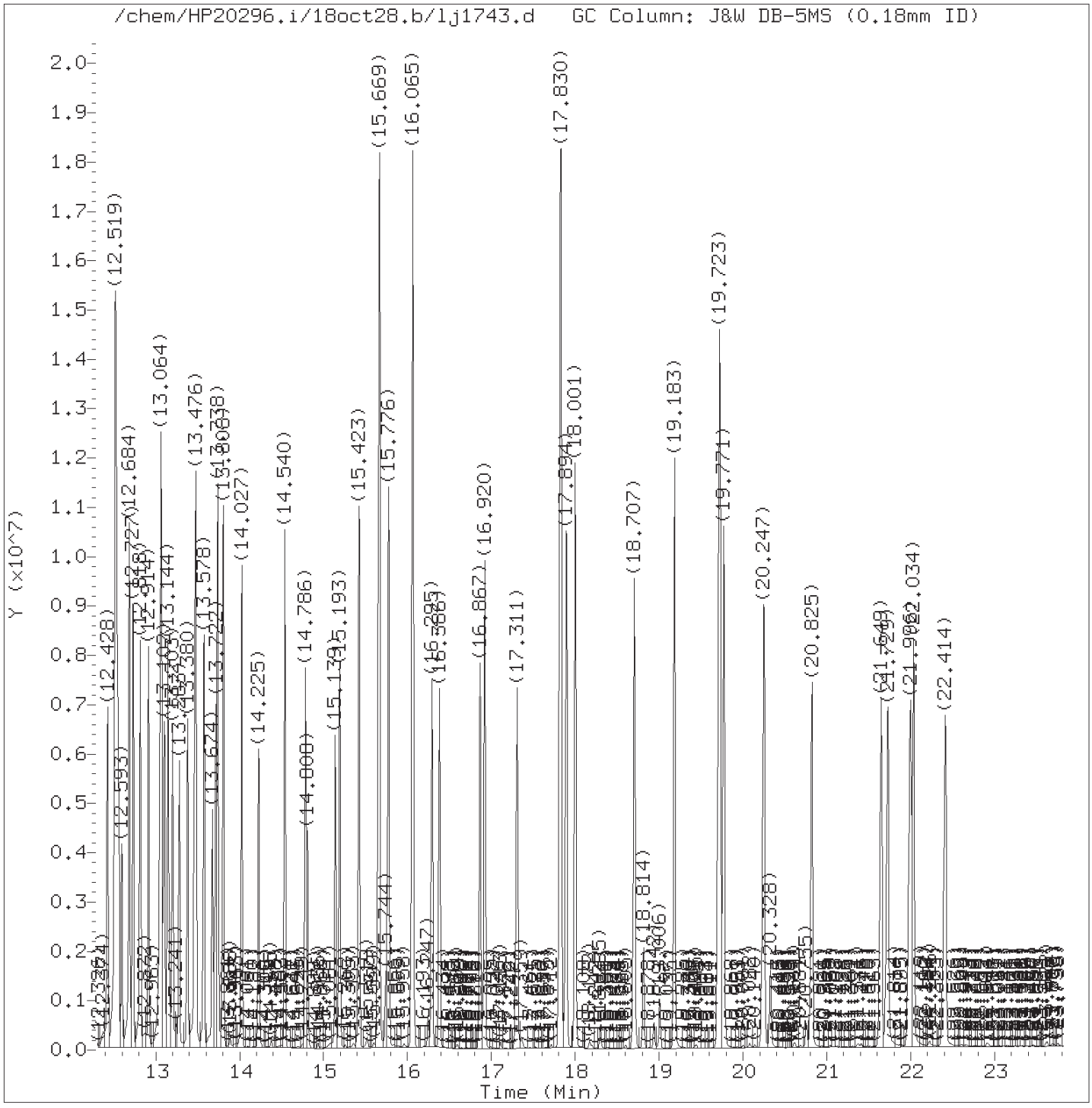
Target Revision 3.5

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

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 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

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 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

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-Nitrosopiperidine	(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 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

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.
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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/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

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.
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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/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

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.
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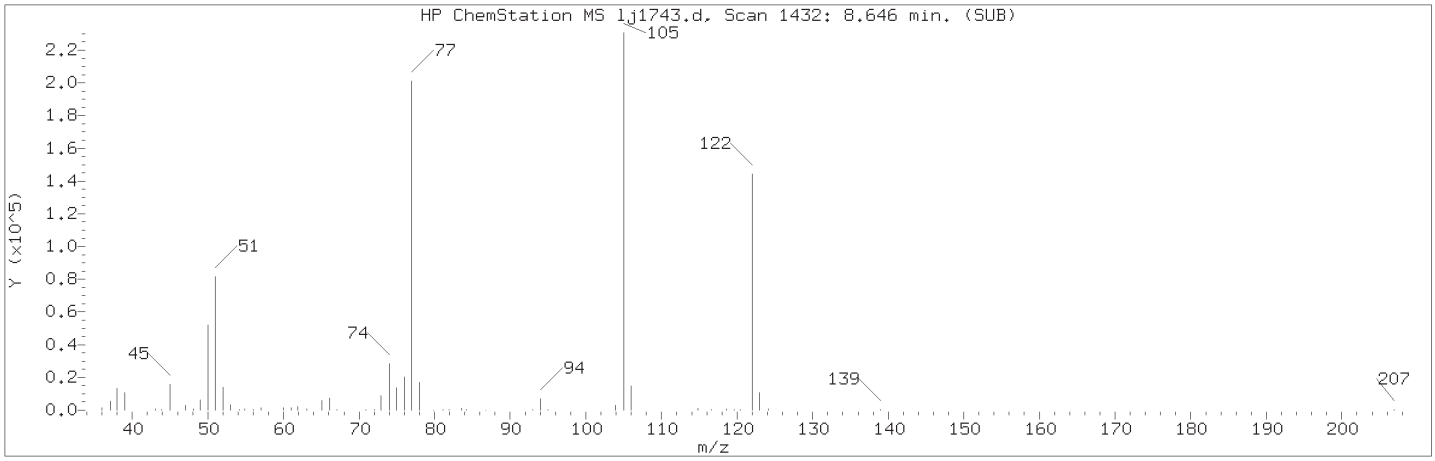
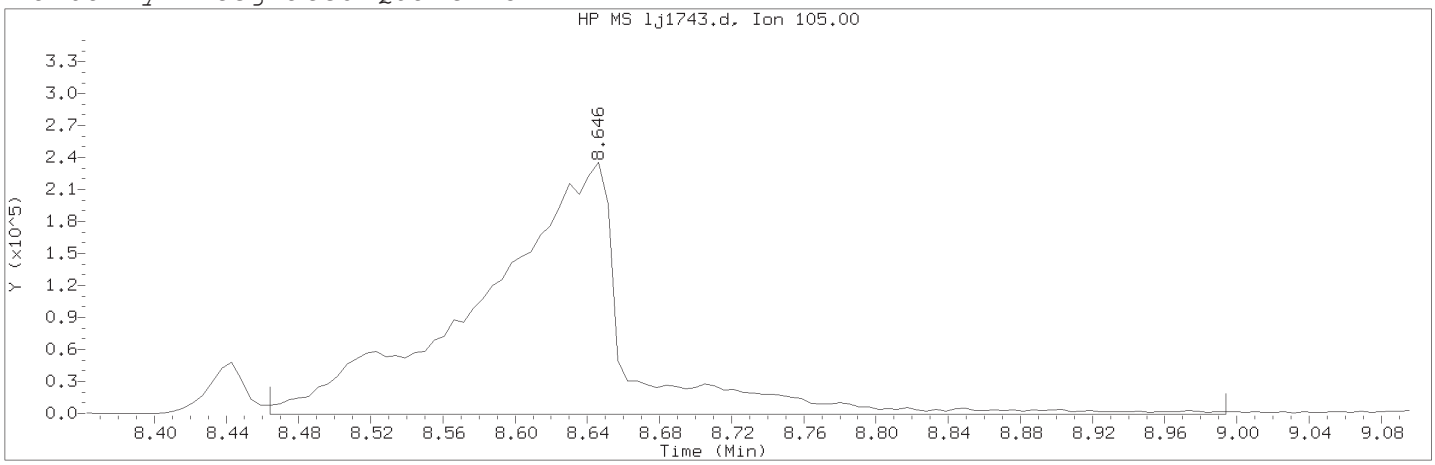
Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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

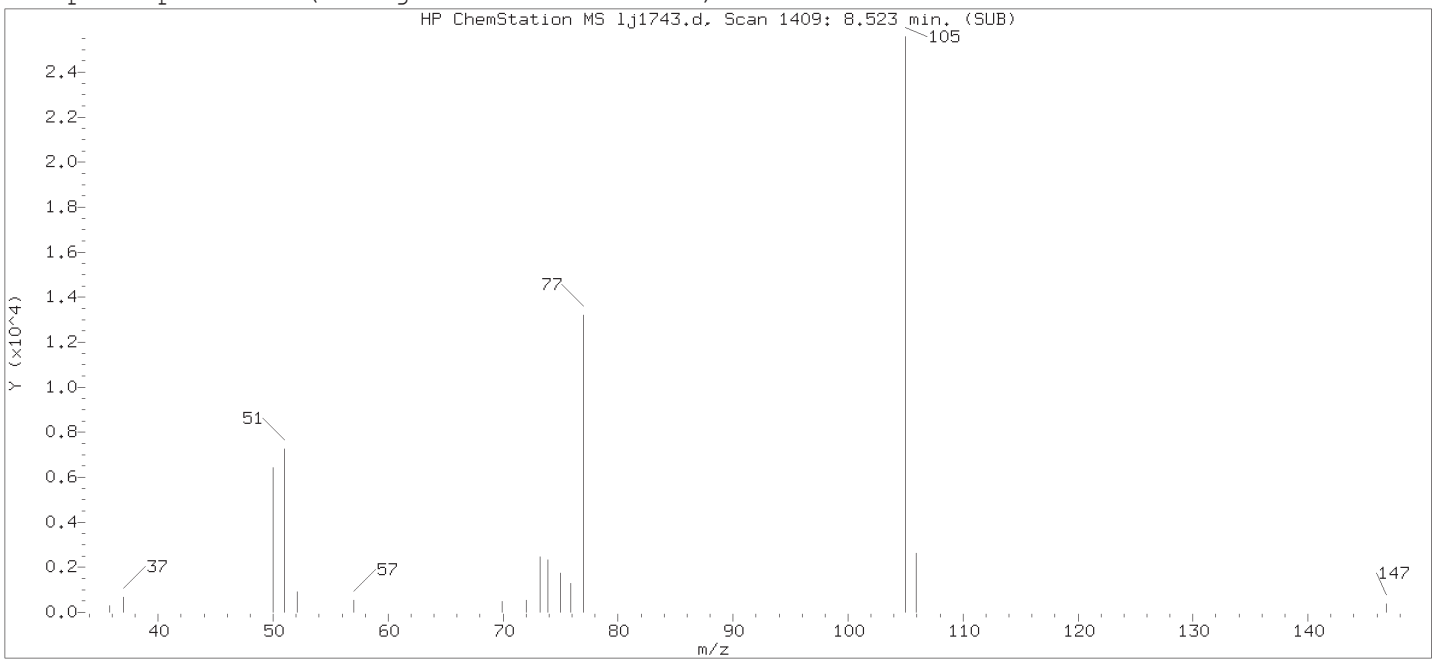
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1432		
Retention Time (minutes)	: 8.646		
Quant Ion	: 105.00		
Area (flag)	: 1336058M		
On-Column Amount (ng/ul)	: 31.5032		
Integration start scan	: 1397	Integration stop scan:	1496
Y at integration start	: -627	Y at integration end:	-627

Reason for manual integration: improper integration

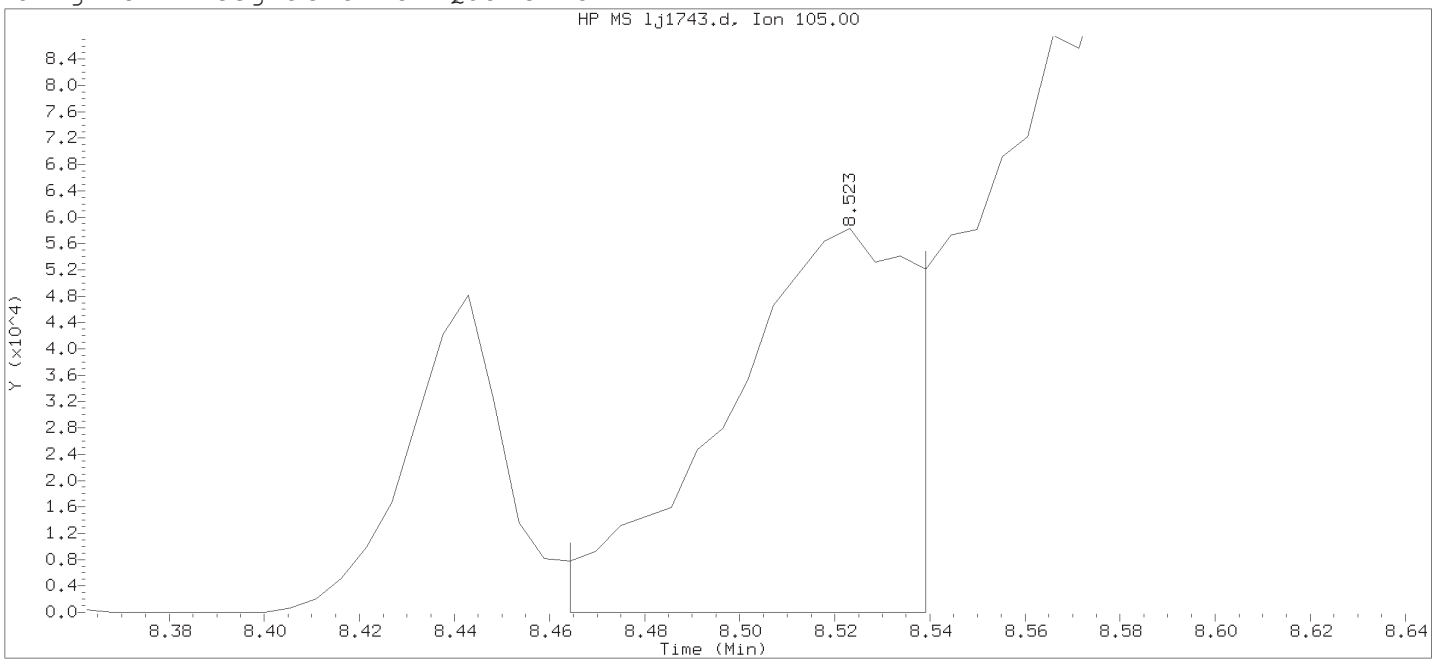
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

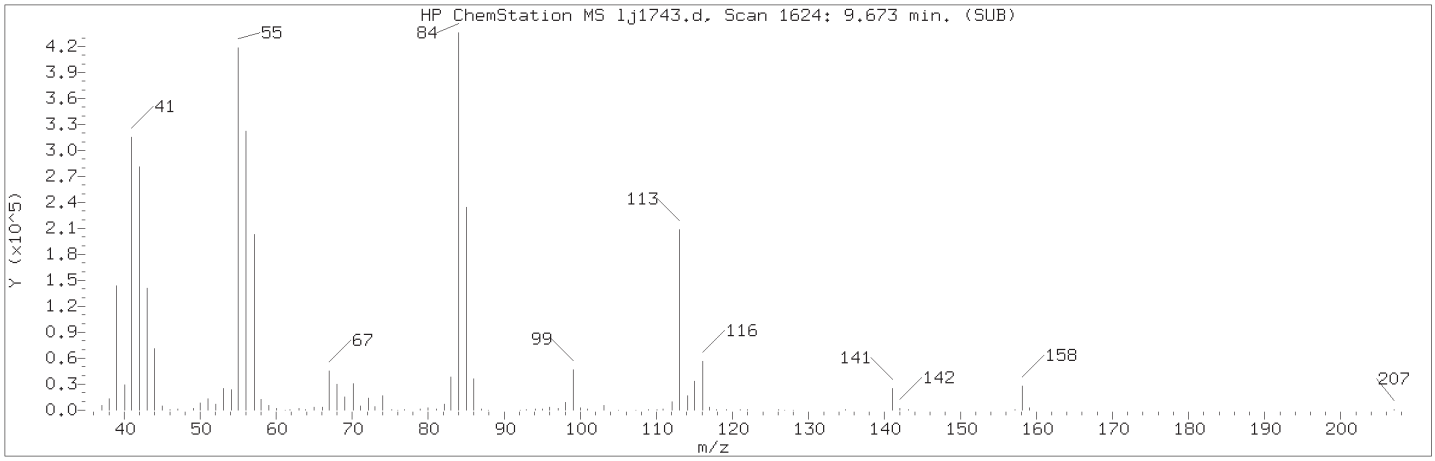
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

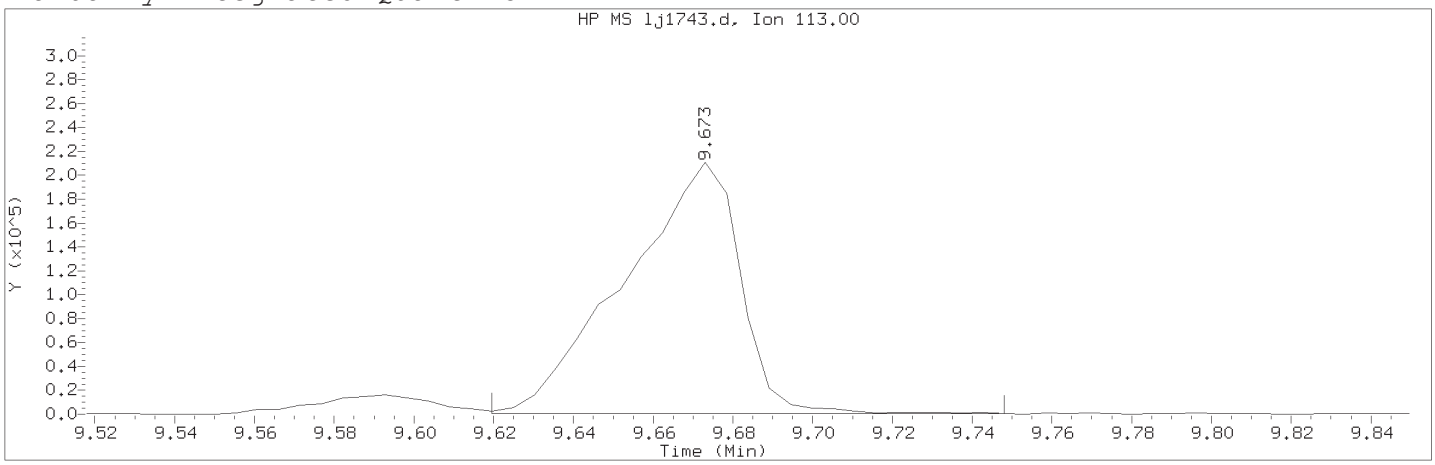
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1409		
Retention Time (minutes)	: 8.523		
Quant Ion	: 105.00		
Area	: 157495		
On-column Amount (ng/ul)	: 5.0013		
Integration start scan	: 1397	Integration stop scan:	1411
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature used for this file.

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

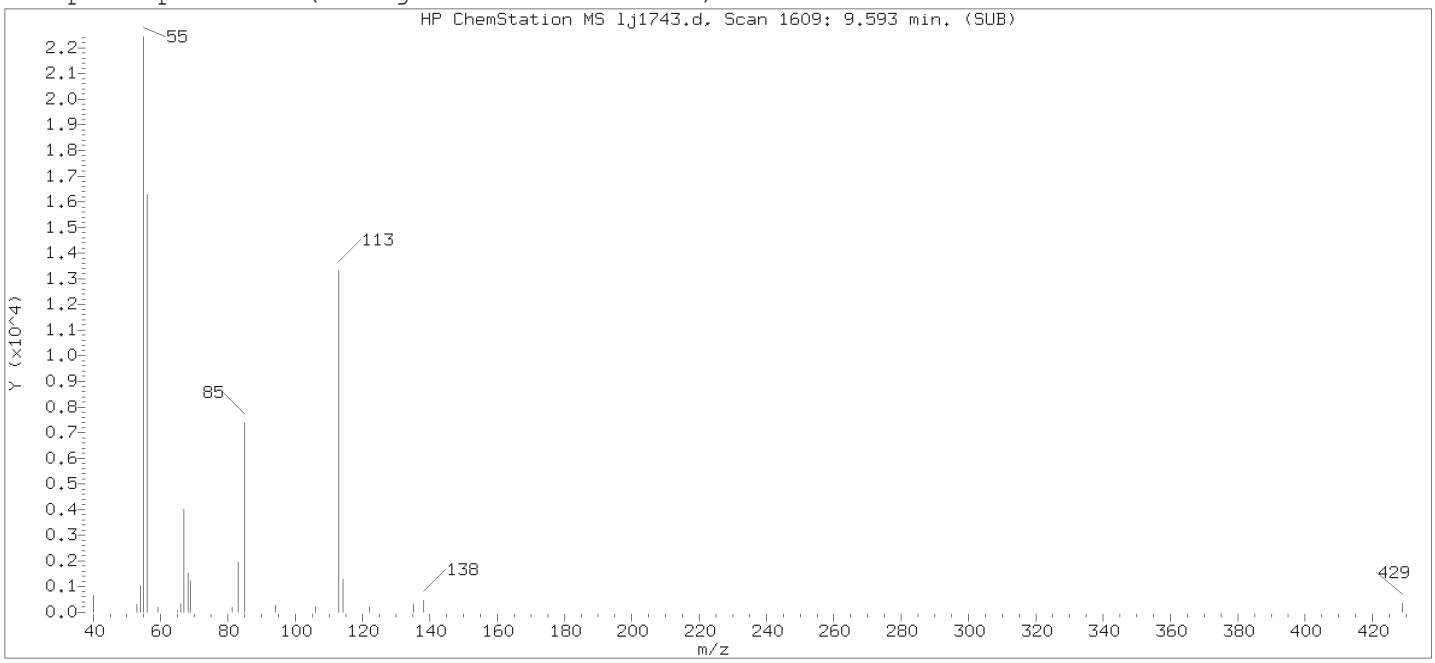
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1624		
Retention Time (minutes)	: 9.673		
Quant Ion	: 113.00		
Area (flag)	: 417472M		
On-Column Amount (ng/ul)	: 29.7638		
Integration start scan	: 1613	Integration stop scan:	1637
Y at integration start	: 712	Y at integration end:	712

Reason for manual integration: improper integration

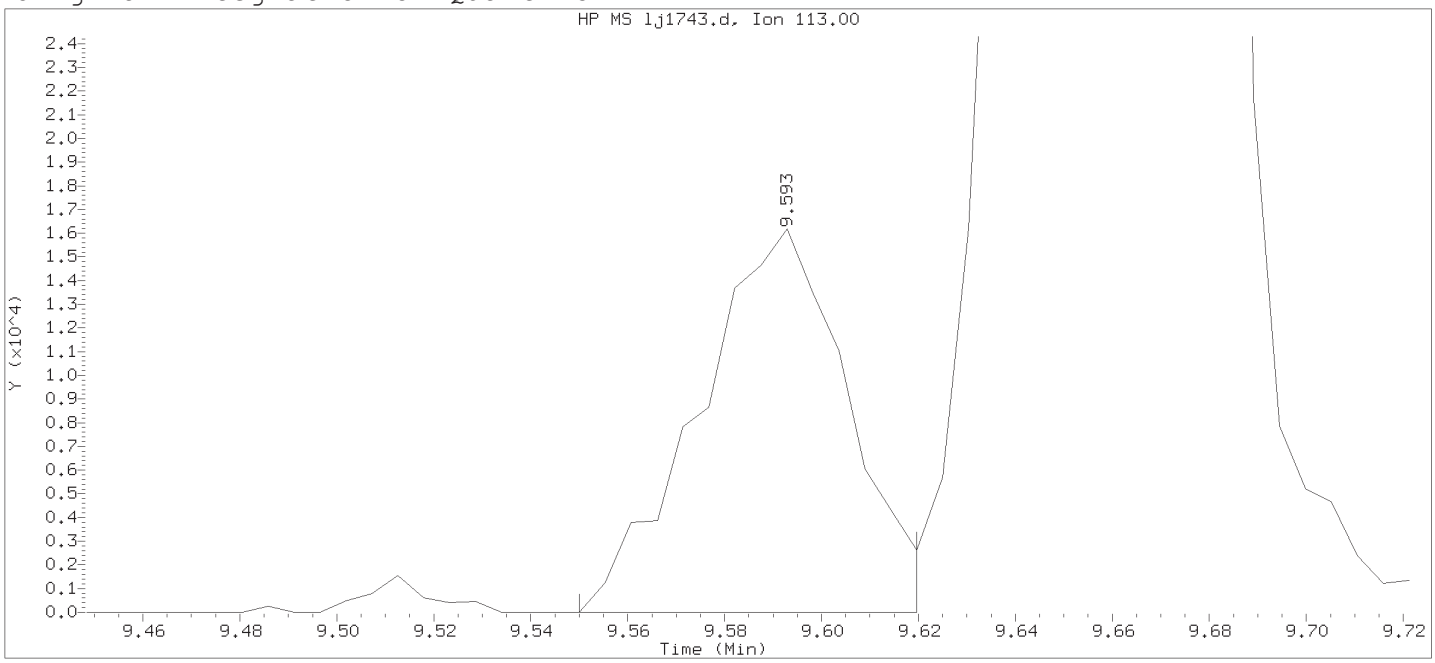
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

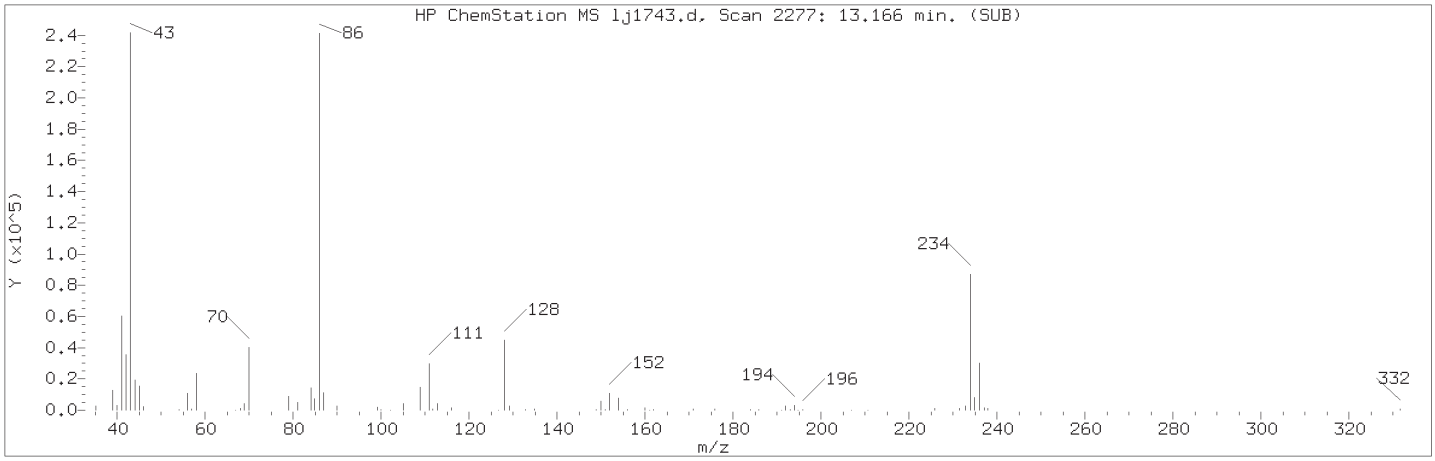
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

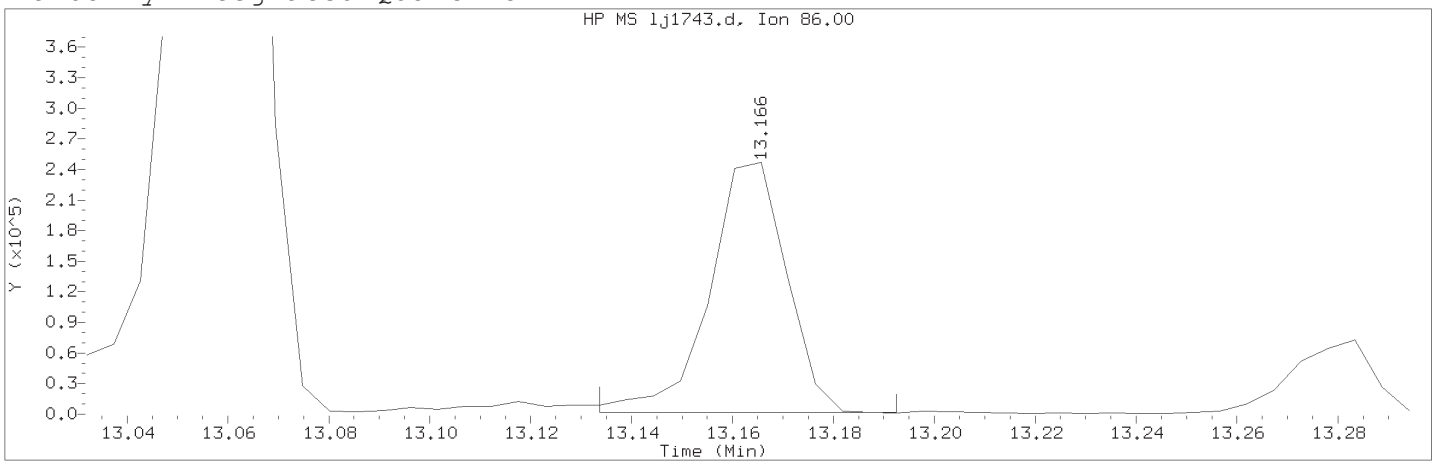
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1609		
Retention Time (minutes)	: 9.593		
Quant Ion	: 113.00		
Area	: 34053		
On-column Amount (ng/ul)	: 2.8772		
Integration start scan	: 1600	Integration stop scan:	1613
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: Ashley Transue

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

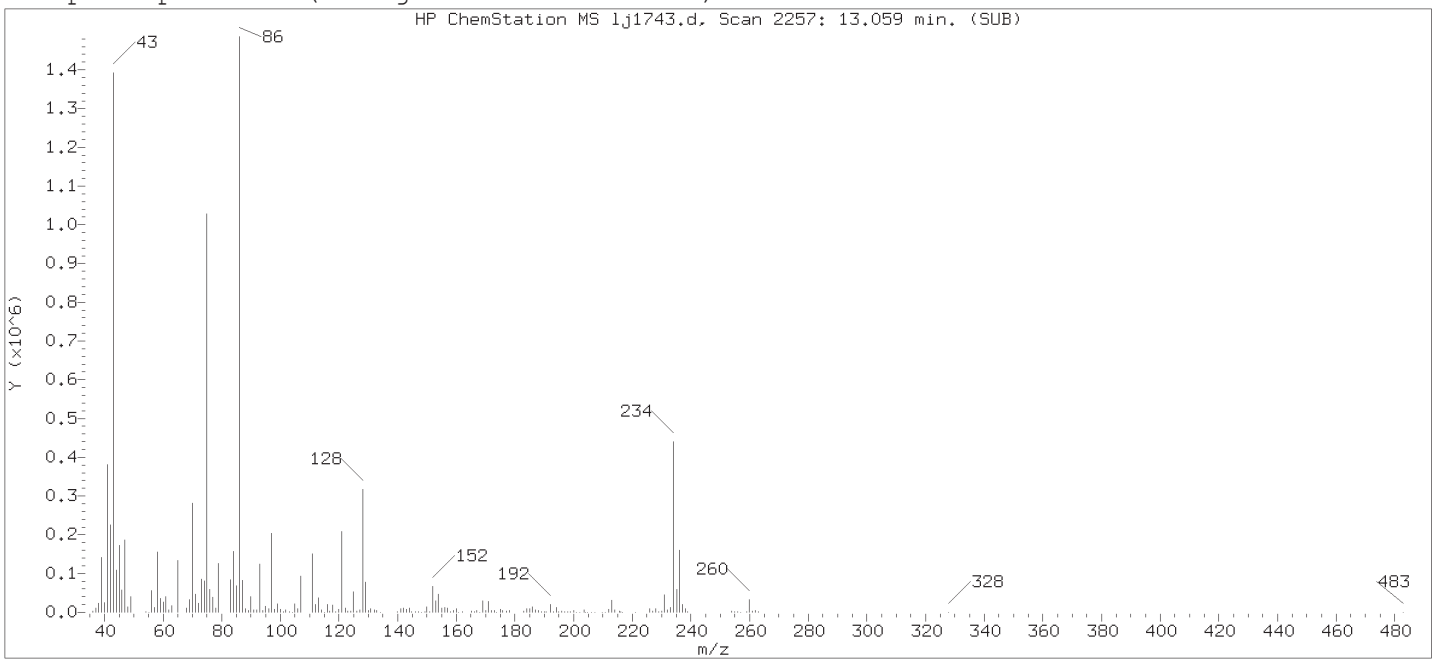
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2277		
Retention Time (minutes)	: 13.166		
Quant Ion	: 86.00		
Area (flag)	: 262250M		
On-Column Amount (ng/ul)	: 5.0113		
Integration start scan	: 2270	Integration stop scan:	2281
Y at integration start	: 1580	Y at integration end:	1580

Reason for manual integration: improper integration

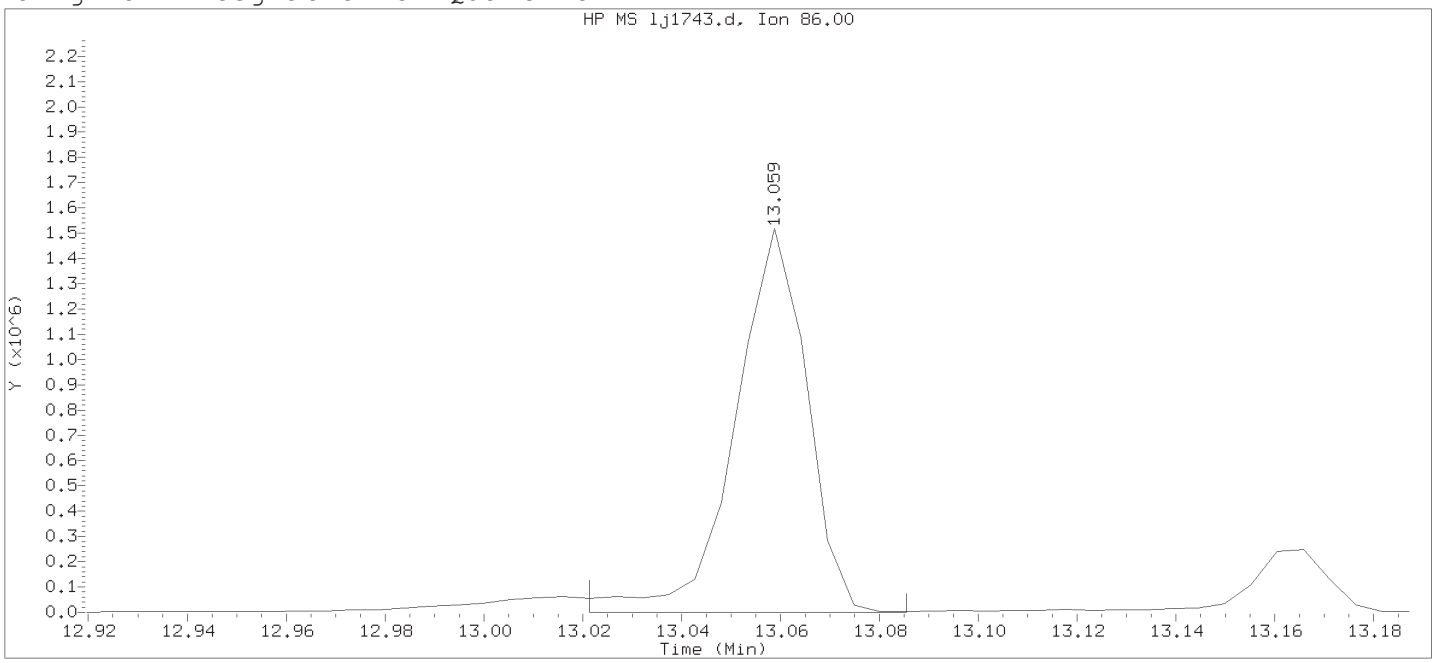
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

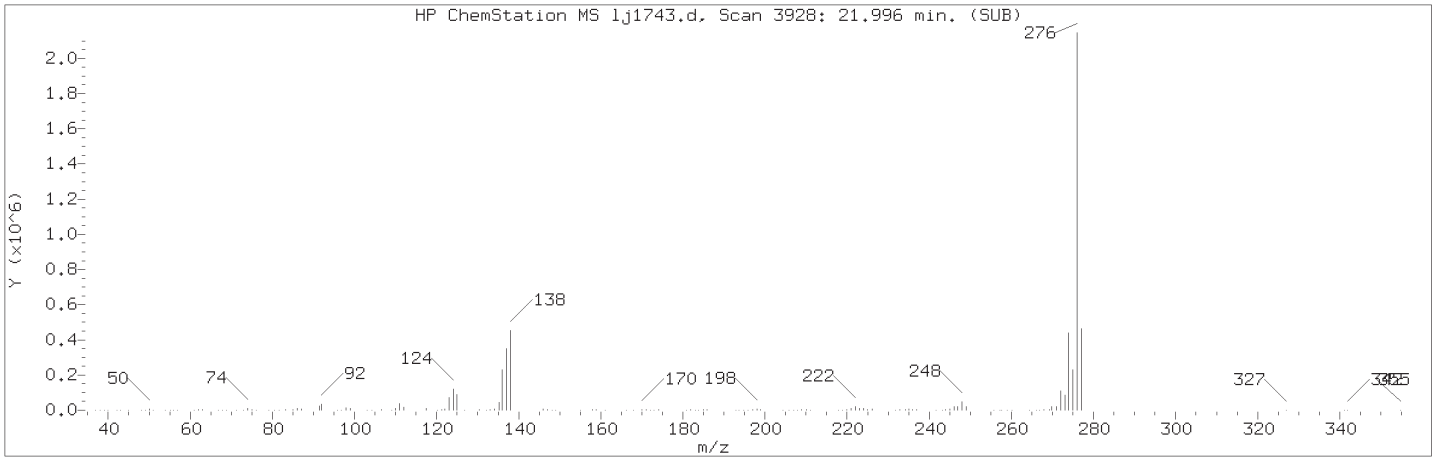
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

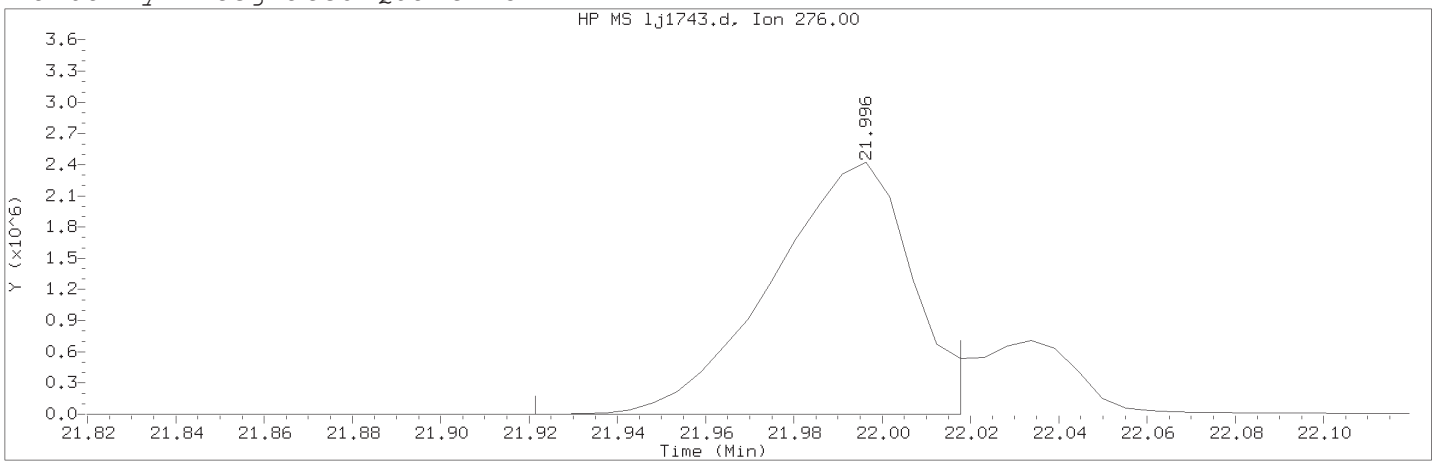
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2257		
Retention Time (minutes)	: 13.059		
Quant Ion	: 86.00		
Area	: 1530356		
On-column Amount (ng/ul)	: 16.4889		
Integration start scan	: 2249	Integration stop scan:	2261
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: 1051

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

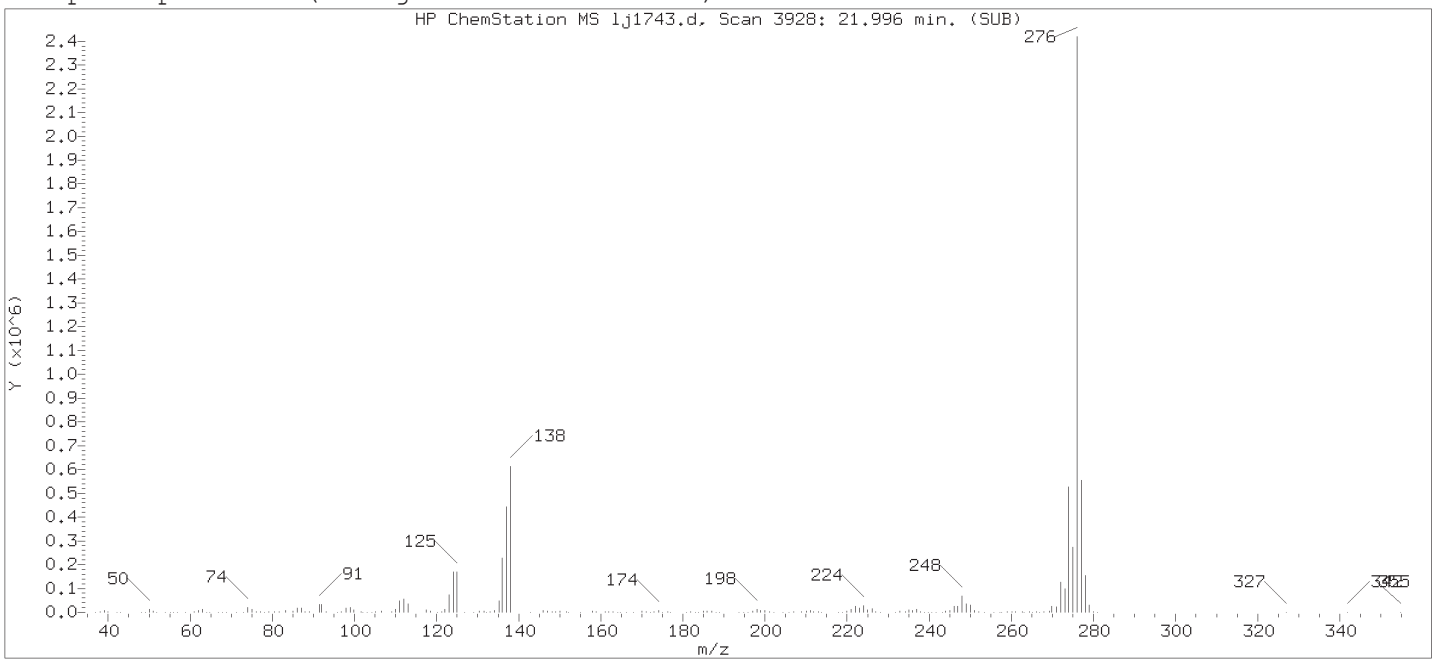
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3928		
Retention Time (minutes)	: 21.996		
Quant Ion	: 276.00		
Area (flag)	: 5340507M		
On-Column Amount (ng/ul)	: 32.8504		
Integration start scan	: 3913	Integration stop scan:	3931
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

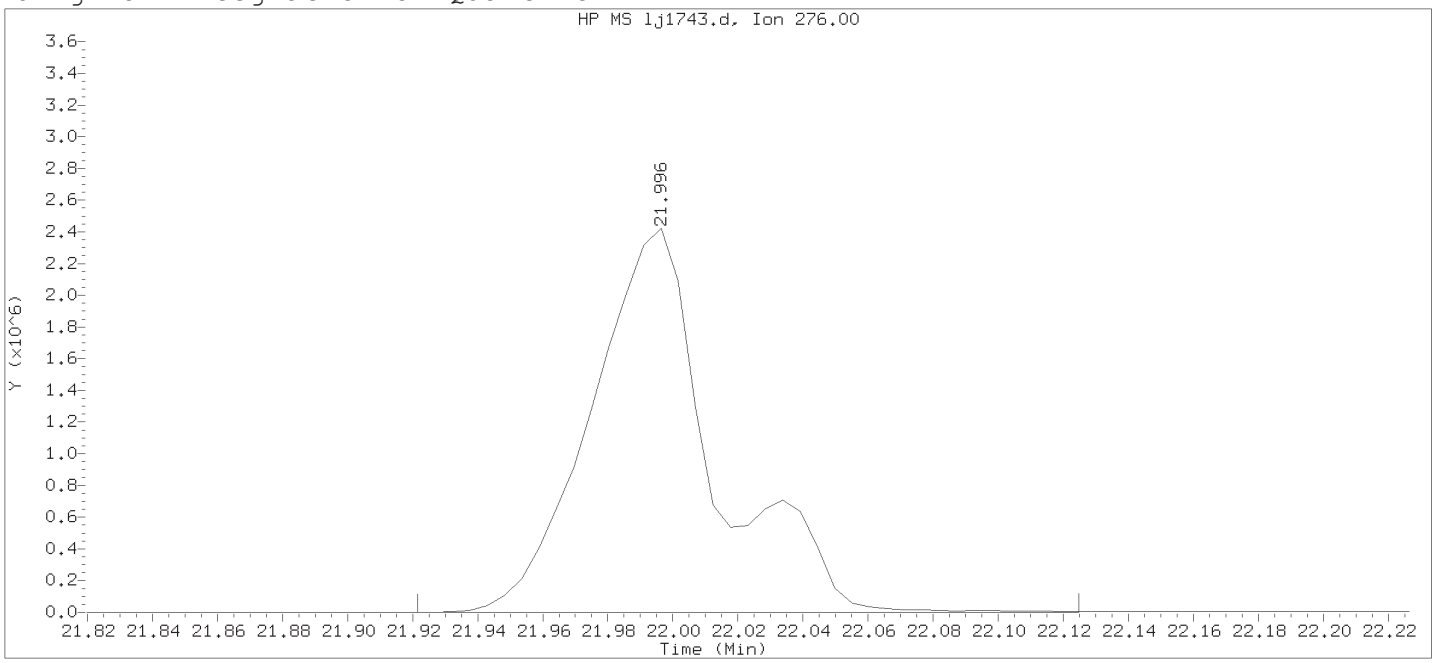
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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



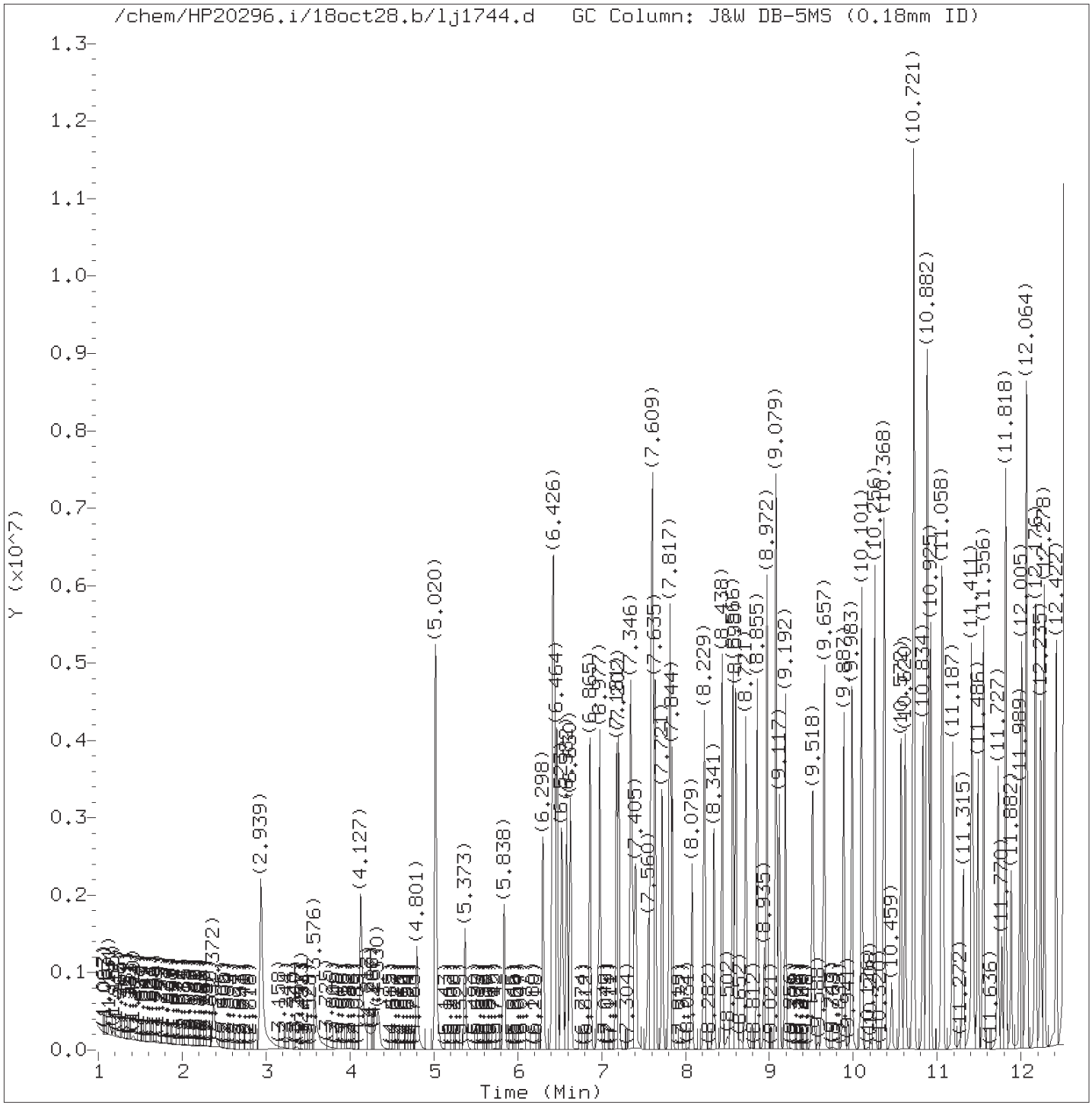
Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

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

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: Ashley Transue



Total Ion Chromatogram (TIC)

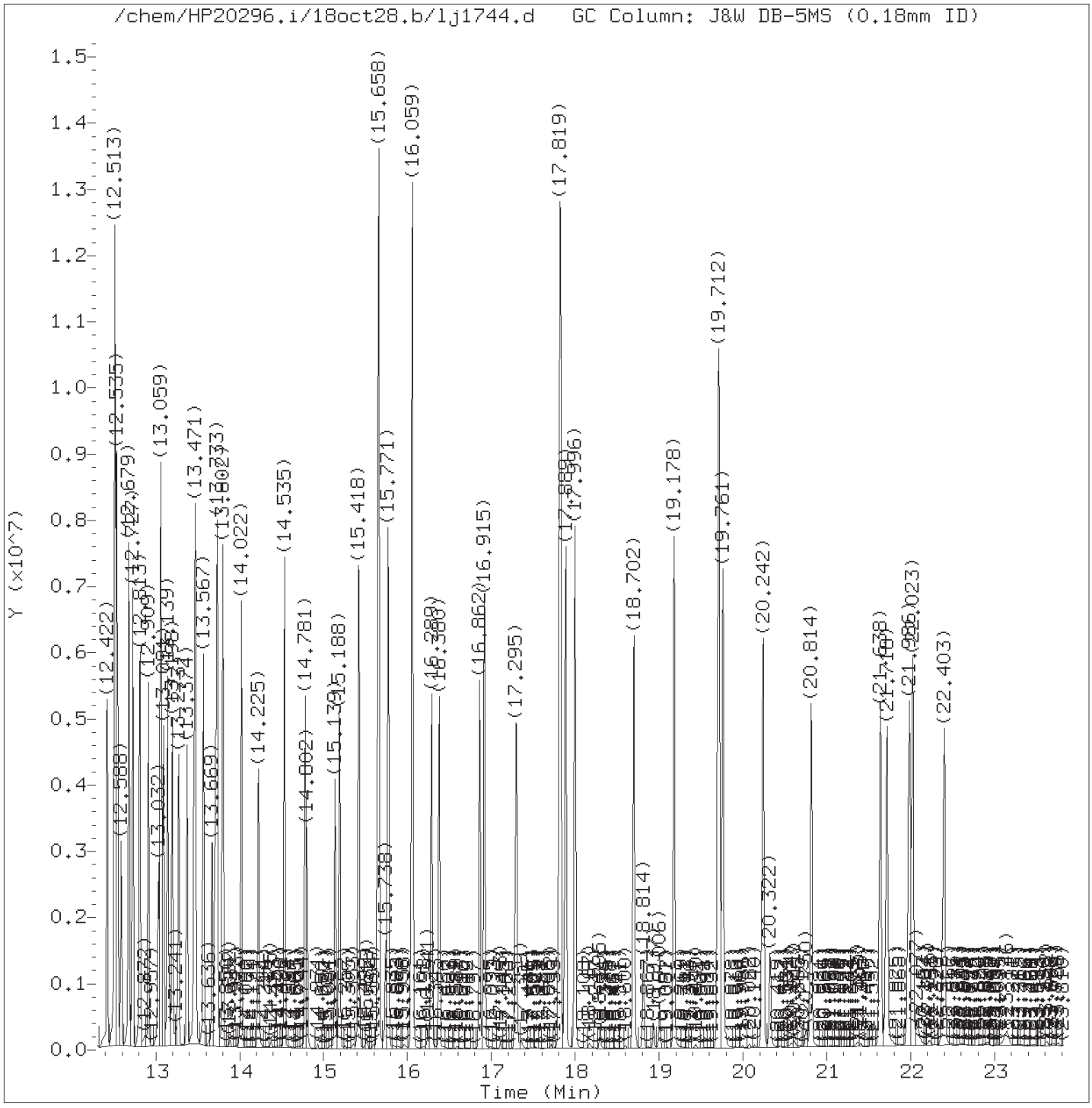
Target Revision 3.5

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

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 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

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 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

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.
* = 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/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

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

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/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

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.
* = 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/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

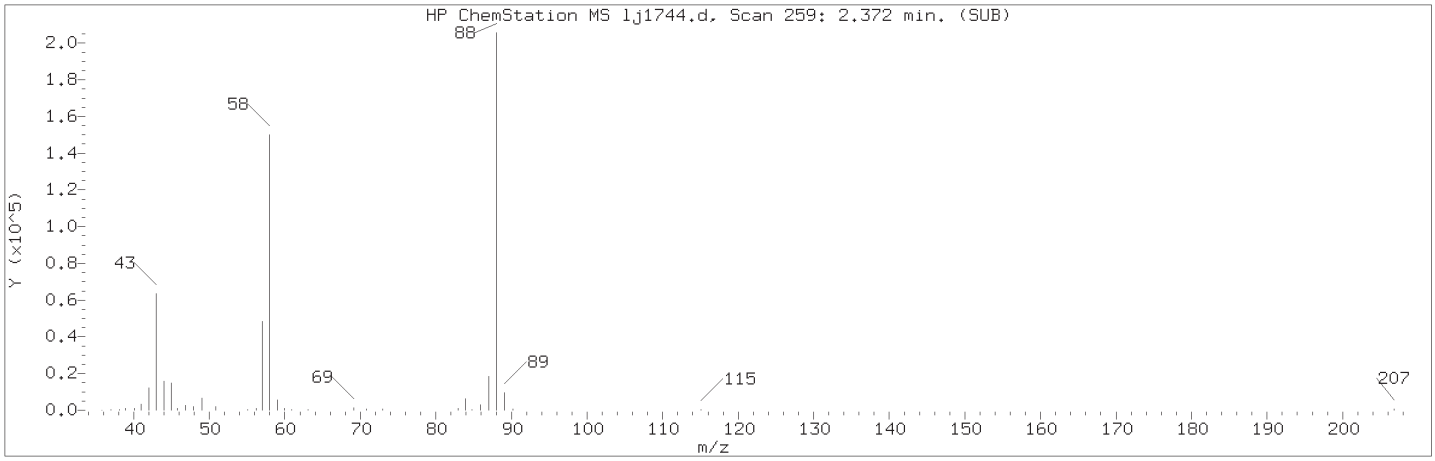
Sample Name: SSTD20 Lab Sample ID: RVSTD2648

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

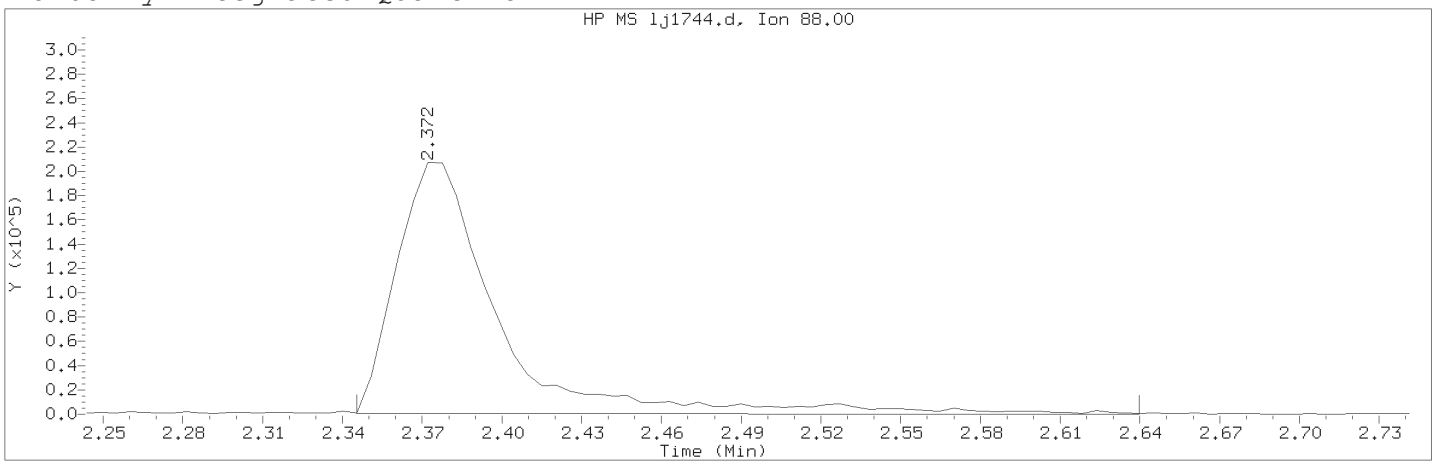
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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

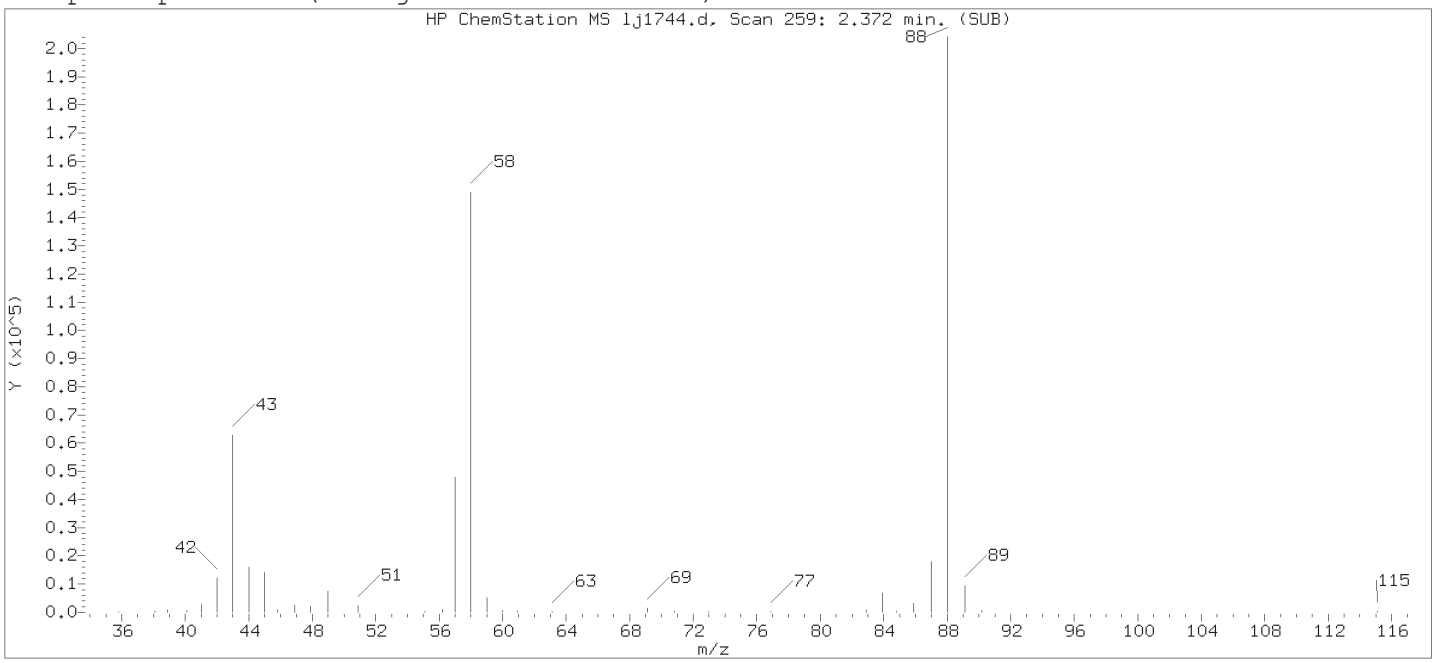
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 259		
Retention Time (minutes)	: 2.372		
Quant Ion	: 88.00		
Area (flag)	: 548473M		
On-Column Amount (ng/ul)	: 19.8866		
Integration start scan	: 253	Integration stop scan:	308
Y at integration start	: 323	Y at integration end:	138

Reason for manual integration: improper integration

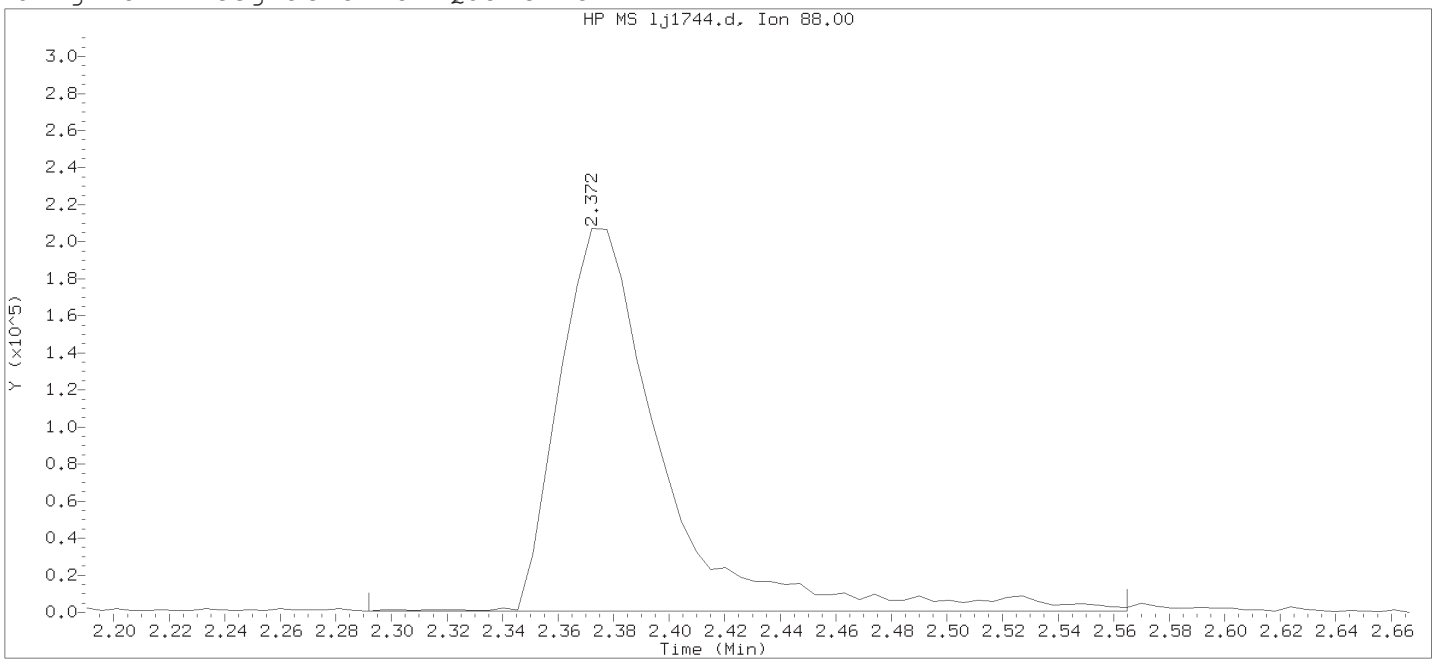
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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

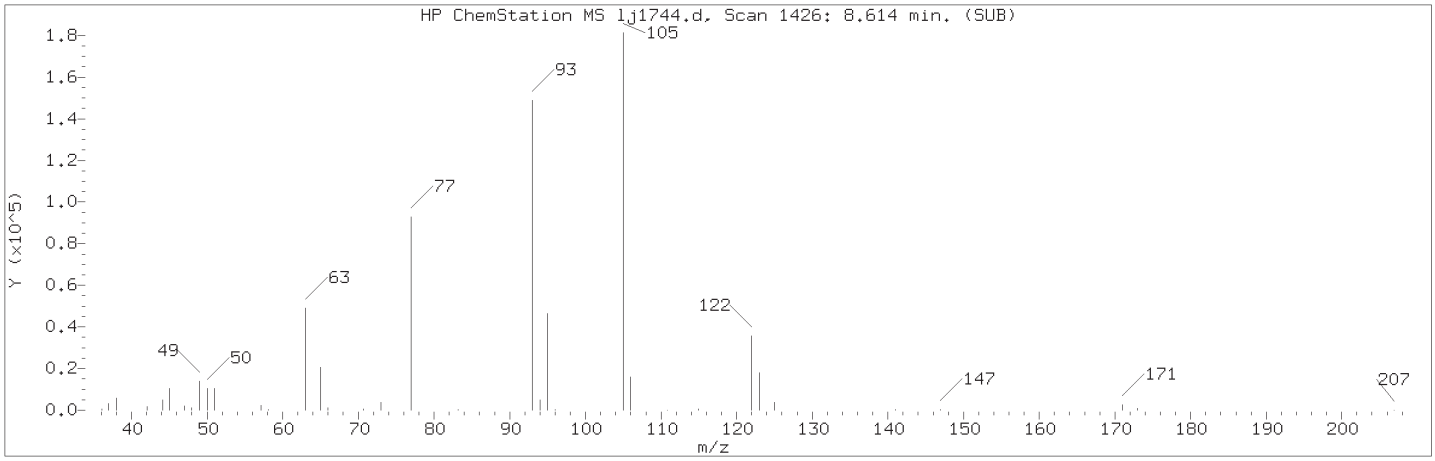
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

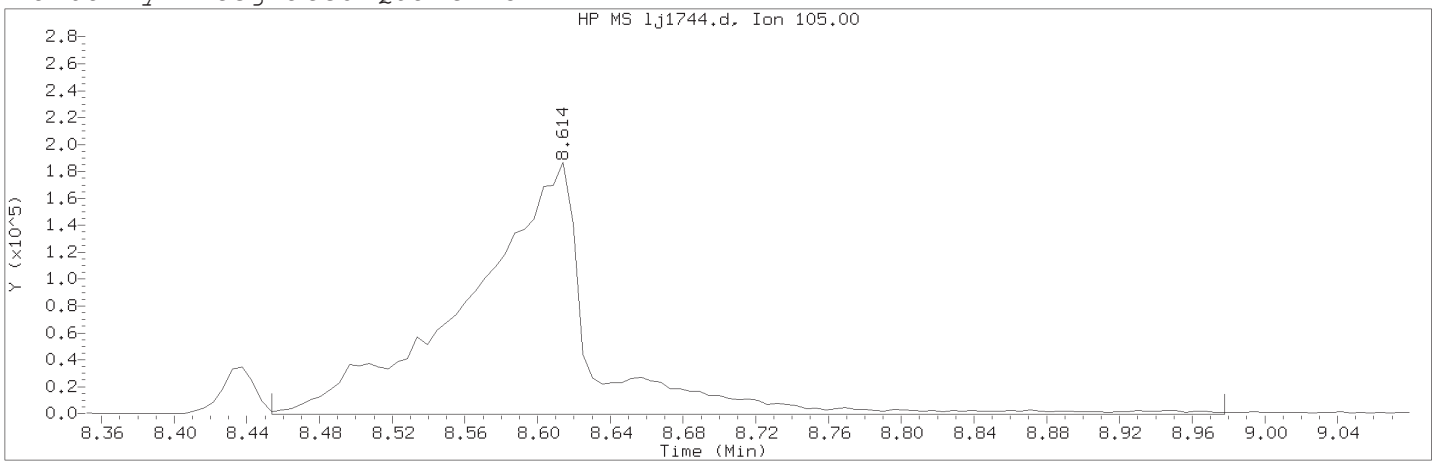
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 259		
Retention Time (minutes)	: 2.372		
Quant Ion	: 88.00		
Area	: 535077		
On-column Amount (ng/ul)	: 18.9031		
Integration start scan	: 243	Integration stop scan:	294
Y at integration start	: 727	Y at integration end:	727

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature used for this file.

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

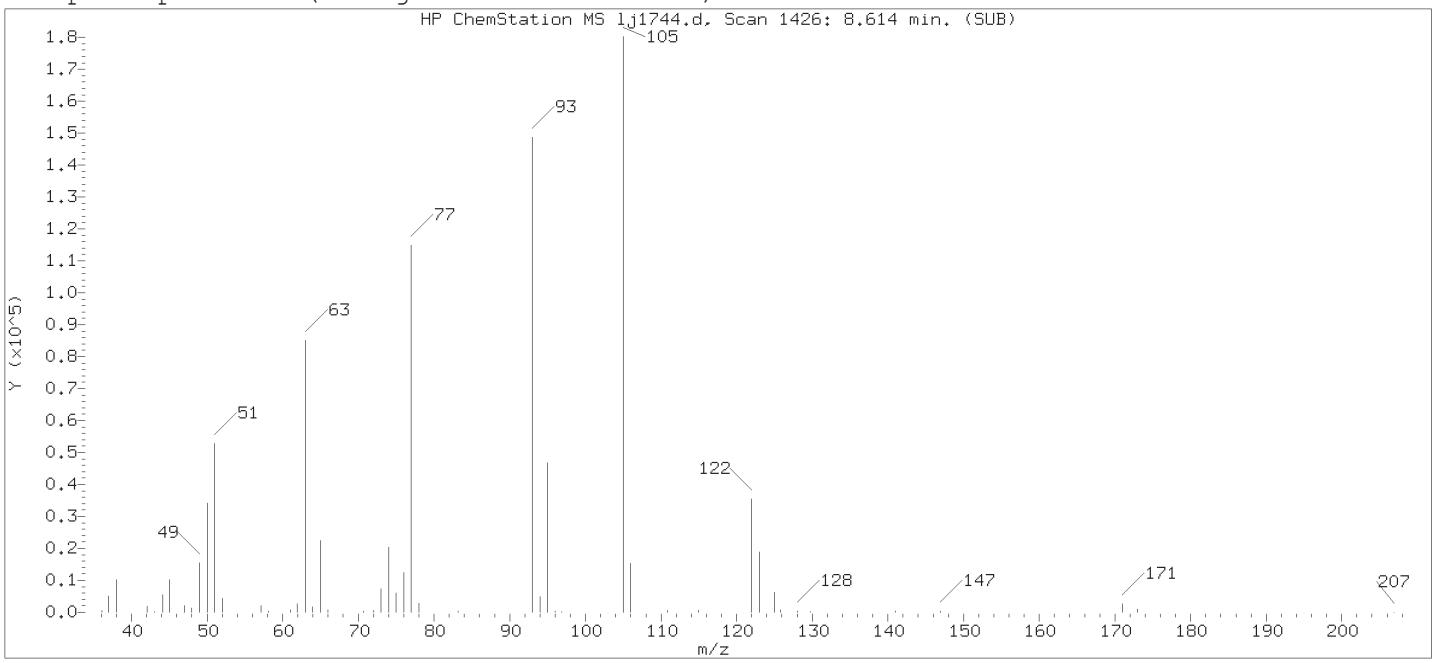
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1426		
Retention Time (minutes)	: 8.614		
Quant Ion	: 105.00		
Area (flag)	: 889205M		
On-Column Amount (ng/ul)	: 20.3999		
Integration start scan	: 1395	Integration stop scan:	1493
Y at integration start	: -376	Y at integration end:	-376

Reason for manual integration: improper integration

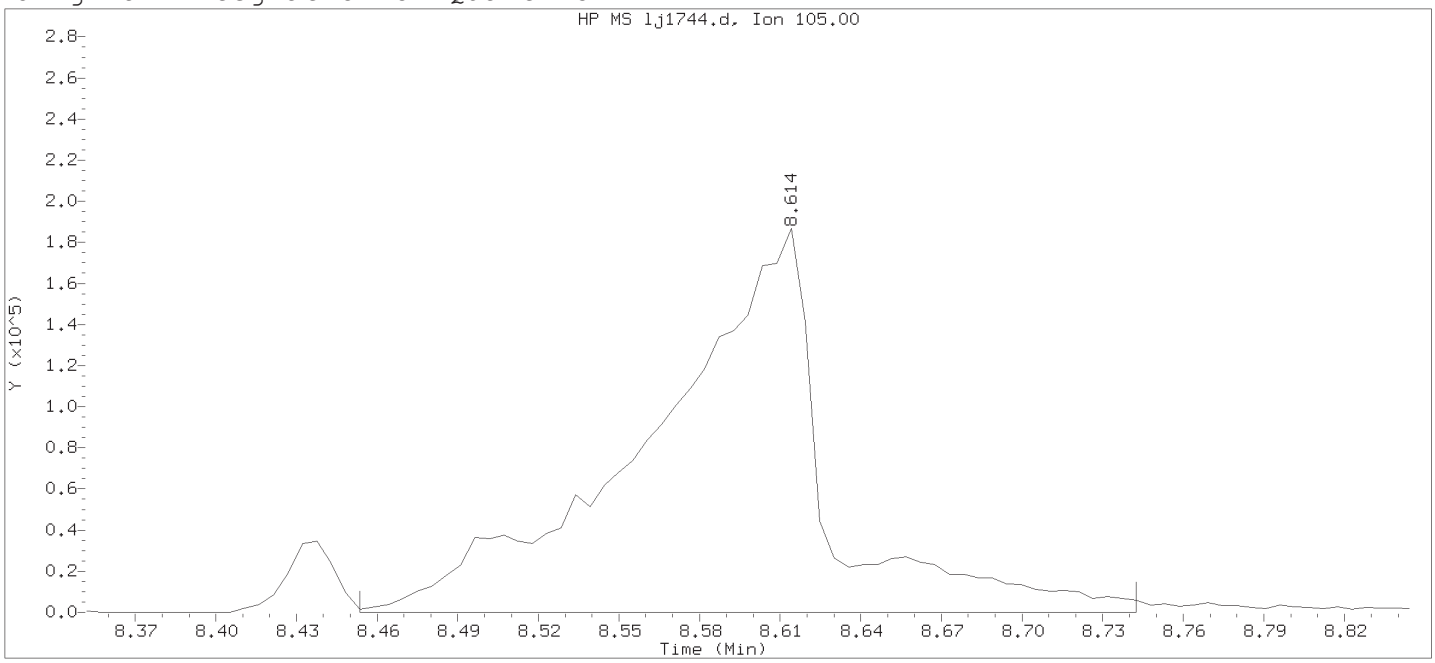
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 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	: 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

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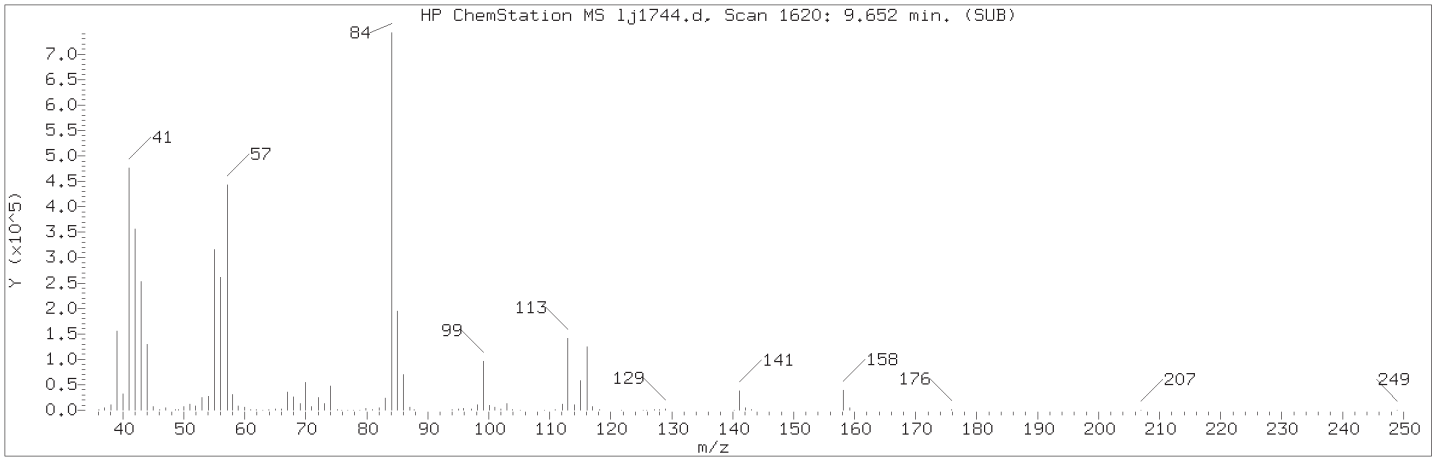
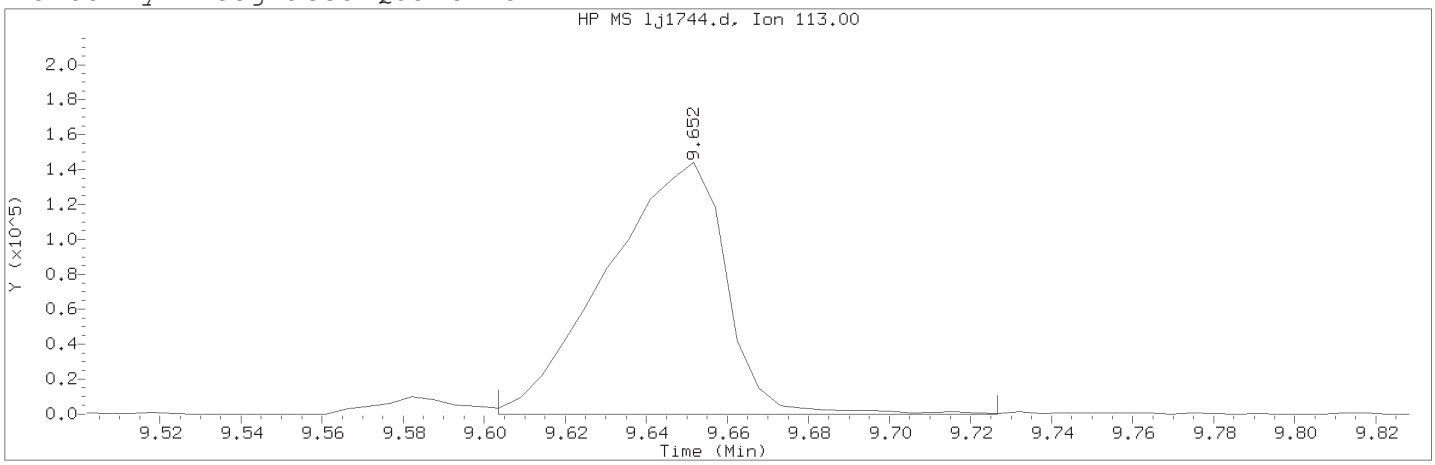
Target 3.5 esignature used 107. Page 1063 of 4595

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

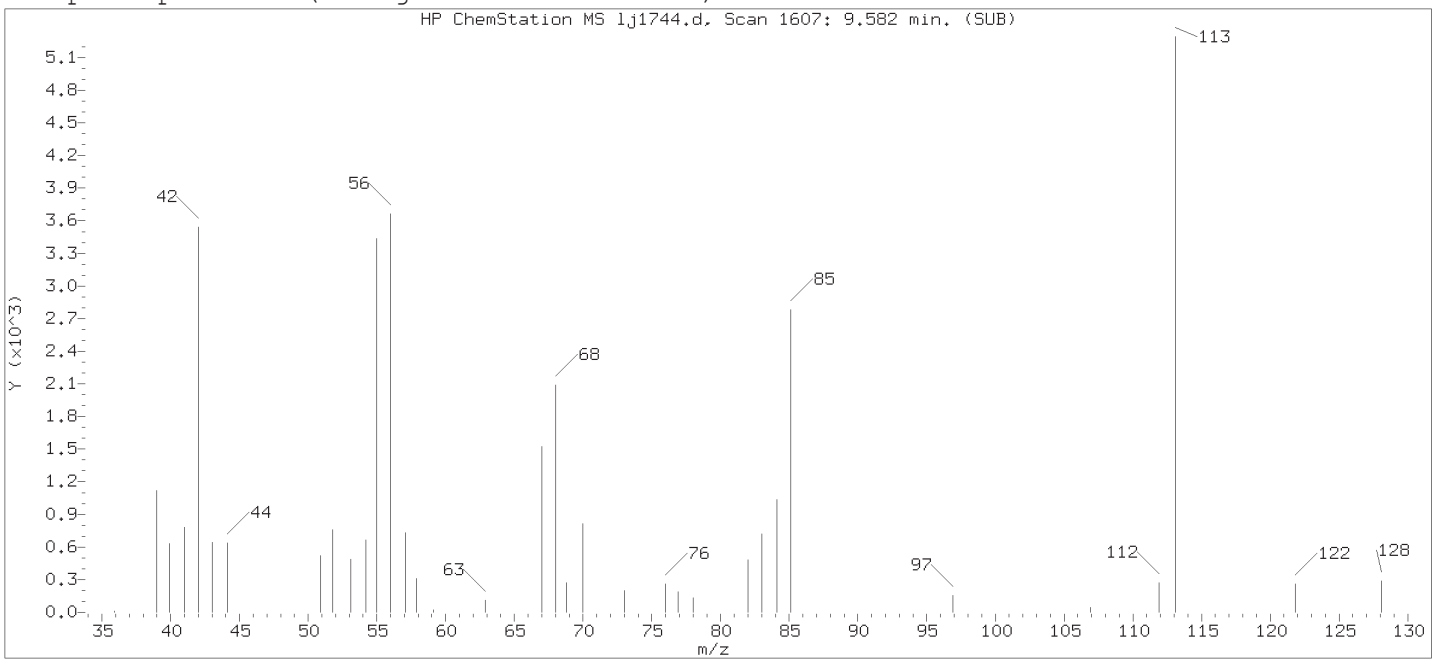
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1620
Retention Time (minutes) : 9.652
Quant Ion : 113.00
Area (flag) : 295113M
On-Column Amount (ng/ul) : 20.4470
Integration start scan : 1610 Integration stop scan: 1633
Y at integration start : -74 Y at integration end: -74

Reason for manual integration: improper integration

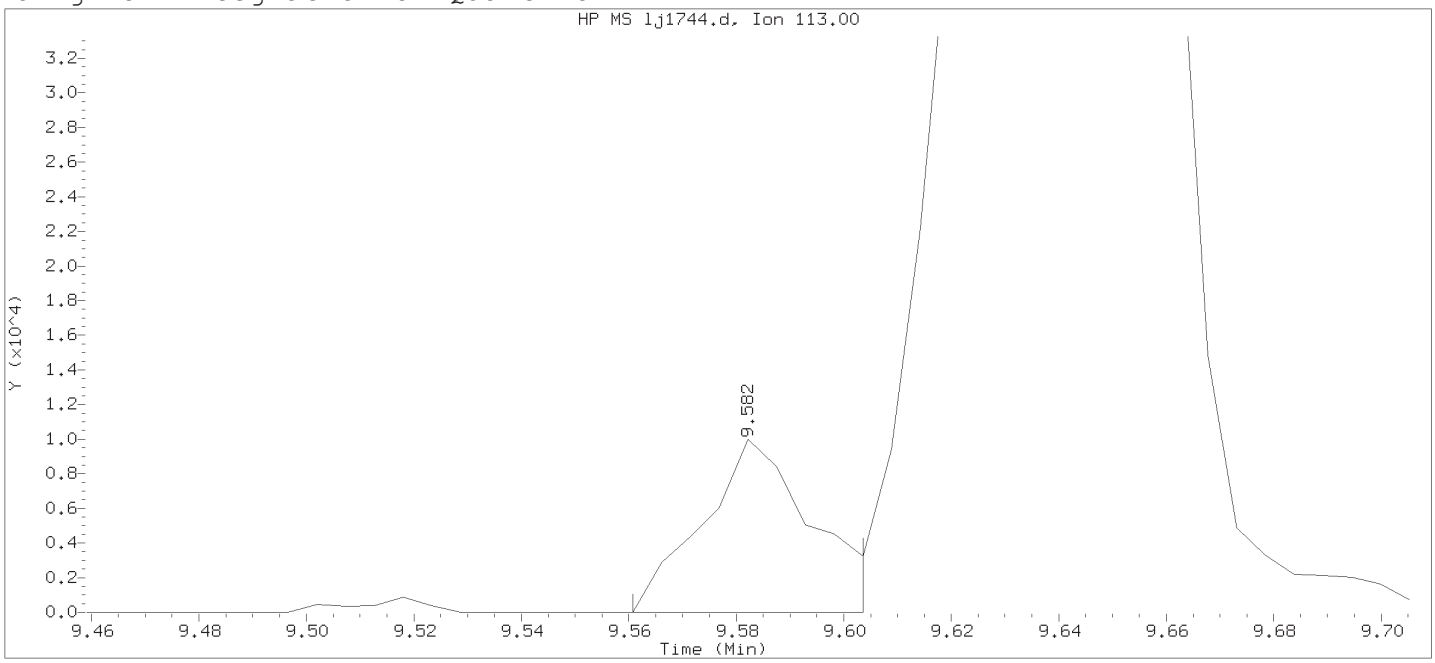
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 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	: 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

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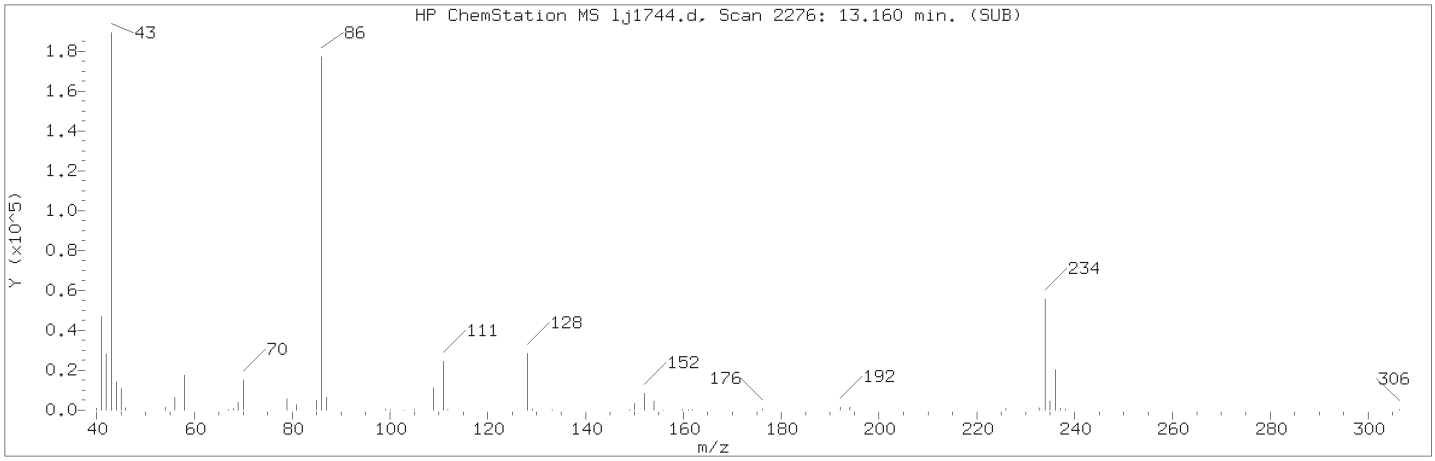
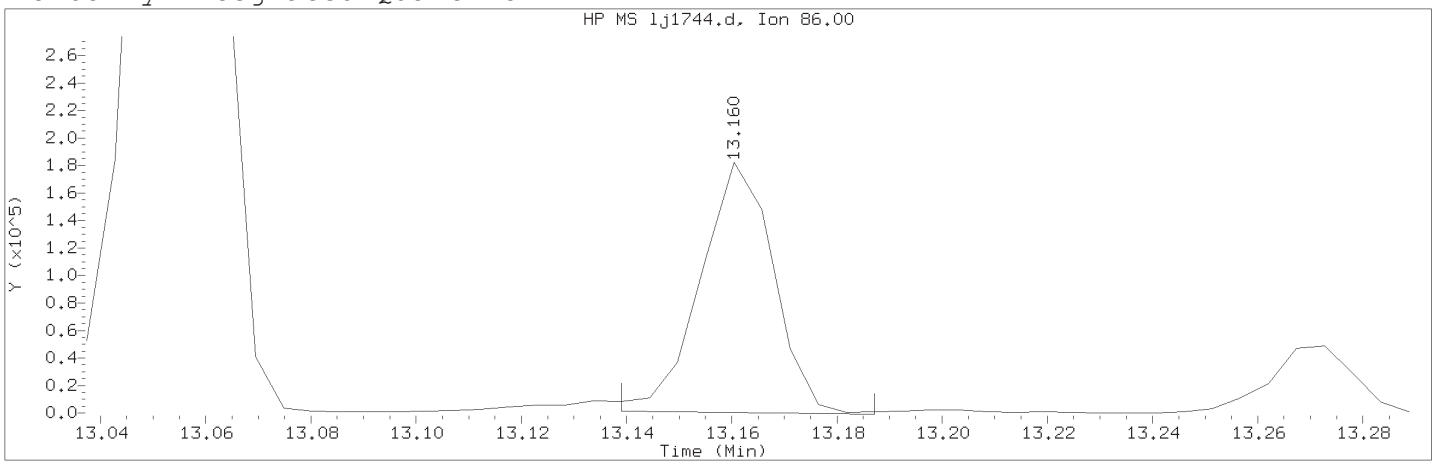
Target 3.5 esignature user ID: 7 Page 1065 of 4595

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

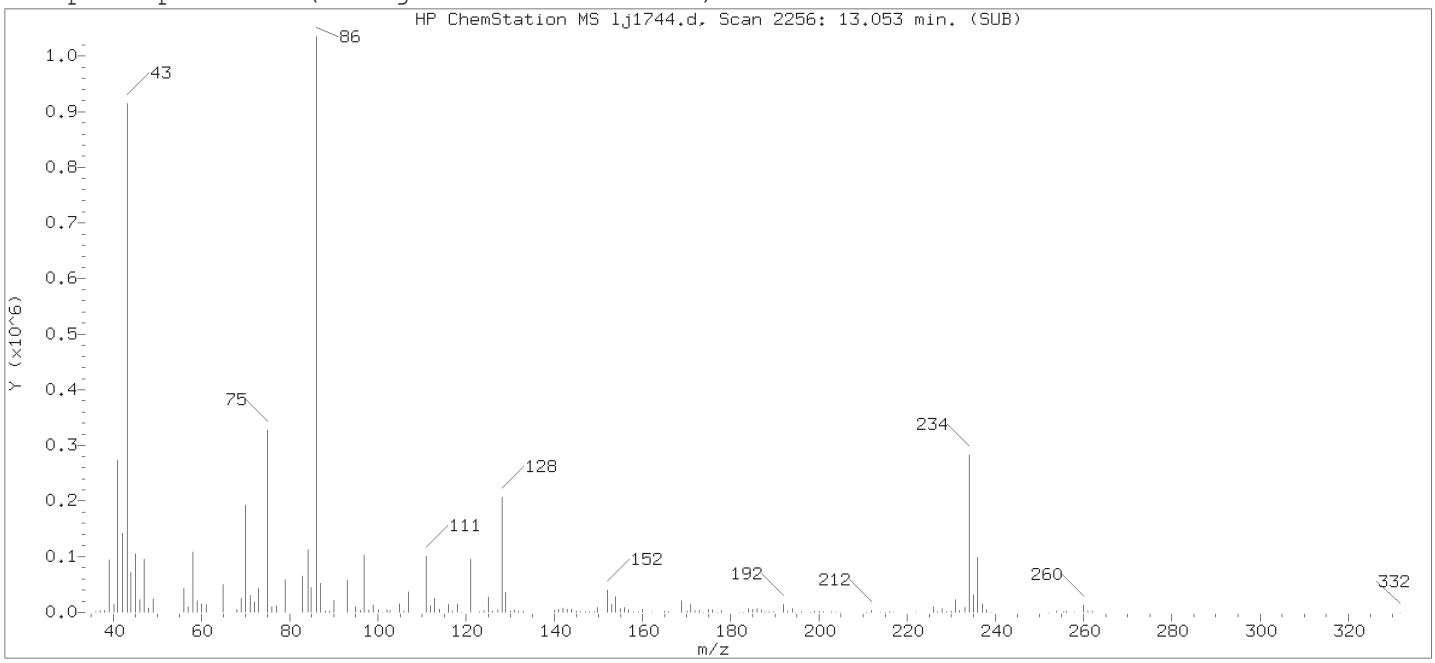
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2276
Retention Time (minutes) : 13.160
Quant Ion : 86.00
Area (flag) : 176901M
On-Column Amount (ng/ul) : 3.2902
Integration start scan : 2271 Integration stop scan: 2280
Y at integration start : 1232 Y at integration end: -821

Reason for manual integration: improper integration

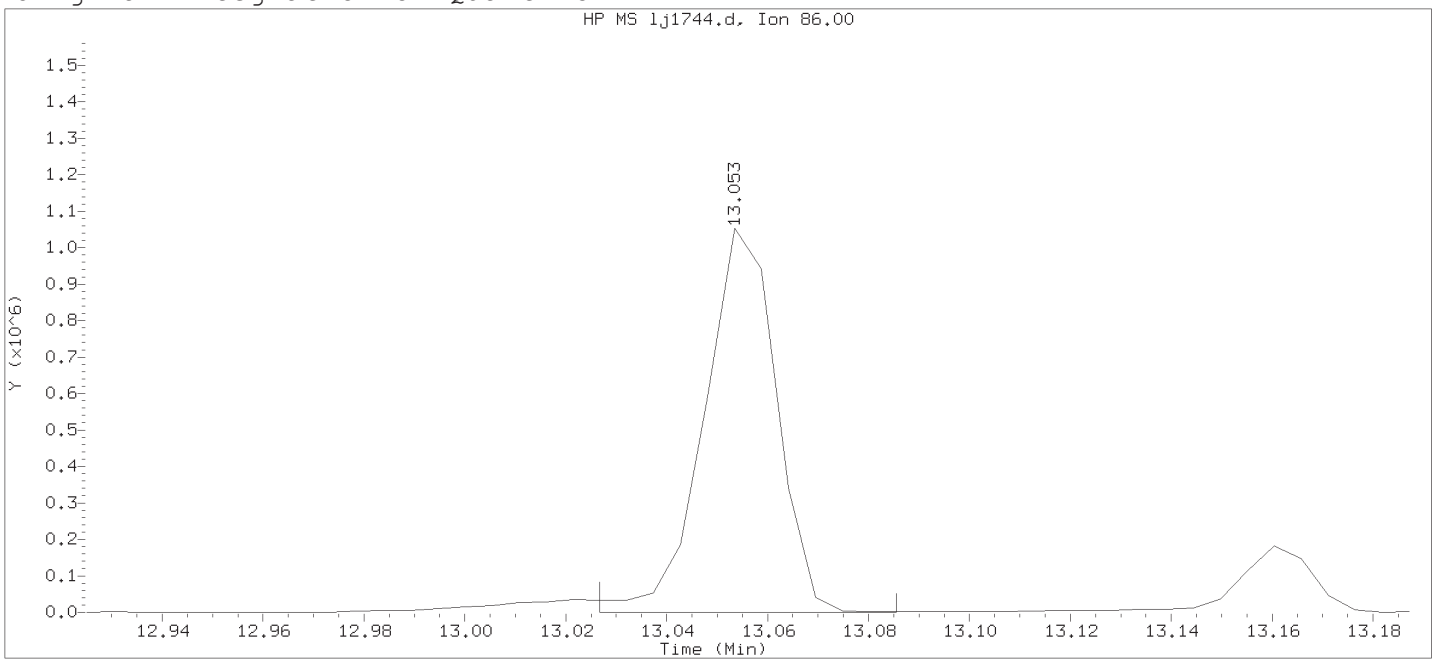
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

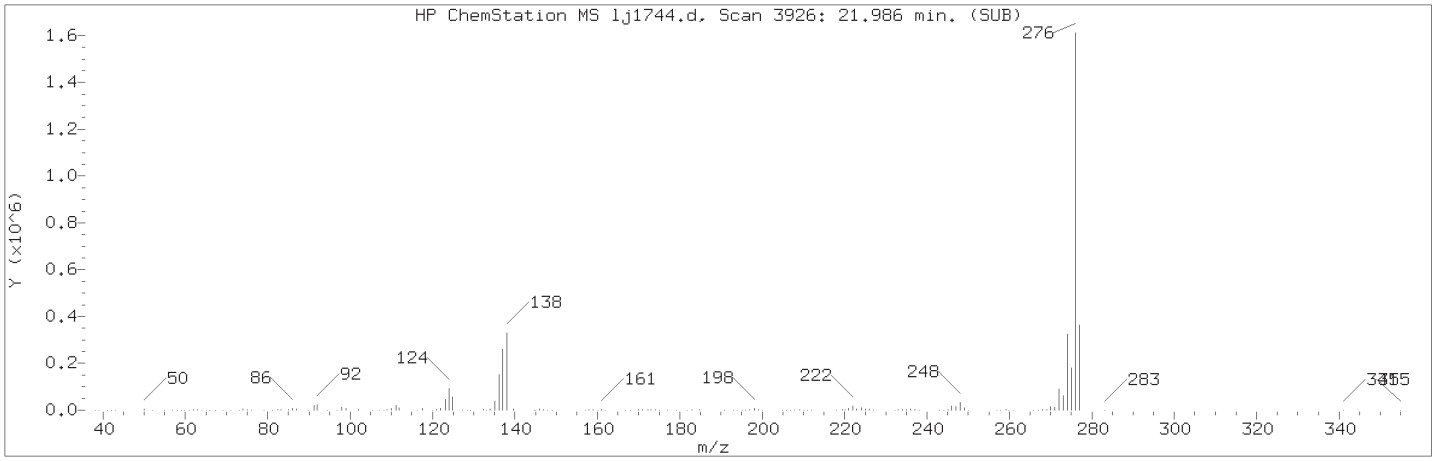
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

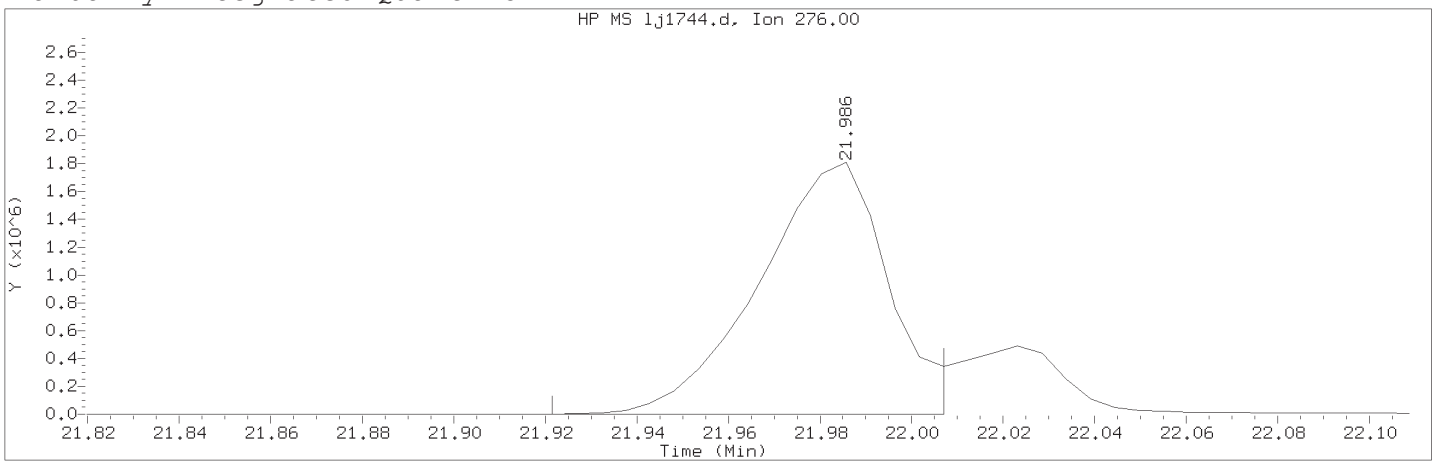
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2256		
Retention Time (minutes)	: 13.053		
Quant Ion	: 86.00		
Area	: 1047189		
On-column Amount (ng/ul)	: 7.5001		
Integration start scan	: 2250	Integration stop scan:	2261
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature used 10/29/2018

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

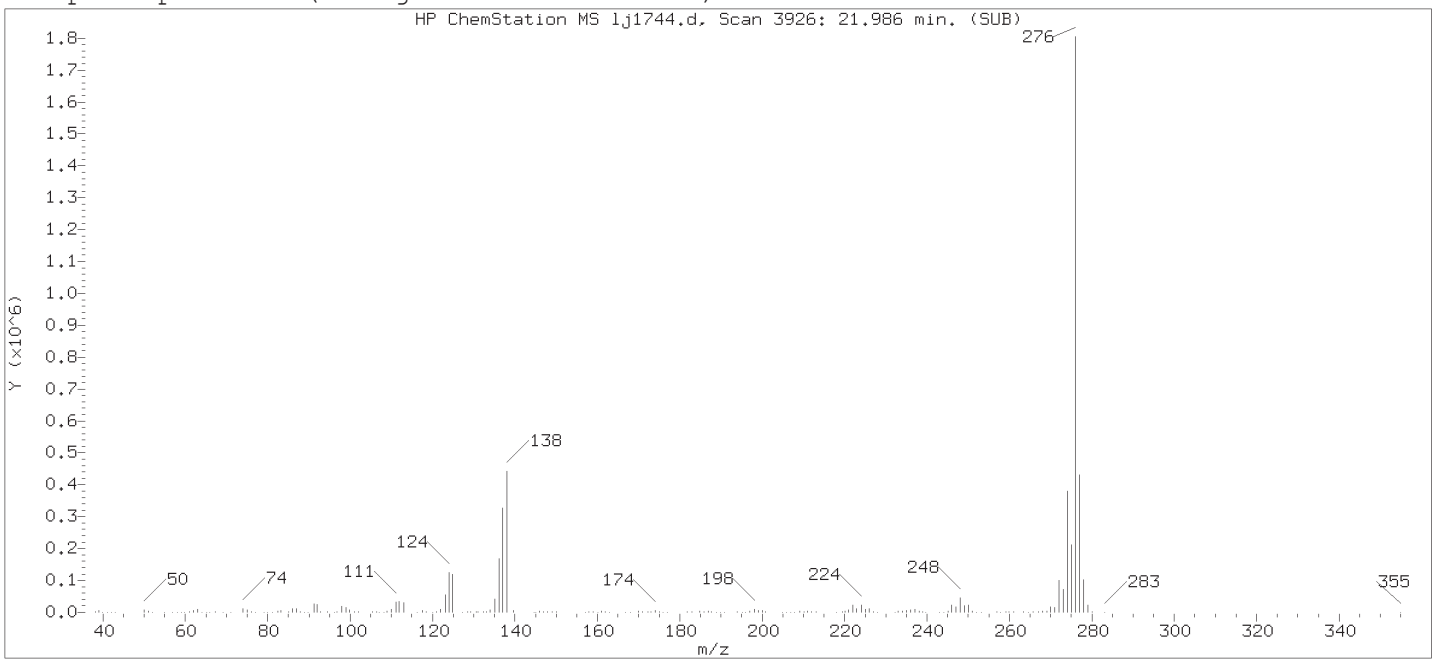
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3926
Retention Time (minutes) : 21.986
Quant Ion : 276.00
Area (flag) : 3537840M
On-Column Amount (ng/ul) : 21.9325
Integration start scan : 3913 Integration stop scan: 3929
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

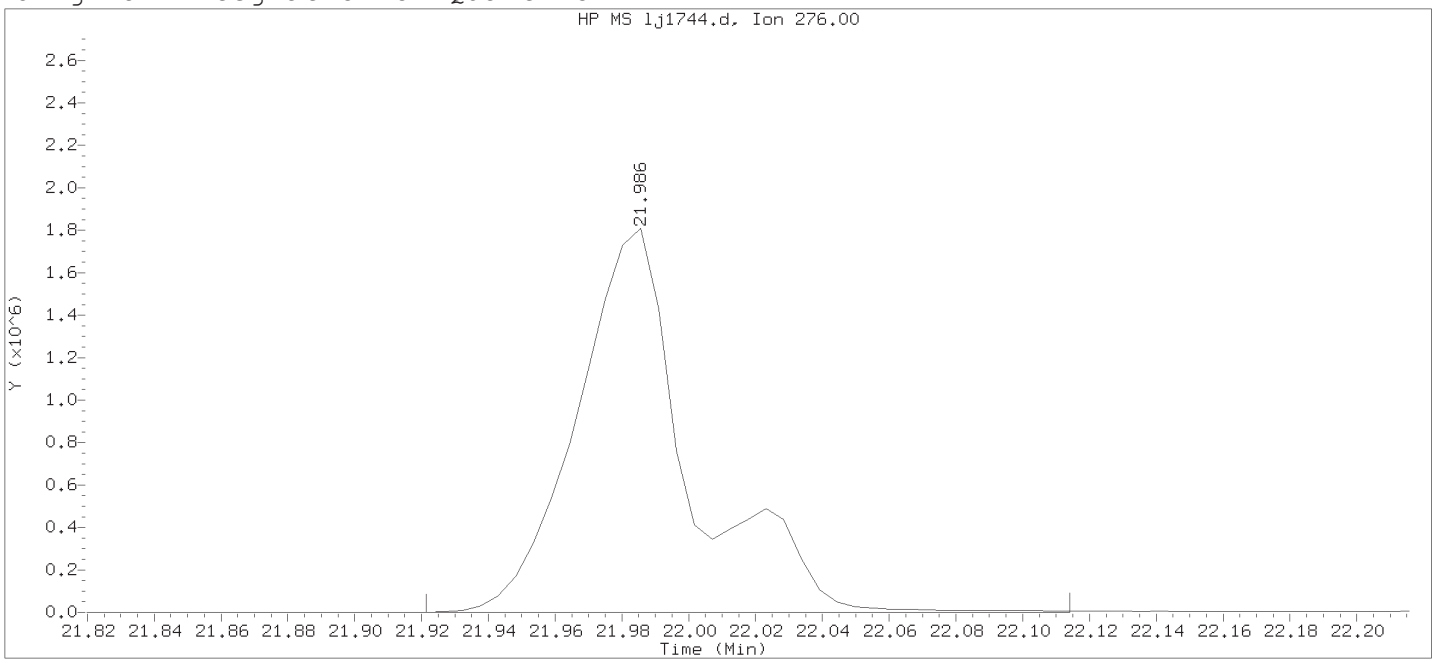
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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

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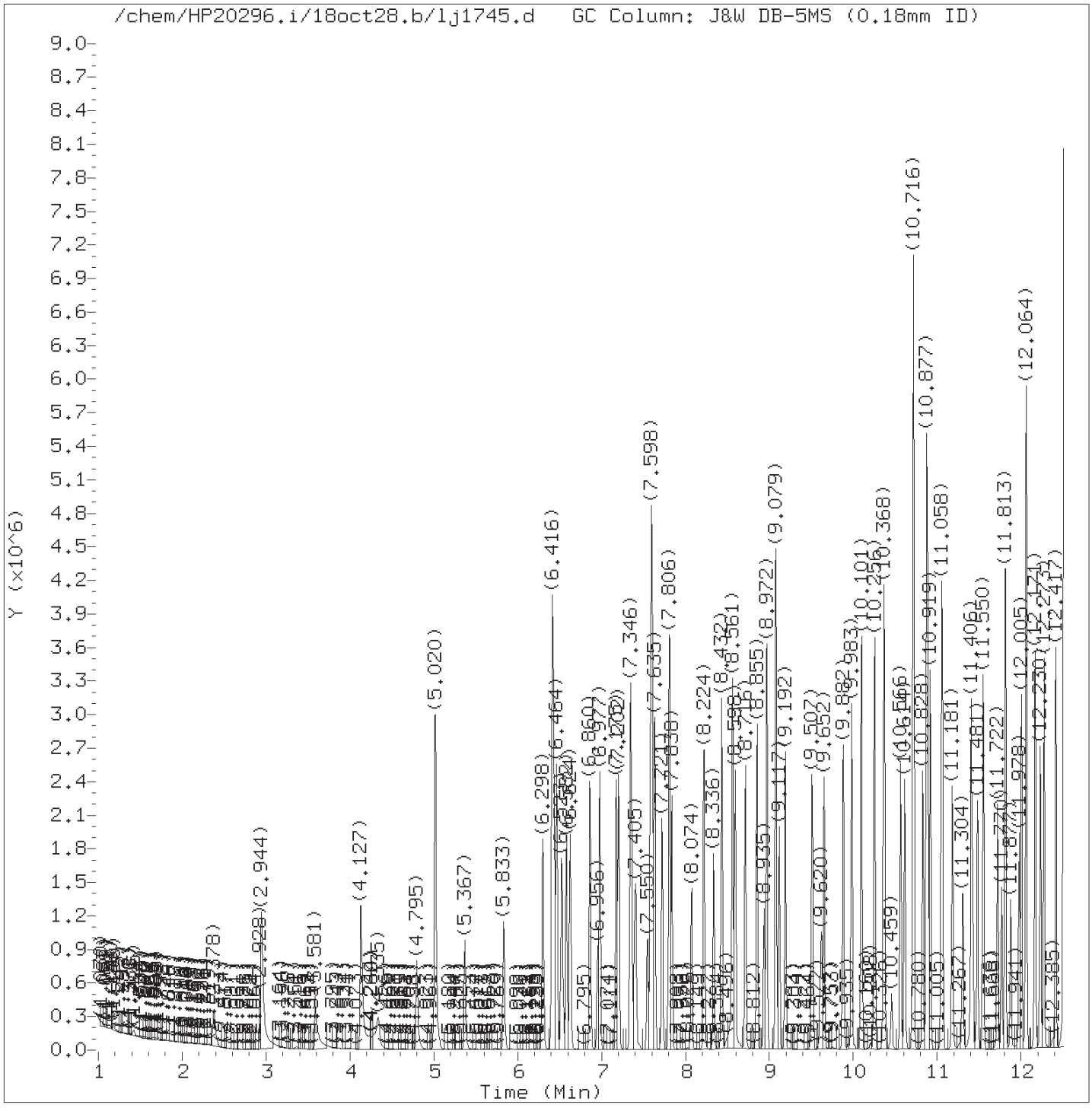
Target 3.5 esignature used: 0007. Page 1069 of 4595



Total Ion Chromatogram (TIC)

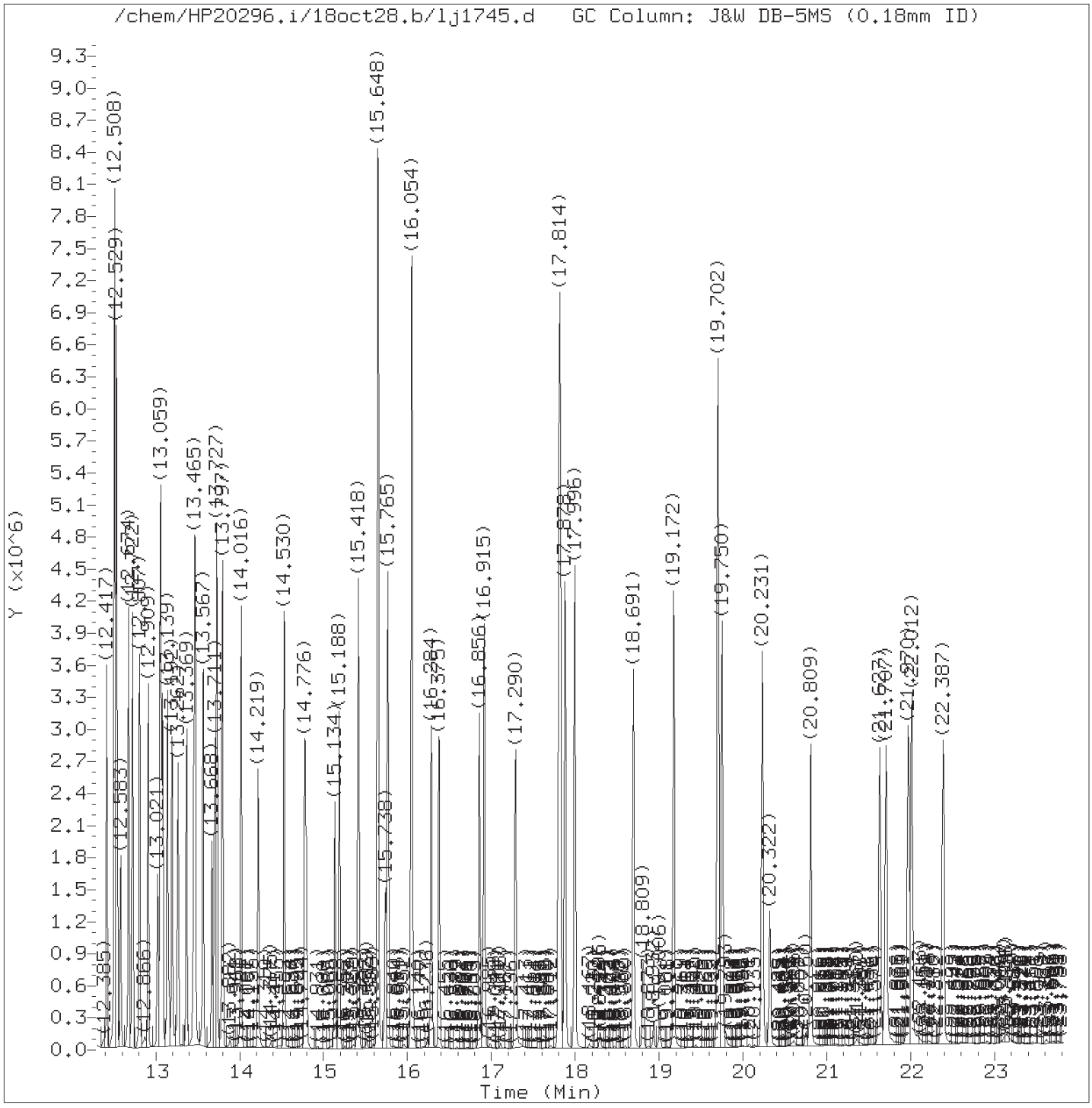
Target Revision 3.5

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

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 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

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 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

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-Nitrosopiperidine	(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

M = Compound was manually integrated.
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$ = 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/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

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

M = Compound was manually integrated.
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$ = 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/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

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

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/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

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

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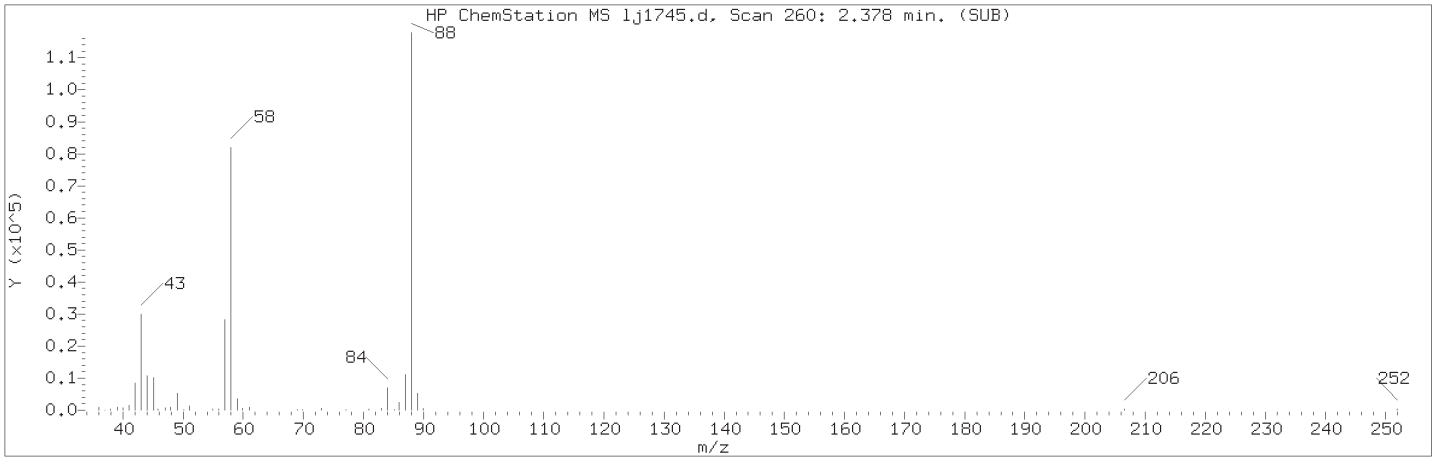
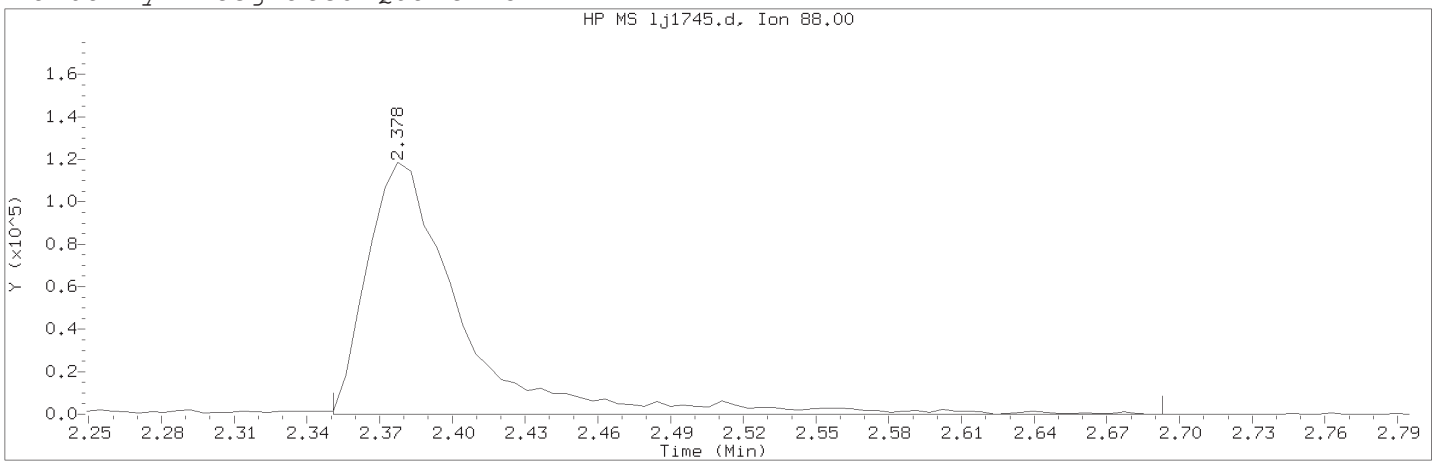
Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d 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

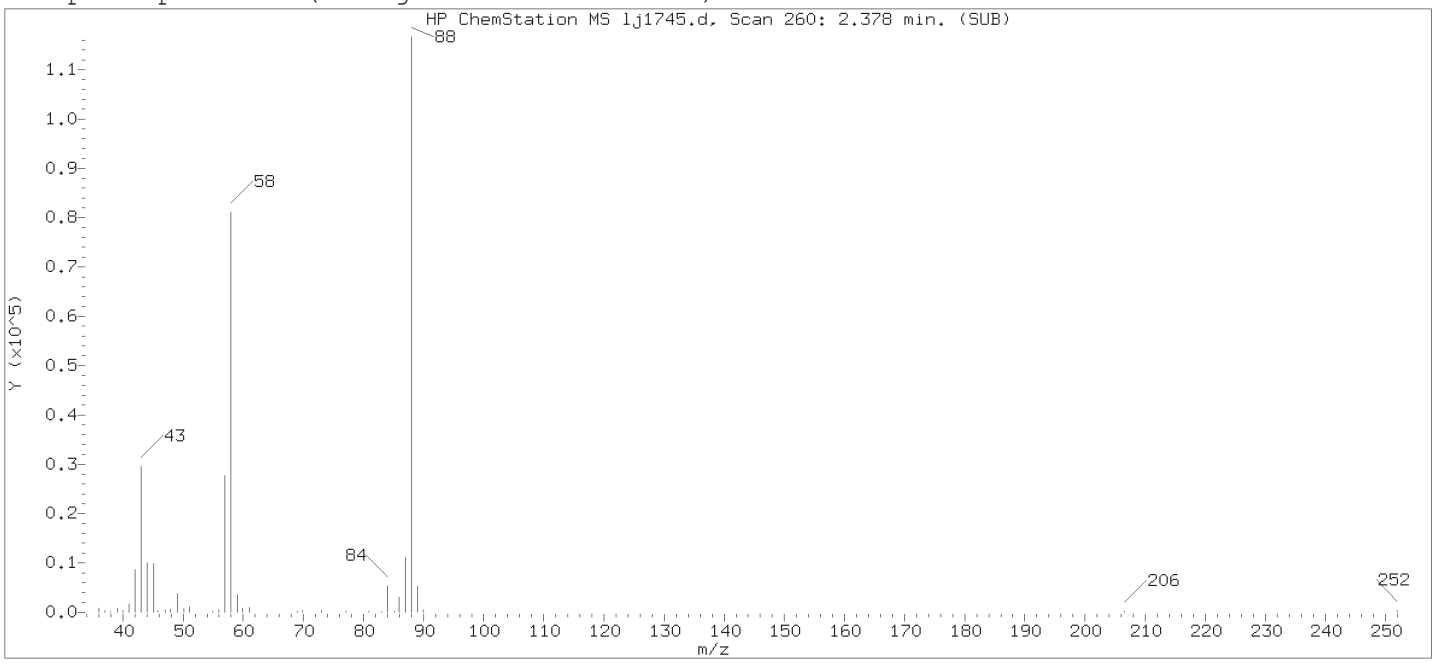
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 260		
Retention Time (minutes)	: 2.378		
Quant Ion	: 88.00		
Area (flag)	: 321162M		
On-Column Amount (ng/ul)	: 12.6322		
Integration start scan	: 254	Integration stop scan:	318
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

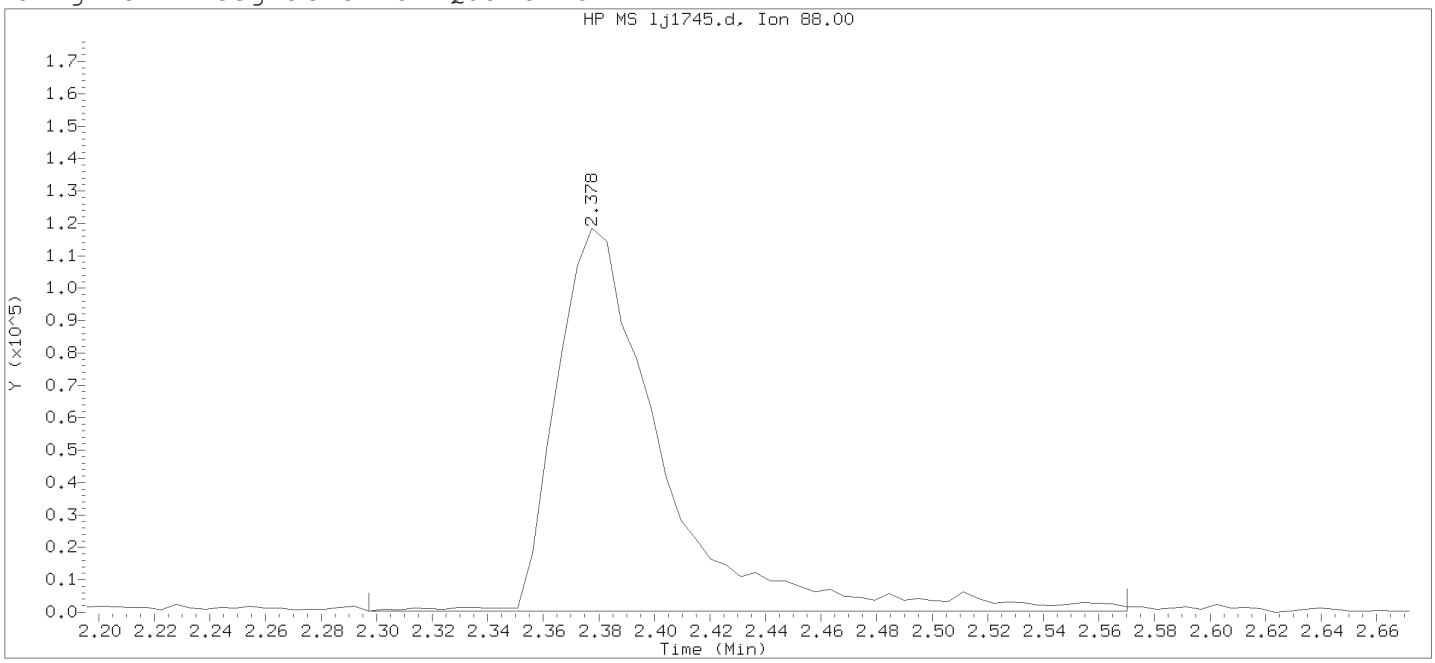
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

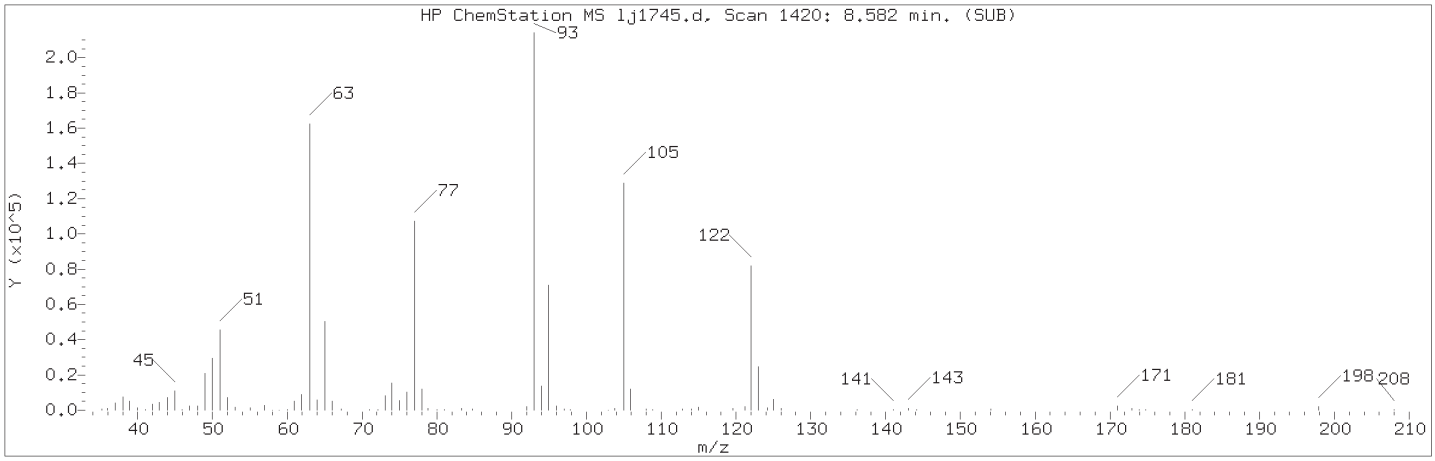
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

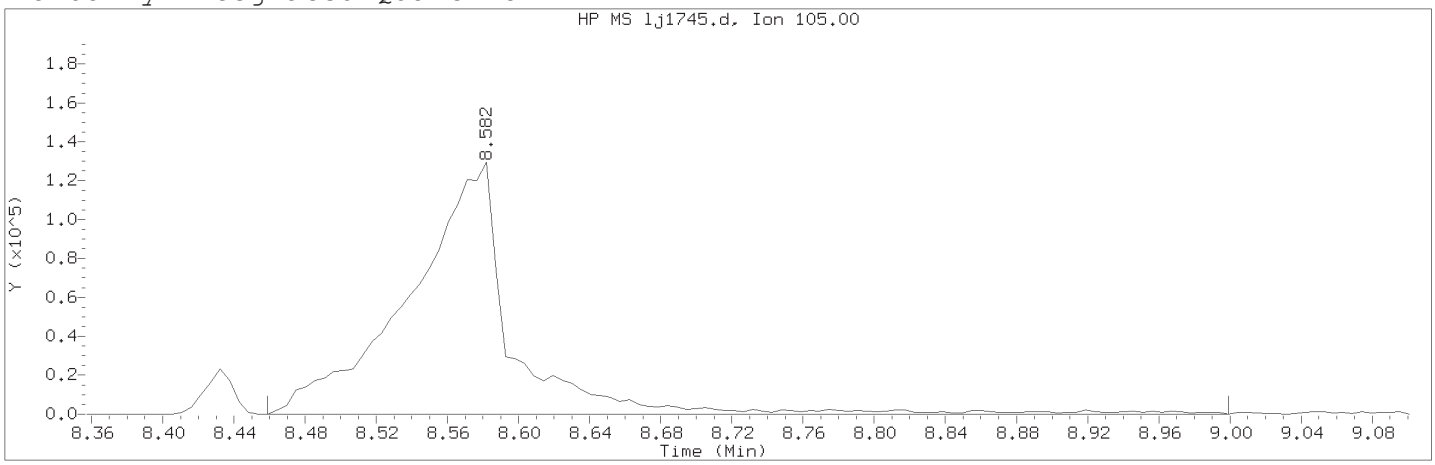
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 260		
Retention Time (minutes)	: 2.378		
Quant Ion	: 88.00		
Area	: 311071		
On-column Amount (ng/ul)	: 12.1750		
Integration start scan	: 244	Integration stop scan:	295
Y at integration start	: 433	Y at integration end:	433

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature used.

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

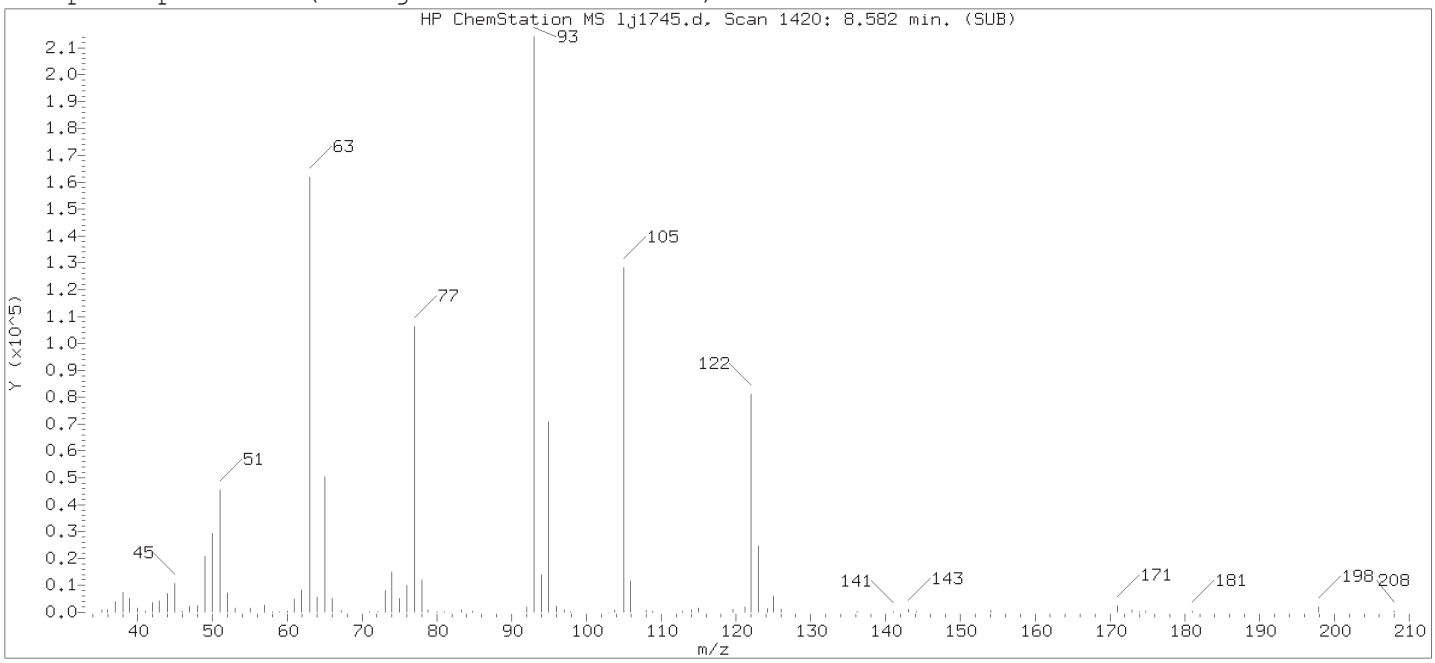
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1420		
Retention Time (minutes)	: 8.582		
Quant Ion	: 105.00		
Area (flag)	: 520132M		
On-Column Amount (ng/ul)	: 12.7045		
Integration start scan	: 1396	Integration stop scan:	1497
Y at integration start	: -11	Y at integration end:	-37

Reason for manual integration: improper integration

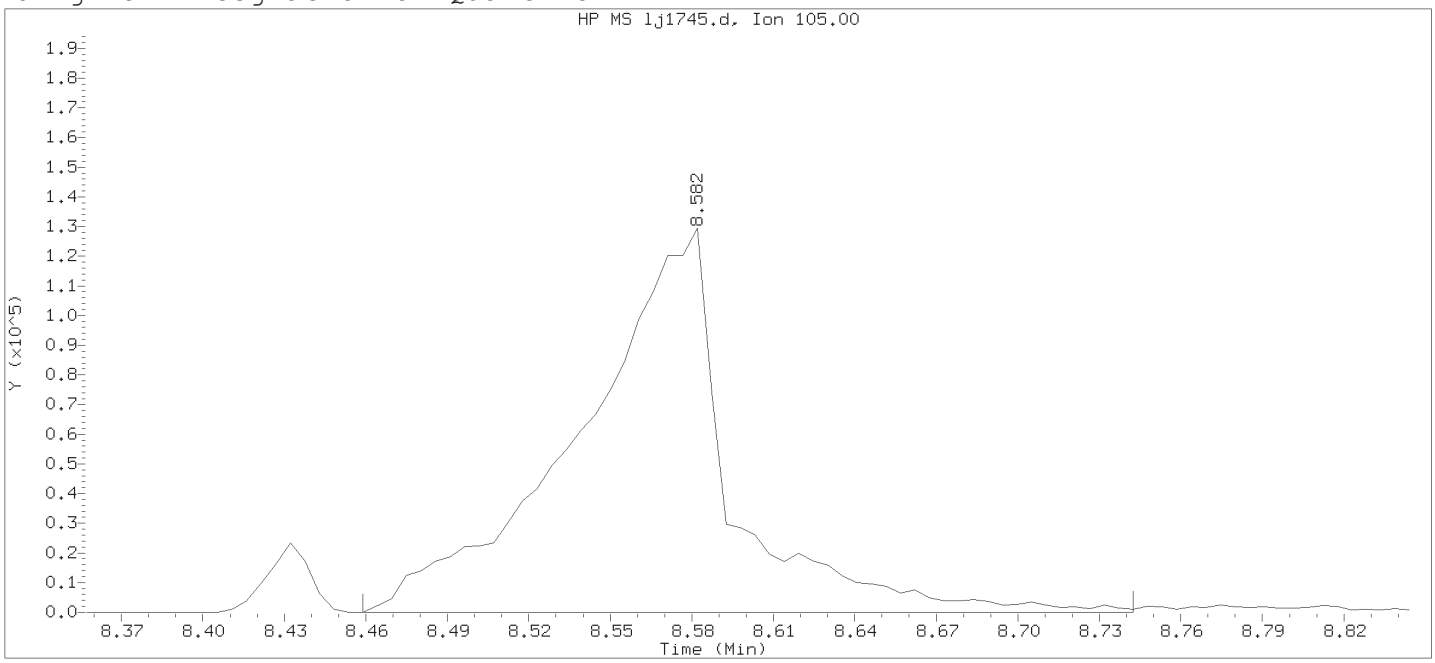
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

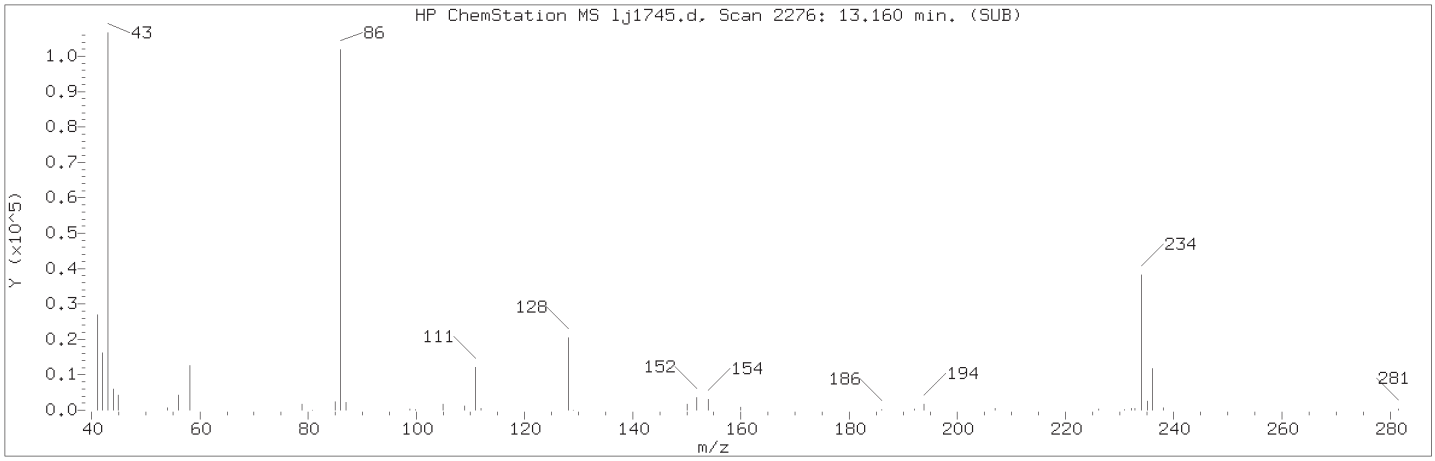
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

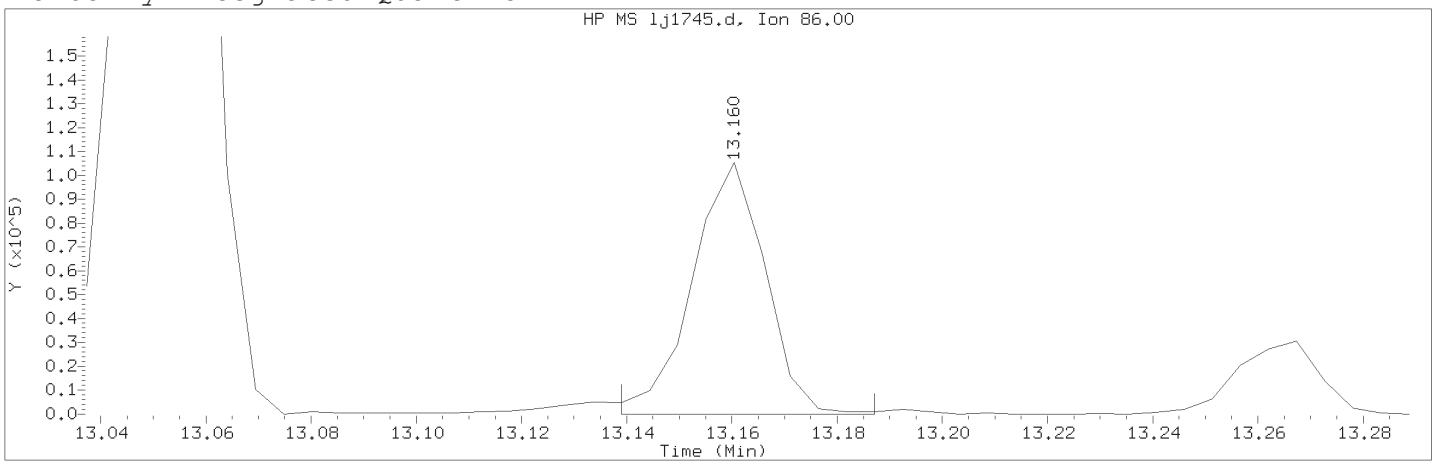
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1420		
Retention Time (minutes)	: 8.582		
Quant Ion	: 105.00		
Area	: 499879		
On-column Amount (ng/ul)	: 16.4370		
Integration start scan	: 1396	Integration stop scan:	1449
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature used: 107 Page 1079

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

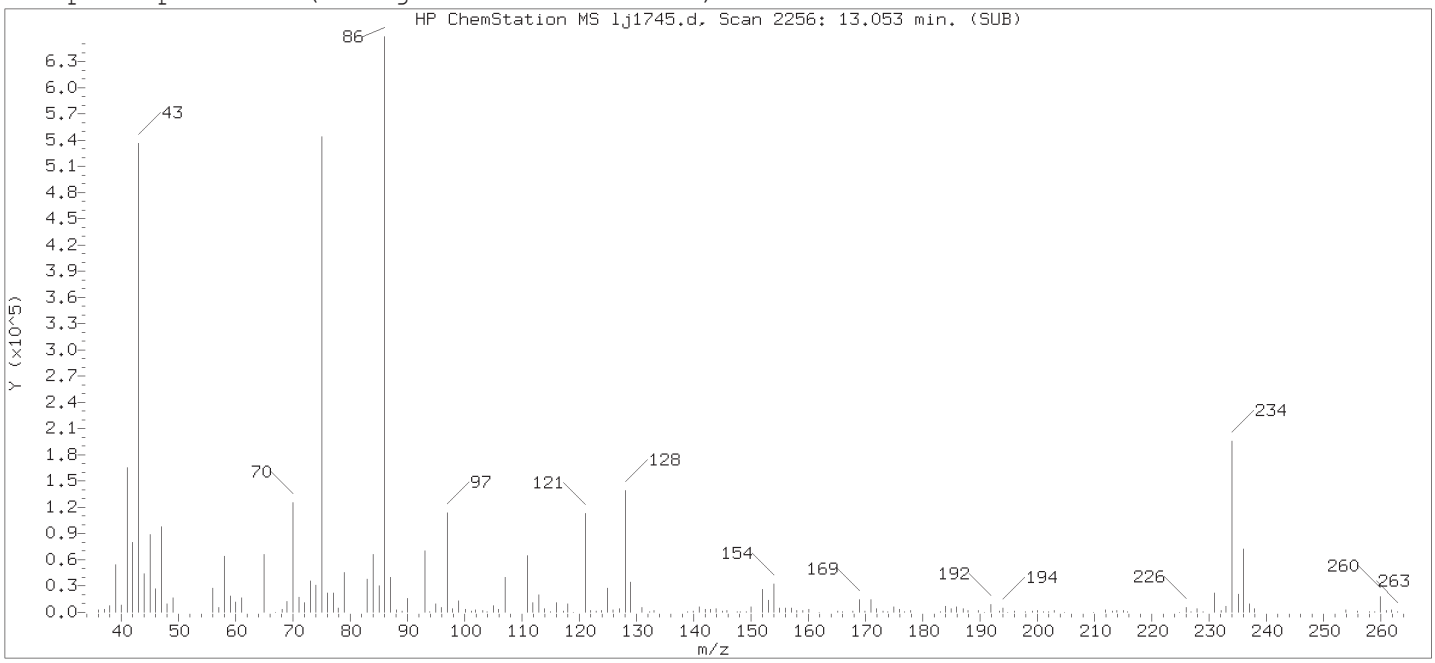
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2276
Retention Time (minutes) : 13.160
Quant Ion : 86.00
Area (flag) : 102295M
On-Column Amount (ng/ul) : 2.0440
Integration start scan : 2271 Integration stop scan: 2280
Y at integration start : -121 Y at integration end: -121

Reason for manual integration: improper integration

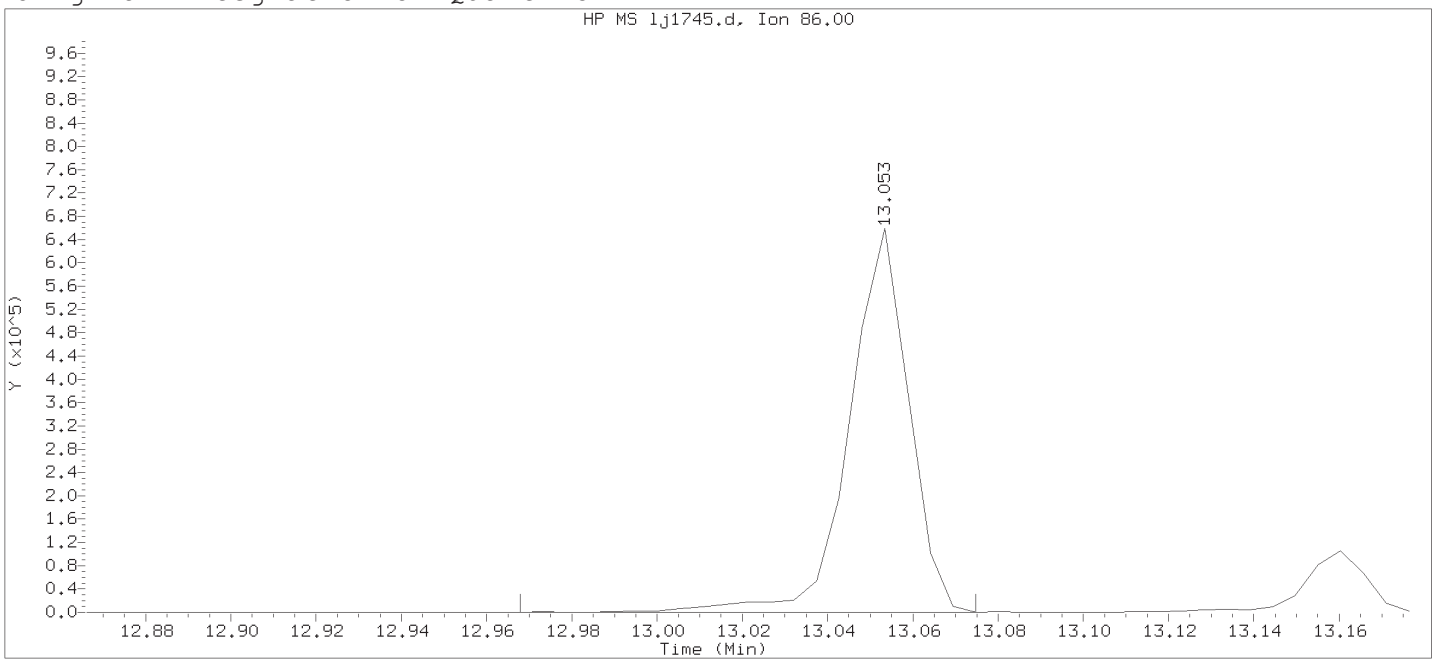
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

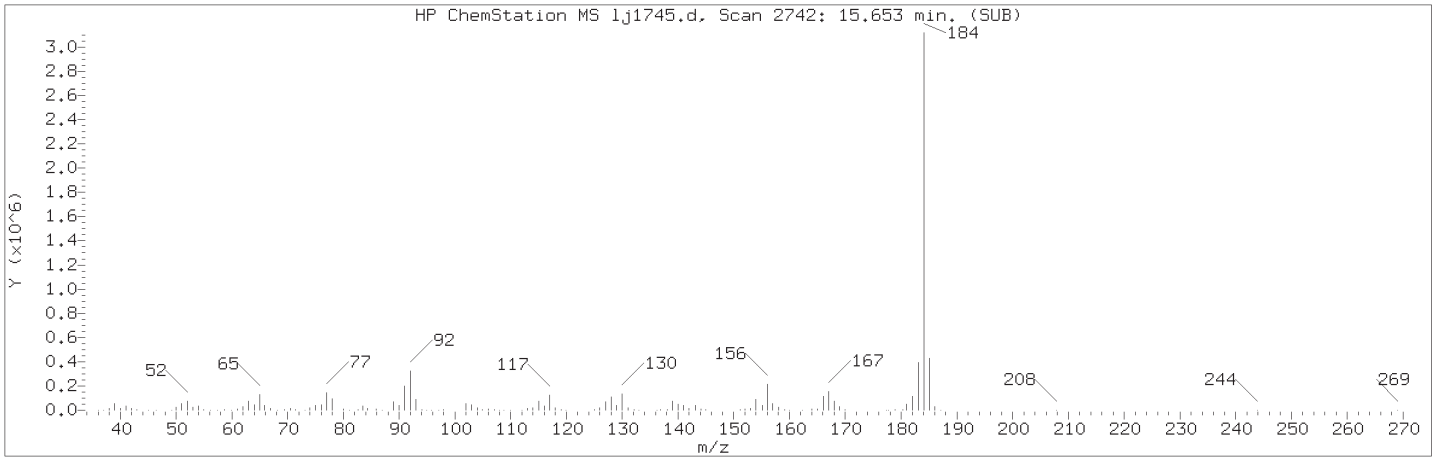
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

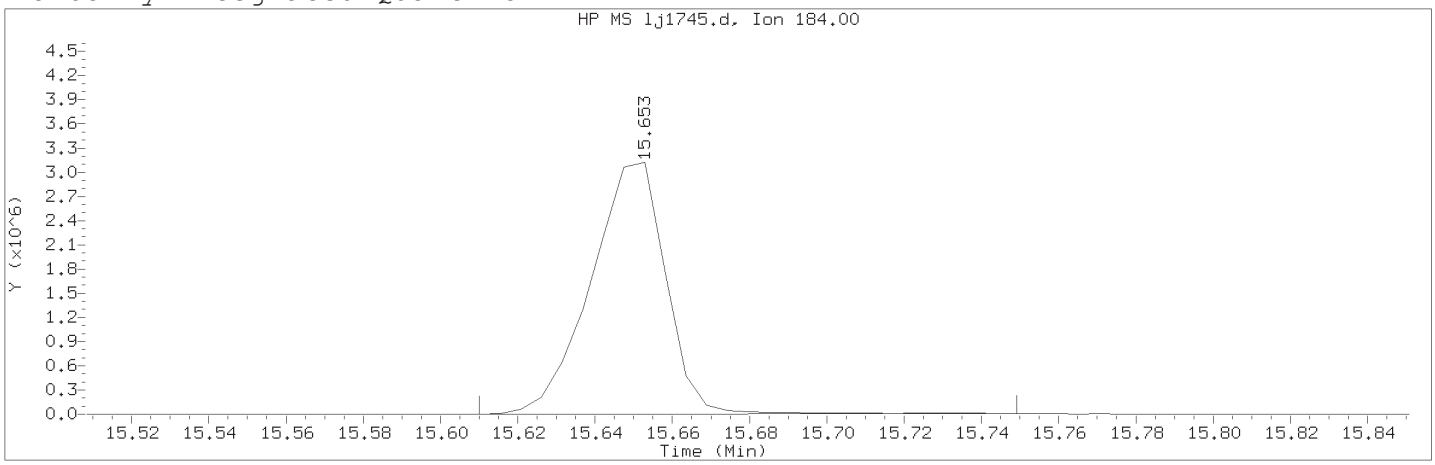
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2256		
Retention Time (minutes)	: 13.053		
Quant Ion	: 86.00		
Area	: 635871		
On-column Amount (ng/ul)	: 3.6712		
Integration start scan	: 2239	Integration stop scan:	2259
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature used: 1005

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

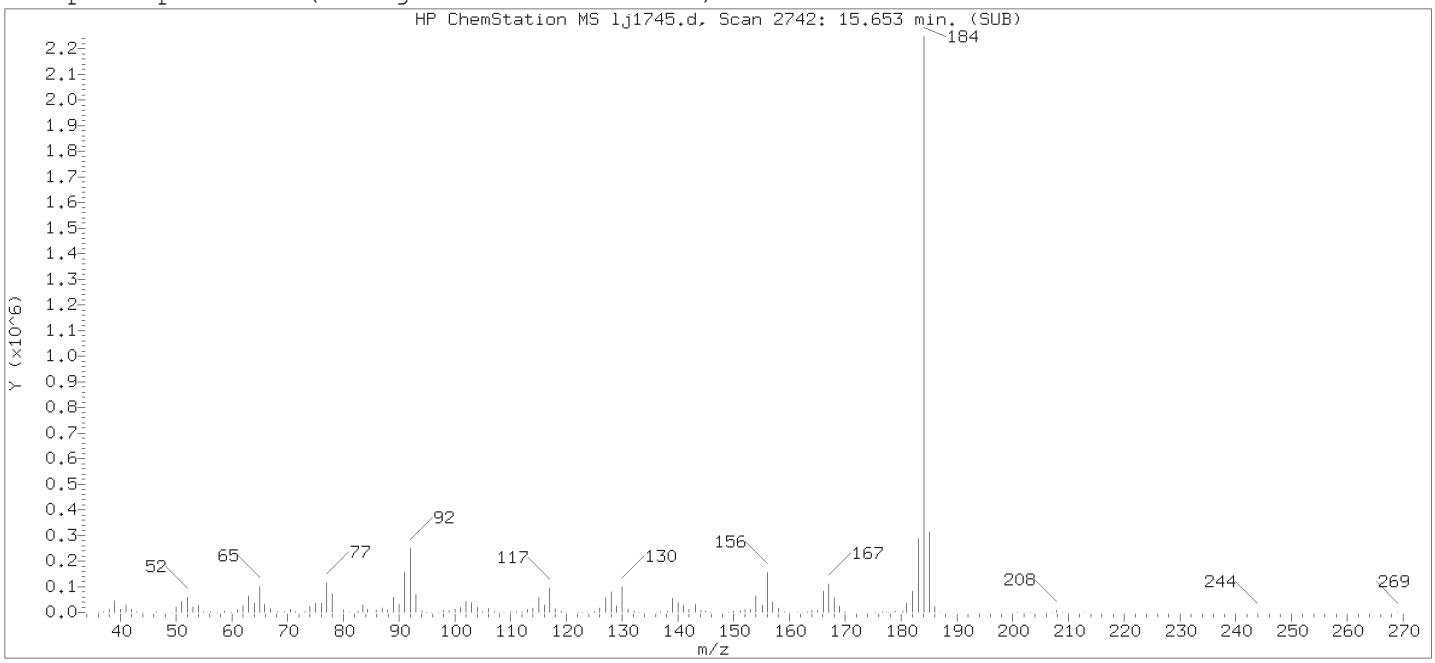
Compound Number : 179
Compound Name : Benzidine
Scan Number : 2742
Retention Time (minutes) : 15.653
Quant Ion : 184.00
Area (flag) : 4201102M
On-Column Amount (ng/ul) : 36.6305
Integration start scan : 2733 Integration stop scan: 2759
Y at integration start : 1753 Y at integration end: 6173

Reason for manual integration: improper integration

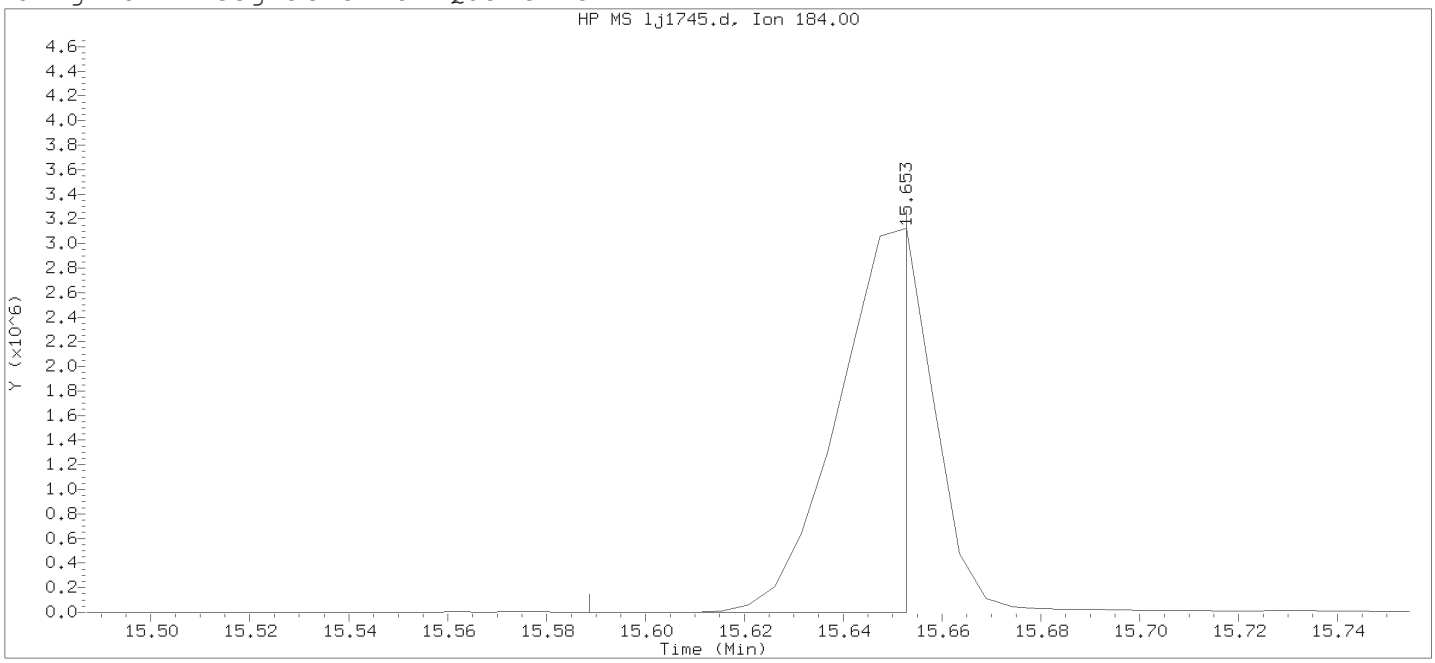
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

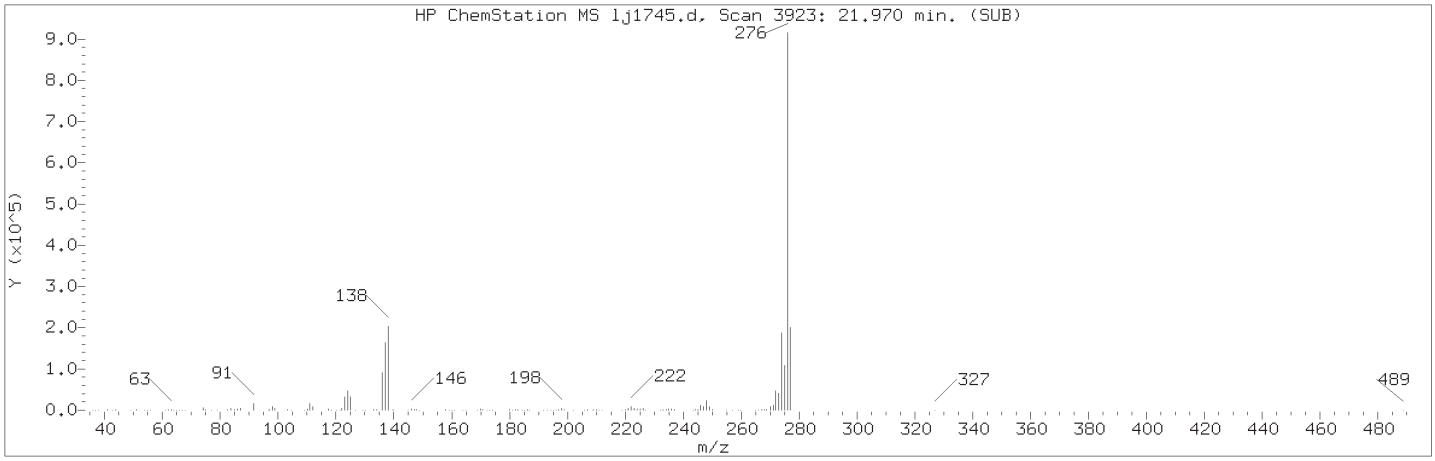
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

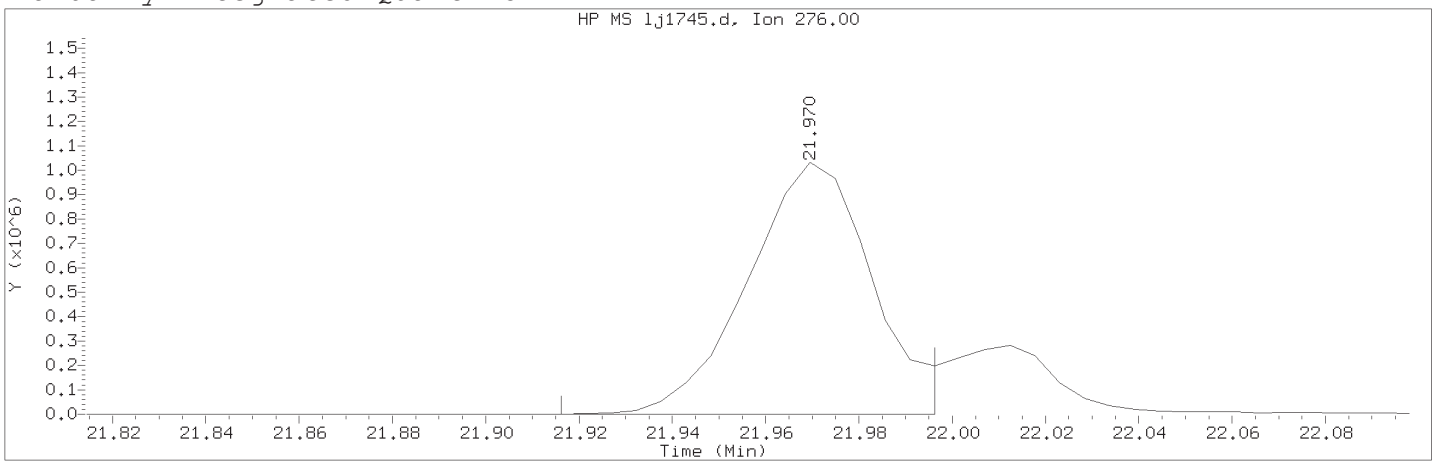
Compound Number	: 179		
Compound Name	: Benzidine		
Scan Number	: 2742		
Retention Time (minutes)	: 15.653		
Quant Ion	: 184.00		
Area	: 2898529		
On-column Amount (ng/ul)	: 26.0571		
Integration start scan	: 2729	Integration stop scan:	2741
Y at integration start	: 640	Y at integration end:	640

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature used for this data.

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

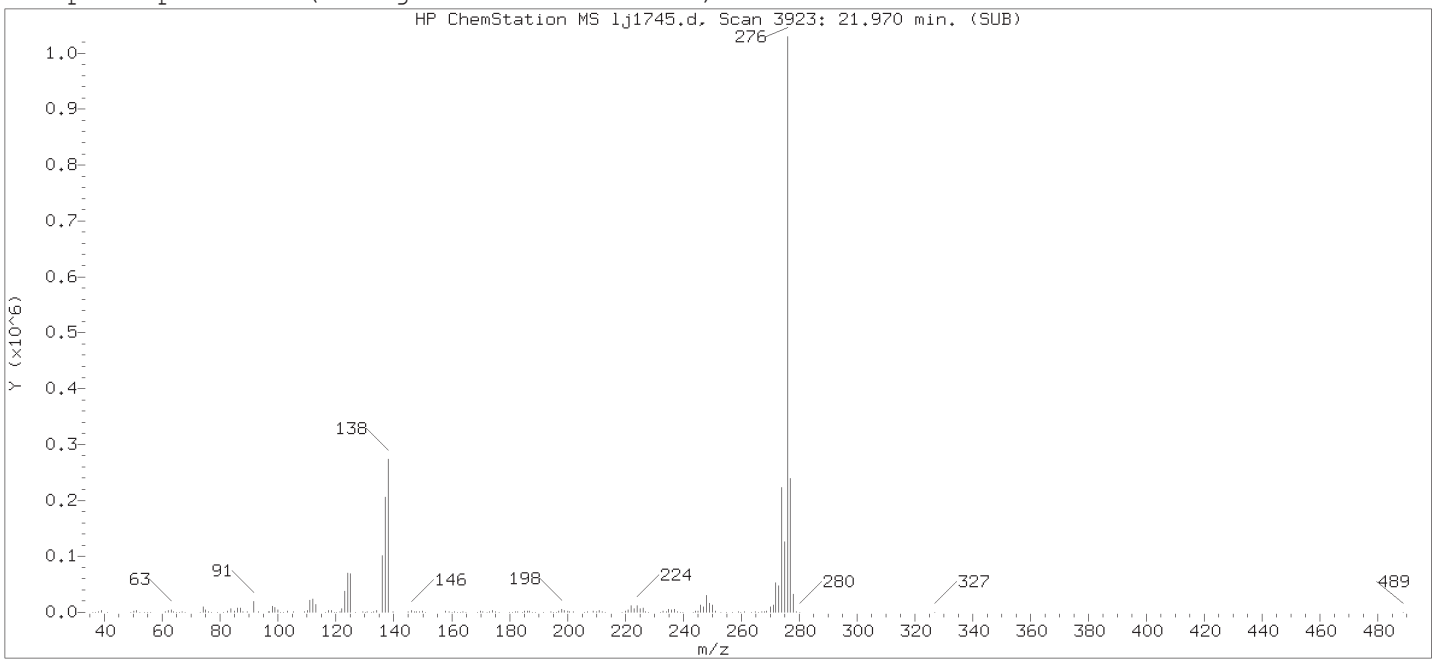
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3923
Retention Time (minutes) : 21.970
Quant Ion : 276.00
Area (flag) : 1913057M
On-Column Amount (ng/ul) : 13.3761
Integration start scan : 3912 Integration stop scan: 3927
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

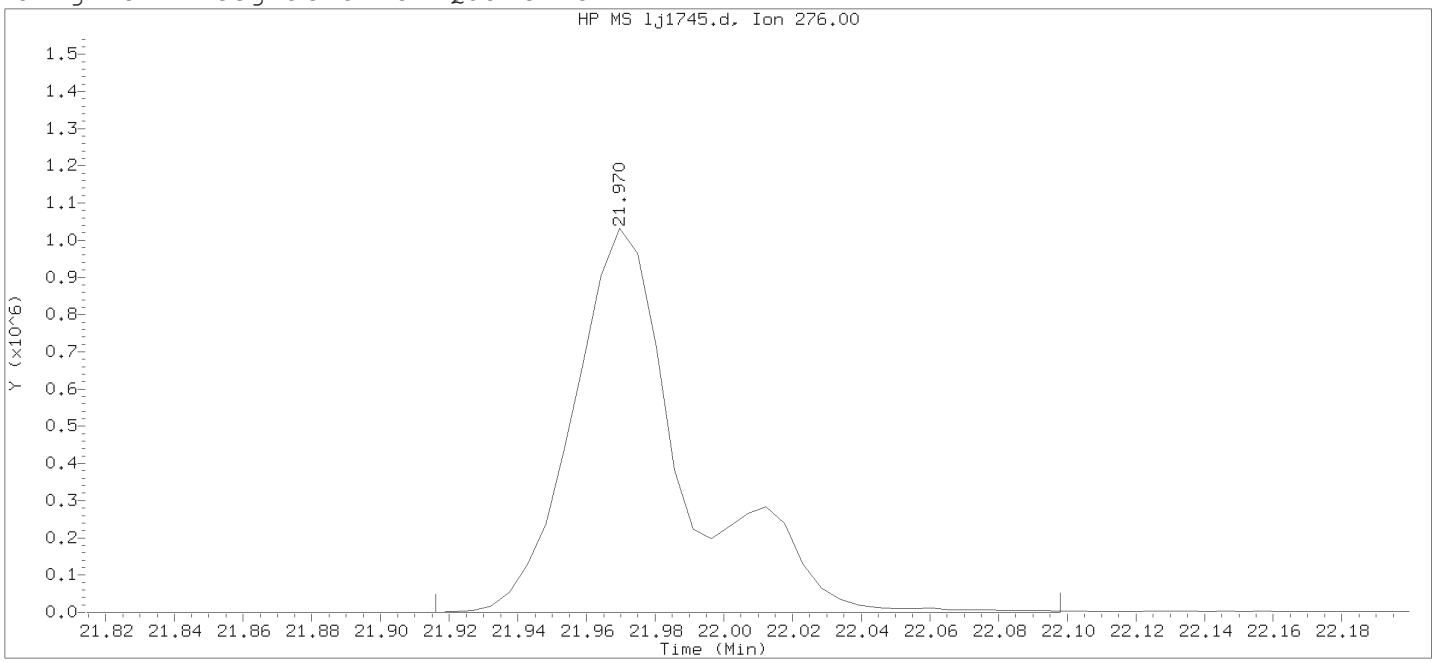
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

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



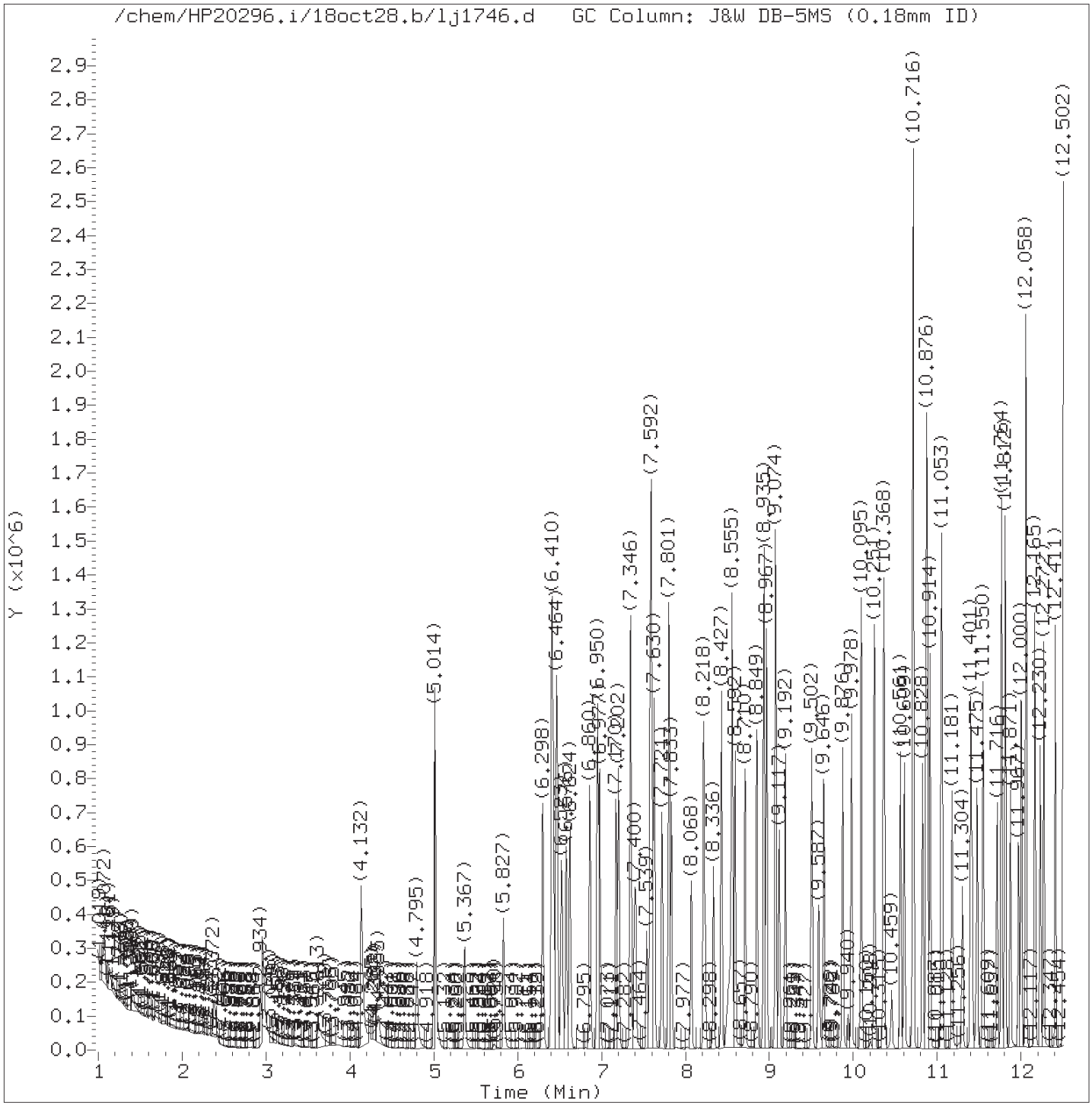
Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

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

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature used for this data.



Total Ion Chromatogram (TIC)

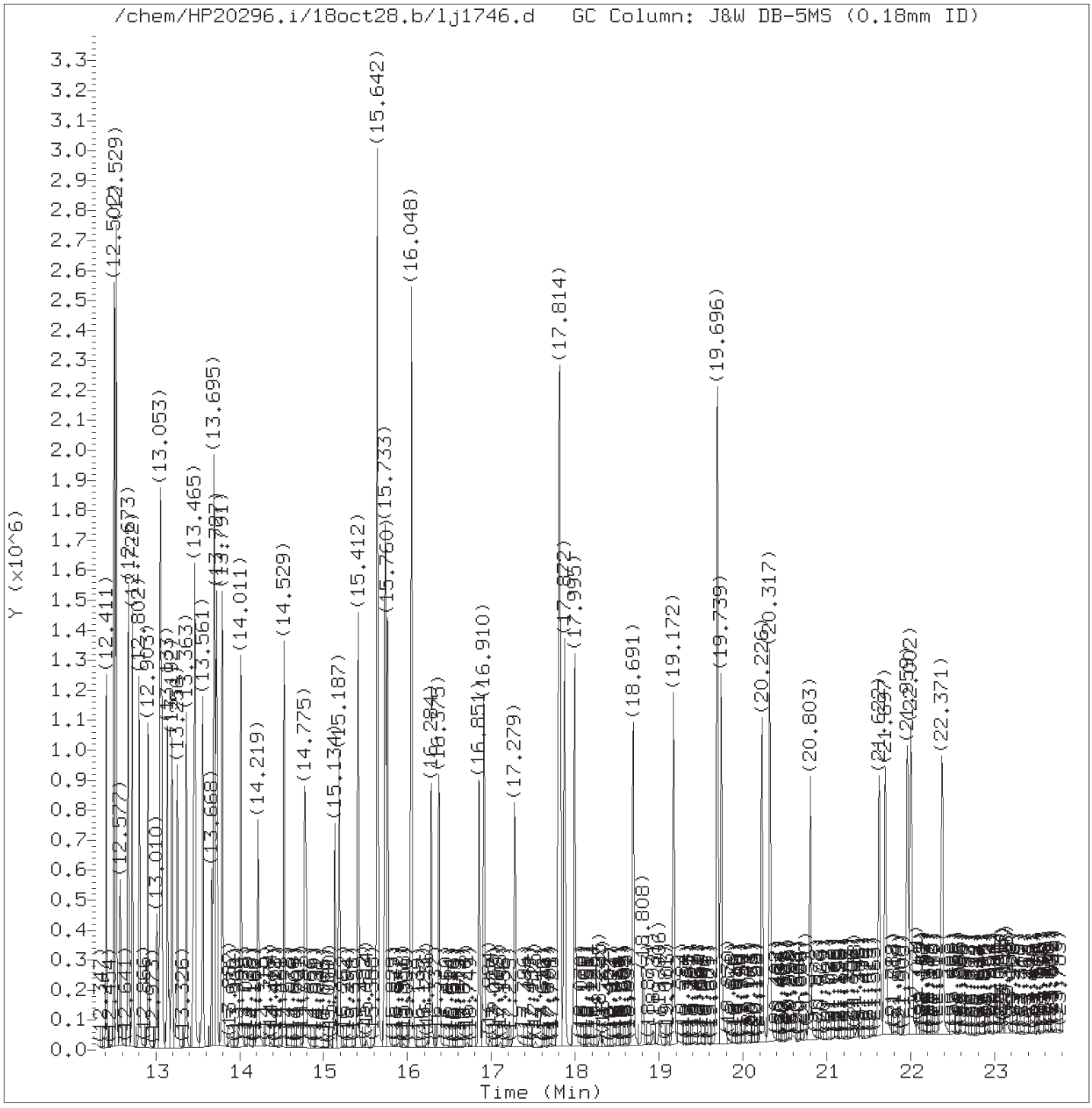
Target Revision 3.5

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

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 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

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 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

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-Nitrosopiperidine	(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 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

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.
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$ = 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 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

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

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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/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

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

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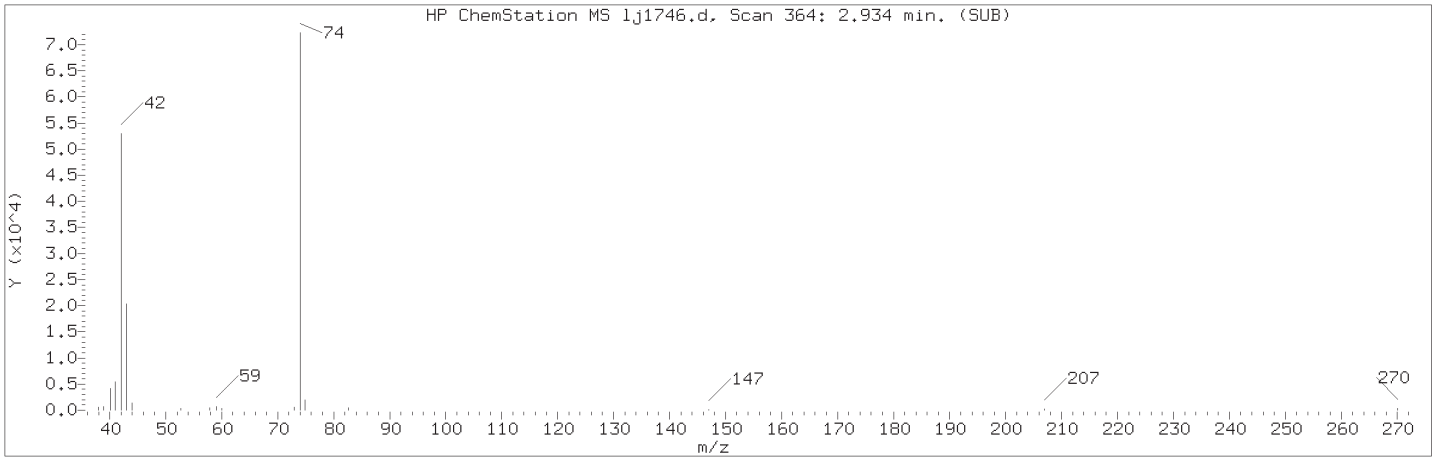
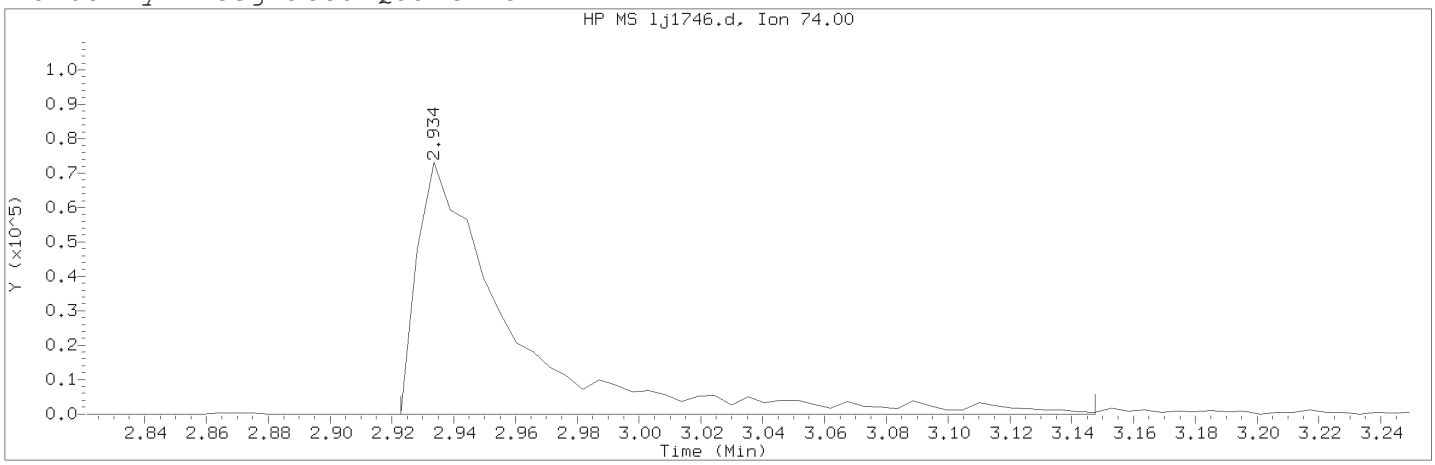
Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/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

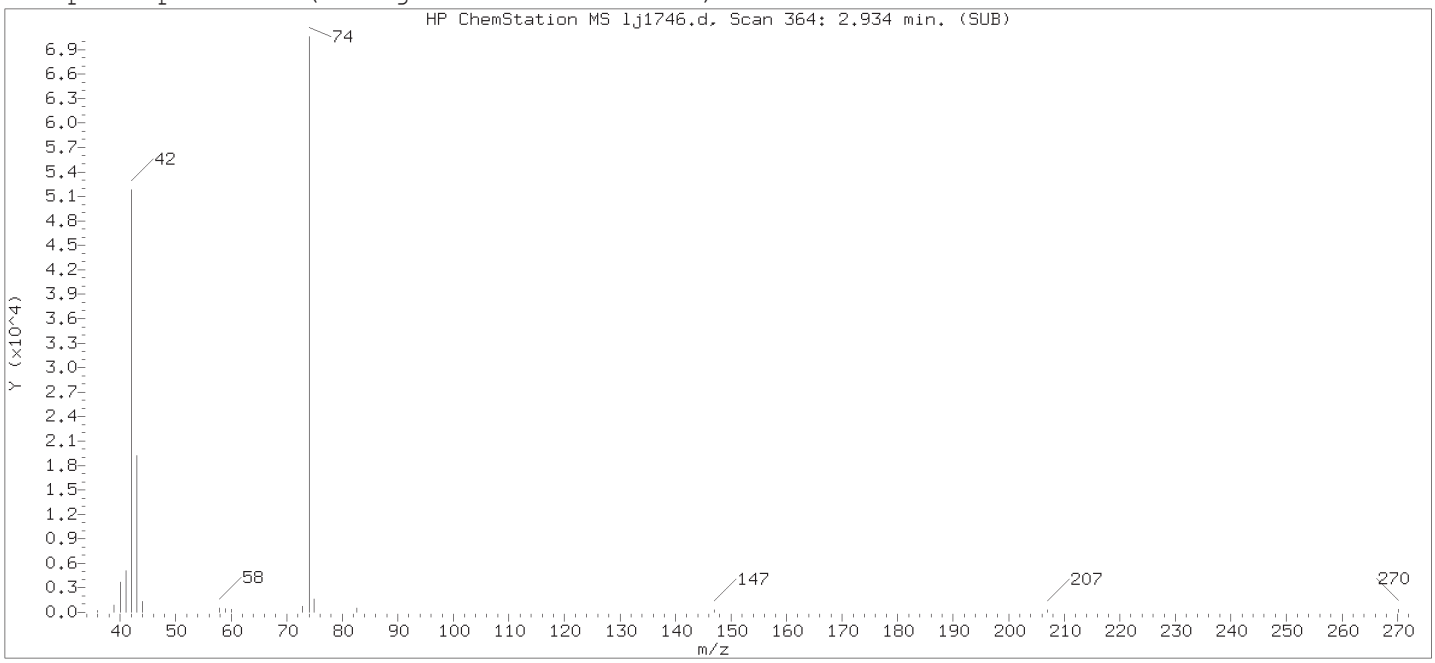
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 364
Retention Time (minutes) : 2.934
Quant Ion : 74.00
Area (flag) : 155201M
On-Column Amount (ng/ul) : 3.5235
Integration start scan : 361 Integration stop scan: 403
Y at integration start : -71 Y at integration end: -71

Reason for manual integration: improper integration

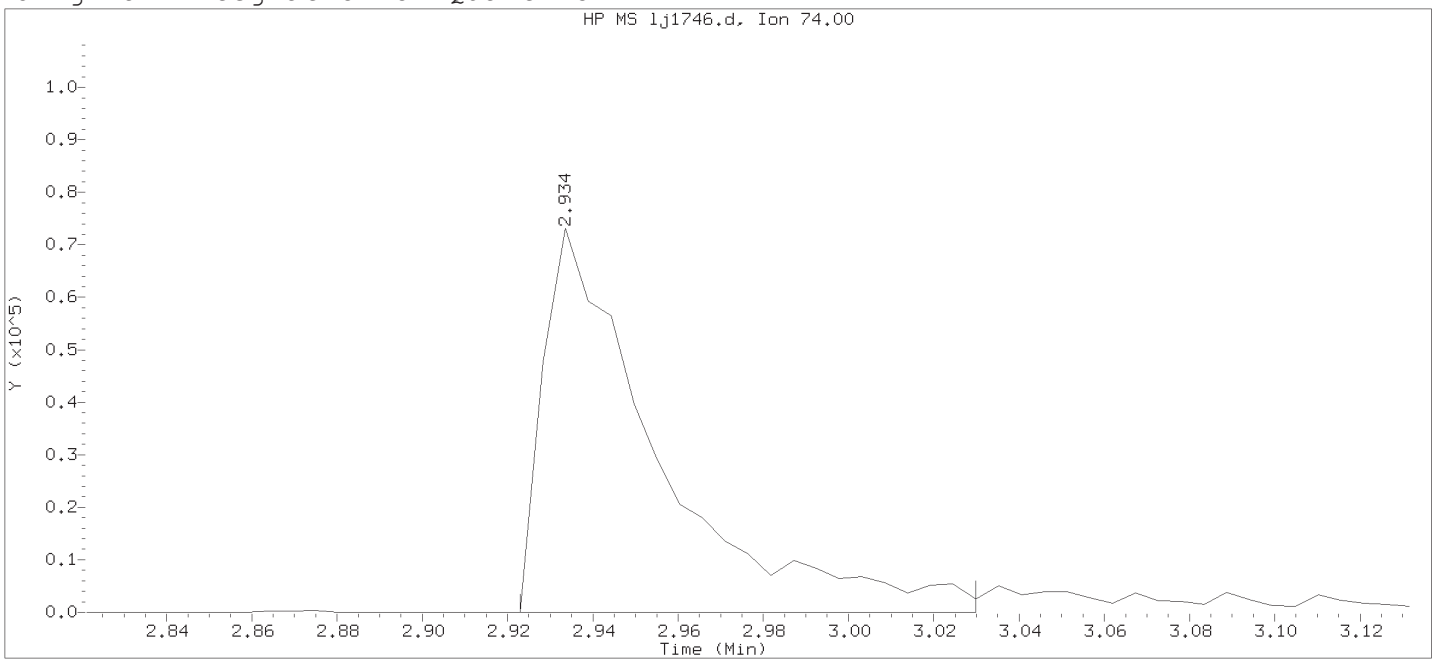
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

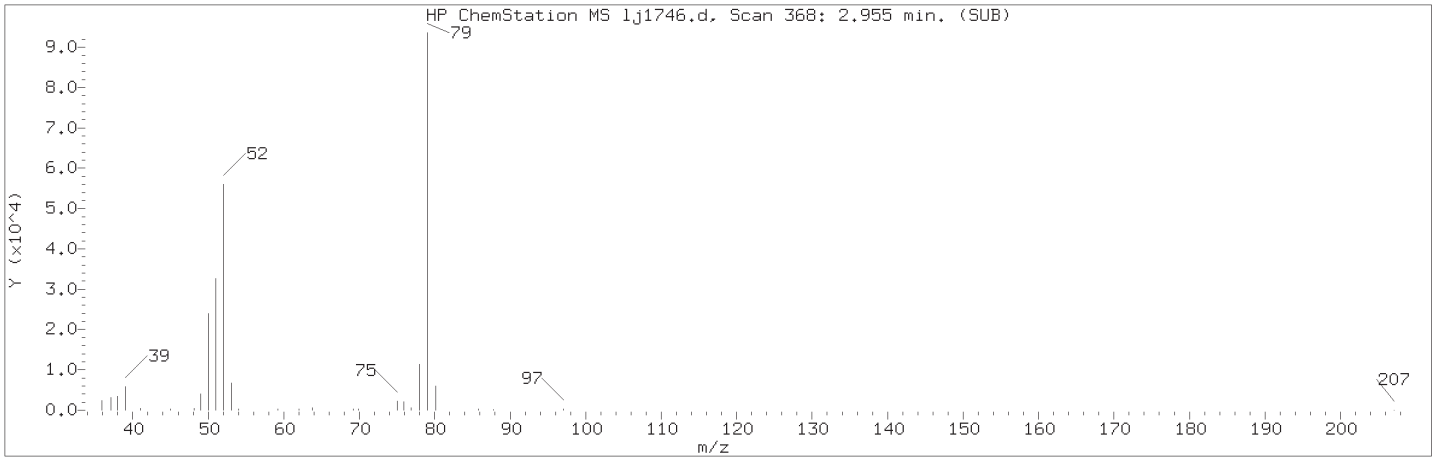
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

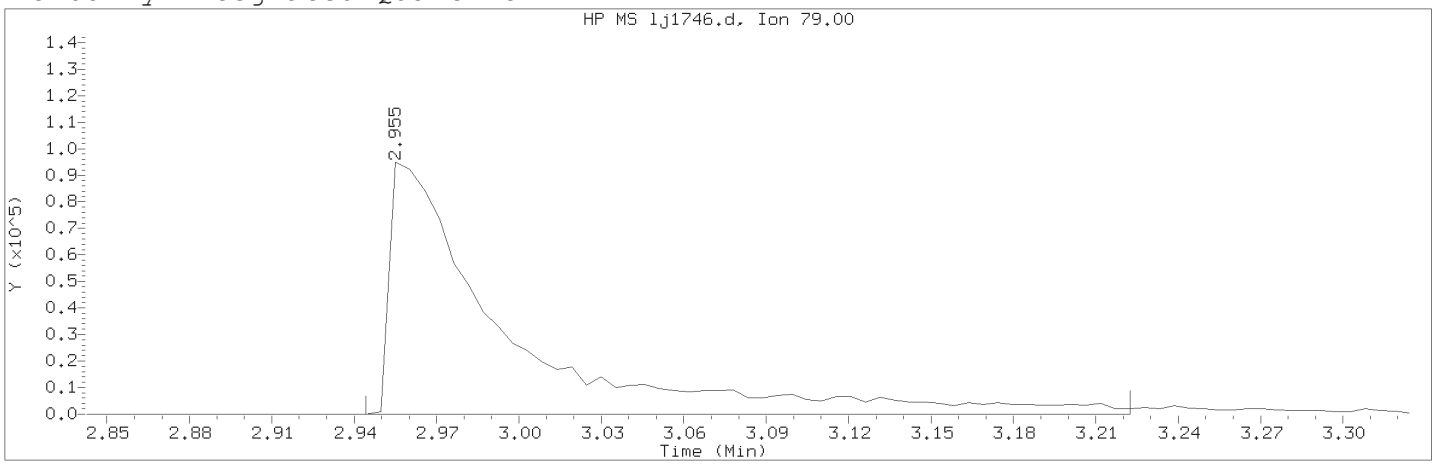
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 364		
Retention Time (minutes)	: 2.934		
Quant Ion	: 74.00		
Area	: 137494		
On-column Amount (ng/ul)	: 3.2648		
Integration start scan	: 361	Integration stop scan:	381
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for [illegible]

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

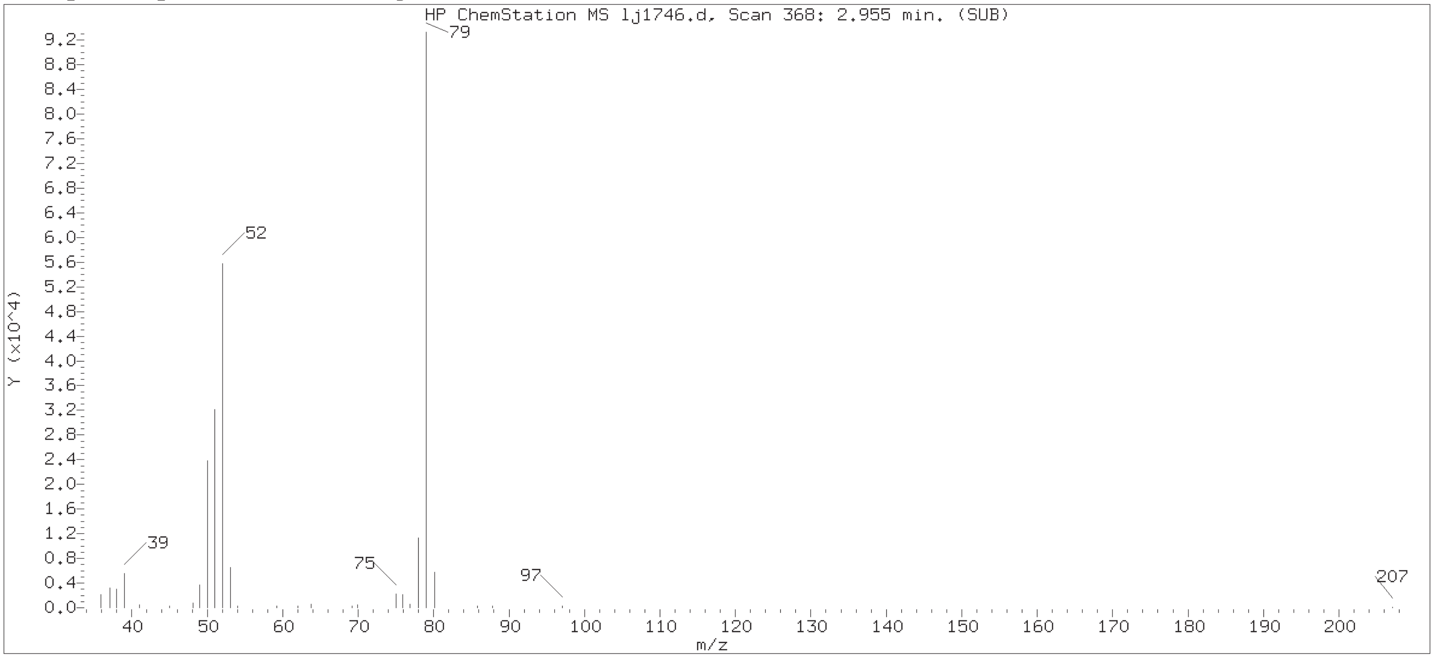
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 368		
Retention Time (minutes)	: 2.955		
Quant Ion	: 79.00		
Area (flag)	: 276989M		
On-Column Amount (ng/ul)	: 3.6605		
Integration start scan	: 365	Integration stop scan:	417
Y at integration start	: -49	Y at integration end:	-49

Reason for manual integration: improper integration

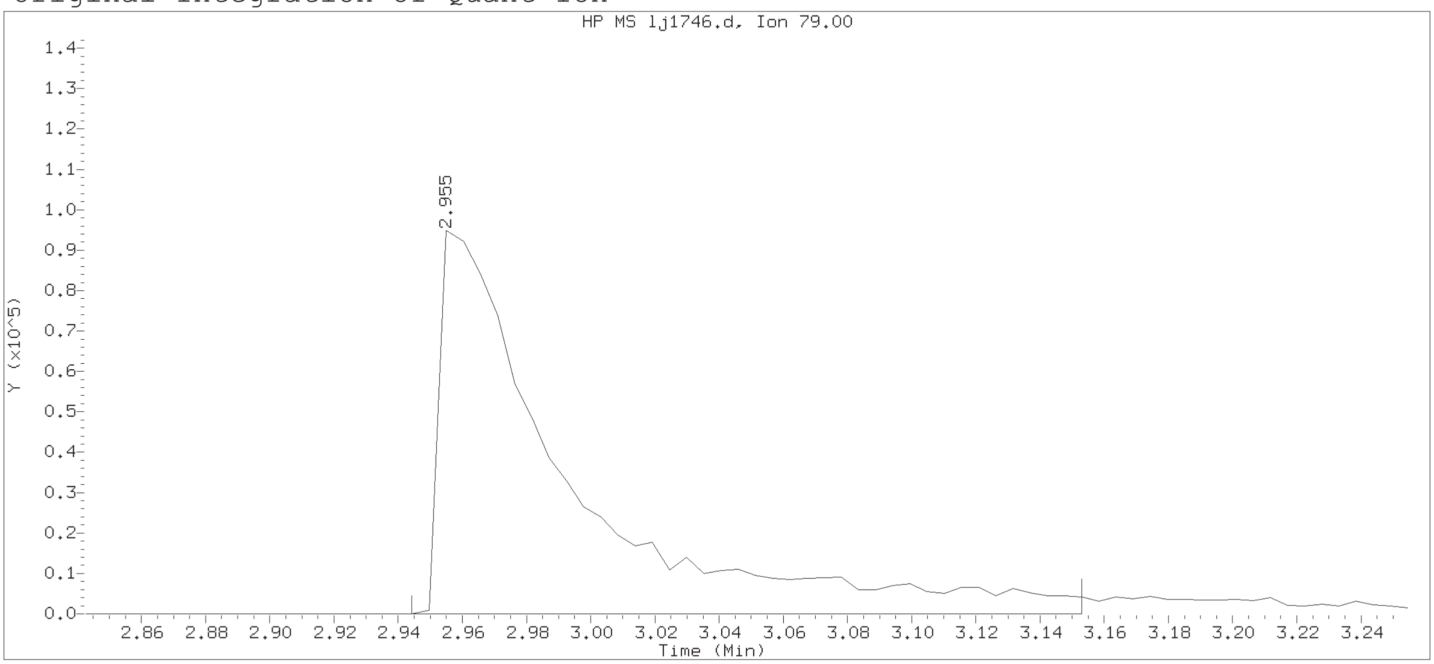
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

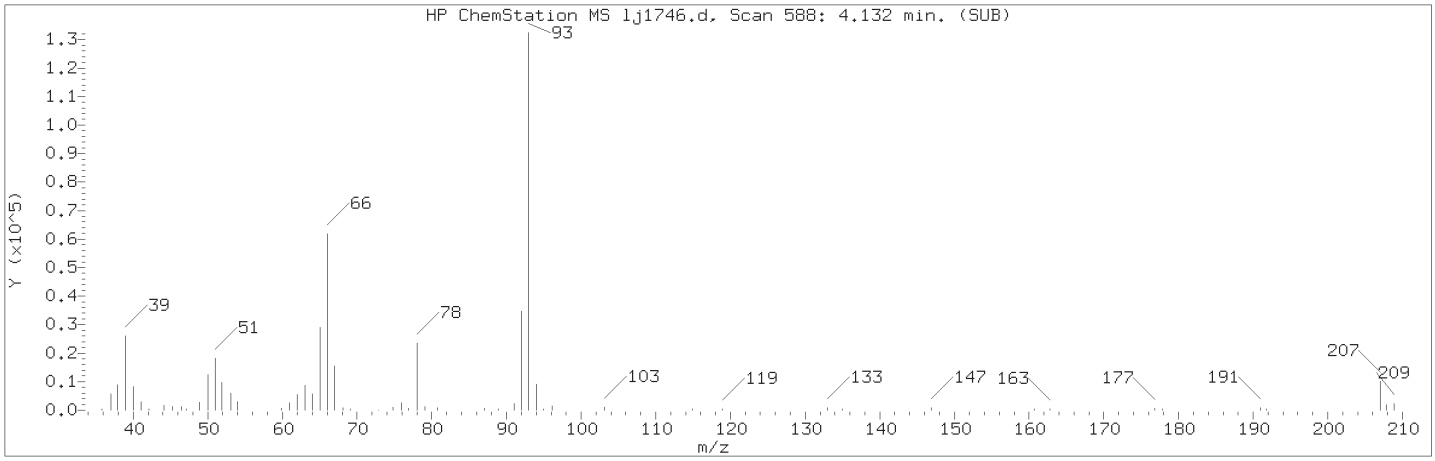
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

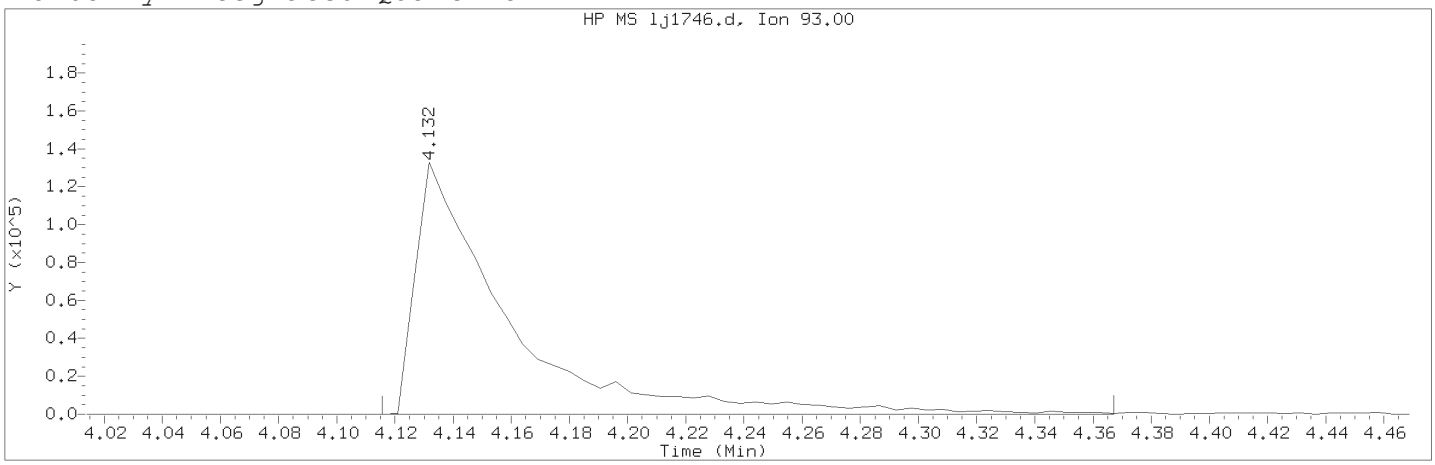
Compound Number : 6
Compound Name : Pyridine
Scan Number : 368
Retention Time (minutes) : 2.955
Quant Ion : 79.00
Area : 261269
On-column Amount (ng/ul) : 3.5075
Integration start scan : 365 Integration stop scan: 404
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art02190

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

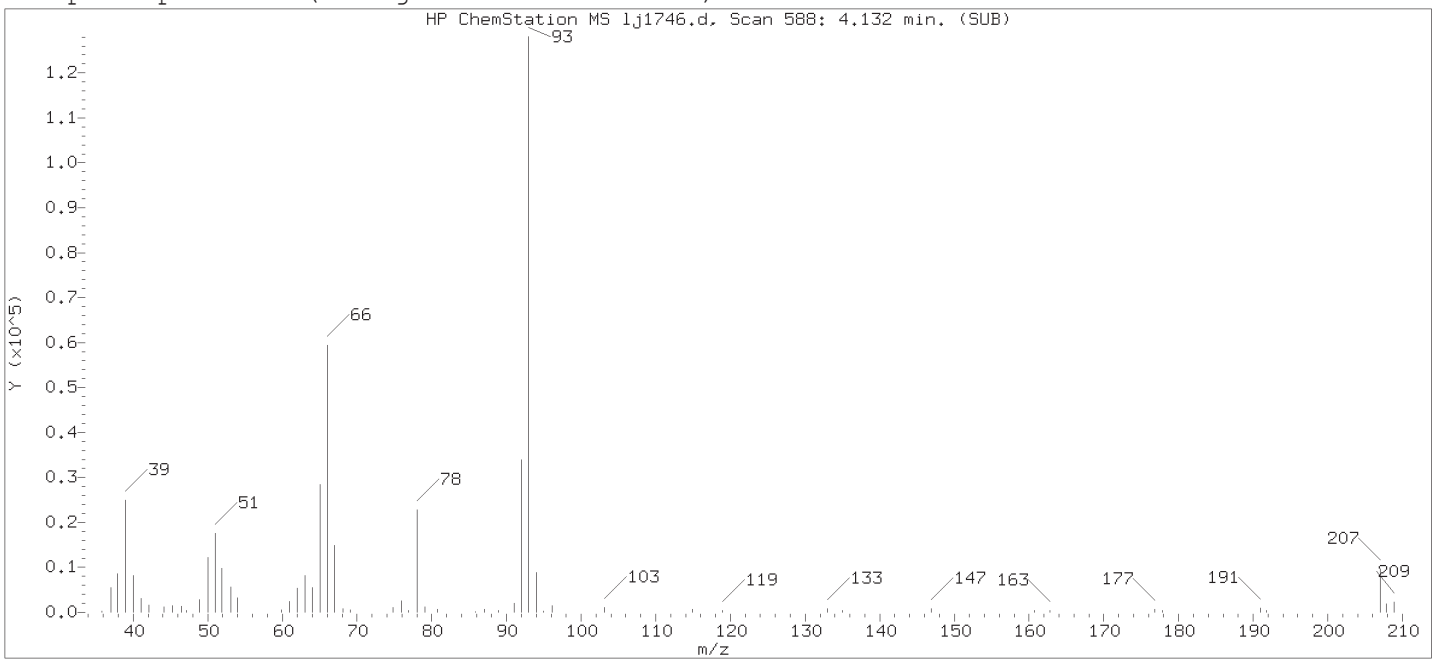
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 588		
Retention Time (minutes)	: 4.132		
Quant Ion	: 93.00		
Area (flag)	: 290870M		
On-Column Amount (ng/ul)	: 3.7543		
Integration start scan	: 584	Integration stop scan:	631
Y at integration start	: 8	Y at integration end:	8

Reason for manual integration: improper integration

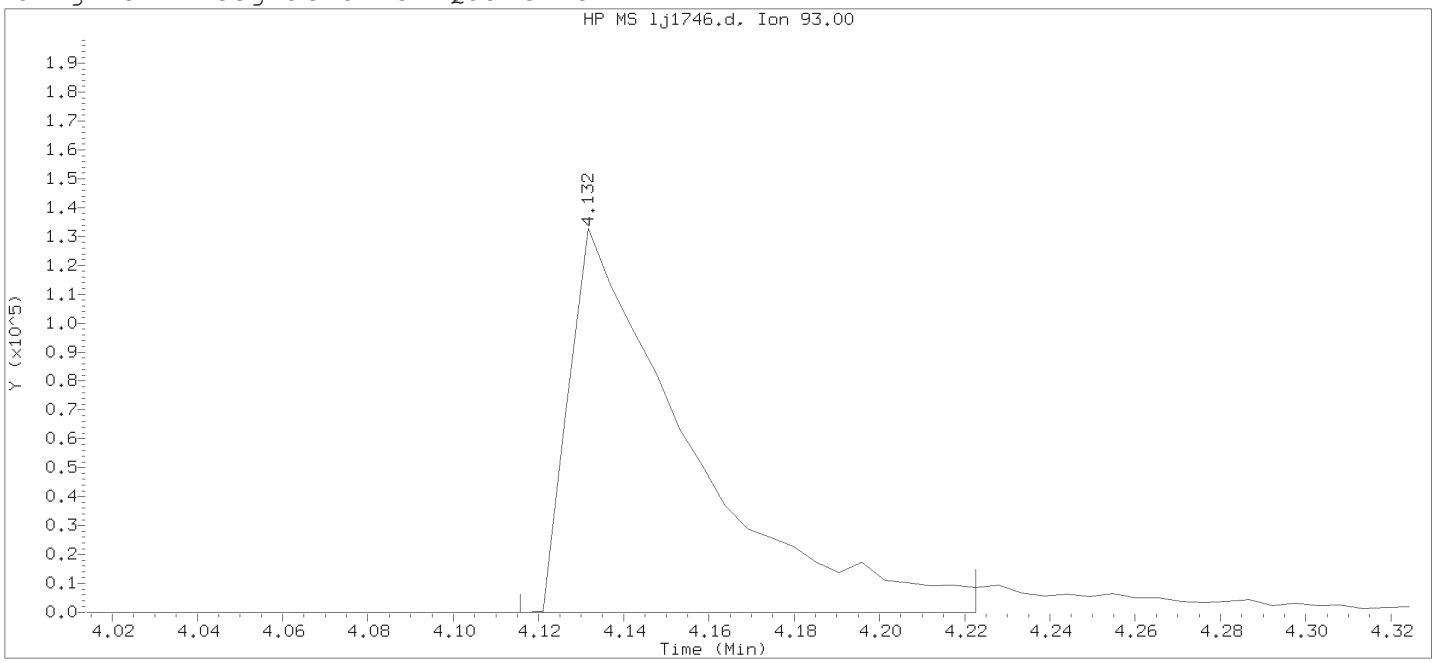
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

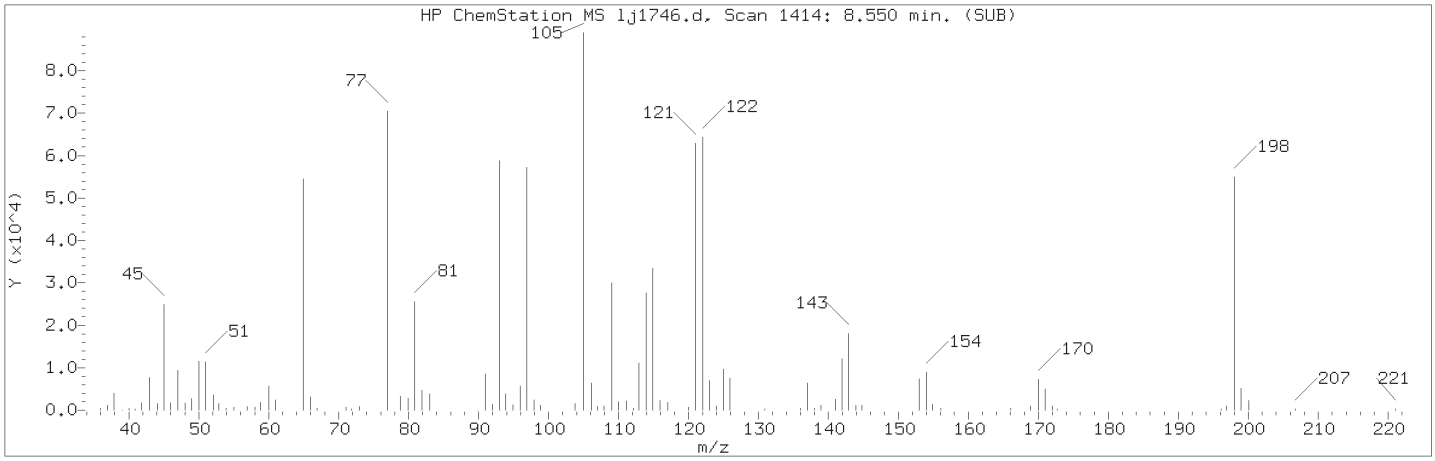
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

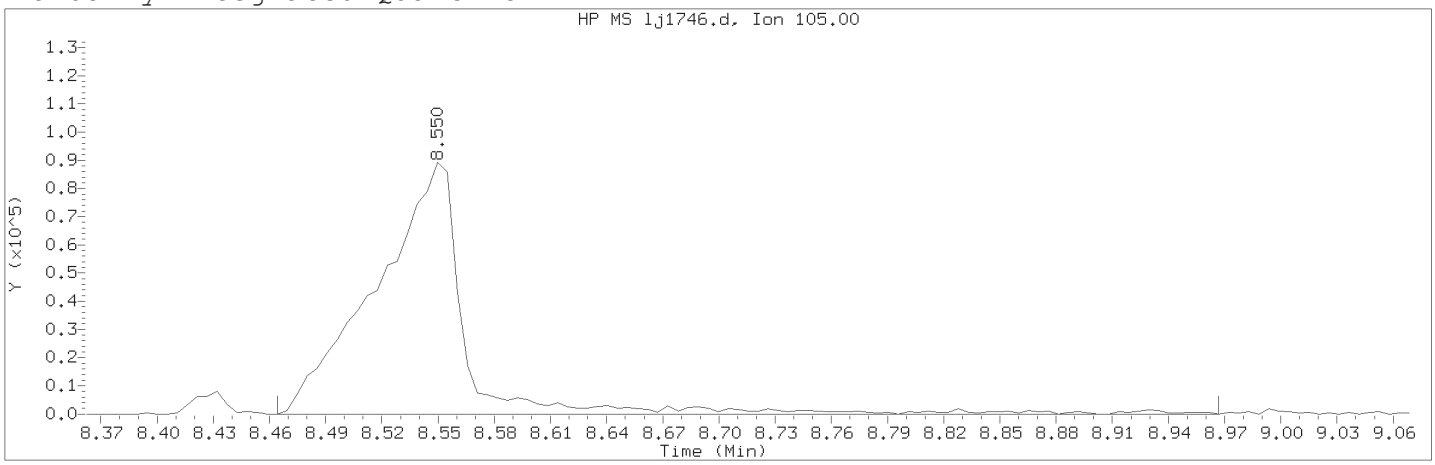
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 588		
Retention Time (minutes)	: 4.132		
Quant Ion	: 93.00		
Area	: 261397		
On-column Amount (ng/ul)	: 3.4597		
Integration start scan	: 584	Integration stop scan:	604
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for [illegible]

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

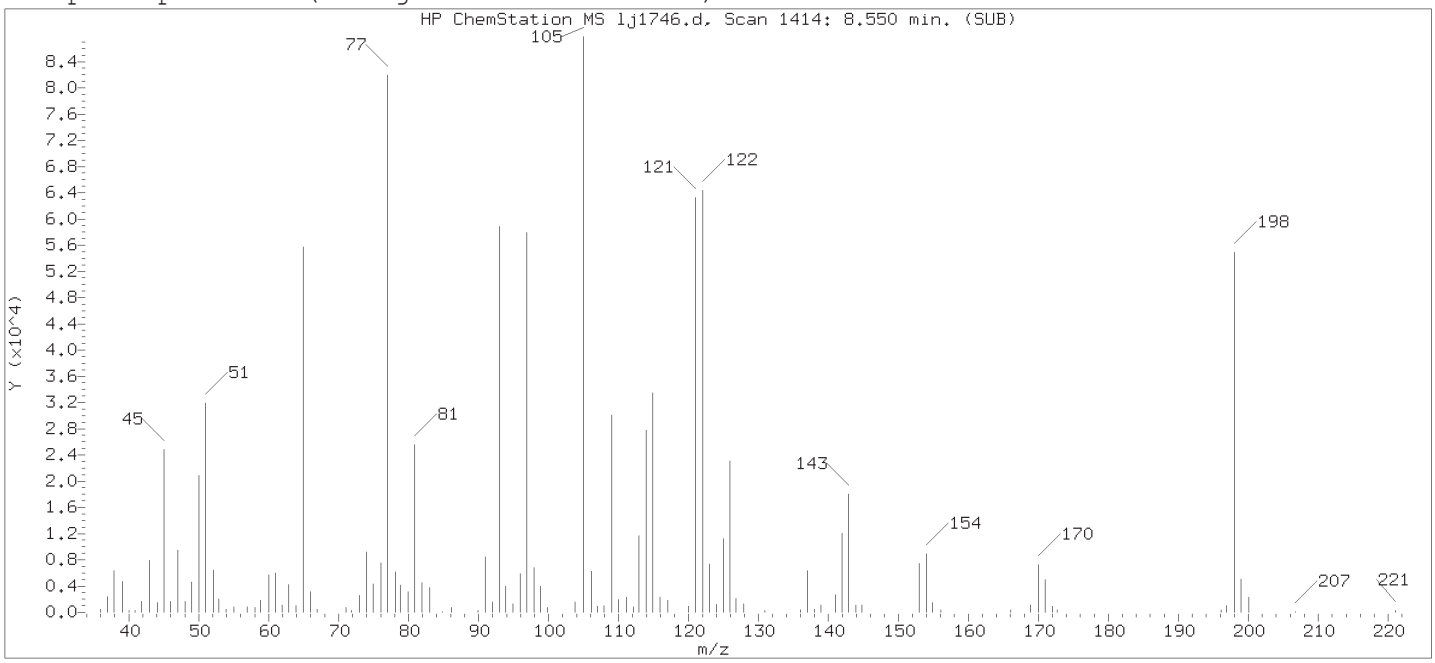
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1414		
Retention Time (minutes)	: 8.550		
Quant Ion	: 105.00		
Area (flag)	: 296626M		
On-Column Amount (ng/ul)	: 6.7587		
Integration start scan	: 1397	Integration stop scan:	1491
Y at integration start	: -69	Y at integration end:	-69

Reason for manual integration: improper integration

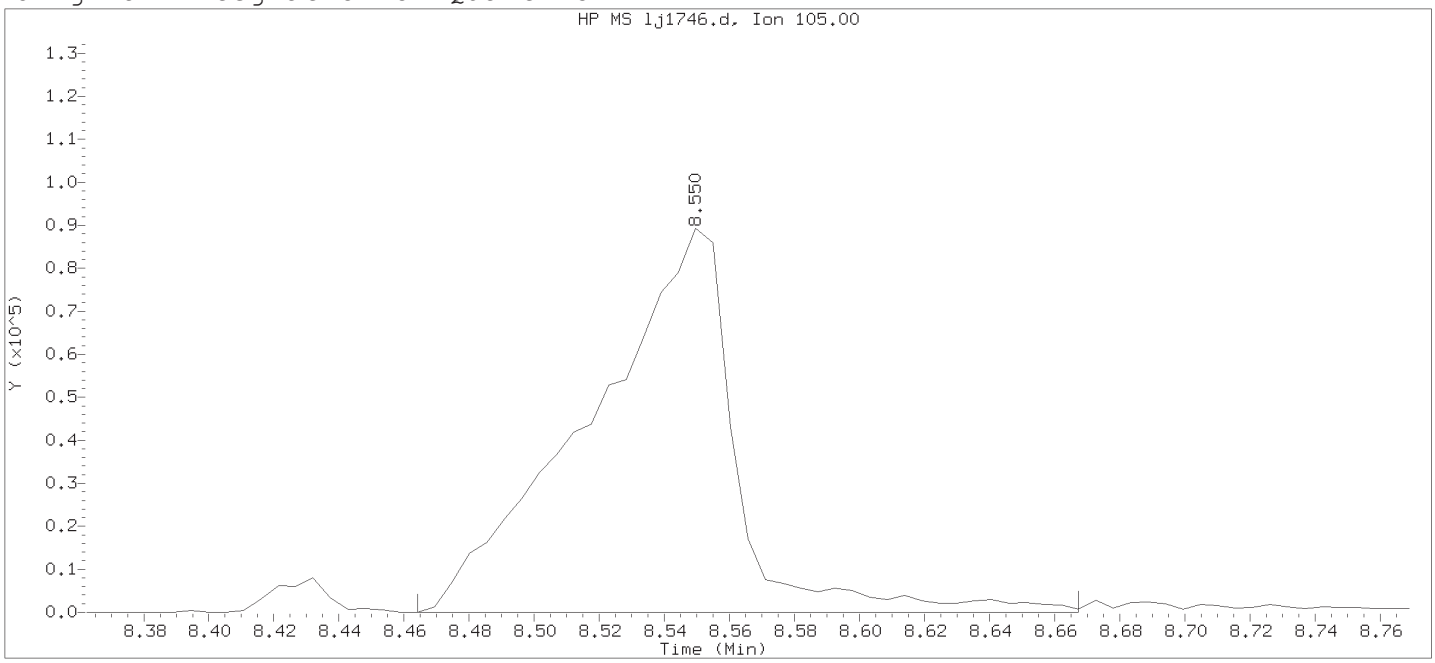
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

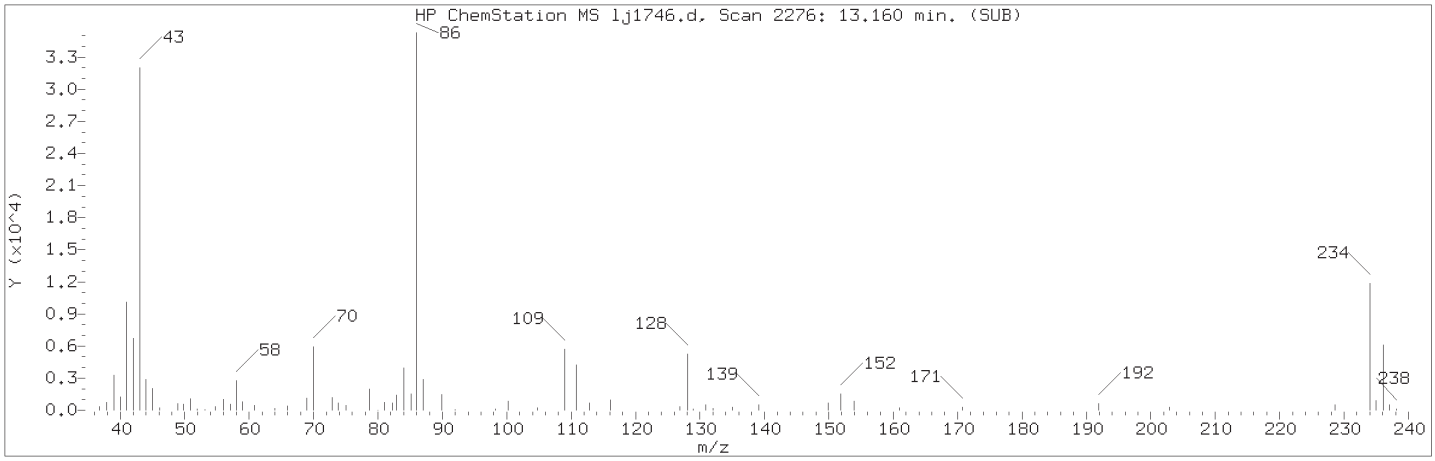
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

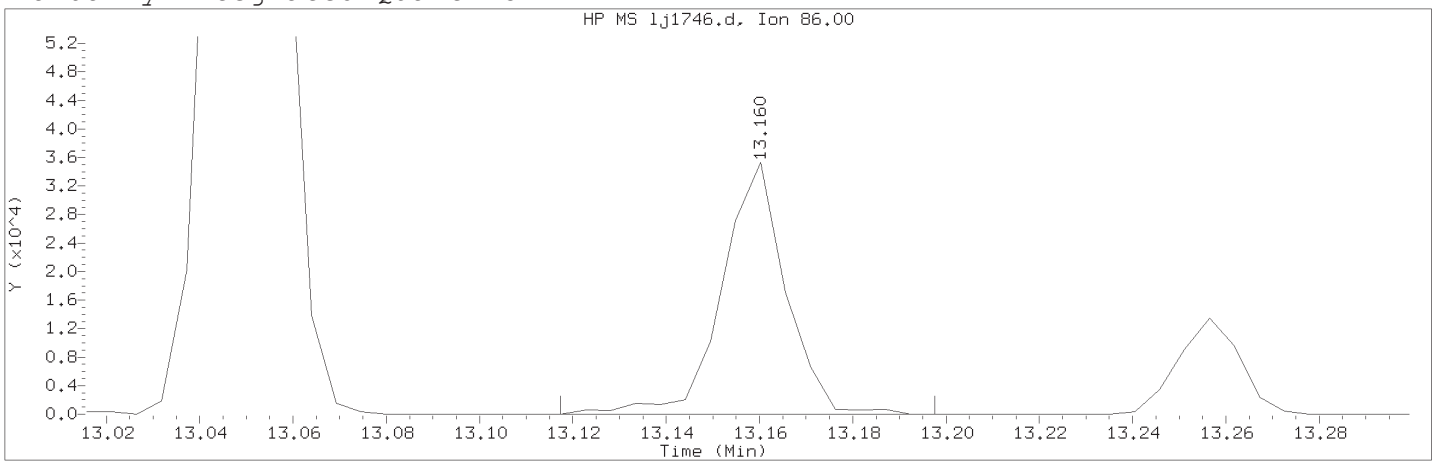
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1414		
Retention Time (minutes)	: 8.550		
Quant Ion	: 105.00		
Area	: 278360		
On-column Amount (ng/ul)	: 8.2455		
Integration start scan	: 1397	Integration stop scan:	1435
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for this data.

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

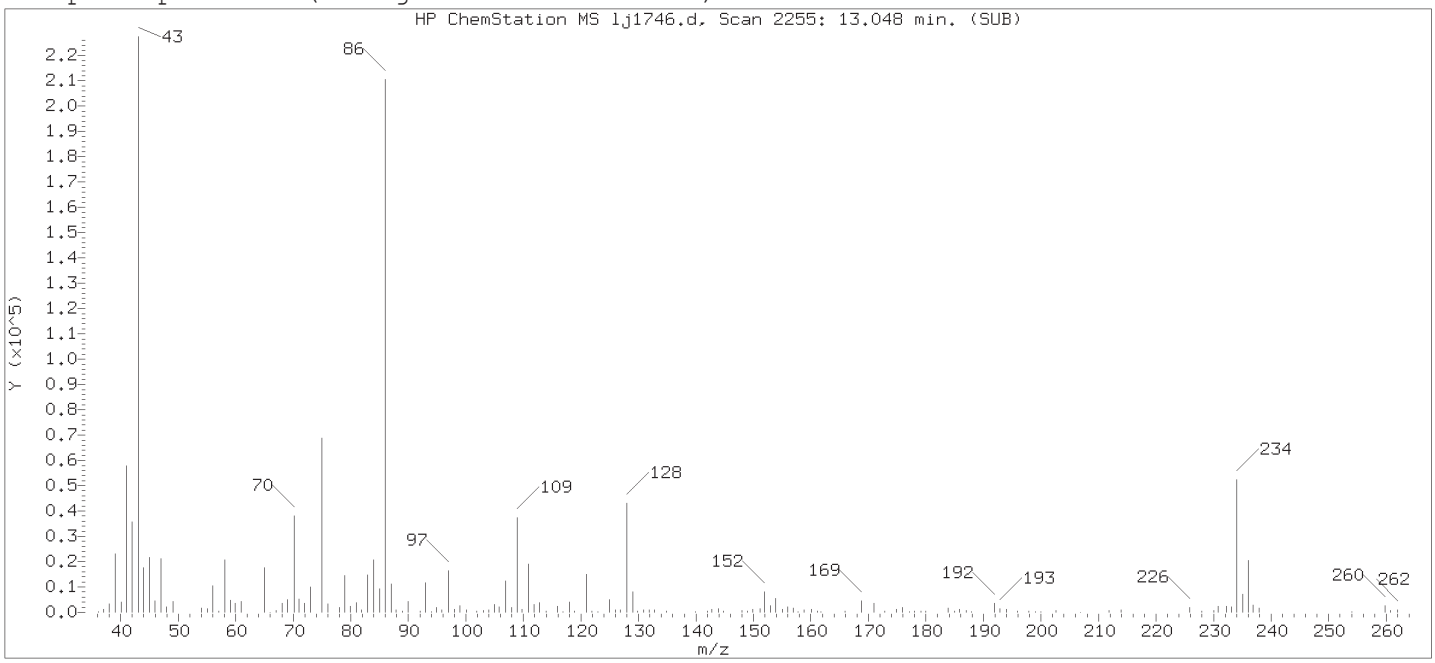
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2276		
Retention Time (minutes)	: 13.160		
Quant Ion	: 86.00		
Area (flag)	: 33482M		
On-Column Amount (ng/ul)	: 0.6455		
Integration start scan	: 2267	Integration stop scan:	2282
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

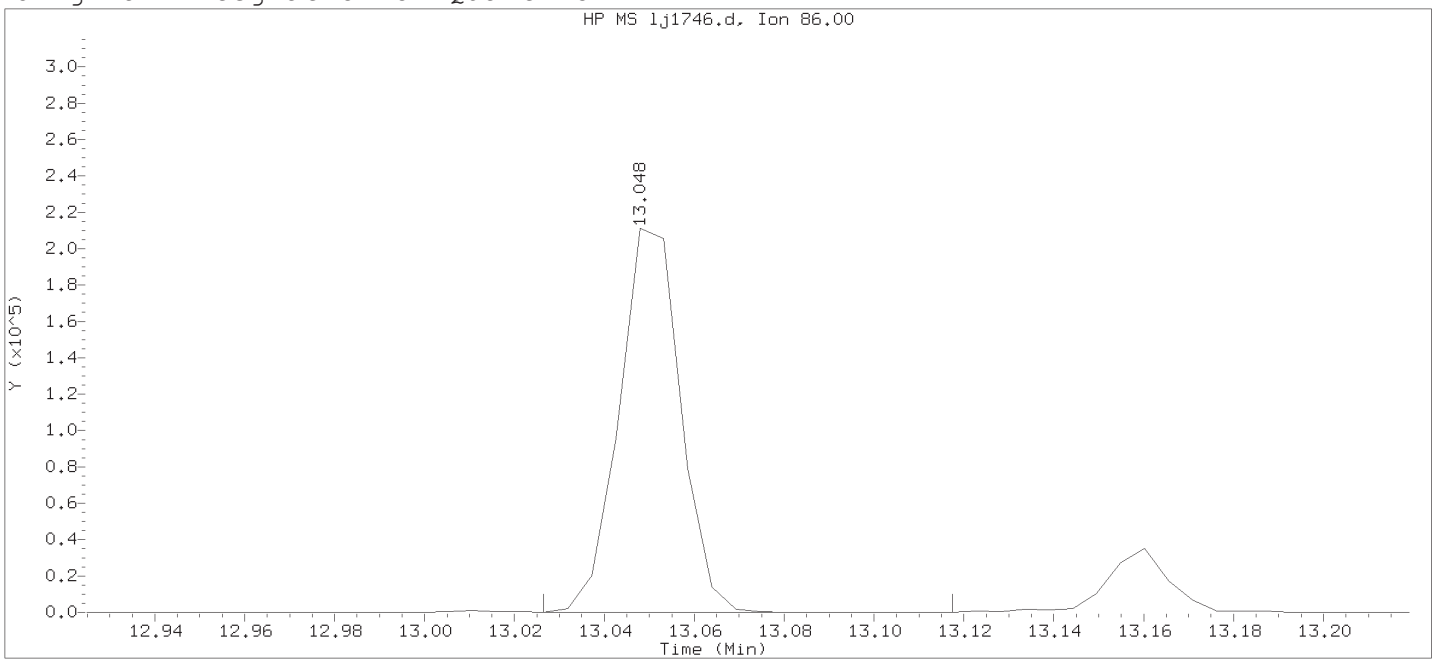
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

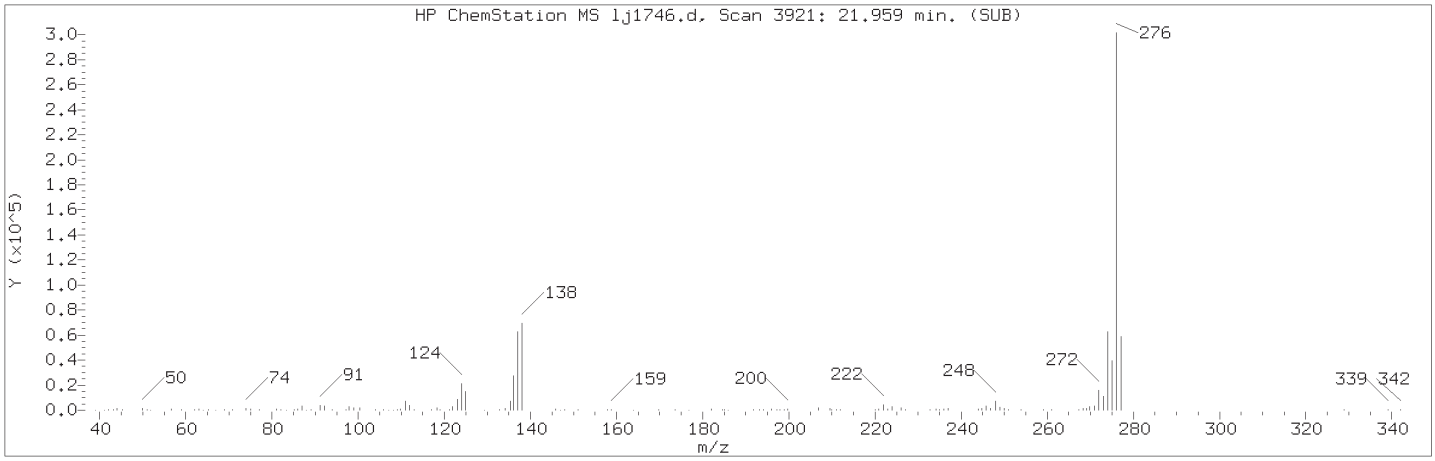
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

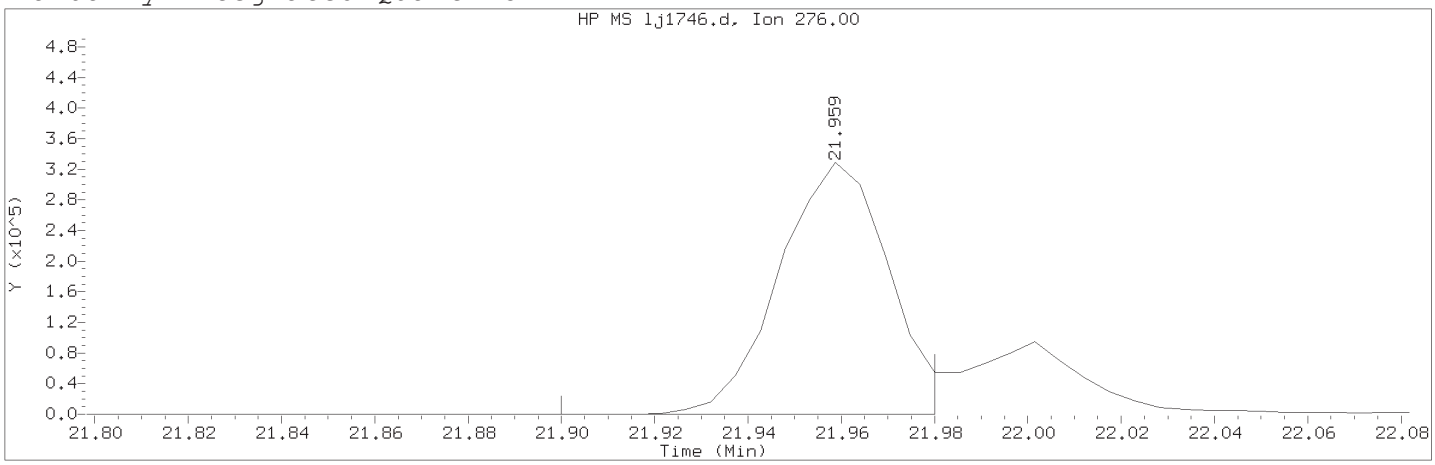
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2255		
Retention Time (minutes)	: 13.048		
Quant Ion	: 86.00		
Area	: 201792		
On-column Amount (ng/ul)	: 0.9026		
Integration start scan	: 2250	Integration stop scan:	2267
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for this file.

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

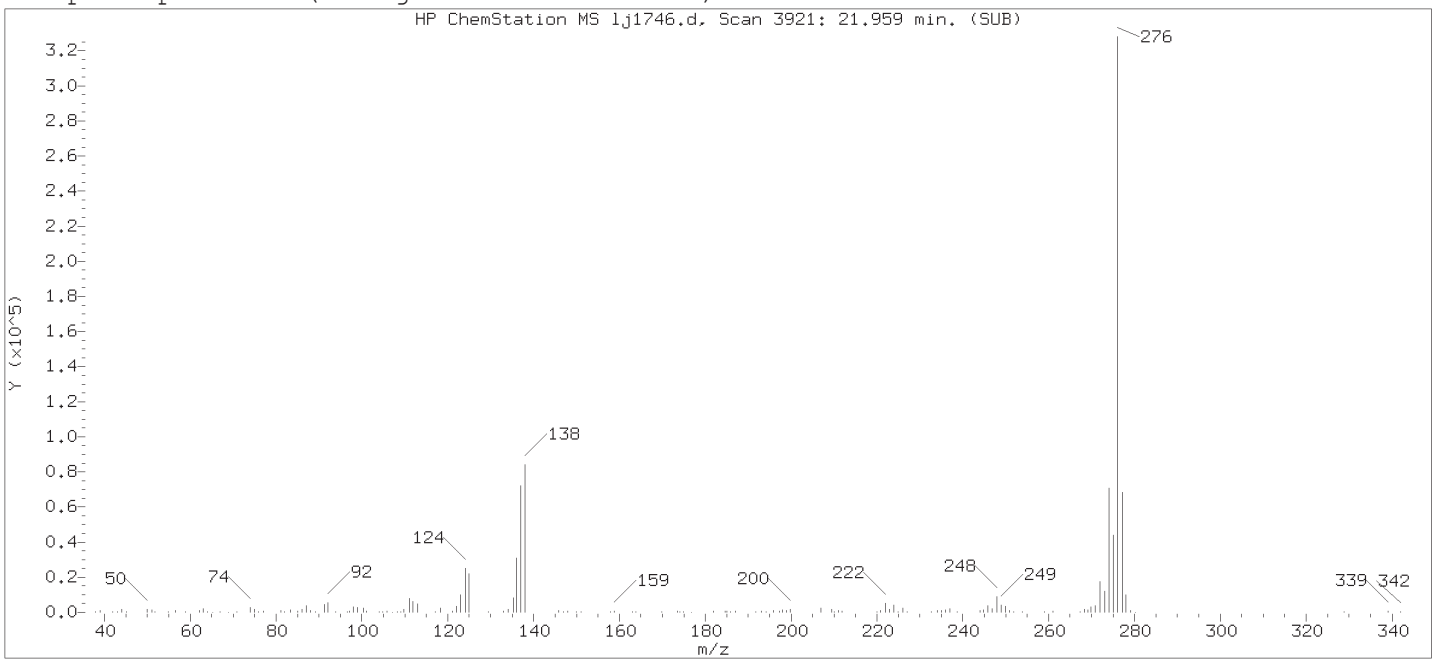
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3921
Retention Time (minutes) : 21.959
Quant Ion : 276.00
Area (flag) : 537390M
On-Column Amount (ng/ul) : 3.6718
Integration start scan : 3909 Integration stop scan: 3924
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

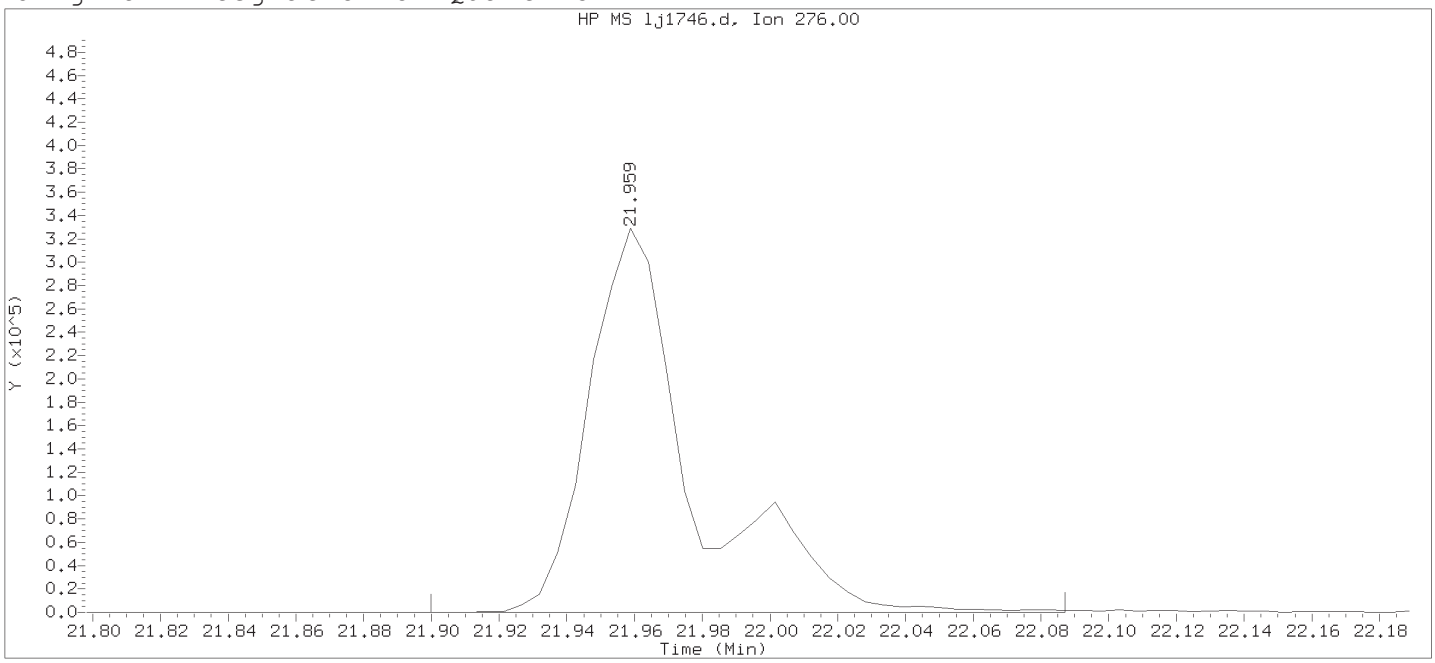
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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



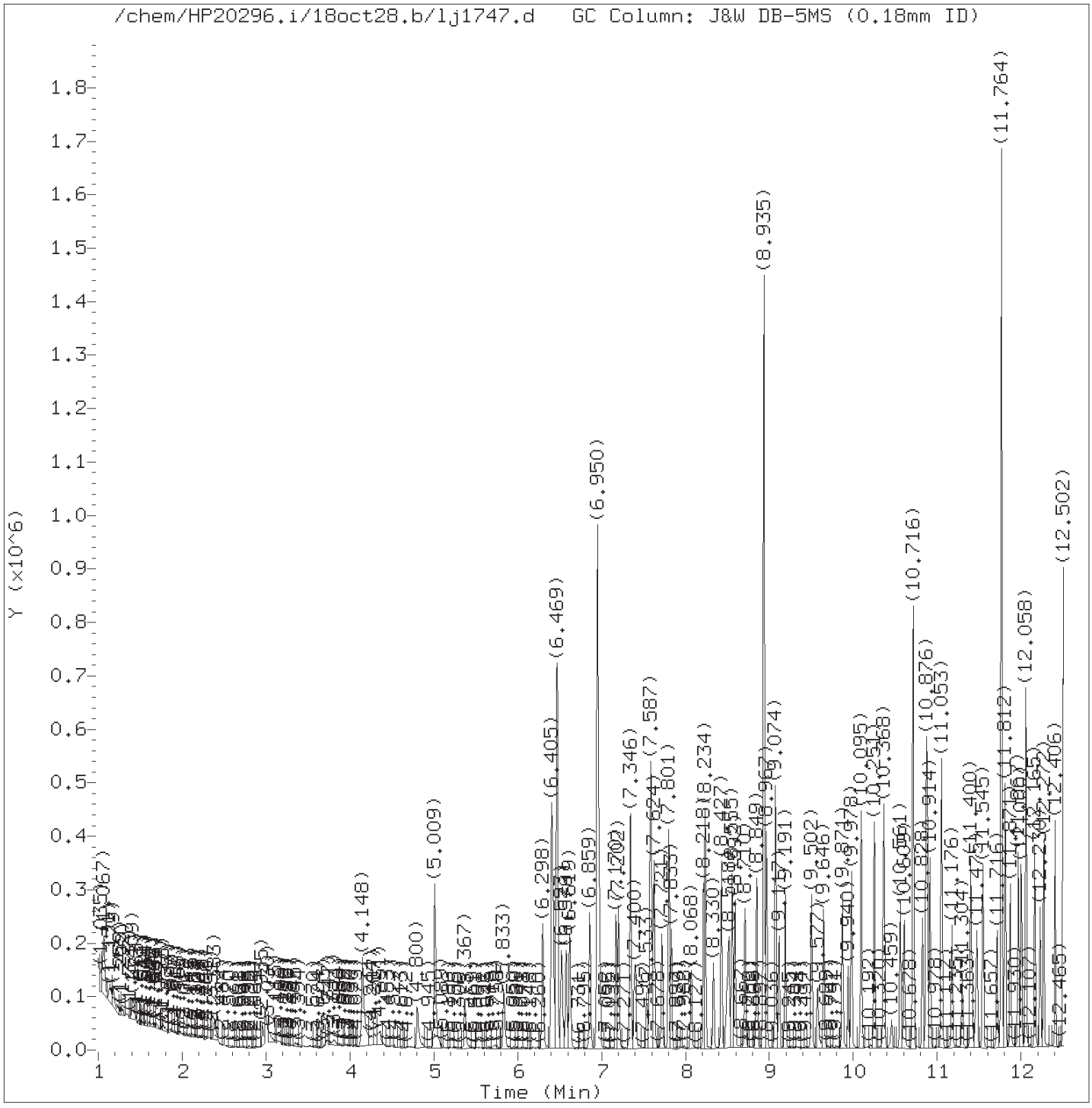
Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

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

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for TIC.



Total Ion Chromatogram (TIC)

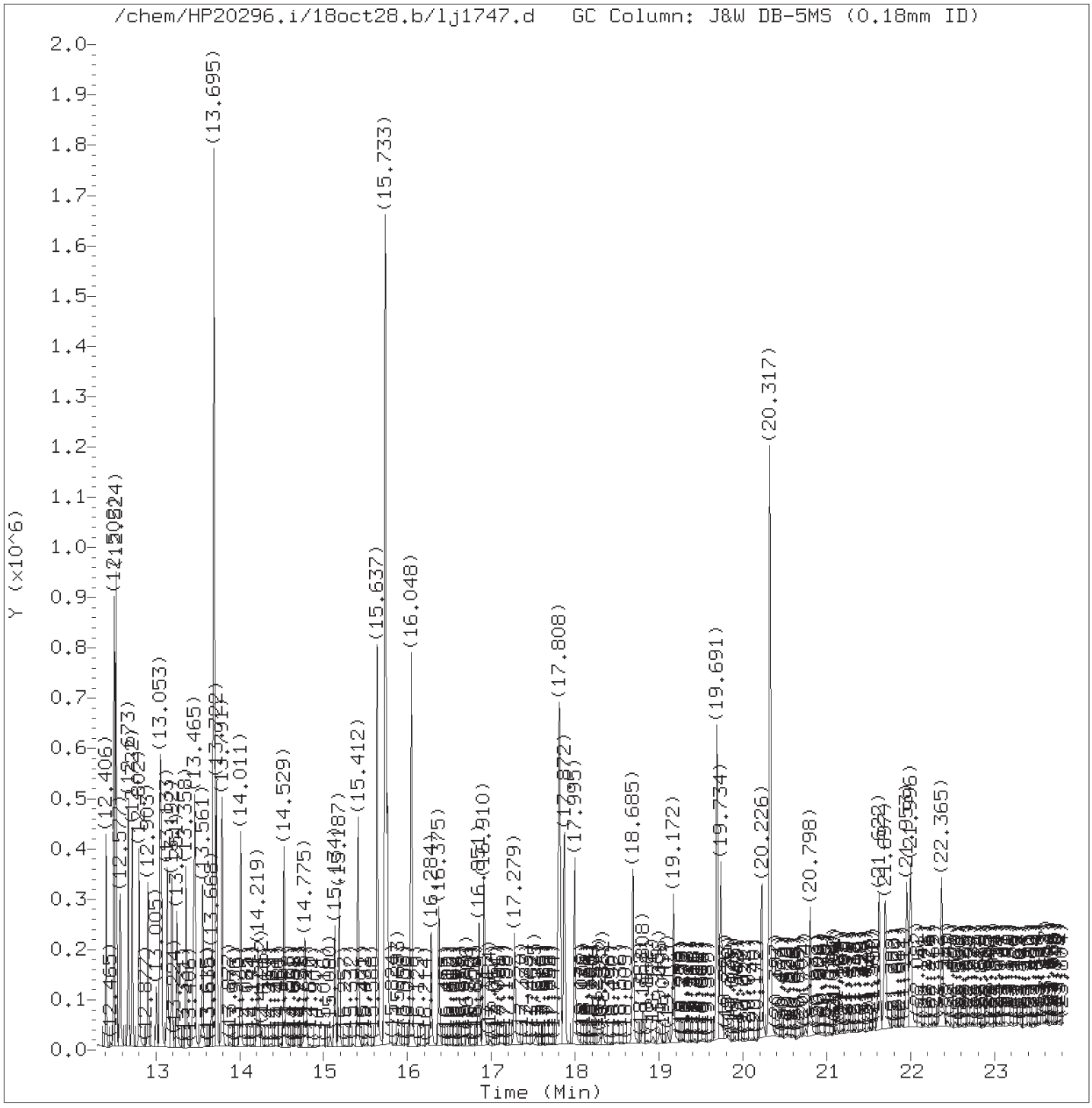
Target Revision 3.5

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

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 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

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 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

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-Nitrosopiperidine	(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

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/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

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 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

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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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 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

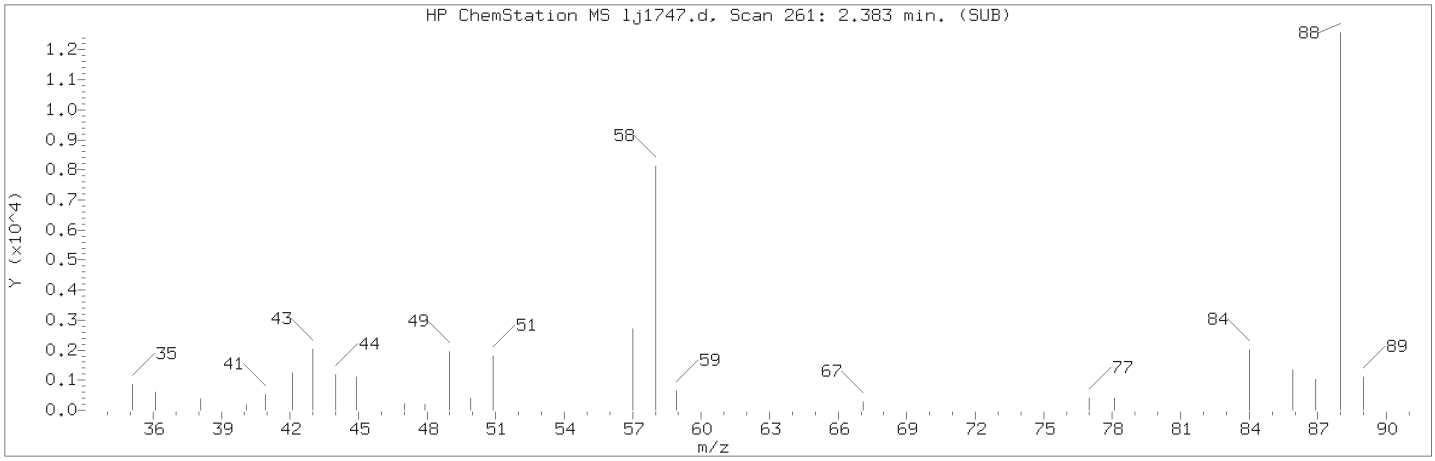
Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

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

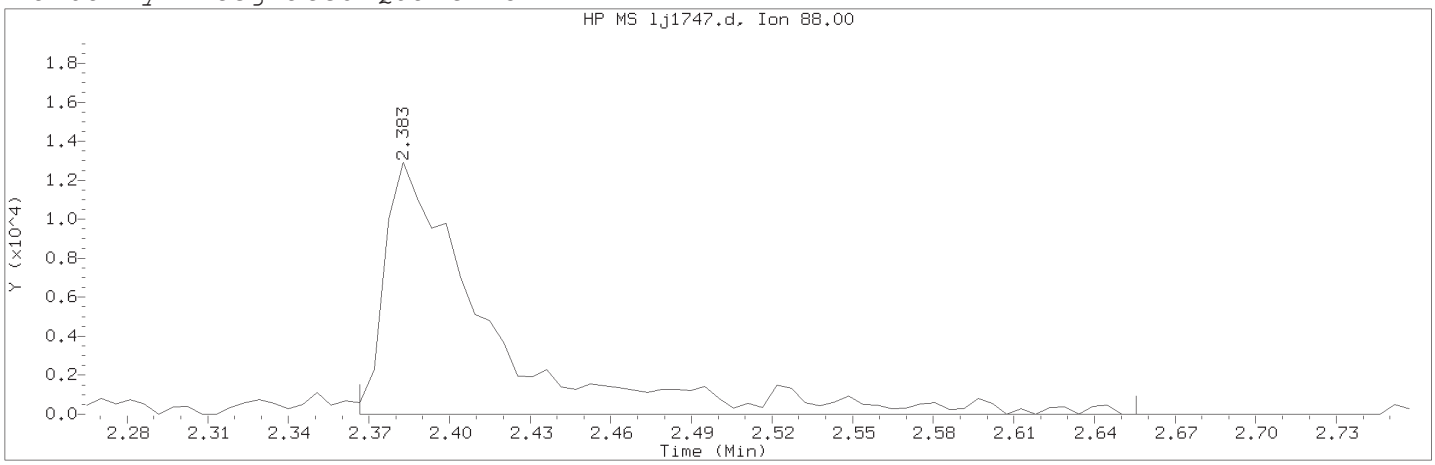
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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/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

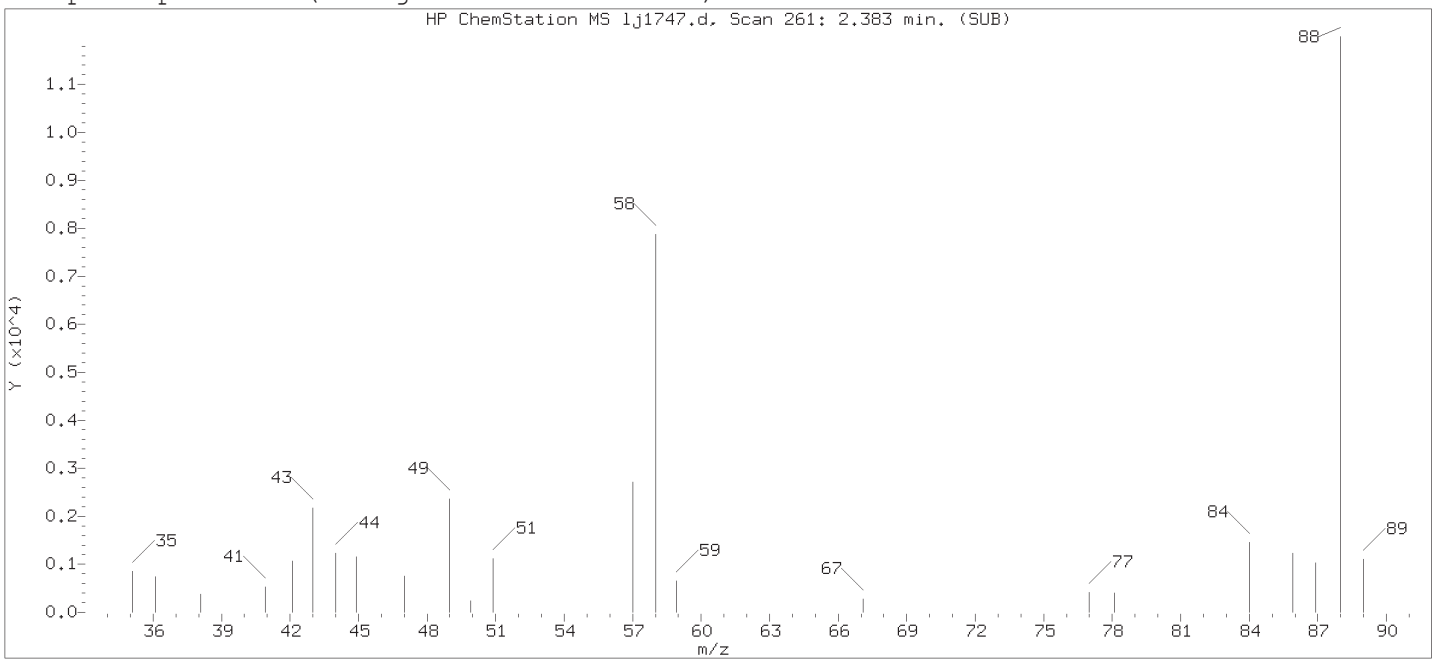
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 261
Retention Time (minutes) : 2.383
Quant Ion : 88.00
Area (flag) : 35662M
On-Column Amount (ng/ul) : 1.2918
Integration start scan : 257 Integration stop scan: 311
Y at integration start : 5 Y at integration end: 5

Reason for manual integration: improper integration

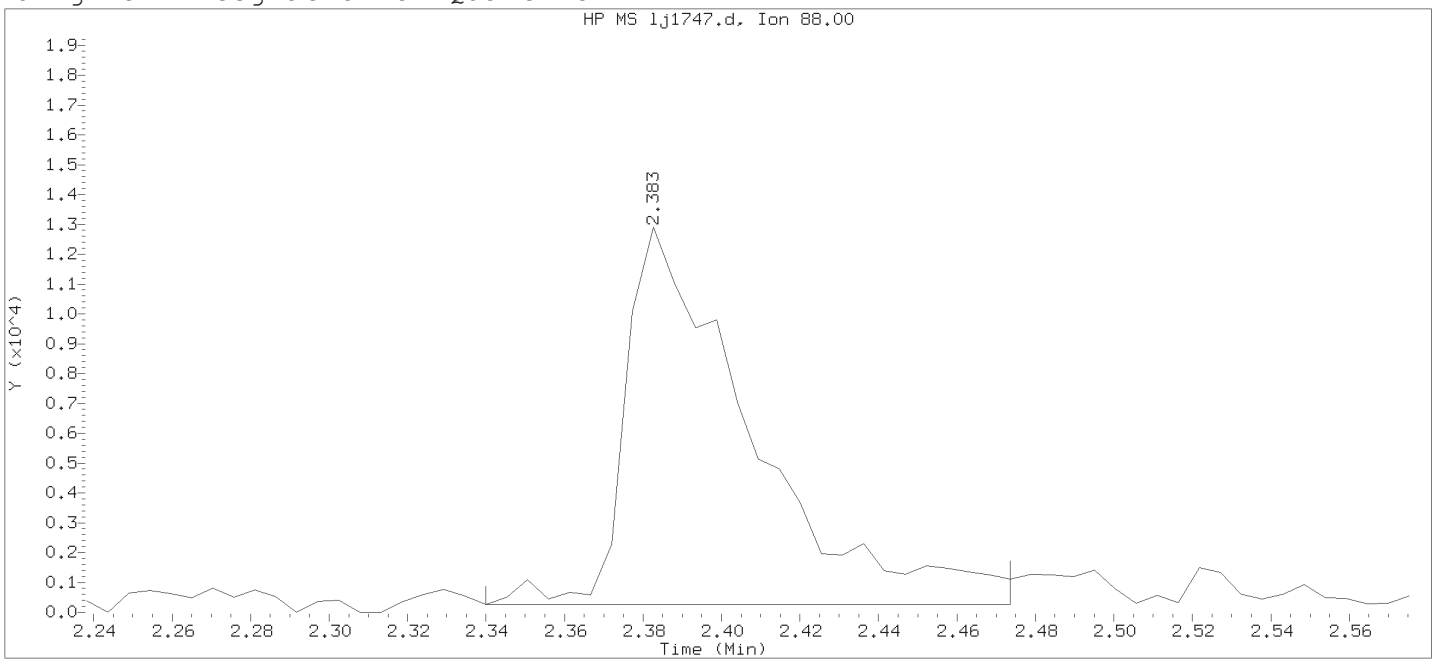
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

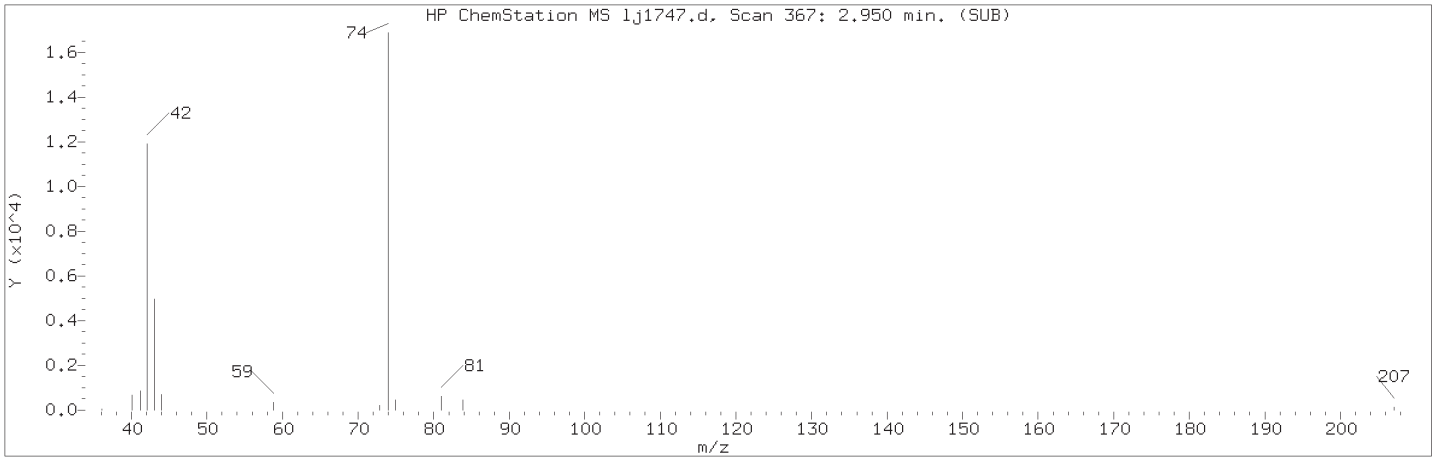
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

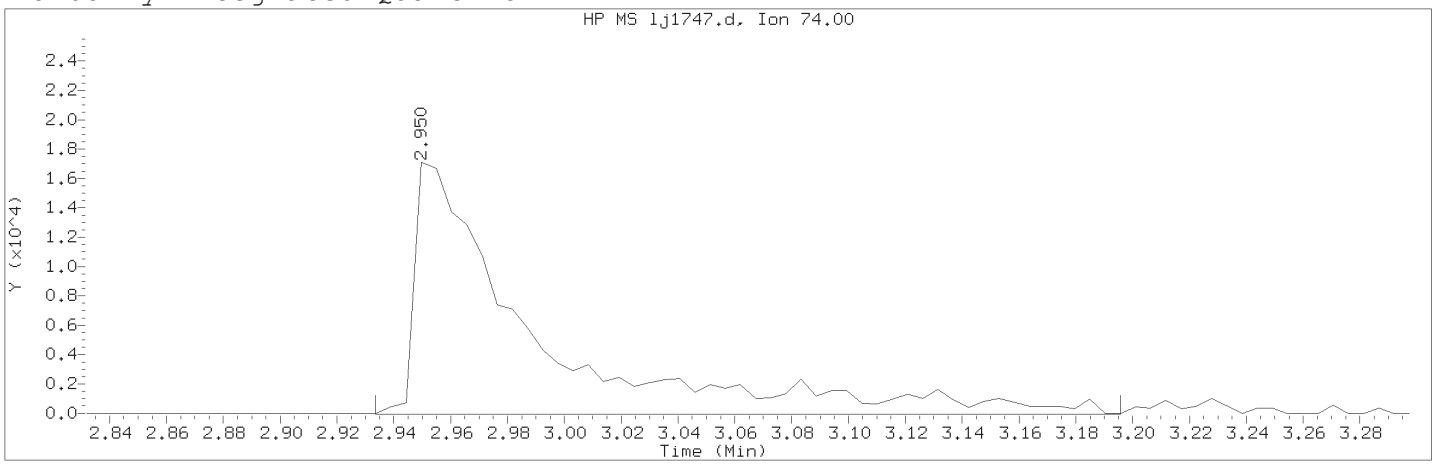
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 261		
Retention Time (minutes)	: 2.383		
Quant Ion	: 88.00		
Area	: 28206		
On-column Amount (ng/ul)	: 1.0589		
Integration start scan	: 252	Integration stop scan:	277
Y at integration start	: 272	Y at integration end:	272

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used: 1007

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

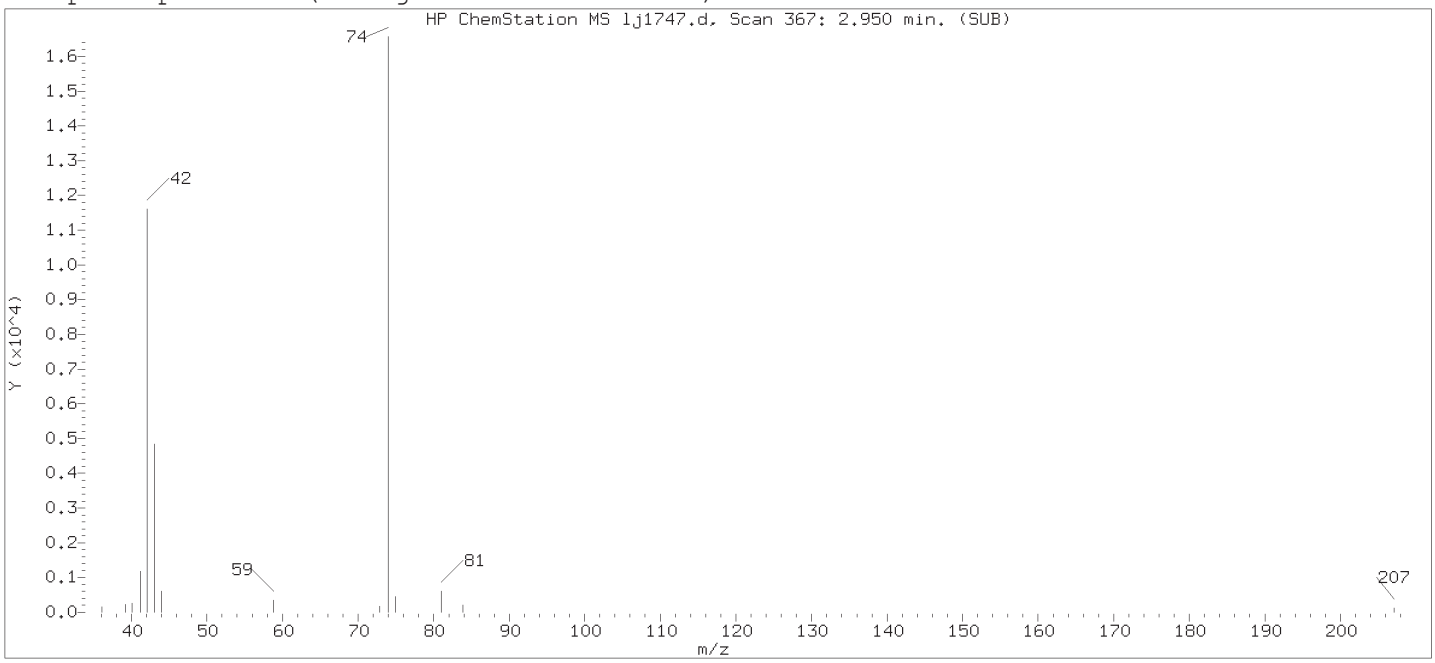
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 367
Retention Time (minutes) : 2.950
Quant Ion : 74.00
Area (flag) : 48925M
On-Column Amount (ng/ul) : 1.1790
Integration start scan : 363 Integration stop scan: 412
Y at integration start : -57 Y at integration end: -57

Reason for manual integration: improper integration

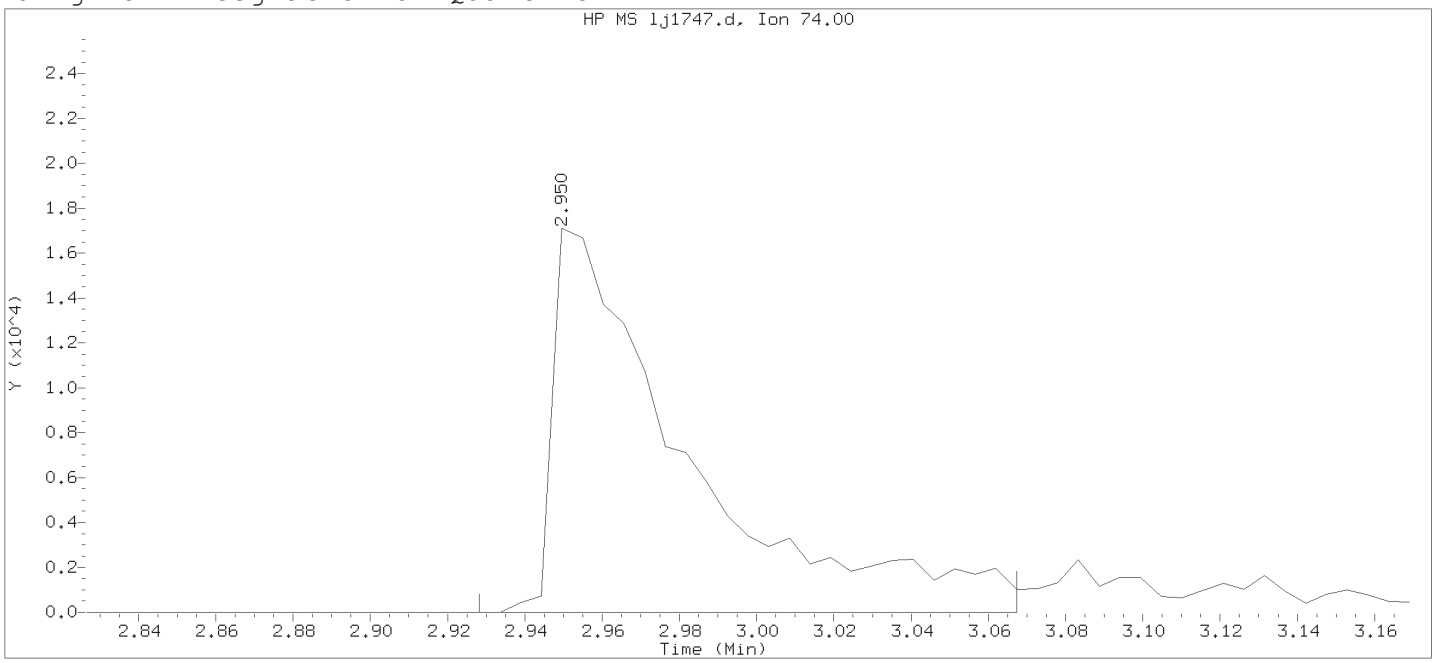
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

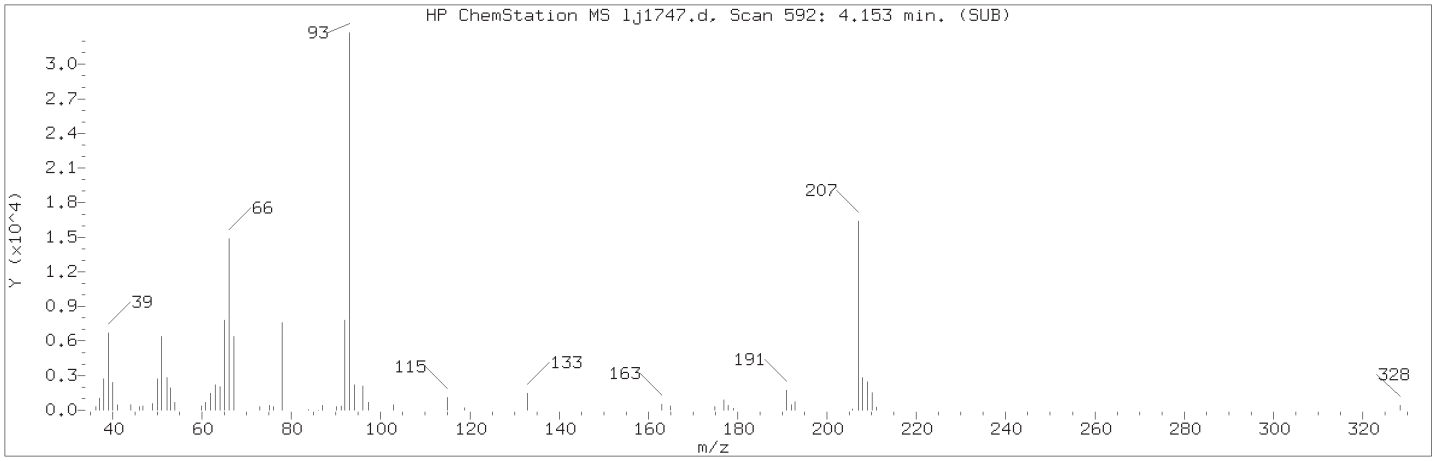
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

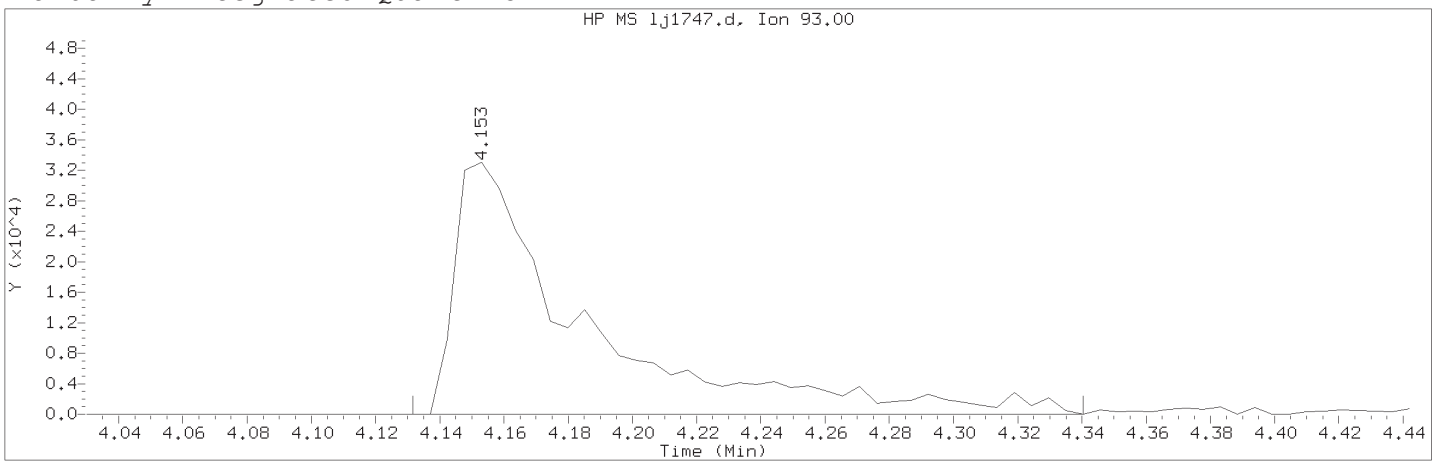
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 367		
Retention Time (minutes)	: 2.950		
Quant Ion	: 74.00		
Area	: 40821		
On-column Amount (ng/ul)	: 1.0312		
Integration start scan	: 362	Integration stop scan:	388
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for this page.

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

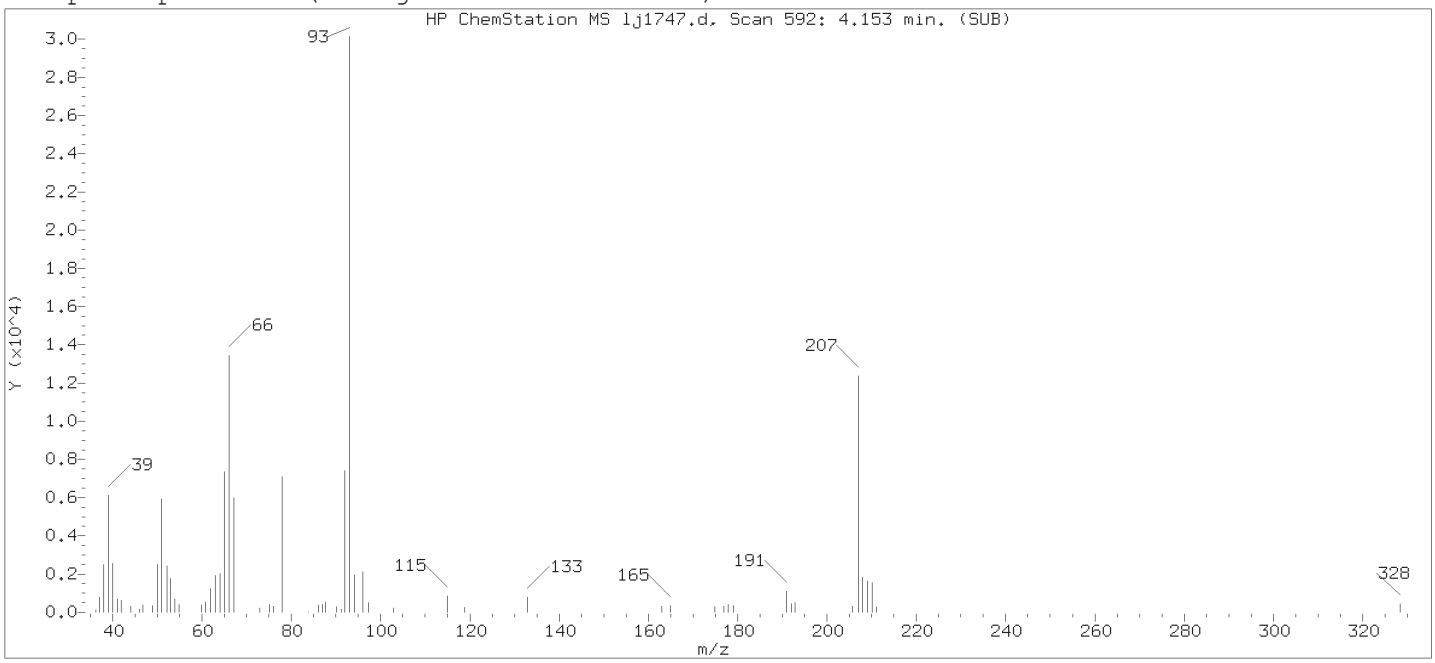
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 592
Retention Time (minutes) : 4.153
Quant Ion : 93.00
Area (flag) : 91395M
On-Column Amount (ng/ul) : 1.2401
Integration start scan : 587 Integration stop scan: 626
Y at integration start : 0 Y at integration end: 12

Reason for manual integration: improper integration

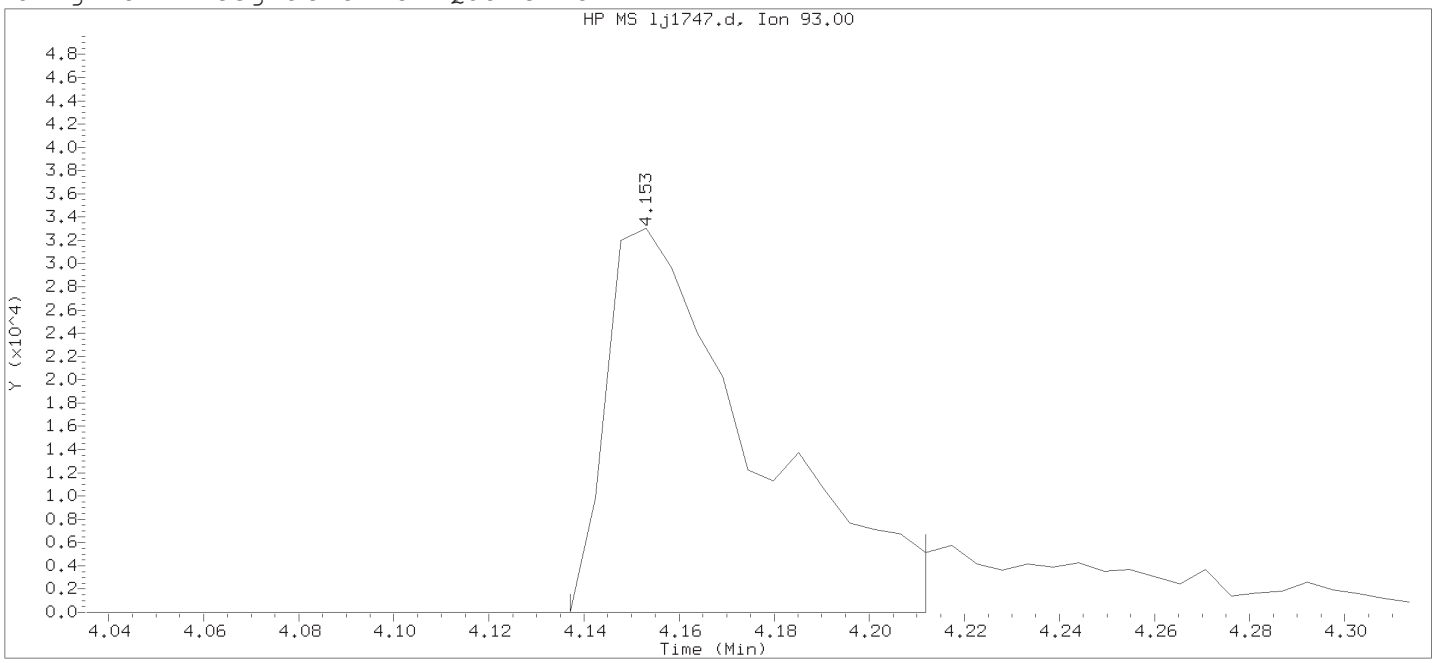
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

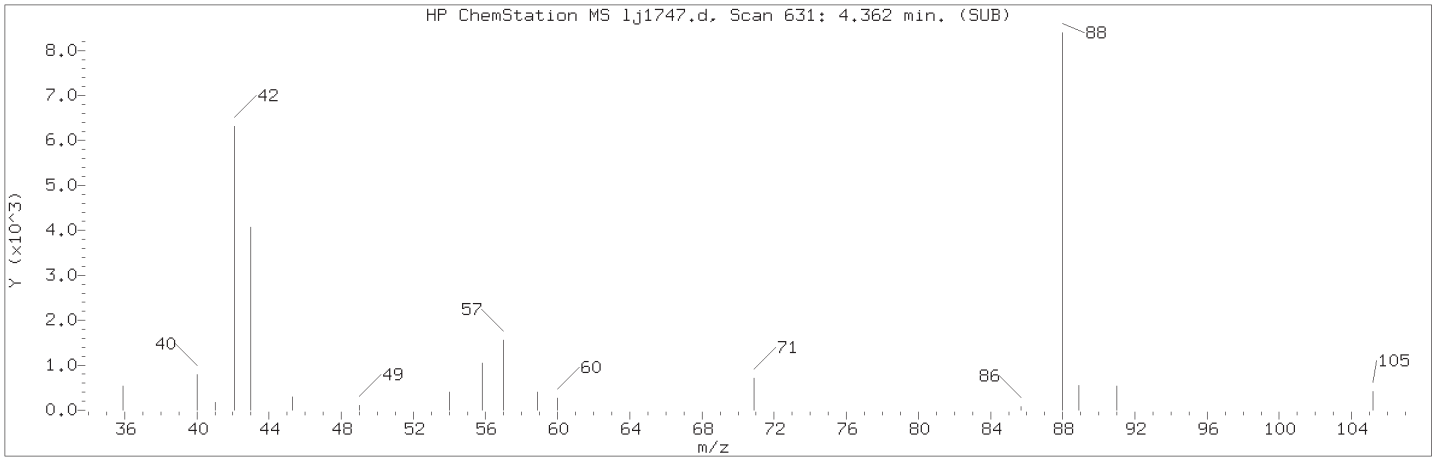
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

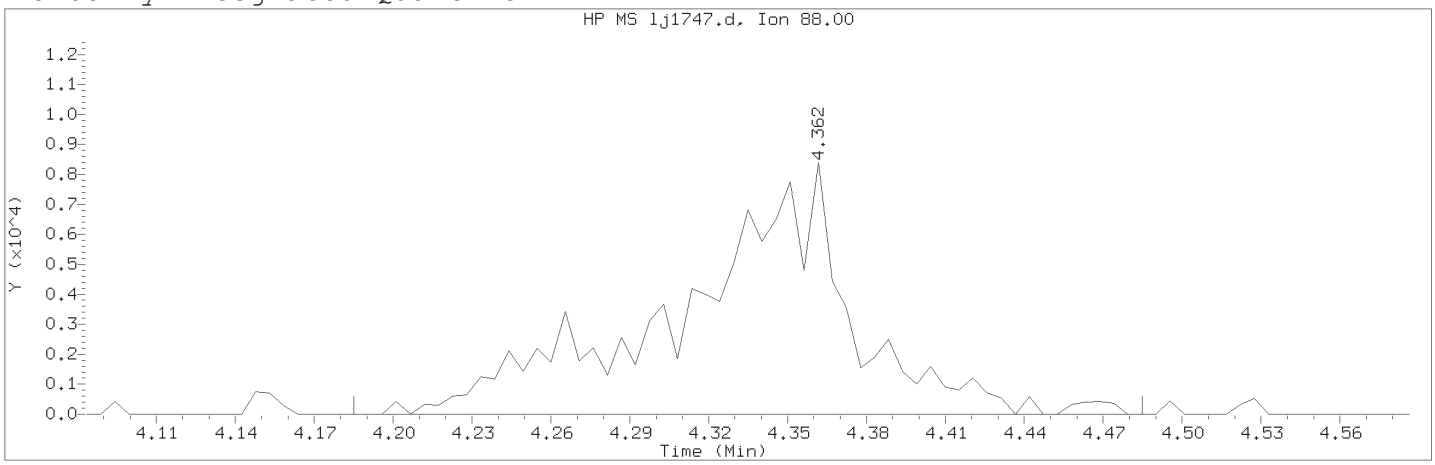
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 592		
Retention Time (minutes)	: 4.153		
Quant Ion	: 93.00		
Area	: 70810		
On-column Amount (ng/ul)	: 1.0181		
Integration start scan	: 588	Integration stop scan:	602
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used: 1007

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

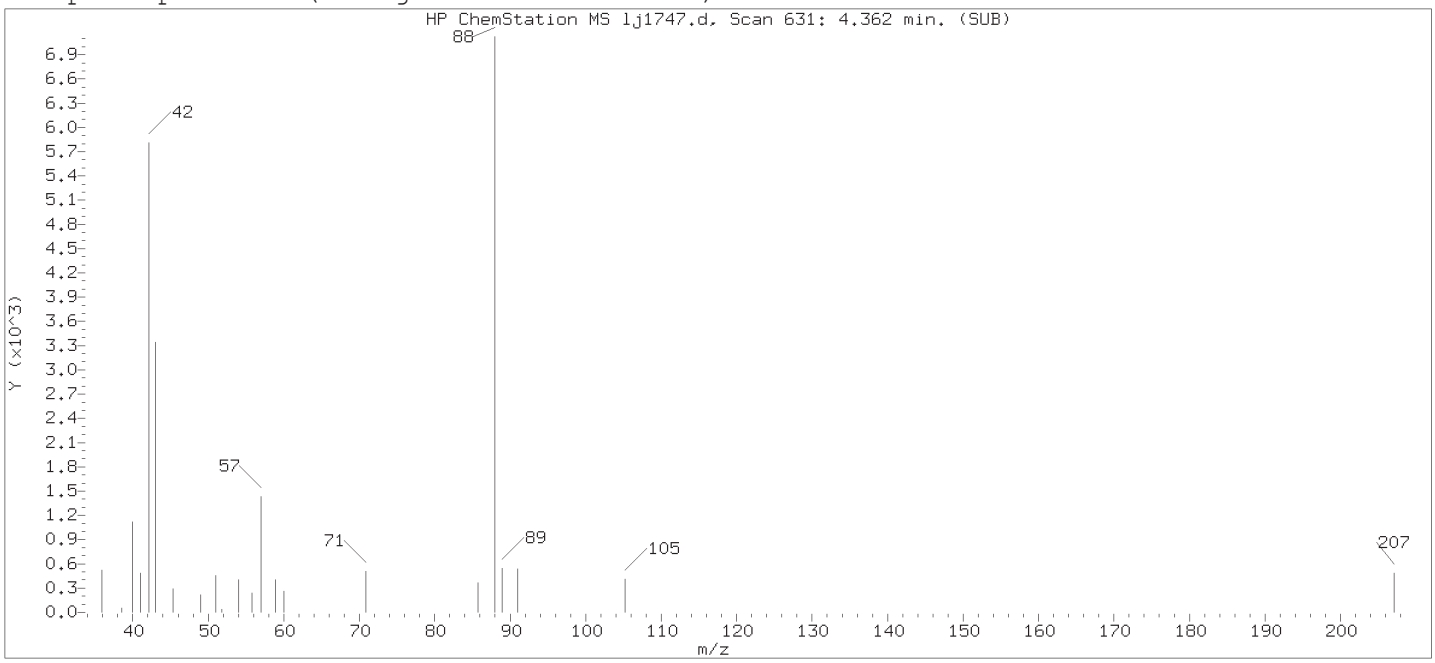
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 631
Retention Time (minutes) : 4.362
Quant Ion : 88.00
Area (flag) : 36907M
On-Column Amount (ng/ul) : 1.2262
Integration start scan : 597 Integration stop scan: 653
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

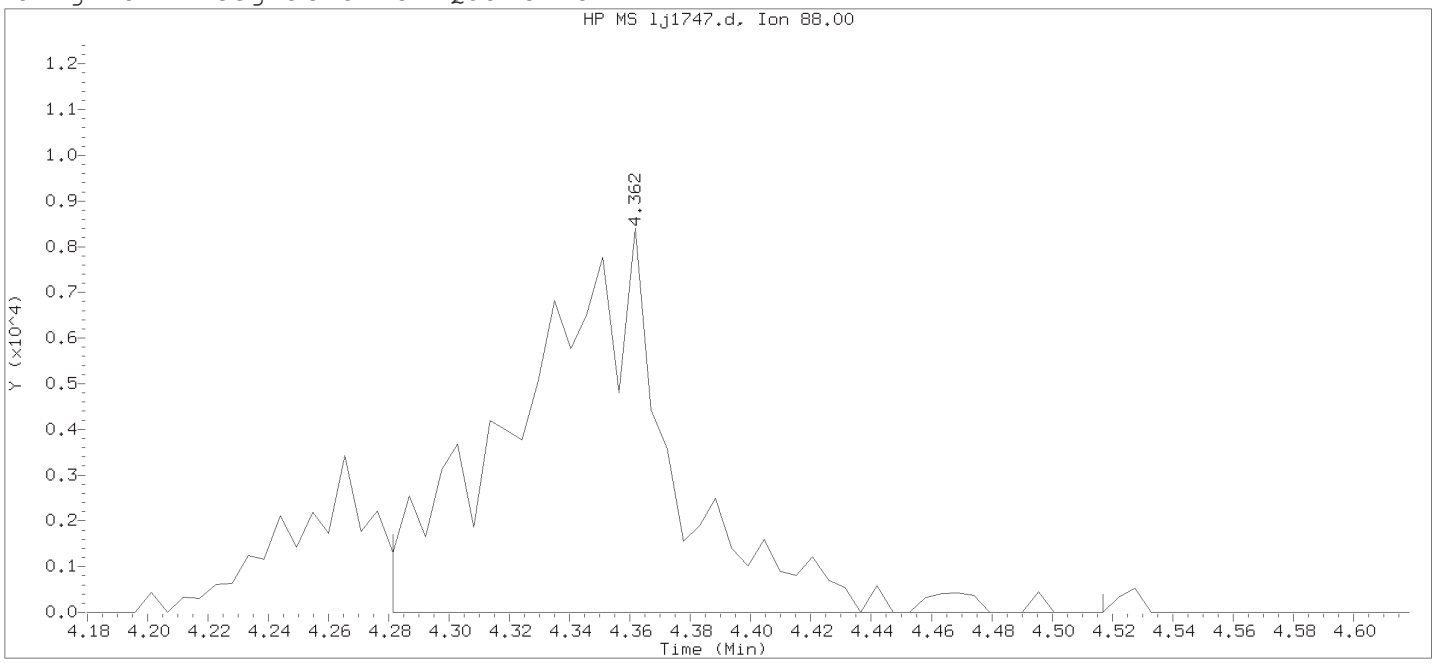
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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

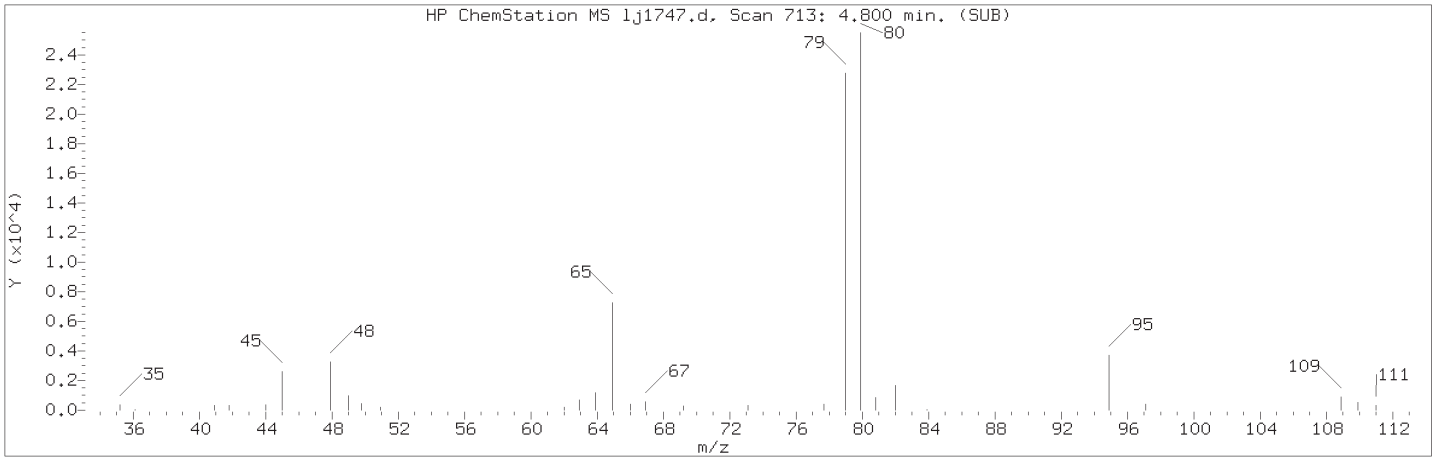
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

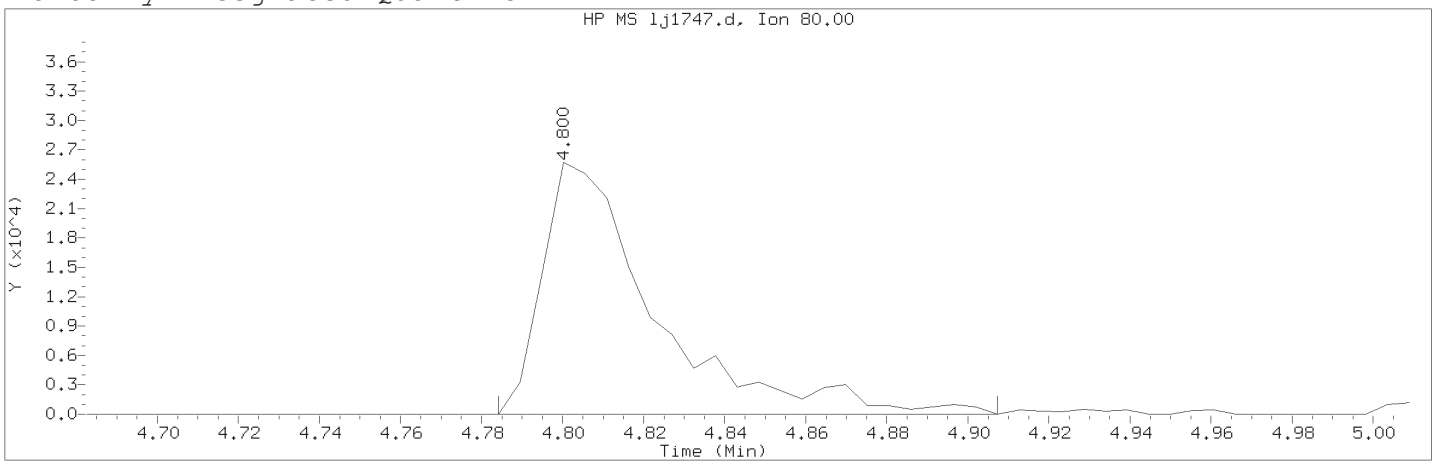
Compound Number	: 9		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 631		
Retention Time (minutes)	: 4.362		
Quant Ion	: 88.00		
Area	: 30559		
On-column Amount (ng/ul)	: 1.0413		
Integration start scan	: 615	Integration stop scan:	659
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used: 1007

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

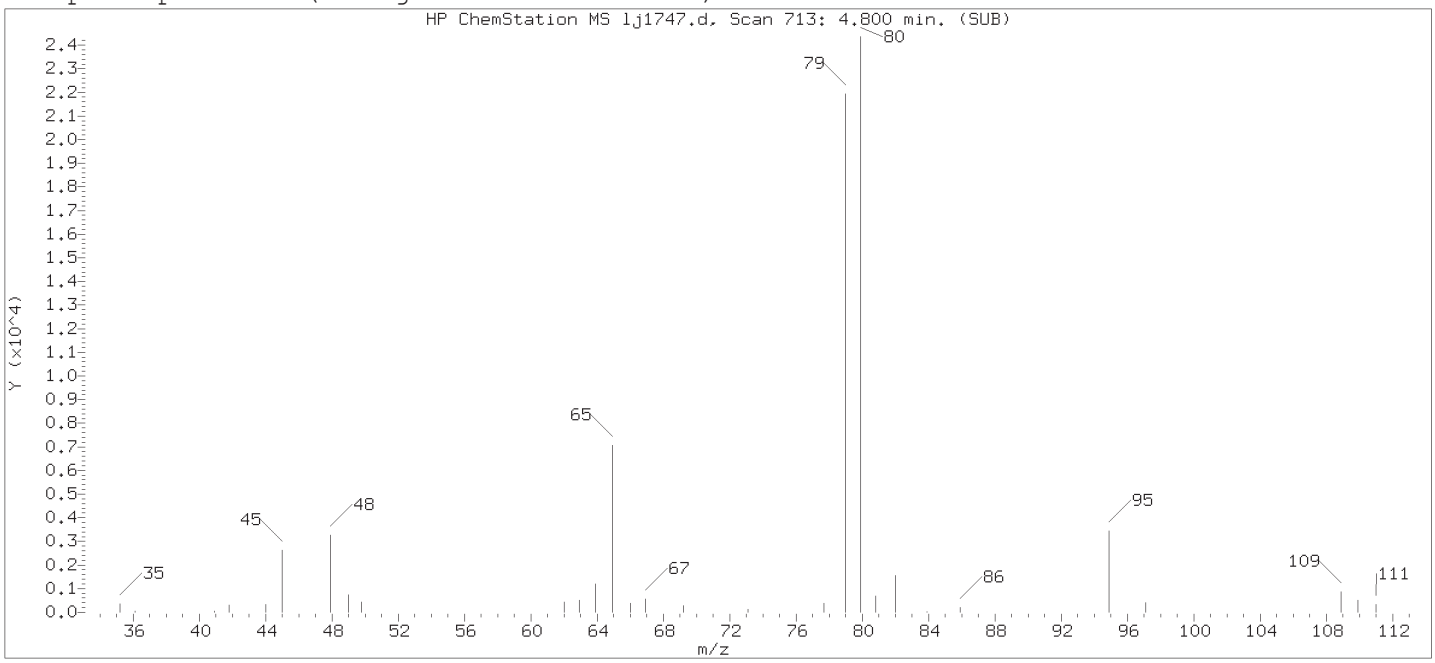
Compound Number : 10
Compound Name : Methyl methanesulfonate
Scan Number : 713
Retention Time (minutes) : 4.800
Quant Ion : 80.00
Area (flag) : 49485M
On-Column Amount (ng/ul) : 1.2856
Integration start scan : 709 Integration stop scan: 732
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

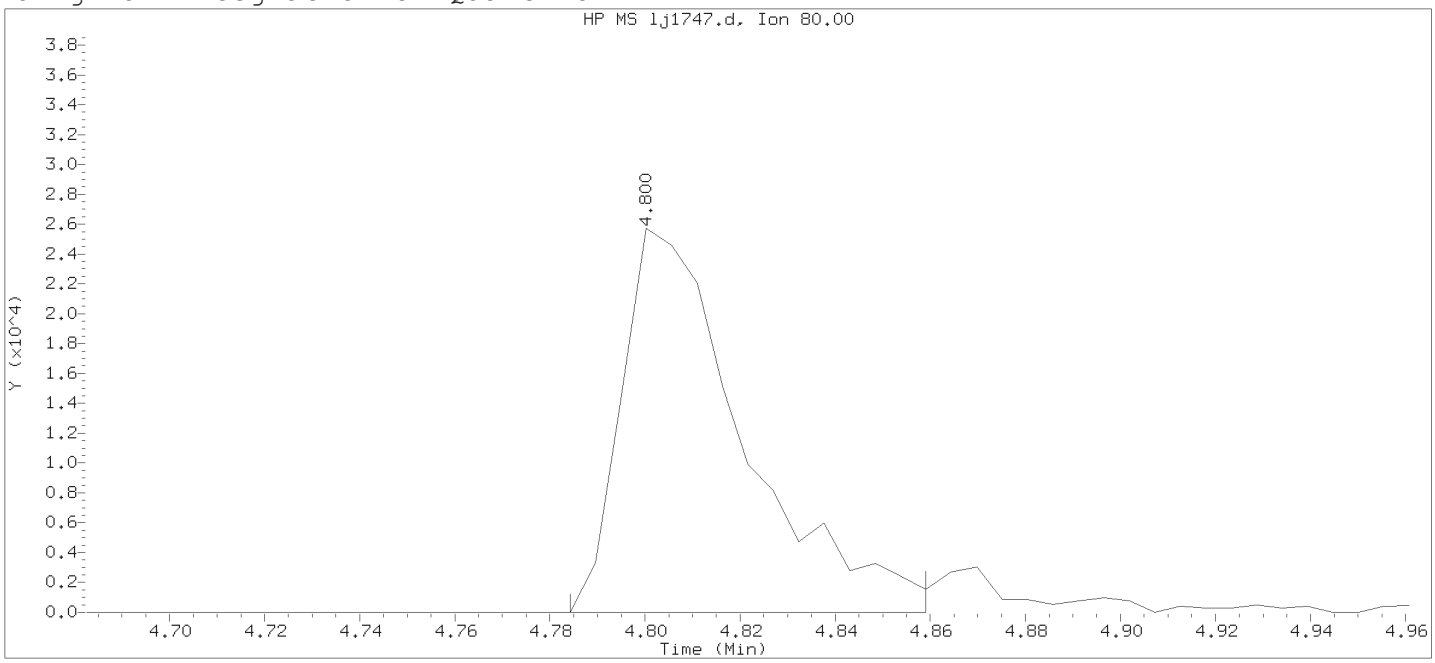
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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

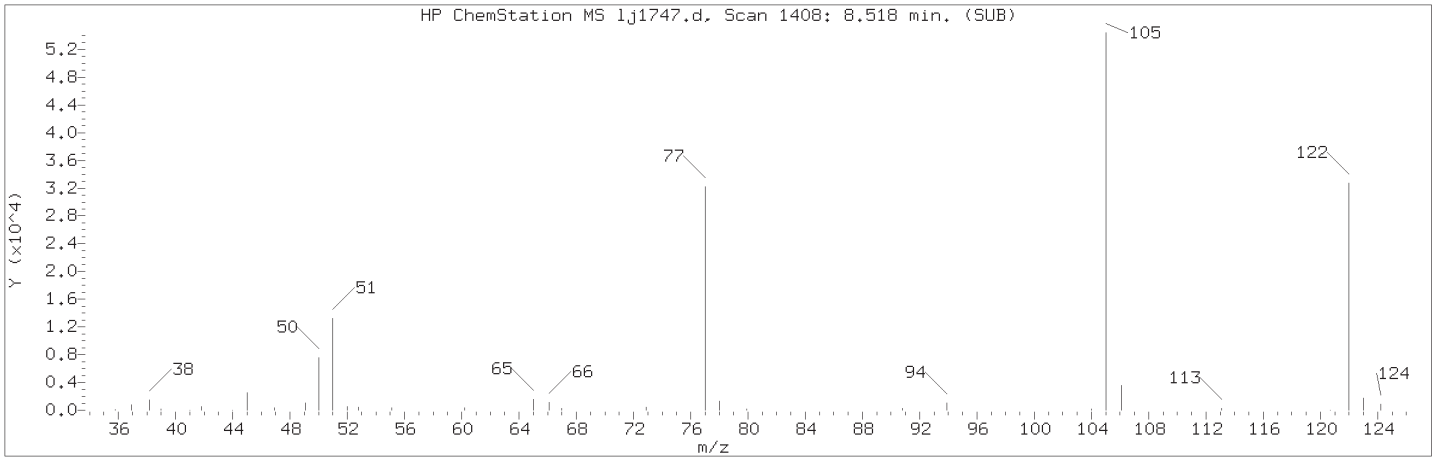
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

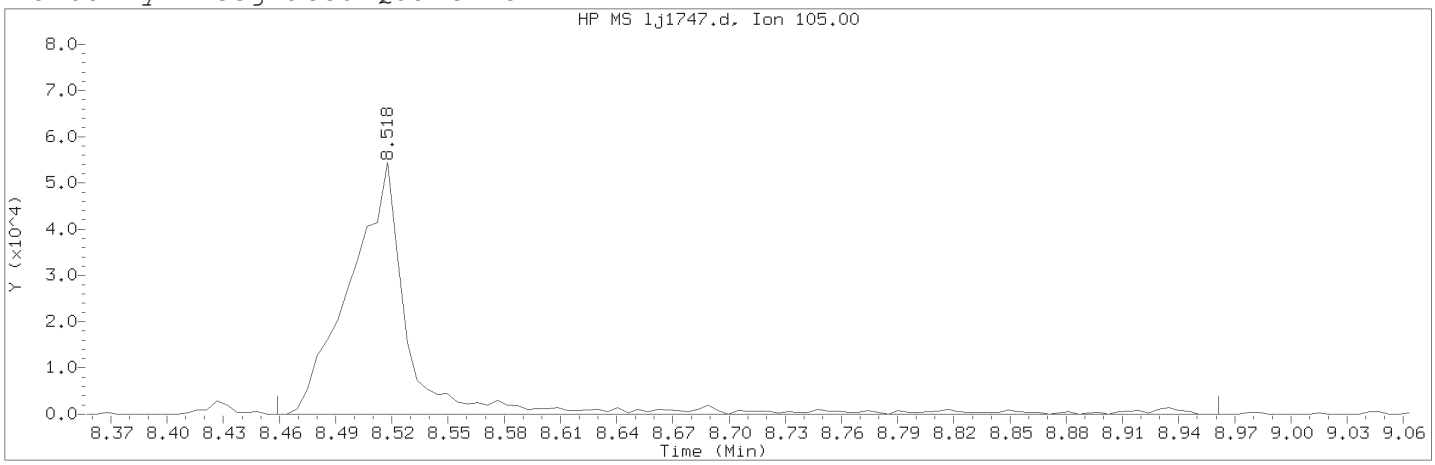
Compound Number	: 10		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 713		
Retention Time (minutes)	: 4.800		
Quant Ion	: 80.00		
Area	: 45876		
On-column Amount (ng/ul)	: 1.2127		
Integration start scan	: 709	Integration stop scan:	723
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: 7

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

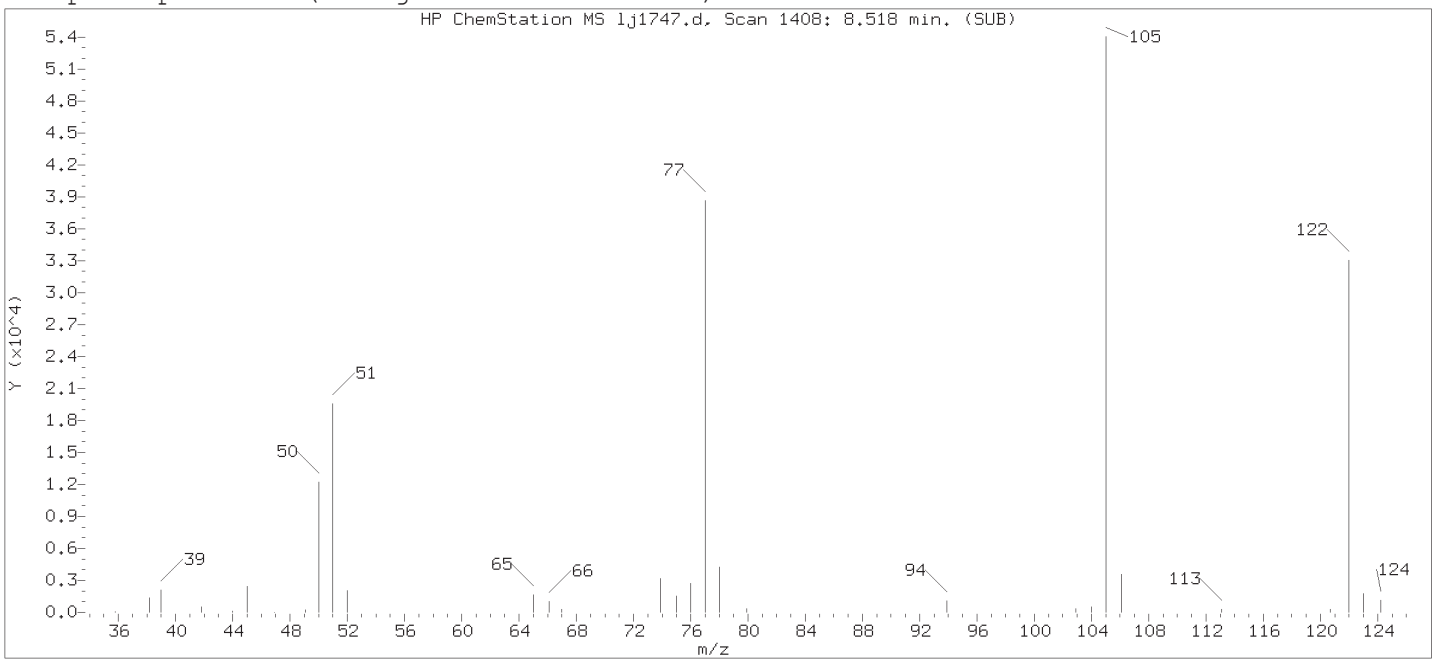
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1408
Retention Time (minutes) : 8.518
Quant Ion : 105.00
Area (flag) : 123190M
On-Column Amount (ng/ul) : 2.9452
Integration start scan : 1396 Integration stop scan: 1490
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

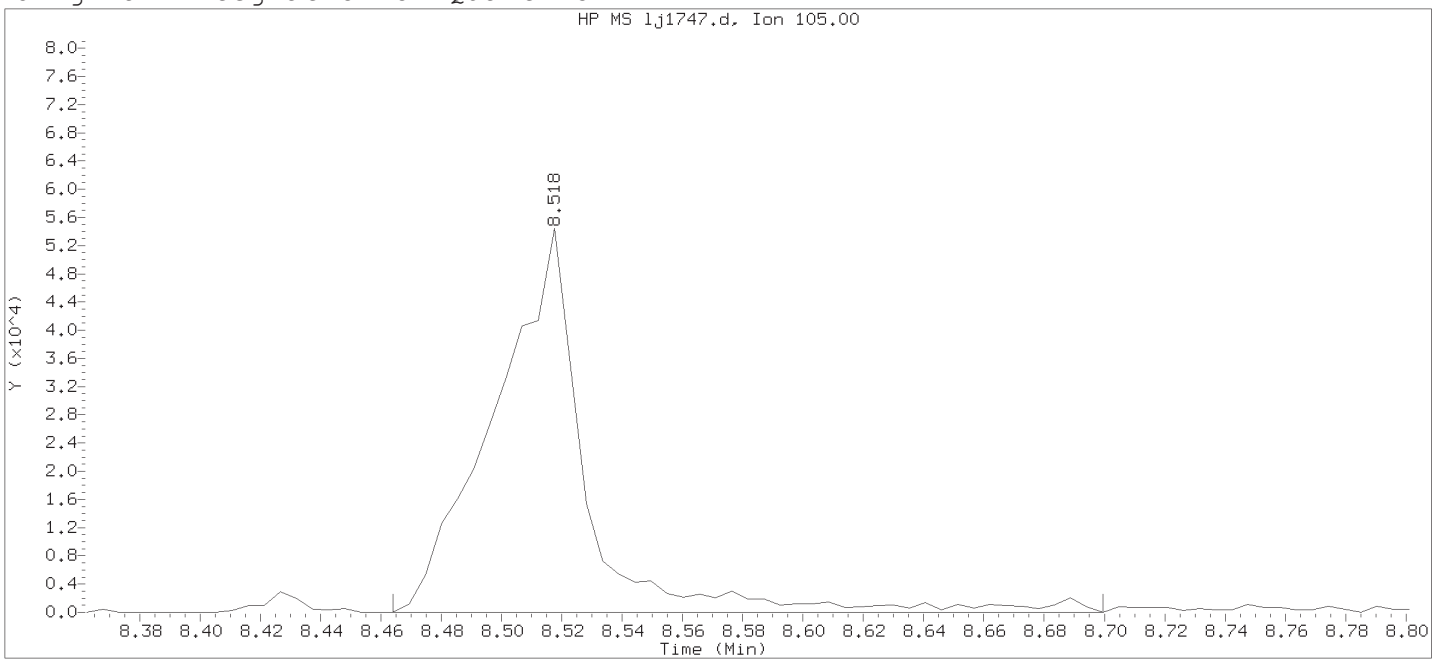
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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

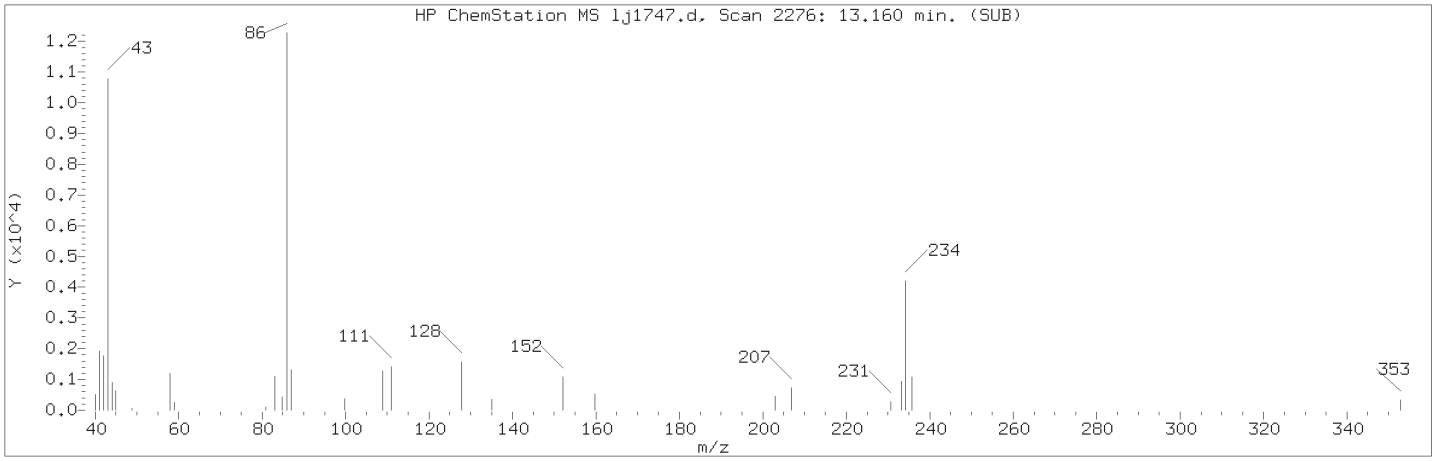
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

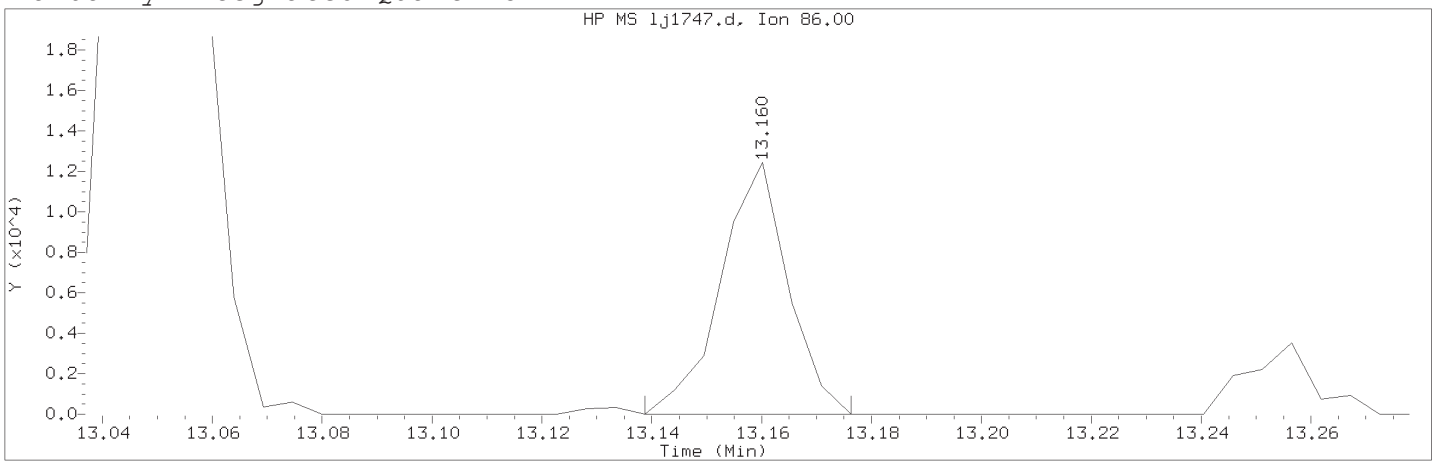
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1408		
Retention Time (minutes)	: 8.518		
Quant Ion	: 105.00		
Area	: 115244		
On-column Amount (ng/ul)	: 3.4519		
Integration start scan	: 1397	Integration stop scan:	1441
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: 25

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

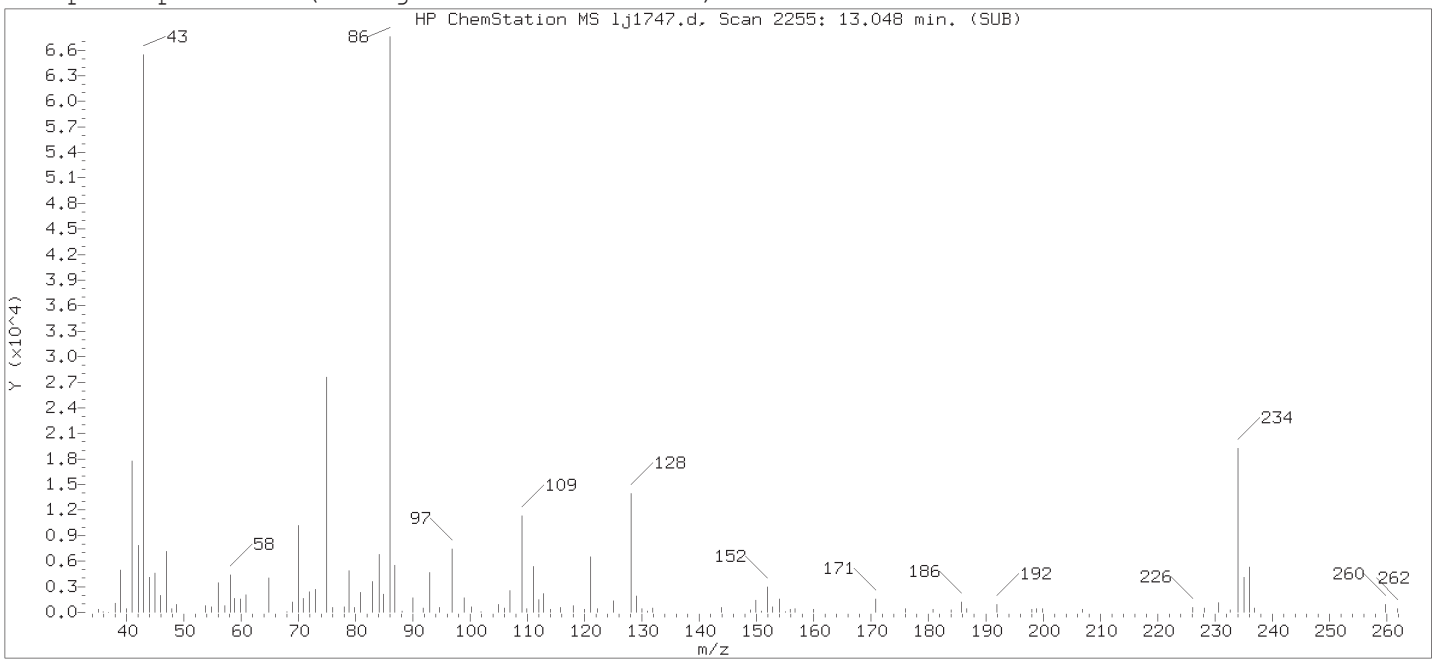
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2276		
Retention Time (minutes)	: 13.160		
Quant Ion	: 86.00		
Area (flag)	: 10565M		
On-Column Amount (ng/ul)	: 0.2014		
Integration start scan	: 2271	Integration stop scan:	2278
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

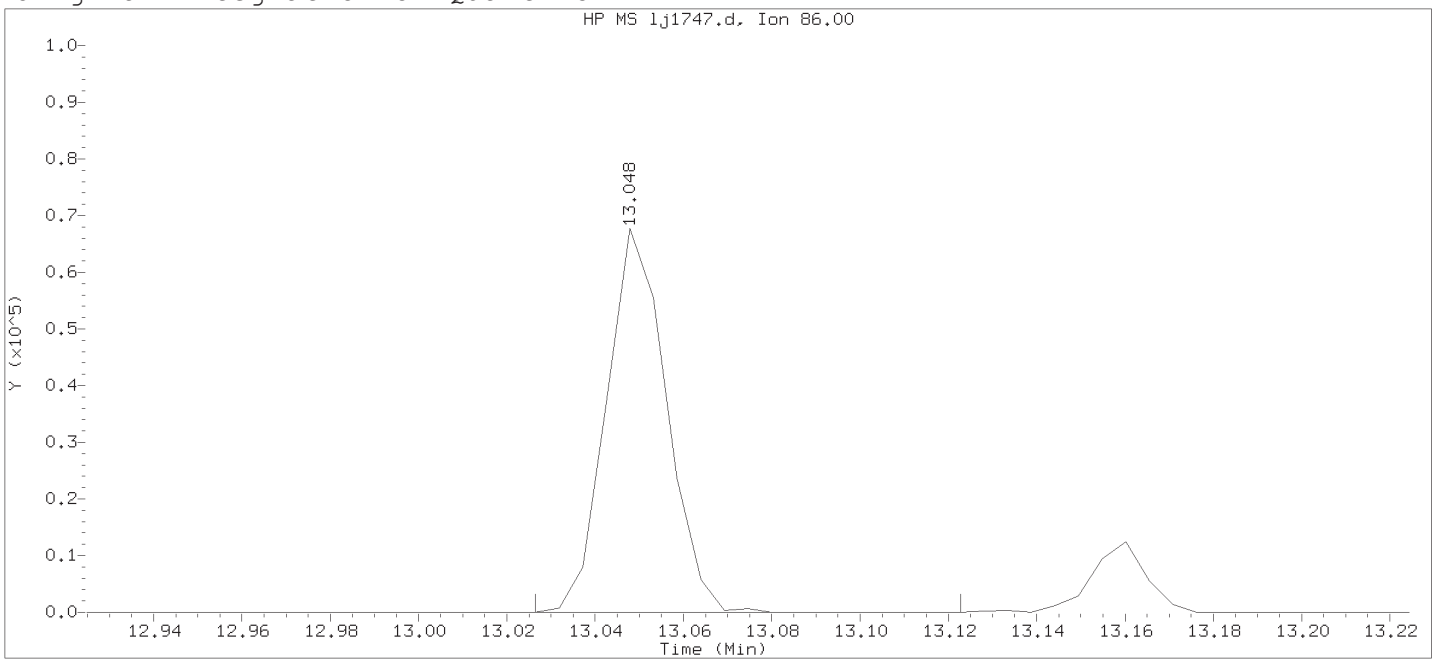
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 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	: 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

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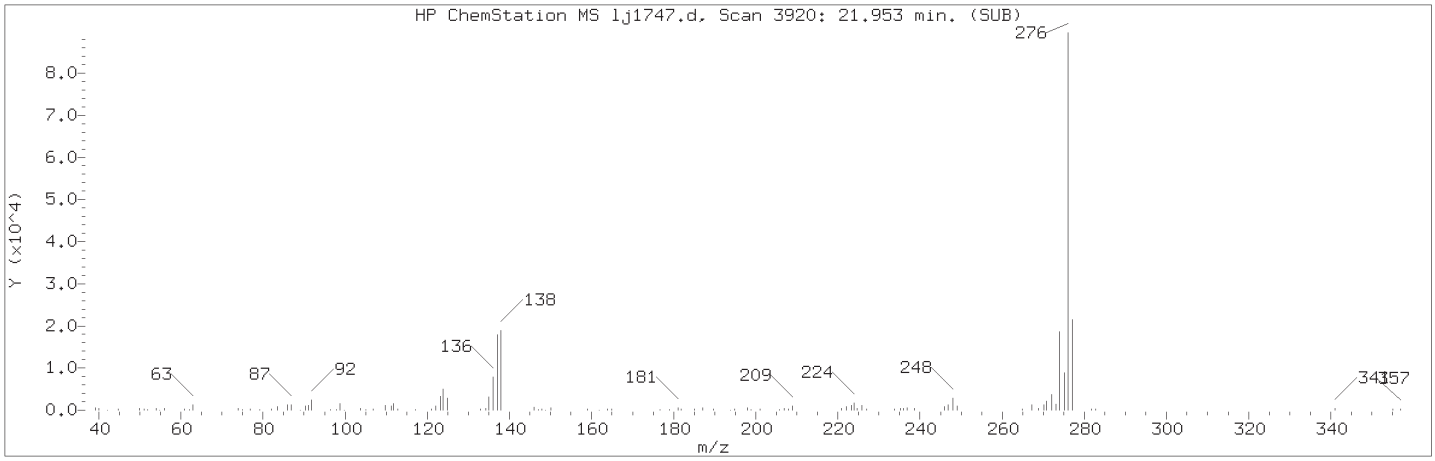
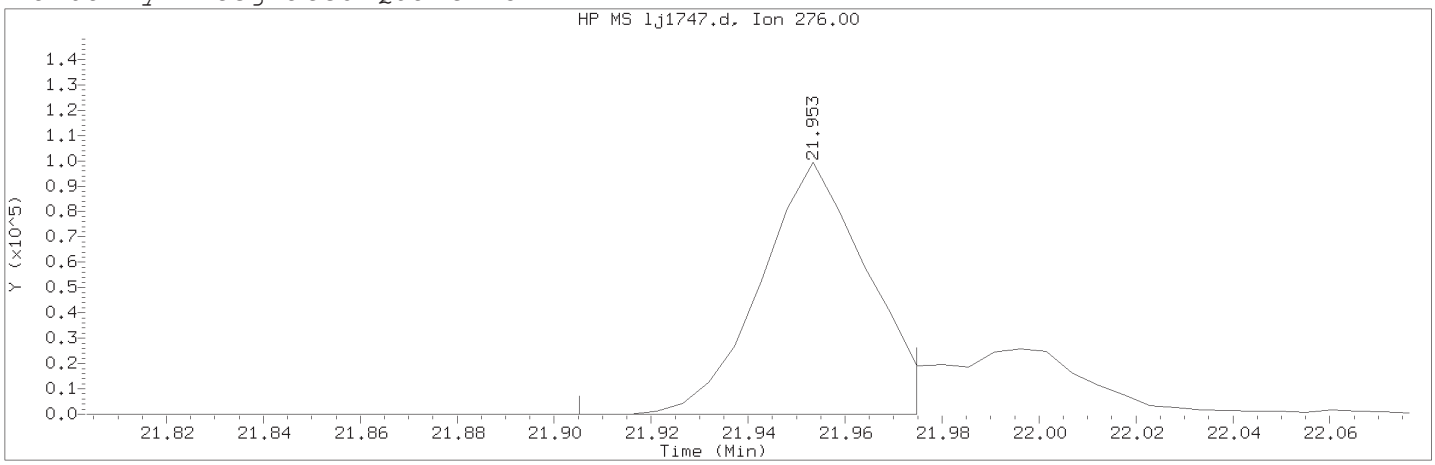
Target 3.5 esignature user ID: 7

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

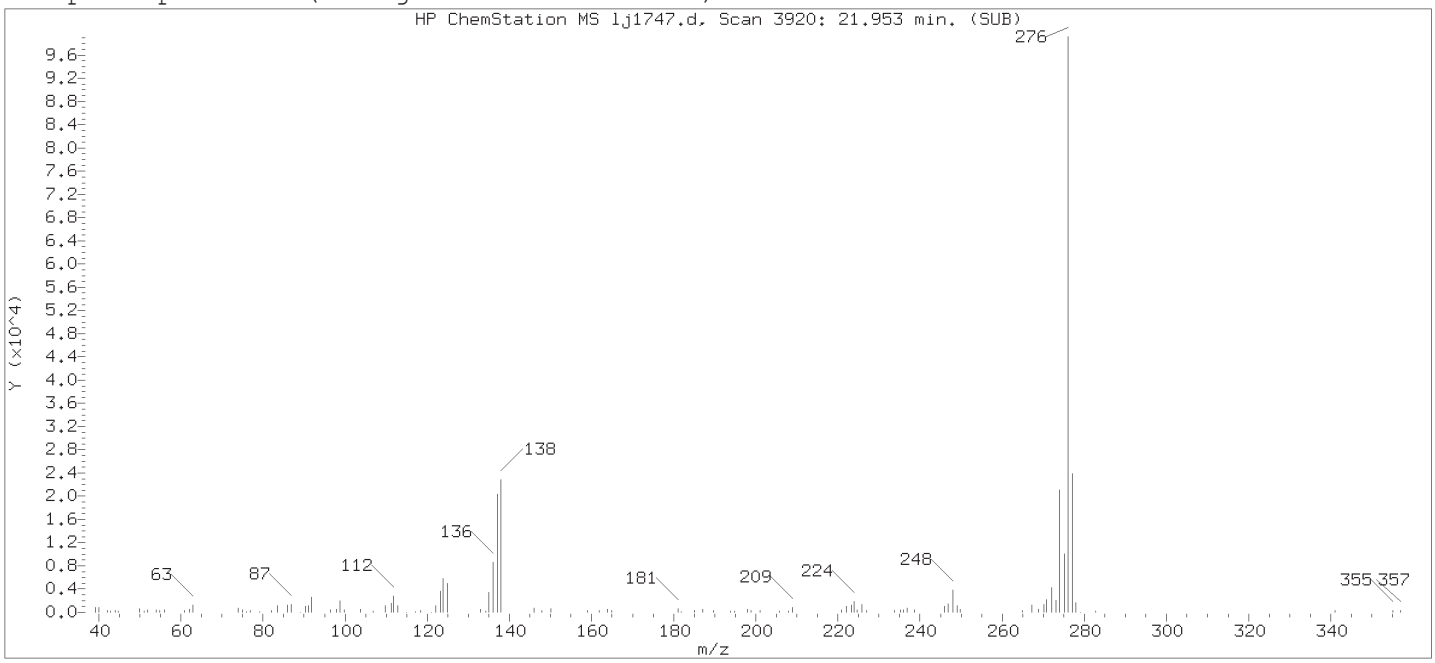
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3920		
Retention Time (minutes)	: 21.953		
Quant Ion	: 276.00		
Area (flag)	: 152452M		
On-Column Amount (ng/ul)	: 1.0831		
Integration start scan	: 3910	Integration stop scan:	3923
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

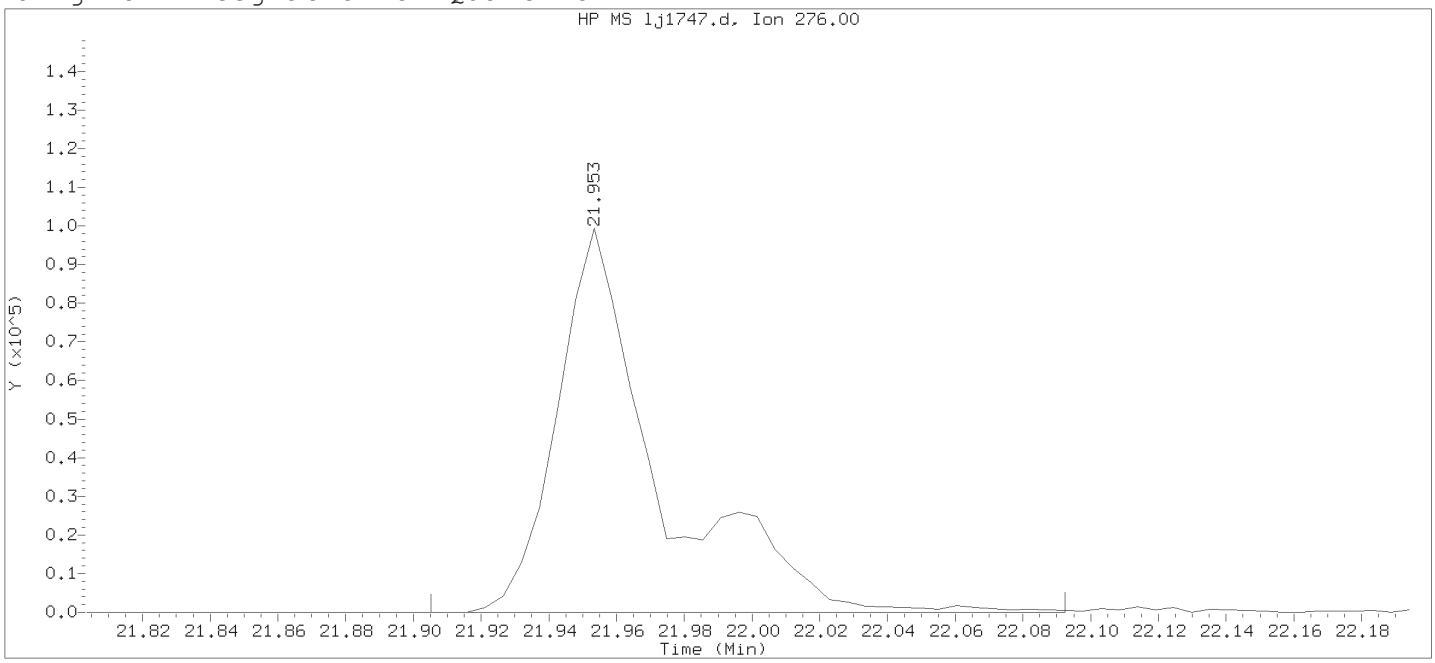
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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



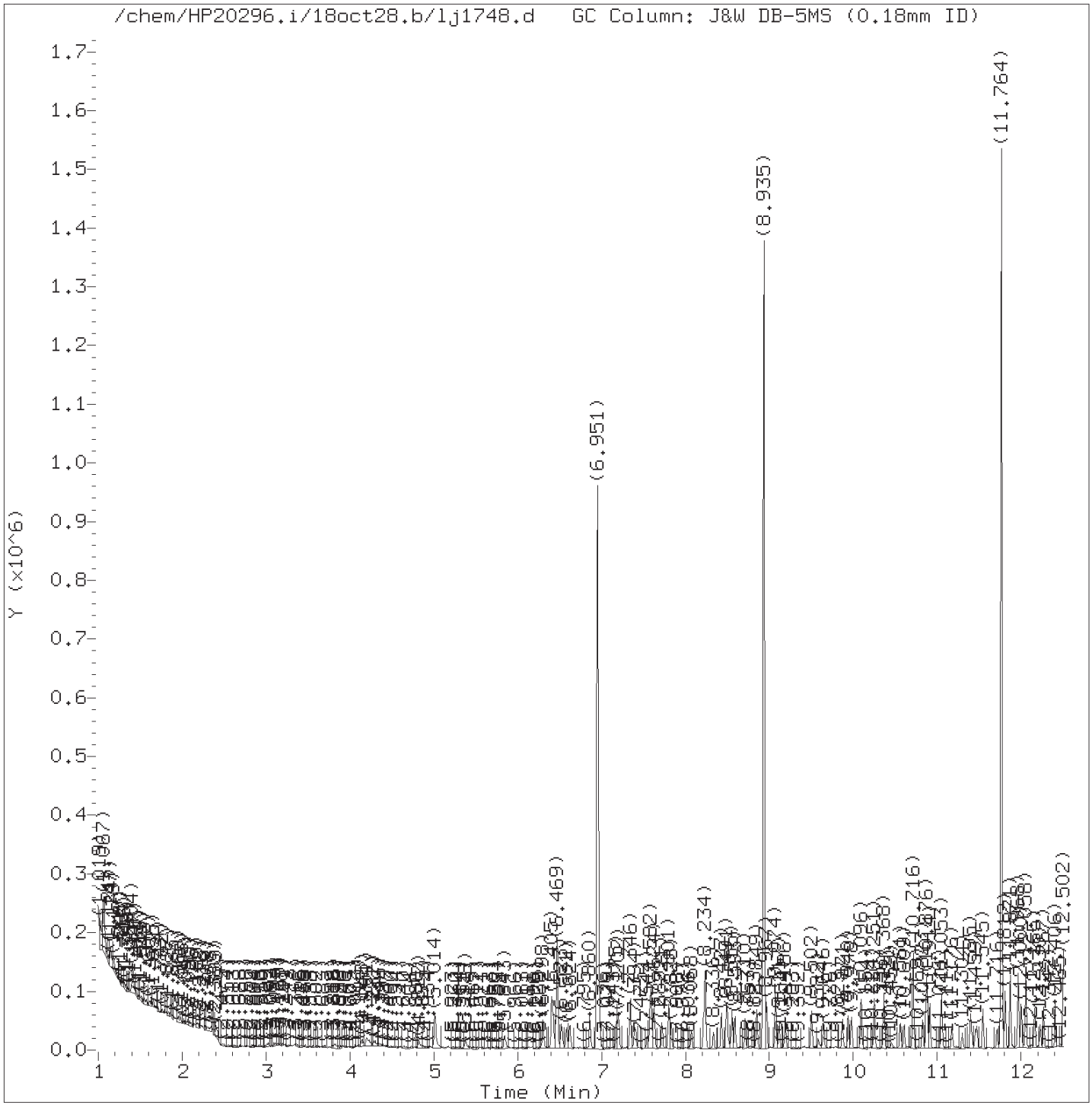
Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

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	: 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

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for this page.



Total Ion Chromatogram (TIC)

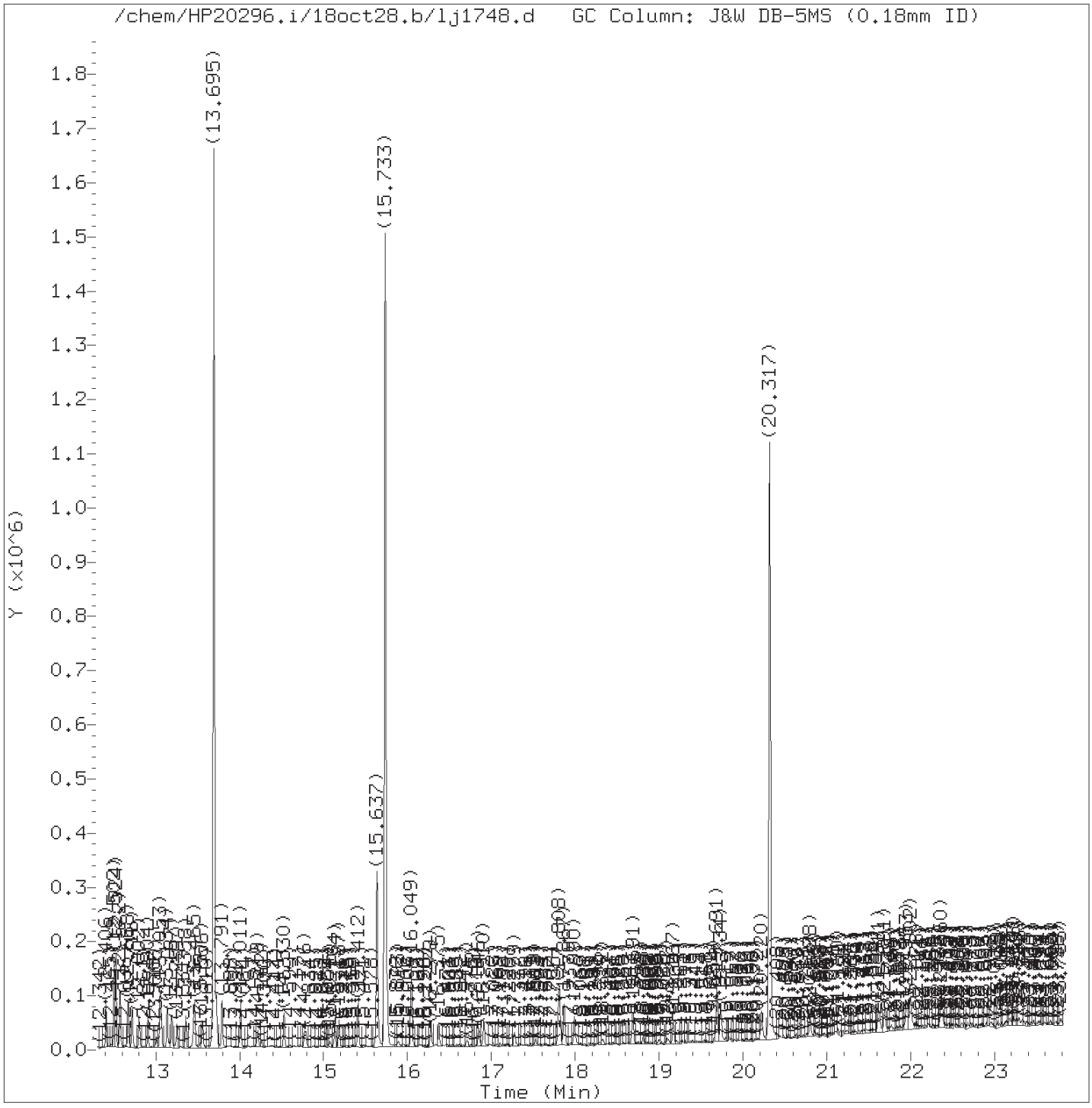
Target Revision 3.5

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

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 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

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 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

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.
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$ = 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 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

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 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

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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* = 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 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

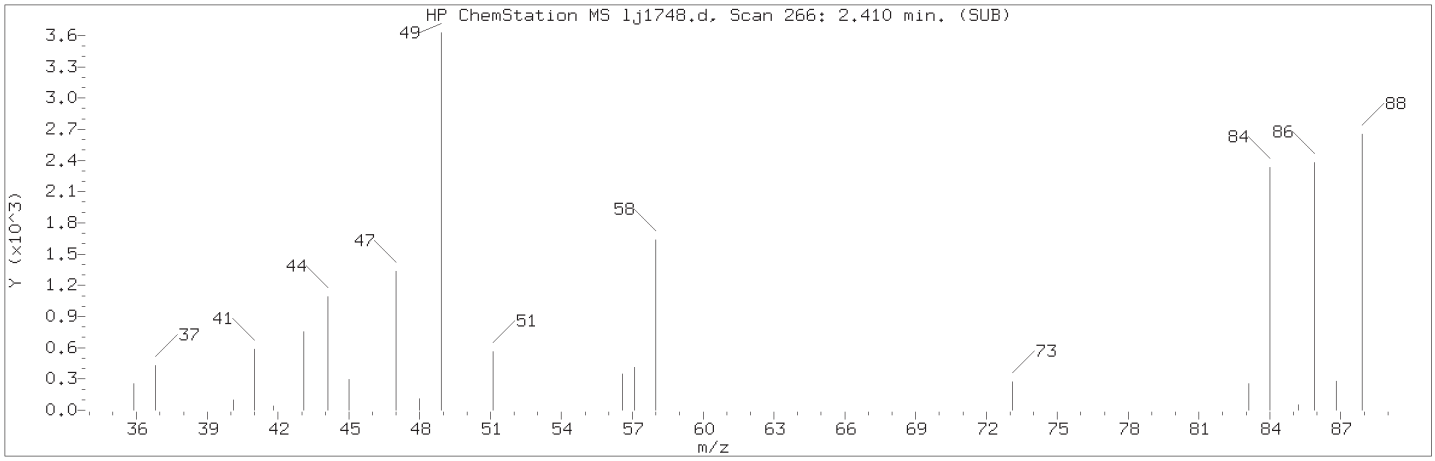
Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

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

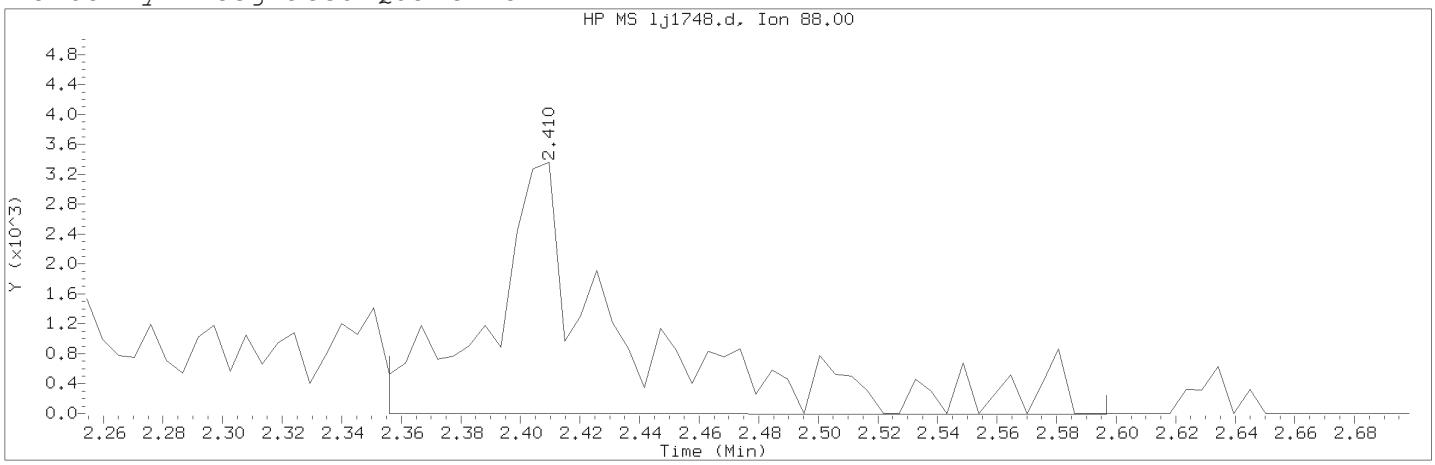
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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

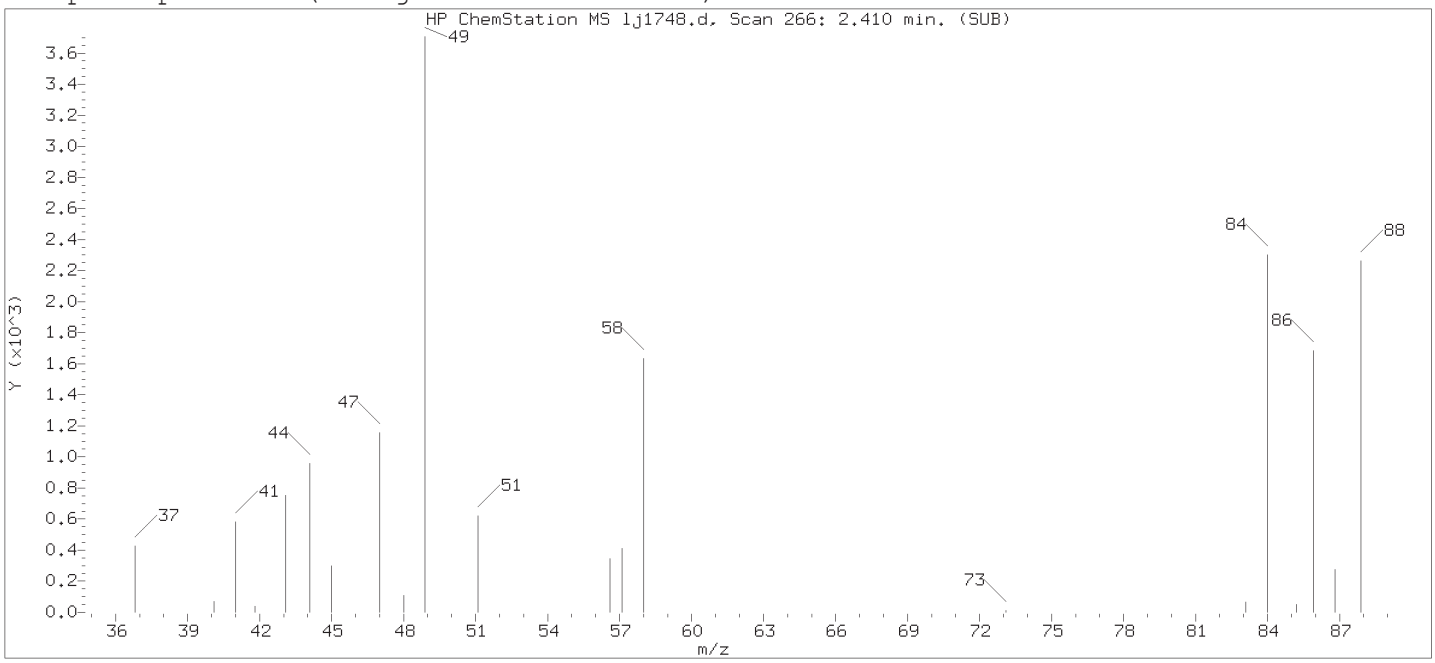
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 266		
Retention Time (minutes)	: 2.410		
Quant Ion	: 88.00		
Area (flag)	: 11035M		
On-Column Amount (ng/ul)	: 0.4051		
Integration start scan	: 255	Integration stop scan:	300
Y at integration start	: 3	Y at integration end:	-8

Reason for manual integration: improper integration

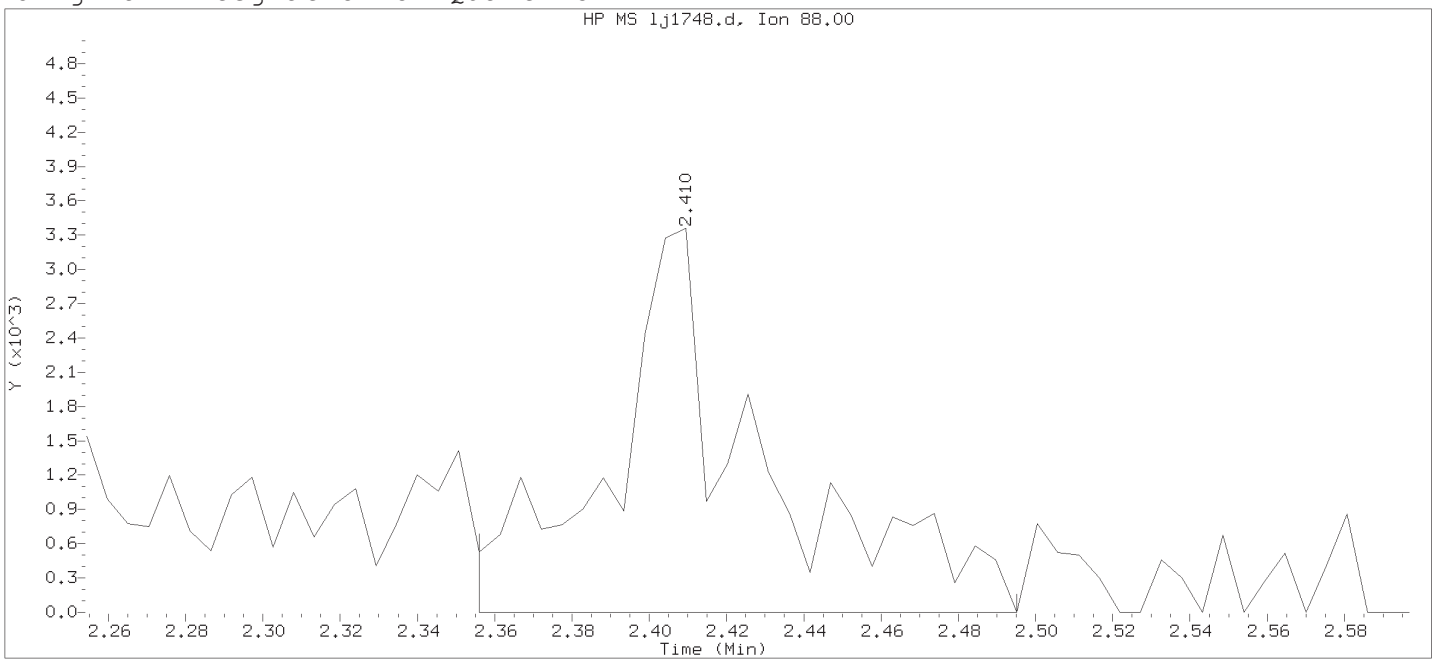
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

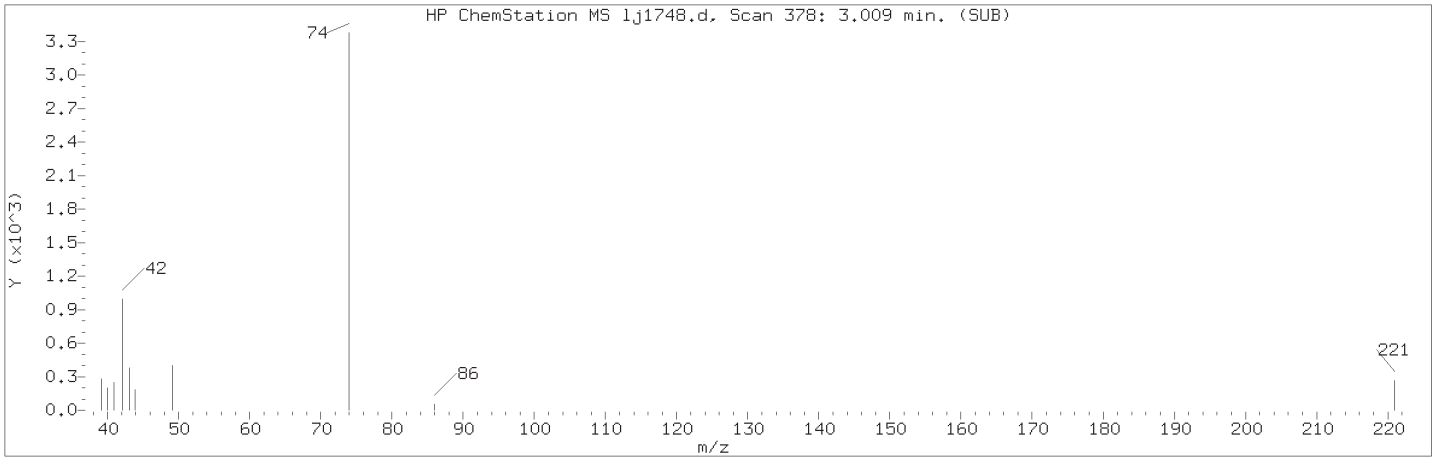
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

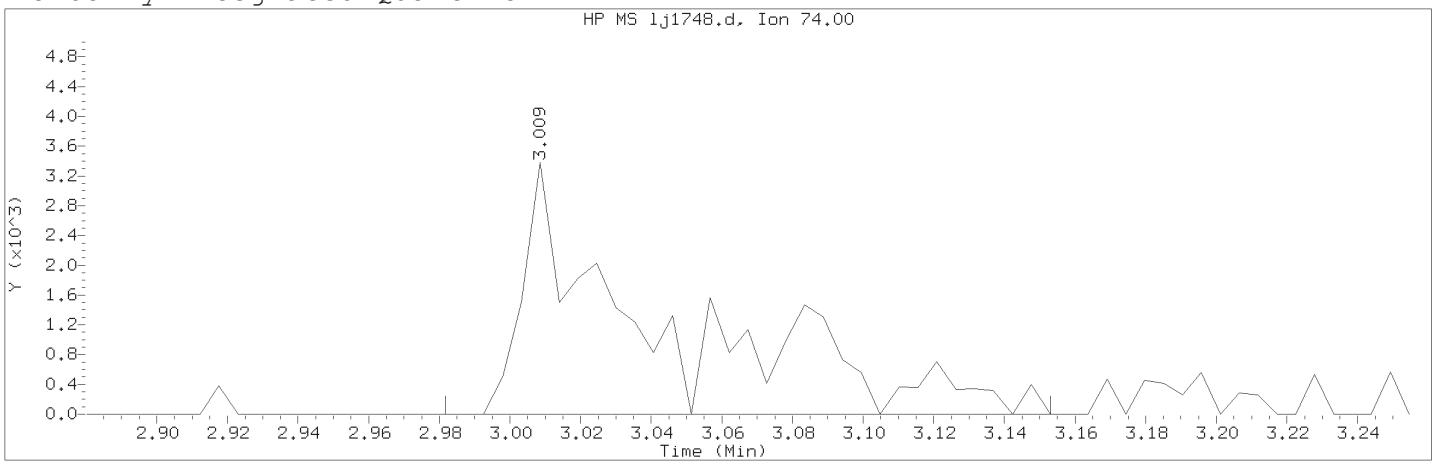
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 266		
Retention Time (minutes)	: 2.410		
Quant Ion	: 88.00		
Area	: 9117		
On-column Amount (ng/ul)	: 0.3469		
Integration start scan	: 255	Integration stop scan:	281
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: 25363

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

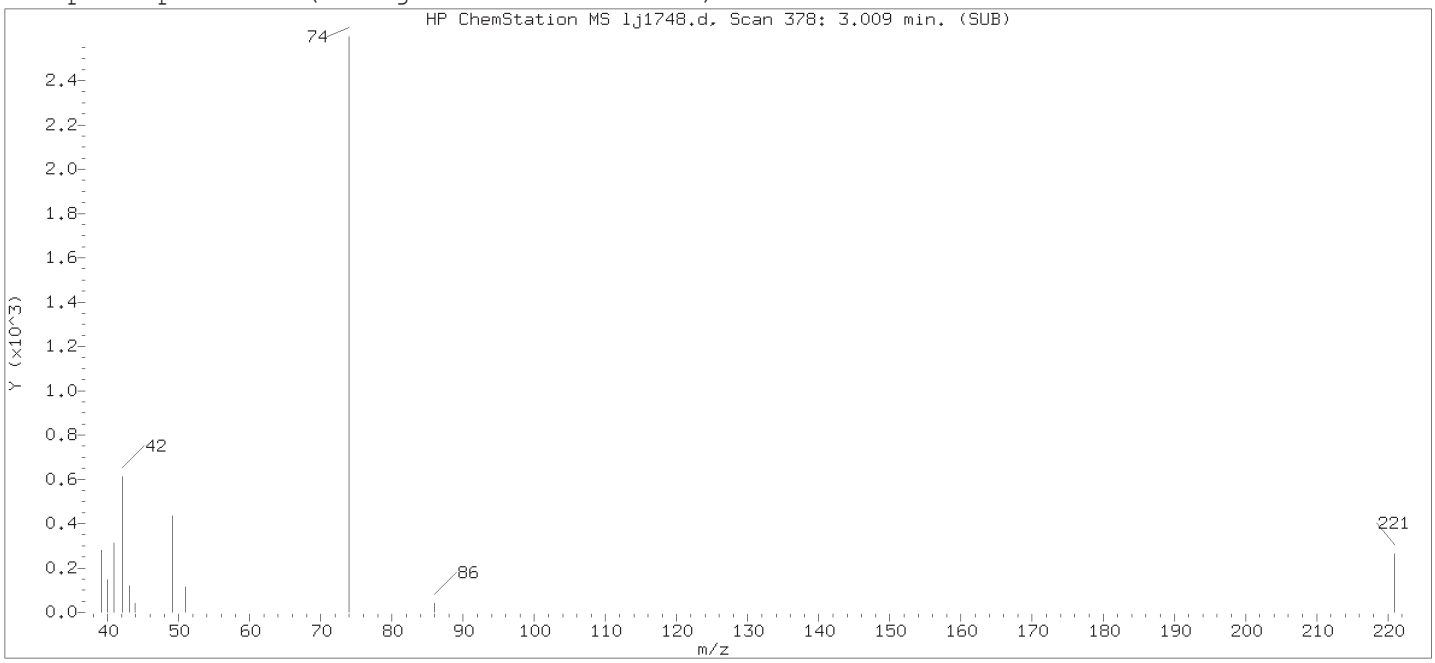
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 378
Retention Time (minutes) : 3.009
Quant Ion : 74.00
Area (flag) : 8786M
On-Column Amount (ng/ul) : 0.2146
Integration start scan : 372 Integration stop scan: 404
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

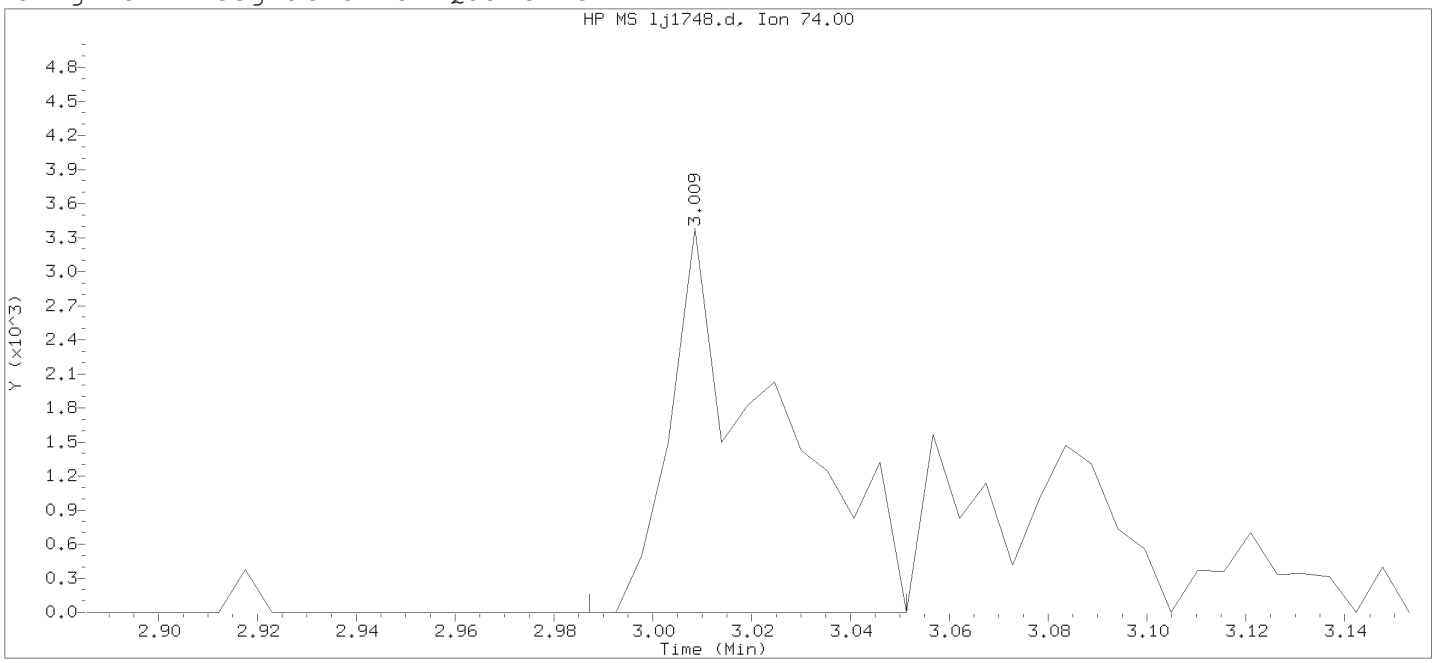
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

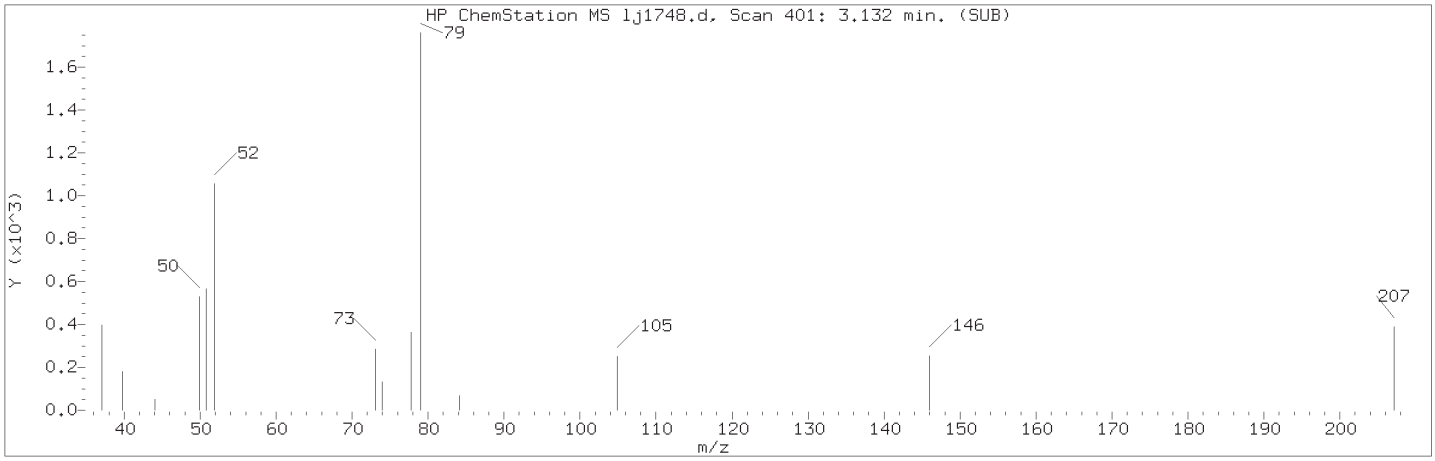
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

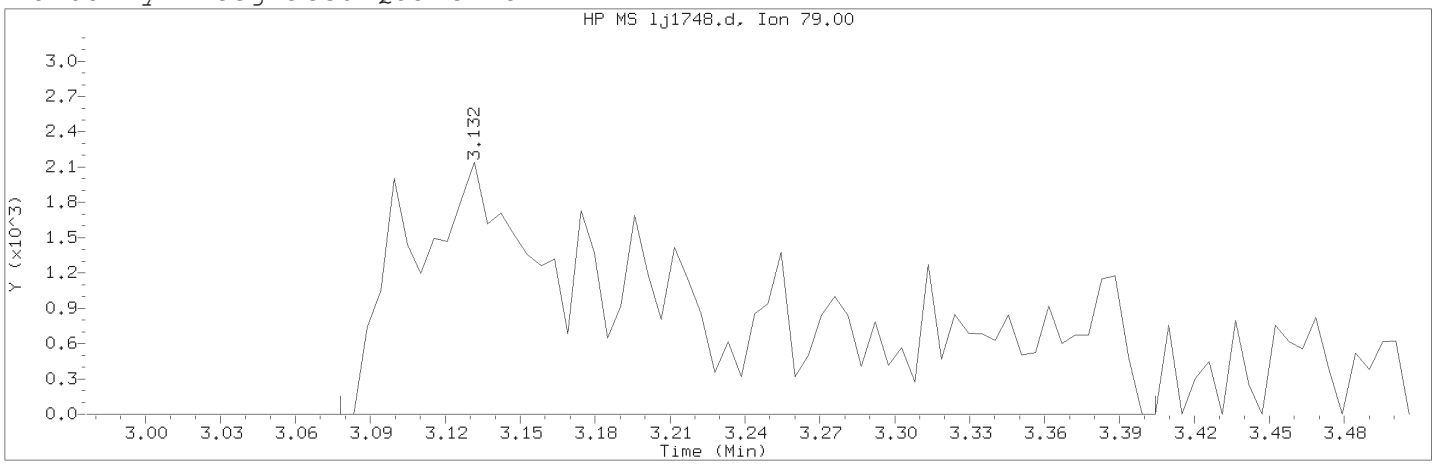
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 378		
Retention Time (minutes)	: 3.009		
Quant Ion	: 74.00		
Area	: 4996		
On-column Amount (ng/ul)	: 0.1279		
Integration start scan	: 373	Integration stop scan:	385
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for this page.

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

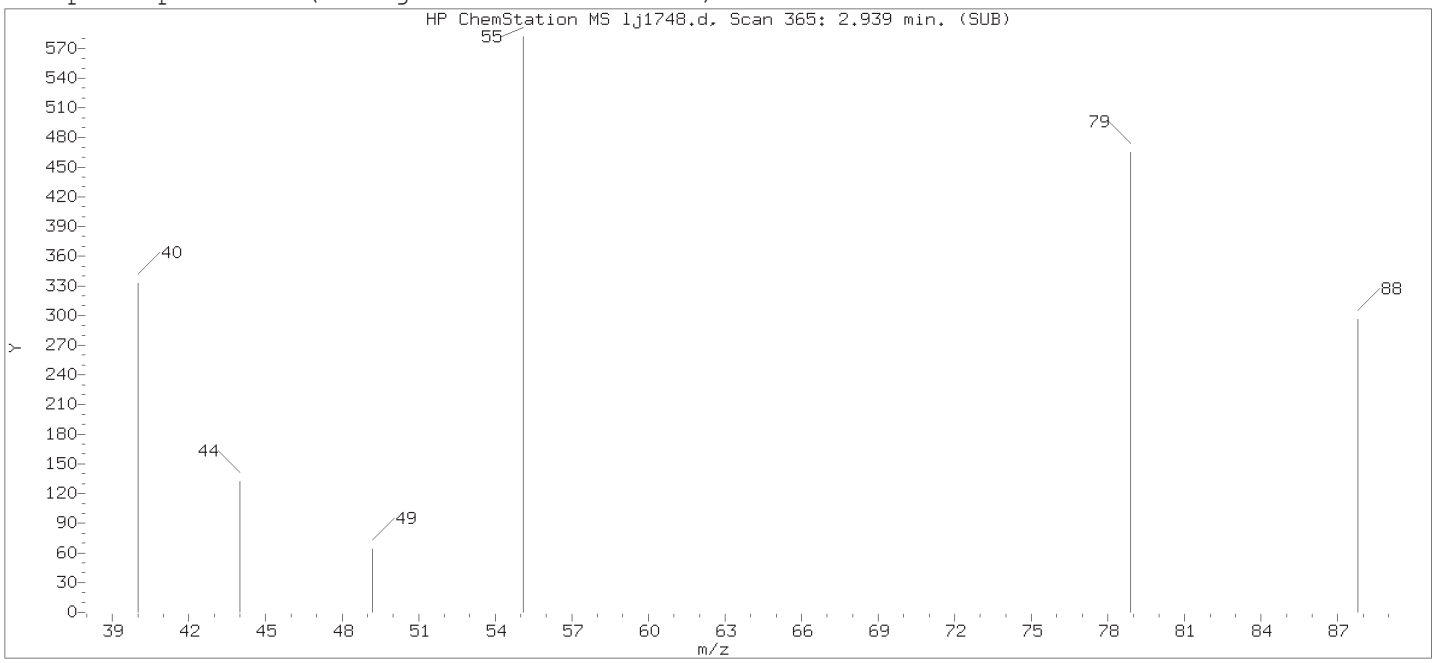
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 401		
Retention Time (minutes)	: 3.132		
Quant Ion	: 79.00		
Area (flag)	: 18321M		
On-Column Amount (ng/ul)	: 0.2630		
Integration start scan	: 390	Integration stop scan:	451
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

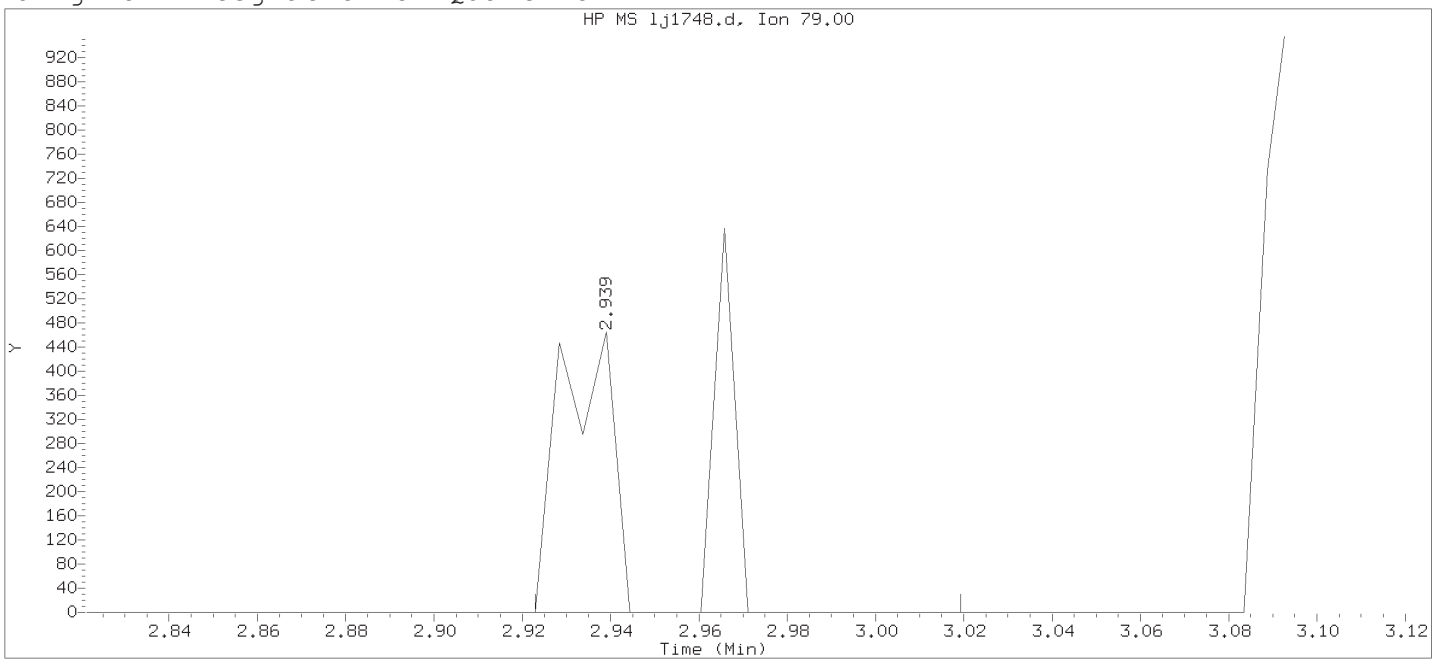
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

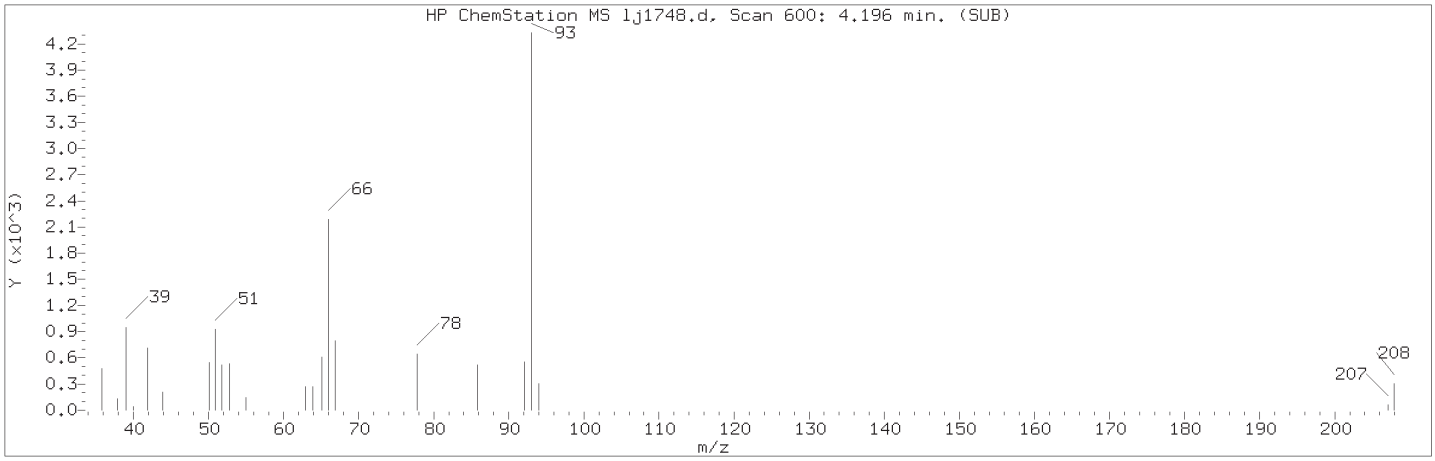
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

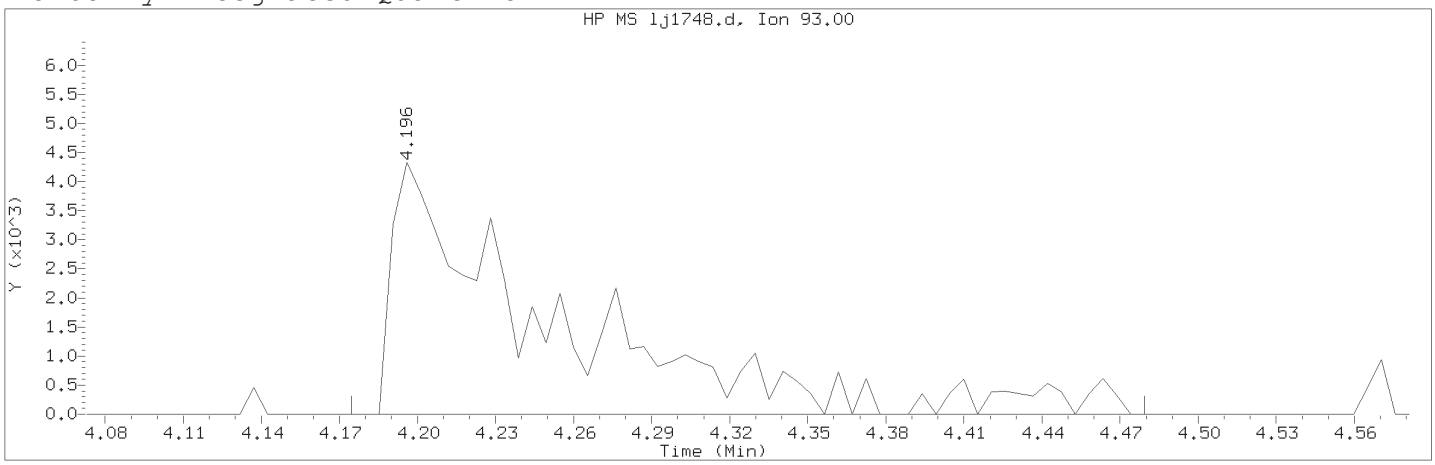
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 365		
Retention Time (minutes)	: 2.939		
Quant Ion	: 79.00		
Area	: 591		
On-column Amount (ng/ul)	: 0.0085		
Integration start scan	: 361	Integration stop scan:	379
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for [illegible]

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

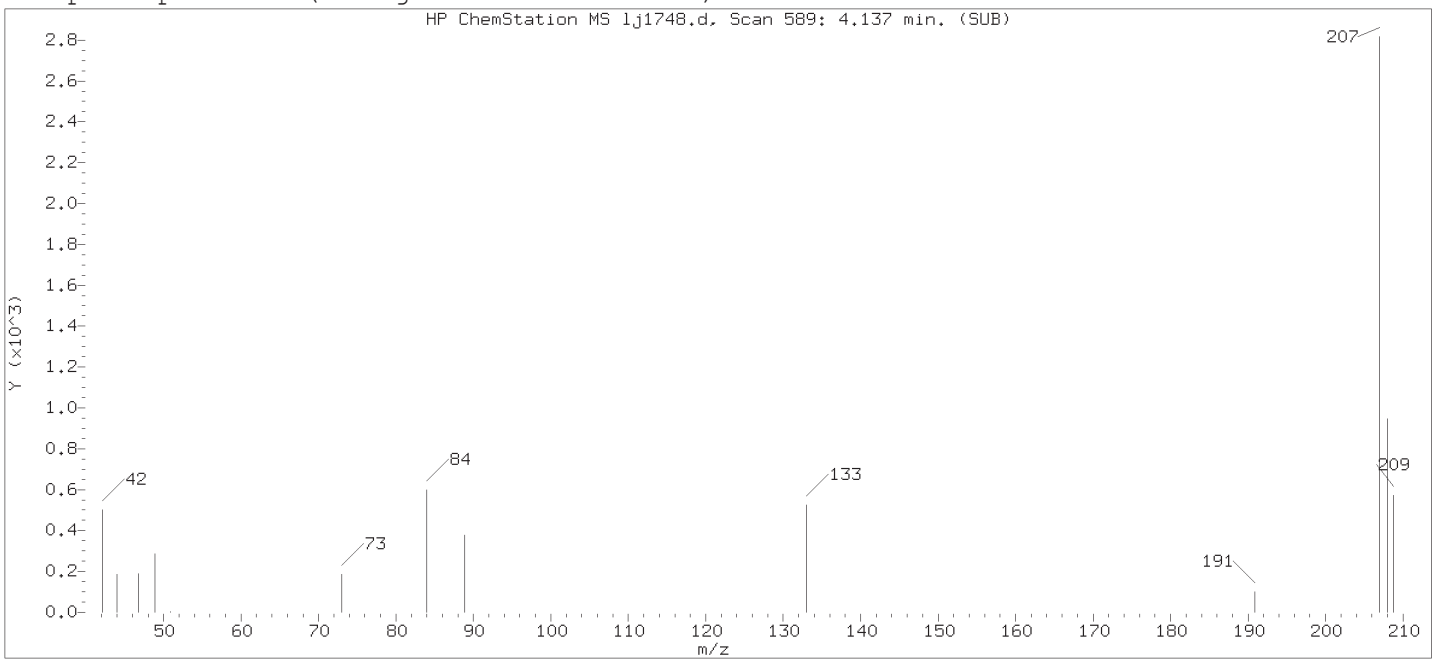
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 600		
Retention Time (minutes)	: 4.196		
Quant Ion	: 93.00		
Area (flag)	: 17988M		
On-Column Amount (ng/ul)	: 0.2474		
Integration start scan	: 595	Integration stop scan:	652
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

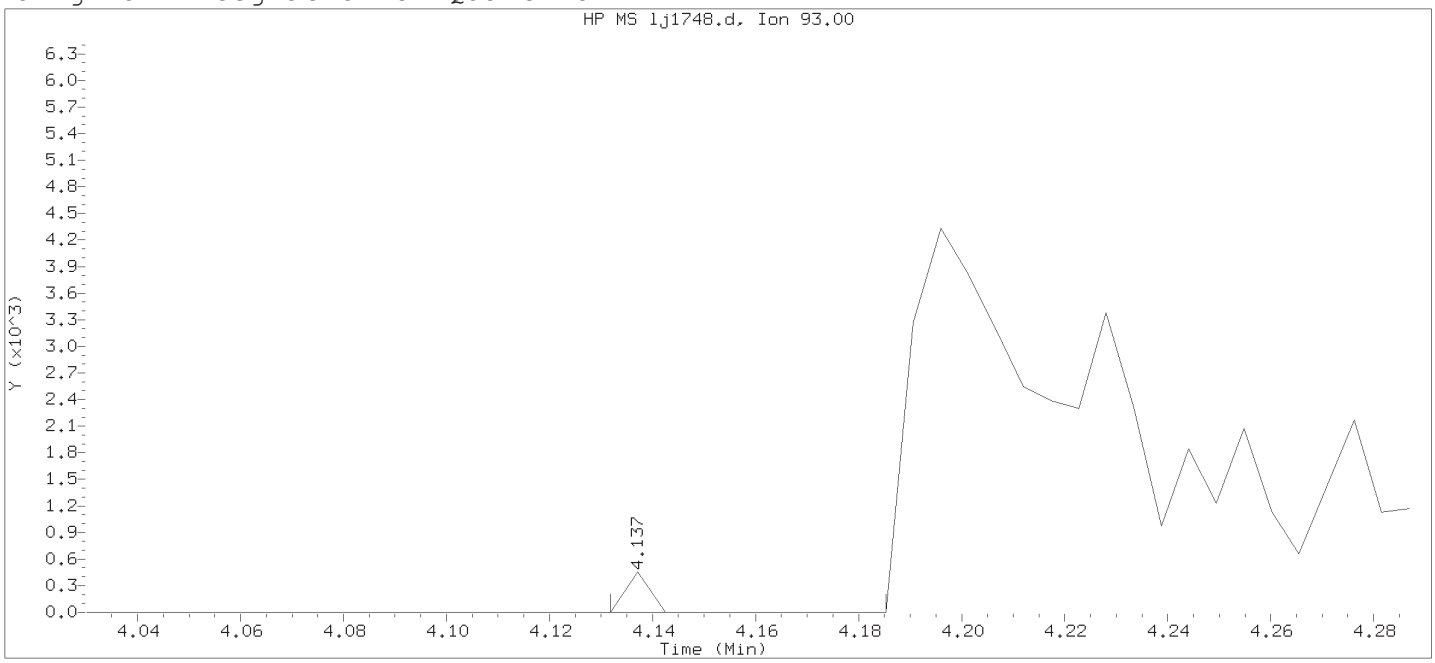
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

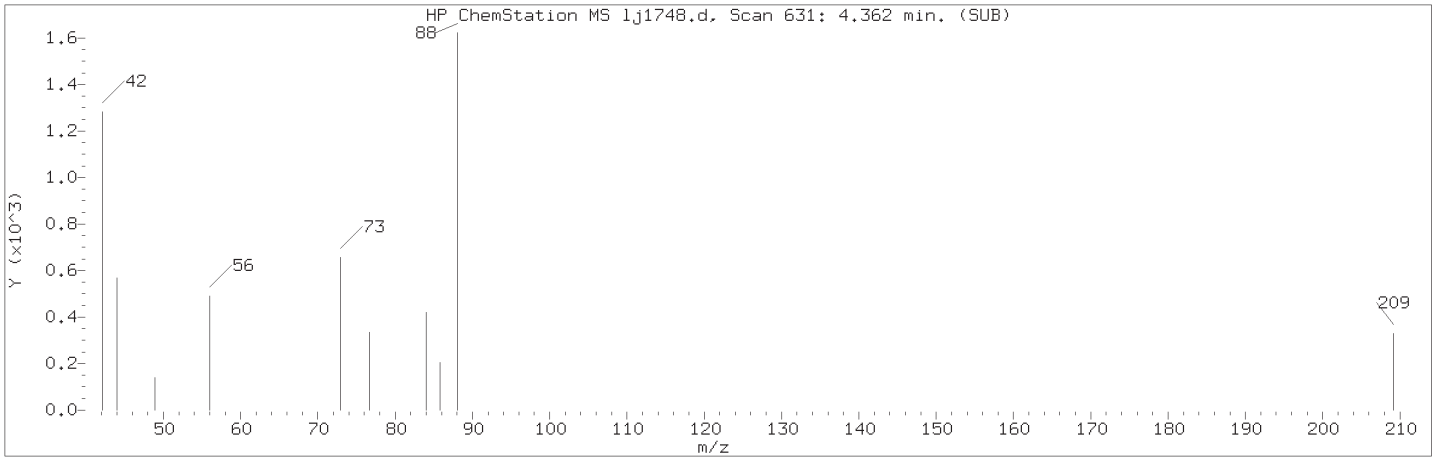
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

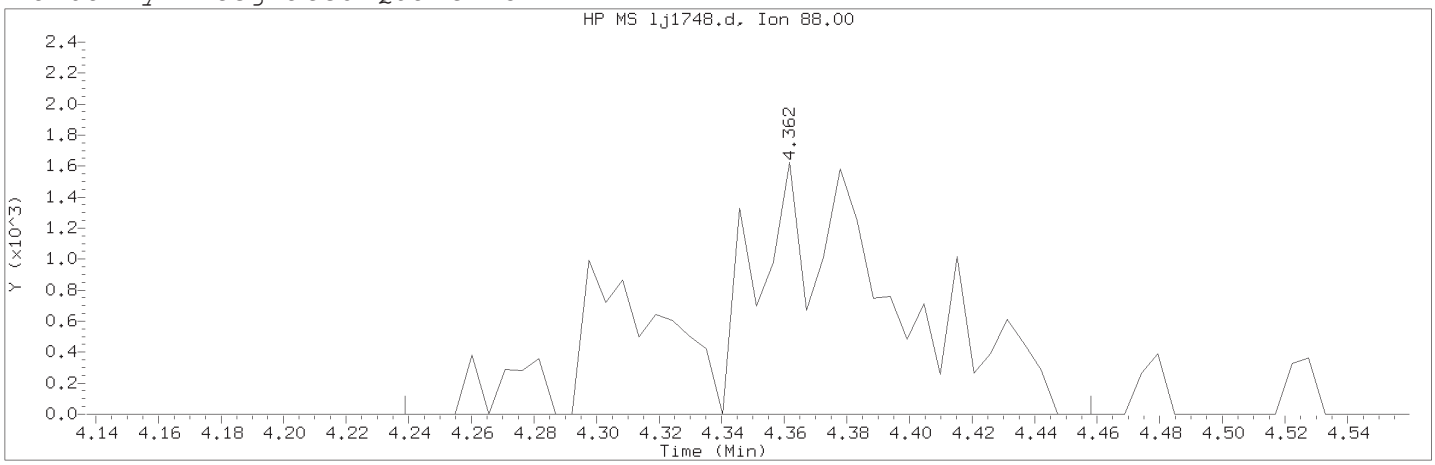
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 589		
Retention Time (minutes)	: 4.137		
Quant Ion	: 93.00		
Area	: 147		
On-column Amount (ng/ul)	: 0.0021		
Integration start scan	: 587	Integration stop scan:	597
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for this report.

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

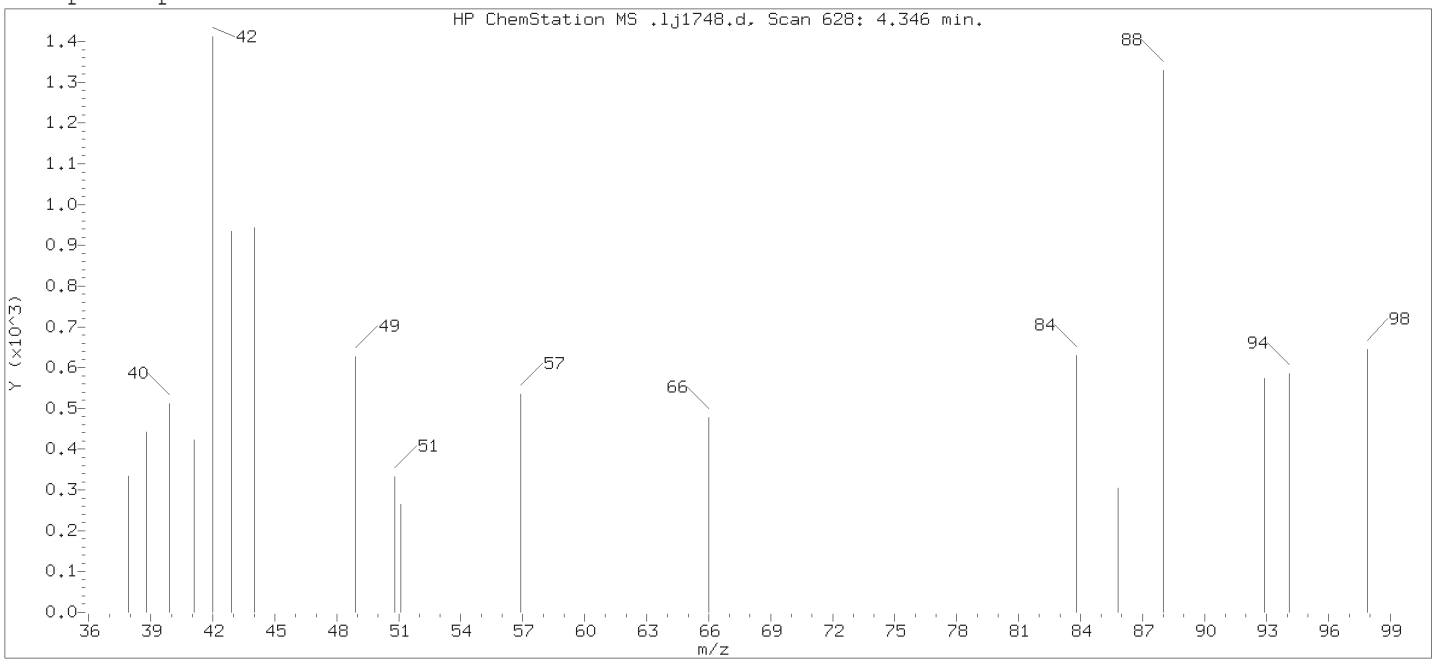
Compound Number	: 9		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 631		
Retention Time (minutes)	: 4.362		
Quant Ion	: 88.00		
Area (flag)	: 6960M		
On-Column Amount (ng/ul)	: 0.2344		
Integration start scan	: 607	Integration stop scan:	648
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

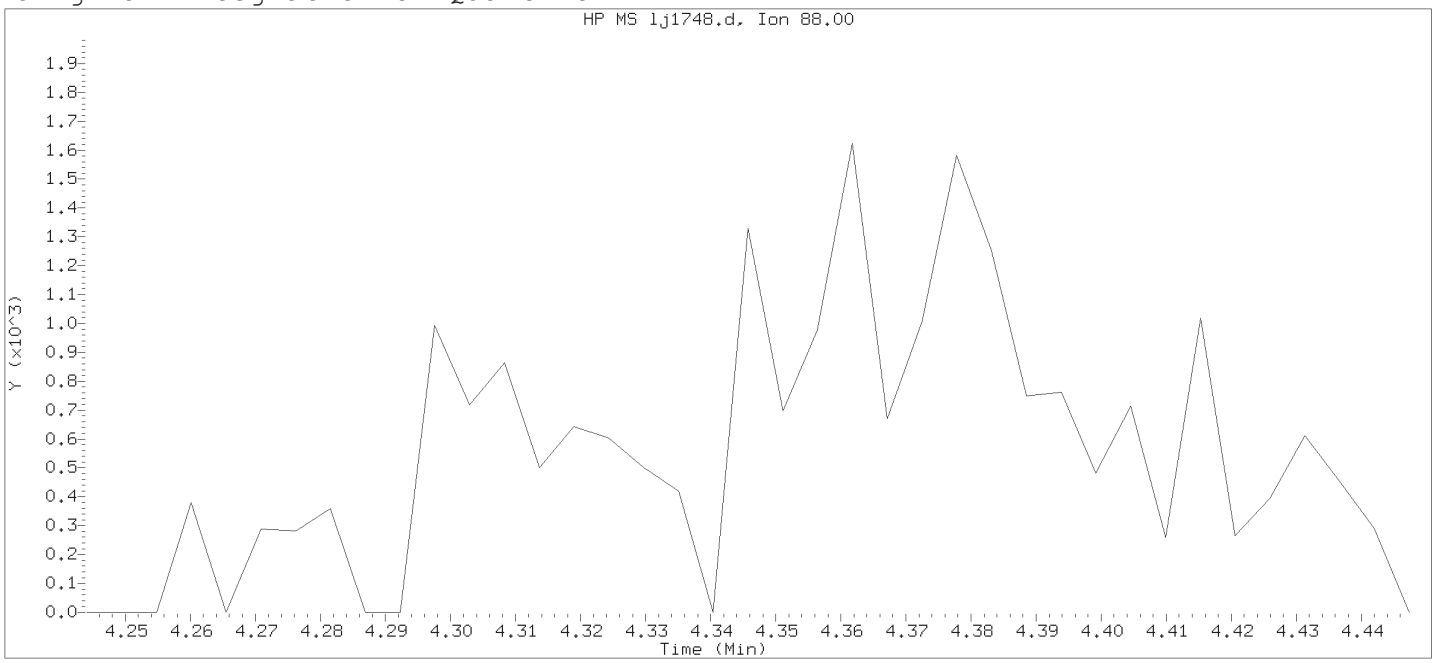
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

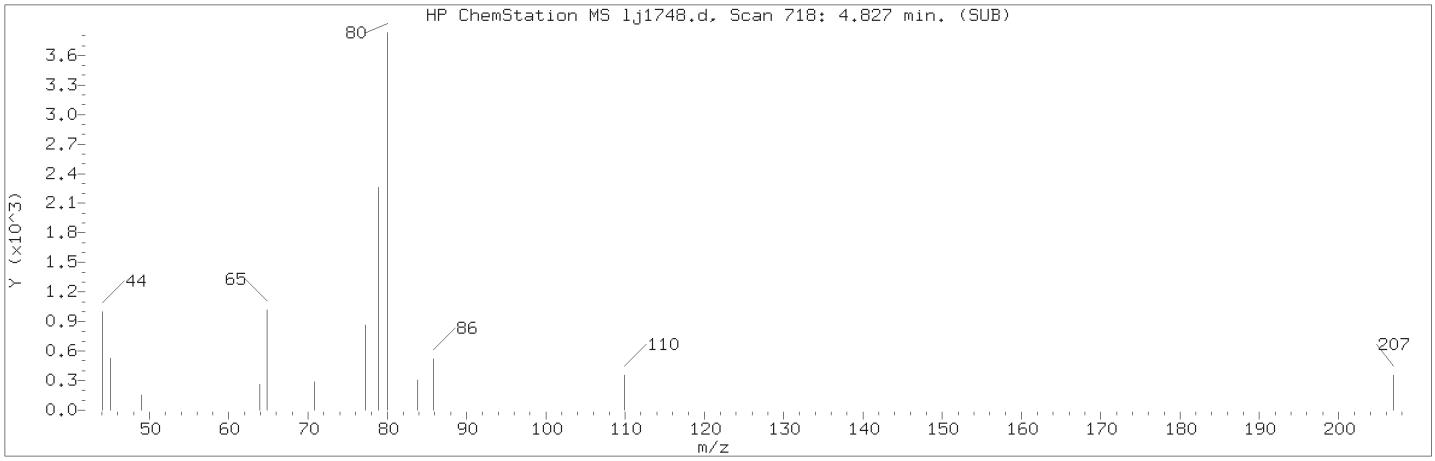
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

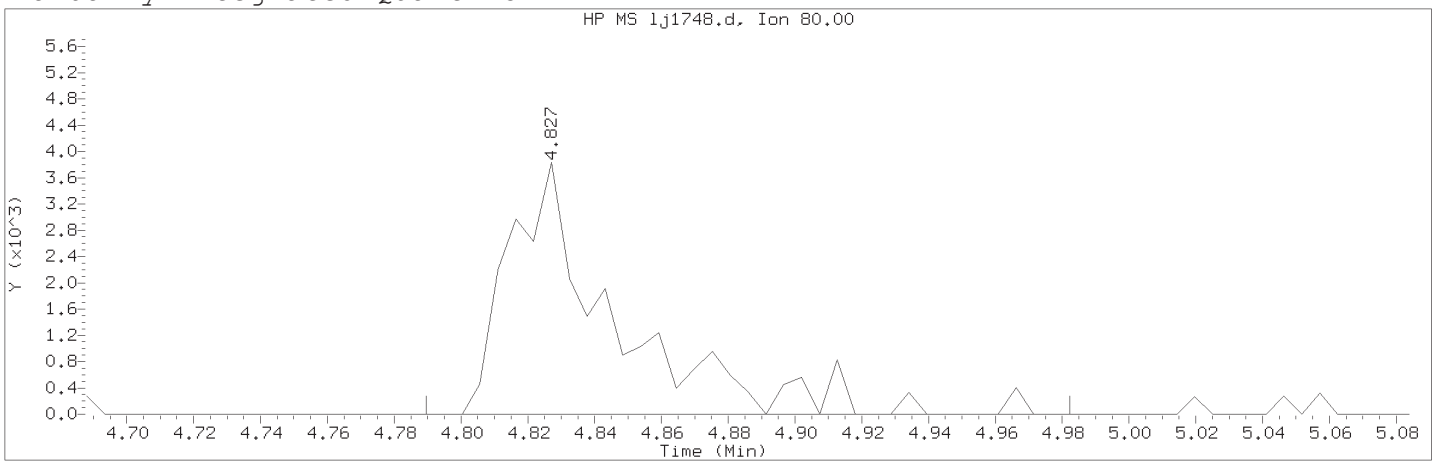
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.346
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used.

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

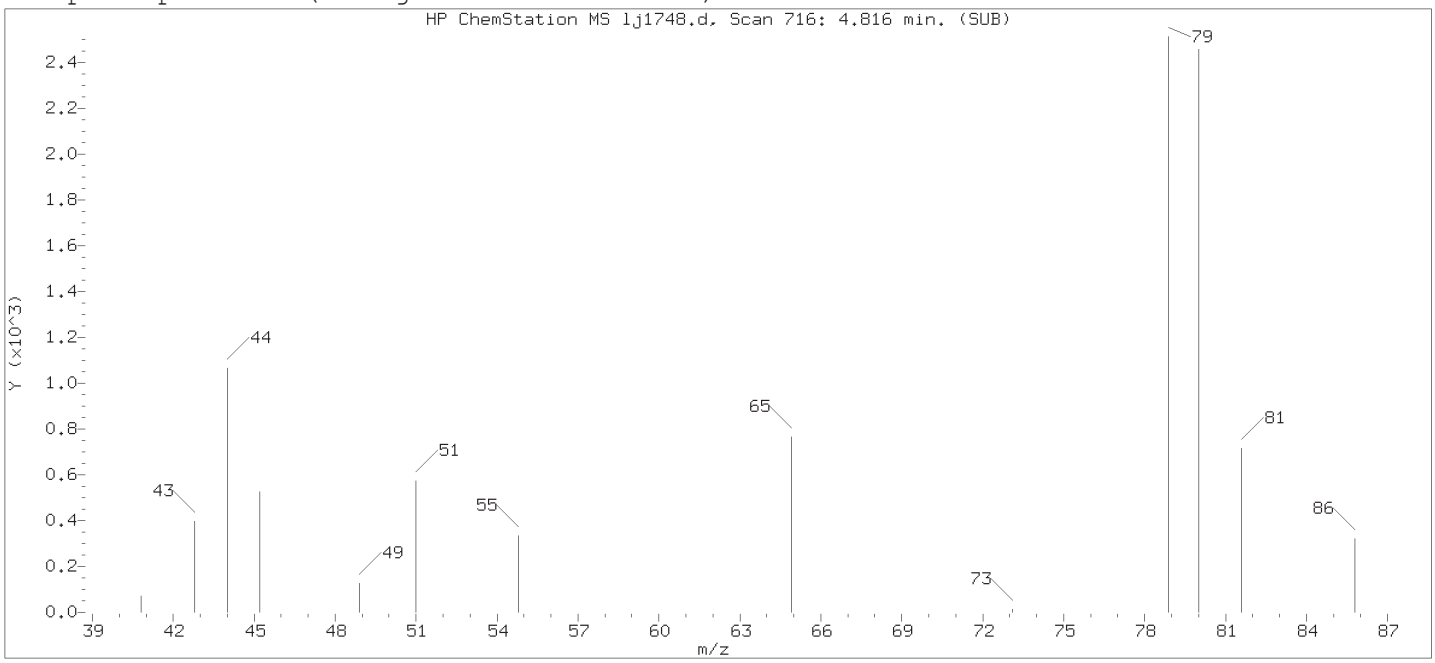
Compound Number : 10
Compound Name : Methyl methanesulfonate
Scan Number : 718
Retention Time (minutes) : 4.827
Quant Ion : 80.00
Area (flag) : 8428M
On-Column Amount (ng/ul) : 0.2219
Integration start scan : 710 Integration stop scan: 746
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

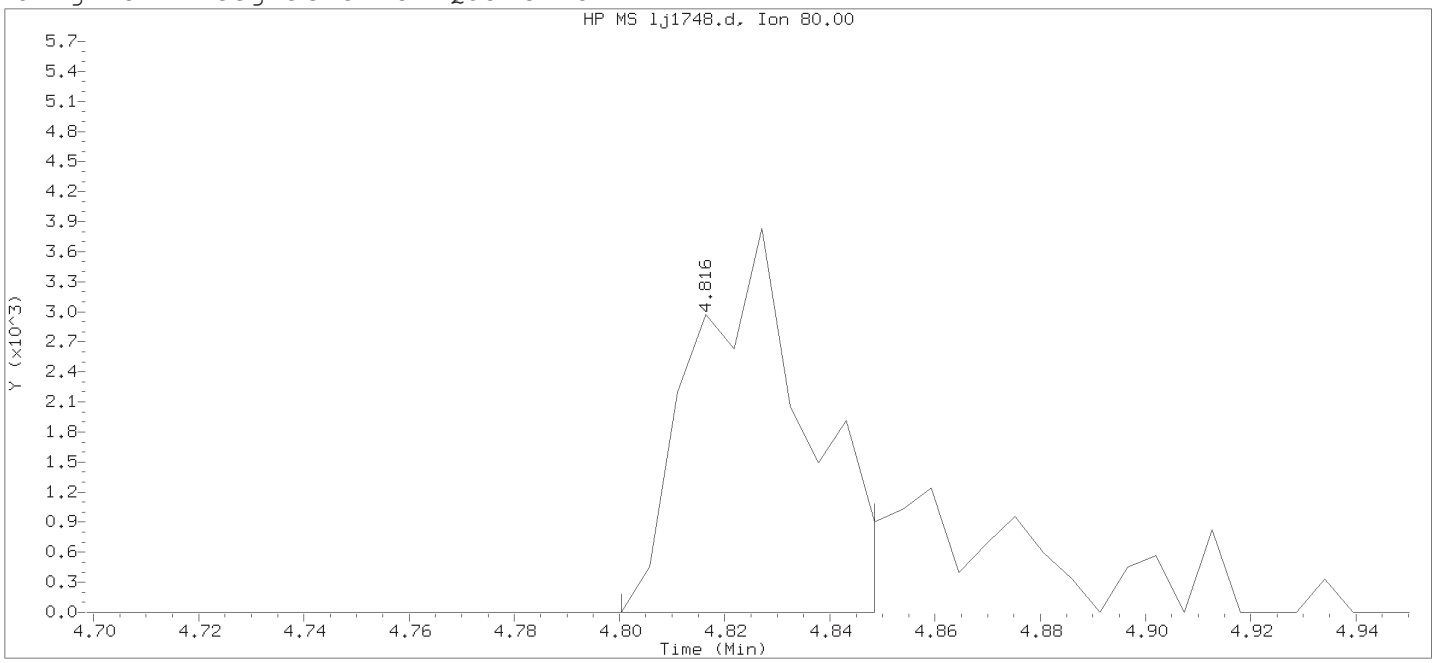
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

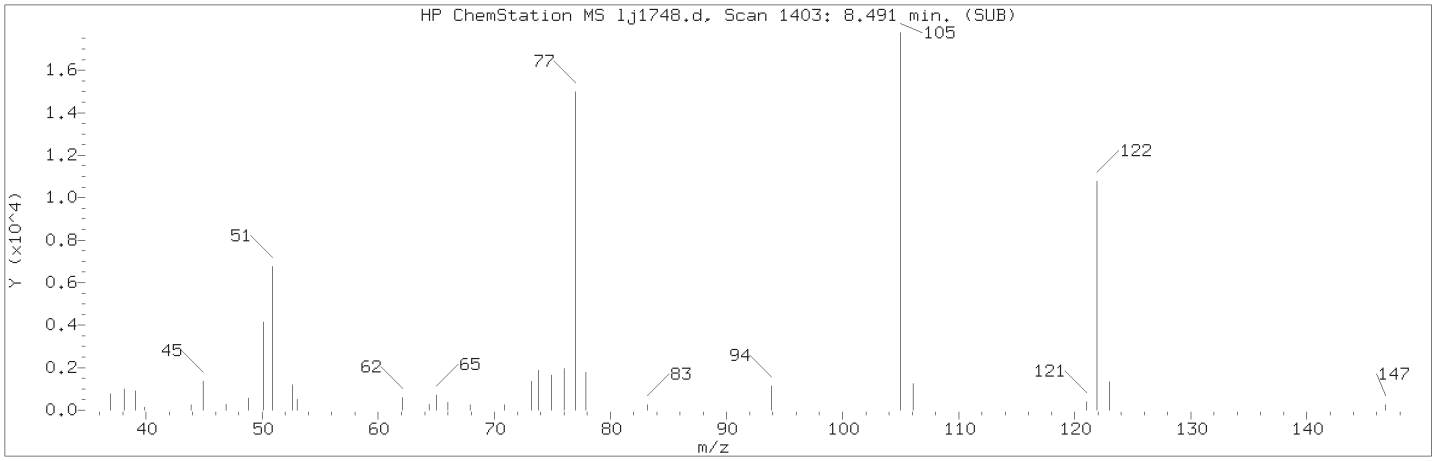
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

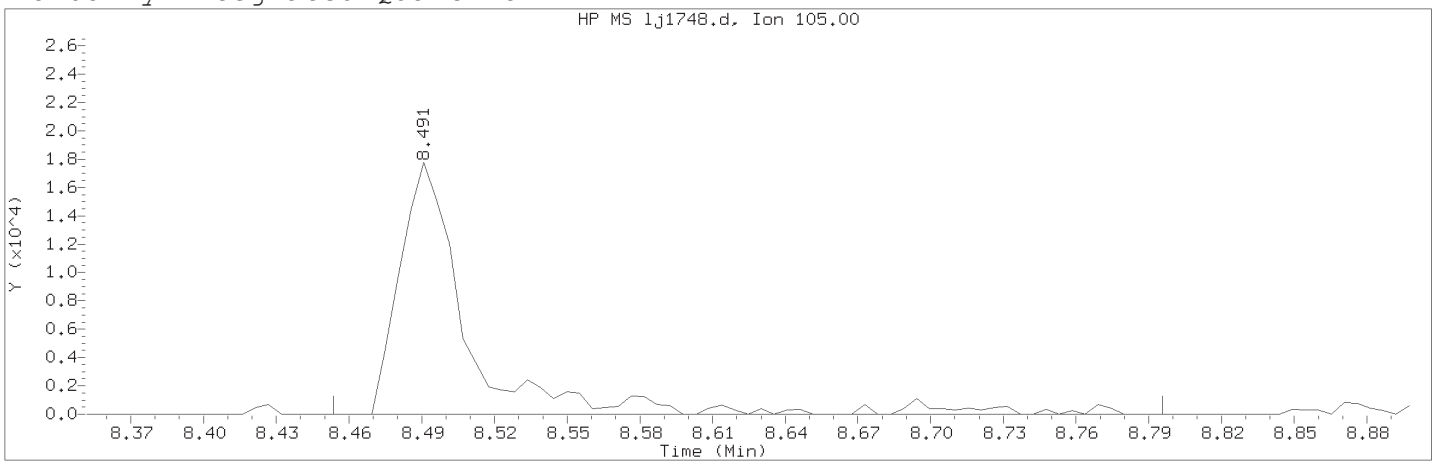
Compound Number	: 10		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 716		
Retention Time (minutes)	: 4.816		
Quant Ion	: 80.00		
Area	: 5776		
On-column Amount (ng/ul)	: 0.1547		
Integration start scan	: 712	Integration stop scan:	721
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: Ashley R. Transue

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

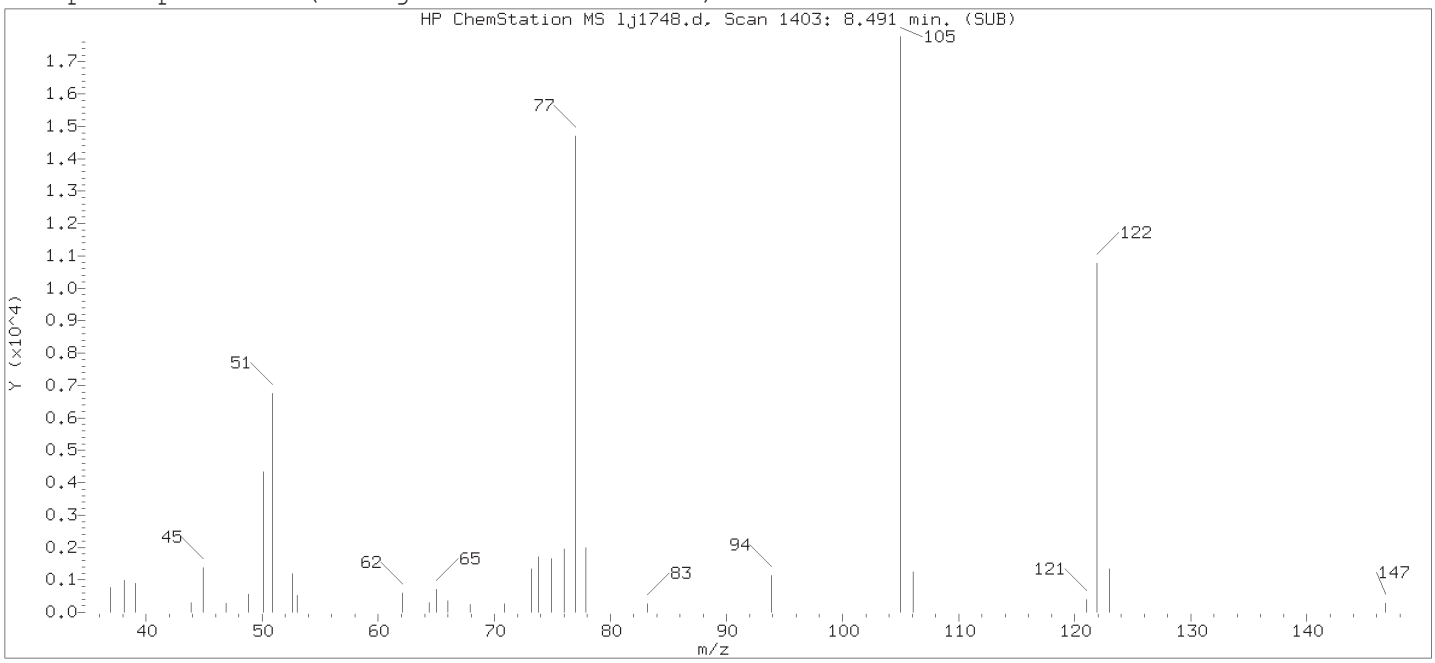
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1403		
Retention Time (minutes)	: 8.491		
Quant Ion	: 105.00		
Area (flag)	: 35392M		
On-Column Amount (ng/ul)	: 0.8791		
Integration start scan	: 1395	Integration stop scan:	1459
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

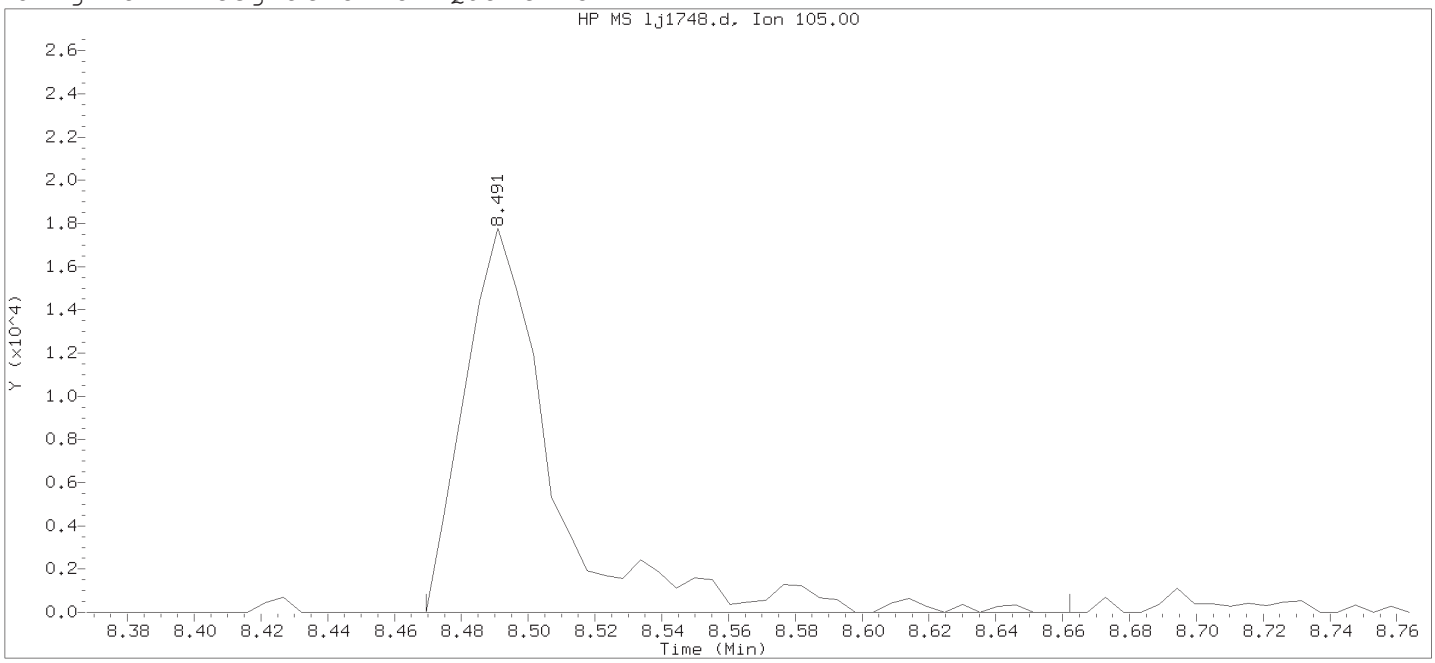
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

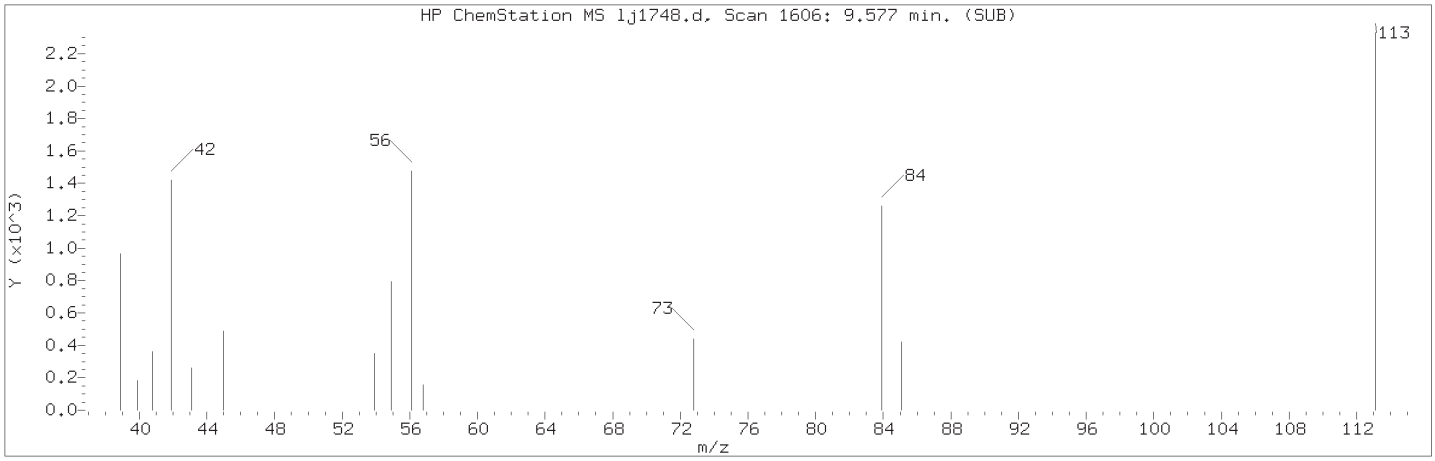
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

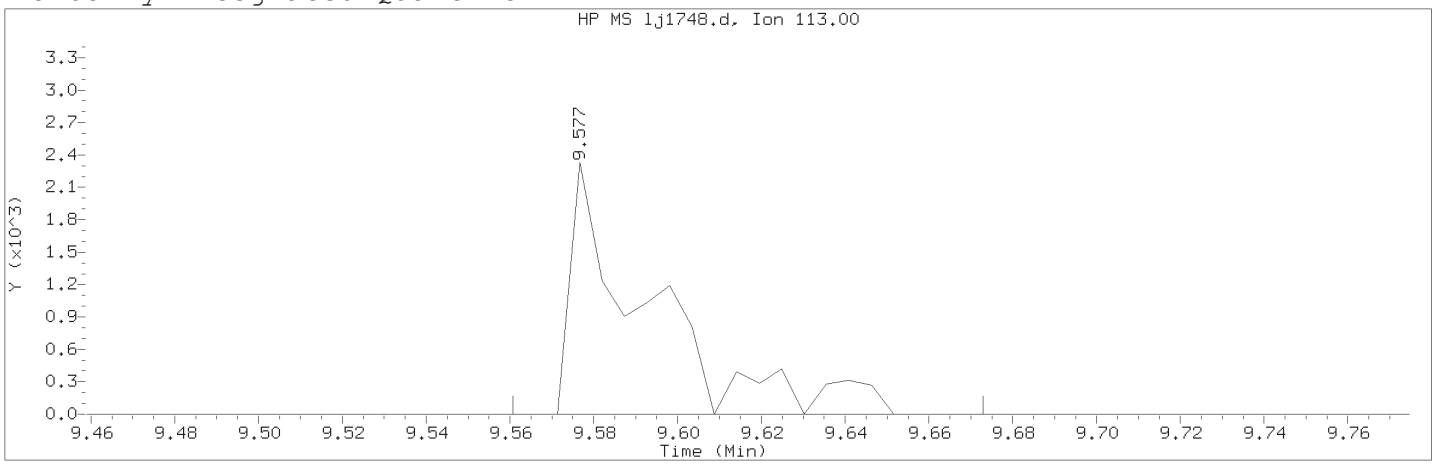
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1403		
Retention Time (minutes)	: 8.491		
Quant Ion	: 105.00		
Area	: 33241		
On-column Amount (ng/ul)	: 1.0344		
Integration start scan	: 1398	Integration stop scan:	1434
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used 107. Page 1445 of 4595

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

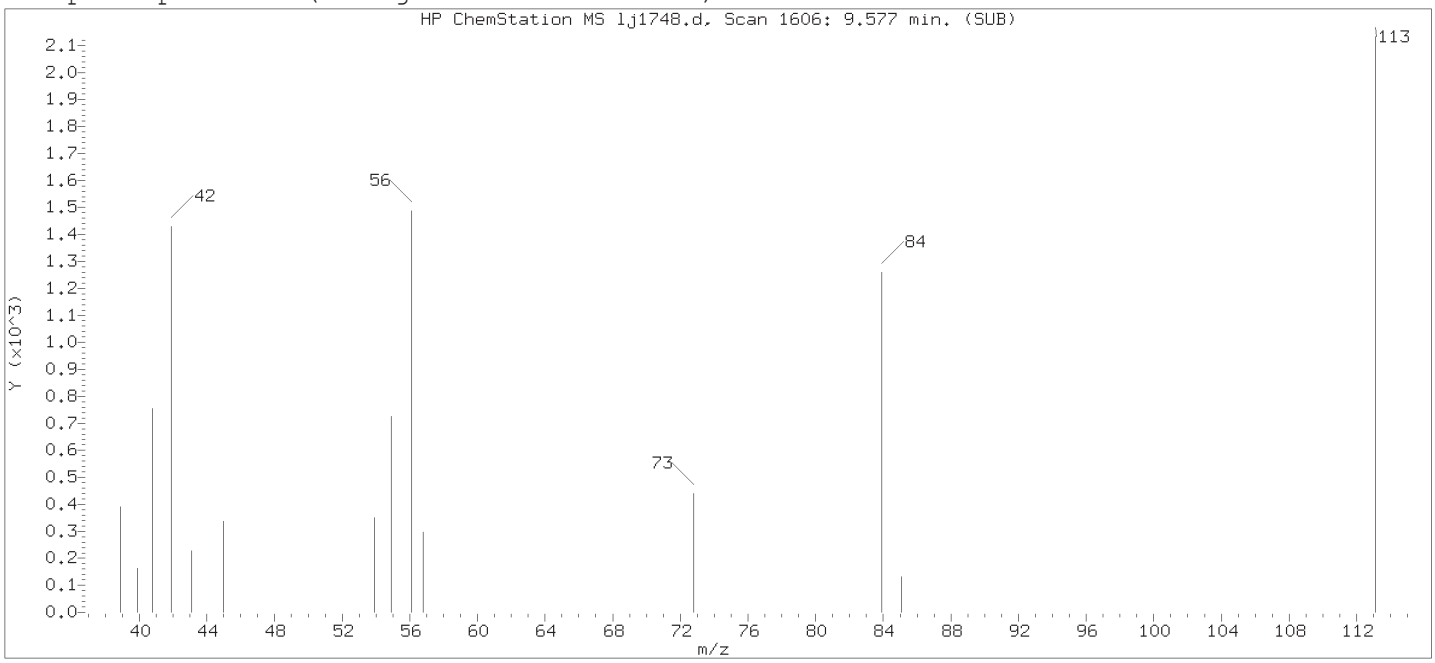
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1606
Retention Time (minutes) : 9.577
Quant Ion : 113.00
Area (flag) : 3036M
On-Column Amount (ng/ul) : 0.2222
Integration start scan : 1602 Integration stop scan: 1623
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

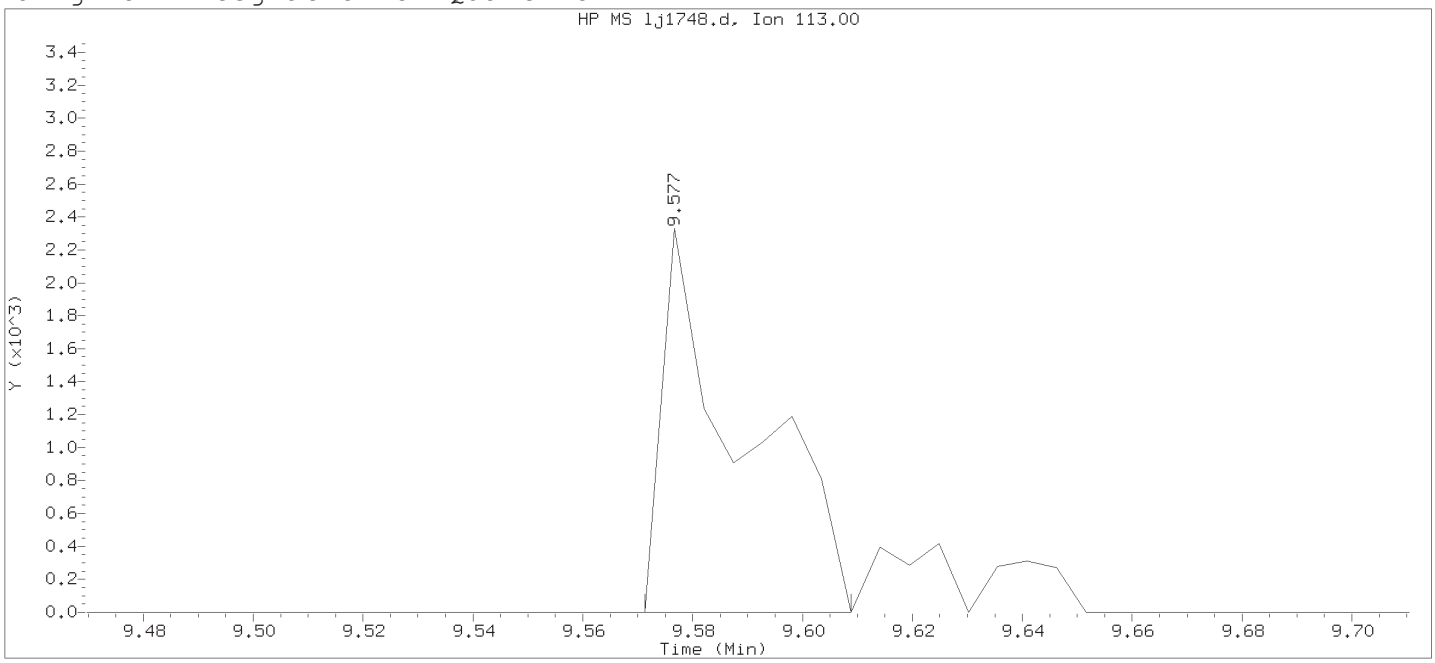
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

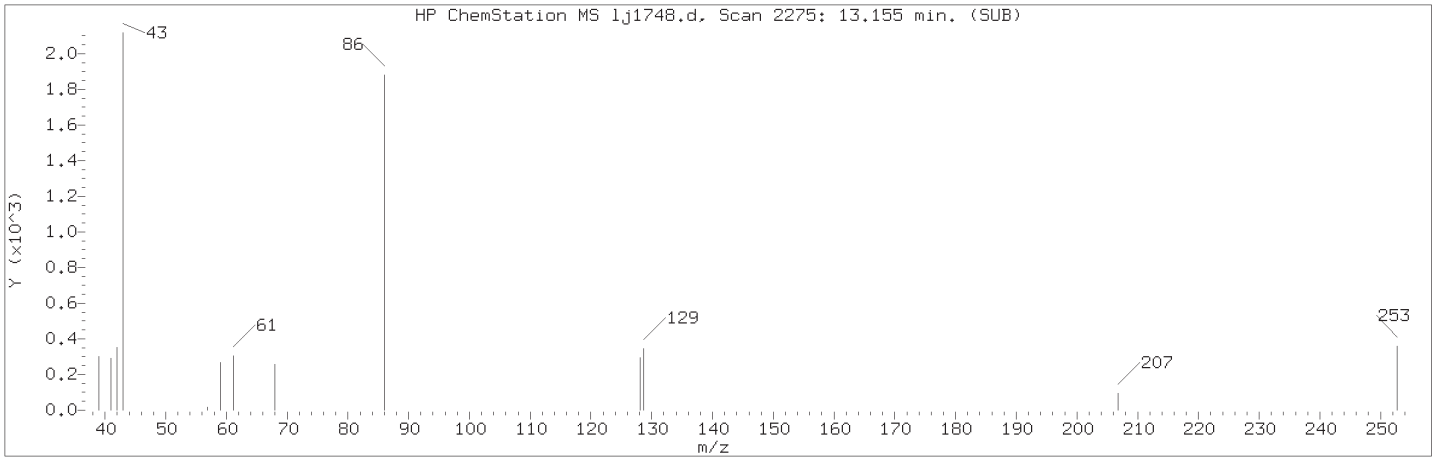
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

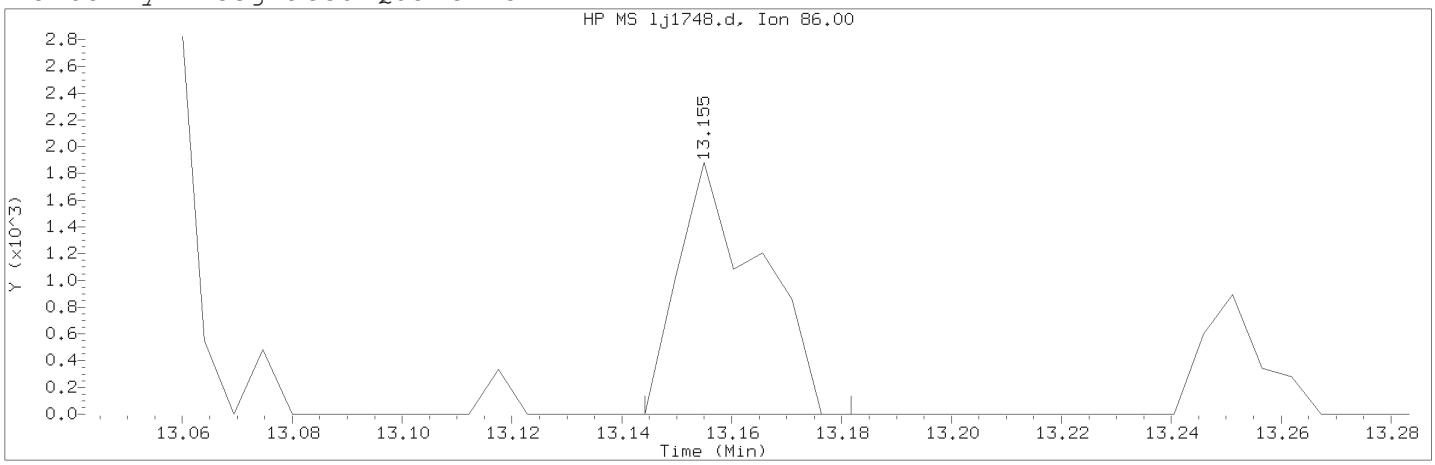
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1606		
Retention Time (minutes)	: 9.577		
Quant Ion	: 113.00		
Area	: 2409		
On-column Amount (ng/ul)	: 0.2631		
Integration start scan	: 1604	Integration stop scan:	1611
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: [illegible]

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

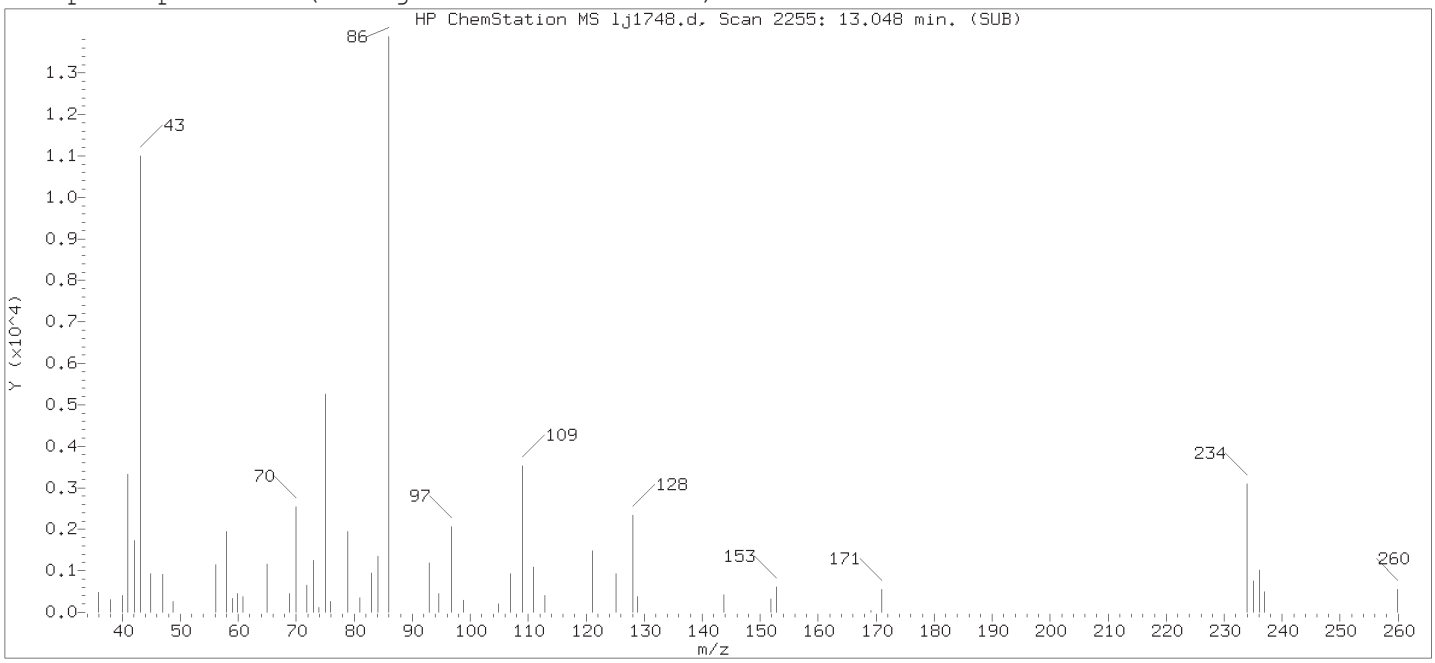
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2275		
Retention Time (minutes)	: 13.155		
Quant Ion	: 86.00		
Area (flag)	: 1930M		
On-Column Amount (ng/ul)	: 0.0402		
Integration start scan	: 2272	Integration stop scan:	2279
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

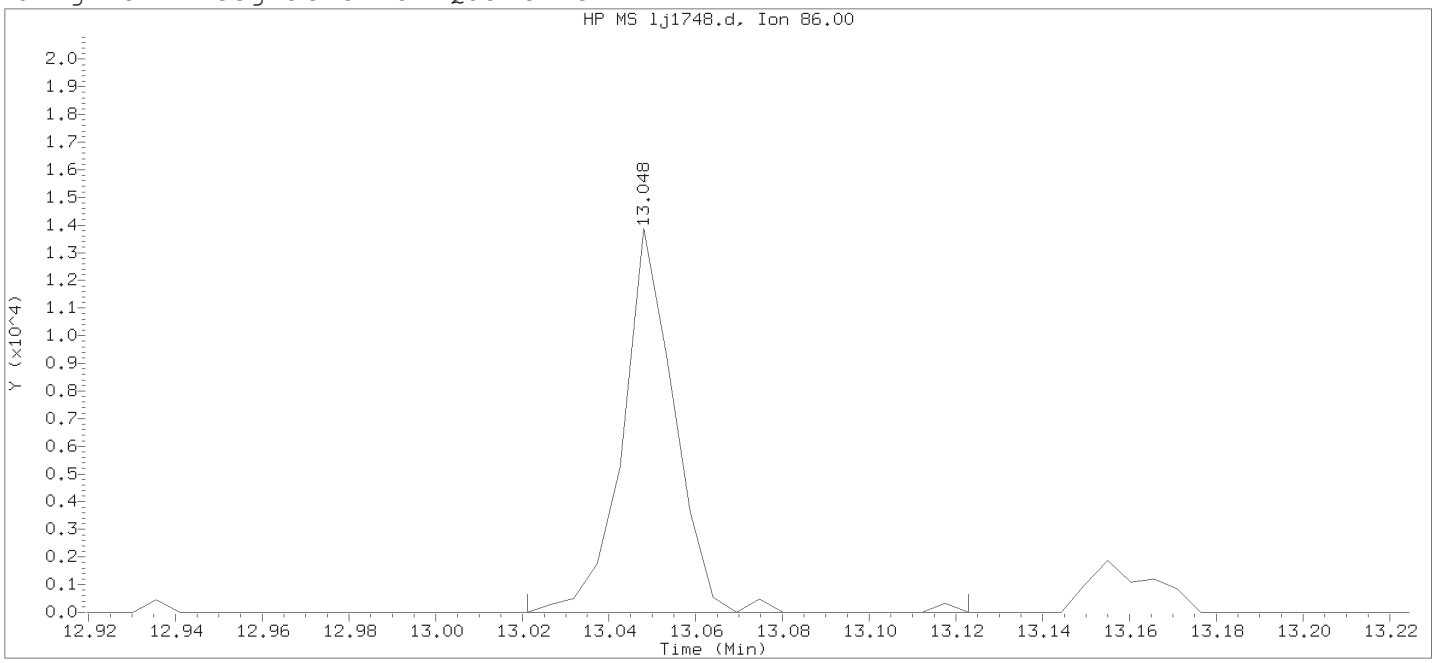
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

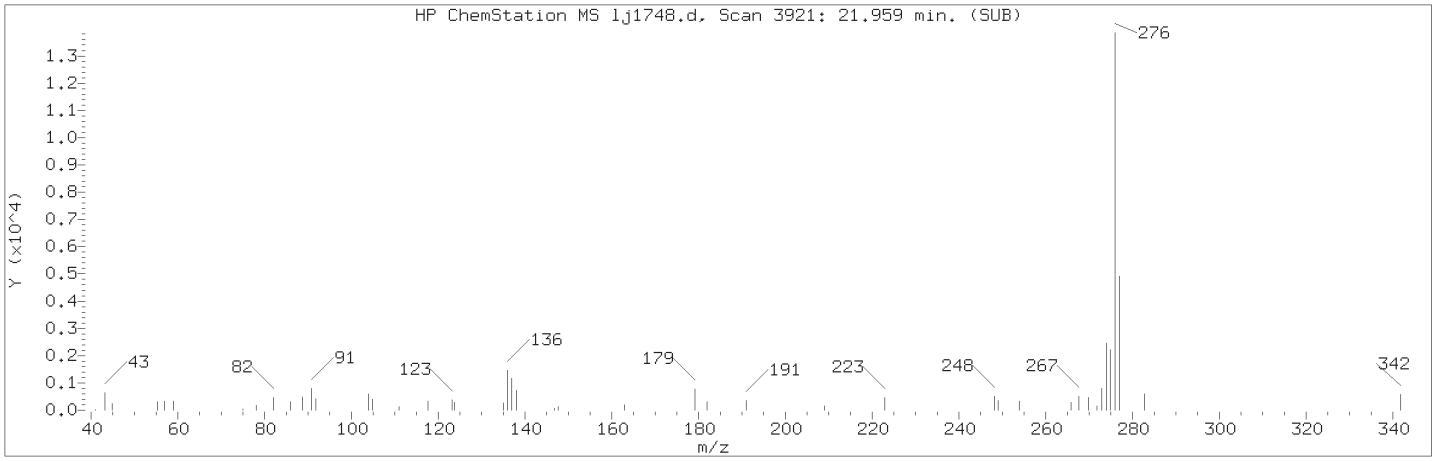
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

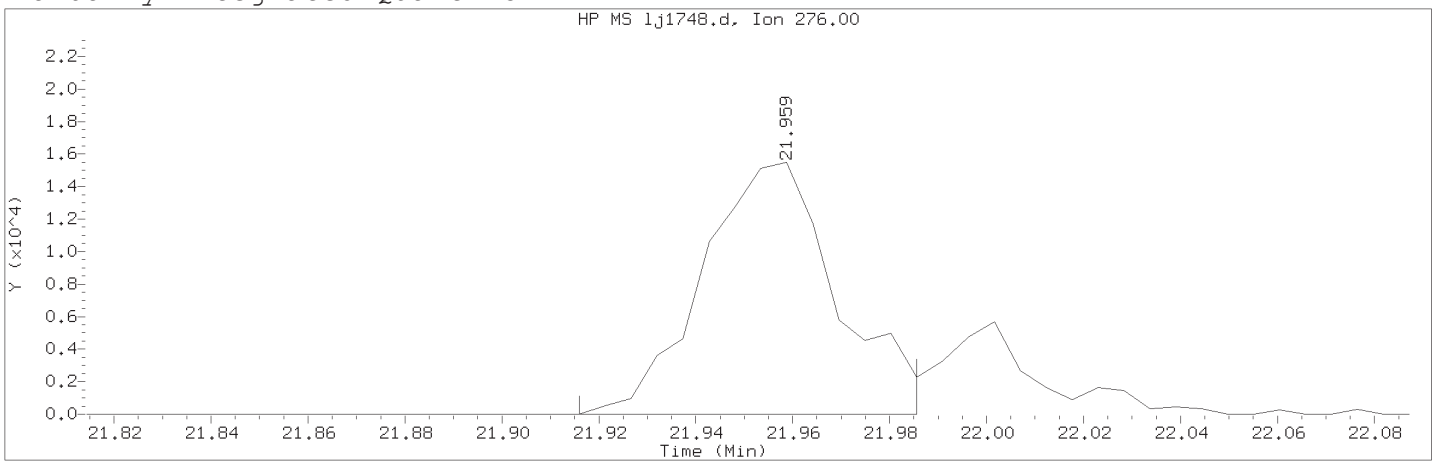
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2255		
Retention Time (minutes)	: 13.048		
Quant Ion	: 86.00		
Area	: 11548		
On-column Amount (ng/ul)	: 0.0469		
Integration start scan	: 2249	Integration stop scan:	2268
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used: 1107

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

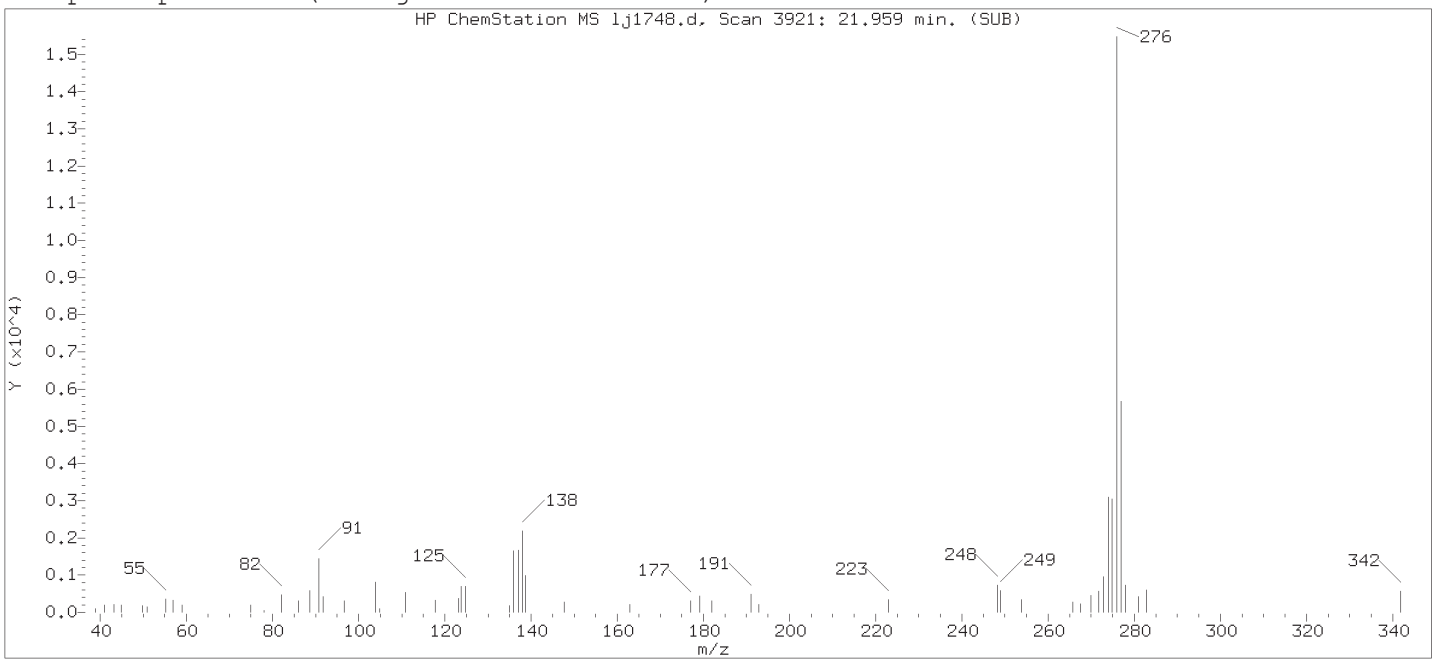
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3921
Retention Time (minutes) : 21.959
Quant Ion : 276.00
Area (flag) : 29821M
On-Column Amount (ng/ul) : 0.2365
Integration start scan : 3912 Integration stop scan: 3925
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

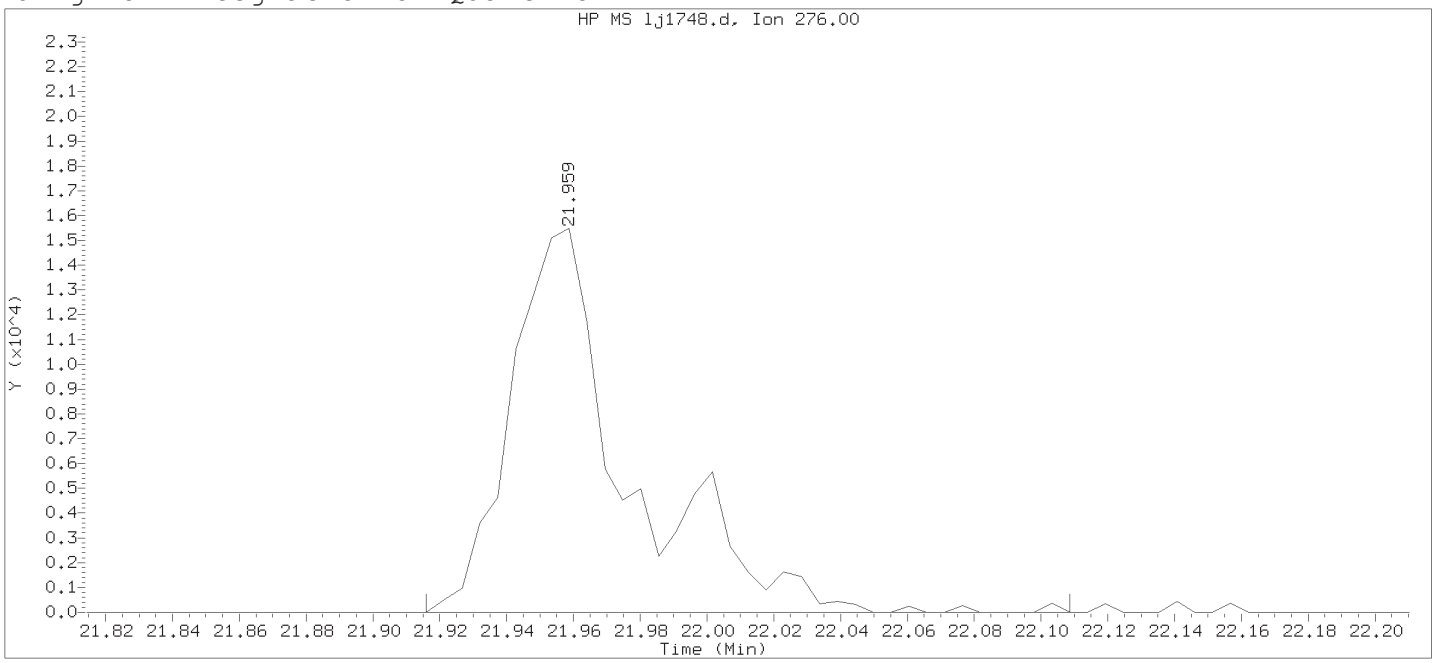
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

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



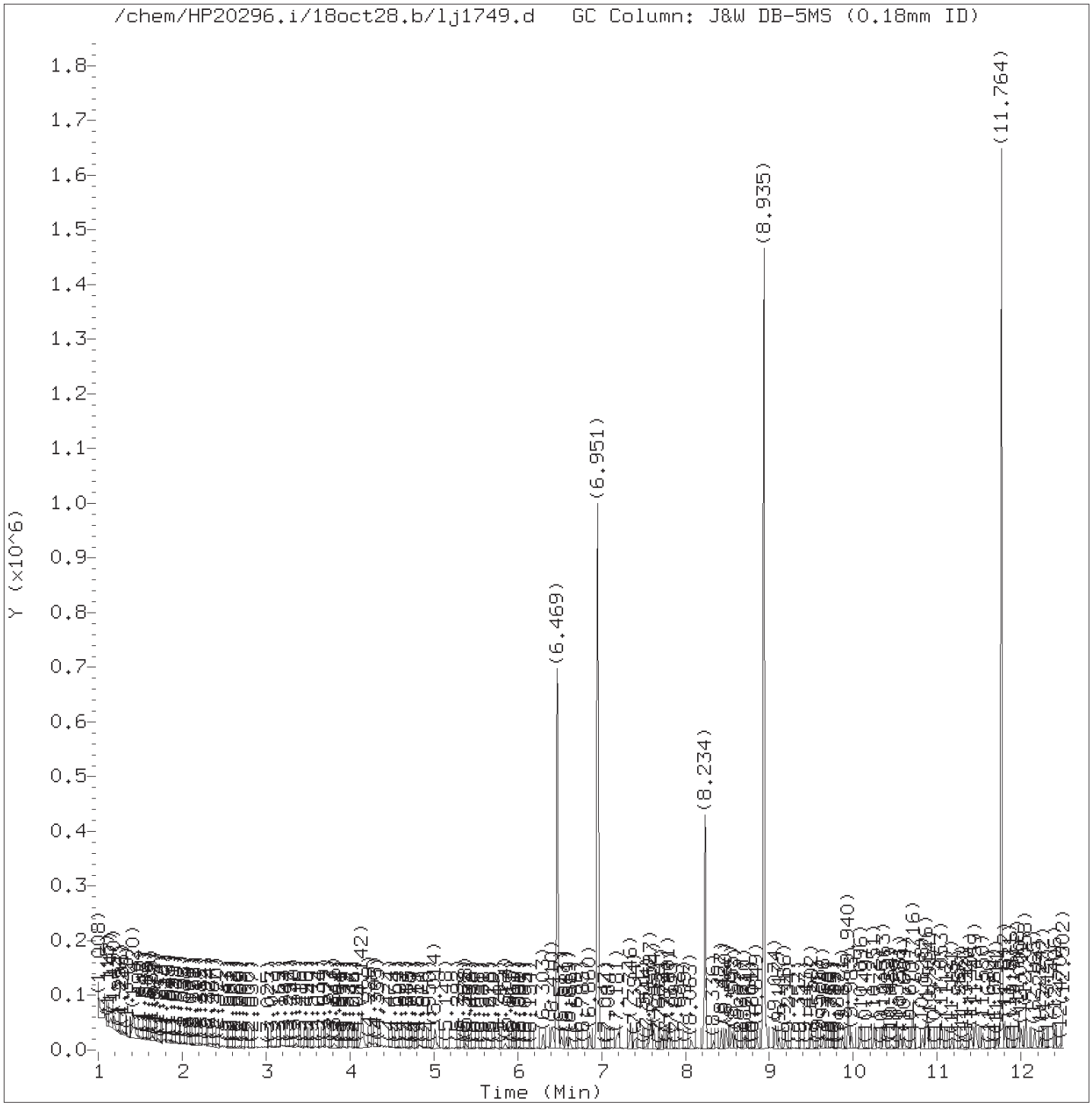
Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 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	: 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

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature used for this file.



Total Ion Chromatogram (TIC)

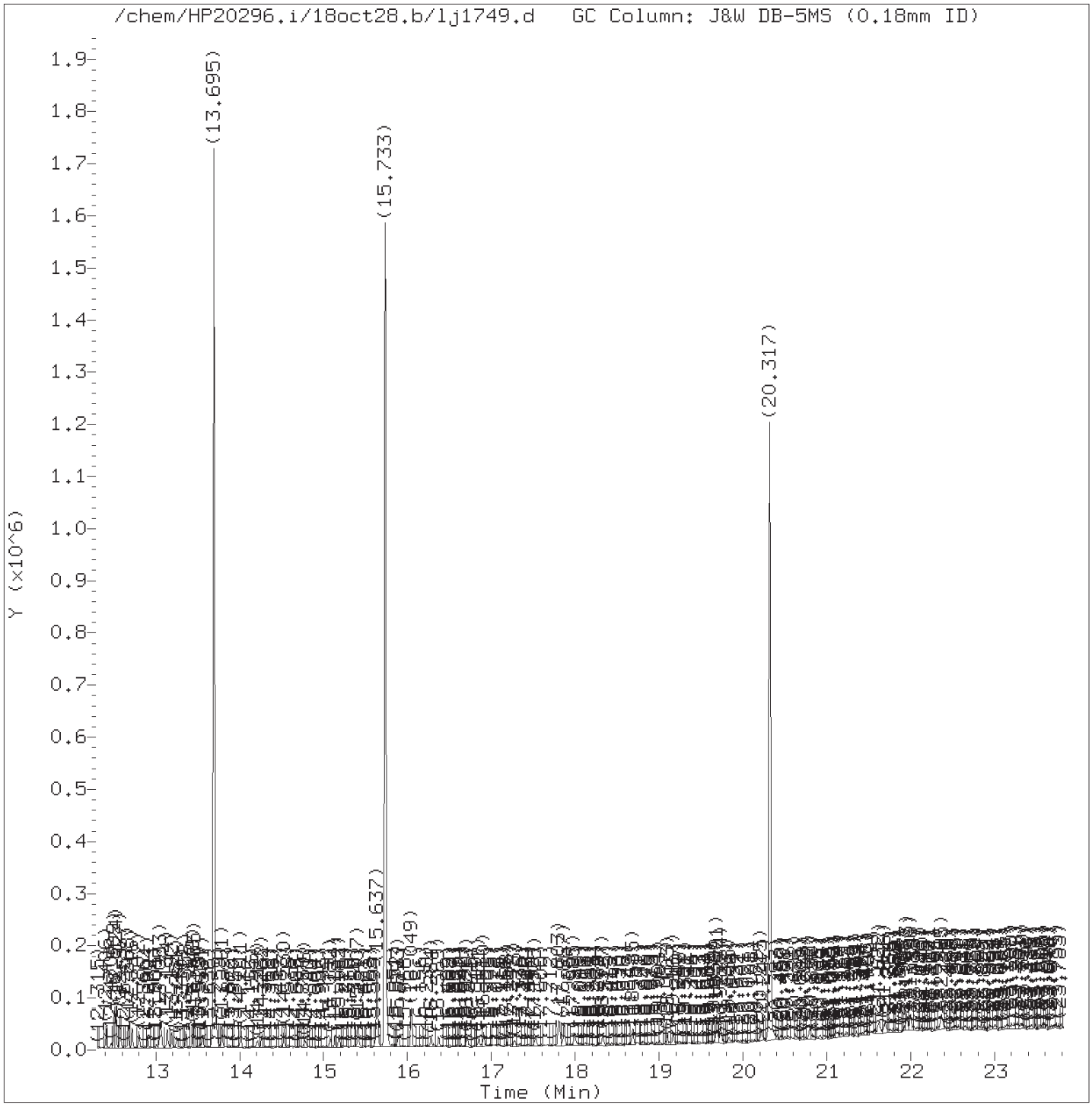
Target Revision 3.5

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

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 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

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 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

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-Nitrosopiperidine	(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 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

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 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

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.
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$ = 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 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

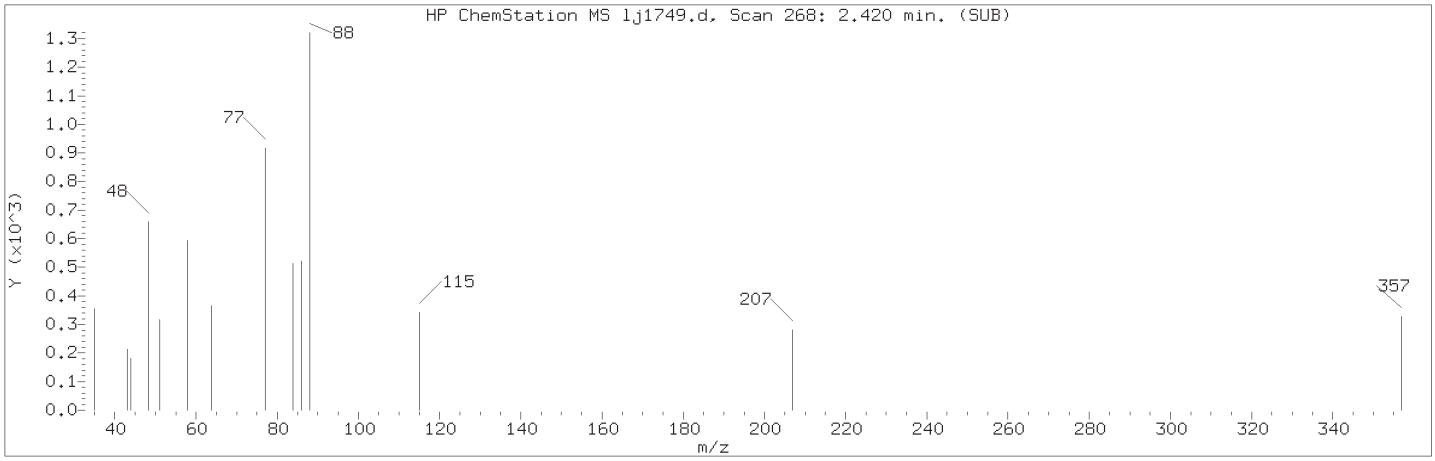
Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

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

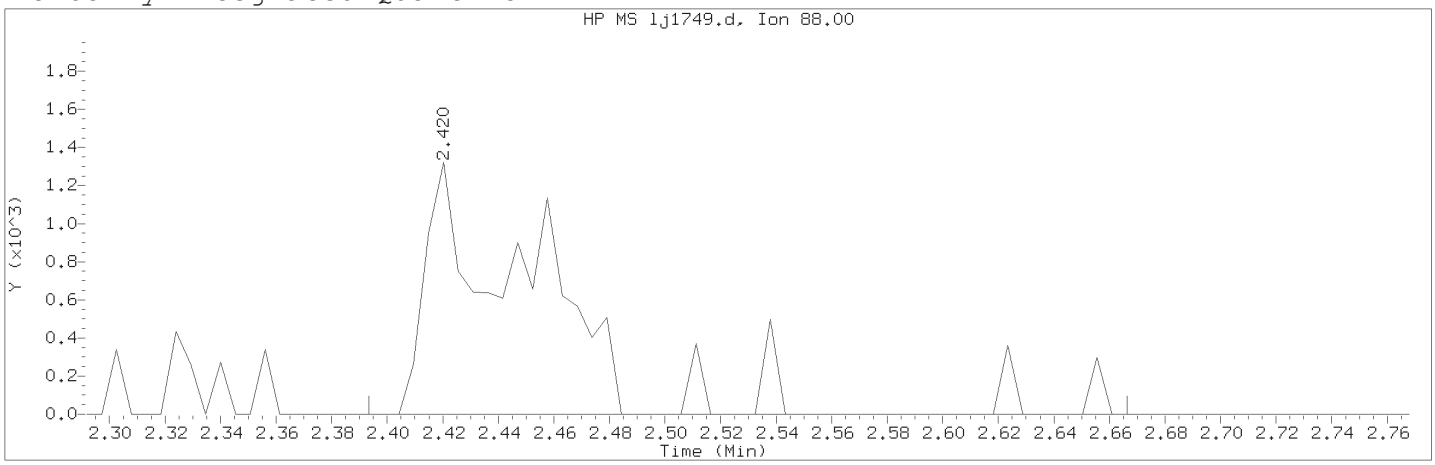
* = Compound is an internal standard.

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/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

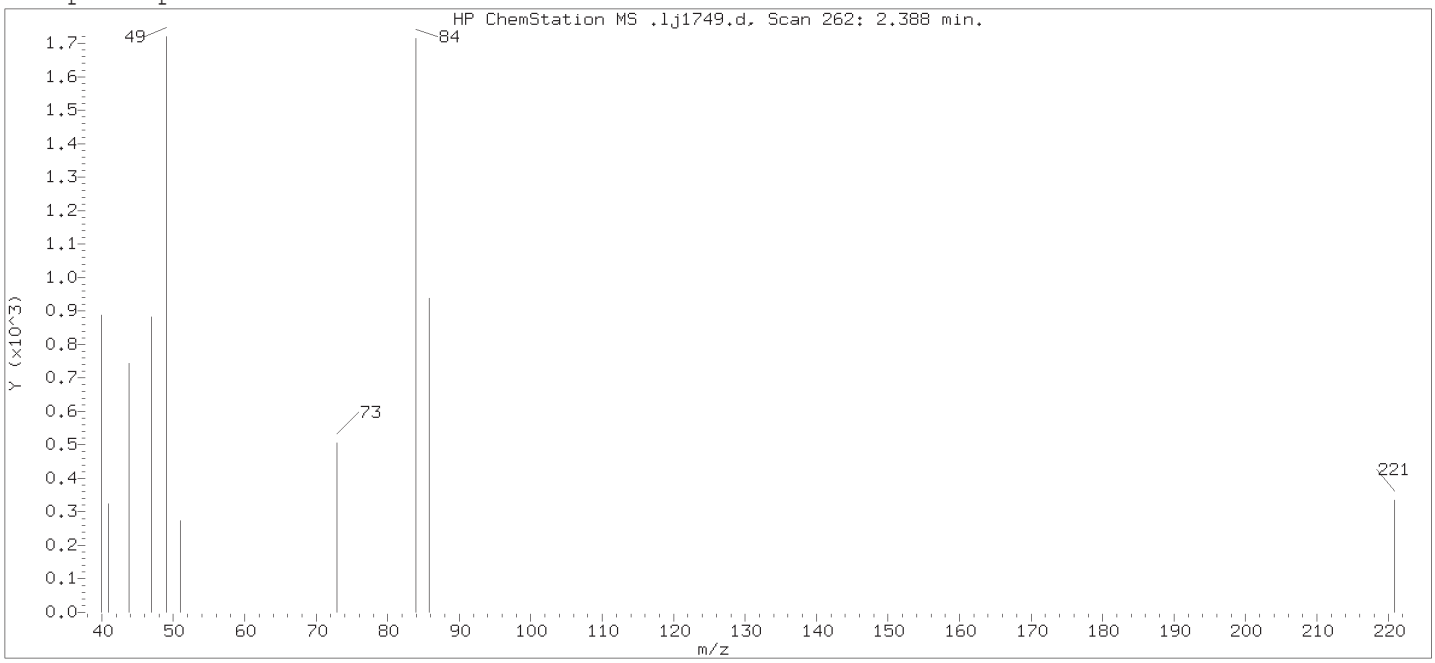
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 268		
Retention Time (minutes)	: 2.420		
Quant Ion	: 88.00		
Area (flag)	: 3687M		
On-Column Amount (ng/ul)	: 0.1325		
Integration start scan	: 262	Integration stop scan:	313
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

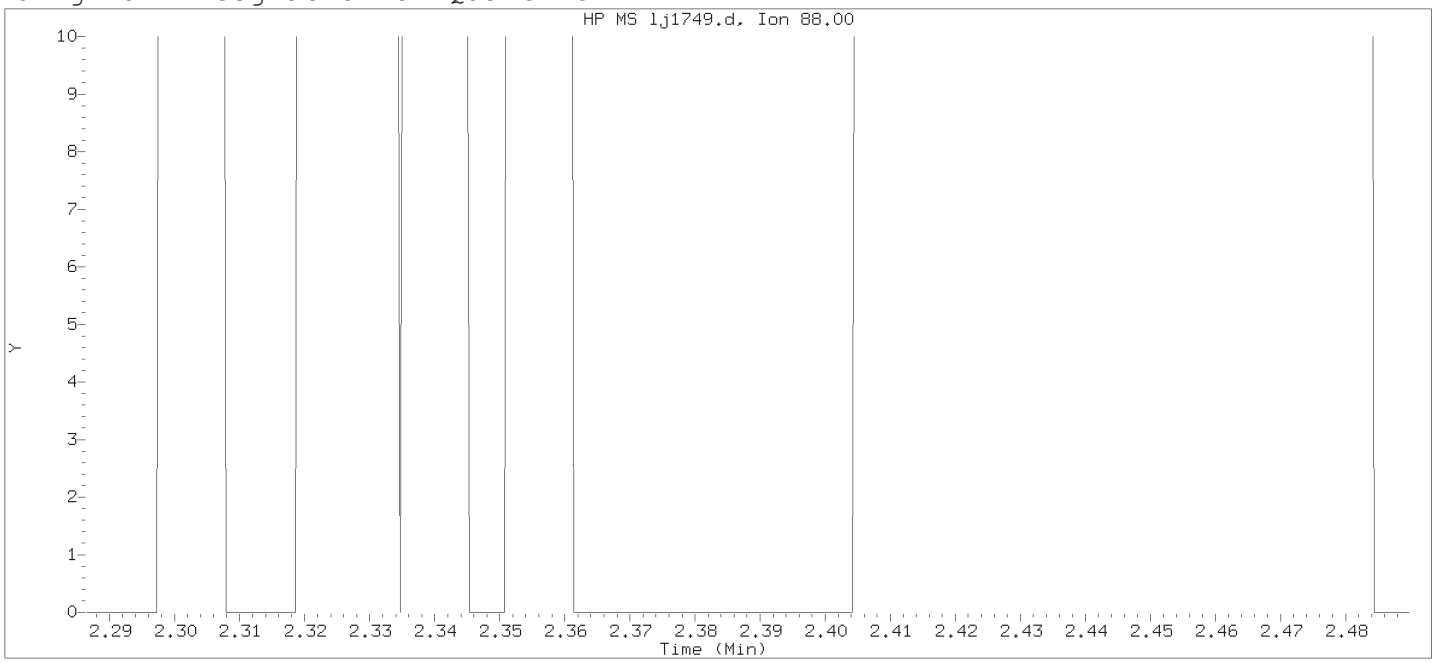
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

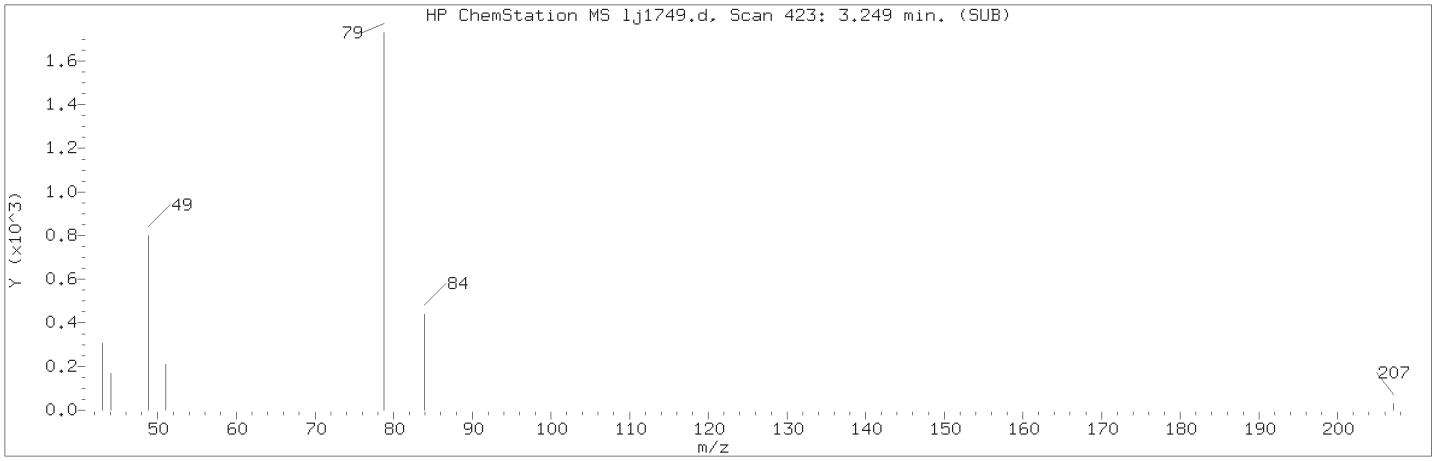
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

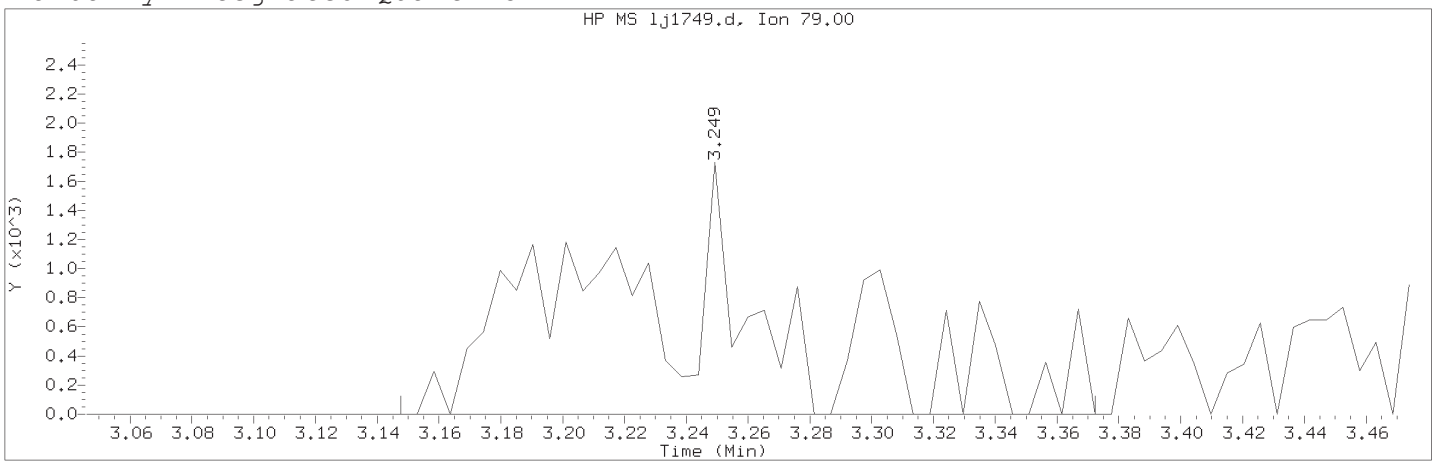
Compound Number : 1
Compound Name : 1,4-Dioxane
Expected RT (minutes) : 2.388
Quant Ion : 88.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used.

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

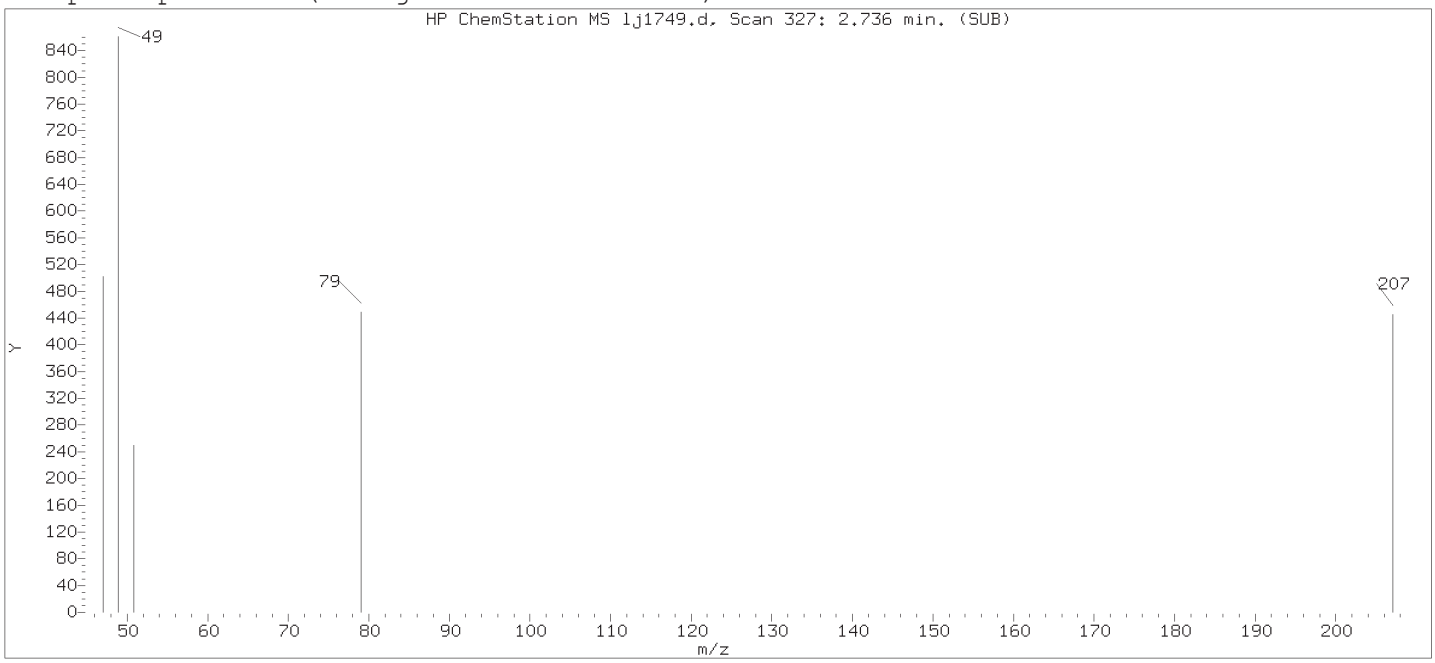
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 423		
Retention Time (minutes)	: 3.249		
Quant Ion	: 79.00		
Area (flag)	: 7175M		
On-Column Amount (ng/ul)	: 0.1008		
Integration start scan	: 403	Integration stop scan:	445
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

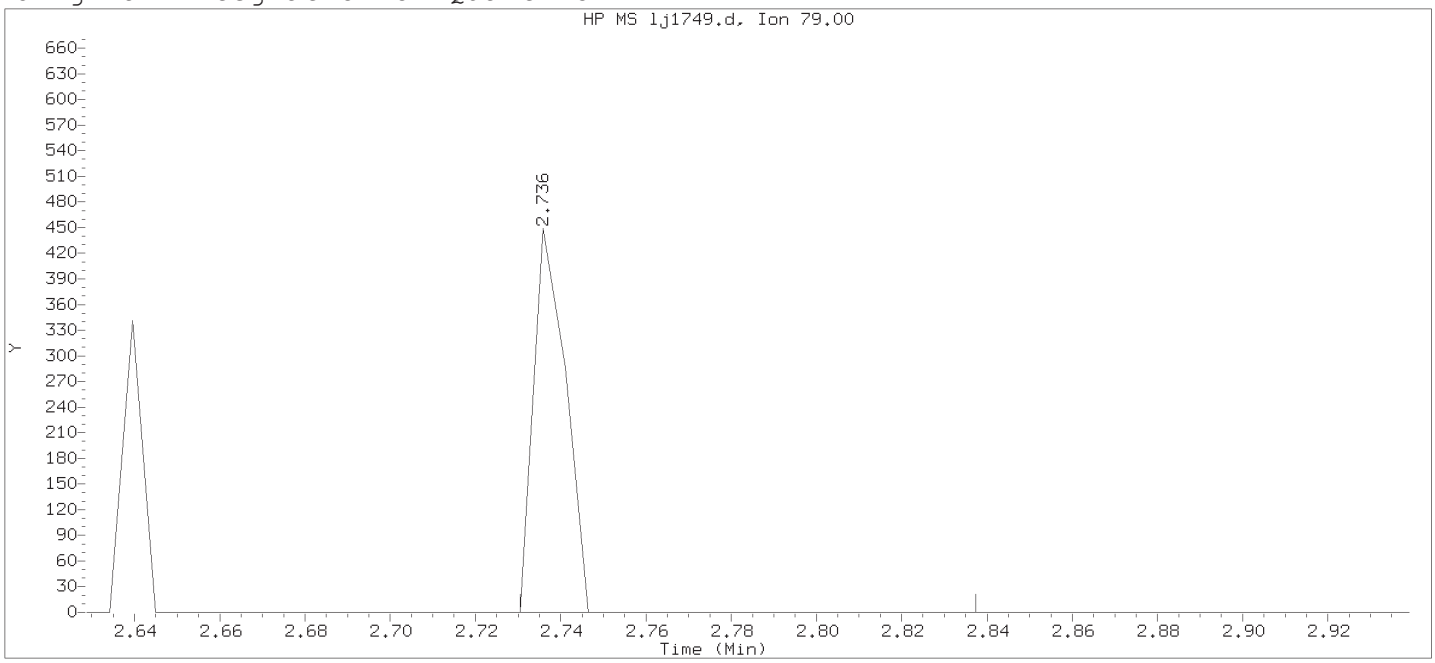
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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

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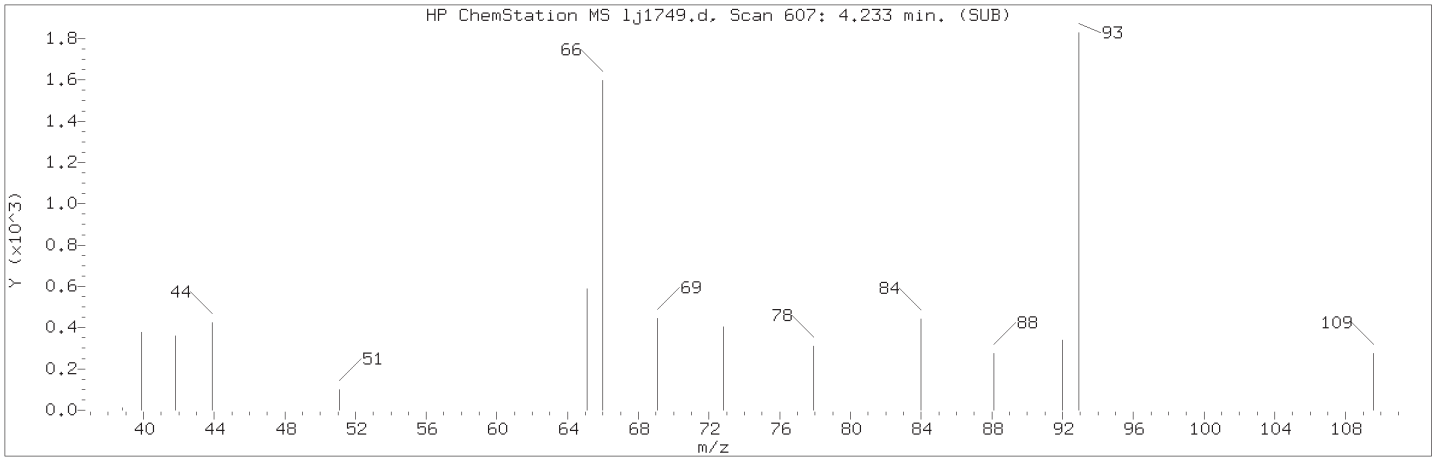
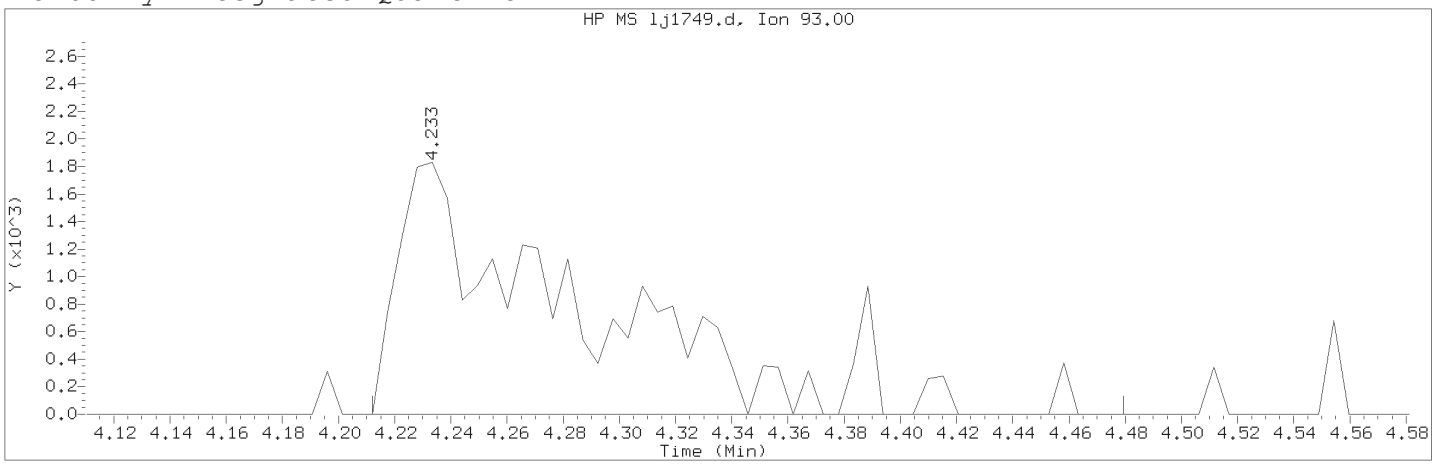
Target 3.5 esignature user ID: 25161

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

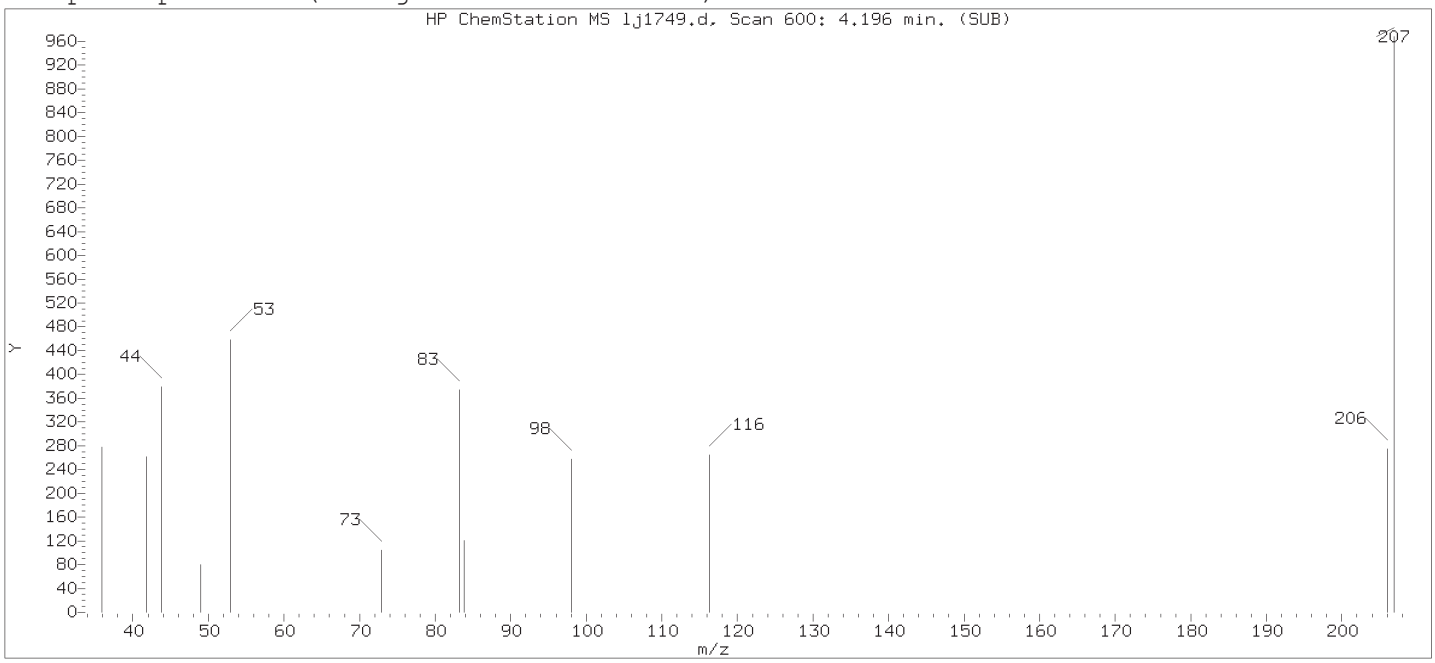
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 607		
Retention Time (minutes)	: 4.233		
Quant Ion	: 93.00		
Area (flag)	: 8043M		
On-Column Amount (ng/ul)	: 0.1083		
Integration start scan	: 602	Integration stop scan:	652
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

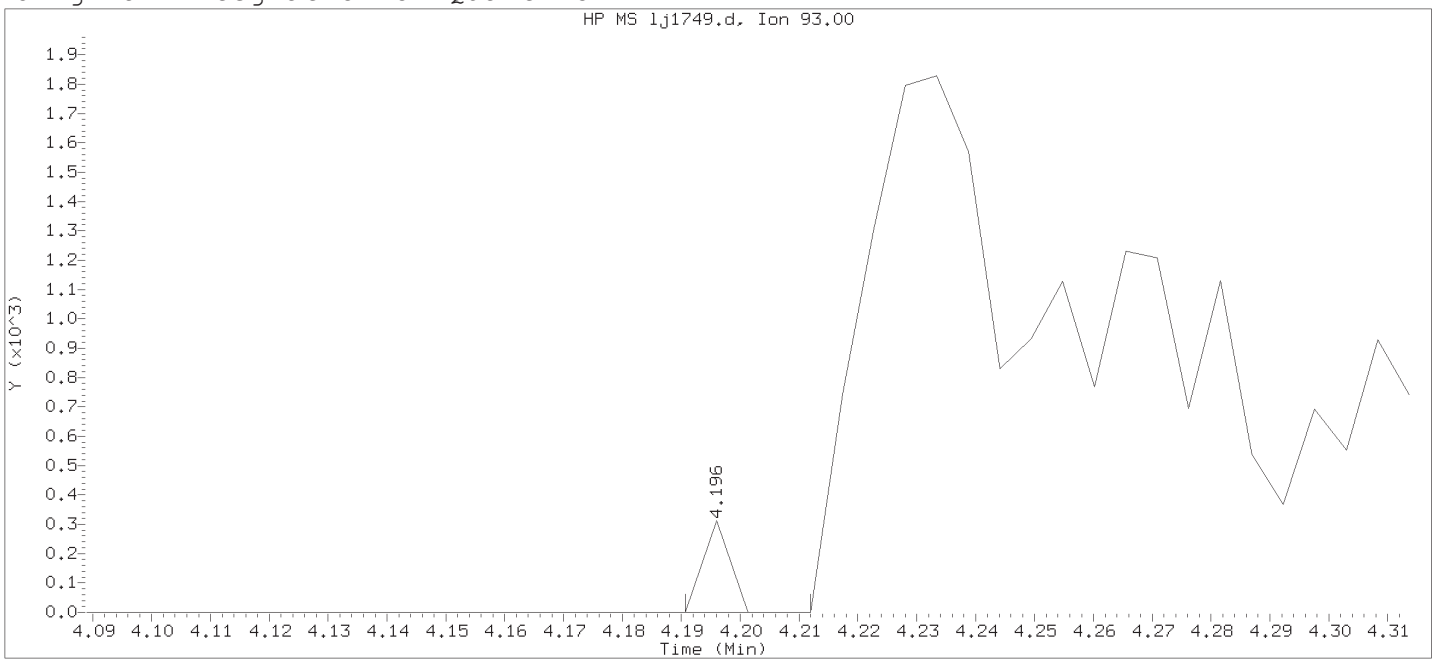
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

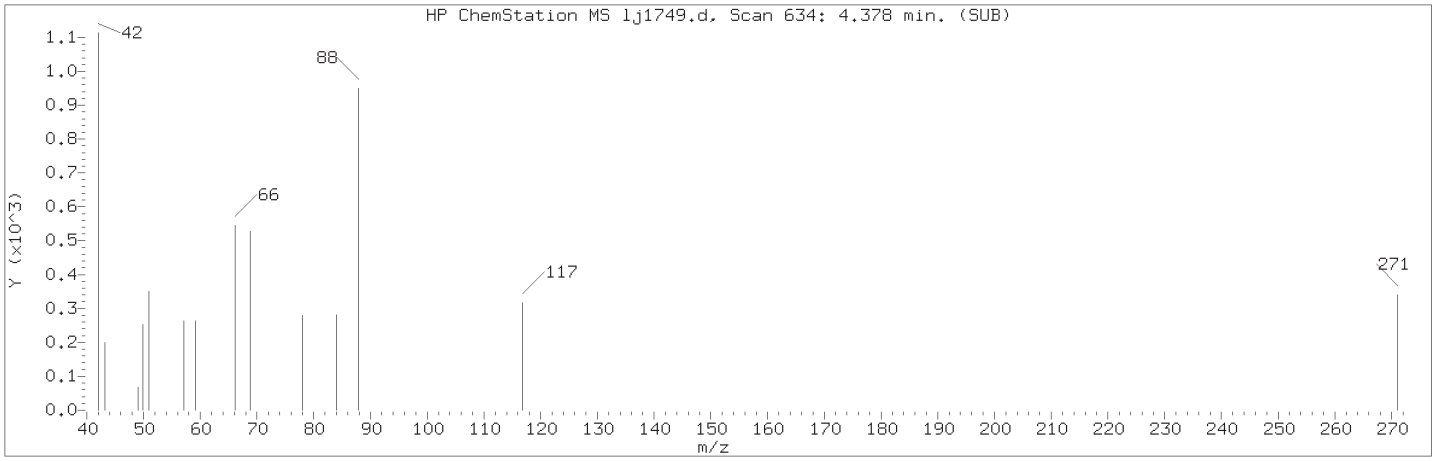
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

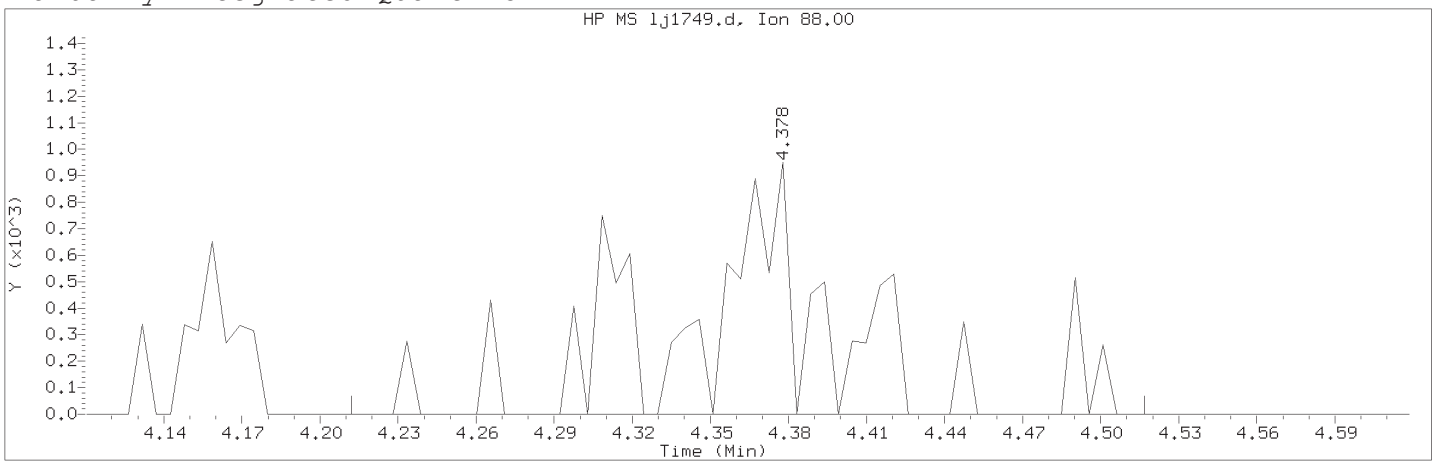
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 600		
Retention Time (minutes)	: 4.196		
Quant Ion	: 93.00		
Area	: 100		
On-column Amount (ng/ul)	: 0.0014		
Integration start scan	: 598	Integration stop scan:	602
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used: 1007. Page 2163

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

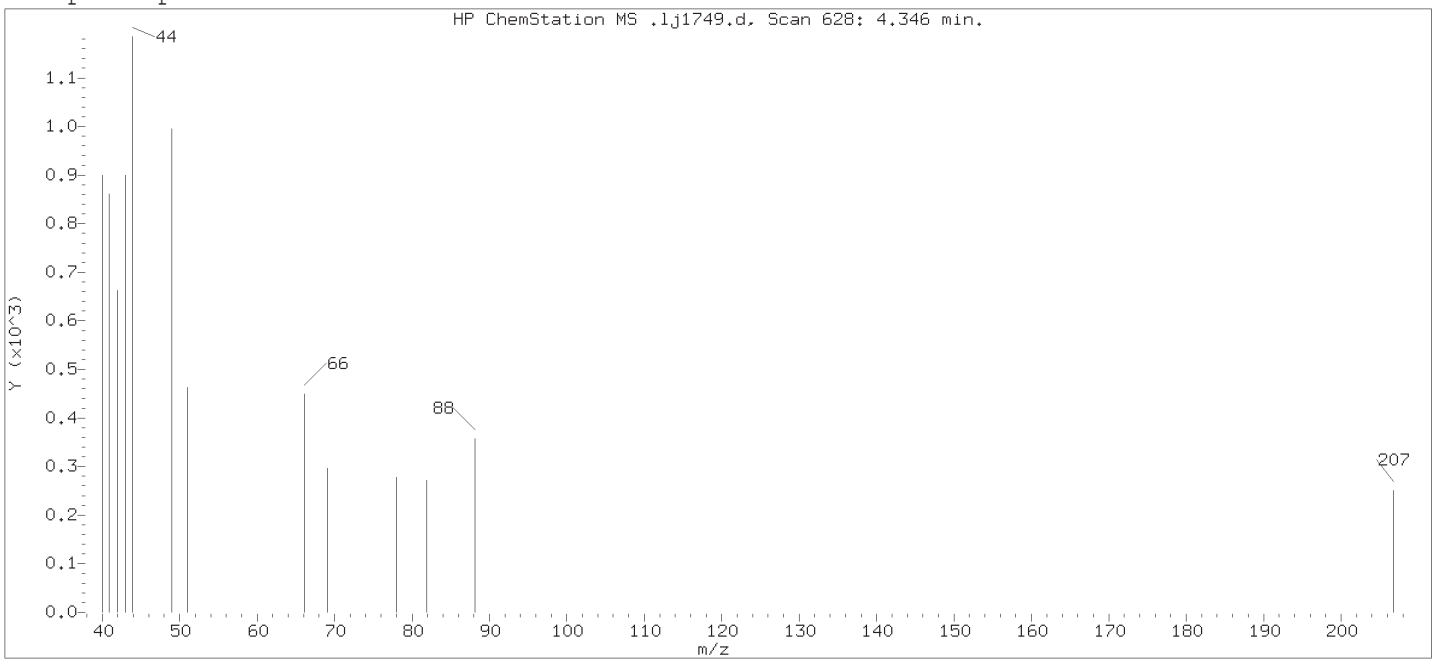
Compound Number	: 9		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 634		
Retention Time (minutes)	: 4.378		
Quant Ion	: 88.00		
Area (flag)	: 3534M		
On-Column Amount (ng/ul)	: 0.1165		
Integration start scan	: 602	Integration stop scan:	659
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

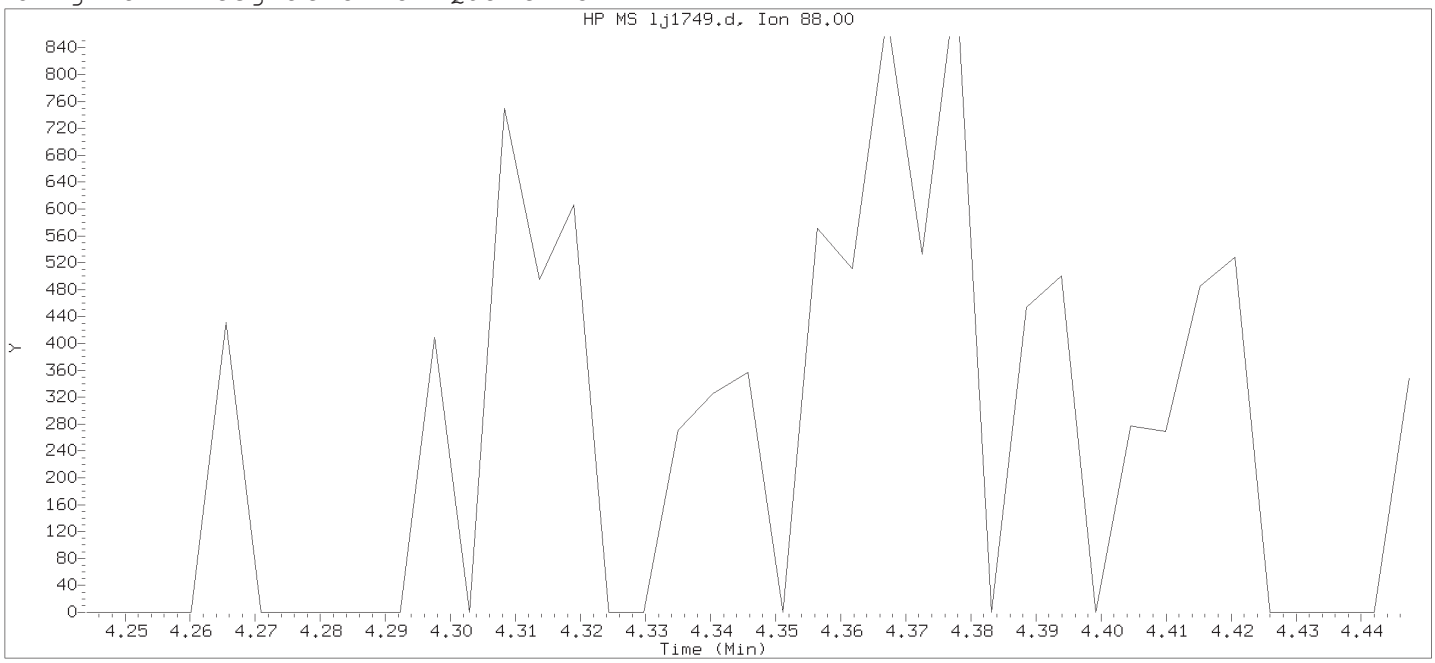
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

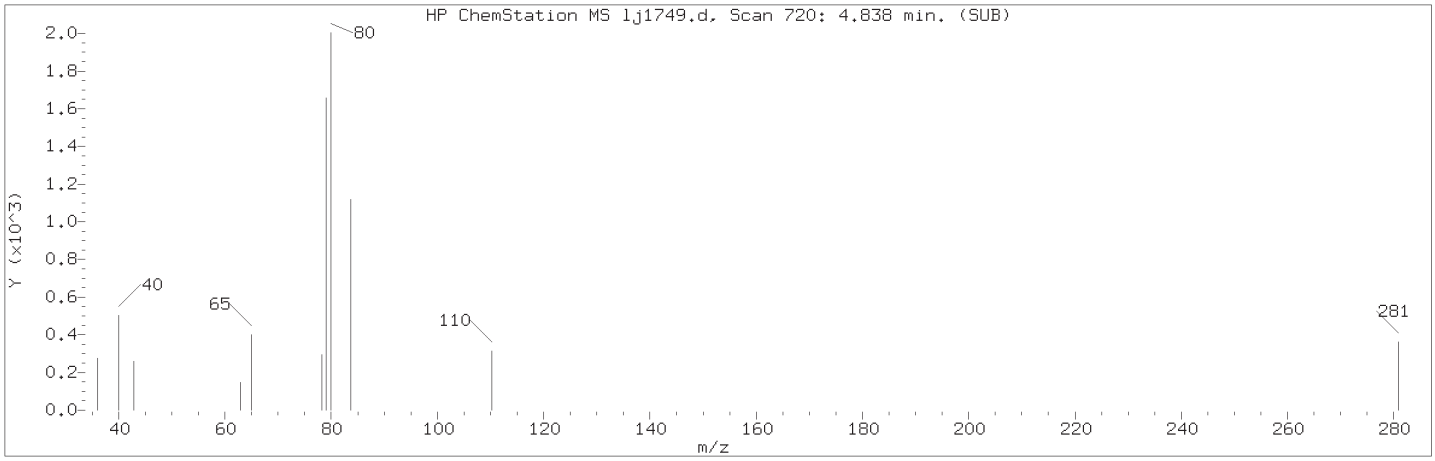
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

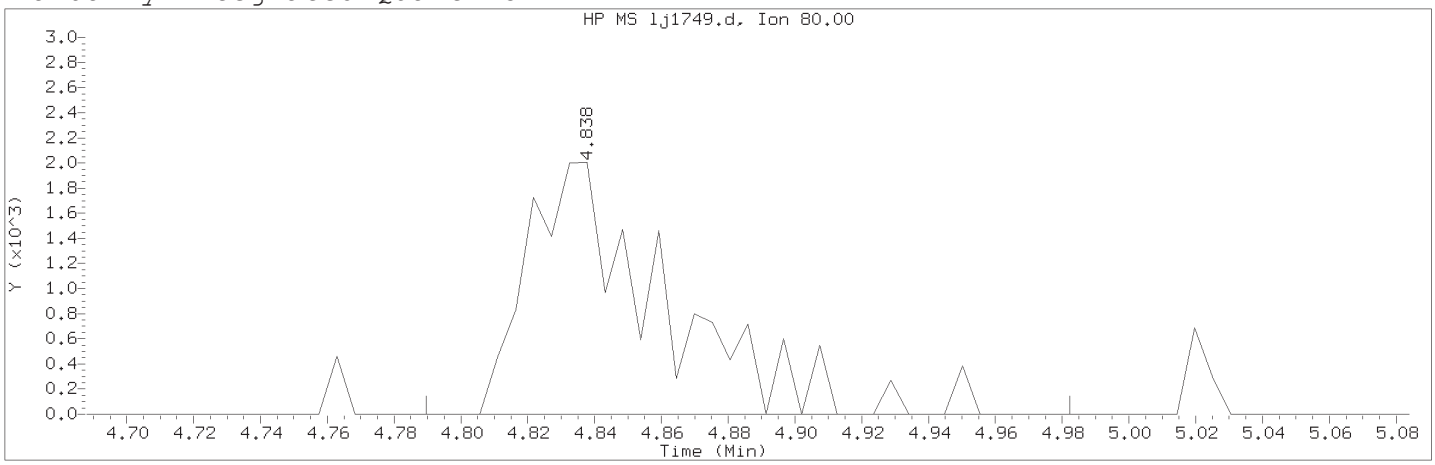
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.346
Quant Ion : 88.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used: 2107

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

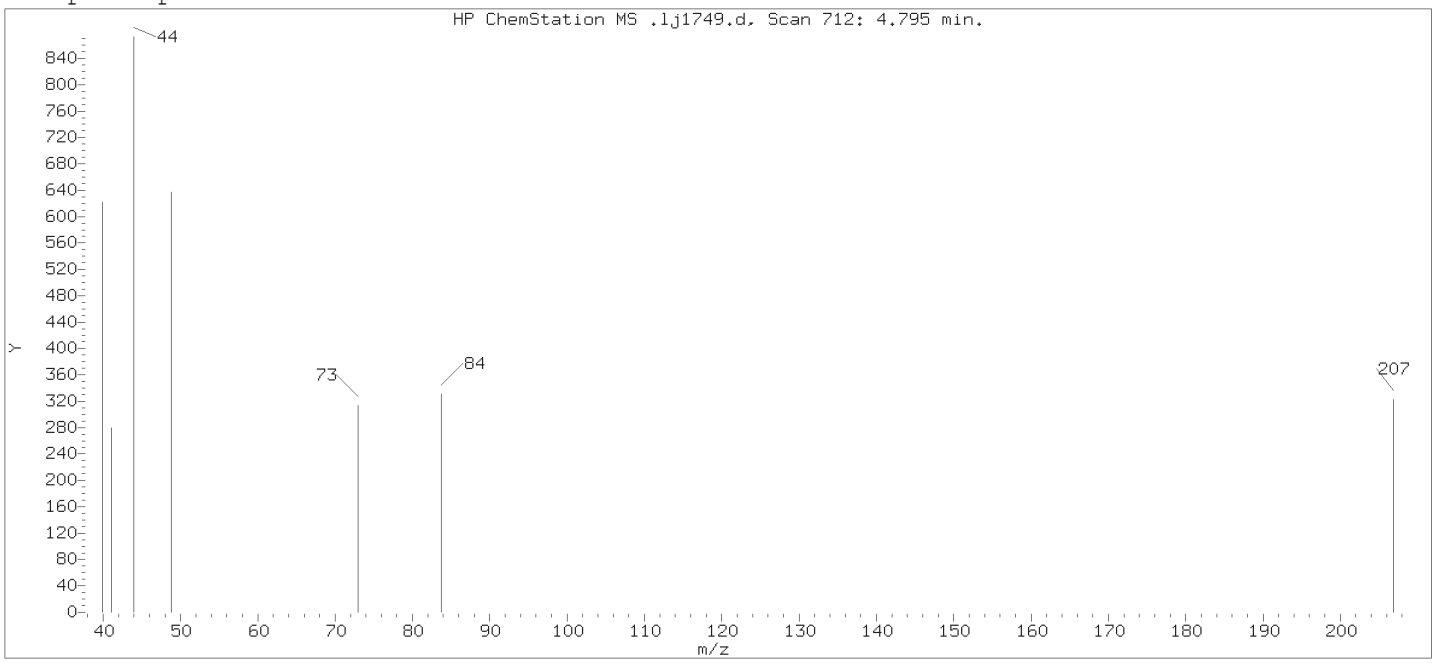
Compound Number	: 10		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 720		
Retention Time (minutes)	: 4.838		
Quant Ion	: 80.00		
Area (flag)	: 5681M		
On-Column Amount (ng/ul)	: 0.1465		
Integration start scan	: 710	Integration stop scan:	746
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

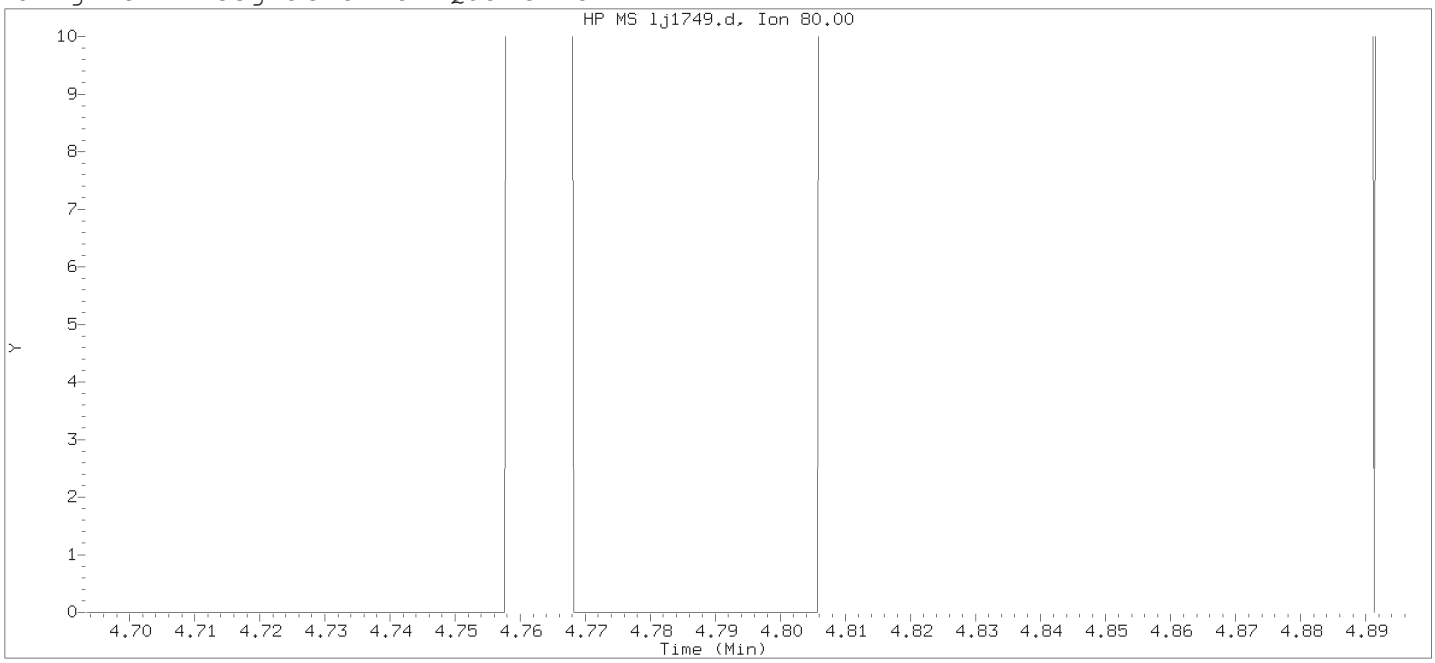
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

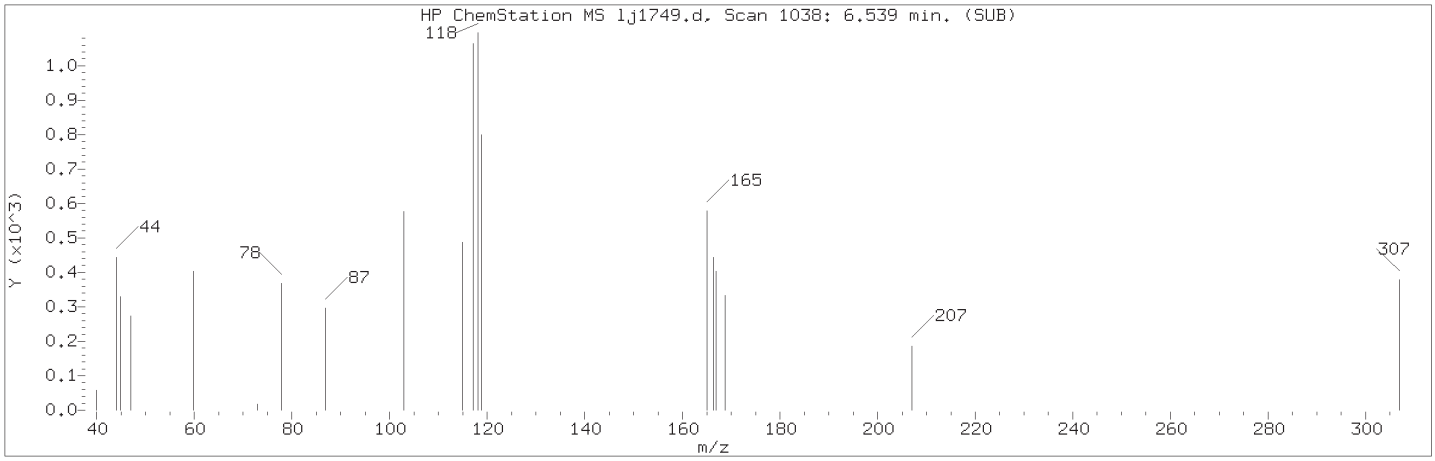
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

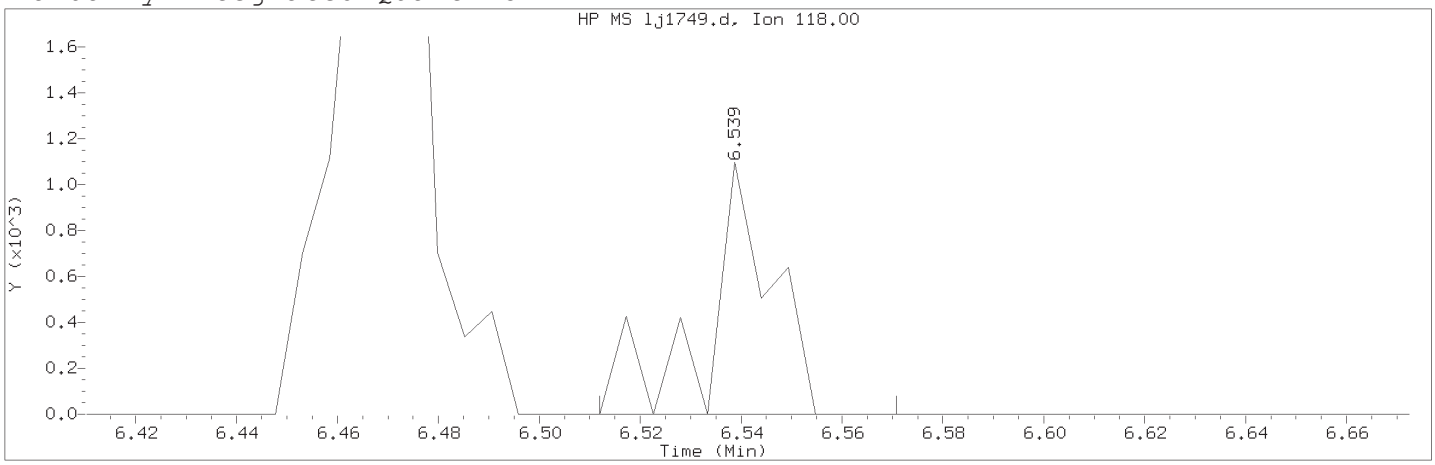
Compound Number : 10
Compound Name : Methyl methanesulfonate
Expected RT (minutes) : 4.795
Quant Ion : 80.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used: 1007

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

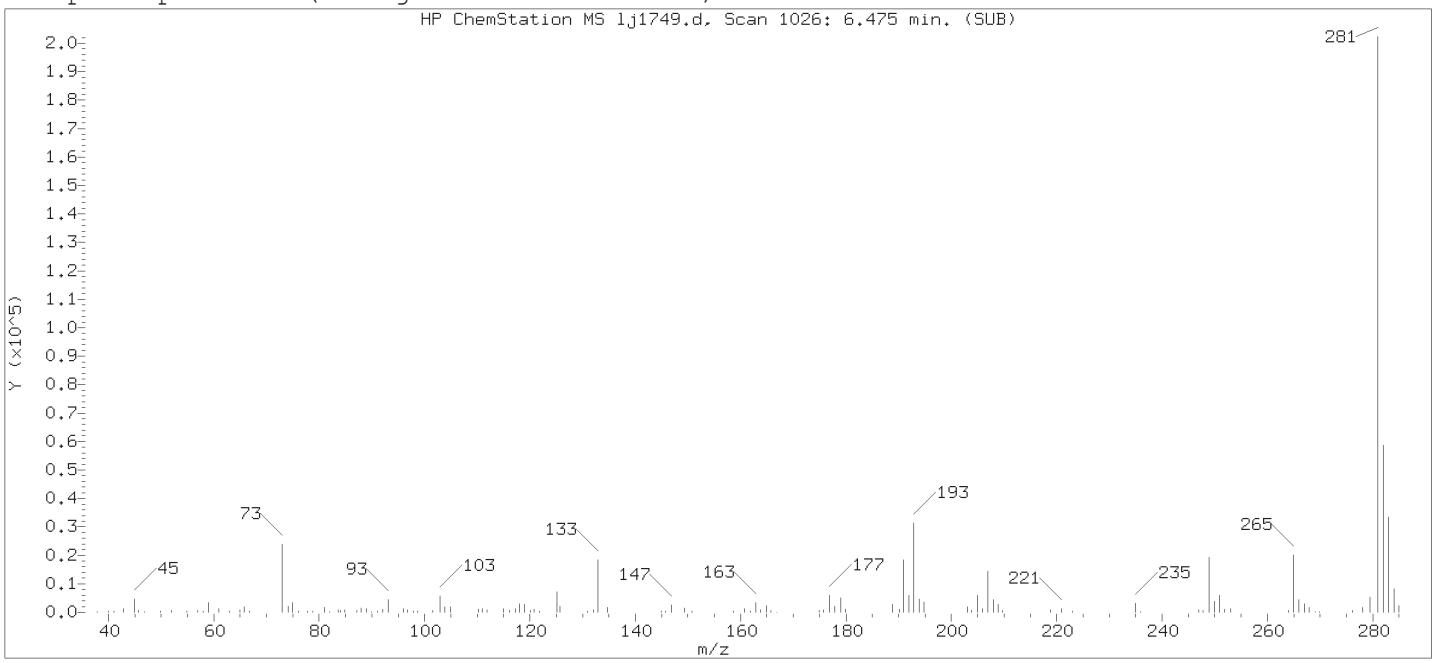
Compound Number : 21
Compound Name : a-methylstyrene
Scan Number : 1038
Retention Time (minutes) : 6.539
Quant Ion : 118.00
Area (flag) : 991M
On-Column Amount (ng/ul) : 0.1767
Integration start scan : 1032 Integration stop scan: 1043
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

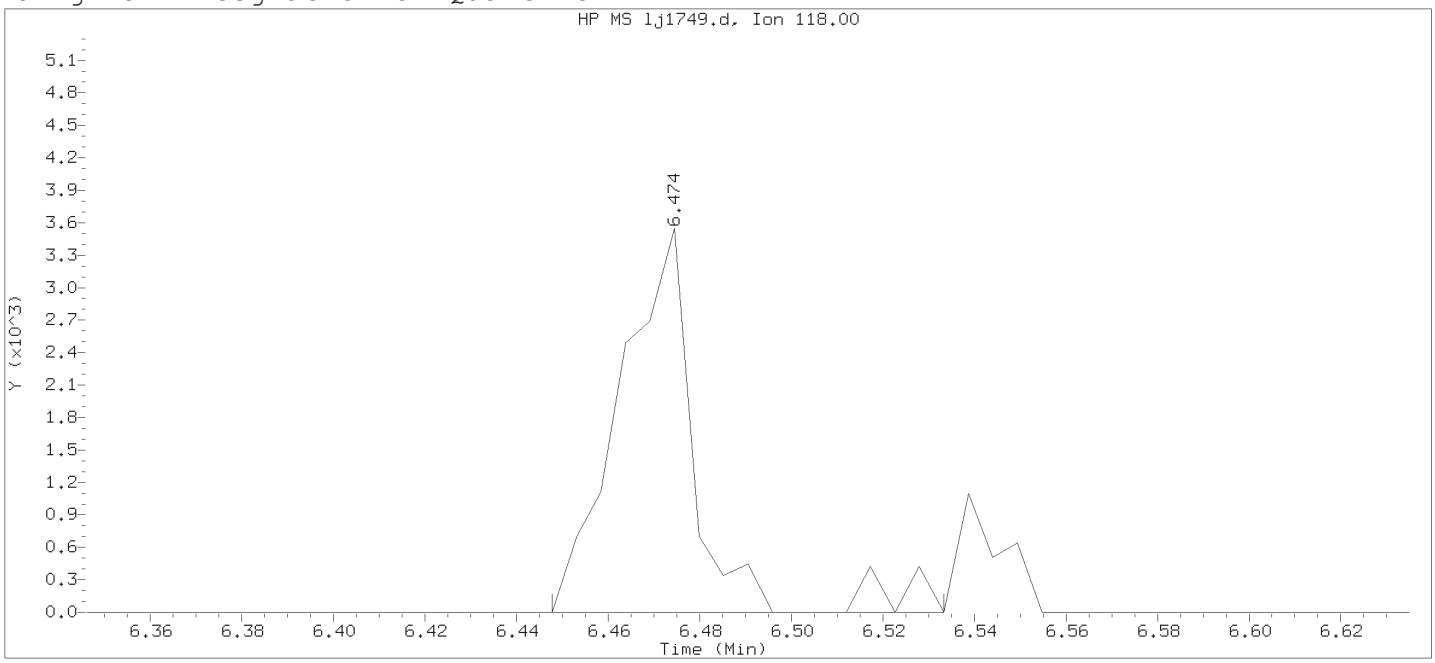
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

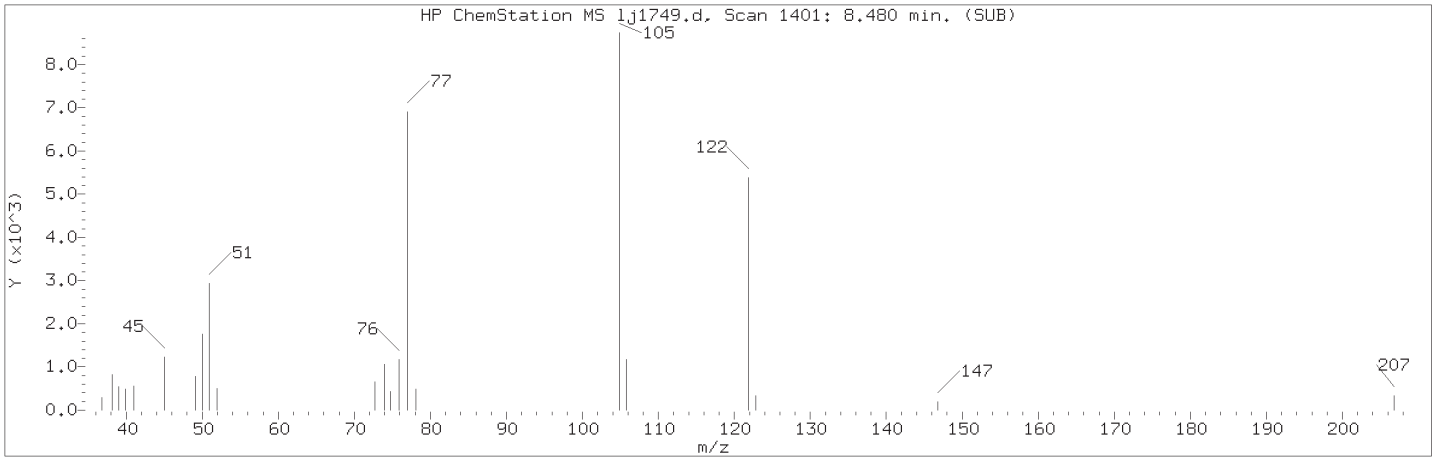
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

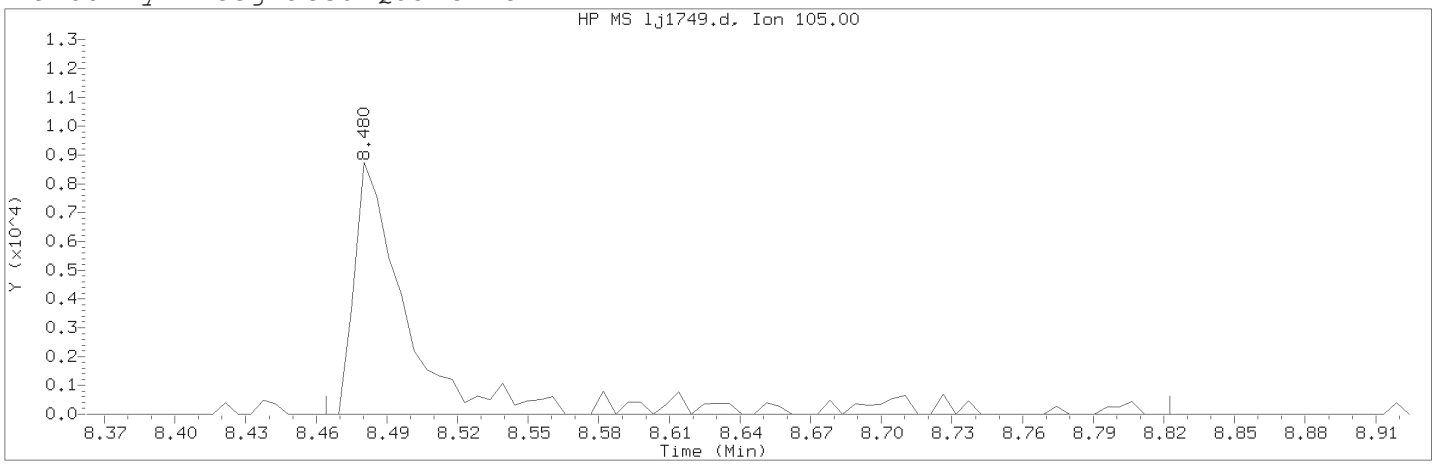
Compound Number	: 21		
Compound Name	: a-methylstyrene		
Scan Number	: 1026		
Retention Time (minutes)	: 6.474		
Quant Ion	: 118.00		
Area	: 4131		
On-column Amount (ng/ul)	: 0.7330		
Integration start scan	: 1020	Integration stop scan:	1036
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: 2169

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

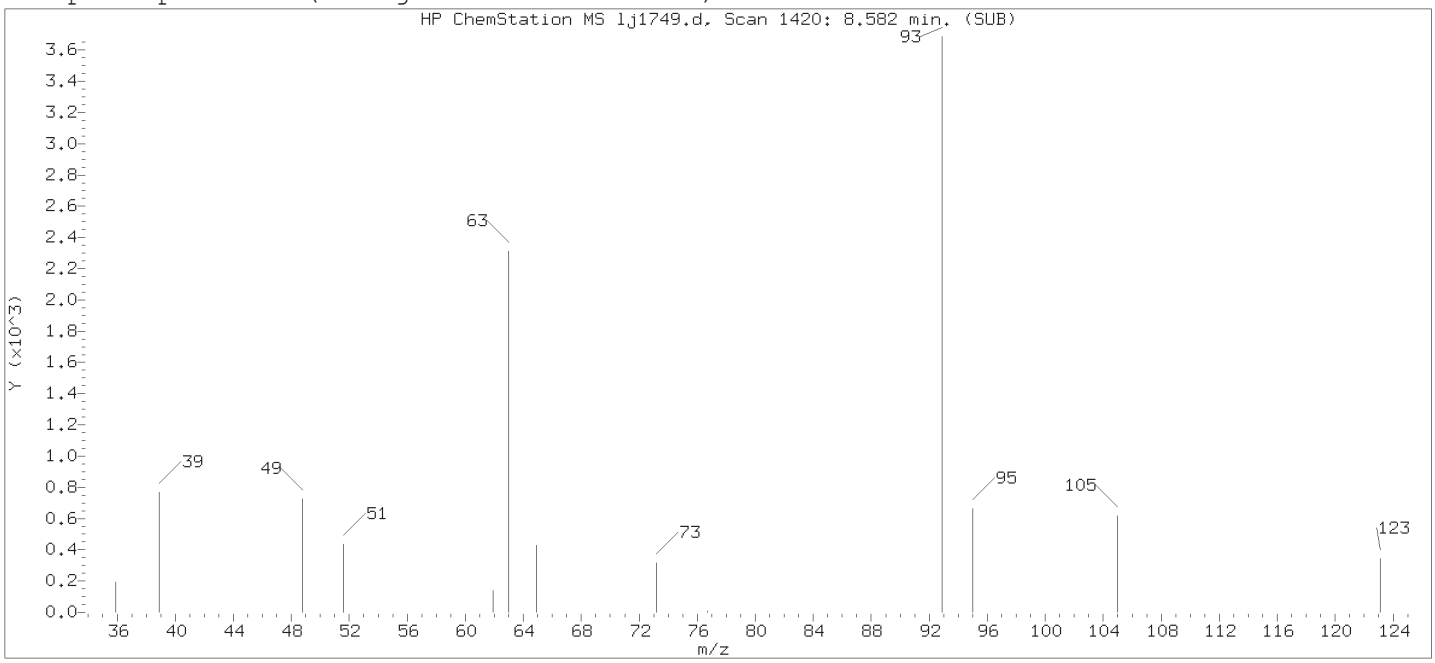
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1401
Retention Time (minutes) : 8.480
Quant Ion : 105.00
Area (flag) : 16027M
On-Column Amount (ng/ul) : 0.3858
Integration start scan : 1397 Integration stop scan: 1464
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

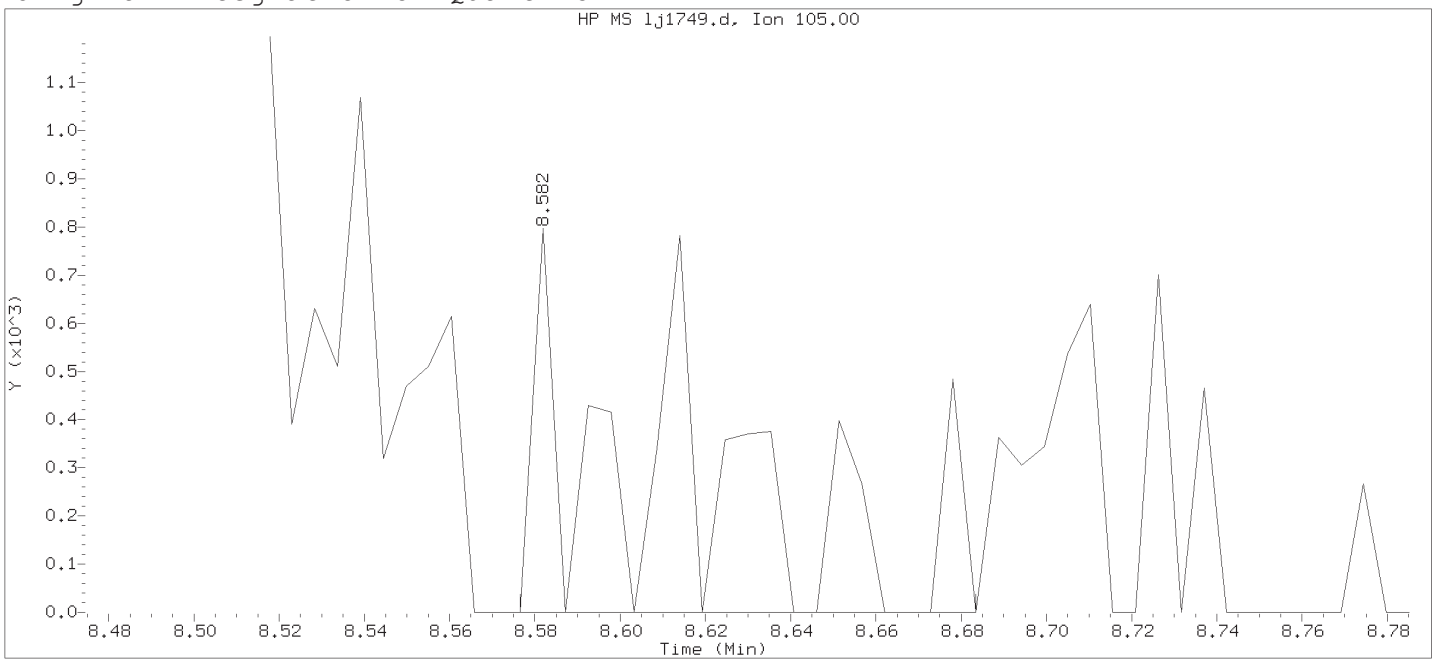
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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

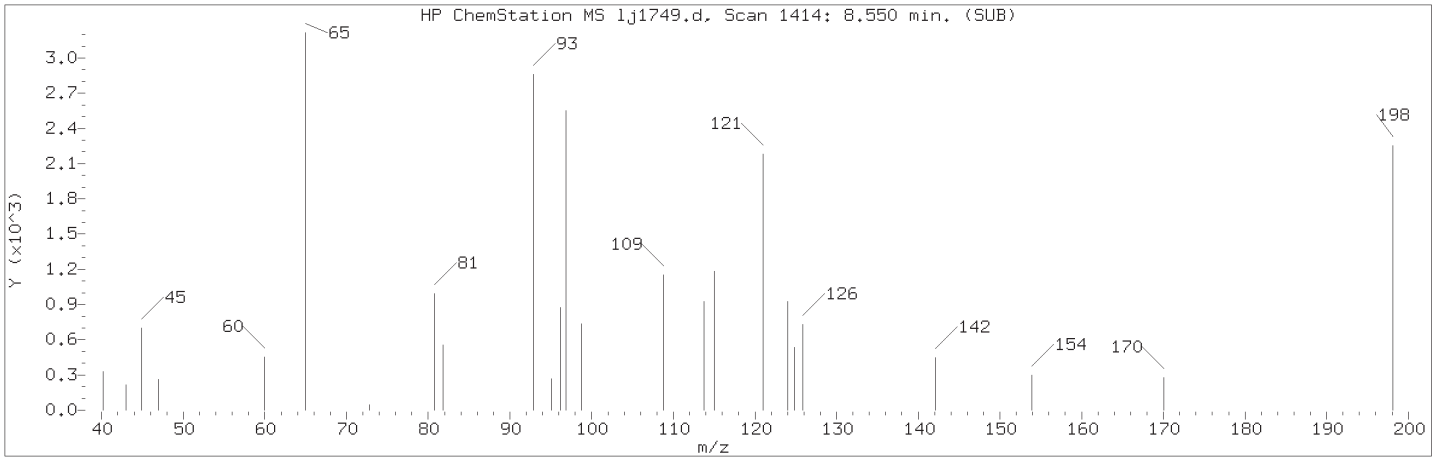
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

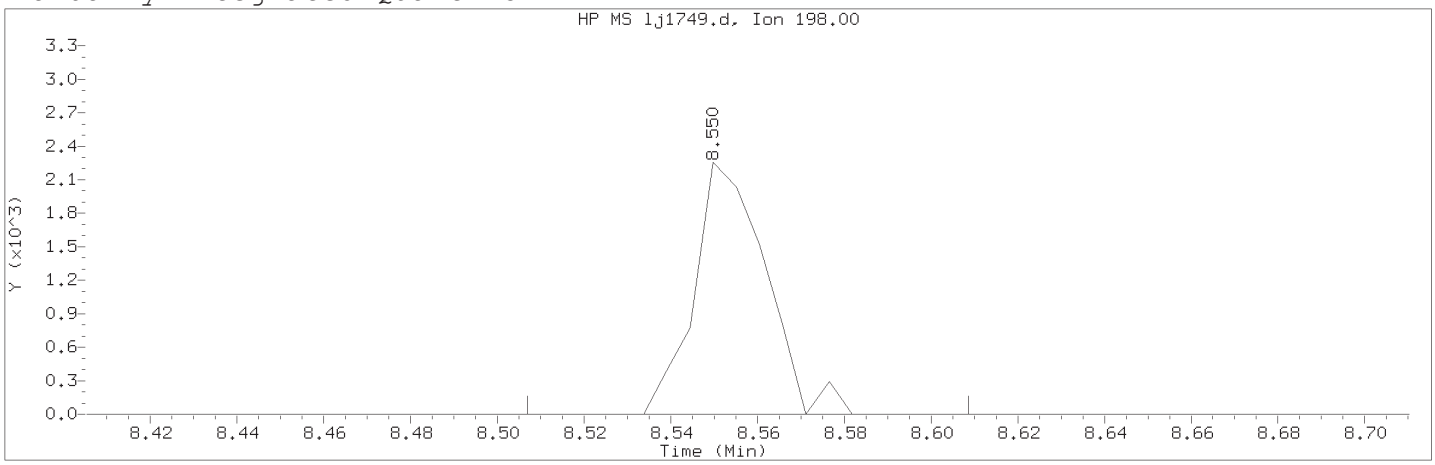
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1420		
Retention Time (minutes)	: 8.582		
Quant Ion	: 105.00		
Area	: 1610		
On-column Amount (ng/ul)	: 0.0486		
Integration start scan	: 1418	Integration stop scan:	1438
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used: 0.0716

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

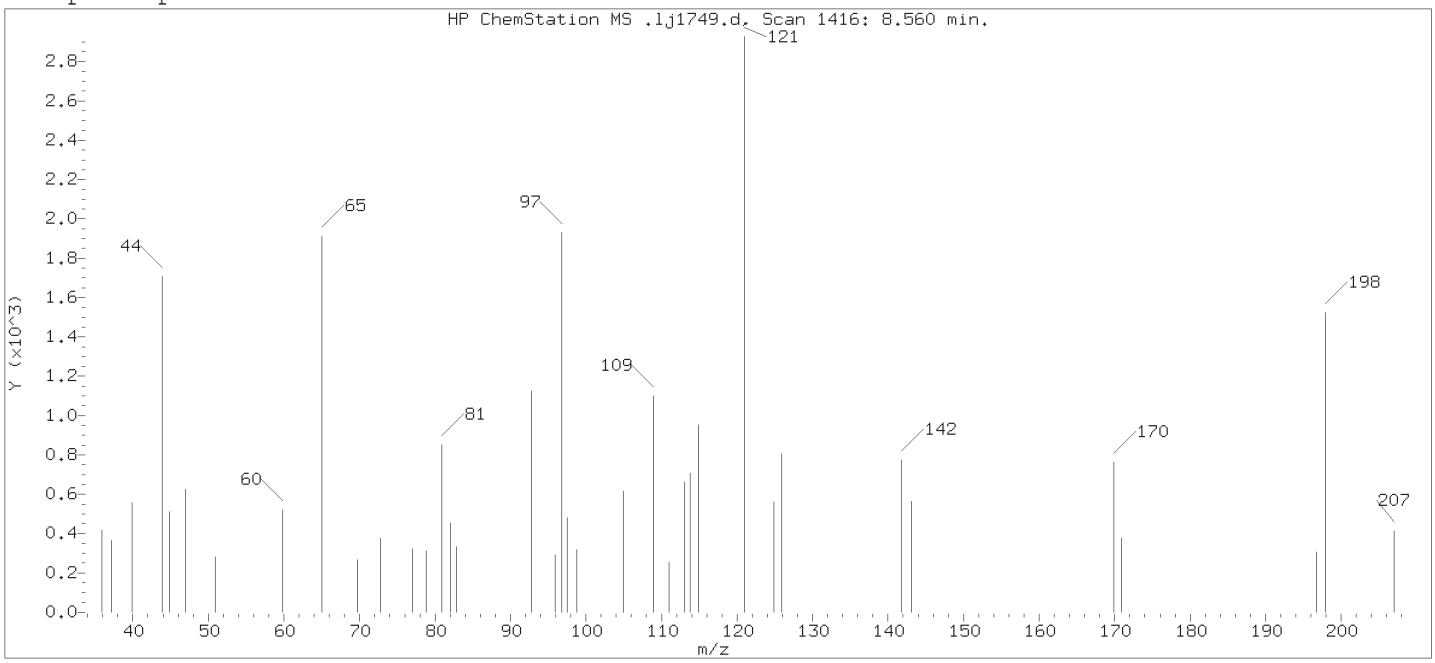
Compound Number : 59
Compound Name : O,O,O-Triethylphosphorothioate
Scan Number : 1414
Retention Time (minutes) : 8.550
Quant Ion : 198.00
Area (flag) : 2586M
On-Column Amount (ng/ul) : 0.0946
Integration start scan : 1405 Integration stop scan: 1424
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

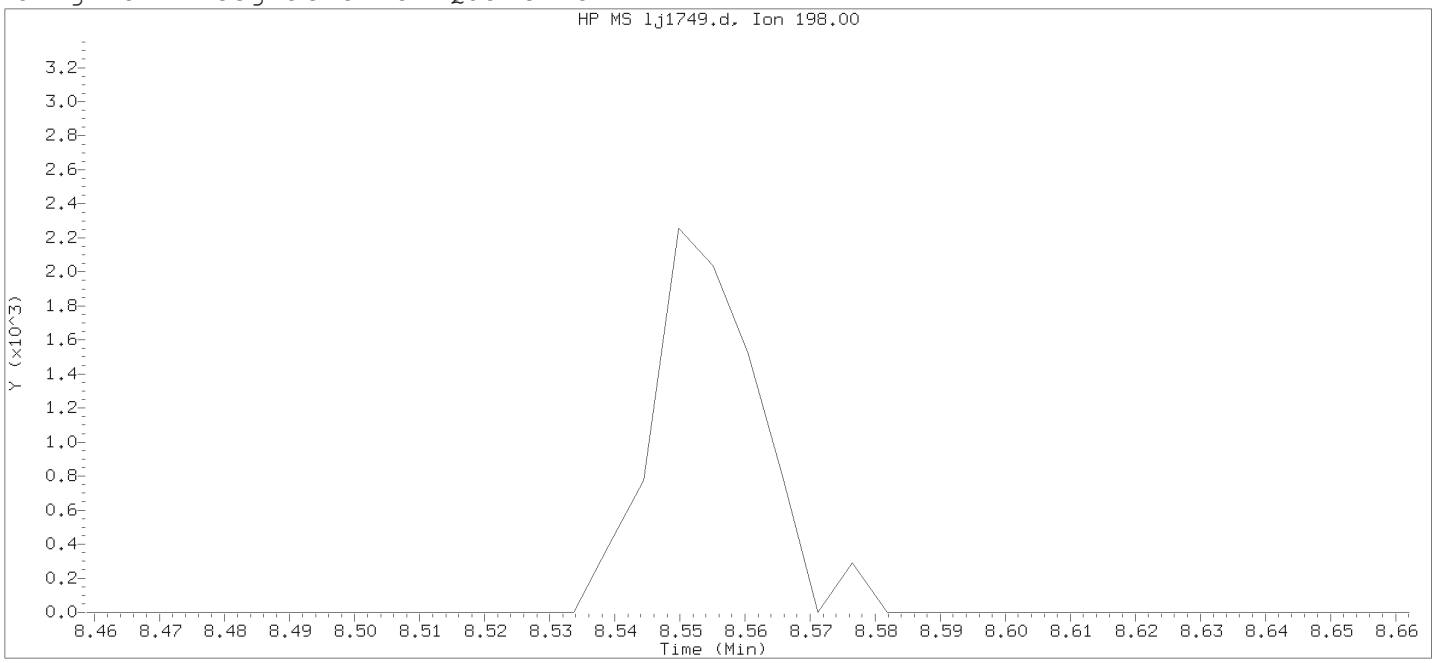
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

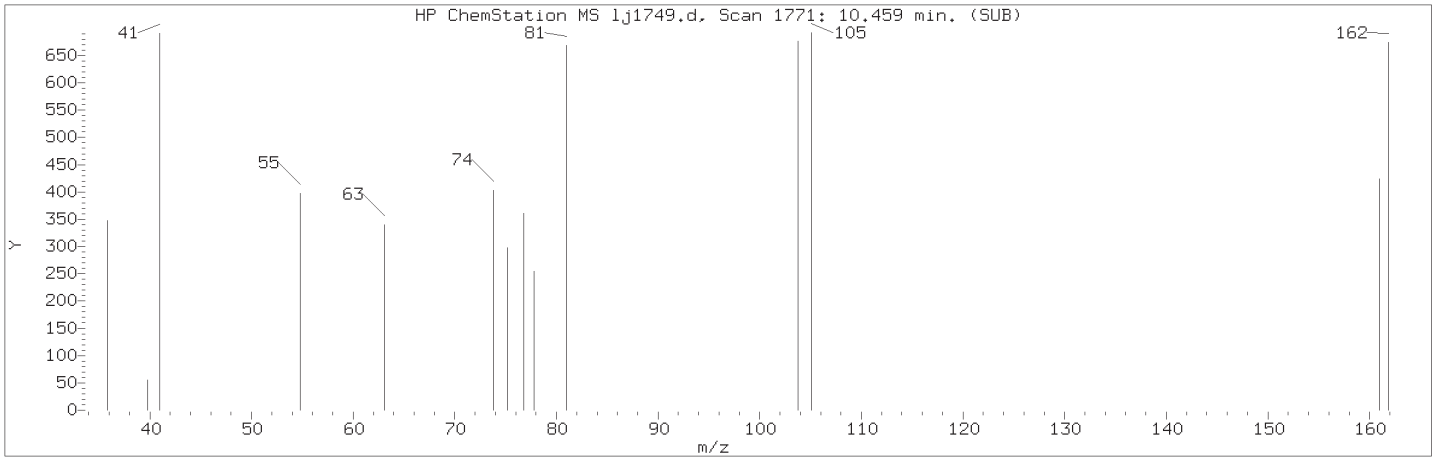
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

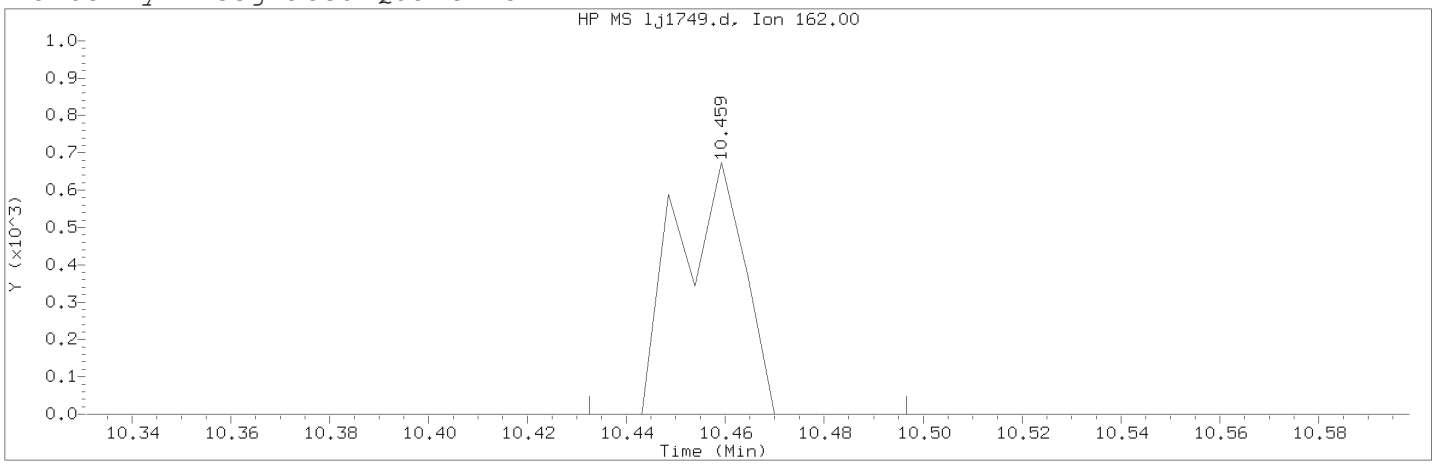
Compound Number : 59
Compound Name : O,O,O-Triethylphosphorothioate
Expected RT (minutes) : 8.561
Quant Ion : 198.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used.

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

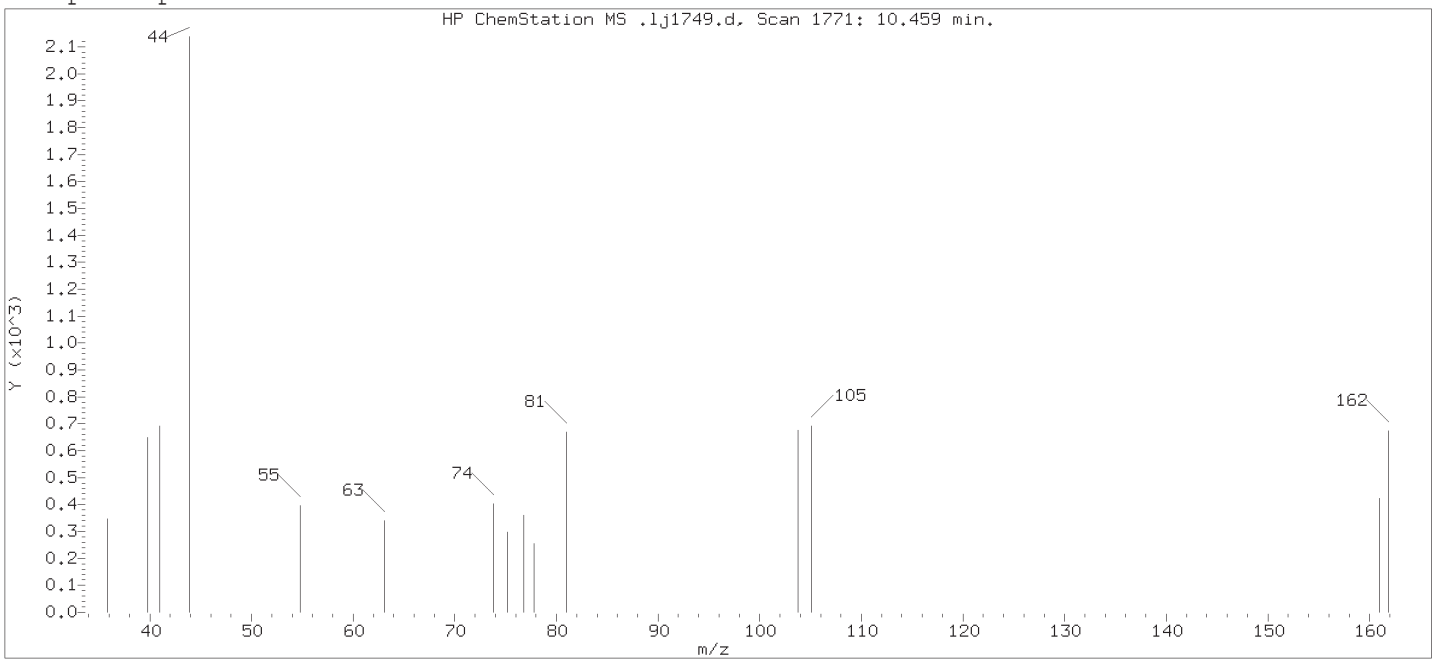
Compound Number : 91
Compound Name : cis-Isosafrole
Scan Number : 1771
Retention Time (minutes) : 10.459
Quant Ion : 162.00
Area (flag) : 633M
On-Column Amount (ng/ul) : 0.0142
Integration start scan : 1765 Integration stop scan: 1777
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

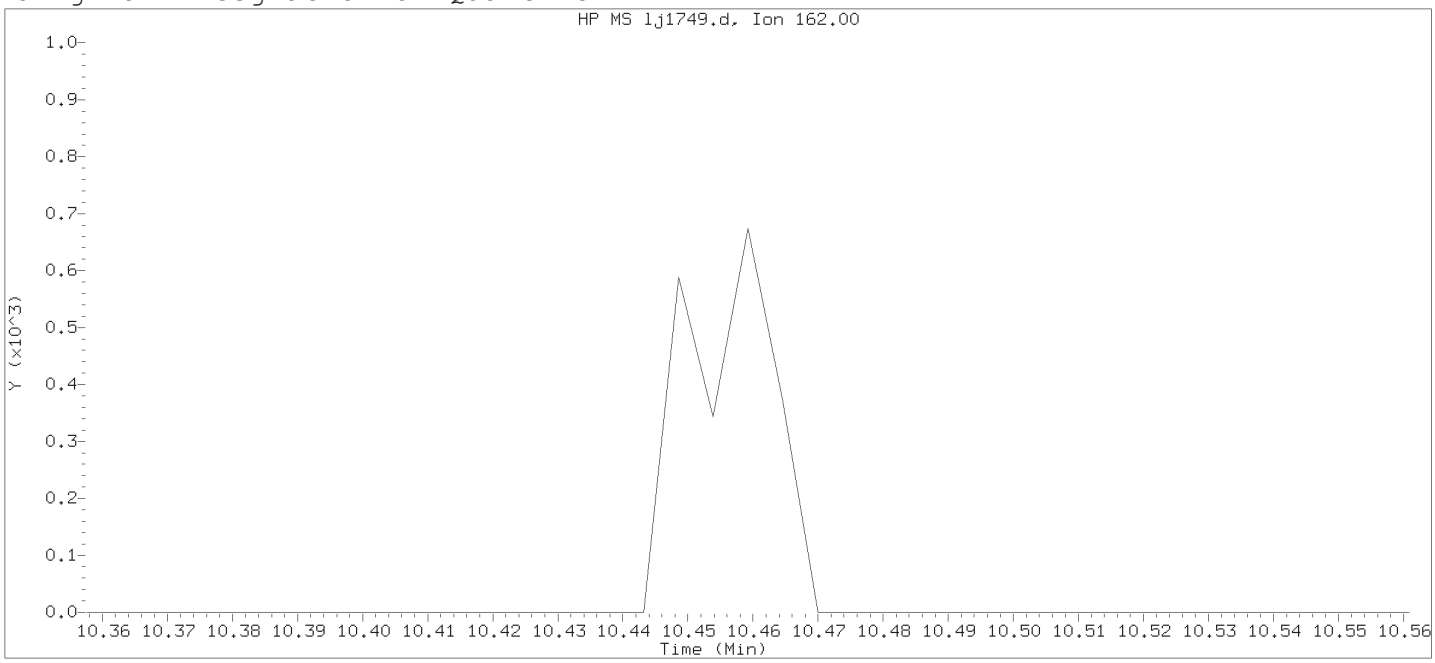
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

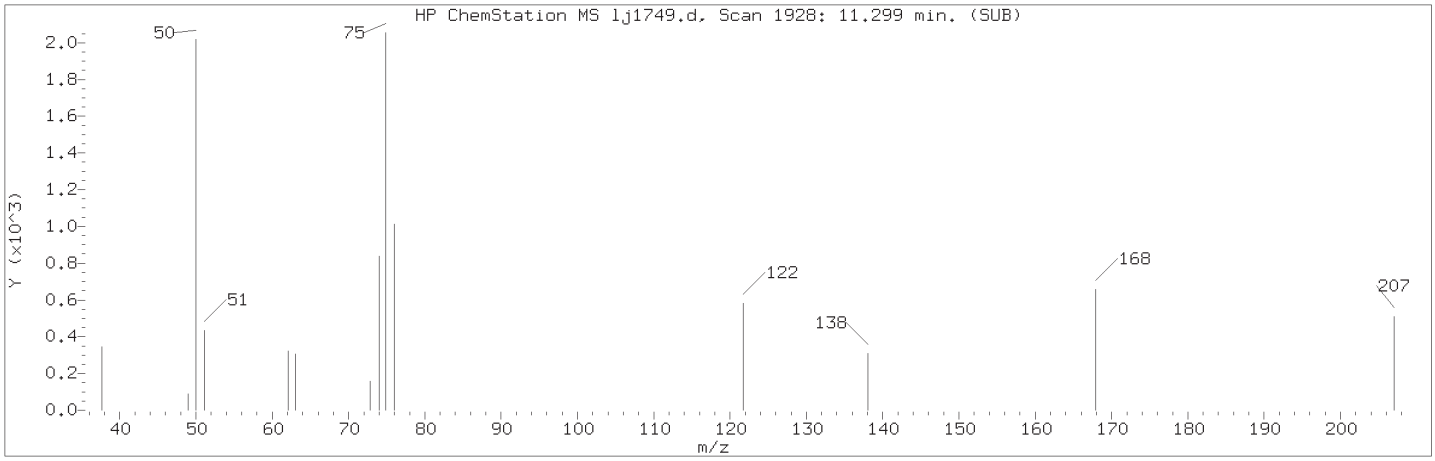
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

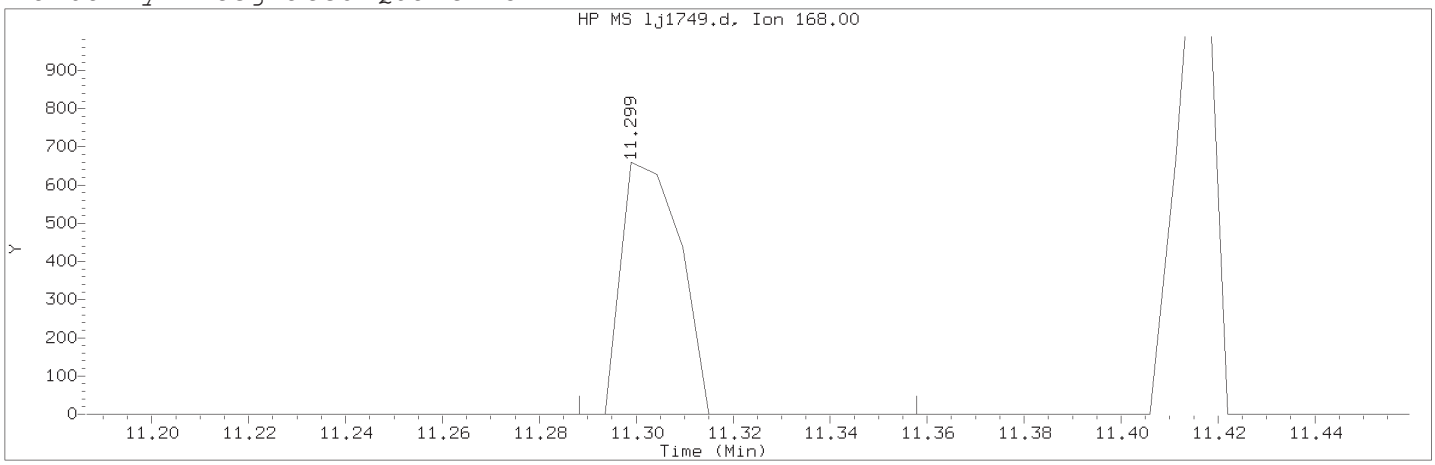
Compound Number : 91
Compound Name : cis-Isosafrole
Expected RT (minutes) : 10.459
Quant Ion : 162.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used: 107

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

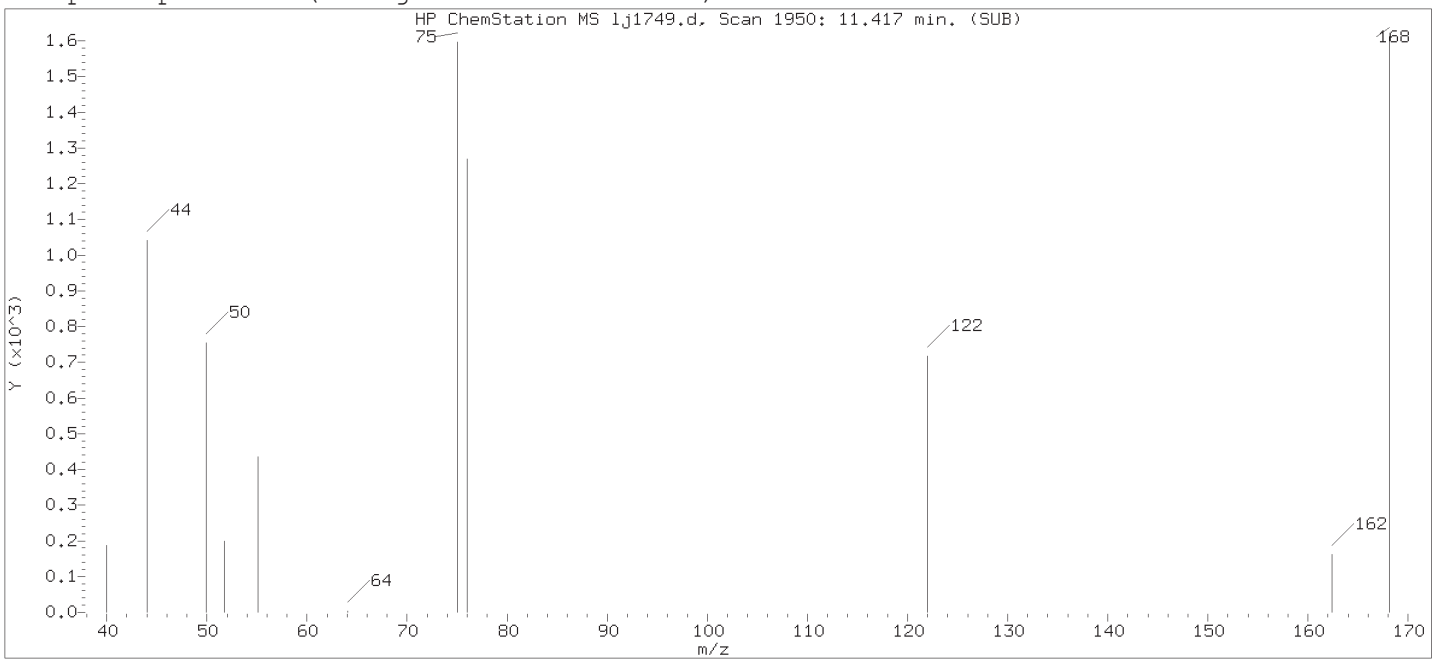
Compound Number : 109
Compound Name : 1,4-Dinitrobenzene
Scan Number : 1928
Retention Time (minutes) : 11.299
Quant Ion : 168.00
Area (flag) : 552M
On-Column Amount (ng/ul) : 0.0385
Integration start scan : 1925 Integration stop scan: 1938
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

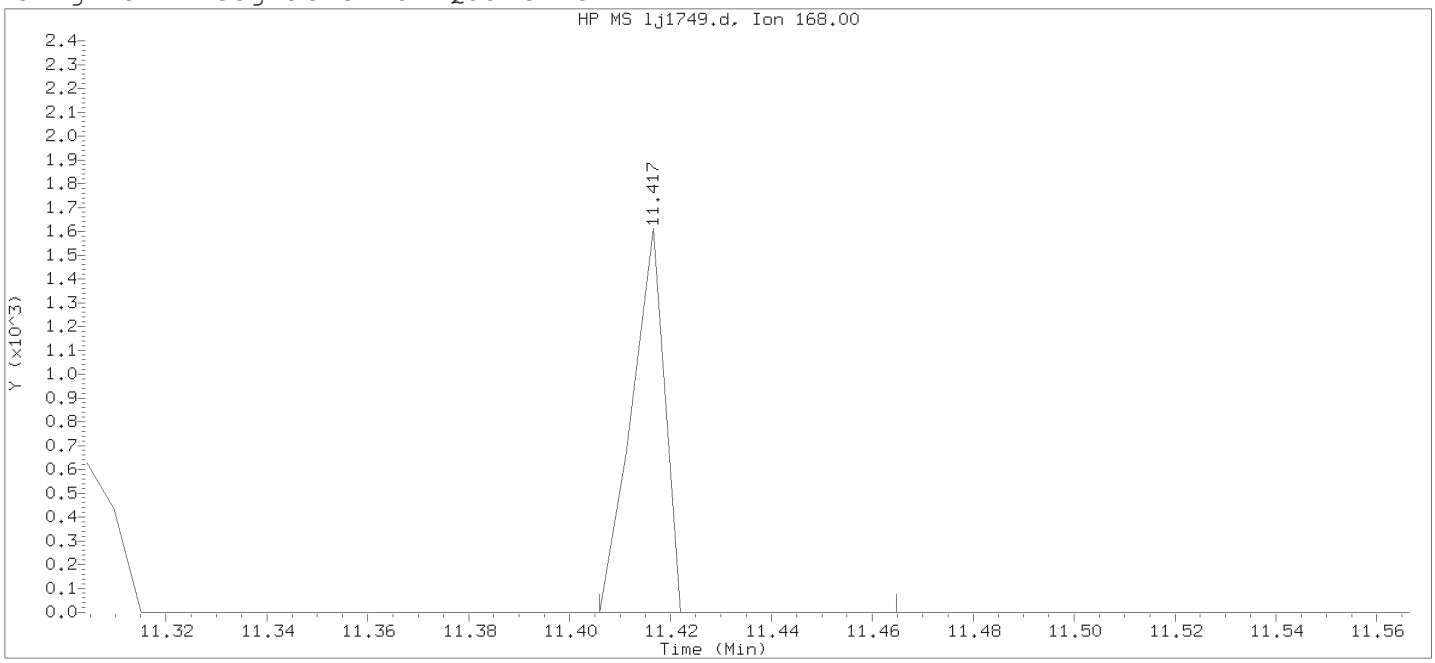
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

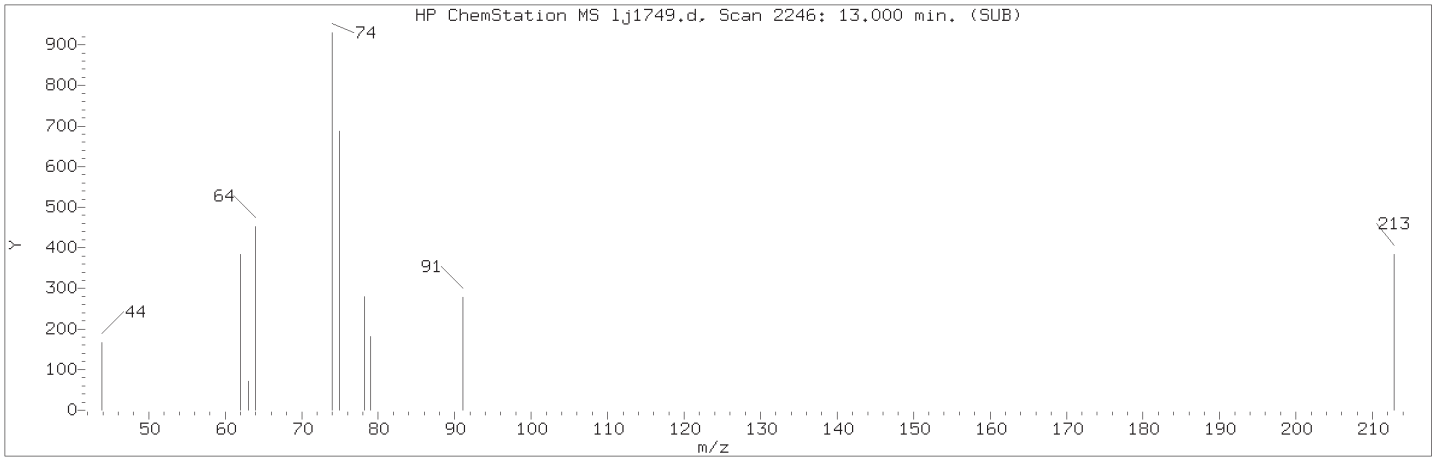
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

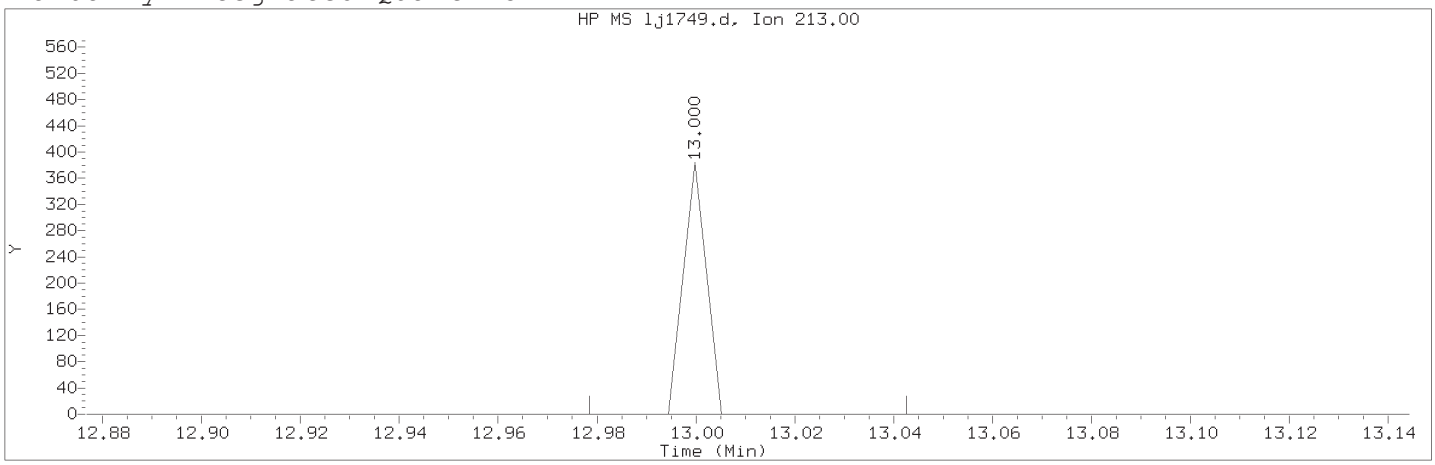
Compound Number	: 109		
Compound Name	: 1,4-Dinitrobenzene		
Scan Number	: 1950		
Retention Time (minutes)	: 11.417		
Quant Ion	: 168.00		
Area	: 732		
On-column Amount (ng/ul)	: 0.0503		
Integration start scan	: 1947	Integration stop scan:	1958
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: 2176

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

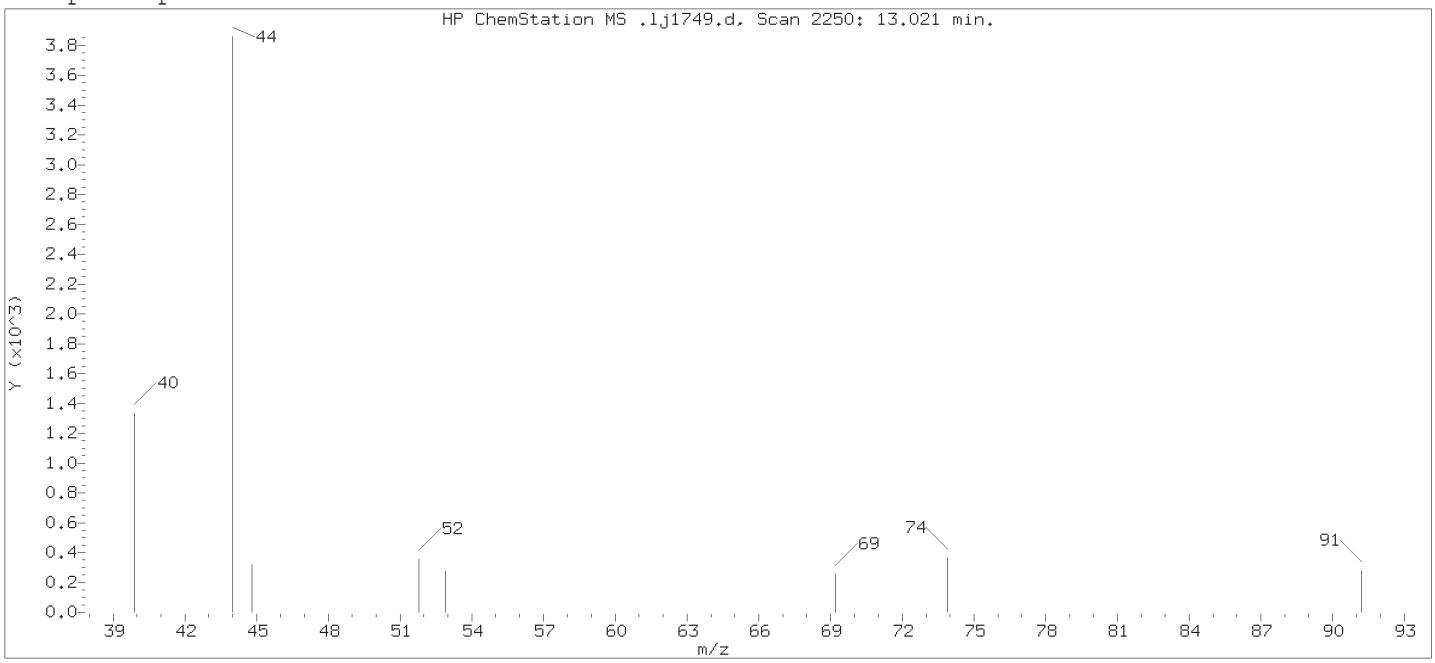
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 2246
Retention Time (minutes) : 13.000
Quant Ion : 213.00
Area (flag) : 123M
On-Column Amount (ng/ul) : 0.0116
Integration start scan : 2241 Integration stop scan: 2253
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

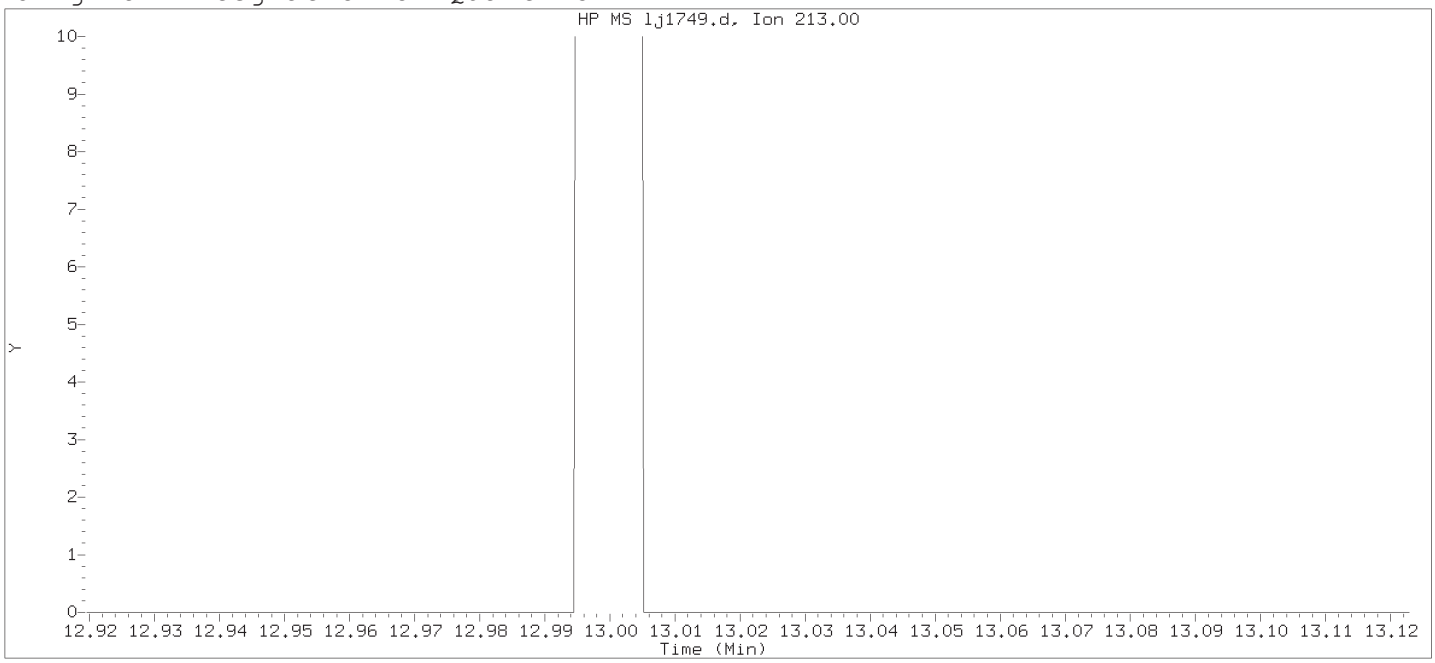
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

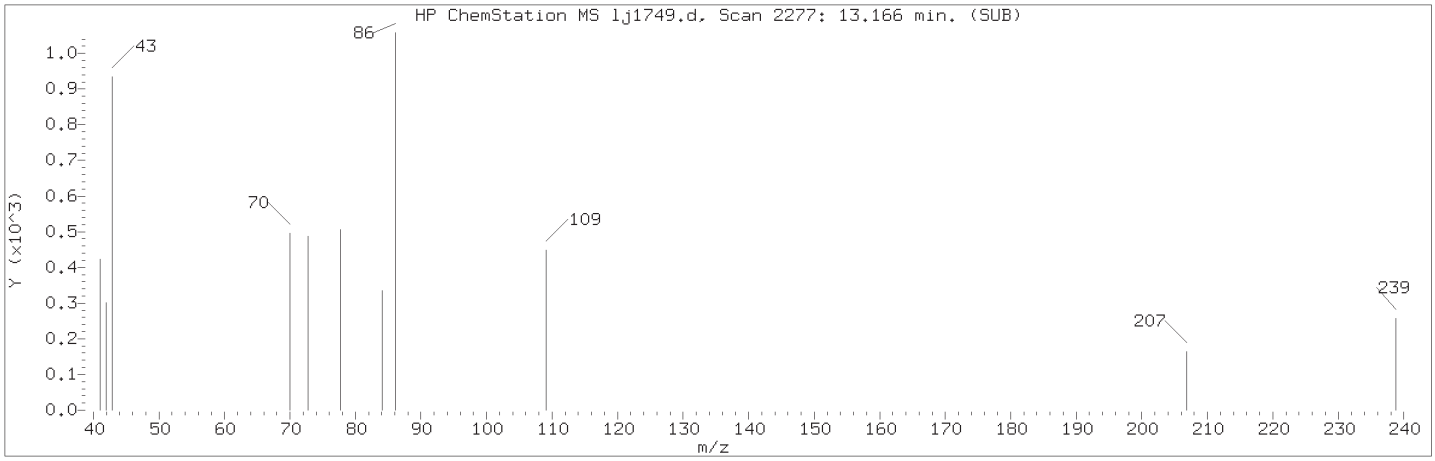
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

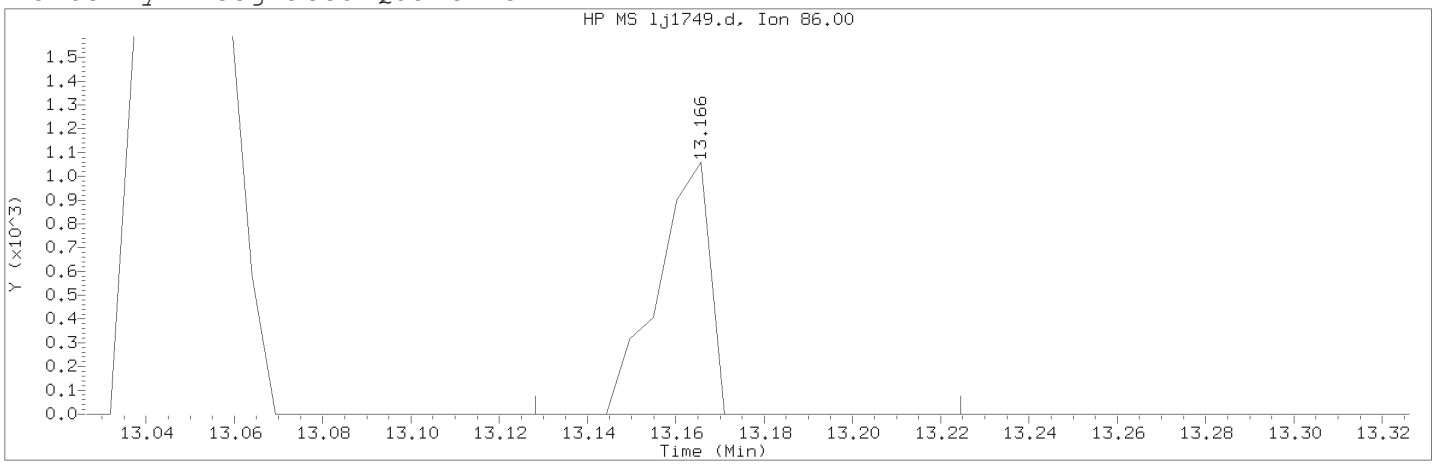
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 13.021
Quant Ion : 213.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used on 10/30/2018.

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

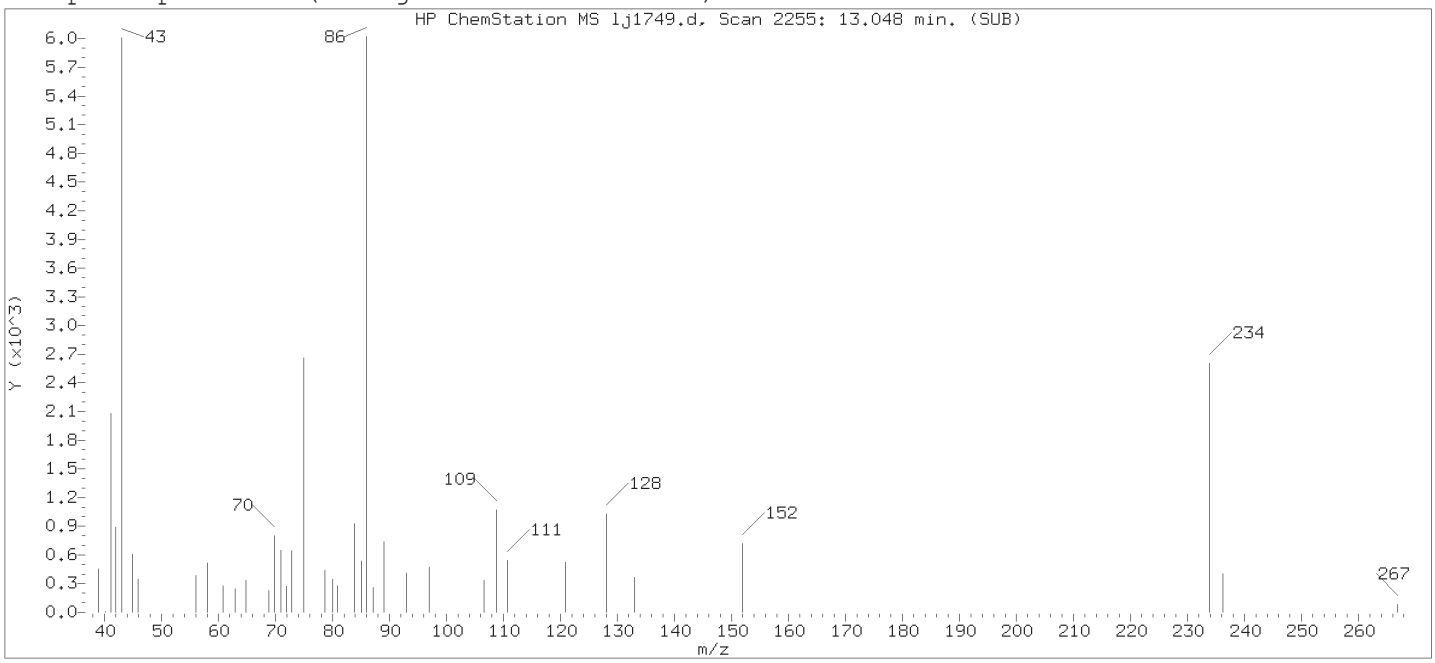
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2277		
Retention Time (minutes)	: 13.166		
Quant Ion	: 86.00		
Area (flag)	: 861M		
On-Column Amount (ng/ul)	: 0.0173		
Integration start scan	: 2269	Integration stop scan:	2287
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

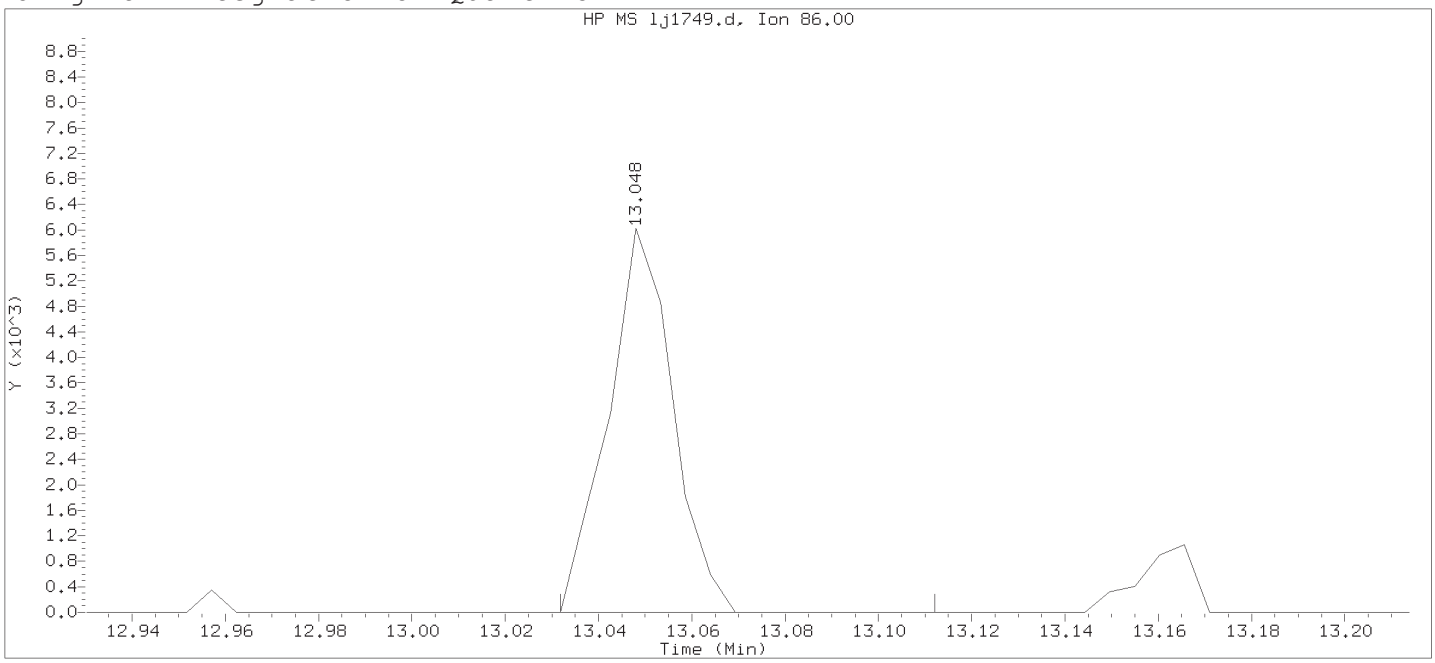
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

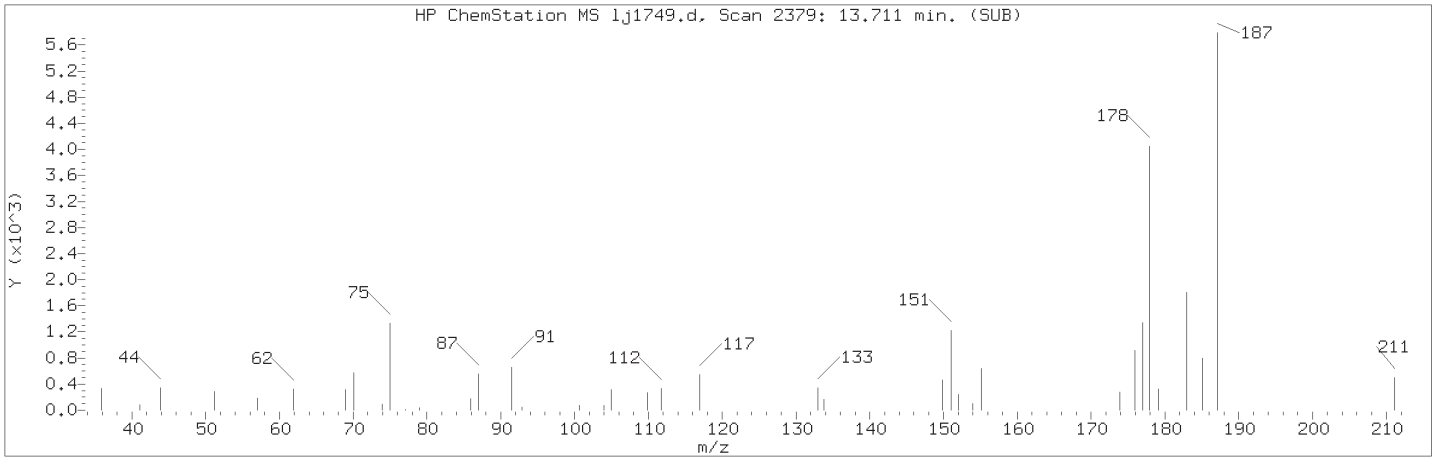
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

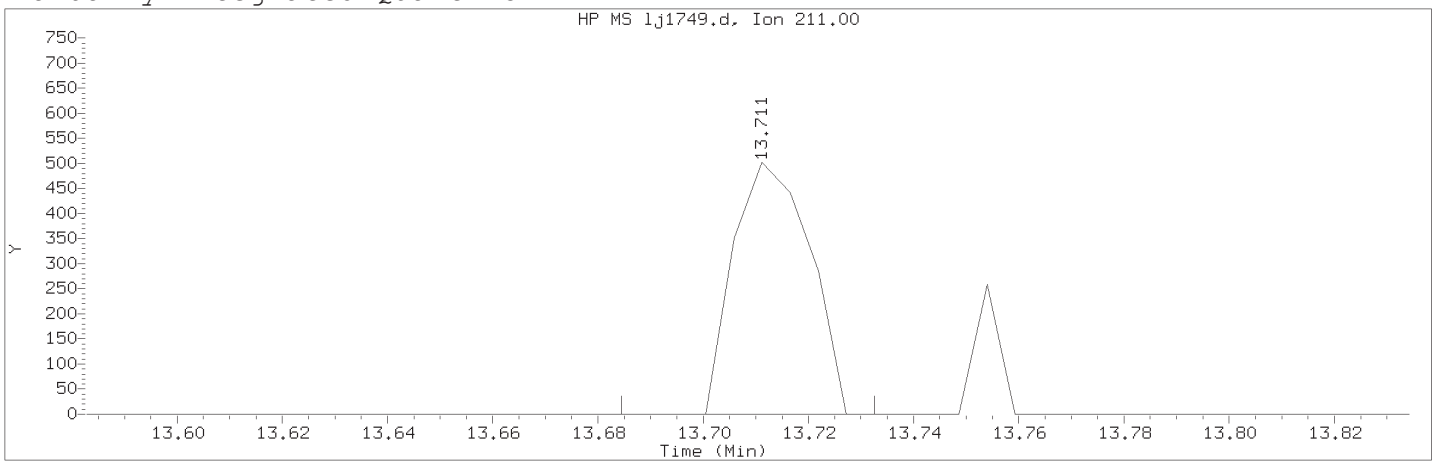
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2255		
Retention Time (minutes)	: 13.048		
Quant Ion	: 86.00		
Area	: 5785		
On-column Amount (ng/ul)	: 0.0228		
Integration start scan	: 2251	Integration stop scan:	2266
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: 25165

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

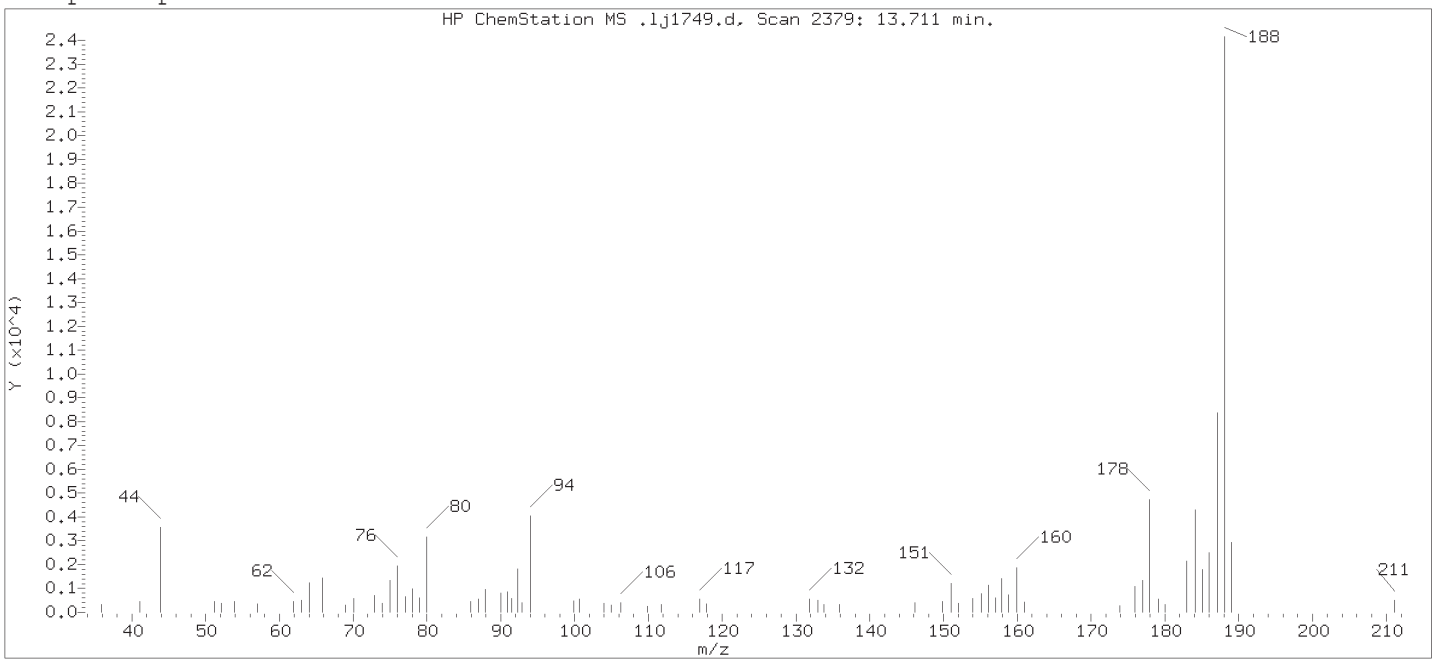
Compound Number	: 159		
Compound Name	: Dinoseb		
Scan Number	: 2379		
Retention Time (minutes)	: 13.711		
Quant Ion	: 211.00		
Area (flag)	: 506M		
On-Column Amount (ng/ul)	: 0.0190		
Integration start scan	: 2373	Integration stop scan:	2382
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

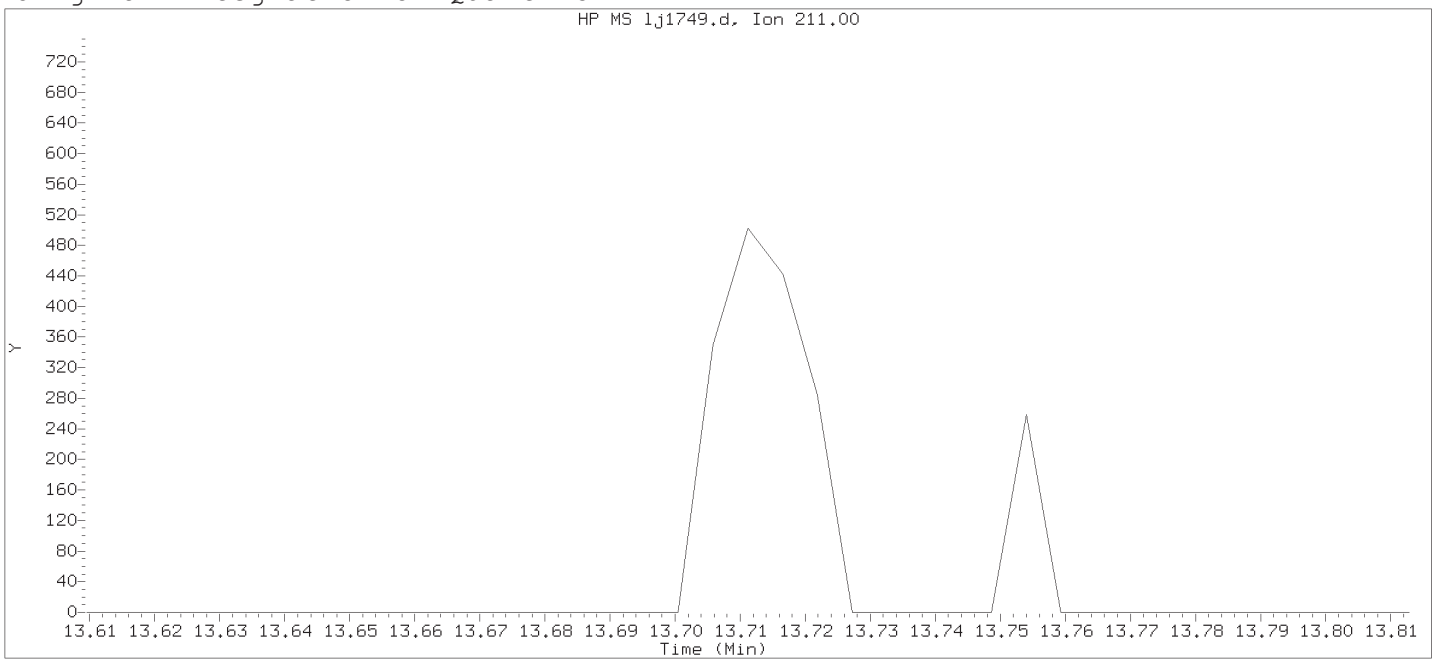
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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

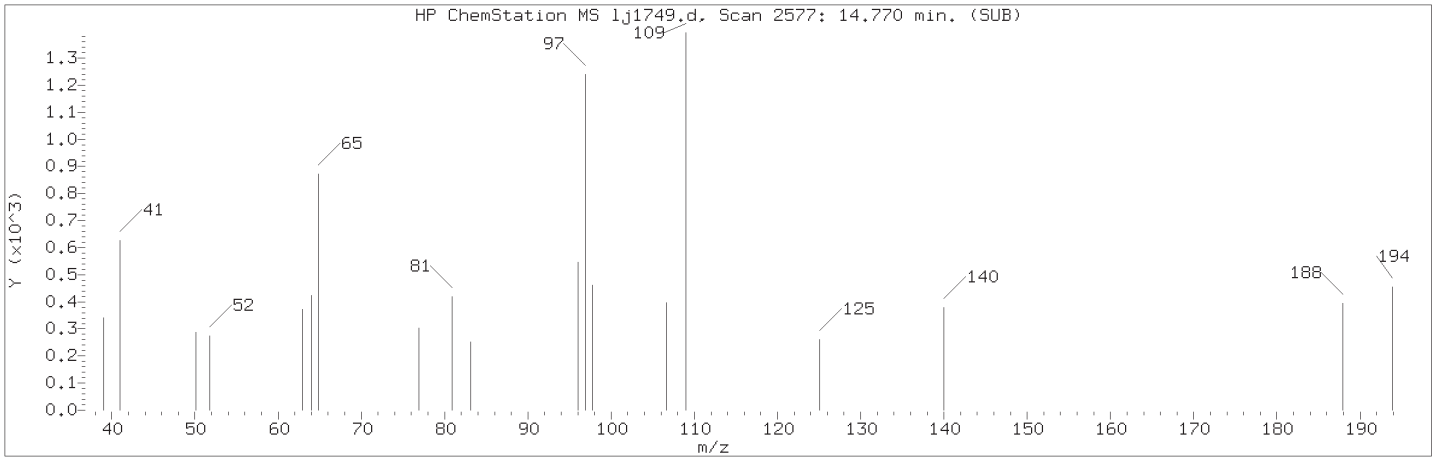
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

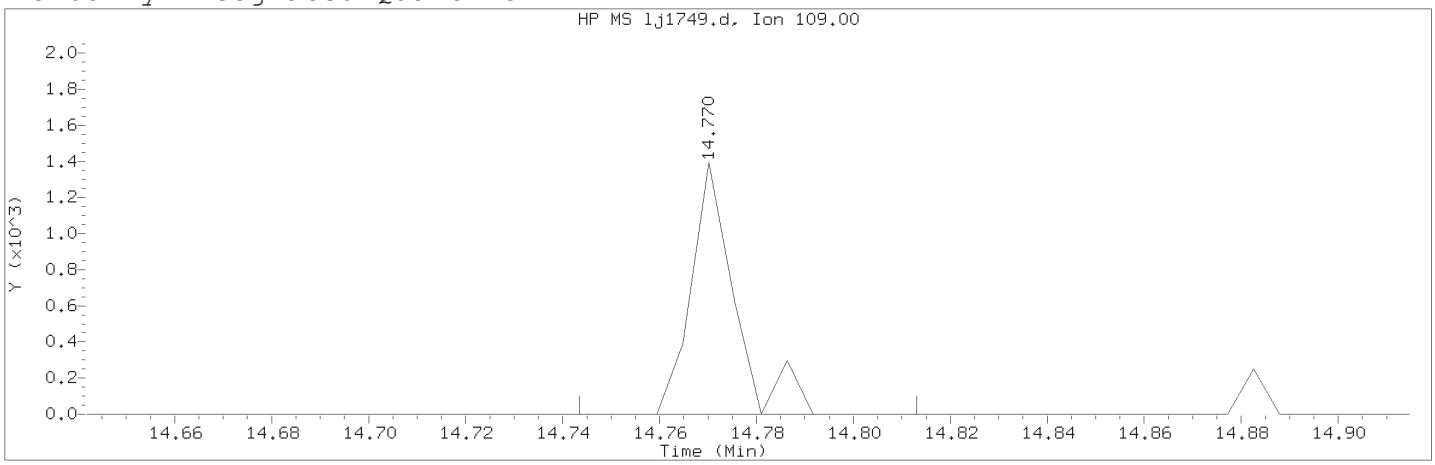
Compound Number : 159
Compound Name : Dinoseb
Expected RT (minutes) : 13.711
Quant Ion : 211.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used: 107. Page 1183 of 4595

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

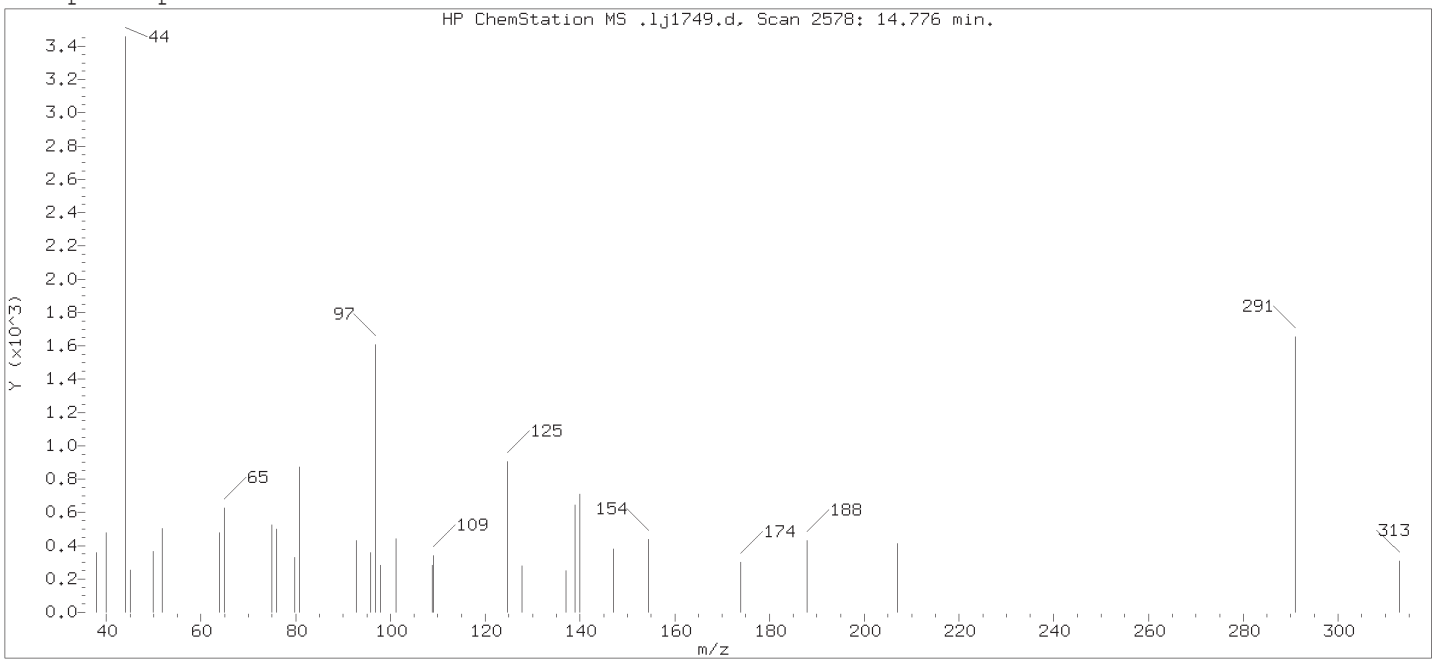
Compound Number	: 172		
Compound Name	: Parathion		
Scan Number	: 2577		
Retention Time (minutes)	: 14.770		
Quant Ion	: 109.00		
Area (flag)	: 868M		
On-Column Amount (ng/ul)	: 0.0368		
Integration start scan	: 2571	Integration stop scan:	2584
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

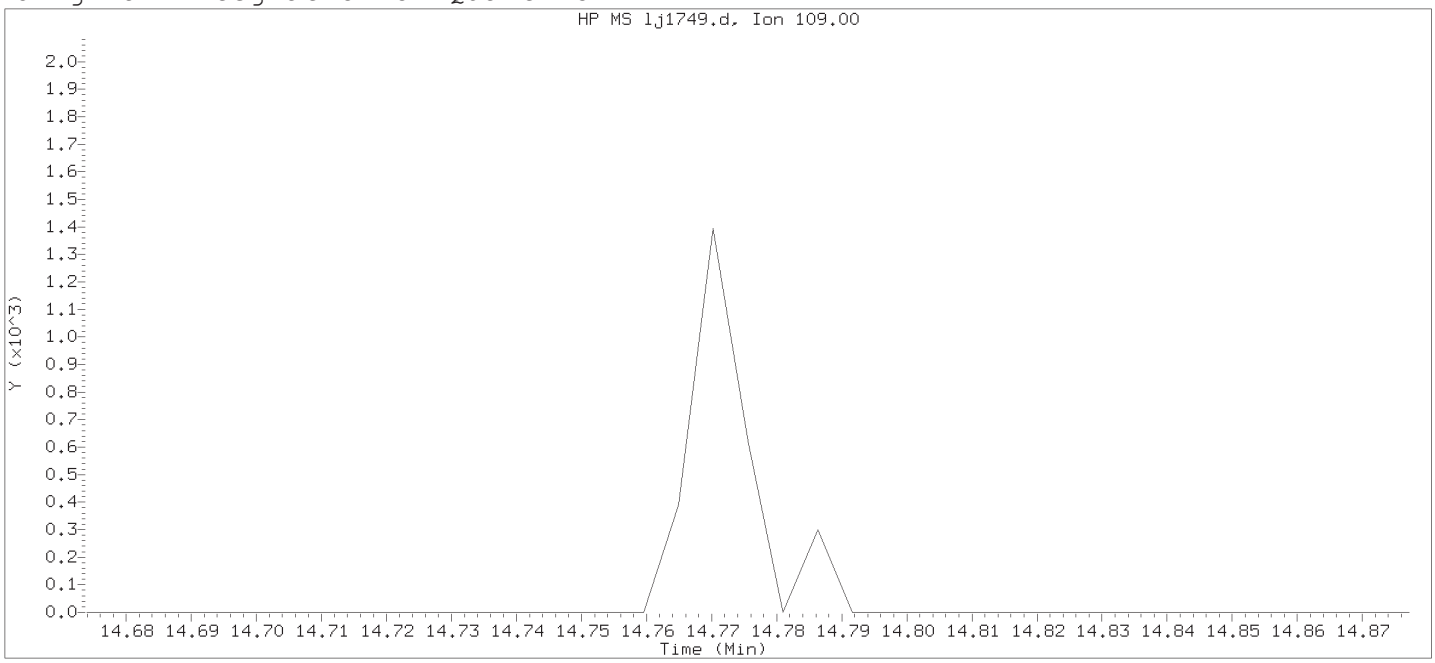
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

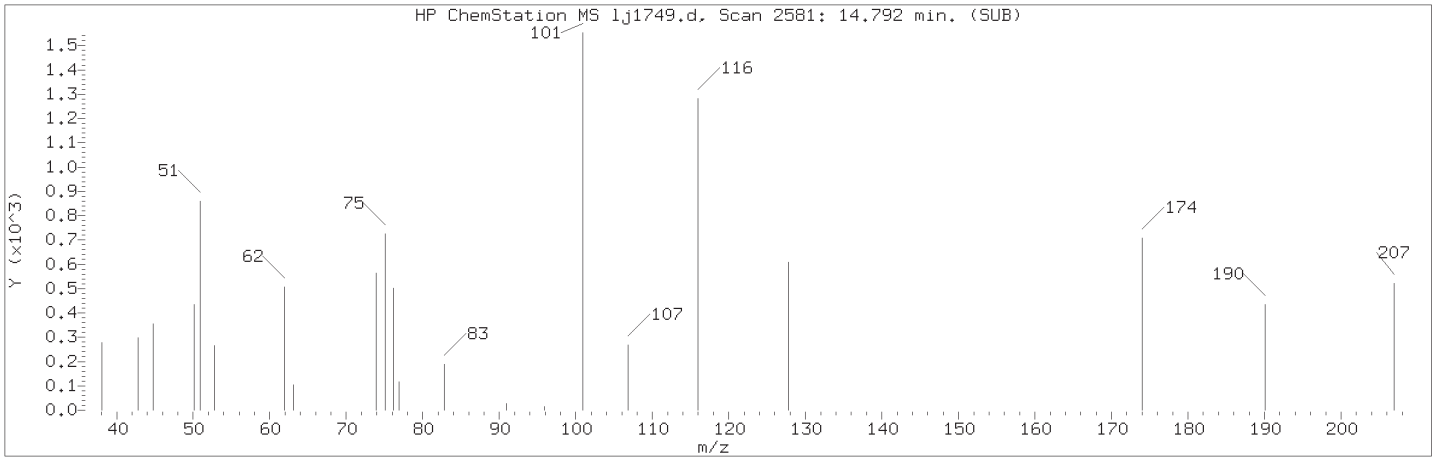
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

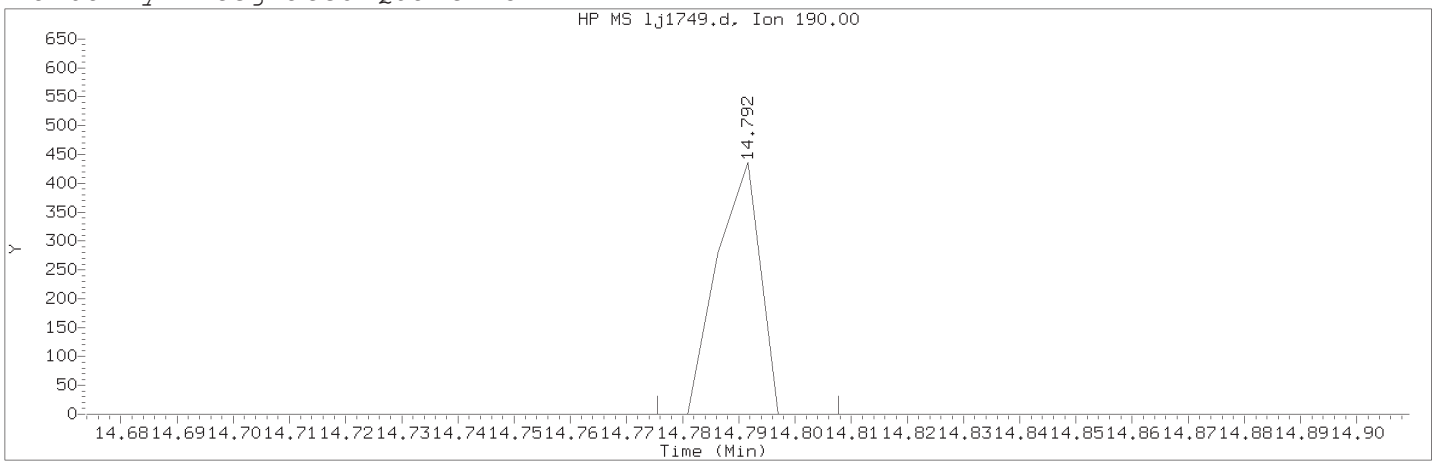
Compound Number : 172
Compound Name : Parathion
Expected RT (minutes) : 14.776
Quant Ion : 109.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature used: 107

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

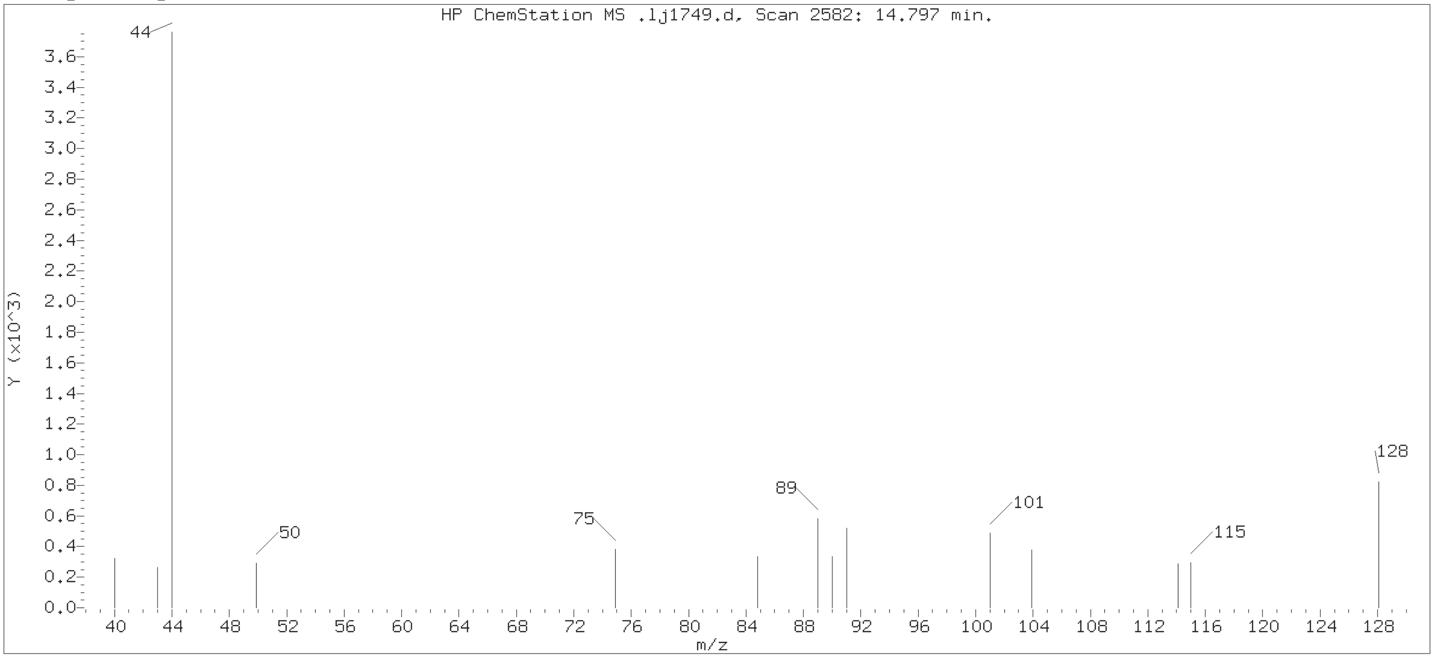
Compound Number : 173
Compound Name : 4-Nitroquinoline-1-oxide
Scan Number : 2581
Retention Time (minutes) : 14.792
Quant Ion : 190.00
Area (flag) : 229M
On-Column Amount (ng/ul) : 2.4008
Integration start scan : 2577 Integration stop scan: 2583
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

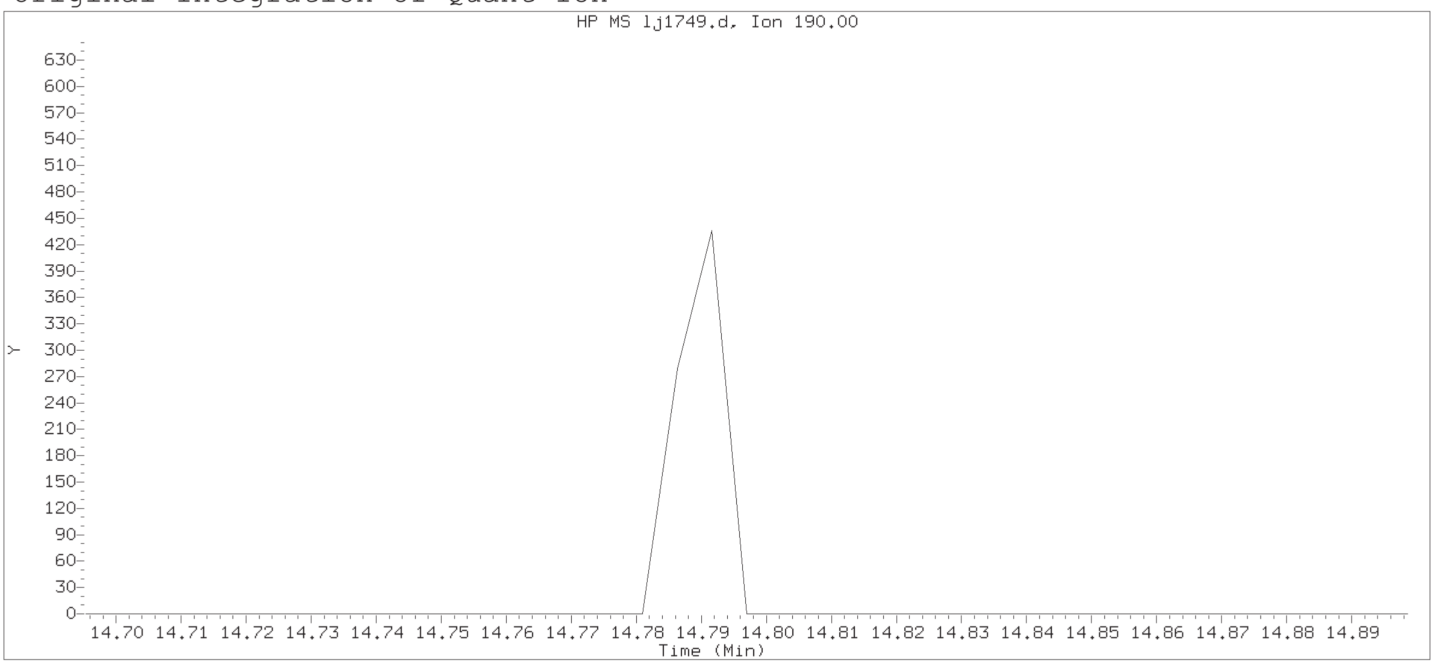
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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



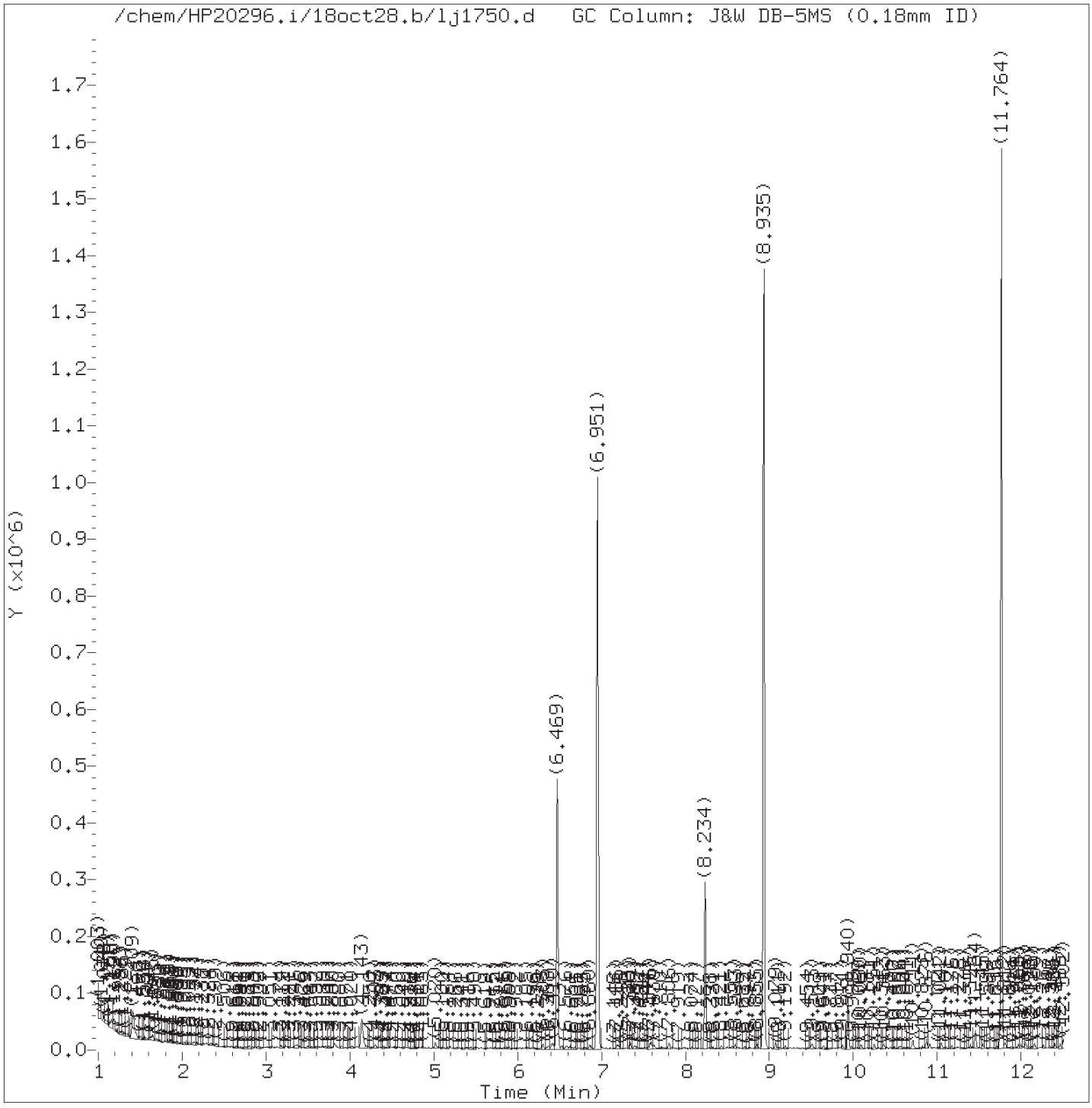
Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

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

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: kab25376



Total Ion Chromatogram (TIC)

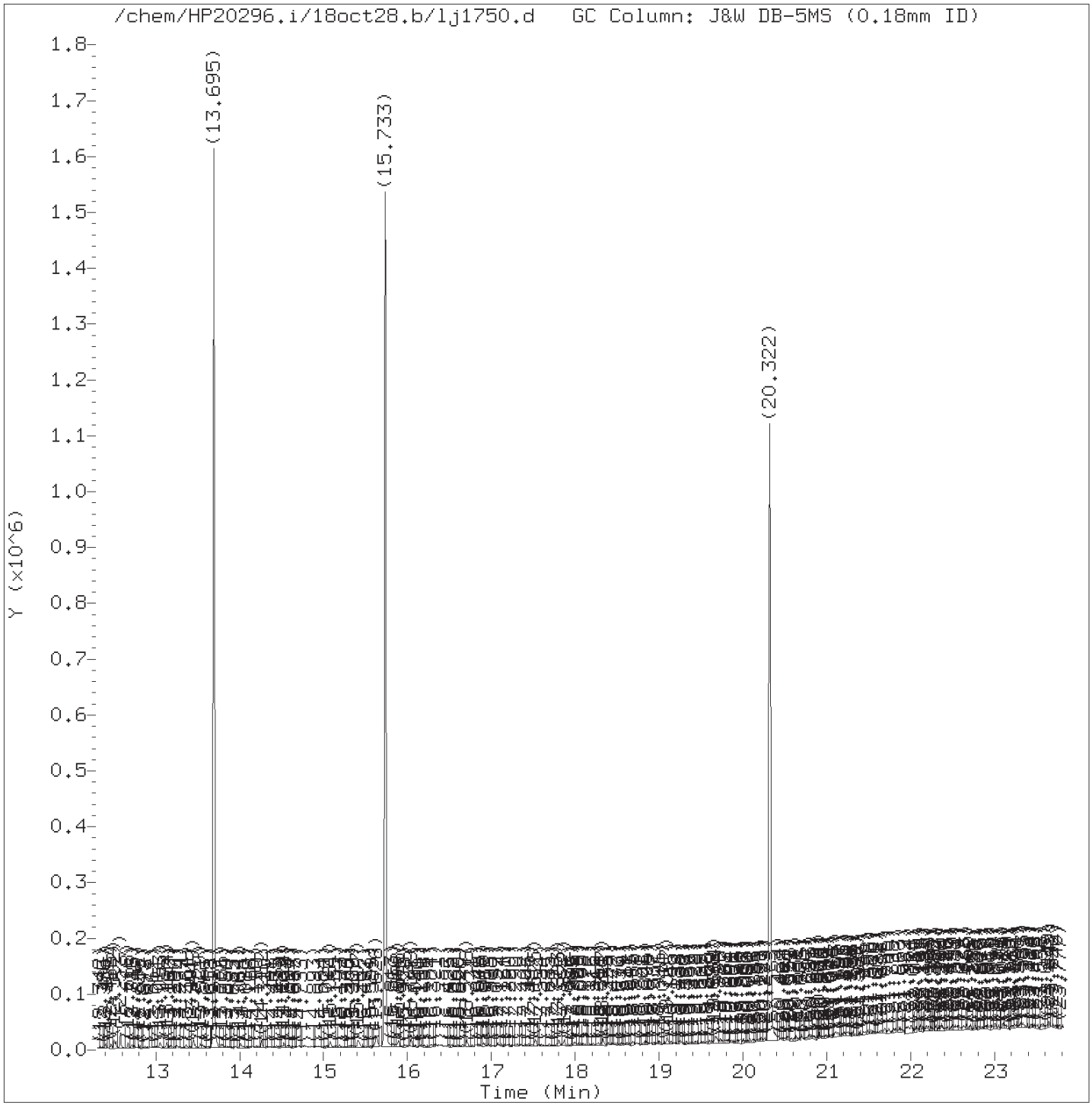
Target Revision 3.5

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

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 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

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 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

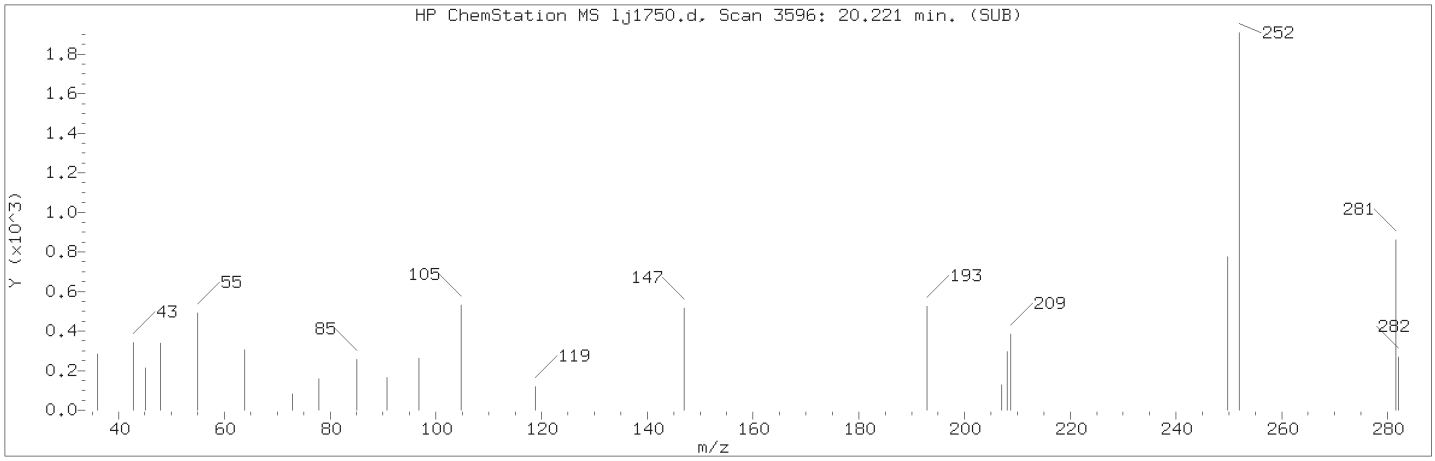
Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

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

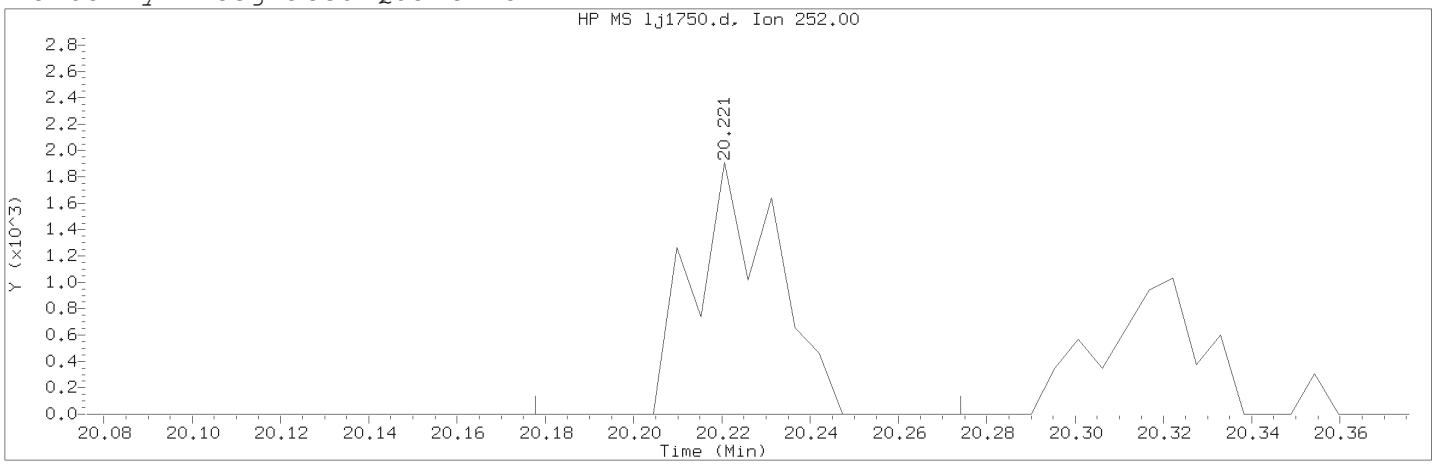
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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

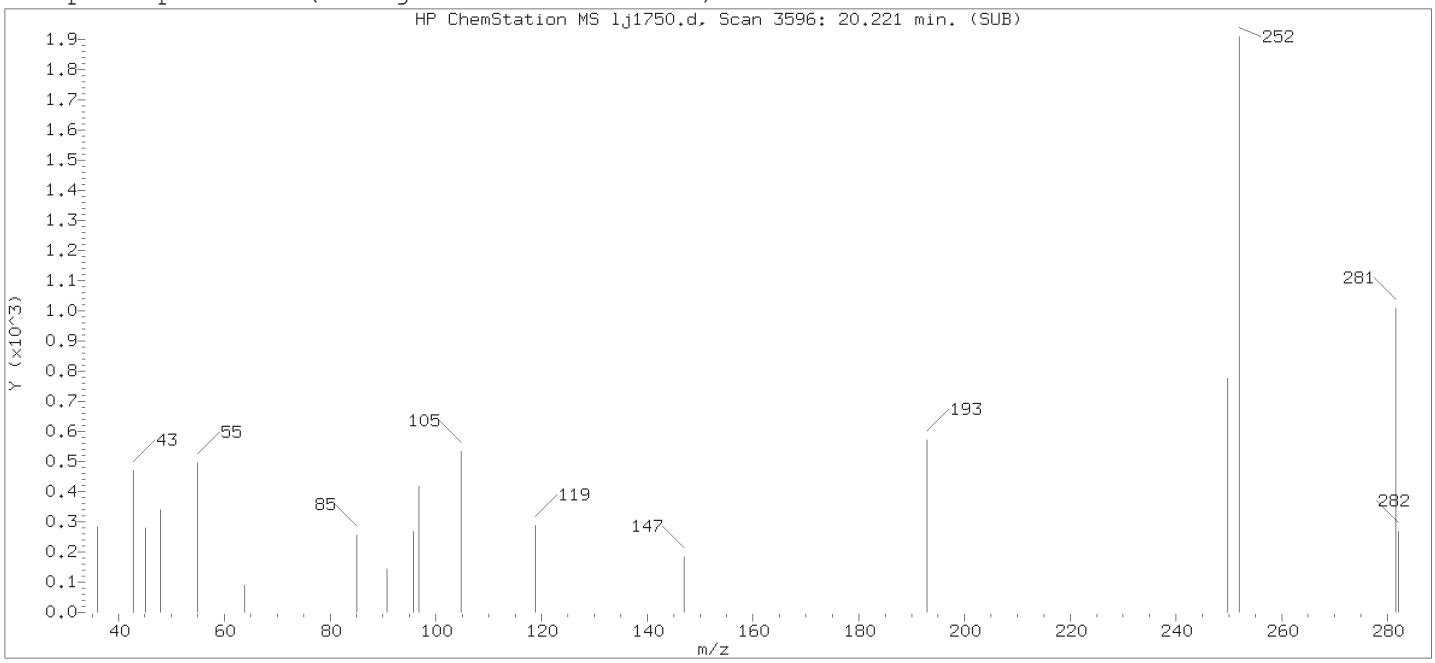
Compound Number	: 216		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3596		
Retention Time (minutes)	: 20.221		
Quant Ion	: 252.00		
Area (flag)	: 2465M		
On-Column Amount (ng/ul)	: 0.0189		
Integration start scan	: 3587	Integration stop scan:	3605
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

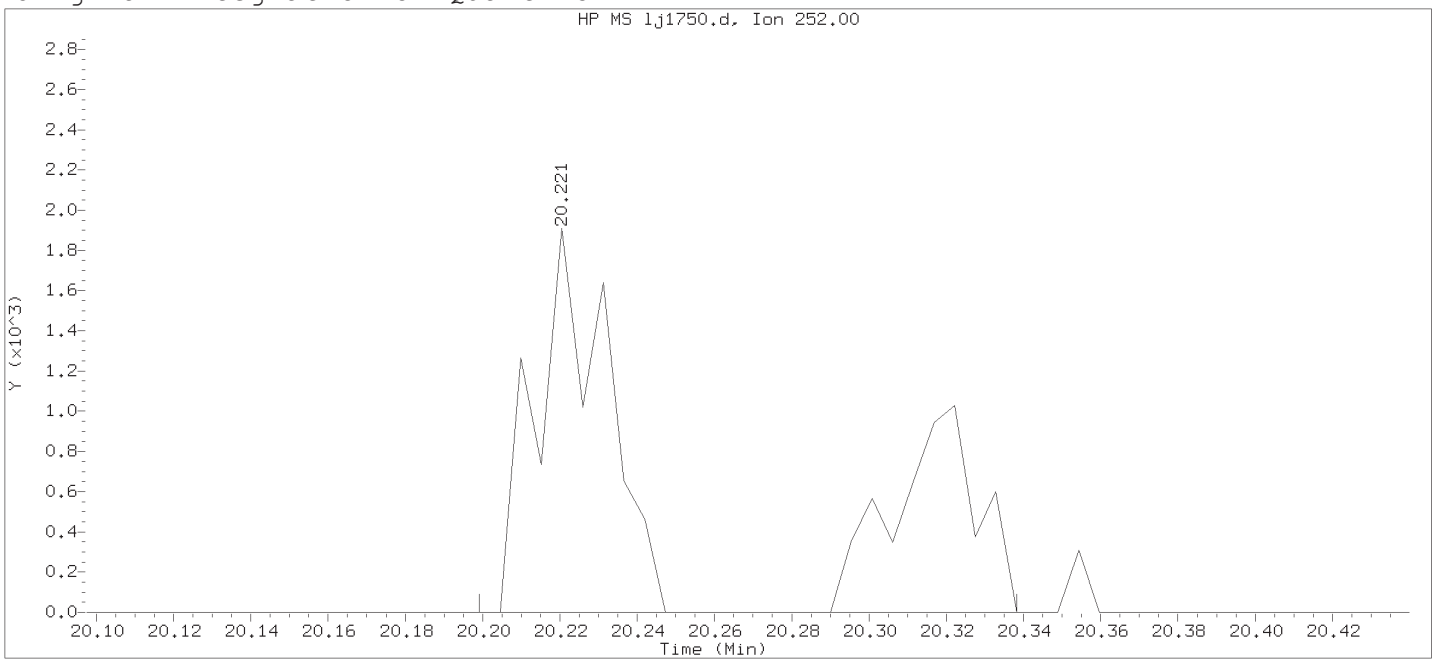
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

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



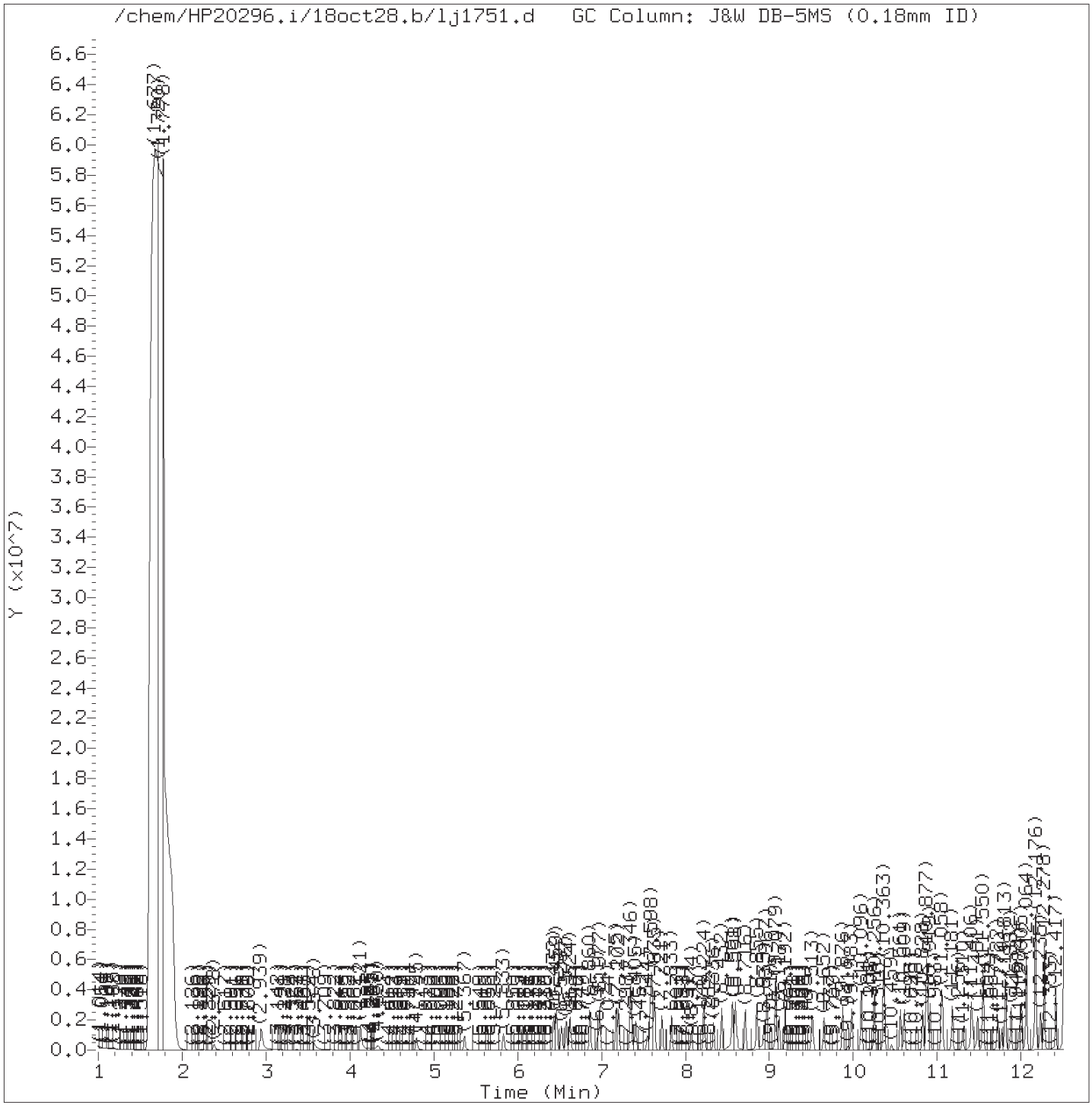
Data File: /chem/HP20296.i/18oct28.b/lj1750.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:47 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

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	: 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

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: 2136



Total Ion Chromatogram (TIC)

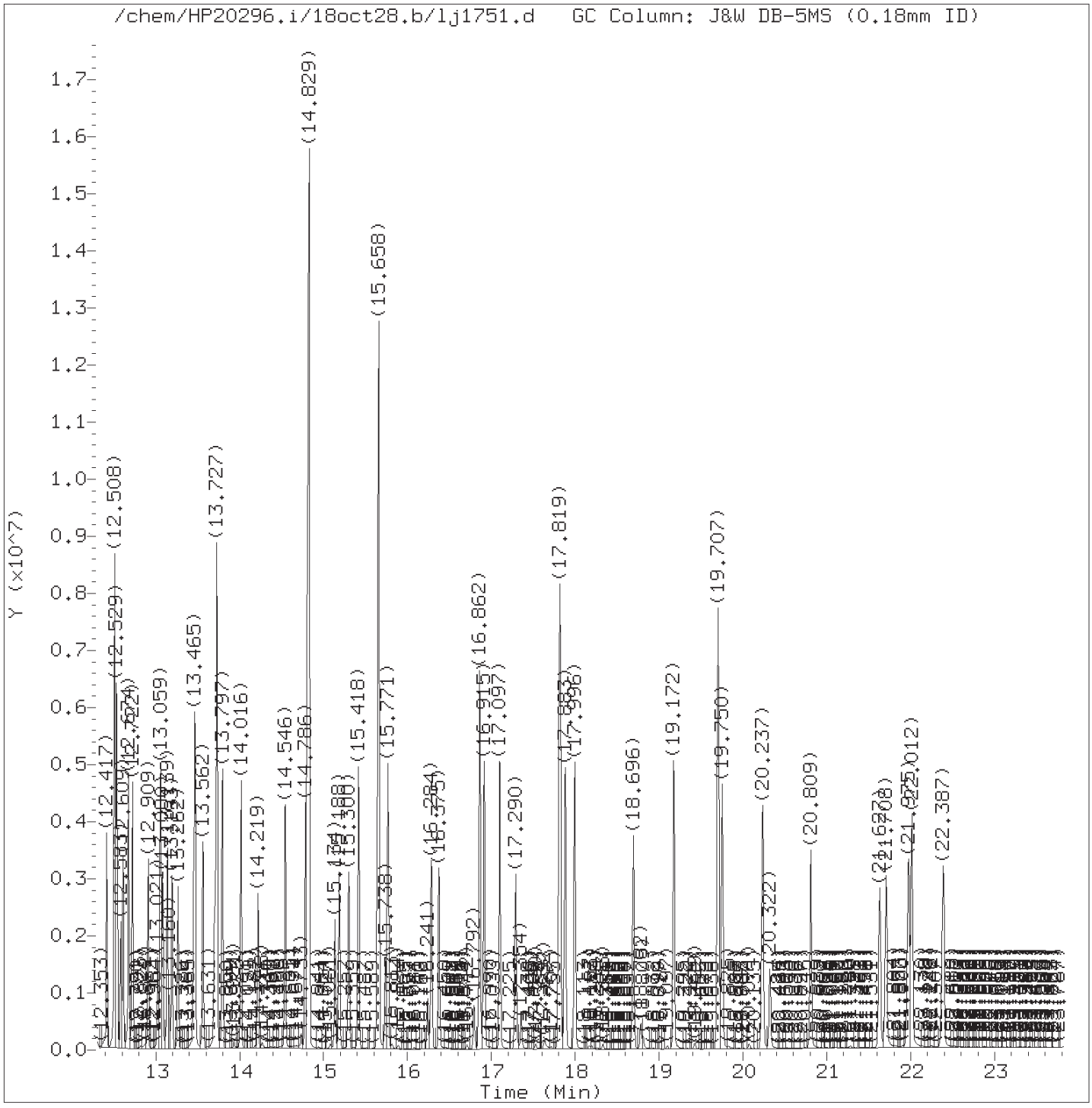
Target Revision 3.5

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

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 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

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 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

	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 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

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 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

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 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

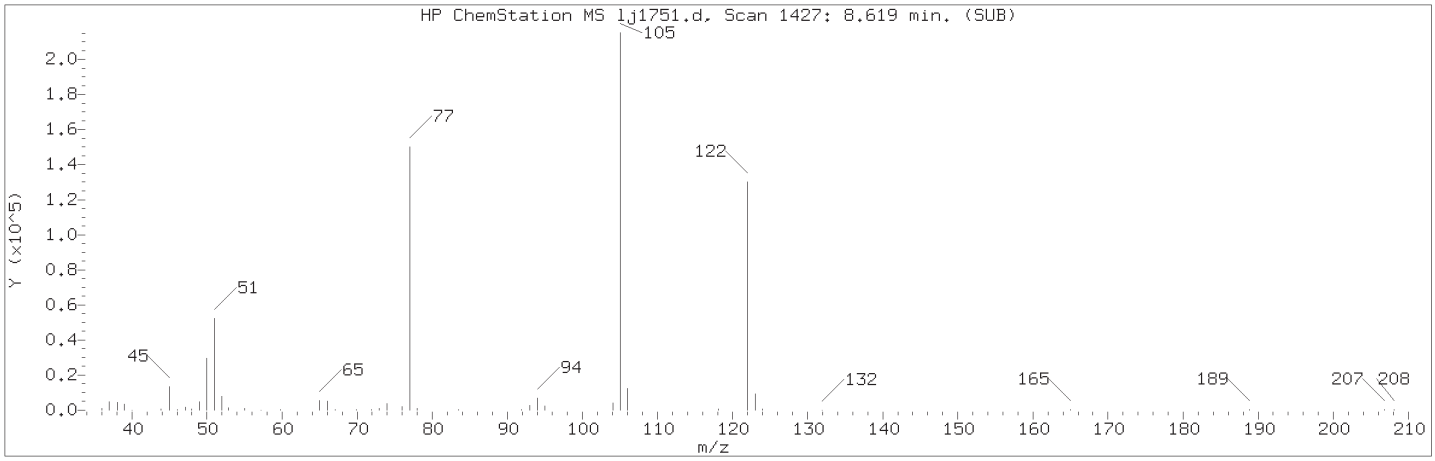
Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

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

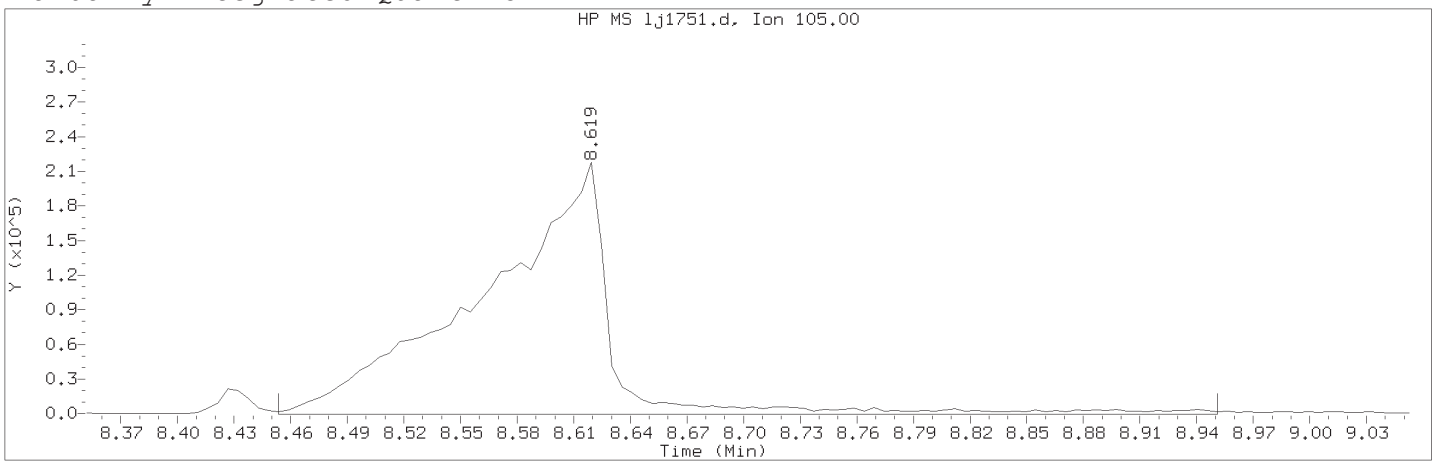
M = Compound was manually integrated.
* = Compound is an internal standard.

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

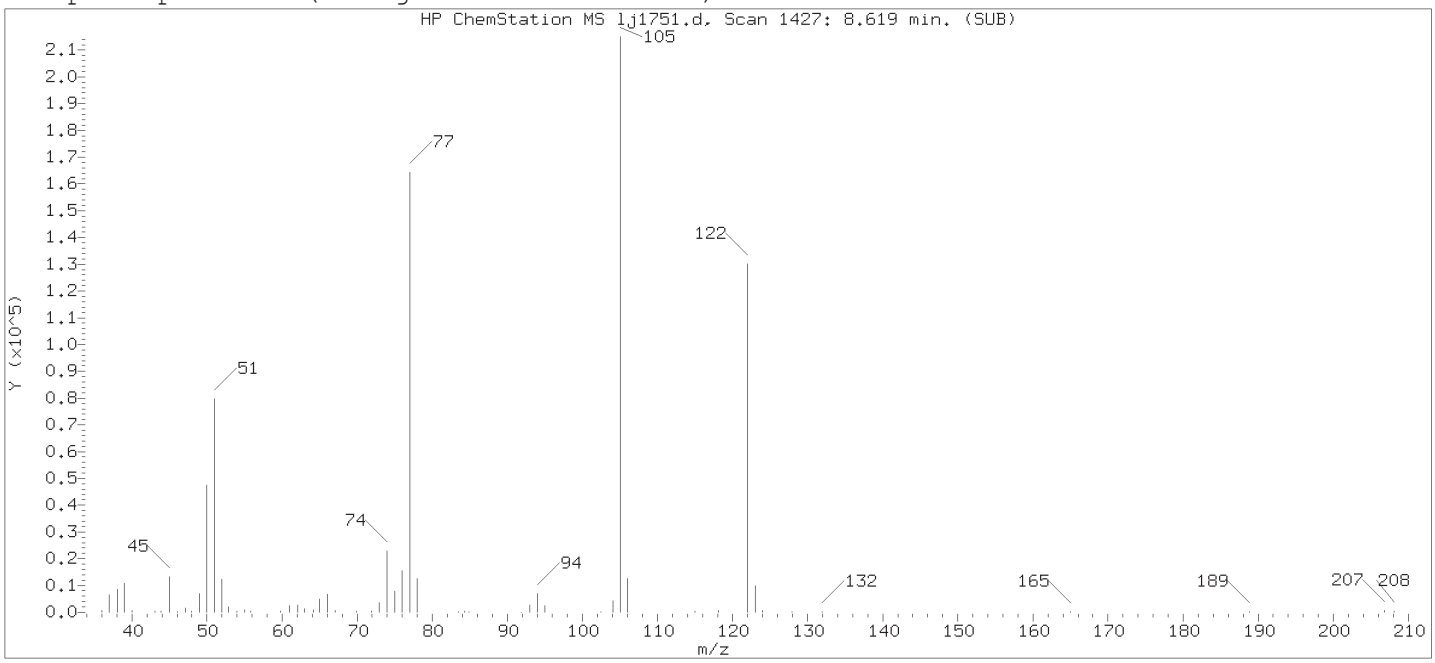
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1427		
Retention Time (minutes)	: 8.619		
Quant Ion	: 105.00		
Area (flag)	: 1012431M		
On-Column Amount (ng/ul)	: 25.8731		
Integration start scan	: 1395	Integration stop scan:	1488
Y at integration start	: -396	Y at integration end:	-396

Reason for manual integration: improper integration

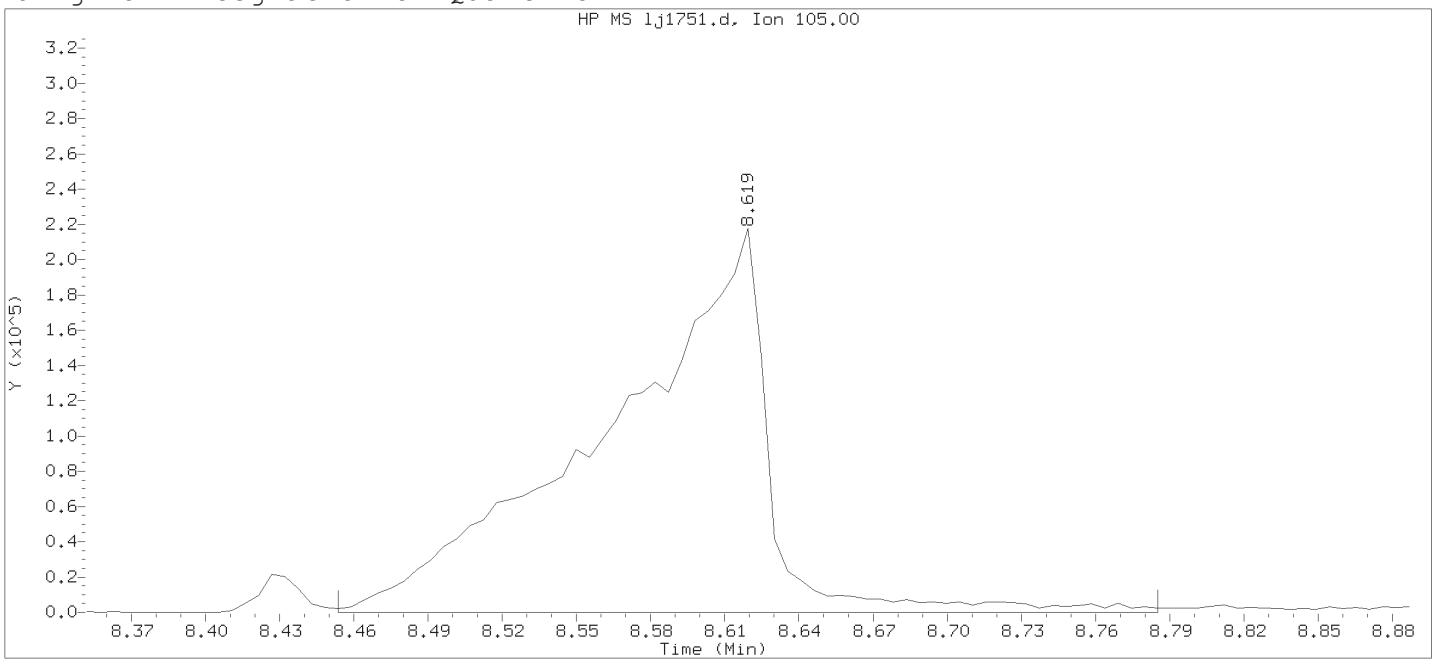
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

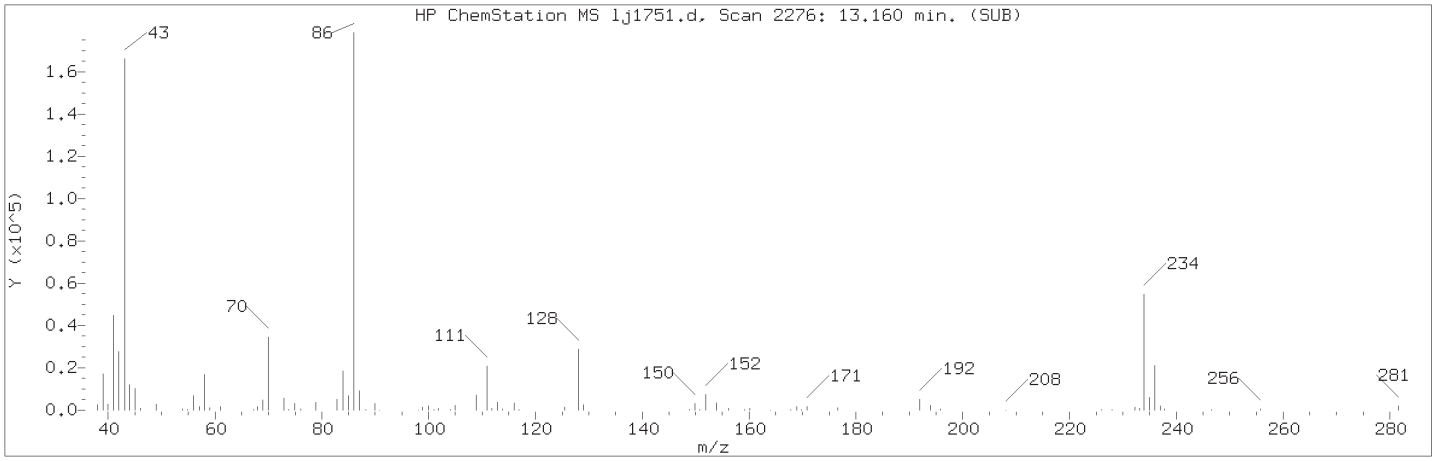
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

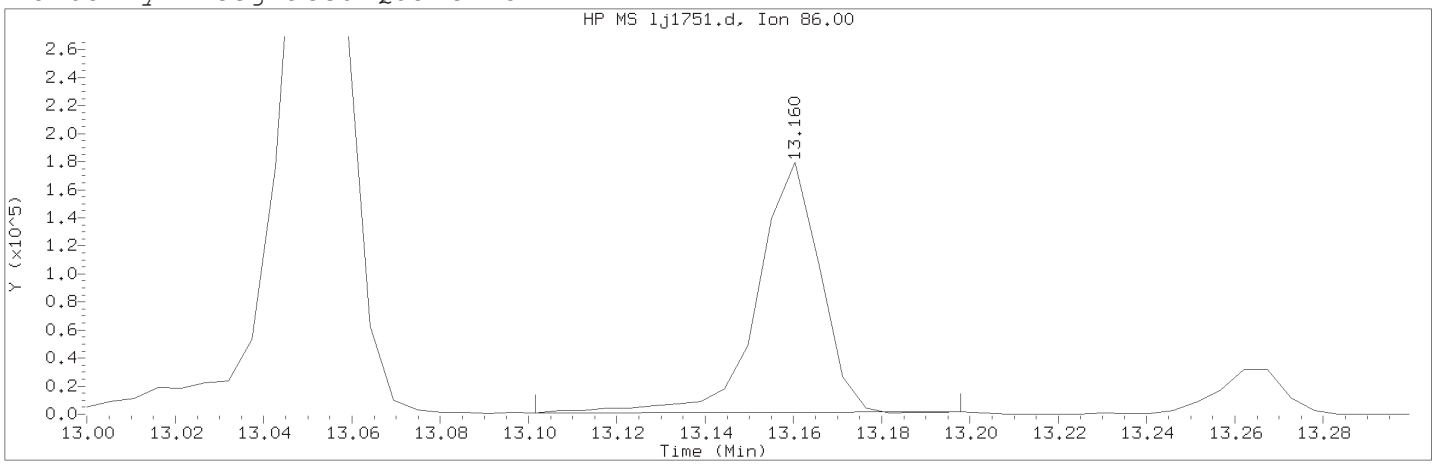
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1427		
Retention Time (minutes)	: 8.619		
Quant Ion	: 105.00		
Area	: 974265		
On-column Amount (ng/ul)	: 31.1927		
Integration start scan	: 1395	Integration stop scan:	1457
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.
Target 3.5 esignature used for this page.

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

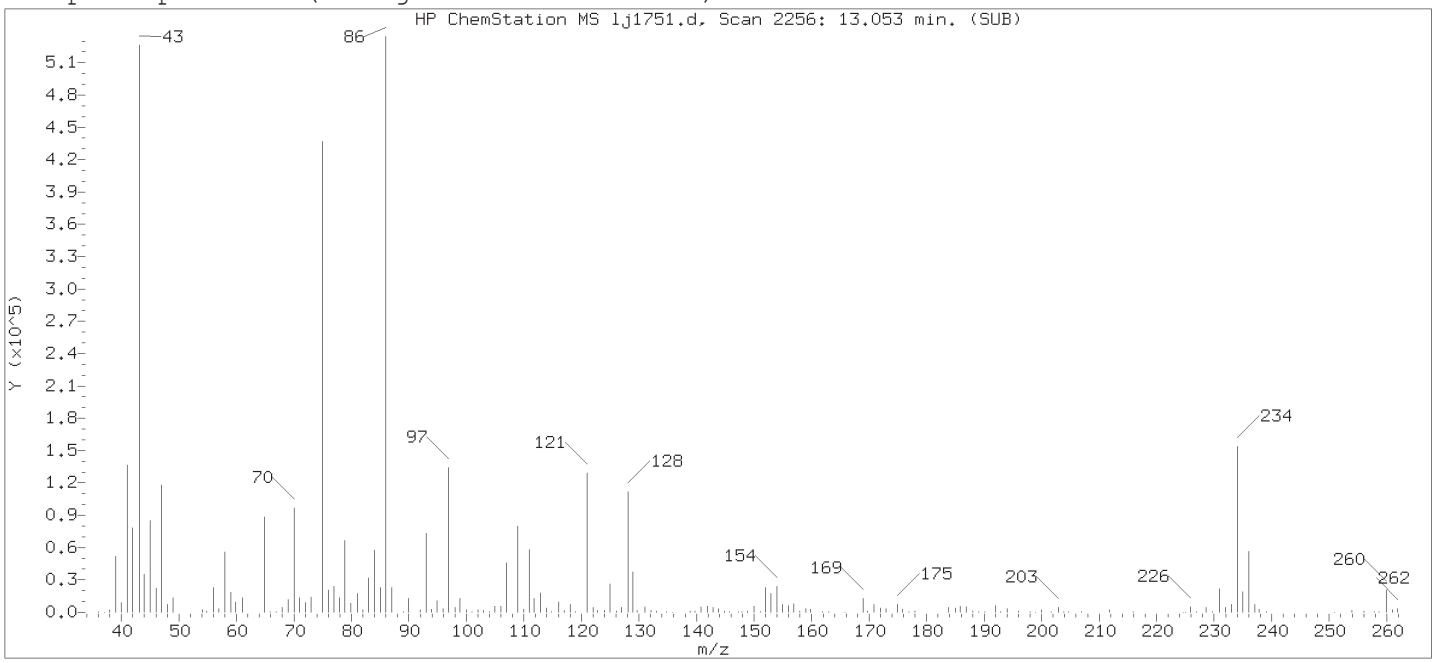
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2276		
Retention Time (minutes)	: 13.160		
Quant Ion	: 86.00		
Area (flag)	: 173458M		
On-Column Amount (ng/ul)	: 3.4514		
Integration start scan	: 2264	Integration stop scan:	2282
Y at integration start	: 1026	Y at integration end:	1557

Reason for manual integration: improper integration

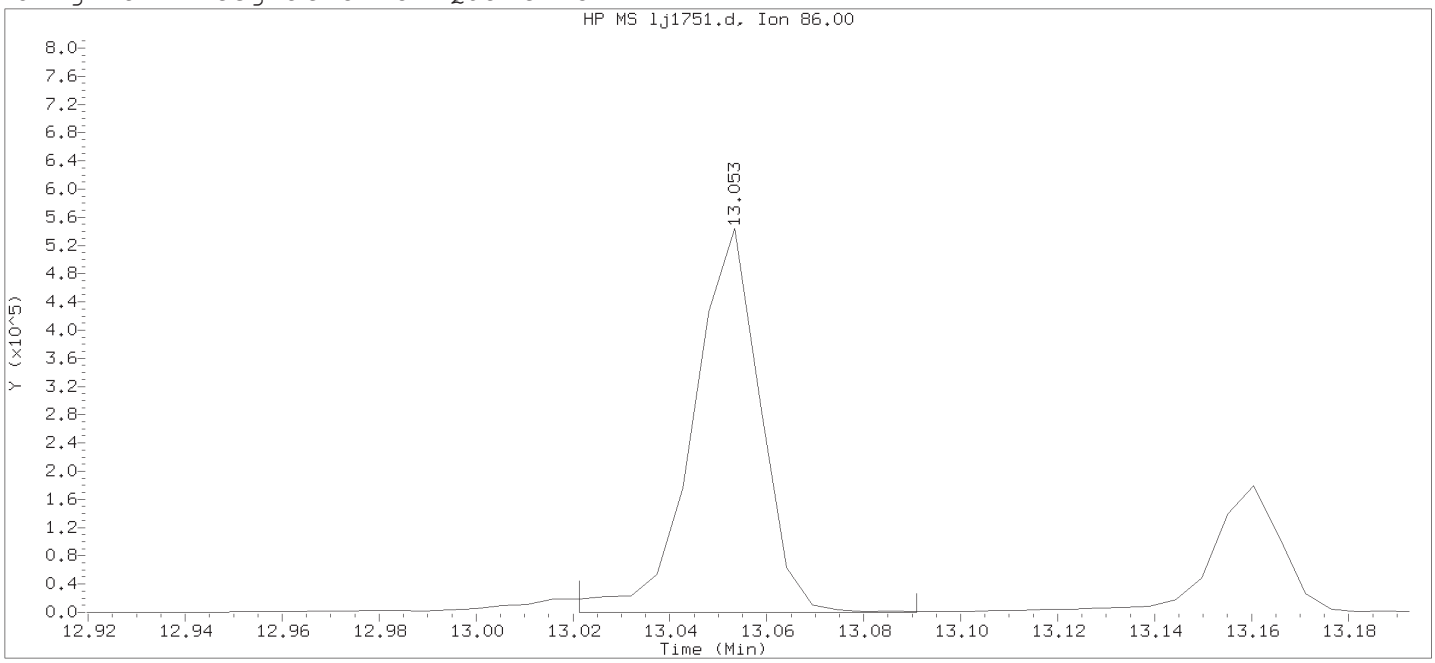
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

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 Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

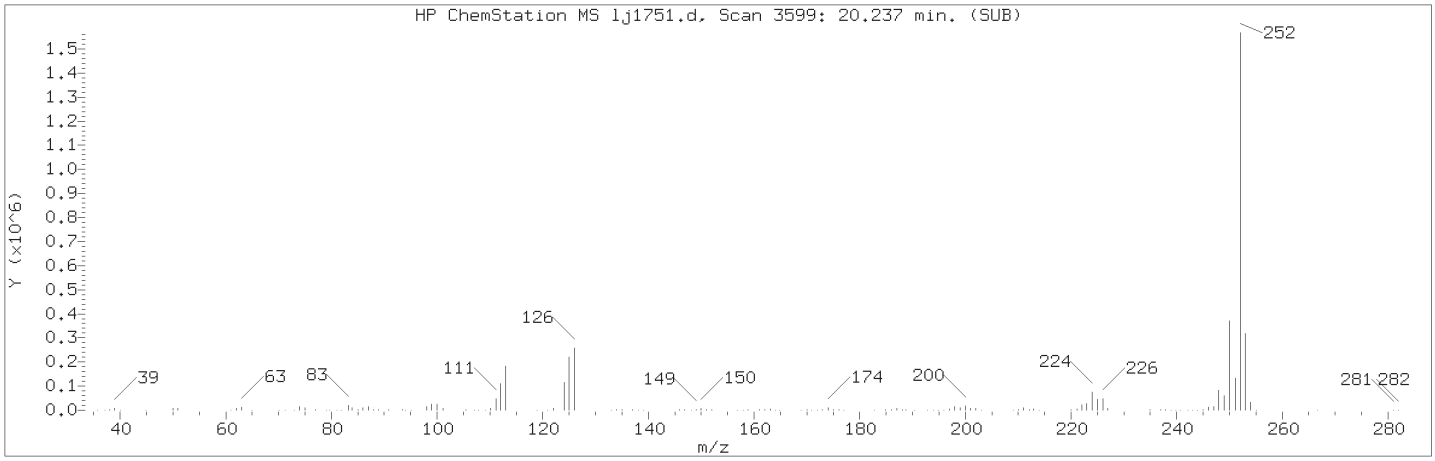
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

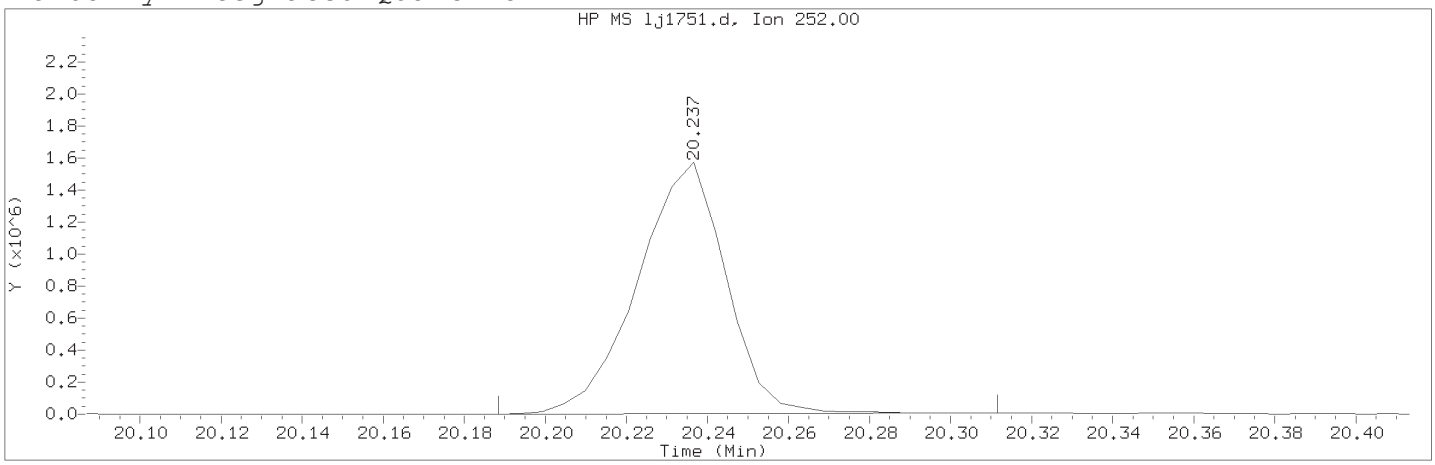
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2256		
Retention Time (minutes)	: 13.053		
Quant Ion	: 86.00		
Area	: 520633		
On-column Amount (ng/ul)	: 2.0220		
Integration start scan	: 2249	Integration stop scan:	2262
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.
Target 3.5 esignature used: 1007

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

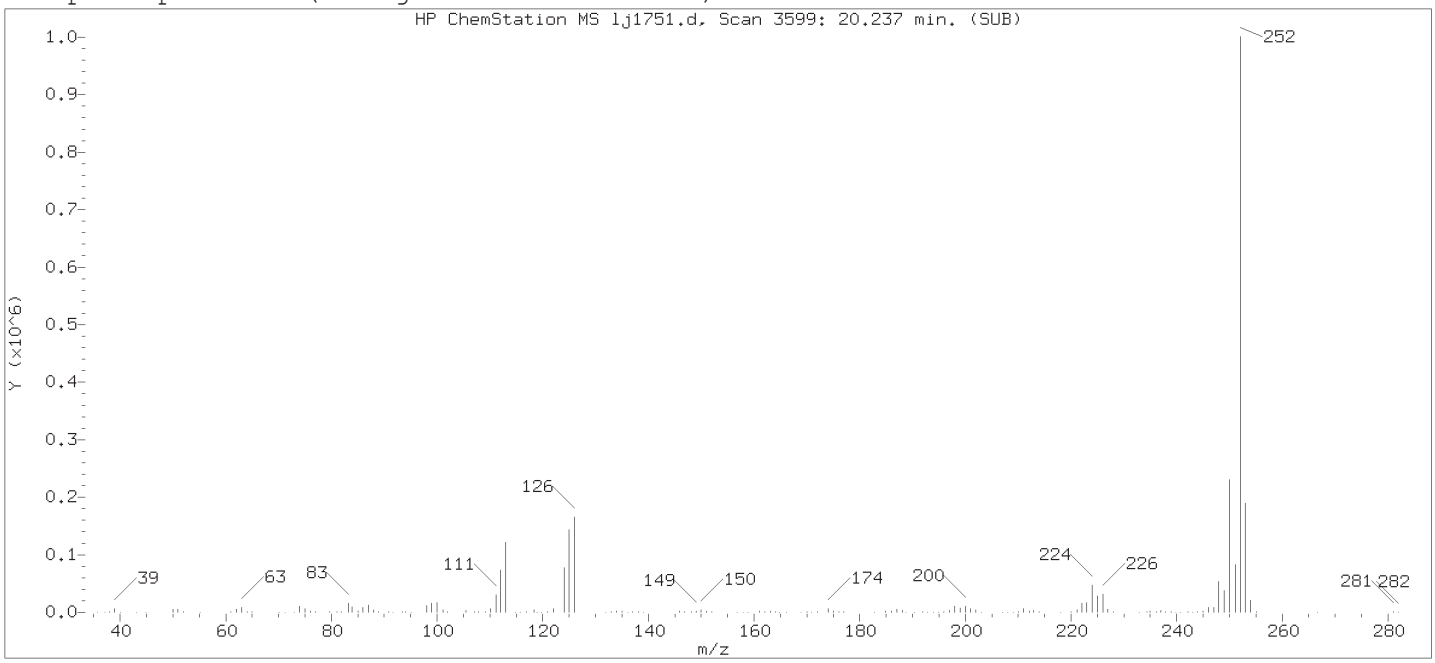
Compound Number	: 216		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3599		
Retention Time (minutes)	: 20.237		
Quant Ion	: 252.00		
Area (flag)	: 2355675M		
On-Column Amount (ng/ul)	: 14.4760		
Integration start scan	: 3589	Integration stop scan:	3612
Y at integration start	: 1527	Y at integration end:	7196

Reason for manual integration: improper integration

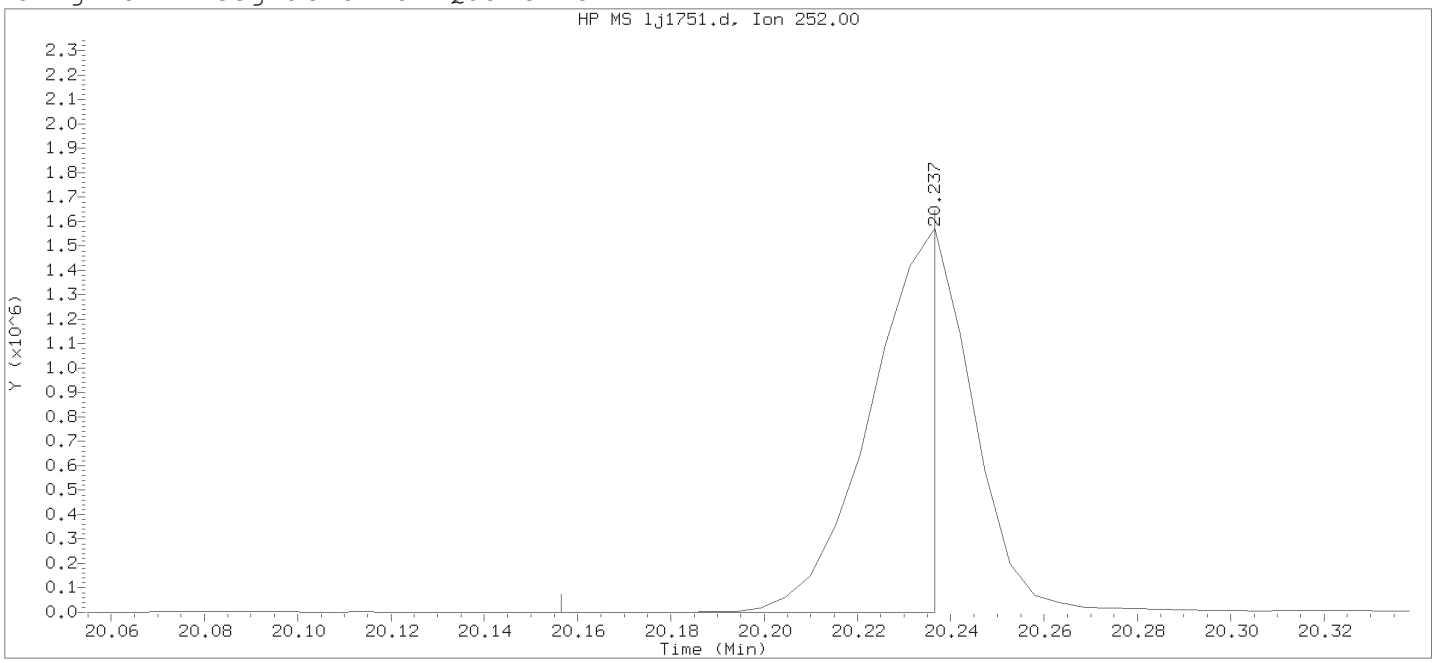
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

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

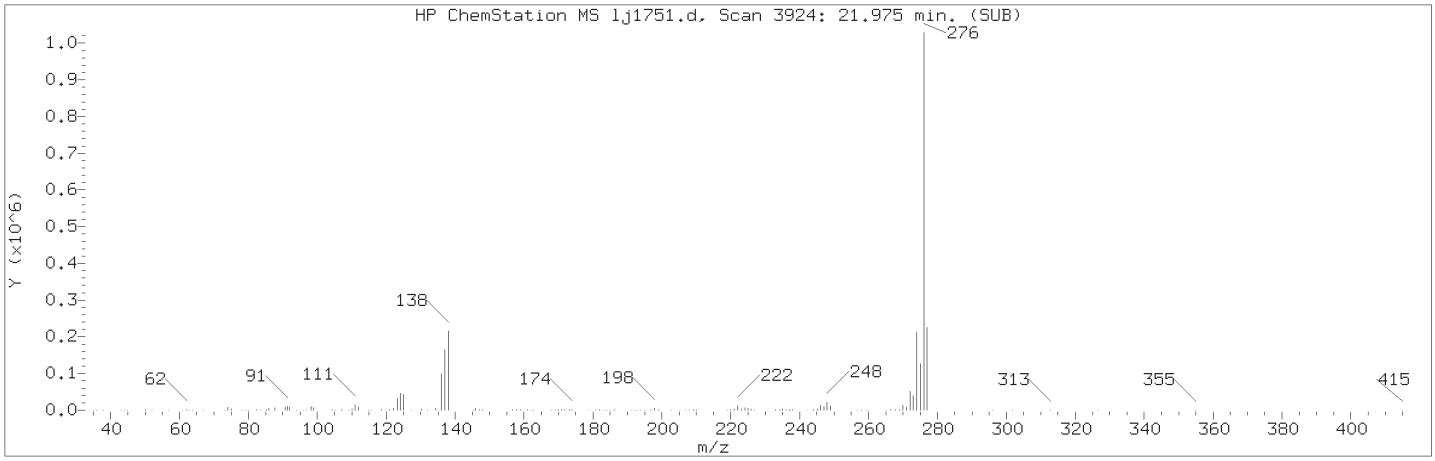
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

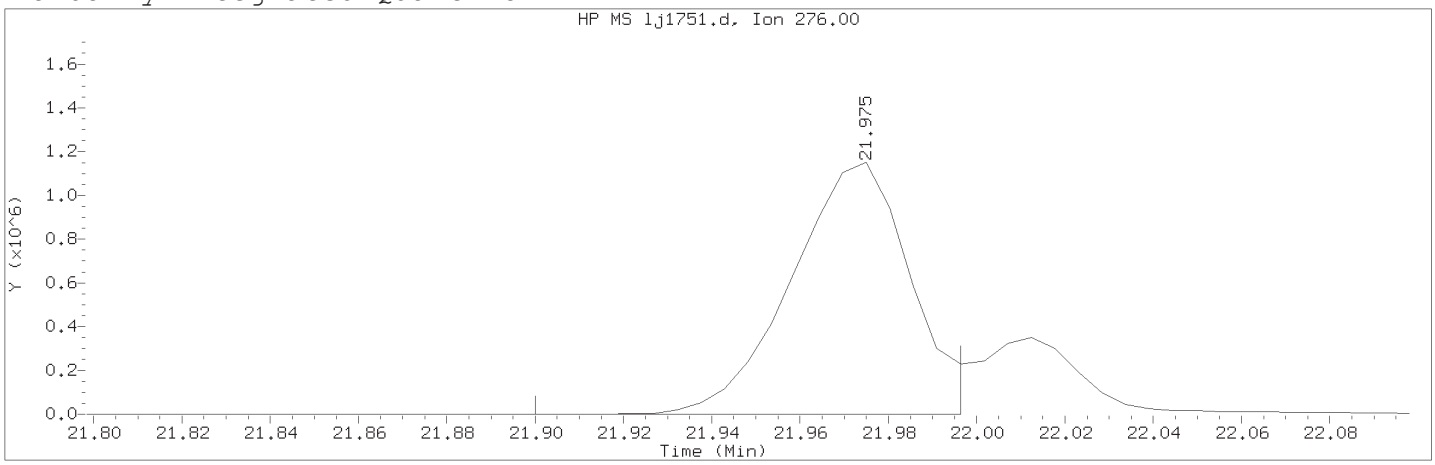
Compound Number	:	216
Compound Name	:	Benzo(a)pyrene
Scan Number	:	3599
Retention Time (minutes)	:	20.237
Quant Ion	:	252.00
Area	:	1454195
On-column Amount (ng/ul)	:	8.9073
Integration start scan	:	3583 Integration stop scan: 3598
Y at integration start	:	276 Y at integration end: 276

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.
Target 3.5 esignature used for this file.

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

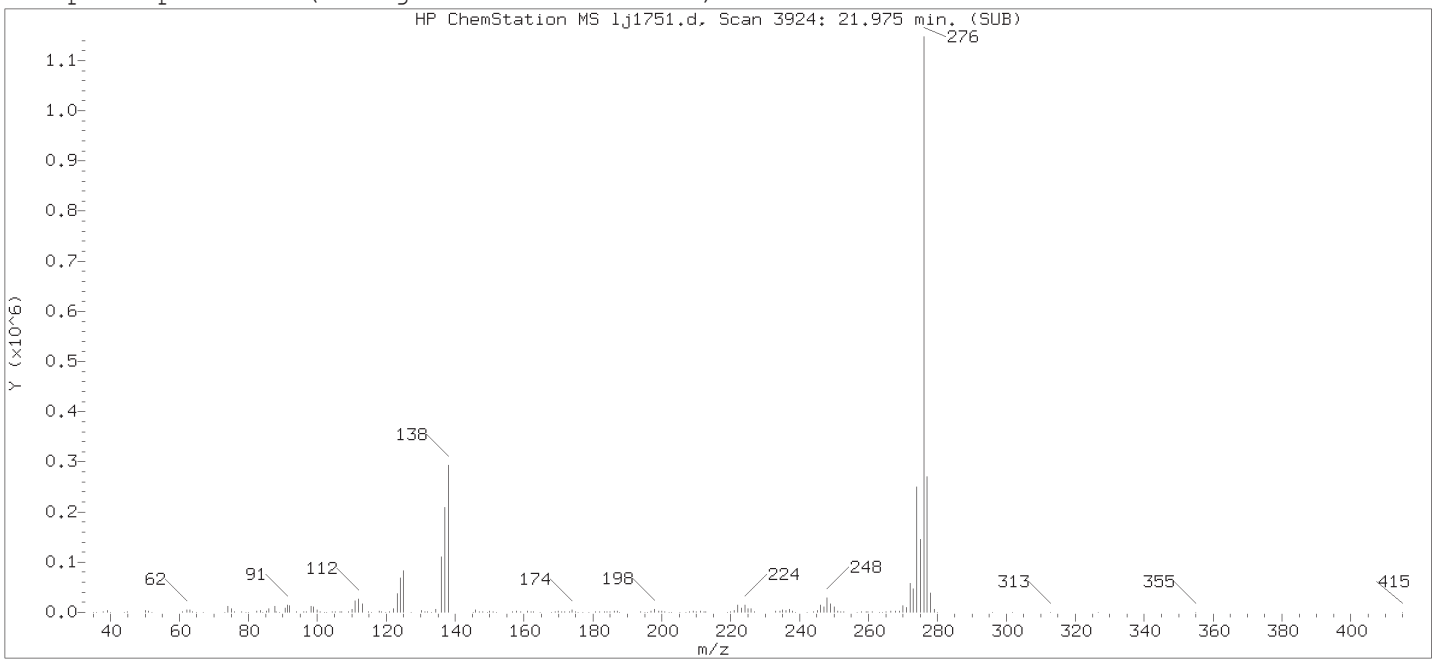
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3924
Retention Time (minutes) : 21.975
Quant Ion : 276.00
Area (flag) : 2159768M
On-Column Amount (ng/ul) : 13.6792
Integration start scan : 3909 Integration stop scan: 3927
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

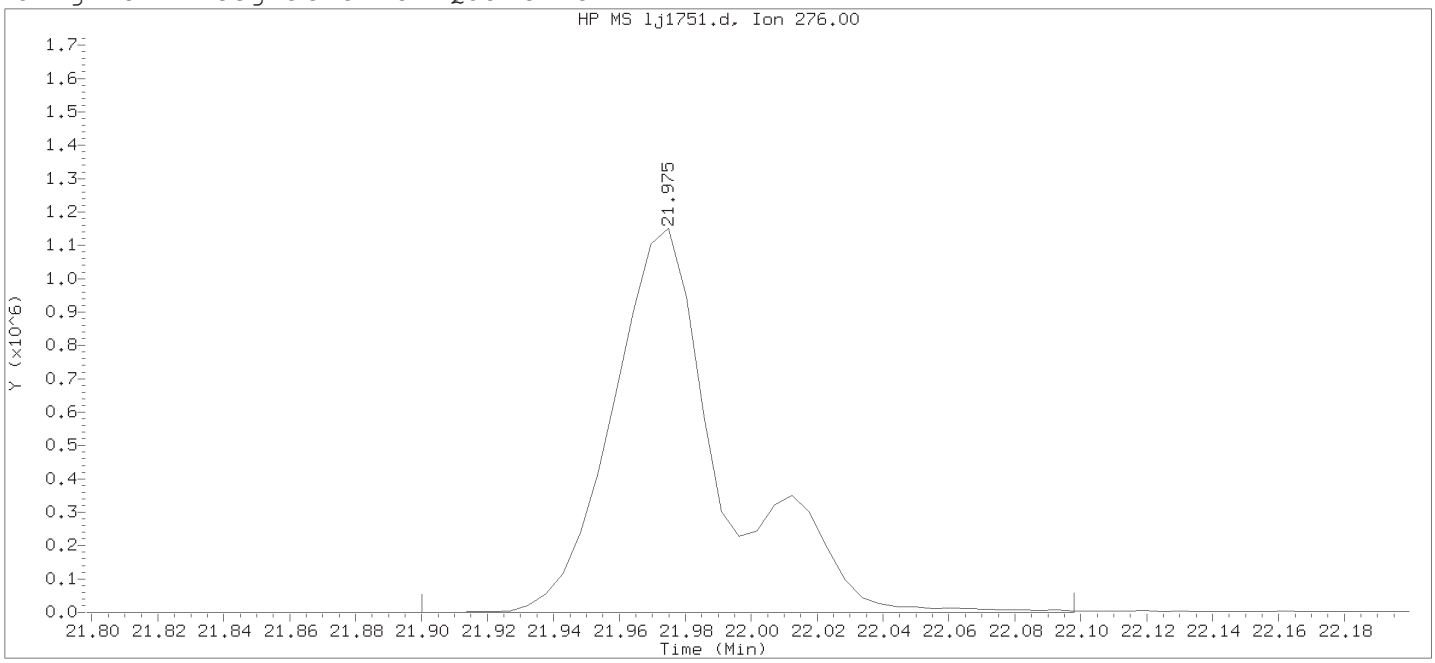
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

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 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	: 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

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.
Target 3.5 esignature used for this page.

Data File: /chem/HP20296.i/18nov01a.b/lk0100c.d

Date : 01-NOV-2018 21:41

Client ID: DFTPP12.5

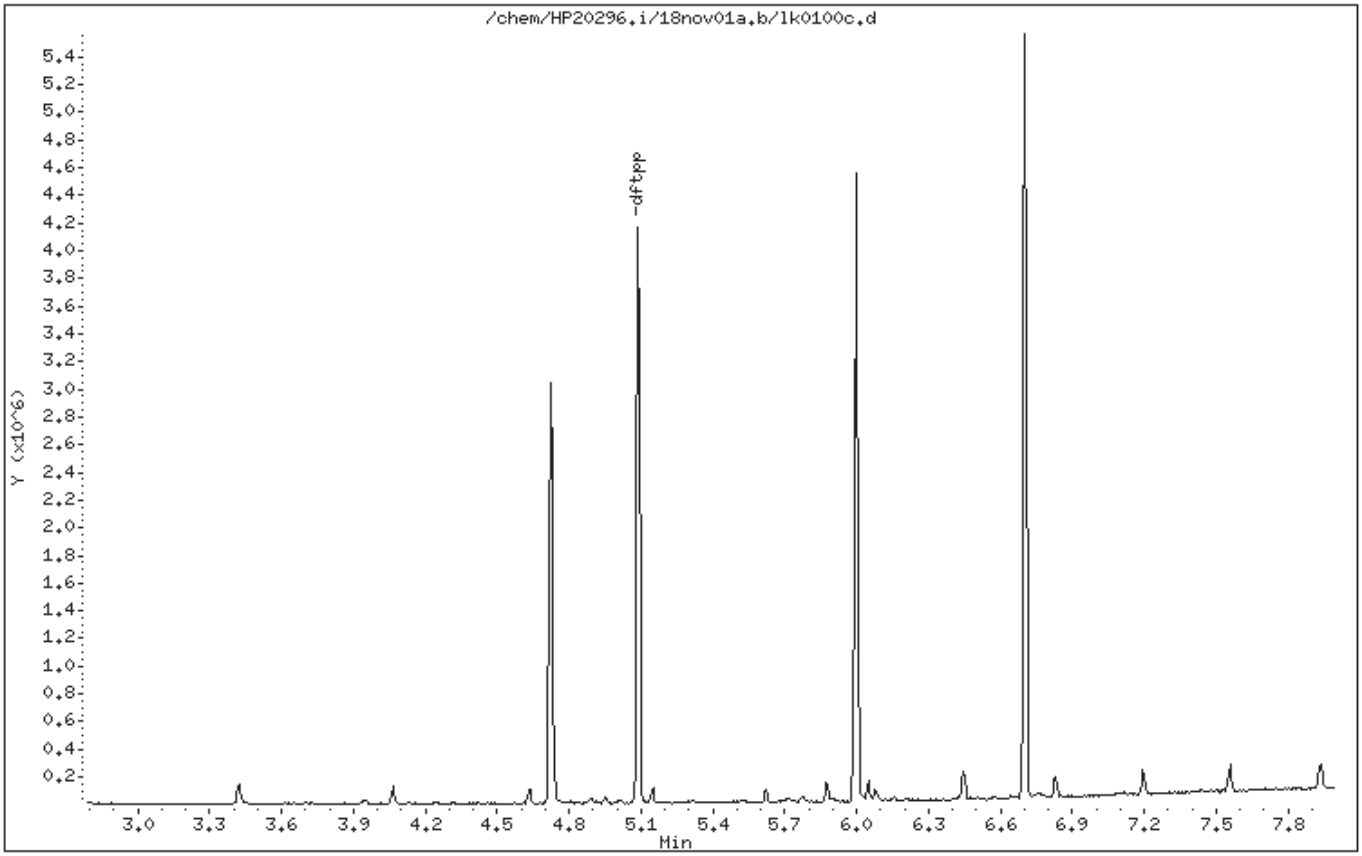
Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP20296.i/18nov01a.b/lk0100c.d

Date : 01-NOV-2018 21:41

Client ID: DFTPP12.5

Instrument: HP20296.i

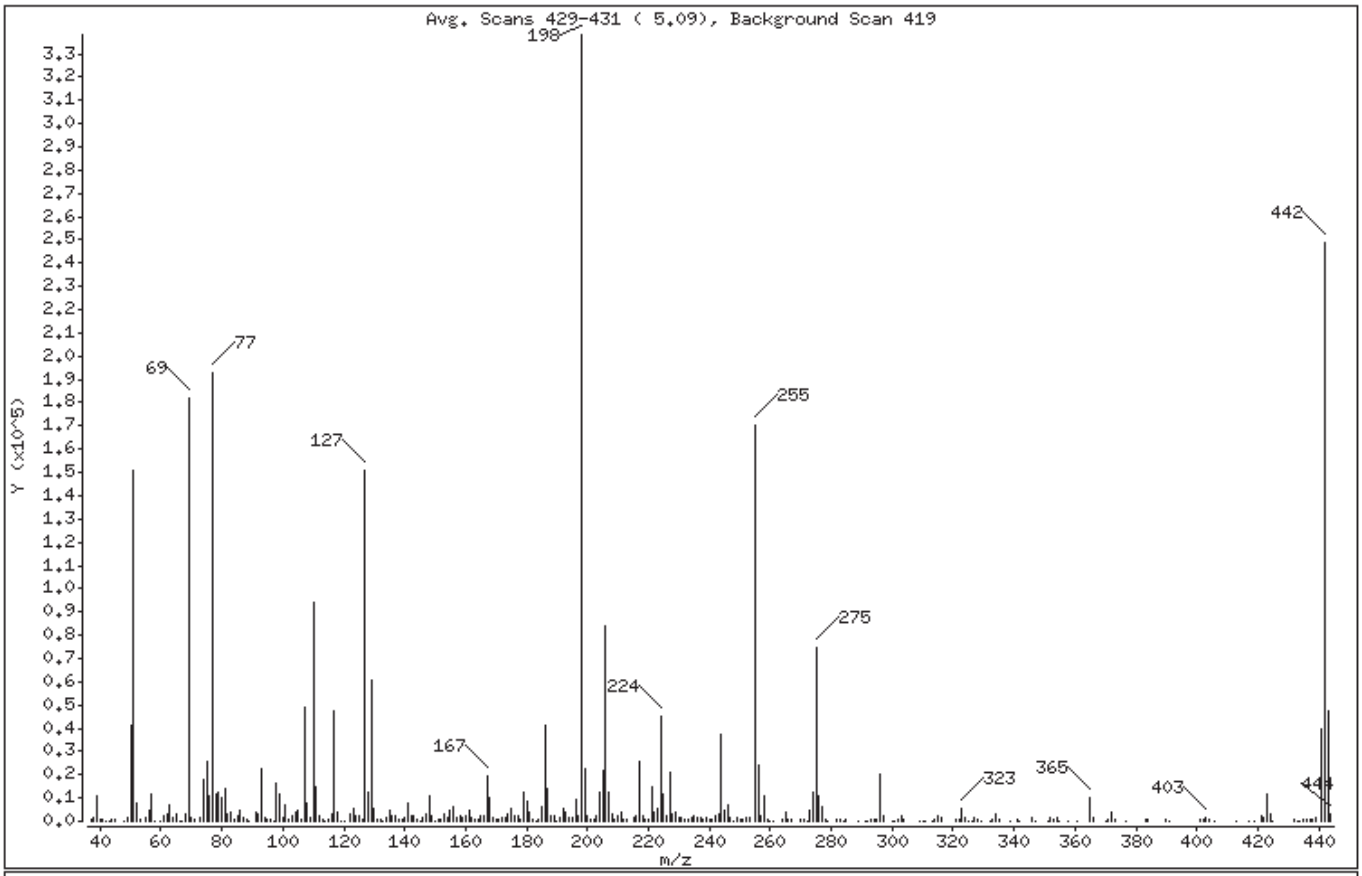
Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18

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	44.66
68	Less than 2.00% of mass 69	0.96 (1.79)
69	Mass 69 relative abundance	53.72
70	Less than 2.00% of mass 69	0.35 (0.66)
127	10.00 - 80.00% of mass 198	44.58
197	Less than 2.00% of mass 198	0.78
199	5.00 - 9.00% of mass 198	6.61
275	10.00 - 60.00% of mass 198	22.09
365	Greater than 1.00% of mass 198	3.00
441	0.01 - 24.00% of mass 442	11.66 (15.83)
442	50.00 - 99.99% of mass 198	73.69
443	15.00 - 24.00% of mass 442	14.13 (19.17)

Digitally signed by Ashley R. Transue on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Date : 01-NOV-2018 21:41

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: lk0100c.d
Spectrum: Avg. Scans 429-431 (5.09), Background Scan 419
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	829	123.00	5326	202.00	821	293.00	1118
38.00	1512	124.00	2153	203.00	2586	294.00	575
39.00	11064	125.00	2457	204.00	12190	295.00	410
40.00	1046	126.00	1151	205.00	21448	296.00	20352
41.00	756	127.00	150720	206.00	83720	297.00	1989
42.00	112	128.00	12730	207.00	12564	300.00	126
43.00	138	129.00	60688	208.00	3324	301.00	345
44.00	617	130.00	5481	209.00	1029	302.00	610
45.00	600	131.00	1095	210.00	2376	303.00	2087
48.00	190	132.00	736	211.00	4129	304.00	901
49.00	1388	133.00	165	212.00	972	309.00	326
50.00	41192	134.00	1265	213.00	683	310.00	239
51.00	150976	135.00	4888	215.00	1520	311.00	236
52.00	7966	136.00	2448	216.00	2065	313.00	372
53.00	627	137.00	2481	217.00	25360	314.00	692
55.00	1320	138.00	892	218.00	2565	315.00	2065
56.00	4528	139.00	554	219.00	581	316.00	1677
57.00	11562	140.00	1396	220.00	457	321.00	1161
58.00	358	141.00	7862	221.00	14794	322.00	849
60.00	222	142.00	2643	222.00	4124	323.00	5410
61.00	2193	143.00	1992	223.00	5618	324.00	1359
62.00	3288	144.00	460	224.00	45104	325.00	147
63.00	6843	145.00	90	225.00	11959	326.00	113
64.00	1319	146.00	1626	226.00	2074	327.00	1277
65.00	3031	147.00	3098	227.00	21080	328.00	390
66.00	131	148.00	10753	228.00	3053	329.00	155
67.00	208	149.00	2504	229.00	3678	332.00	205
68.00	3246	150.00	297	230.00	1329	333.00	1039
69.00	181632	151.00	1141	231.00	1840	334.00	3456
70.00	1199	152.00	912	232.00	665	335.00	976
71.00	396	153.00	2924	233.00	612	339.00	144
73.00	1729	154.00	1593	234.00	1941	341.00	731
74.00	18008	155.00	4792	235.00	2057	342.00	231
75.00	25496	156.00	5855	236.00	1714	346.00	1617
76.00	10829	157.00	1586	237.00	1581	347.00	290

Digitally signed by Ashley R. Transue on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Date : 01-NOV-2018 21:41

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: lk0100c.d
Spectrum: Avg. Scans 429-431 (5.09), Background Scan 419
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	193024	158.00	2130	238.00	431	351.00	91
78.00	11801	159.00	1254	239.00	1228	352.00	1877
79.00	12338	160.00	2271	240.00	916	353.00	916
80.00	9812	161.00	4372	241.00	1109	354.00	1839
81.00	14164	162.00	1338	242.00	2082	355.00	367
82.00	2807	163.00	482	243.00	3265	358.00	192
83.00	3670	164.00	817	244.00	37344	361.00	91
84.00	570	165.00	2528	245.00	4767	365.00	10151
85.00	2131	166.00	2274	246.00	7036	366.00	1703
86.00	4619	167.00	19704	247.00	1715	370.00	235
87.00	1438	168.00	9939	248.00	254	371.00	693
88.00	822	169.00	1730	249.00	1692	372.00	4143
89.00	283	170.00	538	250.00	446	373.00	1098
91.00	3574	171.00	1002	251.00	843	377.00	91
92.00	3348	172.00	1421	252.00	1366	383.00	1027
93.00	22440	173.00	1521	253.00	1682	384.00	468
94.00	1640	174.00	3165	255.00	170176	390.00	584
95.00	793	175.00	5817	256.00	24192	391.00	176
96.00	774	176.00	1964	257.00	1977	401.00	482
97.00	386	177.00	2588	258.00	10831	402.00	950
98.00	16130	178.00	950	259.00	1135	403.00	1622
99.00	11716	179.00	12373	260.00	110	404.00	721
100.00	1234	180.00	8839	261.00	330	406.00	99
101.00	6893	181.00	3662	264.00	768	413.00	119
102.00	454	182.00	933	265.00	4068	417.00	129
103.00	2331	183.00	118	266.00	442	419.00	159
104.00	3946	184.00	1021	267.00	432	421.00	2022
105.00	4611	185.00	6259	270.00	544	422.00	1679
106.00	948	186.00	40968	271.00	741	423.00	11901
107.00	48736	187.00	14037	272.00	310	424.00	3159
108.00	7650	188.00	2217	273.00	4955	425.00	140
109.00	1897	189.00	2706	274.00	12827	432.00	744
110.00	94336	190.00	317	275.00	74704	433.00	203
111.00	14402	191.00	1493	276.00	10554	434.00	212
112.00	1946	192.00	5289	277.00	5855	435.00	757

Digitally signed by Ashley R. Transue on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Date : 01-NOV-2018 21:41

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

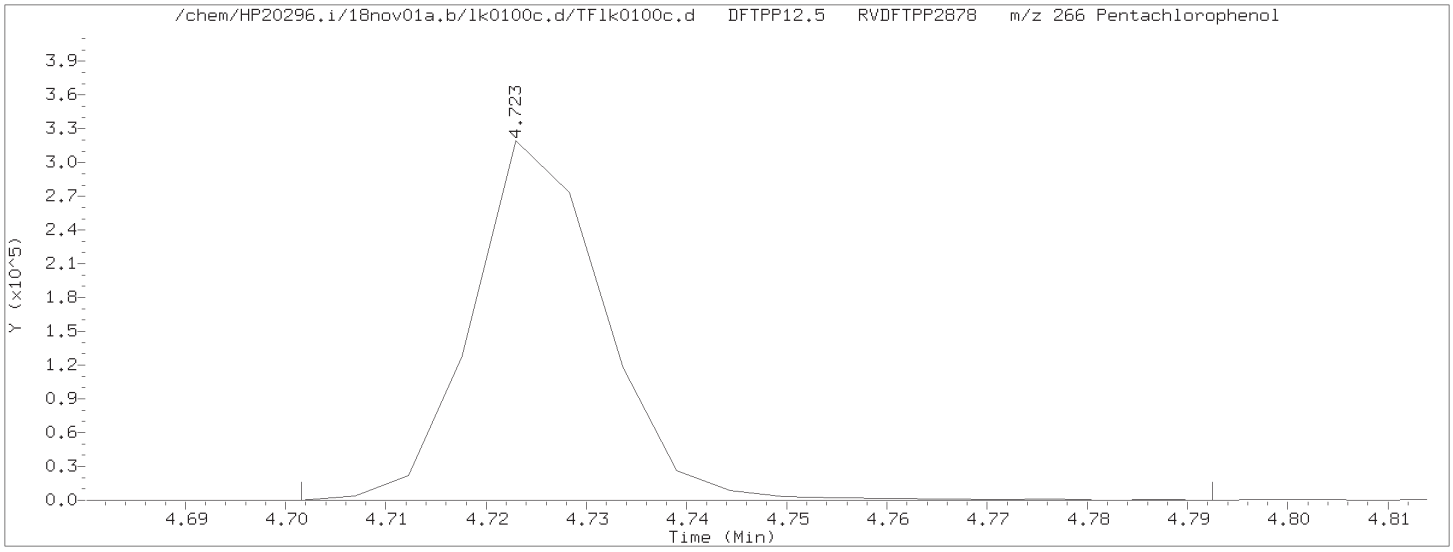
Data File: lk0100c.d
Spectrum: Avg. Scans 429-431 (5.09), Background Scan 419
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	1052	193.00	3995	278.00	1112	436.00	628
114.00	123	194.00	1412	279.00	104	437.00	960
115.00	602	195.00	1610	282.00	461	438.00	917
116.00	2994	196.00	9567	283.00	700	439.00	1903
117.00	47048	197.00	2635	284.00	277	441.00	39440
118.00	3572	198.00	338176	285.00	1009	442.00	249152
119.00	26	199.00	22360	289.00	260	443.00	47776
120.00	385	200.00	2137	291.00	129	444.00	3329
122.00	3041	201.00	1032	292.00	148		

Digitally signed by Ashley R. Transue on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Assessment of GC Column Performance and Injection Port Inertness for

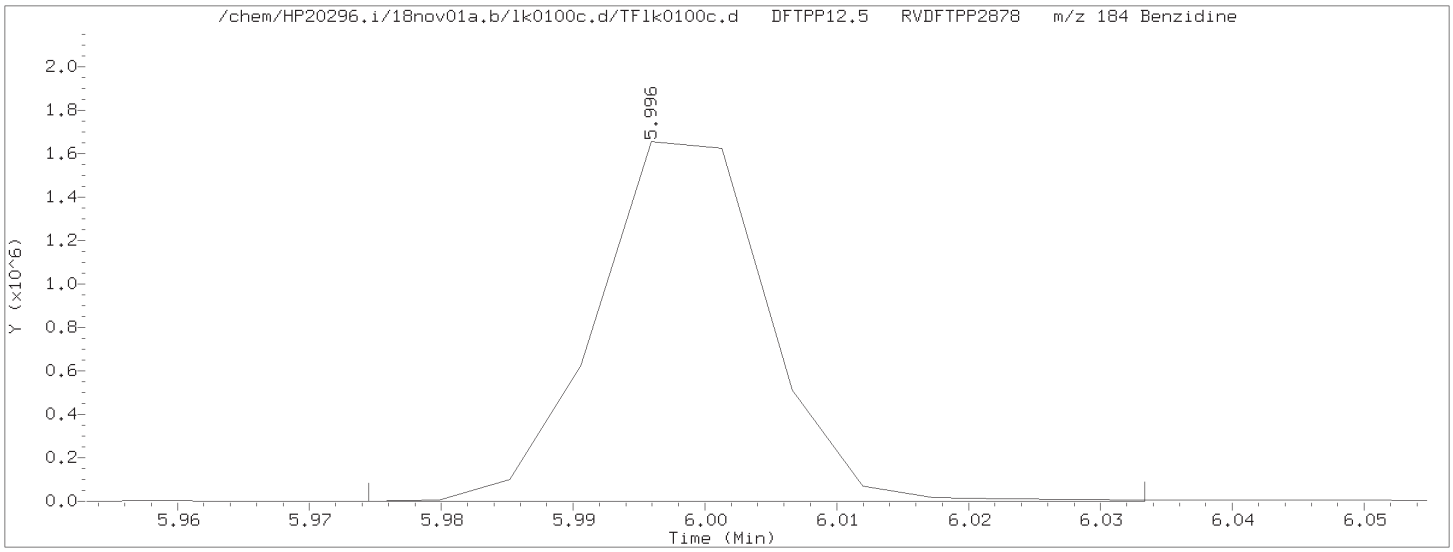
Instrument ID: HP20296.i Injection Date: 01-NOV-2018 21:41 Operator: art12405



Pentachlorophenol EICP peak height = 319488 EICP peak height at 10% = 31949 Pentachlorophenol EICP area = 291697

Pentachlorophenol EICP peak apex (min.) = 4.723
RT at 10% of front half of EICP (min.) = 4.713 'Front' peak width (min.) = 0.0101833333
RT at 10% of back half of EICP (min.) = 4.739 'Tailing' peak width (min.) = 0.0157000000

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0157000000}{0.0101833333} = 1.542$



Benzidine EICP peak height = 1655808 EICP peak height at 10% = 165581 Benzidine EICP area = 1487537

Benzidine EICP peak apex (min.) = 5.996
RT at 10% of front half of EICP (min.) = 5.986 'Front' peak width (min.) = 0.0100000000
RT at 10% of back half of EICP (min.) = 6.011 'Tailing' peak width (min.) = 0.0148333333

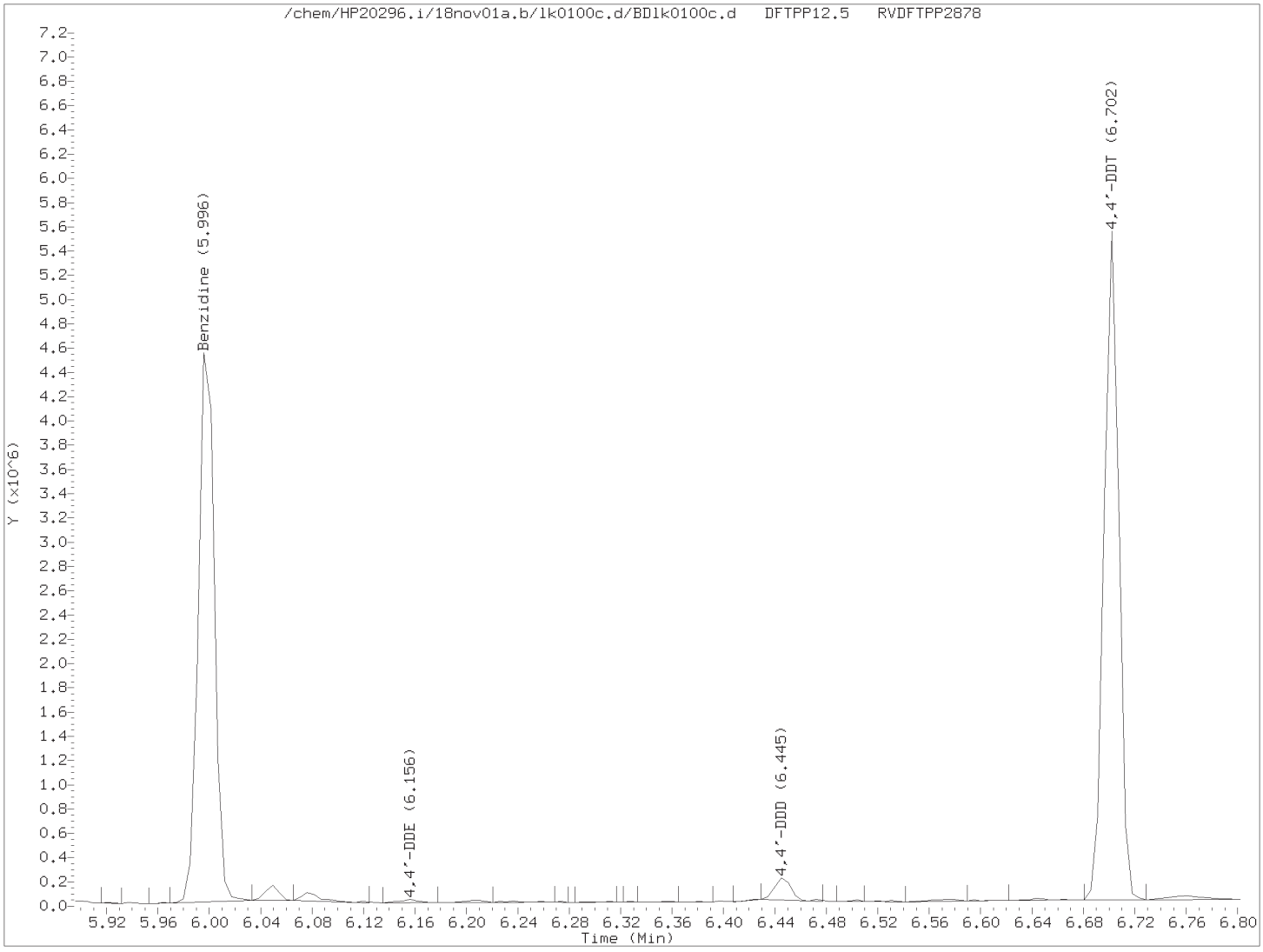
Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0148333333}{0.0100000000} = 1.483$

printed on 11/01/2018 at 21:54

Secondary review performed and digitally signed by Holly B. Ziegler on 11/02/2018 at 13:09. PARALLAX ID: hb01996

Assessment of GC Column Performance and Injection Port Inertness for

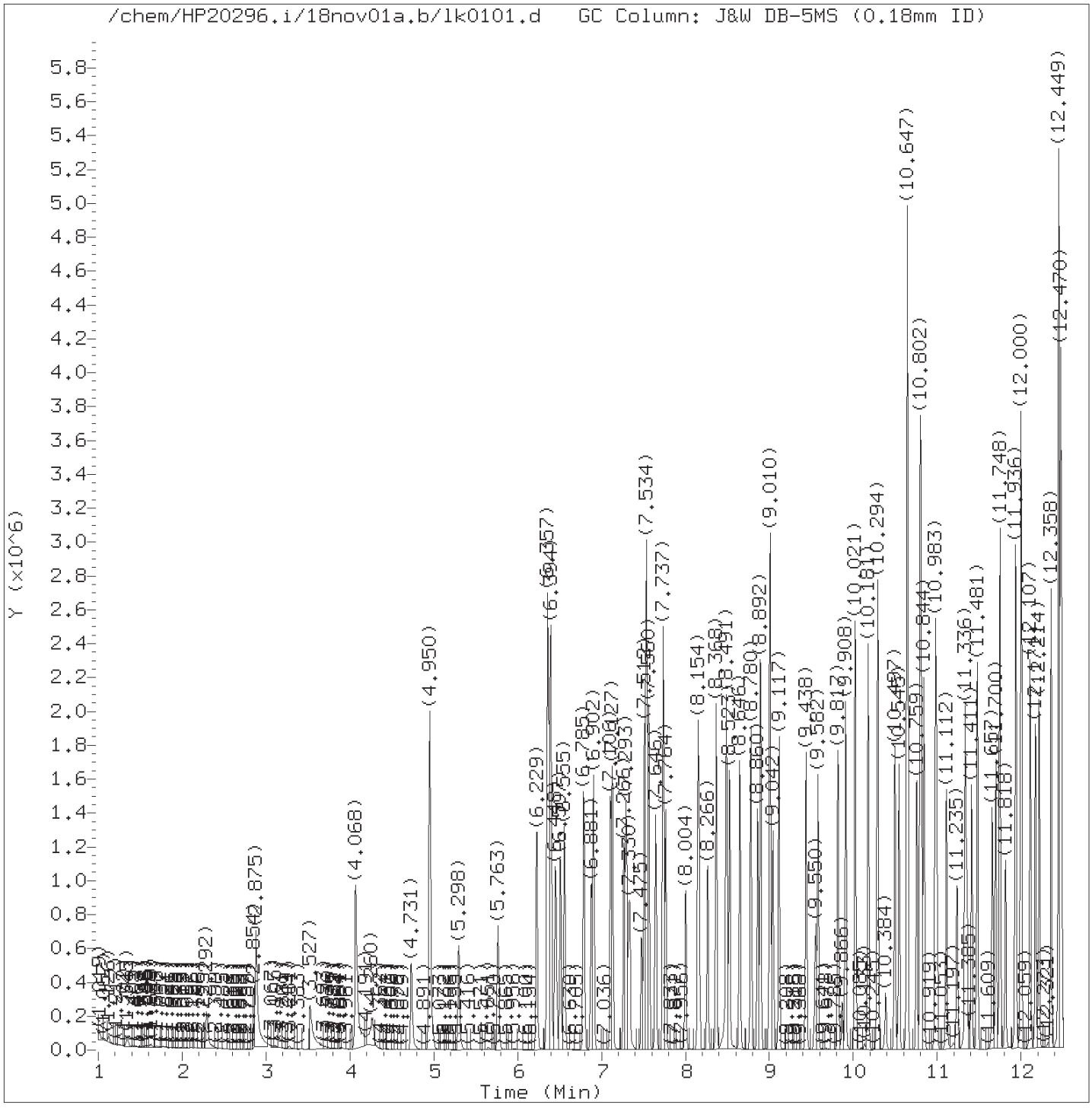
Instrument ID: HP20296.i Injection Date: 01-NOV-2018 21:41 Operator: art12405



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{28814 + 168349}{28814 + 168349 + 4362215} \times 100 = 4.3$$

Secondary review performed and digitally signed by Holly B. Ziegler on 11/02/2018 at 13:09. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

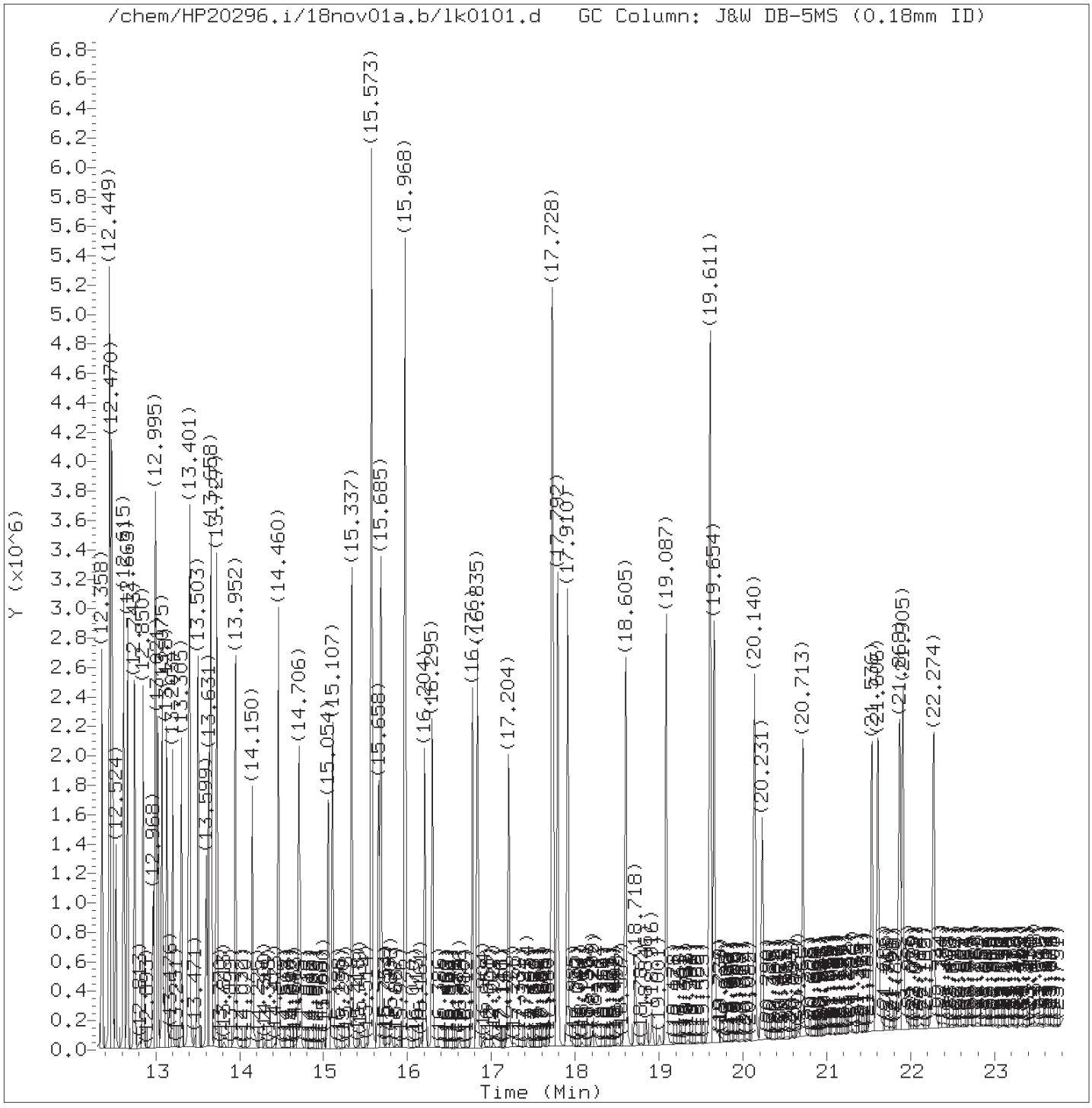
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 01-Nov-2018 22:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 01-Nov-2018 22:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 01-Nov-2018 22:41 art12405

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)	2.292	88	185723	6.698
5) N-Nitrosodimethylamine	(1)	2.854	74	321936	7.724
6) Pyridine	(1)	2.875	79	463692	6.539
8) 2-Picoline	(1)	4.068	93	507654	6.858
9) N-Nitrosomethylethylamine	(1)	4.271	88	234108	7.744
10) Methyl methanesulfonate	(1)	4.726	80	288606	7.465
12)$2-Fluorophenol	(1)	4.950	112	882738	15.385
14) N-Nitrosodiethylamine	(1)	5.298	102	216137	8.273
43) Total Cresols	(1)			941578	16.364
16) Ethyl methanesulfonate	(1)	5.769	109	232787	7.846
17) Benzaldehyde	(1)	6.229	77	429818	8.092
18)$Phenol-d6	(1)	6.357	99	1203157	15.538
19) Phenol	(1)	6.373	94	703640	7.747
20) Aniline	(1)	6.389	93	806596	7.557
21) a-methylstyrene	(1)	6.464	118	44249	7.915
23) bis(2-Chloroethyl)ether	(1)	6.507	93	520678	7.620
24) 2-Chlorophenol	(1)	6.555	128	426985	7.982
25) 1,3-Dichlorobenzene	(1)	6.785	146	464043	7.736
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	185353	5.000
27) 1,4-Dichlorobenzene	(1)	6.902	146	471216	7.818
28) Benzyl alcohol	(1)	7.106	108	282016	7.682
29) 1,2-Dichlorobenzene	(1)	7.127	146	455853	7.783
31) Indene	(1)	7.266	115	487100	7.565
32) 2-Methylphenol	(1)	7.293	108	445753	7.922
35) bis(2-Chloroisopropyl)ether	(1)	7.336	45	629001	7.299
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.336	45	629001	7.299
100) Isosafrole	(3)			371252	7.671
36) N-Nitrosopyrrolidine	(1)	7.475	100	242729	8.447
37) Acetophenone	(1)	7.512	105	677777	7.817
39) N-Nitroso-di-n-propylamine	(1)	7.528	70	406088	7.746
38) 4-Methylphenol	(1)	7.534	108	495825	8.442
40) N-Nitrosomorpholine	(1)	7.544	56	301011	7.906
41) o-Toluidine	(1)	7.560	106	781949	7.968
44) Hexachloroethane	(1)	7.646	117	212958	7.780
45)$Nitrobenzene-d5	(2)	7.737	82	1149130	15.235
46) Nitrobenzene	(2)	7.764	77	591081	7.353
50) N-Nitrosopiperidine	(2)	8.004	114	222381	7.889
125) 2,4_2,6-Dinitrotoluenes	(3)			494991	16.822
52) Isophorone	(2)	8.149	82	1030867	7.600
53) 2-Nitrophenol	(2)	8.266	139	211678	8.018

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 01-Nov-2018 22:41 art12405

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)	8.368	107	494994	7.666
59) O,O,O-Triethylphosphorothioate	(2)	8.491	198	229434	8.286
58) Benzoic acid	(2)	8.502	105	289792M	6.884
57) bis(2-Chloroethoxy)methane	(2)	8.523	93	660796	7.641
62) 2,4-Dichlorophenol	(2)	8.646	162	365610	7.892
151) Diallate trans/cis	(4)			492926	7.183
65) 1,2,4-Trichlorobenzene	(2)	8.780	180	418654	7.830
68)*Naphthalene-d8	(2)	8.860	136	720449	5.000
69) Naphthalene	(2)	8.892	128	1213698	7.458
70) 4-Chloroaniline	(2)	9.005	127	498635	7.600
71) 2,6-Dichlorophenol	(2)	9.010	162	360078	7.995
72) Hexachloropropene	(2)	9.042	213	271412	7.873
74) Hexachlorobutadiene	(2)	9.117	225	261995	8.314
78) Quinoline	(2)	9.438	129	734362	7.584
79) Caprolactam	(2)	9.550	113	119925	8.395
80) N-Nitrosodi-n-butylamine	(2)	9.582	84	385372	7.152
83) 4-Chloro-3-methylphenol	(2)	9.817	107	438398	7.972
85) Safrole	(2)	9.908	162	325529	7.944
86) 2-Methylnaphthalene	(2)	10.021	142	815297	7.809
87) 1-Methylnaphthalene	(2)	10.181	142	778008	7.786
88) Hexachlorocyclopentadiene	(3)	10.288	237	246392	7.342
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.294	216	440181	7.557
91) cis-Isosafrole	(3)	10.384	162	59827	1.242
93) 2,4,6-Trichlorophenol	(3)	10.497	196	287786	8.445
95) 2,4,5-Trichlorophenol	(3)	10.545	196	303085	8.066
96)$2-Fluorobiphenyl	(3)	10.647	172	1916902	15.213
97) trans-Isosafrole	(3)	10.759	162	311425	6.429
98) 1,1'-Biphenyl	(3)	10.796	154	992970	7.673
99) 2-Chloronaphthalene	(3)	10.812	162	845130	7.346
101) 1-Chloronaphthalene	(3)	10.844	162	740099	7.433
103) Diphenyl ether	(3)	10.983	170	560298	7.763
104) 2-Nitroaniline	(3)	11.000	138	247634	8.558
108) 1,4-Naphthoquinone	(3)	11.112	158	314174	7.468
109) 1,4-Dinitrobenzene	(3)	11.240	168	128134	8.297
110) Dimethylphthalate	(3)	11.336	163	929399	7.775
111) 1,3-Dinitrobenzene	(3)	11.358	168	142552	8.112
113) 2,6-Dinitrotoluene	(3)	11.411	165	207141	8.548
114) Acenaphthylene	(3)	11.481	152	1145255	7.984
117) 3-Nitroaniline	(3)	11.657	138	214354	7.716
118)*Acenaphthene-d10	(3)	11.700	164	377017	5.000

M = Compound was manually integrated.
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on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 01-Nov-2018 22:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.748	153	814544	7.357
120) 2,4-Dinitrophenol	(3)	11.818	184	149102	10.204
121) 4-Nitrophenol	(3)	11.936	109	167912	7.218
122) Pentachlorobenzene	(3)	11.941	250	375755	8.086
124) Dibenzofuran	(3)	12.000	168	1145271	7.634
123) 2,4-Dinitrotoluene	(3)	12.005	165	287850	8.274
126) 1-Naphthylamine	(3)	12.107	143	762873	7.051
127) 2,3,4,6-Tetrachlorophenol	(3)	12.171	232	248308	8.413
128) 2-Naphthylamine	(3)	12.214	143	701925	6.519
129) Diethylphthalate	(3)	12.358	149	913378	7.764
131) Fluorene	(3)	12.449	166	915245	7.702
130) Thionazin	(3)	12.454	107	183228	7.945
132) 4-Chlorophenyl-phenylether	(3)	12.470	204	480493	7.894
133) 5-Nitro-o-toluidine	(3)	12.476	152	254948	8.425
134) 4-Nitroaniline	(3)	12.486	138	222124	8.352
135) 4,6-Dinitro-2-methylphenol	(4)	12.529	198	159359	7.788
136) N-Nitrosodiphenylamine	(4)	12.620	169	752699	7.566
137) NDPA as diphenylamine	(4)	12.620	169	752699	7.566
139) 1,2-Diphenylhydrazine	(4)	12.663	77	1230488	6.989
140)$2,4,6-Tribromophenol	(3)	12.749	330	261542	17.705
142) Tetraethyldithiopyrophosphate	(4)	12.850	97	189598	7.223
144) 1,3,5-Trinitrobenzene	(4)	12.968	213	97930	7.900
145) Diallate (peak 1)	(4)	12.989	86	422216	5.963
146) Phorate	(4)	13.000	75	725943	7.892
147) Phenacetin	(4)	13.021	108	530506	7.609
148) 4-Bromophenyl-phenylether	(4)	13.075	248	273244	7.879
149) Diallate (peak 2)	(4)	13.096	86	70710	1.220
150) Hexachlorobenzene	(4)	13.128	284	280171	7.924
152) Dimethoate	(4)	13.203	87	442810	7.594
153) Atrazine	(4)	13.310	200	256179	8.108
154) Pentachlorophenol	(4)	13.390	266	181350	8.096
155) 4-Aminobiphenyl	(4)	13.401	169	654496	7.562
156) Pentachloronitrobenzene	(4)	13.406	237	127528	7.609
157) Pronamide	(4)	13.503	173	450728	8.359
158)*Phenanthrene-d10	(4)	13.626	188	777681	5.000
159) Dinoseb	(4)	13.647	211	258110	8.297
160) Phenanthrene	(4)	13.658	178	1394817	7.492
162) Anthracene	(4)	13.727	178	1418156	7.765
168) Carbazole	(4)	13.952	167	1236303	7.554
169) Methyl parathion	(4)	14.150	109	353451	8.069

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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 01-Nov-2018 22:41 art12405

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)	14.460	149	1613881	7.624
172) Parathion	(4)	14.701	109	223498	8.105
173) 4-Nitroquinoline-1-oxide	(4)	14.722	190	109526	7.143
227) Total PAHs	(6)			23461427	139.167
174) Octachlorostyrene	(4)	15.059	308	105653	8.076
176) Isodrin	(4)	15.107	193	175252	7.993
178) Fluoranthene	(4)	15.337	202	1647108	8.072
179) Benzidine	(5)	15.573	184	2831095	21.313
180)*Pyrene-d10	(5)	15.658	212	833693	5.000
182) Pyrene	(5)	15.685	202	1679588	7.637
184)$Terphenyl-d14	(5)	15.968	244	2100637	15.697
187) p-Dimethylaminoazobenzene	(5)	16.204	225	269954	7.968
190) Chlorobenzilate	(5)	16.295	139	494770	7.612
192) 3,3'-Dimethylbenzidine	(5)	16.776	212	1046509	8.225
193) Butylbenzylphthalate	(5)	16.835	149	753293	7.713
196) 2-Acetylaminofluorene	(5)	17.204	181	607169	7.543
198) 3,3'-Dichlorobenzidine	(5)	17.717	252	574908	7.814
200) Benzo(a)anthracene	(5)	17.728	228	1614185	8.066
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.739	231	331644	8.064
201) Chrysene	(5)	17.792	228	1554111	7.860
204) bis(2-Ethylhexyl)phthalate	(5)	17.910	149	1064669	7.568
208) 6-Methylchrysene	(5)	18.605	242	1038178	7.787
210) Di-n-octylphthalate	(6)	19.087	149	1841640	7.614
211) Benzo(b)fluoranthene	(6)	19.605	252	1537873	7.810
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.611	256	669518	8.297
213) Benzo(k)fluoranthene	(6)	19.654	252	1496941	7.542
216) Benzo(a)pyrene	(6)	20.140	252	1434517	8.151
218)*Perylene-d12	(6)	20.231	264	756230	5.000
220) 3-Methylcholanthrene	(6)	20.713	268	646431	8.053
222) Dibenz(a,h)acridine	(6)	21.536	279	1085729	7.431
223) Dibenz(a,j)acridine	(6)	21.611	279	1155309	7.505
224) Indeno(1,2,3-cd)pyrene	(6)	21.868	276	1291977M	7.566
225) Dibenz(a,h)anthracene	(6)	21.905	278	1349821	7.595
226) Benzo(g,h,i)perylene	(6)	22.274	276	1360286	7.515

M = Compound was manually integrated.
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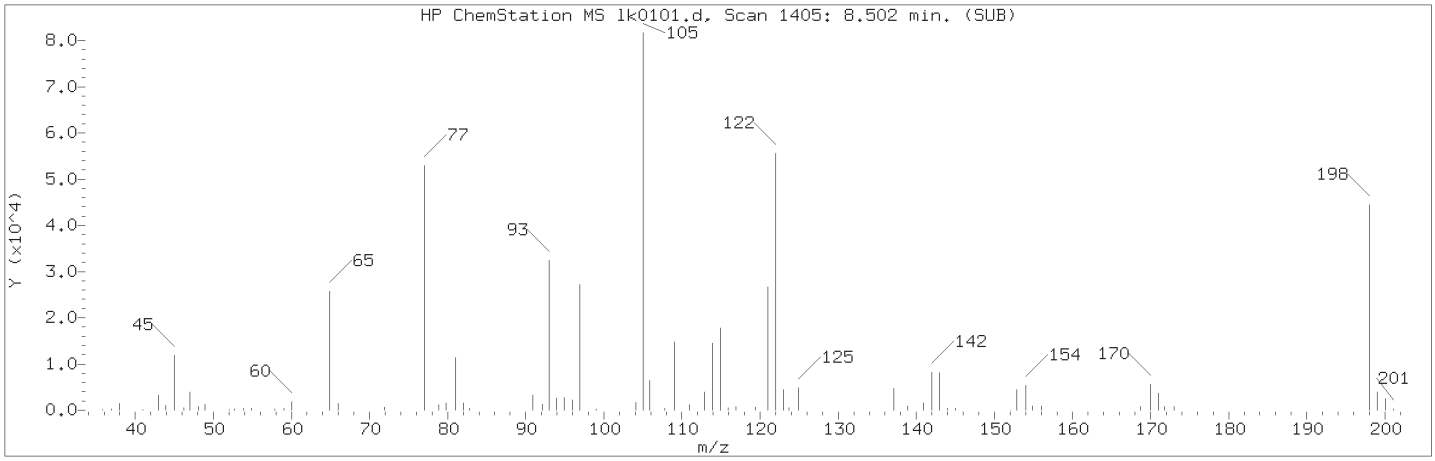
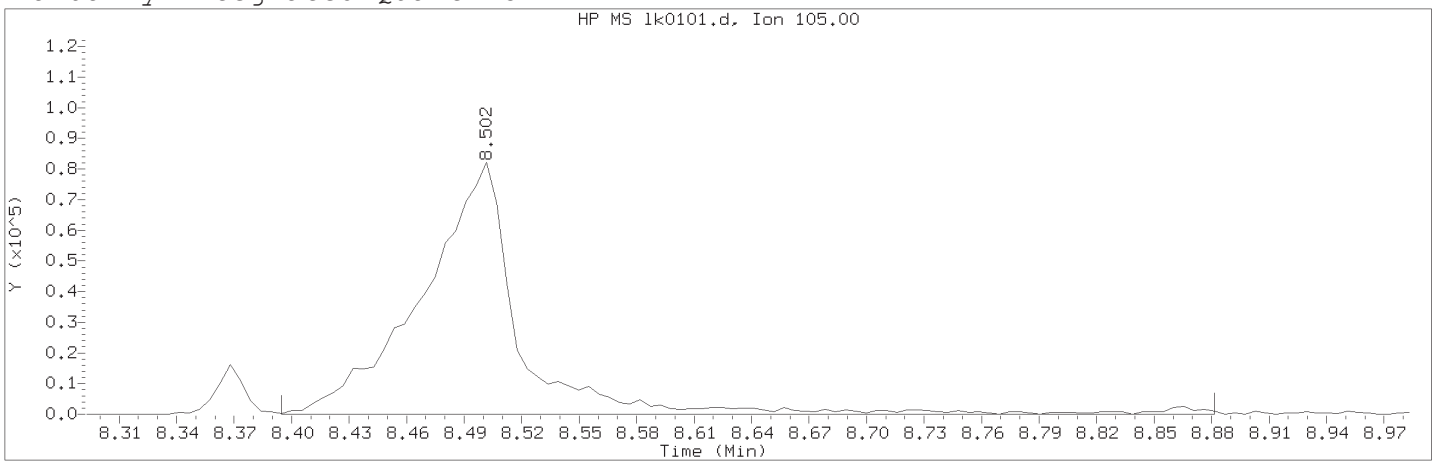
Digitally signed by Ashley R. Transue
on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 01-Nov-2018 22:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

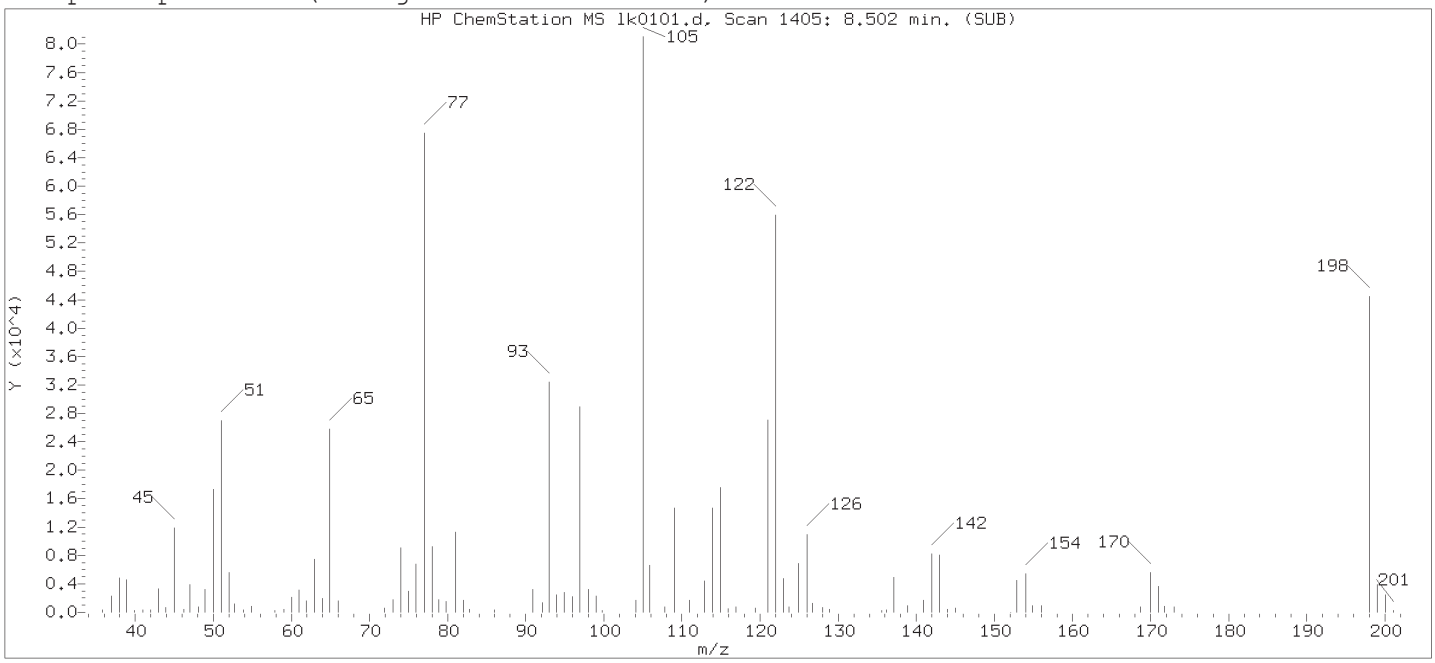
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1405		
Retention Time (minutes)	: 8.502		
Quant Ion	: 105.00		
Area (flag)	: 289792M		
On-Column Amount (ng/ul)	: 6.8837		
Integration start scan	: 1384	Integration stop scan:	1475
Y at integration start	: 29	Y at integration end:	29

Reason for manual integration: improper integration

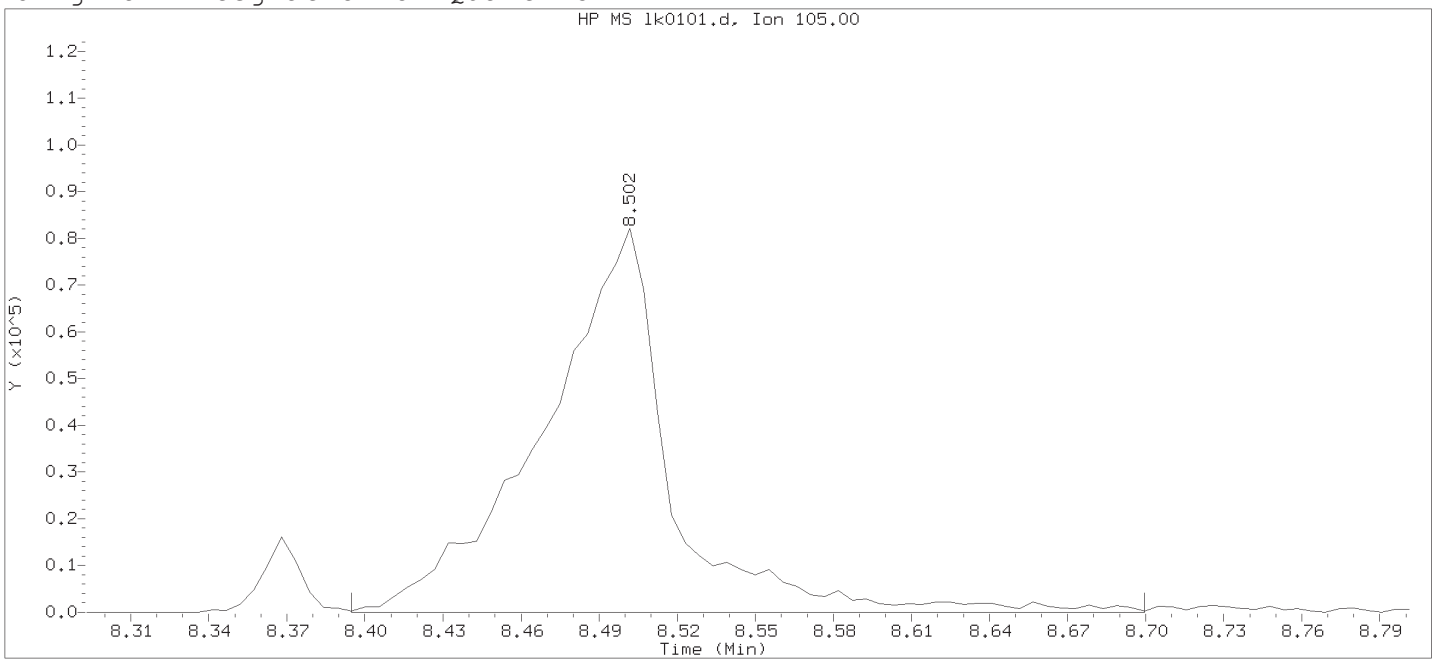
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/02/2018 at 13:09.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

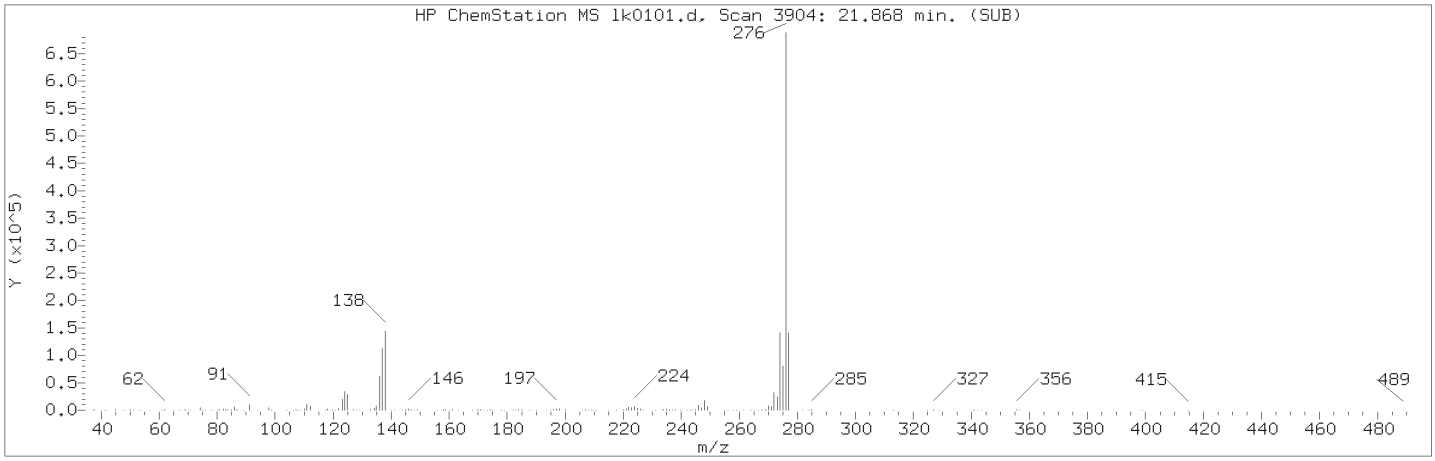
Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:37
Date, time and analyst ID of latest file update: 01-Nov-2018 22:37 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

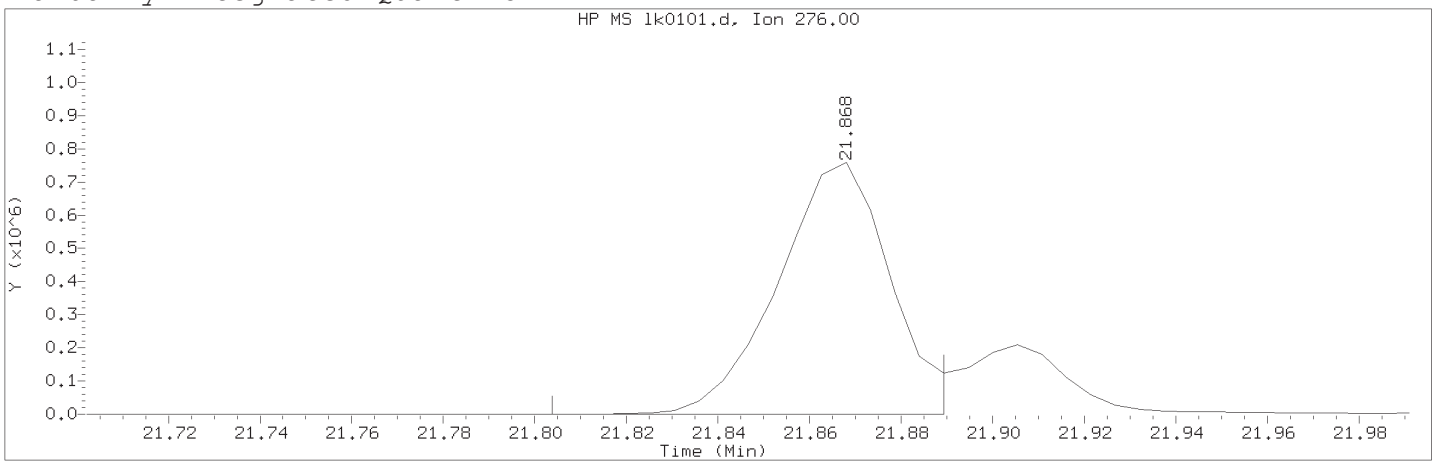
Compound Number	: 58	
Compound Name	: Benzoic acid	
Scan Number	: 1405	
Retention Time (minutes)	: 8.502	
Quant Ion	: 105.00	
Area	: 281211	
On-column Amount (ng/ul)	: 6.6799	
Integration start scan	: 1384	Integration stop scan: 1441
Y at integration start	: 0	Y at integration end: 0

Digitally signed by Ashley R. Transue on 11/01/2018 at 22:44.
Target 3.5 esignature used for TID07.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 01-Nov-2018 22:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

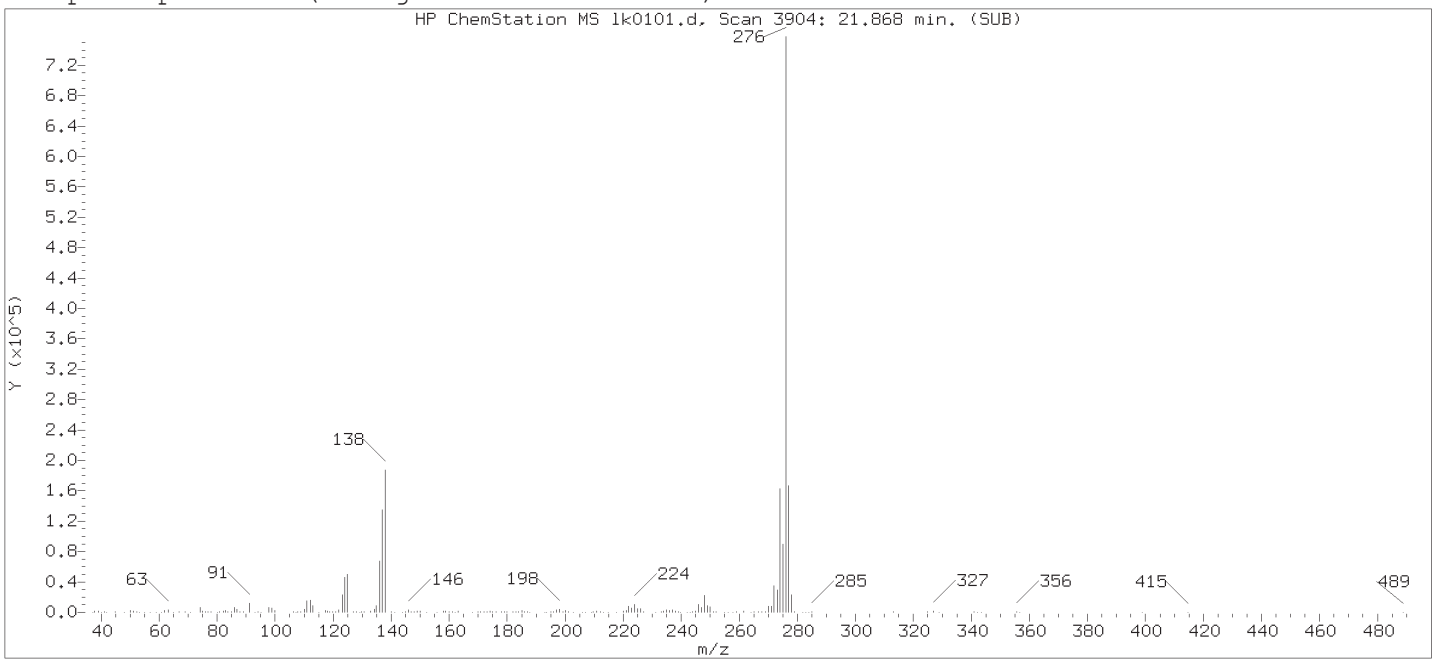
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3904
Retention Time (minutes) : 21.868
Quant Ion : 276.00
Area (flag) : 1291977M
On-Column Amount (ng/ul) : 7.5662
Integration start scan : 3891 Integration stop scan: 3907
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

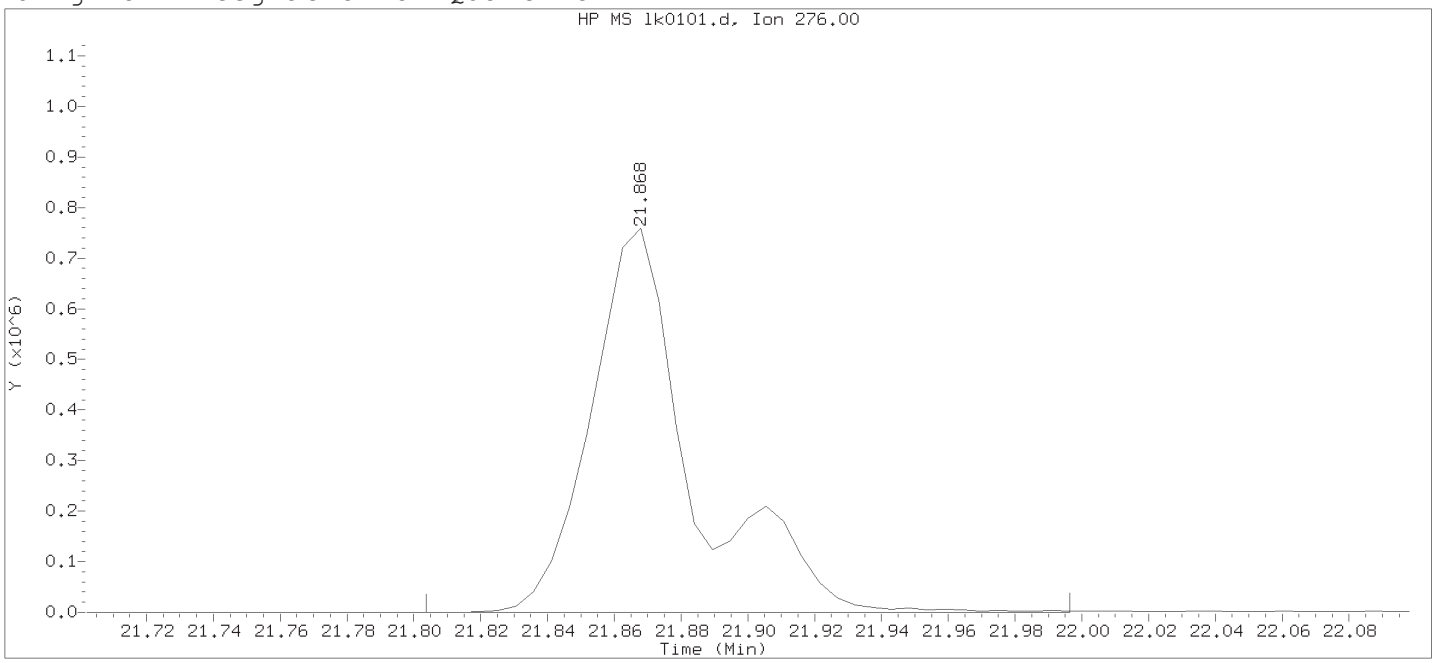
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/01/2018 at 22:44.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/02/2018 at 13:09.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



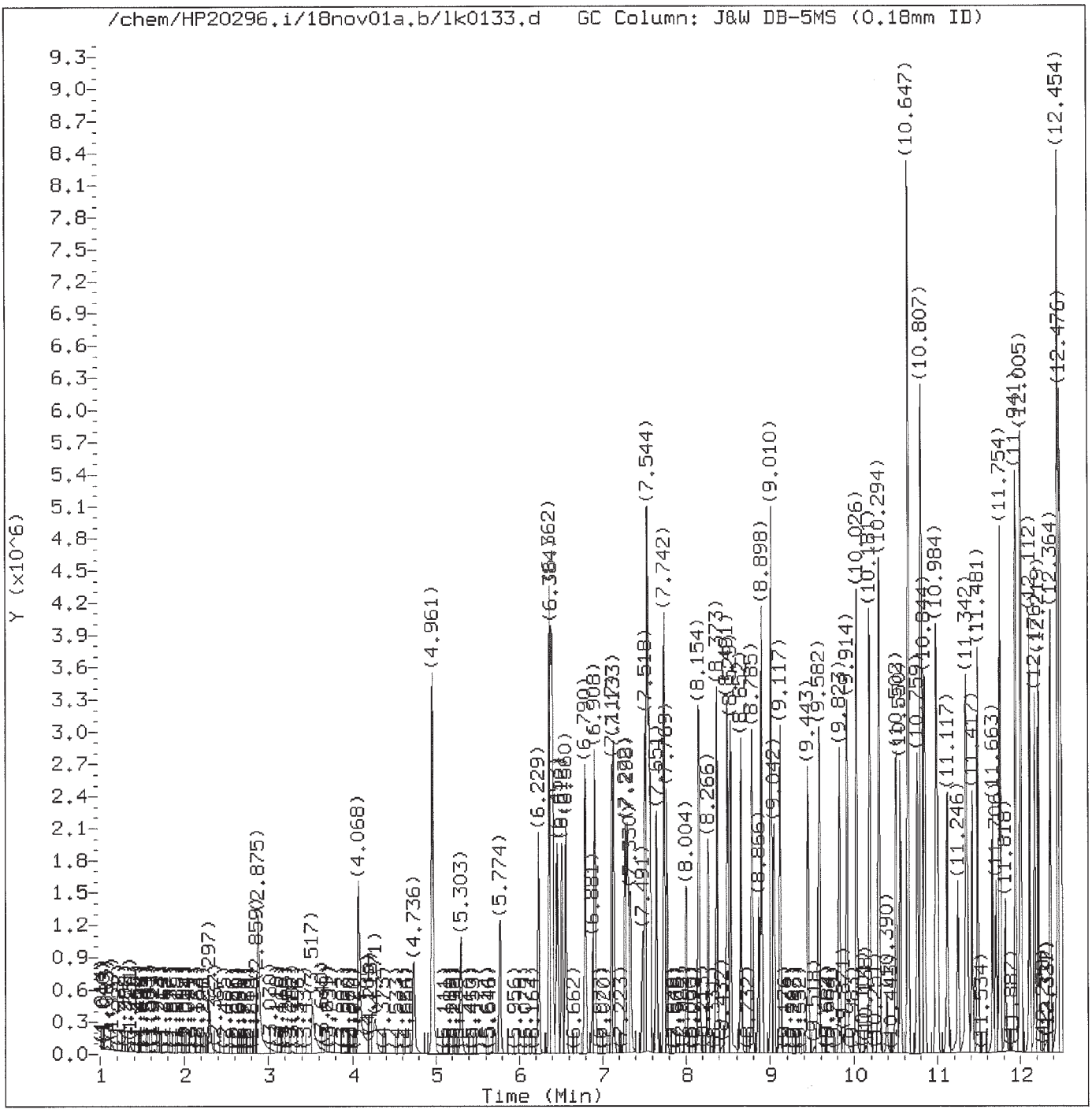
Data File: /chem/HP20296.i/18nov01a.b/lk0101.d Instrument ID: HP20296.i
Injection date and time: 01-NOV-2018 22:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: all1
Calibration date and time: 01-NOV-2018 22:37
Date, time and analyst ID of latest file update: 01-Nov-2018 22:37 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3904		
Retention Time (minutes)	: 21.868		
Quant Ion	: 276.00		
Area	: 1607331		
On-column Amount (ng/ul)	: 9.4130		
Integration start scan	: 3891	Integration stop scan:	3927
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/01/2018 at 22:44.
Target 3.5 esignature used for TIC.



Total Ion Chromatogram (TIC)

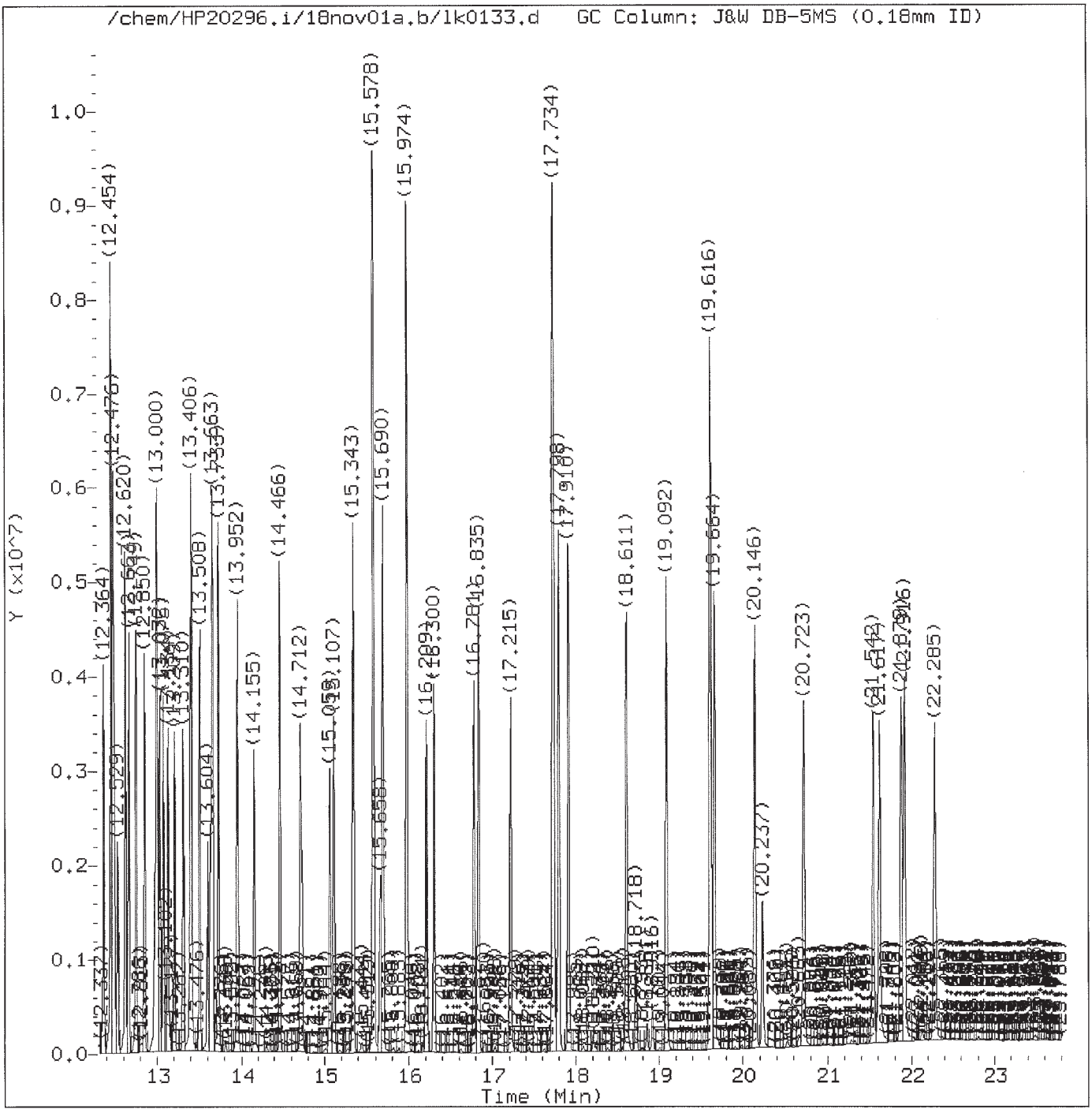
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0133.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 04:21 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Sample Name: SECC12.5 Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:15.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0133.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 04:21 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Sample Name: SECC12.5 Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:15.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0133.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 04:21 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Sample Name: SECC12.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
6) Pyridine	(1)	2.880	79	894122	11.794
12)$2-Fluorophenol	(1)	4.961	112	1521664	24.806
18)$Phenol-d6	(1)	6.362	99	2105416	25.433
19) Phenol	(1)	6.384	94	1202102	12.381
20) Aniline	(1)	6.394	93	1408306	12.342
24) 2-Chlorophenol	(1)	6.560	128	737544	12.897
25) 1,3-Dichlorobenzene	(1)	6.790	146	823861	12.848
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	198155	5.000
27) 1,4-Dichlorobenzene	(1)	6.908	146	829694	12.877
28) Benzyl alcohol	(1)	7.111	108	512117	13.048
29) 1,2-Dichlorobenzene	(1)	7.133	146	785626	12.546
32) 2-Methylphenol	(1)	7.298	108	767175	12.753
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.330	45	1079191	11.714
39) N-Nitroso-di-n-propylamine	(1)	7.539	70	707294	12.620
38) 4-Methylphenol	(1)	7.544	108	862932	13.743
44) Hexachloroethane	(1)	7.651	117	363281	12.415
45)$Nitrobenzene-d5	(2)	7.742	82	1961698	24.915
46) Nitrobenzene	(2)	7.769	77	1038590	12.378
52) Isophorone	(2)	8.154	82	1796150	12.685
53) 2-Nitrophenol	(2)	8.266	139	383158	13.903
55) 2,4-Dimethylphenol	(2)	8.373	107	863175	12.807
57) bis(2-Chloroethoxy)methane	(2)	8.529	93	1124932	12.461
62) 2,4-Dichlorophenol	(2)	8.652	162	640097	13.236
65) 1,2,4-Trichlorobenzene	(2)	8.785	180	719142	12.886
68)*Naphthalene-d8	(2)	8.866	136	752027	5.000
70) 4-Chloroaniline	(2)	9.010	127	872968	12.747
74) Hexachlorobutadiene	(2)	9.117	225	437331	13.296
83) 4-Chloro-3-methylphenol	(2)	9.823	107	748508	13.040
86) 2-Methylnaphthalene	(2)	10.026	142	1437079	13.187
88) Hexachlorocyclopentadiene	(3)	10.288	237	452745	12.733
93) 2,4,6-Trichlorophenol	(3)	10.502	196	501026	13.876
95) 2,4,5-Trichlorophenol	(3)	10.550	196	520122	13.065
96)$2-Fluorobiphenyl	(3)	10.647	172	3367790	25.226
99) 2-Chloronaphthalene	(3)	10.818	162	1522362	12.490
104) 2-Nitroaniline	(3)	11.005	138	432964	14.122
110) Dimethylphthalate	(3)	11.342	163	1604835	12.671
113) 2,6-Dinitrotoluene	(3)	11.417	165	372204	14.496
117) 3-Nitroaniline	(3)	11.663	138	371699	12.628
118)*Acenaphthene-d10	(3)	11.700	164	399452	5.000
120) 2,4-Dinitrophenol	(3)	11.823	184	212586	13.731

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:15.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0133.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 04:21 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:11 knb25316

Sample Name: SECC12.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
121) 4-Nitrophenol	(3)	11.941	109	309662	12.563
124) Dibenzofuran	(3)	12.000	168	2007886	12.632
123) 2,4-Dinitrotoluene	(3)	12.011	165	488483	13.253
129) Diethylphthalate	(3)	12.364	149	1513881	12.146
132) 4-Chlorophenyl-phenylether	(3)	12.470	204	829106	12.856
134) 4-Nitroaniline	(3)	12.492	138	374274	13.282
135) 4,6-Dinitro-2-methylphenol	(4)	12.529	198	291388	13.255
136) N-Nitrosodiphenylamine	(4)	12.620	169	1284006	12.013
140)$2,4,6-Tribromophenol	(3)	12.749	330	462873	29.573
148) 4-Bromophenyl-phenylether	(4)	13.080	248	481386	12.920
154) Pentachlorophenol	(4)	13.390	266	323858	13.458
158)*Phenanthrene-d10	(4)	13.631	188	835521	5.000
168) Carbazole	(4)	13.952	167	2178308	12.389
180)*Pyrene-d10	(5)	15.658	212	887168	5.000
184)$Terphenyl-d14	(5)	15.979	244	3734195	26.222
198) 3,3'-Dichlorobenzidine	(5)	17.728	252	1053697	13.458
210) Di-n-octylphthalate	(6)	19.092	149	3385840	13.392
218)*Perylene-d12	(6)	20.237	264	790458	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:15.
Target 3.5 esignature user ID: knb25316

Raw QC Data

Semivolatiles by GC/MS

Data file: /chem/HP19760.i/18oct31.b/dj2722.d Injection date and time: **31-OCT-2018 15:31**
Data file Sample Info. Line: SBLKWE297;SBLKWE297;1;3;BLANK;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852	(0.000)	869	152	173409	(11)	5.00	
65) Naphthalene-d8	7.793	(0.000)	1202	136	663233	(13)	5.00	
113) Acenaphthene-d10	10.561	(0.000)	1677	164	296177	(8)	5.00	
153) Phenanthrene-d10	12.590	(0.006)	2025	188	527838	(5)	5.00	
175) Pyrene-d10	14.362	(0.006)	2329	212	481080	(0)	5.00	
213) Perylene-d12	18.622	(0.006)	3060	264	473841	(-7)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
11) 2-Fluorophenol	(1)	3.899	(0.000)	112	793821	15.204	30%
17) Phenol-d6	(1)	5.386	(0.001)	99	733810	10.358	21%
44) Nitrobenzene-d5	(2)	6.691	(0.001)	82	878035	13.980	56%
93) 2-Fluorobiphenyl	(3)	9.547	(0.001)	172	1204843	12.734	51%
135) 2,4,6-Tribromophenol	(3)	11.780	(0.000)	330	370285	37.868	76%
179) Terphenyl-d14	(5)	14.688	(0.000)	244	1519615	18.987	76%

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)				Not Detected					0.5
18) Phenol	(1)				Not Detected					0.1
19) Aniline	(1)				Not Detected					0.8
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
27) Benzyl alcohol	(1)				Not Detected					3
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 10/31/2018 at 17:03. Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18oct31.b/dj2722.d Injection date and time: **31-OCT-2018 15:31**
Data file Sample Info. Line: SBLKWE297;SBLKWE297;1;3;BLANK;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

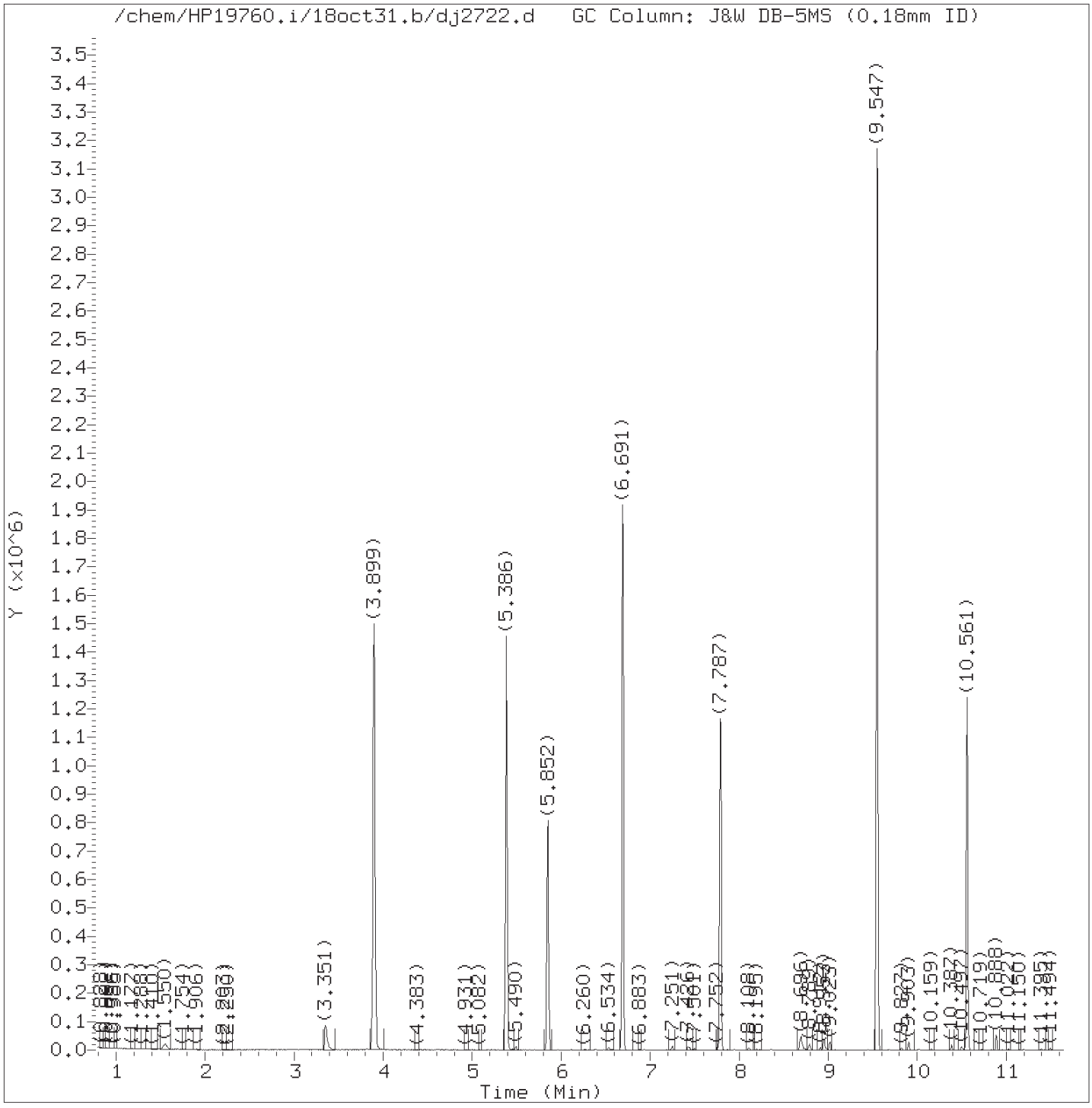
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
96) 2-Chloronaphthalene	(3)			Not Detected					0.1
100) 2-Nitroaniline	(3)			Not Detected					0.5
106) Dimethylphthalate	(3)			Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
112) 3-Nitroaniline	(3)			Not Detected					0.8
115) 2,4-Dinitrophenol	(3)			Not Detected					4
116) 4-Nitrophenol	(3)			Not Detected					3
118) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
119) Dibenzofuran	(3)			Not Detected					0.1
124) Diethylphthalate	(3)			Not Detected					0.5
127) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
129) 4-Nitroaniline	(3)			Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
131) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
149) Pentachlorophenol	(4)			Not Detected					0.3
163) Carbazole	(4)			Not Detected					0.1
193) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
205) Di-n-octylphthalate	(6)			Not Detected					1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 17:03. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

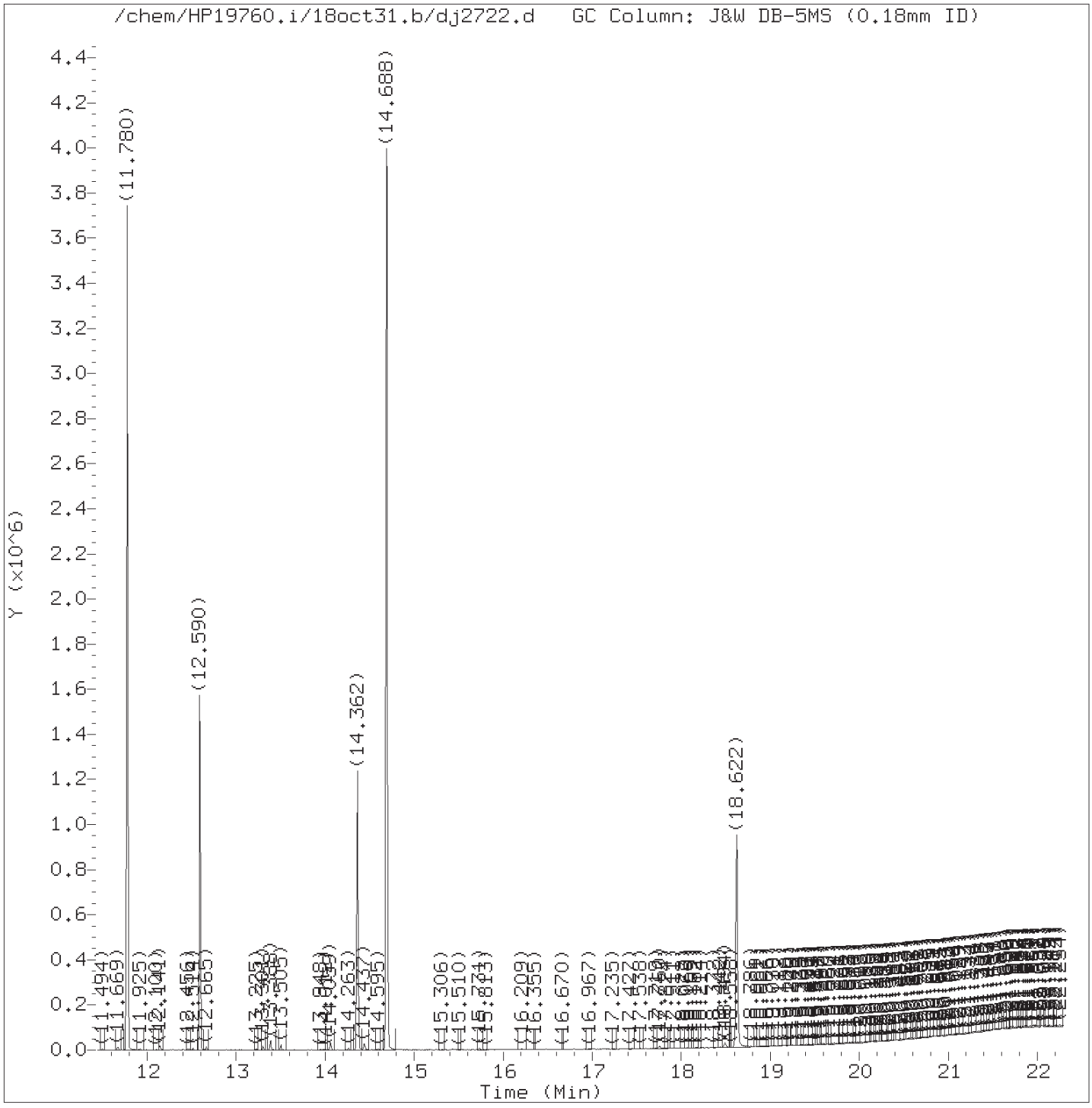
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2722.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 15:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Sample Name: SBLKWE297 Lab Sample ID: SBLKWE297

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:03.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2722.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 15:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Sample Name: SBLKWE297 Lab Sample ID: SBLKWE297

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:03.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2722.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 15:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Sample Name: SBLKWE297 Lab Sample ID: SBLKWE297

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	3.899	112	793821	15.204
17)$Phenol-d6	(1)	5.386	99	733810	10.358
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	173409	5.000
44)$Nitrobenzene-d5	(2)	6.691	82	878035	13.980
65)*Naphthalene-d8	(2)	7.793	136	663233	5.000
93)$2-Fluorobiphenyl	(3)	9.547	172	1204843	12.734
113)*Acenaphthene-d10	(3)	10.561	164	296177	5.000
135)$2,4,6-Tribromophenol	(3)	11.780	330	370285	37.868
153)*Phenanthrene-d10	(4)	12.590	188	527838	5.000
175)*Pyrene-d10	(5)	14.362	212	481080	5.000
179)$Terphenyl-d14	(5)	14.688	244	1519615	18.987
213)*Perylene-d12	(6)	18.622	264	473841	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 10/31/2018 at 17:03.
Target 3.5 esignature user ID: art12405

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0104.d Injection date and time: **02-NOV-2018 00:02**
Data file Sample Info. Line: SBLKWH304;SBLKWH304;1;3;BLANK;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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	6.876	(0.005)	1101	152	166895	(-10)	5.00	
68) Naphthalene-d8	8.860	(0.000)	1472	136	624959	(-13)	5.00	
118) Acenaphthene-d10	11.695	(0.005)	2002	164	335654	(-11)	5.00	
158) Phenanthrene-d10	13.626	(0.000)	2363	188	653158	(-16)	5.00	
180) Pyrene-d10	15.653	(0.005)	2742	212	687268	(-18)	5.00	
218) Perylene-d12	20.231	(0.000)	3598	264	635885	(-16)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
12) 2-Fluorophenol	(1)	4.950	(-0.001)	112	1128529	21.843	44%
18) Phenol-d6	(1)	6.352	(0.000)	99	1043584	14.968	30%
45) Nitrobenzene-d5	(2)	7.731	(0.001)	82	1163384	17.780	71%
96) 2-Fluorobiphenyl	(3)	10.641	(0.000)	172	2018878	17.997	72%
140) 2,4,6-Tribromophenol	(3)	12.748	(0.000)	330	629719	47.880	96%
184) Terphenyl-d14	(5)	15.974	(-0.001)	244	2482610	22.504	90%

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

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Data file: /chem/HP20296.i/18nov01a.b/lk0104.d Injection date and time: **02-NOV-2018 00:02**
Data file Sample Info. Line: SBLKWH304;SBLKWH304;1;3;BLANK;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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

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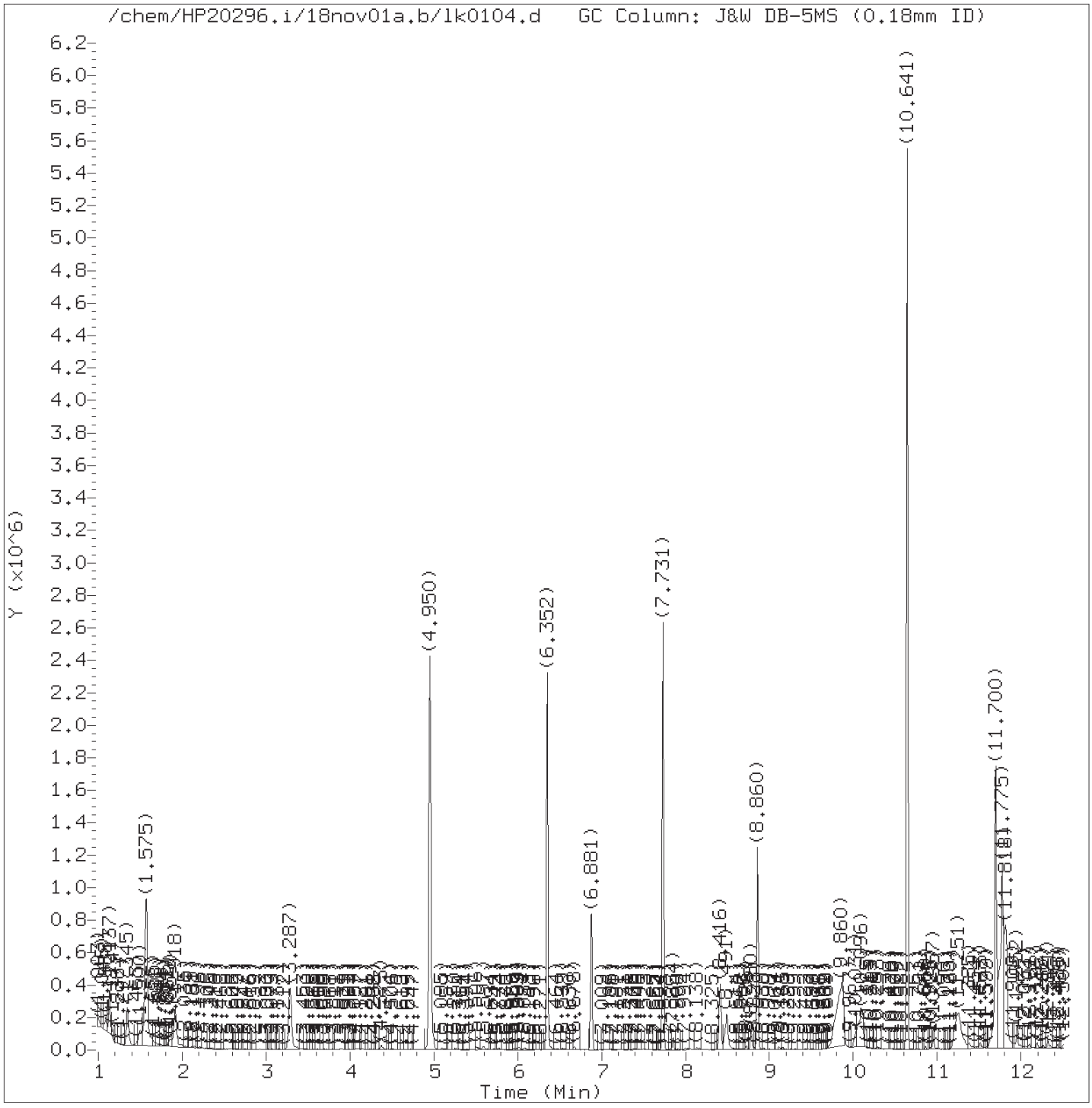
Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0104.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: SBLKWH304 Lab Sample ID: SBLKWH304

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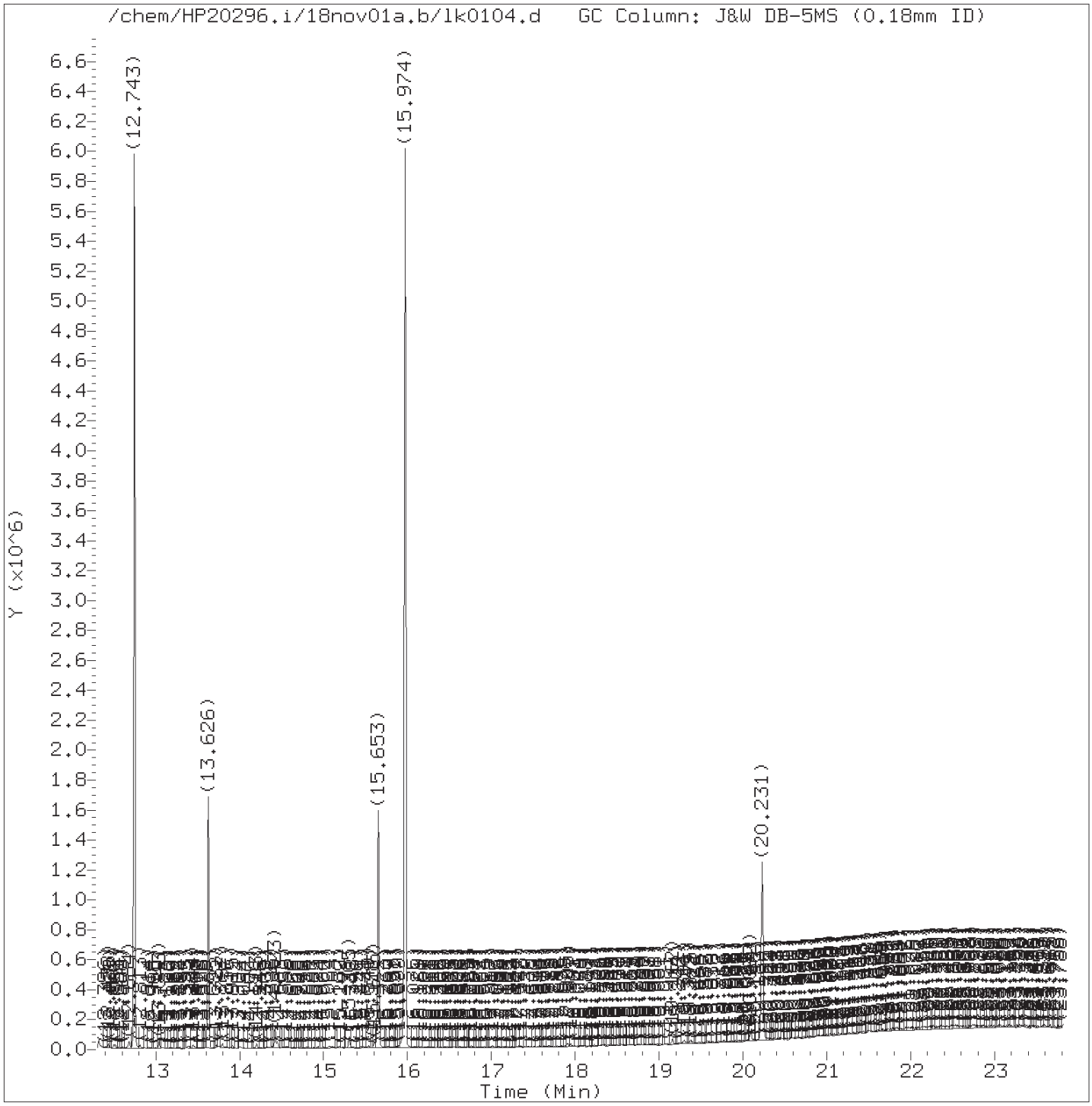
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0104.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: SBLKWH304 Lab Sample ID: SBLKWH304

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0104.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:02 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: SBLKWH304 Lab Sample ID: SBLKWH304

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.950	112	1128529	21.843
18)$Phenol-d6	(1)	6.352	99	1043584	14.968
26)*1,4-Dichlorobenzene-d4	(1)	6.876	152	166895	5.000
45)$Nitrobenzene-d5	(2)	7.731	82	1163384	17.780
68)*Naphthalene-d8	(2)	8.860	136	624959	5.000
96)$2-Fluorobiphenyl	(3)	10.641	172	2018878	17.997
118)*Acenaphthene-d10	(3)	11.695	164	335654	5.000
140)$2,4,6-Tribromophenol	(3)	12.748	330	629719	47.880
158)*Phenanthrene-d10	(4)	13.626	188	653158	5.000
180)*Pyrene-d10	(5)	15.653	212	687268	5.000
184)$Terphenyl-d14	(5)	15.974	244	2482610	22.504
218)*Perylene-d12	(6)	20.231	264	635885	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Data file: /chem/HP19760.i/18oct31.b/dj2723.d Injection date and time: **31-OCT-2018 15:58**
Data file Sample Info. Line: 297WELCS;297WELCS;1;3;LCS;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852	(0.000)	869	152	144284	(-7)	5.00	
65) Naphthalene-d8	7.793	(0.000)	1202	136	540653	(-8)	5.00	
113) Acenaphthene-d10	10.561	(0.000)	1677	164	247924	(-9)	5.00	
153) Phenanthrene-d10	12.590	(0.006)	2025	188	438864	(-12)	5.00	
175) Pyrene-d10	14.362	(0.006)	2329	212	421475	(-12)	5.00	
213) Perylene-d12	18.622	(0.006)	3060	264	448333	(-12)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
11) 2-Fluorophenol	(1)	3.917	(-0.003)	112	1095831	25.226	50%
17) Phenol-d6	(1)	5.391	(0.000)	99	1133034	19.221	38%
44) Nitrobenzene-d5	(2)	6.697	(0.000)	82	902885	17.635	71%
93) 2-Fluorobiphenyl	(3)	9.547	(0.001)	172	1204271	15.205	61%
135) 2,4,6-Tribromophenol	(3)	11.780	(0.000)	330	364279	44.504	89%
179) Terphenyl-d14	(5)	14.688	(0.000)	244	1609353	22.952	92%

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)	1.568	(-0.010)	79	229433	4.131	16.52			0.5
18) Phenol	(1)	5.409	(-0.000)	94	323031	4.790	19.16			0.1
19) Aniline	(1)	5.374	(-0.000)	93	439417	5.500	22.00			0.8
23) 2-Chlorophenol	(1)	5.531	(-0.000)	128	390292	9.304	37.22			0.1
24) 1,3-Dichlorobenzene	(1)	5.758	(-0.000)	146	313940	6.591	26.36			0.1
26) 1,4-Dichlorobenzene	(1)	5.875	(-0.000)	146	324656	6.682	26.73			0.1
27) Benzyl alcohol	(1)	6.108	(-0.000)	108	271126	9.473	37.89			3
28) 1,2-Dichlorobenzene	(1)	6.091	(-0.000)	146	323211	7.080	28.32			0.1
31) 2-Methylphenol	(1)	6.312	(0.000)	108	374686	8.995	35.98			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	6.347	(-0.001)	45	470402	8.116	32.46			0.1
37) 4-Methylphenol	(1)	6.563	(-0.000)	108	402794	8.372	33.49			0.1
38) N-Nitroso-di-n-propylamine	(1)	6.528	(-0.000)	70	330256	9.419	37.68			0.2
43) Hexachloroethane	(1)	6.604	(-0.000)	117	121569	6.169	24.68			0.3
45) Nitrobenzene	(2)	6.726	(0.000)	77	469889	8.968	35.87			0.1
50) Isophorone	(2)	7.122	(0.000)	82	868060	9.920	39.68			0.1
51) 2-Nitrophenol	(2)	7.222	(0.000)	139	203680	10.100	40.40			0.8
53) 2,4-Dimethylphenol	(2)	7.367	(0.000)	107	359160	8.007	32.03			0.8
55) bis(2-Chloroethoxy)methane	(2)	7.513	(0.000)	93	533268	9.339	37.36			0.1
60) 2,4-Dichlorophenol	(2)	7.606	(0.000)	162	312195	9.466	37.86			0.1
62) 1,2,4-Trichlorobenzene	(2)	7.723	(0.000)	180	253929	6.930	27.72			0.1
67) 4-Chloroaniline	(2)	7.950	(0.000)	127	360272	7.619	30.47			1
71) Hexachlorobutadiene	(2)	8.072	(0.000)	225	125330	6.073	24.29			0.1
80) 4-Chloro-3-methylphenol	(2)	8.784	(-0.000)	107	372539	10.260	41.04			0.1
83) 2-Methylnaphthalene	(2)	8.924	(0.000)	142	626123	8.041	32.16			0.03
85) Hexachlorocyclopentadiene	(3)	9.203	(0.000)	237	44343	2.144	8.57		J	1
90) 2,4,6-Trichlorophenol	(3)	9.401	(0.000)	196	210499	10.661	42.64			0.1
92) 2,4,5-Trichlorophenol	(3)	9.448	(0.000)	196	223703	10.616	42.46			0.1

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Data file: /chem/HP19760.i/18oct31.b/dj2723.d Injection date and time: **31-OCT-2018 15:58**
Data file Sample Info. Line: 297WELCS;297WELCS;1;3;LCS;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

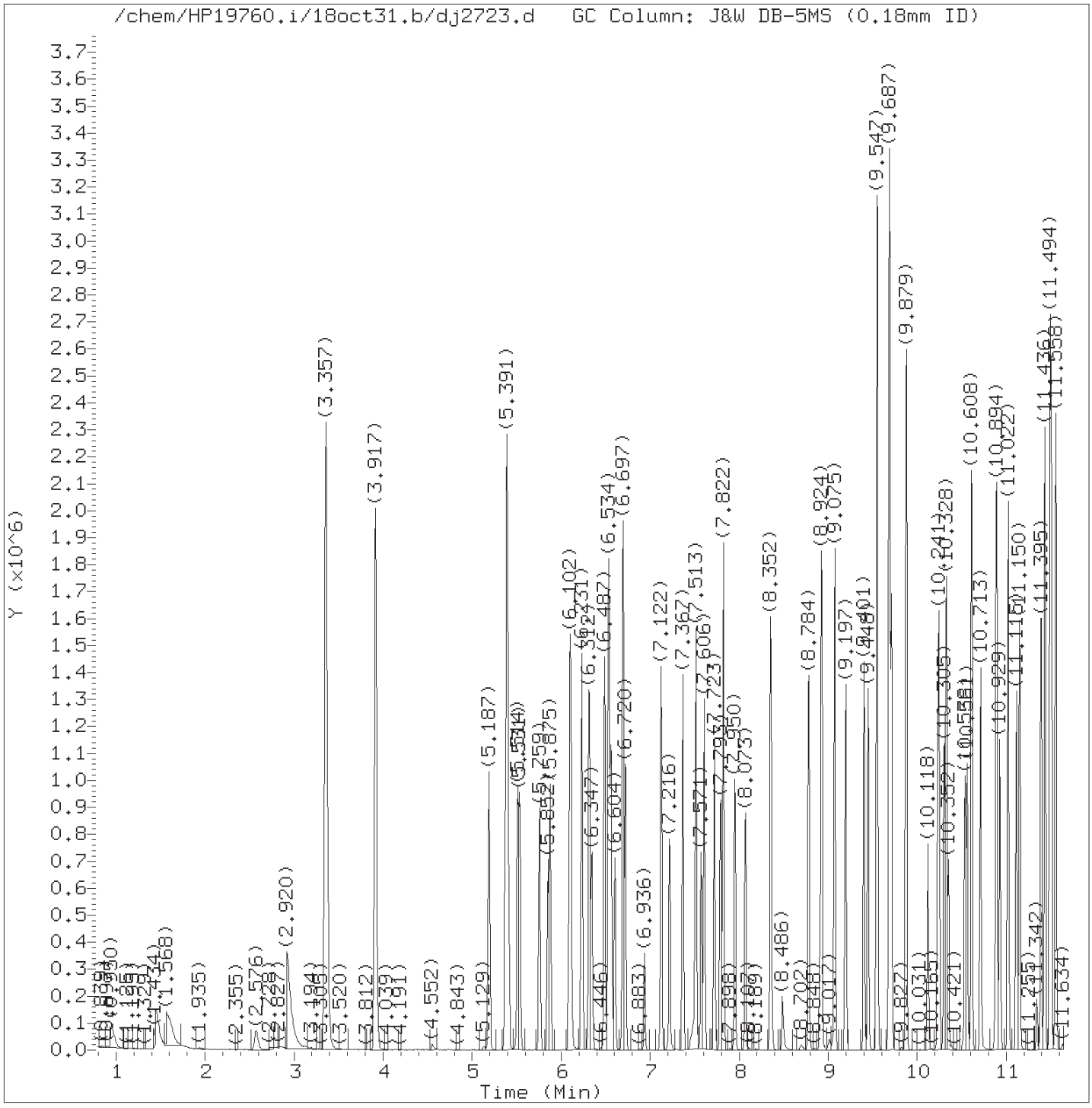
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
96) 2-Chloronaphthalene	(3)	9.681(0.000)	162	602121	8.543	34.17			0.1
100) 2-Nitroaniline	(3)	9.879(0.000)	138	242094	11.956	47.82			0.5
106) Dimethylphthalate	(3)	10.247(0.000)	163	677346	9.109	36.44			0.5
108) 2,6-Dinitrotoluene	(3)	10.305(0.000)	165	185580	11.158	44.63			0.1
112) 3-Nitroaniline	(3)	10.538(0.000)	138	191842	10.678	42.71			0.8
115) 2,4-Dinitrophenol	(3)	10.713(-0.000)	184	240534	27.272	109.09			4
116) 4-Nitrophenol	(3)	10.882(0.000)	109	77164	6.310	25.24		J	3
118) 2,4-Dinitrotoluene	(3)	10.928(0.000)	165	249221	11.107	44.43			0.3
119) Dibenzofuran	(3)	10.894(-0.000)	168	883388	9.181	36.72			0.1
124) Diethylphthalate	(3)	11.395(-0.000)	149	725563	10.319	41.28			0.5
127) 4-Chlorophenyl-phenylether	(3)	11.494(-0.000)	204	312713	8.713	34.85			0.1
129) 4-Nitroaniline	(3)	11.494(-0.000)	138	189736	9.583	38.33			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	11.552(0.000)	198	150685	12.865	51.46			2
131) N-Nitrosodiphenylamine	(4)	11.669(-0.000)	169	659278	11.184	44.73			0.2
143) 4-Bromophenyl-phenylether	(4)	12.129(0.000)	248	181656	9.317	37.27			0.1
149) Pentachlorophenol	(4)	12.403(0.000)	266	144382	12.293	49.17			0.3
163) Carbazole	(4)	12.887(-0.000)	167	1075112	11.108	44.43			0.1
193) 3,3'-Dichlorobenzidine	(5)	16.285(-0.000)	252	353925	9.259	37.04			0.8
205) Di-n-octylphthalate	(6)	17.678(0.000)	149	1467420	10.916	43.66			1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 17:03. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

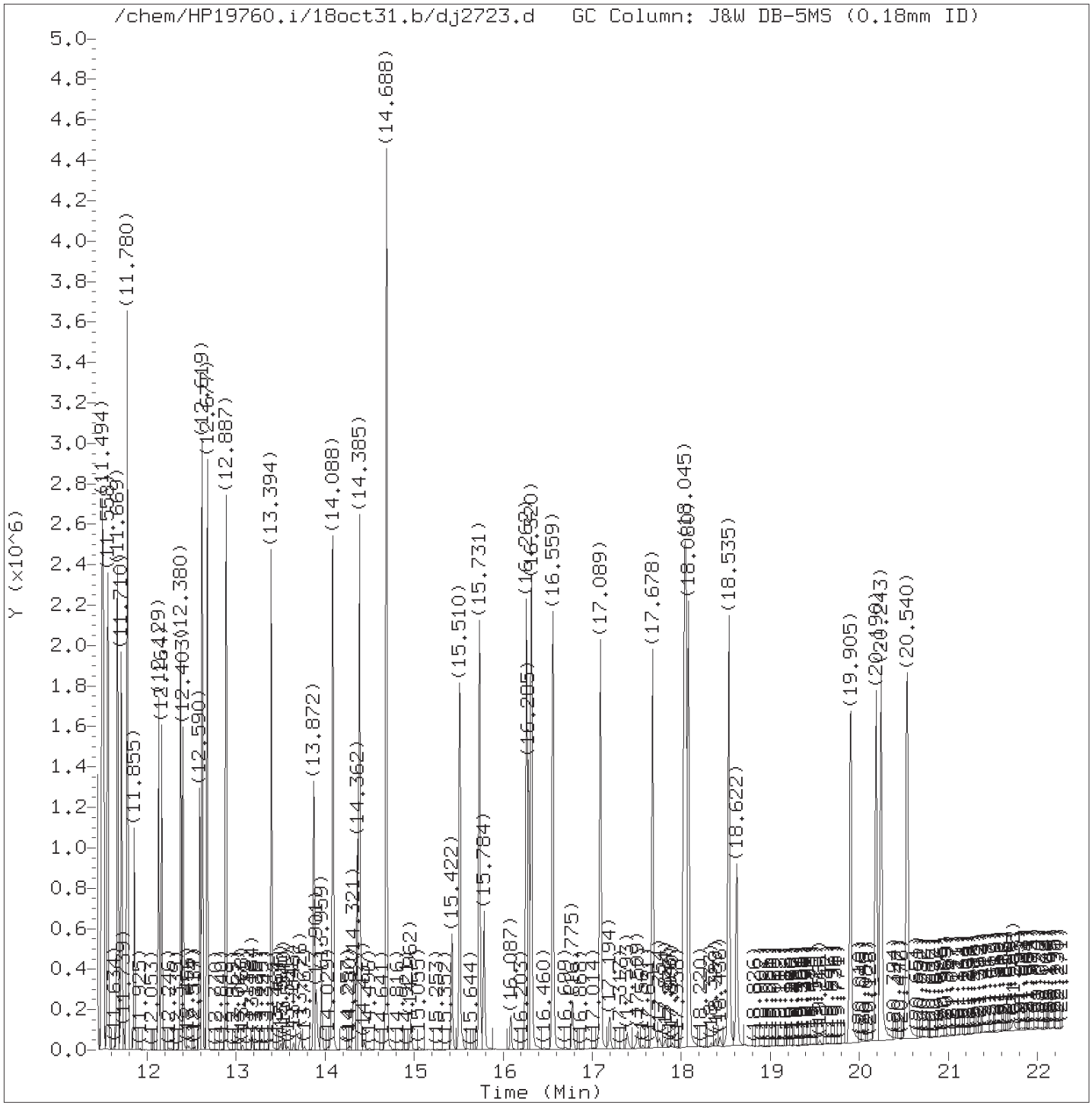
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2723.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 15:58 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Sample Name: 297WELCS Lab Sample ID: 297WELCS

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:03.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2723.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 15:58 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Sample Name: 297WELCS Lab Sample ID: 297WELCS

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:03.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2723.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 15:58 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Sample Name: 297WELCS Lab Sample ID: 297WELCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
5) Pyridine	(1)	1.568	79	229433	4.131
11)$2-Fluorophenol	(1)	3.917	112	1095831	25.226
19) Aniline	(1)	5.374	93	439417	5.500
17)$Phenol-d6	(1)	5.391	99	1133034	19.221
18) Phenol	(1)	5.409	94	323031	4.790
23) 2-Chlorophenol	(1)	5.531	128	390292	9.304
24) 1,3-Dichlorobenzene	(1)	5.759	146	313940	6.591
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	144284	5.000
26) 1,4-Dichlorobenzene	(1)	5.875	146	324656	6.682
28) 1,2-Dichlorobenzene	(1)	6.091	146	323211	7.080
27) Benzyl alcohol	(1)	6.108	108	271126	9.473
31) 2-Methylphenol	(1)	6.312	108	374686	8.995
33) 2,2'-oxybis(1-Chloropropane)	(1)	6.347	45	470402	8.116
38) N-Nitroso-di-n-propylamine	(1)	6.528	70	330256	9.419
37) 4-Methylphenol	(1)	6.563	108	402794	8.372
43) Hexachloroethane	(1)	6.604	117	121569	6.169
44)$Nitrobenzene-d5	(2)	6.697	82	902885	17.635
45) Nitrobenzene	(2)	6.726	77	469889	8.968
50) Isophorone	(2)	7.122	82	868060	9.920
51) 2-Nitrophenol	(2)	7.222	139	203680	10.100
53) 2,4-Dimethylphenol	(2)	7.367	107	359160	8.007
55) bis(2-Chloroethoxy)methane	(2)	7.513	93	533268	9.339
60) 2,4-Dichlorophenol	(2)	7.606	162	312195	9.466
62) 1,2,4-Trichlorobenzene	(2)	7.723	180	253929	6.930
65)*Naphthalene-d8	(2)	7.793	136	540653	5.000
67) 4-Chloroaniline	(2)	7.950	127	360272	7.619
71) Hexachlorobutadiene	(2)	8.073	225	125330	6.073
80) 4-Chloro-3-methylphenol	(2)	8.784	107	372539	10.260
83) 2-Methylnaphthalene	(2)	8.924	142	626123	8.041
85) Hexachlorocyclopentadiene	(3)	9.203	237	44343	2.144
90) 2,4,6-Trichlorophenol	(3)	9.401	196	210499	10.661
92) 2,4,5-Trichlorophenol	(3)	9.448	196	223703	10.616
93)$2-Fluorobiphenyl	(3)	9.547	172	1204271	15.205
96) 2-Chloronaphthalene	(3)	9.681	162	602121	8.543
100) 2-Nitroaniline	(3)	9.879	138	242094	11.956
106) Dimethylphthalate	(3)	10.247	163	677346	9.109
108) 2,6-Dinitrotoluene	(3)	10.305	165	185580	11.158
112) 3-Nitroaniline	(3)	10.538	138	191842	10.678
113)*Acenaphthene-d10	(3)	10.561	164	247924	5.000
115) 2,4-Dinitrophenol	(3)	10.713	184	240534	27.272

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:03.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2723.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 15:58 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:45 art12405

Sample Name: 297WELCS Lab Sample ID: 297WELCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
116) 4-Nitrophenol	(3)	10.882	109	77164	6.310
119) Dibenzofuran	(3)	10.894	168	883388	9.181
118) 2,4-Dinitrotoluene	(3)	10.929	165	249221	11.107
124) Diethylphthalate	(3)	11.395	149	725563	10.319
129) 4-Nitroaniline	(3)	11.494	138	189736	9.583
127) 4-Chlorophenyl-phenylether	(3)	11.494	204	312713	8.713
130) 4,6-Dinitro-2-methylphenol	(4)	11.552	198	150685	12.865
131) N-Nitrosodiphenylamine	(4)	11.669	169	659278	11.184
135)$2,4,6-Tribromophenol	(3)	11.780	330	364279	44.504
143) 4-Bromophenyl-phenylether	(4)	12.129	248	181656	9.317
149) Pentachlorophenol	(4)	12.403	266	144382	12.293
153)*Phenanthrene-d10	(4)	12.590	188	438864	5.000
163) Carbazole	(4)	12.887	167	1075112	11.108
175)*Pyrene-d10	(5)	14.362	212	421475	5.000
179)$Terphenyl-d14	(5)	14.688	244	1609353	22.952
193) 3,3'-Dichlorobenzidine	(5)	16.285	252	353925	9.259
205) Di-n-octylphthalate	(6)	17.678	149	1467420	10.916
213)*Perylene-d12	(6)	18.622	264	448333	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:03.
Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18oct31.b/dj2724.d Injection date and time: **31-OCT-2018 16:26**
Data file Sample Info. Line: 297WELCSD;297WELCSD;1;3;LCSD;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 16:53 Automation

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	5.852	(0.000)	869	152	135918	(-13)	5.00	
65) Naphthalene-d8	7.793	(0.000)	1202	136	516146	(-12)	5.00	
113) Acenaphthene-d10	10.562	(0.000)	1677	164	240003	(-12)	5.00	
153) Phenanthrene-d10	12.590	(0.006)	2025	188	410271	(-18)	5.00	
175) Pyrene-d10	14.362	(0.006)	2329	212	409336	(-15)	5.00	
213) Perylene-d12	18.622	(0.006)	3060	264	438324	(-14)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
11) 2-Fluorophenol	(1)	3.917	(-0.003)	112	1019905	24.923	50%
17) Phenol-d6	(1)	5.391	(0.000)	99	1130020	20.350	41%
44) Nitrobenzene-d5	(2)	6.697	(0.000)	82	903755	18.490	74%
93) 2-Fluorobiphenyl	(3)	9.547	(0.001)	172	1219177	15.902	64%
135) 2,4,6-Tribromophenol	(3)	11.780	(0.000)	330	363533	45.878	92%
179) Terphenyl-d14	(5)	14.688	(0.000)	244	1557263	22.867	91%

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
5) Pyridine	(1)	1.585	(-0.013)	79	208919	3.993	15.97			0.5
18) Phenol	(1)	5.409	(-0.000)	94	318179	5.008	20.03			0.1
19) Aniline	(1)	5.368	(-0.000)	93	429386	5.706	22.82			0.8
23) 2-Chlorophenol	(1)	5.537	(-0.000)	128	395635	10.012	40.05			0.1
24) 1,3-Dichlorobenzene	(1)	5.759	(-0.000)	146	320333	7.139	28.55			0.1
26) 1,4-Dichlorobenzene	(1)	5.875	(0.000)	146	337591	7.376	29.50			0.1
27) Benzyl alcohol	(1)	6.108	(0.000)	108	254452	9.437	37.75			3
28) 1,2-Dichlorobenzene	(1)	6.091	(0.000)	146	327633	7.618	30.47			0.1
31) 2-Methylphenol	(1)	6.312	(0.000)	108	383464	9.772	39.09			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	6.342	(-0.000)	45	475130	8.702	34.81			0.1
37) 4-Methylphenol	(1)	6.557	(0.000)	108	407448	8.990	35.96			0.1
38) N-Nitroso-di-n-propylamine	(1)	6.528	(0.000)	70	338750	10.256	41.02			0.2
43) Hexachloroethane	(1)	6.604	(0.000)	117	122710	6.611	26.44			0.3
45) Nitrobenzene	(2)	6.720	(0.000)	77	468823	9.373	37.49			0.1
50) Isophorone	(2)	7.123	(0.000)	82	889929	10.653	42.61			0.1
51) 2-Nitrophenol	(2)	7.216	(0.000)	139	214895	11.163	44.65			0.8
53) 2,4-Dimethylphenol	(2)	7.367	(0.000)	107	362825	8.473	33.89			0.8
55) bis(2-Chloroethoxy)methane	(2)	7.513	(0.000)	93	539672	9.900	39.60			0.1
60) 2,4-Dichlorophenol	(2)	7.606	(-0.000)	162	323616	10.278	41.11			0.1
62) 1,2,4-Trichlorobenzene	(2)	7.723	(-0.000)	180	261713	7.481	29.93			0.1
67) 4-Chloroaniline	(2)	7.950	(0.000)	127	338399	7.496	29.98			1
71) Hexachlorobutadiene	(2)	8.073	(0.000)	225	129026	6.549	26.20			0.1
80) 4-Chloro-3-methylphenol	(2)	8.784	(0.000)	107	391258	11.287	45.15			0.1
83) 2-Methylnaphthalene	(2)	8.924	(0.000)	142	642699	8.645	34.58			0.03
85) Hexachlorocyclopentadiene	(3)	9.203	(-0.000)	237	55244	2.759	11.03			1
90) 2,4,6-Trichlorophenol	(3)	9.402	(0.000)	196	223695	11.703	46.81			0.1
92) 2,4,5-Trichlorophenol	(3)	9.448	(0.000)	196	236747	11.606	46.42			0.1

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Data file: /chem/HP19760.i/18oct31.b/dj2724.d Injection date and time: **31-OCT-2018 16:26**
Data file Sample Info. Line: 297WELCSD;297WELCSD;1;3;LCSD;;DOD26; Instrument ID: **HP19760.i** Batch: **18297WAE**
Date, time and analyst ID of latest file update: 31-Oct-2018 16:53 Automation

Blank Data file reference: **/chem/HP19760.i/18oct31.b/dj2722.d**

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 31-OCT-2018 15:30
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18oct31.b/dj2721b.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))

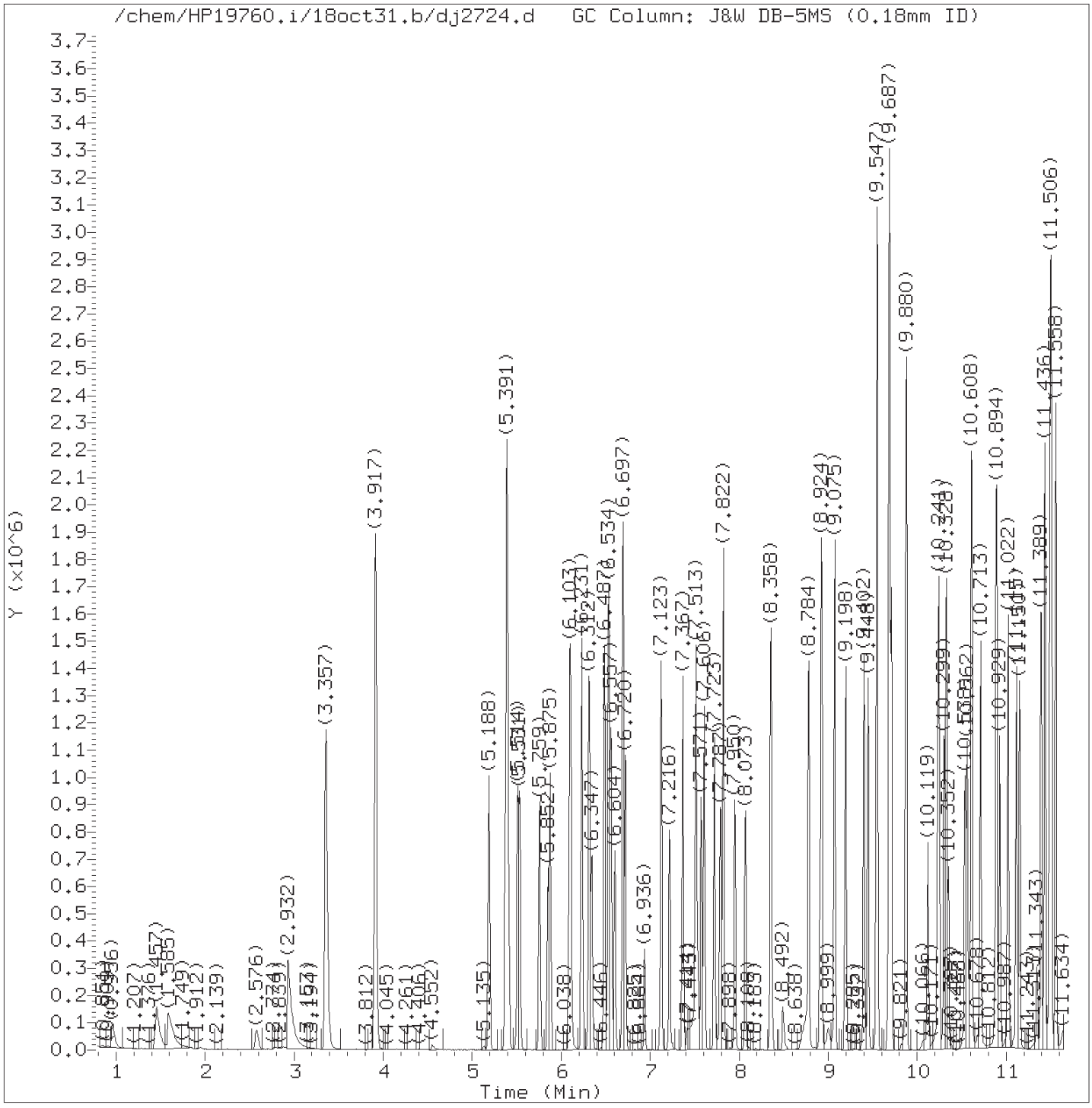
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
96) 2-Chloronaphthalene	(3)	9.681(0.000)	162	626251	9.179	36.72			0.1
100) 2-Nitroaniline	(3)	9.880(-0.000)	138	245938	12.547	50.19			0.5
106) Dimethylphthalate	(3)	10.247(-0.000)	163	739852	10.278	41.11			0.5
108) 2,6-Dinitrotoluene	(3)	10.299(0.000)	165	189690	11.782	47.13			0.1
112) 3-Nitroaniline	(3)	10.538(-0.000)	138	180490	10.377	41.51			0.8
115) 2,4-Dinitrophenol	(3)	10.713(0.000)	184	255731	29.952	119.81			4
116) 4-Nitrophenol	(3)	10.882(0.000)	109	68770	5.809	23.24		J	3
118) 2,4-Dinitrotoluene	(3)	10.929(0.000)	165	245027	11.280	45.12			0.3
119) Dibenzofuran	(3)	10.894(0.000)	168	899545	9.657	38.63			0.1
124) Diethylphthalate	(3)	11.395(0.000)	149	727580	10.689	42.76			0.5
127) 4-Chlorophenyl-phenylether	(3)	11.494(0.000)	204	315903	9.092	36.37			0.1
129) 4-Nitroaniline	(3)	11.494(0.000)	138	175064	9.133	36.53			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	11.552(0.000)	198	151750	13.858	55.43			2
131) N-Nitrosodiphenylamine	(4)	11.669(-0.000)	169	655235	11.890	47.56			0.2
143) 4-Bromophenyl-phenylether	(4)	12.129(0.000)	248	178469	9.791	39.16			0.1
149) Pentachlorophenol	(4)	12.403(0.000)	266	153164	13.949	55.80			0.3
163) Carbazole	(4)	12.887(-0.000)	167	1053827	11.647	46.59			0.1
193) 3,3'-Dichlorobenzidine	(5)	16.285(-0.000)	252	355529	9.577	38.31			0.8
205) Di-n-octylphthalate	(6)	17.678(0.000)	149	1492737	11.312	45.25			1

Total number of targets = 46

Digitally signed by Ashley R. Transue on 10/31/2018 at 17:04. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Holly B. Ziegler on 11/01/2018 at 11:27. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

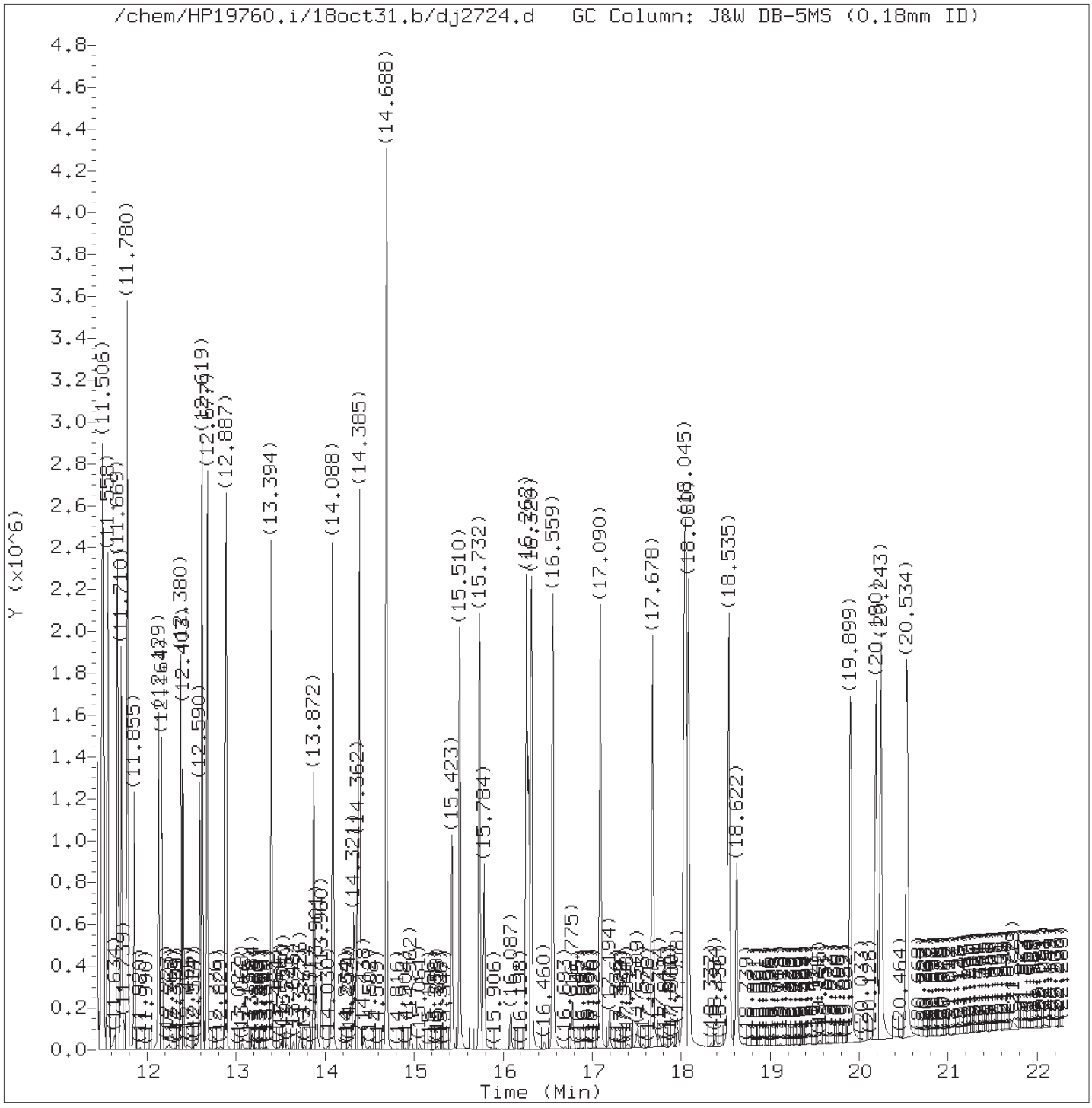
Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2724.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 16:26 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:53 Automation

Sample Name: 297WELCSD Lab Sample ID: 297WELCSD

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:04.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2724.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 16:26 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:53 Automation

Sample Name: 297WELCSD Lab Sample ID: 297WELCSD

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:04.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2724.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 16:26 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:53 Automation

Sample Name: 297WELCSD Lab Sample ID: 297WELCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
5) Pyridine	(1)	1.585	79	208919	3.993
11)$2-Fluorophenol	(1)	3.917	112	1019905	24.923
19) Aniline	(1)	5.368	93	429386	5.706
17)$Phenol-d6	(1)	5.391	99	1130020	20.350
18) Phenol	(1)	5.409	94	318179	5.008
23) 2-Chlorophenol	(1)	5.537	128	395635	10.012
24) 1,3-Dichlorobenzene	(1)	5.759	146	320333	7.139
25)*1,4-Dichlorobenzene-d4	(1)	5.852	152	135918	5.000
26) 1,4-Dichlorobenzene	(1)	5.875	146	337591	7.376
28) 1,2-Dichlorobenzene	(1)	6.091	146	327633	7.618
27) Benzyl alcohol	(1)	6.108	108	254452	9.437
31) 2-Methylphenol	(1)	6.312	108	383464	9.772
33) 2,2'-oxybis(1-Chloropropane)	(1)	6.342	45	475130	8.702
38) N-Nitroso-di-n-propylamine	(1)	6.528	70	338750	10.256
37) 4-Methylphenol	(1)	6.557	108	407448	8.990
43) Hexachloroethane	(1)	6.604	117	122710	6.611
44)$Nitrobenzene-d5	(2)	6.697	82	903755	18.490
45) Nitrobenzene	(2)	6.720	77	468823	9.373
50) Isophorone	(2)	7.123	82	889929	10.653
51) 2-Nitrophenol	(2)	7.216	139	214895	11.163
53) 2,4-Dimethylphenol	(2)	7.367	107	362825	8.473
55) bis(2-Chloroethoxy)methane	(2)	7.513	93	539672	9.900
60) 2,4-Dichlorophenol	(2)	7.606	162	323616	10.278
62) 1,2,4-Trichlorobenzene	(2)	7.723	180	261713	7.481
65)*Naphthalene-d8	(2)	7.793	136	516146	5.000
67) 4-Chloroaniline	(2)	7.950	127	338399	7.496
71) Hexachlorobutadiene	(2)	8.073	225	129026	6.549
80) 4-Chloro-3-methylphenol	(2)	8.784	107	391258	11.287
83) 2-Methylnaphthalene	(2)	8.924	142	642699	8.645
85) Hexachlorocyclopentadiene	(3)	9.203	237	55244	2.759
90) 2,4,6-Trichlorophenol	(3)	9.402	196	223695	11.703
92) 2,4,5-Trichlorophenol	(3)	9.448	196	236747	11.606
93)$2-Fluorobiphenyl	(3)	9.547	172	1219177	15.902
96) 2-Chloronaphthalene	(3)	9.681	162	626251	9.179
100) 2-Nitroaniline	(3)	9.880	138	245938	12.547
106) Dimethylphthalate	(3)	10.247	163	739852	10.278
108) 2,6-Dinitrotoluene	(3)	10.299	165	189690	11.782
112) 3-Nitroaniline	(3)	10.538	138	180490	10.377
113)*Acenaphthene-d10	(3)	10.562	164	240003	5.000
115) 2,4-Dinitrophenol	(3)	10.713	184	255731	29.952

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:04.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18oct31.b/dj2724.d Instrument ID: HP19760.i
Injection date and time: 31-OCT-2018 16:26 Analyst ID: em10340

Method used: /chem/HP19760.i/18oct31.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 31-OCT-2018 15:30
Date, time and analyst ID of latest file update: 31-Oct-2018 16:53 Automation

Sample Name: 297WELCSD Lab Sample ID: 297WELCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
116) 4-Nitrophenol	(3)	10.882	109	68770	5.809
119) Dibenzofuran	(3)	10.894	168	899545	9.657
118) 2,4-Dinitrotoluene	(3)	10.929	165	245027	11.280
124) Diethylphthalate	(3)	11.395	149	727580	10.689
129) 4-Nitroaniline	(3)	11.494	138	175064	9.133
127) 4-Chlorophenyl-phenylether	(3)	11.494	204	315903	9.092
130) 4,6-Dinitro-2-methylphenol	(4)	11.552	198	151750	13.858
131) N-Nitrosodiphenylamine	(4)	11.669	169	655235	11.890
135)$2,4,6-Tribromophenol	(3)	11.780	330	363533	45.878
143) 4-Bromophenyl-phenylether	(4)	12.129	248	178469	9.791
149) Pentachlorophenol	(4)	12.403	266	153164	13.949
153)*Phenanthrene-d10	(4)	12.590	188	410271	5.000
163) Carbazole	(4)	12.887	167	1053827	11.647
175)*Pyrene-d10	(5)	14.362	212	409336	5.000
179)$Terphenyl-d14	(5)	14.688	244	1557263	22.867
193) 3,3'-Dichlorobenzidine	(5)	16.285	252	355529	9.577
205) Di-n-octylphthalate	(6)	17.678	149	1492737	11.312
213)*Perylene-d12	(6)	18.622	264	438324	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/31/2018 at 17:04.
Target 3.5 esignature user ID: art12405

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

304WHLCS

Data file: /chem/HP20296.i/18nov01a.b/lk0105.d Injection date and time: **02-NOV-2018 00:31**
Data file Sample Info. Line: 304WHLCS;304WHLCS;1;3;LCS;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:13 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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	6.881	(0.000)	1102	152	149485	(-19)	5.00	
68) Naphthalene-d8	8.860	(0.000)	1472	136	574797	(-20)	5.00	
118) Acenaphthene-d10	11.700	(0.000)	2003	164	302020	(-20)	5.00	
158) Phenanthrene-d10	13.626	(0.000)	2363	188	604653	(-22)	5.00	
180) Pyrene-d10	15.653	(0.005)	2742	212	660158	(-21)	5.00	
218) Perylene-d12	20.231	(0.000)	3598	264	597035	(-21)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
12) 2-Fluorophenol	(1)	4.966	(-0.002)	112	1210460	26.158	52%
18) Phenol-d6	(1)	6.357	(0.000)	99	1116587	17.880	36%
45) Nitrobenzene-d5	(2)	7.737	(0.000)	82	1178600	19.585	78%
96) 2-Fluorobiphenyl	(3)	10.646	(0.000)	172	2052037	20.329	81%
140) 2,4,6-Tribromophenol	(3)	12.749	(0.000)	330	592811	50.094	100%
184) Terphenyl-d14	(5)	15.974	(-0.001)	244	2353724	22.211	89%

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)	2.912	(-0.005)	79	287523A	5.027	20.11			0.5
19) Phenol	(1)	6.378	(-0.000)	94	389730	5.321	21.28			0.1
20) Aniline	(1)	6.394	(-0.000)	93	599706	6.967	27.87			0.8
24) 2-Chlorophenol	(1)	6.560	(-0.000)	128	441109	10.224	40.90			0.1
25) 1,3-Dichlorobenzene	(1)	6.790	(-0.000)	146	450625	9.315	37.26			0.1
27) 1,4-Dichlorobenzene	(1)	6.908	(-0.000)	146	457343	9.409	37.64			0.1
28) Benzyl alcohol	(1)	7.111	(-0.000)	108	328343	11.089	44.36			3
29) 1,2-Dichlorobenzene	(1)	7.132	(-0.000)	146	445190	9.424	37.70			0.1
32) 2-Methylphenol	(1)	7.293	(-0.000)	108	441794	9.735	38.94			0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.336	(-0.000)	45	630091	9.066	36.26			0.1
38) 4-Methylphenol	(1)	7.534	(-0.000)	108	474280	10.013	40.05			0.1
39) N-Nitroso-di-n-propylamine	(1)	7.528	(-0.000)	70	442190	10.459	41.84			0.2
44) Hexachloroethane	(1)	7.646	(-0.000)	117	189146	8.568	34.27			0.3
46) Nitrobenzene	(2)	7.764	(-0.000)	77	628080	9.794	39.17			0.1
52) Isophorone	(2)	8.149	(0.000)	82	1150049	10.626	42.51			0.1
53) 2-Nitrophenol	(2)	8.266	(0.000)	139	242831	11.528	46.11			0.8
55) 2,4-Dimethylphenol	(2)	8.368	(-0.000)	107	453197	8.797	35.19			0.8
57) bis(2-Chloroethoxy)methane	(2)	8.523	(0.000)	93	727035	10.537	42.15			0.1
62) 2,4-Dichlorophenol	(2)	8.646	(0.000)	162	420445	11.375	45.50			0.1
65) 1,2,4-Trichlorobenzene	(2)	8.780	(0.000)	180	415926	9.751	39.00			0.1
70) 4-Chloroaniline	(2)	9.004	(-0.000)	127	432566	8.264	33.05			1
74) Hexachlorobutadiene	(2)	9.117	(-0.000)	225	259363	10.316	41.27			0.1
83) 4-Chloro-3-methylphenol	(2)	9.817	(-0.000)	107	510548	11.637	46.55			0.1
86) 2-Methylnaphthalene	(2)	10.021	(-0.000)	142	872575	10.476	41.90			0.03
88) Hexachlorocyclopentadiene	(3)	10.288	(0.000)	237	269804	10.036	40.14			1
93) 2,4,6-Trichlorophenol	(3)	10.497	(0.000)	196	343329	12.576	50.30			0.1
95) 2,4,5-Trichlorophenol	(3)	10.545	(0.000)	196	364455	12.108	48.43			0.1

A = User selected an alternate peak.

Digitally signed by Kira N. Beck on 11/02/2018 at 07:14. Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov01a.b/lk0105.d Injection date and time: **02-NOV-2018 00:31**
Data file Sample Info. Line: 304WHLCS;304WHLCS;1;3;LCS;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:13 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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))

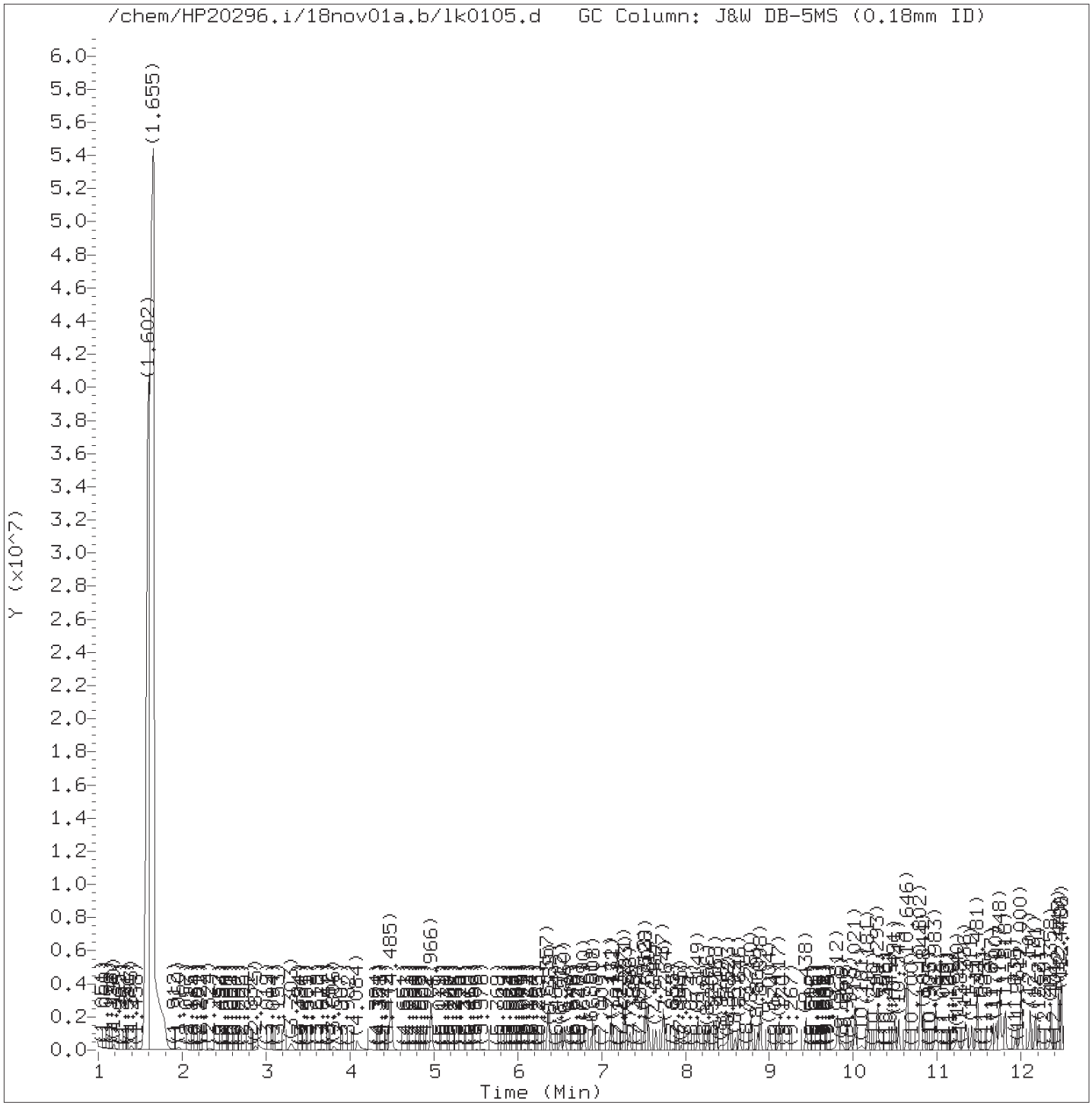
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

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)	10.812(0.000)	162	934093	10.136	40.54			0.1
104) 2-Nitroaniline	(3)	11.000(0.000)	138	276331	11.921	47.68			0.5
110) Dimethylphthalate	(3)	11.336(0.000)	163	744592	7.775	31.10			0.5
113) 2,6-Dinitrotoluene	(3)	11.417(-0.000)	165	242846	12.509	50.04			0.1
117) 3-Nitroaniline	(3)	11.657(0.000)	138	213375	9.588	38.35			0.8
120) 2,4-Dinitrophenol	(3)	11.818(0.000)	184	284593	24.312	97.25			4
121) 4-Nitrophenol	(3)	11.936(0.000)	109	97126	5.212	20.85		J	3
123) 2,4-Dinitrotoluene	(3)	12.005(0.000)	165	305819	10.974	43.89			0.3
124) Dibenzofuran	(3)	12.000(0.000)	168	1301384	10.828	43.31			0.1
129) Diethylphthalate	(3)	12.358(-0.000)	149	932862	9.899	39.60			0.5
132) 4-Chlorophenyl-phenylether	(3)	12.470(0.000)	204	514578	10.553	42.21			0.1
134) 4-Nitroaniline	(3)	12.486(-0.000)	138	200807	9.425	37.70			0.2
135) 4,6-Dinitro-2-methylphenol	(4)	12.524(0.000)	198	192574	12.105	48.42			2
136) N-Nitrosodiphenylamine	(4)	12.620(-0.000)	169	868170	11.223	44.89			0.2
148) 4-Bromophenyl-phenylether	(4)	13.075(-0.000)	248	299383	11.103	44.41			0.1
154) Pentachlorophenol	(4)	13.385(0.000)	266	222701	12.787	51.15			0.3
168) Carbazole	(4)	13.947(0.000)	167	1425372	11.202	44.81			0.1
198) 3,3'-Dichlorobenzidine	(5)	17.717(-0.000)	252	539938	9.268	37.07			0.8
210) Di-n-octylphthalate	(6)	19.087(-0.000)	149	2121862	11.111	44.45			1

Total number of targets = 46

Digitally signed by Kira N. Beck on 11/02/2018 at 07:14. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

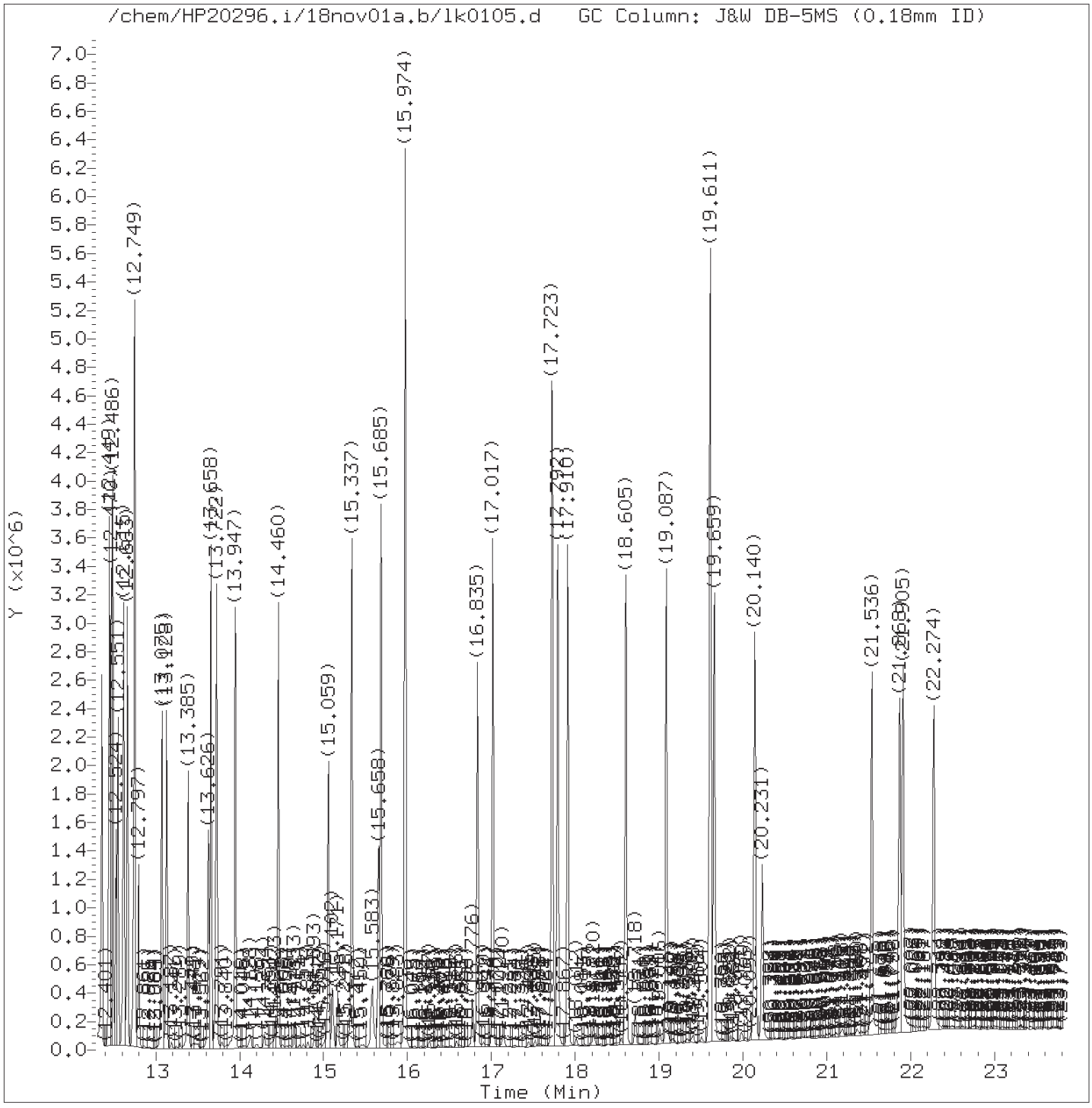
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0105.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:31 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:13 knb25316

Sample Name: 304WHLCS Lab Sample ID: 304WHLCS

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0105.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:31 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:13 knb25316

Sample Name: 304WHLCS Lab Sample ID: 304WHLCS

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0105.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:31 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:13 knb25316

Sample Name: 304WHLCS Lab Sample ID: 304WHLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
6) Pyridine	(1)	2.912	79	287523A	5.027
12)$2-Fluorophenol	(1)	4.966	112	1210460	26.158
18)$Phenol-d6	(1)	6.357	99	1116587	17.880
19) Phenol	(1)	6.378	94	389730	5.321
20) Aniline	(1)	6.394	93	599706	6.967
24) 2-Chlorophenol	(1)	6.560	128	441109	10.224
25) 1,3-Dichlorobenzene	(1)	6.790	146	450625	9.315
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	149485	5.000
27) 1,4-Dichlorobenzene	(1)	6.908	146	457343	9.409
28) Benzyl alcohol	(1)	7.111	108	328343	11.089
29) 1,2-Dichlorobenzene	(1)	7.132	146	445190	9.424
32) 2-Methylphenol	(1)	7.293	108	441794	9.735
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.336	45	630091	9.066
39) N-Nitroso-di-n-propylamine	(1)	7.528	70	442190	10.459
38) 4-Methylphenol	(1)	7.534	108	474280	10.013
44) Hexachloroethane	(1)	7.646	117	189146	8.568
45)$Nitrobenzene-d5	(2)	7.737	82	1178600	19.585
46) Nitrobenzene	(2)	7.764	77	628080	9.794
52) Isophorone	(2)	8.149	82	1150049	10.626
53) 2-Nitrophenol	(2)	8.266	139	242831	11.528
55) 2,4-Dimethylphenol	(2)	8.368	107	453197	8.797
57) bis(2-Chloroethoxy)methane	(2)	8.523	93	727035	10.537
62) 2,4-Dichlorophenol	(2)	8.646	162	420445	11.375
65) 1,2,4-Trichlorobenzene	(2)	8.780	180	415926	9.751
68)*Naphthalene-d8	(2)	8.860	136	574797	5.000
70) 4-Chloroaniline	(2)	9.004	127	432566	8.264
74) Hexachlorobutadiene	(2)	9.117	225	259363	10.316
83) 4-Chloro-3-methylphenol	(2)	9.817	107	510548	11.637
86) 2-Methylnaphthalene	(2)	10.021	142	872575	10.476
88) Hexachlorocyclopentadiene	(3)	10.288	237	269804	10.036
93) 2,4,6-Trichlorophenol	(3)	10.497	196	343329	12.576
95) 2,4,5-Trichlorophenol	(3)	10.545	196	364455	12.108
96)$2-Fluorobiphenyl	(3)	10.646	172	2052037	20.329
99) 2-Chloronaphthalene	(3)	10.812	162	934093	10.136
104) 2-Nitroaniline	(3)	11.000	138	276331	11.921
110) Dimethylphthalate	(3)	11.336	163	744592	7.775
113) 2,6-Dinitrotoluene	(3)	11.417	165	242846	12.509
117) 3-Nitroaniline	(3)	11.657	138	213375	9.588
118)*Acenaphthene-d10	(3)	11.700	164	302020	5.000
120) 2,4-Dinitrophenol	(3)	11.818	184	284593	24.312

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0105.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:31 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:13 knb25316

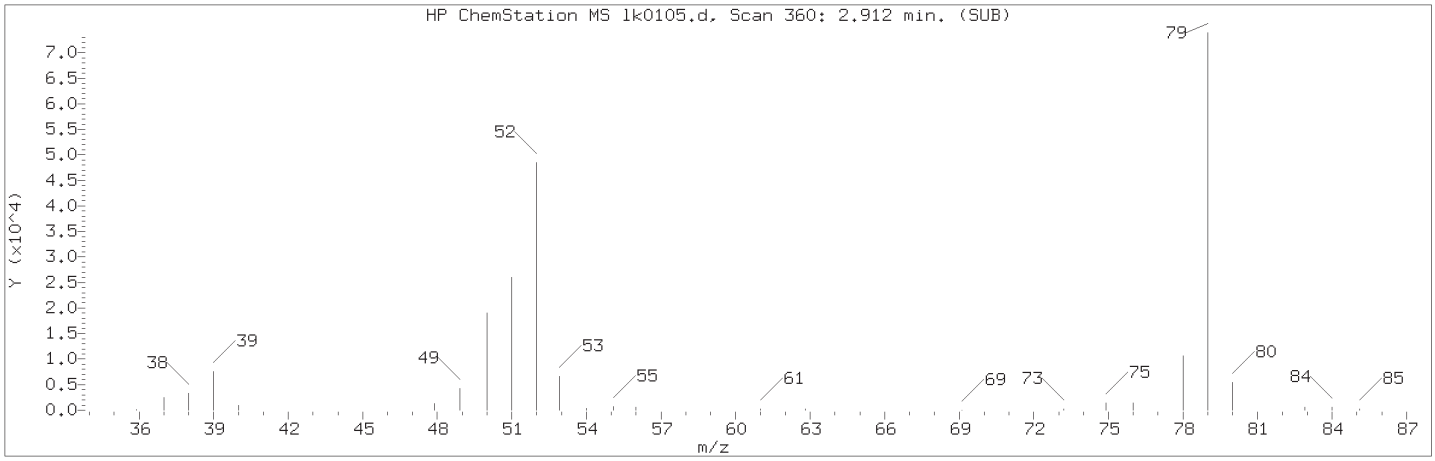
Sample Name: 304WHLCS Lab Sample ID: 304WHLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
121) 4-Nitrophenol	(3)	11.936	109	97126	5.212
124) Dibenzofuran	(3)	12.000	168	1301384	10.828
123) 2,4-Dinitrotoluene	(3)	12.005	165	305819	10.974
129) Diethylphthalate	(3)	12.358	149	932862	9.899
132) 4-Chlorophenyl-phenylether	(3)	12.470	204	514578	10.553
134) 4-Nitroaniline	(3)	12.486	138	200807	9.425
135) 4,6-Dinitro-2-methylphenol	(4)	12.524	198	192574	12.105
136) N-Nitrosodiphenylamine	(4)	12.620	169	868170	11.223
140)$2,4,6-Tribromophenol	(3)	12.749	330	592811	50.094
148) 4-Bromophenyl-phenylether	(4)	13.075	248	299383	11.103
154) Pentachlorophenol	(4)	13.385	266	222701	12.787
158)*Phenanthrene-d10	(4)	13.626	188	604653	5.000
168) Carbazole	(4)	13.947	167	1425372	11.202
180)*Pyrene-d10	(5)	15.653	212	660158	5.000
184)$Terphenyl-d14	(5)	15.974	244	2353724	22.211
198) 3,3'-Dichlorobenzidine	(5)	17.717	252	539938	9.268
210) Di-n-octylphthalate	(6)	19.087	149	2121862	11.111
218)*Perylene-d12	(6)	20.231	264	597035	5.000

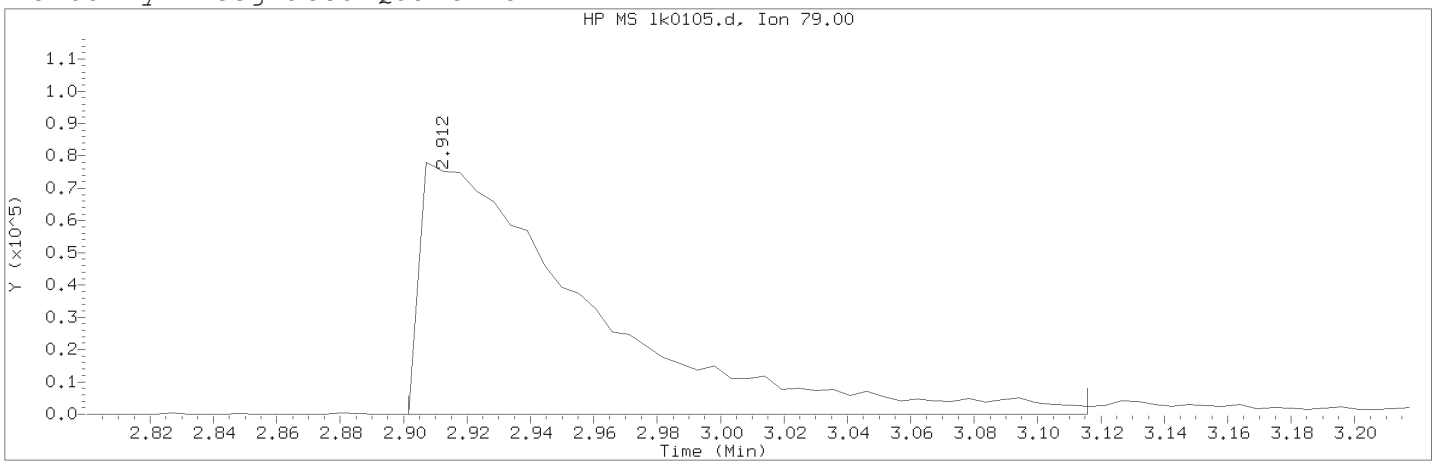
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov01a.b/lk0105.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:31 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:13 knb25316

Sample Name: 304WHLCS Lab Sample ID: 304WHLCS

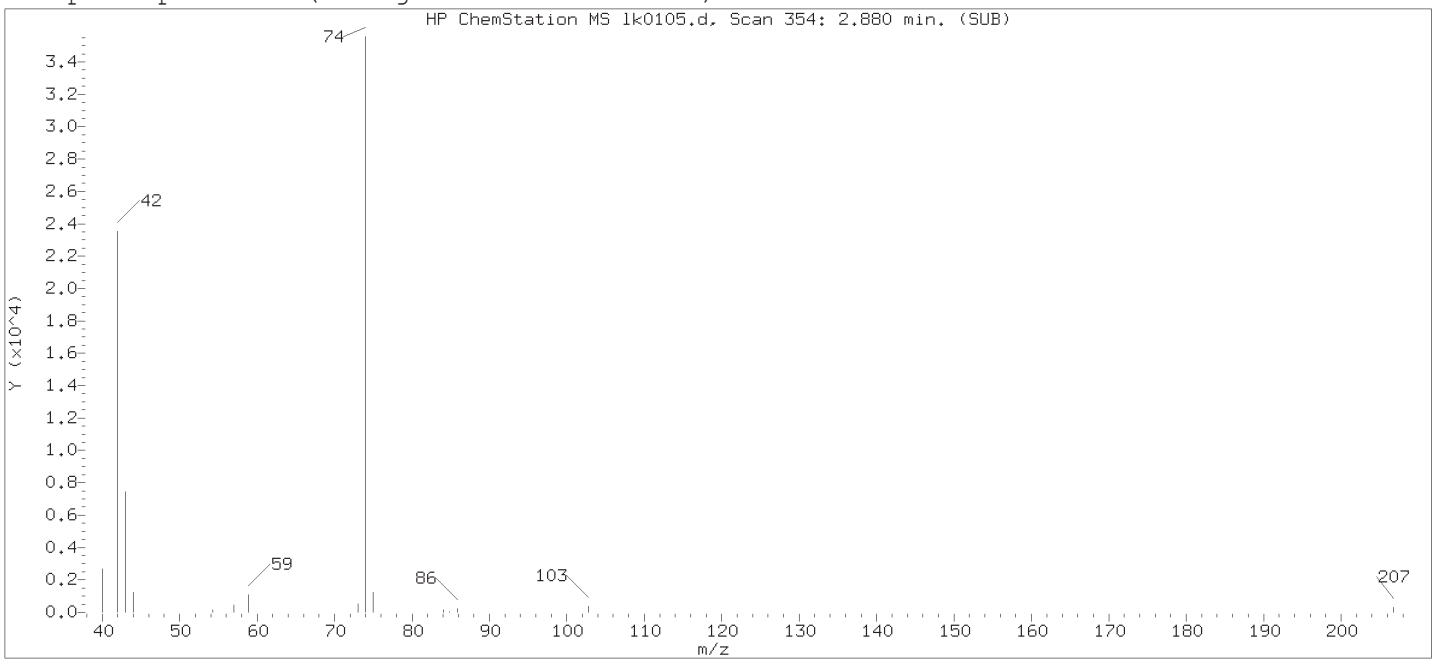
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 360		
Retention Time (minutes)	: 2.912		
Quant Ion	: 79.00		
Area (flag)	: 287523A		
On-Column Amount (ng/ul)	: 5.0272		
Integration start scan	: 357	Integration stop scan:	397
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

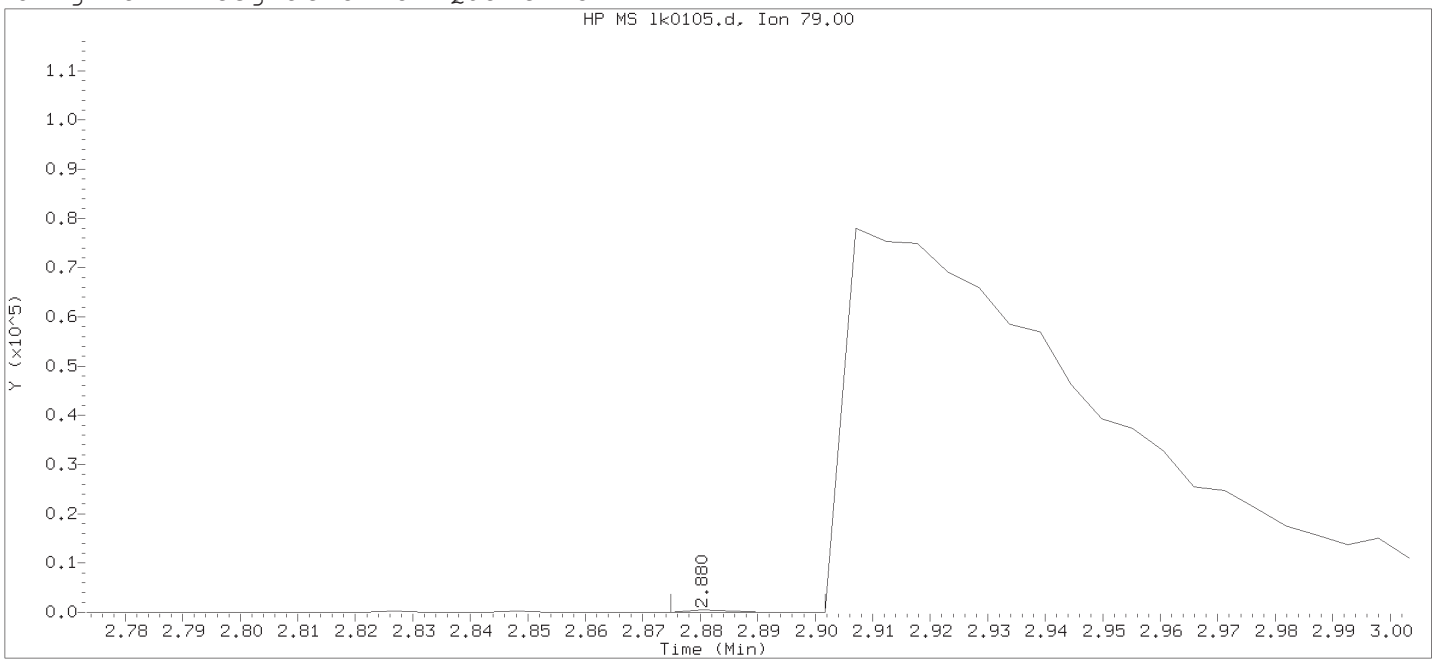
Analyst responsible for change: Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov01a.b/lk0105.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 00:31 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 01:01 Unknown

Sample Name: 304WHLCS Lab Sample ID: 304WHLCS

Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 354		
Retention Time (minutes)	: 2.880		
Quant Ion	: 79.00		
Area	: 225		
On-column Amount (ng/ul)	: 0.0040		
Integration start scan	: 352	Integration stop scan:	357
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: 2158

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov01a.b/lk0106.d Injection date and time: **02-NOV-2018 01:00**
Data file Sample Info. Line: 304WHLCSD;304WHLCSD;1;3;LCSD;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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	6.881(0.000)	1102	152	167138 (-10)	5.00	
68) Naphthalene-d8	8.860(0.000)	1472	136	622316 (-14)	5.00	
118) Acenaphthene-d10	11.700(0.000)	2003	164	329916 (-12)	5.00	
158) Phenanthrene-d10	13.626(0.000)	2363	188	651321 (-16)	5.00	
180) Pyrene-d10	15.653(0.005)	2742	212	697567 (-16)	5.00	
218) Perylene-d12	20.231(0.000)	3598	264	641715 (-15)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
12) 2-Fluorophenol	(1)	4.966(-0.002)	112	1378081	26.635	53%
18) Phenol-d6	(1)	6.357(0.000)	99	1327112	19.006	38%
45) Nitrobenzene-d5	(2)	7.737(0.000)	82	1267464	19.453	78%
96) 2-Fluorobiphenyl	(3)	10.647(0.000)	172	2259597	20.493	82%
140) 2,4,6-Tribromophenol	(3)	12.749(0.000)	330	596340	46.131	92%
184) Terphenyl-d14	(5)	15.974(-0.001)	244	2511102	22.426	90%

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)	2.907(-0.004)	79	341070	5.334	21.33			0.5
19) Phenol	(1)	6.378(-0.000)	94	455097	5.557	22.23			0.1
20) Aniline	(1)	6.394(-0.000)	93	665962	6.920	27.68			0.8
24) 2-Chlorophenol	(1)	6.560(-0.000)	128	464881	9.637	38.55			0.1
25) 1,3-Dichlorobenzene	(1)	6.790(-0.000)	146	487537	9.014	36.06			0.1
27) 1,4-Dichlorobenzene	(1)	6.908(-0.000)	146	500068	9.201	36.81			0.1
28) Benzyl alcohol	(1)	7.111(-0.000)	108	360165	10.879	43.52			3
29) 1,2-Dichlorobenzene	(1)	7.132(-0.000)	146	483851	9.161	36.64			0.1
32) 2-Methylphenol	(1)	7.293(0.000)	108	468186	9.227	36.91			0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.336(0.000)	45	683846	8.800	35.20			0.1
38) 4-Methylphenol	(1)	7.534(0.000)	108	501702	9.473	37.89			0.1
39) N-Nitroso-di-n-propylamine	(1)	7.528(0.000)	70	480674	10.168	40.67			0.2
44) Hexachloroethane	(1)	7.646(0.000)	117	206740	8.376	33.51			0.3
46) Nitrobenzene	(2)	7.764(-0.000)	77	702538	10.118	40.47			0.1
52) Isophorone	(2)	8.149(0.000)	82	1251202	10.678	42.71			0.1
53) 2-Nitrophenol	(2)	8.266(-0.000)	139	242499	10.634	42.53			0.8
55) 2,4-Dimethylphenol	(2)	8.368(-0.000)	107	466000	8.355	33.42			0.8
57) bis(2-Chloroethoxy)methane	(2)	8.523(-0.000)	93	786360	10.526	42.11			0.1
62) 2,4-Dichlorophenol	(2)	8.646(-0.000)	162	420207	10.500	42.00			0.1
65) 1,2,4-Trichlorobenzene	(2)	8.780(-0.000)	180	449867	9.741	38.96			0.1
70) 4-Chloroaniline	(2)	9.004(0.000)	127	471382	8.318	33.27			1
74) Hexachlorobutadiene	(2)	9.117(0.000)	225	265903	9.769	39.08			0.1
83) 4-Chloro-3-methylphenol	(2)	9.812(0.000)	107	505392	10.640	42.56			0.1
86) 2-Methylnaphthalene	(2)	10.021(0.000)	142	940245	10.426	41.70			0.03
88) Hexachlorocyclopentadiene	(3)	10.283(0.000)	237	286368	9.752	39.01			1
93) 2,4,6-Trichlorophenol	(3)	10.497(-0.000)	196	348260	11.678	46.71			0.1
95) 2,4,5-Trichlorophenol	(3)	10.545(-0.000)	196	363521	11.056	44.22			0.1

Digitally signed by Kira N. Beck on 11/02/2018 at 07:14. Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov01a.b/lk0106.d Injection date and time: **02-NOV-2018 01:00**
Data file Sample Info. Line: 304WHLCSD;304WHLCSD;1;3;LCSD;;DOD26; Instrument ID: **HP20296.i** Batch: **18304WAH**
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov01a.b/lk0104.d**

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: **25788M**
Calibration date and time (Last Method Edit): 01-NOV-2018 22:41
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov01a.b/lk0101.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))

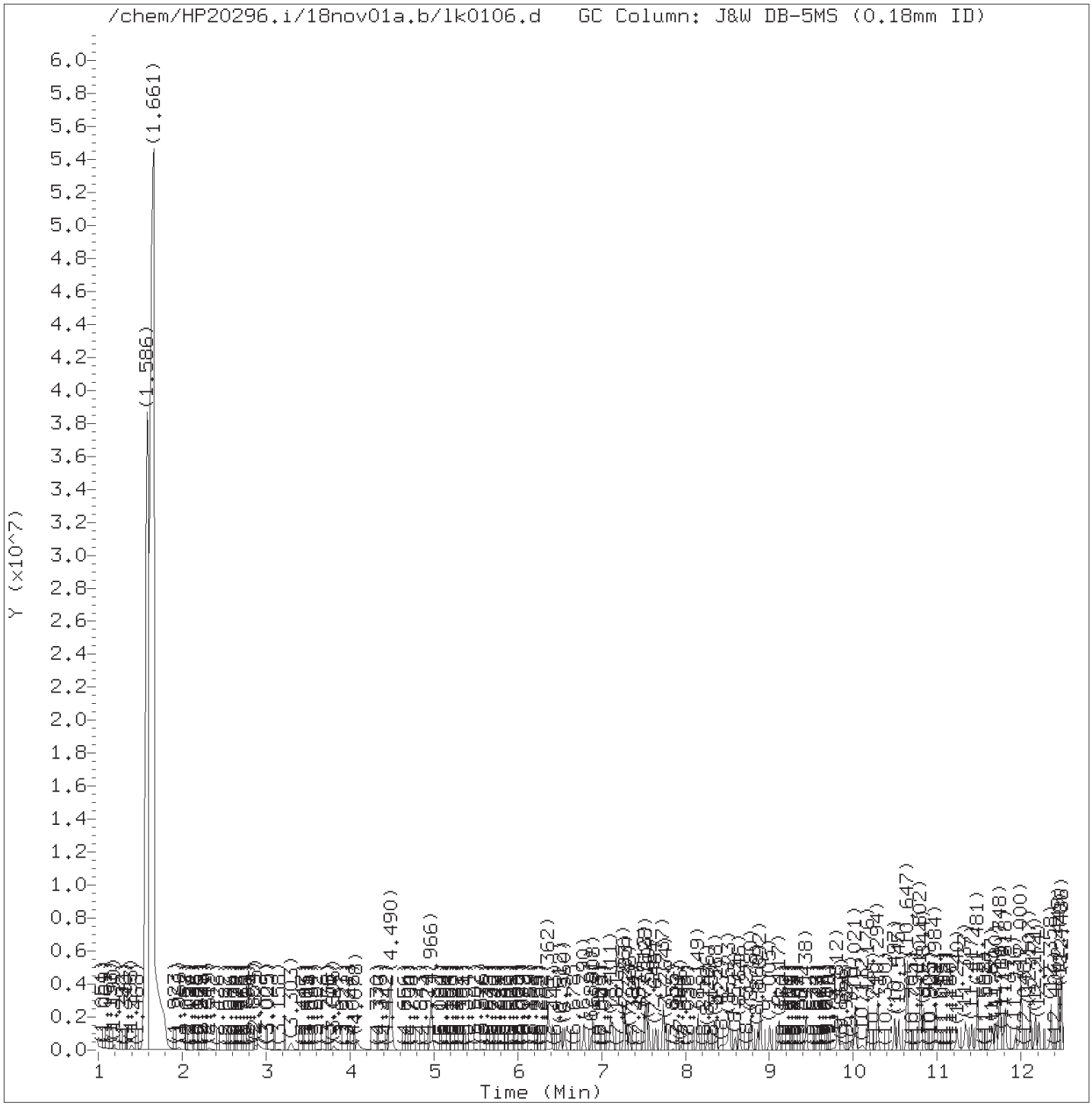
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

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)	10.812(-0.000)	162	1012356	10.056	40.22			0.1
104) 2-Nitroaniline	(3)	11.000(-0.000)	138	311253	12.292	49.17			0.5
110) Dimethylphthalate	(3)	11.336(-0.000)	163	748452	7.155	28.62			0.5
113) 2,6-Dinitrotoluene	(3)	11.417(-0.000)	165	257558	12.145	48.58			0.1
117) 3-Nitroaniline	(3)	11.663(-0.000)	138	229173	9.427	37.71			0.8
120) 2,4-Dinitrophenol	(3)	11.818(0.000)	184	282305	22.077	88.31			4
121) 4-Nitrophenol	(3)	11.936(0.000)	109	109929	5.400	21.60		J	3
123) 2,4-Dinitrotoluene	(3)	12.005(0.000)	165	338762	11.128	44.51			0.3
124) Dibenzofuran	(3)	12.000(0.000)	168	1408657	10.730	42.92			0.1
129) Diethylphthalate	(3)	12.358(0.000)	149	966296	9.387	37.55			0.5
132) 4-Chlorophenyl-phenylether	(3)	12.470(0.000)	204	565620	10.619	42.47			0.1
134) 4-Nitroaniline	(3)	12.486(0.000)	138	204100	8.770	35.08			0.2
135) 4,6-Dinitro-2-methylphenol	(4)	12.529(-0.000)	198	194651	11.358	45.43			2
136) N-Nitrosodiphenylamine	(4)	12.620(-0.000)	169	933030	11.198	44.79			0.2
148) 4-Bromophenyl-phenylether	(4)	13.075(-0.000)	248	312157	10.747	42.99			0.1
154) Pentachlorophenol	(4)	13.385(0.000)	266	221976	11.833	47.33			0.3
168) Carbazole	(4)	13.947(0.000)	167	1559276	11.376	45.51			0.1
198) 3,3'-Dichlorobenzidine	(5)	17.717(-0.000)	252	611857	9.939	39.76			0.8
210) Di-n-octylphthalate	(6)	19.087(-0.000)	149	2130486	10.380	41.52			1

Total number of targets = 46

Digitally signed by Kira N. Beck on 11/02/2018 at 07:14. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/09/2018 at 08:50. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

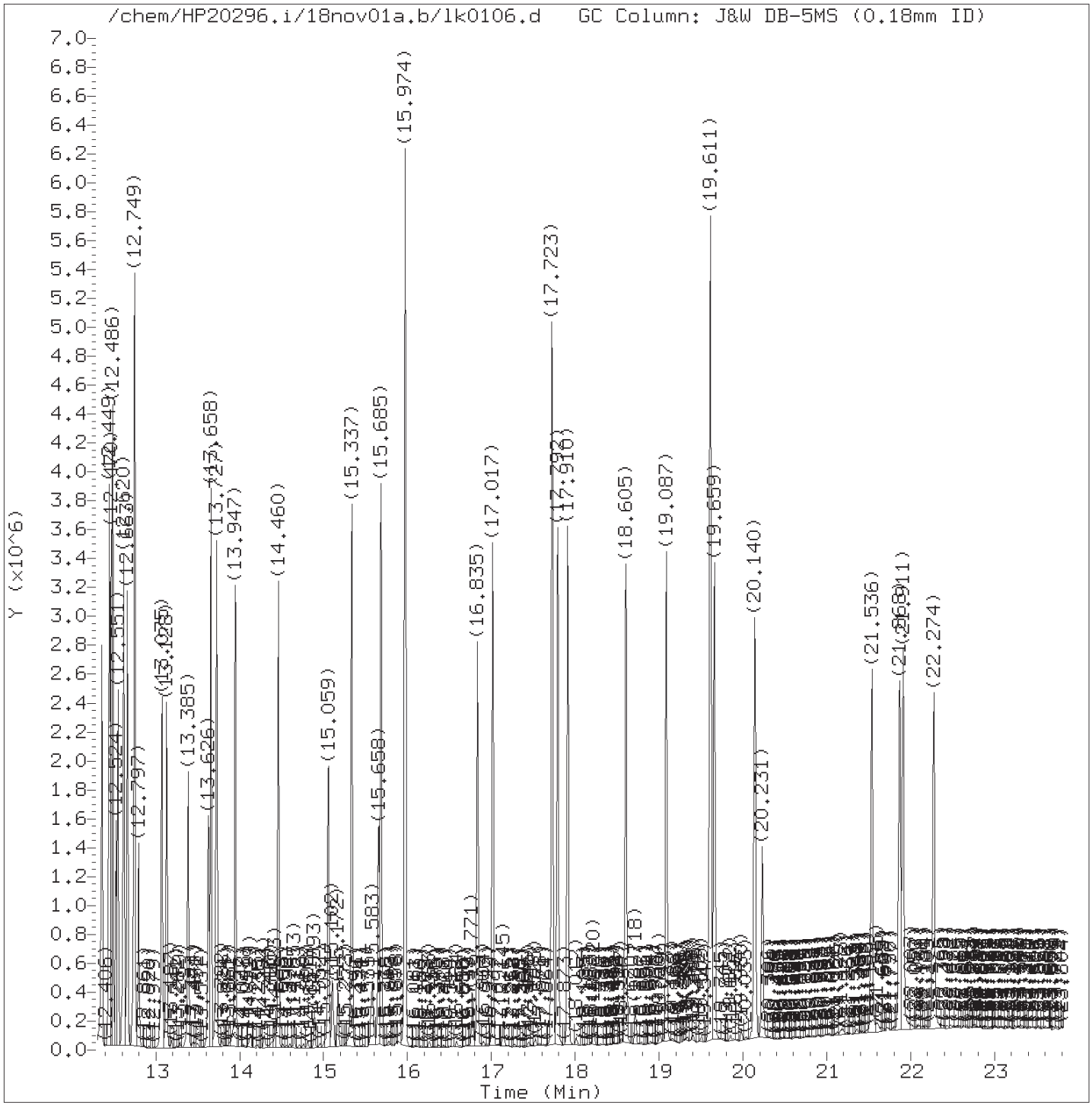
Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0106.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:00 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: 304WHLCSD Lab Sample ID: 304WHLCSD

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0106.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:00 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: 304WHLCSD Lab Sample ID: 304WHLCSD

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0106.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:00 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: 304WHLCSD Lab Sample ID: 304WHLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
6) Pyridine	(1)	2.907	79	341070	5.334
12)$2-Fluorophenol	(1)	4.966	112	1378081	26.635
18)$Phenol-d6	(1)	6.357	99	1327112	19.006
19) Phenol	(1)	6.378	94	455097	5.557
20) Aniline	(1)	6.394	93	665962	6.920
24) 2-Chlorophenol	(1)	6.560	128	464881	9.637
25) 1,3-Dichlorobenzene	(1)	6.790	146	487537	9.014
26)*1,4-Dichlorobenzene-d4	(1)	6.881	152	167138	5.000
27) 1,4-Dichlorobenzene	(1)	6.908	146	500068	9.201
28) Benzyl alcohol	(1)	7.111	108	360165	10.879
29) 1,2-Dichlorobenzene	(1)	7.133	146	483851	9.161
32) 2-Methylphenol	(1)	7.293	108	468186	9.227
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.336	45	683846	8.800
39) N-Nitroso-di-n-propylamine	(1)	7.528	70	480674	10.168
38) 4-Methylphenol	(1)	7.534	108	501702	9.473
44) Hexachloroethane	(1)	7.646	117	206740	8.376
45)$Nitrobenzene-d5	(2)	7.737	82	1267464	19.453
46) Nitrobenzene	(2)	7.764	77	702538	10.118
52) Isophorone	(2)	8.149	82	1251202	10.678
53) 2-Nitrophenol	(2)	8.266	139	242499	10.634
55) 2,4-Dimethylphenol	(2)	8.368	107	466000	8.355
57) bis(2-Chloroethoxy)methane	(2)	8.523	93	786360	10.526
62) 2,4-Dichlorophenol	(2)	8.646	162	420207	10.500
65) 1,2,4-Trichlorobenzene	(2)	8.780	180	449867	9.741
68)*Naphthalene-d8	(2)	8.860	136	622316	5.000
70) 4-Chloroaniline	(2)	9.005	127	471382	8.318
74) Hexachlorobutadiene	(2)	9.117	225	265903	9.769
83) 4-Chloro-3-methylphenol	(2)	9.812	107	505392	10.640
86) 2-Methylnaphthalene	(2)	10.021	142	940245	10.426
88) Hexachlorocyclopentadiene	(3)	10.283	237	286368	9.752
93) 2,4,6-Trichlorophenol	(3)	10.497	196	348260	11.678
95) 2,4,5-Trichlorophenol	(3)	10.545	196	363521	11.056
96)$2-Fluorobiphenyl	(3)	10.647	172	2259597	20.493
99) 2-Chloronaphthalene	(3)	10.812	162	1012356	10.056
104) 2-Nitroaniline	(3)	11.000	138	311253	12.292
110) Dimethylphthalate	(3)	11.337	163	748452	7.155
113) 2,6-Dinitrotoluene	(3)	11.417	165	257558	12.145
117) 3-Nitroaniline	(3)	11.663	138	229173	9.427
118)*Acenaphthene-d10	(3)	11.700	164	329916	5.000
120) 2,4-Dinitrophenol	(3)	11.818	184	282305	22.077

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov01a.b/lk0106.d Instrument ID: HP20296.i
Injection date and time: 02-NOV-2018 01:00 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov01a.b/rv8270d.m Sublist used: 25788M
Calibration date and time: 01-NOV-2018 22:41
Date, time and analyst ID of latest file update: 02-Nov-2018 07:10 knb25316

Sample Name: 304WHLCSD Lab Sample ID: 304WHLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
121) 4-Nitrophenol	(3)	11.936	109	109929	5.400
124) Dibenzofuran	(3)	12.000	168	1408657	10.730
123) 2,4-Dinitrotoluene	(3)	12.005	165	338762	11.128
129) Diethylphthalate	(3)	12.358	149	966296	9.387
132) 4-Chlorophenyl-phenylether	(3)	12.470	204	565620	10.619
134) 4-Nitroaniline	(3)	12.486	138	204100	8.770
135) 4,6-Dinitro-2-methylphenol	(4)	12.529	198	194651	11.358
136) N-Nitrosodiphenylamine	(4)	12.620	169	933030	11.198
140)$2,4,6-Tribromophenol	(3)	12.749	330	596340	46.131
148) 4-Bromophenyl-phenylether	(4)	13.075	248	312157	10.747
154) Pentachlorophenol	(4)	13.385	266	221976	11.833
158)*Phenanthrene-d10	(4)	13.626	188	651321	5.000
168) Carbazole	(4)	13.947	167	1559276	11.376
180)*Pyrene-d10	(5)	15.653	212	697567	5.000
184)$Terphenyl-d14	(5)	15.974	244	2511102	22.426
198) 3,3'-Dichlorobenzidine	(5)	17.717	252	611857	9.939
210) Di-n-octylphthalate	(6)	19.087	149	2130486	10.380
218)*Perylene-d12	(6)	20.231	264	641715	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/02/2018 at 07:14.
Target 3.5 esignature user ID: knb25316

Extraction/Distillation/Digestion Logs

Semivolatiles by GC/MS

Organic Extraction Batchlog Assigned to: 10217 Kate Lutte Reviewed by: CM10340 Start Date: 10/24/18 Start time: 16:30

18297WAE026 Tech 1: 0511067 Tech 2: Kwarn

Dept: 26 Prep Analysis: 11010 8270D BNA Extraction SVOAs 8270D MINI

QC	Sample Code	Amt mL	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
BLANKA ☆	SBLKWE297	250	SS~~1828826~~A	0.125	—	—	1	✓	✓		TAP H2O
LCSA	297WELCS	250	SS1828826A		MS1829526A MS1829526B	1.0 1.0	1	✓	✓		TAP H2O
LCSAP1	297WELCS	250	SS1828826A		MS1829026B	1.0	1	✓	✓		TAP H2O
LCSDA	297WELCSD	250	SS1828826A		MS1829526A MS1829526B	1.0 1.0	1	✓	✓		TAP H2O
LCSDAP1	297WELCSD	250	SS~~1828826~~A ⑧		MS1829026B	1.0	1	✓	✓		TAP H2O

Solvent Used	Lot No.
10N NaOH	4711F51
Methylene Chloride	187356
Sodium Sulfate	18297A
Sulfuric Acid	184517

N/A Kwarn 10/24/18

N/A Kwarn 10/24/18

Spike Solutions: Witness: N/A

MS1829026B APPIX #1 MINI SPIKE
MS1829526A MINI SEP. LCS SPIKE #1
MS1829526B MINI SEP. LCS SPIKE #2
⑧ ~~SS1828826A~~ ~~MINI SEP. BNA SURROGATE~~

Add'l w/ 18297WAE026 ⑧ BNA SURROGATE STANDARD SS18277726A Kwarn 10/24/18

Sample #	Sample Code	Amt mL	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
~~1 9848557 R~~	RVRD1		~~SS1828826A~~						⑧	14241	29880	10/22/2018	N
2 9861917 ☆	GKP01	240	SS~~1828826~~A	0.125	1	✓	✓	153A	Clear	14241	25788	10/31/2018	N
3 9861918 ☆	GKP03	227	SS1828826A		1	✓	✓	153A	tan tint	14241	25788	10/31/2018	N
4 9861919 ☆	GKP04	227	SS1828826A		1	✓	✓	153A	Yellow tint	14241	25788	10/31/2018	N
5 9861920 ☆	GKPR1	223	SS1828826A		1	✓	✓	153A	tan tint	14241	25788	10/31/2018	N
6 9861921 ☆	GKP05	229	SS1828826A		1	✓	✓	153A	tan tint	14241	25788	10/31/2018	N
7 9861922 ☆	GKP02	237	SS1828826A ⑧		1	✓	✓	153A	Yellow tint	14241	25788	10/31/2018	N

⑧ Can not extract due to sample matrix. Will need to be diluted. SM7964 10/24/18

N/A Kwarn 10/24/18

Bench# 6	Bench# 5	Bench# 4		
Rack ID:	—	Work Station	tumble	Micro Temp 100? ✓
Internal Standard	rv1STD2918	Balance #	25996	

R-VAP ID 2	90 C	R-VAP ID 1	90 C	R-VAP ID ~~—~~	~~C~~
S-bath ID	C	S-bath ID	C	N-Evap ~~—~~	~~C~~ M-vap ~~—~~ ~~C~~

18297WAE026

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Organic Extraction Batchlog Assigned to: 12366 Joshua Ruth Reviewed by: ATI2405 11/1/18 Start Date: 11/1/18 Start time: 9:00

18304WAH026

Tech 1: JSR 12366 Tech 2: N/A

Dept: 26 Prep Analysis: 11010 8270D BNA Extraction SVOAs 8270D MINI

QC	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
BLANKA	SBLKWH304	250	SS1828826A	1.0			1	✓	✓		Tap H_2O
LCSA	304WHLCS	250	SS1828826A		MS1829826A	1.0	1	✓	✓		
LCSAPI	304WHLCS	250	SS1828826A		MS1829826B	1.0	1	✓	✓		
LCSDA	304WHLCSD	250	SS1828826A		MS1829826A	1.0	1	✓	✓		
LCSDAPI	304WHLCSD	250	SS1828826A		MS1829826B	1.0	1	✓	✓		

Solvent Used	Lot No.
10N NaOH	4711F51
Methylene Chloride	186618
Sodium Sulfate	18304A
Sulfuric Acid	184517

N/A

Spike Solutions: Witness: N/A
MS1829826B APPIX #1 MINI SPIKE
MS1829826A MINI SEP. LCS SPIKE #1
SS1828826A MINI SEP. BNA SURROGATE

Sample #		Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
1 9861917	R	GKP01	232	SS1828826A	1.0	1	✓	✓	153C	Tan tint	14241	25788	10/31/2018	N
2 9861918	R	GKP03	239	SS1828826A		1	✓	✓	153C	tan tint	14241	25788	10/31/2018	N
3 9861919	R	GKP04	236	SS1828826A		1	✓	✓	153C	tan tint	14241	25788	10/31/2018	N
4 9861920	R	GKPR1	227	SS1828826A		1	✓	✓	153C	Tan tint	14241	25788	10/31/2018	N
5 9861921	R	GKP05	250	SS1828826A		1	✓	✓	153C	tan tint	14241	25788	10/31/2018	N
6 9861922	R	GKP02	250	SS1828826A		1	✓	✓	153C	tan tint	14241	25788	10/31/2018	N

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N/A

Bench# /	Bench# /	Bench# /		
Rack ID:	/	Work Station	Tumble	Micro Temp 100?
Internal Standard	RV1STD2998	Balance #	25996	

R-VAP ID 4	90 C	R-VAP ID 5	90 C	R-VAP ID 3	90 C			18304WAH026
S-bath ID	/ C	S-bath ID	/ C	N-Evap	/ C	M-vap	/ C	

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Semivolatiles by GC/MS-SIM Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS-SIM

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Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS-SIM

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9861917	OU2-1-SW001	X		1	
9861918	OU2-1-SW003	X		1	
9861919	OU2-1-SW004	X		1	
9861920	REF-1-SW001	X		1	
9861921	OU1-1-SW005	X		1	
9861922	OU2-1-SW002	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:

Method Blank

(Sample number(s): 9861917-9861922: Analysis: 14244)
Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The concentrations of the detections in the method blank are below the minimum screening level, therefore the data is reported.

Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS-SIM

LCS/LCSD

Batch#: 18297WAF026 (Sample number(s): 9861917-9861922)
The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: Phenanthrene

(Sample number(s): 9861917-9861922: Analysis: 14244)
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

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

Semivolatiles by GC/MS-SIM

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Quality Control Reference List
GC/MS Semivolatiles

CLIENT: Tidewater, Inc.
SDG: TID07

Fraction: Semivolatiles by GC/MS-SIM

Analysis	Batch Number	Sample Number	Analysis Date
SIM SVOAs 8270D MINI	18297WAF026	SBLKWF297	10/27/2018 19:01
		297WFLCS	10/27/2018 19:31
		297WFLCSD	10/27/2018 20:00
		9861917	10/27/2018 21:28
		9861918	10/27/2018 21:57
		9861919	10/27/2018 22:27
		9861920	10/27/2018 22:56
		9861921	10/27/2018 23:25
		9861922	10/27/2018 23:55

Fraction: Semivolatiles by GC/MS-SIM

18297WAF026 / SBLKWF297 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
1,4-Dioxane	10/27/18	0.2 J	ug/l	0.1	0.2	0.3
bis(2-Chloroethyl)ether	10/27/18	N.D.	ug/l	0.02	0.06	0.07
Naphthalene	10/27/18	N.D.	ug/l	0.03	0.06	0.07
Acenaphthylene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Acenaphthene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Fluorene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Phenanthrene	10/27/18	N.D.	ug/l	0.03	0.06	0.07
Anthracene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Di-n-butylphthalate	10/27/18	N.D.	ug/l	0.05	0.1	1
Fluoranthene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Pyrene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
bis(2-Ethylhexyl)phthalate	10/27/18	N.D.	ug/l	0.08	0.2	1
Benzo(a)anthracene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Chrysene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Benzo(b)fluoranthene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Benzo(k)fluoranthene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Benzo(a)pyrene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Indeno(1,2,3-cd)pyrene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Dibenz(a,h)anthracene	10/27/18	N.D.	ug/l	0.02	0.06	0.07
Benzo(g,h,i)perylene	10/27/18	N.D.	ug/l	0.01	0.03	0.05
Hexachlorobenzene	10/27/18	N.D.	ug/l	0.01	0.03	0.05

Quality Control Summary
Surrogates
GC/MS Semivolatiles
SDG: TID07
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS-SIM

18297WAF026	1-Methylnaphthalene-d10		Benzo(a)pyrene-d12		Fluoranthene-d10	
	Spike Added	1 ug/l	Spike Added	1 ug/l	Spike Added	1 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWF297	82	29 - 112	102	18 - 129	100	38 - 119
297WFLCS	84	29 - 112	98	18 - 129	106	38 - 119
297WFLCSD	82	29 - 112	98	18 - 129	94	38 - 119
9861917	92	29 - 112	74	18 - 129	109	38 - 119
9861918	81	29 - 112	90	18 - 129	108	38 - 119
9861919	64	29 - 112	60	18 - 129	81	38 - 119
9861920	79	29 - 112	66	18 - 129	106	38 - 119
9861921	40	29 - 112	43	18 - 129	47	38 - 119
9861922	78	29 - 112	88	18 - 129	105	38 - 119

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: TID07
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS-SIM

LCS: 297WFLCS LCSD: 297WFLCSD **Analyte**	Batch: **18297WAF026** (Sample number(s): 9861917-9861922)							
	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	0.714	0.747	71	75	10-113	4	30
bis(2-Chloroethyl)ether	1.00	1.14	1.04	114	104	40-116	9	20
Naphthalene	1.00	0.916	0.862	92	86	43-114	6	20
Acenaphthylene	1.00	0.969	0.914	97	91	35-121	6	20
Acenaphthene	1.00	1.02	0.947	102	95	48-114	8	20
Fluorene	1.00	1.05	0.999	105	100	50-118	5	20
Phenanthrene	1.00	1.20	1.01	120 *	101	53-115	17	20
Anthracene	1.00	1.06	0.926	106	93	53-119	14	20
Di-n-butylphthalate	1.00	1.03	0.903 J	103	90	60-145	13	20
Fluoranthene	1.00	1.08	0.956	108	96	58-120	13	20
Pyrene	1.00	1.00	0.982	100	98	53-121	2	20
bis(2-Ethylhexyl)phthalate	1.00	1.03	0.946 J	103	95	55-173	9	20
Benzo(a)anthracene	1.00	1.10	1.08	110	108	59-120	2	20
Chrysene	1.00	1.08	1.05	108	105	57-120	2	20
Benzo(b)fluoranthene	1.00	1.14	1.12	114	112	53-126	1	20
Benzo(k)fluoranthene	1.00	1.09	1.07	109	107	54-125	1	20
Benzo(a)pyrene	1.00	1.08	1.06	108	106	53-120	1	20
Indeno(1,2,3-cd)pyrene	1.00	1.10	1.11	110	111	48-130	1	20
Dibenz(a,h)anthracene	1.00	1.07	1.06	107	106	44-131	1	20
Benzo(g,h,i)perylene	1.00	1.03	1.04	103	104	44-128	0	20
Hexachlorobenzene	1.00	0.962	0.853	96	85	46-124	12	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

5B

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: mj2010.d DFTPP Injection Date: 10/27/18

Instrument ID: HP21585 DFTPP Injection Time: 17:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	43.3
68	Less than 2.0% of mass 69	0.74 (1.5)1
69	Mass 69 relative abundance	49.3
70	Less than 2.0% of mass 69	0.27 (0.54)1
127	10.0 - 80.00% of mass 198	48.9
197	Less than 2.0% of mass 198	0.81
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.78
275	10.0 - 60.0% of mass 198	23.8
365	Greater than 1.00% of mass 198	2.49
441	Present, and less than mass 443	11.1
442	Greater than 50.00% of mass 198	71.0
443	15.00 - 24.00% of mass 442	14.2 (20.0)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	mj2011.d	10/27/18	18:18
02	SBLKWF297	mj2012.d	10/27/18	19:01
03	297WFLCS	mj2013.d	10/27/18	19:31
04	297WFLCSD	mj2014.d	10/27/18	20:00
05	SBLKWN297	mj2015.d	10/27/18	20:29
06	297WNLCS	mj2016.d	10/27/18	20:59
07	9861917	mj2017.d	10/27/18	21:28
08	9861918	mj2018.d	10/27/18	21:57
09	9861919	mj2019.d	10/27/18	22:27
10	9861920	mj2020.d	10/27/18	22:56
11	9861921	mj2021.d	10/27/18	23:25
12	9861922	mj2022.d	10/27/18	23:55
13	rvSIM2768	mj2045.d	10/28/18	00:24
14	9863094	mj2023.d	10/28/18	00:54
15	9863095	mj2024.d	10/28/18	01:23
16	9863096	mj2025.d	10/28/18	01:52
17	9863097MS	mj2026.d	10/28/18	02:22
18	9863098MSD	mj2027.d	10/28/18	02:51

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: mj2010.d DFTPP Injection Date: 10/27/18

Instrument ID: HP21585 DFTPP Injection Time: 17:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	43.3
68	Less than 2.0% of mass 69	0.74 (1.5)1
69	Mass 69 relative abundance	49.3
70	Less than 2.0% of mass 69	0.27 (0.54)1
127	10.0 - 80.00% of mass 198	48.9
197	Less than 2.0% of mass 198	0.81
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.78
275	10.0 - 60.0% of mass 198	23.8
365	Greater than 1.00% of mass 198	2.49
441	Present, and less than mass 443	11.1
442	Greater than 50.00% of mass 198	71.0
443	15.00 - 24.00% of mass 442	14.2 (20.0)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	9863100	mj2028.d	10/28/18	03:20
20	9863102	mj2030.d	10/28/18	04:19
21	9863103	mj2031.d	10/28/18	04:48
22	9863104	mj2032.d	10/28/18	05:18

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 $\overline{RRF}$ 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:_____

_____

Report generated on 10/27/2018 at 18:21

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: _____

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP21585 Calibration Date: 10/27/18 Time: 18:18

Lab File ID: mj2011.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	0.699	0.500	.5	1
N-Nitrosodimethylamine	1.005	1.061	0.530	.5	6
bis(2-Chloroethyl)ether	0.382	0.398	0.520	.5	4
Quinoline	0.690	0.708	0.510	.5	3
Naphthalene	1.150	1.160	0.500	.5	1
2-Methylnaphthalene	0.707	0.733	0.520	.5	4
1-Methylnaphthalene	0.700	0.727	0.520	.5	4
Acenaphthylene	2.632	2.725	0.520	.5	4
Dimethylphthalate	1.974	2.044	2.590	2.5	4
Acenaphthene	1.599	1.612	0.500	.5	1
Dibenzofuran	2.137	2.244	0.530	.5	5
Diethylphthalate	1.964	2.079	2.650	2.5	6
Fluorene	1.864	1.944	0.520	.5	4
Hexachlorobenzene	0.281	0.282	0.500	.5	0
Phenanthrene	1.341	1.358	0.510	.5	1
Anthracene	1.317	1.362	0.520	.5	3
Di-n-butylphthalate	1.470	1.587	2.700	2.5	8
Fluoranthene	1.497	1.583	0.530	.5	6
Pyrene	2.273	2.245	0.490	.5	-1
Butylbenzylphthalate	0.948	0.988	2.610	2.5	4
bis(2-Ethylhexyl)phthalate	1.413	1.481	2.620	2.5	5
Benzo(a)anthracene	1.960	1.998	0.510	.5	2
Chrysene	1.984	1.977	0.500	.5	0
Di-n-octylphthalate	2.585	2.663	2.580	2.5	3
Benzo(b)fluoranthene	1.980	2.012	0.510	.5	2
Benzo(k)fluoranthene	1.976	2.059	0.520	.5	4
Benzo(e)pyrene	1.860	1.928	0.520	.5	4
Benzo(a)pyrene	1.897	1.921	0.510	.5	1
Perylene	1.929	1.928	0.500	.5	0
Indeno(1,2,3-cd)pyrene	1.724	1.663	0.480	.5	-4
Dibenz(a,h)anthracene	1.761	1.712	0.490	.5	-3
Benzo(g,h,i)perylene	1.995	1.931	0.480	.5	-3
1-Methylnaphthalene-d10	0.455	0.461	0.510	.5	1
Fluoranthene-d10	0.981	1.033	0.530	.5	5
Benzo(a)pyrene-d12	0.919	0.951	0.520	.5	4

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/18oct27.b/mj2011.d

Area Summary

File ID:

Internal Standard Name	mj2011.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	57232	53139	26570	106278	Yes
Naphthalene-d8	164185	152458	76229	304916	Yes
Acenaphthene-d10	71954	66371	33186	132742	Yes
Phenanthrene-d10	153475	136980	68490	273960	Yes
Chrysene-d12	112886	94742	47371	189484	Yes
Perylene-d12	108783	90716	45358	181432	Yes

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

RT Summary

File ID:

Internal Standard Name	mj2011.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.619	6.619	Yes
Naphthalene-d8	8.519	8.539	Yes
Acenaphthene-d10	11.316	11.316	Yes
Phenanthrene-d10	13.214	13.214	Yes
Chrysene-d12	17.223	17.223	Yes
Perylene-d12	19.677	19.669	Yes

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

Comments: _____

_____

Report generated on 10/27/2018 at 18:50

Data File: /chem/HP21585.i/18oct27.b/mj2045.d
Report Date: 10/30/2018 09:13

Lancaster Laboratories, Inc.
Shift Ending Continuing Calibration Check Report

Instrument ID: HP21585.i
Client ID: SECC0.5
Lab Sample ID: rvSIM2768
Sublist used: 25784.sub

Injection Date and Time: 28-OCT-2018 00:24
Initial Calibration Date(s): 26-OCT-2018 26-OCT-2018
Initial Calibration Time(s): 07:31 10:02
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m

Target Compounds	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
1,4-Dioxane	0.69359	0.67777	0.010	2.3	20.0
bis(2-Chloroethyl)ether	0.38248	0.41625	0.010	-8.8	20.0
Naphthalene	1.14946	1.19897	0.010	-4.3	20.0
Acenaphthylene	2.63173	2.63506	0.010	-0.1	20.0
Acenaphthene	1.59900	1.56768	0.010	2.0	20.0
Fluorene	1.86421	1.86652	0.010	-0.1	20.0
Hexachlorobenzene	0.28072	0.27325	0.010	2.7	20.0
Phenanthrene	1.34136	1.33315	0.010	0.6	20.0
Anthracene	1.31684	1.34435	0.010	-2.1	20.0
Di-n-butylphthalate	1.47014	1.53678	0.010	-4.5	20.0
Fluoranthene	1.49686	1.53749	0.010	-2.7	20.0
Pyrene	2.27340	2.23751	0.010	1.6	20.0
bis(2-Ethylhexyl)phthalate	1.41312	1.46059	0.010	-3.4	20.0
Benzo(a)anthracene	1.95976	1.88091	0.010	4.0	20.0
Chrysene	1.98419	1.94371	0.010	2.0	20.0
Benzo(b)fluoranthene	1.97970	1.92071	0.010	3.0	20.0
Benzo(k)fluoranthene	1.97625	1.94570	0.010	1.5	20.0
Benzo(a)pyrene	1.89716	1.84396	0.010	2.8	20.0
Indeno(1,2,3-cd)pyrene	1.72430	1.66764	0.010	3.3	20.0
Dibenz(a,h)anthracene	1.76065	1.74010	0.010	1.2	20.0
Benzo(g,h,i)perylene	1.99454	1.94812	0.010	2.3	20.0

Surrogate Standards	ICAL Avg. RRF	SECC RRF	Min. RRF	% Diff.	Max. %Diff.
1-Methylnaphthalene-d10	0.45479	0.46804	0.010	-2.9	20.0
Fluoranthene-d10	0.98056	1.02014	0.010	-4.0	20.0
Benzo(a)pyrene-d12	0.91911	0.94419	0.010	-2.7	20.0

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): mj2011.d Date Analyzed: 10/27/18

Instrument ID: HP21585 Time Analyzed: 18:18

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	57232	6.619	164185	8.519	71954	11.316
UPPER LIMIT	114464	7.119	328370	9.019	143908	11.816
LOWER LIMIT	28616	6.119	82093	8.019	35977	10.816
LLI SAMPLE NO.						
01 SBLKWF297	42803	6.619	116787	8.539	50017	11.316
02 297WFLCS	45007	6.619	130808	8.519	55490	11.316
03 297WFLCSD	42369	6.619	124197	8.519	53819	11.316
04 SBLKWN297	50030	6.619	139267	8.519	60254	11.316
05 297WNLCS	46872	6.619	138515	8.519	59948	11.316
06 9861917	48291	6.619	138389	8.519	59923	11.316
07 9861918	51813	6.619	144822	8.519	63995	11.316
08 9861919	53549	6.619	148929	8.519	67186	11.316
09 9861920	46662	6.619	129200	8.519	57160	11.316
10 9861921	56767	6.619	157363	8.519	68843	11.316
11 9861922	50281	6.619	141885	8.519	62949	11.316
12 rvSIM2768	60574	6.619	166447	8.519	74145	11.316
13 9863094	52183	6.619	146108	8.519	65425	11.316
14 9863095	46168	6.619	131929	8.519	57632	11.316
15 9863096	45214	6.619	129716	8.519	57929	11.316
16 9863097MS	44426	6.619	142202	8.519	63465	11.316
17 9863098MSD	44101	6.619	140954	8.519	63405	11.316

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): mj2011.d Date Analyzed: 10/27/18

Instrument ID: HP21585 Time Analyzed: 18:18

	IS4(PHN)		IS5(CRY)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	153475	13.214	112886	17.223	108783	19.677
UPPER LIMIT	306950	13.714	225772	17.723	217566	20.177
LOWER LIMIT	76738	12.714	56443	16.723	54392	19.177
LLI SAMPLE NO.						
01 SBLKWF297	105212	13.214	67833	17.223	66041	19.669
02 297WFLCS	100964	13.206	74376	17.223	73138	19.670
03 297WFLCSD	109108	13.206	72111	17.223	70954	19.669
04 SBLKWN297	122139	13.206	84384	17.223	81847	19.669
05 297WNLCS	125078	13.206	83316	17.223	80879	19.670
06 9861917	104876	13.207	82065	17.223	84921	19.670
07 9861918	107769	13.207	87882	17.223	94411	19.670
08 9861919	134678	13.206	90278	17.223	93540	19.669
09 9861920	101587	13.207	78158	17.223	82186	19.670
10 9861921	143454	13.207	95115	17.223	99693	19.670
11 9861922	107944	13.206	87727	17.223	93082	19.669
12 rvSIM2768	151546	13.206	107946	17.223	108807	19.669
13 9863094	113558	13.206	86478	17.223	89588	19.669
14 9863095	119685	13.167	93125	17.223	95376	19.677
15 9863096	93275	13.214	80447	17.223	84694	19.669
16 9863097MS	102100	13.206	87069	17.223	94302	19.669
17 9863098MSD	102093	13.214	87846	17.223	94098	19.669

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): mj2011.d Date Analyzed: 10/27/18

Instrument ID: HP21585 Time Analyzed: 18:18

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	57232	6.619	164185	8.519	71954	11.316
UPPER LIMIT	114464	7.119	328370	9.019	143908	11.816
LOWER LIMIT	28616	6.119	82093	8.019	35977	10.816
LLI SAMPLE NO.						
18 9863100	50705	6.619	148124	8.539	75203	11.316
19 9863102	65707	6.619	198201	8.539	84192	11.316
20 9863103	45841	6.619	136996	8.539	59700	11.316
21 9863104	43564	6.619	128308	8.539	56286	11.316

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): mj2011.d Date Analyzed: 10/27/18

Instrument ID: HP21585 Time Analyzed: 18:18

	IS4(PHN)		IS5(CRY)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	153475	13.214	112886	17.223	108783	19.677
UPPER LIMIT	306950	13.714	225772	17.723	217566	20.177
LOWER LIMIT	76738	12.714	56443	16.723	54392	19.177
LLI SAMPLE NO.						
18 9863100	101746	13.214	109225	17.230	111987	19.685
19 9863102	156964	13.214	126517	17.223	133782	19.677
20 9863103	120157	13.214	87869	17.223	91508	19.677
21 9863104	115817	13.214	83838	17.223	88253	19.669

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

GKP01 Lancaster Laboratories, Inc. 9861917
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP21585.i/18oct27.b/mj2017.d Injection date and time: **27-OCT-2018 21:28**
Data file Sample Info. Line: GKP01;9861917;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 240 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	6.619	(0.000)	477	152	48291	(-16)	0.25	
6) Naphthalene-d8	8.519	(0.000)	574	136	138389	(-16)	0.25	
14) Acenaphthene-d10	11.316	(0.000)	771	164	59923	(-17)	0.25	
20) Phenanthrene-d10	13.207	(0.008)	991	188	104876	(-32)	0.25	
29) Chrysene-d12	17.223	(0.000)	1559	240	82065	(-27)	0.25	
38) Perylene-d12	19.670	(0.007)	1878	264	84921	(-22)	0.25	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
10) 1-Methylnaphthalene-d10	(2)	9.754	(0.000)	152	58139	0.231	92%		29 - 112
24) Fluoranthene-d10	(4)	14.845	(-0.001)	212	111745	0.272	109%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.539	(0.000)	264	57482	0.184	74%		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)	2.914	(-0.001)	88	5767	0.043	0.18	0.181	B	0.03
4) bis(2-Chloroethyl)ether	(2)				Not Detected					0.005
7) Naphthalene	(2)	8.558	(0.000)	128	7753M	0.012	0.05			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					0.01
25) Fluoranthene	(4)				Not Detected					0.003
26) Pyrene	(5)				Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					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. M = Compound was manually integrated.

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Data file: /chem/HP21585.i/18oct27.b/mj2017.d Injection date and time: **27-OCT-2018 21:28**
Data file Sample Info. Line: GKP01;9861917;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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)

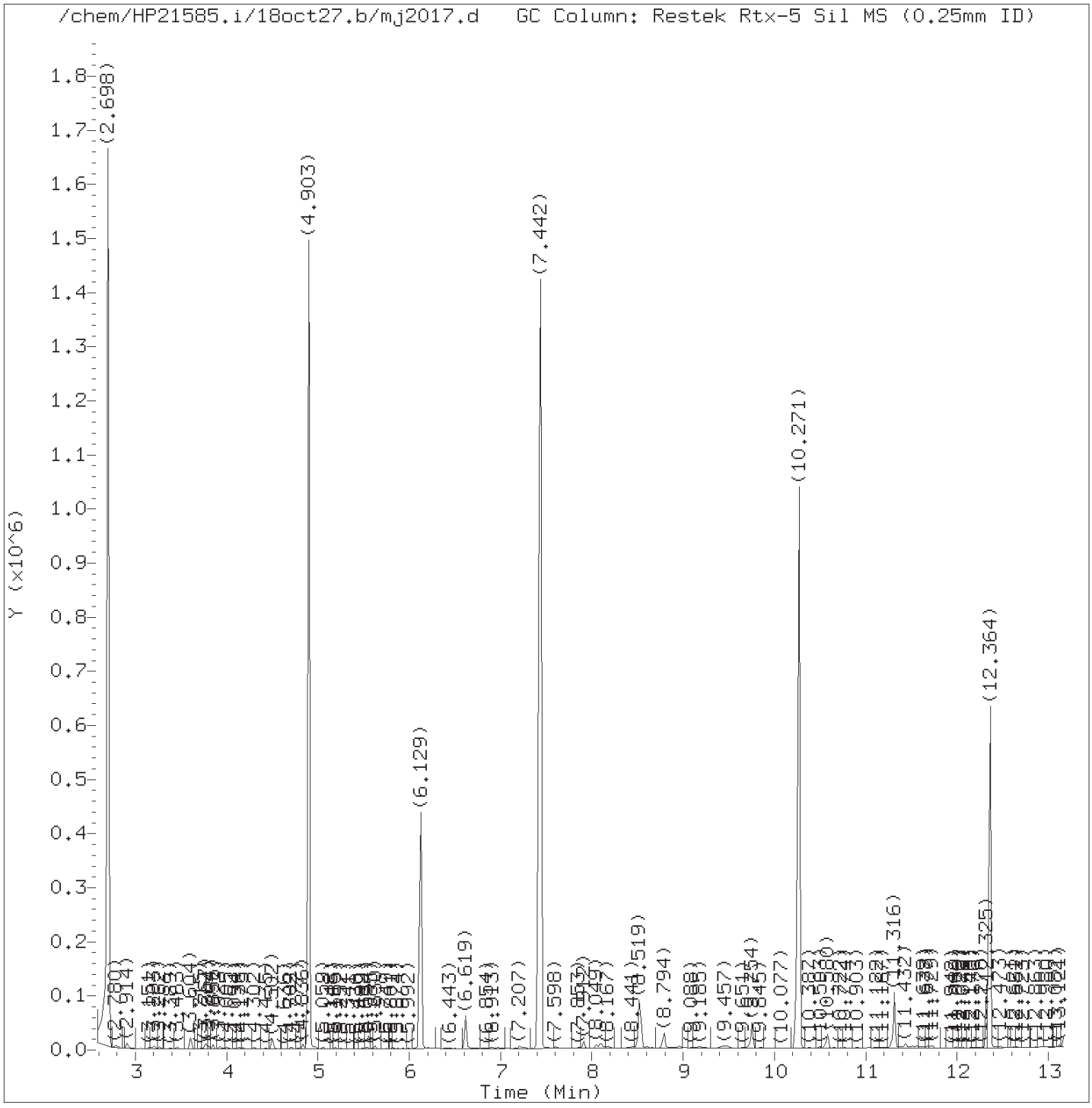
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 240 ml Volume Injected (Vi): 2 ul

THIS SPACE
WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 21

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

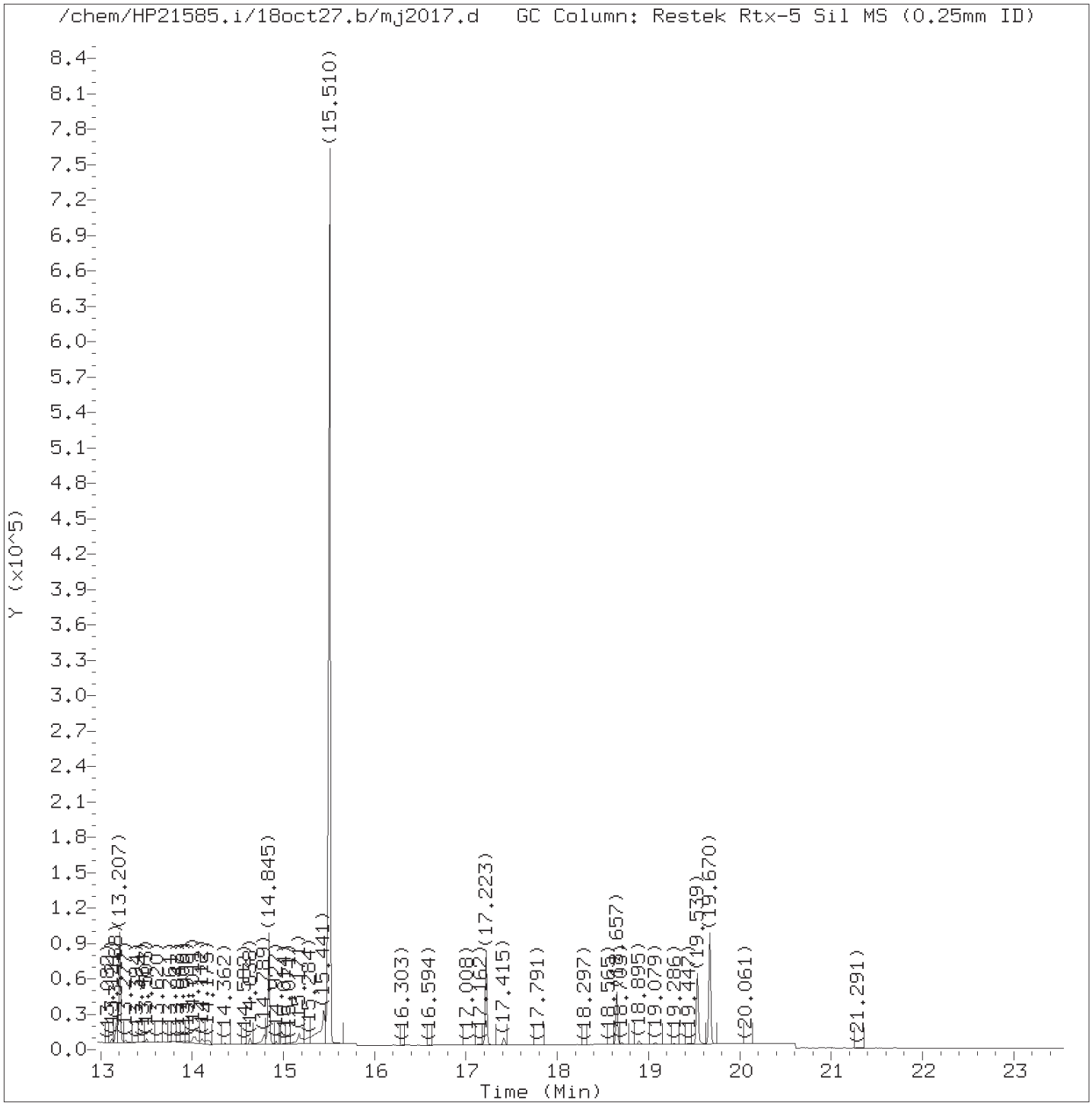
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2017.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:28 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP01 Lab Sample ID: 9861917

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2017.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:28 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP01 Lab Sample ID: 9861917

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2017.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:28 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

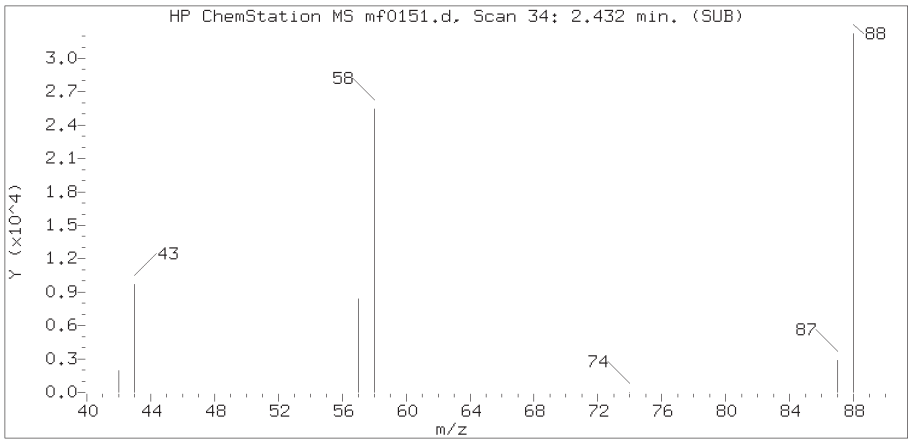
Sample Name: GKP01 Lab Sample ID: 9861917

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.914	88	5767	0.043
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	48291	0.250
6)*Naphthalene-d8	(2)	8.519	136	138389	0.250
7) Naphthalene	(2)	8.559	128	7753M	0.012
10)$1-Methylnaphthalene-d10	(2)	9.754	152	58139	0.231
14)*Acenaphthene-d10	(3)	11.316	164	59923	0.250
20)*Phenanthrene-d10	(4)	13.207	188	104876	0.250
24)$Fluoranthene-d10	(4)	14.845	212	111745	0.272
29)*Chrysene-d12	(5)	17.223	240	82065	0.250
36)$Benzo(a)pyrene-d12	(6)	19.539	264	57482	0.184
38)*Perylene-d12	(6)	19.670	264	84921	0.250

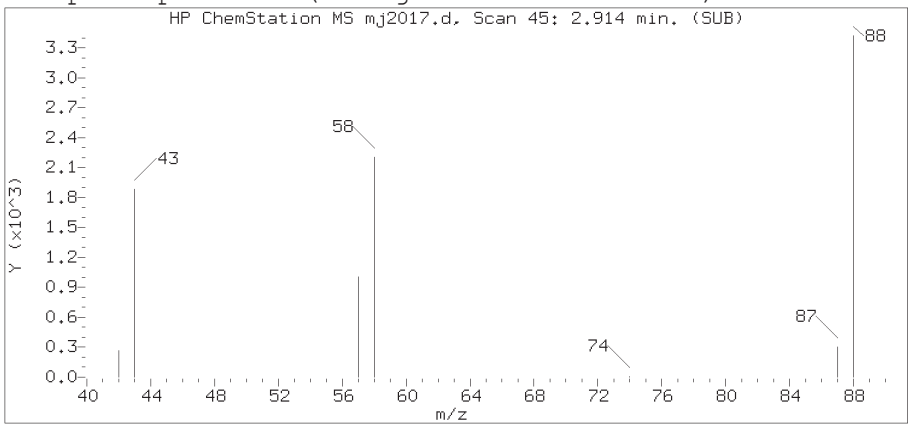
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

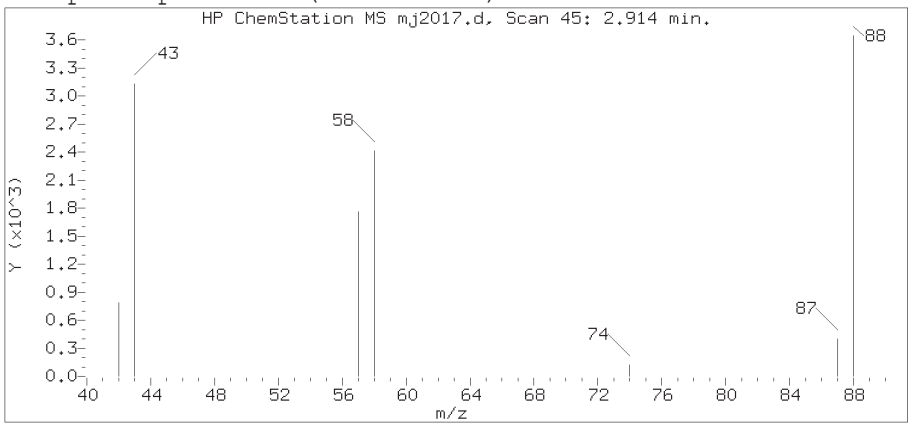
Reference Standard Spectrum for 1,4-Dioxane

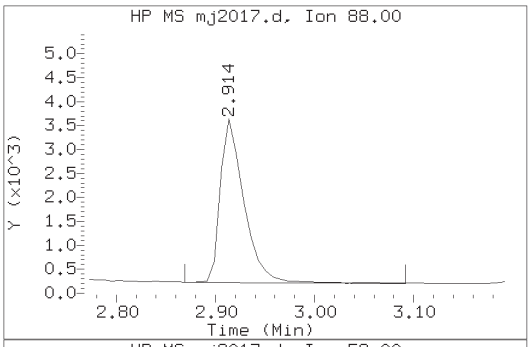


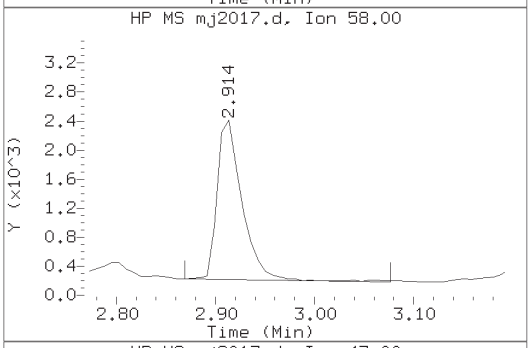
Sample Spectrum (Background Subtracted)

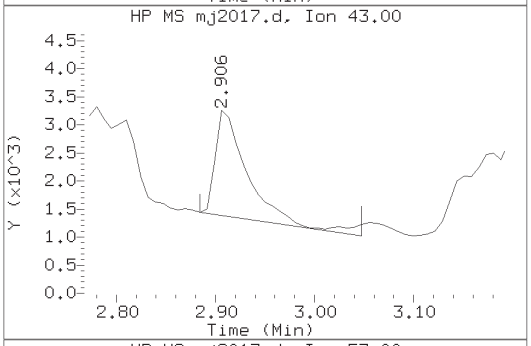


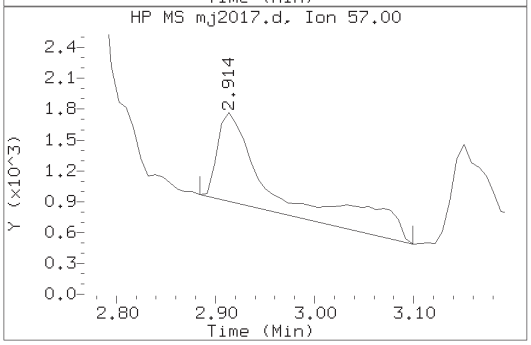
Sample Spectrum (Unaltered)











Data File: /chem/HP21585.i/18oct27.b/mj2017.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:28 Analyst ID: ceb05247

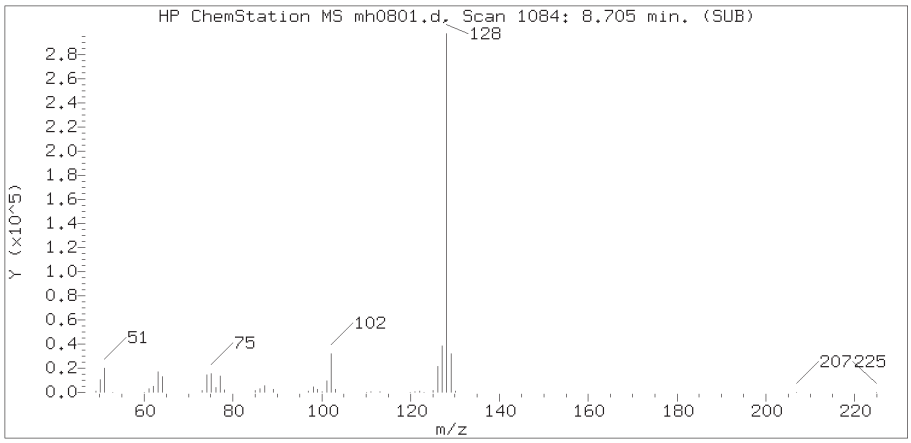
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

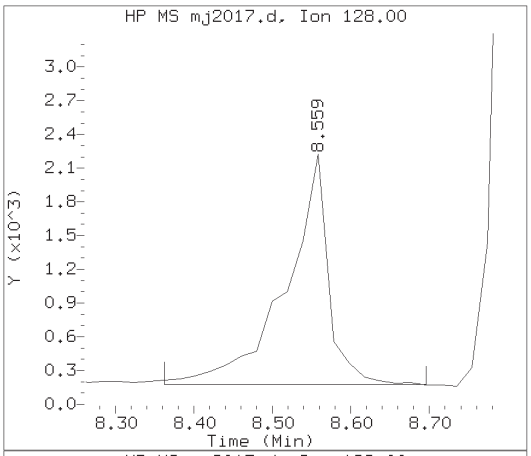
Sample Name: GKP01 Lab Sample ID: 9861917

Compound Number	: 1
Compound Name	: 1,4-Dioxane
Scan Number	: 45
Retention Time (minutes)	: 2.914
Relative Retention Time	:-0.00114
Quant Ion	: 88.00
Area (flag)	: 5767
On-column Amount (ng/ul)	: 0.0430

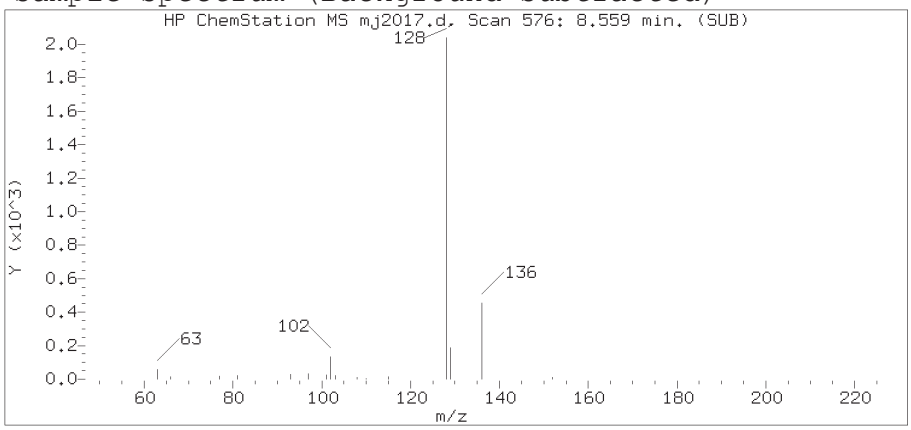
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

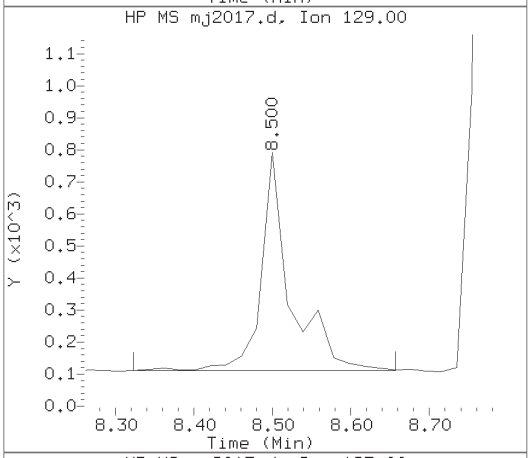
Reference Standard Spectrum for Naphthalene



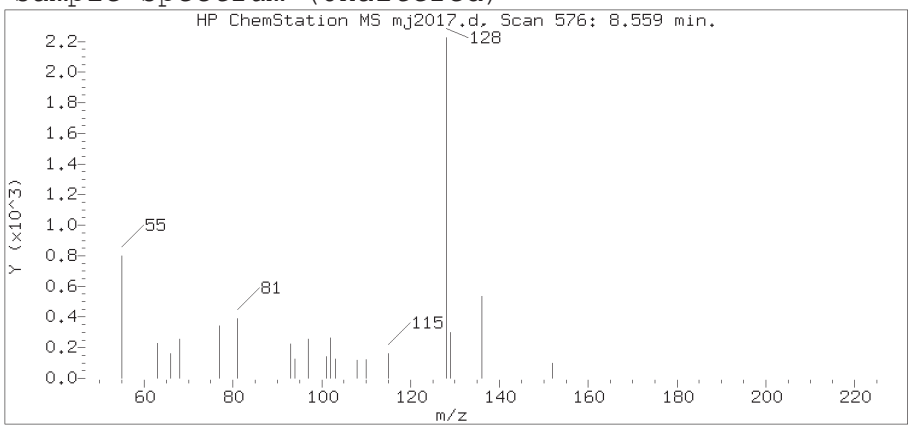


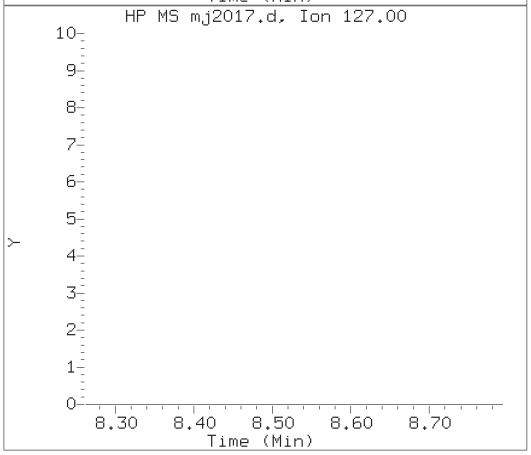
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2017.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:28 Analyst ID: ceb05247

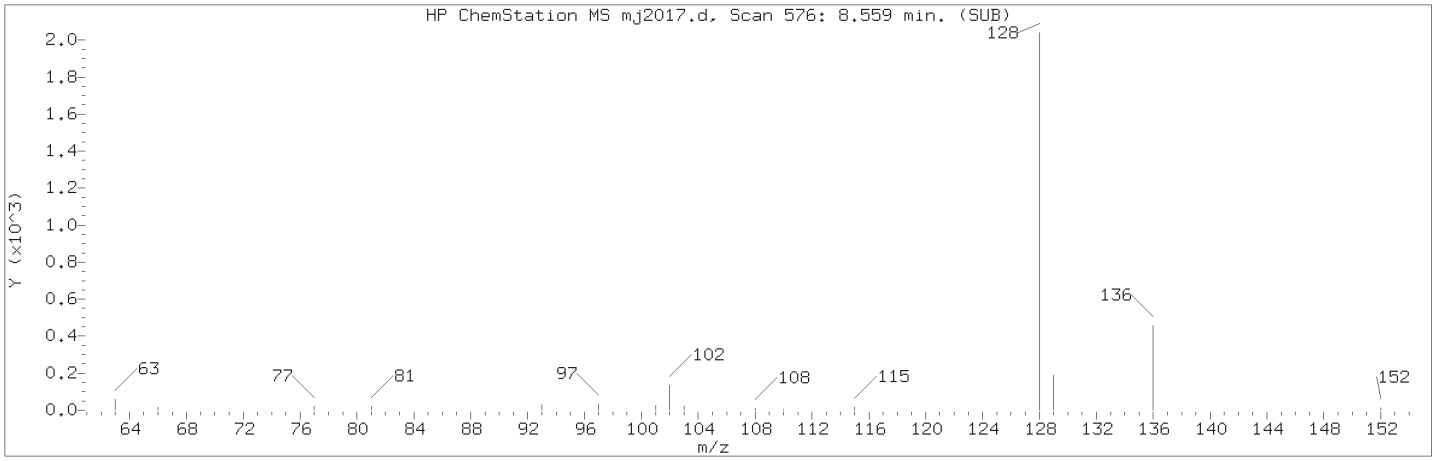
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP01 Lab Sample ID: 9861917

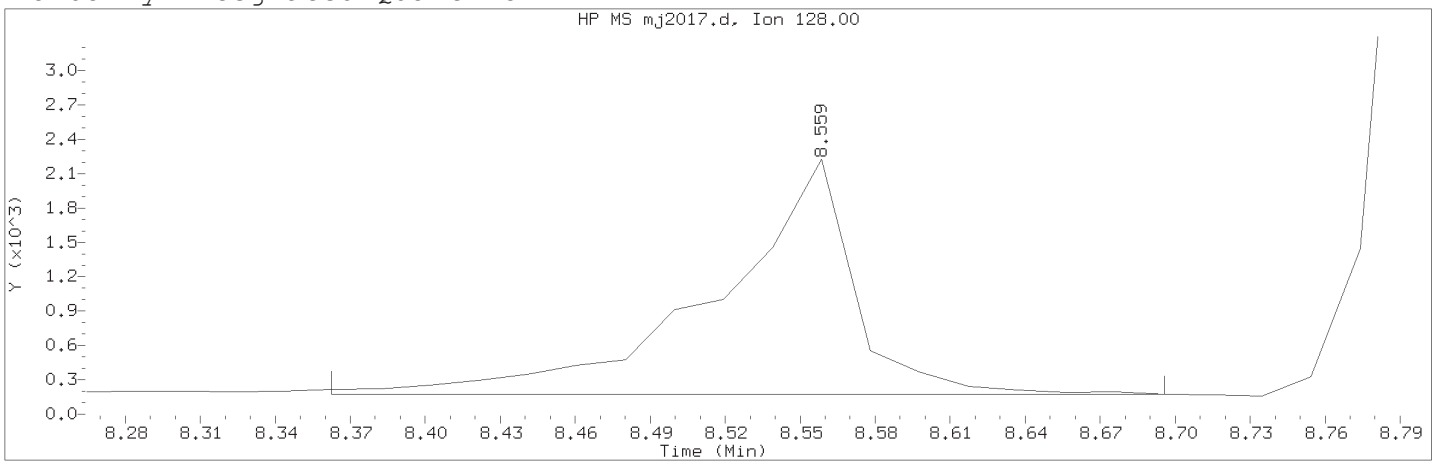
Compound Number	: 7
Compound Name	: Naphthalene
Scan Number	: 576
Retention Time (minutes)	: 8.559
Relative Retention Time	: 0.00000
Quant Ion	: 128.00
Area (flag)	: 7753M
On-column Amount (ng/ul)	: 0.0122

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2017.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:28 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP01 Lab Sample ID: 9861917

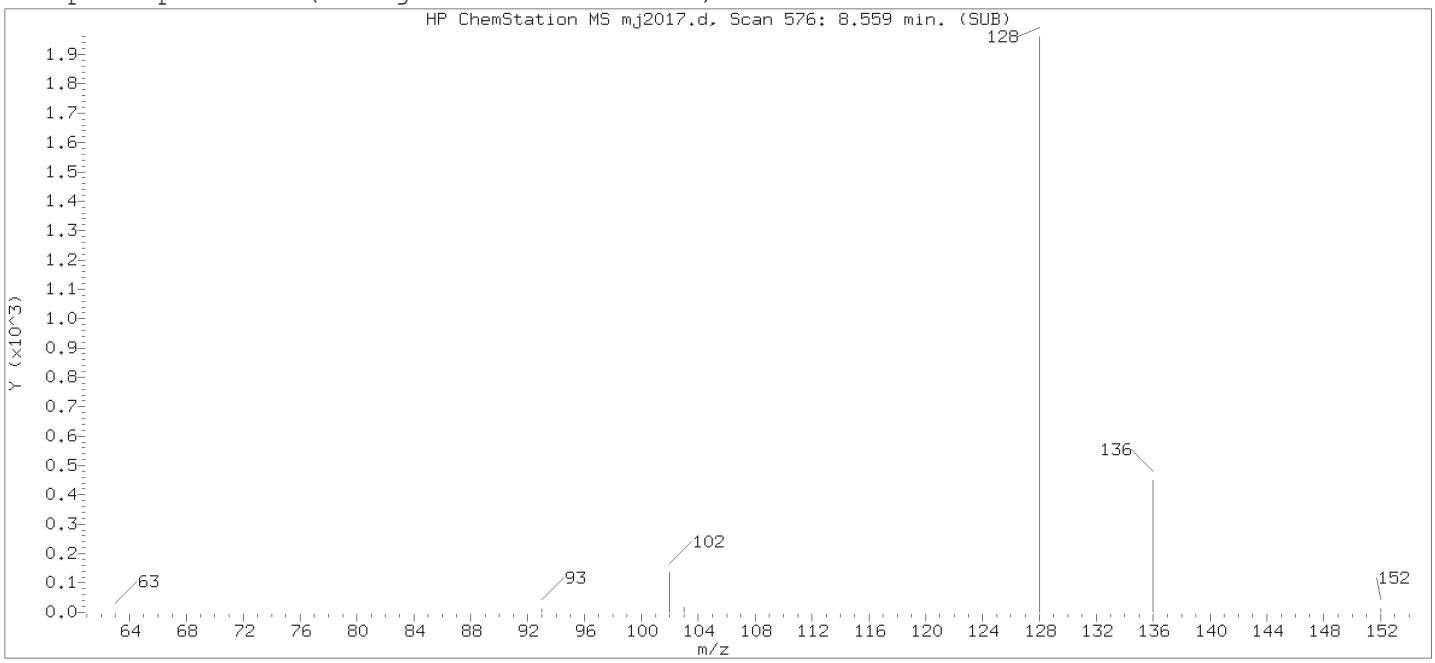
Compound Number	: 7		
Compound Name	: Naphthalene		
Scan Number	: 576		
Retention Time (minutes)	: 8.559		
Quant Ion	: 128.00		
Area (flag)	: 7753M		
On-column Amount (ng/ul)	: 0.0122		
Integration start scan	: 565	Integration stop scan:	582
Y at integration start	: 176	Y at integration end:	176

Reason for manual integration: improper integration

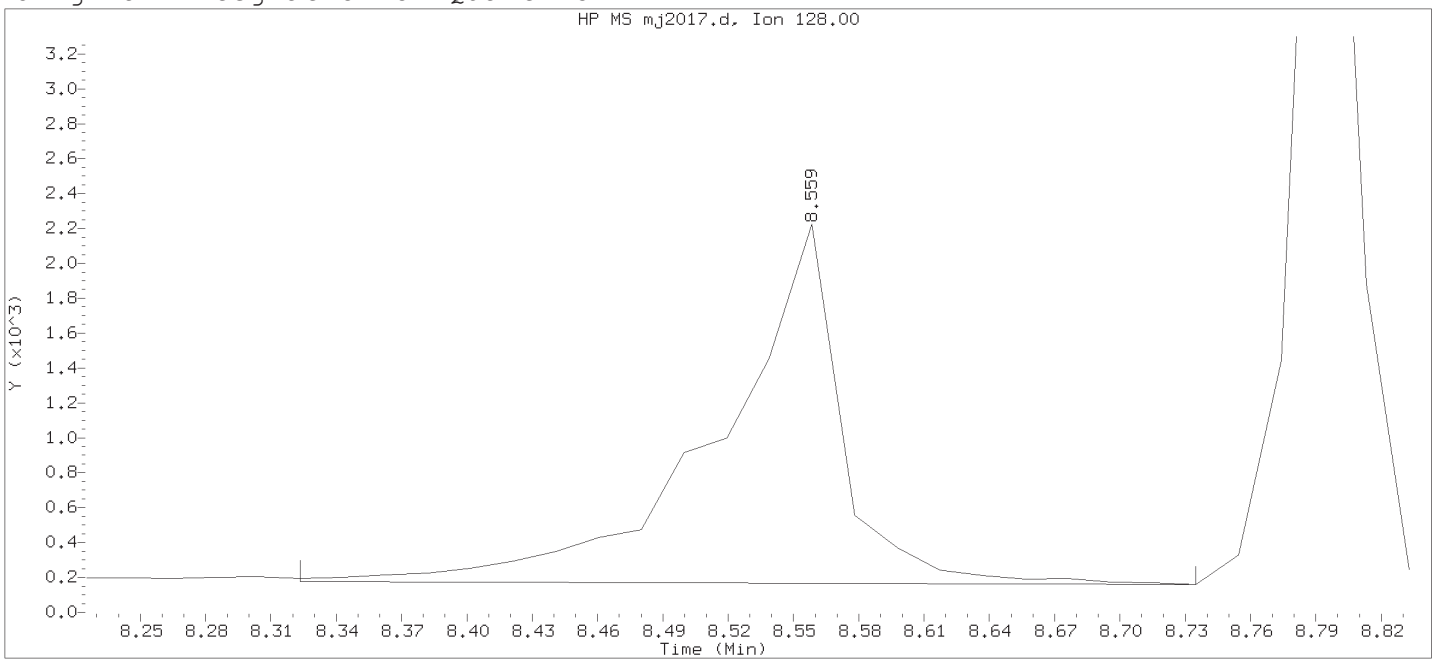
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2017.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:28 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: GKP01 Lab Sample ID: 9861917

Compound Number	: 7		
Compound Name	: Naphthalene		
Scan Number	: 576		
Retention Time (minutes)	: 8.559		
Quant Ion	: 128.00		
Area	: 7976		
On-column Amount (ng/ul)	: 0.0125		
Integration start scan	: 563	Integration stop scan:	584
Y at integration start	: 177	Y at integration end:	159

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used for this page.

GKP03 Lancaster Laboratories, Inc. 9861918
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP21585.i/18oct27.b/mj2018.d Injection date and time: **27-OCT-2018 21:57**
Data file Sample Info. Line: GKP03;9861918;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 227 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	6.619(0.000)	477	152	51813 (-9)	0.25	
6) Naphthalene-d8	8.519(0.000)	574	136	144822 (-12)	0.25	
14) Acenaphthene-d10	11.316(0.000)	771	164	63995 (-11)	0.25	
20) Phenanthrene-d10	13.207(0.008)	991	188	107769M (-30)	0.25	
29) Chrysene-d12	17.223(0.000)	1559	240	87882 (-22)	0.25	
38) Perylene-d12	19.670(0.008)	1878	264	94411 (-13)	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)	9.754(0.000)	152	53591	0.203	81%		29 - 112
24) Fluoranthene-d10	(4)	14.845(-0.001)	212	114524A	0.271	108%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.539(0.000)	264	78054	0.225	90%		18 - 129

A = User selected an alternate peak.

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)	2.914(-0.001)	88	4143	0.029	0.13	0.181	B	0.03
4) bis(2-Chloroethyl)ether	(2)			Not Detected					0.005
7) Naphthalene	(2)	8.558(0.000)	128	8201	0.012	0.05			0.008
13) Acenaphthylene	(3)			Not Detected					0.003
15) Acenaphthene	(3)	11.368(0.000)	154	3301M	0.008	0.04			0.003
18) Fluorene	(3)	12.067(0.000)	166	1706M	0.004	0.02			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)	14.034(-0.000)	149	10395M	0.016	0.07			0.01
25) Fluoranthene	(4)	14.870(-0.000)	202	1982MA	0.003	0.01			0.003
26) Pyrene	(5)			Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					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. M = Compound was manually integrated. A = User selected an alternate peak.

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Data file: /chem/HP21585.i/18oct27.b/mj2018.d Injection date and time: **27-OCT-2018 21:57**
Data file Sample Info. Line: GKP03;9861918;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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)

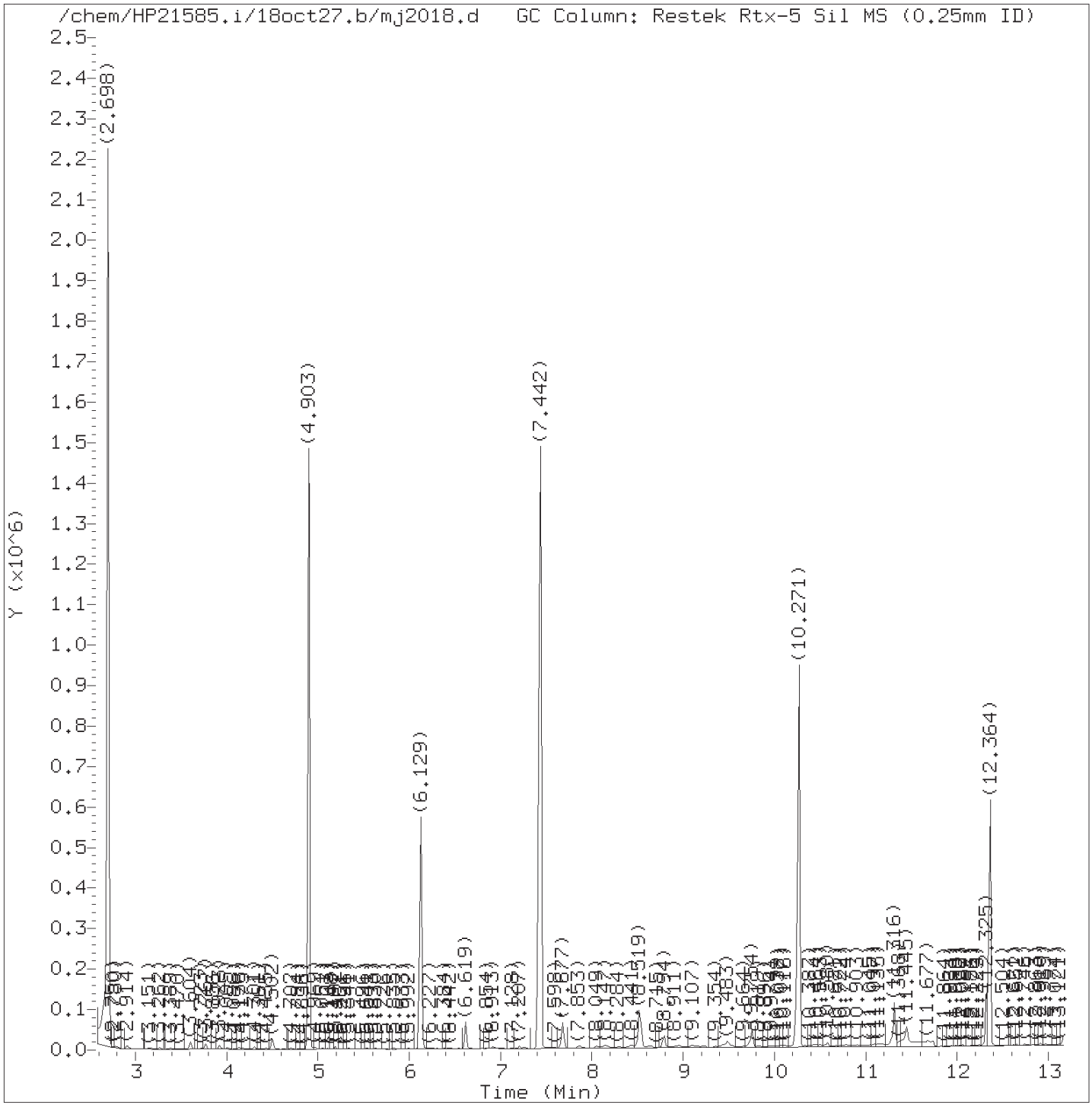
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 227 ml Volume Injected (Vi): 2 ul

THIS SPACE
WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 21

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

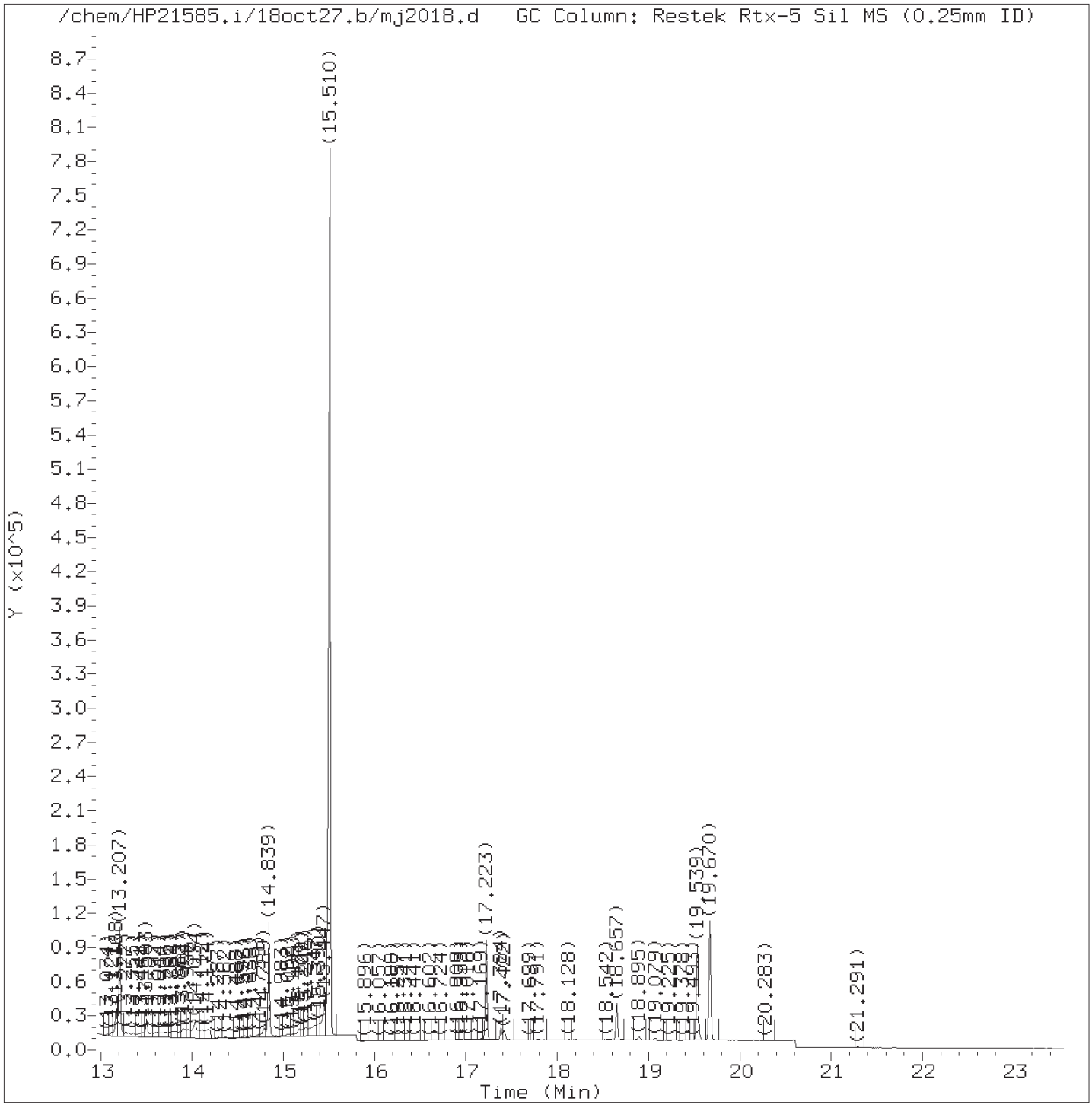
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

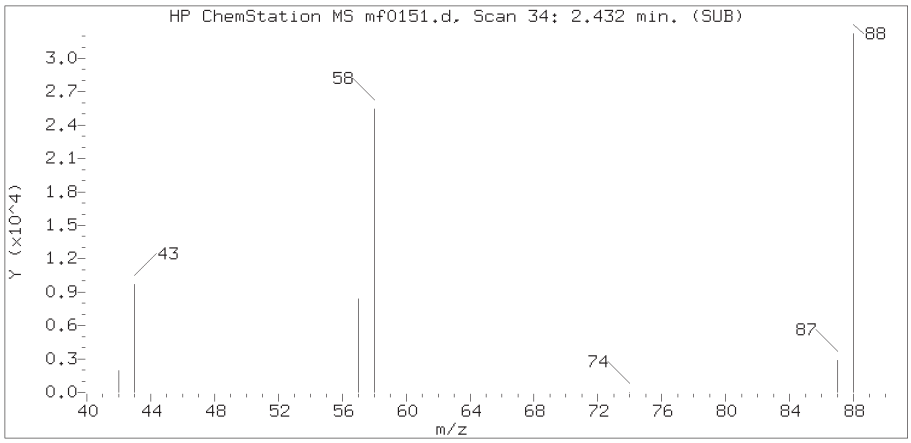
Sample Name: GKP03 Lab Sample ID: 9861918

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.914	88	4143	0.029
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	51813	0.250
6)*Naphthalene-d8	(2)	8.519	136	144822	0.250
7) Naphthalene	(2)	8.558	128	8201	0.012
10)$1-Methylnaphthalene-d10	(2)	9.754	152	53591	0.203
14)*Acenaphthene-d10	(3)	11.316	164	63995	0.250
15) Acenaphthene	(3)	11.368	154	3301M	0.008
18) Fluorene	(3)	12.067	166	1706M	0.004
20)*Phenanthrene-d10	(4)	13.207	188	107769M	0.250
23) Di-n-butylphthalate	(4)	14.034	149	10395M	0.016
24)$Fluoranthene-d10	(4)	14.845	212	114524	0.271
25) Fluoranthene	(4)	14.870	202	1982MA	0.003
29)*Chrysene-d12	(5)	17.223	240	87882	0.250
36)$Benzo(a)pyrene-d12	(6)	19.539	264	78054	0.225
38)*Perylene-d12	(6)	19.670	264	94411	0.250

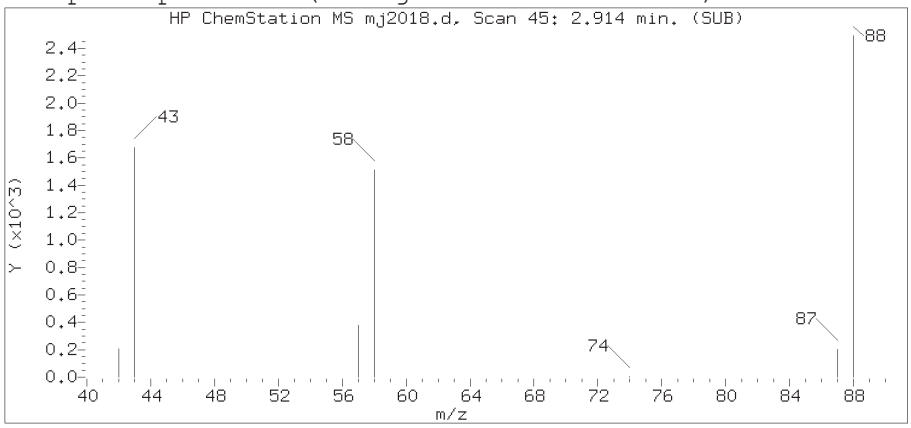
M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

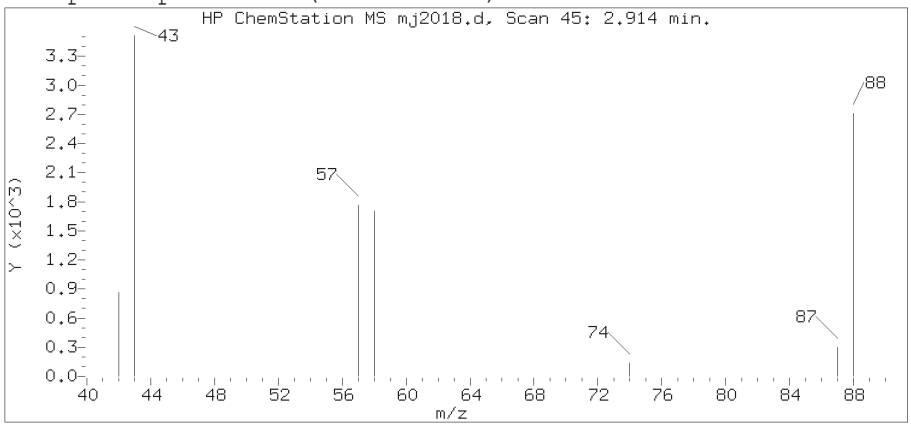
Reference Standard Spectrum for 1,4-Dioxane

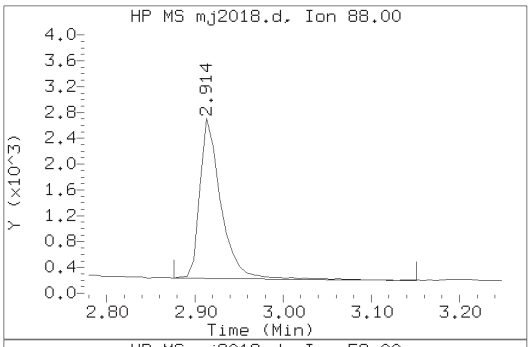


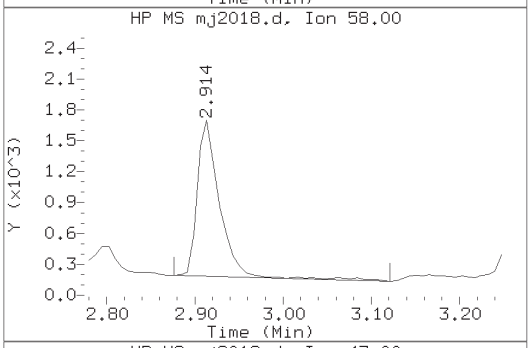
Sample Spectrum (Background Subtracted)

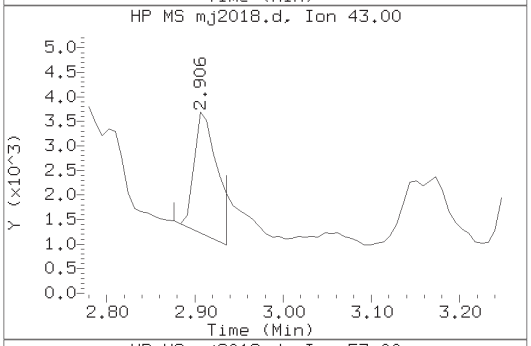


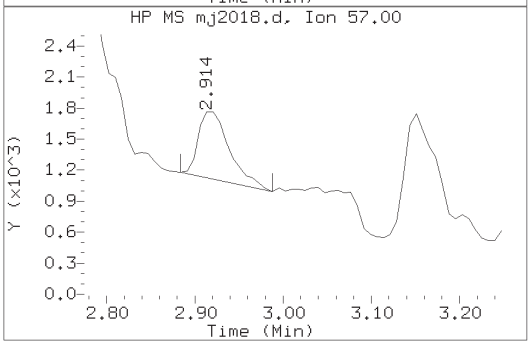
Sample Spectrum (Unaltered)











Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

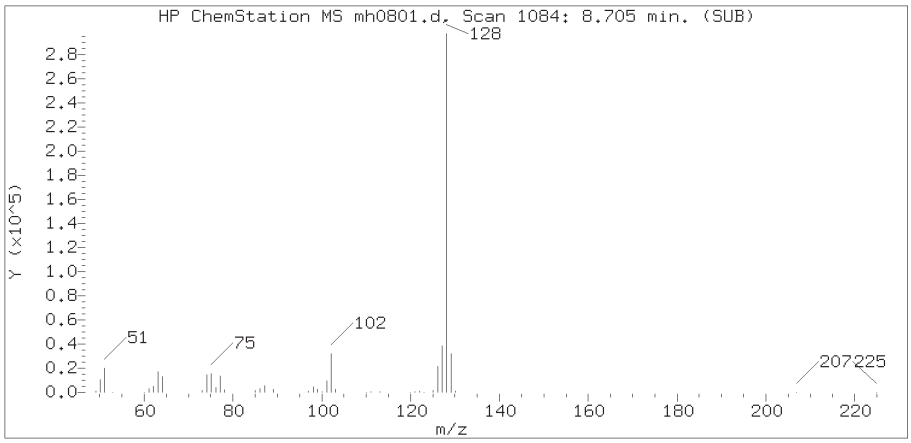
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

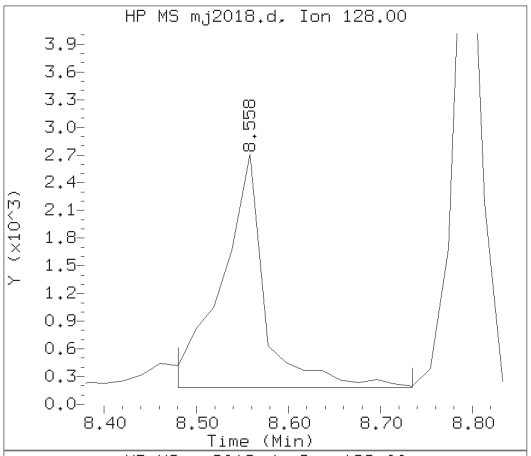
Sample Name: GKP03 Lab Sample ID: 9861918

Compound Number	: 1
Compound Name	: 1,4-Dioxane
Scan Number	: 45
Retention Time (minutes)	: 2.914
Relative Retention Time	:-0.00113
Quant Ion	: 88.00
Area (flag)	: 4143
On-column Amount (ng/ul)	: 0.0288

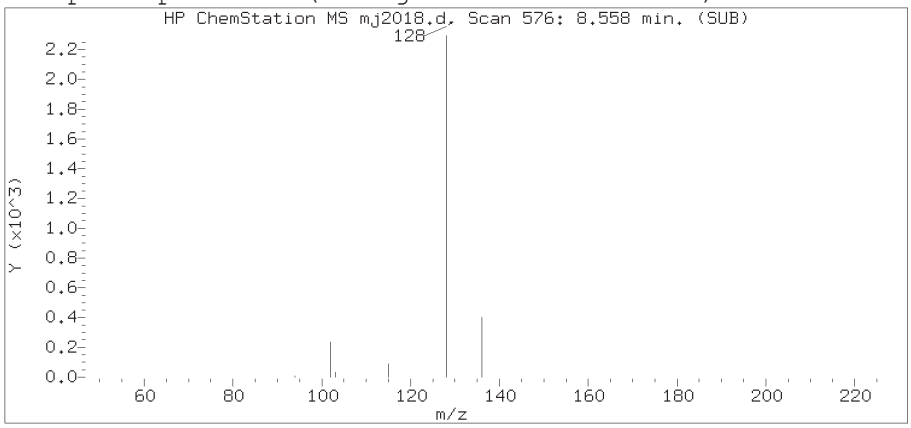
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

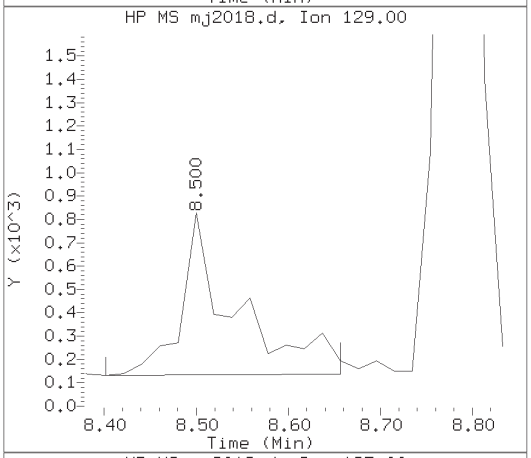
Reference Standard Spectrum for Naphthalene



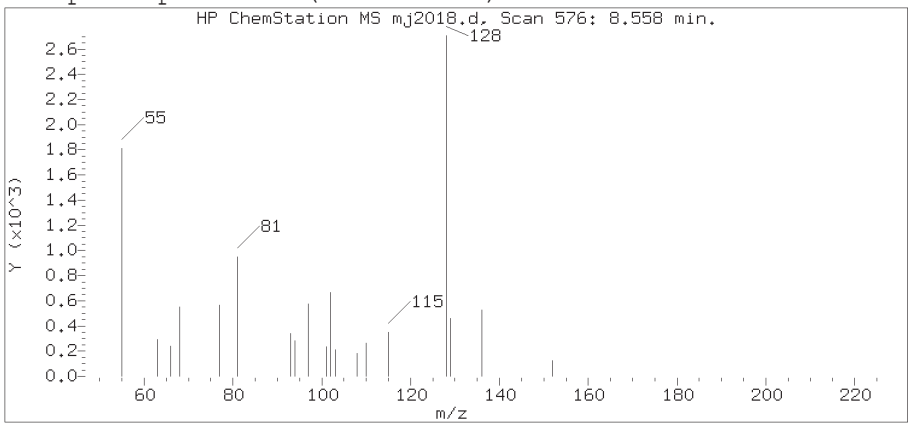


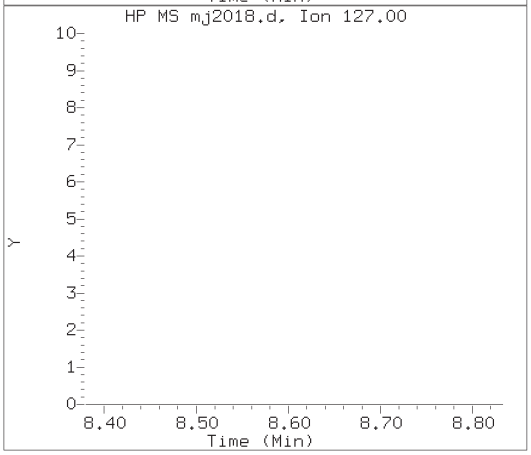
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

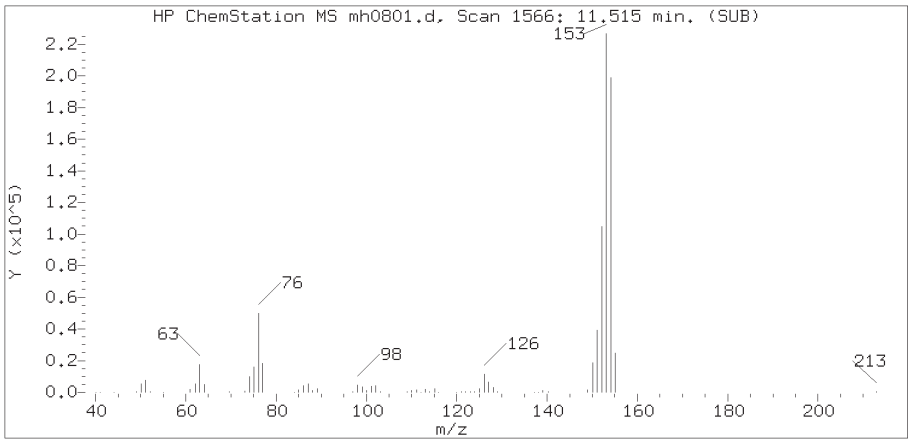
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

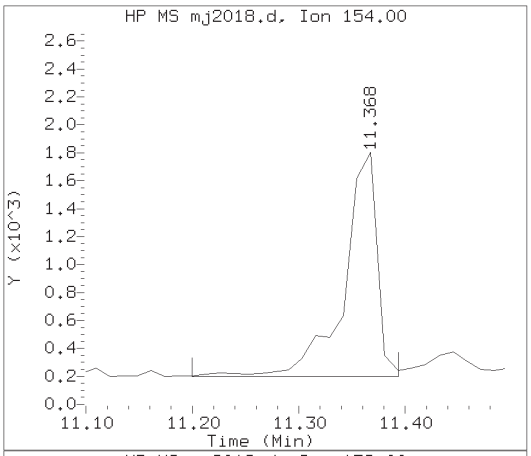
Sample Name: GKP03 Lab Sample ID: 9861918

Compound Number	: 7
Compound Name	: Naphthalene
Scan Number	: 576
Retention Time (minutes)	: 8.558
Relative Retention Time	: 0.00000
Quant Ion	: 128.00
Area (flag)	: 8201
On-column Amount (ng/ul)	: 0.0123

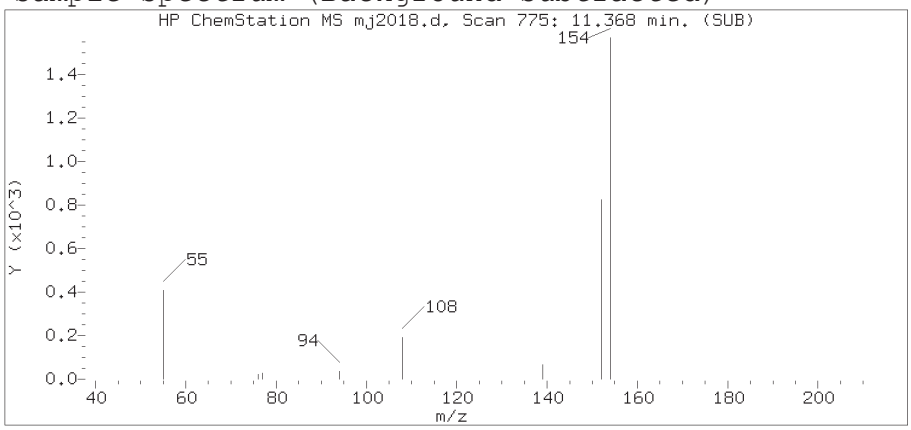
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

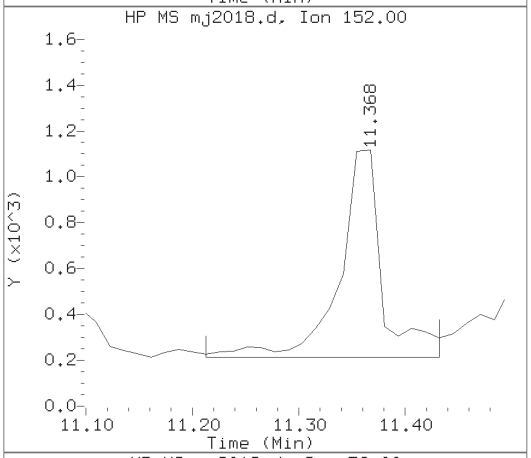
Reference Standard Spectrum for Acenaphthene



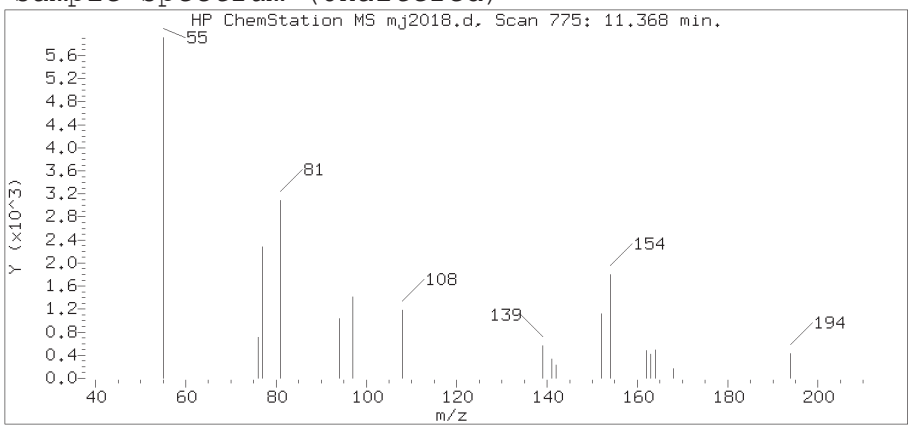


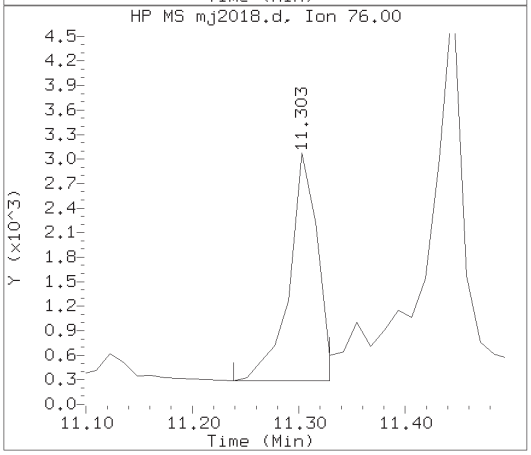
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

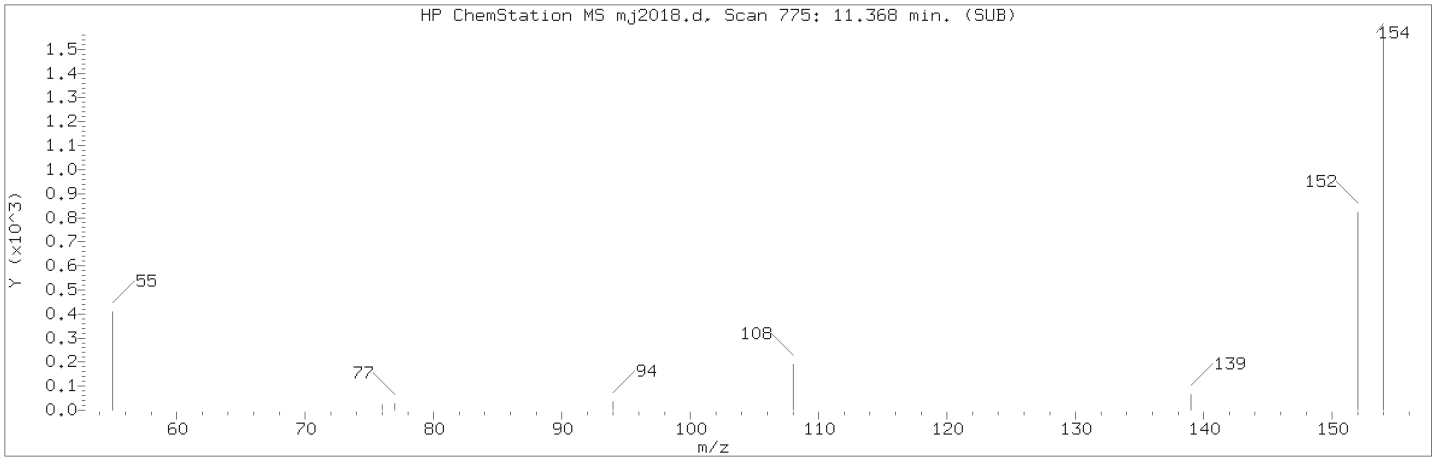
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

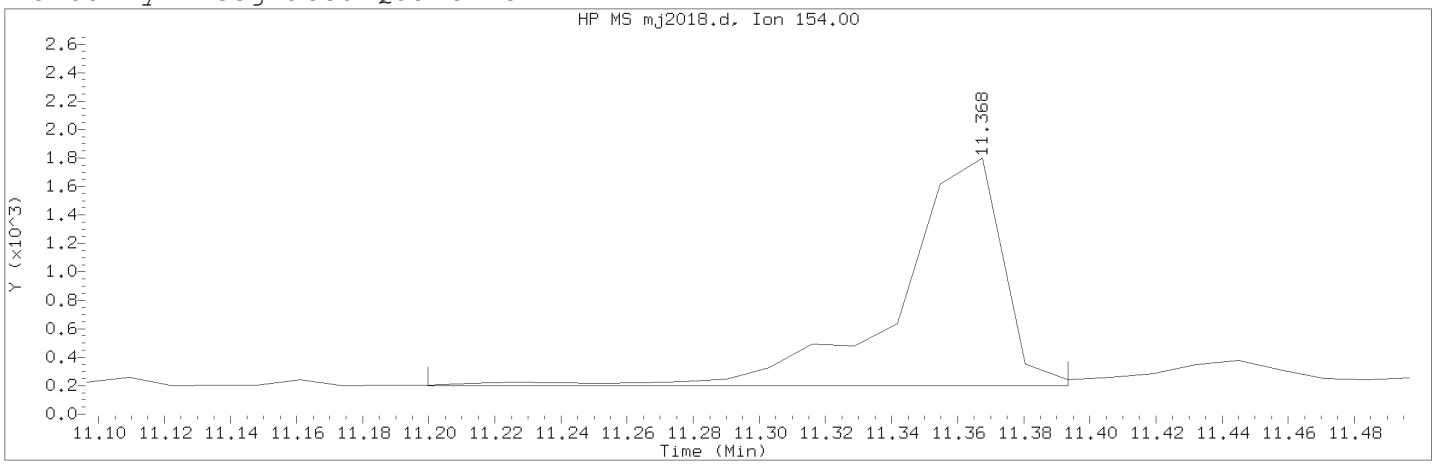
Compound Number	: 15
Compound Name	: Acenaphthene
Scan Number	: 775
Retention Time (minutes)	: 11.368
Relative Retention Time	: 0.00000
Quant Ion	: 154.00
Area (flag)	: 3301M
On-column Amount (ng/ul)	: 0.0081

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

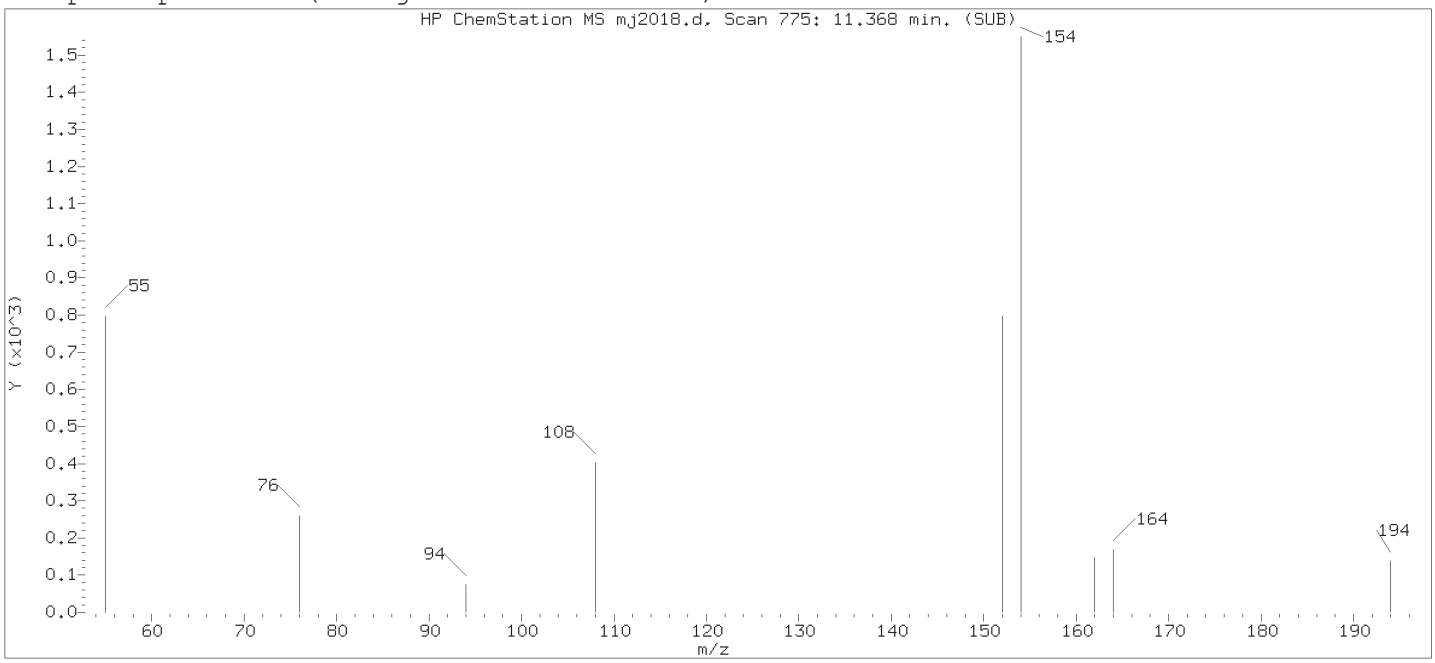
Compound Number	: 15		
Compound Name	: Acenaphthene		
Scan Number	: 775		
Retention Time (minutes)	: 11.368		
Quant Ion	: 154.00		
Area (flag)	: 3301M		
On-column Amount (ng/ul)	: 0.0081		
Integration start scan	: 761	Integration stop scan:	776
Y at integration start	: 198	Y at integration end:	198

Reason for manual integration: improper integration

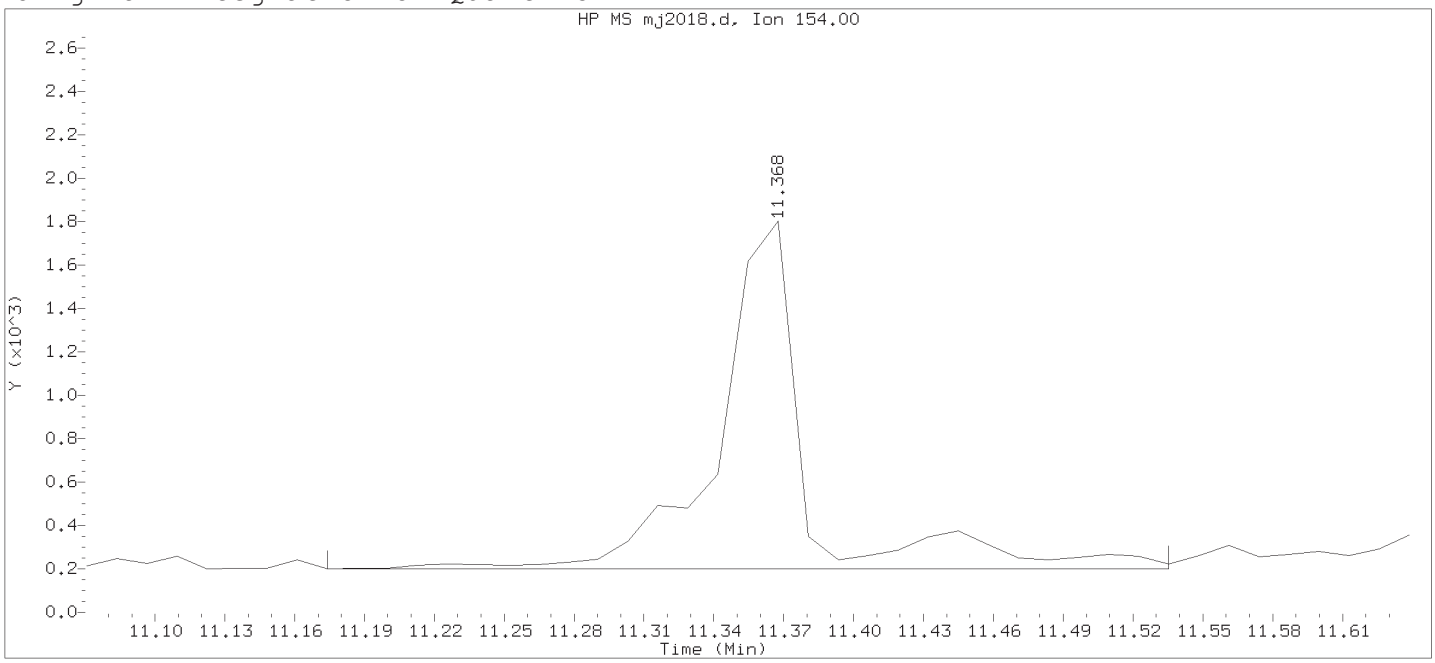
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

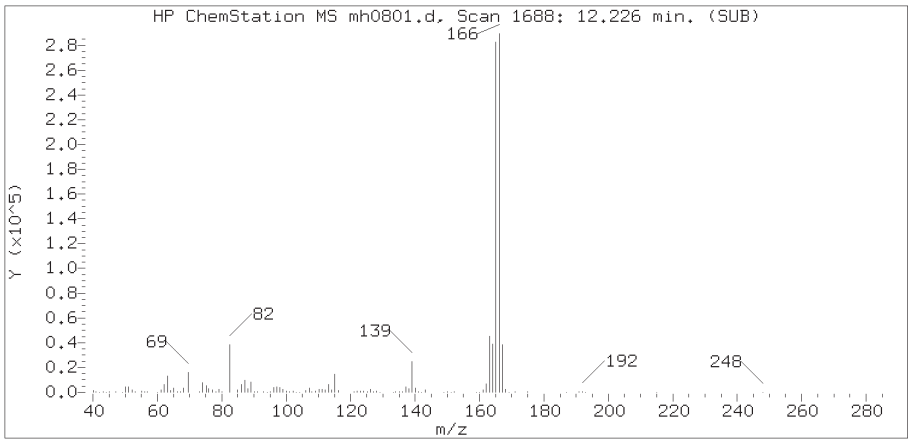
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

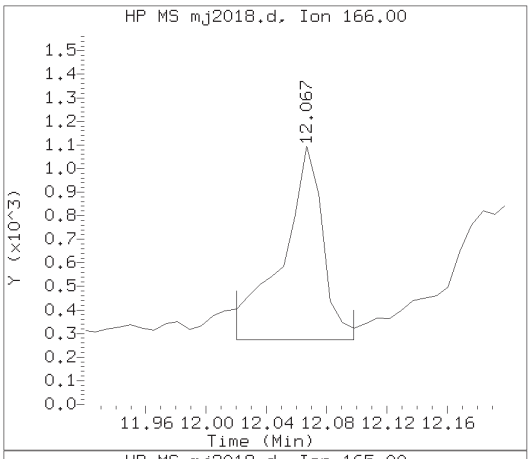
Sample Name: GKP03 Lab Sample ID: 9861918

Compound Number	: 15		
Compound Name	: Acenaphthene		
Scan Number	: 775		
Retention Time (minutes)	: 11.368		
Quant Ion	: 154.00		
Area	: 4192		
On-column Amount (ng/ul)	: 0.0102		
Integration start scan	: 759	Integration stop scan:	787
Y at integration start	: 199	Y at integration end:	199

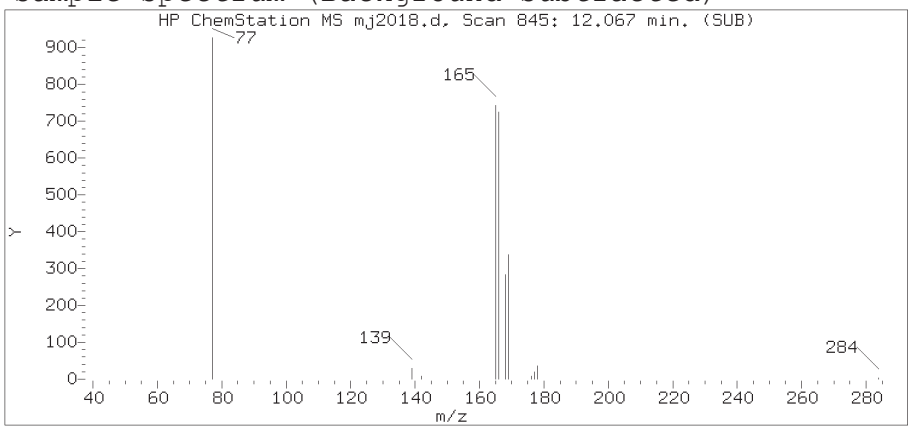
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used for TID07.

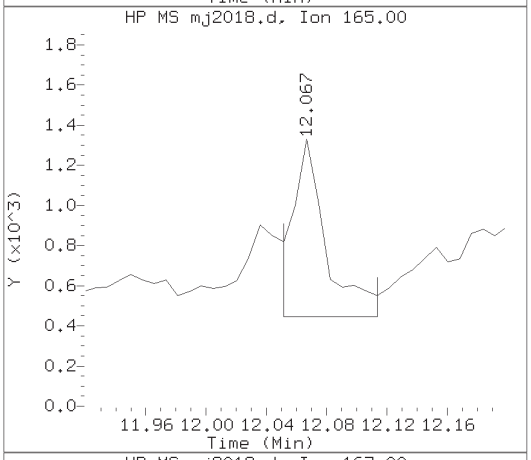
Reference Standard Spectrum for Fluorene



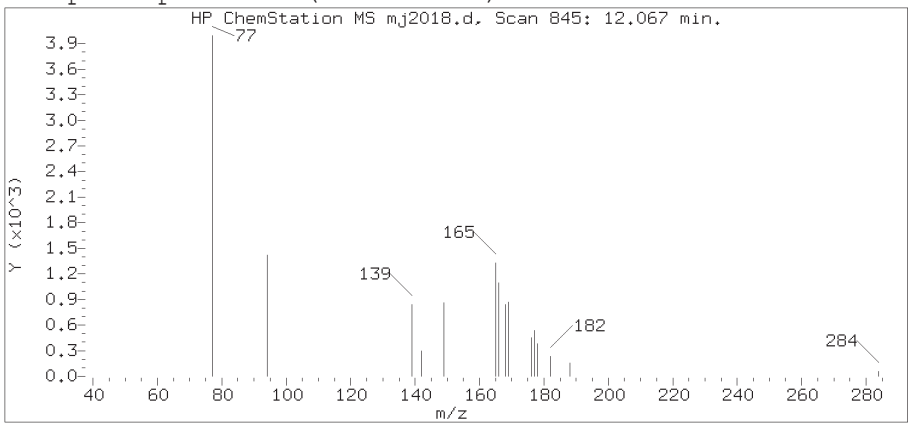


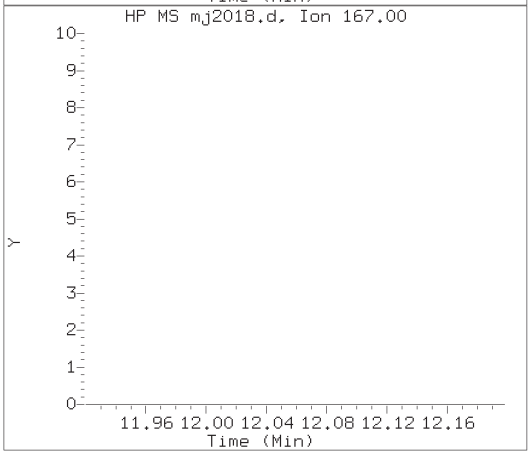
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

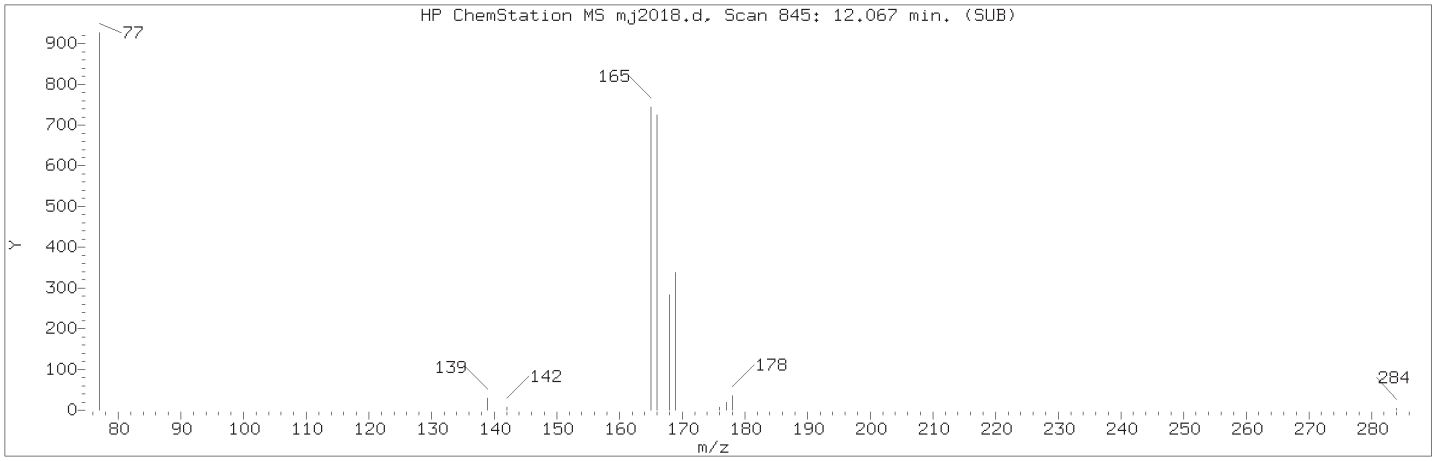
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

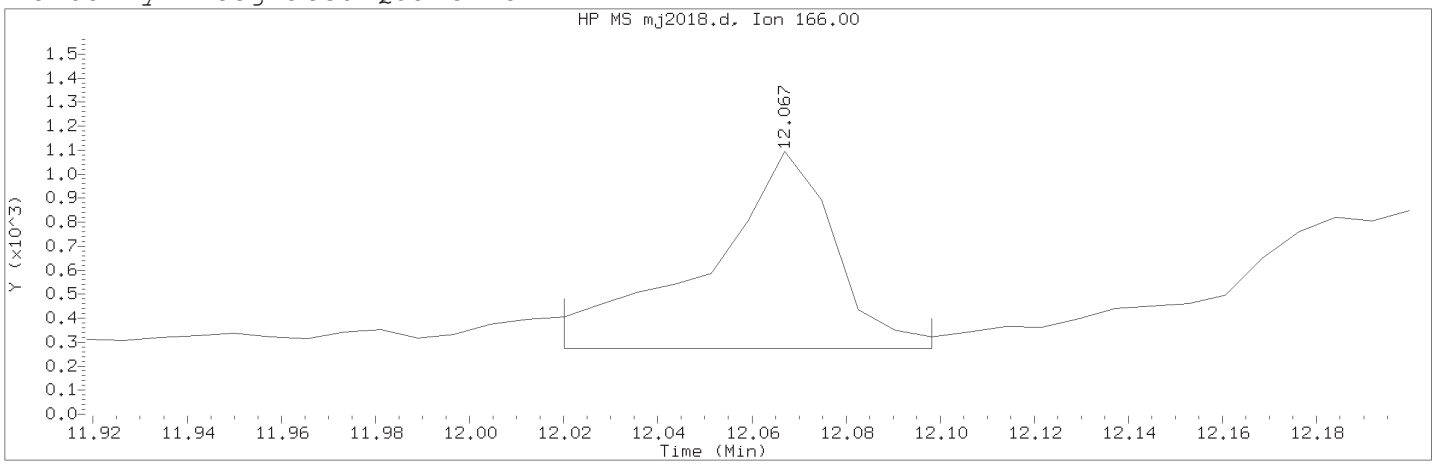
Compound Number	: 18
Compound Name	: Fluorene
Scan Number	: 845
Retention Time (minutes)	: 12.067
Relative Retention Time	: 0.00069
Quant Ion	: 166.00
Area (flag)	: 1706M
On-column Amount (ng/ul)	: 0.0036

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

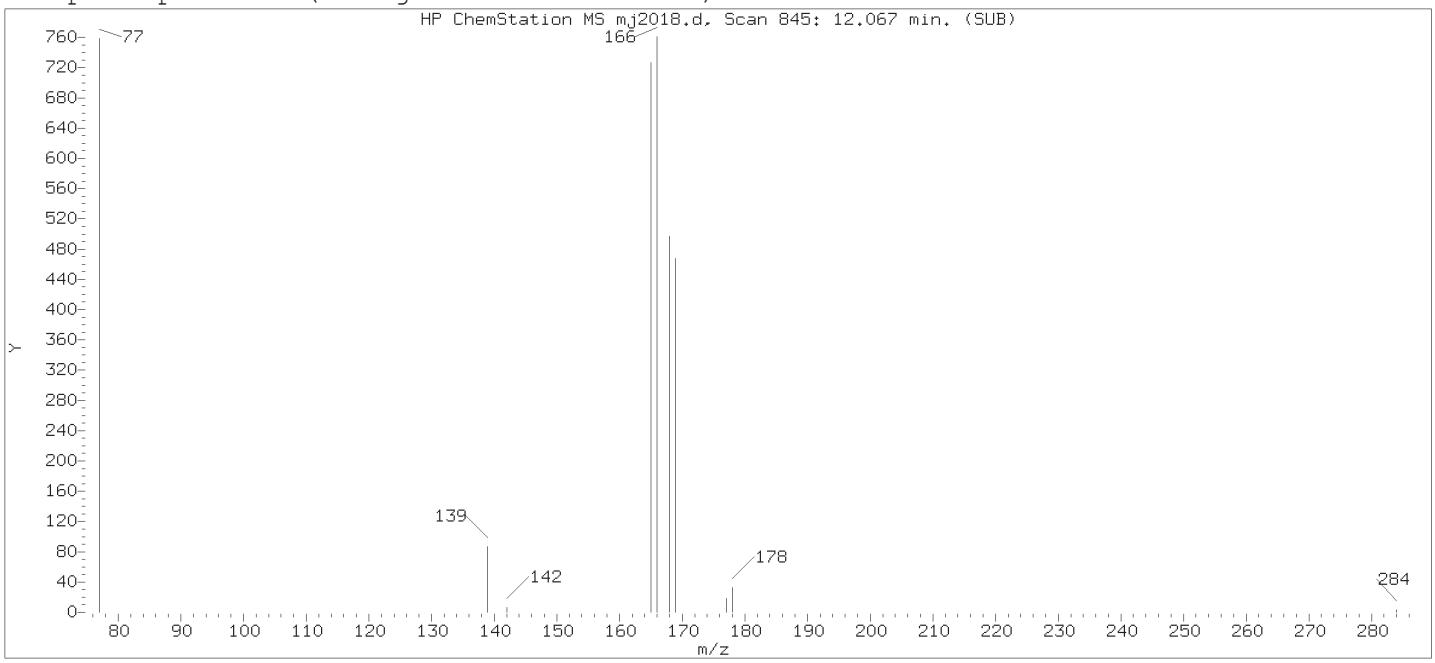
Compound Number : 18
Compound Name : Fluorene
Scan Number : 845
Retention Time (minutes) : 12.067
Quant Ion : 166.00
Area (flag) : 1706M
On-column Amount (ng/ul) : 0.0036
Integration start scan : 838 Integration stop scan: 848
Y at integration start : 274 Y at integration end: 274

Reason for manual integration: improper integration

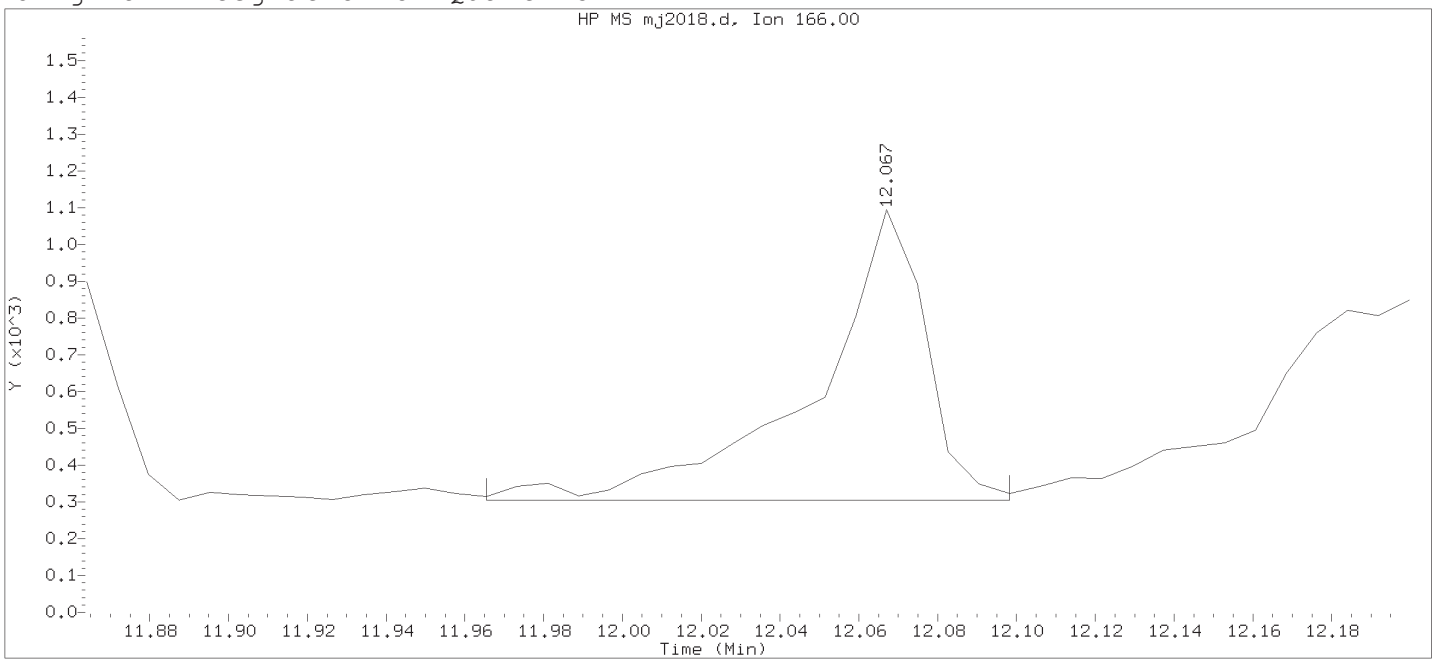
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

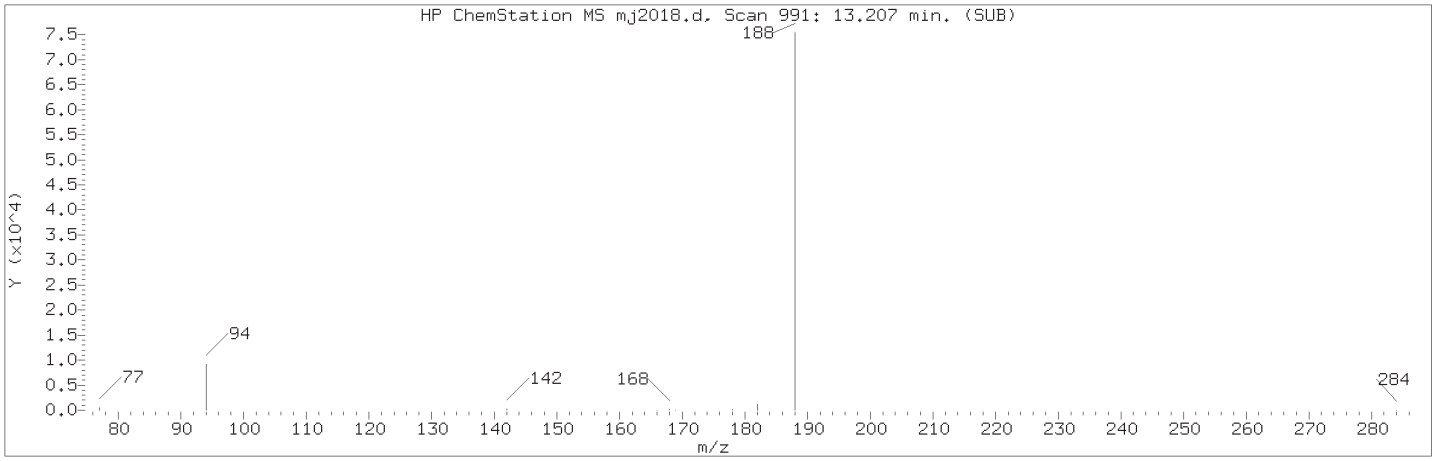
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: GKP03 Lab Sample ID: 9861918

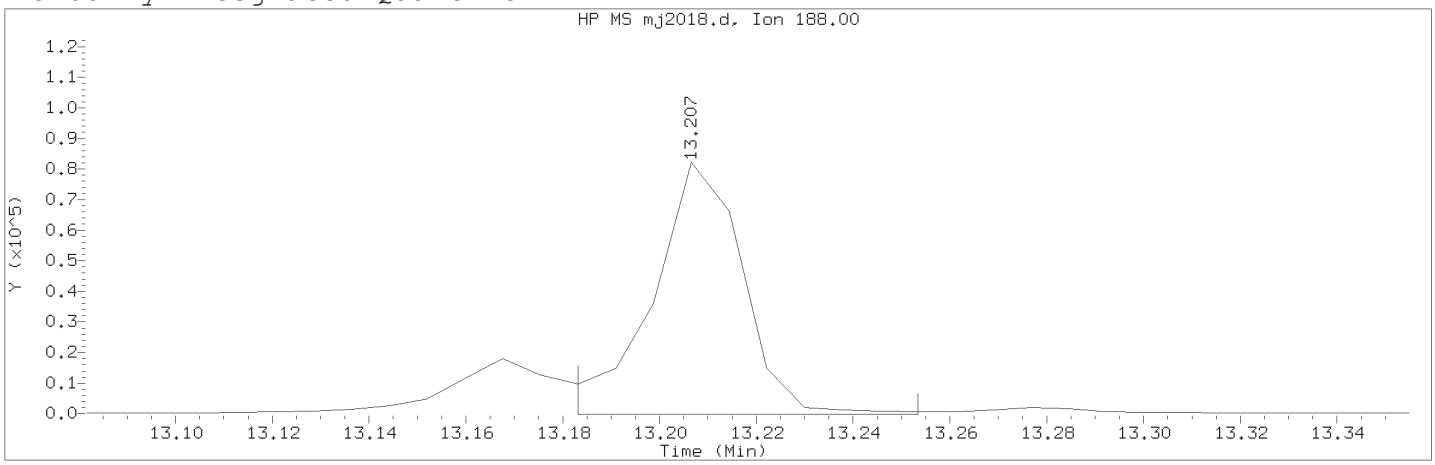
Compound Number	: 18		
Compound Name	: Fluorene		
Scan Number	: 845		
Retention Time (minutes)	: 12.067		
Quant Ion	: 166.00		
Area	: 1554		
On-column Amount (ng/ul)	: 0.0033		
Integration start scan	: 831	Integration stop scan:	848
Y at integration start	: 305	Y at integration end:	305

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used for this file.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

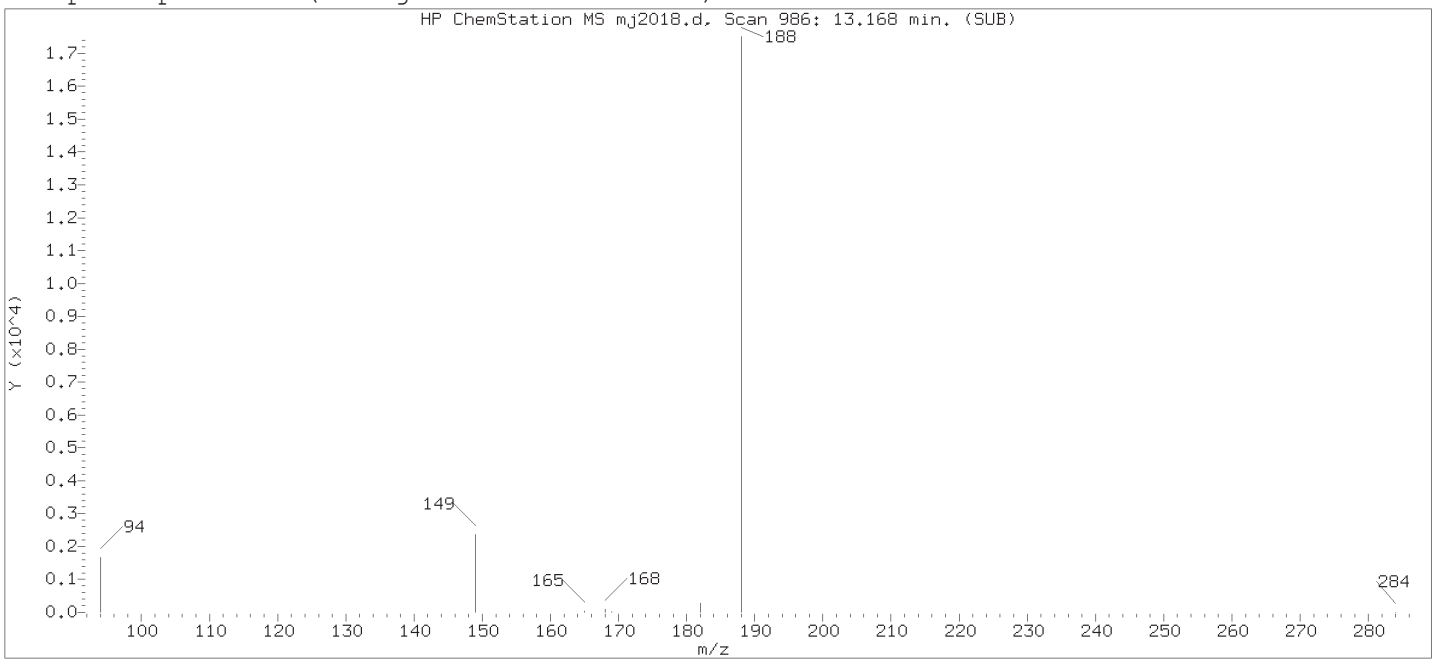
Compound Number	: 20		
Compound Name	: Phenanthrene-d10		
Scan Number	: 991		
Retention Time (minutes)	: 13.207		
Quant Ion	: 188.00		
Area (flag)	: 107769M		
On-column Amount (ng/ul)	: 0.2500		
Integration start scan	: 987	Integration stop scan:	996
Y at integration start	: -108	Y at integration end:	-108

Reason for manual integration: improper integration

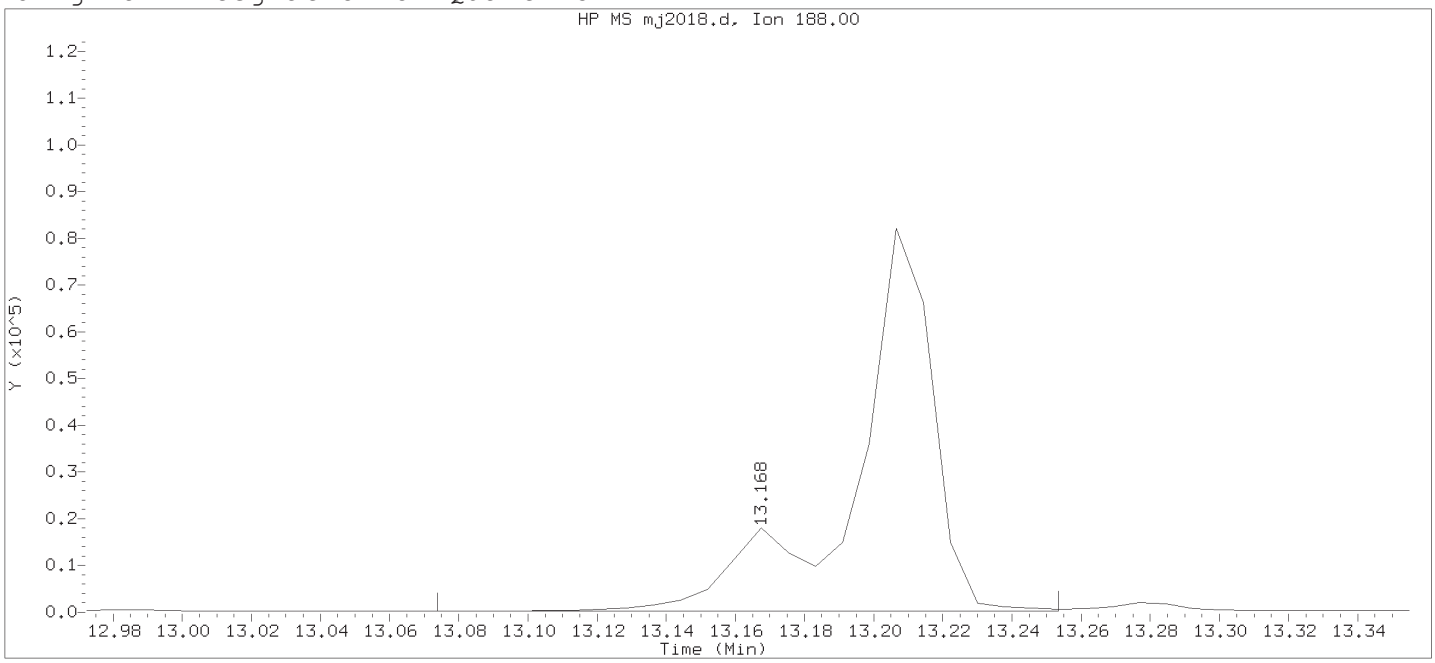
Analyst responsible for change: Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

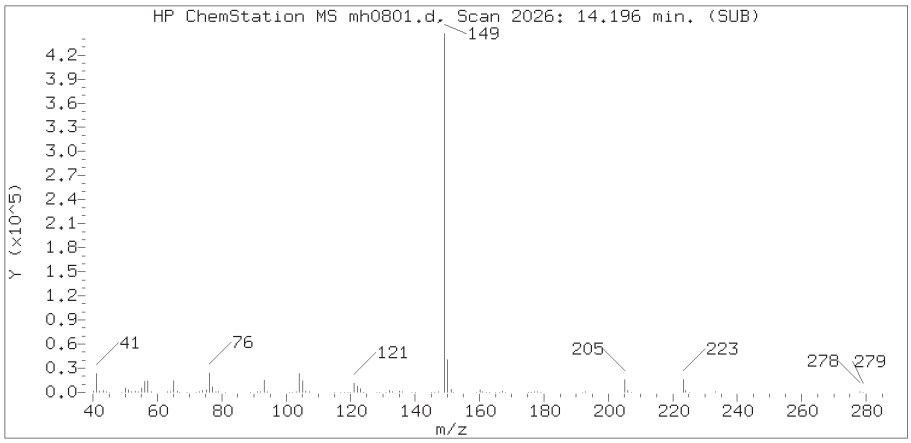
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

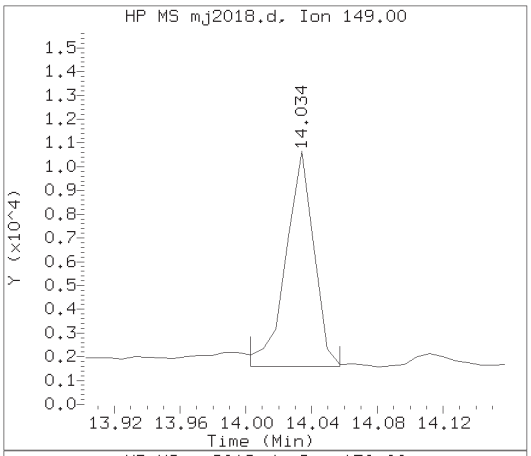
Sample Name: GKP03 Lab Sample ID: 9861918

Compound Number	: 20		
Compound Name	: Phenanthrene-d10		
Scan Number	: 986		
Retention Time (minutes)	: 13.168		
Quant Ion	: 188.00		
Area	: 129528		
On-column Amount (ng/ul)	: 0.2500		
Integration start scan	: 973	Integration stop scan:	996
Y at integration start	: 275	Y at integration end:	321

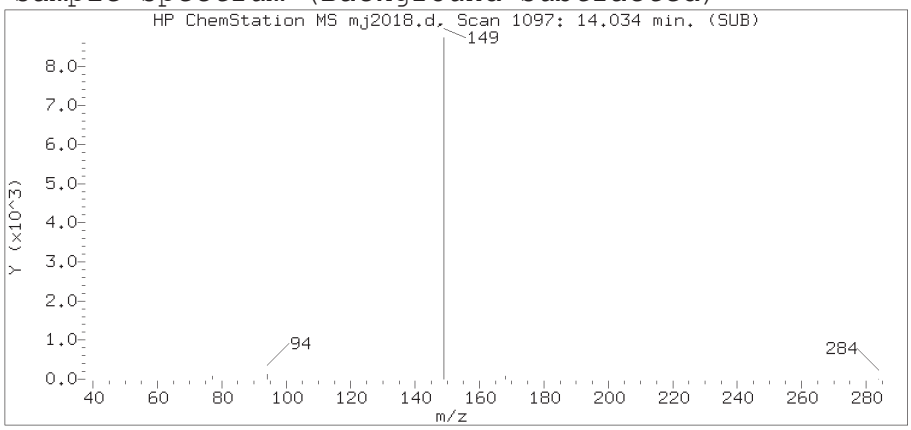
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used: 1007. Page 0145

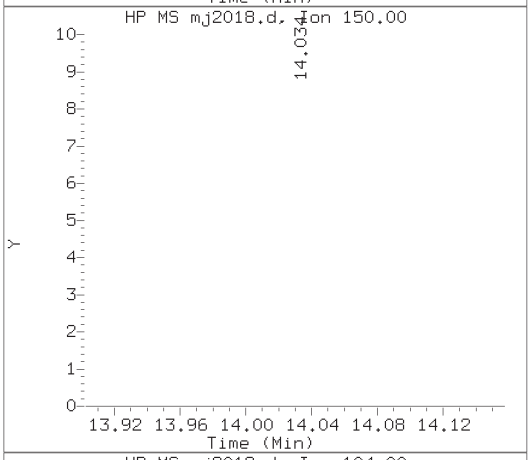
Reference Standard Spectrum for Di-n-butylphthalate



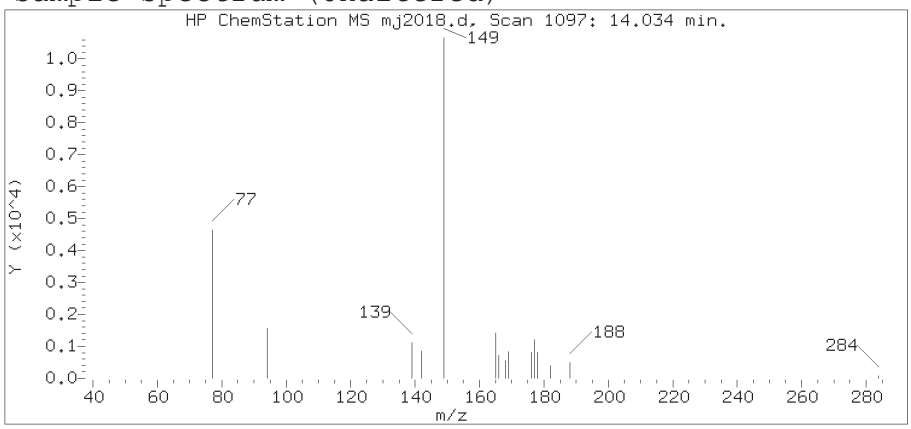


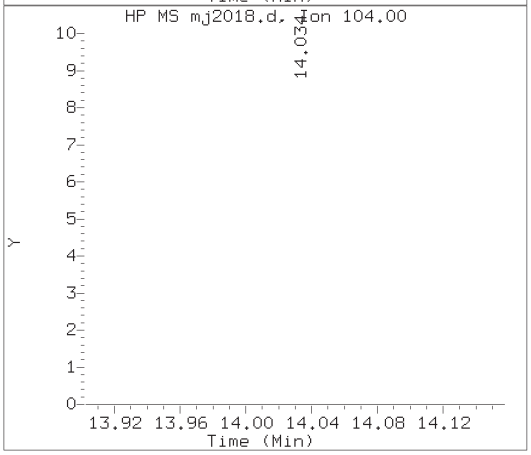
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

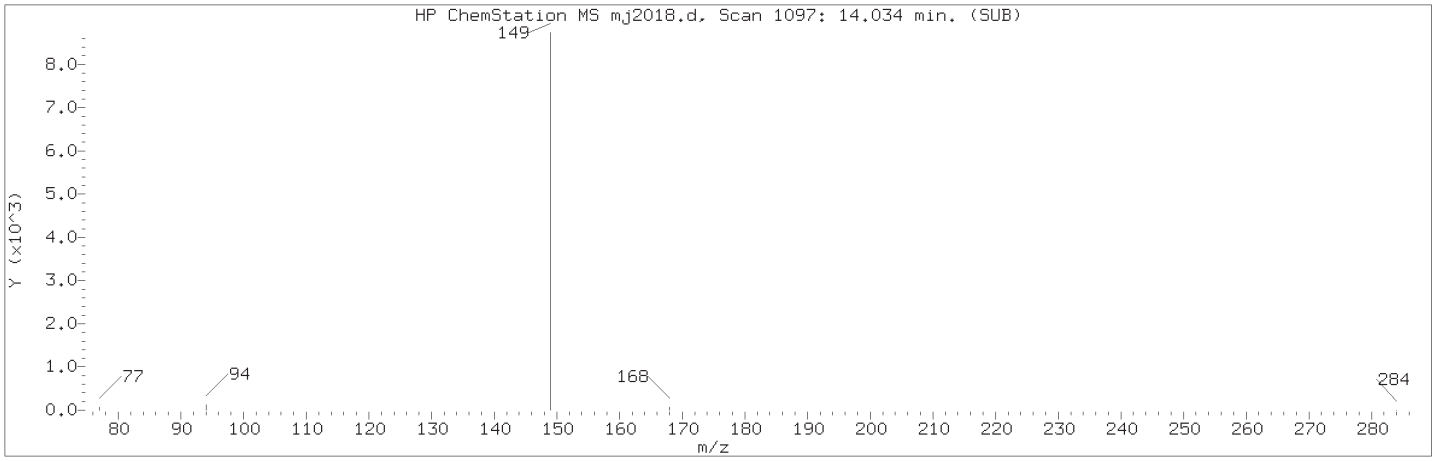
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

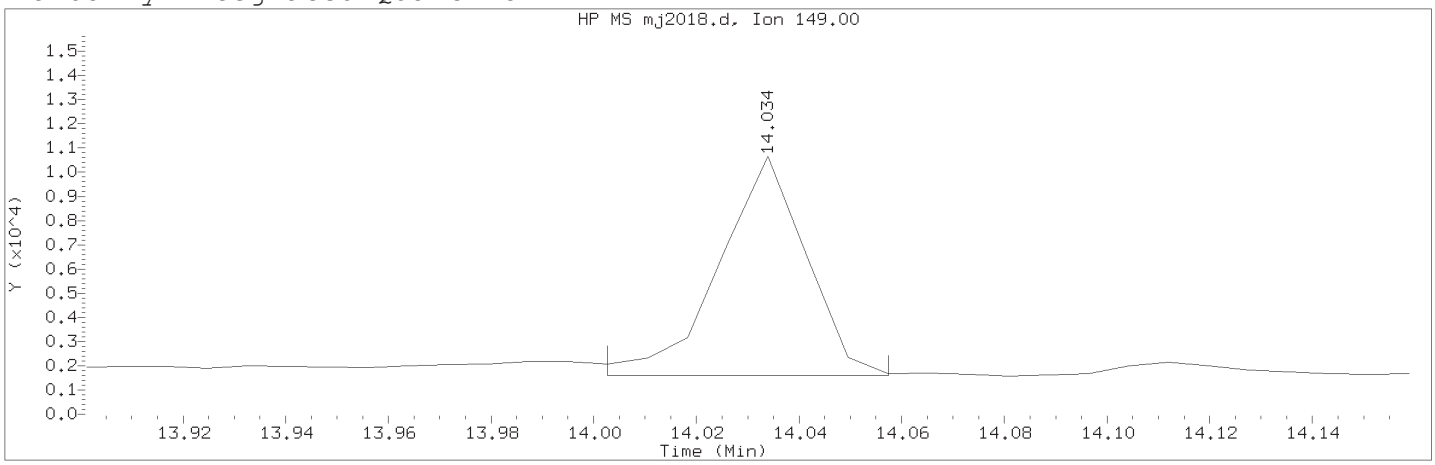
Compound Number	: 23
Compound Name	: Di-n-butylphthalate
Scan Number	: 1097
Retention Time (minutes)	: 14.034
Relative Retention Time	:-0.00063
Quant Ion	: 149.00
Area (flag)	: 10395M
On-column Amount (ng/ul)	: 0.0164

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

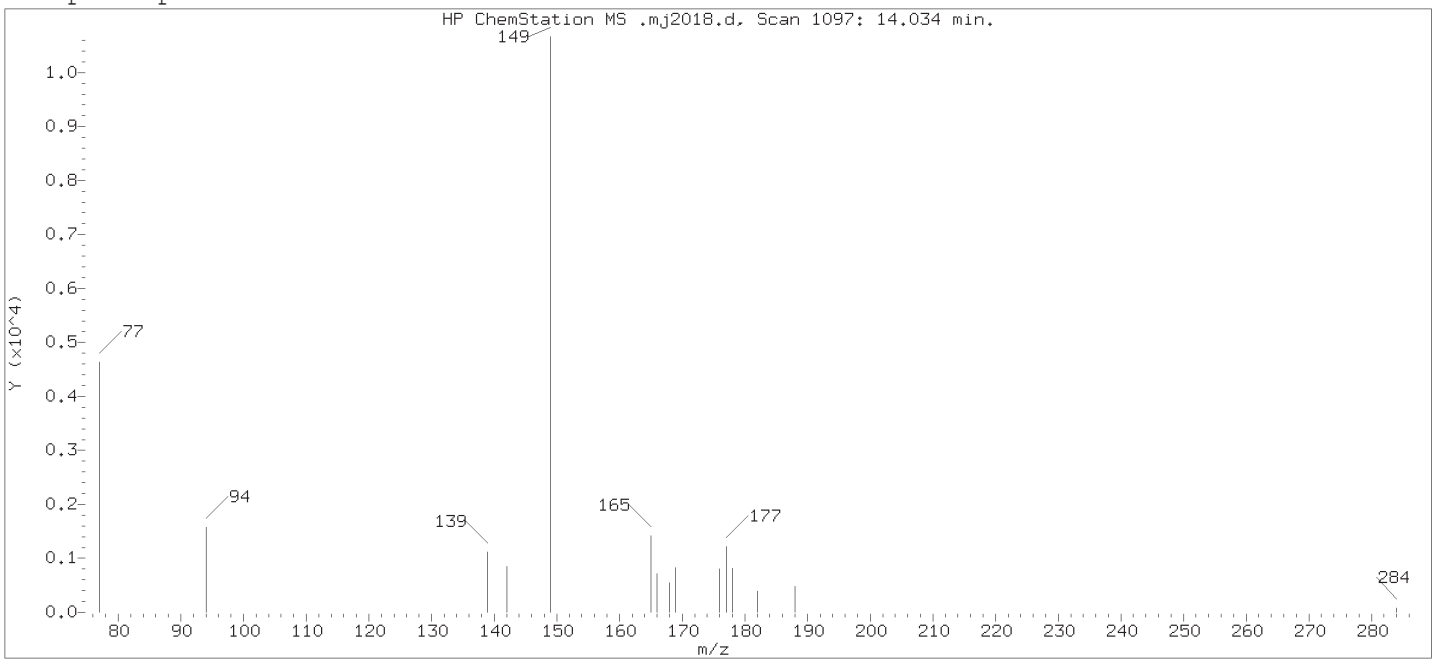
Compound Number : 23
Compound Name : Di-n-butylphthalate
Scan Number : 1097
Retention Time (minutes) : 14.034
Quant Ion : 149.00
Area (flag) : 10395M
On-column Amount (ng/ul) : 0.0164
Integration start scan : 1092 Integration stop scan: 1099
Y at integration start : 1608 Y at integration end: 1588

Reason for manual integration: missed peak

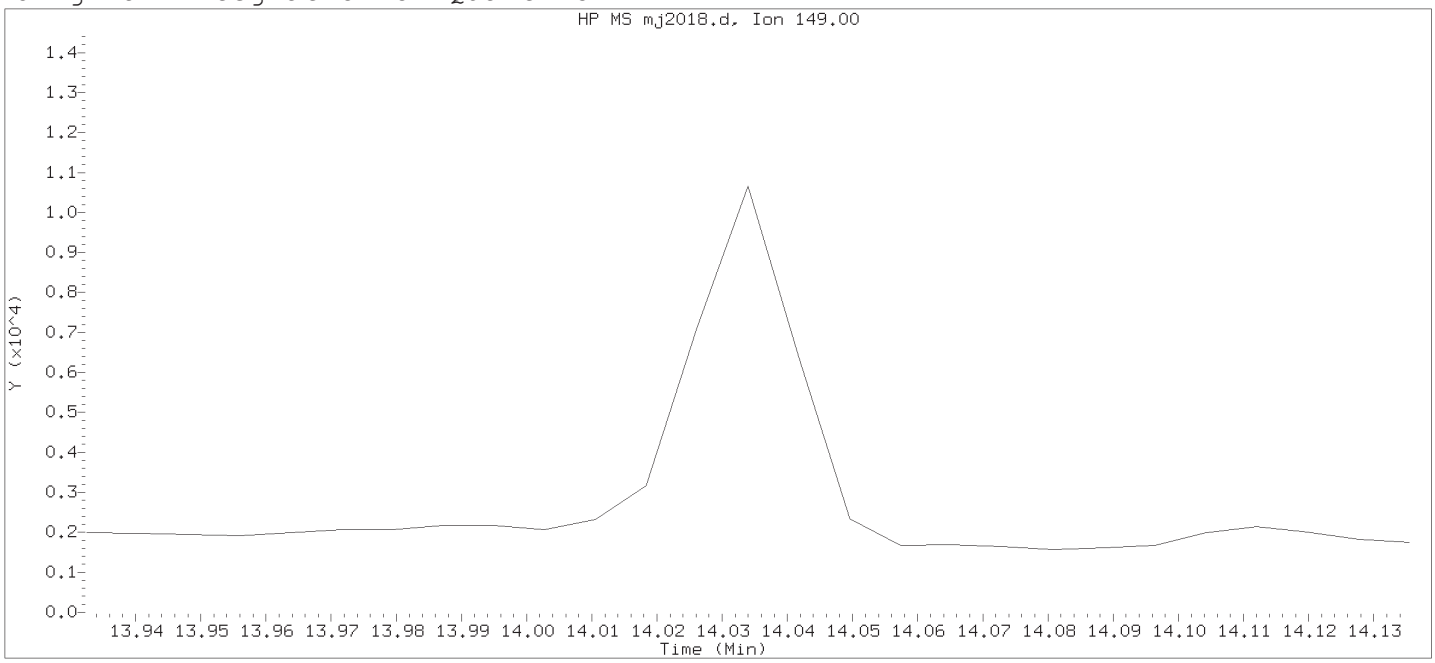
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

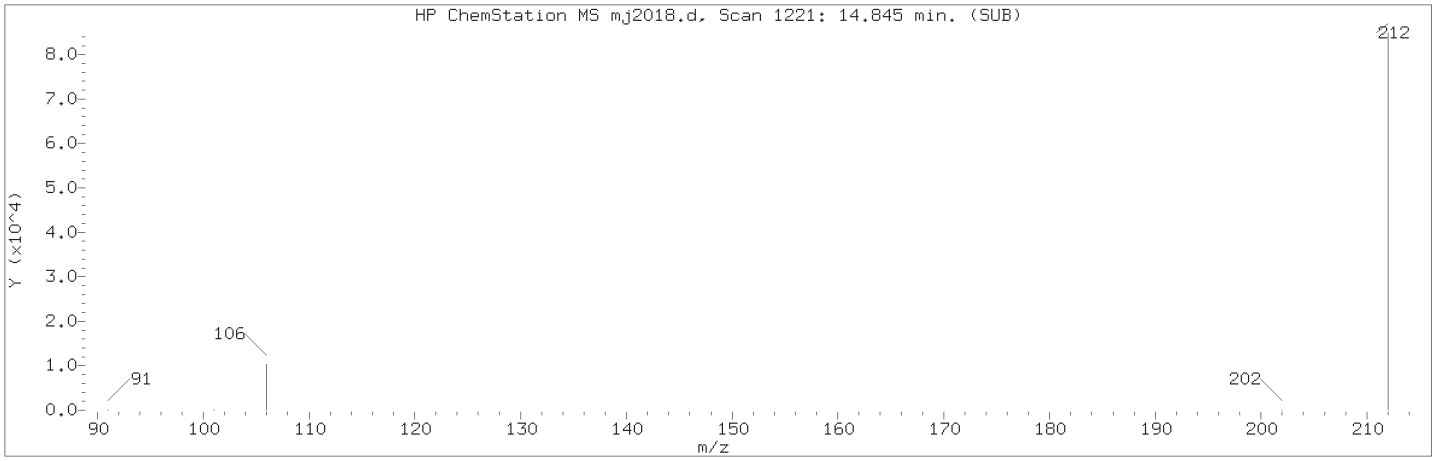
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: GKP03 Lab Sample ID: 9861918

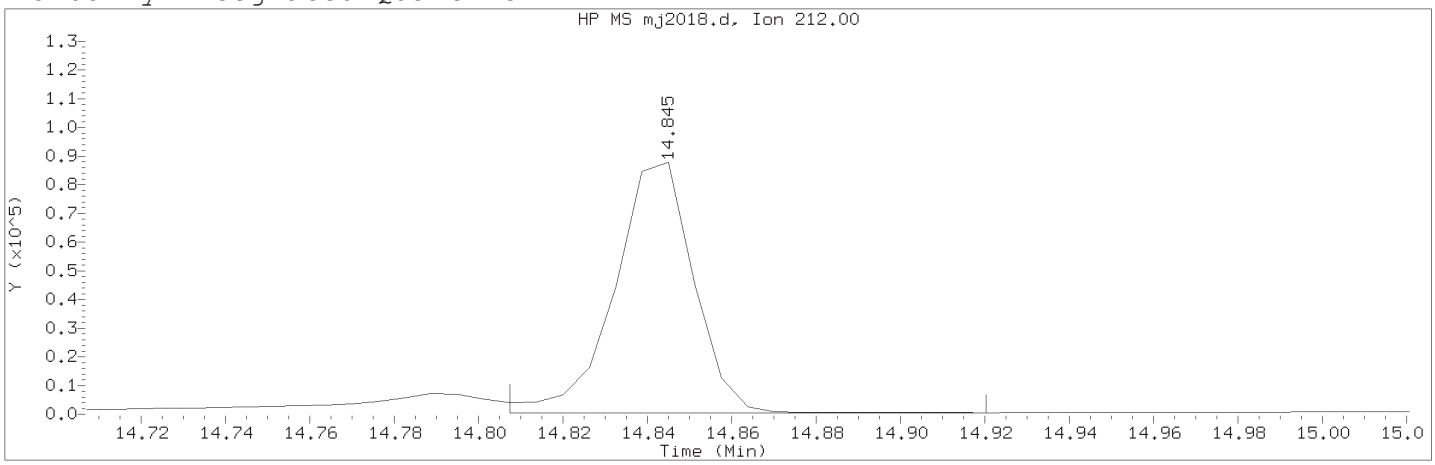
Compound Number : 23
Compound Name : Di-n-butylphthalate
Expected RT (minutes) : 14.034
Quant Ion : 149.00

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used: 1107. Page 0148

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

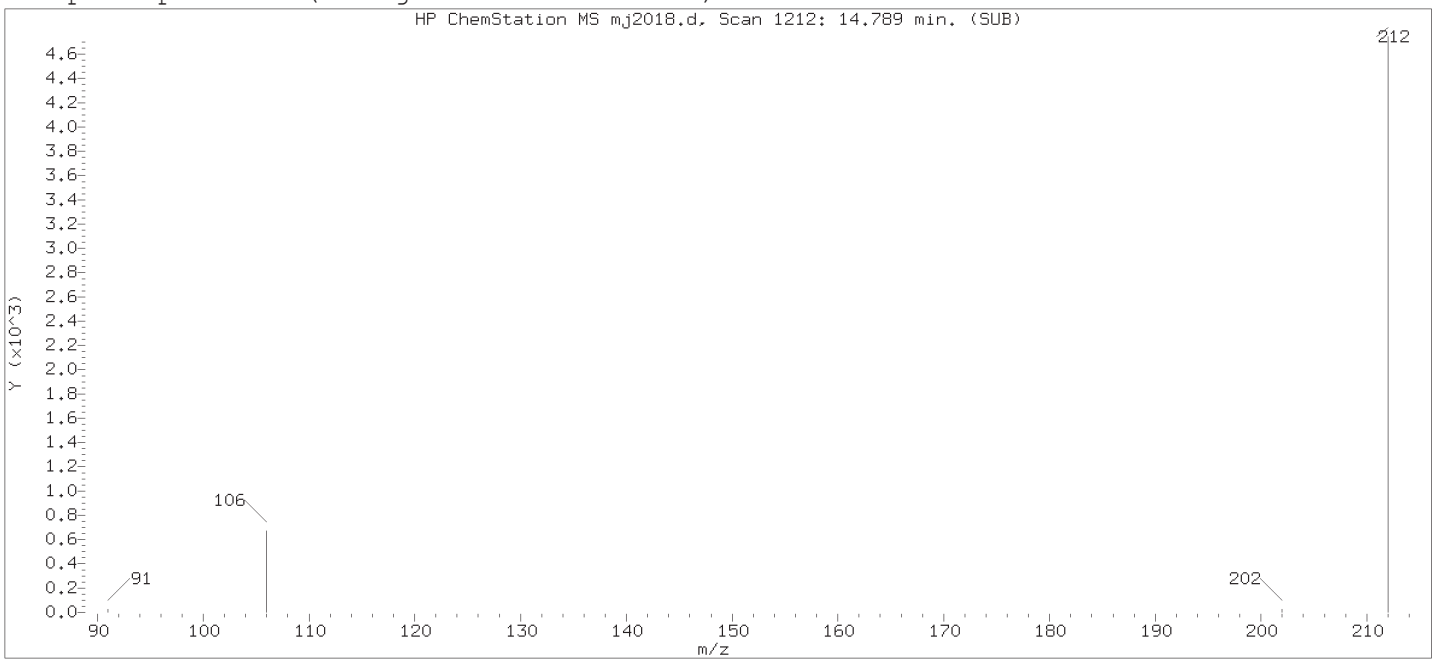
Compound Number : 24
Compound Name : Fluoranthene-d10
Scan Number : 1221
Retention Time (minutes) : 14.845
Quant Ion : 212.00
Area (flag) : 114524A
On-column Amount (ng/ul) : 0.2709
Integration start scan : 1214 Integration stop scan: 1232
Y at integration start : 404 Y at integration end: 404

Reason for manual integration: improper integration

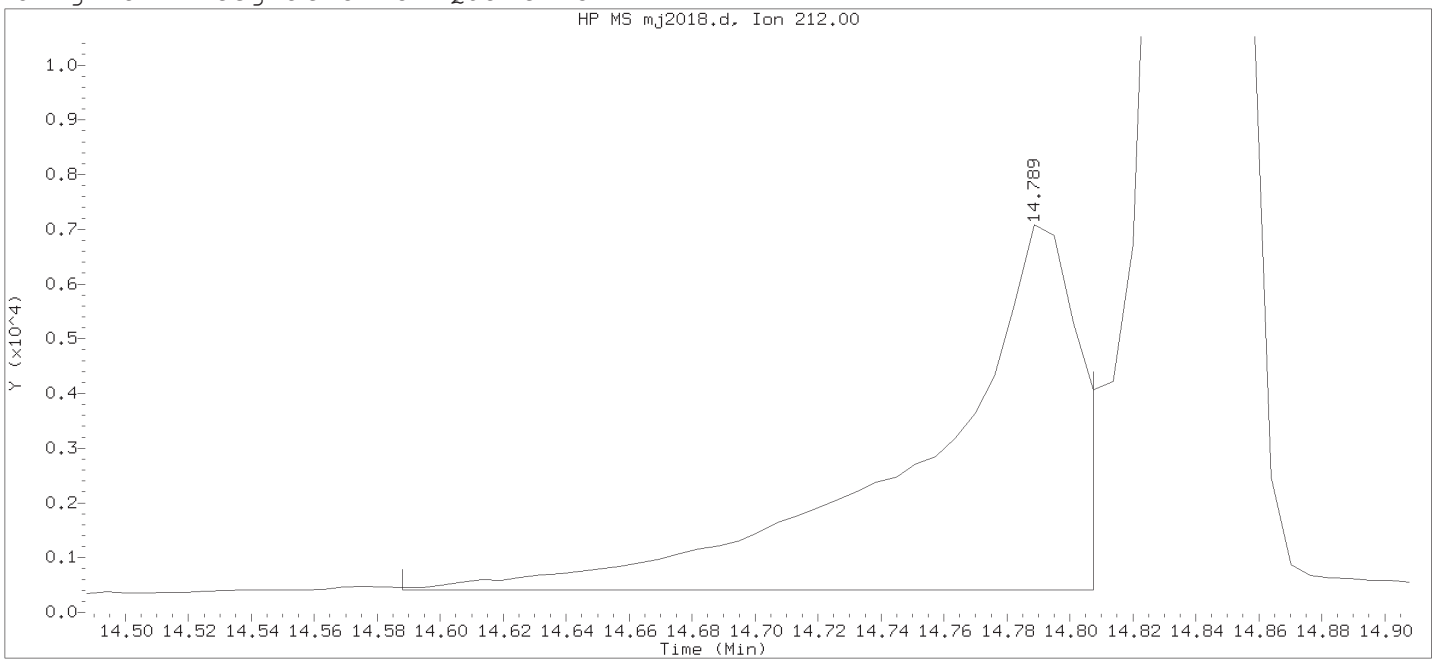
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

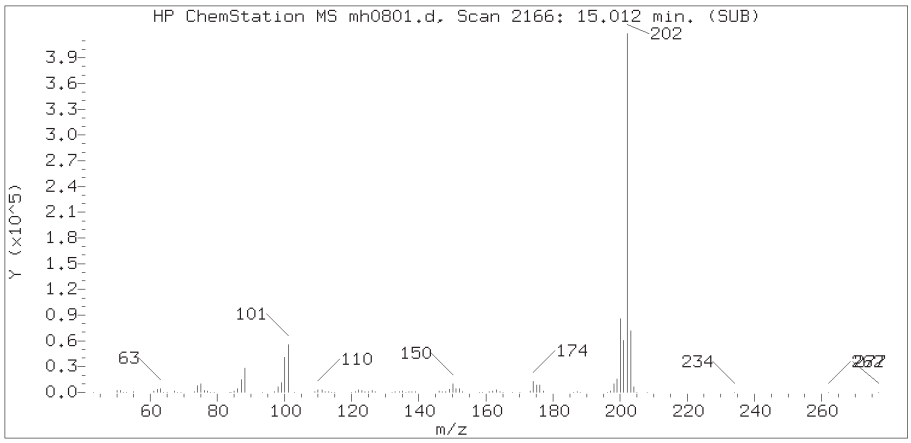
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

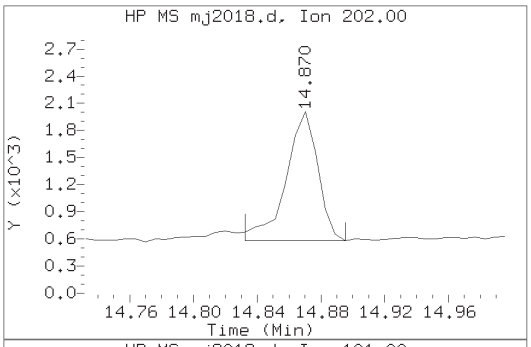
Sample Name: GKP03 Lab Sample ID: 9861918

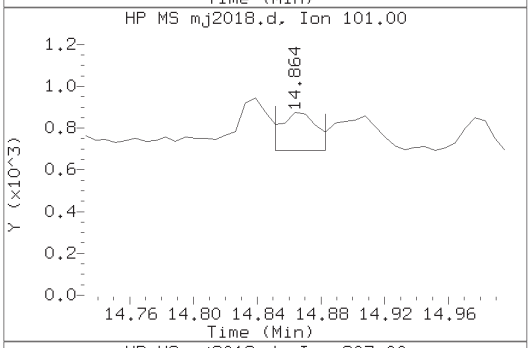
Compound Number	: 24		
Compound Name	: Fluoranthene-d10		
Scan Number	: 1212		
Retention Time (minutes)	: 14.789		
Quant Ion	: 212.00		
Area	: 22287		
On-column Amount (ng/ul)	: 0.0439		
Integration start scan	: 1179	Integration stop scan:	1214
Y at integration start	: 404	Y at integration end:	404

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used: 1007. Page 0126

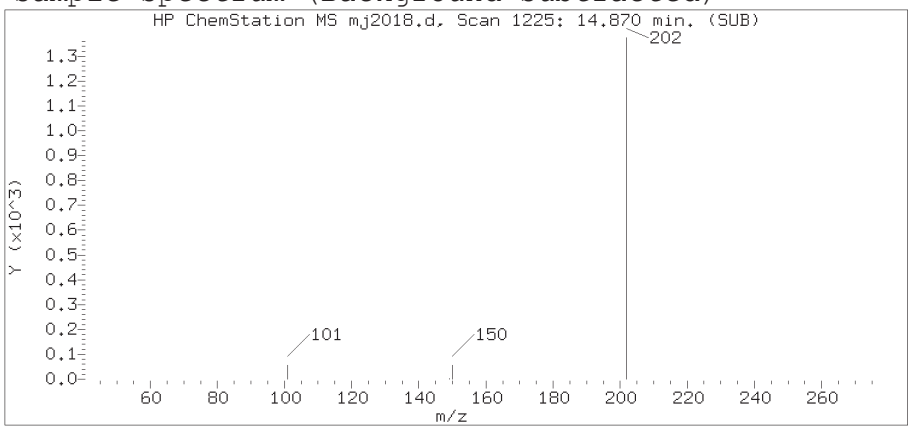
Reference Standard Spectrum for Fluoranthene

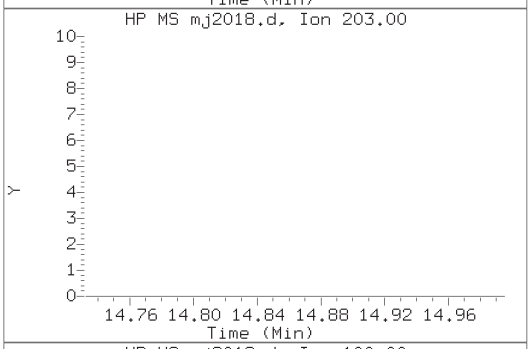




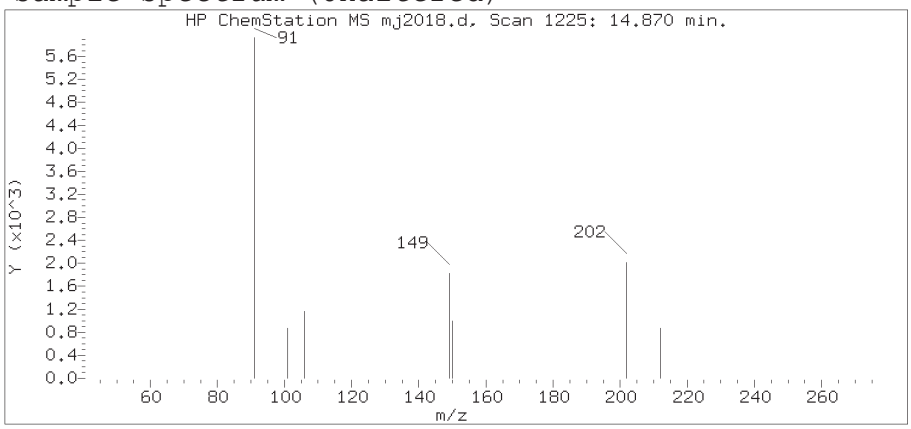


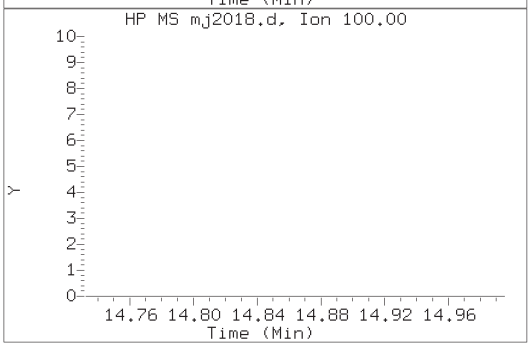
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

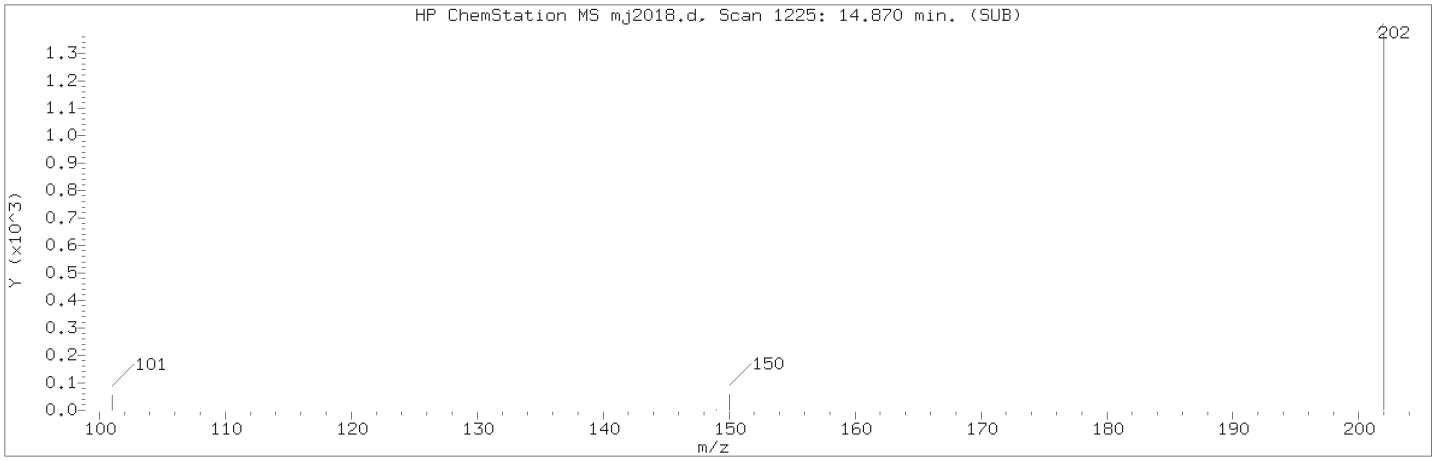
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

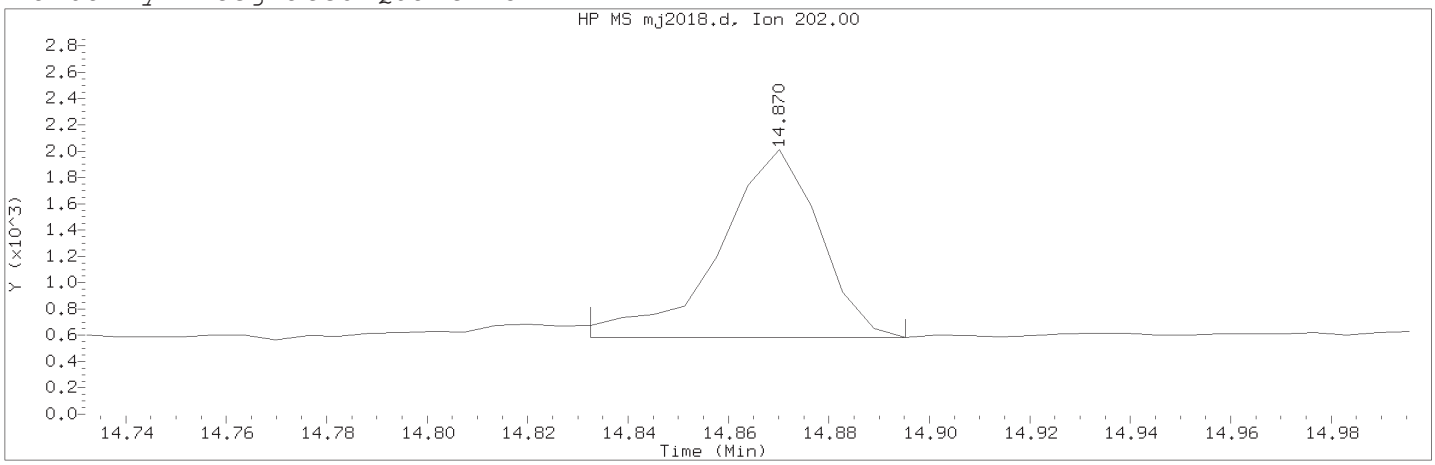
Compound Number	: 25
Compound Name	: Fluoranthene
Scan Number	: 1225
Retention Time (minutes)	: 14.870
Relative Retention Time	:-0.00066
Quant Ion	: 202.00
Area (flag)	: 1982AM
On-column Amount (ng/ul)	: 0.0031

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP03 Lab Sample ID: 9861918

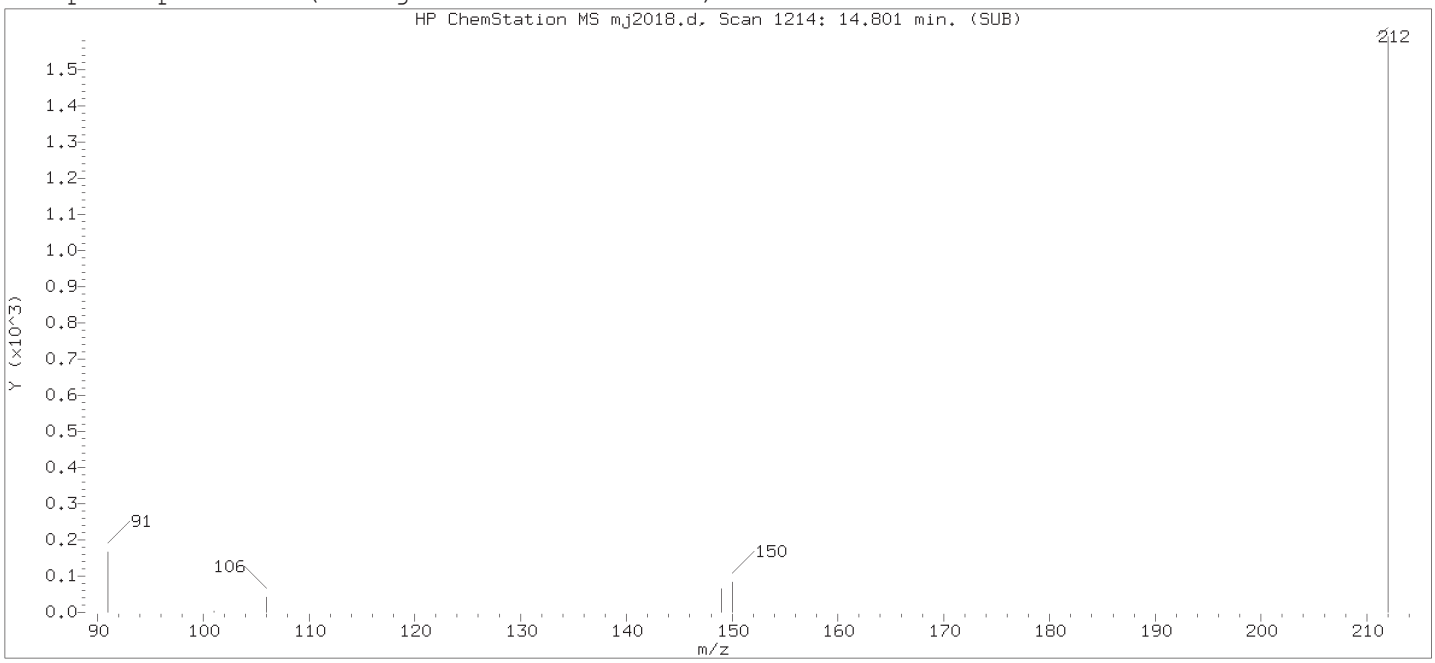
Compound Number : 25
Compound Name : Fluoranthene
Scan Number : 1225
Retention Time (minutes) : 14.870
Quant Ion : 202.00
Area (flag) : 1982AM
On-column Amount (ng/ul) : 0.0031
Integration start scan : 1218 Integration stop scan: 1228
Y at integration start : 583 Y at integration end: 583

Reason for manual integration: improper integration

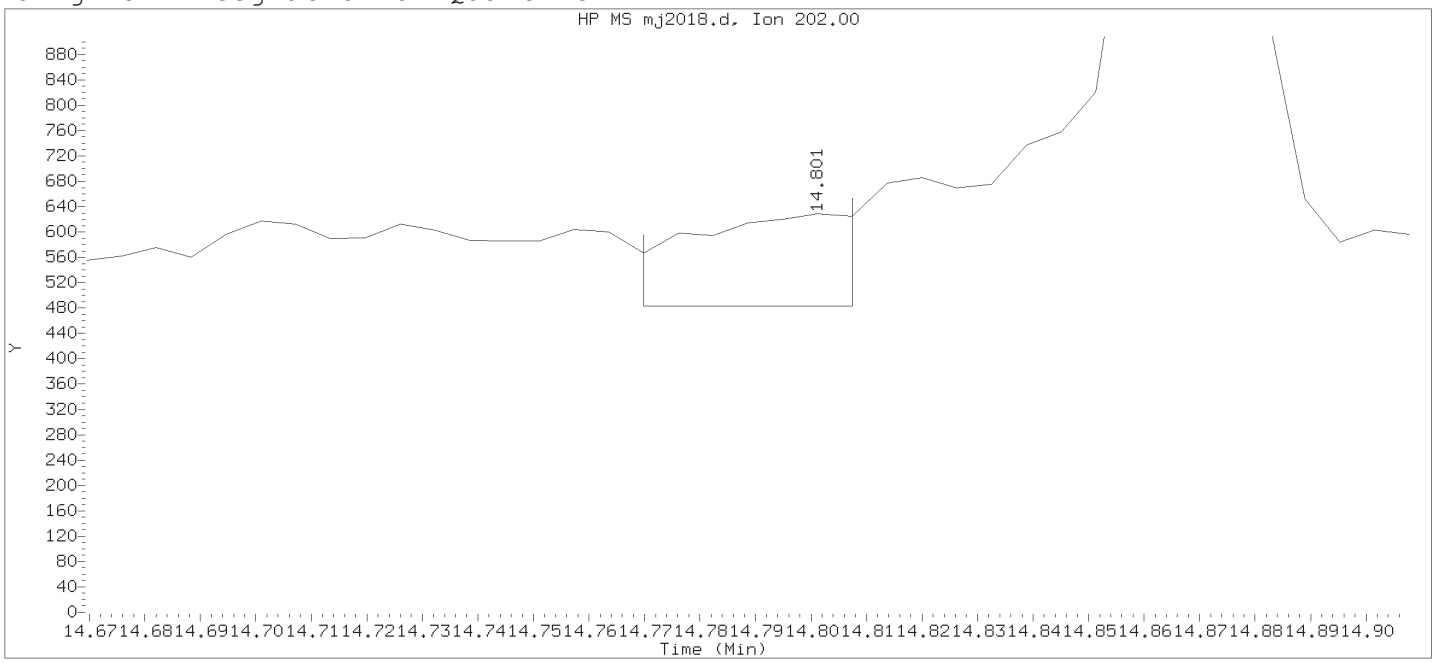
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2018.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 21:57 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: GKP03 Lab Sample ID: 9861918

Compound Number	: 25		
Compound Name	: Fluoranthene		
Scan Number	: 1214		
Retention Time (minutes)	: 14.801		
Quant Ion	: 202.00		
Area	: 283		
On-column Amount (ng/ul)	: 0.0004		
Integration start scan	: 1208	Integration stop scan:	1214
Y at integration start	: 483	Y at integration end:	483

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used.

GKP04 Lancaster Laboratories, Inc. 9861919
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP21585.i/18oct27.b/mj2019.d Injection date and time: **27-OCT-2018 22:27**
Data file Sample Info. Line: GKP04;9861919;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 227 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	6.619(0.000)	477	152	53549 (-6)	0.25	
6) Naphthalene-d8	8.519(0.000)	574	136	148929 (-9)	0.25	
14) Acenaphthene-d10	11.316(0.000)	771	164	67186 (-7)	0.25	
20) Phenanthrene-d10	13.206(0.008)	991	188	134678 (-12)	0.25	
29) Chrysene-d12	17.223(0.000)	1559	240	90278 (-20)	0.25	
38) Perylene-d12	19.669(0.008)	1878	264	93540 (-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)	9.754(0.000)	152	43177	0.159	64%		29 - 112
24) Fluoranthene-d10	(4)	14.845(-0.001)	212	107419	0.203	81%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.539(0.000)	264	51787	0.151	60%		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)	2.913(-0.001)	88	5786	0.039	0.17	0.181	B	0.03
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					0.01
25) Fluoranthene	(4)			Not Detected					0.003
26) Pyrene	(5)			Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					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)	21.693(-0.000)	276	2383	0.003	0.01			0.003

B = Compound detected in referenced method blank.

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Data file: /chem/HP21585.i/18oct27.b/mj2019.d Injection date and time: **27-OCT-2018 22:27**
Data file Sample Info. Line: GKP04;9861919;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 227 ml Volume Injected (Vi): 2 ul

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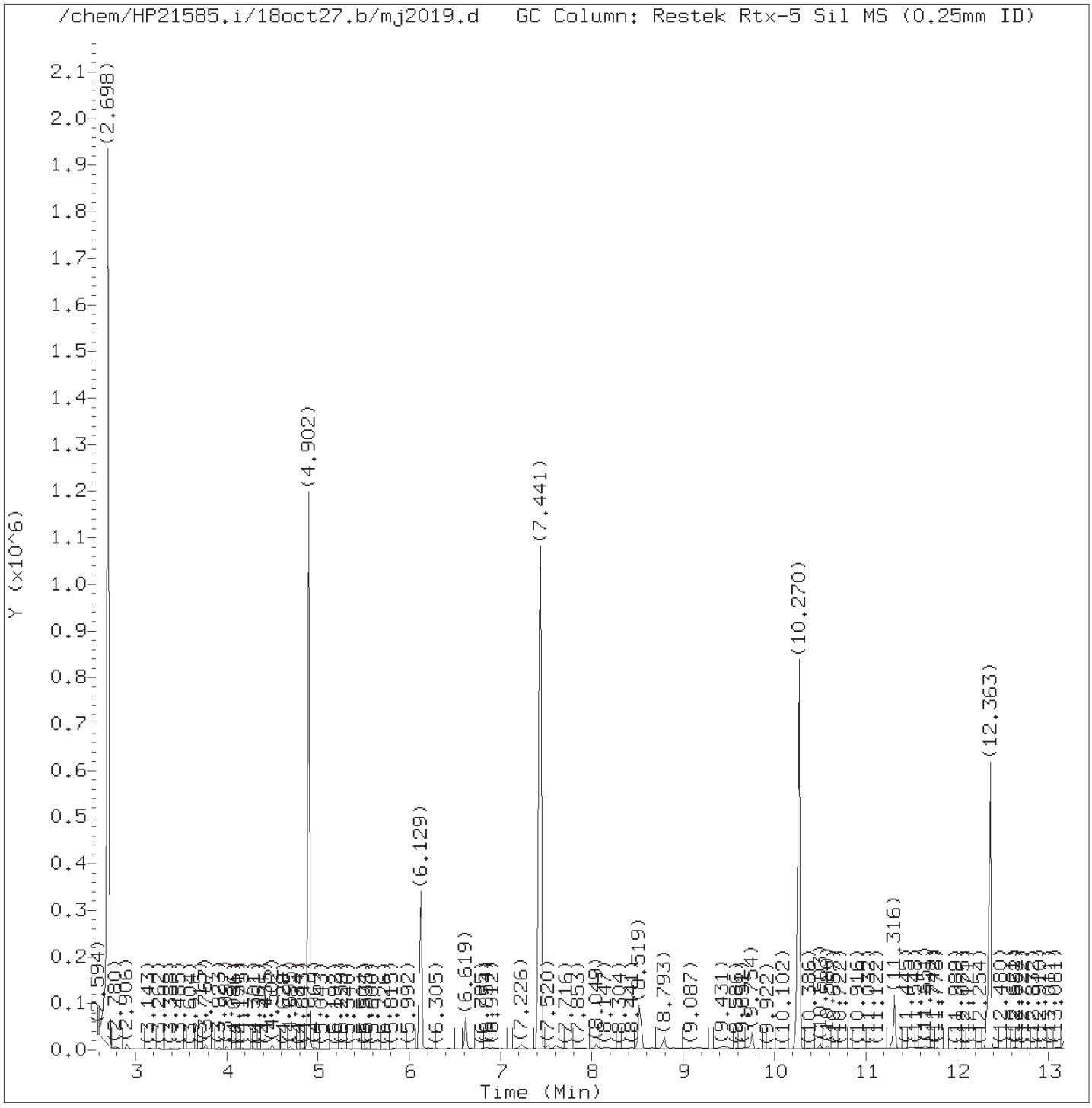
WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 21

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

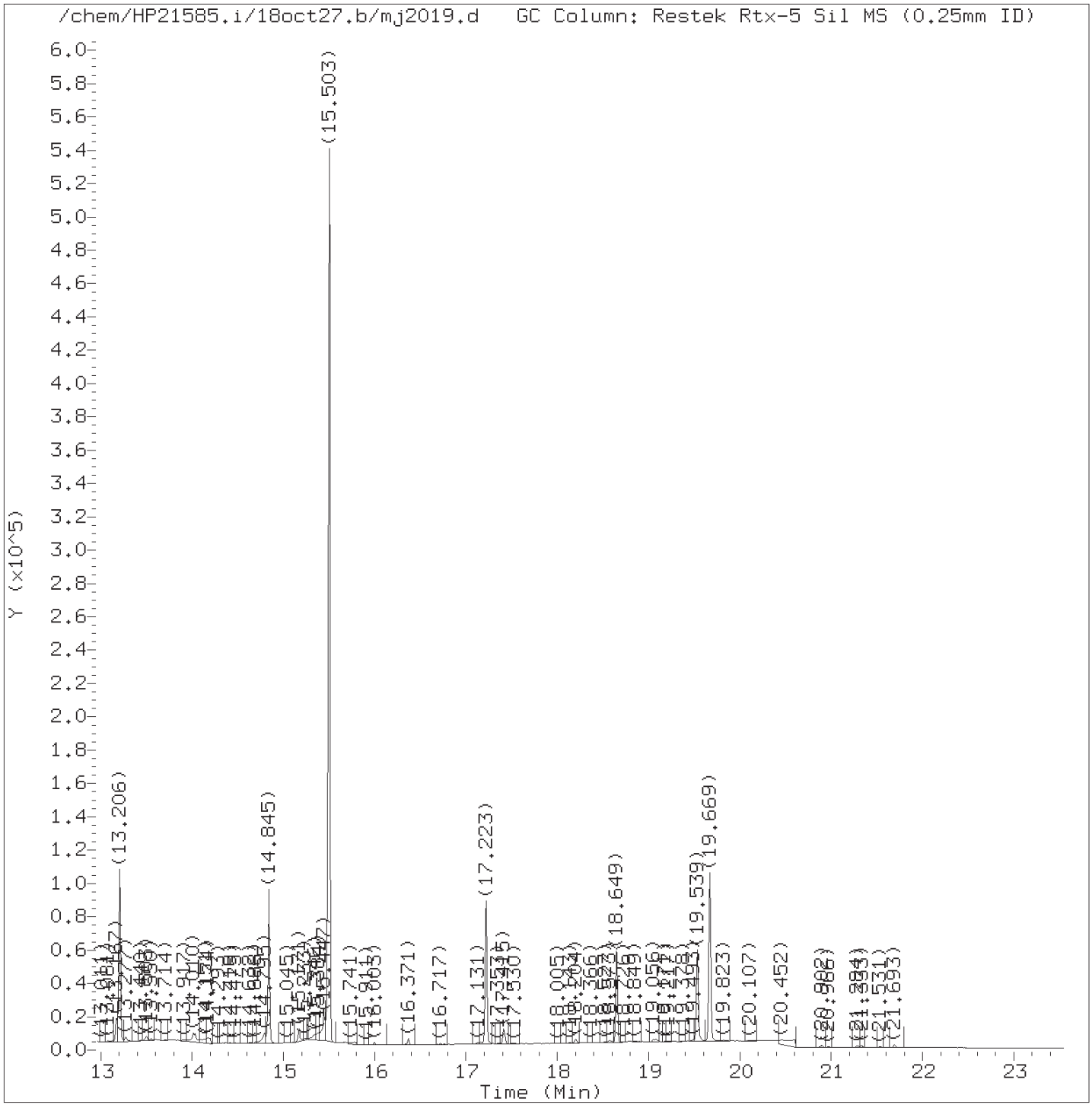
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2019.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:27 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP04 Lab Sample ID: 9861919

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2019.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:27 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP04 Lab Sample ID: 9861919

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2019.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:27 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

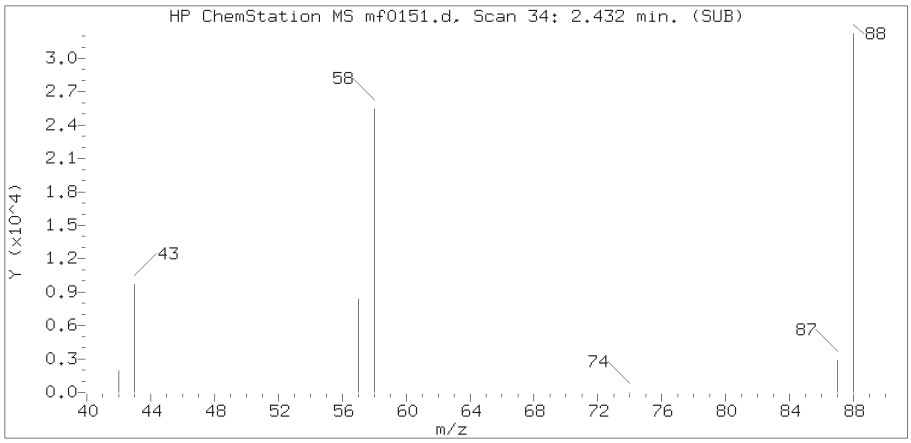
Sample Name: GKP04 Lab Sample ID: 9861919

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.913	88	5786	0.039
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	53549	0.250
6)*Naphthalene-d8	(2)	8.519	136	148929	0.250
10)$1-Methylnaphthalene-d10	(2)	9.754	152	43177	0.159
14)*Acenaphthene-d10	(3)	11.316	164	67186	0.250
20)*Phenanthrene-d10	(4)	13.206	188	134678	0.250
24)$Fluoranthene-d10	(4)	14.845	212	107419	0.203
29)*Chrysene-d12	(5)	17.223	240	90278	0.250
36)$Benzo(a)pyrene-d12	(6)	19.539	264	51787	0.151
38)*Perylene-d12	(6)	19.669	264	93540	0.250
41) Benzo(g,h,i)perylene	(6)	21.693	276	2383	0.003

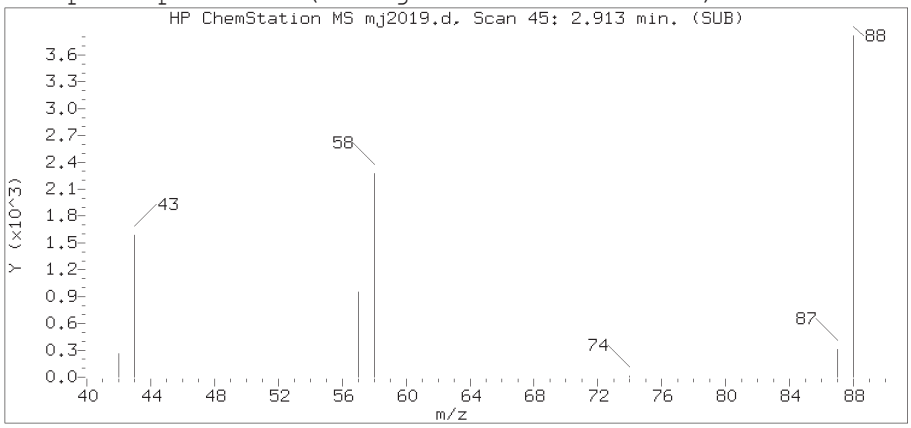
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

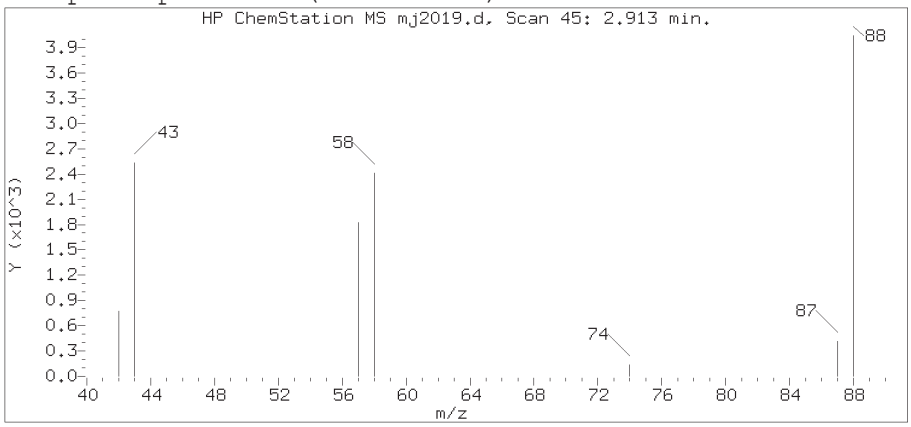
Reference Standard Spectrum for 1,4-Dioxane

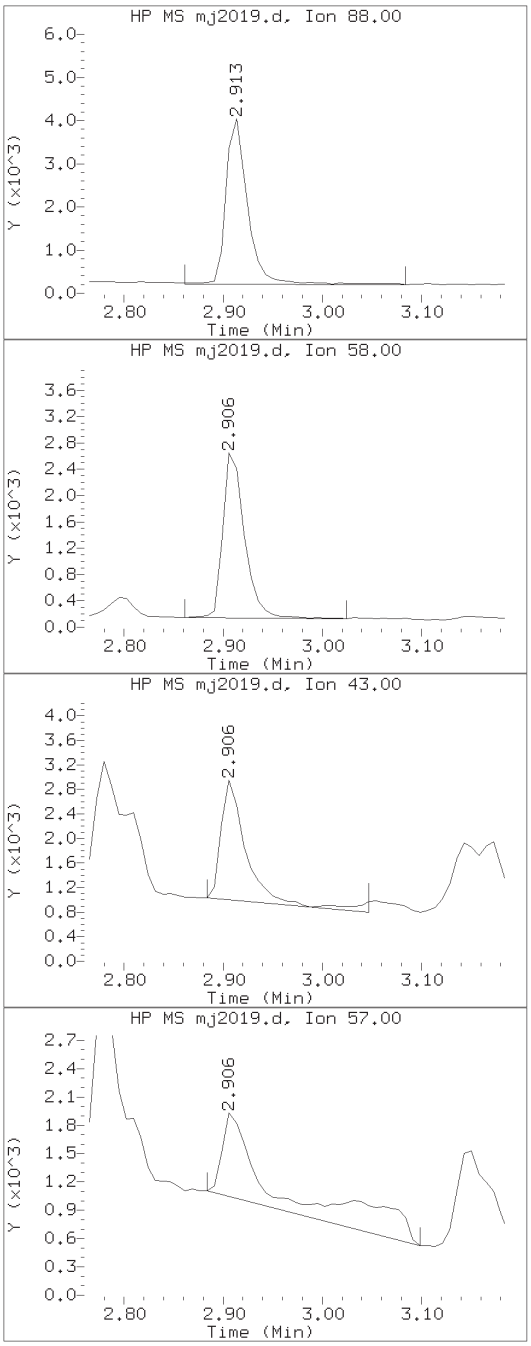


Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2019.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:27 Analyst ID: ceb05247

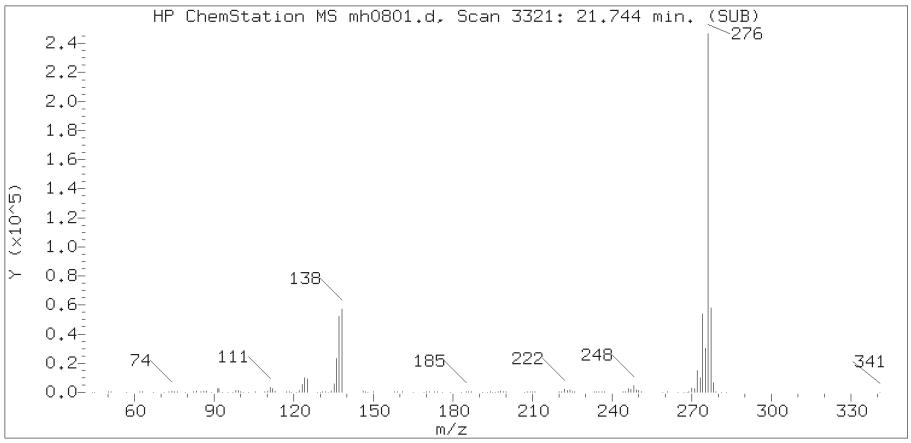
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

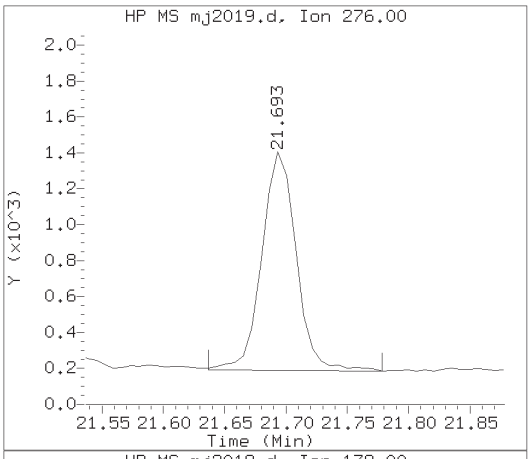
Sample Name: GKP04 Lab Sample ID: 9861919

Compound Number	: 1
Compound Name	: 1,4-Dioxane
Scan Number	: 45
Retention Time (minutes)	: 2.913
Relative Retention Time	:-0.00111
Quant Ion	: 88.00
Area (flag)	: 5786
On-column Amount (ng/ul)	: 0.0389

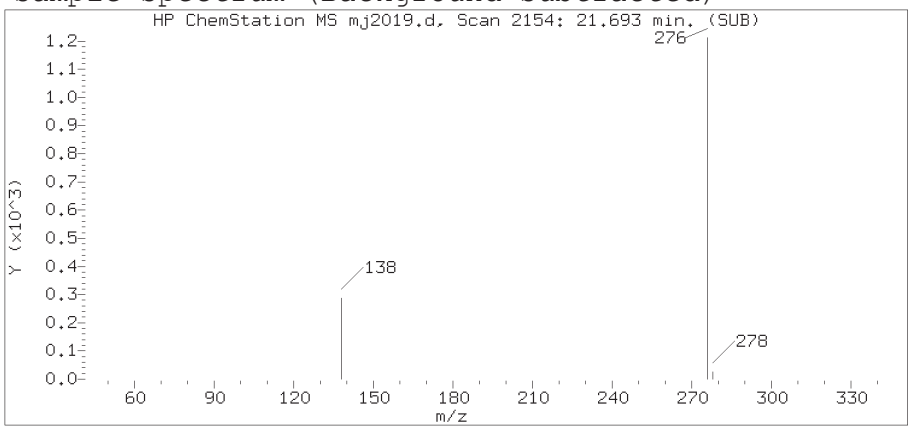
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

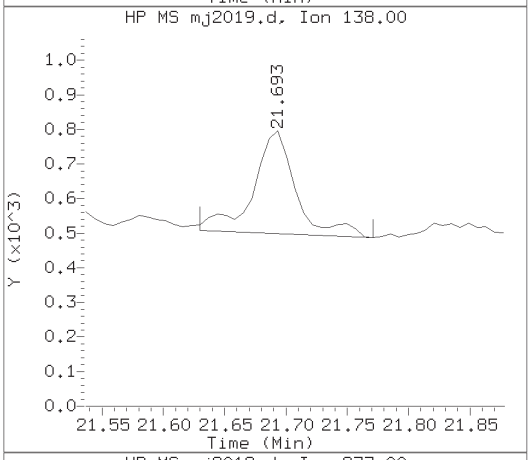
Reference Standard Spectrum for Benzo(g,h,i)perylene



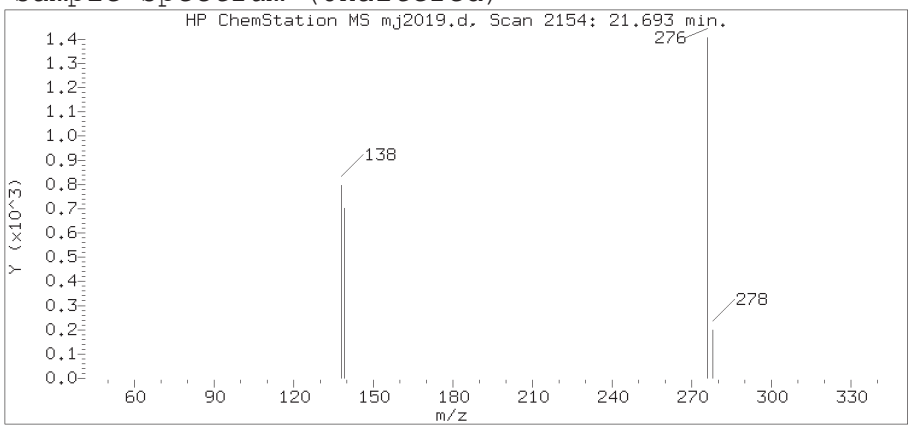


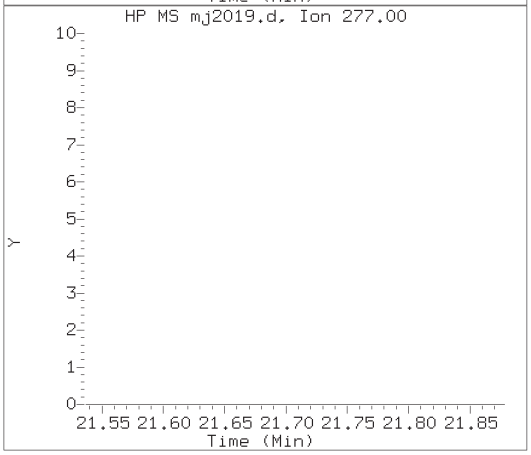
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2019.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:27 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP04 Lab Sample ID: 9861919

Compound Number	: 41
Compound Name	: Benzo(g,h,i)perylene
Scan Number	: 2154
Retention Time (minutes)	: 21.693
Relative Retention Time	:-0.00007
Quant Ion	: 276.00
Area (flag)	: 2383
On-column Amount (ng/ul)	: 0.0032

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

GKPR1 Lancaster Laboratories, Inc. Analysis Summary for GC/MS Semivolatiles 9861920

Data file: /chem/HP21585.i/18oct27.b/mj2020.d Injection date and time: **27-OCT-2018 22:56**
Data file Sample Info. Line: GKPR1;9861920;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 223 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	6.619(0.000)	477	152	46662 (-18)	0.25	
6) Naphthalene-d8	8.519(0.000)	574	136	129200 (-21)	0.25	
14) Acenaphthene-d10	11.316(0.000)	771	164	57160 (-21)	0.25	
20) Phenanthrene-d10	13.207(0.008)	991	188	101587M (-34)	0.25	
29) Chrysene-d12	17.223(0.000)	1559	240	78158 (-31)	0.25	
38) Perylene-d12	19.670(0.008)	1878	264	82186 (-24)	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)	9.754(0.000)	152	46711	0.199	79%		29 - 112
24) Fluoranthene-d10	(4)	14.845(-0.001)	212	105683A	0.265	106%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.539(0.000)	264	49831	0.165	66%		18 - 129

A = User selected an alternate peak.

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)	2.914(-0.001)	88	4792	0.037	0.17	0.181	B	0.03
4) bis(2-Chloroethyl)ether	(2)			Not Detected					0.005
7) Naphthalene	(2)	8.539(0.002)	128	21592M	0.036	0.16			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					0.01
25) Fluoranthene	(4)			Not Detected					0.003
26) Pyrene	(5)			Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					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. M = Compound was manually integrated.

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Data file: /chem/HP21585.i/18oct27.b/mj2020.d Injection date and time: **27-OCT-2018 22:56**
Data file Sample Info. Line: GKPR1;9861920;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 223 ml Volume Injected (Vi): 2 ul

THIS SPACE
WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 21

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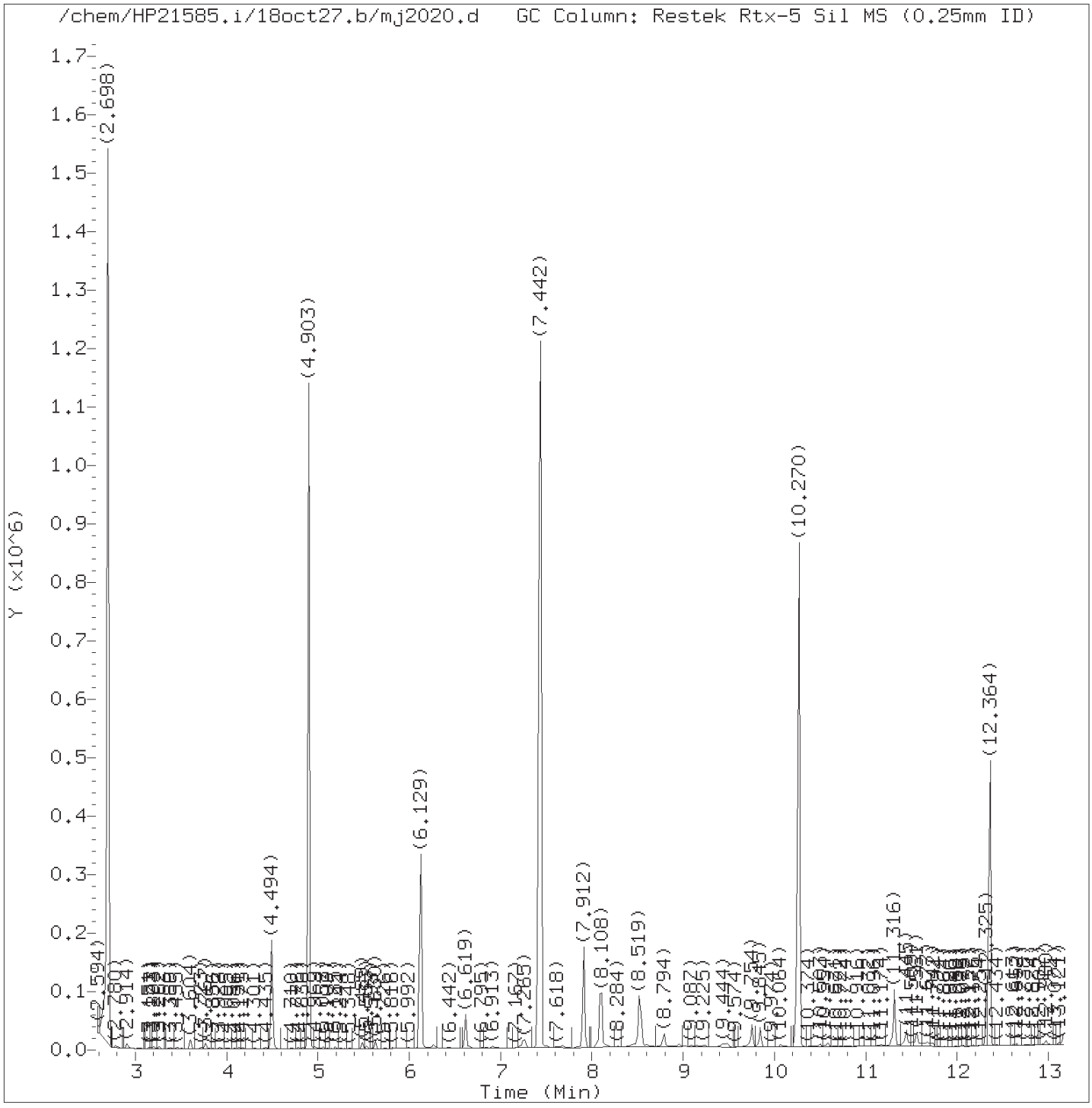
Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

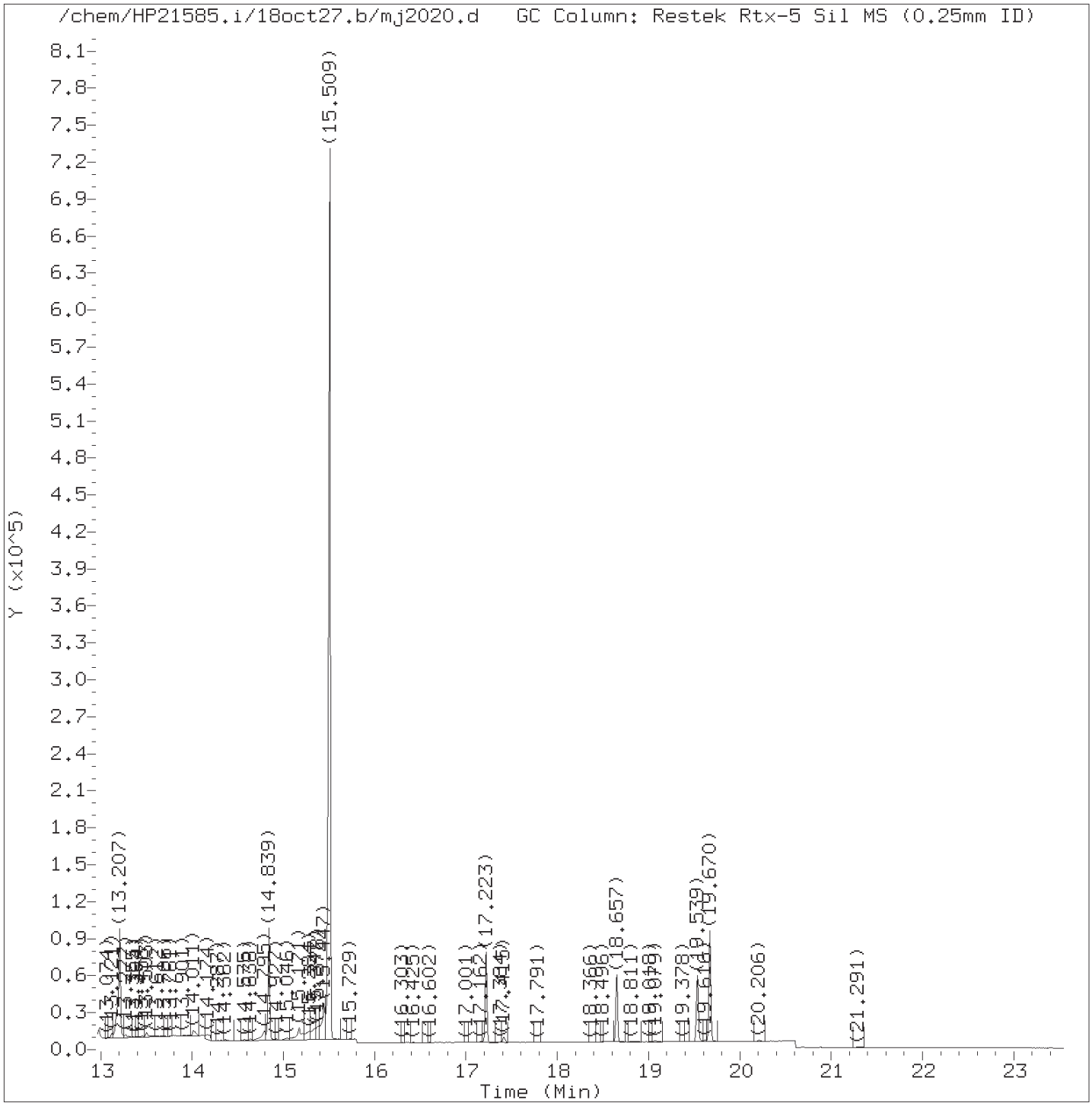
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKPR1 Lab Sample ID: 9861920

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKPR1 Lab Sample ID: 9861920

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKPR1 Lab Sample ID: 9861920

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.914	88	4792	0.037
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	46662	0.250
6)*Naphthalene-d8	(2)	8.519	136	129200	0.250
7) Naphthalene	(2)	8.539	128	21592M	0.036
10)$1-Methylnaphthalene-d10	(2)	9.754	152	46711	0.199
14)*Acenaphthene-d10	(3)	11.316	164	57160	0.250
20)*Phenanthrene-d10	(4)	13.207	188	101587M	0.250
24)$Fluoranthene-d10	(4)	14.845	212	105683	0.265
29)*Chrysene-d12	(5)	17.223	240	78158	0.250
36)$Benzo(a)pyrene-d12	(6)	19.539	264	49831	0.165
38)*Perylene-d12	(6)	19.670	264	82186	0.250

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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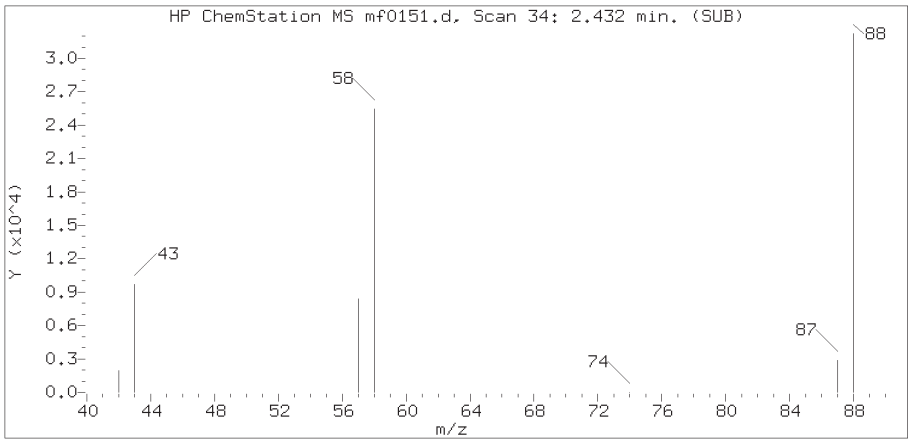
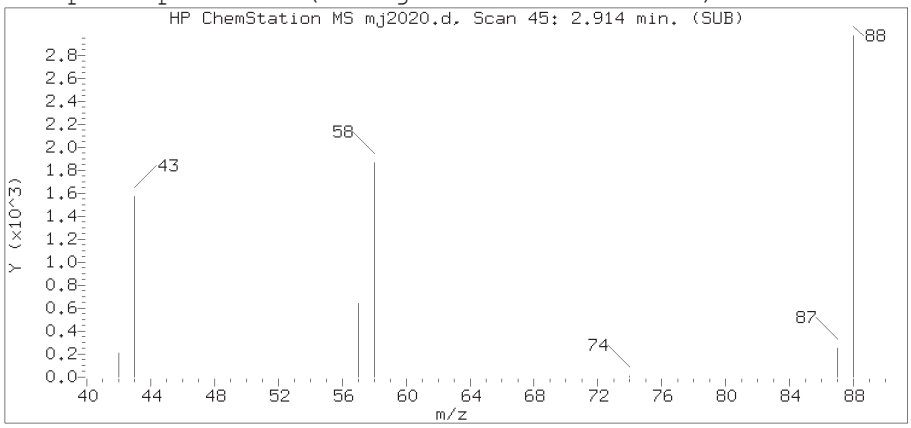
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

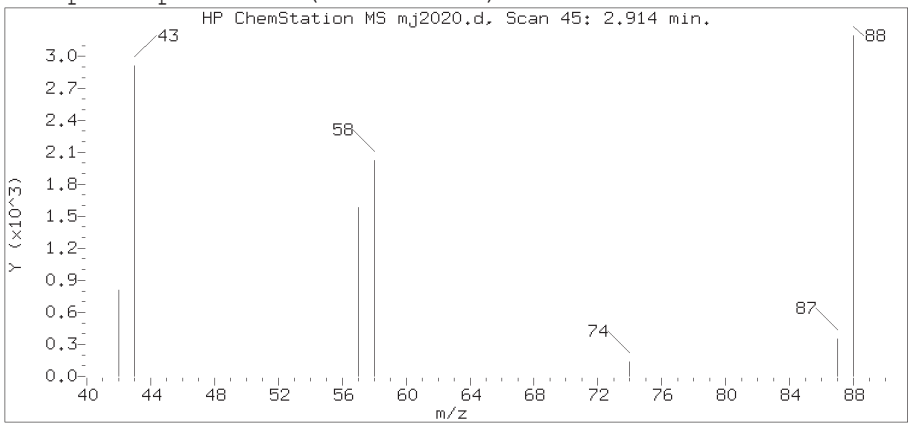
Reference Standard Spectrum for 1,4-Dioxane

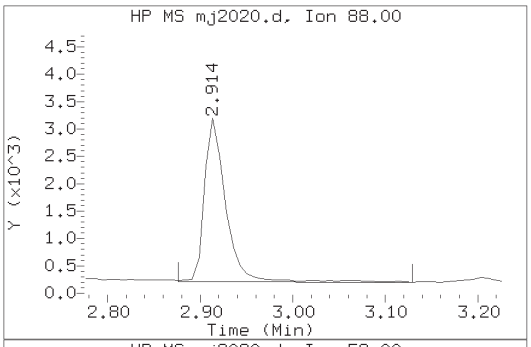


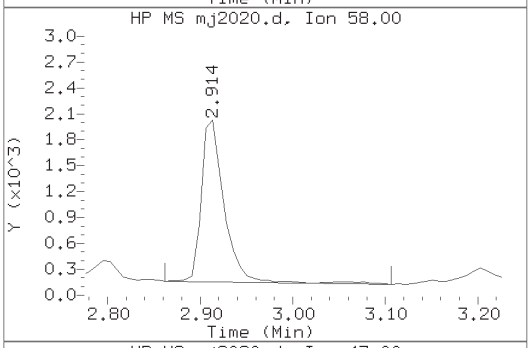
Sample Spectrum (Background Subtracted)

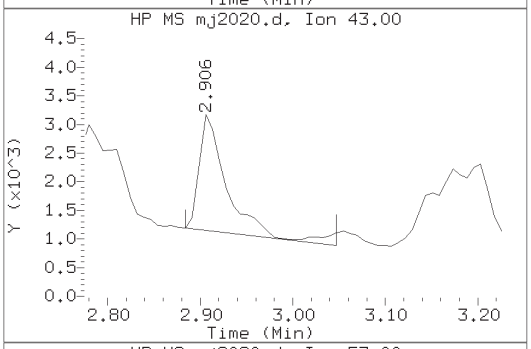


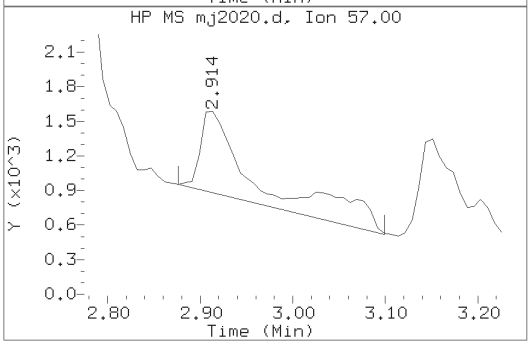
Sample Spectrum (Unaltered)











Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKPR1 Lab Sample ID: 9861920

Compound Number	: 1
Compound Name	: 1,4-Dioxane
Scan Number	: 45
Retention Time (minutes)	: 2.914
Relative Retention Time	:-0.00113
Quant Ion	: 88.00
Area (flag)	: 4792
On-column Amount (ng/ul)	: 0.0370

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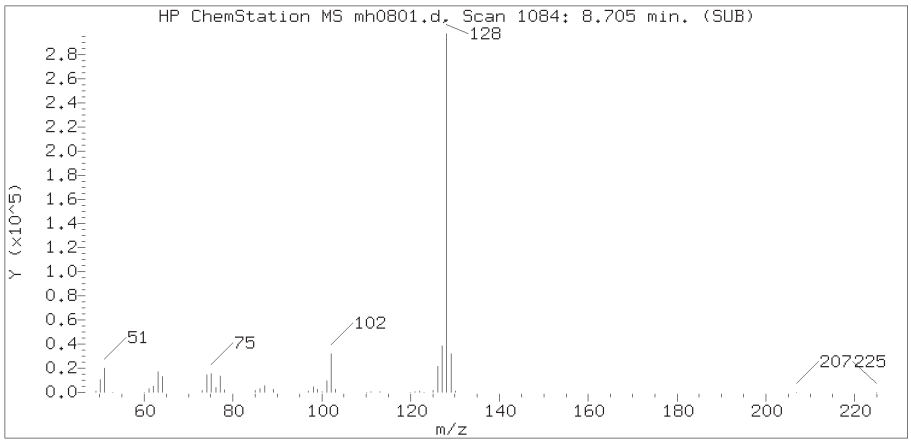
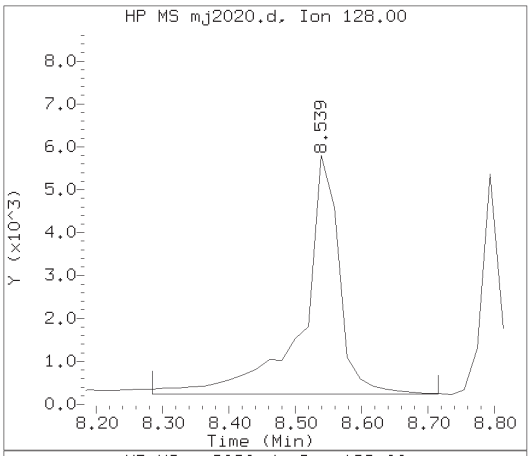
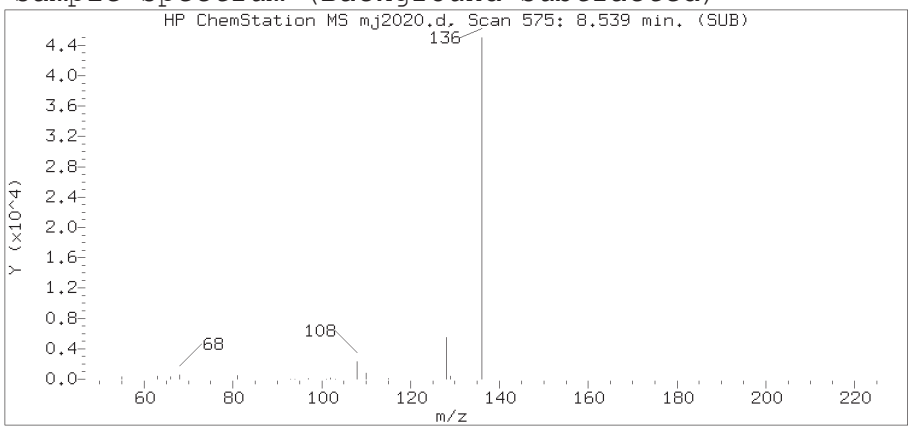
Target 3.5 esignature user ID: jmg00346

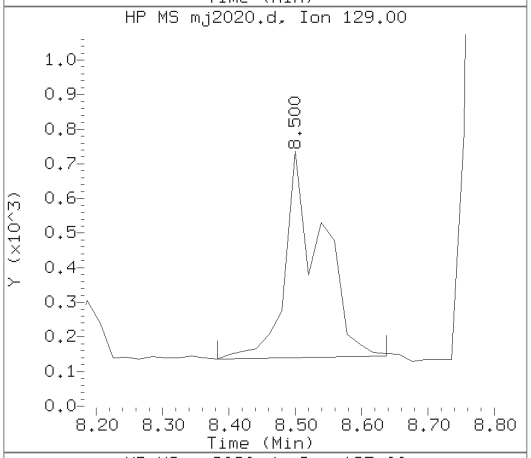
Reference Standard Spectrum for Naphthalene



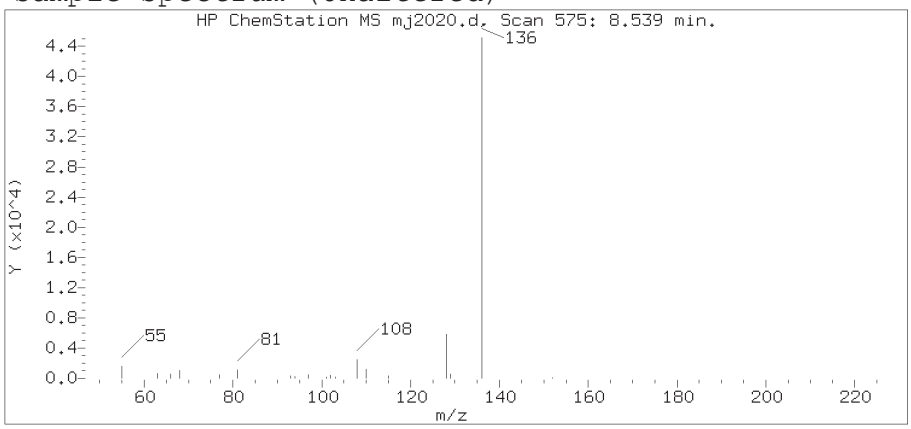


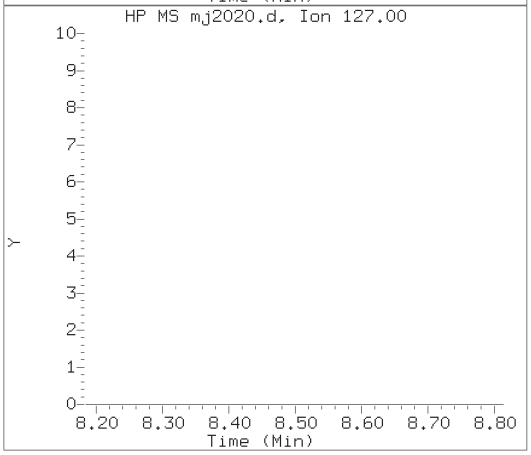
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKPR1 Lab Sample ID: 9861920

Compound Number	: 7
Compound Name	: Naphthalene
Scan Number	: 575
Retention Time (minutes)	: 8.539
Relative Retention Time	: 0.00230
Quant Ion	: 128.00
Area (flag)	: 21592M
On-column Amount (ng/ul)	: 0.0363

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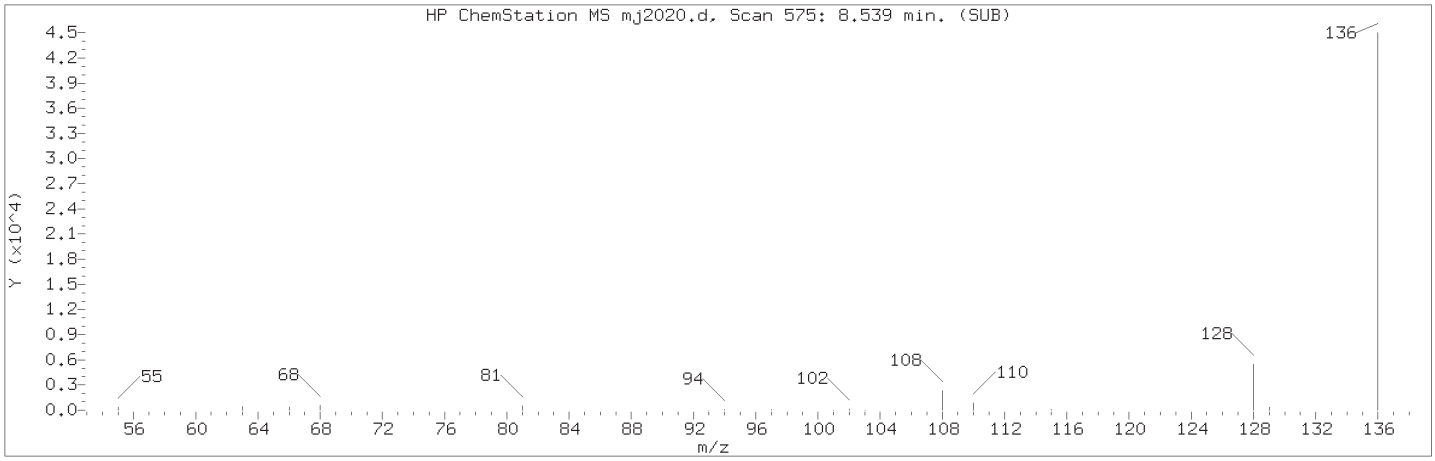
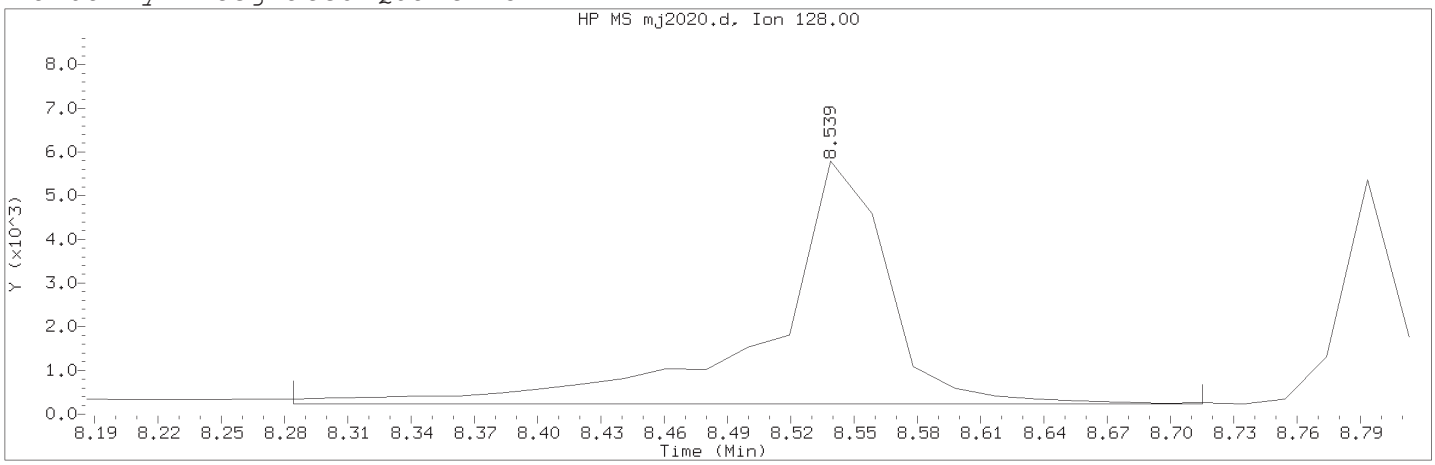
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKPR1 Lab Sample ID: 9861920

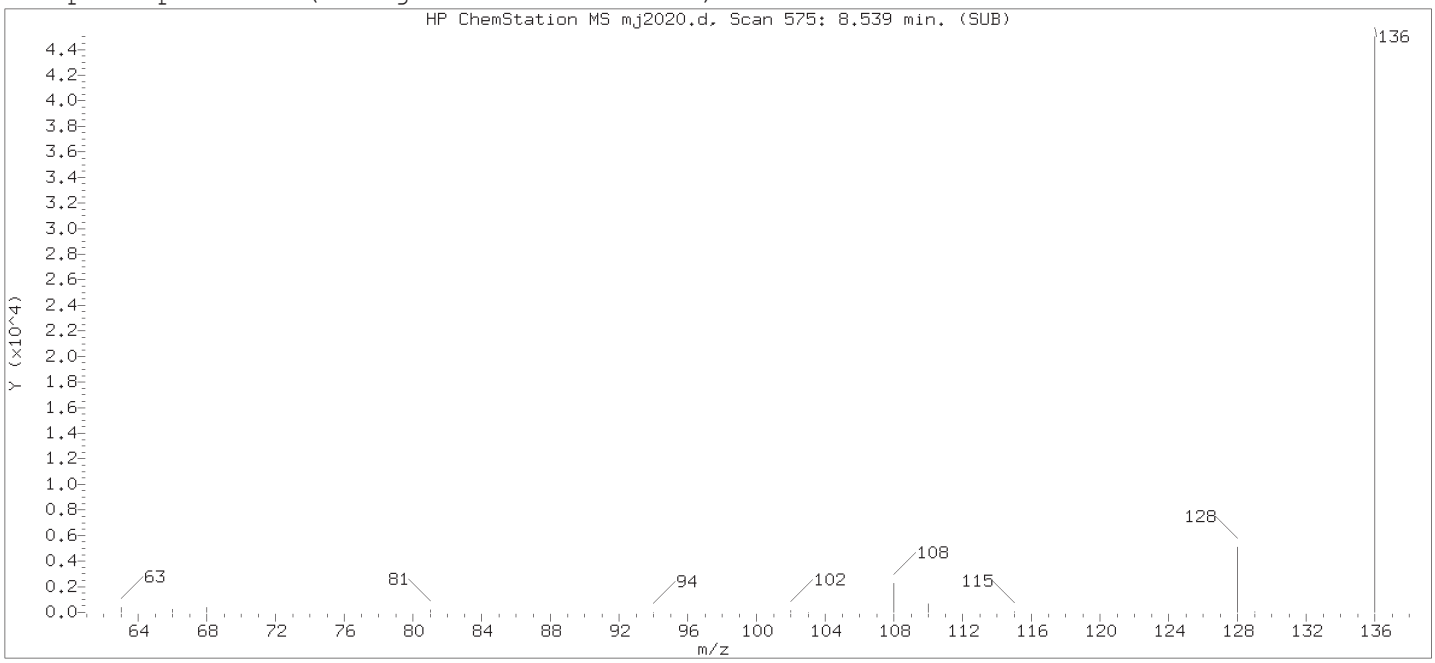
Compound Number	: 7		
Compound Name	: Naphthalene		
Scan Number	: 575		
Retention Time (minutes)	: 8.539		
Quant Ion	: 128.00		
Area (flag)	: 21592M		
On-column Amount (ng/ul)	: 0.0363		
Integration start scan	: 561	Integration stop scan:	583
Y at integration start	: 239	Y at integration end:	239

Reason for manual integration: improper integration

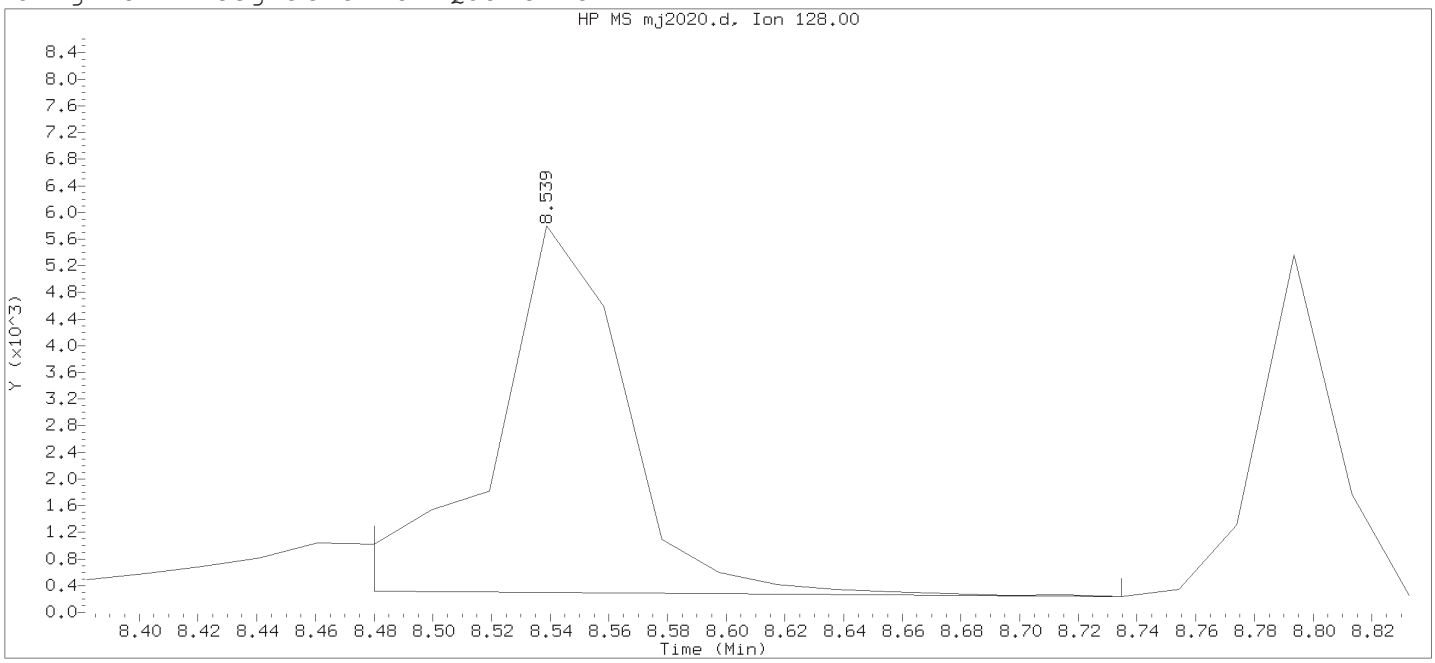
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: GKPR1 Lab Sample ID: 9861920

Compound Number	: 7		
Compound Name	: Naphthalene		
Scan Number	: 575		
Retention Time (minutes)	: 8.539		
Quant Ion	: 128.00		
Area	: 16886		
On-column Amount (ng/ul)	: 0.0284		
Integration start scan	: 571	Integration stop scan:	584
Y at integration start	: 317	Y at integration end:	231

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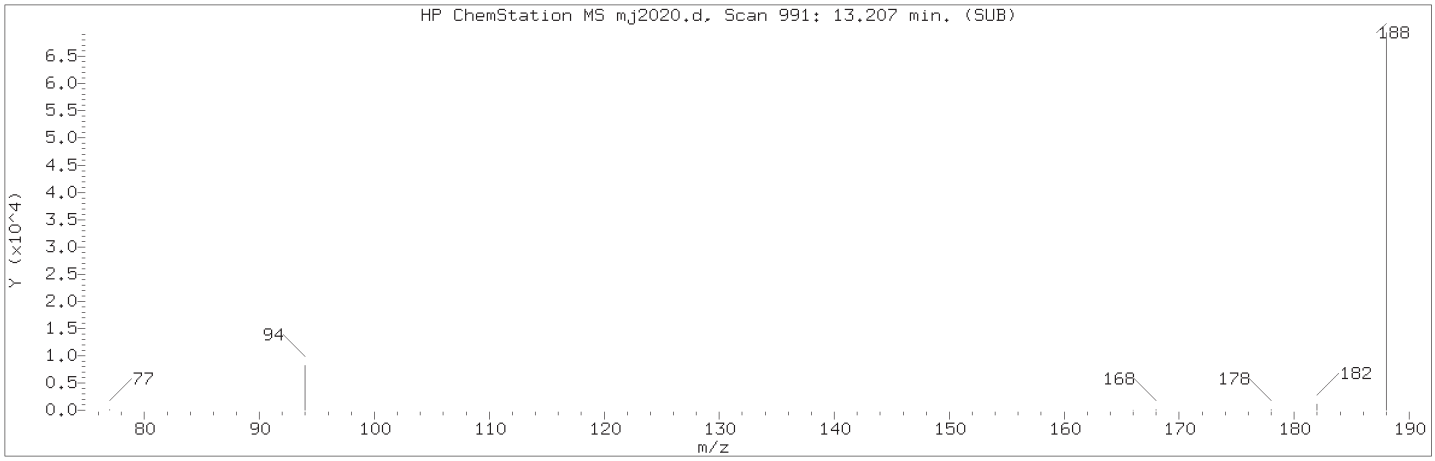
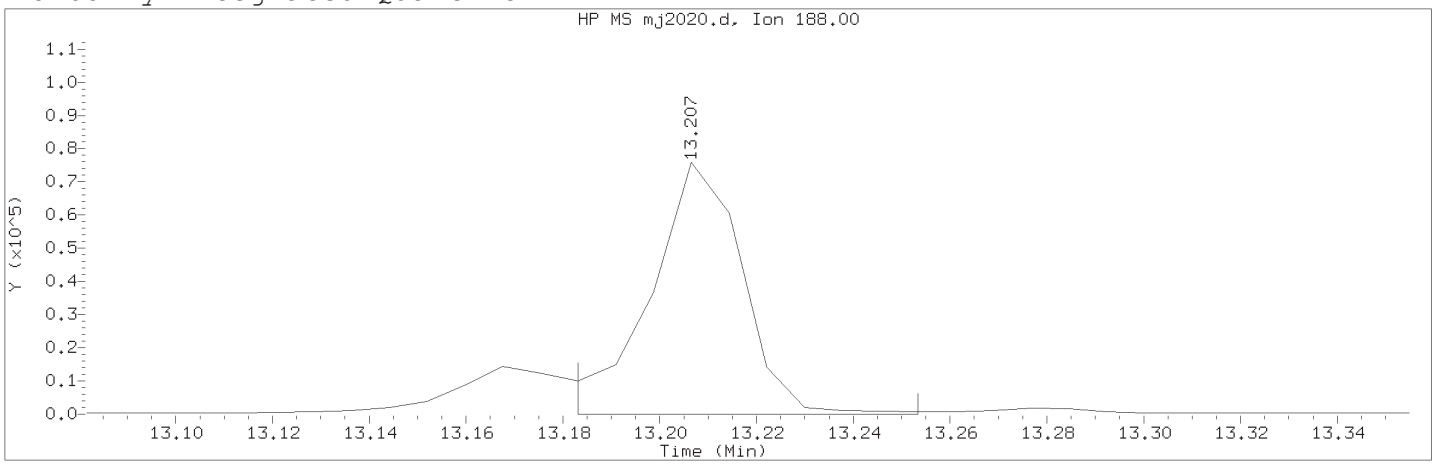
Target 3.5 esignature used: 1007. Page 0339

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKPR1 Lab Sample ID: 9861920

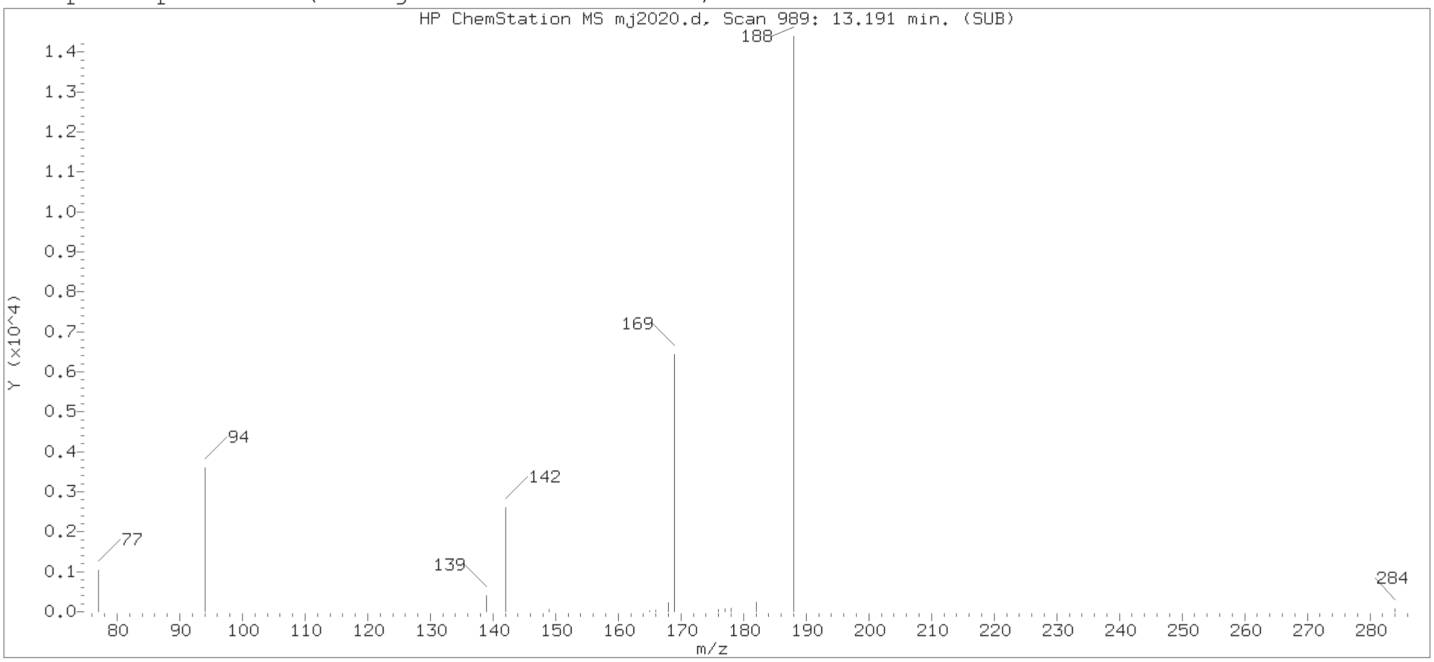
Compound Number	: 20		
Compound Name	: Phenanthrene-d10		
Scan Number	: 991		
Retention Time (minutes)	: 13.207		
Quant Ion	: 188.00		
Area (flag)	: 101587M		
On-column Amount (ng/ul)	: 0.2500		
Integration start scan	: 987	Integration stop scan:	996
Y at integration start	: -86	Y at integration end:	-86

Reason for manual integration: improper integration

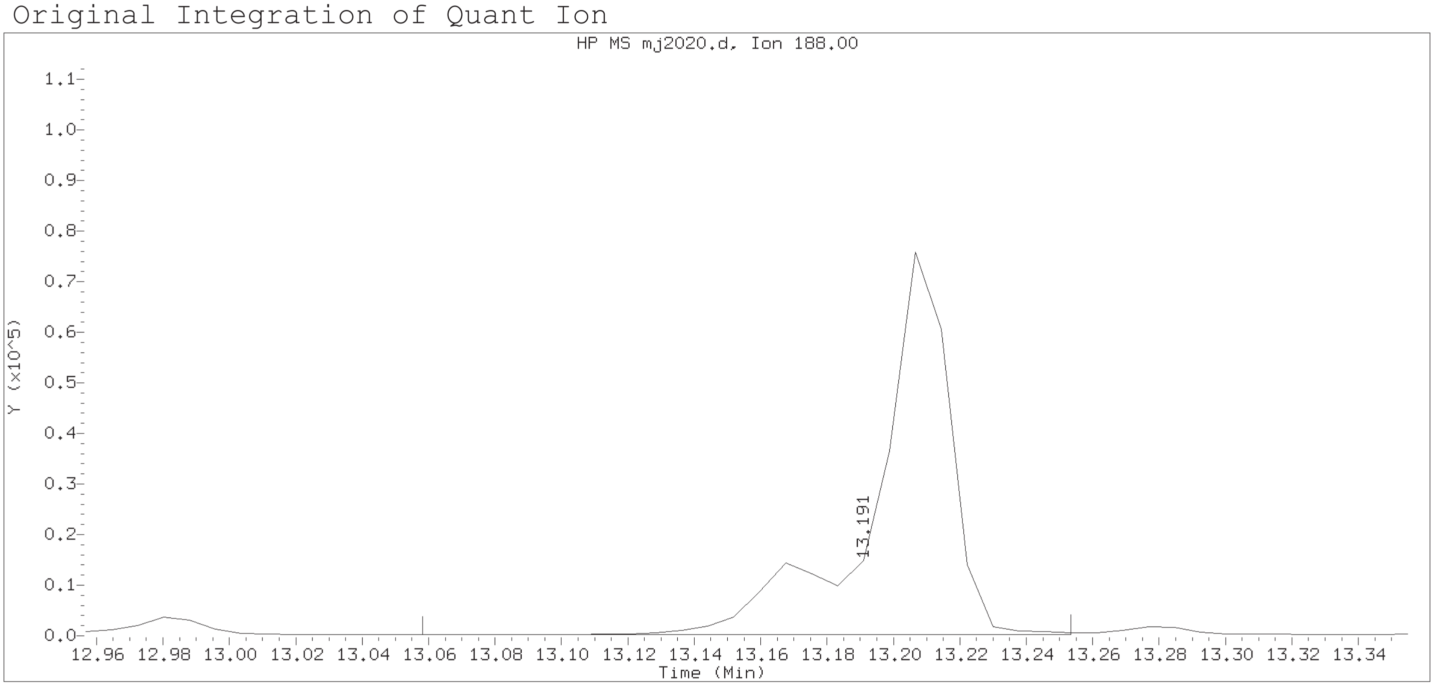
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

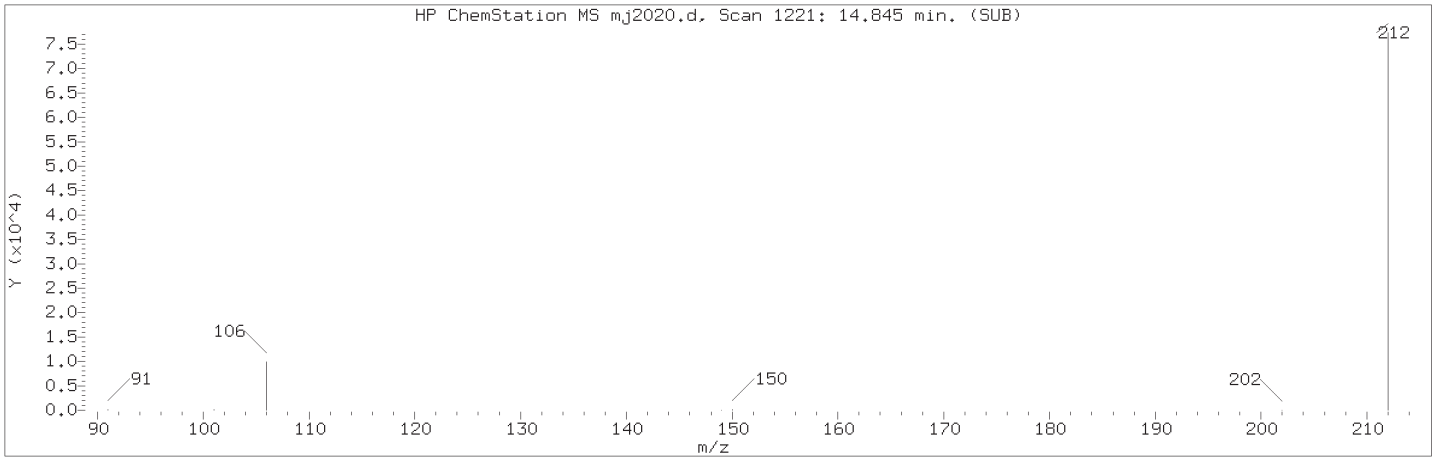
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: GKPR1 Lab Sample ID: 9861920

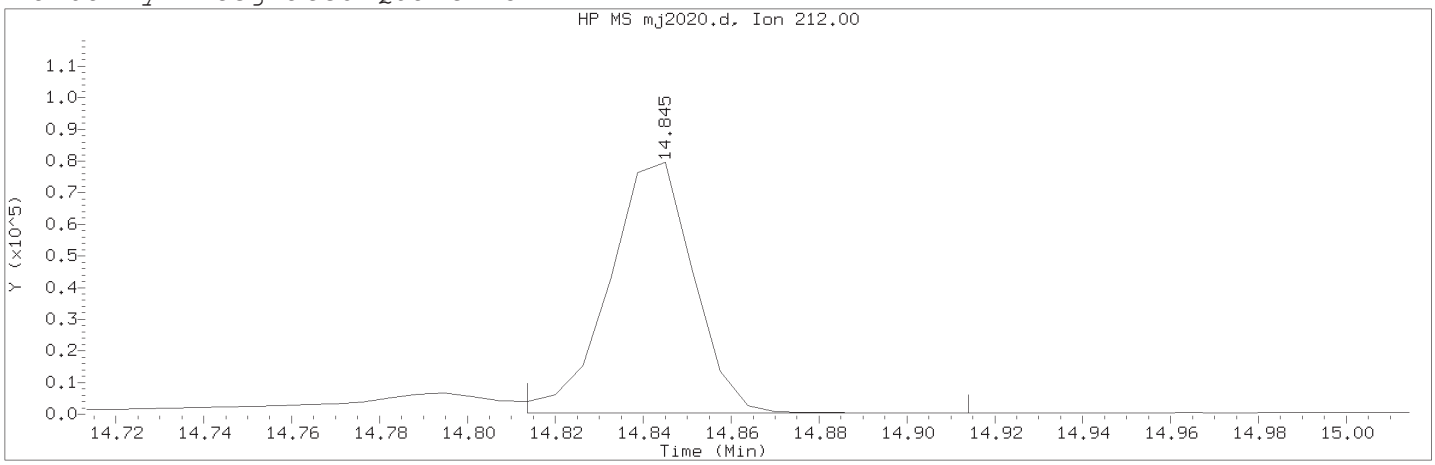
Compound Number	:	20
Compound Name	:	Phenanthrene-d10
Scan Number	:	989
Retention Time (minutes)	:	13.191
Quant Ion	:	188.00
Area	:	119431
On-column Amount (ng/ul)	:	0.2500
Integration start scan	:	971
Y at integration start	:	213
Integration stop scan:		996
Y at integration end:		233

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2020.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKPR1 Lab Sample ID: 9861920

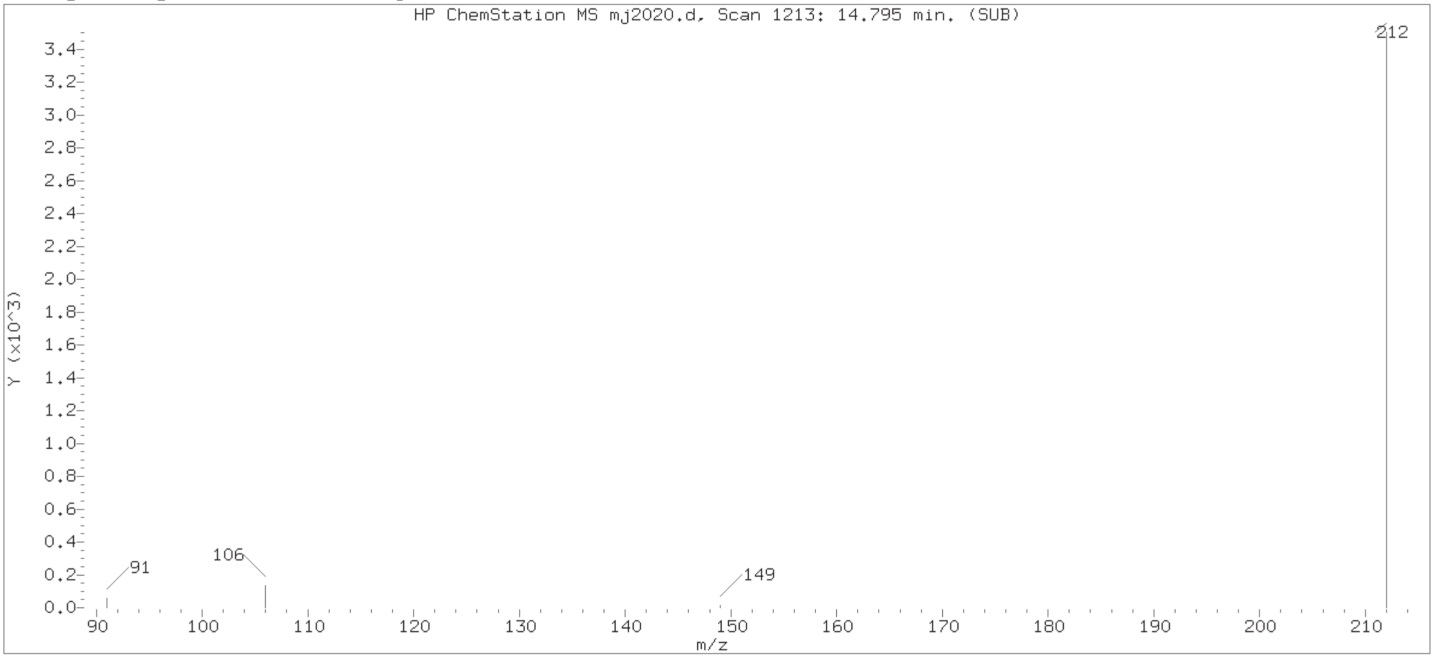
Compound Number : 24
Compound Name : Fluoranthene-d10
Scan Number : 1221
Retention Time (minutes) : 14.845
Quant Ion : 212.00
Area (flag) : 105683A
On-column Amount (ng/ul) : 0.2652
Integration start scan : 1215 Integration stop scan: 1231
Y at integration start : 347 Y at integration end: 350

Reason for manual integration: improper integration

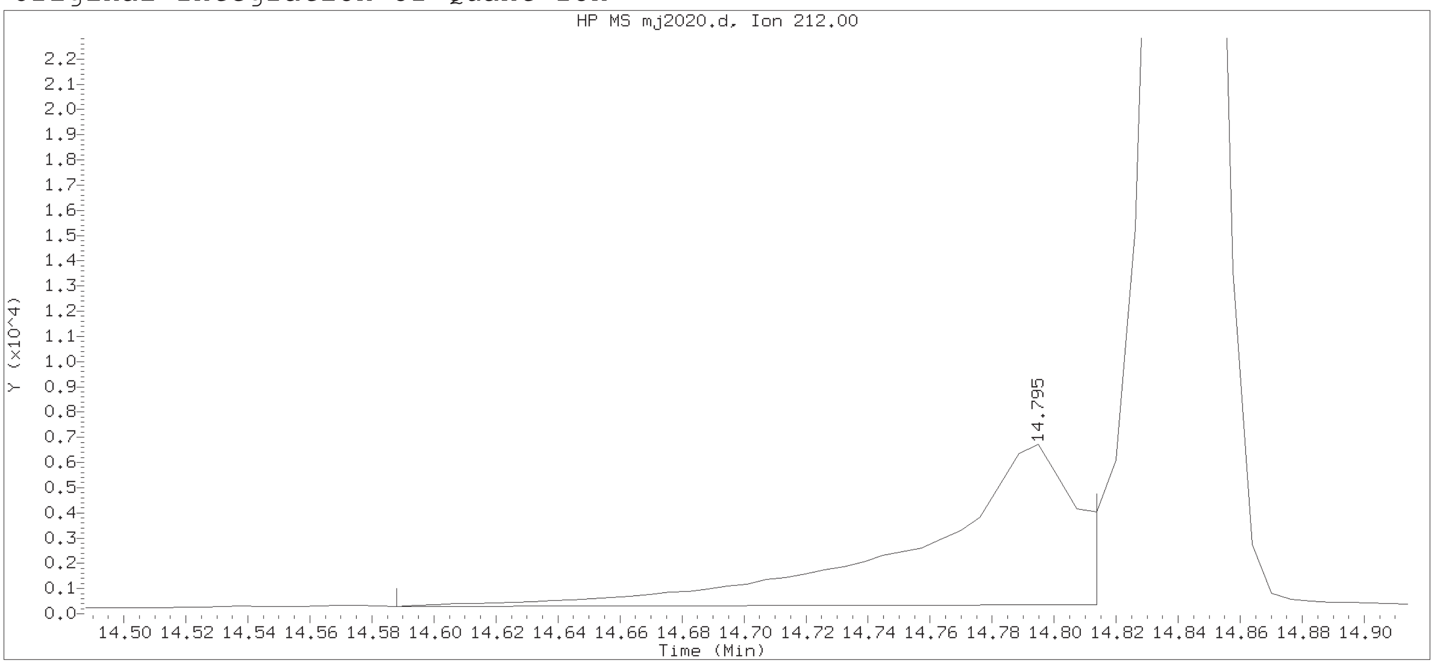
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion

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Data File: /chem/HP21585.i/18oct27.b/mj2020.d          Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 22:56             Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m    Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: GKPR1                          Lab Sample ID: 9861920

Compound Number            : 24
Compound Name              : Fluoranthene-d10
Scan Number                : 1213
Retention Time (minutes)   : 14.795
Quant Ion                  : 212.00
Area                       : 21593
On-column Amount (ng/ul)   : 0.0461
Integration start scan     : 1179     Integration stop scan: 1215
Y at integration start     :  298     Y at integration end:    347
```

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user

GKP05 Lancaster Laboratories, Inc. 9861921
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP21585.i/18oct27.b/mj2021.d Injection date and time: **27-OCT-2018 23:25**
Data file Sample Info. Line: GKP05;9861921;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 229 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	6.619	(0.000)	477	152	56767	(-1)	0.25	
6) Naphthalene-d8	8.519	(0.000)	574	136	157363	(-4)	0.25	
14) Acenaphthene-d10	11.316	(0.000)	771	164	68843	(-4)	0.25	
20) Phenanthrene-d10	13.207	(0.008)	991	188	143454	(-7)	0.25	
29) Chrysene-d12	17.223	(0.000)	1559	240	95115	(-16)	0.25	
38) Perylene-d12	19.670	(0.008)	1878	264	99693	(-8)	0.25	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
10) 1-Methylnaphthalene-d10	(2)	9.754	(0.000)	152	28469	0.099	40%		29 - 112
24) Fluoranthene-d10	(4)	14.845	(-0.001)	212	66814	0.119	47%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.539	(0.000)	264	38975	0.106	43%		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)	2.914	(-0.001)	88	4517	0.029	0.13	0.181	B	0.03
4) bis(2-Chloroethyl)ether	(2)				Not Detected					0.005
7) Naphthalene	(2)	8.558	(0.000)	128	9520	0.013	0.06			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					0.01
25) Fluoranthene	(4)				Not Detected					0.003
26) Pyrene	(5)				Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					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.

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Data file: /chem/HP21585.i/18oct27.b/mj2021.d Injection date and time: **27-OCT-2018 23:25**
Data file Sample Info. Line: GKP05;9861921;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 229 ml Volume Injected (Vi): 2 ul

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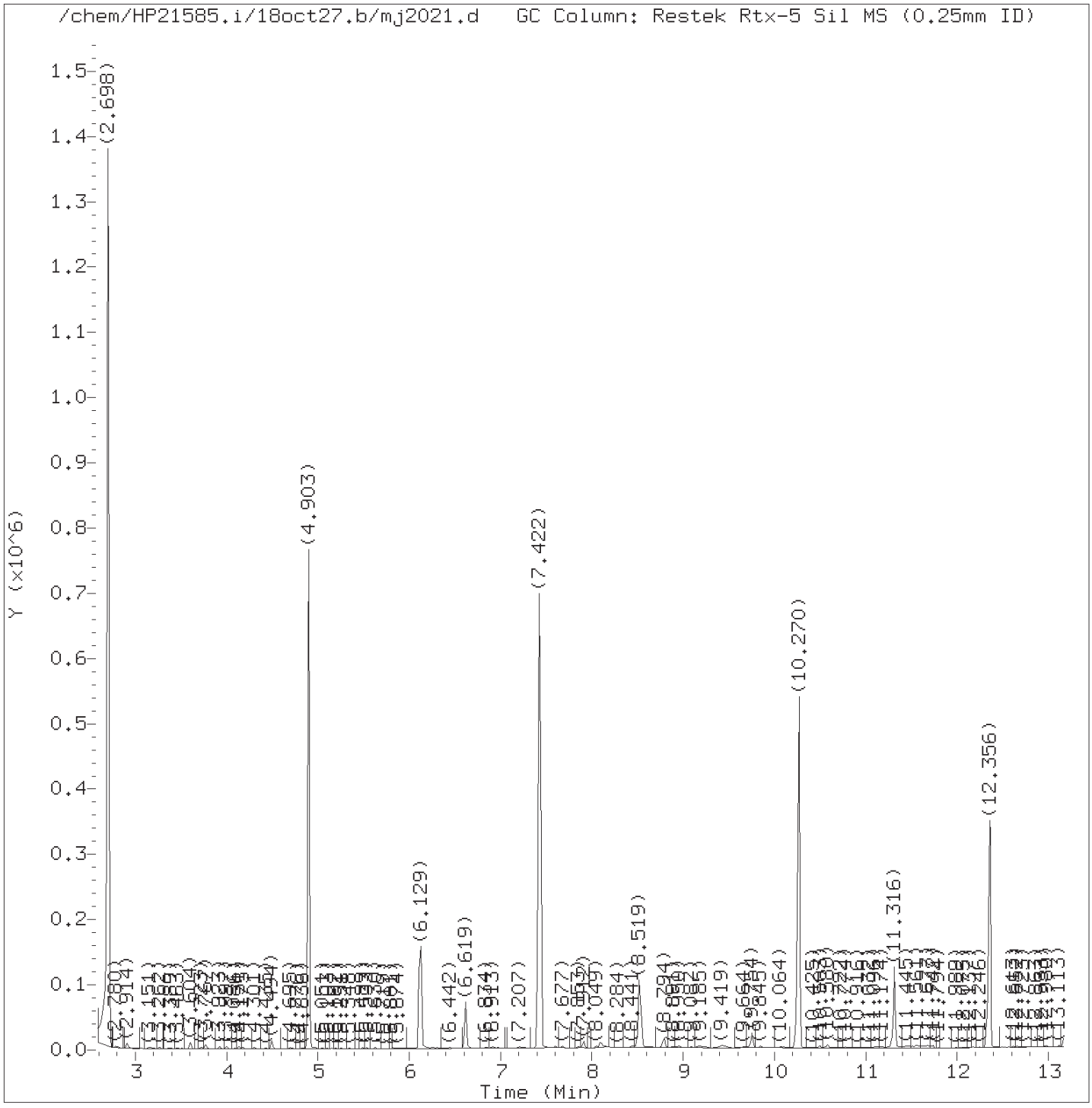
WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 21

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

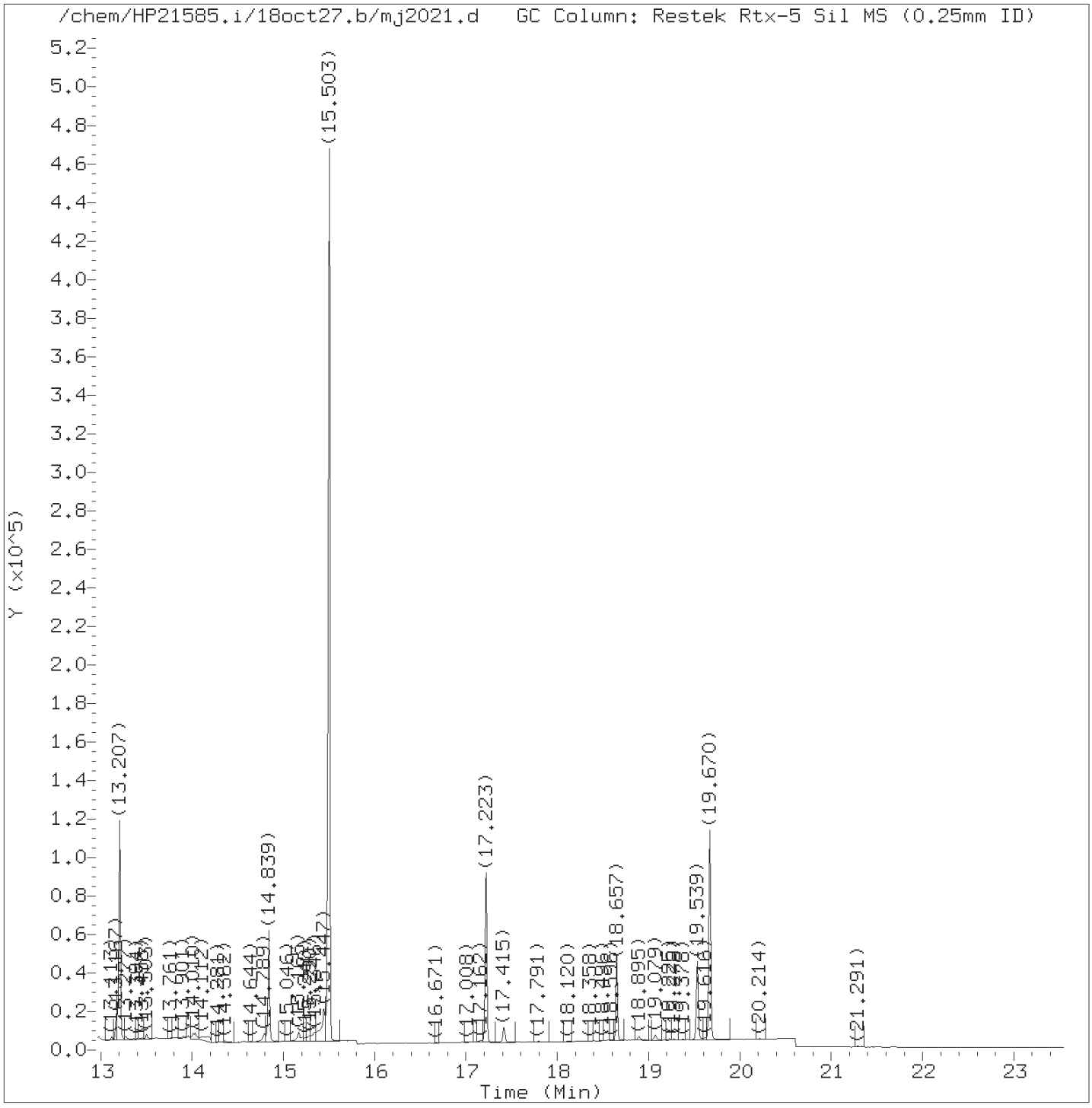
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2021.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:25 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP05 Lab Sample ID: 9861921

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2021.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:25 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP05 Lab Sample ID: 9861921

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2021.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:25 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

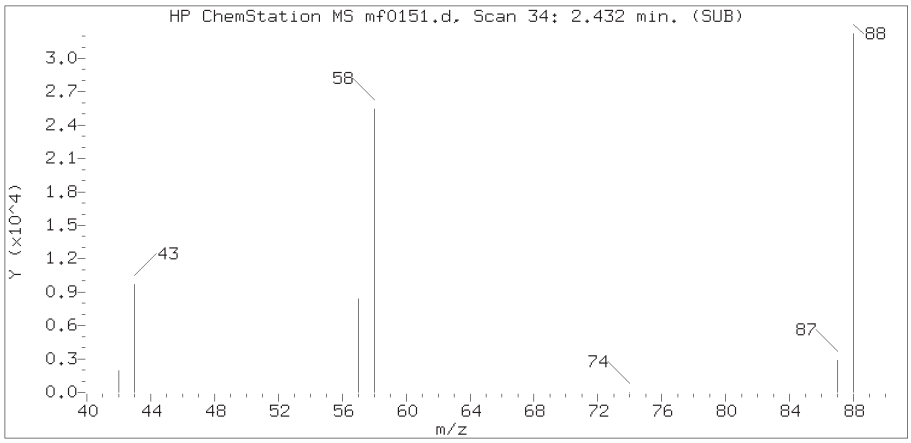
Sample Name: GKP05 Lab Sample ID: 9861921

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.914	88	4517	0.029
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	56767	0.250
6)*Naphthalene-d8	(2)	8.519	136	157363	0.250
7) Naphthalene	(2)	8.558	128	9520	0.013
10)$1-Methylnaphthalene-d10	(2)	9.754	152	28469	0.099
14)*Acenaphthene-d10	(3)	11.316	164	68843	0.250
20)*Phenanthrene-d10	(4)	13.207	188	143454	0.250
24)$Fluoranthene-d10	(4)	14.845	212	66814	0.119
29)*Chrysene-d12	(5)	17.223	240	95115	0.250
36)$Benzo(a)pyrene-d12	(6)	19.539	264	38975	0.106
38)*Perylene-d12	(6)	19.670	264	99693	0.250

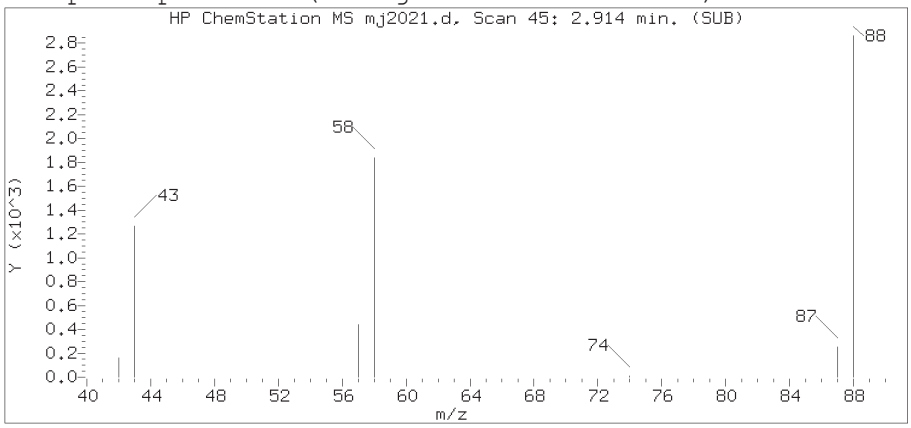
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

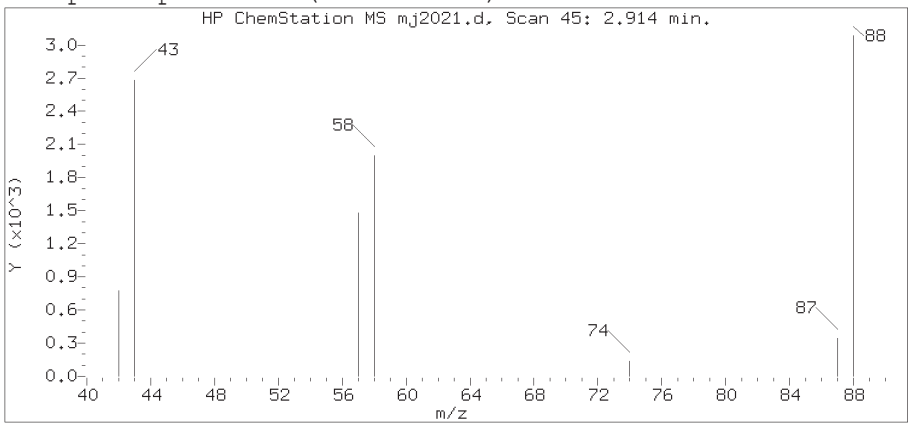
Reference Standard Spectrum for 1,4-Dioxane

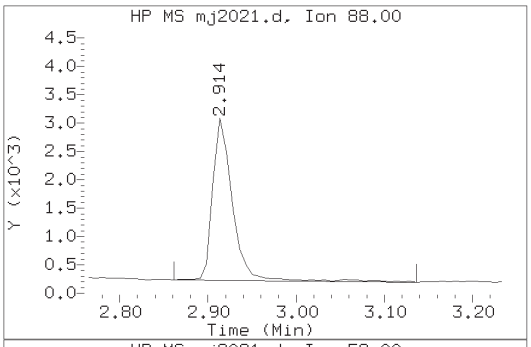


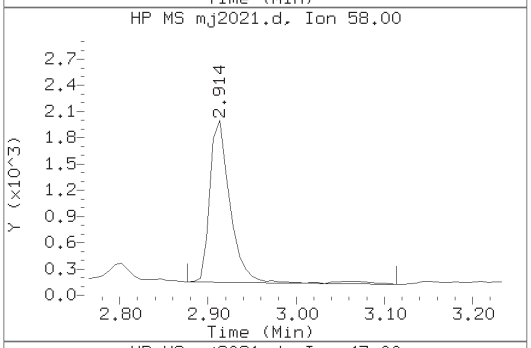
Sample Spectrum (Background Subtracted)

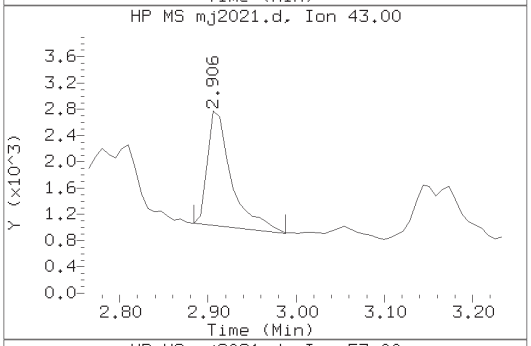


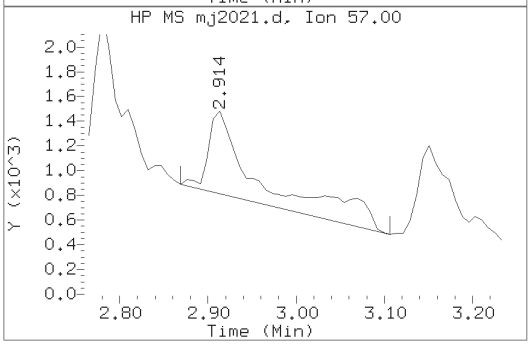
Sample Spectrum (Unaltered)











Data File: /chem/HP21585.i/18oct27.b/mj2021.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:25 Analyst ID: ceb05247

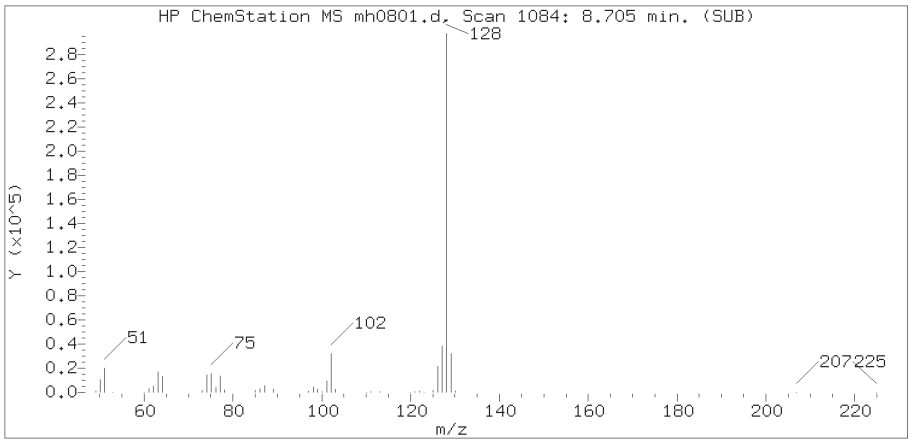
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

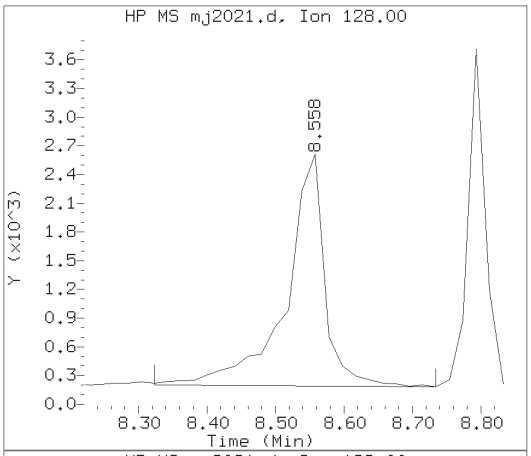
Sample Name: GKP05 Lab Sample ID: 9861921

Compound Number	: 1
Compound Name	: 1,4-Dioxane
Scan Number	: 45
Retention Time (minutes)	: 2.914
Relative Retention Time	:-0.00113
Quant Ion	: 88.00
Area (flag)	: 4517
On-column Amount (ng/ul)	: 0.0287

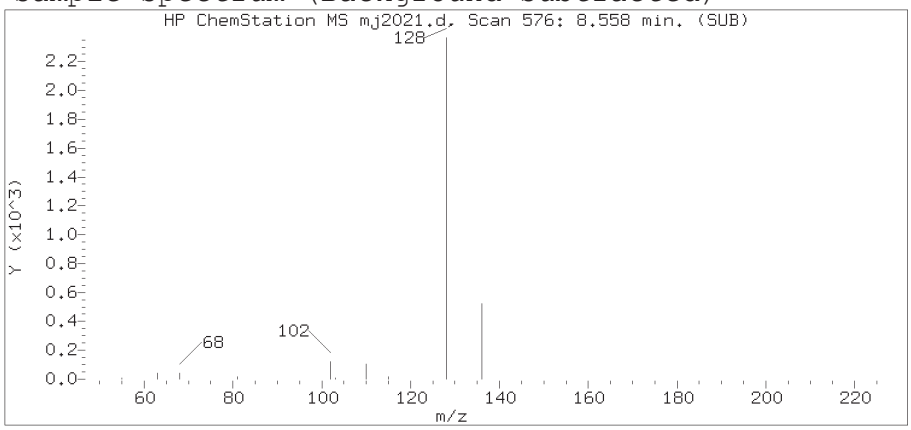
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

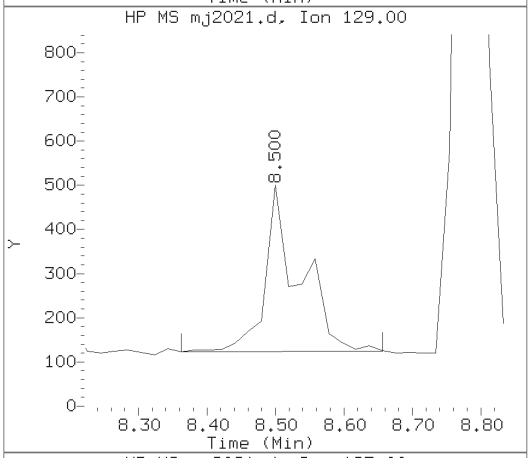
Reference Standard Spectrum for Naphthalene



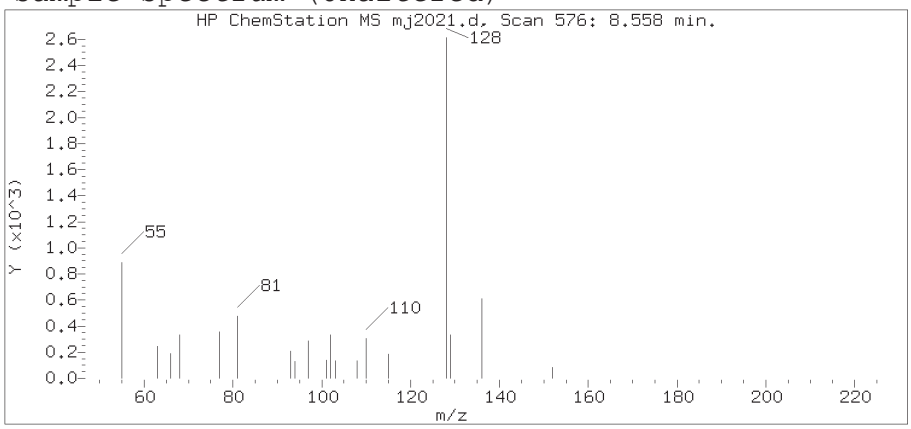


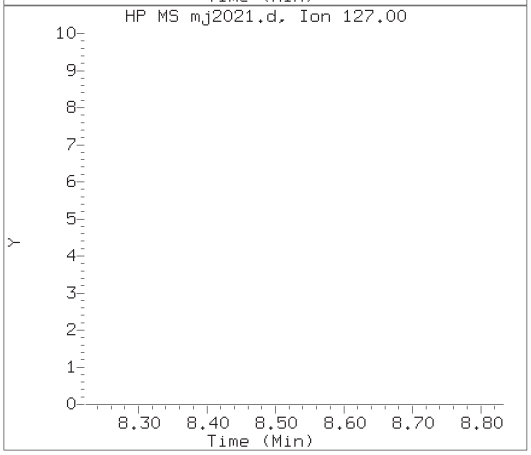
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2021.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:25 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP05 Lab Sample ID: 9861921

Compound Number	: 7
Compound Name	: Naphthalene
Scan Number	: 576
Retention Time (minutes)	: 8.558
Relative Retention Time	: 0.00000
Quant Ion	: 128.00
Area (flag)	: 9520
On-column Amount (ng/ul)	: 0.0132

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

GKP02 Lancaster Laboratories, Inc. 9861922
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP21585.i/18oct27.b/mj2022.d Injection date and time: **27-OCT-2018 23:55**
Data file Sample Info. Line: GKP02;9861922;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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): 237 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	6.619	(0.000)	477	152	50281	(-12)	0.25	
6) Naphthalene-d8	8.519	(0.000)	574	136	141885	(-14)	0.25	
14) Acenaphthene-d10	11.316	(0.000)	771	164	62949	(-13)	0.25	
20) Phenanthrene-d10	13.206	(0.008)	991	188	107944	(-30)	0.25	
29) Chrysene-d12	17.223	(0.000)	1559	240	87727	(-22)	0.25	
38) Perylene-d12	19.669	(0.008)	1878	264	93082	(-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)	9.754	(0.000)	152	50513	0.196	78%		29 - 112
24) Fluoranthene-d10	(4)	14.845	(-0.001)	212	110641	0.261	105%		38 - 119
36) Benzo(a)pyrene-d12	(6)	19.539	(0.000)	264	75204	0.220	88%		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)	2.913	(-0.001)	88	8300	0.059	0.25	0.181	B	0.03
4) bis(2-Chloroethyl)ether	(2)				Not Detected					0.005
7) Naphthalene	(2)	8.558	(-0.000)	128	8023	0.012	0.05			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)	14.034	(-0.000)	149	9911M	0.016	0.07			0.01
25) Fluoranthene	(4)				Not Detected					0.003
26) Pyrene	(5)				Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.414	(0.000)	149	15155M	0.031	0.13			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. M = Compound was manually integrated.

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Data file: /chem/HP21585.i/18oct27.b/mj2022.d Injection date and time: **27-OCT-2018 23:55**
Data file Sample Info. Line: GKP02;9861922;1;0;SAMPLE;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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)

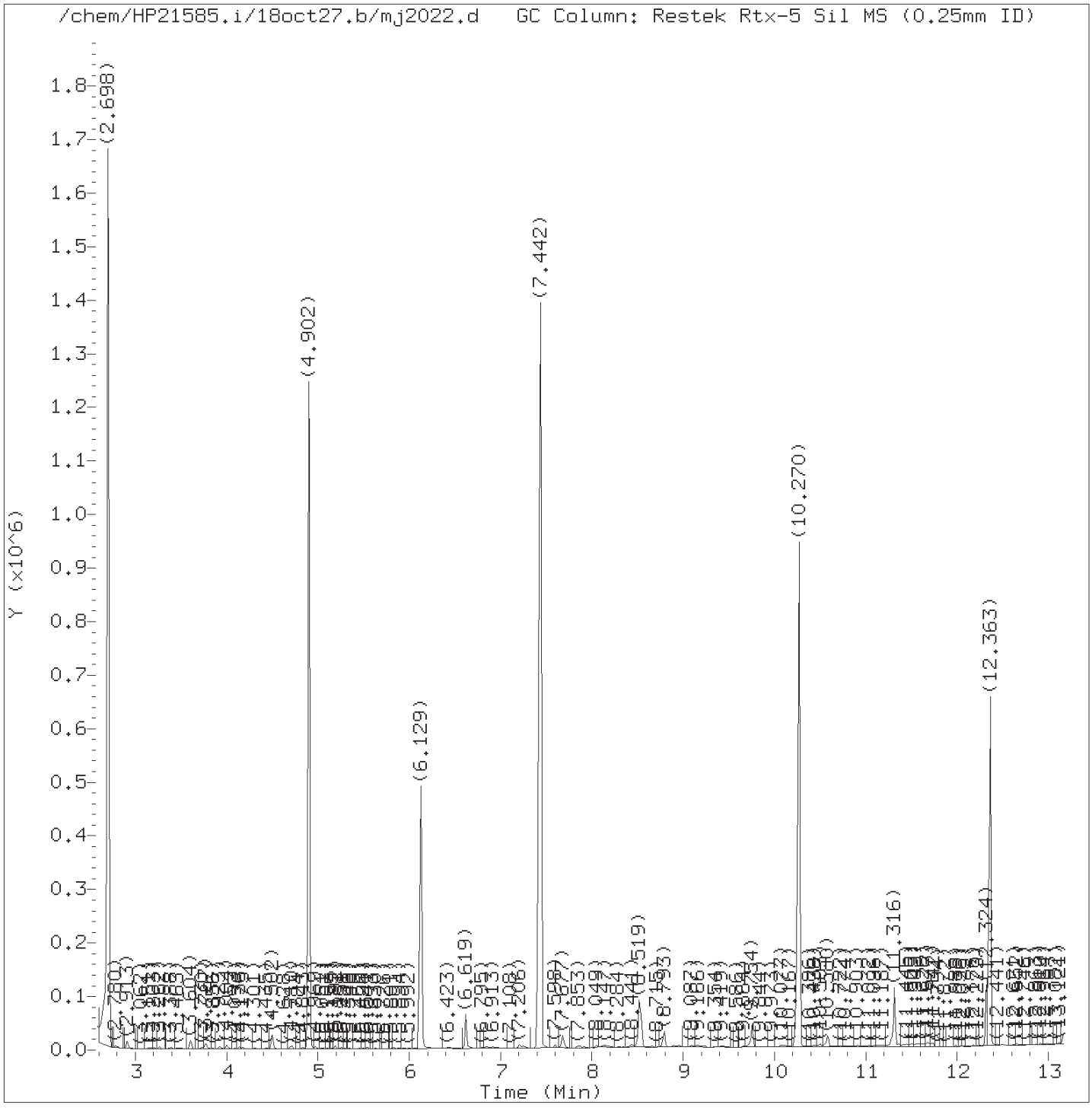
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 237 ml Volume Injected (Vi): 2 ul

THIS SPACE
WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 21

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

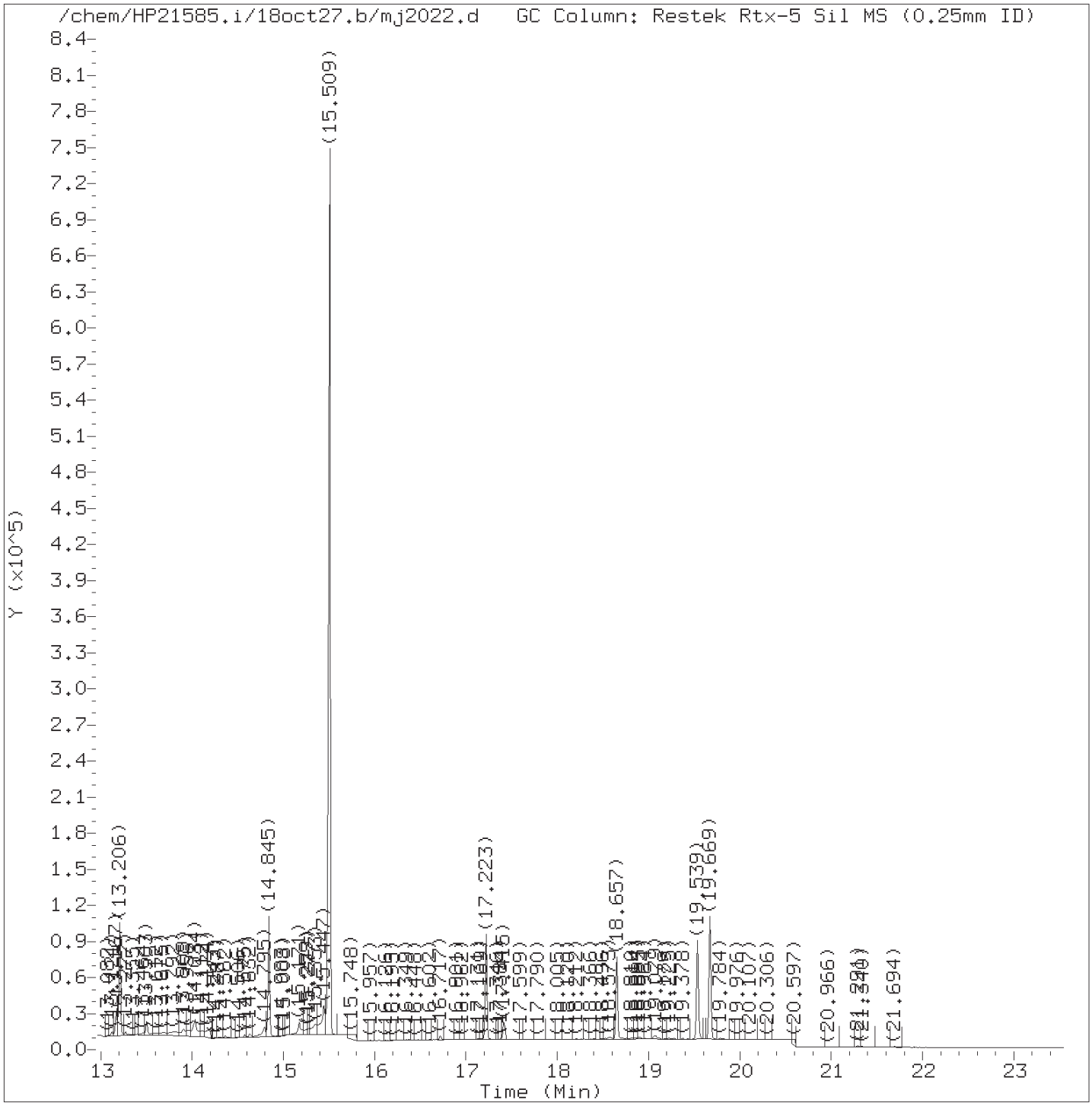
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP02 Lab Sample ID: 9861922

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP02 Lab Sample ID: 9861922

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP02 Lab Sample ID: 9861922

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.913	88	8300	0.059
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	50281	0.250
6)*Naphthalene-d8	(2)	8.519	136	141885	0.250
7) Naphthalene	(2)	8.558	128	8023	0.012
10)$1-Methylnaphthalene-d10	(2)	9.754	152	50513	0.196
14)*Acenaphthene-d10	(3)	11.316	164	62949	0.250
20)*Phenanthrene-d10	(4)	13.206	188	107944	0.250
23) Di-n-butylphthalate	(4)	14.034	149	9911M	0.016
24)$Fluoranthene-d10	(4)	14.845	212	110641	0.261
29)*Chrysene-d12	(5)	17.223	240	87727	0.250
31) bis(2-Ethylhexyl)phthalate	(5)	17.415	149	15155M	0.031
36)$Benzo(a)pyrene-d12	(6)	19.539	264	75204	0.220
38)*Perylene-d12	(6)	19.669	264	93082	0.250

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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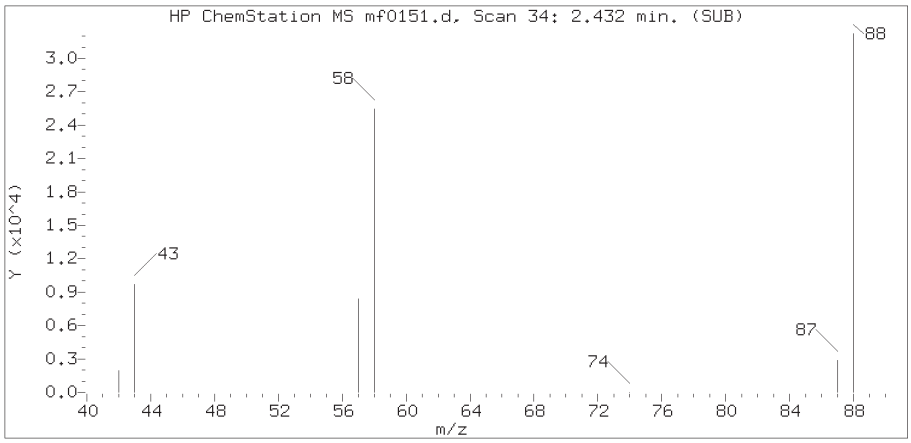
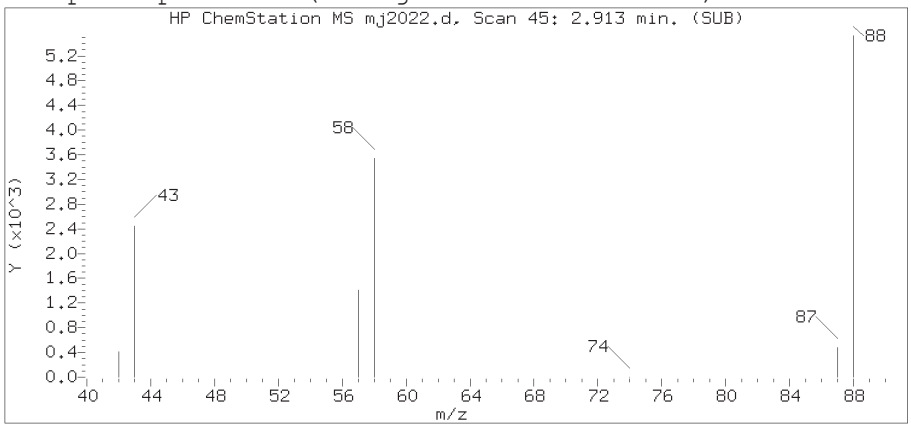
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

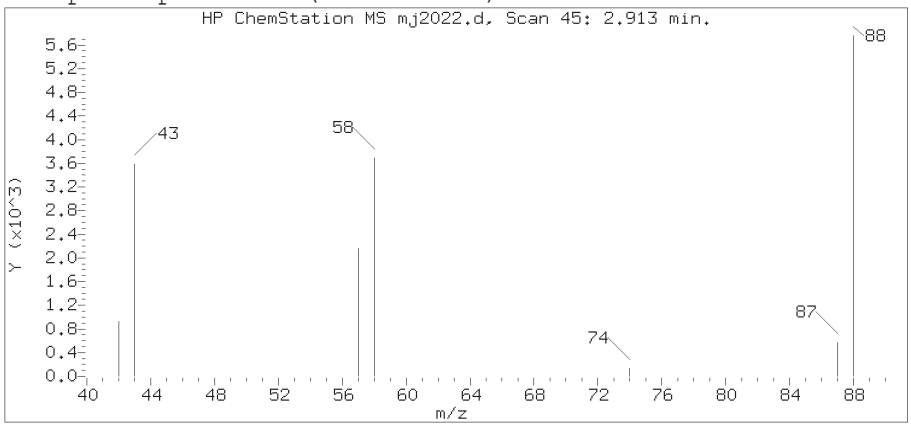
Reference Standard Spectrum for 1,4-Dioxane

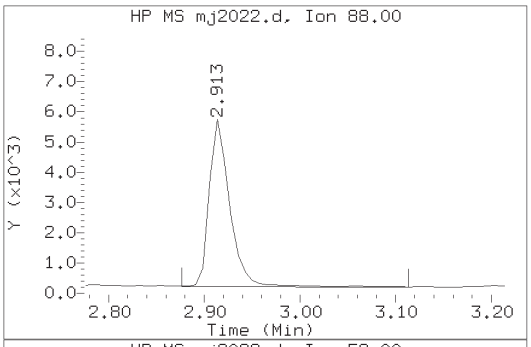


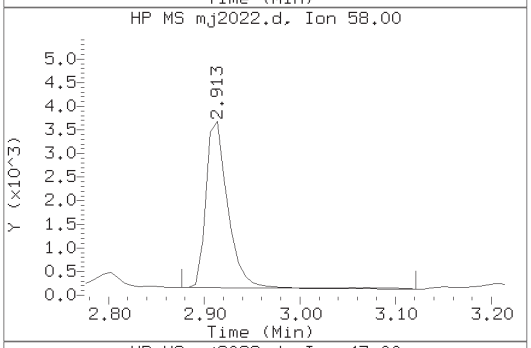
Sample Spectrum (Background Subtracted)

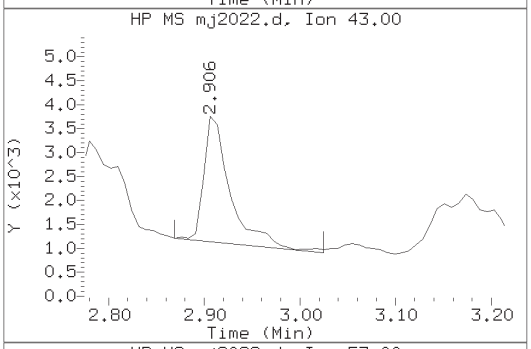


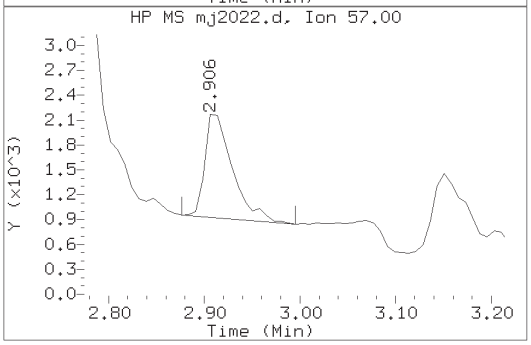
Sample Spectrum (Unaltered)











Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

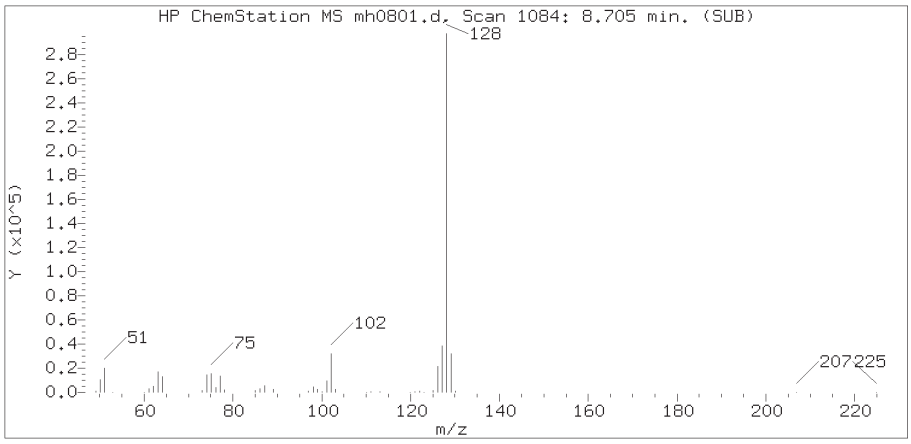
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

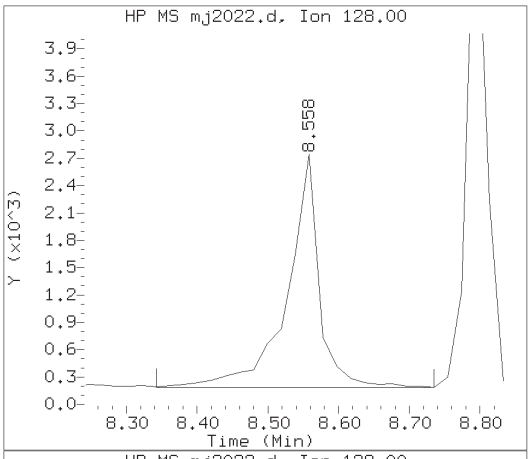
Sample Name: GKP02 Lab Sample ID: 9861922

Compound Number	: 1
Compound Name	: 1,4-Dioxane
Scan Number	: 45
Retention Time (minutes)	: 2.913
Relative Retention Time	:-0.00112
Quant Ion	: 88.00
Area (flag)	: 8300
On-column Amount (ng/ul)	: 0.0595

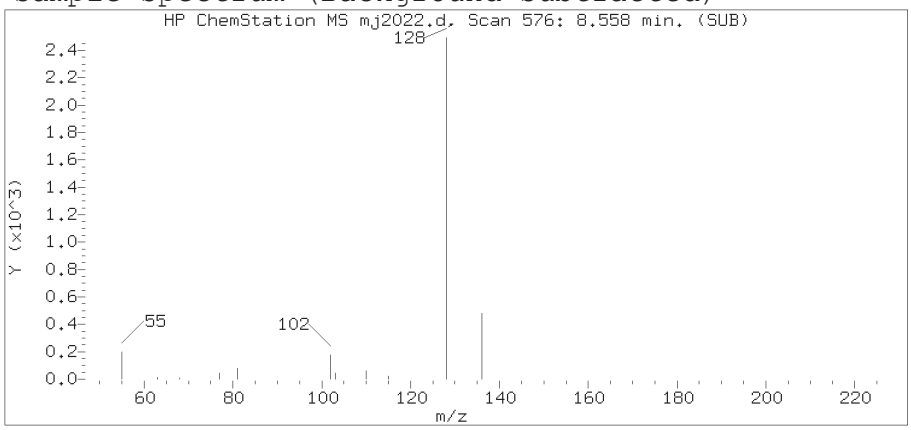
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

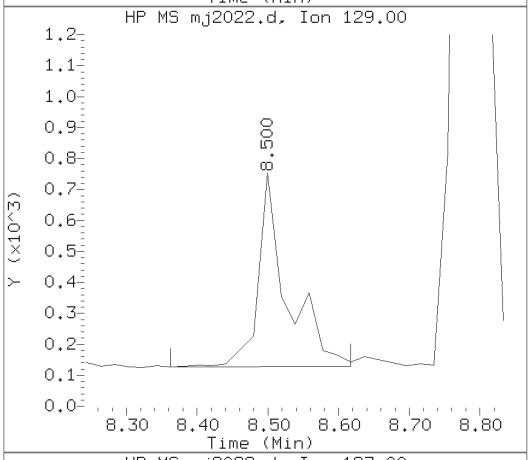
Reference Standard Spectrum for Naphthalene



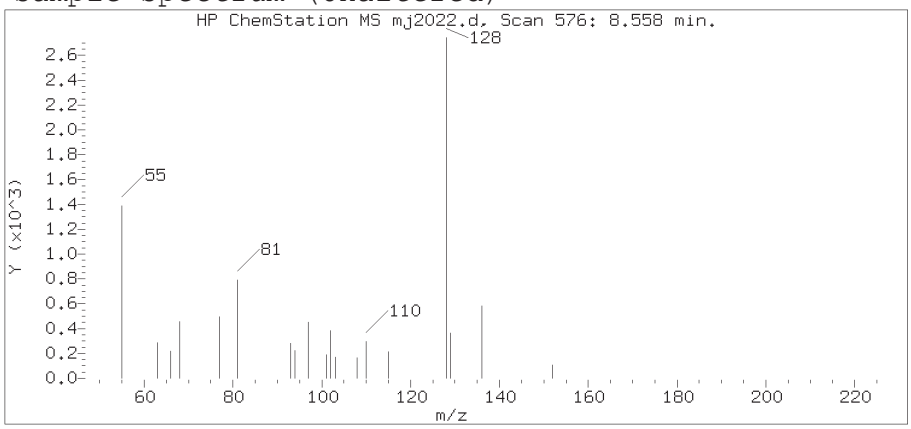


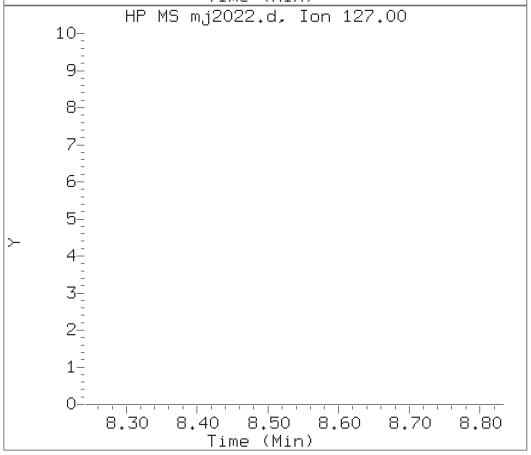
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

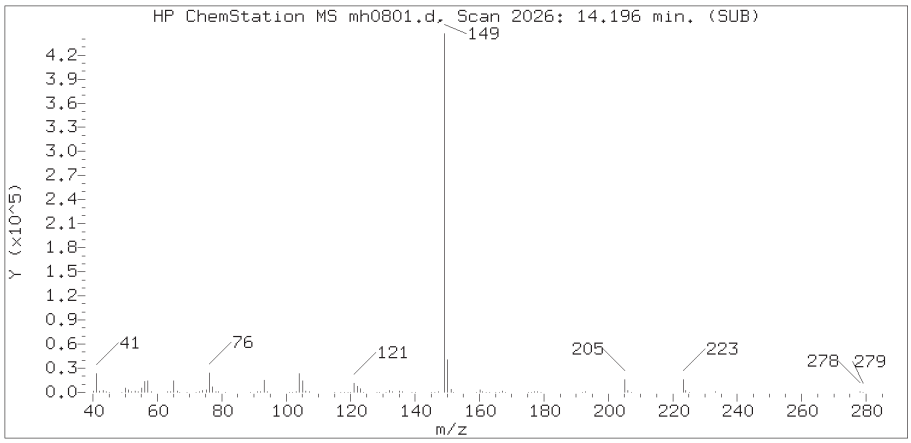
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

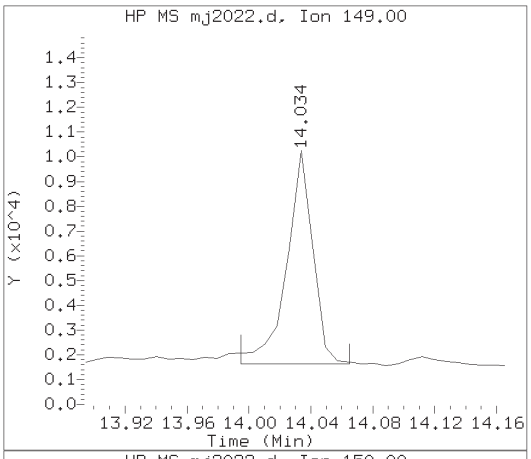
Sample Name: GKP02 Lab Sample ID: 9861922

Compound Number	: 7
Compound Name	: Naphthalene
Scan Number	: 576
Retention Time (minutes)	: 8.558
Relative Retention Time	:-0.00000
Quant Ion	: 128.00
Area (flag)	: 8023
On-column Amount (ng/ul)	: 0.0123

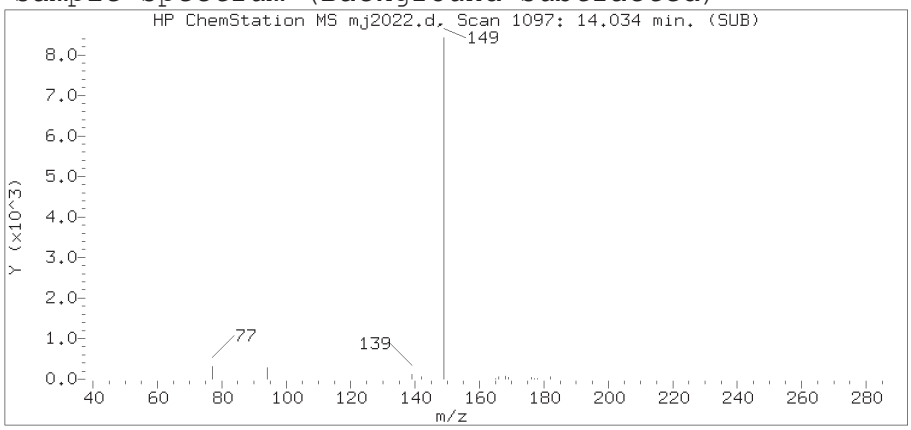
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

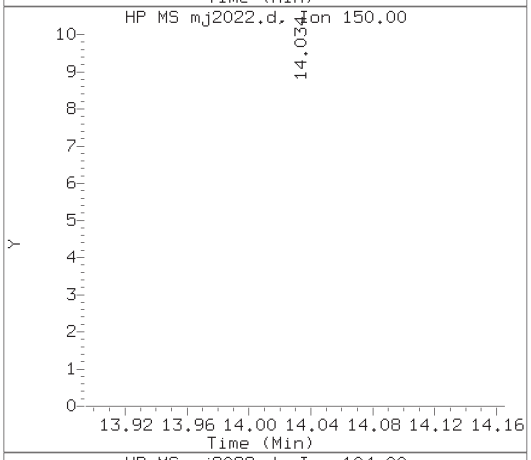
Reference Standard Spectrum for Di-n-butylphthalate



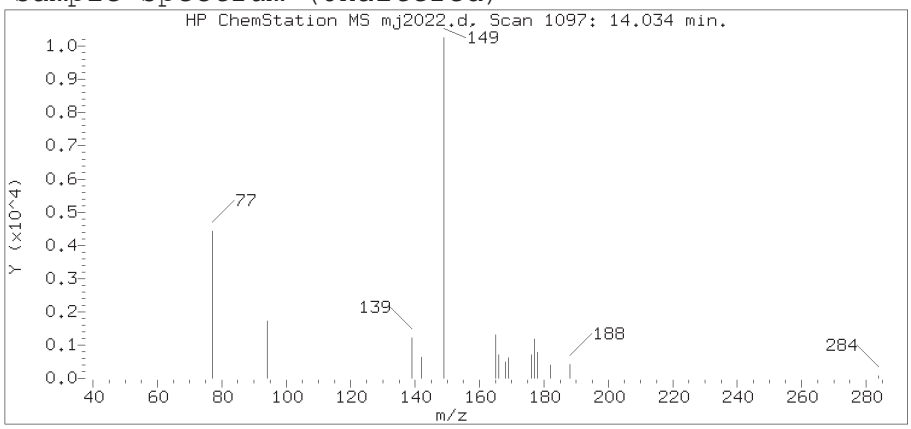


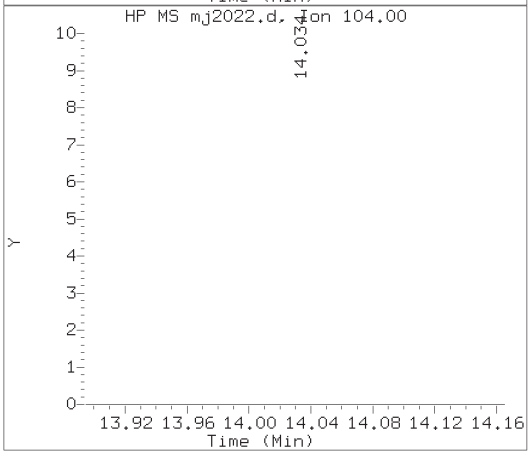
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

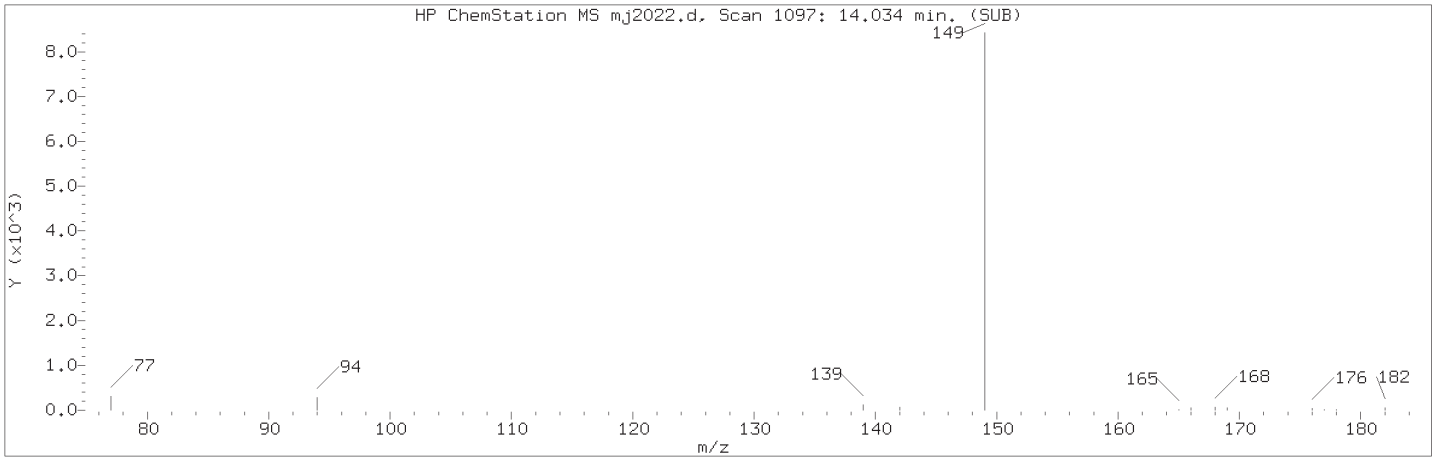
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP02 Lab Sample ID: 9861922

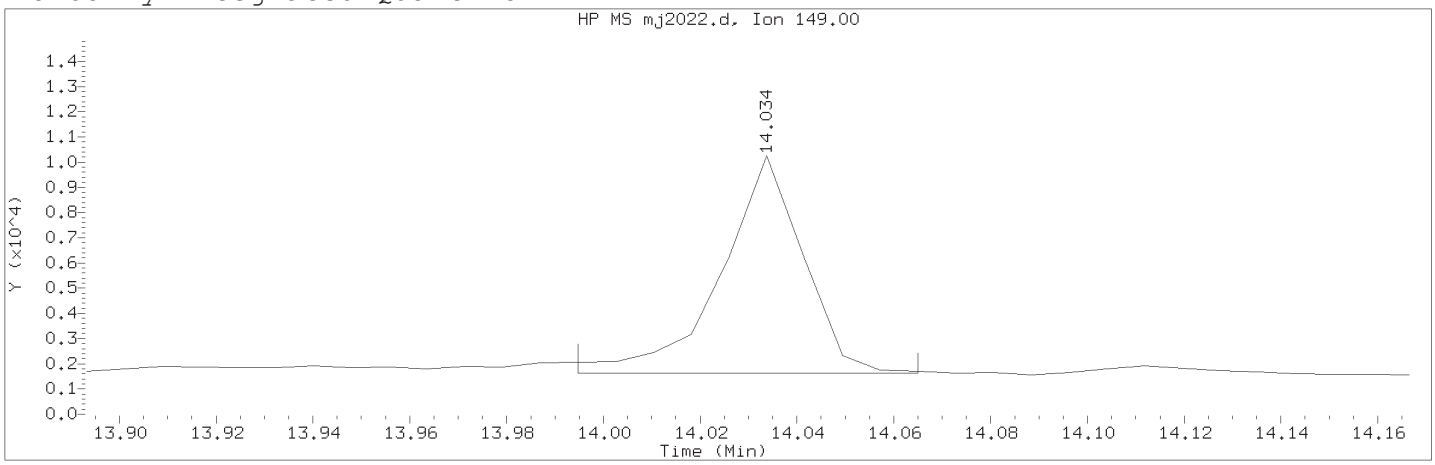
Compound Number	: 23
Compound Name	: Di-n-butylphthalate
Scan Number	: 1097
Retention Time (minutes)	: 14.034
Relative Retention Time	:-0.00063
Quant Ion	: 149.00
Area (flag)	: 9911M
On-column Amount (ng/ul)	: 0.0156

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP02 Lab Sample ID: 9861922

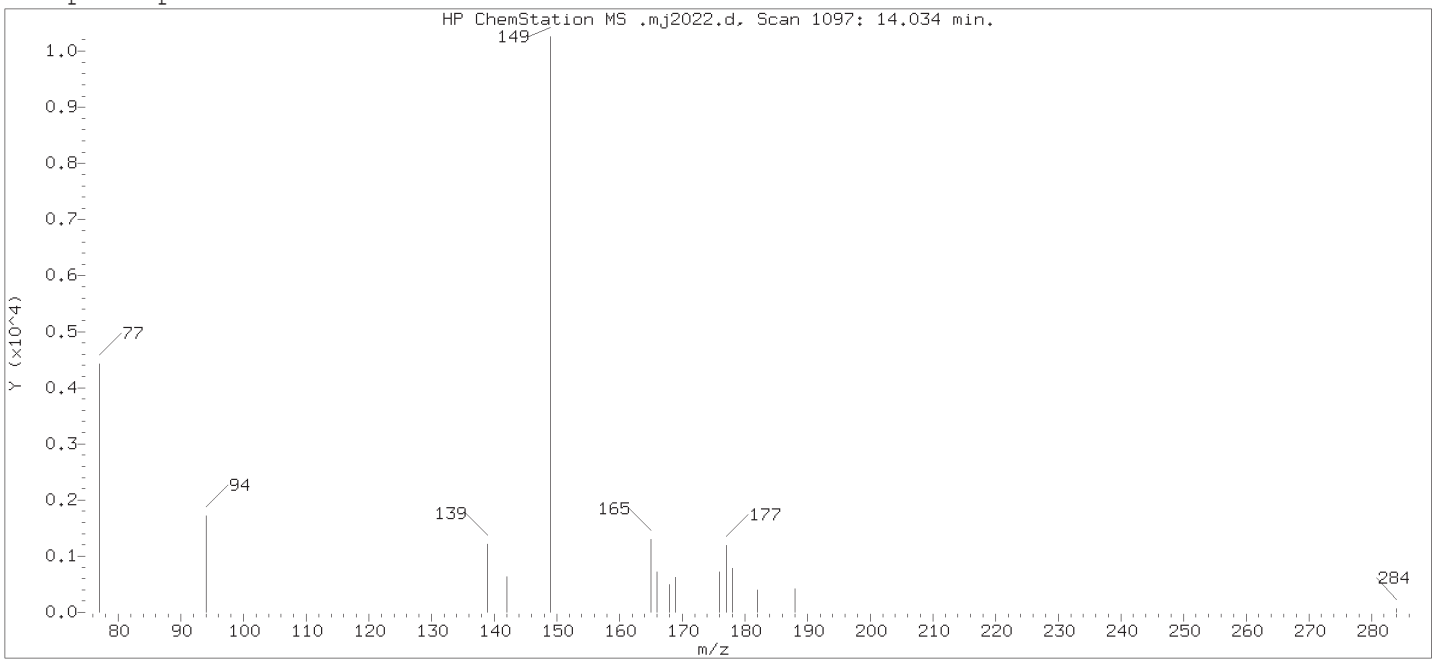
Compound Number : 23
Compound Name : Di-n-butylphthalate
Scan Number : 1097
Retention Time (minutes) : 14.034
Quant Ion : 149.00
Area (flag) : 9911M
On-column Amount (ng/ul) : 0.0156
Integration start scan : 1091 Integration stop scan: 1100
Y at integration start : 1632 Y at integration end: 1632

Reason for manual integration: missed peak

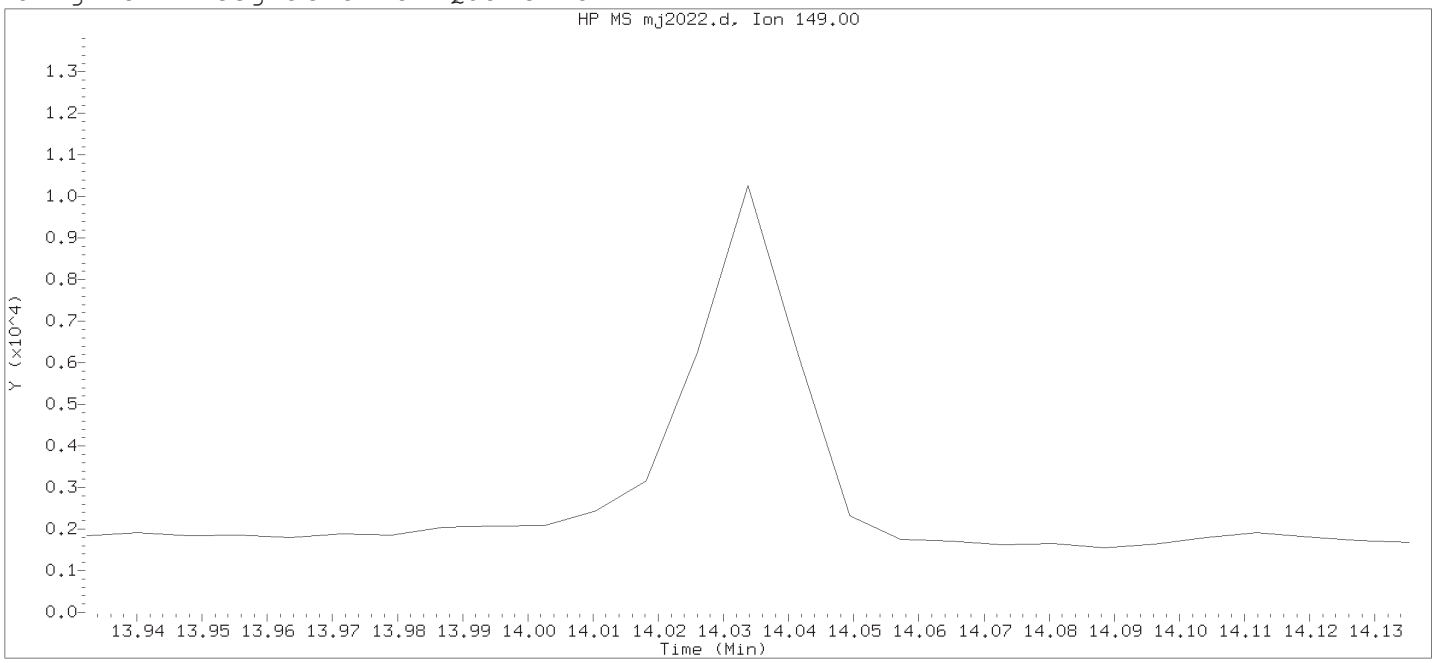
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

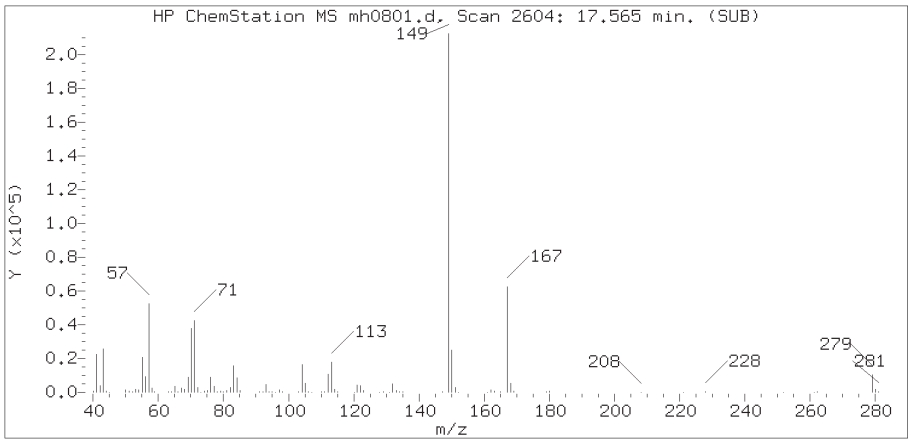
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:09 bkc25363

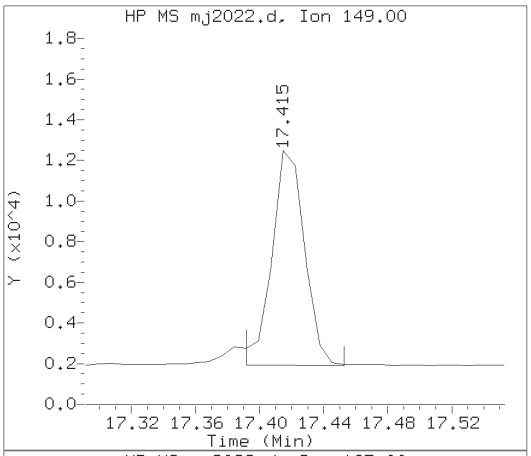
Sample Name: GKP02 Lab Sample ID: 9861922

Compound Number : 23
Compound Name : Di-n-butylphthalate
Expected RT (minutes) : 14.034
Quant Ion : 149.00

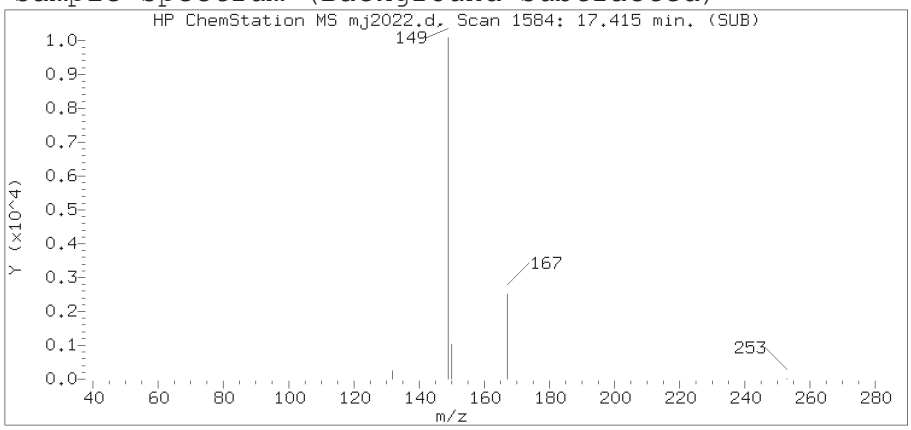
Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used: 1107. Page 1360

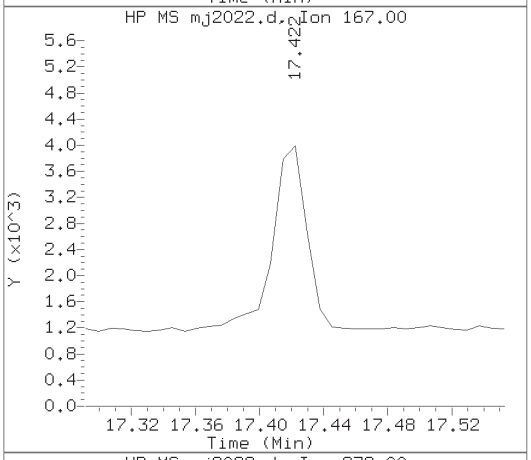
Reference Standard Spectrum for bis(2-Ethylhexyl)phthalate



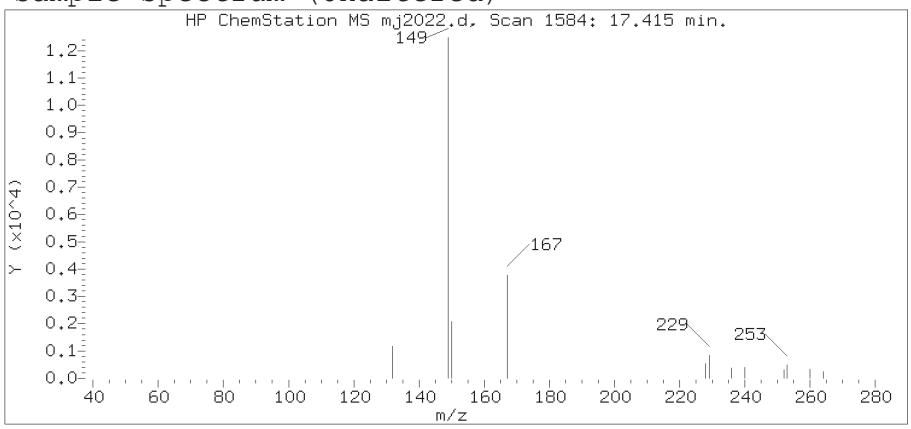


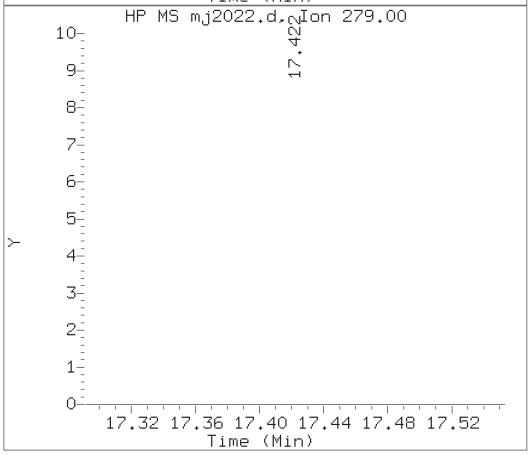
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

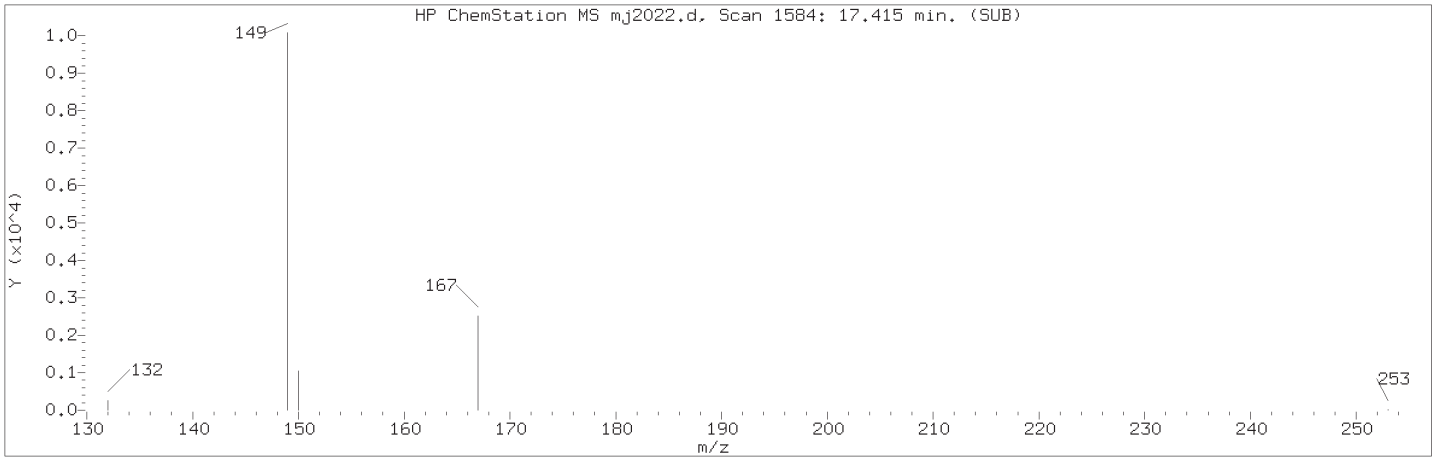
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP02 Lab Sample ID: 9861922

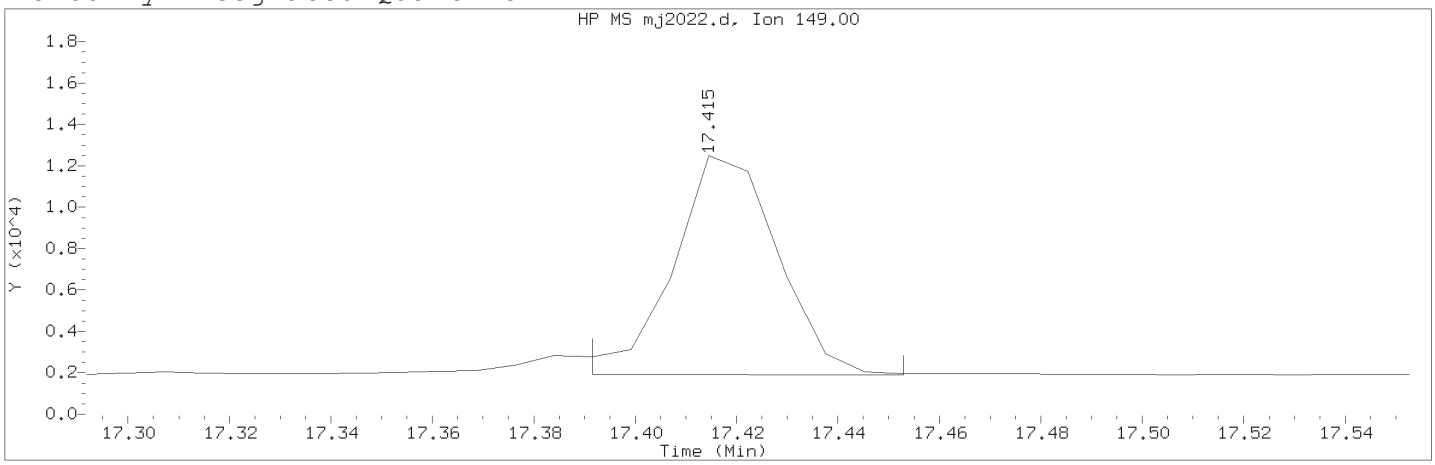
Compound Number	: 31
Compound Name	: bis(2-Ethylhexyl)phthalate
Scan Number	: 1584
Retention Time (minutes)	: 17.415
Relative Retention Time	: 0.00045
Quant Ion	: 149.00
Area (flag)	: 15155M
On-column Amount (ng/ul)	: 0.0306

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: GKP02 Lab Sample ID: 9861922

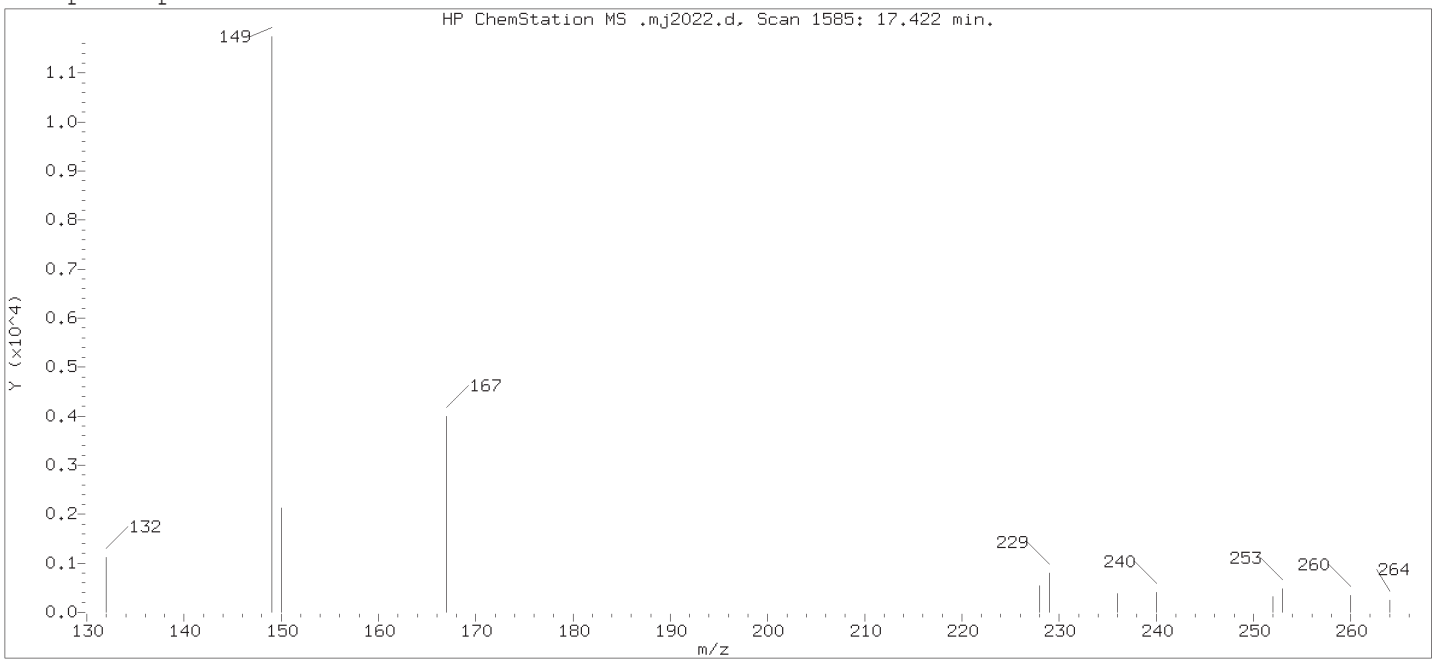
Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1584
Retention Time (minutes) : 17.415
Quant Ion : 149.00
Area (flag) : 15155M
On-column Amount (ng/ul) : 0.0306
Integration start scan : 1580 Integration stop scan: 1588
Y at integration start : 1928 Y at integration end: 1899

Reason for manual integration: missed peak

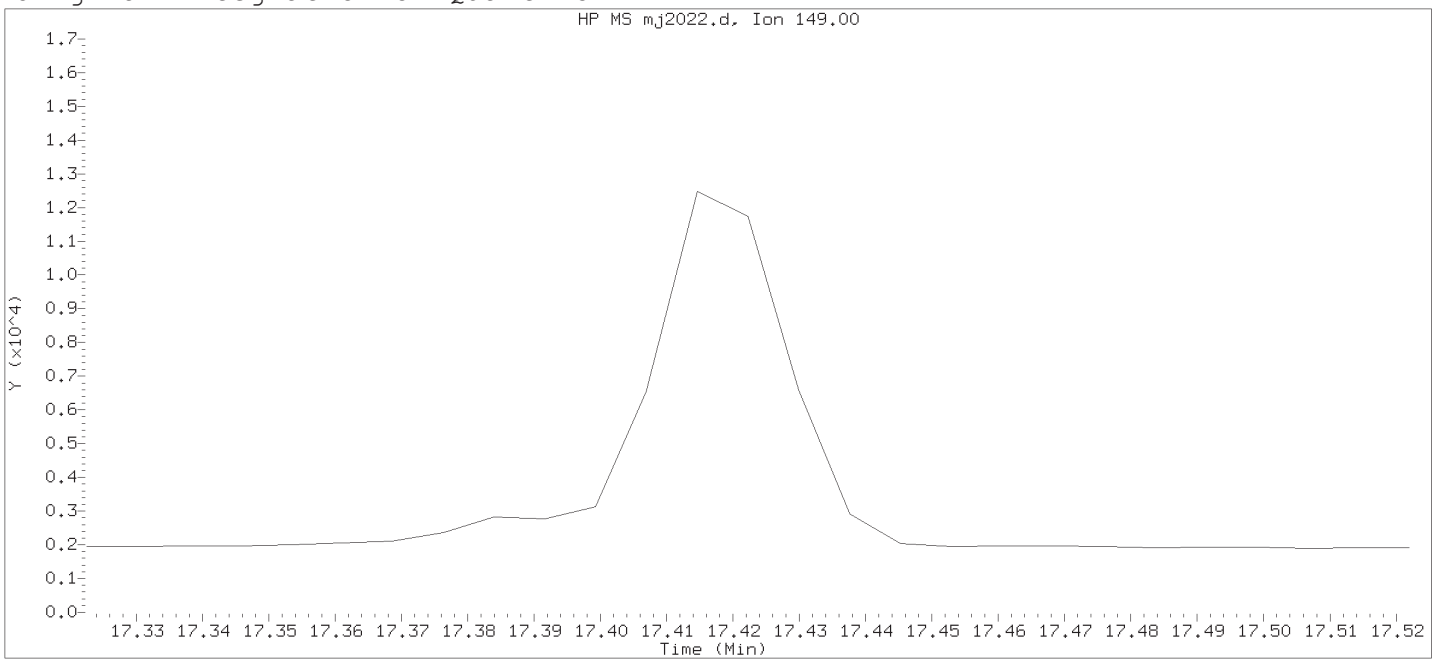
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2022.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 23:55 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:09 bkc25363

Sample Name: GKP02 Lab Sample ID: 9861922

Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Expected RT (minutes) : 17.422
Quant Ion : 149.00

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used.

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
ceb05247	MJ2000.D	RVDFTPP2878	10/26/2018	05:46		
ceb05247	MJ2001.D	RVSIM2768	10/26/2018	06:01		
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\18oct27\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
ceb05247	MJ2010.D	RVDFTPP2878	10/27/2018	17:50		
ceb05247	MJ2011.D	RVSIM2768	10/27/2018	18:18		
ceb05247	MJ2012.D	SBLKWF297	10/27/2018	19:01	18297WAF	
ceb05247	MJ2013.D	297WFLCS	10/27/2018	19:31	18297WAF	
ceb05247	MJ2014.D	297WFLCSD	10/27/2018	20:00	18297WAF	
ceb05247	MJ2015.D	SBLKWN297	10/27/2018	20:29	18297WAN	
ceb05247	MJ2016.D	297WNLCS	10/27/2018	20:59	18297WAN	
ceb05247	MJ2017.D	9861917	10/27/2018	21:28	18297WAF	
ceb05247	MJ2018.D	9861918	10/27/2018	21:57	18297WAF	
ceb05247	MJ2019.D	9861919	10/27/2018	22:27	18297WAF	
ceb05247	MJ2020.D	9861920	10/27/2018	22:56	18297WAF	
ceb05247	MJ2021.D	9861921	10/27/2018	23:25	18297WAF	
ceb05247	MJ2022.D	9861922	10/27/2018	23:55	18297WAF	
ceb05247	MJ2045.D	rvSIM2768	10/28/2018	00:24		
ceb05247	MJ2023.D	9863094	10/28/2018	00:54	18297WAN	
ceb05247	MJ2024.D	9863095	10/28/2018	01:23	18297WAN	
ceb05247	MJ2025.D	9863096	10/28/2018	01:52	18297WAN	
ceb05247	MJ2026.D	9863097	10/28/2018	02:22	18297WAN	
ceb05247	MJ2027.D	9863098	10/28/2018	02:51	18297WAN	
ceb05247	MJ2028.D	9863100	10/28/2018	03:20	18297WAN	
ceb05247	MJ2029.D	9863101	10/28/2018	03:50	18297WAN	
ceb05247	MJ2030.D	9863102	10/28/2018	04:19	18297WAN	
ceb05247	MJ2031.D	9863103	10/28/2018	04:48	18297WAN	
ceb05247	MJ2032.D	9863104	10/28/2018	05:18	18297WAN	
ceb05247	MJ2033.D	9864724	10/28/2018	05:47	18297WAN	
ceb05247	MJ2034.D	9864725	10/28/2018	06:17	18297WAN	

Data File: /chem/HP21585.i/18oct26.b/mj2000.d

Date : 26-OCT-2018 05:46

Client ID: DFTPP12.5

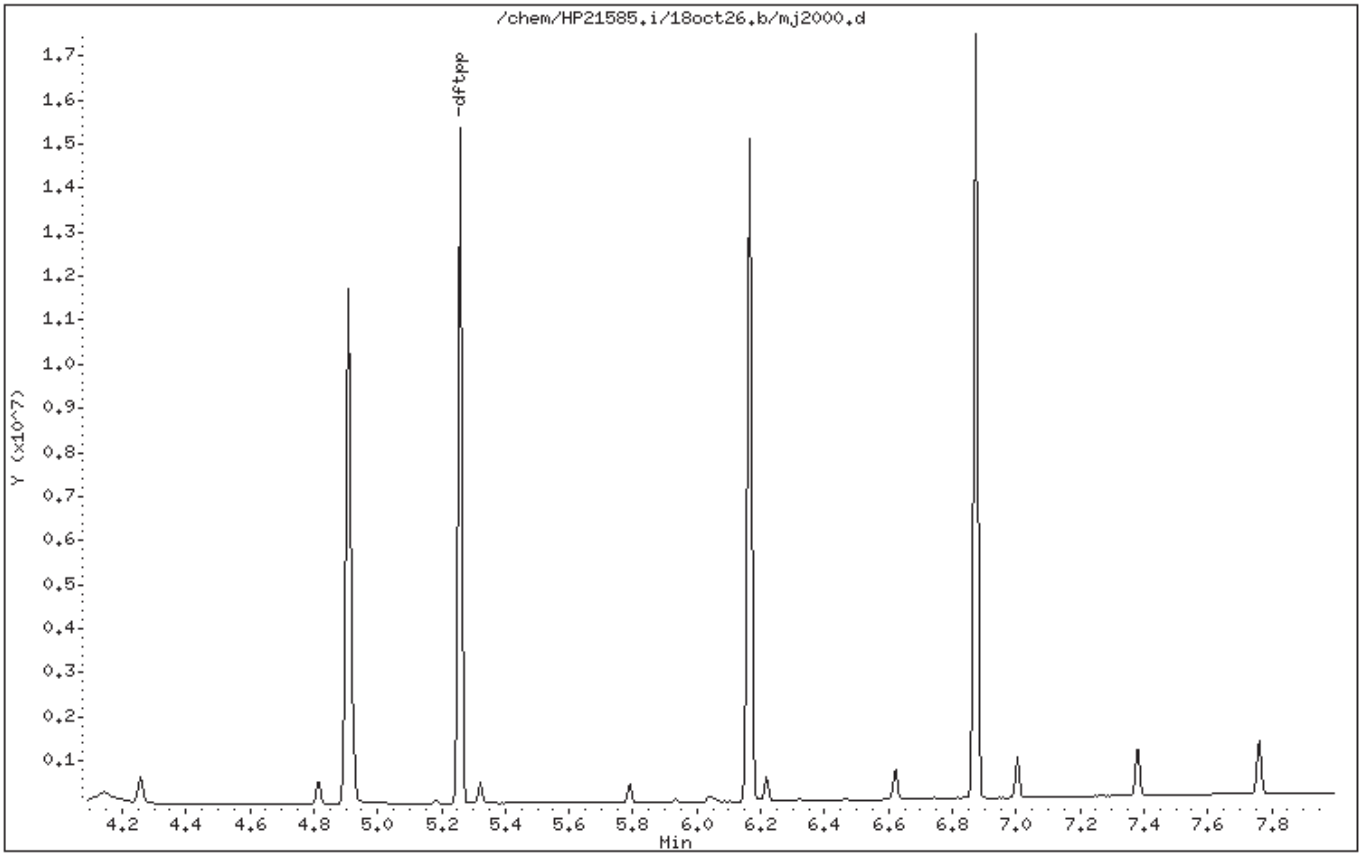
Instrument: HP21585.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

Data File: /chem/HP21585.i/18oct26.b/mj2000.d

Date : 26-OCT-2018 05:46

Client ID: DFTPP12.5

Instrument: HP21585.i

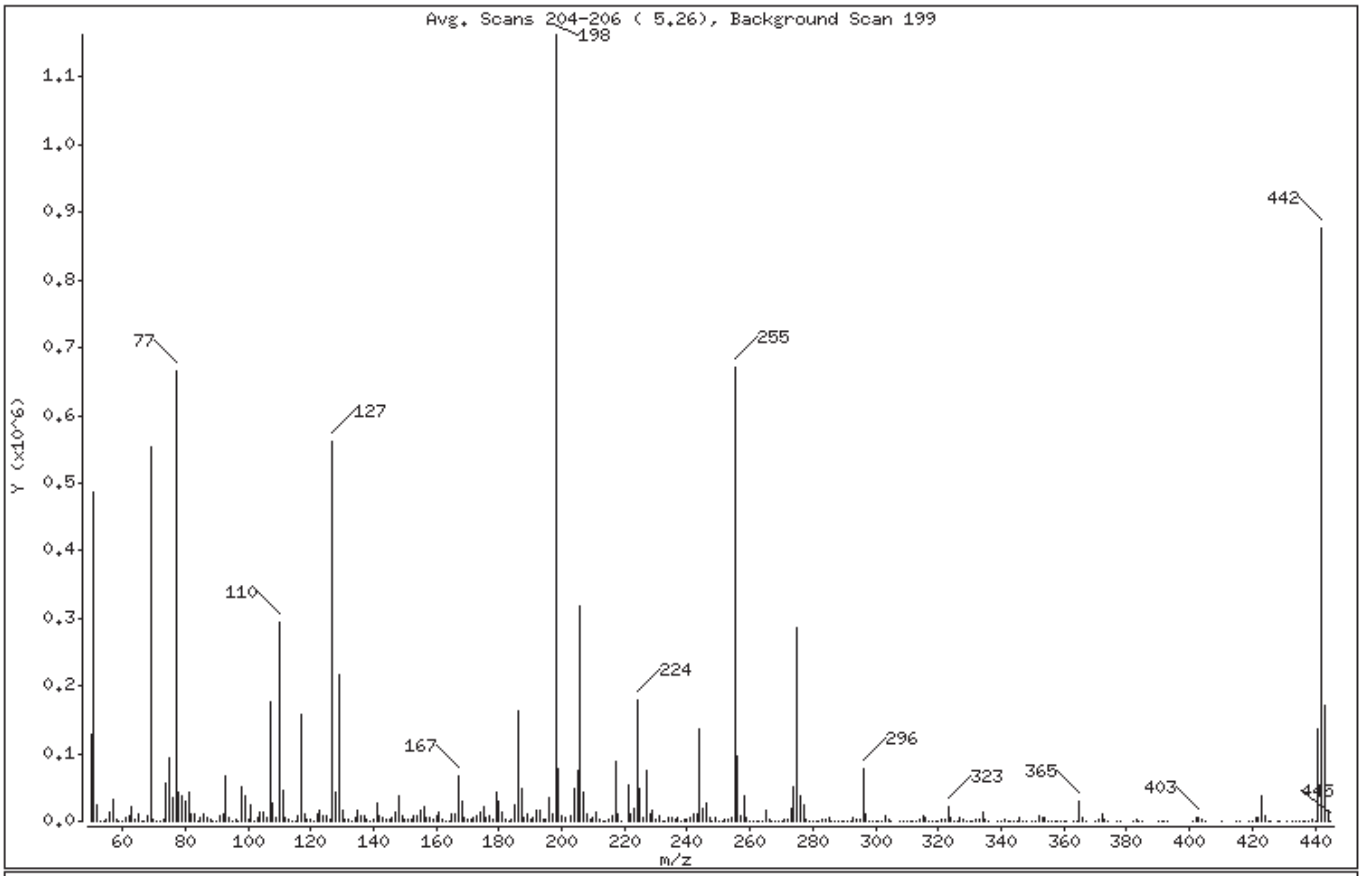
Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0.18

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;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
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;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
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

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

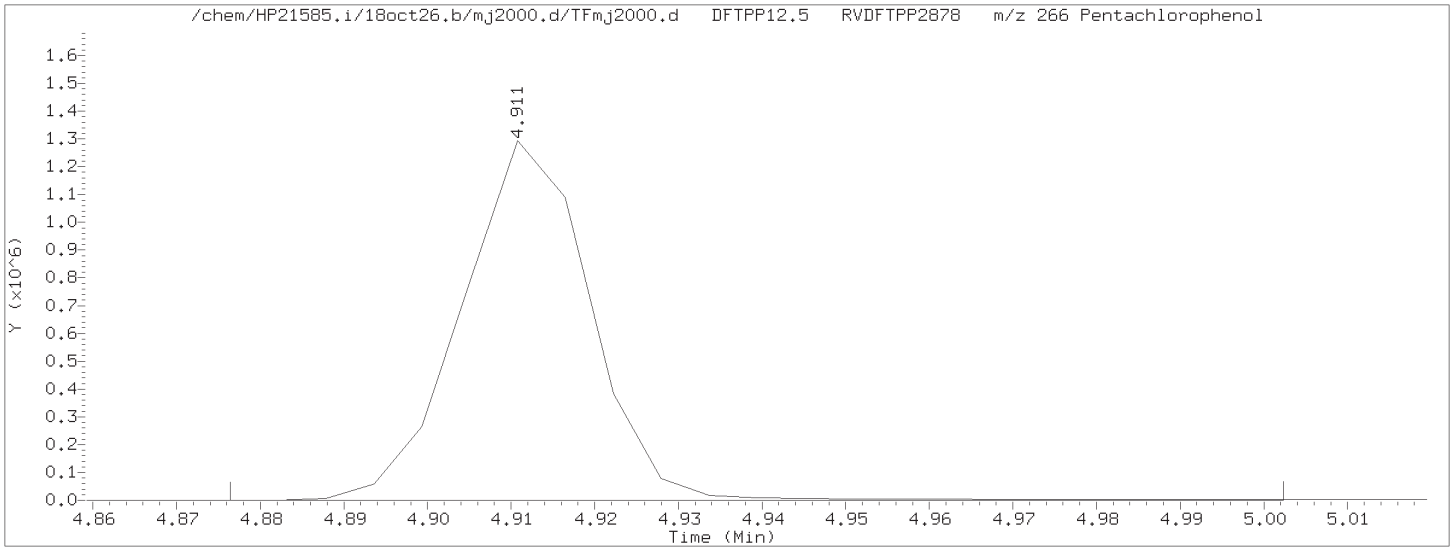
Data File: mj2000.d
Spectrum: Avg. Scans 204-206 (5.26), Background Scan 199
Location of Maximum: 198.00
Number of points: 357

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		

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

Assessment of GC Column Performance and Injection Port Inertness for

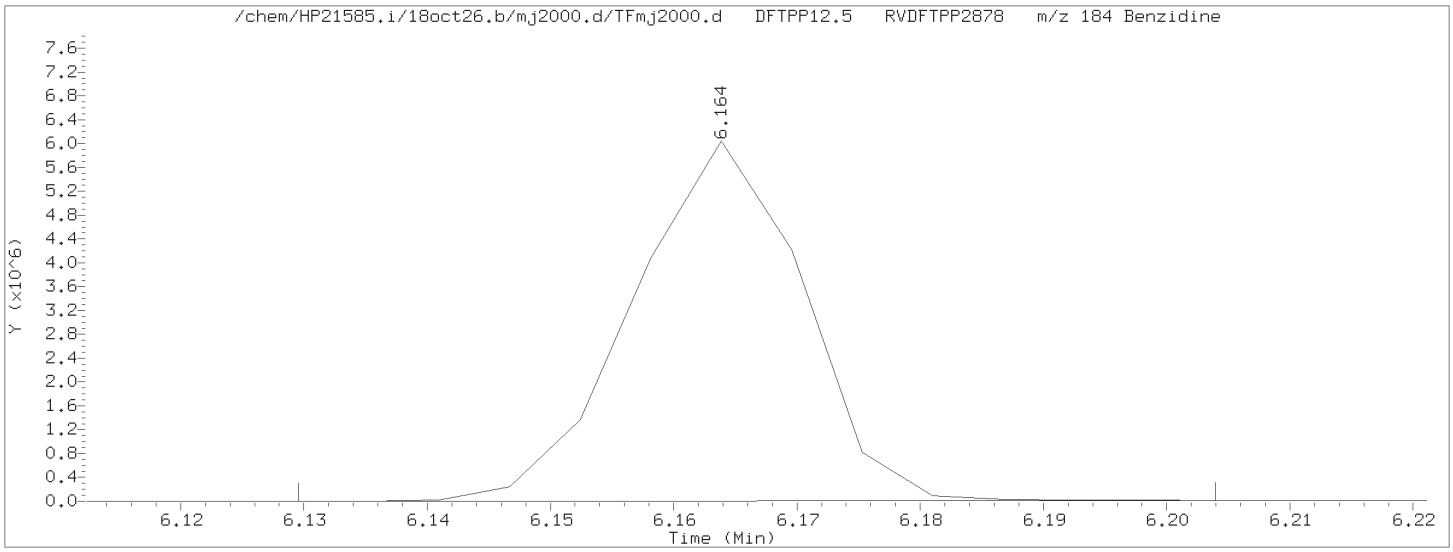
Instrument ID: HP21585.i Injection Date: 26-OCT-2018 05:46 Operator: ceb05247



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 'Front' peak width (min.) = 0.0151666667
RT at 10% of back half of EICP (min.) = 4.927 'Tailing' peak width (min.) = 0.0162000000

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0162000000}{0.0151666667} = 1.068$



Benzidine EICP peak height = 6034458 EICP peak height at 10% = 603446 Benzidine EICP area = 5795344

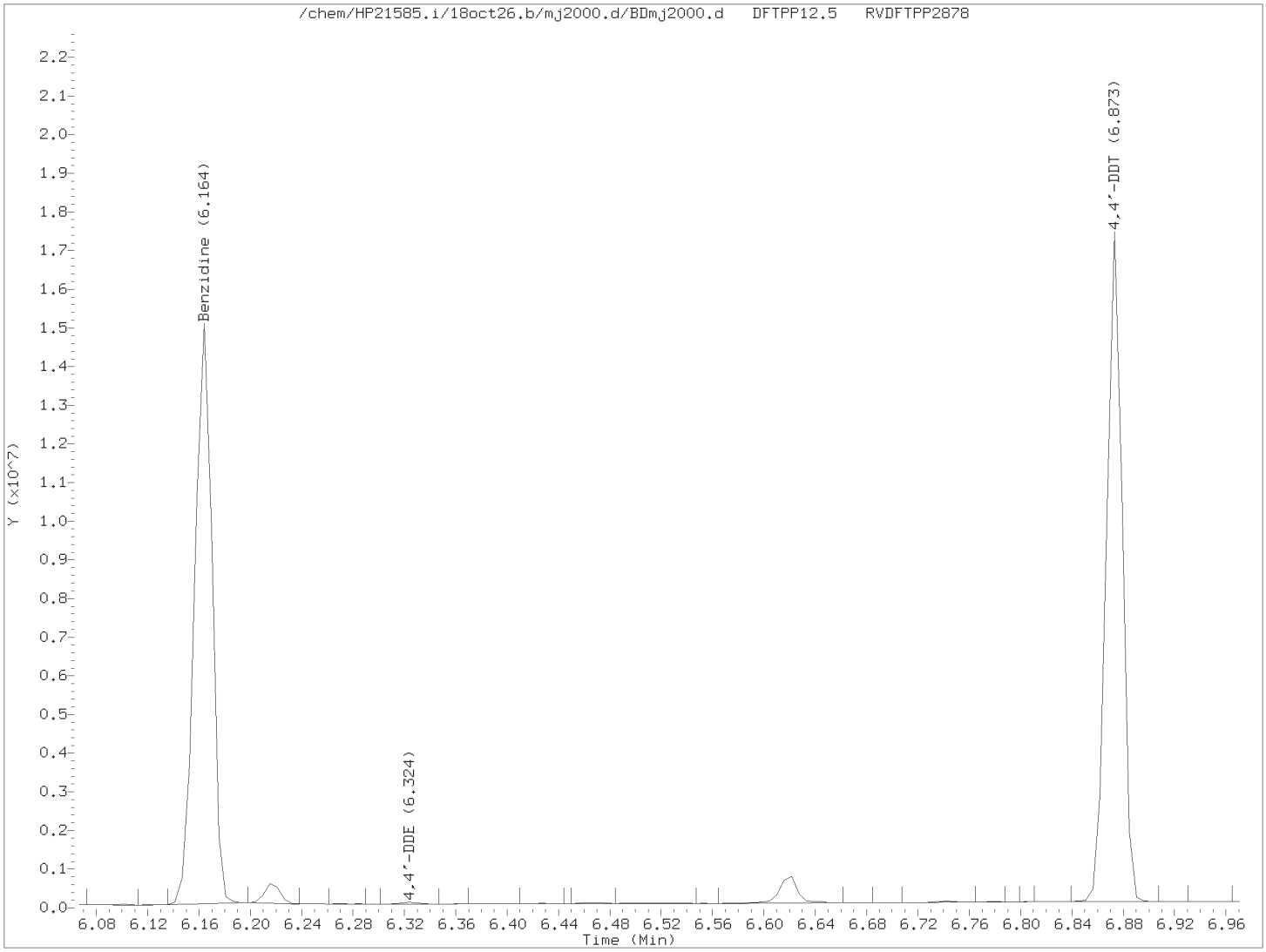
Benzidine EICP peak apex (min.) = 6.164
RT at 10% of front half of EICP (min.) = 6.149 'Front' peak width (min.) = 0.0153000000
RT at 10% of back half of EICP (min.) = 6.177 'Tailing' peak width (min.) = 0.0130833333

Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0130833333}{0.0153000000} = 0.855$

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42. PARALLAX ID: hb01996

Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP21585.i Injection Date: 26-OCT-2018 05:46 Operator: ceb05247

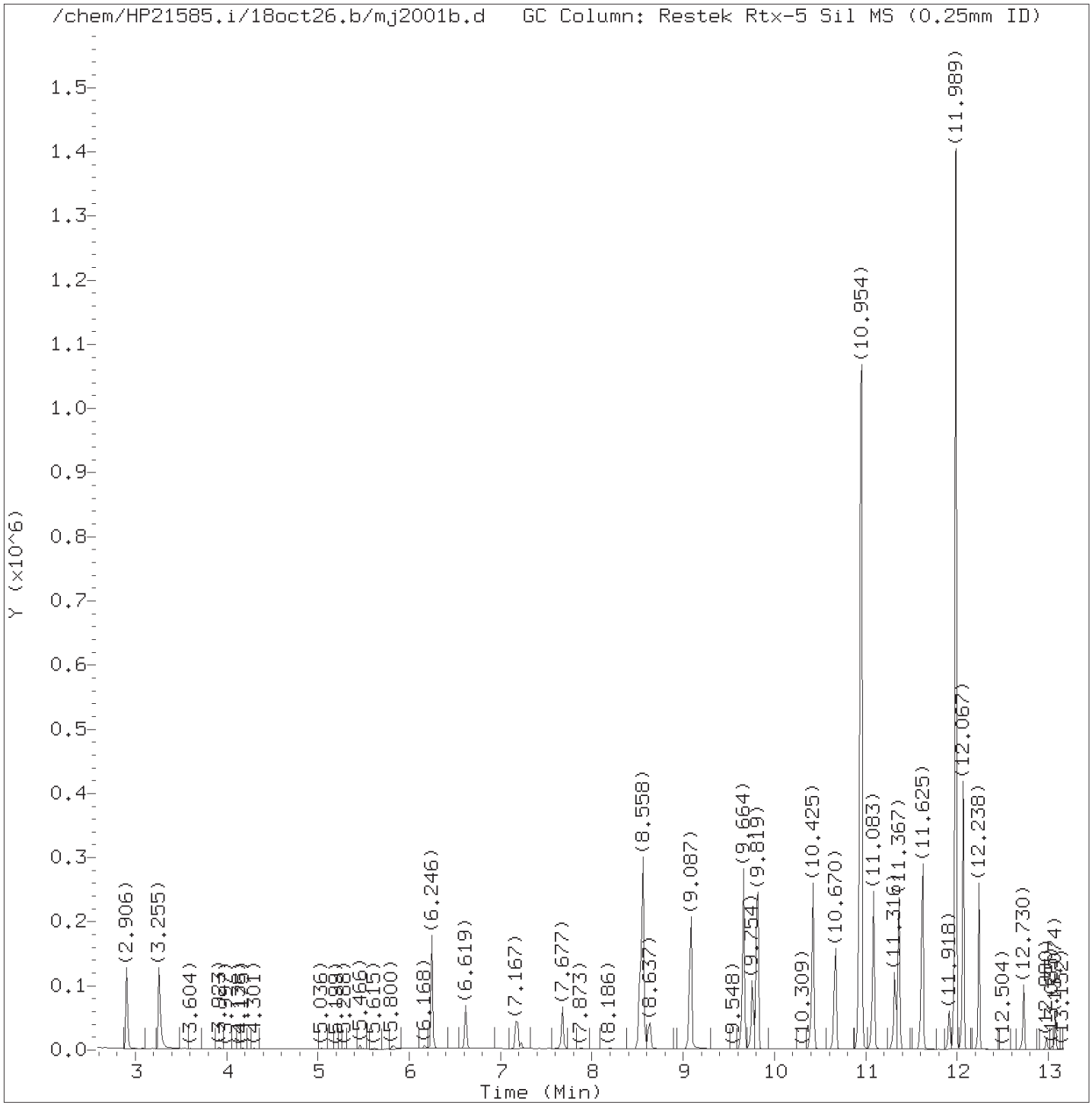


$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{39863 + 7205}{39863 + 7205 + 14989508} \times 100 = 0.3$$

printed on 10/26/2018 at 06:01

Secondary review performed and digitally signed by Holly B. Ziegler on 10/30/2018 at 08:42. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

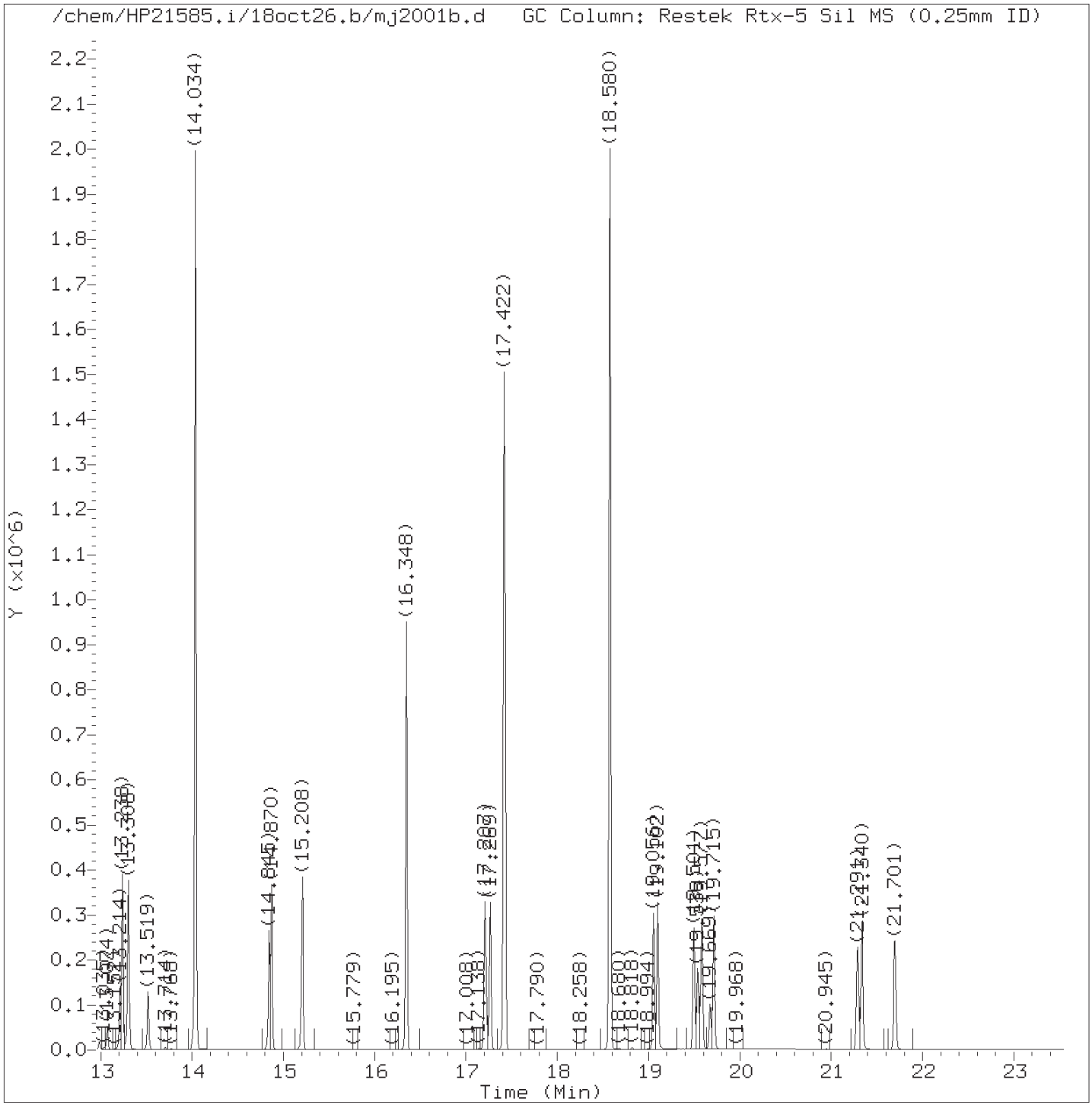
Target Revision 3.5

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

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 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

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 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

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 07:31 Analyst ID: ceb05247

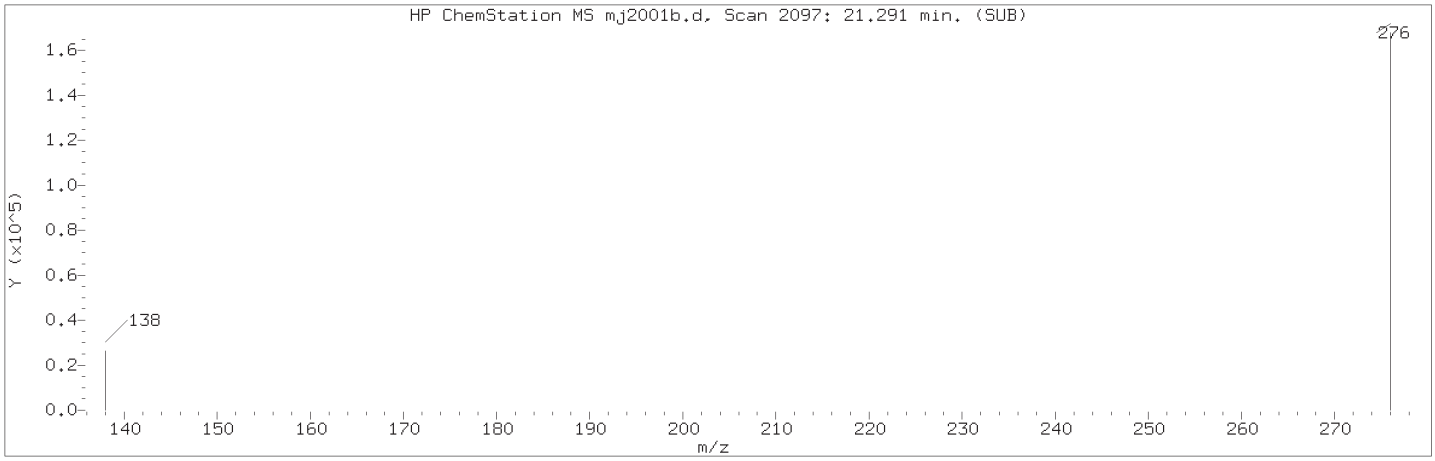
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 17:17
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.5 Lab Sample ID: RVSIM2768

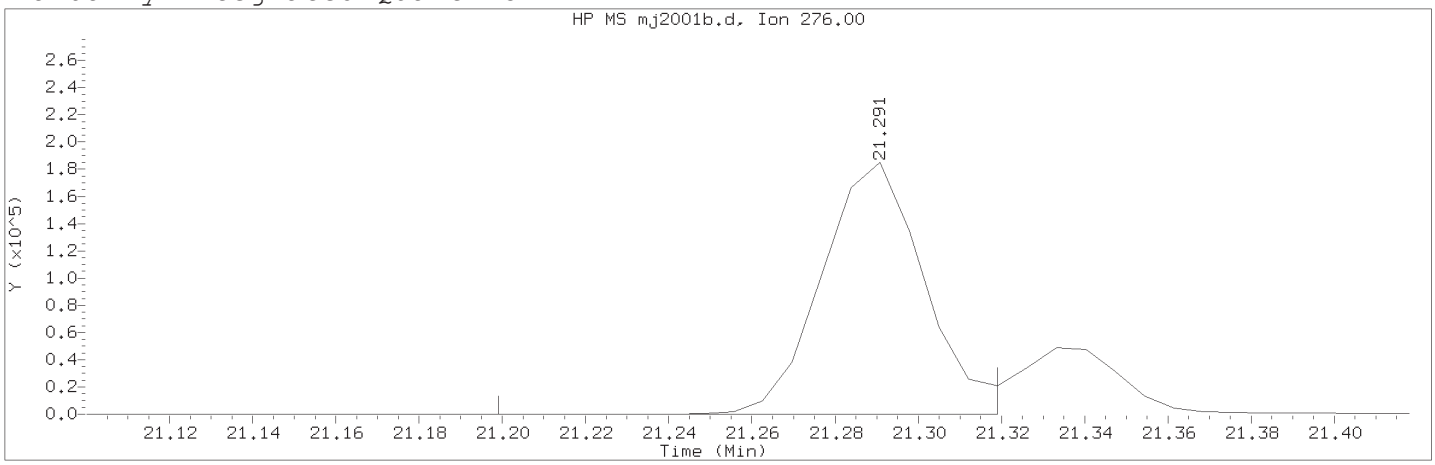
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
41) Benzo(g,h,i)perylene	(6)	21.701	276	362005	0.500

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

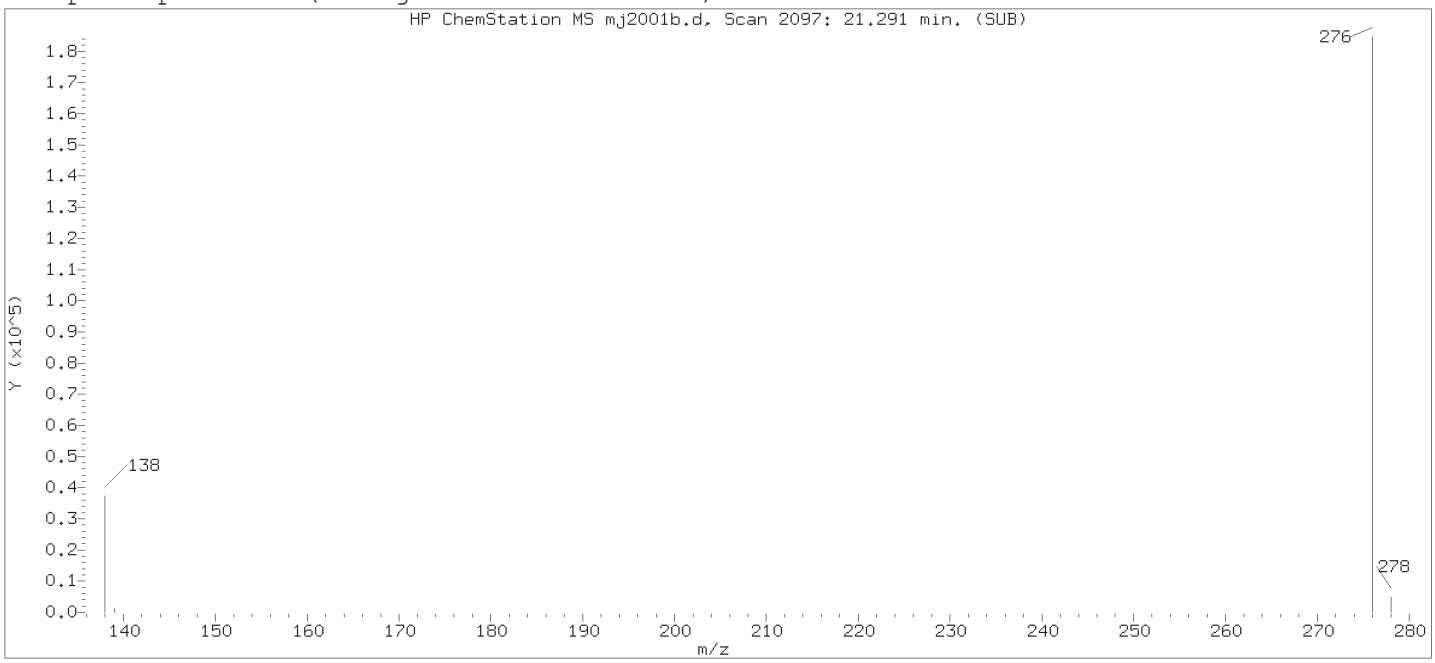
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2097
Retention Time (minutes) : 21.291
Quant Ion : 276.00
Area (flag) : 316754M
On-Column Amount (ng/ul) : 0.5000
Integration start scan : 2083 Integration stop scan: 2100
Y at integration start : 94 Y at integration end: 94

Reason for manual integration: improper integration

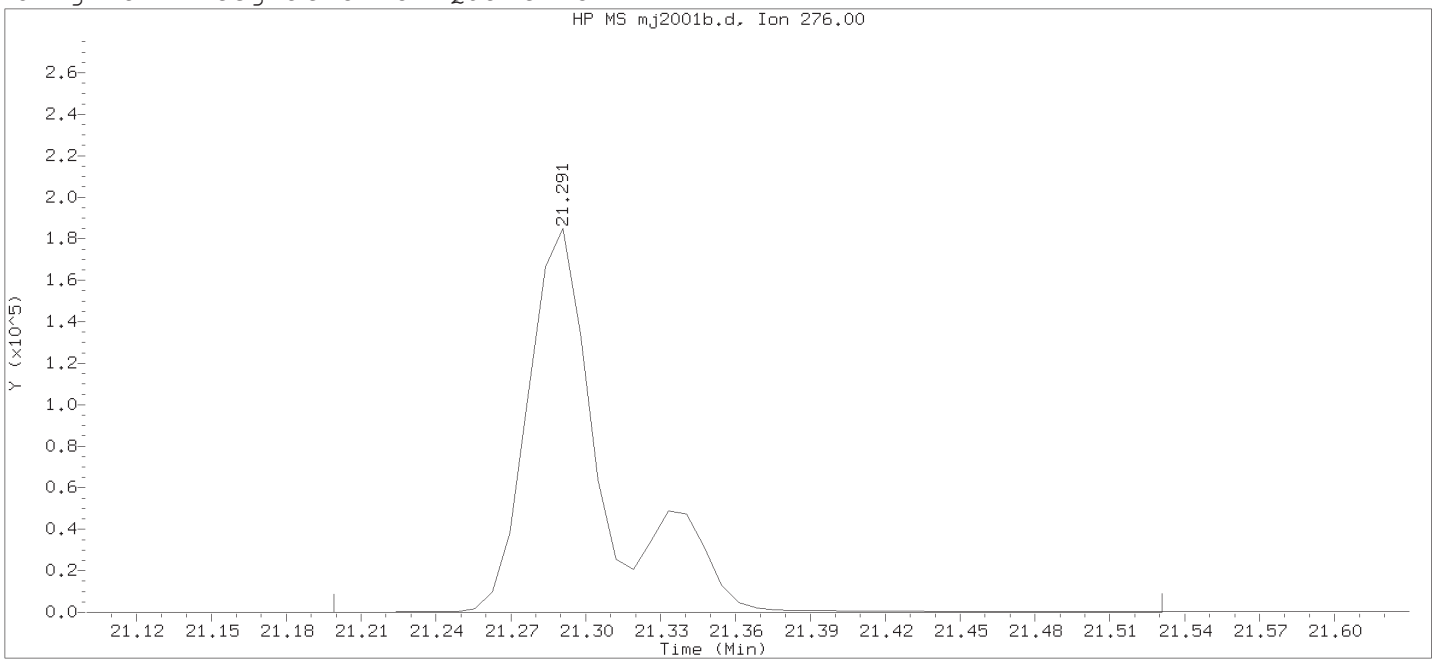
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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



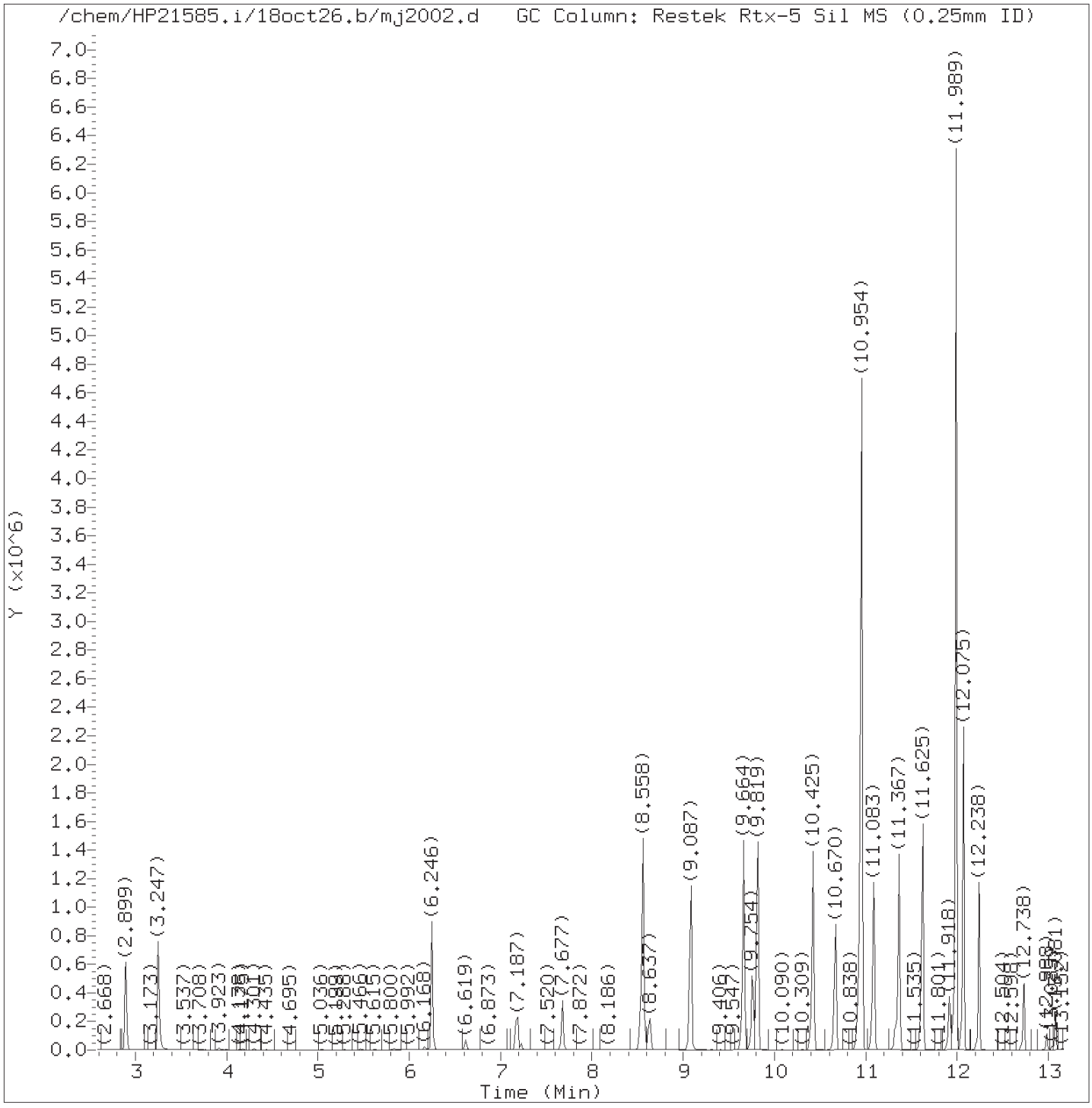
Data File: /chem/HP21585.i/18oct26.b/mj2001b.d Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 07:31 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 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

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: 2115



Total Ion Chromatogram (TIC)

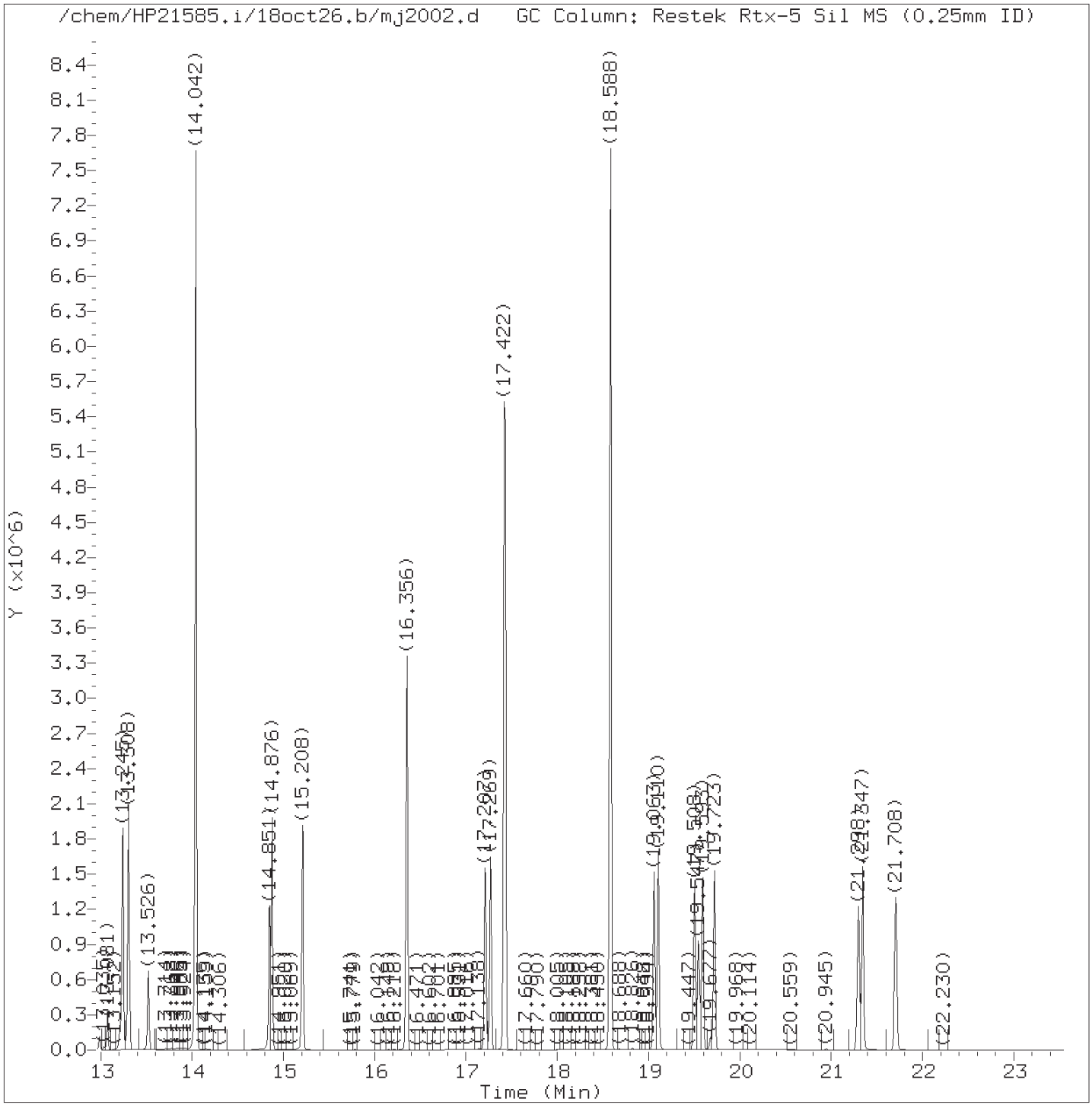
Target Revision 3.5

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

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 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

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 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

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 08:05 Analyst ID: ceb05247

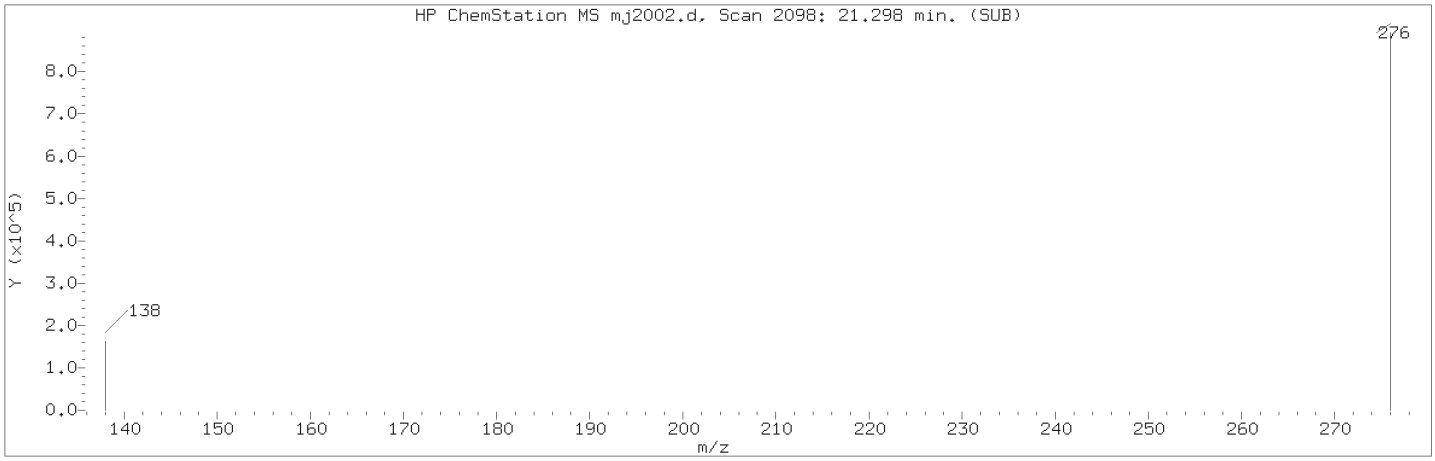
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 17:17
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD2.5 Lab Sample ID: RVSIM2768

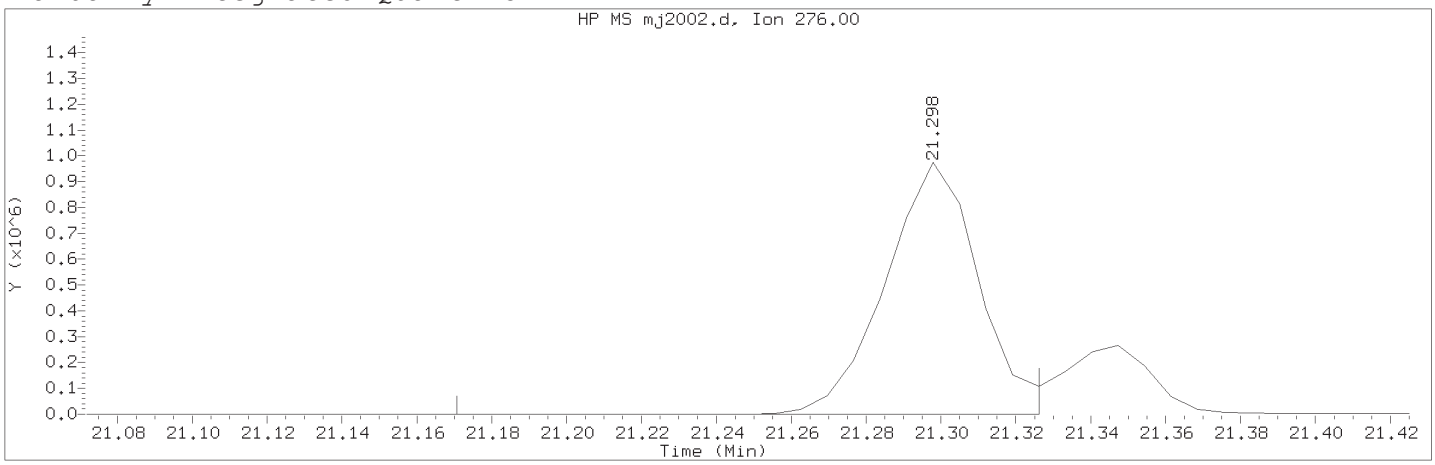
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
41) Benzo(g,h,i)perylene	(6)	21.708	276	1898487	2.499

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

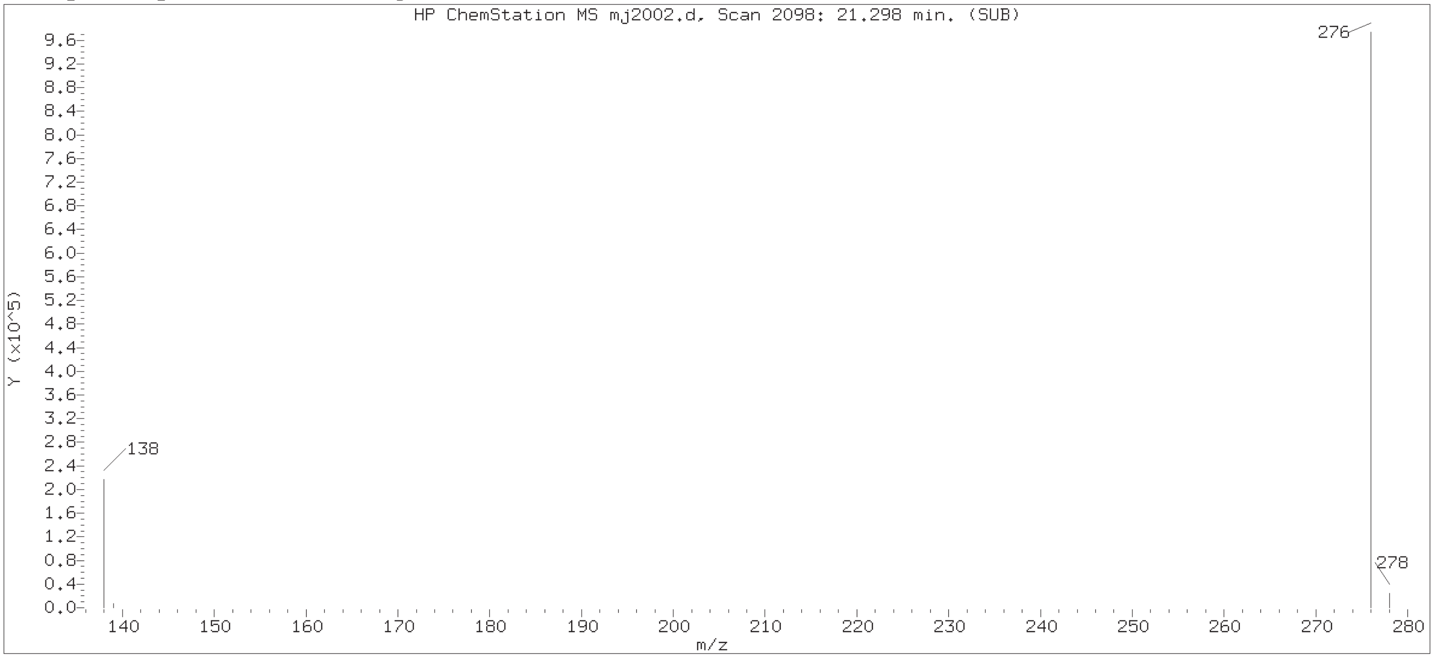
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2098
Retention Time (minutes) : 21.298
Quant Ion : 276.00
Area (flag) : 1681739M
On-Column Amount (ng/ul) : 2.5148
Integration start scan : 2079 Integration stop scan: 2101
Y at integration start : 159 Y at integration end: 159

Reason for manual integration: improper integration

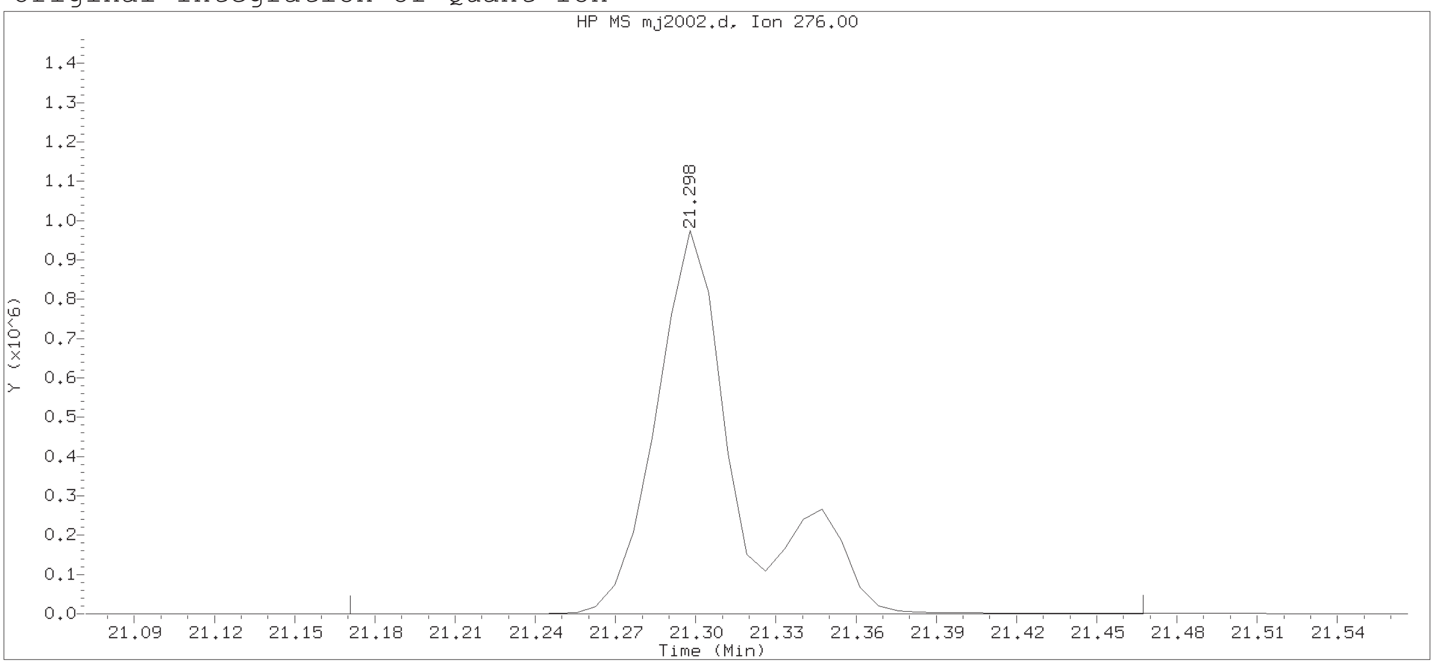
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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

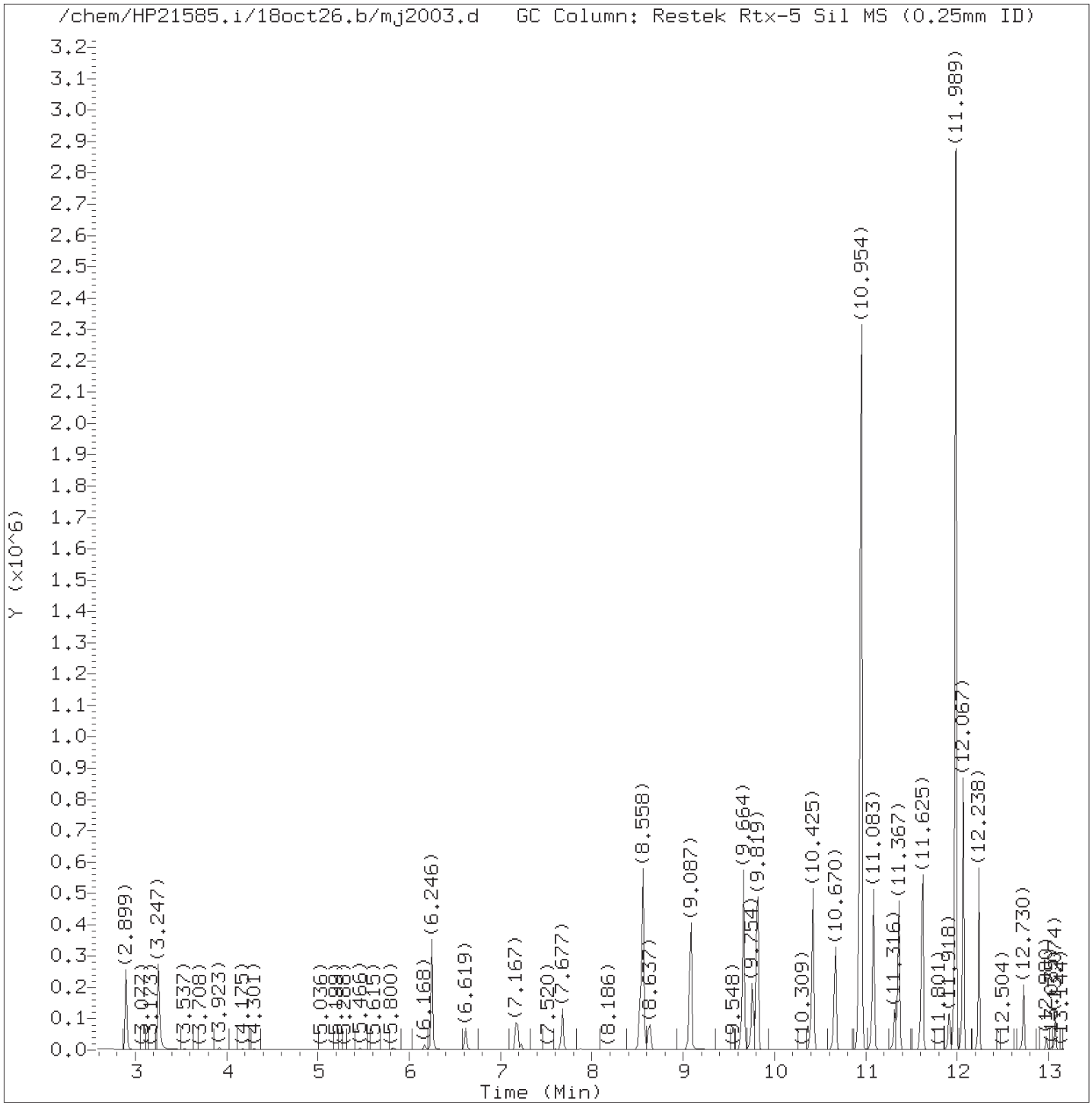
Instrument ID: HP21585.i
Analyst ID: ceb05247

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

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: kb25135



Total Ion Chromatogram (TIC)

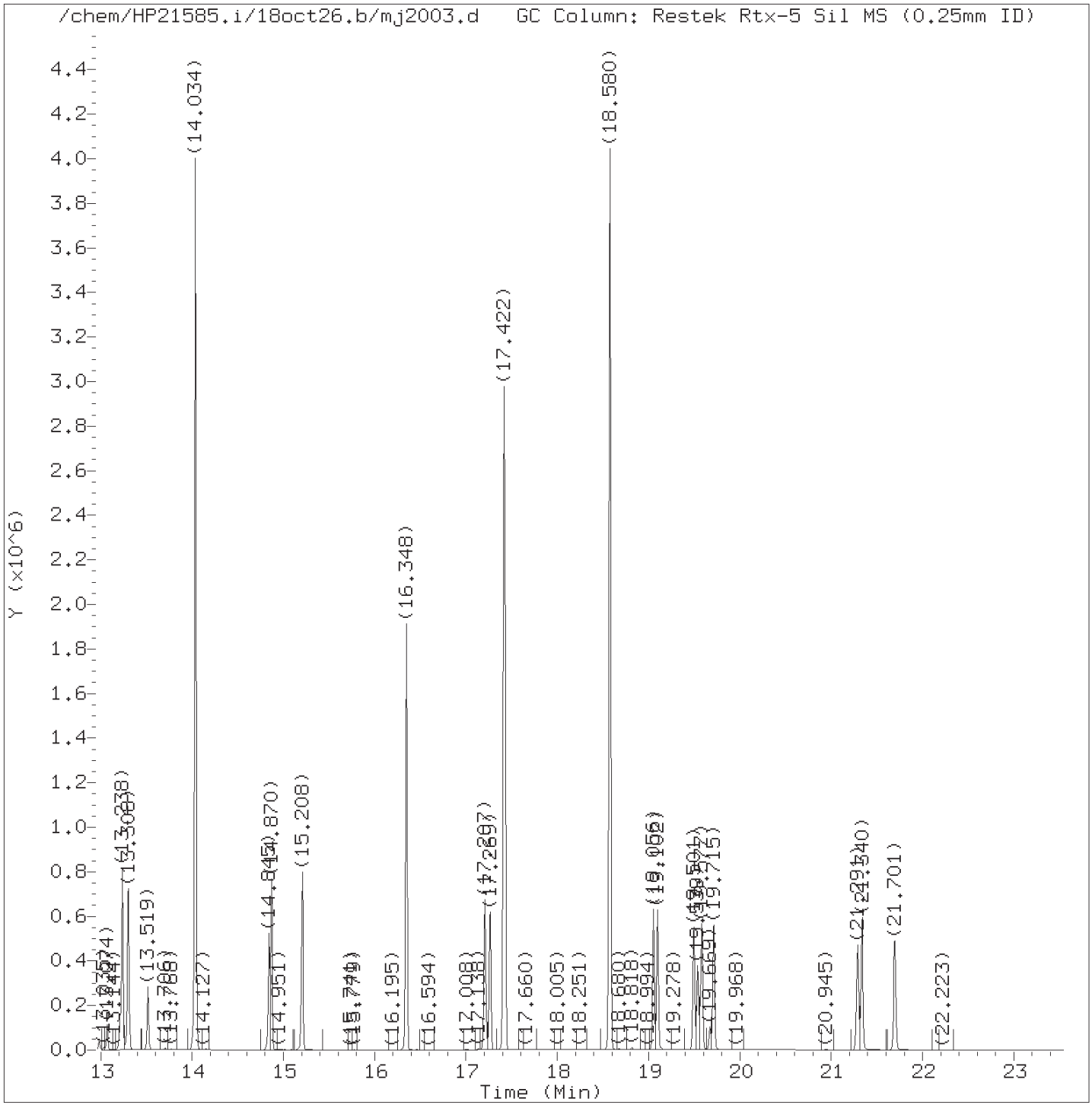
Target Revision 3.5

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

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 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

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 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

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 08:35 Analyst ID: ceb05247

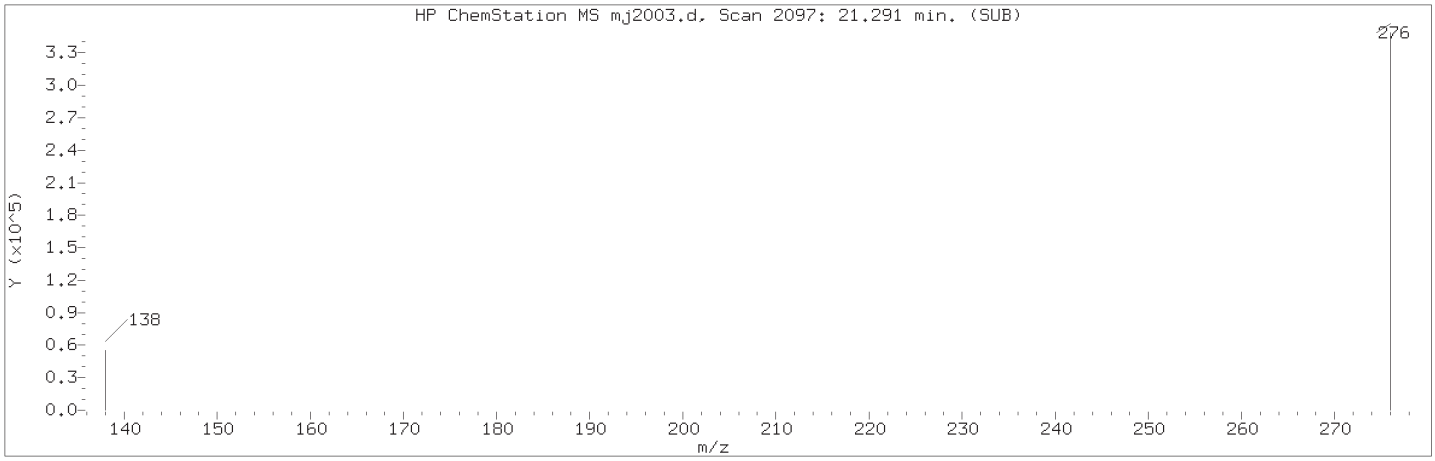
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 17:17
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD001 Lab Sample ID: RVSIM2768

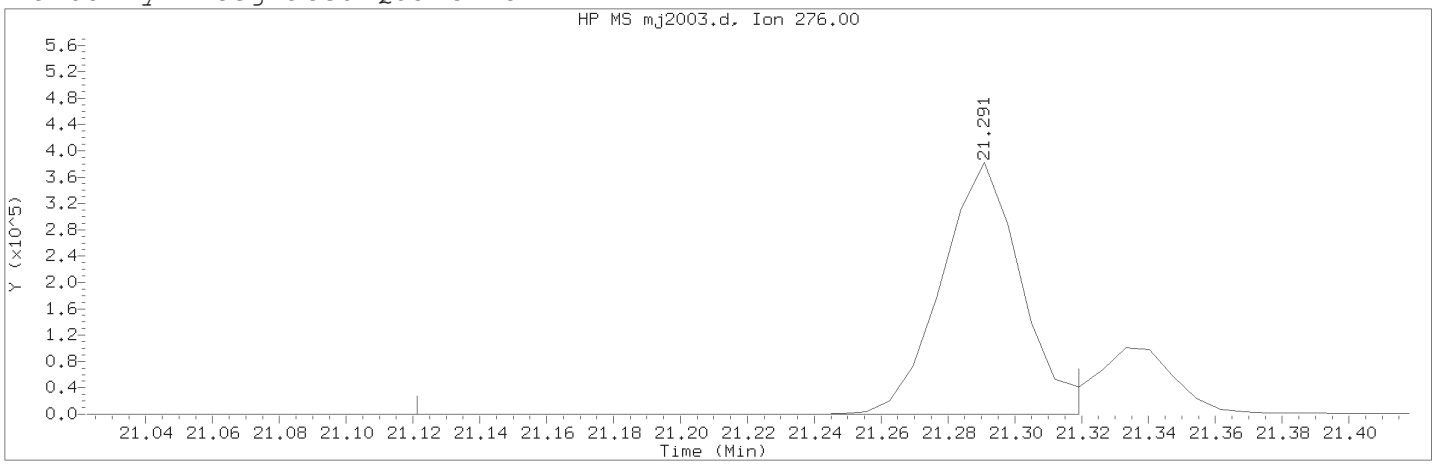
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
41) Benzo(g,h,i)perylene	(6)	21.701	276	719086	0.990

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

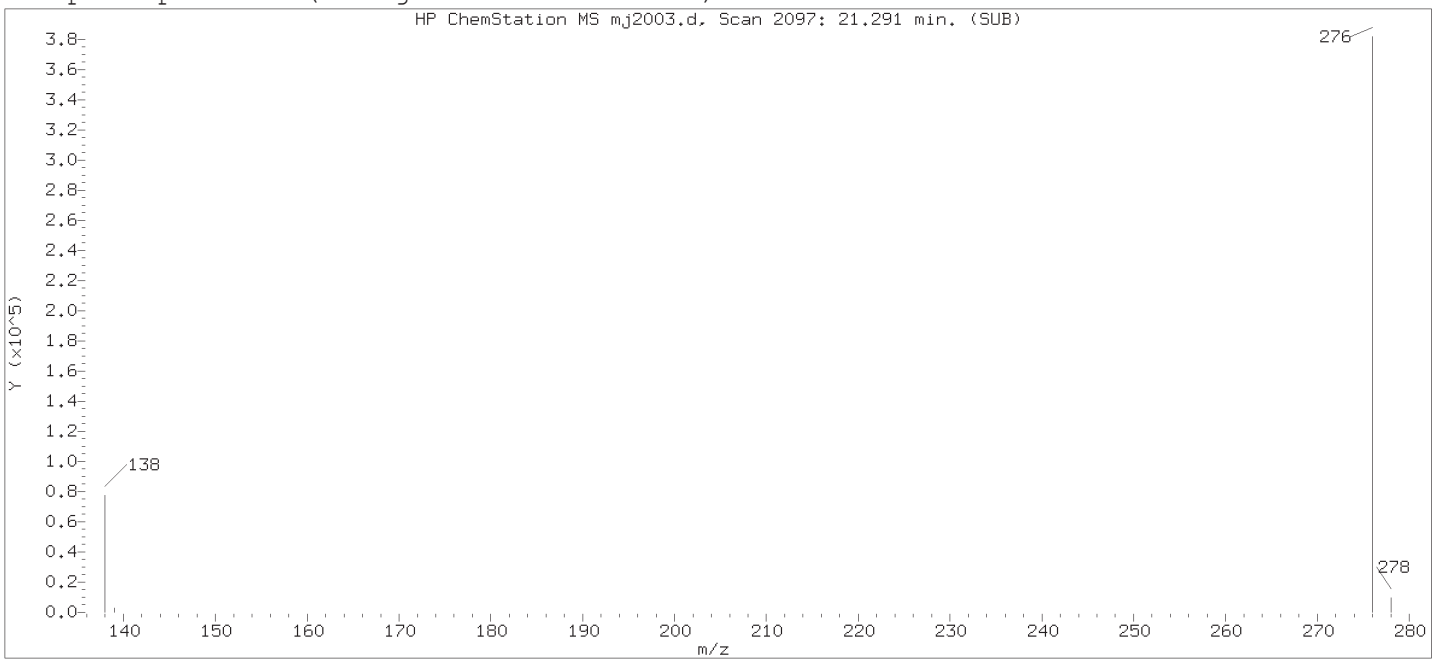
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2097
Retention Time (minutes) : 21.291
Quant Ion : 276.00
Area (flag) : 631955M
On-Column Amount (ng/ul) : 0.9893
Integration start scan : 2072 Integration stop scan: 2100
Y at integration start : 95 Y at integration end: 95

Reason for manual integration: improper integration

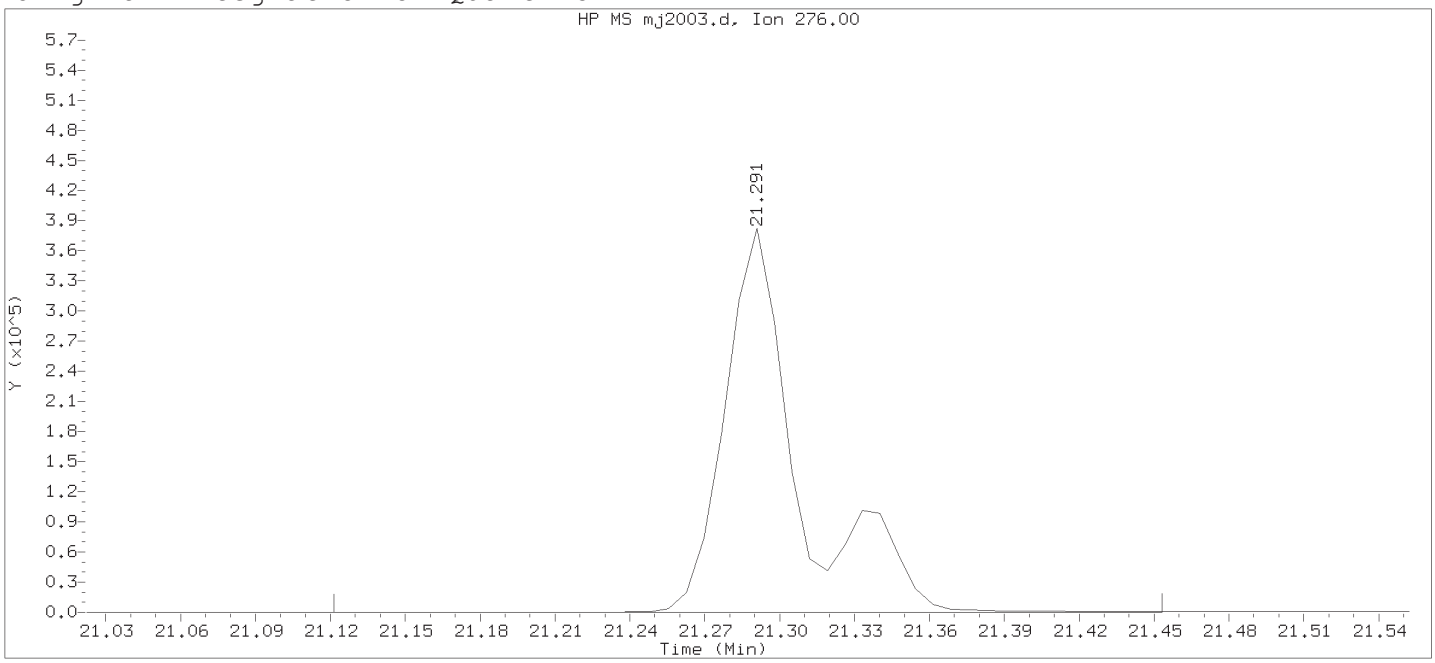
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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



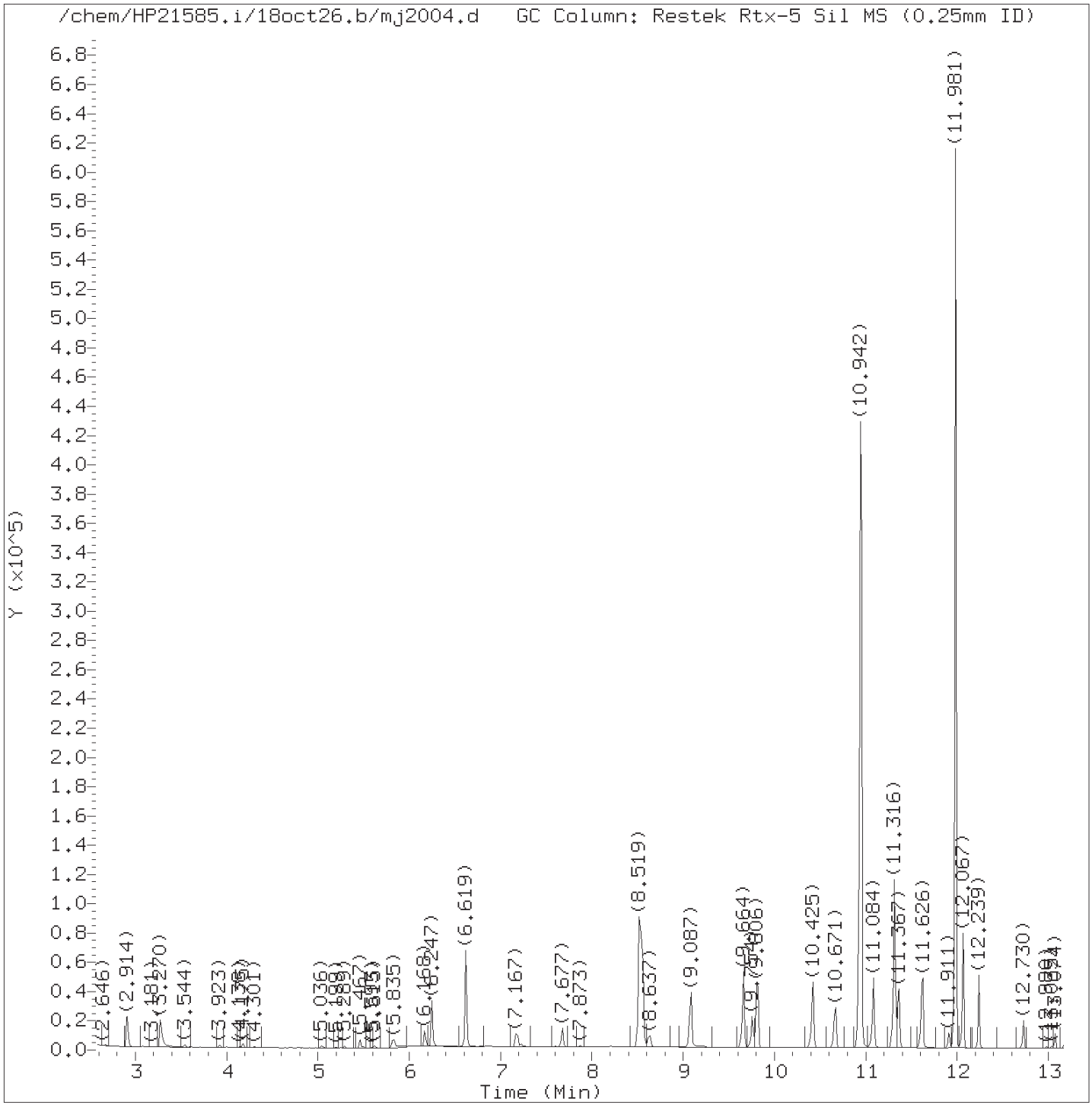
Data File: /chem/HP21585.i/18oct26.b/mj2003.d Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 08:35 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 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

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: 2156



Total Ion Chromatogram (TIC)

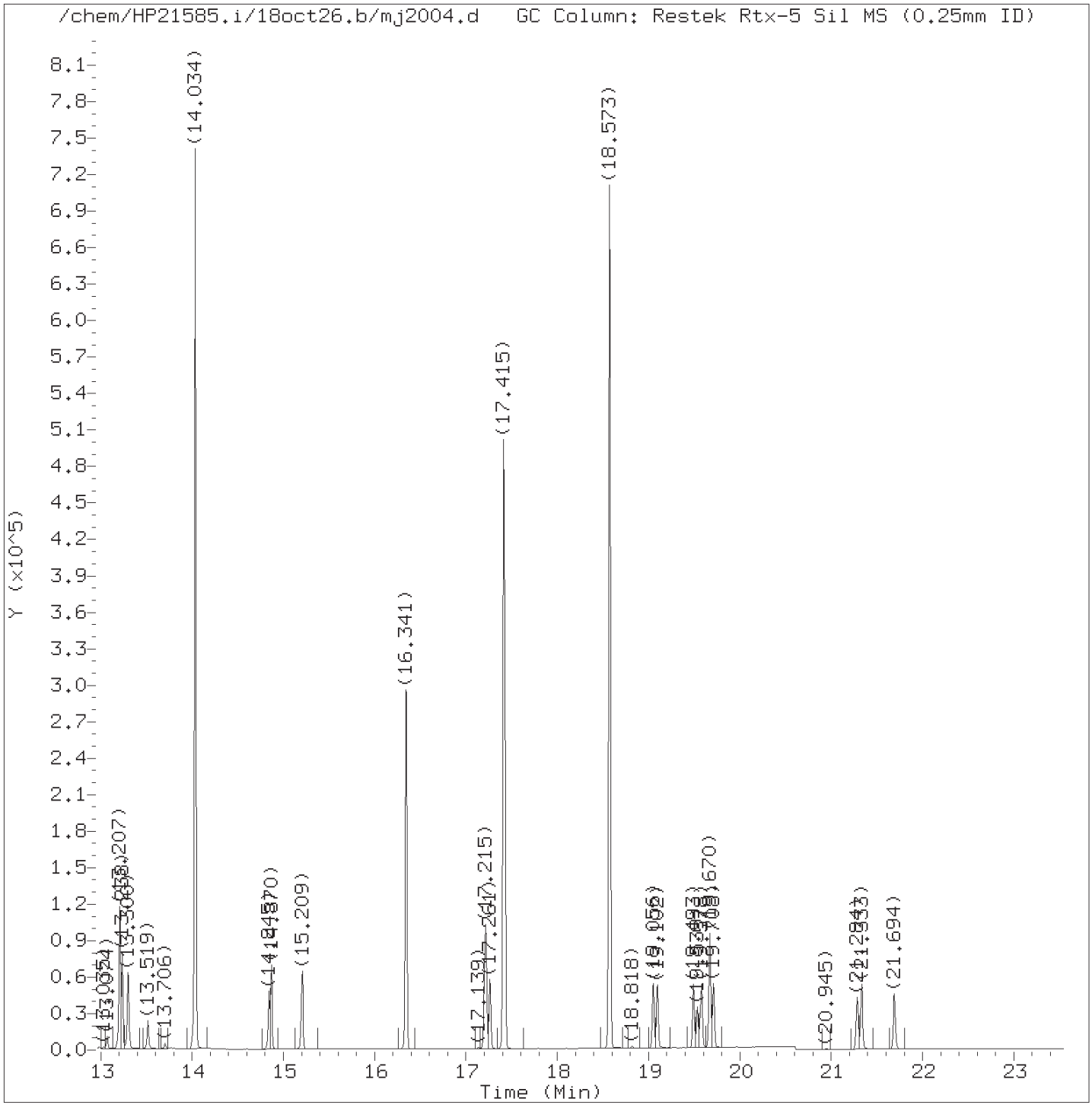
Target Revision 3.5

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

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 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

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 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

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 09:04 Analyst ID: ceb05247

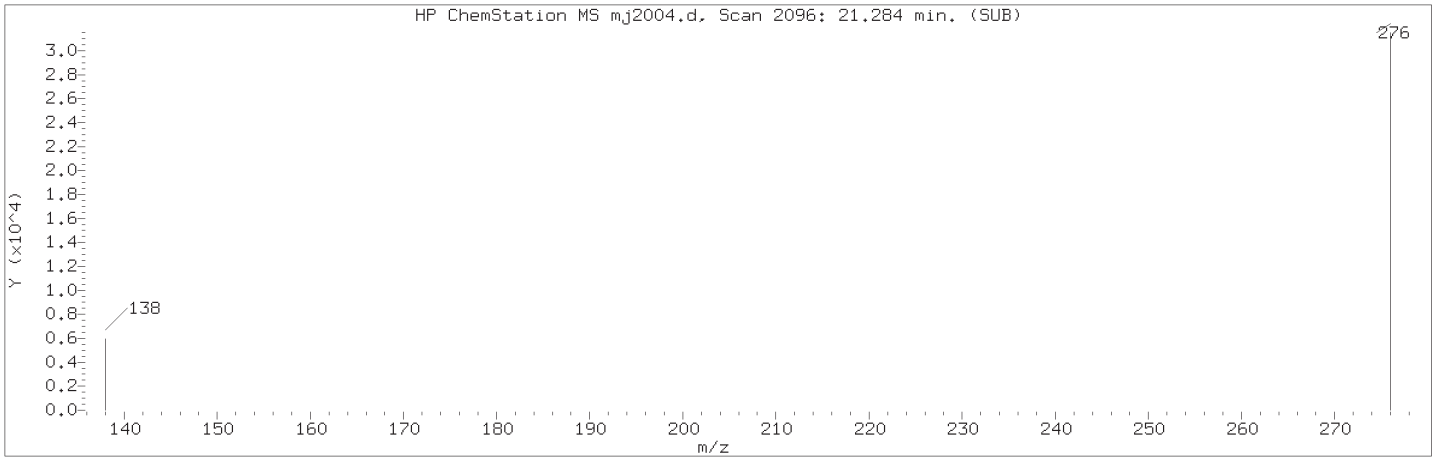
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 17:17
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.1 Lab Sample ID: RVSIM2768

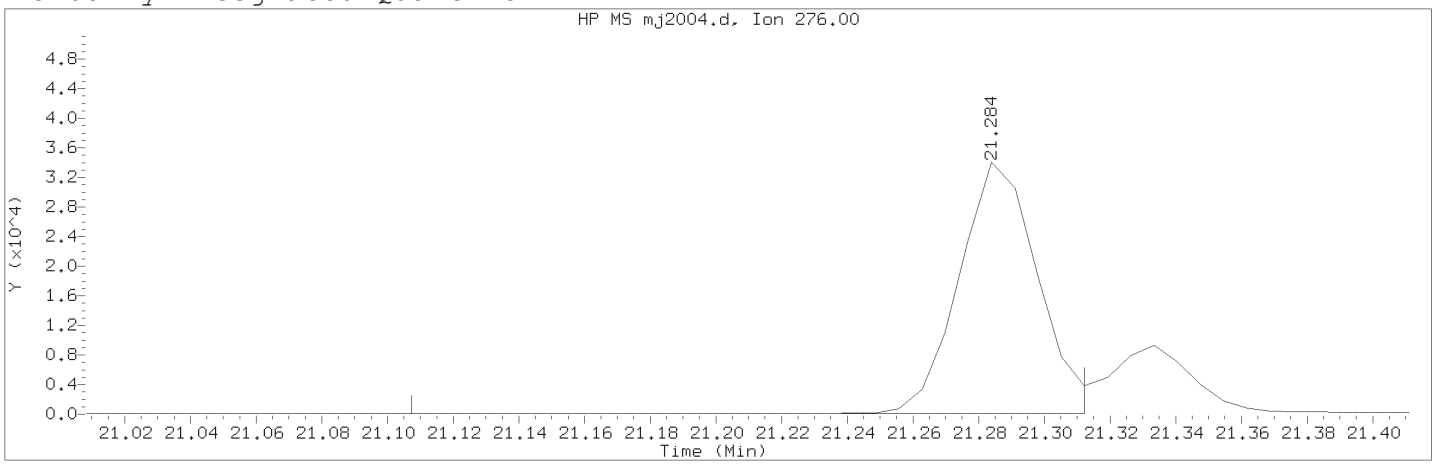
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
41) Benzo(g,h,i)perylene	(6)	21.694	276	66179	0.098

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/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

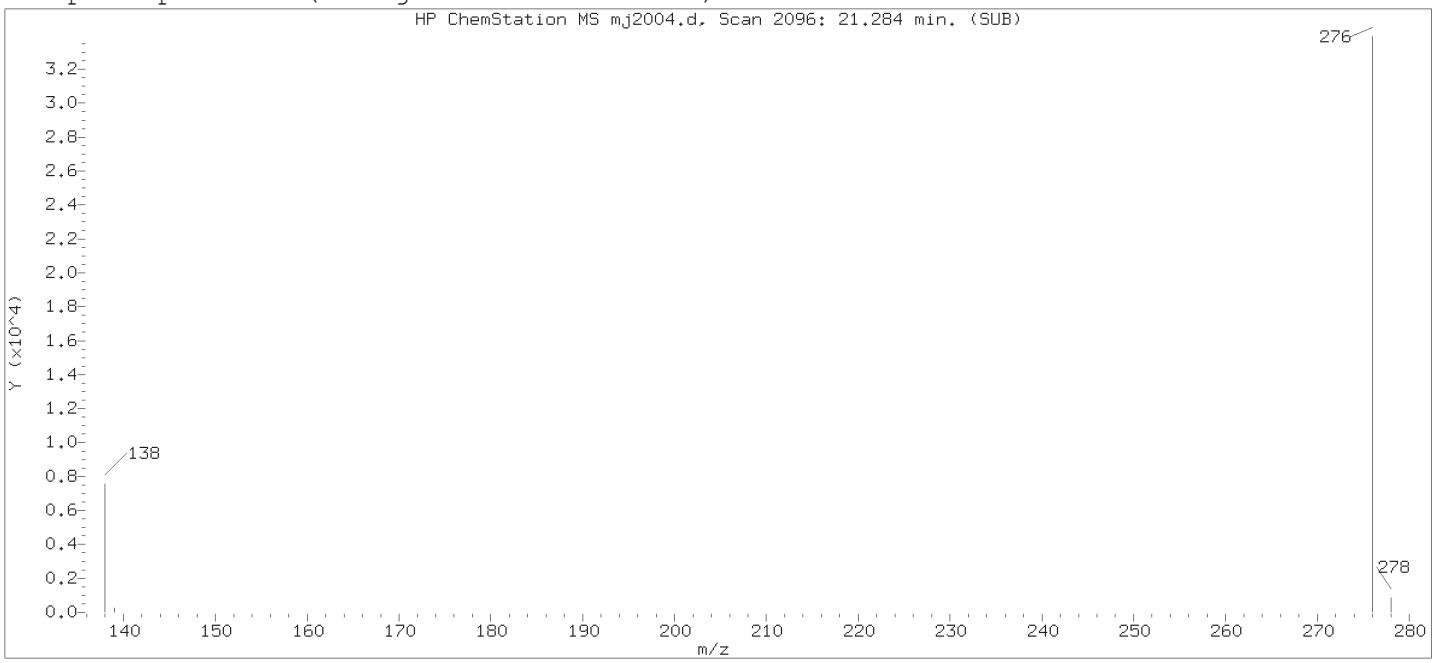
Compound Number	: 39		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 2096		
Retention Time (minutes)	: 21.284		
Quant Ion	: 276.00		
Area (flag)	: 56469M		
On-Column Amount (ng/ul)	: 0.0959		
Integration start scan	: 2070	Integration stop scan:	2099
Y at integration start	: 88	Y at integration end:	88

Reason for manual integration: improper integration

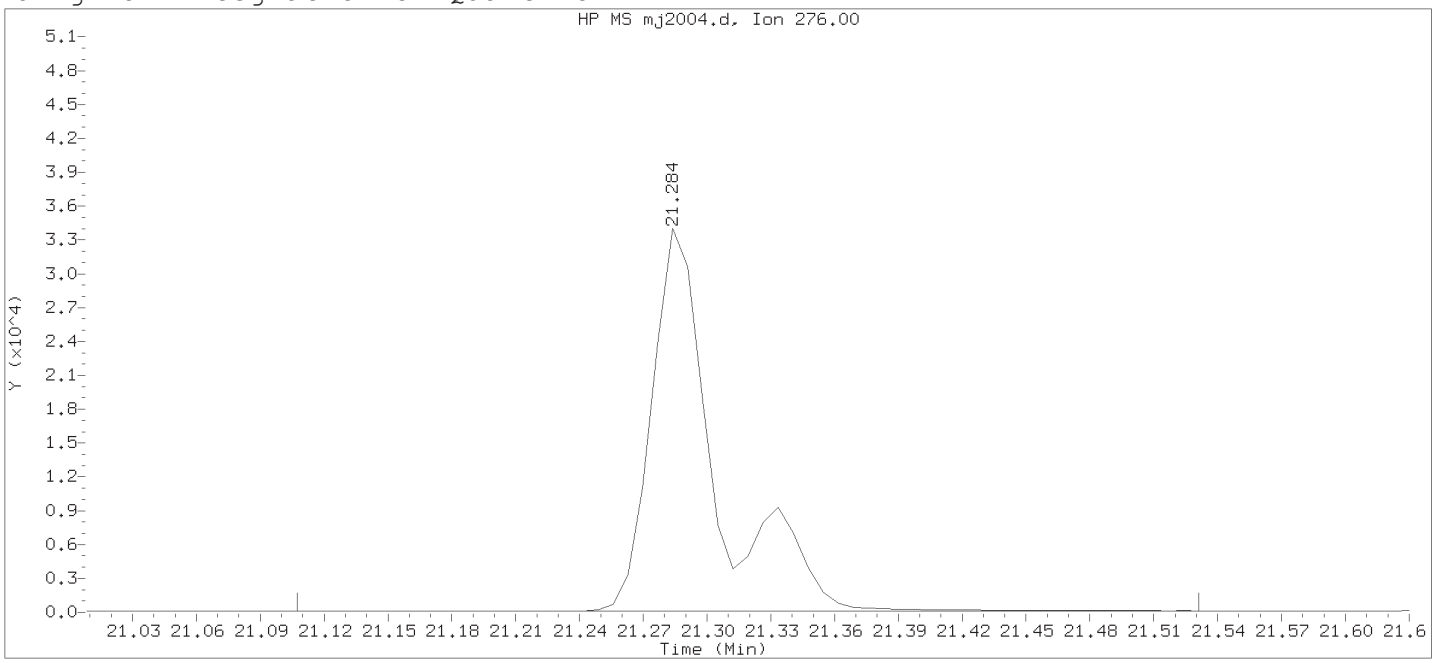
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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



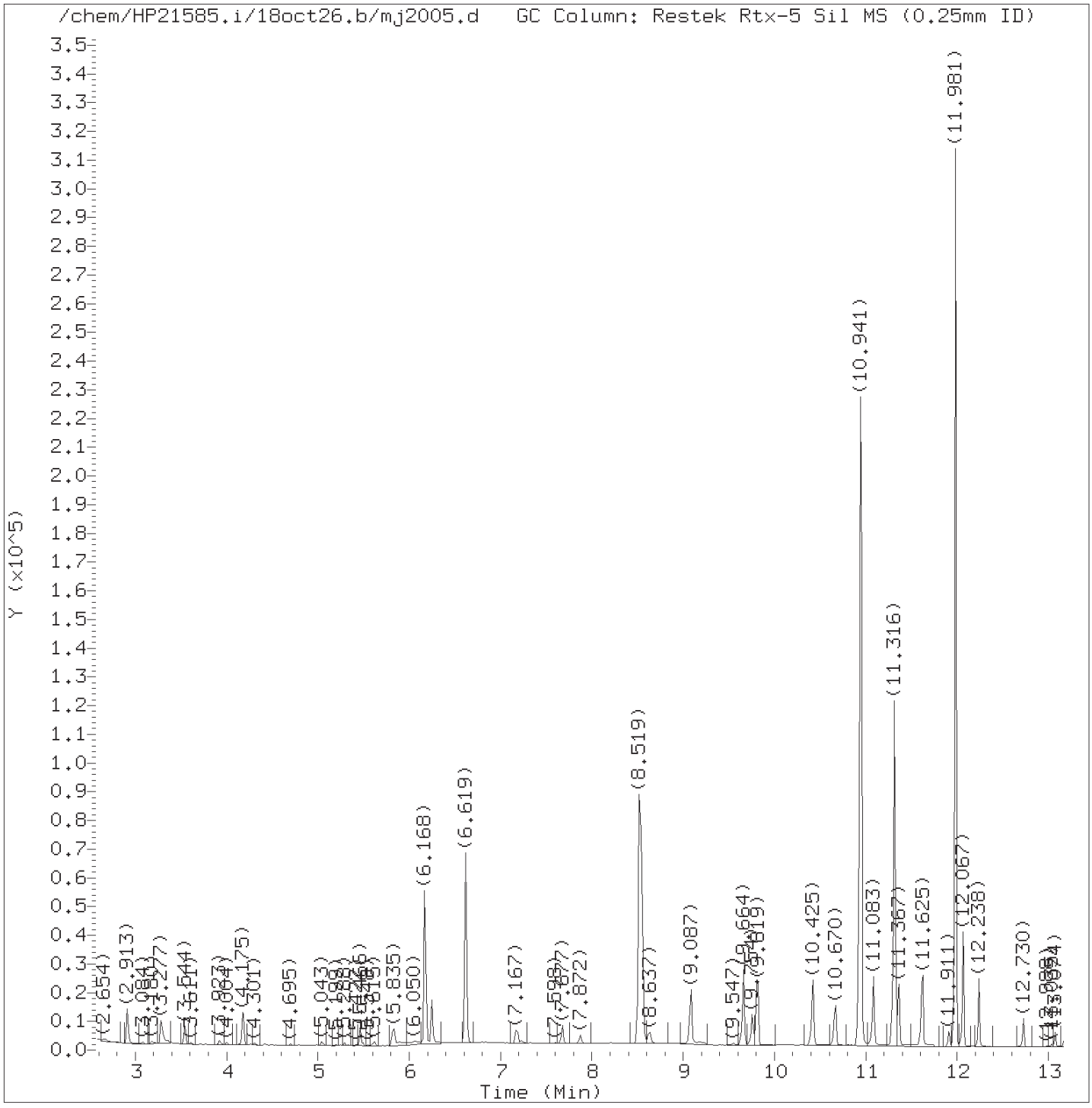
Data File: /chem/HP21585.i/18oct26.b/mj2004.d Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 09:04 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 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

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: 2176



Total Ion Chromatogram (TIC)

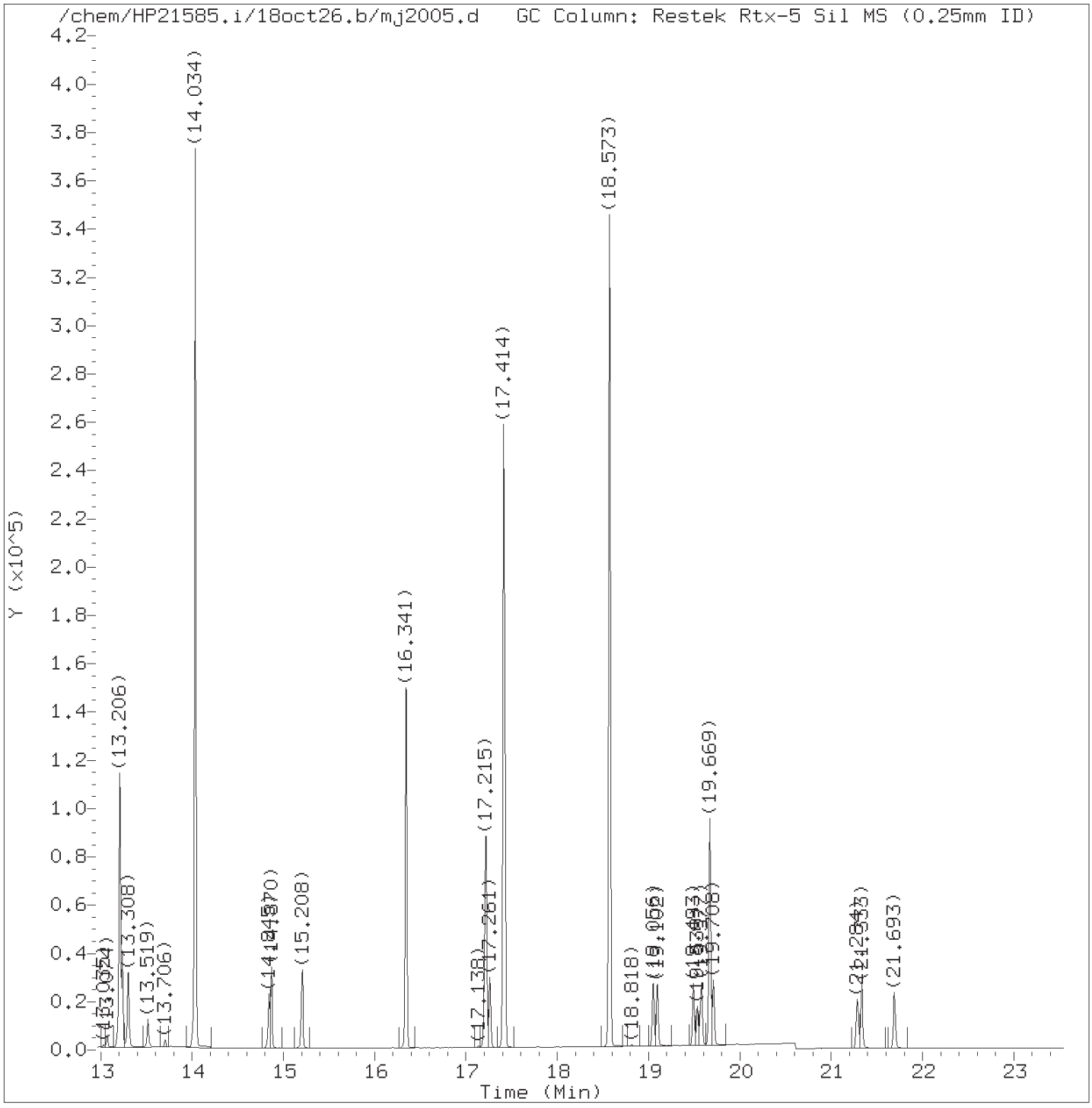
Target Revision 3.5

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

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 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

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 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

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 09:33 Analyst ID: ceb05247

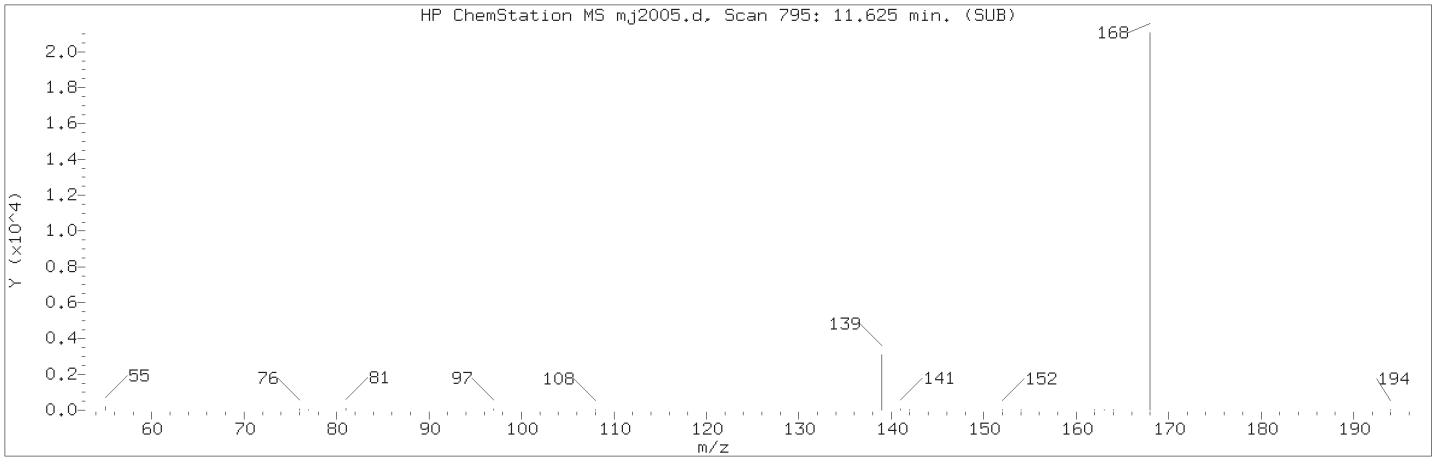
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 17:17
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.05 Lab Sample ID: RVSIM2768

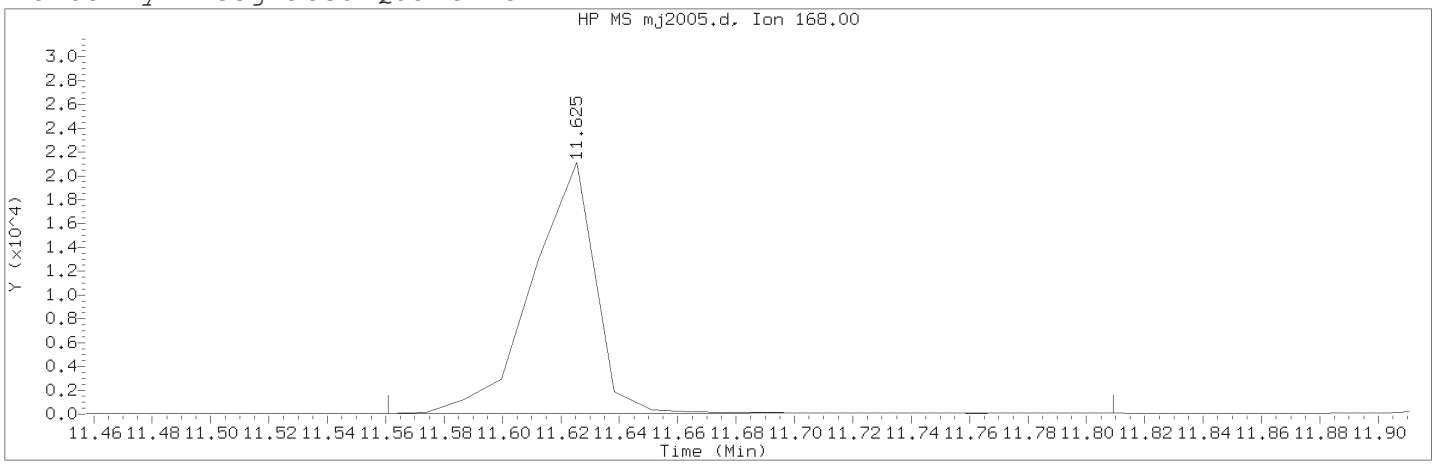
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
41) Benzo(g,h,i)perylene	(6)	21.693	276	32995	0.049

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/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

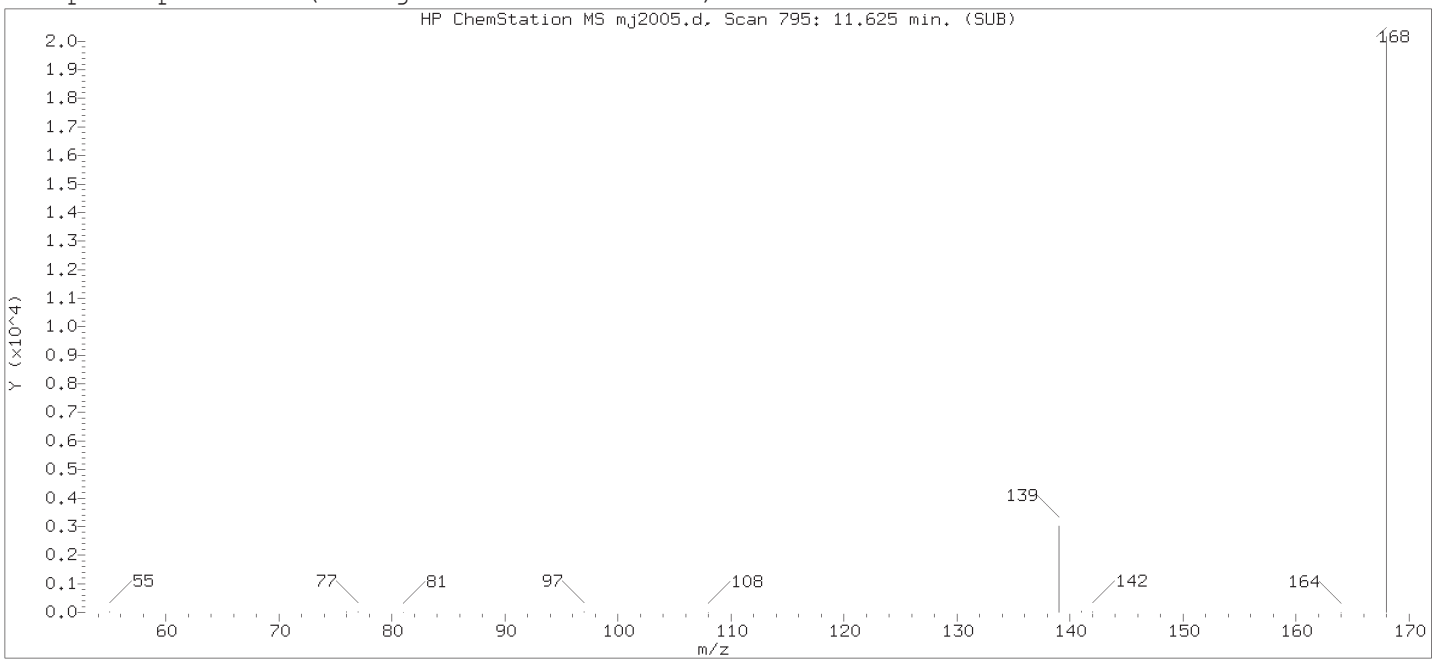
Compound Number	: 16		
Compound Name	: Dibenzofuran		
Scan Number	: 795		
Retention Time (minutes)	: 11.625		
Quant Ion	: 168.00		
Area (flag)	: 25493M		
On-Column Amount (ng/ul)	: 0.0462		
Integration start scan	: 789	Integration stop scan:	811
Y at integration start	: 53	Y at integration end:	83

Reason for manual integration: improper integration

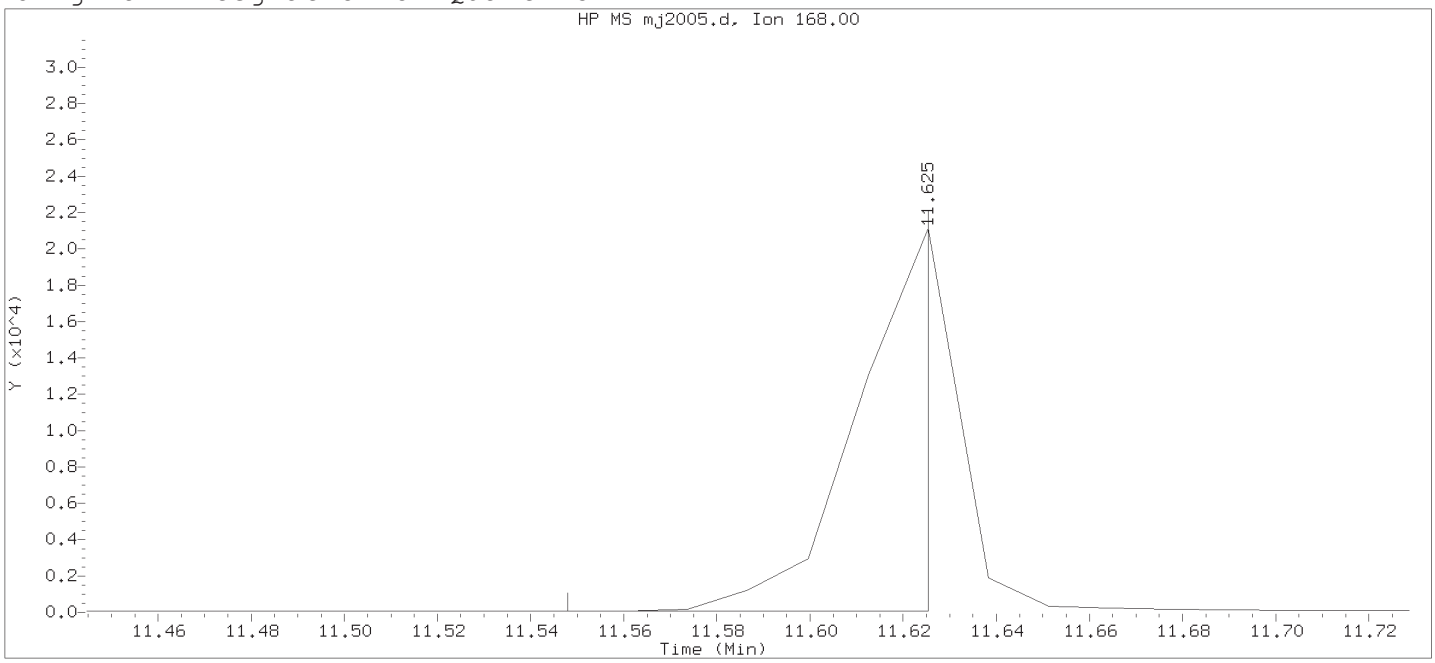
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 09:33 Analyst ID: ceb05247

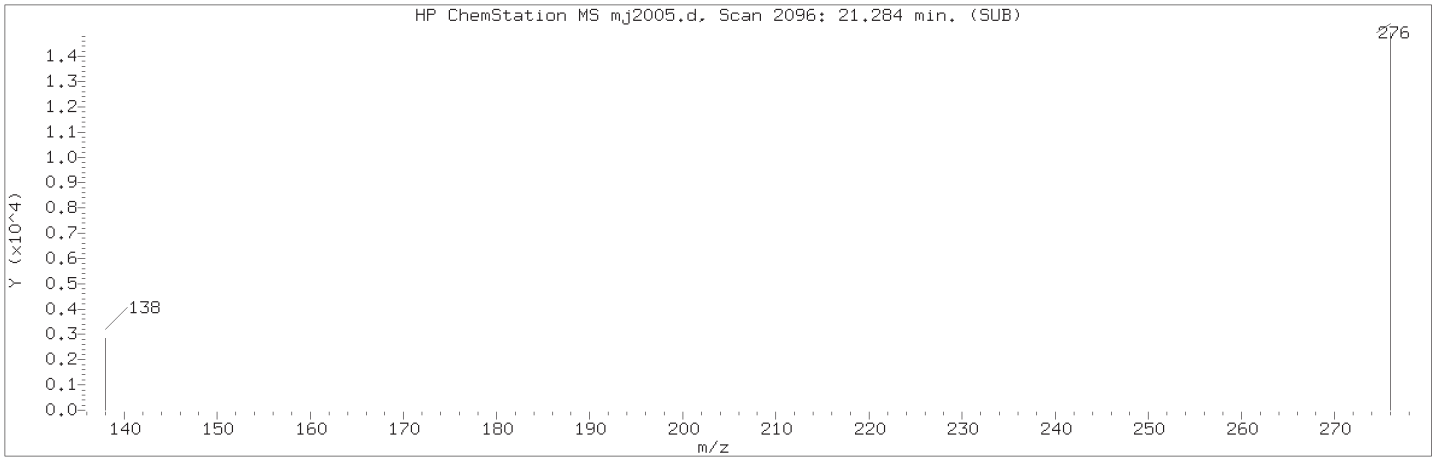
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:02
Date, time and analyst ID of latest file update: 26-Oct-2018 10:02 Unknown

Sample Name: SSTD0.05 Lab Sample ID: RVSIM2768

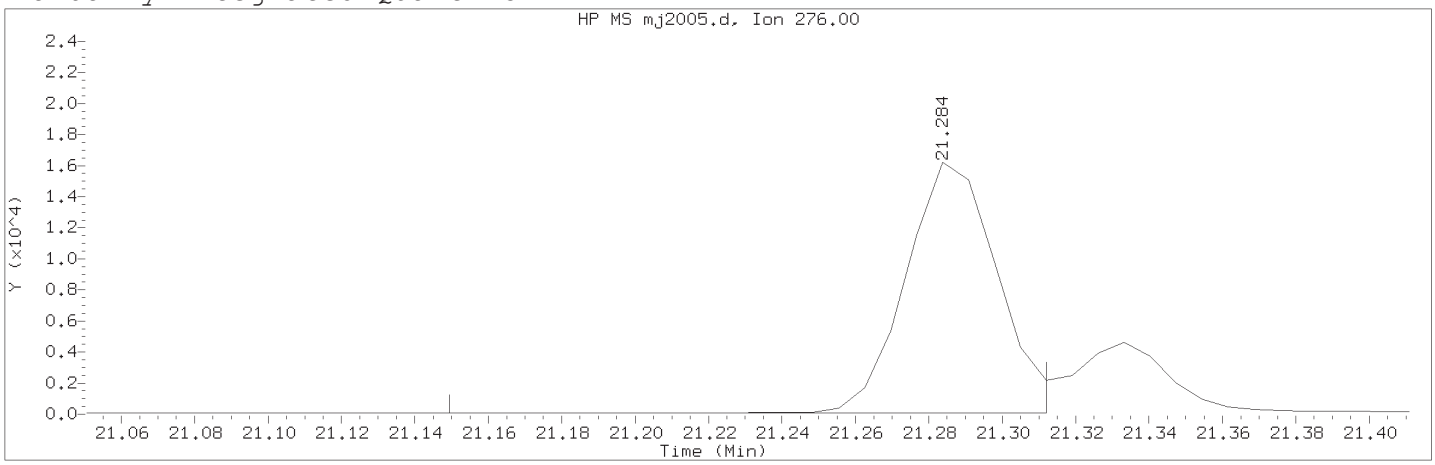
Compound Number	: 16		
Compound Name	: Dibenzofuran		
Scan Number	: 795		
Retention Time (minutes)	: 11.625		
Quant Ion	: 168.00		
Area	: 18566		
On-column Amount (ng/ul)	: 0.0324		
Integration start scan	: 788	Integration stop scan:	794
Y at integration start	: 55	Y at integration end:	55

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: 2156

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

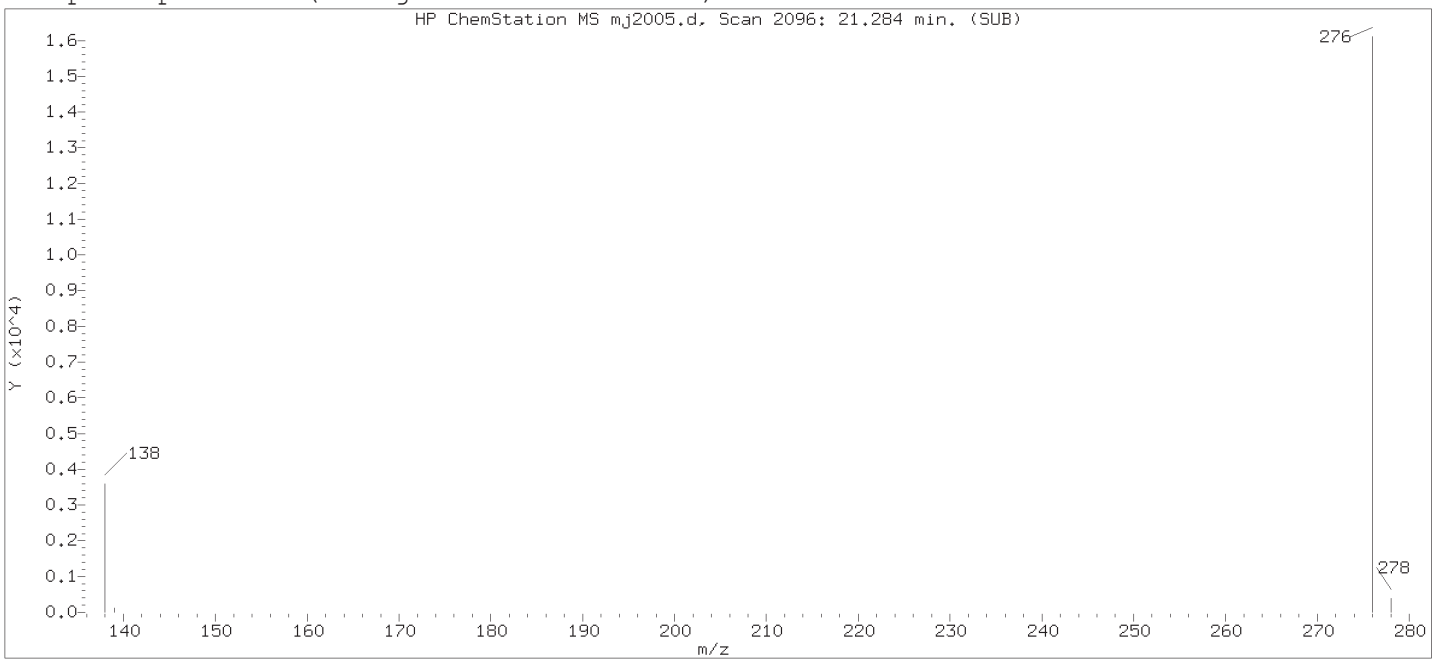
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2096
Retention Time (minutes) : 21.284
Quant Ion : 276.00
Area (flag) : 27971M
On-Column Amount (ng/ul) : 0.0482
Integration start scan : 2076 Integration stop scan: 2099
Y at integration start : 85 Y at integration end: 85

Reason for manual integration: improper integration

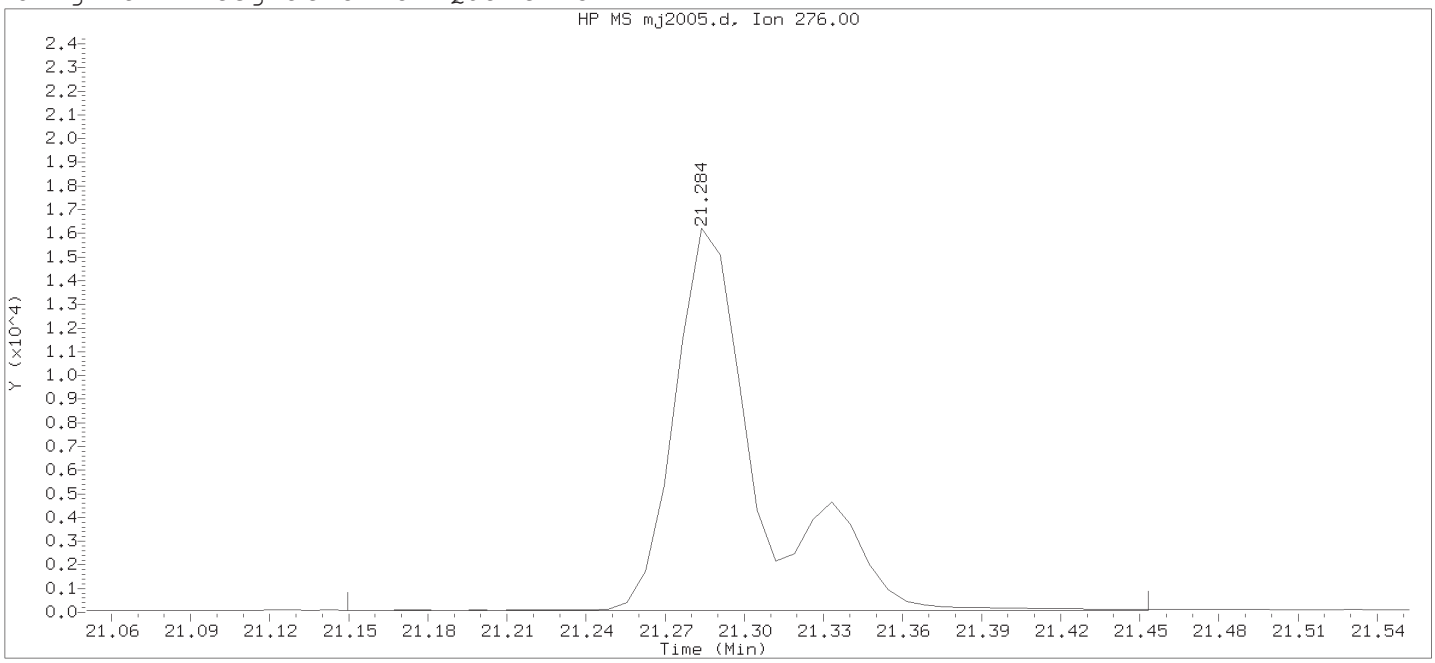
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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



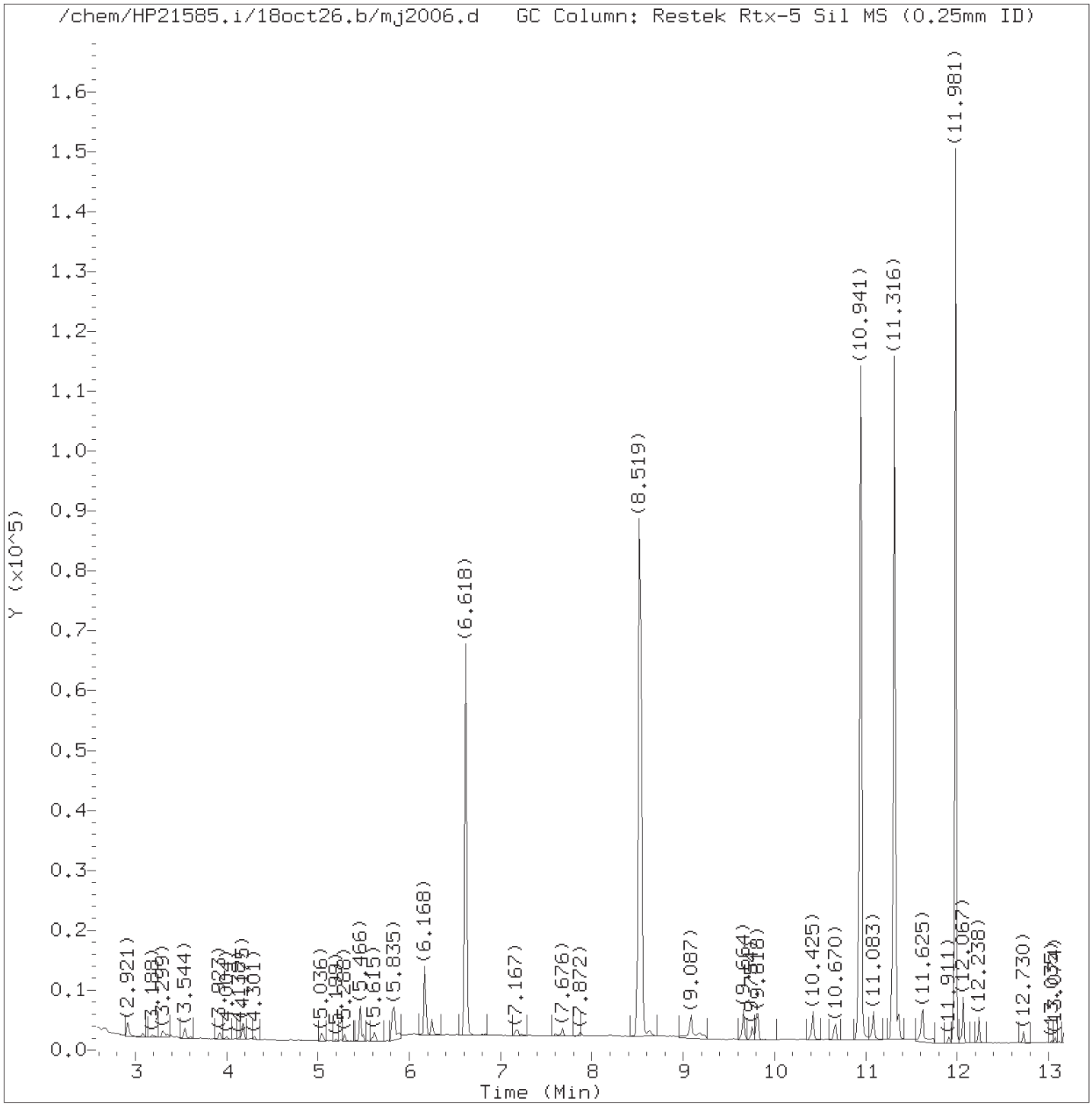
Data File: /chem/HP21585.i/18oct26.b/mj2005.d Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 09:33 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 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

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: 2405



Total Ion Chromatogram (TIC)

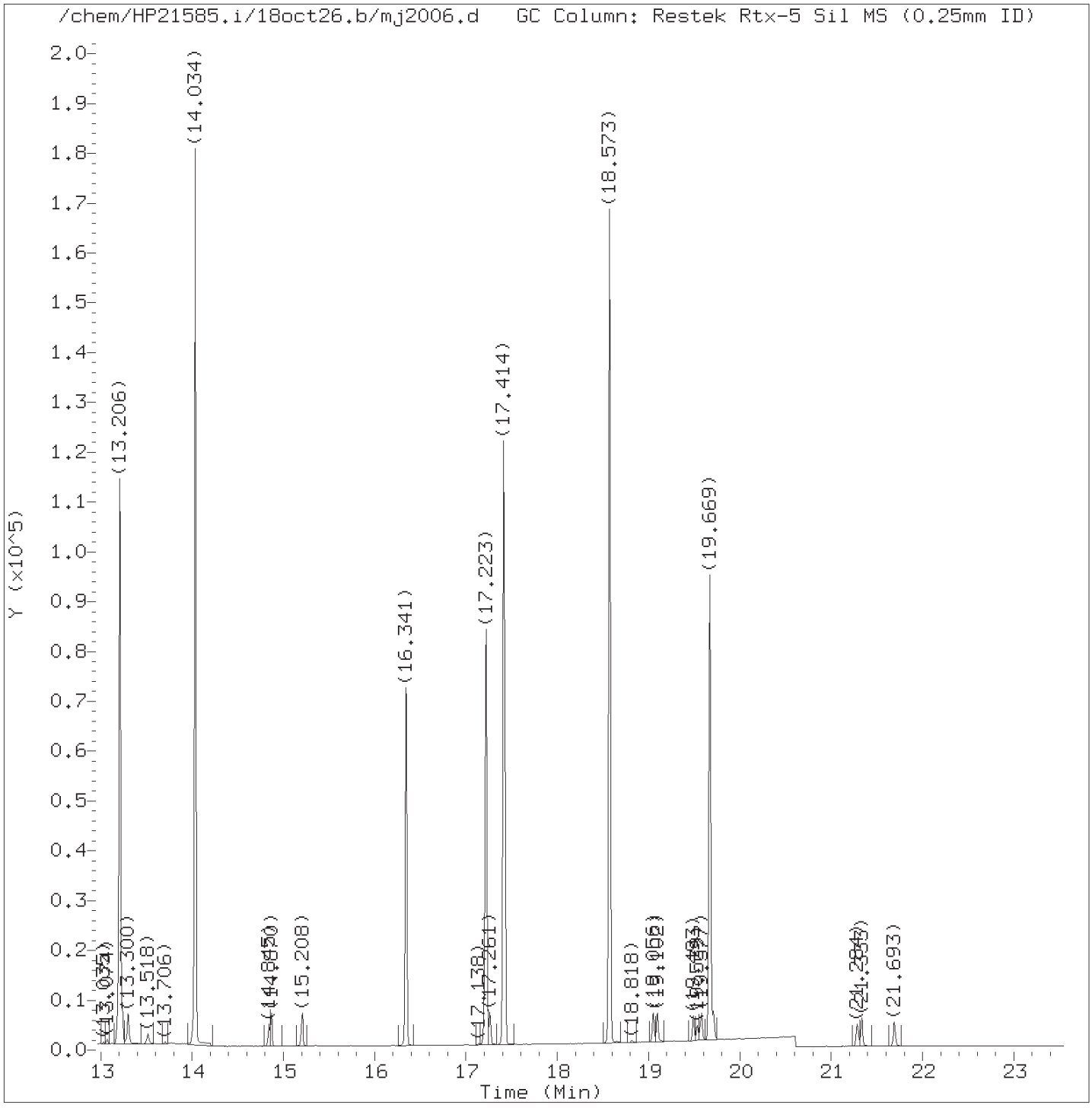
Target Revision 3.5

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

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 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

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 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

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:02 Analyst ID: ceb05247

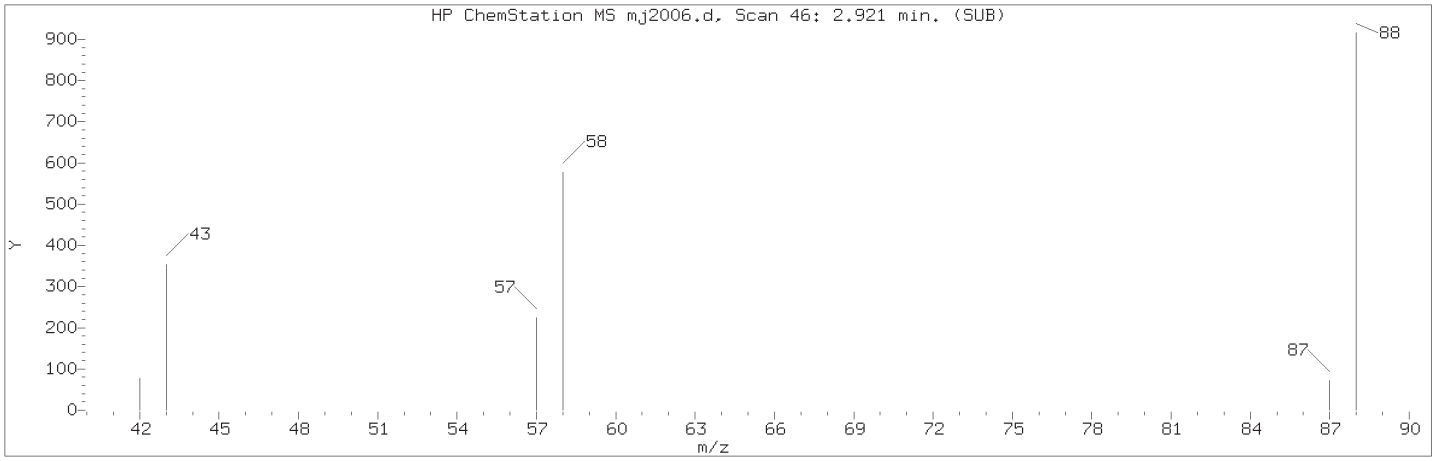
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 17:17
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.01 Lab Sample ID: RVSIM2768

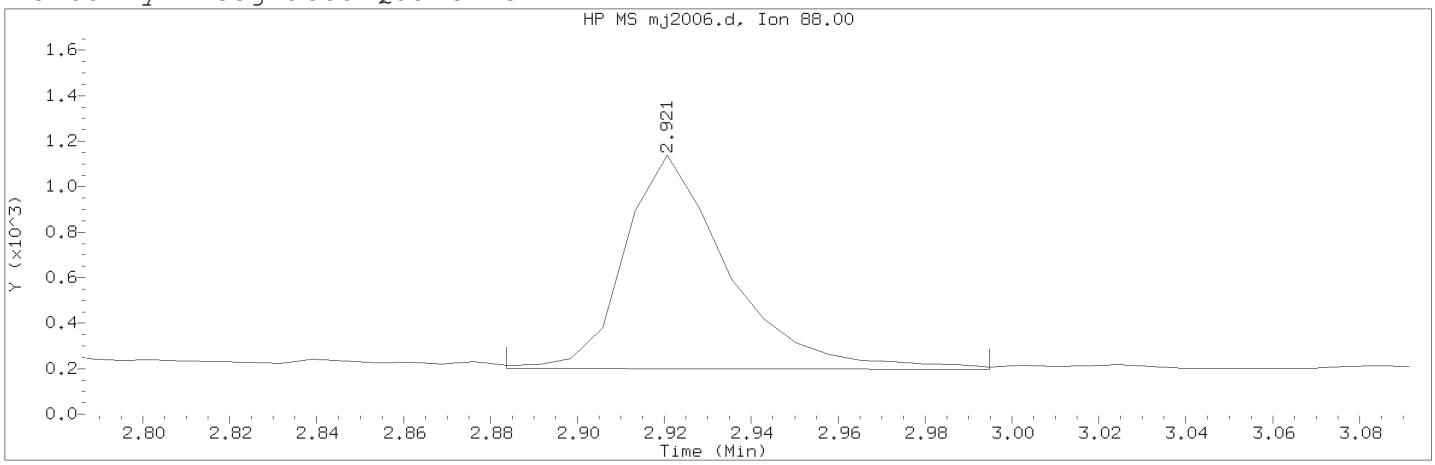
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
41) Benzo(g,h,i)perylene	(6)	21.693	276	7204	0.011

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

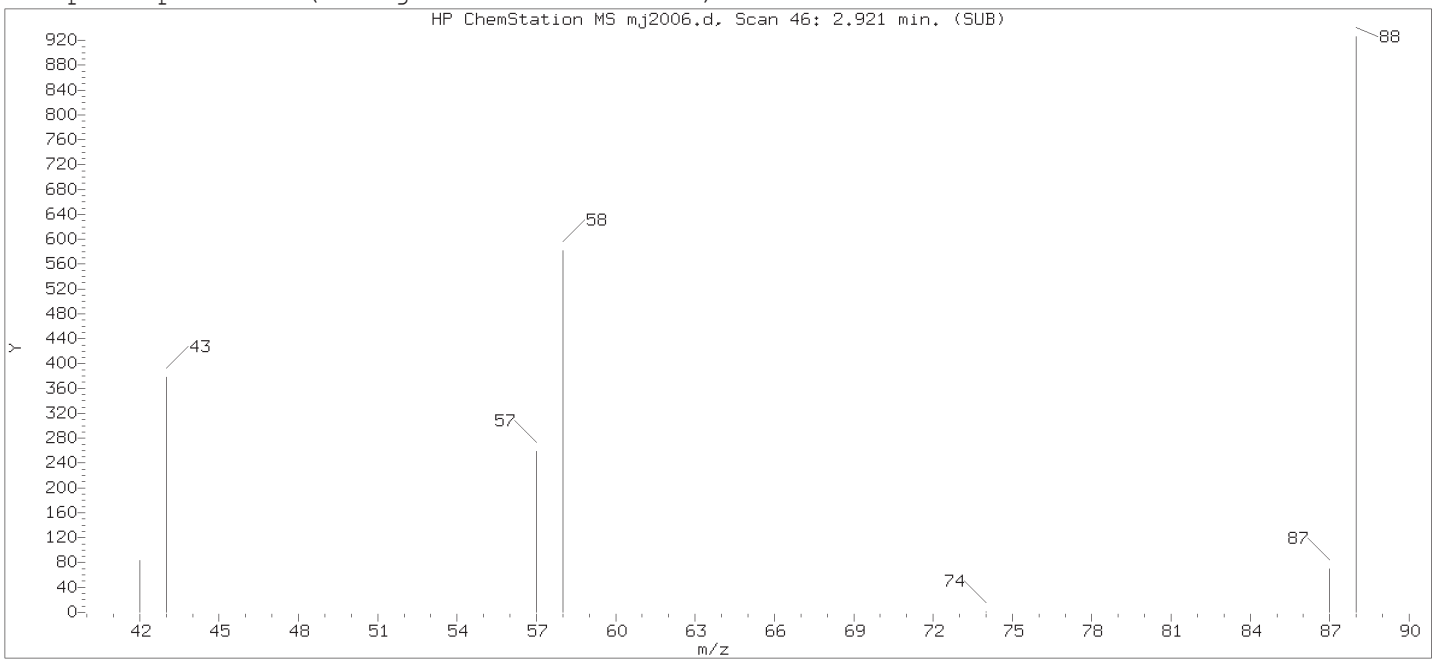
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 46
Retention Time (minutes) : 2.921
Quant Ion : 88.00
Area (flag) : 1562M
On-Column Amount (ng/ul) : 0.0107
Integration start scan : 40 Integration stop scan: 55
Y at integration start : 201 Y at integration end: 196

Reason for manual integration: improper integration

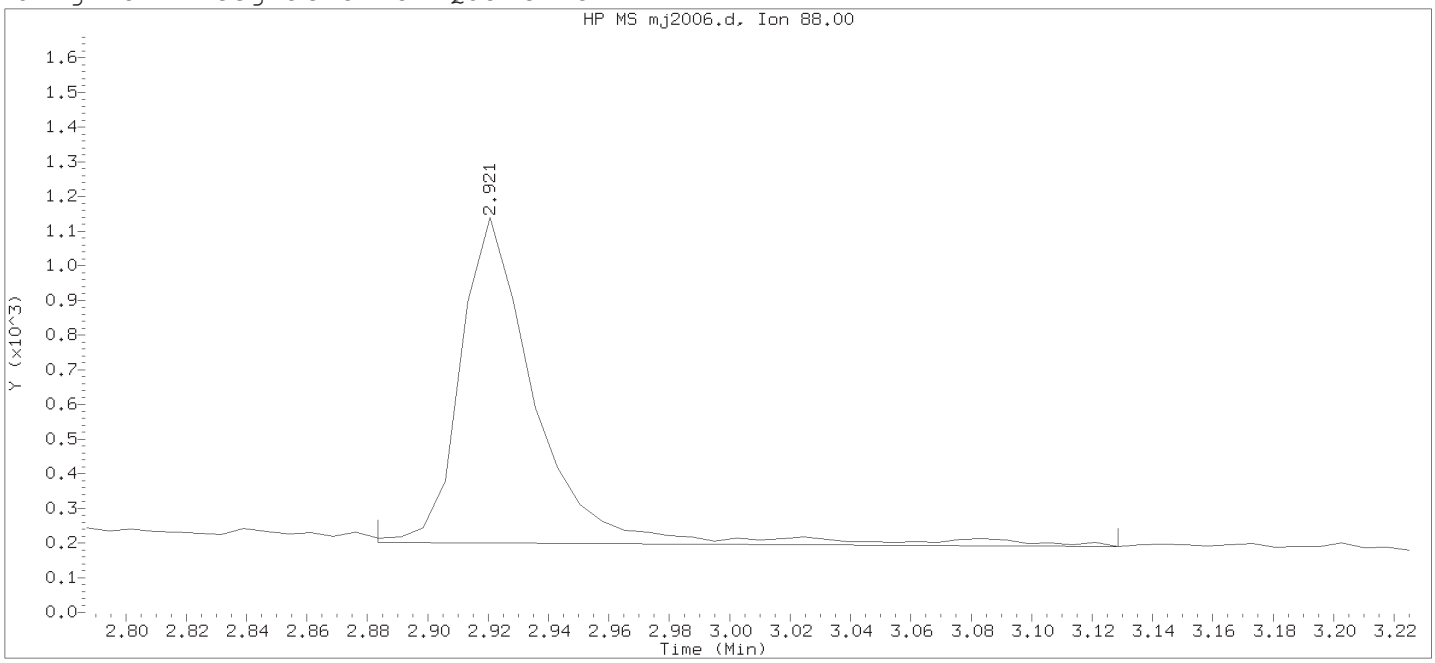
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:02 Analyst ID: ceb05247

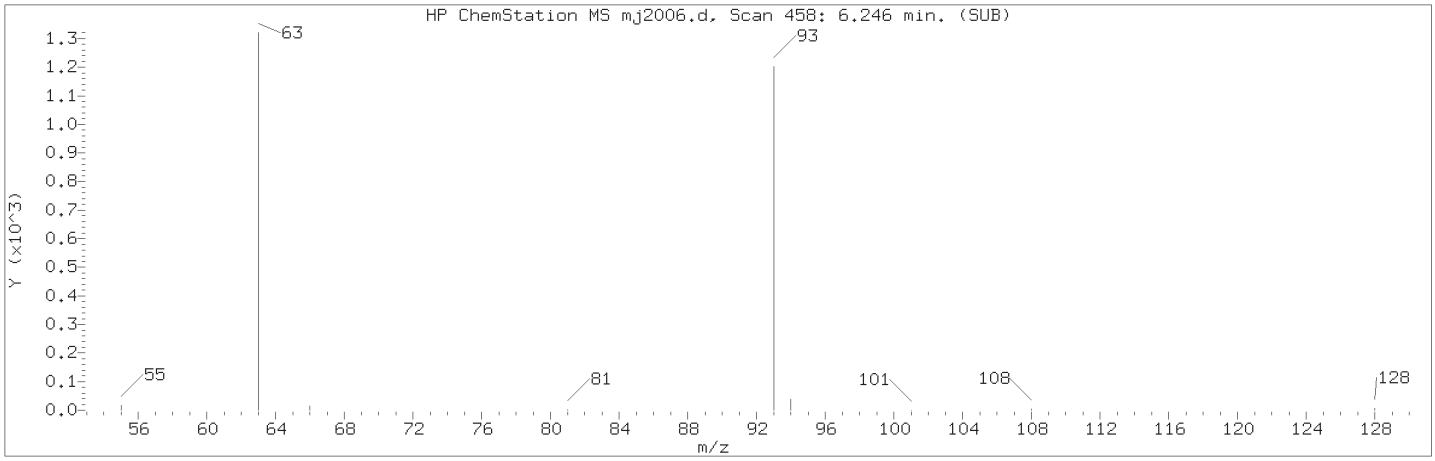
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 10:31 Unknown

Sample Name: SSTD0.01 Lab Sample ID: RVSIM2768

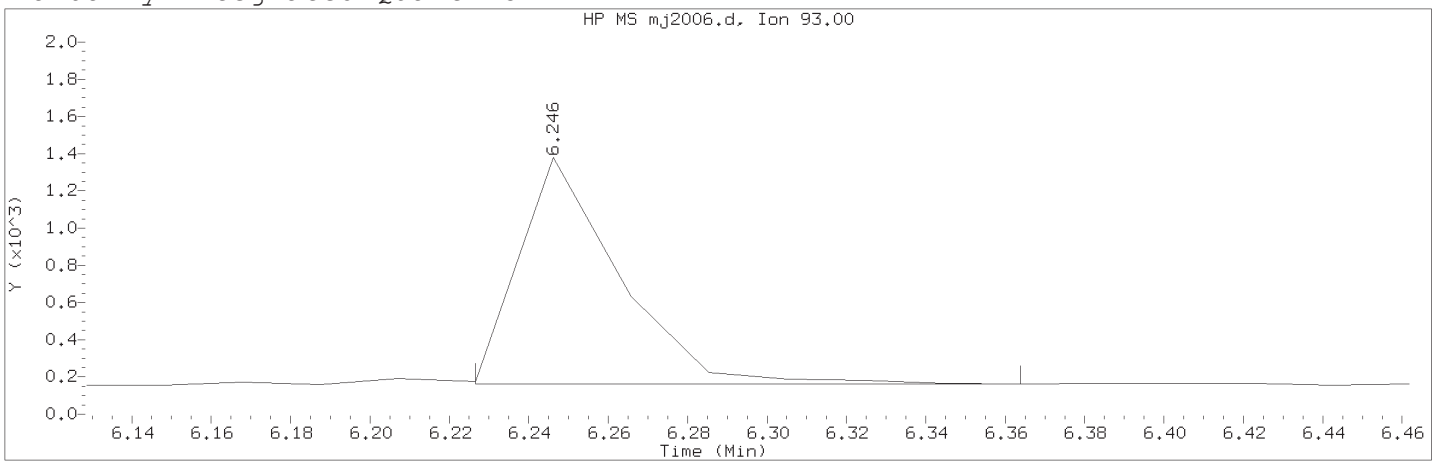
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 46		
Retention Time (minutes)	: 2.921		
Quant Ion	: 88.00		
Area	: 1665		
On-column Amount (ng/ul)	: 0.0113		
Integration start scan	: 40	Integration stop scan:	73
Y at integration start	: 201	Y at integration end:	189

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used for 2018.

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

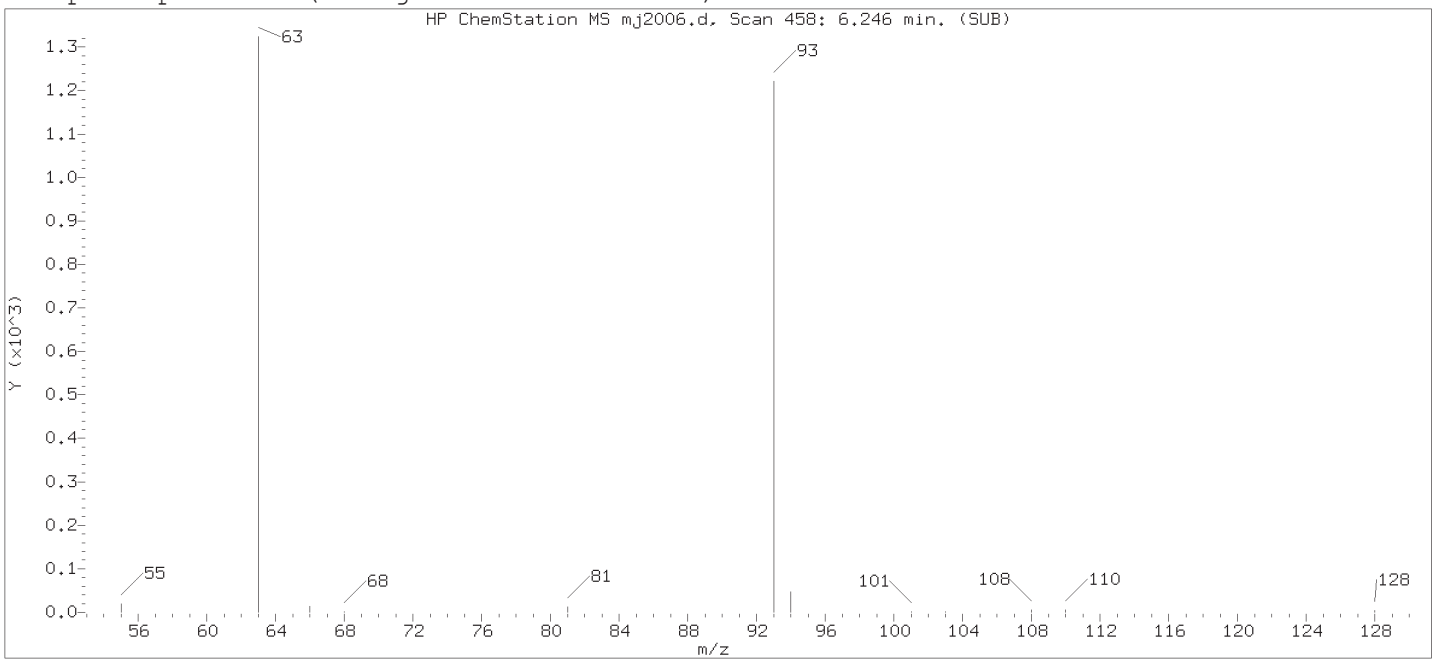
Compound Number	: 4		
Compound Name	: bis(2-Chloroethyl)ether		
Scan Number	: 458		
Retention Time (minutes)	: 6.246		
Quant Ion	: 93.00		
Area (flag)	: 1919M		
On-Column Amount (ng/ul)	: 0.0084		
Integration start scan	: 456	Integration stop scan:	463
Y at integration start	: 162	Y at integration end:	162

Reason for manual integration: improper integration

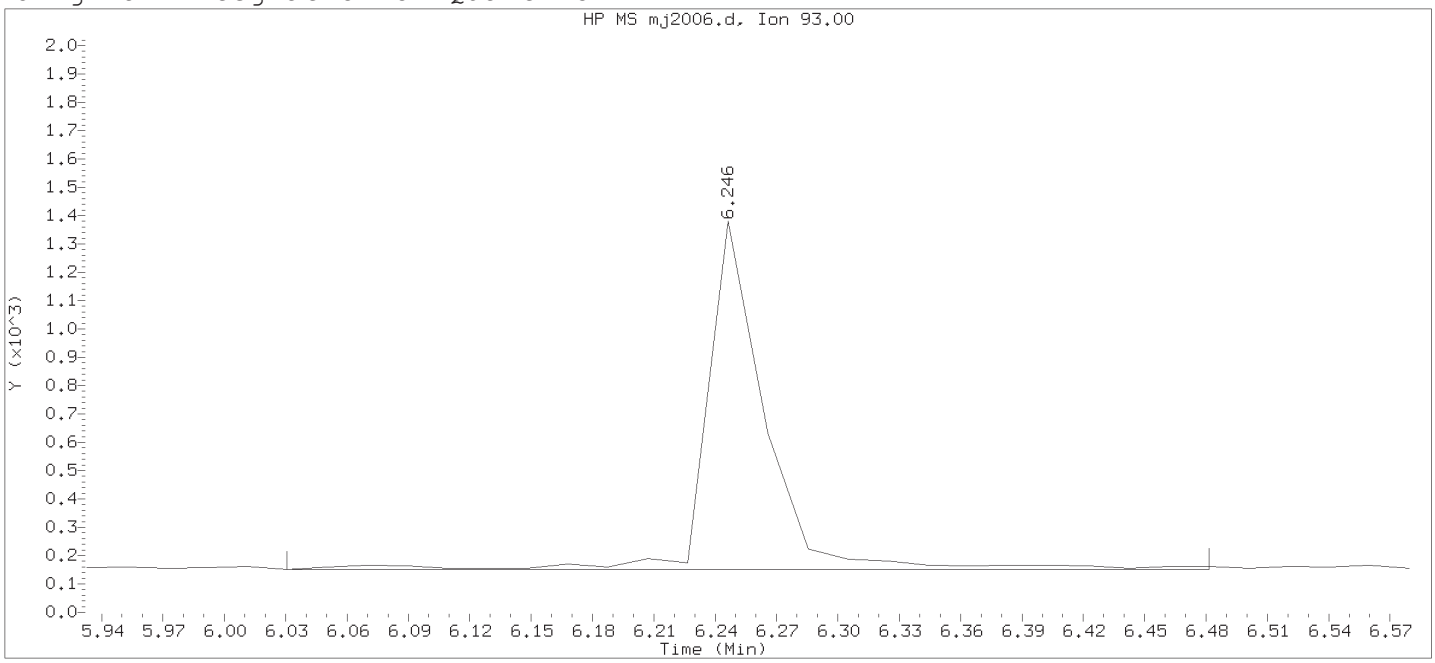
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:02 Analyst ID: ceb05247

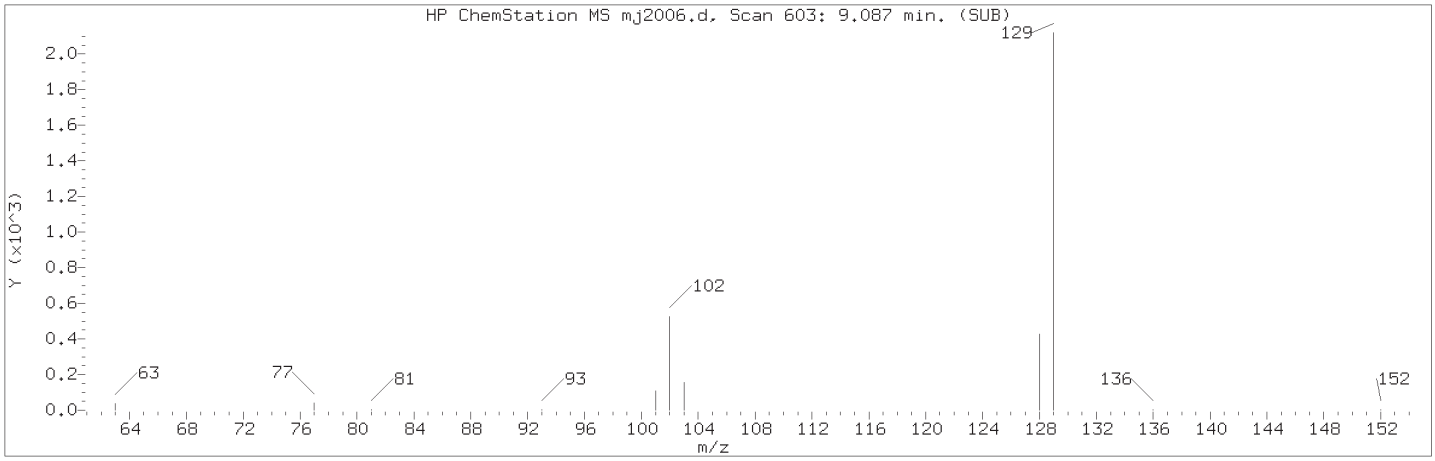
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 10:31 Unknown

Sample Name: SSTD0.01 Lab Sample ID: RVSIM2768

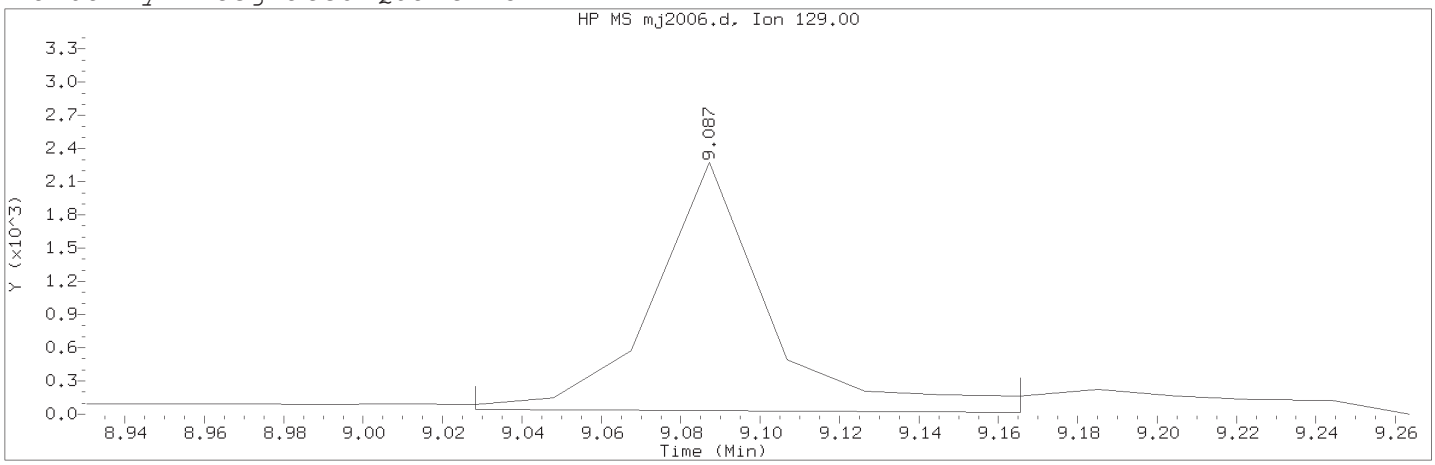
Compound Number	: 4		
Compound Name	: bis(2-Chloroethyl)ether		
Scan Number	: 458		
Retention Time (minutes)	: 6.246		
Quant Ion	: 93.00		
Area	: 2423		
On-column Amount (ng/ul)	: 0.0099		
Integration start scan	: 446	Integration stop scan:	469
Y at integration start	: 152	Y at integration end:	152

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 2017. Page 1413 of 4595

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

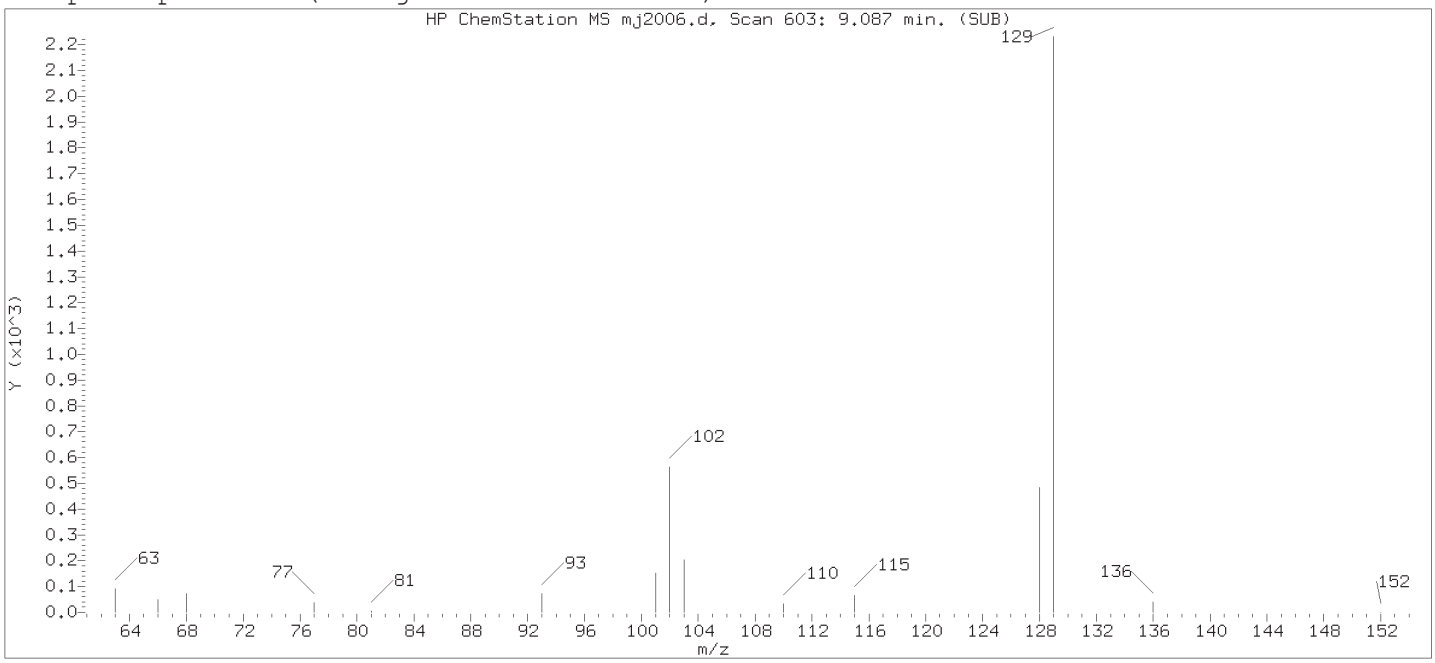
Compound Number	: 8		
Compound Name	: Quinoline		
Scan Number	: 603		
Retention Time (minutes)	: 9.087		
Quant Ion	: 129.00		
Area (flag)	: 3926M		
On-Column Amount (ng/ul)	: 0.0095		
Integration start scan	: 599	Integration stop scan:	606
Y at integration start	: 44	Y at integration end:	19

Reason for manual integration: improper integration

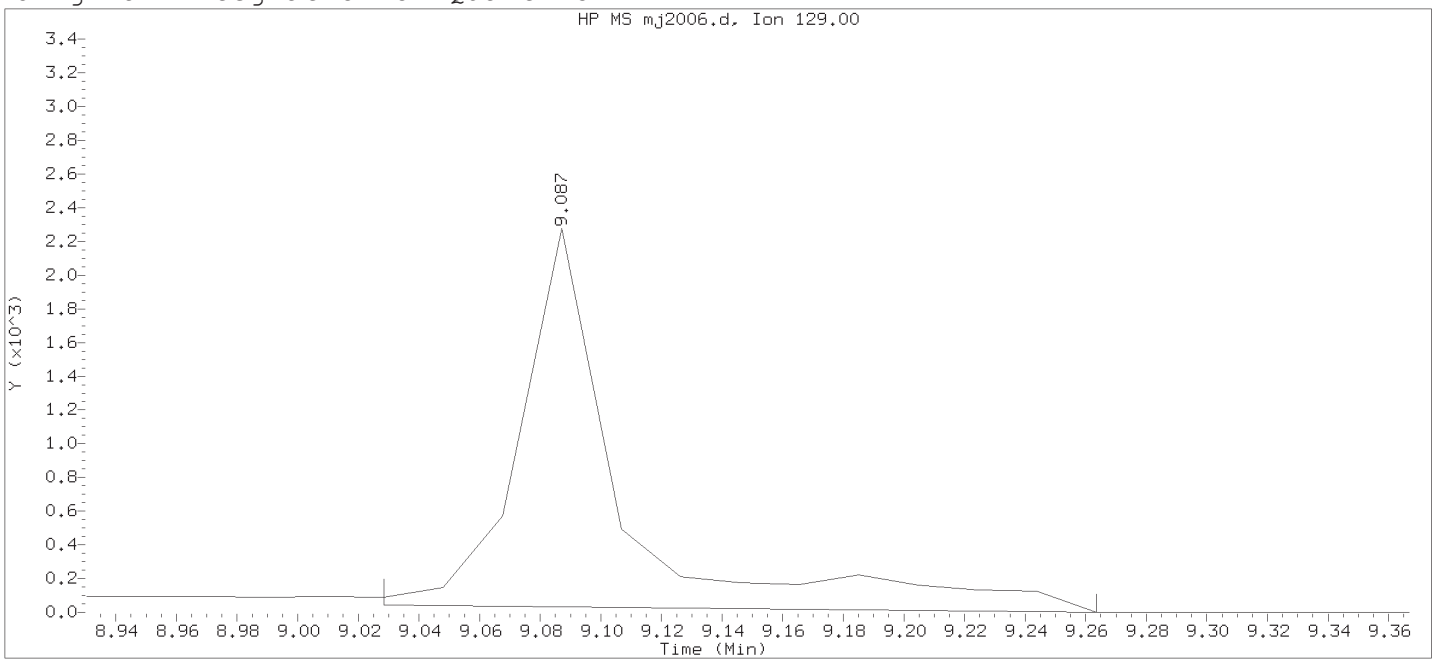
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:02 Analyst ID: ceb05247

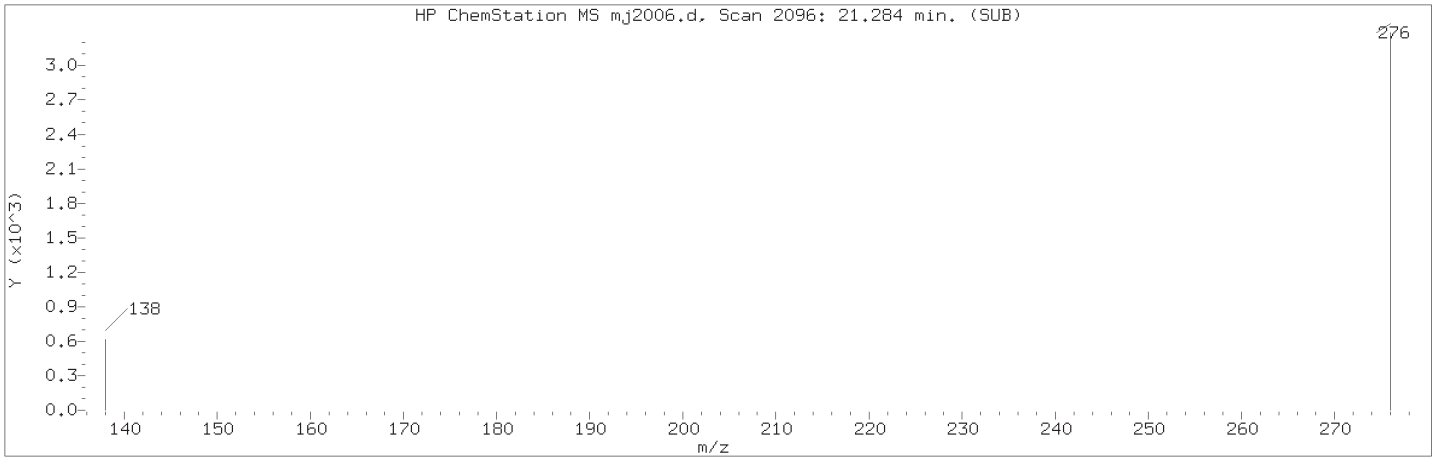
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 10:31 Unknown

Sample Name: SSTD0.01 Lab Sample ID: RVSIM2768

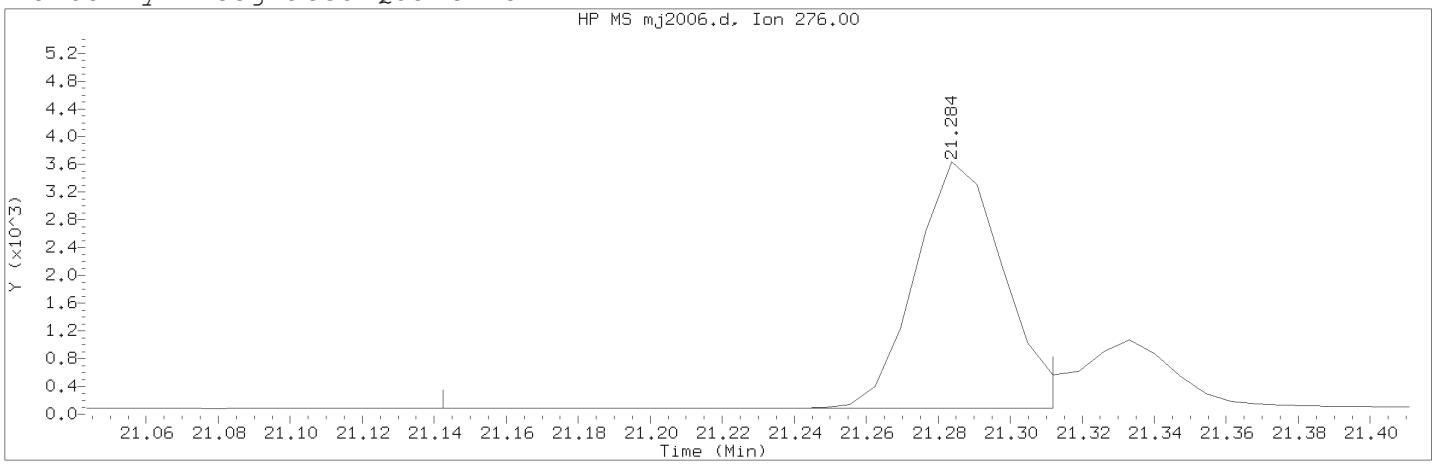
Compound Number	: 8		
Compound Name	: Quinoline		
Scan Number	: 603		
Retention Time (minutes)	: 9.087		
Quant Ion	: 129.00		
Area	: 4863		
On-column Amount (ng/ul)	: 0.0116		
Integration start scan	: 599	Integration stop scan:	611
Y at integration start	: 44	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 1107

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

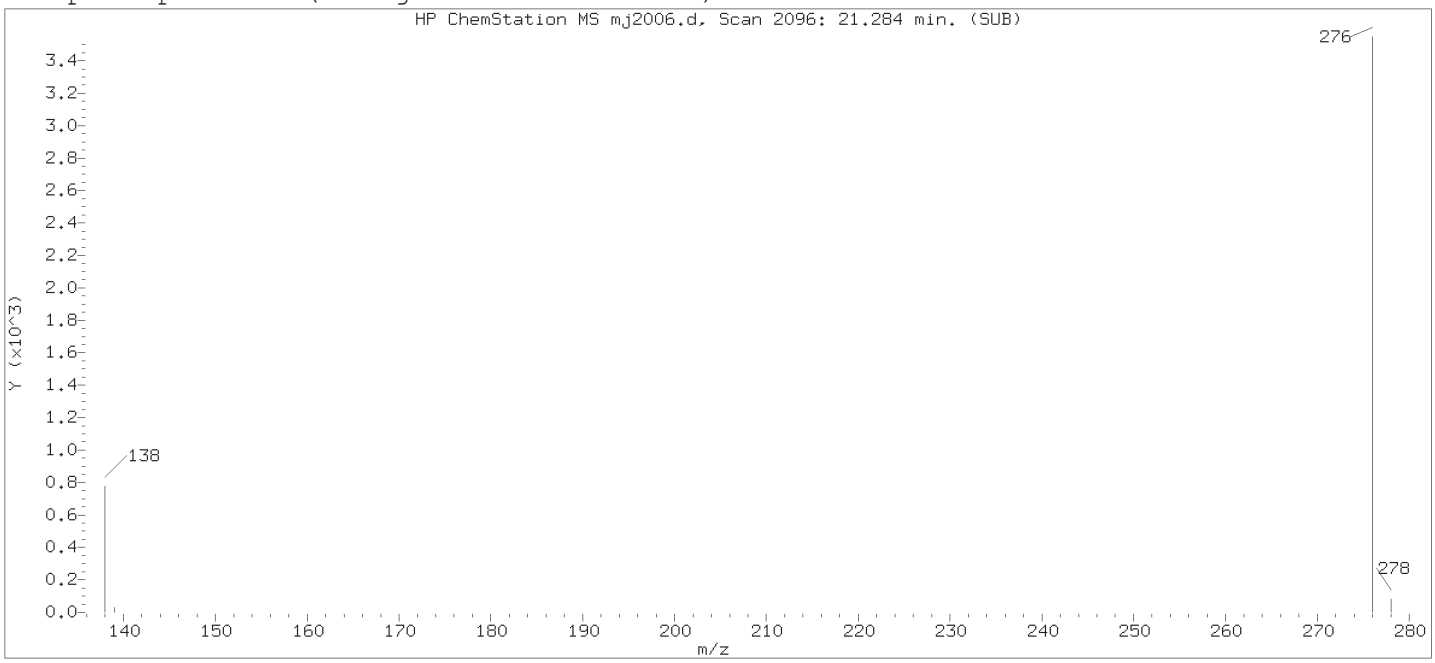
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2096
Retention Time (minutes) : 21.284
Quant Ion : 276.00
Area (flag) : 6102M
On-Column Amount (ng/ul) : 0.0105
Integration start scan : 2075 Integration stop scan: 2099
Y at integration start : 84 Y at integration end: 84

Reason for manual integration: improper integration

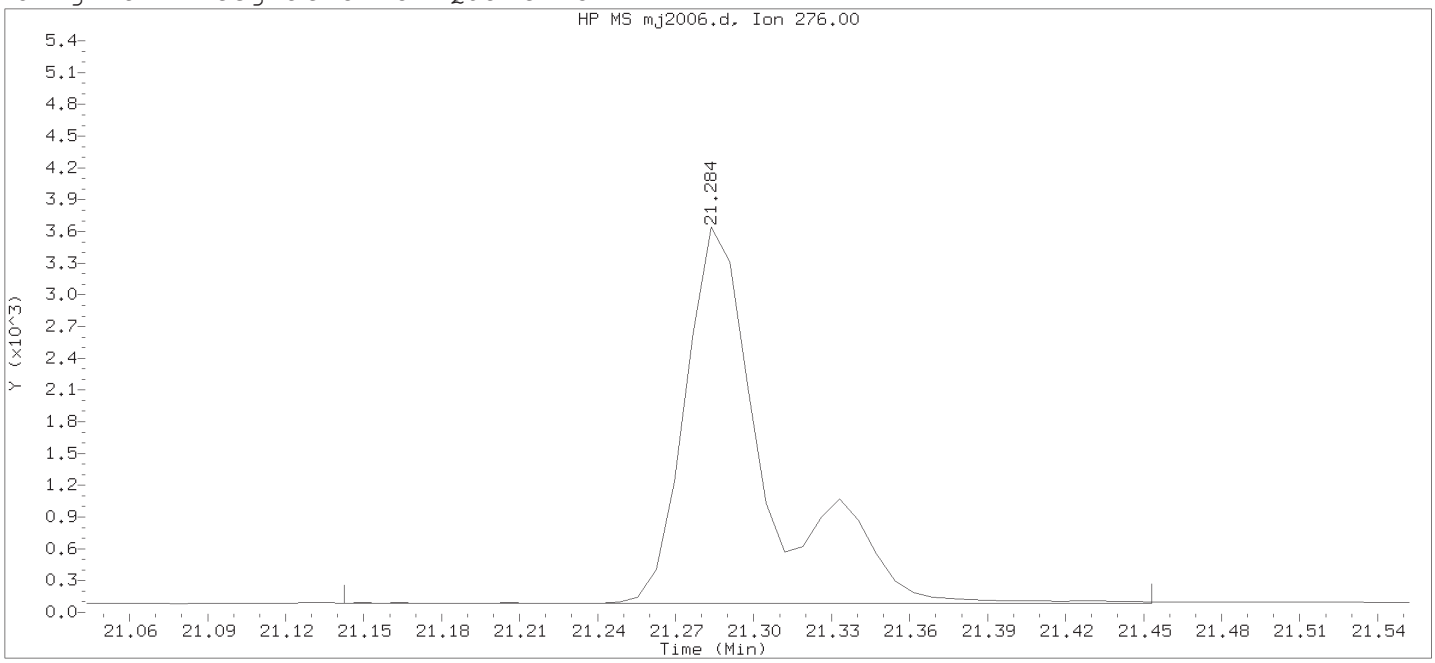
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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



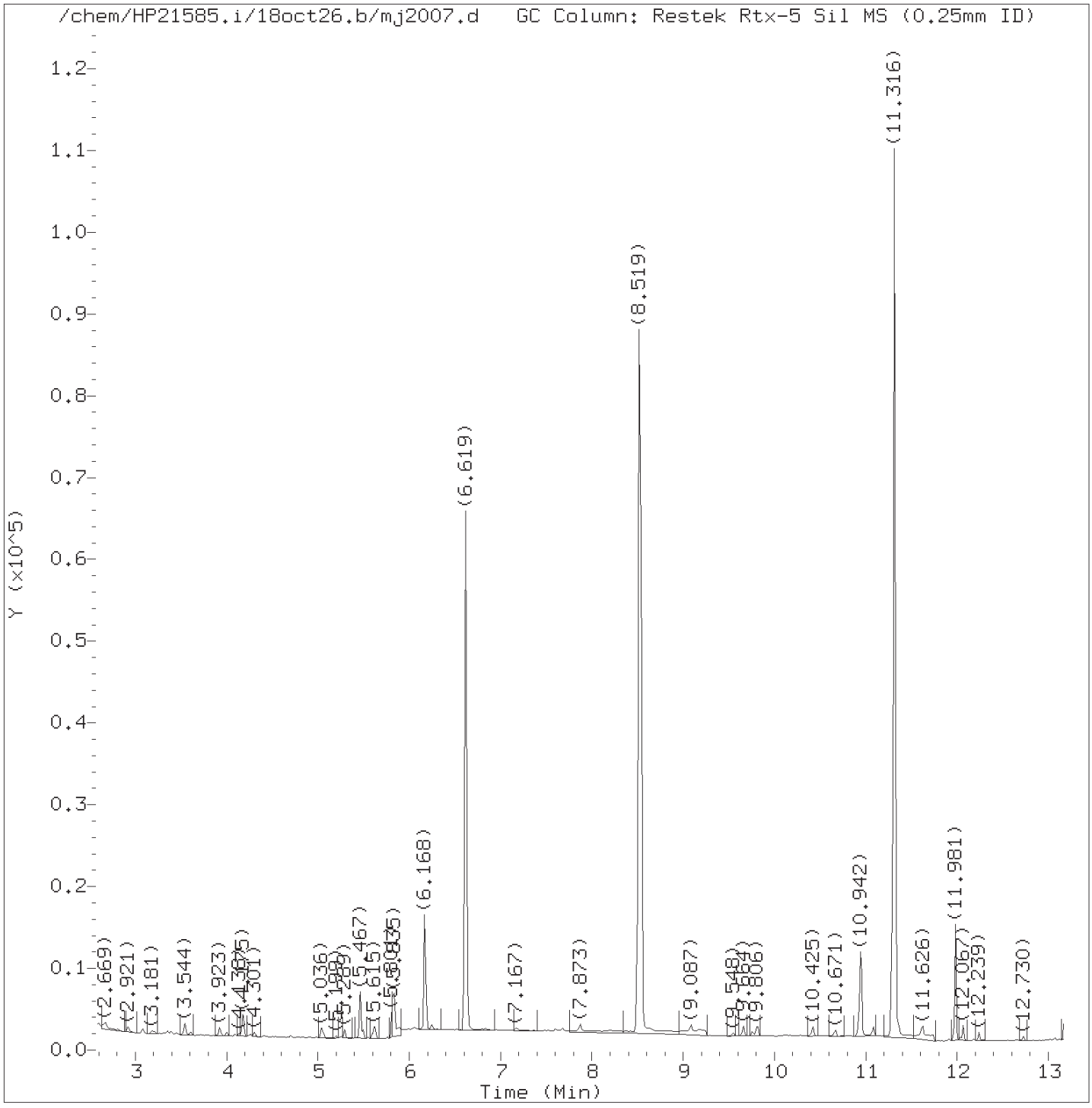
Data File: /chem/HP21585.i/18oct26.b/mj2006.d Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:02 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 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

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: 2176



Total Ion Chromatogram (TIC)

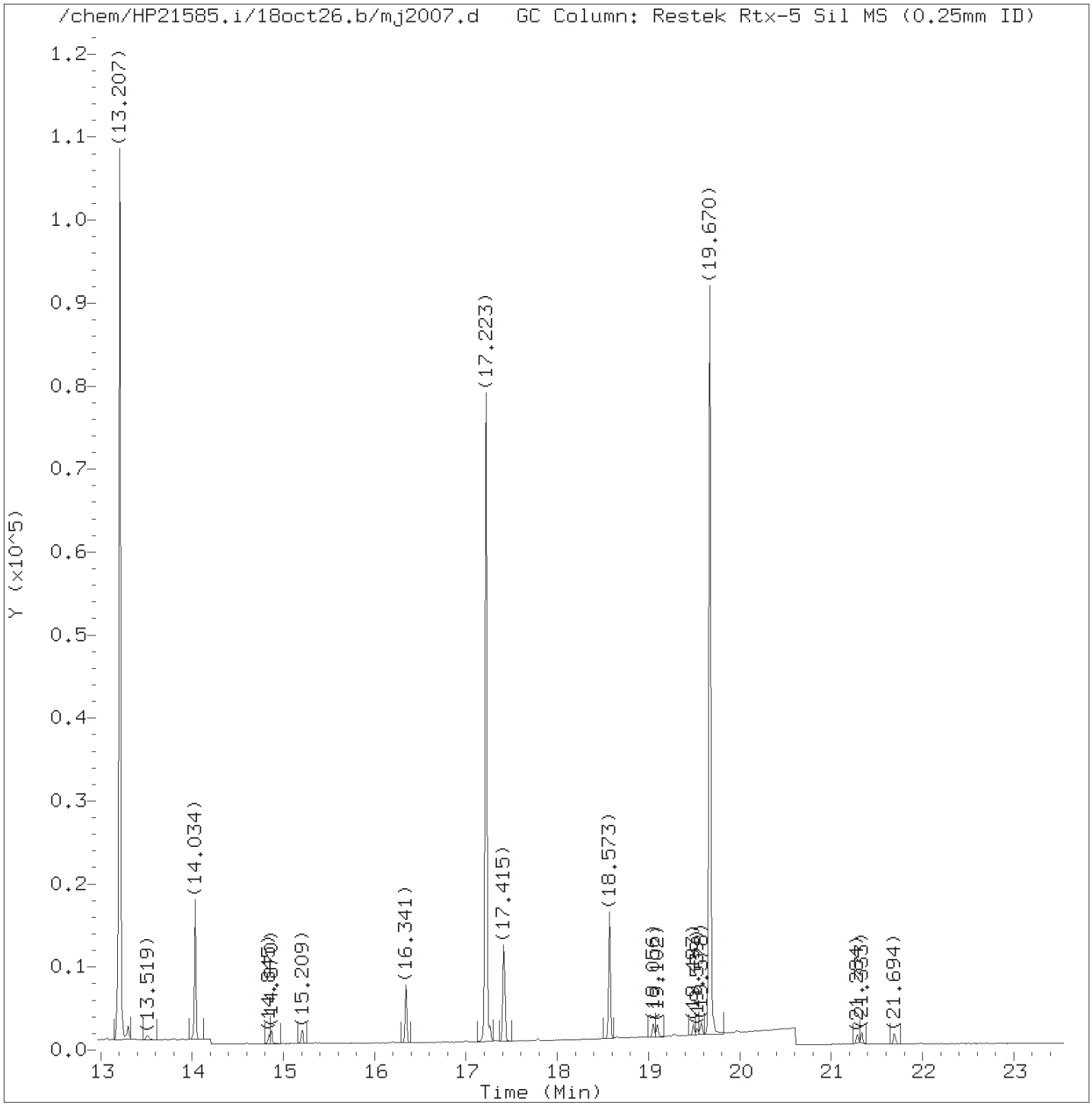
Target Revision 3.5

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

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 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

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 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

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

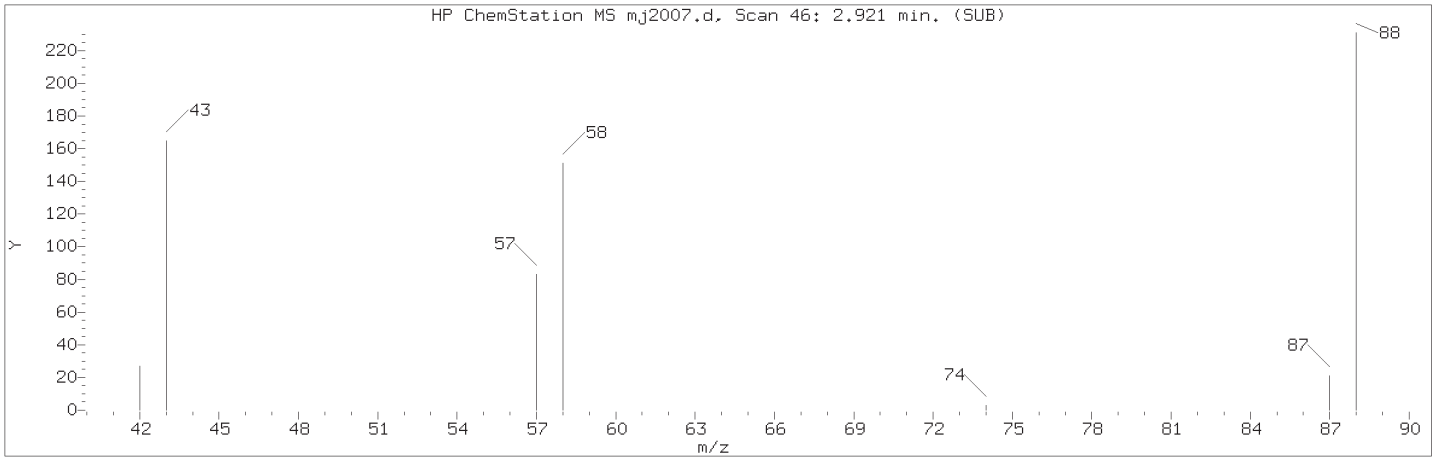
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 17:17
Date, time and analyst ID of latest file update: 27-Oct-2018 17:17 knb25316

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

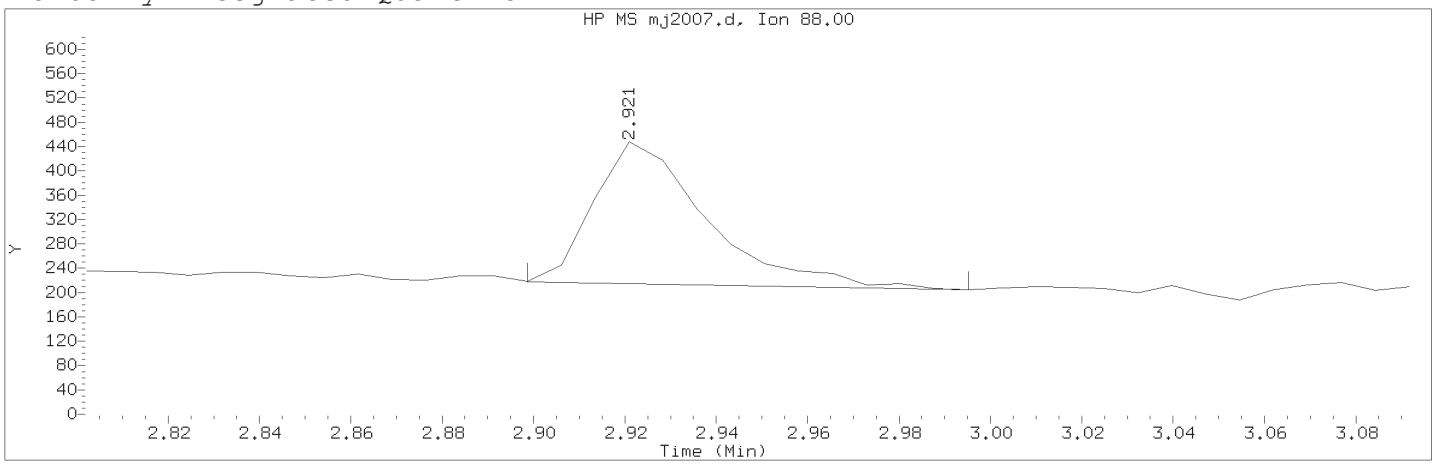
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
41) Benzo(g,h,i)perylene	(6)	21.694	276	1858	0.003

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

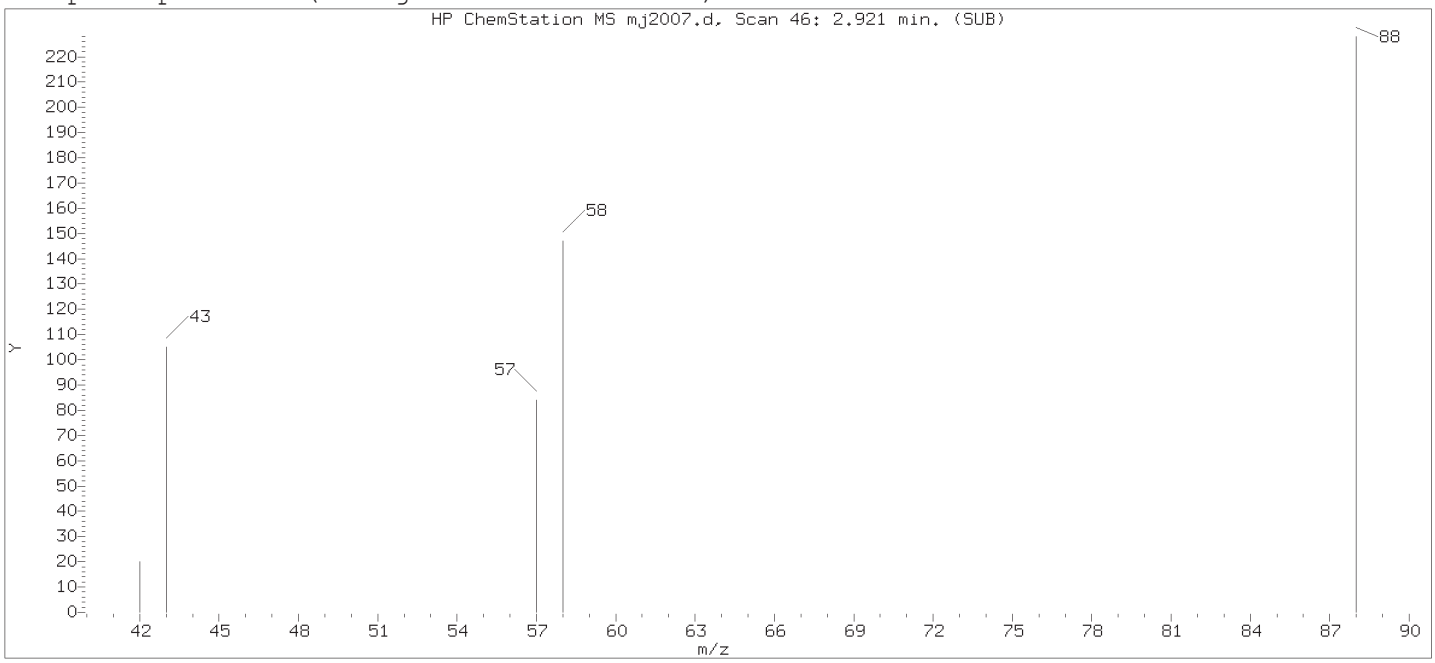
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 46
Retention Time (minutes) : 2.921
Quant Ion : 88.00
Area (flag) : 398M
On-Column Amount (ng/ul) : 0.0028
Integration start scan : 42 Integration stop scan: 55
Y at integration start : 218 Y at integration end: 205

Reason for manual integration: improper integration

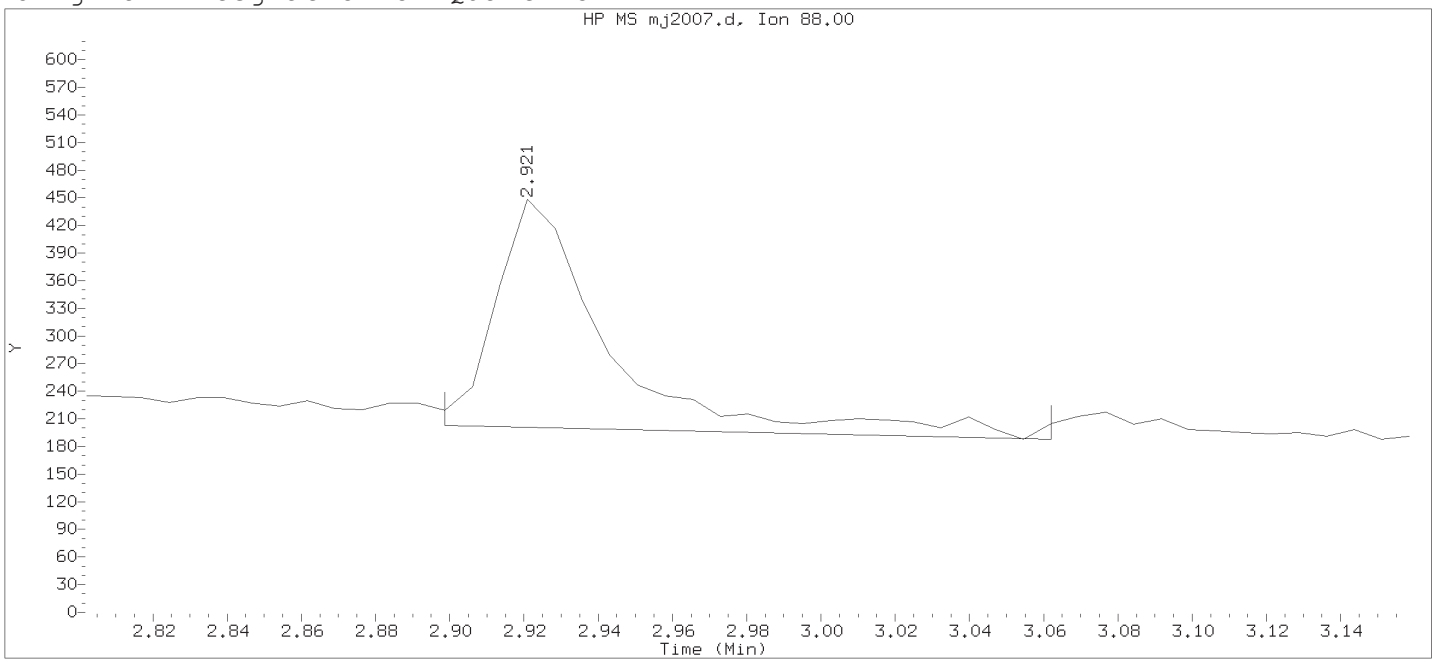
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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

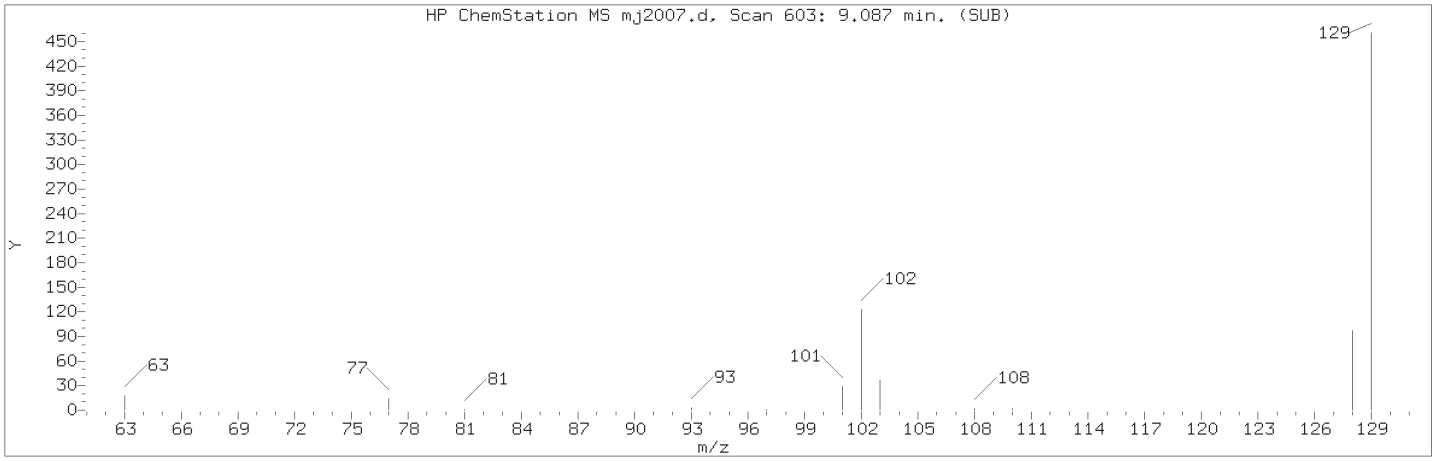
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

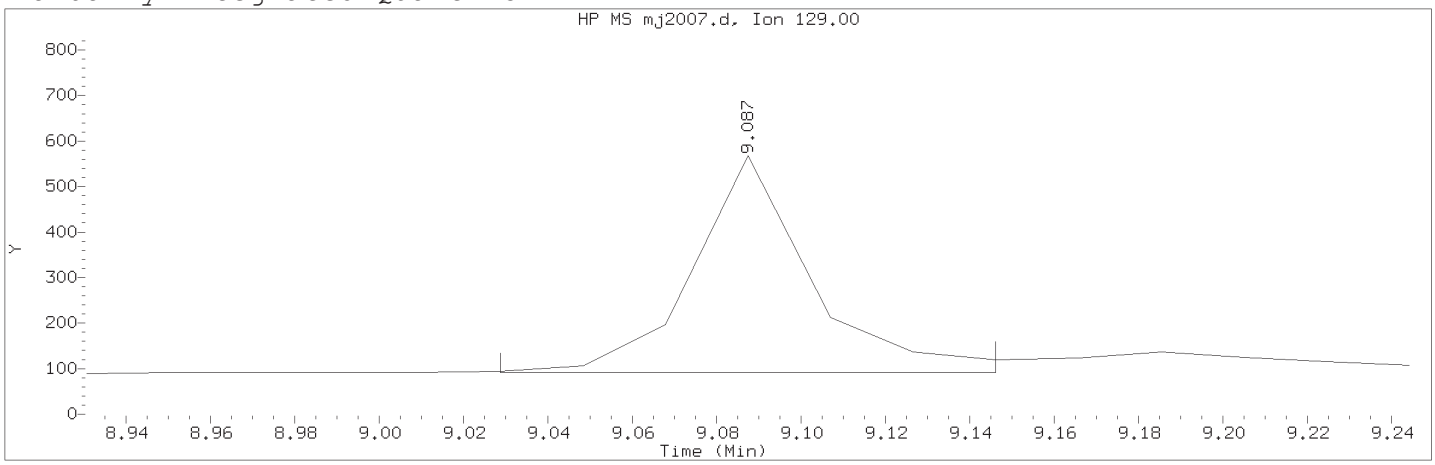
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 46		
Retention Time (minutes)	: 2.921		
Quant Ion	: 88.00		
Area	: 525		
On-column Amount (ng/ul)	: 0.0037		
Integration start scan	: 42	Integration stop scan:	64
Y at integration start	: 203	Y at integration end:	188

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used 107. Page 2 of 6

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

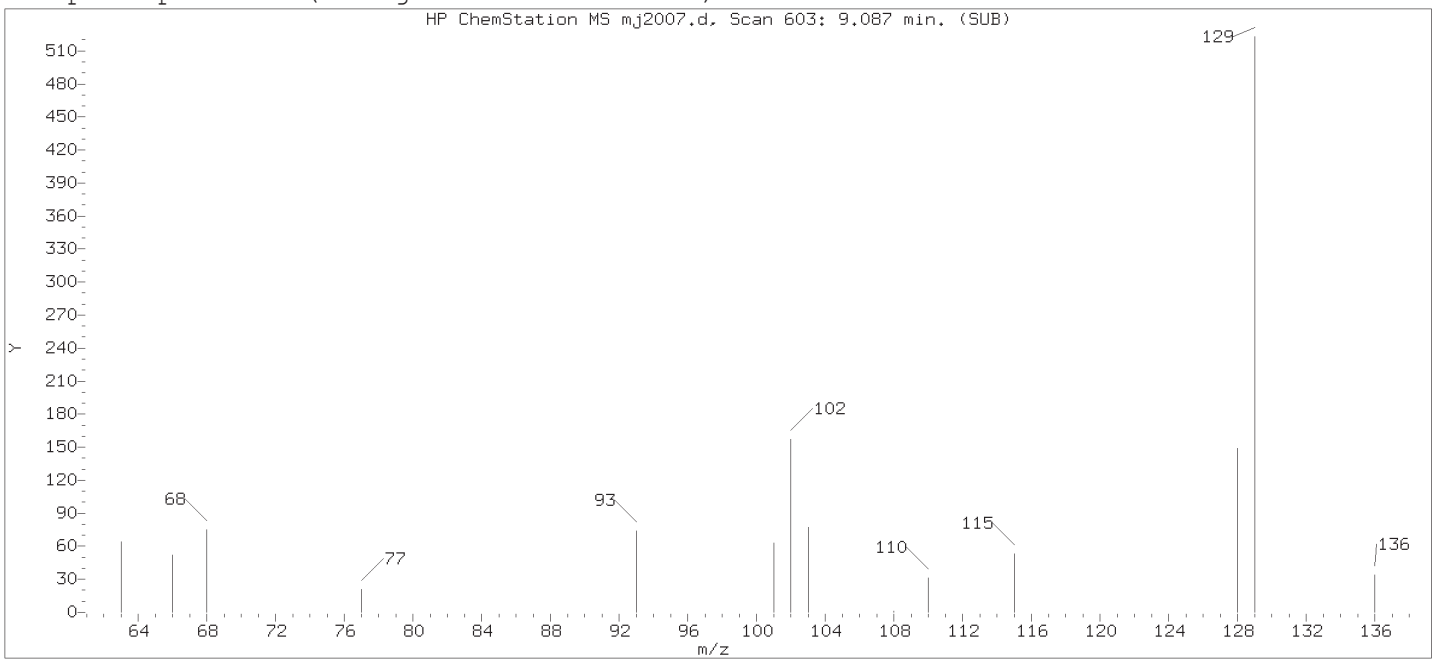
Compound Number	: 8		
Compound Name	: Quinoline		
Scan Number	: 603		
Retention Time (minutes)	: 9.087		
Quant Ion	: 129.00		
Area (flag)	: 806M		
On-Column Amount (ng/ul)	: 0.0020		
Integration start scan	: 599	Integration stop scan:	605
Y at integration start	: 91	Y at integration end:	91

Reason for manual integration: improper integration

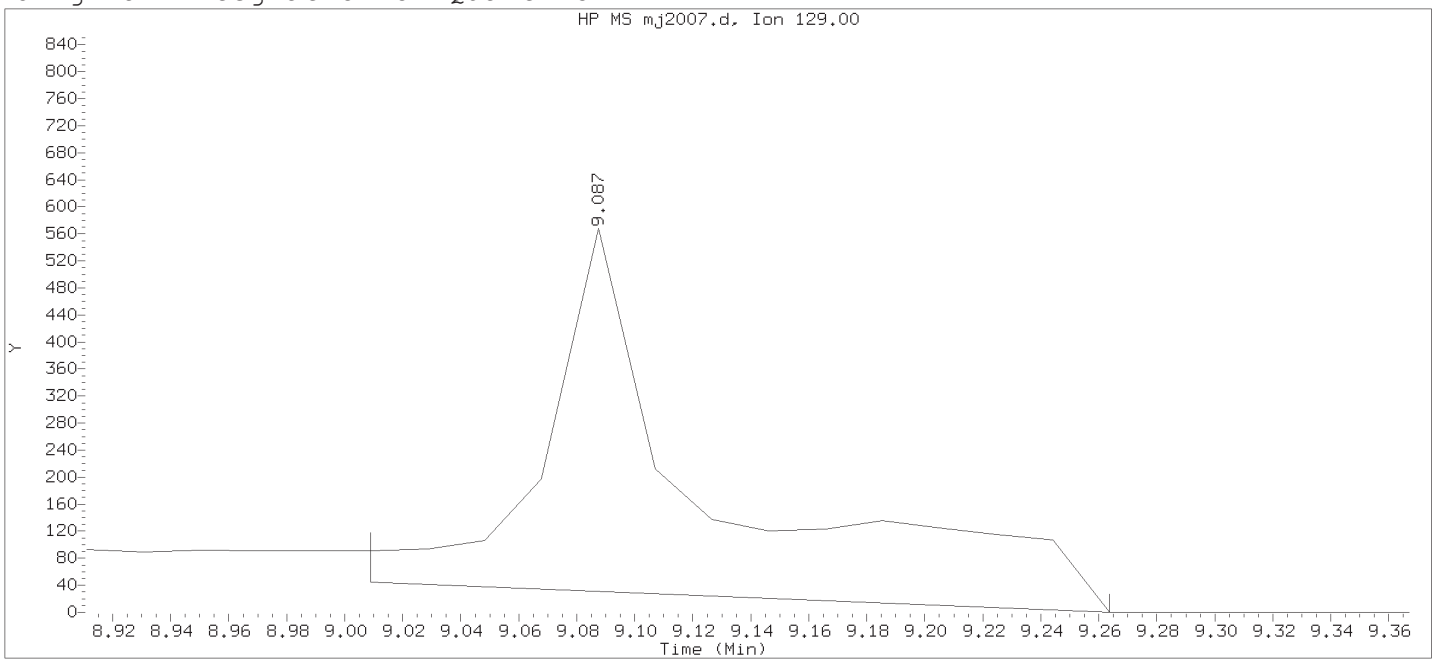
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

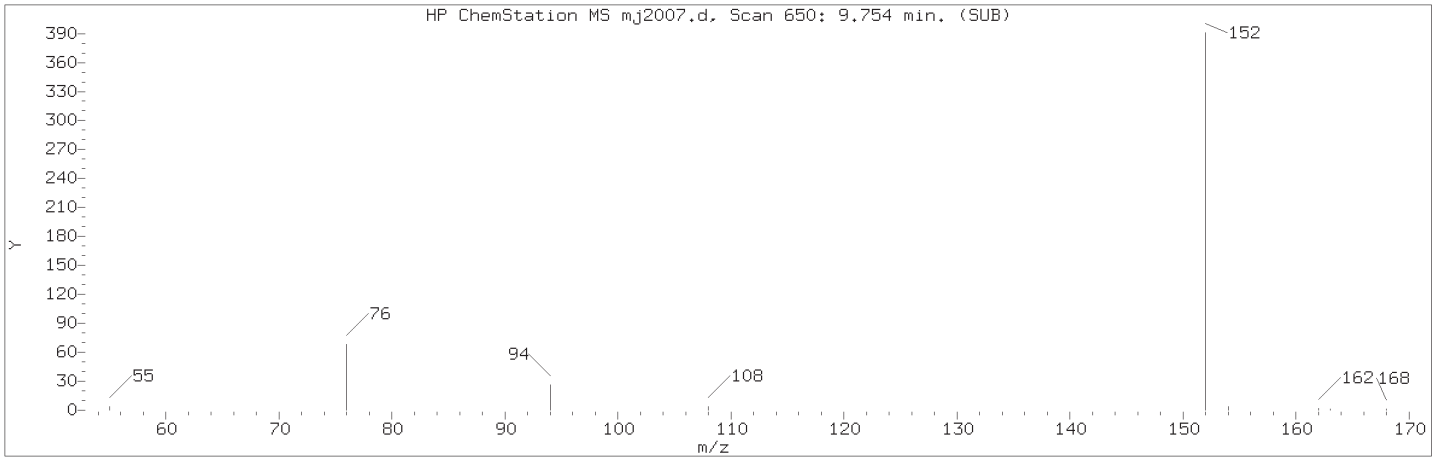
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

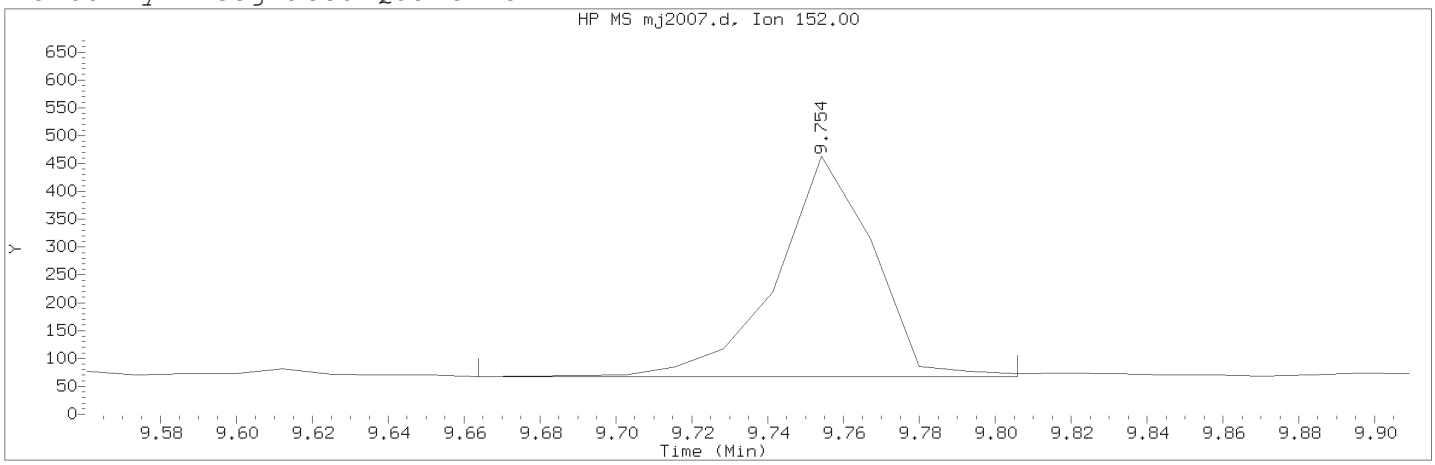
Compound Number	: 8		
Compound Name	: Quinoline		
Scan Number	: 603		
Retention Time (minutes)	: 9.087		
Quant Ion	: 129.00		
Area	: 2001		
On-column Amount (ng/ul)	: 0.0049		
Integration start scan	: 598	Integration stop scan:	611
Y at integration start	: 45	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: 2145

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

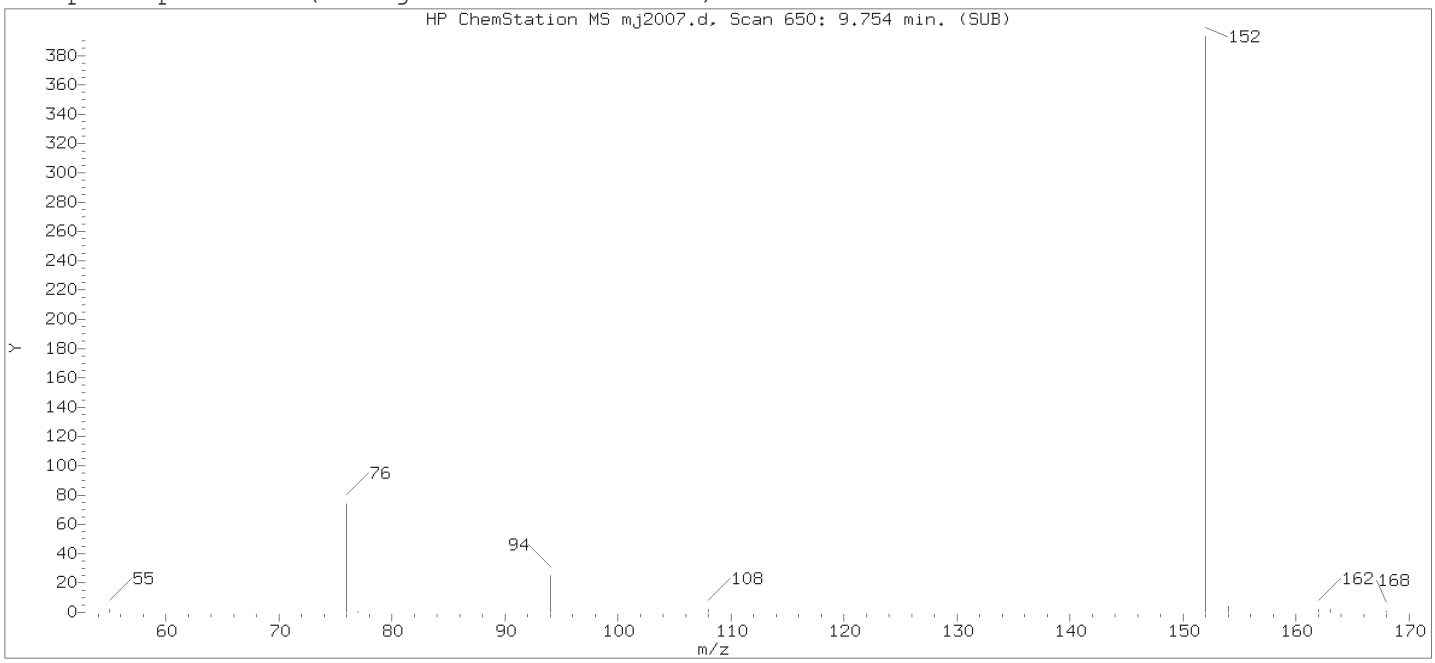
Compound Number : 10
Compound Name : 1-Methylnaphthalene-d10
Scan Number : 650
Retention Time (minutes) : 9.754
Quant Ion : 152.00
Area (flag) : 707M
On-Column Amount (ng/ul) : 0.0027
Integration start scan : 642 Integration stop scan: 653
Y at integration start : 67 Y at integration end: 67

Reason for manual integration: improper integration

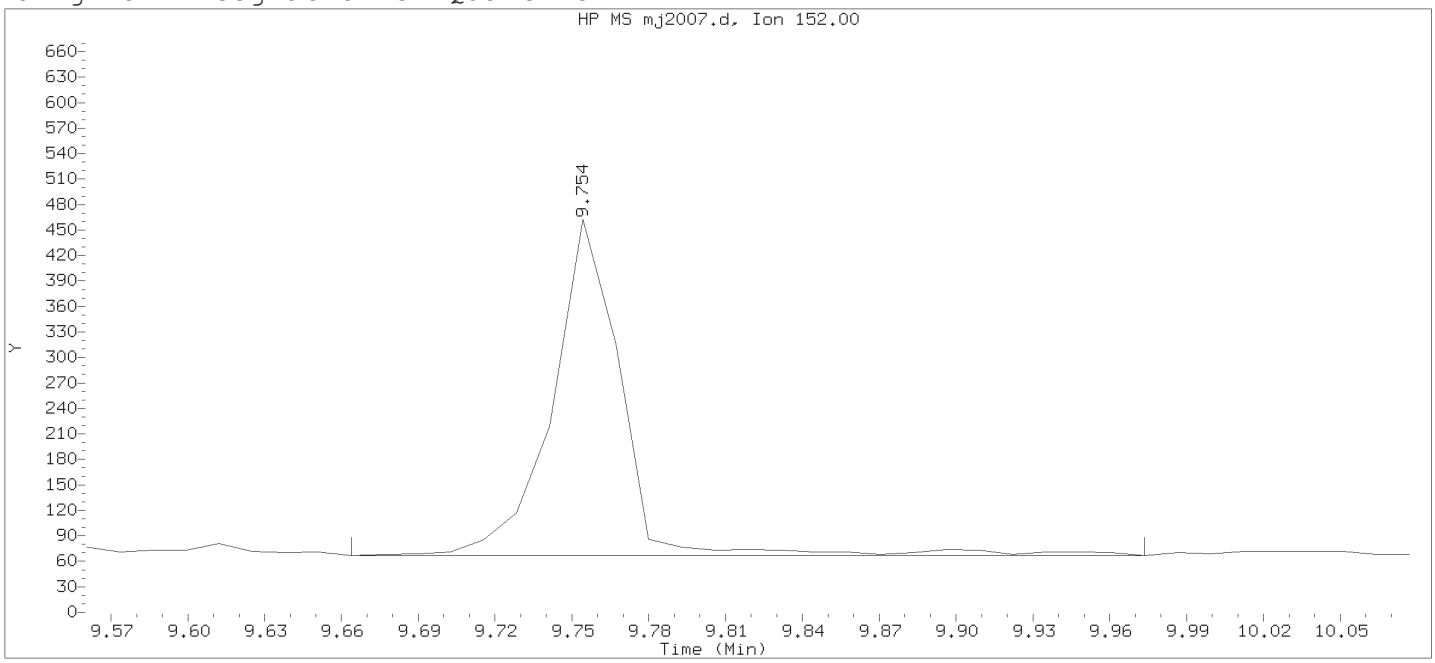
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

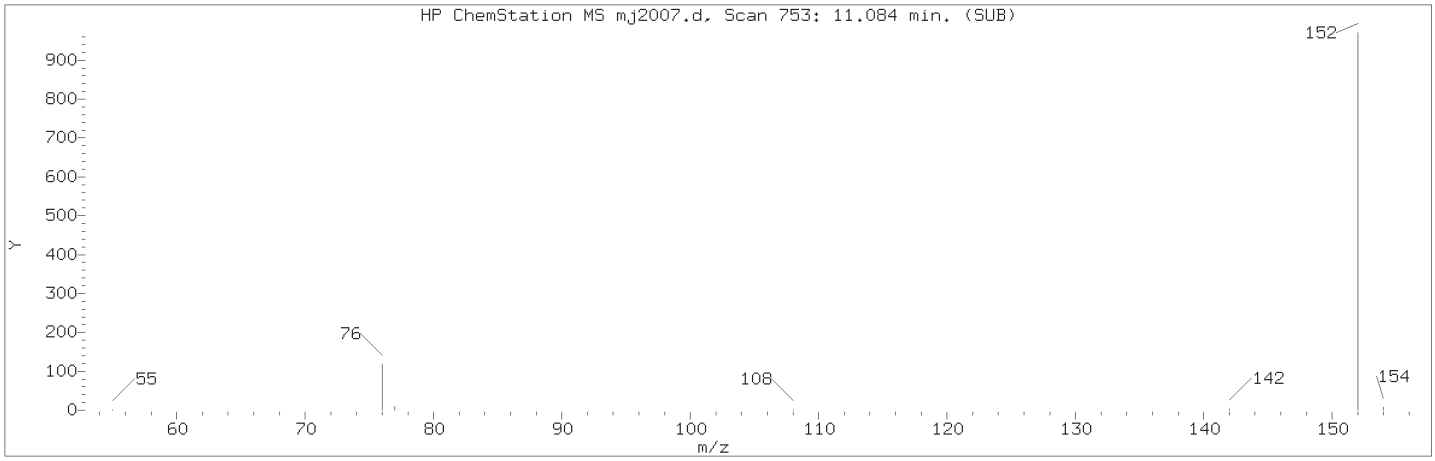
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

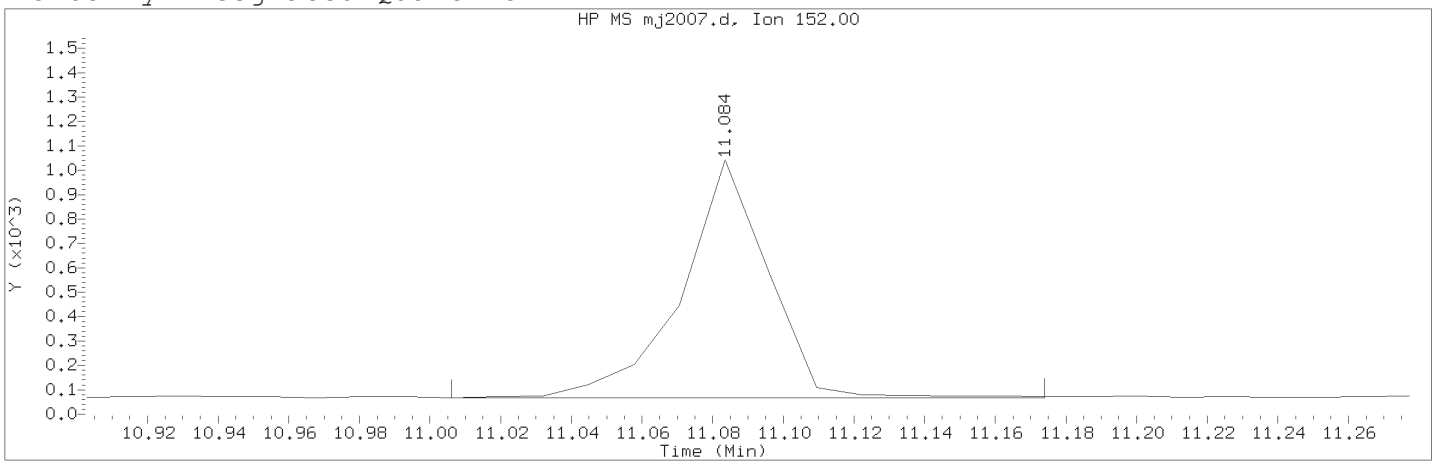
Compound Number	: 10		
Compound Name	: 1-Methylnaphthalene-d10		
Scan Number	: 650		
Retention Time (minutes)	: 9.754		
Quant Ion	: 152.00		
Area	: 741		
On-column Amount (ng/ul)	: 0.0028		
Integration start scan	: 642	Integration stop scan:	666
Y at integration start	: 67	Y at integration end:	67

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 2.0.76

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

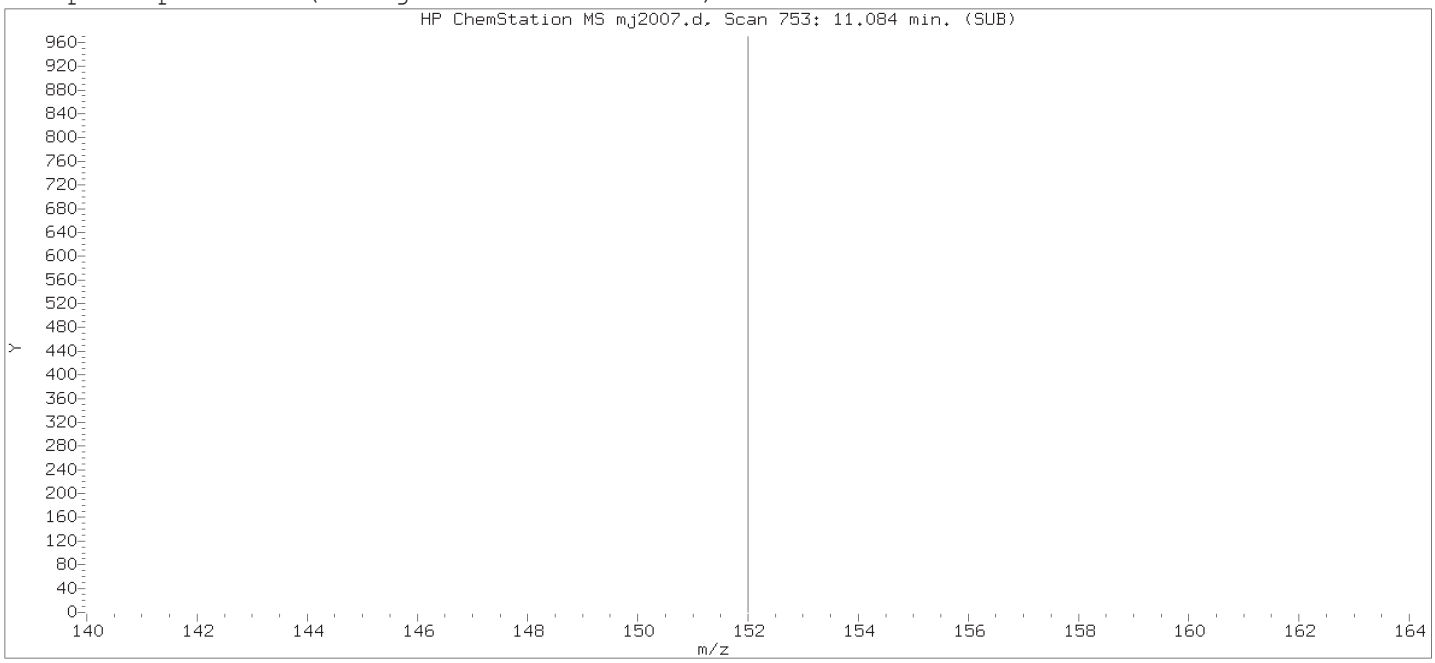
Compound Number : 13
Compound Name : Acenaphthylene
Scan Number : 753
Retention Time (minutes) : 11.084
Quant Ion : 152.00
Area (flag) : 1642M
On-Column Amount (ng/ul) : 0.0025
Integration start scan : 746 Integration stop scan: 759
Y at integration start : 68 Y at integration end: 68

Reason for manual integration: improper integration

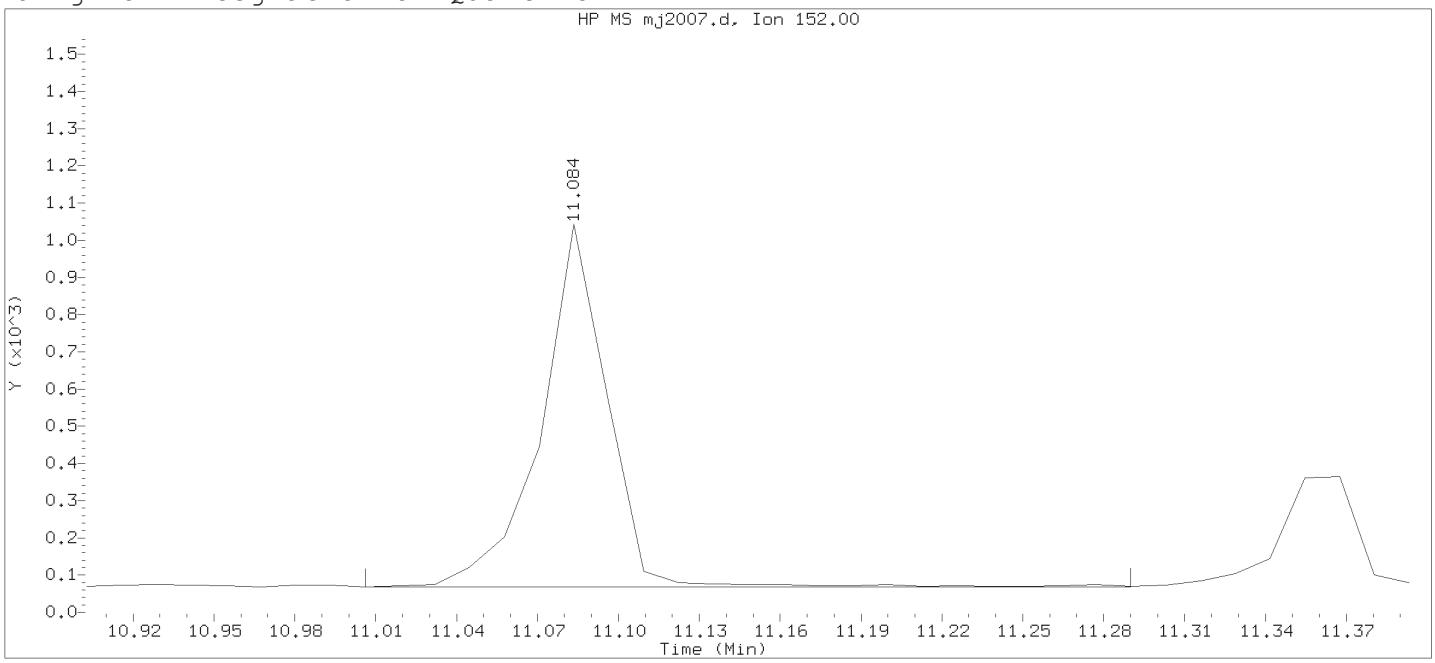
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

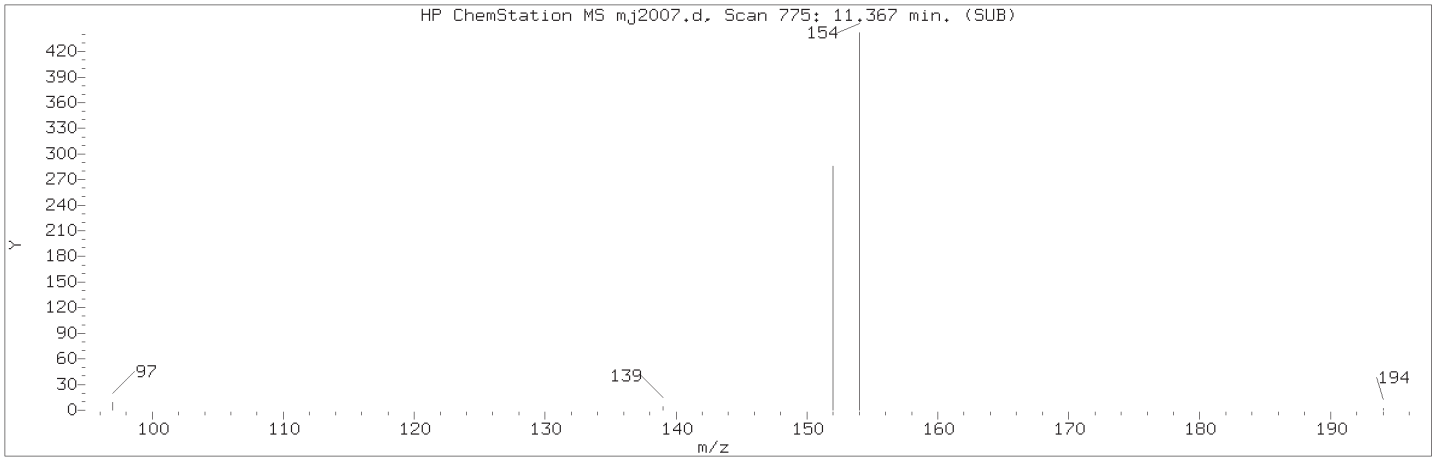
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

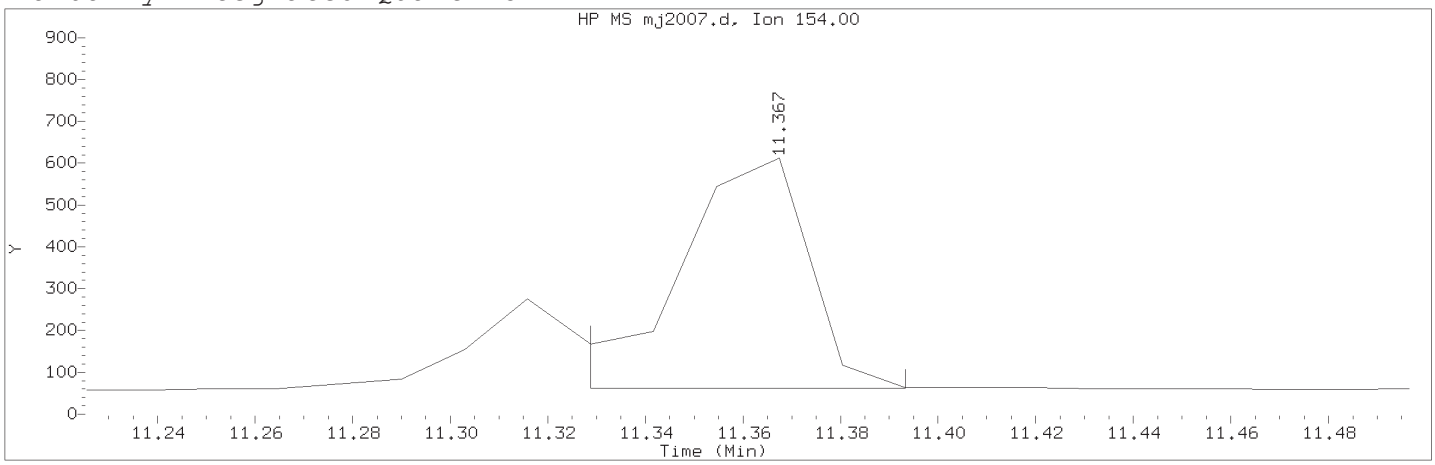
Compound Number	: 13		
Compound Name	: Acenaphthylene		
Scan Number	: 753		
Retention Time (minutes)	: 11.084		
Quant Ion	: 152.00		
Area	: 1663		
On-column Amount (ng/ul)	: 0.0025		
Integration start scan	: 746	Integration stop scan:	768
Y at integration start	: 68	Y at integration end:	68

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used 107. Page 2145

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

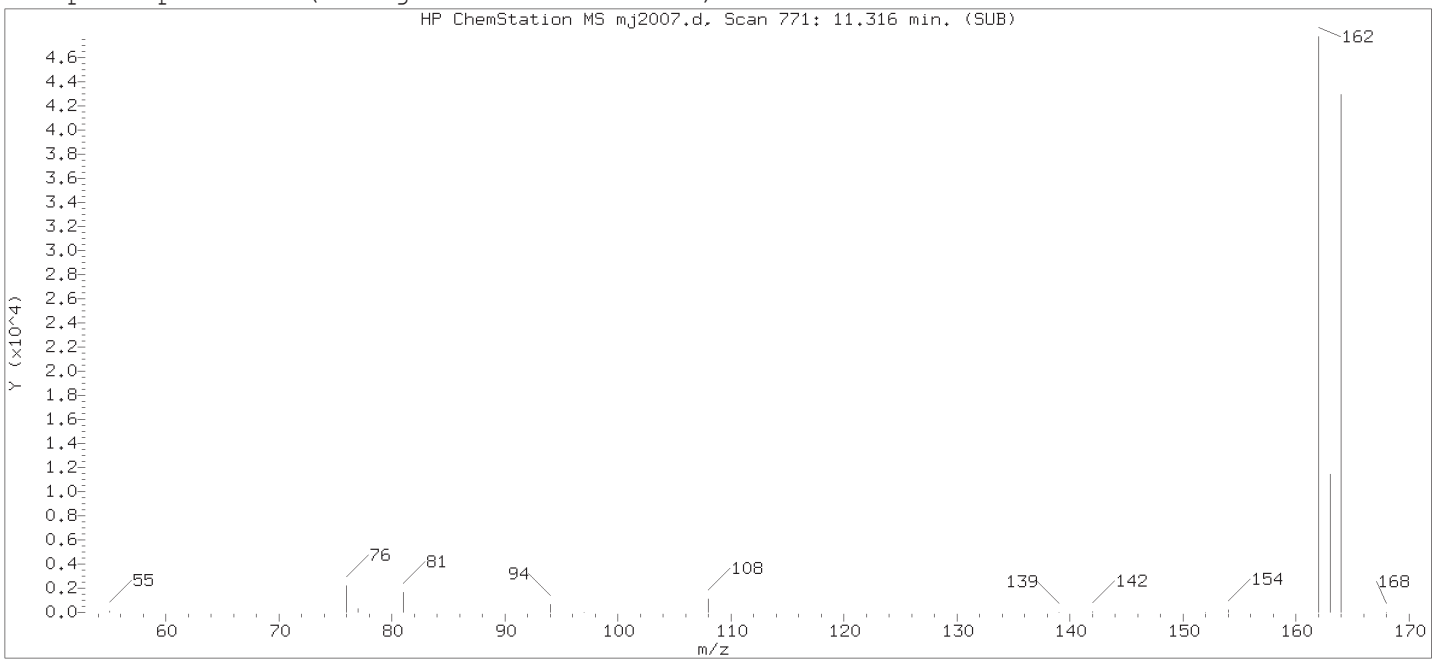
Compound Number : 15
Compound Name : Acenaphthene
Scan Number : 775
Retention Time (minutes) : 11.367
Quant Ion : 154.00
Area (flag) : 966M
On-Column Amount (ng/ul) : 0.0024
Integration start scan : 771 Integration stop scan: 776
Y at integration start : 62 Y at integration end: 62

Reason for manual integration: improper integration

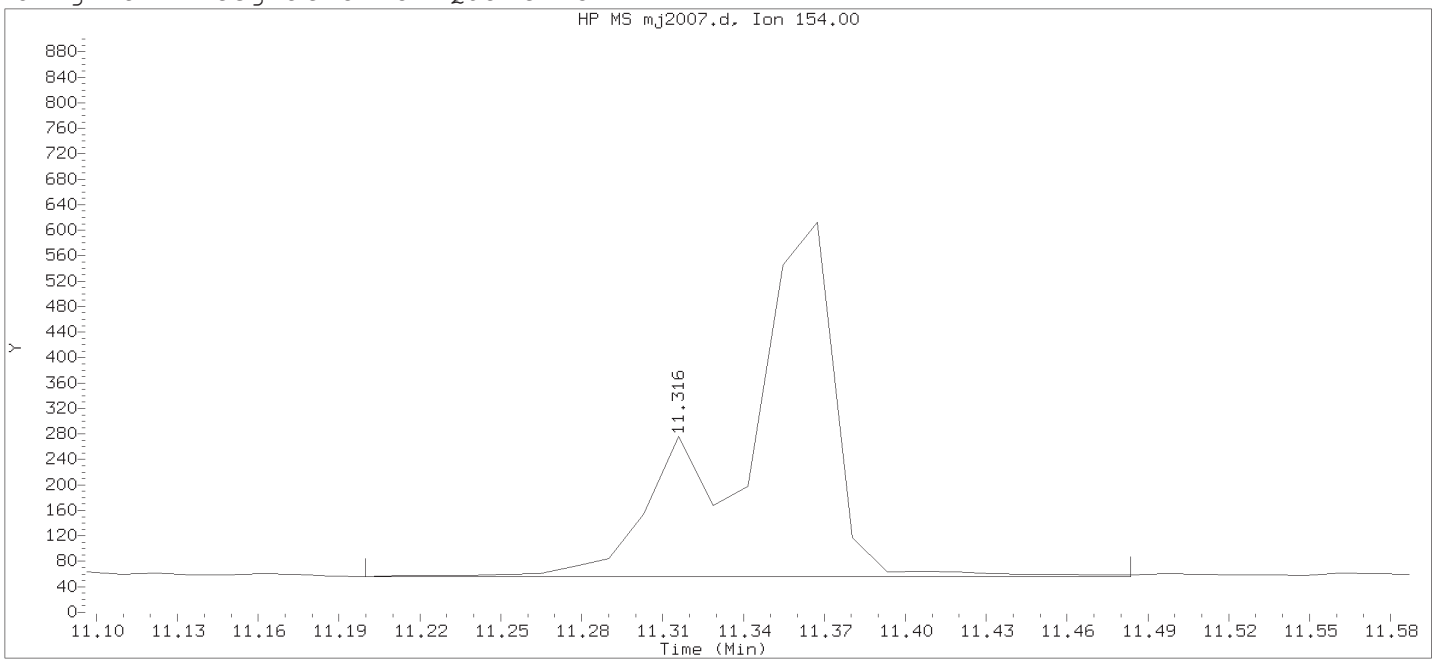
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

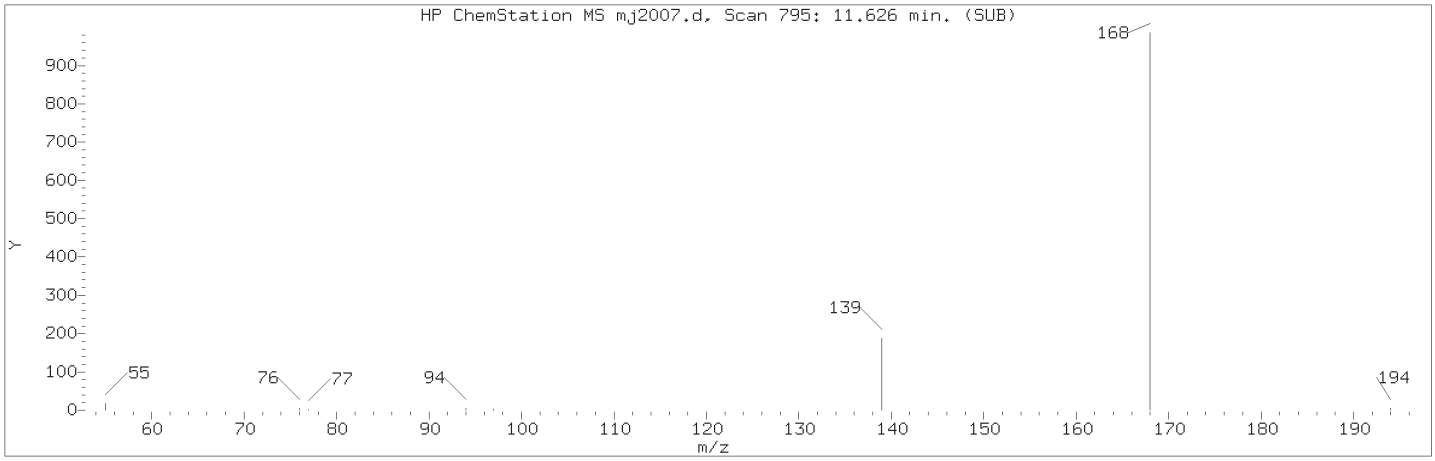
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

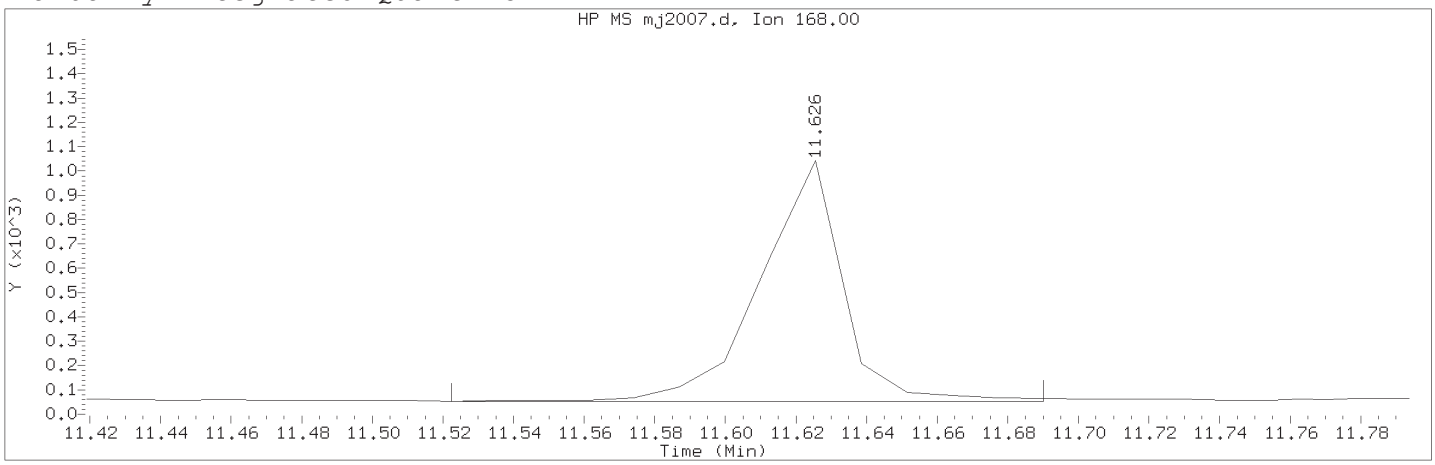
Compound Number	: 15		
Compound Name	: Acenaphthene		
Scan Number	: 771		
Retention Time (minutes)	: 11.316		
Quant Ion	: 154.00		
Area	: 1375		
On-column Amount (ng/ul)	: 0.0034		
Integration start scan	: 761	Integration stop scan:	783
Y at integration start	: 56	Y at integration end:	56

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 2015

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

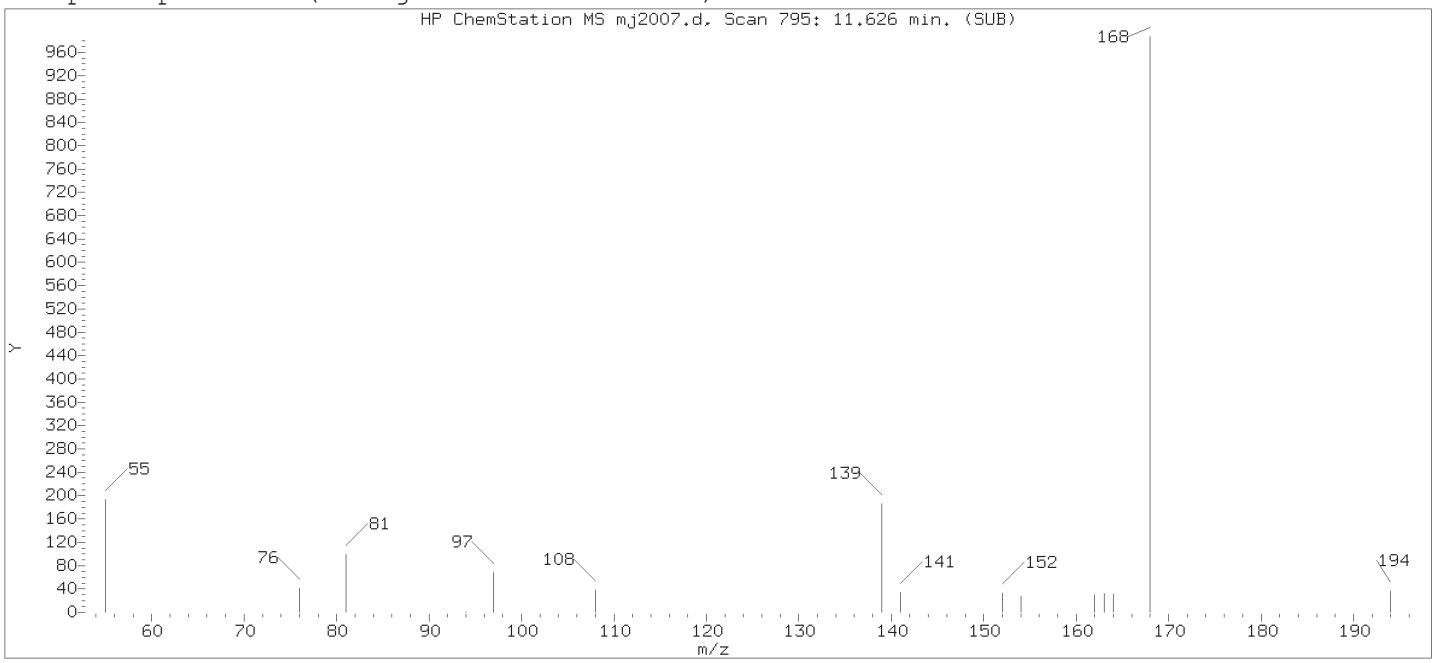
Compound Number : 16
Compound Name : Dibenzofuran
Scan Number : 795
Retention Time (minutes) : 11.626
Quant Ion : 168.00
Area (flag) : 1299M
On-Column Amount (ng/ul) : 0.0024
Integration start scan : 786 Integration stop scan: 799
Y at integration start : 53 Y at integration end: 53

Reason for manual integration: improper integration

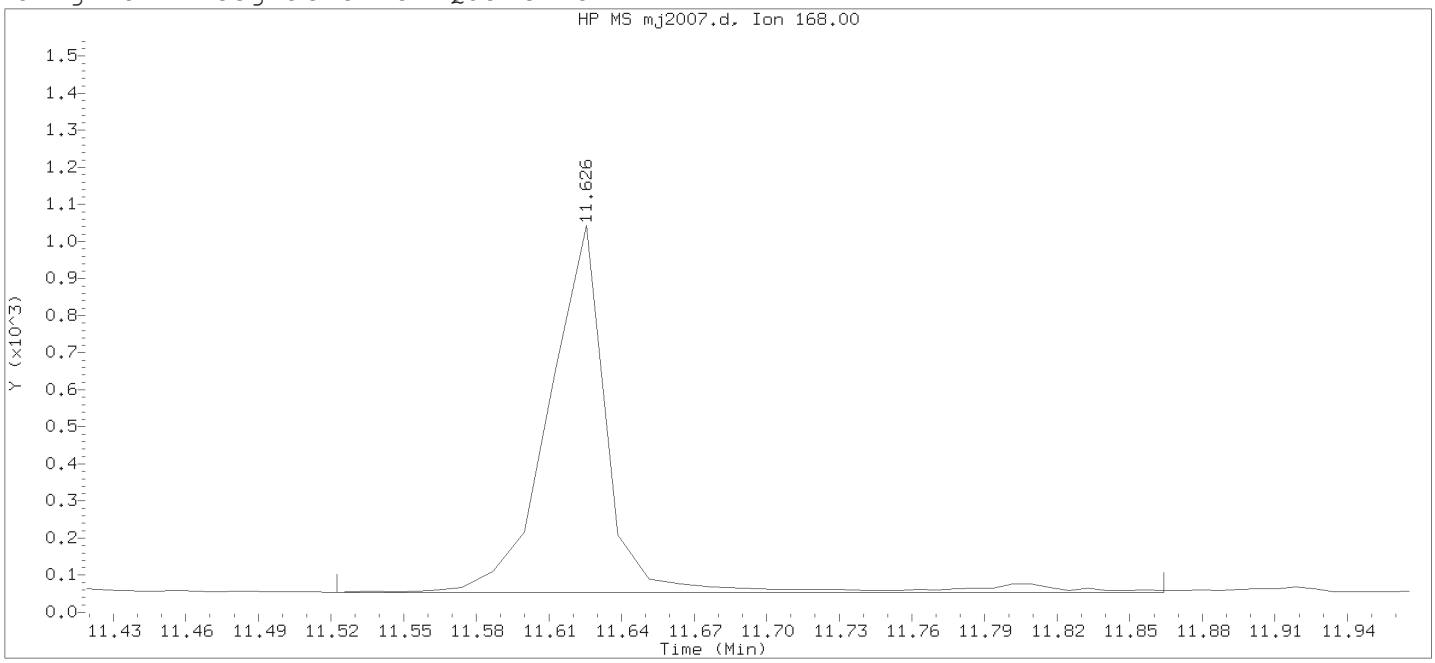
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

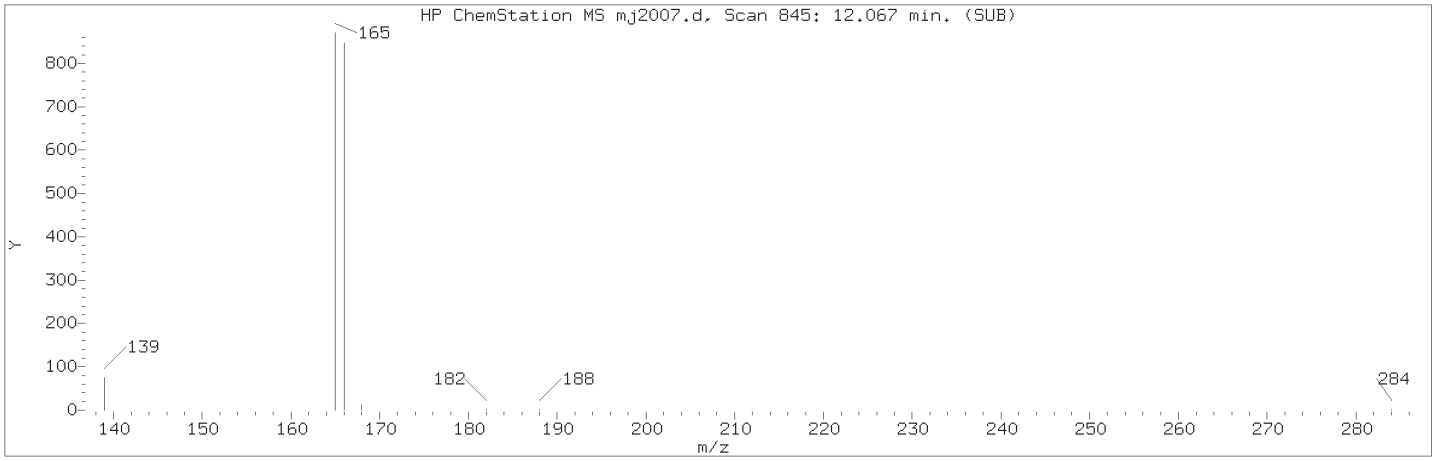
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

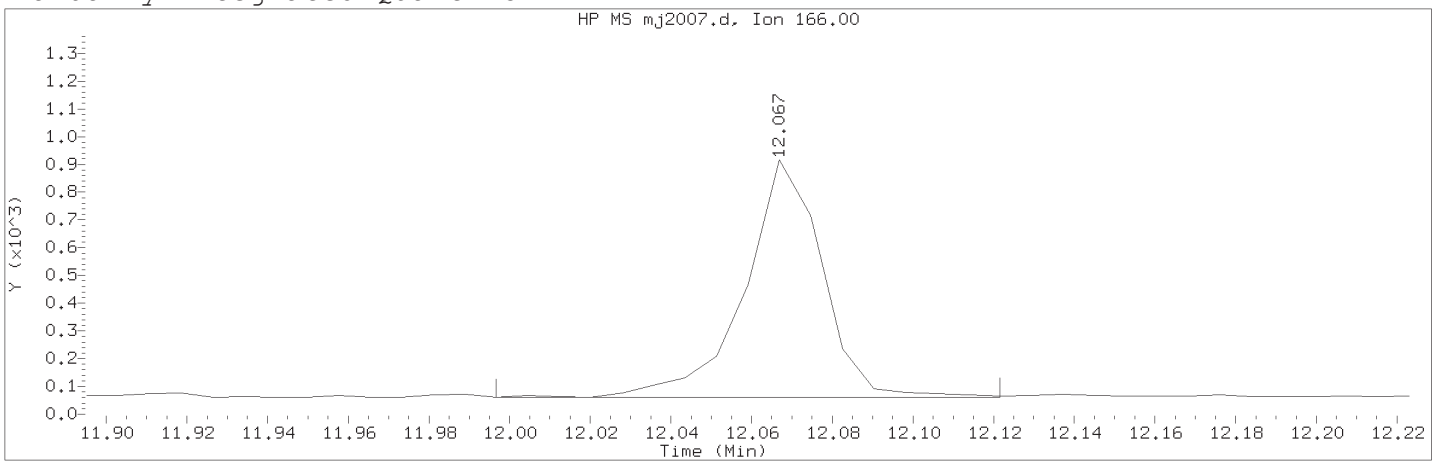
Compound Number	: 16		
Compound Name	: Dibenzofuran		
Scan Number	: 795		
Retention Time (minutes)	: 11.626		
Quant Ion	: 168.00		
Area	: 1512		
On-column Amount (ng/ul)	: 0.0027		
Integration start scan	: 786	Integration stop scan:	818
Y at integration start	: 53	Y at integration end:	53

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 1007. Page 2 of 6

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

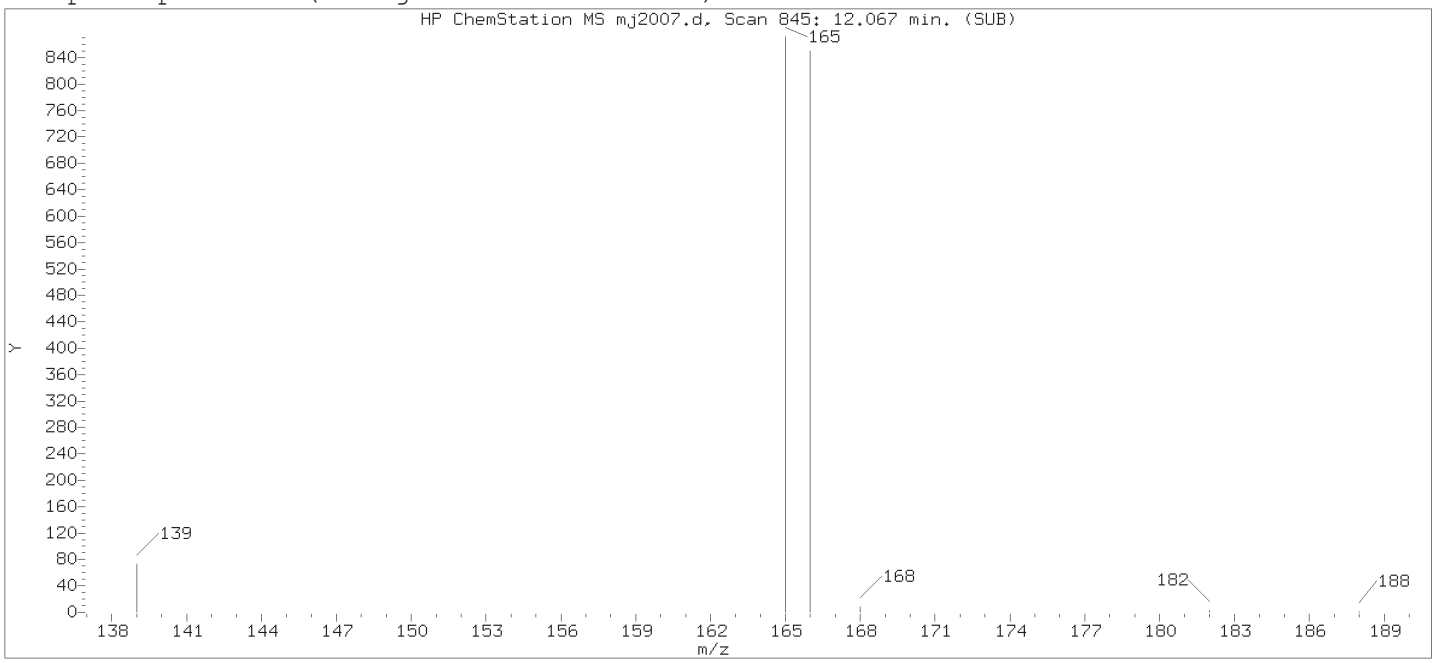
Compound Number : 18
Compound Name : Fluorene
Scan Number : 845
Retention Time (minutes) : 12.067
Quant Ion : 166.00
Area (flag) : 1250M
On-Column Amount (ng/ul) : 0.0027
Integration start scan : 835 Integration stop scan: 851
Y at integration start : 60 Y at integration end: 60

Reason for manual integration: improper integration

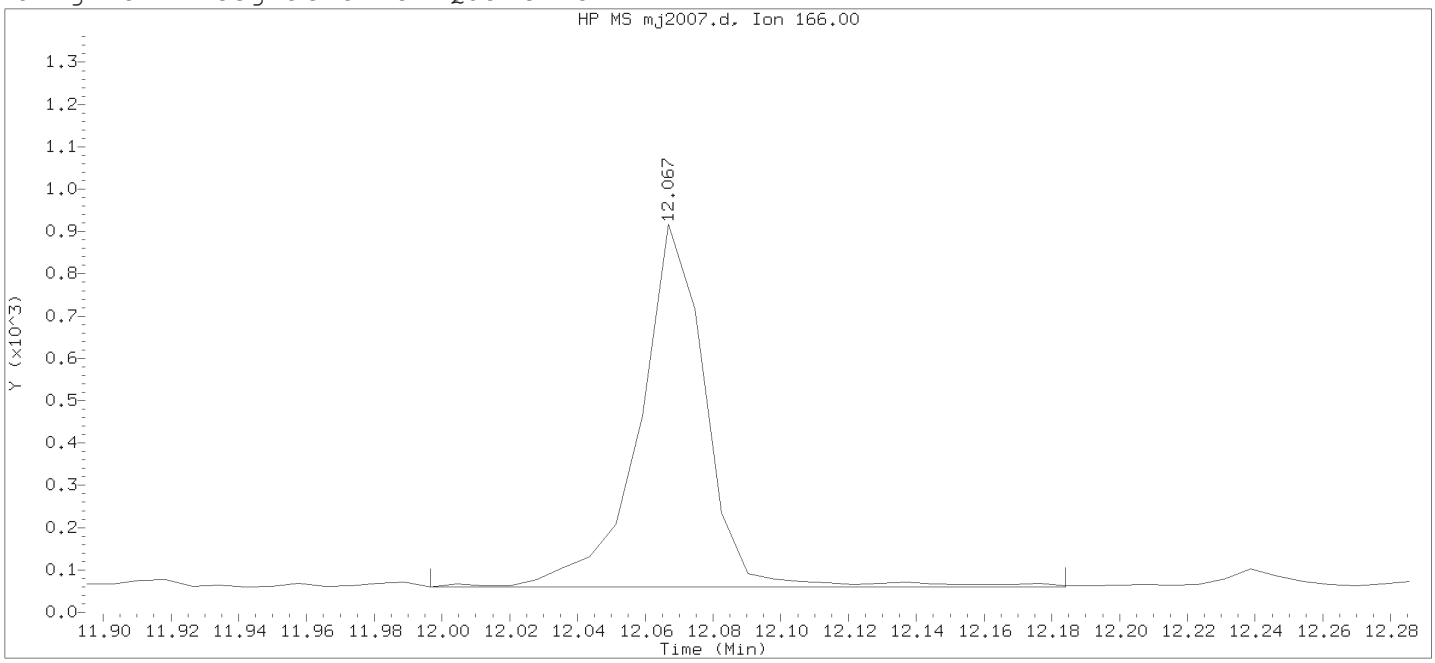
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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

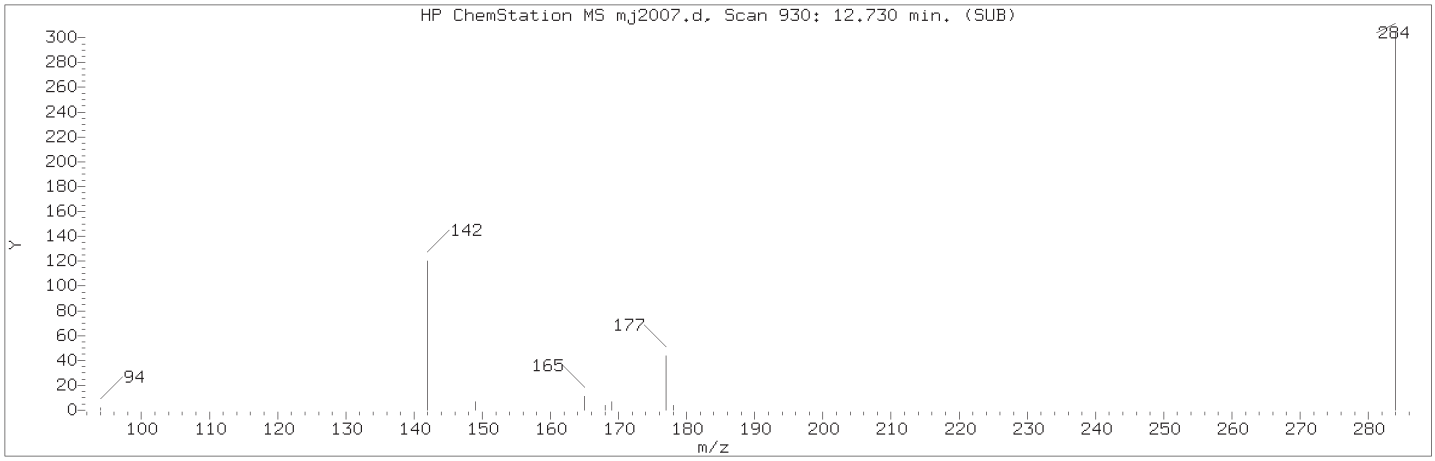
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

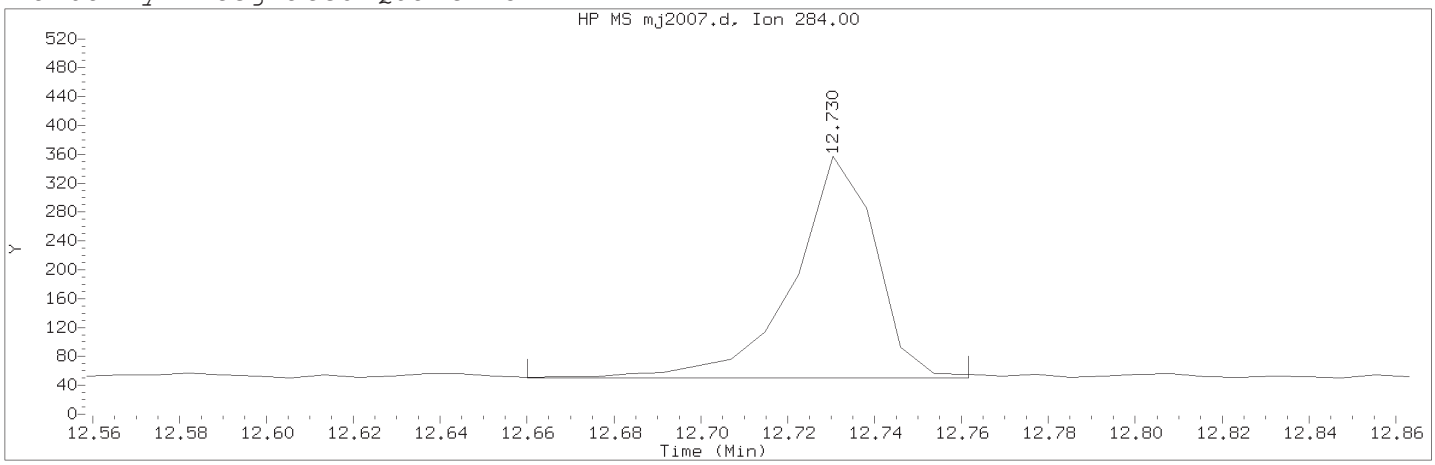
Compound Number	: 18		
Compound Name	: Fluorene		
Scan Number	: 845		
Retention Time (minutes)	: 12.067		
Quant Ion	: 166.00		
Area	: 1179		
On-column Amount (ng/ul)	: 0.0025		
Integration start scan	: 835	Integration stop scan:	859
Y at integration start	: 60	Y at integration end:	60

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 1007. Page 2435

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

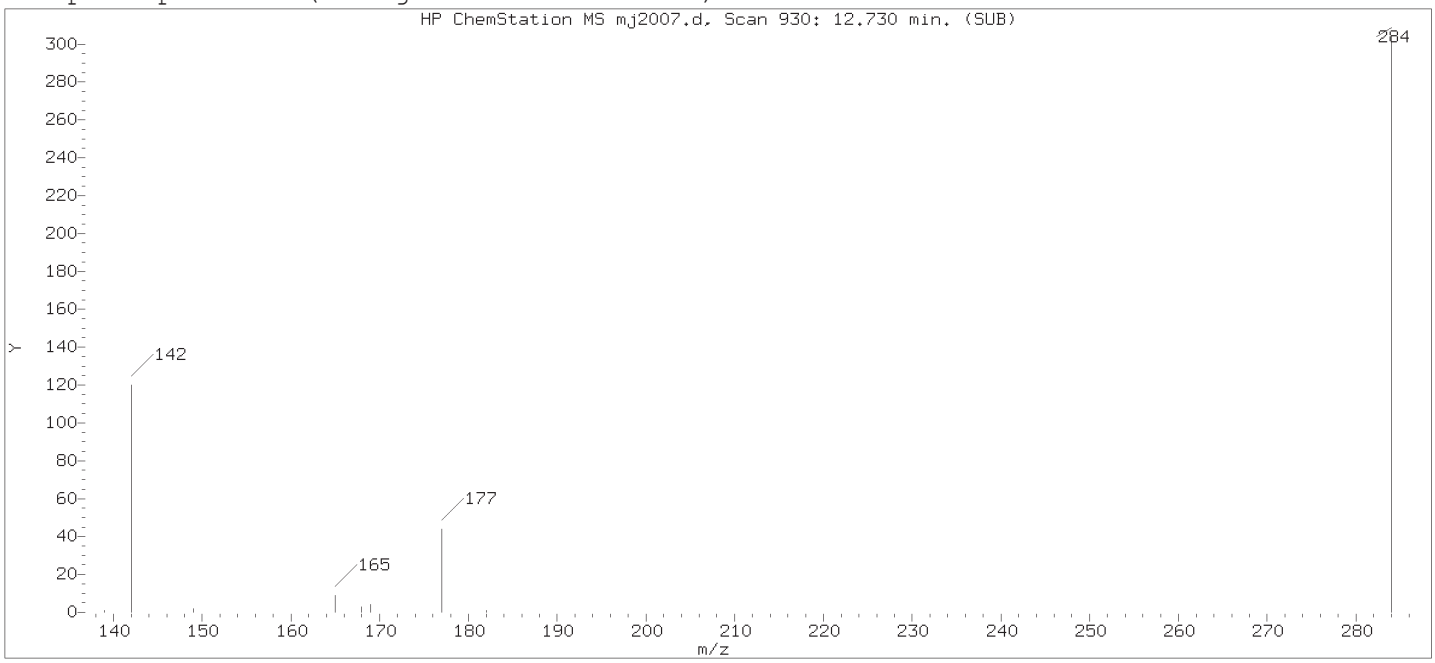
Compound Number : 19
Compound Name : Hexachlorobenzene
Scan Number : 930
Retention Time (minutes) : 12.730
Quant Ion : 284.00
Area (flag) : 405M
On-Column Amount (ng/ul) : 0.0028
Integration start scan : 920 Integration stop scan: 933
Y at integration start : 50 Y at integration end: 50

Reason for manual integration: improper integration

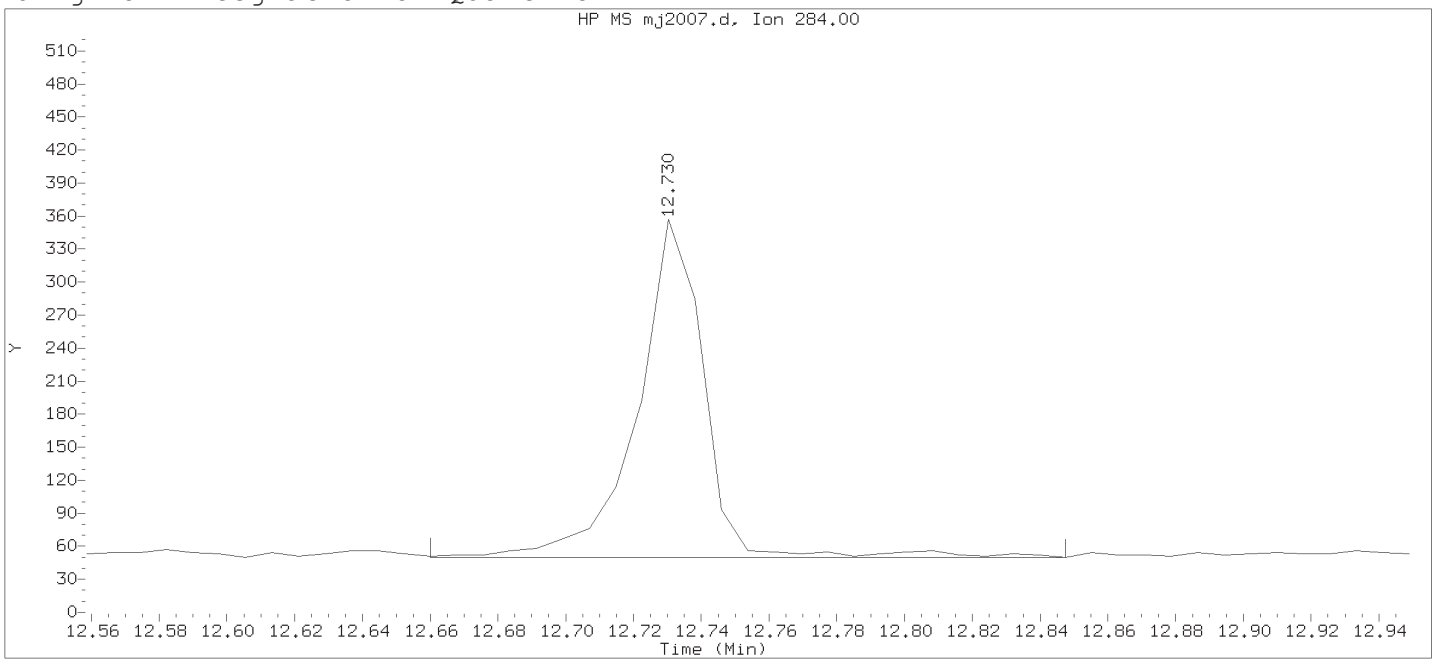
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

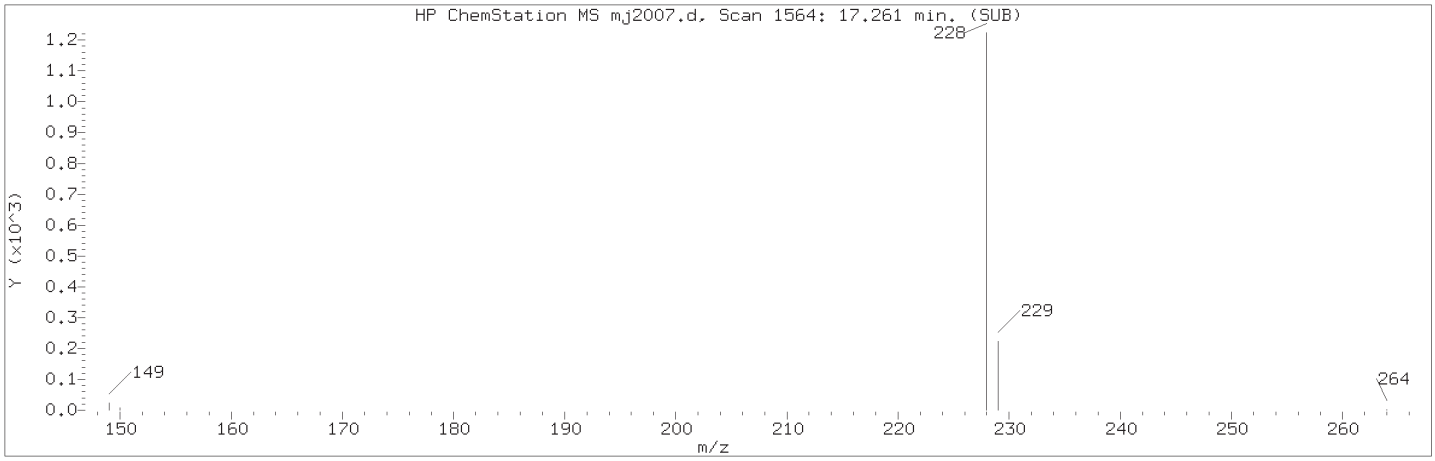
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

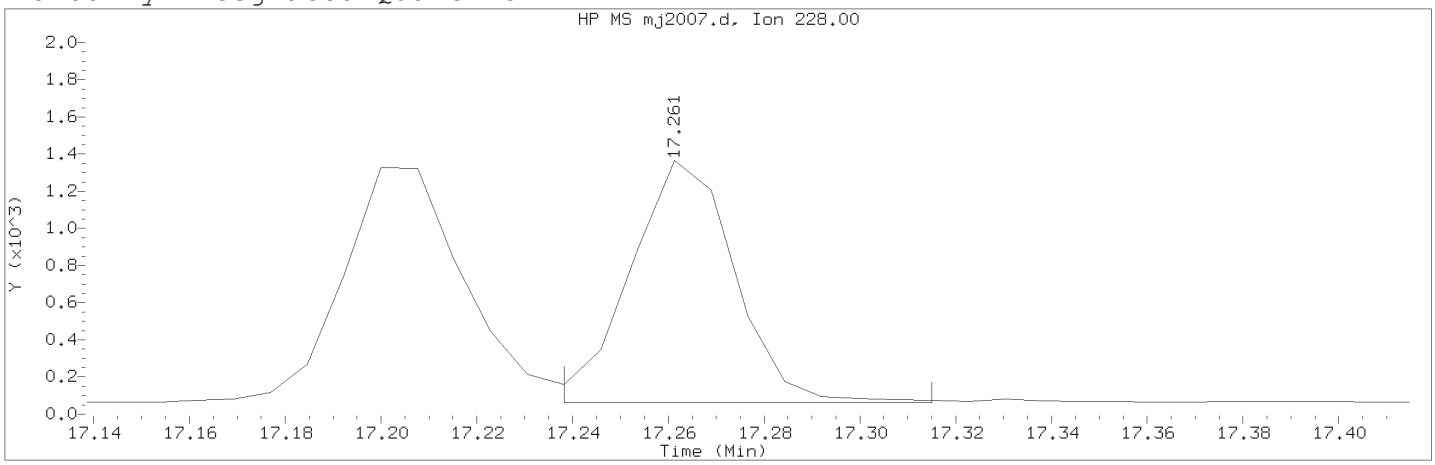
Compound Number	: 19		
Compound Name	: Hexachlorobenzene		
Scan Number	: 930		
Retention Time (minutes)	: 12.730		
Quant Ion	: 284.00		
Area	: 419		
On-column Amount (ng/ul)	: 0.0029		
Integration start scan	: 920	Integration stop scan:	944
Y at integration start	: 50	Y at integration end:	50

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: 2176

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

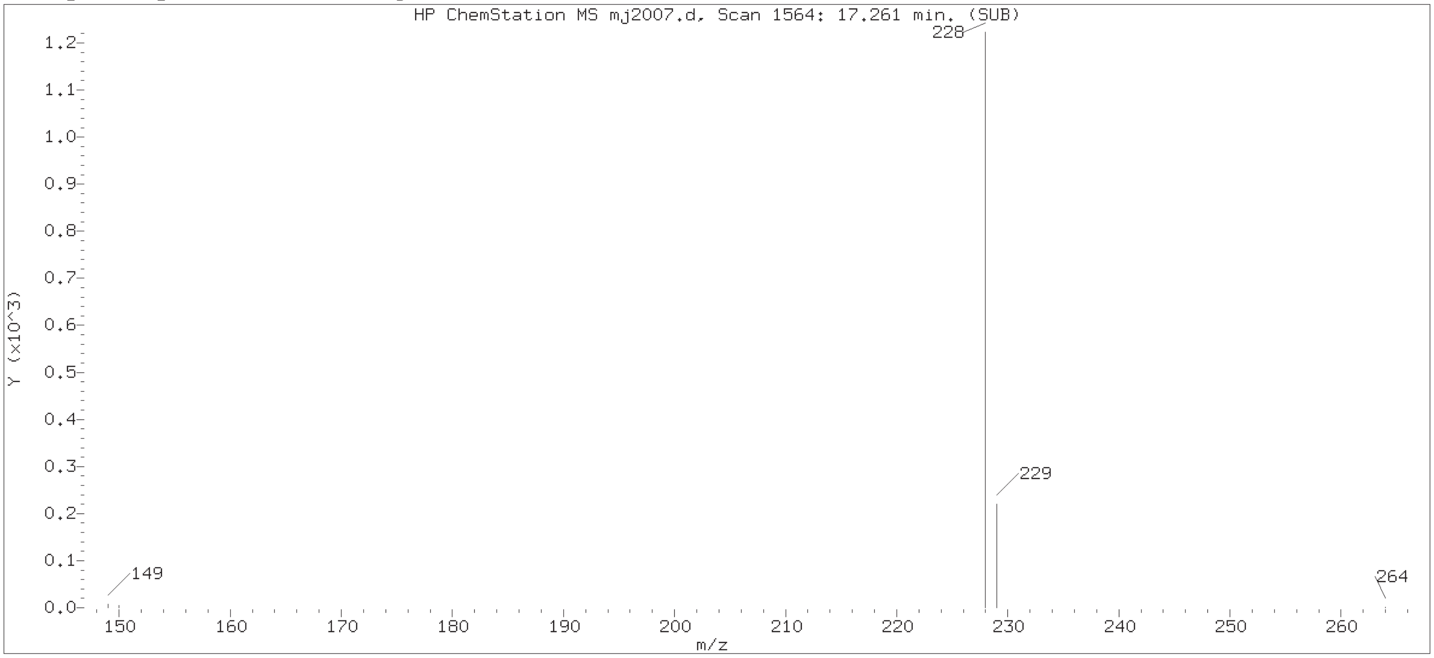
Compound Number : 30
Compound Name : Chrysene
Scan Number : 1564
Retention Time (minutes) : 17.261
Quant Ion : 228.00
Area (flag) : 1992M
On-Column Amount (ng/ul) : 0.0030
Integration start scan : 1560 Integration stop scan: 1570
Y at integration start : 61 Y at integration end: 61

Reason for manual integration: improper integration

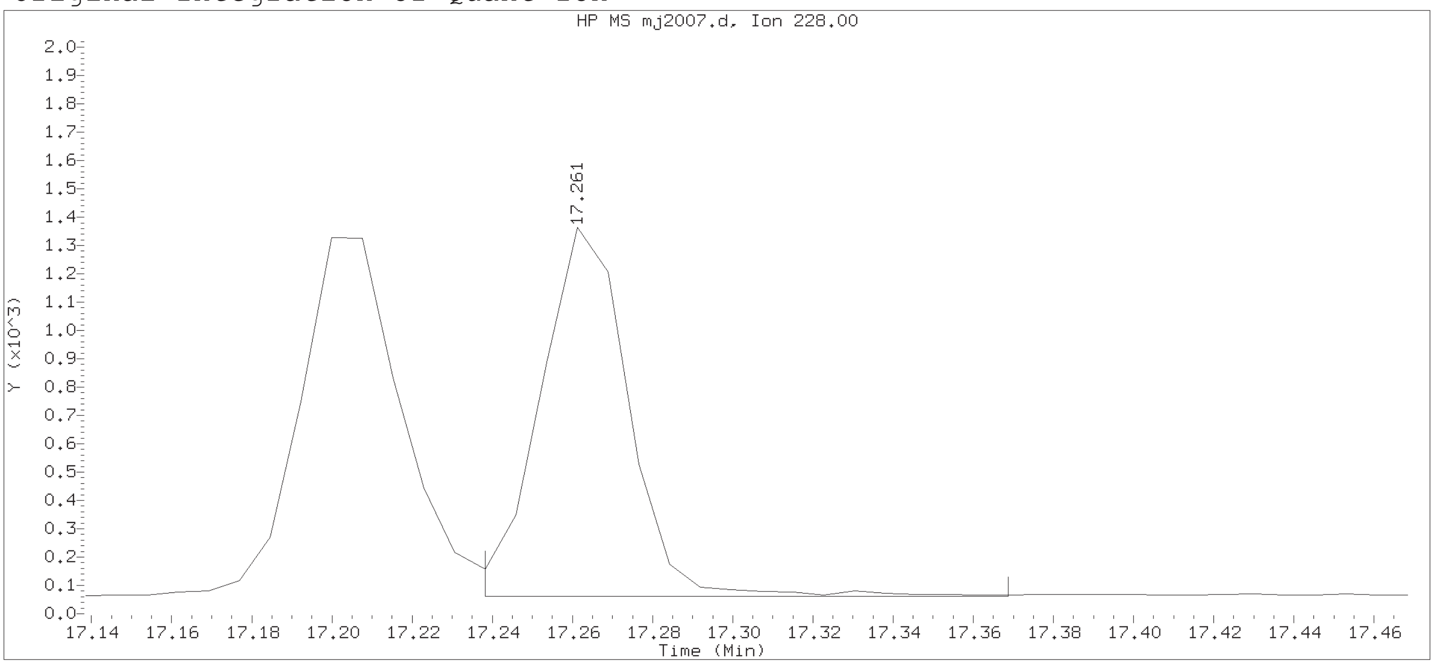
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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   Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32   Analyst ID: ceb05247

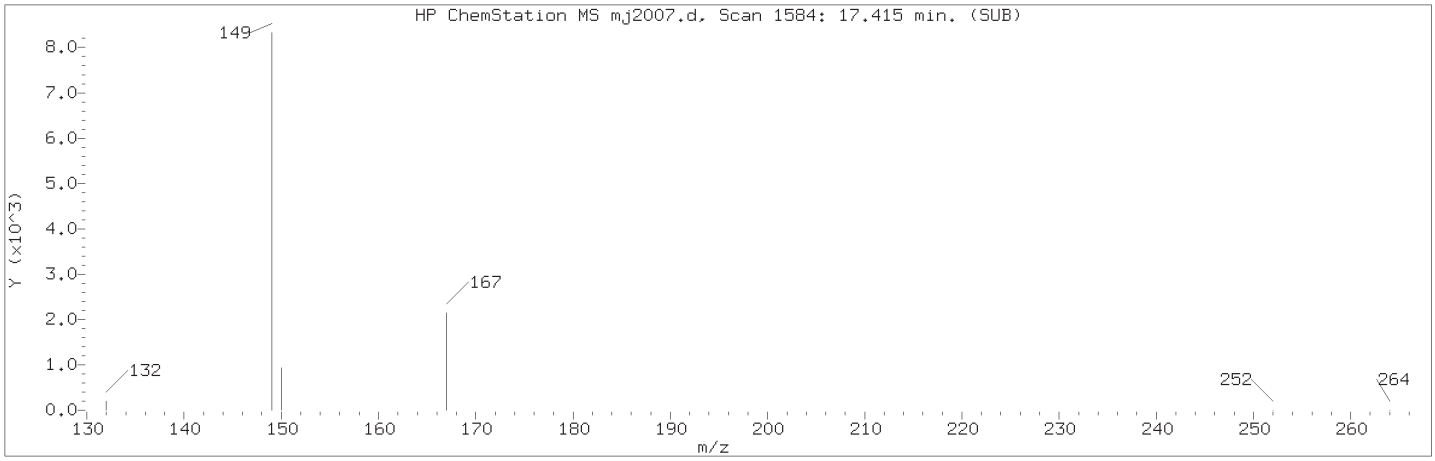
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m   Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025   Lab Sample ID: RVSIM2768

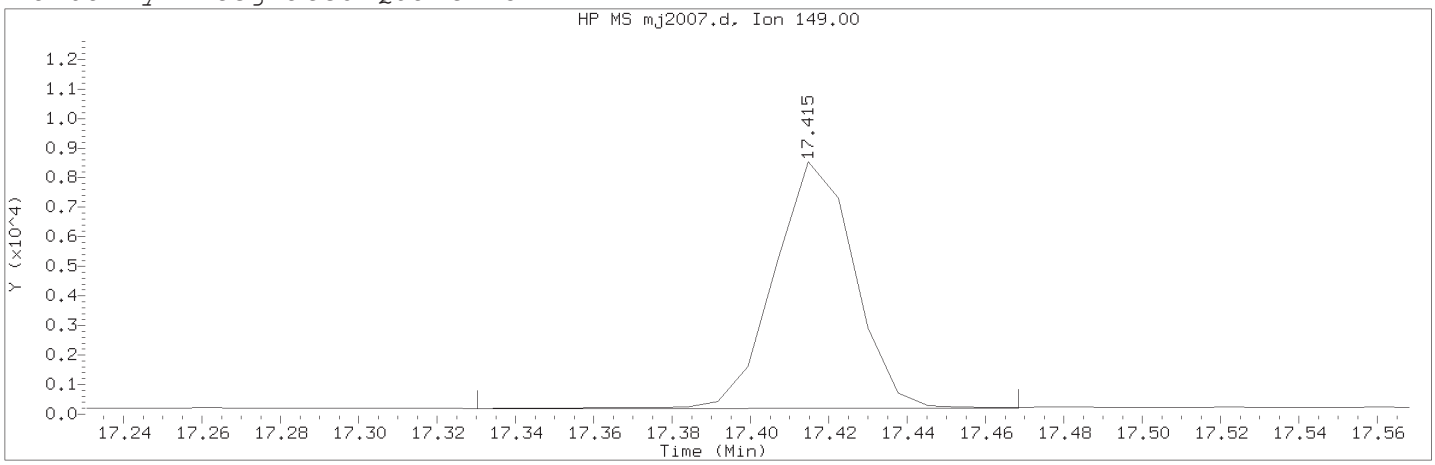
Compound Number : 30
Compound Name : Chrysene
Scan Number : 1564
Retention Time (minutes) : 17.261
Quant Ion : 228.00
Area : 1998
On-column Amount (ng/ul) : 0.0030
Integration start scan : 1560   Integration stop scan: 1577
Y at integration start : 61   Y at integration end: 61

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature user

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

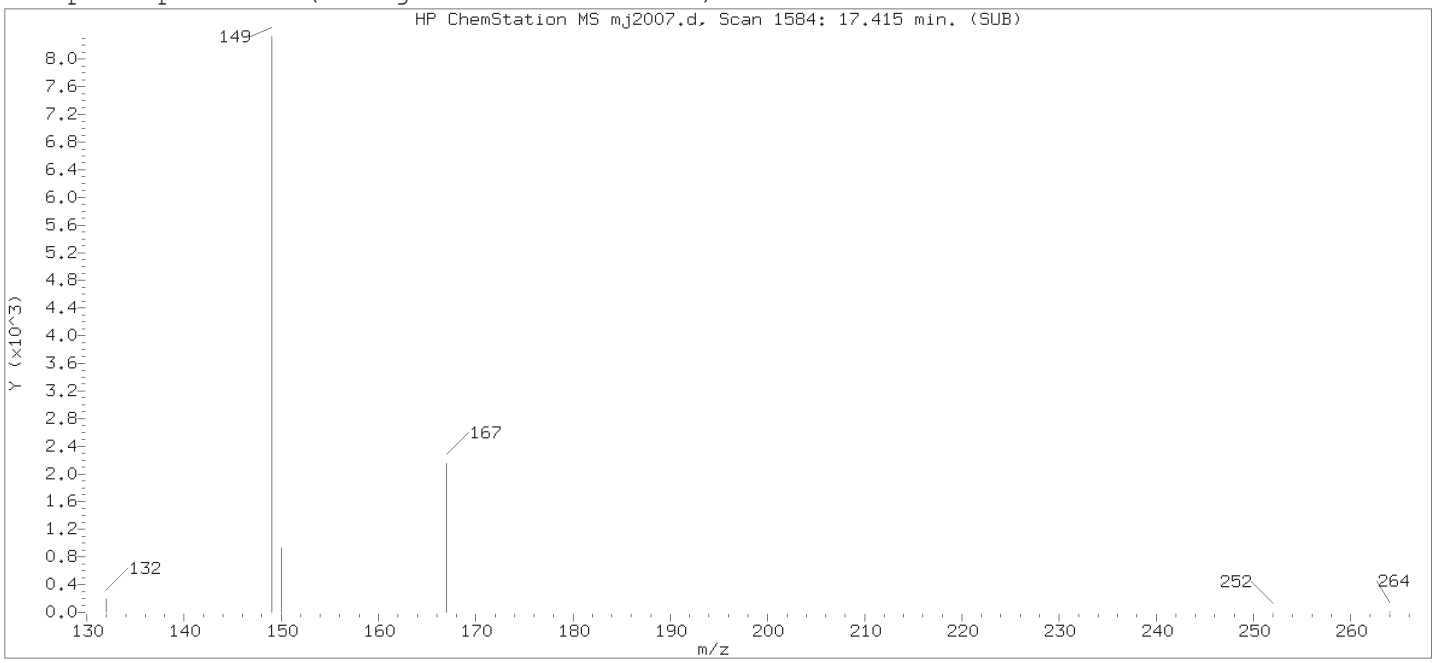
Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1584
Retention Time (minutes) : 17.415
Quant Ion : 149.00
Area (flag) : 11869M
On-Column Amount (ng/ul) : 0.0248
Integration start scan : 1572 Integration stop scan: 1590
Y at integration start : 193 Y at integration end: 201

Reason for manual integration: improper integration

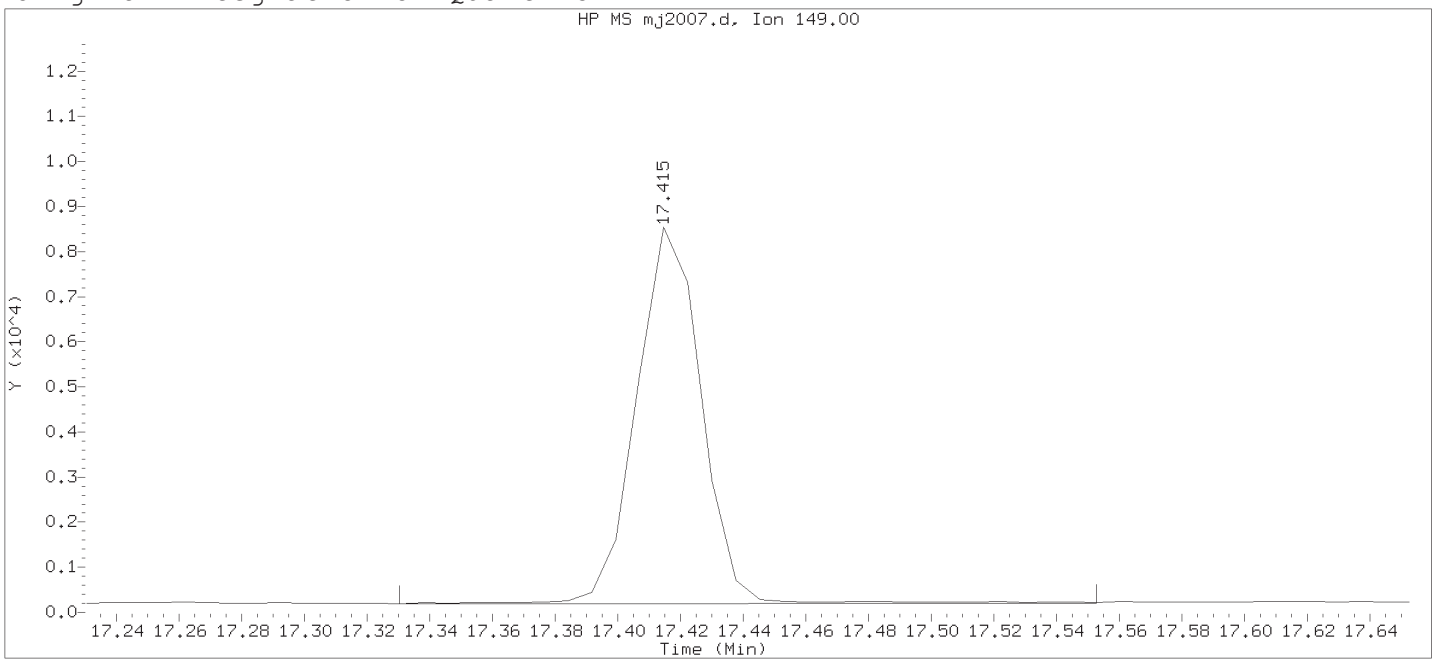
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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

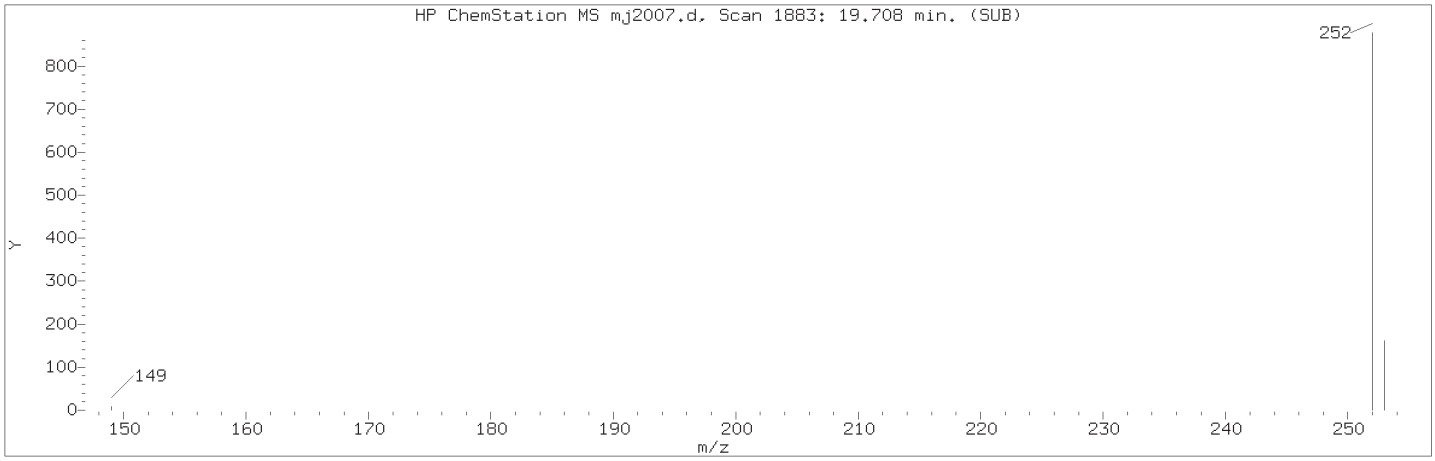
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

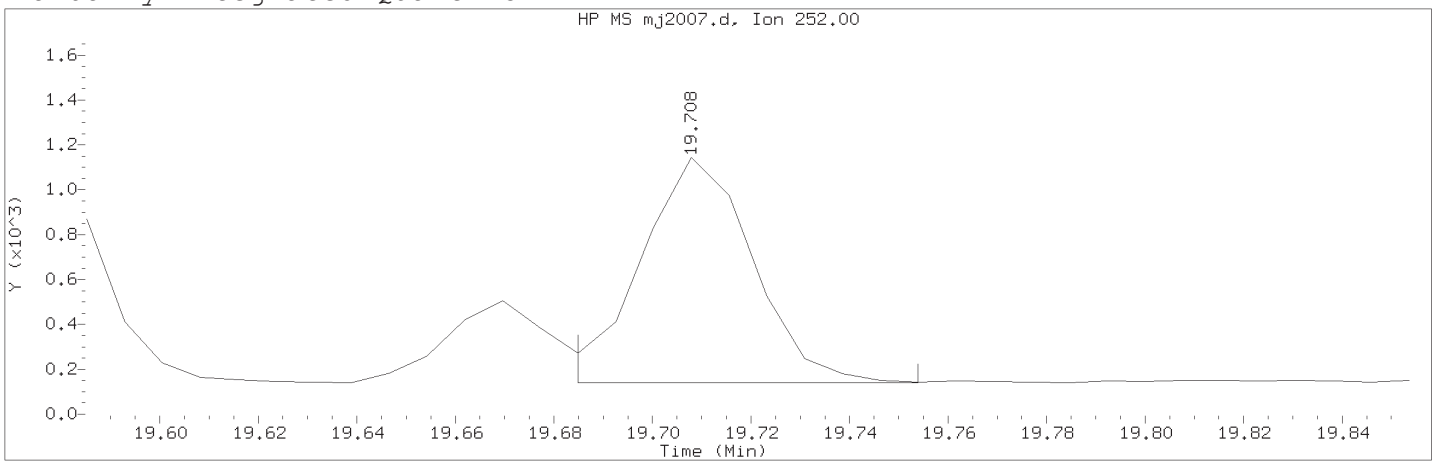
Compound Number	: 31		
Compound Name	: bis(2-Ethylhexyl)phthalate		
Scan Number	: 1584		
Retention Time (minutes)	: 17.415		
Quant Ion	: 149.00		
Area	: 11980		
On-column Amount (ng/ul)	: 0.0243		
Integration start scan	: 1572	Integration stop scan:	1601
Y at integration start	: 193	Y at integration end:	206

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 1107. Page 1441

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

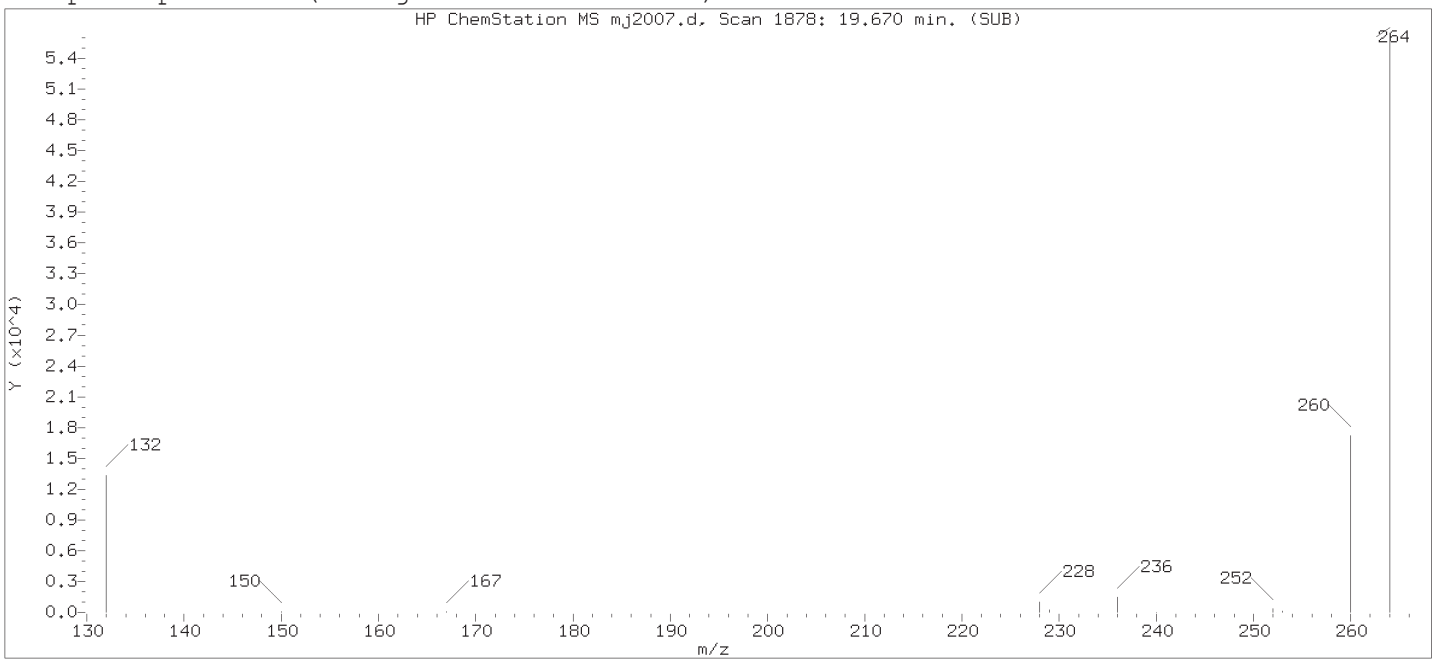
Compound Number	: 45		
Compound Name	: Perylene		
Scan Number	: 1883		
Retention Time (minutes)	: 19.708		
Quant Ion	: 252.00		
Area (flag)	: 1598M		
On-Column Amount (ng/ul)	: 0.0025		
Integration start scan	: 1879	Integration stop scan:	1888
Y at integration start	: 141	Y at integration end:	141

Reason for manual integration: improper integration

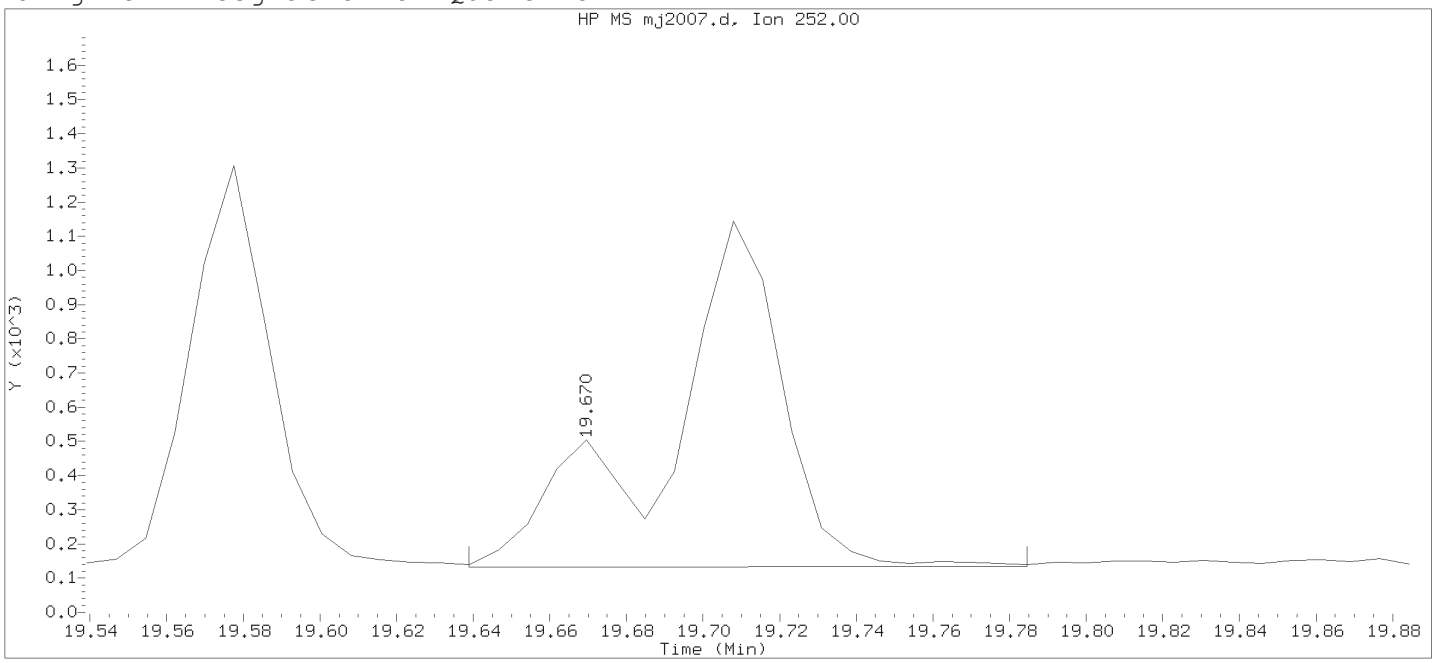
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

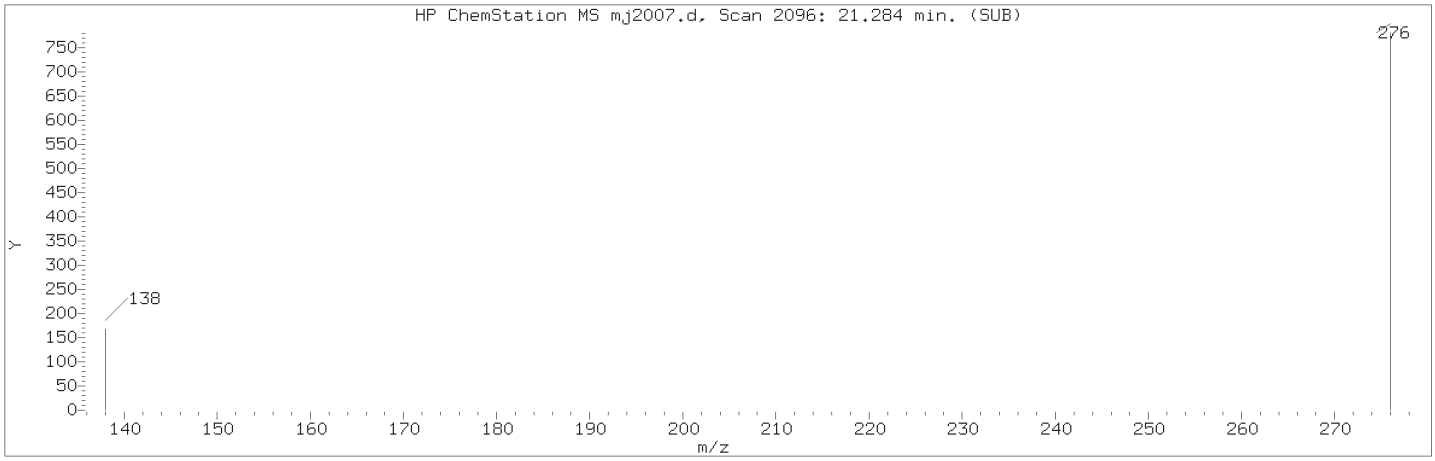
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

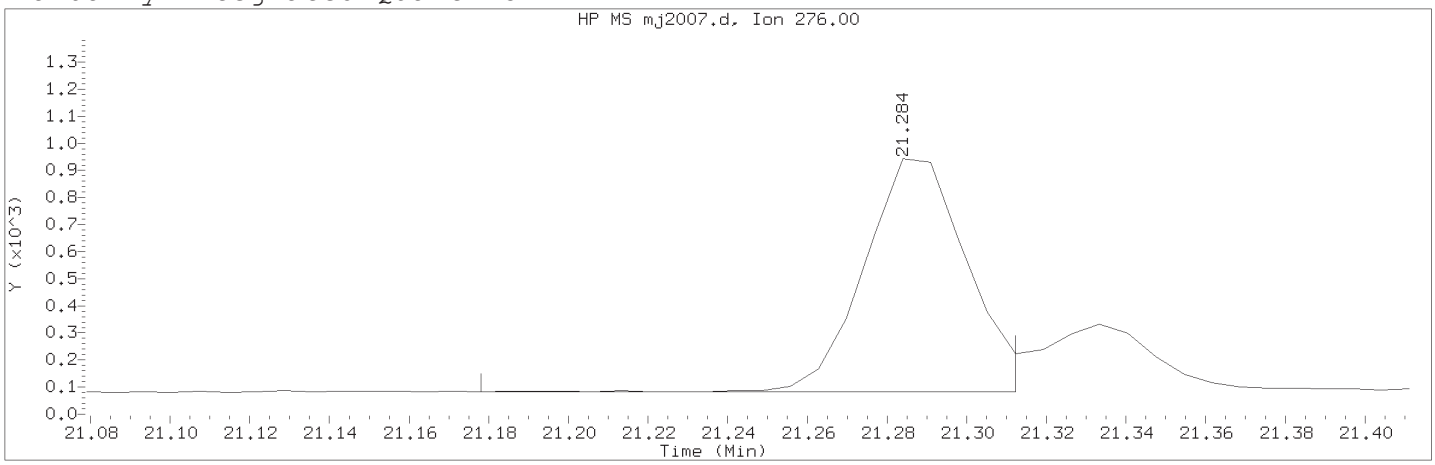
Compound Number	: 45		
Compound Name	: Perylene		
Scan Number	: 1878		
Retention Time (minutes)	: 19.670		
Quant Ion	: 252.00		
Area	: 2150		
On-column Amount (ng/ul)	: 0.0034		
Integration start scan	: 1873	Integration stop scan:	1892
Y at integration start	: 133	Y at integration end:	134

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 1007. Page 2 of 6

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

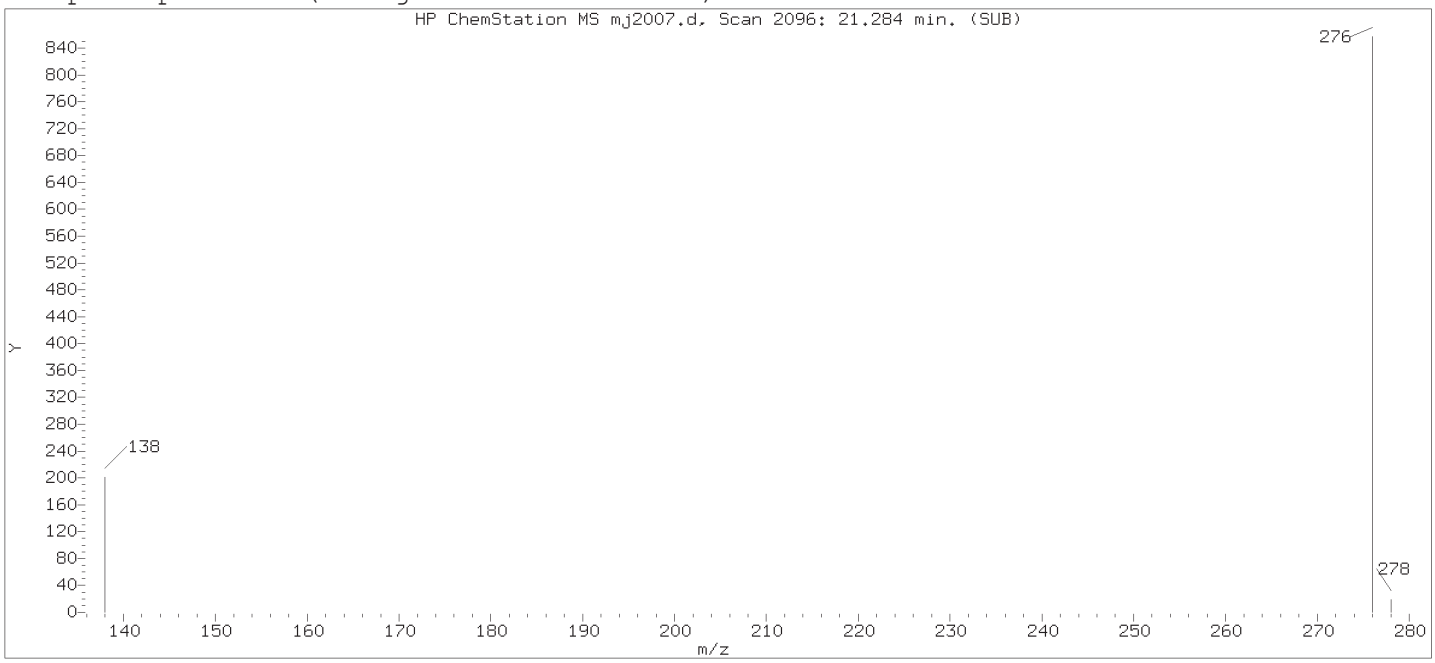
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2096
Retention Time (minutes) : 21.284
Quant Ion : 276.00
Area (flag) : 1565M
On-Column Amount (ng/ul) : 0.0028
Integration start scan : 2080 Integration stop scan: 2099
Y at integration start : 82 Y at integration end: 82

Reason for manual integration: improper integration

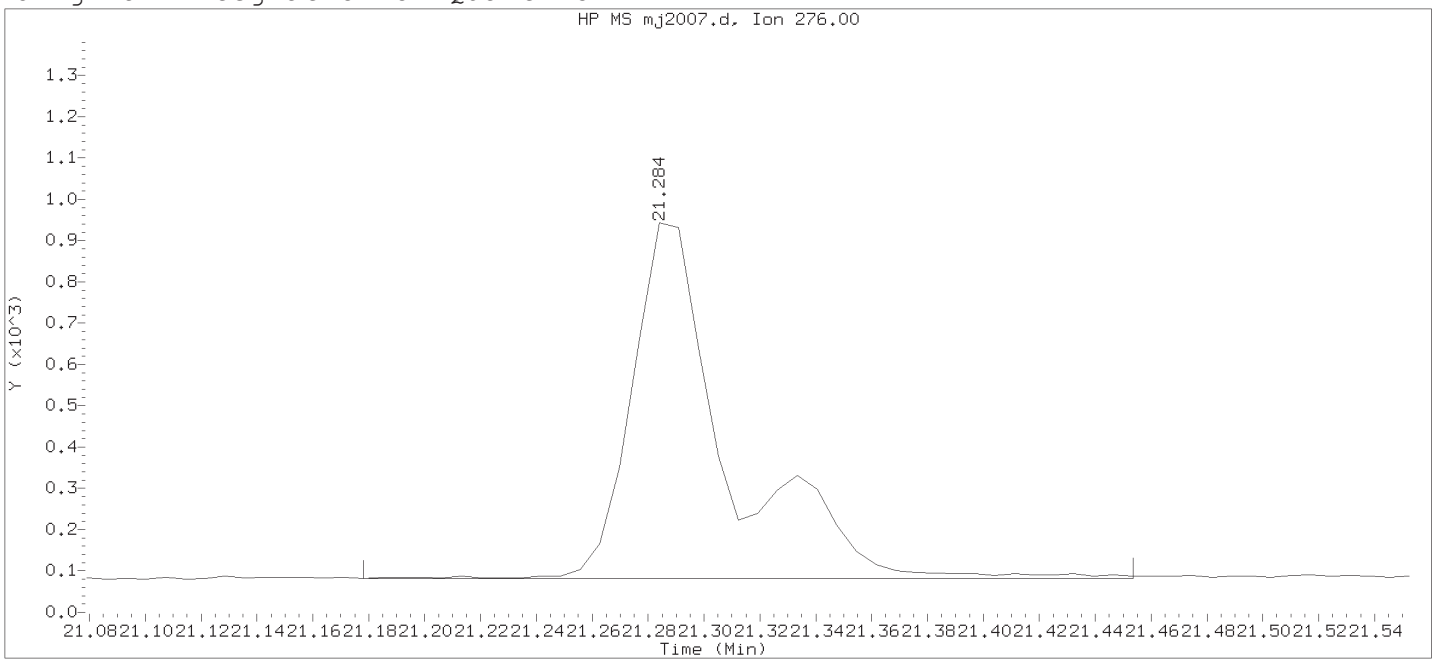
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

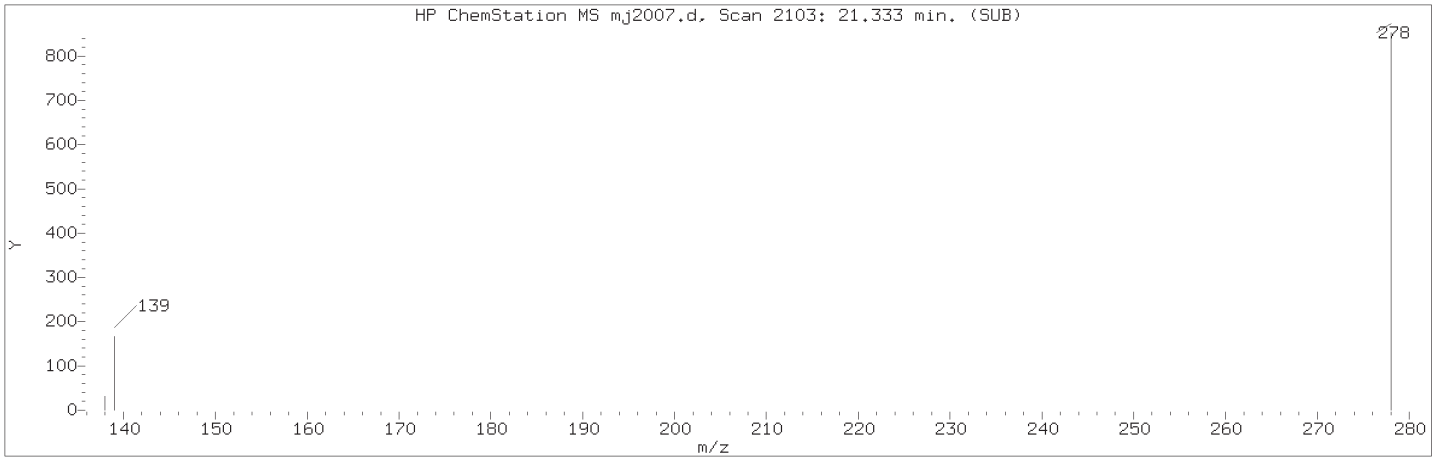
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:00 Unknown

Sample Name: SSTD0.0025 Lab Sample ID: RVSIM2768

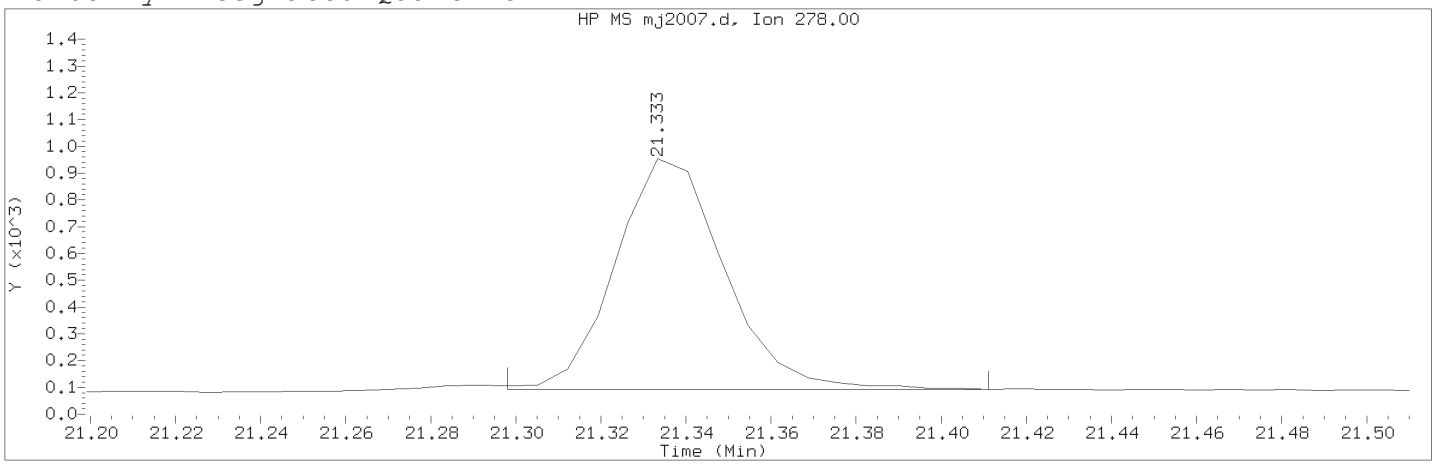
Compound Number	: 39		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 2096		
Retention Time (minutes)	: 21.284		
Quant Ion	: 276.00		
Area	: 2073		
On-column Amount (ng/ul)	: 0.0036		
Integration start scan	: 2080	Integration stop scan:	2119
Y at integration start	: 82	Y at integration end:	82

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used: 1007. Page 2445

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

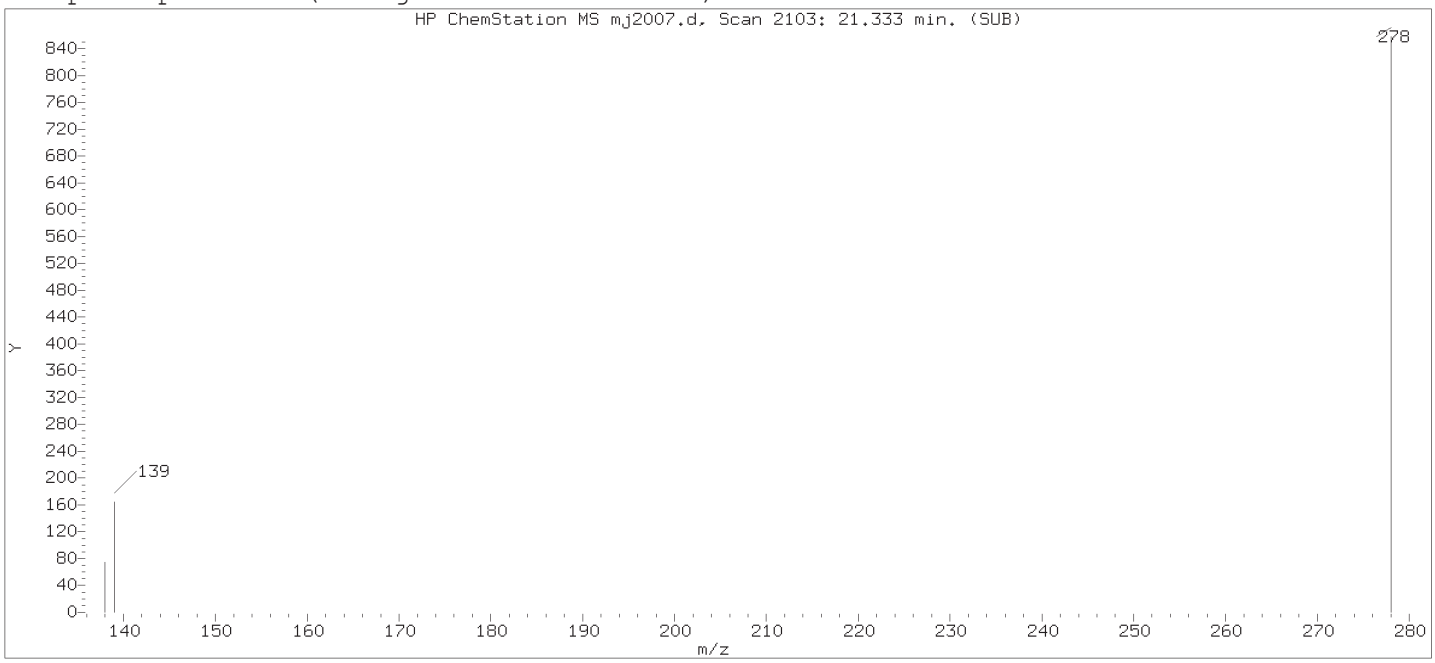
Compound Number : 40
Compound Name : Dibenz(a,h)anthracene
Scan Number : 2103
Retention Time (minutes) : 21.333
Quant Ion : 278.00
Area (flag) : 1543M
On-Column Amount (ng/ul) : 0.0027
Integration start scan : 2097 Integration stop scan: 2113
Y at integration start : 92 Y at integration end: 92

Reason for manual integration: improper integration

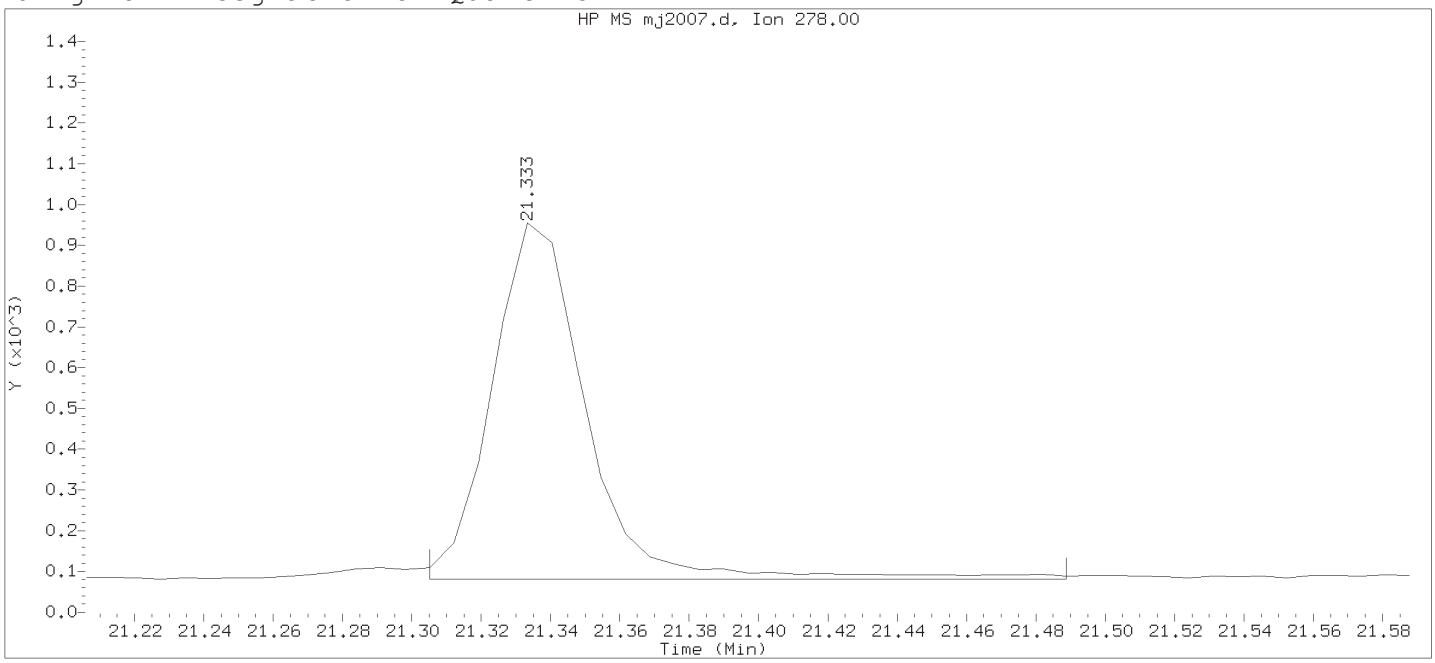
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:22.
Target 3.5 esignature user ID: knb25316

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



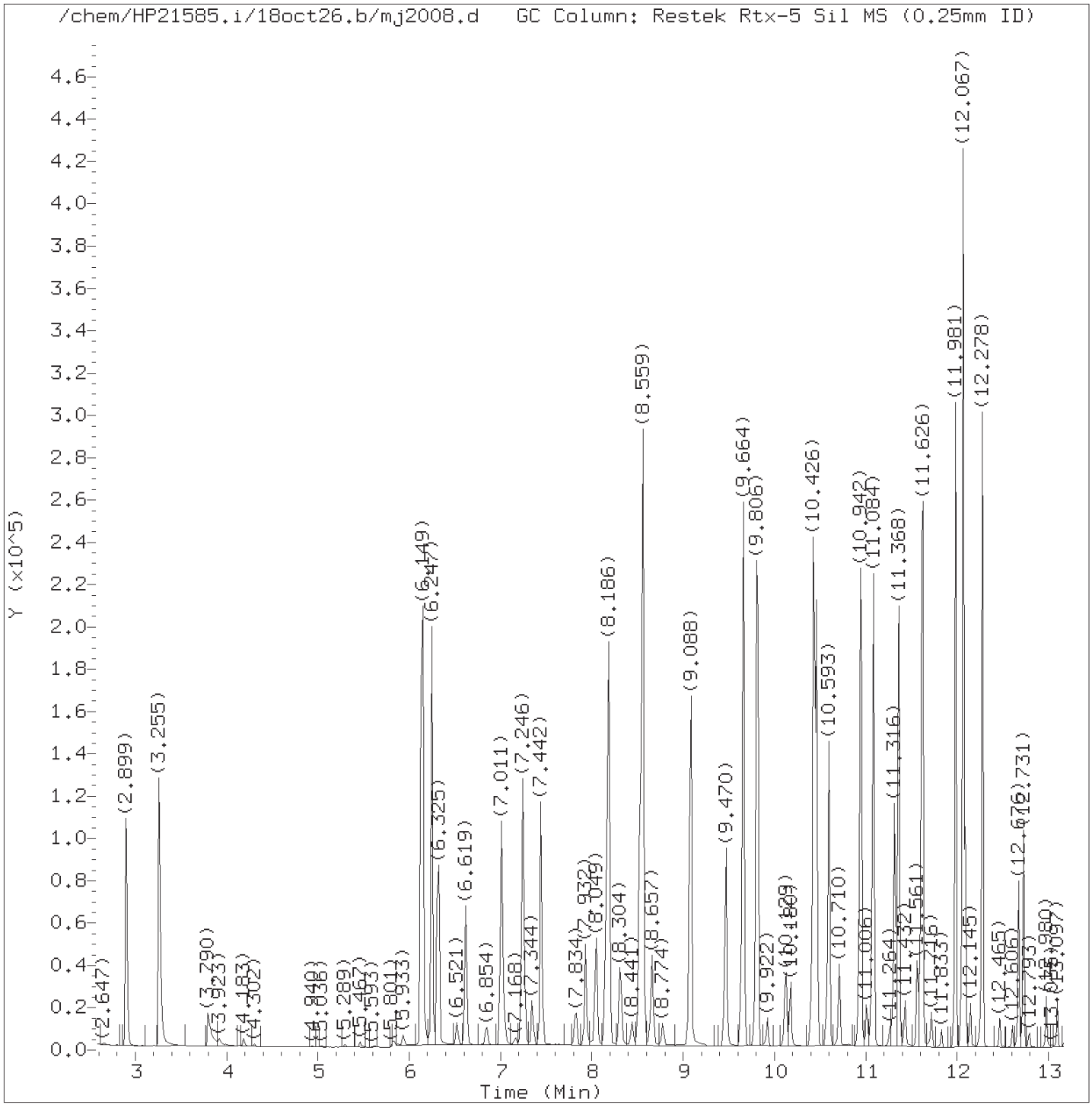
Data File: /chem/HP21585.i/18oct26.b/mj2007.d Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 10:32 Analyst ID: ceb05247

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	:	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

Digitally signed by Kira N. Beck on 10/27/2018 at 18:22.
Target 3.5 esignature used for 2018.



Total Ion Chromatogram (TIC)

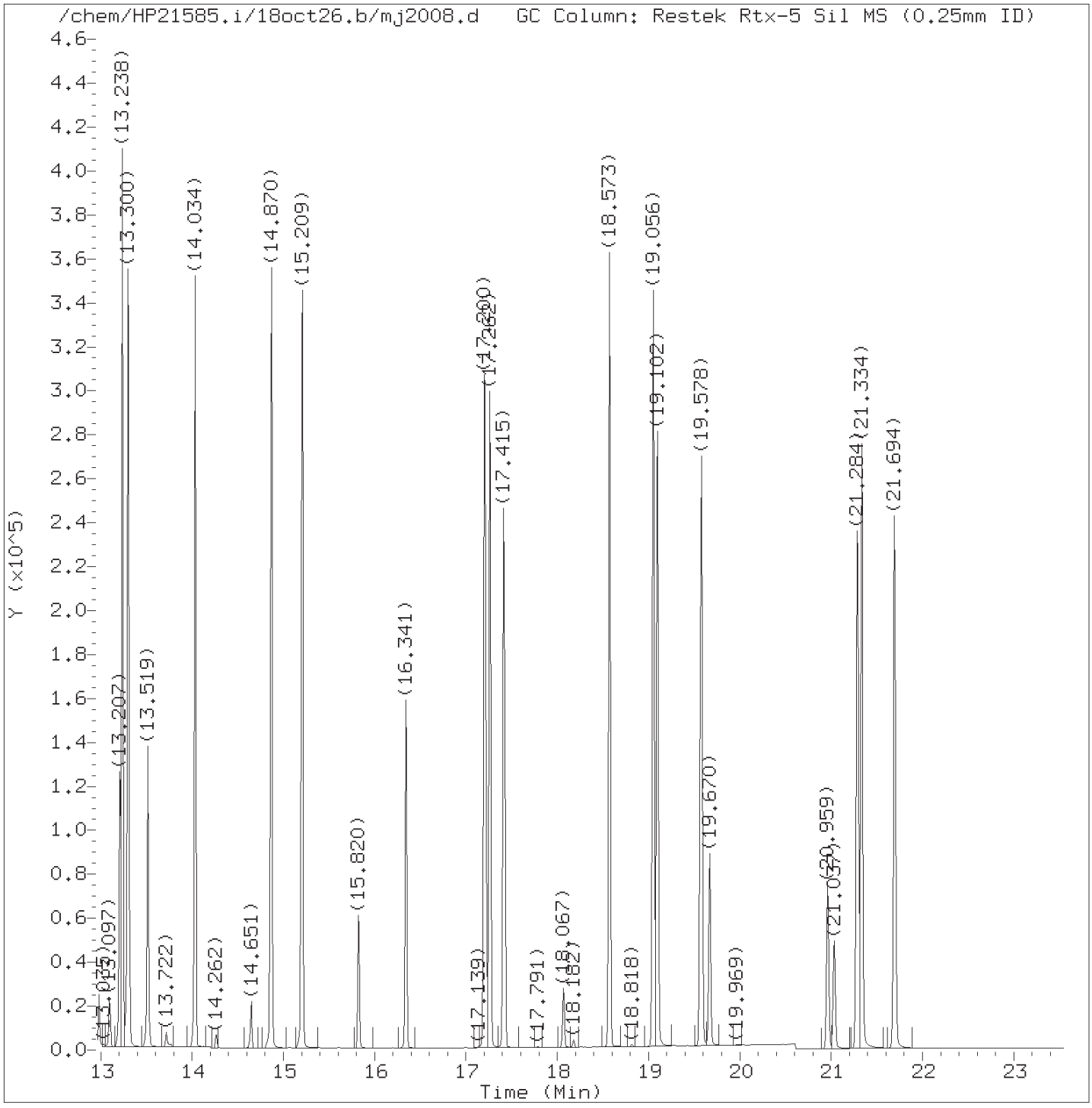
Target Revision 3.5

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: 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 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: 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 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: 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

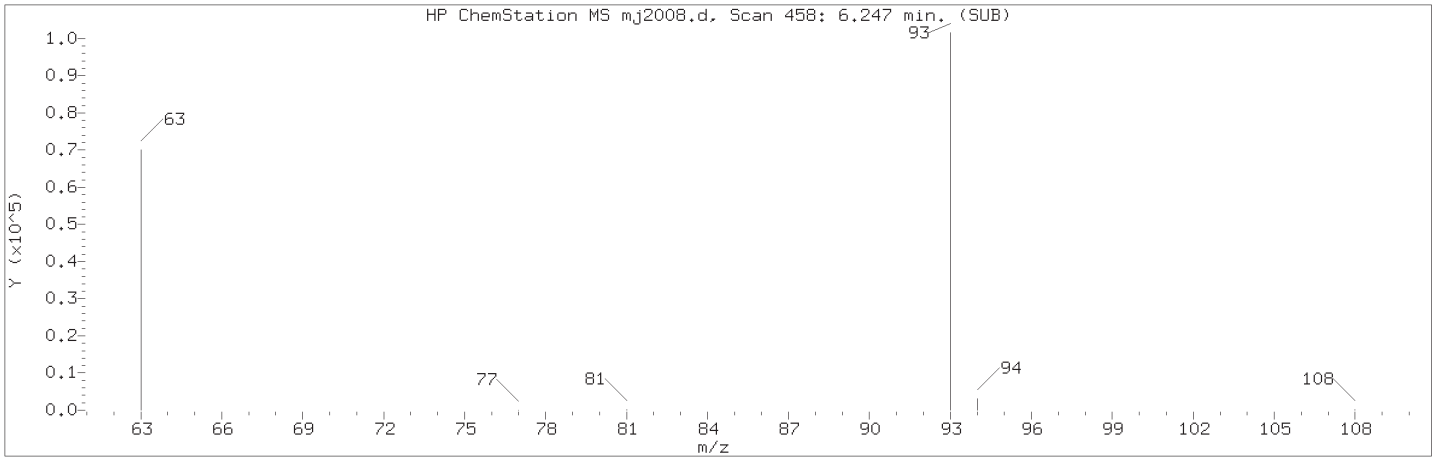
Sample Name: SSTD0.50 Lab Sample ID: RVSICV2788

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

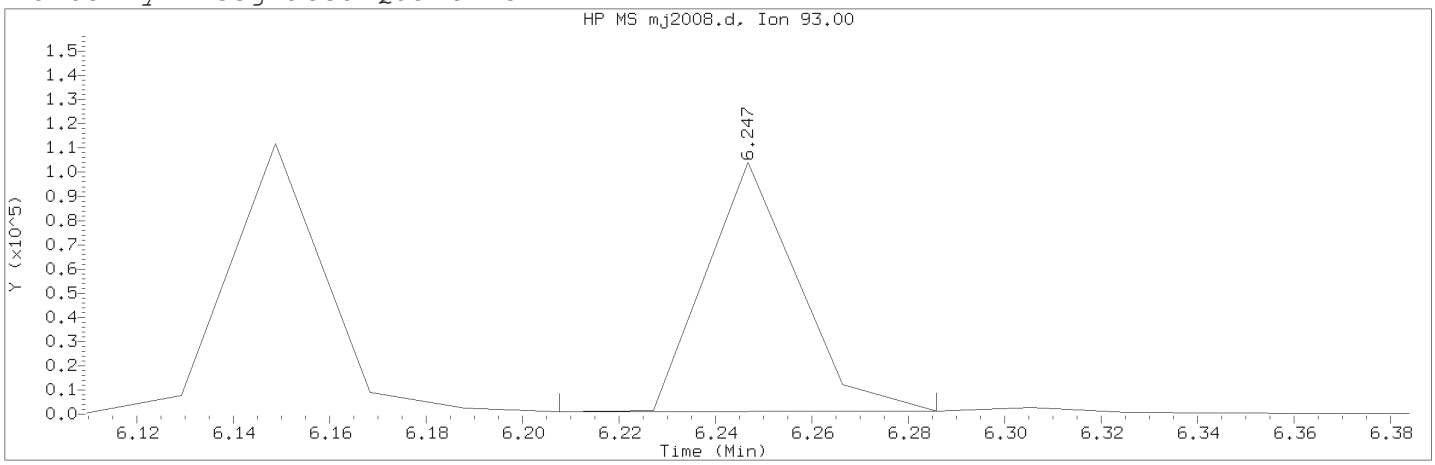
M = Compound was manually integrated.
* = Compound is an internal standard.

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: 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

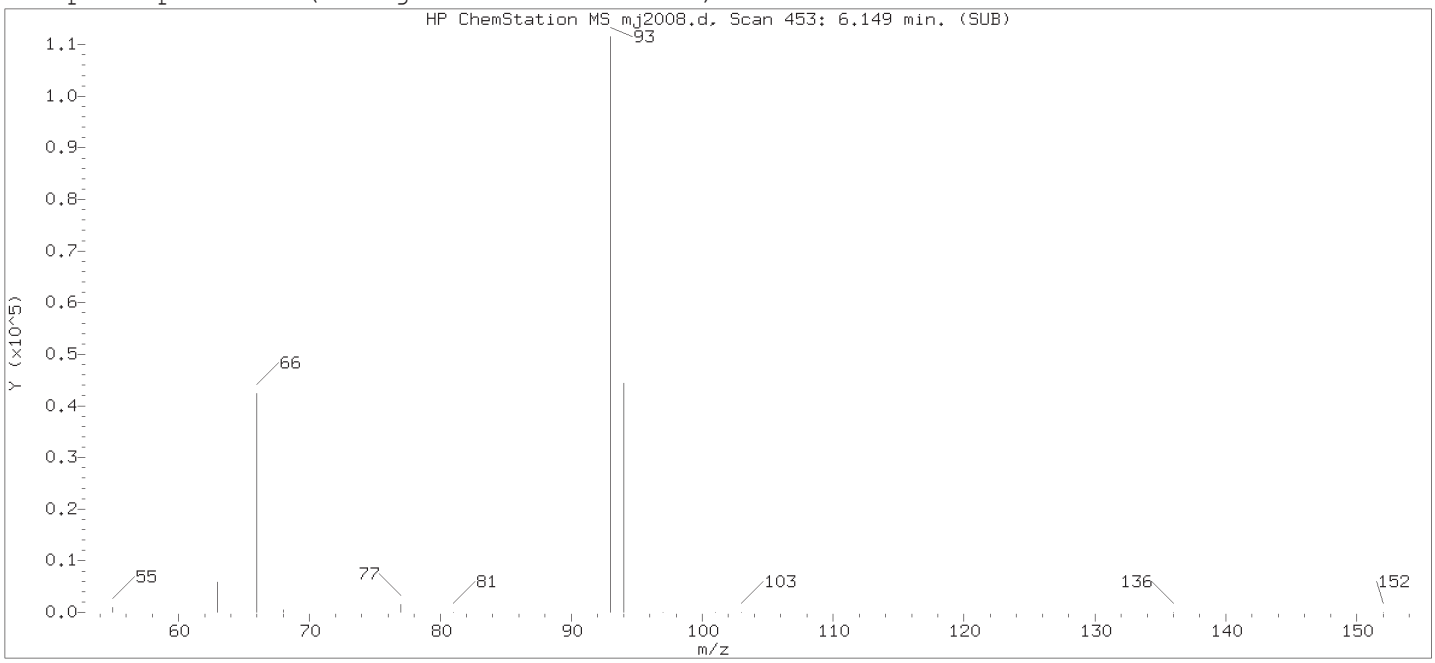
Compound Number : 4
Compound Name : bis(2-Chloroethyl)ether
Scan Number : 458
Retention Time (minutes) : 6.247
Quant Ion : 93.00
Area (flag) : 120926M
On-Column Amount (ng/ul) : 0.5717
Integration start scan : 455 Integration stop scan: 459
Y at integration start : 1064 Y at integration end: 1247

Reason for manual integration: improper integration

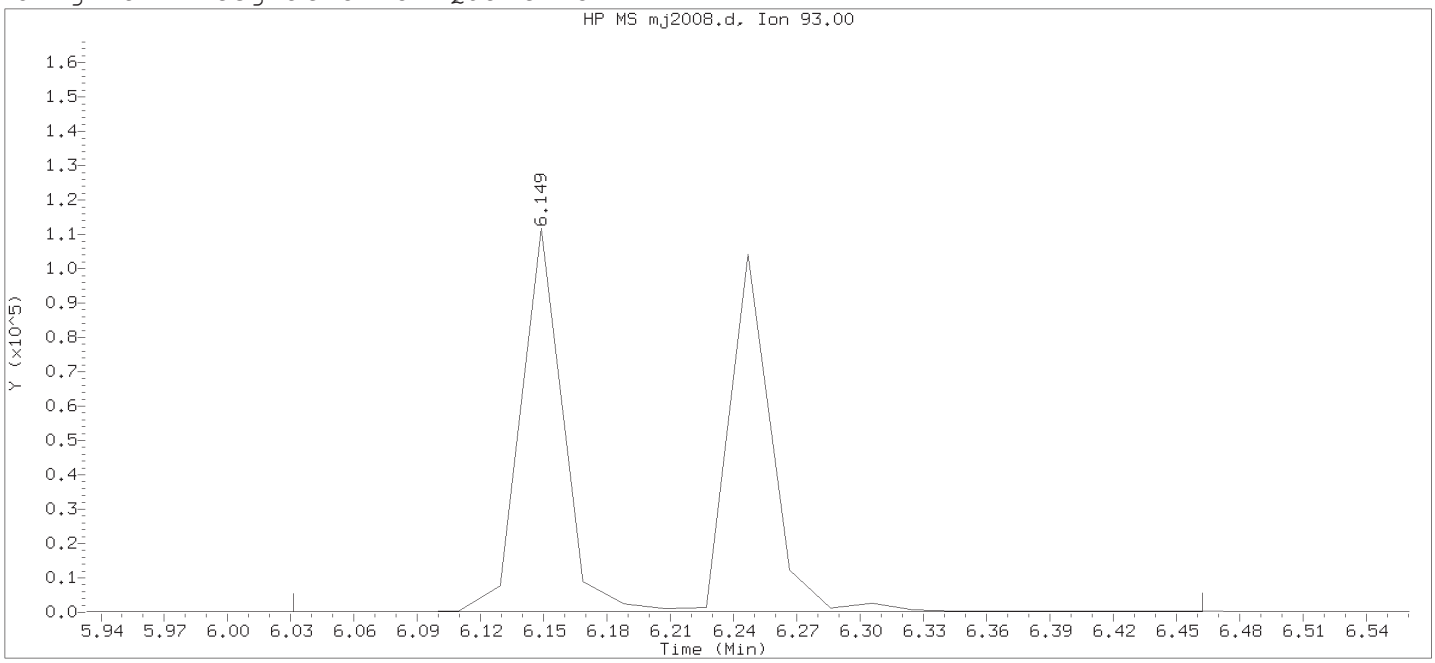
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 14:24.
Target 3.5 esignature user ID: knb25316

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 Instrument ID: HP21585.i
Injection date and time: 26-OCT-2018 11:01 Analyst ID: ceb05247

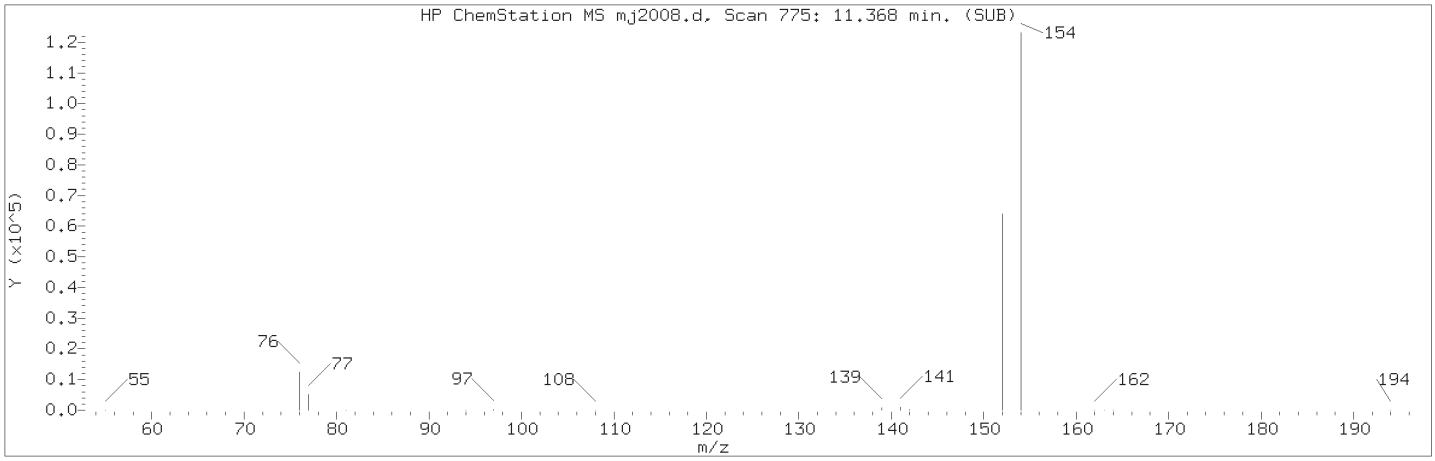
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:29 Unknown

Sample Name: SSTD0.50 Lab Sample ID: RVSICV2788

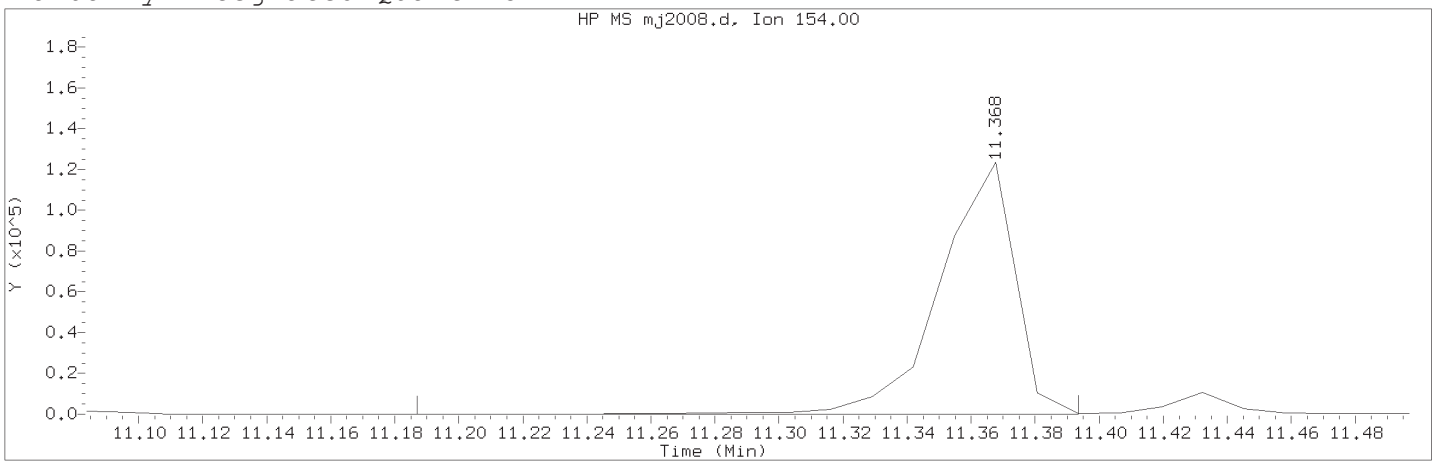
Compound Number	: 4		
Compound Name	: bis(2-Chloroethyl)ether		
Scan Number	: 453		
Retention Time (minutes)	: 6.149		
Quant Ion	: 93.00		
Area	: 298499		
On-column Amount (ng/ul)	: 1.3229		
Integration start scan	: 446	Integration stop scan:	468
Y at integration start	: 156	Y at integration end:	210

Digitally signed by Kira N. Beck on 10/30/2018 at 14:24.
Target 3.5 esignature used: 107. Page 2452

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: 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

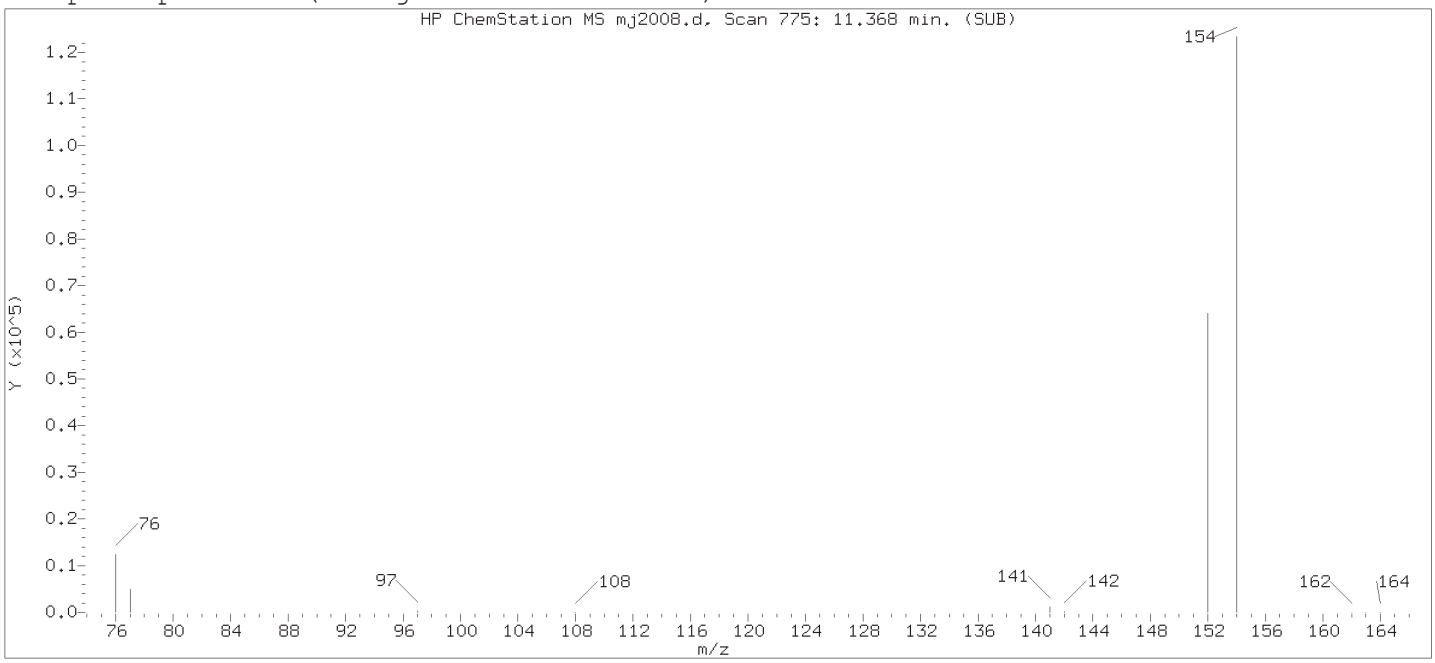
Compound Number : 15
Compound Name : Acenaphthene
Scan Number : 775
Retention Time (minutes) : 11.368
Quant Ion : 154.00
Area (flag) : 187273M
On-Column Amount (ng/ul) : 0.4826
Integration start scan : 760 Integration stop scan: 776
Y at integration start : 58 Y at integration end: 58

Reason for manual integration: improper integration

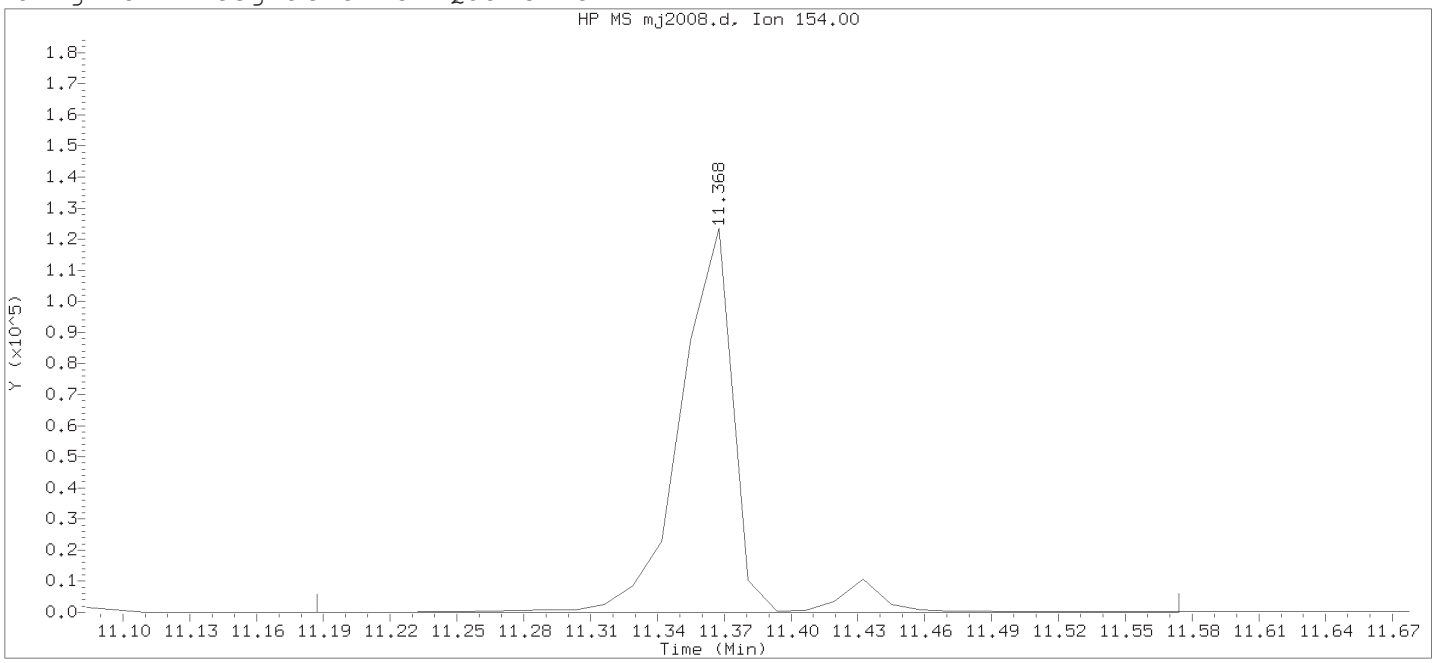
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 14:24.
Target 3.5 esignature user ID: knb25316

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

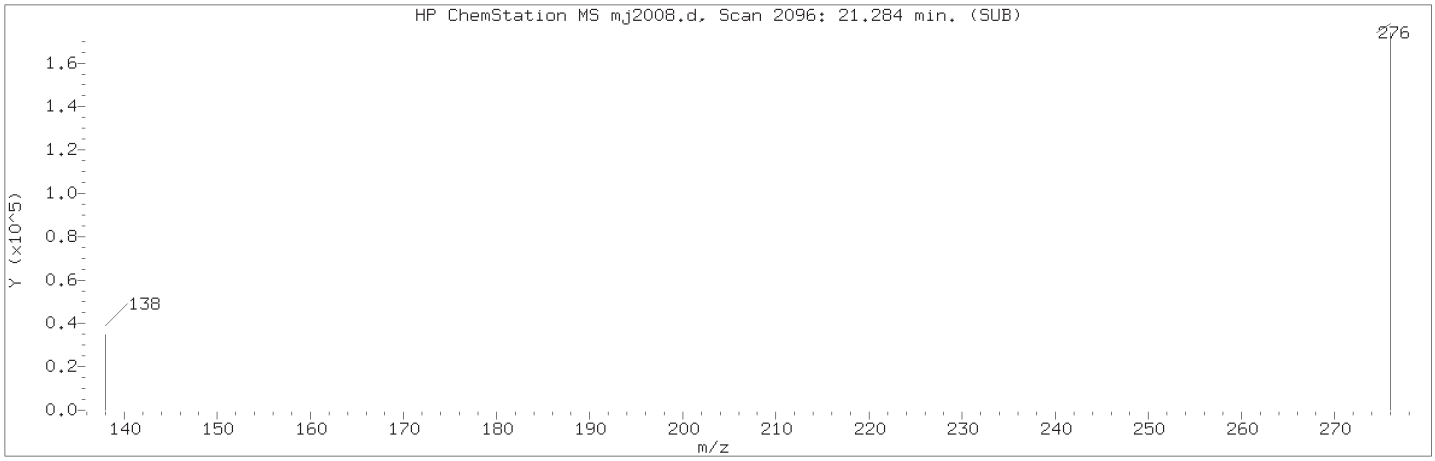
Method used: /chem/HP21585.i/18oct26.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 26-OCT-2018 10:31
Date, time and analyst ID of latest file update: 26-Oct-2018 11:29 Unknown

Sample Name: SSTD0.50 Lab Sample ID: RVSICV2788

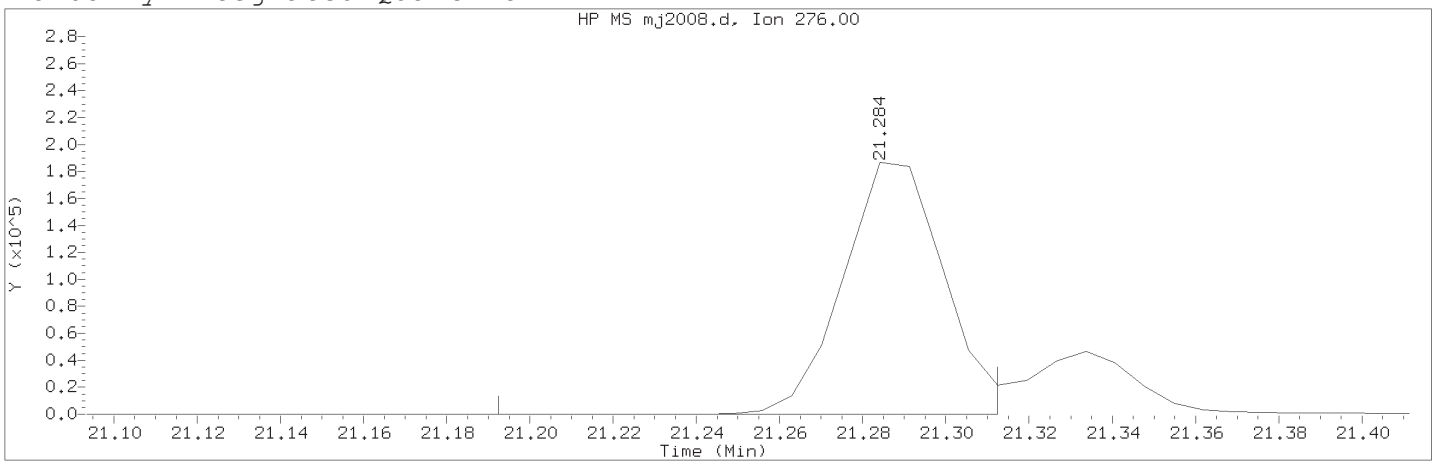
Compound Number	: 15		
Compound Name	: Acenaphthene		
Scan Number	: 775		
Retention Time (minutes)	: 11.368		
Quant Ion	: 154.00		
Area	: 214789		
On-column Amount (ng/ul)	: 0.5500		
Integration start scan	: 760	Integration stop scan:	790
Y at integration start	: 58	Y at integration end:	58

Digitally signed by Kira N. Beck on 10/30/2018 at 14:24.
Target 3.5 esignature user ID: 2156

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: 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

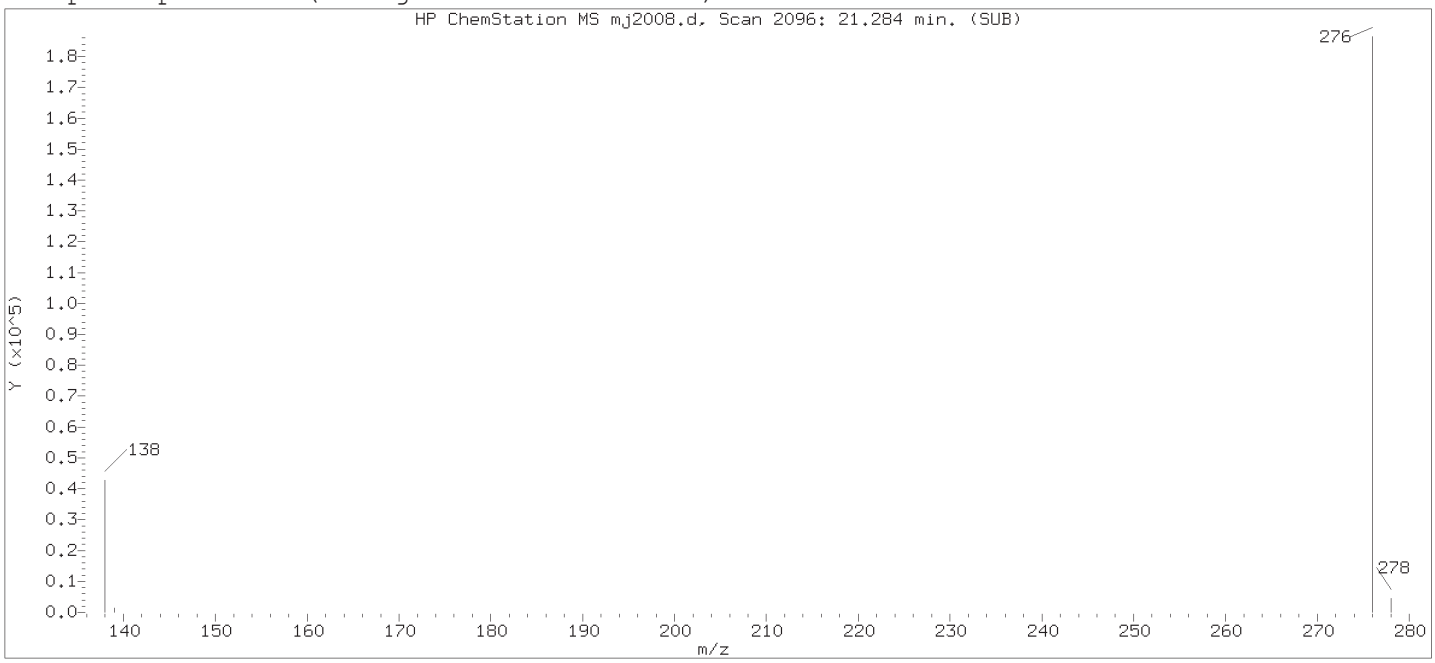
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2096
Retention Time (minutes) : 21.284
Quant Ion : 276.00
Area (flag) : 315036M
On-Column Amount (ng/ul) : 0.5683
Integration start scan : 2082 Integration stop scan: 2099
Y at integration start : 101 Y at integration end: 101

Reason for manual integration: improper integration

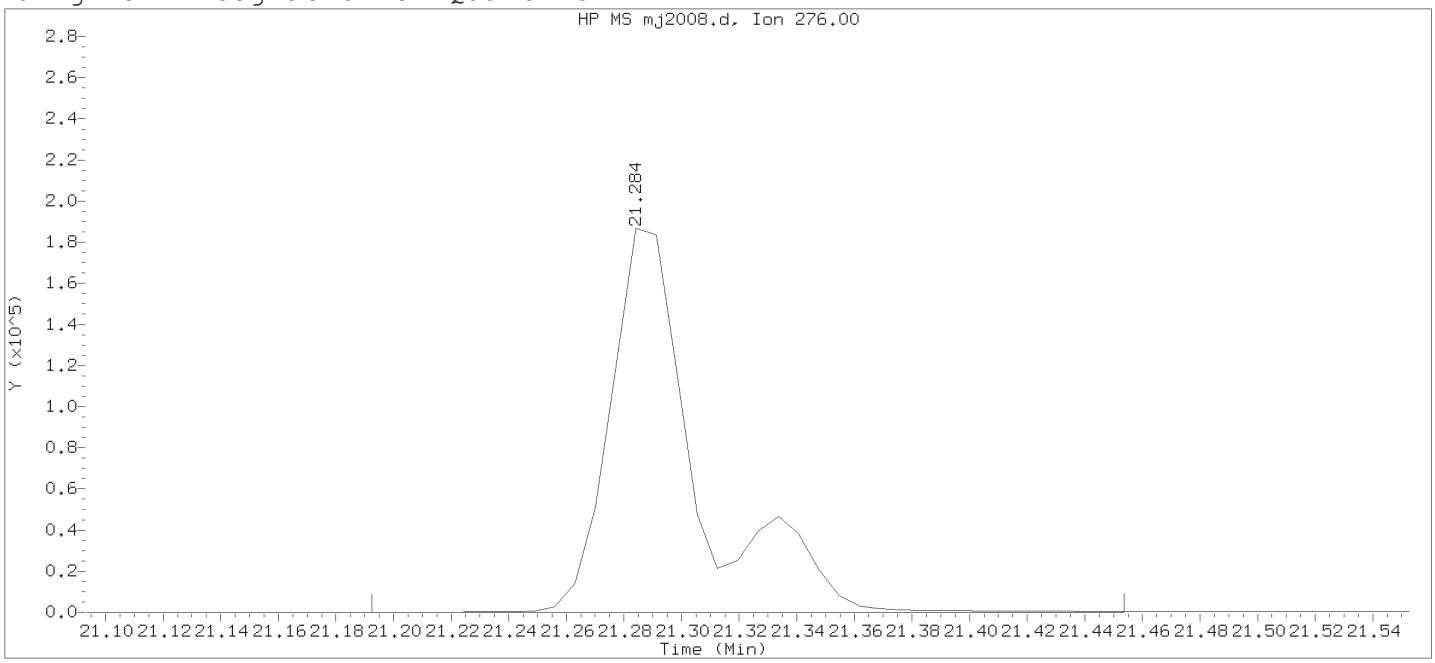
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 14:24.
Target 3.5 esignature user ID: knb25316

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 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: 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	: 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

Digitally signed by Kira N. Beck on 10/30/2018 at 14:24.
Target 3.5 esignature used: 2007. Page 1456 of 4595

Data File: /chem/HP21585.i/18oct27.b/mj2010.d

Date : 27-OCT-2018 17:50

Client ID: DFTPP12.5

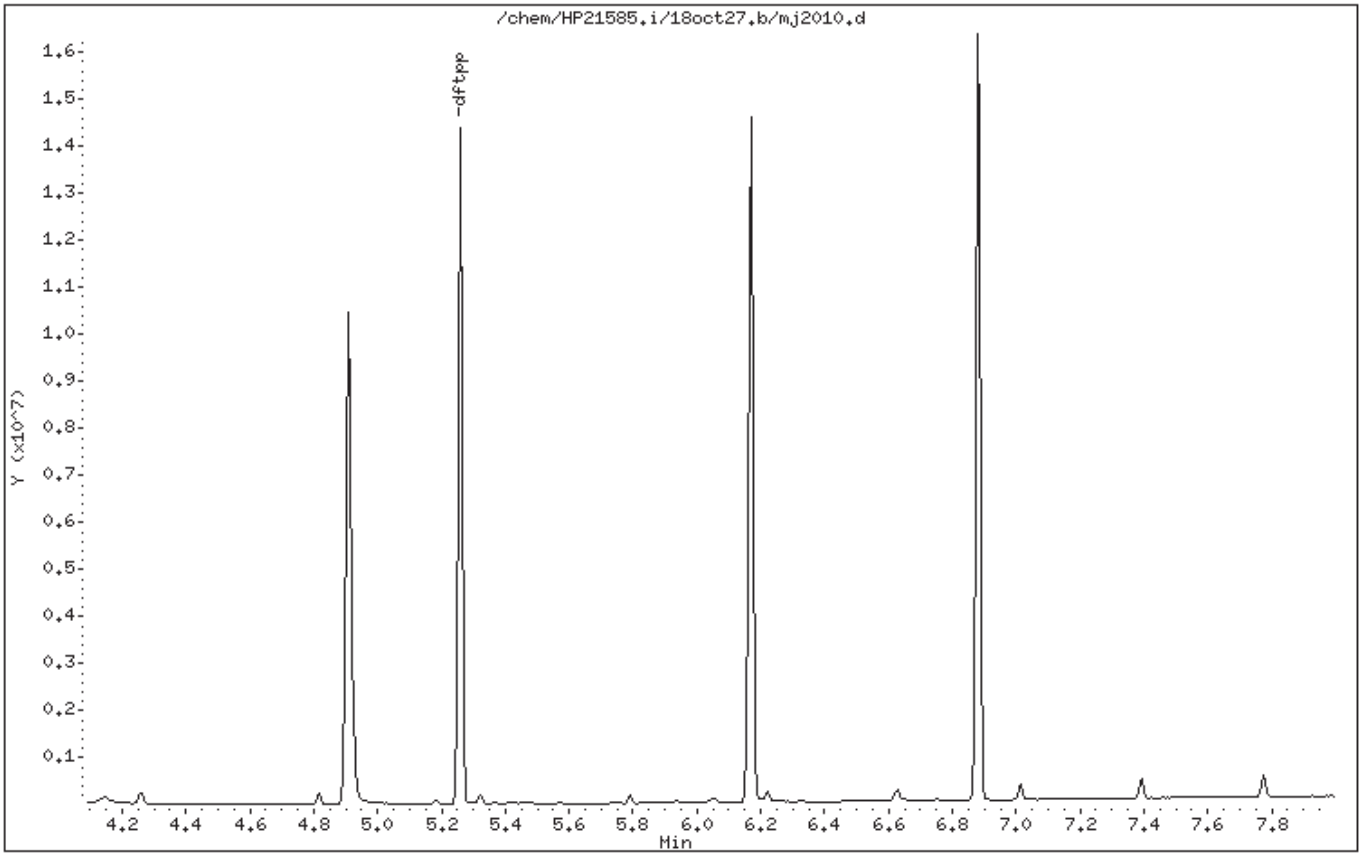
Instrument: HP21585.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by William H Saadeh on 10/30/2018 at 16:07.
Target 3.5 esignature user ID: whs02991

Data File: /chem/HP21585.i/18oct27.b/mj2010.d

Date : 27-OCT-2018 17:50

Client ID: DFTPP12.5

Instrument: HP21585.i

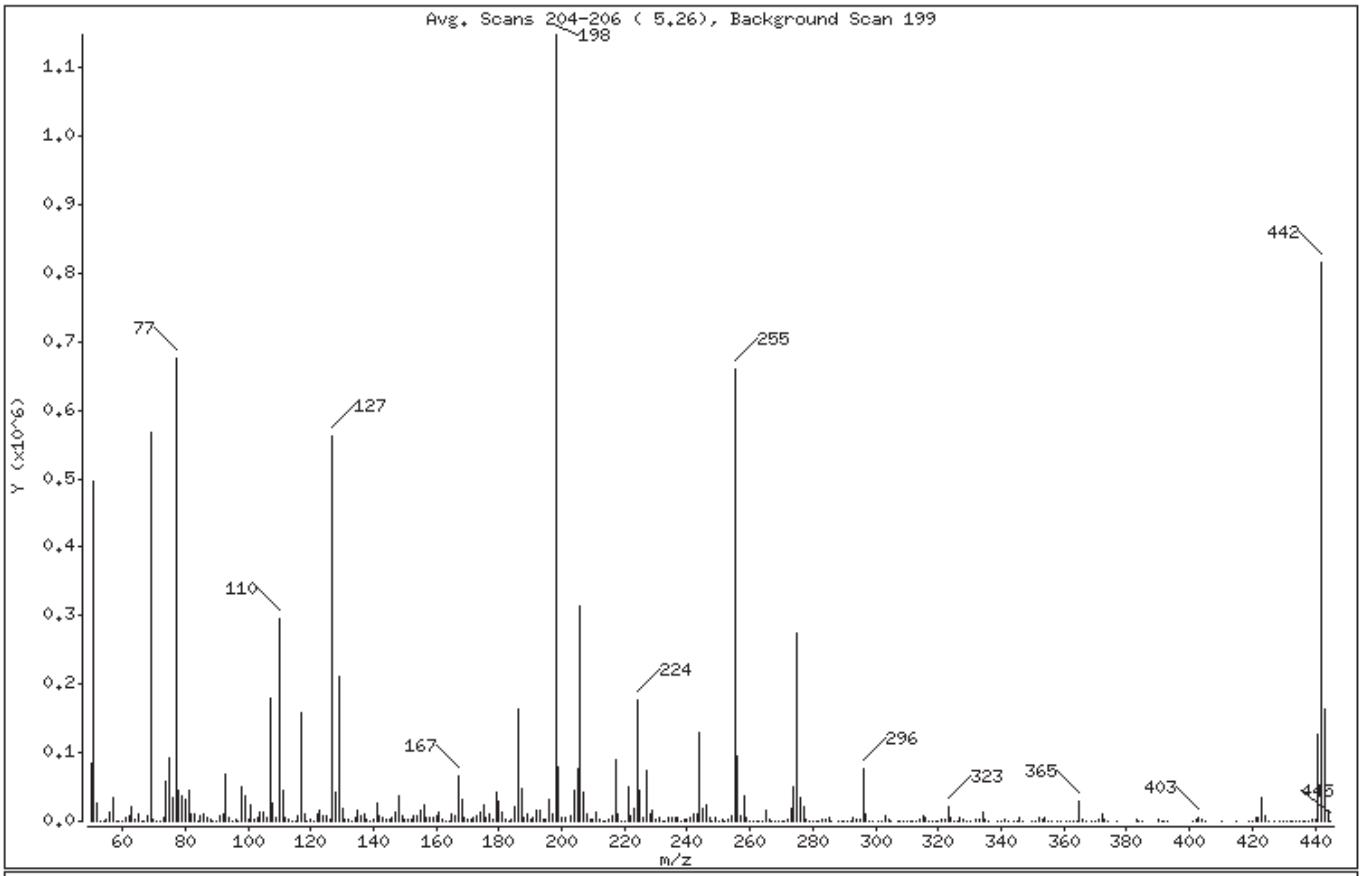
Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: ceb05247

Column phase: DB-5MS

Column diameter: 0.18

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	43.30
68	Less than 2.00% of mass 69	0.74 (1.50)
69	Mass 69 relative abundance	49.33
70	Less than 2.00% of mass 69	0.27 (0.54)
127	10.00 - 80.00% of mass 198	48.88
197	Less than 2.00% of mass 198	0.81
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	23.80
365	Greater than 1.00% of mass 198	2.49
441	0.01 - 24.00% of mass 442	11.10 (15.64)
442	50.00 - 99.99% of mass 198	70.98
443	15.00 - 24.00% of mass 442	14.17 (19.96)

Digitally signed by William H Saadeh on 10/30/2018 at 16:07.
Target 3.5 esignature user ID: whs02991

Date : 27-OCT-2018 17:50

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: mj2010.d
Spectrum: Avg. Scans 204-206 (5.26), Background Scan 199
Location of Maximum: 198.00
Number of points: 352

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	83688	139.00	765	229.00	15963	321.00	2657
51.00	497408	140.00	2306	230.00	1988	322.00	1329
52.00	25160	141.00	26968	231.00	6410	323.00	21376
53.00	864	142.00	8463	232.00	1029	324.00	3994
54.00	85	143.00	6230	233.00	1065	325.00	418
55.00	1797	144.00	1781	234.00	4700	326.00	413
56.00	14293	145.00	1359	235.00	5166	327.00	4219
57.00	33768	146.00	5144	236.00	3999	328.00	1999
58.00	1251	147.00	13467	237.00	5199	329.00	483
59.00	245	148.00	38192	238.00	814	330.00	155
60.00	304	149.00	6834	239.00	2622	332.00	1853
61.00	5456	150.00	1926	240.00	2338	333.00	1909
62.00	7366	151.00	3586	241.00	4171	334.00	13147
63.00	20328	152.00	2099	242.00	9590	335.00	3313
64.00	2817	153.00	8486	243.00	10605	336.00	378
65.00	10449	154.00	7341	244.00	129976	339.00	444
66.00	906	155.00	16560	245.00	17496	340.00	409
67.00	835	156.00	23536	246.00	25080	341.00	2553
68.00	8510	157.00	4558	247.00	5416	342.00	652
69.00	566656	158.00	4683	248.00	1294	344.00	56
70.00	3068	159.00	4206	249.00	4484	345.00	65
71.00	480	160.00	9191	250.00	1184	346.00	4544
72.00	157	161.00	13479	251.00	1350	347.00	745
73.00	3988	162.00	3892	252.00	1274	350.00	219
74.00	58776	163.00	1225	253.00	3499	351.00	484
75.00	91208	164.00	1267	254.00	7210	352.00	6577
76.00	33768	165.00	10316	255.00	660032	353.00	3916
77.00	676288	166.00	8335	256.00	94448	354.00	5790
78.00	46008	167.00	65248	257.00	7345	355.00	881
79.00	38040	168.00	30944	258.00	37320	356.00	191
80.00	30888	169.00	5303	259.00	5566	358.00	184
81.00	43864	170.00	1475	260.00	1181	359.00	465
82.00	10990	171.00	2174	261.00	1224	361.00	86
83.00	9894	172.00	5611	262.00	157	362.00	134
84.00	813	173.00	7060	263.00	527	363.00	275

Date : 27-OCT-2018 17:50

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: mj2010.d
Spectrum: Avg. Scans 204-206 (5.26), Background Scan 199
Location of Maximum: 198.00
Number of points: 352

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	7445	174.00	12301	264.00	1164	364.00	287
86.00	10734	175.00	23560	265.00	15777	365.00	28608
87.00	5457	176.00	6384	266.00	1997	366.00	3935
88.00	1997	177.00	10157	267.00	120	367.00	421
89.00	1138	178.00	3715	268.00	204	369.00	51
90.00	361	179.00	43312	269.00	299	370.00	639
91.00	8864	180.00	29400	270.00	674	371.00	1650
92.00	10431	181.00	14179	271.00	1123	372.00	9982
93.00	67656	182.00	2197	272.00	2118	373.00	2413
94.00	4528	183.00	1143	273.00	19512	374.00	275
95.00	1100	184.00	3215	274.00	49872	377.00	262
96.00	3151	185.00	21416	275.00	273408	383.00	2661
97.00	1298	186.00	163776	276.00	35336	384.00	720
98.00	50240	187.00	46480	277.00	21992	385.00	373
99.00	38264	188.00	4629	278.00	3723	390.00	1337
100.00	3260	189.00	9819	279.00	922	391.00	972
101.00	24496	190.00	1844	280.00	131	392.00	646
102.00	1420	191.00	4449	281.00	194	393.00	56
103.00	6062	192.00	15655	282.00	546	401.00	494
104.00	13660	193.00	16222	283.00	2718	402.00	3423
105.00	12888	194.00	3363	284.00	1433	403.00	5033
106.00	4508	195.00	2195	285.00	4275	404.00	2062
107.00	180480	196.00	32880	286.00	963	405.00	338
108.00	27024	197.00	9352	288.00	264	410.00	144
109.00	4657	198.00	1148416	289.00	784	415.00	179
110.00	294400	199.00	77912	290.00	714	419.00	105
111.00	45792	200.00	6569	291.00	644	420.00	75
112.00	5980	201.00	4781	292.00	1175	421.00	5043
113.00	1671	203.00	8662	293.00	5068	422.00	4573
114.00	404	204.00	45392	294.00	1378	423.00	34912
115.00	438	205.00	76192	295.00	2222	424.00	7454
116.00	8811	206.00	314880	296.00	75824	425.00	721
117.00	159360	207.00	40960	297.00	10343	427.00	149
118.00	10904	208.00	9821	298.00	807	429.00	138
119.00	924	209.00	3442	299.00	123	430.00	82

Digitally signed by William H Saadeh on 10/30/2018 at 16:07.
Target 3.5 esignature user ID: whs02991

Date : 27-OCT-2018 17:50

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

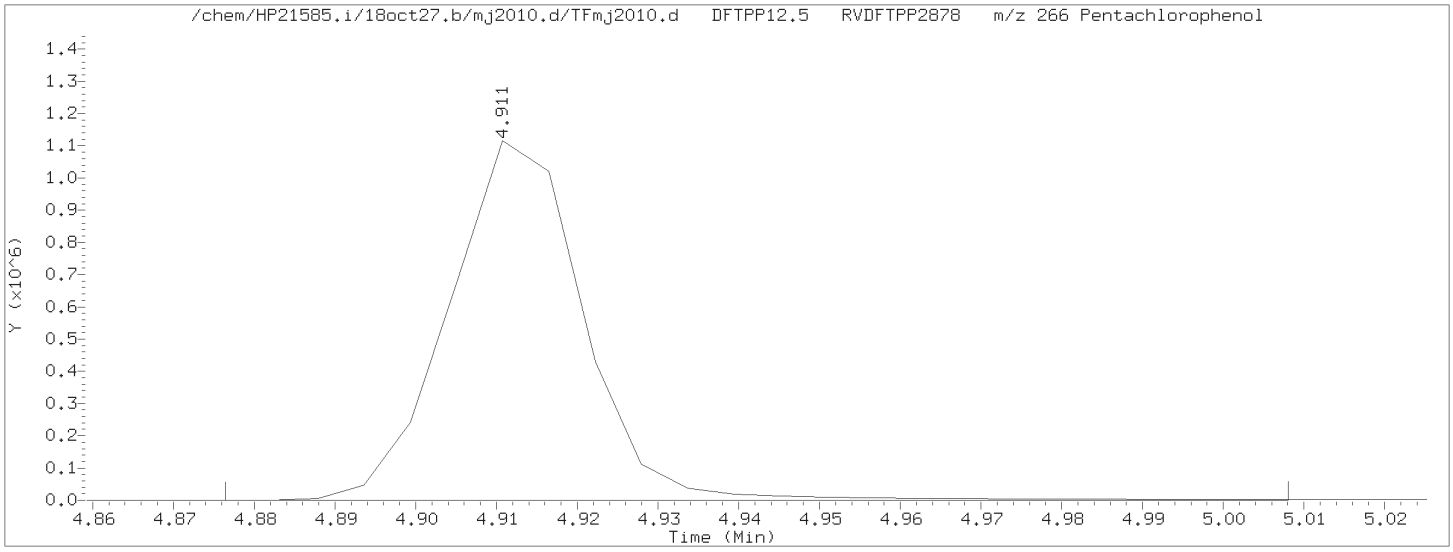
Data File: mj2010.d
Spectrum: Avg. Scans 204-206 (5.26), Background Scan 199
Location of Maximum: 198.00
Number of points: 352

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	2159	210.00	3599	301.00	1047	431.00	142
121.00	484	211.00	12441	302.00	1135	432.00	264
122.00	9544	212.00	2271	303.00	8525	433.00	384
123.00	16053	213.00	965	304.00	2440	434.00	347
124.00	7863	214.00	424	305.00	277	435.00	266
125.00	7571	215.00	3165	307.00	150	436.00	808
126.00	3213	216.00	7592	308.00	956	437.00	995
127.00	561536	217.00	89000	309.00	822	438.00	494
128.00	43096	218.00	10896	310.00	875	439.00	1349
129.00	210560	219.00	1157	311.00	226	440.00	1641
130.00	18856	220.00	945	312.00	295	441.00	127568
131.00	3425	221.00	49720	313.00	699	442.00	815488
132.00	1775	222.00	8767	314.00	3107	443.00	162752
133.00	976	223.00	19704	315.00	7750	444.00	15176
134.00	5790	224.00	176256	316.00	4183	445.00	777
135.00	16464	225.00	44280	317.00	862		
136.00	6735	226.00	4633	318.00	55		
137.00	9271	227.00	74056	319.00	76		
138.00	2090	228.00	10626	320.00	387		

Digitally signed by William H Saadeh on 10/30/2018 at 16:07.
Target 3.5 esignature user ID: whs02991

Assessment of GC Column Performance and Injection Port Inertness for

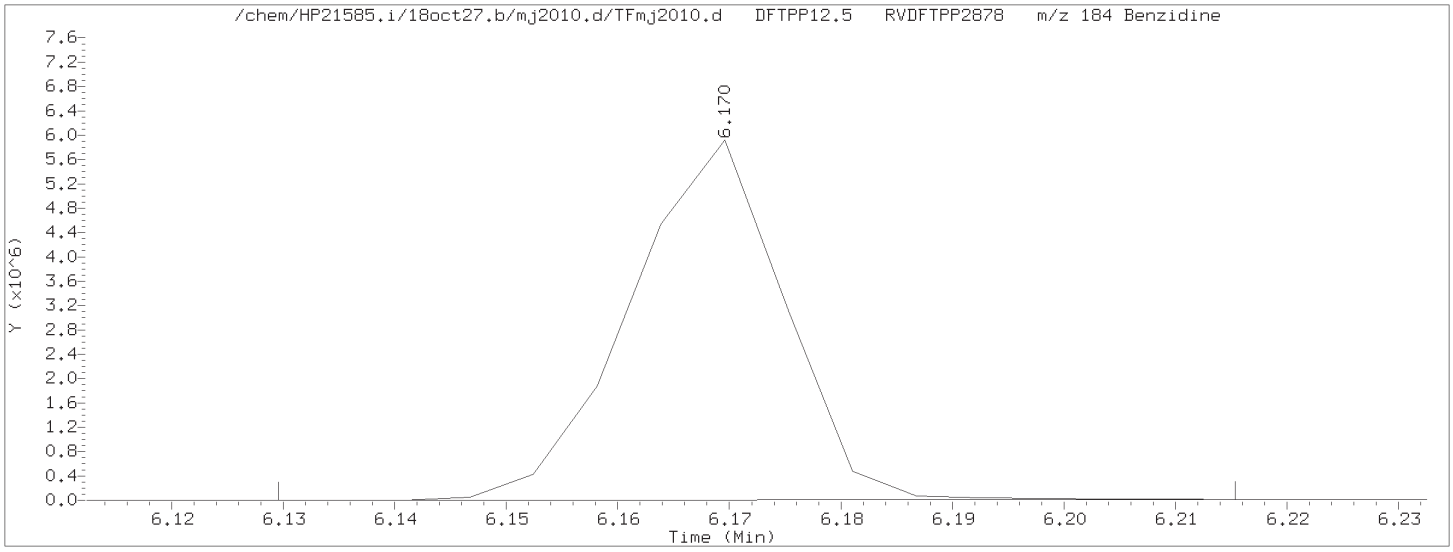
Instrument ID: HP21585.i Injection Date: 27-OCT-2018 17:50 Operator: ceb05247



Pentachlorophenol EICP peak height = 1116160 EICP peak height at 10% = 111616 Pentachlorophenol EICP area = 1293241

Pentachlorophenol EICP peak apex (min.) = 4.911
RT at 10% of front half of EICP (min.) = 4.896 'Front' peak width (min.) = 0.0152500000
RT at 10% of back half of EICP (min.) = 4.928 'Tailing' peak width (min.) = 0.0172333333

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0172333333}{0.0152500000} = 1.130$



Benzidine EICP peak height = 5910783 EICP peak height at 10% = 591078 Benzidine EICP area = 5654798

Benzidine EICP peak apex (min.) = 6.170
RT at 10% of front half of EICP (min.) = 6.153 'Front' peak width (min.) = 0.0164833333
RT at 10% of back half of EICP (min.) = 6.181 'Tailing' peak width (min.) = 0.0111666667

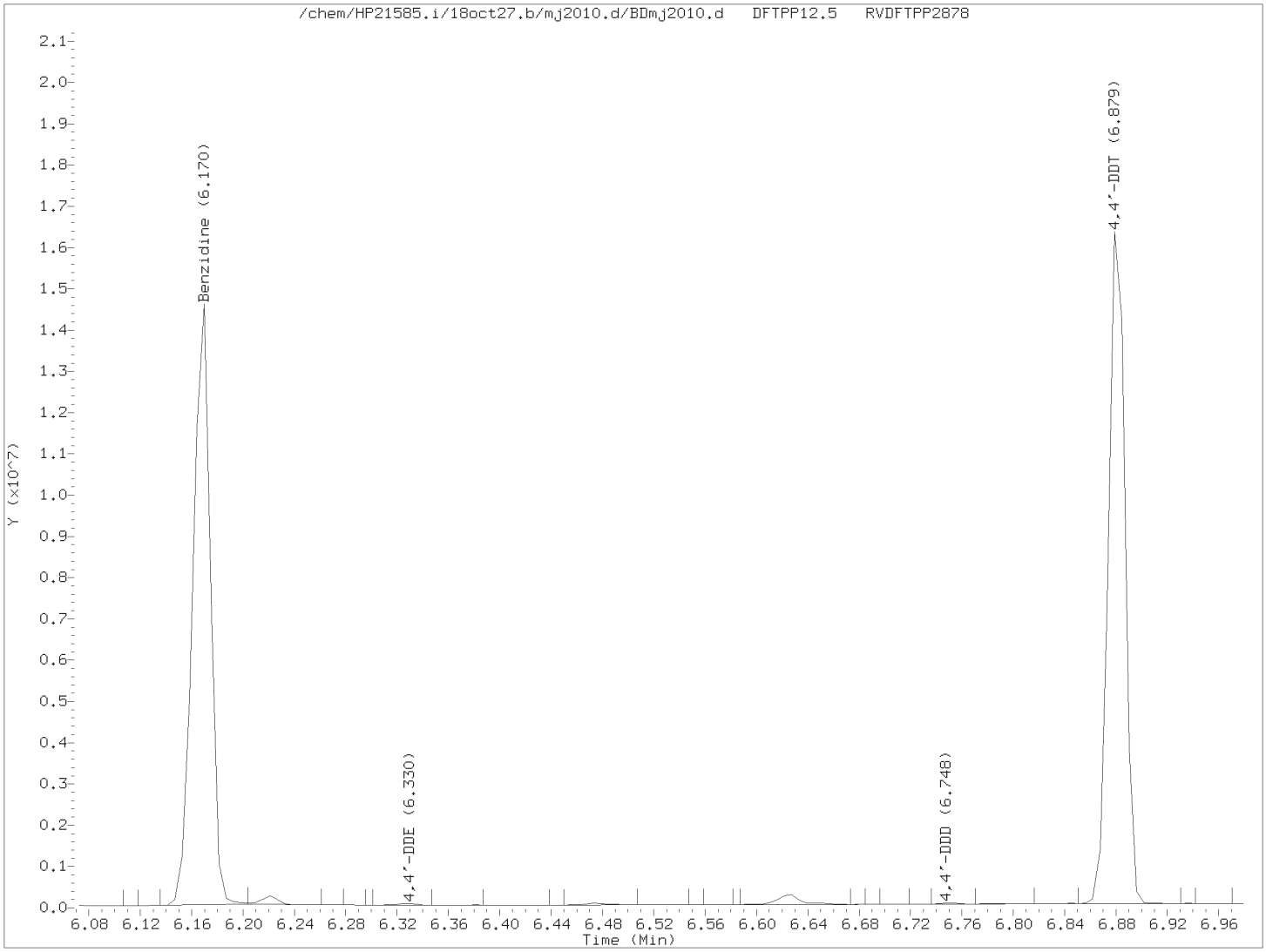
Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0111666667}{0.0164833333} = 0.677$

printed on 10/27/2018 at 18:04

Secondary review performed and digitally signed by Irene L. Dodd on 10/30/2018 at 16:28. PARALLAX ID: ild00415

Assessment of GC Column Performance and Injection Port Inertness for

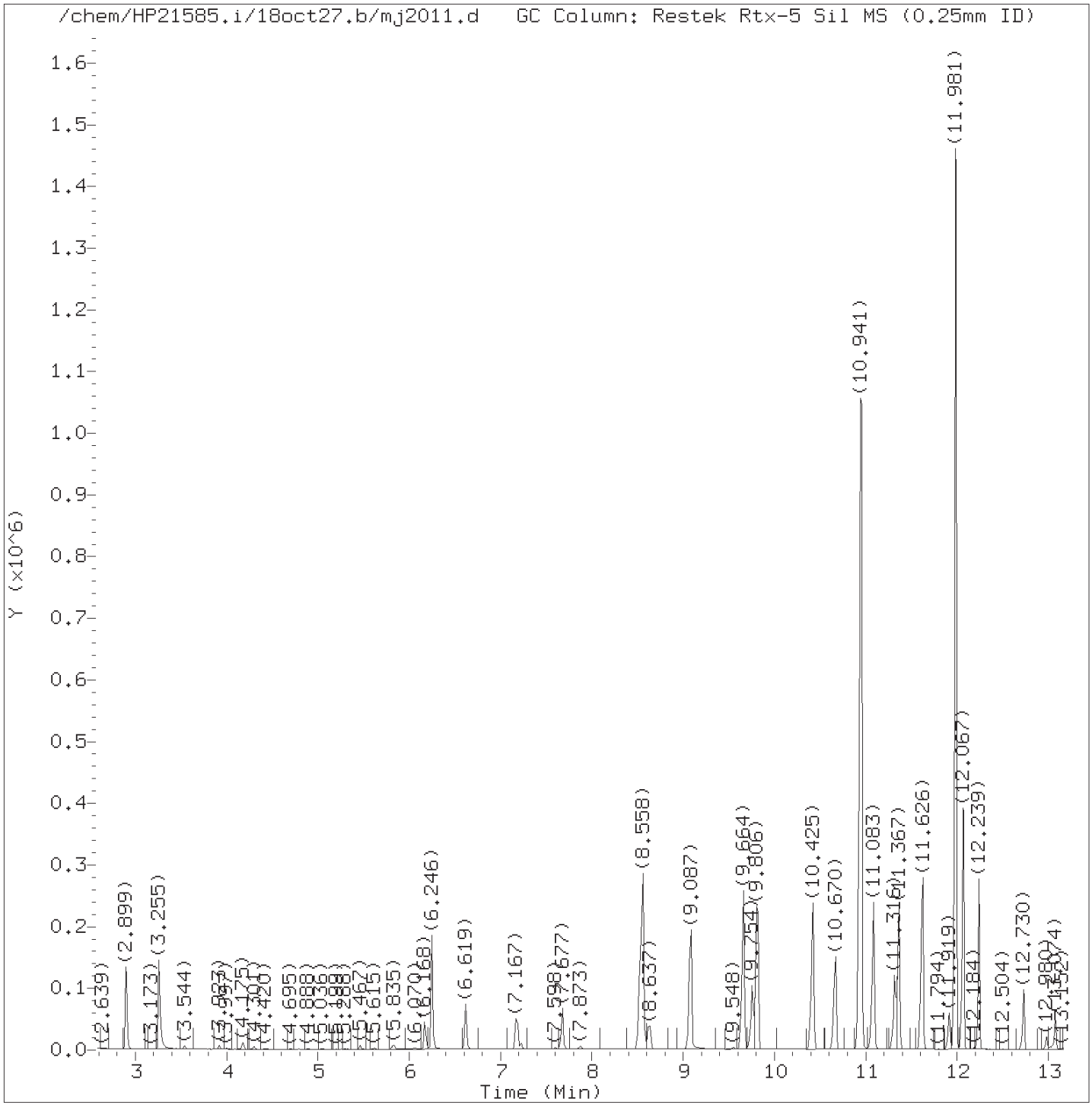
Instrument ID: HP21585.i Injection Date: 27-OCT-2018 17:50 Operator: ceb05247



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{41929 + 22931}{41929 + 22931 + 14854627} \times 100 = 0.4$$

Secondary review performed and digitally signed by Irene L. Dodd on 10/30/2018 at 16:28. PARALLAX ID: ild00415



Total Ion Chromatogram (TIC)

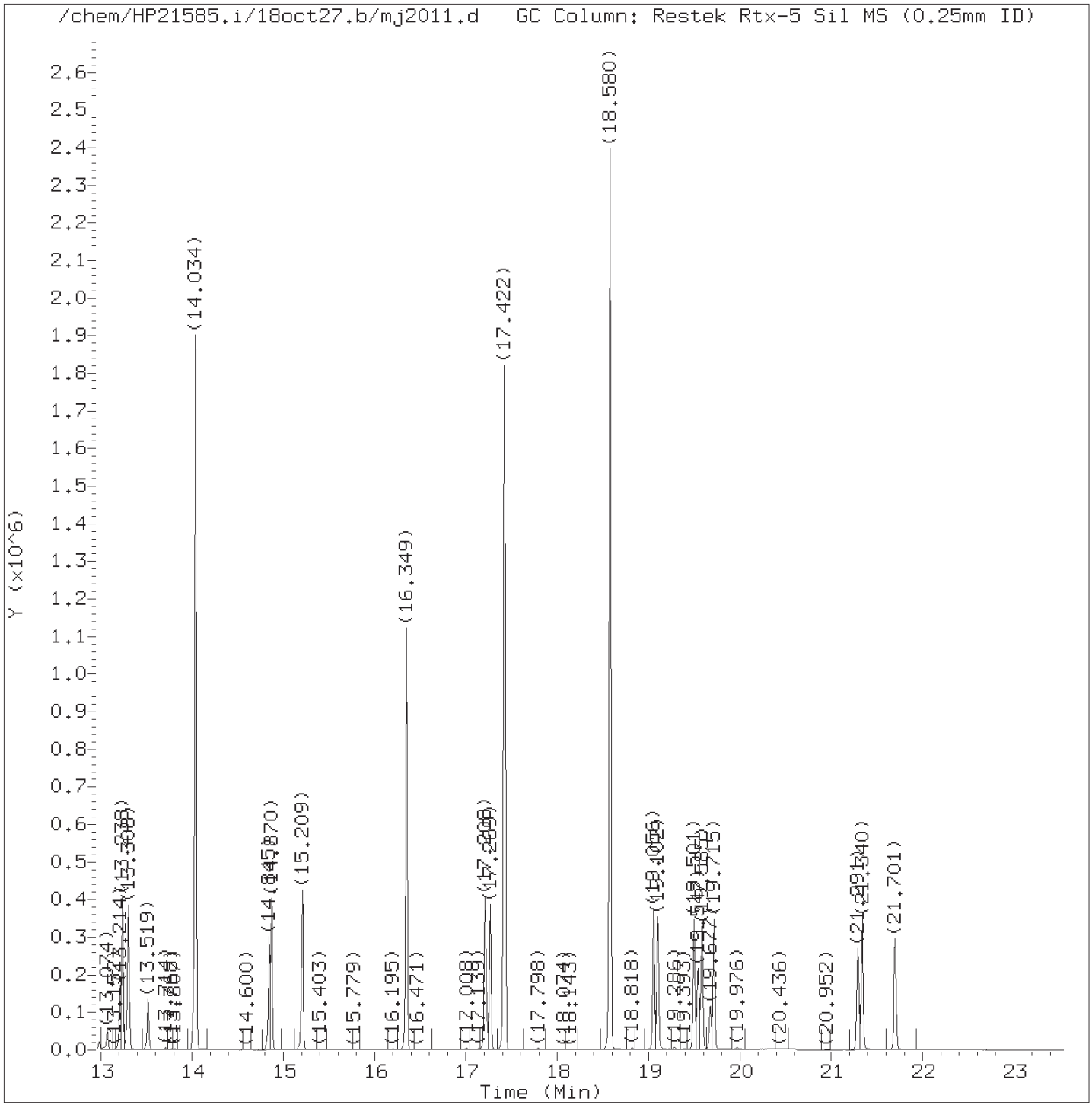
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2011.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 18:18 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 18:49
Date, time and analyst ID of latest file update: 27-Oct-2018 18:49 knb25316

Sample Name: SSTD0.5 Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck
on 10/27/2018 at 18:50.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2011.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 18:18 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 18:49
Date, time and analyst ID of latest file update: 27-Oct-2018 18:49 knb25316

Sample Name: SSTD0.5 Lab Sample ID: RVSIM2768

Digitally signed by Kira N. Beck
on 10/27/2018 at 18:50.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2011.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 18:18 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 18:49
Date, time and analyst ID of latest file update: 27-Oct-2018 18:49 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	79966	0.504
2) N-Nitrosodimethylamine	(1)	3.255	74	121462	0.528
4) bis(2-Chloroethyl)ether	(2)	6.246	93	130701	0.520
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	57232	0.250
6)*Naphthalene-d8	(2)	8.519	136	164185	0.250
7) Naphthalene	(2)	8.558	128	380822	0.504
8) Quinoline	(2)	9.087	129	232608	0.513
9) 2-Methylnaphthalene	(2)	9.664	142	240768	0.518
10)$1-Methylnaphthalene-d10	(2)	9.754	152	151234	0.506
11) 1-Methylnaphthalene	(2)	9.819	142	238709	0.519
12) Dimethylphthalate	(3)	10.954	163	1470411	2.588
13) Acenaphthylene	(3)	11.083	152	392179	0.518
14)*Acenaphthene-d10	(3)	11.316	164	71954	0.250
15) Acenaphthene	(3)	11.367	154	232010	0.504
16) Dibenzofuran	(3)	11.626	168	322997	0.525
17) Diethylphthalate	(3)	11.981	149	1495963	2.646
18) Fluorene	(3)	12.075	166	279757	0.521
19) Hexachlorobenzene	(4)	12.738	284	86483	0.502
20)*Phenanthrene-d10	(4)	13.214	188	153475	0.250
21) Phenanthrene	(4)	13.238	178	416702	0.506
22) Anthracene	(4)	13.308	178	418215	0.517
23) Di-n-butylphthalate	(4)	14.034	149	2435433	2.698
24)$Fluoranthene-d10	(4)	14.845	212	317128	0.527
25) Fluoranthene	(4)	14.870	202	485917	0.529
26) Pyrene	(5)	15.209	202	506960	0.494
27) Butylbenzylphthalate	(5)	16.349	149	1115734	2.607
28) Benzo(a)anthracene	(5)	17.208	228	451133	0.510
29)*Chrysene-d12	(5)	17.223	240	112886	0.250
30) Chrysene	(5)	17.269	228	446296	0.498
31) bis(2-Ethylhexyl)phthalate	(5)	17.422	149	1671525	2.620
32) Di-n-octylphthalate	(6)	18.580	149	2896724	2.576
33) Benzo(b)fluoranthene	(6)	19.056	252	437700	0.508
34) Benzo(k)fluoranthene	(6)	19.102	252	447988	0.521
35) Benzo(e)pyrene	(6)	19.501	252	419480	0.518
36)$Benzo(a)pyrene-d12	(6)	19.547	264	207013	0.518
37) Benzo(a)pyrene	(6)	19.585	252	417987	0.506
38)*Perylene-d12	(6)	19.677	264	108783	0.250
45) Perylene	(6)	19.715	252	419439	0.500
39) Indeno(1,2,3-cd)pyrene	(6)	21.291	276	361773M	0.482
40) Dibenz(a,h)anthracene	(6)	21.340	278	372454	0.486

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 18:50.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2011.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 18:18 Analyst ID: ceb05247

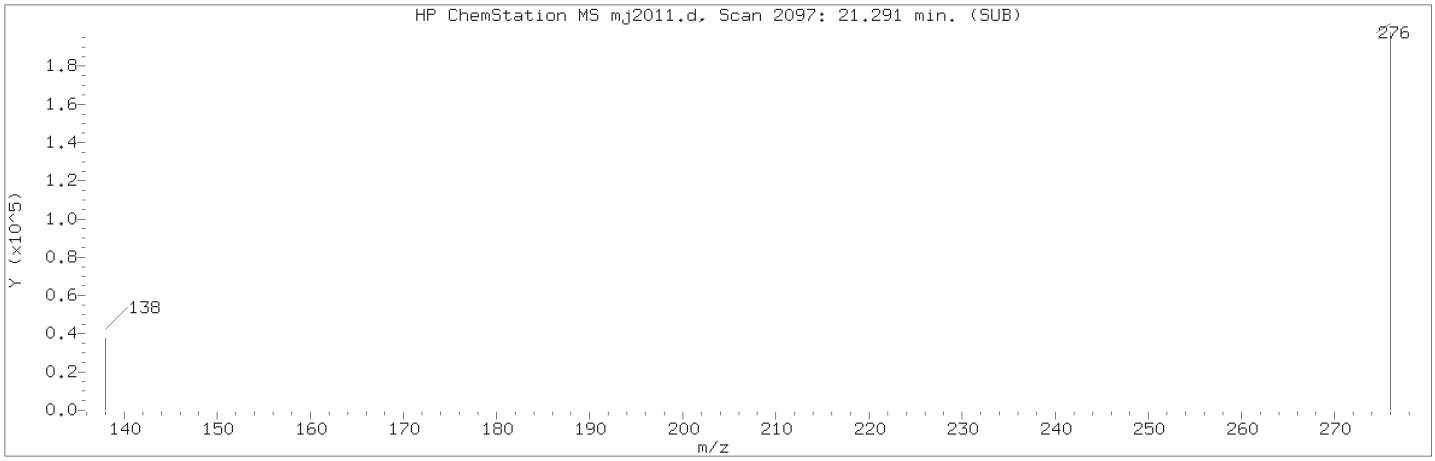
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 18:49
Date, time and analyst ID of latest file update: 27-Oct-2018 18:49 knb25316

Sample Name: SSTD0.5 Lab Sample ID: RVSIM2768

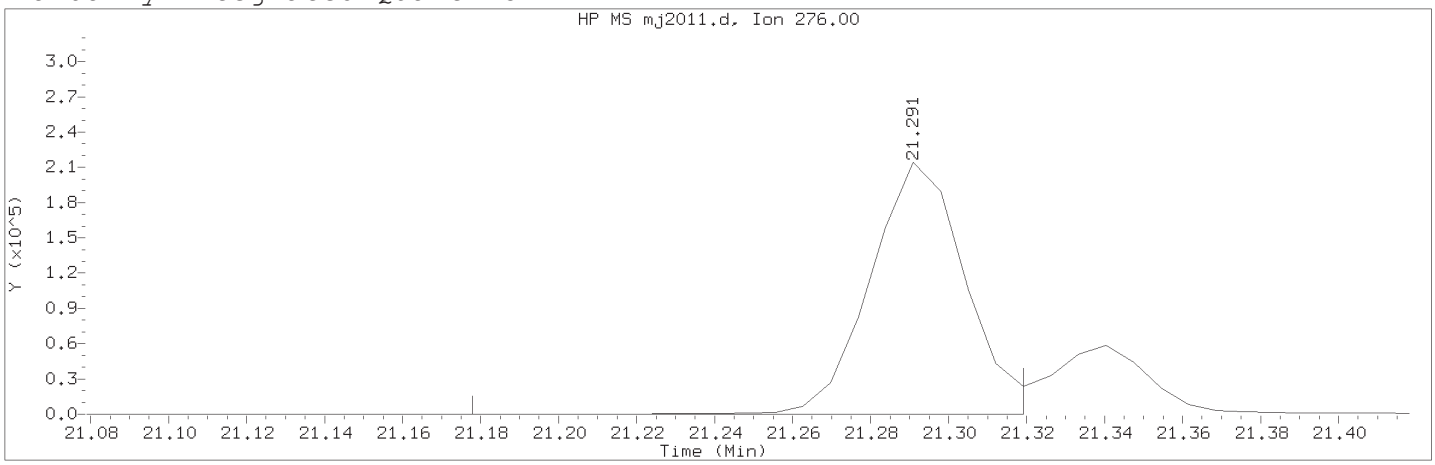
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
41) Benzo(g,h,i)perylene	(6)	21.701	276	420169	0.484

Digitally signed by Kira N. Beck
on 10/27/2018 at 18:50.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2011.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 18:18 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 18:49
Date, time and analyst ID of latest file update: 27-Oct-2018 18:49 knb25316

Sample Name: SSTD0.5 Lab Sample ID: RVSIM2768

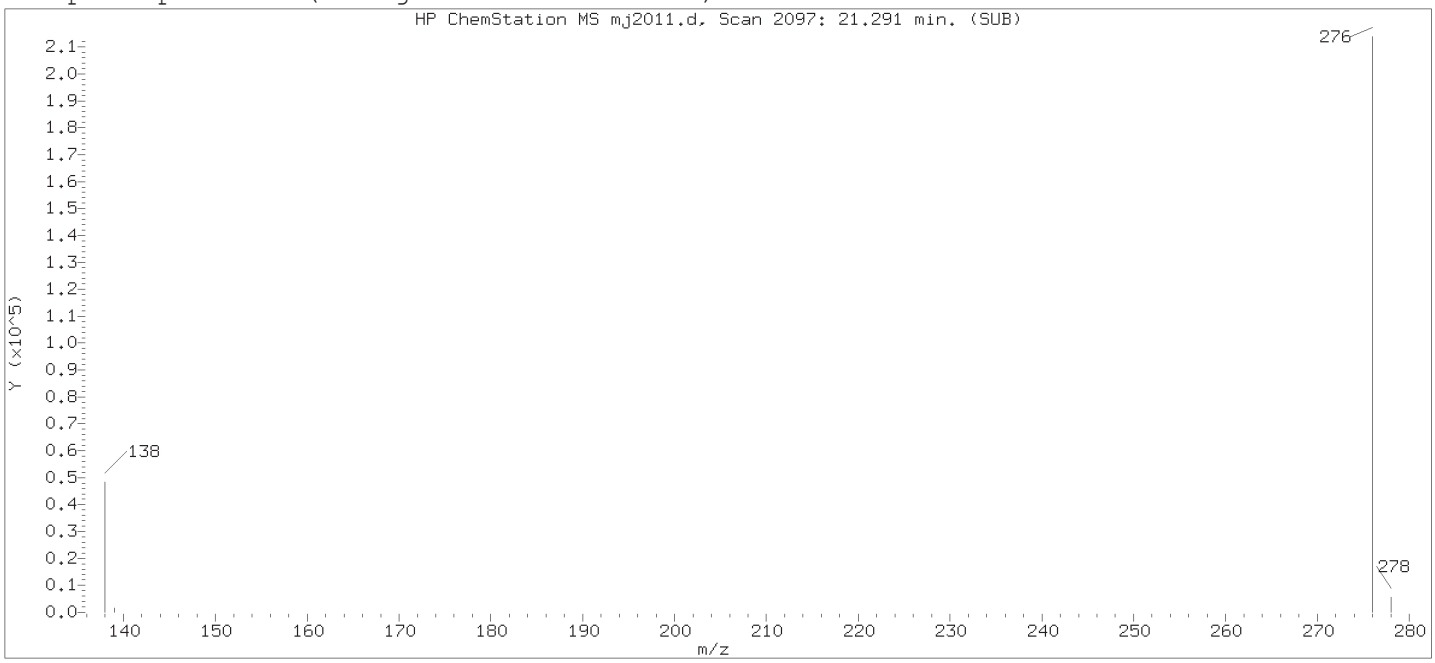
Compound Number	: 39		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 2097		
Retention Time (minutes)	: 21.291		
Quant Ion	: 276.00		
Area (flag)	: 361773M		
On-Column Amount (ng/ul)	: 0.4822		
Integration start scan	: 2080	Integration stop scan:	2100
Y at integration start	: 83	Y at integration end:	83

Reason for manual integration: improper integration

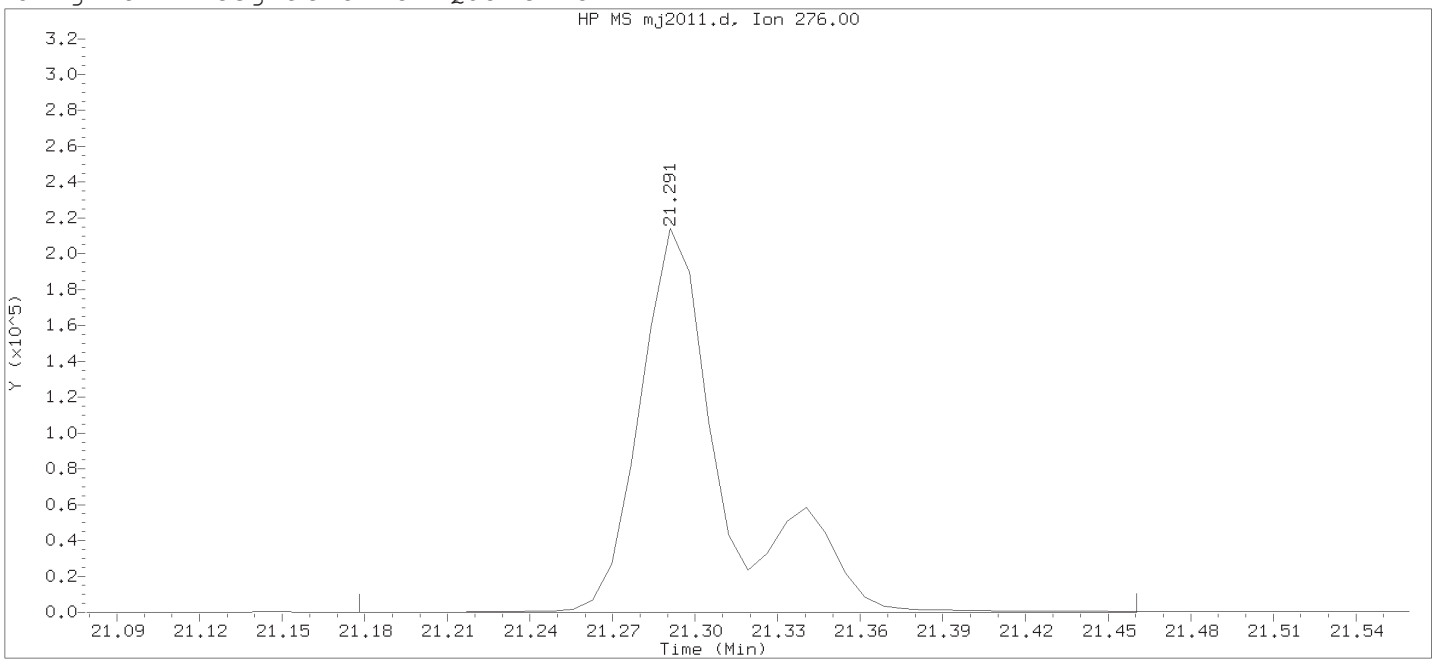
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/27/2018 at 18:50.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Irene L. Dodd on 10/30/2018 at 15:38.
PARALLAX ID: ild00415

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



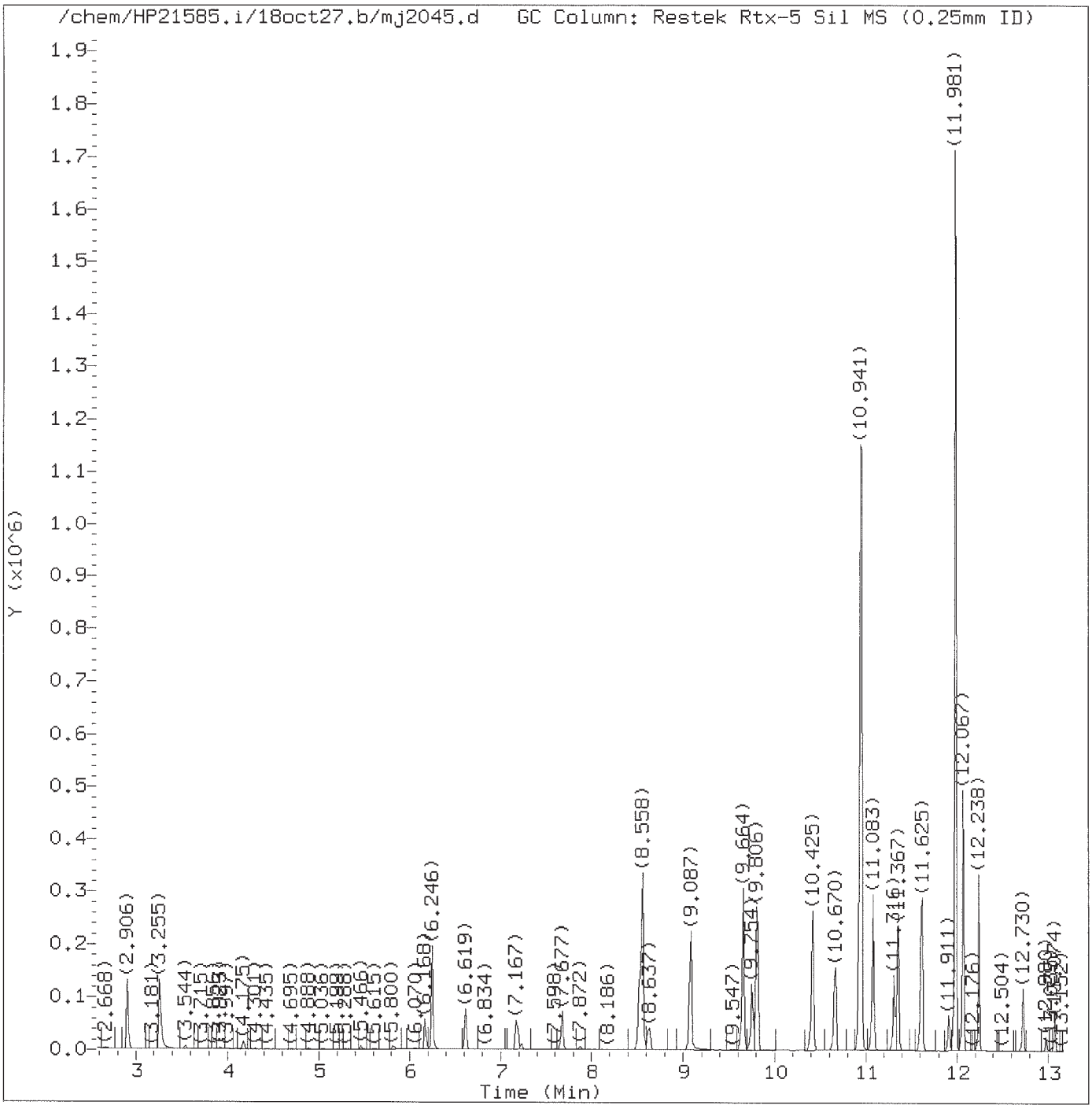
Data File: /chem/HP21585.i/18oct27.b/mj2011.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 18:18 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: all1
Calibration date and time: 27-OCT-2018 18:49
Date, time and analyst ID of latest file update: 27-Oct-2018 18:49 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	: 459092		
On-column Amount (ng/ul)	: 0.6119		
Integration start scan	: 2080	Integration stop scan:	2120
Y at integration start	: 83	Y at integration end:	83

Digitally signed by Kira N. Beck on 10/27/2018 at 18:50.
Target 3.5 esignature used: 1007



Total Ion Chromatogram (TIC)

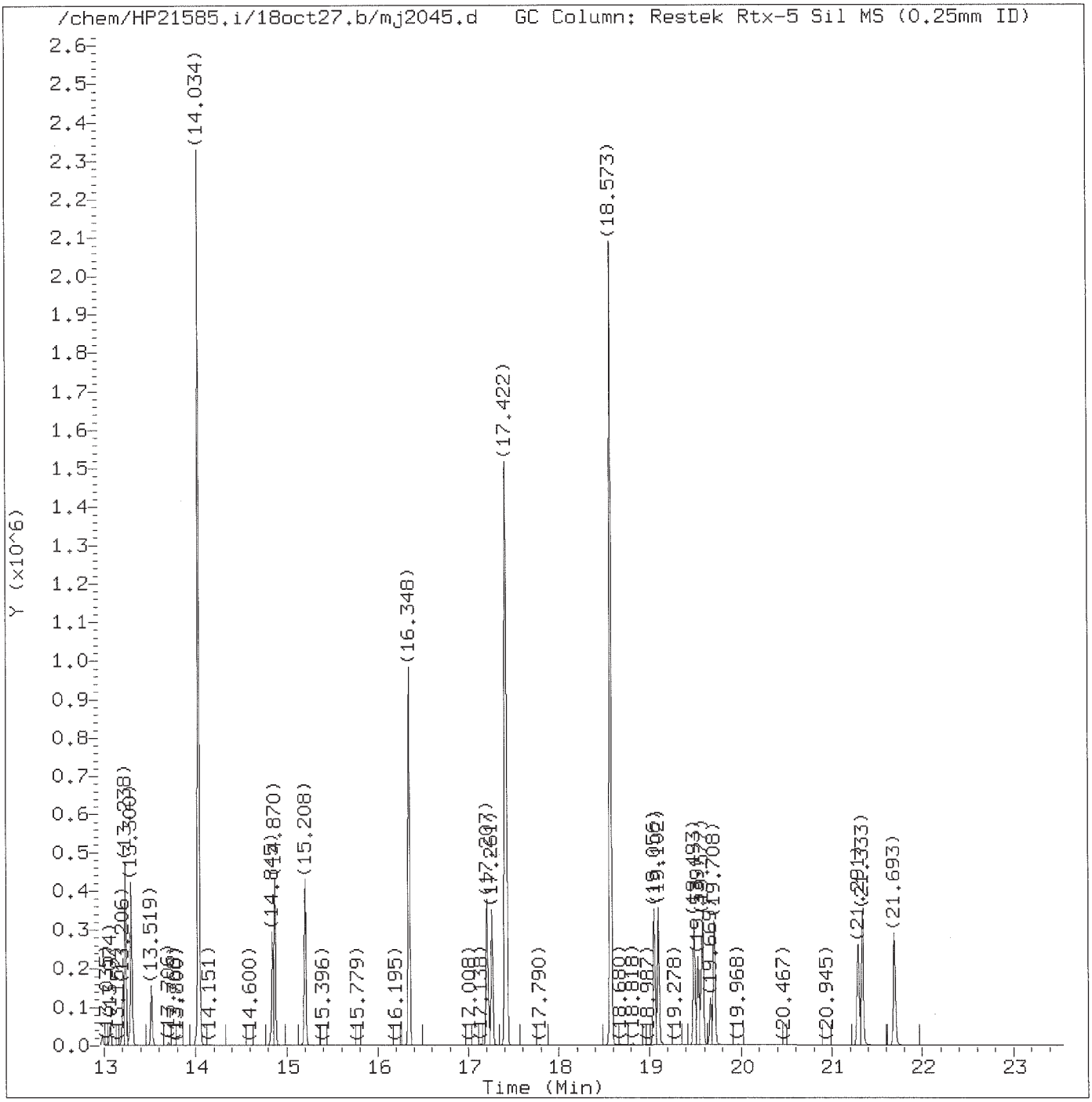
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 30-Oct-2018 09:14 jmg00346

Sample Name: SECC0.5 Lab Sample ID: rvSIM2768

Digitally signed by Joseph M. Gambler
on 10/30/2018 at 09:15.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 30-Oct-2018 09:14 jmg00346

Sample Name: SECC0.5 Lab Sample ID: rvSIM2768

Digitally signed by Joseph M. Gambler
on 10/30/2018 at 09:15.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 30-Oct-2018 09:14 jmg00346

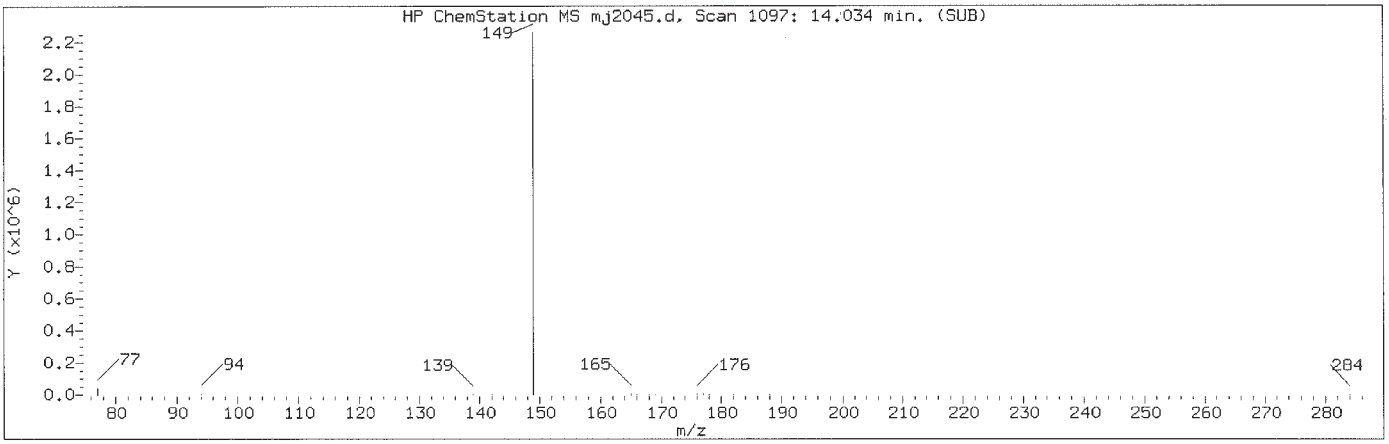
Sample Name: SECC0.5 Lab Sample ID: rvSIM2768

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.906	88	82110	0.489
4) bis(2-Chloroethyl)ether	(2)	6.246	93	138567	0.544
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	60574	0.250
6)*Naphthalene-d8	(2)	8.519	136	166447	0.250
7) Naphthalene	(2)	8.558	128	399129	0.522
10)$1-Methylnaphthalene-d10	(2)	9.754	152	155809	0.515
13) Acenaphthylene	(3)	11.083	152	390753	0.501
14)*Acenaphthene-d10	(3)	11.316	164	74145	0.250
15) Acenaphthene	(3)	11.367	154	232471	0.490
18) Fluorene	(3)	12.067	166	276786	0.501
19) Hexachlorobenzene	(4)	12.730	284	82820	0.487
20)*Phenanthrene-d10	(4)	13.206	188	151546	0.250
21) Phenanthrene	(4)	13.238	178	404068	0.497
22) Anthracene	(4)	13.300	178	407462	0.510
23) Di-n-butylphthalate	(4)	14.034	149	2328933M	2.613
24)$Fluoranthene-d10	(4)	14.845	212	309196	0.520
25) Fluoranthene	(4)	14.870	202	466001	0.514
26) Pyrene	(5)	15.208	202	483061	0.492
28) Benzo(a)anthracene	(5)	17.207	228	406073	0.480
29)*Chrysene-d12	(5)	17.223	240	107946	0.250
30) Chrysene	(5)	17.261	228	419632	0.490
31) bis(2-Ethylhexyl)phthalate	(5)	17.415	149	1576644M	2.584
33) Benzo(b)fluoranthene	(6)	19.056	252	417974	0.485
34) Benzo(k)fluoranthene	(6)	19.102	252	423411	0.492
36)$Benzo(a)pyrene-d12	(6)	19.539	264	205468	0.514
37) Benzo(a)pyrene	(6)	19.577	252	401272	0.486
38)*Perylene-d12	(6)	19.669	264	108807	0.250
39) Indeno(1,2,3-cd)pyrene	(6)	21.291	276	362902M	0.484
40) Dibenz(a,h)anthracene	(6)	21.333	278	378670	0.494
41) Benzo(g,h,i)perylene	(6)	21.693	276	423939	0.488

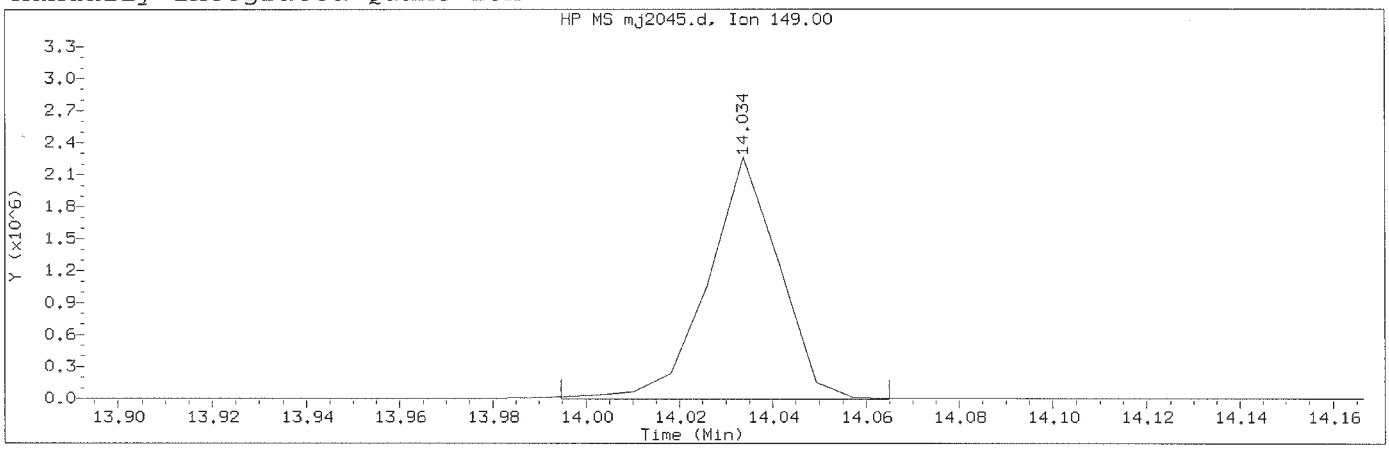
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler
on 10/30/2018 at 09:15.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 30-Oct-2018 09:14 jmg00346

Sample Name: SECC0.5 Lab Sample ID: rvSIM2768

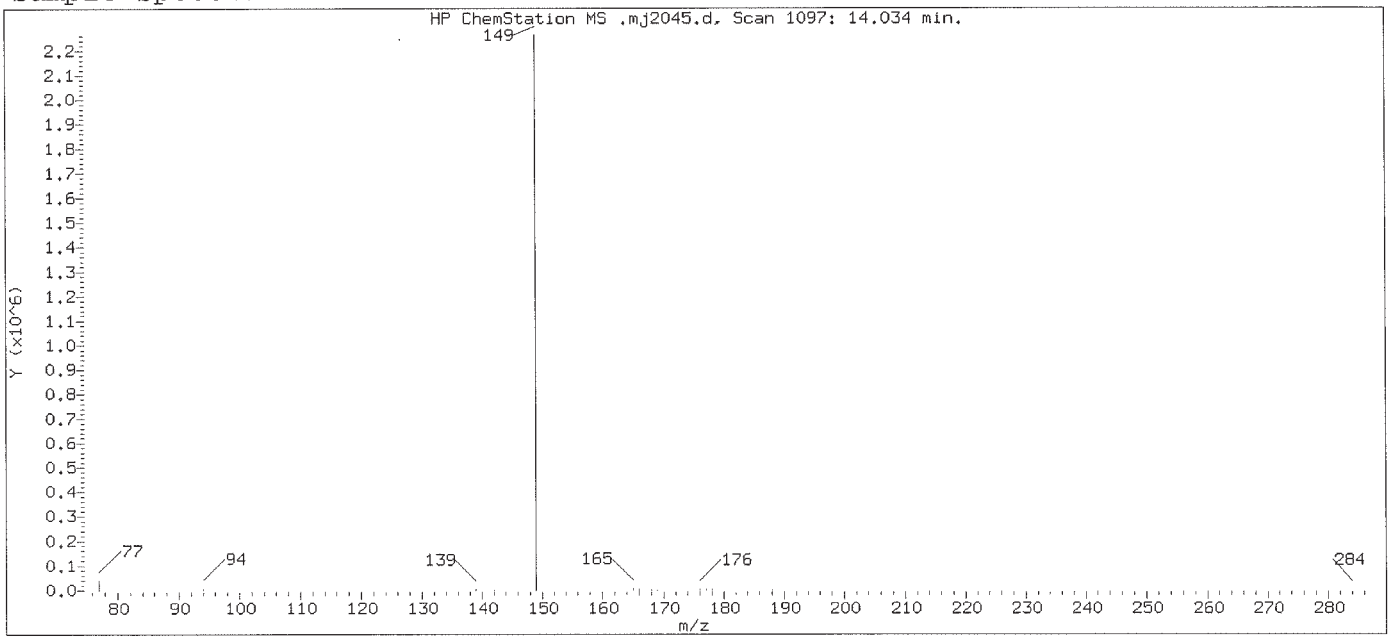
Compound Number : 23
Compound Name : Di-n-butylphthalate
Scan Number : 1097
Retention Time (minutes) : 14.034
Quant Ion : 149.00
Area (flag) : 2328933M
On-Column Amount (ng/ul) : 2.6133
Integration start scan : 1091 Integration stop scan: 1100
Y at integration start : -6148 Y at integration end: -6148

Reason for manual integration: missed peak

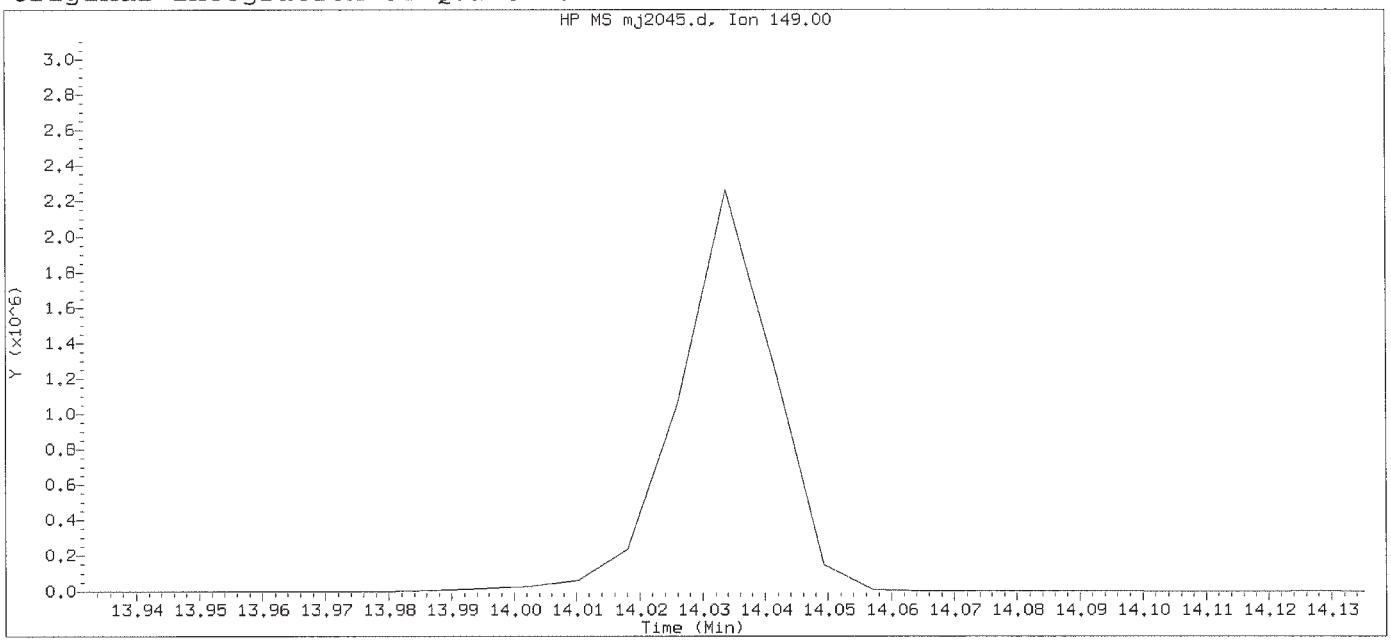
Analyst responsible for change: Digitally signed by Joseph M. Gambler on 10/30/2018 at 09:15. Target 3.5 esignature user ID: jmg00346

GC/MS audit/management approval: CAM 1237 10-31-18

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

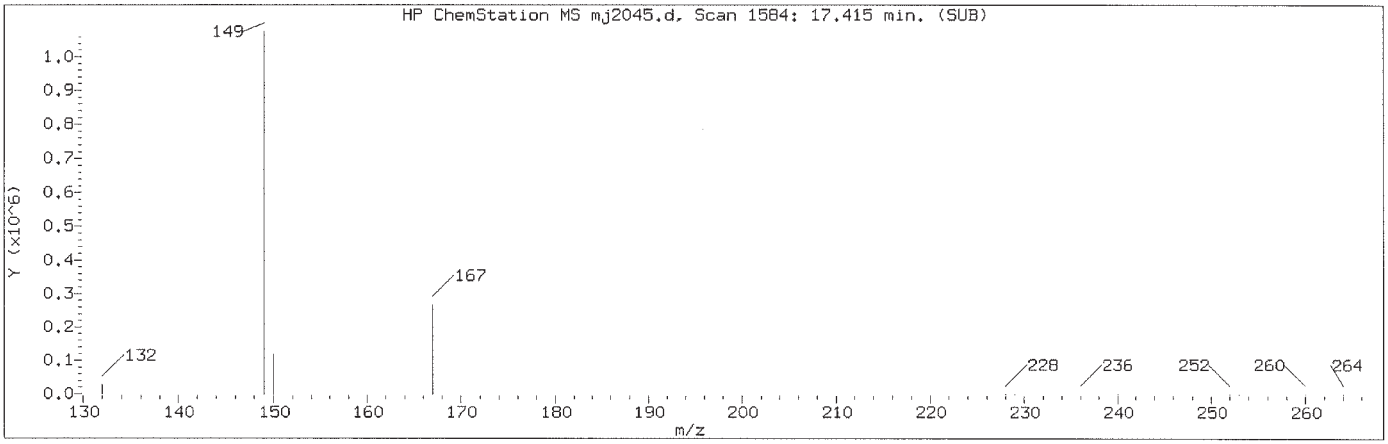
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:09 bkc25363

Sample Name: SECC0.5 Lab Sample ID: rvSIM2768

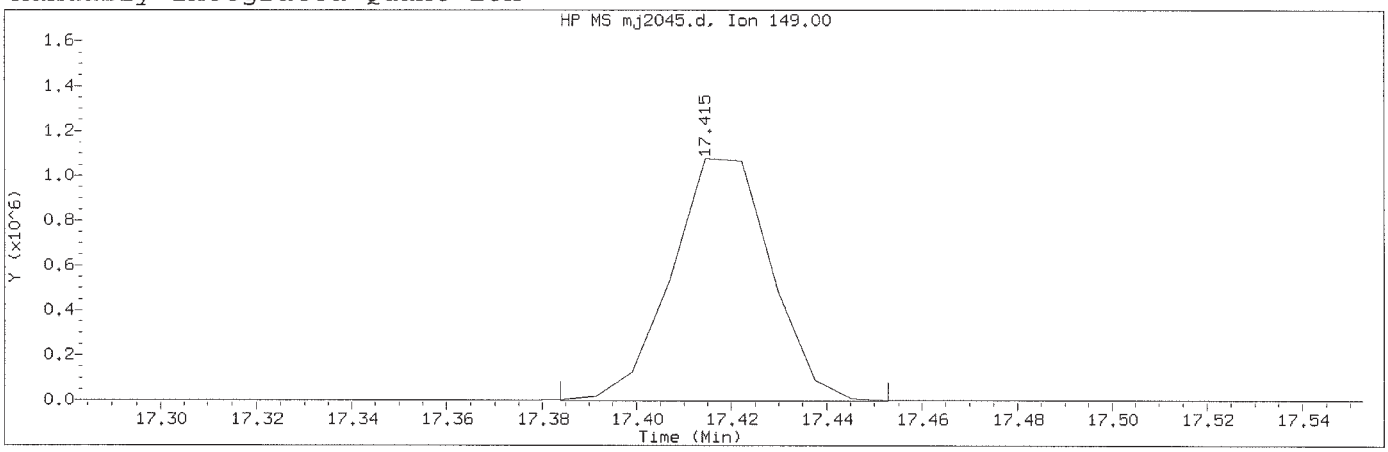
Compound Number : 23
Compound Name : Di-n-butylphthalate
Expected RT (minutes) : 14.034
Quant Ion : 149.00

Digitally signed by Joseph M. Gambler on 10/30/2018 at 09:15.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 30-Oct-2018 09:14 jmg00346

Sample Name: SECC0.5 Lab Sample ID: rvSIM2768

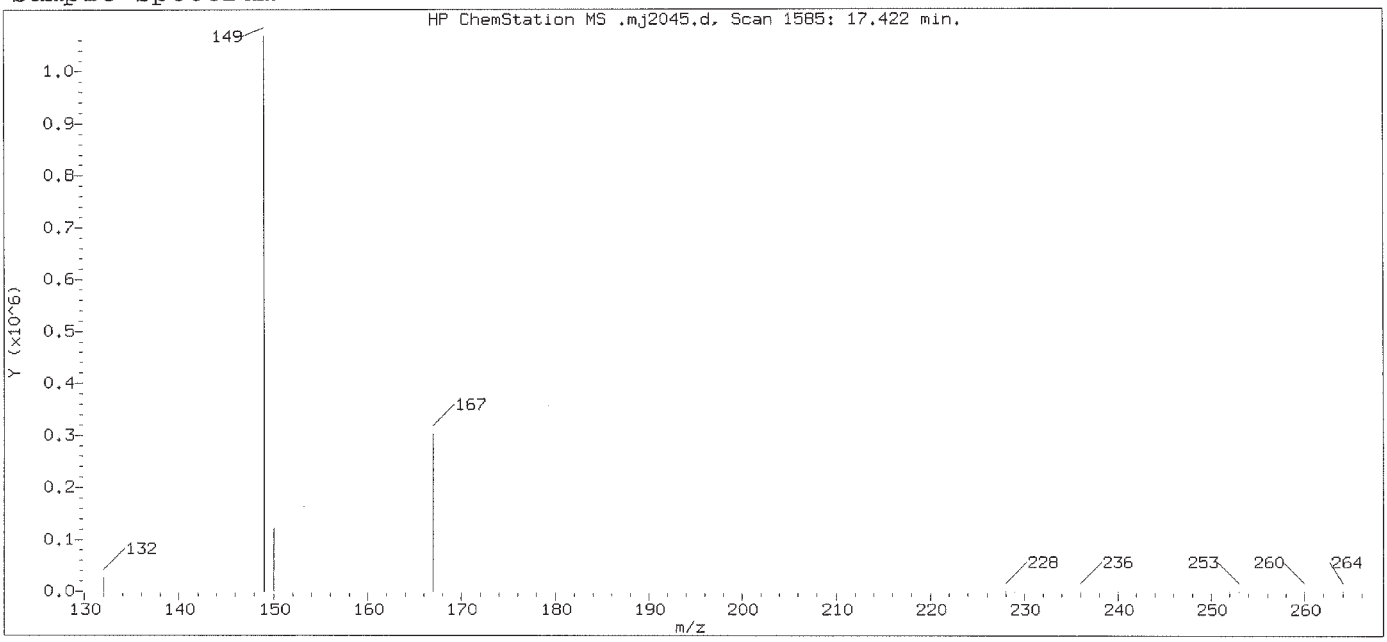
Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1584
Retention Time (minutes) : 17.415
Quant Ion : 149.00
Area (flag) : 1576644M
On-Column Amount (ng/ul) : 2.5840
Integration start scan : 1579 Integration stop scan: 1588
Y at integration start : -1576 Y at integration end: -1576

Reason for manual integration: missed peak

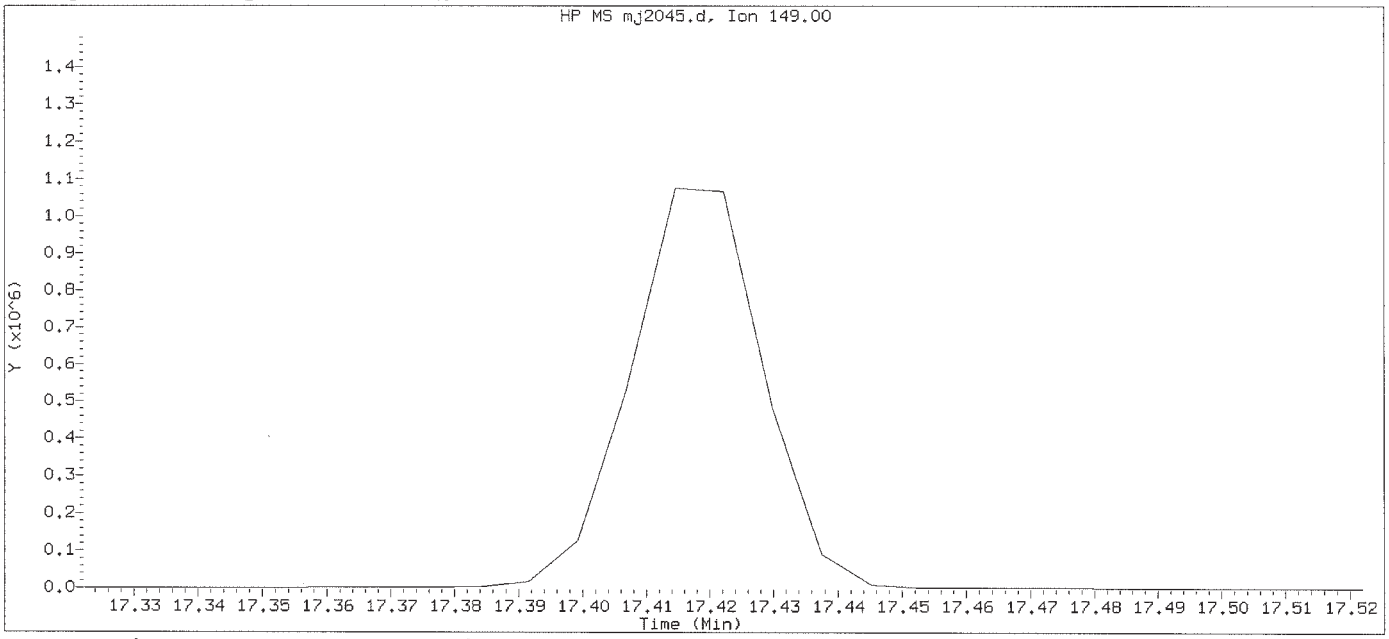
Analyst responsible for change: Digitally signed by Joseph M. Gambler on 10/30/2018 at 09:15. Target 3.5 esignature user ID: jmg00346

GC/MS audit/management approval: CAM 1237 10-31-18

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

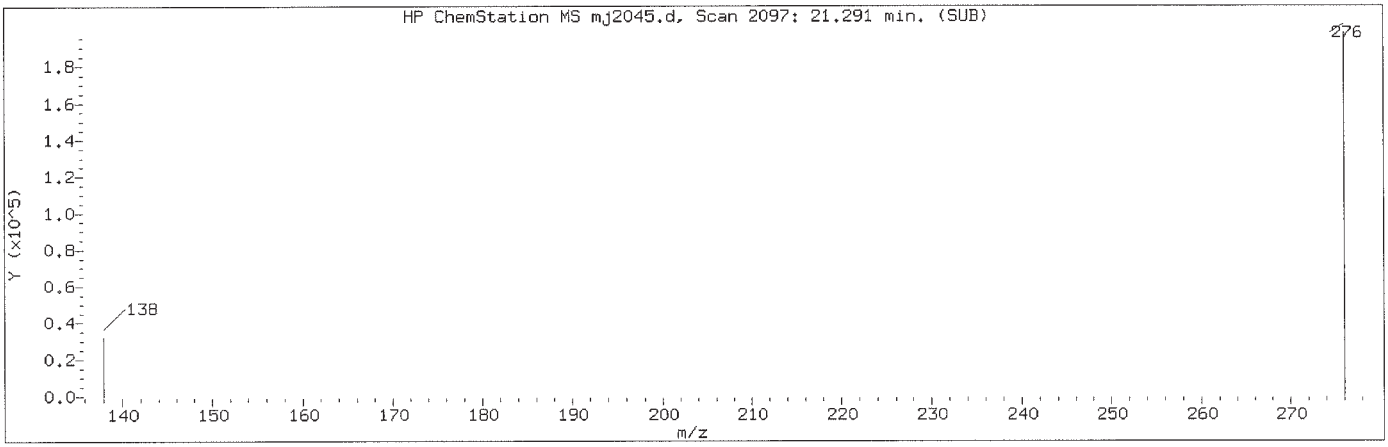
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:09 bkc25363

Sample Name: SECC0.5 Lab Sample ID: rvSIM2768

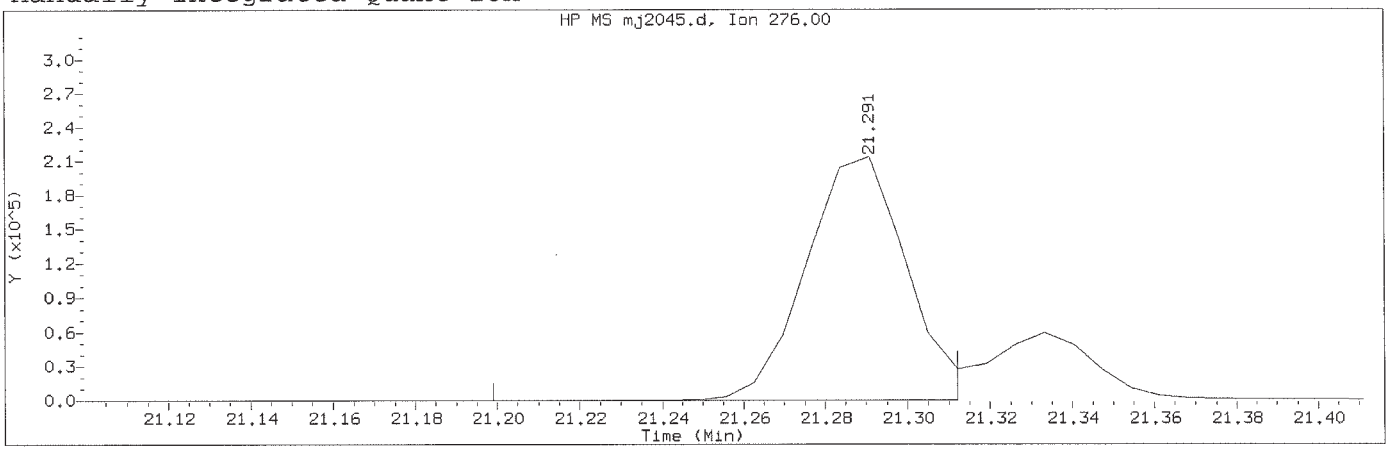
Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Expected RT (minutes) : 17.422
Quant Ion : 149.00

Digitally signed by Joseph M. Gambler on 10/30/2018 at 09:15.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 30-Oct-2018 09:14 jmg00346

Sample Name: SECC0.5 Lab Sample ID: rvSIM2768

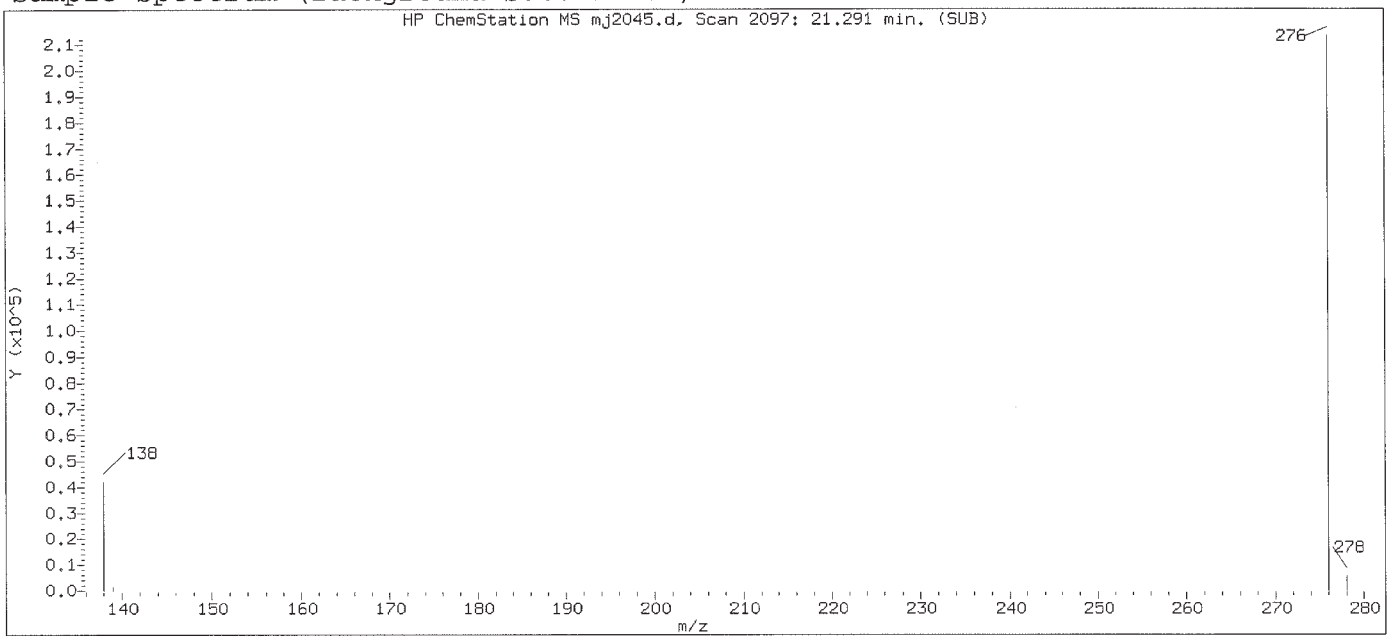
Compound Number	: 39		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 2097		
Retention Time (minutes)	: 21.291		
Quant Ion	: 276.00		
Area (flag)	: 362902M		
On-Column Amount (ng/ul)	: 0.4836		
Integration start scan	: 2083	Integration stop scan:	2099
Y at integration start	: 119	Y at integration end:	119

Reason for manual integration: improper integration

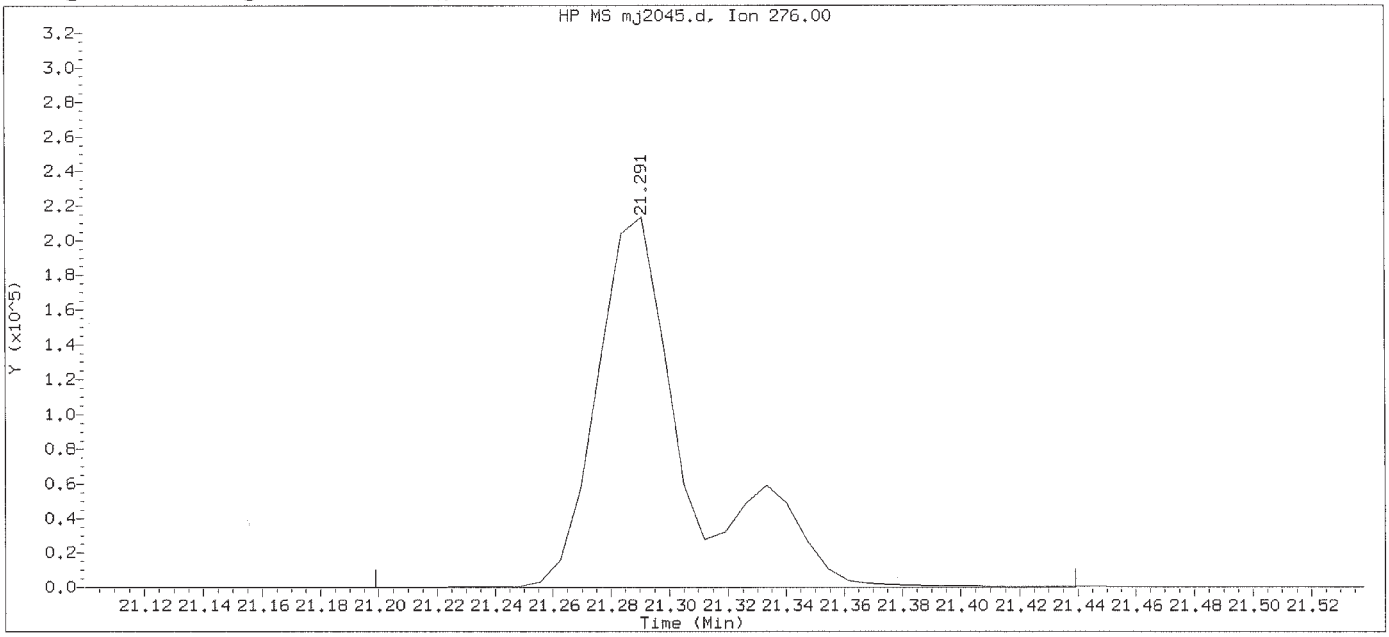
Analyst responsible for change: Digitally signed by Joseph M. Gambler on 10/30/2018 at 09:15. Target 3.5 esignature user ID: jmg00346

GC/MS audit/management approval: CAM 1237 10-31-18

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2045.d Instrument ID: HP21585.i
Injection date and time: 28-OCT-2018 00:24 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:09 bkc25363

Sample Name: SECC0.5 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	: 464619		
On-column Amount (ng/ul)	: 0.6191		
Integration start scan	: 2083	Integration stop scan:	2117
Y at integration start	: 119	Y at integration end:	119

Digitally signed by Joseph M. Gambler on 10/30/2018 at 09:15.
Target 3.5 esignature user ID: jmg00346

Raw QC Data

Semivolatiles by GC/MS-SIM

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

SBLKWF297

Data file: /chem/HP21585.i/18oct27.b/mj2012.d
Data file Sample Info. Line: SBLKWF297;SBLKWF297;1;3;BLANK;;DOD26;
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Injection date and time: **27-OCT-2018 19:01**
Instrument ID: **HP21585.i** Batch: **18297WAF**

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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	6.619(0.000)	477	152	42803 (-25)	0.25	
6) Naphthalene-d8	8.539(-0.020)	575	136	116787 (-29)	0.25	
14) Acenaphthene-d10	11.316(0.000)	771	164	50017 (-30)	0.25	
20) Phenanthrene-d10	13.214(0.000)	992	188	105212 (-31)	0.25	
29) Chrysene-d12	17.223(0.000)	1559	240	67833 (-40)	0.25	
38) Perylene-d12	19.669(0.008)	1878	264	66041 (-39)	0.25	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
10) 1-Methylnaphthalene-d10	(2)	9.754(0.003)	152	43346	0.204	82%
24) Fluoranthene-d10	(4)	14.845(0.000)	212	103534	0.251	100%
36) Benzo(a)pyrene-d12	(6)	19.539(0.000)	264	61682	0.254	102%

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)	2.913(-0.001)	88	5375	0.045	0.18			0.03
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					0.01
25) Fluoranthene	(4)			Not Detected					0.003
26) Pyrene	(5)			Not Detected					0.003
31) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					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

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:56. Target 3.5 esignature user ID: jmg00346

Data file: /chem/HP21585.i/18oct27.b/mj2012.d Injection date and time: **27-OCT-2018 19:01**
Data file Sample Info. Line: SBLKWF297;SBLKWF297;1;3;BLANK;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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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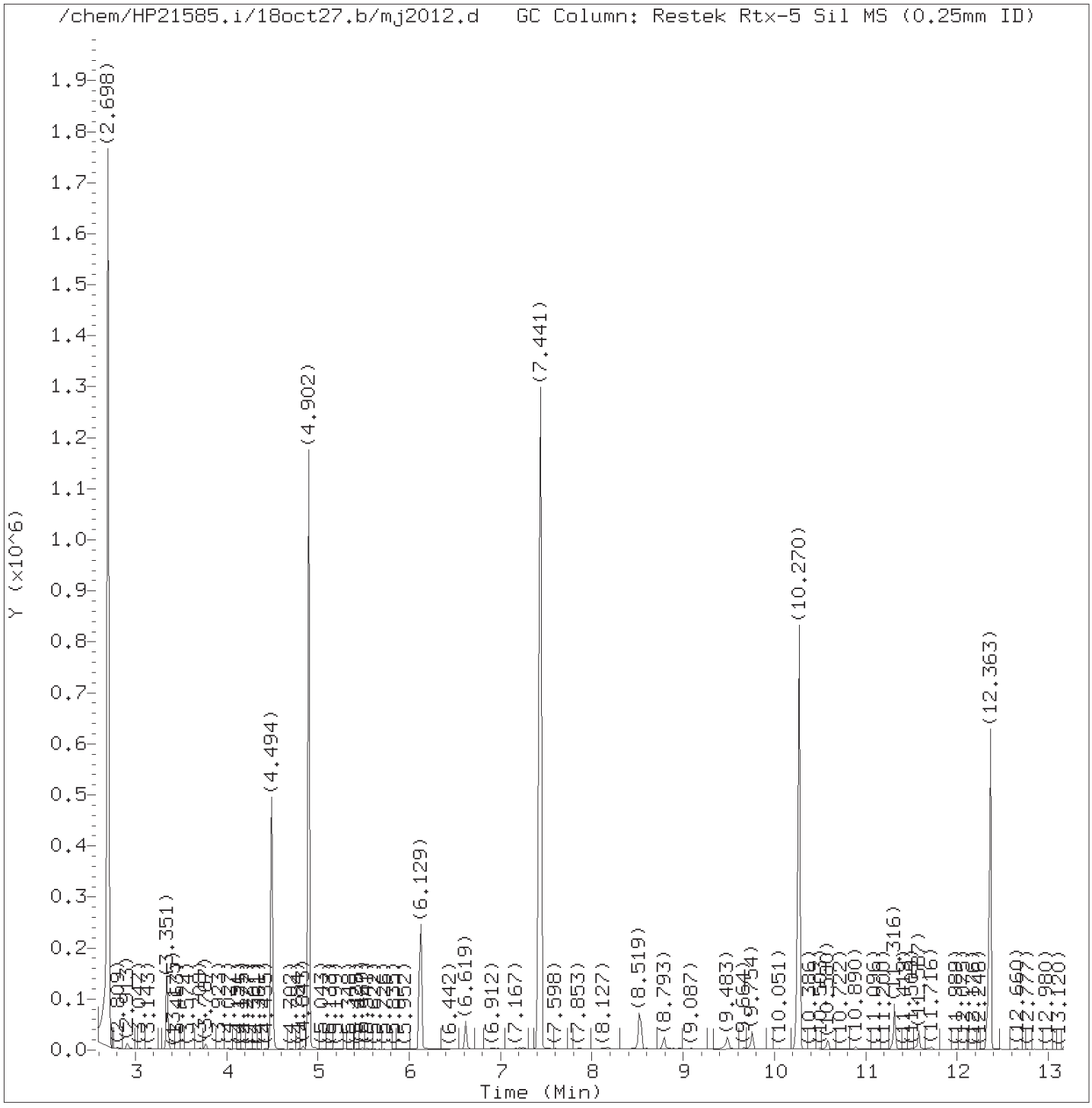
WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 21

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:56. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

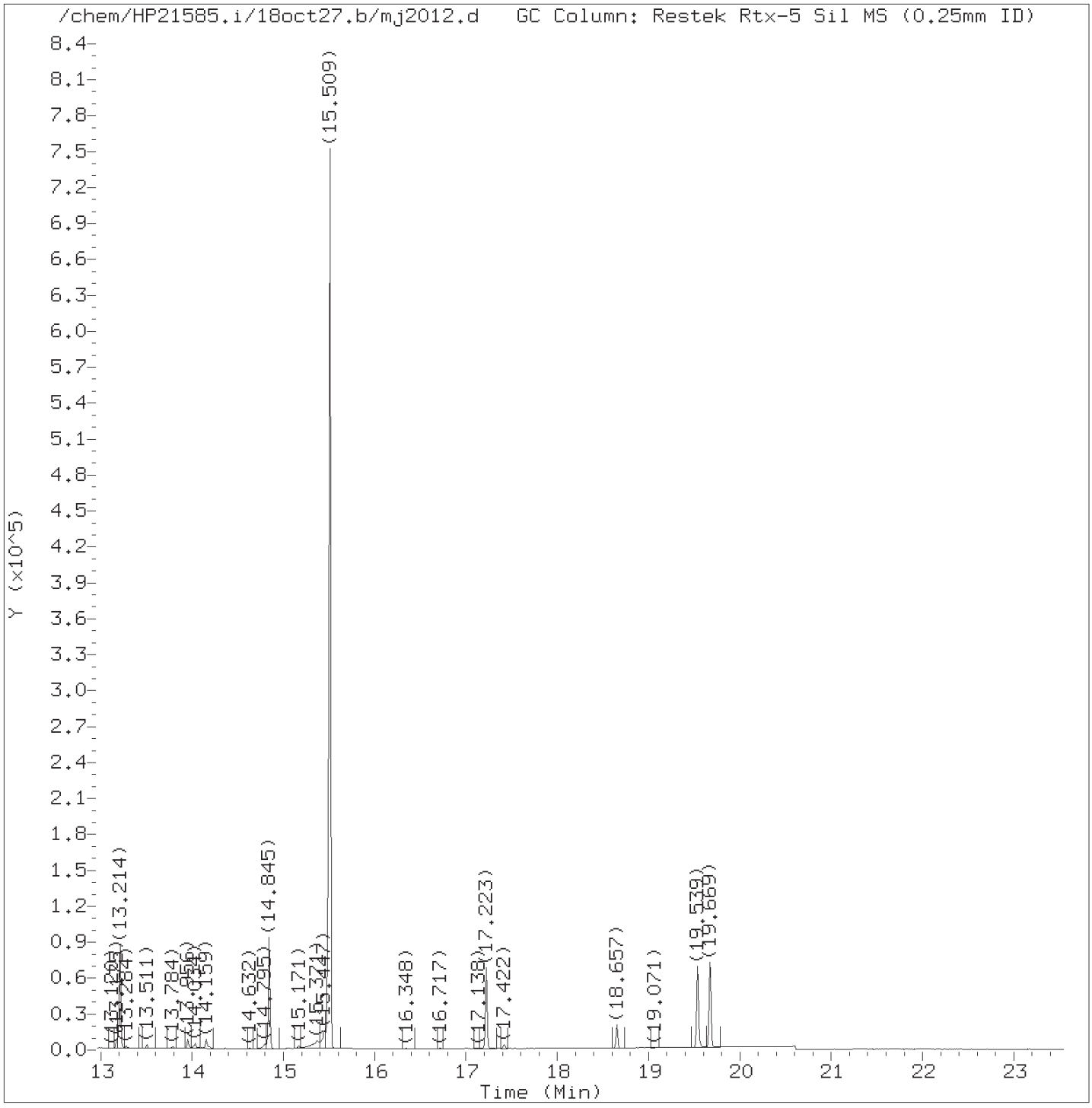
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2012.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:01 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: SBLKWF297 Lab Sample ID: SBLKWF297

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:56.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2012.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:01 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: SBLKWF297 Lab Sample ID: SBLKWF297

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:56.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2012.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:01 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

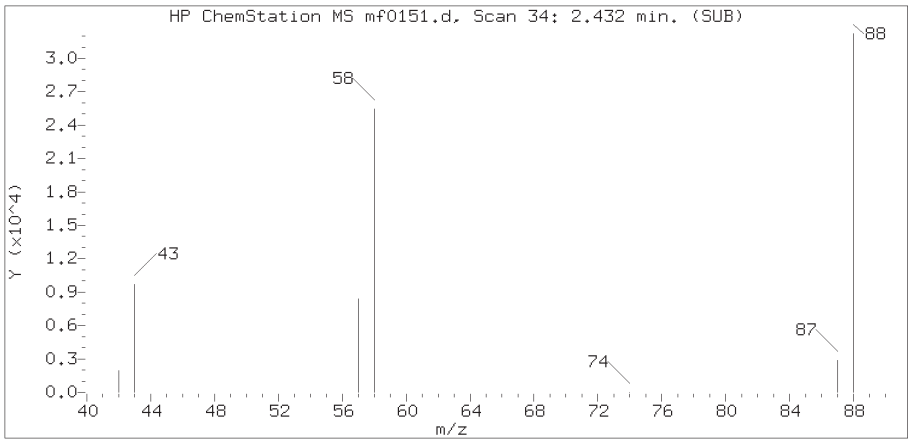
Sample Name: SBLKWF297 Lab Sample ID: SBLKWF297

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.913	88	5375	0.045
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	42803	0.250
6)*Naphthalene-d8	(2)	8.539	136	116787	0.250
10)$1-Methylnaphthalene-d10	(2)	9.754	152	43346	0.204
14)*Acenaphthene-d10	(3)	11.316	164	50017	0.250
20)*Phenanthrene-d10	(4)	13.214	188	105212	0.250
24)$Fluoranthene-d10	(4)	14.845	212	103534	0.251
29)*Chrysene-d12	(5)	17.223	240	67833	0.250
36)$Benzo(a)pyrene-d12	(6)	19.539	264	61682	0.254
38)*Perylene-d12	(6)	19.669	264	66041	0.250

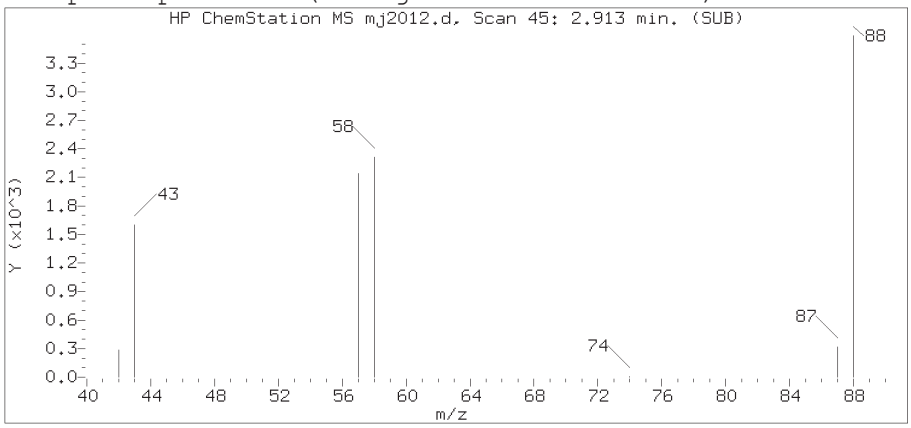
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:56.
Target 3.5 esignature user ID: jmg00346

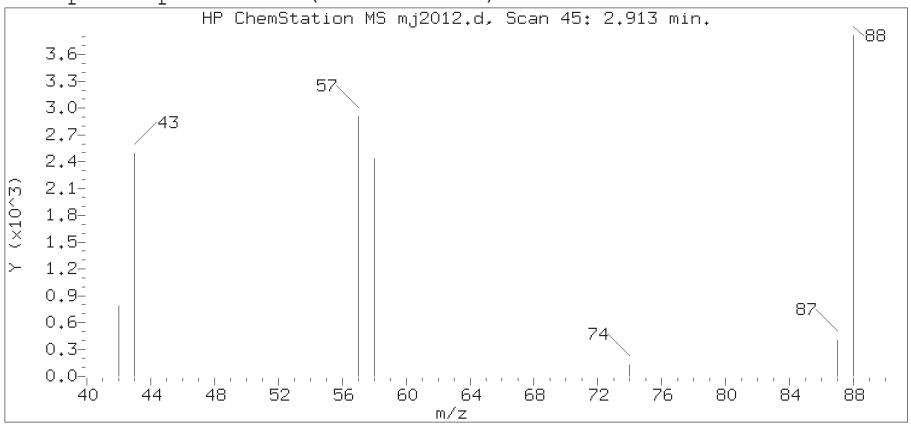
Reference Standard Spectrum for 1,4-Dioxane

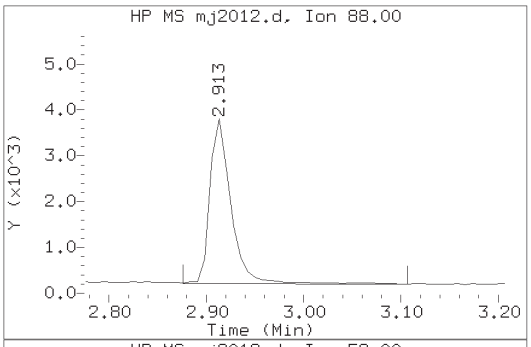


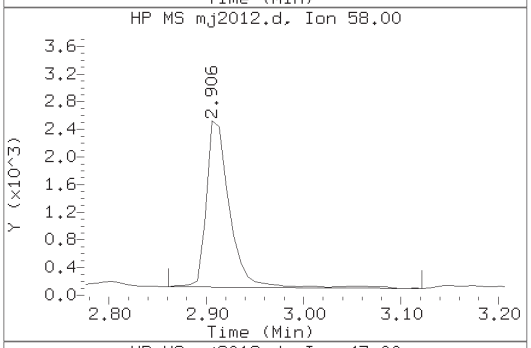
Sample Spectrum (Background Subtracted)

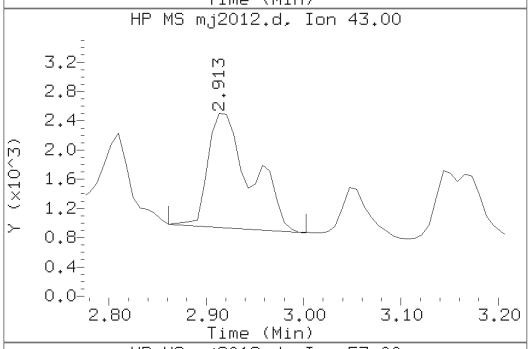


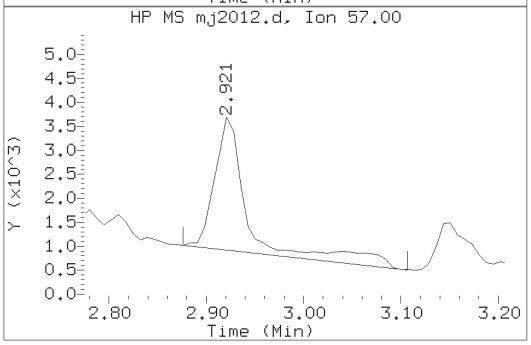
Sample Spectrum (Unaltered)











Data File: /chem/HP21585.i/18oct27.b/mj2012.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:01 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: SBLKWF297 Lab Sample ID: SBLKWF297

Compound Number	: 1
Compound Name	: 1,4-Dioxane
Scan Number	: 45
Retention Time (minutes)	: 2.913
Relative Retention Time	:-0.00111
Quant Ion	: 88.00
Area (flag)	: 5375
On-column Amount (ng/ul)	: 0.0453

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:56.
Target 3.5 esignature user ID: jmg00346

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP21585.i/18oct27.b/mj2013.d Injection date and time: **27-OCT-2018 19:31**
Data file Sample Info. Line: 297WFLCS;297WFLCS;1;3;LCS;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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	6.619(0.000)	477	152	45007 (-21)	0.25	
6) Naphthalene-d8	8.519(0.000)	574	136	130808 (-20)	0.25	
14) Acenaphthene-d10	11.316(0.000)	771	164	55490 (-23)	0.25	
20) Phenanthrene-d10	13.206(0.008)	991	188	100964 (-34)	0.25	
29) Chrysene-d12	17.223(0.000)	1559	240	74376 (-34)	0.25	
38) Perylene-d12	19.669(0.008)	1878	264	73138 (-33)	0.25	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
10) 1-Methylnaphthalene-d10	(2)	9.754(0.000)	152	50130	0.211	84%
24) Fluoranthene-d10	(4)	14.845(-0.001)	212	105133	0.265	106%
36) Benzo(a)pyrene-d12	(6)	19.539(0.000)	264	65691	0.244	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)	2.980(-0.011)	88	22287	0.178	0.71	0.181	B	0.03
4) bis(2-Chloroethyl)ether	(2)	6.266(-0.002)	93	57253	0.286	1.14			0.005
7) Naphthalene	(2)	8.558(0.000)	128	137697	0.229	0.92			0.008
13) Acenaphthylene	(3)	11.083(-0.000)	152	141574	0.242	0.97			0.003
15) Acenaphthene	(3)	11.367(0.000)	154	90584	0.255	1.02			0.003
18) Fluorene	(3)	12.067(0.000)	166	108645	0.263	1.05			0.003
19) Hexachlorobenzene	(4)	12.730(0.000)	284	27264	0.240	0.96			0.003
21) Phenanthrene	(4)	13.238(-0.000)	178	162619	0.300	1.20			0.008
22) Anthracene	(4)	13.300(-0.000)	178	141230	0.266	1.06			0.003
23) Di-n-butylphthalate	(4)	14.034(-0.000)	149	152864M	0.257	1.03			0.01
25) Fluoranthene	(4)	14.870(-0.000)	202	163854	0.271	1.08			0.003
26) Pyrene	(5)	15.208(-0.000)	202	169524	0.251	1.00			0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.422(0.000)	149	108740M	0.259	1.03			0.02
28) Benzo(a)anthracene	(5)	17.208(-0.000)	228	160127	0.275	1.10			0.003
30) Chrysene	(5)	17.269(0.000)	228	158663	0.269	1.08			0.003
33) Benzo(b)fluoranthene	(6)	19.056(-0.000)	252	164375	0.284	1.14			0.003
34) Benzo(k)fluoranthene	(6)	19.102(-0.000)	252	156860	0.271	1.09			0.003
37) Benzo(a)pyrene	(6)	19.577(0.000)	252	149207	0.269	1.08			0.003
39) Indeno(1,2,3-cd)pyrene	(6)	21.284(-0.000)	276	139213M	0.276	1.10			0.003
40) Dibenz(a,h)anthracene	(6)	21.333(-0.000)	278	137704	0.267	1.07			0.005
41) Benzo(g,h,i)perylene	(6)	21.694(-0.000)	276	150667	0.258	1.03			0.003

B = Compound detected in referenced method blank. M = Compound was manually integrated.

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Data file: /chem/HP21585.i/18oct27.b/mj2013.d Injection date and time: **27-OCT-2018 19:31**
Data file Sample Info. Line: 297WFLCS;297WFLCS;1;3;LCS;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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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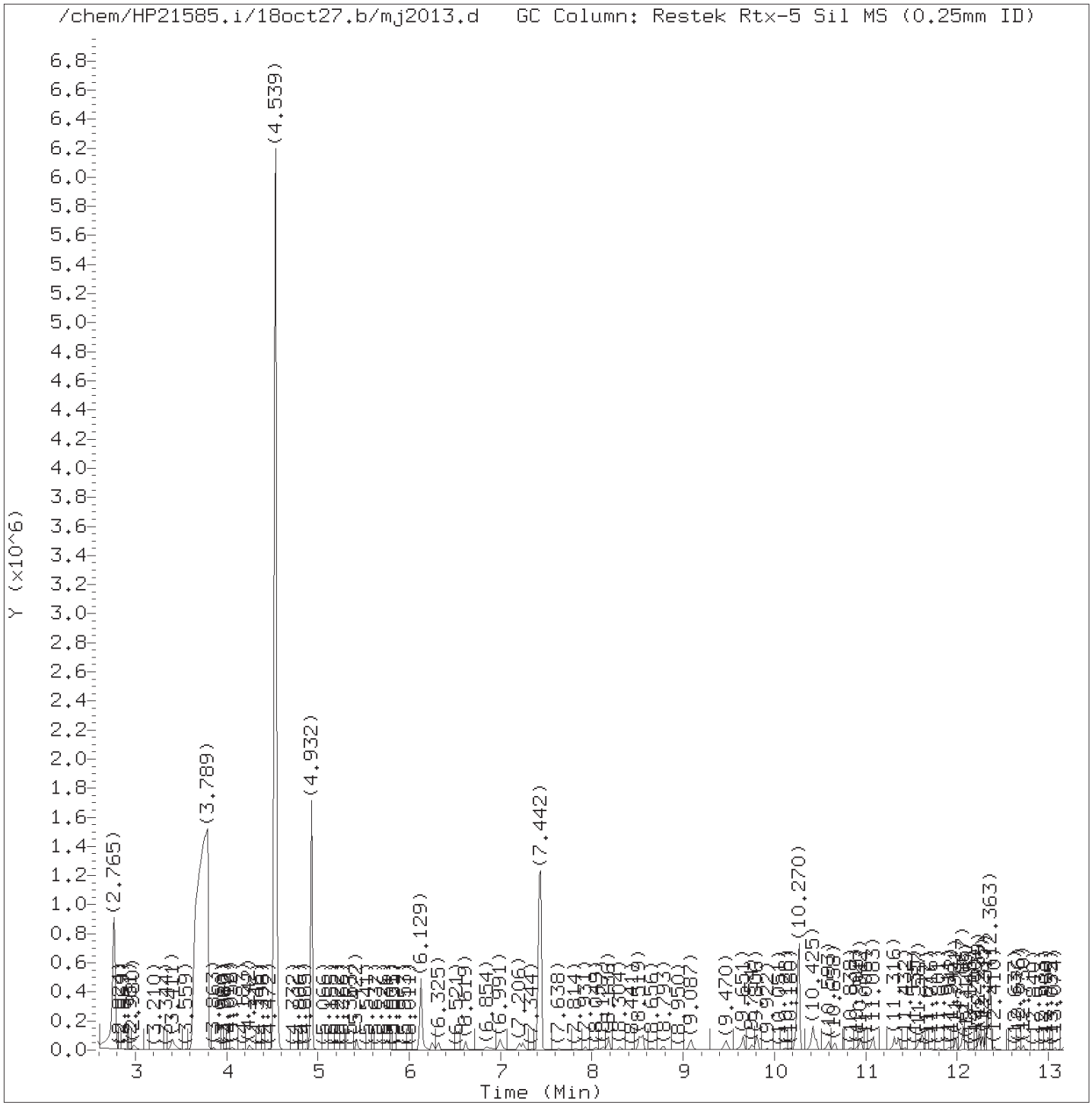
Total number of targets = 21

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

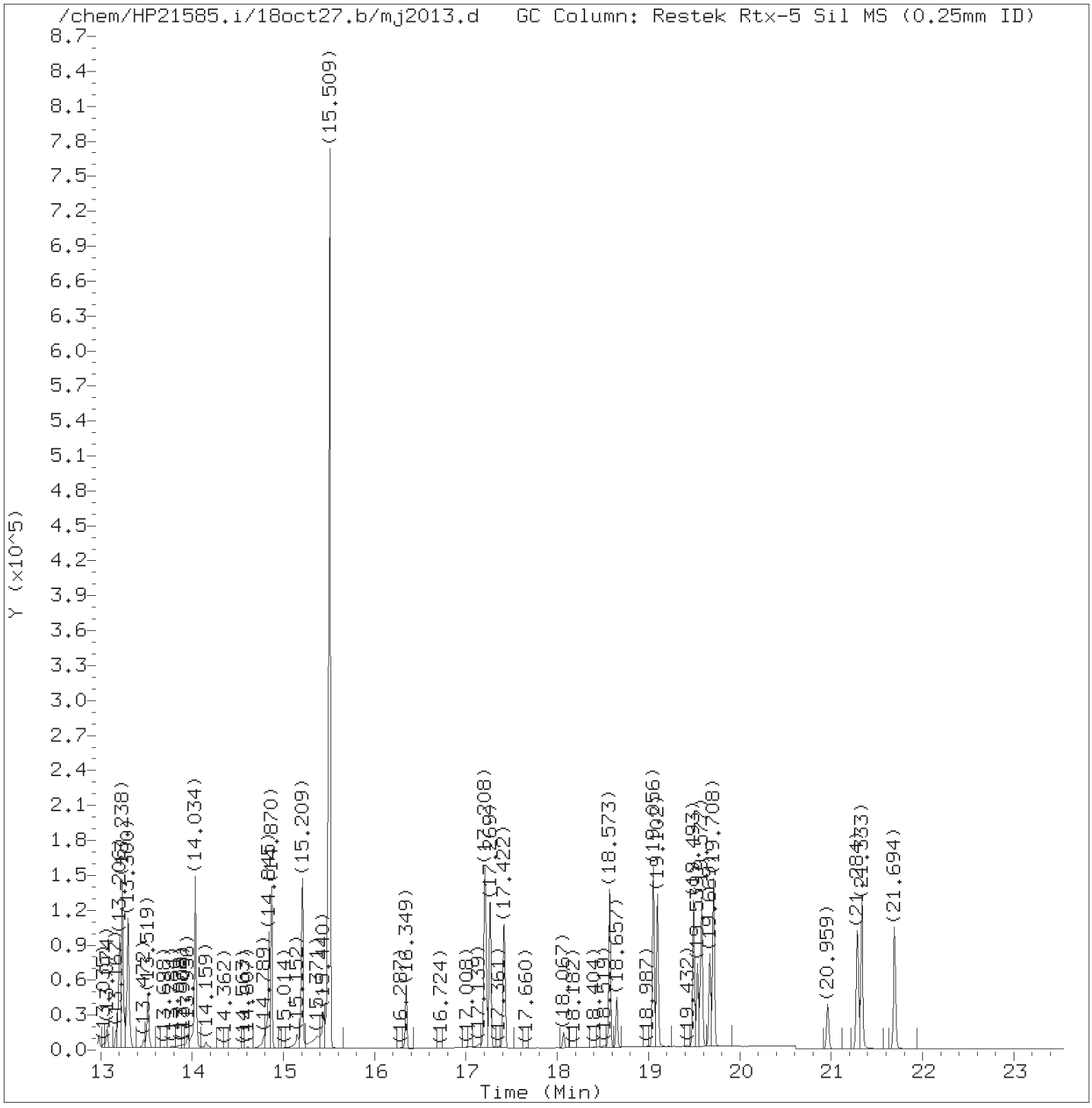
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

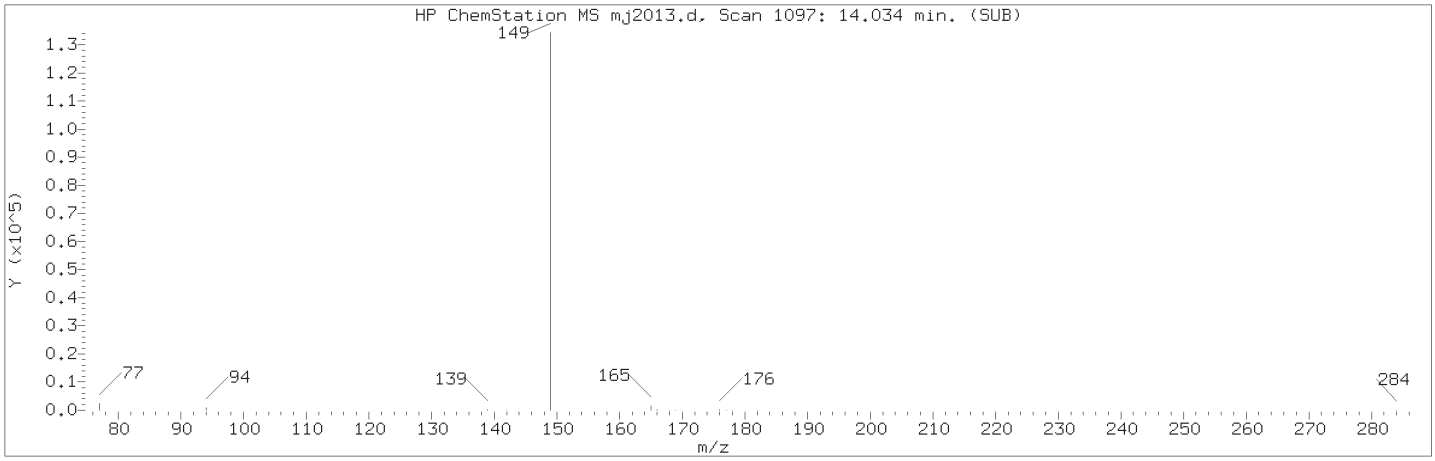
Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.980	88	22287	0.178
4) bis(2-Chloroethyl)ether	(2)	6.266	93	57253	0.286
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	45007	0.250
6)*Naphthalene-d8	(2)	8.519	136	130808	0.250
7) Naphthalene	(2)	8.558	128	137697	0.229
10)$1-Methylnaphthalene-d10	(2)	9.754	152	50130	0.211
13) Acenaphthylene	(3)	11.083	152	141574	0.242
14)*Acenaphthene-d10	(3)	11.316	164	55490	0.250
15) Acenaphthene	(3)	11.367	154	90584	0.255
18) Fluorene	(3)	12.067	166	108645	0.263
19) Hexachlorobenzene	(4)	12.730	284	27264	0.240
20)*Phenanthrene-d10	(4)	13.206	188	100964	0.250
21) Phenanthrene	(4)	13.238	178	162619	0.300
22) Anthracene	(4)	13.300	178	141230	0.266
23) Di-n-butylphthalate	(4)	14.034	149	152864M	0.257
24)$Fluoranthene-d10	(4)	14.845	212	105133	0.265
25) Fluoranthene	(4)	14.870	202	163854	0.271
26) Pyrene	(5)	15.209	202	169524	0.251
28) Benzo(a)anthracene	(5)	17.208	228	160127	0.275
29)*Chrysene-d12	(5)	17.223	240	74376	0.250
30) Chrysene	(5)	17.269	228	158663	0.269
31) bis(2-Ethylhexyl)phthalate	(5)	17.422	149	108740M	0.259
33) Benzo(b)fluoranthene	(6)	19.056	252	164375	0.284
34) Benzo(k)fluoranthene	(6)	19.102	252	156860	0.271
36)$Benzo(a)pyrene-d12	(6)	19.539	264	65691	0.244
37) Benzo(a)pyrene	(6)	19.577	252	149207	0.269
38)*Perylene-d12	(6)	19.669	264	73138	0.250
39) Indeno(1,2,3-cd)pyrene	(6)	21.284	276	139213M	0.276
40) Dibenz(a,h)anthracene	(6)	21.333	278	137704	0.267
41) Benzo(g,h,i)perylene	(6)	21.694	276	150667	0.258

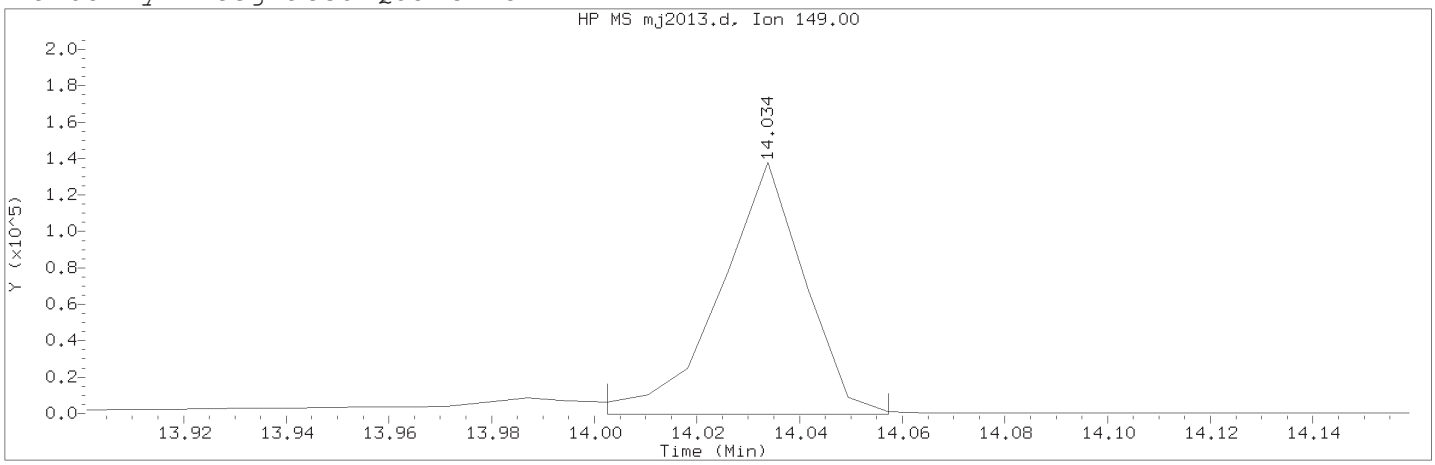
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

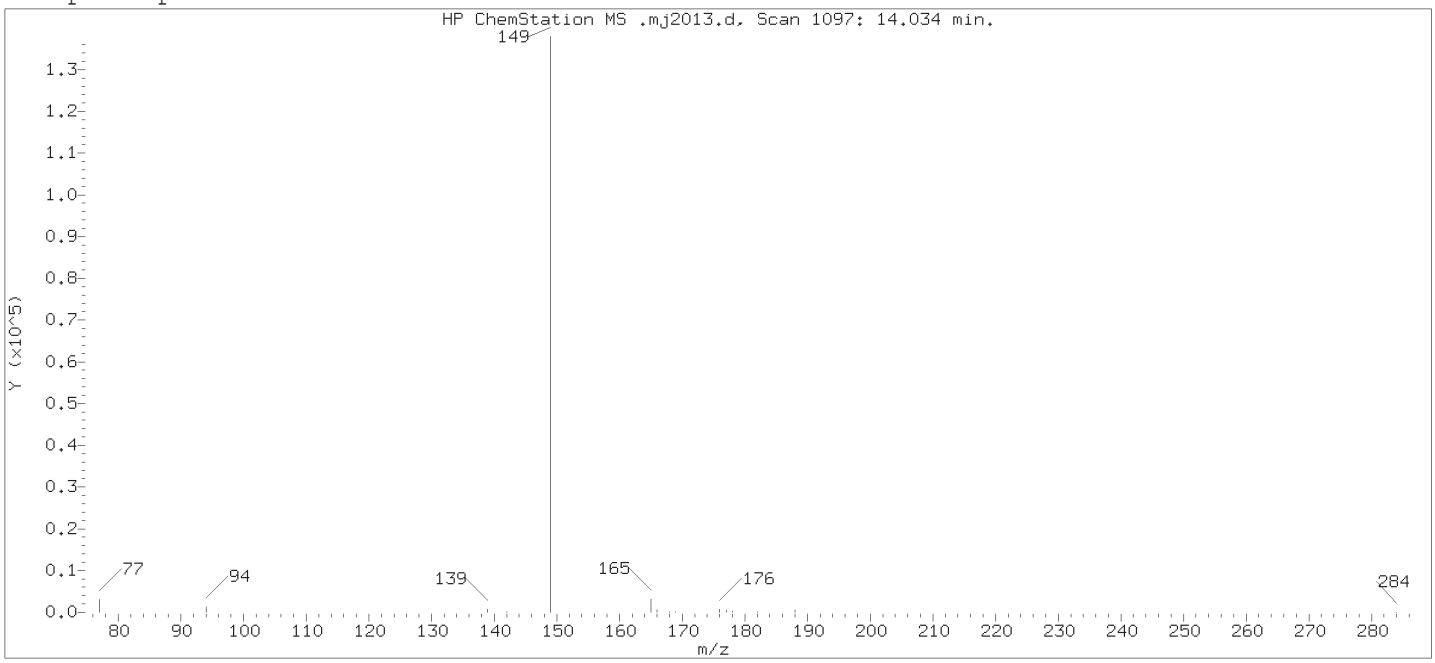
Compound Number : 23
Compound Name : Di-n-butylphthalate
Scan Number : 1097
Retention Time (minutes) : 14.034
Quant Ion : 149.00
Area (flag) : 152864M
On-Column Amount (ng/ul) : 0.2575
Integration start scan : 1092 Integration stop scan: 1099
Y at integration start : -369 Y at integration end: -369

Reason for manual integration: missed peak

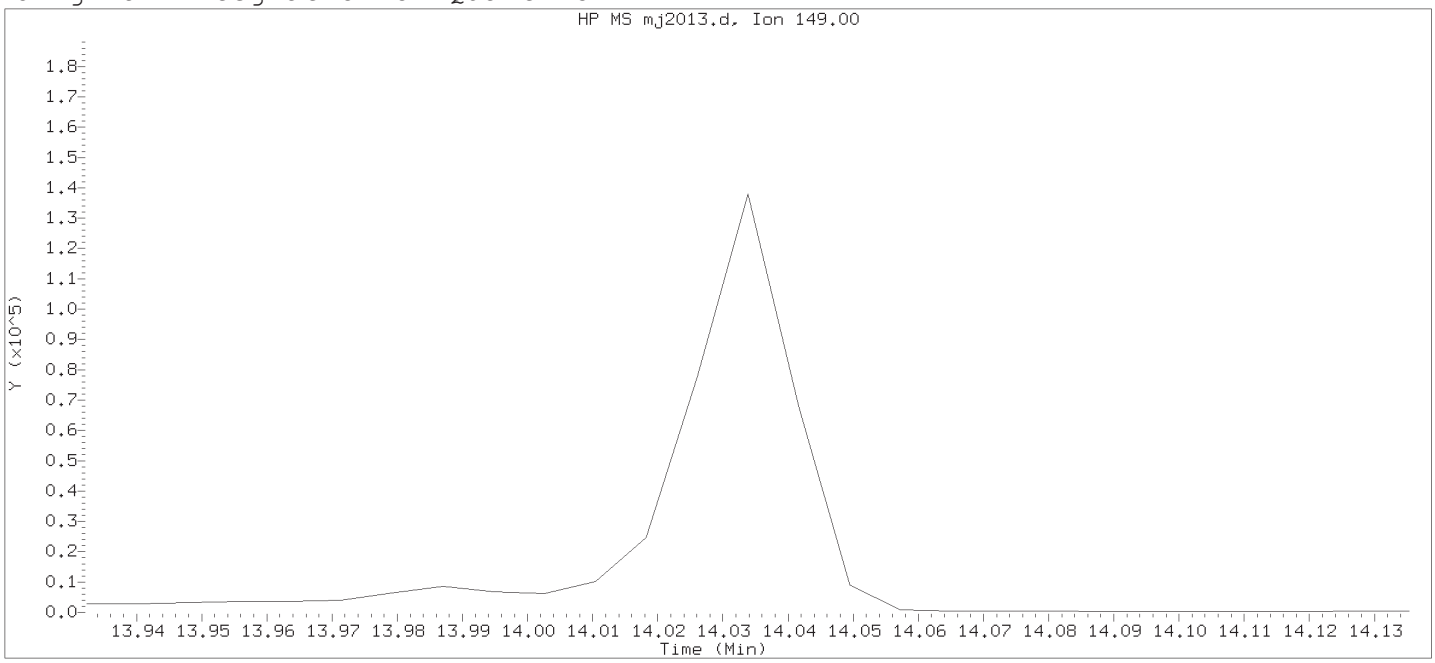
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

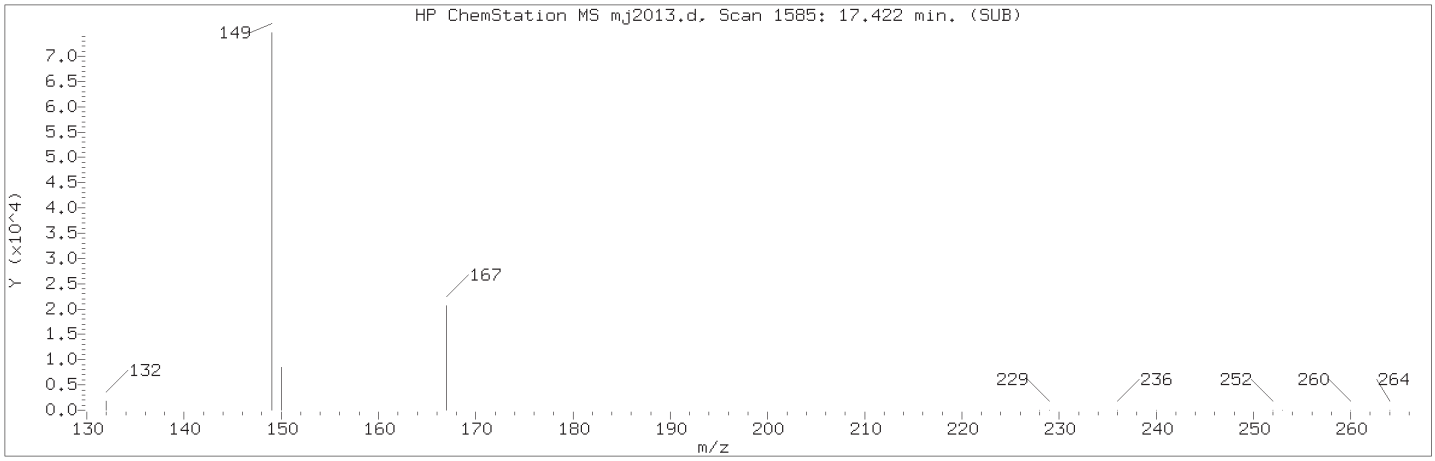
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

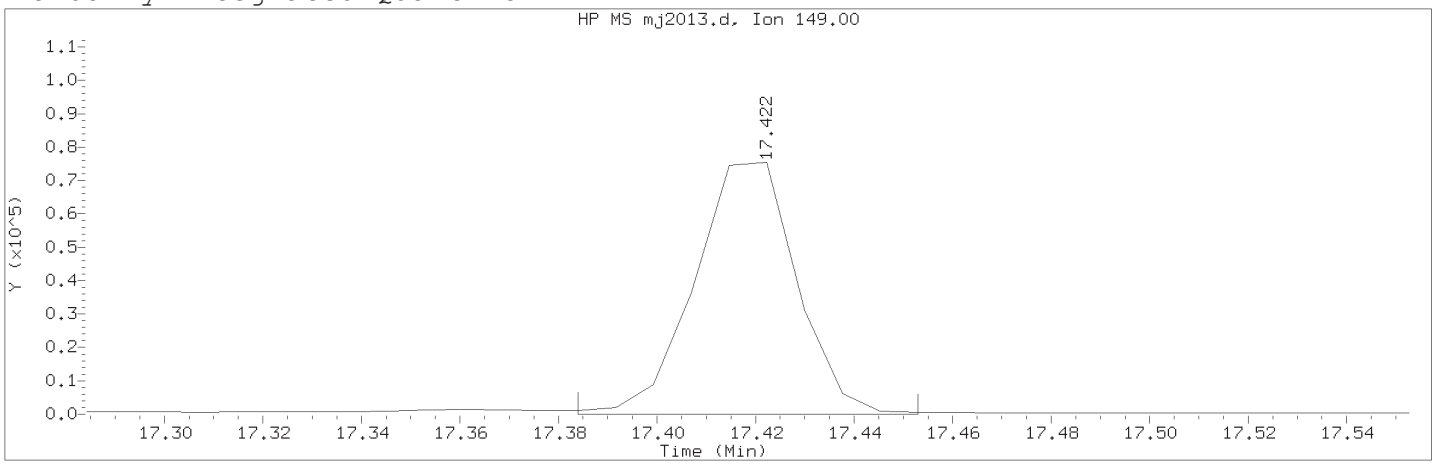
Compound Number : 23
Compound Name : Di-n-butylphthalate
Expected RT (minutes) : 14.034
Quant Ion : 149.00

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

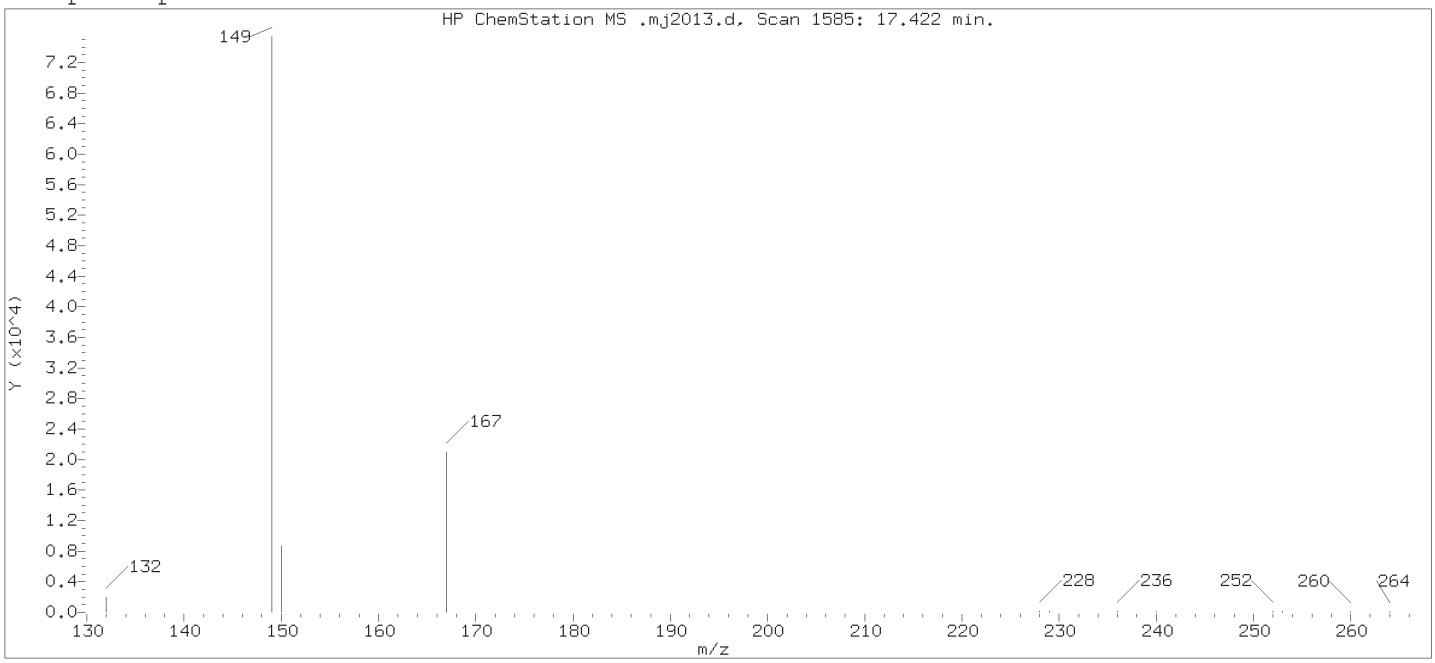
Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1585
Retention Time (minutes) : 17.422
Quant Ion : 149.00
Area (flag) : 108740M
On-Column Amount (ng/ul) : 0.2587
Integration start scan : 1579 Integration stop scan: 1588
Y at integration start : 71 Y at integration end: 71

Reason for manual integration: missed peak

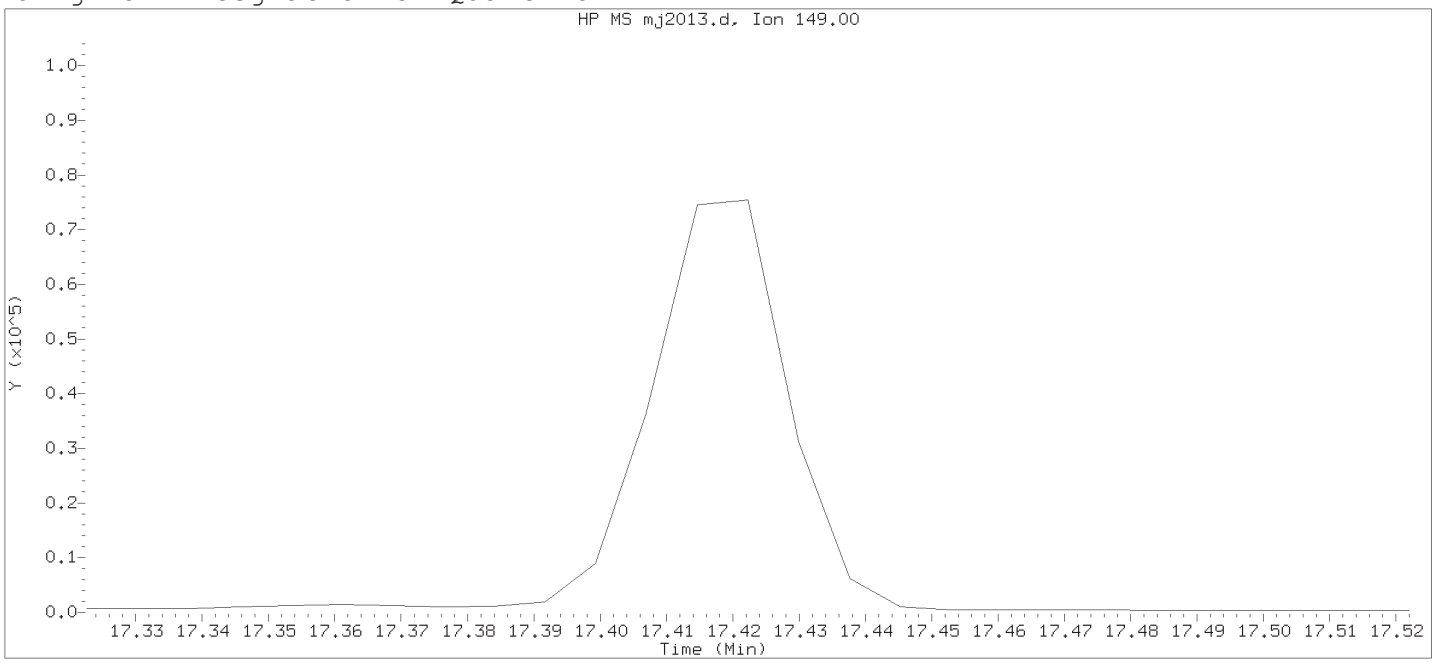
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

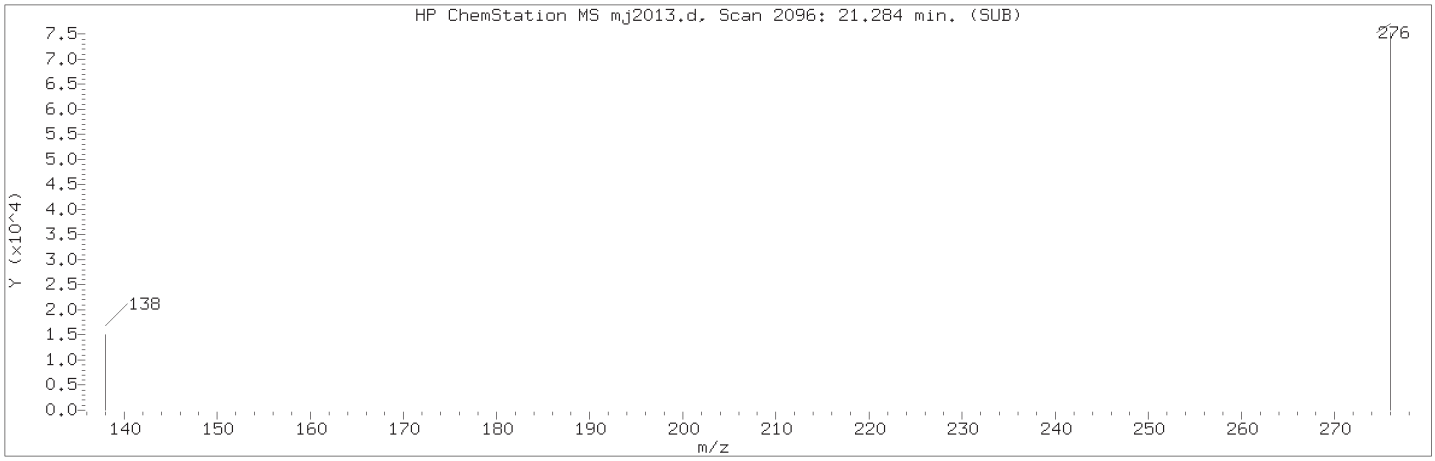
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

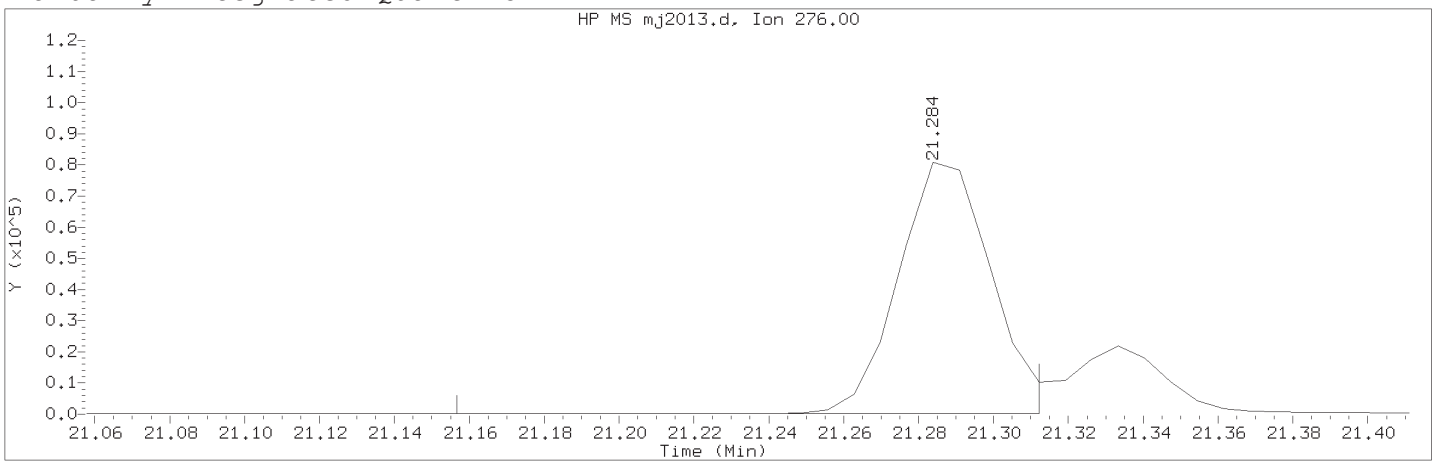
Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Expected RT (minutes) : 17.422
Quant Ion : 149.00

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used for this page.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

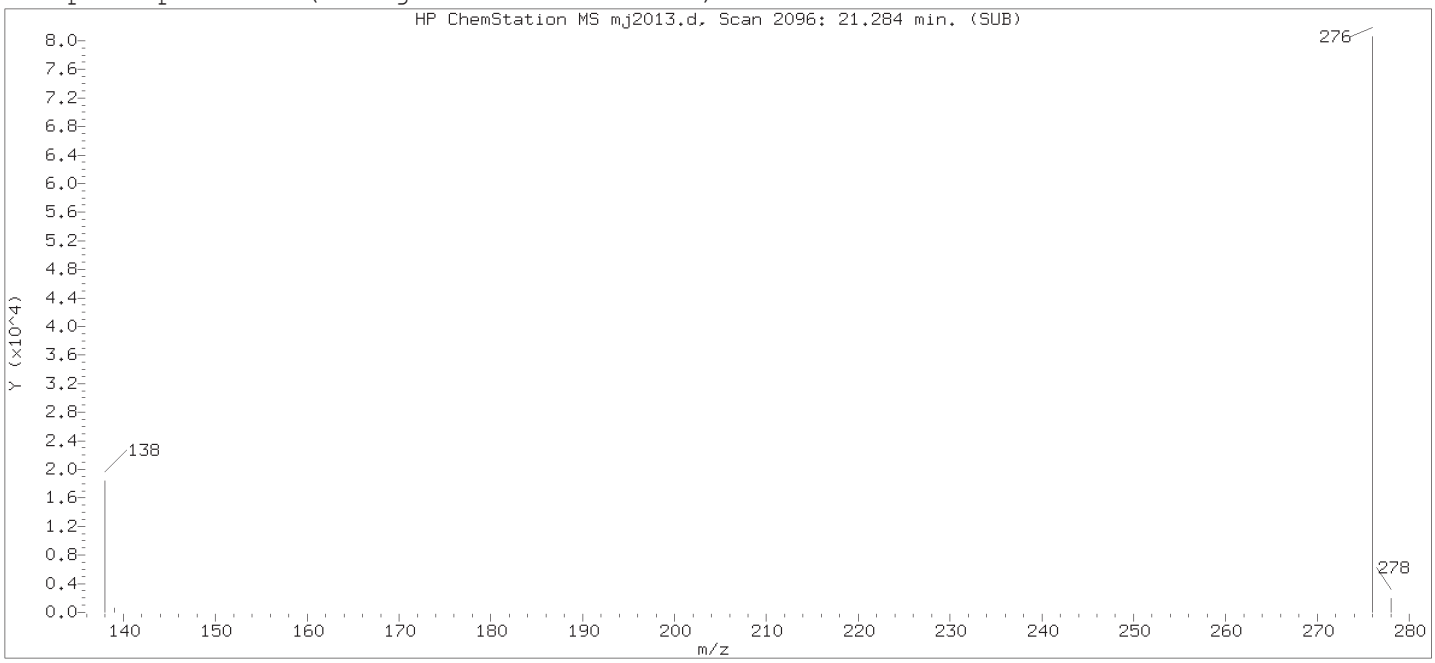
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2096
Retention Time (minutes) : 21.284
Quant Ion : 276.00
Area (flag) : 139213M
On-Column Amount (ng/ul) : 0.2760
Integration start scan : 2077 Integration stop scan: 2099
Y at integration start : 157 Y at integration end: 157

Reason for manual integration: improper integration

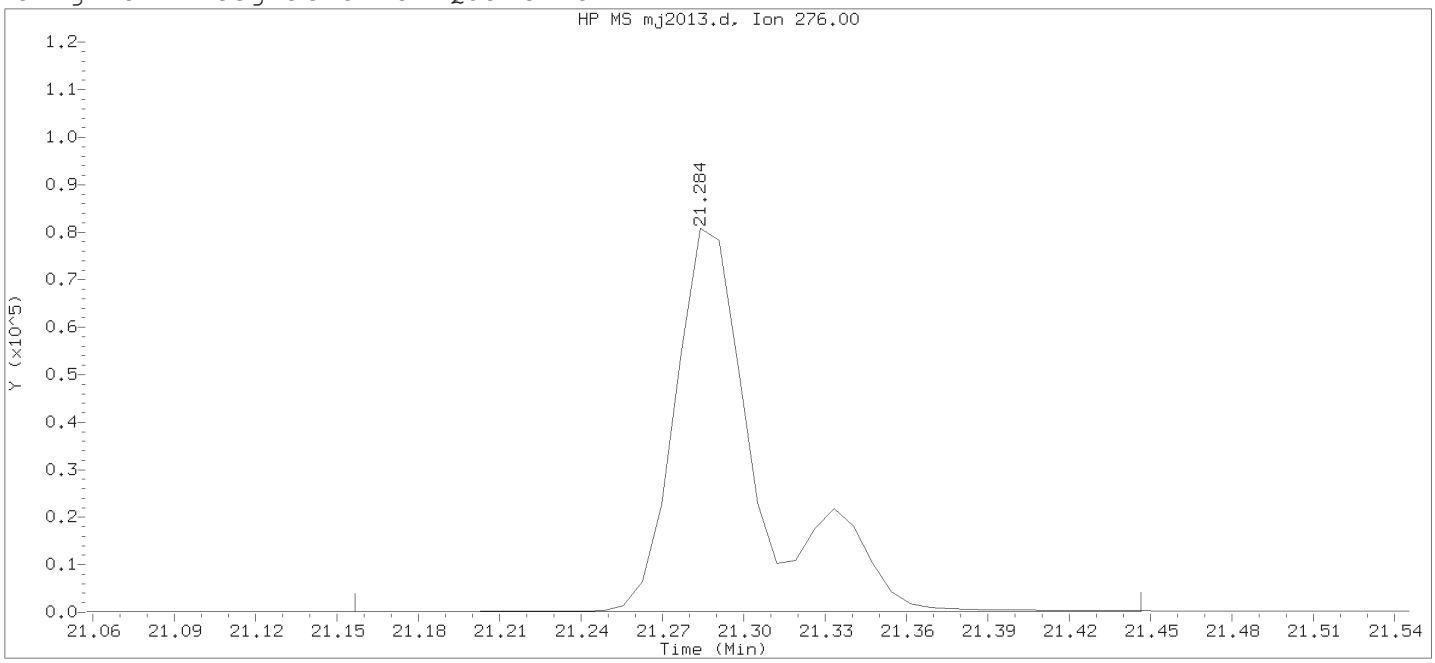
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2013.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 19:31 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: 297WFLCS Lab Sample ID: 297WFLCS

Compound Number	: 39		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 2096		
Retention Time (minutes)	: 21.284		
Quant Ion	: 276.00		
Area	: 176476		
On-column Amount (ng/ul)	: 0.3498		
Integration start scan	: 2077	Integration stop scan:	2118
Y at integration start	: 157	Y at integration end:	157

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Target 3.5 esignature used: 1007. Page 1496 of 4595

Data file: /chem/HP21585.i/18oct27.b/mj2014.d Injection date and time: **27-OCT-2018 20:00**
Data file Sample Info. Line: 297WFLCSD;297WFLCSD;1;3;LCSD;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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	6.619(0.000)	477	152	42369 (-26)	0.25	
6) Naphthalene-d8	8.519(0.000)	574	136	124197 (-24)	0.25	
14) Acenaphthene-d10	11.316(0.000)	771	164	53819 (-25)	0.25	
20) Phenanthrene-d10	13.206(0.008)	991	188	109108 (-29)	0.25	
29) Chrysene-d12	17.223(0.000)	1559	240	72111 (-36)	0.25	
38) Perylene-d12	19.669(0.008)	1878	264	70954 (-35)	0.25	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
10) 1-Methylnaphthalene-d10	(2)	9.754(0.000)	152	46044	0.204	82%
24) Fluoranthene-d10	(4)	14.845(-0.001)	212	100075	0.234	94%
36) Benzo(a)pyrene-d12	(6)	19.539(0.000)	264	63871	0.245	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)	2.988(-0.012)	88	21944	0.187	0.75	0.181	B	0.03
4) bis(2-Chloroethyl)ether	(2)	6.266(-0.002)	93	49524	0.261	1.04			0.005
7) Naphthalene	(2)	8.558(-0.000)	128	123013	0.215	0.86			0.008
13) Acenaphthylene	(3)	11.083(0.000)	152	129497	0.229	0.91			0.003
15) Acenaphthene	(3)	11.354(0.001)	154	81469	0.237	0.95			0.003
18) Fluorene	(3)	12.067(0.000)	166	100218	0.250	1.00			0.003
19) Hexachlorobenzene	(4)	12.730(0.000)	284	26118	0.213	0.85			0.003
21) Phenanthrene	(4)	13.238(-0.000)	178	148338	0.253	1.01			0.008
22) Anthracene	(4)	13.308(-0.000)	178	133070	0.232	0.93			0.003
23) Di-n-butylphthalate	(4)	14.034(-0.000)	149	144806M	0.226	0.90			0.01
25) Fluoranthene	(4)	14.870(-0.000)	202	156075	0.239	0.96			0.003
26) Pyrene	(5)	15.208(0.000)	202	161061	0.246	0.98			0.003
31) bis(2-Ethylhexyl)phthalate	(5)	17.414(0.000)	149	96424M	0.237	0.95			0.02
28) Benzo(a)anthracene	(5)	17.207(-0.000)	228	152363	0.270	1.08			0.003
30) Chrysene	(5)	17.261(0.000)	228	150089	0.262	1.05			0.003
33) Benzo(b)fluoranthene	(6)	19.056(-0.000)	252	158012	0.281	1.12			0.003
34) Benzo(k)fluoranthene	(6)	19.102(-0.000)	252	150392	0.268	1.07			0.003
37) Benzo(a)pyrene	(6)	19.577(0.000)	252	143225	0.266	1.06			0.003
39) Indeno(1,2,3-cd)pyrene	(6)	21.291(-0.000)	276	135990M	0.278	1.11			0.003
40) Dibenz(a,h)anthracene	(6)	21.333(-0.000)	278	132391	0.265	1.06			0.005
41) Benzo(g,h,i)perylene	(6)	21.693(-0.000)	276	146802	0.259	1.04			0.003

B = Compound detected in referenced method blank. M = Compound was manually integrated.

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Data file: /chem/HP21585.i/18oct27.b/mj2014.d Injection date and time: **27-OCT-2018 20:00**
Data file Sample Info. Line: 297WFLCSD;297WFLCSD;1;3;LCSD;;DOD26; Instrument ID: **HP21585.i** Batch: **18297WAF**
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Blank Data file reference: **/chem/HP21585.i/18oct27.b/mj2012.d**

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: **25784**
Calibration date and time (Last Method Edit): 30-OCT-2018 08:52
Mid Level Daily Calibration Standard Reference: **/chem/HP21585.i/18oct27.b/mj2011.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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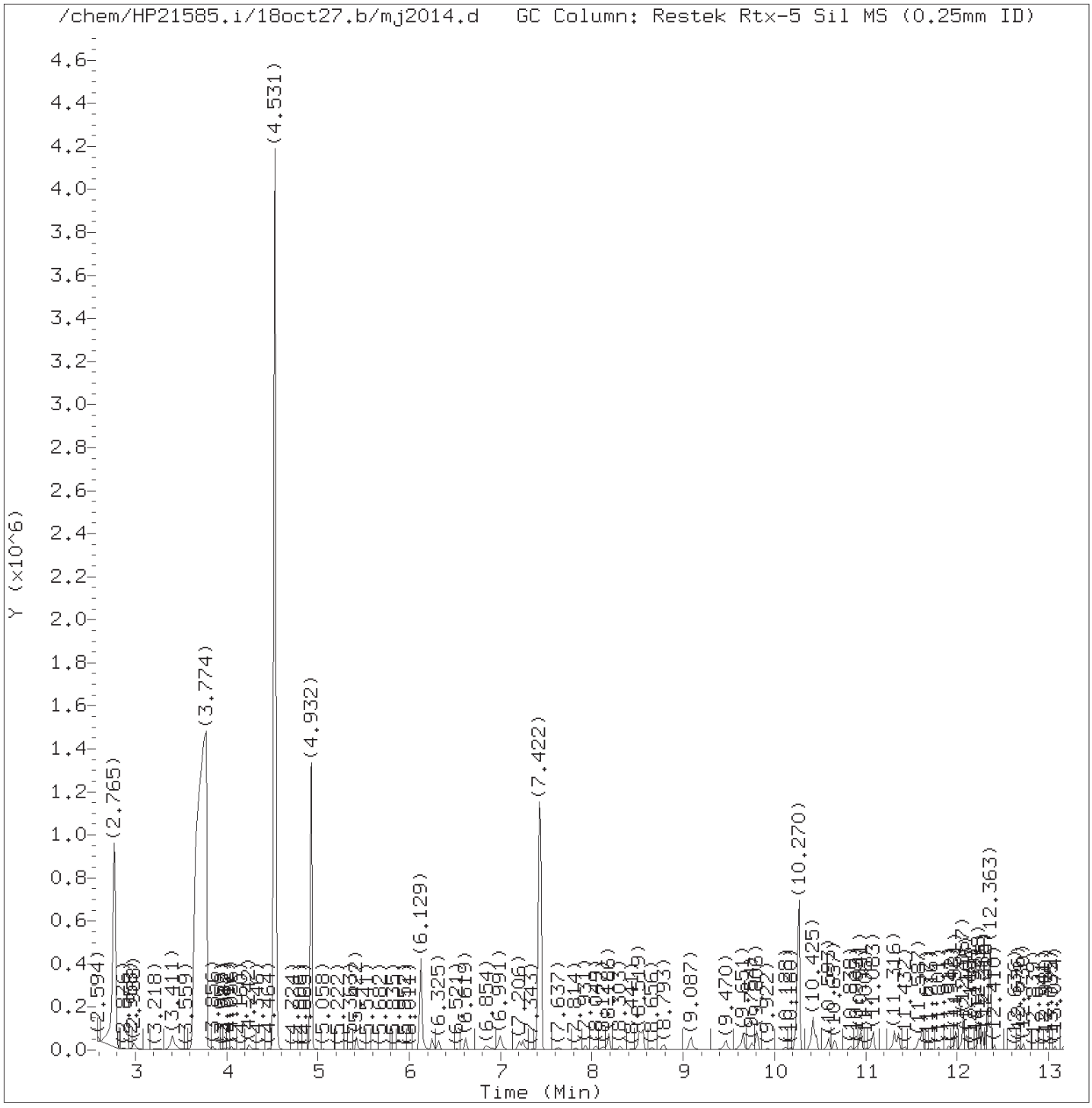
BLANK INTENTIONALLY

Total number of targets = 21

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57. Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03. PARALLAX ID: 1dl07768



Total Ion Chromatogram (TIC)

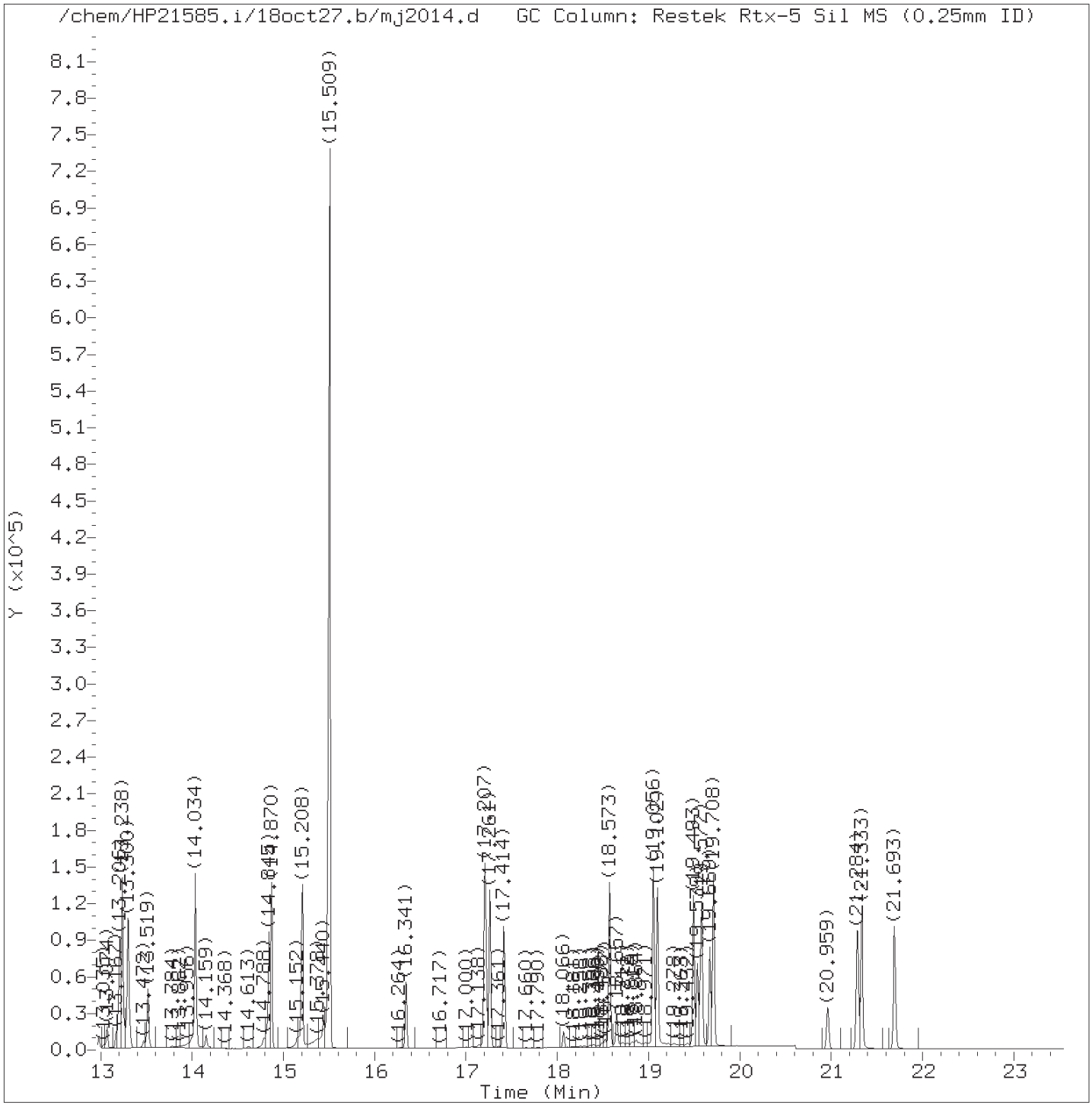
Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Quant Report

Target Revision 3.5

Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

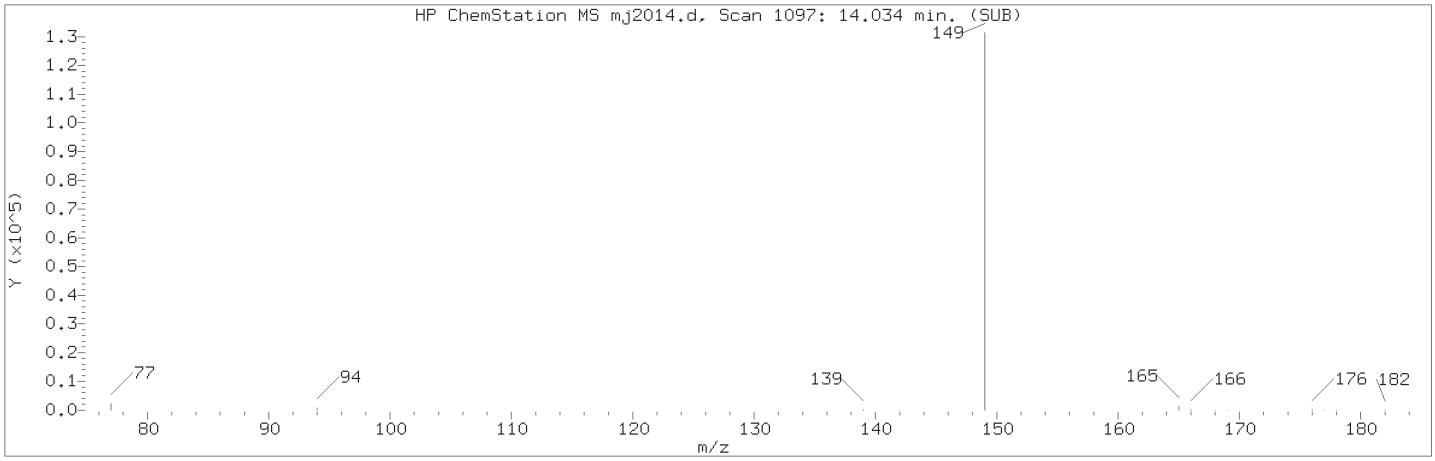
Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.988	88	21944	0.187
4) bis(2-Chloroethyl)ether	(2)	6.266	93	49524	0.261
5)*1,4-Dichlorobenzene-d4	(1)	6.619	152	42369	0.250
6)*Naphthalene-d8	(2)	8.519	136	124197	0.250
7) Naphthalene	(2)	8.558	128	123013	0.215
10)$1-Methylnaphthalene-d10	(2)	9.754	152	46044	0.204
13) Acenaphthylene	(3)	11.083	152	129497	0.229
14)*Acenaphthene-d10	(3)	11.316	164	53819	0.250
15) Acenaphthene	(3)	11.354	154	81469	0.237
18) Fluorene	(3)	12.067	166	100218	0.250
19) Hexachlorobenzene	(4)	12.730	284	26118	0.213
20)*Phenanthrene-d10	(4)	13.206	188	109108	0.250
21) Phenanthrene	(4)	13.238	178	148338	0.253
22) Anthracene	(4)	13.308	178	133070	0.232
23) Di-n-butylphthalate	(4)	14.034	149	144806M	0.226
24)$Fluoranthene-d10	(4)	14.845	212	100075	0.234
25) Fluoranthene	(4)	14.870	202	156075	0.239
26) Pyrene	(5)	15.208	202	161061	0.246
28) Benzo(a)anthracene	(5)	17.207	228	152363	0.270
29)*Chrysene-d12	(5)	17.223	240	72111	0.250
30) Chrysene	(5)	17.261	228	150089	0.262
31) bis(2-Ethylhexyl)phthalate	(5)	17.414	149	96424M	0.237
33) Benzo(b)fluoranthene	(6)	19.056	252	158012	0.281
34) Benzo(k)fluoranthene	(6)	19.102	252	150392	0.268
36)$Benzo(a)pyrene-d12	(6)	19.539	264	63871	0.245
37) Benzo(a)pyrene	(6)	19.577	252	143225	0.266
38)*Perylene-d12	(6)	19.669	264	70954	0.250
39) Indeno(1,2,3-cd)pyrene	(6)	21.291	276	135990M	0.278
40) Dibenz(a,h)anthracene	(6)	21.333	278	132391	0.265
41) Benzo(g,h,i)perylene	(6)	21.693	276	146802	0.259

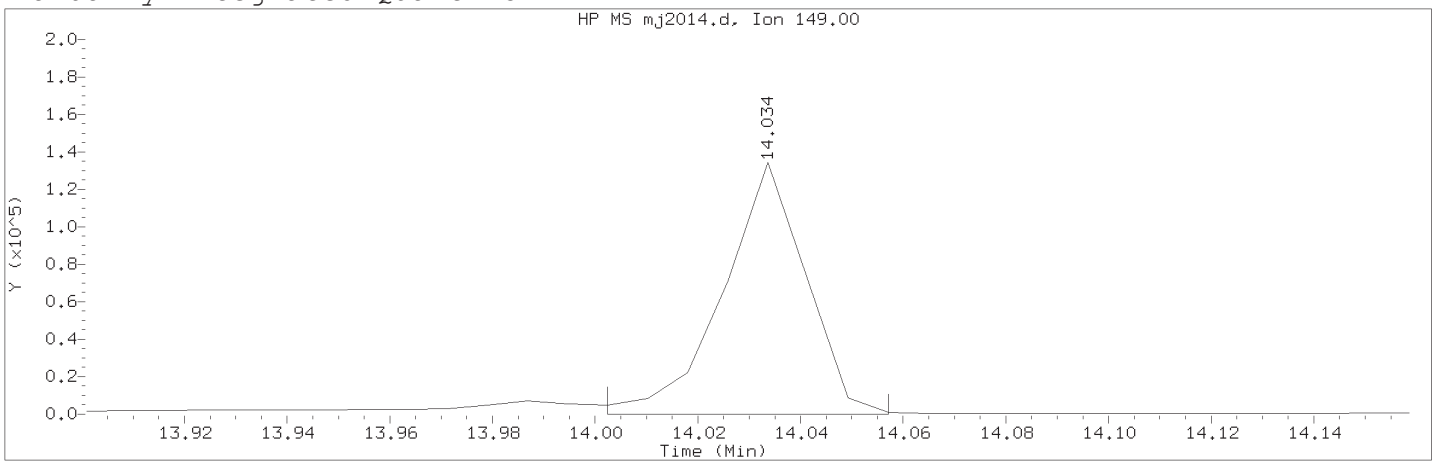
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

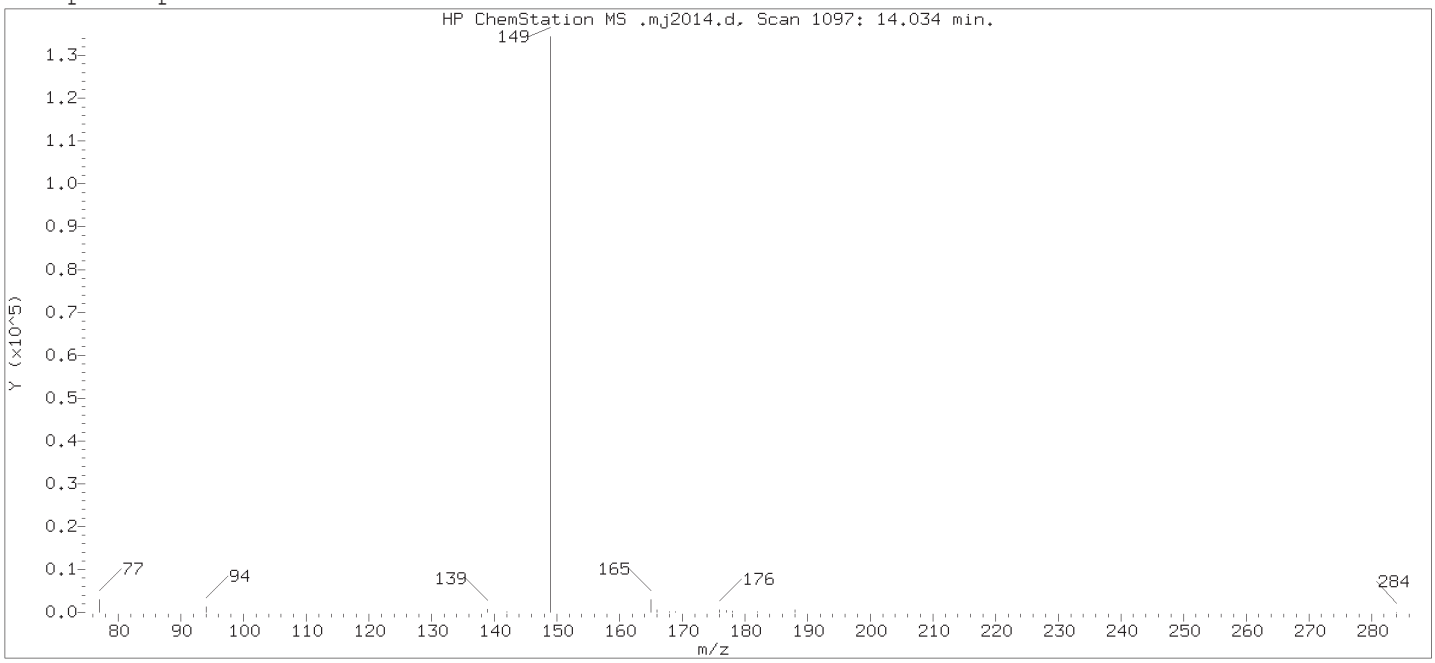
Compound Number : 23
Compound Name : Di-n-butylphthalate
Scan Number : 1097
Retention Time (minutes) : 14.034
Quant Ion : 149.00
Area (flag) : 144806M
On-Column Amount (ng/ul) : 0.2257
Integration start scan : 1092 Integration stop scan: 1099
Y at integration start : 129 Y at integration end: 129

Reason for manual integration: missed peak

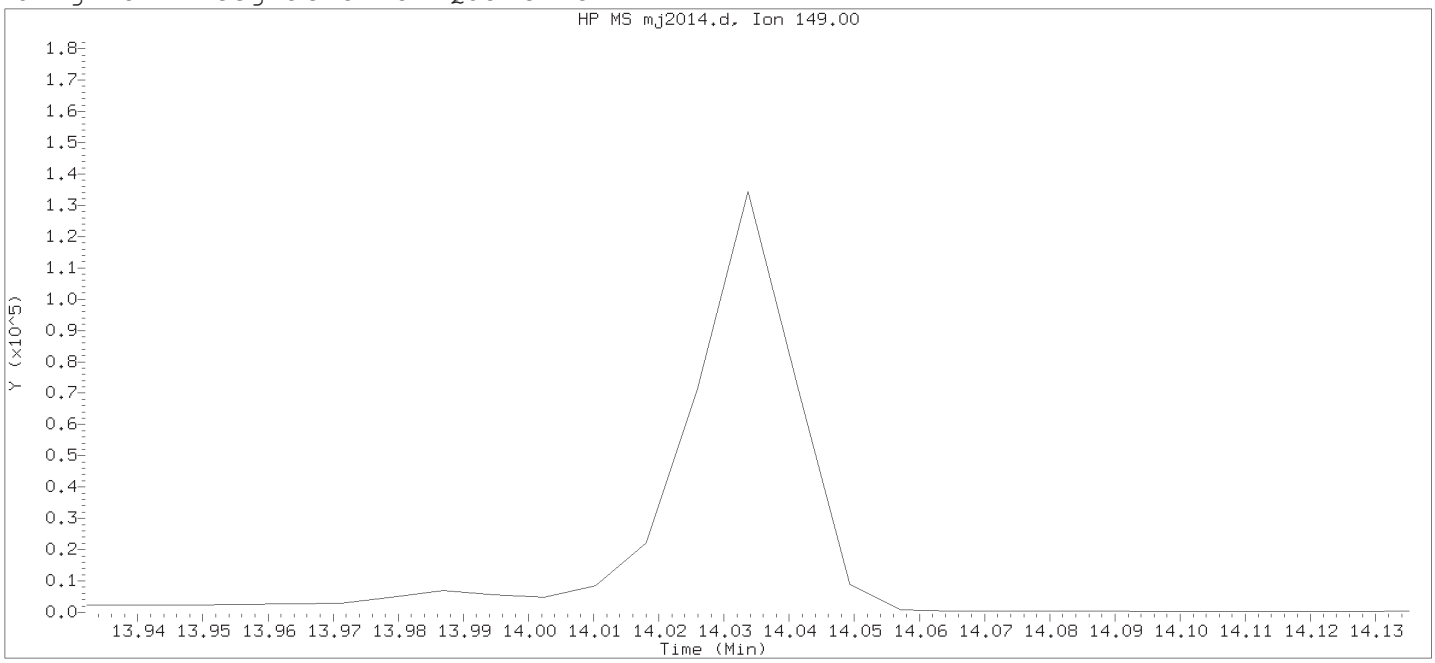
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

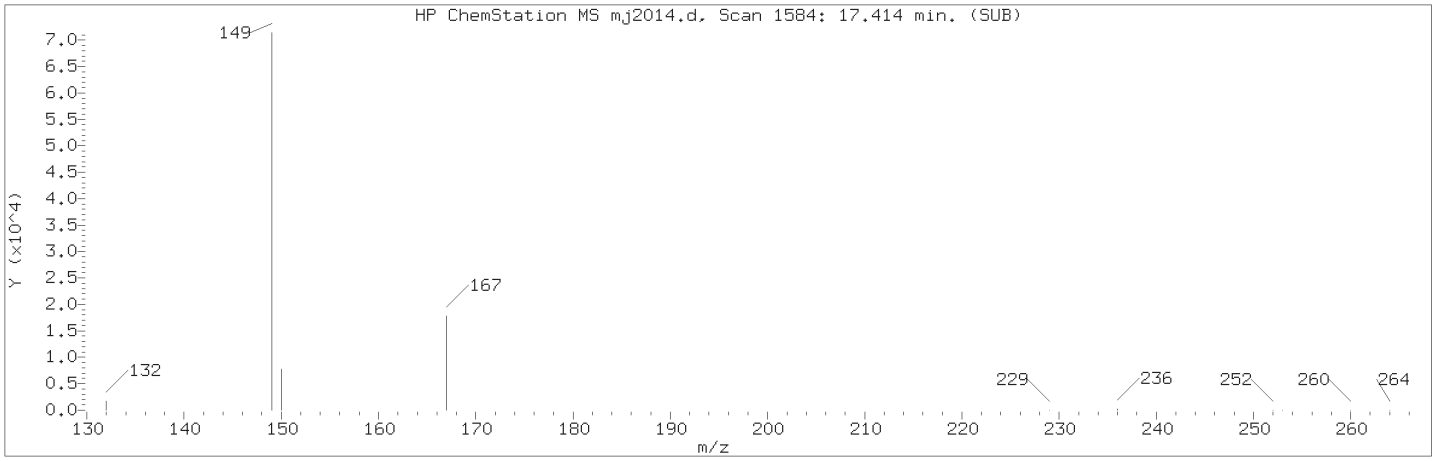
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

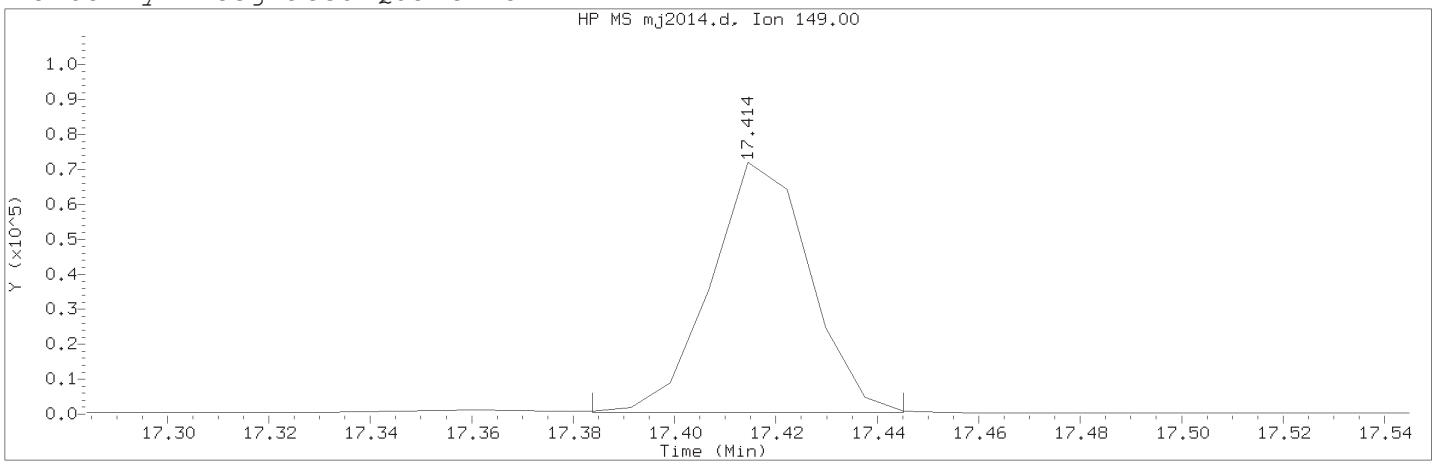
Compound Number : 23
Compound Name : Di-n-butylphthalate
Expected RT (minutes) : 14.034
Quant Ion : 149.00

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

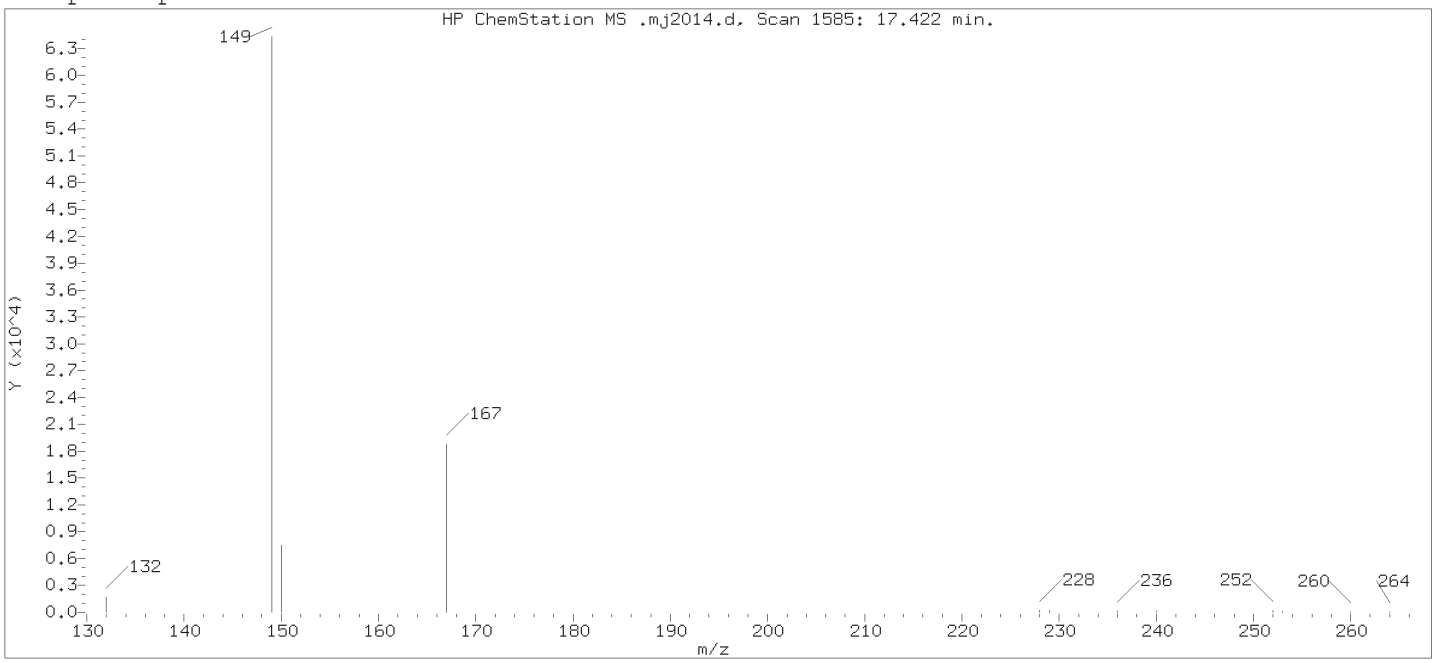
Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1584
Retention Time (minutes) : 17.414
Quant Ion : 149.00
Area (flag) : 96424M
On-Column Amount (ng/ul) : 0.2366
Integration start scan : 1579 Integration stop scan: 1587
Y at integration start : 520 Y at integration end: 520

Reason for manual integration: missed peak

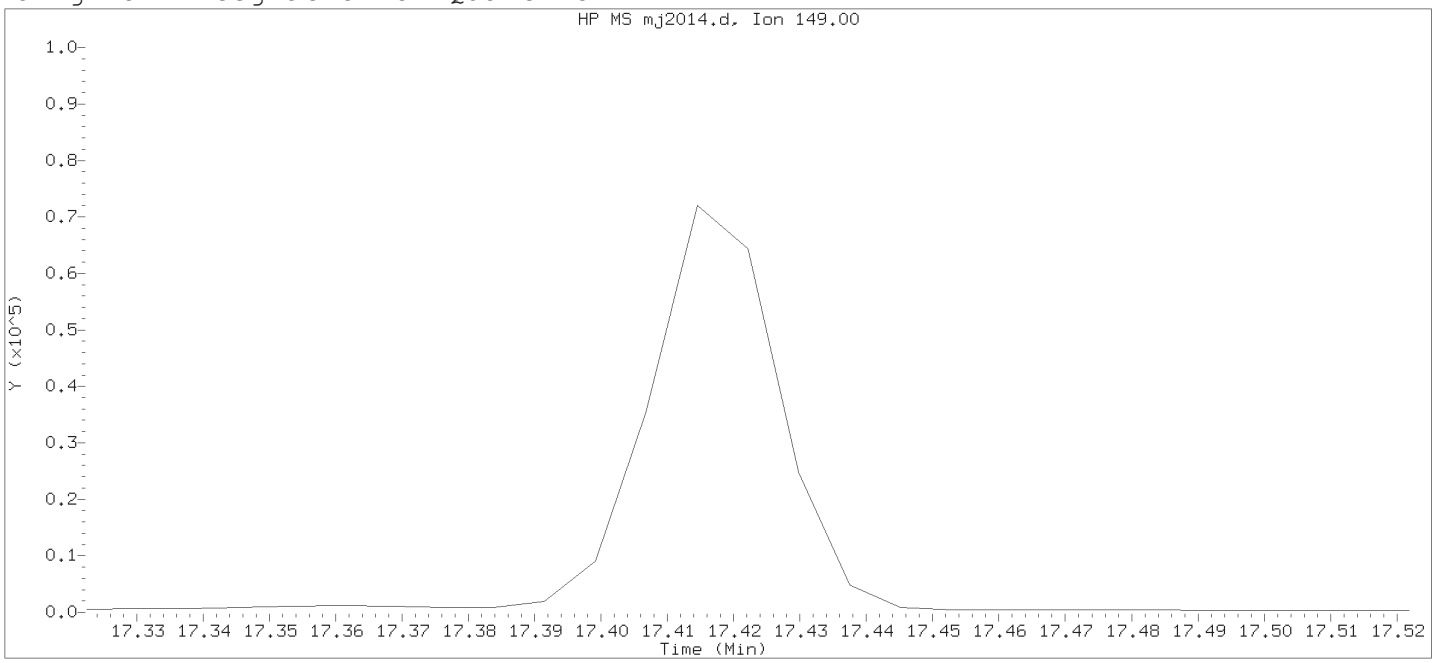
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

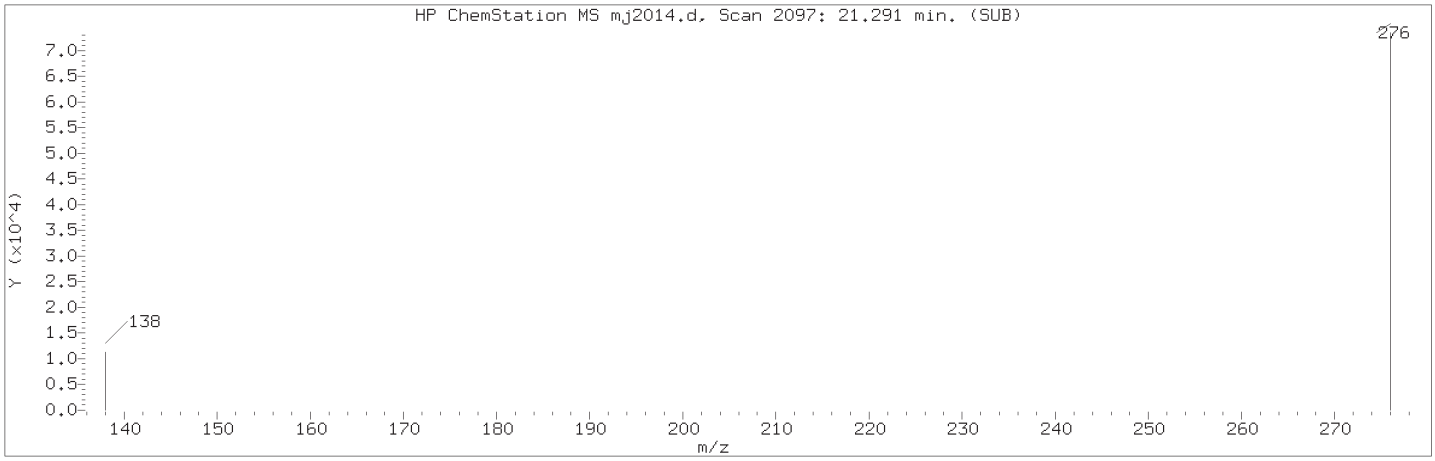
Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

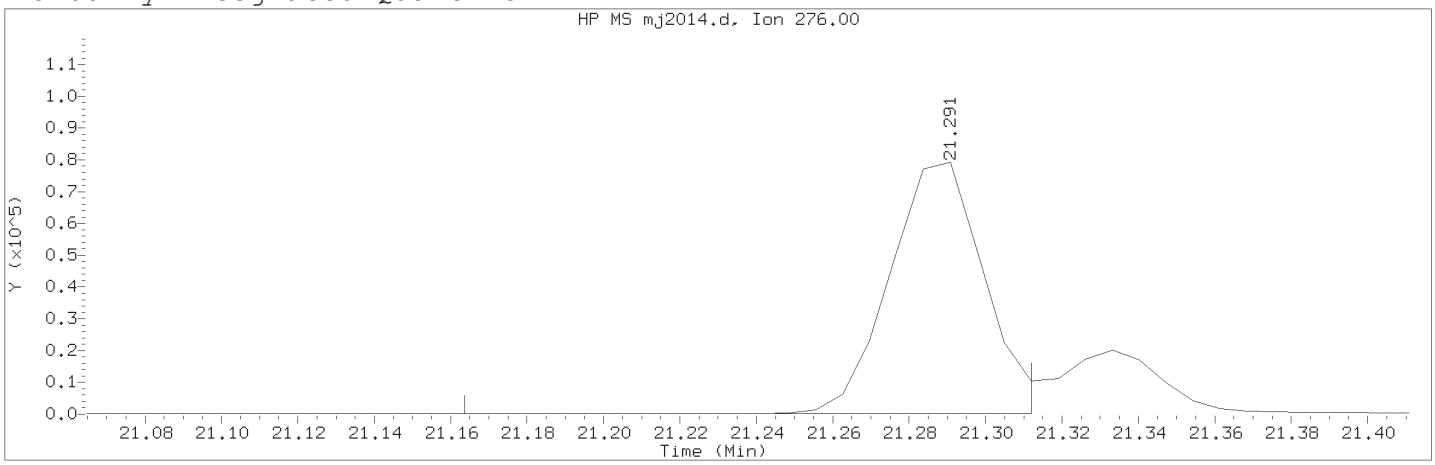
Compound Number : 31
Compound Name : bis(2-Ethylhexyl)phthalate
Expected RT (minutes) : 17.422
Quant Ion : 149.00

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 30-OCT-2018 08:52
Date, time and analyst ID of latest file update: 31-Oct-2018 08:56 jmg00346

Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

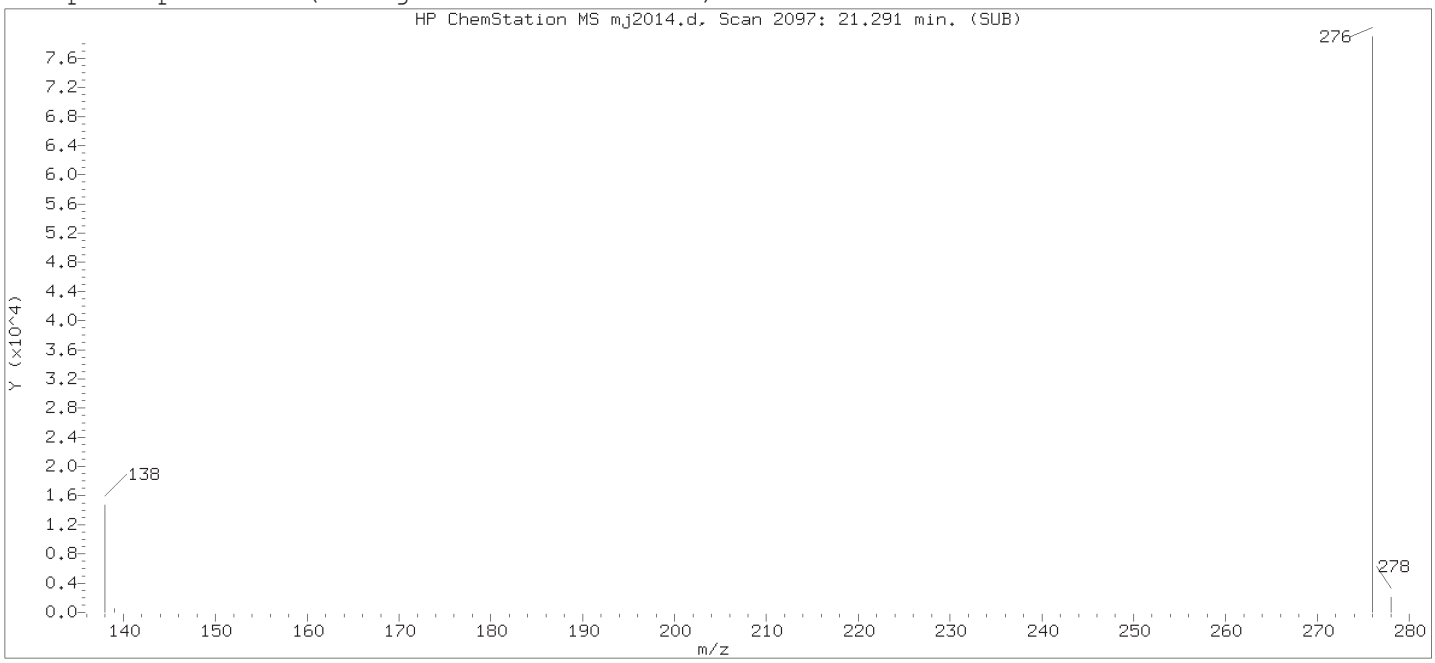
Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2097
Retention Time (minutes) : 21.291
Quant Ion : 276.00
Area (flag) : 135990M
On-Column Amount (ng/ul) : 0.2779
Integration start scan : 2078 Integration stop scan: 2099
Y at integration start : 154 Y at integration end: 154

Reason for manual integration: improper integration

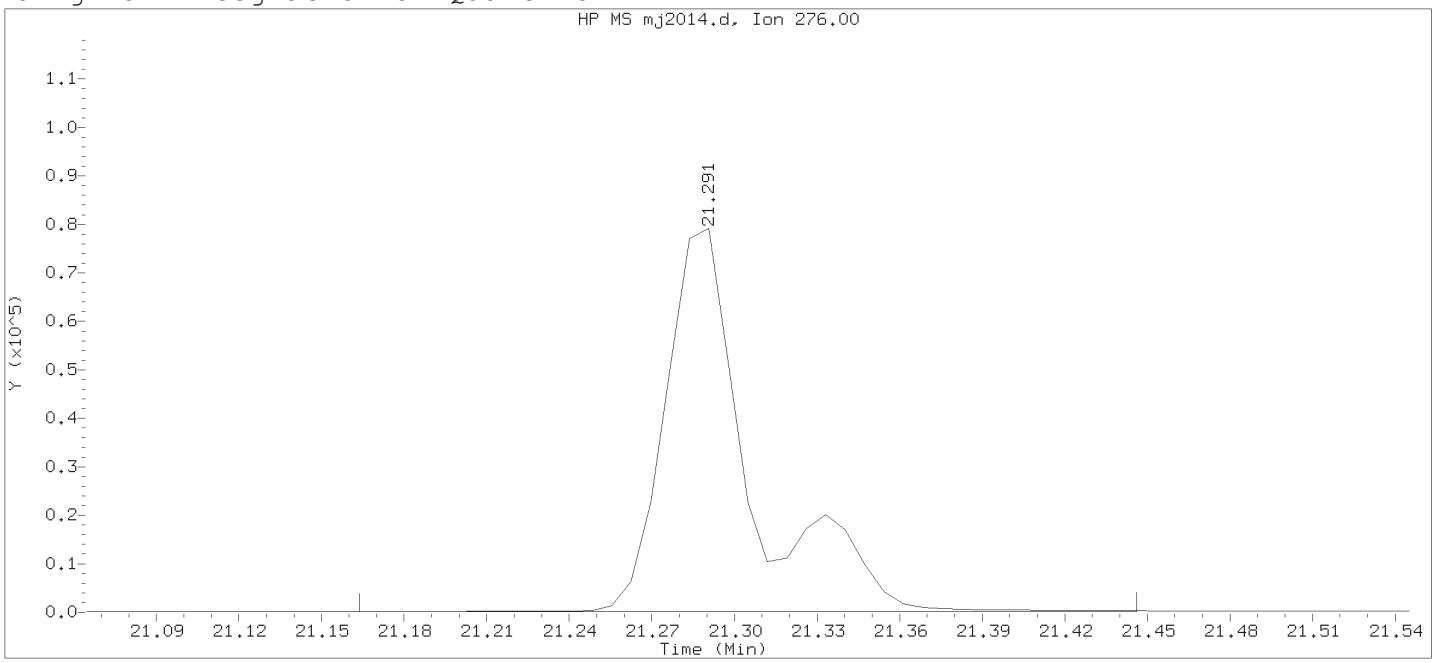
Analyst responsible for change: Digitally signed by Joseph M. Gambler
on 10/31/2018 at 08:57.
Target 3.5 esignature user ID: jmg00346

Secondary review performed and digitally signed by Larry D. Lewis on 10/31/2018 at 12:03.
PARALLAX ID: ldl07768

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP21585.i/18oct27.b/mj2014.d Instrument ID: HP21585.i
Injection date and time: 27-OCT-2018 20:00 Analyst ID: ceb05247

Method used: /chem/HP21585.i/18oct27.b/rvsim8270d.m Sublist used: 25784
Calibration date and time: 28-OCT-2018 23:58
Date, time and analyst ID of latest file update: 29-Oct-2018 00:08 bkc25363

Sample Name: 297WFLCSD Lab Sample ID: 297WFLCSD

Compound Number : 39
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 2097
Retention Time (minutes) : 21.291
Quant Ion : 276.00
Area : 171815
On-column Amount (ng/ul) : 0.3511
Integration start scan : 2078 Integration stop scan: 2118
Y at integration start : 154 Y at integration end: 154

Digitally signed by Joseph M. Gambler on 10/31/2018 at 08:57.
Target 3.5 esignature used for 8270.

Extraction/Distillation/Digestion Logs

Semivolatiles by GC/MS-SIM

Organic Extraction Batchlog Assigned to: 10217 Kate Lutte Reviewed by: KB 10.27.18 Start Date: 10/24/18 Start time: 16:30

18297WAF026 Tech 1: OSilva Tech 2: Kmorn

Dept: 26	Prep Analysis: 10466 BNA Water Extraction SIM										SIM SVOAs 8270D MINI
QC	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
BLANKA	SBLKWF297	250	~~SS1828826A~~	0.125	—	—	1	✓	✓		TAP H2O
LCSA	297WFLCS	250	SS1828826A		MS1829226B	1.0	1	✓	✓		TAP H2O
LCSDA	297WFLCSD	250	~~SS1828826A~~		MS1829226B	1.0	1	✓	✓		TAP H2O

Solvent Used	Lot No.
10N NaOH	4711F57
Methylene Chloride	187356
Sodium Sulfate	18297A
Sulfuric Acid	184577

N/A Kmorn 10/24/18

Spike Solutions: Witness: N/A

MS1829226B MINI SIM SPIKE

~~SS1828826A~~ ~~MINI SEP. BNA SURROGATE~~

*Split w/18297WAE026 ⑧ BNA SURROGATE STANDARD; SS1827726A Kmorn 10/24/18

Sample #	Sample Code	Amt ( )	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
1 9861917	GKP01	240	~~SS1828826A~~	0.125	1	✓	✓	153A	Clear	14244	25784	10/31/2018	N
2 9861918	GKP03	227	SS1828826A		1	✓	✓	153A	tan tint	14244	25784	10/31/2018	N
3 9861919	GKP04	227	SS1828826A		1	✓	✓	153A	Yellow tint	14244	25784	10/31/2018	N
4 9861920	GKPR1	223	SS1828826A		1	✓	✓	153A	tan tint	14244	25784	10/31/2018	N
5 9861921	GKP05	229	SS1828826A		1	✓	✓	153A	tan tint	14244	25784	10/31/2018	N
6 9861922	GKP02	237	~~SS1828826A~~ ⑧		1	✓	✓	153A	Yellow tint	14244	25784	10/31/2018	N

TID07 Page 1509 of 4595

N/A Kmorn 10/24/18

Bench# 6	Bench# 5	Bench# —
Rack ID: —	Work Station	tomble
Internal Standard	Balance #	75996

Micro Temp 100? ✓

R-VAP ID 7	90 C	R-VAP ID 1	90 C	R-VAP ID —	C
S-bath ID —	C	S-bath ID —	C	N-Evap —	C

M-vap C

18297WAF026

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Herbicides Data

Case Narrative/Conformance Summary

Herbicides

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Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

Pesticide Residue Analysis

Fraction: Herbicides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9861917	OU2-1-SW001	X		1	
9861918	OU2-1-SW003	X		1	
9861919	OU2-1-SW004	X		1	
9861920	REF-1-SW001	X		1	
9861921	OU1-1-SW005	X		1	
9861922	OU2-1-SW002	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): 9861917-9861922: 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

Batch#: 182950006A (Sample number(s): 9861917-9861922)
The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: Dinoseb

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Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

Pesticide Residue Analysis

Fraction: Herbicides

(Sample number(s): 9861917-9861922: Analysis: 10407)
The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.

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

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Quality Control Reference List
Pesticide Residue Analysis

CLIENT: Tidewater, Inc.
SDG: TID07

Fraction: Herbicides

Analysis	Batch Number	Sample Number	Analysis Date
Herb water 8151A Master	182950006A	PBLK06295	10/24/2018 04:26
		LCS06295	10/24/2018 04:59
		9861917	10/24/2018 11:35
		9861918	10/24/2018 13:14
		9861919	10/24/2018 13:47
		9861920	10/24/2018 14:20
		9861921	10/24/2018 14:53
		9861922	10/24/2018 15:26

Quality Control Summary
Method Blank
Pesticide Residue Analysis
SDG: TID07
Matrix: LIQUID

Fraction: Herbicides

182950006A / PBLK06295 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Dalapon	10/24/18	N.D.	ug/l	1.8	3.6	4.0
Dicamba	10/24/18	N.D.	ug/l	0.080	0.16	0.30
MCPP	10/24/18	N.D.	ug/l	50	100	200
MCPA	10/24/18	N.D.	ug/l	50	100	200
2,4-DP (Dichloroprop)	10/24/18	N.D.	ug/l	0.16	0.32	0.50
2,4-D	10/24/18	N.D.	ug/l	0.25	0.50	0.60
2,4,5-TP	10/24/18	N.D.	ug/l	0.010	0.030	0.050
2,4,5-T	10/24/18	N.D.	ug/l	0.065	0.13	0.15
2,4-DB	10/24/18	N.D.	ug/l	0.63	1.3	1.5
Dinoseb	10/24/18	N.D.	ug/l	0.18	0.40	0.50

Quality Control Summary
Surrogates
Pesticide Residue Analysis
SDG: TID07
Matrix: LIQUID

Fraction: Herbicides

182950006A	2,4-DCAA-D1		2,4-DCAA-D2	
	Spike Added	2 ug/l	Spike Added	2 ug/l
Sample	% Recovery	Limits	% Recovery	Limits
PBLK06295	80	32 - 138	73	32 - 138
LCS06295	81	32 - 138	80	32 - 138
9861917	83	32 - 138	86	32 - 138
9861918	80	32 - 138	79	32 - 138
9861919	83	32 - 138	79	32 - 138
9861920	78	32 - 138	83	32 - 138
9861921	78	32 - 138	75	32 - 138
9861922	77	32 - 138	81	32 - 138

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: TID07
Matrix: LIQUID

Pesticide Residue Analysis
Fraction: Herbicides

LCS: LCS06295	Batch: **182950006A** (Sample number(s): 9861917-9861922)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dalapon	6.26	2.92 J	NA	47	NA	19-139	NA	NA
Dicamba	0.250	0.221 J	NA	88	NA	50-141	NA	NA
MCPP	250.58	199.03 J	NA	79	NA	33-157	NA	NA
MCPA	503.93	305.3	NA	61	NA	35-144	NA	NA
2,4-DP (Dichloroprop)	2.50	2.24	NA	90	NA	46-159	NA	NA
2,4-D	2.50	1.87	NA	75	NA	45-152	NA	NA
2,4,5-TP	0.250	0.220	NA	88	NA	51-134	NA	NA
2,4,5-T	0.250	0.201	NA	80	NA	42-147	NA	NA
2,4-DB	2.51	1.89	NA	75	NA	35-153	NA	NA
Dinoseb	1.25	0.211 J	NA	17 *	NA	19-133	NA	NA

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
MCPP	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: 19850A Calibration File: 15HERB1828901

GC Column (1) : ZB XLB ID: 0.32 (mm)

ICAL Date(s) Analyzed: 10/16/2018 10/16/2018

COMPOUND	RT OF STANDARDS						MIDPOINT RT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		FROM	TO
Dalapon	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.70	3.76
2,4-DCAA	11.96	11.95	11.95	11.94	11.93	11.93	11.95	11.92	11.98
Dicamba	12.09	12.08	12.07	12.07	12.06	12.06	12.07	12.04	12.10
Mcpp	12.49	12.49	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	13.47	13.47	13.46	13.46	13.45	13.45	13.46	13.43	13.49
2,4-D	13.91	13.90	13.90	13.90	13.90	13.89	13.90	13.87	13.93
PCP	15.10	15.10	15.10	15.09	15.09	15.08	15.10	15.07	15.13
2,4,5-TP	15.39	15.39	15.39	15.39	15.39	15.38	15.39	15.36	15.42
2,4,5-T	15.92	15.92	15.91	15.91	15.91	15.91	15.91	15.88	15.94
2,4-DB	16.75	16.75	16.75	16.74	16.74	16.74	16.75	16.72	16.78
Dinoseb	16.94	16.94	16.94	16.93	16.93	16.93	16.94	16.91	16.97
Picloram	17.90	17.90	17.89	17.89	17.89	17.88	17.89	17.86	17.92
Hexachlorophene	26.14	26.14	26.14	26.14	26.14	26.14	26.14	26.11	26.17

6E
INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850A Calibration File: 15HERB1828901

GC Column (1) : ZB XLB ID: 0.32 (mm)

ICAL Date(s) Analyzed: 10/16/2018 10/16/2018

COMPOUND	CALIBRATION FACTORS LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	%RSD
Dalapon	7.90E-04	7.66E-04	7.65E-04	7.50E-04	8.39E-04	8.68E-04	7.96E-04	6
2,4-DCAA	1.68E-03	1.56E-03	1.51E-03	1.42E-03	1.44E-03	1.51E-03	1.52E-03	6
Dicamba	5.81E-03	5.68E-03	5.76E-03	5.48E-03	5.89E-03	5.88E-03	5.75E-03	3
Mcpp	1.40E-05	1.20E-05	1.00E-05	7.00E-06	6.00E-06	5.00E-06	9.00E-06	38
Mcpa	1.90E-05	1.50E-05	1.20E-05	9.00E-06	7.00E-06	7.00E-06	1.15E-05	41
2,4-DP	1.37E-03	1.33E-03	1.21E-03	1.12E-03	1.11E-03	1.02E-03	1.19E-03	11
2,4-D	1.55E-03	1.53E-03	1.52E-03	1.46E-03	1.53E-03	1.62E-03	1.54E-03	3
PCP	1.60E-02	1.71E-02	1.76E-02	1.77E-02	1.88E-02	1.95E-02	1.78E-02	7
2,4,5-TP	6.51E-03	6.71E-03	6.92E-03	7.02E-03	7.69E-03	7.95E-03	7.13E-03	8
2,4,5-T	5.71E-03	5.96E-03	6.09E-03	6.32E-03	7.29E-03	7.51E-03	6.48E-03	11
2,4-DB	8.45E-04	8.76E-04	8.68E-04	8.53E-04	9.73E-04	1.00E-03	9.03E-04	7
Dinoseb	3.17E-03	3.18E-03	3.13E-03	2.99E-03	3.01E-03	3.05E-03	3.09E-03	3
Picloram	4.69E-03	5.24E-03	5.93E-03	5.86E-03	6.81E-03	7.16E-03	5.95E-03	16
Hexachlorophene	5.23E-03	5.32E-03	5.62E-03	5.80E-03	6.18E-03	6.44E-03	5.77E-03	8

linear
linear 10/17/18

File Name: V:\CP15\15HERB1828901.CAL
Version: 14

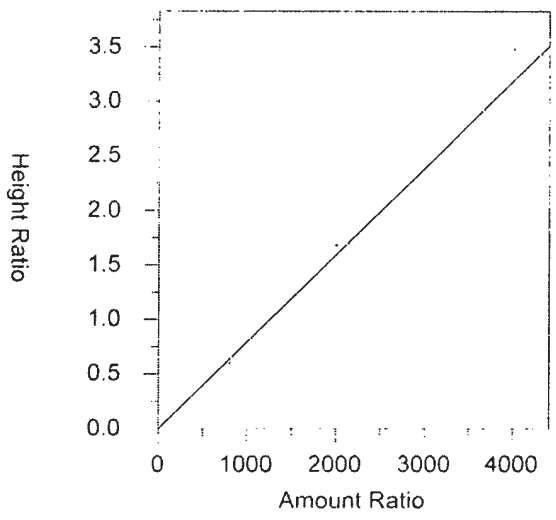
Creator:
Description:
Reason for change:

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: 3.726 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

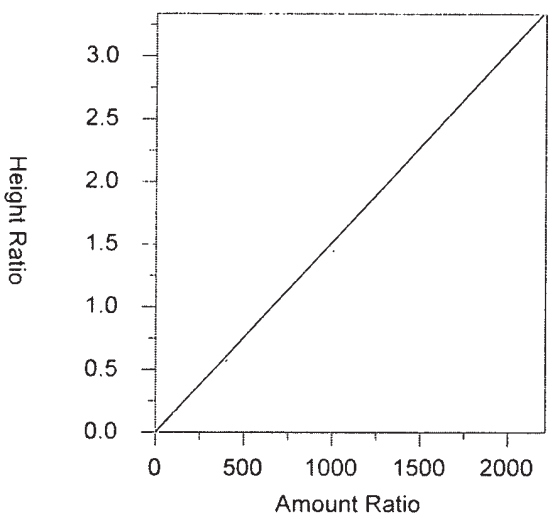
Single peak quantification by height

Y = 0.0007961277 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9895236
Average error: 4.809%
Average CF: 0.0007961277
RSD: 5.928%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	100	755154.5	7551.545	-0.831	100	0.07895096	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
2	201	1498846	7456.945	-3.847	201	0.1538656	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
3	401	2812007	7012.486	-3.897	401	0.3068074	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
4	802	5506521	6865.986	-5.853	802	0.6011204	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
5	2005	1.444463E+07	7204.304	5.387	2005	1.682229	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
6	4010	2.747069E+07	6850.546	9.041	4010	3.481108	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\

2 DCAA



Expected retention time: 11.945 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

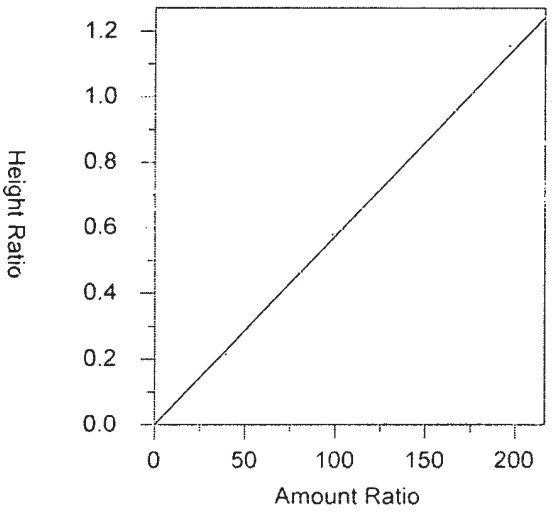
Single peak quantification by height

Y = 0.001520584 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9986295
Average error: 4.365%
Average CF: 0.001520584
RSD: 6.193%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	50	804441.4	16088.83	10.621	50	0.08410387	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	101	1533074	15178.95	2.475	101	0.1573793	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	201	2789518	13878.2	-0.420	201	0.3043537	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	402	5231489	13013.65	-6.573	402	0.5710965	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	1005	1.241562E+07	12353.85	-5.383	1005	1.445929	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	2010	2.39454E+07	11913.13	-0.720	2010	3.034381	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

3 DICAMBA



Expected retention time: 12.073 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

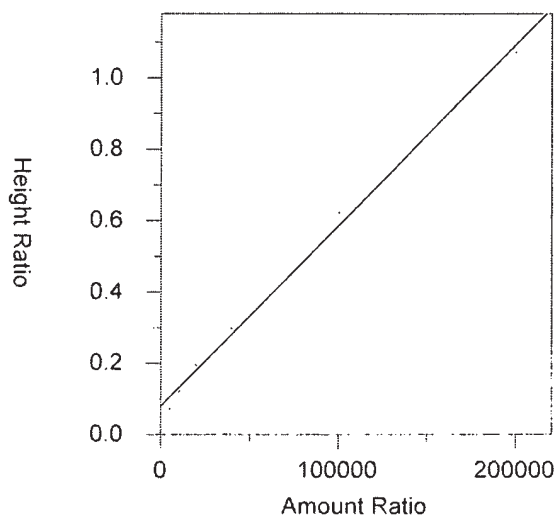
Single peak quantification by height

Y = 0.005749298 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9990042
Average error: 1.986%
Average CF: 0.005749298
RSD: 2.676%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	4.9	272185.6	55548.08	1.013	4.9	0.02845684	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
2	9.8	541828.8	55288.65	-1.280	9.8	0.05562201	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
3	19.7	1040332	52808.73	0.217	19.7	0.1135067	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
4	39.3	1972919	50201.5	-4.680	39.3	0.2153741	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
5	98.3	4972437	50584.3	2.466	98.3	0.5790925	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
6	196.6	9121651	46397	2.264	196.6	1.155903	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2

4 MCPP



Expected retention time:	12.482 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

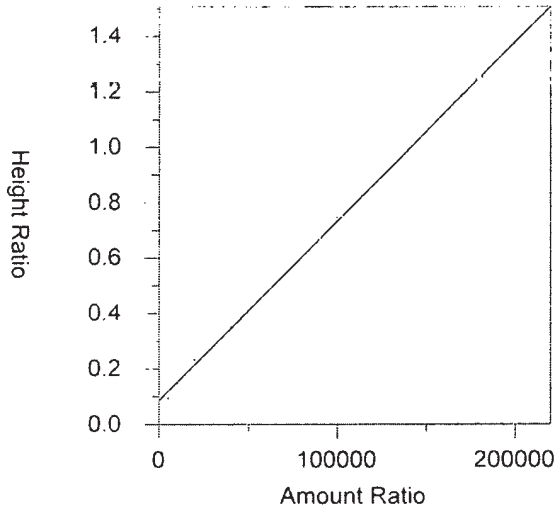
Y = 5.058342E-06 X + 0.08028344

Linear fit with equal weighting

Coefficient of determination:	0.9953631
Average error:	10.072%
Average CF:	9.196715E-06
RSD:	38.180%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5004	685156.9	136.9218	-32.163	5004	0.07163274	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
2	10008	1180608	117.9664	-7.418	10008	0.1211966	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
3	20016	1785405	89.19889	7.309	20016	0.1947987	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
4	40032	2730670	68.21218	5.416	40032	0.2980941	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
5	100080	5347857	53.43582	6.188	100080	0.6228141	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-2
6	200160	8456068	42.24654	-1.940	200160	1.07156	\\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

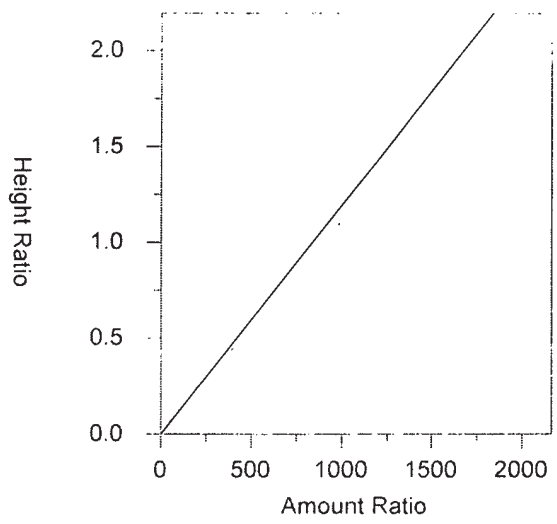
Y = 6.46642E-06 X + 0.08704972

Linear fit with equal weighting

Coefficient of determination:	0.9990221
Average error:	5.943%
Average CF:	1.143879E-05
RSD:	41.368%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	4990	907307.4	181.8251	-20.499	4990	0.09485845	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP
2	9979	1436372	143.9395	-2.722	9979	0.1474523	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP
3	19958	2133723	106.9107	7.726	19958	0.2328024	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP
4	39916	3242869	81.24233	2.563	39916	0.3540084	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP
5	99790	6385537	63.98975	1.547	99790	0.7436628	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP
6	199580	1.08059E+07	54.1432	-0.601	199580	1.369333	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEP

6 2,4-DP



Expected retention time: 13.461 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

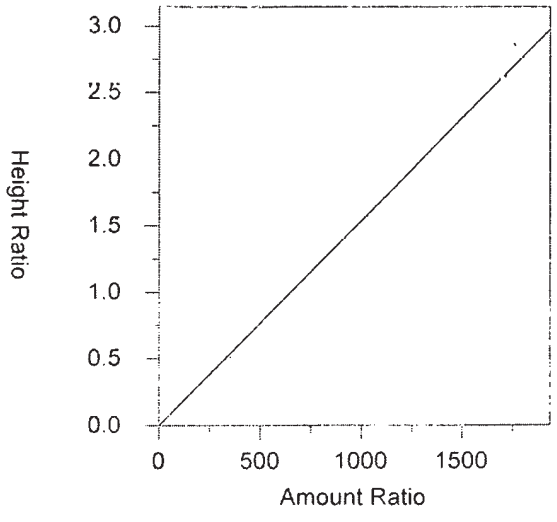
Single peak quantification by height

Y = 0.001193569 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9536747
Average error: 9.217%
Average CF: 0.001193569
RSD: 11.434%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	49.2	645808.6	13126.19	14.977	49.2	0.0675189	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	98.3	1268866	12908.1	11.019	98.3	0.1302568	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	196.6	2186261	11120.35	1.653	196.6	0.2385346	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	393.2	4040723	10276.51	-6.010	393.2	0.4411063	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	983	9405429	9568.087	-6.641	983	1.095361	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1966	1.574008E+07	8006.145	-14.999	1966	1.994596	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

7 2,4-D



Expected retention time: 13.901 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

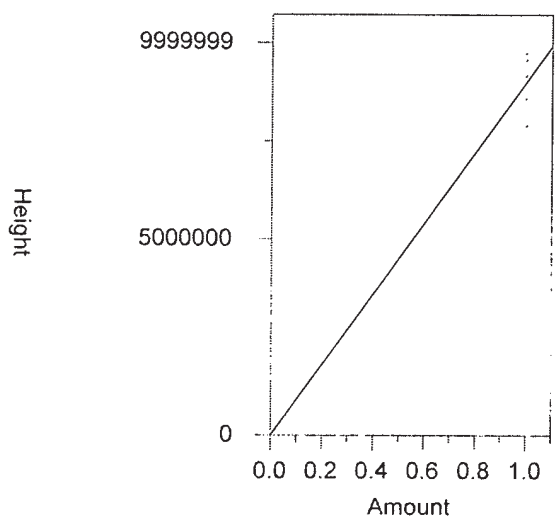
Single peak quantification by height

Y = 0.00153563 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9957013
Average error: 2.181%
Average CF: 0.00153563
RSD: 3.483%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	44	651215.6	14800.36	0.764	44	0.0680842	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	88	1312857	14918.83	-0.268	88	0.1347727	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	176	2457664	13964	-0.786	176	0.2681463	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	352	4699900	13351.99	-5.083	352	0.5130655	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	880	1.155666E+07	13132.57	-0.404	880	1.345894	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1760	2.256021E+07	12818.3	5.777	1760	2.858848	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

8 DBOFB ** Internal standard component **



Expected retention time: 14.24 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

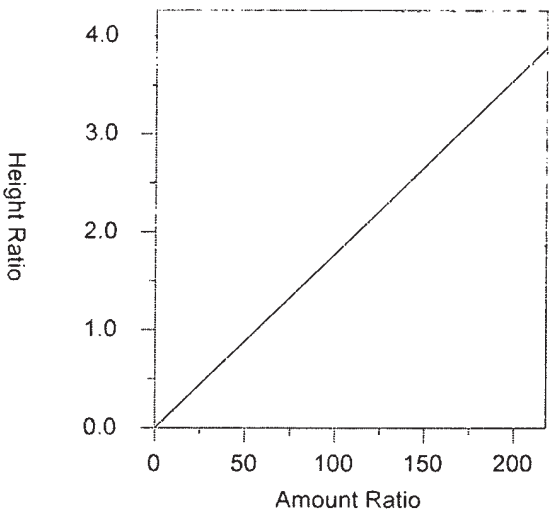
Single peak quantification by height

Y = 9018316 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0
Average error: 5.761%
Average CF: 9018316
RSD: 7.553%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	9564856	9564856	6.060	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289001.008
2	1	9741266	9741266	8.016	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289001.009
3	1	9165383	9165383	1.631	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289001.010
4	1	9160429	9160429	1.576	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289001.011
5	1	8586602	8586602	-4.787	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289001.012
6	1	7891363	7891363	-12.496	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289001.013

9 PCP



Expected retention time: 15.096 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

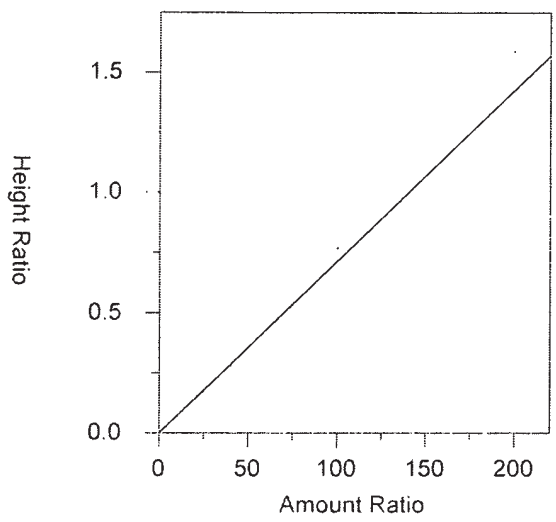
Single peak quantification by height

Y = 0.01778607 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9879448
Average error: 5.140%
Average CF: 0.01778607
RSD: 6.970%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	767055.2	153411	-9.822	5	0.08019517	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	9.9	1645327	166194.7	-4.077	9.9	0.1689028	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	19.8	3190505	161136.6	-1.153	19.8	0.3481039	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	39.6	6428180	162327.8	-0.368	39.6	0.7017335	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	99.1	1.597301E+07	161180.7	5.539	99.1	1.860225	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	198.2	3.056774E+07	154226.8	9.882	198.2	3.873569	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

10 2,4,5-TP



Expected retention time: 15.391 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

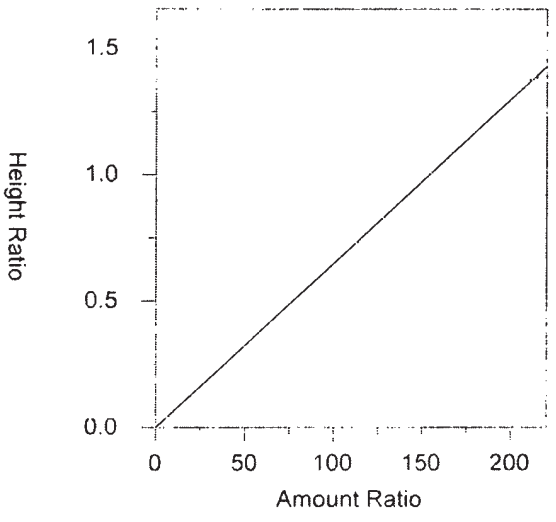
Single peak quantification by height

Y = 0.007129699 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9838259
Average error: 6.411%
Average CF: 0.007129699
RSD: 7.924%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	311303.4	62260.68	-8.701	5	0.03254659	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	10	653382.6	65338.26	-5.924	10	0.06707369	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	20	1267679	63383.95	-3.003	20	0.1383116	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	40	2570553	64263.82	-1.604	40	0.2806149	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	100	6598896	65988.96	7.790	100	0.7685108	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	200	1.254008E+07	62700.4	11.442	200	1.589089	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

11 2,4,5-T



Expected retention time: 15.913 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

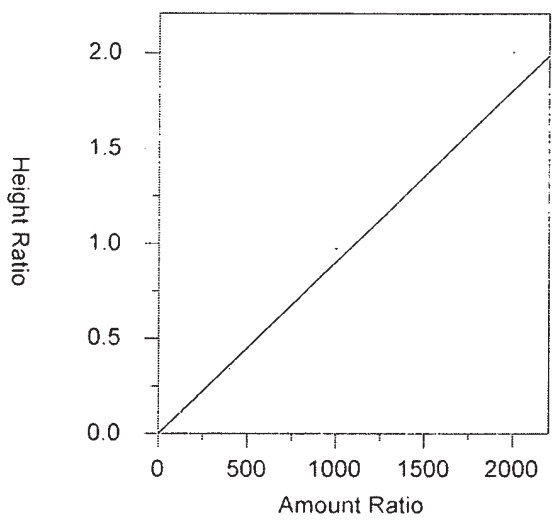
Single peak quantification by height

Y = 0.006480186 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.970303
Average error: 9.467%
Average CF: 0.006480186
RSD: 11.472%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	272999.3	54599.86	-11.910	5	0.02854192	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	10	580591.9	58059.19	-8.025	10	0.05960127	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	20	1116130	55806.5	-6.039	20	0.1217767	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	40	2316848	57921.2	-2.426	40	0.2529192	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	100.1	6263386	62571.29	12.452	100.1	0.7294371	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	200.2	1.187054E+07	59293.41	15.949	200.2	1.504245	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

12 2,4-DB



Expected retention time: 16.747 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

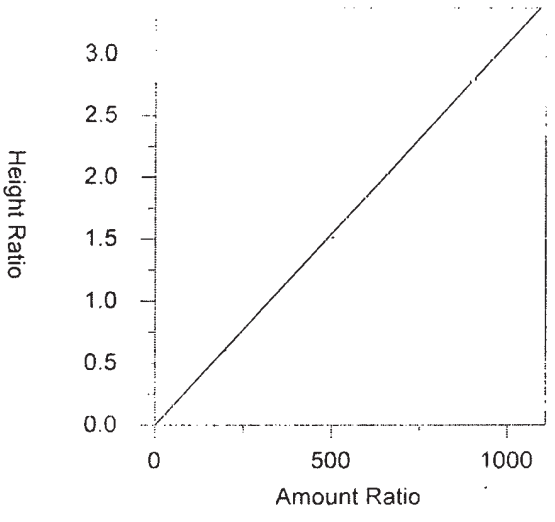
Single peak quantification by height

Y = 0.000903016 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9846341
Average error: 6.258%
Average CF: 0.000903016
RSD: 7.449%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	50.1	404849.6	8080.831	-6.442	50.1	0.04232679	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	100.1	854525.3	8536.717	-2.953	100.1	0.0877222	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	200.2	1593508	7959.581	-3.829	200.2	0.1738616	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	400.4	3128267	7812.855	-5.551	400.4	0.3414979	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	1001	8361621	8353.268	7.731	1001	0.9737986	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	2002	1.584191E+07	7913.042	11.044	2002	2.0075	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

13 DINOSEB



Expected retention time: 16.936 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

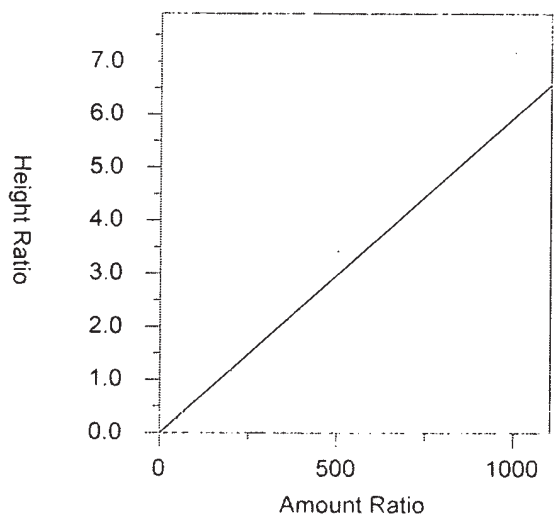
Single peak quantification by height

Y = 0.003087552 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9994056
Average error: 2.442%
Average CF: 0.003087552
RSD: 2.800%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	25.2	764709.9	30345.63	2.755	25.2	0.07994996	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	50.4	1562994	31011.79	3.109	50.4	0.1604508	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	100.7	2891301	28712.03	1.461	100.7	0.3154588	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	201.4	5506872	27342.96	-3.325	201.4	0.6011587	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	503.5	1.299939E+07	25818.05	-2.616	503.5	1.513916	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1007	2.419585E+07	24027.66	-1.385	1007	3.066118	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

14 Picloram



Expected retention time:	17.891 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

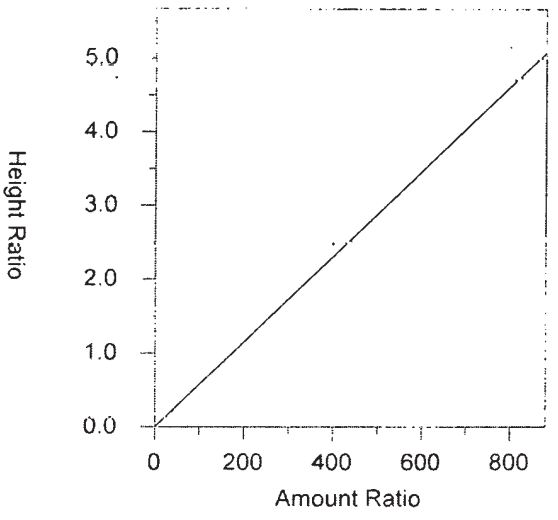
Y = 0.005946827 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9560255
Average error:	11.647%
Average CF:	0.005946827
RSD:	15.633%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	25.1	1124714	44809.32	-21.222	25.1	0.1175882	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	50.2	2561862	51033.11	-11.905	50.2	0.2629907	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	100.4	5457509	54357.66	-0.270	100.4	0.595448	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	200.7	1.076437E+07	53634.13	-1.544	200.7	1.175094	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	501.8	2.935299E+07	58495.4	14.555	501.8	3.418464	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1003.5	5.669338E+07	56495.64	20.386	1003.5	7.184232	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

15 Hexachlorophene



Expected retention time:	26.143 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 = 0.005765484 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9833898
Average error:	6.513%
Average CF:	0.005765484
RSD:	8.265%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	20	1000297	50014.85	-9.305	20	0.1045805	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	40	2073407	51835.18	-7.706	40	0.2128478	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	80	4120545	51506.81	-2.528	80	0.4495769	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	160	8506119	53163.24	0.661	160	0.9285721	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	400	2.121686E+07	53042.15	7.143	400	2.470926	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	800	4.066944E+07	50836.8	11.735	800	5.153665	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

6D

INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850B Calibration File: 15HERB1828901B

GC Column (2) : ZB 35 ID: 0.32 (mm)

ICAL Date(s) Analyzed: 10/16/2018 10/16/2018

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	12.54	12.53	12.52	12.52	12.51	12.51	12.52	12.49	12.55
Dicamba	12.90	12.89	12.88	12.88	12.87	12.87	12.88	12.85	12.91
Mcpp	12.94	12.94	12.94	12.94	12.94	12.95	12.94	12.91	12.97
Mcpa	13.47	13.47	13.46	13.46	13.47	13.48	13.46	13.43	13.49
2,4-DP	14.00	14.00	13.99	13.99	13.99	13.98	13.99	13.96	14.02
2,4-D	14.62	14.62	14.62	14.61	14.61	14.61	14.62	14.59	14.65
PCP	15.32	15.31	15.31	15.31	15.30	15.30	15.31	15.28	15.34
2,4,5-TP	15.81	15.81	15.81	15.81	15.80	15.80	15.81	15.78	15.84
2,4,5-T	16.52	16.51	16.51	16.51	16.51	16.50	16.51	16.48	16.54
Dinoseb	16.95	16.95	16.94	16.94	16.94	16.94	16.94	16.91	16.97
2,4-DB	17.22	17.22	17.22	17.22	17.21	17.21	17.22	17.19	17.25
Picloram	19.52	19.52	19.51	19.51	19.51	19.51	19.51	19.48	19.54
Hexachlorophene	26.57	26.57	26.57	26.57	26.57	26.57	26.57	26.54	26.60

6E

INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850B Calibration File: 15HERB1828901B

GC Column (2) : ZB 35 ID: 0.32 (mm)

ICAL Date(s) Analyzed: 10/16/2018 10/16/2018

COMPOUND	CALIBRATION FACTORS							%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	
Dalapon	1.13E-03	1.09E-03	1.07E-03	1.08E-03	1.13E-03	1.15E-03	1.11E-03	3
2,4-DCAA	1.55E-03	1.45E-03	1.39E-03	1.41E-03	1.47E-03	1.57E-03	1.47E-03	5
Dicamba	5.83E-03	5.78E-03	5.50E-03	5.73E-03	6.12E-03	6.40E-03	5.89E-03	5
Mcpp	6.00E-06	6.00E-06	6.00E-06	6.00E-06	6.00E-06	6.00E-06	6.00E-06	4
Mcpa	1.00E-05	9.00E-06	8.00E-06	8.00E-06	8.00E-06	8.00E-06	8.50E-06	10
2,4-DP	1.49E-03	1.33E-03	1.24E-03	1.24E-03	1.21E-03	1.19E-03	1.28E-03	9
2,4-D	1.54E-03	1.51E-03	1.46E-03	1.49E-03	1.58E-03	1.64E-03	1.54E-03	4
PCP	1.72E-02	1.76E-02	1.80E-02	1.88E-02	1.94E-02	2.01E-02	1.85E-02	6
2,4,5-TP	6.88E-03	6.82E-03	6.98E-03	7.07E-03	7.55E-03	7.88E-03	7.20E-03	6
2,4,5-T	5.86E-03	5.89E-03	6.23E-03	6.48E-03	7.10E-03	7.45E-03	6.50E-03	10
Dinoseb	2.87E-03	2.96E-03	2.83E-03	2.88E-03	2.93E-03	2.85E-03	2.88E-03	2
2,4-DB	8.52E-04	8.94E-04	8.80E-04	8.93E-04	1.00E-03	1.02E-03	9.24E-04	8
Picloram	4.95E-03	5.28E-03	5.76E-03	6.22E-03	6.76E-03	7.24E-03	6.03E-03	15
Hexachlorophene	5.32E-03	5.20E-03	5.29E-03	5.42E-03	5.99E-03	6.51E-03	5.62E-03	9

File Name: V:\CP15\15HERB1828901b.CAL
Version: 13

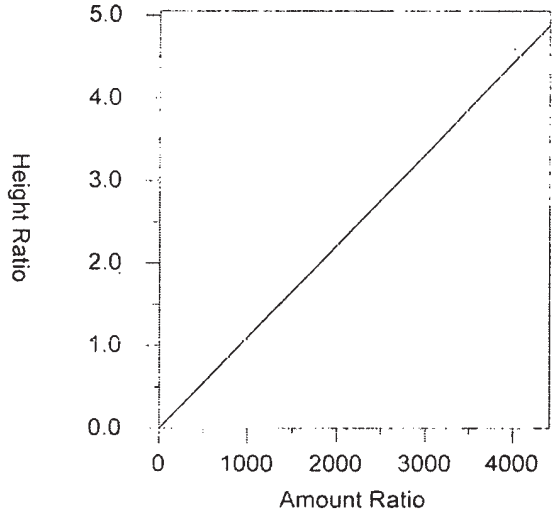
Creator:
Description:
Reason for change:

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: 3.857 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

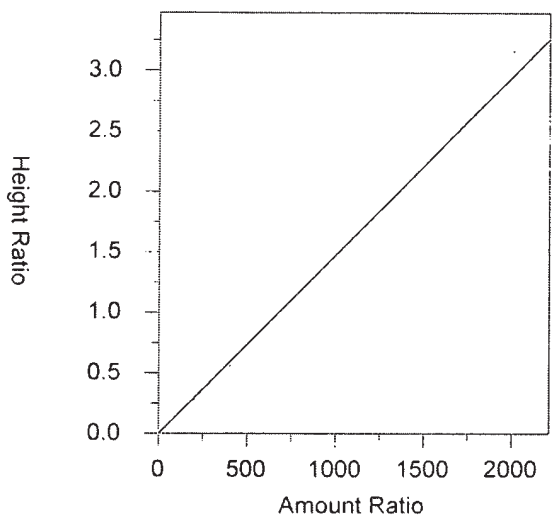
Single peak quantification by height

$Y = 0.001106283\ X + 0$

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9982042
Average error: 2.511%
Average CF: 0.001106283
RSD: 2.860%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	100	1162134	11621.34	2.128	100	0.112982	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
2	201	2282077	11353.62	-1.628	201	0.2187421	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
3	401	4324336	10783.88	-3.286	401	0.4290429	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
4	802	8160843	10175.61	-2.618	802	0.8640091	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
5	2005	2.078869E+07	10368.42	1.849	2005	2.259113	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\
6	4010	3.91337E+07	9759.027	3.556	4010	4.593927	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\

2 DCAA



Expected retention time: 12.522 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

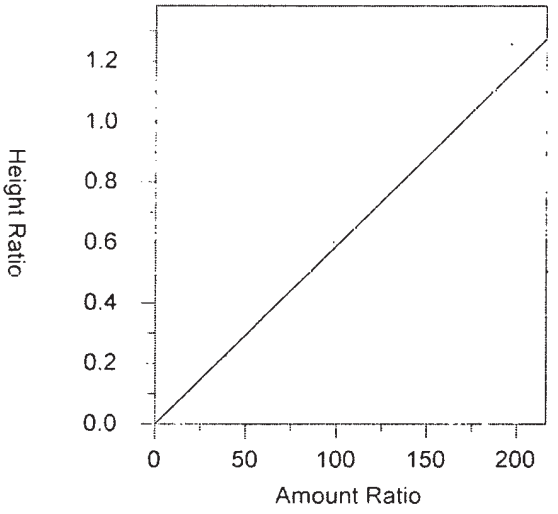
Single peak quantification by height

Y = 0.001474517 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9944384
Average error: 4.003%
Average CF: 0.001474517
RSD: 5.116%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	50	798998.9	15979.98	5.361	50	0.07767821	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	101	1531295	15161.34	-1.442	101	0.146778	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	201	2813425	13997.14	-5.817	201	0.2791365	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	402	5335993	13273.61	-4.693	402	0.5649351	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	1005	1.362915E+07	13561.34	-0.054	1005	1.481084	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	2010	2.692528E+07	13395.66	6.647	2010	3.160774	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

3 DICAMBA



Expected retention time: 12.884 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

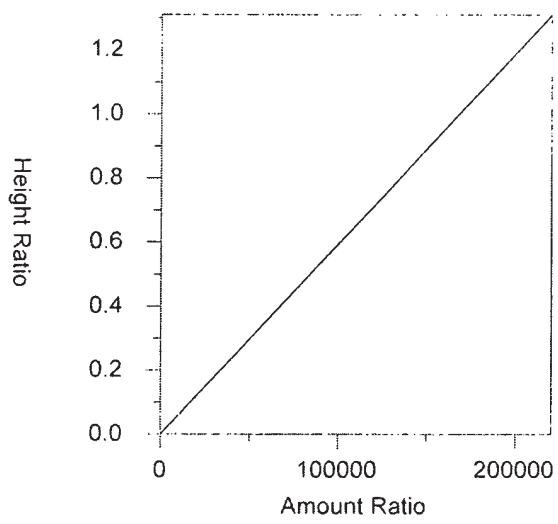
Single peak quantification by height

Y = 0.005892818 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9907748
Average error: 4.154%
Average CF: 0.005892818
RSD: 5.421%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	4.9	293908.4	59981.3	-1.043	4.9	0.02857361	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	9.8	591109	60317.24	-1.888	9.8	0.05665909	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	19.7	1091227	55392.23	-6.737	19.7	0.1082671	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	39.3	2126332	54105.14	-2.793	39.3	0.2251201	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	98.3	5535133	56308.57	3.839	98.3	0.6015045	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	196.6	1.071994E+07	54526.65	8.622	196.6	1.25842	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

4 MCPP



Expected retention time:	12.938 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

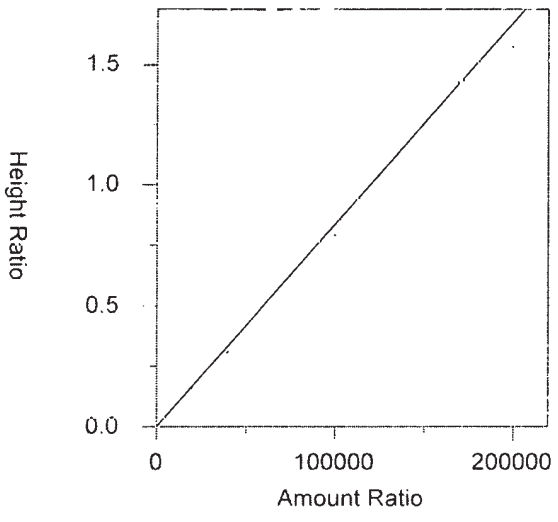
Y = 5.944439E-06 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9998516
Average error:	2.776%
Average CF:	5.944439E-06
RSD:	3.733%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5004	322970.3	64.54243	5.557	5004	0.03139899	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT
2	10008	631518.2	63.10134	1.749	10008	0.0605324	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT
3	20016	1146270	57.26768	-4.417	20016	0.1137282	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT
4	40032	2159782	53.95139	-3.911	40032	0.2286616	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT
5	100080	5527574	55.23156	0.969	100080	0.6006831	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT
6	200160	1.01411E+07	50.66497	0.053	200160	1.190469	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT

5 MCPA



Expected retention time:	13.463 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

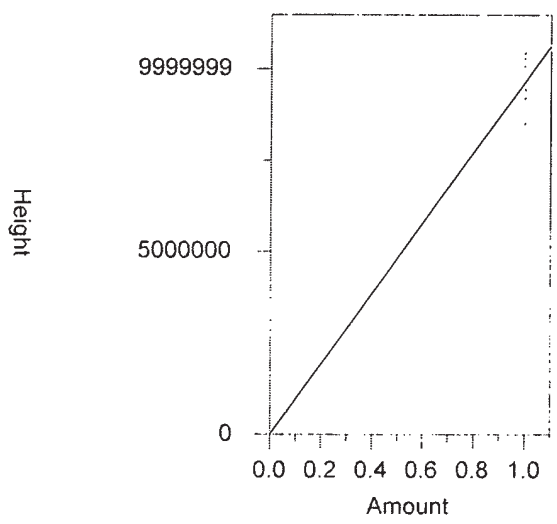
Y = 8.376211E-06 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9926879
Average error:	8.347%
Average CF:	8.376211E-06
RSD:	10.411%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	4990	508782.3	101.9604	18.341	4990	0.04946353	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	9979	930448.9	93.24069	6.699	9979	0.08918556	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	19958	1589762	79.65537	-5.649	19958	0.1577297	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	39916	2907062	72.82949	-7.946	39916	0.307778	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	99790	7268330	72.83626	-5.505	99790	0.7898515	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	199580	1.339461E+07	67.11399	-5.941	199580	1.572401	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

6 DBOFB ** Internal standard component **



Expected retention time: 13.724 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

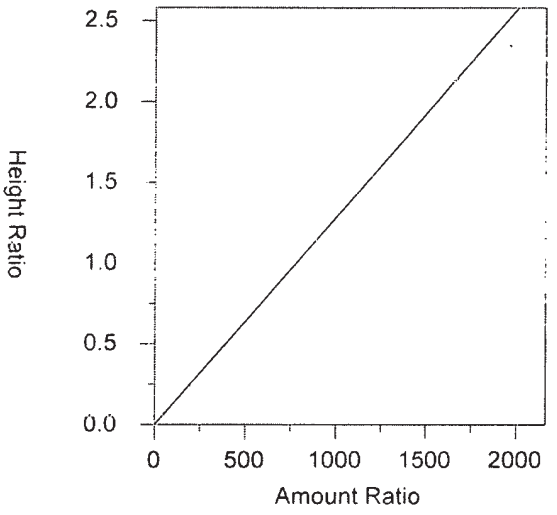
Single peak quantification by height

Y = 9660635 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0
Average error: 6.266%
Average CF: 9660635
RSD: 7.639%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	1.028601E+07	1.028601E+07	6.473	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289
2	1	1.043273E+07	1.043273E+07	7.992	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289
3	1	1.007903E+07	1.007903E+07	4.331	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289
4	1	9445321	9445321	-2.229	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289
5	1	9202147	9202147	-4.746	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289
6	1	8518573	8518573	-11.822	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15\15herb18289

7 2,4-DP



Expected retention time: 13.993 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

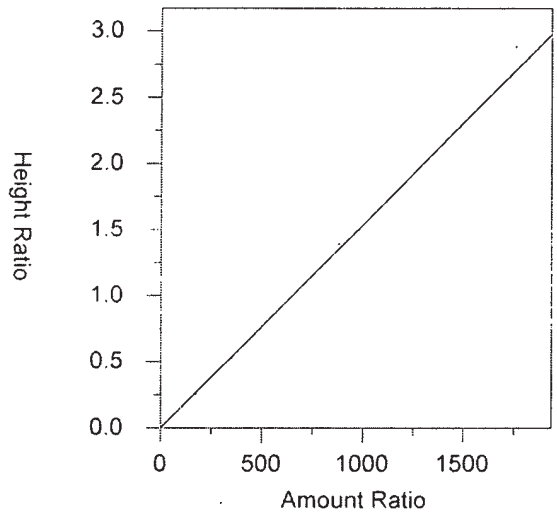
Single peak quantification by height

Y = 0.001282336 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9907274
Average error: 6.503%
Average CF: 0.001282336
RSD: 8.603%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	49.2	752068.3	15285.94	15.889	49.2	0.07311565	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	98.3	1362676	13862.42	3.619	98.3	0.1306155	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	196.6	2447325	12448.25	-3.686	196.6	0.2428135	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	393.2	4612214	11729.94	-3.155	393.2	0.4883068	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	983	1.093452E+07	11123.62	-5.734	983	1.188257	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1966	1.998705E+07	10166.35	-6.933	1966	2.346291	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

8 2,4-D



Expected retention time: 14.617 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

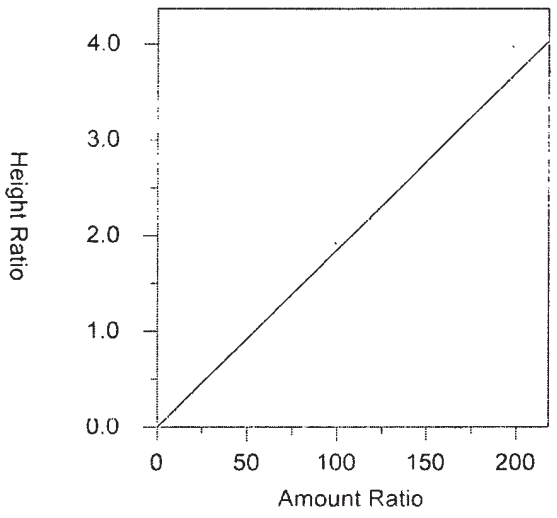
Single peak quantification by height

Y = 0.001537172 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9943855
Average error: 3.243%
Average CF: 0.001537172
RSD: 4.222%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	44	696789.3	15836.12	0.157	44	0.06774146	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	88	1387643	15768.67	-1.673	88	0.1330086	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	176	2592333	14729.17	-4.931	176	0.2572006	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	352	4951007	14065.36	-3.125	352	0.5241756	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	880	1.282125E+07	14569.6	3.000	880	1.393289	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1760	2.456111E+07	13955.18	6.573	1760	2.883242	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

9 PCP



Expected retention time: 15.31 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

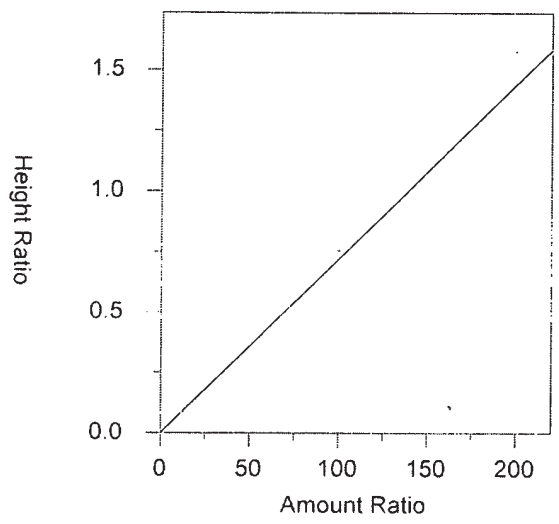
Single peak quantification by height

Y = 0.0185059 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9910356
Average error: 4.876%
Average CF: 0.0185059
RSD: 5.914%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	886039	177207.8	-6.905	5	0.0861402	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	9.9	1815519	183385.8	-5.014	9.9	0.1740215	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	19.8	3593114	181470.4	-2.708	19.8	0.356494	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	39.6	7030460	177536.9	1.569	39.6	0.7443326	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	99.1	1.766299E+07	178234	4.663	99.1	1.919442	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	198.2	3.386838E+07	170879.8	8.396	198.2	3.975828	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

10 2,4,5-TP



Expected retention time: 15.808 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

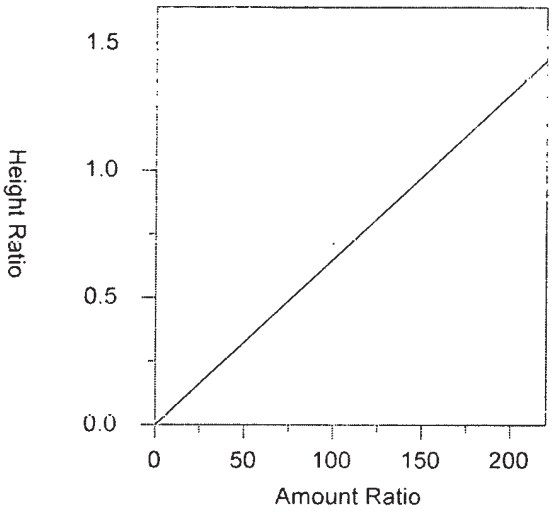
Single peak quantification by height

Y = 0.007196937 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9888052
Average error: 4.795%
Average CF: 0.007196937
RSD: 5.884%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	354060.7	70812.14	-4.344	5	0.03442158	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	10	711752.9	71175.29	-5.205	10	0.06822307	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	20	1405929	70296.45	-3.090	20	0.1394905	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	40	2671635	66790.88	-1.745	40	0.2828527	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	100	6943007	69430.07	4.836	100	0.7544986	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	200	1.343237E+07	67161.85	9.549	200	1.576833	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

11 2,4,5-T



Expected retention time: 16.512 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

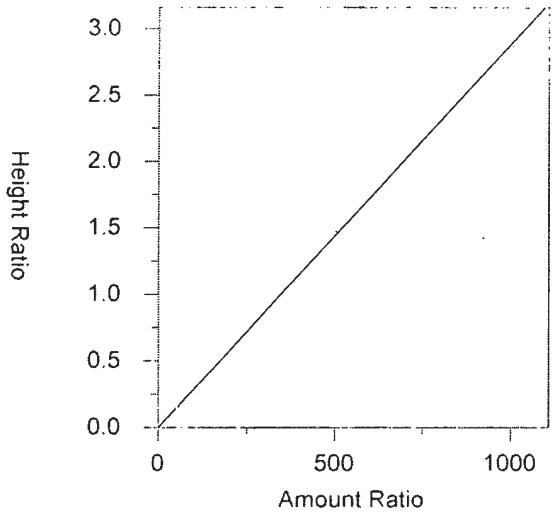
Single peak quantification by height

Y = 0.006500624 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9755452
Average error: 7.923%
Average CF: 0.006500624
RSD: 10.008%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	5	301360	60272	-9.861	5	0.02929805	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	10	614397	61439.7	-9.407	10	0.0588913	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	20	1255163	62758.15	-4.215	20	0.1245321	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	40	2448981	61224.52	-0.287	40	0.2592798	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	100.1	6537240	65307.09	9.173	100.1	0.7104038	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	200.2	1.270445E+07	63458.79	14.596	200.2	1.491382	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

12 DINOSEB



Expected retention time: 16.944 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

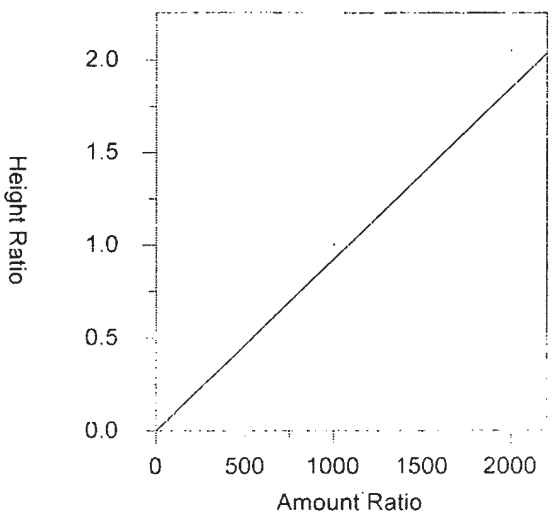
Single peak quantification by height

Y = 0.002884286 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9997271
Average error: 1.342%
Average CF: 0.002884286
RSD: 1.701%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	25.2	742626.8	29469.32	-0.669	25.2	0.07219775	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	50.4	1555258	30858.29	2.550	50.4	0.1490749	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	100.7	2869127	28491.83	-1.992	100.7	0.284663	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	201.4	5474774	27183.59	-0.218	201.4	0.5796282	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	503.5	1.356113E+07	26933.72	1.477	503.5	1.473692	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1007	2.445781E+07	24287.79	-1.149	1007	2.871116	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

13 2,4-DB



Expected retention time: 17.218 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

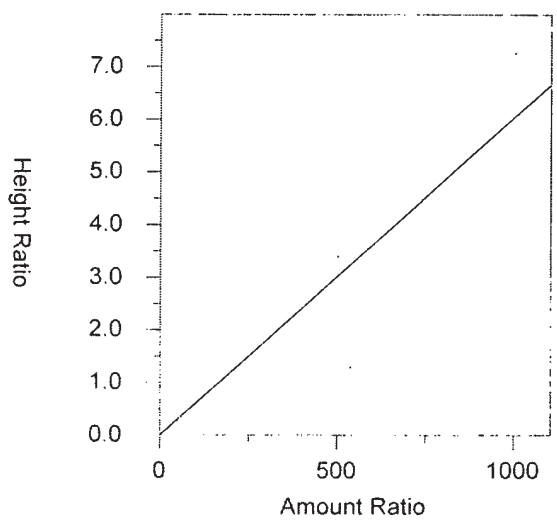
Single peak quantification by height

Y = 0.0009244294 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9848986
Average error: 6.428%
Average CF: 0.0009244294
RSD: 7.683%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	50.1	439161.1	8765.69	-7.814	50.1	0.04269499	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	100.1	933711.4	9327.786	-3.282	100.1	0.08949828	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	200.2	1775205	8867.158	-4.832	200.2	0.1761286	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	400.4	3378748	8438.432	-3.357	400.4	0.3577166	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	1001	9236800	9227.572	8.474	1001	1.003766	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	2002	1.746976E+07	8726.154	10.811	2002	2.050785	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

14 Picloram



Expected retention time:	19.513 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

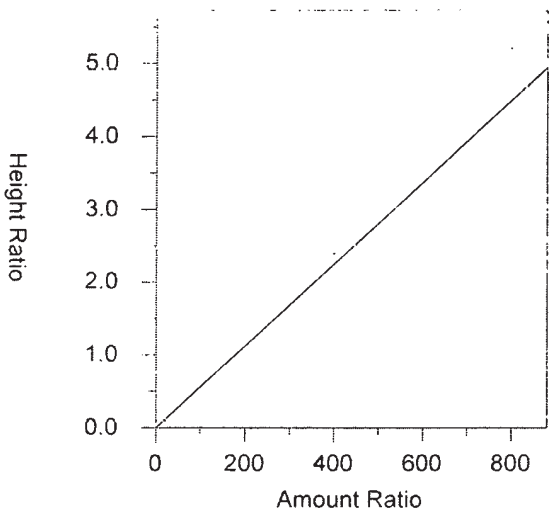
Y = 0.006034099 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9587366
Average error:	11.683%
Average CF:	0.006034099
RSD:	14.500%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	25.1	1278283	50927.61	-17.947	25.1	0.1242739	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	50.2	2764173	55063.21	-12.532	50.2	0.264952	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	100.4	5827065	58038.5	-4.570	100.4	0.5781375	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	200.7	1.179361E+07	58762.38	3.103	200.7	1.248619	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	501.8	3.121059E+07	62197.27	12.013	501.8	3.391664	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	1003.5	6.186342E+07	61647.65	19.933	1003.5	7.262181	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

15 Hexachlorophene



Expected retention time:	26.567 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 = 0.005620854 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9730863
Average error:	7.462%
Average CF:	0.005620854
RSD:	9.239%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source
1	20	1094590	54729.5	-5.339	20	0.1064154	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
2	40	2167964	54199.1	-7.575	40	0.2078041	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
3	80	4267908	53348.85	-5.832	80	0.4234443	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
4	160	8185210	51157.56	-3.641	160	0.8665889	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
5	400	2.20451E+07	55112.75	6.552	400	2.395648	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI
6	800	4.437086E+07	55463.57	15.835	800	5.20872	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEI

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850A

GC Column (1) : ZB XLB ID: .32 (mm)

Lab File ID: 15HERB18289001.015.RAW

Lab Standard ID: ICHBXAA

Calibration: 15HERB1828901

Date Analyzed: 10/16/18

Time Analyzed: 17:33

Initial Calibration: 15HERB1828901

Init. Calib Date(s): 10/16/18 10/16/18

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Dalapon	3.73	3.70	3.76	401.50	481.60	-17
2,4-DCAA	11.95	11.92	11.98	191.23	201.00	-5
Dicamba	12.07	12.04	12.10	20.29	18.94	7
Mcpp	12.48	12.45	12.51	22292.52	19186.00	16
Mcpa	12.86	12.83	12.89	22464.62	19084.00	18
2,4-DP	13.46	13.43	13.49	224.25	192.80	16
2,4-D	13.90	13.87	13.93	199.71	187.20	7
PCP	15.09	15.07	15.13	93.75	93.34	0
2,4,5-TP	15.39	15.36	15.42	20.39	18.64	9
2,4,5-T	15.91	15.88	15.94	20.81	18.62	12
2,4-DB	16.75	16.72	16.78	188.42	181.80	4
Dinoseb	16.94	16.91	16.97	91.62	93.34	-2
Picloram	17.89	17.86	17.92	200.44	183.20	9
Hexachlorophene	26.14	26.11	26.17	97.41	99.20	-2

Compounds 14

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850B

GC Column (2) : ZB 35 ID: .32 (mm)

Lab File ID: 15HERB18289001B.015.RAW

Lab Standard ID: ICHBXAA

Calibration: 15HERB1828901B

Date Analyzed: 10/16/18

Time Analyzed: 17:33

Initial Calibration: 15HERB1828901B

Init. Calib Date(s): 10/16/18 10/16/18

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Dalapon	3.86	3.83	3.89	410.57	481.60	-15
2,4-DCAA	12.52	12.49	12.55	193.82	201.00	-4
Dicamba	12.88	12.85	12.91	19.66	18.94	4
Mcpp	12.94	12.91	12.97	18960.60	19186.00	-1
Mcpa	13.46	13.43	13.49	18951.83	19084.00	-1
2,4-DP	13.99	13.96	14.02	212.47	192.80	10
2,4-D	14.62	14.59	14.65	192.65	187.20	3
PCP	15.31	15.28	15.34	87.26	93.34	-7
2,4,5-TP	15.81	15.78	15.84	19.58	18.64	5
2,4,5-T	16.51	16.48	16.54	18.74	18.62	1
Dinoseb	16.94	16.91	16.97	85.98	93.34	-8
2,4-DB	17.22	17.19	17.25	188.14	181.80	3
Picloram	19.51	19.48	19.54	194.74	183.20	6
Hexachlorophene	26.57	26.54	26.60	95.53	99.20	-4

Compounds 14

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850A Date Analyzed: 10/23/18

GC Column (1) : ZB XLB ID: .32 (mm) Time Analyzed: 22:56

Lab File ID: 15HERB18289003.016.RAW Initial Calibration: 15HERB1828901

Lab Standard ID: HERB3TC Init. Calib Date(s): 10/16/18 10/16/18

Calibration: 15HERB1828901

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (mg/l)	NOM AMOUNT (mg/l)	%D
Dalapon	3.73	3.70	3.76	368.76	401.00	-8
2,4-DCAA	11.95	11.92	11.98	179.25	201.00	-11
Dicamba	12.07	12.04	12.10	18.48	19.66	-6
Mcpp	12.48	12.45	12.51	18687.00	20016.00	-7
Mcpa	12.86	12.83	12.89	19343.19	19958.00	-3
2,4-DP	13.46	13.43	13.49	188.04	196.60	-4
2,4-D	13.90	13.87	13.93	162.01	176.00	-8
PCP	15.10	15.07	15.13	18.54	19.82	-6
2,4,5-TP	15.39	15.36	15.42	18.25	20.00	-9
2,4,5-T	15.91	15.88	15.94	18.05	20.02	-10
2,4-DB	16.74	16.72	16.78	178.74	200.20	-11
Dinoseb	16.93	16.91	16.97	95.78	100.70	-5
Picloram	17.89	17.86	17.92	91.56	99.96	-8
Hexachlorophene	26.14	26.11	26.17	72.28	80.00	-10

Compounds 14

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850B Date Analyzed: 10/23/18

GC Column (2) : ZB 35 ID: .32 (mm) Time Analyzed: 22:56

Lab File ID: 15HERB18289003B.016.RAW Initial Calibration: 15HERB1828901B

Lab Standard ID: HERB3TC Init. Calib Date(s): 10/16/18 10/16/18

Calibration: 15HERB1828901B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (mg/l)	NOM AMOUNT (mg/l)	%D
Dalapon	3.86	3.83	3.89	383.37	401.00	-4
2,4-DCAA	12.52	12.49	12.55	191.91	201.00	-5
Dicamba	12.88	12.85	12.91	19.48	19.66	-1
Mcpp	12.93	12.91	12.97	19676.96	20016.00	-2
Mcpa	13.46	13.43	13.49	19214.89	19958.00	-4
2,4-DP	13.99	13.96	14.02	191.64	196.60	-3
2,4-D	14.61	14.59	14.65	169.57	176.00	-4
PCP	15.31	15.28	15.34	19.28	19.82	-3
2,4,5-TP	15.80	15.78	15.84	19.06	20.00	-5
2,4,5-T	16.50	16.48	16.54	18.73	20.02	-6
Dinoseb	16.94	16.91	16.97	93.27	100.70	-7
2,4-DB	17.21	17.19	17.25	188.48	200.20	-6
Picloram	19.51	19.48	19.54	93.74	99.96	-6
Hexachlorophene	26.56	26.54	26.60	78.26	80.00	-2

Compounds 14

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: HIBLKX1824B HIBLKQR ID: QR **Batchnumber: 1829599999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on : Oct 23, 2018 23:29:52
Instrument : CP15--19850A
Result file : 15HERB18289003.017.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 63% (34-142) Conc.: 2.51239

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.71	3.76	10158	0.012120
DCAA	11.92	11.97	11.98	4021898	2.512390
2,4-DP	13.43	13.46	13.49	4284	0.003409
2,4-D	13.87	13.91	13.93	4969	0.003074
DBOFB	14.21	14.24	14.27	10527700	0.001000
2,4,5-T	15.88	15.92	15.94	8679	0.001272
DINOSEB	16.91	16.94	16.97	9160	0.002818
Picloram	17.86	17.90	17.92	56318	0.008996
Hexachlorophene	26.11	26.14	26.17	48537	0.007997

Analysis Report (B)

Injected on : Oct 23, 2018 23:29:52
Instrument : CP15--19850B
Result file : 15HERB18289003B.017.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 60% (34-142) Conc.: 2.416508

Peak name	Min	R.T.	Max	Height	Amount
DCAA	12.49	12.54	12.55	3908753	2.416508
MCPA	13.43	13.46	13.49	1300	0.141485
DBOFB	13.69	13.72	13.75	10969840	0.001000
2,4-DP	13.96	13.97	14.02	124225	0.088309
2,4-D	14.59	14.61	14.65	3318	0.001968
PCP	15.28	15.32	15.34	1912	0.000094
2,4,5-T	16.48	16.51	16.54	3024	0.000424
DINOSEB	16.91	16.94	16.97	5729	0.001811
2,4-DB	17.19	17.22	17.25	4153	0.004095
Picloram	19.48	19.52	19.54	68230	0.010308
Hexachlorophene	26.54	26.56	26.60	61224	0.009929

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4	<1.8			
☐ DCAA	A	2.512390				3.89	
☑ DICAMBA			<0.3	<0.08			
☑ MCPP			<200	<50			
☑ MCPA			<200	<50			
☑ 2,4-DP	A	0.003409	<0.5	<0.16		185.13	**
☑ 2,4-D	B	0.001968	<0.6	<0.25		43.87	**
☐ DBOFB	A	0.001000				0.00	
☑ PCP			<0.07	<0.027			
☑ 2,1,5 TP			<0.05	<0.01			
☑ 2,4,5-T	B	0.000424	<0.15	<0.065		100.01	**
☑ 2,4-DB			<1.5	<0.63			
☑ DINOSEB	B	0.001811	<0.5	<0.18		43.52	**
☑ Picloram	B	0.010308	<1	<0.36		13.60	
☑ Hexachlorophene	B	0.009929	<0.2	<0.18		21.57	

Units: ug/l

Reviewed by: _____ Verified by: Michele D. Hamilton
Group Leader
Date: 10/25 Date: OCT 25 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: 10/24/18

GC Column (1) : ZB XLB ID: .32 (mm) Time Analyzed: 5:32

Lab File ID: 15HERB18289003.028.RAW Initial Calibration: 15HERB1828901

Lab Standard ID: HERB3TD Init. Calib Date(s): 10/16/18 10/16/18

Calibration: 15HERB1828901

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (mg/l)	NOM AMOUNT (mg/l)	%D
Dalapon	3.73	3.70	3.76	360.27	401.00	-10
2,4-DCAA	11.95	11.92	11.98	171.08	201.00	-15
Dicamba	12.07	12.04	12.10	18.08	19.66	-8
Mcpp	12.48	12.45	12.51	18148.17	20016.00	-9
Mcpa	12.86	12.83	12.89	17996.75	19958.00	-10
2,4-DP	13.46	13.43	13.49	180.50	196.60	-8
2,4-D	13.90	13.87	13.93	156.73	176.00	-11
PCP	15.10	15.07	15.13	18.30	19.82	-8
2,4,5-TP	15.39	15.36	15.42	18.06	20.00	-10
2,4,5-T	15.91	15.88	15.94	17.82	20.02	-11
2,4-DB	16.74	16.72	16.78	178.47	200.20	-11
Dinoseb	16.93	16.91	16.97	98.53	100.70	-2
Picloram	17.89	17.86	17.92	90.86	99.96	-9
Hexachlorophene	26.14	26.11	26.17	66.29	80.00	-17

Compounds 14

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850B Date Analyzed: 10/24/18

GC Column (2) : ZB 35 ID: .32 (mm) Time Analyzed: 5:32

Lab File ID: 15HERB18289003B.028.RAW Initial Calibration: 15HERB1828901B

Lab Standard ID: HERB3TD Init. Calib Date(s): 10/16/18 10/16/18

Calibration: 15HERB1828901B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (mg/l)	NOM AMOUNT (mg/l)	%D
Dalapon	3.86	3.83	3.89	372.32	401.00	-7
2,4-DCAA	12.52	12.49	12.55	185.39	201.00	-8
Dicamba	12.88	12.85	12.91	18.50	19.66	-6
Mcpp	12.93	12.91	12.97	18901.08	20016.00	-6
Mcpa	13.46	13.43	13.49	19024.09	19958.00	-5
2,4-DP	13.99	13.96	14.02	187.75	196.60	-4
2,4-D	14.61	14.59	14.65	163.56	176.00	-7
PCP	15.31	15.28	15.34	19.44	19.82	-2
2,4,5-TP	15.80	15.78	15.84	18.78	20.00	-6
2,4,5-T	16.50	16.48	16.54	18.53	20.02	-7
Dinoseb	16.94	16.91	16.97	98.02	100.70	-3
2,4-DB	17.21	17.19	17.25	184.70	200.20	-8
Picloram	19.51	19.48	19.54	92.59	99.96	-7
Hexachlorophene	26.56	26.54	26.60	74.07	80.00	-7

Compounds 14

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: HIBLKX1824B HIBLKQS ID: QS **Batchnumber: 1829599999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 06:05:38
Instrument : CP15--19850A
Result file : 15HERB18289003.029.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 64% (34-142) Conc.: 2.563376

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.71	3.76	16763	0.019792
DCAA	11.92	11.97	11.98	4146684	2.563376
2,4-DP	13.43	13.47	13.49	3046	0.002399
2,4-D	13.87	13.91	13.93	5841	0.003575
DBOFB	14.21	14.24	14.27	10638450	0.001000
PCP	15.07	15.10	15.13	4792	0.000253
2,4,5-T	15.88	15.92	15.94	8992	0.001304
DINOSEB	16.91	16.94	16.97	9755	0.002970
Picloram	17.86	17.90	17.92	67306	0.010639
Hexachlorophene	26.11	26.14	26.17	46785	0.007628

Analysis Report (B)

Injected on : Oct 24, 2018 06:05:38
Instrument : CP15--19850B
Result file : 15HERB18289003B.029.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 61% (34-142) Conc.: 2.444447

Peak name	Min	R.T.	Max	Height	Amount
DCAA	12.49	12.54	12.55	3966670	2.444447
MCPA	13.43	13.46	13.49	1051	0.113966
DBOFB	13.69	13.72	13.75	11005140	0.001000
2,4-DP	13.96	13.99	14.02	116552	0.082589
2,4-D	14.59	14.62	14.65	4918	0.002907
PCP	15.28	15.31	15.34	4282	0.000210
2,4,5-TP	15.78	15.79	15.84	2374	0.000300
DINOSEB	16.91	16.94	16.97	8136	0.002563
2,4-DB	17.19	17.23	17.25	7994	0.007857
Picloram	19.48	19.51	19.54	77774	0.011712
Hexachlorophene	26.54	26.56	26.60	69193	0.011186

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4	<1.8			
☐ DCAA	A	2.563376				4.75	
☑ DICAMBA			<0.3	<0.08			
☑ MCPP			<200	<50			
☑ MCPA			<200	<50			
☑ 2,4-DP	A	0.002399	<0.5	<0.16		188.71	**
☑ 2,4-D	A	0.003575	<0.6	<0.25		20.62	
☐ DBOFB	A	0.001000				0.00	
☑ PCP	A	0.000253	<0.07	<0.027		18.56	
☑ 2,4,5-TP			<0.05	<0.01			
☑ 2,4,5-T			<0.15	<0.065			
☑ 2,4-DB			<1.5	<0.63			
☑ DINOSEB	A	0.002970	<0.5	<0.18		14.70	
☑ Picloram	B	0.011712	<1	<0.36		9.60	
☑ Hexachlorophene	B	0.011186	<0.2	<0.18		37.82	

Units: ug/l

Reviewed by: _____ Verified by: Michele D. Hamilton Group Leader

Date: 10/25 Date: OCT 25 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: 10/24/18

GC Column (1) : ZB XLB ID: .32 (mm) Time Analyzed: 12:08

Lab File ID: 15HERB18289003.040.RAW Initial Calibration: 15HERB1828901

Lab Standard ID: HERB3TE Init. Calib Date(s): 10/16/18 10/16/18

Calibration: 15HERB1828901

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (mg/l)	NOM AMOUNT (mg/l)	%D
Dalapon	3.73	3.70	3.76	376.90	401.00	-6
2,4-DCAA	11.95	11.92	11.98	182.75	201.00	-9
Dicamba	12.07	12.04	12.10	18.66	19.66	-5
Mcpp	12.48	12.45	12.51	19422.97	20016.00	-3
Mcpa	12.87	12.83	12.89	19434.71	19958.00	-3
2,4-DP	13.46	13.43	13.49	188.22	196.60	-4
2,4-D	13.90	13.87	13.93	160.13	176.00	-9
PCP	15.10	15.07	15.13	18.64	19.82	-6
2,4,5-TP	15.39	15.36	15.42	18.75	20.00	-6
2,4,5-T	15.91	15.88	15.94	18.14	20.02	-9
2,4-DB	16.74	16.72	16.78	184.08	200.20	-8
Dinoseb	16.93	16.91	16.97	102.44	100.70	2
Picloram	17.89	17.86	17.92	94.20	99.96	-6
Hexachlorophene	26.14	26.11	26.17	65.16	80.00	-19

Compounds 14

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850B Date Analyzed: 10/24/18

GC Column (2) : ZB 35 ID: .32 (mm) Time Analyzed: 12:08

Lab File ID: 15HERB18289003B.040.RAW Initial Calibration: 15HERB1828901B

Lab Standard ID: HERB3TE Init. Calib Date(s): 10/16/18 10/16/18

Calibration: 15HERB1828901B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (mg/l)	NOM AMOUNT (mg/l)	%D
Dalapon	3.86	3.83	3.89	378.40	401.00	-6
2,4-DCAA	12.52	12.49	12.55	184.58	201.00	-8
Dicamba	12.88	12.85	12.91	18.50	19.66	-6
Mcpp	12.94	12.91	12.97	20309.78	20016.00	1
Mcpa	13.46	13.43	13.49	19364.76	19958.00	-3
2,4-DP	13.99	13.96	14.02	187.78	196.60	-4
2,4-D	14.61	14.59	14.65	159.35	176.00	-9
PCP	15.31	15.28	15.34	18.19	19.82	-8
2,4,5-TP	15.80	15.78	15.84	18.41	20.00	-8
2,4,5-T	16.51	16.48	16.54	18.18	20.02	-9
Dinoseb	16.94	16.91	16.97	103.56	100.70	3
2,4-DB	17.21	17.19	17.25	180.17	200.20	-10
Picloram	19.51	19.48	19.54	92.93	99.96	-7
Hexachlorophene	26.56	26.54	26.60	71.37	80.00	-11

Compounds 14

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: HIBLKX1824B HIBLKQT ID: QT **Batchnumber: 1829599999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 12:41:28
Instrument : CP15--19850A
Result file : 15HERB18289003.041.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 63% (34-142) Conc.: 2.501194

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.70	3.76	15536	0.018131
DCAA	11.92	11.97	11.98	4093476	2.501194
2,4-D	13.87	13.91	13.93	4156	0.002515
DBOFB	14.21	14.24	14.27	10763030	0.001000
PCP	15.07	15.11	15.13	4148	0.000217
2,4,5-T	15.88	15.92	15.94	10627	0.001524
DINOSEB	16.91	16.94	16.97	8727	0.002626
Picloram	17.86	17.90	17.92	54728	0.008550
Hexachlorophene	26.11	26.14	26.17	44405	0.007156

Analysis Report (B)

Injected on : Oct 24, 2018 12:41:28
Instrument : CP15--19850B
Result file : 15HERB18289003B.041.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 61% (34-142) Conc.: 2.458184

Peak name	Min	R.T.	Max	Height	Amount
DCAA	12.49	12.54	12.55	3856642	2.458184
MCPA	13.43	13.46	13.49	3426	0.384437
DBOFB	13.69	13.72	13.75	10640090	0.001000
2,4-D	14.59	14.61	14.65	3875	0.002369
PCP	15.28	15.30	15.34	1061	0.000054
2,4,5-TP	15.78	15.81	15.84	2082	0.000272
2,4,5-T	16.48	16.51	16.54	4726	0.000683
DINOSEB	16.91	16.95	16.97	8370	0.002727
2,4-DB	17.19	17.22	17.25	5974	0.006074
Picloram	19.48	19.51	19.54	62009	0.009658
Hexachlorophene	26.54	26.56	26.60	65649	0.010977

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4	<1.8			
☐ DCAA	A	2.501194				1.73	
☑ DICAMBA			<0.3	<0.08			
☑ MCPP			<200	<50			
☑ MCPA			<200	<50			
☑ 2,4-DP			<0.5	<0.16			
☑ 2,4-D	A	0.002515	<0.6	<0.25		5.95	
☐ DBOFB	A	0.001000				0.00	
☑ PCP	B	0.000054	<0.07	<0.027		120.36	**
☑ 2,4,5-TP			<0.05	<0.01			
☑ 2,4,5-T	B	0.000683	<0.15	<0.065		76.16	**
☑ 2,4-DB			<1.5	<0.63			
☑ DINOSEB	B	0.002727	<0.5	<0.18		3.78	
☑ Picloram	B	0.009658	<1	<0.36		12.17	
☑ Hexachlorophene	A	0.007156	<0.2	<0.18		42.15	**

Units: ug/l

Reviewed by: _____ Verified by: Michele D. Hamilton Group Leader

Date: 10/25 Date: OCT 25 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: 10/24/18

GC Column (1) : ZB XLB ID: .32 (mm) Time Analyzed: 15:59

Lab File ID: 15HERB18289003.047.RAW Initial Calibration: 15HERB1828901

Lab Standard ID: HERB3TF Init. Calib Date(s): 10/16/18 10/16/18

Calibration: 15HERB1828901

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (mg/l)	NOM AMOUNT (mg/l)	%D
Dalapon	3.73	3.70	3.76	377.84	401.00	-6
2,4-DCAA	11.95	11.92	11.98	179.19	201.00	-11
Dicamba	12.07	12.04	12.10	18.78	19.66	-5
Mcpp	12.48	12.45	12.51	19691.25	20016.00	-2
Mcpa	12.86	12.83	12.89	18914.71	19958.00	-5
2,4-DP	13.46	13.43	13.49	192.02	196.60	-2
2,4-D	13.90	13.87	13.93	163.34	176.00	-7
PCP	15.10	15.07	15.13	19.27	19.82	-3
2,4,5-TP	15.39	15.36	15.42	18.34	20.00	-8
2,4,5-T	15.91	15.88	15.94	18.36	20.02	-8
2,4-DB	16.74	16.72	16.78	181.77	200.20	-9
Dinoseb	16.93	16.91	16.97	103.59	100.70	3
Picloram	17.89	17.86	17.92	92.94	99.96	-7
Hexachlorophene	26.14	26.11	26.17	67.91	80.00	-15

Compounds 14

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: 19850B Date Analyzed: 10/24/18

GC Column (2) : ZB 35 ID: .32 (mm) Time Analyzed: 15:59

Lab File ID: 15HERB18289003B.047.RAW Initial Calibration: 15HERB1828901B

Lab Standard ID: HERB3TF Init. Calib Date(s): 10/16/18 10/16/18

Calibration: 15HERB1828901B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (mg/l)	NOM AMOUNT (mg/l)	%D
Dalapon	3.86	3.83	3.89	384.66	401.00	-4
2,4-DCAA	12.52	12.49	12.55	186.66	201.00	-7
Dicamba	12.88	12.85	12.91	18.76	19.66	-5
Mcpp	12.94	12.91	12.97	19524.42	20016.00	-2
Mcpa	13.46	13.43	13.49	18809.69	19958.00	-6
2,4-DP	13.99	13.96	14.02	191.93	196.60	-2
2,4-D	14.61	14.59	14.65	161.63	176.00	-8
PCP	15.31	15.28	15.34	19.22	19.82	-3
2,4,5-TP	15.80	15.78	15.84	18.59	20.00	-7
2,4,5-T	16.51	16.48	16.54	18.46	20.02	-8
Dinoseb	16.94	16.91	16.97	106.10	100.70	5
2,4-DB	17.21	17.19	17.25	181.82	200.20	-9
Picloram	19.51	19.48	19.54	90.38	99.96	-10
Hexachlorophene	26.56	26.54	26.60	74.58	80.00	-7

Compounds 14

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: HIBLKX1824B HIBLKQU ID: QU **Batchnumber: 1829599999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 16:32:24
Instrument : CP15--19850A
Result file : 15HERB18289003.048.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 61% (34-142) Conc.: 2.432305

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.70	3.76	14301	0.016230
DCAA	11.92	11.97	11.98	4093478	2.432305
2,4-D	13.87	13.91	13.93	3787	0.002228
DBOFB	14.21	14.24	14.27	11067870	0.001000
2,4,5-T	15.88	15.91	15.94	8607	0.001200
DINOSEB	16.91	16.94	16.97	9377	0.002744
Picloram	17.86	17.90	17.92	47844	0.007269
Hexachlorophene	26.11	26.14	26.17	45983	0.007206

Analysis Report (B)

Injected on : Oct 24, 2018 16:32:24
Instrument : CP15--19850B
Result file : 15HERB18289003B.048.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 60% (34-142) Conc.: 2.383952

Peak name	Min	R.T.	Max	Height	Amount
DCAA	12.49	12.54	12.55	3961174	2.383952
MCPA	13.43	13.46	13.49	754	0.079883
DBOFB	13.69	13.72	13.75	11268780	0.001000
2,4-DP	13.96	13.98	14.02	102338	0.070820
2,4-D	14.59	14.62	14.65	5231	0.003020
PCP	15.28	15.30	15.34	1118	0.000054
2,4,5-TP	15.78	15.80	15.84	2051	0.000253
DINOSEB	16.91	16.94	16.97	6732	0.002071
2,4-DB	17.19	17.22	17.25	9106	0.008741
Picloram	19.48	19.51	19.54	55530	0.008167
Hexachlorophene	26.54	26.56	26.60	62494	0.009866

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4	<1.8			
☐ DCAA	A	2.432305				2.01	
☑ DICAMBA			<0.3	<0.08			
☑ MCPP			<200	<50			
☑ MCPA			<200	<50			
☑ 2,4-DP			<0.5	<0.16			
☑ 2,4-D	B	0.003020	<0.6	<0.25		30.17	
☐ DBOFB	A	0.001000				0.00	
☑ PCP			<0.07	<0.027			
☑ 2,4,5 TP			<0.05	<0.01			
☑ 2,4,5-T			<0.15	<0.065			
☑ 2,4-DB			<1.5	<0.63			
☑ DINOSEB	A	0.002744	<0.5	<0.18		27.94	
☑ Picloram	B	0.008167	<1	<0.36		11.63	
☑ Hexachlorophene	B	0.009866	<0.2	<0.18		31.16	

Units: ug/l

Michele D. Hamilton
Group Leader

Reviewed by: _____ Verified by: _____

Date: 10/25/18 Date: _____

OCT 25 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
Pesticide Residue Analysis
Runlog for 15HERB18289001
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
7848	15HERB18289001.001	CONDITIONER		10/16/18 9:52	1828899999	1.00
7848	15HERB18289001.002	CONDITIONER		10/16/18 10:25	1828899999	1.00
7848	15HERB18289001.003	CONDITIONER		10/16/18 10:58	1828899999	1.00
7848	15HERB18289001.004	CONDITIONER		10/16/18 11:31	1828899999	1.00
7848	15HERB18289001.005	CONDITIONER		10/16/18 12:04	1828899999	1.00
7848	15HERB18289001.006	CONDITIONER		10/16/18 12:37	1828899999	1.00
7848	15HERB18289001.007	HIBLKX1824B	HIBLKAA	10/16/18 13:09	1828899999	10.00
7848	15HERB18289001.008	HERB11824E	HERB1AA	10/16/18 13:42	1828899999	1.00
7848	15HERB18289001.009	HERB21824E	HERB2AA	10/16/18 14:15	1828899999	1.00
7848	15HERB18289001.010	HERB31824F	HERB3AA	10/16/18 14:48	1828899999	1.00
7848	15HERB18289001.011	HERB41824E	HERB4AA	10/16/18 15:21	1828899999	1.00
7848	15HERB18289001.012	HERB51824E	HERB5AA	10/16/18 15:54	1828899999	1.00
7848	15HERB18289001.013	HERB61824E	HERB6AA	10/16/18 16:27	1828899999	1.00
7848	15HERB18289001.014	MDHEX1824E	MDHEXAA	10/16/18 17:00	1828899999	1.00
7848	15HERB18289001.015	ICHBX1824I	ICHBXAA	10/16/18 17:33	1828899999	1.00
7848	15HERB18289001.016	ICHBX1824J	ICHBXAA	10/16/18 18:06	1828899999	1.00
7848	15HERB18289001.017	ICHBX1824K	ICHBXQU	10/16/18 18:39	1828899999	1.00
7848	15HERB18289001.018	BLANKA 10/11/18 F	PBLK02284	10/16/18 20:03	182840002A	10.00
7848	15HERB18289001.019	LCSA 10/11/18 F	LCS02284	10/16/18 20:36	182840002A	10.00
7848	15HERB18289001.020	LCSDA 10/11/18 F	LCSD02284	10/16/18 21:09	182840002A	10.00
7848	15HERB18289001.021	9837352 F	PUSL2	10/16/18 21:42	182840002A	10.00
7848	15HERB18289001.022	9837355 F	71602	10/16/18 22:15	182840002A	10.00
7848	15HERB18289001.023	9839091 F	LBL02	10/16/18 22:48	182840002A	10.00
7848	15HERB18289001.024	9839963 F	HNFR2	10/16/18 23:21	182840002A	10.00
7848	15HERB18289001.025	9839966 F	HNFR5	10/16/18 23:54	182840002A	10.00
7848	15HERB18289001.026	9839972 F	FNK01	10/17/18 0:27	182840002A	10.00
7848	15HERB18289001.027	9839975 F	FNK04	10/17/18 1:00	182840002A	10.00
7848	15HERB18289001.028	HERB31824F	HERB3RS	10/17/18 1:33	1828899999	1.00
7848	15HERB18289001.029	HIBLKX1824B	HIBLKPL	10/17/18 2:06	1828899999	10.00
7848	15HERB18289001.030	9840525 F	76872	10/17/18 2:39	182840002A	10.00
7848	15HERB18289001.031	9841760 F	PCNVE	10/17/18 3:12	182840002A	10.00
7848	15HERB18289001.032	BLANKA 10/15/18 F	PBLK37285	10/17/18 3:45	182850037A	10.00
7848	15HERB18289001.033	LCSA 10/15/18 F	LCS37285	10/17/18 4:18	182850037A	10.00
7848	15HERB18289001.034	LCSDA 10/15/18 F	LCSD37285	10/17/18 4:51	182850037A	10.00
7848	15HERB18289001.035	9845749 F	48552	10/17/18 5:24	182850037A	10.00
7848	15HERB18289001.036	9841036 F	79-95	10/17/18 5:57	182850037A	10.00
7848	15HERB18289001.037	9841616 F	87765	10/17/18 6:30	182850037A	10.00
7848	15HERB18289001.038	9842956 F	1--19	10/17/18 7:02	182850037A	10.00
7848	15HERB18289001.039	9842957 F	1--58	10/17/18 7:35	182850037A	10.00
7848	15HERB18289001.040	HERB31824F	HERB3RT	10/17/18 8:08	1828899999	1.00
7848	15HERB18289001.041	HIBLKX1824B	HIBLKPM	10/17/18 8:41	1828899999	10.00
7848	15HERB18289001.042	9842958 F	1--62	10/17/18 9:15	182850037A	10.00
7848	15HERB18289001.043	9842959 F	1-102	10/17/18 9:48	182850037A	10.00
7848	15HERB18289001.044	9842960 F	1-103	10/17/18 10:21	182850037A	10.00
7848	15HERB18289001.045	9842961 F	1-104	10/17/18 10:54	182850037A	10.00
7848	15HERB18289001.046	9842962 F	1-107	10/17/18 11:27	182850037A	10.00
7848	15HERB18289001.047	9842963 F	1-108	10/17/18 12:00	182850037A	10.00
7848	15HERB18289001.048	9842964 F	1-109	10/17/18 12:33	182850037A	10.00
7848	15HERB18289001.049	9842965 F	1-113	10/17/18 13:06	182850037A	10.00
7848	15HERB18289001.050	9842966 F	1-116	10/17/18 13:39	182850037A	10.00
7848	15HERB18289001.051	9842967 F	1-129	10/17/18 14:12	182850037A	10.00
7848	15HERB18289001.052	HERB31824F	HERB3RU	10/17/18 14:45	1828899999	1.00
7848	15HERB18289001.053	HIBLKX1824B	HIBLKPN	10/17/18 15:18	1828899999	10.00
7848	15HERB18289001.054	BLANKA 10/15/18 F	PBLK09288	10/17/18 15:51	182880009A	10.00
7848	15HERB18289001.055	LCSA 10/15/18 F	LCS09288	10/17/18 16:24	182880009A	10.00
7848	15HERB18289001.056	LCSDA 10/15/18 F	LCSD09288	10/17/18 16:57	182880009A	10.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
7848	15HERB18289001.057	9842968 F	1-131	10/17/18 17:30	182880009A	10.00
7848	15HERB18289001.058	9842969 F	1-135	10/17/18 18:03	182880009A	10.00
7848	15HERB18289001.059	9842970 F	1-144	10/17/18 18:36	182880009A	10.00
7848	15HERB18289001.060	9843575 F	67402	10/17/18 19:22	182880009A	10.00
7848	15HERB18289001.061	9843764 F	BWCNV	10/17/18 19:55	182880009A	10.00
7848	15HERB18289001.062	9845665 F	IRM01	10/17/18 20:28	182880009A	10.00
7848	15HERB18289001.063	9845668 F	IRM03	10/17/18 21:01	182880009A	10.00
7848	15HERB18289001.064	HERB31824F	HERB3RV	10/17/18 21:34	1828899999	1.00
7848	15HERB18289001.065	HIBLKX1824B	HIBLKPO	10/17/18 22:07	1828899999	10.00
7848	15HERB18289001.066	BLANKA 10/16/18 F	PBLK20289	10/17/18 22:40	182890020A	10.00
7848	15HERB18289001.067	LCSA 10/16/18 F	LCS20289	10/17/18 23:13	182890020A	10.00
7848	15HERB18289001.068	LCSDA 10/16/18 F	LCSD20289	10/17/18 23:46	182890020A	10.00
7848	15HERB18289001.069	9848769 F	S1602	10/18/18 0:19	182890020A	10.00
7848	15HERB18289001.070	9848772 F	S1605	10/18/18 0:52	182890020A	10.00
7848	15HERB18289001.071	9848775 F	S1608	10/18/18 1:25	182890020A	10.00
7848	15HERB18289001.072	9848778 F	S1611	10/18/18 1:58	182890020A	10.00
7848	15HERB18289001.073	9848781 F	S1614	10/18/18 2:31	182890020A	10.00
7848	15HERB18289001.074	9848784 F	S1617	10/18/18 3:04	182890020A	10.00
7848	15HERB18289001.075	9848787 F	S1620	10/18/18 3:37	182890020A	10.00
7848	15HERB18289001.076	HERB31824F	HERB3RW	10/18/18 4:10	1828999999	1.00
7848	15HERB18289001.077	HIBLKX1824B	HIBLKPP	10/18/18 4:43	1828999999	10.00
7848	15HERB18289001.078	9848790 F	S1623	10/18/18 5:16	182890020A	10.00
7848	15HERB18289001.079	9850910 F	WC9NV	10/18/18 5:49	182890020A	10.00
7848	15HERB18289001.080	9850913 F	WC13N	10/18/18 6:22	182890020A	10.00
7848	15HERB18289001.081	9850916 F	WC14N	10/18/18 6:55	182890020A	10.00
7848	15HERB18289001.082	9850919 F	WC10N	10/18/18 7:28	182890020A	10.00
7848	15HERB18289001.083	9850922 F	WC11N	10/18/18 8:01	182890020A	10.00
7848	15HERB18289001.084	9850925 F	WC12N	10/18/18 8:34	182890020A	10.00
7848	15HERB18289001.085	9850928 F	WC20N	10/18/18 9:06	182890020A	10.00
7848	15HERB18289001.086	9850931 F	WC19N	10/18/18 9:39	182890020A	10.00
7848	15HERB18289001.087	9850934 F	WC17N	10/18/18 10:12	182890020A	10.00
7848	15HERB18289001.088	HERB31824F	HERB3RX	10/18/18 10:45	1828999999	1.00
7848	15HERB18289001.089	HIBLKX1824B	HIBLKPQ	10/18/18 11:18	1828999999	10.00
7848	15HERB18289001.090	9850937 F	WC15N	10/18/18 11:51	182890020A	10.00
7848	15HERB18289001.091	9850940 F	WC16N	10/18/18 12:24	182890020A	10.00
7848	15HERB18289001.092	9850943 F	WC18N	10/18/18 12:57	182890020A	10.00
7848	15HERB18289001.093	BLANKA 10/11/18 F	PBLK25284	10/18/18 13:30	182840025A	10.00
7848	15HERB18289001.094	LCSA 10/11/18 F	LCS25284	10/18/18 14:03	182840025A	10.00
7848	15HERB18289001.095	LCSDA 10/11/18 F	LCSD25284	10/18/18 14:36	182840025A	10.00
7848	15HERB18289001.096	9840984 F	SWS02	10/18/18 15:09	182840025A	10.00
7848	15HERB18289001.097	9840985 F	SWS07	10/18/18 15:42	182840025A	10.00
7848	15HERB18289001.098	9840986 F	SWS08	10/18/18 16:15	182840025A	10.00
7848	15HERB18289001.099	HERB31824F	HERB3RY	10/18/18 16:48	1828999999	1.00
7848	15HERB18289001.100	HIBLKX1824B	HIBLKPR	10/18/18 17:21	1828999999	10.00
7848	15HERB18289001.101	BLANKA 10/15/18 F	PBLK08288	10/18/18 17:54	182880008A	10.00
7848	15HERB18289001.102	LCSA 10/15/18 F	LCS08288	10/18/18 18:27	182880008A	10.00
7848	15HERB18289001.103	LCSDA 10/15/18 F	LCSD08288	10/18/18 19:00	182880008A	10.00
7848	15HERB18289001.104	9843830 F	CSW01	10/18/18 19:33	182880008A	10.00
7848	15HERB18289001.105	9843831 F	CSW02	10/18/18 20:06	182880008A	10.00
7848	15HERB18289001.106	9843832 F	CSW03	10/18/18 20:39	182880008A	10.00
7848	15HERB18289001.107	9843833 F	CSW04	10/18/18 21:12	182880008A	10.00
7848	15HERB18289001.108	9843834 F	CSW05	10/18/18 21:45	182880008A	10.00
7848	15HERB18289001.109	9843835 F	CSW06	10/18/18 22:18	182880008A	10.00
7848	15HERB18289001.110	9843836 F	CSW07	10/18/18 22:51	182880008A	10.00
7848	15HERB18289001.111	HERB31824F	HERB3RZ	10/18/18 23:24	1828999999	1.00
7848	15HERB18289001.112	HIBLKX1824B	HIBLKPS	10/18/18 23:57	1828999999	10.00
7848	15HERB18289001.113	9843837 F	CSW08	10/19/18 0:30	182880008A	10.00
7848	15HERB18289001.114	9843845 F	CSW10	10/19/18 1:03	182880008A	10.00
7848	15HERB18289001.115	9843846 F	CSW11	10/19/18 1:36	182880008A	10.00
7848	15HERB18289001.116	9843847 F	CSW12	10/19/18 2:09	182880008A	10.00
7848	15HERB18289001.117	9847972 F	GW38C	10/19/18 2:42	182880008A	10.00
7848	15HERB18289001.118	9847973 F	GW77A	10/19/18 3:15	182880008A	10.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
7848	15HERB18289001.119	9849840 F	78AGW	10/19/18 3:48	182880008A	10.00
7848	15HERB18289001.120	HERB31824F	HERB3SA	10/19/18 4:21	1828999999	1.00
7848	15HERB18289001.121	HIBLKX1824B	HIBLKPT	10/19/18 4:54	1828999999	10.00

Eurofins Lancaster Laboratories
Pesticide Residue Analysis
Runlog for 15HERB18289003
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
120	15HERB18289003.001	CONDITIONER		10/23/18 14:41	1829599999	1.00
120	15HERB18289003.002	CONDITIONER		10/23/18 15:14	1829599999	1.00
120	15HERB18289003.003	CONDITIONER		10/23/18 15:47	1829599999	1.00
120	15HERB18289003.004	HERB31824F	HERB3TB	10/23/18 16:20	1829599999	1.00
120	15HERB18289003.005	HIBLKX1824B	HIBLKQQ	10/23/18 16:53	1829599999	10.00
120	15HERB18289003.006	BLANKA 10/4/18 RI F	PBLK41276	10/23/18 17:26	182760041A	10.00
120	15HERB18289003.007	BLANKB 10/4/18 RI F	PBLK41276	10/23/18 17:59	182760041A	10.00
120	15HERB18289003.008	LLOQ 10/4/18 RI F		10/23/18 18:32	182760041A	10.00
120	15HERB18289003.009	LOD1 10/4/18 RI F		10/23/18 19:05	182760041A	10.00
120	15HERB18289003.010	LOD2 10/4/18 RI F		10/23/18 19:38	182760041A	10.00
120	15HERB18289003.011	LOD3 10/4/18 RI F		10/23/18 20:11	182760041A	10.00
120	15HERB18289003.012	LOD4 10/4/18 RI F		10/23/18 20:44	182760041A	10.00
120	15HERB18289003.013	MDLV1 10/4/18 RI F		10/23/18 21:17	182760041A	10.00
120	15HERB18289003.014	MDLV2 10/4/18 RI F		10/23/18 21:50	182760041A	10.00
120	15HERB18289003.015	MDLV3 10/4/18 RI F		10/23/18 22:23	182760041A	10.00
120	15HERB18289003.016	HERB31824F	HERB3TC	10/23/18 22:56	1829599999	1.00
120	15HERB18289003.017	HIBLKX1824B	HIBLKQR	10/23/18 23:29	1829599999	10.00
120	15HERB18289003.018	BLANKA 10/22/18 F	PBLK18295	10/24/18 0:02	182950018A	10.00
120	15HERB18289003.019	LCSA 10/22/18 F	LCS18295	10/24/18 0:35	182950018A	10.00
120	15HERB18289003.020	9860062 F	AD331	10/24/18 1:08	182950018A	10.00
120	15HERB18289003.021	9860063 F	AD332	10/24/18 1:41	182950018A	10.00
120	15HERB18289003.022	9860064 F	AD333	10/24/18 2:14	182950018A	10.00
120	15HERB18289003.023	9860065MS F	AD333	10/24/18 2:47	182950018A	10.00
120	15HERB18289003.024	9860066MSD F	AD333	10/24/18 3:20	182950018A	10.00
120	15HERB18289003.025	9860068 F	AD334	10/24/18 3:53	182950018A	10.00
120	15HERB18289003.026	BLANKA 10/22/18 F	PBLK06295	10/24/18 4:26	182950006A	10.00
120	15HERB18289003.027	LCSA 10/22/18 F	LCS06295	10/24/18 4:59	182950006A	10.00
120	15HERB18289003.028	HERB31824F	HERB3TD	10/24/18 5:32	1829599999	1.00
120	15HERB18289003.029	HIBLKX1824B	HIBLKQS	10/24/18 6:05	1829599999	10.00
120	15HERB18289003.030	9859872 F	C3311	10/24/18 6:38	182950006A	10.00
120	15HERB18289003.031	9859873 F	C3312	10/24/18 7:11	182950006A	10.00
120	15HERB18289003.032	9859874 F	C3313	10/24/18 7:44	182950006A	10.00
120	15HERB18289003.033	9859875 F	C3314	10/24/18 8:17	182950006A	10.00
120	15HERB18289003.034	9860265 F	GW3C1	10/24/18 8:50	182950006A	10.00
120	15HERB18289003.035	9860266MS F	GW3C1	10/24/18 9:23	182950006A	10.00
120	15HERB18289003.036	9860267MSD F	GW3C1	10/24/18 9:56	182950006A	10.00
120	15HERB18289003.037	9860269 F	GW3FD	10/24/18 10:29	182950006A	10.00
120	15HERB18289003.038	9860270 F	GW3BL	10/24/18 11:02	182950006A	10.00
120	15HERB18289003.039	9861917 F	GKP01	10/24/18 11:35	182950006A	10.00
120	15HERB18289003.040	HERB31824F	HERB3TE	10/24/18 12:08	1829599999	1.00
120	15HERB18289003.041	HIBLKX1824B	HIBLKQT	10/24/18 12:41	1829599999	10.00
120	15HERB18289003.042	9861918 F	GKP03	10/24/18 13:14	182950006A	10.00
120	15HERB18289003.043	9861919 F	GKP04	10/24/18 13:47	182950006A	10.00
120	15HERB18289003.044	9861920 F	GKPR1	10/24/18 14:20	182950006A	10.00
120	15HERB18289003.045	9861921 F	GKP05	10/24/18 14:53	182950006A	10.00
120	15HERB18289003.046	9861922 F	GKP02	10/24/18 15:26	182950006A	10.00
120	15HERB18289003.047	HERB31824F	HERB3TF	10/24/18 15:59	1829599999	1.00
120	15HERB18289003.048	HIBLKX1824B	HIBLKQU	10/24/18 16:32	1829599999	10.00

Sample Data

Herbicides

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Data Summary

Sample Name: 9861917 F GKP01 Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 1000 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on Oct 24, 2018 11:35:21
Instrument 19850A
Result file 15HERB18289003.039.RAW
Calibration file 15HERB1828901
Method file 15HERB

%SSR(DCAA) 83% (32 - 138) Conc: 1.656739

Analysis Report (B)

Injected on Oct 24, 2018 11:35:21
Instrument 19850B
Result file 15HERB18289003B.039.RAW
Calibration file 15HERB1828901B
Method file 15HERBB

%SSR(DCAA) 86% (32 - 138) Conc: 1.728277

Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	1753449	2.059386
2,4-DCAA	11.92	11.96	11.98	2694246	1.656739
MCPP	12.45	12.49	12.51	67223	0
2,4-D	13.87	13.88	13.93	177347	0.107985
Pentachlorophenol	15.07	15.09	15.13	136670	0.007185
2,4,5-TP	15.36	15.39	15.42	121288	0.015906
2,4,5-T	15.88	15.89	15.94	353911	0.051066
2,4-DB	16.72	16.75	16.78	150674	0.156016
Dinoseb	16.91	16.94	16.97	136327	0.041285

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	281388	0.218277
2,4-DCAA	12.49	12.53	12.55	2969587	1.728277
Dicamba	12.85	12.87	12.91	119954	0.017469
MCPA	13.43	13.47	13.49	101322	10.3806
2,4-DP (Dichloroprop)	13.96	14.01	14.02	170315	0.113977
2,4-D	14.59	14.62	14.65	99458	0.055525
Pentachlorophenol	15.28	15.30	15.34	529462	0.024552
2,4,5-TP	15.78	15.82	15.84	99396	0.011852
2,4,5-T	16.48	16.48	16.54	124071	0.016379
2,4-DB	17.19	17.23	17.25	203104	0.188543
Picloram	19.48	19.53	19.54	38107	0.00542

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑	Dalapon			<1.8	<3.6	<4	D2		
☐	2,4-DCAA	B	1.728277	0.1	0.2	0.2		4.23	
☑	2,4-DCAA-D1	A	1.656739	0.1	0.2	0.2			
☑	2,4-DCAA-D2	B	1.728277	0.1	0.2	0.2			
☑	Dicamba			<0.08	<0.16	<0.3	D1		
☑	MCPP			<50	<100	<200	D1		
☑	MCPA			<50	<100	<200	D1		
☑	2,4-DP (Dichloroprop)			<0.16	<0.32	<0.5	D1		
☑	2,4-D			<0.25	<0.5	<0.6	D2		
☐	Pentachlorophenol			<0.027	<0.06	<0.07			
☑	2,4,5-TP	A	0.015906	0.01	<0.03	<0.05	JD1	29.21	
☑	2,4,5-T			<0.065	<0.13	<0.15	D2		
☑	2,4-DB			<0.63	<1.3	<1.5	D1		
☑	Dinoseb			<0.18	<0.4	<0.5	D2		
☐	Picloram			<0.36	<0.8	<1			
☐	Hexachlorophene					<0.2			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Michele D. Hamilton
Group Leader

OCT 25 2018

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:19:56

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861917** F GKP01 ID: AB **Batchnumber: 182950006A**
Sample Amount: 1000 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 11:35:21
Instrument : CP15--19850A
Result file : 15HERB18289003.039.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET

%SSR(DCAA) : 83% (32-138) Conc.: 1.656739

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.72	3.76	1753449	2.059386
DCAA	11.92	11.96	11.98	2694246	1.656739
MCPP	12.45	12.49	12.51	67223	-146.288800
2,4-D	13.87	13.88	13.93	177347	0.107985
DBOFB	14.21	14.23	14.27	10694800	0.001000
PCP	15.07	15.09	15.13	136670	0.007185
2,4,5-TP	15.36	15.39	15.42	121288	0.015906
2,4,5-T	15.88	15.89	15.94	353911	0.051066
2,4-DB	16.72	16.75	16.78	150674	0.156016
DINOSEB	16.91	16.94	16.97	136327	0.041285

Analysis Report (B)

Injected on : Oct 24, 2018 11:35:21
Instrument : CP15--19850B
Result file : 15HERB18289003B.039.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET

%SSR(DCAA) : 86% (32-138) Conc.: 1.728277

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	281388	0.218277
DCAA	12.49	12.53	12.55	2969587	1.728277
DICAMBA	12.85	12.87	12.91	119954	0.017469
MCPA	13.43	13.47	13.49	101322	10.380600
DBOFB	13.69	13.71	13.75	11652870	0.001000
2,4-DP	13.96	14.01	14.02	170315	0.113977
2,4-D	14.59	14.62	14.65	99458	0.055525
PCP	15.28	15.30	15.34	529462	0.024552
2,4,5-TP	15.78	15.82	15.84	99396	0.011852
2,4,5-T	16.48	16.48	16.54	124071	0.016379
2,4-DB	17.19	17.23	17.25	203104	0.188543
Picloram	19.48	19.53	19.54	38107	0.005420

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4	<1.8			
☐ DCAA	B	1.728277				4.23	
☑ DICAMBA			<0.3	<0.08			
☑ MCPP			<200	<50			
☑ MCPA			<200	<50			
☑ 2,4 DP			<0.5	<0.16			
☑ 2,4-D			<0.6	<0.25			
☐ DBOFB	A	0.001000				0.00	
☐ PCP			<0.07	<0.027			
☑ 2,4,5-TP	A	0.015906	<0.05	0.01	J	29.21	
☑ 2,4,5-T			<0.15	<0.065			
☑ 2,4-DB			<1.5	<0.63			
☑ DINOSEB			<0.5	<0.18			
☐ Picloram			<1	<0.36			
☐ Hexachlorophene			<0.2	<0.18			

Units: ug/l

Reviewed by: RMASH
Date: 10/25/18

Verified by: Michele D. Hamilton
Group Leader
Date: OCT 25 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

9861917 F ABGKP01 T 182950006A 10407 SW-846 8151A

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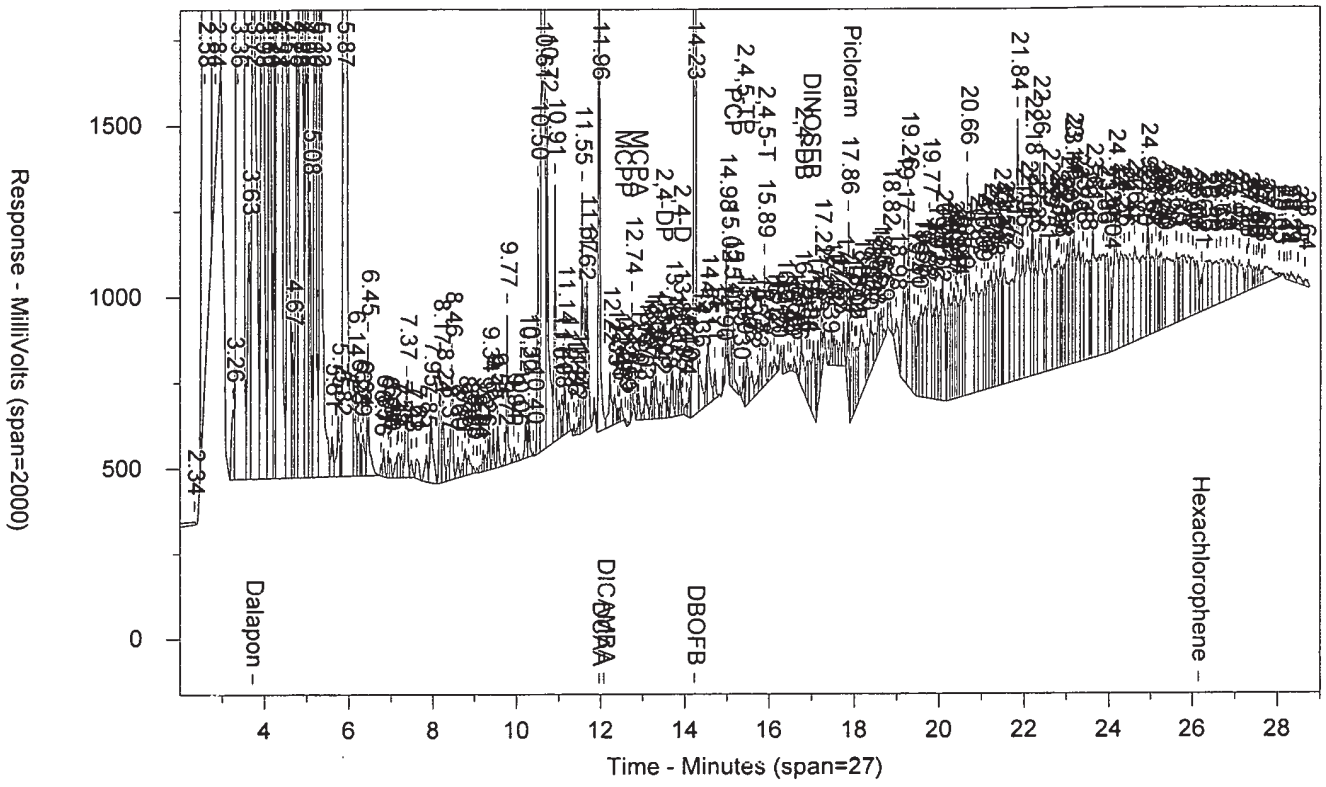

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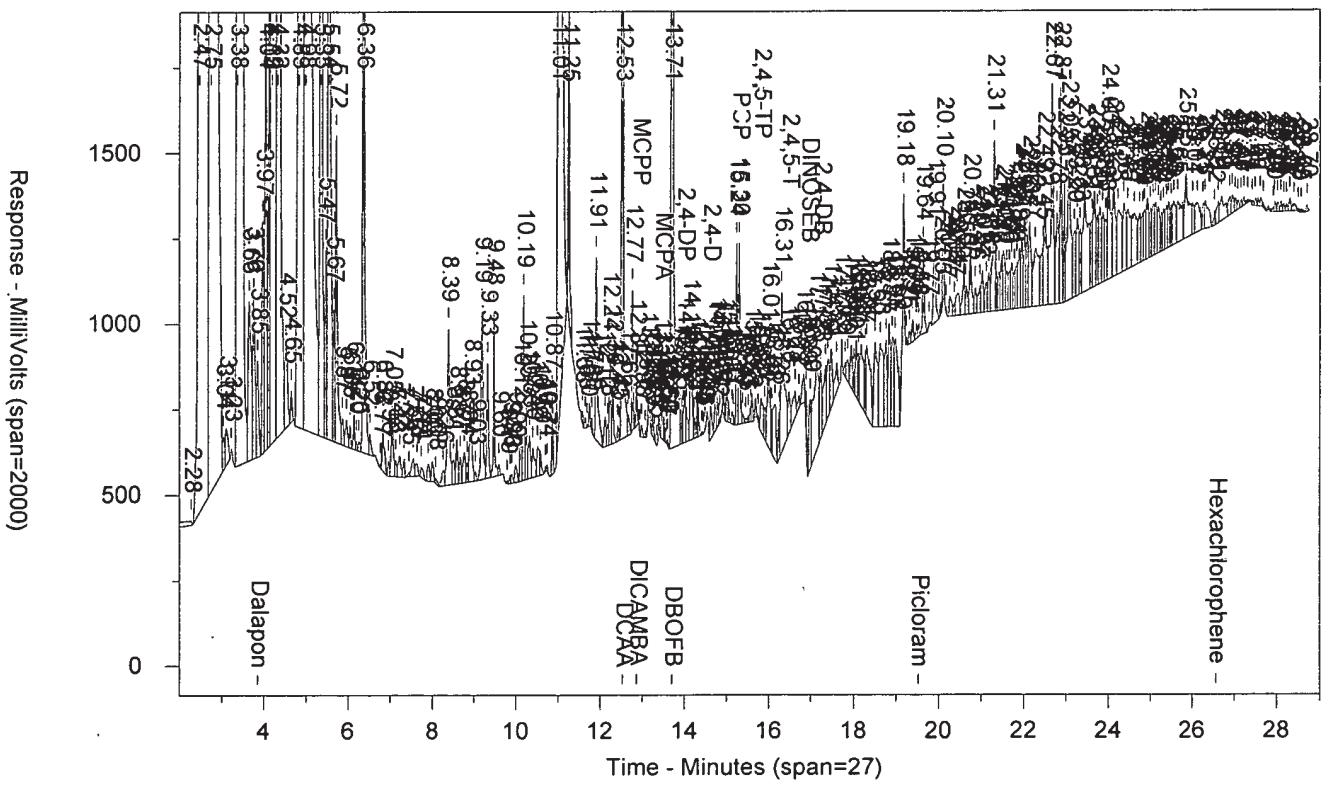

LANCASTER LABORATORIES

Sample Number: 9861917 F ABGKP01 T 182950006A 10407 SW-846 8151A
Injected On: 10/24/2018 11:35:21 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.718	1753449	2.059	Dalapon	3.851	281388	.218	Dalapon
11.958	2694246	1.657	DCAA	12.527	2969587	1.728	DCAA
12.493	67223	-146.289	MCPP		0		MCPP
	0		DICAMBA	12.866	119954	.017	DICAMBA
	0		MCPA	13.474	101322	10.381	MCPA
14.227	10694800	.001	DBOFB	13.707	11652870	.001	DBOFB
13.883	177347	.108	2,4-D	14.62	99458	.056	2,4-D
	0		2,4-DP	14.009	170315	.114	2,4-DP
15.09	136670	.007	PCP	15.3	529462	.025	PCP
15.393	121288	.016	2,4,5-TP	15.822	99396	.012	2,4,5-TP
15.886	353911	.051	2,4,5-T	16.484	124071	.016	2,4,5-T
16.754	150674	.156	2,4-DB	17.225	203104	.189	2,4-DB
16.945	136327	.041	DINOSEB		0		DINOSEB
	0		Picloram	19.528	38107	.005	Picloram

Files:
Area File: 15herb18289003.039.RAW
Area File: 15herb18289003B.039.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 12:04:12 PM
File Reported On: 10/24/2018 at 4:08:21 PM

9861917 F ABGKP01 T 182950006A 10407 SW-846 8151A

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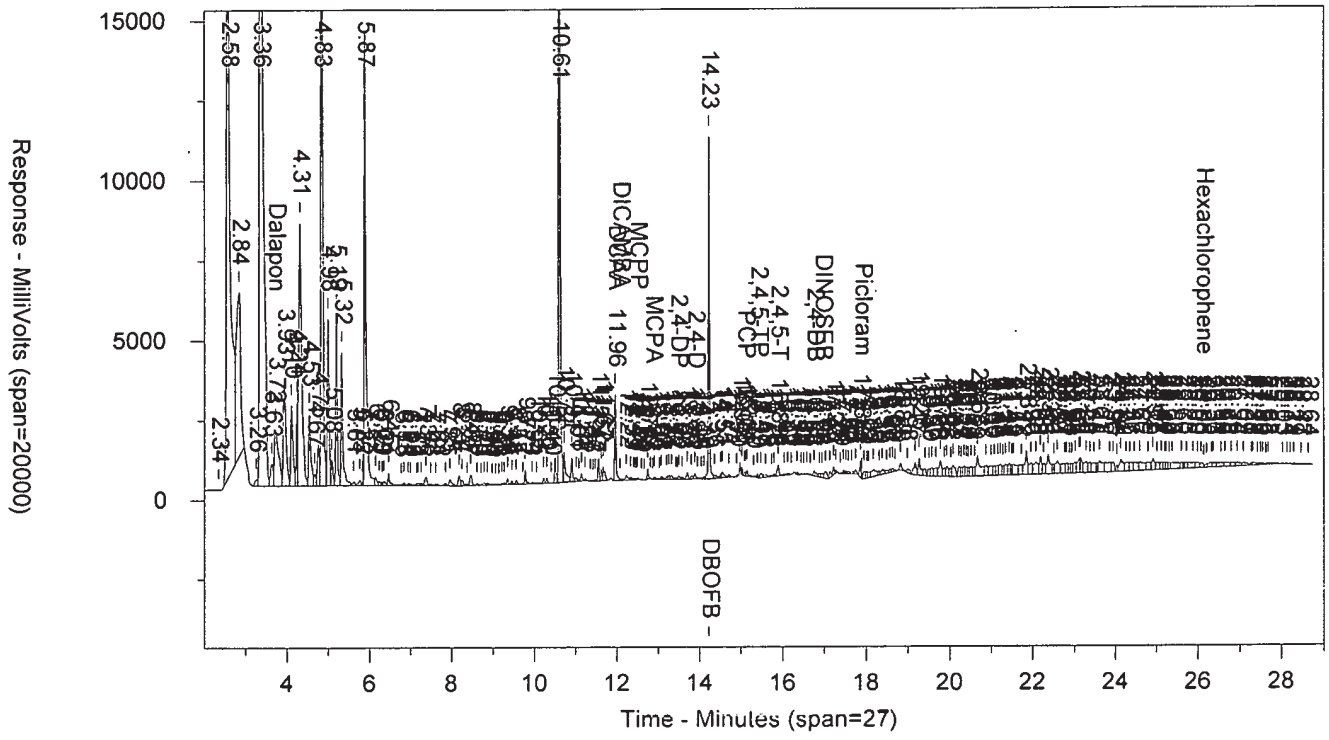

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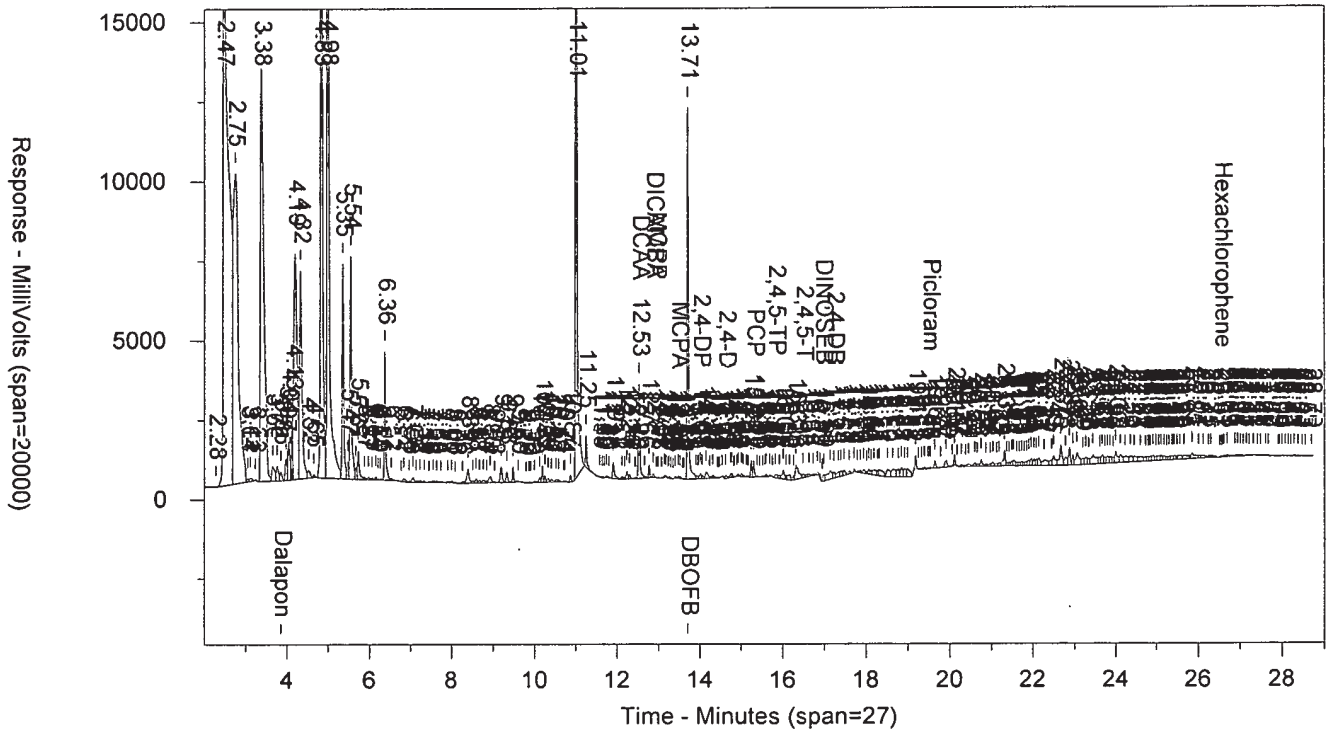

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Data Summary

Sample Name: 9861918 F GKP03 Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 968 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on Oct 24, 2018 13:14:21
Instrument 19850A
Result file 15HERB18289003.042.RAW
Calibration file 15HERB1828901
Method file 15HERB

%SSR(DCAA) 80% (32 - 138) Conc: 1.647189

Analysis Report (B)

Injected on Oct 24, 2018 13:14:21
Instrument 19850B
Result file 15HERB18289003B.042.RAW
Calibration file 15HERB1828901B
Method file 15HERBB

%SSR(DCAA) 79% (32 - 138) Conc: 1.628295

Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.70	3.76	5261601	6.739011
2,4-DCAA	11.92	11.95	11.98	2456364	1.647189
MCPP	12.45	12.46	12.51	436496	0
2,4-D	13.87	13.88	13.93	256520	0.170332
Pentachlorophenol	15.07	15.09	15.13	116714	0.006691
2,4,5-TP	15.36	15.39	15.42	109055	0.015597
2,4,5-T	15.88	15.88	15.94	368218	0.05794
2,4-DB	16.72	16.75	16.78	156426	0.176634
Dinoseb	16.91	16.95	16.97	139357	0.046023

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	113292	0.094875
2,4-DCAA	12.49	12.52	12.55	2591568	1.628295
Dicamba	12.85	12.90	12.91	340385	0.053514
MCPA	13.43	13.47	13.49	122724	13.57385
2,4-DP (Dichloroprop)	13.96	14.00	14.02	253571	0.183197
2,4-D	14.59	14.61	14.65	77176	0.046514
Pentachlorophenol	15.28	15.30	15.34	307489	0.015394
2,4,5-TP	15.78	15.82	15.84	103017	0.013261
2,4,5-T	16.48	16.48	16.54	113568	0.016185
2,4-DB	17.19	17.22	17.25	210956	0.211416

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑	Dalapon			<1.8595	<3.719	<4.1322	D2		
☐	2,4-DCAA	A	1.647189	0.1033	0.2066	0.2066		1.15	
☑	2,4-DCAA-D1	A	1.647189	0.1033	0.2066	0.2066			
☑	2,4-DCAA-D2	B	1.628295	0.1033	0.2066	0.2066			
☑	Dicamba			<0.0826	<0.1653	<0.3099	D1		
☑	MCPP			<51.6529	<103.3058	<206.6116	D1		
☑	MCPA			<51.6529	<103.3058	<206.6116	D1		
☑	2,4-DP (Dichloroprop)			<0.1653	<0.3306	<0.5166	D1		
☑	2,4-D			<0.2583	<0.5165	<0.6198	D2		
☐	Pentachlorophenol			<0.0279	<0.062	<0.0723			
☑	2,4,5-TP	A	0.015597	0.0103	<0.031	<0.0517	JD1	16.19	
☑	2,4,5-T			<0.0671	<0.1343	<0.155	D2		
☑	2,4-DB			<0.6508	<1.343	<1.5496	D1		
☑	Dinoseb			<0.186	<0.4132	<0.5165	D2		
☐	Picloram			<0.3719	<0.8264	<1.0331			
☐	Hexachlorophene					<0.2066			

Michele D. Hamilton
Michele D. Hamilton
Group Leader

OCT 25 2018

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:19:58

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861918** F GKP03 ID: AB **Batchnumber: 182950006A**
Sample Amount: 968 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 13:14:21
Instrument : CP15--19850A
Result file : 15HERB18289003.042.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 80% (32-138) Conc.: 1.647189

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.70	3.76	5261601	6.739011
DCAA	11.92	11.95	11.98	2456364	1.647189
MCPP	12.45	12.46	12.51	436496	-75.971860
2,4-D	13.87	13.88	13.93	256520	0.170332
DBOFB	14.21	14.22	14.27	10131260	0.001033
PCP	15.07	15.09	15.13	116714	0.006691
2,4,5-TP	15.36	15.39	15.42	109055	0.015597
2,4,5-T	15.88	15.88	15.94	368218	0.057940
2,4-DB	16.72	16.75	16.78	156426	0.176634
DINOSEB	16.91	16.95	16.97	139357	0.046023

Analysis Report (B)

Injected on : Oct 24, 2018 13:14:21
Instrument : CP15--19850B
Result file : 15HERB18289003B.042.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 79% (32-138) Conc.: 1.628295

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	113292	0.094875
DCAA	12.49	12.52	12.55	2591568	1.628295
DICAMBA	12.85	12.90	12.91	340385	0.053514
MCPA	13.43	13.47	13.49	122724	13.573850
DBOFB	13.69	13.70	13.75	11150760	0.001033
2,4-DP	13.96	14.00	14.02	253571	0.183197
2,4-D	14.59	14.61	14.65	77176	0.046514
PCP	15.28	15.30	15.34	307489	0.015394
2,4,5-TP	15.78	15.82	15.84	103017	0.013261
2,4,5-T	16.48	16.48	16.54	113568	0.016185
2,4-DB	17.19	17.22	17.25	210956	0.211416

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4.1322	<1.8595			
☐ DCAA	A	1.647189				1.15	
☑ DICAMBA			<0.3099	<0.0826			
☑ MCPP			<206.6116	<51.6529			
☑ MCPA			<206.6116	<51.6529			
☑ 2,4-DP			<0.5165	<0.1653			
☑ 2,4-D			<0.6198	<0.2583			
☐ DBOFB	A	0.001033				0.00	
☐ PCP			<0.0723	<0.0279			
☑ 2,4,5-TP	A	0.015597	<0.0517	0.0103	J	16.19	
☑ 2,4,5-T			<0.155	<0.0671			
☑ 2,4-DB			<1.5496	<0.6508			
☑ DINOSEB			<0.5165	<0.186			
☐ Picloram			<1.0331	<0.3719			
☐ Hexachlorophene			<0.2066	<0.186			

Units: ug/l

Reviewed by: _____ Verified by: Michele D. Hamilton Group Leader

Date: _____ Date: OCT 25 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

9861918 F ABGKP03 T 182950006A 10407 SW-846 8151A

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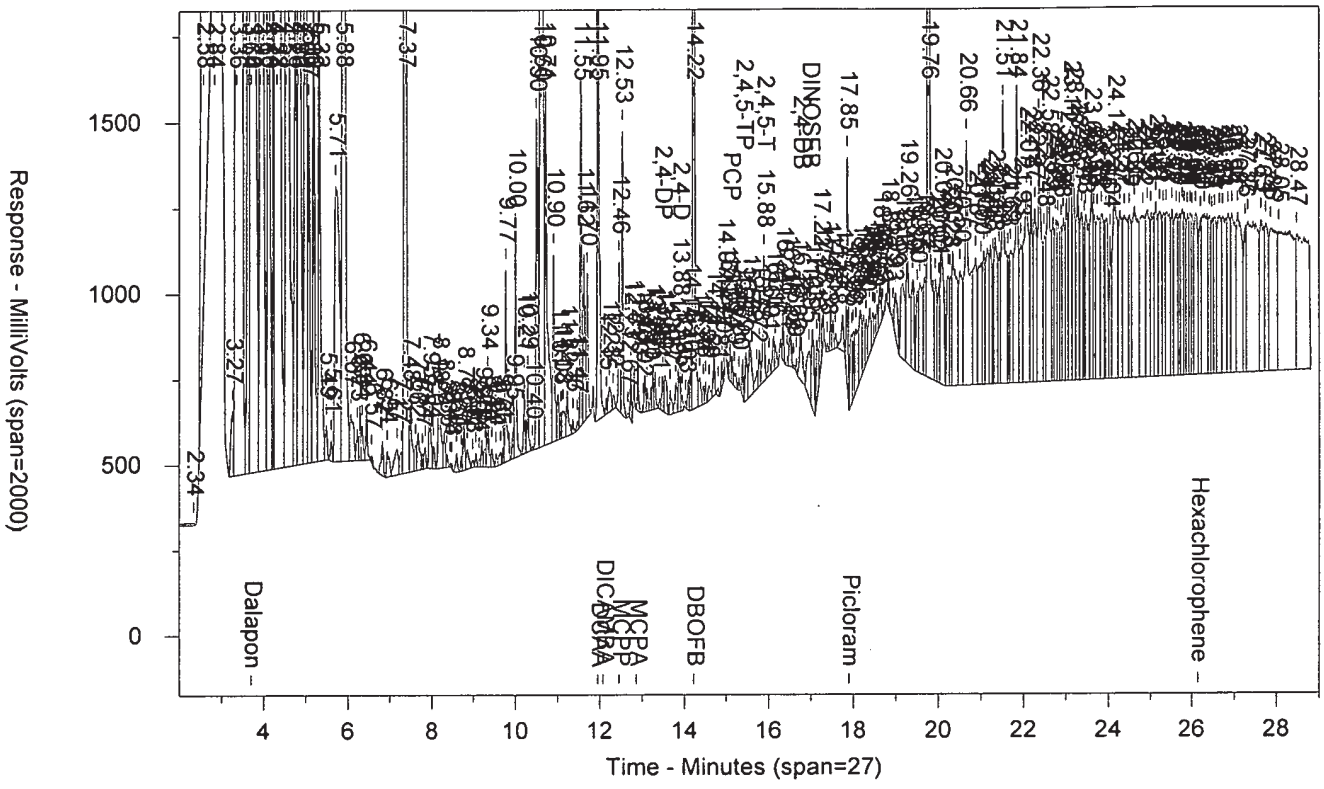

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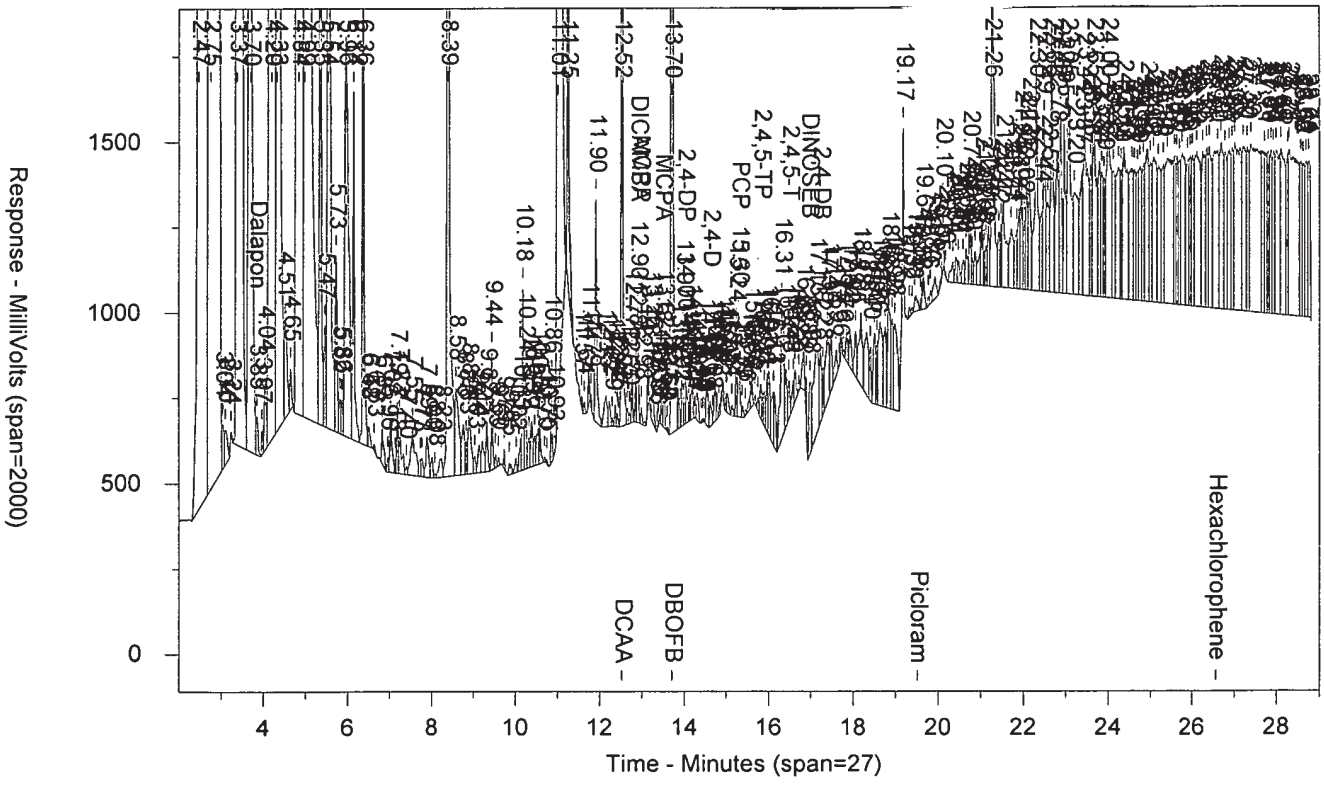

LANCASTER LABORATORIES

Sample Number: 9861918 F ABGKP03 T 182950006A 10407 SW-846 8151A
Injected On: 10/24/2018 1:14:21 PM Sample Weight: 968
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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.698	5261601	6.739	Dalapon	3.847	113292	.095	Dalapon
11.954	2456364	1.647	DCAA	12.525	2591568	1.628	DCAA
12.457	436496	-75.972	MCPP		0		MCPP
	0		DICAMBA	12.9	340385	.054	DICAMBA
	0		MCPA	13.473	122724	13.574	MCPA
14.225	10131270	.001	DBOFB	13.704	11150780	.001	DBOFB
13.879	256520	.17	2,4-D	14.613	77176	.047	2,4-D
	0		2,4-DP	14.003	253571	.183	2,4-DP
15.092	116714	.007	PCP	15.298	307489	.015	PCP
15.388	109055	.016	2,4,5-TP	15.817	103017	.013	2,4,5-TP
15.884	368218	.058	2,4,5-T	16.483	113568	.016	2,4,5-T
16.749	156426	.177	2,4-DB	17.22	210956	.211	2,4-DB
16.95	139357	.046	DINOSEB		0		DINOSEB

Files:
Area File: 15herb18289003.042.RAW
Area File: 15herb18289003B.042.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
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9861918 F ABGKP03 T 182950006A 10407 SW-846 8151A

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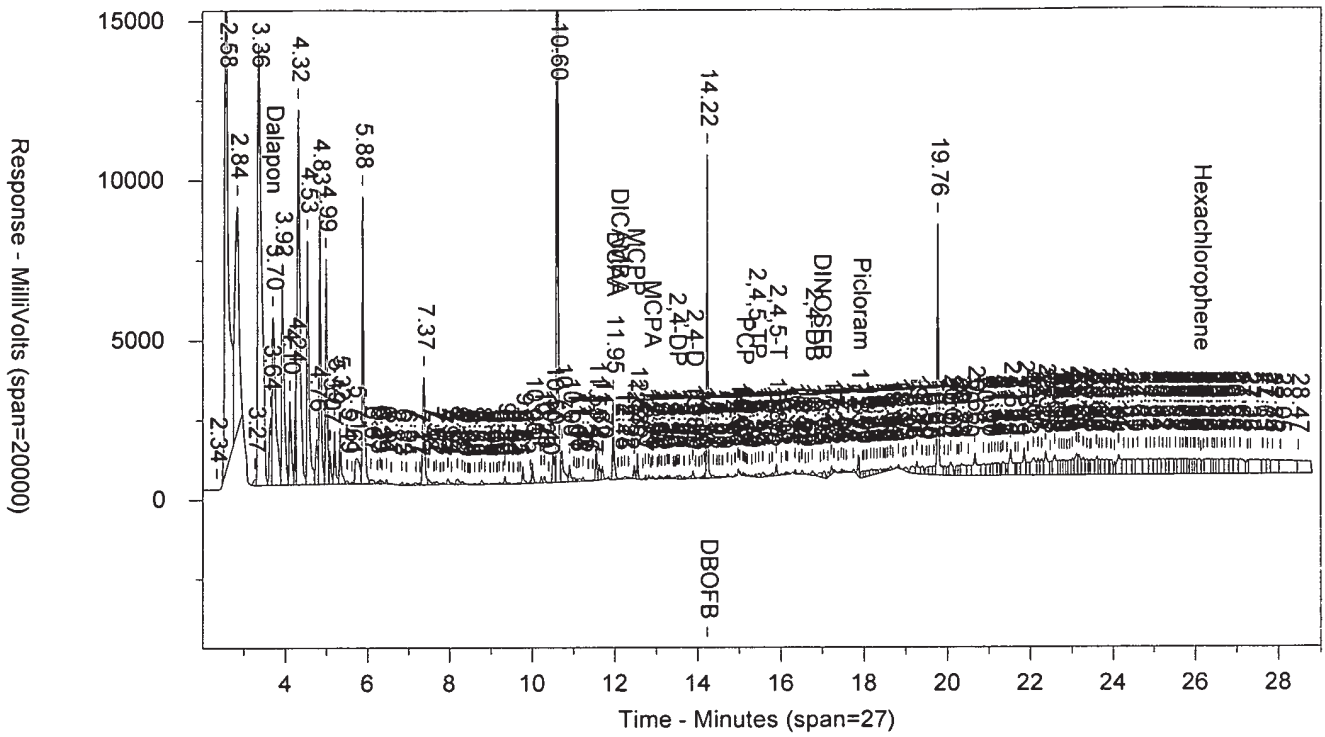

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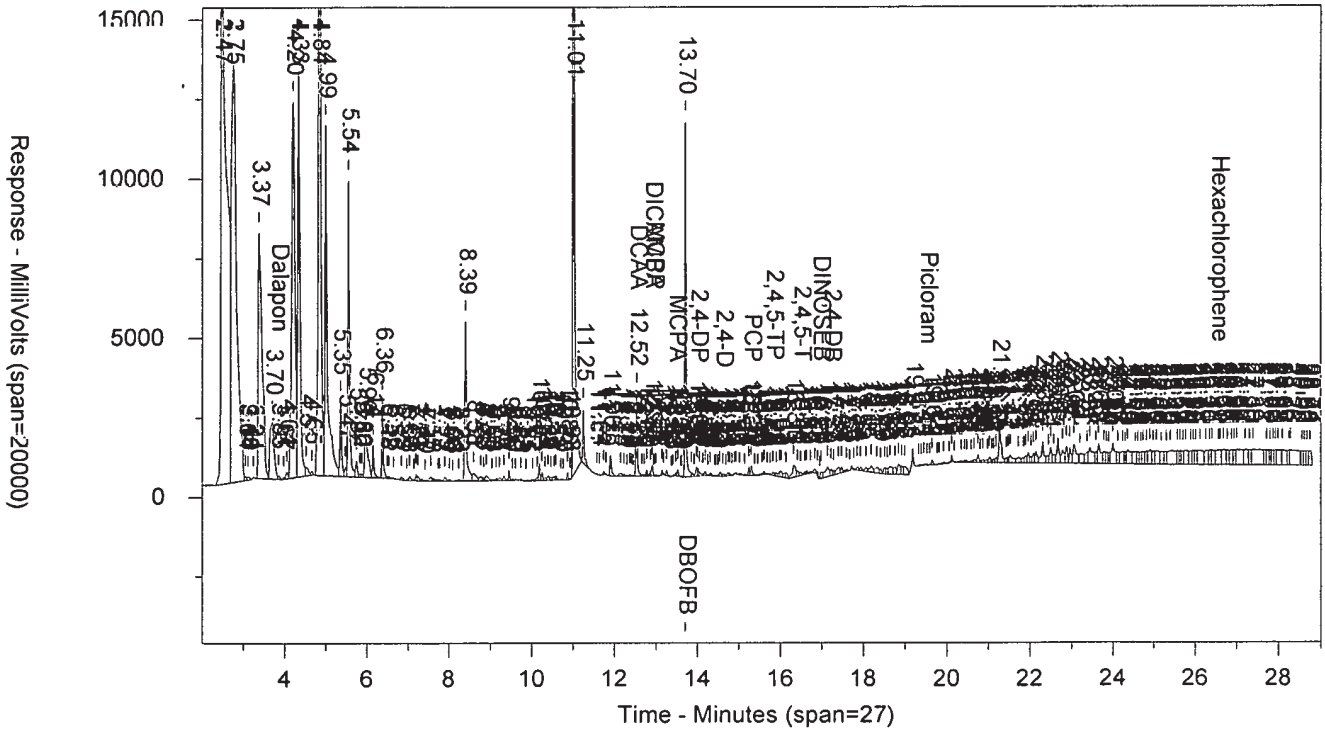

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Data Summary

Sample Name: 9861919 F GKP04 Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 967 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on Oct 24, 2018 13:47:25
Instrument 19850A
Result file 15HERB18289003.043.RAW
Calibration file 15HERB1828901
Method file 15HERB

%SSR(DCAA) 83% (32 - 138) Conc: 1.714451

Analysis Report (B)

Injected on Oct 24, 2018 13:47:25
Instrument 19850B
Result file 15HERB18289003B.043.RAW
Calibration file 15HERB1828901B
Method file 15HERBB

%SSR(DCAA) 79% (32 - 138) Conc: 1.642516

Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.71	3.76	2048499	2.624349
2,4-DCAA	11.92	11.96	11.98	2556035	1.714451
MCPP	12.45	12.45	12.51	49515	0
2,4-DP (Dichloroprop)	13.43	13.45	13.49	87012	0.074353
2,4-D	13.87	13.88	13.93	297070	0.197306
2,4,5-TP	15.36	15.37	15.42	681330	0.097466
2,4,5-T	15.88	15.88	15.94	390767	0.061503
2,4-DB	16.72	16.76	16.78	314207	0.354886

Compound	Min	RT	Max	Height	Amount
2,4-DCAA	12.49	12.53	12.55	2632852	1.642516
Dicamba	12.85	12.86	12.91	183194	0.028597
MCPP	12.91	12.95	12.97	79284	12.2689
MCPA	13.43	13.47	13.49	521295	57.24915
2,4-DP (Dichloroprop)	13.96	14.01	14.02	222213	0.159404
2,4-D	14.59	14.62	14.65	42304	0.025316
Pentachlorophenol	15.28	15.29	15.34	161928	0.008049
2,4,5-TP	15.78	15.81	15.84	174728	0.022333
Dinoseb	16.91	16.97	16.97	336068	0.107182
2,4-DB	17.19	17.22	17.25	147969	0.147241
Picloram	19.48	19.51	19.54	58770	0.008959

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑	Dalapon			<1.8614	<3.7229	<4.1365	D2		
☐	2,4-DCAA	A	1.714451	0.1034	0.2068	0.2068		4.29	
☑	2,4-DCAA-D1	A	1.714451	0.1034	0.2068	0.2068			
☑	2,4-DCAA-D2	B	1.642516	0.1034	0.2068	0.2068			
☑	Dicamba			<0.0827	<0.1655	<0.3102	D1		
☑	MCPP			<51.7063	<103.4126	<206.8252	D1		
☑	MCPA			<51.7063	<103.4126	<206.8252	D1		
☑	2,4-DP (Dichloroprop)			<0.1655	<0.3309	<0.5171	D1		
☑	2,4-D			<0.2585	<0.5171	<0.6205	D2		
☐	Pentachlorophenol			<0.0279	<0.062	<0.0724			
☑	2,4,5-TP			<0.024	<0.048	<0.0517	VD2		2706
☑	2,4,5-T			<0.0672	<0.1344	<0.1551	D2		
☑	2,4-DB			<0.6515	<1.3444	<1.5512	D2		
☑	Dinoseb			<0.1861	<0.4137	<0.5171	D1		
☐	Picloram			<0.3723	<0.8273	<1.0341			
☐	Hexachlorophene					<0.2068			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Michele D. Hamilton
Group Leader

OCT 25 2018

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:20:00

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861919** F GKP04 ID: AB **Batchnumber: 182950006A**
Sample Amount: 967 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 13:47:25
Instrument : CP15--19850A
Result file : 15HERB18289003.043.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 83% (32-138) Conc.: 1.714451

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.71	3.76	2048499	2.624349
DCAA	11.92	11.96	11.98	2556035	1.714451
MCPP	12.45	12.45	12.51	49515	-154.147500
2,4-DP	13.43	13.45	13.49	87012	0.074353
2,4-D	13.87	13.88	13.93	297070	0.197306
DBOFB	14.21	14.23	14.27	10139230	0.001034
2,4,5-TP	15.36	15.37	15.42	681330	0.097466
2,4,5-T	15.88	15.88	15.94	390767	0.061503
2,4-DB	16.72	16.76	16.78	314207	0.354886

Analysis Report (B)

Injected on : Oct 24, 2018 13:47:25
Instrument : CP15--19850B
Result file : 15HERB18289003B.043.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 79% (32-138) Conc.: 1.642516

Peak name	Min	R.T.	Max	Height	Amount
DCAA	12.49	12.53	12.55	2632852	1.642516
DICAMBA	12.85	12.86	12.91	183194	0.028597
MCPP	12.91	12.95	12.97	79284	12.268900
MCPA	13.43	13.47	13.49	521295	57.249150
DBOFB	13.69	13.71	13.75	11241920	0.001034
2,4-DP	13.96	14.01	14.02	222213	0.159404
2,4-D	14.59	14.62	14.65	42304	0.025316
PCP	15.28	15.29	15.34	161928	0.008049
2,4,5-TP	15.78	15.81	15.84	174728	0.022333
DINOSEB	16.91	16.97	16.97	336068	0.107182
2,4-DB	17.19	17.22	17.25	147969	0.147241
Picloram	19.48	19.51	19.54	58770	0.008959

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4.1365	<1.8614			
☐ DCAA	A	1.714451				4.29	
☑ DICAMBA			<0.3102	<0.0827			
☑ MCPP			<206.8252	<51.7063			
☑ MCPA			<206.8252	<51.7063			
☑ 2,4-DP			<0.5171	<0.1655			
☑ 2,4-D			<0.6205	<0.2585			
☐ DBOFB	A	0.001034				0.00	
☐ PCP			<0.0724	<0.0279			
☑ 2,4,5-TP	B	0.022333	<0.0517	0.0103	J <0.027	125.43	** we DISAGREE
☑ 2,4,5-T			<0.1551	<0.0672			
☑ 2,4-DB			<1.5512	<0.6515			
☑ DINOSEB			<0.5171	<0.1861			
☐ Picloram			<1.0341	<0.3723			
☐ Hexachlorophene			<0.2068	<0.1861			

Units: ug/l

Reviewed by: RJA 8K
Date: 10/25/18

Verified by: Michele D. Hamilton
Michele D. Hamilton
Group Leader
Date: OCT 25 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

9861919 F ABGKP04 T 182950006A 10407 SW-846 8151A

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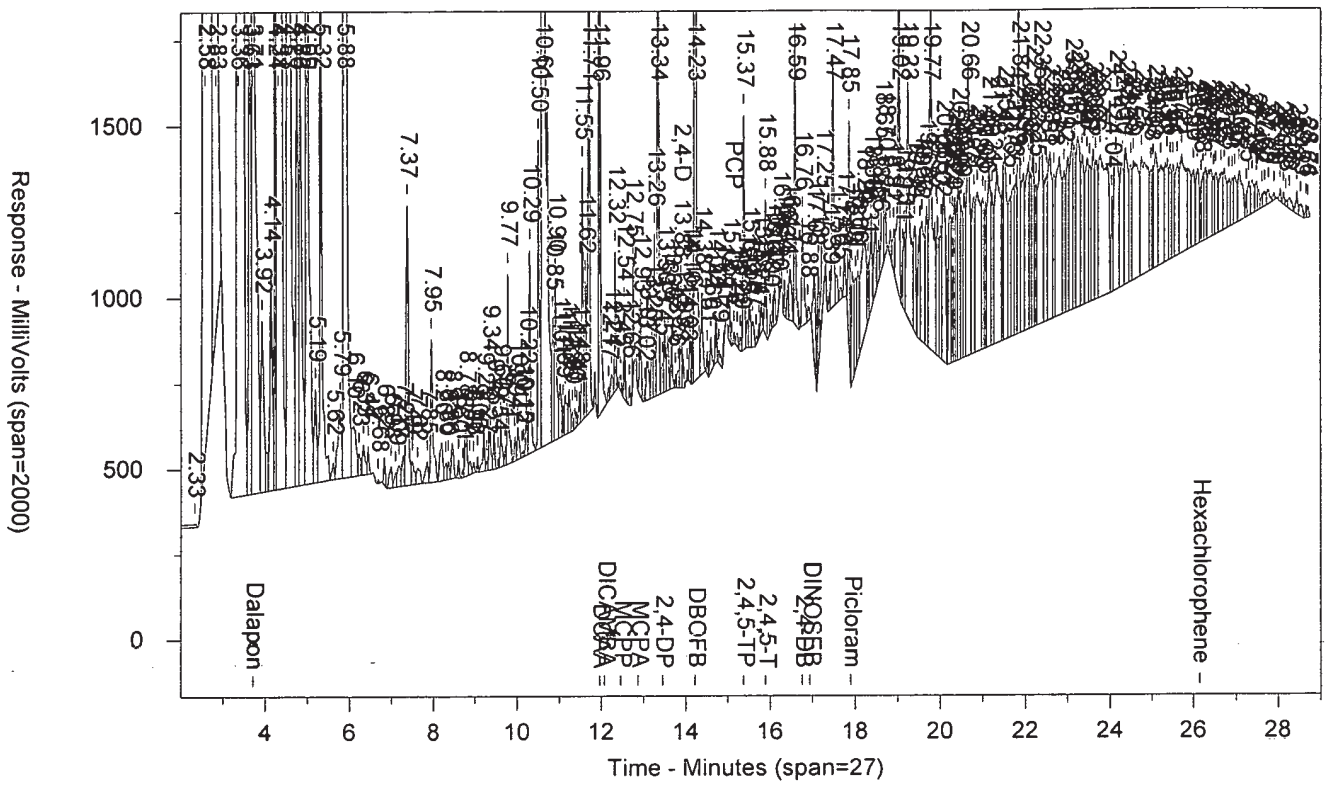

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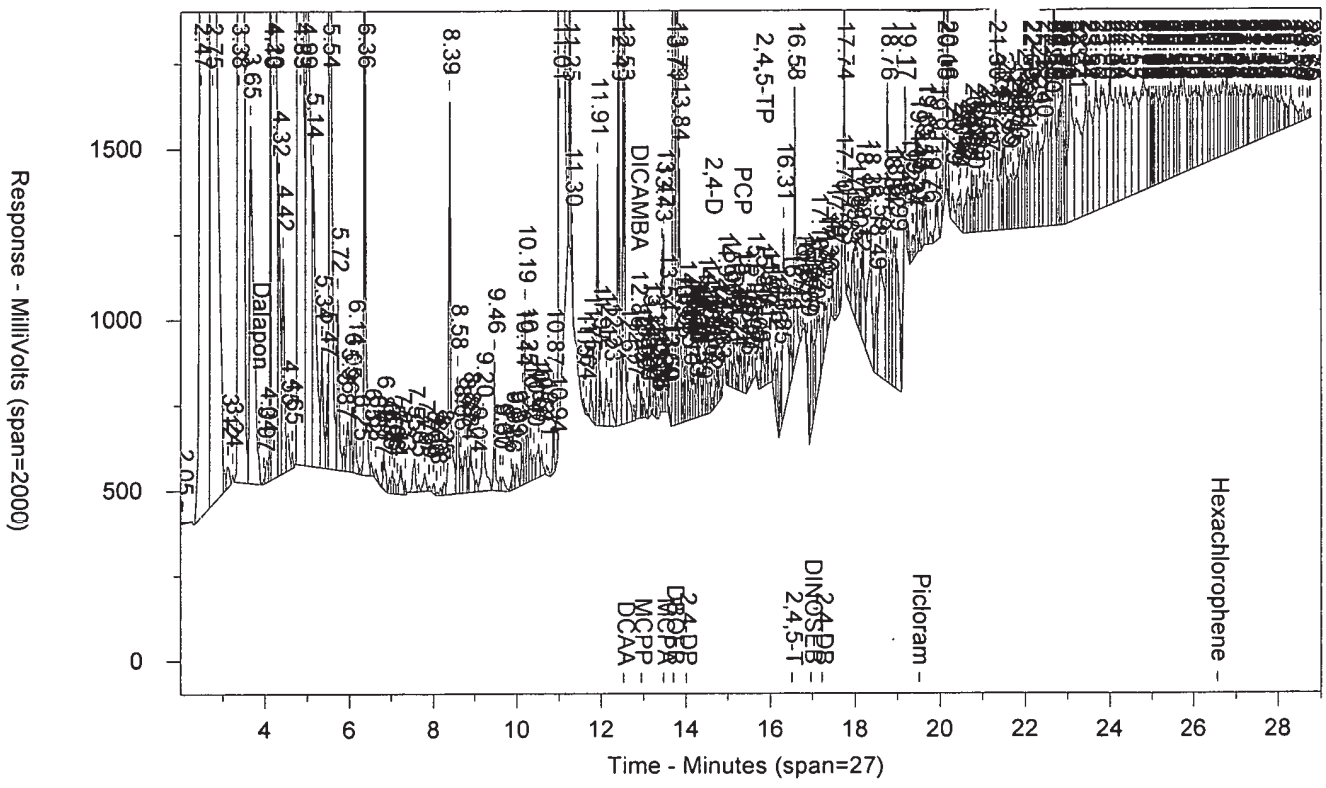

LANCASTER LABORATORIES

Sample Number: 9861919 F ABGKP04 T 182950006A 10407 SW-846 8151A
Injected On: 10/24/2018 1:47:25 PM Sample Weight: 967
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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.706	2048499	2.624	Dalapon		0		Dalapon
11.956	2556035	1.714	DCAA	12.527	2632853	1.643	DCAA
12.453	49515	-154.148	MCPP	12.949	79284	12.269	MCPP
	0		DICAMBA	12.858	183194	.029	DICAMBA
13.45	87012	.074	2,4-DP	14.008	222213	.159	2,4-DP
	0		MCPA	13.472	521295	57.249	MCPA
14.226	10139230	.001	DBOFB	13.706	11241920	.001	DBOFB
13.882	297070	.197	2,4-D	14.618	42304	.025	2,4-D
	0		PCP	15.291	161928	.008	PCP
15.374	681330	.097	2,4,5-TP	15.808	174728	.022	2,4,5-TP
15.885	390767	.062	2,4,5-T		0		2,4,5-T
16.758	314207	.355	2,4-DB	17.222	147969	.147	2,4-DB
	0		DINOSEB	16.968	336068	.107	DINOSEB
	0		Picloram	19.509	58770	.009	Picloram

Files:
Area File: 15herb18289003.043.RAW
Area File: 15herb18289003B.043.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 2:16:12 PM
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9861919 F ABGKP04 - T 182950006A 10407 SW-846 8151A

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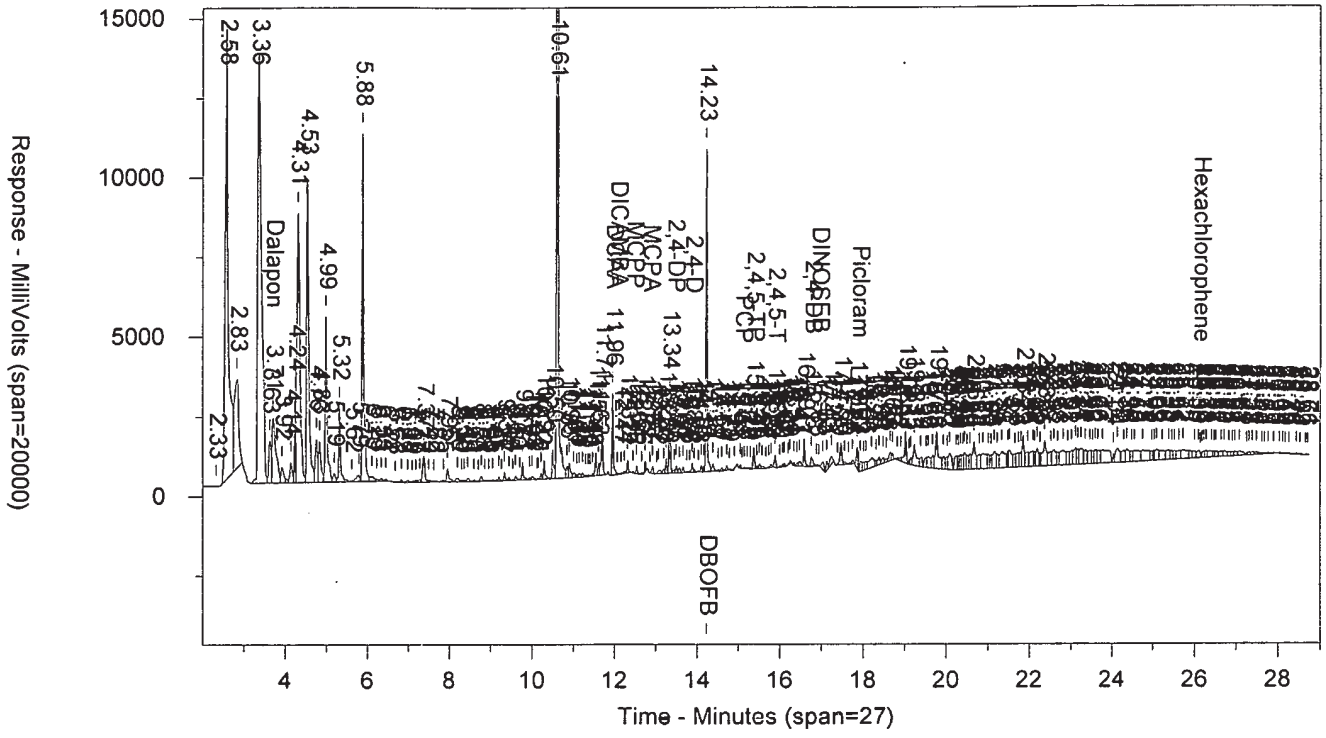

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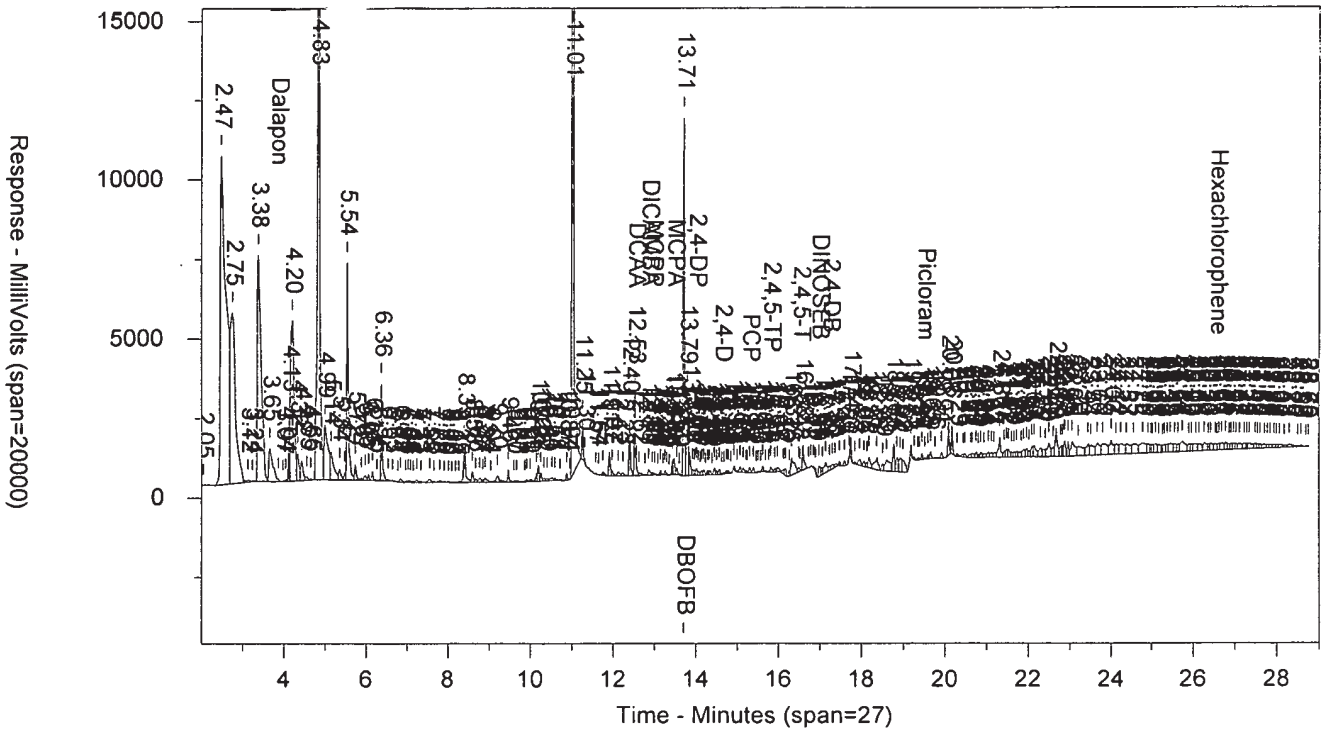

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Data Summary

Sample Name: 9861920 F GKPR1 Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 953 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on Oct 24, 2018 14:20:20
Instrument 19850A
Result file 15HERB18289003.044.RAW
Calibration file 15HERB1828901
Method file 15HERB

%SSR(DCAA) 78% (32 - 138) Conc: 1.642833

Analysis Report (B)

Injected on Oct 24, 2018 14:20:20
Instrument 19850B
Result file 15HERB18289003B.044.RAW
Calibration file 15HERB1828901B
Method file 15HERBB

%SSR(DCAA) 83% (32 - 138) Conc: 1.746612

Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	1825050	2.410012
2,4-DCAA	11.92	11.96	11.98	2376164	1.642833
2,4-D	13.87	13.88	13.93	161412	0.110503
Pentachlorophenol	15.07	15.09	15.13	202158	0.011949
2,4,5-TP	15.36	15.39	15.42	107034	0.015783
2,4-DB	16.72	16.75	16.78	406647	0.473423
Dinoseb	16.91	16.93	16.97	138082	0.047017

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	188634	0.164381
2,4-DCAA	12.49	12.53	12.55	2671469	1.746612
Dicamba	12.85	12.87	12.91	64049	0.010478
MCPP	12.91	12.92	12.97	12801	2.075941
MCPA	13.43	13.48	13.49	83185	9.573967
2,4-DP (Dichloroprop)	13.96	13.98	14.02	86769	0.065231
2,4-D	14.59	14.62	14.65	65213	0.040898
Pentachlorophenol	15.28	15.30	15.34	588928	0.030679
2,4,5-TP	15.78	15.83	15.84	148798	0.019932
2,4-DB	17.19	17.23	17.25	225224	0.234875
Picloram	19.48	19.53	19.54	34926	0.00558

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑	Dalapon			<1.8888	<3.7775	<4.1973	D2		
☐	2,4-DCAA	B	1.746612	0.1049	0.2099	0.2099		6.12	
☑	2,4-DCAA-D1	A	1.642833	0.1049	0.2099	0.2099			
☑	2,4-DCAA-D2	B	1.746612	0.1049	0.2099	0.2099			
☑	Dicamba			<0.0839	<0.1679	<0.3148	D1		
☑	MCPP			<52.4659	<104.9318	<209.8636	D1		
☑	MCPA			<52.4659	<104.9318	<209.8636	D1		
☑	2,4-DP (Dichloroprop)			<0.1679	<0.3358	<0.5247	D1		
☑	2,4-D			<0.2623	<0.5247	<0.6296	D2		
☐	Pentachlorophenol			<0.0283	<0.063	<0.0735			
☑	2,4,5-TP	B	0.019932	0.0105	<0.0315	<0.0525	JD2	23.23	
☑	2,4,5-T			<0.0682	<0.1364	<0.1574	D1		
☑	2,4-DB			<0.6611	<1.3641	<1.574	D2		
☑	Dinoseb			<0.1889	<0.4197	<0.5247	D2		
☐	Picloram			<0.3778	<0.8395	<1.0493			
☐	Hexachlorophene					<0.2099			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Michele D. Hamilton
Group Leader

OCT 25 2018

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:20:02

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861920** F GKPR1 ID: AB **Batchnumber: 182950006A**
Sample Amount: 953 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 14:20:20
Instrument : CP15--19850A
Result file : 15HERB18289003.044.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 78% (32-138) Conc.: 1.642833

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.72	3.76	1825050	2.410012
DCAA	11.92	11.96	11.98	2376164	1.642833
2,4-D	13.87	13.88	13.93	161412	0.110503
DBOFB	14.21	14.23	14.27	9981133	0.001049
PCP	15.07	15.09	15.13	202158	0.011949
2,4,5-TP	15.36	15.39	15.42	107034	0.015783
2,4-DB	16.72	16.75	16.78	406647	0.473423
DINOSEB	16.91	16.93	16.97	138082	0.047017

Analysis Report (B)

Injected on : Oct 24, 2018 14:20:20
Instrument : CP15--19850B
Result file : 15HERB18289003B.044.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 83% (32-138) Conc.: 1.746612

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	188634	0.164381
DCAA	12.49	12.53	12.55	2671469	1.746612
DICAMBA	12.85	12.87	12.91	64049	0.010478
MCPP	12.91	12.92	12.97	12801	2.075941
MCPA	13.43	13.48	13.49	83185	9.573967
DBOFB	13.69	13.71	13.75	10884560	0.001049
2,4-DP	13.96	13.98	14.02	86769	0.065231
2,4-D	14.59	14.62	14.65	65213	0.040898
PCP	15.28	15.30	15.34	588928	0.030679
2,4,5-TP	15.78	15.83	15.84	148798	0.019932
2,4-DB	17.19	17.23	17.25	225224	0.234875
Picloram	19.48	19.53	19.54	34926	0.005580

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4.1973	<1.8888			
☐ DCAA	B	1.746612				6.12	
☑ DICAMBA			<0.3148	<0.0839			
☑ MCPP			<209.8636	<52.4659			
☑ MCPA			<209.8636	<52.4659			
☑ 2,4-DP			<0.5247	<0.1679			
☑ 2,4-D			<0.6296	<0.2623			
☐ DBOFB	A	0.001049				0.00	
☐ PCP			<0.0735	<0.0283			
☑ 2,4,5-TP	B	0.019932	<0.0525	0.0105	J	23.23	
☑ 2,4,5-T			<0.1574	<0.0682			
☑ 2,4-DB			<1.574	<0.6611			
☑ DINOSEB			<0.5247	<0.1889			
☐ Picloram			<1.0493	<0.3778			
☐ Hexachlorophene			<0.2099	<0.1889			

Units: ug/l

Reviewed by: Russ
Date: 10/25

Verified by: Michele D. Hamilton
Group Leader
Date: OCT 25 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

9861920 F ABGKPR1 T 182950006A 10407 SW-846 8151A

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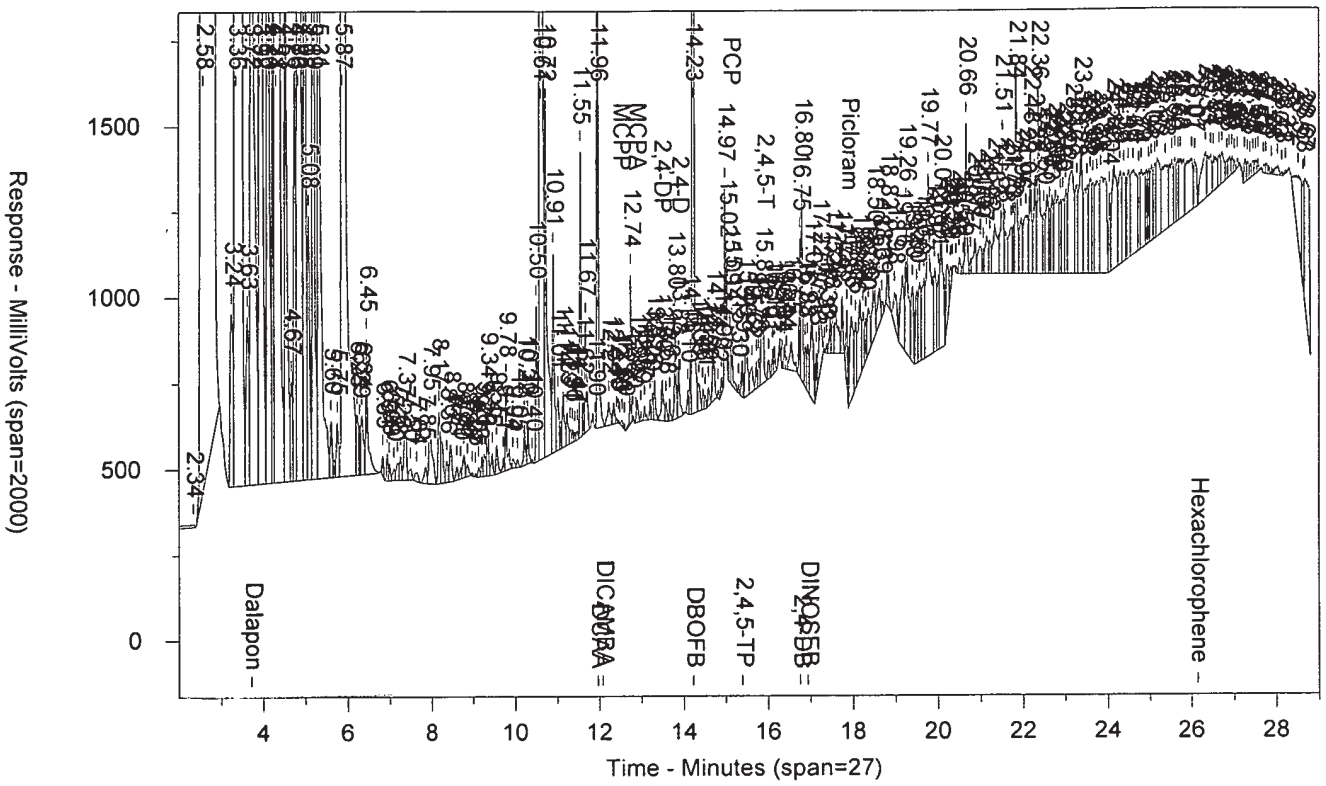

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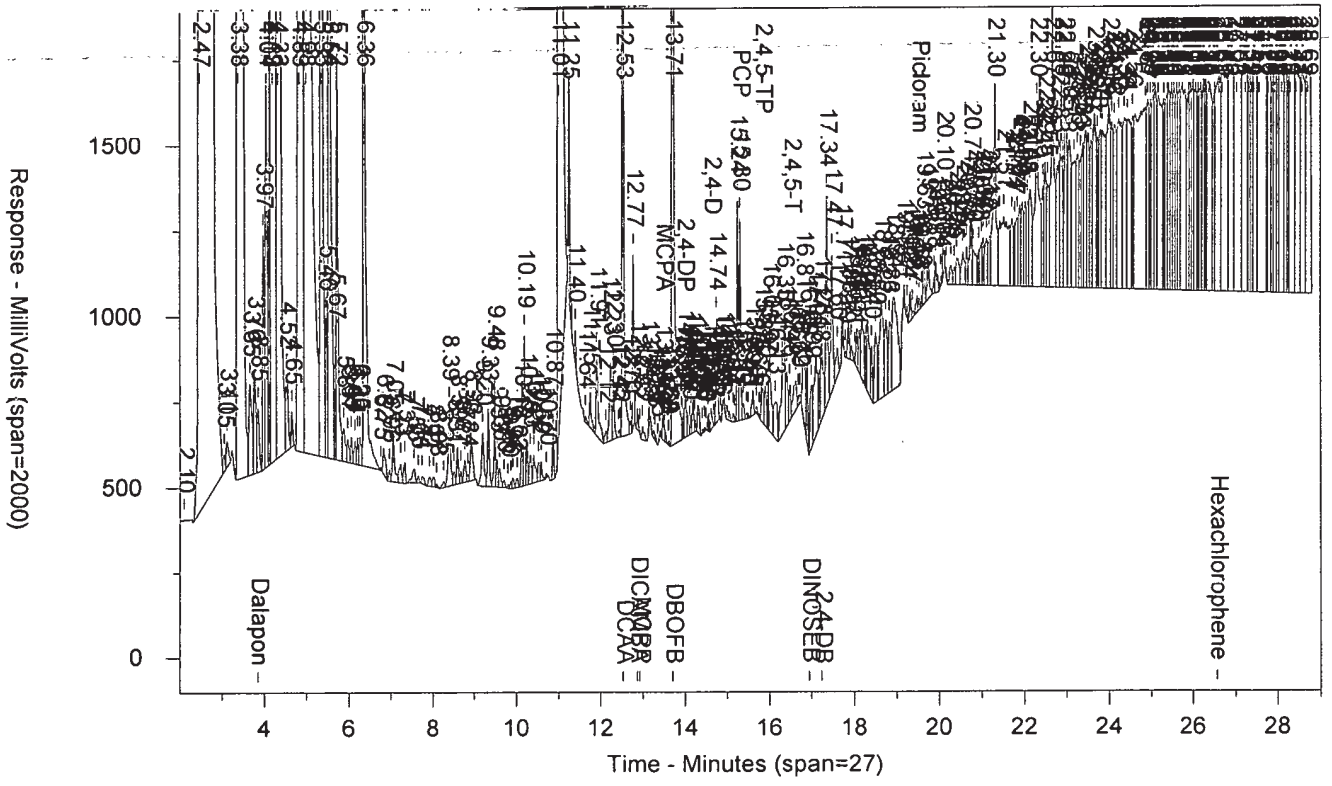

LANCASTER LABORATORIES

Sample Number: 9861920 F ABGKPR1 T 182950006A 10407 SW-846 8151A
Injected On: 10/24/2018 2:20:20 PM Sample Weight: 953
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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.72	1825050	2.41	Dalapon	3.847	188634	.164	Dalapon
11.957	2376165	1.643	DCAA	12.526	2671469	1.747	DCAA
	0		DICAMBA	12.87	64049	.01	DICAMBA
	0		MCPP	12.922	12801	2.076	MCPP
	0		MCPA	13.477	83185	9.574	MCPA
14.226	9981133	.001	DBOFB	13.706	10884560	.001	DBOFB
13.883	161412	.111	2,4-D	14.616	65213	.041	2,4-D
	0		2,4-DP	13.982	86769	.065	2,4-DP
15.094	202158	.012	PCP	15.298	588928	.031	PCP
15.387	107034	.016	2,4,5-TP	15.828	148798	.02	2,4,5-TP
16.752	406647	.473	2,4-DB	17.23	225224	.235	2,4-DB
16.93	138082	.047	DINOSEB		0		DINOSEB
	0		Picloram	19.525	34926	.006	Picloram

Files:
Area File: 15herb18289003.044.RAW
Area File: 15herb18289003B.044.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 2:49:12 PM
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9861920 F ABGKPR1 T 182950006A 10407 SW-846 8151A

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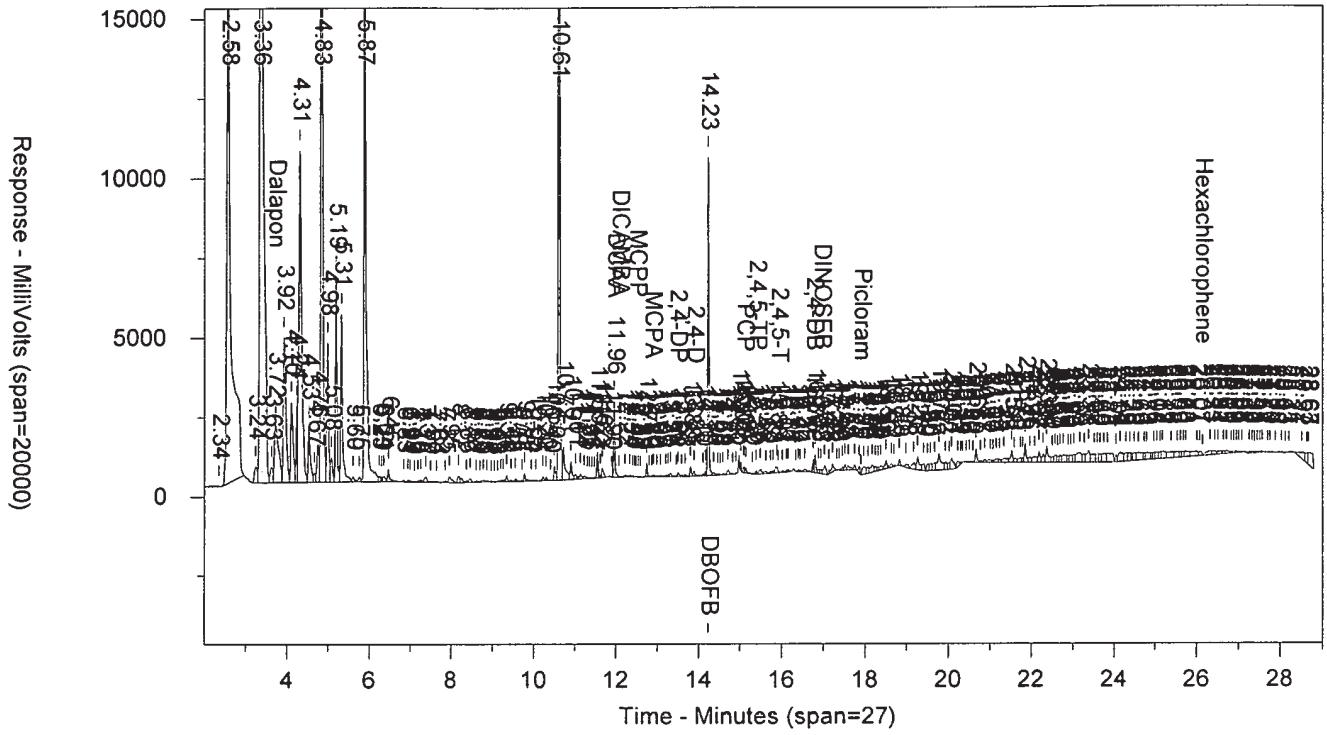

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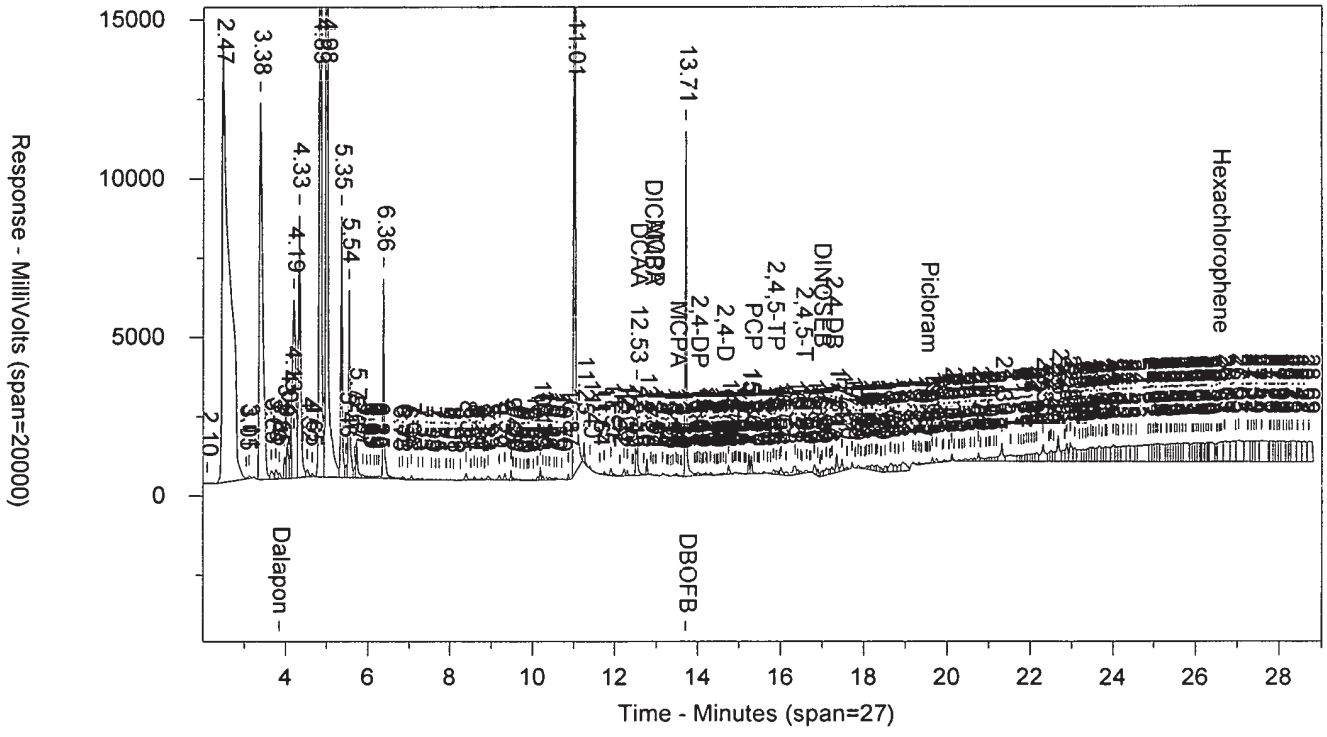

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Data Summary

Sample Name: 9861921 F GKP05 Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 1063 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on Oct 24, 2018 14:53:30
Instrument 19850A
Result file 15HERB18289003.045.RAW
Calibration file 15HERB1828901
Method file 15HERB

%SSR(DCAA) 78% (32 - 138) Conc: 1.460067

Analysis Report (B)

Injected on Oct 24, 2018 14:53:30
Instrument 19850B
Result file 15HERB18289003B.045.RAW
Calibration file 15HERB1828901B
Method file 15HERBB

%SSR(DCAA) 75% (32 - 138) Conc: 1.419067

Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	843726	1.082577
2,4-DCAA	11.92	11.96	11.98	2173416	1.460067
MCPP	12.45	12.51	12.51	21825	0
2,4-D	13.87	13.89	13.93	162385	0.108019
Pentachlorophenol	15.07	15.09	15.13	149228	0.008571
2,4,5-TP	15.36	15.39	15.42	95370	0.013664
2,4,5-T	15.88	15.89	15.94	174282	0.027473
2,4-DB	16.72	16.75	16.78	192758	0.21805
Dinoseb	16.91	16.95	16.97	100957	0.033401

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	85446	0.07189
2,4-DCAA	12.49	12.53	12.55	2248066	1.419067
Dicamba	12.85	12.87	12.91	61674	0.009741
MCPA	13.43	13.48	13.49	94419	10.49189
2,4-DP (Dichloroprop)	13.96	14.01	14.02	128560	0.093314
2,4-D	14.59	14.61	14.65	61093	0.036993
Pentachlorophenol	15.28	15.30	15.34	470233	0.023651
2,4,5-TP	15.78	15.82	15.84	90751	0.011737
2,4,5-T	16.48	16.48	16.54	94333	0.013507
2,4-DB	17.19	17.23	17.25	187739	0.189028
Picloram	19.48	19.53	19.54	26877	0.004146

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑	Dalapon			<1.6933	<3.3866	<3.7629	D2		
☐	2,4-DCAA	A	1.460067	0.0941	0.1881	0.1881		2.85	
☑	2,4-DCAA-D1	A	1.460067	0.0941	0.1881	0.1881			
☑	2,4-DCAA-D2	B	1.419067	0.0941	0.1881	0.1881			
☑	Dicamba			<0.0753	<0.1505	<0.2822	D1		
☑	MCPP			<47.0367	<94.0734	<188.1468	D1		
☑	MCPA			<47.0367	<94.0734	<188.1468	D1		
☑	2,4-DP (Dichloroprop)			<0.1505	<0.301	<0.4704	D1		
☑	2,4-D			<0.2352	<0.4704	<0.5644	D2		
☐	Pentachlorophenol			<0.0254	<0.0564	<0.0659			
☑	2,4,5-TP	A	0.013664	0.0094	<0.0282	<0.047	JD1	15.17	
☑	2,4,5-T			<0.0611	<0.1223	<0.1411	D2		
☑	2,4-DB			<0.5927	<1.223	<1.4111	D2		
☑	Dinoseb			<0.1693	<0.3763	<0.4704	D2		
☐	Picloram			<0.3387	<0.7526	<0.9407			
☐	Hexachlorophene					<0.1881			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Miche'le D. Hamilton
Group Leader

OCT 25 2018

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:20:06

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861921** F GKP05 ID: AB **Batchnumber: 182950006A**
Sample Amount: 1063 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 14:53:30
Instrument : CP15--19850A
Result file : 15HERB18289003.045.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 78% (32-138) Conc.: 1.460067

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.72	3.76	843726	1.082577
DCAA	11.92	11.96	11.98	2173416	1.460067
MCPP	12.45	12.51	12.51	21825	-144.901200
2,4-D	13.87	13.89	13.93	162385	0.108019
DBOFB	14.21	14.23	14.27	9209300	0.000941
PCP	15.07	15.09	15.13	149228	0.008571
2,4,5-TP	15.36	15.39	15.42	95370	0.013664
2,4,5-T	15.88	15.89	15.94	174282	0.027473
2,4-DB	16.72	16.75	16.78	192758	0.218050
DINOSEB	16.91	16.95	16.97	100957	0.033401

Analysis Report (B)

Injected on : Oct 24, 2018 14:53:30
Instrument : CP15--19850B
Result file : 15HERB18289003B.045.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 75% (32-138) Conc.: 1.419067

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	85446	0.071890
DCAA	12.49	12.53	12.55	2248066	1.419067
DICAMBA	12.85	12.87	12.91	61674	0.009741
MCPA	13.43	13.48	13.49	94419	10.491890
DBOFB	13.69	13.71	13.75	10107020	0.000941
2,4-DP	13.96	14.01	14.02	128560	0.093314
2,4-D	14.59	14.61	14.65	61093	0.036993
PCP	15.28	15.30	15.34	470233	0.023651
2,4,5-TP	15.78	15.82	15.84	90751	0.011737
2,4,5-T	16.48	16.48	16.54	94333	0.013507
2,4-DB	17.19	17.23	17.25	187739	0.189028
Picloram	19.48	19.53	19.54	26877	0.004146

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<3.7629	<1.6933			
☐ DCAA	A	1.460067				2.85	
☑ DICAMBA			<0.2822	<0.0753			
☑ MCPP			<188.1468	<47.0367			
☑ MCPA			<188.1468	<47.0367			
☑ 2,4-DP			<0.4704	<0.1505			
☑ 2,4-D			<0.5644	<0.2352			
☐ DBOFB	A	0.000941				0.00	
☐ PCP			<0.0659	<0.0254			
☑ 2,4,5-TP	A	0.013664	<0.047	0.0094	J	15.18	
☑ 2,4,5-T			<0.1411	<0.0611			
☑ 2,4-DB			<1.4111	<0.5927			
☑ DINOSEB			<0.4704	<0.1693			
☐ Picloram			<0.9407	<0.3387			
☐ Hexachlorophene			<0.1881	<0.1693			

Units: ug/l

Reviewed by: _____ Verified by: _____
Miche'le D. Hamilton
Group Leader
Date: 10/26 Date: OCT 25 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

9861921 F ABGKP05 T 182950006A 10407 SW-846 8151A

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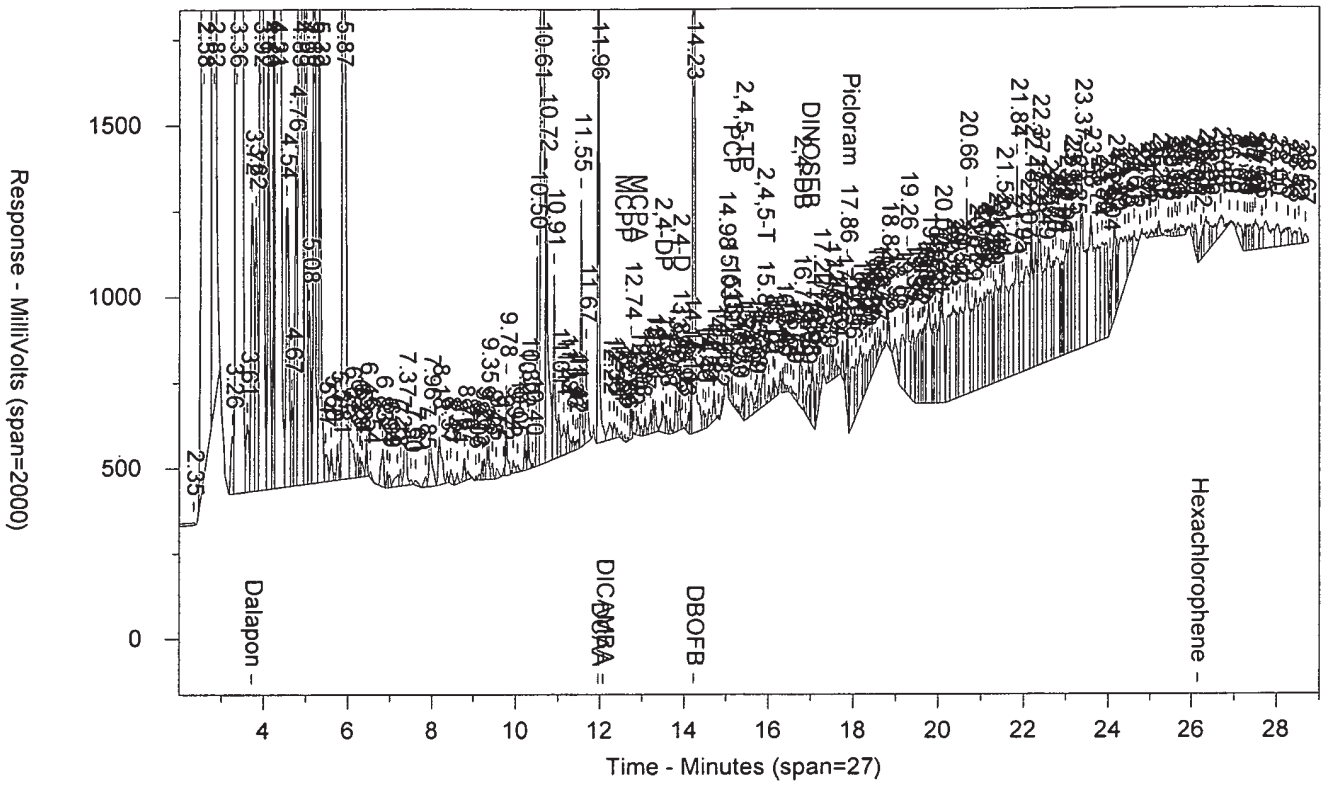

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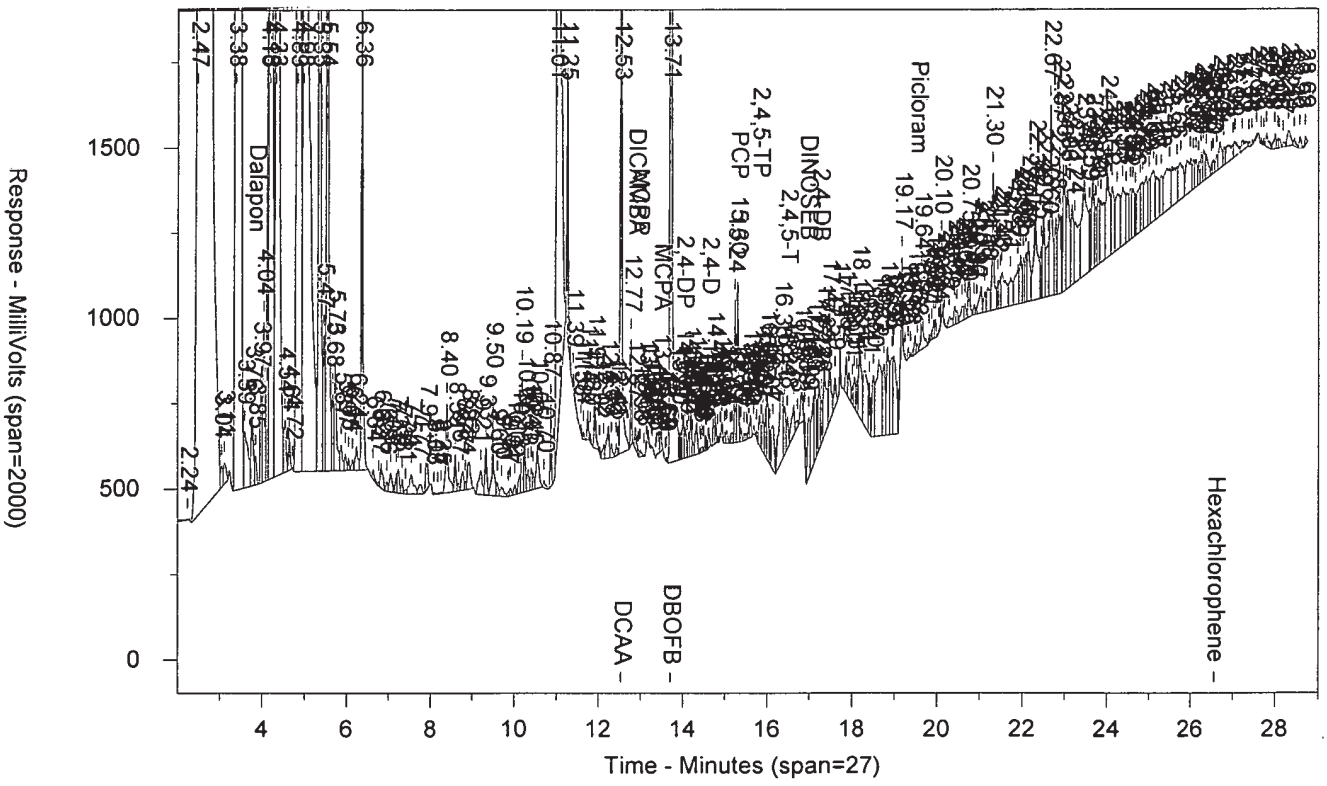

LANCASTER LABORATORIES

Sample Number: 9861921 F ABGKP05 T 182950006A 10407 SW-846 8151A
Injected On: 10/24/2018 2:53:30 PM Sample Weight: 1063
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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.719	843726	1.083	Dalapon	3.846	85446	.072	Dalapon
11.957	2173417	1.46	DCAA	12.528	2248066	1.419	DCAA
12.507	21825	-144.901	MCPP		0		MCPP
	0		DICAMBA	12.87	61674	.01	DICAMBA
	0		MCPA	13.476	94419	10.492	MCPA
14.227	9209300	.001	DBOFB	13.707	10107020	.001	DBOFB
13.885	162385	.108	2,4-D	14.611	61093	.037	2,4-D
	0		2,4-DP	14.01	128560	.093	2,4-DP
15.092	149228	.009	PCP	15.301	470233	.024	PCP
15.391	95370	.014	2,4,5-TP	15.823	90751	.012	2,4,5-TP
15.885	174282	.027	2,4,5-T	16.483	94333	.014	2,4,5-T
16.753	192758	.218	2,4-DB	17.229	187739	.189	2,4-DB
16.947	100957	.033	DINOSEB		0		DINOSEB
	0		Picloram	19.531	26877	.004	Picloram

Files:
Area File: 15herb18289003.045.RAW
Area File: 15herb18289003B.045.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 3:22:19 PM
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9861921 F ABGKP05 T 182950006A 10407 SW-846 8151A

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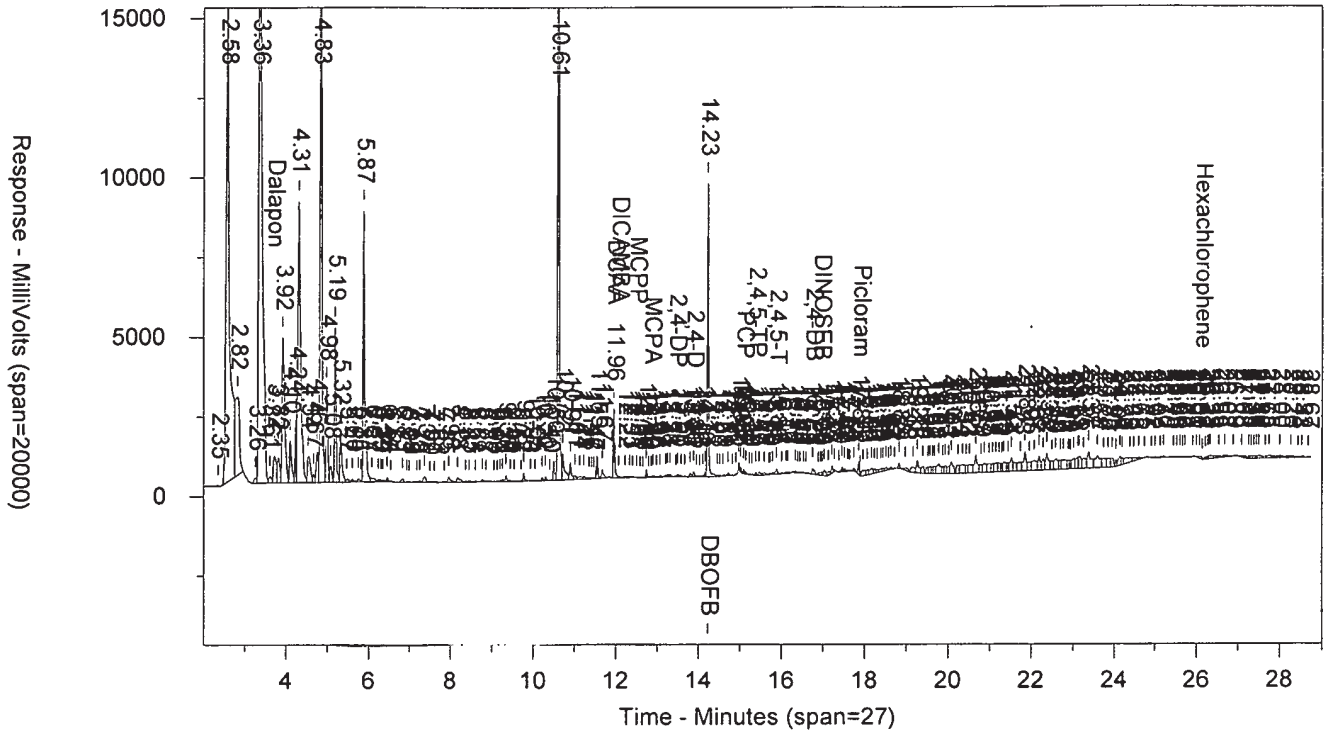

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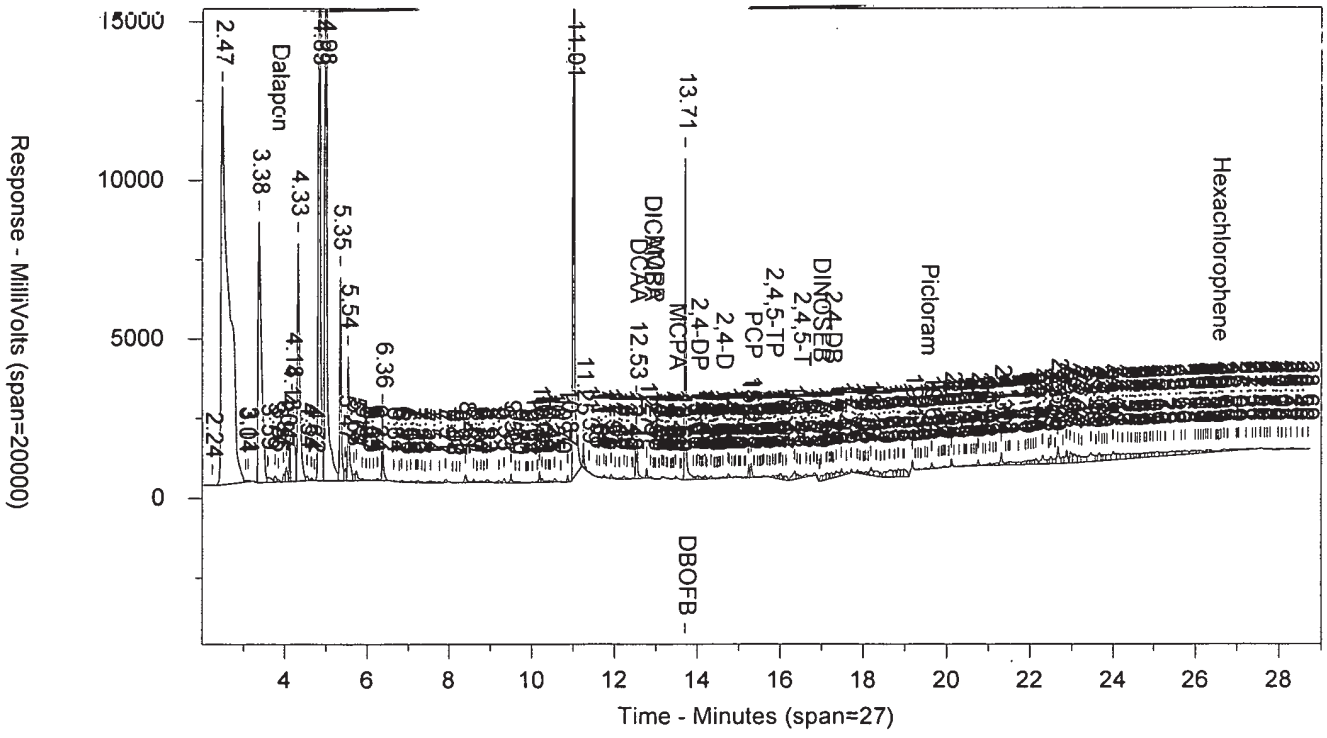

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Data Summary

Sample Name: 9861922 F GKP02 Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 1038 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on Oct 24, 2018 15:26:27
Instrument 19850A
Result file 15HERB18289003.046.RAW
Calibration file 15HERB1828901
Method file 15HERB

%SSR(DCAA) 77% (32 - 138) Conc: 1.489991

Analysis Report (B)

Injected on Oct 24, 2018 15:26:27
Instrument 19850B
Result file 15HERB18289003B.046.RAW
Calibration file 15HERB1828901B
Method file 15HERBB

%SSR(DCAA) 81% (32 - 138) Conc: 1.552024

Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.72	3.76	1149367	1.390312
2,4-DCAA	11.92	11.96	11.98	2352651	1.489991
MCPP	12.45	12.45	12.51	30144	0
2,4-D	13.87	13.88	13.93	182265	0.114302
Pentachlorophenol	15.07	15.09	15.13	67402	0.003649
2,4,5-TP	15.36	15.39	15.42	101463	0.013705
2,4,5-T	15.88	15.89	15.94	295878	0.043971
2,4-DB	16.72	16.75	16.78	92909	0.099083

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	86106	0.067412
2,4-DCAA	12.49	12.53	12.55	2642259	1.552024
Dicamba	12.85	12.87	12.91	94456	0.013883
MCPA	13.43	13.47	13.49	81850	8.463333
2,4-DP (Dichloroprop)	13.96	14.01	14.02	161819	0.109295
2,4-D	14.59	14.62	14.65	55506	0.031274
Pentachlorophenol	15.28	15.30	15.34	598562	0.028014
2,4,5-TP	15.78	15.82	15.84	107462	0.012932
2,4,5-T	16.48	16.48	16.54	92158	0.012279
2,4-DB	17.19	17.22	17.25	161706	0.151504

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑	Dalapon			<1.7341	<3.4682	<3.8536	D2		
☐	2,4-DCAA	B	1.552024	0.0963	0.1927	0.1927		4.08	
☑	2,4-DCAA-D1	A	1.489991	0.0963	0.1927	0.1927			
☑	2,4-DCAA-D2	B	1.552024	0.0963	0.1927	0.1927			
☑	Dicamba			<0.0771	<0.1541	<0.289	D1		
☑	MCPP			<48.1696	<96.3391	<192.6782	D1		
☑	MCPA			<48.1696	<96.3391	<192.6782	D1		
☑	2,4-DP (Dichloroprop)			<0.1541	<0.3083	<0.4817	D1		
☑	2,4-D			<0.2408	<0.4817	<0.578	D2		
☐	Pentachlorophenol			<0.026	<0.0578	<0.0674			
☑	2,4,5-TP	A	0.013705	0.0096	<0.0289	<0.0482	JD1	5.80	
☑	2,4,5-T			<0.0626	<0.1252	<0.1445	D2		
☑	2,4-DB			<0.6069	<1.2524	<1.4451	D1		
☑	Dinoseb			<0.1734	<0.3854	<0.4817	D1		
☐	Picloram			<0.3468	<0.7707	<0.9634			
☐	Hexachlorophene					<0.1927			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Michele D. Hamilton
Miche'le D. Hamilton
Group Leader

OCT 25 2018

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:20:08

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861922** F GKP02 ID: AB **Batchnumber: 182950006A**
Sample Amount: 1038 ML Total Volume: 10 ml Analyst: 120 SDG: TID07 State: NY
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 15:26:27
Instrument : CP15--19850A
Result file : 15HERB18289003.046.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET

%SSR(DCAA) : 77% (32-138) Conc.: 1.489991

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.72	3.76	1149367	1.390312
DCAA	11.92	11.96	11.98	2352651	1.489991
MCPP	12.45	12.45	12.51	30144	-147.165700
2,4-D	13.87	13.88	13.93	182265	0.114302
DBOFB	14.21	14.23	14.27	10003830	0.000963
PCP	15.07	15.09	15.13	67402	0.003649
2,4,5-TP	15.36	15.39	15.42	101463	0.013705
2,4,5-T	15.88	15.89	15.94	295878	0.043971
2,4-DB	16.72	16.75	16.78	92909	0.099083

Analysis Report (B)

Injected on : Oct 24, 2018 15:26:27
Instrument : CP15--19850B
Result file : 15HERB18289003B.046.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET

%SSR(DCAA) : 81% (32-138) Conc.: 1.552024

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	86106	0.067412
DCAA	12.49	12.53	12.55	2642259	1.552024
DICAMBA	12.85	12.87	12.91	94456	0.013883
MCPA	13.43	13.47	13.49	81850	8.463333
DBOFB	13.69	13.71	13.75	11123200	0.000963
2,4-DP	13.96	14.01	14.02	161819	0.109295
2,4-D	14.59	14.62	14.65	55506	0.031274
PCP	15.28	15.30	15.34	598562	0.028014
2,4,5-TP	15.78	15.82	15.84	107462	0.012932
2,4,5-T	16.48	16.48	16.54	92158	0.012279
2,4-DB	17.19	17.22	17.25	161706	0.151504

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<3.8536	<1.7341			
☐ DCAA	B	1.552024				4.08	
☑ DICAMBA			<0.289	<0.0771			
☑ MCPP			<192.6782	<48.1696			
☑ MCPA			<192.6782	<48.1696			
☑ 2,4-DP			<0.4817	<0.1541			
☑ 2,4-D			<0.578	<0.2408			
☐ DBOFB	A	0.000963				0.00	
☐ PCP			<0.0674	<0.026			
☑ 2,4,5-TP	A	0.013705	<0.0482	0.0096	J	5.80	
☑ 2,4,5-T			<0.1445	<0.0626			
☑ 2,4-DB			<1.4451	<0.6069			
☑ DINOSEB			<0.4817	<0.1734			
☐ Picloram			<0.9634	<0.3468			
☐ Hexachlorophene			<0.1927	<0.1734			

Units: ug/l

Reviewed by: _____ Verified by: Michele D. Hamilton
Michele D. Hamilton
Group Leader
Date: _____ Date: OCT 25 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

9861922 F ABGKP02 T 182950006A 10407 SW-846 8151A

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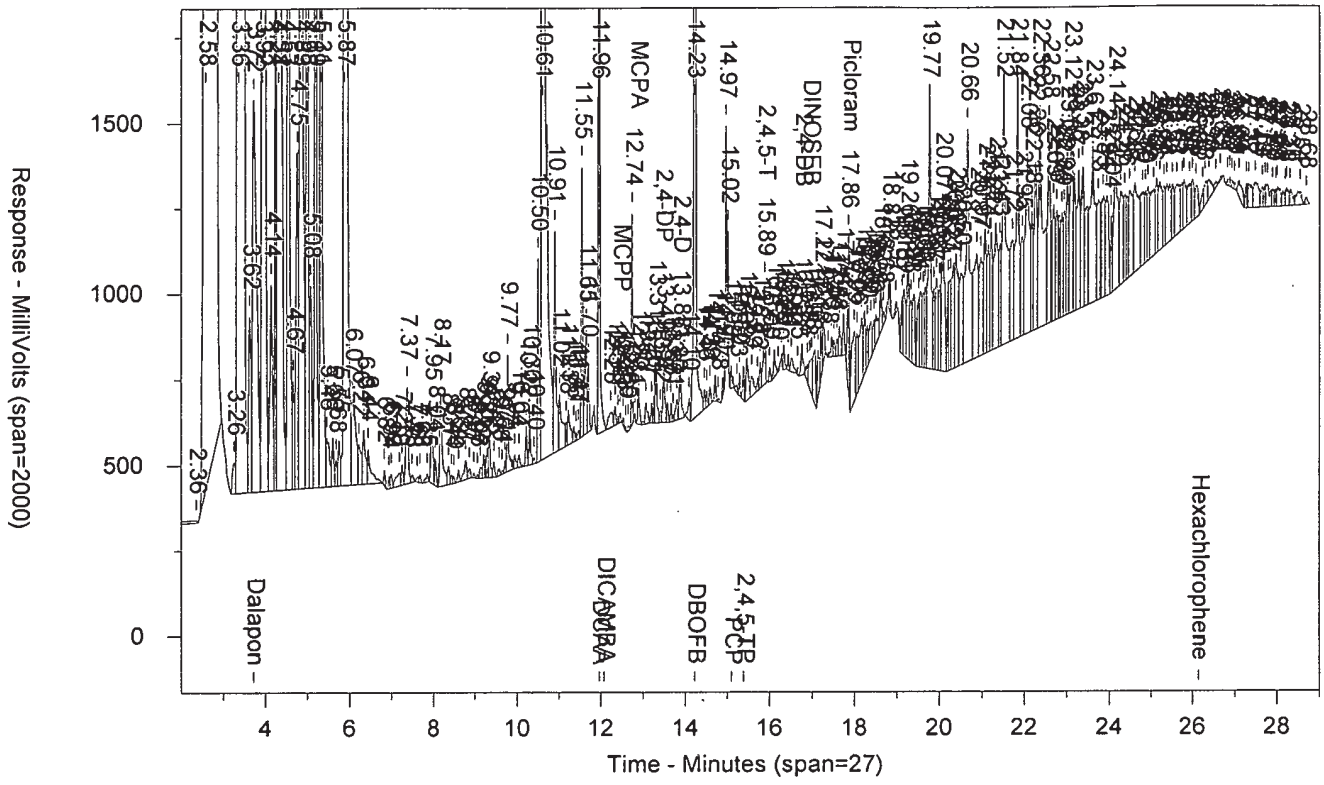

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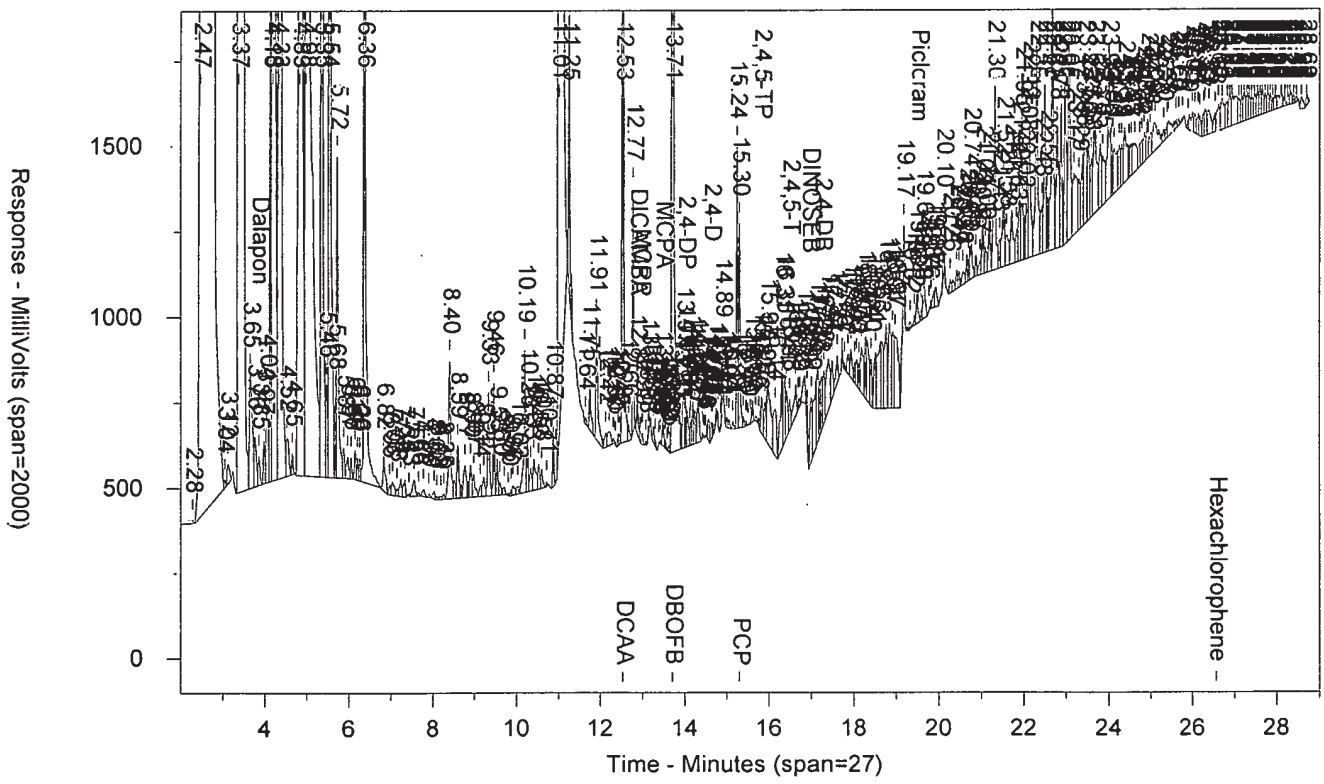

LANCASTER LABORATORIES

Sample Number: 9861922 F ABGKP02 T 182950006A 10407 SW-846 8151A
Injected On: 10/24/2018 3:26:27 PM Sample Weight: 1038
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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.719	1149367	1.39	Dalapon	3.85	86106	.067	Dalapon
11.956	2352651	1.49	DCAA	12.527	2642259	1.552	DCAA
12.454	30144	-147.166	MCPP		0		MCPP
	0		DICAMBA	12.867	94456	.014	DICAMBA
	0		MCPA	13.474	81850	8.463	MCPA
14.227	10003830	.001	DBOFB	13.706	11123200	.001	DBOFB
13.884	182265	.114	2,4-D	14.618	55506	.031	2,4-D
	0		2,4-DP	14.006	161819	.109	2,4-DP
15.095	67402	.004	PCP	15.297	598562	.028	PCP
15.387	101463	.014	2,4,5-TP	15.822	107462	.013	2,4,5-TP
15.885	295878	.044	2,4,5-T	16.485	92158	.012	2,4,5-T
16.753	92909	.099	2,4-DB	17.222	161706	.152	2,4-DB

Files:
Area File: 15herb18289003.046.RAW
Area File: 15herb18289003B.046.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 3:55:14 PM
File Reported On: 10/24/2018 at 4:10:34 PM

9861922 F ABGKP02 T 182950006A 10407 SW-846 8151A

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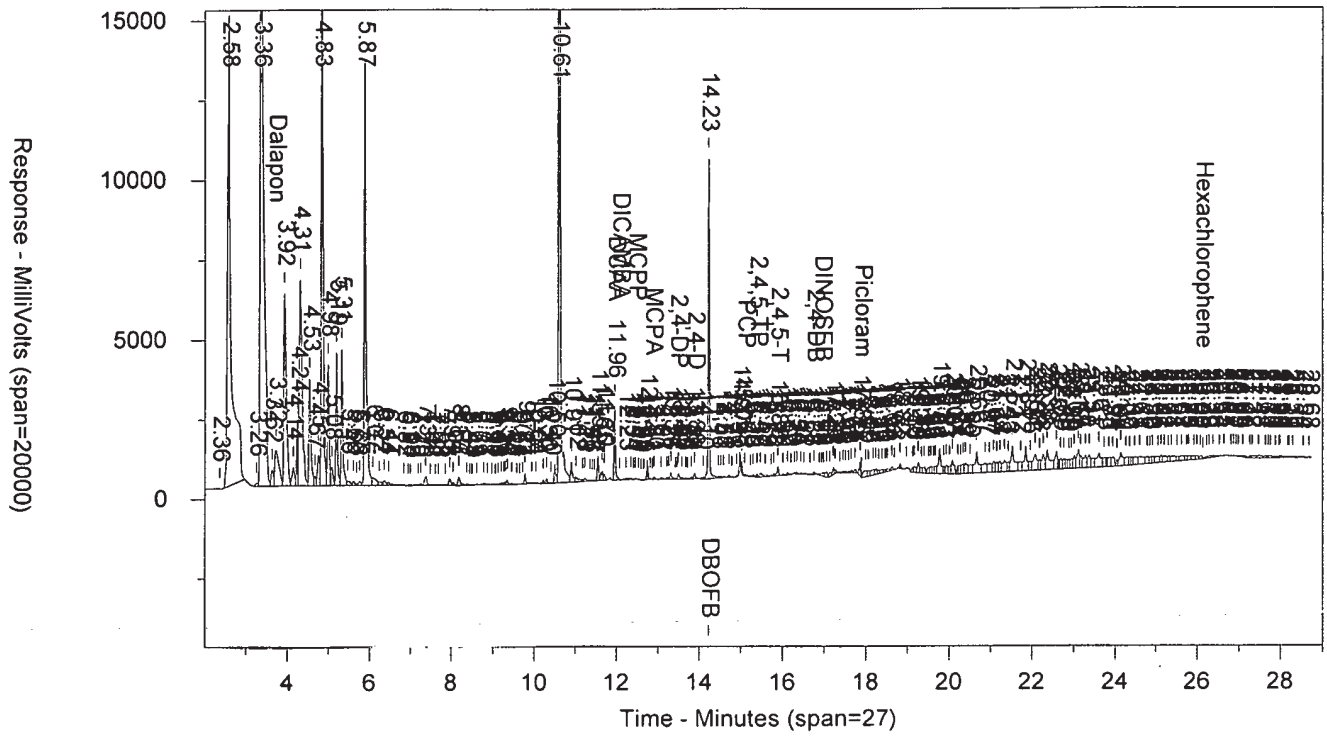

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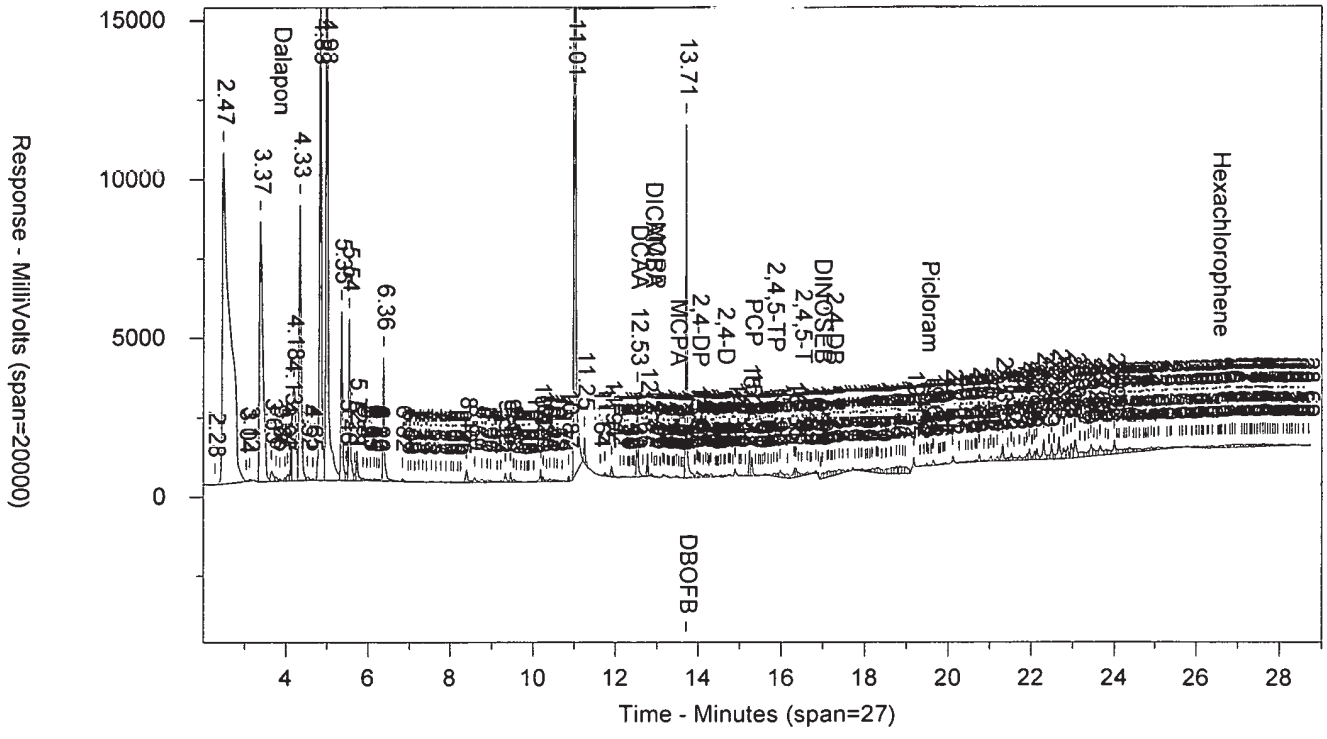

Standards Data

Herbicides

Eurofins Lancaster Laboratories

CHROM PERFECT SEQUENCE FILE

Sequence File: \\Uslan-chromperfect\chromperfect-data\Dept-24\Active\CP15\15herb18289001.seq

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Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15

Number of Entries: 121

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	1828899999	
2 CONDITIONER	2	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	
3 CONDITIONER	3	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	
4 CONDITIONER	4	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	
5 CONDITIONER	5	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	
6 CONDITIONER	6	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	
7 HIBLKX1824B	7	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828899999	10407
8 HERB11824E	8	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	1	1828899999	10407
9 HERB21824E	9	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	2	1828899999	10407
10 HERB31824F	10	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	3	1828899999	10407
11 HERB41824E	11	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	4	1828899999	10407
12 HERB51824E	12	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	5	1828899999	10407
13 HERB61824E	13	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	6	1828899999	10407
14 MDHEX1824E	14	ICAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	10407
15 ICHBX1824I	15	CCAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	10407
16 ICHBX1824J	16	CCAL	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	10407
17 ICHBX1824K	17	CCAL	QU	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	10407
18 BLANKA 10/11/18 F	18	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
19 LCSA 10/11/18 F	19	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
20 LCSDA 10/11/18 F	20	LCSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
21 9837352 F	21	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
22 9837355 F	22	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
23 9839091 F	23	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
24 9839963 F	24	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
25 9839966 F	25	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
26 9839972 F	26	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
27 9839975 F	27	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
28 HERB31824F	28	CCAL	RS	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	10407
29 HIBLKX1824B	29	MISC	PL	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828899999	10407
30 9840525 F	30	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
31 9841760 F	31	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182840002A	00952
32 BLANKA 10/15/18 F	32	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
33 LCSA 10/15/18 F	33	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
34 LCSDA 10/15/18 F	34	LCSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
35 9845749 F	35	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
36 9841036 F	36	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
37 9841616 F	37	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
38 9842956 F	38	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
39 9842957 F	39	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
40 HERB31824F	40	CCAL	RT	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	10407
41 HIBLKX1824B	41	MISC	PM	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828899999	10407
42 9842958 F	42	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
43 9842959 F	43	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
44 9842960 F	44	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
45 9842961 F	45	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
46 9842962 F	46	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
47 9842963 F	47	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
48 9842964 F	48	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
49 9842965 F	49	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
50 9842966 F	50	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952

Eurofins Lancaster Laboratories

CHROM PERFECT SEQUENCE FILE

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Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15

Number of Entries: 121

Samplename	VP	Code	ID	Method	Samp Amt	DF	Int Std	C	Batch Number	Analysis
51 9842967 F	51	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182850037A	00952
52 HERB31824F	52	CCAL	RU	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	10407
53 HIBLKX1824B	53	MISC	PN	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828899999	10407
54 BLANKA 10/15/18 F	54	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
55 LCSA 10/15/18 F	55	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
56 LCSDA 10/15/18 F	56	LCSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
57 9842968 F	57	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
58 9842969 F	58	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
59 9842970 F	59	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
60 9843575 F	60	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
61 9843764 F	61	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
62 9845665 F	62	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
63 9845668 F	63	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182880009A	00952
64 HERB31824F	64	CCAL	RV	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828899999	10407
65 HIBLKX1824B	65	MISC	PO	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828899999	10407
66 BLANKA 10/16/18 F	66	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
67 LCSA 10/16/18 F	67	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
68 LCSDA 10/16/18 F	68	LCSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
69 9848769 F	69	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
70 9848772 F	70	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
71 9848775 F	71	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
72 9848778 F	72	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
73 9848781 F	73	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
74 9848784 F	74	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
75 9848787 F	75	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
76 HERB31824F	76	CCAL	RW	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828999999	10407
77 HIBLKX1824B	77	MISC	PP	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828999999	10407
78 9848790 F	78	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
79 9850910 F	79	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
80 9850913 F	80	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
81 9850916 F	81	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
82 9850919 F	82	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
83 9850922 F	83	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
84 9850925 F	84	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
85 9850928 F	85	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
86 9850931 F	86	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
87 9850934 F	87	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
88 HERB31824F	88	CCAL	RX	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828999999	10407
89 HIBLKX1824B	89	MISC	PQ	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828999999	10407
90 9850937 F	90	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
91 9850940 F	91	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
92 9850943 F	92	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	50	10	1	0	182890020A	00952
93 BLANKA 10/11/18 F	93	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	182840025A	10407
94 LCSA 10/11/18 F	94	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	182840025A	10407
95 LCSDA 10/11/18 F	95	LCSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	182840025A	10407
96 9840984 F	96	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	975	10	1	0	182840025A	10407
97 9840985 F	97	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	951	10	1	0	182840025A	10407
98 9840986 F	98	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	789	10	1	0	182840025A	10407
99 HERB31824F	99	CCAL	RY	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828999999	10407
100 HIBLKX1824B	100	MISC	PR	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828999999	10407

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CHROM PERFECT SEQUENCE FILE

Sequence File: \\Uslan-chromperfect\chromperfect-data\Dept-24\Active\CP15\15herb18289001.seq

Chromatography Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15

Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15

Number of Entries: 121

Samplename	VP	Code	ID	Method	Samp Amt	DF	Int Std	C	Batch Number	Analysis
101 BLANKA 10/15/18 F	101	BLK	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	182880008A	10407
102 LCSA 10/15/18 F	102	LCS	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	182880008A	10407
103 LCSDA 10/15/18 F	103	LCSD	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	182880008A	10407
104 9843830 F	104	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1061	10	1	0	182880008A	10407
105 9843831 F	105	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1062	10	1	0	182880008A	10407
106 9843832 F	106	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1062	10	1	0	182880008A	10407
107 9843833 F	107	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1063	10	1	0	182880008A	10407
108 9843834 F	108	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1061	10	1	0	182880008A	10407
109 9843835 F	109	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1049	10	1	0	182880008A	10407
110 9843836 F	110	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1050	10	1	0	182880008A	10407
111 HERB31824F	111	CCAL	RZ	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828999999	10407
112 HIBLKX1824B	112	MISC	PS	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828999999	10407
113 9843837 F	113	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1062	10	1	0	182880008A	10407
114 9843845 F	114	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1047	10	1	0	182880008A	10407
115 9843846 F	115	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	964	10	1	0	182880008A	10407
116 9843847 F	116	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	1062	10	1	0	182880008A	10407
117 9847972 F	117	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	955	10	1	0	182880008A	10407
118 9847973 F	118	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	972	10	1	0	182880008A	10407
119 9849840 F	119	T	AB	EPT-24\ACTIVE\CP15\15HERB.MET	977	10	1	0	182880008A	10407
120 HERB31824F	120	CCAL	SA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1828999999	10407
121 HIBLKX1824B	121	MISC	PT	EPT-24\ACTIVE\CP15\15HERB.MET	1000	10	1	0	1828999999	10407

MW 15249 10/16/18

Heather M. Miller
Chemist

Set-up by: OCT 17 2018 Date: _____

Eurofins Lancaster Laboratories

CHROM PERFECT SEQUENCE FILE

Sequence File: \\Uslan-chromperfect\chromperfect-data\Dept-24\Active\CP15\15herb18289003.seq

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Method Directory: \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP15

Number of Entries: 48

	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	1829599999	
2	CONDITIONER	2	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1829599999	
3	CONDITIONER	3	MISC	AA	EPT-24\ACTIVE\CP15\15HERB.MET	1	1	1	0	1829599999	
4	HERB31824F	4	CCAL	TB	15HERB.MET	1	1	1	0	1829599999	10407
5	HIBLKX1824B	5	MISC	QQ	15HERB.MET	1000	10	1	0	1829599999	10407
6	BLANKA 10/4/18 RI F	6	BLK	AB	15HERB.MET	1000	10	1	0	182760041A	
7	BLANKB 10/4/18 RI F	7	BLK	AB	15HERB.MET	1000	10	1	0	182760041A	
8	LLOQ 10/4/18 RI F	8	CRDL	AB	15HERB.MET	1000	10	1	0	182760041A	
9	LOD1 10/4/18 RI F	9	CRDL	AB	15HERB.MET	1000	10	1	0	182760041A	
10	LOD2 10/4/18 RI F	10	CRDL	AB	15HERB.MET	1000	10	1	0	182760041A	
11	LOD3 10/4/18 RI F	11	CRDL	AB	15HERB.MET	1000	10	1	0	182760041A	
12	LOD4 10/4/18 RI F	12	CRDL	AB	15HERB.MET	1000	10	1	0	182760041A	
13	MDLV1 10/4/18 RI F	13	MDL	AB	15HERB.MET	1000	10	1	0	182760041A	
14	MDLV2 10/4/18 RI F	14	MDL	AB	15HERB.MET	1000	10	1	0	182760041A	
15	MDLV3 10/4/18 RI F	15	MDL	AB	15HERB.MET	1000	10	1	0	182760041A	
16	HERB31824F	16	CCAL	TC	15HERB.MET	1	1	1	0	1829599999	10407
17	HIBLKX1824B	17	MISC	QR	15HERB.MET	1000	10	1	0	1829599999	10407
18	BLANKA 10/22/18 F	18	BLK	AB	15HERB.MET	30	10	1	0	182950018A	10401
19	LCSA 10/22/18 F	19	LCS	AB	15HERB.MET	30	10	1	0	182950018A	10401
20	9860062 F	20	T	AB	15HERB.MET	30.19	10	1	0	182950018A	10401
21	9860063 F	21	T	AB	15HERB.MET	30.1	10	1	0	182950018A	10401
22	9860064 F	22	T	AB	15HERB.MET	30.2	10	1	0	182950018A	10401
23	9860065MS F	23	MS	AB	15HERB.MET	30.41	10	1	0	182950018A	10401
24	9860066MSD F	24	MSD	AB	15HERB.MET	30.01	10	1	0	182950018A	10401
25	9860068 F	25	T	AB	15HERB.MET	30.23	10	1	0	182950018A	10401
26	BLANKA 10/22/18 F	26	BLK	AB	15HERB.MET	1000	10	1	0	182950006A	10407
27	LCSA 10/22/18 F	27	LCS	AB	15HERB.MET	1000	10	1	0	182950006A	10407
28	HERB31824F	28	CCAL	TD	15HERB.MET	1	1	1	0	1829599999	10407
29	HIBLKX1824B	29	MISC	QS	15HERB.MET	1000	10	1	0	1829599999	10407
30	9859872 F	30	T	AB	15HERB.MET	1050	10	1	0	182950006A	10407
31	9859873 F	31	T	AB	15HERB.MET	1051	10	1	0	182950006A	10407
32	9859874 F	32	T	AB	15HERB.MET	1027	10	1	0	182950006A	10407
33	9859875 F	33	T	AB	15HERB.MET	1049	10	1	0	182950006A	10407
34	9860265 F	34	T	AB	15HERB.MET	1000	10	1	0	182950006A	10407
35	9860266MS F	35	MS	AB	15HERB.MET	940	10	1	0	182950006A	10407
36	9860267MSD F	36	MSD	AB	15HERB.MET	983	10	1	0	182950006A	10407
37	9860269 F	37	T	AB	15HERB.MET	962	10	1	0	182950006A	10407
38	9860270 F	38	T	AB	15HERB.MET	1031	10	1	0	182950006A	10407
39	9861917 F	39	T	AB	15HERB.MET	1000	10	1	0	182950006A	10407
40	HERB31824F	40	CCAL	TE	15HERB.MET	1	1	1	0	1829599999	10407
41	HIBLKX1824B	41	MISC	QT	15HERB.MET	1000	10	1	0	1829599999	10407
42	9861918 F	42	T	AB	15HERB.MET	968	10	1	0	182950006A	10407
43	9861919 F	43	T	AB	15HERB.MET	967	10	1	0	182950006A	10407
44	9861920 F	44	T	AB	15HERB.MET	953	10	1	0	182950006A	10407
45	9861921 F	45	T	AB	15HERB.MET	1063	10	1	0	182950006A	10407
46	9861922 F	46	T	AB	15HERB.MET	1038	10	1	0	182950006A	10407
47	HERB31824F	47	CCAL	TF	15HERB.MET	1	1	1	0	1829599999	10407
48	HIBLKX1824B	48	MISC	QU	15HERB.MET	1000	10	1	0	1829599999	10407

Set-up by: _____ Date: 10/24/18

HIBLKX1824B AAHIBLKAA MISC 1828899999 10407 SW-846 8151A

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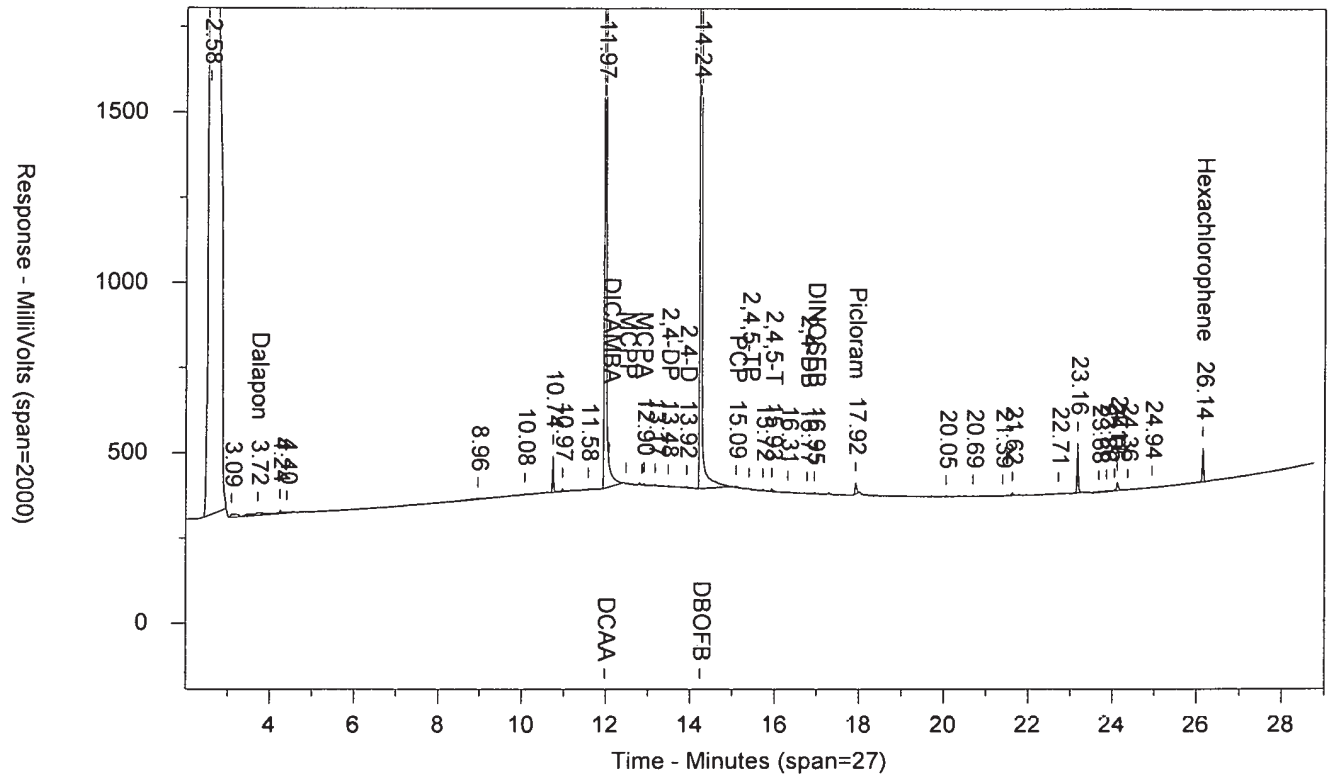

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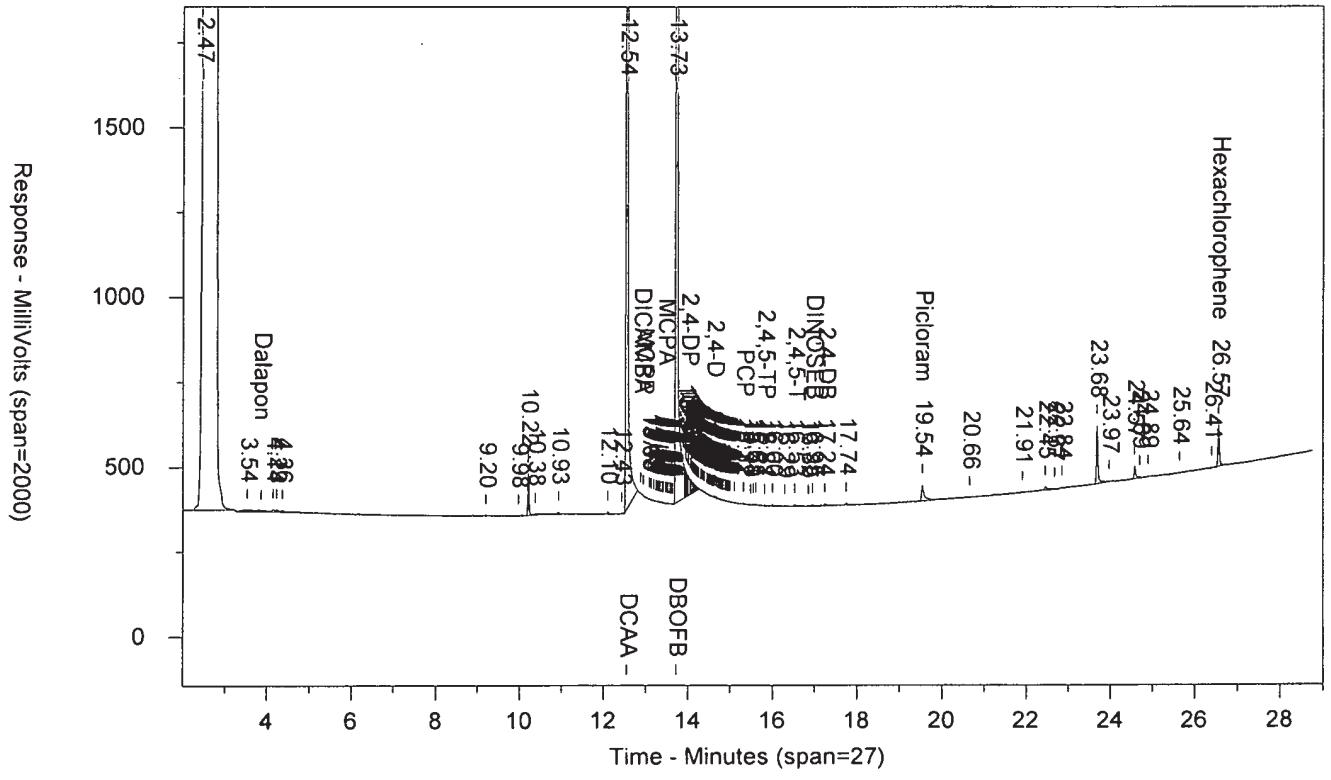

LANCASTER LABORATORIES

Sample Number: HIBLKX1824B AAHIBLKAA MISC 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 1:09:59 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.72	8060	.01	Dalapon		0		Dalapon
11.972	3926944	2.916	DCAA	12.543	3835087	2.503	DCAA
	0		MCPA	13.46	906	.106	MCPA
13.481	4091	.004	2,4-DP	14	62057	.049	2,4-DP
14.242	9718998	.001	DBOFB	13.725	10295030	.001	DBOFB
13.918	5620	.005	2,4-D	14.612	1218	.001	2,4-D
15.088	4764		PCP	15.316	3265		PCP
	0		2,4,5-TP	15.808	2287		2,4,5-TP
15.929	9613	.002	2,4,5-T	16.527	6116	.001	2,4,5-T
16.767	3122	.005	2,4-DB	17.239	6347	.009	2,4-DB
16.946	5591	.002	DINOSEB	16.952	5878	.002	DINOSEB
17.92	34643	.01	Picloram	19.538	48849	.01	Picloram
26.145	101725	.013	Hexachlorophene	26.568	121762	.014	Hexachlorophene

Files:
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Area File: 15herb18289001B.007.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/16/2018 1:38:47 PM
File Reported On: 10/16/2018 at 5:23:47 PM

HIBLKX1824B AAHIBLKAA MISC 1828899999 10407 SW-846 815

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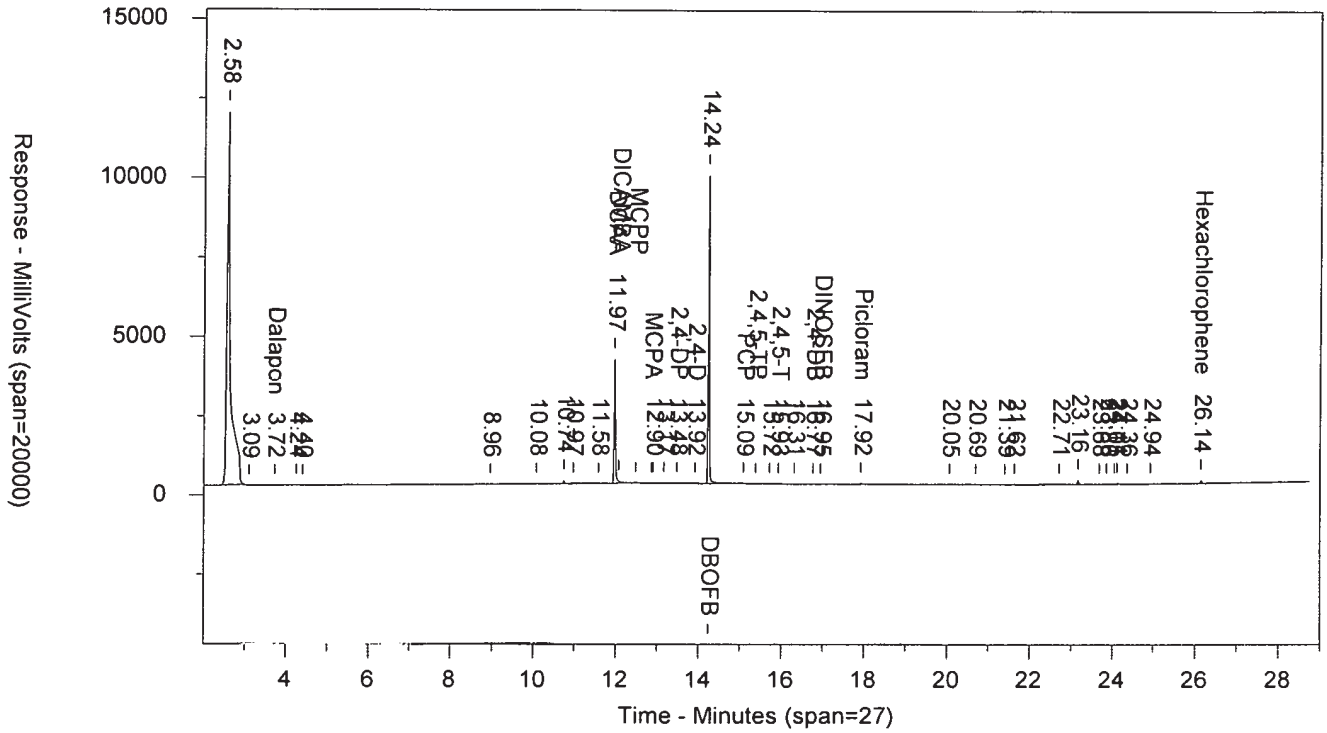

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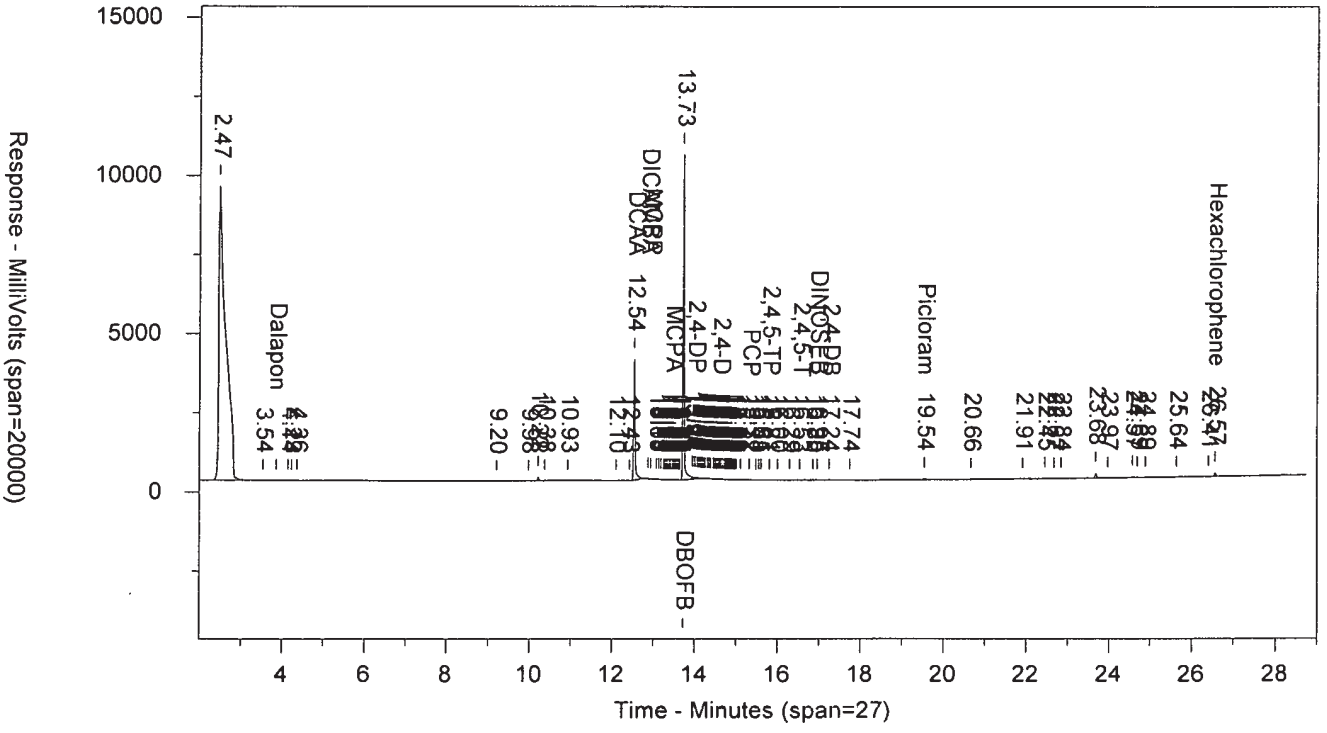

HERB11824E AAHERB1AA ICAL 1828899999 10407 SW-846 8151A

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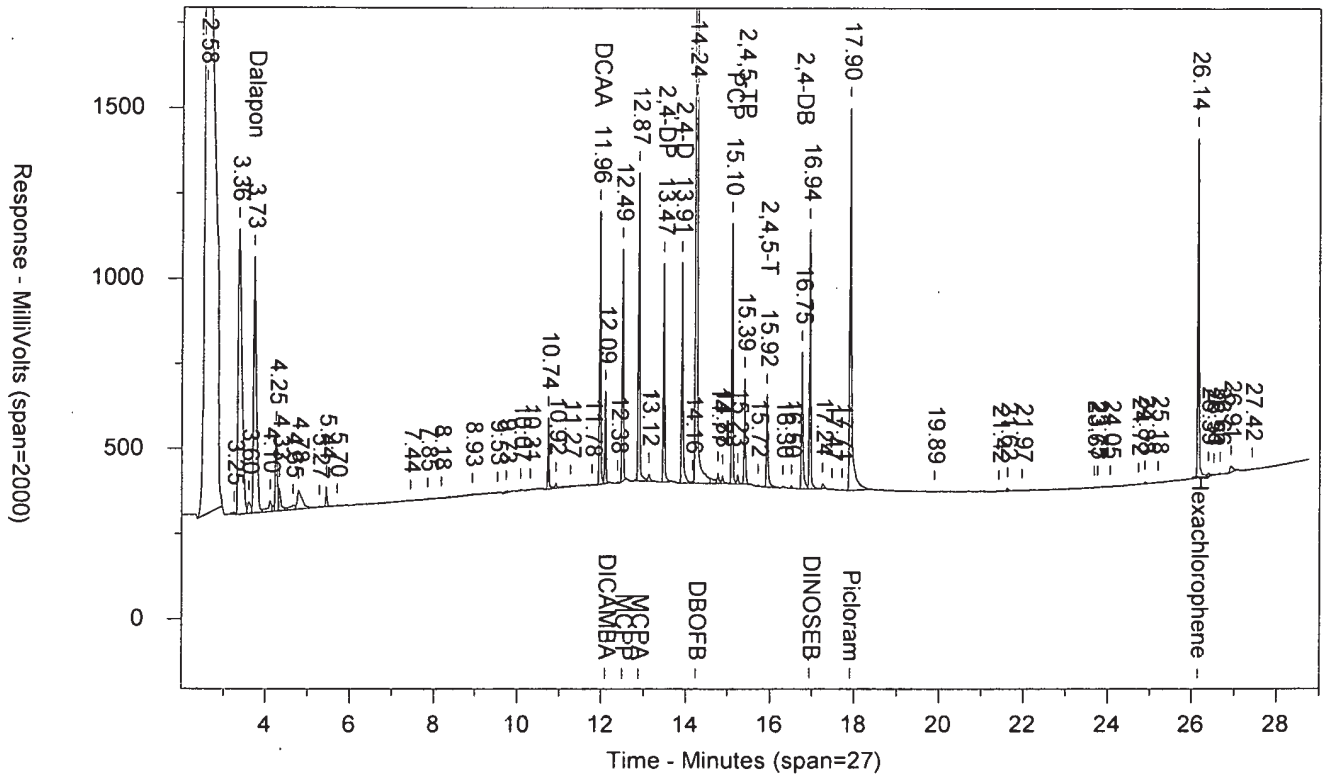

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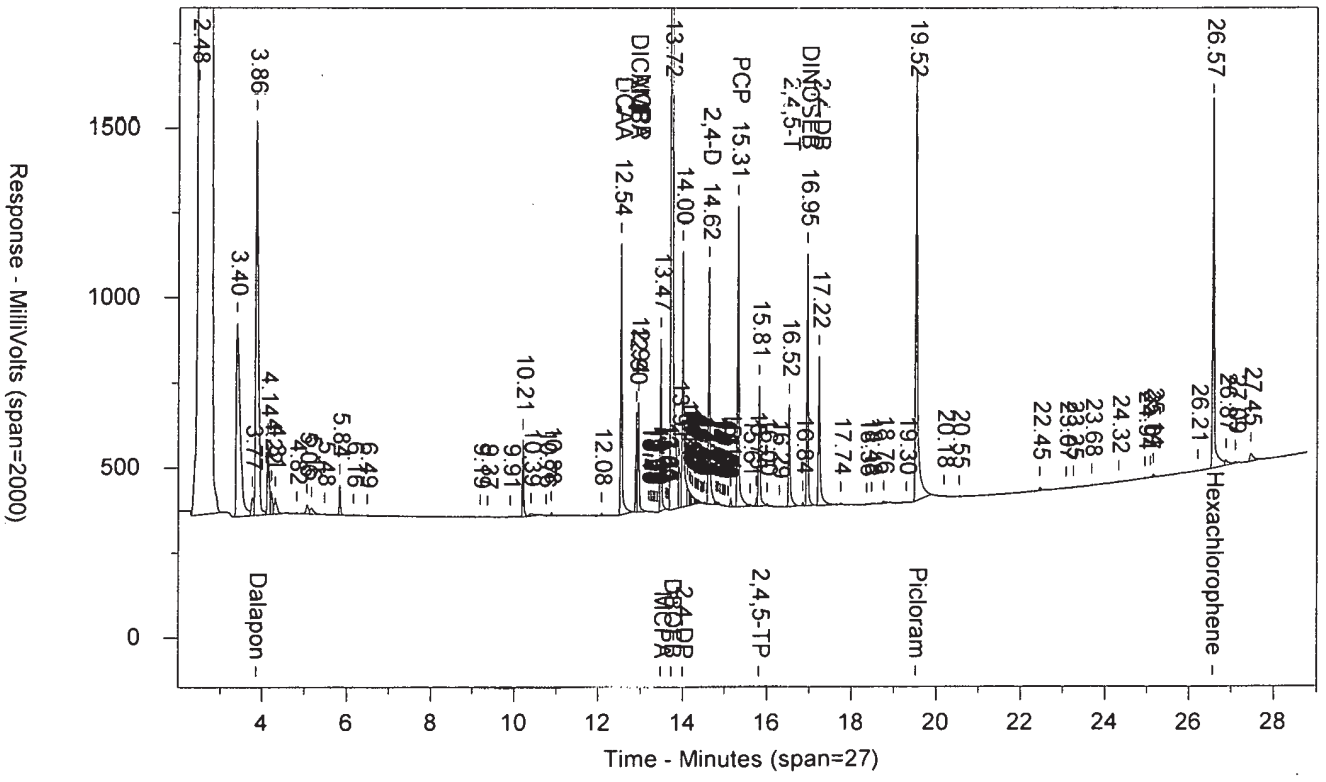

LANCASTER LABORATORIES

Sample Number: HERB11824E AAHERB1AA ICAL 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 1:42:56 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.725	755155	92.722	Dalapon	3.856	1162134	101.294	Dalapon
11.962	804441	60.696	DCAA	12.535	798999	52.184	DCAA
12.088	272186	5.087	DICAMBA	12.896	293908	4.476	DICAMBA
12.492	685157	8763.993	MCPP	12.944	322970	5231.355	MCPP
12.871	907307	9648.114	MCPA	13.47	508782	5980.061	MCPA
13.469	645809	64.32	2,4-DP	13.998	752068	59.717	2,4-DP
14.241	9564856	1	DBOFB	13.725	10286010	1	DBOFB
13.906	651216	63.132	2,4-D	14.623	696789	53.852	2,4-D
15.099	767055	4.816	PCP	15.315	886039	4.549	PCP
15.394	311303	5.737	2,4,5-TP	15.812	354061	5.43	2,4,5-TP
15.919	272999	6.196	2,4,5-T	16.516	301360	5.485	2,4,5-T
16.752	404850	67.536	2,4-DB	17.223	439161	59.488	2,4-DB
16.939	764710	26.33	DINOSEB	16.948	742627	26.582	DINOSEB
17.898	1124714	31.714	Picloram	19.519	1278283	26.252	Picloram
26.144	1000297	13.05	Hexachlorophene	26.568	1094590	12.949	Hexachlorophene

Files:
Area File: 15herb18289001.008.RAW
Area File: 15herb18289001B.008.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
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Format B: herw15.FMTA
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HERB11824E AAHERB1AA ICAL 1828899999 10407 SW-846 81

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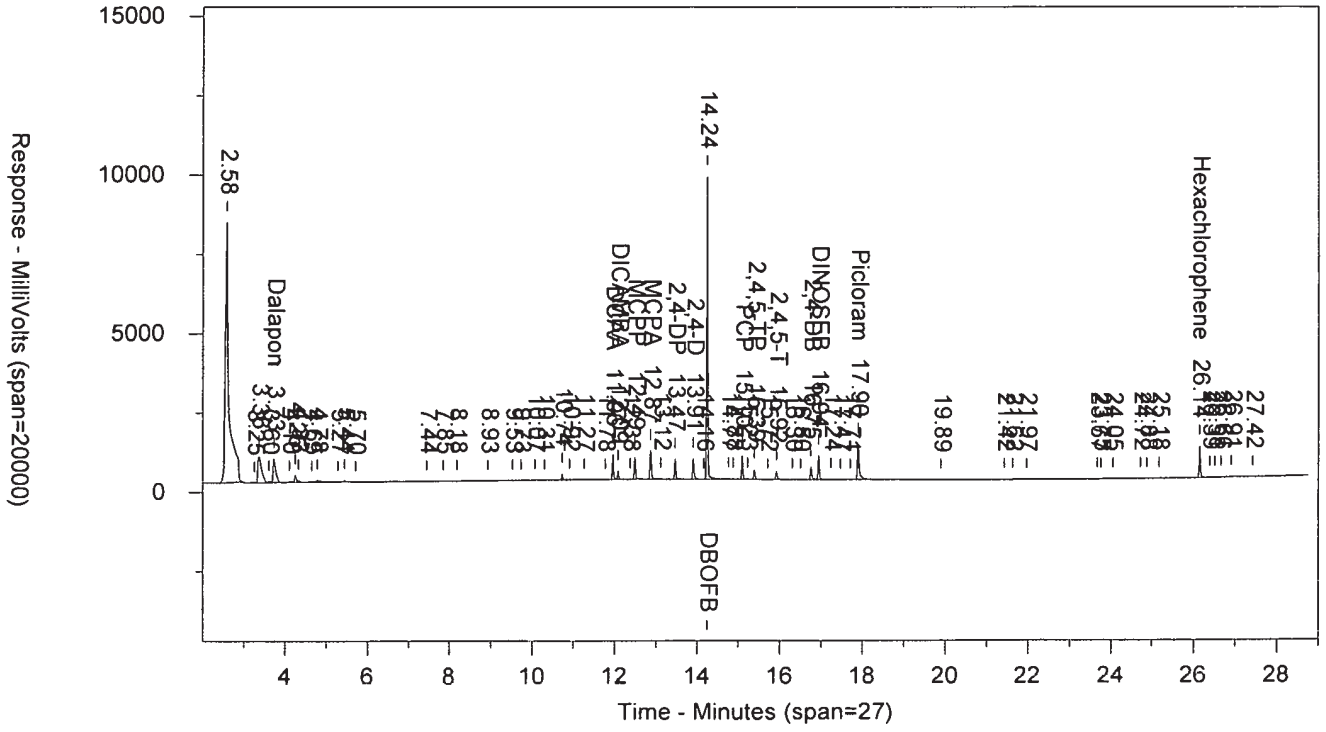

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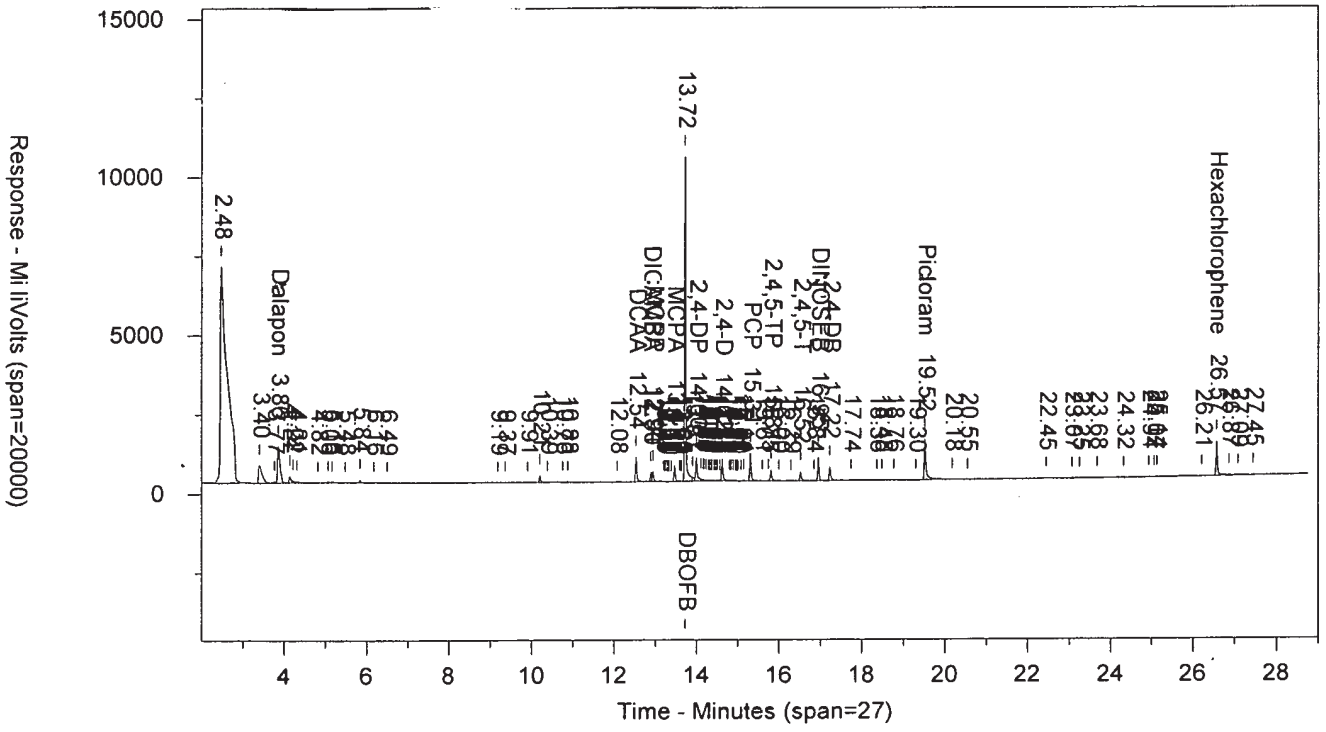

HERB21824E AAHERB2AA ICAL 1828899999 10407 SW-846 8151A

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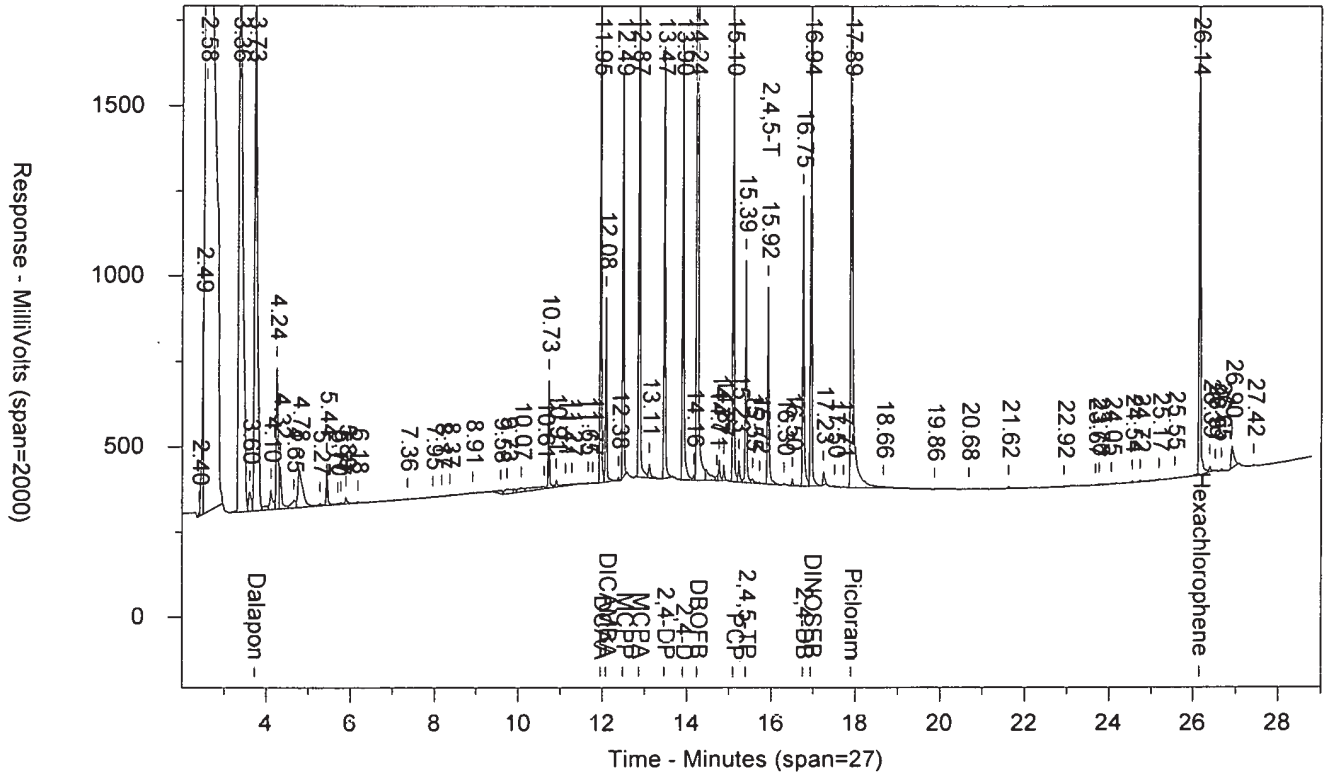

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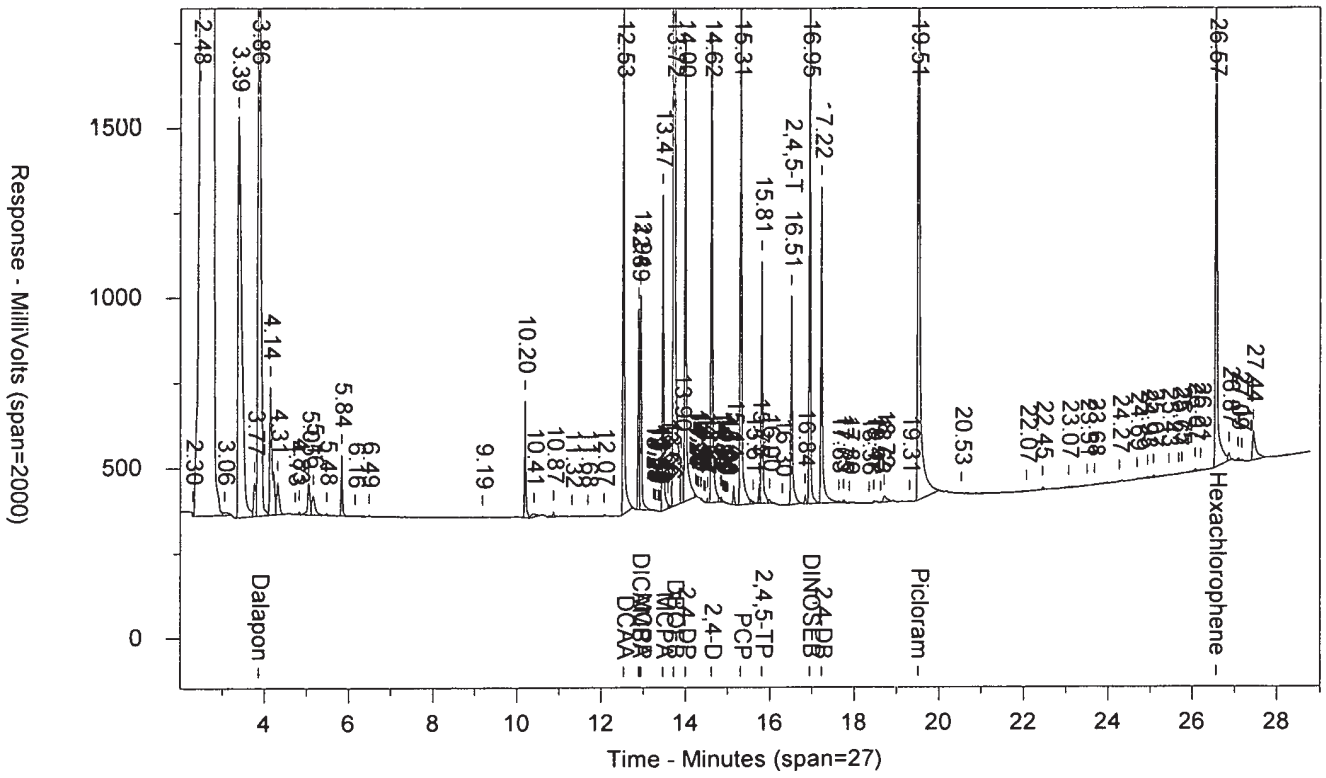

LANCASTER LABORATORIES

Sample Number: HERB21824E AAHERB2AA ICAL 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 2:15:56 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.727	1498846	185.773	Dalapon	3.858	2282077	200.62	Dalapon
11.954	1533074	110.808	DCAA	12.529	1531295	99.894	DCAA
12.081	541829	9.973	DICAMBA	12.89	591109	9.157	DICAMBA
12.487	1180608	14301.52	MCPP	12.941	631518	10224.13	MCPP
12.867	1436372	14058.4	MCPA	13.466	930449	10895.49	MCPA
13.465	1268866	119.556	2,4-DP	13.996	1362676	105.588	2,4-DP
14.241	9741266	1	DBOFB	13.725	10432730	1	DBOFB
13.904	1312857	114.066	2,4-D	14.619	1387643	100.553	2,4-D
15.098	1645327	10.139	PCP	15.313	1815519	9.358	PCP
15.393	653383	11.245	2,4,5-TP	15.809	711753	10.444	2,4,5-TP
15.916	580592	11.955	2,4,5-T	16.513	614397	10.578	2,4,5-T
16.749	854525	127.631	2,4-DB	17.222	933711	118.233	2,4-DB
16.937	1562994	52.493	DINOSEB	16.946	1555258	54.697	DINOSEB
17.895	2561862	64.36	Picloram	19.515	2764173	53.672	Picloram
26.143	2073407	27.917	Hexachlorophene	26.568	2167964	27.028	Hexachlorophene

Files:
Area File: 15herb18289001.009.RAW
Area File: 15herb18289001B.009.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/16/2018 2:44:47 PM
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HERB21824E AAHERB2AA ICAL 1828899999 10407 SW-846 815

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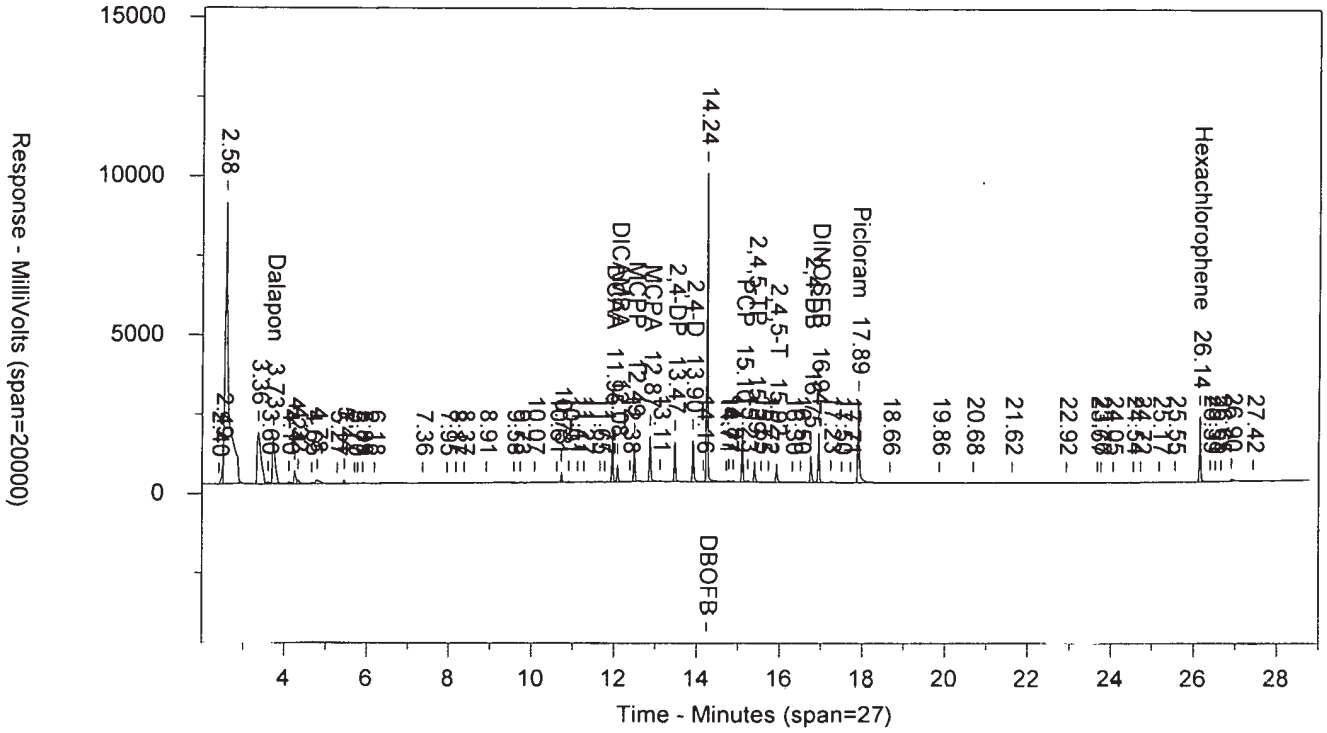

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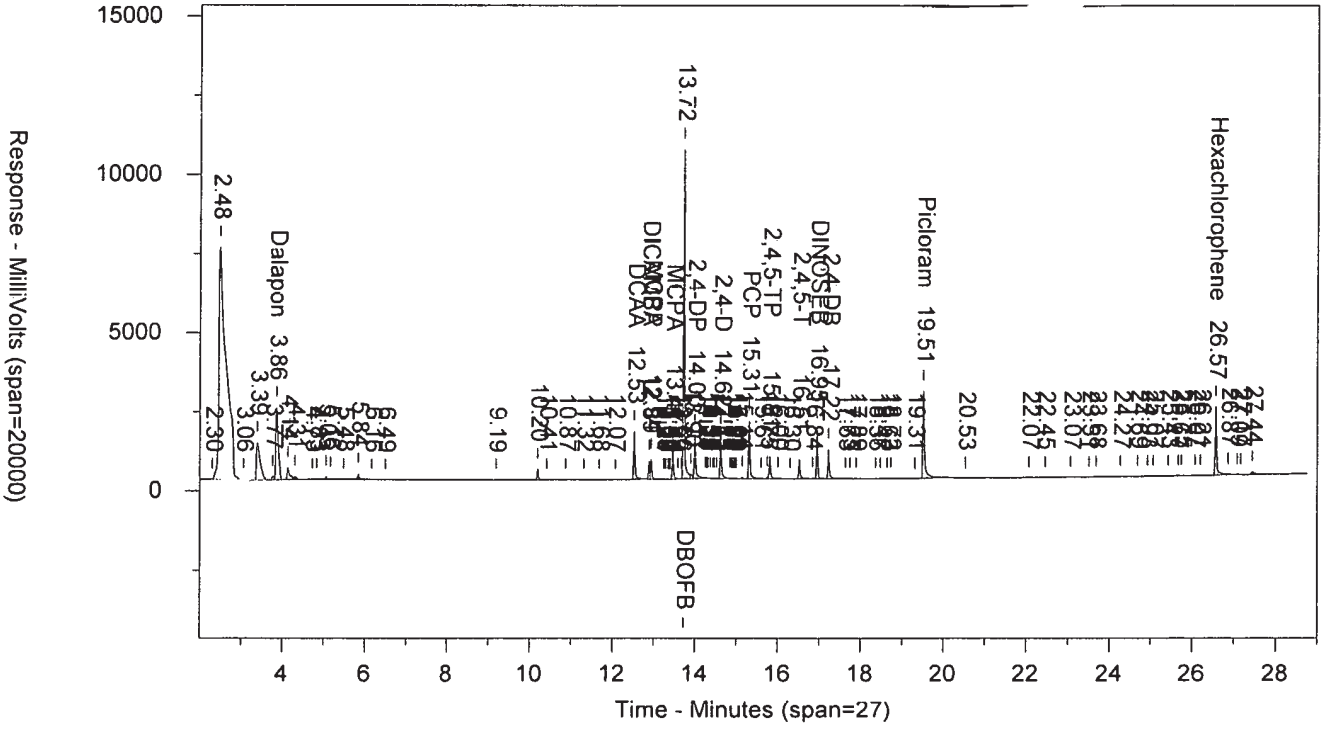

HERB31824F AAHERB3AA ICAL 1828899999 10407 SW-846 8151A

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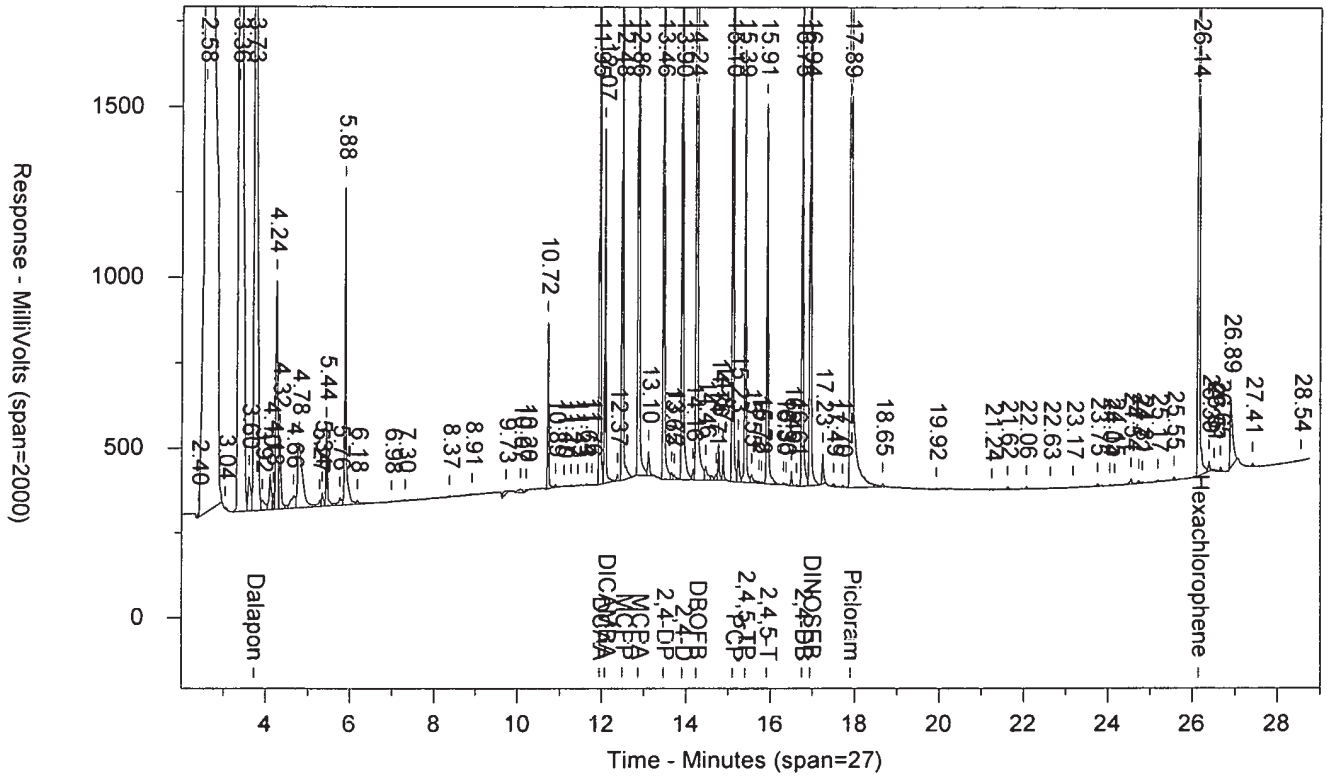

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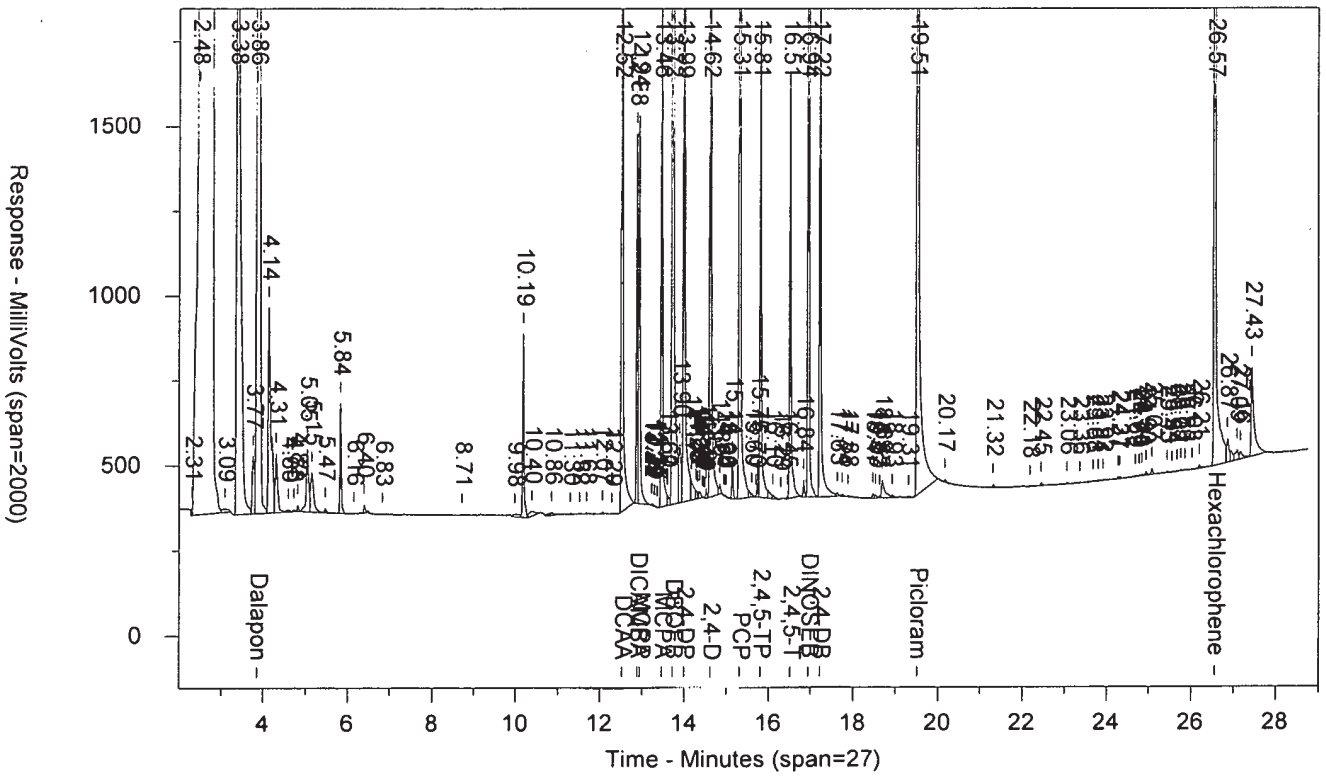

LANCASTER LABORATORIES

Sample Number: HERB31824F AAHERB3AA ICAL 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 2:48:52 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.726	2812007	380.999	Dalapon	3.857	4324336	398.773	Dalapon
11.945	2789518	211.409	DCAA	12.522	2813425	191.033	DCAA
12.073	1040332	20.448	DICAMBA	12.884	1091227	17.94	DICAMBA
12.482	1785405	22366.88	MCPP	12.938	1146270	19404.85	MCPP
12.863	2133723	21572.97	MCPA	13.463	1589762	19258.8	MCPA
13.461	2186261	213.195	2,4-DP	13.993	2447325	196.331	2,4-DP
14.24	9165383	1	DBOFB	13.724	10079030	1	DBOFB
13.901	2457664	211.883	2,4-D	14.617	2592333	187.528	2,4-D
15.096	3190505	20.758	PCP	15.31	3593114	19.392	PCP
15.391	1267679	22.256	2,4,5-TP	15.808	1405929	20.914	2,4,5-TP
15.913	1116130	22.988	2,4,5-T	16.512	1255163	21.692	2,4,5-T
16.747	1593508	234.212	2,4-DB	17.218	1775205	220.813	2,4-DB
16.936	2891301	103.167	DINOSEB	16.944	2869127	103.469	DINOSEB
17.891	5457509	133.115	Picloram	19.513	5827065	112.439	Picloram
26.143	4120545	62.732	Hexachlorophene	26.567	4267908	58.759	Hexachlorophene

Files:
Area File: 15herb18289001.010.RAW
Area File: 15herb18289001B.010.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/16/2018 3:17:42 PM
File Reported On: 10/16/2018 at 5:25:04 PM

HERB31824F AAHERB3AA ICAL 1828899999 10407 SW-846 815

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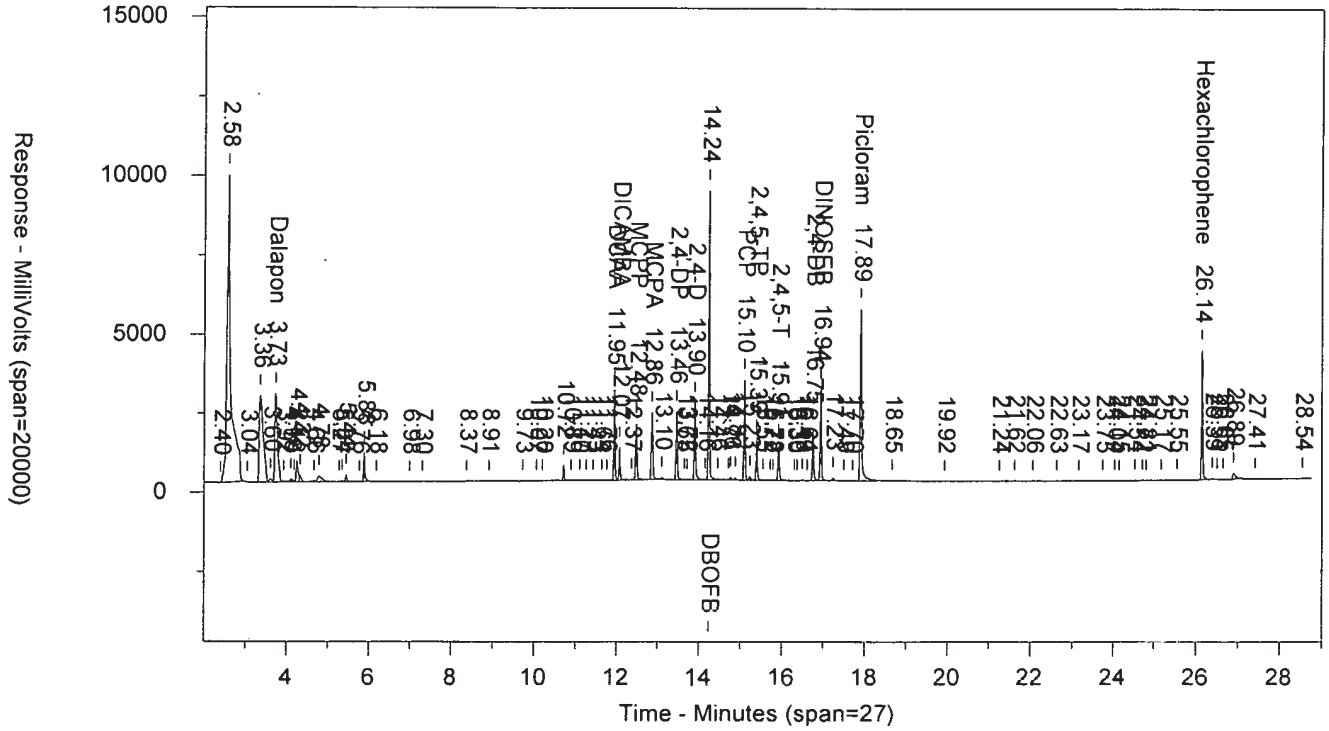

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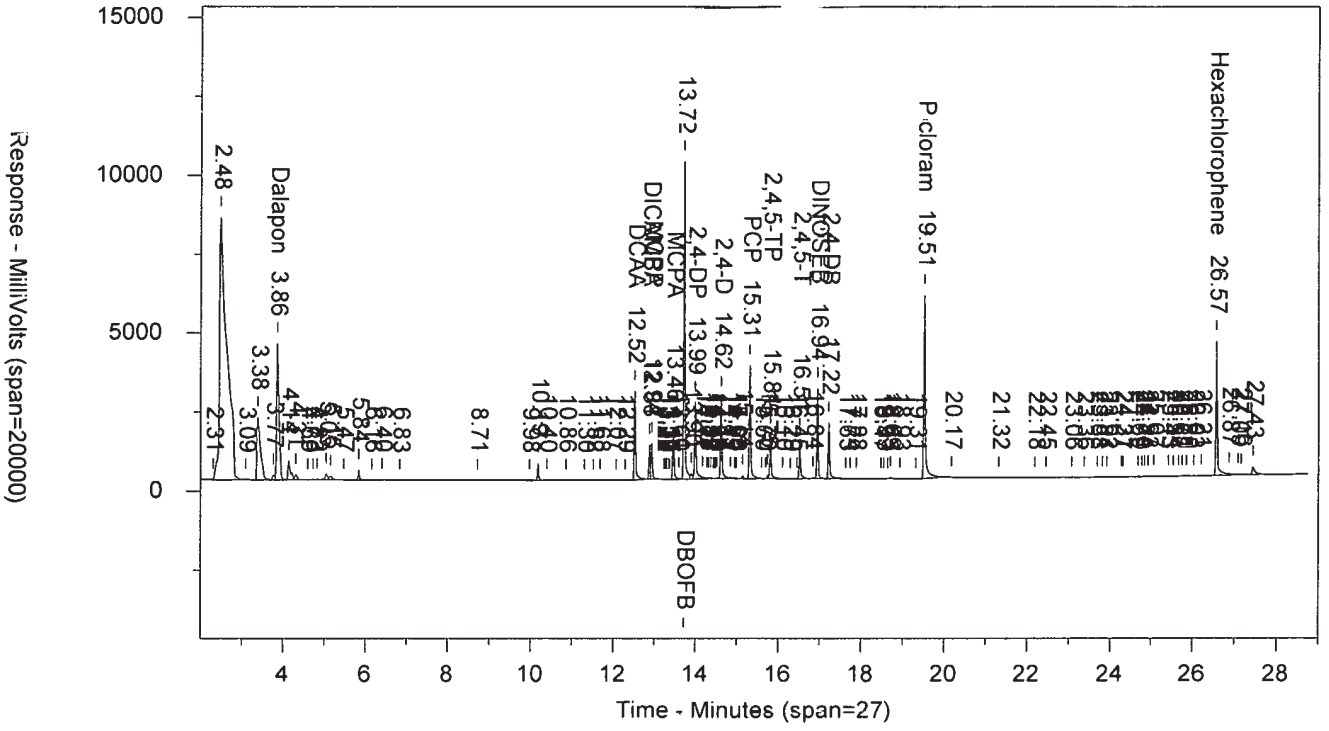

HERB41824E AAHERB4AA ICAL 1828899999 10407 SW-846 8151A

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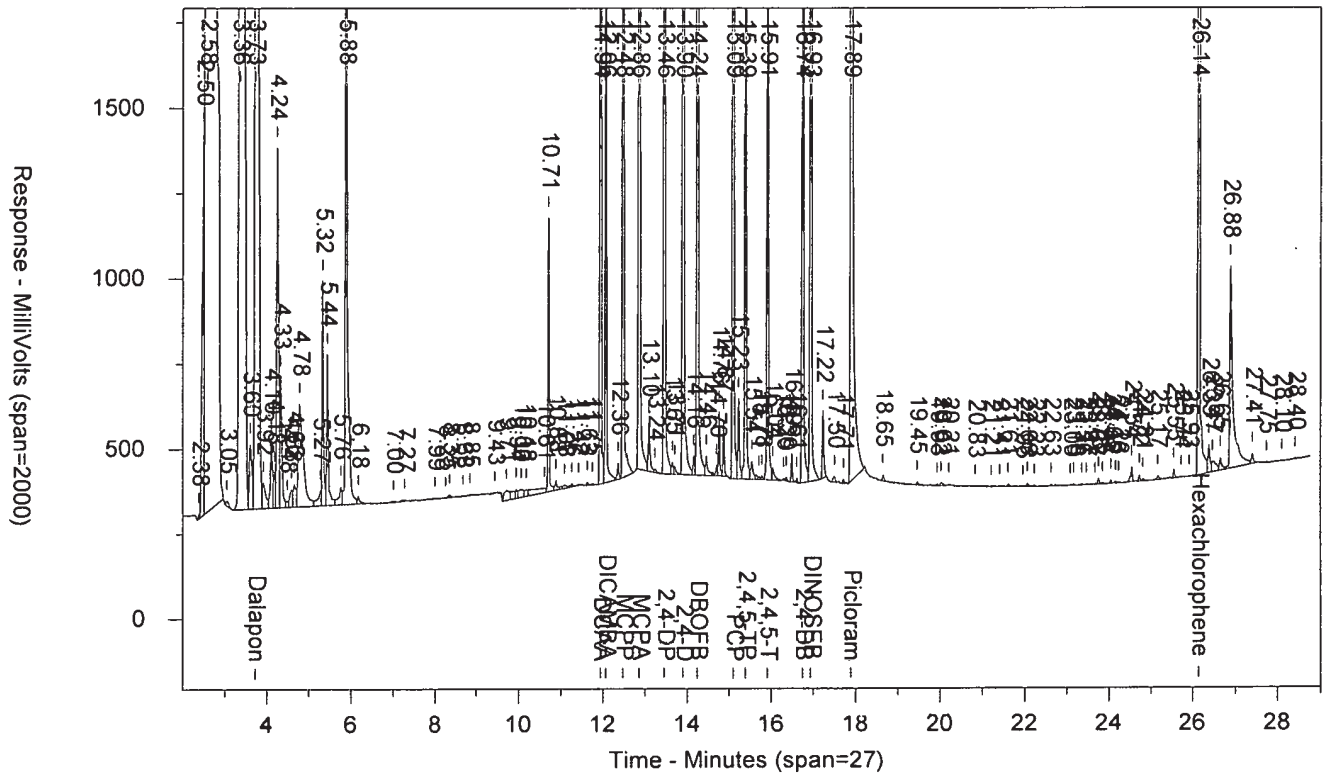

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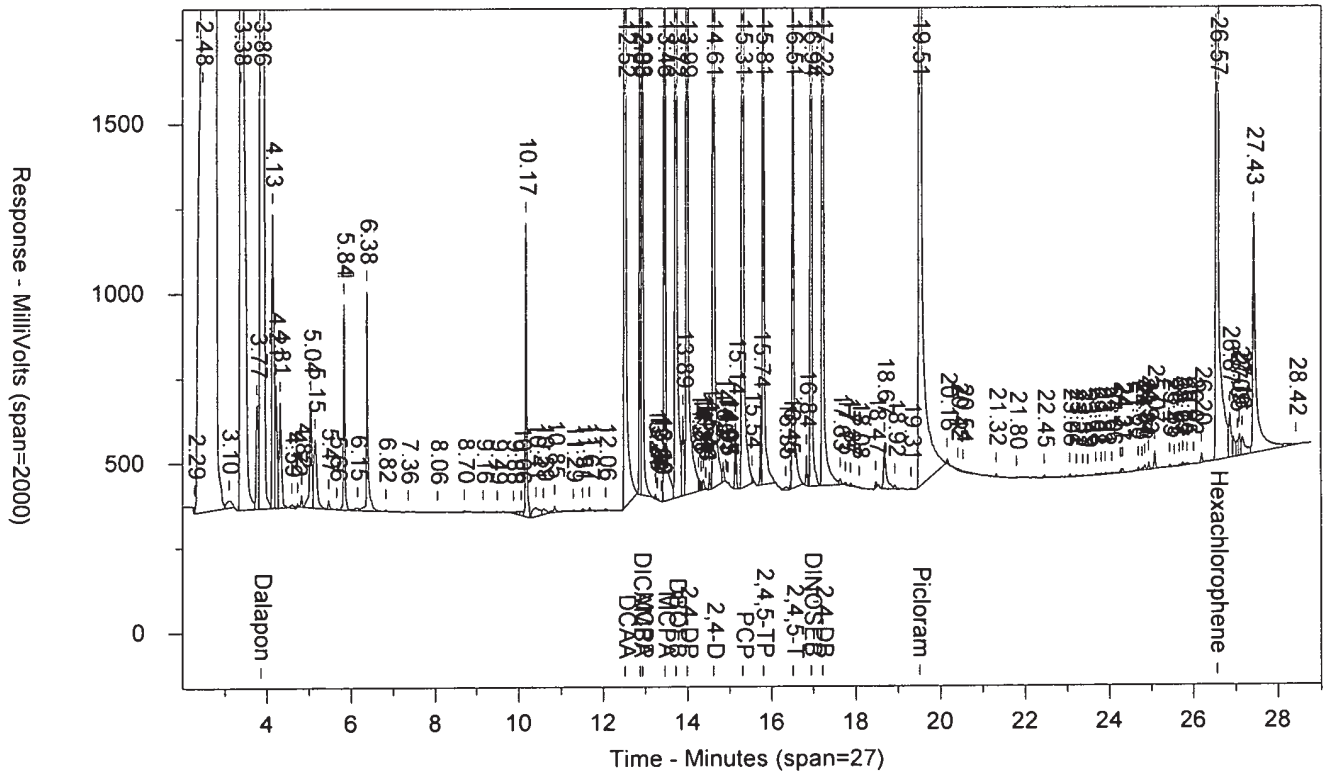

LANCASTER LABORATORIES

Sample Number: HERB41824E AAHERB4AA ICAL 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 3:21:56 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.726	5506521	754.126	Dalapon	3.857	8160843	806.165	Dalapon
11.938	5231489	390.886	DCAA	12.516	5335993	389.885	DCAA
12.065	1972919	38.7	DICAMBA	12.878	2126332	38.158	DICAMBA
12.478	2730670	33640.23	MCPP	12.935	2159782	39308.89	MCPP
12.863	3242869	32208.72	MCPA	13.462	2907062	37951.98	MCPA
13.457	4040723	386.3	2,4-DP	13.99	4612214	394.734	2,4-DP
14.24	9160429	1	DBOFB	13.723	9445321	1	DBOFB
13.898	4699900	381.141	2,4-D	14.614	4951007	370.888	2,4-D
15.094	6428180	41.293	PCP	15.309	7030460	40.744	PCP
15.389	2570553	43.158	2,4,5-TP	15.806	2671635	41.507	2,4,5-TP
15.911	2316848	45.073	2,4,5-T	16.51	2448981	43.498	2,4,5-T
16.744	3128267	429.971	2,4-DB	17.216	3378748	427.275	2,4-DB
16.932	5506872	195.442	DINOSEB	16.942	5474774	208.983	DINOSEB
17.889	10764370	236.843	Picloram	19.511	11793610	231.124	Picloram
26.142	8506119	137.158	Hexachlorophene	26.567	8185210	128.696	Hexachloropher

Files:
Area File: 15herb18289001.011.RAW
Area File: 15herb18289001B.011.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/16/2018 3:50:45 PM
File Reported On: 10/16/2018 at 5:25:26 PM

HERB41824E AAHERB4AA ICAL 1828899999 10407 SW-846 815

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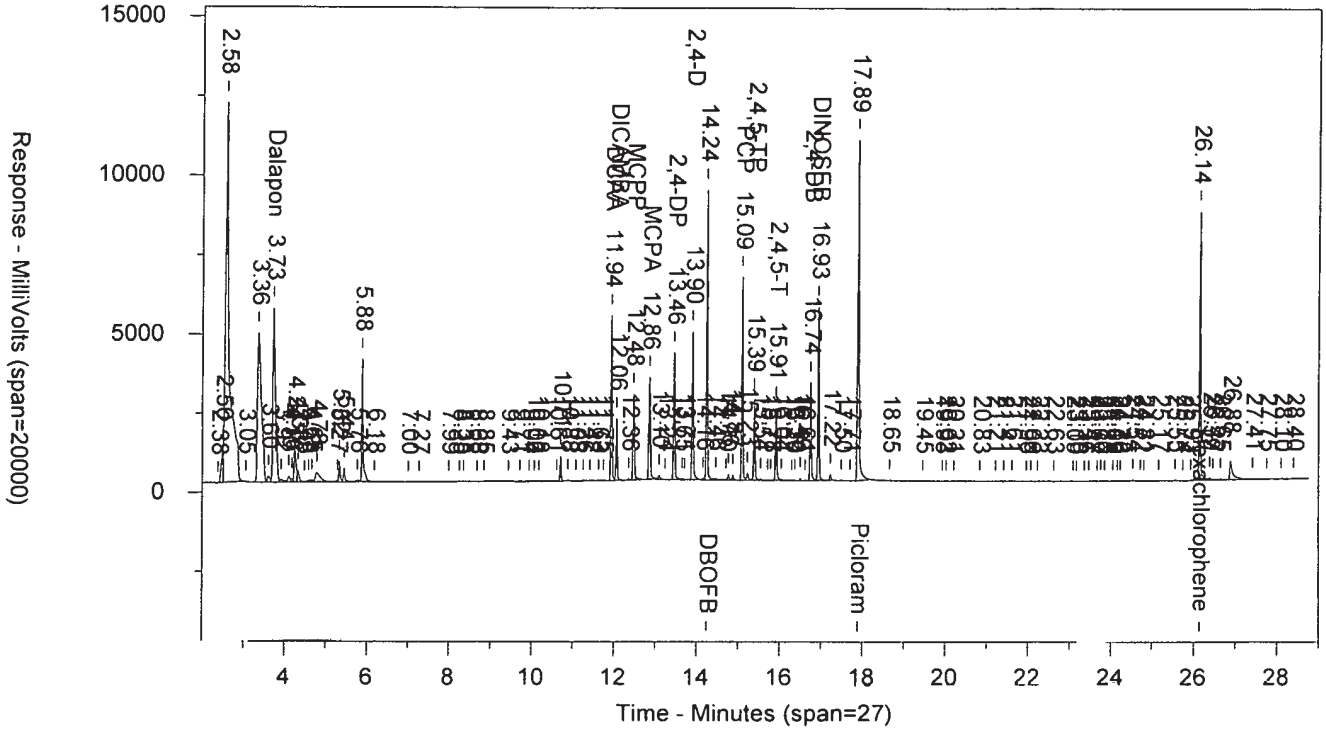

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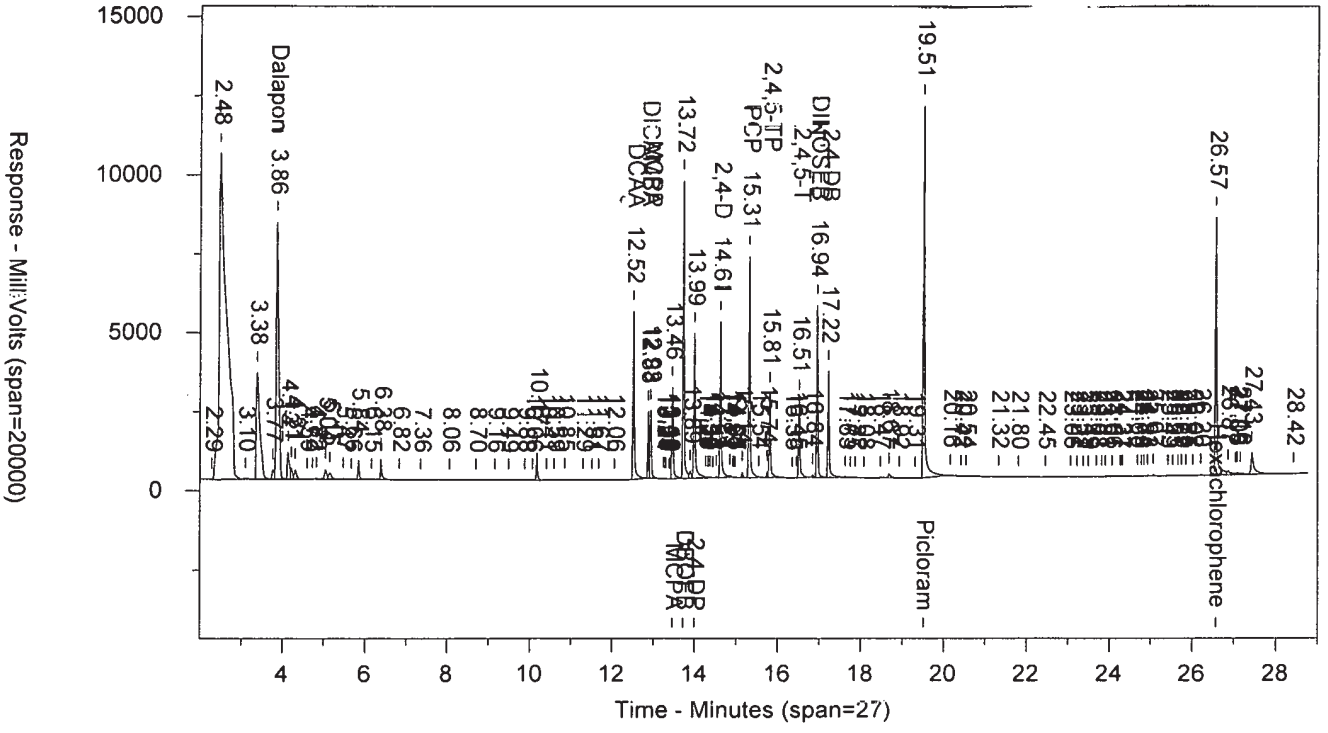

HERB51824E AAHERB5AA ICAL 1828899999 10407 SW-846 8151A

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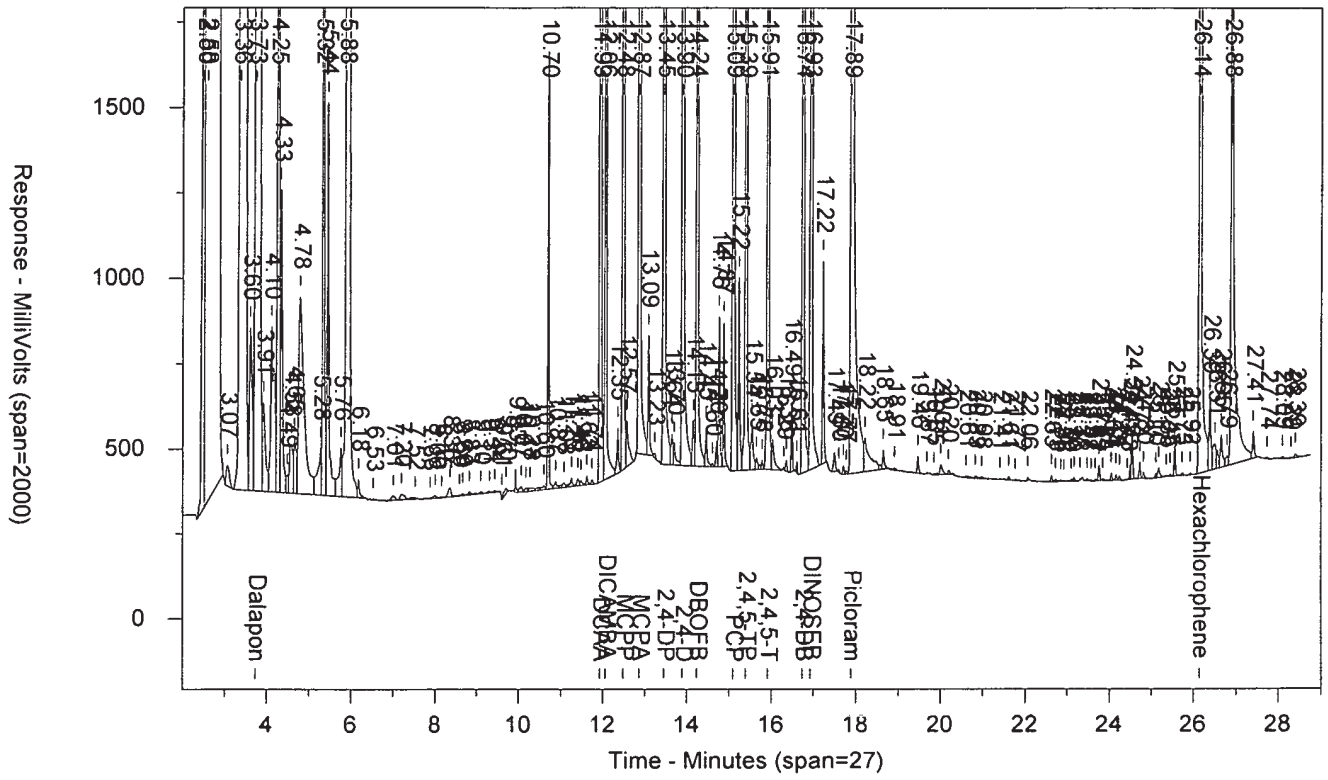

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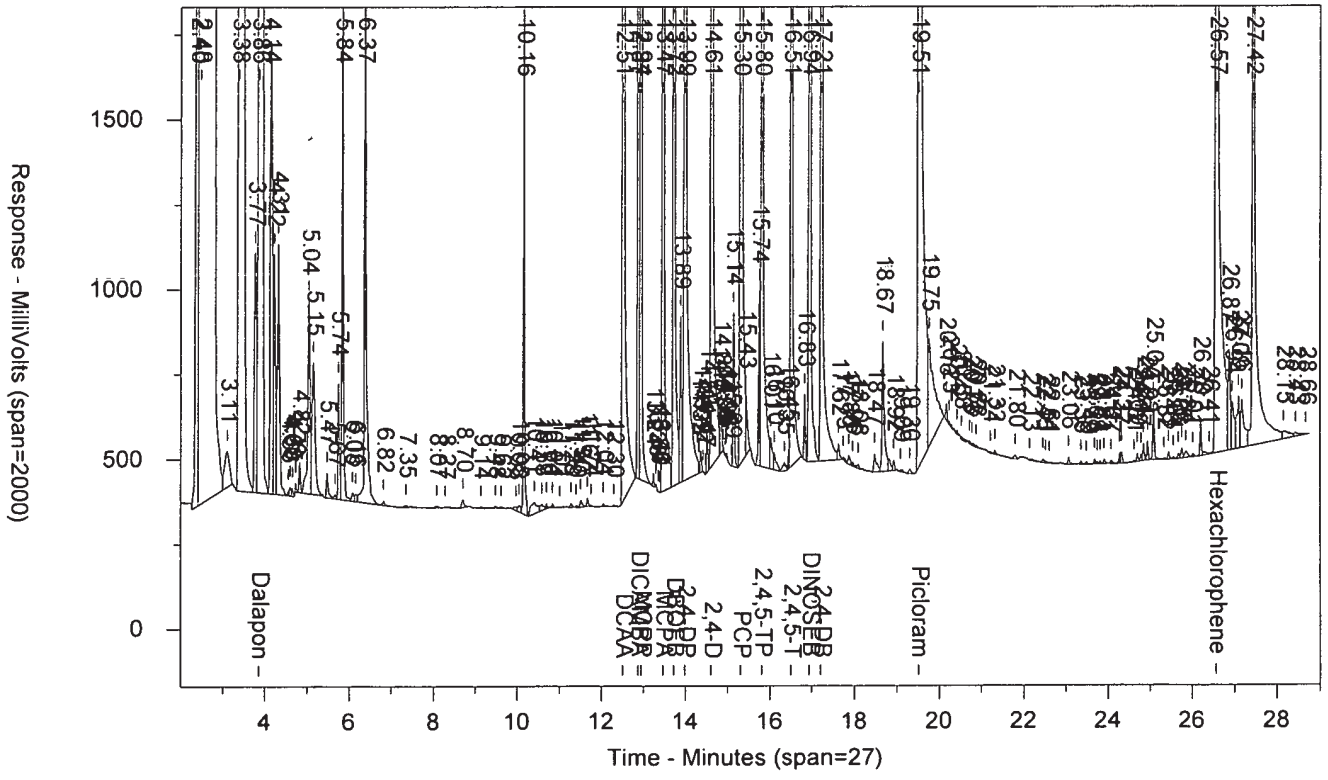

LANCASTER LABORATORIES

Sample Number: HERB51824E AAHERB5AA ICAL 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 3:54:53 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.729	14444630	2154.721	Dalapon	3.859	20788690	2110.173	Dalapon
11.93	12415620	985.828	DCAA	12.51	13629150	1025.123	DCAA
12.057	4972437	104.832	DICAMBA	12.873	5535133	103.484	DICAMBA
12.482	5347857	69614.54	MCPP	12.937	5527574	103310.7	MCPP
12.867	6385537	66856.58	MCPA	13.466	7268330	97158.65	MCPA
13.453	9405429	952.139	2,4-DP	13.985	10934520	954.676	2,4-DP
14.238	8586602	1	DBOFB	13.72	9202147	1	DBOFB
13.897	11556660	957.968	2,4-D	14.612	12821250	960.979	2,4-D
15.089	15973010	108.533	PCP	15.304	17662990	105.001	PCP
15.385	6598896	114.493	2,4,5-TP	15.804	6943007	108.813	2,4,5-TP
15.908	6263386	124.216	2,4,5-T	16.506	6537240	115.734	2,4,5-T
16.74	8361621	1172.564	2,4-DB	17.211	9236800	1159.773	2,4-DB
16.931	12999390	495.752	DINOSEB	16.938	13561130	525.706	DINOSEB
17.886	29352990	650.556	Picloram	19.508	31210590	606.605	Picloram
26.142	21216860	387.233	Hexachlorophene	26.566	22045100	381.884	Hexachloropher

Files:
Area File: 15herb18289001.012.RAW
Area File: 15herb18289001B.012.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/16/2018 4:23:42 PM
File Reported On: 10/16/2018 at 5:25:52 PM

HERB51824E AAHERB5AA ICAL 1828899999 10407 SW-846 815

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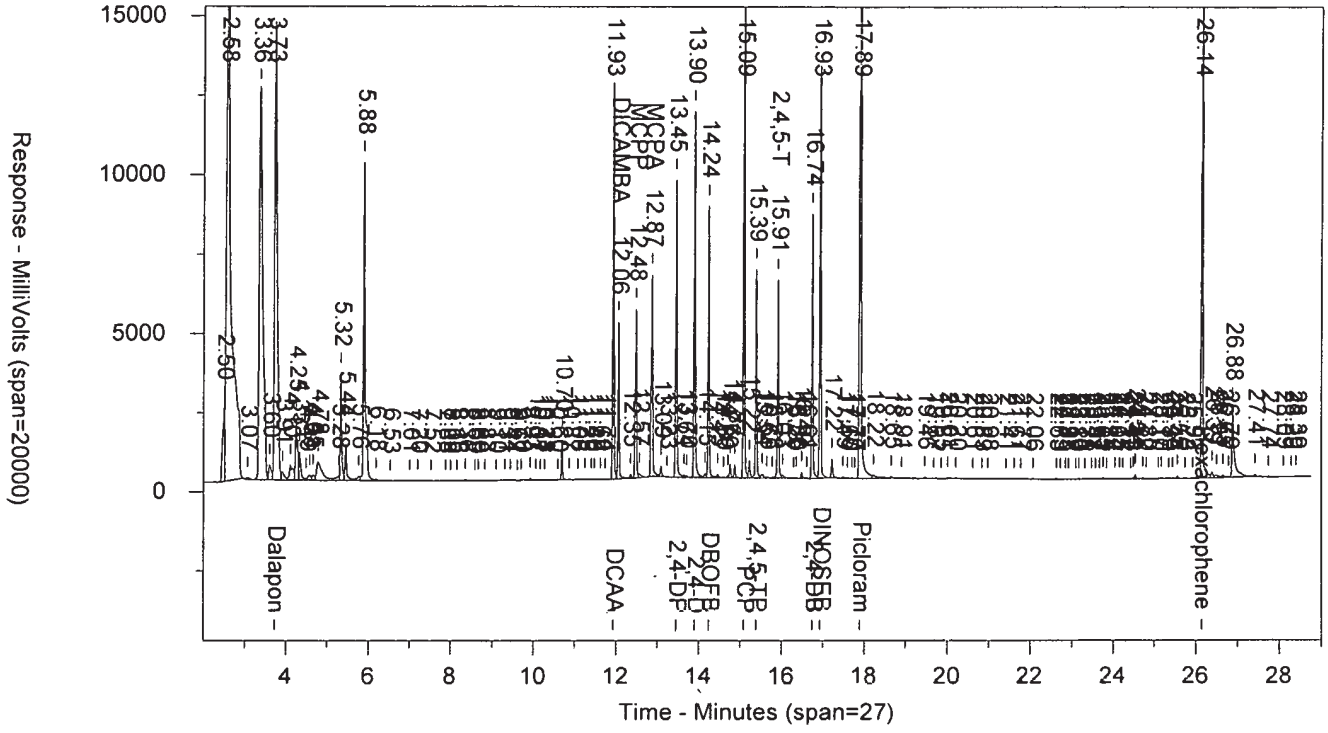

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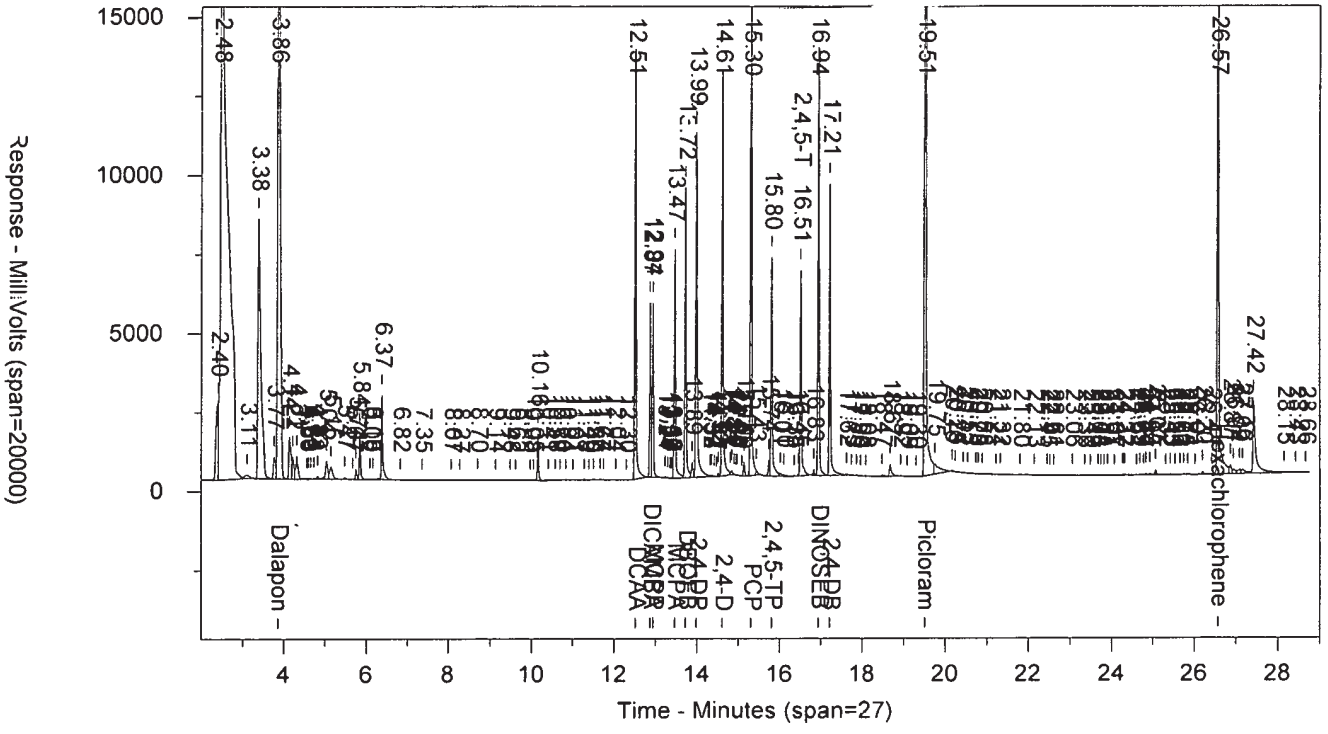

HERB61824E AAHERB6AA ICAL 1828899999 10407 SW-846 8151A

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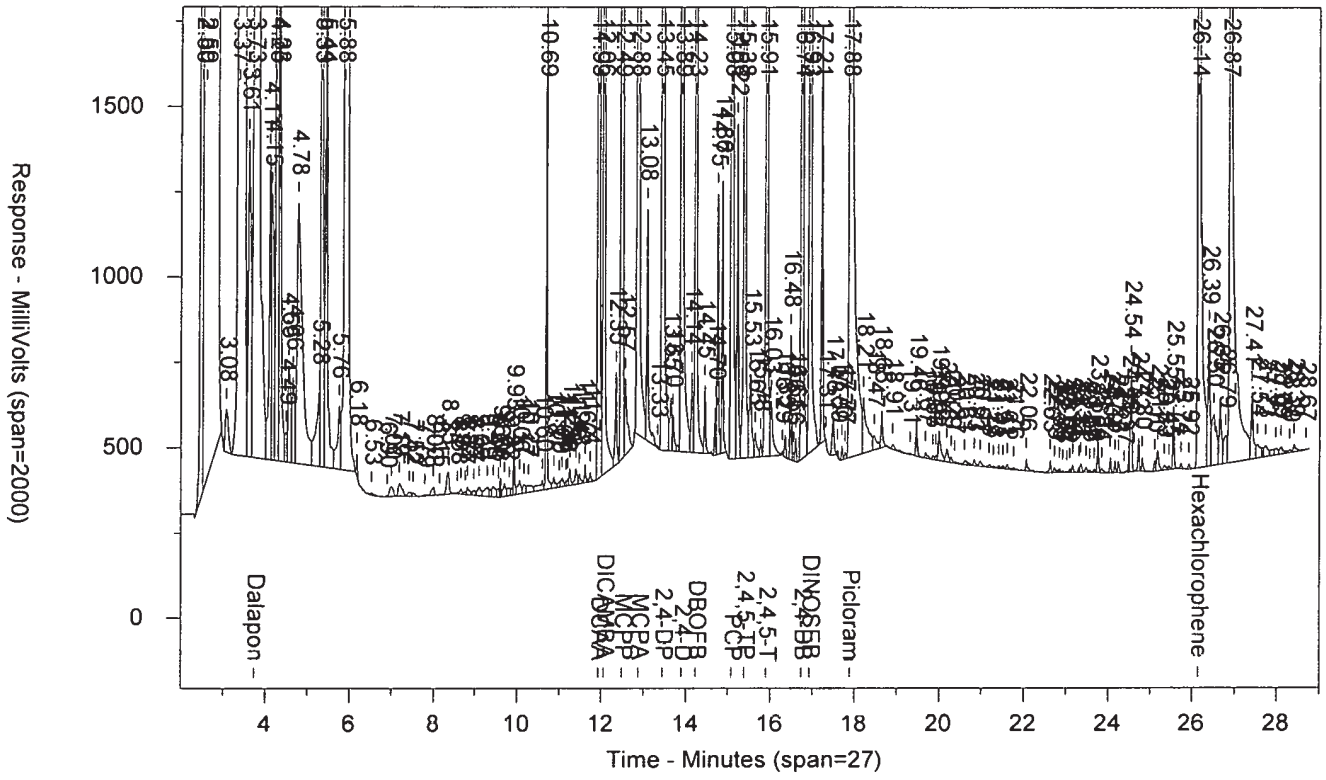

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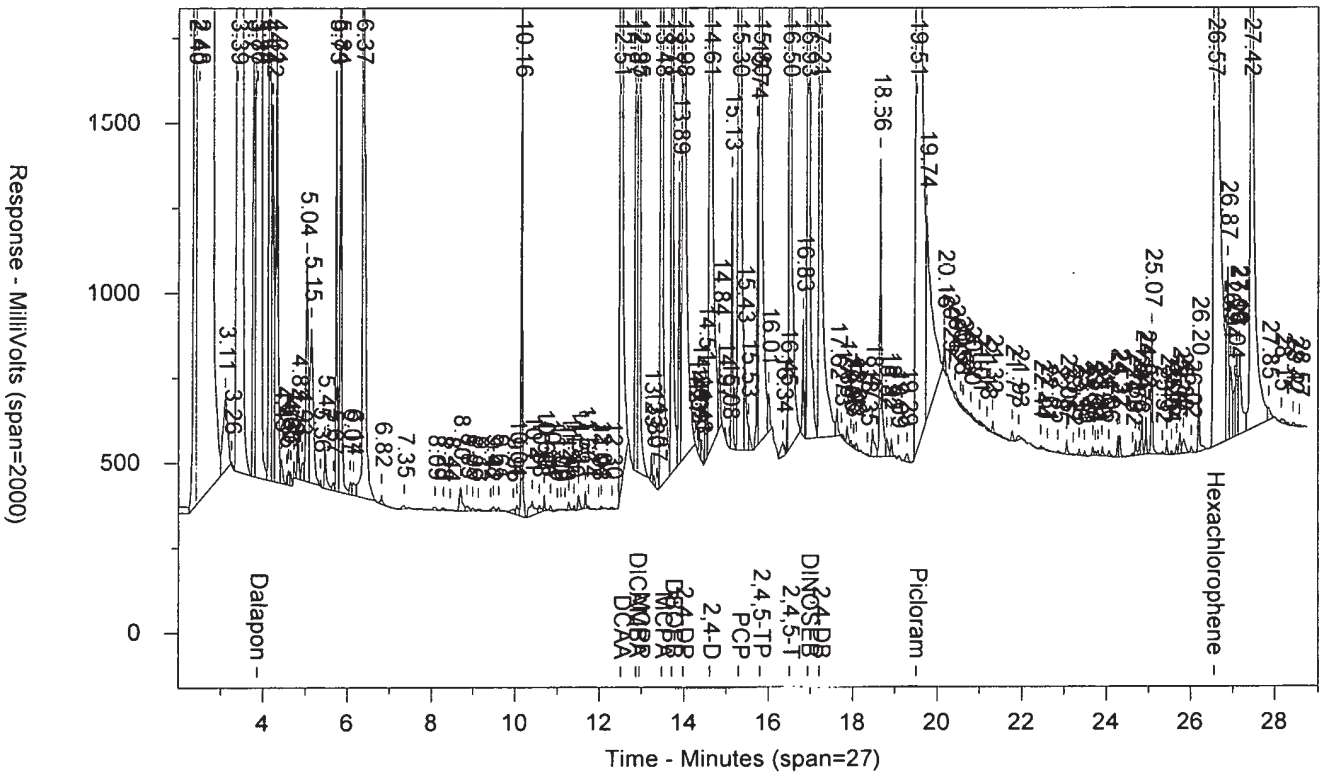

LANCASTER LABORATORIES

Sample Number: HERB61824E AAHERB6AA ICAL 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 4:27:52 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.732	27470690	4404.576	Dalapon	3.859	39133700	4221.432	Dalapon
11.929	23945400	2034.192	DCAA	12.508	26925280	2168.237	DCAA
12.056	9121651	205	DICAMBA	12.872	10719940	216.657	DICAMBA
12.494	8456068	117907.1	MCPP	12.948	10141100	203164.2	MCPP
12.879	10805900	121452	MCPA	13.477	13394610	191208.7	MCPA
13.446	15740080	1689.074	2,4-DP	13.98	19987050	1858.773	2,4-DP
14.231	7891363	1	DBOFB	13.712	8518573	1	DBOFB
13.893	22560210	1944.667	2,4-D	14.61	24561110	1927.847	2,4-D
15.083	30567740	222.086	PCP	15.298	33868380	217.053	PCP
15.383	12540080	228.944	2,4,5-TP	15.801	13432370	224.107	2,4,5-TP
15.906	11870540	242.552	2,4,5-T	16.504	12704450	235.593	2,4,5-T
16.738	15841910	2297.662	2,4-DB	17.209	17469760	2284.671	2,4-DB
16.927	24195850	1000.766	DINOSEB	16.935	24457810	1005.177	DINOSEB
17.884	56693380	1270.536	Picloram	19.507	61863420	1246.465	Picloram
26.141	40669440	852.835	Hexachlorophene	26.565	44370860	886.696	Hexachlorophen

Files:
Area File: 15herb18289001.013.RAW
Area File: 15herb18289001B.013.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
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HERB61824E AAHERB6AA ICAL 1828899999 10407 SW-846 815

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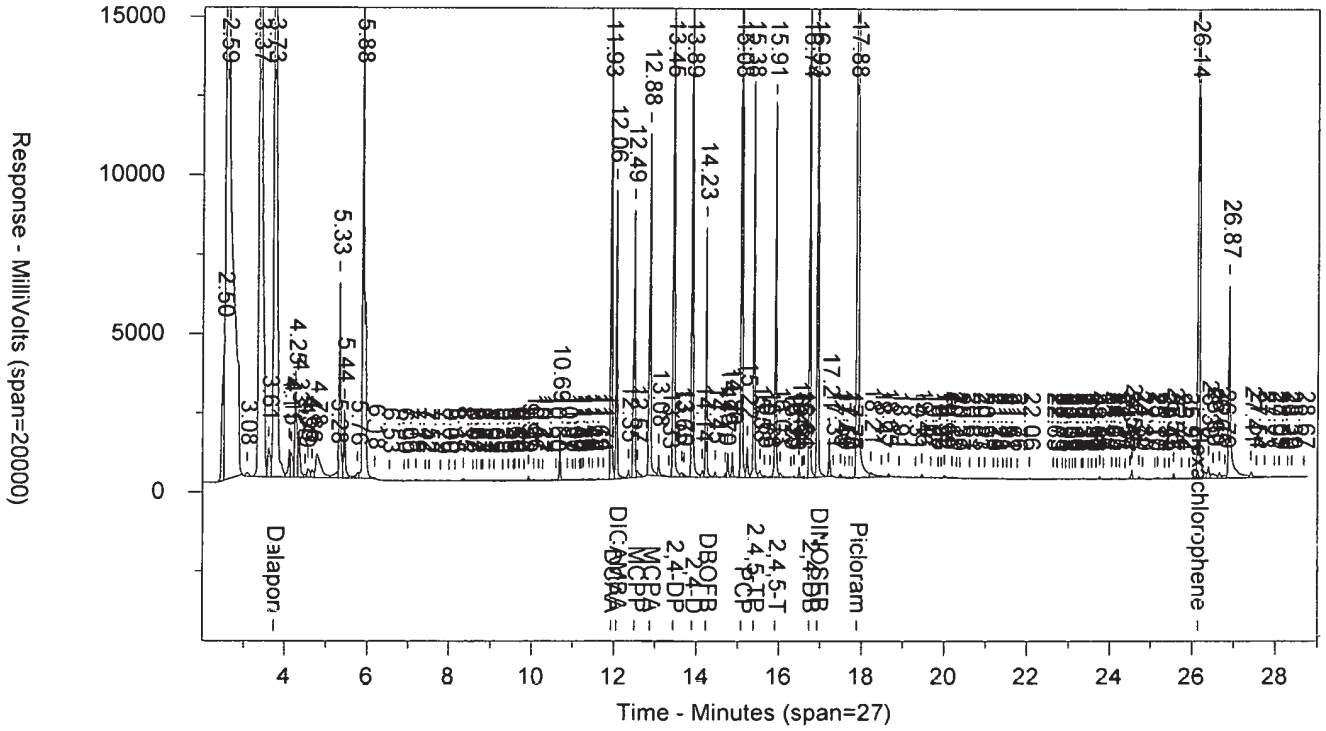

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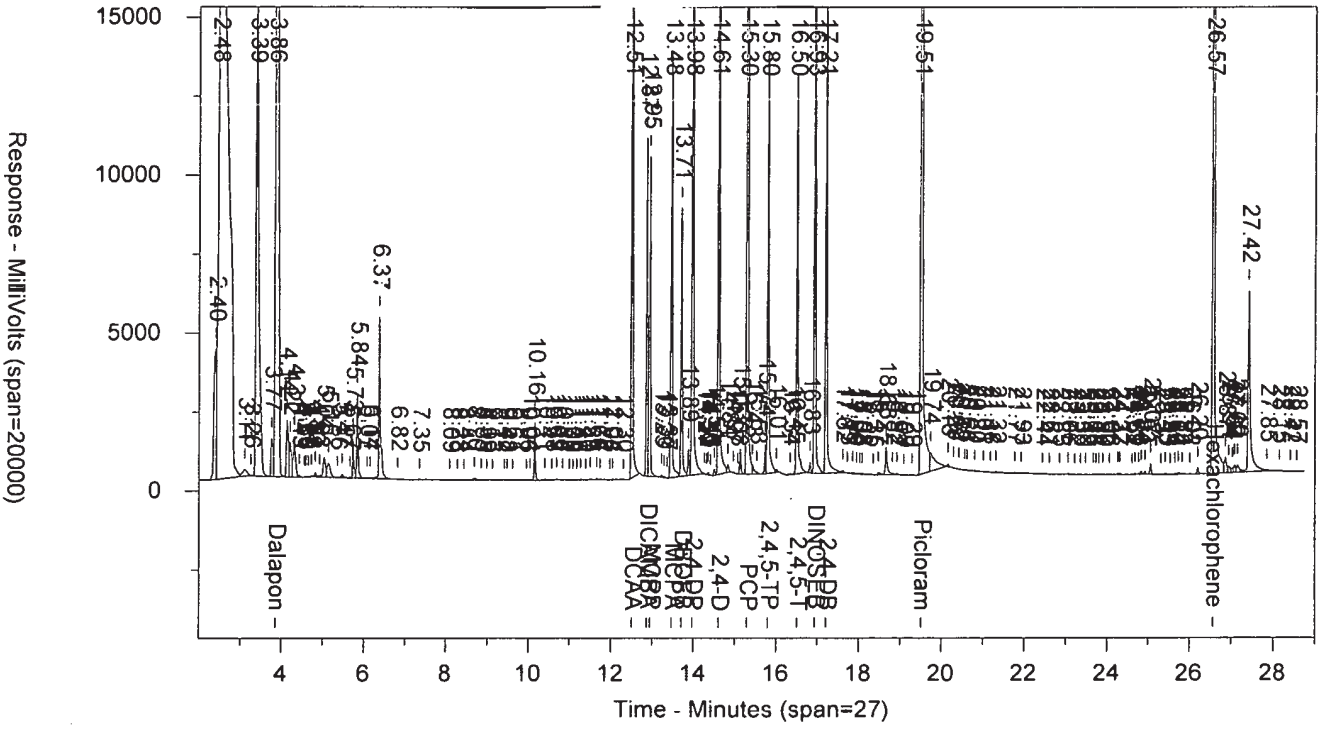

MDHEX1824E AAMDHEXAA ICAL 1828899999 10407 SW-846 8151/

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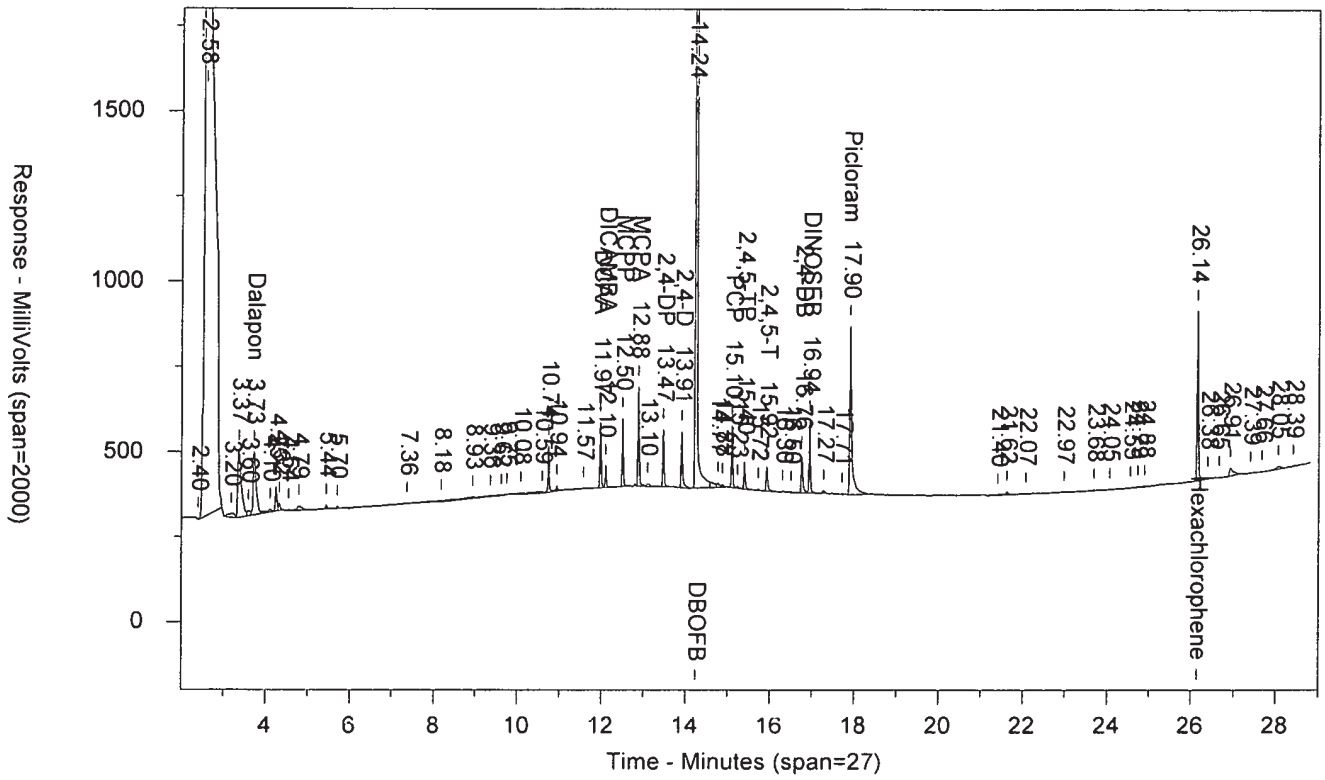

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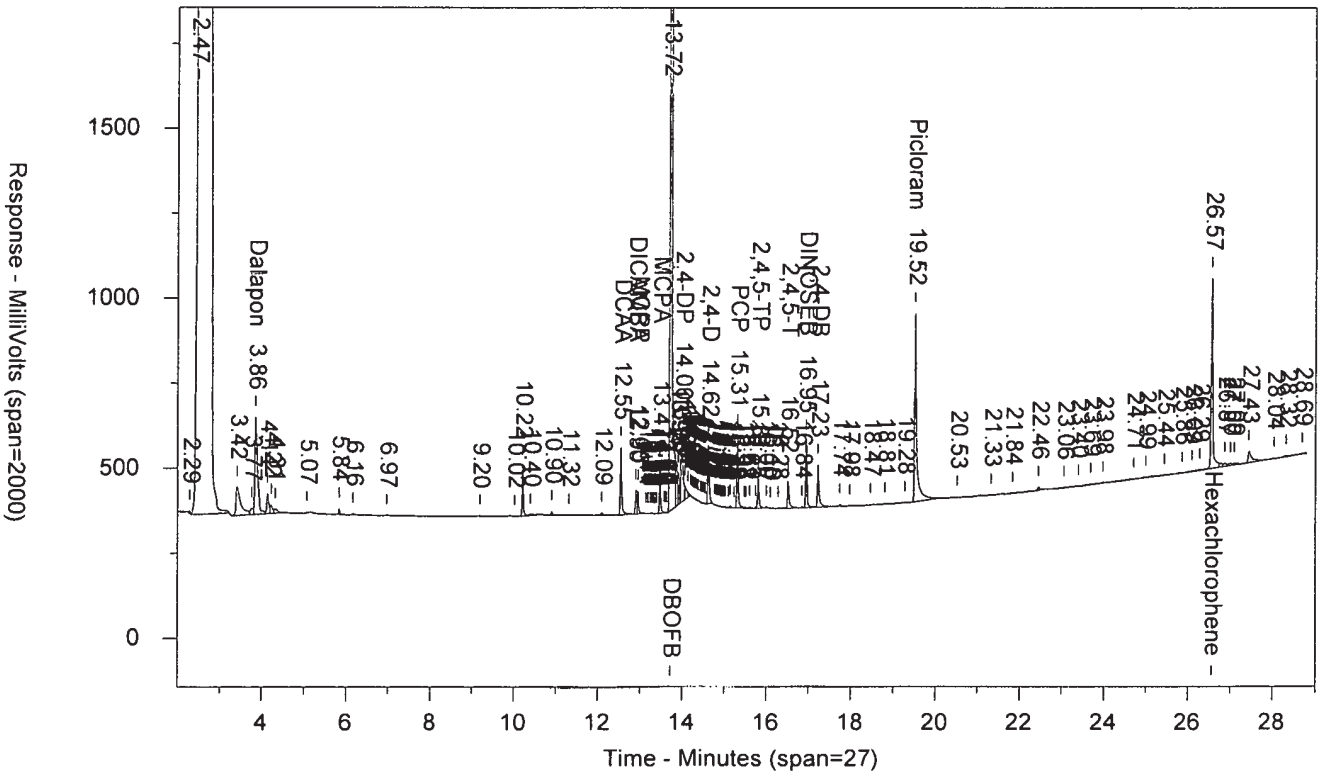

LANCASTER LABORATORIES

Sample Number: MDHEX1824E AAMDHEXAA ICAL 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 5:00:47 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.726	186065	24.592	Dalapon	3.856	287895	25.863	Dalapon
11.974	192340	13.31	DCAA	12.545	199857	13.47	DCAA
12.1	66274	1.213	DICAMBA	12.904	71117	1.199	DICAMBA
12.503	201101	-11688.25	MCPP	12.952	67503	1128.544	MCPP
12.878	293351	-8688.37	MCPA	13.474	139523	1655.408	MCPA
13.472	168684	14.871	2,4-DP	14.001	219445	17.007	2,4-DP
14.241	9503685	1	DBOFB	13.724	10062200	1	DBOFB
13.909	166291	11.394	2,4-D	14.624	173344	11.207	2,4-D
15.1	182161	1.078	PCP	15.314	215084	1.155	PCP
15.396	79769	1.177	2,4,5-TP	15.812	88760	1.226	2,4,5-TP
15.922	72023	1.169	2,4,5-T	16.515	80849	1.236	2,4,5-T
16.756	105346	12.275	2,4-DB	17.226	124893	13.427	2,4-DB
16.94	211936	7.223	DINOSEB	16.947	197789	6.815	DINOSEB
17.901	496322	8.782	Picloram	19.522	556582	9.167	Picloram
26.144	501418	9.151	Hexachlorophene	26.566	562314	9.942	Hexachlorophene

Files:
Area File: 15herb18289001.014.RAW
Area File: 15herb18289001B.014.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/16/2018 5:29:41 PM
File Reported On: 10/16/2018 at 7:32:07 PM

MDHEX1824E AAMDHEXAA ICAL 1828899999 10407 SW-846 81

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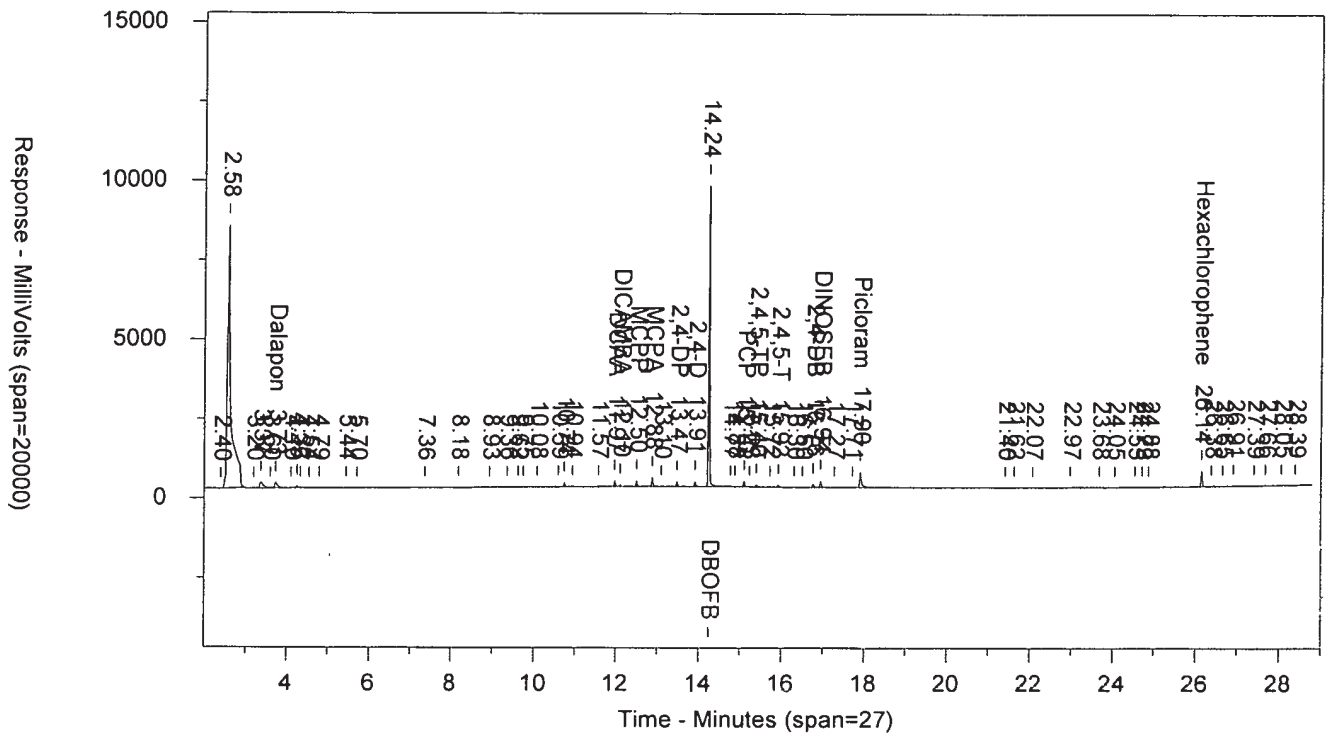

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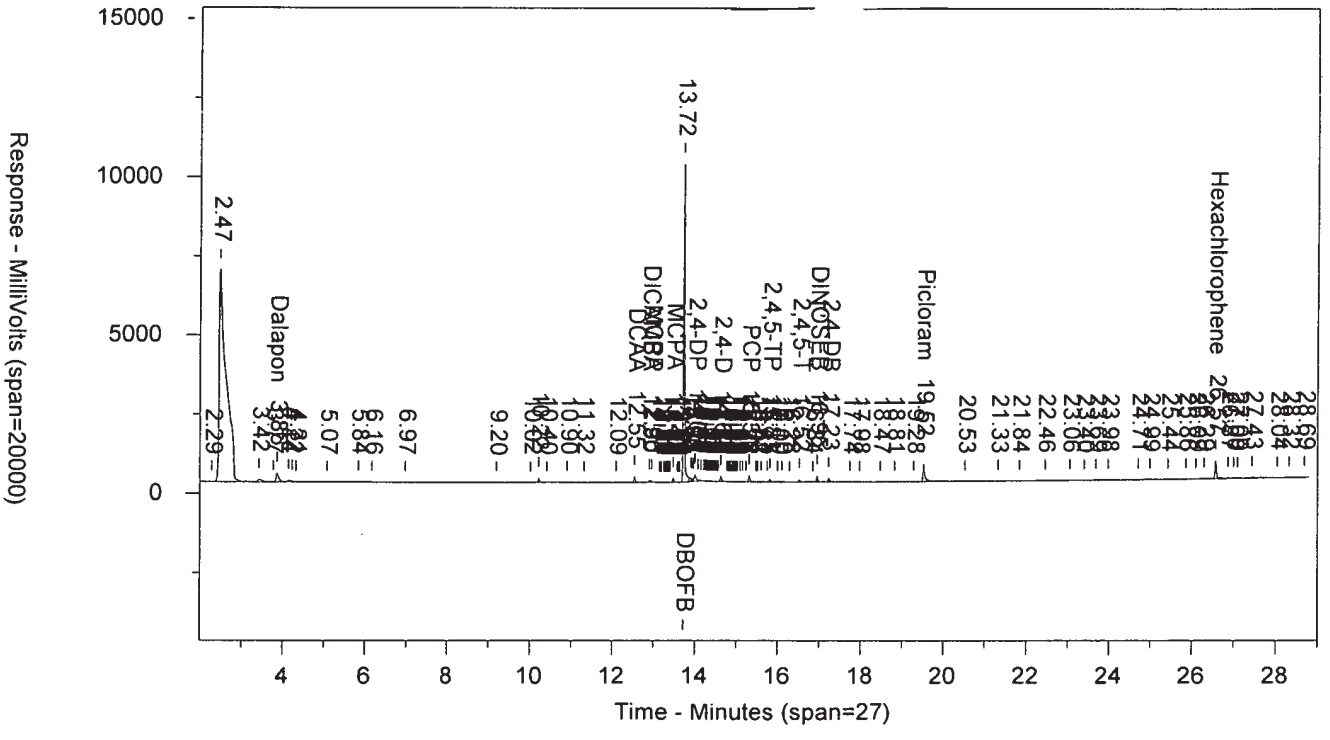

ICHBX1824I AAICHBXAA CCAL 1828899999 10407 SW-846 8151A

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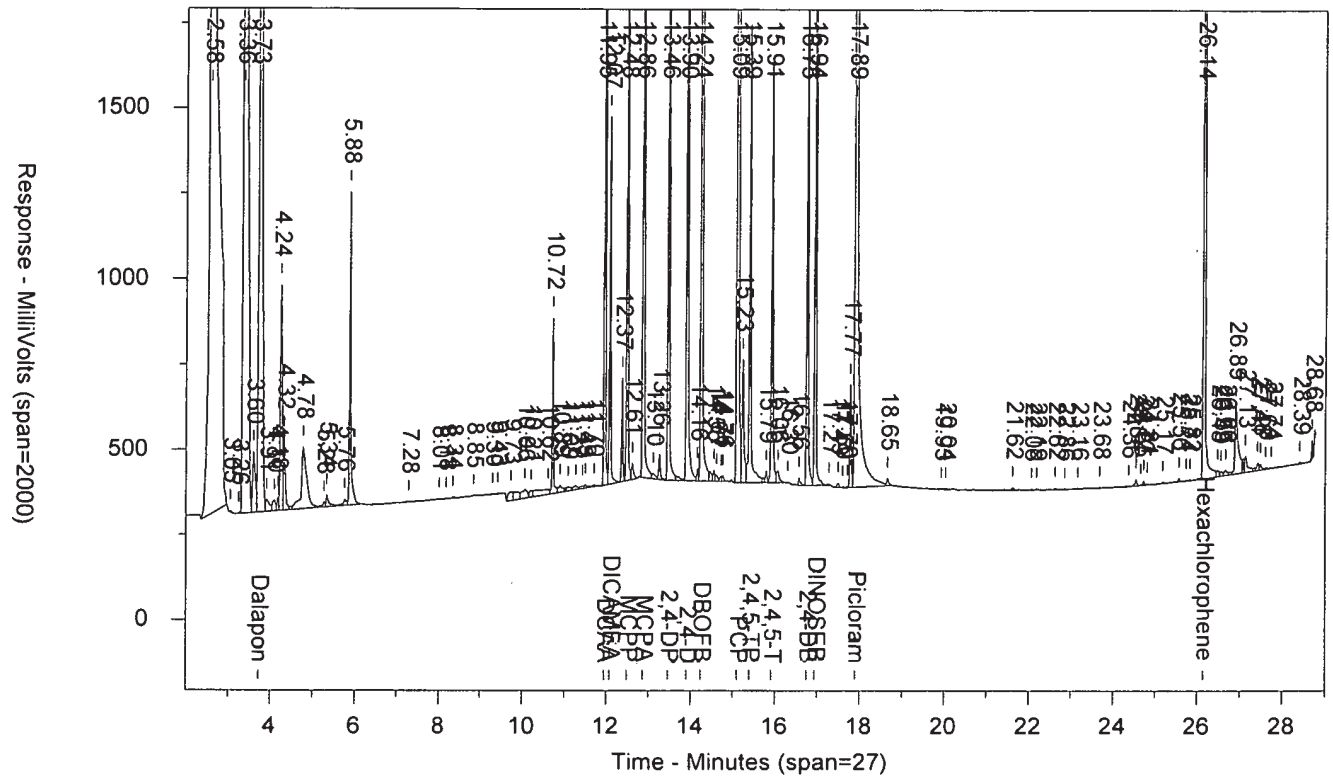

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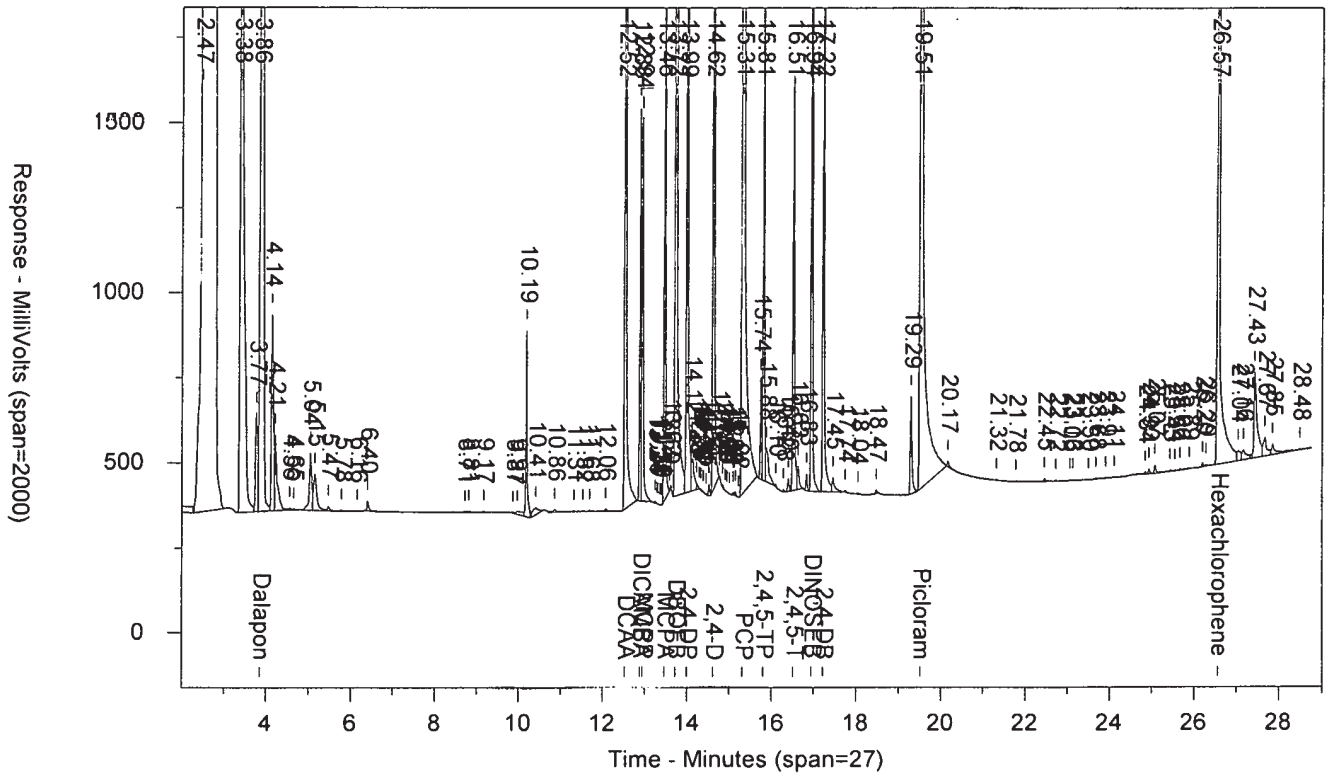

LANCASTER LABORATORIES

Sample Number: ICHBX1824I AAICHBXAA CCAL 1828899999 10407 SW-846 8151A
Injected On: 10/16/2018 5:33:45 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: 7848

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.726	2958031	401.497	Dalapon	3.857	4547239	410.573	Dalapon
11.945	2690997	191.234	DCAA	12.523	2861121	193.819	DCAA
12.072	1079589	20.291	DICAMBA	12.885	1159956	19.662	DICAMBA
12.483	1786486	22292.52	MCPP	12.936	1128377	18960.6	MCPP
12.864	2149885	22464.62	MCPA	13.463	1589242	18951.83	MCPA
13.461	2476961	224.251	2,4-DP	13.993	2727618	212.467	2,4-DP
14.241	9254167	1	DBOFB	13.724	10011320	1	DBOFB
13.901	2838066	199.71	2,4-D	14.616	2964712	192.65	2,4-D
15.095	15430120	93.746	PCP	15.31	16167160	87.263	PCP
15.39	1345017	20.385	2,4,5-TP	15.807	1410730	19.58	2,4,5-TP
15.914	1248103	20.813	2,4,5-T	16.511	1219682	18.741	2,4,5-T
16.747	1574596	188.424	2,4-DB	17.217	1741220	188.143	2,4-DB
16.936	2617774	91.618	DINOSEB	16.944	2482604	85.976	DINOSEB
17.89	11030780	200.44	Picloram	19.511	11764210	194.742	Picloram
26.143	5197486	97.414	Hexachlorophene	26.566	5375845	95.533	Hexachloropher

Files:
Area File: 15herb18289001.015.RAW
Area File: 15herb18289001B.015.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/16/2018 6:02:34 PM
File Reported On: 10/16/2018 at 7:32:25 PM

ICHBX1824I AAICHBXAA CCAL 1828899999 10407 SW-846 815

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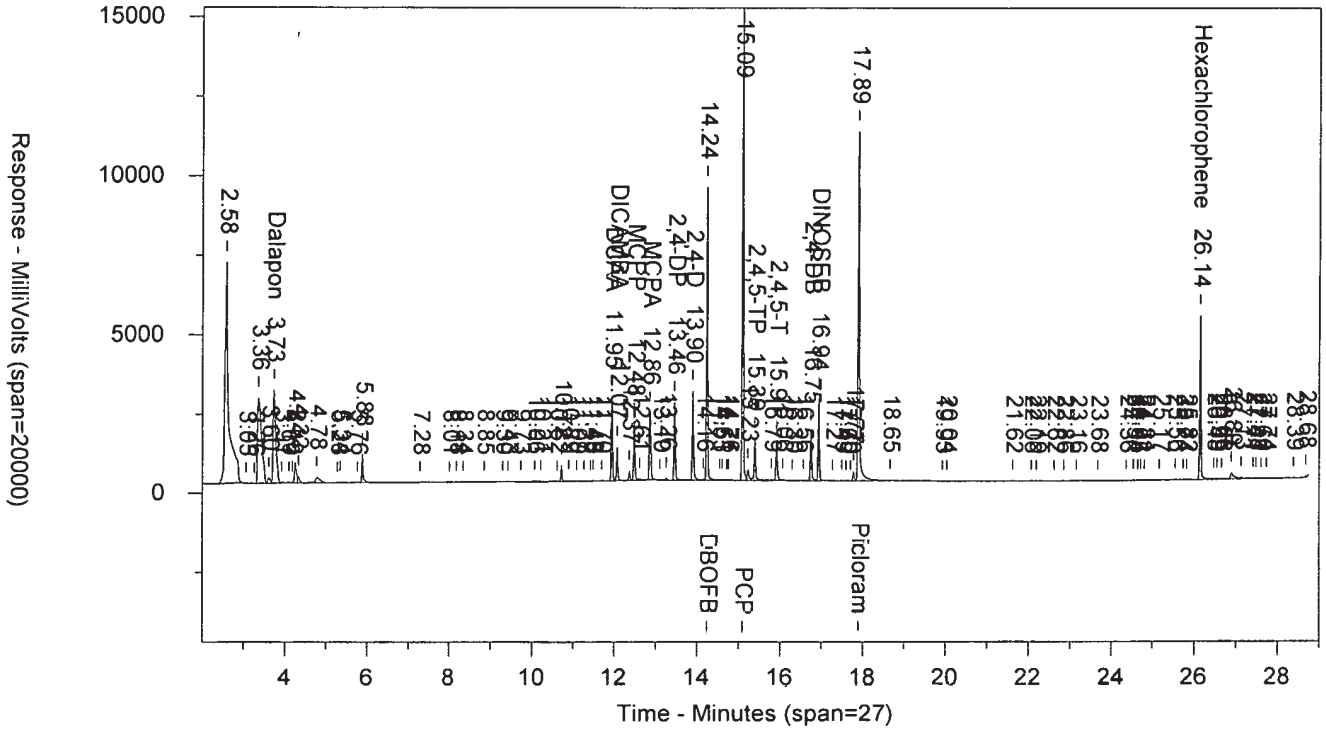

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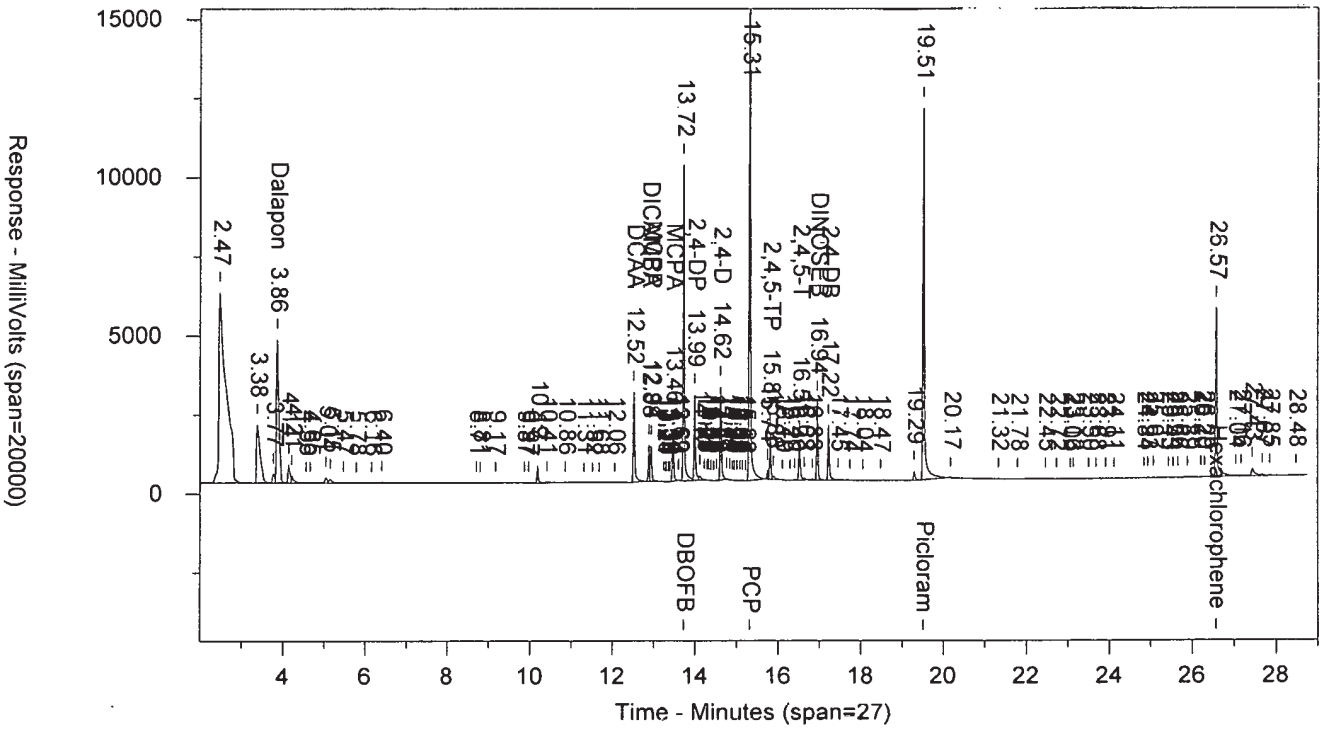

HERB31824F TCHERB3TC CCAL 1829599999 10407 SW-846 8151A

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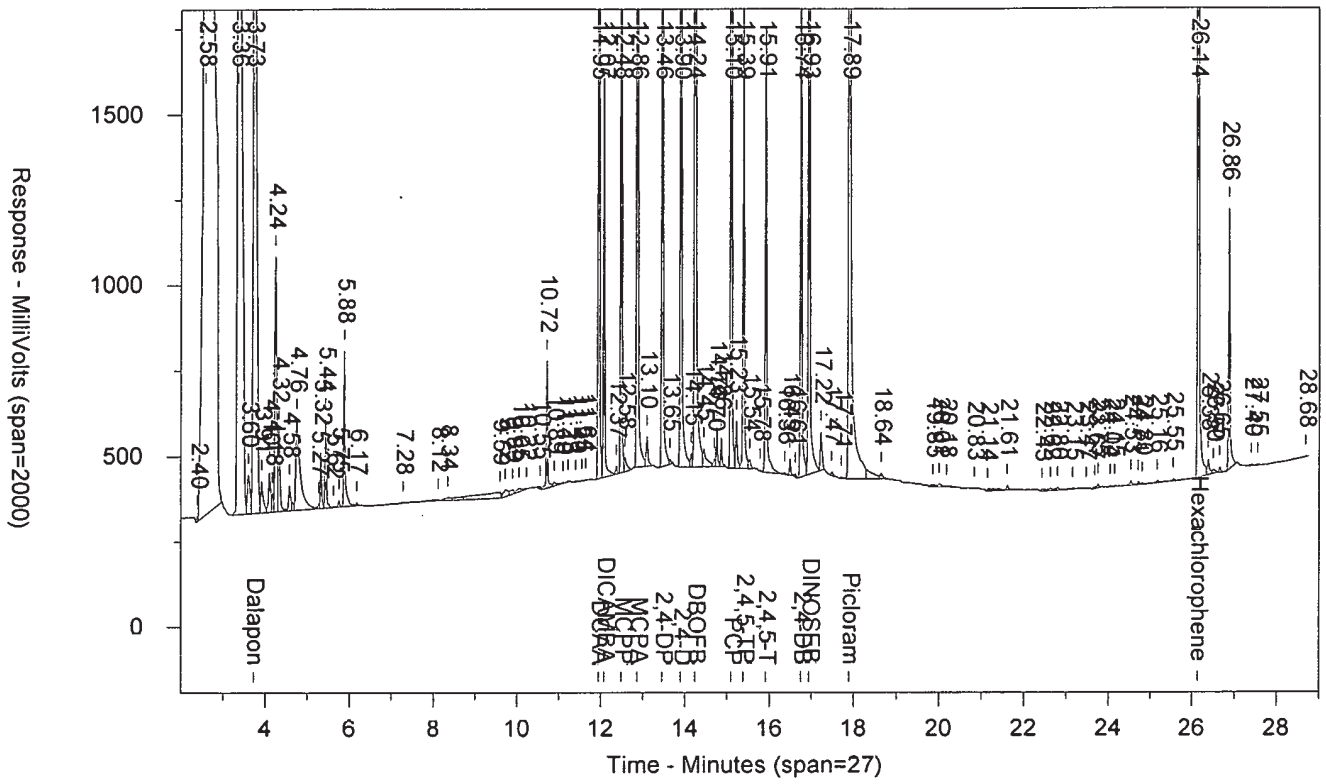

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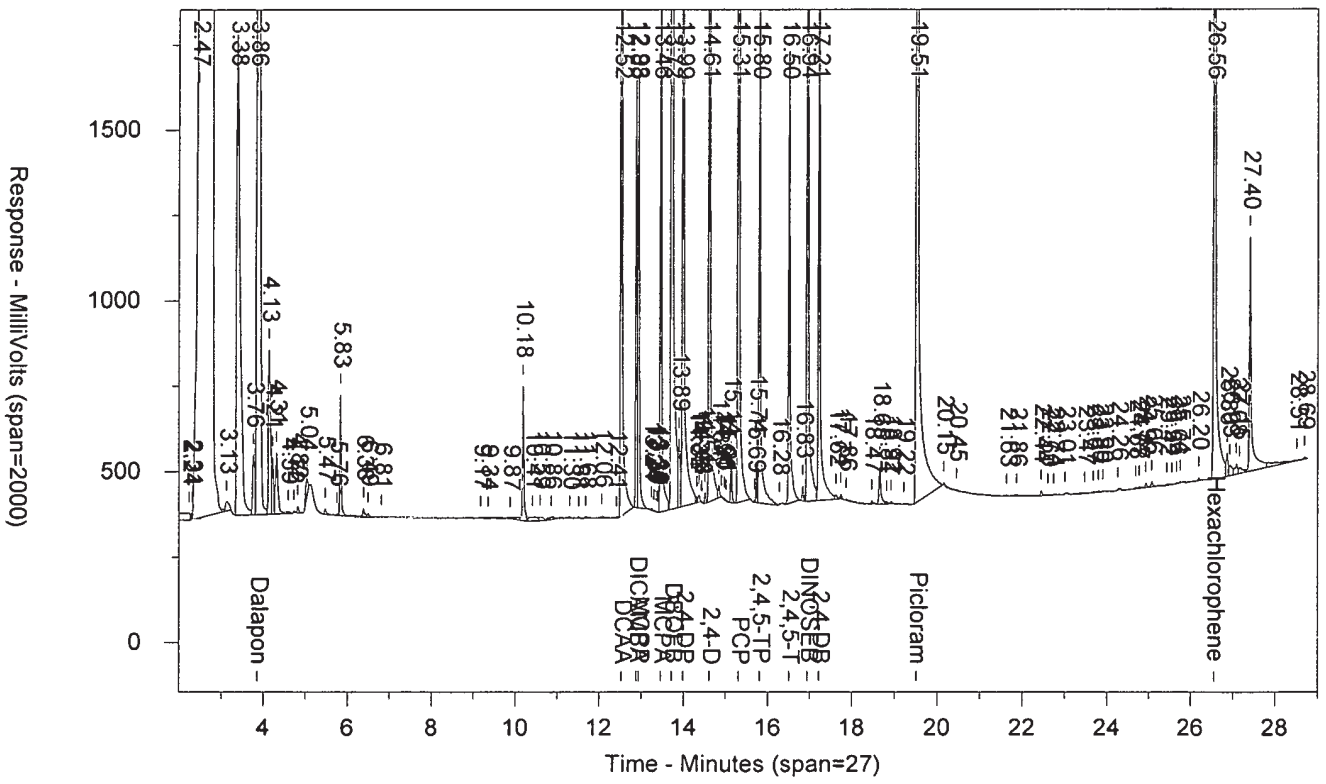

LANCASTER LABORATORIES

Sample Number: HERB31824F TCHERB3TC CCAL 1829599999 10407 SW-846 8151A
Injected On: 10/23/2018 10:56:49 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.725	3274962	368.757	Dalapon	3.856	4623991	383.366	Dalapon
11.945	3040609	179.253	DCAA	12.519	3085148	191.906	DCAA
12.071	1185164	18.479	DICAMBA	12.881	1251611	19.481	DICAMBA
12.481	1950050	18687	MCPP	12.934	1275283	19676.96	MCPP
12.863	2366392	19343.19	MCPA	13.46	1754783	19214.89	MCPA
13.457	2503626	188.035	2,4-DP	13.987	2679382	191.644	2,4-DP
14.237	11155340	1	DBOFB	13.717	10902790	1	DBOFB
13.899	2775368	162.014	2,4-D	14.612	2841819	169.565	2,4-D
15.095	3679380	18.544	PCP	15.309	3891008	19.285	PCP
15.386	1451778	18.254	2,4,5-TP	15.802	1495754	19.062	2,4,5-TP
15.91	1304845	18.05	2,4,5-T	16.505	1327802	18.734	2,4,5-T
16.743	1800566	178.744	2,4-DB	17.211	1899682	188.482	2,4-DB
16.932	3298975	95.782	DINOSEB	16.939	2933181	93.274	DINOSEB
17.891	6074153	91.563	Picloram	19.507	6167229	93.743	Picloram
26.136	4648913	72.282	Hexachlorophene	26.559	4795707	78.255	Hexachlorophe

Files:
Area File: 15herb18289003.016.RAW
Area File: 15herb18289003B.016.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/23/2018 11:25:36 PM
File Reported On: 10/24/2018 at 4:00:50 PM

HERB31824F TCHERB3TC CCAL 1829599999 10407 SW-846 81

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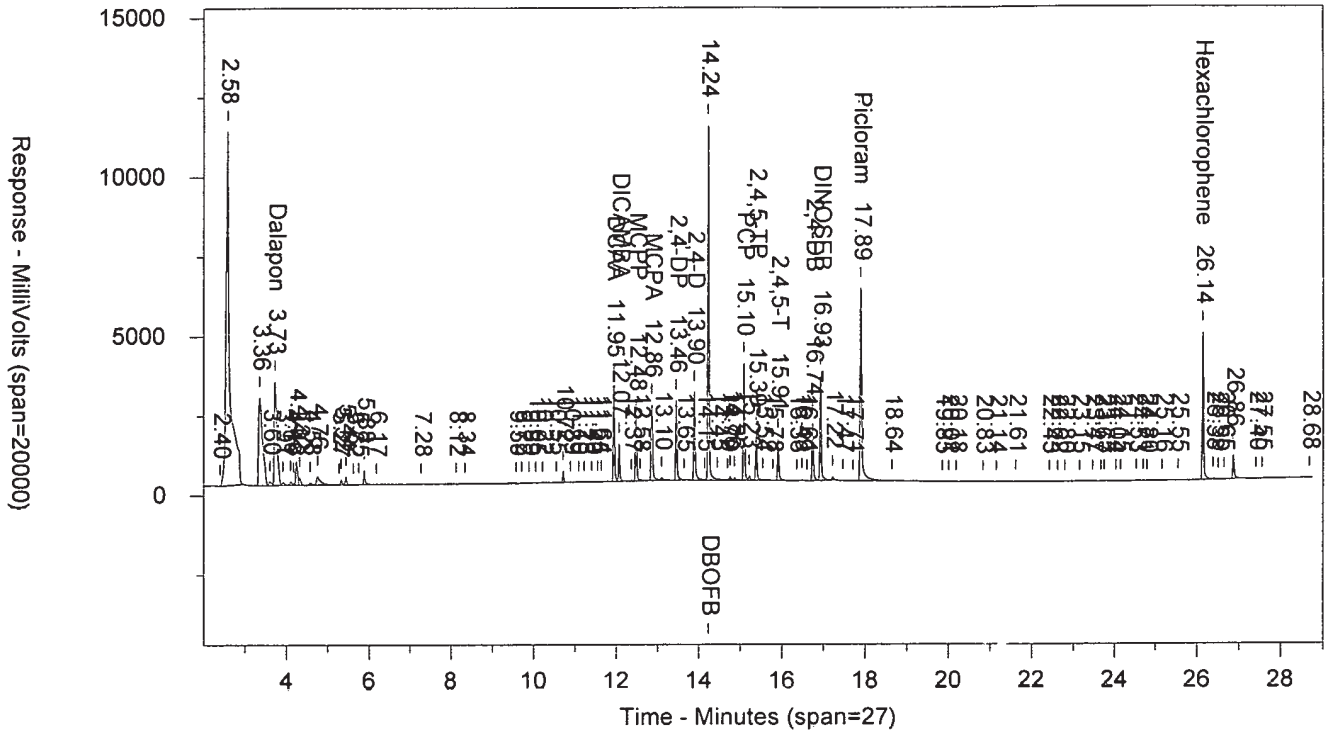

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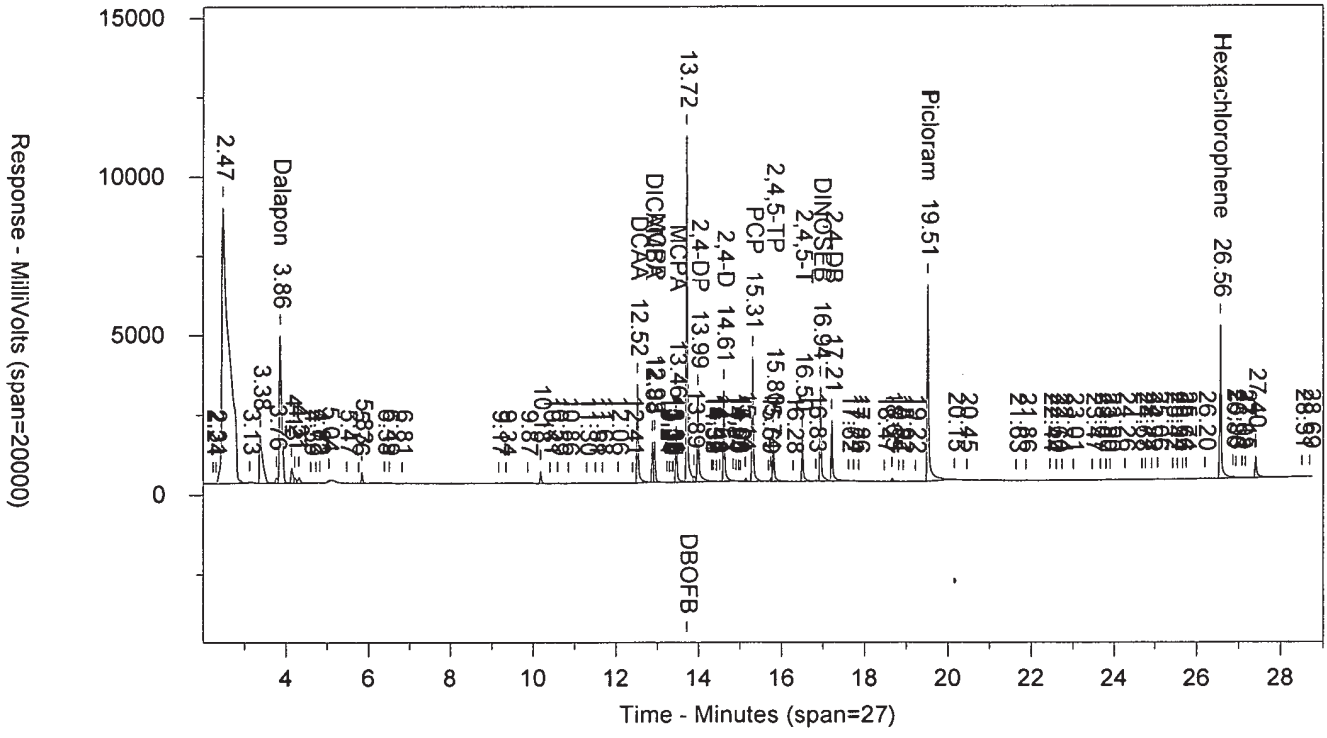

HIBLKX1824B QRHIBLKQR MISC 1829599999 10407 SW-846 8151A

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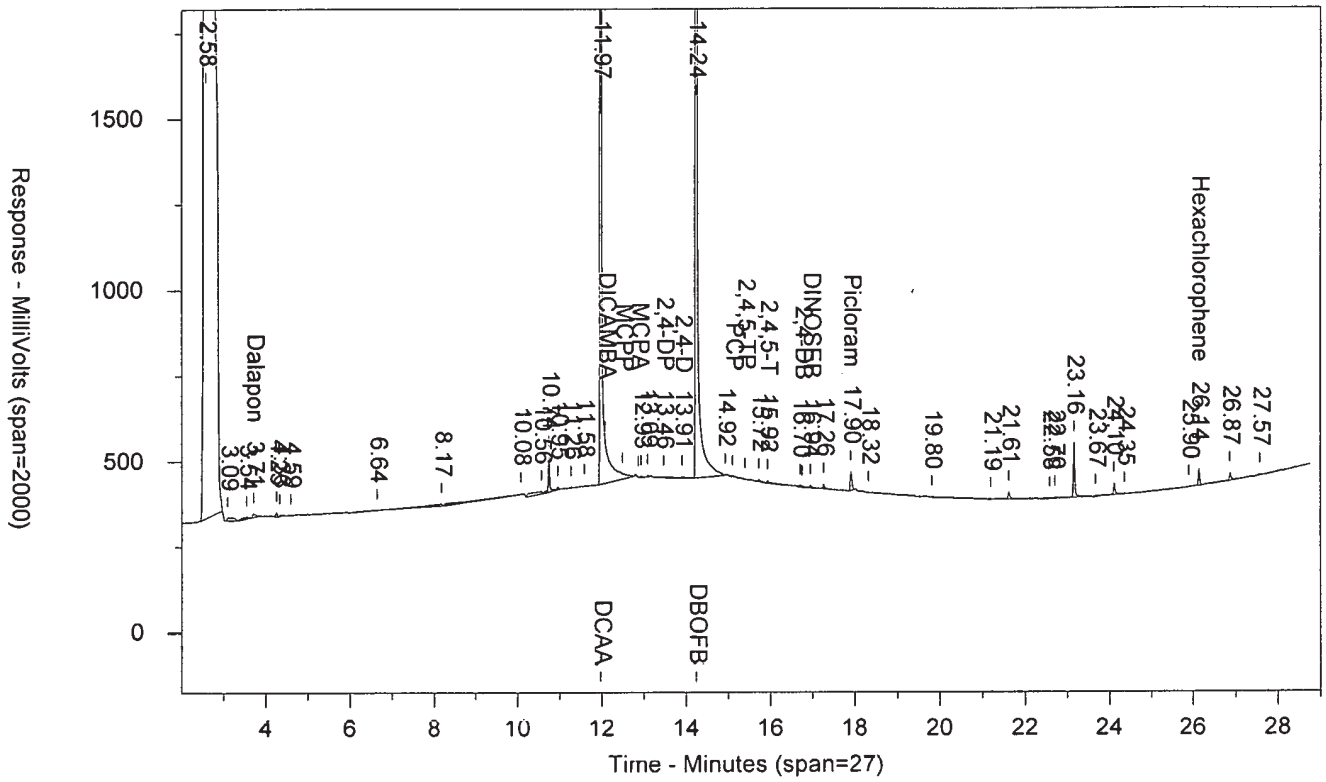

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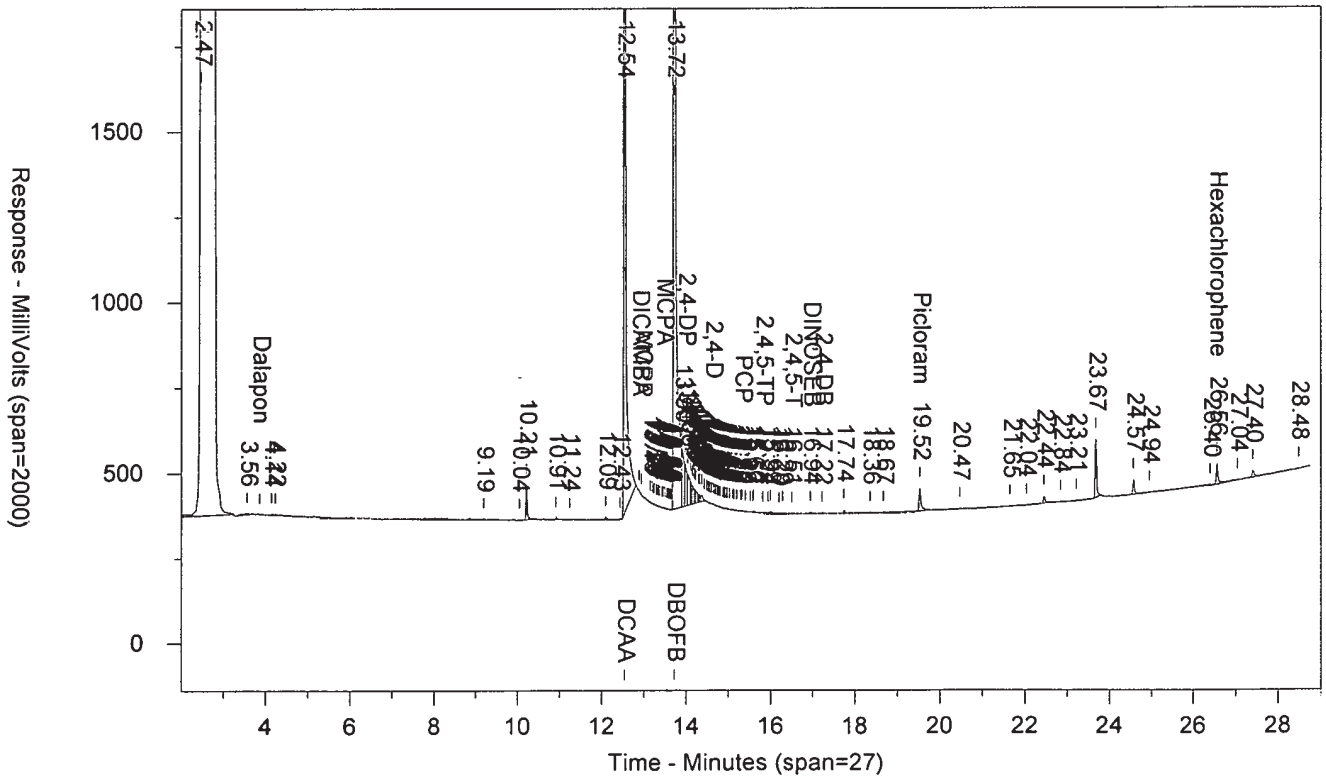

LANCASTER LABORATORIES

Sample Number: HIBLKX1824B QRHIBLKQR MISC 1829599999 10407 SW-846 8151A
Injected On: 10/23/2018 11:29:52 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.708	10158	.012	Dalapon		0		Dalapon
11.969	4021898	2.512	DCAA	12.537	3908753	2.417	DCAA
13.463	4284	.003	2,4-DP	13.972	124225	.088	2,4-DP
	0		MCPA	13.464	1300	.141	MCPA
14.238	10527700	.001	DBOFB	13.719	10969840	.001	DBOFB
13.908	4969	.003	2,4-D	14.614	3318	.002	2,4-D
	0		PCP	15.317	1912		PCP
15.923	8679	.001	2,4,5-T	16.506	3024		2,4,5-T
16.942	9160	.003	DINOSEB	16.942	5729	.002	DINOSEB
	0		2,4-DB	17.22	4153	.004	2,4-DB
17.904	56318	.009	Picloram	19.517	68230	.01	Picloram
26.139	48537	.008	Hexachlorophene	26.56	61224	.01	Hexachlorophe

Files:
Area File: 15herb18289003.017.RAW
Area File: 15herb18289003B.017.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/23/2018 11:58:39 PM
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HIBLKX1824B QRHIBLKQR MISC 1829599999 10407 SW-846 81

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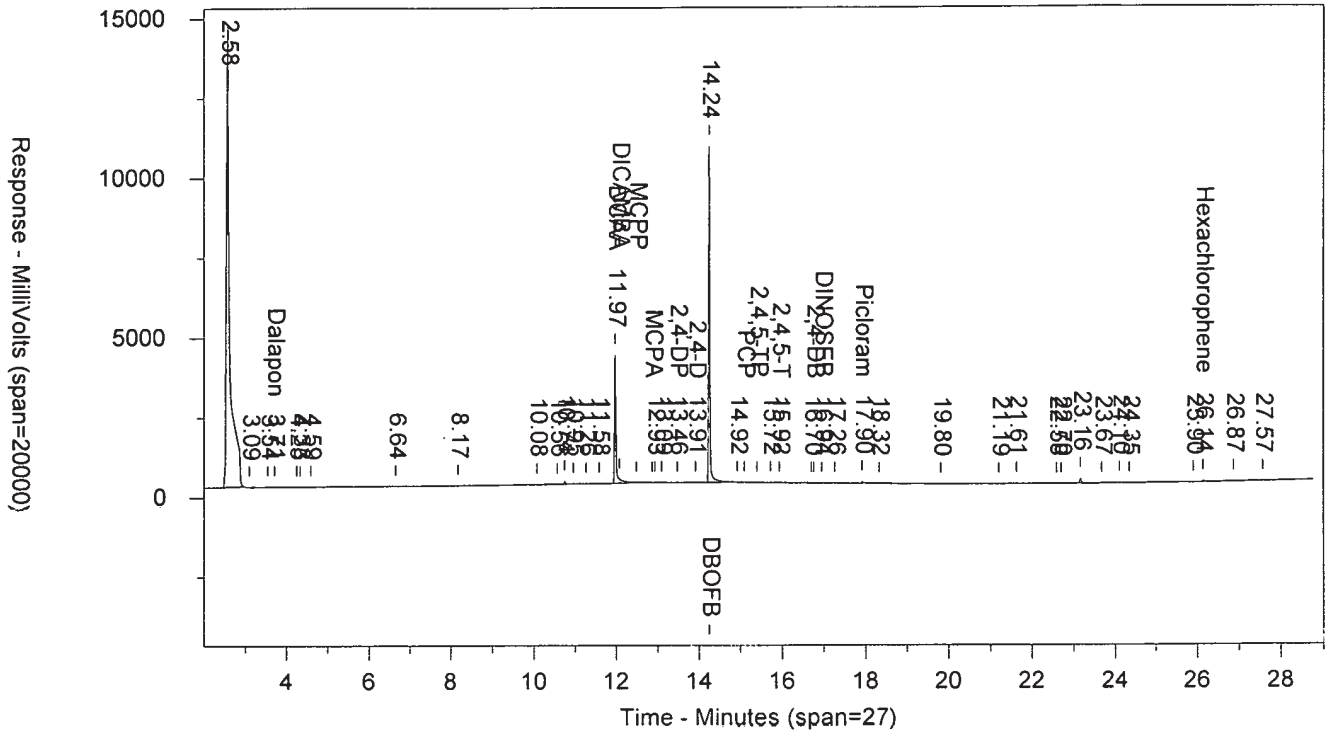

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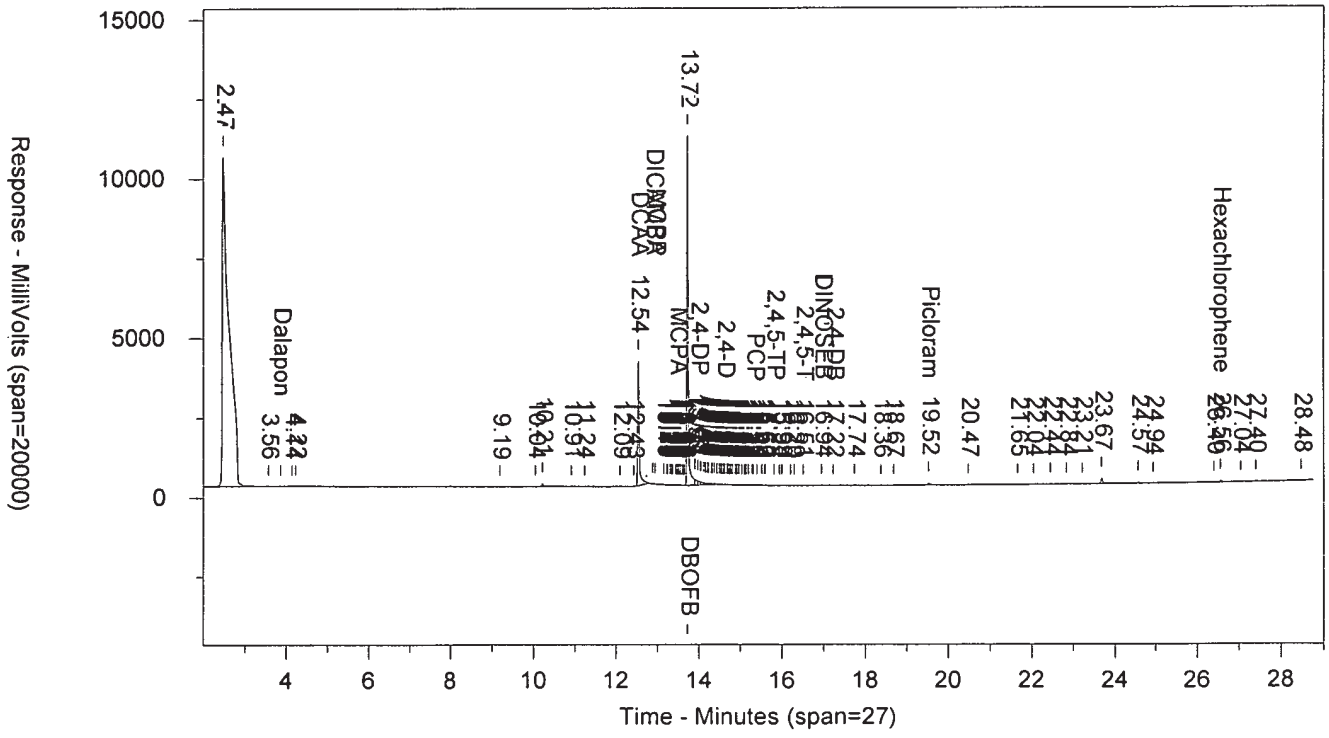

HERB31824F TDHERB3TD CCAL 1829599999 10407 SW-846 8151A

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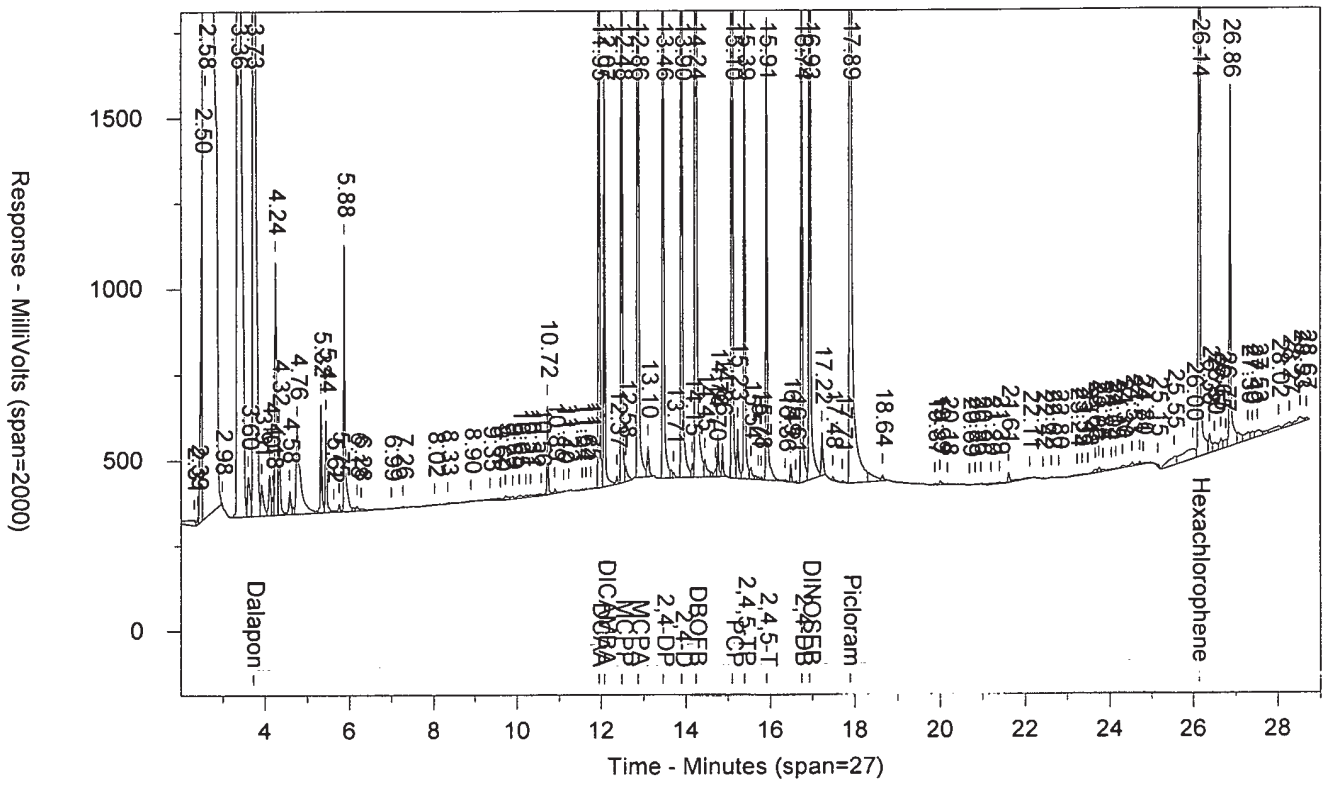

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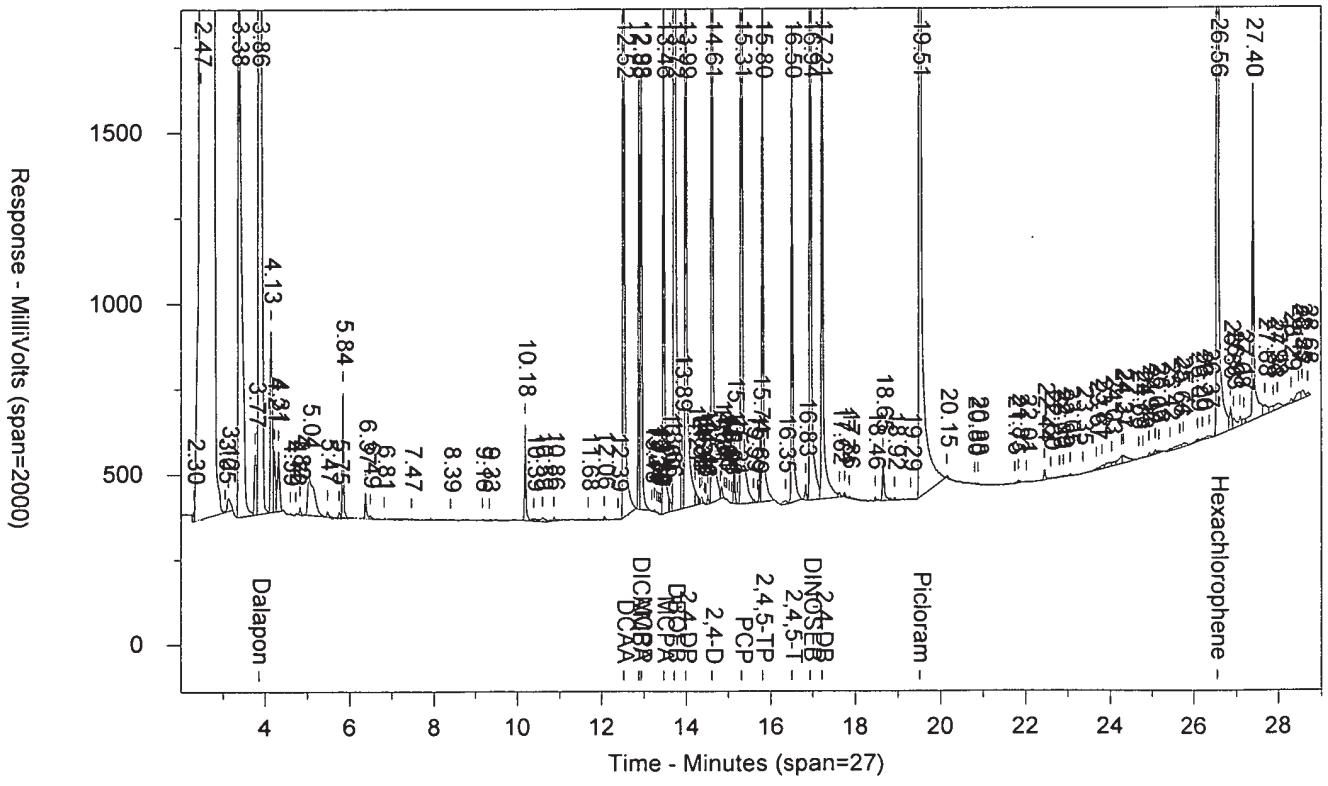

LANCASTER LABORATORIES

Sample Number: HERB31824F TDHERB3TD CCAL 1829599999 10407 SW-846 8151A
Injected On: 10/24/2018 5:32:39 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.726	3356815	360.271	Dalapon	3.856	4752708	372.316	Dalapon
11.945	3044546	171.079	DCAA	12.519	3154262	185.389	DCAA
12.072	1216310	18.076	DICAMBA	12.881	1257783	18.498	DICAMBA
12.481	2013974	18148.17	MCPP	12.935	1296465	18901.08	MCPP
12.864	2380775	17996.75	MCPA	13.46	1838717	19024.09	MCPA
13.457	2521323	180.495	2,4-DP	13.987	2778144	187.754	2,4-DP
14.236	11703500	1	DBOFB	13.716	11538880	1	DBOFB
13.899	2816869	156.734	2,4-D	14.611	2901065	163.558	2,4-D
15.095	3809883	18.303	PCP	15.308	4151143	19.44	PCP
15.386	1507273	18.064	2,4,5-TP	15.801	1559903	18.784	2,4,5-TP
15.91	1351439	17.819	2,4,5-T	16.504	1389724	18.527	2,4,5-T
16.743	1886187	178.473	2,4-DB	17.21	1970189	184.702	2,4-DB
16.931	3560454	98.532	DINOSEB	16.937	3262140	98.017	DINOSEB
17.888	6323755	90.86	Picloram	19.507	6447075	92.595	Picloram
26.136	4473038	66.29	Hexachlorophene	26.558	4803810	74.066	Hexachlorophe

Files:
Area File: 15herb18289003.028.RAW
Area File: 15herb18289003B.028.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
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HERB31824F TDHERB3TD CCAL 1829599999 10407 SW-846 81

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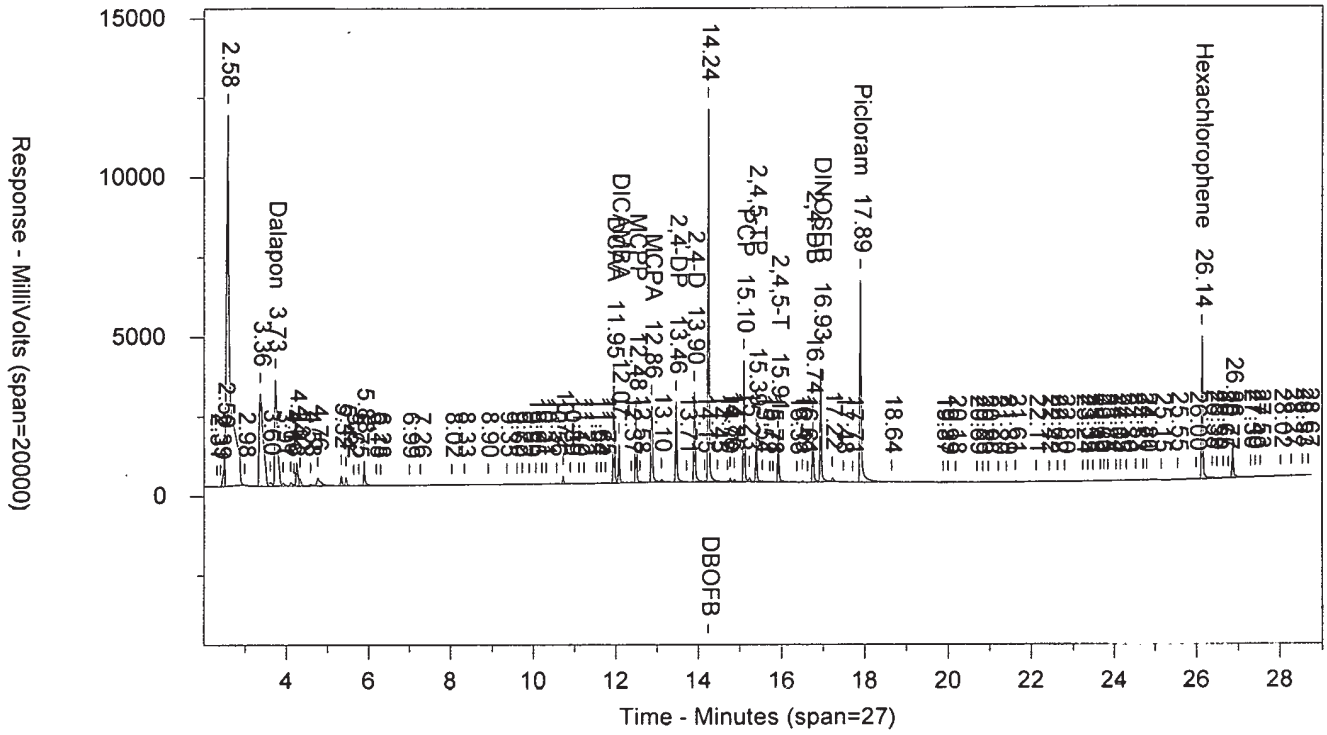

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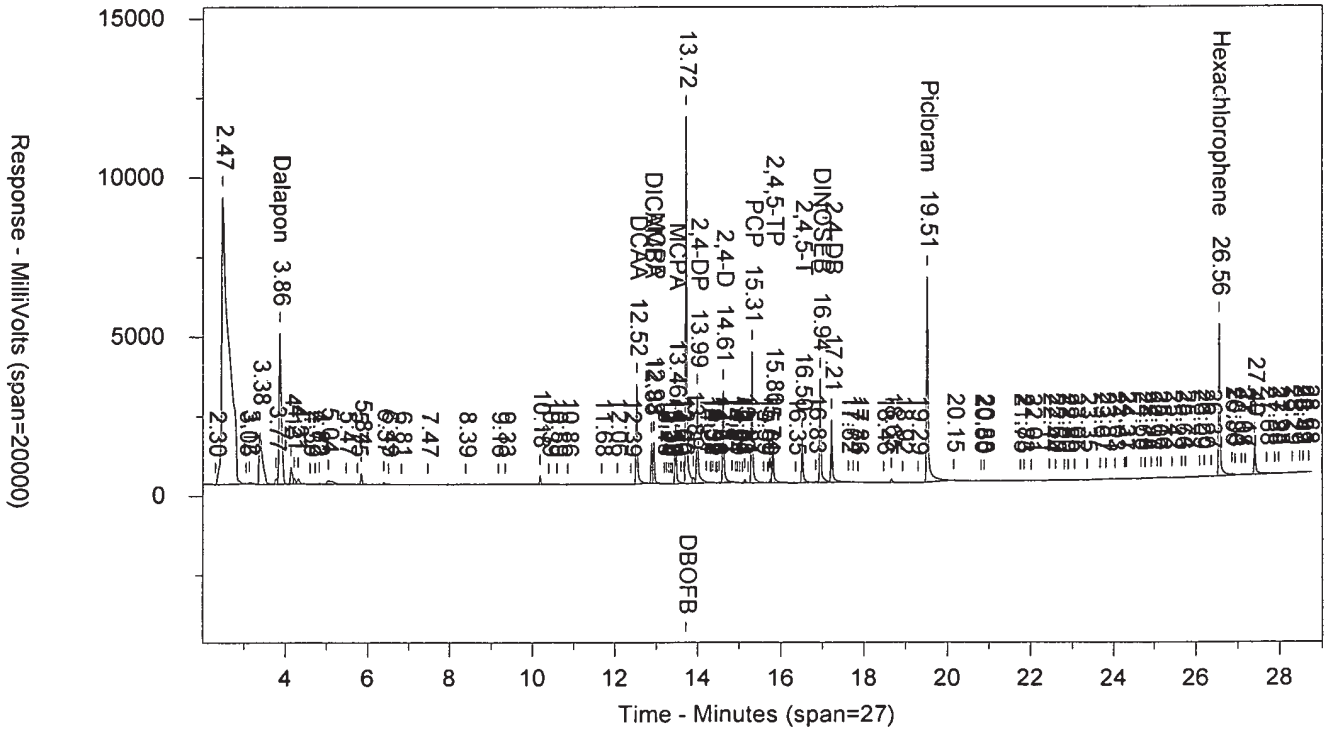

HIBLKX1824B QSHIBLKQS MISC 1829599999 10407 SW-846 8151A

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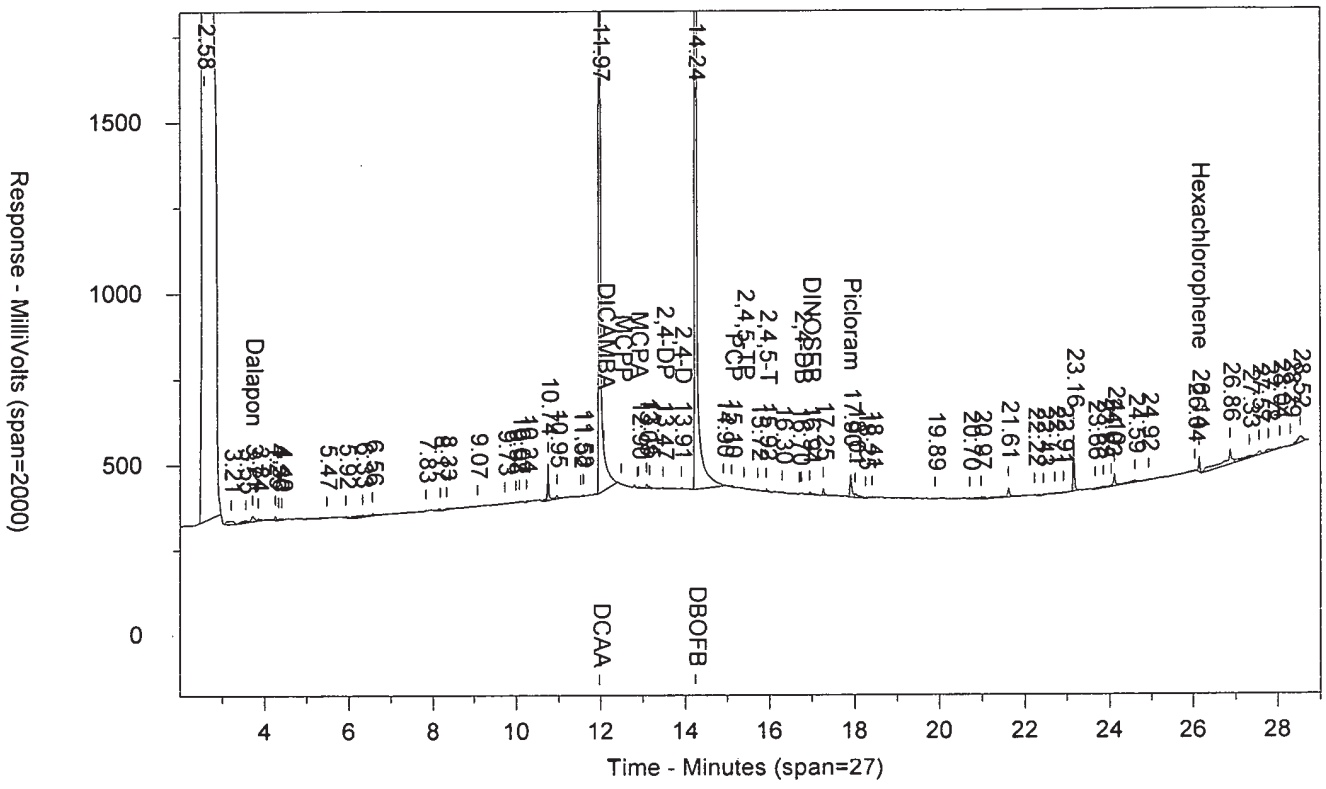

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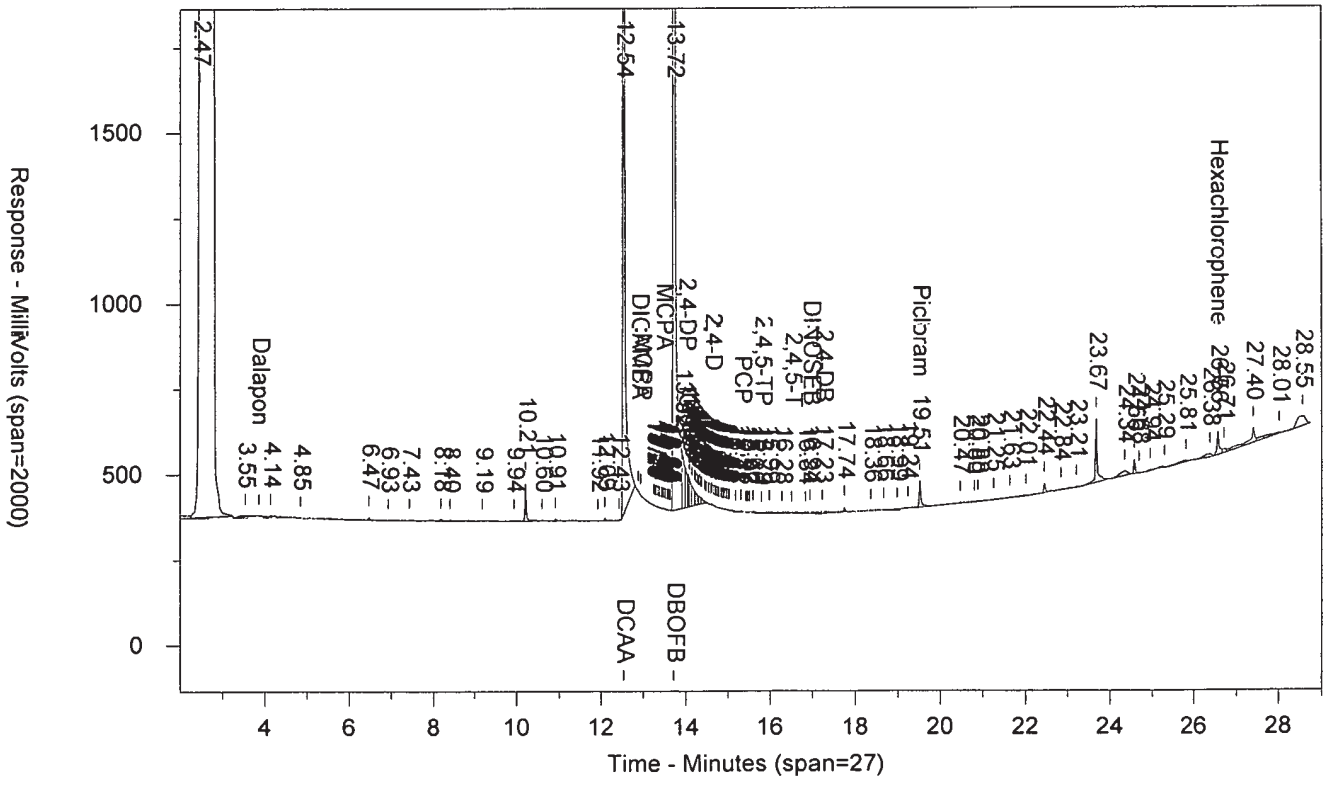

LANCASTER LABORATORIES

Sample Number: HIBLKX1824B QSHIBLKQS MISC 1829599999 10407 SW-846 8151A
Injected On: 10/24/2018 6:05:38 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.707	16763	.02	Dalapon		0		Dalapon
11.969	4146684	2.563	DCAA	12.537	3966670	2.444	DCAA
	0		MCPA	13.456	1051	.114	MCPA
13.471	3046	.002	2,4-DP	13.989	116552	.083	2,4-DP
14.237	10638450	.001	DBOFB	13.717	11005140	.001	DBOFB
13.908	5841	.004	2,4-D	14.619	4918	.003	2,4-D
15.099	4792		PCP	15.311	4282		PCP
	0		2,4,5-TP	15.795	2374		2,4,5-TP
15.922	8992	.001	2,4,5-T		0		2,4,5-T
16.938	9755	.003	DINOSEB	16.944	8136	.003	DINOSEB
	0		2,4-DB	17.226	7994	.008	2,4-DB
17.898	67306	.011	Picloram	19.512	77774	.012	Picloram
26.136	46785	.008	Hexachlorophene	26.561	69193	.011	Hexachlorophe

Files:
Area File: 15herb18289003.029.RAW
Area File: 15herb18289003B.029.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 6:34:27 AM
File Reported On: 10/24/2018 at 4:05:03 PM

HIBLKX1824B QSHIBLKQS MISC 1829599999 10407 SW-846 81

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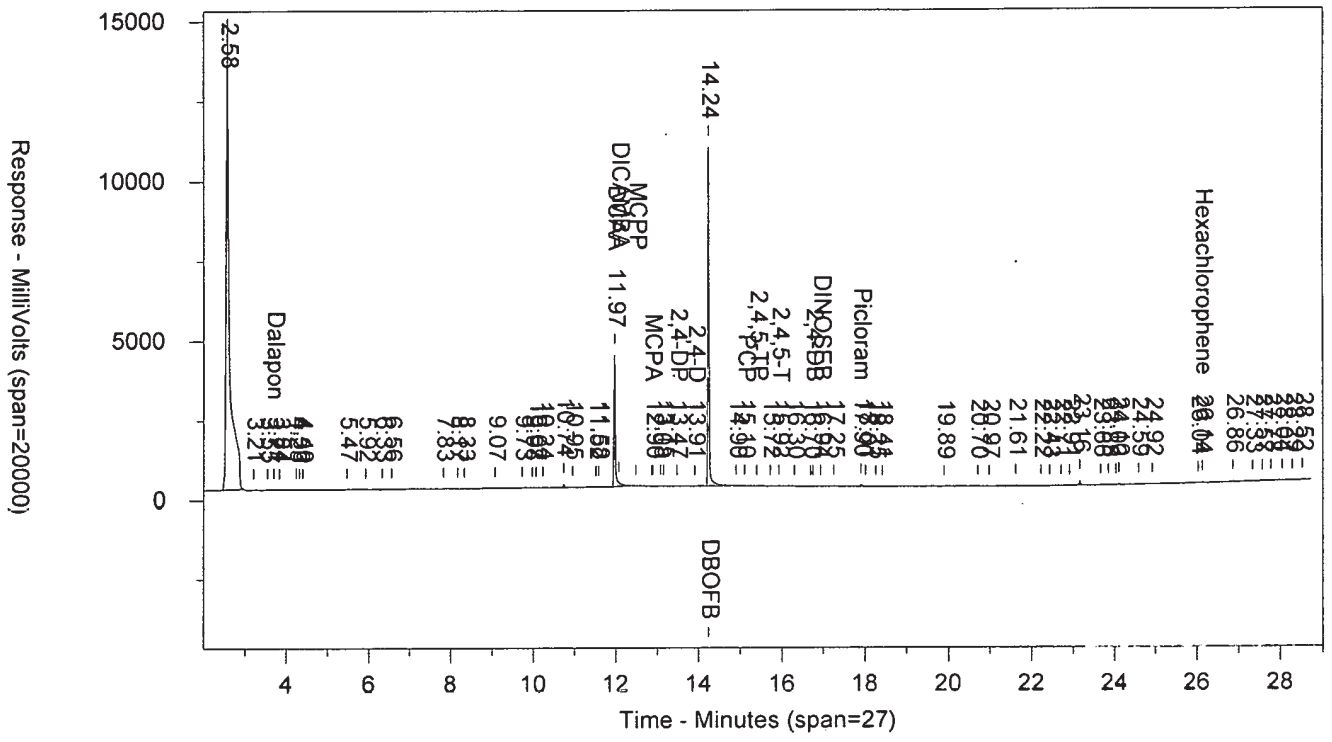

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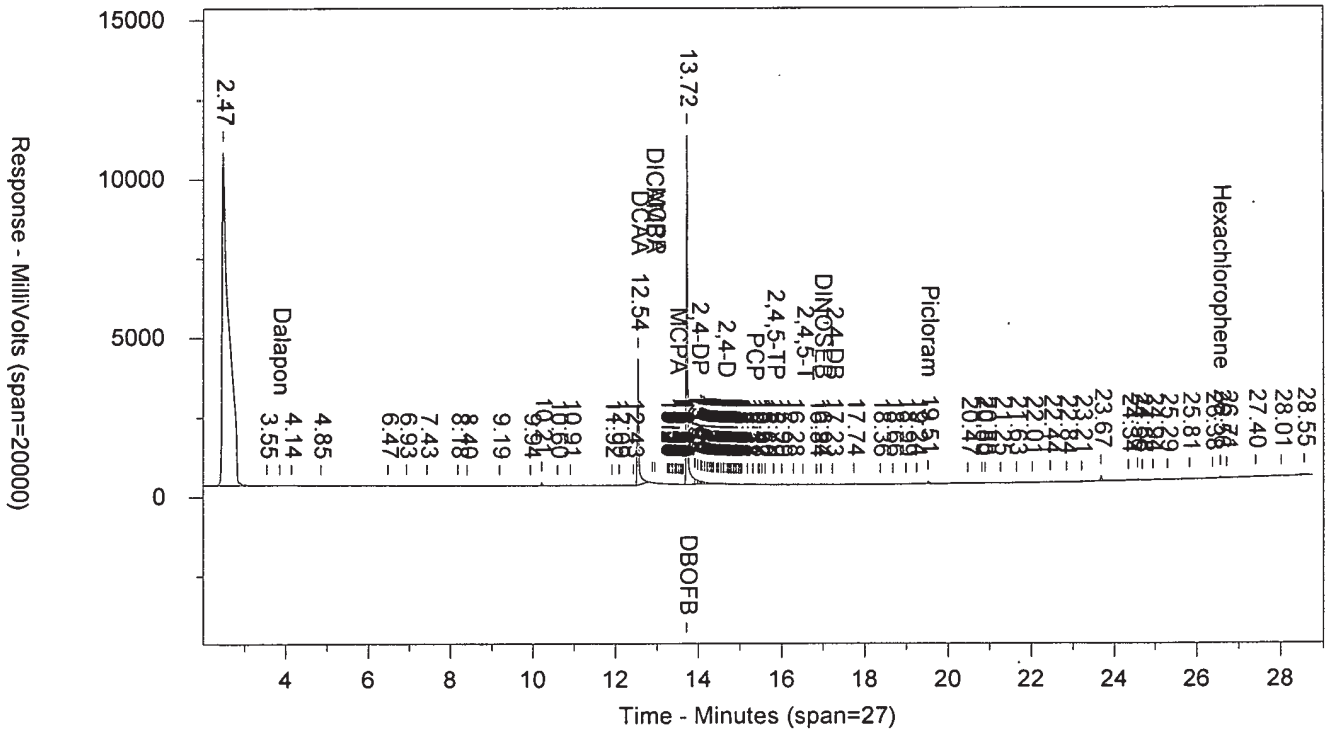

HERB31824F TEHERB3TE CCAL 1829599999 10407 SW-846 8151A

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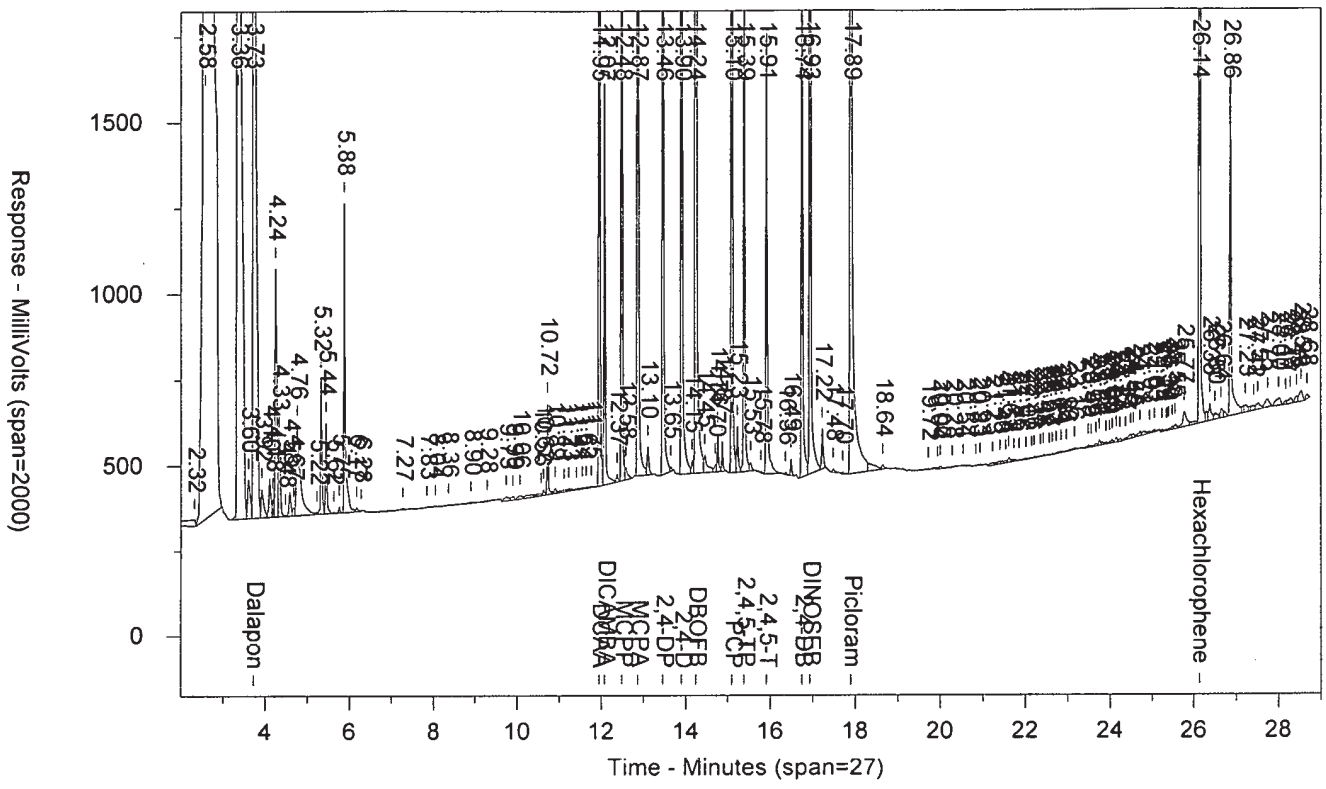

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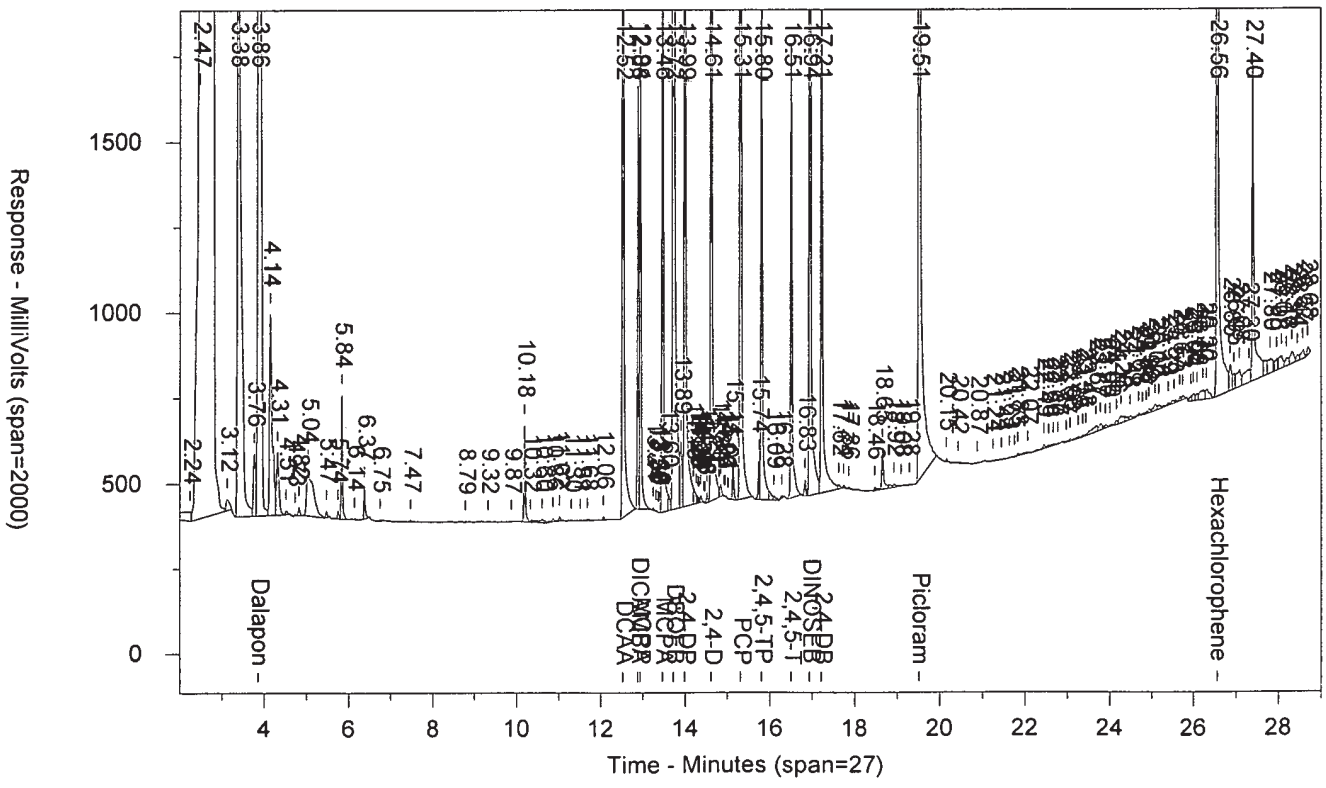

LANCASTER LABORATORIES

Sample Number: HERB31824F TEHERB3TE CCAL 1829599999 10407 SW-846 8151A
Injected On: 10/24/2018 12:08:21 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.727	3275314	376.903	Dalapon	3.857	4702632	378.4	Dalapon
11.946	3033327	182.754	DCAA	12.52	3057488	184.583	DCAA
12.072	1170871	18.658	DICAMBA	12.882	1224678	18.5	DICAMBA
12.483	1948749	19422.97	MCPP	12.936	1356249	20309.78	MCPP
12.865	2321961	19434.71	MCPA	13.463	1822145	19364.76	MCPA
13.457	2452241	188.224	2,4-DP	13.989	2705085	187.783	2,4-DP
14.237	10915430	1	DBOFB	13.719	11233710	1	DBOFB
13.9	2684147	160.132	2,4-D	14.613	2751669	159.349	2,4-D
15.095	3618988	18.641	PCP	15.31	3781978	18.192	PCP
15.387	1458939	18.747	2,4,5-TP	15.802	1488749	18.414	2,4,5-TP
15.91	1283241	18.142	2,4,5-T	16.505	1327877	18.184	2,4,5-T
16.744	1814445	184.08	2,4-DB	17.213	1871065	180.174	2,4-DB
16.931	3452535	102.443	DINOSEB	16.938	3355519	103.562	DINOSEB
17.889	6114863	94.202	Picloram	19.509	6299492	92.933	Picloram
26.137	4100884	65.163	Hexachlorophene	26.558	4506268	71.366	Hexachlorophe

Files:
Area File: 15herb18289003.040.RAW
Area File: 15herb18289003B.040.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 12:37:10 PM
File Reported On: 10/24/2018 at 4:08:37 PM

HERB31824F TEHERB3TE CCAL 1829599999 10407 SW-846 81

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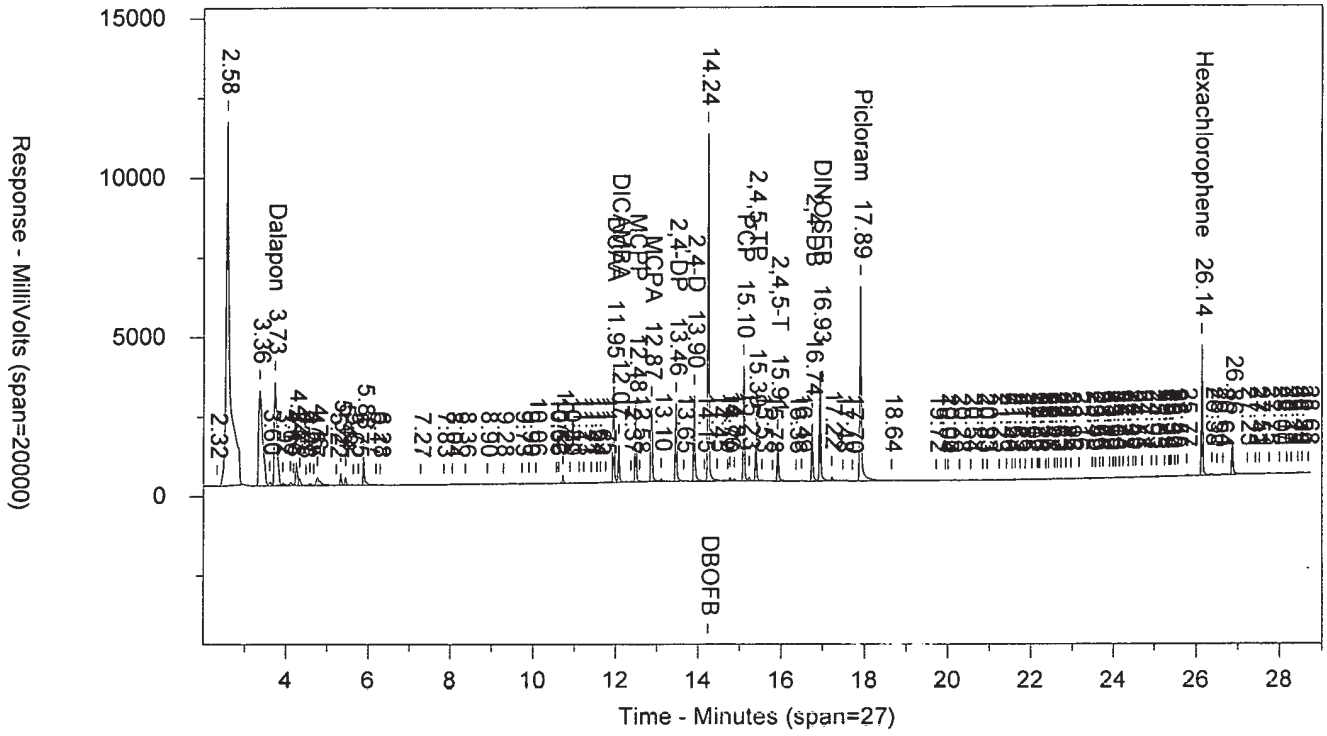

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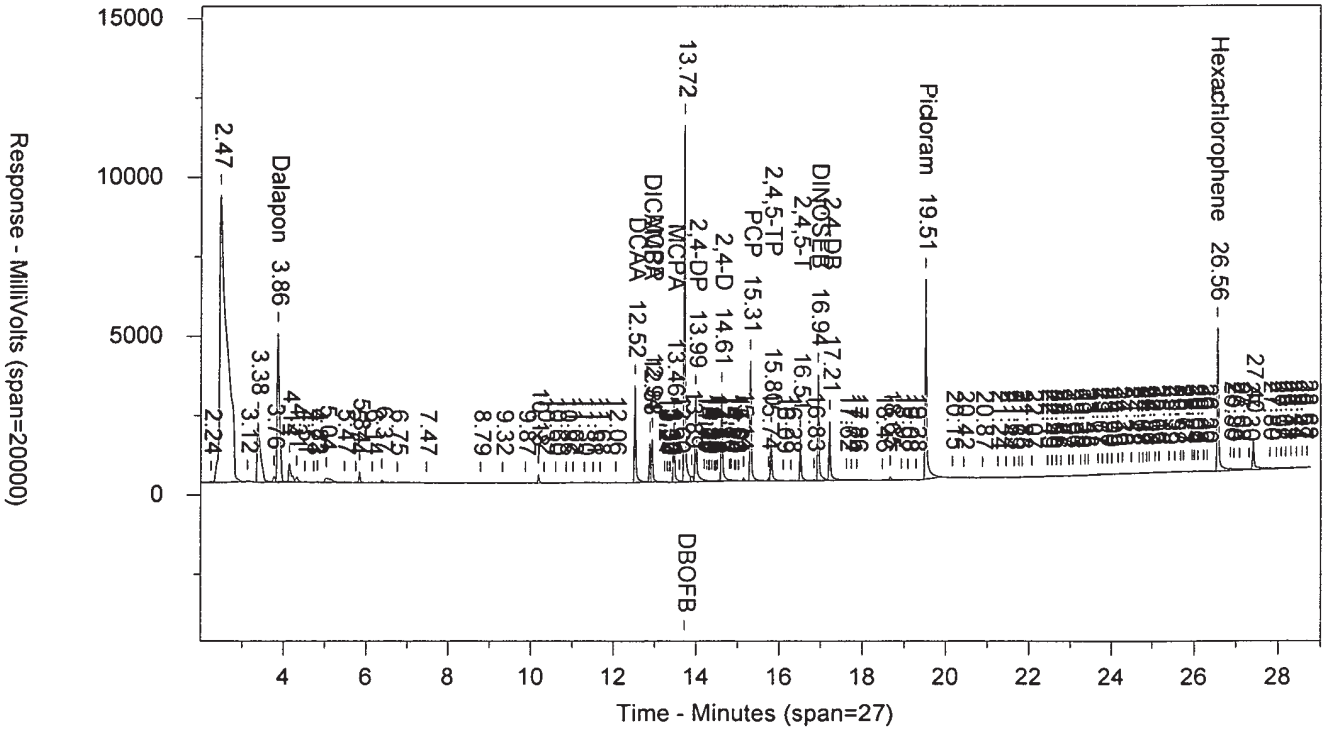

HIBLKX1824B QTHIBLKQT MISC 1829599999 10407 SW-846 8151A

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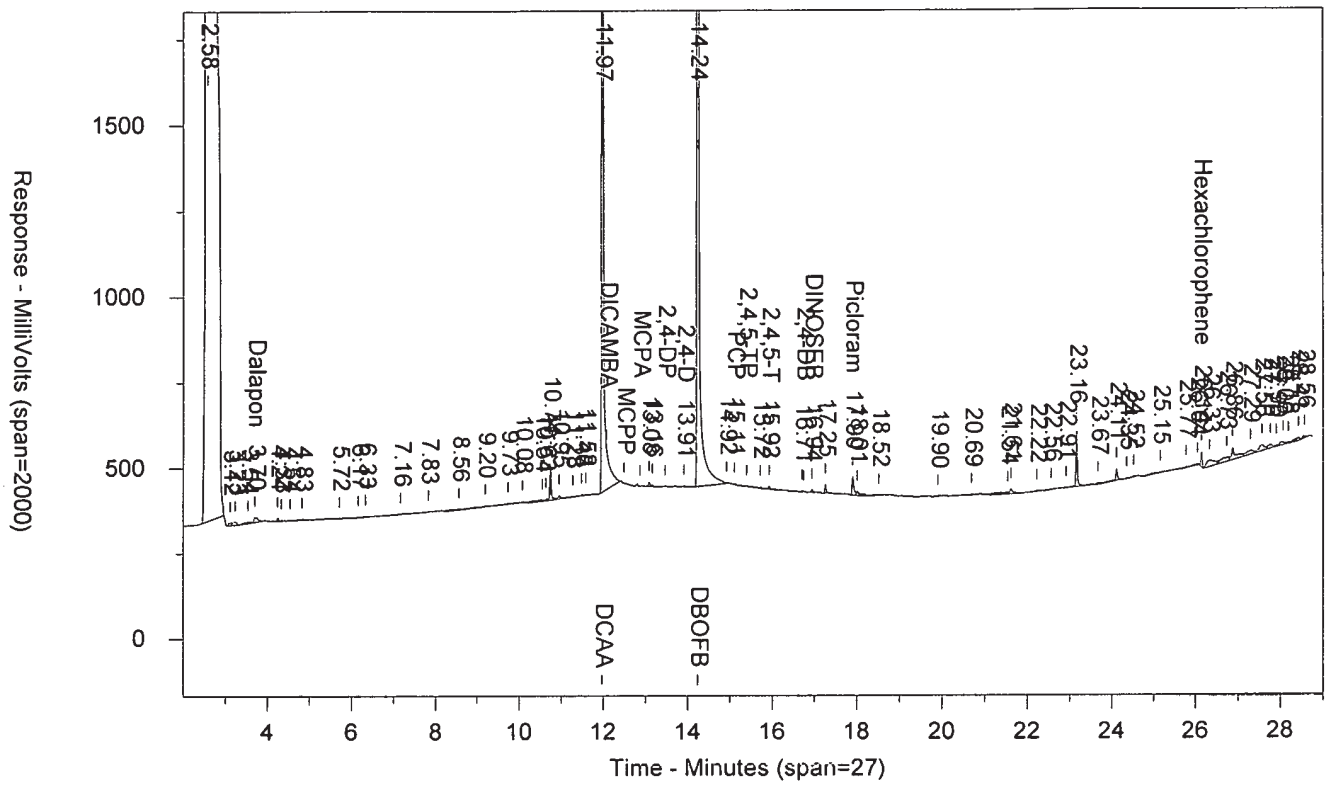

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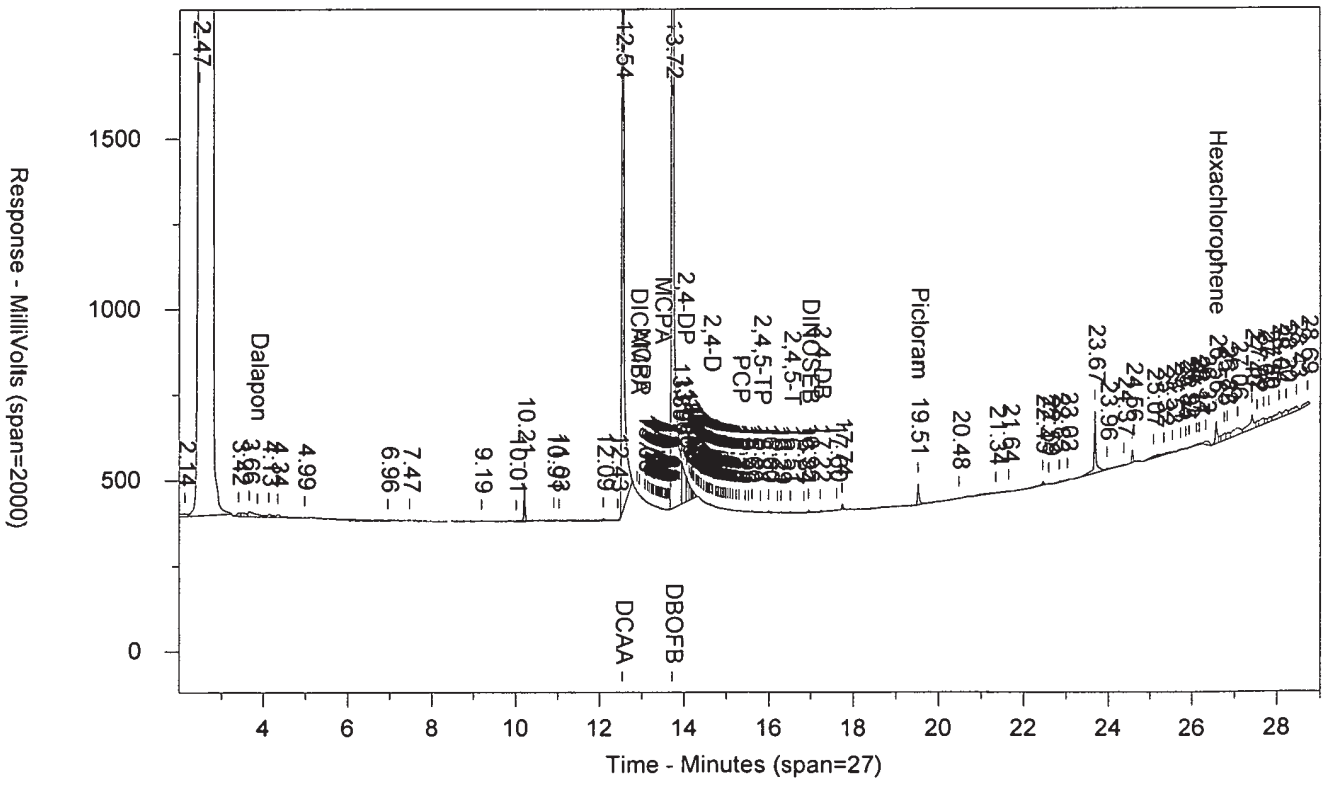

LANCASTER LABORATORIES

Sample Number: HIBLKX1824B QTHIBLKQT MISC 1829599999 10407 SW-846 8151A
Injected On: 10/24/2018 12:41:28 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.701	15536	.018	Dalapon		0		Dalapon
11.97	4093476	2.501	DCAA	12.538	3856642	2.458	DCAA
	0		MCPA	13.46	3426	.384	MCPA
14.238	10763030	.001	DBOFB	13.719	10640090	.001	DBOFB
13.909	4156	.003	2,4-D	14.614	3875	.002	2,4-D
15.108	4148		PCP	15.303	1061		PCP
	0		2,4,5-TP	15.806	2082		2,4,5-TP
15.922	10627	.002	2,4,5-T	16.512	4726	.001	2,4,5-T
16.936	8727	.003	DINOSEB	16.946	8370	.003	DINOSEB
	0		2,4-DB	17.22	5974	.006	2,4-DB
17.901	54728	.009	Picloram	19.514	62009	.01	Picloram
26.136	44405	.007	Hexachlorophene	26.56	65649	.011	Hexachlorophe

Files:
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Area File: 15herb18289003B.041.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
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Format B: herw15.FMTA
Area File Created On: 10/24/2018 1:10:15 PM
File Reported On: 10/24/2018 at 4:08:55 PM

HIBLKX1824B QTHIBLKQT MISC 1829599999 10407 SW-846 81

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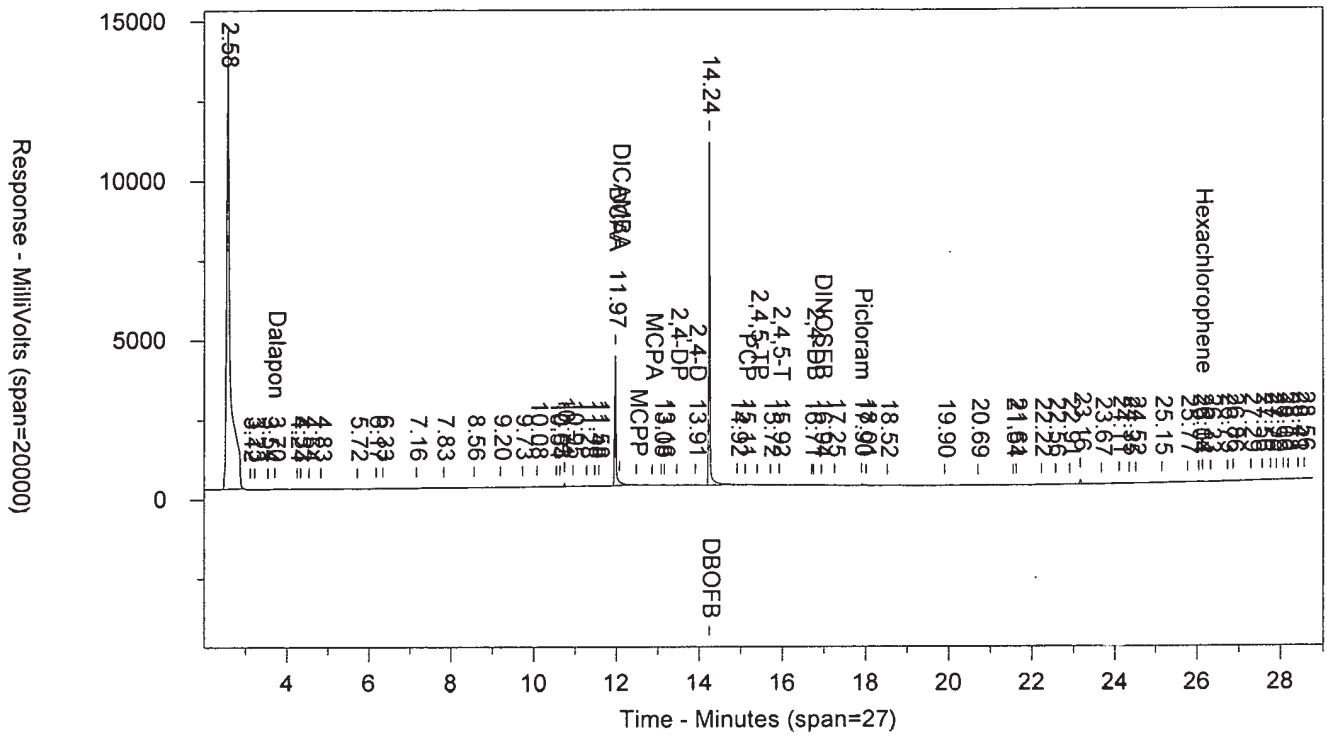

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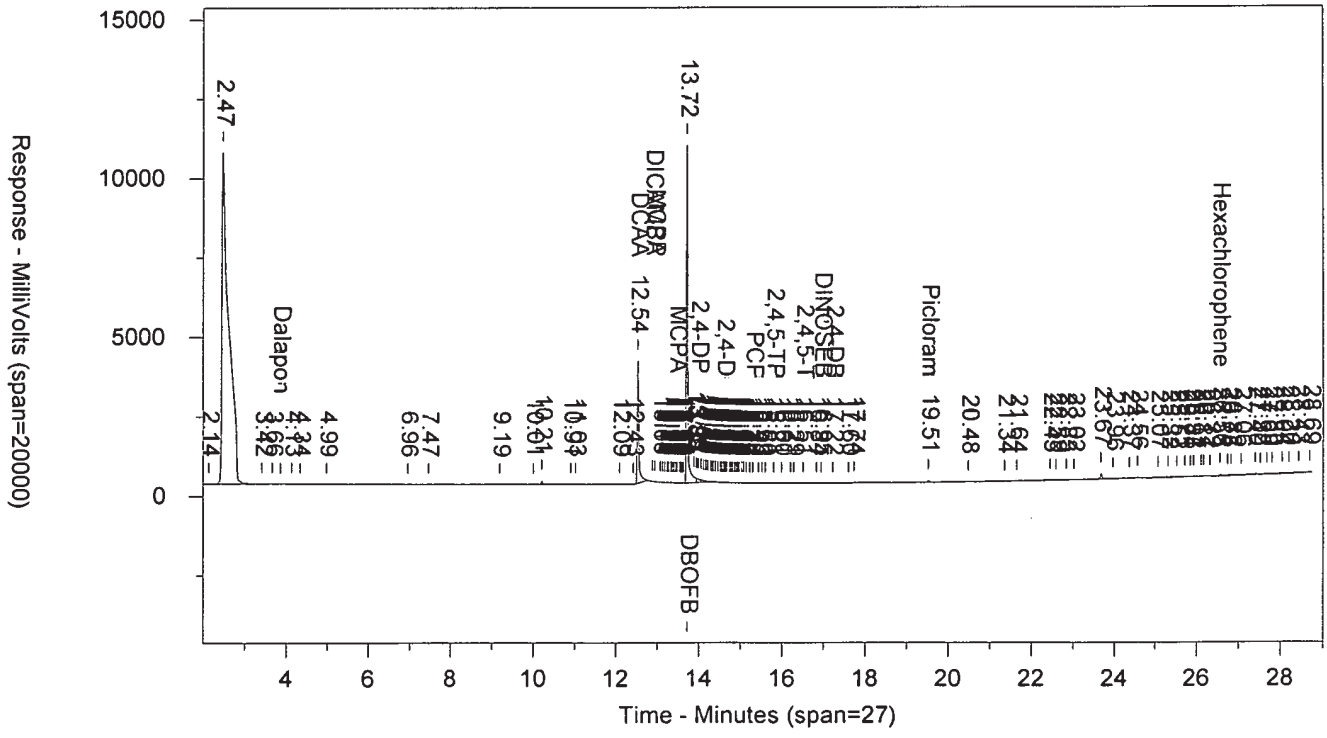

HERB31824F TFHERB3TF CCAL 1829599999 10407 SW-846 8151A

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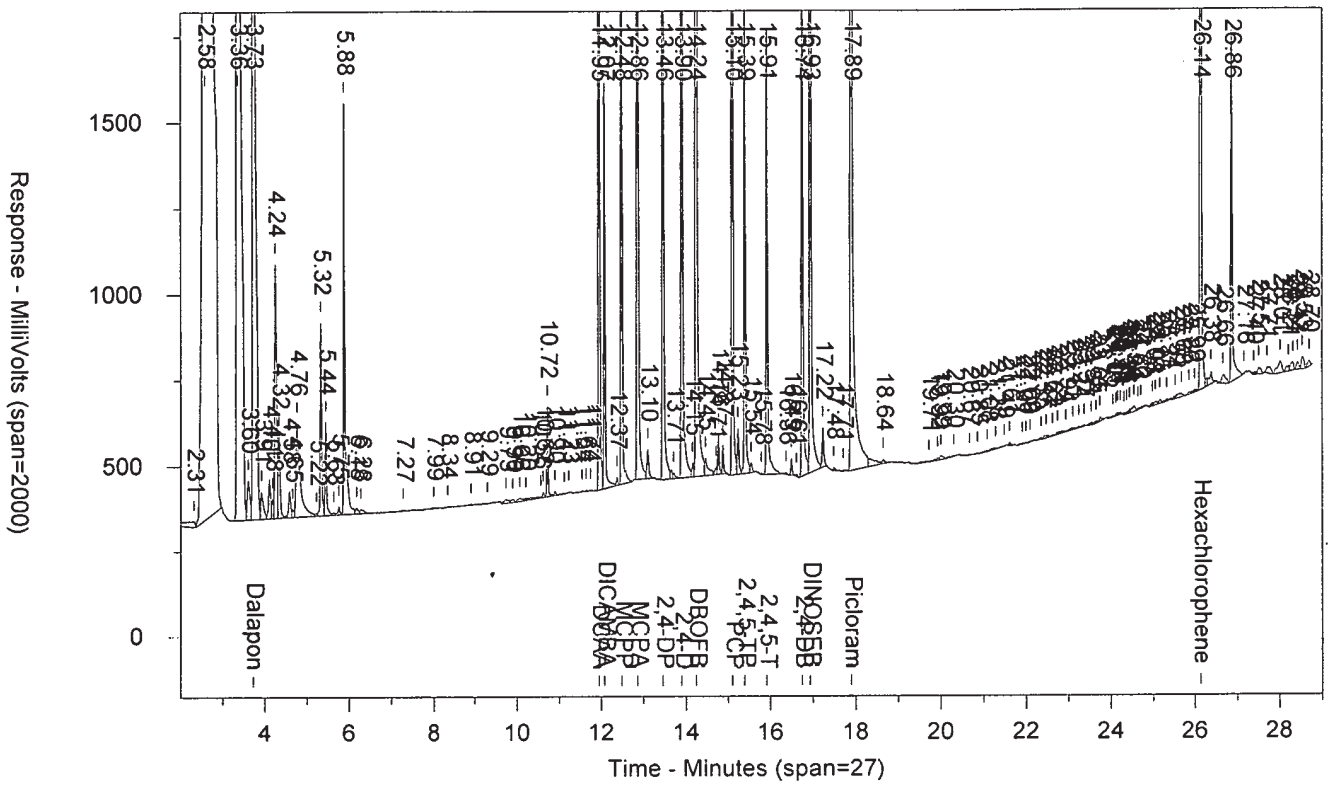

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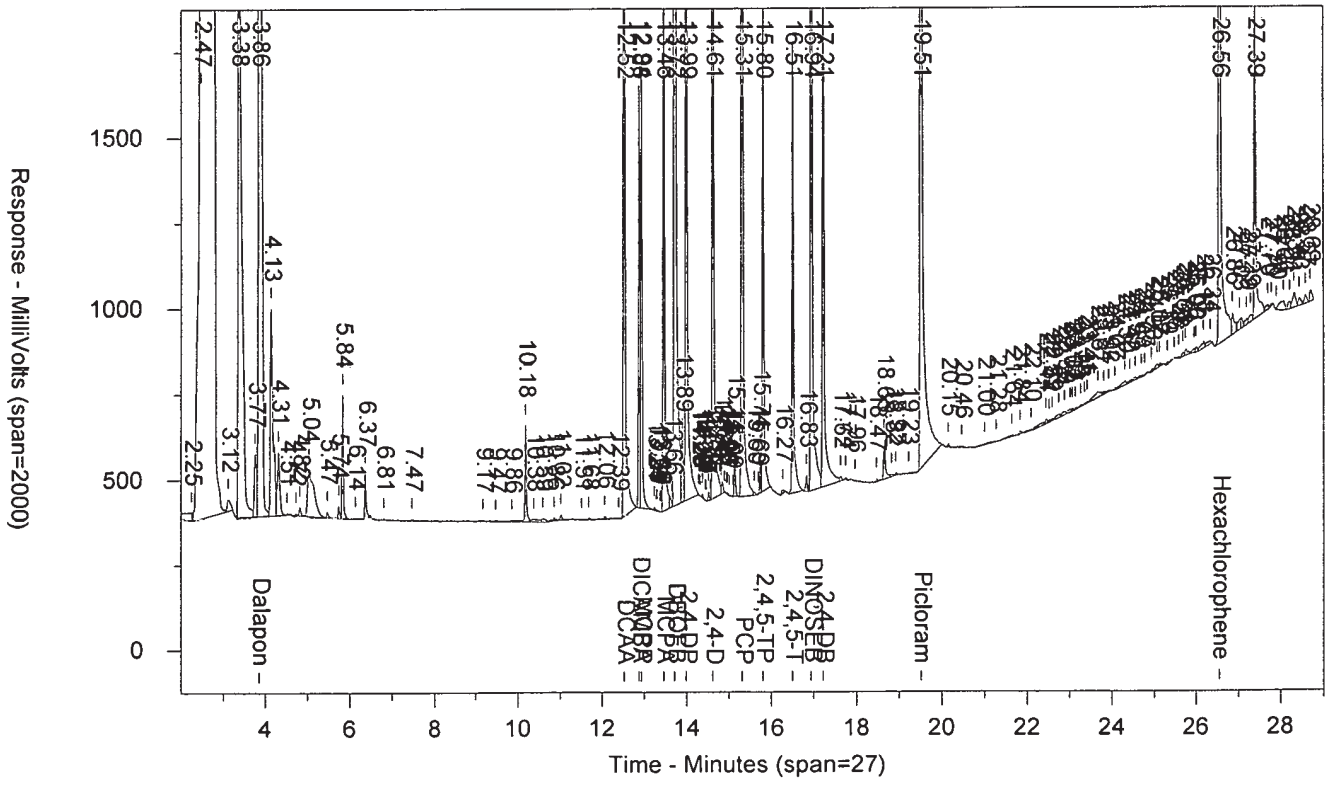

LANCASTER LABORATORIES

Sample Number: HERB31824F TFHERB3TF CCAL 1829599999 10407 SW-846 8151A
Injected On: 10/24/2018 3:59:26 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.727	3289547	377.839	Dalapon	3.857	4705277	384.663	Dalapon
11.946	2979759	179.194	DCAA	12.52	3043249	186.659	DCAA
12.072	1180437	18.775	DICAMBA	12.882	1222392	18.761	DICAMBA
12.481	1967209	19691.25	MCPP	12.935	1283297	19524.42	MCPP
12.864	2289503	18914.71	MCPA	13.462	1742077	18809.69	MCPA
13.458	2506335	192.019	2,4-DP	13.988	2721366	191.932	2,4-DP
14.237	10935710	1	DBOFB	13.718	11057030	1	DBOFB
13.899	2742959	163.337	2,4-D	14.614	2747213	161.634	2,4-D
15.097	3747679	19.268	PCP	15.309	3933770	19.225	PCP
15.387	1429728	18.337	2,4,5-TP	15.804	1479384	18.591	2,4,5-TP
15.913	1301437	18.365	2,4,5-T	16.506	1327118	18.464	2,4,5-T
16.744	1794964	181.766	2,4-DB	17.213	1858498	181.824	2,4-DB
16.931	3497699	103.591	DINOSEB	16.938	3383661	106.099	DINOSEB
17.892	6044376	92.944	Picloram	19.509	6029846	90.376	Picloram
26.135	4281974	67.914	Hexachlorophene	26.557	4635078	74.579	Hexachlorophe

Files:
Area File: 15herb18289003.047.RAW
Area File: 15herb18289003B.047.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
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Format B: herw15.FMTA
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HERB31824F TFHERB3TF CCAL 1829599999 10407 SW-846 81

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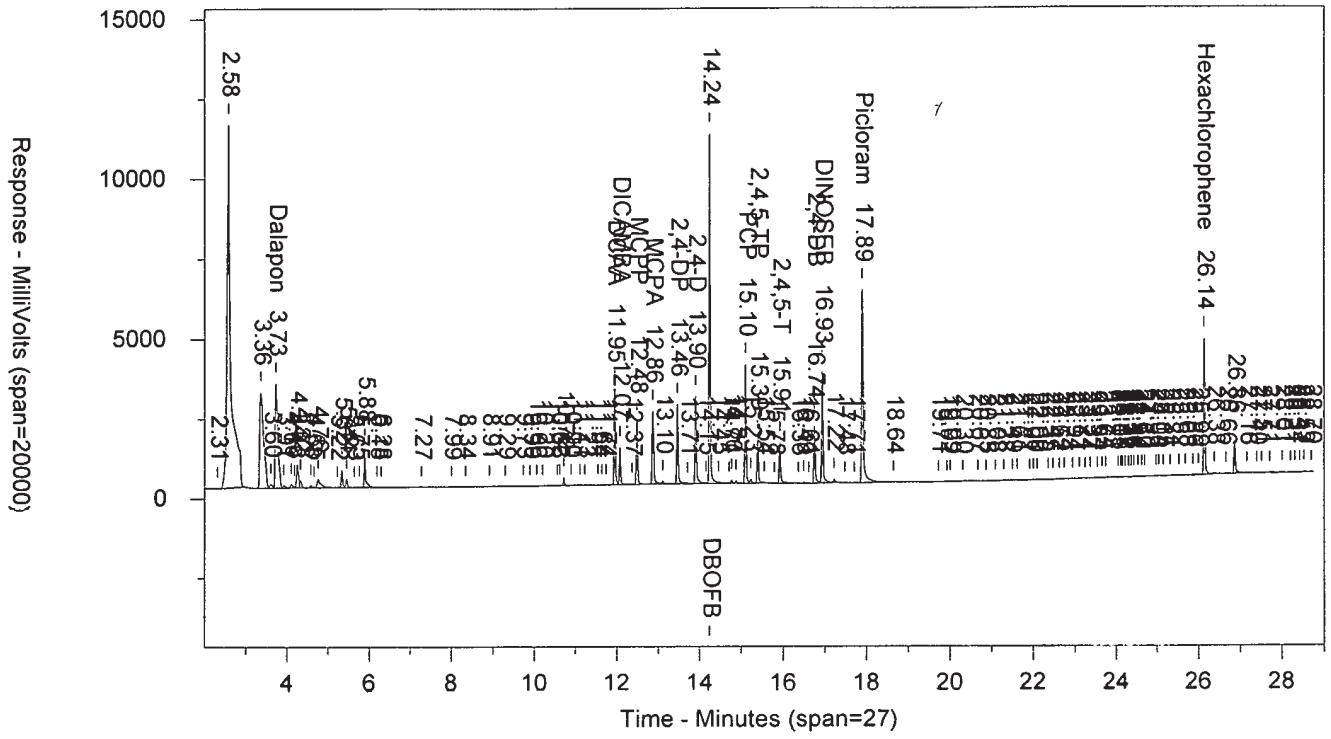

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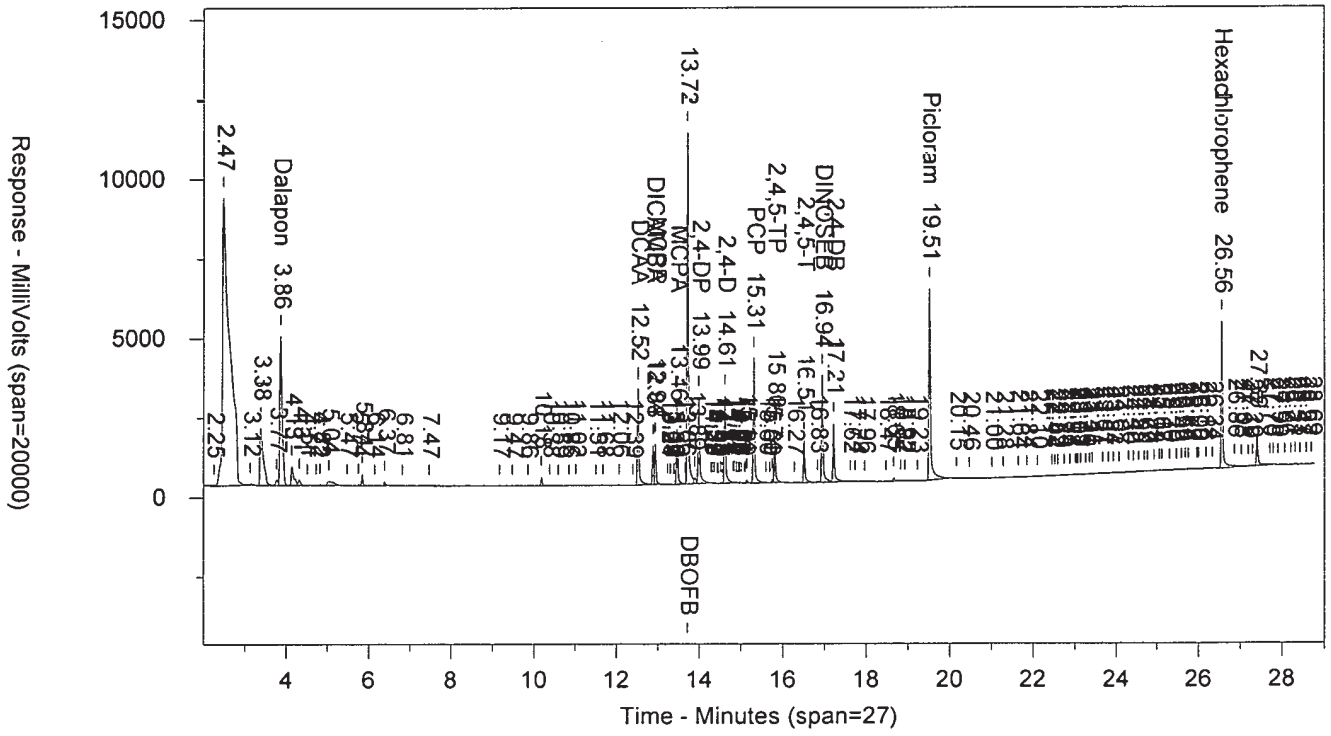

HIBLKX1824B QUHIBLKQU MISC 1829599999 10407 SW-846 8151A

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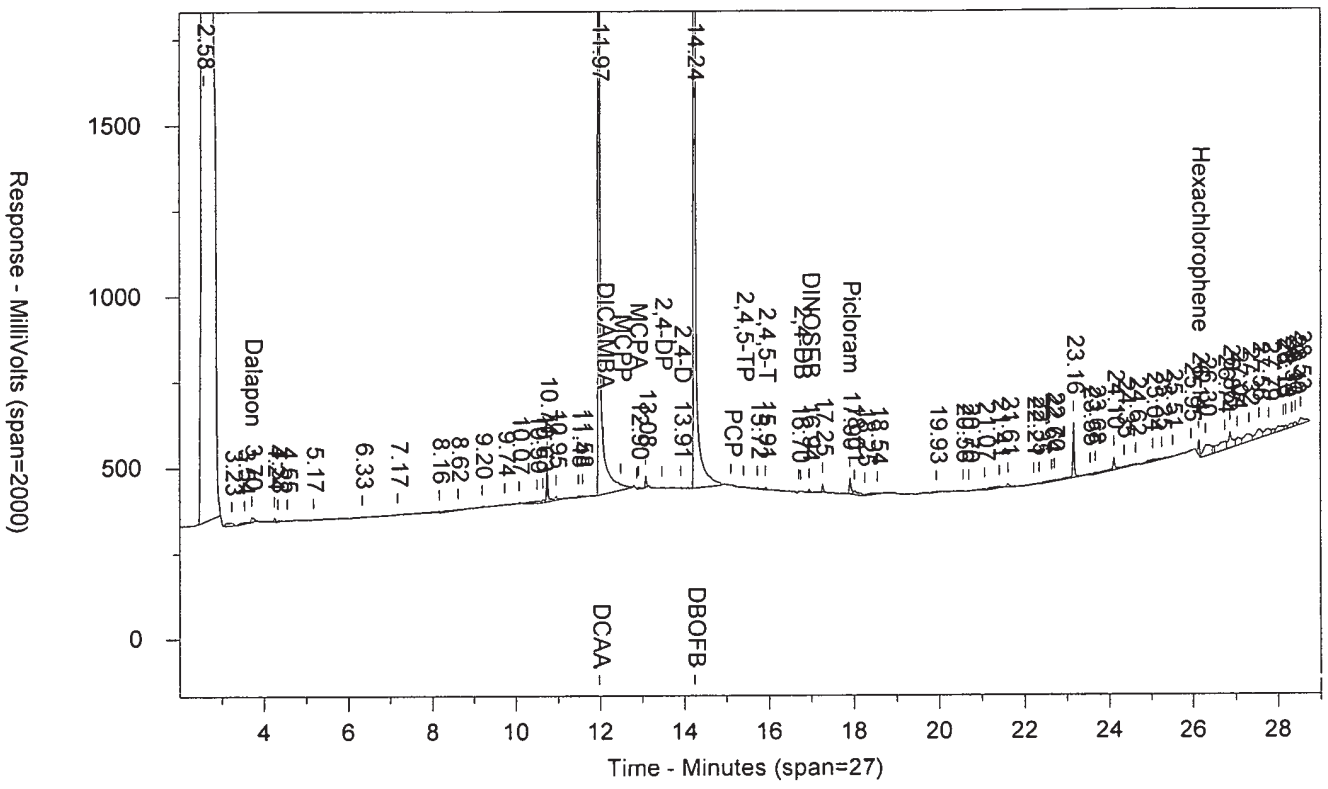

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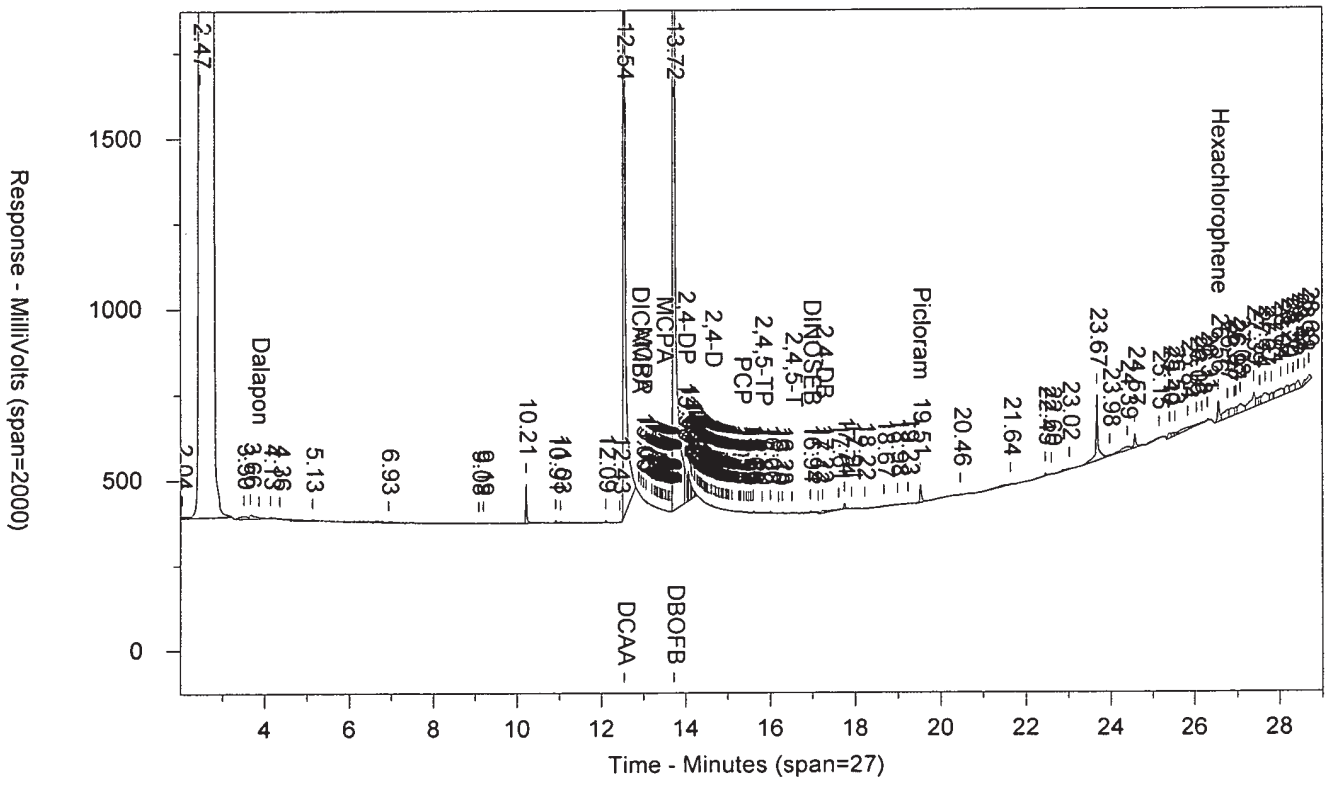

LANCASTER LABORATORIES

Sample Number: HIBLKX1824B QUHIBLKQU MISC 1829599999 10407 SW-846 8151A
Injected On: 10/24/2018 4:32:24 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.699	14301	.016	Dalapon		0		Dalapon
11.969	4093478	2.432	DCAA	12.538	3961174	2.384	DCAA
	0		MCPA	13.456	754	.08	MCPA
14.238	11067870	.001	DBOFB	13.719	11268780	.001	DBOFB
13.913	3787	.002	2,4-D	14.619	5231	.003	2,4-D
	0		2,4-DP	13.981	102338	.071	2,4-DP
	0		PCP	15.301	1118		PCP
	0		2,4,5-TP	15.803	2051		2,4,5-TP
15.914	8607	.001	2,4,5-T		0		2,4,5-T
16.941	9377	.003	DINOSEB	16.944	6732	.002	DINOSEB
	0		2,4-DB	17.224	9106	.009	2,4-DB
17.903	47844	.007	Picloram	19.514	55530	.008	Picloram
26.136	45983	.007	Hexachlorophene	26.558	62494	.01	Hexachlorophe

Files:
Area File: 15herb18289003.048.RAW
Area File: 15herb18289003B.048.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 5:01:11 PM
File Reported On: 10/24/2018 at 5:25:19 PM

HIBLKX1824B QUHIBLKQU MISC 1829599999 10407 SW-846 81

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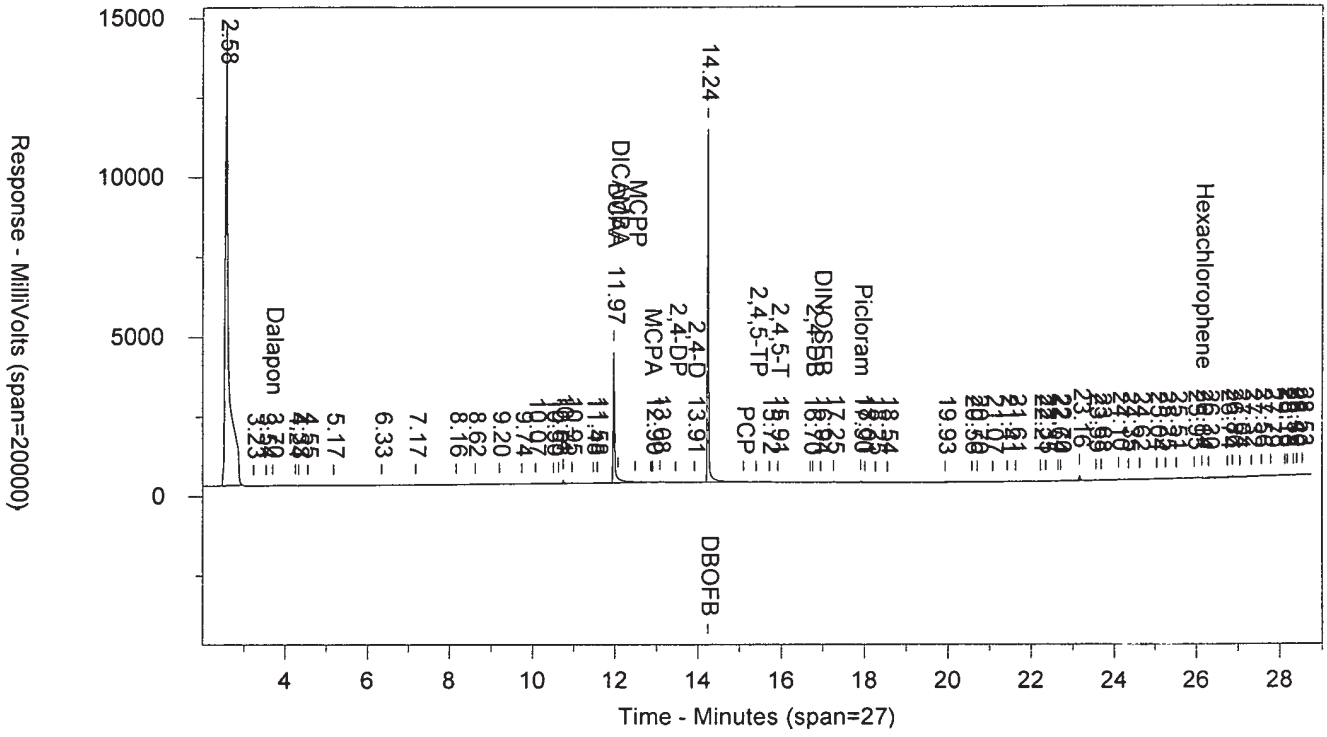

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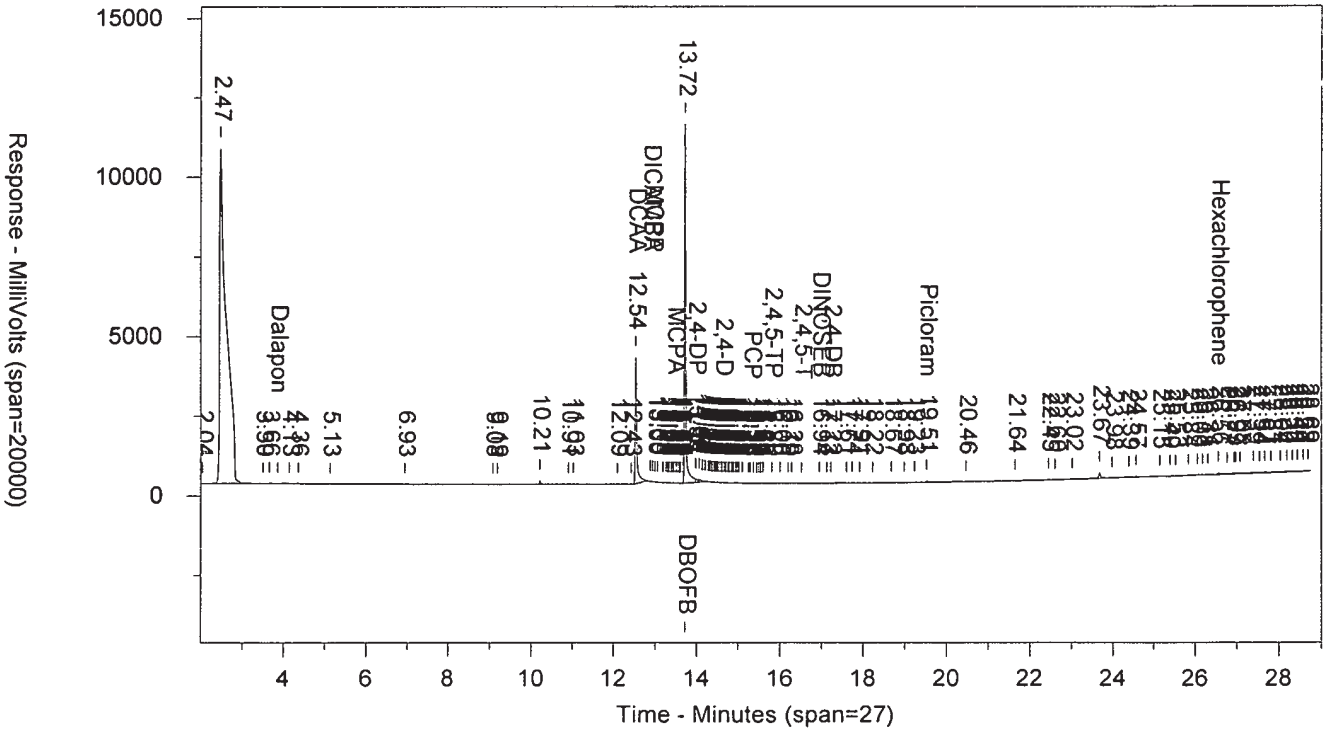

Raw QC Data

Herbicides

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Data Summary

Sample Name: BLANKA 10/22/18 F PBLK06295 BLK Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 1000 ML Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on	Oct 24, 2018 04:26:41
Instrument	19850A
Result file	15HERB18289003.026.RAW
Calibration file	15HERB1828901
Method file	15HERB

%SSR(DCAA) 80% (34 - 142) Conc: 1.602267

Analysis Report (B)

Injected on	Oct 24, 2018 04:26:41
Instrument	19850B
Result file	15HERB18289003B.026.RAW
Calibration file	15HERB1828901B
Method file	15HERBB

%SSR(DCAA) 73% (34 - 142) Conc: 1.457792

Single Component Data

Compound	Min	RT	Max	Height	Amount
2,4-DCAA	11.92	11.96	11.98	2430684	1.602267
MCPA	12.83	12.87	12.89	16204	0
2,4-D	13.87	13.88	13.93	111111	0.072525
Pentachlorophenol	15.07	15.10	15.13	49167	0.002771
2,4,5-TP	15.36	15.40	15.42	34108	0.004795
2,4,5-T	15.88	15.89	15.94	230047	0.035583
2,4-DB	16.72	16.75	16.78	17414	0.01933
Dinoseb	16.91	16.95	16.97	31869	0.010346

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.87	3.89	50648	0.042955
2,4-DCAA	12.49	12.53	12.55	2290998	1.457792
MCPP	12.91	12.92	12.97	31396	4.955513
MCPA	13.43	13.47	13.49	10226	1.145467
2,4-DP (Dichloroprop)	13.96	14.01	14.02	174651	0.127788
Pentachlorophenol	15.28	15.30	15.34	146780	0.007442
2,4,5-TP	15.78	15.82	15.84	32059	0.00418
2,4,5-T	16.48	16.49	16.54	64456	0.009303
2,4-DB	17.19	17.23	17.25	118742	0.120518
Picloram	19.48	19.52	19.54	20544	0.003194

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
Dalapon			<1.8	<3.6	<4			
2,4-DCAA	A	1.602267	0.1	0.2	0.2		9.44	
2,4-DCAA-D1	A	1.602267	0.1	0.2	0.2			
2,4-DCAA-D2	B	1.457792	0.1	0.2	0.2			
Dicamba			<0.08	<0.16	<0.3			
MCPP			<50	<100	<200			
MCPA			<50	<100	<200			
2,4-DP (Dichloroprop)			<0.16	<0.32	<0.5			
2,4-D			<0.25	<0.5	<0.6			
Pentachlorophenol			<0.027	<0.06	<0.07			
2,4,5-TP			<0.01	<0.03	<0.05			
2,4,5-T			<0.065	<0.13	<0.15			
2,4-DB			<0.63	<1.3	<1.5			
Dinoseb			<0.18	<0.4	<0.5			
Picloram			<0.36	<0.8	<1			
Hexachlorophene					<0.2			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Michele D. Hamilton
Group Leader

OCT 25 2018

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:19:18

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Data Summary

Sample Name: BLANKA 10/22/18 F PBLK06295 BLK Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 1000 ML Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on	Oct 24, 2018 04:26:41
Instrument	19850A
Result file	15HERB18289003.026.RAW
Calibration file	15HERB1828901
Method file	15HERB

%SSR(DCAA) 80% (32 - 138) Conc: 1.602267

Analysis Report (B)

Injected on	Oct 24, 2018 04:26:41
Instrument	19850B
Result file	15HERB18289003B.026.RAW
Calibration file	15HERB1828901B
Method file	15HERBB

%SSR(DCAA) 73% (32 - 138) Conc: 1.457792

Single Component Data

Compound	Min	RT	Max	Height	Amount
2,4-DCAA	11.92	11.96	11.98	2430684	1.602267
MCPA	12.83	12.87	12.89	16204	0
2,4-D	13.87	13.88	13.93	111111	0.072525
Pentachlorophenol	15.07	15.10	15.13	49167	0.002771
2,4,5-TP	15.36	15.40	15.42	34108	0.004795
2,4,5-T	15.88	15.89	15.94	230047	0.035583
2,4-DB	16.72	16.75	16.78	17414	0.01933
Dinoseb	16.91	16.95	16.97	31869	0.010346

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.87	3.89	50648	0.042955
2,4-DCAA	12.49	12.53	12.55	2290998	1.457792
MCPP	12.91	12.92	12.97	31396	4.955513
MCPA	13.43	13.47	13.49	10226	1.145467
2,4-DP (Dichloroprop)	13.96	14.01	14.02	174651	0.127788
Pentachlorophenol	15.28	15.30	15.34	146780	0.007442
2,4,5-TP	15.78	15.82	15.84	32059	0.00418
2,4,5-T	16.48	16.49	16.54	64456	0.009303
2,4-DB	17.19	17.23	17.25	118742	0.120518
Picloram	19.48	19.52	19.54	20544	0.003194

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
Dalapon			<1.8	<3.6	<4			
2,4-DCAA	A	1.602267	0.1	0.2	0.2		9.44	
2,4-DCAA-D1	A	1.602267	0.1	0.2	0.2			
2,4-DCAA-D2	B	1.457792	0.1	0.2	0.2			
Dicamba			<0.08	<0.16	<0.3			
MCPP			<50	<100	<200			
MCPA			<50	<100	<200			
2,4-DP (Dichloroprop)			<0.16	<0.32	<0.5			
2,4-D			<0.25	<0.5	<0.6			
Pentachlorophenol			<0.027	<0.06	<0.07			
2,4,5-TP			<0.01	<0.03	<0.05			
2,4,5-T			<0.065	<0.13	<0.15			
2,4-DB			<0.63	<1.3	<1.5			
Dinoseb			<0.18	<0.4	<0.5			
Picloram			<0.36	<0.8	<1			
Hexachlorophene					<0.2			

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Michele D. Hamilton
Group Leader

OCT 25 2018

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:19:21

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **BLANKA** 10/22/18 F PBLK06295 ID: AB **Batchnumber: 182950006A**
Sample Amount: 1000 ML Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 04:26:41
Instrument : CP15--19850A
Result file : 15HERB18289003.026.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 80% (34-142) Conc.: 1.602267

Peak name	Min	R.T.	Max	Height	Amount
DCAA	11.92	11.96	11.98	2430684	1.602267
MCPA	12.83	12.87	12.89	16204	-132.106300
2,4-D	13.87	13.88	13.93	111111	0.072525
DBOFB	14.21	14.23	14.27	9976622	0.001000
PCP	15.07	15.10	15.13	49167	0.002771
2,4,5-TP	15.36	15.40	15.42	34108	0.004795
2,4,5-T	15.88	15.89	15.94	230047	0.035583
2,4-DB	16.72	16.75	16.78	17414	0.019330
DINOSEB	16.91	16.95	16.97	31869	0.010346

Analysis Report (B)

Injected on : Oct 24, 2018 04:26:41
Instrument : CP15--19850B
Result file : 15HERB18289003B.026.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 73% (34-142) Conc.: 1.457792

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.87	3.89	50648	0.042955
DCAA	12.49	12.53	12.55	2290998	1.457792
MCPP	12.91	12.92	12.97	31396	4.955513
MCPA	13.43	13.47	13.49	10226	1.145467
DBOFB	13.69	13.71	13.75	10658090	0.001000
2,4-DP	13.96	14.01	14.02	174651	0.127788
PCP	15.28	15.30	15.34	146780	0.007442
2,4,5-TP	15.78	15.82	15.84	32059	0.004180
2,4,5-T	16.48	16.49	16.54	64456	0.009303
2,4-DB	17.19	17.23	17.25	118742	0.120518
Picloram	19.48	19.52	19.54	20544	0.003194

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon			<4	<1.8			
☐ DCAA	A	1.602267				9.44	
☑ DICAMBA			<0.3	<0.08			
☑ MCPP			<200	<50			
☑ MCPA			<200	<50			
☑ 2,4-DP			<0.5	<0.16			
☑ 2,4-D			<0.6	<0.25			
☐ DBOFB	A	0.001000				0.00	
☑ PCP			<0.07	<0.027			
☑ 2,4,5-TP			<0.05	<0.01			
☑ 2,4,5-T			<0.15	<0.065			
☑ 2,4-DB			<1.5	<0.63			
☑ DINOSEB			<0.5	<0.18			
☑ Picloram			<1	<0.36			
☑ Hexachlorophene			<0.2	<0.18			

Units: ug/l

Reviewed by: _____ Verified by: Michelle D. Hamilton
Group Leader
Date: 10/25/18 Date: OCT 25 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

BLANKA 10/22/18 F ABPBLK06295 BLK 182950006A 10407 SW-846 8151

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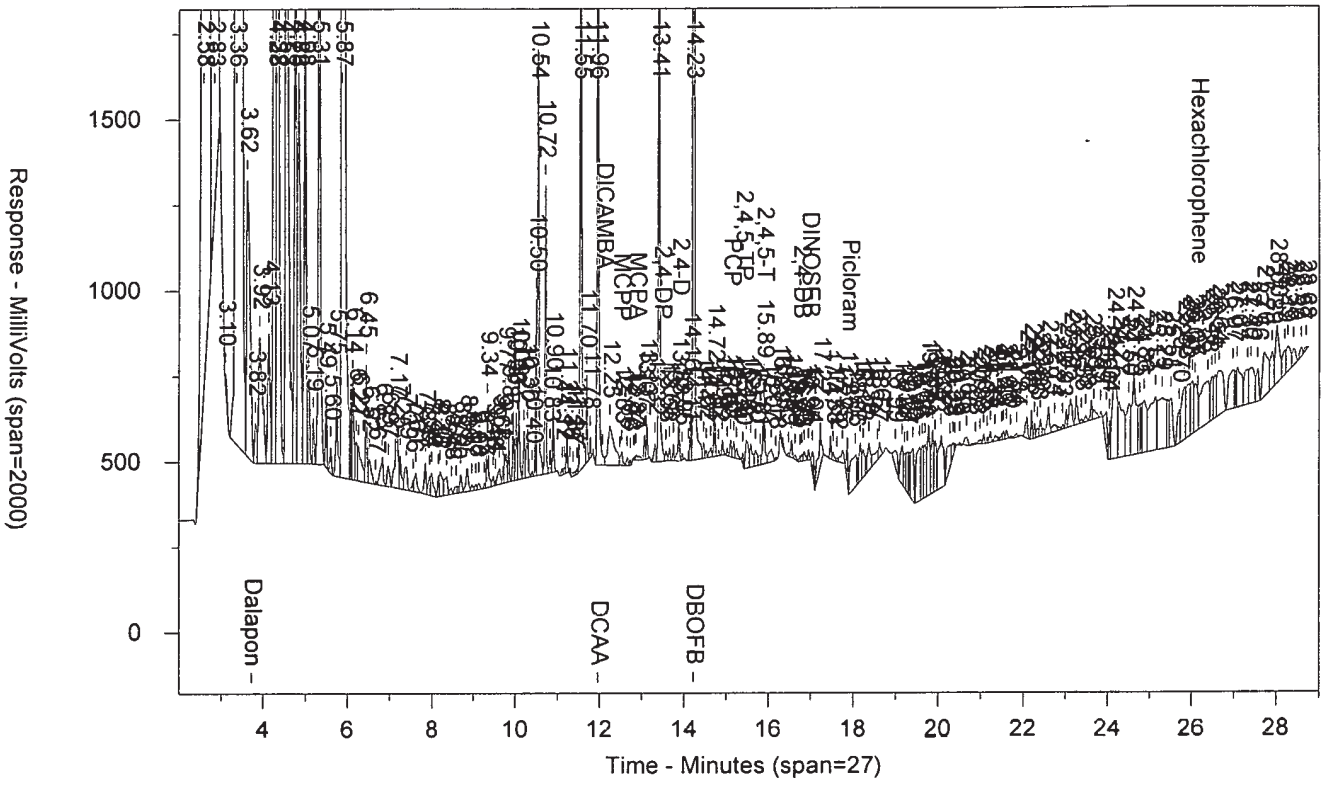

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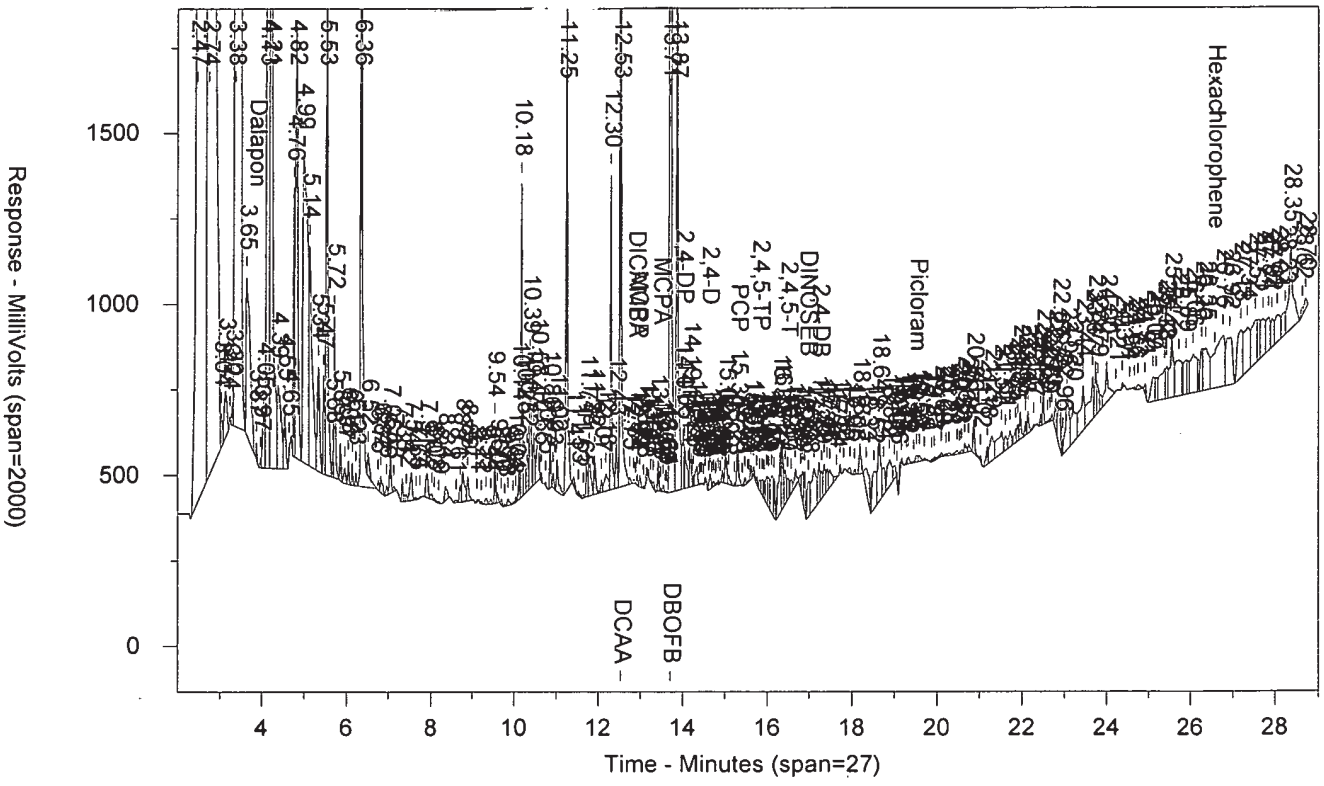

LANCASTER LABORATORIES

Sample Number: BLANKA 10/22/18 F ABPBLK06295 BLK 182950006A 10407 SW-846 8151A
Injected On: 10/24/2018 4:26:41 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
	0		Dalapon	3.875	50648	.043	Dalapon
11.957	2430685	1.602	DCAA	12.527	2290998	1.458	DCAA
12.866	16204	-132.106	MCPA	13.47	10226	1.145	MCPA
	0		MCPP	12.925	31396	4.956	MCPP
14.227	9976622	.001	DBOFB	13.707	10658090	.001	DBOFB
13.884	111111	.073	2,4-D		0		2,4-D
	0		2,4-DP	14.011	174651	.128	2,4-DP
15.103	49167	.003	PCP	15.298	146780	.007	PCP
15.397	34108	.005	2,4,5-TP	15.818	32059	.004	2,4,5-TP
15.892	230047	.036	2,4,5-T	16.486	64456	.009	2,4,5-T
16.754	17414	.019	2,4-DB	17.227	118742	.121	2,4-DB
16.952	31869	.01	DINOSEB		0		DINOSEB
	0		Picloram	19.516	20544	.003	Picloram

Files:
Area File: 15herb18289003.026.RAW
Area File: 15herb18289003B.026.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 4:55:28 AM
File Reported On: 10/24/2018 at 4:04:13 PM

BLANKA 10/22/18 F ABPBLK06295 BLK 182950006A 10407 SW-846 8

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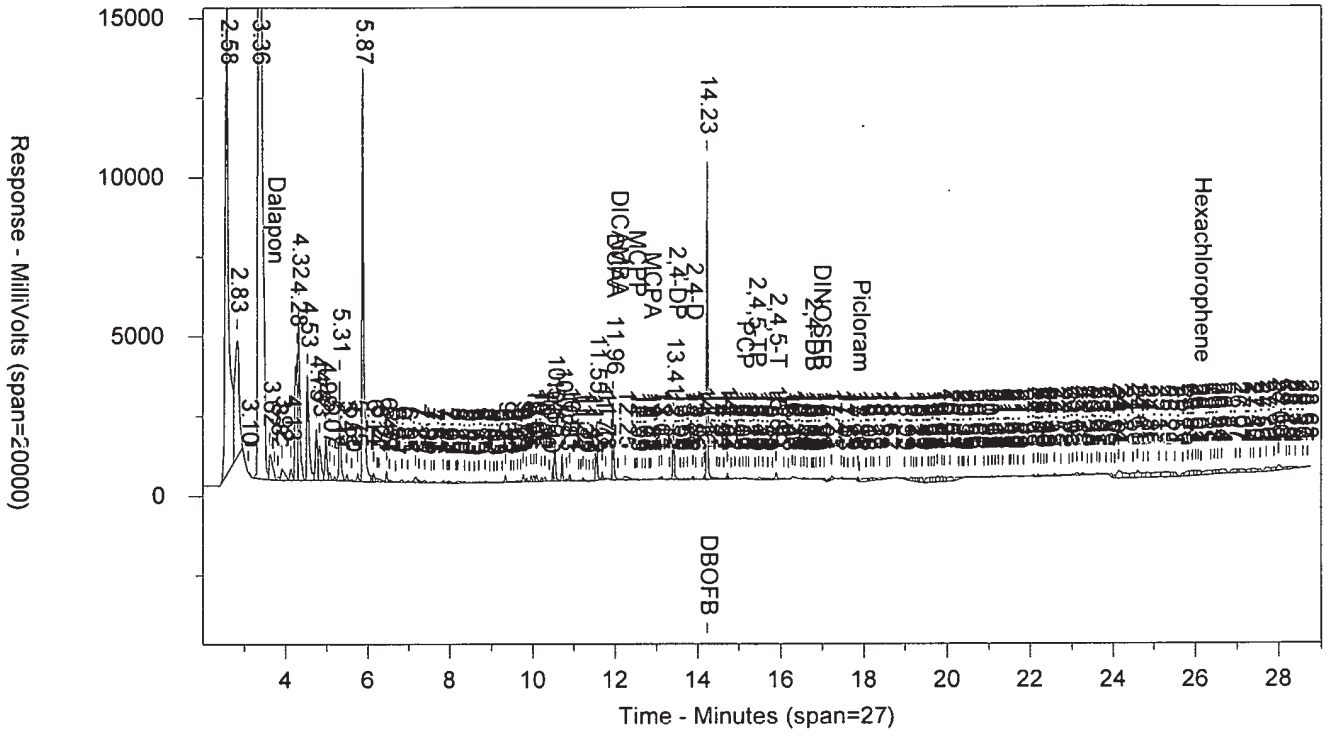

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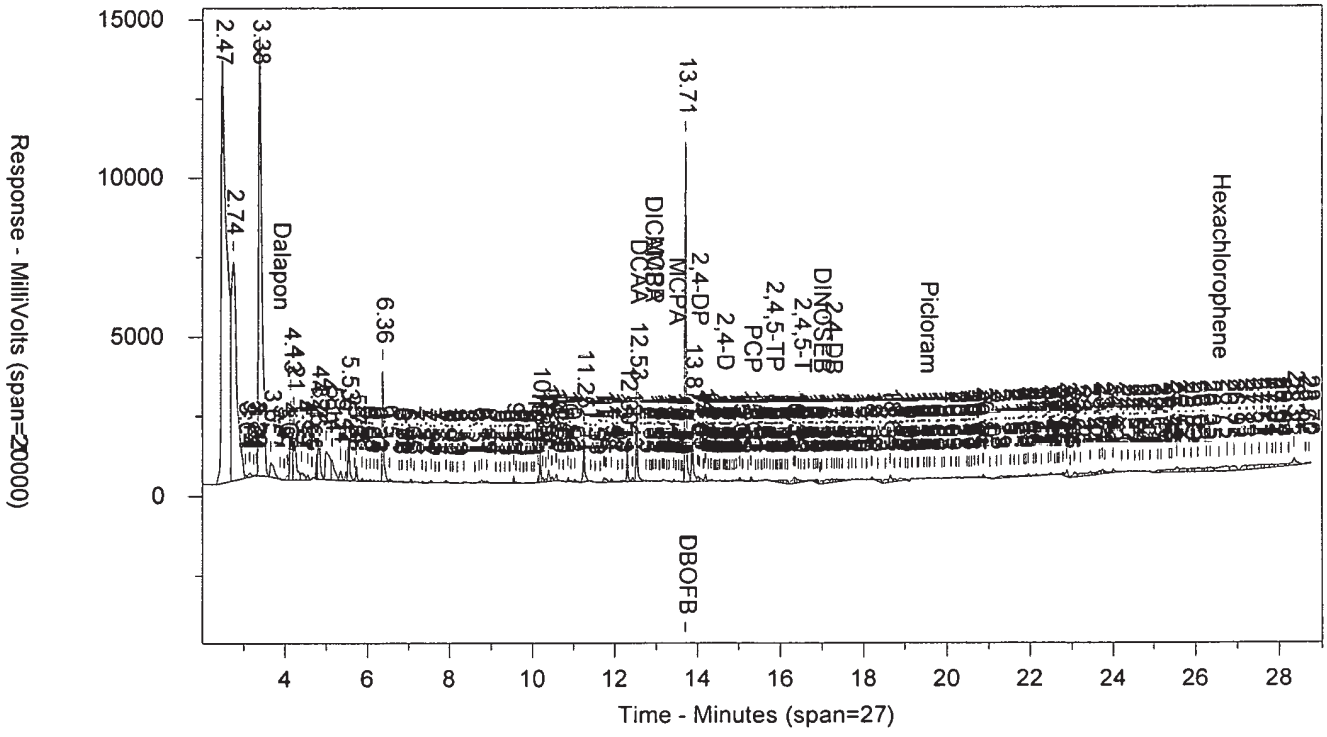

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Data Summary

Sample Name: LCSA 10/22/18 F LCS06295 LCS Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 1000 ML Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on Oct 24, 2018 04:59:40
Instrument 19850A
Result file 15HERB18289003.027.RAW
Calibration file 15HERB1828901
Method file 15HERB

%SSR(DCAA) 81% (34 - 142) Conc: 1.619151

Analysis Report (B)

Injected on Oct 24, 2018 04:59:40
Instrument 19850B
Result file 15HERB18289003B.027.RAW
Calibration file 15HERB1828901B
Method file 15HERBB

%SSR(DCAA) 80% (34 - 142) Conc: 1.608841

Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.73	3.76	4172209	5.06578
2,4-DCAA	11.92	11.94	11.98	2547034	1.619151
Dicamba	12.04	12.07	12.10	1303750	0.219201
MCPP	12.45	12.48	12.51	2012100	225.7923
MCPA	12.83	12.86	12.89	3271245	354.3857
2,4-DP (Dichloroprop)	13.43	13.44	13.49	2844359	2.303562
2,4-D	13.87	13.89	13.93	2963343	1.865342
Pentachlorophenol	15.07	15.08	15.13	15677510	0.852041
2,4,5-TP	15.36	15.37	15.42	1621974	0.219905
2,4,5-T	15.88	15.90	15.94	1345121	0.200649
2,4-DB	16.72	16.74	16.78	1765088	1.889444
Dinoseb	16.91	16.92	16.97	1383704	0.433204
Picloram	17.86	17.88	17.92	9363619	1.522024
Hexachlorophene	26.11	26.13	26.17	5146860	0.862918

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	3566768	2.921896
2,4-DCAA	12.49	12.51	12.55	2617622	1.608841
Dicamba	12.85	12.88	12.91	1437224	0.221033
MCPP	12.91	12.93	12.97	1305506	199.0324
MCPA	13.43	13.46	13.49	2821722	305.2971
2,4-DP (Dichloroprop)	13.96	13.97	14.02	3170041	2.240366
2,4-D	14.59	14.60	14.65	3148809	1.856436
Pentachlorophenol	15.28	15.30	15.34	16067320	0.786845
2,4,5-TP	15.78	15.79	15.84	1573949	0.198198
2,4,5-T	16.48	16.50	16.54	1420683	0.198061
Dinoseb	16.91	16.93	16.97	670869	0.210792
2,4-DB	17.19	17.20	17.25	1805635	1.770159
Picloram	19.48	19.50	19.54	13406890	2.013593
Hexachlorophene	26.54	26.56	26.60	5865327	0.945684

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
Dalapon	B	2.921896	1.8	<3.6	<4	JP	53.68	
2,4-DCAA	A	1.619151	0.1	0.2	0.2		0.64	
2,4-DCAA-D1	A	1.619151	0.1	0.2	0.2			
2,4-DCAA-D2	B	1.608841	0.1	0.2	0.2			
Dicamba	B	0.221033	0.08	0.16	<0.3	J	0.83	
MCPP	B	199.0324	50	100	<200	J	12.60	
MCPA	B	305.2971	50	100	200		14.88	
2,4-DP (Dichloroprop)	B	2.240366	0.16	0.32	0.5		2.78	
2,4-D	A	1.865342	0.25	0.5	0.6		0.48	
Pentachlorophenol	A	0.852041	0.027	0.06	0.07		7.96	
2,4,5-TP	A	0.219905	0.01	0.03	0.05		10.38	
2,4,5-T	A	0.200649	0.065	0.13	0.15		1.30	
2,4-DB	A	1.889444	0.63	1.3	1.5		6.52	
Dinoseb	B	0.210792	0.18	<0.4	<0.5	JP	69.07	
Picloram	B	2.013593	0.36	0.8	1		27.81	
Hexachlorophene	B	0.945684			0.2		9.15	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:19:23

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Data Summary

Sample Name: LCSA 10/22/18 F LCS06295 LCS Sample ID: AB **Batchnumber: 182950006A**
Sample Amount: 1000 ML Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on Oct 24, 2018 04:59:40
Instrument 19850A
Result file 15HERB18289003.027.RAW
Calibration file 15HERB1828901
Method file 15HERB

%SSR(DCAA) 81% (32 - 138) Conc: 1.619151

Analysis Report (B)

Injected on Oct 24, 2018 04:59:40
Instrument 19850B
Result file 15HERB18289003B.027.RAW
Calibration file 15HERB1828901B
Method file 15HERBB

%SSR(DCAA) 80% (32 - 138) Conc: 1.608841

Single Component Data

Compound	Min	RT	Max	Height	Amount
Dalapon	3.70	3.73	3.76	4172209	5.06578
2,4-DCAA	11.92	11.94	11.98	2547034	1.619151
Dicamba	12.04	12.07	12.10	1303750	0.219201
MCPP	12.45	12.48	12.51	2012100	225.7923
MCPA	12.83	12.86	12.89	3271245	354.3857
2,4-DP (Dichloroprop)	13.43	13.44	13.49	2844359	2.303562
2,4-D	13.87	13.89	13.93	2963343	1.865342
Pentachlorophenol	15.07	15.08	15.13	15677510	0.852041
2,4,5-TP	15.36	15.37	15.42	1621974	0.219905
2,4,5-T	15.88	15.90	15.94	1345121	0.200649
2,4-DB	16.72	16.74	16.78	1765088	1.889444
Dinoseb	16.91	16.92	16.97	1383704	0.433204
Picloram	17.86	17.88	17.92	9363619	1.522024
Hexachlorophene	26.11	26.13	26.17	5146860	0.862918

Compound	Min	RT	Max	Height	Amount
Dalapon	3.83	3.85	3.89	3566768	2.921896
2,4-DCAA	12.49	12.51	12.55	2617622	1.608841
Dicamba	12.85	12.88	12.91	1437224	0.221033
MCPP	12.91	12.93	12.97	1305506	199.0324
MCPA	13.43	13.46	13.49	2821722	305.2971
2,4-DP (Dichloroprop)	13.96	13.97	14.02	3170041	2.240366
2,4-D	14.59	14.60	14.65	3148809	1.856436
Pentachlorophenol	15.28	15.30	15.34	16067320	0.786845
2,4,5-TP	15.78	15.79	15.84	1573949	0.198198
2,4,5-T	16.48	16.50	16.54	1420683	0.198061
Dinoseb	16.91	16.93	16.97	670869	0.210792
2,4-DB	17.19	17.20	17.25	1805635	1.770159
Picloram	19.48	19.50	19.54	13406890	2.013593
Hexachlorophene	26.54	26.56	26.60	5865327	0.945684

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
Dalapon	B	2.921896	1.8	<3.6	<4	JP	53.68	
2,4-DCAA	A	1.619151	0.1	0.2	0.2		0.64	
2,4-DCAA-D1	A	1.619151	0.1	0.2	0.2			
2,4-DCAA-D2	B	1.608841	0.1	0.2	0.2			
Dicamba	B	0.221033	0.08	0.16	<0.3	J	0.83	
MCPP	B	199.0324	50	100	<200	J	12.60	
MCPA	B	305.2971	50	100	200		14.88	
2,4-DP (Dichloroprop)	B	2.240366	0.16	0.32	0.5		2.78	
2,4-D	A	1.865342	0.25	0.5	0.6		0.48	
Pentachlorophenol	A	0.852041	0.027	0.06	0.07		7.96	
2,4,5-TP	A	0.219905	0.01	0.03	0.05		10.38	
2,4,5-T	A	0.200649	0.065	0.13	0.15		1.30	
2,4-DB	A	1.889444	0.63	1.3	1.5		6.52	
Dinoseb	B	0.210792	0.18	<0.4	<0.5	JP	69.07	
Picloram	B	2.013593	0.36	0.8	1		27.81	
Hexachlorophene	B	0.945684			0.2		9.15	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Michele D. Hamilton
Group Leader

OCT 25 2018

Reviewed and digitally signed by Richard A Shober on 10/25/2018 09:19:25

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **LCSA** 10/22/18 F LCS06295 ID: AB **Batchnumber: 182950006A**
Sample Amount: 1000 ML Total Volume: 10 ml Analyst: 120 SDG: State:
Analyses: 10407

Analysis Report (A)

Injected on : Oct 24, 2018 04:59:40
Instrument : CP15--19850A
Result file : 15HERB18289003.027.RAW
Calibration file : 15HERB1828901.CAL
Method file : 15HERB.MET
%SSR(DCAA) : 81% (34-142) Conc.: 1.619151

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.70	3.73	3.76	4172209	5.065780
DCAA	11.92	11.94	11.98	2547034	1.619151
DICAMBA	12.04	12.07	12.10	1303750	0.219201
MCPP	12.45	12.48	12.51	2012100	225.792300
MCPA	12.83	12.86	12.89	3271245	354.385700
2,4-DP	13.43	13.44	13.49	2844359	2.303562
2,4-D	13.87	13.89	13.93	2963343	1.865342
DBOFB	14.21	14.23	14.27	10345150	0.001000
PCP	15.07	15.08	15.13	15677510	0.852041
2,4,5-TP	15.36	15.37	15.42	1621974	0.219905
2,4,5-T	15.88	15.90	15.94	1345121	0.200649
2,4-DB	16.72	16.74	16.78	1765088	1.889444
DINOSEB	16.91	16.92	16.97	1383704	0.433204
Picloram	17.86	17.88	17.92	9363619	1.522024
Hexachlorophene	26.11	26.13	26.17	5146860	0.862918

Analysis Report (B)

Injected on : Oct 24, 2018 04:59:40
Instrument : CP15--19850B
Result file : 15HERB18289003B.027.RAW
Calibration file : 15HERB1828901B.CAL
Method file : 15HERBB.MET
%SSR(DCAA) : 80% (34-142) Conc.: 1.608841

Peak name	Min	R.T.	Max	Height	Amount
Dalapon	3.83	3.85	3.89	3566768	2.921896
DCAA	12.49	12.51	12.55	2617622	1.608841
DICAMBA	12.85	12.88	12.91	1437224	0.221033
MCPP	12.91	12.93	12.97	1305506	199.032400
MCPA	13.43	13.46	13.49	2821722	305.297100
DBOFB	13.69	13.71	13.75	11034280	0.001000
2,4-DP	13.96	13.97	14.02	3170041	2.240366
2,4-D	14.59	14.60	14.65	3148809	1.856436
PCP	15.28	15.30	15.34	16067320	0.786845
2,4,5-TP	15.78	15.79	15.84	1573949	0.198198
2,4,5-T	16.48	16.50	16.54	1420683	0.198061
DINOSEB	16.91	16.93	16.97	670869	0.210793
2,4-DB	17.19	17.20	17.25	1805635	1.770159
Picloram	19.48	19.50	19.54	13406890	2.013593
Hexachlorophene	26.54	26.56	26.60	5865327	0.945684

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☑ Dalapon	B	2.921896	<4	1.8	J	53.68	**
☐ DCAA	A	1.619151				0.64	
☑ DICAMBA	B	0.221033	<0.3	0.08	J	0.83	
☑ MCPP B 199	A	225.792300	200	50		12.60	A-ent ICV
☑ MCPA B 305	A	354.385700	200	50		14.88	A-ent ICV
☑ 2,4-DP B 2.24	A	2.303562	0.5	0.16		2.78	A-ent ICV
☑ 2,4-D	A	1.865342	0.6	0.25		0.48	
☐ DBOFB	A	0.001000				0.00	
☑ PCP	A	0.852041	0.07	0.027		7.96	
☑ 2,4,5-TP	A	0.219905	0.05	0.01		10.38	
☑ 2,4,5-T	A	0.200649	0.15	0.065		1.30	
☑ 2,4-DB	A	1.889444	1.5	0.63		6.52	
☑ DINOSEB	B	0.210793	<0.5	0.18	J	69.07	**
☑ Picloram	B	2.013593	1	0.36		27.81	
☑ Hexachlorophene	B	0.945684	0.2	0.18		9.15	

Units: ug/l

Miche'le D. Hamilton
Group Leader

Reviewed by: _____ Verified by: _____ OCT 25 2018
Date: _____ Date: _____

%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 10/22/18 F ABLCS06295 LCS 182950006A 10407 SW-846 8151A

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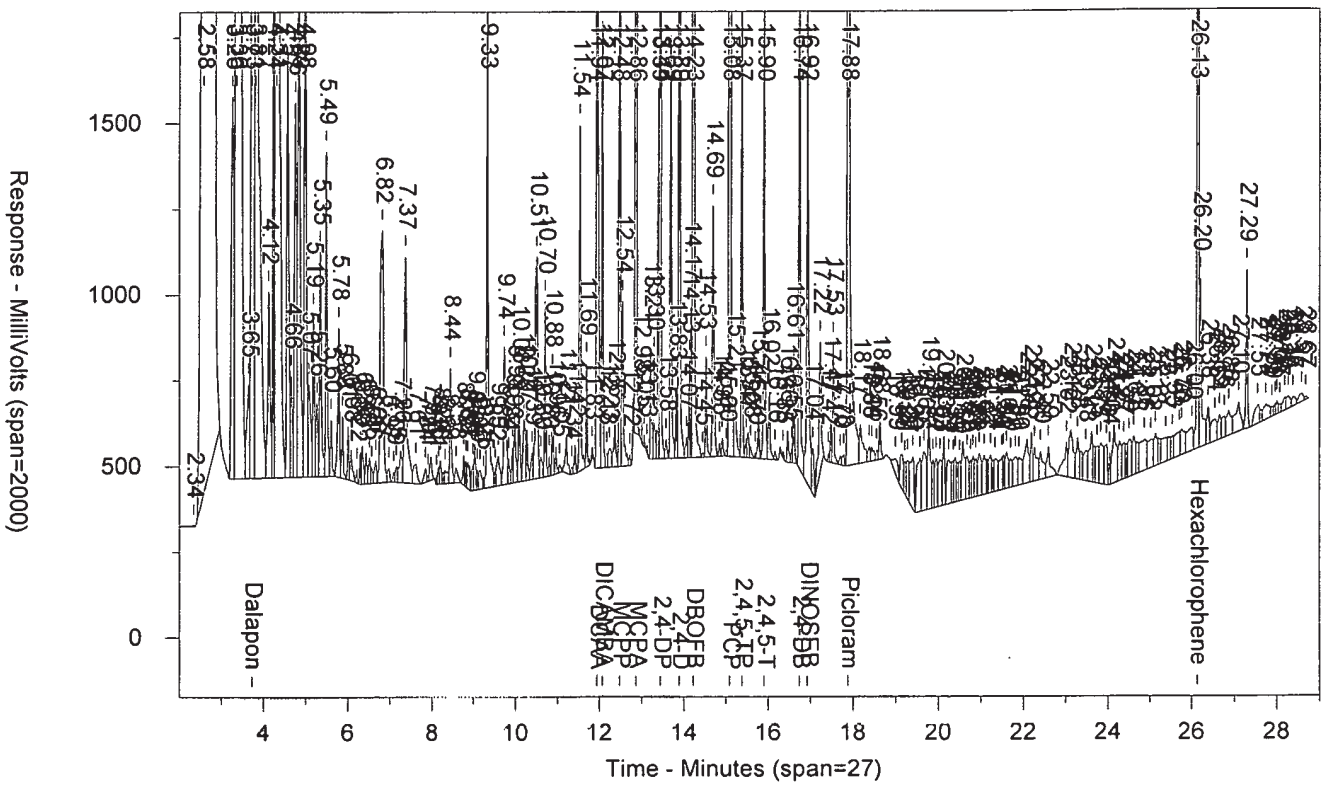

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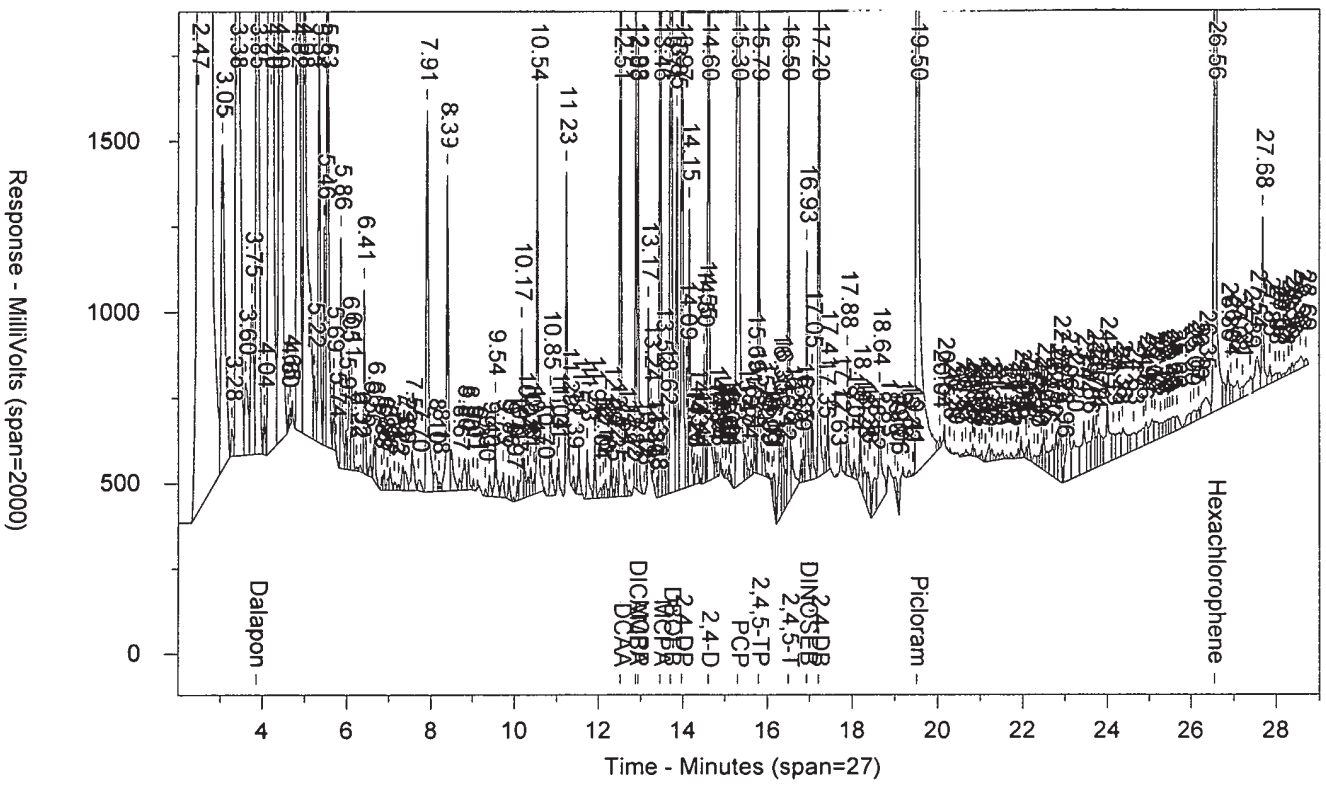

LANCASTER LABORATORIES

Sample Number: LCSA 10/22/18 F ABLCS06295 LCS 182950006A 10407 SW-846 8151A
Injected On: 10/24/2018 4:59:40 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: 120

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
3.725	4172209	5.066	Dalapon	3.855	3566768	2.922	Dalapon
11.939	2547034	1.619	DCAA	12.513	2617622	1.609	DCAA
12.065	1303751	.219	DICAMBA	12.877	1437224	.221	DICAMBA
12.475	2012100	225.792	MCPP	12.93	1305506	199.032	MCPP
12.861	3271245	354.386	MCPA	13.457	2821722	305.297	MCPA
13.439	2844359	2.304	2,4-DP	13.973	3170041	2.24	2,4-DP
14.226	10345150	.001	DBOFB	13.708	11034280	.001	DBOFB
13.889	2963343	1.865	2,4-D	14.604	3148809	1.856	2,4-D
15.084	15677510	.852	PCP	15.297	16067330	.787	PCP
15.375	1621974	.22	2,4,5-TP	15.792	1573949	.198	2,4,5-TP
15.901	1345121	.201	2,4,5-T	16.498	1420683	.198	2,4,5-T
16.735	1765089	1.889	2,4-DB	17.205	1805635	1.77	2,4-DB
16.922	1383704	.433	DINOSEB	16.928	670869	.211	DINOSEB
17.88	9363619	1.522	Picloram	19.502	13406890	2.014	Picloram
26.134	5146860	.863	Hexachlorophene	26.556	5865327	.946	Hexachlorophe

Files:
Area File: 15herb18289003.027.RAW
Area File: 15herb18289003B.027.RAW
Method A: 15HERB.MET
Method B: 15HERBB.MET
Calibration File A: 15HERB1828901.CAL
Calibration File B: 15HERB1828901b.CAL
Format A: herw15.FMTA
Format B: herw15.FMTA
Area File Created On: 10/24/2018 5:28:27 AM
File Reported On: 10/24/2018 at 4:04:34 PM

LCSA 10/22/18 F ABLCS06295 LCS 182950006A 10407 SW-846 815

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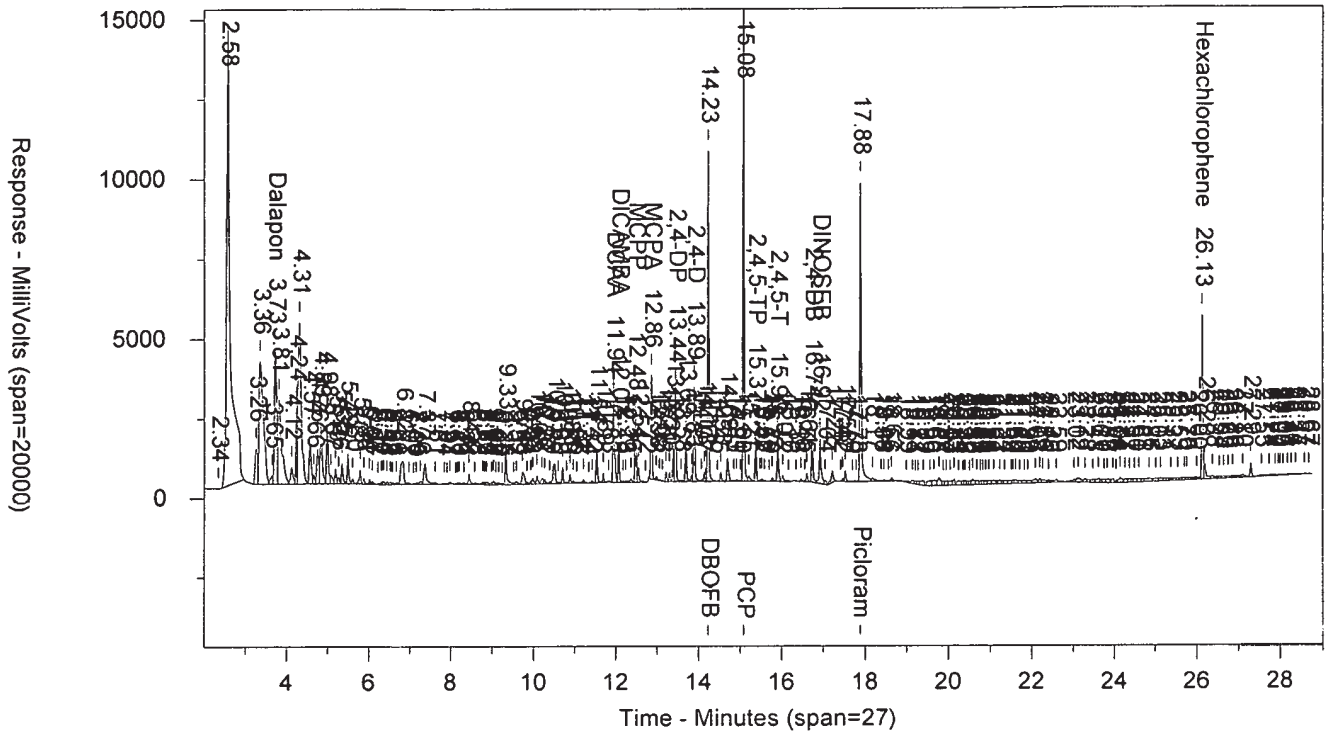

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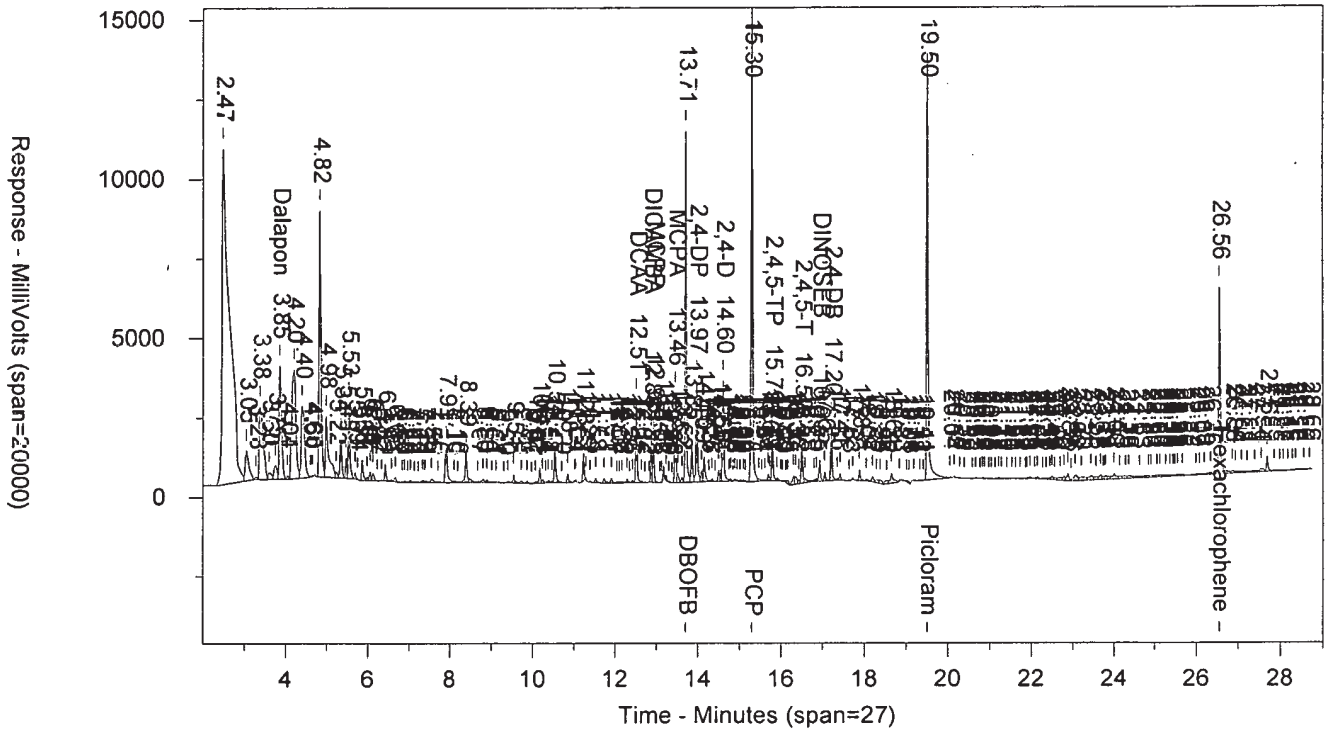

Extraction/Distillation/Digestion Logs

Herbicides

Organic Extraction Batchlog Assigned to: 9931 Ryan Dowdy

Reviewed by: [illegible] Start Date: 10-22-18 Start time: 16:00

182950006A

Tech 1: RD9931 Tech 2: [illegible]

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
9860266MS (8a)	GW3C1	940	IS1828824A SS1828124A	0.1 1.0	MS1824924C MS1828224A	1.0 1.0	10	√ (8)	√ (8)	43A	clear
9860267MSD (8a)	GW3C1	983	IS1828824A SS1828124A		MS1824924C MS1828224A	1.0 1.0	10	√ (8)	√ (8)	43A	clear
BLANKA	PBLK06295	1000	IS1828824A SS1828124A		[illegible]	[illegible]	10	√	√	7	DI H2O
LCSA	LCS06295	1000	IS1828824A SS1828124A	↓	MS1824924C MS1828224A	1.0 1.0	10	√	√	7	DI H2O

(8) Sample required x2 base to P.H. 12 RD9931 10-22-18

(8a) MeCl2 would not seperate from sample, even after centrifusing, continued with prep as normal. RD9931 10-22-18

(8b) Sample required x2 acid to P.H. 2 RD9931 10-22-18

Solvent Used	Lot No.
12 N Sulfuric Acid	H200-16
6 N NaOH	28089337
Diazald Solution	9931/022184
Ethyl Ether	183339
Hexane	183385
Methanol	181172
Methylene Chloride	186617 183564
NaCl	
Sodium Sulfate(acid)	~~294~~ 2894/022184 (3) RD9931 10-22-18

Spike Solutions: Witness: [illegible]

IS1828824A HERB INTERNAL STANDARD
MS1828224A HERB SPIKE
MS1824924C MCPA FORTIFICATION MIX
SS1828124A HERB SURROGATE STANDARD

Sample #	Sample Code	Amt	SS/IS Sol.	Amt (mL)	FV (mL)	pH 2	pH 12	BC	Comments	Analyses	List	Due Date	Prio
1 9836950 (8c)	SS-07	~~1032~~ (3)	IS1828824A SS1828124A	0.1 1.0		√	~~√~~ (3) RD9931 10-22-18	~~43A~~ (3) RD9931 10-22-18	~~clear~~ (3) RD9931 10-22-18	10407	14719	10/15/2018	N
2 9859872	C3311 1050	(3) ~~1057~~	IS1828824A SS1828124A		10	√	√	43A	clear	10407	12658	10/30/2018	N
3 9859873	C3312 1057	(3) ~~1027~~	IS1828824A SS1828124A		10	√	√	43A	clear	10407	12658	10/30/2018	N
4 9859874	C3313	1027	IS1828824A SS1828124A		10	√	√	43A	clear	10407	12658	10/30/2018	N
5 9859875	C3314	1049	IS1828824A SS1828124A		10	√	√	43A	clear	10407	12658	10/30/2018	N
6 9860265BKG (8a)	GW3C1	1000	IS1828824A SS1828124A		10	√ (8b)	√ (8)	43A	clear	10407	1661	10/29/2018	N
7 9860269 (8a)	GW3FD	962	IS1828824A SS1828124A	↓	10	(8b) √	√ (8)	43A	clear	10407	1661	10/29/2018	N

(8c) Sample not found by Storage RD9931 10-22-18 NA RD9931/10-22-18

Bench#	~~Bench#~~	~~Bench#~~
Rack ID:		Work Station: herbhood 2
Internal Standard		Balance #: 25996

Micro Temp 100? [ ]

R-VAP ID	C	R-VAP ID	C	R-VAP ID	C
S-bath ID 10421	85 C	S-bath ID	C	N-Evap3	96 C

~~M-vap~~ ~~C~~

182950006A

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Sample #	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	FV (mL)	pH 2	pH 12	BC	Comments	Analyses	List	Due Date	Prio
8 9860270	GW3BL	1031	IS1828824A SS1828124A	0.1 1.0	10	✓	✓	43A	clear	10407	1661	10/29/2018	N
9 9861917	GKP01	1000	IS1828824A SS1828124A	↓	10	✓	✓	43A	yellow tint	10407	25781	10/31/2018	N
10 9861918	GKP03	968	IS1828824A SS1828124A		10	✓	✓	43A	tan/cloudy	10407	25781	10/31/2018	N
11 9861919	GKP04	967	IS1828824A SS1828124A		10	✓	✓	43A	yellow/cloudy	10407	25781	10/31/2018	N
12 9861920	GKPR1	953	IS1828824A SS1828124A		10	✓	✓	43A	yellow tint	10407	25781	10/31/2018	N
13 9861921	GKP05	1063	IS1828824A SS1828124A		10	✓	✓	43A	tan tint	10407	25781	10/31/2018	N
14 9861922	GKP02	1038	IS1828824A SS1828124A		10	✓	✓	43A	yellow/cloudy	10407	25781	10/31/2018	N

VA 109931 10-2278

Bench# ~~Bench#~~ ~~Bench#~~				
Rack ID:		Work Station	hood2	Micro Temp 100?
Internal Standard		Balance #	25496	

R-VAP ID ~~R-VAP ID~~	C	~~R-VAP ID~~	C	R-VAP ID	C
S-bath ID K981	85 C	~~S-bath ID~~	C	N-Evap3	40 C

M-vap ~~M-vap~~	C

182950006A

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Prep-Process Worksheet

Florisil
Prep: 00816 Water Sample Herbicide Extract
Batch: 182950006A

Verified: [illegible]
Start Date: 10-23-18
Start Time: 00:05
Tech 1: RD9931
Tech 2: —

Sample #	Aliquot (mL)	Final Volume (mL)	D.F. Aliq	D.F. F.V.	Comments
9860266MS	2	2			
9860267MSD					
BLANKA					
LCSA					

(8) Sample not found by Storage RD9931 10-22-18

	Sample #	QC	Aliquot (mL)	Final Volume (mL)	D.F. Aliq	D.F. F.V.	Comments	Analyses
1	~~9836950~~						(8)	10407
2	9859872		2	2				10407
3	9859873							10407
4	9859874							10407
5	9859875							10407
6	9860265							10407
7	9860269							10407
8	9860270							10407
9	9861917							10407
10	9861918							10407
11	9861919							10407
12	9861920							10407
13	9861921							10407
14	9861922							10407

NA RD9931 10-23-18

Additional Comment: _____

DF = Dilution Factor FV = Final Volume

Solvent Used	Lot No.	Solvent Used	Lot No.
		FLORISIL	6363355-16
		5% Ether/Hexane	9438022818 B

S-Evap/bath	C	S-Evap/bath	C	N-Evap	C

*The documented temperatures are NIST corrected.

Pesticides Data

Case Narrative/Conformance Summary

Pesticides

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Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

Pesticide Residue Analysis

Fraction: Pesticides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9861917	OU2-1-SW001	X		1	
9861918	OU2-1-SW003	X		1	
9861919	OU2-1-SW004	X		1	
9861920	REF-1-SW001	X		1	
9861921	OU1-1-SW005	X		1	
9861922	OU2-1-SW002	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): 9861917-9861922: 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.

(Sample number(s): 9861917-9861922: Analysis: 10589)
The response for the decachlorobiphenyl surrogate in the continuing calibration verification standard associated with the Blank and Labratory Control Spike is outside the QC acceptance limits on D2. Since the surrogate recovery is within the acceptance limits, the data is reported.

Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

Pesticide Residue Analysis

Fraction: Pesticides

(Sample number(s): 9861917-9861922: Analysis: 10589)
Z=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

(Sample number(s): 9861917, 9861920-9861922: Analysis: 10589)
Z1=The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. The client was contacted and the data reported.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Method Blank

For noncompliant preparation/method blanks, corrective action is not required if the sample is ND or > 10 times the blank concentration, unless otherwise specified in the method or by the client.

(Sample number(s): 9861917, 9861920-9861922: Analysis: 10589)
B=Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The client was contacted and the data reported.

LCS/LCSD

Batch#: 182980006A (Sample number(s): 9861917-9861922)
The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: Endosulfan I

(Sample number(s): 9861917-9861922: Analysis: 10589)
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Endosulfan I.

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.

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Case Narrative/Conformance Summary

CLIENT: Tidewater, Inc.
SDG: TID07

Pesticide Residue Analysis

Fraction: Pesticides

Batch#: 182980006A (Sample number(s): 9861917-9861922)
The recovery(ies) for the following surrogate(s) were below the acceptance window: Decachlorobiphenyl-D1 (9861919), Decachlorobiphenyl-D2 (9861919)

SAMPLE ANALYSIS:

(Sample number(s): 9861917, 9861919-9861922: Analysis: 10589)
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial.

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

Pesticides

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Quality Control Reference List
Pesticide Residue Analysis

CLIENT: Tidewater, Inc.
SDG: TID07

Fraction: Pesticides

Analysis	Batch Number	Sample Number	Analysis Date
OC Pesticides in Water	182980006A	PBLK06298	11/05/2018 19:28
		LCS06298	11/05/2018 19:40
		9861917	11/09/2018 23:19
		9861918	11/09/2018 23:32
		9861919	11/09/2018 23:45
		9861920	11/09/2018 23:58
		9861921	11/10/2018 00:11
		9861922	11/10/2018 00:24
OC Pesticides in Water	183180015A	PBLK15318	11/15/2018 11:49
		LCS15318	11/15/2018 12:02
		LCSD15318	11/15/2018 12:14
		9861917RE	11/15/2018 13:02
		9861919RE	11/15/2018 13:14
		9861920RE	11/15/2018 13:27
		9861921RE	11/15/2018 13:39
		9861922RE	11/15/2018 13:51

Quality Control Summary
Method Blank
Pesticide Residue Analysis
SDG: TID07
Matrix: LIQUID

Fraction: Pesticides

182980006A / PBLK06298 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Alpha BHC	11/05/18	N.D.	ug/l	0.0024	0.0056	0.0080
Gamma BHC - Lindane	11/05/18	N.D.	ug/l	0.0016	0.0056	0.0080
Beta BHC	11/05/18	N.D.	ug/l	0.0027	0.0056	0.0080
Delta BHC	11/05/18	N.D.	ug/l	0.0027	0.0056	0.0080
Heptachlor	11/05/18	N.D.	ug/l	0.0016	0.0056	0.0080
Aldrin	11/05/18	N.D.	ug/l	0.0016	0.0056	0.0080
Heptachlor Epoxide	11/05/18	N.D.	ug/l	0.0018	0.0056	0.0080
Gamma Chlordane	11/05/18	N.D.	ug/l	0.0056	0.016	0.016
Alpha Chlordane	11/05/18	N.D.	ug/l	0.0024	0.0056	0.0080
p,p-DDE	11/05/18	N.D.	ug/l	0.0040	0.0080	0.016
Endosulfan I	11/05/18	N.D.	ug/l	0.0034	0.0072	0.0080
Dieldrin	11/05/18	N.D.	ug/l	0.0042	0.0080	0.016
Endrin	11/05/18	N.D.	ug/l	0.0065	0.016	0.016
p,p-DDD	11/05/18	N.D.	ug/l	0.0040	0.0080	0.016
Endosulfan II	11/05/18	N.D.	ug/l	0.012	0.024	0.024
p,p-DDT	11/05/18	0.0081 J	ug/l	0.0042	0.0080	0.016
Endosulfan Sulfate	11/05/18	N.D.	ug/l	0.0046	0.0096	0.016
Endrin Aldehyde	11/05/18	N.D.	ug/l	0.016	0.032	0.080
Endrin Ketone	11/05/18	N.D.	ug/l	0.0040	0.0080	0.016
Methoxychlor	11/05/18	N.D.	ug/l	0.024	0.056	0.080
Chlordane	11/05/18	N.D.	ug/l	0.13	0.26	0.40
Toxaphene	11/05/18	N.D.	ug/l	0.24	0.48	0.80

183180015A / PBLK15318 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Alpha BHC	11/15/18	N.D.	ug/l	0.0060	0.014	0.020
Gamma BHC - Lindane	11/15/18	N.D.	ug/l	0.0040	0.014	0.020
Beta BHC	11/15/18	N.D.	ug/l	0.0068	0.014	0.020
Delta BHC	11/15/18	N.D.	ug/l	0.0068	0.014	0.020
Heptachlor	11/15/18	N.D.	ug/l	0.0040	0.014	0.020
Aldrin	11/15/18	N.D.	ug/l	0.0040	0.014	0.020
Heptachlor Epoxide	11/15/18	N.D.	ug/l	0.0046	0.014	0.020
Gamma Chlordane	11/15/18	N.D.	ug/l	0.014	0.040	0.040
Alpha Chlordane	11/15/18	N.D.	ug/l	0.0060	0.014	0.020
p,p-DDE	11/15/18	N.D.	ug/l	0.010	0.020	0.040
Endosulfan I	11/15/18	N.D.	ug/l	0.0086	0.018	0.020
Dieldrin	11/15/18	N.D.	ug/l	0.011	0.020	0.040
Endrin	11/15/18	N.D.	ug/l	0.016	0.040	0.040
p,p-DDD	11/15/18	N.D.	ug/l	0.010	0.020	0.040
Endosulfan II	11/15/18	N.D.	ug/l	0.030	0.060	0.060
p,p-DDT	11/15/18	N.D.	ug/l	0.010	0.020	0.040
Endosulfan Sulfate	11/15/18	N.D.	ug/l	0.012	0.024	0.040
Endrin Aldehyde	11/15/18	N.D.	ug/l	0.040	0.080	0.20
Endrin Ketone	11/15/18	N.D.	ug/l	0.010	0.020	0.040
Methoxychlor	11/15/18	N.D.	ug/l	0.060	0.14	0.20

Quality Control Summary
Method Blank
Pesticide Residue Analysis
SDG: TID07
Matrix: LIQUID

Fraction: Pesticides

183180015A / PBLK15318 Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Chlordane	11/15/18	N.D.	ug/l	0.32	0.64	1.0
Toxaphene	11/15/18	N.D.	ug/l	0.60	1.2	2.0

Quality Control Summary
Surrogates
Pesticide Residue Analysis
SDG: TID07
Matrix: LIQUID

Fraction: Pesticides

182980006A	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
PBLK06298	80	32 - 149	85	32 - 149	72	44 - 124	71	44 - 124
LCS06298	72	32 - 149	75	32 - 149	66	44 - 124	65	44 - 124
9861917	76	32 - 149	75	32 - 149	78	44 - 124	72	44 - 124
9861918	51	32 - 149	49	32 - 149	71	44 - 124	63	44 - 124
9861919	29 *	32 - 149	27 *	32 - 149	59	44 - 124	53	44 - 124
9861920	52	32 - 149	50	32 - 149	78	44 - 124	71	44 - 124
9861921	70	32 - 149	67	32 - 149	76	44 - 124	64	44 - 124
9861922	62	32 - 149	58	32 - 149	74	44 - 124	68	44 - 124

183180015A	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
PBLK15318	73	32 - 149	90	32 - 149	57	29 - 129	61	29 - 129
LCS15318	60	32 - 149	70	32 - 149	59	29 - 129	61	29 - 129
LCSD15318	79	32 - 149	89	32 - 149	59	29 - 129	63	29 - 129

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: TID07
Matrix: LIQUID

Pesticide Residue Analysis
Fraction: Pesticides

LCS: LCS06298	Batch: **182980006A** (Sample number(s): 9861917-9861922)							
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	0.0702	NA	69	NA	54-138	NA	NA
Gamma BHC - Lindane	0.102	0.0696	NA	68	NA	59-134	NA	NA
Beta BHC	0.100	0.0661	NA	66	NA	56-136	NA	NA
Delta BHC	0.100	0.0737	NA	74	NA	52-142	NA	NA
Heptachlor	0.102	0.0585	NA	57	NA	54-130	NA	NA
Aldrin	0.100	0.0455	NA	46	NA	45-134	NA	NA
Heptachlor Epoxide	0.100	0.0717	NA	72	NA	61-133	NA	NA
Gamma Chlordane	0.100	0.0712	NA	71	NA	56-136	NA	NA
Alpha Chlordane	0.100	0.0701	NA	70	NA	60-129	NA	NA
p,p-DDE	0.200	0.141	NA	70	NA	57-135	NA	NA
Endosulfan I	0.102	0.0576	NA	56 *	NA	62-126	NA	NA
Dieldrin	0.204	0.149	NA	73	NA	60-136	NA	NA
Endrin	0.202	0.158	NA	78	NA	60-138	NA	NA
p,p-DDD	0.204	0.164	NA	81	NA	56-143	NA	NA
Endosulfan II	0.200	0.124	NA	62	NA	52-135	NA	NA
p,p-DDT	0.204	0.148	NA	72	NA	51-143	NA	NA
Endosulfan Sulfate	0.202	0.152	NA	75	NA	62-133	NA	NA
Endrin Aldehyde	0.202	0.132	NA	65	NA	51-132	NA	NA
Endrin Ketone	0.200	0.153	NA	76	NA	58-134	NA	NA
Methoxychlor	1.02	0.815	NA	80	NA	54-145	NA	NA

LCS: LCS15318 LCSD: LCSD15318	Batch: **183180015A** (Sample number(s): 9861917, 9861919-9861922)							
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	0.0887	0.0897	87	88	47-132	1	30
Gamma BHC - Lindane	0.102	0.0905	0.0945	89	93	51-132	4	30
Beta BHC	0.100	0.0906	0.0985	91	99	56-125	8	30
Delta BHC	0.100	0.0896	0.0968	90	97	49-140	8	30
Heptachlor	0.102	0.0675	0.0740	66	73	38-135	9	30
Aldrin	0.100	0.0482	0.0495	48	50	28-119	3	30
Heptachlor Epoxide	0.100	0.0903	0.0942	90	94	56-132	4	30
Gamma Chlordane	0.100	0.0883	0.0956	88	96	53-130	8	30
Alpha Chlordane	0.100	0.0867	0.0944	87	94	53-126	9	30
p,p-DDE	0.200	0.169	0.188	84	94	51-129	11	30
Endosulfan I	0.102	0.0822	0.0879	81	86	40-138	7	30
Dieldrin	0.204	0.194	0.213	95	104	54-126	9	30
Endrin	0.202	0.192	0.219	95	108	35-143	13	30
p,p-DDD	0.204	0.205	0.231	100	113	42-148	12	30
Endosulfan II	0.200	0.168	0.184	84	92	54-124	9	30
p,p-DDT	0.204	0.200	0.231	98	113	40-145	14	30
Endosulfan Sulfate	0.202	0.186	0.208	92	103	41-133	11	30

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: TID07
Matrix: LIQUID

Pesticide Residue Analysis

Fraction: Pesticides

LCS: LCS15318 LCSD: LCSD15318 **Analyte**	Batch: **183180015A** (Sample number(s): 9861917, 9861919-9861922) **Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Endrin Aldehyde	0.202	0.164 J	0.178 J	81	88	40-135	8	20
Endrin Ketone	0.200	0.198	0.209	99	105	44-136	6	30
Methoxychlor	1.02	1.12	1.26	110	124	39-143	11	30

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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1016

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 3 Max %RSD: 5 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1221

	1	2	3	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 30 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1248

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 250.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1254

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1260

	1	2	3	4	5	6	SUM
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 Avg Concentration (ng/ml): 50.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Chlordane

		1	2	3	4	5	6	SUM
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	123284	132521	84804	355226	499231	128443	1323509
	Conc	12.500	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	212178	220433	140109	604105	846837	203833	2227495
	Conc	25.000	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	527505	530682	342023	1601275	2217994	544557	5764036
	Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	983850	973956	628222	2977870	4093850	974958	10632706
	Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	1935369	1823109	1216798	5626510	7493745	1811374	19906905
	Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	4881049	4472092	3115444	14203800	18952210	4622708	50247303
	Conc	500.000	500.000	500.000	500.000	500.000	500.000	

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

		1	2	3	4	5	6	SUM
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		**6.603**	**5.117**	**5.916**	**5.358**	**7.100**	**6.859**	
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1016

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 3 Max %RSD: 5 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1221

	1	2	3	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 30 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1248

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 250.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1254

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1260

	1	2	3	4	5	6	SUM
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 Avg Concentration (ng/ml): 50.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Chlordane

		1	2	3	4	5	6	SUM
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	377285	403594	272385	1185038	921260	434945	3594507
	Conc	12.500	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	652947	675287	450090	1999810	1539187	647179	5964500
	Conc	25.000	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	1642544	1638282	1162179	5404774	4127468	1676081	15651328
	Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	3171962	3046482	2129964	10176280	7622940	2951771	29099399
	Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	6401828	5788234	4139737	20431460	14973900	5543394	57278553
	Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	17734560	14877020	11017480	53285910	39541440	14702010	151158420
	Conc	500.000	500.000	500.000	500.000	500.000	500.000	

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

		1	2	3	4	5	6	SUM
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								
Level 1	Height	514571	511096	941194	1013307	609072	942304	4531544
	Conc	50.000	50.000	50.000	50.000	50.000	50.000	
Level 2	Height	1018445	1061126	1935048	2077736	1249966	1921570	9263891
	Conc	100.000	100.000	100.000	100.000	100.000	100.000	
Level 3	Height	2036424	2096546	3882978	4201018	2466283	3844229	18527478
	Conc	200.000	200.000	200.000	200.000	200.000	200.000	
Level 4	Height	5103620	5325630	9799539	10783050	6263254	9624753	46899846
	Conc	500.000	500.000	500.000	500.000	500.000	500.000	
Level 5	Height	10056680	10451430	19382900	20760490	12194250	18614450	91460200
	Conc	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6	Height	20136310	21094510	38721940	41287840	24214190	36797160	182251950
	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: H9190A Calibration File: 05PEST1830601

GC Column (1) : RTX-CLP ID: 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: H9190A Calibration File: 05PEST1830601

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

ICAL Date(s) Analyzed: 11/2/2018 11/2/2018

COMPOUND	CALIBRATION FACTORS							%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	
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

- linear

2330
11/4/18

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 FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
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 FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Chlordane	1	3.54	3.51	3.57	9696	1	12.5	123284	6.91
	1					2	25	212178	
	1					3	50	527505	
	1					4	100	983850	
	1					5	200	1935369	
	1					6	500	4881049	
	2	3.98	3.95	4.01	9639	1	12.5	132521	8.45
	2					2	25	220433	
	2					3	50	530682	
	2					4	100	973956	
	2					5	200	1823109	
	2					6	500	4472092	
	3	4.34	4.31	4.37	6304	1	12.5	84804	7.31
	3					2	25	140109	
	3					3	50	342023	
	3					4	100	628222	
	3					5	200	1216798	
	3					6	500	3115444	
	4	4.49	4.46	4.52	28488	1	12.5	355226	9.02
	4					2	25	604105	
	4					3	50	1601275	
	4					4	100	2977870	
	4					5	200	5626510	
	4					6	500	14203800	
	5	4.59	4.56	4.62	39081	1	12.5	499231	9.09
	5					2	25	846837	
	5					3	50	2217994	
	5					4	100	4093850	
	5					5	200	7493745	
	5					6	500	18952210	
	6	5.20	5.17	5.23	9562	1	12.5	128443	10.09
	6					2	25	203833	
	6					3	50	544557	
	6					4	100	974958	
	6					5	200	1811374	
	6					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 FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Toxaphene	1	5.10	5.07	5.13	4111	1	50	181201	6.60
	1					2	100	414282	
	1					3	200	860393	
	1					4	500	2196185	
	1					5	1000	4186302	
	1					6	2000	8033599	
	2	5.24	5.21	5.27	6435	1	50	299491	5.12
	2					2	100	666474	
	2					3	200	1344840	
	2					4	500	3374814	
	2					5	1000	6365490	
	2					6	2000	12226390	
	3	5.33	5.30	5.36	5844	1	50	264781	5.92
	3					2	100	596318	
	3					3	200	1220354	
	3					4	500	3127568	
	3					5	1000	5818990	
	3					6	2000	11256050	
	4	5.49	5.46	5.52	6069	1	50	290710	5.36
	4					2	100	637312	
	4					3	200	1270127	
	4					4	500	3171599	
	4					5	1000	5893980	
	4					6	2000	11274970	
	5	5.72	5.69	5.75	5174	1	50	228368	7.10
	5					2	100	546142	
	5					3	200	1081529	
	5					4	500	2762580	
	5					5	1000	5112733	
	5					6	2000	9936037	
	6	5.79	5.76	5.82	6013	1	50	278776	6.86
	6					2	100	637515	
	6					3	200	1266008	
	6					4	500	3215731	
	6					5	1000	5815044	
	6					6	2000	11102840	

File Name: V:\CP5\05pest1830601.cal
Version: 12

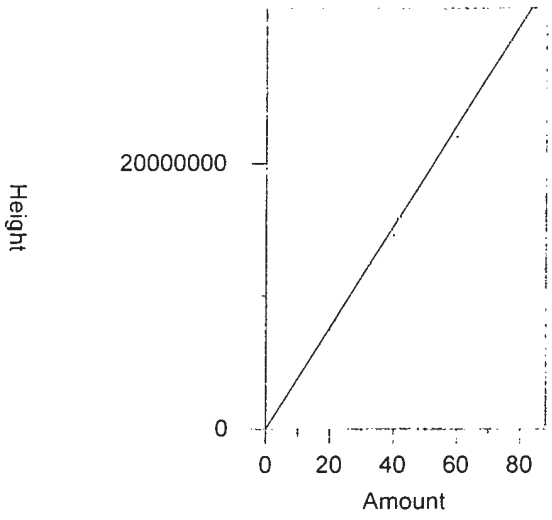
Creator:
Description:
Reason for change:

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

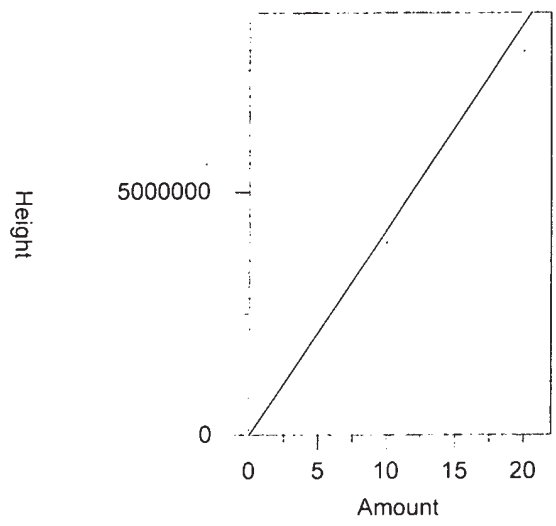
Single peak quantification by height

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



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

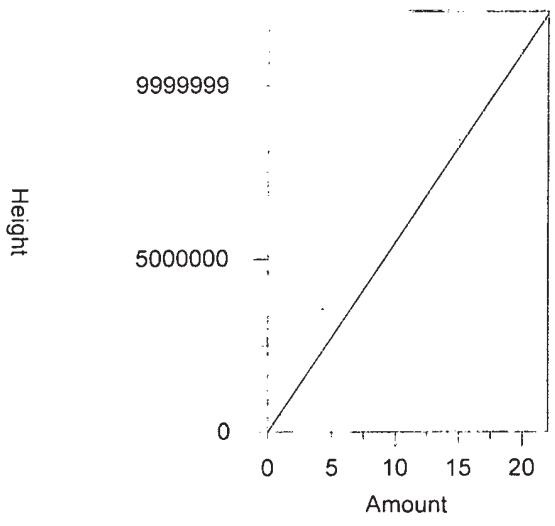
Y = 421389.9 X + 0

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

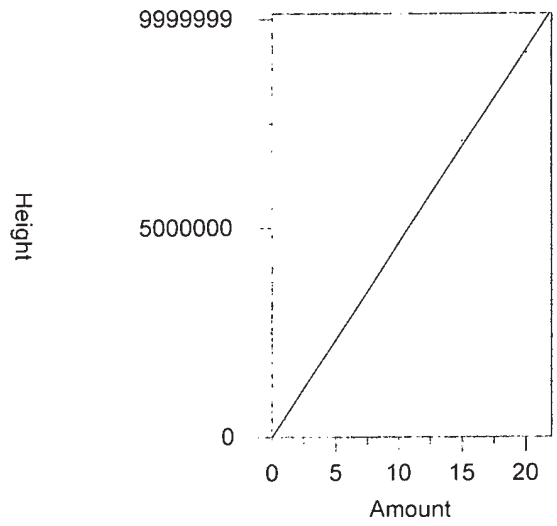
Y = 548601.7 X + 0

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



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

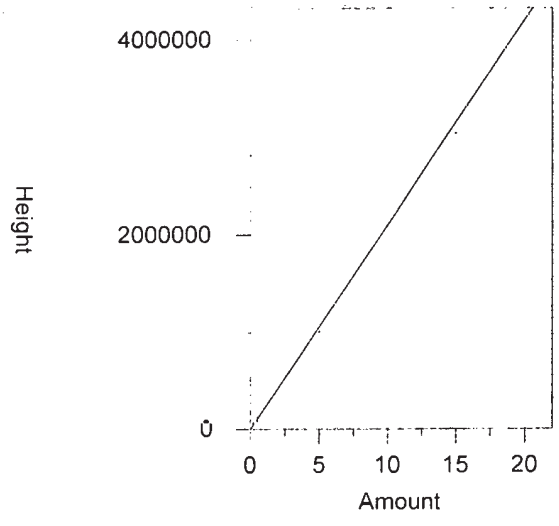
Single peak quantification by height

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

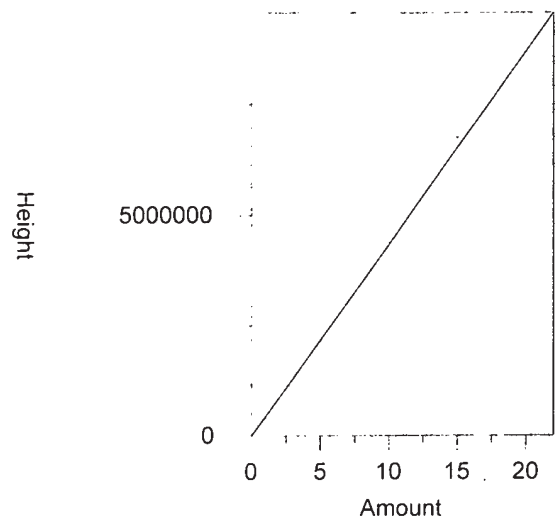
Single peak quantification by height

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



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

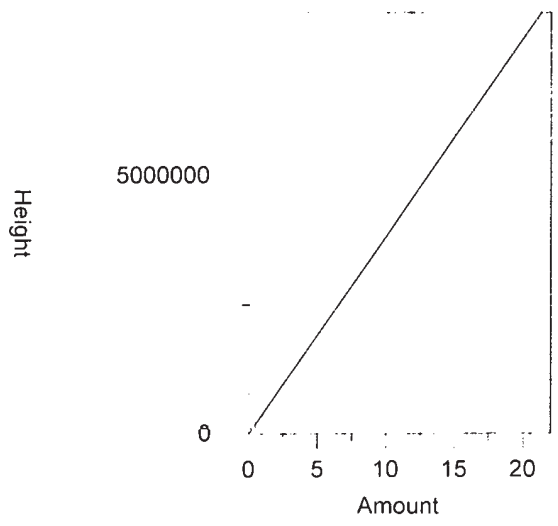
Single peak quantification by height

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

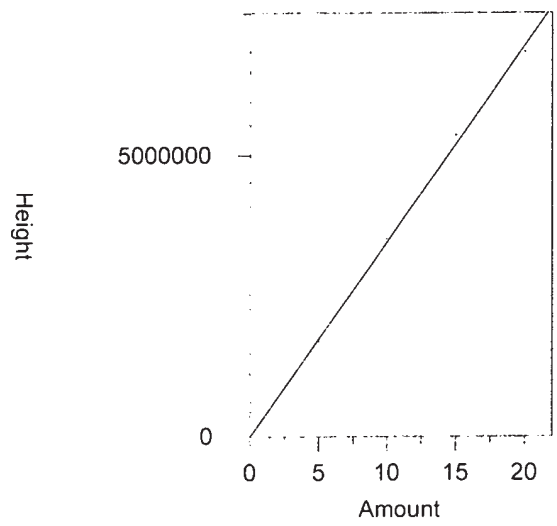
Single peak quantification by height

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



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

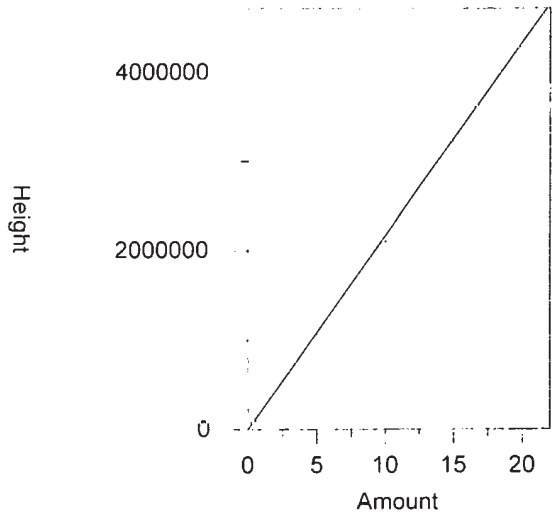
Single peak quantification by height

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

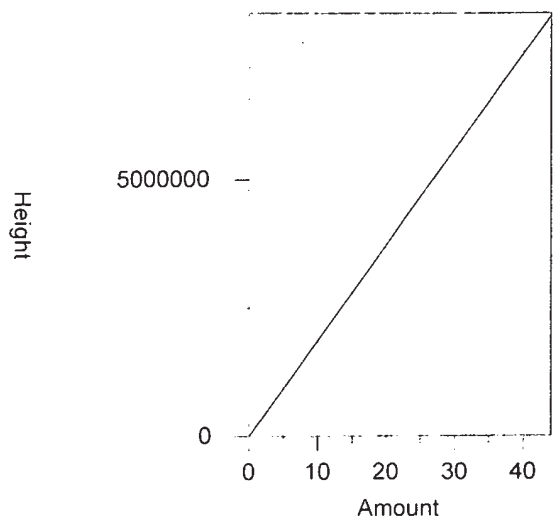
Single peak quantification by height

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

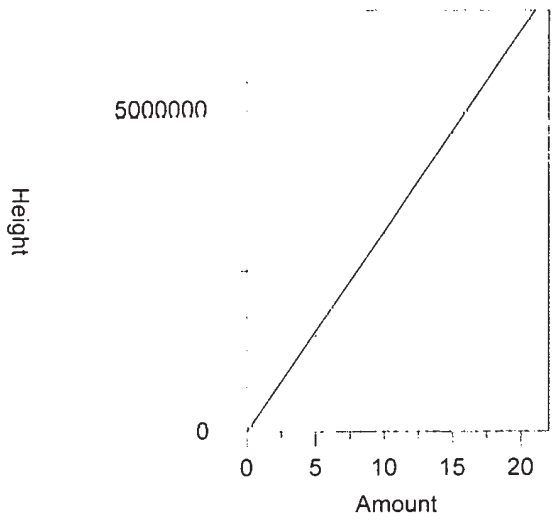
Single peak quantification by height

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

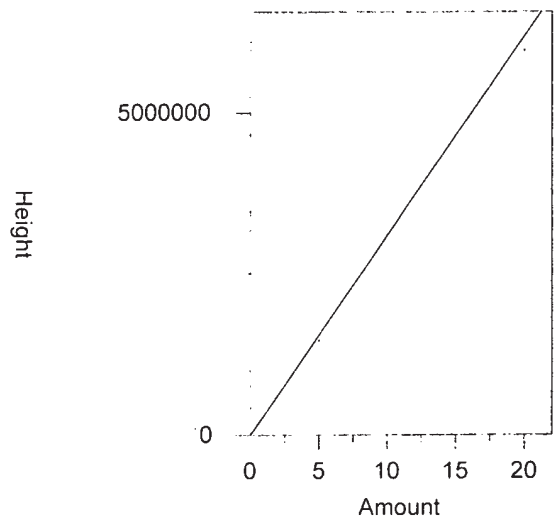
Single peak quantification by height

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



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

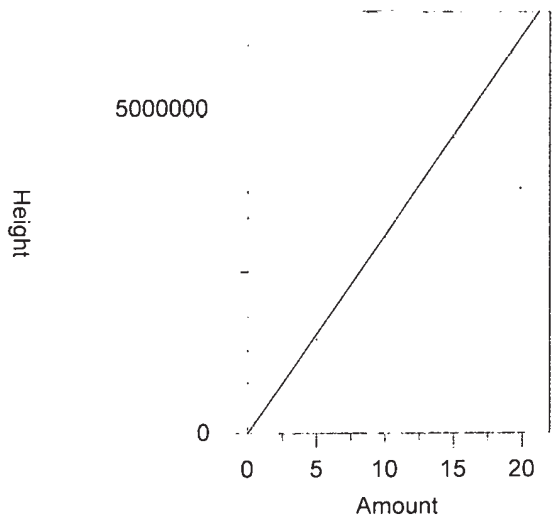
Y = 309041.8 X + 0

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\05pest18306001.004
2	1	297316.4	297316.4	-3.794	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005
3	5	1464083	292816.6	-5.250	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006
4	10	3097707	309770.7	0.236	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007
5	15	4653881	310258.7	0.394	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008
6	20	5961455	298072.8	-3.549	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009

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

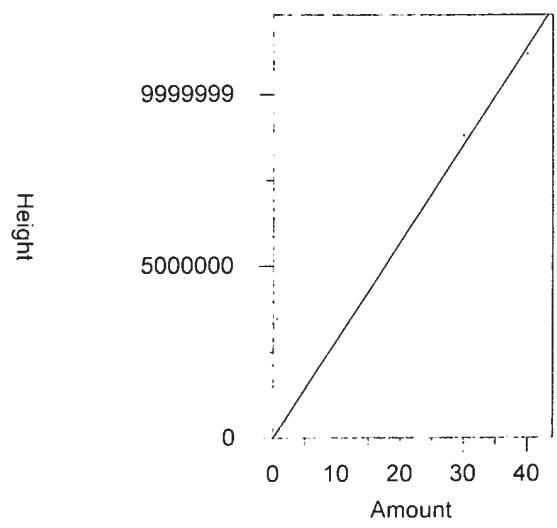
Y = 306399.7 X + 0

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\05pest18306001.004
2	1	300285.2	300285.2	-1.996	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.005
3	5	1450284	290056.8	-5.334	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.006
4	10	3023141	302314.1	-1.333	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.007
5	15	4552478	303498.5	-0.947	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.008
6	20	5907953	295397.7	-3.591	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.009

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

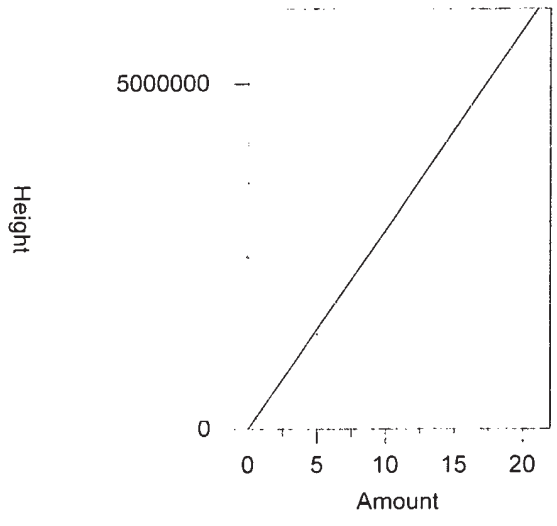
Single peak quantification by height

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

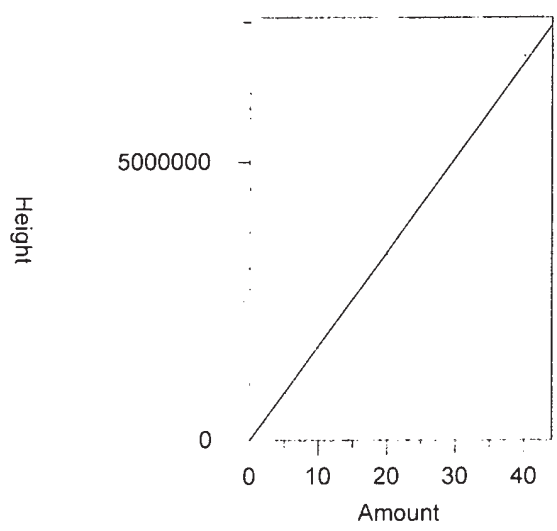
Single peak quantification by height

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



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

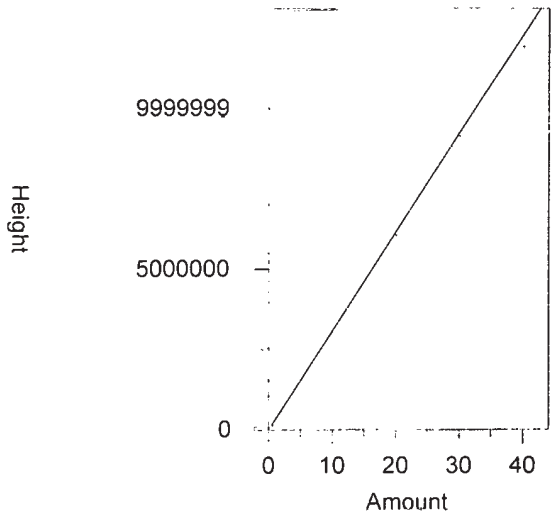
Single peak quantification by height

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

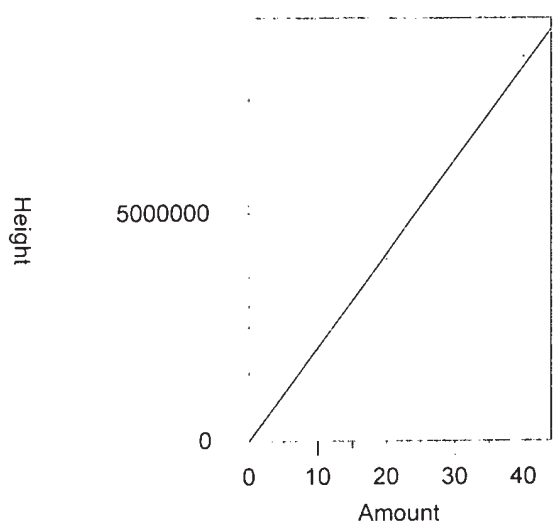
Single peak quantification by height

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



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

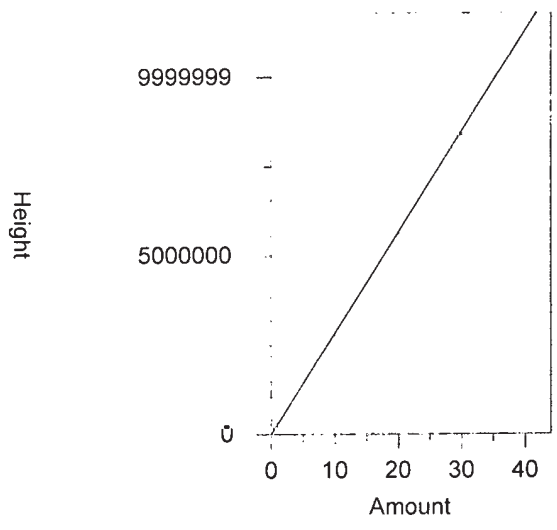
Single peak quantification by height

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

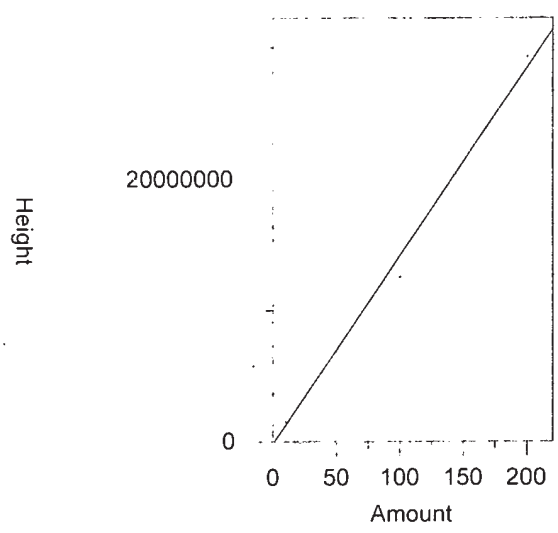
Single peak quantification by height

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

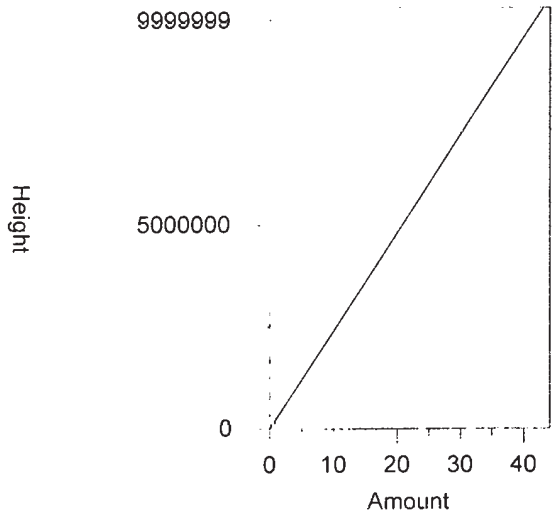
Y = 143277.1 X + -171568.1

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

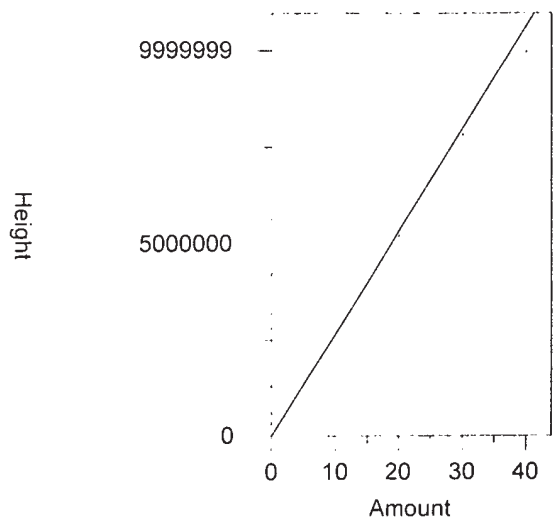
Y = 240558.9 X + 0

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



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

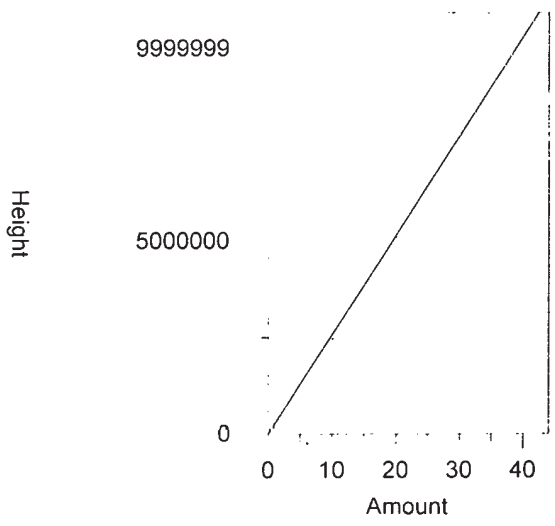
Single peak quantification by height

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

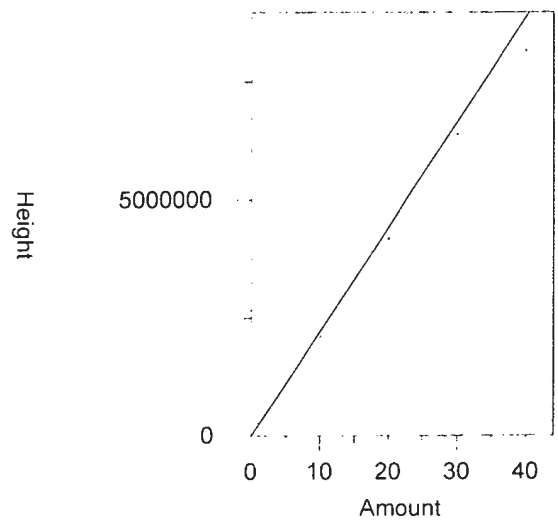
Single peak quantification by height

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



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

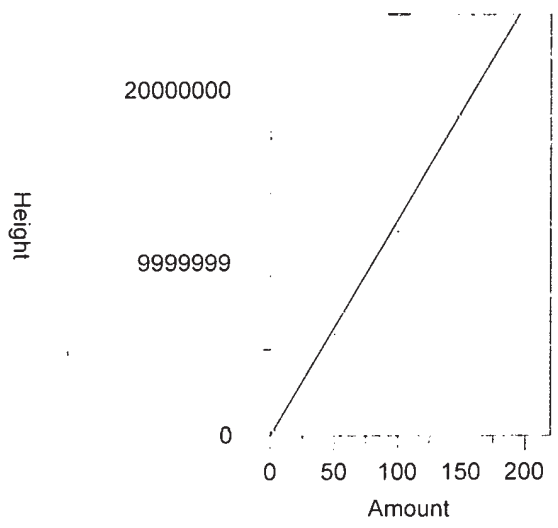
Single peak quantification by height

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

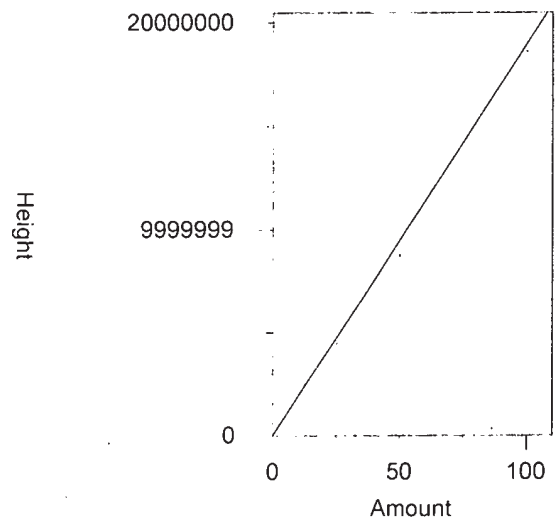
Single peak quantification by height

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

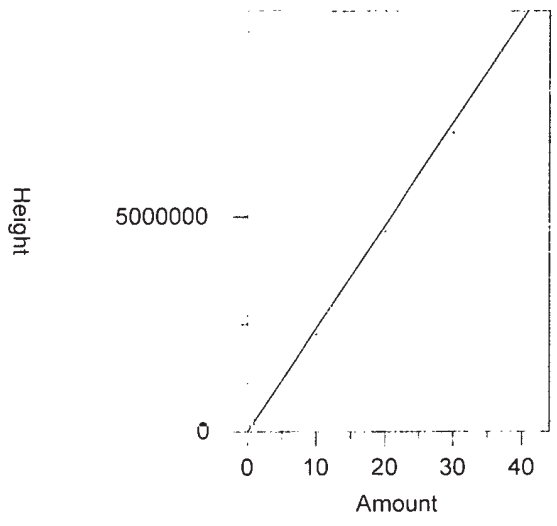
Single peak quantification by height

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

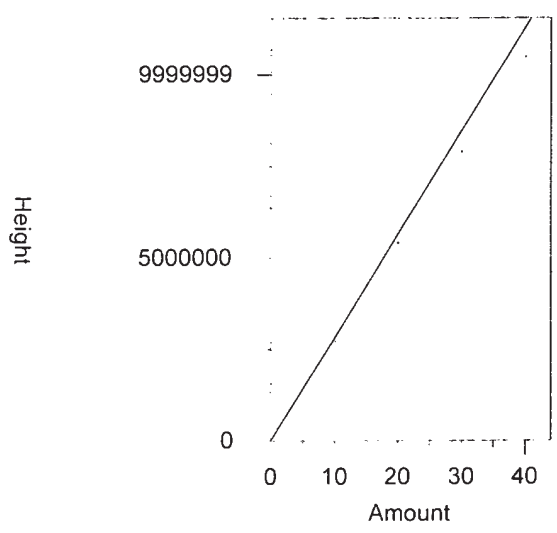
Single peak quantification by height

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



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

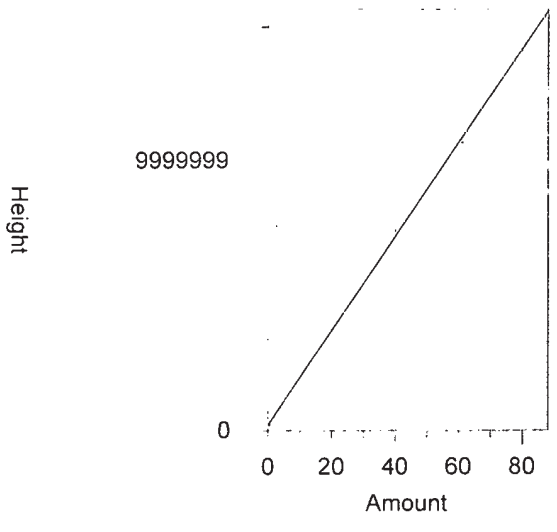
Single peak quantification by height

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.
2	4	844831.2	211207.8	-6.325	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
3	20	3731430	186571.5	0.865	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
4	40	7410688	185267.2	2.978	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
5	61	1.06818E+07	175111.5	-1.715	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.
6	80	1.422103E+07	177762.9	0.216	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306001.

6D

INITIAL CALIBRATION - RETENTION TIME SUMMARY

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 11/2/2018

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
4,4'-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: H9190B Calibration File: 05PEST1830601B

GC Column (2) : RTXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/2/2018 11/2/2018

COMPOUND	CALIBRATION FACTORS							%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	
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

~linear

11/4/18

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 FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
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 FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Chlordane	1	3.28	3.25	3.31	31392	1	12.5	377285	9.92
	1					2	25	652947	
	1					3	50	1642544	
	1					4	100	3171962	
	1					5	200	6401828	
	1					6	500	17734560	
	2	3.79	3.76	3.82	30204	1	12.5	403594	7.09
	2					2	25	675287	
	2					3	50	1638282	
	2					4	100	3046482	
	2					5	200	5788234	
	2					6	500	14877020	
	3	4.12	4.09	4.15	21179	1	12.5	272385	8.37
	3					2	25	450090	
	3					3	50	1162179	
	3					4	100	2129964	
	3					5	200	4139737	
	3					6	500	11017480	
	4	4.31	4.28	4.34	98897	1	12.5	1185038	10.47
	4					2	25	1999810	
	4					3	50	5404774	
	4					4	100	10176280	
	4					5	200	20431460	
	4					6	500	53285910	
	5	4.43	4.40	4.46	74667	1	12.5	921260	9.60
	5					2	25	1539187	
	5					3	50	4127468	
	5					4	100	7622940	
	5					5	200	14973900	
	5					6	500	39541440	
	6	5.13	5.10	5.16	30141	1	12.5	434945	11.30
	6					2	25	647179	
	6					3	50	1676081	
	6					4	100	2951771	
	6					5	200	5543394	
	6					6	500	14702010	

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 FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Toxaphene	1	4.68	4.65	4.71	10165	1	50	514571	.87
	1					2	100	1018445	
	1					3	200	2036424	
	1					4	500	5103620	
	1					5	1000	10056680	
	1					6	2000	20136310	
	2	4.91	4.88	4.94	10494	1	50	511096	1.46
	2					2	100	1061126	
	2					3	200	2096546	
	2					4	500	5325630	
	2					5	1000	10451430	
	2					6	2000	21094510	
	3	5.08	5.05	5.11	19322	1	50	941194	1.35
	3					2	100	1935048	
	3					3	200	3882978	
	3					4	500	9799539	
	3					5	1000	19382900	
	3					6	2000	38721940	
	4	5.35	5.32	5.38	20837	1	50	1013307	2.07
	4					2	100	2077736	
	4					3	200	4201018	
	4					4	500	10783050	
	4					5	1000	20760490	
	4					6	2000	41287840	
	5	5.41	5.38	5.44	12307	1	50	609072	1.43
	5					2	100	1249966	
	5					3	200	2466283	
	5					4	500	6263254	
	5					5	1000	12194250	
	5					6	2000	24214190	
	6	5.70	5.67	5.73	18924	1	50	942304	1.92
	6					2	100	1921570	
	6					3	200	3844229	
	6					4	500	9624753	
	6					5	1000	18614450	
	6					6	2000	36797160	

File Name: V:\CP5\05pest1830601b.cal
Version: 11

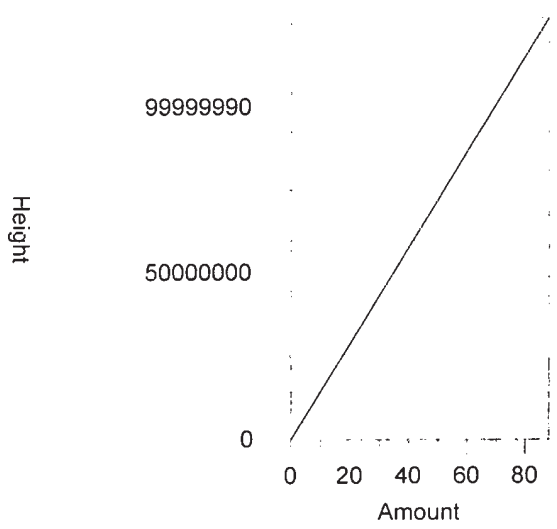
Creator:
Description:
Reason for change:

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

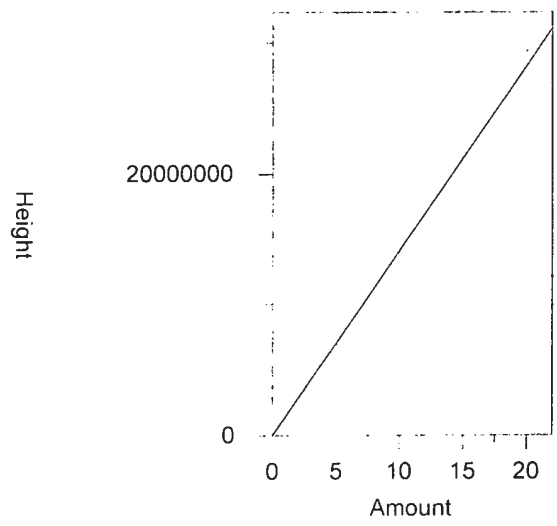
Single peak quantification by height

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



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

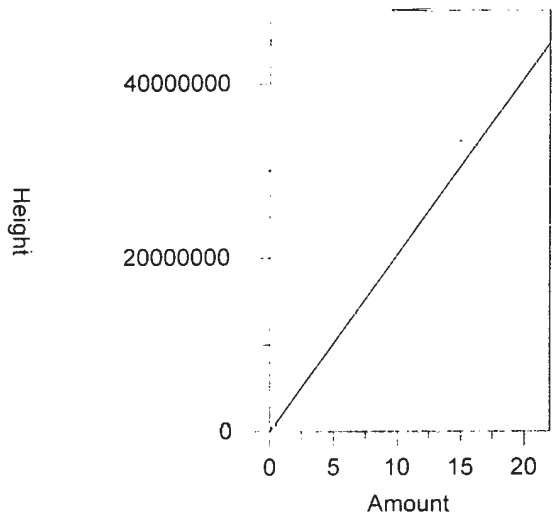
Single peak quantification by height

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

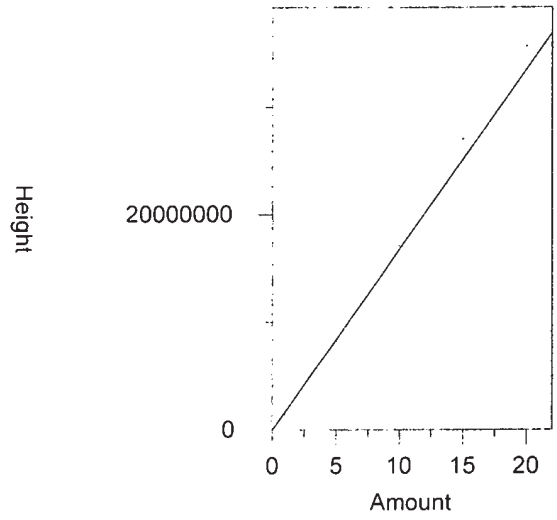
Single peak quantification by height

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



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

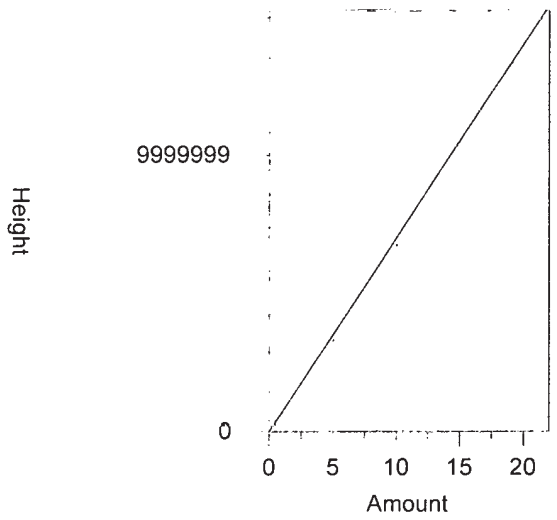
Y = 1673706 X + 0

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

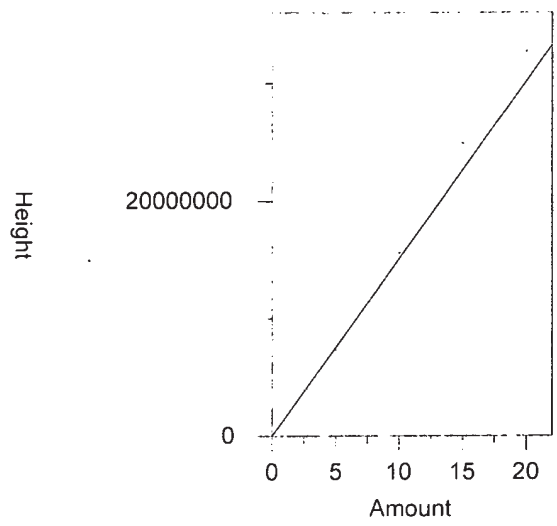
Y = 701462.1 X + 0

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



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

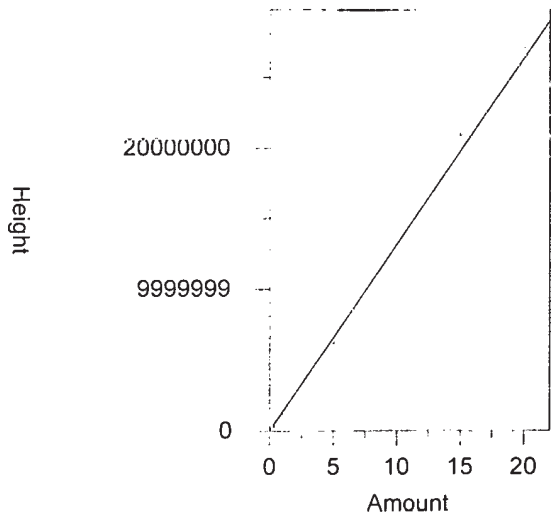
Single peak quantification by height

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

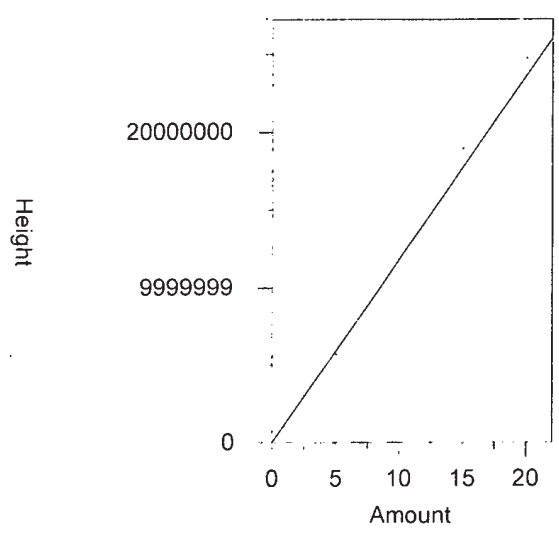
Single peak quantification by height

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



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

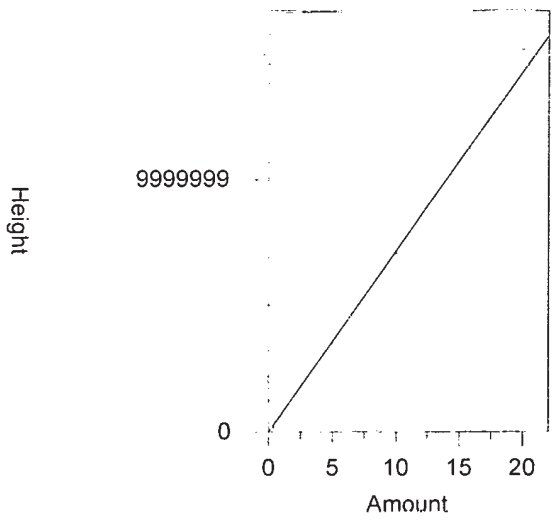
Single peak quantification by height

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

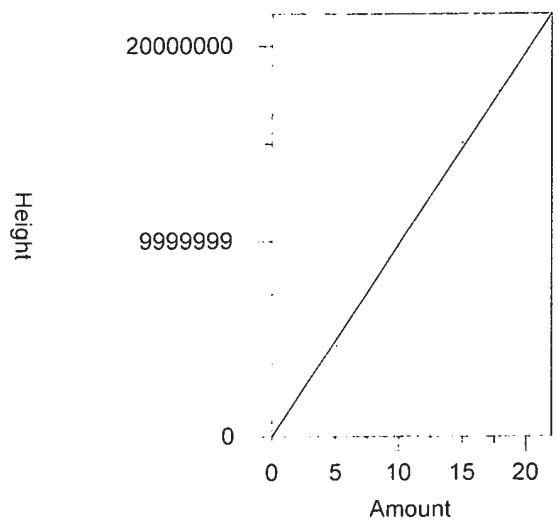
Single peak quantification by height

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



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

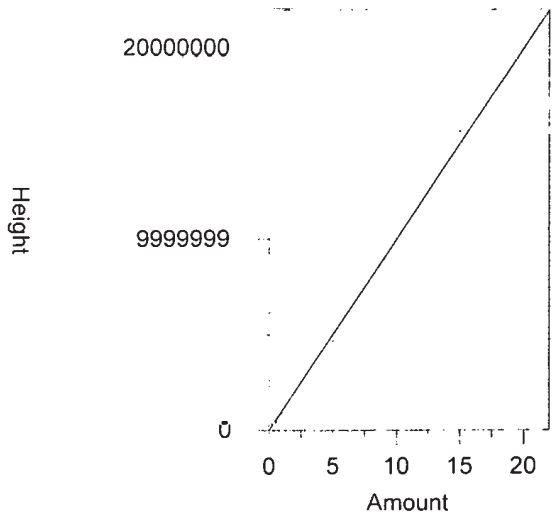
Single peak quantification by height

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

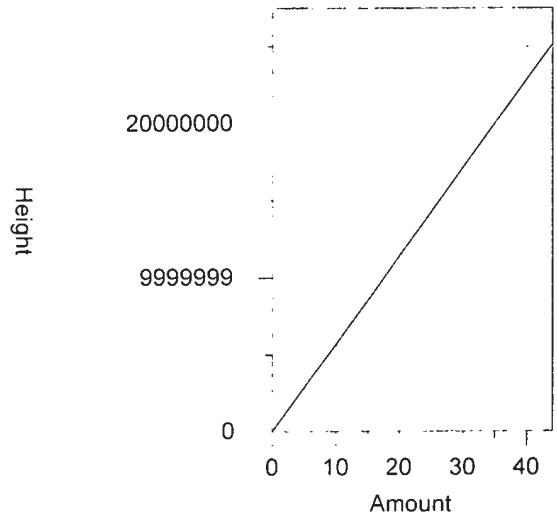
Single peak quantification by height

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



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

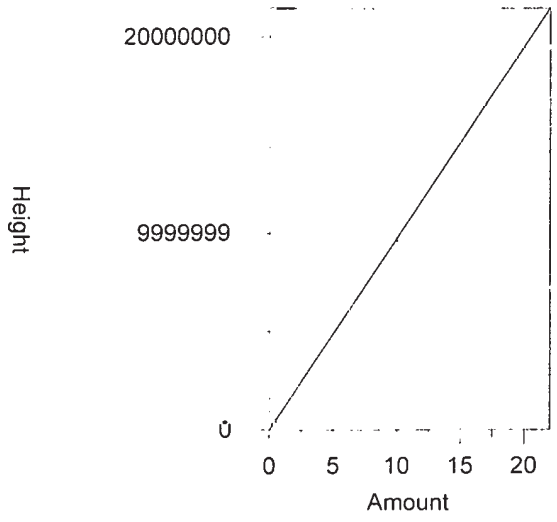
Single peak quantification by height

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

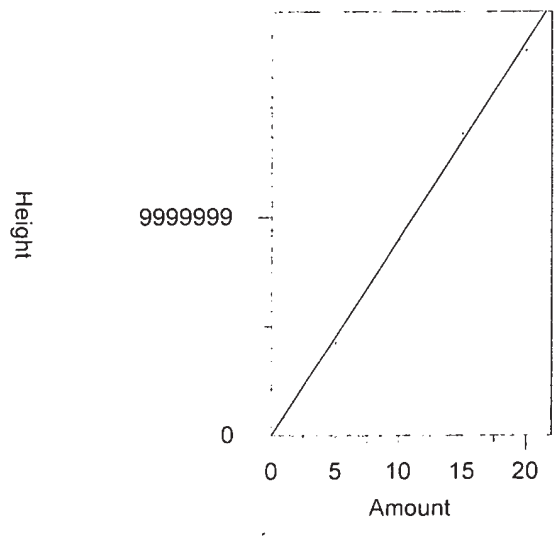
Single peak quantification by height

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



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

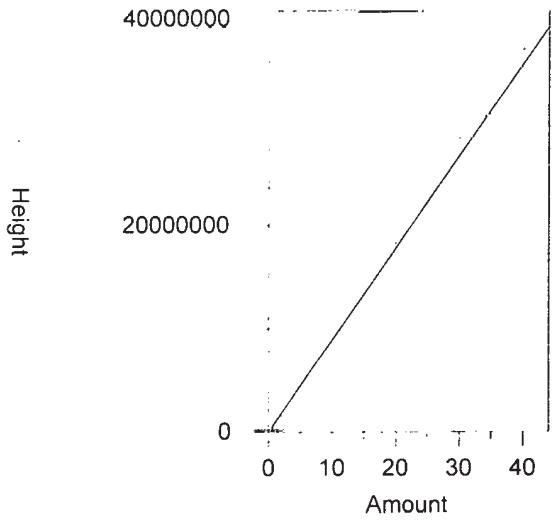
Single peak quantification by height

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

15 4,4'-DDE



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

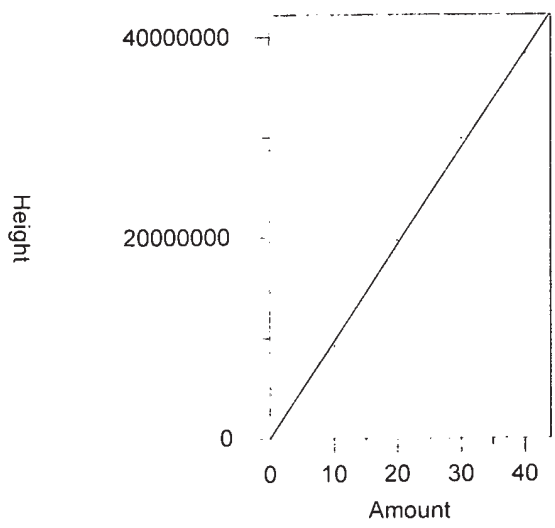
Single peak quantification by height

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

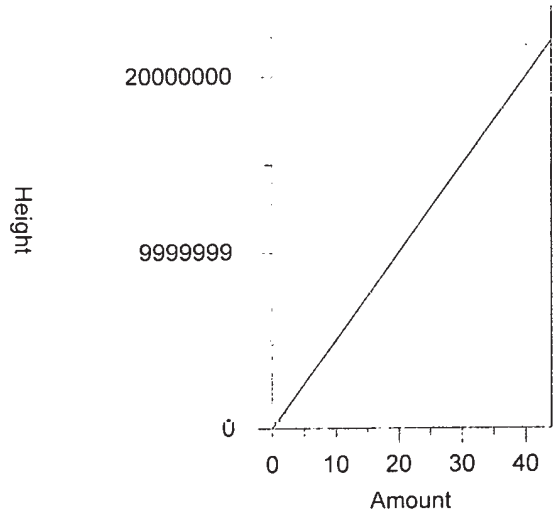
Single peak quantification by height

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

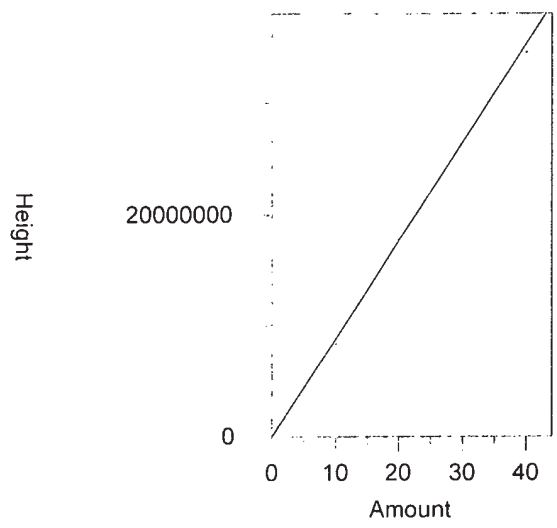
Single peak quantification by height

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

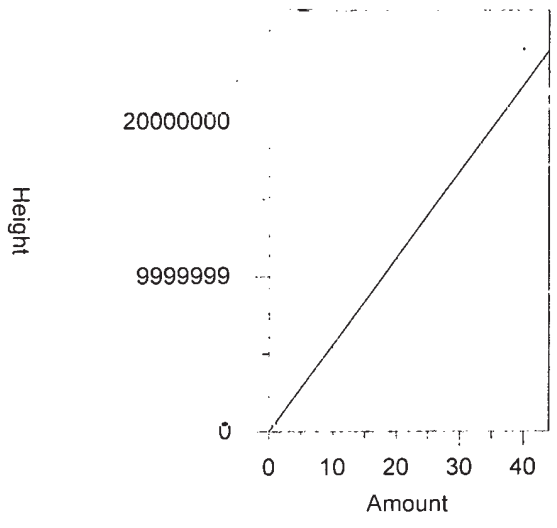
Y = 882816.6 X + 0

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

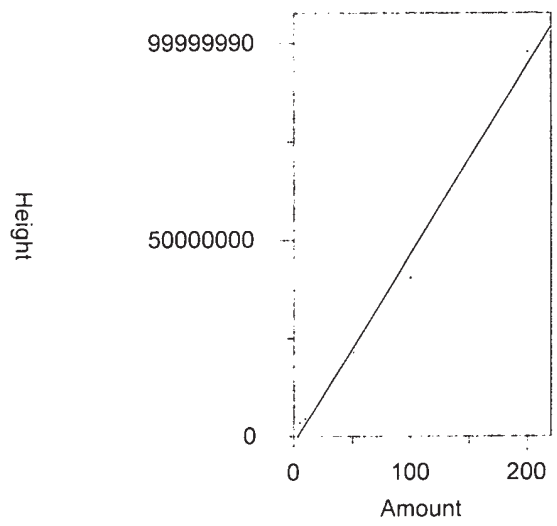
Y = 558660 X + 0

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



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

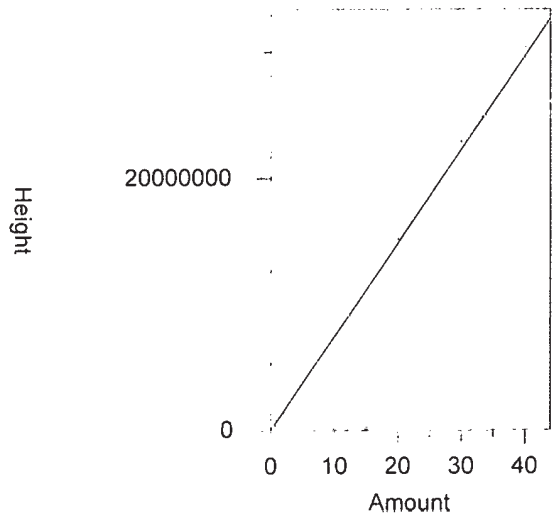
Single peak quantification by height

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

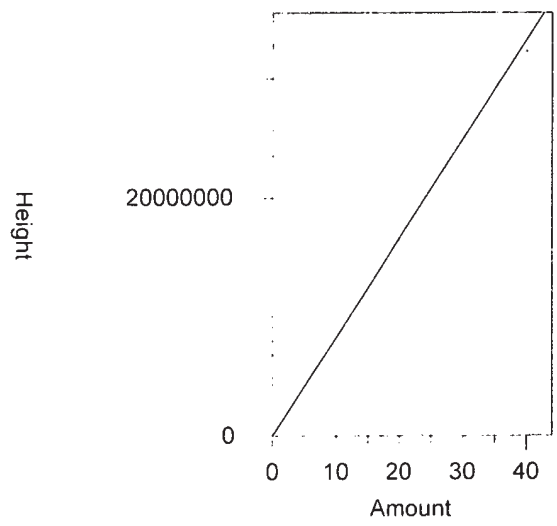
Single peak quantification by height

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

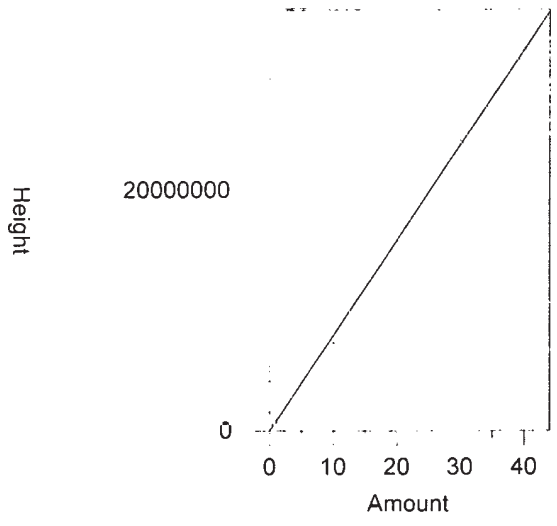
Single peak quantification by height

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

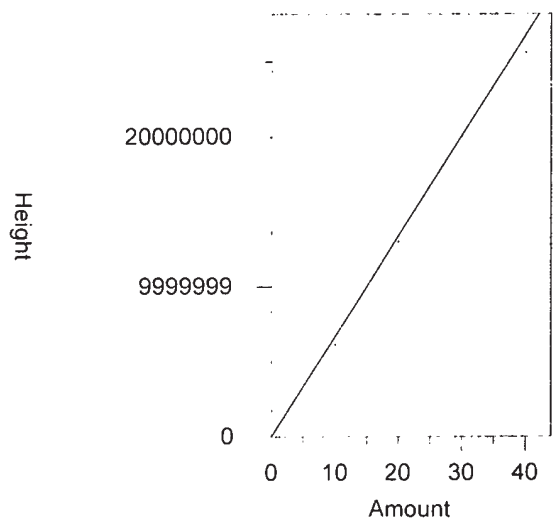
Single peak quantification by height

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



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

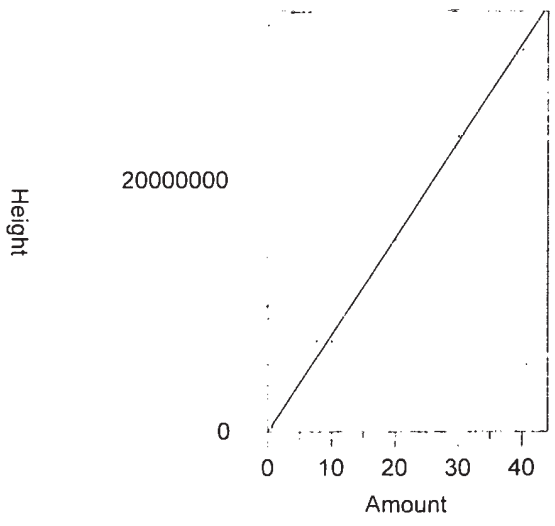
Y = 669305.9 X + 0

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

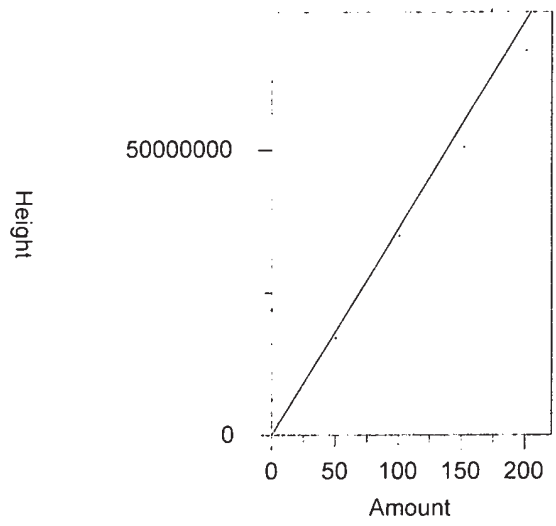
Y = 771466.7 X + 0

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

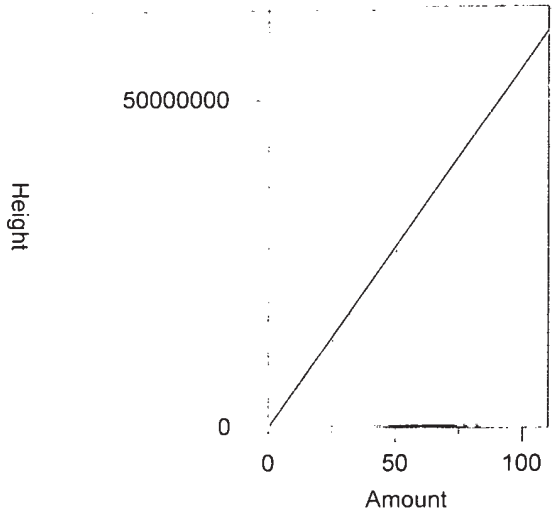
Y = 362115 X + 0

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

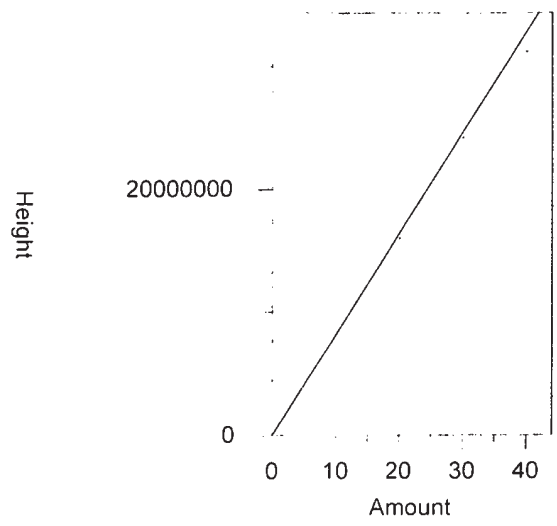
Y = 553017.4 X + 0

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



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

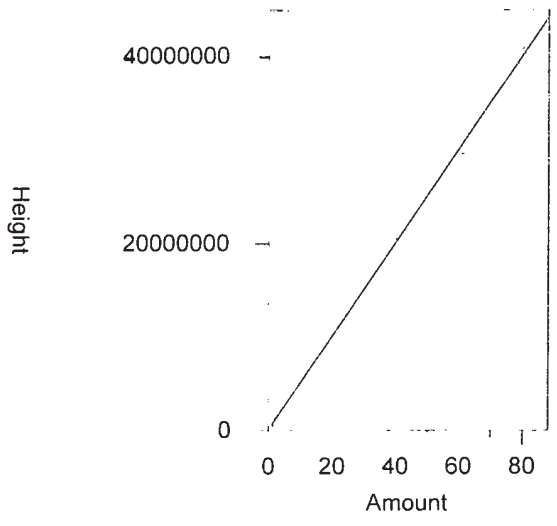
Single peak quantification by height

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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1016

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 3 Max %RSD: 5 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1221

	1	2	3	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 30 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1248

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 250.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1254

	1	2	3	4	5	6	SUM
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 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1260

	1	2	3	4	5	6	SUM
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 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Chlordane

		1	2	3	4	5	6	SUM
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

		1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1016

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 3 Max %RSD: 5 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1221

	1	2	3	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 30 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1248

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 250.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1254

	1	2	3	4	5	6	SUM
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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1260

	1	2	3	4	5	6	SUM
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	6320900	8050472	5441882	7117040	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 Avg Concentration (ng/ml): 50.000000

Min # of Peaks Required: 4 Max %RSD: 40 Report Base:

Slope: Y-Intercept: E-Flag Basis: Chlordane

		1	2	3	4	5	6	SUM
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

		1	2	3	4	5	6	SUM
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		**4.538**	**6.936**	**6.965**	**8.956**	**8.563**	**7.577**	
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: H9190A Calibration File: 05PEST1830603

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

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	RT OF STANDARDS LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MIDPOINT RT	RT WINDOW 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
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							5.07	5.05	5.09
Kepone							5.10	5.08	5.12
4,4'-DDD							5.12	5.10	5.14
Endosulfan II							5.24	5.22	5.26
4,4'-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: H9190A Calibration File: 05PEST1830603

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

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	CALIBRATION FACTORS							%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	
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
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	2.50E+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
4,4'-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: H9190A Calibration File: 05PEST1830603

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

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
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:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190A Calibration File: 05PEST1830603

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

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
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	4.48	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: H9190A Calibration File: 05PEST1830603

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

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
Toxaphene	1	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	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\05pest1830603.cal
Version: 1

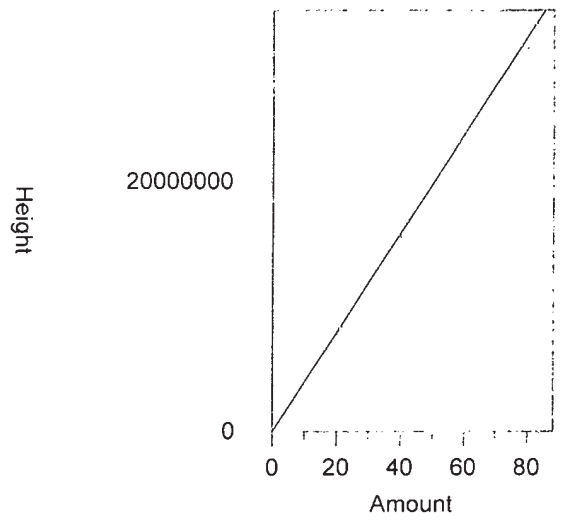
Creator:
Description:
Reason for change:

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

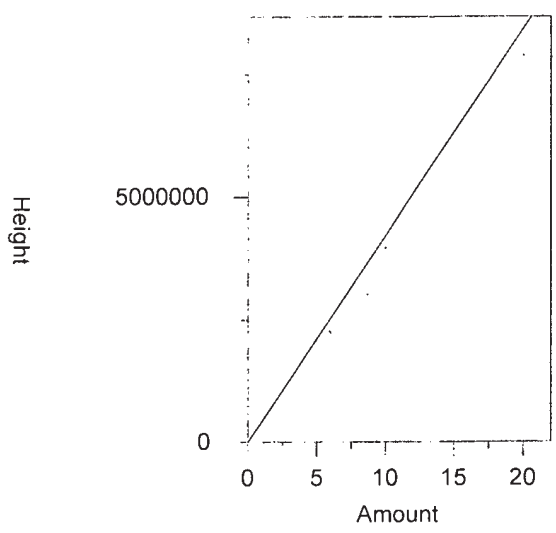
Single peak quantification by height

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

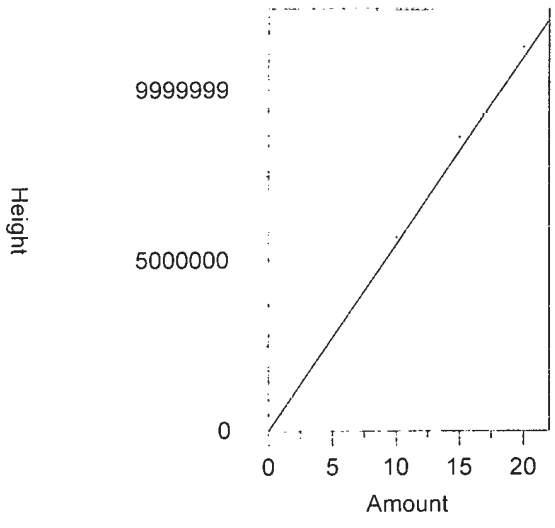
Single peak quantification by height

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

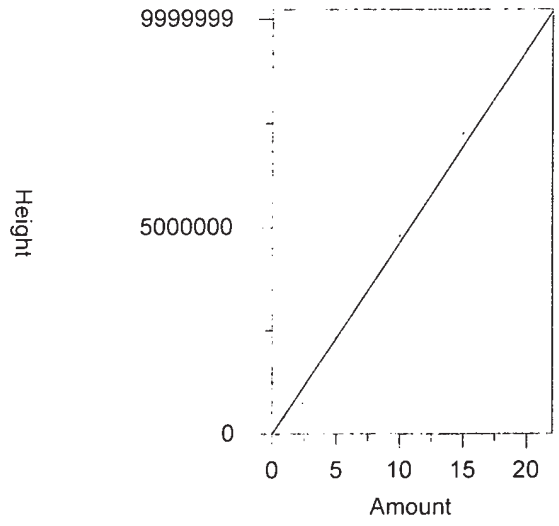
Single peak quantification by height

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

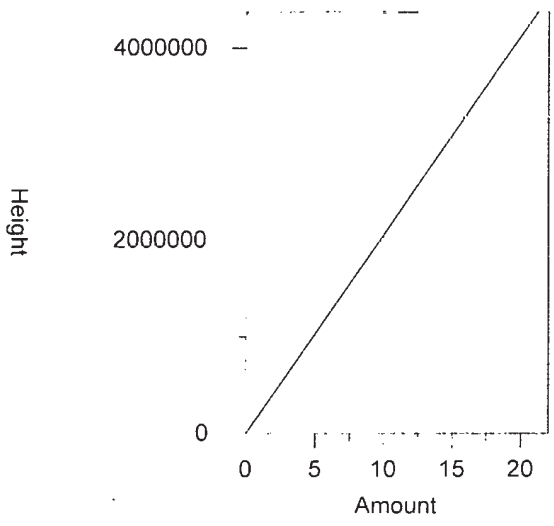
Single peak quantification by height

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

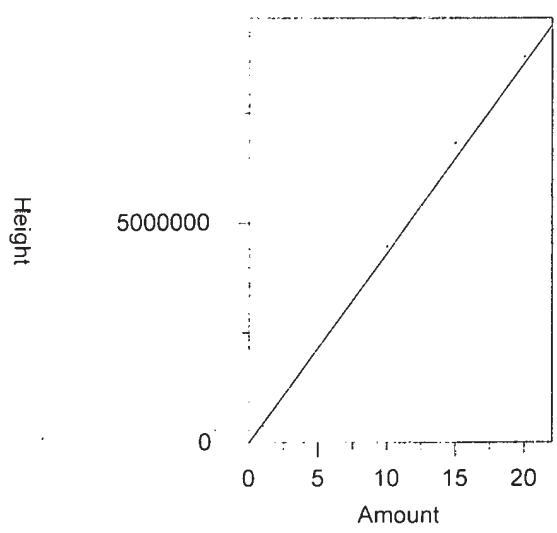
Single peak quantification by height

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

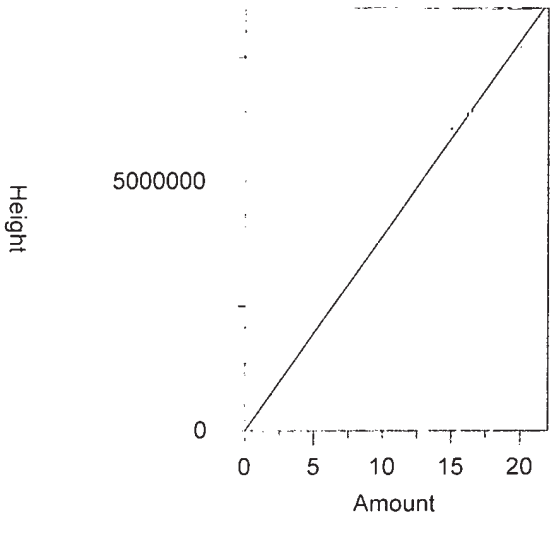
Single peak quantification by height

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

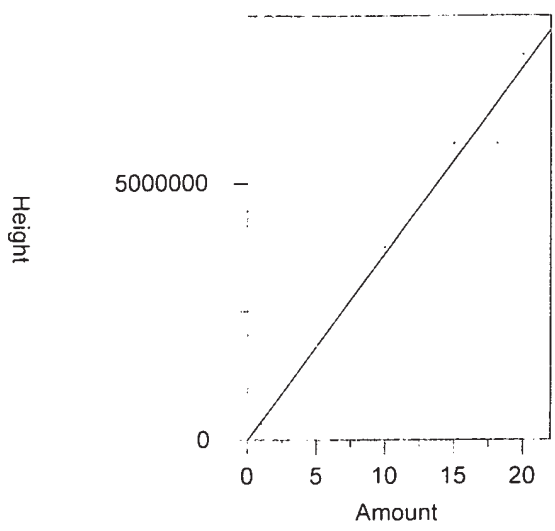
Single peak quantification by height

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



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

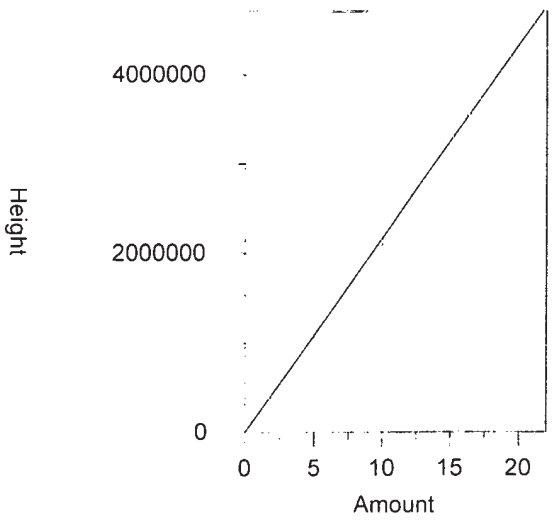
Single peak quantification by height

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

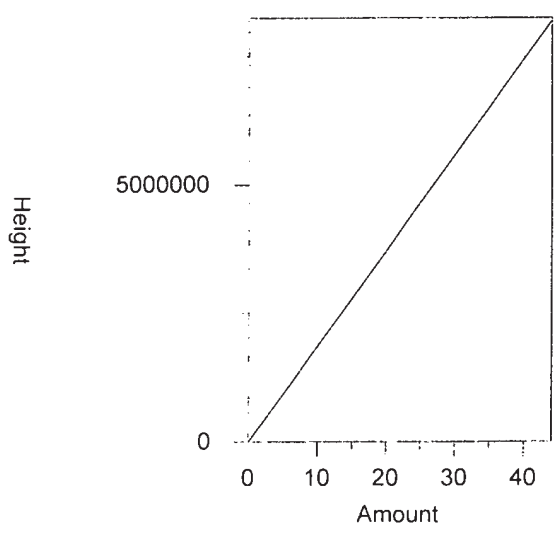
Single peak quantification by height

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

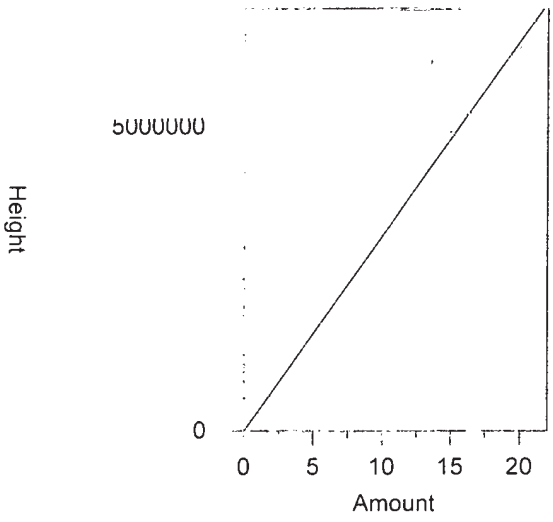
Y = 186052.7 X + 0

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

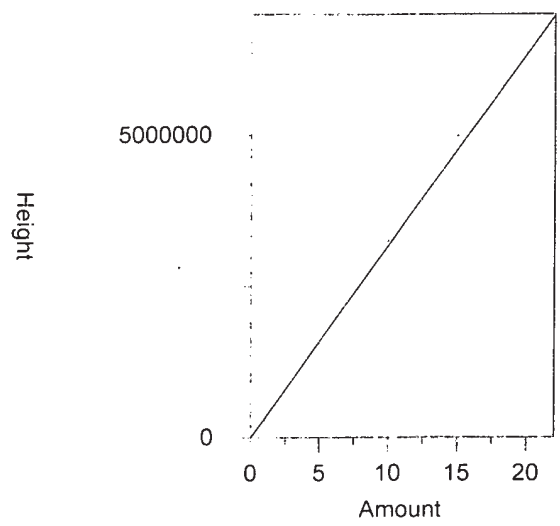
Y = 320389.5 X + 0

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



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

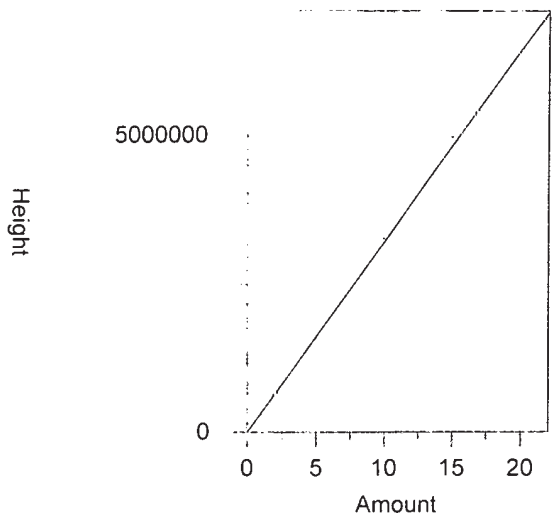
Y = 316682.4 X + 0

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

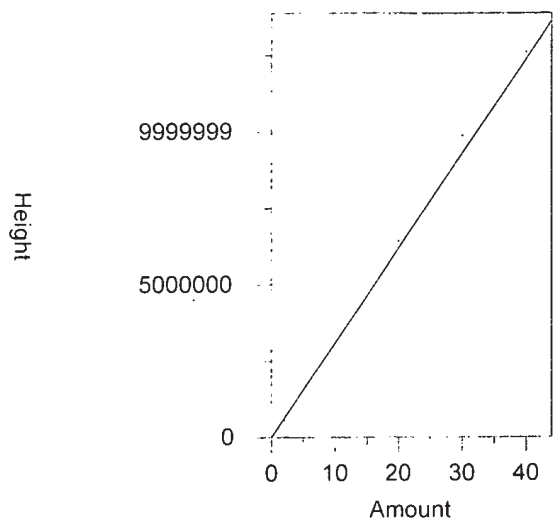
Y = 320873.6 X + 0

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



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

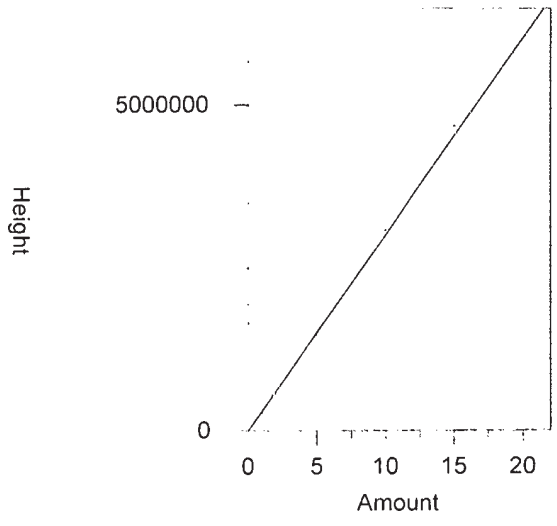
Single peak quantification by height

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

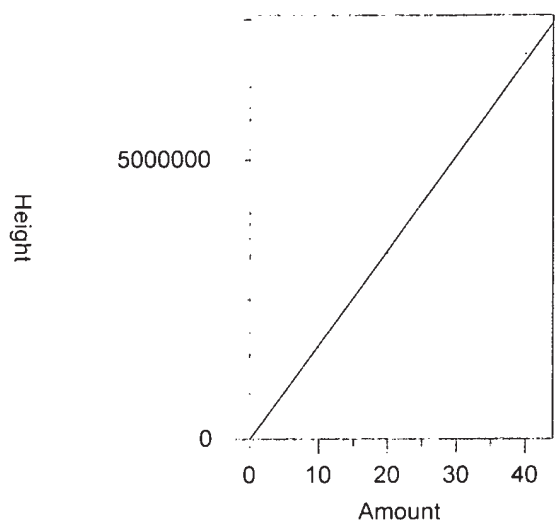
Single peak quantification by height

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

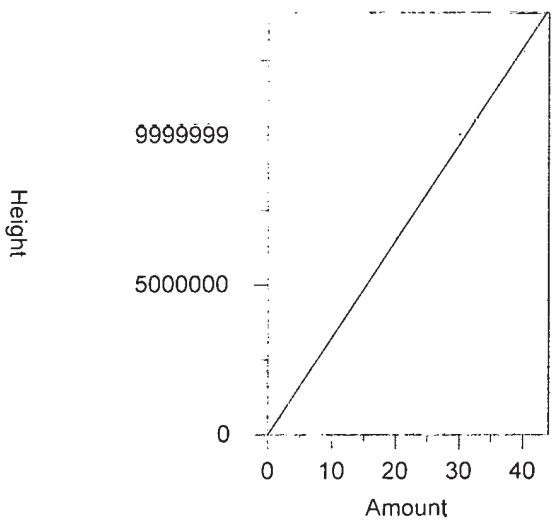
Single peak quantification by height

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

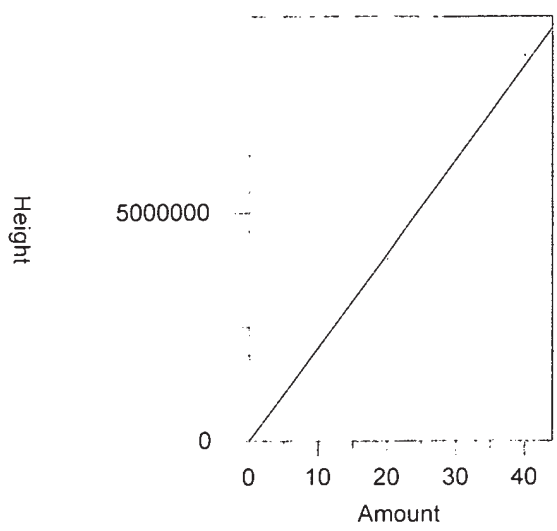
Single peak quantification by height

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

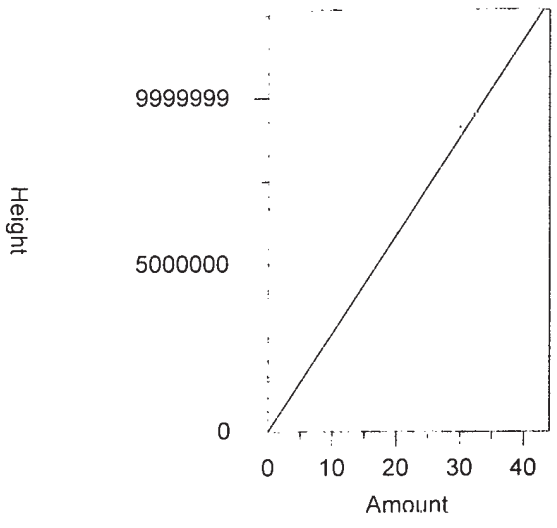
Y = 205345.8 X + 0

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

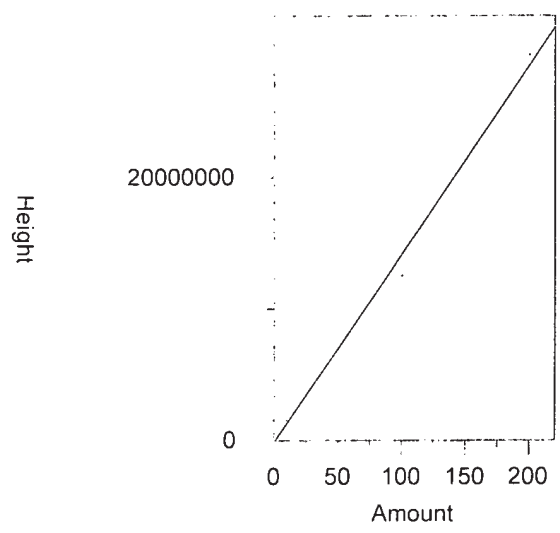
Y = 295035.1 X + 0

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

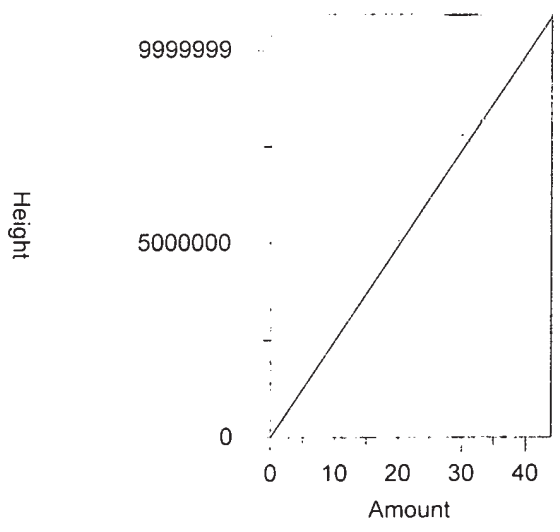
Y = 143277.1 X + -171568.1

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

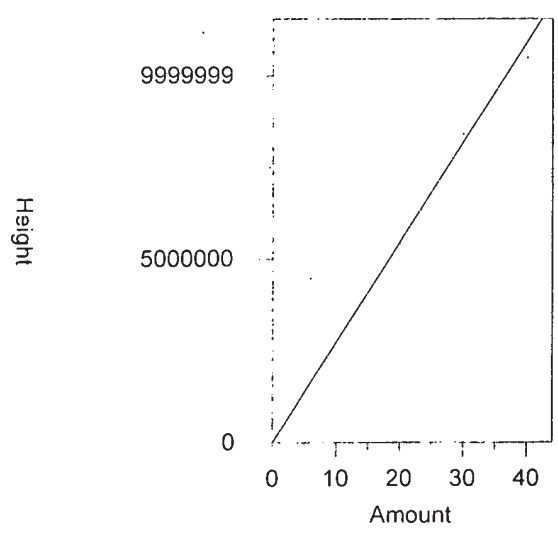
Y = 246711.3 X + 0

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

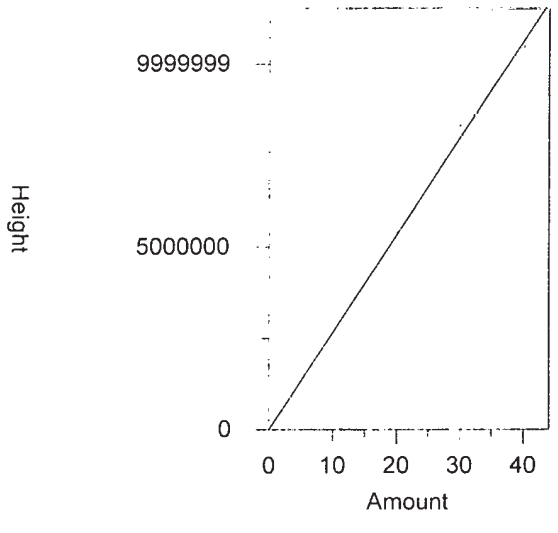
Single peak quantification by height

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

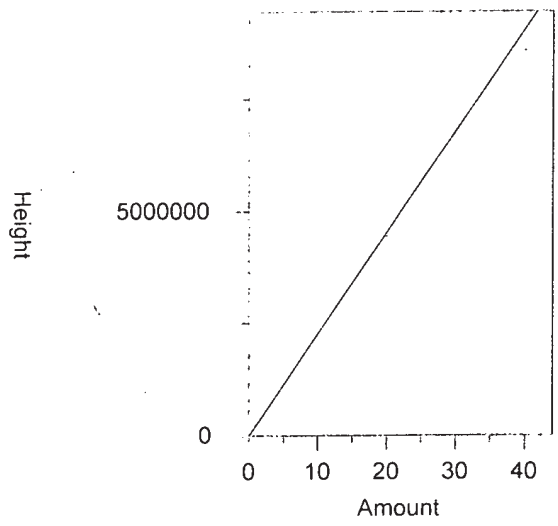
Single peak quantification by height

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

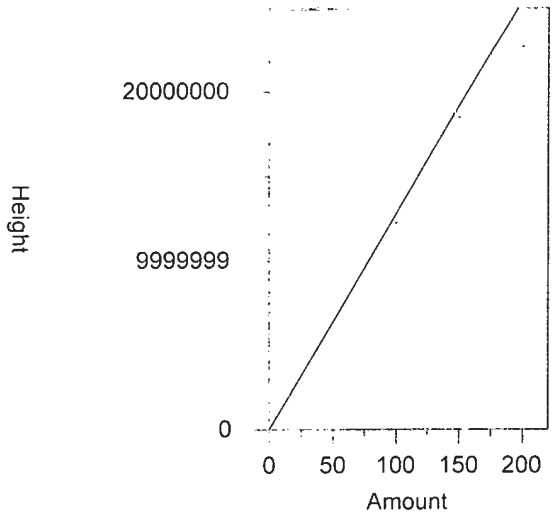
Y = 225811.5 X + 0

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\05pest18306006.004
2	2	440222.2	220111.1	-2.524	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.005
3	10	2226642	222664.2	-1.394	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.006
4	20	4440235	222011.8	-1.683	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.007
5	30	6792906	226430.2	0.274	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.008
6	40	8567951	214198.8	-5.143	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.009

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

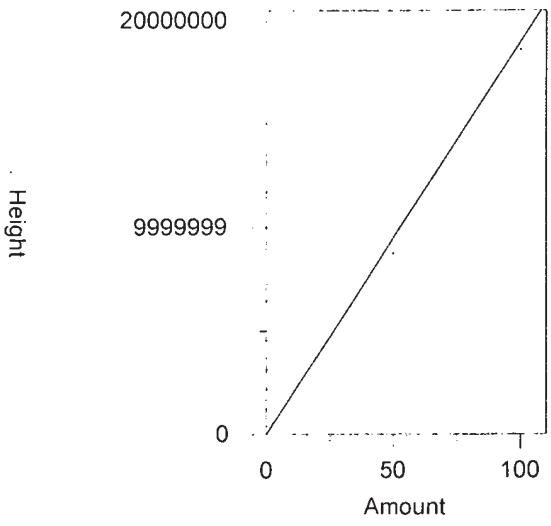
Y = 127561.9 X + 0

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\05pest18306006.
2	10	1289565	128956.5	1.093	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
3	50	6401755	128035.1	0.371	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
4	100	1.224278E+07	122427.8	-4.025	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
5	150	1.84648E+07	123098.7	-3.499	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
6	200	2.269835E+07	113491.8	-11.030	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.

26 Mirex



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

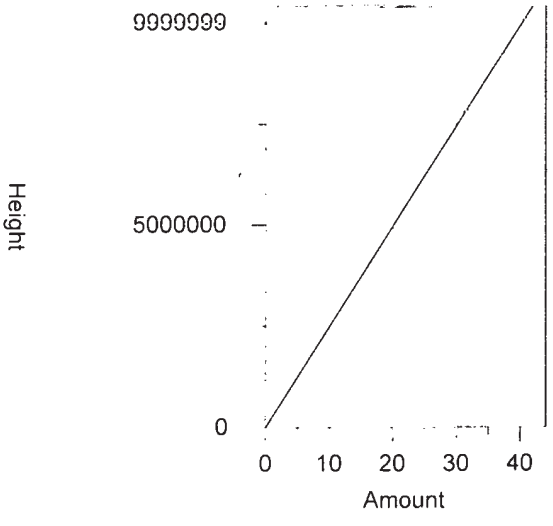
Single peak quantification by height

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

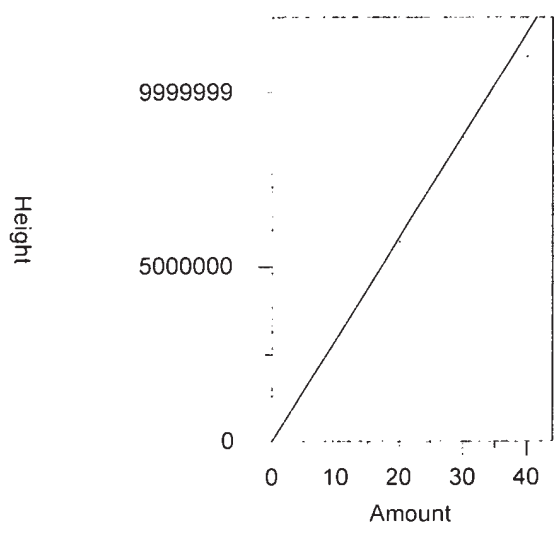
Single peak quantification by height

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



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

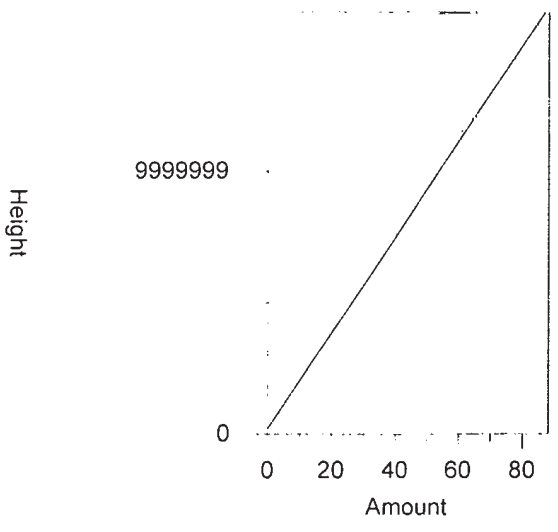
Single peak quantification by height

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.
2	4	824692.4	206173.1	-11.466	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
3	20	3946944	197347.2	2.442	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
4	40	7630587	190764.7	1.680	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
5	61	1.151316E+07	188740.3	1.538	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.
6	80	1.459565E+07	182445.6	-1.433	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006.

6D
INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Calibration File: 05PEST1830603B

GC Column (2) : RTXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	RT OF STANDARDS LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MIDPOINT RT	RT WINDOW 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: H9190B Calibration File: 05PEST1830603B

GC Column (2) : RTXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	CALIBRATION FACTORS							%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	
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
4,4'-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: H9190B Calibration File: 05PEST1830603B

GC Column (2) : RTXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
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

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Calibration File: 05PEST1830603B

GC Column (2) : RTXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
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: H9190B Calibration File: 05PEST1830603B

GC Column (2) : RTXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 11/9/2018 11/9/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
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
					23004		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

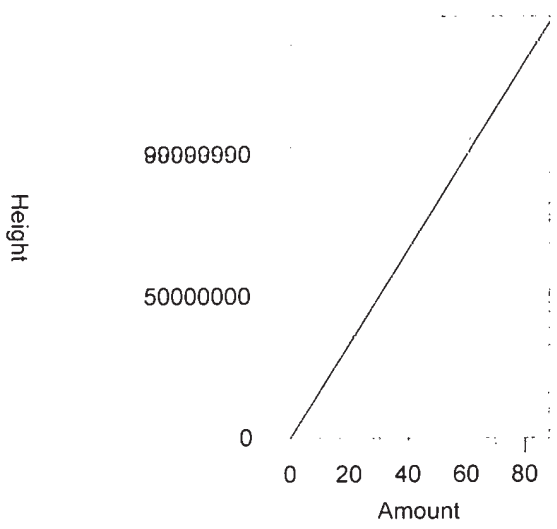
Creator:
Description:
Reason for change:

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

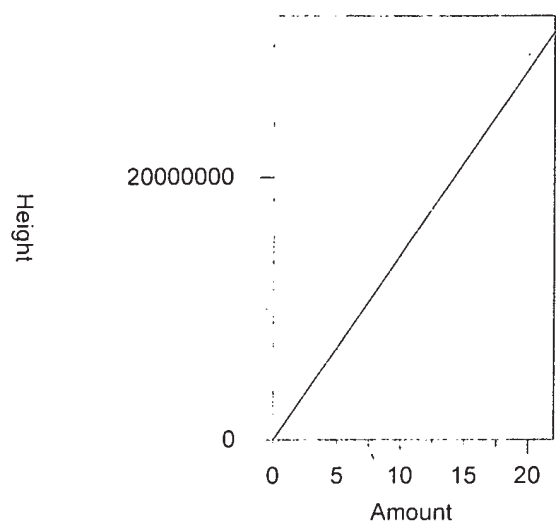
Single peak quantification by height

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

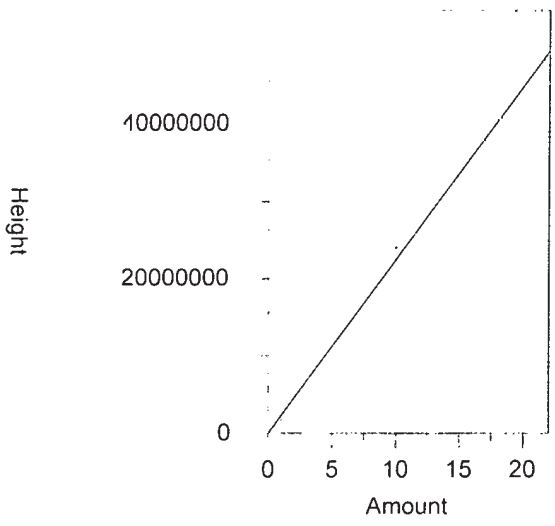
Y = 1412457 X + 0

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

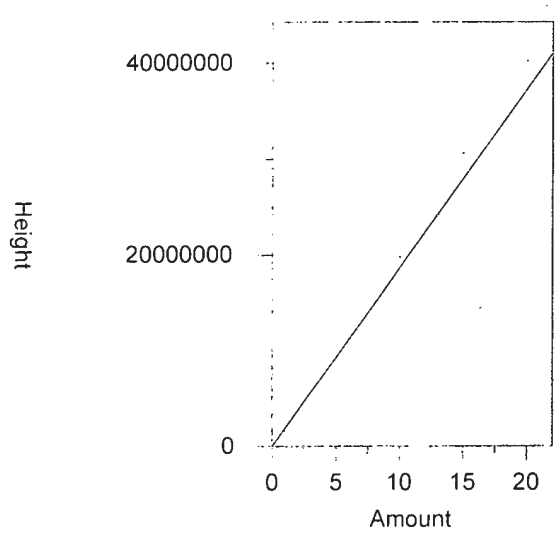
Y = 2243786 X + 0

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

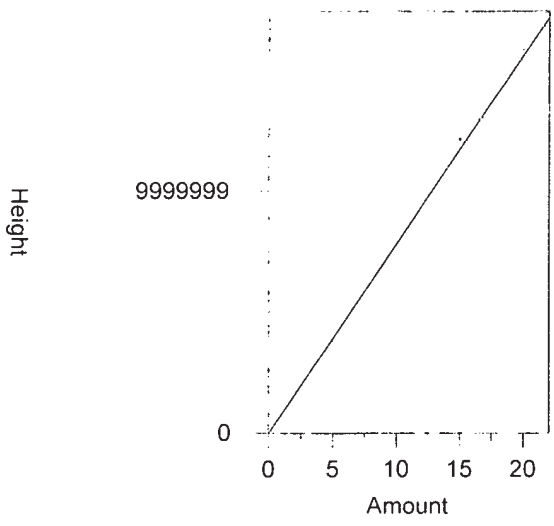
Single peak quantification by height

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\05pest18306006l
2	1	1562534	1562534	-16.101	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
3	5	9195616	1839123	-1.249	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
4	10	1.979611E+07	1979611	6.294	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
5	15	3.062886E+07	2041924	9.640	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
6	20	4.019756E+07	2009878	7.919	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l

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

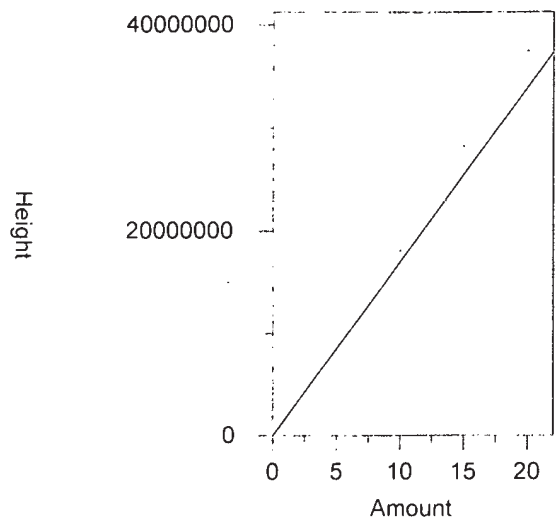
Single peak quantification by height

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\05pest18306006l
2	1	723805	723805	-7.485	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
3	5	3793329	758665.8	-3.030	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
4	10	7782440	778244	-0.527	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
5	15	1.218022E+07	812014.7	3.789	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
6	20	1.588231E+07	794115.5	1.501	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l

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

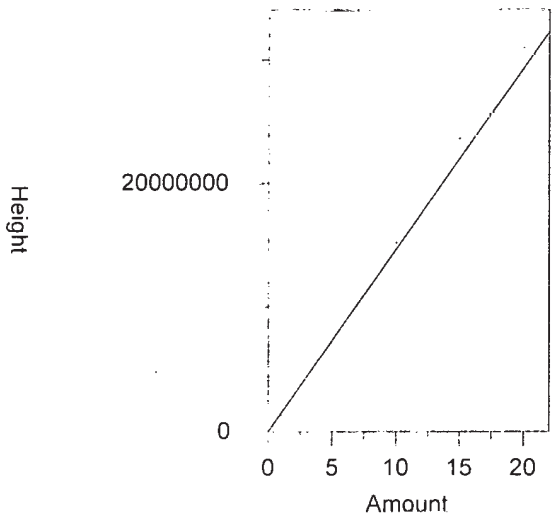
Single peak quantification by height

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

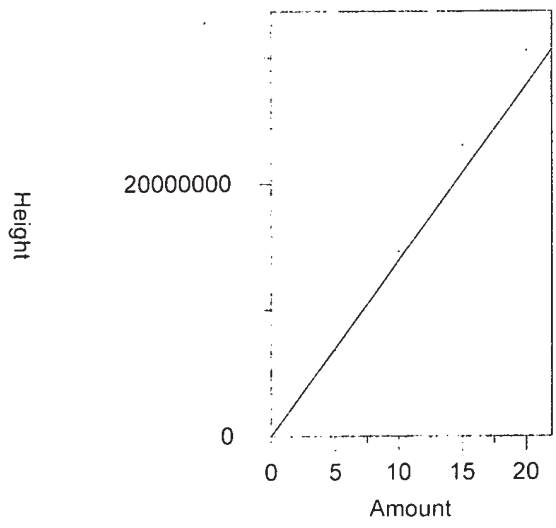
Single peak quantification by height

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



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

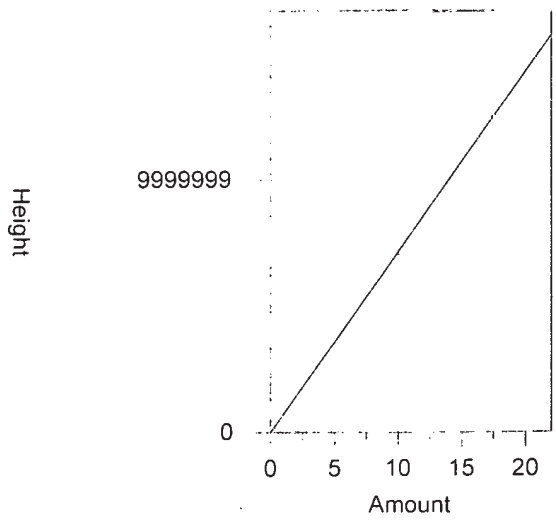
Single peak quantification by height

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\05pest18306006I
2	1	1145551	1145551	-17.668	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006I
3	5	6817345	1363469	-2.006	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006I
4	10	1.463943E+07	1463943	5.215	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006I
5	15	2.303977E+07	1535985	10.392	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006I
6	20	3.055277E+07	1527639	9.793	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006I

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

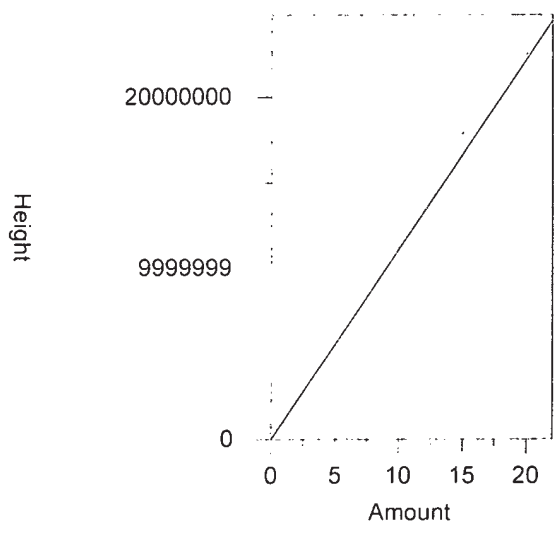
Single peak quantification by height

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



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

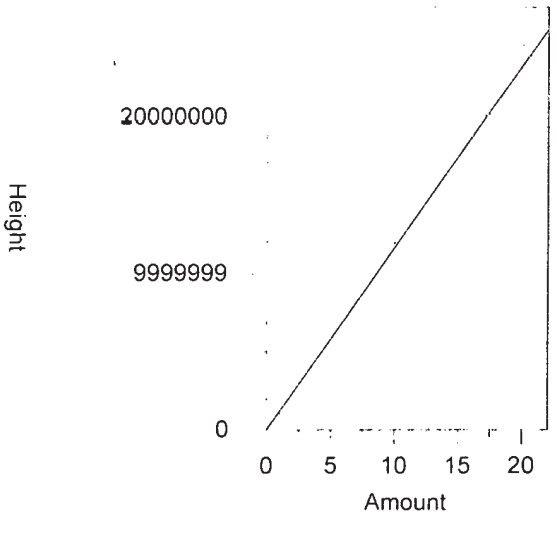
Y = 1111478 X + 0

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

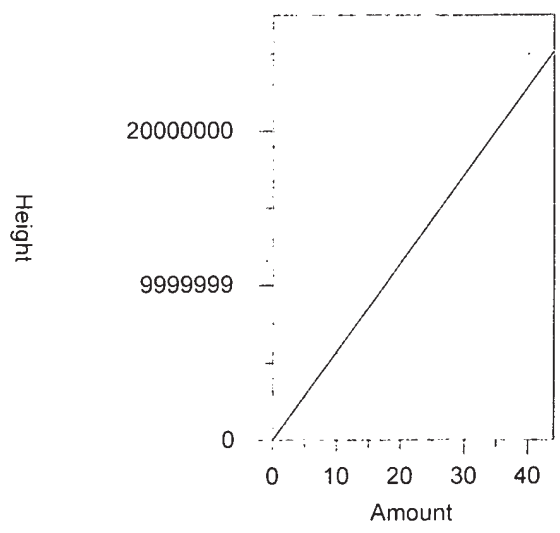
Y = 1165326 X + 0

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



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

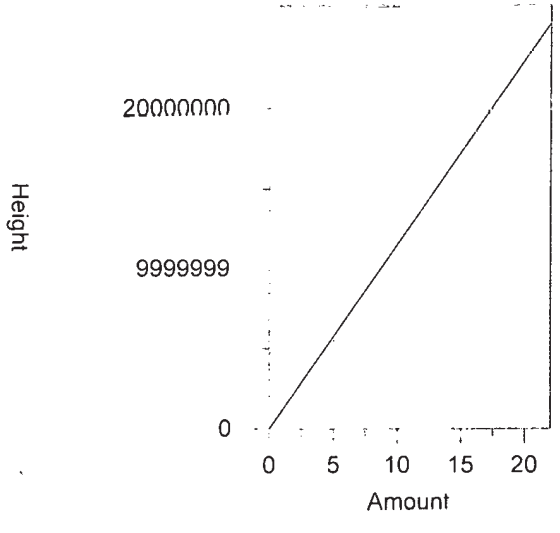
Single peak quantification by height

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	525522	-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

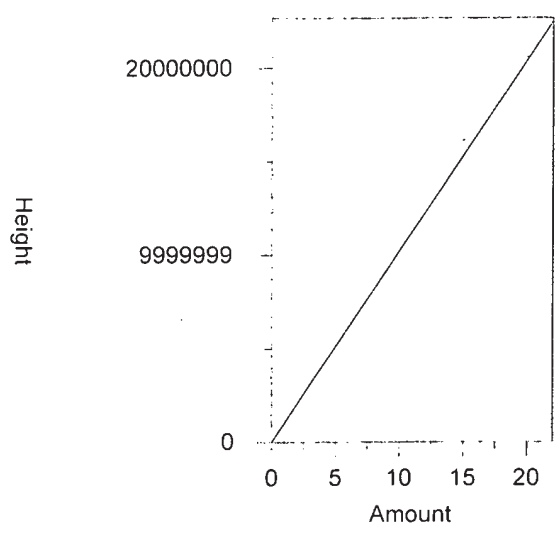
Single peak quantification by height

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\05pest18306006\
2	1	1016607	1016607	-11.778	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
3	5	5547413	1109483	-3.718	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
4	10	1.166727E+07	1166727	1.250	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
5	15	1.858898E+07	1239265	7.545	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
6	20	2.405027E+07	1202514	4.355	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\

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

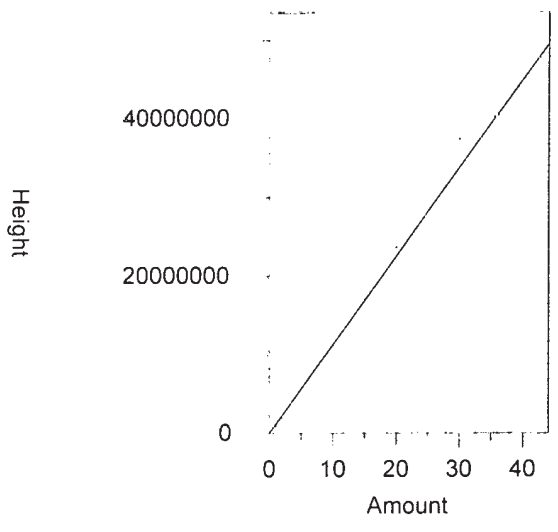
Single peak quantification by height

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

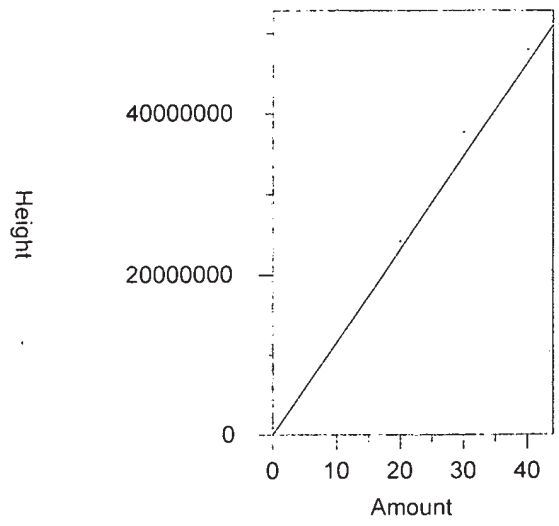
Single peak quantification by height

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

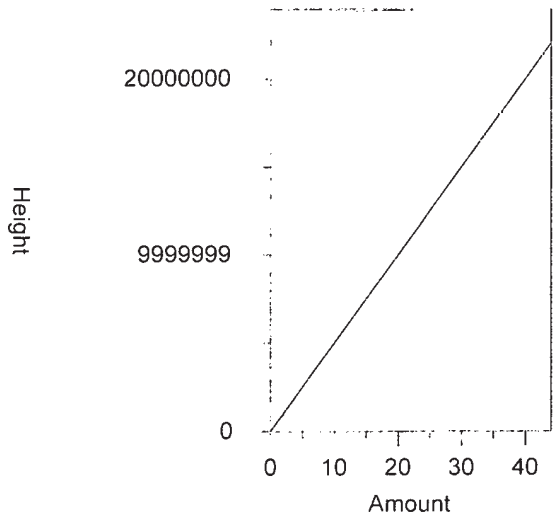
Y = 1157629 X + 0

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\05pest18306006l
2	2	1987515	993757.5	-14.156	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
3	10	1.14572E+07	1145720	-1.029	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
4	20	2.421373E+07	1210687	4.583	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
5	30	3.769675E+07	1256558	8.546	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l
6	40	4.79854E+07	1199635	3.629	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006l

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

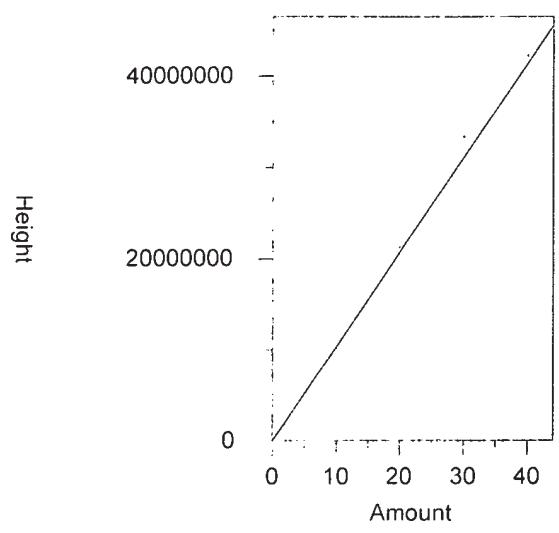
Y = 500224.4 X + 0

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

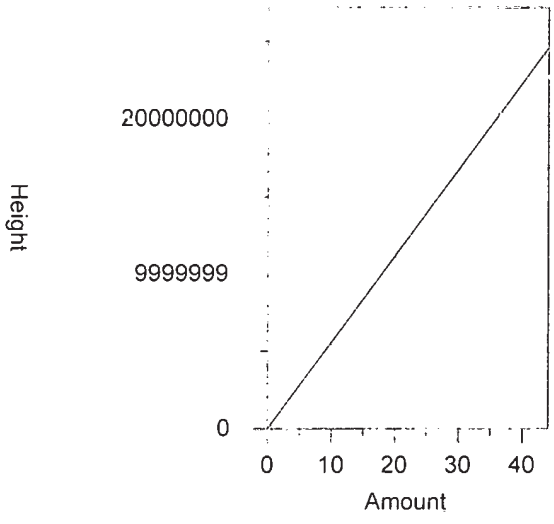
Y = 1035135 X + 0

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

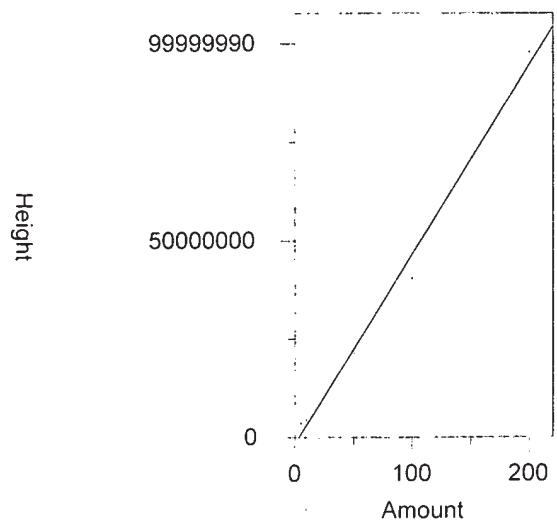
Y = 558660 X + 0

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



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

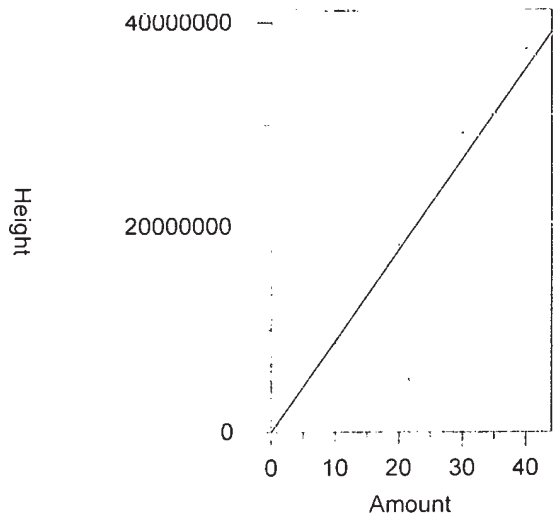
Y = 481848.6 X + -1683167

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

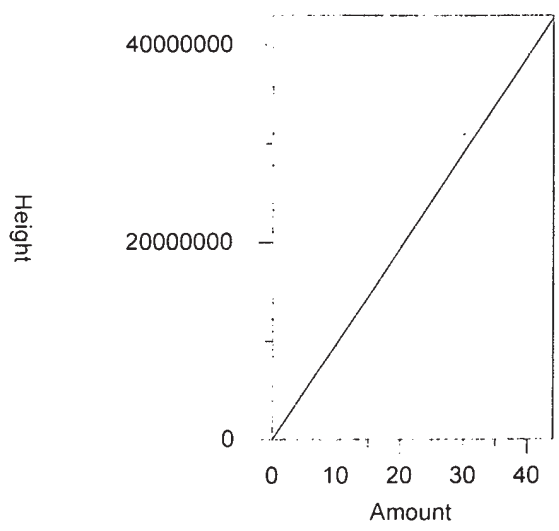
Y = 888102.1 X + 0

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

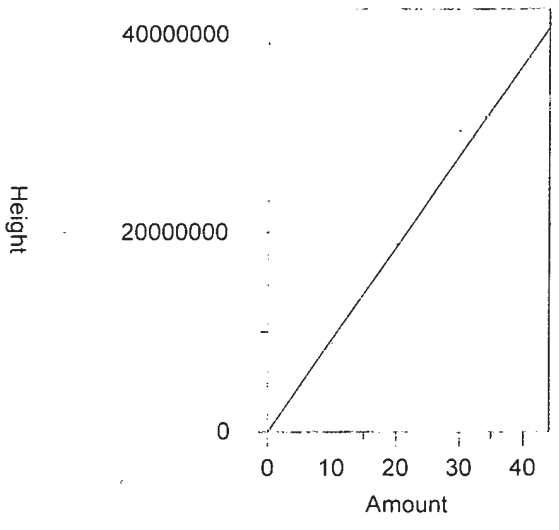
Y = 969809.6 X + 0

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

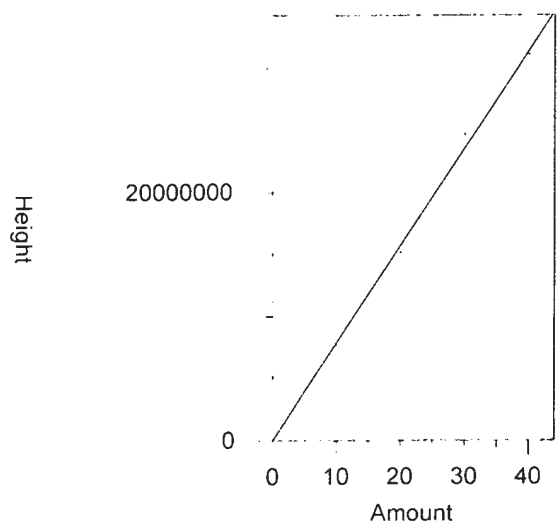
Y = 925279.2 X + 0

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

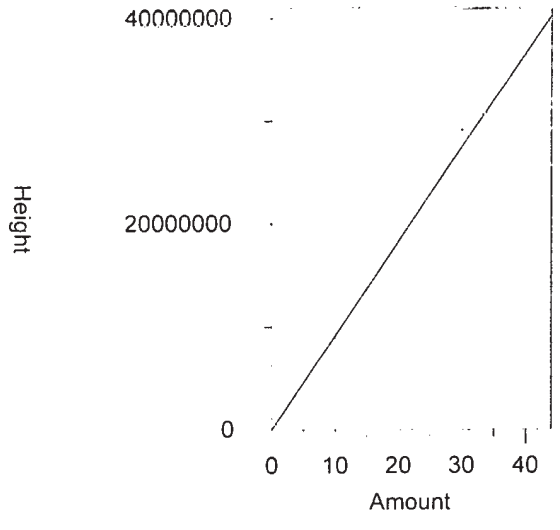
Y = 784638.4 X + 0

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\05pest18306006\
2	2	1462964	731482	-6.775	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
3	10	7659114	765911.4	-2.387	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
4	20	1.515264E+07	757632	-3.442	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
5	30	2.466607E+07	822202.3	4.787	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
6	40	3.111384E+07	777846	-0.866	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\

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

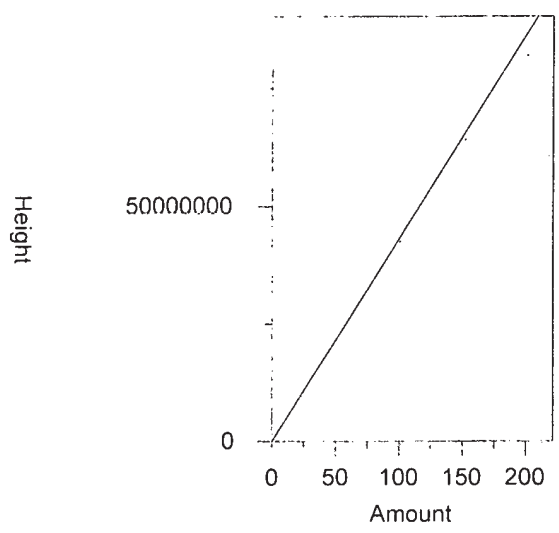
Y = 914614.1 X + 0

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\05pest18306006\
2	2	1626707	813353.5	-11.071	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
3	10	8891474	889147.4	-2.784	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
4	20	1.837186E+07	918593	0.435	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
5	30	2.909661E+07	969887	6.043	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\
6	40	3.726982E+07	931745.5	1.873	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306006\

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

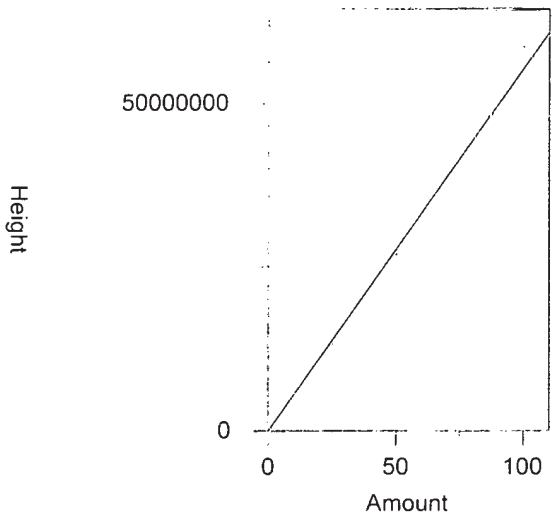
Single peak quantification by height

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

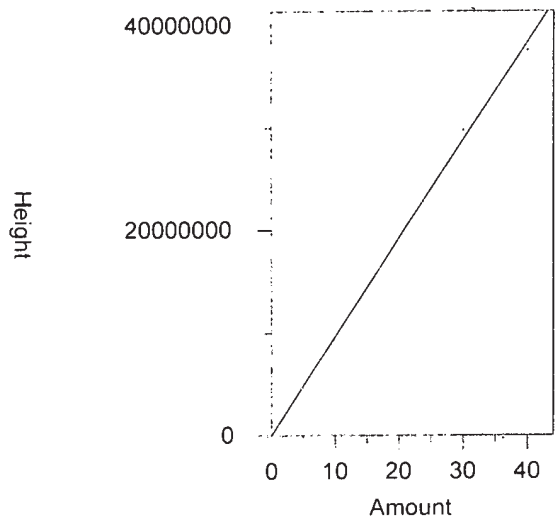
Single peak quantification by height

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

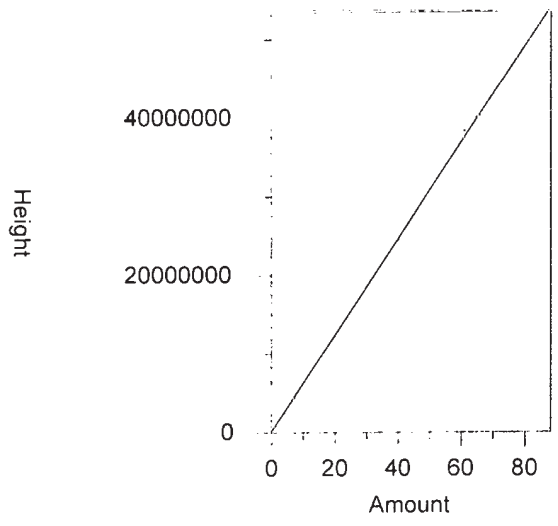
Single peak quantification by height

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: **06PEST1826101**

Area Files Used For Calibration

Sequence _____ Injections _____

Component: **Aroclor-1016** **AR16**

Calibration Levels: 1 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1016

	1	2	3	4	5	6	SUM
Retention Time:	2.294	2.638	2.867	3.076	3.170	3.300	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	314466	493794	276163	907450	496275	382229	2870377
RF (Height/Conc):	1572	2469	1381	4537	2481	1911	
%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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 2 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1221

	1	2	3	SUM
Retention Time:	2.120	2.223	2.296	
RT Window (Mins):	0.03000	0.03000	0.03000	
Height:	205478	140497	427741	773716
RF (Height/Conc):	1027	702	2139	
%RSD For RF	**0.000**	**0.000**	**0.000**	
Slope				
Y-Intercept				

Component: **Aroclor-1248** **AR48**

Calibration Levels: 1 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1248

	1	2	3	4	5	6	SUM
Retention Time:	3.071	3.390	3.593	3.729	3.952	4.451	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	476568	368599	650893	522369	815884	468772	3303085
RF (Height/Conc):	2383	1843	3254	2612	4079	2344	
%RSD For RF	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **06PEST1826101**

Component: **Aroclor-1254** **2154**

Calibration Levels: 1 Concentration (ng/ml): 250.000000

Min # of Peaks Required: 4 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1254

	1	2	3	4	5	6	SUM
Retention Time:	3.953	4.075	4.372	4.454	4.624	4.996	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1048074	1258802	1060918	2137710	1371402	1600307	8477213
RF (Height/Conc):	4192	5035	4244	8551	5486	6401	
%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: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1260

	1	2	3	4	5	6	SUM
Retention Time:	4.575	4.712	4.995	5.244	5.407	5.678	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1157623	1337611	1338900	1002036	2349092	1583704	8768966
RF (Height/Conc):	5788	6688	6695	5010	11745	7919	
%RSD For RF	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
Slope							
Y-Intercept							

Component: **T. Chlordane** **CHLD**

Calibration Levels: 6 Avg Concentration (ng/ml): 50.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: T. Chlordane

		1	2	3	4	5	SUM
Retention Time:		2.893	3.900	4.076	4.158	4.920	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		415359	367161	1656217	1324279	616767	4379783
RF (Height/Conc):		2968	2673	10911	8889	4211	
%RSD For RF		**8.008**	**8.992**	**6.244**	**4.856**	**5.948**	
Slope							
Y-Intercept							
Level 1	Height	41455	37559	138481	118988	56472	392955
	Conc	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	70055	65819	239329	206531	96733	678467
	Conc	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	159400	145549	567341	450101	224499	1546890
	Conc	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	297130	261956	1085809	877843	409646	2932384
	Conc	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	560757	494293	2265335	1729166	821173	5870724
	Conc	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	1363359	1197788	5641004	4563046	2092079	14857276
	Conc	500.000	500.000	500.000	500.000	500.000	

Multiple Component Initial Calibration Report: **06PEST1826101**

Component: **Total PCBs**

Calibration Levels: | Concentration (ng/ml):

Min # of Peaks Required: | Max %RSD: | Report Base:

Slope: | Y-Intercept: | E-Flag Basis:

Component: **Toxaphene** **TOXA**

Calibration Levels: 6 | Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 | Max %RSD: 30 | Report Base:

Slope: | Y-Intercept: | E-Flag Basis: Toxaphene

		1	2	3	4	5	SUM
Retention Time:		4.813	5.074	5.133	5.416	5.511	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		1029399	955638	922748	951309	1389788	5248882
RF (Height/Conc):		1587	1482	1353	1392	2112	
%RSD For RF		**2.907**	**3.722**	**7.074**	**6.932**	**3.103**	
Slope							
Y-Intercept							
Level 1	Height	82157	77792	64702	65370	105140	395161
	Conc	50.000	50.000	50.000	50.000	50.000	
Level 2	Height	157225	150382	122805	130861	202721	763994
	Conc	100.000	100.000	100.000	100.000	100.000	
Level 3	Height	303986	283102	260171	263677	410798	1521734
	Conc	200.000	200.000	200.000	200.000	200.000	
Level 4	Height	777758	714180	689159	708629	1074030	3963756
	Conc	500.000	500.000	500.000	500.000	500.000	
Level 5	Height	1608089	1463462	1431110	1463543	2130210	8096414
	Conc	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6	Height	3247176	3044912	2968542	3075774	4415829	16752233
	Conc	2000.000	2000.000	2000.000	2000.000	2000.000	

Multiple Component Initial Calibration Report: **06PEST1826101B**

Area Files Used For Calibration

Sequence _____ Injections _____

Component: **Aroclor-1016** **AR16**

Calibration Levels: 1 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1016

	1	2	3	4	5	6	SUM
Retention Time:	2.968	3.329	3.535	3.848	3.877	3.979	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	735076	1013832	526739	2080641	1260206	998069	6614563
RF (Height/Conc):	3675	5069	2634	10403	6301	4990	
%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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 2 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1221

	1	2	3	SUM
Retention Time:	2.801	2.875	2.965	
RT Window (Mins):	0.03000	0.03000	0.03000	
Height:	310128	305510	1008148	1623786
RF (Height/Conc):	1551	1528	5041	
%RSD For RF	**0.000**	**0.000**	**0.000**	
Slope				
Y-Intercept				

Component: **Aroclor-1248** **AR48**

Calibration Levels: 1 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1248

	1	2	3	4	5	6	SUM
Retention Time:	3.846	4.071	4.243	4.649	4.764	5.067	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1027865	1279198	1458766	1651478	1497826	982652	7897785
RF (Height/Conc):	5139	6396	7294	8257	7489	4913	
%RSD For RF	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **06PEST1826101B**

Component: **Aroclor-1254** **2154**

Calibration Levels: 1 Concentration (ng/ml): 250.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1254

	1	2	3	4	5	6	SUM
Retention Time:	4.587	4.768	5.065	5.294	5.492	5.602	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	2404870	3596959	4276134	3263028	1935204	3350084	18826279
RF (Height/Conc):	9619	14388	17105	13052	7741	13400	
%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: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1260

	1	2	3	4	5	6	SUM
Retention Time:	5.198	5.428	5.606	5.830	6.042	6.247	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	2411392	1039451	3282484	1956743	4145277	2555580	15390927
RF (Height/Conc):	12057	5197	16412	9784	20726	12778	
%RSD For RF	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
Slope							
Y-Intercept							

Component: **T. Chlordane** **CHLD**

Calibration Levels: 6 Avg Concentration (ng/ml): 50.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: T. Chlordane

		1	2	3	4	5	SUM
Retention Time:		3.733	4.610	4.833	4.872	5.523	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		1171047	1105592	4947510	3194833	1218820	11637801
RF (Height/Conc):		7952	7548	32704	21235	8104	
%RSD For RF		**4.360**	**6.102**	**7.487**	**5.776**	**5.766**	
Slope							
Y-Intercept							
Level 1	Height	101329	94319	405426	261477	98582	961133
	Conc	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	183412	171920	698275	473632	181672	1708911
	Conc	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	414967	414728	1708781	1122349	428041	4088866
	Conc	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	801975	766712	3425322	2190052	838942	8023003
	Conc	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	1632739	1509872	6844343	4318928	1662252	15968134
	Conc	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	3891862	3676000	16602910	10802560	4103429	39076761
	Conc	500.000	500.000	500.000	500.000	500.000	

Multiple Component Initial Calibration Report: **06PEST1826101B**

Component: **Total PCBs**
Calibration Levels:
Min # of Peaks Required:
Slope:
Max %RSD:
Y-Intercept:
Concentration (ng/ml):
Report Base:
E-Flag Basis:

Component: **Toxaphene**
TOXA
Calibration Levels: 6
Avg Concentration (ng/ml): 200.000000
Min # of Peaks Required: 5
Max %RSD: 30
Report Base:
Slope:
Y-Intercept:
E-Flag Basis: Toxaphene

		1	2	3	4	5	SUM
Retention Time:		5.518	5.690	5.743	5.981	6.071	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		2485505	2713135	2201313	1756782	2648987	11805722
RF (Height/Conc):		3824	4211	3403	2638	4085	
%RSD For RF		**5.082**	**2.661**	**2.447**	**4.939**	**3.811**	
Slope							
Y-Intercept							
Level 1	Height	174568	202393	166144	122498	195211	860814
	Conc	50.000	50.000	50.000	50.000	50.000	
Level 2	Height	387603	425235	338294	254955	398097	1804184
	Conc	100.000	100.000	100.000	100.000	100.000	
Level 3	Height	753751	829559	666297	515756	807960	3573323
	Conc	200.000	200.000	200.000	200.000	200.000	
Level 4	Height	2041286	2191495	1724494	1363458	2176915	9497648
	Conc	500.000	500.000	500.000	500.000	500.000	
Level 5	Height	3898536	4236812	3545274	2760028	4143089	18583739
	Conc	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6	Height	7657287	8393317	6767374	5523994	8172652	36514624
	Conc	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: H9147A Calibration File: 06PEST1826101

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

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	RT OF STANDARDS						MIDPOINT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	RT	FROM	TO
Tetrachloro-m-xylene	1.85	1.84	1.84	1.84	1.84	1.84	1.84	1.82	1.86
Hcb	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.27	2.31
alpha-BHC	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.36	2.40
gamma-BHC (Lindane)	2.73	2.73	2.72	2.73	2.73	2.72	2.73	2.71	2.75
beta-BHC	2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.94	2.98
Heptachlor	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.05	3.09
delta-BHC	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.22	3.26
Aldrin	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.35	3.39
Telodrin	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.46	3.50
Heptachlor epoxide	3.88	3.87	3.87	3.87	3.87	3.87	3.87	3.85	3.89
gamma-Chlordane	4.08	4.08	4.07	4.08	4.08	4.07	4.08	4.06	4.10
o,p-DDE	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.06	4.10
alpha-Chlordane	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.14	4.18
Endosulfan I	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.18	4.22
4,4'-DDE	4.34	4.33	4.33	4.33	4.33	4.33	4.33	4.31	4.35
Dieldrin	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.42	4.46
o,p-DDD	4.50	4.49	4.49	4.50	4.49	4.49	4.50	4.48	4.52
Endrin	4.69	4.69	4.69	4.69	4.69	4.69	4.69	4.67	4.71
o,p-DDT	4.72	4.71	4.71	4.72	4.71	4.71	4.72	4.70	4.74
4,4'-DDD	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.77	4.81
Endosulfan II	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.88	4.92
4,4'-DDT	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.98	5.02
Endrin aldehyde	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.05	5.09
Endosulfan sulfate	5.22	5.22	5.22	5.22	5.22	5.22	5.22	5.20	5.24
Methoxychlor	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.48	5.52
Endrin ketone	5.66	5.66	5.65	5.66	5.66	5.65	5.66	5.64	5.68
Mirex	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.72	5.76
Decachlorobiphenyl	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.37	6.43

6E

INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Calibration File: 06PEST1826101

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

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	CALIBRATION FACTORS							%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	
Tetrachloro-m-xylene	9.07E+04	7.82E+04	7.90E+04	7.73E+04	7.89E+04	8.09E+04	8.08E+04	6
Hcb	1.33E+05	1.14E+05	1.05E+05	9.94E+04	9.66E+04	9.42E+04	1.07E+05	13
alpha-BHC	1.46E+05	1.28E+05	1.28E+05	1.31E+05	1.35E+05	1.34E+05	1.34E+05	5
gamma-BHC (Lindane)	1.47E+05	1.20E+05	1.19E+05	1.25E+05	1.21E+05	1.22E+05	1.26E+05	8
beta-BHC	7.99E+04	6.96E+04	6.00E+04	5.67E+04	5.53E+04	5.48E+04	6.27E+04	16
Heptachlor	1.27E+05	1.11E+05	1.03E+05	9.88E+04	1.01E+05	9.96E+04	1.07E+05	10
delta-BHC	1.51E+05	1.31E+05	1.29E+05	1.33E+05	1.34E+05	1.37E+05	1.36E+05	6
Aldrin	1.36E+05	1.17E+05	1.16E+05	1.13E+05	1.17E+05	1.13E+05	1.19E+05	7
Telodrin	9.69E+04	8.82E+04	8.04E+04	7.74E+04	7.24E+04	7.35E+04	8.15E+04	12
Heptachlor epoxide	1.43E+05	1.24E+05	1.13E+05	1.13E+05	1.11E+05	1.14E+05	1.20E+05	10
gamma-Chlordane	1.41E+05	1.21E+05	1.17E+05	1.18E+05	1.18E+05	1.15E+05	1.22E+05	8
o,p-DDE	9.01E+04	8.07E+04	7.70E+04	7.61E+04	7.55E+04	7.65E+04	7.93E+04	7
alpha-Chlordane	1.50E+05	1.28E+05	1.20E+05	1.19E+05	1.15E+05	1.18E+05	1.25E+05	10
Endosulfan I	1.43E+05	1.20E+05	1.13E+05	1.11E+05	1.12E+05	1.13E+05	1.18E+05	10
4,4'-DDE	1.32E+05	1.14E+05	1.24E+05	1.24E+05	1.29E+05	1.24E+05	1.25E+05	5
Dieldrin	1.39E+05	1.26E+05	1.28E+05	1.31E+05	1.30E+05	1.29E+05	1.30E+05	3
o,p-DDD	8.75E+04	7.78E+04	7.00E+04	7.18E+04	7.14E+04	7.20E+04	7.51E+04	9
Endrin	1.32E+05	1.16E+05	1.16E+05	1.18E+05	1.23E+05	1.20E+05	1.21E+05	5
o,p-DDT	8.11E+04	7.30E+04	6.65E+04	6.95E+04	6.88E+04	7.22E+04	7.18E+04	7
4,4'-DDD	1.21E+05	1.05E+05	1.07E+05	1.12E+05	1.13E+05	1.13E+05	1.12E+05	5
Endosulfan II	1.34E+05	1.16E+05	1.15E+05	1.16E+05	1.17E+05	1.18E+05	1.19E+05	6
4,4'-DDT	8.66E+04	7.60E+04	8.45E+04	8.90E+04	9.17E+04	9.06E+04	8.64E+04	7
Endrin aldehyde	1.09E+05	9.72E+04	8.85E+04	9.08E+04	9.13E+04	9.55E+04	9.54E+04	8
Endosulfan sulfate	1.23E+05	1.07E+05	1.03E+05	1.01E+05	1.06E+05	1.07E+05	1.08E+05	7
Methoxychlor	4.07E+04	3.74E+04	4.18E+04	4.47E+04	4.45E+04	4.43E+04	4.22E+04	7
Endrin ketone	1.46E+05	1.26E+05	1.24E+05	1.26E+05	1.25E+05	1.26E+05	1.29E+05	7
Mirex	1.02E+05	9.20E+04	8.21E+04	8.22E+04	8.20E+04	8.26E+04	8.72E+04	10
Decachlorobiphenyl	1.21E+05	9.88E+04	9.64E+04	9.43E+04	9.51E+04	9.38E+04	9.99E+04	10

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Calibration File: 06PEST1826101

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

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Aroclor-1016	1	2.29	2.26	2.32	1572	1	200	314466	.00
	2	2.64	2.61	2.67	2469	1	200	493794	.00
	3	2.87	2.84	2.90	1381	1	200	276163	.00
	4	3.08	3.05	3.11	4537	1	200	907450	.00
	5	3.17	3.14	3.20	2481	1	200	496275	.00
	6	3.30	3.27	3.33	1911	1	200	382229	.00
Aroclor-1221	1	2.12	2.09	2.15	1027	1	200	205478	.00
	2	2.22	2.19	2.25	702	1	200	140497	.00
	3	2.30	2.27	2.33	2139	1	200	427741	.00
Aroclor-1248	1	3.07	3.04	3.10	2383	1	200	476568	.00
	2	3.39	3.36	3.42	1843	1	200	368599	.00
	3	3.59	3.56	3.62	3254	1	200	650893	.00
	4	3.73	3.70	3.76	2612	1	200	522369	.00
	5	3.95	3.92	3.98	4079	1	200	815884	.00
	6	4.45	4.42	4.48	2344	1	200	468772	.00
Aroclor-1254	1	3.95	3.92	3.98	4192	1	250	1048074	.00
	2	4.08	4.05	4.11	5035	1	250	1258802	.00
	3	4.37	4.34	4.40	4244	1	250	1060918	.00
	4	4.45	4.42	4.48	8551	1	250	2137710	.00
	5	4.62	4.59	4.65	5486	1	250	1371402	.00
	6	5.00	4.97	5.03	6401	1	250	1600307	.00
Aroclor-1260	1	4.58	4.55	4.61	5788	1	200	1157623	.00
	2	4.71	4.68	4.74	6688	1	200	1337611	.00
	3	5.00	4.97	5.03	6695	1	200	1338900	.00
	4	5.24	5.21	5.27	5010	1	200	1002036	.00
	5	5.41	5.38	5.44	11745	1	200	2349092	.00
	6	5.68	5.65	5.71	7919	1	200	1583704	.00

6F
INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Calibration File: 06PEST1826101

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

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Chlordane	1	2.89	2.86	2.92	2968	1	12.5	41455	8.01
	1					2	25	70055	
	1					3	50	159400	
	1					4	100	297130	
	1					5	200	560757	
	1					6	500	1363359	
	2	3.90	3.87	3.93	2673	1	12.5	37559	8.99
	2					2	25	65819	
	2					3	50	145549	
	2					4	100	261956	
	2					5	200	494293	
	2					6	500	1197788	
	3	4.08	4.05	4.11	10911	1	12.5	138481	6.24
	3					2	25	239329	
	3					3	50	567341	
	3					4	100	1085809	
	3					5	200	2265335	
	3					6	500	5641004	
	4	4.16	4.13	4.19	8889	1	12.5	118988	4.86
	4					2	25	206531	
	4					3	50	450101	
	4					4	100	877843	
	4					5	200	1729166	
	4					6	500	4563046	
	5	4.92	4.89	4.95	4211	1	12.5	56472	5.95
	5					2	25	96733	
	5					3	50	224499	
	5					4	100	409646	
	5					5	200	821173	
	5					6	500	2092079	

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Calibration File: 06PEST1826101

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

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Toxaphene	1	4.81	4.78	4.84	1587	1	50	82157	2.91
	1					2	100	157225	
	1					3	200	303986	
	1					4	500	777758	
	1					5	1000	1608089	
	1					6	2000	3247176	
	2	5.07	5.04	5.10	1482	1	50	77792	3.72
	2					2	100	150382	
	2					3	200	283102	
	2					4	500	714180	
	2					5	1000	1463462	
	2					6	2000	3044912	
	3	5.13	5.10	5.16	1353	1	50	64702	7.07
	3					2	100	122805	
	3					3	200	260171	
	3					4	500	689159	
	3					5	1000	1431110	
	3					6	2000	2968542	
	4	5.42	5.39	5.45	1392	1	50	65370	6.93
	4					2	100	130861	
	4					3	200	263677	
	4					4	500	708629	
	4					5	1000	1463543	
	4					6	2000	3075774	
	5	5.51	5.48	5.54	2112	1	50	105140	3.10
	5					2	100	202721	
	5					3	200	410798	
	5					4	500	1074030	
	5					5	1000	2130210	
	5					6	2000	4415829	

File Name: V:\CP6\06pest1826101.CAL
Version: 11

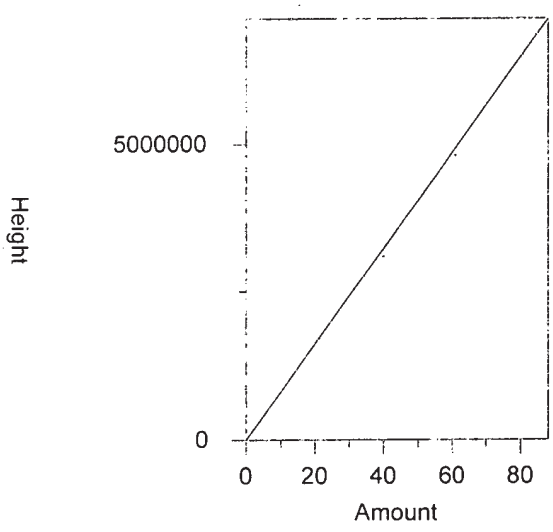
Creator:
Description:
Reason for change:

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: 1.844 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

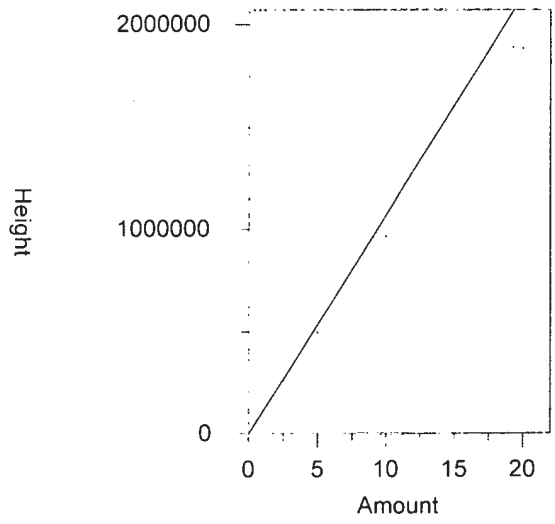
Single peak quantification by height

$Y = 80841.9\ X + 0$

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9989083
Average error: 4.103%
Average CF: 80841.9
RSD: 6.177%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	181486.5	90743.25	12.248	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004.BND
2	4	312617.8	78154.45	-3.324	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005.BND
3	20	1579868	78993.4	-2.287	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006.BND
4	40	3092829	77320.73	-4.356	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007.BND
5	61	4815782	78947.24	-2.344	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008.BND
6	80	6471385	80892.31	0.062	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009.BND

2 HCB



Expected retention time: 2.291 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

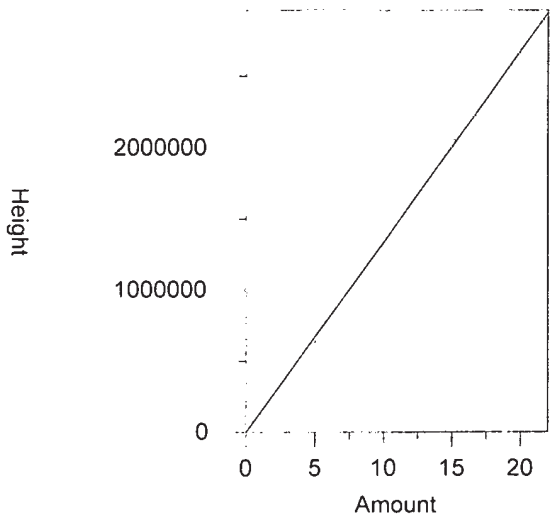
Single peak quantification by height

Y = 106957.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9677857
Average error: 10.256%
Average CF: 106957.5
RSD: 13.489%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	66265	132530	23.909	Manual	9/19/2018 5:36:54 AM
2	1	114292	114292	6.857	Manual	9/19/2018 5:38:22 AM
3	2.5	261899	104759.6	-2.055	Manual	9/19/2018 5:38:51 AM
4	5	497046	99409.2	-7.057	Manual	9/19/2018 5:39:23 AM
5	10	965987	96598.7	-9.685	Manual	9/19/2018 5:39:54 AM
6	20	1883105	94155.25	-11.969	Manual	9/19/2018 5:40:31 AM

3 alpha-BHC



Expected retention time: 2.378 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

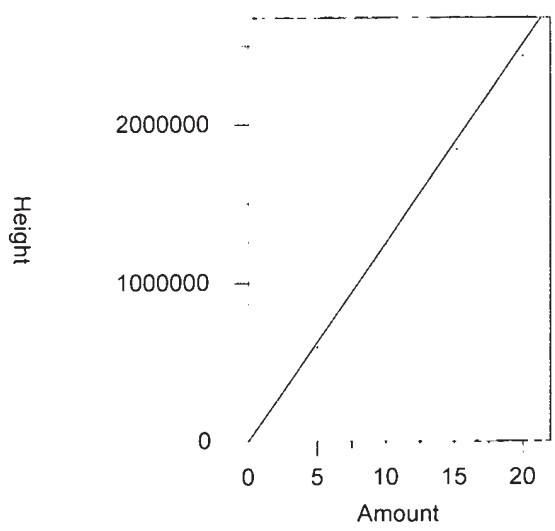
Single peak quantification by height

Y = 133706.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9996141
Average error: 3.529%
Average CF: 133706.5
RSD: 4.959%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	72788.34	145576.7	8.878	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	127642.7	127642.7	-4.535	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	639232.9	127846.6	-4.383	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	1314759	131475.9	-1.668	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.2	2055020	135198.7	1.116	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	2689966	134498.3	0.592	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

4 gamma-BHC



Expected retention time: 2.725 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

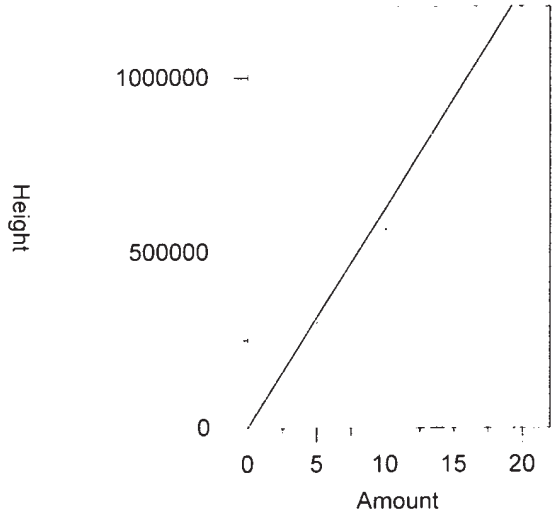
Single peak quantification by height

Y = 125550 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9975905
Average error: 5.632%
Average CF: 125550
RSD: 8.433%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	73380.77	146761.5	16.895	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	119760.5	119760.5	-4.611	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	594320.4	118864.1	-5.325	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	1247687	124768.7	-0.622	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.2	1845633	121423.2	-3.287	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	2434437	121721.9	-3.049	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

5 beta-BHC



Expected retention time: 2.959 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

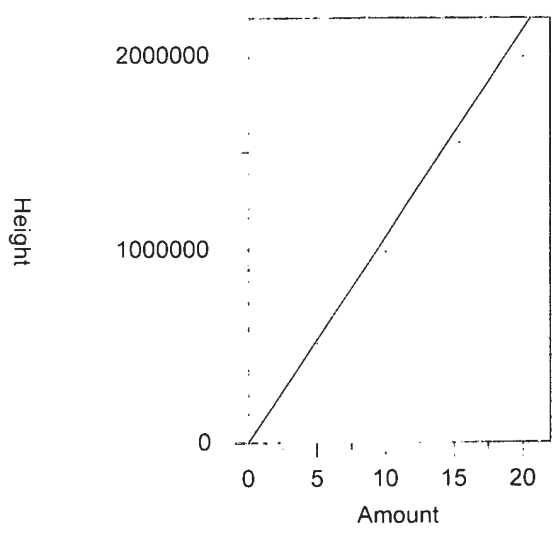
Single peak quantification by height

Y = 62726 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9539475
Average error: 12.794%
Average CF: 62726
RSD: 16.016%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	39962.07	79924.14	27.418	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	69603.5	69603.5	10.964	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	300076.8	60015.36	-4.321	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	567183.8	56718.38	-9.578	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.2	841175.1	55340.47	-11.774	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	1095083	54754.15	-12.709	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

6 Heptachlor



Expected retention time: 3.07 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

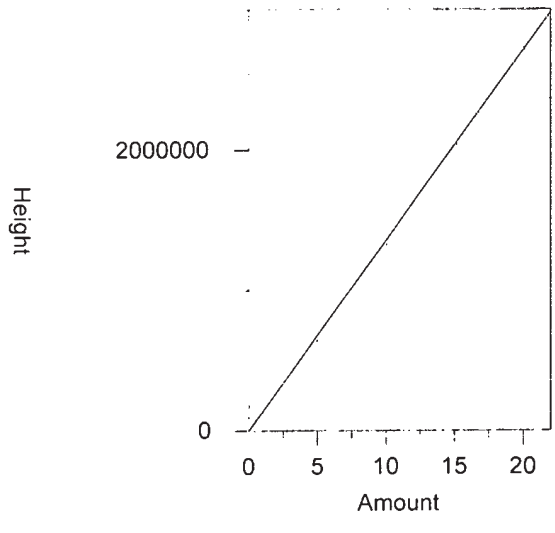
Single peak quantification by height

Y = 106567.9 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9888719
Average error: 7.609%
Average CF: 106567.9
RSD: 10.155%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	63428.85	126857.7	19.039	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	110604	110604	3.787	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	514723.8	102944.8	-3.400	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	987986.1	98798.61	-7.290	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.4	1549355	100607.5	-5.593	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	1991897	99594.85	-6.543	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

7 delta-BHC



Expected retention time: 3.239 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

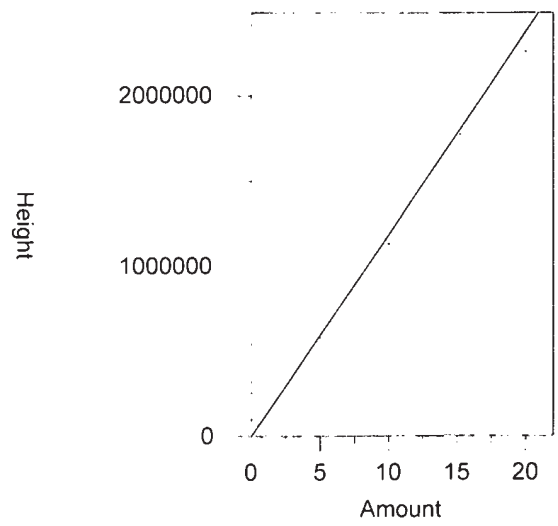
Single peak quantification by height

Y = 135579.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9994748
Average error: 4.014%
Average CF: 135579.3
RSD: 5.895%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	75448.95	150897.9	11.299	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	130543.4	130543.4	-3.714	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	643474.4	128694.9	-5.078	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	1325783	132578.3	-2.213	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.2	2039439	134173.6	-1.037	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	2731755	136587.8	0.744	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

8 Aldrin



Expected retention time: 3.373 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

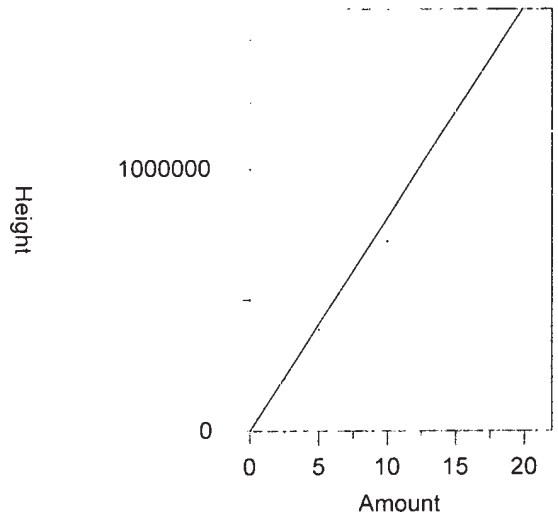
Single peak quantification by height

Y = 118522.6 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.995858
Average error: 4.784%
Average CF: 118522.6
RSD: 7.200%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	67766.98	135534	14.353	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	117260	117260	-1.065	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	577561.4	115512.3	-2.540	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	1131195	113119.5	-4.559	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.2	1776051	116845.5	-1.415	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	2257286	112864.3	-4.774	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

9 Telodrin



Expected retention time: 3.478 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

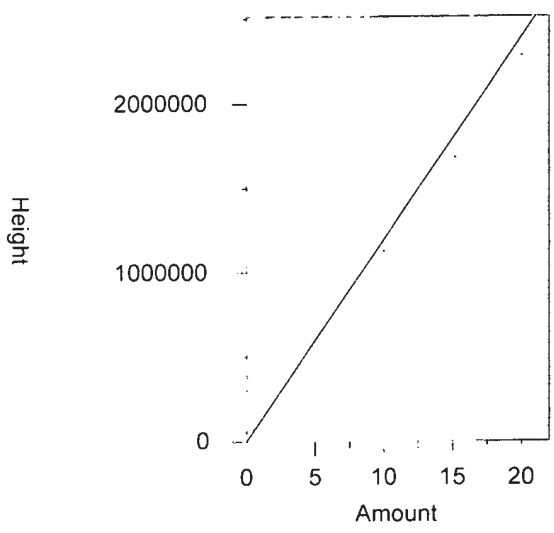
Single peak quantification by height

Y = 81462.04 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9766468
Average error: 9.077%
Average CF: 81462.04
RSD: 11.600%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	48433	96866	18.909	Manual	9/19/2018 5:36:58 AM
2	1	88240	88240	8.320	Manual	9/19/2018 5:38:26 AM
3	2.5	200958	80383.2	-1.324	Manual	9/19/2018 5:38:55 AM
4	5	386909	77381.8	-5.009	Manual	9/19/2018 5:39:28 AM
5	10	724257	72425.7	-11.093	Manual	9/19/2018 5:39:58 AM
6	20	1469511	73475.55	-9.804	Manual	9/19/2018 5:40:36 AM

10 Hept. epoxide



Expected retention time: 3.874 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

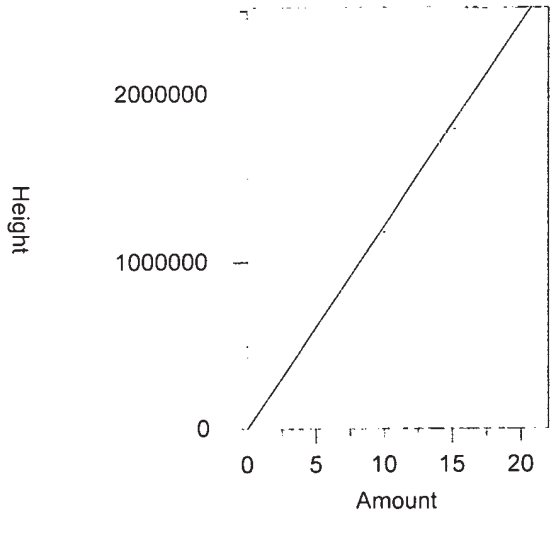
Single peak quantification by height

Y = 119720.9 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9909722
Average error: 7.787%
Average CF: 119720.9
RSD: 10.403%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	71637.09	143274.2	19.673	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	124135.5	124135.5	3.687	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	564279.6	112855.9	-5.734	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	1128409	112840.9	-5.747	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.2	1685807	110908.4	-7.361	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	2286213	114310.6	-4.519	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

11 g. Chlordane



Expected retention time: 4.076 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

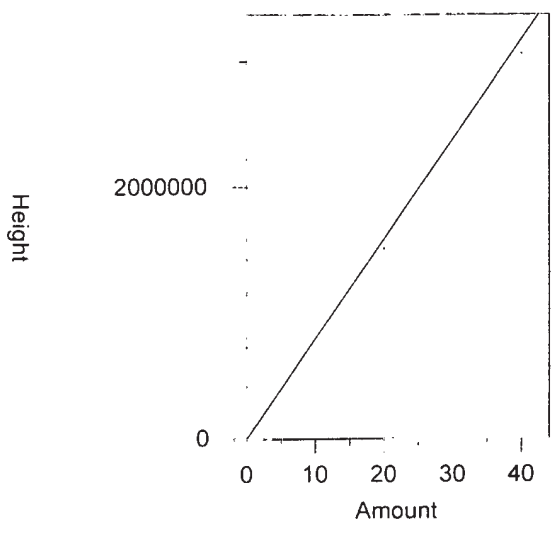
Single peak quantification by height

Y = 121624.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9940184
Average error: 5.433%
Average CF: 121624.8
RSD: 8.139%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	70724.99	141450	16.300	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	120618.9	120618.9	-0.827	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	586357	117271.4	-3.579	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	1177986	117798.6	-3.146	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.2	1793601	118000.1	-2.980	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	2292193	114609.6	-5.768	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

12 o,p-DDE



Expected retention time:	4.08 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

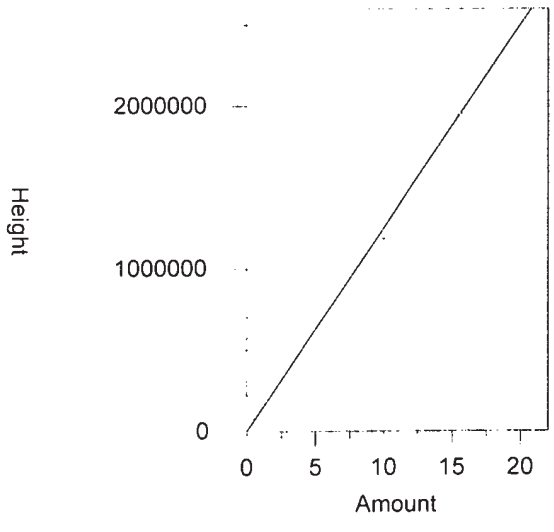
Y = 79319.64 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.996978
Average error:	5.127%
Average CF:	79319.64
RSD:	7.052%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	90091	90091	13.580	Manual	9/19/2018 5:37:03 AM
2	2	161495	80747.5	1.800	Manual	9/19/2018 5:38:31 AM
3	5	384752	76950.4	-2.987	Manual	9/19/2018 5:39:00 AM
4	10	761164	76116.4	-4.038	Manual	9/19/2018 5:39:33 AM
5	20	1509445	75472.25	-4.850	Manual	9/19/2018 5:40:03 AM
6	40	3061611	76540.27	-3.504	Manual	9/19/2018 5:40:41 AM

13 a. Chlordane



Expected retention time:	4.158 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

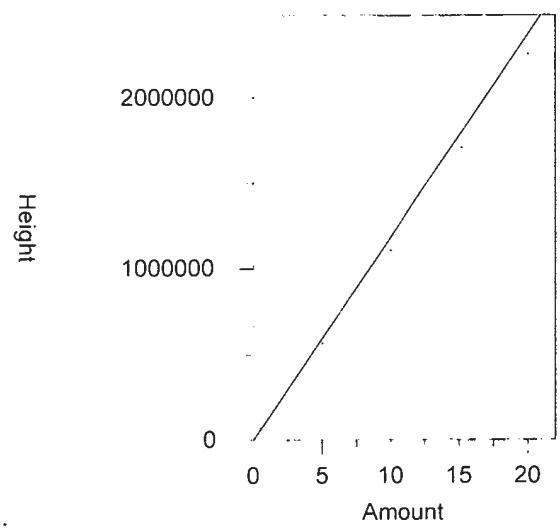
Y = 124950.6 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9892771
Average error:	7.460%
Average CF:	124950.6
RSD:	10.349%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	74934.33	149868.7	19.942	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	127996.9	127996.9	2.438	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	599338.7	119867.7	-4.068	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	1185335	118533.5	-5.136	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.4	1777647	115431.6	-7.618	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	2360109	118005.5	-5.558	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

14 Endosulfan I



Expected retention time: 4.203 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

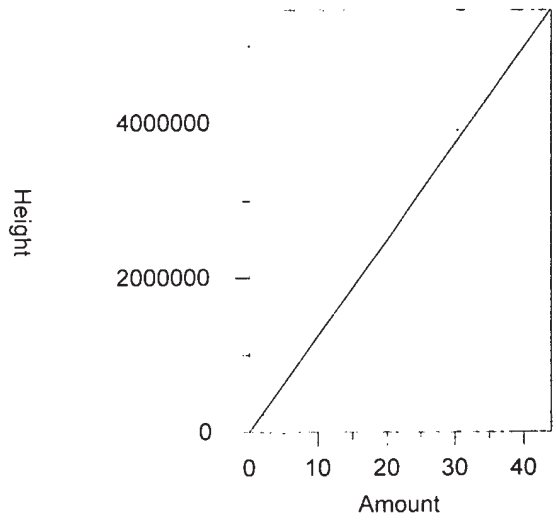
Single peak quantification by height

Y = 118492.6 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9925898
Average error: 7.089%
Average CF: 118492.6
RSD: 10.270%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	71250.23	142500.5	20.261	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	1	119686.2	119686.2	1.007	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	5	565475.4	113095.1	-4.555	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	10	1105529	110552.9	-6.701	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	15.2	1707556	112339.2	-5.193	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	20	2255635	112781.8	-4.820	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

15 4,4'-DDE



Expected retention time: 4.334 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

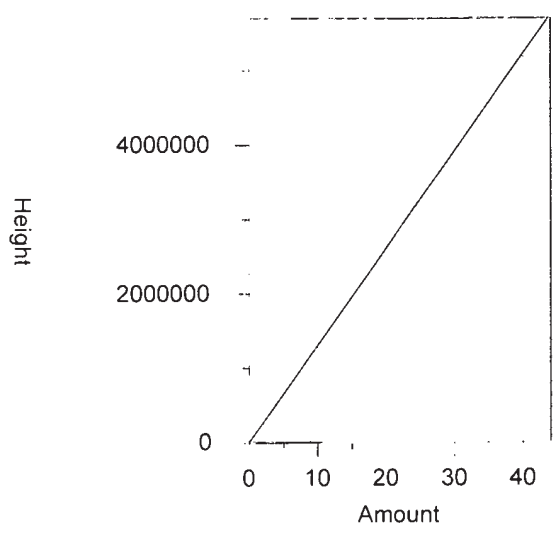
Single peak quantification by height

Y = 124570.1 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9991488
Average error: 3.165%
Average CF: 124570.1
RSD: 5.060%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	132247	132247	6.163	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	2	227025.9	113513	-8.876	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	10	1244360	124436	-0.108	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	20	2487510	124375.5	-0.156	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	30.4	3913119	128721	3.332	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	40	4965137	124128.4	-0.355	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

16 Dieldrin



Expected retention time: 4.439 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

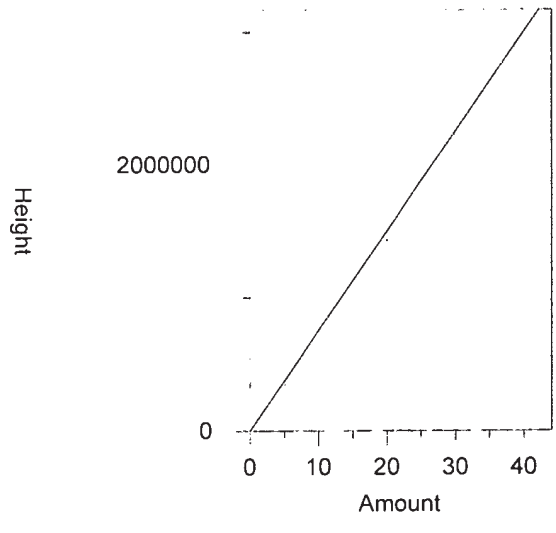
Single peak quantification by height

Y = 130439 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.999867
Average error: 2.260%
Average CF: 130439
RSD: 3.422%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	138672.3	138672.3	6.312	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	2	251104.9	125552.5	-3.746	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	10	1279249	127924.9	-1.927	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	20	2620984	131049.2	0.468	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	30.6	3978827	130027	-0.316	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	40	5176318	129408	-0.790	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

17 o,p-DDD



Expected retention time: 4.496 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

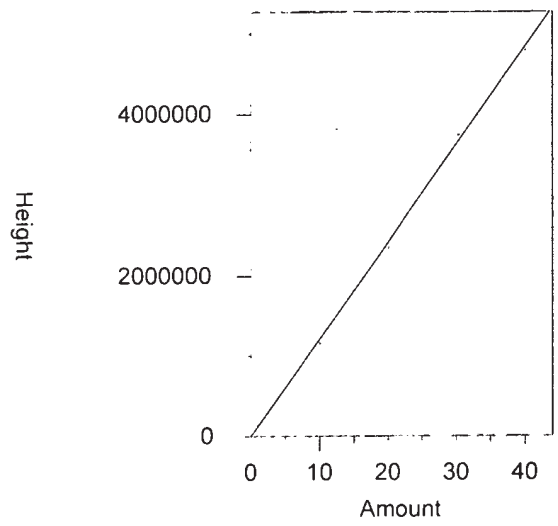
Single peak quantification by height

Y = 75097.78 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.996052
Average error: 6.718%
Average CF: 75097.78
RSD: 8.869%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	87543	87543	16.572	Manual	9/19/2018 5:37:10 AM
2	2	155576	77788	3.582	Manual	9/19/2018 5:38:36 AM
3	5	350109	70021.8	-6.759	Manual	9/19/2018 5:39:08 AM
4	10	718116	71811.6	-4.376	Manual	9/19/2018 5:39:39 AM
5	20	1428449	71422.45	-4.894	Manual	9/19/2018 5:40:15 AM
6	40	2879994	71999.85	-4.125	Manual	9/19/2018 5:40:53 AM

18 Endrin



Expected retention time: 4.69 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

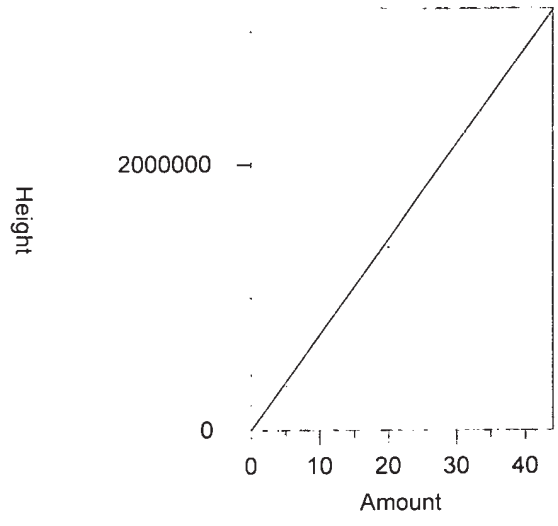
Single peak quantification by height

Y = 120949.6 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9992095
Average error: 3.812%
Average CF: 120949.6
RSD: 5.134%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	132401.5	132401.5	9.468	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004..
2	2	232891.8	116445.9	-3.724	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005..
3	10	1161186	116118.6	-3.994	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006..
4	20	2352932	117646.6	-2.731	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007..
5	30.4	3749240	123330.3	1.968	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008..
6	40	4790199	119755	-0.988	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009..

19 o,p-DDT



Expected retention time: 4.716 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

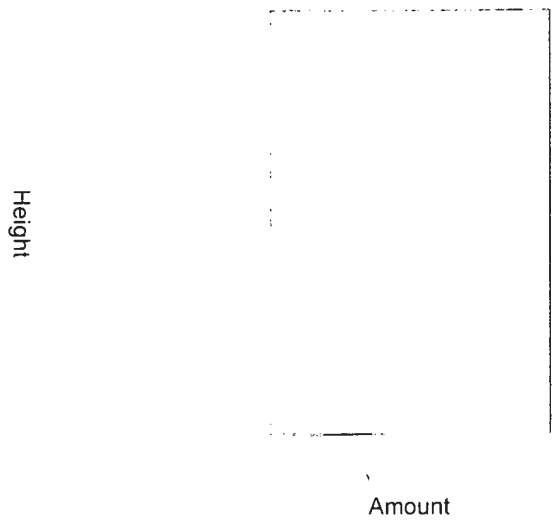
Single peak quantification by height

Y = 71847.52 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9990857
Average error: 4.973%
Average CF: 71847.52
RSD: 7.100%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	81105	81105	12.885	Manual	9/19/2018 5:53:21 AM
2	2	145939	72969.5	1.562	Manual	9/19/2018 5:53:30 AM
3	5	332731	66546.2	-7.379	Manual	9/19/2018 5:53:37 AM
4	10	694896	69489.6	-3.282	Manual	9/19/2018 5:53:57 AM
5	20	1375736	68786.8	-4.260	Manual	9/19/2018 5:54:08 AM
6	40	2887522	72188.05	0.474	Manual	9/19/2018 5:55:59 AM

20 Kepone



Expected retention time (frozen): 4.75 minutes
Search window: 0 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

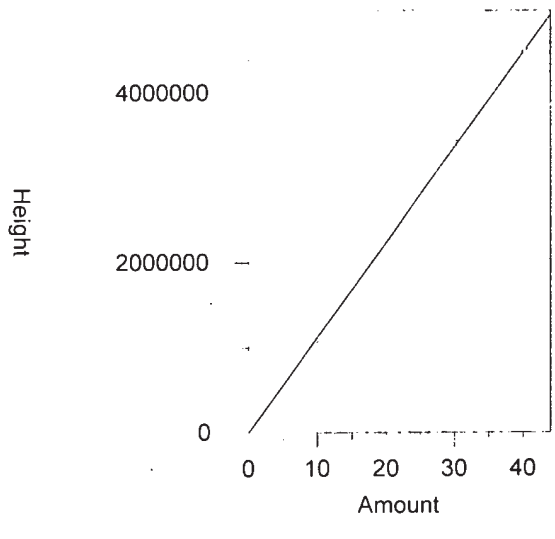
Single peak quantification by height

Y = 0.0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 1
Average error: 0.000%
Average CF: 0
RSD: 0.000%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	(0)	0	0.000	Manual	9/19/2018 5:11:53 AM
2	(10)	(0)	--	--	Manual	8/31/2018 11:39:26 AM
3	(25)	(0)	--	--	Manual	8/31/2018 11:39:27 AM
4	(50)	(0)	--	--	Manual	8/31/2018 11:39:27 AM
5	(100)	(0)	--	--	Manual	8/31/2018 11:39:30 AM
6	(200)	(0)	--	--	Manual	8/31/2018 11:39:36 AM

21 4,4'-DDD



Expected retention time: 4.792 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

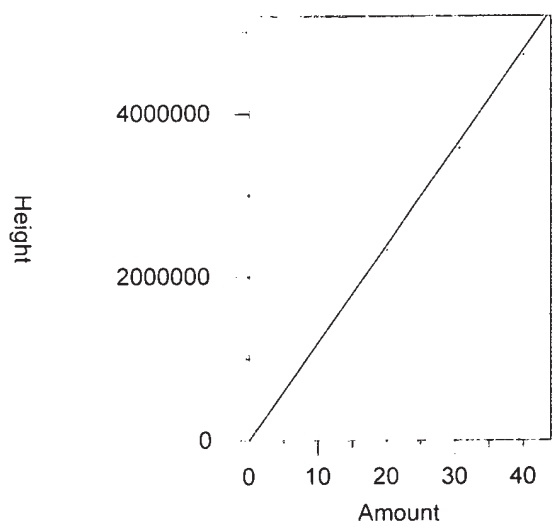
Single peak quantification by height

Y = 111762.4 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9996589
Average error: 3.348%
Average CF: 111762.4
RSD: 4.859%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	120740.1	120740.1	8.033	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	2	210107	105053.5	-6.003	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	10	1073712	107371.2	-3.929	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	20	2232716	111635.8	-0.113	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	30.4	3430460	112844.1	0.968	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	40	4517193	112929.8	1.045	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

22 Endosulfan II



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

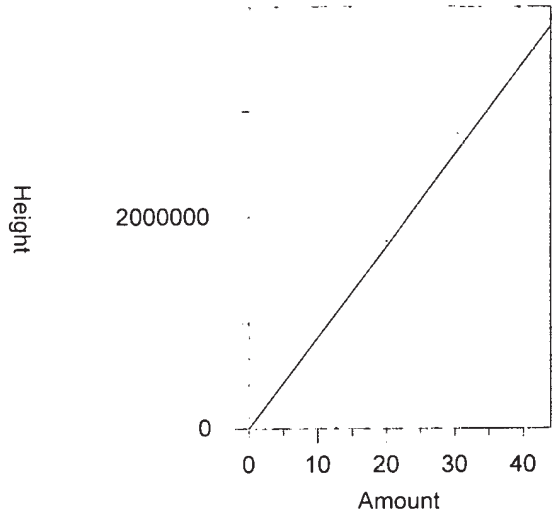
Single peak quantification by height

Y = 119381.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9990901
Average error: 4.204%
Average CF: 119381.8
RSD: 6.238%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	134437.5	134437.5	12.611	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	2	232023.8	116011.9	-2.823	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	10	1147101	114710.1	-3.913	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	20	2328895	116444.8	-2.460	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	30.6	3575525	116847.2	-2.123	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	40	4713564	117839.1	-1.292	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

23 4,4'-DDT



Expected retention time: 5.001 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

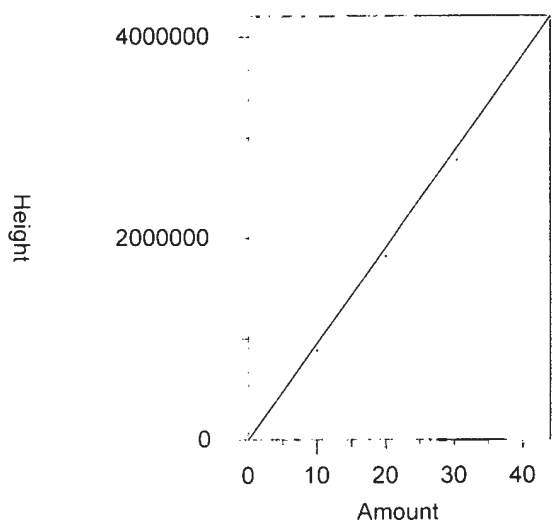
Single peak quantification by height

Y = 86387.98 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9945096
Average error: 4.750%
Average CF: 86387.98
RSD: 6.630%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	86602.13	86602.13	0.248	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	2	151996.6	75998.3	-12.027	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	10	844682.3	84468.23	-2.222	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	20	1780133	89006.65	3.031	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	30.4	2786483	91660.63	6.103	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	40	3623678	90591.95	4.866	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

24 Endrin aldehyde



Expected retention time: 5.072 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

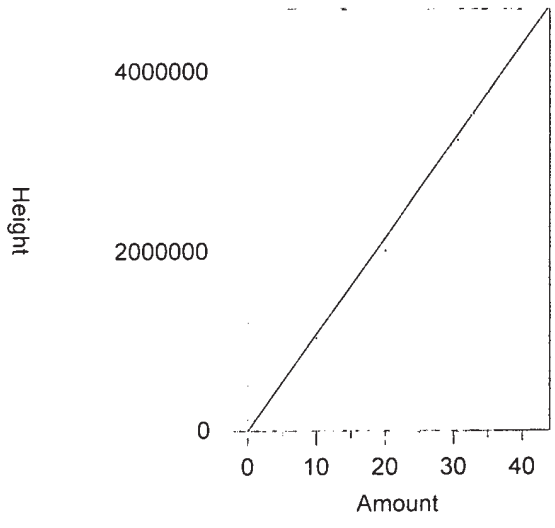
Single peak quantification by height

Y = 95430.88 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9973505
Average error: 5.478%
Average CF: 95430.88
RSD: 7.840%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	109219.8	109219.8	14.449	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004..
2	2	194470.2	97235.1	1.891	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005..
3	10	884840.8	88484.08	-7.279	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006..
4	20	1816694	90834.7	-4.816	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007..
5	30.4	2775250	91291.12	-4.338	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008..
6	40	3820819	95520.48	0.094	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009..

25 Endo. sulfate



Expected retention time: 5.222 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

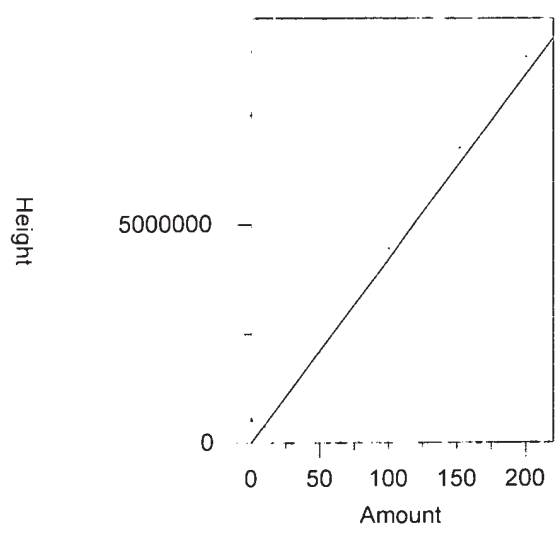
Single peak quantification by height

Y = 107776.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9980704
Average error: 4.614%
Average CF: 107776.3
RSD: 7.153%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	122695.8	122695.8	13.843	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004..
2	2	214307	107153.5	-0.578	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005..
3	10	1034577	103457.7	-4.007	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006..
4	20	2013009	100650.5	-6.612	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007..
5	30.6	3236420	105765.4	-1.866	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008..
6	40	4277391	106934.8	-0.781	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009..

26 Methoxychlor



Expected retention time: 5.499 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

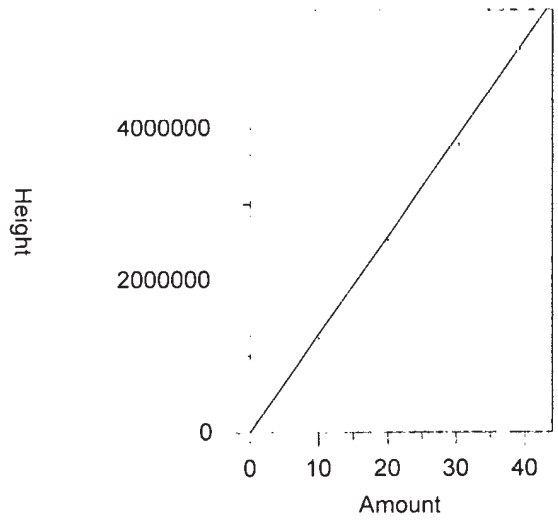
Single peak quantification by height

Y = 42202.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9943365
Average error: 5.368%
Average CF: 42202.8
RSD: 6.809%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	203340.3	40668.06	-3.637	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	10	373801	37380.1	-11.427	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	50	2088182	41763.64	-1.041	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	100	4465378	44653.78	5.808	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	152	6762995	44493.39	5.428	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	200	8851571	44257.86	4.869	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

27 Endrin ketone



Expected retention time: 5.656 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

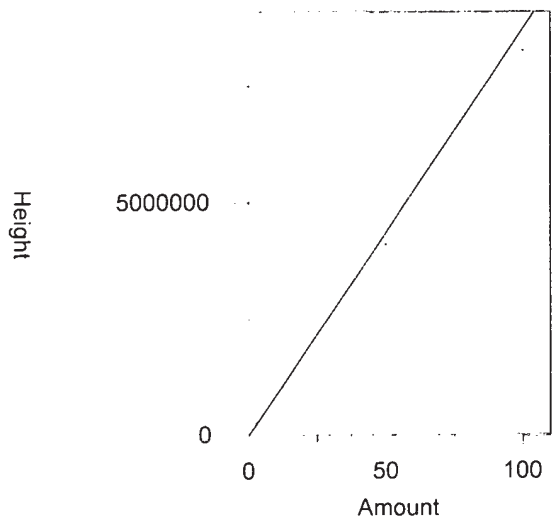
Single peak quantification by height

Y = 128929.4 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.998408
Average error: 4.510%
Average CF: 128929.4
RSD: 6.675%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	146373.6	146373.6	13.530	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	2	251662.2	125831.1	-2.403	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	10	1236910	123691	-4.063	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	20	2528913	126445.6	-1.926	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	30.4	3799206	124973.9	-3.068	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	40	5050449	126261.2	-2.069	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

28 Mirex



Expected retention time: 5.742 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

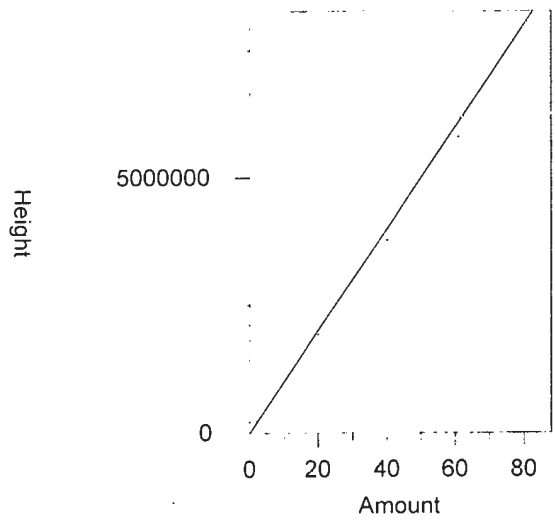
Single peak quantification by height

Y = 87177.31 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9936135
Average error: 7.568%
Average CF: 87177.31
RSD: 9.538%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	255396	102158.4	17.185	Manual	9/19/2018 5:38:10 AM
2	5	459949	91989.8	5.520	Manual	9/19/2018 5:38:40 AM
3	12.5	1026860	82148.8	-5.768	Manual	9/19/2018 5:39:14 AM
4	25	2054786	82191.44	-5.719	Manual	9/19/2018 5:39:44 AM
5	50	4100185	82003.7	-5.935	Manual	9/19/2018 5:40:20 AM
6	100	8257175	82571.75	-5.283	Manual	9/19/2018 5:41:03 AM

29 DCB



Expected retention time: 6.403 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 = 99874.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9914012
Average error: 7.004%
Average CF: 99874.8
RSD: 10.449%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	241719.2	120859.6	21.011	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.004
2	4	395262.7	98815.67	-1.060	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.005
3	20	1927513	96375.65	-3.504	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.006
4	40	3770711	94267.77	-5.614	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.007
5	61	5802878	95129.15	-4.752	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.008
6	80	7504073	93800.91	-6.082	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001.009

6D
INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826101B

GC Column (2) : STXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	RT OF STANDARDS						MIDPOINT	RT WINDOW	
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	RT	FROM	TO
Tetrachloro-m-xylene	2.64	2.64	2.64	2.64	2.64	2.63	2.64	2.62	2.66
alpha-BHC	3.04	3.04	3.04	3.04	3.04	3.03	3.04	3.02	3.06
Hcb	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.10	3.14
gamma-BHC (Lindane)	3.37	3.37	3.37	3.37	3.37	3.36	3.37	3.35	3.39
beta-BHC	3.62	3.62	3.62	3.62	3.62	3.61	3.62	3.60	3.64
delta-BHC	3.86	3.86	3.86	3.87	3.87	3.86	3.87	3.85	3.89
Heptachlor	3.93	3.93	3.93	3.93	3.93	3.92	3.93	3.91	3.95
Aldrin	4.21	4.22	4.21	4.22	4.22	4.21	4.22	4.20	4.24
Telodrin	4.31	4.31	4.31	4.31	4.31	4.32	4.31	4.29	4.33
Heptachlor epoxide	4.58	4.58	4.58	4.58	4.58	4.57	4.58	4.56	4.60
o,p-DDE	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.68	4.72
gamma-Chlordane	4.83	4.84	4.84	4.84	4.84	4.83	4.84	4.82	4.86
alpha-Chlordane	4.87	4.88	4.87	4.88	4.88	4.87	4.88	4.86	4.90
Endosulfan I	4.91	4.91	4.91	4.91	4.91	4.90	4.91	4.89	4.93
4,4'-DDE	4.98	4.99	4.98	4.99	4.99	4.98	4.99	4.97	5.01
o,p-DDD	5.06	5.06	5.06	5.05	5.06	5.06	5.05	5.03	5.07
Dieldrin	5.10	5.11	5.10	5.11	5.10	5.10	5.11	5.09	5.13
Endrin	5.28	5.28	5.28	5.28	5.28	5.27	5.28	5.26	5.30
o,p-DDT	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.27	5.31
4,4'-DDD	5.37	5.37	5.37	5.37	5.37	5.36	5.37	5.35	5.39
Endosulfan II	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.45	5.49
Endrin aldehyde	5.55	5.55	5.55	5.55	5.55	5.55	5.55	5.53	5.57
4,4'-DDT	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.57	5.61
Endosulfan sulfate	5.75	5.76	5.76	5.76	5.76	5.75	5.76	5.74	5.78
Methoxychlor	5.90	5.90	5.90	5.90	5.90	5.89	5.90	5.88	5.92
Endrin ketone	6.06	6.06	6.06	6.06	6.06	6.05	6.06	6.04	6.08
Mirex	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.38	6.42
Decachlorobiphenyl	7.07	7.07	7.07	7.07	7.07	7.06	7.07	7.04	7.10

6E

INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826101B

GC Column (2) : STXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	CALIBRATION FACTORS							%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	
Tetrachloro-m-xylene	2.18E+05	1.93E+05	2.00E+05	1.97E+05	1.96E+05	1.97E+05	2.00E+05	5
alpha-BHC	3.35E+05	2.92E+05	3.05E+05	3.14E+05	3.13E+05	3.08E+05	3.11E+05	5
Hcb	2.86E+05	2.54E+05	2.44E+05	2.38E+05	2.27E+05	2.22E+05	2.45E+05	10
gamma-BHC (Lindane)	3.26E+05	2.84E+05	2.95E+05	2.97E+05	2.87E+05	2.94E+05	2.97E+05	5
beta-BHC	1.71E+05	1.61E+05	1.46E+05	1.47E+05	1.40E+05	1.39E+05	1.51E+05	8
delta-BHC	3.64E+05	3.33E+05	3.34E+05	3.50E+05	3.41E+05	3.41E+05	3.44E+05	3
Heptachlor	3.27E+05	2.83E+05	2.75E+05	2.93E+05	2.72E+05	2.72E+05	2.87E+05	7
Aldrin	3.22E+05	2.88E+05	3.02E+05	3.04E+05	2.90E+05	2.98E+05	3.01E+05	4
Telodrin	2.22E+05	2.10E+05	2.02E+05	1.95E+05	1.94E+05	1.88E+05	2.02E+05	6
Heptachlor epoxide	3.18E+05	2.86E+05	2.82E+05	2.90E+05	2.74E+05	2.71E+05	2.87E+05	6
o,p-DDE	1.93E+05	1.85E+05	1.73E+05	1.76E+05	1.80E+05	1.73E+05	1.80E+05	4
gamma-Chlordane	3.18E+05	2.82E+05	2.82E+05	2.87E+05	2.84E+05	2.81E+05	2.89E+05	5
alpha-Chlordane	3.19E+05	2.81E+05	2.84E+05	2.86E+05	2.71E+05	2.71E+05	2.85E+05	6
Endosulfan I	3.03E+05	2.65E+05	2.71E+05	2.74E+05	2.63E+05	2.58E+05	2.72E+05	6
4,4'-DDE	2.99E+05	2.57E+05	3.00E+05	2.87E+05	2.86E+05	2.89E+05	2.87E+05	5
o,p-DDD	1.77E+05	1.64E+05	1.55E+05	1.54E+05	1.60E+05	1.59E+05	1.62E+05	5
Dieldrin	3.03E+05	2.74E+05	2.99E+05	2.93E+05	2.91E+05	2.92E+05	2.92E+05	3
Endrin	2.46E+05	2.30E+05	2.40E+05	2.44E+05	2.36E+05	2.37E+05	2.39E+05	2
o,p-DDT	1.70E+05	1.60E+05	1.52E+05	1.66E+05	1.65E+05	1.67E+05	1.63E+05	4
4,4'-DDD	2.42E+05	2.06E+05	2.41E+05	2.37E+05	2.38E+05	2.42E+05	2.35E+05	6
Endosulfan II	2.75E+05	2.37E+05	2.55E+05	2.54E+05	2.54E+05	2.46E+05	2.54E+05	5
Endrin aldehyde	2.14E+05	1.97E+05	1.92E+05	1.89E+05	1.94E+05	1.92E+05	1.96E+05	5
4,4'-DDT	1.81E+05	1.74E+05	1.87E+05	2.00E+05	1.97E+05	1.96E+05	1.89E+05	6
Endosulfan sulfate	2.46E+05	2.22E+05	2.17E+05	2.20E+05	2.17E+05	2.22E+05	2.24E+05	5
Methoxychlor	7.46E+04	6.94E+04	8.37E+04	8.65E+04	8.68E+04	9.02E+04	8.19E+04	10
Endrin ketone	2.64E+05	2.40E+05	2.53E+05	2.48E+05	2.53E+05	2.53E+05	2.52E+05	3
Mirex	1.85E+05	1.73E+05	1.53E+05	1.58E+05	1.52E+05	1.53E+05	1.62E+05	9
Decachlorobiphenyl	1.72E+05	1.46E+05	1.44E+05	1.46E+05	1.38E+05	1.46E+05	1.48E+05	8

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826101B

GC Column (2) : STXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Aroclor-1016	1	2.97	2.94	3.00	3675	1	200	735076	.00
	2	3.33	3.30	3.36	5069	1	200	1013832	.00
	3	3.54	3.51	3.57	2634	1	200	526739	.00
	4	3.85	3.82	3.88	10403	1	200	2080641	.00
	5	3.88	3.85	3.91	6301	1	200	1260206	.00
	6	3.98	3.95	4.01	4990	1	200	998069	.00
Aroclor-1221	1	2.80	2.77	2.83	1551	1	200	310128	.00
	2	2.88	2.85	2.91	1528	1	200	305510	.00
	3	2.97	2.94	3.00	5041	1	200	1008148	.00
Aroclor-1248	1	3.85	3.82	3.88	5139	1	200	1027865	.00
	2	4.07	4.04	4.10	6396	1	200	1279198	.00
	3	4.24	4.21	4.27	7294	1	200	1458766	.00
	4	4.65	4.62	4.68	8257	1	200	1651478	.00
	5	4.76	4.73	4.79	7489	1	200	1497826	.00
	6	5.07	5.04	5.10	4913	1	200	982652	.00
Aroclor-1254	1	4.59	4.56	4.62	9619	1	250	2404870	.00
	2	4.77	4.74	4.80	14388	1	250	3596959	.00
	3	5.07	5.04	5.10	17105	1	250	4276134	.00
	4	5.29	5.26	5.32	13052	1	250	3263028	.00
	5	5.49	5.46	5.52	7741	1	250	1935204	.00
	6	5.60	5.57	5.63	13400	1	250	3350084	.00
Aroclor-1260	1	5.20	5.17	5.23	12057	1	200	2411392	.00
	2	5.43	5.40	5.46	5197	1	200	1039451	.00
	3	5.61	5.58	5.64	16412	1	200	3282484	.00
	4	5.83	5.80	5.86	9784	1	200	1956743	.00
	5	6.04	6.01	6.07	20726	1	200	4145277	.00
	6	6.25	6.22	6.28	12778	1	200	2555580	.00

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826101B

GC Column (2) : STXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Chlordane	1	3.73	3.70	3.76	7952	1	12.5	101329	4.36
	1					2	25	183412	
	1					3	50	414967	
	1					4	100	801975	
	1					5	200	1632739	
	1					6	500	3891862	
	2	4.61	4.58	4.64	7548	1	12.5	94319	6.10
	2					2	25	171920	
	2					3	50	414728	
	2					4	100	766712	
	2					5	200	1509872	
	2					6	500	3676000	
	3	4.83	4.80	4.86	32704	1	12.5	405426	7.49
	3					2	25	698275	
	3					3	50	1708781	
	3					4	100	3425322	
	3					5	200	6844343	
	3					6	500	16602910	
	4	4.87	4.84	4.90	21235	1	12.5	261477	5.78
	4					2	25	473632	
	4					3	50	1122349	
	4					4	100	2190052	
	4					5	200	4318928	
	4					6	500	10802560	
	5	5.52	5.49	5.55	8104	1	12.5	98582	5.77
	5					2	25	181672	
	5					3	50	428041	
	5					4	100	838942	
	5					5	200	1662252	
	5					6	500	4103429	

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826101B

GC Column (2) : STXCLPII ID: 0.32 (mm)

ICAL Date(s) Analyzed: 9/18/2018 9/19/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	LEVEL	AMOUNT (ng)	PEAK HEIGHT	%RSD
Toxaphene	1	5.52	5.49	5.55	3824	1	50	174568	5.08
	1					2	100	387603	
	1					3	200	753751	
	1					4	500	2041286	
	1					5	1000	3898536	
	1					6	2000	7657287	
	2	5.69	5.66	5.72	4211	1	50	202393	2.66
	2					2	100	425235	
	2					3	200	829559	
	2					4	500	2191495	
	2					5	1000	4236812	
	2					6	2000	8393317	
	3	5.74	5.71	5.77	3403	1	50	166144	2.45
	3					2	100	338294	
	3					3	200	666297	
	3					4	500	1724494	
	3					5	1000	3545274	
	3					6	2000	6767374	
	4	5.98	5.95	6.01	2638	1	50	122498	4.94
	4					2	100	254955	
	4					3	200	515756	
	4					4	500	1363458	
	4					5	1000	2760028	
	4					6	2000	5523994	
	5	6.07	6.04	6.10	4085	1	50	195211	3.81
	5					2	100	398097	
	5					3	200	807960	
	5					4	500	2176915	
	5					5	1000	4143089	
	5					6	2000	8172652	

File Name: V:\CP6\06pest1826101b.CAL
Version: 9

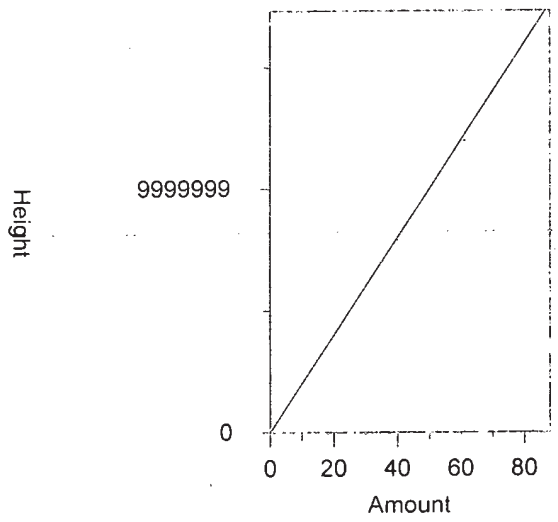
Creator:
Description:
Reason for change:

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: 2.639 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

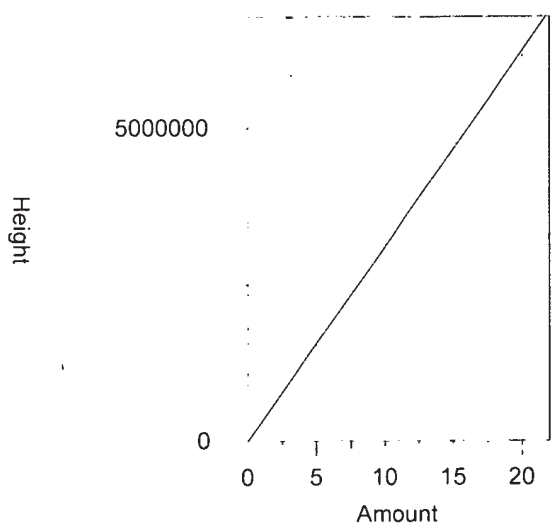
Single peak quantification by height

$Y = 200335.1\ X + 0$

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.999271
Average error: 2.980%
Average CF: 200335.1
RSD: 4.514%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	436490.9	218245.5	8.940	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.004.
2	4	772077.3	193019.3	-3.652	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.005.
3	20	3996570	199828.5	-0.253	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.006.
4	40	7896001	197400	-1.465	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.007.
5	61	1.198464E+07	196469.5	-1.930	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.008.
6	80	1.576381E+07	197047.6	-1.641	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.009.

2 alpha-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

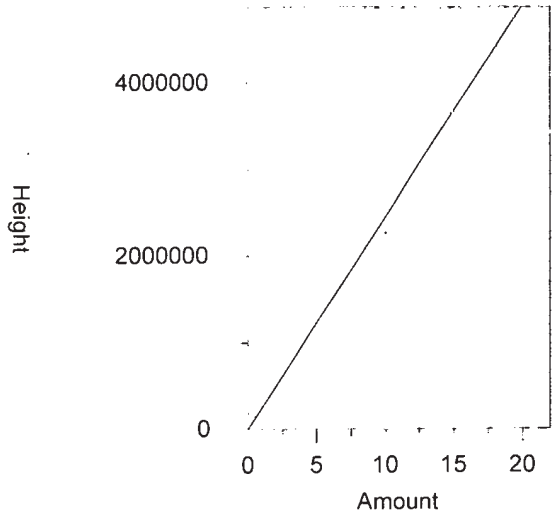
Single peak quantification by height

$Y_i = 311248.3\ X + 0$

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9997056
Average error: 3.090%
Average CF: 311248.3
RSD: 4.508%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	167493.8	334987.6	7.627	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	292478.2	292478.2	-6.031	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1524213	304842.6	-2.058	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	3144049	314404.9	1.014	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.2	4760749	313207.2	0.629	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	6151389	307569.4	-1.182	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

3 HCB



Expected retention time: 3.118 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

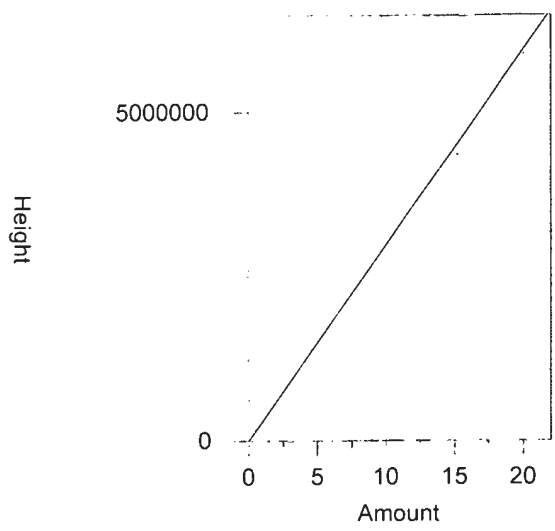
Single peak quantification by height

$Y = 245004.5\ X + 0$

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9809339
Average error: 6.793%
Average CF: 245004.5
RSD: 9.510%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	143103	286206	16.817	Manual	9/19/2018 5:45:18 AM
2	1	253733	253733	3.563	Manual	9/19/2018 5:46:03 AM
3	2.5	609678	243871.2	-0.463	Manual	9/19/2018 5:47:03 AM
4	5	1190838	238167.6	-2.791	Manual	9/19/2018 5:47:36 AM
5	10	2265343	226534.3	-7.539	Manual	9/19/2018 5:48:42 AM
6	20	4430296	221514.8	-9.587	Manual	9/19/2018 5:49:52 AM

4 gamma-BHC



Expected retention time: 3.368 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

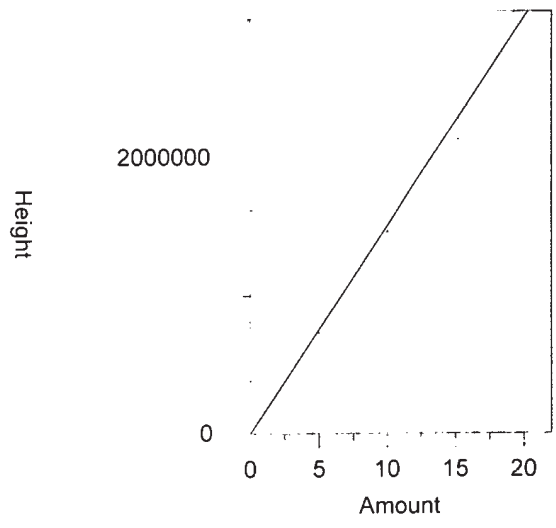
Single peak quantification by height

Y = 297204 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9988357
Average error: 3.255%
Average CF: 297204
RSD: 5.058%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	162979.3	325958.6	9.675	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	283949.4	283949.4	-4.460	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1476670	295334	-0.629	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	2974735	297473.5	0.091	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.2	4355949	286575.6	-3.576	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	5878660	293933	-1.101	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

5 beta-BHC



Expected retention time: 3.622 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

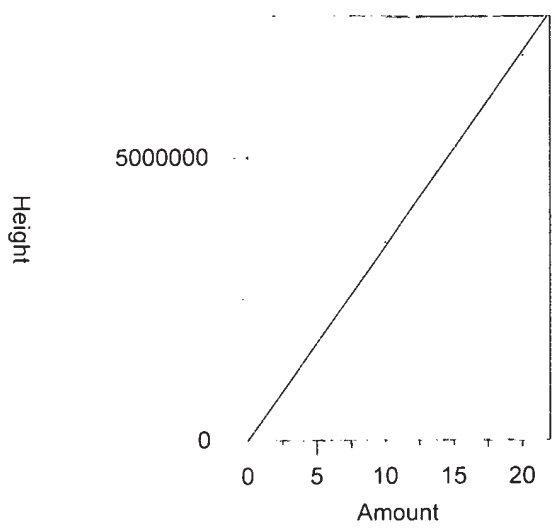
Single peak quantification by height

Y = 150690.1 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9859539
Average error: 6.801%
Average CF: 150690.1
RSD: 8.423%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	85445.84	170891.7	13.406	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	161234.6	161234.6	6.997	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	731430.7	146286.1	-2.923	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	1467284	146728.4	-2.629	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.2	2129410	140092.8	-7.033	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	2778135	138906.8	-7.820	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

6 delta-BHC



Expected retention time:	3.865 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

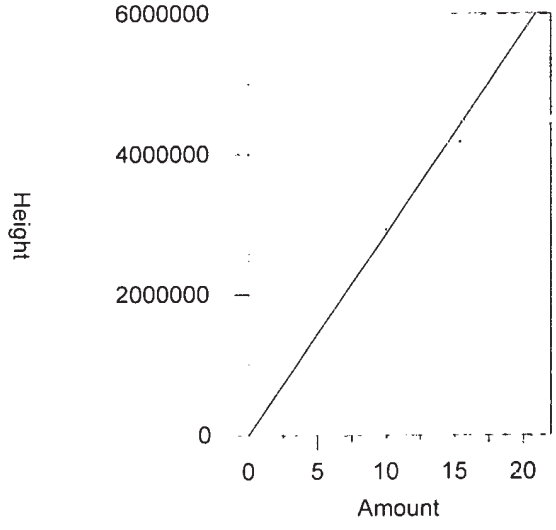
Y = 343939.5 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9996556
Average error:	2.567%
Average CF:	343939.5
RSD:	3.381%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	182033.2	364066.4	5.852	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	333124.3	333124.3	-3.145	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1670702	334140.4	-2.849	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	3502943	350294.3	1.848	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.2	5188809	341369	-0.747	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	6812850	340642.5	-0.959	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

7 Heptachlor



Expected retention time:	3.928 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

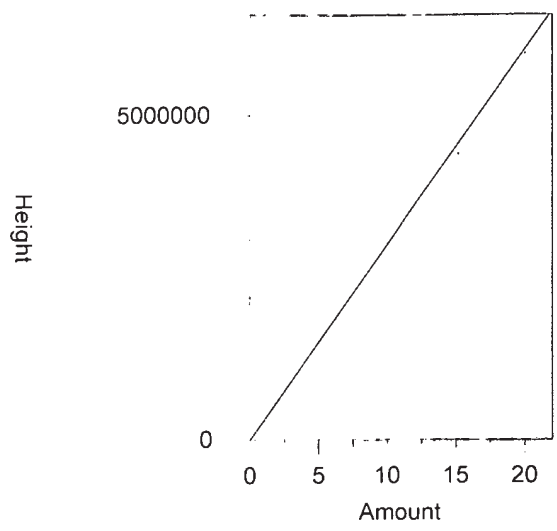
Y = 286927.3 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9937164
Average error:	5.293%
Average CF:	286927.3
RSD:	7.331%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	163326.1	326652.2	13.845	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	283041.8	283041.8	-1.354	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1374941	274988.2	-4.161	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	2927639	292763.9	2.034	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.4	4183400	271649.3	-5.325	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	5449371	272468.6	-5.039	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

8 Aldrin



Expected retention time: 4.216 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

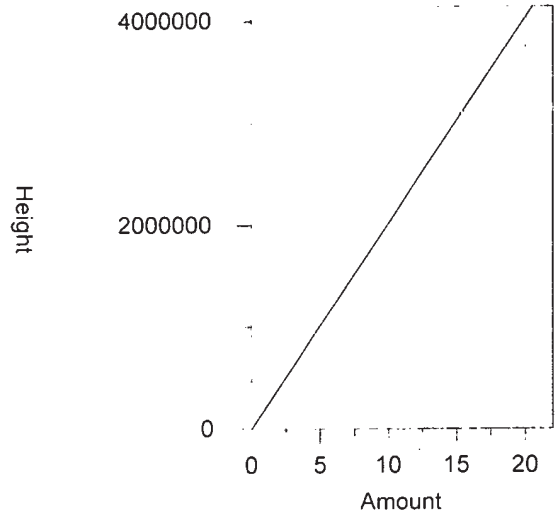
Single peak quantification by height

Y = 300562.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9988695
Average error: 2.860%
Average CF: 300562.8
RSD: 4.047%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	160948.9	321897.8	7.098	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	288255.3	288255.3	-4.095	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1510368	302073.6	0.503	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	3035052	303505.2	0.979	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.2	4405934	289864.1	-3.560	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	5955611	297780.6	-0.926	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

9 Telodrin



Expected retention time: 4.312 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

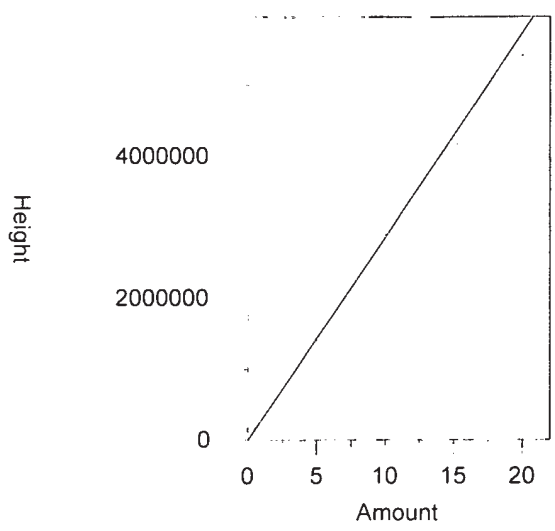
Single peak quantification by height

Y = 201744.7 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9917321
Average error: 4.656%
Average CF: 201744.7
RSD: 6.083%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	110761	221522	9.803	Manual	9/19/2018 5:45:22 AM
2	1	210146	210146	4.164	Manual	9/19/2018 5:46:07 AM
3	2.5	504327	201730.8	-0.007	Manual	9/19/2018 5:47:07 AM
4	5	975282	195056.4	-3.315	Manual	9/19/2018 5:47:42 AM
5	10	1938231	193823.1	-3.927	Manual	9/19/2018 5:48:48 AM
6	20	3763798	188189.9	-6.719	Manual	9/19/2018 5:49:57 AM

10 Hept. epoxide



Expected retention time: 4.583 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

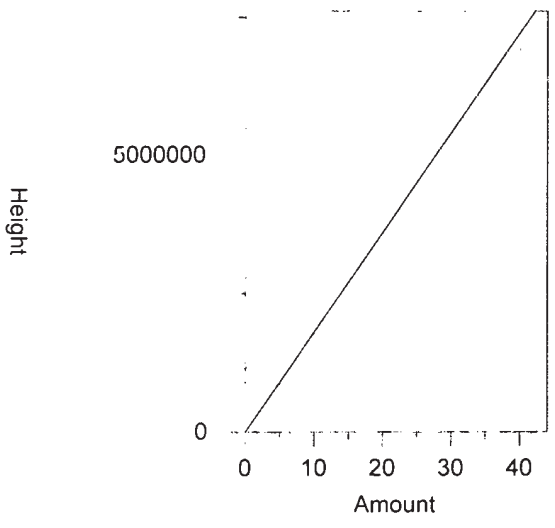
Single peak quantification by height

Y = 286668.2 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9940741
Average error: 3.938%
Average CF: 286668.2
RSD: 5.817%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	158811.3	317622.6	10.798	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	285615.3	285615.3	-0.367	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1409713	281942.6	-1.648	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	2895816	289581.6	1.016	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.2	4169846	274332	-4.303	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	5418305	270915.3	-5.495	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

11 o,p-DDE



Expected retention time: 4.7 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

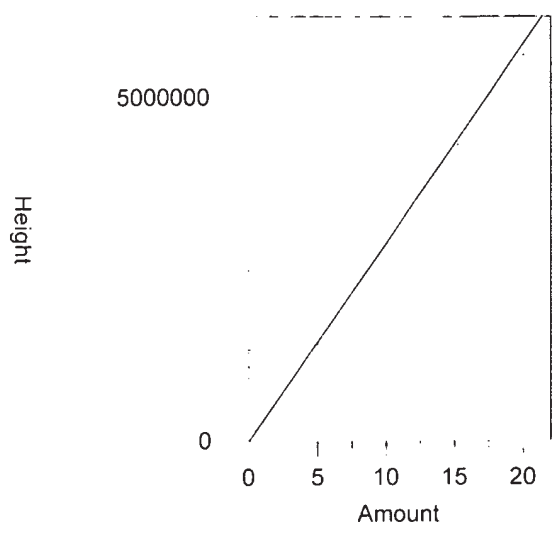
Single peak quantification by height

Y = 180136.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9973912
Average error: 3.359%
Average CF: 180136.3
RSD: 4.401%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	193497	193497	7.417	Manual	9/19/2018 5:45:32 AM
2	2	369179	184589.5	2.472	Manual	9/19/2018 5:46:14 AM
3	5	866518	173303.6	-3.793	Manual	9/19/2018 5:47:13 AM
4	10	1760788	176078.8	-2.252	Manual	9/19/2018 5:47:48 AM
5	20	3609457	180472.8	0.187	Manual	9/19/2018 5:49:01 AM
6	40	6915041	172876	-4.030	Manual	9/19/2018 5:50:03 AM

12 g. Chlordane



Expected retention time: 4.836 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

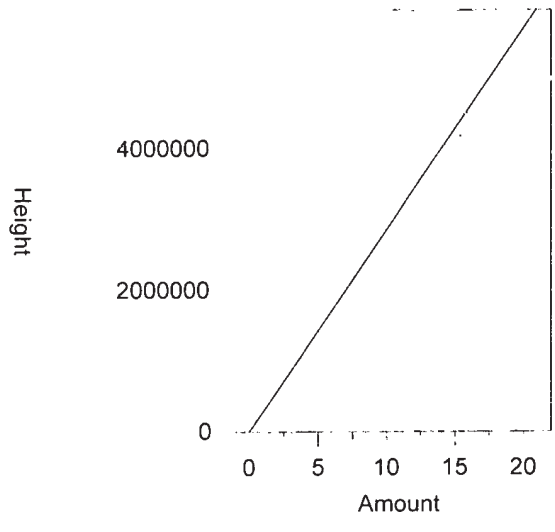
Single peak quantification by height

Y = 289229.4 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9986424
Average error: 3.344%
Average CF: 289229.4
RSD: 4.977%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	159121.1	318242.2	10.031	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	282251.5	282251.5	-2.413	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1409672	281934.4	-2.522	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	2874354	287435.4	-0.620	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.2	4322845	284397.7	-1.671	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	5622301	281115.1	-2.805	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

13 a. Chlordane



Expected retention time: 4.875 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

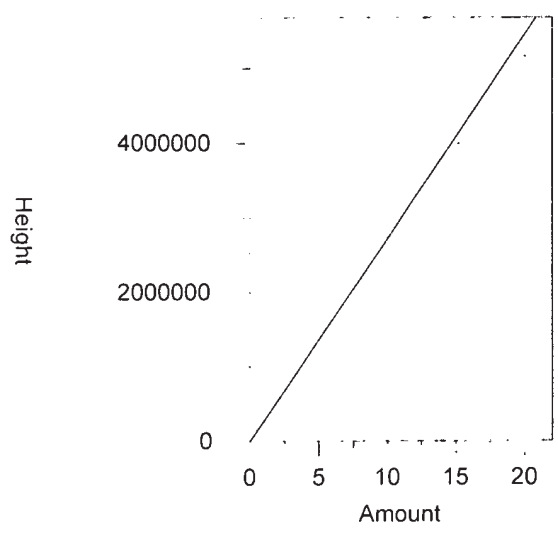
Single peak quantification by height

Y = 285346.6 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9945348
Average error: 3.931%
Average CF: 285346.6
RSD: 6.120%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	159330	318660	11.675	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	280804.5	280804.5	-1.592	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1421427	284285.4	-0.372	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	2856852	285685.2	0.119	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.4	4178484	271330.1	-4.912	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	5426291	271314.6	-4.918	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

14 Endosulfan I



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: 0.1
Low alarm limit: 0
Component constant: 0

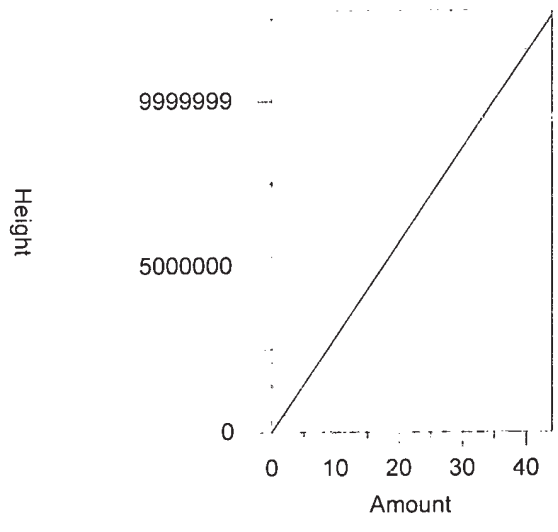
Single peak quantification by height

Y = 272169.1 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9950163
Average error: 3.911%
Average CF: 272169.1
RSD: 5.869%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	151291.6	302583.2	11.175	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	1	264789.9	264789.9	-2.711	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	5	1356004	271200.8	-0.356	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	10	2736911	273691.1	0.559	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	15.2	3999336	263114.2	-3.327	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	20	5152703	257635.2	-5.340	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

15 4,4'-DDE



Expected retention time: 4.985 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

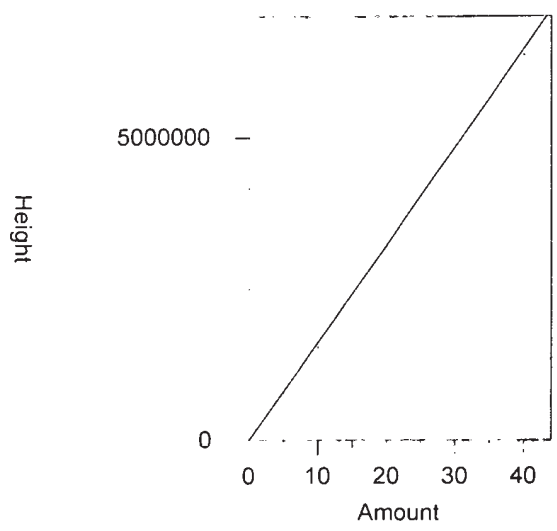
Single peak quantification by height

Y = 286502.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9996638
Average error: 3.430%
Average CF: 286502.8
RSD: 5.367%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	298986.4	298986.4	4.357	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
2	2	514997	257498.5	-10.124	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
3	10	2997629	299762.9	4.628	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
4	20	5747341	287367.1	0.302	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
5	30.4	8695094	286022.8	-0.168	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
6	40	1.157515E+07	289378.8	1.004	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011

16 o,p-DDD



Expected retention time: 5.054 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

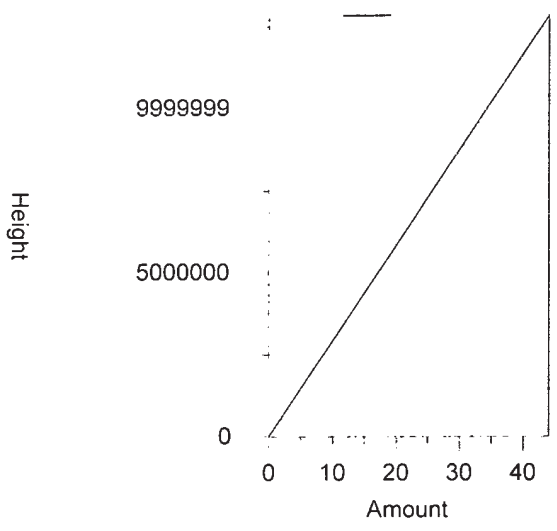
Single peak quantification by height

Y = 161506.7 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9993771
Average error: 3.632%
Average CF: 161506.7
RSD: 5.049%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	176620	176620	9.358	Manual	9/19/2018 5:45:36 AM
2	2	327985	163992.5	1.539	Manual	9/19/2018 5:46:18 AM
3	5	777282	155456.4	-3.746	Manual	9/19/2018 5:47:17 AM
4	10	1543286	154328.6	-4.444	Manual	9/19/2018 5:47:53 AM
5	20	3192320	159616	-1.171	Manual	9/19/2018 5:49:04 AM
6	40	6361076	159026.9	-1.535	Manual	9/19/2018 5:50:08 AM

17 Dieldrin



Expected retention time: 5.105 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

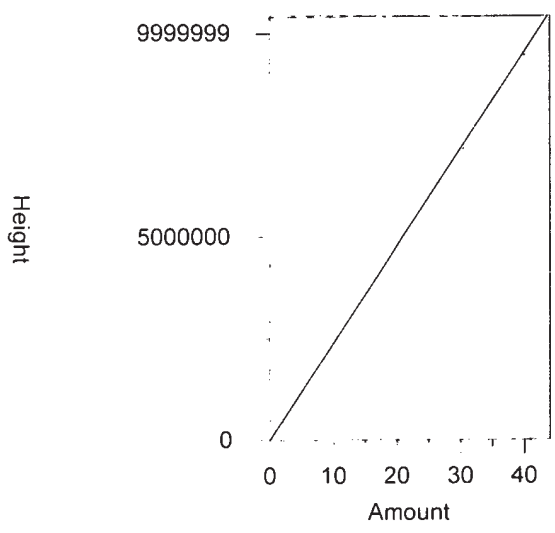
Single peak quantification by height

Y = 292103.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9999156
Average error: 2.191%
Average CF: 292103.3
RSD: 3.368%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	302740.9	302740.9	3.642	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
2	2	548624	274312	-6.091	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
3	10	2992542	299254.2	2.448	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
4	20	5863212	293160.6	0.362	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
5	30.6	8895204	290692.9	-0.483	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
6	40	1.169836E+07	292459	0.122	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I

18 Endrin



Expected retention time: 5.28 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

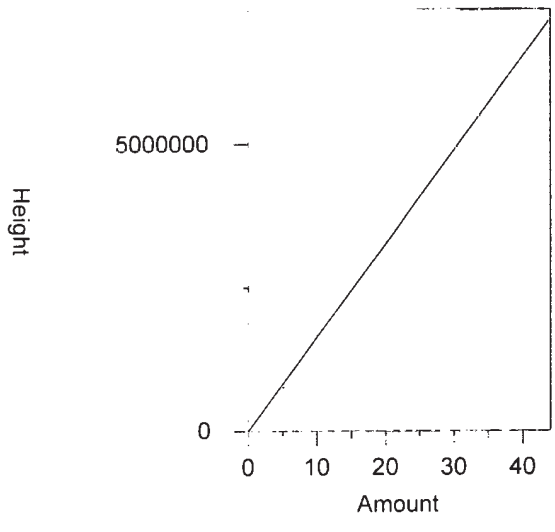
Single peak quantification by height

Y = 239039 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9996104
Average error: 1.910%
Average CF: 239039
RSD: 2.414%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	245945.1	245945.1	2.889	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	2	460760.4	230380.2	-3.622	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	10	2404502	240450.2	0.590	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	20	4888310	244415.5	2.249	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	30.4	7180115	236188	-1.193	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	40	9474195	236854.9	-0.914	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

19 o,p-DDT



Expected retention time: 5.285 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

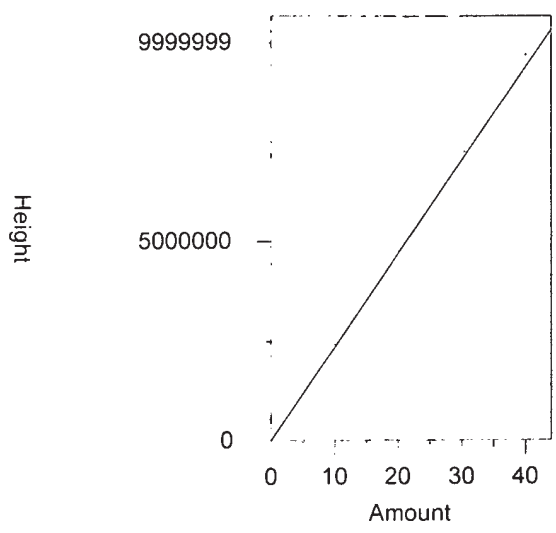
Single peak quantification by height

Y = 163130.4 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.999118
Average error: 2.946%
Average CF: 163130.4
RSD: 3.847%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	169674	169674	4.011	Manual	9/19/2018 5:45:43 AM
2	2	319195	159597.5	-2.166	Manual	9/19/2018 5:46:23 AM
3	5	761225	152245	-6.673	Manual	9/19/2018 5:47:23 AM
4	10	1656332	165633.2	1.534	Manual	9/19/2018 5:47:59 AM
5	20	3294447	164722.3	0.976	Manual	9/19/2018 5:49:14 AM
6	40	6676417	166910.4	2.317	Manual	9/19/2018 5:50:13 AM

20 4,4'-DDD



Expected retention time: 5.372 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

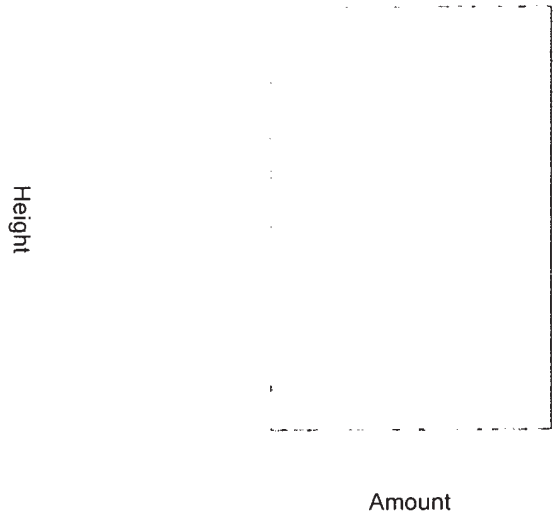
Single peak quantification by height

Y = 234502.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9983069
Average error: 3.986%
Average CF: 234502.5
RSD: 5.935%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	241830.7	241830.7	3.125	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	2	412925.1	206462.5	-11.957	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	10	2413625	241362.5	2.925	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	20	4734167	236708.3	0.941	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	30.4	7241445	238205.4	1.579	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	40	9697831	242445.8	3.387	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

21 Kepone



Expected retention time (frozen): 5.39 minutes
Search window: 0 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

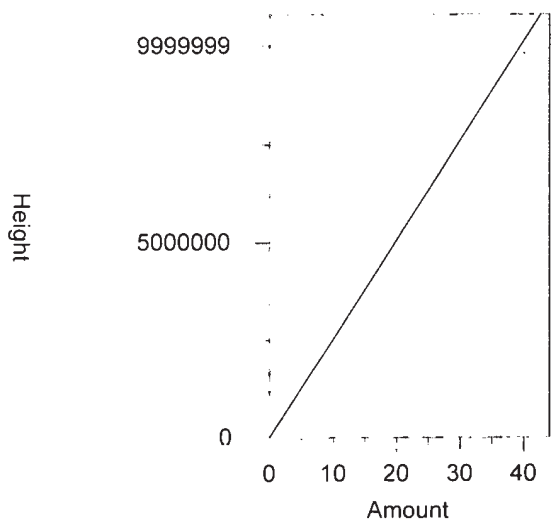
Single peak quantification by height

Y = 0.0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 1
Average error: 0.000%
Average CF: 0
RSD: 0.000%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	(0)	0	0.000	Manual	9/19/2018 5:12:49 AM
2	(10)	(0)	--	--	Manual	8/31/2018 12:41:12 PM
3	(25)	(0)	--	--	Manual	8/31/2018 12:41:13 PM
4	(50)	(0)	--	--	Manual	8/31/2018 12:41:13 PM
5	(100)	(0)	--	--	Manual	8/31/2018 12:41:14 PM
6	(200)	(0)	--	--	Manual	8/31/2018 12:41:15 PM

22 Endosulfan II



Expected retention time: 5.473 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

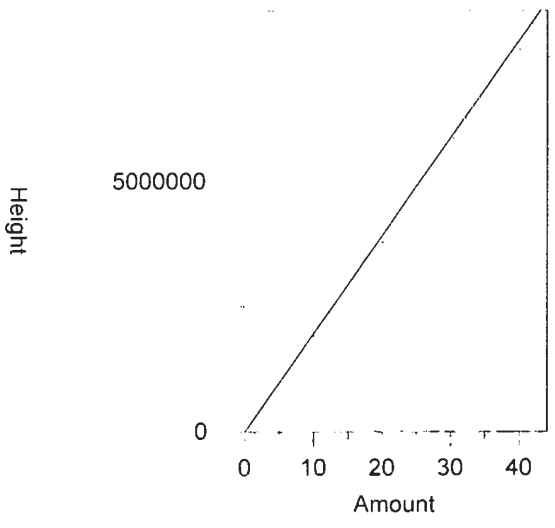
Single peak quantification by height

Y = 253537.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9986309
Average error: 3.219%
Average CF: 253537.3
RSD: 4.963%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	274805.5	274805.5	8.389	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	2	474144.5	237072.3	-6.494	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	10	2551559	255155.9	0.638	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	20	5085579	254279	0.293	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	30.6	7784429	254393.1	0.338	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	40	9820731	245518.3	-3.163	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

23 Endrin aldehyde



Expected retention time: 5.554 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

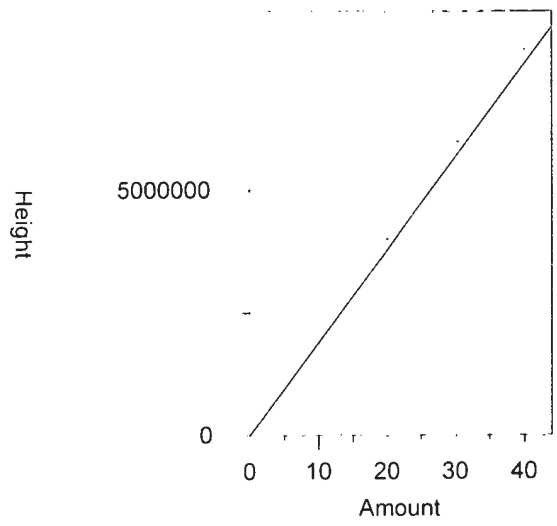
Single peak quantification by height

Y = 196400.6 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9986228
Average error: 3.216%
Average CF: 196400.6
RSD: 4.704%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	214489	214489	9.210	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	2	394522.4	197261.2	0.438	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	10	1919342	191934.2	-2.274	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	20	3786727	189336.3	-3.597	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	30.4	5884047	193554.2	-1.449	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	40	7673143	191828.6	-2.328	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

24 4,4'-DDT



Expected retention time: 5.594 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

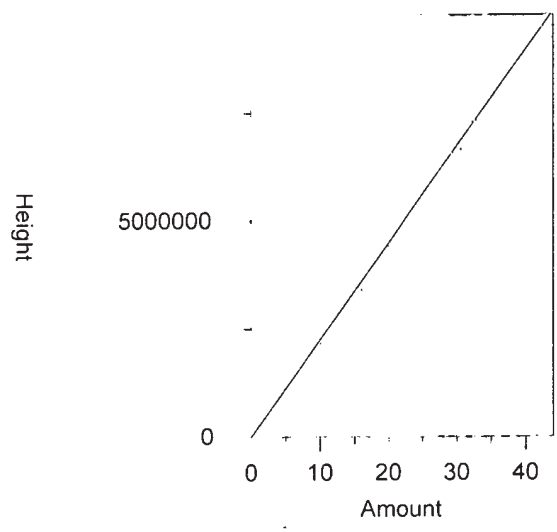
Single peak quantification by height

Y = 189099.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9960641
Average error: 4.642%
Average CF: 189099.5
RSD: 5.598%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	180555.1	180555.1	-4.518	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	2	347177.4	173588.7	-8.202	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	10	1868197	186819.7	-1.206	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	20	4009610	200480.5	6.019	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	30.4	5982148	196781.2	4.062	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	40	7854861	196371.5	3.846	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

25 Endo. sulfate



Expected retention time: 5.755 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

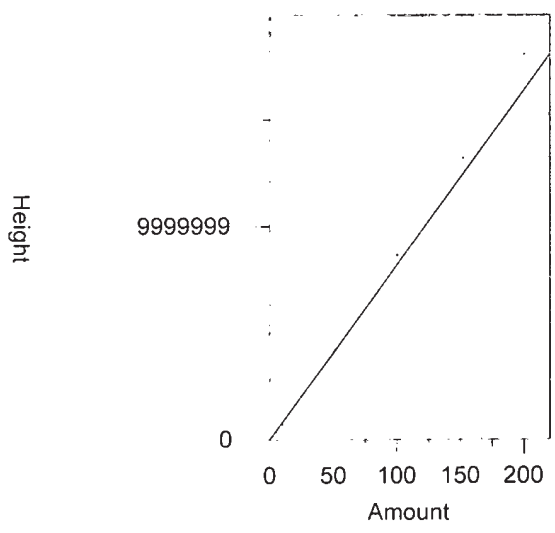
Single peak quantification by height

Y = 224238.2 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9989591
Average error: 3.300%
Average CF: 224238.2
RSD: 4.954%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	246434.5	246434.5	9.899	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
2	2	444398	222199	-0.909	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
3	10	2168806	216880.6	-3.281	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
4	20	4409794	220489.7	-1.672	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
5	30.6	6651352	217364.4	-3.065	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00
6	40	8882426	222060.7	-0.971	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001B.00

26 Methoxychlor



Expected retention time: 5.899 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

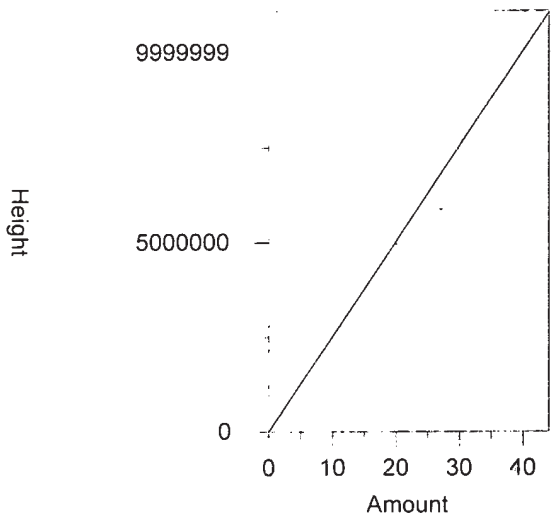
Single peak quantification by height

Y = 81875.28 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9859496
Average error: 8.038%
Average CF: 81875.28
RSD: 9.865%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	372857.3	74571.46	-8.921	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
2	10	694364.1	69436.41	-15.192	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
3	50	4187341	83746.82	2.286	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
4	100	8650660	86506.6	5.657	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
5	152	1.319854E+07	86832.5	6.055	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
6	200	1.803158E+07	90157.9	10.116	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011

27 Endrin ketone



Expected retention time: 6.057 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

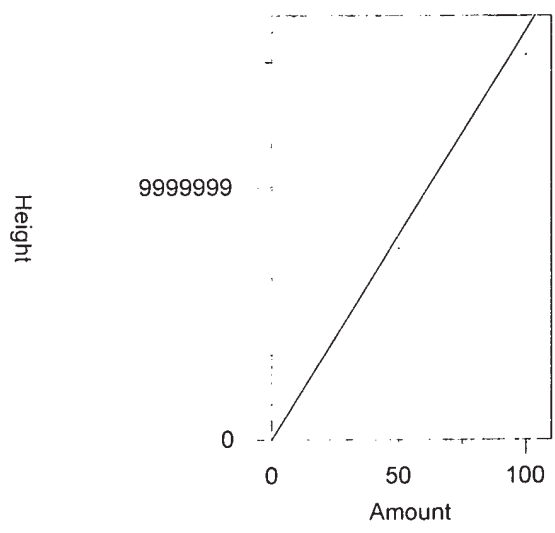
Single peak quantification by height

Y = 251707.6 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9998998
Average error: 1.964%
Average CF: 251707.6
RSD: 2.997%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	263655.8	263655.8	4.747	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
2	2	480959.6	240479.8	-4.461	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
3	10	2527646	252764.6	0.420	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
4	20	4962061	248103	-1.432	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
5	30.4	7682462	252712.6	0.399	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011
6	40	1.010119E+07	252529.8	0.327	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest182610011

28 Mirex



Expected retention time: 6.4 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

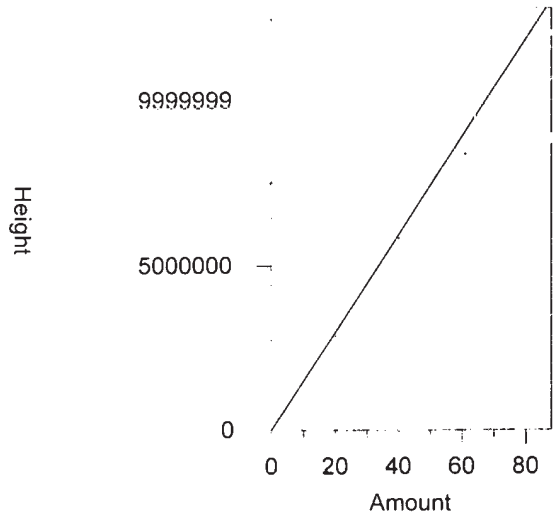
Single peak quantification by height

Y = 162484.9 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9924278
Average error: 6.947%
Average CF: 162484.9
RSD: 8.512%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	463430	185372	14.086	Manual	9/19/2018 5:45:48 AM
2	5	867299	173459.8	6.754	Manual	9/19/2018 5:46:33 AM
3	12.5	1915897	153271.8	-5.670	Manual	9/19/2018 5:47:27 AM
4	25	3955748	158229.9	-2.619	Manual	9/19/2018 5:48:04 AM
5	50	7575803	151516.1	-6.751	Manual	9/19/2018 5:49:39 AM
6	100	1.5306E+07	153060	-5.800	Manual	9/19/2018 5:50:18 AM

29 DCB



Expected retention time: 7.072 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 = 148474.6 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9949344
Average error: 5.250%
Average CF: 148474.6
RSD: 8.013%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	343721	171860.5	15.751	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
2	4	583522.3	145880.6	-1.747	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
3	20	2879239	143962	-3.039	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
4	40	5839318	145983	-1.678	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
5	61	8390314	137546.1	-7.361	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I
6	80	1.164925E+07	145615.6	-1.926	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261001I

Multiple Component Initial Calibration Report: **06PEST1826103**

Area Files Used For Calibration

Sequence _____ Injections _____

Component: **Aroclor-1016** **AR16**

Calibration Levels: 1 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1016

	1	2	3	4	5	6	SUM
Retention Time:	2.284	2.626	2.854	3.062	3.156	3.285	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	314466	493794	276163	907450	496275	382229	2870377
RF (Height/Conc):	1572	2469	1381	4537	2481	1911	
%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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 2 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1221

	1	2	3	SUM
Retention Time:	2.110	2.213	2.286	
RT Window (Mins):	0.03000	0.03000	0.03000	
Height:	205478	140497	427741	773716
RF (Height/Conc):	1027	702	2139	
%RSD For RF	**0.000**	**0.000**	**0.000**	
Slope				
Y-Intercept				

Component: **Aroclor-1248** **AR48**

Calibration Levels: 1 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1248

	1	2	3	4	5	6	SUM
Retention Time:	3.057	3.375	3.677	3.712	3.934	4.431	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	476568	368599	650893	522369	815884	468772	3303085
RF (Height/Conc):	2383	1843	3254	2612	4079	2344	
%RSD For RF	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **06PEST1826103**

Component: **Aroclor-1254** **2154**

Calibration Levels:1 Concentration (ng/ml): 250.000000

Min # of Peaks Required:4 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1254

	1	2	3	4	5	6	SUM
Retention Time:	3.935	4.056	4.352	4.434	4.603	4.973	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1048074	1258802	1060918	2137710	1371402	1600307	8477213
RF (Height/Conc):	4192	5035	4244	8551	5486	6401	
%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:5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1260

	1	2	3	4	5	6	SUM
Retention Time:	4.554	4.691	4.972	5.220	5.382	5.652	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1157623	1337611	1338900	1002036	2349092	1583704	8768966
RF (Height/Conc):	5788	6688	6695	5010	11745	7919	
%RSD For RF	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
Slope							
Y-Intercept							

Component: **T. Chlordane** **CHLD**

Calibration Levels:6 Avg Concentration (ng/ml): 50.000000

Min # of Peaks Required:5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: T. Chlordane

		1	2	3	4	5	SUM
Retention Time:		2.880	3.882	4.057	4.139	4.898	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		415359	367161	1656217	1324279	616767	4379783
RF (Height/Conc):		2968	2673	10911	8889	4211	
%RSD For RF		**8.008**	**8.992**	**6.244**	**4.856**	**5.948**	
Slope							
Y-Intercept							
Level 1	Height	41455	37559	138481	118988	56472	392955
	Conc	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	70055	65819	239329	206531	96733	678467
	Conc	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	159400	145549	567341	450101	224499	1546890
	Conc	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	297130	261956	1085809	877843	409646	2932384
	Conc	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	560757	494293	2265335	1729166	821173	5870724
	Conc	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	1363359	1197788	5641004	4563046	2092079	14857276
	Conc	500.000	500.000	500.000	500.000	500.000	

Multiple Component Initial Calibration Report: **06PEST1826103**

Component: **Total PCBs**

Calibration Levels: Concentration (ng/ml):

Min # of Peaks Required: Max %RSD: Report Base:

Slope: Y-Intercept: E-Flag Basis:

Component: **Toxaphene** **TOXA**

Calibration Levels:6 Avg Concentration (ng/ml): 200.000000

Min # of Peaks Required:5 Max %RSD: 30 Report Base:

Slope: Y-Intercept: E-Flag Basis: Toxaphene

		1	2	3	4	5	SUM
Retention Time:		4.791	5.051	5.110	5.391	5.486	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		1029399	955638	922748	951309	1389788	5248882
RF (Height/Conc):		1587	1482	1353	1392	2112	
%RSD For RF		**2.907**	**3.722**	**7.074**	**6.932**	**3.103**	
Slope							
Y-Intercept							
Level 1	Height	82157	77792	64702	65370	105140	395161
	Conc	50.000	50.000	50.000	50.000	50.000	
Level 2	Height	157225	150382	122805	130861	202721	763994
	Conc	100.000	100.000	100.000	100.000	100.000	
Level 3	Height	303986	283102	260171	263677	410798	1521734
	Conc	200.000	200.000	200.000	200.000	200.000	
Level 4	Height	777758	714180	689159	708629	1074030	3963756
	Conc	500.000	500.000	500.000	500.000	500.000	
Level 5	Height	1608089	1463462	1431110	1463543	2130210	8096414
	Conc	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6	Height	3247176	3044912	2968542	3075774	4415829	16752233
	Conc	2000.000	2000.000	2000.000	2000.000	2000.000	

Multiple Component Initial Calibration Report: **06PEST1826103B**

Area Files Used For Calibration

Sequence _____ Injections _____

Component: **Aroclor-1016** **AR16**

Calibration Levels: 1 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1016

	1	2	3	4	5	6	SUM
Retention Time:	2.960	3.320	3.526	3.838	3.867	3.969	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	735076	1013832	526739	2080641	1260206	998069	6614563
RF (Height/Conc):	3675	5069	2634	10403	6301	4990	
%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 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 2 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1221

	1	2	3	SUM
Retention Time:	2.794	2.868	2.957	
RT Window (Mins):	0.03000	0.03000	0.03000	
Height:	310128	305510	1008148	1623786
RF (Height/Conc):	1551	1528	5041	
%RSD For RF	**0.000**	**0.000**	**0.000**	
Slope				
Y-Intercept				

Component: **Aroclor-1248** **AR48**

Calibration Levels: 1 Concentration (ng/ml): 200.000000

Min # of Peaks Required: 5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1248

	1	2	3	4	5	6	SUM
Retention Time:	3.836	4.061	4.232	4.637	4.752	5.054	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	1027865	1279198	1458766	1651478	1497826	982652	7897785
RF (Height/Conc):	5139	6396	7294	8257	7489	4913	
%RSD For RF	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
Slope							
Y-Intercept							

Multiple Component Initial Calibration Report: **06PEST1826103B**

Component: **Aroclor-1254** **2154**

Calibration Levels:1 Concentration (ng/ml): 250.000000

Min # of Peaks Required:5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1254

	1	2	3	4	5	6	SUM
Retention Time:	4.575	4.756	5.052	5.280	5.478	5.588	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	2404870	3596959	4276134	3263028	1935204	3350084	18826279
RF (Height/Conc):	9619	14388	17105	13052	7741	13400	
%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:5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: Aroclor-1260

	1	2	3	4	5	6	SUM
Retention Time:	5.185	5.414	5.592	5.815	6.027	6.231	
RT Window (Mins):	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	
Height:	2411392	1039451	3282484	1956743	4145277	2555580	15390927
RF (Height/Conc):	12057	5197	16412	9784	20726	12778	
%RSD For RF	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
Slope							
Y-Intercept							

Component: **T. Chlordane** **CHLD**

Calibration Levels:6 Avg Concentration (ng/ml): 50.000000

Min # of Peaks Required:5 Max %RSD: 20 Report Base:

Slope: Y-Intercept: E-Flag Basis: T. Chlordane

		1	2	3	4	5	SUM
Retention Time:		3.723	4.598	4.821	4.860	5.509	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		1171047	1105592	4947510	3194833	1218820	11637801
RF (Height/Conc):		7952	7548	32704	21235	8104	
%RSD For RF		**4.360**	**6.102**	**7.487**	**5.776**	**5.766**	
Slope							
Y-Intercept							
Level 1	Height	101329	94319	405426	261477	98582	961133
	Conc	12.500	12.500	12.500	12.500	12.500	
Level 2	Height	183412	171920	698275	473632	181672	1708911
	Conc	25.000	25.000	25.000	25.000	25.000	
Level 3	Height	414967	414728	1708781	1122349	428041	4088866
	Conc	50.000	50.000	50.000	50.000	50.000	
Level 4	Height	801975	766712	3425322	2190052	838942	8023003
	Conc	100.000	100.000	100.000	100.000	100.000	
Level 5	Height	1632739	1509872	6844343	4318928	1662252	15968134
	Conc	200.000	200.000	200.000	200.000	200.000	
Level 6	Height	3891862	3676000	16602910	10802560	4103429	39076761
	Conc	500.000	500.000	500.000	500.000	500.000	

Multiple Component Initial Calibration Report: **06PEST1826103B**

Component: **Total PCBs**
Calibration Levels: Concentration (ng/ml):
Min # of Peaks Required: Max %RSD: Report Base:
Slope: Y-Intercept: E-Flag Basis:

Component: **Toxaphene** **TOXA**
Calibration Levels: 6 Avg Concentration (ng/ml): 200.000000
Min # of Peaks Required: 5 Max %RSD: 30 Report Base:
Slope: Y-Intercept: E-Flag Basis: Toxaphene

		1	2	3	4	5	SUM
Retention Time:		5.504	5.675	5.728	5.966	6.055	
RT Window (Mins):		0.03000	0.03000	0.03000	0.03000	0.03000	
Average Height:		2485505	2713135	2201313	1756782	2648987	11805722
RF (Height/Conc):		3824	4211	3403	2638	4085	
%RSD For RF		**5.082**	**2.661**	**2.447**	**4.939**	**3.811**	
Slope							
Y-Intercept							
Level 1	Height	174568	202393	166144	122498	195211	860814
	Conc	50.000	50.000	50.000	50.000	50.000	
Level 2	Height	387603	425235	338294	254955	398097	1804184
	Conc	100.000	100.000	100.000	100.000	100.000	
Level 3	Height	753751	829559	666297	515756	807960	3573323
	Conc	200.000	200.000	200.000	200.000	200.000	
Level 4	Height	2041286	2191495	1724494	1363458	2176915	9497648
	Conc	500.000	500.000	500.000	500.000	500.000	
Level 5	Height	3898536	4236812	3545274	2760028	4143089	18583739
	Conc	1000.000	1000.000	1000.000	1000.000	1000.000	
Level 6	Height	7657287	8393317	6767374	5523994	8172652	36514624
	Conc	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: H9147A Calibration File: 06PEST1826103

GC Column (1) : STX-CLP ID: 0.32 (mm) ICAL 06PEST1826103

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	RT OF STANDARDS LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MIDPOINT RT	RT WINDOW FROM	TO
Tetrachloro-m-xylene			1.82				1.82	1.80	1.84
Hcb			2.28				2.28	2.26	2.30
alpha-BHC			2.36				2.36	2.34	2.38
gamma-BHC (Lindane)			2.71				2.71	2.69	2.73
beta-BHC			2.94				2.94	2.92	2.96
Heptachlor			3.05				3.05	3.03	3.07
delta-BHC			3.22				3.22	3.20	3.24
Aldrin			3.36				3.36	3.34	3.38
Telodrin			3.47				3.47	3.45	3.49
Heptachlor epoxide			3.86				3.86	3.84	3.88
gamma-Chlordane			4.06				4.06	4.04	4.08
o,p-DDE			4.06				4.07	4.05	4.09
alpha-Chlordane			4.14				4.14	4.12	4.16
Endosulfan I			4.19				4.19	4.17	4.21
4,4'-DDE			4.32				4.32	4.30	4.34
Dieldrin			4.42				4.42	4.40	4.44
o,p-DDD			4.48				4.48	4.46	4.50
Endrin			4.67				4.67	4.65	4.69
o,p-DDT			4.70				4.70	4.68	4.72
4,4'-DDD			4.78				4.78	4.76	4.80
Endosulfan II			4.88				4.88	4.86	4.90
4,4'-DDT			4.98				4.98	4.96	5.00
Endrin aldehyde			5.06				5.06	5.04	5.08
Endosulfan sulfate			5.21				5.21	5.19	5.23
Methoxychlor			5.48				5.48	5.46	5.50
Endrin ketone			5.64				5.64	5.62	5.66
Mirex			5.73				5.73	5.71	5.75
Decachlorobiphenyl			6.39				6.39	6.36	6.42

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

6E

INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Calibration File: 06PEST1826103

GC Column (1) : STX-CLP ID: 0.32 (mm) ICAL 06PEST1826103

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	CALIBRATION FACTORS						MEAN	%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6		
Tetrachloro-m-xylene	8.58E+04	7.24E+04	7.46E+04	7.83E+04	7.80E+04	7.81E+04	7.79E+04	6
Hcb	1.33E+05	1.14E+05	1.05E+05	9.94E+04	9.66E+04	9.42E+04	1.07E+05	13
alpha-BHC	1.50E+05	1.20E+05	1.25E+05	1.35E+05	1.31E+05	1.33E+05	1.32E+05	8
gamma-BHC (Lindane)	1.38E+05	1.21E+05	1.17E+05	1.22E+05	1.25E+05	1.24E+05	1.24E+05	6
beta-BHC	7.80E+04	6.68E+04	6.10E+04	5.65E+04	5.60E+04	5.62E+04	6.24E+04	14
Heptachlor	1.30E+05	1.13E+05	1.04E+05	1.06E+05	1.08E+05	1.10E+05	1.12E+05	8
delta-BHC	1.49E+05	1.23E+05	1.28E+05	1.32E+05	1.32E+05	1.39E+05	1.34E+05	7
Aldrin	1.31E+05	1.13E+05	1.12E+05	1.14E+05	1.14E+05	1.14E+05	1.16E+05	6
Telodrin	9.69E+04	8.82E+04	8.04E+04	7.74E+04	7.24E+04	7.35E+04	8.15E+04	12
Heptachlor epoxide	1.42E+05	1.17E+05	1.08E+05	1.10E+05	1.13E+05	1.12E+05	1.17E+05	11
gamma-Chlordane	1.42E+05	1.18E+05	1.13E+05	1.15E+05	1.20E+05	1.22E+05	1.22E+05	8
o,p-DDE	9.01E+04	8.07E+04	7.70E+04	7.61E+04	7.55E+04	7.65E+04	7.93E+04	7
alpha-Chlordane	1.44E+05	1.24E+05	1.22E+05	1.17E+05	1.19E+05	1.21E+05	1.24E+05	8
Endosulfan I	1.37E+05	1.14E+05	1.10E+05	1.07E+05	1.04E+05	1.11E+05	1.14E+05	10
4,4'-DDE	1.27E+05	1.08E+05	1.22E+05	1.21E+05	1.28E+05	1.32E+05	1.23E+05	7
Dieldrin	1.39E+05	1.22E+05	1.30E+05	1.28E+05	1.35E+05	1.33E+05	1.31E+05	5
o,p-DDD	8.75E+04	7.78E+04	7.00E+04	7.18E+04	7.14E+04	7.20E+04	7.51E+04	9
Endrin	1.38E+05	1.11E+05	1.15E+05	1.20E+05	1.20E+05	1.20E+05	1.21E+05	8
o,p-DDT	8.11E+04	7.30E+04	6.65E+04	6.95E+04	6.88E+04	7.22E+04	7.18E+04	7
4,4'-DDD	1.13E+05	9.45E+04	9.77E+04	9.83E+04	1.05E+05	1.09E+05	1.03E+05	7
Endosulfan II	1.36E+05	1.18E+05	1.19E+05	1.14E+05	1.18E+05	1.17E+05	1.20E+05	7
4,4'-DDT	1.02E+05	9.15E+04	9.47E+04	9.62E+04	1.03E+05	1.05E+05	9.89E+04	6
Endrin aldehyde	1.21E+05	1.02E+05	9.97E+04	9.90E+04	9.63E+04	1.00E+05	1.03E+05	9
Endosulfan sulfate	1.29E+05	1.12E+05	1.09E+05	1.08E+05	1.08E+05	1.10E+05	1.13E+05	7
Methoxychlor	5.28E+04	4.32E+04	4.90E+04	5.04E+04	4.94E+04	5.08E+04	4.93E+04	7
Endrin ketone	1.54E+05	1.30E+05	1.32E+05	1.33E+05	1.31E+05	1.29E+05	1.35E+05	7
Mirex	1.02E+05	9.20E+04	8.21E+04	8.22E+04	8.20E+04	8.26E+04	8.72E+04	10
Decachlorobiphenyl	1.15E+05	9.18E+04	9.11E+04	9.19E+04	8.81E+04	9.05E+04	9.47E+04	10

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:

6F
INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Calibration File: 06PEST1826103

GC Column (1) : STX-CLP ID: 0.32 (mm) ICAL 06PEST1826103

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
Aroclor-1016	1	2.28	2.25	2.31	1572	1572	1	200	314466	.00
	2	2.63	2.60	2.66	2469	2469	1	200	493794	.00
	3	2.85	2.82	2.88	1381	1381	1	200	276163	.00
	4	3.06	3.03	3.09	4537	4537	1	200	907450	.00
	5	3.16	3.13	3.19	2481	2481	1	200	496275	.00
	6	3.28	3.25	3.31	1911	1911	1	200	382229	.00
Aroclor-1221	1	2.11	2.08	2.14	1027	1027	1	200	205478	.00
	2	2.21	2.18	2.24	702	702	1	200	140497	.00
	3	2.29	2.26	2.32	2139	2139	1	200	427741	.00
Aroclor-1248	1	3.06	3.03	3.09	2383	2383	1	200	476568	.00
	2	3.37	3.34	3.40	1843	1843	1	200	368599	.00
	3	3.58	3.55	3.61	3254	3254	1	200	650893	.00
	4	3.71	3.68	3.74	2612	2612	1	200	522369	.00
	5	3.93	3.90	3.96	4079	4079	1	200	815884	.00
	6	4.43	4.40	4.46	2344	2344	1	200	468772	.00
Aroclor-1254	1	3.94	3.91	3.97	4192	4192	1	250	1048074	.00
	2	4.06	4.03	4.09	5035	5035	1	250	1258802	.00
	3	4.35	4.32	4.38	4244	4244	1	250	1060918	.00
	4	4.43	4.40	4.46	8551	8551	1	250	2137710	.00
	5	4.60	4.57	4.63	5486	5486	1	250	1371402	.00
	6	4.97	4.94	5.00	6401	6401	1	250	1600307	.00
Aroclor-1260	1	4.55	4.52	4.58	5788	5788	1	200	1157623	.00
	2	4.69	4.66	4.72	6688	6688	1	200	1337611	.00
	3	4.97	4.94	5.00	6695	6695	1	200	1338900	.00
	4	5.22	5.19	5.25	5010	5010	1	200	1002036	.00
	5	5.38	5.35	5.41	11745	11745	1	200	2349092	.00
	6	5.65	5.62	5.68	7919	7919	1	200	1583704	.00

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Calibration File: 06PEST1826103

GC Column (1) : STX-CLP ID: 0.32 (mm) ICAL 06PEST1826103

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
Chlordane	1	2.88	2.85	2.91	3316	2968	1	12.5	41455	8.01
					2802		2	25	70055	
					3188		3	50	159400	
					2971		4	100	297130	
					2804		5	200	560757	
					2727		6	500	1363359	
	2	3.88	3.85	3.91	3005	2673	1	12.5	37559	8.99
					2633		2	25	65819	
					2911		3	50	145549	
					2620		4	100	261956	
					2471		5	200	494293	
					2396		6	500	1197788	
	3	4.06	4.03	4.09	11078	10911	1	12.5	138481	6.24
					9573		2	25	239329	
					11347		3	50	567341	
					10858		4	100	1085809	
					11327		5	200	2265335	
					11282		6	500	5641004	
	4	4.14	4.11	4.17	9519	8889	1	12.5	118988	4.86
					8261		2	25	206531	
					9002		3	50	450101	
					8778		4	100	877843	
					8646		5	200	1729166	
					9126		6	500	4563046	
	5	4.90	4.87	4.93	4518	4211	1	12.5	56472	5.95
					3869		2	25	96733	
					4490		3	50	224499	
					4096		4	100	409646	
					4106		5	200	821173	
					4184		6	500	2002079	

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Calibration File: 06PEST1826103

GC Column (1) : STX-CLP ID: 0.32 (mm) ICAL 06PEST1826103

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
Toxaphene	1	4.79	4.76	4.82	1643	1587	1	50	82157	2.91
					1572		2	100	157225	
					1520		3	200	303986	
					1556		4	500	777758	
					1608		5	1000	1608089	
					1624		6	2000	3247176	
	2	5.05	5.02	5.08	1556	1482	1	50	77792	3.72
					1504		2	100	150382	
					1416		3	200	283102	
					1428		4	500	714180	
					1463		5	1000	1463462	
					1522		6	2000	3044912	
	3	5.11	5.08	5.14	1294	1353	1	50	64702	7.07
					1228		2	100	122805	
					1301		3	200	260171	
					1378		4	500	689159	
					1431		5	1000	1431110	
					1484		6	2000	2968542	
	4	5.39	5.36	5.42	1307	1392	1	50	65370	6.93
					1309		2	100	130861	
					1318		3	200	263677	
					1417		4	500	708629	
					1464		5	1000	1463543	
					1538		6	2000	3075774	
	5	5.49	5.46	5.52	2103	2112	1	50	105140	3.10
					2027		2	100	202721	
					2054		3	200	410798	
					2148		4	500	1074030	
					2130		5	1000	2130210	
					2208		6	2000	4115820	

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:

File Name: V:\CP6\06pest1826103.CAL
Version: 7

RT Update

Old ICAL: 06pest1826102

New ICAL: 06pest 1826103

Files Used: 06pest 18261018.003
.004
.006

DJS 15222 10/10/18

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: 1.823 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 = 77888.27 X + 0

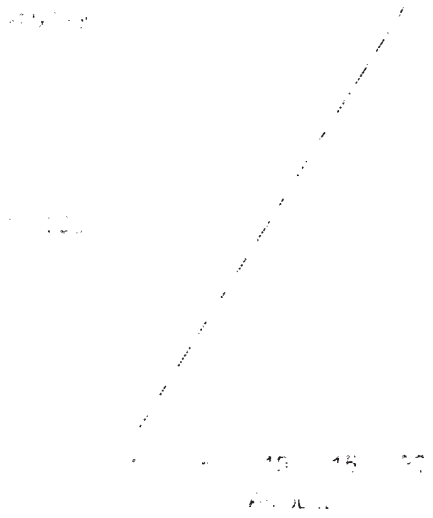
Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9998097
Average error: 3.750%
Average CF: 77888.27
RSD: 5.864%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	171696.1	85848.05	10.219	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BND
2	4	289761.8	72440.45	-6.994	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BND
3	20	1491453	74572.65	-4.257	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BND
4	40	3133346	78333.65	0.572	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BND
5	61	4759107	78018.15	0.167	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BND
6	80	6249336	78116.7	0.293	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BND

2 HCB

Anita M Dale
Anita Dale
Chemist
OCT 11 2018

(3) Anita M Dale
Anita Dale
Chemist
OCT 10 2018



Expected retention time: 2.276 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

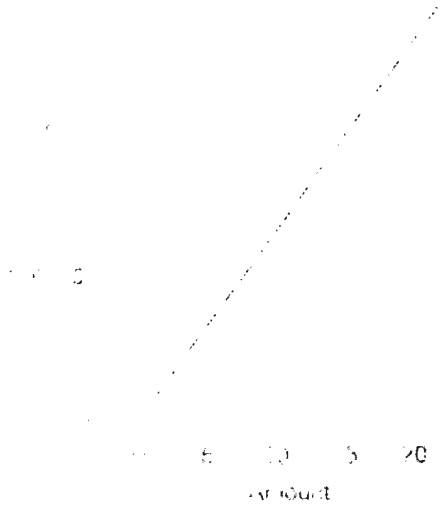
Single peak quantification by height

Y = 106957.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9677857
Average error: 10.256%
Average CF: 106957.5
RSD: 13.489%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	66265	132530	23.909	Manual	9/19/2018 5:36:54 AM
2	1	114292	114292	6.857	Manual	9/19/2018 5:38:22 AM
3	2.5	261899	104759.6	-2.055	Manual	9/19/2018 5:38:51 AM
4	5	497046	99409.2	-7.057	Manual	9/19/2018 5:39:23 AM
5	10	965987	96598.7	-9.685	Manual	9/19/2018 5:39:54 AM
6	20	1883105	94155.25	-11.969	Manual	9/19/2018 5:40:31 AM

3 alpha-BHC



Expected retention time: 2.36 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

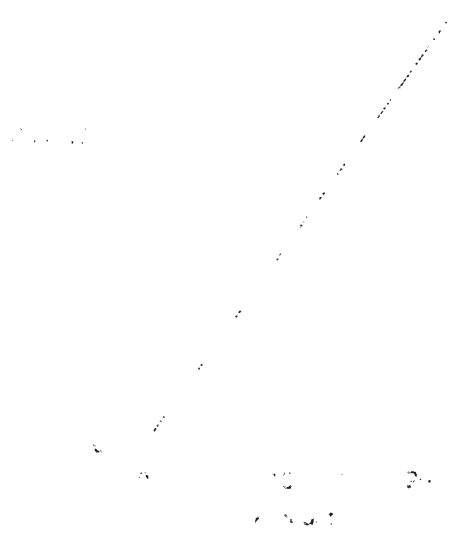
Single peak quantification by height

Y = 132123.1 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9994718
Average error: 5.305%
Average CF: 132123.1
RSD: 7.776%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	74920.1	149840.2	13.410	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNC
2	1	119792.2	119792.2	-9.333	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNC
3	5	624157.8	124831.6	-5.519	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNC
4	10	1345659	134565.9	1.849	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNC
5	15.2	1986947	130720.2	-1.062	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNC
6	20	2659775	132988.8	0.655	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNC

4 gamma-BHC



Expected retention time:	2.708 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

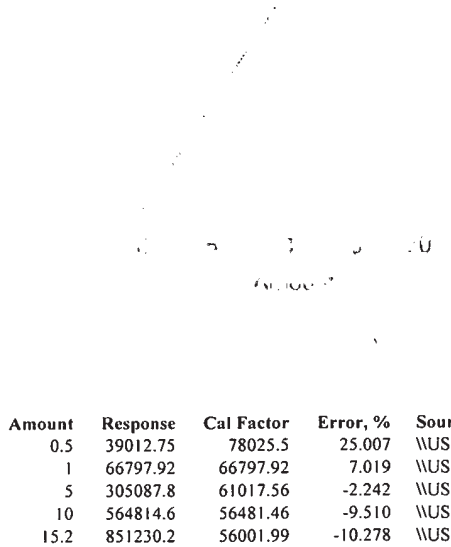
Y = 124293.4 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9995567
Average error:	3.688%
Average CF:	124293.4
RSD:	5.662%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	68758.91	137517.8	10.640	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	1	120518.1	120518.1	-3.037	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	5	585862.9	117172.6	-5.729	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	10	1215516	121551.6	-2.206	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	15.2	1897252	124819.2	0.423	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	20	2483627	124181.4	-0.090	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

5 beta-BHC



Expected retention time:	2.943 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

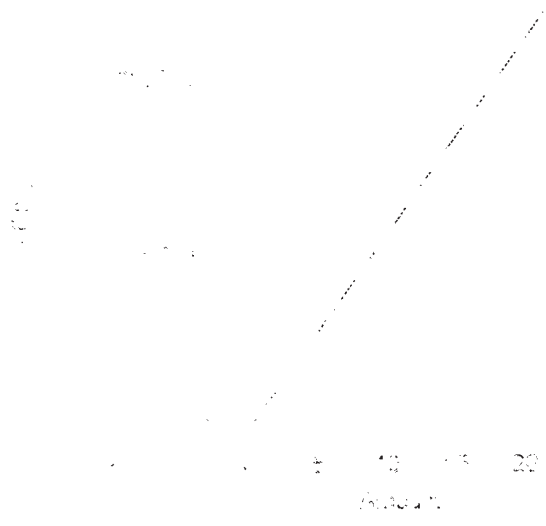
Y = 62417.02 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9698873
Average error:	10.675%
Average CF:	62417.02
RSD:	13.969%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	39012.75	78025.5	25.007	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	1	66797.92	66797.92	7.019	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	5	305087.8	61017.56	-2.242	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	10	564814.6	56481.46	-9.510	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	15.2	851230.2	56001.99	-10.278	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	20	1123554	56177.7	-9.996	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

6 Heptachlor



Expected retention time: 3.053 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

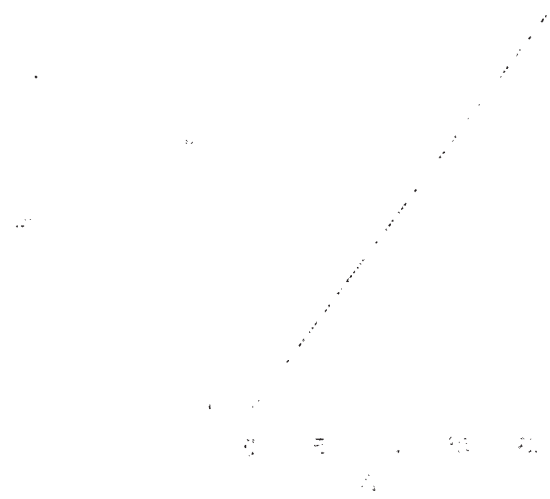
Single peak quantification by height

Y = 112140.9 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9972971
Average error: 5.809%
Average CF: 112140.9
RSD: 8.478%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	65216.11	130432.2	16.311	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	1	113393.5	113393.5	1.117	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	5	522129.9	104426	-6.880	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	10	1059539	105953.9	-5.517	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	15.4	1667947	108308.3	-3.418	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	20	2206625	110331.3	-1.614	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

7 delta-BHC



Expected retention time: 3.224 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

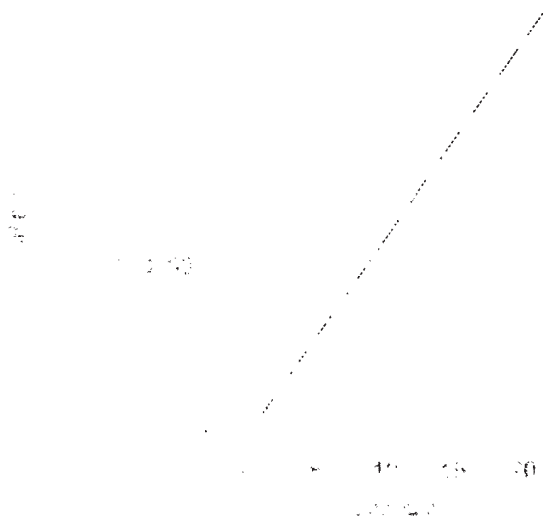
Single peak quantification by height

Y = 133684.2 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9976433
Average error: 5.105%
Average CF: 133684.2
RSD: 6.834%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	74360.47	148720.9	11.248	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	1	122631.3	122631.3	-8.268	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	5	639832.6	127966.5	-4.277	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	10	1317229	131722.9	-1.467	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	15.2	2005548	131944	-1.302	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	20	2782392	139119.6	4.066	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

8 Aldrin



Expected retention time: 3.357 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

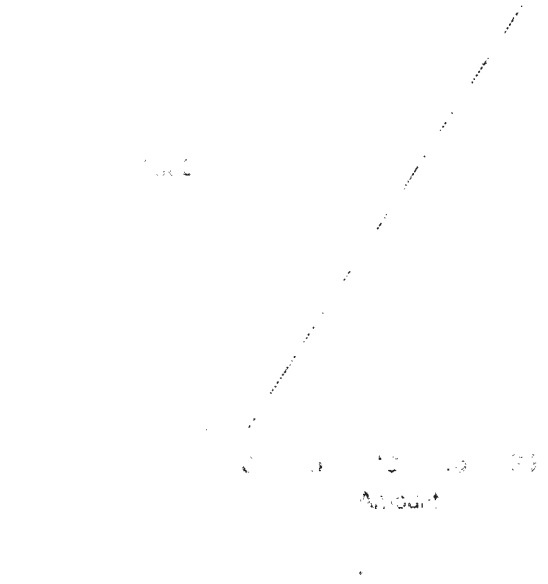
Single peak quantification by height

Y = 116152.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9987451
Average error: 4.268%
Average CF: 116152.3
RSD: 6.304%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	65513.04	131026.1	12.805	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	1	112605.2	112605.2	-3.054	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	5	560384.6	112076.9	-3.509	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	10	1139941	113994.1	-1.858	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	15.2	1726810	113605.9	-2.192	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	20	2272107	113605.4	-2.193	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

9 Telodrin



Expected retention time: 3.466 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 = 81462.04 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9766468
Average error: 9.077%
Average CF: 81462.04
RSD: 11.600%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	48433	96866	18.909	Manual	9/19/2018 5:36:58 AM
2	1	88240	88240	8.320	Manual	9/19/2018 5:38:26 AM
3	2.5	200958	80383.2	-1.324	Manual	9/19/2018 5:38:55 AM
4	5	386909	77381.8	-5.009	Manual	9/19/2018 5:39:28 AM
5	10	724257	72425.7	-11.093	Manual	9/19/2018 5:39:58 AM
6	20	1469511	73475.55	-9.804	Manual	9/19/2018 5:40:36 AM

10 Hept. epoxide

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

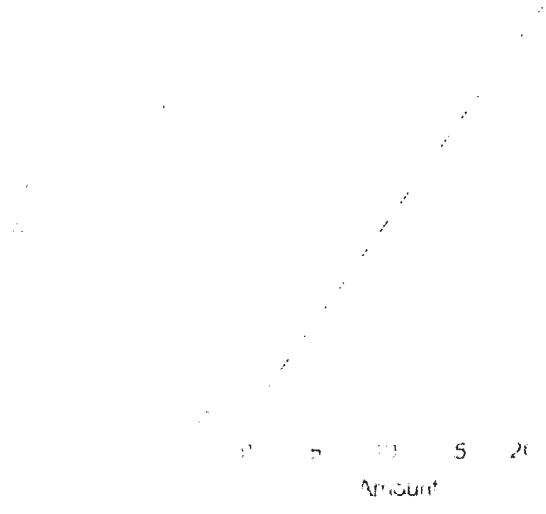
Y = 117016.8 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9943875
Average error:	7.032%
Average CF:	117016.8
RSD:	10.612%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	70808.48	141617	21.023	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	1	117101.5	117101.5	0.072	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	5	541431.6	108286.3	-7.461	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	10	1102474	110247.4	-5.785	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	15.2	1722469	113320.3	-3.159	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	20	2230570	111528.5	-4.690	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

11 g. Chlordane



Expected retention time:	4.06 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

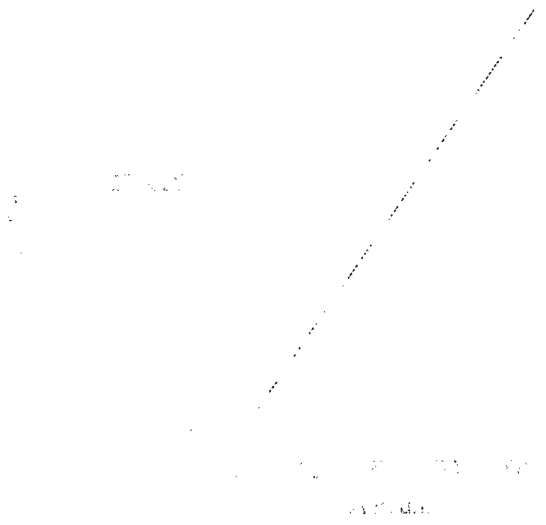
Y = 121723 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9984594
Average error:	5.504%
Average CF:	121723
RSD:	8.456%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	70803.25	141606.5	16.335	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	1	118458.7	118458.7	-2.682	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	5	565296	113059.2	-7.118	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	10	1148777	114877.7	-5.624	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	15.2	1830058	120398.6	-1.088	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	20	2438748	121937.4	0.176	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

12 o,p-DDE



Expected retention time: 4.067 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 = 79319.64 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.996978
Average error: 5.127%
Average CF: 79319.64
RSD: 7.052%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	90091	90091	13.580	Manual	9/19/2018 5:37:03 AM
2	2	161495	80747.5	1.800	Manual	9/19/2018 5:38:31 AM
3	5	384752	76950.4	-2.987	Manual	9/19/2018 5:39:00 AM
4	10	761164	76116.4	-4.038	Manual	9/19/2018 5:39:33 AM
5	20	1509445	75472.25	-4.850	Manual	9/19/2018 5:40:03 AM
6	40	3061611	76540.27	-3.504	Manual	9/19/2018 5:40:41 AM

13 a. Chlordane

Expected retention time: 4.141 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 = 124476.9 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9960822
Average error: 5.308%
Average CF: 124476.9
RSD: 8.021%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	72148.8	144297.6	15.923	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	1	123736.7	123736.7	-0.595	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	5	608832.8	121766.6	-2.177	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	10	1170368	117036.8	-5.977	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	15.4	1831196	118908.8	-4.473	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	20	2422293	121114.6	-2.701	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

14 Endosulfan I

Expected retention time:	4.187 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

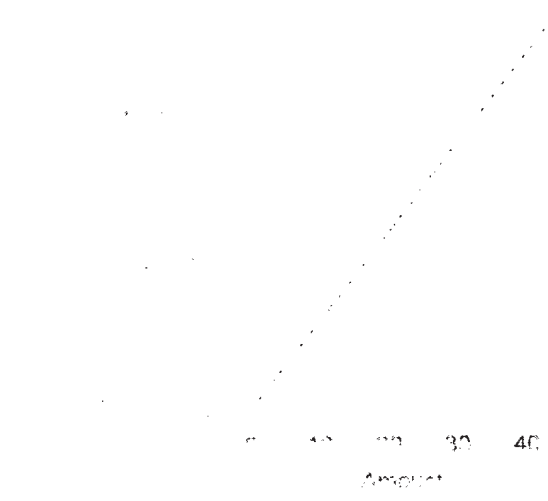
Y = 113513.3 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9916002
Average error:	6.809%
Average CF:	113513.3
RSD:	10.418%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	68323.14	136646.3	20.379	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNC
2	1	113566.9	113566.9	0.047	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNC
3	5	547529.9	109506	-3.530	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNC
4	10	1070464	107046.4	-5.697	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNC
5	15.2	1574577	103590.6	-8.741	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNC
6	20	2214469	110723.5	-2.458	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNC

15 4,4'-DDE



Expected retention time:	4.318 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

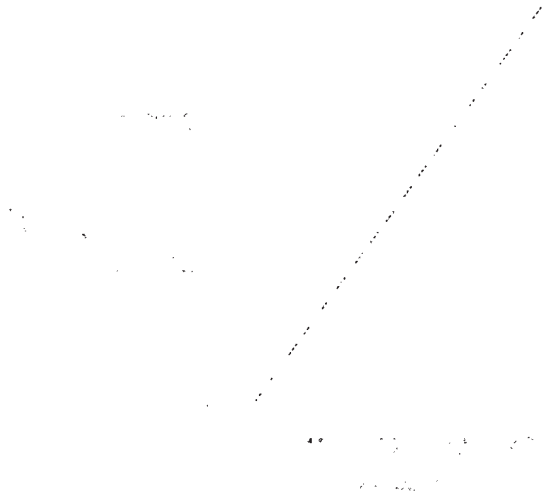
Y = 123092.9 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.993162
Average error:	4.576%
Average CF:	123092.9
RSD:	6.578%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	126654.6	126654.6	2.893	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNC
2	2	216997.3	108498.6	-11.856	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNC
3	10	1224225	122422.5	-0.545	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNC
4	20	2429197	121459.9	-1.327	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNC
5	30.4	3876355	127511.7	3.590	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNC
6	40	5280413	132010.3	7.244	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNC

16 Dieldrin



Expected retention time: 4.422 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

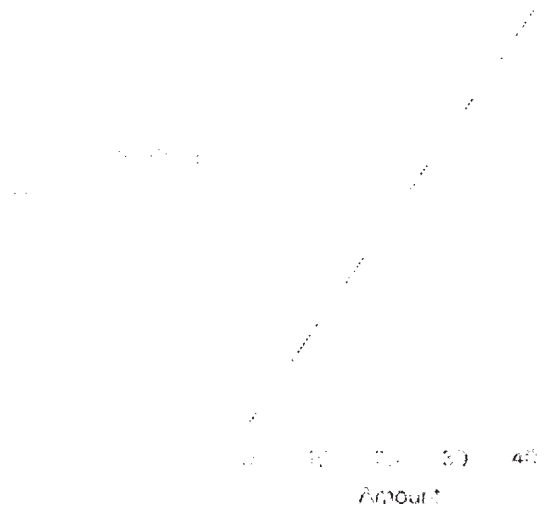
Single peak quantification by height

Y = 131294.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9988163
Average error: 3.504%
Average CF: 131294.3
RSD: 4.549%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	138904.3	138904.3	5.796	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	2	243761.9	121881	-7.170	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	10	1297960	129796	-1.141	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	20	2568081	128404	-2.201	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	30.6	4143441	135406.6	3.132	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	40	5334960	133374	1.584	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

17 o,p-DDD



Expected retention time: 4.482 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 = 75097.78 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.996052
Average error: 6.718%
Average CF: 75097.78
RSD: 8.869%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	87543	87543	16.572	Manual	9/19/2018 5:37:10 AM
2	2	155576	77788	3.582	Manual	9/19/2018 5:38:36 AM
3	5	350109	70021.8	-6.759	Manual	9/19/2018 5:39:08 AM
4	10	718116	71811.6	-4.376	Manual	9/19/2018 5:39:39 AM
5	20	1428449	71422.45	-4.894	Manual	9/19/2018 5:40:15 AM
6	40	2879994	71999.85	-4.125	Manual	9/19/2018 5:40:53 AM

18 Endrin

Expected retention time: 4.672 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 = 120621.4 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9997407
Average error: 4.736%
Average CF: 120621.4
RSD: 7.593%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	137757.7	137757.7	14.207	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	2	221671.7	110835.9	-8.113	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	10	1152930	115293	-4.417	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	20	2395555	119777.8	-0.699	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	30.4	3638888	119700.3	-0.764	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	40	4814548	120363.7	-0.214	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

19 o,p-DDT

Expected retention time: 4.703 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 = 71847.52 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9990857
Average error: 4.973%
Average CF: 71847.52
RSD: 7.100%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	81105	81105	12.885	Manual	9/19/2018 5:53:21 AM
2	2	145939	72969.5	1.562	Manual	9/19/2018 5:53:30 AM
3	5	332731	66546.2	-7.379	Manual	9/19/2018 5:53:37 AM
4	10	694896	69489.6	-3.282	Manual	9/19/2018 5:53:57 AM
5	20	1375736	68786.8	-4.260	Manual	9/19/2018 5:54:08 AM
6	40	2887522	72188.05	0.474	Manual	9/19/2018 5:55:59 AM

20 Kepone

Expected retention time (frozen): 4.75 minutes
Search window: 0 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 = 0.0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 1
Average error: 0.000%
Average CF: 0
RSD: 0.000%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	(0)	0	0.000	Manual	9/19/2018 5:11:53 AM
2	(10)	(0)	--	--	Manual	8/31/2018 11:39:26 AM
3	(25)	(0)	--	--	Manual	8/31/2018 11:39:27 AM
4	(50)	(0)	--	--	Manual	8/31/2018 11:39:27 AM
5	(100)	(0)	--	--	Manual	8/31/2018 11:39:30 AM
6	(200)	(0)	--	--	Manual	8/31/2018 11:39:36 AM

21 4,4'-DDD

Expected retention time: 4.776 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 = 102880.6 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.994655
Average error: 5.875%
Average CF: 102880.6
RSD: 6.978%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	112664	112664	9.509	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	2	188911.6	94455.8	-8.189	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	10	977433.1	97743.31	-4.993	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	20	1966189	98309.45	-4.443	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	30.4	3190574	104953.1	2.014	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	40	4366313	109157.8	6.101	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

22 Endosulfan II

Expected retention time: 4.882 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

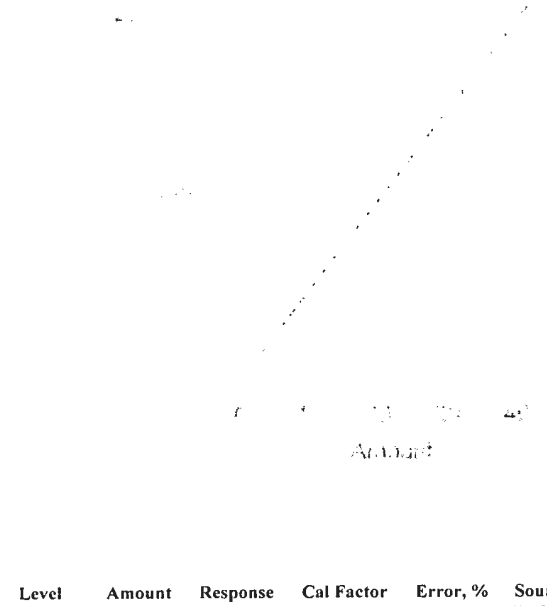
Single peak quantification by height

Y = 120350.9 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.997357
Average error: 4.416%
Average CF: 120350.9
RSD: 6.692%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	136293.5	136293.5	13.247	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BND
2	2	236955.7	118477.9	-1.556	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BND
3	10	1190468	119046.8	-1.084	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BND
4	20	2270664	113533.2	-5.665	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BND
5	30.6	3611266	118015.2	-1.941	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BND
6	40	4669556	116738.9	-3.001	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BND

23 4,4'-DDT



Expected retention time: 4.984 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

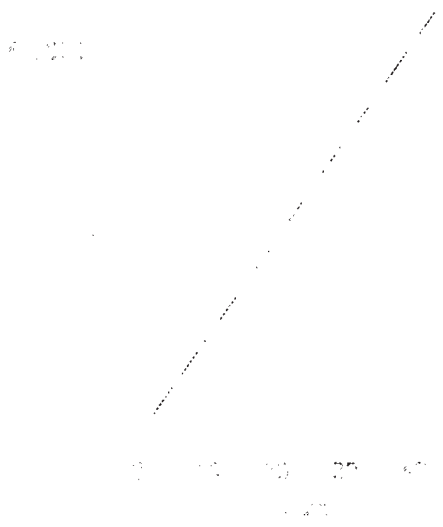
Single peak quantification by height

Y = 98857.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9935229
Average error: 4.767%
Average CF: 98857.5
RSD: 5.539%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	102160.2	102160.2	3.341	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BND
2	2	183042.2	91521.1	-7.421	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BND
3	10	947310.6	94731.06	-4.174	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BND
4	20	1923665	96183.25	-2.705	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BND
5	30.4	3137279	103200	4.393	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BND
6	40	4213976	105349.4	6.567	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BND

24 Endrin aldehyde



Expected retention time:	5.055 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 = 102885 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9950782
Average error:	5.722%
Average CF:	102885
RSD:	8.585%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	120545.6	120545.6	17.165	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	2	203270.4	101635.2	-1.215	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	10	997258.3	99725.83	-3.071	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	20	1979169	98958.45	-3.816	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	30.4	2926168	96255.53	-6.444	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	40	4007580	100189.5	-2.620	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

25 Endo. sulfate

Expected retention time:	5.205 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 = 112747.4 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9970766
Average error:	4.822%
Average CF:	112747.4
RSD:	7.239%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	129056.9	129056.9	14.466	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNE
2	2	224612.7	112306.4	-0.391	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNE
3	10	1088337	108833.7	-3.471	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNE
4	20	2167060	108353	-3.898	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNE
5	30.6	3292719	107605.2	-4.561	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNE
6	40	4413161	110329	-2.145	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNE

26 Methoxychlor

Expected retention time: 5.483 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 = 49273.52 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9986891
Average error: 4.248%
Average CF: 49273.52
RSD: 6.588%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	264069.4	52813.88	7.185	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.
2	10	432212.1	43221.21	-12.283	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.
3	50	2452296	49045.92	-0.462	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.
4	100	5039560	50395.6	2.277	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.
5	152	7510755	49412.86	0.283	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.
6	200	1.015033E+07	50751.65	3.000	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.

27 Endrin ketone

Expected retention time: 5.638 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

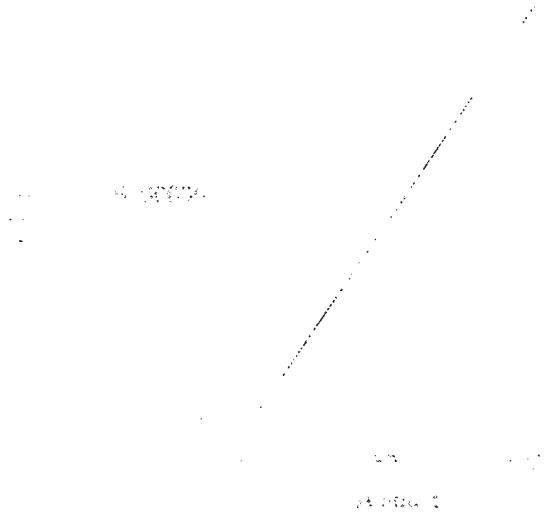
Single peak quantification by height

Y = 134852.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9970497
Average error: 4.719%
Average CF: 134852.3
RSD: 6.994%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	153943.3	153943.3	14.157	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BNC
2	2	259890.1	129945	-3.639	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BNC
3	10	1317551	131755.1	-2.297	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BNC
4	20	2657419	132871	-1.469	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BNC
5	30.4	3985623	131106	-2.778	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BNC
6	40	5179730	129493.3	-3.974	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BNC

28 Mirex



Expected retention time: 5.728 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

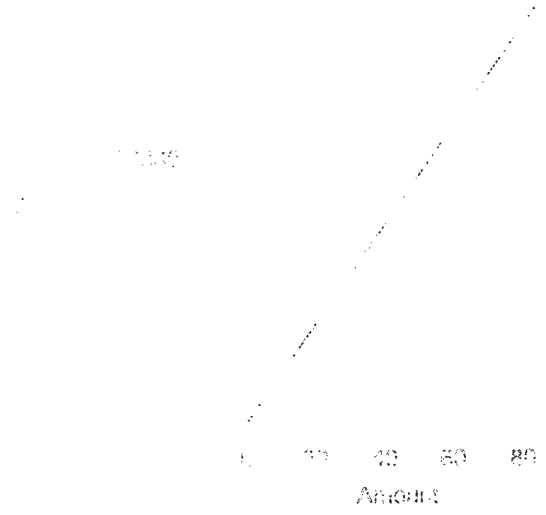
Single peak quantification by height

Y = 87177.31 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9936135
Average error: 7.568%
Average CF: 87177.31
RSD: 9.538%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	255396	102158.4	17.185	Manual	9/19/2018 5:38:10 AM
2	5	459949	91989.8	5.520	Manual	9/19/2018 5:38:40 AM
3	12.5	1026860	82148.8	-5.768	Manual	9/19/2018 5:39:14 AM
4	25	2054786	82191.44	-5.719	Manual	9/19/2018 5:39:44 AM
5	50	4100185	82003.7	-5.935	Manual	9/19/2018 5:40:20 AM
6	100	8257175	82571.75	-5.283	Manual	9/19/2018 5:41:03 AM

29 DCB



Expected retention time: 6.386 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 = 94667.85 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9928138
Average error: 7.015%
Average CF: 94667.85
RSD: 10.410%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	229178.6	114589.3	21.044	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.010.BND
2	4	367090.7	91772.67	-3.058	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.011.BND
3	20	1821594	91079.7	-3.790	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.012.BND
4	40	3676022	91900.55	-2.923	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.013.BND
5	61	5376588	88140.79	-6.895	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.014.BND
6	80	7241928	90524.1	-4.377	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014.015.BND

6D
INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826103B

GC Column (2) : STXCLPII ID: 0.32 (mm) ICAL 06PEST1826103B

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	RT OF STANDARDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4 LEVEL 5 LEVEL 6	MIDPOINT RT	RT WINDOW FROM	RT WINDOW TO
Tetrachloro-m-xylene	2.62	2.62	2.60	2.64
alpha-BHC	3.02	3.02	3.00	3.04
Hcb	3.11	3.11	3.09	3.13
gamma-BHC (Lindane)	3.35	3.35	3.33	3.37
beta-BHC	3.61	3.61	3.59	3.63
delta-BHC	3.85	3.85	3.83	3.87
Heptachlor	3.92	3.92	3.90	3.94
Aldrin	4.20	4.20	4.18	4.22
Telodrin	4.31	4.31	4.29	4.33
Heptachlor epoxide	4.57	4.57	4.55	4.59
o,p-DDE	4.70	4.70	4.68	4.72
gamma-Chlordane	4.82	4.82	4.80	4.84
alpha-Chlordane	4.86	4.86	4.84	4.88
Endosulfan I	4.90	4.90	4.88	4.92
4,4'-DDE	4.97	4.97	4.95	4.99
o,p-DDD	5.05	5.05	5.03	5.07
Dieldrin	5.09	5.09	5.07	5.11
Endrin	5.27	5.27	5.25	5.29
o,p-DDT	5.28	5.28	5.26	5.30
4,4'-DDD	5.36	5.36	5.34	5.38
Endosulfan II	5.46	5.46	5.44	5.48
Endrin aldehyde	5.54	5.54	5.52	5.56
4,4'-DDT	5.58	5.58	5.56	5.60
Endosulfan sulfate	5.74	5.74	5.72	5.76
Methoxychlor	5.89	5.89	5.87	5.91
Endrin ketone	6.05	6.05	6.03	6.07
Mirex	6.39	6.39	6.37	6.41
Decachlorobiphenyl	7.06	7.06	7.03	7.09

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST1826103B.003.RAW analyzed on 10/10/2018 12:2

6E

INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826103B

GC Column (2) : STXCLPII ID: 0.32 (mm) ICAL 06PEST1826103B

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	CALIBRATION FACTORS							%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	MEAN	
Tetrachloro-m-xylene	2.27E+05	2.01E+05	2.02E+05	2.04E+05	2.01E+05	2.10E+05	2.07E+05	5
alpha-BHC	3.44E+05	3.01E+05	3.16E+05	3.31E+05	3.21E+05	3.23E+05	3.23E+05	4
Hcb	2.86E+05	2.54E+05	2.44E+05	2.38E+05	2.27E+05	2.22E+05	2.45E+05	10
gamma-BHC (Lindane)	3.37E+05	2.95E+05	2.95E+05	3.08E+05	3.07E+05	3.20E+05	3.10E+05	5
beta-BHC	1.84E+05	1.53E+05	1.49E+05	1.44E+05	1.45E+05	1.48E+05	1.54E+05	10
delta-BHC	3.81E+05	3.40E+05	3.47E+05	3.65E+05	3.49E+05	3.71E+05	3.59E+05	4
Heptachlor	3.66E+05	3.20E+05	3.16E+05	3.13E+05	2.99E+05	3.12E+05	3.21E+05	7
Aldrin	3.42E+05	3.01E+05	3.06E+05	3.06E+05	3.19E+05	3.18E+05	3.15E+05	5
Telodrin	2.22E+05	2.10E+05	2.02E+05	1.95E+05	1.94E+05	1.88E+05	2.02E+05	6
Heptachlor epoxide	3.38E+05	2.93E+05	2.85E+05	2.86E+05	2.86E+05	2.83E+05	2.95E+05	7
o,p-DDE	1.93E+05	1.85E+05	1.73E+05	1.76E+05	1.80E+05	1.73E+05	1.80E+05	4
gamma-Chlordane	3.29E+05	2.86E+05	3.03E+05	2.91E+05	2.87E+05	3.01E+05	3.00E+05	5
alpha-Chlordane	3.27E+05	2.64E+05	2.94E+05	2.90E+05	2.81E+05	2.84E+05	2.90E+05	7
Endosulfan I	3.22E+05	2.67E+05	2.76E+05	2.77E+05	2.78E+05	2.77E+05	2.83E+05	7
4,4'-DDE	2.97E+05	2.59E+05	2.90E+05	2.73E+05	2.94E+05	3.01E+05	2.86E+05	6
o,p-DDD	1.77E+05	1.64E+05	1.55E+05	1.54E+05	1.60E+05	1.59E+05	1.62E+05	5
Dieldrin	3.33E+05	2.76E+05	3.06E+05	3.01E+05	2.98E+05	3.15E+05	3.05E+05	6
Endrin	2.66E+05	2.29E+05	2.58E+05	2.48E+05	2.51E+05	2.57E+05	2.51E+05	5
o,p-DDT	1.70E+05	1.60E+05	1.52E+05	1.66E+05	1.65E+05	1.67E+05	1.63E+05	4
4,4'-DDD	2.38E+05	2.09E+05	2.35E+05	2.31E+05	2.32E+05	2.38E+05	2.30E+05	5
Endosulfan II	2.92E+05	2.54E+05	2.65E+05	2.55E+05	2.57E+05	2.67E+05	2.65E+05	5
Endrin aldehyde	2.55E+05	2.17E+05	2.23E+05	2.11E+05	2.12E+05	2.15E+05	2.22E+05	7
4,4'-DDT	2.30E+05	2.15E+05	2.17E+05	2.27E+05	2.30E+05	2.36E+05	2.26E+05	3
Endosulfan sulfate	2.72E+05	2.40E+05	2.41E+05	2.34E+05	2.33E+05	2.41E+05	2.44E+05	6
Methoxychlor	9.99E+04	9.06E+04	1.02E+05	1.05E+05	1.03E+05	1.10E+05	1.02E+05	6
Endrin ketone	2.96E+05	2.60E+05	2.73E+05	2.58E+05	2.62E+05	2.65E+05	2.69E+05	5
Mirex	1.85E+05	1.73E+05	1.53E+05	1.58E+05	1.52E+05	1.53E+05	1.62E+05	9
Decachlorobiphenyl	1.71E+05	1.47E+05	1.47E+05	1.39E+05	1.41E+05	1.43E+05	1.48E+05	8

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826103B

GC Column (2) : STXCLPII ID: 0.32 (mm) ICAL 06PEST1826103B

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
Aroclor-1016	1	2.96	2.93	2.99	3675	3675	1	200	735076	.00
	2	3.32	3.29	3.35	5069	5069	1	200	1013832	.00
	3	3.53	3.50	3.56	2634	2634	1	200	526739	.00
	4	3.84	3.81	3.87	10403	10403	1	200	2080641	.00
	5	3.87	3.84	3.90	6301	6301	1	200	1260206	.00
	6	3.97	3.94	4.00	4990	4990	1	200	998069	.00
Aroclor-1221	1	2.79	2.76	2.82	1551	1551	1	200	310128	.00
	2	2.87	2.84	2.90	1528	1528	1	200	305510	.00
	3	2.96	2.93	2.99	5041	5041	1	200	1008148	.00
Aroclor-1248	1	3.84	3.81	3.87	5139	5139	1	200	1027865	.00
	2	4.06	4.03	4.09	6396	6396	1	200	1279198	.00
	3	4.23	4.20	4.26	7294	7294	1	200	1458766	.00
	4	4.64	4.61	4.67	8257	8257	1	200	1651478	.00
	5	4.75	4.72	4.78	7489	7489	1	200	1497826	.00
	6	5.05	5.02	5.08	4913	4913	1	200	982652	.00
Aroclor-1254	1	4.58	4.55	4.61	9619	9619	1	250	2404870	.00
	2	4.76	4.73	4.79	14388	14388	1	250	3596959	.00
	3	5.05	5.02	5.08	17105	17105	1	250	4276134	.00
	4	5.28	5.25	5.31	13052	13052	1	250	3263028	.00
	5	5.48	5.45	5.51	7741	7741	1	250	1935204	.00
	6	5.59	5.56	5.62	13400	13400	1	250	3350084	.00
Aroclor-1260	1	5.18	5.15	5.21	12057	12057	1	200	2411392	.00
	2	5.41	5.38	5.44	5197	5197	1	200	1039451	.00
	3	5.59	5.56	5.62	16412	16412	1	200	3282484	.00
	4	5.82	5.79	5.85	9784	9784	1	200	1956743	.00
	5	6.03	6.00	6.06	20726	20726	1	200	4145277	.00
	6	6.23	6.20	6.26	12778	12778	1	200	2555580	.00

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0

6F

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826103B

GC Column (2) : STXCLPII ID: 0.32 (mm) ICAL 06PEST1826103B

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
Chlordane	1	3.72	3.69	3.75	8106	7952	1	12.5	101329	4.36
					7336		2	25	183412	
					8299		3	50	414967	
					8020		4	100	801975	
					8164		5	200	1632739	
					7784		6	500	3891862	
	2	4.60	4.57	4.63	7546	7548	1	12.5	94319	6.10
					6877		2	25	171920	
					8295		3	50	414728	
					7667		4	100	766712	
					7549		5	200	1509872	
					7352		6	500	3676000	
	3	4.82	4.79	4.85	32434	32704	1	12.5	405426	7.49
					27931		2	25	698275	
					34176		3	50	1708781	
					34253		4	100	3425322	
					34222		5	200	6844343	
					33206		6	500	16602910	
	4	4.86	4.83	4.89	20918	21235	1	12.5	261477	5.78
					18945		2	25	473632	
					22447		3	50	1122349	
					21901		4	100	2190052	
					21595		5	200	4318928	
					21605		6	500	10802560	
	5	5.51	5.48	5.54	7887	8104	1	12.5	98582	5.77
					7267		2	25	181672	
					8561		3	50	428041	
					8389		4	100	838942	
					8311		5	200	1662252	
					8207		6	500	4103429	

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0

6F
INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Calibration File: 06PEST1826103B

GC Column (2) : STXCLPII ID: 0.32 (mm) ICAL 06PEST1826103B

ICAL Date(s) Analyzed: 10/10/2018 10/10/2018

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	AVERAGE CF	LEVEL	AMOUNT	PEAK HEIGHT	%RSD
Toxaphene	1	5.50	5.47	5.53	3491	3824	1	50	174568	5.08
					3876		2	100	387603	
					3769		3	200	753751	
					4083		4	500	2041286	
					3899		5	1000	3898536	
					3829		6	2000	7657287	
	2	5.68	5.65	5.71	4048	4211	1	50	202393	2.66
					4252		2	100	425235	
					4148		3	200	829559	
					4383		4	500	2191495	
					4237		5	1000	4236812	
					4197		6	2000	8393317	
	3	5.73	5.70	5.76	3323	3403	1	50	166144	2.45
					3383		2	100	338294	
					3331		3	200	666297	
					3449		4	500	1724494	
					3545		5	1000	3545274	
					3384		6	2000	6767374	
	4	5.97	5.94	6.00	2450	2638	1	50	122498	4.94
					2550		2	100	254955	
					2579		3	200	515756	
					2727		4	500	1363458	
					2760		5	1000	2760028	
					2762		6	2000	5523994	
	5	6.06	6.03	6.09	3904	4085	1	50	195211	3.81
					3981		2	100	398097	
					4040		3	200	807960	
					4354		4	500	2176915	
					4143		5	1000	4143089	
					4086		6	2000	8172652	

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0

File Name: V:\CP6\06pest1826103b.CAL
Version: 6

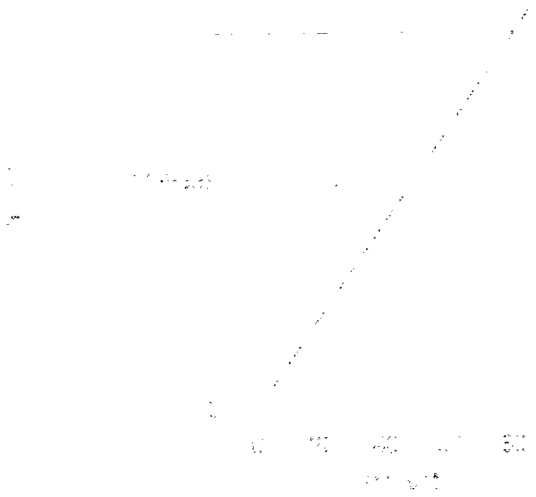
Creator:
Description:
Reason for change:

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: 2.621 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

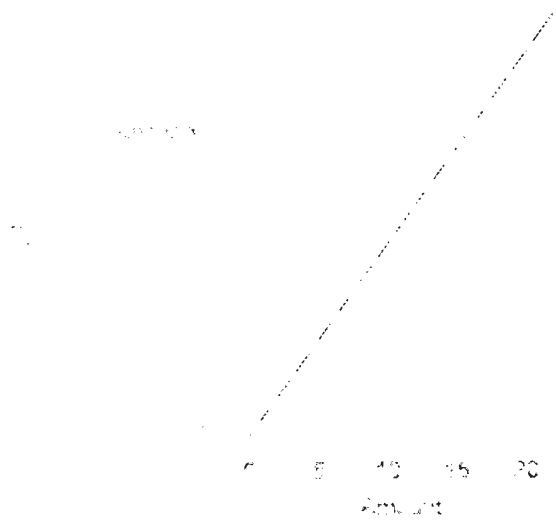
Single peak quantification by height

Y = 207470.1 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9989824
Average error: 3.503%
Average CF: 207470.1
RSD: 4.919%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	454383.5	227191.8	9.506	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BI
2	4	802284.9	200571.2	-3.325	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BI
3	20	4046603	202330.2	-2.477	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BI
4	40	8171645	204291.1	-1.532	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BI
5	61	1.225406E+07	200886.2	-3.173	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BI
6	80	1.6764E+07	209550	1.003	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BI

2 alpha-BHC



Expected retention time: 3.024 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

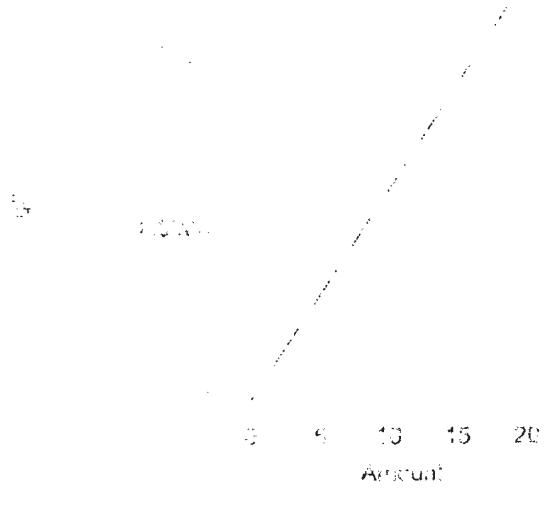
Single peak quantification by height

Y = 322571.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9997179
Average error: 3.109%
Average CF: 322571.3
RSD: 4.448%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	172040.3	344080.6	6.668	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	301293.3	301293.3	-6.596	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1579023	315804.6	-2.098	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	3305612	330561.2	2.477	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.2	4872045	320529.3	-0.633	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	6463176	323158.8	0.182	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

3 HCB



Expected retention time: 3.109 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

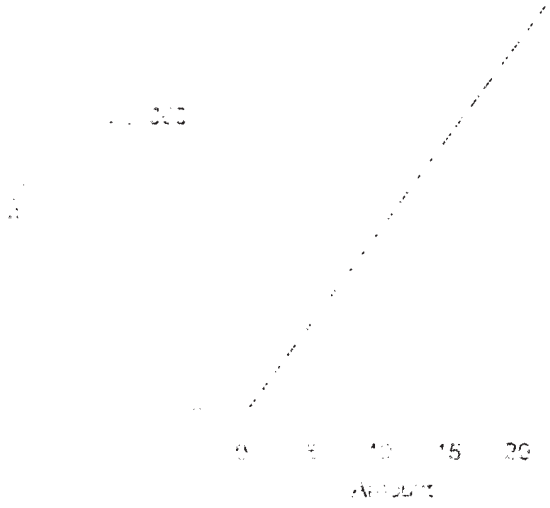
Single peak quantification by height

Y = 245004.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9809339
Average error: 6.793%
Average CF: 245004.5
RSD: 9.510%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	143103	286206	16.817	Manual	9/19/2018 5:45:18 AM
2	1	253733	253733	3.563	Manual	9/19/2018 5:46:03 AM
3	2.5	609678	243871.2	-0.463	Manual	9/19/2018 5:47:03 AM
4	5	1190838	238167.6	-2.791	Manual	9/19/2018 5:47:36 AM
5	10	2265343	226534.3	-7.539	Manual	9/19/2018 5:48:42 AM
6	20	4430296	221514.8	-9.587	Manual	9/19/2018 5:49:52 AM

4 gamma-BHC



Expected retention time:	3.353 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 = 310296.8 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9985064
Average error:	3.898%
Average CF:	310296.8
RSD:	5.158%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	168499.2	336998.4	8.605	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	295401.1	295401.1	-4.800	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1474895	294979	-4.937	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	3079644	307964.4	-0.752	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.2	4659612	306553.4	-1.206	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	6397693	319884.7	3.090	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

5 beta-BHC

Expected retention time:	3.61 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

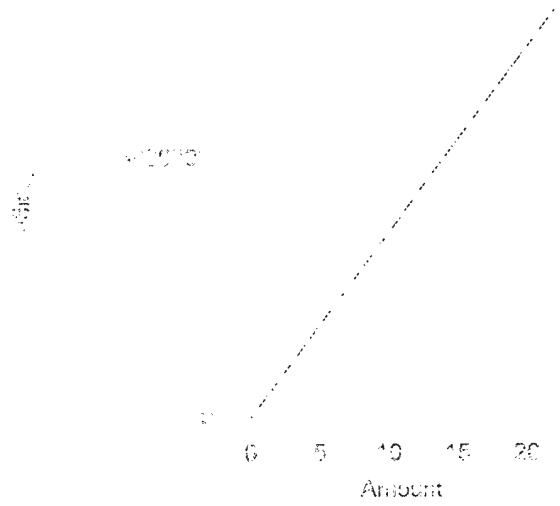
Y = 153935.8 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9939207
Average error:	6.593%
Average CF:	153935.8
RSD:	9.887%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	92191.66	184383.3	19.779	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	152648.5	152648.5	-0.836	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	744423.7	148884.7	-3.281	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	1442488	144248.8	-6.293	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.2	2203759	144984.1	-5.815	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	2969309	148465.5	-3.554	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

6 delta-BHC



Expected retention time: 3.853 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

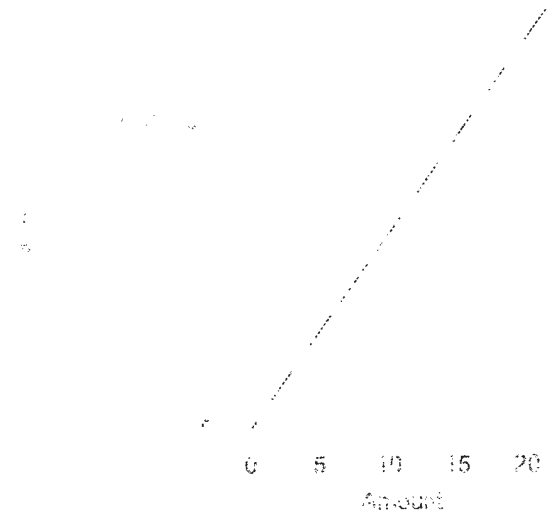
Single peak quantification by height

Y = 358765.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9978229
Average error: 3.763%
Average CF: 358765.5
RSD: 4.432%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	190386.2	380772.4	6.134	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	340156.6	340156.6	-5.187	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1732752	346550.4	-3.405	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	3648544	364854.4	1.697	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.2	5306217	349093.2	-2.696	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	7423318	371165.9	3.456	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

7 Heptachlor



Expected retention time: 3.915 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

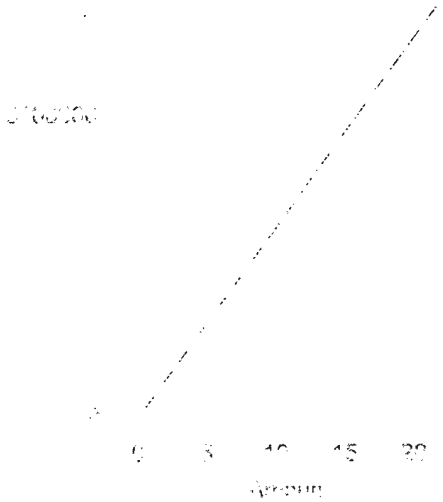
Single peak quantification by height

Y = 320911.9 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9948356
Average error: 4.653%
Average CF: 320911.9
RSD: 7.178%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	182853.4	365706.8	13.959	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	320201.6	320201.6	-0.221	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1577667	315533.4	-1.676	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	3130800	313080	-2.441	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.4	4607625	299196.4	-6.767	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	6235068	311753.4	-2.854	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

8 Aldrin



Expected retention time: 4.203 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

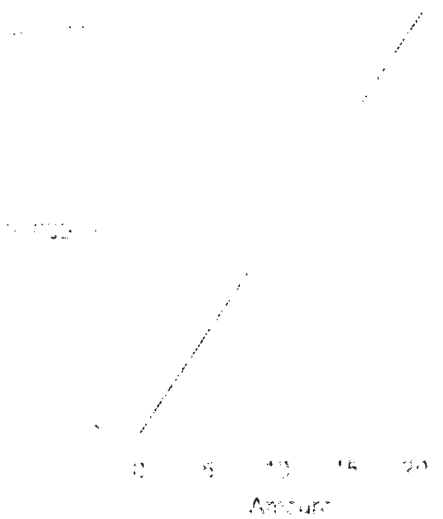
Single peak quantification by height

Y = 315309.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9993886
Average error: 3.547%
Average CF: 315309.8
RSD: 4.738%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	170852	341704	8.371	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	300658.1	300658.1	-4.647	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1530055	306011	-2.949	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	3057128	305712.8	-3.044	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.2	4854067	319346.5	1.280	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	6368524	318426.2	0.988	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

9 Telodrin



Expected retention time: 4.307 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

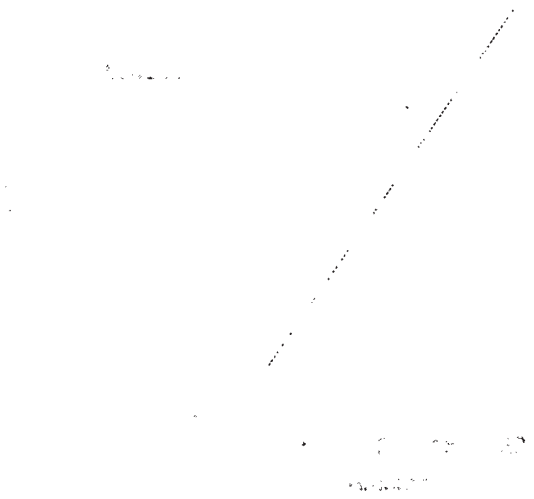
Single peak quantification by height

Y = 201744.7 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9917321
Average error: 4.656%
Average CF: 201744.7
RSD: 6.083%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.5	110761	221522	9.803	Manual	9/19/2018 5:45:22 AM
2	1	210146	210146	4.164	Manual	9/19/2018 5:46:07 AM
3	2.5	504327	201730.8	-0.007	Manual	9/19/2018 5:47:07 AM
4	5	975282	195056.4	-3.315	Manual	9/19/2018 5:47:42 AM
5	10	1938231	193823.1	-3.927	Manual	9/19/2018 5:48:48 AM
6	20	3763798	188189.9	-6.719	Manual	9/19/2018 5:49:57 AM

10 Hept. epoxide



Expected retention time: 4.57 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

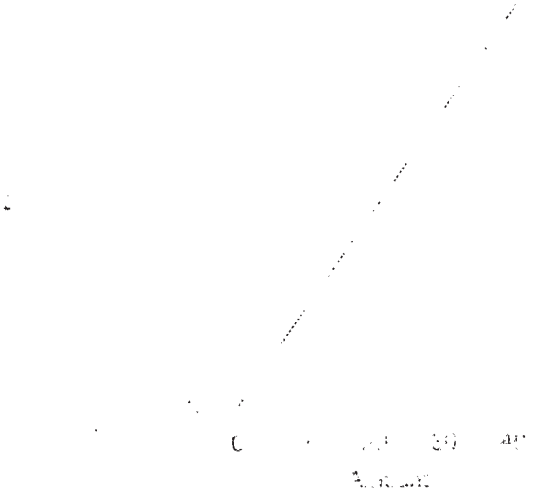
Single peak quantification by height

Y = 295089.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9963989
Average error: 4.810%
Average CF: 295089.3
RSD: 7.164%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	168835.2	337670.4	14.430	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	293044.5	293044.5	-0.693	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1424130	284826	-3.478	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	2864291	286429.1	-2.935	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.2	4340246	285542.5	-3.235	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	5660468	283023.4	-4.089	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

11 o,p-DDE



Expected retention time: 4.695 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

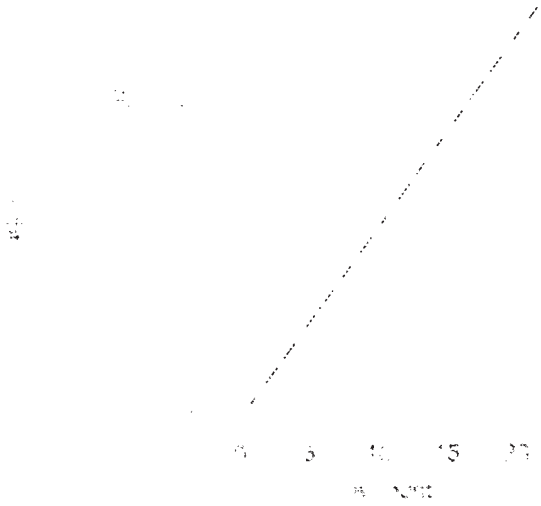
Single peak quantification by height

Y = 180136.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9973912
Average error: 3.359%
Average CF: 180136.3
RSD: 4.401%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	193497	193497	7.417	Manual	9/19/2018 5:45:32 AM
2	2	369179	184589.5	2.472	Manual	9/19/2018 5:46:14 AM
3	5	866518	173303.6	-3.793	Manual	9/19/2018 5:47:13 AM
4	10	1760788	176078.8	-2.252	Manual	9/19/2018 5:47:48 AM
5	20	3609457	180472.8	0.187	Manual	9/19/2018 5:49:01 AM
6	40	6915041	172876	-4.030	Manual	9/19/2018 5:50:03 AM

12 g. Chlordane



Expected retention time: 4.824 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

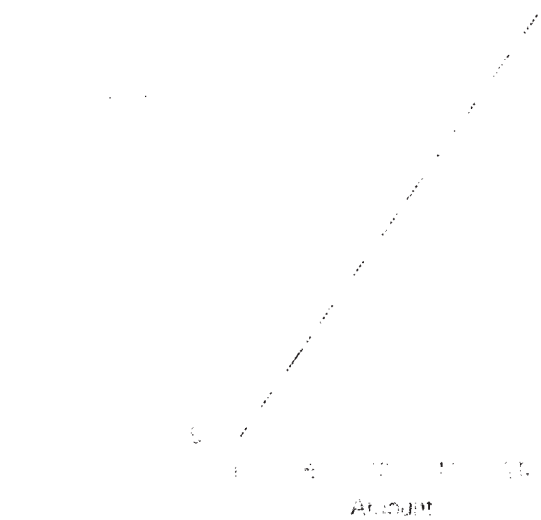
Single peak quantification by height

Y = 299587.1 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9982429
Average error: 3.900%
Average CF: 299587.1
RSD: 5.446%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	164696.5	329393	9.949	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	285906.3	285906.3	-4.567	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1516134	303226.8	1.215	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	2912708	291270.8	-2.776	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.2	4355334	286535.1	-4.357	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	6023812	301190.6	0.535	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

13 a. Chlordane



Expected retention time: 4.863 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

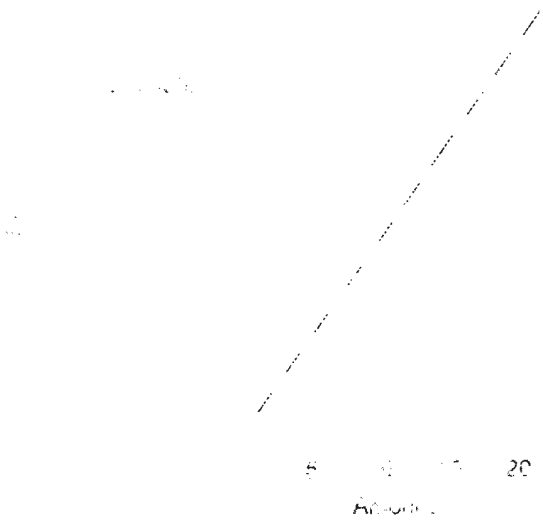
Single peak quantification by height

Y = 290140.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9986185
Average error: 4.744%
Average CF: 290140.8
RSD: 7.237%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	163619.8	327239.6	12.787	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	263772.8	263772.8	-9.088	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1471389	294277.8	1.426	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	2901961	290196.1	0.019	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.4	4330793	281220.3	-3.075	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	5682759	284137.9	-2.069	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

14 Endosulfan I



Expected retention time: 4.895 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

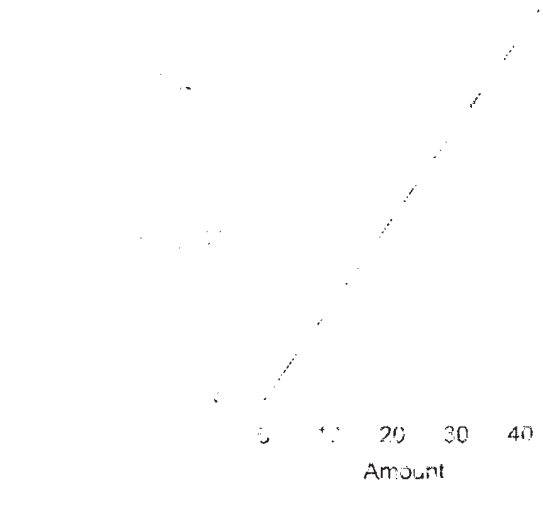
Single peak quantification by height

Y = 282693.3 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.998978
Average error: 4.635%
Average CF: 282693.3
RSD: 6.965%

Level	Amount	Response	Cal Factor	Error, %	Source
1	0.5	161001.7	322003.4	13.906	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	1	266843.6	266843.6	-5.607	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	5	1377742	275548.4	-2.527	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	10	2767552	276755.2	-2.101	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	15.2	4231317	278376.1	-1.527	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	20	5532662	276633.1	-2.144	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

15 4,4'-DDE



Expected retention time: 4.974 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

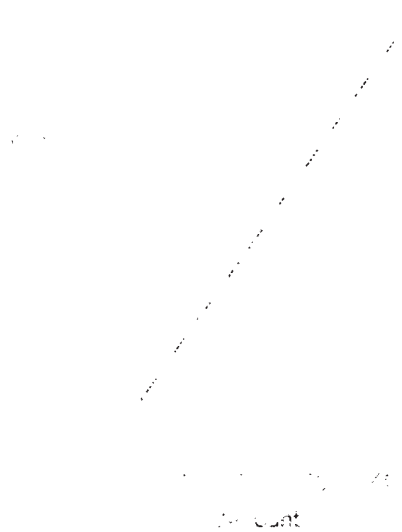
Single peak quantification by height

Y = 285765.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9955163
Average error: 4.609%
Average CF: 285765.5
RSD: 5.728%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	297243.2	297243.2	4.016	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010
2	2	517449.7	258724.8	-9.463	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011
3	10	2901887	290188.7	1.548	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012
4	20	5465818	273290.9	-4.365	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013
5	30.4	8943618	294198	2.951	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014
6	40	1.20379E+07	300947.5	5.313	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015

16 o,p-DDD



Expected retention time: 5.05 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

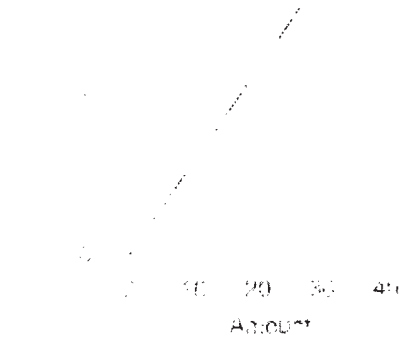
Single peak quantification by height

Y = 161506.7 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9993771
Average error: 3.632%
Average CF: 161506.7
RSD: 5.049%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	176620	176620	9.358	Manual	9/19/2018 5:45:36 AM
2	2	327985	163992.5	1.539	Manual	9/19/2018 5:46:18 AM
3	5	777282	155456.4	-3.746	Manual	9/19/2018 5:47:17 AM
4	10	1543286	154328.6	-4.444	Manual	9/19/2018 5:47:53 AM
5	20	3192320	159616	-1.171	Manual	9/19/2018 5:49:04 AM
6	40	6361076	159026.9	-1.535	Manual	9/19/2018 5:50:08 AM

17 Dieldrin



Expected retention time: 5.093 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 = 304916.8 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9982492
Average error: 4.369%
Average CF: 304916.8
RSD: 6.243%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	333435.8	333435.8	9.353	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
2	2	552082.4	276041.2	-9.470	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
3	10	3064923	306492.3	0.517	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
4	20	6012297	300614.8	-1.411	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
5	30.6	9122671	298126.5	-2.227	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
6	40	1.259162E+07	314790.5	3.238	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01

18 Endrin

Expected retention time: 5.268 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

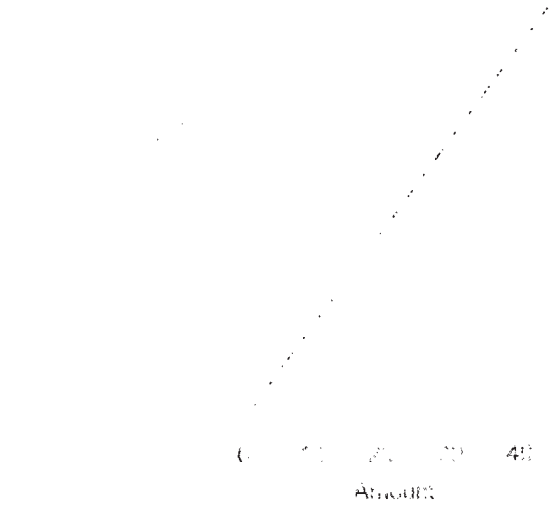
Single peak quantification by height

Y = 251272.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9992857
Average error: 3.462%
Average CF: 251272.5
RSD: 4.966%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	265534.4	265534.4	5.676	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
2	2	458148.6	229074.3	-8.834	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
3	10	2577050	257705	2.560	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
4	20	4957733	247886.7	-1.347	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
5	30.4	7622979	250755.9	-0.206	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
6	40	1.026714E+07	256678.5	2.151	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01

19 o,p-DDT



Expected retention time: 5.28 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

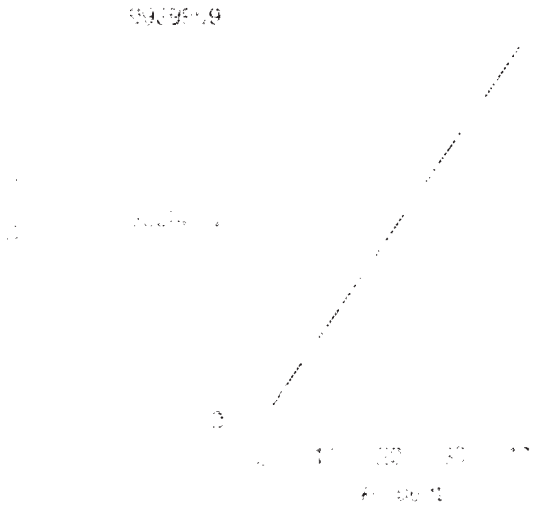
Single peak quantification by height

Y = 163130.4 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.999118
Average error: 2.946%
Average CF: 163130.4
RSD: 3.847%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1	169674	169674	4.011	Manual	9/19/2018 5:45:43 AM
2	2	319195	159597.5	-2.166	Manual	9/19/2018 5:46:23 AM
3	5	761225	152245	-6.673	Manual	9/19/2018 5:47:23 AM
4	10	1656332	165633.2	1.534	Manual	9/19/2018 5:47:59 AM
5	20	3294447	164722.3	0.976	Manual	9/19/2018 5:49:14 AM
6	40	6676417	166910.4	2.317	Manual	9/19/2018 5:50:13 AM

20 4,4'-DDD



Expected retention time:	5.361 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 = 230430.7 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9984449
Average error:	3.136%
Average CF:	230430.7
RSD:	4.813%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	238244.3	238244.3	3.391	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	2	417506.8	208753.4	-9.407	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	10	2345602	234560.2	1.792	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	20	4611210	230560.5	0.056	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	30.4	7053117	232010.4	0.686	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	40	9538207	238455.2	3.482	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

21 Kepone

Expected retention time (frozen):	5.39 minutes
Search window:	0 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 = 0.0

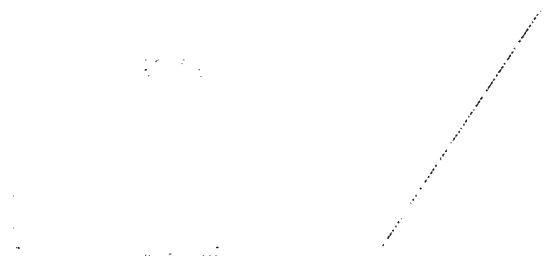
Average CF fit with equal weighting, forced to origin

Coefficient of determination:	1
Average error:	0.000%
Average CF:	0
RSD:	0.000%

Amount

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	5	(0)	0	0.000	Manual	9/19/2018 5:12:49 AM
2	(10)	(0)	--	--	Manual	8/31/2018 12:41:12 PM
3	(25)	(0)	--	--	Manual	8/31/2018 12:41:13 PM
4	(50)	(0)	--	--	Manual	8/31/2018 12:41:13 PM
5	(100)	(0)	--	--	Manual	8/31/2018 12:41:14 PM
6	(200)	(0)	--	--	Manual	8/31/2018 12:41:15 PM

22 Endosulfan II



Expected retention time: 5.462 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 = 264969.2 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9988121
Average error: 3.640%
Average CF: 264969.2
RSD: 5.394%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	292068.9	292068.9	10.228	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
2	2	507446	253723	-4.244	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
3	10	2649139	264913.9	-0.021	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
4	20	5105272	255263.6	-3.663	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
5	30.6	7865433	257040.3	-2.992	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
6	40	1.067221E+07	266805.3	0.693	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01

23 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 = 222099.7 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9959856
Average error: 5.014%
Average CF: 222099.7
RSD: 7.417%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	254599.3	254599.3	14.633	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	2	433634.5	216817.3	-2.378	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	10	2230057	223005.7	0.408	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	20	4229560	211478	-4.782	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	30.4	6433397	211624.9	-4.716	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	40	8602924	215073.1	-3.164	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

24 4,4'-DDT

Expected retention time:	5.582 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

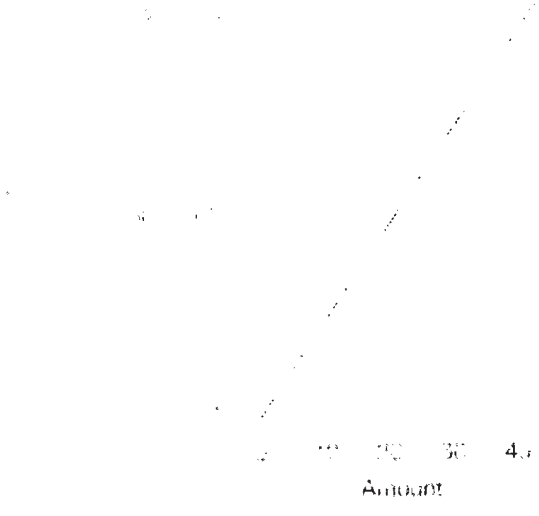
Y = 225846.9 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9974084
Average error:	2.796%
Average CF:	225846.9
RSD:	3.493%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	229605.4	229605.4	1.664	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	2	430647.5	215323.8	-4.659	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	10	2174234	217423.4	-3.730	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	20	4540817	227040.8	0.529	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	30.4	6992310	230010.2	1.843	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	40	9427112	235677.8	4.353	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

25 Endo. sulfate



Expected retention time:	5.743 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

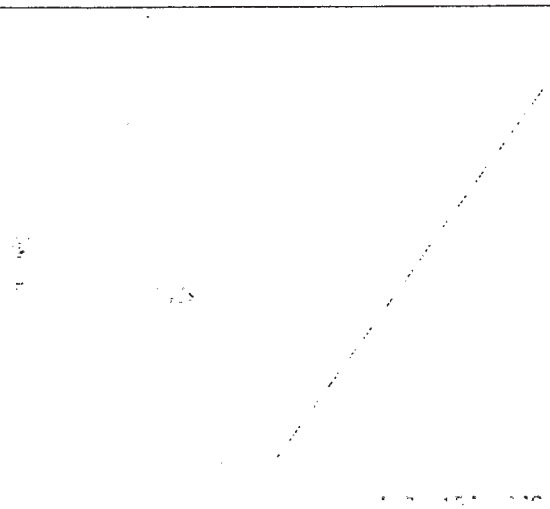
Y = 243507.1 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9977921
Average error:	3.892%
Average CF:	243507.1
RSD:	5.916%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	271940.2	271940.2	11.677	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.010.BN
2	2	480617.9	240309	-1.313	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.011.BN
3	10	2412642	241264.2	-0.921	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.012.BN
4	20	4676211	233810.5	-3.982	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.013.BN
5	30.6	7126075	232878.3	-4.365	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.014.BN
6	40	9633609	240840.2	-1.095	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.015.BN

26 Methoxychlor



Expected retention time:	5.887 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

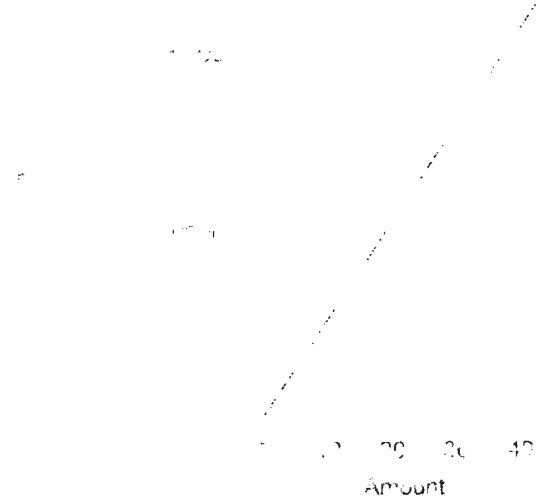
Y = 101847.6 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.991643
Average error:	4.304%
Average CF:	101847.6
RSD:	6.449%

Level	Amount	Response	Cal Factor	Error, %	Source
1	5	499616.7	99923.34	-1.889	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
2	10	906208.6	90620.86	-11.023	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
3	50	5115041	102300.8	0.445	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
4	100	1.052339E+07	105233.9	3.325	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
5	152	1.559076E+07	102570.8	0.710	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
6	200	2.208724E+07	110436.2	8.433	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01

27 Endrin ketone



Expected retention time:	6.045 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

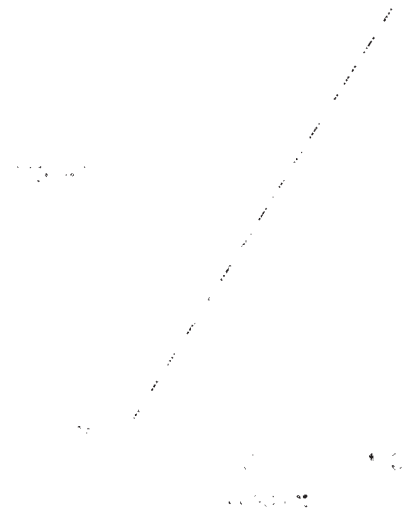
Y = 268986.6 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9986338
Average error:	3.834%
Average CF:	268986.6
RSD:	5.266%

Level	Amount	Response	Cal Factor	Error, %	Source
1	1	295836.1	295836.1	9.982	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
2	2	519337.6	259668.8	-3.464	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
3	10	2730722	273072.2	1.519	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
4	20	5163550	258177.5	-4.018	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
5	30.4	7971506	262220.6	-2.515	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
6	40	1.059778E+07	264944.5	-1.503	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01

28 Mirex



Expected retention time: 6.394 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

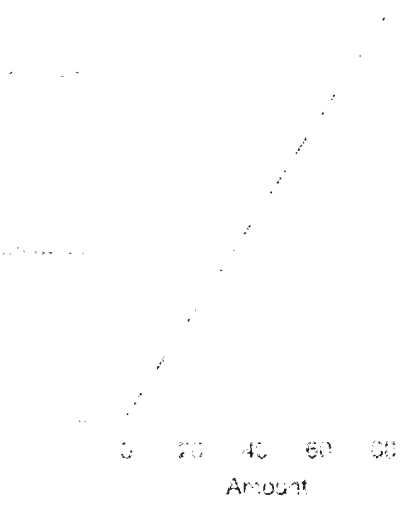
Single peak quantification by height

Y = 162484.9 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9924278
Average error: 6.947%
Average CF: 162484.9
RSD: 8.512%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2.5	463430	185372	14.086	Manual	9/19/2018 5:45:48 AM
2	3	867299	173459.8	6.754	Manual	9/19/2018 5:46:33 AM
3	12.5	1915897	153271.8	-5.670	Manual	9/19/2018 5:47:27 AM
4	25	3955748	158229.9	-2.619	Manual	9/19/2018 5:48:04 AM
5	50	7575803	151516.1	-6.751	Manual	9/19/2018 5:49:39 AM
6	100	1.5306E+07	153060	-5.800	Manual	9/19/2018 5:50:18 AM

29 DCB



Expected retention time: 7.059 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 = 147879.5 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9953523
Average error: 5.303%
Average CF: 147879.5
RSD: 8.070%

Level	Amount	Response	Cal Factor	Error, %	Source
1	2	342813.1	171406.5	15.910	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
2	4	586499.4	146624.8	-0.848	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
3	20	2930610	146530.5	-0.912	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
4	40	5542581	138564.5	-6.299	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
5	61	8621188	141331	-4.428	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.01
6	80	1.142558E+07	142819.8	-3.422	\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261014B.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 FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
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: 20:54

Lab File ID: 05PEST18306001.010.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: ICMAXAA Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.55	2.54	2.58	39.93	40.06	0
alpha-BHC	2.97	2.95	2.99	19.90	20.04	-1
gamma-BHC (Lindane)	3.21	3.19	3.23	19.51	19.98	-2
beta-BHC	3.28	3.26	3.30	18.33	20.10	-9
delta-BHC	3.43	3.41	3.45	20.00	20.16	-1
Heptachlor	3.61	3.59	3.63	19.03	20.12	-5
Aldrin	3.87	3.85	3.89	19.28	20.10	-4
Heptachlor epoxide	4.39	4.37	4.41	18.12	20.10	-10
gamma-Chlordane	4.49	4.47	4.51	19.69	20.04	-2
alpha-Chlordane	4.60	4.58	4.62	19.22	20.06	-4
4,4'-DDE	4.66	4.64	4.68	20.04	19.98	0
Endosulfan I	4.71	4.69	4.73	19.00	20.06	-5
Dieldrin	4.90	4.88	4.92	18.71	19.94	-6
Endrin	5.08	5.06	5.10	20.29	19.64	3
4,4'-DDD	5.13	5.11	5.15	20.39	20.00	2
Endosulfan II	5.25	5.23	5.27	19.62	19.70	0
4,4'-DDT	5.33	5.31	5.35	20.40	20.00	2
Endrin aldehyde	5.55	5.53	5.57	19.10	20.14	-5
Methoxychlor	5.68	5.66	5.70	93.70	99.08	-5
Endosulfan sulfate	5.85	5.84	5.88	19.17	20.10	-5
Endrin ketone	6.05	6.03	6.07	18.82	19.76	-5
Decachlorobiphenyl	6.71	6.68	6.74	44.60	40.04	11

Compounds 22

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: 20:54

Lab File ID: 05PEST18306001B.010.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: ICMAXAA Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.37	2.35	2.39	42.08	40.06	5
alpha-BHC	2.79	2.77	2.81	21.73	20.04	8
gamma-BHC (Lindane)	3.05	3.03	3.07	21.26	19.98	6
beta-BHC	3.12	3.10	3.14	19.10	20.10	-5
delta-BHC	3.34	3.33	3.37	21.22	20.16	5
Heptachlor	3.39	3.37	3.41	20.05	20.12	0
Aldrin	3.65	3.64	3.68	20.12	20.10	0
Heptachlor epoxide	4.15	4.13	4.17	18.63	20.10	-7
gamma-Chlordane	4.31	4.29	4.33	20.46	20.04	2
alpha-Chlordane	4.43	4.41	4.45	20.20	20.06	1
Endosulfan I	4.48	4.46	4.50	19.24	20.06	-4
4,4'-DDE	4.58	4.56	4.60	20.17	19.98	1
Dieldrin	4.70	4.68	4.72	19.49	19.94	-2
Endrin	4.93	4.91	4.95	20.73	19.64	6
4,4'-DDD	5.03	5.01	5.05	20.33	20.00	2
Endosulfan II	5.09	5.08	5.12	19.67	19.70	0
4,4'-DDT	5.26	5.24	5.28	20.07	20.00	0
Endrin aldehyde	5.34	5.33	5.37	19.20	20.14	-5
Endosulfan sulfate	5.54	5.52	5.56	19.42	20.10	-3
Methoxychlor	5.75	5.73	5.77	95.76	99.08	-3
Endrin ketone	5.91	5.89	5.93	19.20	19.76	-3
Decachlorobiphenyl	6.70	6.67	6.73	43.87	40.04	10

Compounds 22

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 FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
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
~~Kepone~~	~~5.12~~	~~5.10~~	~~5.14~~	~~4.65~~	~~50.22~~	~~-91~~
Mirex	5.79	5.77	5.81	22.54	24.76	-9

Compounds 7

(8)

(8) See nj 05pest1830601.024

NJ 23dp 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 FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
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
~~Kepone~~	~~5.02~~	~~4.99~~	~~5.03~~	~~6.50~~	~~50.22~~	~~-87~~ (8)
Mirex	5.87	5.85	5.89	21.86	24.76	-12

Compounds 7

(8) see inj # 05pest18306001B.024

MD 2304 11/4/18

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: 23:54

Lab File ID: 05PEST18306001.024.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: ICKEPAA Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Kepone	5.11	5.10	5.14	40.61	49.65	-18

Compounds 1

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: 23:54

Lab File ID: 05PEST18306001B.024.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: ICKEPAA Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Kepone	5.01	4.99	5.03	40.24	49.65	-19

Compounds 1

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190A Date Analyzed: 11/03/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 1:24

Lab File ID: 05PEST18306001.031.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: ICTXXAA Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	5.11	5.07	5.13	515.47	501.00	3
	5.24	5.21	5.27	514.35	501.00	3
	5.33	5.30	5.36	521.31	501.00	4
	5.49	5.46	5.52	510.97	501.00	2
	5.72	5.69	5.75	528.29	501.00	5
	5.79	5.76	5.82	521.31	501.00	4

Compounds 6

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/03/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 1:24

Lab File ID: 05PEST18306001B.031.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: ICTXXAA Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	4.68	4.65	4.71	488.43	501.00	-3
	4.91	4.88	4.94	500.19	501.00	0
	5.08	5.05	5.11	494.36	501.00	-1
	5.35	5.32	5.38	499.38	501.00	0
	5.40	5.38	5.44	496.91	501.00	-1
	5.70	5.67	5.73	506.05	501.00	1

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: ICTXX1824D ICTXXAA ID: AA **Batchnumber: 1830599999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 03, 2018 01:24:44
Instrument : CP05--H9190A
Result file : 05PEST18306001.031.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**3**	**75.05**	
3.05	3.11	3.11	2636.364	0.298249			2
3.52	3.54	3.58	15135.71	2.143073			5
3.57	3.62	3.63	5920.464	1.246315			6
Height Summation:			**23692.538**				
Amount Avg CF:			**1.229212**	Linear:			
Aroclor-1248					**5**	**152.04**	
3.67	3.71	3.72	6757.04	1.833019			2
3.86	3.87	3.92	14978.5	1.716395			3
+ 3.86	3.91	3.92	6480.261	0.742577			3
4.22	4.24	4.28	153095.9	15.411111			4
4.40	4.42	4.46	334652.7	49.647979			5
4.72	4.72	4.78	926070.2	181.466218			6
+ 4.72	4.76	4.78	640497.4	125.507376			6
Height Summation:			**1435554.34**				
Amount Avg CF:			**50.014944**	Linear:			
Aroclor-1254					**6**	**81.72**	
4.40	4.42	4.46	334652.7	26.284205			1
4.63	4.63	4.69	500925.1	52.579985			2
4.72	4.76	4.78	640497.4	38.551649			3
4.94	4.97	5.00	1529772	123.592692			4
5.08	5.11	5.14	2118948	248.702583			5
5.29	5.33	5.35	3046424	222.62008			6
Height Summation:			**8171219.2**				
Amount Avg CF:			**118.721865**	Linear:			
Aroclor-1260					**5**	**28.19**	
4.86	4.90	4.93	1366639	116.860188			1
5.07	5.11	5.13	2118948	134.154191			2
5.28	5.33	5.34	3046424	183.320295			3
E 5.54	5.58	5.60	2211840	238.071994			4
5.76	5.79	5.82	3134671	164.868621			5
Height Summation:			**11878522**				
Amount Avg CF:			**167.455058**	Linear:			
Chlordane					**6**	**131.68**	
3.61	3.64	3.67	15135.71	1.560989			1
3.95	3.98	4.01	63685.99	6.607352			2
4.31	4.31	4.37	456898.7	72.473298			3
+ 4.46	4.47	4.52	369355.7	12.965412			4
4.46	4.52	4.52	513129.8	18.012283			4
4.56	4.58	4.62	642293.9	16.435117			5
5.17	5.18	5.23	1461332	152.827647			6
Height Summation:			**3152476.1**				
Amount Avg CF:			**44.652781**	Linear:			

Analysis Report (B)

Injected on : Nov 03, 2018 01:24:44
Instrument : CP05--H9190B
Result file : 05PEST18306001B.031.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**86.71**	
2.94	3.00	3.00	6444.772	0.242052			2
3.12	3.17	3.18	32821.6	2.95906			3
3.28	3.31	3.34	41409.12	0.888268			4
3.39	3.40	3.45	29480.73	1.262192			5
Height Summation:			**110156.222**				
Amount Avg CF:			**1.337893**	Linear:			
Aroclor-1221					**1**		
2.55	2.55	2.59	6323.59	0.569567			1
Height Summation:			**6323.59**				
Amount Avg CF:			**0.569567**	Linear:			
Aroclor-1248					**5**	**105.91**	
3.28	3.31	3.34	41409.12	1.754097			1
+ 3.54	3.57	3.60	99245.38	4.428			2
3.54	3.59	3.60	118629.6	5.292859			2
+ 3.87	3.88	3.93	369492.4	15.833447			4
3.87	3.91	3.93	504066	21.600179			4
4.13	4.15	4.19	1141952	35.408277			5
4.32	4.37	4.38	1881288	74.111011			6
Height Summation:			**3687344.72**				
Amount Avg CF:			**27.633285**	Linear:			
Aroclor-1254					**5**	**42.57**	
4.12	4.15	4.18	1141952	36.659483			1
4.28	4.30	4.34	1247598	35.484493			2
4.65	4.68	4.71	4964902	97.728135			3
5.23	5.25	5.29	2583788	66.703257			6
+ 5.83	5.84	5.89	1662990	41.582813			4
5.83	5.87	5.89	3011364	75.2987			4
Height Summation:			**12949604**				
Amount Avg CF:			**62.374814**	Linear:			
Aroclor-1260					**6**	**49.83**	
4.81	4.81	4.87	3912247	112.137727			1
+ 4.81	4.84	4.87	3574897	102.468178			1
4.96	4.97	5.02	4193187	100.689596			2
+ 4.96	5.02	5.02	3980725	95.587817			2
5.23	5.25	5.29	2583788	59.737503			3
E 5.50	5.51	5.56	5763480	211.819367			4
5.67	5.70	5.73	9576553	171.468553			5
5.92	5.96	5.98	2207818	66.59065			6
Height Summation:			**28237073**				
Amount Avg CF:			**120.407233**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **ICTXX1824D** ICTXXAA ID: AA **Batchnumber: 1830599999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 03, 2018 01:24:44
Instrument : CP05--H9190A
Result file : 05PEST18306001.031.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**6**	**1.20**	
5.07	5.11	5.13	2118948	515.469732			1
5.21	5.24	5.27	3309576	514.347617			2
5.30	5.33	5.36	3046424	521.309912			3
5.46	5.49	5.52	3100962	510.970455			4
5.69	5.72	5.75	2733244	528.293481			5
5.76	5.79	5.82	3134671	521.30646			6

Height Summation: **17443825**
Amount Avg CF: **518.616276** Linear:

Analysis Report (B)

Injected on : Nov 03, 2018 01:24:44
Instrument : CP05--H9190B
Result file : 05PEST18306001B.031.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**5**	**186.40**	
3.25	3.28	3.31	32124.58	1.02335			1
4.09	4.15	4.15	1141952	53.920231			3
4.28	4.30	4.34	1247598	12.615107			4
4.40	4.40	4.46	1315085	17.612768			5
+ 4.40	4.46	4.46	1280964	17.15579			5
E 5.10	5.15	5.16	16377930	543.385901			6

Height Summation: **20114689.58**
Amount Avg CF: **125.711472** Linear:

Toxaphene					**6**	**1.19**	
4.65	4.68	4.71	4964902	488.430567			1
4.88	4.91	4.94	5249098	500.185188			2
+ 4.88	4.93	4.94	4433122	422.431046			2
+ 5.05	5.06	5.11	6304483	326.284662			3
5.05	5.08	5.11	9552113	494.363766			3
5.32	5.35	5.38	10405410	499.383374			4
5.38	5.40	5.44	6115295	496.906651			5
5.67	5.70	5.73	9576553	506.046807			6

Height Summation: **45863371**
Amount Avg CF: **497.552725** Linear:

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		8.47	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		** 57.65	4	30	
Aroclor-1254			0	0		** 62.23	4	40	
Aroclor-1260			0	0	E	32.69	4	40	
Chlordane			0.5	0.16		** 95.16	4	40	
Toxaphene			1	0.3		4.15	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: 11/03/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 2:54

Lab File ID: 05PEST18306001.038.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: ICCHXAA Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.54	3.51	3.57	104.38	100.20	4
	3.98	3.95	4.01	110.84	100.20	11
	4.34	4.31	4.37	95.42	100.20	-5
	4.50	4.46	4.52	99.86	100.20	0
	4.60	4.56	4.62	78.63	100.20	-22
	5.20	5.17	5.23	90.37	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: 11/03/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 2:54

Lab File ID: 05PEST18306001B.038.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: ICCHXAA Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.28	3.25	3.31	102.71	100.20	3
	3.79	3.76	3.82	111.61	100.20	11
	4.12	4.09	4.15	94.64	100.20	-6
	4.31	4.28	4.34	97.80	100.20	-2
	4.43	4.40	4.46	109.78	100.20	10
	5.13	5.10	5.16	88.41	100.20	-12

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **ICCHX1824F** ICCHXAA ID: AA **Batchnumber: 1830599999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 03, 2018 02:54:42
Instrument : CP05--H9190A
Result file : 05PEST18306001.038.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**142.86**	
3.05	3.09	3.11	94704.61	10.713815			2
3.21	3.26	3.27	27512.61	10.581631			3
3.41	3.43	3.47	27743.29	4.110473			4
3.52	3.54	3.58	1012114	143.305742			5
E 3.57	3.61	3.63	1611389	339.213009			6
Height Summation:			**2773463.51**				
Amount Avg CF:			**101.584934**	Linear:			
Aroclor-1248					**6**	**69.62**	
3.39	3.39	3.45	103646.9	15.372245			1
+ 3.39	3.43	3.45	27743.29	4.114707			1
3.67	3.70	3.72	150070.5	40.710443			2
3.86	3.88	3.92	47181.66	5.406574			3
4.22	4.25	4.28	159054.8	16.010952			4
4.40	4.43	4.46	395826.3	58.723494			5
+ 4.72	4.73	4.78	40799.91	7.994864			6
4.72	4.77	4.78	175287.5	34.348109			6
Height Summation:			**1031067.66**				
Amount Avg CF:			**28.428636**	Linear:			
Aroclor-1254					**6**	**91.08**	
4.40	4.43	4.46	395826.3	31.088885			1
4.63	4.67	4.69	69524.7	7.297713			2
+ 4.72	4.73	4.78	40799.91	2.455754			3
4.72	4.77	4.78	175287.5	10.550585			3
4.94	4.96	5.00	154265.4	12.463345			4
5.08	5.10	5.14	362438.6	42.539702			5
5.29	5.29	5.35	11978.5	0.875339			6
Height Summation:			**1169321**				
Amount Avg CF:			**17.469262**	Linear:			
Aroclor-1260					**5**	**142.02**	
4.86	4.92	4.93	71854.33	6.144205			1
5.07	5.10	5.13	362438.6	22.946602			2
5.28	5.29	5.34	11978.5	0.720813			3
5.54	5.57	5.60	17533.93	1.887269			4
6.06	6.01	6.02	15055.75	1.326646			6
Height Summation:			**478861.11**				
Amount Avg CF:			**6.605107**	Linear:			
Chlordane					**6**	**11.69**	
3.51	3.54	3.57	1012114	104.382213			1
3.95	3.98	4.01	1068358	110.840985			2
4.31	4.34	4.37	601556.4	95.41891			3
4.46	4.50	4.52	2844718	99.857512			4
4.56	4.60	4.62	3072876	78.629231			5
5.17	5.20	5.23	864086.1	90.367039			6
Height Summation:			**9463708.5**				
Amount Avg CF:			**96.582648**	Linear:			

Analysis Report (B)

Injected on : Nov 03, 2018 02:54:42
Instrument : CP05--H9190B
Result file : 05PEST18306001B.038.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**183.74**	
2.66	2.67	2.72	27552.17	1.433898			1
2.94	3.00	3.00	32397.47	1.216778			2
3.12	3.14	3.18	334320.3	30.140941			3
3.28	3.34	3.34	13809.03	0.296218			4
E 3.39	3.39	3.45	5581388	238.96222			5
3.47	3.48	3.53	505408.4	32.874764			6
+ 3.47	3.52	3.53	353067.9	22.965633			6
Height Summation:			**6494875.37**				
Amount Avg CF:			**50.820803**	Linear:			
Aroclor-1221					**2**	**15.32**	
2.55	2.55	2.59	36271.96	3.267022			1
2.64	2.67	2.68	27552.17	4.06061			2
Height Summation:			**63824.13**				
Amount Avg CF:			**3.663816**	Linear:			
Aroclor-1248					**5**	**173.01**	
3.28	3.34	3.34	13809.03	0.584953			1
3.54	3.57	3.60	29739.82	1.326892			2
3.76	3.79	3.82	3371098	120.594822			3
+ 3.87	3.89	3.93	361636.8	15.496819			4
3.87	3.92	3.93	398961.5	17.096253			4
4.13	4.18	4.19	277386.5	8.600868			5
Height Summation:			**4090994.85**				
Amount Avg CF:			**29.640758**	Linear:			
Aroclor-1254					**6**	**164.47**	
4.12	4.18	4.18	277386.5	8.904793			1
E 4.28	4.31	4.34	9672320	275.102531			2
4.65	4.70	4.71	349062.4	6.870874			3
5.09	5.13	5.15	2664646	99.426259			5
5.23	5.26	5.29	166827.2	4.306823			6
5.83	5.86	5.89	117769.3	2.944803			4
Height Summation:			**13248011.4**				
Amount Avg CF:			**66.259347**	Linear:			
Aroclor-1260					**6**	**135.60**	
+ 4.81	4.81	4.87	364301.8	10.442075			1
4.81	4.85	4.87	413652.6	11.856629			1
4.96	5.00	5.02	1194376	28.680151			2
5.23	5.26	5.29	166827.2	3.857066			3
5.50	5.54	5.56	74817.95	2.749709			4
5.67	5.73	5.73	38790.29	0.694542			5
5.92	5.96	5.98	16694.28	0.503521			6
Height Summation:			**1905158.32**				
Amount Avg CF:			**8.056936**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: ICCHX1824F ICCHXAA ID: AA **Batchnumber: 1830599999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 03, 2018 02:54:42
Instrument : CP05--H9190A
Result file : 05PEST18306001.038.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene						**1**		
	5.07	5.10	5.13	362438.6	88.169284			1
Height Summation:				**362438.6**				
Amount Avg CF:				**88.169284**	Linear:			

Analysis Report (B)

Injected on : Nov 03, 2018 02:54:42
Instrument : CP05--H9190B
Result file : 05PEST18306001B.038.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane						**6**	**8.89**	
+	3.25	3.25	3.31	116841.8	3.722075			1
	3.25	3.28	3.31	3224279	102.711609			1
	3.76	3.79	3.82	3371098	111.610566			2
	4.09	4.12	4.15	2004383	94.642152			3
	4.28	4.31	4.34	9672320	97.801817			4
	4.40	4.43	4.46	8196816	109.778928			5
	5.10	5.13	5.16	2664646	88.407452			6
Height Summation:				**29133542**				
Amount Avg CF:				**100.825421**	Linear:			
Toxaphene						**5**	**58.04**	
	4.65	4.70	4.71	349062.4	34.339599			1
+	4.88	4.91	4.94	209674.8	19.979857			2
	4.88	4.94	4.94	270324.2	25.759123			2
	5.05	5.08	5.11	340605.2	17.627814			3
	5.32	5.35	5.38	497492.1	23.875973			4
	5.67	5.73	5.73	38790.29	2.049767			6
Height Summation:				**1496274.19**				
Amount Avg CF:				**20.730455**	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	** 66.62	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		4.17	4	30	
Aroclor-1254			0	0		** 116.54	4	40	
Aroclor-1260			0	0		19.80	4	40	
Chlordane			0.5	0.16		4.30	4	40	
Toxaphene			1	0.3		** 123.85	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: 11/09/18

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 FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
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 FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
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 FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
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 FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
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 : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**77.82**	
3.04	3.08	3.10	3852.217	0.435797			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
Height Summation:			**38026.107**				
Amount Avg CF:			**1.59263**	Linear:			
Aroclor-1248					**6**	**150.07**	
3.38	3.42	3.44	5848.87	0.867467			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
Height Summation:			**1320169.659**				
Amount Avg CF:			**37.717234**	Linear:			
Aroclor-1254					**6**	**81.84**	
4.39	4.41	4.45	383694.5	30.136033			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
Height Summation:			**9395685.7**				
Amount Avg CF:			**136.614098**	Linear:			
Aroclor-1260					**6**	**38.56**	
4.85	4.89	4.91	1580052	135.10896			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	186.847941			5
5.94	5.94	6.00	892464.4	78.640024			6
Height Summation:			**14505773.4**				
Amount Avg CF:			**173.197257**	Linear:			
Chlordane					**6**	**134.53**	
3.50	3.52	3.56	12979.6	1.174461			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
Height Summation:			**3573802.03**				
Amount Avg CF:			**43.929489**	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
Aroclor-1016					**5**	**69.77**	
2.66	2.67	2.72	9590.152	0.499101			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
Height Summation:			**150512.752**				
Amount Avg CF:			**1.545717**	Linear:			
Aroclor-1221					**1**		
2.54	2.54	2.58	14616.34	1.316496			1
Height Summation:			**14616.34**				
Amount Avg CF:			**1.316496**	Linear:			
Aroclor-1248					**5**	**106.52**	
3.27	3.30	3.33	32459.74	1.375			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
Height Summation:			**4780609.34**				
Amount Avg CF:			**35.839573**	Linear:			
Aroclor-1254					**5**	**47.31**	
4.11	4.14	4.17	1473742	47.310763			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
Height Summation:			**17511004**				
Amount Avg CF:			**86.600313**	Linear:			
Aroclor-1260					**6**	**51.63**	
+ 4.79	4.80	4.85	5011050	143.632996			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
Height Summation:			**35668365**				
Amount Avg CF:			**152.09742**	Linear:			

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
Toxaphene					**6**	**0.93**	
5.06	5.09	5.12	2451988	512.758985			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
Chlordane					**4**	**101.59**	
3.23	3.26	3.29	96215.48	2.352039			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:

Toxaphene					**6**	**1.20**	
4.64	4.67	4.70	6537470	468.644549			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	485.451701			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 FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
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 FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
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

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**142.84**	
+ 3.04	3.04	3.10	7293.358	0.825089			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
Height Summation:			**3160900.74**				
Amount Avg CF:			**115.893931**	Linear:			
Aroclor-1221					**1**		
2.66	2.70	2.70	7719.903	2.152669			1
Height Summation:			**7719.903**				
Amount Avg CF:			**2.152669**	Linear:			
Aroclor-1248					**6**	**102.10**	
3.38	3.43	3.44	32580.64	4.832152			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
Height Summation:			**1064481.8**				
Amount Avg CF:			**30.64389**	Linear:			
Aroclor-1254					**6**	**100.58**	
4.39	4.42	4.45	454566.4	35.702435			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
Height Summation:			**1267718.31**				
Amount Avg CF:			**19.753199**	Linear:			
Aroclor-1260					**5**	**147.74**	
4.85	4.91	4.91	98054.51	8.384561			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
Height Summation:			**576704.634**				
Amount Avg CF:			**7.883895**	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 : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**173.71**	
2.66	2.66	2.72	41944.84	2.182936			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
Height Summation:			**7961369.53**				
Amount Avg CF:			**73.974177**	Linear:			
Aroclor-1221					**1**		
2.63	2.66	2.67	41944.84	6.181786			2
Height Summation:			**41944.84**				
Amount Avg CF:			**6.181786**	Linear:			
Aroclor-1248					**5**	**175.55**	
3.27	3.32	3.33	21127.99	0.894985			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
Height Summation:			**5322923.6**				
Amount Avg CF:			**38.499707**	Linear:			
Aroclor-1254					**6**	**162.74**	
4.11	4.16	4.17	360991.3	11.588714			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
Height Summation:			**18408443.6**				
Amount Avg CF:			**91.965894**	Linear:			
Aroclor-1260					**5**	**138.38**	
+ 4.79	4.79	4.85	470140.1	13.475745			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
Height Summation:			**2341747.79**				
Amount Avg CF:			**11.831911**	Linear:			

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

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**6**	**10.31**	
3.50	3.53	3.56	1160100	104.971799			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:			
Toxaphene					**3**	**160.18**	
5.06	5.10	5.12	440650.2	92.148636			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 : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**6**	**7.67**	
+ 3.23	3.24	3.29	132930.6	3.249559			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:			
Toxaphene					**5**	**65.96**	
4.64	4.68	4.70	454500.9	32.581315			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: H9147A Date Analyzed: 09/18/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 19:01

Lab File ID: 06PEST18261001.003.RAW Initial Calibration: 06PEST1826101

Lab Standard ID: PEMAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	1.84	1.82	1.86	19.90	20.10	-1
alpha-BHC	2.38	2.36	2.40	9.83	10.00	-2
gamma-BHC (Lindane)	2.73	2.71	2.75	9.80	10.00	-2
beta-BHC	2.96	2.94	2.98	8.79	10.00	-12
4,4'-DDE	4.33	4.31	4.35	0.36		
Endrin	4.69	4.67	4.71	51.59	50.10	3
4,4'-DDD	4.79	4.77	4.81	1.66		
4,4'-DDT	5.00	4.98	5.02	117.35	100.40	17
Methoxychlor	5.50	5.48	5.52	276.67	250.90	10
Endrin ketone	5.66	5.64	5.68	0.70		
Decachlorobiphenyl	6.40	6.37	6.43	20.29	20.00	1

4'4-DDT % breakdown: 2 Endrin % breakdown: 1 Combined % breakdown: 3.2

Compounds 11

7D
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 09/18/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 19:01

Lab File ID: 06PEST18261001B.003.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: PEMAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.63	2.62	2.66	20.18	20.10	0
alpha-BHC	3.04	3.02	3.06	9.97	10.00	0
gamma-BHC (Lindane)	3.36	3.35	3.39	10.23	10.00	2
beta-BHC	3.62	3.60	3.64	8.93	10.00	-11
4,4'-DDE	4.98	4.97	5.01	0.34		
Endrin	5.28	5.26	5.30	53.08	50.10	6
4,4'-DDD	5.37	5.35	5.39	1.56		
Endrin aldehyde	5.55	5.53	5.57	0.17		
4,4'-DDT	5.59	5.57	5.61	117.50	100.40	17
Methoxychlor	5.89	5.88	5.92	289.39	250.90	15
Endrin ketone	6.05	6.04	6.08	0.66		
Decachlorobiphenyl	7.07	7.04	7.10	21.06	20.00	5

4'4-DDT % breakdown: 2 Endrin % breakdown: 2 Combined % breakdown: 4

Compounds 12

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD Date Analyzed: 09/18/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 20:26

Lab File ID: 06PEST18261001.010.RAW Initial Calibration: 06PEST1826101

Lab Standard ID: ICMAXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101 Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Tetrachloro-m-xylene	1.84	1.82	1.86	39.91	40.06	100	75 - 125
alpha-BHC	2.38	2.36	2.40	20.05	20.04	100	69 - 125
gamma-BHC (Lindane)	2.72	2.71	2.75	19.52	19.98	98	75 - 125
beta-BHC	2.96	2.94	2.98	16.99	20.10	85	75 - 125
Heptachlor	3.07	3.05	3.09	19.14	20.12	95	75 - 125
delta-BHC	3.24	3.22	3.26	19.00	20.16	94	75 - 125
Aldrin	3.37	3.35	3.39	18.26	20.10	91	75 - 125
Heptachlor epoxide	3.87	3.85	3.89	18.34	20.10	91	75 - 125
gamma-Chlordane	4.07	4.06	4.10	19.29	20.04	96	75 - 125
alpha-Chlordane	4.16	4.14	4.18	18.21	20.06	91	73 - 125
Endosulfan I	4.20	4.18	4.22	18.01	20.06	90	75 - 125
4,4'-DDE	4.33	4.31	4.35	19.73	19.98	99	75 - 125
Dieldrin	4.44	4.42	4.46	19.38	19.94	97	48 - 125
Endrin	4.69	4.67	4.71	20.35	19.64	104	5 - 125
4,4'-DDD	4.79	4.77	4.81	19.79	20.00	99	75 - 125
Endosulfan II	4.90	4.88	4.92	19.57	19.70	99	75 - 125
4,4'-DDT	5.00	4.98	5.02	21.26	20.00	106	75 - 125
Endrin aldehyde	5.07	5.05	5.09	19.11	20.14	95	75 - 125
Endosulfan sulfate	5.22	5.20	5.24	18.86	20.10	94	70 - 125
Methoxychlor	5.50	5.48	5.52	103.31	99.08	104	75 - 125
Endrin ketone	5.65	5.64	5.68	18.73	19.76	95	75 - 125
Decachlorobiphenyl	6.40	6.37	6.43	39.24	40.04	98	75 - 125

Compounds 22

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 09/18/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 20:26

Lab File ID: 06PEST18261001B.010.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: ICMAXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Tetrachloro-m-xylene	2.63	2.62	2.66	39.57	40.06	99	75 - 125
alpha-BHC	3.04	3.02	3.06	19.51	20.04	97	69 - 125
gamma-BHC (Lindane)	3.36	3.35	3.39	19.69	19.98	99	75 - 125
beta-BHC	3.62	3.60	3.64	18.40	20.10	92	75 - 125
delta-BHC	3.86	3.85	3.89	18.69	20.16	93	75 - 125
Heptachlor	3.92	3.91	3.95	19.36	20.12	96	75 - 125
Aldrin	4.21	4.20	4.24	19.59	20.10	97	75 - 125
Heptachlor epoxide	4.58	4.56	4.60	18.33	20.10	91	75 - 125
gamma-Chlordane	4.83	4.82	4.86	18.99	20.04	95	75 - 125
alpha-Chlordane	4.87	4.86	4.90	19.46	20.06	97	73 - 125
Endosulfan I	4.90	4.89	4.93	18.87	20.06	94	75 - 125
4,4'-DDE	4.98	4.97	5.01	19.60	19.98	98	75 - 125
Dieldrin	5.10	5.09	5.13	19.00	19.94	95	48 - 125
Endrin	5.27	5.26	5.30	21.45	19.64	109	5 - 125
4,4'-DDD	5.37	5.35	5.39	19.95	20.00	100	75 - 125
Endosulfan II	5.47	5.45	5.49	19.39	19.70	98	75 - 125
Endrin aldehyde	5.55	5.53	5.57	20.07	20.14	100	75 - 125
4,4'-DDT	5.59	5.57	5.61	20.50	20.00	103	75 - 125
Endosulfan sulfate	5.75	5.74	5.78	19.71	20.10	98	70 - 125
Methoxychlor	5.89	5.88	5.92	102.47	99.08	103	75 - 125
Endrin ketone	6.05	6.04	6.08	18.96	19.76	96	75 - 125
Decachlorobiphenyl	7.07	7.04	7.10	39.38	40.04	98	75 - 125

Compounds 22

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 09/18/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 20:26

Lab File ID: 06PEST18261001.010.RAW Initial Calibration: 06PEST1826101

Lab Standard ID: ICMAXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Tetrachloro-m-xylene	1.84	1.82	1.86	39.91	40.06	0
alpha-BHC	2.38	2.36	2.40	20.05	20.04	0
gamma-BHC (Lindane)	2.72	2.71	2.75	19.52	19.98	-2
beta-BHC	2.96	2.94	2.98	16.99	20.10	-15
Heptachlor	3.07	3.05	3.09	19.14	20.12	-5
delta-BHC	3.24	3.22	3.26	19.00	20.16	-6
Aldrin	3.37	3.35	3.39	18.26	20.10	-9
Heptachlor epoxide	3.87	3.85	3.89	18.34	20.10	-9
gamma-Chlordane	4.07	4.06	4.10	19.29	20.04	-4
alpha-Chlordane	4.16	4.14	4.18	18.21	20.06	-9
Endosulfan I	4.20	4.18	4.22	18.01	20.06	-10
4,4'-DDE	4.33	4.31	4.35	19.73	19.98	-1
Dieldrin	4.44	4.42	4.46	19.38	19.94	-3
Endrin	4.69	4.67	4.71	20.35	19.64	4
4,4'-DDD	4.79	4.77	4.81	19.79	20.00	-1
Endosulfan II	4.90	4.88	4.92	19.57	19.70	-1
4,4'-DDT	5.00	4.98	5.02	21.26	20.00	6
Endrin aldehyde	5.07	5.05	5.09	19.11	20.14	-5
Endosulfan sulfate	5.22	5.20	5.24	18.86	20.10	-6
Methoxychlor	5.50	5.48	5.52	103.31	99.08	4
Endrin ketone	5.65	5.64	5.68	18.73	19.76	-5
Decachlorobiphenyl	6.40	6.37	6.43	39.24	40.04	-2

Compounds 22

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 09/18/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 20:26

Lab File ID: 06PEST18261001B.010.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: ICMAXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Tetrachloro-m-xylene	2.63	2.62	2.66	39.57	40.06	-1
alpha-BHC	3.04	3.02	3.06	19.51	20.04	-3
gamma-BHC (Lindane)	3.36	3.35	3.39	19.69	19.98	-1
beta-BHC	3.62	3.60	3.64	18.40	20.10	-8
delta-BHC	3.86	3.85	3.89	18.69	20.16	-7
Heptachlor	3.92	3.91	3.95	19.36	20.12	-4
Aldrin	4.21	4.20	4.24	19.59	20.10	-3
Heptachlor epoxide	4.58	4.56	4.60	18.33	20.10	-9
gamma-Chlordane	4.83	4.82	4.86	18.99	20.04	-5
alpha-Chlordane	4.87	4.86	4.90	19.46	20.06	-3
Endosulfan I	4.90	4.89	4.93	18.87	20.06	-6
4,4'-DDE	4.98	4.97	5.01	19.60	19.98	-2
Dieldrin	5.10	5.09	5.13	19.00	19.94	-5
Endrin	5.27	5.26	5.30	21.45	19.64	9
4,4'-DDD	5.37	5.35	5.39	19.95	20.00	0
Endosulfan II	5.47	5.45	5.49	19.39	19.70	-2
Endrin aldehyde	5.55	5.53	5.57	20.07	20.14	0
4,4'-DDT	5.59	5.57	5.61	20.50	20.00	2
Endosulfan sulfate	5.75	5.74	5.78	19.71	20.10	-2
Methoxychlor	5.89	5.88	5.92	102.47	99.08	3
Endrin ketone	6.05	6.04	6.08	18.96	19.76	-4
Decachlorobiphenyl	7.07	7.04	7.10	39.38	40.04	-2

Compounds 22

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD
Date Analyzed: 09/18/18

GC Column (1) : STX-CLP ID: .32 (mm)
Time Analyzed: 21:51

Lab File ID: 06PEST18261001.017.RAW
Initial Calibration: 06PEST1826101

Lab Standard ID: ICMEXAA
Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Hcb	2.29	2.27	2.31	4.22	4.99	85	75 - 125
Telodrin	3.48	3.46	3.50	4.77	5.05	94	75 - 125
o,p-DDE	4.08	4.06	4.10	8.79	10.09	87	75 - 125
o,p-DDD	4.50	4.48	4.52	8.69	10.14	86	75 - 125
o,p-DDT	4.72	4.70	4.74	8.06	10.00	81	75 - 125
Mirex	5.74	5.72	5.76	21.57	24.76	87	75 - 125

Compounds 6

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 09/18/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 21:51

Lab File ID: 06PEST18261001B.017.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: ICMEXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Hcb	3.12	3.10	3.14	4.23	4.99	85	75 - 125
Telodrin	4.31	4.29	4.33	5.04	5.05	100	75 - 125
o,p-DDE	4.70	4.68	4.72	9.10	10.09	90	75 - 125
o,p-DDD	5.05	5.03	5.07	8.83	10.14	87	75 - 125
o,p-DDT	5.29	5.27	5.31	8.27	10.00	83	75 - 125
Mirex	6.40	6.38	6.42	21.86	24.76	88	75 - 125

Compounds 6

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 09/18/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 21:51

Lab File ID: 06PEST18261001.017.RAW Initial Calibration: 06PEST1826101

Lab Standard ID: ICMEXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Hcb	2.29	2.27	2.31	4.22	4.99	-15
Telodrin	3.48	3.46	3.50	4.77	5.05	-5
o,p-DDE	4.08	4.06	4.10	8.79	10.09	-13
o,p-DDD	4.50	4.48	4.52	8.69	10.14	-14
o,p-DDT	4.72	4.70	4.74	8.06	10.00	-19
Mirex	5.74	5.72	5.76	21.57	24.76	-13

Compounds 6

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 09/18/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 21:51

Lab File ID: 06PEST18261001B.017.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: ICMEXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Hcb	3.12	3.10	3.14	4.23	4.99	-15
Telodrin	4.31	4.29	4.33	5.04	5.05	0
o,p-DDE	4.70	4.68	4.72	9.10	10.09	-10
o,p-DDD	5.05	5.03	5.07	8.83	10.14	-13
o,p-DDT	5.29	5.27	5.31	8.27	10.00	-17
Mirex	6.40	6.38	6.42	21.86	24.76	-12

Compounds 6

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD
Date Analyzed: 09/18/18

GC Column (1) : STX-CLP ID: .32 (mm)
Time Analyzed: 23:16

Lab File ID: 06PEST18261001.024.RAW
Initial Calibration: 06PEST1826101

Lab Standard ID: ICTXXAA
Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Toxaphene	4.81	4.78	4.84	438.51	501.00	88	68 - 134
	5.07	5.04	5.10	439.49	501.00	88	68 - 134
	5.13	5.10	5.16	466.83	501.00	93	68 - 134
	5.41	5.39	5.45	442.01	501.00	88	68 - 134
	5.51	5.48	5.54	443.18	501.00	88	68 - 134

Compounds 5

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 09/18/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 23:16

Lab File ID: 06PEST18261001B.024.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: ICTXXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Toxaphene	5.52	5.49	5.55	457.11	501.00	91	68 - 134
	5.69	5.66	5.72	457.28	501.00	91	68 - 134
	5.74	5.71	5.77	450.33	501.00	90	68 - 134
	5.98	5.95	6.01	457.69	501.00	91	68 - 134
	6.07	6.04	6.10	455.76	501.00	91	68 - 134

Compounds 5

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 09/18/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 23:16

Lab File ID: 06PEST18261001.024.RAW Initial Calibration: 06PEST1826101

Lab Standard ID: ICTXXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Toxaphene	4.81	4.78	4.84	438.51	501.00	-12
	5.07	5.04	5.10	439.49	501.00	-12
	5.13	5.10	5.16	466.83	501.00	-7
	5.41	5.39	5.45	442.01	501.00	-12
	5.51	5.48	5.54	443.18	501.00	-12

Compounds 5

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 09/18/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 23:16

Lab File ID: 06PEST18261001B.024.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: ICTXXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Toxaphene	5.52	5.49	5.55	457.11	501.00	-9
	5.69	5.66	5.72	457.28	501.00	-9
	5.74	5.71	5.77	450.33	501.00	-10
	5.98	5.95	6.01	457.69	501.00	-9
	6.07	6.04	6.10	455.76	501.00	-9

Compounds 5

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **ICTXX1824D** ICTXXAA ID: AA **Batchnumber: 1826099999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Sep 18, 2018 23:16:53
Instrument : CP06--H9147A
Result file : 06PEST18261001.024.RAW
Calibration file : 06PEST1826101.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**67.23**	
2.84	2.87	2.90	14457.35	10.470157			3
3.05	3.09	3.11	9774.771	2.154338			4
3.14	3.19	3.20	7551.062	3.043096			5
3.27	3.32	3.33	15087.58	7.894524			6
Height Summation:			**46870.763**				
Amount Avg CF:			**5.890529**	Linear:			
Aroclor-1221					**1**		
2.09	2.14	2.15	2784.111	2.709887			1
Height Summation:			**2784.111**				
Amount Avg CF:			**2.709887**	Linear:			
Aroclor-1248					**5**	**164.23**	
3.04	3.09	3.10	9774.771	4.102152			1
3.36	3.38	3.42	12468.68	6.765444			2
+ 3.36	3.41	3.42	69806.36	37.876587			2
3.70	3.70	3.76	32412.64	12.409864			4
3.92	3.92	3.98	50965.9	12.493418			5
+ 3.92	3.98	3.98	24948.43	6.115681			5
4.42	4.45	4.48	308469.9	131.607647			6
Height Summation:			**414091.891**				
Amount Avg CF:			**33.475705**	Linear:			
Aroclor-1254					**6**	**57.04**	
+ 3.92	3.92	3.98	50965.9	12.157038			1
3.92	3.98	3.98	24948.43	5.951018			1
4.05	4.05	4.11	131669.6	26.149784			2
+ 4.34	4.35	4.40	167822.7	39.546577			3
4.34	4.38	4.40	277823.5	65.467713			3
4.42	4.45	4.48	308469.9	36.074807			4
4.59	4.64	4.65	260497.2	47.487389			5
+ 4.97	4.98	5.03	200633.3	31.342939			6
4.97	5.00	5.03	196006.7	30.620172			6
+ 4.97	5.02	5.03	175398.6	27.400774			6
Height Summation:			**1199415.33**				
Amount Avg CF:			**35.291814**	Linear:			
Aroclor-1260					**6**	**60.07**	
4.55	4.58	4.61	273524.9	47.2563			1
+ 4.68	4.70	4.74	270435.3	40.435568			2
4.68	4.72	4.74	246011.9	36.783773			2
+ 4.97	4.98	5.03	200633.3	29.969871			3
4.97	5.00	5.03	196006.7	29.278766			3
+ 4.97	5.02	5.03	175398.6	26.200403			3
+ 5.21	5.22	5.27	226947.7	45.297315			4
5.21	5.24	5.27	487452.1	97.292333			4
+ 5.38	5.38	5.44	381922.8	32.516632			5
5.38	5.41	5.44	615355.1	52.39089			5
+ 5.65	5.65	5.71	146981.3	18.561714			6
5.65	5.70	5.71	129875	16.401423			6
Height Summation:			**1948225.7**				
Amount Avg CF:			**46.567248**	Linear:			

Analysis Report (B)

Injected on : Sep 18, 2018 23:16:53
Instrument : CP06--H9147B
Result file : 06PEST18261001B.024.RAW
Calibration file : 06PEST1826101B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**75.81**	
2.94	2.98	3.00	5955.123	1.620274			1
3.30	3.33	3.36	7845.674	1.547727			2
3.51	3.53	3.57	9338.625	3.545826			3
* 3.85	3.86	3.91	17746.22	2.8164			5
* 3.82	3.86	3.88	17746.22	2.8164			4
+ 3.85	3.89	3.91	17673.08	2.804792			5
3.95	3.99	4.01	43444.15	8.705641			6
Height Summation:			**102076.012**				
Amount Avg CF:			**3.508711**	Linear:			
Aroclor-1221					**2**	**95.35**	
2.77	2.81	2.83	9415.767	6.072181			1
2.94	2.98	2.99	5955.123	1.181399			3
Height Summation:			**15370.89**				
Amount Avg CF:			**3.62679**	Linear:			
Aroclor-1248					**5**	**134.53**	
3.82	3.86	3.88	17746.22	3.453025			1
4.04	4.06	4.10	24032.79	3.757478			2
4.62	4.62	4.68	155363.1	18.815037			4
4.73	4.76	4.79	362283.2	48.374537			5
+ 5.04	5.06	5.10	542502.8	110.416058			6
5.04	5.08	5.10	700520.8	142.577596			6
Height Summation:			**1259946.11**				
Amount Avg CF:			**43.395535**	Linear:			
Aroclor-1254					**6**	**99.69**	
+ 4.56	4.56	4.62	250951.1	26.087803			1
4.56	4.60	4.62	45006.84	4.678719			1
4.74	4.76	4.80	362283.2	25.179826			2
5.04	5.06	5.10	542502.8	31.716897			3
+ 5.04	5.08	5.10	700520.8	40.955265			3
5.26	5.30	5.32	1222659	93.675185			4
5.46	5.47	5.52	1122986	145.073336			5
+ 5.46	5.52	5.52	1748134	225.833297			5
5.57	5.58	5.63	322465.8	24.064009			6
+ 5.57	5.63	5.63	1145420	85.476961			6
Height Summation:			**3617903.64**				
Amount Avg CF:			**54.064662**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **ICTXX1824D** ICTXXAA ID: AA **Batchnumber: 1826099999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Sep 18, 2018 23:16:53
Instrument : CP06--H9147A
Result file : 06PEST18261001.024.RAW
Calibration file : 06PEST1826101.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**167.72**	
2.86	2.87	2.92	14457.35	4.870965			1
3.87	3.89	3.93	82480.8	30.86267			2
+ 3.87	3.92	3.93	50965.9	19.070423			2
4.05	4.05	4.11	131669.6	12.067743			3
4.13	4.17	4.19	40361.2	4.540693			4
4.89	4.91	4.95	856583.5	203.43548			5
+ 4.89	4.95	4.95	383566	91.095536			5
Height Summation:			**1125552.45**				
Amount Avg CF:				**51.15551** Linear:			
Toxaphene					**5**	**2.64**	
4.78	4.81	4.84	695947.9	438.506873			1
5.04	5.07	5.10	651141.6	439.492936			2
5.10	5.13	5.16	631509.4	466.825501			3
5.39	5.41	5.45	615355.1	442.00813			4
5.48	5.51	5.54	935855.7	443.176988			5
Height Summation:			**3529809.7**				
Amount Avg CF:				**446.002086** Linear:			

Analysis Report (B)

Injected on : Sep 18, 2018 23:16:53
Instrument : CP06--H9147B
Result file : 06PEST18261001B.024.RAW
Calibration file : 06PEST1826101B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1260					**6**	**63.49**	
5.17	5.19	5.23	639973.3	53.079159			1
+ 5.17	5.22	5.23	801733.6	66.495501			1
+ 5.40	5.40	5.46	343382.6	66.069993			2
E 5.40	5.43	5.46	1078578	207.528397			2
+ 5.58	5.58	5.64	322465.8	19.647669			3
5.58	5.63	5.64	1145420	69.78983			3
5.80	5.82	5.86	967198.6	98.85801			4
6.01	6.03	6.07	727721.2	35.11086			5
+ 6.01	6.07	6.07	1861641	89.81986			5
6.22	6.23	6.28	143126.4	135.051661			6
+ 6.22	6.27	6.28	129996.6	122.662603			6
Height Summation:			**4702017.5**				
Amount Avg CF:				**99.902986** Linear:			
T. Chlordane					**5**	**193.55**	
3.70	3.73	3.76	33010.93	4.151508			1
4.58	4.60	4.64	45006.84	5.963098			2
+ 4.58	4.62	4.64	155363.1	20.584547			2
4.80	4.82	4.86	190989.4	5.840016			3
* 4.84	4.86	4.90	214247.8	10.089316			4
+* 4.80	4.86	4.86	214247.8	6.551204			3
5.49	5.52	5.55	1748134	215.722257			5
+ 5.49	5.55	5.55	1008866	124.495519			5
Height Summation:			**2231388.97**				
Amount Avg CF:				**48.353239** Linear:			
Toxaphene					**5**	**0.67**	
5.49	5.52	5.55	1748134	457.110229			1
5.66	5.69	5.72	1925507	457.284244			2
5.71	5.74	5.77	1532250	450.325036			3
+ 5.95	5.95	6.01	926656.6	351.289471			4
5.95	5.98	6.01	1207334	457.692442			4
6.04	6.07	6.10	1861641	455.758891			5
+ 6.04	6.10	6.10	552002.6	135.138887			5
Height Summation:			**8274866**				
Amount Avg CF:				**455.634168** Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 50.68	5	20	
Aroclor-1221			0	0		28.94	2	20	
Aroclor-1248			0	0		25.81	5	20	
Aroclor-1254			0	0		** 42.02	4	20	
Aroclor-1260			0	0		** 72.83	5	20	
T. Chlordane			0.5	0.16		5.63	5	20	
Total PCBs			0	0					
Toxaphene			1	0.3		2.14	5	30	

Units: ug/l

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD Date Analyzed: 09/19/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 0:42

Lab File ID: 06PEST18261001.031.RAW Initial Calibration: 06PEST1826101

Lab Standard ID: ICCHXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101 Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Chlordane	2.89	2.86	2.92	102.49	100.20	102	75 - 125
	3.90	3.87	3.93	96.18	100.20	96	75 - 125
	4.07	4.05	4.11	100.40	100.20	100	75 - 125
	4.16	4.13	4.19	110.34	100.20	110	75 - 125
	4.92	4.89	4.95	92.97	100.20	93	75 - 125

Compounds 5

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 09/19/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 0:42

Lab File ID: 06PEST18261001B.031.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: ICCHXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Chlordane	3.73	3.70	3.76	108.49	100.20	108	75 - 125
	4.61	4.58	4.64	96.08	100.20	96	75 - 125
	4.83	4.80	4.86	94.88	100.20	95	75 - 125
	4.87	4.84	4.90	113.60	100.20	113	75 - 125
	5.52	5.49	5.55	100.20	100.20	100	75 - 125

Compounds 5

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 09/19/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 0:42

Lab File ID: 06PEST18261001.031.RAW Initial Calibration: 06PEST1826101

Lab Standard ID: ICCHXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Chlordane	2.89	2.86	2.92	102.49	100.20	2
	3.90	3.87	3.93	96.18	100.20	-4
	4.07	4.05	4.11	100.40	100.20	0
	4.16	4.13	4.19	110.34	100.20	10
	4.92	4.89	4.95	92.97	100.20	-7

Compounds 5

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 09/19/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 0:42

Lab File ID: 06PEST18261001B.031.RAW Initial Calibration: 06PEST1826101B

Lab Standard ID: ICCHXAA Init. Calib Date(s): 09/18/18 09/19/18

Calibration: 06PEST1826101B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Chlordane	3.73	3.70	3.76	108.49	100.20	8
	4.61	4.58	4.64	96.08	100.20	-4
	4.83	4.80	4.86	94.88	100.20	-5
	4.87	4.84	4.90	113.60	100.20	13
	5.52	5.49	5.55	100.20	100.20	0

Compounds 5

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **ICCHX1824F** ICCHXAA ID: AA **Batchnumber: 1826099999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Sep 19, 2018 00:42:14
Instrument : CP06--H9147A
Result file : 06PEST18261001.031.RAW
Calibration file : 06PEST1826101.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**115.78**	
2.26	2.31	2.32	30137.78	18.653252			1
2.61	2.62	2.67	38142.1	15.448588			2
+ 2.61	2.66	2.67	9679.345	3.920398			2
E 2.84	2.89	2.90	304204.6	220.308007			3
3.05	3.07	3.11	433557.2	95.555061			4
3.14	3.17	3.20	84674.41	34.123988			5
3.27	3.28	3.33	55829.1	29.212383			6
Height Summation:			**946545.19**				
Amount Avg CF:			**68.883546**	Linear:			
Aroclor-1221					**2**	**76.26**	
2.19	2.24	2.25	33071.07	17.078643			2
2.27	2.31	2.33	30137.78	14.091602			3
Height Summation:			**63209.75**				
Amount Avg CF:			**30.585072**	Linear:			
Aroclor-1248					**6**	**161.74**	
3.04	3.07	3.10	433557.2	181.949774			1
+ 3.36	3.37	3.42	21949.11	11.909479			2
3.36	3.40	3.42	27907.88	15.142678			2
3.56	3.57	3.62	29088.28	8.937961			3
3.70	3.71	3.76	37797.65	14.471628			4
3.92	3.94	3.98	105631.8	25.893828			5
4.42	4.45	4.48	19301.2	8.234792			6
Height Summation:			**653284.01**				
Amount Avg CF:			**42.438444**	Linear:			
Aroclor-1254					**6**	**185.94**	
3.92	3.94	3.98	105631.8	25.196646			1
+ 4.05	4.05	4.11	61474.59	12.208947			2
4.05	4.07	4.11	1095403	217.548709			2
+ 4.34	4.35	4.40	35882.25	8.455472			3
4.34	4.38	4.40	76760.86	18.088311			3
4.42	4.45	4.48	19301.2	2.257229			4
4.59	4.61	4.65	46761.77	8.524446			5
+ 4.59	4.64	4.65	32842.57	5.987043			5
4.97	4.97	5.03	11778.95	1.840108			6
Height Summation:			**1355637.58**				
Amount Avg CF:			**45.575908**	Linear:			
Aroclor-1260					**5**	**150.72**	
4.55	4.55	4.61	22749.44	3.930371			1
4.68	4.73	4.74	167643.3	25.066077			2
4.97	4.97	5.03	11778.95	1.759497			3
5.38	5.39	5.44	6009.289	0.511627			5
5.65	5.70	5.71	22413.03	2.830457			6
Height Summation:			**230594.009**				
Amount Avg CF:			**6.819606**	Linear:			

Analysis Report (B)

Injected on : Sep 19, 2018 00:42:14
Instrument : CP06--H9147B
Result file : 06PEST18261001B.031.RAW
Calibration file : 06PEST1826101B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**133.32**	
2.94	2.99	3.00	4468.748	1.21586			1
3.30	3.32	3.36	6449.672	1.272335			2
+ 3.30	3.35	3.36	14081.25	2.777827			2
3.85	3.88	3.91	73243.18	11.624001			5
+ 3.95	3.96	4.01	97754.47	19.58872			6
3.95	3.98	4.01	190191.7	38.111934			6
Height Summation:			**274353.3**				
Amount Avg CF:			**13.056033**	Linear:			
Aroclor-1221					**1**		
2.94	2.99	2.99	4468.748	0.886526			3
Height Summation:			**4468.748**				
Amount Avg CF:			**0.886526**	Linear:			
Aroclor-1248					**5**	**75.78**	
4.04	4.09	4.10	21980.89	3.436667			2
+ 4.21	4.22	4.27	910633.1	124.849784			3
4.21	4.25	4.27	91885.43	12.597693			3
4.62	4.65	4.68	220825.7	26.742796			4
4.73	4.77	4.79	419434.4	56.005758			5
5.04	5.07	5.10	200695.2	40.847665			6
Height Summation:			**954821.62**				
Amount Avg CF:			**27.926116**	Linear:			
Aroclor-1254					**6**	**136.81**	
4.56	4.61	4.62	725195.7	75.388243			1
4.74	4.77	4.80	419434.4	29.152014			2
5.04	5.07	5.10	200695.2	11.733449			3
+ 5.26	5.26	5.32	106788.6	8.18171			4
5.26	5.31	5.32	19496.31	1.493728			4
5.46	5.49	5.52	49706.47	6.421348			5
+ 5.46	5.52	5.52	812015.6	104.900517			5
5.57	5.62	5.63	17111.61	1.276954			6
Height Summation:			**1431639.69**				
Amount Avg CF:			**20.910956**	Linear:			
Aroclor-1260					**5**	**115.64**	
+ 5.17	5.18	5.23	27939.49	2.317291			1
5.17	5.21	5.23	38429.75	3.18735			1
5.40	5.42	5.46	80451.02	15.479521			2
+ 5.40	5.45	5.46	90103.09	17.336669			2
5.58	5.62	5.64	17111.61	1.042601			3
5.80	5.81	5.86	24553.5	2.50963			4
6.22	6.22	6.28	29877.98	28.192359			6
Height Summation:			**190423.86**				
Amount Avg CF:			**10.082292**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: ICCHX1824F ICCHXAA ID: AA **Batchnumber: 1826099999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Sep 19, 2018 00:42:14
Instrument : CP06--H9147A
Result file : 06PEST18261001.031.RAW
Calibration file : 06PEST1826101.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**6.61**	
2.86	2.89	2.92	304204.6	102.492492			1
3.87	3.90	3.93	257053	96.184106			2
4.05	4.07	4.11	1095403	100.395549			3
4.13	4.16	4.19	980793.9	110.340723			4
4.89	4.92	4.95	391448.7	92.967649			5
Height Summation:			**3028903.2**				
Amount Avg CF:			**100.476104**	Linear:			
Toxaphene					**3**	**50.55**	
4.78	4.82	4.84	21800.48	13.736172			1
5.04	5.07	5.10	15071.78	10.172812			2
5.39	5.39	5.45	6009.289	4.316458			4
Height Summation:			**42881.549**				
Amount Avg CF:			**9.408481**	Linear:			

Analysis Report (B)

Injected on : Sep 19, 2018 00:42:14
Instrument : CP06--H9147B
Result file : 06PEST18261001B.031.RAW
Calibration file : 06PEST1826101B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**7.91**	
3.70	3.73	3.76	862680.8	108.492135			1
4.58	4.61	4.64	725195.7	96.083463			2
4.80	4.83	4.86	3103001	94.882621			3
4.84	4.87	4.90	2412311	113.600082			4
+ 4.84	4.90	4.90	1124211	52.941127			4
5.49	5.52	5.55	812015.6	100.203896			5
Height Summation:			**7915204.1**				
Amount Avg CF:			**102.65244**	Linear:			
Toxaphene					**4**	**182.35**	
+ 5.49	5.49	5.55	49706.47	12.99748			1
5.49	5.52	5.55	812015.6	212.329625			1
5.71	5.75	5.77	34091.89	10.019534			3
5.95	5.97	6.01	9907.002	3.75568			4
6.04	6.09	6.10	5632.549	1.378936			5
Height Summation:			**861647.041**				
Amount Avg CF:			**56.870944**	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	** 136.27	5	20	
Aroclor-1221			0	0		** 188.73	2	20	
Aroclor-1248			0	0		** 41.25	5	20	
Aroclor-1254			0	0		** 74.19	4	20	
Aroclor-1260			0	0		38.61	5	20	
T. Chlordane			0.5	0.16		2.14	5	20	
Total PCBs			0	0					
Toxaphene			1	0.3		** 143.22	5	30	

Units: ug/l

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190A Date Analyzed: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 17:10

Lab File ID: 05PEST18306002.024.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: MIXA4UB Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.55	2.54	2.58	35.64	40.06	-11
alpha-BHC	2.96	2.95	2.99	9.29	10.00	-7
gamma-BHC (Lindane)	3.21	3.19	3.23	9.19	10.00	-8
beta-BHC	3.28	3.26	3.30	8.62	10.00	-14
delta-BHC	3.43	3.41	3.45	9.24	10.00	-8
Heptachlor	3.61	3.59	3.63	8.85	10.13	-13
Aldrin	3.87	3.85	3.89	9.01	10.13	-11
Heptachlor epoxide	4.39	4.37	4.41	8.76	10.13	-14
gamma-Chlordane	4.49	4.47	4.51	8.82	10.13	-13
alpha-Chlordane	4.60	4.58	4.62	8.82	10.13	-13
4,4'-DDE	4.66	4.64	4.68	18.08	20.13	-10
Endosulfan I	4.71	4.69	4.73	8.73	10.13	-14
Dieldrin	4.90	4.88	4.92	17.45	20.13	-13
Endrin	5.08	5.06	5.10	17.37	20.00	-13
4,4'-DDD	5.12	5.11	5.15	17.74	20.00	-11
Endosulfan II	5.24	5.23	5.27	17.22	20.13	-14
4,4'-DDT	5.33	5.31	5.35	17.46	20.00	-13
Endrin aldehyde	5.55	5.53	5.57	16.56	20.00	-17
Methoxychlor	5.68	5.66	5.70	82.28	100.25	-18
Endosulfan sulfate	5.85	5.84	5.88	17.02	19.75	-14
Endrin ketone	6.05	6.03	6.07	17.09	20.00	-15
Decachlorobiphenyl	6.71	6.68	6.74	38.68	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: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 17:10

Lab File ID: 05PEST18306002B.024.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: MIXA4UB Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.37	2.35	2.39	40.43	40.06	1
alpha-BHC	2.78	2.77	2.81	10.11	10.00	1
gamma-BHC (Lindane)	3.04	3.03	3.07	10.09	10.00	1
beta-BHC	3.11	3.10	3.14	9.42	10.00	-6
delta-BHC	3.34	3.33	3.37	10.03	10.00	0
Heptachlor	3.38	3.37	3.41	9.60	10.13	-5
Aldrin	3.65	3.64	3.68	9.62	10.13	-5
Heptachlor epoxide	4.14	4.13	4.17	9.25	10.13	-9
gamma-Chlordane	4.30	4.29	4.33	9.38	10.13	-7
alpha-Chlordane	4.43	4.41	4.45	9.28	10.13	-8
Endosulfan I	4.47	4.46	4.50	9.24	10.13	-9
4,4'-DDE	4.57	4.56	4.60	19.30	20.13	-4
Dieldrin	4.69	4.68	4.72	19.06	20.13	-5
Endrin	4.92	4.91	4.95	18.64	20.00	-7
4,4'-DDD	5.02	5.01	5.05	18.67	20.00	-7
Endosulfan II	5.09	5.08	5.12	18.19	20.13	-10
4,4'-DDT	5.25	5.24	5.28	18.28	20.00	-9
Endrin aldehyde	5.34	5.33	5.37	17.57	20.00	-12
Endosulfan sulfate	5.53	5.52	5.56	18.46	19.75	-7
Methoxychlor	5.74	5.73	5.77	88.43	100.25	-12
Endrin ketone	5.90	5.89	5.93	17.98	20.00	-10
Decachlorobiphenyl	6.69	6.67	6.73	39.82	40.04	-1

Compounds 22

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190A Date Analyzed: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 17:23

Lab File ID: 05PEST18306002.025.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: TOXA4VQ Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	5.10	5.07	5.13	474.53	504.25	-6
	5.24	5.21	5.27	467.36	504.25	-7
	5.32	5.30	5.36	467.34	504.25	-7
	5.49	5.46	5.52	456.17	504.25	-10
	5.72	5.69	5.75	466.82	504.25	-7
	5.79	5.76	5.82	463.78	504.25	-8

Compounds 6

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 17:23

Lab File ID: 05PEST18306002B.025.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: TOXA4VQ Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	4.67	4.65	4.71	471.89	504.25	-6
	4.91	4.88	4.94	476.89	504.25	-5
	5.08	5.05	5.11	481.36	504.25	-5
	5.34	5.32	5.38	470.92	504.25	-7
	5.40	5.38	5.44	467.40	504.25	-7
	5.70	5.67	5.73	469.17	504.25	-7

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4VQ ID: VQ **Batchnumber: 1830899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 05, 2018 17:23:04
Instrument : CP05--H9190A
Result file : 05PEST18306002.025.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**2**	**5.78**	
3.52	3.53	3.58	21124.3	2.991001			5
3.57	3.61	3.63	15419.81	3.24602			6
Height Summation:			**36544.11**				
Amount Avg CF:			**3.11851**	Linear:			
Aroclor-1248					**5**	**127.98**	
3.67	3.70	3.72	19766.71	5.362223			2
3.86	3.86	3.92	13717.28	1.571871			3
4.22	4.23	4.28	150116.8	15.111225			4
4.40	4.42	4.46	329866.7	48.937944			5
4.72	4.75	4.78	595738.2	116.736677			6
Height Summation:			**1109205.69**				
Amount Avg CF:			**37.543988**	Linear:			
Aroclor-1254					**6**	**80.50**	
4.40	4.42	4.46	329866.7	25.908304			1
4.63	4.63	4.69	471736.7	49.516202			2
4.72	4.75	4.78	595738.2	35.857585			3
4.94	4.97	5.00	1403702	113.407297			4
5.08	5.10	5.14	1950669	228.951546			5
5.29	5.32	5.35	2731008	199.570782			6
Height Summation:			**7482720.6**				
Amount Avg CF:			**108.868619**	Linear:			
Aroclor-1260					**5**	**25.87**	
4.86	4.90	4.93	1286140	109.976784			1
5.07	5.10	5.13	1950669	123.500162			2
5.28	5.32	5.34	2731008	164.339958			3
E 5.54	5.57	5.60	1949286	209.811924			4
5.76	5.79	5.82	2788732	146.673893			5
Height Summation:			**10705835**				
Amount Avg CF:			**150.860544**	Linear:			
Chlordane					**6**	**127.62**	
3.51	3.53	3.57	21124.3	2.17861			1
3.95	3.97	4.01	71493.58	7.417381			2
4.31	4.31	4.37	433686.3	68.791345			3
+ 4.46	4.47	4.52	346725.2	12.171019			4
4.46	4.51	4.52	492988	17.30525			4
4.56	4.58	4.62	631334.4	16.154683			5
5.17	5.17	5.23	1334698	139.584129			6
Height Summation:			**2985324.58**				
Amount Avg CF:			**41.905233**	Linear:			

Analysis Report (B)

Injected on : Nov 05, 2018 17:23:04
Instrument : CP05--H9190B
Result file : 05PEST18306002B.025.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**31.89**	
3.12	3.15	3.18	24641.58	2.221583			3
+ 3.12	3.17	3.18	16808.66	1.5154			3
3.28	3.31	3.34	51185.77	1.097987			4
3.39	3.40	3.45	42470.1	1.81832			5
3.47	3.52	3.53	19730.48	1.283388			6
Height Summation:			**138027.93**				
Amount Avg CF:			**1.605319**	Linear:			
Aroclor-1248					**5**	**104.65**	
3.28	3.31	3.34	51185.77	2.168237			1
+ 3.54	3.57	3.60	99829.62	4.454067			2
3.54	3.59	3.60	116608.5	5.202685			2
+ 3.87	3.87	3.93	378706.2	16.228275			4
3.87	3.91	3.93	518081	22.200749			4
4.13	4.14	4.19	1151020	35.689447			5
4.32	4.36	4.38	1880036	74.06169			6
Height Summation:			**3716931.27**				
Amount Avg CF:			**27.864561**	Linear:			
Aroclor-1254					**6**	**123.10**	
4.12	4.14	4.18	1151020	36.950589			1
4.28	4.30	4.34	1302129	37.035477			2
4.65	4.67	4.71	4796794	94.419131			3
4.83	4.84	4.89	3500252	96.022065			4
E 5.09	5.15	5.15	15176030	566.265043			5
+ 5.23	5.25	5.29	2355577	60.811745			6
5.23	5.28	5.29	5925726	152.978968			6
Height Summation:			**31851951**				
Amount Avg CF:			**163.945212**	Linear:			
Aroclor-1260					**5**	**33.82**	
4.81	4.81	4.87	3736562	107.102023			1
+ 4.81	4.84	4.87	3500252	100.32861			1
4.96	4.97	5.02	4005453	96.181602			2
+ 4.96	5.01	5.02	3735314	89.694845			2
+ 5.23	5.25	5.29	2355577	54.461236			3
5.23	5.28	5.29	5925726	137.00353			3
5.67	5.70	5.73	8878685	158.9732			5
5.92	5.96	5.98	2012558	60.701356			6
Height Summation:			**24558984**				
Amount Avg CF:			**111.992342**	Linear:			
Chlordane					**5**	**183.70**	
3.25	3.27	3.31	37324.55	1.188999			1
4.09	4.14	4.15	1151020	54.3484			3
4.28	4.30	4.34	1302129	13.166498			4
4.40	4.45	4.46	1275114	17.077442			5
E 5.10	5.15	5.16	15176030	503.509341			6
Height Summation:			**18941617.55**				
Amount Avg CF:			**117.858136**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4VQ ID: VQ **Batchnumber: 1830899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 05, 2018 17:23:04
Instrument : CP05--H9190A
Result file : 05PEST18306002.025.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**6**	**1.28**	
5.07	5.10	5.13	1950669	474.533036			1
5.21	5.24	5.27	3007250	467.362548			2
5.30	5.32	5.36	2731008	467.335322			3
5.46	5.49	5.52	2768386	456.169232			4
5.69	5.72	5.75	2415195	466.819564			5
5.76	5.79	5.82	2788732	463.775626			6

Height Summation: **15661240**
Amount Avg CF: **465.999221** Linear:

Analysis Report (B)

Injected on : Nov 05, 2018 17:23:04
Instrument : CP05--H9190B
Result file : 05PEST18306002B.025.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**6**	**1.11**	
4.65	4.67	4.71	4796794	471.89266			1
4.88	4.91	4.94	5004668	476.893516			2
+ 4.88	4.93	4.94	4322010	411.843212			2
5.05	5.08	5.11	9300925	481.363685			3
5.32	5.34	5.38	9812297	470.9183			4
5.38	5.40	5.44	5752224	467.404821			5
+ 5.38	5.43	5.44	4341458	352.771102			5
5.67	5.70	5.73	8878685	469.169877			6

Height Summation: **43545593**
Amount Avg CF: **472.940476** Linear:

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 64.07	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		29.60	4	30	
Aroclor-1254			0	0		** 40.38	4	40	
Aroclor-1260			0	0	E	29.57	4	40	
Chlordane			0.5	0.16		** 95.08	4	40	
Toxaphene			1	0.3		1.48	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: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 17:36

Lab File ID: 05PEST18306002.026.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: CHLD4CD Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.54	3.51	3.57	94.61	100.20	-6
	3.98	3.95	4.01	92.86	100.20	-7
	4.33	4.31	4.37	90.98	100.20	-9
	4.49	4.46	4.52	95.21	100.20	-5
	4.59	4.56	4.62	95.53	100.20	-5
	5.19	5.17	5.23	90.21	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: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 17:36

Lab File ID: 05PEST18306002B.026.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: CHLD4CD Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.27	3.25	3.31	97.69	100.20	-3
	3.78	3.76	3.82	97.58	100.20	-3
	4.12	4.09	4.15	95.98	100.20	-4
	4.31	4.28	4.34	100.37	100.20	0
	4.43	4.40	4.46	97.91	100.20	-2
	5.12	5.10	5.16	91.38	100.20	-9

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4CD ID: CD **Batchnumber: 1830899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 05, 2018 17:36:00
Instrument : CP05--H9190A
Result file : 05PEST18306002.026.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**131.45**	
3.05	3.08	3.11	67253.18	7.608269			2
3.21	3.26	3.27	30993.24	11.920316			3
3.41	3.47	3.47	110094.5	16.31171			4
3.52	3.54	3.58	917361.1	129.88963			5
E 3.57	3.60	3.63	1291236	271.817699			6
Height Summation:			**2416938.02**				
Amount Avg CF:			**87.509525**	Linear:			
Aroclor-1221					**1**		
2.67	2.71	2.71	5953.267	1.660049			1
Height Summation:			**5953.267**				
Amount Avg CF:			**1.660049**	Linear:			
Aroclor-1248					**4**	**49.69**	
3.67	3.70	3.72	164038.2	44.499537			2
4.22	4.25	4.28	231498.1	23.303321			4
4.40	4.42	4.46	544361.4	80.759675			5
+ 4.72	4.73	4.78	78650.15	15.411732			6
4.72	4.77	4.78	223565.3	43.808287			6
Height Summation:			**1163463**				
Amount Avg CF:			**48.092705**	Linear:			
Aroclor-1254					**5**	**84.57**	
4.40	4.42	4.46	544361.4	42.75509			1
4.63	4.66	4.69	108034.8	11.339955			2
+ 4.72	4.73	4.78	78650.15	4.733966			3
4.72	4.77	4.78	223565.3	13.456434			3
4.94	4.96	5.00	261954.2	21.163693			4
5.08	5.10	5.14	675952.4	79.337062			5
Height Summation:			**1813868.1**				
Amount Avg CF:			**33.610447**	Linear:			
Aroclor-1260					**4**	**137.83**	
4.86	4.91	4.93	77967.31	6.666921			1
5.07	5.10	5.13	675952.4	42.795693			2
+ 5.54	5.57	5.60	13181.4	1.418784			4
5.54	5.59	5.60	35656.17	3.837861			4
+ 5.96	5.97	6.02	11746.8	1.035076			6
5.96	6.00	6.02	30074.34	2.650018			6
Height Summation:			**819650.22**				
Amount Avg CF:			**13.987623**	Linear:			
Chlordane					**6**	**2.42**	
3.51	3.54	3.57	917361.1	94.610076			1
3.95	3.98	4.01	895086	92.864203			2
4.31	4.33	4.37	573570.3	90.979753			3
4.46	4.49	4.52	2712244	95.207306			4
4.56	4.59	4.62	3733341	95.529312			5
5.17	5.19	5.23	862599.5	90.211569			6
Height Summation:			**9694201.9**				
Amount Avg CF:			**93.233703**	Linear:			

Analysis Report (B)

Injected on : Nov 05, 2018 17:36:00
Instrument : CP05--H9190B
Result file : 05PEST18306002B.026.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**192.12**	
2.66	2.67	2.72	12746.26	0.663354			1
2.94	2.98	3.00	42164.44	1.583604			2
3.12	3.14	3.18	261388.2	23.565683			3
3.28	3.33	3.34	12112.52	0.259826			4
3.39	3.39	3.45	4630250	198.240083			5
3.47	3.48	3.53	292282.1	19.011764			6
+ 3.47	3.51	3.53	188830.4	12.282651			6
Height Summation:			**5250943.52**				
Amount Avg CF:			**40.554052**	Linear:			
Aroclor-1221					**2**	**34.84**	
2.55	2.55	2.59	12610.44	1.135824			1
+ 2.55	2.58	2.59	11495.62	1.035412			1
2.64	2.67	2.68	12746.26	1.87853			2
Height Summation:			**25356.7**				
Amount Avg CF:			**1.507177**	Linear:			
Aroclor-1248					**5**	**165.13**	
3.28	3.33	3.34	12112.52	0.513088			1
3.54	3.57	3.60	57431.02	2.562382			2
3.76	3.78	3.82	2947306	105.434444			3
3.87	3.89	3.93	434216.4	18.606992			4
+ 3.87	3.92	3.93	369380.4	15.828647			4
4.13	4.18	4.19	240794.7	7.466273			5
Height Summation:			**3691860.64**				
Amount Avg CF:			**26.916636**	Linear:			
Aroclor-1254					**6**	**153.74**	
4.12	4.18	4.18	240794.7	7.730105			1
E 4.28	4.31	4.34	9926078	282.31998			2
4.65	4.70	4.71	1076664	21.192838			3
4.83	4.84	4.89	383055.4	10.508321			4
5.09	5.12	5.15	2754218	102.768469			5
5.23	5.26	5.29	156482.9	4.039774			6
Height Summation:			**14537293**				
Amount Avg CF:			**71.426581**	Linear:			
Aroclor-1260					**6**	**163.88**	
4.81	4.84	4.87	383055.4	10.979614			1
4.96	5.00	5.02	2205598	52.962286			2
5.23	5.26	5.29	156482.9	3.617904			3
+ 5.50	5.51	5.56	65956.56	2.424035			4
5.50	5.54	5.56	96200.36	3.535555			4
5.67	5.72	5.73	55852	1.000032			5
5.92	5.96	5.98	63403.96	1.912346			6
Height Summation:			**2960592.62**				
Amount Avg CF:			**12.334623**	Linear:			

Eurofins Lancaster Laboratories Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4CD ID: CD **Batchnumber: 1830899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 05, 2018 17:36:00
Instrument : CP05--H9190A
Result file : 05PEST18306002.026.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**4**	**174.61**	
5.07	5.10	5.13	675952.4	164.436788			1
5.21	5.24	5.27	48943.09	7.60634			2
5.46	5.50	5.52	53976.45	8.894134			4
5.69	5.75	5.75	4801.848	0.928122			5

Height Summation: **783673.788**
Amount Avg CF: **45.466346** Linear:

Analysis Report (B)

Injected on : Nov 05, 2018 17:36:00
Instrument : CP05--H9190B
Result file : 05PEST18306002B.026.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**6**	**3.11**	
+ 3.25	3.25	3.31	113415.8	3.612938			1
3.25	3.27	3.31	3066609	97.688923			1
3.76	3.78	3.82	2947306	97.579629			2
4.09	4.12	4.15	2032758	95.981952			3
4.28	4.31	4.34	9926078	100.367695			4
4.40	4.43	4.46	7310634	97.910404			5
5.10	5.12	5.16	2754218	91.379266			6

Height Summation: **28037603**
Amount Avg CF: **96.817978** Linear:

Toxaphene					**5**	**93.45**	
4.65	4.70	4.71	1076664	105.918628			1
4.88	4.91	4.94	669258.6	63.773478			2
5.05	5.06	5.11	421743.3	21.827067			3
5.32	5.35	5.38	527717.2	25.326556			4
5.67	5.72	5.73	55852	2.951347			6

Height Summation: **2751235.1**
Amount Avg CF: **43.959415** 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	** 73.33	4	40	
Aroclor-1221			0	0		9.65	3	5	
Aroclor-1248			0	0		** 56.46	4	30	
Aroclor-1254			0	0		** 72.01	4	40	
Aroclor-1260			0	0		12.56	4	40	
Chlordane			0.5	0.16		3.77	4	40	
Toxaphene			1	0.3		3.37	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: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 18:23

Lab File ID: 05PEST18306002.028.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: MIXE4ZT Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Hcb	2.84	2.82	2.86	4.75	5.00	-5
Telodrin	4.06	4.04	4.08	4.73	5.05	-6
o,p-DDE	4.38	4.36	4.40	9.79	10.10	-3
o,p-DDD	4.80	4.78	4.82	9.78	10.00	-2
o,p-DDT	5.00	4.98	5.02	9.77	10.00	-2
Kepone	5.11	5.10	5.14	3.86	50.25	-92
Mirex	5.79	5.77	5.81	24.59	25.10	-2

Compounds 7

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 18:23

Lab File ID: 05PEST18306002B.028.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: MIXE4ZT Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Hcb	2.69	2.67	2.71	5.22	5.00	4
Telodrin	3.79	3.78	3.82	5.17	5.05	2
o,p-DDE	4.31	4.30	4.34	10.53	10.10	4
o,p-DDD	4.73	4.72	4.76	10.60	10.00	6
o,p-DDT	4.96	4.95	4.99	10.75	10.00	8
Kepone	5.01	4.99	5.03	5.90	50.25	-88
Mirex	5.86	5.85	5.89	26.35	25.10	5

Compounds 7

7D

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190A Date Analyzed: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 19:53

Lab File ID: 05PEST18306002.035.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: PEMLB Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.55	2.54	2.58	19.18	20.10	-5
alpha-BHC	2.97	2.95	2.99	9.58	10.00	-4
gamma-BHC (Lindane)	3.21	3.19	3.23	9.55	10.00	-5
beta-BHC	3.28	3.26	3.30	8.59	10.00	-14
4,4'-DDE	4.66	4.64	4.68	0.28		
Endrin	5.08	5.06	5.10	47.51	50.10	-5
4,4'-DDD	5.12	5.11	5.15	0.62		
4,4'-DDT	5.33	5.31	5.35	95.12	100.40	-5
Endrin aldehyde	5.55	5.53	5.57	0.28		
Methoxychlor	5.68	5.66	5.70	224.13	250.90	-11
Endrin ketone	6.05	6.03	6.07	0.73		
Decachlorobiphenyl	6.71	6.68	6.74	23.25	20.00	16

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: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 19:53

Lab File ID: 05PEST18306002B.035.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: PEMLB 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	21.48	20.10	7
alpha-BHC	2.79	2.77	2.81	10.60	10.00	6
gamma-BHC (Lindane)	3.05	3.03	3.07	10.57	10.00	6
beta-BHC	3.12	3.10	3.14	9.40	10.00	-6
4,4'-DDE	4.58	4.56	4.60	0.30		
Endrin	4.93	4.91	4.95	53.18	50.10	6
4,4'-DDD	5.03	5.01	5.05	0.53		
4,4'-DDT	5.26	5.24	5.28	108.91	100.40	8
Endrin aldehyde	5.34	5.33	5.37	0.46		
Methoxychlor	5.75	5.73	5.77	238.01	250.90	-5
Endrin ketone	5.91	5.89	5.93	0.97		
Decachlorobiphenyl	6.70	6.67	6.73	24.70	20.00	24

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: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 20:06

Lab File ID: 05PEST18306002.036.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: MIXA3ED Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.55	2.54	2.58	20.08	20.03	0
alpha-BHC	2.97	2.95	2.99	5.08	5.00	2
gamma-BHC (Lindane)	3.21	3.19	3.23	5.07	5.00	1
beta-BHC	3.28	3.26	3.30	4.89	5.00	-2
delta-BHC	3.43	3.41	3.45	5.05	5.00	1
Heptachlor	3.61	3.59	3.63	4.96	5.06	-2
Aldrin	3.87	3.85	3.89	4.89	5.06	-3
Heptachlor epoxide	4.39	4.37	4.41	4.83	5.06	-5
gamma-Chlordane	4.49	4.47	4.51	4.93	5.06	-3
alpha-Chlordane	4.60	4.58	4.62	4.94	5.06	-3
4,4'-DDE	4.66	4.64	4.68	10.42	10.06	4
Endosulfan I	4.71	4.69	4.73	4.92	5.06	-3
Dieldrin	4.90	4.88	4.92	10.18	10.06	1
Endrin	5.08	5.06	5.10	10.13	10.00	1
4,4'-DDD	5.12	5.11	5.15	10.51	10.00	5
Endosulfan II	5.25	5.23	5.27	10.11	10.06	0
4,4'-DDT	5.33	5.31	5.35	10.33	10.00	3
Endrin aldehyde	5.55	5.53	5.57	10.02	10.00	0
Methoxychlor	5.68	5.66	5.70	51.62	50.13	3
Endosulfan sulfate	5.85	5.84	5.88	10.22	9.88	3
Endrin ketone	6.05	6.03	6.07	10.28	10.00	3
Decachlorobiphenyl	6.71	6.68	6.74	23.16	20.02	16

Compounds 22

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 20:06

Lab File ID: 05PEST18306002B.036.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: MIXA3ED Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.37	2.35	2.39	22.03	20.03	10
alpha-BHC	2.79	2.77	2.81	5.35	5.00	7
gamma-BHC (Lindane)	3.05	3.03	3.07	5.31	5.00	6
beta-BHC	3.12	3.10	3.14	5.23	5.00	5
delta-BHC	3.34	3.33	3.37	5.32	5.00	6
Heptachlor	3.39	3.37	3.41	5.21	5.06	3
Aldrin	3.66	3.64	3.68	5.22	5.06	3
Heptachlor epoxide	4.15	4.13	4.17	5.26	5.06	4
gamma-Chlordane	4.31	4.29	4.33	5.13	5.06	1
alpha-Chlordane	4.43	4.41	4.45	5.18	5.06	2
Endosulfan I	4.48	4.46	4.50	5.19	5.06	2
4,4'-DDE	4.58	4.56	4.60	10.80	10.06	7
Dieldrin	4.70	4.68	4.72	10.85	10.06	8
Endrin	4.93	4.91	4.95	10.68	10.00	7
4,4'-DDD	5.03	5.01	5.05	10.83	10.00	8
Endosulfan II	5.09	5.08	5.12	10.67	10.06	6
4,4'-DDT	5.25	5.24	5.28	10.35	10.00	4
Endrin aldehyde	5.34	5.33	5.37	10.53	10.00	5
Endosulfan sulfate	5.54	5.52	5.56	10.75	9.88	9
Methoxychlor	5.74	5.73	5.77	53.95	50.13	8
Endrin ketone	5.90	5.89	5.93	10.84	10.00	8
Decachlorobiphenyl	6.70	6.67	6.73	24.36	20.02	22

Compounds 22

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190A Date Analyzed: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 20:19

Lab File ID: 05PEST18306002.037.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: MIXE4ZR Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Hcb	2.84	2.82	2.86	4.49	5.00	-10
Telodrin	4.06	4.04	4.08	4.40	5.05	-13
o,p-DDE	4.38	4.36	4.40	8.74	10.10	-13
o,p-DDD	4.80	4.78	4.82	8.70	10.00	-13
o,p-DDT	5.00	4.98	5.02	8.41	10.00	-16
Kepone	5.11	5.10	5.14	3.50	50.25	-93
Mirex	5.79	5.77	5.81	21.10	25.10	-16

Compounds 7

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 20:19

Lab File ID: 05PEST18306002B.037.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: MIXE4ZR Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Hcb	2.69	2.67	2.71	4.93	5.00	-1
Telodrin	3.79	3.78	3.82	4.76	5.05	-6
o,p-DDE	4.31	4.30	4.34	9.31	10.10	-8
o,p-DDD	4.73	4.72	4.76	9.27	10.00	-7
o,p-DDT	4.96	4.95	4.99	9.33	10.00	-7
Kepone	5.01	4.99	5.03	5.57	50.25	-89
Mirex	5.87	5.85	5.89	22.55	25.10	-10

Compounds 7

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190A Date Analyzed: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 20:32

Lab File ID: 05PEST18306002.038.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: TOXA4VV Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	5.10	5.07	5.13	460.24	504.25	-9
	5.23	5.21	5.27	455.09	504.25	-10
	5.32	5.30	5.36	453.38	504.25	-10
	5.49	5.46	5.52	445.46	504.25	-12
	5.72	5.69	5.75	455.42	504.25	-10
	5.79	5.76	5.82	451.95	504.25	-10

Compounds 6

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 20:32

Lab File ID: 05PEST18306002B.038.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: TOXA4VV Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	4.68	4.65	4.71	473.18	504.25	-6
	4.91	4.88	4.94	464.39	504.25	-8
	5.08	5.05	5.11	465.14	504.25	-8
	5.34	5.32	5.38	470.39	504.25	-7
	5.40	5.38	5.44	458.76	504.25	-9
	5.70	5.67	5.73	465.60	504.25	-8

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4VV ID: VV **Batchnumber: 1830899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 05, 2018 20:32:03
Instrument : CP05--H9190A
Result file : 05PEST18306002.038.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**3**	**71.95**	
3.05	3.10	3.11	3294.89	0.372747			2
3.52	3.53	3.58	20691.05	2.929656			5
3.57	3.61	3.63	15169.91	3.193413			6
Height Summation:			**39155.85**				
Amount Avg CF:			**2.165272**	Linear:			
Aroclor-1248					**5**	**128.56**	
3.67	3.70	3.72	19188.1	5.205261			2
3.86	3.86	3.92	13127.49	1.504287			3
4.22	4.23	4.28	144256	14.521259			4
4.40	4.42	4.46	318130.7	47.196829			5
4.72	4.75	4.78	581177.8	113.883524			6
Height Summation:			**1075880.09**				
Amount Avg CF:			**36.462232**	Linear:			
Aroclor-1254					**6**	**80.31**	
4.40	4.42	4.46	318130.7	24.986538			1
4.63	4.63	4.69	458766.7	48.154796			2
4.72	4.75	4.78	581177.8	34.981192			3
4.94	4.97	5.00	1376885	111.24071			4
5.08	5.10	5.14	1891916	222.05566			5
5.29	5.32	5.35	2649458	193.611444			6
Height Summation:			**7276334.2**				
Amount Avg CF:			**105.83839**	Linear:			
Aroclor-1260					**5**	**26.43**	
4.86	4.90	4.93	1232290	105.372115			1
5.07	5.10	5.13	1891916	119.78041			2
5.28	5.32	5.34	2649458	159.432641			3
E 5.54	5.57	5.60	1903639	204.898696			4
5.76	5.79	5.82	2717632	142.934375			5
Height Summation:			**10394935**				
Amount Avg CF:			**146.483647**	Linear:			
Chlordane					**6**	**127.35**	
3.51	3.53	3.57	20691.05	2.133927			1
3.95	3.97	4.01	68953.01	7.1538			2
4.31	4.31	4.37	422680.9	67.045668			3
+ 4.46	4.47	4.52	337970.1	11.86369			4
4.46	4.51	4.52	479779.3	16.841588			4
4.56	4.58	4.62	613117	15.688533			5
5.17	5.17	5.23	1290917	135.005466			6
Height Summation:			**2896138.26**				
Amount Avg CF:			**40.64483**	Linear:			

Analysis Report (B)

Injected on : Nov 05, 2018 20:32:03
Instrument : CP05--H9190B
Result file : 05PEST18306002B.038.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**33.84**	
3.12	3.15	3.18	24781.54	2.234202			3
+ 3.12	3.17	3.18	17717.99	1.597381			3
3.28	3.31	3.34	47245.18	1.013457			4
3.39	3.39	3.45	36323.91	1.555176			5
3.47	3.52	3.53	20346.96	1.323487			6
Height Summation:			**128697.59**				
Amount Avg CF:			**1.53158**	Linear:			
Aroclor-1248					**5**	**104.89**	
3.28	3.31	3.34	47245.18	2.001313			1
+ 3.54	3.57	3.60	102659.4	4.580322			2
3.54	3.59	3.60	118401.6	5.282687			2
+ 3.87	3.87	3.93	378688.3	16.227508			4
3.87	3.91	3.93	508695.8	21.798575			4
4.13	4.14	4.19	1115709	34.594566			5
4.32	4.36	4.38	1848100	72.803611			6
Height Summation:			**3638151.58**				
Amount Avg CF:			**27.29615**	Linear:			
Aroclor-1254					**6**	**122.76**	
4.12	4.14	4.18	1115709	35.817018			1
4.28	4.30	4.34	1293066	36.777705			2
4.65	4.68	4.71	4809926	94.677619			3
4.83	4.84	4.89	3424071	93.932199			4
E 5.09	5.15	5.15	14938180	557.390117			5
+ 5.23	5.25	5.29	2319951	59.892022			6
5.23	5.28	5.29	5890840	152.078349			6
Height Summation:			**31471792**				
Amount Avg CF:			**161.778834**	Linear:			
Aroclor-1260					**5**	**34.36**	
4.81	4.81	4.87	3668385	105.147849			1
+ 4.81	4.84	4.87	3424071	98.145015			1
4.96	4.97	5.02	3799824	91.243902			2
+ 4.96	5.01	5.02	3717111	89.257742			2
+ 5.23	5.25	5.29	2319951	53.637559			3
5.23	5.28	5.29	5890840	136.196961			3
5.67	5.70	5.73	8811177	157.764466			5
5.92	5.96	5.98	2022563	61.003119			6
Height Summation:			**24192789**				
Amount Avg CF:			**110.271259**	Linear:			
Chlordane					**5**	**183.94**	
3.25	3.27	3.31	35907.74	1.143866			1
4.09	4.14	4.15	1115709	52.6811			3
4.28	4.30	4.34	1293066	13.074857			4
4.40	4.45	4.46	1259864	16.8732			5
E 5.10	5.15	5.16	14938180	495.617969			6
Height Summation:			**18642726.74**				
Amount Avg CF:			**115.878198**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4VV ID: VV **Batchnumber: 1830899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 05, 2018 20:32:03
Instrument : CP05--H9190A
Result file : 05PEST18306002.038.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**6**	**1.07**	
5.07	5.10	5.13	1891916	460.24038			1
5.21	5.23	5.27	2928289	455.091066			2
5.30	5.32	5.36	2649458	453.380329			3
5.46	5.49	5.52	2703374	445.456682			4
5.69	5.72	5.75	2356207	455.418103			5
5.76	5.79	5.82	2717632	451.951454			6

Height Summation: **15246876**
Amount Avg CF: **453.589669** Linear:

Analysis Report (B)

Injected on : Nov 05, 2018 20:32:03
Instrument : CP05--H9190B
Result file : 05PEST18306002B.038.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**6**	**1.08**	
4.65	4.68	4.71	4809926	473.184542			1
4.88	4.91	4.94	4873462	464.390931			2
+ 4.88	4.93	4.94	4265842	406.490978			2
5.05	5.08	5.11	8987421	465.138477			3
5.32	5.34	5.38	9801381	470.394412			4
5.38	5.40	5.44	5645834	458.759956			5
+ 5.38	5.43	5.44	4305868	349.879188			5
5.67	5.70	5.73	8811177	465.602601			6

Height Summation: **42929201**
Amount Avg CF: **466.245153** Linear:

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		34.28	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		28.75	4	30	
Aroclor-1254			0	0		** 41.81	4	40	
Aroclor-1260			0	0	E	28.21	4	40	
Chlordane			0.5	0.16		** 96.13	4	40	
Toxaphene			1	0.3		2.75	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: 11/05/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 20:45

Lab File ID: 05PEST18306002.039.RAW Initial Calibration: 05PEST1830601

Lab Standard ID: CHLD4CI Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.53	3.51	3.57	99.51	100.20	-1
	3.98	3.95	4.01	98.85	100.20	-1
	4.33	4.31	4.37	98.29	100.20	-2
	4.49	4.46	4.52	104.39	100.20	4
	4.59	4.56	4.62	103.55	100.20	3
	5.19	5.17	5.23	102.61	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: 11/05/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 20:45

Lab File ID: 05PEST18306002B.039.RAW Initial Calibration: 05PEST1830601B

Lab Standard ID: CHLD4CI Init. Calib Date(s): 11/02/18 11/02/18

Calibration: 05PEST1830601B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.27	3.25	3.31	104.28	100.20	4
	3.78	3.76	3.82	103.82	100.20	4
	4.12	4.09	4.15	103.22	100.20	3
	4.31	4.28	4.34	109.90	100.20	10
	4.43	4.40	4.46	106.44	100.20	6
	5.12	5.10	5.16	103.41	100.20	3

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: CHLD41824D CHLD4Cl ID: Cl **Batchnumber: 1830899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 05, 2018 20:45:00
Instrument : CP05--H9190A
Result file : 05PEST18306002.039.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**131.96**	
3.05	3.08	3.11	70009.71	7.920112			2
3.21	3.26	3.27	32612.74	12.543193			3
3.41	3.47	3.47	117391.2	17.392796			4
3.52	3.53	3.58	964888	136.618988			5
E 3.57	3.60	3.63	1376505	289.76765			6
Height Summation:			**2561406.65**				
Amount Avg CF:			**92.848548**	Linear:			
Aroclor-1221					**1**		
2.67	2.71	2.71	11167.01	3.113884			1
Height Summation:			**11167.01**				
Amount Avg CF:			**3.113884**	Linear:			
Aroclor-1248					**4**	**52.59**	
3.67	3.70	3.72	168845.9	45.803748			2
4.22	4.25	4.28	250248.8	25.190825			4
4.40	4.42	4.46	613010.9	90.944291			5
+ 4.72	4.73	4.78	85109.71	16.677502			6
4.72	4.76	4.78	245548.6	48.115981			6
Height Summation:			**1277654.2**				
Amount Avg CF:			**52.513711**	Linear:			
Aroclor-1254					**5**	**84.49**	
4.40	4.42	4.46	613010.9	48.146941			1
4.63	4.66	4.69	117560.8	12.339859			2
+ 4.72	4.73	4.78	85109.71	5.122768			3
4.72	4.76	4.78	245548.6	14.779612			3
4.94	4.96	5.00	292584.7	23.638379			4
5.08	5.10	5.14	747596.1	87.745939			5
Height Summation:			**2016301.1**				
Amount Avg CF:			**37.330146**	Linear:			
Aroclor-1260					**5**	**156.73**	
4.86	4.91	4.93	84688.08	7.241609			1
5.07	5.10	5.13	747596.1	47.331577			2
+ 5.54	5.56	5.60	14181.05	1.526381			4
5.54	5.59	5.60	42420.05	4.565894			4
5.76	5.78	5.82	8621.848	0.453468			5
+ 5.96	5.97	6.02	16056.11	1.414794			6
5.96	6.00	6.02	33960.28	2.99243			6
Height Summation:			**917286.358**				
Amount Avg CF:			**12.516995**	Linear:			
Chlordane					**6**	**2.59**	
3.51	3.53	3.57	964888	99.511661			1
3.95	3.98	4.01	952782.8	98.850184			2
4.31	4.33	4.37	619677.9	98.293343			3
4.46	4.49	4.52	2973744	104.386683			4
4.56	4.59	4.62	4046649	103.546286			5
5.17	5.19	5.23	981129.9	102.607603			6
Height Summation:			**10538871.6**				
Amount Avg CF:			**101.199293**	Linear:			

Analysis Report (B)

Injected on : Nov 05, 2018 20:45:00
Instrument : CP05--H9190B
Result file : 05PEST18306002B.039.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**193.42**	
2.66	2.67	2.72	12214.54	0.635682			1
+ 2.66	2.72	2.72	6039.653	0.314322			1
2.94	2.98	3.00	36365.71	1.365816			2
3.12	3.14	3.18	280610.6	25.298695			3
3.28	3.33	3.34	13892.06	0.297999			4
E 3.39	3.39	3.45	5025086	215.144639			5
3.47	3.48	3.53	305258.4	19.855819			6
+ 3.47	3.51	3.53	207180.3	13.476237			6
Height Summation:			**5673427.31**				
Amount Avg CF:			**43.766442**	Linear:			
Aroclor-1221					**2**	**39.71**	
2.55	2.57	2.59	11222.19	1.010785			1
2.64	2.67	2.68	12214.54	1.800166			2
Height Summation:			**23436.73**				
Amount Avg CF:			**1.405475**	Linear:			
Aroclor-1248					**5**	**163.78**	
3.28	3.33	3.34	13892.06	0.58847			1
3.54	3.57	3.60	63761.28	2.844817			2
3.76	3.78	3.82	3135756	112.175895			3
3.87	3.89	3.93	474393.2	20.328644			4
+ 3.87	3.92	3.93	401077.8	17.186941			4
4.13	4.17	4.19	264609.4	8.204691			5
Height Summation:			**3952411.94**				
Amount Avg CF:			**28.828503**	Linear:			
Aroclor-1254					**6**	**152.10**	
4.12	4.17	4.18	264609.4	8.494616			1
E 4.28	4.31	4.34	10869280	309.146766			2
4.65	4.70	4.71	1224441	24.101651			3
4.83	4.84	4.89	433612.7	11.895254			4
5.09	5.12	5.15	3116822	116.298356			5
5.23	5.26	5.29	180697.3	4.664894			6
Height Summation:			**16089462.4**				
Amount Avg CF:			**79.100256**	Linear:			
Aroclor-1260					**6**	**161.60**	
4.81	4.84	4.87	433612.7	12.428751			1
4.96	4.99	5.02	2491341	59.823737			2
5.23	5.26	5.29	180697.3	4.177744			3
+ 5.50	5.51	5.56	80722.34	2.966707			4
5.50	5.54	5.56	116251.2	4.272463			4
5.67	5.72	5.73	73596.32	1.317745			5
5.92	5.96	5.98	81139.84	2.447283			6
Height Summation:			**3376638.36**				
Amount Avg CF:			**14.077954**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4Cl ID: Cl **Batchnumber: 1830899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 05, 2018 20:45:00
Instrument : CP05--H9190A
Result file : 05PEST18306002.039.RAW
Calibration file : 05PEST1830601.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**5**	**195.43**	
5.07	5.10	5.13	747596.1	181.865323			1
5.21	5.24	5.27	53706.6	8.346647			2
5.46	5.50	5.52	59266.11	9.765754			4
5.69	5.75	5.75	5381.73	1.040205			5
5.76	5.78	5.82	8621.848	1.433843			6

Height Summation: **874572.388**
Amount Avg CF: **40.490354** Linear:

Analysis Report (B)

Injected on : Nov 05, 2018 20:45:00
Instrument : CP05--H9190B
Result file : 05PEST18306002B.039.RAW
Calibration file : 05PEST1830601B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**6**	**2.46**	
+ 3.25	3.25	3.31	117103.8	3.730421			1
3.25	3.27	3.31	3273380	104.275755			1
3.76	3.78	3.82	3135756	103.818845			2
4.09	4.12	4.15	2186114	103.223054			3
4.28	4.31	4.34	10869280	109.904897			4
4.40	4.43	4.46	7947758	106.443325			5
5.10	5.12	5.16	3116822	103.409719			6

Height Summation: **30529110**
Amount Avg CF: **105.179266** Linear:

Toxaphene					**5**	**91.93**	
4.65	4.70	4.71	1224441	120.456438			1
4.88	4.90	4.94	781947.2	74.511546			2
5.05	5.06	5.11	486699.6	25.18884			3
5.32	5.35	5.38	620526.8	29.780736			4
5.67	5.72	5.73	73596.32	3.888997			6

Height Summation: **3187210.92**
Amount Avg CF: **50.765311** 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	** 71.85	4	40	
Aroclor-1221			0	0		** 75.60	3	5	
Aroclor-1248			0	0		** 58.24	4	30	
Aroclor-1254			0	0		** 71.75	4	40	
Aroclor-1260			0	0		11.74	4	40	
Chlordane			0.5	0.16		3.86	4	40	
Toxaphene			1	0.3		22.52	4	40	

Units: ug/l

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **IBLKX1824B** PIBLKQH ID: QH **Batchnumber: 1831299999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 09, 2018 22:15:45
Instrument : CP05--H9190A
Result file : 05PEST18306007.043.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTD.MET

%SSR(TCX) : 112% (29-129) Conc.: 0.225042
%SSR(DCB) : 120% (32-149) Conc.: 0.240389

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.53	2.54	2.57	8921380	0.225042
HCB	2.81	2.83	2.85	119843	0.002844
alpha-BHC	2.94	2.95	2.98	9393	0.000171
Dieldrin	4.87	4.88	4.91	4850	0.000150
Mirex	5.76	5.79	5.80	13760	0.000725
DCB	6.67	6.70	6.73	4590280	0.240389

Analysis Report (B)

Injected on : Nov 09, 2018 22:15:45
Instrument : CP05--H9190B
Result file : 05PEST18306007B.043.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDB.MET

%SSR(TCX) : 119% (29-129) Conc.: 0.238776
%SSR(DCB) : 120% (32-149) Conc.: 0.240082

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.34	2.36	2.38	39896270	0.238776
gamma-BHC	3.02	3.04	3.06	6807	0.000037
delta-BHC	3.31	3.32	3.35	30515	0.000180
Hept. epoxide	4.12	4.16	4.16	5195	0.000047
a. Chlordane	4.40	4.41	4.44	36444	0.000316
Dieldrin	4.67	4.67	4.70	73072	0.000631
Endrin	4.90	4.92	4.94	75302	0.000727
4,4'-DDD	5.00	5.02	5.04	74822	0.000842
Endrin aldehyde	5.31	5.33	5.35	50930	0.000649
Endrin ketone	5.88	5.89	5.92	53161	0.000554
DCB	6.66	6.69	6.72	14850470	0.240082

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☐ TCX	B	0.238776				5.92	
☑ HCB			<0.01	<0.003			
☑ alpha-BHC			<0.01	<0.003			
☑ gamma-BHC			<0.01	<0.002			
☑ beta-BHC			<0.01	<0.0034			
☑ delta-BHC			<0.01	<0.0034			
☑ Heptachlor			<0.01	<0.002			
☑ Aldrin			<0.01	<0.002			
☑ Telodrin			<0.01	<0.0036			
☑ o,p-DDE			<0.02	<0.007			
☑ Hept. epoxide			<0.01	<0.0023			
☑ g. Chlordane			<0.02	<0.007			
☑ a. Chlordane			<0.01	<0.003			
☑ 4,4'-DDE			<0.02	<0.005			
☑ Endosulfan I			<0.01	<0.0043			
☑ o,p-DDD			<0.02	<0.005			
☑ Dieldrin	A	0.000150	<0.02	<0.0053		123.20	** <MDL
☑ o,p-DDT			<0.02	<0.0051			
☑ Endrin			<0.02	<0.0081			
☑ Kepone			<0.2	<0.07			
☑ 4,4'-DDD			<0.02	<0.005			
☑ Endosulfan II			<0.03	<0.015			
☑ 4,4'-DDT			<0.02	<0.0052			
☑ Endrin aldehyde			<0.1	<0.02			
☑ Methoxychlor			<0.1	<0.03			
☑ Mirex			<0.05	<0.01			
☑ Endo. sulfate			<0.02	<0.0058			
☑ Endrin ketone			<0.02	<0.005			

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%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

NOV 12 2018

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **IBLKX1824B** PIBLKQH ID: QH **Batchnumber: 1831299999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on	: Nov 09, 2018 22:15:45
Instrument	: CP05--H9190A
Result file	: 05PEST18306007.043.RAW
Calibration file	: 05PEST1830603.CAL
Method file	: 05PESTD.MET

Analysis Report (B)

Injected on	: Nov 09, 2018 22:15:45
Instrument	: CP05--H9190B
Result file	: 05PEST18306007B.043.RAW
Calibration file	: 05PEST1830603B.CAL
Method file	: 05PESTDB.MET

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
DCB	A	0.240389				0.13	

Units: ug/l

Reviewed by: Andrea L Jones Andrea L. Jones Chemist Verified by:

Date: NOV 12 2018 Date:

%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: **IBLKX1824B** PIBLKQH ID: QH **Batchnumber: 1831299999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 09, 2018 22:15:45
Instrument : CP05--H9190A
Result file : 05PEST18306007.043.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTD.MET

%SSR(TCX) : 112% (29-129) Conc.: 0.225042
%SSR(DCB) : 120% (32-149) Conc.: 0.240389

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**1**		
2.78	2.83	2.84	119843.3	0.19047			1
Height Summation:			**119843.3**				
Amount Avg CF:			**0.19047**	Linear:			
Aroclor-1221					**1**		
2.80	2.83	2.84	119843.3	0.145875			3
Height Summation:			**119843.3**				
Amount Avg CF:			**0.145875**	Linear:			
Aroclor-1248					**2**	**63.16**	
3.66	3.68	3.72	4176.864	0.011331			2
4.39	4.45	4.45	19965.38	0.02962			5
Height Summation:			**24142.244**				
Amount Avg CF:			**0.020475**	Linear:			
Aroclor-1260					**2**	**38.38**	
4.85	4.88	4.91	4850.121	0.004147			1
5.74	5.79	5.80	13759.68	0.007237			5
Height Summation:			**18609.801**				
Amount Avg CF:			**0.005692**	Linear:			
Chlordane					**1**		
4.29	4.32	4.35	3770.655	0.005234			3
Height Summation:			**3770.655**				
Amount Avg CF:			**0.005234**	Linear:			
Toxaphene					**3**	**55.76**	
5.45	5.50	5.51	6744.613	0.009794			4
5.68	5.72	5.74	4053.254	0.006812			5
5.75	5.79	5.81	13759.68	0.019702			6
Height Summation:			**24557.547**				
Amount Avg CF:			**0.012103**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 22:15:45
Instrument : CP05--H9190B
Result file : 05PEST18306007B.043.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDB.MET

%SSR(TCX) : 119% (29-129) Conc.: 0.238776
%SSR(DCB) : 120% (32-149) Conc.: 0.240082

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**96.37**	
2.66	2.71	2.72	63569.61	0.033084			1
2.93	2.94	2.99	19861.03	0.007459			2
3.11	3.14	3.17	7806.539	0.007038			3
3.27	3.32	3.33	30515.25	0.006546			4
Height Summation:			**121752.429**				
Amount Avg CF:			**0.013532**	Linear:			
Aroclor-1221					**1**		
2.67	2.71	2.71	63569.61	0.027746			3
Height Summation:			**63569.61**				
Amount Avg CF:			**0.027746**	Linear:			
Aroclor-1248					**2**	**110.08**	
3.27	3.32	3.33	30515.25	0.012926			1
4.11	4.16	4.17	5195.135	0.001611			5
Height Summation:			**35710.385**				
Amount Avg CF:			**0.007269**	Linear:			
Aroclor-1254					**6**	**56.03**	
4.11	4.16	4.17	5195.135	0.001668			1
4.27	4.27	4.33	47687.85	0.013563			2
4.64	4.67	4.70	73072.12	0.014383			3
4.81	4.85	4.87	75232.88	0.020639			4
5.07	5.12	5.13	76972.09	0.028721			5
5.21	5.27	5.27	63920.76	0.016502			6
Height Summation:			**342080.835**				
Amount Avg CF:			**0.015913**	Linear:			
Aroclor-1260					**2**	**26.41**	
4.79	4.85	4.85	75232.88	0.021564			1
5.21	5.27	5.27	63920.76	0.014779			3
Height Summation:			**139153.64**				
Amount Avg CF:			**0.018171**	Linear:			
Chlordane					**4**	**121.02**	
3.23	3.25	3.29	6172.051	0.001509			1
4.27	4.27	4.33	47687.85	0.003594			4
4.39	4.41	4.45	36444.32	0.003635			5
5.08	5.12	5.14	76972.09	0.02048			6
Height Summation:			**167276.311**				
Amount Avg CF:			**0.007304**	Linear:			
Toxaphene					**3**	**48.66**	
4.64	4.67	4.70	73072.12	0.052382			1
4.87	4.92	4.93	75301.66	0.052282			2
5.31	5.33	5.37	50929.61	0.017901			4
Height Summation:			**199303.39**				
Amount Avg CF:			**0.040855**	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 173.47	4	40	

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **IBLKX1824B** PIBLKQH ID: QH **Batchnumber: 1831299999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 09, 2018 22:15:45
Instrument : CP05--H9190A
Result file : 05PEST18306007.043.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTD.MET

Analysis Report (B)

Injected on : Nov 09, 2018 22:15:45
Instrument : CP05--H9190B
Result file : 05PEST18306007B.043.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDB.MET

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1221			0	0		** 136.08	3	5	
Aroclor-1248			0	0		** 95.20	4	30	
Aroclor-1254			0	0			4	40	
Aroclor-1260			0	0		** 104.59	4	40	
Chlordane			0.5	0.16		33.03	4	40	
Toxaphene			1	0.3		** 108.59	4	40	

Units: ug/l

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NOV 12 2018

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: 22:28

Lab File ID: 05PEST18306007.044.RAW Initial Calibration: 05PEST1830603

Lab Standard ID: PEMMC Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.55	2.53	2.57	22.59	20.10	12
alpha-BHC	2.96	2.94	2.98	11.37	10.00	14
gamma-BHC (Lindane)	3.20	3.18	3.22	11.51	10.00	15
beta-BHC	3.27	3.25	3.29	10.48	10.00	5
4,4'-DDE	4.66	4.63	4.67	0.59		
Endrin	5.07	5.05	5.09	58.19	50.10	16
4,4'-DDD	5.12	5.10	5.14	0.98		
4,4'-DDT	5.33	5.31	5.35	115.49	100.40	15
Endrin aldehyde	5.54	5.52	5.56	0.25		
Methoxychlor	5.68	5.65	5.69	261.97	250.90	4
Endrin ketone	6.04	6.02	6.06	0.71		
Decachlorobiphenyl	6.70	6.67	6.73	25.26	20.00	26

4'4-DDT % breakdown: 1 Endrin % breakdown: 2 Combined % breakdown: 3.4

Compounds 12

7D

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B

GC Column (2) : RTXCLPII ID: .32 (mm)

Lab File ID: 05PEST18306007B.044.RAW

Lab Standard ID: PEMMC

Calibration: 05PEST1830603B

Date Analyzed: 11/09/18

Time Analyzed: 22:28

Initial Calibration: 05PEST1830603B

Init. Calib Date(s): 11/09/18 11/09/18

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	2.36	2.34	2.38	23.95	20.10	19
alpha-BHC	2.78	2.76	2.80	12.20	10.00	22
gamma-BHC (Lindane)	3.04	3.02	3.06	12.23	10.00	22
beta-BHC	3.10	3.09	3.13	10.79	10.00	8
4,4'-DDE	4.56	4.55	4.59	0.51		
Endrin	4.92	4.90	4.94	63.10	50.10	26
4,4'-DDD	5.01	5.00	5.04	0.72		
4,4'-DDT	5.24	5.23	5.27	131.47	100.40	31
Endrin aldehyde	5.33	5.31	5.35	0.31		
Methoxychlor	5.73	5.72	5.76	286.69	250.90	14
Endrin ketone	5.89	5.88	5.92	0.82		
Decachlorobiphenyl	6.69	6.66	6.72	25.01	20.00	25

4'4-DDT % breakdown: 1 Endrin % breakdown: 2 Combined % breakdown: 3

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: 22:41

Lab File ID: 05PEST18306007.045.RAW Initial Calibration: 05PEST1830603

Lab Standard ID: MIXA4WE Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Tetrachloro-m-xylene	2.55	2.53	2.57	43.24	40.06	8
alpha-BHC	2.96	2.94	2.98	11.57	10.00	16
gamma-BHC (Lindane)	3.20	3.18	3.22	11.56	10.00	16
beta-BHC	3.27	3.25	3.29	11.18	10.00	12
delta-BHC	3.42	3.40	3.44	11.61	10.00	16
Heptachlor	3.60	3.58	3.62	11.58	10.13	14
Aldrin	3.86	3.84	3.88	11.79	10.13	16
Heptachlor epoxide	4.38	4.36	4.40	11.66	10.13	15
gamma-Chlordane	4.49	4.47	4.51	12.11	10.13	20
alpha-Chlordane	4.60	4.57	4.61	11.76	10.13	16
4,4'-DDE	4.66	4.63	4.67	23.10	20.13	15
Endosulfan I	4.70	4.68	4.72	11.88	10.13	17
Dieldrin	4.89	4.87	4.91	23.27	20.13	16
Endrin	5.07	5.05	5.09	23.83	20.00	19
4,4'-DDD	5.12	5.10	5.14	23.69	20.00	18
Endosulfan II	5.24	5.22	5.26	23.30	20.13	16
4,4'-DDT	5.33	5.31	5.35	23.58	20.00	18
Endrin aldehyde	5.54	5.52	5.56	22.20	20.00	11
Methoxychlor	5.68	5.65	5.69	109.49	100.25	9
Endosulfan sulfate	5.85	5.83	5.87	22.83	19.75	16
Endrin ketone	6.05	6.02	6.06	22.41	20.00	12
Decachlorobiphenyl	6.70	6.67	6.73	45.49	40.04	14

Compounds 22

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: 22:41

Lab File ID: 05PEST18306007B.045.RAW Initial Calibration: 05PEST1830603B

Lab Standard ID: MIXA4WE Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Tetrachloro-m-xylene	2.36	2.34	2.38	46.88	40.06	17
alpha-BHC	2.78	2.76	2.80	12.62	10.00	26
gamma-BHC (Lindane)	3.04	3.02	3.06	12.50	10.00	25
beta-BHC	3.10	3.09	3.13	11.72	10.00	17
delta-BHC	3.33	3.31	3.35	12.48	10.00	25
Heptachlor	3.38	3.36	3.40	12.36	10.13	22
Aldrin	3.64	3.62	3.66	12.31	10.13	22
Heptachlor epoxide	4.14	4.12	4.16	12.36	10.13	22
gamma-Chlordane	4.30	4.28	4.32	12.49	10.13	23
alpha-Chlordane	4.42	4.40	4.44	12.43	10.13	23
Endosulfan I	4.46	4.45	4.49	12.14	10.13	20
4,4'-DDE	4.56	4.55	4.59	24.72	20.13	23
Dieldrin	4.68	4.67	4.71	24.72	20.13	23
Endrin	4.92	4.90	4.94	25.24	20.00	26
4,4'-DDD	5.01	5.00	5.04	25.32	20.00	27
Endosulfan II	5.08	5.06	5.10	24.43	20.13	21
4,4'-DDT	5.24	5.23	5.27	25.08	20.00	25
Endrin aldehyde	5.33	5.31	5.35	23.71	20.00	19
Endosulfan sulfate	5.53	5.51	5.55	24.65	19.75	25
Methoxychlor	5.73	5.72	5.76	114.03	100.25	14
Endrin ketone	5.89	5.88	5.92	23.79	20.00	19
Decachlorobiphenyl	6.69	6.66	6.72	46.77	40.04	17

Compounds 22

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: 22:54

Lab File ID: 05PEST18306007.046.RAW Initial Calibration: 05PEST1830603

Lab Standard ID: TOXA4XQ Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Toxaphene	5.09	5.06	5.12	559.98	504.25	11
	5.22	5.20	5.26	544.80	504.25	8
	5.31	5.29	5.35	551.82	504.25	9
	5.48	5.45	5.51	549.65	504.25	9
	5.71	5.68	5.74	553.53	504.25	10
	5.78	5.75	5.81	546.85	504.25	8

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: 22:54

Lab File ID: 05PEST18306007B.046.RAW Initial Calibration: 05PEST1830603B

Lab Standard ID: TOXA4XQ Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Toxaphene	4.67	4.64	4.70	512.31	504.25	2
	4.90	4.87	4.93	516.89	504.25	3
	5.07	5.04	5.10	520.34	504.25	3
	5.33	5.31	5.37	532.25	504.25	6
	5.39	5.36	5.42	529.69	504.25	5
	5.69	5.66	5.72	523.60	504.25	4

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4XQ ID: XQ **Batchnumber: 1831299999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 09, 2018 22:54:20
Instrument : CP05--H9190A
Result file : 05PEST18306007.046.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**89.00**	
3.04	3.08	3.10	3701.592	0.418757			2
3.40	3.46	3.46	13085.79	1.938804			4
3.51	3.52	3.57	18569.35	2.629244			5
3.56	3.59	3.62	30228.28	6.363346			6
Height Summation:			**65585.012**				
Amount Avg CF:			**2.837537**	Linear:			
Aroclor-1248					**6**	**144.60**	
3.38	3.39	3.44	7169.284	1.063302			1
3.66	3.69	3.72	44369.42	12.036335			2
3.85	3.85	3.91	19962.65	2.287532			3
4.21	4.22	4.27	176847.4	17.802011			4
4.39	4.41	4.45	423563.3	62.838465			5
4.71	4.74	4.77	813147.1	159.3386			6
Height Summation:			**1485059.154**				
Amount Avg CF:			**42.561041**	Linear:			
Aroclor-1254					**6**	**81.44**	
4.39	4.41	4.45	423563.3	33.267398			1
4.62	4.62	4.68	626871	65.799992			2
4.71	4.74	4.77	813147.1	48.943464			3
4.93	4.96	4.99	1921552	155.245215			4
E 5.06	5.09	5.12	2677810	314.296653			5
E 5.27	5.31	5.33	3736207	273.026572			6
Height Summation:			**10199150.4**				
Amount Avg CF:			**148.429882**	Linear:			
Aroclor-1260					**5**	**26.66**	
4.85	4.89	4.91	1719587	147.040484			1
5.06	5.09	5.12	2677810	169.536691			2
E 5.27	5.31	5.33	3736207	224.828379			3
E 5.53	5.56	5.59	2686346	289.145575			4
E 5.74	5.78	5.80	3819141	200.868452			5
Height Summation:			**14639091**				
Amount Avg CF:			**206.283916**	Linear:			
Chlordane					**6**	**131.96**	
3.50	3.52	3.56	18569.35	1.68025			1
3.94	3.96	4.00	73101.73	6.570634			2
4.29	4.30	4.35	565100.8	78.440725			3
+ 4.45	4.46	4.51	454450.8	13.649926			4
4.45	4.50	4.51	640563.7	19.24003			4
4.55	4.57	4.61	830571.9	18.038901			5
5.15	5.16	5.22	1815343	164.921781			6
Height Summation:			**3943250.48**				
Amount Avg CF:			**48.14872**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 22:54:20
Instrument : CP05--H9190B
Result file : 05PEST18306007B.046.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**63.31**	
2.66	2.67	2.72	10034.3	0.522215			1
3.11	3.14	3.17	33768.8	3.044456			3
+ 3.11	3.16	3.17	31373.46	2.828502			3
3.27	3.30	3.33	53845.31	1.155037			4
3.37	3.39	3.43	85289.02	3.651574			5
3.46	3.50	3.52	63716.27	4.144485			6
Height Summation:			**246653.7**				
Amount Avg CF:			**2.503553**	Linear:			
Aroclor-1221					**2**	**1.40**	
2.54	2.55	2.58	16747.83	1.50848			1
2.63	2.67	2.67	10034.3	1.478844			2
Height Summation:			**26782.13**				
Amount Avg CF:			**1.493662**	Linear:			
Aroclor-1248					**5**	**106.43**	
3.27	3.30	3.33	53845.31	2.280896			1
3.53	3.56	3.59	166060.1	7.409051			2
+ 3.85	3.86	3.91	563226.8	24.135331			4
3.85	3.90	3.91	774607	33.193372			4
4.11	4.13	4.17	1623677	50.345028			5
4.30	4.35	4.36	2772149	109.205377			6
Height Summation:			**5390338.41**				
Amount Avg CF:			**40.486745**	Linear:			
Aroclor-1254					**5**	**46.01**	
4.11	4.13	4.17	1623677	52.124047			1
4.27	4.29	4.33	1894765	53.891377			2
4.64	4.67	4.70	7146652	140.673265			3
4.81	4.83	4.87	5128379	140.686311			4
+ 4.81	4.85	4.87	4253482	116.685348			4
5.21	5.24	5.27	3493008	90.175745			6
Height Summation:			**19286481**				
Amount Avg CF:			**95.510149**	Linear:			
Aroclor-1260					**6**	**50.03**	
4.79	4.80	4.85	5501214	157.682691			1
+ 4.79	4.83	4.85	5128379	146.996027			1
4.95	4.96	5.01	6033896	144.889925			2
+ 4.95	5.00	5.01	5524102	132.648412			2
5.21	5.24	5.27	3493008	80.758784			3
E 5.48	5.49	5.54	8026538	294.991255			4
+ 5.65	5.66	5.71	6455556	115.586981			5
E 5.65	5.69	5.71	13359640	239.204873			5
5.90	5.95	5.96	3019222	91.063646			6
Height Summation:			**39433518**				
Amount Avg CF:			**168.098529**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4XQ ID: XQ **Batchnumber: 1831299999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 09, 2018 22:54:20
Instrument : CP05--H9190A
Result file : 05PEST18306007.046.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**6**	**0.98**	
5.06	5.09	5.12	2677810	559.982813			1
5.20	5.22	5.26	4082646	544.804576			2
5.29	5.31	5.35	3736207	551.819914			3
5.45	5.48	5.51	3785343	549.654537			4
5.68	5.71	5.74	3293590	553.527575			5
5.75	5.78	5.81	3819141	546.854114			6

Height Summation: **21394737**
Amount Avg CF: **551.107255** Linear:

Analysis Report (B)

Injected on : Nov 09, 2018 22:54:20
Instrument : CP05--H9190B
Result file : 05PEST18306007B.046.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**5**	**185.46**	
3.23	3.26	3.29	123652.9	3.022761			1
4.08	4.13	4.14	1623677	58.418802			3
4.27	4.29	4.33	1894765	14.281679			4
4.39	4.39	4.45	1928127	19.229987			5
+ 4.39	4.45	4.45	1827085	18.222255			5
E 5.08	5.14	5.14	22158940	589.583992			6

Height Summation: **27729161.9**
Amount Avg CF: **136.907444** Linear:

Toxaphene					**6**	**1.45**	
4.64	4.67	4.70	7146652	512.314321			1
4.87	4.90	4.93	7444801	516.889788			2
+ 4.87	4.92	4.93	6326876	439.272667			2
+ 5.04	5.04	5.10	9153763	350.682533			3
5.04	5.07	5.10	13582160	520.335328			3
5.31	5.33	5.37	15143260	532.250488			4
5.36	5.39	5.42	8850897	529.687148			5
5.66	5.69	5.72	13359640	523.595073			6

Height Summation: **65527410**
Amount Avg CF: **522.512024** Linear:

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		12.51	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0		5.00	4	30	
Aroclor-1254			0	0	E	** 43.39	4	40	
Aroclor-1260			0	0	E	20.40	4	40	
Chlordane			0.5	0.16		** 95.93	4	40	
Toxaphene			1	0.3		5.33	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: 23:07

Lab File ID: 05PEST18306007.047.RAW Initial Calibration: 05PEST1830603

Lab Standard ID: CHLD4DP Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Chlordane	3.53	3.50	3.56	102.34	100.20	2
	3.97	3.94	4.00	100.51	100.20	0
	4.32	4.29	4.35	100.70	100.20	0
	4.48	4.45	4.51	104.22	100.20	4
	4.58	4.55	4.61	102.58	100.20	2
	5.19	5.16	5.22	100.57	100.20	0

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: 23:07

Lab File ID: 05PEST18306007B.047.RAW Initial Calibration: 05PEST1830603B

Lab Standard ID: CHLD4DP Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Chlordane	3.26	3.23	3.29	102.18	100.20	2
	3.77	3.74	3.80	102.42	100.20	2
	4.11	4.08	4.14	101.63	100.20	1
	4.30	4.27	4.33	105.57	100.20	5
	4.42	4.39	4.45	103.91	100.20	4
	5.11	5.08	5.14	97.36	100.20	-3

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: CHLD41824D CHLD4DP ID: DP **Batchnumber: 1831299999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 09, 2018 23:07:10
Instrument : CP05--H9190A
Result file : 05PEST18306007.047.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**131.27**	
+ 3.04	3.04	3.10	8834.818	0.999472			2
3.04	3.08	3.10	77108.52	8.723191			2
3.20	3.25	3.26	38527.89	14.81822			3
3.40	3.46	3.46	131609.7	19.499423			4
3.51	3.53	3.57	1131014	160.140854			5
E 3.56	3.60	3.62	1567918	330.061942			6
Height Summation:			**2946178.11**				
Amount Avg CF:			**106.648726**	Linear:			
Aroclor-1221					**1**		
2.66	2.70	2.70	7200.118	2.007729			1
Height Summation:			**7200.118**				
Amount Avg CF:			**2.007729**	Linear:			
Aroclor-1248					**4**	**47.22**	
3.66	3.69	3.72	229059.1	62.138112			2
4.21	4.24	4.27	293172.8	29.511688			4
4.39	4.42	4.45	688188.6	102.097408			5
+ 4.71	4.72	4.77	110826.5	21.716783			6
4.71	4.76	4.77	300304.2	58.845504			6
Height Summation:			**1510724.7**				
Amount Avg CF:			**63.148178**	Linear:			
Aroclor-1254					**5**	**83.00**	
4.39	4.42	4.45	688188.6	54.051528			1
4.62	4.66	4.68	148605	15.598437			2
+ 4.71	4.72	4.77	110826.5	6.670666			3
4.71	4.76	4.77	300304.2	18.075361			3
4.93	4.95	4.99	351992.3	28.438013			4
5.06	5.09	5.12	876597.6	102.886946			5
Height Summation:			**2365687.7**				
Amount Avg CF:			**43.810057**	Linear:			
Aroclor-1260					**5**	**156.83**	
4.85	4.91	4.91	112970.3	9.659998			1
5.06	5.09	5.12	876597.6	55.49888			2
+ 5.53	5.56	5.59	16034.02	1.725826			4
5.53	5.59	5.59	43322.88	4.66307			4
5.74	5.77	5.80	8256.637	0.434259			5
+ 5.94	5.96	6.00	15805.89	1.392745			6
5.94	6.00	6.00	36731.27	3.236597			6
Height Summation:			**1077878.687**				
Amount Avg CF:			**14.698561**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:07:10
Instrument : CP05--H9190B
Result file : 05PEST18306007B.047.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**185.58**	
2.66	2.66	2.72	21025.64	1.094238			1
2.93	2.97	2.99	95528.08	3.587826			2
3.11	3.13	3.17	331992.2	29.931049			3
3.27	3.32	3.33	19998.65	0.428991			4
E 3.37	3.38	3.43	5987158	256.334906			5
3.46	3.47	3.52	500295.1	32.542164			6
+ 3.46	3.51	3.52	240145.5	15.620489			6
Height Summation:			**6955997.67**				
Amount Avg CF:			**53.986529**	Linear:			
Aroclor-1221					**2**	**68.68**	
2.54	2.56	2.58	11910.54	1.072784			1
+ 2.63	2.63	2.67	5490.367	0.809164			2
2.63	2.66	2.67	21025.64	3.098737			2
Height Summation:			**32936.18**				
Amount Avg CF:			**2.08576**	Linear:			
Aroclor-1248					**5**	**165.00**	
3.27	3.32	3.33	19998.65	0.847146			1
3.53	3.56	3.59	70285.29	3.135897			2
3.75	3.77	3.81	3985948	142.589948			3
3.85	3.88	3.91	591656.7	25.353606			4
+ 3.85	3.91	3.91	520395.4	22.299925			4
4.11	4.17	4.17	329986.1	10.231813			5
Height Summation:			**4997874.74**				
Amount Avg CF:			**36.431682**	Linear:			
Aroclor-1254					**6**	**155.09**	
4.11	4.17	4.17	329986.1	10.59337			1
E 4.27	4.30	4.33	14006150	398.366402			2
4.64	4.69	4.70	1445778	28.458404			3
4.81	4.83	4.87	526780.3	14.451112			4
5.07	5.11	5.13	3659307	136.540165			5
5.21	5.22	5.27	337901.1	8.723279			6
+ 5.21	5.25	5.27	179234.1	4.62712			6
Height Summation:			**20305902.5**				
Amount Avg CF:			**99.522122**	Linear:			
Aroclor-1260					**5**	**145.47**	
+ 4.79	4.79	4.85	500687.2	14.351324			1
4.79	4.83	4.85	526780.3	15.099237			1
4.95	4.99	5.01	3138484	75.363366			2
5.21	5.22	5.27	337901.1	7.812316			3
+ 5.21	5.25	5.27	179234.1	4.143915			3
+ 5.48	5.50	5.54	77863.45	2.861637			4
5.48	5.53	5.54	120027.6	4.411253			4
5.90	5.95	5.96	93808.34	2.829381			6
Height Summation:			**4217001.34**				
Amount Avg CF:			**21.103111**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4DP ID: DP **Batchnumber: 1831299999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 09, 2018 23:07:10
Instrument : CP05--H9190A
Result file : 05PEST18306007.047.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**6**	**1.47**	
3.50	3.53	3.56	1131014	102.339948			1
3.94	3.97	4.00	1118206	100.50819			2
4.29	4.32	4.35	725457.2	100.699536			3
4.45	4.48	4.51	3469885	104.221783			4
4.55	4.58	4.61	4722924	102.575537			5
5.15	5.19	5.22	1106987	100.56847			6
Height Summation:			**12274473.2**				
Amount Avg CF:			**101.818911**	Linear:			
Toxaphene					**5**	**188.54**	
5.06	5.09	5.12	876597.6	183.313824			1
5.20	5.24	5.26	92653.71	12.364081			2
5.45	5.50	5.51	62057.37	9.011103			4
5.68	5.69	5.74	23697.83	3.982707			5
+ 5.68	5.74	5.74	5072.912	0.852564			5
5.75	5.77	5.81	8256.637	1.182249			6
Height Summation:			**1063263.147**				
Amount Avg CF:			**41.970793**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:07:10
Instrument : CP05--H9190B
Result file : 05PEST18306007B.047.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**6**	**2.70**	
+ 3.23	3.24	3.29	142546.1	3.484615			1
3.23	3.26	3.29	4180045	102.18342			1
3.74	3.77	3.80	3985948	102.417504			2
4.08	4.11	4.14	2824592	101.626913			3
4.27	4.30	4.33	14006150	105.570529			4
4.39	4.42	4.45	10418410	103.907001			5
5.08	5.11	5.14	3659307	97.363359			6
Height Summation:			**39074452**				
Amount Avg CF:			**102.178121**	Linear:			
Toxaphene					**5**	**93.40**	
4.64	4.69	4.70	1445778	103.641925			1
4.87	4.90	4.93	917070.4	63.67186			2
5.04	5.05	5.10	574674.3	22.01589			3
5.31	5.34	5.37	692577.8	24.342504			4
5.66	5.72	5.72	65615.88	2.571638			6
Height Summation:			**3695716.38**				
Amount Avg CF:			**43.248763**	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	** 65.57	4	40	
Aroclor-1221			0	0		3.81	3	5	
Aroclor-1248			0	0		** 53.66	4	30	
Aroclor-1254			0	0		** 77.74	4	40	
Aroclor-1260			0	0		35.78	4	40	
Chlordane			0.5	0.16		0.35	4	40	
Toxaphene			1	0.3		3.00	4	40	

Units: ug/l

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **IBLKX1824B** PIBLKQG ID: QG **Batchnumber: 1831299999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 10, 2018 00:37:00
Instrument : CP05--H9190A
Result file : 05PEST18306007.054.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTD.MET

%SSR(TCX) : 115% (29-129) Conc.: 0.230544
%SSR(DCB) : 121% (32-149) Conc.: 0.241736

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.53	2.54	2.57	9139466	0.230544
HCB	2.81	2.83	2.85	128484	0.003049
alpha-BHC	2.94	2.94	2.98	5127	0.000093
Endosulfan I	4.68	4.70	4.72	2651	0.000088
Dieldrin	4.87	4.88	4.91	4831	0.000149
Mirex	5.76	5.79	5.80	16445	0.000866
DCB	6.67	6.70	6.73	4614877	0.241736

Analysis Report (B)

Injected on : Nov 10, 2018 00:37:00
Instrument : CP05--H9190B
Result file : 05PEST18306007B.054.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDB.MET

%SSR(TCX) : 117% (29-129) Conc.: 0.234556
%SSR(DCB) : 122% (32-149) Conc.: 0.244094

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.34	2.36	2.38	39191260	0.234556
gamma-BHC	3.02	3.05	3.06	7160	0.000038
delta-BHC	3.31	3.33	3.35	5489	0.000032
a. Chlordane	4.40	4.42	4.44	38922	0.000338
Dieldrin	4.67	4.67	4.70	5008	0.000043
Endrin	4.90	4.91	4.94	50303	0.000486
Kepone	4.97	5.00	5.01	23043	0.035410
Endrin aldehyde	5.31	5.33	5.35	24231	0.000309
Endo. sulfate	5.51	5.52	5.55	5135	0.000056
DCB	6.66	6.69	6.72	15096920	0.244094

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
☐ TCX	B	0.234556				1.73	
☑ HCB			<0.01	<0.003			
☑ alpha-BHC			<0.01	<0.003			
☑ gamma-BHC			<0.01	<0.002			
☑ beta-BHC			<0.01	<0.0034			
☑ delta-BHC			<0.01	<0.0034			
☑ Heptachlor			<0.01	<0.002			
☑ Aldrin			<0.01	<0.002			
☑ Telodrin			<0.01	<0.0036			
☑ o,p-DDE			<0.02	<0.007			
☑ Hept. epoxide			<0.01	<0.0023			
☑ g. Chlordane			<0.02	<0.007			
☑ a. Chlordane			<0.01	<0.003			
☑ 4,4'-DDE			<0.02	<0.005			
☑ Endosulfan I			<0.01	<0.0043			
☑ o,p-DDD			<0.02	<0.005			
☑ Dieldrin	B	0.000043	<0.02	<0.0053		110.18 **	4mm 9/3 11-13 rk
☑ o,p-DDT			<0.02	<0.0051			
☑ Endrin			<0.02	<0.0081			
☑ Kepone			<0.2	<0.07			
☑ 4,4'-DDD			<0.02	<0.005			
☑ Endosulfan II			<0.03	<0.015			
☑ 4,4'-DDT			<0.02	<0.0052			
☑ Endrin aldehyde			<0.1	<0.02			
☑ Methoxychlor			<0.1	<0.03			
☑ Mirex			<0.05	<0.01			
☑ Endo. sulfate			<0.02	<0.0058			
☑ Endrin ketone			<0.02	<0.005			

%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

Printed on: 11/13/2018 09:18:49

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **IBLKX1824B** PIBLKQG ID: QG **Batchnumber: 1831299999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on	: Nov 10, 2018 00:37:00
Instrument	: CP05--H9190A
Result file	: 05PEST18306007.054.RAW
Calibration file	: 05PEST1830603.CAL
Method file	: 05PESTD.MET

Analysis Report (B)

Injected on	: Nov 10, 2018 00:37:00
Instrument	: CP05--H9190B
Result file	: 05PEST18306007B.054.RAW
Calibration file	: 05PEST1830603B.CAL
Method file	: 05PESTDB.MET

Summary Report

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
DCB	B	0.244094				0.97	

Units: ug/l

Reviewed by: [signature] Verified by: _____

Date: 11-13-18 Date: _____

%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

Printed on: 11/13/2018 09:18:49

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: IBLKX1824B PIBLKQG ID: QG **Batchnumber: 1831299999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 10, 2018 00:37:00
Instrument : CP05--H9190A
Result file : 05PEST18306007.054.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTD.MET

%SSR(TCX) : 115% (29-129) Conc.: 0.230544
%SSR(DCB) : 121% (32-149) Conc.: 0.241736

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**1**		
2.78	2.83	2.84	128484.4	0.204203			1
Height Summation:			**128484.4**				
Amount Avg CF:			**0.204203**	Linear:			
Aroclor-1221					**1**		
2.80	2.83	2.84	128484.4	0.156394			3
Height Summation:			**128484.4**				
Amount Avg CF:			**0.156394**	Linear:			
Aroclor-1248					**3**	**58.32**	
3.66	3.68	3.72	4794.77	0.013007			2
4.21	4.26	4.27	3679.843	0.003704			4
4.39	4.45	4.45	10604.05	0.015732			5
Height Summation:			**19078.663**				
Amount Avg CF:			**0.010814**	Linear:			
Aroclor-1254					**1**		
4.39	4.45	4.45	10604.05	0.008329			1
Height Summation:			**10604.05**				
Amount Avg CF:			**0.008329**	Linear:			
Aroclor-1260					**2**	**50.00**	
4.85	4.88	4.91	4830.837	0.004131			1
5.74	5.79	5.80	16445.45	0.00865			5
Height Summation:			**21276.287**				
Amount Avg CF:			**0.00639**	Linear:			
Toxaphene					**3**	**74.37**	
5.45	5.50	5.51	6177.121	0.00897			4
5.68	5.72	5.74	3418.491	0.005745			5
5.75	5.79	5.81	16445.45	0.023548			6
Height Summation:			**26041.062**				
Amount Avg CF:			**0.012754**	Linear:			

Analysis Report (B)

Injected on : Nov 10, 2018 00:37:00
Instrument : CP05--H9190B
Result file : 05PEST18306007B.054.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDB.MET

%SSR(TCX) : 117% (29-129) Conc.: 0.234556
%SSR(DCB) : 122% (32-149) Conc.: 0.244094

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**3**	**119.06**	
2.66	2.71	2.72	64733.93	0.033689			1
2.93	2.94	2.99	10123.92	0.003802			2
3.37	3.42	3.43	11876.37	0.005085			5
Height Summation:			**86734.22**				
Amount Avg CF:			**0.014192**	Linear:			
Aroclor-1221					**1**		
2.67	2.71	2.71	64733.93	0.028254			3
Height Summation:			**64733.93**				
Amount Avg CF:			**0.028254**	Linear:			
Aroclor-1248					**1**		
3.53	3.55	3.59	4849	0.002163			2
Height Summation:			**4849**				
Amount Avg CF:			**0.002163**	Linear:			
Aroclor-1254					**3**	**67.54**	
4.27	4.27	4.33	22492.33	0.006397			2
4.64	4.67	4.70	5008.429	0.000986			3
4.81	4.84	4.87	20028.22	0.005494			4
Height Summation:			**47528.979**				
Amount Avg CF:			**0.004292**	Linear:			
Aroclor-1260					**4**	**44.55**	
4.79	4.84	4.85	20028.22	0.005741			1
4.95	5.00	5.01	23043.43	0.005533			2
5.48	5.52	5.54	5135.372	0.001887			4
5.65	5.66	5.71	40410.04	0.007235			5
Height Summation:			**88617.062**				
Amount Avg CF:			**0.005099**	Linear:			
Chlordane					**3**	**61.59**	
3.23	3.25	3.29	5164.477	0.001262			1
4.27	4.27	4.33	22492.33	0.001695			4
4.39	4.42	4.45	38921.82	0.003882			5
Height Summation:			**66578.627**				
Amount Avg CF:			**0.00228**	Linear:			
Toxaphene					**4**	**87.53**	
4.64	4.67	4.70	5008.429	0.00359			1
4.87	4.91	4.93	50302.71	0.034925			2
5.31	5.33	5.37	24230.95	0.008517			4
5.66	5.66	5.72	40410.04	0.015838			6
Height Summation:			**119952.129**				
Amount Avg CF:			**0.015717**	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 174.01	4	40	
Aroclor-1221			0	0		** 138.79	3	5	
Aroclor-1248			0	0		** 133.32	4	30	
Aroclor-1254			0	0		** 63.96	4	40	

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **IBLKX1824B** PIBLKQG ID: QG **Batchnumber: 1831299999**
Sample Amount: 1000 Total Volume: 10 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 10, 2018 00:37:00
Instrument : CP05--H9190A
Result file : 05PEST18306007.054.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTD.MET

Analysis Report (B)

Injected on : Nov 10, 2018 00:37:00
Instrument : CP05--H9190B
Result file : 05PEST18306007B.054.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDB.MET

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1260			0	0		22.47	4	40	
Chlordane			0.5	0.16			4	40	
Toxaphene			1	0.3		20.82	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: 11/10/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 0:49

Lab File ID: 05PEST18306007.055.RAW Initial Calibration: 05PEST1830603

Lab Standard ID: MIXA4WF Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.55	2.53	2.57	43.86	40.06	9
alpha-BHC	2.96	2.94	2.98	11.76	10.00	18
gamma-BHC (Lindane)	3.20	3.18	3.22	11.81	10.00	18
beta-BHC	3.27	3.25	3.29	11.36	10.00	14
delta-BHC	3.42	3.40	3.44	11.85	10.00	19
Heptachlor	3.60	3.58	3.62	11.84	10.13	17
Aldrin	3.86	3.84	3.88	11.99	10.13	18
Heptachlor epoxide	4.38	4.36	4.40	12.03	10.13	19
gamma-Chlordane	4.48	4.47	4.51	12.42	10.13	23
alpha-Chlordane	4.59	4.57	4.61	11.99	10.13	18
4,4'-DDE	4.65	4.63	4.67	23.92	20.13	19
Endosulfan I	4.70	4.68	4.72	12.04	10.13	19
Dieldrin	4.89	4.87	4.91	23.94	20.13	19
Endrin	5.07	5.05	5.09	24.39	20.00	22
4,4'-DDD	5.12	5.10	5.14	24.87	20.00	24
Endosulfan II	5.24	5.22	5.26	23.96	20.13	19
4,4'-DDT	5.33	5.31	5.35	24.83	20.00	24
Endrin aldehyde	5.54	5.52	5.56	22.90	20.00	15
Methoxychlor	5.67	5.65	5.69	116.23	100.25	16
Endosulfan sulfate	5.85	5.83	5.87	23.90	19.75	21
Endrin ketone	6.04	6.02	6.06	23.58	20.00	18
Decachlorobiphenyl	6.70	6.67	6.73	47.56	40.04	19

Compounds 22

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/10/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 0:49

Lab File ID: 05PEST18306007B.055.RAW Initial Calibration: 05PEST1830603B

Lab Standard ID: MIXA4WF Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.36	2.34	2.38	47.91	40.06	20
alpha-BHC	2.78	2.76	2.80	12.86	10.00	29
gamma-BHC (Lindane)	3.04	3.02	3.06	12.82	10.00	28
beta-BHC	3.10	3.09	3.13	12.02	10.00	20
delta-BHC	3.33	3.31	3.35	12.73	10.00	27
Heptachlor	3.38	3.36	3.40	12.71	10.13	26
Aldrin	3.64	3.62	3.66	12.72	10.13	26
Heptachlor epoxide	4.14	4.12	4.16	12.69	10.13	25
gamma-Chlordane	4.30	4.28	4.32	12.74	10.13	26
alpha-Chlordane	4.42	4.40	4.44	12.57	10.13	24
Endosulfan I	4.46	4.45	4.49	12.69	10.13	25
4,4'-DDE	4.56	4.55	4.59	25.37	20.13	26
Dieldrin	4.68	4.67	4.71	25.62	20.13	27
Endrin	4.92	4.90	4.94	26.20	20.00	31
4,4'-DDD	5.02	5.00	5.04	26.10	20.00	31
Endosulfan II	5.08	5.06	5.10	25.17	20.13	25
4,4'-DDT	5.24	5.23	5.27	25.59	20.00	28
Endrin aldehyde	5.33	5.31	5.35	24.53	20.00	23
Endosulfan sulfate	5.53	5.51	5.55	25.12	19.75	27
Methoxychlor	5.74	5.72	5.76	121.56	100.25	21
Endrin ketone	5.89	5.88	5.92	24.47	20.00	22
Decachlorobiphenyl	6.69	6.66	6.72	47.48	40.04	19

Compounds 22

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190A Date Analyzed: 11/10/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 1:02

Lab File ID: 05PEST18306007.056.RAW Initial Calibration: 05PEST1830603

Lab Standard ID: TOXA4XR Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	5.09	5.06	5.12	551.61	504.25	9
	5.23	5.20	5.26	539.37	504.25	7
	5.32	5.29	5.35	544.98	504.25	8
	5.48	5.45	5.51	546.43	504.25	8
	5.72	5.68	5.74	545.79	504.25	8
	5.78	5.75	5.81	537.37	504.25	7

Compounds 6

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/10/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 1:02

Lab File ID: 05PEST18306007B.056.RAW Initial Calibration: 05PEST1830603B

Lab Standard ID: TOXA4XR Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	4.67	4.64	4.70	502.08	504.25	0
	4.90	4.87	4.93	508.29	504.25	1
	5.07	5.04	5.10	523.61	504.25	4
	5.33	5.31	5.37	524.27	504.25	4
	5.39	5.36	5.42	517.60	504.25	3
	5.69	5.66	5.72	518.99	504.25	3

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4XR ID: XR **Batchnumber: 1831299999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 10, 2018 01:02:31
Instrument : CP05--H9190A
Result file : 05PEST18306007.056.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**98.25**	
3.04	3.09	3.10	4881.959	0.55229			2
3.40	3.43	3.46	6141.925	0.909994			4
+ 3.40	3.46	3.46	13883.4	2.056978			4
3.51	3.52	3.57	22006.01	3.115842			5
3.56	3.60	3.62	30603.09	6.442247			6
Height Summation:			**63632.984**				
Amount Avg CF:			**2.755093**	Linear:			
Aroclor-1248					**6**	**144.72**	
+ 3.38	3.40	3.44	7243.493	1.074309			1
3.38	3.43	3.44	6141.925	0.910931			1
3.66	3.69	3.72	40689.63	11.038098			2
3.85	3.86	3.91	17993.24	2.061856			3
4.21	4.23	4.27	175488.1	17.665179			4
4.39	4.41	4.45	419423.2	62.224253			5
E+ 4.71	4.71	4.77	1130181	221.462338			6
4.71	4.75	4.77	791702.8	155.136525			6
Height Summation:			**1451438.895**				
Amount Avg CF:			**41.50614**	Linear:			
Aroclor-1254					**6**	**81.59**	
4.39	4.41	4.45	419423.2	32.942227			1
4.62	4.62	4.68	613794.5	64.427408			2
4.71	4.75	4.77	791702.8	47.652728			3
4.93	4.96	4.99	1898401	153.37481			4
E 5.06	5.09	5.12	2637788	309.59924			5
E 5.27	5.32	5.33	3689888	269.64177			6
Height Summation:			**10050997.5**				
Amount Avg CF:			**146.27303**	Linear:			
Aroclor-1260					**6**	**37.89**	
4.85	4.89	4.91	1698727	145.256763			1
5.06	5.09	5.12	2637788	167.002831			2
E 5.27	5.32	5.33	3689888	222.041107			3
E 5.53	5.57	5.59	2672320	287.635883			4
5.74	5.78	5.80	3752872	197.383021			5
5.94	5.95	6.00	947680.6	83.505432			6
Height Summation:			**15399275.6**				
Amount Avg CF:			**183.804173**	Linear:			
Chlordane					**6**	**135.27**	
3.50	3.52	3.56	22006.01	1.991217			1
3.94	3.97	4.00	72221.91	6.491553			2
4.29	4.30	4.35	554597.5	76.982779			3
4.45	4.46	4.51	447881.2	13.452601			4
+ 4.45	4.51	4.51	625547	18.788987			4
4.55	4.57	4.61	807757.1	17.543394			5
5.15	5.17	5.22	1773774	161.145286			6
Height Summation:			**3678237.72**				
Amount Avg CF:			**46.267805**	Linear:			

Analysis Report (B)

Injected on : Nov 10, 2018 01:02:31
Instrument : CP05--H9190B
Result file : 05PEST18306007B.056.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**62.07**	
2.66	2.67	2.72	8689.098	0.452207			1
3.11	3.14	3.17	34781.68	3.135773			3
+ 3.11	3.16	3.17	31424.81	2.833131			3
3.27	3.30	3.33	54650.11	1.1723			4
3.37	3.39	3.43	72506.78	3.104314			5
3.46	3.50	3.52	59535.16	3.87252			6
Height Summation:			**230162.828**				
Amount Avg CF:			**2.347423**	Linear:			
Aroclor-1221					**2**	**11.34**	
2.54	2.55	2.58	12107.06	1.090485			1
2.63	2.67	2.67	8689.098	1.28059			2
Height Summation:			**20796.158**				
Amount Avg CF:			**1.185537**	Linear:			
Aroclor-1248					**5**	**106.22**	
3.27	3.30	3.33	54650.11	2.314987			1
3.53	3.56	3.59	163246.9	7.283535			2
+ 3.53	3.58	3.59	160597.6	7.165332			2
+ 3.85	3.86	3.91	565208.4	24.220247			4
3.85	3.90	3.91	760672.8	32.596265			4
4.11	4.13	4.17	1587488	49.222923			5
4.30	4.35	4.36	2711469	106.814963			6
Height Summation:			**5277526.81**				
Amount Avg CF:			**39.646535**	Linear:			
Aroclor-1254					**5**	**42.75**	
4.11	4.13	4.17	1587488	50.962291			1
4.27	4.29	4.33	1879554	53.458742			2
4.64	4.67	4.70	7003864	137.862654			3
+ 4.81	4.83	4.87	5059532	138.797638			4
4.81	4.85	4.87	4234633	116.168266			4
5.21	5.24	5.27	3417936	88.237681			6
Height Summation:			**18123475**				
Amount Avg CF:			**89.337927**	Linear:			
Aroclor-1260					**6**	**51.24**	
+ 4.79	4.80	4.85	5430410	155.653218			1
4.79	4.83	4.85	5059532	145.022648			1
4.95	4.96	5.01	5891720	141.4759			2
+ 4.95	5.00	5.01	5452885	130.938302			2
5.21	5.24	5.27	3417936	79.02311			3
E 5.48	5.49	5.54	7944951	291.99277			4
+ 5.65	5.66	5.71	6338062	113.483246			5
E 5.65	5.69	5.71	13242130	237.100852			5
5.90	5.95	5.96	2973683	89.69013			6
Height Summation:			**38529952**				
Amount Avg CF:			**164.050902**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4XR ID: XR **Batchnumber: 1831299999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 10, 2018 01:02:31
Instrument : CP05--H9190A
Result file : 05PEST18306007.056.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene					**6**	**0.95**	
5.06	5.09	5.12	2637788	551.613425			1
5.20	5.23	5.26	4041918	539.369669			2
5.29	5.32	5.35	3689888	544.978819			3
5.45	5.48	5.51	3763169	546.434739			4
5.68	5.72	5.74	3247533	545.78714			5
5.75	5.78	5.81	3752872	537.365207			6

Height Summation: **21133168**
Amount Avg CF: **544.258167** Linear:

Analysis Report (B)

Injected on : Nov 10, 2018 01:02:31
Instrument : CP05--H9190B
Result file : 05PEST18306007B.056.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**5**	**186.16**	
3.23	3.26	3.29	102099.2	2.495869			1
4.08	4.13	4.14	1587488	57.116746			3
4.27	4.29	4.33	1879554	14.167027			4
+ 4.39	4.39	4.45	1879631	18.746317			5
4.39	4.45	4.45	1813316	18.084931			5
E 5.08	5.14	5.14	21898140	582.644874			6
Height Summation:			**27280597.2**				
Amount Avg CF:			**134.90189**	Linear:			
Toxaphene					**6**	**1.71**	
4.64	4.67	4.70	7003864	502.078432			1
4.87	4.90	4.93	7320913	508.28829			2
+ 4.87	4.92	4.93	6205554	430.849326			2
+ 5.04	5.04	5.10	8948002	342.799787			3
5.04	5.07	5.10	13667550	523.606636			3
5.31	5.33	5.37	14916270	524.272316			4
5.36	5.39	5.42	8648947	517.601331			5
5.66	5.69	5.72	13242130	518.989586			6
Height Summation:			**64799674**				
Amount Avg CF:			**515.806098**	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		15.98	4	40	
Aroclor-1221			0	0			3	5	
Aroclor-1248			0	0	E	4.58	4	30	
Aroclor-1254			0	0	E	** 48.33	4	40	
Aroclor-1260			0	0	E	11.36	4	40	
Chlordane			0.5	0.16		** 97.85	4	40	
Toxaphene			1	0.3		5.37	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: 11/10/18

GC Column (1) : RTX-CLP ID: .32 (mm) Time Analyzed: 1:15

Lab File ID: 05PEST18306007.057.RAW Initial Calibration: 05PEST1830603

Lab Standard ID: CHLD4DQ Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.52	3.50	3.56	102.51	100.20	2
	3.97	3.94	4.00	102.71	100.20	3
	4.32	4.29	4.35	103.52	100.20	3
	4.48	4.45	4.51	107.74	100.20	8
	4.58	4.55	4.61	105.68	100.20	5
	5.18	5.16	5.22	104.26	100.20	4

Compounds 6

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9190B Date Analyzed: 11/10/18

GC Column (2) : RTXCLPII ID: .32 (mm) Time Analyzed: 1:15

Lab File ID: 05PEST18306007B.057.RAW Initial Calibration: 05PEST1830603B

Lab Standard ID: CHLD4DQ Init. Calib Date(s): 11/09/18 11/09/18

Calibration: 05PEST1830603B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.26	3.23	3.29	102.22	100.20	2
	3.77	3.74	3.80	103.30	100.20	3
	4.11	4.08	4.14	104.35	100.20	4
	4.30	4.27	4.33	109.31	100.20	9
	4.42	4.39	4.45	106.93	100.20	7
	5.11	5.08	5.14	101.39	100.20	1

Compounds 6

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4DQ ID: DQ **Batchnumber: 1831299999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 10, 2018 01:15:20
Instrument : CP05--H9190A
Result file : 05PEST18306007.057.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**131.69**	
3.04	3.07	3.10	78936.12	8.929946			2
3.20	3.25	3.26	39086.95	15.03324			3
3.40	3.46	3.46	132597	19.645703			4
3.51	3.52	3.57	1132851	160.400956			5
E 3.56	3.59	3.62	1593829	335.516459			6
Height Summation:			**2977300.07**				
Amount Avg CF:			**107.905261**	Linear:			
Aroclor-1221					**1**		
2.66	2.70	2.70	7895.807	2.20172			1
Height Summation:			**7895.807**				
Amount Avg CF:			**2.20172**	Linear:			
Aroclor-1248					**4**	**47.18**	
3.66	3.69	3.72	228983.2	62.117522			2
4.21	4.24	4.27	300868.3	30.286341			4
4.39	4.41	4.45	702204.3	104.176731			5
+ 4.71	4.72	4.77	116355.4	22.800188			6
4.71	4.76	4.77	310160.3	60.776836			6
Height Summation:			**1542216.1**				
Amount Avg CF:			**64.339358**	Linear:			
Aroclor-1254					**5**	**83.97**	
4.39	4.41	4.45	702204.3	55.152346			1
4.62	4.65	4.68	153965.4	16.161096			2
+ 4.71	4.72	4.77	116355.4	7.003452			3
4.71	4.76	4.77	310160.3	18.668602			3
4.93	4.95	4.99	358256.9	28.94414			4
5.06	5.09	5.12	914946.1	107.387939			5
Height Summation:			**2439533**				
Amount Avg CF:			**45.262824**	Linear:			
Aroclor-1260					**5**	**172.15**	
4.85	4.90	4.91	117316.8	10.031664			1
5.06	5.09	5.12	914946.1	57.926789			2
5.53	5.56	5.59	16472.16	1.772985			4
+ 5.53	5.59	5.59	45134.69	4.858085			4
5.74	5.77	5.80	8853.814	0.465668			5
5.94	5.96	6.00	16554.74	1.458731			6
+ 5.94	6.00	6.00	37362.25	3.292197			6
Height Summation:			**1074143.614**				
Amount Avg CF:			**14.331167**	Linear:			
Chlordane					**6**	**1.92**	
3.50	3.52	3.56	1132851	102.50617			1
3.94	3.97	4.00	1142719	102.711503			2
4.29	4.32	4.35	745780.9	103.520636			3
4.45	4.48	4.51	3587107	107.742674			4
4.55	4.58	4.61	4865978	105.682477			5
5.15	5.18	5.22	1147634	104.261202			6
Height Summation:			**12622069.9**				
Amount Avg CF:			**104.40411**	Linear:			

Analysis Report (B)

Injected on : Nov 10, 2018 01:15:20
Instrument : CP05--H9190B
Result file : 05PEST18306007B.057.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**179.34**	
2.93	2.97	2.99	104984	3.942969			2
3.11	3.12	3.17	342053	30.838089			3
3.27	3.32	3.33	21665.39	0.464745			4
E 3.37	3.38	3.43	6152950	263.433144			5
+ 3.46	3.47	3.52	501098.1	32.594396			6
3.46	3.50	3.52	240837.8	15.665521			6
Height Summation:			**6862490.19**				
Amount Avg CF:			**62.868894**	Linear:			
Aroclor-1221					**2**	**65.49**	
2.54	2.56	2.58	12375.96	1.114705			1
2.63	2.65	2.67	20611.26	3.037666			2
Height Summation:			**32987.22**				
Amount Avg CF:			**2.076185**	Linear:			
Aroclor-1248					**5**	**164.64**	
3.27	3.32	3.33	21665.39	0.917749			1
3.53	3.56	3.59	71653.3	3.196933			2
3.75	3.77	3.81	4020364	143.821117			3
3.85	3.88	3.91	601554.8	25.777759			4
+ 3.85	3.91	3.91	527072.7	22.58606			4
4.11	4.16	4.17	333470.7	10.339859			5
Height Summation:			**5048708.19**				
Amount Avg CF:			**36.810683**	Linear:			
Aroclor-1254					**6**	**156.94**	
4.11	4.16	4.17	333470.7	10.705234			1
E 4.27	4.30	4.33	14502280	412.477455			2
4.64	4.68	4.70	1476564	29.06439			3
4.81	4.83	4.87	530676.6	14.557998			4
5.07	5.11	5.13	3810760	142.191349			5
+ 5.21	5.21	5.27	341203.8	8.808542			6
5.21	5.25	5.27	178225.5	4.601082			6
Height Summation:			**20831976.8**				
Amount Avg CF:			**102.266251**	Linear:			
Aroclor-1260					**6**	**173.63**	
+ 4.79	4.79	4.85	515414.6	14.773459			1
4.79	4.83	4.85	530676.6	15.210918			1
4.95	4.98	5.01	3229670	77.552985			2
+ 5.21	5.21	5.27	341203.8	7.888675			3
5.21	5.25	5.27	178225.5	4.120596			3
5.48	5.50	5.54	76243.72	2.802109			4
+ 5.48	5.53	5.54	120688.5	4.435543			4
5.65	5.71	5.71	65595.61	1.174492			5
5.90	5.95	5.96	89910.84	2.711827			6
Height Summation:			**4170322.27**				
Amount Avg CF:			**17.262154**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4DQ ID: DQ **Batchnumber: 1831299999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 10, 2018 01:15:20
Instrument : CP05--H9190A
Result file : 05PEST18306007.057.RAW
Calibration file : 05PEST1830603.CAL
Method file : 05PESTDI.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene						**5**	**192.15**	
	5.06	5.09	5.12	914946.1	191.33325			1
	5.20	5.23	5.26	98185.29	13.102237			2
	5.45	5.50	5.51	64020.03	9.296093			4
+	5.68	5.68	5.74	24574.15	4.129983			5
	5.68	5.74	5.74	5534.657	0.930166			5
	5.75	5.77	5.81	8853.814	1.267757			6

Height Summation: **1091539.891**
Amount Avg CF: **43.185901** Linear:

Analysis Report (B)

Injected on : Nov 10, 2018 01:15:20
Instrument : CP05--H9190B
Result file : 05PEST18306007B.057.RAW
Calibration file : 05PEST1830603B.CAL
Method file : 05PESTDIB.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane						**6**	**2.88**	
+	3.23	3.24	3.29	141133.5	3.450083			1
	3.23	3.26	3.29	4181526	102.219624			1
	3.74	3.77	3.80	4020364	103.301811			2
	4.08	4.11	4.14	2900308	104.351124			3
	4.27	4.30	4.33	14502280	109.31008			4
	4.39	4.42	4.45	10721540	106.930238			5
	5.08	5.11	5.14	3810760	101.393076			6

Height Summation: **40136778**
Amount Avg CF: **104.584325** Linear:

Toxaphene						**5**	**93.57**	
	4.64	4.68	4.70	1476564	105.848848			1
	4.87	4.89	4.93	932441.1	64.739042			2
	5.04	5.05	5.10	580806.1	22.2508			3
	5.31	5.34	5.37	711407.1	25.004311			4
	5.66	5.71	5.72	65595.61	2.570843			6

Height Summation: **3766813.91**
Amount Avg CF: **44.082769** 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	** 52.74	4	40	
Aroclor-1221			0	0		5.87	3	5	
Aroclor-1248			0	0		** 54.43	4	30	
Aroclor-1254			0	0		** 77.28	4	40	
Aroclor-1260			0	0		18.55	4	40	
Chlordane			0.5	0.16		0.17	4	40	
Toxaphene			1	0.3		2.06	4	40	

Units: ug/l

7D
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 8:25

Lab File ID: 06PEST18261045.002.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: PEMNL Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
Tetrachloro-m-xylene	1.81	1.80	1.84	21.81	20.10	9
alpha-BHC	2.35	2.34	2.38	9.59	10.00	-4
gamma-BHC (Lindane)	2.70	2.69	2.73	9.70	10.00	-3
beta-BHC	2.93	2.92	2.96	8.65	10.00	-13
4,4'-DDE	4.31	4.30	4.34	0.28		
Endrin	4.67	4.65	4.69	47.17	50.10	-6
4,4'-DDD	4.77	4.76	4.80	0.60		
4,4'-DDT	4.98	4.96	5.00	101.00	100.40	1
Methoxychlor	5.48	5.46	5.50	237.11	250.90	-5
Endrin ketone	5.63	5.62	5.66	0.46		
Decachlorobiphenyl	6.38	6.36	6.42	20.86	20.00	4

4'4-DDT % breakdown: 1 Endrin % breakdown: 1 Combined % breakdown: 2

Compounds 11

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
18261018.003.RAW analyzed on 10/10/2018 12:28:

7D
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 8:25

Lab File ID: 06PEST18261045B.002.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: PEMNL Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng/ml)	NOM AMOUNT (ng/ml)	%D
gamma-BHC (Lindane)	3.33	3.33	3.37	10.84	10.00	8
beta-BHC	3.59	3.59	3.63	10.05	10.00	1
4,4'-DDE	4.96	4.95	4.99	0.36		
Endrin	5.25	5.25	5.29	56.90	50.10	14
4,4'-DDD	5.35	5.34	5.38	0.70		
Endrin aldehyde	5.53	5.52	5.56	0.21		
4,4'-DDT	5.57	5.56	5.60	110.28	100.40	10
Methoxychlor	5.88	5.87	5.91	263.77	250.90	5
Endrin ketone	6.03	6.03	6.07	0.56		
Decachlorobiphenyl	7.04	7.03	7.09	24.99	20.00	25

4'4-DDT % breakdown: 1 Endrin % breakdown: 1 Combined % breakdown: 2

Compounds 10

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 8:37

Lab File ID: 06PEST18261045.003.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: MIXA4YL Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	1.81	1.80	1.84	40.39	40.06	1
alpha-BHC	2.35	2.34	2.38	9.52	10.00	-5
gamma-BHC (Lindane)	2.69	2.69	2.73	9.03	10.00	-10
beta-BHC	2.93	2.92	2.96	8.64	10.00	-14
Heptachlor	3.04	3.03	3.07	8.64	10.13	-15
delta-BHC	3.21	3.20	3.24	9.22	10.00	-8
Aldrin	3.35	3.34	3.38	8.95	10.13	-12
Heptachlor epoxide	3.85	3.84	3.88	8.86	10.13	-12
gamma-Chlordane	4.05	4.04	4.08	8.89	10.13	-12
alpha-Chlordane	4.13	4.12	4.16	8.89	10.13	-12
Endosulfan I	4.18	4.17	4.21	8.96	10.13	-11
4,4'-DDE	4.31	4.30	4.34	17.73	20.13	-12
Dieldrin	4.41	4.40	4.44	17.42	20.13	-13
Endrin	4.67	4.65	4.69	17.97	20.00	-10
4,4'-DDD	4.77	4.76	4.80	17.23	20.00	-14
Endosulfan II	4.87	4.86	4.90	17.42	20.13	-13
4,4'-DDT	4.98	4.96	5.00	17.87	20.00	-11
Endrin aldehyde	5.05	5.04	5.08	16.50	20.00	-17
Endosulfan sulfate	5.20	5.19	5.23	16.90	19.75	-14
Methoxychlor	5.48	5.46	5.50	90.10	100.25	-10
Endrin ketone	5.63	5.62	5.66	17.91	20.00	-10
Decachlorobiphenyl	6.38	6.36	6.42	35.86	40.04	-10

Compounds 22

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 8:37

Lab File ID: 06PEST18261045B.003.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: MIXA4YL Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.60	2.60	2.64	40.86	40.06	2
alpha-BHC	3.00	3.00	3.04	10.50	10.00	5
gamma-BHC (Lindane)	3.33	3.33	3.37	10.28	10.00	3
beta-BHC	3.59	3.59	3.63	10.00	10.00	0
delta-BHC	3.84	3.83	3.87	10.23	10.00	2
Heptachlor	3.90	3.90	3.94	9.79	10.13	-3
Aldrin	4.19	4.18	4.22	10.07	10.13	-1
Heptachlor epoxide	4.55	4.55	4.59	9.81	10.13	-3
gamma-Chlordane	4.81	4.80	4.84	9.91	10.13	-2
alpha-Chlordane	4.85	4.84	4.88	9.97	10.13	-1
Endosulfan I	4.88	4.88	4.92	10.14	10.13	0
4,4'-DDE	4.96	4.95	4.99	19.65	20.13	-2
Dieldrin	5.08	5.07	5.11	19.72	20.13	-2
Endrin	5.25	5.25	5.29	20.23	20.00	1
4,4'-DDD	5.35	5.34	5.38	19.01	20.00	-5
Endosulfan II	5.45	5.44	5.48	19.31	20.13	-4
Endrin aldehyde	5.53	5.52	5.56	18.90	20.00	-5
4,4'-DDT	5.57	5.56	5.60	19.43	20.00	-3
Endosulfan sulfate	5.73	5.72	5.76	18.78	19.75	-5
Methoxychlor	5.87	5.87	5.91	97.54	100.25	-3
Endrin ketone	6.03	6.03	6.07	18.52	20.00	-7
Decachlorobiphenyl	7.04	7.03	7.09	40.81	40.04	2

Compounds 22

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 8:37

Lab File ID: 06PEST18261045.003.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: MIXA4YL Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103 Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Tetrachloro-m-xylene	1.81	1.80	1.84	40.39	40.06	101	75 - 125
alpha-BHC	2.35	2.34	2.38	9.52	10.00	95	69 - 125
gamma-BHC (Lindane)	2.69	2.69	2.73	9.03	10.00	90	75 - 125
beta-BHC	2.93	2.92	2.96	8.64	10.00	86	75 - 125
Heptachlor	3.04	3.03	3.07	8.64	10.13	85	75 - 125
delta-BHC	3.21	3.20	3.24	9.22	10.00	92	75 - 125
Aldrin	3.35	3.34	3.38	8.95	10.13	88	75 - 125
Heptachlor epoxide	3.85	3.84	3.88	8.86	10.13	87	75 - 125
gamma-Chlordane	4.05	4.04	4.08	8.89	10.13	88	75 - 125
alpha-Chlordane	4.13	4.12	4.16	8.89	10.13	88	73 - 125
Endosulfan I	4.18	4.17	4.21	8.96	10.13	88	75 - 125
4,4'-DDE	4.31	4.30	4.34	17.73	20.13	88	75 - 125
Dieldrin	4.41	4.40	4.44	17.42	20.13	87	48 - 125
Endrin	4.67	4.65	4.69	17.97	20.00	90	5 - 125
4,4'-DDD	4.77	4.76	4.80	17.23	20.00	86	75 - 125
Endosulfan II	4.87	4.86	4.90	17.42	20.13	87	75 - 125
4,4'-DDT	4.98	4.96	5.00	17.87	20.00	89	75 - 125
Endrin aldehyde	5.05	5.04	5.08	16.50	20.00	83	75 - 125
Endosulfan sulfate	5.20	5.19	5.23	16.90	19.75	86	70 - 125
Methoxychlor	5.48	5.46	5.50	90.10	100.25	90	75 - 125
Endrin ketone	5.63	5.62	5.66	17.91	20.00	90	75 - 125
Decachlorobiphenyl	6.38	6.36	6.42	35.86	40.04	90	75 - 125

Compounds 22

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 8:37

Lab File ID: 06PEST18261045B.003.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: MIXA4YL Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Tetrachloro-m-xylene	2.60	2.60	2.64	40.86	40.06	102	75 - 125
alpha-BHC	3.00	3.00	3.04	10.50	10.00	105	69 - 125
gamma-BHC (Lindane)	3.33	3.33	3.37	10.28	10.00	103	75 - 125
beta-BHC	3.59	3.59	3.63	10.00	10.00	100	75 - 125
delta-BHC	3.84	3.83	3.87	10.23	10.00	102	75 - 125
Heptachlor	3.90	3.90	3.94	9.79	10.13	97	75 - 125
Aldrin	4.19	4.18	4.22	10.07	10.13	99	75 - 125
Heptachlor epoxide	4.55	4.55	4.59	9.81	10.13	97	75 - 125
gamma-Chlordane	4.81	4.80	4.84	9.91	10.13	98	75 - 125
alpha-Chlordane	4.85	4.84	4.88	9.97	10.13	98	73 - 125
Endosulfan I	4.88	4.88	4.92	10.14	10.13	100	75 - 125
4,4'-DDE	4.96	4.95	4.99	19.65	20.13	98	75 - 125
Dieldrin	5.08	5.07	5.11	19.72	20.13	98	48 - 125
Endrin	5.25	5.25	5.29	20.23	20.00	101	5 - 125
4,4'-DDD	5.35	5.34	5.38	19.01	20.00	95	75 - 125
Endosulfan II	5.45	5.44	5.48	19.31	20.13	96	75 - 125
Endrin aldehyde	5.53	5.52	5.56	18.90	20.00	95	75 - 125
4,4'-DDT	5.57	5.56	5.60	19.43	20.00	97	75 - 125
Endosulfan sulfate	5.73	5.72	5.76	18.78	19.75	95	70 - 125
Methoxychlor	5.87	5.87	5.91	97.54	100.25	97	75 - 125
Endrin ketone	6.03	6.03	6.07	18.52	20.00	93	75 - 125
Decachlorobiphenyl	7.04	7.03	7.09	40.81	40.04	102	75 - 125

Compounds 22

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 8:49

Lab File ID: 06PEST18261045.004.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: TOXA4ZX Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	4.79	4.76	4.82	462.70	504.25	-8
	5.05	5.02	5.08	441.93	504.25	-12
	5.11	5.08	5.14	488.28	504.25	-3
	5.39	5.36	5.42	497.90	504.25	-1
	5.49	5.46	5.52	466.56	504.25	-7

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 8:49

Lab File ID: 06PEST18261045B.004.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: TOXA4ZX Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	5.50	5.47	5.53	558.40	504.25	11
	5.67	5.65	5.71	526.79	504.25	4
	5.72	5.70	5.76	542.97	504.25	8
	5.96	5.94	6.00	554.98	504.25	10
	6.05	6.03	6.09	543.85	504.25	8

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD.
Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm)
Time Analyzed: 8:49

Lab File ID: 06PEST18261045.004.RAW
Initial Calibration: 06PEST1826103

Lab Standard ID: TOXA4ZX
Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Toxaphene	4.79	4.76	4.82	462.70	504.25	92	68 - 134
	5.05	5.02	5.08	441.93	504.25	88	68 - 134
	5.11	5.08	5.14	488.28	504.25	97	68 - 134
	5.39	5.36	5.42	497.90	504.25	99	68 - 134
	5.49	5.46	5.52	466.56	504.25	93	68 - 134

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 8:49

Lab File ID: 06PEST18261045B.004.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: TOXA4ZX Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Toxaphene	5.50	5.47	5.53	558.40	504.25	111	68 - 134
	5.67	5.65	5.71	526.79	504.25	104	68 - 134
	5.72	5.70	5.76	542.97	504.25	108	68 - 134
	5.96	5.94	6.00	554.98	504.25	110	68 - 134
	6.05	6.03	6.09	543.85	504.25	108	68 - 134

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4ZX ID: ZX **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 08:49:19
Instrument : CP06--H9147A
Result file : 06PEST18261045.004.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**52.84**	
2.60	2.65	2.66	3850.227	1.559447			2
2.82	2.84	2.88	5036.531	3.647506			3
3.03	3.07	3.09	3213.132	0.708167			4
3.13	3.17	3.19	6310.292	2.543063			5
+ 3.25	3.26	3.31	6879.466	3.599657			6
3.25	3.30	3.31	6744.408	3.528988			6
Height Summation:			**25154.59**				
Amount Avg CF:			**2.397434**	Linear:			
Aroclor-1248					**5**	**137.42**	
3.03	3.07	3.09	3213.132	1.348446			1
+ 3.34	3.36	3.40	15520.44	8.421314			2
3.34	3.39	3.40	72489.77	39.332592			2
3.55	3.60	3.61	50312.41	15.459503			3
3.90	3.96	3.96	27997.82	6.863186			5
4.40	4.42	4.46	303658.3	129.554794			6
Height Summation:			**457671.432**				
Amount Avg CF:			**38.511704**	Linear:			
Aroclor-1254					**6**	**56.76**	
3.91	3.96	3.97	27997.82	6.678398			1
4.03	4.03	4.09	128619.4	25.544009			2
+ 4.32	4.33	4.38	173231.6	40.821157			3
4.32	4.36	4.38	279835.2	65.94176			3
4.40	4.42	4.46	303658.3	35.512102			4
4.57	4.62	4.63	252119.9	45.960247			5
+ 4.94	4.96	5.00	199083.1	31.100767			6
4.94	4.98	5.00	198370.6	30.98946			6
+ 4.94	5.00	5.00	189293.3	29.571404			6
Height Summation:			**1190601.22**				
Amount Avg CF:			**35.104329**	Linear:			
Aroclor-1260					**6**	**54.45**	
4.52	4.55	4.58	259094.1	44.763122			1
4.66	4.68	4.72	324225.1	48.478235			2
+ 4.94	4.96	5.00	199083.1	29.738308			3
4.94	4.98	5.00	198370.6	29.631877			3
+ 4.94	5.00	5.00	189293.3	28.275943			3
+ 5.19	5.19	5.25	291175.7	58.116814			4
5.19	5.22	5.25	502018.8	100.199753			4
+ 5.35	5.36	5.41	418052.2	35.592663			5
5.35	5.39	5.41	693161.1	59.015237			5
5.62	5.63	5.68	176029.2	22.230063			6
Height Summation:			**2152898.9**				
Amount Avg CF:			**50.719715**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 08:49:19
Instrument : CP06--H9147B
Result file : 06PEST18261045B.004.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**48.21**	
3.29	3.33	3.35	6539.782	1.290112			2
3.50	3.50	3.56	11163.72	4.238805			3
* 3.81	3.84	3.87	16018.82	1.539797			4
* 3.84	3.84	3.90	16018.82	2.542254			5
3.94	3.97	4.00	17800.78	3.567044			6
Height Summation:			**67541.922**				
Amount Avg CF:			**2.635602**	Linear:			
Aroclor-1248					**6**	**146.87**	
3.81	3.84	3.87	16018.82	3.116911			1
4.03	4.04	4.09	18310.84	2.862863			2
+ 4.03	4.08	4.09	26775.43	4.186284			2
4.20	4.26	4.26	72229.51	9.902823			3
4.61	4.66	4.67	146145.6	17.698764			4
4.72	4.74	4.78	428088.9	57.161366			5
+ 5.02	5.04	5.08	602851.4	122.69886			6
5.02	5.06	5.08	787210.6	160.221645			6
Height Summation:			**1468004.27**				
Amount Avg CF:			**41.827395**	Linear:			
Aroclor-1254					**6**	**102.91**	
4.55	4.57	4.61	63530.71	6.604381			1
+ 4.55	4.60	4.61	138178.4	14.364435			1
4.73	4.74	4.79	428088.9	29.753529			2
+ 5.02	5.04	5.08	602851.4	35.245119			3
5.02	5.06	5.08	787210.6	46.023499			3
+ 5.25	5.25	5.31	457737.1	35.069964			4
5.25	5.28	5.31	1454228	111.417064			4
+ 5.45	5.45	5.51	1295794	167.397597			5
E 5.45	5.50	5.51	2135508	275.876342			5
+ 5.56	5.56	5.62	412602.8	30.790482			6
5.56	5.61	5.62	1318665	98.405368			6
Height Summation:			**6187231.21**				
Amount Avg CF:			**94.680031**	Linear:			
Aroclor-1260					**6**	**85.88**	
5.15	5.18	5.21	717164.6	59.481378			1
+ 5.15	5.20	5.21	896183.7	74.329159			1
E 5.38	5.41	5.44	1257975	242.046042			2
5.56	5.61	5.62	1318665	80.345555			3
5.79	5.80	5.85	1222772	124.980337			4
+ 5.79	5.84	5.85	1032255	105.507468			4
6.00	6.01	6.06	913377.6	44.068351			5
+ 6.00	6.05	6.06	2221474	107.180968			5
+ 6.20	6.21	6.26	236248.6	18.488844			6
6.20	6.25	6.26	200264.6	15.672732			6
Height Summation:			**5630218.8**				
Amount Avg CF:			**94.432399**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4ZX ID: ZX **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 08:49:19
Instrument : CP06--H9147A
Result file : 06PEST18261045.004.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**4**	**163.32**	
3.85	3.90	3.91	42020.55	15.723252			2
4.03	4.03	4.09	128619.4	11.788187			3
4.11	4.14	4.17	37704.51	4.241812			4
4.87	4.90	4.93	832700.3	197.763307			5
Height Summation:			**1041044.76**				
Amount Avg CF:			**57.379139**	Linear:			
Toxaphene					**5**	**4.69**	
4.76	4.79	4.82	734347.8	462.702104			1
5.02	5.05	5.08	654749.9	441.928385			2
5.08	5.11	5.14	660538.6	488.284518			3
5.36	5.39	5.42	693161.1	497.895998			4
5.46	5.49	5.52	985235.8	466.561067			5
Height Summation:			**3728033.2**				
Amount Avg CF:			**471.474414**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 08:49:19
Instrument : CP06--H9147B
Result file : 06PEST18261045B.004.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**187.45**	
3.69	3.70	3.75	10828.75	1.361841			1
+ 3.69	3.74	3.75	35917.29	4.517017			1
+ 4.57	4.57	4.63	63530.71	8.417384			2
4.57	4.60	4.63	138178.4	18.307691			2
+ 4.79	4.80	4.85	187697.9	5.739369			3
* 4.79	4.84	4.85	255238.1	7.804593			3
* 4.83	4.84	4.89	255238.1	12.019623			4
5.48	5.50	5.54	2135508	263.524767			5
+ 5.48	5.53	5.54	1198600	147.908969			5
Height Summation:			**2794991.35**				
Amount Avg CF:			**60.603703**	Linear:			
Toxaphene					**5**	**2.27**	
5.47	5.50	5.53	2135508	558.402588			1
+ 5.47	5.53	5.53	1198600	313.415516			1
5.65	5.67	5.71	2218198	526.794758			2
5.70	5.72	5.76	1847494	542.974582			3
5.94	5.96	6.00	1463956	554.976167			4
6.03	6.05	6.09	2221474	543.851648			5
Height Summation:			**9886630**				
Amount Avg CF:			**545.399949**	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		9.46	5	20	
Aroclor-1221			0	0			2	20	
Aroclor-1248			0	0		8.25	5	20	
Aroclor-1254			0	0		** 91.81	4	20	
Aroclor-1260			0	0		** 60.23	5	20	
T. Chlordane			0.5	0.16		5.47	5	20	
Total PCBs			0	0					
Toxaphene			1	0.3		14.54	5	30	

Units: ug/l

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 9:01

Lab File ID: 06PEST18261045.005.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: CHLD4FP Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	2.86	2.85	2.91	98.58	100.20	-2
	3.87	3.85	3.91	99.54	100.20	-1
	4.05	4.03	4.09	101.07	100.20	1
	4.13	4.11	4.17	98.20	100.20	-2
	4.89	4.87	4.93	100.82	100.20	1

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 9:01

Lab File ID: 06PEST18261045B.005.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: CHLD4FP Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.71	3.69	3.75	114.67	100.20	14
	4.59	4.57	4.63	111.88	100.20	12
	4.81	4.79	4.85	118.62	100.20	18
	4.85	4.83	4.89	113.41	100.20	13
	5.50	5.48	5.54	115.31	100.20	15

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD
Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm)
Time Analyzed: 9:01

Lab File ID: 06PEST18261045.005.RAW
Initial Calibration: 06PEST1826103

Lab Standard ID: CHLD4FP
Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Chlordane	2.86	2.85	2.91	98.58	100.20	98	75 - 125
	3.87	3.85	3.91	99.54	100.20	99	75 - 125
	4.05	4.03	4.09	101.07	100.20	101	75 - 125
	4.13	4.11	4.17	98.20	100.20	98	75 - 125
	4.89	4.87	4.93	100.82	100.20	101	75 - 125

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD
Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm)
Time Analyzed: 9:01

Lab File ID: 06PEST18261045B.005.RAW
Initial Calibration: 06PEST1826103B

Lab Standard ID: CHLD4FP
Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Chlordane	3.71	3.69	3.75	114.67	100.20	114	75 - 125
	4.59	4.57	4.63	111.88	100.20	112	75 - 125
	4.81	4.79	4.85	118.62	100.20	118	75 - 125
	4.85	4.83	4.89	113.41	100.20	113	75 - 125
	5.50	5.48	5.54	115.31	100.20	115	75 - 125

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4FP ID: FP **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 09:01:27
Instrument : CP06--H9147A
Result file : 06PEST18261045.005.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**144.51**	
2.25	2.28	2.31	22233.09	14.140219			1
2.60	2.63	2.66	12001.1	4.860772			2
E 2.82	2.86	2.88	292592.2	211.898191			3
3.03	3.04	3.09	399243.8	87.992462			4
3.13	3.14	3.19	49384.59	19.902107			5
+ 3.13	3.17	3.19	21873.05	8.814891			5
3.25	3.30	3.31	5229.418	2.736275			6
Height Summation:			**780684.198**				
Amount Avg CF:			**56.921671**	Linear:			
Aroclor-1221					**2**	**89.16**	
2.18	2.21	2.24	32217.65	45.862403			2
2.26	2.28	2.32	22233.09	10.395585			3
Height Summation:			**54450.74**				
Amount Avg CF:			**28.128994**	Linear:			
Aroclor-1248					**6**	**123.21**	
3.03	3.04	3.09	399243.8	167.549563			1
3.34	3.37	3.40	41591.61	22.567403			2
+ 3.34	3.40	3.40	36508.2	19.809169			2
3.55	3.60	3.61	98199.6	30.173807			3
3.68	3.74	3.74	22449.87	8.595407			4
+ 3.90	3.92	3.96	228366.5	55.980139			5
3.90	3.94	3.96	86931.28	21.309716			5
4.40	4.40	4.46	90878.7	38.773092			6
Height Summation:			**739294.86**				
Amount Avg CF:			**48.161498**	Linear:			
Aroclor-1254					**5**	**167.24**	
+ 3.91	3.92	3.97	228366.5	54.472895			1
3.91	3.94	3.97	86931.28	20.735959			1
4.03	4.05	4.09	1102747	219.007239			2
+ 4.03	4.07	4.09	846758.1	168.167452			2
4.32	4.36	4.38	110568.8	26.054983			3
4.57	4.58	4.63	41955.59	7.648303			5
4.94	4.98	5.00	12969.85	2.02615			6
Height Summation:			**1355172.52**				
Amount Avg CF:			**55.094527**	Linear:			
Aroclor-1260					**5**	**64.95**	
4.52	4.58	4.58	41955.59	7.248576			1
4.66	4.68	4.72	49234.35	7.361535			2
+ 4.66	4.71	4.72	314860.8	47.078082			2
4.94	4.98	5.00	12969.85	1.937389			3
5.35	5.35	5.41	10786.05	0.918317			5
5.62	5.68	5.68	53025.73	6.696419			6
Height Summation:			**167971.57**				
Amount Avg CF:			**4.832447**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 09:01:27
Instrument : CP06--H9147B
Result file : 06PEST18261045B.005.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**3**	**132.69**	
* 3.81	3.85	3.87	18614.3	1.789285			4
* 3.84	3.85	3.90	18614.3	2.954168			5
+ 3.94	3.94	4.00	74329.99	14.89476			6
3.94	3.96	4.00	127660.2	25.581438			6
Height Summation:			**164888.8**				
Amount Avg CF:			**10.108297**	Linear:			
Aroclor-1248					**6**	**86.58**	
3.81	3.85	3.87	18614.3	3.621935			1
4.03	4.07	4.09	29825.42	4.663144			2
4.20	4.23	4.26	110929.1	15.208622			3
4.61	4.63	4.67	567546.8	68.731984			4
4.72	4.76	4.78	462961.9	61.817848			5
5.02	5.05	5.08	279548.4	56.896724			6
Height Summation:			**1469425.92**				
Amount Avg CF:			**35.156709**	Linear:			
Aroclor-1254					**6**	**120.59**	
+ 4.55	4.56	4.61	130643.4	13.581129			1
4.55	4.59	4.61	844443.5	87.784735			1
4.73	4.76	4.79	462961.9	32.177313			2
5.02	5.05	5.08	279548.4	16.343524			3
5.25	5.29	5.31	137134	10.506652			4
5.45	5.48	5.51	80330.84	10.377567			5
+ 5.45	5.50	5.51	934408.9	120.711938			5
5.56	5.59	5.62	13701.85	1.0225			6
Height Summation:			**1818120.49**				
Amount Avg CF:			**26.368715**	Linear:			
Aroclor-1260					**6**	**156.00**	
5.15	5.19	5.21	59721.24	4.953259			1
5.38	5.41	5.44	142208.1	27.362156			2
+ 5.38	5.44	5.44	167328.5	32.195553			2
5.56	5.59	5.62	13701.85	0.834846			3
5.79	5.80	5.85	46926.17	4.796355			4
+ 5.79	5.84	5.85	10299.74	1.052743			4
6.00	6.00	6.06	11567.9	0.558124			5
+ 6.20	6.21	6.26	63938.52	5.003836			6
6.20	6.24	6.26	16376.8	1.28165			6
Height Summation:			**290502.06**				
Amount Avg CF:			**6.631065**	Linear:			
T. Chlordane					**5**	**2.19**	
3.69	3.71	3.75	911768.5	114.665484			1
4.57	4.59	4.63	844443.5	111.882979			2
4.79	4.81	4.85	3879420	118.623725			3
4.83	4.85	4.89	2408244	113.40856			4
+ 4.83	4.89	4.89	2420296	113.97611			4
5.48	5.50	5.54	934408.9	115.307406			5
Height Summation:			**8978284.9**				
Amount Avg CF:			**114.777631**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4FP ID: FP **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 09:01:27
Instrument : CP06--H9147A
Result file : 06PEST18261045.005.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane						**5**	**1.29**	
	2.85	2.86	2.91	292592.2	98.580047			1
+	2.85	2.91	2.91	43586.32	14.685085			1
	3.85	3.87	3.91	266010.9	99.535973			2
	4.03	4.05	4.09	1102747	101.068639			3
+	4.03	4.07	4.09	846758.1	77.606821			3
	4.11	4.13	4.17	872901.8	98.202707			4
	4.87	4.89	4.93	424507.2	100.818923			5
Height Summation:				**2958759.1**				
Amount Avg CF:				**99.641258**	Linear:			
Toxaphene						**3**	**105.90**	
	4.76	4.79	4.82	23144.74	14.583171			1
	5.02	5.05	5.08	5967.169	4.027586			2
	5.46	5.50	5.52	2707.043	1.281928			5
Height Summation:				**31818.952**				
Amount Avg CF:				**6.630895**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 09:01:27
Instrument : CP06--H9147B
Result file : 06PEST18261045B.005.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene						**4**	**177.07**	
+	5.47	5.48	5.53	80330.84	21.005283			1
	5.47	5.50	5.53	934408.9	244.333596			1
	5.70	5.73	5.76	27779.19	8.164245			3
	5.94	5.96	6.00	30581.57	11.593274			4
	6.03	6.08	6.09	13530.62	3.312508			5
Height Summation:				**1006300.28**				
Amount Avg CF:				**66.850906**	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	** 139.68	5	20	
Aroclor-1221			0	0			2	20	
Aroclor-1248			0	0		31.22	5	20	
Aroclor-1254			0	0		** 70.52	4	20	
Aroclor-1260			0	0		31.38	5	20	
T. Chlordane			0.5	0.16		14.12	5	20	
Total PCBs			0	0					
Toxaphene			1	0.3		** 163.90	5	30	

Units: ug/l

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 12:26

Lab File ID: 06PEST18261045.010.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: MIXA3FD Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	1.81	1.80	1.84	20.69	20.03	3
alpha-BHC	2.35	2.34	2.38	4.74	5.00	-5
gamma-BHC (Lindane)	2.69	2.69	2.73	4.64	5.00	-7
beta-BHC	2.93	2.92	2.96	4.63	5.00	-7
Heptachlor	3.04	3.03	3.07	4.69	5.06	-7
delta-BHC	3.21	3.20	3.24	4.55	5.00	-9
Aldrin	3.34	3.34	3.38	4.67	5.06	-8
Heptachlor epoxide	3.85	3.84	3.88	4.62	5.06	-9
gamma-Chlordane	4.05	4.04	4.08	4.63	5.06	-9
alpha-Chlordane	4.13	4.12	4.16	4.55	5.06	-10
Endosulfan I	4.18	4.17	4.21	4.67	5.06	-8
4,4'-DDE	4.31	4.30	4.34	9.15	10.06	-9
Dieldrin	4.41	4.40	4.44	8.93	10.06	-11
Endrin	4.66	4.65	4.69	8.75	10.00	-12
4,4'-DDD	4.77	4.76	4.80	8.49	10.00	-15
Endosulfan II	4.87	4.86	4.90	8.97	10.06	-11
4,4'-DDT	4.98	4.96	5.00	8.96	10.00	-10
Endrin aldehyde	5.05	5.04	5.08	9.13	10.00	-9
Endosulfan sulfate	5.20	5.19	5.23	8.87	9.88	-10
Methoxychlor	5.48	5.46	5.50	47.66	50.13	-5
Endrin ketone	5.63	5.62	5.66	8.69	10.00	-13
Decachlorobiphenyl	6.38	6.36	6.42	18.79	20.02	-6

Compounds 22

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 12:26

Lab File ID: 06PEST18261045B.010.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: MIXA3FD Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.60	2.60	2.64	20.72	20.03	3
alpha-BHC	3.01	3.00	3.04	5.21	5.00	4
gamma-BHC (Lindane)	3.34	3.33	3.37	5.28	5.00	6
beta-BHC	3.60	3.59	3.63	5.25	5.00	5
delta-BHC	3.84	3.83	3.87	5.33	5.00	7
Heptachlor	3.90	3.90	3.94	5.06	5.06	0
Aldrin	4.19	4.18	4.22	5.13	5.06	1
Heptachlor epoxide	4.56	4.55	4.59	5.00	5.06	-1
gamma-Chlordane	4.81	4.80	4.84	5.02	5.06	-1
alpha-Chlordane	4.85	4.84	4.88	5.10	5.06	1
Endosulfan I	4.88	4.88	4.92	4.96	5.06	-2
4,4'-DDE	4.96	4.95	4.99	9.83	10.06	-2
Dieldrin	5.08	5.07	5.11	10.04	10.06	0
Endrin	5.26	5.25	5.29	10.09	10.00	1
4,4'-DDD	5.35	5.34	5.38	9.42	10.00	-6
Endosulfan II	5.45	5.44	5.48	9.82	10.06	-2
Endrin aldehyde	5.53	5.52	5.56	9.59	10.00	-4
4,4'-DDT	5.57	5.56	5.60	9.65	10.00	-3
Endosulfan sulfate	5.73	5.72	5.76	9.97	9.88	1
Methoxychlor	5.88	5.87	5.91	48.23	50.13	-4
Endrin ketone	6.03	6.03	6.07	9.79	10.00	-2
Decachlorobiphenyl	7.04	7.03	7.09	20.99	20.02	5

Compounds 22

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:
Lab Code: Case No.: SAS No.: SDG No.:
Instrument: H9147A Detector: ECD
Date Analyzed: 11/15/18
GC Column (1) : STX-CLP ID: .32 (mm)
Time Analyzed: 12:26
Lab File ID: 06PEST18261045.010.RAW
Initial Calibration: 06PEST1826103
Lab Standard ID: MIXA3FD
Init. Calib Date(s): 10/10/18 10/10/18
Calibration: 06PEST1826103
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Tetrachloro-m-xylene	1.81	1.80	1.84	20.69	20.03	103	75 - 125
alpha-BHC	2.35	2.34	2.38	4.74	5.00	95	69 - 125
gamma-BHC (Lindane)	2.69	2.69	2.73	4.64	5.00	93	75 - 125
beta-BHC	2.93	2.92	2.96	4.63	5.00	93	75 - 125
Heptachlor	3.04	3.03	3.07	4.69	5.06	93	75 - 125
delta-BHC	3.21	3.20	3.24	4.55	5.00	91	75 - 125
Aldrin	3.34	3.34	3.38	4.67	5.06	92	75 - 125
Heptachlor epoxide	3.85	3.84	3.88	4.62	5.06	91	75 - 125
gamma-Chlordane	4.05	4.04	4.08	4.63	5.06	92	75 - 125
alpha-Chlordane	4.13	4.12	4.16	4.55	5.06	90	73 - 125
Endosulfan I	4.18	4.17	4.21	4.67	5.06	92	75 - 125
4,4'-DDE	4.31	4.30	4.34	9.15	10.06	91	75 - 125
Dieldrin	4.41	4.40	4.44	8.93	10.06	89	48 - 125
Endrin	4.66	4.65	4.69	8.75	10.00	88	5 - 125
4,4'-DDD	4.77	4.76	4.80	8.49	10.00	85	75 - 125
Endosulfan II	4.87	4.86	4.90	8.97	10.06	89	75 - 125
4,4'-DDT	4.98	4.96	5.00	8.96	10.00	90	75 - 125
Endrin aldehyde	5.05	5.04	5.08	9.13	10.00	91	75 - 125
Endosulfan sulfate	5.20	5.19	5.23	8.87	9.88	90	70 - 125
Methoxychlor	5.48	5.46	5.50	47.66	50.13	95	75 - 125
Endrin ketone	5.63	5.62	5.66	8.69	10.00	87	75 - 125
Decachlorobiphenyl	6.38	6.36	6.42	18.79	20.02	94	75 - 125

Compounds 22

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD
Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm)
Time Analyzed: 12:26

Lab File ID: 06PEST18261045B.010.RAW
Initial Calibration: 06PEST1826103B

Lab Standard ID: MIXA3FD
Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Tetrachloro-m-xylene	2.60	2.60	2.64	20.72	20.03	103	75 - 125
alpha-BHC	3.01	3.00	3.04	5.21	5.00	104	69 - 125
gamma-BHC (Lindane)	3.34	3.33	3.37	5.28	5.00	106	75 - 125
beta-BHC	3.60	3.59	3.63	5.25	5.00	105	75 - 125
delta-BHC	3.84	3.83	3.87	5.33	5.00	107	75 - 125
Heptachlor	3.90	3.90	3.94	5.06	5.06	100	75 - 125
Aldrin	4.19	4.18	4.22	5.13	5.06	101	75 - 125
Heptachlor epoxide	4.56	4.55	4.59	5.00	5.06	99	75 - 125
gamma-Chlordane	4.81	4.80	4.84	5.02	5.06	99	75 - 125
alpha-Chlordane	4.85	4.84	4.88	5.10	5.06	101	73 - 125
Endosulfan I	4.88	4.88	4.92	4.96	5.06	98	75 - 125
4,4'-DDE	4.96	4.95	4.99	9.83	10.06	98	75 - 125
Dieldrin	5.08	5.07	5.11	10.04	10.06	100	48 - 125
Endrin	5.26	5.25	5.29	10.09	10.00	101	5 - 125
4,4'-DDD	5.35	5.34	5.38	9.42	10.00	94	75 - 125
Endosulfan II	5.45	5.44	5.48	9.82	10.06	98	75 - 125
Endrin aldehyde	5.53	5.52	5.56	9.59	10.00	96	75 - 125
4,4'-DDT	5.57	5.56	5.60	9.65	10.00	97	75 - 125
Endosulfan sulfate	5.73	5.72	5.76	9.97	9.88	101	70 - 125
Methoxychlor	5.88	5.87	5.91	48.23	50.13	96	75 - 125
Endrin ketone	6.03	6.03	6.07	9.79	10.00	98	75 - 125
Decachlorobiphenyl	7.04	7.03	7.09	20.99	20.02	105	75 - 125

Compounds 22

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 12:38

Lab File ID: 06PEST18261045.011.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: TOXA4AE Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	4.79	4.76	4.82	472.87	504.25	-6
	5.05	5.02	5.08	449.64	504.25	-11
	5.11	5.08	5.14	506.79	504.25	1
	5.39	5.36	5.42	517.68	504.25	3
	5.49	5.46	5.52	493.00	504.25	-2

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 12:38

Lab File ID: 06PEST18261045B.011.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: TOXA4AE Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	5.50	5.47	5.53	536.32	504.25	6
	5.67	5.65	5.71	540.90	504.25	7
	5.72	5.70	5.76	562.27	504.25	12
	5.96	5.94	6.00	564.05	504.25	12
	6.05	6.03	6.09	569.26	504.25	13

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 12:38

Lab File ID: 06PEST18261045.011.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: TOXA4AE Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103 Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Toxaphene	4.79	4.76	4.82	472.87	504.25	94	68 - 134
	5.05	5.02	5.08	449.64	504.25	89	68 - 134
	5.11	5.08	5.14	506.79	504.25	101	68 - 134
	5.39	5.36	5.42	517.68	504.25	103	68 - 134
	5.49	5.46	5.52	493.00	504.25	98	68 - 134

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 12:38

Lab File ID: 06PEST18261045B.011.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: TOXA4AE Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Toxaphene	5.50	5.47	5.53	536.32	504.25	106	68 - 134
	5.67	5.65	5.71	540.90	504.25	107	68 - 134
	5.72	5.70	5.76	562.27	504.25	112	68 - 134
	5.96	5.94	6.00	564.05	504.25	112	68 - 134
	6.05	6.03	6.09	569.26	504.25	113	68 - 134

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4AE ID: AE **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 12:38:32
Instrument : CP06--H9147A
Result file : 06PEST18261045.011.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**50.61**	
2.60	2.66	2.66	3684.589	1.492359			2
2.82	2.84	2.88	5091.164	3.687072			3
3.03	3.07	3.09	3602.807	0.794051			4
3.13	3.17	3.19	6589.921	2.655754			5
3.25	3.31	3.31	6047.716	3.164446			6
Height Summation:			**25016.197**				
Amount Avg CF:			**2.358736**	Linear:			
Aroclor-1248					**5**	**151.34**	
3.03	3.07	3.09	3602.807	1.51198			1
+ 3.34	3.36	3.40	16056.69	8.712281			2
3.34	3.39	3.40	73576.76	39.922387			2
3.68	3.68	3.74	11088.01	4.245279			4
3.90	3.96	3.96	24766.41	6.071062			5
4.40	4.43	4.46	311510.1	132.904738			6
Height Summation:			**424544.087**				
Amount Avg CF:			**36.931089**	Linear:			
Aroclor-1254					**6**	**57.71**	
3.91	3.96	3.97	24766.41	5.907601			1
4.03	4.03	4.09	115455.3	22.929599			2
I 4.32	4.34	4.38	174664.3	41.158765			3
4.32	4.37	4.38	278970.5	65.737998			3
4.40	4.43	4.46	311510.1	36.430351			4
+ 4.57	4.58	4.63	208758.2	38.055618			5
4.57	4.63	4.63	260077.1	47.410807			5
+ 4.94	4.96	5.00	209358.4	32.705975			6
4.94	4.98	5.00	219274	34.25499			6
+ 4.94	5.00	5.00	197902.8	30.91638			6
Height Summation:			**1210053.41**				
Amount Avg CF:			**35.445224**	Linear:			
Aroclor-1260					**6**	**53.25**	
4.52	4.56	4.58	258757	44.704882			1
+ 4.52	4.58	4.58	208758.2	36.066699			1
4.66	4.68	4.72	335907.4	50.224976			2
+ 4.94	4.96	5.00	209358.4	31.273194			3
4.94	4.98	5.00	219274	32.754351			3
+ 4.94	5.00	5.00	197902.8	29.561999			3
+ 5.19	5.20	5.25	300224.1	59.922817			4
5.19	5.22	5.25	516150.1	103.020271			4
+ 5.35	5.36	5.41	447954.8	38.138549			5
5.35	5.39	5.41	720698.9	61.359785			5
5.62	5.64	5.68	186645.8	23.570794			6
Height Summation:			**2237433.2**				
Amount Avg CF:			**52.605843**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 12:38:32
Instrument : CP06--H9147B
Result file : 06PEST18261045B.011.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**45.27**	
3.29	3.33	3.35	8711.245	1.718479			2
3.50	3.50	3.56	11179.19	4.244679			3
3.81	3.83	3.87	18507.11	1.778982			4
3.94	3.97	4.00	18025.49	3.612073			6
Height Summation:			**56423.035**				
Amount Avg CF:			**2.838553**	Linear:			
Aroclor-1248					**6**	**144.87**	
3.81	3.83	3.87	18507.11	3.601078			1
+ 4.03	4.04	4.09	21037.91	3.289234			2
4.03	4.09	4.09	26201.28	4.096517			2
4.20	4.26	4.26	71986.84	9.869553			3
4.61	4.66	4.67	142428.1	17.248562			4
4.72	4.74	4.78	433129.4	57.834408			5
+ 5.02	5.03	5.08	625998.7	127.41005			6
5.02	5.06	5.08	779204.7	158.592197			6
Height Summation:			**1471457.43**				
Amount Avg CF:			**41.873719**	Linear:			
Aroclor-1254					**6**	**97.63**	
+ 4.55	4.57	4.61	60817.57	6.322334			1
4.55	4.60	4.61	136961.6	14.237942			1
4.73	4.74	4.79	433129.4	30.10386			2
+ 5.02	5.03	5.08	625998.7	36.598403			3
5.02	5.06	5.08	779204.7	45.555442			3
+ 5.25	5.25	5.31	465581.6	35.670978			4
5.25	5.28	5.31	1479726	113.370618			4
+ 5.45	5.45	5.51	1279554	165.299627			5
E 5.45	5.50	5.51	2051059	264.966768			5
+ 5.56	5.56	5.62	422459.3	31.526023			6
5.56	5.61	5.62	1309759	97.740758			6
Height Summation:			**6189839.7**				
Amount Avg CF:			**94.329231**	Linear:			
Aroclor-1260					**6**	**68.62**	
+ 5.15	5.17	5.21	735803.9	61.027315			1
5.15	5.20	5.21	911877.1	75.630764			1
E 5.38	5.41	5.44	1246309	239.801395			2
5.56	5.61	5.62	1309759	79.802918			3
5.79	5.80	5.85	1211343	123.812172			4
+ 5.79	5.84	5.85	1015296	103.774078			4
+ 6.00	6.01	6.06	917694.8	44.276645			5
6.00	6.05	6.06	2325260	112.188401			5
6.20	6.21	6.26	230622.3	18.048529			6
+ 6.20	6.24	6.26	198170.9	15.508879			6
Height Summation:			**7235170.4**				
Amount Avg CF:			**108.21403**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4AE ID: AE **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 12:38:32
Instrument : CP06--H9147A
Result file : 06PEST18261045.011.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane						**3**	**130.99**	
	3.85	3.85	3.91	82117.23	30.72663			2
+	3.85	3.90	3.91	41794.01	15.638485			2
	4.03	4.03	4.09	115455.3	10.581675			3
	4.87	4.90	4.93	882686.4	209.634824			5
Height Summation:				**1080258.93**				
Amount Avg CF:				**83.64771**	Linear:			
Toxaphene						**5**	**5.57**	
	4.76	4.79	4.82	750479.7	472.866585			1
	5.02	5.05	5.08	666171.1	449.63721			2
	5.08	5.11	5.14	685573.3	506.790713			3
+	5.36	5.36	5.42	447954.8	321.764886			4
	5.36	5.39	5.42	720698.9	517.676336			4
	5.46	5.49	5.52	1041065	492.999135			5
Height Summation:				**3863988**				
Amount Avg CF:				**487.993996**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 12:38:32
Instrument : CP06--H9147B
Result file : 06PEST18261045B.011.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane						**5**	**185.32**	
+	3.69	3.70	3.75	10496.37	1.32004			1
	3.69	3.75	3.75	20498.7	2.57795			1
+	4.57	4.57	4.63	60817.57	8.057911			2
	4.57	4.60	4.63	136961.6	18.146474			2
+	4.79	4.79	4.85	190814.8	5.834677			3
*	4.83	4.84	4.89	254442.4	11.982152			4
*	4.79	4.84	4.85	254442.4	7.780262			3
	5.48	5.50	5.54	2051059	253.103639			5
+	5.48	5.53	5.54	1282640	158.279626			5
Height Summation:				**2717404.1**				
Amount Avg CF:				**58.718095**	Linear:			
Toxaphene						**5**	**2.68**	
	5.47	5.50	5.53	2051059	536.32047			1
+	5.47	5.53	5.53	1282640	335.390687			1
	5.65	5.67	5.71	2277589	540.899391			2
	5.70	5.72	5.76	1913158	562.273092			3
	5.94	5.96	6.00	1487897	564.052044			4
	6.03	6.05	6.09	2325260	569.260087			5
+	6.03	6.08	6.09	801460.9	196.210188			5
Height Summation:				**10054963**				
Amount Avg CF:				**554.561017**	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		18.46	5	20	
Aroclor-1221			0	0			2	20	
Aroclor-1248			0	0		12.54	5	20	
Aroclor-1254			0	0		** 90.75	4	20	
Aroclor-1260			0	0		** 69.16	5	20	
T. Chlordane			0.5	0.16		35.02	5	20	
Total PCBs			0	0					
Toxaphene			1	0.3		12.77	5	30	

Units: ug/l

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 12:50

Lab File ID: 06PEST18261045.012.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: CHLD4FR Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	2.86	2.85	2.91	100.72	100.20	1
	3.88	3.85	3.91	100.25	100.20	0
	4.05	4.03	4.09	101.12	100.20	1
	4.13	4.11	4.17	100.72	100.20	1
	4.90	4.87	4.93	102.34	100.20	2

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 12:50

Lab File ID: 06PEST18261045B.012.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: CHLD4FR Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.70	3.69	3.75	118.26	100.20	18
	4.58	4.57	4.63	116.22	100.20	16
	4.81	4.79	4.85	117.33	100.20	17
	4.88	4.83	4.89	111.51	100.20	11
	5.50	5.48	5.54	116.23	100.20	16

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD
Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm)
Time Analyzed: 12:50

Lab File ID: 06PEST18261045.012.RAW
Initial Calibration: 06PEST1826103

Lab Standard ID: CHLD4FR
Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Chlordane	2.86	2.85	2.91	100.72	100.20	101	75 - 125
	3.88	3.85	3.91	100.25	100.20	100	75 - 125
	4.05	4.03	4.09	101.12	100.20	101	75 - 125
	4.13	4.11	4.17	100.72	100.20	101	75 - 125
	4.90	4.87	4.93	102.34	100.20	102	75 - 125

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD
Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm)
Time Analyzed: 12:50

Lab File ID: 06PEST18261045B.012.RAW
Initial Calibration: 06PEST1826103B

Lab Standard ID: CHLD4FR
Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Chlordane	3.70	3.69	3.75	118.26	100.20	118	75 - 125
	4.58	4.57	4.63	116.22	100.20	116	75 - 125
	4.81	4.79	4.85	117.33	100.20	117	75 - 125
	4.88	4.83	4.89	111.51	100.20	111	75 - 125
	5.50	5.48	5.54	116.23	100.20	116	75 - 125

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4FR ID: FR **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 12:50:36
Instrument : CP06--H9147A
Result file : 06PEST18261045.012.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**146.99**	
2.25	2.28	2.31	21701.71	13.802262			1
2.60	2.63	2.66	12090.57	4.89701			2
E 2.82	2.86	2.88	298956.1	216.50699			3
3.03	3.04	3.09	407288.5	89.765497			4
3.13	3.15	3.19	40829.74	16.454482			5
3.25	3.30	3.31	6067.799	3.174955			6
Height Summation:			**786934.419**				
Amount Avg CF:				**57.433533** Linear:			
Aroclor-1221					**2**	**90.69**	
2.18	2.21	2.24	32610.77	46.422016			2
2.26	2.28	2.32	21701.71	10.147126			3
Height Summation:			**54312.48**				
Amount Avg CF:				**28.284571** Linear:			
Aroclor-1248					**6**	**102.40**	
3.03	3.04	3.09	407288.5	170.92566			1
3.34	3.37	3.40	42921.51	23.289			2
+ 3.34	3.40	3.40	37401.04	20.29362			2
+ 3.55	3.55	3.61	49135.48	15.097867			3
3.55	3.60	3.61	111252	34.18442			3
3.68	3.69	3.74	38597.72	14.777952			4
+ 3.68	3.74	3.74	29350.39	11.237416			4
3.90	3.92	3.96	236249.4	57.912497			5
+ 3.90	3.95	3.96	88026.34	21.578151			5
4.40	4.40	4.46	89666.09	38.255736			6
Height Summation:			**925975.22**				
Amount Avg CF:				**56.557544** Linear:			
Aroclor-1254					**4**	**126.09**	
3.91	3.92	3.97	236249.4	56.353225			1
+ 3.91	3.95	3.97	88026.34	20.997167			1
4.03	4.05	4.09	1103303	219.117661			2
+ 4.03	4.07	4.09	835302.2	165.892293			2
4.32	4.36	4.38	106730.9	25.150601			3
4.57	4.58	4.63	38472.54	7.013359			5
Height Summation:			**1484755.84**				
Amount Avg CF:				**76.908712** Linear:			
Aroclor-1260					**3**	**137.34**	
4.52	4.58	4.58	38472.54	6.646817			1
+ 4.66	4.68	4.72	47854.36	7.155198			2
4.66	4.71	4.72	310311.4	46.397854			2
5.35	5.36	5.41	11759.37	1.001184			5
Height Summation:			**360543.31**				
Amount Avg CF:				**18.015285** Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 12:50:36
Instrument : CP06--H9147B
Result file : 06PEST18261045B.012.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**3**	**145.25**	
* 3.81	3.84	3.87	19383.28	1.863203			4
+* 3.84	3.84	3.90	19383.28	3.076208			5
E 3.84	3.90	3.90	1384054	219.655199			5
3.94	3.95	4.00	126592.7	25.367525			6
Height Summation:			**1530029.98**				
Amount Avg CF:				**82.295309** Linear:			
Aroclor-1248					**6**	**86.94**	
3.81	3.84	3.87	19383.28	3.771561			1
4.03	4.07	4.09	30805.28	4.816343			2
4.20	4.23	4.26	109272	14.98143			3
4.61	4.63	4.67	585626.2	70.921465			4
4.72	4.75	4.78	461694.2	61.648576			5
5.02	5.04	5.08	288282.6	58.674404			6
Height Summation:			**1495063.56**				
Amount Avg CF:				**35.802296** Linear:			
Aroclor-1254					**6**	**107.62**	
+ 4.55	4.56	4.61	129851.8	13.498838			1
4.55	4.58	4.61	877157.3	91.185521			1
4.73	4.75	4.79	461694.2	32.089204			2
5.02	5.04	5.08	288282.6	16.854161			3
5.25	5.29	5.31	141340.2	10.828914			4
+ 5.45	5.47	5.51	80573.55	10.408922			5
5.45	5.50	5.51	941891.7	121.678606			5
5.56	5.58	5.62	15512.35	1.157609			6
Height Summation:			**2725878.35**				
Amount Avg CF:				**45.632336** Linear:			
Aroclor-1260					**6**	**148.11**	
5.15	5.19	5.21	59066.66	4.898968			1
+ 5.38	5.40	5.44	140051.9	26.947283			2
5.38	5.43	5.44	165023.7	31.752088			2
5.56	5.58	5.62	15512.35	0.945159			3
5.79	5.79	5.85	47205.58	4.824914			4
+ 5.79	5.84	5.85	11296.44	1.154617			4
6.00	6.00	6.06	12116.86	0.58461			5
6.20	6.20	6.26	62238.46	4.870789			6
+ 6.20	6.24	6.26	17077.55	1.336491			6
Height Summation:			**361163.61**				
Amount Avg CF:				**7.979421** Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4FR ID: FR **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 12:50:36
Instrument : CP06--H9147A
Result file : 06PEST18261045.012.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**0.79**	
2.85	2.86	2.91	298956.1	100.724169			1
+ 2.85	2.91	2.91	45409.54	15.299364			1
3.85	3.88	3.91	267924	100.251817			2
4.03	4.05	4.09	1103303	101.119597			3
+ 4.03	4.07	4.09	835302.2	76.556868			3
4.11	4.13	4.17	895293.2	100.721772			4
4.87	4.90	4.93	430926.8	102.343555			5
Height Summation:			**2996403.1**				
Amount Avg CF:			**101.032182**	Linear:			
Toxaphene					**3**	**83.27**	
4.76	4.79	4.82	19814.67	12.484942			1
5.02	5.05	5.08	5420.442	3.658568			2
5.36	5.42	5.42	4136.236	2.971049			4
Height Summation:			**29371.348**				
Amount Avg CF:			**6.37152**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 12:50:36
Instrument : CP06--H9147B
Result file : 06PEST18261045B.012.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**2.24**	
3.69	3.70	3.75	940350.6	118.260015			1
+ 3.69	3.74	3.75	63868.18	8.032166			1
4.57	4.58	4.63	877157.3	116.217334			2
+ 4.57	4.63	4.63	585626.2	77.59146			2
4.79	4.81	4.85	3837270	117.334876			3
+* 4.83	4.85	4.89	2351156	110.720183			4
+* 4.79	4.85	4.85	2351156	71.892933			3
4.83	4.88	4.89	2368007	111.513727			4
5.48	5.50	5.54	941891.7	116.230794			5
Height Summation:			**8964676.6**				
Amount Avg CF:			**115.911349**	Linear:			
Toxaphene					**5**	**160.43**	
5.47	5.50	5.53	941891.7	246.290233			1
5.65	5.68	5.71	7253.612	1.722644			2
+ 5.70	5.72	5.76	28480.41	8.370332			3
5.70	5.76	5.76	209379	61.536046			3
5.94	5.95	6.00	31481.57	11.934458			4
6.03	6.07	6.09	14180.75	3.47167			5
Height Summation:			**1204186.632**				
Amount Avg CF:			**64.99101**	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	35.59	5	20	
Aroclor-1221			0	0			2	20	
Aroclor-1248			0	0		** 44.94	5	20	
Aroclor-1254			0	0		** 51.05	4	20	
Aroclor-1260			0	0		** 77.21	5	20	
T. Chlordane			0.5	0.16		13.72	5	20	
Total PCBs			0	0					
Toxaphene			1	0.3		** 164.29	5	30	

Units: ug/l

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 14:03

Lab File ID: 06PEST18261045.018.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: MIXA4YR Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	1.81	1.80	1.84	42.05	40.06	5
alpha-BHC	2.35	2.34	2.38	10.16	10.00	2
gamma-BHC (Lindane)	2.69	2.69	2.73	9.81	10.00	-2
beta-BHC	2.93	2.92	2.96	9.12	10.00	-9
Heptachlor	3.04	3.03	3.07	9.50	10.13	-6
delta-BHC	3.21	3.20	3.24	9.83	10.00	-2
Aldrin	3.34	3.34	3.38	9.87	10.13	-3
Heptachlor epoxide	3.85	3.84	3.88	9.55	10.13	-6
gamma-Chlordane	4.05	4.04	4.08	9.37	10.13	-7
alpha-Chlordane	4.13	4.12	4.16	9.43	10.13	-7
Endosulfan I	4.18	4.17	4.21	9.64	10.13	-5
4,4'-DDE	4.31	4.30	4.34	19.20	20.13	-5
Dieldrin	4.41	4.40	4.44	19.32	20.13	-4
Endrin	4.66	4.65	4.69	18.22	20.00	-9
4,4'-DDD	4.77	4.76	4.80	18.96	20.00	-5
Endosulfan II	4.87	4.86	4.90	18.95	20.13	-6
4,4'-DDT	4.98	4.96	5.00	20.41	20.00	2
Endrin aldehyde	5.05	5.04	5.08	18.41	20.00	-8
Endosulfan sulfate	5.20	5.19	5.23	18.41	19.75	-7
Methoxychlor	5.47	5.46	5.50	106.12	100.25	6
Endrin ketone	5.63	5.62	5.66	19.65	20.00	-2
Decachlorobiphenyl	6.38	6.36	6.42	38.96	40.04	-3

Compounds 22

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 14:03

Lab File ID: 06PEST18261045B.018.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: MIXA4YR Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Tetrachloro-m-xylene	2.60	2.60	2.64	41.77	40.06	4
alpha-BHC	3.00	3.00	3.04	11.08	10.00	11
gamma-BHC (Lindane)	3.33	3.33	3.37	10.84	10.00	8
beta-BHC	3.59	3.59	3.63	10.43	10.00	4
delta-BHC	3.83	3.83	3.87	10.88	10.00	9
Heptachlor	3.90	3.90	3.94	10.80	10.13	7
Aldrin	4.18	4.18	4.22	10.64	10.13	5
Heptachlor epoxide	4.55	4.55	4.59	10.44	10.13	3
gamma-Chlordane	4.81	4.80	4.84	10.23	10.13	1
alpha-Chlordane	4.85	4.84	4.88	10.39	10.13	3
Endosulfan I	4.88	4.88	4.92	10.40	10.13	3
4,4'-DDE	4.96	4.95	4.99	20.37	20.13	1
Dieldrin	5.08	5.07	5.11	20.73	20.13	3
Endrin	5.25	5.25	5.29	21.03	20.00	5
4,4'-DDD	5.35	5.34	5.38	20.67	20.00	3
Endosulfan II	5.45	5.44	5.48	20.27	20.13	1
Endrin aldehyde	5.53	5.52	5.56	19.45	20.00	-3
4,4'-DDT	5.57	5.56	5.60	21.46	20.00	7
Endosulfan sulfate	5.73	5.72	5.76	19.87	19.75	1
Methoxychlor	5.87	5.87	5.91	110.24	100.25	10
Endrin ketone	6.03	6.03	6.07	20.40	20.00	2
Decachlorobiphenyl	7.04	7.03	7.09	42.09	40.04	5

Compounds 22

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD
Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm)
Time Analyzed: 14:03

Lab File ID: 06PEST18261045.018.RAW
Initial Calibration: 06PEST1826103

Lab Standard ID: MIXA4YR
Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Tetrachloro-m-xylene	1.81	1.80	1.84	42.05	40.06	105	75 - 125
alpha-BHC	2.35	2.34	2.38	10.16	10.00	102	69 - 125
gamma-BHC (Lindane)	2.69	2.69	2.73	9.81	10.00	98	75 - 125
beta-BHC	2.93	2.92	2.96	9.12	10.00	91	75 - 125
Heptachlor	3.04	3.03	3.07	9.50	10.13	94	75 - 125
delta-BHC	3.21	3.20	3.24	9.83	10.00	98	75 - 125
Aldrin	3.34	3.34	3.38	9.87	10.13	97	75 - 125
Heptachlor epoxide	3.85	3.84	3.88	9.55	10.13	94	75 - 125
gamma-Chlordane	4.05	4.04	4.08	9.37	10.13	92	75 - 125
alpha-Chlordane	4.13	4.12	4.16	9.43	10.13	93	73 - 125
Endosulfan I	4.18	4.17	4.21	9.64	10.13	95	75 - 125
4,4'-DDE	4.31	4.30	4.34	19.20	20.13	95	75 - 125
Dieldrin	4.41	4.40	4.44	19.32	20.13	96	48 - 125
Endrin	4.66	4.65	4.69	18.22	20.00	91	5 - 125
4,4'-DDD	4.77	4.76	4.80	18.96	20.00	95	75 - 125
Endosulfan II	4.87	4.86	4.90	18.95	20.13	94	75 - 125
4,4'-DDT	4.98	4.96	5.00	20.41	20.00	102	75 - 125
Endrin aldehyde	5.05	5.04	5.08	18.41	20.00	92	75 - 125
Endosulfan sulfate	5.20	5.19	5.23	18.41	19.75	93	70 - 125
Methoxychlor	5.47	5.46	5.50	106.12	100.25	106	75 - 125
Endrin ketone	5.63	5.62	5.66	19.65	20.00	98	75 - 125
Decachlorobiphenyl	6.38	6.36	6.42	38.96	40.04	97	75 - 125

Compounds 22

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 14:03

Lab File ID: 06PEST18261045B.018.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: MIXA4YR Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Tetrachloro-m-xylene	2.60	2.60	2.64	41.77	40.06	104	75 - 125
alpha-BHC	3.00	3.00	3.04	11.08	10.00	111	69 - 125
gamma-BHC (Lindane)	3.33	3.33	3.37	10.84	10.00	108	75 - 125
beta-BHC	3.59	3.59	3.63	10.43	10.00	104	75 - 125
delta-BHC	3.83	3.83	3.87	10.88	10.00	109	75 - 125
Heptachlor	3.90	3.90	3.94	10.80	10.13	107	75 - 125
Aldrin	4.18	4.18	4.22	10.64	10.13	105	75 - 125
Heptachlor epoxide	4.55	4.55	4.59	10.44	10.13	103	75 - 125
gamma-Chlordane	4.81	4.80	4.84	10.23	10.13	101	75 - 125
alpha-Chlordane	4.85	4.84	4.88	10.39	10.13	103	73 - 125
Endosulfan I	4.88	4.88	4.92	10.40	10.13	103	75 - 125
4,4'-DDE	4.96	4.95	4.99	20.37	20.13	101	75 - 125
Dieldrin	5.08	5.07	5.11	20.73	20.13	103	48 - 125
Endrin	5.25	5.25	5.29	21.03	20.00	105	5 - 125
4,4'-DDD	5.35	5.34	5.38	20.67	20.00	103	75 - 125
Endosulfan II	5.45	5.44	5.48	20.27	20.13	101	75 - 125
Endrin aldehyde	5.53	5.52	5.56	19.45	20.00	97	75 - 125
4,4'-DDT	5.57	5.56	5.60	21.46	20.00	107	75 - 125
Endosulfan sulfate	5.73	5.72	5.76	19.87	19.75	101	70 - 125
Methoxychlor	5.87	5.87	5.91	110.24	100.25	110	75 - 125
Endrin ketone	6.03	6.03	6.07	20.40	20.00	102	75 - 125
Decachlorobiphenyl	7.04	7.03	7.09	42.09	40.04	105	75 - 125

Compounds 22

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 14:15

Lab File ID: 06PEST18261045.019.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: TOXA4AD Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	4.79	4.76	4.82	512.54	504.25	2
	5.05	5.02	5.08	469.21	504.25	-7
	5.11	5.08	5.14	517.84	504.25	3
	5.39	5.36	5.42	530.76	504.25	5
	5.49	5.46	5.52	504.74	504.25	0

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 14:15

Lab File ID: 06PEST18261045B.019.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: TOXA4AD Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Toxaphene	5.50	5.47	5.53	543.81	504.25	8
	5.67	5.65	5.71	564.06	504.25	12
	5.72	5.70	5.76	564.64	504.25	12
	5.96	5.94	6.00	587.21	504.25	16
	6.05	6.03	6.09	577.26	504.25	14

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 14:15

Lab File ID: 06PEST18261045.019.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: TOXA4AD Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103 Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Toxaphene	4.79	4.76	4.82	512.54	504.25	102	68 - 134
	5.05	5.02	5.08	469.21	504.25	93	68 - 134
	5.11	5.08	5.14	517.84	504.25	103	68 - 134
	5.39	5.36	5.42	530.76	504.25	105	68 - 134
	5.49	5.46	5.52	504.74	504.25	100	68 - 134

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 14:15

Lab File ID: 06PEST18261045B.019.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: TOXA4AD Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Toxaphene	5.50	5.47	5.53	543.81	504.25	108	68 - 134
	5.67	5.65	5.71	564.06	504.25	112	68 - 134
	5.72	5.70	5.76	564.64	504.25	112	68 - 134
	5.96	5.94	6.00	587.21	504.25	116	68 - 134
	6.05	6.03	6.09	577.26	504.25	114	68 - 134

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4AD ID: AD **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 14:15:38
Instrument : CP06--H9147A
Result file : 06PEST18261045.019.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**48.78**	
2.25	2.30	2.31	1453.295	0.924294			1
2.60	2.65	2.66	3912.617	1.584716			2
2.82	2.84	2.88	5061.305	3.665448			3
3.13	3.17	3.19	6568.626	2.647172			5
3.25	3.30	3.31	6828.08	3.572769			6
Height Summation:			**23823.923**				
Amount Avg CF:				**2.47888** Linear:			
Aroclor-1221					**1**		
2.26	2.30	2.32	1453.295	0.679521			3
Height Summation:			**1453.295**				
Amount Avg CF:				**0.679521** Linear:			
Aroclor-1248					**4**	**117.63**	
+ 3.34	3.36	3.40	15701.81	8.519725			2
3.34	3.38	3.40	75873.53	41.168603			2
3.55	3.60	3.61	51960.86	15.966022			3
3.90	3.96	3.96	29642.7	7.266401			5
4.40	4.42	4.46	317386.4	135.411842			6
Height Summation:			**474863.49**				
Amount Avg CF:				**49.953217** Linear:			
Aroclor-1254					**5**	**61.06**	
3.91	3.96	3.97	29642.7	7.070756			1
+ 4.32	4.33	4.38	179447.2	42.285832			3
+ 4.32	4.36	4.38	293373.5	69.131992			3
4.32	4.38	4.38	320499.9	75.524192			3
4.40	4.42	4.46	317386.4	37.11757			4
+ 4.57	4.58	4.63	221541.6	40.38597			5
4.57	4.62	4.63	275309.8	50.187655			5
+ 4.94	4.95	5.00	209032.9	32.655125			6
4.94	4.97	5.00	219575.1	34.302028			6
+ 4.94	5.00	5.00	208285.6	32.538382			6
Height Summation:			**1162413.9**				
Amount Avg CF:				**40.84044** Linear:			
Aroclor-1260					**6**	**56.25**	
4.52	4.55	4.58	282255.3	48.764632			1
+ 4.52	4.58	4.58	221541.6	38.275259			1
4.66	4.68	4.72	350560.1	52.415852			2
+ 4.94	4.95	5.00	209032.9	31.224572			3
4.94	4.97	5.00	219575.1	32.799328			3
+ 4.94	5.00	5.00	208285.6	31.112943			3
5.19	5.22	5.25	564201.8	112.611084			4
+ 5.35	5.36	5.41	440801.8	37.529548			5
5.35	5.39	5.41	738915	62.910691			5
5.62	5.63	5.68	189332.9	23.910137			6
+ 5.62	5.68	5.68	152600.2	19.271303			6
Height Summation:			**2344840.2**				
Amount Avg CF:				**55.568621** Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 14:15:38
Instrument : CP06--H9147B
Result file : 06PEST18261045B.019.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**49.35**	
3.29	3.33	3.35	9380.109	1.850427			2
3.50	3.50	3.56	12633.12	4.796729			3
3.81	3.83	3.87	17927.34	1.723252			4
3.94	3.97	4.00	18056.99	3.618385			6
Height Summation:			**57997.559**				
Amount Avg CF:				**2.997198** Linear:			
Aroclor-1221					**1**		
2.76	2.81	2.82	5312.92	3.426276			1
Height Summation:			**5312.92**				
Amount Avg CF:				**3.426276** Linear:			
Aroclor-1248					**6**	**144.43**	
3.81	3.83	3.87	17927.34	3.488267			1
+ 4.03	4.04	4.09	18651.11	2.916063			2
4.03	4.08	4.09	26536.13	4.14887			2
4.20	4.26	4.26	79862.77	10.94936			3
4.61	4.66	4.67	151848.2	18.38937			4
4.72	4.74	4.78	443219	59.181641			5
+ 5.02	5.03	5.08	637237.3	129.697451			6
5.02	5.06	5.08	805931.6	164.031946			6
Height Summation:			**1525325.04**				
Amount Avg CF:				**43.364909** Linear:			
Aroclor-1254					**6**	**96.05**	
+ 4.55	4.57	4.61	61557.85	6.399291			1
4.55	4.60	4.61	145548.6	15.13061			1
4.73	4.74	4.79	443219	30.805119			2
+ 5.02	5.03	5.08	637237.3	37.255457			3
5.02	5.06	5.08	805931.6	47.118004			3
+ 5.25	5.25	5.31	480312.4	36.799592			4
5.25	5.28	5.31	1527173	117.005815			4
E 5.45	5.50	5.51	2079690	268.665474			5
5.56	5.61	5.62	1391458	103.837546			6
Height Summation:			**6393020.2**				
Amount Avg CF:				**97.093761** Linear:			
Aroclor-1260					**6**	**68.62**	
+ 5.15	5.17	5.21	751252.6	62.308625			1
5.15	5.20	5.21	955282.1	79.23076			1
E 5.38	5.41	5.44	1297405	249.632739			2
5.56	5.61	5.62	1391458	84.780794			3
5.79	5.80	5.85	1240784	126.821356			4
+ 5.79	5.82	5.85	938812.6	95.956659			4
+ 5.79	5.84	5.85	1096020	112.024931			4
+ 6.00	6.01	6.06	982182.9	47.388047			5
6.00	6.05	6.06	2357950	113.765618			5
6.20	6.21	6.26	242018.5	18.940397			6
+ 6.20	6.24	6.26	215167.8	16.839058			6
Height Summation:			**7484897.6**				
Amount Avg CF:				**112.195277** Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **TOXA41824E** TOXA4AD ID: AD **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 14:15:38
Instrument : CP06--H9147A
Result file : 06PEST18261045.019.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane						**3**	**151.34**	
	3.85	3.90	3.91	42634.32	15.952912			2
	4.11	4.14	4.17	39061.88	4.394518			4
	4.87	4.89	4.93	924386.8	219.538518			5
+	4.87	4.93	4.93	422558	100.355995			5
Height Summation:				**1006083**				
Amount Avg CF:				**79.961983**	Linear:			
Toxaphene						**5**	**4.57**	
	4.76	4.79	4.82	813438.9	512.536281			1
	5.02	5.05	5.08	695165.6	469.207267			2
	5.08	5.11	5.14	700522.3	517.841339			3
	5.36	5.39	5.42	738915	530.760918			4
	5.46	5.49	5.52	1065868	504.744663			5
Height Summation:				**4013909.8**				
Amount Avg CF:				**507.018094**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 14:15:38
Instrument : CP06--H9147B
Result file : 06PEST18261045B.019.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane						**5**	**183.30**	
+	3.69	3.70	3.75	10661.89	1.340857			1
	3.69	3.74	3.75	27965.7	3.517012			1
+	4.57	4.57	4.63	61557.85	8.155993			2
	4.57	4.60	4.63	145548.6	19.284193			2
+	4.79	4.79	4.85	191362.7	5.85143			3
*	4.83	4.84	4.89	267355.8	12.590268			4
*	4.79	4.84	4.85	267355.8	8.175124			3
	5.48	5.50	5.54	2079690	256.636746			5
+	5.48	5.53	5.54	1303878	160.900426			5
Height Summation:				**2787915.9**				
Amount Avg CF:				**60.040668**	Linear:			
Toxaphene						**5**	**2.88**	
	5.47	5.50	5.53	2079690	543.807038			1
+	5.47	5.53	5.53	1303878	340.944099			1
	5.65	5.67	5.71	2375119	564.061567			2
	5.70	5.72	5.76	1921195	564.63515			3
+	5.70	5.76	5.76	979036.8	287.736846			3
	5.94	5.96	6.00	1548994	587.213518			4
	6.03	6.05	6.09	2357950	577.263112			5
+	6.03	6.08	6.09	796557.9	195.009857			5
Height Summation:				**10282948**				
Amount Avg CF:				**567.396077**	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		18.93	5	20	
Aroclor-1221			0	0		** 133.80	2	20	
Aroclor-1248			0	0		14.12	5	20	
Aroclor-1254			0	0		** 81.57	4	20	
Aroclor-1260			0	0		** 67.51	5	20	
T. Chlordane			0.5	0.16		28.46	5	20	
Total PCBs			0	0					
Toxaphene			1	0.3		11.24	5	30	

Units: ug/l

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm) Time Analyzed: 14:27

Lab File ID: 06PEST18261045.020.RAW Initial Calibration: 06PEST1826103

Lab Standard ID: CHLD4FS Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	2.86	2.85	2.91	100.13	100.20	0
	3.87	3.85	3.91	99.68	100.20	-1
	4.05	4.03	4.09	99.07	100.20	-1
	4.13	4.11	4.17	99.82	100.20	0
	4.89	4.87	4.93	98.20	100.20	-2

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 14:27

Lab File ID: 06PEST18261045B.020.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: CHLD4FS Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/l)	NOM AMOUNT (ug/l)	%D
Chlordane	3.71	3.69	3.75	120.43	100.20	20
	4.59	4.57	4.63	116.25	100.20	16
	4.81	4.79	4.85	113.96	100.20	14
	4.88	4.83	4.89	113.14	100.20	13
	5.50	5.48	5.54	116.28	100.20	16

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147A Detector: ECD
Date Analyzed: 11/15/18

GC Column (1) : STX-CLP ID: .32 (mm)
Time Analyzed: 14:27

Lab File ID: 06PEST18261045.020.RAW
Initial Calibration: 06PEST1826103

Lab Standard ID: CHLD4FS
Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103
Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Chlordane	2.86	2.85	2.91	100.13	100.20	100	75 - 125
	3.87	3.85	3.91	99.68	100.20	99	75 - 125
	4.05	4.03	4.09	99.07	100.20	99	75 - 125
	4.13	4.11	4.17	99.82	100.20	100	75 - 125
	4.89	4.87	4.93	98.20	100.20	98	75 - 125

Compounds 5

Retention time update only using file(s) 06PEST18261018.004.RAW analyzed on 10/10/2018 12:41:
06PEST18261018.006.RAW analyzed on 10/10/2018 13:05:
06PEST18261018.003.RAW analyzed on 10/10/2018 12:28:

7E
CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories
Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H9147B Detector: ECD Date Analyzed: 11/15/18

GC Column (2) : STXCLPII ID: .32 (mm) Time Analyzed: 14:27

Lab File ID: 06PEST18261045B.020.RAW Initial Calibration: 06PEST1826103B

Lab Standard ID: CHLD4FS Init. Calib Date(s): 10/10/18 10/10/18

Calibration: 06PEST1826103B Method: 608.3 PEST

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	Recovery	Limits
Chlordane	3.71	3.69	3.75	120.43	100.20	120	75 - 125
	4.59	4.57	4.63	116.25	100.20	116	75 - 125
	4.81	4.79	4.85	113.96	100.20	114	75 - 125
	4.88	4.83	4.89	113.14	100.20	113	75 - 125
	5.50	5.48	5.54	116.28	100.20	116	75 - 125

Compounds 5

Retention time update only using file(s) 06PEST18261018B.004.RAW analyzed on 10/10/2018 12:4
06PEST18261018B.006.RAW analyzed on 10/10/2018 13:0
06PEST18261018B.003.RAW analyzed on 10/10/2018 12:2

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4FS ID: FS **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 14:27:47
Instrument : CP06--H9147A
Result file : 06PEST18261045.020.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**145.94**	
2.25	2.27	2.31	22429.02	14.26483			1
2.60	2.63	2.66	11936.06	4.834429			2
E 2.82	2.86	2.88	297196.8	215.232888			3
3.03	3.04	3.09	416997.8	91.905405			4
+ 3.03	3.08	3.09	23652.31	5.212918			4
3.13	3.14	3.19	39952.01	16.100755			5
3.25	3.30	3.31	6413.537	3.355861			6
Height Summation:			**794925.227**				
Amount Avg CF:			**57.615695**	Linear:			
Aroclor-1221					**2**	**88.97**	
2.18	2.21	2.24	32360.25	46.065396			2
2.26	2.27	2.32	22429.02	10.487197			3
Height Summation:			**54789.27**				
Amount Avg CF:			**28.276297**	Linear:			
Aroclor-1248					**6**	**100.97**	
3.03	3.04	3.09	416997.8	175.000336			1
+ 3.03	3.08	3.09	23652.31	9.926101			1
3.34	3.37	3.40	45009.76	24.422074			2
+ 3.34	3.40	3.40	35740.94	19.392858			2
3.55	3.60	3.61	114116.2	35.064504			3
3.68	3.68	3.74	38378.5	14.694019			4
+ 3.68	3.74	3.74	30760.26	11.777215			4
3.90	3.91	3.96	246673.8	60.467861			5
+ 3.90	3.94	3.96	90438.75	22.169512			5
4.40	4.40	4.46	97910.81	41.773318			6
Height Summation:			**959086.87**				
Amount Avg CF:			**58.570352**	Linear:			
Aroclor-1254					**5**	**143.35**	
3.91	3.91	3.97	246673.8	58.839786			1
+ 3.91	3.94	3.97	90438.75	21.572606			1
4.03	4.05	4.09	1080910	214.670377			2
+ 4.03	4.07	4.09	881941.4	175.154909			2
4.32	4.35	4.38	113824.6	26.822195			3
4.57	4.58	4.63	40173.57	7.323449			5
4.94	4.98	5.00	5303.812	0.828562			6
Height Summation:			**1486885.782**				
Amount Avg CF:			**61.696874**	Linear:			
Aroclor-1260					**5**	**153.57**	
4.52	4.58	4.58	40173.57	6.9407			1
+ 4.66	4.68	4.72	49991.38	7.474726			2
4.66	4.70	4.72	301026.1	45.009513			2
4.94	4.98	5.00	5303.812	0.792264			3
5.35	5.35	5.41	11402.78	0.970824			5
5.62	5.68	5.68	54941.88	6.938403			6
Height Summation:			**412848.142**				
Amount Avg CF:			**12.130341**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 14:27:47
Instrument : CP06--H9147B
Result file : 06PEST18261045B.020.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**3**	**122.75**	
* 3.84	3.85	3.90	25474.59	4.042925			5
* 3.81	3.85	3.87	25474.59	2.448725			4
3.94	3.96	4.00	133717.6	26.795262			6
Height Summation:			**184666.78**				
Amount Avg CF:			**11.095637**	Linear:			
Aroclor-1248					**6**	**84.86**	
3.81	3.85	3.87	25474.59	4.956797			1
4.03	4.07	4.09	35372.17	5.530367			2
4.20	4.23	4.26	113217.3	15.522339			3
4.61	4.63	4.67	590611.7	71.525228			4
4.72	4.75	4.78	464003.9	61.956983			5
5.02	5.05	5.08	283324.8	57.665338			6
Height Summation:			**1512004.46**				
Amount Avg CF:			**36.192842**	Linear:			
Aroclor-1254					**6**	**107.42**	
+ 4.55	4.56	4.61	134556.5	13.987918			1
4.55	4.59	4.61	877388.8	91.209587			1
4.73	4.75	4.79	464003.9	32.249735			2
5.02	5.05	5.08	283324.8	16.564308			3
5.25	5.29	5.31	147196	11.277562			4
+ 5.45	5.48	5.51	80975.38	10.460833			5
5.45	5.50	5.51	942281.9	121.729014			5
5.56	5.59	5.62	15718.36	1.172983			6
+ 5.56	5.61	5.62	13456.21	1.00417			6
Height Summation:			**2729913.76**				
Amount Avg CF:			**45.700531**	Linear:			
Aroclor-1260					**6**	**147.00**	
5.15	5.19	5.21	59207.83	4.910676			1
+ 5.38	5.40	5.44	138391.6	26.627826			2
5.38	5.43	5.44	165947.9	31.929913			2
5.56	5.59	5.62	15718.36	0.957711			3
+ 5.56	5.61	5.62	13456.21	0.81988			3
5.79	5.79	5.85	47918.39	4.89777			4
+ 5.79	5.84	5.85	11908.04	1.217129			4
6.00	6.04	6.06	14452.16	0.697283			5
6.20	6.21	6.26	64186.48	5.023242			6
+ 6.20	6.24	6.26	19552.61	1.53019			6
Height Summation:			**367431.12**				
Amount Avg CF:			**8.069433**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **CHLD41824D** CHLD4FS ID: FS **Batchnumber: 1831899999**
Sample Amount: 1 Total Volume: 1 ml Analyst: 2306 SDG: State:
Analyses: 00177

Analysis Report (A)

Injected on : Nov 15, 2018 14:27:47
Instrument : CP06--H9147A
Result file : 06PEST18261045.020.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTDI.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**0.77**	
2.85	2.86	2.91	297196.8	100.131427			1
+ 2.85	2.91	2.91	45965.63	15.486722			1
3.85	3.87	3.91	266404.7	99.683325			2
4.03	4.05	4.09	1080910	99.067241			3
+ 4.03	4.07	4.09	881941.4	80.83143			3
4.11	4.13	4.17	887233.4	99.815033			4
4.87	4.89	4.93	413483	98.200716			5
Height Summation:			**2945227.9**				
Amount Avg CF:			**99.379548**	Linear:			
Toxaphene					**3**	**94.98**	
4.76	4.79	4.82	18936.82	11.931821			1
5.02	5.05	5.08	5716.253	3.858228			2
5.46	5.49	5.52	3157.241	1.49512			5
Height Summation:			**27810.314**				
Amount Avg CF:			**5.761723**	Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 14:27:47
Instrument : CP06--H9147B
Result file : 06PEST18261045B.020.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDIB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**2.44**	
3.69	3.71	3.75	957566.1	120.425064			1
4.57	4.59	4.63	877388.8	116.248006			2
+ 4.57	4.63	4.63	590611.7	78.252005			2
4.79	4.81	4.85	3726852	113.958547			3
+* 4.83	4.85	4.89	2267408	106.776338			4
+* 4.79	4.85	4.85	2267408	69.332113			3
4.83	4.88	4.89	2402489	113.137547			4
5.48	5.50	5.54	942281.9	116.278946			5
Height Summation:			**8906577.8**				
Amount Avg CF:			**116.009622**	Linear:			
Toxaphene					**5**	**158.31**	
+ 5.47	5.48	5.53	80975.38	21.17382			1
5.47	5.50	5.53	942281.9	246.392265			1
5.65	5.68	5.71	7431.118	1.764799			2
+ 5.70	5.73	5.76	28333.1	8.327038			3
5.70	5.76	5.76	208783	61.360882			3
5.94	5.96	6.00	38596.66	14.631742			4
+ 6.03	6.04	6.09	14452.16	3.538115			5
6.03	6.07	6.09	16242.03	3.976303			5
Height Summation:			**1213334.708**				
Amount Avg CF:			**65.625198**	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	** 135.41	5	20	
Aroclor-1221			0	0			2	20	
Aroclor-1248			0	0		** 47.23	5	20	
Aroclor-1254			0	0		29.79	4	20	
Aroclor-1260			0	0		** 40.21	5	20	
T. Chlordane			0.5	0.16		15.44	5	20	
Total PCBs			0	0					
Toxaphene			1	0.3		** 167.72	5	30	

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	LCSDA 11/5/18 C	LCSD17309	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 C	PBLK17309	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	LCSDA 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 06PEST18261001
Instrument CP06--H9147A

Data Directory Path is - \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	06PEST18261001.001	CONDITIONER		9/18/18 18:36	1826099999	1.00
2306	06PEST18261001.002	IBLKX1824B	PIBLKAA	9/18/18 18:49	1826099999	10.00
2306	06PEST18261001.003	EVALX1824B	PEMAA	9/18/18 19:01	1826099999	1.00
2306	06PEST18261001.004	MIXA11824B	MIXA1AA	9/18/18 19:13	1826099999	1.00
2306	06PEST18261001.005	MIXA21824A	MIXA2AA	9/18/18 19:25	1826099999	1.00
2306	06PEST18261001.006	MIXA31824A	MIXA3AA	9/18/18 19:37	1826099999	1.00
2306	06PEST18261001.007	MIXA41824A	MIXA4AA	9/18/18 19:49	1826099999	1.00
2306	06PEST18261001.008	MIXA51824A	MIXA5AA	9/18/18 20:02	1826099999	1.00
2306	06PEST18261001.009	MIXA61824A	MIXA6AA	9/18/18 20:14	1826099999	1.00
2306	06PEST18261001.010	ICMAX1824A	ICMAXAA	9/18/18 20:26	1826099999	1.00
2306	06PEST18261001.011	MIXE11824C	MIXE1AA	9/18/18 20:38	1826099999	1.00
2306	06PEST18261001.012	MIXE21824C	MIXE2AA	9/18/18 20:50	1826099999	1.00
2306	06PEST18261001.013	MIXE31824C	MIXE3AA	9/18/18 21:02	1826099999	1.00
2306	06PEST18261001.014	MIXE41824C	MIXE4AA	9/18/18 21:15	1826099999	1.00
2306	06PEST18261001.015	MIXE51824C	MIXE5AA	9/18/18 21:27	1826099999	1.00
2306	06PEST18261001.016	MIXE61824C	MIXE6AA	9/18/18 21:39	1826099999	1.00
2306	06PEST18261001.017	ICMEX1824C	ICMEXAA	9/18/18 21:51	1826099999	1.00
2306	06PEST18261001.018	TOXA11824D	TOXA1AA	9/18/18 22:03	1826099999	1.00
2306	06PEST18261001.019	TOXA21824D	TOXA2AA	9/18/18 22:16	1826099999	1.00
2306	06PEST18261001.020	TOXA31824D	TOXA3AA	9/18/18 22:28	1826099999	1.00
2306	06PEST18261001.021	TOXA41824D	TOXA4AA	9/18/18 22:40	1826099999	1.00
2306	06PEST18261001.022	TOXA51824D	TOXA5AA	9/18/18 22:52	1826099999	1.00
2306	06PEST18261001.023	TOXA61824D	TOXA6AA	9/18/18 23:04	1826099999	1.00
2306	06PEST18261001.024	ICTXX1824D	ICTXXAA	9/18/18 23:16	1826099999	1.00
2306	06PEST18261001.025	CHLD11824D	CHLD1AA	9/18/18 23:29	1826099999	1.00
2306	06PEST18261001.026	CHLD21824D	CHLD2AA	9/18/18 23:41	1826099999	1.00
2306	06PEST18261001.027	CHLD31824D	CHLD3AA	9/18/18 23:53	1826099999	1.00
2306	06PEST18261001.028	CHLD41824D	CHLD4AA	9/19/18 0:05	1826099999	1.00
2306	06PEST18261001.029	CHLD51824D	CHLD5AA	9/19/18 0:17	1826099999	1.00
2306	06PEST18261001.030	CHLD61824E	CHLD6AA	9/19/18 0:29	1826099999	1.00
2306	06PEST18261001.031	ICCHX1824F	ICCHXAA	9/19/18 0:42	1826099999	1.00
2306	06PEST18261001.032	AR1641824A	AR164AA	9/19/18 0:54	1826099999	1.00
2306	06PEST18261001.033	2154X1824A	2154XAA	9/19/18 1:06	1826099999	1.00
2306	06PEST18261001.034	AR4841824B	AR484AA	9/19/18 1:18	1826099999	1.00
2306	06PEST18261001.035	MDLAX1824A	MDLAXAA	9/19/18 1:30	1826099999	1.00
2306	06PEST18261001.036	MDLEX1824C	MDLEXAA	9/19/18 1:43	1826099999	1.00
2306	06PEST18261001.037	MDTXX1824D	MDTXXAA	9/19/18 1:55	1826099999	1.00
2306	06PEST18261001.038	MDCHX1824D	MDCHXAA	9/19/18 2:07	1826099999	1.00
2306	06PEST18261001.039	BLANKA 8/29/18 RI C	PBLK28240	9/19/18 2:19	182400028A	5.00
2306	06PEST18261001.040	MIXE 8/29/18 RI		9/19/18 2:31	182400028A	5.00
2306	06PEST18261001.041	BLANKA 8/28/18 RI C	PBLK24240	9/19/18 2:43	182400024A	5.00
2306	06PEST18261001.042	MIXE 8/28/18 RI C		9/19/18 2:56	182400024A	5.00
2306	06PEST18261001.043	BLANKA 9/9/18 RI CF	PBLK04250	9/19/18 3:08	182500004A	5.00
2306	06PEST18261001.044	LCSA 9/9/18 RI CF	LCS04250	9/19/18 3:20	182500004A	5.00
2306	06PEST18261001.045	LCSDA 9/9/18 RI CF	LCSD04250	9/19/18 3:32	182500004A	5.00
2306	06PEST18261001.046	EVALX1824B	PEMWU	9/19/18 3:44	1826099999	1.00
2306	06PEST18261001.047	MIXA41824A	MIXA4YC	9/19/18 3:56	1826099999	1.00
2306	06PEST18261001.048	MIXE41824C	MIXE4QJ	9/19/18 4:09	1826099999	1.00
2306	06PEST18261001.049	CHLD41824D	CHLD4MM	9/19/18 4:21	1826099999	1.00
2306	06PEST18261001.050	9787520 CF DF5	49K02	9/19/18 4:33	182500004A	25.00
2306	06PEST18261001.051	HEXANE	AA	9/19/18 4:45	1826099999	1.00
2306	06PEST18261001.052	9787618 CF	DC128	9/19/18 4:57	182500004A	5.00
2306	06PEST18261001.053	HEXANE	AA	9/19/18 5:10	1826099999	1.00
2306	06PEST18261001.054	9789783 RI CF DF5	3662C	9/19/18 5:22	182500004A	25.00
2306	06PEST18261001.055	HEXANE	AA	9/19/18 5:34	1826099999	1.00
2306	06PEST18261001.056	9790202 CF DF5	G1701	9/19/18 5:46	182500004A	25.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	06PEST18261001.057	HEXANE	AA	9/19/18 5:58	1826099999	1.00
2306	06PEST18261001.058	MIXA41824A	MIXA4YD	9/19/18 6:10	1826099999	1.00
2306	06PEST18261001.059	MIXE41824C	MIXE4QK	9/19/18 6:23	1826099999	1.00
2306	06PEST18261001.060	TOXA41824D	TOXA4AT	9/19/18 6:35	1826099999	1.00
2306	06PEST18261001.061	CHLD41824D	CHLD4MN	9/19/18 6:47	1826099999	1.00
2306	06PEST18261001.062	BLANKA 9/4/18 RI CF	PBLK27243	9/19/18 6:59	182430027A	5.00
2306	06PEST18261001.063	LCSA 9/4/18 RI CF	LCS27243	9/19/18 7:11	182430027A	5.00
2306	06PEST18261001.064	LCSDA 9/4/18 RI CF	LCSD27243	9/19/18 7:23	182430027A	5.00
2306	06PEST18261001.065	9777408 RI CF	RGBT4	9/19/18 7:36	182430027A	5.00
2306	06PEST18261001.066	HEXANE	AA	9/19/18 7:48	1826099999	1.00
2306	06PEST18261001.067	9777924 RI CF	BDY-2	9/19/18 8:00	182430027A	5.00
2306	06PEST18261001.068	9777928 RI CF	QRINF	9/19/18 8:12	182430027A	5.00
2306	06PEST18261001.069	HEXANE	AA	9/19/18 8:24	1826099999	1.00
2306	06PEST18261001.070	MIXA41824A	MIXA4YE	9/19/18 8:36	1826099999	1.00
2306	06PEST18261001.071	MIXE41824C	MIXE4QL	9/19/18 8:48	1826099999	1.00
2306	06PEST18261001.072	TOXA41824D	TOXA4AU	9/19/18 9:01	1826099999	1.00
2306	06PEST18261001.073	CHLD41824D	CHLD4MO	9/19/18 9:13	1826099999	1.00
2306	06PEST18261001.074	9777937 CF DF5	QRTTW	9/19/18 9:25	182430027A	25.00
2306	06PEST18261001.075	9777940 RI CF	STRC1	9/19/18 9:37	182430027A	5.00
2306	06PEST18261001.076	HEXANE	AA	9/19/18 9:49	1826099999	1.00
2306	06PEST18261001.077	9780709 CF DF10	01331	9/19/18 10:01	182430027A	50.00
2306	06PEST18261001.078	HEXANE	AA	9/19/18 10:14	1826099999	1.00
2306	06PEST18261001.079	9782252 CF DF5	45220	9/19/18 10:26	182430027A	25.00
2306	06PEST18261001.080	9782252 CF DF10	45220	9/19/18 10:38	182430027A	50.00
2306	06PEST18261001.081	MIXA41824A	MIXA4YF	9/19/18 10:50	1826099999	1.00
2306	06PEST18261001.082	MIXE41824C	MIXE4QM	9/19/18 11:02	1826099999	1.00
2306	06PEST18261001.083	TOXA41824D	TOXA4AV	9/19/18 11:15	1826099999	1.00
2306	06PEST18261001.084	CHLD41824D	CHLD4MP	9/19/18 11:27	1826099999	1.00
2306	06PEST18261001.085	EVALX1824B	PEMWY	9/19/18 11:39	1826199999	1.00

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Pesticide Residue Analysis
Runlog for 06PEST18261018
Instrument CP06--H9147A

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Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	06PEST18261018.001	HEXANE	AA	10/10/18 12:03	1828299999	1.00
2306	06PEST18261018.002	EVALX1824B	PEMEE	10/10/18 12:16	1828299999	1.00
2306	06PEST18261018.003	MIXA41824B	MIXA4JE	10/10/18 12:28	1828299999	1.00
2306	06PEST18261018.004	MIXE41824D	MIXE4UD	10/10/18 12:41	1828299999	1.00
2306	06PEST18261018.005	TOXA41824D	TOXA4JD	10/10/18 12:53	1828299999	1.00
2306	06PEST18261018.006	CHLD41824D	CHLD4TP	10/10/18 13:05	1828299999	1.00

Eurofins Lancaster Laboratories
Pesticide Residue Analysis
Runlog for 05PEST18306002
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	05PEST18306002.001	HEXANE	AA	11/5/18 11:54	1830899999	1.00
2306	05PEST18306002.002	EVALX1824B	PEMKX	11/5/18 12:07	1830899999	1.00
2306	05PEST18306002.003	MIXA41824B	MIXA4TY	11/5/18 12:20	1830899999	1.00
2306	05PEST18306002.004	TOXA41824E	TOXA4VN	11/5/18 12:33	1830899999	1.00
2306	05PEST18306002.005	CHLD41824D	CHLD4CA	11/5/18 12:45	1830899999	1.00
2306	05PEST18306002.006	HEXANE	AA	11/5/18 13:19	1830899999	1.00
2306	05PEST18306002.007	BLANKA 11/1/18 F	PBLK09305	11/5/18 13:32	183050009A	2.00
2306	05PEST18306002.008	LCSA 11/1/18 F	LCS09305	11/5/18 13:44	183050009A	2.00
2306	05PEST18306002.009	MIXA31824B	MIXA3EB	11/5/18 13:57	1830899999	1.00
2306	05PEST18306002.010	TOXA41824E	TOXA4VO	11/5/18 14:10	1830899999	1.00
2306	05PEST18306002.011	CHLD41824D	CHLD4CB	11/5/18 14:23	1830899999	1.00
2306	05PEST18306002.012	9876907 F	13F13	11/5/18 14:36	183050009A	2.00
2306	05PEST18306002.013	MIXA41824B	MIXA4UC	11/5/18 14:49	1830899999	1.00
2306	05PEST18306002.014	9877492 F	EBERA	11/5/18 15:01	183050009A	2.00
2306	05PEST18306002.015	9876332 F	14T02	11/5/18 15:14	183050009A	2.00
2306	05PEST18306002.016	9876334 F	14T04	11/5/18 15:27	183050009A	2.00
2306	05PEST18306002.017	9876335MS F	14T04	11/5/18 15:40	183050009A	2.00
2306	05PEST18306002.018	9876336MSD F	14T04	11/5/18 15:53	183050009A	2.00
2306	05PEST18306002.019	9876342 F	14T06	11/5/18 16:06	183050009A	2.00
2306	05PEST18306002.020	MIXA31824B	MIXA3EC	11/5/18 16:18	1830899999	1.00
2306	05PEST18306002.021	9874781 F DF5	BRL01	11/5/18 16:31	183050009A	10.00
2306	05PEST18306002.022	HEXANE	AA	11/5/18 16:44	1830899999	1.00
2306	05PEST18306002.023	9874782 F DF5	BRL02	11/5/18 16:57	183050009A	10.00
2306	05PEST18306002.024	MIXA41824B	MIXA4UB	11/5/18 17:10	1830899999	1.00
2306	05PEST18306002.025	TOXA41824E	TOXA4VQ	11/5/18 17:23	1830899999	1.00
2306	05PEST18306002.026	CHLD41824D	CHLD4CD	11/5/18 17:36	1830899999	1.00
2306	05PEST18306002.027	HEXANE	AA	11/5/18 18:11	1830899999	1.00
2306	05PEST18306002.028	MIXE41824D	MIXE4ZT	11/5/18 18:23	1830899999	1.00
2306	05PEST18306002.029	BLANKA 10/24/18 F	PBLK09297	11/5/18 18:36	182970009A	2.00
2306	05PEST18306002.030	LCSSW 10/24/18 F	LCS09297	11/5/18 18:49	182970009A	2.00
2306	05PEST18306002.031	LCSCHL 10/24/18 F	LCS09297	11/5/18 19:02	182970009A	2.00
2306	05PEST18306002.032	LCSTOX 10/24/18 F	LCS09297	11/5/18 19:15	182970009A	2.00
2306	05PEST18306002.033	BLANKA 10/25/18 F	PBLK06298	11/5/18 19:28	182980006A	2.00
2306	05PEST18306002.034	LCSA 10/25/18 F	LCS06298	11/5/18 19:40	182980006A	2.00
2306	05PEST18306002.035	EVALX1824B	PEMLB	11/5/18 19:53	1830899999	1.00
2306	05PEST18306002.036	MIXA31824B	MIXA3ED	11/5/18 20:06	1830899999	1.00
2306	05PEST18306002.037	MIXE41824D	MIXE4ZR	11/5/18 20:19	1830899999	1.00
2306	05PEST18306002.038	TOXA41824E	TOXA4VV	11/5/18 20:32	1830899999	1.00
2306	05PEST18306002.039	CHLD41824D	CHLD4CI	11/5/18 20:45	1830899999	1.00
2306	05PEST18306002.040	9860265 F	GW3C1	11/5/18 20:57	182970009A	2.00
2306	05PEST18306002.041	9860266MS F	GW3C1	11/5/18 21:10	182970009A	2.00
2306	05PEST18306002.042	9860267MSD F	GW3C1	11/5/18 21:23	182970009A	2.00
2306	05PEST18306002.043	9860376MS F	GW3C1	11/5/18 21:36	182970009A	2.00
2306	05PEST18306002.044	9860377MS F	GW3C1	11/5/18 21:49	182970009A	2.00
2306	05PEST18306002.045	9860378MSD F	GW3C1	11/5/18 22:01	182970009A	2.00
2306	05PEST18306002.046	9860379MSD F	GW3C1	11/5/18 22:14	182970009A	2.00
2306	05PEST18306002.047	9860269 F	GW3FD	11/5/18 22:27	182970009A	2.00
2306	05PEST18306002.048	9860270 F	GW3BL	11/5/18 22:40	182970009A	2.00
2306	05PEST18306002.049	MIXA41824B	MIXA4UI	11/5/18 22:53	1830899999	1.00
2306	05PEST18306002.050	MIXE41824D	MIXE4ZS	11/5/18 23:06	1830899999	1.00
2306	05PEST18306002.051	TOXA41824E	TOXA4VW	11/5/18 23:18	1830899999	1.00
2306	05PEST18306002.052	CHLD41824D	CHLD4CJ	11/5/18 23:31	1830899999	1.00
2306	05PEST18306002.053	9861917 F	GKP01	11/5/18 23:44	182980006A	2.00
2306	05PEST18306002.054	9861918 F	GKP03	11/5/18 23:57	182980006A	2.00
2306	05PEST18306002.055	9861919 F	GKP04	11/6/18 0:10	182980006A	2.00
2306	05PEST18306002.056	9861920 F	GKPR1	11/6/18 0:23	182980006A	2.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	05PEST18306002.057	9861921 F	GKP05	11/6/18 0:35	182980006A	2.00
2306	05PEST18306002.058	9861922 F	GKP02	11/6/18 0:48	182980006A	2.00
2306	05PEST18306002.059	9862000 F	L4203	11/6/18 1:01	182980006A	2.00
2306	05PEST18306002.060	9862001 F	L4204	11/6/18 1:14	182980006A	2.00
2306	05PEST18306002.061	9862002 F	L4205	11/6/18 1:27	182980006A	2.00
2306	05PEST18306002.062	9862003MS F	L4205	11/6/18 1:40	182980006A	2.00
2306	05PEST18306002.063	EVALX1824B	PEMLC	11/6/18 1:52	1830899999	1.00
2306	05PEST18306002.064	MIXA31824B	MIXA3EE	11/6/18 2:05	1830899999	1.00
2306	05PEST18306002.065	TOXA41824E	TOXA4VX	11/6/18 2:18	1830899999	1.00
2306	05PEST18306002.066	CHLD41824D	CHLD4CK	11/6/18 2:31	1830899999	1.00
2306	05PEST18306002.067	9862004MSD F	L4205	11/6/18 2:44	182980006A	2.00
2306	05PEST18306002.068	9862006 F	L4206	11/6/18 2:57	182980006A	2.00
2306	05PEST18306002.069	9862010 F	L4210	11/6/18 3:09	182980006A	2.00
2306	05PEST18306002.070	9862011 F	L4211	11/6/18 3:22	182980006A	2.00
2306	05PEST18306002.071	9862012 F	L4212	11/6/18 3:35	182980006A	2.00
2306	05PEST18306002.072	9862013 F	L4213	11/6/18 3:48	182980006A	2.00
2306	05PEST18306002.073	MIXA41824B	MIXA4UK	11/6/18 4:01	1830899999	1.00
2306	05PEST18306002.074	TOXA41824E	TOXA4VY	11/6/18 4:14	1830899999	1.00
2306	05PEST18306002.075	CHLD41824D	CHLD4CL	11/6/18 4:27	1830899999	1.00

Eurofins Lancaster Laboratories
Pesticide Residue Analysis
Runlog for 06PEST18261045
Instrument CP06--H9147A

Data Directory Path is - \\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	06PEST18261045.001	HEXANE	AA	11/15/18 8:12	1831899999	1.00
2306	06PEST18261045.002	EVALX1824B	PEMNL	11/15/18 8:25	1831899999	1.00
2306	06PEST18261045.003	MIXA41824B	MIXA4YL	11/15/18 8:37	1831899999	1.00
2306	06PEST18261045.004	TOXA41824E	TOXA4ZX	11/15/18 8:49	1831899999	1.00
2306	06PEST18261045.005	CHLD41824D	CHLD4FP	11/15/18 9:01	1831899999	1.00
2306	06PEST18261045.006	HEXANE	AA	11/15/18 11:37	1831899999	1.00
2306	06PEST18261045.007	BLANKA 11/14/18 F	PBLK15318	11/15/18 11:49	183180015A	5.00
2306	06PEST18261045.008	LCSA 11/14/18 F	LCS15318	11/15/18 12:02	183180015A	5.00
2306	06PEST18261045.009	LCSDA 11/14/18 F	LCSD15318	11/15/18 12:14	183180015A	5.00
2306	06PEST18261045.010	MIXA31824B	MIXA3FD	11/15/18 12:26	1831899999	1.00
2306	06PEST18261045.011	TOXA41824E	TOXA4AE	11/15/18 12:38	1831899999	1.00
2306	06PEST18261045.012	CHLD41824D	CHLD4FR	11/15/18 12:50	1831899999	1.00
2306	06PEST18261045.013	9861917R F	GKP01	11/15/18 13:02	183180015A	5.00
2306	06PEST18261045.014	9861919R F	GKP04	11/15/18 13:14	183180015A	5.00
2306	06PEST18261045.015	9861920R F	GKPR1	11/15/18 13:27	183180015A	5.00
2306	06PEST18261045.016	9861921R F	GKP05	11/15/18 13:39	183180015A	5.00
2306	06PEST18261045.017	9861922R F	GKP02	11/15/18 13:51	183180015A	5.00
2306	06PEST18261045.018	MIXA41824B	MIXA4YR	11/15/18 14:03	1831899999	1.00
2306	06PEST18261045.019	TOXA41824E	TOXA4AD	11/15/18 14:15	1831899999	1.00
2306	06PEST18261045.020	CHLD41824D	CHLD4FS	11/15/18 14:27	1831899999	1.00
2306	06PEST18261045.021	HEXANE	AA	11/15/18 15:11	1831899999	1.00
2306	06PEST18261045.022	MIXE41824D	MIXE4AS	11/15/18 15:24	1831899999	1.00
2306	06PEST18261045.023	IBLKX1824B	PIBLKWB	11/15/18 15:36	1831899999	10.00
2306	06PEST18261045.024	BLANKA 11/14/18	PBLK10318	11/15/18 15:48	183180010A	5.00
2306	06PEST18261045.025	LCSA 11/14/18	LCS10318	11/15/18 16:00	183180010A	5.00
2306	06PEST18261045.026	LCSDA 11/14/18	LCSD10318	11/15/18 16:13	183180010A	5.00
2306	06PEST18261045.027	BLANKA 11/14/18 F	PBLK11318	11/15/18 16:25	183180011A	5.00
2306	06PEST18261045.028	LCSA 11/14/18 F	LCS11318	11/15/18 16:37	183180011A	5.00
2306	06PEST18261045.029	LCSDA 11/14/18 F	LCSD11318	11/15/18 16:49	183180011A	5.00
2306	06PEST18261045.030	BLANKA 11/14/18 F	PBLK12318	11/15/18 17:01	183180012A	5.00
2306	06PEST18261045.031	LCSA 11/14/18 F	LCS12318	11/15/18 17:13	183180012A	5.00
2306	06PEST18261045.032	LCSDA 11/14/18 F	LCSD12318	11/15/18 17:26	183180012A	5.00
2306	06PEST18261045.033	EVALX1824B	PEMNS	11/15/18 17:38	1831899999	1.00
2306	06PEST18261045.034	MIXA31824B	MIXA3FG	11/15/18 17:50	1831899999	1.00
2306	06PEST18261045.035	MIXE41824D	MIXE4AT	11/15/18 18:02	1831899999	1.00
2306	06PEST18261045.036	TOXA41824E	TOXA4AK	11/15/18 18:14	1831899999	1.00
2306	06PEST18261045.037	CHLD41824D	CHLD4FZ	11/15/18 18:26	1831899999	1.00
2306	06PEST18261045.038	EVALX1824B	PEMNY	11/15/18 18:38	1831999999	1.00
2306	06PEST18261045.039	9892503	HFMSN	11/15/18 18:51	183180010A	5.00
2306	06PEST18261045.040	9894746	PALDN	11/15/18 19:03	183180010A	5.00
2306	06PEST18261045.041	9890180	31047	11/15/18 19:15	183180010A	5.00
2306	06PEST18261045.042	9889732 F	44505	11/15/18 19:27	183180011A	5.00
2306	06PEST18261045.043	9892681 F	61C-2	11/15/18 19:39	183180012A	5.00
2306	06PEST18261045.044	9892682 F	61A-3	11/15/18 19:51	183180012A	5.00
2306	06PEST18261045.045	MIXA41824B	MIXA4ZA	11/15/18 20:03	1831899999	1.00
2306	06PEST18261045.046	MIXE41824D	MIXE4AU	11/15/18 20:16	1831899999	1.00
2306	06PEST18261045.047	TOXA41824E	TOXA4AL	11/15/18 20:28	1831899999	1.00
2306	06PEST18261045.048	CHLD41824D	CHLD4GA	11/15/18 20:40	1831899999	1.00
2306	06PEST18261045.049	IBLKX1824B	PIBLKWD	11/15/18 20:52	1831899999	10.00
2306	06PEST18261045.050	9889353 F	Q1201	11/15/18 21:04	183180015A	5.00
2306	06PEST18261045.051	9889354 F	Q1202	11/15/18 21:17	183180015A	5.00
2306	06PEST18261045.052	9889355 F	Q1203	11/15/18 21:29	183180015A	5.00
2306	06PEST18261045.053	9889356 F	Q1204	11/15/18 21:41	183180015A	5.00
2306	06PEST18261045.054	9889357 F	Q1205	11/15/18 21:53	183180015A	5.00
2306	06PEST18261045.055	9889358 F	Q1206	11/15/18 22:05	183180015A	5.00
2306	06PEST18261045.056	9889359MS F	Q1206	11/15/18 22:17	183180015A	5.00

Operator	File	LLI#	Client ID	Analysis Date	Batch	Dilution Factor
2306	06PEST18261045.057	9889362 F	Q1207	11/15/18 22:30	183180015A	5.00
2306	06PEST18261045.058	9892339 F	Q1501	11/15/18 22:42	183180015A	5.00
2306	06PEST18261045.059	9892340 F	Q1502	11/15/18 22:54	183180015A	5.00
2306	06PEST18261045.060	MIXA31824B	MIXA3FH	11/15/18 23:06	1831899999	1.00
2306	06PEST18261045.061	MIXE41824D	MIXE4AV	11/15/18 23:18	1831899999	1.00
2306	06PEST18261045.062	TOXA41824E	TOXA4AM	11/15/18 23:30	1831899999	1.00
2306	06PEST18261045.063	CHLD41824D	CHLD4GB	11/15/18 23:43	1831899999	1.00
2306	06PEST18261045.064	BLANKA 11/14/18 CF	PBLK02318	11/15/18 23:55	183180002A	5.00
2306	06PEST18261045.065	LCSA 11/14/18 CF	LCS02318	11/16/18 0:07	183180002A	5.00
2306	06PEST18261045.066	LCSDA 11/14/18 CF	LCSD02318	11/16/18 0:19	183180002A	5.00
2306	06PEST18261045.067	EVALX1824B	PEMNU	11/16/18 0:31	1831899999	1.00
2306	06PEST18261045.068	MIXA41824B	MIXA4ZC	11/16/18 0:43	1831899999	1.00
2306	06PEST18261045.069	MIXE41824D	MIXE4AW	11/16/18 0:56	1831899999	1.00
2306	06PEST18261045.070	TOXA41824E	TOXA4AN	11/16/18 1:08	1831899999	1.00
2306	06PEST18261045.071	CHLD41824D	CHLD4GC	11/16/18 1:20	1831899999	1.00
2306	06PEST18261045.072	9889961 CF	4562C	11/16/18 1:32	183180002A	5.00
2306	06PEST18261045.073	9889961 CF DF5	4562C	11/16/18 1:45	183180002A	25.00
2306	06PEST18261045.074	9890349 CF	43251	11/16/18 1:57	183180002A	5.00
2306	06PEST18261045.075	9890349 CF DF5	43251	11/16/18 2:09	183180002A	25.00
2306	06PEST18261045.076	9890589 CF DF5	G20-1	11/16/18 2:21	183180002A	25.00
2306	06PEST18261045.077	9890591 CF	G21-1	11/16/18 2:33	183180002A	5.00
2306	06PEST18261045.078	9892500 CF	14--1	11/16/18 2:45	183180002A	5.00
2306	06PEST18261045.079	9892791 CF	049-3	11/16/18 2:58	183180002A	5.00
2306	06PEST18261045.080	9895805 CF	86442	11/16/18 3:10	183180002A	5.00
2306	06PEST18261045.081	9897472 CF	32444	11/16/18 3:22	183180002A	5.00
2306	06PEST18261045.082	MIXA31824B	MIXA3FI	11/16/18 3:34	1831899999	1.00
2306	06PEST18261045.083	MIXE41824D	MIXE4AY	11/16/18 3:47	1831899999	1.00
2306	06PEST18261045.084	TOXA41824E	TOXA4AP	11/16/18 3:59	1831899999	1.00
2306	06PEST18261045.085	CHLD41824D	CHLD4GE	11/16/18 4:11	1831899999	1.00
2306	06PEST18261045.086	9897689 CF	K7602	11/16/18 4:23	183180002A	5.00
2306	06PEST18261045.087	9897689 CF DF5	K7602	11/16/18 4:35	183180002A	25.00
2306	06PEST18261045.088	MIXA41824B	MIXA4ZD	11/16/18 4:48	1831899999	1.00
2306	06PEST18261045.089	MIXE41824D	MIXE4AX	11/16/18 5:00	1831899999	1.00
2306	06PEST18261045.090	TOXA41824E	TOXA4AO	11/16/18 5:12	1831899999	1.00
2306	06PEST18261045.091	CHLD41824D	CHLD4GD	11/16/18 5:24	1831899999	1.00

Sample Data

Pesticides

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Data Summary

Sample Name: 9861917 RI F GKP01 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 238 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 09, 2018 23:19:59
Instrument	H9190A
Result file	05PEST18306007.048.BND
Calibration file	05PEST1830603
Method file	05PEST18306007

%SSR(TCX) 78% (44 - 124) Conc: 0.246207
%SSR(DCB) 76% (32 - 149) Conc: 0.23744

Analysis Report (B)

Injected on	Nov 09, 2018 23:19:59
Instrument	H9190B
Result file	05PEST18306007B.048.BND
Calibration file	05PEST1830603B
Method file	05PEST18306007B

%SSR(TCX) 72% (44 - 124) Conc: 0.226608
%SSR(DCB) 75% (32 - 149) Conc: 0.234132

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.53	2.54	2.57	11614907	0.246207
HCB	2.81	2.83	2.85	293839	0.00586
Alpha BHC	2.94	2.96	2.98	65045	0.000996
Beta BHC	3.25	3.28	3.29	1730103	0.070564
Delta BHC	3.40	3.40	3.44	63306	0.001235
Heptachlor	3.58	3.59	3.62	191812	0.004123
Aldrin	3.84	3.86	3.88	37056	0.00086
Telodrin	4.03	4.05	4.06	27971	0.001084
Heptachlor Epoxide	4.36	4.39	4.40	22516	0.000591
Gamma Chlordane	4.47	4.48	4.51	444509	0.011795
Alpha Chlordane	4.57	4.58	4.61	142489	0.003732
p,p-DDE	4.63	4.66	4.67	41903	0.001137
Endosulfan I	4.68	4.70	4.72	227100	0.006346
o,p-DDD	4.77	4.79	4.81	31015	0.001541
Dieldrin	4.87	4.89	4.91	48356	0.001257
Endrin	5.05	5.05	5.09	11739	0.000334
Kepone	5.08	5.11	5.12	106498	0.016309
p,p-DDT	5.31	5.32	5.35	944464	0.029855
Endosulfan Sulfate	5.83	5.84	5.87	33418	0.001131
Decachlorobiphenyl	6.67	6.70	6.73	5360146	0.23744

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.34	2.36	2.38	45057260	0.226608
HCB	2.66	2.69	2.70	886232	0.005273
Alpha BHC	2.76	2.80	2.80	516125	0.001933
Gamma BHC - Lindane	3.02	3.05	3.06	756662	0.003414
Beta BHC	3.09	3.09	3.13	1182642	0.012703
Delta BHC	3.31	3.35	3.35	249924	0.001238
Heptachlor	3.36	3.39	3.40	83394	0.000477
Aldrin	3.62	3.64	3.66	42545	0.000257
Telodrin	3.76	3.78	3.80	1375474	0.01615
Heptachlor Epoxide	4.12	4.15	4.16	908949	0.006872
Gamma Chlordane	4.28	4.31	4.32	745491	0.005376
Alpha Chlordane	4.40	4.42	4.44	619904	0.004521
Endosulfan I	4.45	4.48	4.48	740368	0.006088
p,p-DDE	4.55	4.56	4.59	110148	0.000821
Dieldrin	4.67	4.67	4.70	138968	0.001009
o,p-DDD	4.70	4.70	4.74	244929	0.004115
Endrin	4.90	4.94	4.94	89917	0.00073
Kepone	4.97	4.98	5.01	64846	0.030485
p,p-DDD	5.00	5.01	5.04	358131	0.003389
p,p-DDT	5.23	5.24	5.27	3753206	0.034087
Endrin Aldehyde	5.31	5.32	5.35	100311	0.001074
Methoxychlor	5.72	5.75	5.76	60892	0.001186
Mirex	5.83	5.84	5.87	85188	0.001294
Endrin Ketone	5.88	5.88	5.92	514004	0.004499
Decachlorobiphenyl	6.66	6.69	6.72	17217670	0.234132

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.0042	<0.0084	<0.0168			
☐	Total Endosulfans (I + II)	A	0.006346			<0.0084	J	0.00	
☐	Tetrachloro-m-xylene	A	0.246207	0.0126	0.0252	0.0252		8.29	
☑	Tetrachloro-m-xylene-D1	A	0.246207	0.0126	0.0252	0.0252			
☑	Tetrachloro-m-xylene-D2	B	0.226608	0.0126	0.0252	0.0252			
☐	HCB	A	0.00586	0.0025	<0.0059	<0.0084	J	10.55	
☑	Alpha BHC			<0.0025	<0.0059	<0.0084	D1		
☑	Gamma BHC - Lindane			<0.0017	<0.0059	<0.0084	D1		
☑	Beta BHC			<0.014	<0.028	<0.028	VD1		2706
☑	Delta BHC			<0.0029	<0.0059	<0.0084	D1		
☑	Heptachlor			<0.0017	<0.0059	<0.0084	D1		
☑	Aldrin			<0.0017	<0.0059	<0.0084	D1		
☐	Telodrin					<0.0084			
☐	o,p-DDE			<0.0059	<0.0118	<0.0168			
☑	Heptachlor Epoxide			<0.0019	<0.0059	<0.0084	D1		
☑	Gamma Chlordane			<0.0059	<0.0168	<0.0168	D1		
☑	Alpha Chlordane	A	0.003732	0.0025	<0.0059	<0.0084	JD1	19.12	

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:27:23

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Data Summary

Sample Name: 9861917 RI F GKP01 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 238 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 09, 2018 23:19:59
Instrument	H9190A
Result file	05PEST18306007.048.BND
Calibration file	05PEST1830603
Method file	05PEST18306007

Analysis Report (B)

Injected on	Nov 09, 2018 23:19:59
Instrument	H9190B
Result file	05PEST18306007B.048.BND
Calibration file	05PEST1830603B
Method file	05PEST18306007B

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
✓	p,p-DDE			<0.0042	<0.0084	<0.0168	D1		
✓	Endosulfan I	A	0.006346	0.0036	<0.0076	<0.0084	JD1	4.15	
	o,p-DDD			<0.0042	<0.0084	<0.0168			
✓	Dieldrin			<0.0045	<0.0084	<0.0168	D1		
	o,p-DDT			<0.0043	<0.0084	<0.0168			
✓	Endrin			<0.0068	<0.0168	<0.0168	D1		
	Kepone					<0.1681			
✓	p,p-DDD			<0.0042	<0.0084	<0.0168	D1		
✓	Endosulfan II			<0.0126	<0.0252	<0.0252	D1		
✓	p,p-DDT	A	0.029855	0.0044	0.0084	0.0168	D1	13.24	
✓	Endrin Aldehyde			<0.0168	<0.0336	<0.084	D1		
✓	Methoxychlor			<0.0252	<0.0588	<0.084	D1		
	Mirex			<0.0084	<0.0336	<0.042			
✓	Endosulfan Sulfate			<0.0049	<0.0101	<0.0168	D1		
✓	Endrin Ketone			<0.0042	<0.0084	<0.0168	D1		
	Decachlorobiphenyl	A	0.23744	0.0126	0.0252	0.0252		1.40	
✓	Decachlorobiphenyl-D1	A	0.23744	0.0126	0.0252	0.0252			
✓	Decachlorobiphenyl-D2	B	0.234132	0.0126	0.0252	0.0252			

Multiple Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
✓	Chlordane			<0.1345	<0.2689	<0.4202	D1		4	
✓	Toxaphene			<0.2521	<0.5042	<0.8403	D1		4	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L. Tomayko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:27:23

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861917** RI F GKP01 ID: AB **Batchnumber: 182980006A**
Sample Amount: 238 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:19:59
Instrument : CP05--H9190A
Result file : 05pest18306007.048.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.048.BND

%SSR(TCX) : 78% (44-124) Conc.: 0.246207
%SSR(DCB) : 76% (32-149) Conc.: 0.23744

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.53	2.54	2.57	11614907	0.246207
HCB	2.81	2.83	2.85	293839	0.005860
alpha-BHC	2.94	2.96	2.98	65045	0.000996
beta-BHC	3.25	3.28	3.29	1730103	0.070564
delta-BHC	3.40	3.40	3.44	63306	0.001235
Heptachlor	3.58	3.59	3.62	191812	0.004123
Aldrin	3.84	3.86	3.88	37056	0.000860
Telodrin	4.03	4.05	4.06	27971	0.001084
Hept. epoxide	4.36	4.39	4.40	22516	0.000591
g. Chlordane	4.47	4.48	4.51	444509	0.011795
a. Chlordane	4.57	4.58	4.61	142489	0.003732
4,4'-DDE	4.63	4.66	4.67	41903	0.001137
Endosulfan I	4.68	4.70	4.72	227100	0.006346
o,p-DDD	4.77	4.79	4.81	31015	0.001541
Dieldrin	4.87	4.89	4.91	48356	0.001257
Endrin	5.05	5.05	5.09	11739	0.000334
Kepone	5.08	5.11	5.12	106498	0.016309
4,4'-DDT	5.31	5.32	5.35	944464	0.029855
Endo. sulfate	5.83	5.84	5.87	33418	0.001131
DCB	6.67	6.70	6.73	5360146	0.237440

Analysis Report (B)

Injected on : Nov 09, 2018 23:19:59
Instrument : CP05--H9190B
Result file : 05pest18306007B.048.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.048.BND

%SSR(TCX) : 72% (44-124) Conc.: 0.226608
%SSR(DCB) : 75% (32-149) Conc.: 0.234132

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.34	2.36	2.38	45057260	0.226608
HCB	2.66	2.69	2.70	886232	0.005273
alpha-BHC	2.76	2.80	2.80	516125	0.001933
gamma-BHC	3.02	3.05	3.06	756662	0.003414
beta-BHC	3.09	3.09	3.13	1182642	0.012703
delta-BHC	3.31	3.35	3.35	249924	0.001238
Heptachlor	3.36	3.39	3.40	83394	0.000477
Aldrin	3.62	3.64	3.66	42545	0.000257
Telodrin	3.76	3.78	3.80	1375474	0.016150
Hept. epoxide	4.12	4.15	4.16	908949	0.006872
g. Chlordane	4.28	4.31	4.32	745491	0.005376
a. Chlordane	4.40	4.42	4.44	619904	0.004521
Endosulfan I	4.45	4.48	4.48	740368	0.006088
4,4'-DDE	4.55	4.56	4.59	110148	0.000821
Dieldrin	4.67	4.67	4.70	138968	0.001009
o,p-DDD	4.70	4.70	4.74	244929	0.004115
Endrin	4.90	4.94	4.94	89917	0.000730
Kepone	4.97	4.98	5.01	64846	0.030485
4,4'-DDD	5.00	5.01	5.04	358131	0.003389
4,4'-DDT	5.23	5.24	5.27	3753206	0.034087
Endrin aldehyde	5.31	5.32	5.35	100311	0.001074
Methoxychlor	5.72	5.75	5.76	60892	0.001186
Mirex	5.83	5.84	5.87	85188	0.001294
Endrin ketone	5.88	5.88	5.92	514004	0.004499
DCB	6.66	6.69	6.72	17217670	0.234132

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	A	0.246207	0.0252	0.0126		8.29	
☐ HCB	A	0.005860	<0.0084	0.0025	J	10.55	
☑ alpha-BHC			<0.0084	<0.0025			
☑ gamma-BHC			<0.0084	<0.0017			
☑ beta-BHC	B	0.012703	0.0084	~~0.0029~~ 0.014		138.98	** (8) 37X, qs 2131 11-13-18
☑ delta-BHC			<0.0084	<0.0029			
☑ Heptachlor			<0.0084	<0.0017			
☑ Aldrin			<0.0084	<0.0017			
☐ Telodrin	A	0.001084	<0.0084			174.84	**
☐ o,p-DDE			<0.0168	<0.0059			
☑ Hept. epoxide			<0.0084	<0.0019			
☑ g. Chlordane			<0.0168	<0.0059			
☑ a. Chlordane (A)	B	0.004521	<0.0084	0.0025	J	19.12	Bliss ce
☑ 4,4'-DDE			<0.0168	<0.0042			
☑ Endosulfan I	A	0.006346	<0.0084	0.0036	J	4.14	
☐ o,p-DDD			<0.0168	<0.0042			
☑ Dieldrin			<0.0168	<0.0045			

%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

Jamie L. Brillhart
Senior Chemist

NOV 13 2018

Printed on: 11/13/2018 12:10:01

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861917** RI F GKP01 ID: AB **Batchnumber: 182980006A**
Sample Amount: 238 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:19:59
Instrument : CP05--H9190A
Result file : 05pest18306007.048.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.048.BND

Analysis Report (B)

Injected on : Nov 09, 2018 23:19:59
Instrument : CP05--H9190B
Result file : 05pest18306007B.048.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.048.BND

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ o,p-DDT			<0.0168	<0.0043			
☑ Endrin			<0.0168	<0.0068			
☐ Kepone	A	0.016309	<0.1681			60.59 **	
☑ 4,4'-DDD			<0.0168	<0.0042			B LMNL
☑ Endosulfan II			<0.0252	<0.0126			
☑ 4,4'-DDT	B	0.034087	0.0168	0.0044		13.24	DOS 2x's & 05PEST18306002.
☑ Endrin aldehyde			<0.084	<0.0168			
☑ Methoxychlor			<0.084	<0.0252			
☐ Mirex			<0.042	<0.0084			
☑ Endo. sulfate			<0.0168	<0.0049			
☑ Endrin ketone			<0.0168	<0.0042			
☐ DCB	A	0.237440	0.0252	0.0126		1.40	
☐ Total DDTs	B	0.034087	0.0168	0.0042		0.00	
☐ Total DDTs	A	0.034087	0.0168	0.0042		0.00	
☐ Total Endosulfans	A	0.006346	<0.0084			0.00	

Units: ug/l

Valerie L. Tomayko
Valerie L. Tomayko
Principal Specialist

Reviewed by: Jamie L. Brillhart
Jamie L. Brillhart
Senior Chemist
Date: NOV 13 2018

Verified by: NOV 19 2018
Date:

%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

Printed on: 11/13/2018 12:10:01

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861917** RI F GKP01 ID: AB **Batchnumber: 182980006A**
Sample Amount: 238 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:19:59
Instrument : CP05--H9190A
Result file : 05pest18306007.048.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.048.BND

%SSR(TCX) : 78% (44-124) Conc.: 0.246207
%SSR(DCB) : 76% (32-149) Conc.: 0.23744

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**80.05**	
2.78	2.83	2.84	293839.0312	0.392441			1
3.04	3.06	3.10	20268.81835	0.019269			2
+ 3.04	3.10	3.10	40117.64453	0.038138			2
3.20	3.25	3.26	175681.7968	0.567807			3
3.40	3.45	3.46	34938.84765	0.043501			4
3.51	3.52	3.57	596805.9375	0.710101			5
+* 3.56	3.57	3.62	45041.6875	0.079678			6
+* 3.51	3.57	3.57	45041.6875	0.053592			5
3.56	3.59	3.62	191811.7812	0.339313			6
Height Summation:			**1313346.212891**				
Amount Avg CF:			**0.345405**	Linear:			
Aroclor-1221					**3**	**36.94**	
2.66	2.68	2.70	125861.4531	0.294925			1
2.77	2.77	2.81	148813.75	0.539785			2
2.80	2.83	2.84	293839.0312	0.30056			3
Height Summation:			**568514.234375**				
Amount Avg CF:			**0.378423**	Linear:			
Aroclor-1248					**5**	**136.68**	
3.38	3.40	3.44	63305.76171	0.0789			1
3.66	3.68	3.72	130649.1562	0.297831			2
3.85	3.86	3.91	37055.55468	0.035683			3
4.21	4.22	4.27	187901.1562	0.158947			4
+ 4.39	4.39	4.45	22516.36718	0.028071			5
4.39	4.43	4.45	967470.5	1.206141			5
Height Summation:			**1386382.128906**				
Amount Avg CF:			**0.3555**	Linear:			
Aroclor-1254					**5**	**105.06**	
+ 4.39	4.39	4.45	22516.36718	0.014861			1
4.39	4.43	4.45	967470.5	0.638545			1
4.62	4.66	4.68	41903.37890	0.036962			2
4.93	4.96	4.99	83399.59375	0.056622			4
5.06	5.11	5.12	106498.3671	0.10504			5
5.27	5.30	5.33	836497.3125	0.513679			6
+ 5.27	5.32	5.33	944464.0625	0.579979			6
Height Summation:			**2035769.152344**				
Amount Avg CF:			**0.270169**	Linear:			
Aroclor-1260					**5**	**86.13**	
4.85	4.89	4.91	48356.45312	0.034747			1
5.06	5.11	5.12	106498.3671	0.05666			2
5.27	5.30	5.33	836497.3125	0.422997			3
+ 5.27	5.32	5.33	944464.0625	0.477594			3
5.53	5.57	5.59	390861.7187	0.353534			4
5.94	5.97	6.00	204862.5781	0.151694			6
Height Summation:			**1587076.429688**				
Amount Avg CF:			**0.203927**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:19:59
Instrument : CP05--H9190B
Result file : 05pest18306007B.048.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.048.BND

%SSR(TCX) : 72% (44-124) Conc.: 0.226608
%SSR(DCB) : 75% (32-149) Conc.: 0.234132

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**138.23**	
+ 2.66	2.66	2.72	912686.9375	0.399151			1
2.66	2.69	2.72	886232.375	0.387582			1
E 2.93	2.96	2.99	6606636.5	2.085133			2
3.11	3.14	3.17	311336.9062	0.235873			3
3.27	3.30	3.33	173030.1875	0.031191			4
+ 3.37	3.39	3.43	83393.79687	0.030004			5
3.37	3.42	3.43	802228.5625	0.288628			5
Height Summation:			**8779464.53125**				
Amount Avg CF:			**0.605681**	Linear:			
Aroclor-1221					**2**	**78.25**	
2.63	2.66	2.67	912686.9375	1.130343			2
2.67	2.69	2.71	886232.375	0.325046			3
Height Summation:			**1798919.3125**				
Amount Avg CF:			**0.727695**	Linear:			
Aroclor-1248					**6**	**75.98**	
3.27	3.30	3.33	173030.1875	0.061593			1
3.53	3.53	3.59	378045.6562	0.141741			2
3.75	3.78	3.81	1375473.5	0.413488			3
+ 3.75	3.81	3.81	329566.5312	0.099073			3
3.85	3.90	3.91	68368.41406	0.024619			4
+ 4.11	4.11	4.17	785110.8125	0.20457			5
4.11	4.15	4.17	908949.25	0.236837			5
4.30	4.31	4.36	745490.5	0.246787			6
Height Summation:			**3649357.507813**				
Amount Avg CF:			**0.187511**	Linear:			
Aroclor-1254					**7**	**114.44**	
+ 4.11	4.11	4.17	785110.8125	0.211798			1
4.11	4.15	4.17	908949.25	0.245206			1
E+ 4.27	4.27	4.33	10505045	2.510816			2
4.27	4.31	4.33	745490.5	0.17818			2
+ 4.64	4.64	4.70	105049.5468	0.017376			3
4.64	4.67	4.70	138967.5781	0.022987			3
+ 4.81	4.81	4.87	210984.7031	0.048638			4
4.81	4.85	4.87	118141.0703	0.027235			4
5.07	5.12	5.13	205553.4062	0.064452			5
5.21	5.24	5.27	3753205.5	0.814227			6
5.21	5.24	5.27	3753205.5	0.814227			6
Height Summation:			**9623512.804688**				
Amount Avg CF:			**0.309502**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861917** RI F GKP01 ID: AB **Batchnumber: 182980006A**
Sample Amount: 238 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:19:59
Instrument : CP05--H9190A
Result file : 05pest18306007.048.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.048.BND

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**6**	**163.74**	
3.50	3.52	3.56	596805.9375	0.453799			1
3.94	3.95	4.00	9412.398438	0.007109			2
+ 3.94	3.99	4.00	63783.78906	0.048177			2
+ 4.29	4.30	4.35	42361.89843	0.049413			3
4.29	4.33	4.35	22691.73437	0.026469			3
4.45	4.48	4.51	444509.4375	0.112196			4
+ 4.45	4.50	4.51	362834.6875	0.091581			4
4.55	4.58	4.61	142489.4062	0.026006			5
5.15	5.17	5.22	17646.60742	0.013472			6
+ 5.15	5.21	5.22	43140.09375	0.032935			6
Height Summation:			**1233555.521484**				
Amount Avg CF:			**0.106508**	Linear:			
Toxaphene					**5**	**152.68**	
5.06	5.11	5.12	106498.3671	0.18715			1
+ 5.20	5.21	5.26	43140.09375	0.048376			2
5.20	5.24	5.26	3753205.5	4.208762			2
+ 5.29	5.30	5.35	836497.3125	1.038207			3
5.29	5.32	5.35	944464.0625	1.172209			3
5.45	5.50	5.51	61363.94140	0.074877			4
5.68	5.70	5.74	97546.08593	0.137763			5
Height Summation:			**4963077.957031**				
Amount Avg CF:			**1.156152**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:19:59
Instrument : CP05--H9190B
Result file : 05pest18306007B.048.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.048.BND

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1260					**7**	**151.20**	
4.79	4.81	4.85	210984.7031	0.050819			1
+ 4.79	4.85	4.85	118141.0703	0.028456			1
4.95	4.98	5.01	64845.73437	0.013085			2
5.21	5.24	5.27	3753205.5	0.729198			3
5.21	5.24	5.27	3753205.5	0.729198			3
5.48	5.49	5.54	105780.4218	0.032669			4
+ 5.65	5.66	5.71	84949.64062	0.012782			5
5.65	5.71	5.71	154493.4218	0.023245			5
5.90	5.95	5.96	43750.70703	0.011089			6
Height Summation:			**8086265.988281**				
Amount Avg CF:			**0.227043**	Linear:			
Chlordane					**6**	**98.76**	
3.23	3.26	3.29	151285.5312	0.031078			1
3.74	3.78	3.80	1375473.5	0.296994			2
4.08	4.11	4.14	785110.8125	0.237376			3
+ 4.27	4.27	4.33	10505045	0.665388			4
4.27	4.31	4.33	745490.5	0.047219			4
4.39	4.42	4.45	619903.6875	0.051954			5
5.08	5.12	5.14	205553.4062	0.045959			6
Height Summation:			**3882817.4375**				
Amount Avg CF:			**0.11843**	Linear:			
Toxaphene					**6**	**203.13**	
+ 4.64	4.64	4.70	105049.5468	0.063282			1
4.64	4.67	4.70	138967.5781	0.083714			1
4.87	4.89	4.93	26958.52343	0.015729			2
5.04	5.05	5.10	4537988	1.460935			3
5.31	5.32	5.37	100310.8203	0.029628			4
+ 5.36	5.37	5.42	322669.3437	0.162272			5
5.36	5.40	5.42	126433.375	0.063584			5
5.66	5.71	5.72	154493.4218	0.050882			6
Height Summation:			**5085151.71875**				
Amount Avg CF:			**0.284079**	Linear:			

B A 60S ICV

4mL

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 54.73	4	40	
Aroclor-1221			0	0		** 63.15	3	5	
Aroclor-1248			0	0		** 61.87	4	30	
Aroclor-1254			0	0		13.57	4	40	
Aroclor-1260			0	0		10.73	4	40	
Chlordane			0.4202	0.1345		10.60	4	40	
Toxaphene			0.8403	0.2521		** 121.10	4	40	

Units: ug/l

9861917 RI F ABGKP01 T 182980006A 10589 SW-846 8081B

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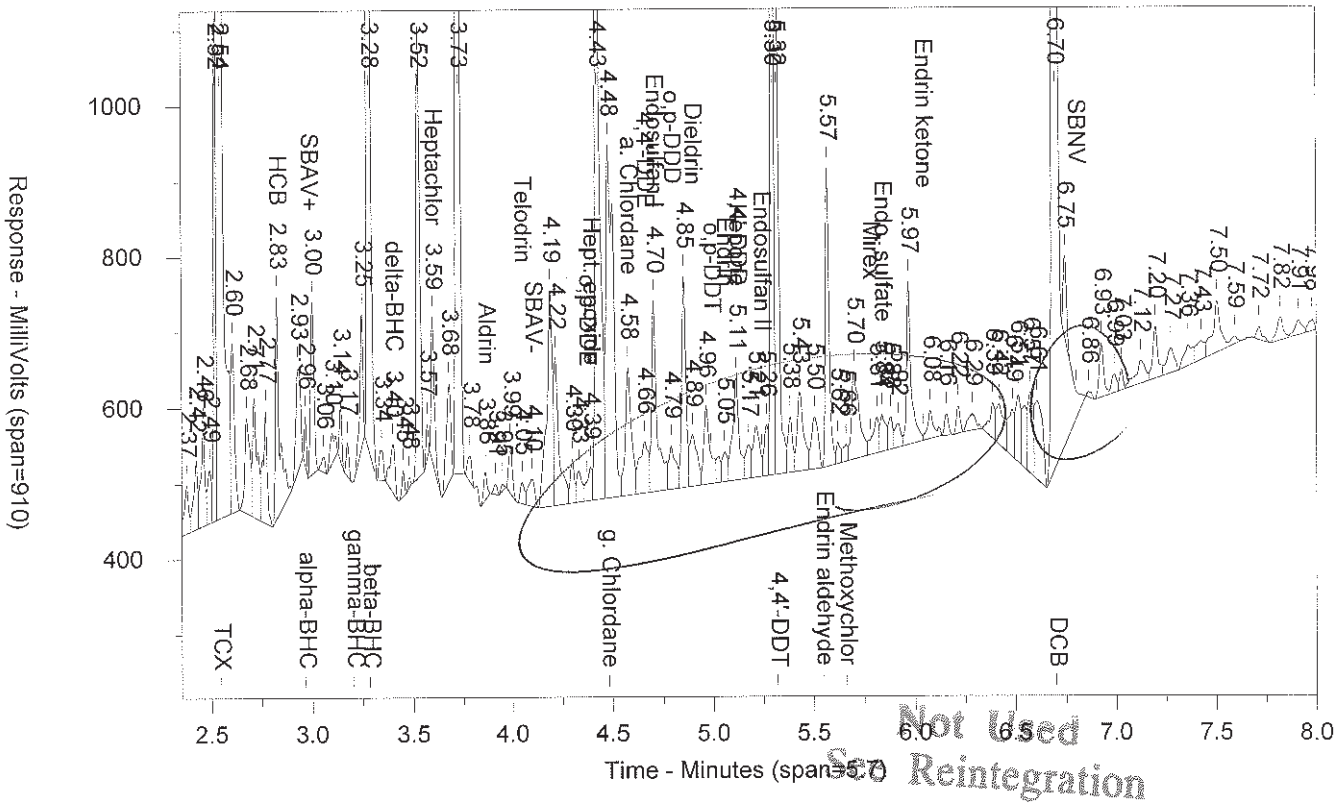

Not Used
See Reintegration

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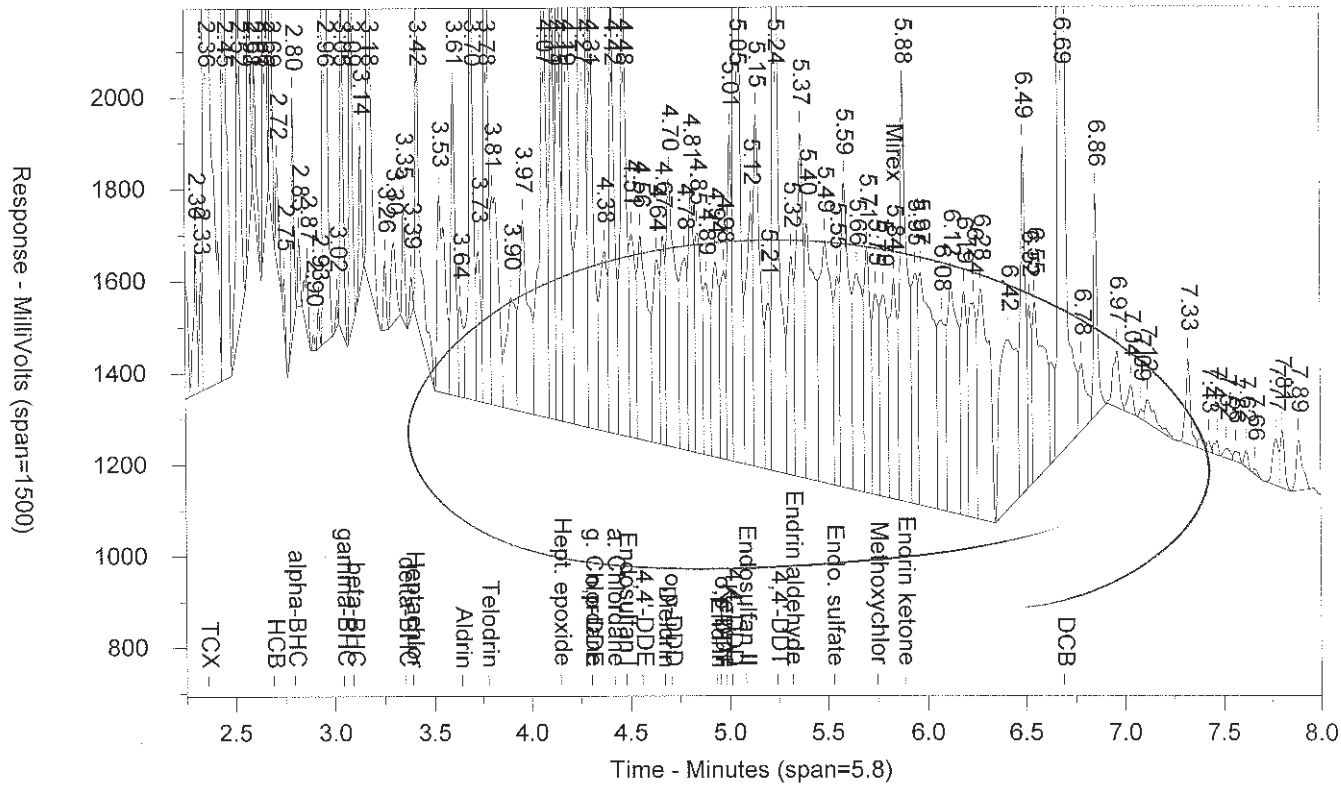

LANCASTER LABORATORIES

Sample Number: 9861917 RI F ABGKP01 T 182980006A 10589 SW-846 8081B
Injected On: 11/9/2018 11:19:59 PM Sample Weight: 238
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	11614910	.246	TCX	2.359	45057260	.227	TCX
2.825	293839	.006	HCB	2.691	886232	.005	HCB
2.965	65045	.001	alpha-BHC	2.797	516125	.002	alpha-BHC
	0		gamma-BHC	3.045	756662	.003	gamma-BHC
3.282	1730103	.071	beta-BHC	3.092	1182642	.013	beta-BHC
3.398	63306	.001	delta-BHC	3.352	249924	.001	delta-BHC
3.594	191812	.004	Heptachlor	3.39	83394		Heptachlor
3.863	37056	.001	Aldrin	3.639	195536	.001	Aldrin
4.049	27971	.001	Telodrin	3.779	1504192	.018	Telodrin
4.393	44344	.001	Hept. epoxide	4.146	1228692	.009	Hept. epoxide
4.482	468840	.012	g. Chlordane	4.31	1052855	.008	g. Chlordane
4.576	168210	.004	a. Chlordane	4.42	953507	.007	a. Chlordane
4.702	252833	.007	Endosulfan I	4.478	1083502	.009	Endosulfan I
4.656	67632	.002	4,4'-DDE	4.558	444597	.003	4,4'-DDE
4.895	67939	.002	Dieldrin	4.67	454338	.003	Dieldrin
4.788	56757	.003	o,p-DDD	4.702	581856	.01	o,p-DDD
5.055	39446	.001	Endrin	4.936	424916	.003	Endrin
5.112	134476	.018	Kepone	4.98	408679	.036	Kepone
	0		4,4'-DDD	5.012	708182	.007	4,4'-DDD
5.317	975480	.031	4,4'-DDT	5.244	4057056	.037	4,4'-DDT
	0		Endrin aldehyde	5.322	476530	.005	Endrin aldehyde
5.66	22199	.001	Methoxychlor	5.749	438465	.009	Methoxychlor
	0		Mirex	5.838	479083	.007	Mirex
5.839	48195	.002	Endo. sulfate		0		Endo. sulfate
	0		Endrin ketone	5.884	937052	.008	Endrin ketone
6.697	5360146	.237	DCB	6.687	17373300	.236	DCB

Files:
Area File: 05pest18306007.048.RAW
Area File: 05pest18306007B.048.RAW
Method A: 05PESTD.MET
Method B: 05PESTDB.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 11:28:01 PM
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Not Used
See Reintegration

9861917 RI F ABGKP01 T 182980006A 10589 SW-846 8081B

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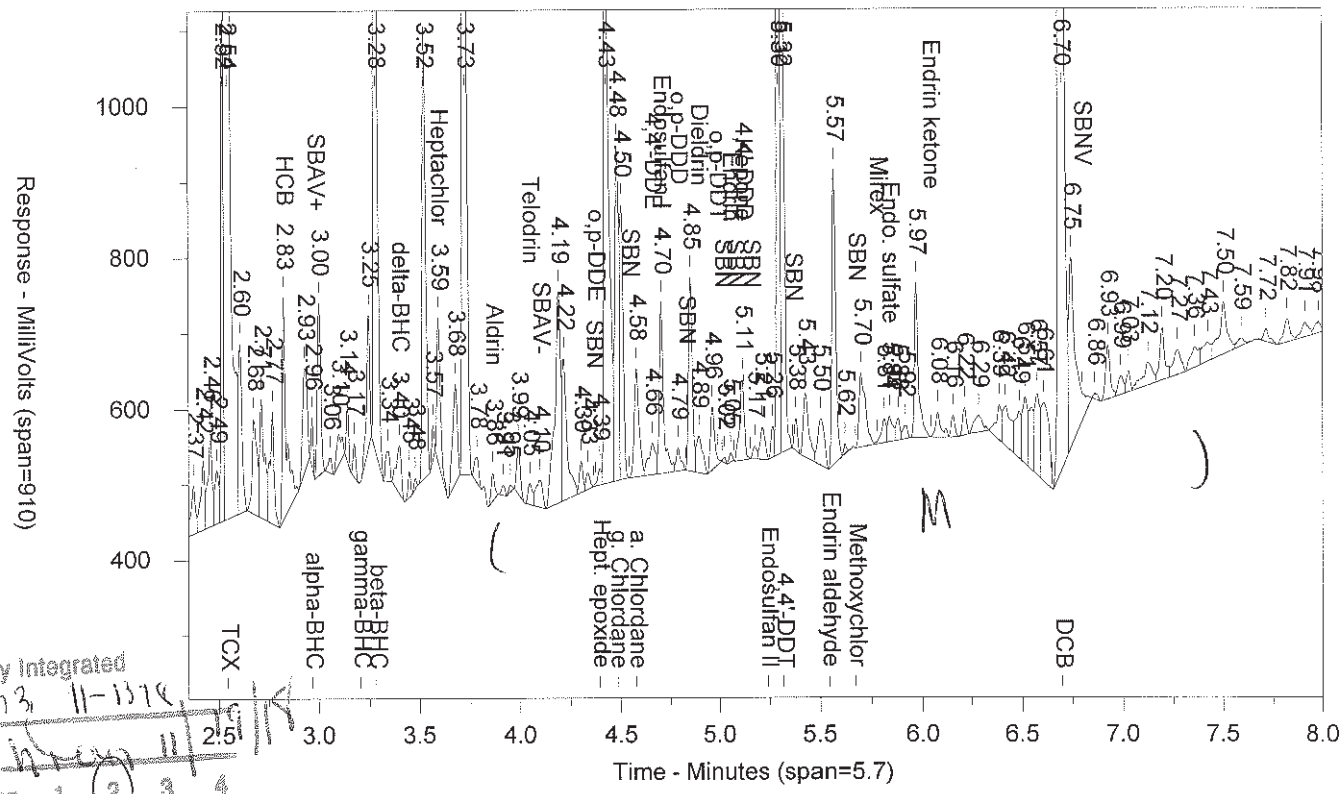

M = Manually Integrated

Analyst: [illegible]

Approved by: [illegible]

Circle Reason 1 2 3 4

1 = Missed Peak
2 = Improper Baseline
3 = RT Update
4 = Other

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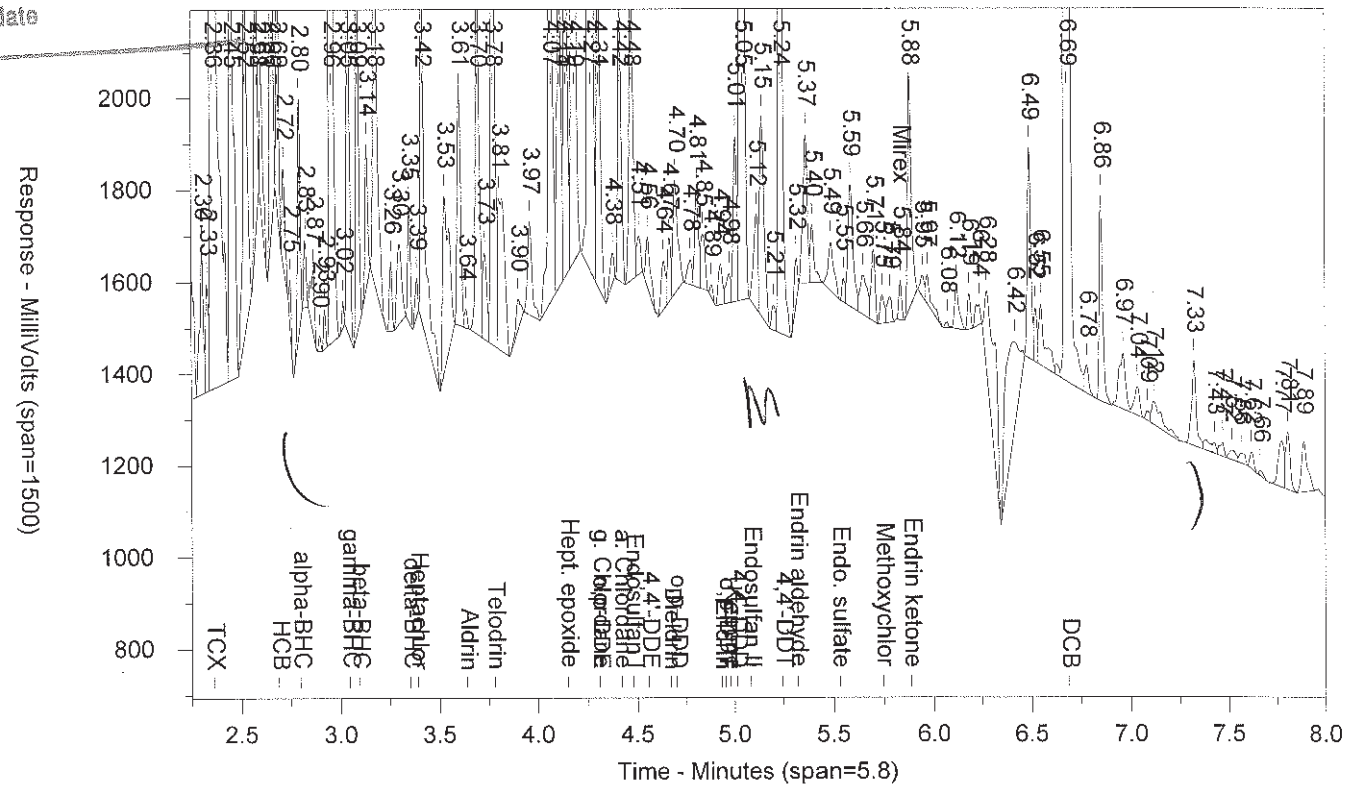

LANCASTER LABORATORIES

Sample Number: 9861917 RI F ABGKP01 T 182980006A 10589 SW-846 8081B
Injected On: 11/9/2018 11:19:59 PM Sample Weight: 238
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	11614910	.246	TCX	2.359	45057260	.227	TCX
2.825	293839	.006	HCB	2.691	886232	.005	HCB
2.965	65045	.001	alpha-BHC	2.797	516125	.002	alpha-BHC
	0		gamma-BHC	3.045	756662	.003	gamma-BHC
3.282	1730103	.071	beta-BHC	3.092	1182642	.013	beta-BHC
3.398	63306	.001	delta-BHC	3.352	249924	.001	delta-BHC
3.594	191812	.004	Heptachlor	3.39	83394		Heptachlor
3.863	37056	.001	Aldrin	3.639	42545		Aldrin
4.049	27971	.001	Telodrin	3.779	1375474	.016	Telodrin
4.393	22516	.001	Hept. epoxide	4.146	908949	.007	Hept. epoxide
4.482	444509	.012	g. Chlordane	4.31	745491	.005	g. Chlordane
4.576	142489	.004	a. Chlordane	4.42	619904	.005	a. Chlordane
4.702	227100	.006	Endosulfan I	4.478	740368	.006	Endosulfan I
4.656	41903	.001	4,4'-DDE	4.558	110148	.001	4,4'-DDE
4.895	48356	.001	Dieldrin	4.67	138968	.001	Dieldrin
4.788	31015	.002	o,p-DDD	4.702	244929	.004	o,p-DDD
5.055	11739		Endrin	4.936	89917	.001	Endrin
5.112	106498	.016	Kepone	4.98	64846	.03	Kepone
	0		4,4'-DDD	5.012	358131	.003	4,4'-DDD
5.317	944464	.03	4,4'-DDT	5.244	3753206	.034	4,4'-DDT
	0		Endrin aldehyde	5.322	100311	.001	Endrin aldehyde
	0		Methoxychlor	5.749	60892	.001	Methoxychlor
	0		Mirex	5.838	85188	.001	Mirex
5.839	33418	.001	Endo. sulfate		0		Endo. sulfate
	0		Endrin ketone	5.884	514004	.004	Endrin ketone
6.697	5360146	.237	DCB	6.687	17217670	.234	DCB

Files:
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Area File: 05pest18306007B.048.BND
Method A: 05pest18306007.048.BND
Method B: 05pest18306007B.048.BND
Calibration File A: 05pest18306007.048.BND
Calibration File B: 05pest18306007B.048.BND
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/13/2018 11:33:30 AM
File Reported On: 11/13/2018 at 11:34:28 AM

9861917 RI F ABGKP01 T 182980006A 10589 SW-846 8081B

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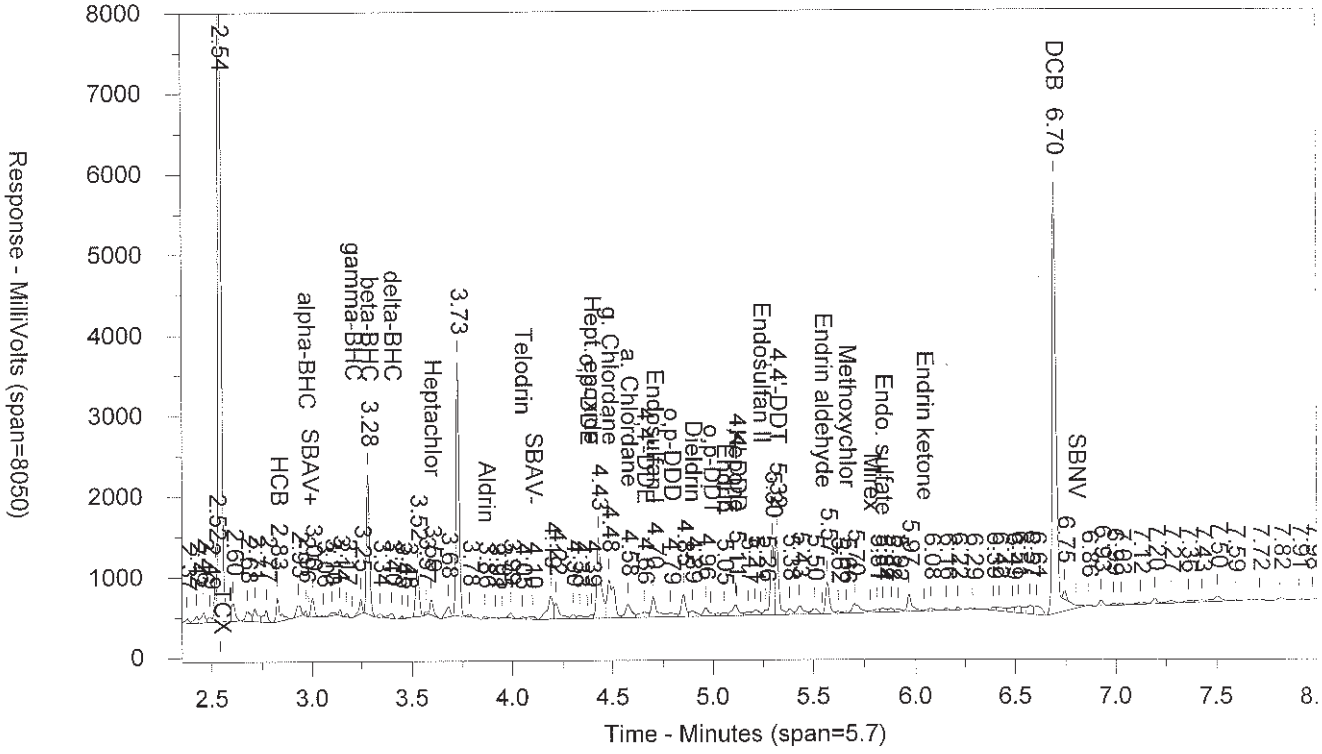

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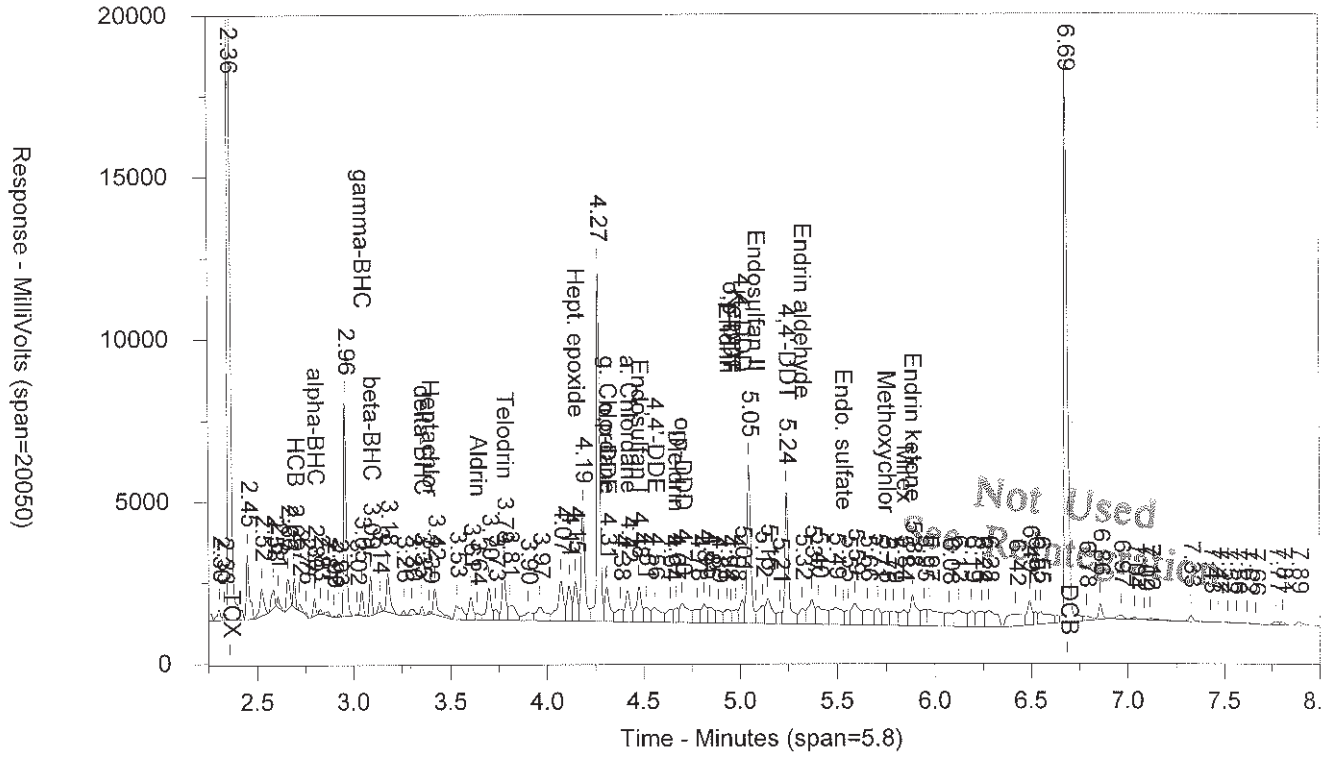

9861917 RI F ABGKP01 T 182980006A 10589 SW-846 8081B

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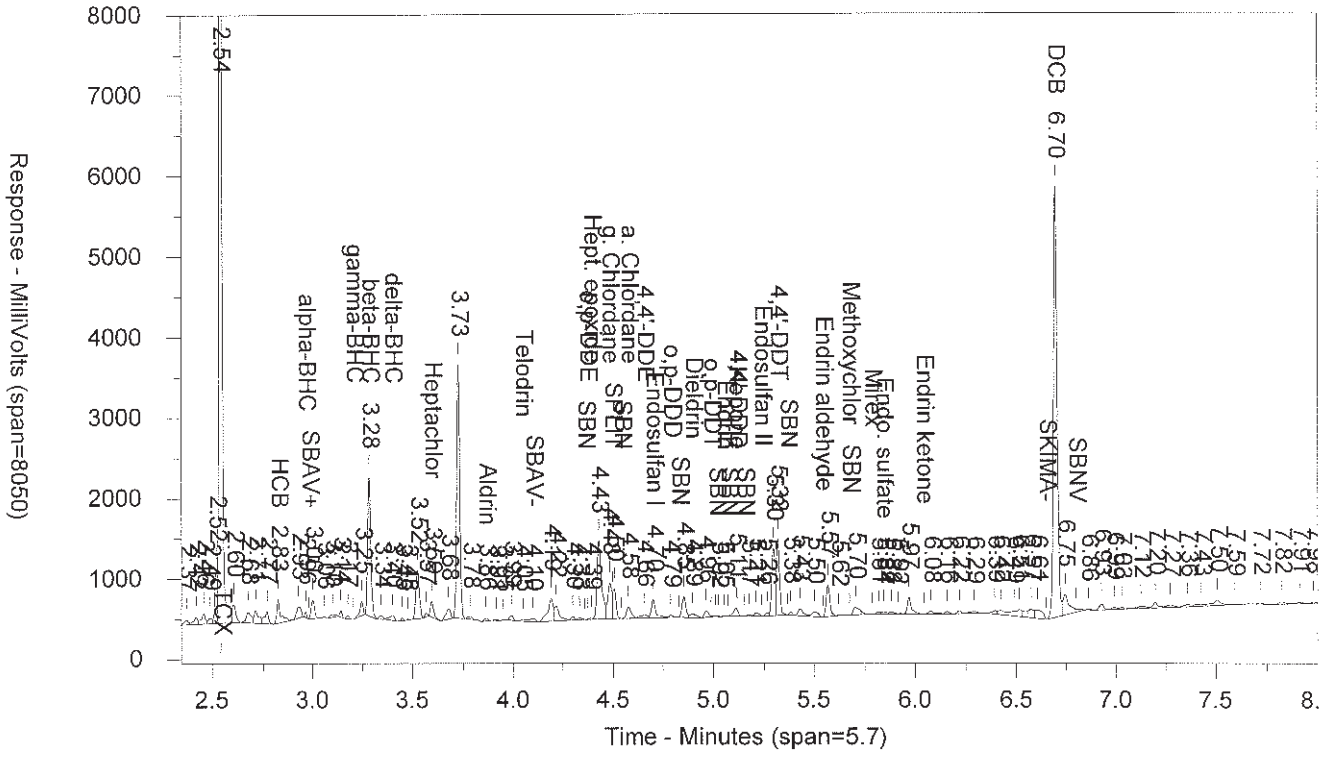

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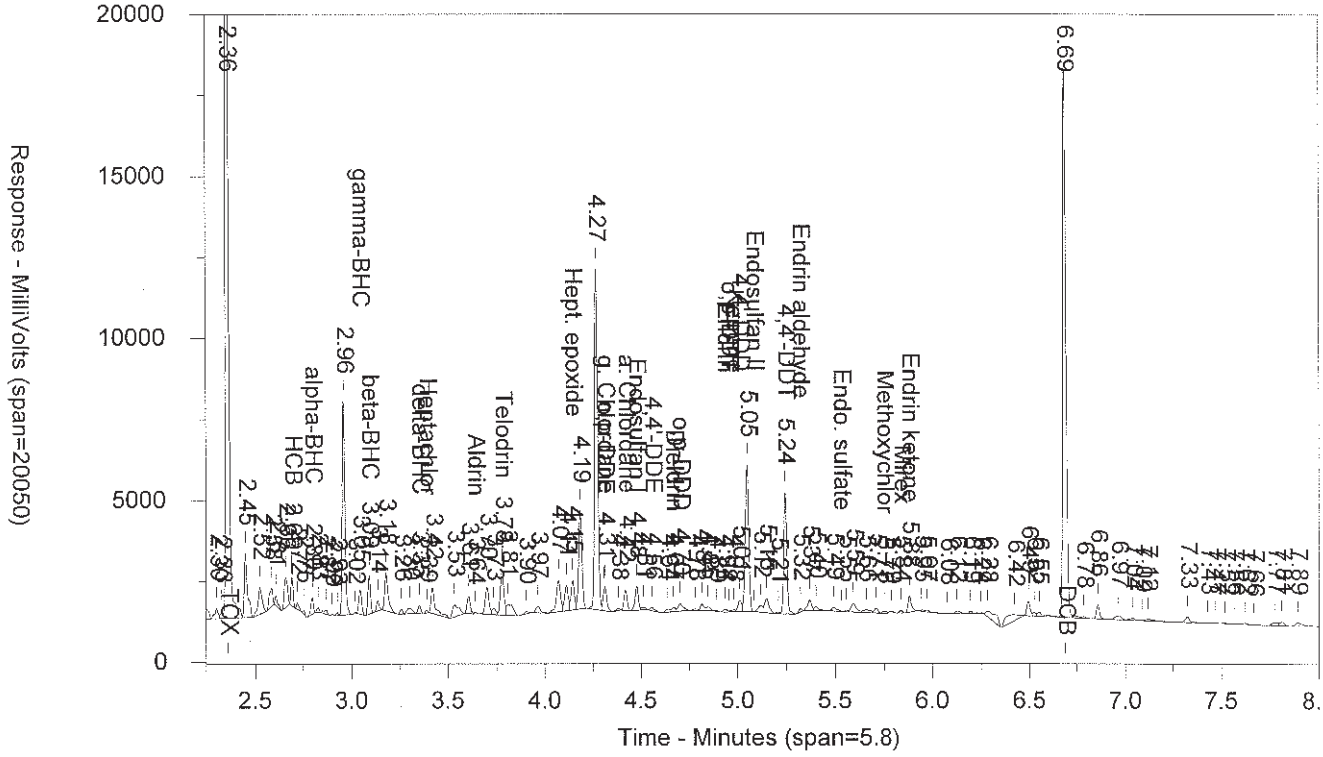

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Data Summary

Sample Name: 9861917R F GKP01 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 137 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 15, 2018 13:02:45
Instrument H9147A
Result file 06PEST18261045.013.RAW
Calibration file 06PEST1826103
Method file 06PESTD

%SSR(TCX) 63% (44 - 124) Conc: 0.344315
%SSR(DCB) 88% (32 - 149) Conc: 0.476106

Analysis Report (B)

Injected on Nov 15, 2018 13:02:45
Instrument H9147B
Result file 06PEST18261045B.013.RAW
Calibration file 06PEST1826103B
Method file 06PESTDB

%SSR(TCX) 65% (44 - 124) Conc: 0.357772
%SSR(DCB) 100% (32 - 149) Conc: 0.543379

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	1.80	1.81	1.84	734816	0.344315
HCB	2.26	2.26	2.30	12539	0.004278
Alpha BHC	2.34	2.35	2.38	19147	0.005289
Beta BHC	2.92	2.95	2.96	10778	0.006302
Heptachlor	3.03	3.04	3.07	13952	0.004541
Delta BHC	3.20	3.22	3.24	14151	0.003863
Alpha Chlordane	4.12	4.16	4.16	8634	0.002532
Dieldrin	4.40	4.41	4.44	12217	0.003396
p,p-DDD	4.76	4.77	4.80	11065	0.003925
Endosulfan II	4.86	4.89	4.90	15326	0.004647
p,p-DDT	4.96	4.98	5.00	9524	0.003516
Decachlorobiphenyl	6.36	6.38	6.42	1234972	0.476106

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.60	2.60	2.64	2033818	0.357772
Beta BHC	3.59	3.60	3.63	64824	0.015369
Delta BHC	3.83	3.85	3.87	39409	0.004009
Telodrin	4.29	4.31	4.33	14194	0.002568
Gamma Chlordane	4.80	4.81	4.84	25181	0.003068
Alpha Chlordane	4.84	4.87	4.88	49740	0.006257
p,p-DDE	4.95	4.99	4.99	26529	0.003388
Dieldrin	5.07	5.08	5.11	102473	0.012265
Endrin	5.25	5.28	5.29	24927	0.003621
p,p-DDD	5.34	5.35	5.38	37406	0.005924
Endrin Aldehyde	5.52	5.55	5.56	8139	0.001337
Methoxychlor	5.87	5.91	5.91	14082	0.005046
Decachlorobiphenyl	7.03	7.04	7.09	2201718	0.543379

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.0182	<0.0365	<0.073			
☐	Total Endosulfans (I + II)					<0.0365			
☐	Tetrachloro-m-xylene	B	0.357772	0.0547	0.1095	0.1095		3.83	
☑	Tetrachloro-m-xylene-D1	A	0.344315	0.0547	0.1095	0.1095			
☑	Tetrachloro-m-xylene-D2	B	0.357772	0.0547	0.1095	0.1095			
☐	HCB			<0.0109	<0.0255	<0.0365			
☑	Alpha BHC			<0.0109	<0.0255	<0.0365	D2		
☑	Gamma BHC - Lindane			<0.0073	<0.0255	<0.0365	D1		
☑	Beta BHC			<0.0124	<0.0255	<0.0365	D1		
☑	Heptachlor			<0.0073	<0.0255	<0.0365	D2		
☑	Delta BHC			<0.0124	<0.0255	<0.0365	D1		
☑	Aldrin			<0.0073	<0.0255	<0.0365	D1		
☐	Telodrin					<0.0365			
☑	Heptachlor Epoxide			<0.0084	<0.0255	<0.0365	D1		
☑	Gamma Chlordane			<0.0255	<0.073	<0.073	D1		
☐	o,p-DDE			<0.0255	<0.0511	<0.073			
☑	Alpha Chlordane			<0.0109	<0.0255	<0.0365	D1		
☑	Endosulfan I			<0.0157	<0.0328	<0.0365	D1		
☑	p,p-DDE			<0.0182	<0.0365	<0.073	D1		
☑	Dieldrin			<0.0193	<0.0365	<0.073	D1		
☐	o,p-DDD			<0.0182	<0.0365	<0.073			
☑	Endrin			<0.0296	<0.073	<0.073	D1		
☐	o,p-DDT			<0.0186	<0.0365	<0.073			
☐	Kepone					<0.7299			
☑	p,p-DDD			<0.0182	<0.0365	<0.073	D1		
☑	Endosulfan II			<0.0547	<0.1095	<0.1095	D2		
☑	p,p-DDT			<0.019	<0.0365	<0.073	D2		
☑	Endrin Aldehyde			<0.073	<0.146	<0.365	D1		
☑	Endosulfan Sulfate			<0.0212	<0.0438	<0.073	D1		

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:06

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Data Summary

Sample Name: 9861917R F GKP01 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 137 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 15, 2018 13:02:45
Instrument	H9147A
Result file	06PEST18261045.013.RAW
Calibration file	06PEST1826103
Method file	06PESTD

Analysis Report (B)

Injected on	Nov 15, 2018 13:02:45
Instrument	H9147B
Result file	06PEST18261045B.013.RAW
Calibration file	06PEST1826103B
Method file	06PESTDB

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑ Methoxychlor			<0.1095	<0.2555	<0.365	D1		
☑ Endrin Ketone			<0.0182	<0.0365	<0.073	D1		
☐ Mirex			<0.0365	<0.146	<0.1825			
☐ Decachlorobiphenyl	B	0.543379	0.0547	0.1095	0.1095		13.20	
☑ Decachlorobiphenyl-D1	A	0.476106	0.0547	0.1095	0.1095			
☑ Decachlorobiphenyl-D2	B	0.543379	0.0547	0.1095	0.1095			

Multiple Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
☑ Chlordane			<0.5839	<1.1679	<1.8248	D1		5	
☑ Toxaphene			<1.0949	<2.1898	<3.6496	D1		5	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L. Tomeyko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:06

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861917R** F GKP01 ID: AB **Batchnumber: 183180015A**
Sample Amount: 137 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:02:45
Instrument : CP06--H9147A
Result file : 06PEST18261045.013.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

%SSR(TCX) : 63% (44-124) Conc.: 0.344315
%SSR(DCB) : 88% (32-149) Conc.: 0.476107

Peak name	Min	R.T.	Max	Height	Amount
TCX	1.80	1.81	1.84	734816	0.344315
HCB	2.26	2.26	2.30	12539	0.004278
alpha-BHC	2.34	2.35	2.38	19147	0.005289
beta-BHC	2.92	2.95	2.96	10778	0.006302
Heptachlor	3.03	3.04	3.07	13952	0.004541
delta-BHC	3.20	3.22	3.24	14151	0.003863
a. Chlordane	4.12	4.16	4.16	8634	0.002532
Dieldrin	4.40	4.41	4.44	12217	0.003396
4,4'-DDD	4.76	4.77	4.80	11065	0.003925
Endosulfan II	4.86	4.89	4.90	15326	0.004647
4,4'-DDT	4.96	4.98	5.00	9524	0.003516
DCB	6.36	6.38	6.42	1234972	0.476107

Analysis Report (B)

Injected on : Nov 15, 2018 13:02:45
Instrument : CP06--H9147B
Result file : 06PEST18261045B.013.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

%SSR(TCX) : 65% (44-124) Conc.: 0.357772
%SSR(DCB) : 100% (32-149) Conc.: 0.543379

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.60	2.60	2.64	2033818	0.357772
beta-BHC	3.59	3.60	3.63	64824	0.015369
delta-BHC	3.83	3.85	3.87	39409	0.004009
Telodrin	4.29	4.31	4.33	14194	0.002568
g. Chlordane	4.80	4.81	4.84	25181	0.003068
a. Chlordane	4.84	4.87	4.88	49740	0.006257
4,4'-DDE	4.95	4.99	4.99	26529	0.003388
Dieldrin	5.07	5.08	5.11	102473	0.012265
Endrin	5.25	5.28	5.29	24927	0.003621
4,4'-DDD	5.34	5.35	5.38	37406	0.005924
Endrin aldehyde	5.52	5.55	5.56	8139	0.001337
Methoxychlor	5.87	5.91	5.91	14082	0.005046
DCB	7.03	7.04	7.09	2201718	0.543379

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	B	0.357772	0.1095	0.0547		3.83	
☐ HCB			<0.0365	<0.0109			
☑ alpha-BHC			<0.0365	<0.0109			
☑ gamma-BHC			<0.0365	<0.0073			
☑ beta-BHC			<0.0365	<0.0124			
☑ Heptachlor			<0.0365	<0.0073			
☑ delta-BHC			<0.0365	<0.0124			
☑ Aldrin			<0.0365	<0.0073			
☐ Telodrin			<0.0365				
☑ Hept. epoxide			<0.0365	<0.0084			
☑ g. Chlordane			<0.073	<0.0255			
☐ o,p-DDE			<0.073	<0.0255			
☑ a. Chlordane			<0.0365	<0.0109			
☑ Endosulfan I			<0.0365	<0.0157			
☑ 4,4'-DDE			<0.073	<0.0182			
☑ Dieldrin			<0.073	<0.0193			
☐ o,p-DDD			<0.073	<0.0182			
☑ Endrin			<0.073	<0.0296			
☐ o,p-DDT			<0.073	<0.0186			
☐ Kepone			<0.7299				
☑ 4,4'-DDD			<0.073	<0.0182			
☑ Endosulfan II			<0.1095	<0.0547			
☑ 4,4'-DDT			<0.073	<0.019			
☑ Endrin aldehyde			<0.365	<0.073			
☑ Endo. sulfate			<0.073	<0.0212			
☑ Methoxychlor			<0.365	<0.1095			
☑ Endrin ketone			<0.073	<0.0182			
☐ Mirex			<0.1825	<0.0365			

%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

Printed on: 11/15/2018 14:16:37

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861917R** F GKP01 ID: AB **Batchnumber: 183180015A**
Sample Amount: 137 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:02:45
Instrument : CP06--H9147A
Result file : 06PEST18261045.013.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

Analysis Report (B)

Injected on : Nov 15, 2018 13:02:45
Instrument : CP06--H9147B
Result file : 06PEST18261045B.013.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ DCB	B	0.543379	0.1095	0.0547		13.20	
☐ Total DDTs			<0.073	<0.0182			
☐ Total Endosulfans	A	0.000000	<0.0365				

Units: ug/l

Valerie L. Tomayko
Principal Specialist

Reviewed by: DJS 15222
Date: 11/16/18

Verified by:
Date: NOV 19 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

Printed on: 11/15/2018 14:16:37

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861917R** F GKP01 ID: AB **Batchnumber: 183180015A**
Sample Amount: 137 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:02:45
Instrument : CP06--H9147A
Result file : 06PEST18261045.013.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

%SSR(TCX) : 63% (44-124) Conc.: 0.344315
%SSR(DCB) : 88% (32-149) Conc.: 0.476107

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**68.51**	
2.25	2.26	2.31	12538.69	0.291043			1
2.60	2.61	2.66	13463.14	0.199012			2
+ 2.82	2.84	2.88	11956.94	0.316034			3
2.82	2.87	2.88	32635.99	0.862603			3
3.03	3.04	3.09	13951.6	0.112223			4
3.13	3.16	3.19	43244.7	0.636048			5
3.25	3.26	3.31	20283.69	0.387349			6
Height Summation:			**136117.81**				
Amount Avg CF:				**0.414713** Linear:			
Aroclor-1221					**2**	**86.53**	
2.08	2.13	2.14	25013.71	0.888571			1
2.26	2.26	2.32	12538.69	0.213969			3
Height Summation:			**37552.4**				
Amount Avg CF:				**0.55127** Linear:			
Aroclor-1248					**5**	**87.54**	
3.03	3.04	3.09	13951.6	0.213687			1
3.34	3.40	3.40	47155.34	0.933805			2
3.55	3.56	3.61	10078.78	0.113026			3
3.90	3.93	3.96	17430.39	0.15594			5
+ 4.40	4.41	4.46	12217.42	0.190238			6
4.40	4.45	4.46	41064.56	0.639418			6
Height Summation:			**129680.67**				
Amount Avg CF:				**0.411175** Linear:			
Aroclor-1254					**5**	**69.88**	
3.91	3.93	3.97	17430.39	0.151742			1
4.03	4.04	4.09	6896.84	0.04999			2
4.32	4.35	4.38	4032.226	0.034678			3
+ 4.40	4.41	4.46	12217.42	0.052146			4
4.40	4.45	4.46	41064.56	0.17527			4
4.94	4.98	5.00	9524.382	0.054303			6
Height Summation:			**78948.398**				
Amount Avg CF:				**0.093196** Linear:			
Aroclor-1260					**2**	**40.20**	
4.52	4.54	4.58	4589.54	0.028939			1
4.94	4.98	5.00	9524.382	0.051924			3
Height Summation:			**14113.922**				
Amount Avg CF:				**0.040431** Linear:			
T. Chlordane					**5**	**105.00**	
2.85	2.87	2.91	32635.99	0.401303			1
4.03	4.04	4.09	6896.84	0.02307			3
4.11	4.16	4.17	8634.18	0.035451 LMDL			4
4.87	4.89	4.93	15325.59	0.132838			5
4.87	4.89	4.93	15325.59	0.132838			5
Height Summation:			**78818.19**				
Amount Avg CF:				**0.1451** Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 13:02:45
Instrument : CP06--H9147B
Result file : 06PEST18261045B.013.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

%SSR(TCX) : 65% (44-124) Conc.: 0.357772
%SSR(DCB) : 100% (32-149) Conc.: 0.543379

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**53.87**	
2.93	2.94	2.99	76455.8	0.759202			1
3.29	3.31	3.35	105463.2	0.759302			2
3.50	3.52	3.56	39709.52	0.550273			3
* 3.84	3.85	3.90	39408.77	0.228261			5
* 3.81	3.85	3.87	39408.77	0.138253			4
3.94	3.96	4.00	109088.7	0.797808			6
Height Summation:			**409534.76**				
Amount Avg CF:				**0.53885** Linear:			
Aroclor-1221					**2**	**11.47**	
2.84	2.86	2.90	19691.92	0.470481			2
2.93	2.94	2.99	76455.8	0.553561			3
Height Summation:			**96147.72**				
Amount Avg CF:				**0.512021** Linear:			
Aroclor-1248					**6**	**116.55**	
3.81	3.85	3.87	39408.77	0.279857			1
4.03	4.04	4.09	28458.36	0.162387			2
4.20	4.22	4.26	17970	0.089917			3
4.61	4.63	4.67	8958.834	0.039597			4
4.72	4.74	4.78	14185.17	0.069128			5
+ 5.02	5.03	5.08	22944.8	0.170437			6
5.02	5.08	5.08	102472.7	0.761181			6
Height Summation:			**211453.834**				
Amount Avg CF:				**0.233678** Linear:			
Aroclor-1254					**4**	**85.44**	
4.73	4.74	4.79	14185.17	0.035982			2
+ 5.02	5.03	5.08	22944.8	0.048958			3
5.02	5.08	5.08	102472.7	0.218648			3
5.25	5.28	5.31	24927.4	0.069702			4
5.45	5.50	5.51	13225.26	0.062354			5
Height Summation:			**154810.53**				
Amount Avg CF:				**0.096672** Linear:			
Aroclor-1260					**2**	**66.48**	
5.15	5.20	5.21	25727.71	0.077878			1
5.38	5.41	5.44	30763.88	0.216031			2
Height Summation:			**56491.59**				
Amount Avg CF:				**0.146954** Linear:			
T. Chlordane					**4**	**169.95**	
+ 3.69	3.70	3.75	54164.06	0.248604 X			1
3.69	3.74	3.75	295818.8	1.357761 ✓			1
4.79	4.81	4.85	25180.8	0.028101			3
4.83	4.87	4.89	49740.41	0.085488 LMDL			4
5.48	5.50	5.54	13225.26	0.059563			5
Height Summation:			**383965.27**				
Amount Avg CF:				**0.382728** Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861917R** F GKP01 ID: AB **Batchnumber: 183180015A**
Sample Amount: 137 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:02:45
Instrument : CP06--H9147A
Result file : 06PEST18261045.013.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene						**2**	**54.31**	
	4.76	4.77	4.82	11064.97	0.254448 LMQC			1
	5.02	5.08	5.08	4597.37	0.113249 LMQC			2

Height Summation: **15662.34**
Amount Avg CF: **0.183849** Linear:

Analysis Report (B)

Injected on : Nov 15, 2018 13:02:45
Instrument : CP06--H9147B
Result file : 06PEST18261045B.013.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene						**5**	**33.19**	
	5.47	5.50	5.53	13225.26	0.126212			1
	5.65	5.66	5.71	8899.464	0.077136			2
	5.70	5.71	5.76	12200.48	0.130865			3
	5.94	5.95	6.00	7017.737	0.097094			4
	6.03	6.07	6.09	6144.029	0.054896			5

LMPC

Height Summation: **47486.97**
Amount Avg CF: **0.09724** Linear:

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		26.04	5	20	
Aroclor-1221			0	0		7.38	2	20	
Aroclor-1248			0	0		** 55.05	5	20	
Aroclor-1254			0	0		3.66	4	20	
Aroclor-1260			0	0		** 113.69	5	20	
T. Chlordane			1.8248	0.5839		** 90.04	5	20	
Total PCBs			0	0					
Toxaphene			3.6496	1.0949		** 61.62	5	30	

Units: ug/l

9861917R F ABGKP01 T 183180015A 10589 SW-846 8081B

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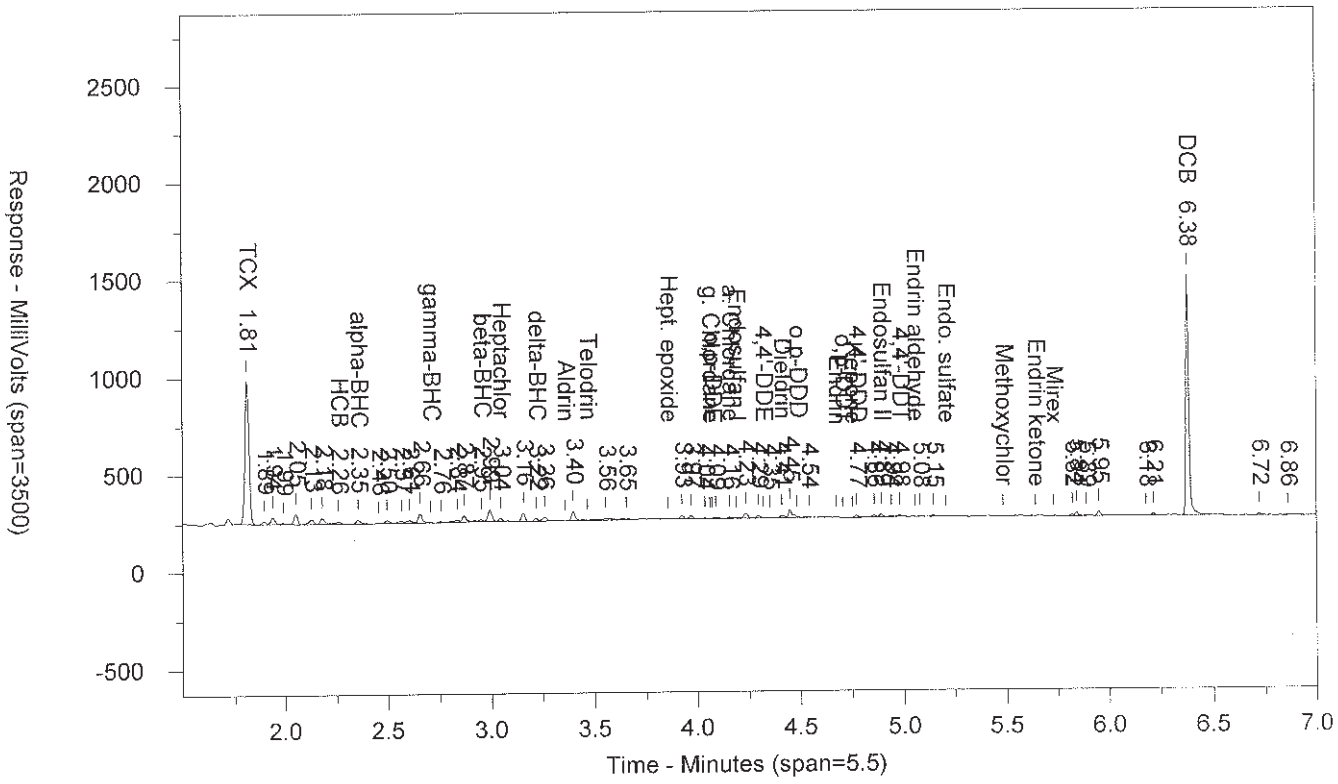

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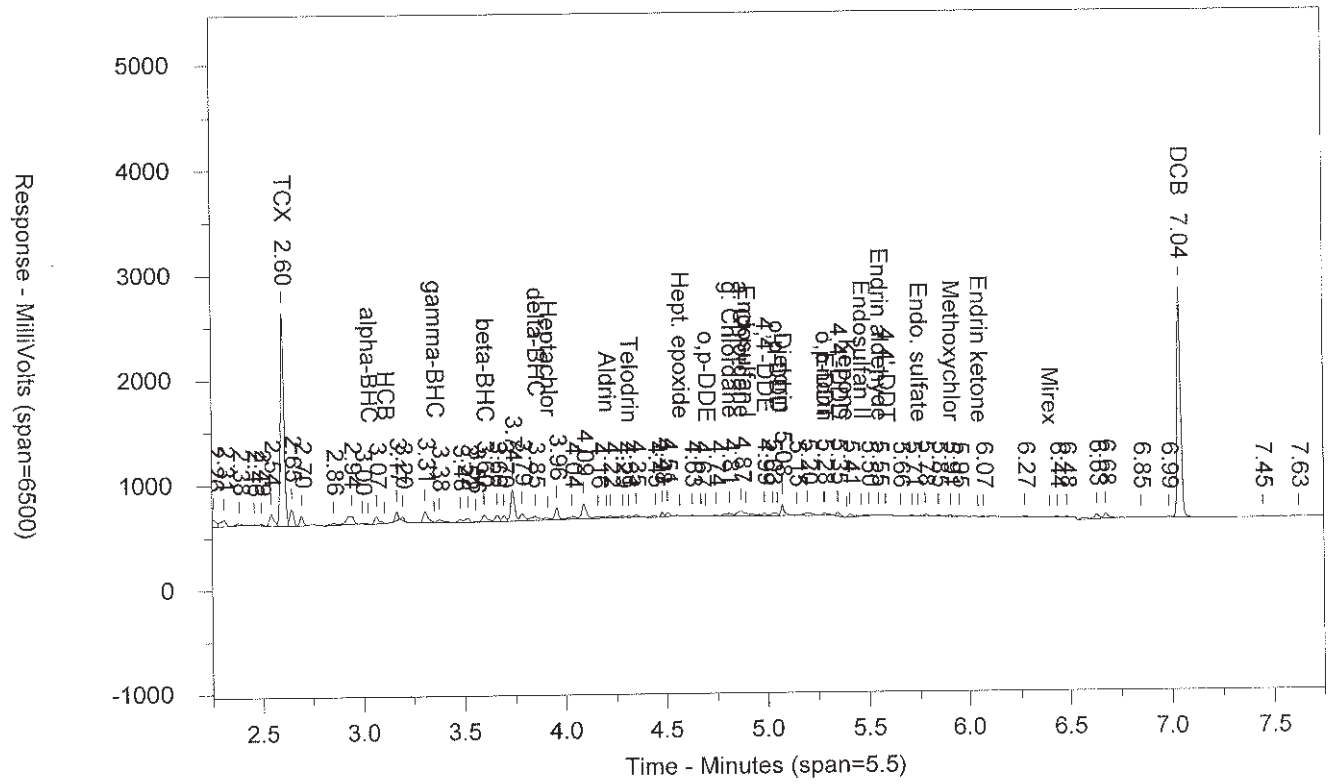

LANCASTER LABORATORIES

Sample Number: 9861917R F ABGKP01 T 183180015A 10589 SW-846 8081B
Injected On: 11/15/2018 1:02:45 PM Sample Weight: 137
Instrument ID: CP6-9147 Dilution Factor: 5
Oven Parameters: 150c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min; hold 1.5 min
Column A ID: DB-CLP 30m x 0.32mm x 0.5um
Column B ID: DB-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
1.81	734816	.344	TCX	2.602	2033818	.358	TCX
2.26	12539	.004	HCB		0		HCB
2.355	19147	.005	alpha-BHC		0		alpha-BHC
2.951	10778	.006	beta-BHC	3.6	64824	.015	beta-BHC
3.044	13952	.005	Heptachlor		0		Heptachlor
3.219	14151	.004	delta-BHC	3.852	39409	.004	delta-BHC
4.157	8634	.003	a. Chlordane	4.871	49740	.006	a. Chlordane
	0		Telodrin	4.314	14194	.003	Telodrin
4.412	12217	.003	Dieldrin	5.075	102473	.012	Dieldrin
4.771	11065	.004	4,4'-DDD	5.348	37406	.006	4,4'-DDD
	0		g. Chlordane	4.812	25181	.003	g. Chlordane
4.891	15326	.005	Endosulfan II		0		Endosulfan II
4.98	9524	.004	4,4'-DDT		0		4,4'-DDT
	0		4,4'-DDE	4.986	26529	.003	4,4'-DDE
	0		Endrin	5.283	24927	.004	Endrin
	0		Endrin aldehyde	5.549	8139	.001	Endrin aldehyde
	0		Methoxychlor	5.906	14082	.005	Methoxychlor
6.38	1234972	.476	DCB	7.042	2201718	.543	DCB

Files:
Area File: 06pest18261045.013.RAW
Area File: 06pest18261045B.013.RAW
Method A: 06PESTD.MET
Method B: 06PESTDB.MET
Calibration File A: 06pest1826103.CAL
Calibration File B: 06pest1826103b.CAL
Format A: pestD6.FMTA
Format B: pestD6.FMTA
Area File Created On: 11/15/2018 1:10:44 PM
File Reported On: 11/15/2018 at 1:42:20 PM

9861917R F ABGKP01 T 183180015A 10589 SW-846 8081B

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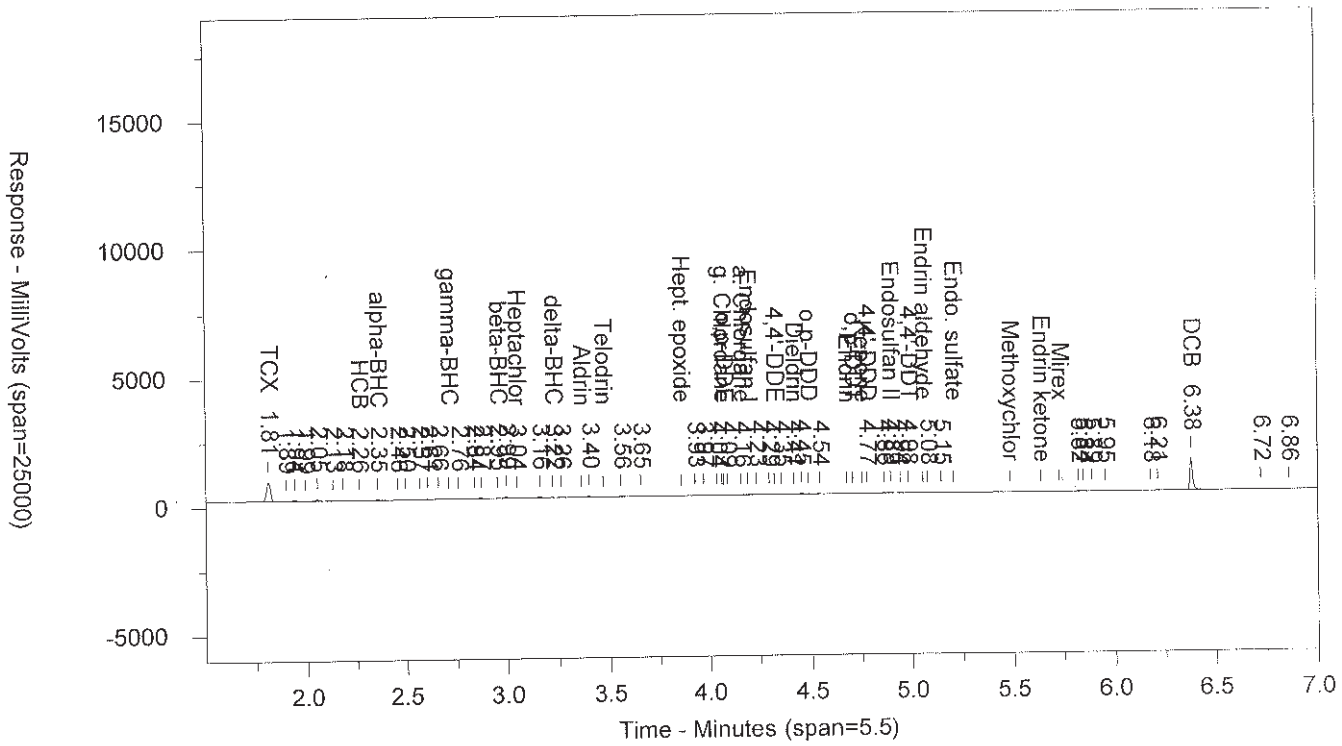

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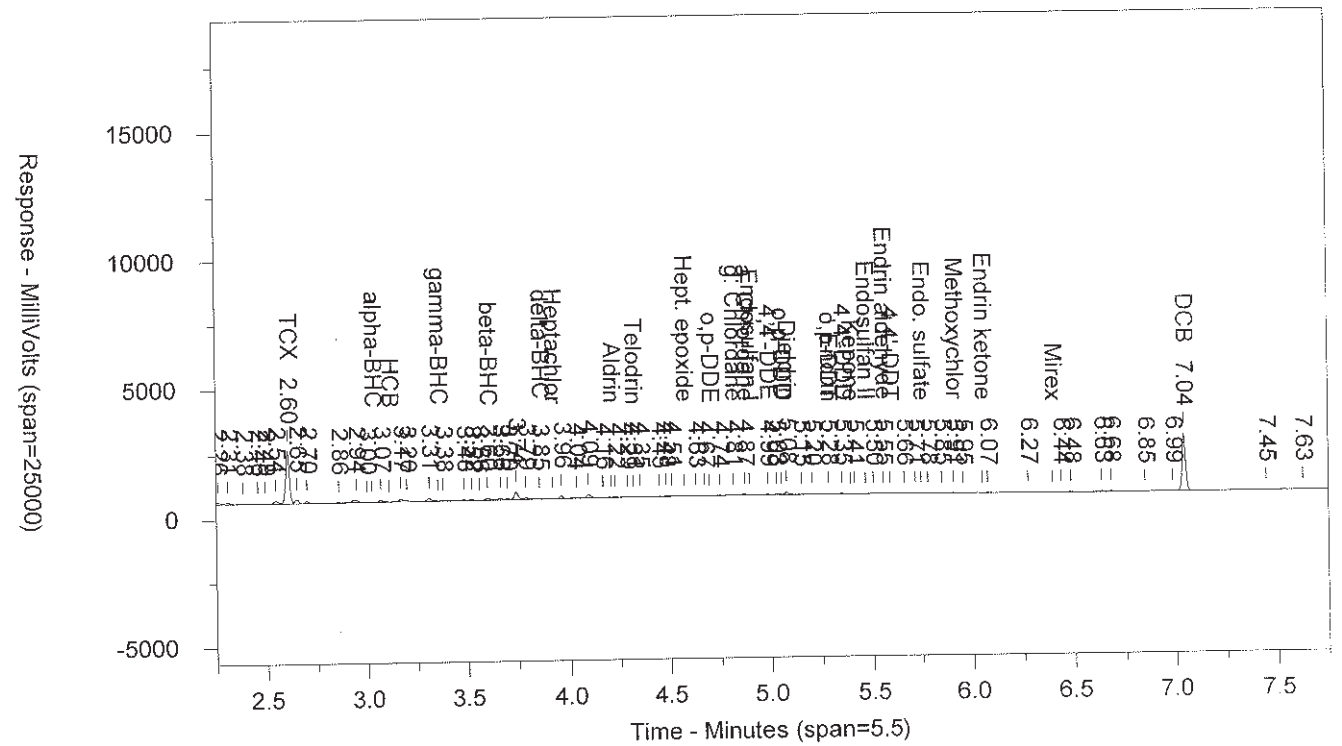

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Data Summary

Sample Name: 9861918 RI F GKP03 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 245 mL Total Volume: 2 ml Analyst: 2131 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 09, 2018 23:32:51
Instrument H9190A
Result file 05PEST18306007.049.BND
Calibration file 05PEST1830603
Method file 05PEST18306007

%SSR(TCX) 71% (44 - 124) Conc: 0.217198
%SSR(DCB) 51% (32 - 149) Conc: 0.153687

Analysis Report (B)

Injected on Nov 09, 2018 23:32:51
Instrument H9190B
Result file 05PEST18306007B.049.BND
Calibration file 05PEST1830603B
Method file 05PEST18306007B

%SSR(TCX) 63% (44 - 124) Conc: 0.193965
%SSR(DCB) 49% (32 - 149) Conc: 0.150173

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.53	2.55	2.57	10547733	0.217198
HCB	2.81	2.85	2.85	1956152	0.037895
Alpha BHC	2.94	2.94	2.98	125294	0.001864
Beta BHC	3.25	3.29	3.29	309797	0.012274
Delta BHC	3.40	3.40	3.44	41285	0.000783
Heptachlor	3.58	3.60	3.62	87659	0.00183
Aldrin	3.84	3.87	3.88	63902	0.00144
Telodrin	4.03	4.05	4.06	10682	0.000402
Gamma Chlordane	4.47	4.49	4.51	93849	0.002419
Alpha Chlordane	4.57	4.58	4.61	41720	0.001061
p,p-DDE	4.63	4.66	4.67	42822	0.001129
Endosulfan I	4.68	4.71	4.72	126243	0.003427
Dieldrin	4.87	4.89	4.91	40093	0.001012
Endrin	5.05	5.06	5.09	15413	0.000426
Kepone	5.08	5.09	5.12	31683	0.01158
p,p-DDD	5.10	5.12	5.14	50040	0.001656
Decachlorobiphenyl	6.67	6.70	6.73	3638617	0.153687

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.34	2.36	2.38	39701056	0.193965
HCB	2.66	2.70	2.70	2071069	0.01197
Gamma BHC - Lindane	3.02	3.05	3.06	430017	0.001885
Beta BHC	3.09	3.10	3.13	2392809	0.024967
Delta BHC	3.31	3.31	3.35	104271	0.000502
Heptachlor	3.36	3.39	3.40	17046	0.000095
Aldrin	3.62	3.64	3.66	14515	0.000085
Telodrin	3.76	3.78	3.80	175605	0.002003
Alpha Chlordane	4.40	4.42	4.44	158678	0.001124
Endosulfan I	4.45	4.48	4.48	376464	0.003007
p,p-DDE	4.55	4.56	4.59	226820	0.001643
Dieldrin	4.67	4.67	4.70	165339	0.001166
o,p-DDD	4.70	4.70	4.74	206677	0.003373
Endrin	4.90	4.94	4.94	85612	0.000675
Kepone	4.97	4.98	5.01	43679	0.029255
p,p-DDD	5.00	5.01	5.04	154955	0.001424
p,p-DDT	5.23	5.25	5.27	112901	0.000996
Endrin Aldehyde	5.31	5.33	5.35	86594	0.000901
Methoxychlor	5.72	5.75	5.76	46915	0.000888
Mirex	5.83	5.84	5.87	139848	0.002064
Endrin Ketone	5.88	5.89	5.92	472615	0.004019
Decachlorobiphenyl	6.66	6.69	6.72	11403069	0.150173

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.0041	<0.0082	<0.0163			
☐	Total Endosulfans (I + II)					<0.0082			
☐	Tetrachloro-m-xylene	A	0.217198	0.0122	0.0245	0.0245		11.30	
☑	Tetrachloro-m-xylene-D1	A	0.217198	0.0122	0.0245	0.0245			
☑	Tetrachloro-m-xylene-D2	B	0.193965	0.0122	0.0245	0.0245			
☐	HCB	B	0.01197	0.0024	0.0057	0.0082	P	103.98	
☑	Alpha BHC			<0.0024	<0.0057	<0.0082	D2		
☑	Gamma BHC - Lindane			<0.0016	<0.0057	<0.0082	D1		
☑	Beta BHC	A	0.012274	0.0028	0.0057	0.0082	PD1	68.17	
☑	Delta BHC			<0.0028	<0.0057	<0.0082	D2		
☑	Heptachlor			<0.0016	<0.0057	<0.0082	D2		
☑	Aldrin			<0.0016	<0.0057	<0.0082	D2		
☐	Telodrin					<0.0082			
☐	o,p-DDE			<0.0057	<0.0114	<0.0163			
☑	Heptachlor Epoxide			<0.0019	<0.0057	<0.0082	D1		
☑	Gamma Chlordane			<0.0057	<0.0163	<0.0163	D2		
☑	Alpha Chlordane			<0.0024	<0.0057	<0.0082	D1		
☑	p,p-DDE			<0.0041	<0.0082	<0.0163	D1		
☑	Endosulfan I			<0.0035	<0.0073	<0.0082	D2		
☐	o,p-DDD			<0.0041	<0.0082	<0.0163			

Reviewed and digitally signed by Jamie L Brillhart on 11/13/2018 13:08:37

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Data Summary

Sample Name: 9861918 RI F GKP03 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 245 mL Total Volume: 2 ml Analyst: 2131 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 09, 2018 23:32:51
Instrument H9190A
Result file 05PEST18306007.049.BND
Calibration file 05PEST1830603
Method file 05PEST18306007

Analysis Report (B)

Injected on Nov 09, 2018 23:32:51
Instrument H9190B
Result file 05PEST18306007B.049.BND
Calibration file 05PEST1830603B
Method file 05PEST18306007B

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
✓	Dieldrin			<0.0043	<0.0082	<0.0163	D1		
	o,p-DDT			<0.0042	<0.0082	<0.0163			
✓	Endrin			<0.0066	<0.0163	<0.0163	D1		
	Kepone					<0.1633			
✓	p,p-DDD			<0.0041	<0.0082	<0.0163	D2		
✓	Endosulfan II			<0.0122	<0.0245	<0.0245	D1		
✓	p,p-DDT			<0.0042	<0.0082	<0.0163	D1		
✓	Endrin Aldehyde			<0.0163	<0.0327	<0.0816	D1		
✓	Methoxychlor			<0.0245	<0.0571	<0.0816	D1		
	Mirex			<0.0082	<0.0327	<0.0408			
✓	Endosulfan Sulfate			<0.0047	<0.0098	<0.0163	D1		
✓	Endrin Ketone			<0.0041	<0.0082	<0.0163	D1		
	Decachlorobiphenyl	A	0.153687	0.0122	0.0245	0.0245		2.31	
✓	Decachlorobiphenyl-D1	A	0.153687	0.0122	0.0245	0.0245			
✓	Decachlorobiphenyl-D2	B	0.150173	0.0122	0.0245	0.0245			

Multiple Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
✓	Chlordane			<0.1306	<0.2612	<0.4082	D2		4	A oos icv
✓	Toxaphene			<0.2449	<0.4898	<0.8163	D1		4	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L Tomayko
Principal Specialist

NOV 13 2018

Reviewed and digitally signed by Jamie L Brillhart on 11/13/2018 13:08:37

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861918** RI F GKP03 ID: AB **Batchnumber: 182980006A**
Sample Amount: 245 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:32:51
Instrument : CP05--H9190A
Result file : 05pest18306007.049.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.049.BND

%SSR(TCX) : 71% (44-124) Conc.: 0.217198
%SSR(DCB) : 51% (32-149) Conc.: 0.153687

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.53	2.55	2.57	10547733	0.217198
HCB	2.81	2.85	2.85	1956152	0.037895
alpha-BHC	2.94	2.94	2.98	125294	0.001864
beta-BHC	3.25	3.29	3.29	309797	0.012274
delta-BHC	3.40	3.40	3.44	41285	0.000783
Heptachlor	3.58	3.60	3.62	87659	0.001830
Aldrin	3.84	3.87	3.88	63902	0.001440
Telodrin	4.03	4.05	4.06	10682	0.000402
g. Chlordane	4.47	4.49	4.51	93849	0.002419
a. Chlordane	4.57	4.58	4.61	41720	0.001061
4,4'-DDE	4.63	4.66	4.67	42822	0.001129
Endosulfan I	4.68	4.71	4.72	126243	0.003427
Dieldrin	4.87	4.89	4.91	40093	0.001012
Endrin	5.05	5.06	5.09	15413	0.000426
Kepone	5.08	5.09	5.12	31683	0.011580
4,4'-DDD	5.10	5.12	5.14	50040	0.001656
DCB	6.67	6.70	6.73	3638617	0.153687

Analysis Report (B)

Injected on : Nov 09, 2018 23:32:51
Instrument : CP05--H9190B
Result file : 05pest18306007B.049.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.049.BND

%SSR(TCX) : 63% (44-124) Conc.: 0.193965
%SSR(DCB) : 49% (32-149) Conc.: 0.150173

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.34	2.36	2.38	39701056	0.193965
HCB	2.66	2.70	2.70	2071069	0.011970
gamma-BHC	3.02	3.05	3.06	430017	0.001885
beta-BHC	3.09	3.10	3.13	2392809	0.024967
delta-BHC	3.31	3.31	3.35	104271	0.000502
Heptachlor	3.36	3.39	3.40	17046	0.000095
Aldrin	3.62	3.64	3.66	14515	0.000085
Telodrin	3.76	3.78	3.80	175605	0.002003
a. Chlordane	4.40	4.42	4.44	158678	0.001124
Endosulfan I	4.45	4.48	4.48	376464	0.003007
4,4'-DDE	4.55	4.56	4.59	226820	0.001643
Dieldrin	4.67	4.67	4.70	165339	0.001166
o,p-DDD	4.70	4.70	4.74	206677	0.003373
Endrin	4.90	4.94	4.94	85612	0.000675
Kepone	4.97	4.98	5.01	43679	0.029255
4,4'-DDD	5.00	5.01	5.04	154955	0.001424
4,4'-DDT	5.23	5.25	5.27	112901	0.000996
Endrin aldehyde	5.31	5.33	5.35	86594	0.000901
Methoxychlor	5.72	5.75	5.76	46915	0.000888
Mirex	5.83	5.84	5.87	139848	0.002064
Endrin ketone	5.88	5.89	5.92	472615	0.004019
DCB	6.66	6.69	6.72	11403069	0.150173

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	A	0.217198	0.0245	0.0122		11.30	
☐ HCB	B	0.011970	0.0082	0.0024		103.98	**
☑ alpha-BHC			<0.0082	<0.0024			
☑ gamma-BHC			<0.0082	<0.0016			
☑ beta-BHC	A	0.012274	0.0082	0.0028		68.16	**
☑ delta-BHC			<0.0082	<0.0028			
☑ Heptachlor			<0.0082	<0.0016			
☑ Aldrin			<0.0082	<0.0016			
☐ Telodrin	A	0.000402	<0.0082			133.12	**
☐ o,p-DDE			<0.0163	<0.0057			
☑ Hept. epoxide			<0.0082	<0.0019			
☑ g. Chlordane			<0.0163	<0.0057			
☑ a. Chlordane			<0.0082	<0.0024			
☑ 4,4'-DDE			<0.0163	<0.0041			
☑ Endosulfan I			<0.0082	<0.0035			
☐ o,p-DDD			<0.0163	<0.0041			
☑ Dieldrin			<0.0163	<0.0043			
☐ o,p-DDT			<0.0163	<0.0042			
☑ Endrin			<0.0163	<0.0066			
☐ Kepone	A	0.011580	<0.1633			86.57	**

%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

Jamie L. Brillhart
Senior Chemist

Printed on: 11/13/2018 12:10:53

NOV 13 2018

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861918** RI F GKP03 ID: AB **Batchnumber: 182980006A**
Sample Amount: 245 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:32:51
Instrument : CP05--H9190A
Result file : 05pest18306007.049.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.049.BND

Analysis Report (B)

Injected on : Nov 09, 2018 23:32:51
Instrument : CP05--H9190B
Result file : 05pest18306007B.049.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.049.BND

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☑ 4,4'-DDD			<0.0163	<0.0041			
☑ Endosulfan II			<0.0245	<0.0122			
☑ 4,4'-DDT			<0.0163	<0.0042			LMnL
☑ Endrin aldehyde			<0.0816	<0.0163			
☑ Methoxychlor			<0.0816	<0.0245			
☐ Mirex			<0.0408	<0.0082			
☑ Endo. sulfate			<0.0163	<0.0047			
☑ Endrin ketone			<0.0163	<0.0041			
☐ DCB	A	0.153687	0.0245	0.0122		2.31	
☐ Total DDTs			<0.0163	<0.0041			
☐ Total Endosulfans	A	0.000000	<0.0082				

Units: ug/l

Reviewed by: Jamie L. Brillhart, Senior Chemist
Date: NOV 13 2018

Verified by: Valorie L. Tomayko, Principal Specialist
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

Printed on: 11/13/2018 12:10:53

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861918** RI F GKP03 ID: AB **Batchnumber: 182980006A**
Sample Amount: 245 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:32:51
Instrument : CP05--H9190A
Result file : 05pest18306007.049.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.049.BND

%SSR(TCX) : 71% (44-124) Conc.: 0.217198
%SSR(DCB) : 51% (32-149) Conc.: 0.153687

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**125.58**	
2.78	2.78	2.84	231816.2031	0.30076			1
3.04	3.06	3.10	13771.82519	0.012718			2
3.20	3.25	3.26	219534.0468	0.689266			3
3.40	3.45	3.46	50037.78515	0.06052			4
3.51	3.53	3.57	1296582.375	1.498643			5
3.56	3.60	3.62	87658.9375	0.150637			6
Height Summation:			**1899401.172852**				
Amount Avg CF:			**0.452091**	Linear:			
Aroclor-1221					**2**	**81.47**	
2.66	2.69	2.70	96527.59375	0.219726			1
2.77	2.78	2.81	231816.2031	0.816831			2
Height Summation:			**328343.796875**				
Amount Avg CF:			**0.518278**	Linear:			
Aroclor-1248					**5**	**77.08**	
3.38	3.40	3.44	41284.55468	0.049984			1
3.66	3.68	3.72	56620.12890	0.125385			2
3.85	3.87	3.91	63902.29687	0.059776			3
4.21	4.26	4.27	75380.05468	0.061943			4
4.39	4.45	4.45	207296.1093	0.251051			5
Height Summation:			**444483.144531**				
Amount Avg CF:			**0.109628**	Linear:			
Aroclor-1254					**4**	**37.58**	
4.62	4.66	4.68	42822.125	0.036693			2
4.93	4.97	4.99	74088.9375	0.048863			4
5.06	5.09	5.12	31682.60156	0.030356			5
+ 5.06	5.12	5.12	50040.07031	0.047945			5
5.27	5.30	5.33	117363.4140	0.070012			6
Height Summation:			**265957.078125**				
Amount Avg CF:			**0.046481**	Linear:			
Aroclor-1260					**5**	**90.36**	
+ 4.85	4.86	4.91	206032.5937	0.143818			1
4.85	4.89	4.91	40093.48437	0.027987			1
+ 5.06	5.06	5.12	15412.91699	0.007966			2
5.06	5.09	5.12	31682.60156	0.016375			2
+ 5.06	5.12	5.12	50040.07031	0.025862			2
5.27	5.30	5.33	117363.4140	0.057652			3
5.53	5.57	5.59	23693.71093	0.020819			4
5.94	5.97	6.00	171724.4531	0.123523			6
Height Summation:			**384557.664063**				
Amount Avg CF:			**0.049271**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:32:51
Instrument : CP05--H9190B
Result file : 05pest18306007B.049.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.049.BND

%SSR(TCX) : 63% (44-124) Conc.: 0.193965
%SSR(DCB) : 49% (32-149) Conc.: 0.150173

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**135.74**	
+ 2.66	2.66	2.72	845502.5625	0.359204			1
2.66	2.70	2.72	2071069	0.879875			1
2.93	2.96	2.99	576499	0.176751			2
3.11	3.14	3.17	326352.0937	0.240184			3
3.27	3.31	3.33	104270.5937	0.018259			4
3.37	3.39	3.43	17045.52539	0.005957			5
+ 3.37	3.42	3.43	391435.0312	0.136808			5
Height Summation:			**3095236.212891**				
Amount Avg CF:			**0.264205**	Linear:			
Aroclor-1221					**2**	**22.51**	
2.63	2.66	2.67	845502.5625	1.017219			2
2.67	2.70	2.71	2071069	0.737909			3
Height Summation:			**2916571.5625**				
Amount Avg CF:			**0.877564**	Linear:			
Aroclor-1248					**6**	**85.69**	
3.27	3.31	3.33	104270.5937	0.036056			1
3.53	3.54	3.59	459290.8437	0.167282			2
+ 3.53	3.59	3.59	468334.125	0.170576			2
3.75	3.78	3.81	175605.25	0.051281			3
+ 3.75	3.81	3.81	235507.0312	0.068774			3
3.85	3.88	3.91	110045.3203	0.038495			4
4.11	4.12	4.17	655653.125	0.165957			5
4.30	4.34	4.36	57640.23437	0.018536			6
Height Summation:			**1562505.367188**				
Amount Avg CF:			**0.079601**	Linear:			
Aroclor-1254					**5**	**221.66**	
4.11	4.12	4.17	655653.125	0.171821			1
E 4.27	4.27	4.33	146489088	34.012074			2
+ 4.64	4.64	4.70	66917.25	0.010753			3
4.64	4.67	4.70	165339.1718	0.026567			3
+ 4.81	4.82	4.87	129139.1015	0.02892			4
4.81	4.85	4.87	73555.53906	0.016472			4
5.21	5.25	5.27	112901.1406	0.023793			6
Height Summation:			**147496536.976563**				
Amount Avg CF:			**6.850146**	Linear:			
Aroclor-1260					**5**	**63.55**	
4.79	4.82	4.85	129139.1015	0.030217			1
4.95	4.98	5.01	43679.33203	0.008562			2
5.21	5.25	5.27	112901.1406	0.021308			3
5.48	5.49	5.54	120603.7734	0.036183			4
5.65	5.66	5.71	43992.38281	0.00643			5
+ 5.65	5.71	5.71	101378.1484	0.014818			5
Height Summation:			**450315.730469**				
Amount Avg CF:			**0.02054**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861918** RI F GKP03 ID: AB **Batchnumber: 182980006A**
Sample Amount: 245 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:32:51
Instrument : CP05--H9190A
Result file : 05pest18306007.049.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.049.BND

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane						**6**	**214.02**	
	3.50	3.53	3.56	1296582.375	0.957726			1
	3.94	3.99	4.00	71123.3125	0.052186			2
+	4.29	4.30	4.35	46207.33203	0.052359			3
	4.29	4.34	4.35	15586.36132	0.017661			3
	4.45	4.49	4.51	93849.04687	0.023011			4
	4.55	4.58	4.61	41719.52343	0.007397			5
	5.15	5.17	5.22	17648.75781	0.013089			6
Height Summation:				**1536509.376953**				
Amount Avg CF:				**0.178512**	Linear:			
Toxaphene						**4**	**65.39**	
	5.06	5.09	5.12	31682.60156	0.054085			1
+	5.06	5.12	5.12	50040.07031	0.085423			1
	5.20	5.22	5.26	31908.8125	0.03476			2
	5.29	5.30	5.35	117363.4140	0.141502			3
	5.68	5.70	5.74	42959.39453	0.058938			5
+	5.68	5.74	5.74	13368.40820	0.018341			5
Height Summation:				**223914.222656**				
Amount Avg CF:				**0.072321**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:32:51
Instrument : CP05--H9190B
Result file : 05pest18306007B.049.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.049.BND

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane						**5**	**215.66**	
	3.23	3.26	3.29	113019.4531	0.022554			1
	3.74	3.78	3.80	175605.25	0.036834			2
	4.08	4.12	4.14	655653.125	0.192571			3
E	4.27	4.27	4.33	146489088	9.013493			4
	4.39	4.42	4.45	158677.9062	0.012919			5
Height Summation:				**147592043.73437**				
Amount Avg CF:				**1.855674**	Linear:			
Toxaphene						**6**	**69.36**	
+	4.64	4.64	4.70	66917.25	0.039159			1
	4.64	4.67	4.70	165339.1718	0.096755			1
	4.87	4.89	4.93	33393.47656	0.018927			2
	5.04	5.05	5.10	130950.1640	0.040953			3
	5.31	5.33	5.37	86594.05468	0.024846			4
+	5.36	5.37	5.42	156877.5	0.07664			5
	5.36	5.41	5.42	64320.00390	0.031423			5
	5.66	5.71	5.72	101378.1484	0.032435			6
Height Summation:				**581975.019531**				
Amount Avg CF:				**0.04089**	Linear:			

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Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 52.46	4	40	
Aroclor-1221			0	0		** 51.48	3	5	
Aroclor-1248			0	0		31.74	4	30	
Aroclor-1254			0	0		** 197.30	4	40	
Aroclor-1260			0	0		** 82.31	4	40	
Chlordane			0.4082	0.1306		** 164.90	4	40	(B) A WS CCV
Toxaphene			0.8163	0.2449		** 55.53	4	40	

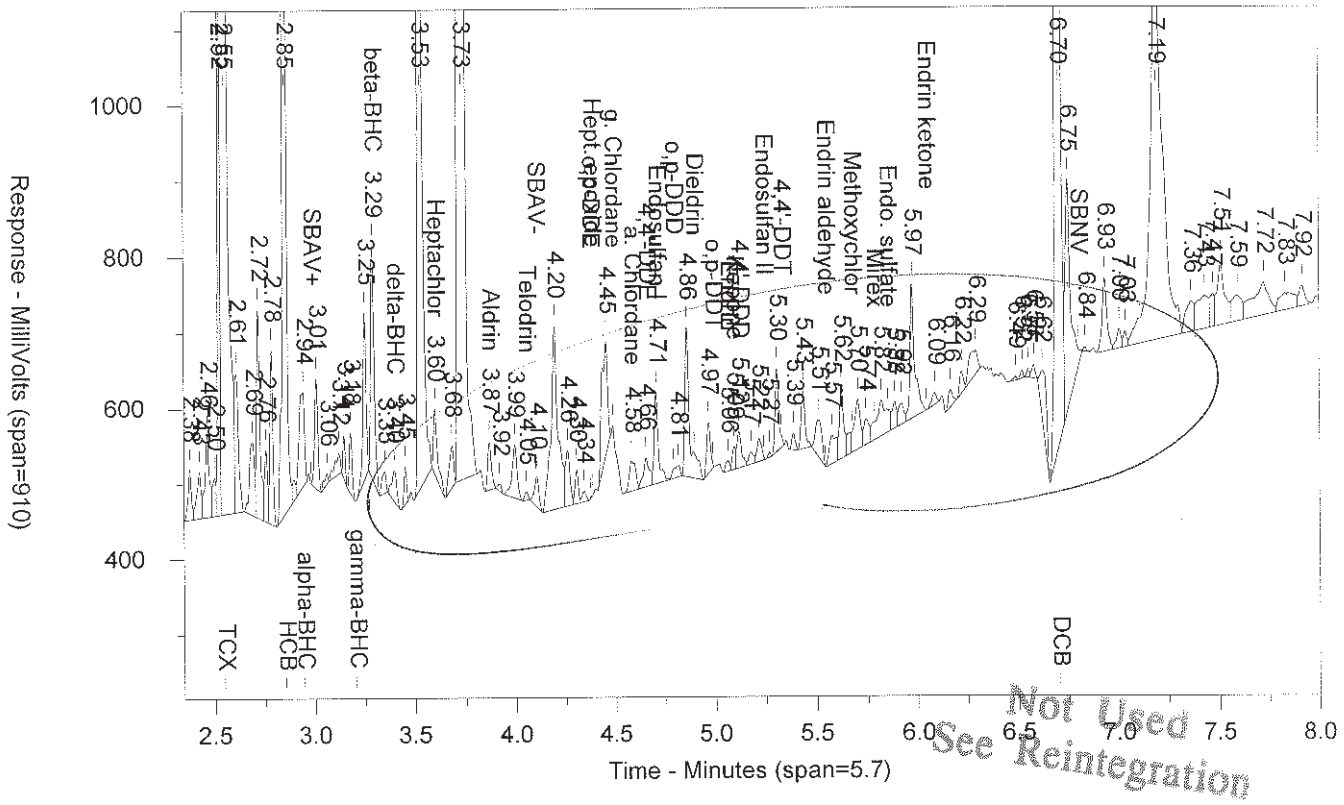
Units: ug/l

Jamie L Brillhart
Jamie L. Brillhart
Senior Chemist

NOV 13 2018

9861918 RI F ABGKP03 T 182980006A 10589 SW-846 8081B

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.049.RAW



Not Used See Reintegration

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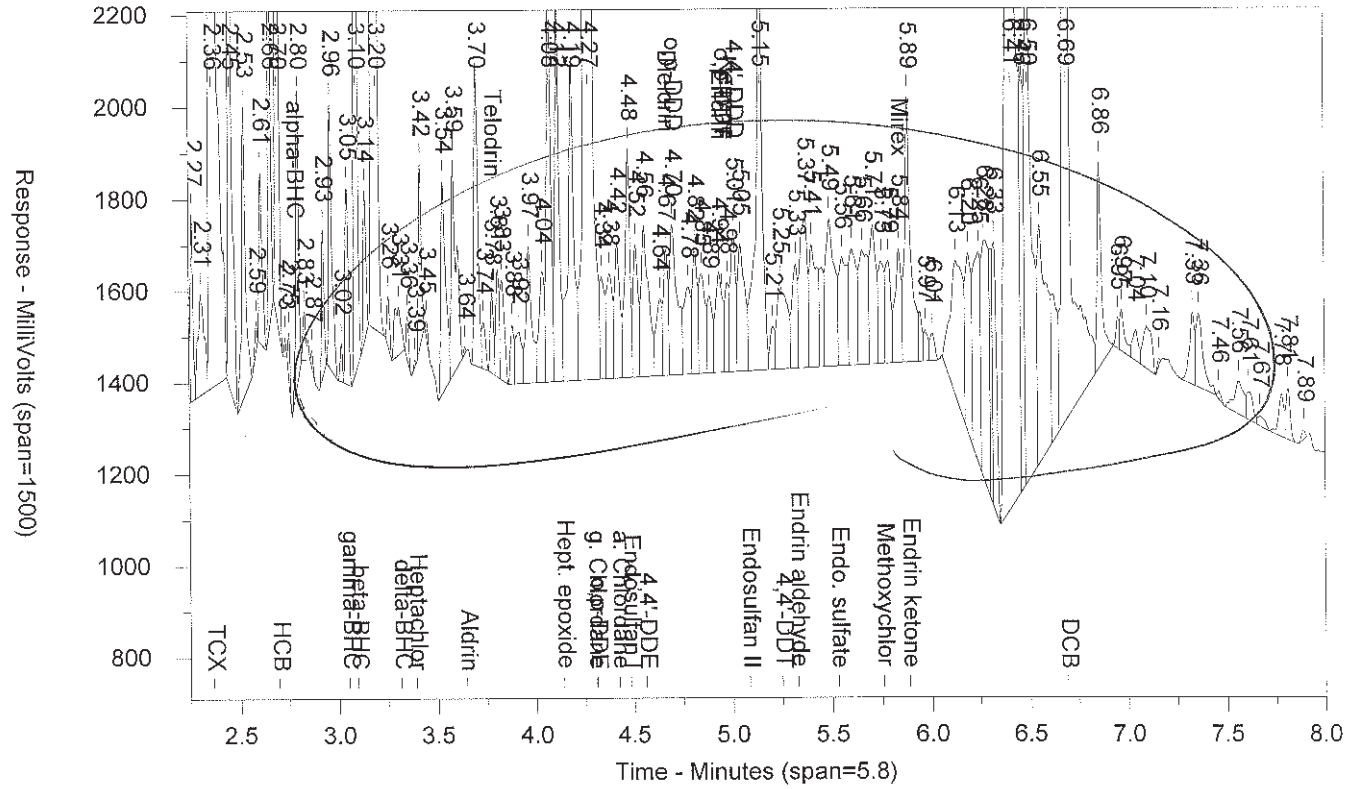

LANCASTER LABORATORIES

Sample Number: 9861918 RI F ABGKP03 T 182980006A 10589 SW-846 8081B
Injected On: 11/9/2018 11:32:51 PM Sample Weight: 245
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
2.546	10547730	.217	TCX	2.363	39701060	.194	TCX
2.851	1956152	.038	HCB	2.697	2071069	.012	HCB
2.941	125294	.002	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.049	430017	.002	gamma-BHC
3.289	309797	.012	beta-BHC	3.096	2392809	.025	beta-BHC
3.398	41285	.001	delta-BHC	3.314	104271	.001	delta-BHC
3.598	87659	.002	Heptachlor	3.394	17046		Heptachlor
3.867	63902	.001	Aldrin	3.645	14515		Aldrin
4.051	10682		Telodrin	3.781	175605	.002	Telodrin
4.582	40170	.001	a. Chlordane	4.422	298830	.002	a. Chlordane
4.706	120391	.003	Endosulfan I	4.481	500303	.004	Endosulfan I
4.655	38748	.001	4,4'-DDE	4.562	330391	.002	4,4'-DDE
	0		Dieldrin	4.672	277281	.002	Dieldrin
	0		o,p-DDD	4.704	330402	.005	o,p-DDD
5.062	14262		Endrin	4.94	219912	.002	Endrin
5.093	30485	.012	Kepone	4.983	196660	.032	Kepone
5.117	48808	.002	4,4'-DDD	5.014	305960	.003	4,4'-DDD
	0		4,4'-DDT	5.248	191359	.002	4,4'-DDT
	0		Endrin aldehyde	5.326	227873	.002	Endrin aldehyde
	0		Methoxychlor	5.754	223483	.004	Methoxychlor
	0		Mirex	5.842	249617	.004	Mirex
	0		Endrin ketone	5.888	580260	.005	Endrin ketone
6.701	3638617	.154	DCB	6.691	11621150	.153	DCB

Files:
Area File: 05pest18306007.049.RAW
Area File: 05pest18306007B.049.RAW
Method A: 05PESTD.MET
Method B: 05PESTDB.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 11:40:52 PM
File Reported On: 11/13/2018 at 3:56:19 AM

Not Used
See Reintegration

9861918 RI F ABGKP03 T 182980006A 10589 SW-846 8081B

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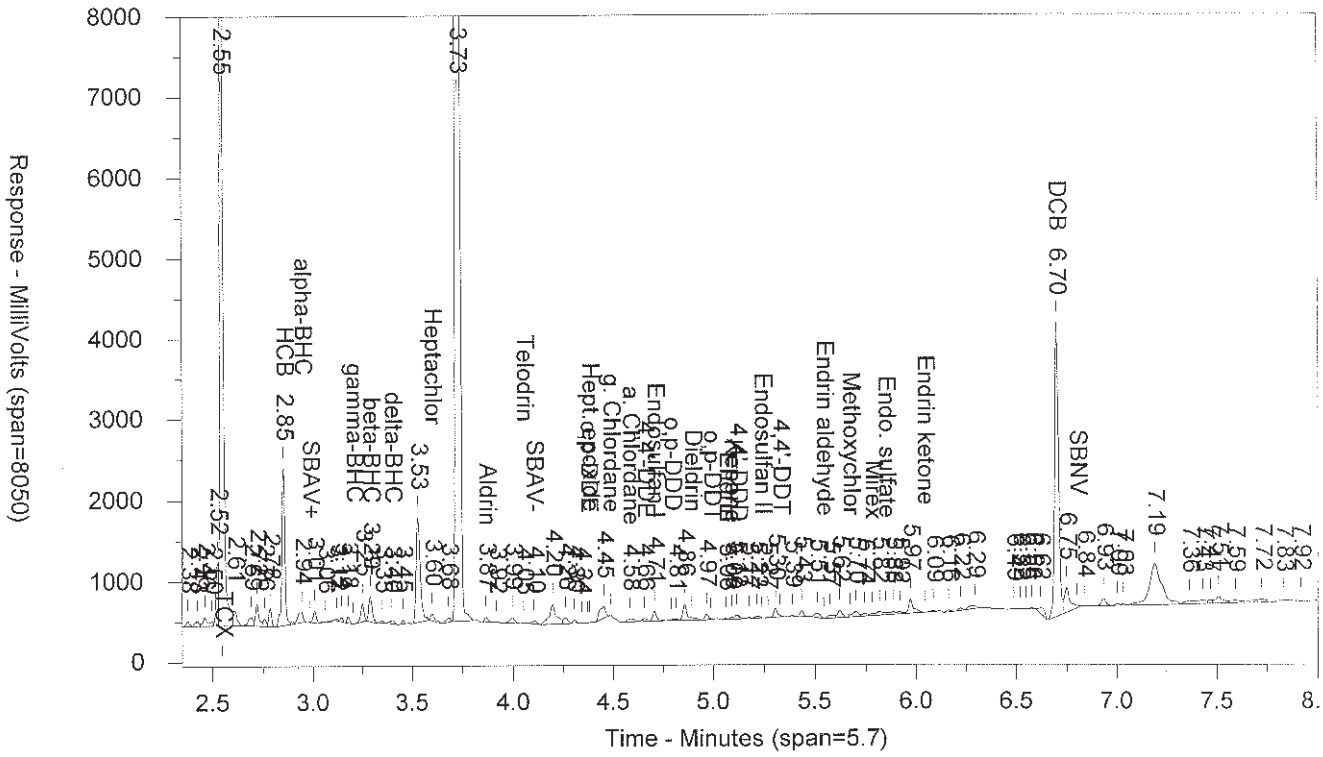

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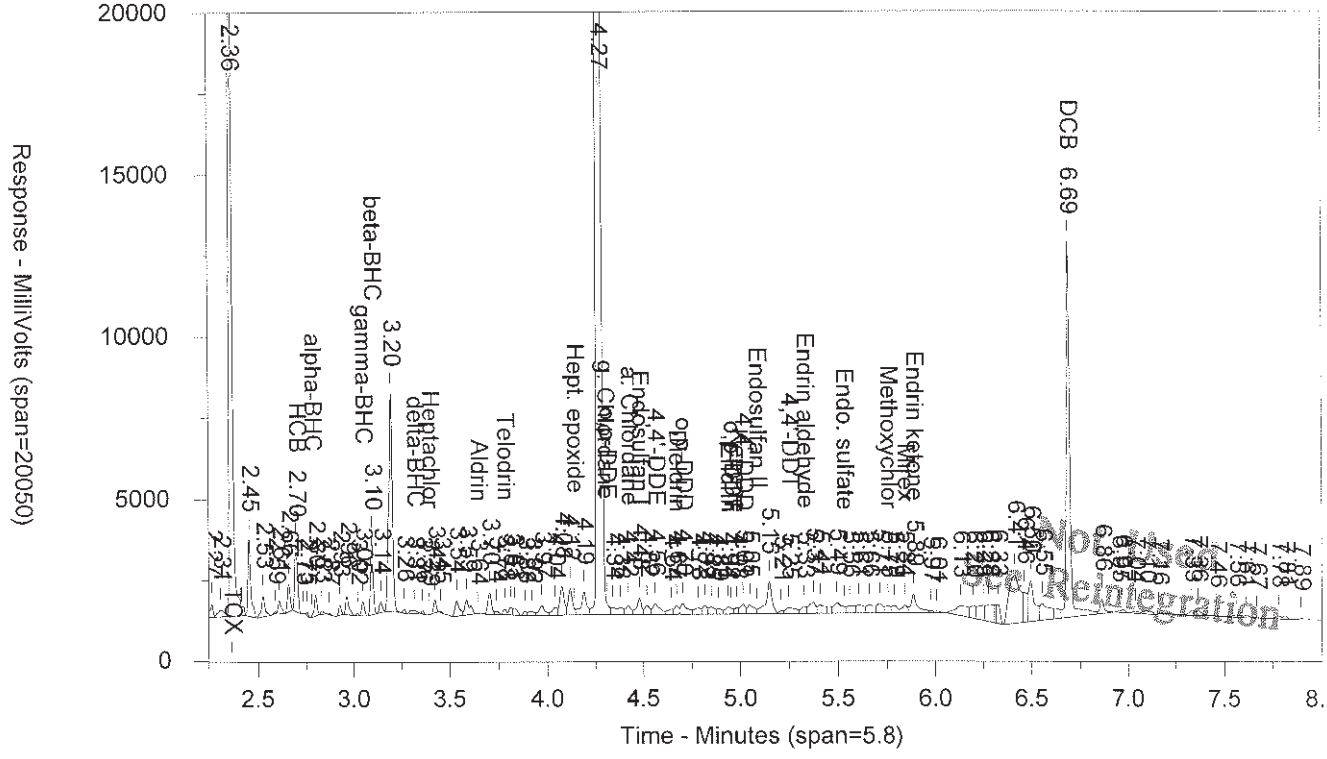

9861918 RI F ABGKP03 T 182980006A 10589 SW-846 8081B

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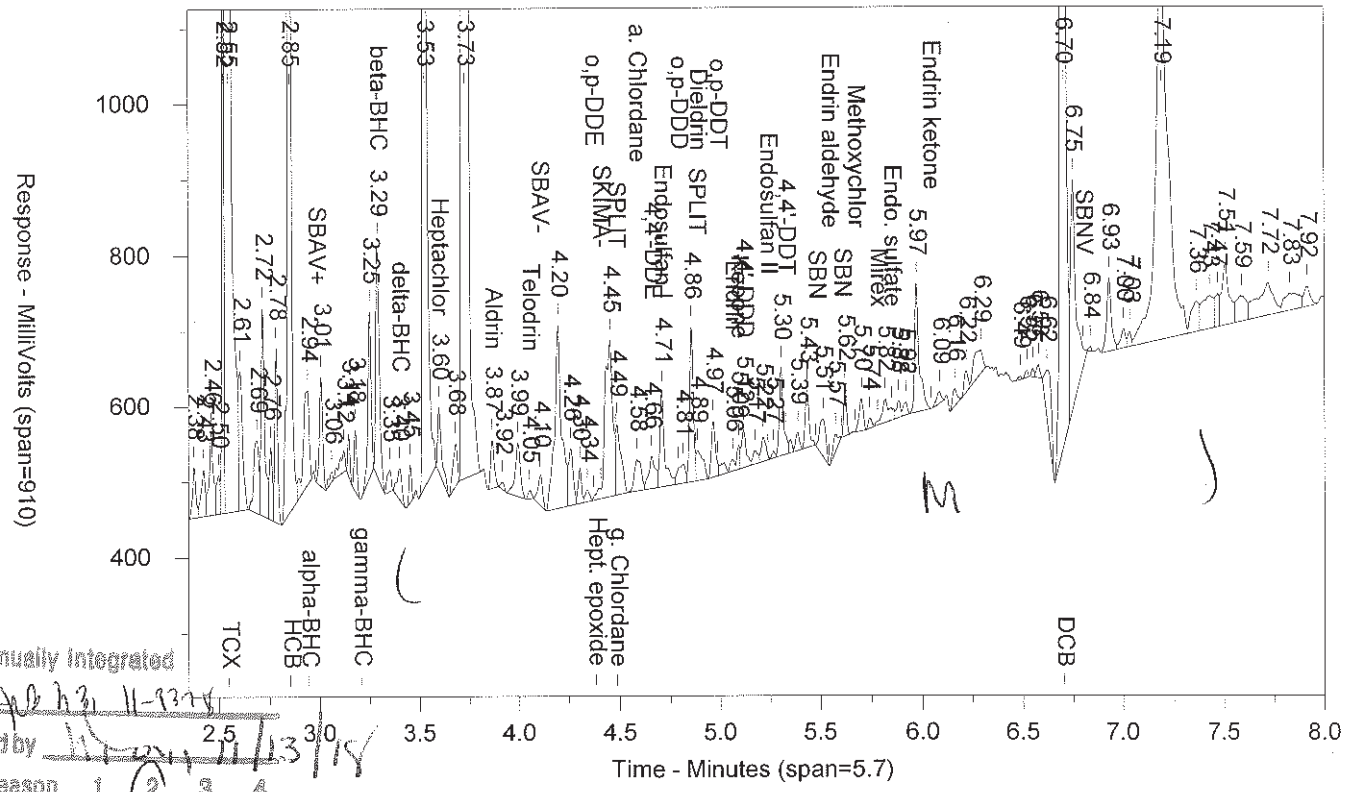

M = Manually Integrated

Analyst

Approved by

Circle Reason 1 2 3 4

1 = Missed Peak
2 = Improper Baseline
3 = RT Update
4 = Other

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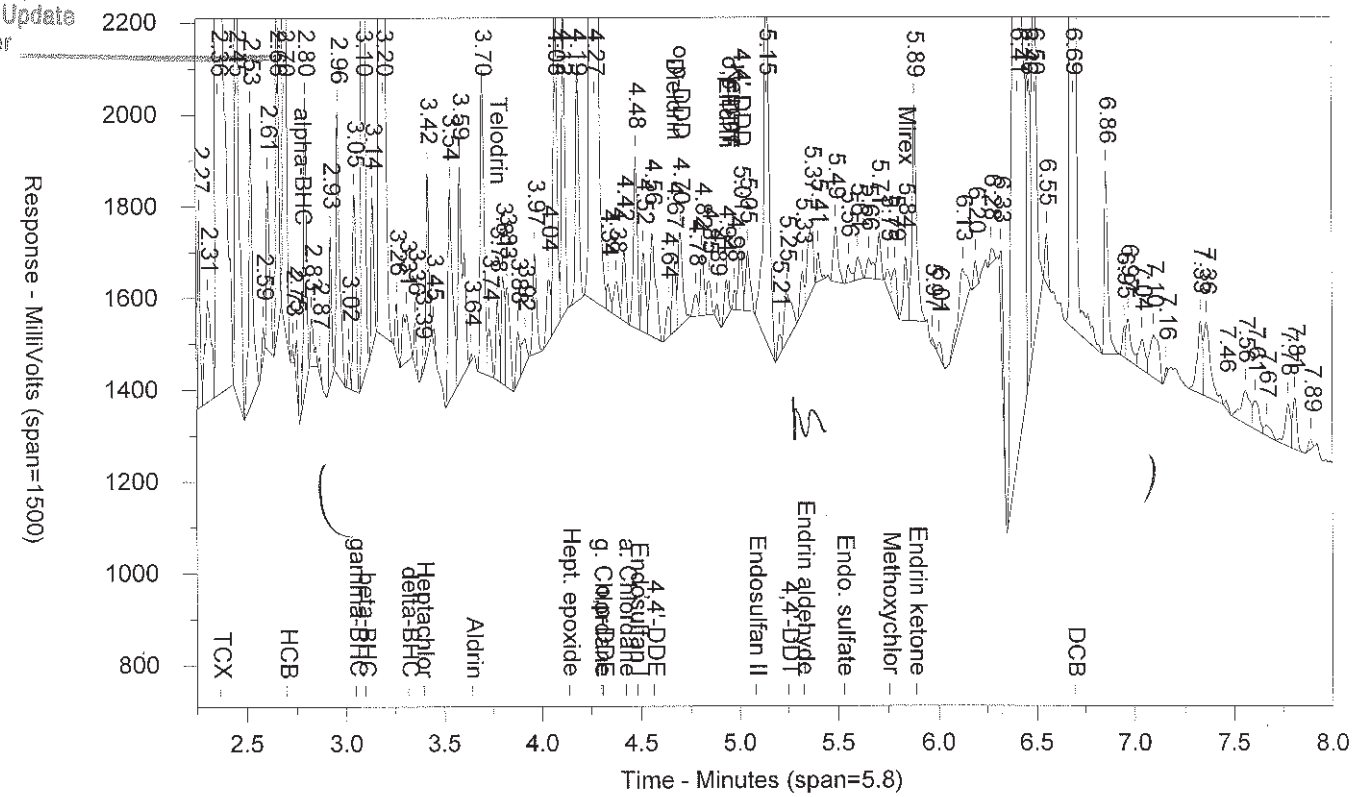

LANCASTER LABORATORIES

Sample Number: 9861918 RI F ABGKP03 T 182980006A 10589 SW-846 8081B
Injected On: 11/9/2018 11:32:51 PM Sample Weight: 245
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
2.546	10547730	.217	TCX	2.363	39701060	.194	TCX
2.851	1956152	.038	HCB	2.697	2071069	.012	HCB
2.941	125294	.002	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.049	430017	.002	gamma-BHC
3.289	309797	.012	beta-BHC	3.096	2392809	.025	beta-BHC
3.398	41285	.001	delta-BHC	3.314	104271	.001	delta-BHC
3.598	87659	.002	Heptachlor	3.394	17046		Heptachlor
3.867	63902	.001	Aldrin	3.645	14515		Aldrin
4.051	10682		Telodrin	3.781	175605	.002	Telodrin
4.582	41720	.001	a. Chlordane	4.422	158678	.001	a. Chlordane
4.706	126243	.003	Endosulfan I	4.481	376464	.003	Endosulfan I
4.485	93849	.002	g. Chlordane		0		g. Chlordane
4.655	42822	.001	4,4'-DDE	4.562	226820	.002	4,4'-DDE
4.887	40093	.001	Dieldrin	4.672	165339	.001	Dieldrin
	0		o,p-DDD	4.704	206677	.003	o,p-DDD
5.062	15413		Endrin	4.94	85612	.001	Endrin
5.093	31683	.012	Kepone	4.983	43679	.029	Kepone
5.117	50040	.002	4,4'-DDD	5.014	154955	.001	4,4'-DDD
	0		4,4'-DDT	5.248	112901	.001	4,4'-DDT
	0		Endrin aldehyde	5.326	86594	.001	Endrin aldehyde
	0		Methoxychlor	5.754	46915	.001	Methoxychlor
	0		Mirex	5.842	139848	.002	Mirex
	0		Endrin ketone	5.888	472615	.004	Endrin ketone
6.701	3638617	.154	DCB	6.691	11403070	.15	DCB

Files:
Area File: 05pest18306007.049.BND
Area File: 05pest18306007B.049.BND
Method A: 05pest18306007.049.BND
Method B: 05pest18306007B.049.BND
Calibration File A: 05pest18306007.049.BND
Calibration File B: 05pest18306007B.049.BND
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/13/2018 11:36:29 AM
File Reported On: 11/13/2018 at 11:36:53 AM

9861918 RI F ABGKP03 T 182980006A 10589 SW-846 8081B

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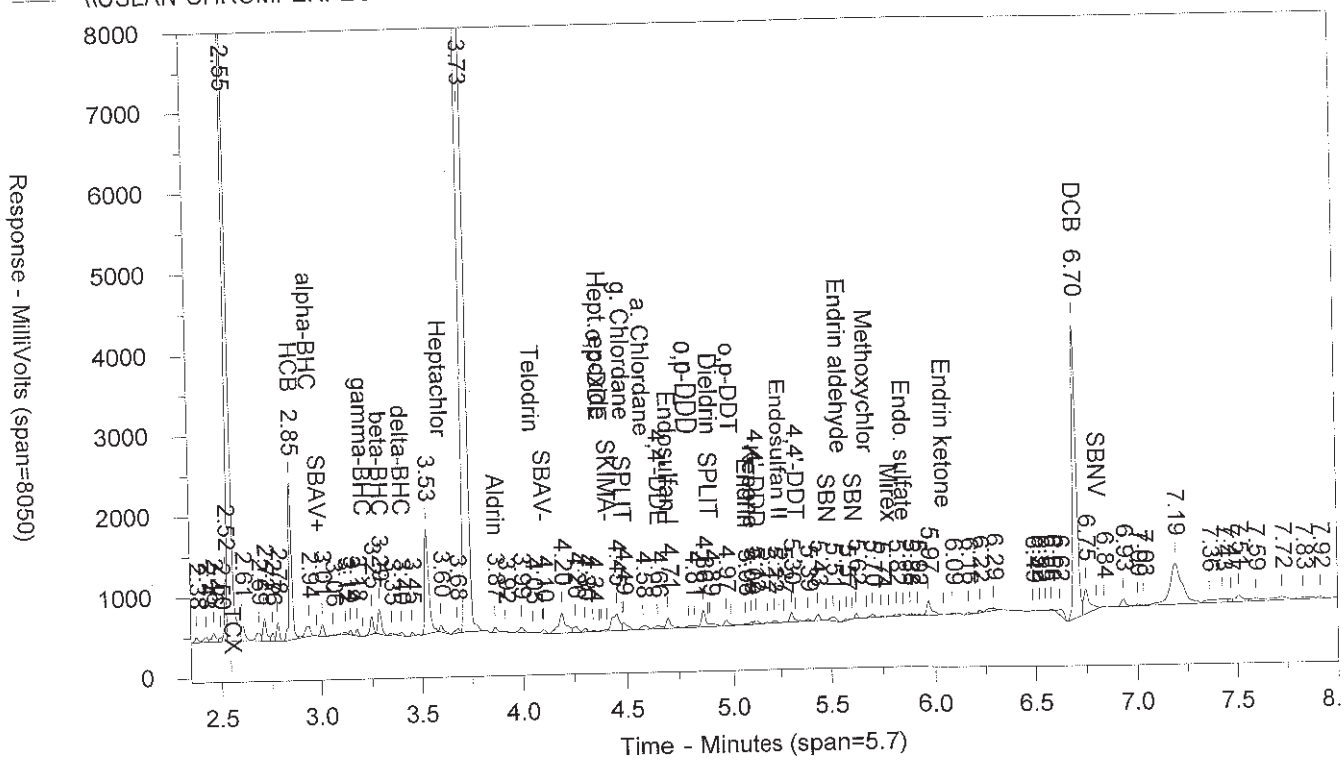

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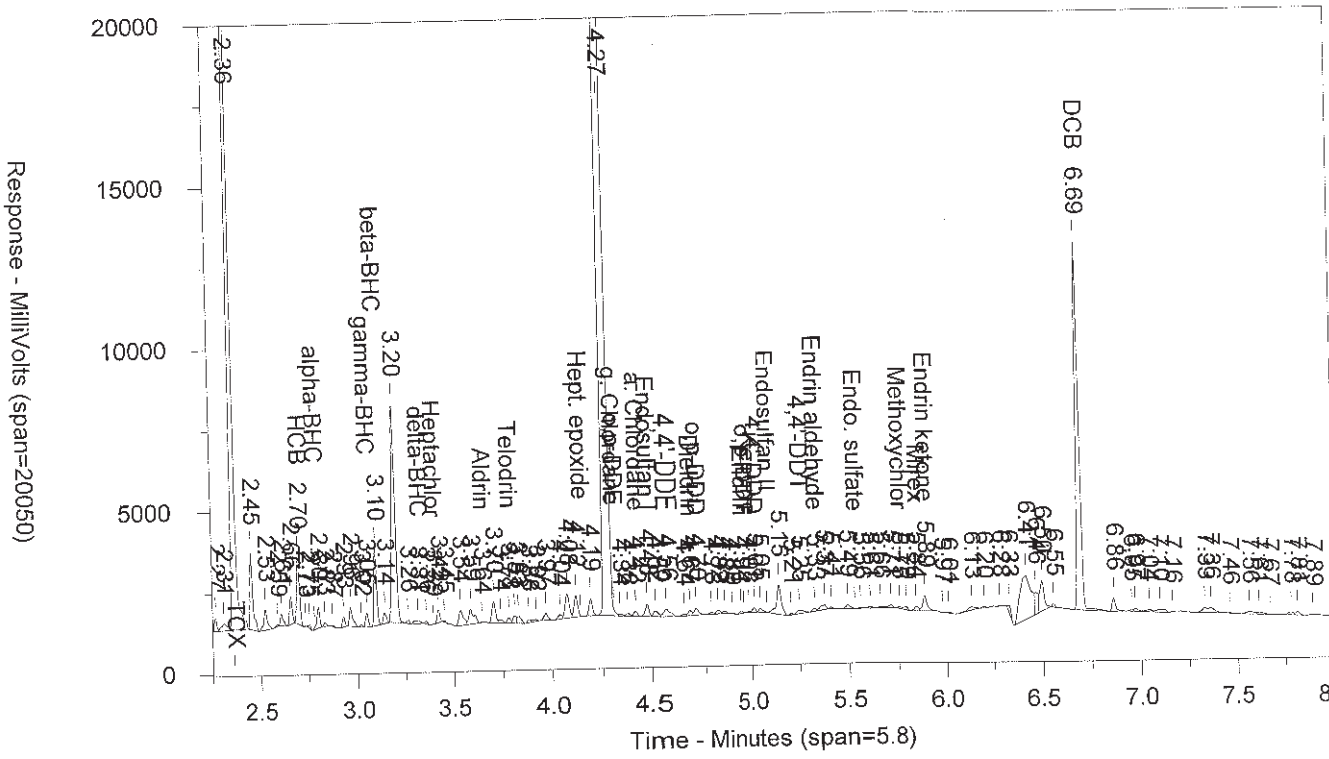

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Data Summary

Sample Name: 9861919 RI F GKP04 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 235 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 09, 2018 23:45:37
Instrument H9190A
Result file 05PEST18306007.050.BND
Calibration file 05PEST1830603
Method file 05PEST18306007

%SSR(TCX) 59% (44 - 124) Conc: 0.188479
%SSR(DCB) * 29% (32 - 149) Conc: 0.09279

Analysis Report (B)

Injected on Nov 09, 2018 23:45:37
Instrument H9190B
Result file 05PEST18306007B.050.BND
Calibration file 05PEST1830603B
Method file 05PEST18306007B

%SSR(TCX) 53% (44 - 124) Conc: 0.171114
%SSR(DCB) * 27% (32 - 149) Conc: 0.085829

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.53	2.55	2.57	8779487	0.188479
HCB	2.81	2.83	2.85	116273	0.002348
Alpha BHC	2.94	2.94	2.98	92002	0.001427
Gamma BHC - Lindane	3.18	3.22	3.22	120937	0.002225
Beta BHC	3.25	3.25	3.29	148848	0.006148
Heptachlor	3.58	3.61	3.62	46922	0.001021
Telodrin	4.03	4.05	4.06	123482	0.004846
Heptachlor Epoxide	4.36	4.40	4.40	16729	0.000444
Gamma Chlordane	4.47	4.50	4.51	60964	0.001638
Alpha Chlordane	4.57	4.60	4.61	26011	0.00069
p,p-DDE	4.63	4.64	4.67	15665	0.000431
o,p-DDD	4.77	4.80	4.81	25276	0.001272
Dieldrin	4.87	4.90	4.91	65682	0.001729
o,p-DDT	4.97	4.97	5.01	91100	0.003776
Endrin	5.05	5.06	5.09	20406	0.000589
Kepone	5.08	5.09	5.12	5910	0.010542
Endosulfan II	5.22	5.22	5.26	46848	0.001463
p,p-DDT	5.31	5.31	5.35	21138	0.000677
Methoxychlor	5.65	5.66	5.69	7486	0.000499
Decachlorobiphenyl	6.67	6.70	6.73	2191837	0.09279

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.34	2.36	2.38	33594284	0.171114
HCB	2.66	2.70	2.70	957702	0.005771
Gamma BHC - Lindane	3.02	3.05	3.06	633453	0.002895
Beta BHC	3.09	3.10	3.13	1619557	0.017618
Delta BHC	3.31	3.35	3.35	125148	0.000628
Heptachlor	3.36	3.38	3.40	60670	0.000352
Aldrin	3.62	3.66	3.66	87359	0.000534
Telodrin	3.76	3.78	3.80	349469	0.004156
Alpha Chlordane	4.40	4.42	4.44	47533	0.000351
Endosulfan I	4.45	4.47	4.48	33625	0.00028
p,p-DDE	4.55	4.55	4.59	269017	0.002032
Dieldrin	4.67	4.68	4.70	48829	0.000359
o,p-DDD	4.70	4.70	4.74	279552	0.004756
Endrin	4.90	4.94	4.94	79894	0.000657
Kepone	4.97	4.99	5.01	103554	0.031558
p,p-DDT	5.23	5.25	5.27	89271	0.000821
Endrin Aldehyde	5.31	5.32	5.35	151355	0.001642
Methoxychlor	5.72	5.75	5.76	38032	0.00075
Mirex	5.83	5.84	5.87	60616	0.000933
Endrin Ketone	5.88	5.89	5.92	309434	0.002743
Decachlorobiphenyl	6.66	6.69	6.72	6297494	0.085829

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.0043	<0.0085	<0.017			
☐	Total Endosulfans (I + II)					<0.0085			
	Tetrachloro-m-xylene	A	0.188479	0.0128	0.0255	0.0255		9.66	
☑	Tetrachloro-m-xylene-D1	A	0.188479	0.0128	0.0255	0.0255			
☑	Tetrachloro-m-xylene-D2	B	0.171114	0.0128	0.0255	0.0255			
☐	HCB			<0.0026	<0.006	<0.0085			
☑	Alpha BHC			<0.0026	<0.006	<0.0085	D1		
✓	Gamma BHC - Lindane	A	0.002225	0.0017	<0.006	<0.0085	JD1	26.17	
☑	Beta BHC	A	0.006148	0.0029	0.006	<0.0085	JPD1	96.52	
☑	Delta BHC			<0.0029	<0.006	<0.0085	D1		
☑	Heptachlor			<0.0017	<0.006	<0.0085	D1		
✓	Aldrin			<0.0017	<0.006	<0.0085	D1		
	Telodrin	A	0.004846			<0.0085	J	15.33	
☐	o,p-DDE			<0.006	<0.0119	<0.017			
☑	Heptachlor Epoxide			<0.002	<0.006	<0.0085	D1		
✓	Gamma Chlordane			<0.006	<0.017	<0.017	D1		
☑	Alpha Chlordane			<0.0026	<0.006	<0.0085	D1		
☑	p,p-DDE			<0.0043	<0.0085	<0.017	D1		
✓	Endosulfan I			<0.0037	<0.0077	<0.0085	D1		
☐	o,p-DDD			<0.0043	<0.0085	<0.017			
✓	Dieldrin			<0.0045	<0.0085	<0.017	D1		

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:36:39

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Data Summary

Sample Name: 9861919 RI F GKP04 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 235 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 09, 2018 23:45:37
Instrument	H9190A
Result file	05PEST18306007.050.BND
Calibration file	05PEST1830603
Method file	05PEST18306007

Analysis Report (B)

Injected on	Nov 09, 2018 23:45:37
Instrument	H9190B
Result file	05PEST18306007B.050.BND
Calibration file	05PEST1830603B
Method file	05PEST18306007B

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐ o,p-DDT			<0.0043	<0.0085	<0.017			
☑ Endrin			<0.0069	<0.017	<0.017	D1		
☐ Kepone					<0.1702			
☑ p,p-DDD			<0.0043	<0.0085	<0.017	D1		
☑ Endosulfan II			<0.0128	<0.0255	<0.0255	D1		
☑ p,p-DDT			<0.0044	<0.0085	<0.017	D1		
☑ Endrin Aldehyde			<0.017	<0.034	<0.0851	D1		
☑ Methoxychlor			<0.0255	<0.0596	<0.0851	D1		
☐ Mirex			<0.0085	<0.034	<0.0426			
☑ Endosulfan Sulfate			<0.0049	<0.0102	<0.017	D1		
☑ Endrin Ketone			<0.0043	<0.0085	<0.017	D1		
☐ Decachlorobiphenyl	A	0.09279	0.0128	0.0255	0.0255		7.79	
☑ Decachlorobiphenyl-D1	A	0.09279	0.0128	0.0255	0.0255			
☑ Decachlorobiphenyl-D2	B	0.085829	0.0128	0.0255	0.0255			

Multiple Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
☑ Chlordane			<0.1362	<0.2723	<0.4255	D1		4	
☑ Toxaphene			<0.2553	<0.5106	<0.8511	D1		4	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L. Tomayko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:36:39

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861919** RI F GKP04 ID: AB **Batchnumber: 182980006A**
Sample Amount: 235 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:45:37
Instrument : CP05--H9190A
Result file : 05pest18306007.050.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.050.BND

%SSR(TCX) : 59% (44-124) Conc.: 0.188479
%SSR(DCB) : *29% (32-149) Conc.: 0.09279

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.53	2.55	2.57	8779487	0.188479
HCB	2.81	2.83	2.85	116273	0.002348
alpha-BHC	2.94	2.94	2.98	92002	0.001427
gamma-BHC	3.18	3.22	3.22	120937	0.002225
beta-BHC	3.25	3.25	3.29	148848	0.006148
Heptachlor	3.58	3.61	3.62	46922	0.001021
Telodrin	4.03	4.05	4.06	123482	0.004846
Hept. epoxide	4.36	4.40	4.40	16729	0.000444
g. Chlordane	4.47	4.50	4.51	60964	0.001638
a. Chlordane	4.57	4.60	4.61	26011	0.000690
4,4'-DDE	4.63	4.64	4.67	15665	0.000431
o,p-DDD	4.77	4.80	4.81	25276	0.001272
Dieldrin	4.87	4.90	4.91	65682	0.001729
o,p-DDT	4.97	4.97	5.01	91100	0.003776
Endrin	5.05	5.06	5.09	20406	0.000589
Kepone	5.08	5.09	5.12	5910	0.010542
Endosulfan II	5.22	5.22	5.26	46848	0.001463
4,4'-DDT	5.31	5.31	5.35	21138	0.000677
Methoxychlor	5.65	5.66	5.69	7486	0.000499
DCB	6.67	6.70	6.73	2191837	0.092790

Analysis Report (B)

Injected on : Nov 09, 2018 23:45:37
Instrument : CP05--H9190B
Result file : 05pest18306007B.050.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.050.BND

%SSR(TCX) : 53% (44-124) Conc.: 0.171114
%SSR(DCB) : *27% (32-149) Conc.: 0.085829

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.34	2.36	2.38	33594284	0.171114
HCB	2.66	2.70	2.70	957702	0.005771
gamma-BHC	3.02	3.05	3.06	633453	0.002895
beta-BHC	3.09	3.10	3.13	1619557	0.017618
delta-BHC	3.31	3.35	3.35	125148	0.000628
Heptachlor	3.36	3.38	3.40	60670	0.000352
Aldrin	3.62	3.66	3.66	87359	0.000534
Telodrin	3.76	3.78	3.80	349469	0.004156
a. Chlordane	4.40	4.42	4.44	47533	0.000351
Endosulfan I	4.45	4.47	4.48	33625	0.000280
4,4'-DDE	4.55	4.55	4.59	269017	0.002032
Dieldrin	4.67	4.68	4.70	48829	0.000359
o,p-DDD	4.70	4.70	4.74	279552	0.004756
Endrin	4.90	4.94	4.94	79894	0.000657
Kepone	4.97	4.99	5.01	103554	0.031558
4,4'-DDT	5.23	5.25	5.27	89271	0.000821
Endrin aldehyde	5.31	5.32	5.35	151355	0.001642
Methoxychlor	5.72	5.75	5.76	38032	0.000750
Mirex	5.83	5.84	5.87	60616	0.000933
Endrin ketone	5.88	5.89	5.92	309434	0.002743
DCB	6.66	6.69	6.72	6297494	0.085829

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	A	0.188479	0.0255	0.0128		9.66	
☐ HCB			<0.0085	<0.0026			
☑ alpha-BHC			<0.0085	<0.0026			
☑ gamma-BHC (A)	B	0.002895	<0.0085	0.0017	J	26.17	BLOSCU
☑ beta-BHC	A	0.006148	<0.0085	0.0029	J	96.52	**
☑ delta-BHC			<0.0085	<0.0029			
☑ Heptachlor			<0.0085	<0.0017			
☑ Aldrin			<0.0085	<0.0017			
☐ Telodrin	A	0.004846	<0.0085			15.34	
☐ o,p-DDE			<0.017	<0.006			
☑ Hept. epoxide			<0.0085	<0.002			
☑ g. Chlordane			<0.017	<0.006			
☑ a. Chlordane			<0.0085	<0.0026			
☑ 4,4'-DDE			<0.017	<0.0043			
☑ Endosulfan I			<0.0085	<0.0037			
☐ o,p-DDD			<0.017	<0.0043			
☑ Dieldrin			<0.017	<0.0045			
☐ o,p-DDT			<0.017	<0.0043			
☑ Endrin			<0.017	<0.0069			
☐ Kepone	A	0.010542	<0.1702			99.84	

Jamie L. Brillhart
Senior Chemist

%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

NOV 13 2018

Printed on: 11/13/2018 12:11:50

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861919** RI F GKP04 ID: AB **Batchnumber: 182980006A**
Sample Amount: 235 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	: Nov 09, 2018 23:45:37
Instrument	: CP05--H9190A
Result file	: 05pest18306007.050.BND
Calibration file	: 05PEST1830603.CAL
Method file	: 05pest18306007.050.BND

Analysis Report (B)

Injected on	: Nov 09, 2018 23:45:37
Instrument	: CP05--H9190B
Result file	: 05pest18306007B.050.BND
Calibration file	: 05PEST1830603B.CAL
Method file	: 05pest18306007B.050.BND

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☑ 4,4'-DDD			<0.017	<0.0043		Outside RT Window A	
☑ Endosulfan II			<0.0255	<0.0128			
☑ 4,4'-DDT			<0.017	<0.0044			
☑ Endrin aldehyde			<0.0851	<0.017			
☑ Methoxychlor			<0.0851	<0.0255			
☐ Mirex			<0.0426	<0.0085			
☑ Endo. sulfate			<0.017	<0.0049			
☑ Endrin ketone			<0.017	<0.0043			
☐ DCB	A	0.092790	0.0255	0.0128		7.79	
☐ Total DDTs	B	0.004756	<0.017	0.0043	J	0.00	
☐ Total DDTs	A	0.004756	<0.017	0.0043	J	0.00	
☐ Total Endosulfans	A	0.000000	<0.0085				

Units: ug/l

Jamie L. Brillhart
Senior Chemist

Reviewed by: _____

Date: NOV 13 2018

Verified by: Valerie L. Tomayko
Principal Specialist

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

Printed on: 11/13/2018 12:11:50

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861919** RI F GKP04 ID: AB **Batchnumber: 182980006A**
Sample Amount: 235 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:45:37
Instrument : CP05--H9190A
Result file : 05pest18306007.050.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.050.BND

%SSR(TCX) : 59% (44-124) Conc.: 0.188479
%SSR(DCB) : *29% (32-149) Conc.: 0.09279

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**136.93**	
2.78	2.83	2.84	116272.75	0.157272			1
3.04	3.05	3.10	23079.5625	0.022221			2
3.20	3.22	3.26	120936.5937	0.395859			3
+ 3.20	3.25	3.26	148847.7031	0.48722			3
3.51	3.53	3.57	1129139.875	1.360643			5
+ 3.56	3.57	3.62	44552.48046	0.079819			6
3.56	3.61	3.62	46921.73437	0.084064			6
Height Summation:			**1436350.515625**				
Amount Avg CF:			**0.404012**	Linear:			
Aroclor-1221					**2**	**60.37**	
2.66	2.68	2.70	126359.8203	0.299872			1
2.80	2.83	2.84	116272.75	0.12045			3
Height Summation:			**242632.570313**				
Amount Avg CF:			**0.210161**	Linear:			
Aroclor-1248					**6**	**132.59**	
3.38	3.40	3.44	32546.99414	0.041082			1
3.66	3.68	3.72	214759.4531	0.495821			2
3.85	3.88	3.91	117872.6640	0.114954			3
4.21	4.26	4.27	111937.6796	0.095898			4
4.39	4.40	4.45	16729.13085	0.021122			5
4.71	4.74	4.77	27274.65429	0.045486			6
Height Summation:			**521120.576172**				
Amount Avg CF:			**0.135727**	Linear:			
Aroclor-1254					**6**	**104.48**	
4.39	4.40	4.45	16729.13085	0.011182			1
4.62	4.64	4.68	15664.77246	0.013994			2
4.71	4.74	4.77	27274.65429	0.013972			3
4.93	4.97	4.99	91099.86718	0.062639			4
5.06	5.09	5.12	5909.593262	0.005903			5
5.27	5.31	5.33	21137.94921	0.013146			6
Height Summation:			**177815.967285**				
Amount Avg CF:			**0.020139**	Linear:			
Aroclor-1260					**5**	**116.23**	
+ 4.85	4.86	4.91	268961.1562	0.195733			1
4.85	4.90	4.91	65682.17187	0.047799			1
5.06	5.09	5.12	5909.593262	0.003184			2
5.27	5.31	5.33	21137.94921	0.010825			3
5.53	5.57	5.59	12652.06933	0.01159			4
5.94	5.97	6.00	132527.2187	0.099385			6
Height Summation:			**237909.002441**				
Amount Avg CF:			**0.034557**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:45:37
Instrument : CP05--H9190B
Result file : 05pest18306007B.050.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.050.BND

%SSR(TCX) : 53% (44-124) Conc.: 0.171114
%SSR(DCB) : *27% (32-149) Conc.: 0.085829

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**86.29**	
+ 2.66	2.66	2.72	715030.3125	0.316701			1
2.66	2.70	2.72	957702.375	0.424185			1
2.93	2.99	2.99	247435.5781	0.079091			2
3.11	3.14	3.17	679059.3125	0.521031			3
3.37	3.38	3.43	60669.86718	0.022107			5
3.46	3.48	3.52	372071.9062	0.205972			6
Height Summation:			**2316939.039063**				
Amount Avg CF:			**0.250477**	Linear:			
Aroclor-1221					**2**	**61.09**	
2.63	2.66	2.67	715030.3125	0.896855			2
2.67	2.70	2.71	957702.375	0.355744			3
Height Summation:			**1672732.6875**				
Amount Avg CF:			**0.626299**	Linear:			
Aroclor-1248					**6**	**89.35**	
3.27	3.27	3.33	1448188	0.522089			1
3.53	3.53	3.59	788122.3125	0.299263			2
3.75	3.78	3.81	349469.3437	0.106397			3
+ 3.75	3.81	3.81	319070.8437	0.097142			3
3.85	3.90	3.91	209239.6406	0.076309			4
4.11	4.12	4.17	867178.3125	0.228838			5
+ 4.11	4.17	4.17	252727.4687	0.066692			5
4.30	4.34	4.36	43163.11718	0.014471			6
Height Summation:			**3705360.726563**				
Amount Avg CF:			**0.207894**	Linear:			
Aroclor-1254					**6**	**198.51**	
4.11	4.12	4.17	867178.3125	0.236924			1
+ 4.11	4.17	4.17	252727.4687	0.069048			1
4.27	4.27	4.33	7033322	1.702498			2
+ 4.64	4.64	4.70	176639.3281	0.029591			3
4.64	4.68	4.70	48829.40234	0.00818			3
+ 4.81	4.82	4.87	49310.67968	0.011513			4
4.81	4.85	4.87	97907.57812	0.022859			4
5.07	5.12	5.13	142586.25	0.045279			5
+ 5.21	5.21	5.27	65246.41796	0.014335			6
+ 5.21	5.22	5.27	46847.83984	0.010293			6
5.21	5.25	5.27	89270.96875	0.019614			6
Height Summation:			**8279094.511719**				
Amount Avg CF:			**0.339226**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861919** RI F GKP04 ID: AB **Batchnumber: 182980006A**
Sample Amount: 235 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:45:37
Instrument : CP05--H9190A
Result file : 05pest18306007.050.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.050.BND

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**6**	**197.58**	
3.50	3.53	3.56	1129139.875	0.869535			1
3.94	3.99	4.00	94350.30468	0.072175			2
4.29	4.30	4.35	59918.52343	0.070785			3
4.45	4.50	4.51	60963.73828	0.015584			4
4.55	4.60	4.61	26011.17187	0.004808			5
5.15	5.18	5.22	9120.375	0.007052			6
Height Summation:			**1379503.988281**				
Amount Avg CF:			**0.173323**	Linear:			
Toxaphene					**6**	**74.39**	
5.06	5.09	5.12	5909.593262	0.010518			1
5.20	5.22	5.26	46847.83984	0.053205			2
5.20	5.22	5.26	46847.83984	0.053205			2
5.29	5.31	5.35	21137.94921	0.02657			3
5.45	5.51	5.51	61012.67578	0.075399			4
5.68	5.70	5.74	3357.597412	0.004802			5
+ 5.68	5.74	5.74	29238.0625	0.04182			5
Height Summation:			**185113.495361**				
Amount Avg CF:			**0.037283**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:45:37
Instrument : CP05--H9190B
Result file : 05pest18306007B.050.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.050.BND

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1260					**5**	**77.05**	
4.79	4.82	4.85	49310.67968	0.012029			1
4.95	4.99	5.01	103553.5312	0.021163			2
+ 5.21	5.21	5.27	65246.41796	0.012838			3
+ 5.21	5.22	5.27	46847.83984	0.009218			3
5.21	5.25	5.27	89270.96875	0.017566			3
5.48	5.50	5.54	152718.5781	0.047768			4
5.65	5.66	5.71	38862.33593	0.005922			5
+ 5.65	5.71	5.71	106417.1796	0.016216			5
Height Summation:			**433716.09375**				
Amount Avg CF:			**0.020889**	Linear:			
Chlordane					**6**	**94.52**	
3.23	3.27	3.29	1448188	0.301291			1
3.74	3.78	3.80	349469.3437	0.076421			2
4.08	4.12	4.14	867178.3125	0.265536			3
4.27	4.27	4.33	7033322	0.451177			4
4.39	4.42	4.45	47532.86718	0.004035			5
5.08	5.12	5.14	142586.25	0.032288			6
Height Summation:			**9888276.773438**				
Amount Avg CF:			**0.188458**	Linear:			
Toxaphene					**6**	**18.71**	
+ 4.64	4.64	4.70	176639.3281	0.107766			1
4.64	4.68	4.70	48829.40234	0.02979			1
4.87	4.90	4.93	84528.08593	0.049947			2
5.04	5.05	5.10	115234.1640	0.037571			3
5.31	5.32	5.37	151355.1718	0.045275			4
+ 5.31	5.35	5.37	43914.50390	0.013136			4
5.36	5.41	5.42	70917.72656	0.03612			5
5.66	5.71	5.72	106417.1796	0.035496			6
Height Summation:			**577281.730469**				
Amount Avg CF:			**0.039033**	Linear:			

LMnc

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 46.92	4	40	
Aroclor-1221			0	0		** 99.50	3	5	
Aroclor-1248			0	0		** 42.00	4	30	
Aroclor-1254			0	0		** 177.58	4	40	
Aroclor-1260			0	0		** 49.30	4	40	
Chlordane			0.4255	0.1362		8.37	4	40	(B) A 05 ICV
Toxaphene			0.8511	0.2553		4.59	4		

Units: ug/l

Jamie L. Brillhart
Senior Chemist

NOV 13 2018

9861919 RI F ABGKP04 T 182980006A 10589 SW-846 8081B

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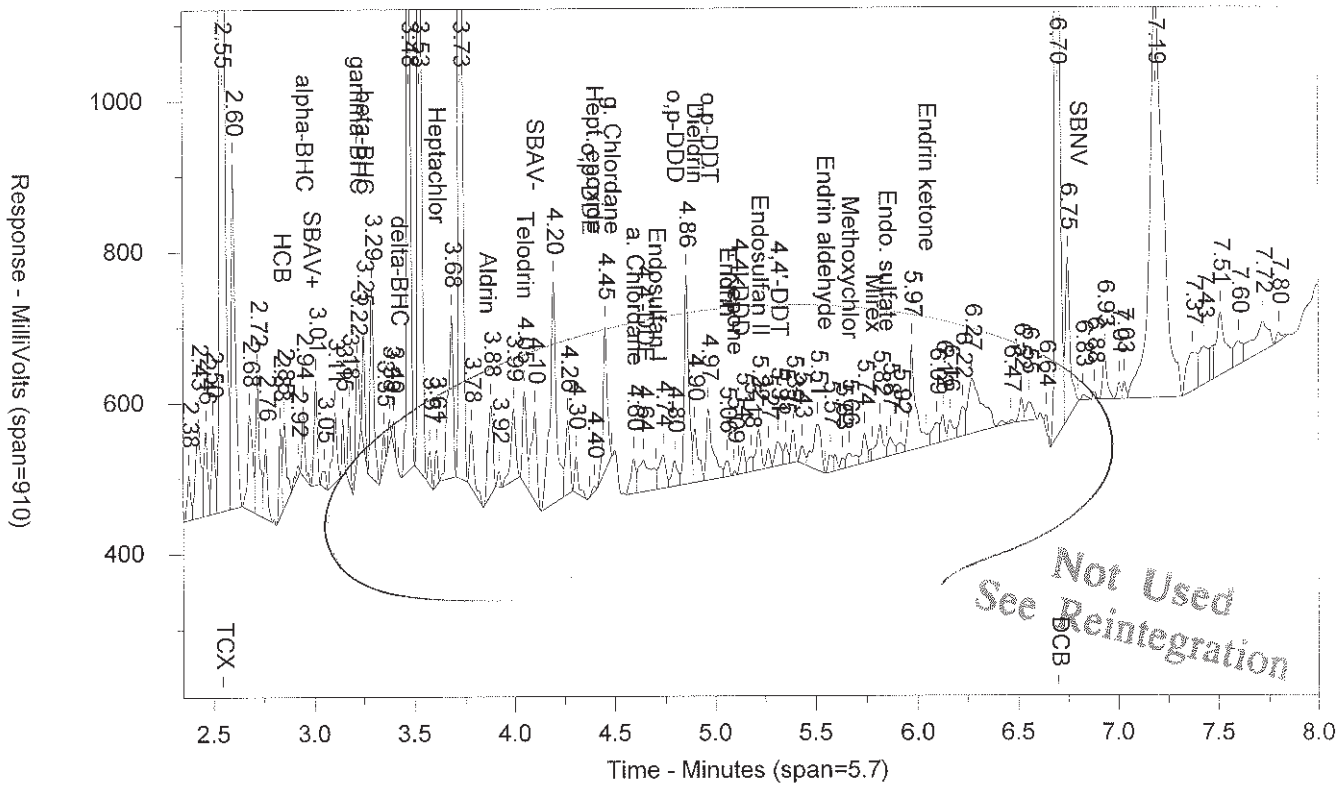

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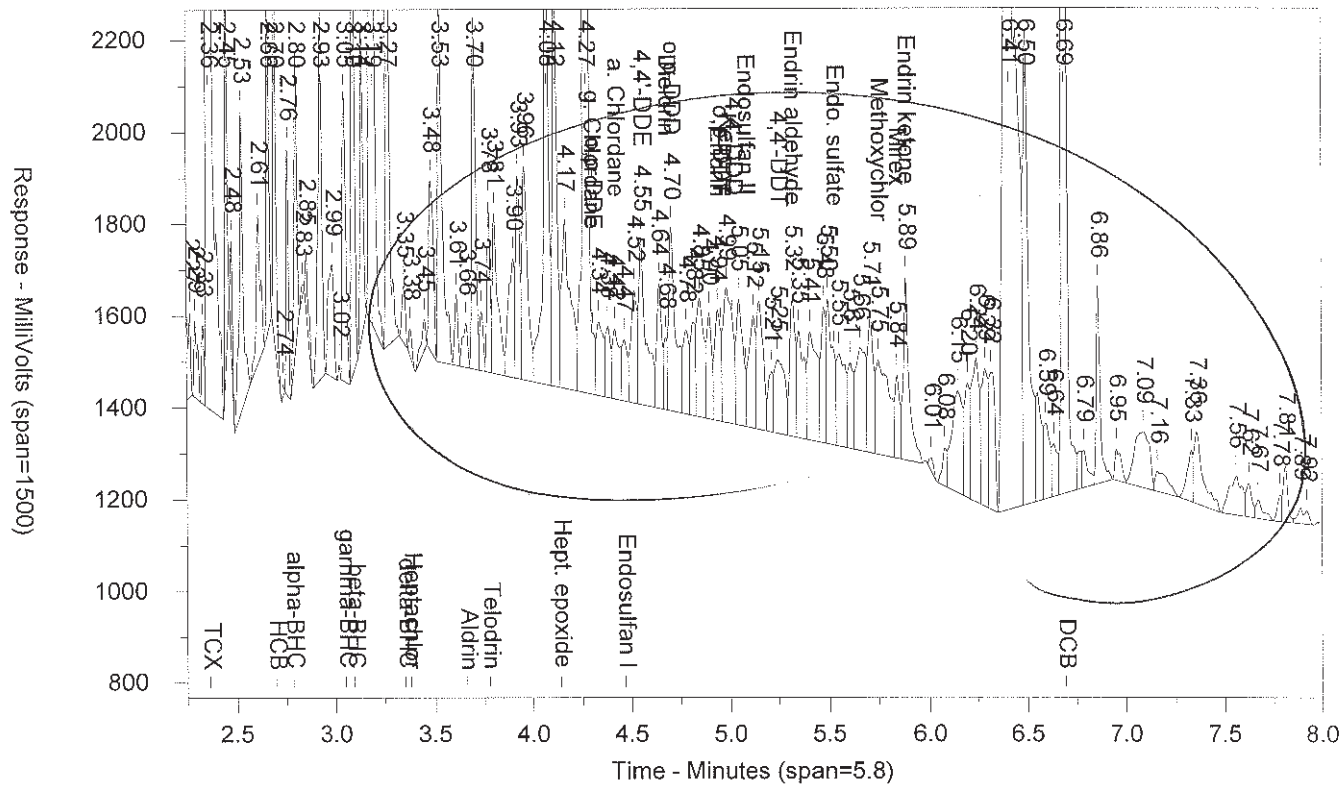

LANCASTER LABORATORIES

Sample Number: 9861919 RI F ABGKP04 T 182980006A 10589 SW-846 8081B
Injected On: 11/9/2018 11:45:37 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: 235
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
2.546	8779487	.188	TCX	2.363	33594280	.171	TCX
2.83	116273	.002	HCB	2.695	957702	.006	HCB
2.944	92002	.001	alpha-BHC		0		alpha-BHC
3.219	120937	.002	gamma-BHC	3.049	633453	.003	gamma-BHC
3.25	148848	.006	beta-BHC	3.097	1619557	.018	beta-BHC
	0		delta-BHC	3.351	125148	.001	delta-BHC
3.607	46922	.001	Heptachlor	3.381	60670		Heptachlor
	0		Aldrin	3.661	96678	.001	Aldrin
4.049	123483	.005	Telodrin	3.778	372974	.004	Telodrin
4.395	7995		Hept. epoxide		0		Hept. epoxide
4.596	46107	.001	a. Chlordane	4.421	152528	.001	a. Chlordane
	0		Endosulfan I	4.469	133268	.001	Endosulfan I
4.642	42296	.001	4,4'-DDE	4.554	360928	.003	4,4'-DDE
4.899	71394	.002	Dieldrin	4.677	156924	.001	Dieldrin
4.796	34028	.002	o,p-DDD	4.705	398943	.007	o,p-DDD
5.057	21195	.001	Endrin	4.941	240746	.002	Endrin
4.966	94730	.004	o,p-DDT		0		o,p-DDT
5.095	6126	.011	Kepone	4.986	292305	.035	Kepone
5.217	53722	.002	Endosulfan II		0		Endosulfan II
5.313	32020	.001	4,4'-DDT	5.247	158958	.001	4,4'-DDT
	0		Endrin aldehyde	5.321	297833	.003	Endrin aldehyde
5.665	18036	.001	Methoxychlor	5.752	204518	.004	Methoxychlor
	0		Mirex	5.844	179317	.003	Mirex
	0		Endrin ketone	5.888	397293	.004	Endrin ketone
6.702	2191837	.093	DCB	6.691	6372512	.087	DCB

Files:
Area File: 05pest18306007.050.RAW
Area File: 05pest18306007B.050.RAW
Method A: 05PESTD.MET
Method B: 05PESTDB.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 11:53:38 PM
File Reported On: 11/13/2018 at 3:56:27 AM

Not Used
See Reintegration

9861919 RI F ABGKP04 T 182980006A 10589 SW-846 8081B

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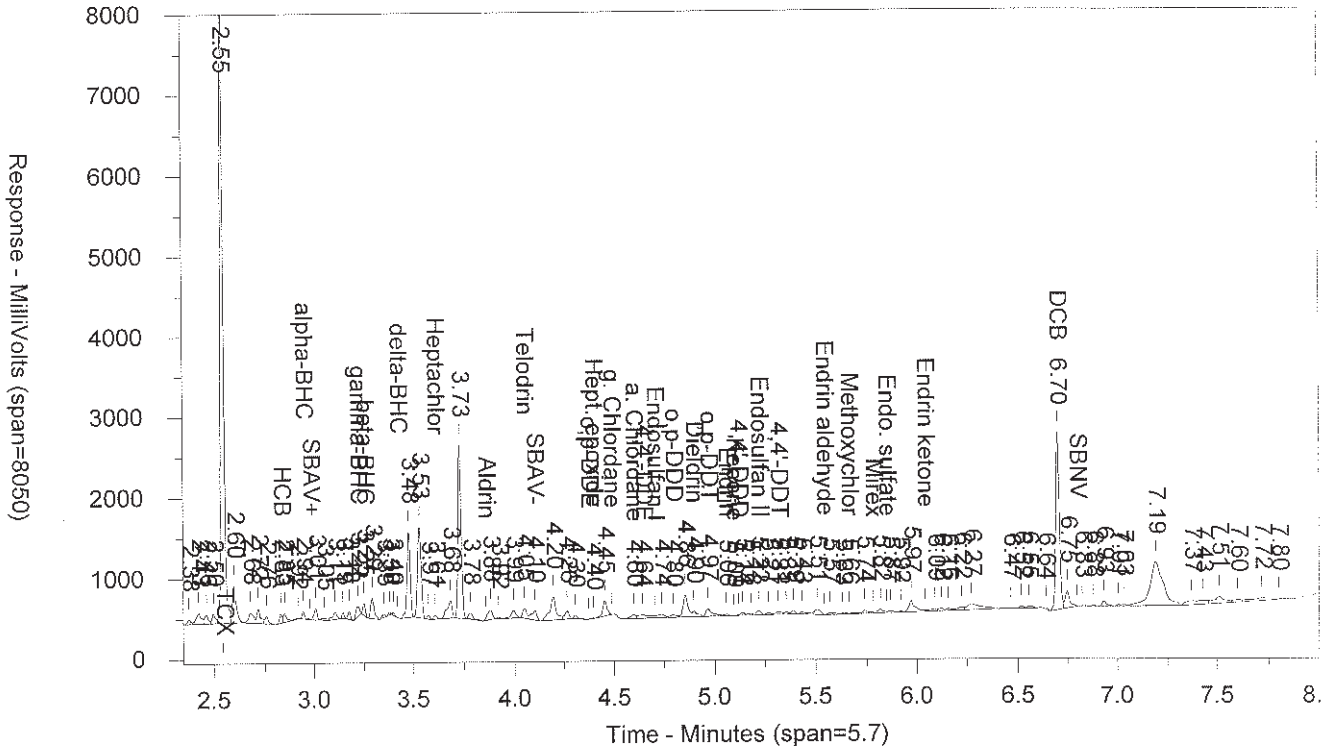

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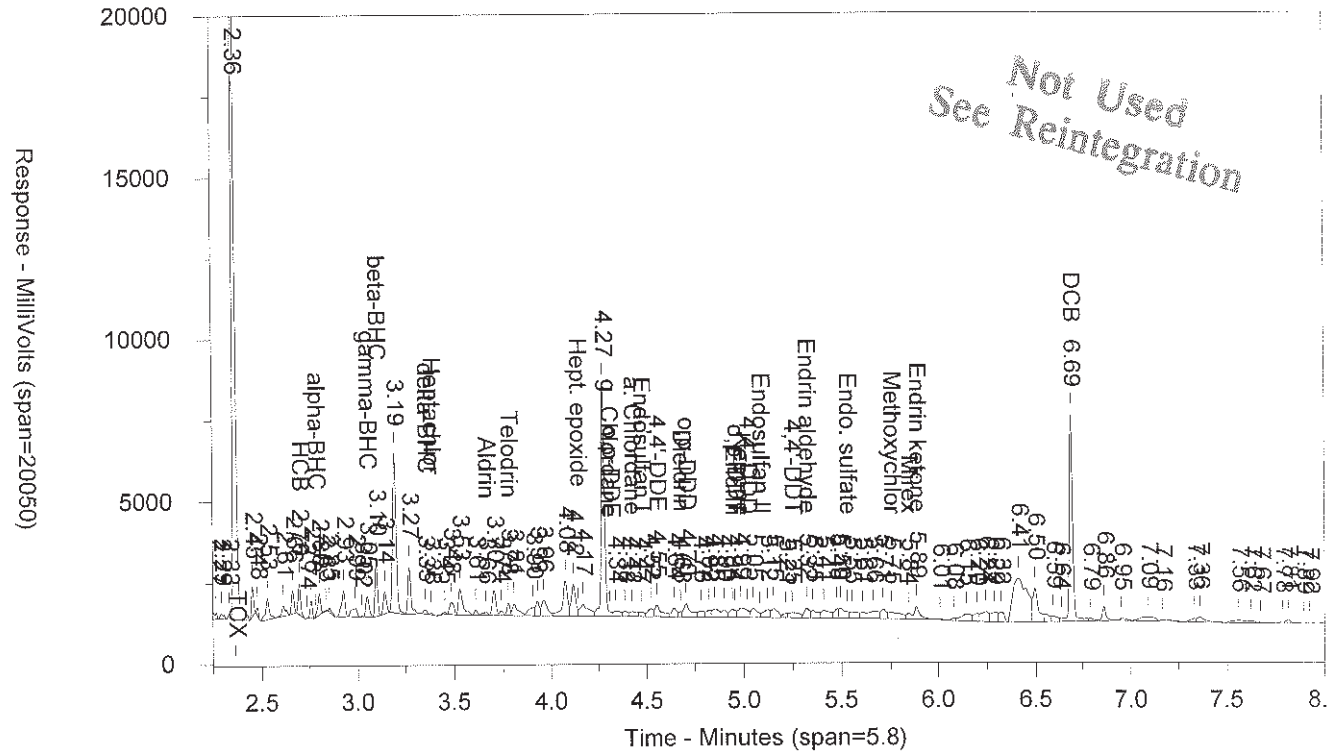

9861919 RI F ABGKP04 T 182980006A 10589 SW-846 8081B

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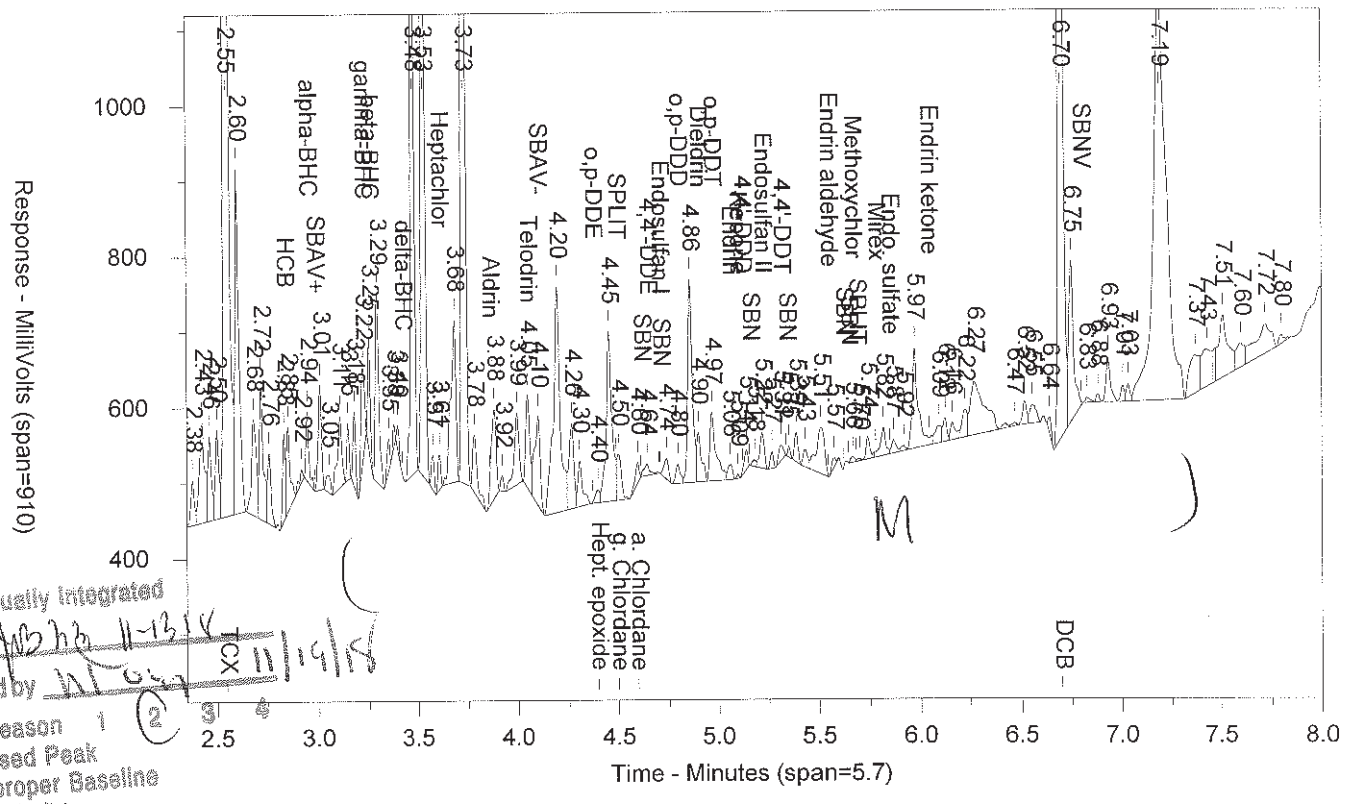

M = Manually Integrated

Analyst

Approved by

Circle Reason
1 = Missed Peak
2 = Improper Baseline
3 = RT Update
4 = Other

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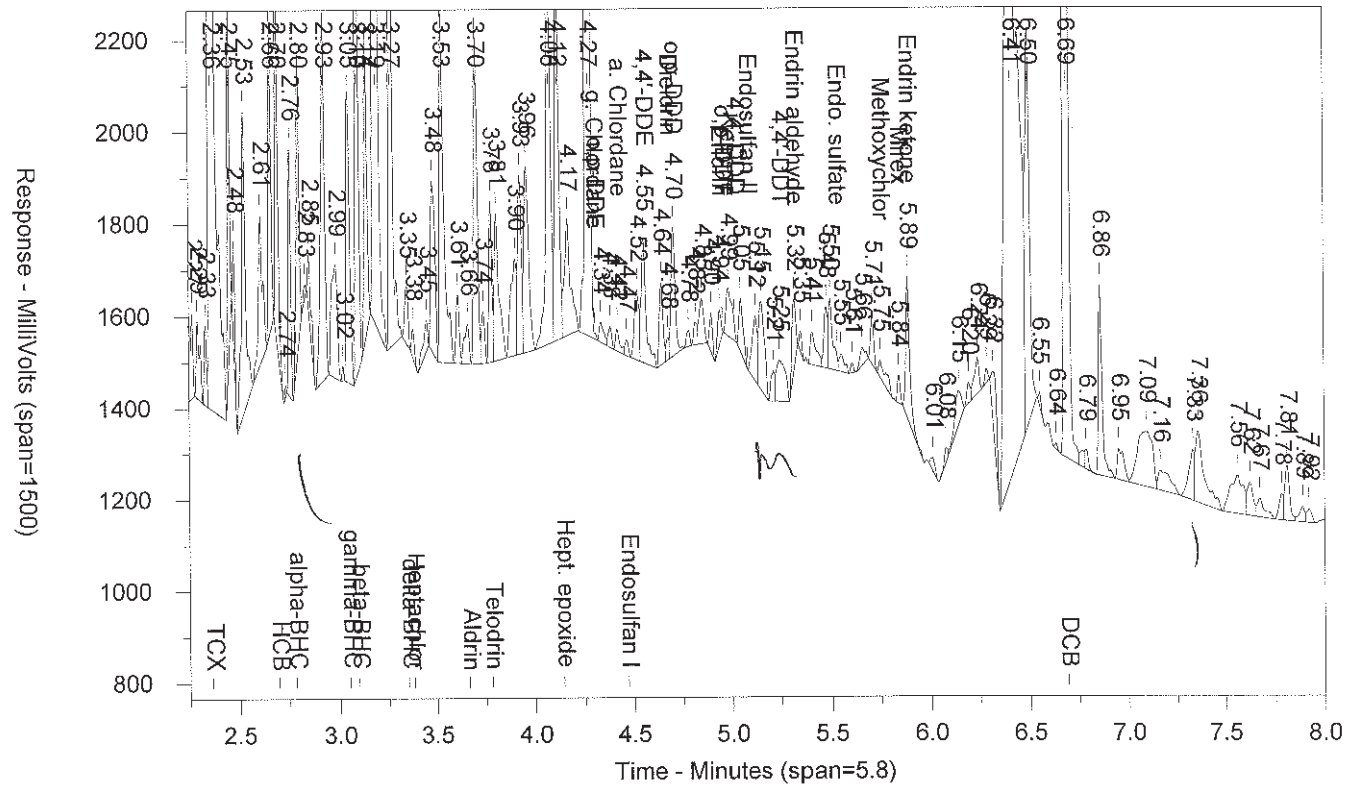


LANCASTER LABORATORIES

Sample Number: 9861919 RI F ABGKP04 T 182980006A 10589 SW-846 8081B
Injected On: 11/9/2018 11:45:37 PM Sample Weight: 235
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 ui

Threshold: 7
Calibration Type: external
Quantitation: Height

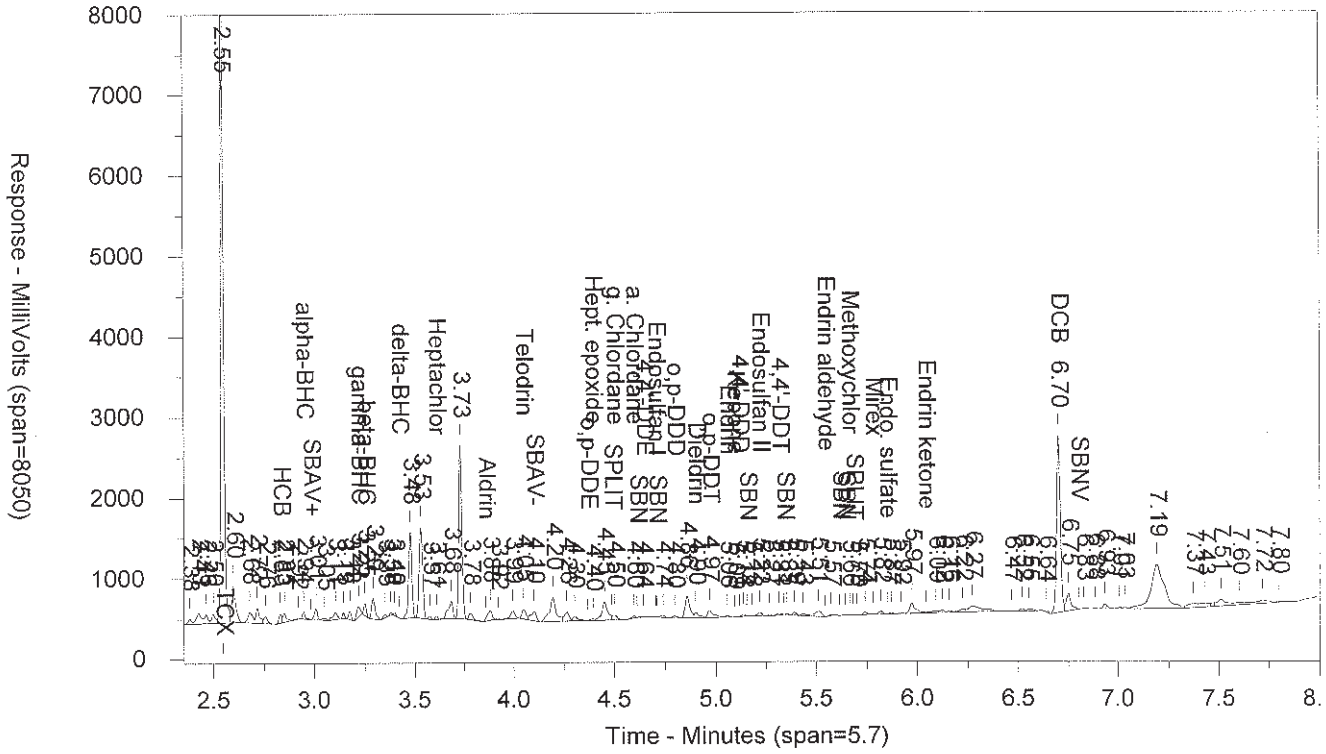
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.546	8779487	.188	TCX	2.363	33594280	.171	TCX
2.83	116273	.002	HCB	2.695	957702	.006	HCB
2.944	92002	.001	alpha-BHC		0		alpha-BHC
3.219	120937	.002	gamma-BHC	3.049	633453	.003	gamma-BHC
3.25	148848	.006	beta-BHC	3.097	1619557	.018	beta-BHC
	0		delta-BHC	3.351	125148	.001	delta-BHC
3.607	46922	.001	Heptachlor	3.381	60670		Heptachlor
	0		Aldrin	3.661	87359	.001	Aldrin
4.049	123483	.005	Telodrin	3.778	349469	.004	Telodrin
4.395	16729		Hept. epoxide		0		Hept. epoxide
4.596	26011	.001	a. Chlordane	4.421	47533		a. Chlordane
	0		Endosulfan I	4.469	33625		Endosulfan I
4.5	60964	.002	g. Chlordane		0		g. Chlordane
4.642	15665		4,4'-DDE	4.554	269017	.002	4,4'-DDE
4.899	65682	.002	Dieldrin	4.677	48829		Dieldrin
4.796	25276	.001	o,p-DDD	4.705	279552	.005	o,p-DDD
5.057	20406	.001	Endrin	4.941	79894	.001	Endrin
4.966	91100	.004	o,p-DDT		0		o,p-DDT
5.095	5910	.011	Kepone	4.986	103554	.032	Kepone
5.217	46848	.001	Endosulfan II		0		Endosulfan II
5.313	21138	.001	4,4'-DDT	5.247	89271	.001	4,4'-DDT
	0		Endrin aldehyde	5.321	151355	.002	Endrin aldehyde
5.665	7486		Methoxychlor	5.752	38032	.001	Methoxychlor
	0		Mirex	5.844	60616	.001	Mirex
	0		Endrin ketone	5.888	309434	.003	Endrin ketone
6.702	2191837	.093	DCB	6.691	6297494	.086	DCB

Files:
Area File: 05pest18306007.050.BND
Area File: 05pest18306007B.050.BND
Method A: 05pest18306007.050.BND
Method B: 05pest18306007B.050.BND
Calibration File A: 05pest18306007.050.BND
Calibration File B: 05pest18306007B.050.BND
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/13/2018 11:39:14 AM
File Reported On: 11/13/2018 at 11:39:44 AM

9861919 RI F ABGKP04 T 182980006A 10589 SW-846 8081B

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.050.BND



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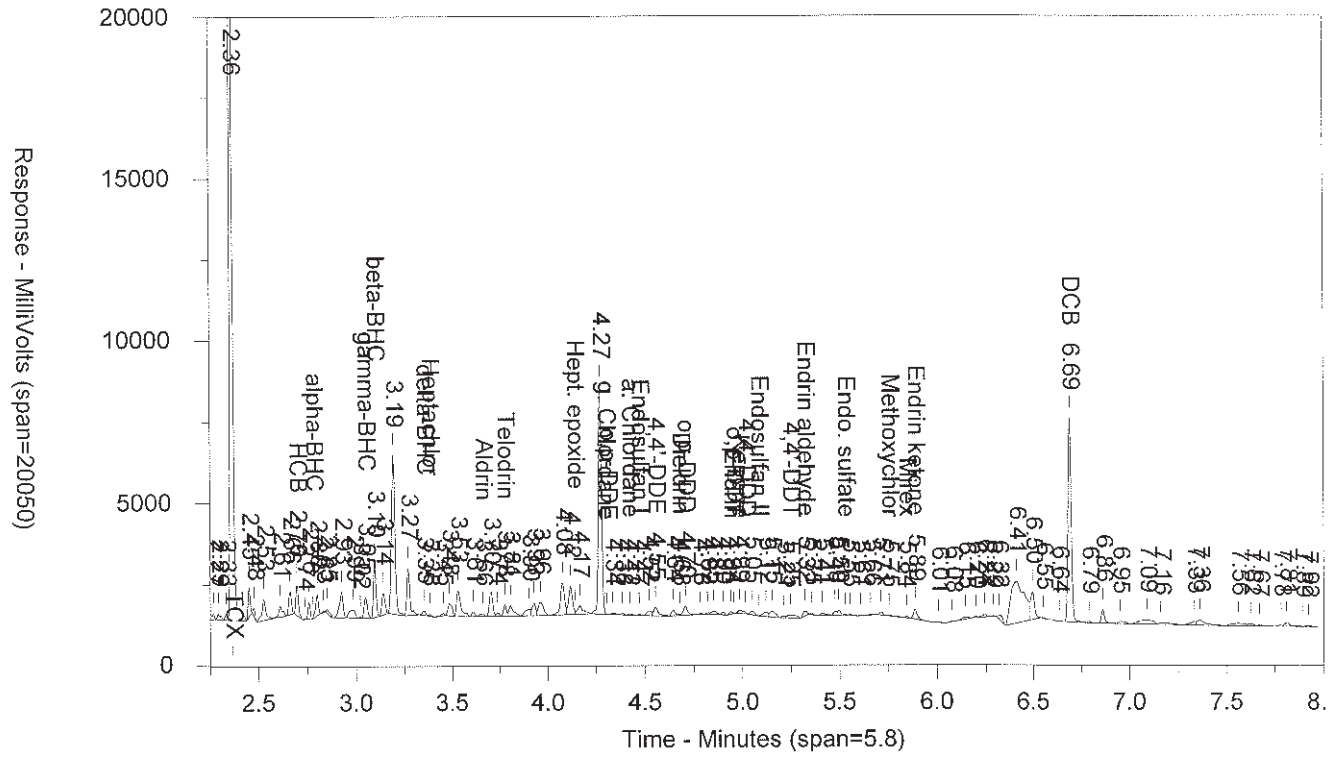

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Data Summary

Sample Name: 9861919R F GKP04 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 229 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 15, 2018 13:14:53
Instrument H9147A
Result file 06PEST18261045.014.RAW
Calibration file 06PEST1826103
Method file 06PESTD

%SSR(TCX) * 40% (44 - 124) Conc: 0.130872
%SSR(DCB) 47% (32 - 149) Conc: 0.153881

Analysis Report (B)

Injected on Nov 15, 2018 13:14:53
Instrument H9147B
Result file 06PEST18261045B.014.RAW
Calibration file 06PEST1826103B
Method file 06PESTDB

%SSR(TCX) * 42% (44 - 124) Conc: 0.137535
%SSR(DCB) 55% (32 - 149) Conc: 0.179111

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	1.80	1.81	1.84	466859	0.130872
Alpha BHC	2.34	2.36	2.38	10327	0.001707
Beta BHC	2.92	2.95	2.96	5742	0.002009
Delta BHC	3.20	3.22	3.24	8666	0.001415
Dieldrin	4.40	4.41	4.44	5948	0.000989
o,p-DDD	4.46	4.47	4.50	6042	0.001757
p,p-DDT	4.96	4.98	5.00	11009	0.002431
Endrin Aldehyde	5.04	5.07	5.07	5564	0.001181
Methoxychlor	5.46	5.50	5.50	5276	0.002338
Decachlorobiphenyl	6.36	6.38	6.42	667196	0.153881

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.60	2.60	2.64	1306873	0.137535
Alpha BHC	3.00	3.03	3.04	27141	0.001837
Beta BHC	3.59	3.61	3.63	16000	0.002269
Heptachlor	3.90	3.90	3.94	20744	0.001411
Aldrin	4.18	4.19	4.22	48284	0.003343
Telodrin	4.29	4.32	4.33	40074	0.004337
o,p-DDE	4.68	4.69	4.72	8201	0.000994
Alpha Chlordane	4.84	4.87	4.88	67842	0.005105
p,p-DDE	4.95	4.99	4.99	17677	0.001351
o,p-DDD	5.03	5.03	5.07	19352	0.002616
Dieldrin	5.07	5.10	5.11	5499	0.000394
Endrin	5.25	5.29	5.29	20537	0.001785
p,p-DDD	5.34	5.35	5.38	9464	0.000897
Endosulfan II	5.44	5.44	5.48	18581	0.001531
Methoxychlor	5.87	5.91	5.91	12698	0.002722
Decachlorobiphenyl	7.03	7.04	7.09	1213100	0.179111

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.0109	<0.0218	<0.0437			
☐	Total Endosulfans (I + II)					<0.0218			
☐	Tetrachloro-m-xylene	B	0.137535	0.0328	0.0655	0.0655		4.96	
☑	Tetrachloro-m-xylene-D1	A	0.130872	0.0328	0.0655	0.0655			
☑	Tetrachloro-m-xylene-D2	B	0.137535	0.0328	0.0655	0.0655			
☐	HCB			<0.0066	<0.0153	<0.0218			
☑	Alpha BHC			<0.0066	<0.0153	<0.0218	D1		
☑	Gamma BHC - Lindane			<0.0044	<0.0153	<0.0218	D1		
☑	Beta BHC			<0.0074	<0.0153	<0.0218	D1		
☑	Heptachlor			<0.0044	<0.0153	<0.0218	D1		
☑	Delta BHC			<0.0074	<0.0153	<0.0218	D2		
☑	Aldrin			<0.0044	<0.0153	<0.0218	D1		
☐	Telodrin					<0.0218			
☑	Heptachlor Epoxide			<0.005	<0.0153	<0.0218	D1		
☑	Gamma Chlordane			<0.0153	<0.0437	<0.0437	D1		
☐	o,p-DDE			<0.0153	<0.0306	<0.0437			
☑	Alpha Chlordane			<0.0066	<0.0153	<0.0218	D1		
☑	Endosulfan I			<0.0094	<0.0197	<0.0218	D1		
☑	p,p-DDE			<0.0109	<0.0218	<0.0437	D1		
☑	Dieldrin			<0.0116	<0.0218	<0.0437	D2		
☐	o,p-DDD			<0.0109	<0.0218	<0.0437			
☑	Endrin			<0.0177	<0.0437	<0.0437	D1		
☐	o,p-DDT			<0.0111	<0.0218	<0.0437			
☐	Kepone					<0.4367			
☑	p,p-DDD			<0.0109	<0.0218	<0.0437	D1		
☑	Endosulfan II			<0.0328	<0.0655	<0.0655	D1		

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:10

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Data Summary

Sample Name: 9861919R F GKP04 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 229 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 15, 2018 13:14:53
Instrument H9147A
Result file 06PEST18261045.014.RAW
Calibration file 06PEST1826103
Method file 06PESTD

Analysis Report (B)

Injected on Nov 15, 2018 13:14:53
Instrument H9147B
Result file 06PEST18261045B.014.RAW
Calibration file 06PEST1826103B
Method file 06PESTDB

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
✓	p,p-DDT			<0.0114	<0.0218	<0.0437	D2		
✓	Endrin Aldehyde			<0.0437	<0.0873	<0.2183	D2		
✓	Endosulfan Sulfate			<0.0127	<0.0262	<0.0437	D1		
✓	Methoxychlor			<0.0655	<0.1528	<0.2183	D1		
✓	Endrin Ketone			<0.0109	<0.0218	<0.0437	D1		
	Mirex			<0.0218	<0.0873	<0.1092			
	Decachlorobiphenyl	B	0.179111	0.0328	0.0655	0.0655		15.15	
✓	Decachlorobiphenyl-D1	A	0.153881	0.0328	0.0655	0.0655			
✓	Decachlorobiphenyl-D2	B	0.179111	0.0328	0.0655	0.0655			

Multiple Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
✓	Chlordane			<0.3493	<0.6987	<1.0917	D1		5	
✓	Toxaphene			<0.655	<1.31	<2.1834	D1		5	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L. Tomayko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:10

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861919R** F GKP04 ID: AB **Batchnumber: 183180015A**
Sample Amount: 229 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:14:53
Instrument : CP06--H9147A
Result file : 06PEST18261045.014.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

%SSR(TCX) : *40% (44-124) Conc.: 0.130872
%SSR(DCB) : 47% (32-149) Conc.: 0.153881

Peak name	Min	R.T.	Max	Height	Amount
TCX	1.80	1.81	1.84	466859	0.130872
alpha-BHC	2.34	2.36	2.38	10327	0.001707
beta-BHC	2.92	2.95	2.96	5742	0.002009
delta-BHC	3.20	3.22	3.24	8666	0.001415
Dieldrin	4.40	4.41	4.44	5948	0.000989
o,p-DDD	4.46	4.47	4.50	6042	0.001757
4,4'-DDT	4.96	4.98	5.00	11009	0.002431
Endrin aldehyde	5.04	5.07	5.07	5564	0.001181
Methoxychlor	5.46	5.50	5.50	5276	0.002338
DCB	6.36	6.38	6.42	667196	0.153881

Analysis Report (B)

Injected on : Nov 15, 2018 13:14:53
Instrument : CP06--H9147B
Result file : 06PEST18261045B.014.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

%SSR(TCX) : *42% (44-124) Conc.: 0.137535
%SSR(DCB) : 55% (32-149) Conc.: 0.179111

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.60	2.60	2.64	1306873	0.137535
alpha-BHC	3.00	3.03	3.04	27141	0.001837
beta-BHC	3.59	3.61	3.63	16000	0.002269
Heptachlor	3.90	3.90	3.94	20744	0.001411
Aldrin	4.18	4.19	4.22	48284	0.003343
Telodrin	4.29	4.32	4.33	40074	0.004337
o,p-DDE	4.68	4.69	4.72	8201	0.000994
a. Chlordane	4.84	4.87	4.88	67842	0.005105
4,4'-DDE	4.95	4.99	4.99	17677	0.001351
o,p-DDD	5.03	5.03	5.07	19352	0.002616
Dieldrin	5.07	5.10	5.11	5499	0.000394
Endrin	5.25	5.29	5.29	20537	0.001785
4,4'-DDD	5.34	5.35	5.38	9464	0.000897
Endosulfan II	5.44	5.44	5.48	18581	0.001531
Methoxychlor	5.87	5.91	5.91	12698	0.002722
DCB	7.03	7.04	7.09	1213100	0.179111

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	B	0.137535	0.0655	0.0328		4.96	
☐ HCB			<0.0218	<0.0066			
☑ alpha-BHC			<0.0218	<0.0066			
☑ gamma-BHC			<0.0218	<0.0044			
☑ beta-BHC			<0.0218	<0.0074			
☑ Heptachlor			<0.0218	<0.0044			
☑ delta-BHC			<0.0218	<0.0074			
☑ Aldrin			<0.0218	<0.0044			
☐ Telodrin			<0.0218				
☑ Hept. epoxide			<0.0218	<0.005			
☑ g. Chlordane			<0.0437	<0.0153			
☐ o,p-DDE			<0.0437	<0.0153			
☑ a. Chlordane			<0.0218	<0.0066			
☑ Endosulfan I			<0.0218	<0.0094			
☑ 4,4'-DDE			<0.0437	<0.0109			
☑ Dieldrin			<0.0437	<0.0116			
☐ o,p-DDD			<0.0437	<0.0109			
☑ Endrin			<0.0437	<0.0177			
☐ o,p-DDT			<0.0437	<0.0111			
☐ Kepone			<0.4367				
☑ 4,4'-DDD			<0.0437	<0.0109			
☑ Endosulfan II			<0.0655	<0.0328			
☑ 4,4'-DDT			<0.0437	<0.0114			
☑ Endrin aldehyde			<0.2183	<0.0437			
☑ Endo. sulfate			<0.0437	<0.0127			

%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-Single Component Data Summary

Sample Name: **9861919R** F GKP04 ID: AB **Batchnumber: 183180015A**
Sample Amount: 229 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:14:53
Instrument : CP06--H9147A
Result file : 06PEST18261045.014.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

Analysis Report (B)

Injected on : Nov 15, 2018 13:14:53
Instrument : CP06--H9147B
Result file : 06PEST18261045B.014.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☑ Methoxychlor			<0.2183	<0.0655			
☑ Endrin ketone			<0.0437	<0.0109			
☐ Mirex			<0.1092	<0.0218			
☐ DCB	B	0.179111	0.0655	0.0328		15.15	
☐ Total DDTs			<0.0437	<0.0109			
☐ Total Endosulfans	A	0.000000	<0.0218				

Units: ug/l

Reviewed by: DSS 15222
Date: 11/16/18

Verified by: Valerie L Tomayko
Valerie L Tomayko
Principal Specialist
Date: NOV 19 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: **9861919R** F GKP04 ID: AB **Batchnumber: 183180015A**
Sample Amount: 229 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:14:53
Instrument : CP06--H9147A
Result file : 06PEST18261045.014.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET
%SSR(TCX) : *40% (44-124) Conc.: 0.130872
%SSR(DCB) : 47% (32-149) Conc.: 0.153881

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**4**	**51.88**	
+ 2.60	2.60	2.66	17306.83	0.153051			2
2.60	2.66	2.66	38836.51	0.343446			2
2.82	2.87	2.88	21060.16	0.333013			3
3.13	3.17	3.19	11694.28	0.1029			5
3.25	3.27	3.31	13973.26	0.159639			6
+ 3.25	3.31	3.31	2371.958	0.027099			6
Height Summation:			**85564.21**				
Amount Avg CF:				**0.234749** Linear:			
Aroclor-1221					**1**		
2.08	2.12	2.14	12199.85	0.259271			1
Height Summation:			**12199.85**				
Amount Avg CF:				**0.259271** Linear:			
Aroclor-1248					**5**	**78.55**	
3.34	3.40	3.40	19195.17	0.227406			2
3.55	3.56	3.61	13876.45	0.093096			3
3.68	3.74	3.74	14307.39	0.119605			4
3.90	3.92	3.96	2888.466	0.01546			5
4.40	4.41	4.46	5947.695	0.055405			6
Height Summation:			**56215.171**				
Amount Avg CF:				**0.102194** Linear:			
Aroclor-1254					**4**	**51.24**	
3.91	3.92	3.97	2888.466	0.015044			1
4.40	4.41	4.46	5947.695	0.015187			4
4.57	4.63	4.63	4349.426	0.017312			5
4.94	4.98	5.00	11008.56	0.037549			6
Height Summation:			**24194.147**				
Amount Avg CF:				**0.021273** Linear:			
Aroclor-1260					**3**	**59.92**	
4.52	4.54	4.58	6066.733	0.022885			1
4.94	4.98	5.00	11008.56	0.035904			3
5.19	5.25	5.25	2037.503	0.008879			4
Height Summation:			**19112.796**				
Amount Avg CF:				**0.022556** Linear:			
T. Chlordane					**1**		
2.85	2.87	2.91	21060.16	0.154925 LMQL			1
Height Summation:			**21060.16**				
Amount Avg CF:				**0.154925** Linear:			
Toxaphene					**2**	**28.42**	
5.02	5.07	5.08	5563.623	0.081991 LMQL			2
5.46	5.50	5.52	5275.788	0.054549			5
Height Summation:			**10839.411**				
Amount Avg CF:				**0.06827** Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 13:14:53
Instrument : CP06--H9147B
Result file : 06PEST18261045B.014.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET
%SSR(TCX) : *42% (44-124) Conc.: 0.137535
%SSR(DCB) : 55% (32-149) Conc.: 0.179111

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**3**	**83.47**	
2.93	2.93	2.99	111016.3	0.659506			1
3.29	3.31	3.35	62564.42	0.26948			2
3.81	3.81	3.87	48061.63	0.100871			4
Height Summation:			**221642.35**				
Amount Avg CF:				**0.343286** Linear:			
Aroclor-1221					**3**	**57.63**	
2.76	2.79	2.82	9418.116	0.132613			1
2.84	2.86	2.90	20553.45	0.293781			2
2.93	2.93	2.99	111016.3	0.480869			3
Height Summation:			**140987.866**				
Amount Avg CF:				**0.302421** Linear:			
Aroclor-1248					**4**	**59.76**	
3.81	3.81	3.87	48061.63	0.204186			1
4.03	4.04	4.09	16451.6	0.056161			2
4.72	4.76	4.78	30847.11	0.089933			5
5.02	5.03	5.08	19351.99	0.085998			6
Height Summation:			**114712.33**				
Amount Avg CF:				**0.10907** Linear:			
Aroclor-1254					**4**	**30.58**	
4.73	4.76	4.79	30847.11	0.046812			2
5.02	5.03	5.08	19351.99	0.024703			3
5.25	5.29	5.31	20537.11	0.034355			4
5.45	5.50	5.51	9325.418	0.026304			5
Height Summation:			**80061.628**				
Amount Avg CF:				**0.033043** Linear:			
Aroclor-1260					**2**	**88.51**	
5.15	5.21	5.21	11061.87	0.020032			1
5.38	5.41	5.44	20720.51	0.087048			2
+ 5.38	5.44	5.44	18581.18	0.078061			2
Height Summation:			**31782.38**				
Amount Avg CF:				**0.05354** Linear:			
T. Chlordane					**4**	**171.10**	
+ 3.69	3.70	3.75	23984.75	0.065859 ✗			1
3.69	3.74	3.75	308277.1	0.846494 ✓			1
4.79	4.80	4.85	14050.58	0.009381			3
4.83	4.87	4.89	67842.16	0.069756 LMQL			4
5.48	5.50	5.54	9325.418	0.025126			5
Height Summation:			**399495.258**				
Amount Avg CF:				**0.237689** Linear:			
Toxaphene					**3**	**10.50**	
5.47	5.50	5.53	9325.418	0.053241			1
5.65	5.66	5.71	8398.592	0.043549 LMQL			2
5.94	5.96	6.00	6237.231	0.051626			4
Height Summation:			**23961.241**				
Amount Avg CF:				**0.049472** Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861919R** F GKP04 ID: AB **Batchnumber: 183180015A**
Sample Amount: 229 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:14:53
Instrument : CP06--H9147A
Result file : 06PEST18261045.014.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

Analysis Report (B)

Injected on : Nov 15, 2018 13:14:53
Instrument : CP06--H9147B
Result file : 06PEST18261045B.014.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

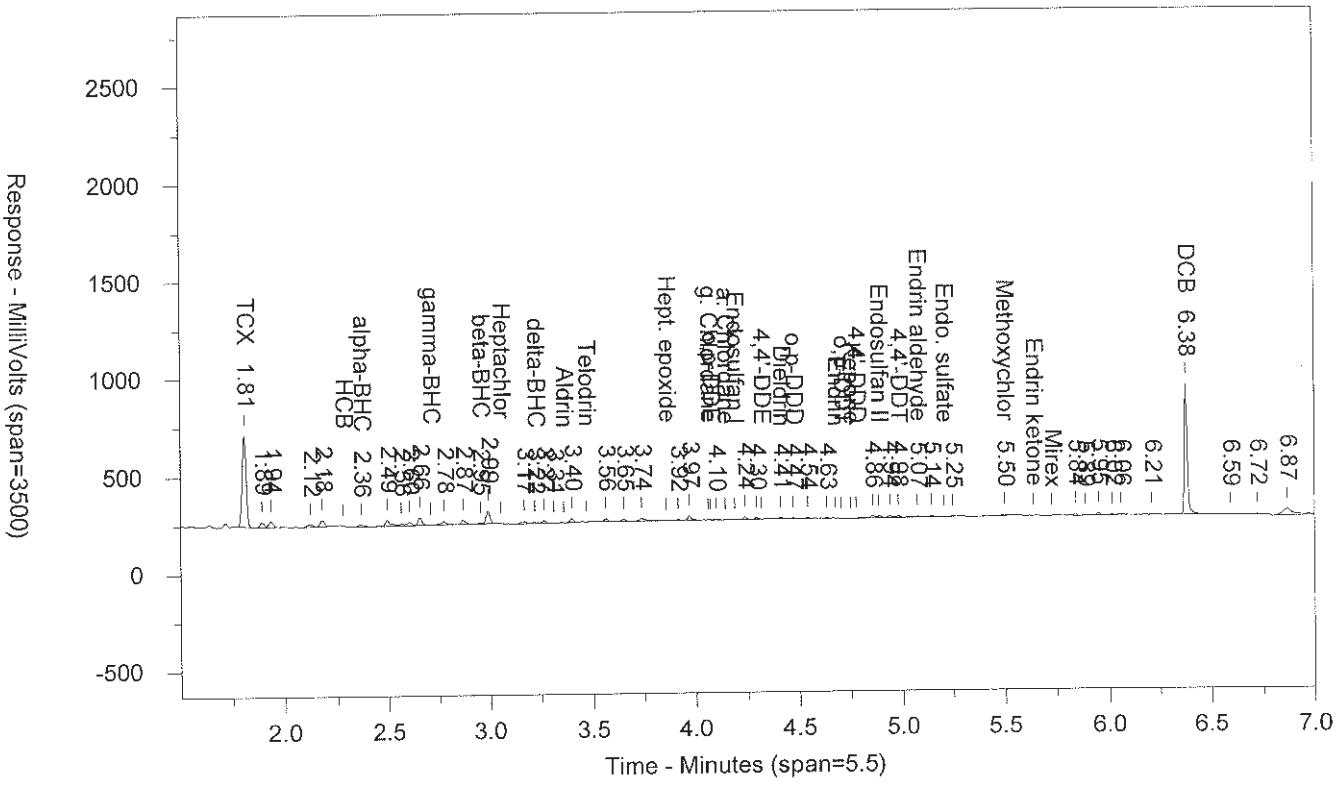
Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		37.55	5	20	
Aroclor-1221			0	0		15.36	2	20	
Aroclor-1248			0	0		6.51	5	20	
Aroclor-1254			0	0		** 43.34	4	20	
Aroclor-1260			0	0		** 81.43	5	20	
T. Chlordane			1.0917	0.3493		** 42.16	5	20	
Total PCBs			0	0					
Toxaphene			2.1834	0.655		31.93	5	30	

Units: ug/l

9861919R F ABGKP04 T 183180015A 10589 SW-846 8081B

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261045.014.RAW



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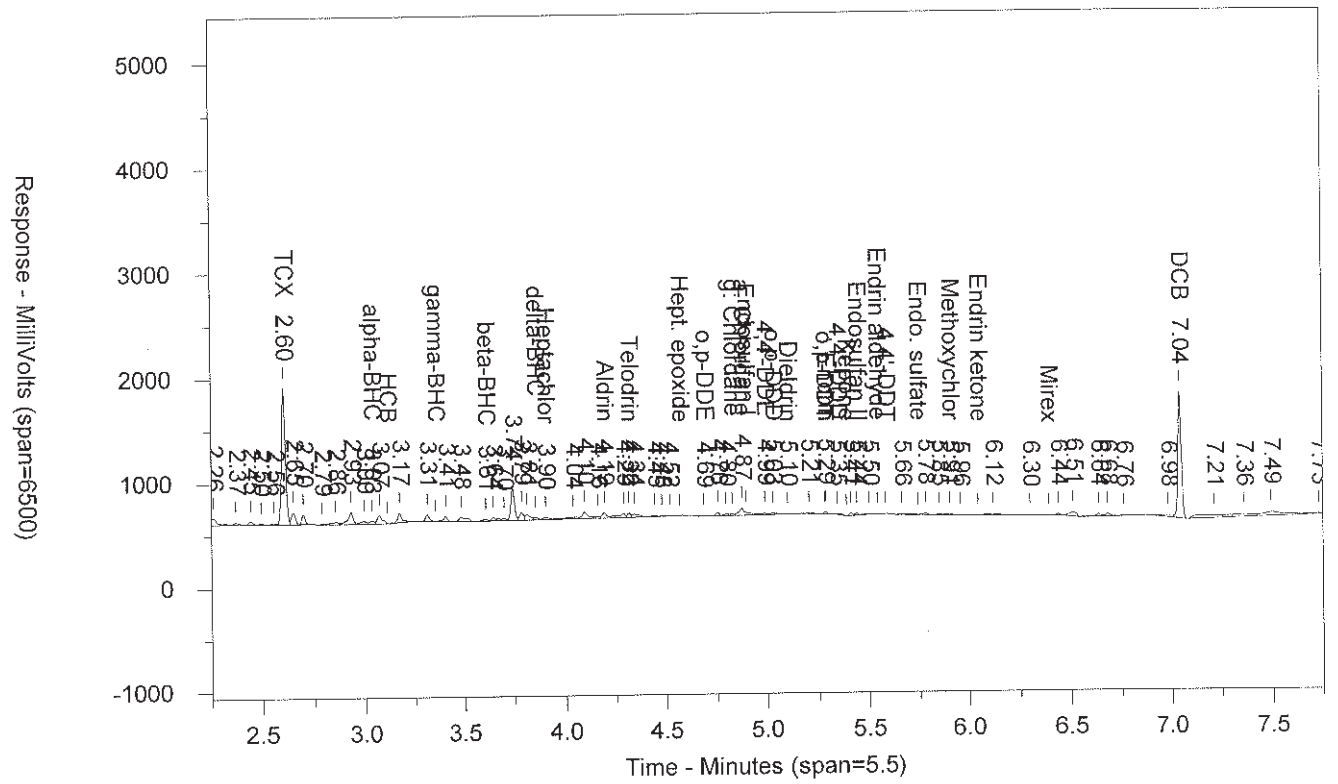

LANCASTER LABORATORIES

Sample Number: 9861919R F ABGKP04 T 183180015A 10589 SW-846 8081B
Injected On: 11/15/2018 1:14:53 PM Sample Weight: 229
Instrument ID: CP6-9147 Dilution Factor: 5
Oven Parameters: 150c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min; hold 1.5 min
Column A ID: DB-CLP 30m x 0.32mm x 0.5um
Column B ID: DB-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
1.81	466859	.131	TCX	2.605	1306873	.138	TCX
2.364	10327	.002	alpha-BHC	3.032	27141	.002	alpha-BHC
2.953	5742	.002	beta-BHC	3.607	16000	.002	beta-BHC
3.22	8666	.001	delta-BHC		0		delta-BHC
	0		Heptachlor	3.903	20744	.001	Heptachlor
	0		Aldrin	4.194	48284	.003	Aldrin
	0		Telodrin	4.316	40074	.004	Telodrin
4.412	5948	.001	Dieldrin	5.104	5499		Dieldrin
4.472	6042	.002	o,p-DDD	5.031	19352	.003	o,p-DDD
	0		o,p-DDE	4.688	8201	.001	o,p-DDE
	0		a. Chlordane	4.874	67842	.005	a. Chlordane
4.981	11009	.002	4,4'-DDT		0		4,4'-DDT
	0		4,4'-DDE	4.99	17677	.001	4,4'-DDE
5.075	5564	.001	Endrin aldehyde		0		Endrin aldehyde
	0		Endrin	5.286	20537	.002	Endrin
	0		4,4'-DDD	5.347	9464	.001	4,4'-DDD
	0		Endosulfan II	5.442	18581	.002	Endosulfan II
5.5	5276	.002	Methoxychlor	5.907	12698	.003	Methoxychlor
6.379	667196	.154	DCB	7.044	1213100	.179	DCB

Files:
Area File: 06pest18261045.014.RAW
Area File: 06pest18261045B.014.RAW
Method A: 06PESTD.MET
Method B: 06PESTDB.MET
Calibration File A: 06pest1826103.CAL
Calibration File B: 06pest1826103b.CAL
Format A: pestD6.FMTA
Format B: pestD6.FMTA
Area File Created On: 11/15/2018 1:22:52 PM
File Reported On: 11/15/2018 at 1:42:31 PM

9861919R F ABGKP04 T 183180015A 10589 SW-846 8081B

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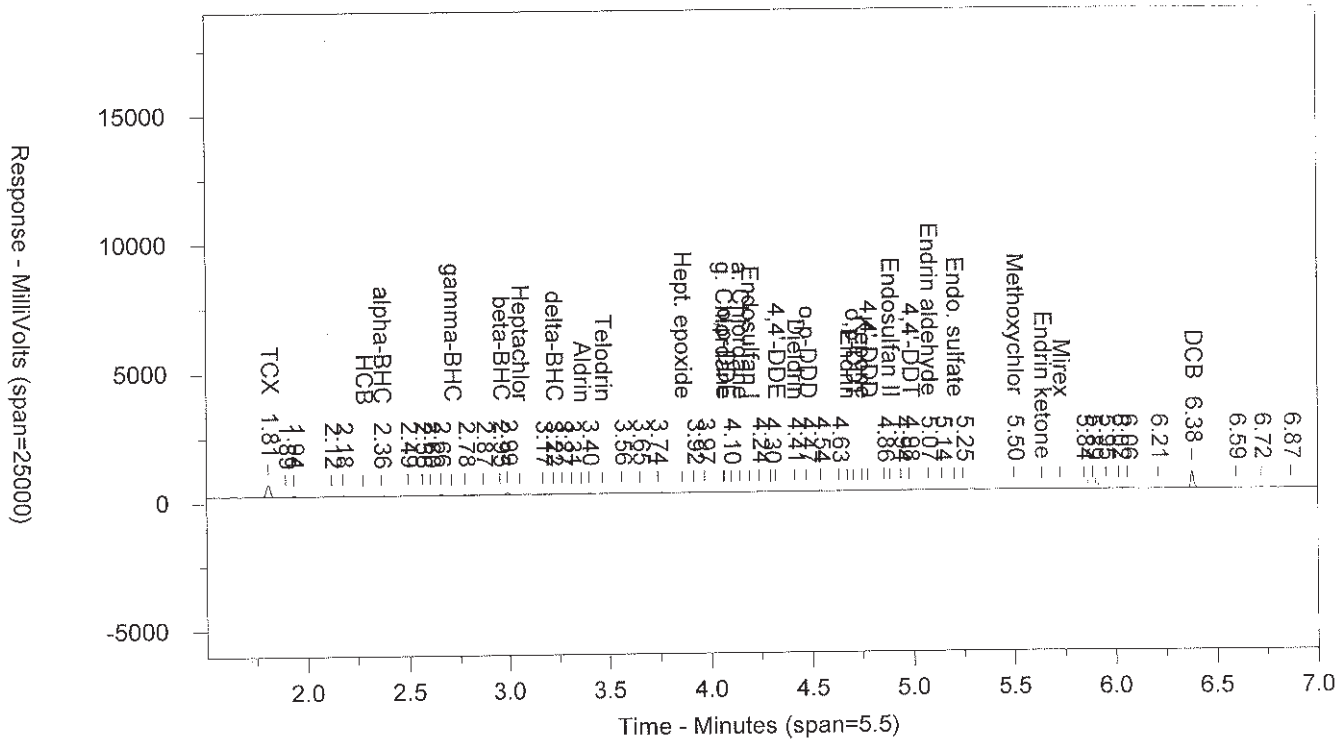

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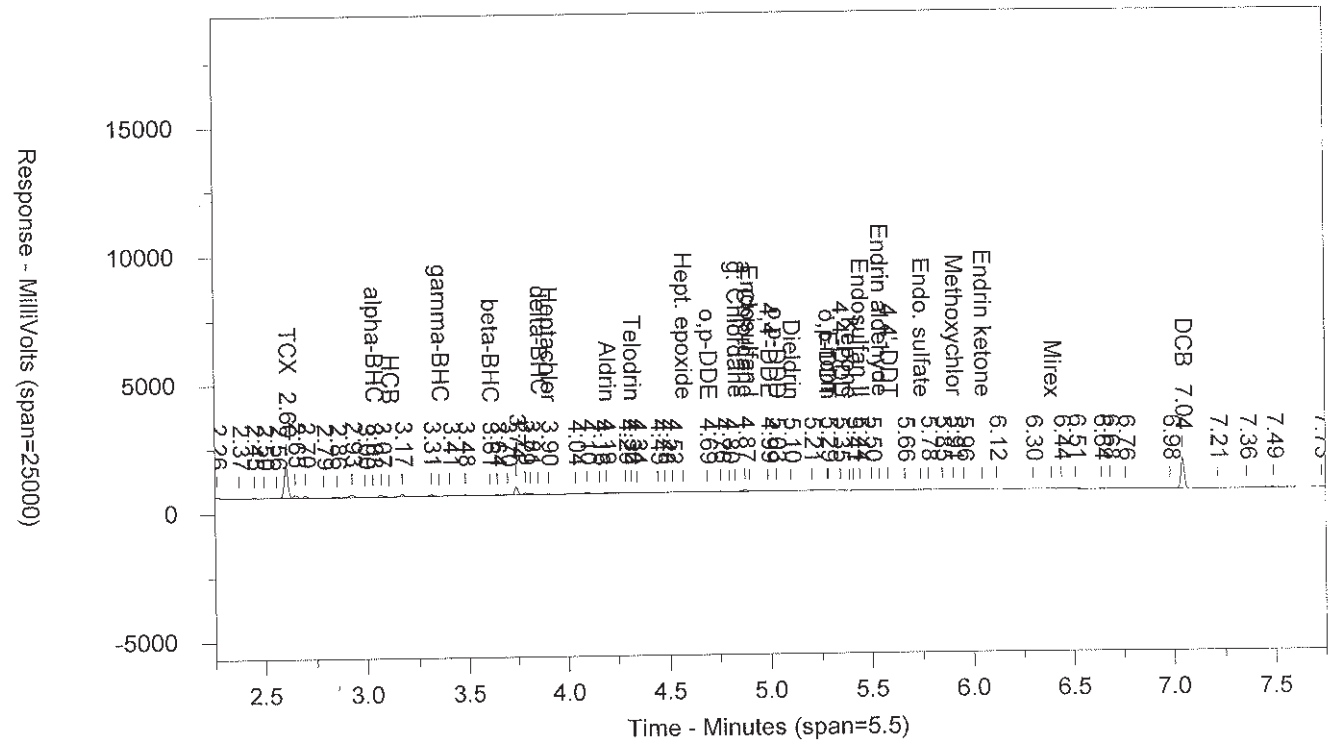

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Data Summary

Sample Name: 9861920 RI F GKPR1 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 223 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 09, 2018 23:58:27
Instrument H9190A
Result file 05PEST18306007.051.BND
Calibration file 05PEST1830603
Method file 05PEST18306007

%SSR(TCX) 78% (44 - 124) Conc: 0.261651
%SSR(DCB) 52% (32 - 149) Conc: 0.172852

Analysis Report (B)

Injected on Nov 09, 2018 23:58:27
Instrument H9190B
Result file 05PEST18306007B.051.BND
Calibration file 05PEST1830603B
Method file 05PEST18306007B

%SSR(TCX) 71% (44 - 124) Conc: 0.240305
%SSR(DCB) 50% (32 - 149) Conc: 0.165936

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.53	2.55	2.57	11565531	0.261651
HCB	2.81	2.83	2.85	226927	0.00483
Alpha BHC	2.94	2.95	2.98	99813	0.001632
Beta BHC	3.25	3.29	3.29	901615	0.039247
Heptachlor	3.58	3.60	3.62	285718	0.006555
Telodrin	4.03	4.05	4.06	38253	0.001582
Heptachlor Epoxide	4.36	4.40	4.40	40430	0.001132
Gamma Chlordane	4.47	4.49	4.51	148130	0.004195
Alpha Chlordane	4.57	4.59	4.61	63189	0.001766
Endosulfan I	4.68	4.71	4.72	227841	0.006795
Dieldrin	4.87	4.90	4.91	41270	0.001145
o,p-DDT	4.97	4.97	5.01	84246	0.003679
Kepone	5.08	5.11	5.12	46293	0.013637
p,p-DDT	5.31	5.32	5.35	244887	0.008262
Decachlorobiphenyl	6.67	6.70	6.73	3720112	0.172852

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.34	2.36	2.38	44769344	0.240305
HCB	2.66	2.69	2.70	924714	0.005872
Alpha BHC	2.76	2.80	2.80	457992	0.001831
Gamma BHC - Lindane	3.02	3.05	3.06	366527	0.001765
Beta BHC	3.09	3.09	3.13	1481709	0.016985
Delta BHC	3.31	3.35	3.35	133681	0.000706
Heptachlor	3.36	3.39	3.40	54793	0.000335
Aldrin	3.62	3.64	3.66	31540	0.000203
Telodrin	3.76	3.78	3.80	427726	0.00536
Heptachlor Epoxide	4.12	4.15	4.16	497622	0.004015
Gamma Chlordane	4.28	4.31	4.32	271647	0.002091
Alpha Chlordane	4.40	4.42	4.44	284323	0.002213
Endosulfan I	4.45	4.48	4.48	719845	0.006318
p,p-DDE	4.55	4.56	4.59	151318	0.001204
Dieldrin	4.67	4.67	4.70	204587	0.001585
o,p-DDD	4.70	4.74	4.74	26674	0.000478
Endrin	4.90	4.94	4.94	79267	0.000687
Kepone	4.97	4.98	5.01	38414	0.032044
p,p-DDD	5.00	5.01	5.04	32424	0.000327
p,p-DDT	5.23	5.24	5.27	800910	0.007763
Endrin Aldehyde	5.31	5.32	5.35	132914	0.001519
Methoxychlor	5.72	5.75	5.76	82467	0.001715
Mirex	5.83	5.84	5.87	139551	0.002263
Endrin Ketone	5.88	5.88	5.92	612020	0.005717
Decachlorobiphenyl	6.66	6.69	6.72	11467982	0.165936

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐ Total DDTs			<0.0045	<0.009	<0.0179			
☐ Total Endosulfans (I + II)	A	0.006795			<0.009	J	0.00	
☐ Tetrachloro-m-xylene	A	0.261651	0.0135	0.0269	0.0269		8.51	
☑ Tetrachloro-m-xylene-D1	A	0.261651	0.0135	0.0269	0.0269			
☑ Tetrachloro-m-xylene-D2	B	0.240305	0.0135	0.0269	0.0269			
☐ HCB	B	0.005872	0.0027	<0.0063	<0.009	J	19.47	
☑ Alpha BHC			<0.0027	<0.0063	<0.009	D1		
☑ Gamma BHC - Lindane			<0.0018	<0.0063	<0.009	D1		
☑ Beta BHC	B	0.016985	0.003	0.0063	0.009	PD2	79.18	
☑ Delta BHC			<0.003	<0.0063	<0.009	D1		
☑ Heptachlor			<0.0018	<0.0063	<0.009	D1		
☑ Aldrin			<0.0018	<0.0063	<0.009	D1		
☐ Telodrin					<0.009			
☐ o,p-DDE			<0.0063	<0.0126	<0.0179			
☑ Heptachlor Epoxide			<0.0021	<0.0063	<0.009	D1		
☑ Gamma Chlordane			<0.0063	<0.0179	<0.0179	D1		
☑ Alpha Chlordane			<0.0027	<0.0063	<0.009	D1		

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:36:47

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Data Summary

Sample Name: 9861920 RI F GKPR1 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 223 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 09, 2018 23:58:27
Instrument H9190A
Result file 05PEST18306007.051.BND
Calibration file 05PEST1830603
Method file 05PEST18306007

Analysis Report (B)

Injected on Nov 09, 2018 23:58:27
Instrument H9190B
Result file 05PEST18306007B.051.BND
Calibration file 05PEST1830603B
Method file 05PEST18306007B

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑	p,p-DDE			<0.0045	<0.009	<0.0179	D1		
☑	Endosulfan I	A	0.006795	0.0039	<0.0081	<0.009	JD1	7.28	
☐	o,p-DDD			<0.0045	<0.009	<0.0179			
☑	Dieldrin			<0.0048	<0.009	<0.0179	D1		
☐	o,p-DDT			<0.0046	<0.009	<0.0179			
☑	Endrin			<0.0073	<0.0179	<0.0179	D1		
☐	Kepone					<0.1794			
☑	p,p-DDD			<0.0045	<0.009	<0.0179	D1		
☑	Endosulfan II			<0.0135	<0.0269	<0.0269	D1		
☑	p,p-DDT	A	0.008262	0.0047	<0.009	<0.0179	JD1	6.23	
☑	Endrin Aldehyde			<0.0179	<0.0359	<0.0897	D1		
☑	Methoxychlor			<0.0269	<0.0628	<0.0897	D1		
☐	Mirex			<0.009	<0.0359	<0.0448			
☑	Endosulfan Sulfate			<0.0052	<0.0108	<0.0179	D1		
☑	Endrin Ketone			<0.0045	<0.009	<0.0179	D1		
☐	Decachlorobiphenyl	A	0.172852	0.0135	0.0269	0.0269		4.08	
☑	Decachlorobiphenyl-D1	A	0.172852	0.0135	0.0269	0.0269			
☑	Decachlorobiphenyl-D2	B	0.165936	0.0135	0.0269	0.0269			

Multiple Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
☑	Chlordane			<0.1435	<0.287	<0.4484	D1		4	
☑	Toxaphene			<0.2691	<0.5381	<0.8969	D1		4	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L. Tomayko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:36:47

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861920** RI F GKPR1 ID: AB **Batchnumber: 182980006A**
Sample Amount: 223 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:58:27
Instrument : CP05--H9190A
Result file : 05pest18306007.051.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.051.BND

%SSR(TCX) : 78% (44-124) Conc.: 0.261651
%SSR(DCB) : 52% (32-149) Conc.: 0.172852

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.53	2.55	2.57	11565531	0.261651
HCB	2.81	2.83	2.85	226927	0.004830
alpha-BHC	2.94	2.95	2.98	99813	0.001632
beta-BHC	3.25	3.29	3.29	901615	0.039247
Heptachlor	3.58	3.60	3.62	285718	0.006555
Telodrin	4.03	4.05	4.06	38253	0.001582
Hept. epoxide	4.36	4.40	4.40	40430	0.001132
g. Chlordane	4.47	4.49	4.51	148130	0.004195
a. Chlordane	4.57	4.59	4.61	63189	0.001766
Endosulfan I	4.68	4.71	4.72	227841	0.006795
Dieldrin	4.87	4.90	4.91	41270	0.001145
o,p-DDT	4.97	4.97	5.01	84246	0.003679
Kepone	5.08	5.11	5.12	46293	0.013637
4,4'-DDT	5.31	5.32	5.35	244887	0.008262
DCB	6.67	6.70	6.73	3720112	0.172852

Analysis Report (B)

Injected on : Nov 09, 2018 23:58:27
Instrument : CP05--H9190B
Result file : 05pest18306007B.051.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.051.BND

%SSR(TCX) : 71% (44-124) Conc.: 0.240305
%SSR(DCB) : 50% (32-149) Conc.: 0.165936

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.34	2.36	2.38	44769344	0.240305
HCB	2.66	2.69	2.70	924714	0.005872
alpha-BHC	2.76	2.80	2.80	457992	0.001831
gamma-BHC	3.02	3.05	3.06	366527	0.001765
beta-BHC	3.09	3.09	3.13	1481709	0.016985
delta-BHC	3.31	3.35	3.35	133681	0.000706
Heptachlor	3.36	3.39	3.40	54793	0.000335
Aldrin	3.62	3.64	3.66	31540	0.000203
Telodrin	3.76	3.78	3.80	427726	0.005360
Hept. epoxide	4.12	4.15	4.16	497622	0.004015
g. Chlordane	4.28	4.31	4.32	271647	0.002091
a. Chlordane	4.40	4.42	4.44	284323	0.002213
Endosulfan I	4.45	4.48	4.48	719845	0.006318
4,4'-DDE	4.55	4.56	4.59	151318	0.001204
Dieldrin	4.67	4.67	4.70	204587	0.001585
o,p-DDD	4.70	4.74	4.74	26674	0.000478
Endrin	4.90	4.94	4.94	79267	0.000687
Kepone	4.97	4.98	5.01	38414	0.032044
4,4'-DDD	5.00	5.01	5.04	32424	0.000327
4,4'-DDT	5.23	5.24	5.27	800910	0.007763
Endrin aldehyde	5.31	5.32	5.35	132914	0.001519
Methoxychlor	5.72	5.75	5.76	82467	0.001715
Mirex	5.83	5.84	5.87	139551	0.002263
Endrin ketone	5.88	5.88	5.92	612020	0.005717
DCB	6.66	6.69	6.72	11467982	0.165936

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	A	0.261651	0.0269	0.0135		8.51	
☐ HCB	B	0.005872	<0.009	0.0027	J	19.47	
☑ alpha-BHC			<0.009	<0.0027			
☑ gamma-BHC			<0.009	<0.0018			
☑ beta-BHC	B	0.016985	0.009	0.003		79.18 **	CLS LW
☑ delta-BHC			<0.009	<0.003			
☑ Heptachlor			<0.009	<0.0018			
☑ Aldrin			<0.009	<0.0018			
☐ Telodrin	A	0.001582	<0.009			108.84 **	
☐ o,p-DDE			<0.0179	<0.0063			
☑ Hept. epoxide			<0.009	<0.0021			
☑ g. Chlordane			<0.0179	<0.0063			
☑ a. Chlordane			<0.009	<0.0027			
☑ 4,4'-DDE			<0.0179	<0.0045			
☑ Endosulfan I	A	0.006795	<0.009	0.0039	J	7.27	
☐ o,p-DDD			<0.0179	<0.0045			
☑ Dieldrin			<0.0179	<0.0048			

Jamie L. Brillhart
Senior Chemist

%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

NOV 13 2018

Printed on: 11/13/2018 12:12:59

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861920** RI F GKPR1 ID: AB **Batchnumber: 182980006A**
Sample Amount: 223 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:58:27
Instrument : CP05--H9190A
Result file : 05pest18306007.051.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.051.BND

Analysis Report (B)

Injected on : Nov 09, 2018 23:58:27
Instrument : CP05--H9190B
Result file : 05pest18306007B.051.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.051.BND

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ o,p-DDT			<0.0179	<0.0046			
☑ Endrin			<0.0179	<0.0073			
☐ Kepone	A	0.013637	<0.1794			80.59	**
☑ 4,4'-DDD			<0.0179	<0.0045			
☑ Endosulfan II			<0.0269	<0.0135			
☑ 4,4'-DDT	A	0.008262	<0.0179	0.0047	J	6.22	A DDS ↑ both runs ∠ 05Pest18306002
☑ Endrin aldehyde			<0.0897	<0.0179			
☑ Methoxychlor			<0.0897	<0.0269			
☐ Mirex			<0.0448	<0.009			
☑ Endo. sulfate			<0.0179	<0.0052			
☑ Endrin ketone			<0.0179	<0.0045			
☐ DCB	A	0.172852	0.0269	0.0135		4.08	
☐ Total DDTs	A	0.008262	<0.0179	0.0045	J	0.00	
☐ Total Endosulfans	A	0.006795	<0.009			0.00	

Jamie L. Brillhart
Senior Chemist

Units: ug/l

Reviewed by: NOV 13 2018
Date:

Verified by: Valerie L. Tomayko
Principal Specialist
Date: NOV 19 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

Printed on: 11/13/2018 12:12:59

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861920** RI F GKPR1 ID: AB **Batchnumber: 182980006A**
Sample Amount: 223 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:58:27
Instrument : CP05--H9190A
Result file : 05pest18306007.051.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.051.BND

%SSR(TCX) : 78% (44-124) Conc.: 0.261651
%SSR(DCB) : 52% (32-149) Conc.: 0.172852

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**82.58**	
2.78	2.83	2.84	226927.2031	0.323463			1
3.04	3.06	3.10	20036.66992	0.020329			2
3.20	3.25	3.26	192421.6875	0.663743			3
3.40	3.45	3.46	49968.04687	0.066397			4
3.51	3.53	3.57	708877.6875	0.900183			5
+ 3.56	3.57	3.62	30767.65429	0.058089			6
3.56	3.60	3.62	285717.9062	0.53943			6
Height Summation:			**1483949.201172**				
Amount Avg CF:			**0.418924**	Linear:			
Aroclor-1221					**2**	**29.49**	
2.66	2.68	2.70	151252.4218	0.378262			1
2.80	2.83	2.84	226927.2031	0.247731			3
Height Summation:			**378179.625**				
Amount Avg CF:			**0.312997**	Linear:			
Aroclor-1248					**7**	**94.50**	
3.38	3.40	3.44	23502.27539	0.031262			1
3.66	3.69	3.72	59093.44921	0.143772			2
3.85	3.89	3.91	7410.319336	0.007616			3
4.21	4.22	4.27	217515.9375	0.196375			4
+ 4.21	4.26	4.27	128068.625	0.115621			4
4.39	4.40	4.45	40429.74218	0.053794			5
4.71	4.71	4.77	227841.1562	0.400414			6
4.71	4.71	4.77	227841.1562	0.400414			6
Height Summation:			**803634.036133**				
Amount Avg CF:			**0.176235**	Linear:			
Aroclor-1254					**5**	**89.12**	
4.39	4.40	4.45	40429.74218	0.028479			1
4.62	4.63	4.68	16388.92578	0.015428			2
4.93	4.97	4.99	84245.67968	0.061043			4
5.06	5.11	5.12	46292.68359	0.04873			5
5.27	5.30	5.33	236374.9375	0.154918			6
+ 5.27	5.32	5.33	244886.5937	0.160496			6
+ 5.27	5.32	5.33	244886.5937	0.160496			6
Height Summation:			**423731.96875**				
Amount Avg CF:			**0.06172**	Linear:			
Aroclor-1260					**6**	**90.17**	
+ 4.85	4.86	4.91	148700.1406	0.114038			1
4.85	4.90	4.91	41270.35156	0.03165			1
5.06	5.11	5.12	46292.68359	0.026286			2
5.27	5.30	5.33	236374.9375	0.127569			3
+ 5.27	5.32	5.33	244886.5937	0.132163			3
+ 5.27	5.32	5.33	244886.5937	0.132163			3
5.53	5.57	5.59	53991.64453	0.05212			4
5.74	5.74	5.80	36863.25	0.017389			5
5.94	5.97	6.00	222480.7656	0.175821			6
Height Summation:			**637273.632813**				
Amount Avg CF:			**0.071806**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:58:27
Instrument : CP05--H9190B
Result file : 05pest18306007B.051.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.051.BND

%SSR(TCX) : 71% (44-124) Conc.: 0.240305
%SSR(DCB) : 50% (32-149) Conc.: 0.165936

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**77.43**	
+ 2.66	2.66	2.72	895662.5	0.418054			1
2.66	2.69	2.72	924713.8125	0.431614			1
2.93	2.96	2.99	2935819	0.988905			2
3.11	3.14	3.17	360589.25	0.291563			3
3.27	3.30	3.33	207376.5625	0.039896			4
+ 3.37	3.39	3.43	54792.80078	0.02104			5
3.37	3.42	3.43	1302734	0.500228			5
Height Summation:			**5731232.625**				
Amount Avg CF:			**0.450441**	Linear:			
Aroclor-1221					**2**	**75.19**	
2.63	2.66	2.67	895662.5	1.183873			2
2.67	2.69	2.71	924713.8125	0.361974			3
Height Summation:			**1820376.3125**				
Amount Avg CF:			**0.772923**	Linear:			
Aroclor-1248					**5**	**23.11**	
3.27	3.30	3.33	207376.5625	0.078785			1
3.53	3.53	3.59	315773.6875	0.126357			2
3.75	3.78	3.81	427725.9687	0.13723			3
+ 3.75	3.81	3.81	179799.2812	0.057686			3
+ 4.11	4.12	4.17	712501.0625	0.198138			5
4.11	4.15	4.17	497621.9687	0.138383			5
4.30	4.31	4.36	271647.1562	0.095975			6
Height Summation:			**1720145.34375**				
Amount Avg CF:			**0.115346**	Linear:			
Aroclor-1254					**6**	**77.35**	
+ 4.11	4.12	4.17	712501.0625	0.205139			1
4.11	4.15	4.17	497621.9687	0.143273			1
E+ 4.27	4.27	4.33	9713285	2.477737			2
4.27	4.31	4.33	271647.1562	0.069294			2
4.64	4.67	4.70	204587.2812	0.036117			3
+ 4.81	4.81	4.87	193616.9531	0.047637			4
4.81	4.84	4.87	98107.05468	0.024138			4
5.07	5.12	5.13	141420.6718	0.047326			5
5.21	5.24	5.27	800909.625	0.185438			6
Height Summation:			**2014293.757813**				
Amount Avg CF:			**0.084264**	Linear:			
Aroclor-1260					**5**	**109.06**	
4.79	4.81	4.85	193616.9531	0.049773			1
+ 4.79	4.84	4.85	98107.05468	0.02522			1
4.95	4.98	5.01	38414.27734	0.008273			2
5.21	5.24	5.27	800909.625	0.166073			3
5.48	5.49	5.54	125365.3906	0.041322			4
+ 5.65	5.66	5.71	76134.54687	0.012226			5
5.65	5.71	5.71	139437.7812	0.022391			5
Height Summation:			**1297744.027344**				
Amount Avg CF:			**0.057566**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861920** RI F GKPR1 ID: AB **Batchnumber: 182980006A**
Sample Amount: 223 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 09, 2018 23:58:27
Instrument : CP05--H9190A
Result file : 05pest18306007.051.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.051.BND

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane						**6**	**173.18**	
	3.50	3.53	3.56	708877.6875	0.575273			1
	3.94	4.00	4.00	95398.73437	0.076904			2
+	4.29	4.30	4.35	21415.22851	0.02666			3
	4.29	4.34	4.35	33218.58984	0.041354			3
+	4.45	4.45	4.51	225134.2968	0.060647			4
	4.45	4.49	4.51	148129.625	0.039903			4
+	4.45	4.51	4.51	197331.3125	0.053158			4
	4.55	4.59	4.61	63188.74218	0.012308			5
	5.15	5.18	5.22	22724.80859	0.018516			6
Height Summation:				**1071538.1875**				
Amount Avg CF:				**0.127376**	Linear:			
Toxaphene						**5**	**66.59**	
	5.06	5.11	5.12	46292.68359	0.086823			1
	5.20	5.22	5.26	33255.94921	0.039801			2
+	5.29	5.30	5.35	236374.9375	0.313107			3
	5.29	5.32	5.35	244886.5937	0.324382			3
	5.29	5.32	5.35	244886.5937	0.324382			3
	5.68	5.70	5.74	142880.0781	0.215361			5
Height Summation:				**712201.898438**				
Amount Avg CF:				**0.19815**	Linear:			

Analysis Report (B)

Injected on : Nov 09, 2018 23:58:27
Instrument : CP05--H9190B
Result file : 05pest18306007B.051.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.051.BND

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane						**6**	**112.12**	
	3.23	3.26	3.29	150702.625	0.03304			1
	3.74	3.78	3.80	427725.9687	0.098567			2
	4.08	4.12	4.14	712501.0625	0.229913			3
+	4.27	4.27	4.33	9713285	0.656622			4
	4.27	4.31	4.33	271647.1562	0.018363			4
	4.39	4.42	4.45	284323.3437	0.025432			5
	5.08	5.12	5.14	141420.6718	0.033747			6
Height Summation:				**1988320.828125**				
Amount Avg CF:				**0.073177**	Linear:			
Toxaphene						**6**	**96.91**	
	4.64	4.67	4.70	204587.2812	0.131534			1
	4.87	4.89	4.93	23347.83593	0.014538			2
	5.04	5.05	5.10	782811.8125	0.268966			3
+	5.31	5.32	5.37	132914.2812	0.041898			4
	5.31	5.32	5.37	244886.5937	0.077195			4
+	5.36	5.37	5.42	384786.375	0.206527			5
	5.36	5.40	5.42	70649.89062	0.03792			5
	5.66	5.71	5.72	139437.7812	0.049012			6
Height Summation:				**1465721.195313**				
Amount Avg CF:				**0.096528**	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		7.25	4	40	
Aroclor-1221			0	0		** 84.71	3	5	
Aroclor-1248			0	0		** 41.77	4	30	
Aroclor-1254			0	0		30.89	4	40	
Aroclor-1260			0	0		22.01	4	40	
Chlordane			0.4484	0.1435		** 54.05	4	40	
Toxaphene			0.8969	0.2691		** 68.97	4	40	

Units: ug/l

NOV 13 2018

9861920 RI F ABGKPR1 T 182980006A 10589 SW-846 8081B

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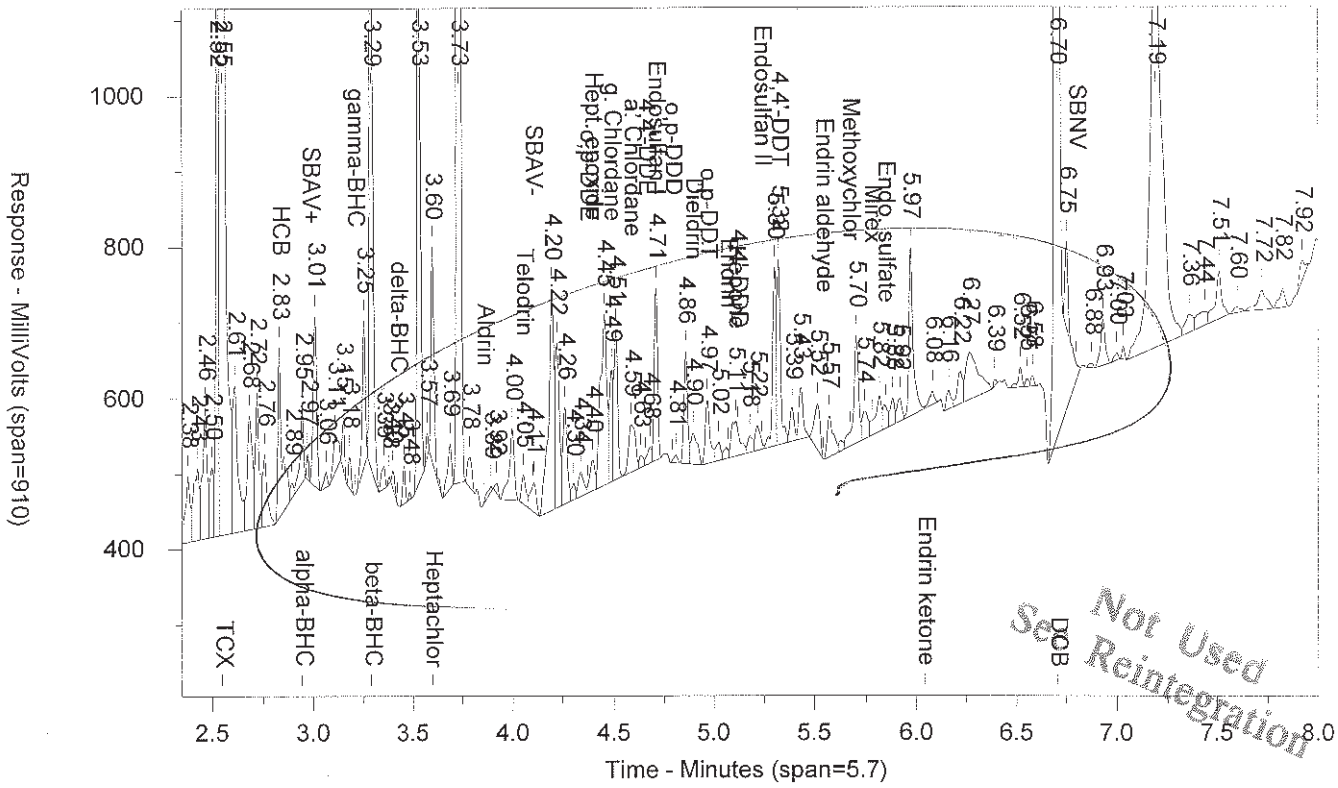

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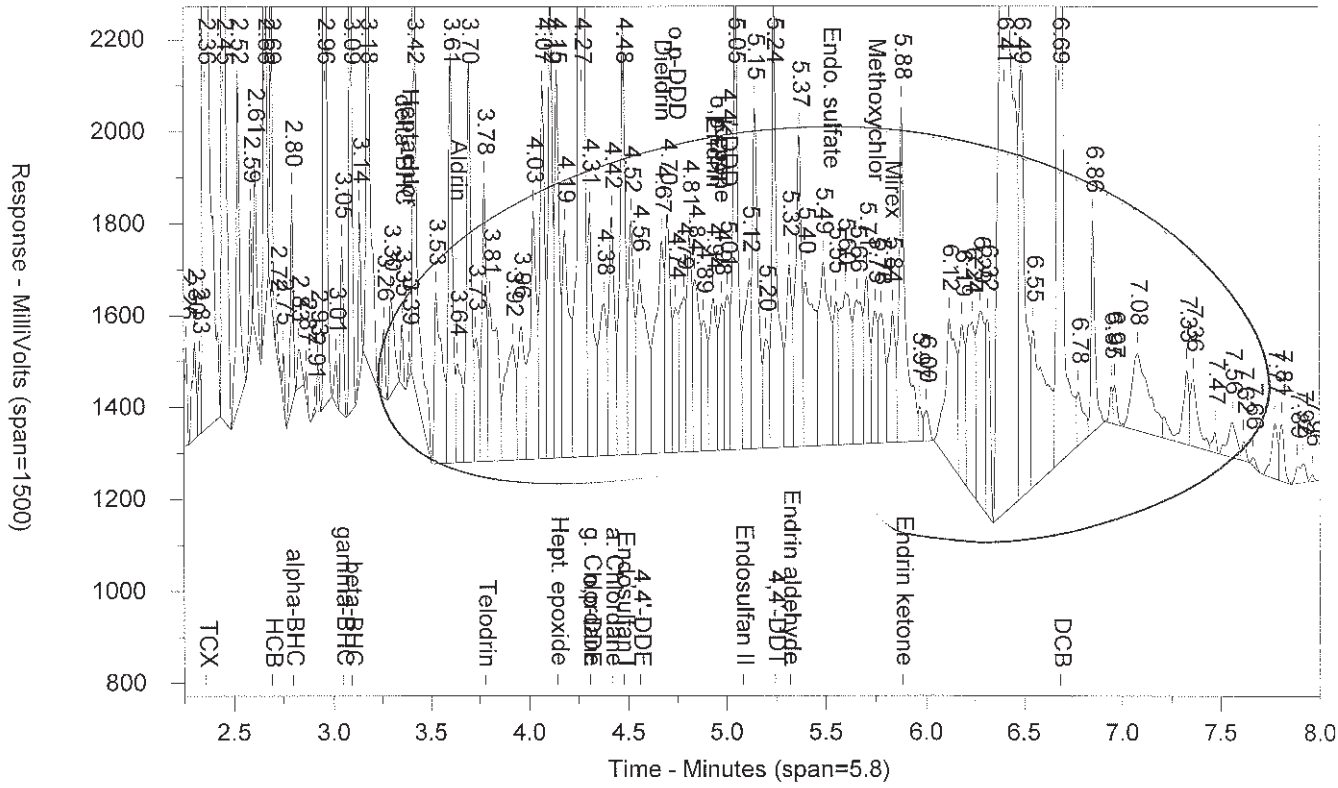

LANCASTER LABORATORIES

Sample Number: 9861920 RI F ABGKPR1 T 182980006A 10589 SW-846 8081B
Injected On: 11/9/2018 11:58:27 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: 223
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
2.548	11565530	.262	TCX	2.36	44769340	.24	TCX
2.831	226927	.005	HCB	2.691	924714	.006	HCB
2.945	99813	.002	alpha-BHC	2.798	457992	.002	alpha-BHC
	0		gamma-BHC	3.046	366527	.002	gamma-BHC
3.288	901615	.039	beta-BHC	3.092	1481709	.017	beta-BHC
	0		delta-BHC	3.353	133681	.001	delta-BHC
3.598	285718	.007	Heptachlor	3.39	54793		Heptachlor
	0		Aldrin	3.64	215492	.001	Aldrin
4.052	38253	.002	Telodrin	3.777	608046	.008	Telodrin
4.396	40430	.001	Hept. epoxide	4.147	843349	.007	Hept. epoxide
4.487	148130	.004	g. Chlordane	4.31	529888	.004	g. Chlordane
4.586	63189	.002	a. Chlordane	4.419	520953	.004	a. Chlordane
4.707	227841	.007	Endosulfan I	4.477	953576	.008	Endosulfan I
	0		4,4'-DDE	4.559	380872	.003	4,4'-DDE
4.895	41270	.001	Dieldrin	4.67	463754	.004	Dieldrin
	0		o,p-DDD	4.742	316844	.006	o,p-DDD
	0		Endrin	4.936	333418	.003	Endrin
4.967	84246	.004	o,p-DDT		0		o,p-DDT
5.109	46293	.014	Kepone	4.98	319801	.037	Kepone
	0		4,4'-DDD	5.008	337382	.003	4,4'-DDD
5.322	244887	.008	4,4'-DDT	5.245	1012702	.01	4,4'-DDT
	0		Endrin aldehyde	5.321	396886	.005	Endrin aldehyde
	0		Methoxychlor	5.75	288122	.006	Methoxychlor
	0		Mirex	5.838	286574	.005	Mirex
	0		Endrin ketone	5.884	727518	.007	Endrin ketone
6.702	3720112	.173	DCB	6.687	11610720	.168	DCB

Files:
Area File: 05pest18306007.051.RAW
Area File: 05pest18306007B.051.RAW
Method A: 05PESTD.MET
Method B: 05PESTDB.MET
Calibration File A: 05pest1830603.cal
Calibration File B: 05pest1830603b.cal
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/10/2018 12:06:29 AM
File Reported On: 11/13/2018 at 3:56:35 AM

Not Used
See Reintegration

9861920 RI F ABGKPR1 T 182980006A 10589 SW-846 8081B

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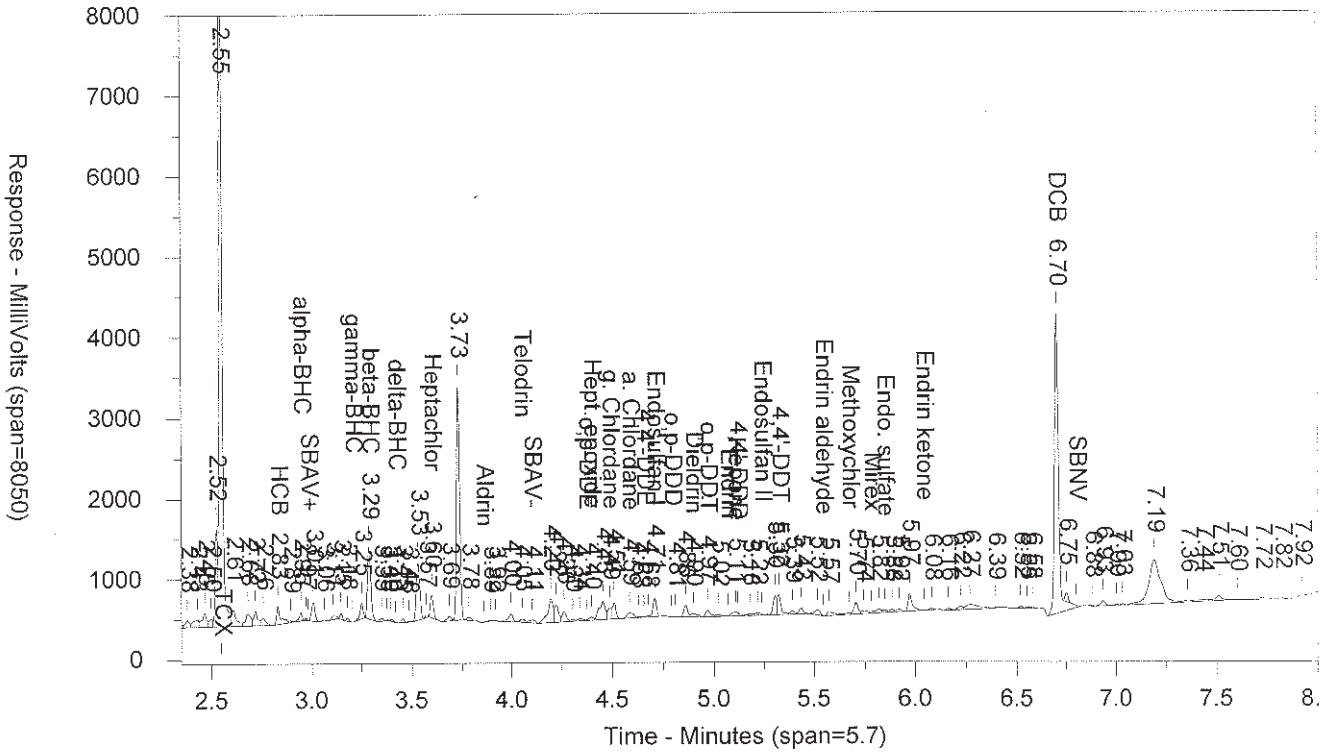

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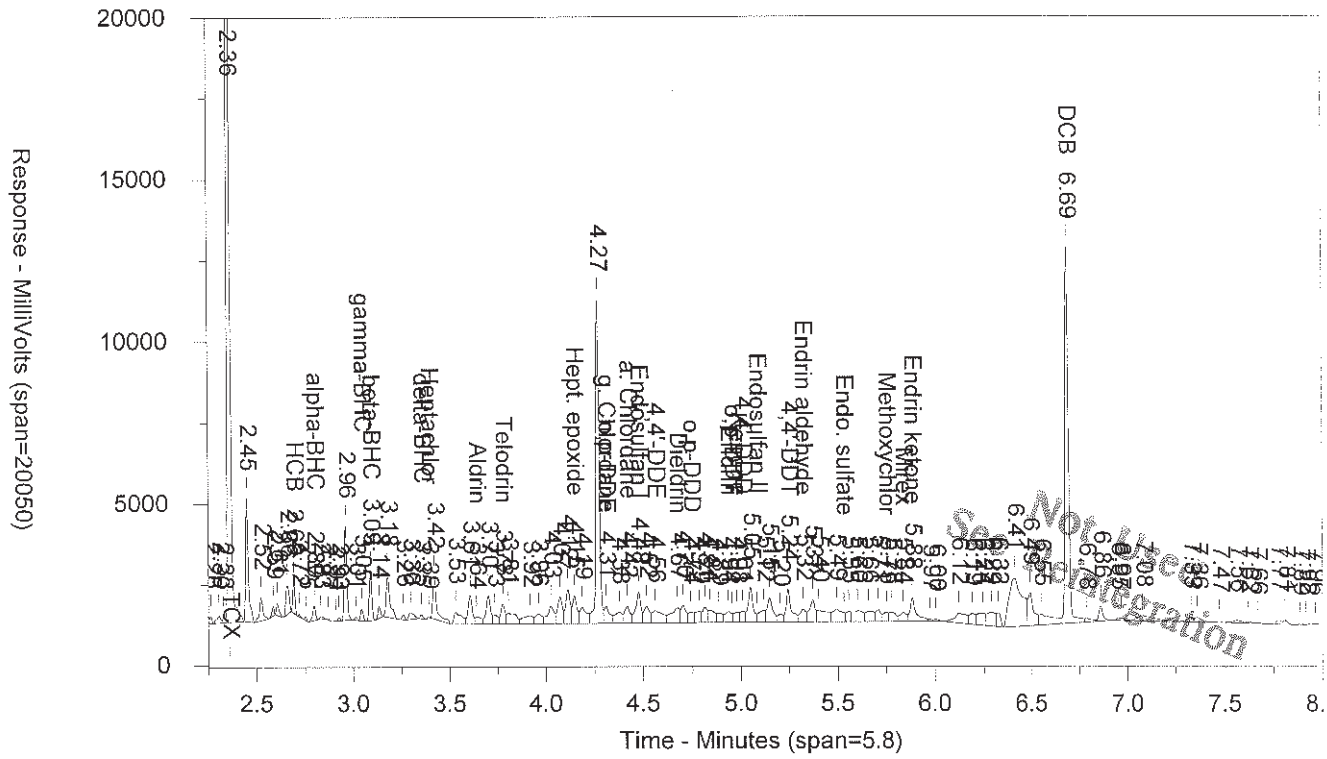

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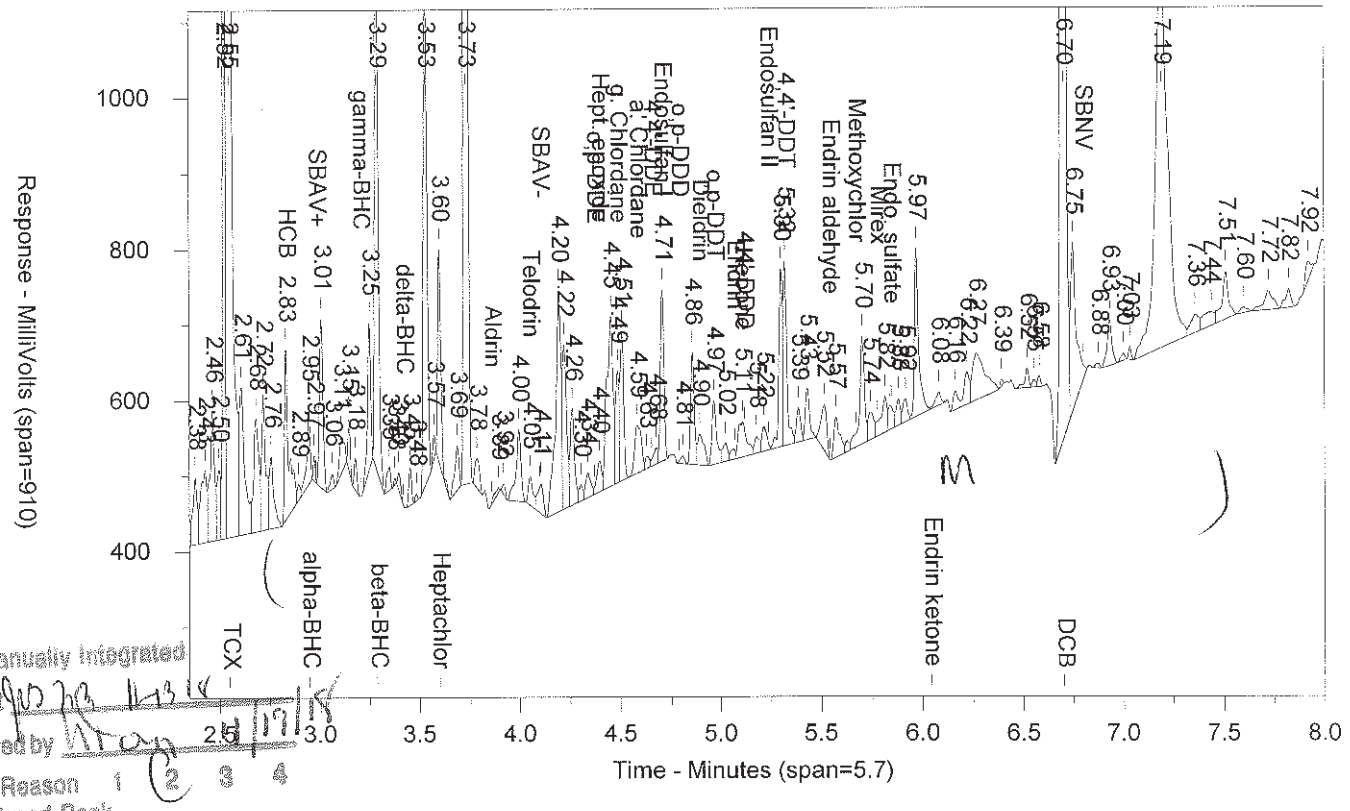

M = Manually Integrated

Analyst

Approved by

Circle Reason 1 2 3 4

1 = Missed Peak
2 = Improper Baseline
3 = RT Update
4 = Other

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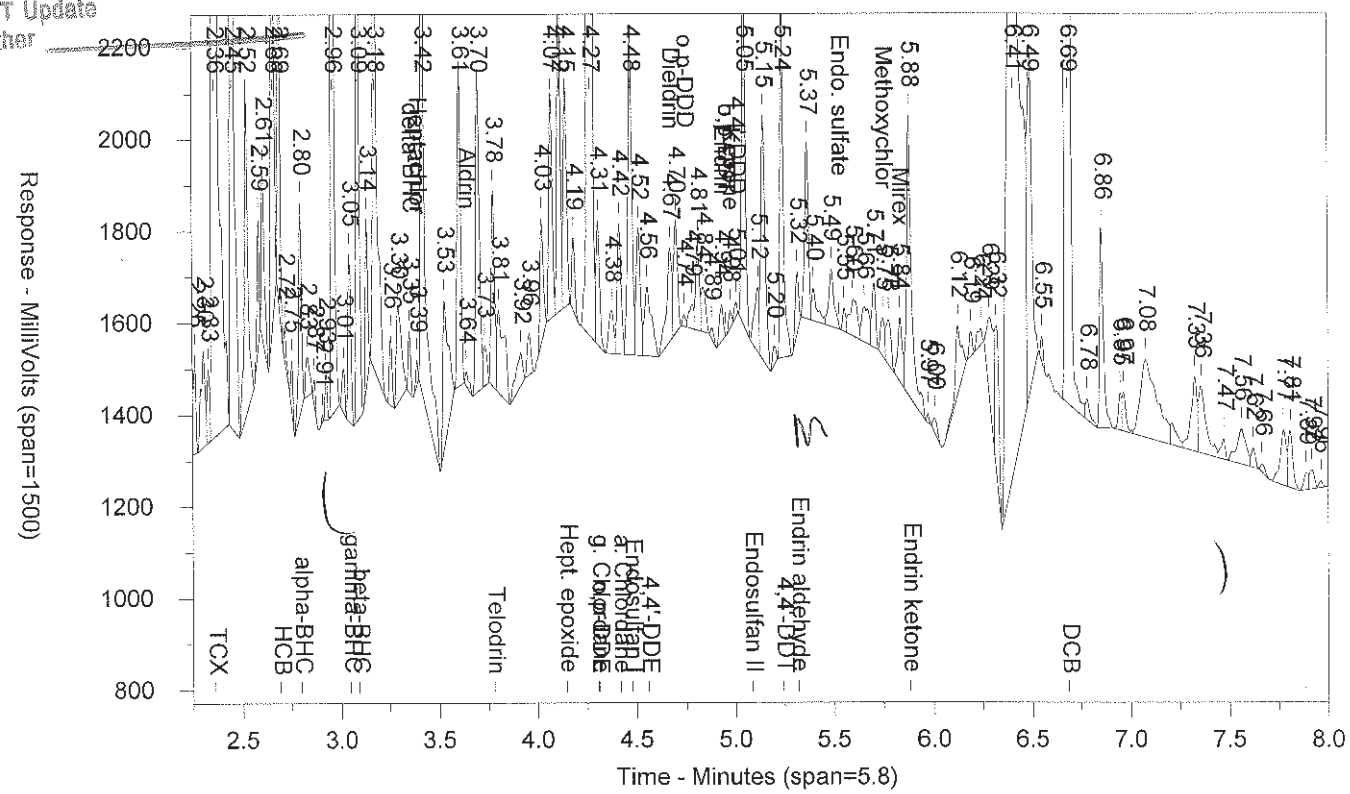

LANCASTER LABORATORIES

Sample Number: 9861920 RI F ABGKPR1 T 182980006A 10589 SW-846 8081B
Injected On: 11/9/2018 11:58:27 PM Sample Weight: 223
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
2.548	11565530	.262	TCX	2.36	44769340	.24	TCX
2.831	226927	.005	HCB	2.691	924714	.006	HCB
2.945	99813	.002	alpha-BHC	2.798	457992	.002	alpha-BHC
	0		gamma-BHC	3.046	366527	.002	gamma-BHC
3.288	901615	.039	beta-BHC	3.092	1481709	.017	beta-BHC
	0		delta-BHC	3.353	133681	.001	delta-BHC
3.598	285718	.007	Heptachlor	3.39	54793		Heptachlor
	0		Aldrin	3.64	31540		Aldrin
4.052	38253	.002	Telodrin	3.777	427726	.005	Telodrin
4.396	40430	.001	Hept. epoxide	4.147	497622	.004	Hept. epoxide
4.487	148130	.004	g. Chlordane	4.31	271647	.002	g. Chlordane
4.586	63189	.002	a. Chlordane	4.419	284323	.002	a. Chlordane
4.707	227841	.007	Endosulfan I	4.477	719845	.006	Endosulfan I
	0		4,4'-DDE	4.559	151318	.001	4,4'-DDE
4.895	41270	.001	Dieldrin	4.67	204587	.002	Dieldrin
	0		o,p-DDD	4.742	26674		o,p-DDD
	0		Endrin	4.936	79267	.001	Endrin
4.967	84246	.004	o,p-DDT		0		o,p-DDT
5.109	46293	.014	Kepone	4.98	38414	.032	Kepone
	0		4,4'-DDD	5.008	32424		4,4'-DDD
5.322	244887	.008	4,4'-DDT	5.245	800910	.008	4,4'-DDT
	0		Endrin aldehyde	5.321	132914	.002	Endrin aldehyde
	0		Methoxychlor	5.75	82467	.002	Methoxychlor
	0		Mirex	5.838	139551	.002	Mirex
	0		Endrin ketone	5.884	612020	.006	Endrin ketone
6.702	3720112	.173	DCB	6.687	11467980	.166	DCB

Files:
Area File: 05pest18306007.051.BND
Area File: 05pest18306007B.051.BND
Method A: 05pest18306007.051.BND
Method B: 05pest18306007B.051.BND
Calibration File A: 05pest18306007.051.BND
Calibration File B: 05pest18306007B.051.BND
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/13/2018 11:43:12 AM
File Reported On: 11/13/2018 at 11:43:53 AM

9861920 RI F ABGKPR1 T 182980006A 10589 SW-846 8081B

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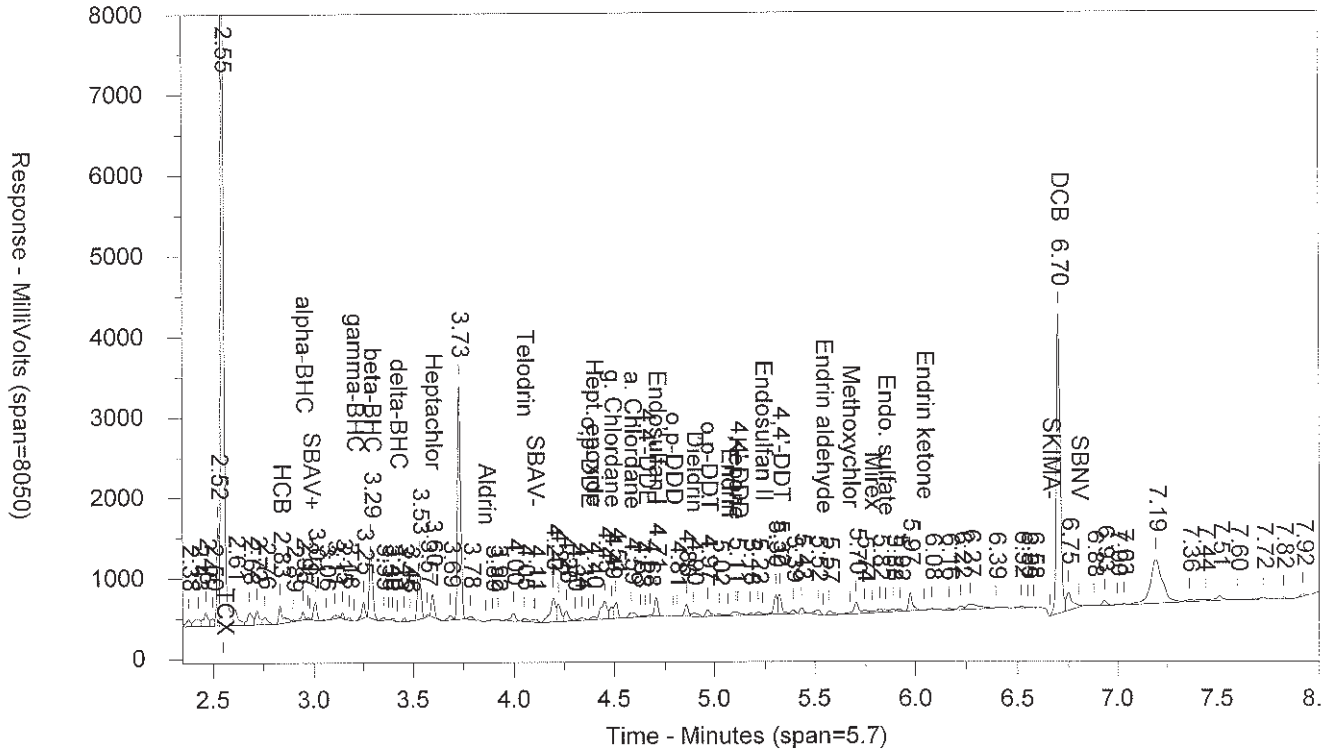

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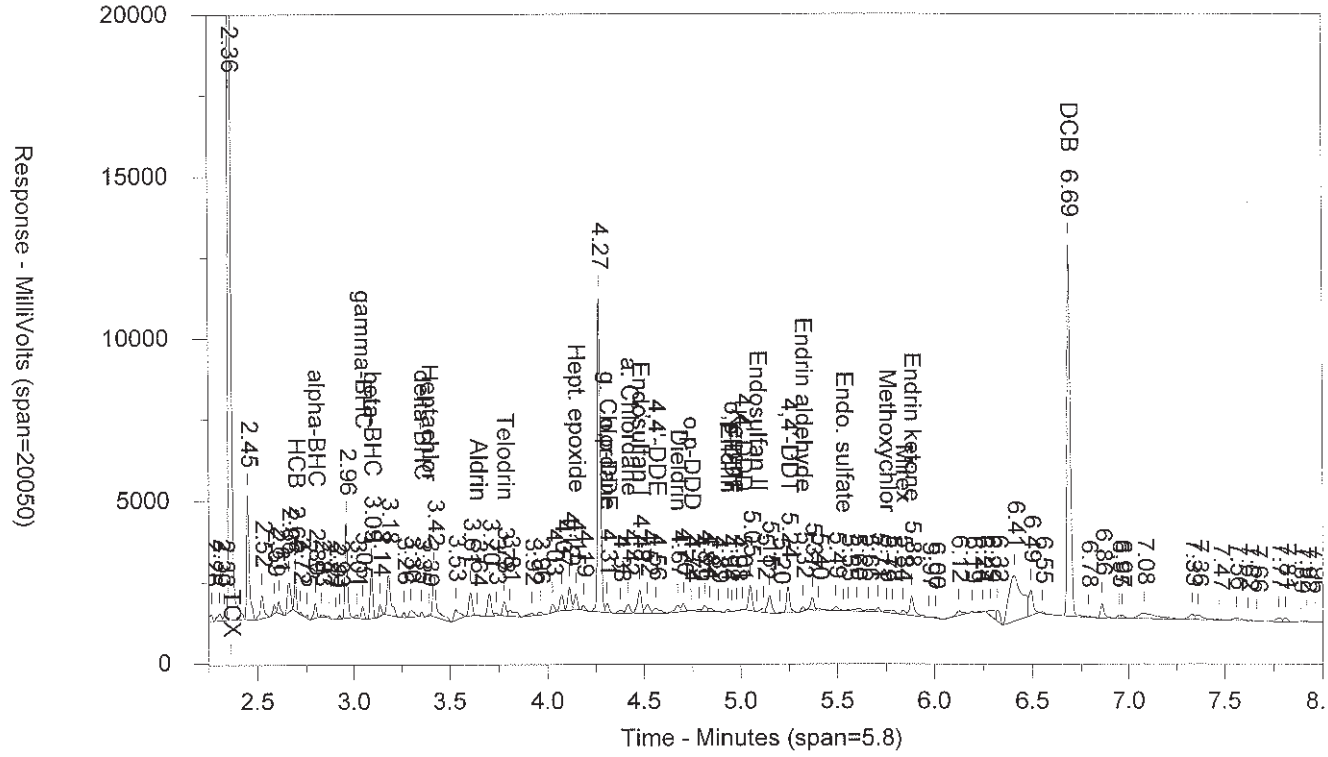

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Data Summary

Sample Name: 9861920R F GKPR1 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 226 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY

Analyses: 10589

Analysis Report (A)

Injected on Nov 15, 2018 13:27:03
Instrument H9147A
Result file 06PEST18261045.015.RAW
Calibration file 06PEST1826103
Method file 06PESTD

%SSR(TCX) 57% (44 - 124) Conc: 0.188581
%SSR(DCB) 72% (32 - 149) Conc: 0.23824

Analysis Report (B)

Injected on Nov 15, 2018 13:27:03
Instrument H9147B
Result file 06PEST18261045B.015.RAW
Calibration file 06PEST1826103B
Method file 06PESTDB

%SSR(TCX) 58% (44 - 124) Conc: 0.193692
%SSR(DCB) 82% (32 - 149) Conc: 0.270381

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	1.80	1.81	1.84	663908	0.188581
HCB	2.26	2.26	2.30	7816	0.001617
Alpha BHC	2.34	2.35	2.38	14067	0.002355
Beta BHC	2.92	2.95	2.96	10321	0.003658
Heptachlor	3.03	3.05	3.07	6695	0.001321
Delta BHC	3.20	3.22	3.24	9015	0.001492
Heptachlor Epoxide	3.84	3.85	3.88	11578	0.002189
Endosulfan I	4.17	4.20	4.21	12679	0.002471
Dieldrin	4.40	4.41	4.44	13224	0.002228
o,p-DDD	4.46	4.47	4.50	12233	0.003604
p,p-DDD	4.76	4.79	4.80	2850	0.000613
Endosulfan II	4.86	4.89	4.90	26597	0.004889
p,p-DDT	4.96	4.98	5.00	8608	0.001926
Endrin Aldehyde	5.04	5.04	5.07	4093	0.00088
Methoxychlor	5.46	5.50	5.50	8497	0.003815
Decachlorobiphenyl	6.36	6.38	6.42	1019427	0.23824

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.60	2.60	2.64	1816375	0.193692
Beta BHC	3.59	3.60	3.63	120369	0.0173
Delta BHC	3.83	3.85	3.87	20818	0.001284
Heptachlor Epoxide	4.55	4.58	4.59	12572	0.000943
Gamma Chlordane	4.80	4.82	4.84	49115	0.003627
Alpha Chlordane	4.84	4.87	4.88	52854	0.00403
p,p-DDE	4.95	4.99	4.99	23097	0.001788
Dieldrin	5.07	5.08	5.11	29951	0.002173
Endrin	5.25	5.28	5.29	28557	0.002514
p,p-DDD	5.34	5.35	5.38	18486	0.001775
Endosulfan II	5.44	5.47	5.48	12121	0.001012
Endrin Aldehyde	5.52	5.56	5.56	8627	0.000859
Methoxychlor	5.87	5.91	5.91	14902	0.003237
Endrin Ketone	6.03	6.03	6.07	4177	0.000344
Decachlorobiphenyl	7.03	7.04	7.09	1807265	0.270381

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐ Total DDTs			<0.0111	<0.0221	<0.0442			
☐ Total Endosulfans (I + II)					<0.0221			
☐ Tetrachloro-m-xylene	B	0.193692	0.0332	0.0664	0.0664		2.67	
☑ Tetrachloro-m-xylene-D1	A	0.188581	0.0332	0.0664	0.0664			
☑ Tetrachloro-m-xylene-D2	B	0.193692	0.0332	0.0664	0.0664			
☐ HCB			<0.0066	<0.0155	<0.0221			
☑ Alpha BHC			<0.0066	<0.0155	<0.0221	D2		
☑ Gamma BHC - Lindane			<0.0044	<0.0155	<0.0221	D1		
☑ Beta BHC			<0.0075	<0.0155	<0.0221	D1		
☑ Heptachlor			<0.0044	<0.0155	<0.0221	D2		
☑ Delta BHC			<0.0075	<0.0155	<0.0221	D2		
☑ Aldrin			<0.0044	<0.0155	<0.0221	D1		
☐ Telodrin					<0.0221			
☑ Heptachlor Epoxide			<0.0051	<0.0155	<0.0221	D2		
☑ Gamma Chlordane			<0.0155	<0.0442	<0.0442	D1		
☐ o,p-DDE			<0.0155	<0.031	<0.0442			
☑ Alpha Chlordane			<0.0066	<0.0155	<0.0221	D1		
☑ Endosulfan I			<0.0095	<0.0199	<0.0221	D2		
☑ p,p-DDE			<0.0111	<0.0221	<0.0442	D1		
☑ Dieldrin			<0.0117	<0.0221	<0.0442	D2		
☐ o,p-DDD			<0.0111	<0.0221	<0.0442			
☑ Endrin			<0.0179	<0.0442	<0.0442	D1		
☐ o,p-DDT			<0.0113	<0.0221	<0.0442			
☐ Kepone					<0.4425			
☑ p,p-DDD			<0.0111	<0.0221	<0.0442	D1		
☑ Endosulfan II			<0.0332	<0.0664	<0.0664	D2		

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:25

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Data Summary

Sample Name: 9861920R F GKPR1 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 226 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 15, 2018 13:27:03
Instrument	H9147A
Result file	06PEST18261045.015.RAW
Calibration file	06PEST1826103
Method file	06PESTD

Analysis Report (B)

Injected on	Nov 15, 2018 13:27:03
Instrument	H9147B
Result file	06PEST18261045B.015.RAW
Calibration file	06PEST1826103B
Method file	06PESTDB

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑ p,p-DDT			<0.0115	<0.0221	<0.0442	D2		
☑ Endrin Aldehyde			<0.0442	<0.0885	<0.2212	D2		
☑ Endosulfan Sulfate			<0.0128	<0.0265	<0.0442	D1		
☑ Methoxychlor			<0.0664	<0.1549	<0.2212	D2		
☑ Endrin Ketone			<0.0111	<0.0221	<0.0442	D1		
☐ Mirex			<0.0221	<0.0885	<0.1106			
☐ Decachlorobiphenyl	B	0.270381	0.0332	0.0664	0.0664		12.64	
☑ Decachlorobiphenyl-D1	A	0.23824	0.0332	0.0664	0.0664			
☑ Decachlorobiphenyl-D2	B	0.270381	0.0332	0.0664	0.0664			

Multiple Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
☑ Chlordane			<0.354	<0.708	<1.1062	D1		5	
☑ Toxaphene			<0.6637	<1.3274	<2.2124	D1		5	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L. Tomayko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:25

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861920R** F GKPR1 ID: AB **Batchnumber: 183180015A**
Sample Amount: 226 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:27:03
Instrument : CP06--H9147A
Result file : 06PEST18261045.015.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

%SSR(TCX) : 57% (44-124) Conc.: 0.188581
%SSR(DCB) : 72% (32-149) Conc.: 0.23824

Peak name	Min	R.T.	Max	Height	Amount
TCX	1.80	1.81	1.84	663908	0.188581
HCB	2.26	2.26	2.30	7816	0.001617
alpha-BHC	2.34	2.35	2.38	14067	0.002355
beta-BHC	2.92	2.95	2.96	10321	0.003658
Heptachlor	3.03	3.05	3.07	6695	0.001321
delta-BHC	3.20	3.22	3.24	9015	0.001492
Hept. epoxide	3.84	3.85	3.88	11578	0.002189
Endosulfan I	4.17	4.20	4.21	12679	0.002471
Dieldrin	4.40	4.41	4.44	13224	0.002228
o,p-DDD	4.46	4.47	4.50	12233	0.003604
4,4'-DDD	4.76	4.79	4.80	2850	0.000613
Endosulfan II	4.86	4.89	4.90	26597	0.004889
4,4'-DDT	4.96	4.98	5.00	8608	0.001926
Endrin aldehyde	5.04	5.04	5.07	4093	0.000880
Methoxychlor	5.46	5.50	5.50	8497	0.003815
DCB	6.36	6.38	6.42	1019427	0.238240

Analysis Report (B)

Injected on : Nov 15, 2018 13:27:03
Instrument : CP06--H9147B
Result file : 06PEST18261045B.015.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

%SSR(TCX) : 58% (44-124) Conc.: 0.193692
%SSR(DCB) : 82% (32-149) Conc.: 0.270381

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.60	2.60	2.64	1816375	0.193692
beta-BHC	3.59	3.60	3.63	120369	0.017300
delta-BHC	3.83	3.85	3.87	20818	0.001284
Hept. epoxide	4.55	4.58	4.59	12572	0.000943
g. Chlordane	4.80	4.82	4.84	49115	0.003627
a. Chlordane	4.84	4.87	4.88	52854	0.004030
4,4'-DDE	4.95	4.99	4.99	23097	0.001788
Dieldrin	5.07	5.08	5.11	29951	0.002173
Endrin	5.25	5.28	5.29	28557	0.002514
4,4'-DDD	5.34	5.35	5.38	18486	0.001775
Endosulfan II	5.44	5.47	5.48	12121	0.001012
Endrin aldehyde	5.52	5.56	5.56	8627	0.000859
Methoxychlor	5.87	5.91	5.91	14902	0.003237
Endrin ketone	6.03	6.03	6.07	4177	0.000344
DCB	7.03	7.04	7.09	1807265	0.270381

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	B	0.193692	0.0664	0.0332		2.67	
☐ HCB			<0.0221	<0.0066			
☑ alpha-BHC			<0.0221	<0.0066			
☑ gamma-BHC			<0.0221	<0.0044			
☑ beta-BHC			<0.0221	<0.0075			
☑ Heptachlor			<0.0221	<0.0044			
☑ delta-BHC			<0.0221	<0.0075			
☑ Aldrin			<0.0221	<0.0044			
☐ Telodrin			<0.0221				
☑ Hept. epoxide			<0.0221	<0.0051			
☑ g. Chlordane			<0.0442	<0.0155			
☐ o,p-DDE			<0.0442	<0.0155			
☑ a. Chlordane			<0.0221	<0.0066			
☑ Endosulfan I			<0.0221	<0.0095			
☑ 4,4'-DDE			<0.0442	<0.0111			
☑ Dieldrin			<0.0442	<0.0117			
☐ o,p-DDD			<0.0442	<0.0111			
☑ Endrin			<0.0442	<0.0179			
☐ o,p-DDT			<0.0442	<0.0113			
☐ Kepone			<0.4425				
☑ 4,4'-DDD			<0.0442	<0.0111			
☑ Endosulfan II			<0.0664	<0.0332			
☑ 4,4'-DDT			<0.0442	<0.0115			
☑ Endrin aldehyde			<0.2212	<0.0442			
☑ Endo. sulfate			<0.0442	<0.0128			

%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

Printed on: 11/15/2018 14:18:29

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861920R** F GKPR1 ID: AB **Batchnumber: 183180015A**
Sample Amount: 226 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	: Nov 15, 2018 13:27:03
Instrument	: CP06--H9147A
Result file	: 06PEST18261045.015.RAW
Calibration file	: 06PEST1826103.CAL
Method file	: 06PESTD.MET

Analysis Report (B)

Injected on	: Nov 15, 2018 13:27:03
Instrument	: CP06--H9147B
Result file	: 06PEST18261045B.015.RAW
Calibration file	: 06PEST1826103B.CAL
Method file	: 06PESTDB.MET

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☑ Methoxychlor			<0.2212	<0.0664			
☑ Endrin ketone			<0.0442	<0.0111			
☐ Mirex			<0.1106	<0.0221			
☐ DCB	B	0.270381	0.0664	0.0332		12.64	
☐ Total DDTs			<0.0442	<0.0111			
☐ Total Endosulfans	A	0.000000	<0.0221				

Units: ug/l

Reviewed by: DJS 15222 Verified by: Valerie L. Tomayko, Principal Specialist

Date: 11/16/18 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: **9861920R** F GKPR1 ID: AB **Batchnumber: 183180015A**
Sample Amount: 226 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:27:03
Instrument : CP06--H9147A
Result file : 06PEST18261045.015.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

%SSR(TCX) : 57% (44-124) Conc.: 0.188581
%SSR(DCB) : 72% (32-149) Conc.: 0.23824

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**85.93**	
2.25	2.26	2.31	7815.65	0.109972			1
2.60	2.61	2.66	10449.19	0.093633			2
+ 2.82	2.84	2.88	29514.8	0.472896			3
2.82	2.87	2.88	33926.87	0.543588			3
3.03	3.05	3.09	6695.457	0.032647			4
3.13	3.15	3.19	26354.21	0.234974			5
3.25	3.26	3.31	40621.31	0.470242			6
Height Summation:			**125862.687**				
Amount Avg CF:			**0.247509**	Linear:			
Aroclor-1221					**2**	**104.95**	
2.08	2.12	2.14	25358.35	0.546069			1
2.26	2.26	2.32	7815.65	0.080849			3
Height Summation:			**33174**				
Amount Avg CF:			**0.313459**	Linear:			
Aroclor-1248					**5**	**131.61**	
3.03	3.05	3.09	6695.457	0.062165			1
3.34	3.40	3.40	51802.01	0.621848			2
3.55	3.56	3.61	13384.26	0.090986			3
3.90	3.93	3.96	6156.361	0.033388			5
4.40	4.41	4.46	13223.98	0.124822			6
Height Summation:			**91262.068**				
Amount Avg CF:			**0.186642**	Linear:			
Aroclor-1254					**4**	**8.62**	
3.91	3.93	3.97	6156.361	0.032489			1
4.03	4.04	4.09	6424.63	0.028229			2
4.40	4.41	4.46	13223.98	0.034215			4
4.94	4.98	5.00	8607.915	0.029751			6
Height Summation:			**34412.886**				
Amount Avg CF:			**0.031171**	Linear:			
Aroclor-1260					**4**	**63.86**	
4.52	4.54	4.58	5976.692	0.022845			1
4.94	4.98	5.00	8607.915	0.028447			3
5.35	5.41	5.41	3349.997	0.00631			5
5.62	5.67	5.68	3275.024	0.00915			6
Height Summation:			**21209.628**				
Amount Avg CF:			**0.016688**	Linear:			
T. Chlordane					**3**	**88.74**	
2.85	2.87	2.91	33926.87	0.25289			1
4.03	4.04	4.09	6424.63	0.013027			3
4.87	4.89	4.93	26596.86	0.139749			5
Height Summation:			**66948.36**				
Amount Avg CF:			**0.135222**	Linear:			

LMPC

Analysis Report (B)

Injected on : Nov 15, 2018 13:27:03
Instrument : CP06--H9147B
Result file : 06PEST18261045B.015.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

%SSR(TCX) : 58% (44-124) Conc.: 0.193692
%SSR(DCB) : 82% (32-149) Conc.: 0.270381

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**94.87**	
2.93	2.95	2.99	138748.8	0.835196			1
3.29	3.31	3.35	109537.4	0.478066			2
3.50	3.52	3.56	27150.06	0.228069			3
* 3.84	3.85	3.90	20818.2	0.073096			5
* 3.81	3.85	3.87	20818.2	0.044273			4
3.94	3.96	4.00	51130.08	0.226677			6
Height Summation:			**368202.74**				
Amount Avg CF:			**0.31423**	Linear:			
Aroclor-1221					**3**	**99.49**	
2.76	2.79	2.82	6110.229	0.087178			1
2.84	2.86	2.90	10880.5	0.157585			2
2.93	2.95	2.99	138748.8	0.608971			3
Height Summation:			**155739.529**				
Amount Avg CF:			**0.284578**	Linear:			
Aroclor-1248					**5**	**34.48**	
3.81	3.85	3.87	20818.2	0.089619			1
4.03	4.05	4.09	33259.93	0.115047			2
4.61	4.63	4.67	29425.79	0.07884			4
4.72	4.75	4.78	17327.59	0.051188			5
+ 5.02	5.03	5.08	19896.74	0.089593			6
5.02	5.08	5.08	29951.24	0.134867			6
Height Summation:			**130782.75**				
Amount Avg CF:			**0.093912**	Linear:			
Aroclor-1254					**5**	**24.39**	
4.55	4.56	4.61	12580.15	0.028933			1
+ 4.55	4.58	4.61	12572.35	0.028915			1
4.73	4.75	4.79	17327.59	0.026644			2
+ 5.02	5.03	5.08	19896.74	0.025735			3
5.02	5.08	5.08	29951.24	0.03874			3
5.25	5.28	5.31	28557.19	0.048406			4
5.45	5.47	5.51	12121.3	0.034644			5
+ 5.45	5.51	5.51	11035.98	0.031542			5
Height Summation:			**100537.47**				
Amount Avg CF:			**0.035473**	Linear:			
Aroclor-1260					**3**	**122.92**	
5.15	5.20	5.21	27485.5	0.050434			1
5.38	5.41	5.44	50336.24	0.214273			2
6.00	6.03	6.06	4176.582	0.004458			5
Height Summation:			**81998.322**				
Amount Avg CF:			**0.089722**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861920R** F GKPR1 ID: AB **Batchnumber: 183180015A**
Sample Amount: 226 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:27:03
Instrument : CP06--H9147A
Result file : 06PEST18261045.015.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene						**4**	**33.89**	
	4.76	4.79	4.82	2850.171	0.039731 LMDL			1
+	5.02	5.04	5.08	4092.535	0.061113 X			2
	5.02	5.08	5.08	4758.992	0.071065			2
	5.36	5.41	5.42	3349.997	0.053237 LMDL			4
	5.46	5.50	5.52	8497.375	0.089026			5

Height Summation: **19456.535**
Amount Avg CF: **0.063264** Linear:

Analysis Report (B)

Injected on : Nov 15, 2018 13:27:03
Instrument : CP06--H9147B
Result file : 06PEST18261045B.015.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane						**5**	**181.98**	
+	3.69	3.70	3.75	30283.49	0.084259 X			1
	3.69	3.74	3.75	318368.2	0.885808 ✓			1
	4.57	4.58	4.63	12572.35	0.036853			2
	4.79	4.82	4.85	49114.69	0.033226			3
	4.83	4.87	4.89	52854.47	0.055067 LMDL			4
	5.48	5.51	5.54	11035.98	0.03013			5

Height Summation: **443945.69**
Amount Avg CF: **0.208217** Linear:

Toxaphene						**3**	**60.99**	
	5.47	5.51	5.53	11035.98	0.063844			1
	5.94	5.95	6.00	11582.26	0.097141 LMDL			4
	6.03	6.03	6.09	4176.582	0.022622			5

Height Summation: **26794.822**
Amount Avg CF: **0.061202** Linear:

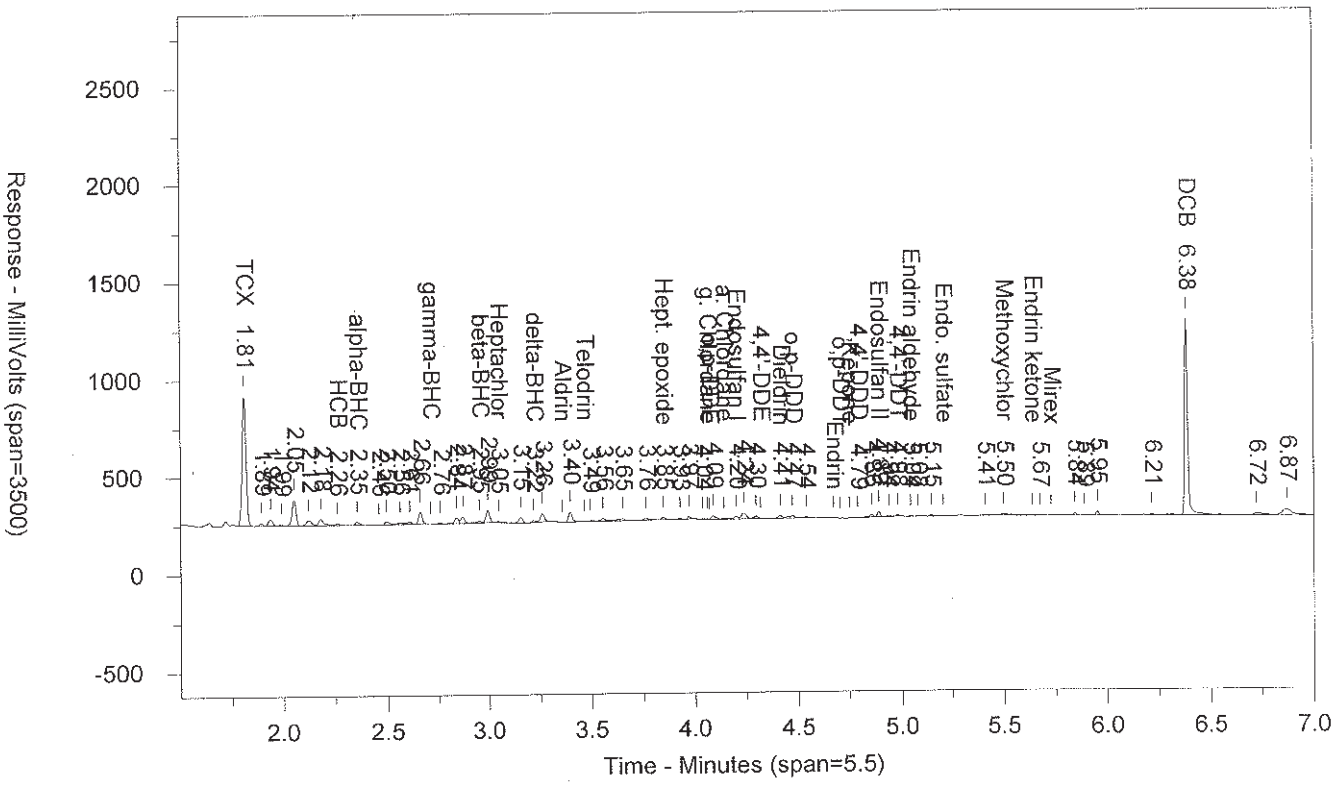
Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		23.75	5	20	
Aroclor-1221			0	0		9.66	2	20	
Aroclor-1248			0	0		** 66.10	5	20	
Aroclor-1254			0	0		12.91	4	20	
Aroclor-1260			0	0		** 137.27	5	20	
T. Chlordane			1.1062	0.354		** 42.51	5	20	
Total PCBs			0	0					
Toxaphene			2.2124	0.6637		3.31	5	30	

Units: ug/l

9861920R F ABGKPR1 T 183180015A 10589 SW-846 8081B

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP6\06pest18261045.015.RAW



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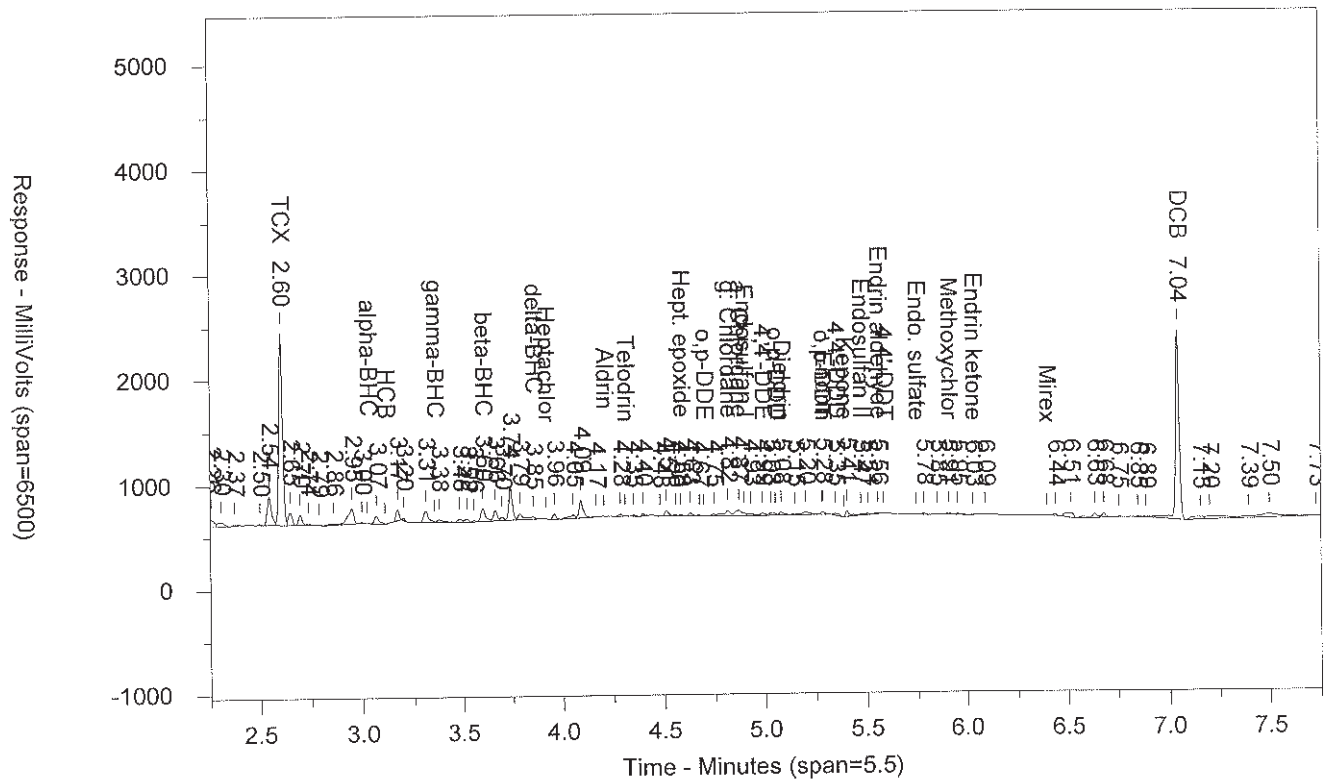

LANCASTER LABORATORIES

Sample Number: 9861920R F ABGKPR1 T 183180015A 10589 SW-846 8081B
Injected On: 11/15/2018 1:27:03 PM Sample Weight: 226
Instrument ID: CP6-9147 Dilution Factor: 5
Oven Parameters: 150c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min; hold 1.5 min
Column A ID: DB-CLP 30m x 0.32mm x 0.5um
Column B ID: DB-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
1.811	663908	.189	TCX	2.603	1816375	.194	TCX
2.26	7816	.002	HCB		0		HCB
2.355	14067	.002	alpha-BHC		0		alpha-BHC
2.952	10321	.004	beta-BHC	3.601	120369	.017	beta-BHC
3.046	6695	.001	Heptachlor		0		Heptachlor
3.219	9015	.001	delta-BHC	3.851	20818	.001	delta-BHC
3.845	11578	.002	Hept. epoxide	4.582	12572	.001	Hept. epoxide
4.199	12679	.002	Endosulfan I		0		Endosulfan I
4.414	13224	.002	Dieldrin	5.078	29951	.002	Dieldrin
4.472	12233	.004	o,p-DDD		0		o,p-DDD
4.791	2850	.001	4,4'-DDD	5.349	18486	.002	4,4'-DDD
	0		g. Chlordane	4.816	49115	.004	g. Chlordane
	0		a. Chlordane	4.87	52854	.004	a. Chlordane
4.891	26597	.005	Endosulfan II	5.472	12121	.001	Endosulfan II
4.98	8608	.002	4,4'-DDT		0		4,4'-DDT
	0		4,4'-DDE	4.987	23097	.002	4,4'-DDE
5.044	4093	.001	Endrin aldehyde	5.557	8627	.001	Endrin aldehyde
	0		Endrin	5.285	28557	.003	Endrin
5.498	8497	.004	Methoxychlor	5.907	14902	.003	Methoxychlor
	0		Endrin ketone	6.03	4177		Endrin ketone
6.381	1019427	.238	DCB	7.043	1807265	.27	DCB

Files:
Area File: 06pest18261045.015.RAW
Area File: 06pest18261045B.015.RAW
Method A: 06PESTD.MET
Method B: 06PESTDB.MET
Calibration File A: 06pest1826103.CAL
Calibration File B: 06pest1826103b.CAL
Format A: pestD6.FMTA
Format B: pestD6.FMTA
Area File Created On: 11/15/2018 1:35:01 PM
File Reported On: 11/15/2018 at 1:42:41 PM

9861920R F ABGKPR1 T 183180015A 10589 SW-846 8081B

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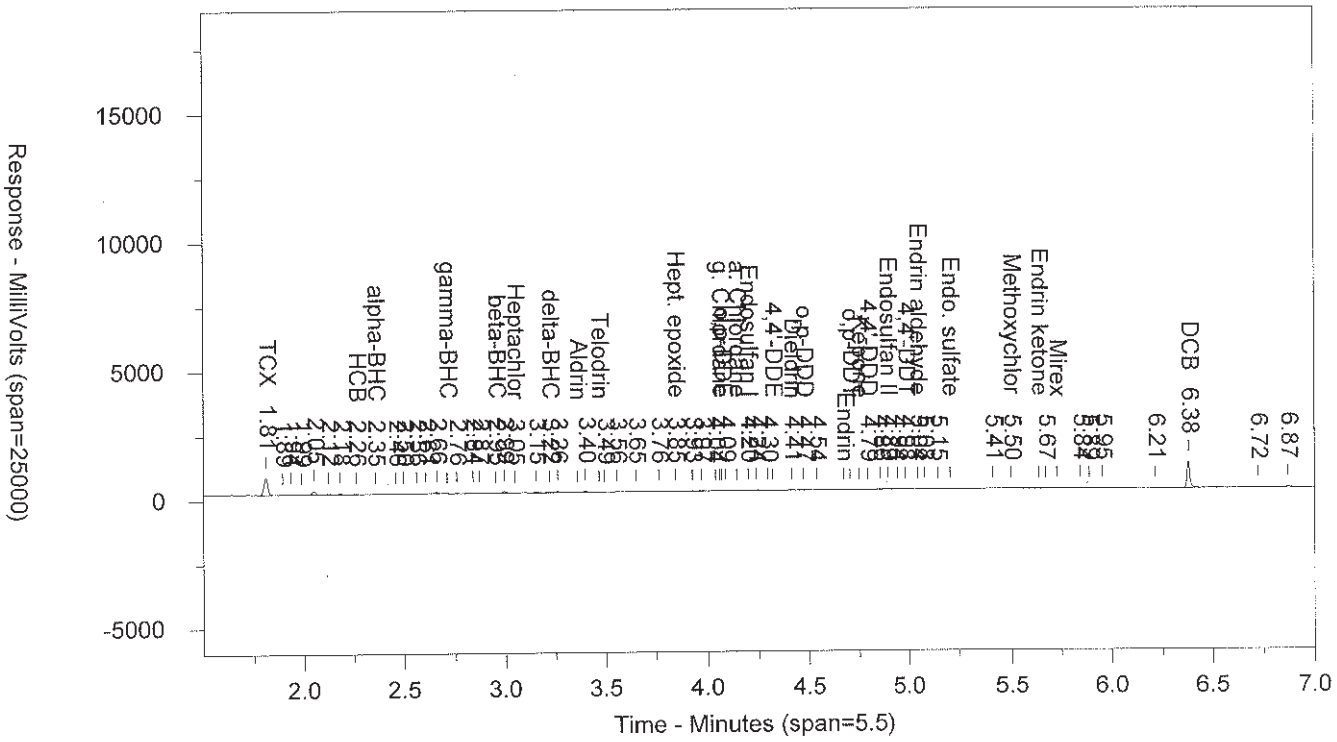

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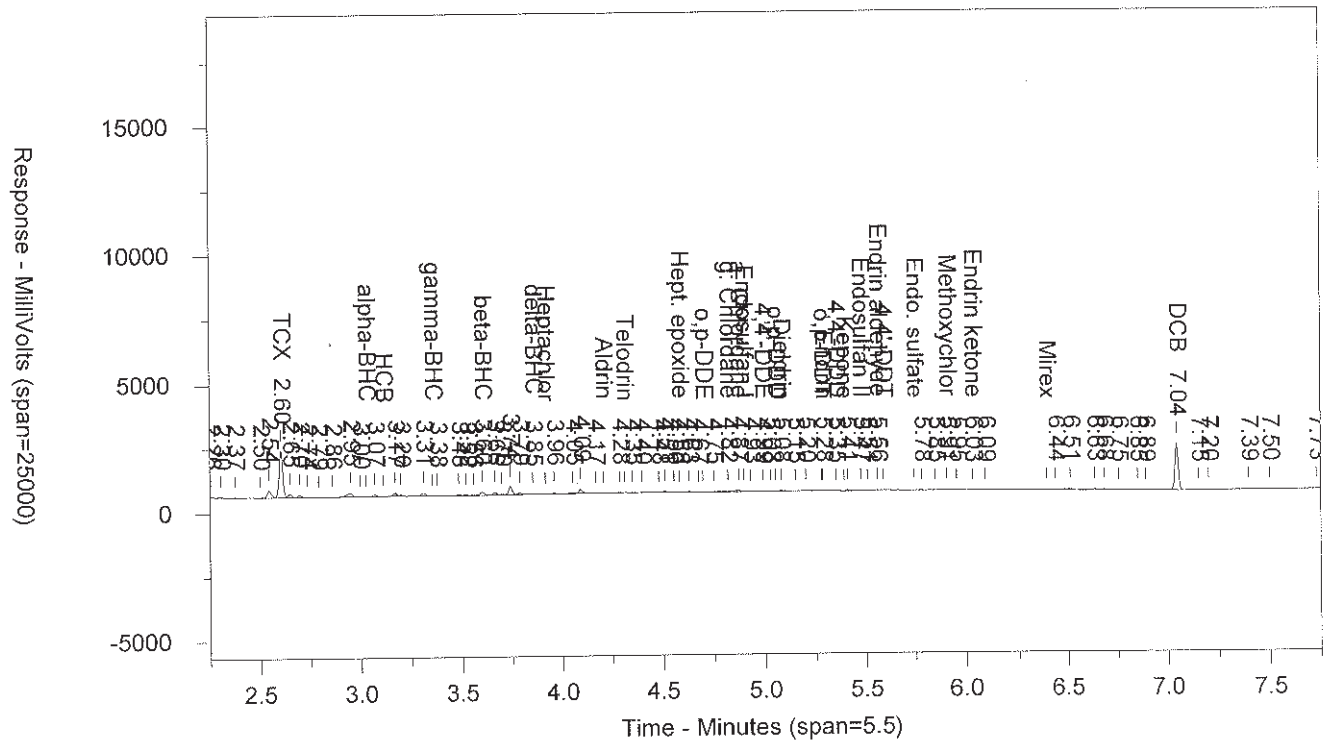

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Data Summary

Sample Name: 9861921 RI F GKP05 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 247 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 10, 2018 00:11:17
Instrument H9190A
Result file 05PEST18306007.052.BND
Calibration file 05PEST1830603
Method file 05PEST18306007

%SSR(TCX) 76% (44 - 124) Conc: 0.230351
%SSR(DCB) 70% (32 - 149) Conc: 0.210926

Analysis Report (B)

Injected on Nov 10, 2018 00:11:17
Instrument H9190B
Result file 05PEST18306007B.052.BND
Calibration file 05PEST1830603B
Method file 05PEST18306007B

%SSR(TCX) 64% (44 - 124) Conc: 0.195095
%SSR(DCB) 67% (32 - 149) Conc: 0.202377

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.53	2.55	2.57	11277795	0.230351
HCB	2.81	2.83	2.85	201500	0.003872
Alpha BHC	2.94	2.97	2.98	73432	0.001084
Beta BHC	3.25	3.28	3.29	2050898	0.0806
Delta BHC	3.40	3.40	3.44	81575	0.001534
Heptachlor	3.58	3.60	3.62	202153	0.004187
Aldrin	3.84	3.87	3.88	29698	0.000664
Telodrin	4.03	4.05	4.06	37976	0.001418
Heptachlor Epoxide	4.36	4.39	4.40	30934	0.000782
Alpha Chlordane	4.57	4.58	4.61	69666	0.001758
p,p-DDE	4.63	4.65	4.67	13610	0.000356
Endosulfan I	4.68	4.70	4.72	93097	0.002507
Dieldrin	4.87	4.90	4.91	1397009	0.034983
Kepone	5.08	5.11	5.12	9356	0.010225
Endosulfan II	5.22	5.22	5.26	47983	0.001426
p,p-DDT	5.31	5.32	5.35	966388	0.029434
Mirex	5.76	5.79	5.80	18867	0.000805
Endosulfan Sulfate	5.83	5.84	5.87	28124	0.000917
Decachlorobiphenyl	6.67	6.70	6.73	4957366	0.210926

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.34	2.36	2.38	40258316	0.195095
HCB	2.66	2.69	2.70	821775	0.004711
Alpha BHC	2.76	2.80	2.80	598876	0.002161
Gamma BHC - Lindane	3.02	3.04	3.06	827612	0.003598
Beta BHC	3.09	3.09	3.13	336456	0.003482
Delta BHC	3.31	3.35	3.35	135092	0.000645
Heptachlor	3.36	3.39	3.40	362297	0.001999
Aldrin	3.62	3.64	3.66	49319	0.000287
Telodrin	3.76	3.78	3.80	361054	0.004085
Heptachlor Epoxide	4.12	4.14	4.16	752273	0.00548
Gamma Chlordane	4.28	4.31	4.32	316749	0.002201
Alpha Chlordane	4.40	4.42	4.44	245843	0.001727
Endosulfan I	4.45	4.47	4.48	242378	0.001921
p,p-DDE	4.55	4.56	4.59	175966	0.001264
Dieldrin	4.67	4.70	4.70	261758	0.001831
Endrin	4.90	4.92	4.94	7384384	0.057763
Kepone	4.97	5.01	5.01	136860	0.030584
Endosulfan II	5.06	5.10	5.10	1134218	0.00947
p,p-DDT	5.23	5.24	5.27	2001351	0.017514
Endrin Aldehyde	5.31	5.32	5.35	149344	0.001541
Endosulfan Sulfate	5.51	5.55	5.55	33434	0.000296
Methoxychlor	5.72	5.74	5.76	250238	0.004697
Mirex	5.83	5.84	5.87	312388	0.004574
Endrin Ketone	5.88	5.88	5.92	508763	0.004291
Decachlorobiphenyl	6.66	6.68	6.72	15455765	0.202377

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.004	<0.0081	<0.0162			
☐	Total Endosulfans (I + II)					<0.0081			
☐	Tetrachloro-m-xylene	A	0.230351	0.0121	0.0243	0.0243		16.57	
☑	Tetrachloro-m-xylene-D1	A	0.230351	0.0121	0.0243	0.0243			
☑	Tetrachloro-m-xylene-D2	B	0.195095	0.0121	0.0243	0.0243			
☐	HCB	B	0.004711	0.0024	<0.0057	<0.0081	J	19.55	
☑	Alpha BHC			<0.0024	<0.0057	<0.0081	D1		
☑	Gamma BHC - Lindane			<0.0016	<0.0057	<0.0081	D1		
☑	Beta BHC			<0.0036	<0.0072	<0.0081	VD2		2706
☑	Delta BHC			<0.0028	<0.0057	<0.0081	D1		
☑	Heptachlor	A	0.004187	0.0016	<0.0057	<0.0081	JPD1	70.74	
☑	Aldrin			<0.0016	<0.0057	<0.0081	D1		
☐	Telodrin					<0.0081			
☐	o,p-DDE			<0.0057	<0.0113	<0.0162			
☑	Heptachlor Epoxide			<0.0019	<0.0057	<0.0081	D1		
☑	Gamma Chlordane			<0.0057	<0.0162	<0.0162	D1		
☑	Alpha Chlordane			<0.0024	<0.0057	<0.0081	D1		

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:36:52

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Data Summary

Sample Name: 9861921 RI F GKP05 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 247 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 10, 2018 00:11:17
Instrument	H9190A
Result file	05PEST18306007.052.BND
Calibration file	05PEST1830603
Method file	05PEST18306007

Analysis Report (B)

Injected on	Nov 10, 2018 00:11:17
Instrument	H9190B
Result file	05PEST18306007B.052.BND
Calibration file	05PEST1830603B
Method file	05PEST18306007B

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
✓ p,p-DDE			<0.004	<0.0081	<0.0162	D1		
✓ Endosulfan I			<0.0035	<0.0073	<0.0081	D1		
o,p-DDD			<0.004	<0.0081	<0.0162			
✓ Dieldrin			<0.0043	<0.0081	<0.0162	D1		
o,p-DDT			<0.0041	<0.0081	<0.0162			
✓ Endrin			<0.0066	<0.0162	<0.0162	D1		
Kepone					<0.1619			
✓ p,p-DDD			<0.004	<0.0081	<0.0162	D1		
✓ Endosulfan II			<0.0121	<0.0243	<0.0243	D1		
✓ p,p-DDT	A	0.029434	0.0042	0.0081	0.0162	PD1	50.78	
✓ Endrin Aldehyde			<0.0162	<0.0324	<0.081	D1		
✓ Methoxychlor			<0.0243	<0.0567	<0.081	D1		
Mirex			<0.0081	<0.0324	<0.0405			
✓ Endosulfan Sulfate			<0.0047	<0.0097	<0.0162	D1		
✓ Endrin Ketone			<0.004	<0.0081	<0.0162	D1		
Decachlorobiphenyl	A	0.210926	0.0121	0.0243	0.0243		4.14	
✓ Decachlorobiphenyl-D1	A	0.210926	0.0121	0.0243	0.0243			
✓ Decachlorobiphenyl-D2	B	0.202377	0.0121	0.0243	0.0243			

Multiple Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
✓ Chlordane			<0.1296	<0.2591	<0.4049	D1		4	
✓ 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
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:36:52

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861921** RI F GKP05 ID: AB **Batchnumber: 182980006A**
Sample Amount: 247 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 10, 2018 00:11:17
Instrument : CP05--H9190A
Result file : 05pest18306007.052.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.052.BND

%SSR(TCX) : 76% (44-124) Conc.: 0.230351
%SSR(DCB) : 70% (32-149) Conc.: 0.210926

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.53	2.55	2.57	11277795	0.230351
HCB	2.81	2.83	2.85	201500	0.003872
alpha-BHC	2.94	2.97	2.98	73432	0.001084
beta-BHC	3.25	3.28	3.29	2050898	0.080600
delta-BHC	3.40	3.40	3.44	81575	0.001534
Heptachlor	3.58	3.60	3.62	202153	0.004187
Aldrin	3.84	3.87	3.88	29698	0.000664
Telodrin	4.03	4.05	4.06	37976	0.001418
Hept. epoxide	4.36	4.39	4.40	30934	0.000782
a. Chlordane	4.57	4.58	4.61	69666	0.001758
4,4'-DDE	4.63	4.65	4.67	13610	0.000356
Endosulfan I	4.68	4.70	4.72	93097	0.002507
Dieldrin	4.87	4.90	4.91	1397009	0.034983
Kepone	5.08	5.11	5.12	9356	0.010225
Endosulfan II	5.22	5.22	5.26	47983	0.001426
4,4'-DDT	5.31	5.32	5.35	966388	0.029434
Mirex	5.76	5.79	5.80	18867	0.000805
Endo. sulfate	5.83	5.84	5.87	28124	0.000917
DCB	6.67	6.70	6.73	4957366	0.210926

9356 / 265845 x 2/247 = 0.0028

Analysis Report (B)

Injected on : Nov 10, 2018 00:11:17
Instrument : CP05--H9190B
Result file : 05pest18306007B.052.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.052.BND

%SSR(TCX) : 64% (44-124) Conc.: 0.195095
%SSR(DCB) : 67% (32-149) Conc.: 0.202377

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.34	2.36	2.38	40258316	0.195095
HCB	2.66	2.69	2.70	821775	0.004711
alpha-BHC	2.76	2.80	2.80	598876	0.002161
gamma-BHC	3.02	3.04	3.06	827612	0.003598
beta-BHC	3.09	3.09	3.13	336456	0.003482
delta-BHC	3.31	3.35	3.35	135092	0.000645
Heptachlor	3.36	3.39	3.40	362297	0.001999
Aldrin	3.62	3.64	3.66	49319	0.000287
Telodrin	3.76	3.78	3.80	361054	0.004085
Hept. epoxide	4.12	4.14	4.16	752273	0.005480
g. Chlordane	4.28	4.31	4.32	316749	0.002201
a. Chlordane	4.40	4.42	4.44	245843	0.001727
Endosulfan I	4.45	4.47	4.48	242378	0.001921
4,4'-DDE	4.55	4.56	4.59	175966	0.001264
Dieldrin	4.67	4.70	4.70	261758	0.001831
Endrin	4.90	4.92	4.94	7384384	0.057763
Kepone	4.97	5.01	5.01	136860	0.030584
Endosulfan II	5.06	5.10	5.10	1134218	0.009470
4,4'-DDT	5.23	5.24	5.27	2001351	0.017514
Endrin aldehyde	5.31	5.32	5.35	149344	0.001541
Endo. sulfate	5.51	5.55	5.55	33434	0.000296
Methoxychlor	5.72	5.74	5.76	250238	0.004697
Mirex	5.83	5.84	5.87	312388	0.004574
Endrin ketone	5.88	5.88	5.92	508763	0.004291
DCB	6.66	6.68	6.72	15455765	0.202377

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	A	0.230351	0.0243	0.0121		16.57	
☐ HCB	B	0.004711	<0.0081	0.0024	J	19.55	
☑ alpha-BHC			<0.0081	<0.0024			
☑ gamma-BHC			<0.0081	<0.0016			
☑ beta-BHC	B	0.003482	<0.0081	0.0028 (B) J D.0032		183.43	** B278 dup QB 11-13-18
☑ delta-BHC			<0.0081	<0.0028			
☑ Heptachlor (A)	B	0.001999	<0.0081	0.0016	J	70.76	** B165 CCV
☑ Aldrin			<0.0081	<0.0016			
☐ Telodrin	A	0.001418	<0.0081			96.93	**
☐ o,p-DDE			<0.0162	<0.0057			
☑ Hept. epoxide			<0.0081	<0.0019			
☑ g. Chlordane			<0.0162	<0.0057			
☑ a. Chlordane			<0.0081	<0.0024			
☑ 4,4'-DDE			<0.0162	<0.004			
☑ Endosulfan I			<0.0081	<0.0035			
☐ o,p-DDD			<0.0162	<0.004			
☑ Dieldrin			<0.0162	<0.0043			

Jamie L. Brillhart
Jamie L. Brillhart
Senior Chemist

%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

NOV 13 2018

Printed on: 11/13/2018 12:13:51

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861921** RI F GKP05 ID: AB **Batchnumber: 182980006A**
Sample Amount: 247 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 10, 2018 00:11:17
Instrument : CP05--H9190A
Result file : 05pest18306007.052.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.052.BND

Analysis Report (B)

Injected on : Nov 10, 2018 00:11:17
Instrument : CP05--H9190B
Result file : 05pest18306007B.052.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.052.BND

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ o,p-DDT			<0.0162	<0.0041			
☑ Endrin			<0.0162	<0.0066			
☐ Kepone	A	0.010225	<0.1619			99.78	**
☑ 4,4'-DDD			<0.0162	<0.004			A 4mL
☑ Endosulfan II			<0.0243	<0.0121			
☑ 4,4'-DDT (A)	B	0.017514	0.0162	0.0042		50.78	** BDL Opening CCV was 2e-3
☑ Endrin aldehyde			<0.081	<0.0162			
☑ Methoxychlor			<0.081	<0.0243			
☐ Mirex			<0.0405	<0.0081			
☑ Endo. sulfate			<0.0162	<0.0047			
☑ Endrin ketone			<0.0162	<0.004			
☐ DCB	A	0.210926	0.0243	0.0121		4.14	
☐ Total DDTs	B	0.017514	0.0162	0.004		0.00	
☐ Total DDTs	A	0.017514	0.0162	0.004		0.00	
☐ Total Endosulfans	A	0.000000	<0.0081				

Units: ug/l

Reviewed by: Jamie L. Brillhart
Jamie L. Brillhart
Senior Chemist
Date: NOV 13 2018

Verified by: Valerie L. Tomayko
Valerie L. Tomayko
Principal Specialist
Date: NOV 19 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

Printed on: 11/13/2018 12:13:51

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861921** RI F GKP05 ID: AB **Batchnumber: 182980006A**
Sample Amount: 247 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 10, 2018 00:11:17
Instrument : CP05--H9190A
Result file : 05pest18306007.052.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.052.BND

%SSR(TCX) : 76% (44-124) Conc.: 0.230351
%SSR(DCB) : 70% (32-149) Conc.: 0.210926

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**85.80**	
2.78	2.83	2.84	201499.5	0.25931			1
3.04	3.06	3.10	13170.89257	0.012065			2
3.20	3.25	3.26	200482.375	0.624353			3
+ 3.40	3.40	3.46	81575.11718	0.097864			4
3.40	3.45	3.46	28019.73242	0.033615			4
3.51	3.53	3.57	264834.0312	0.303627			5
+* 3.56	3.57	3.62	44394.96093	0.075673			6
+* 3.51	3.57	3.57	44394.96093	0.050898			5
3.56	3.60	3.62	202153.4531	0.344577			6
Height Summation:			**910159.984375**				
Amount Avg CF:			**0.262924**	Linear:			
Aroclor-1221					**2**	**22.17**	
2.66	2.68	2.70	120665.7187	0.272447			1
2.80	2.83	2.84	201499.5	0.198598			3
Height Summation:			**322165.21875**				
Amount Avg CF:			**0.235523**	Linear:			
Aroclor-1248					**6**	**90.94**	
3.38	3.40	3.44	81575.11718	0.097965			1
3.66	3.68	3.72	216582.7343	0.475737			2
3.85	3.87	3.91	29697.6875	0.027555			3
4.21	4.22	4.27	207690.3906	0.169286			4
+ 4.39	4.39	4.45	30933.98632	0.03716			5
4.39	4.45	4.45	307267.75	0.369111			5
4.71	4.74	4.77	37835.94140	0.060033			6
Height Summation:			**880649.621094**				
Amount Avg CF:			**0.199948**	Linear:			
Aroclor-1254					**6**	**179.97**	
4.39	4.39	4.45	30933.98632	0.019673			1
+ 4.39	4.45	4.45	307267.75	0.195412			1
4.62	4.65	4.68	13609.95800	0.011567			2
4.71	4.74	4.77	37835.94140	0.01844			3
4.93	4.96	4.99	70110.08593	0.045865			4
5.06	5.09	5.12	13214.63183	0.012559			5
+ 5.06	5.11	5.12	9355.606445	0.008891			5
5.27	5.30	5.33	635246.3125	0.37588			6
+ 5.27	5.32	5.33	966387.75	0.571819			6
Height Summation:			**800950.916016**				
Amount Avg CF:			**0.080664**	Linear:			

Analysis Report (B)

Injected on : Nov 10, 2018 00:11:17
Instrument : CP05--H9190B
Result file : 05pest18306007B.052.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.052.BND

%SSR(TCX) : 64% (44-124) Conc.: 0.195095
%SSR(DCB) : 67% (32-149) Conc.: 0.202377

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**132.84**	
+ 2.66	2.66	2.72	1039793.875	0.43817			1
2.66	2.69	2.72	821775.375	0.346297			1
E 2.93	2.96	2.99	7536170	2.291838			2
3.11	3.14	3.17	363579.5625	0.265416			3
3.27	3.30	3.33	541719.375	0.094093			4
+ 3.37	3.39	3.43	362296.9062	0.125599			5
3.37	3.42	3.43	1204946.125	0.417722			5
Height Summation:			**10468190.4375**				
Amount Avg CF:			**0.683073**	Linear:			
Aroclor-1221					**3**	**68.07**	
E 2.54	2.57	2.58	2422636.25	1.76686			1
+ 2.63	2.64	2.67	108807.3359	0.129845			2
2.63	2.66	2.67	1039793.875	1.24084			2
2.67	2.69	2.71	821775.375	0.290423			3
Height Summation:			**4284205.5**				
Amount Avg CF:			**1.099374**	Linear:			
Aroclor-1248					**6**	**50.74**	
3.27	3.30	3.33	541719.375	0.185808			1
+ 3.53	3.53	3.59	154594.3593	0.05585			2
3.53	3.55	3.59	114571.75	0.041391			2
3.75	3.78	3.81	361053.8125	0.104583			3
+ 3.75	3.81	3.81	403948.9375	0.117008			3
3.85	3.90	3.91	225694.1406	0.078311			4
4.11	4.14	4.17	752273.3125	0.188871			5
4.30	4.31	4.36	316748.9687	0.101036			6
Height Summation:			**2312061.359375**				
Amount Avg CF:			**0.116667**	Linear:			
Aroclor-1254					**7**	**97.43**	
4.11	4.14	4.17	752273.3125	0.195545			1
E+ 4.27	4.27	4.33	10091083	2.323993			2
4.27	4.31	4.33	316748.9687	0.072948			2
4.64	4.66	4.70	241507.2656	0.038492			3
4.81	4.85	4.87	5007257.5	1.112256			4
5.07	5.10	5.13	1134217.5	0.342682			5
5.21	5.24	5.27	2001350.75	0.418356			6
5.21	5.24	5.27	2001350.75	0.418356			6
Height Summation:			**11454706.046875**				
Amount Avg CF:			**0.371234**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861921** RI F GKP05 ID: AB **Batchnumber: 182980006A**
Sample Amount: 247 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 10, 2018 00:11:17
Instrument : CP05--H9190A
Result file : 05pest18306007.052.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.052.BND

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1260						**6**	**112.84**	
+	4.85	4.85	4.91	317660.625	0.219943			1
	4.85	4.90	4.91	1397009.375	0.967264			1
	5.06	5.09	5.12	13214.63183	0.006774			2
+	5.06	5.11	5.12	9355.606445	0.004796			2
	5.27	5.30	5.33	635246.3125	0.309525			3
+	5.27	5.32	5.33	966387.75	0.470874			3
	5.53	5.57	5.59	496818.8437	0.432998			4
	5.74	5.79	5.80	18866.59179	0.008035			5
	5.94	5.97	6.00	260215.3906	0.18566			6
Height Summation:				**2821371.145508**				
Amount Avg CF:				**0.318376**	Linear:			
Chlordane						**6**	**99.70**	
	3.50	3.53	3.56	264834.0312	0.194037			1
	3.94	3.99	4.00	87406.67968	0.063615			2
+	4.29	4.30	4.35	51554.08203	0.057944			3
	4.29	4.33	4.35	42633.05078	0.047918			3
	4.45	4.51	4.51	293493.75	0.07138			4
	4.55	4.58	4.61	69665.85937	0.012251			5
	5.15	5.18	5.22	18388.97070	0.013527			6
Height Summation:				**776422.341797**				
Amount Avg CF:				**0.067121**	Linear:			
Toxaphene						**6**	**181.12**	
	5.06	5.09	5.12	13214.63183	0.022376			1
+	5.06	5.11	5.12	9355.606445	0.015842			1
	5.20	5.22	5.26	47983.08203	0.051847			2
+	5.20	5.24	5.26	2001350.75	2.162496			2
+	5.29	5.30	5.35	635246.3125	0.759699			3
	5.29	5.32	5.35	966387.75	1.155715			3
	5.45	5.50	5.51	84406.3125	0.099241			4
	5.68	5.70	5.74	96024.95312	0.130673			5
	5.75	5.79	5.81	18866.59179	0.021874			6
Height Summation:				**1226883.321289**				
Amount Avg CF:				**0.246954**	Linear:			

Analysis Report (B)

Injected on : Nov 10, 2018 00:11:17
Instrument : CP05--H9190B
Result file : 05pest18306007B.052.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.052.BND

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1260						**7**	**124.61**	
	4.79	4.81	4.85	372716.5312	0.086504			1
	4.95	4.98	5.01	35010.14453	0.006807			2
	5.21	5.24	5.27	2001350.75	0.374668			3
	5.21	5.24	5.27	2001350.75	0.374668			3
	5.48	5.49	5.54	158826.9062	0.047265			4
	5.65	5.71	5.71	244121.2343	0.035393			5
	5.90	5.94	5.96	44773.86718	0.010935			6
Height Summation:				**4858150.183594**				
Amount Avg CF:				**0.133748**	Linear:			
Chlordane						**6**	**108.84**	
	3.23	3.26	3.29	190885.3593	0.037784			1
	3.74	3.78	3.80	361053.8125	0.075119			2
	4.08	4.11	4.14	248228.2343	0.072316			3
	4.27	4.31	4.33	316748.9687	0.019332			4
	4.39	4.42	4.45	245843.4062	0.019853			5
	5.08	5.10	5.14	1134217.5	0.244358			6
Height Summation:				**2496977.28125**				
Amount Avg CF:				**0.078127**	Linear:			
Toxaphene						**6**	**157.58**	
	4.64	4.66	4.70	241507.2656	0.140184			1
	4.87	4.92	4.93	7384384	4.151377			2
	5.04	5.05	5.10	2897860.25	0.898928			3
+	5.04	5.10	5.10	1134217.5	0.351839			3
	5.31	5.32	5.37	149344.375	0.042503			4
+	5.36	5.37	5.42	355044.0312	0.172047			5
	5.36	5.40	5.42	1479044.625	0.716715			5
	5.66	5.71	5.72	244121.2343	0.077471			6
Height Summation:				**12396261.75**				
Amount Avg CF:				**1.00453**	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 88.83	4	40	
Aroclor-1221			0	0		** 129.43	3	5	
Aroclor-1248			0	0		** 52.61	4	30	
Aroclor-1254			0	0		** 128.60	4	40	
Aroclor-1260			0	0		** 81.67	4	40	
Chlordane			0.4049	0.1296		15.15	4	40	
Toxaphene			0.8097	0.2429		** 121.07	4	40	

Units: ug/l

9861921 RI F ABGKP05 T 182980006A 10589 SW-846 8081B

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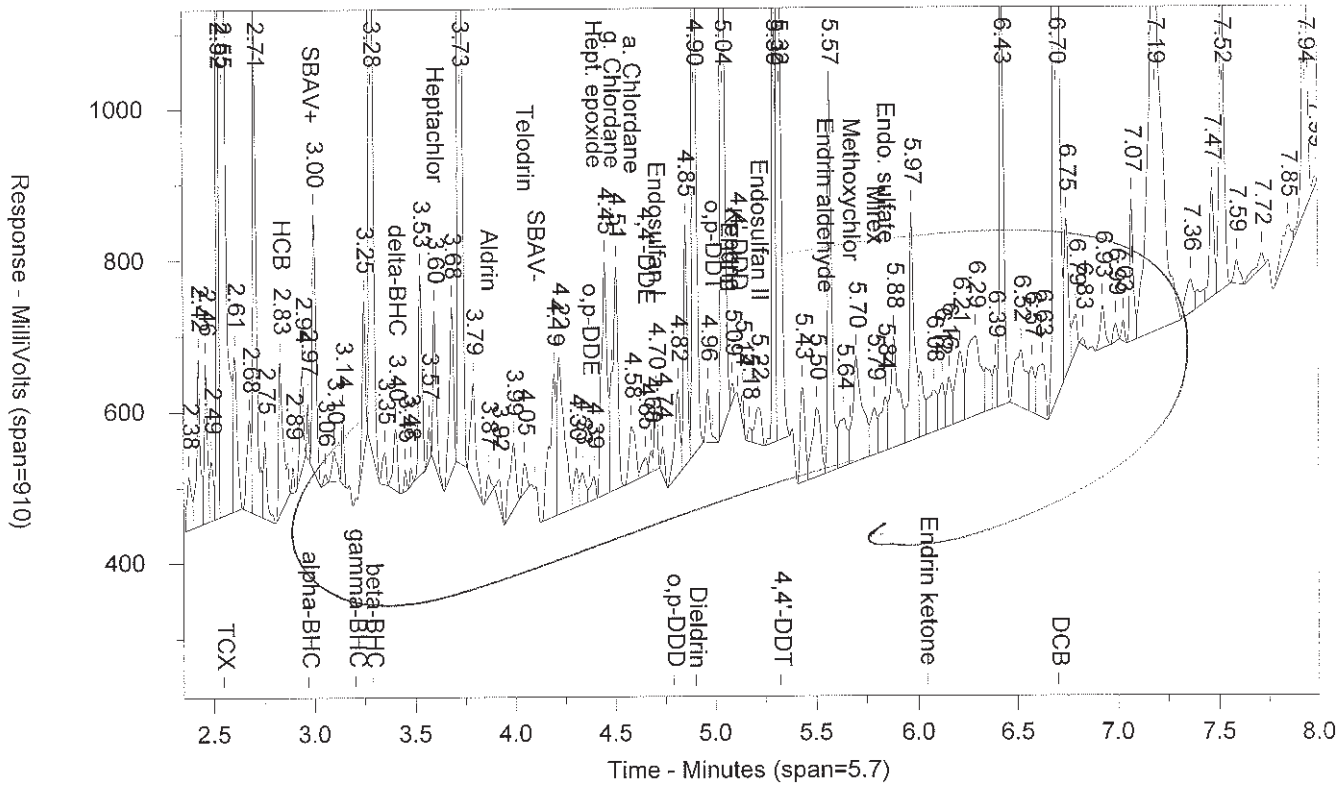

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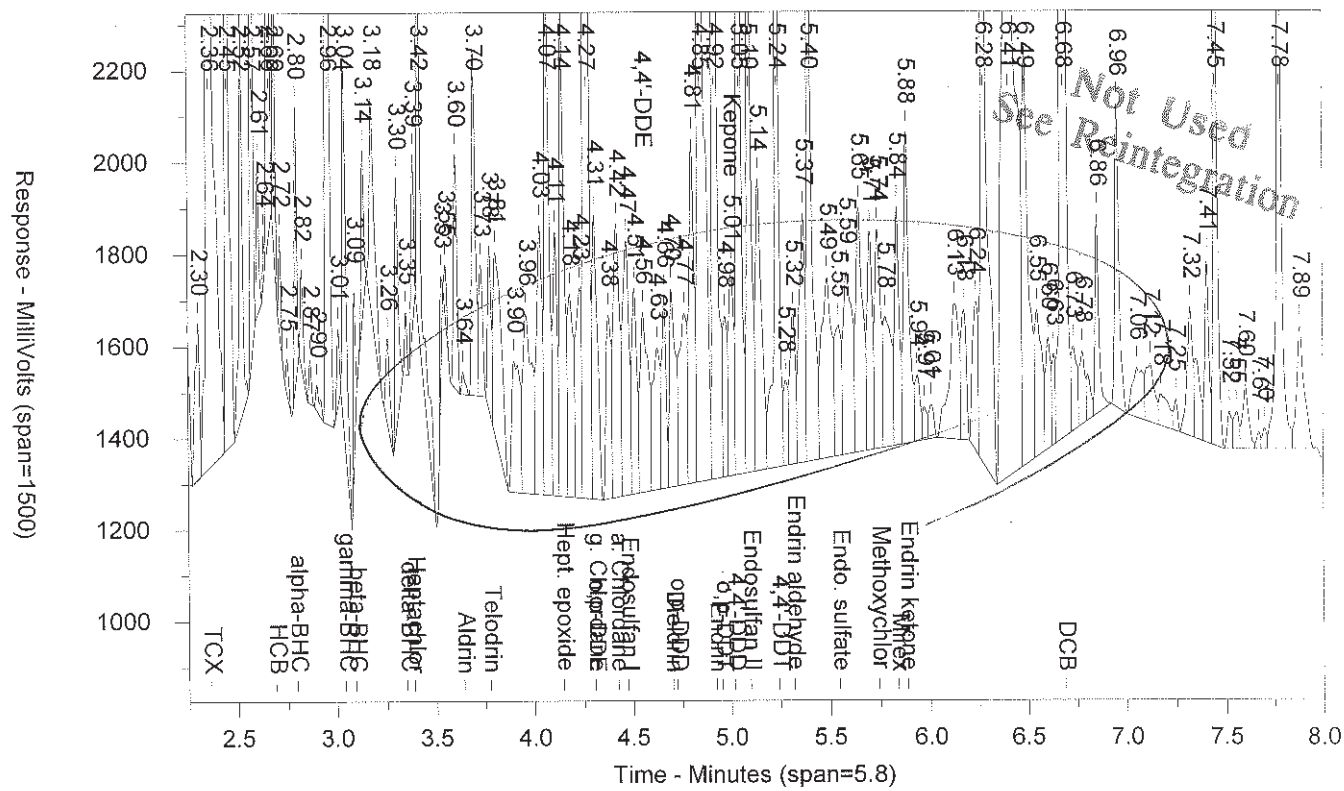

LANCASTER LABORATORIES

Sample Number: 9861921 RI F ABGKP05 T 182980006A 10589 SW-846 8081B
Injected On: 11/10/2018 12:11:17 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: 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
2.545	11277800	.23	TCX	2.357	40258320	.195	TCX
2.829	201500	.004	HCB	2.689	821775	.005	HCB
2.967	73432	.001	alpha-BHC	2.795	598876	.002	alpha-BHC
	0		gamma-BHC	3.043	827612	.004	gamma-BHC
3.285	2050898	.081	beta-BHC	3.093	336456	.003	beta-BHC
3.403	81575	.002	delta-BHC	3.35	135092	.001	delta-BHC
3.596	202154	.004	Heptachlor	3.388	362297	.002	Heptachlor
3.865	29698	.001	Aldrin	3.64	49319		Aldrin
4.048	37976	.001	Telodrin	3.775	361054	.004	Telodrin
4.393	30934	.001	Hept. epoxide	4.144	1064601	.008	Hept. epoxide
	0		g. Chlordane	4.308	619057	.004	g. Chlordane
4.583	73793	.002	a. Chlordane	4.422	595059	.004	a. Chlordane
4.705	96645	.003	Endosulfan I	4.473	554760	.004	Endosulfan I
4.65	23808	.001	4,4'-DDE	4.555	392626	.003	4,4'-DDE
4.9	1397009	.035	Dieldrin	4.701	432551	.003	Dieldrin
	0		Endrin	4.924	7595864	.059	Endrin
5.09	23601	.011	Kepone	5.008	449124	.036	Kepone
5.218	47983	.001	Endosulfan II	5.1	1435641	.012	Endosulfan II
5.324	966388	.029	4,4'-DDT	5.242	2145350	.019	4,4'-DDT
	0		Endrin aldehyde	5.317	326801	.003	Endrin aldehyde
5.843	70383	.002	Endo. sulfate	5.547	284232	.003	Endo. sulfate
	0		Methoxychlor	5.742	476943	.009	Methoxychlor
5.79	61374	.003	Mirex	5.836	519708	.008	Mirex
	0		Endrin ketone	5.881	676705	.006	Endrin ketone
6.7	4957366	.211	DCB	6.685	15588320	.204	DCB

Files:
Area File: 05pest18306007.052.RAW
Area File: 05pest18306007B.052.RAW
Method A: 05PESTD.MET
Method B: 05PESTDB.MET
Calibration File A: 05pest1830603.cal
Calibration File B: 05pest1830603b.cal
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/10/2018 12:19:18 AM
File Reported On: 11/13/2018 at 3:56:43 AM

Not Used
See Reintegration

9861921 RI F ABGKP05 T 182980006A 10589 SW-846 8081B

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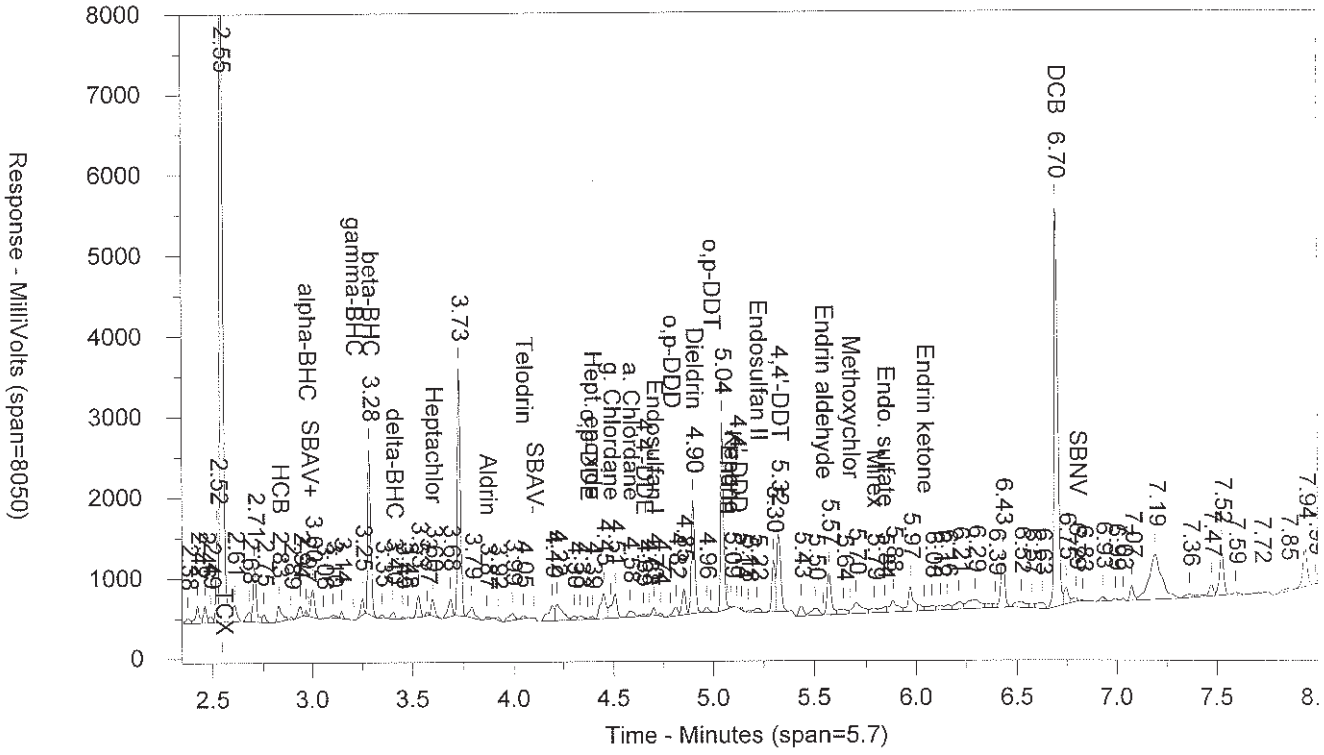

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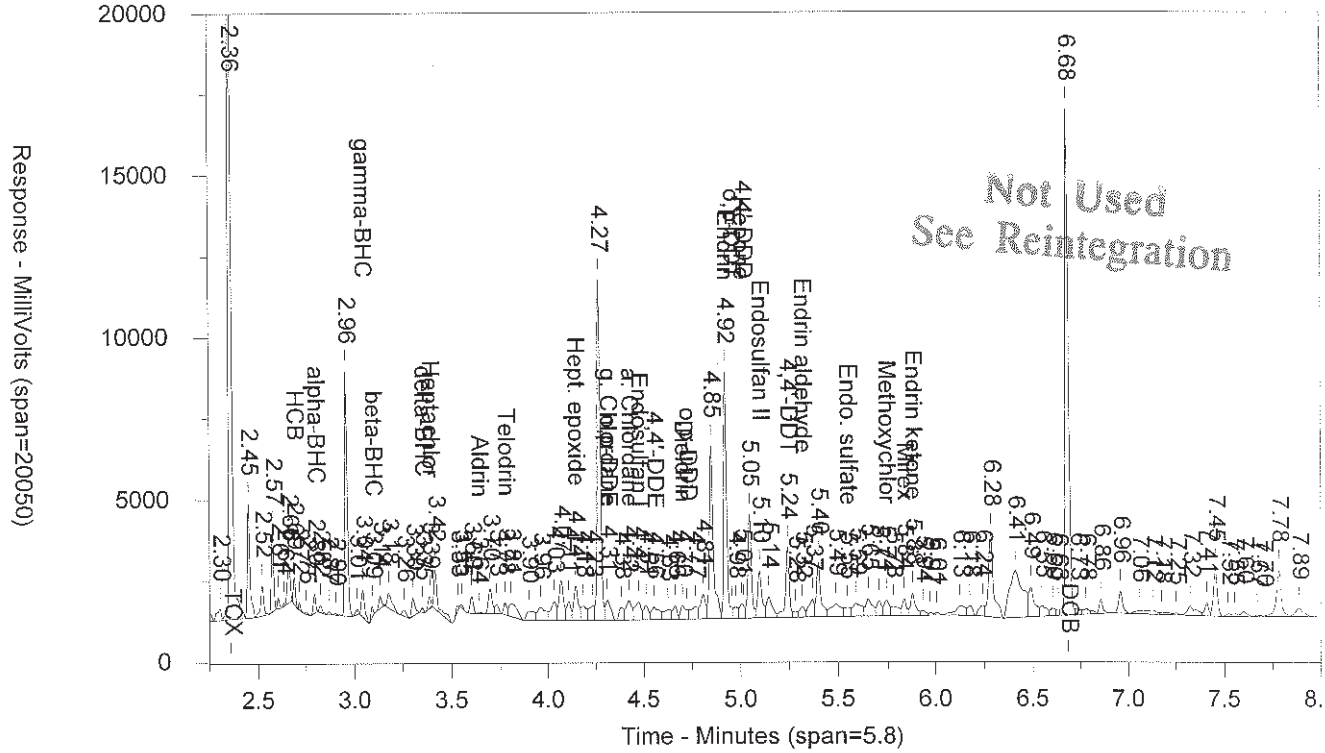

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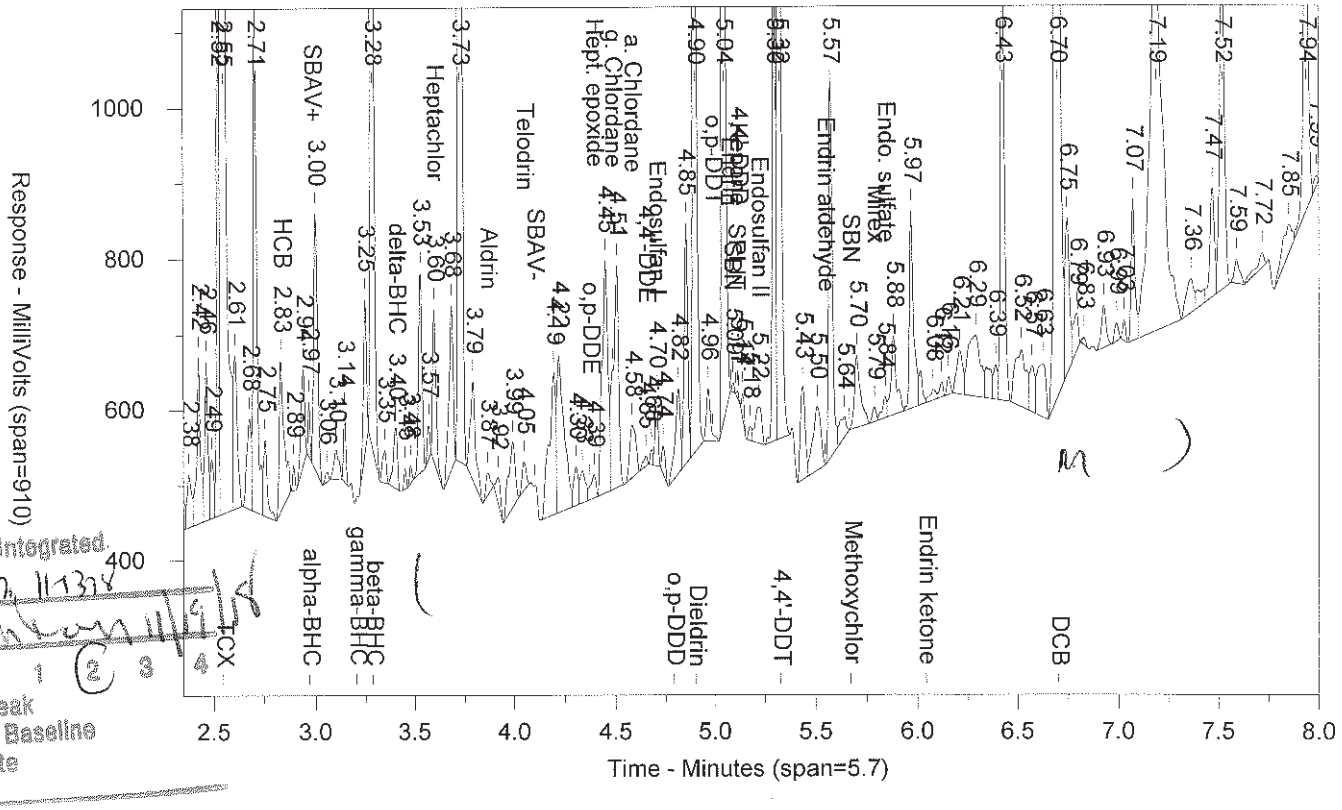

M = Manually Integrated
Analyst
Approved by
Circle Reason
1 = Missed Peak
2 = Improper Baseline
3 = RT Update
4 = Other

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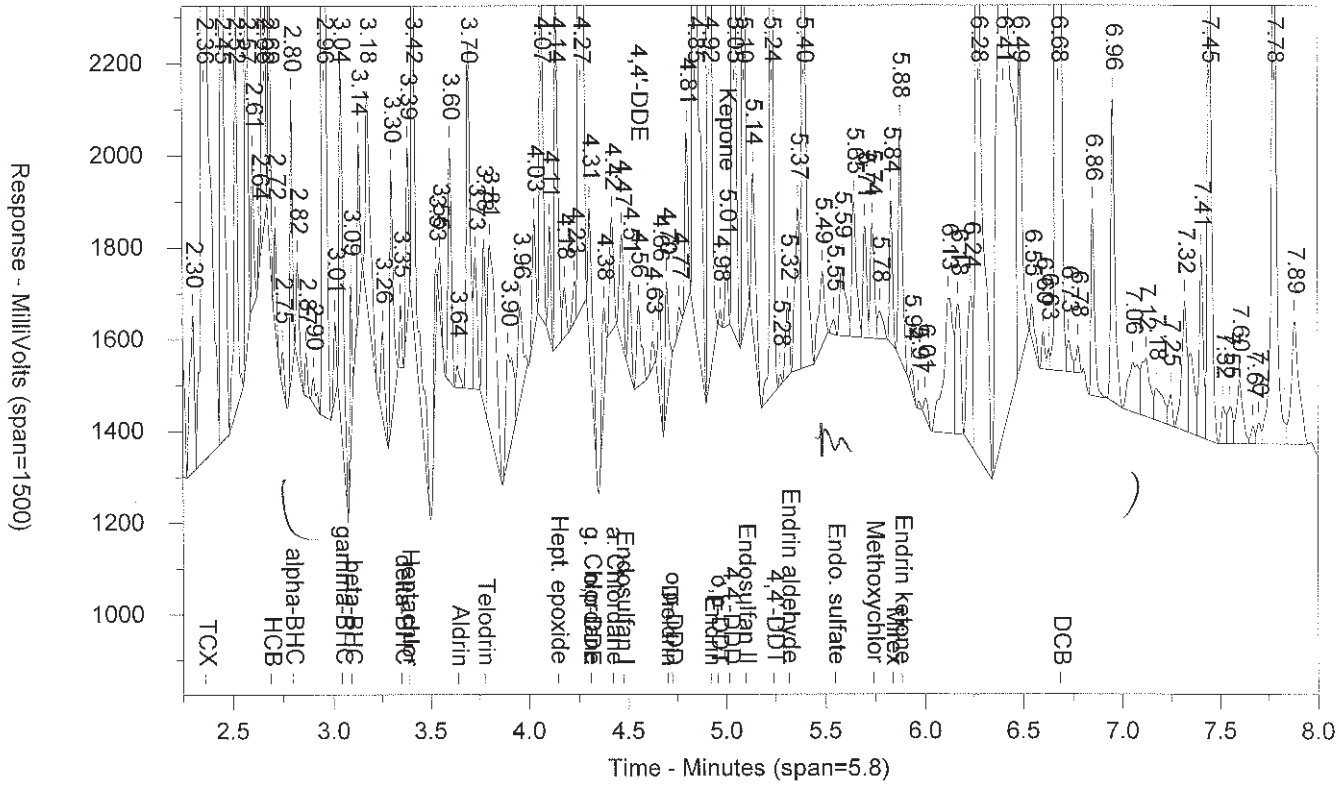

LANCASTER LABORATORIES

Sample Number: 9861921 RI F ABGKP05 T 182980006A 10589 SW-846 8081B
Injected On: 11/10/2018 12:11:17 AM Sample Weight: 247
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
2.545	11277800	.23	TCX	2.357	40258320	.195	TCX
2.829	201500	.004	HCB	2.689	821775	.005	HCB
2.967	73432	.001	alpha-BHC	2.795	598876	.002	alpha-BHC
	0		gamma-BHC	3.043	827612	.004	gamma-BHC
3.285	2050898	.081	beta-BHC	3.093	336456	.003	beta-BHC
3.403	81575	.002	delta-BHC	3.35	135092	.001	delta-BHC
3.596	202154	.004	Heptachlor	3.388	362297	.002	Heptachlor
3.865	29698	.001	Aldrin	3.64	49319		Aldrin
4.048	37976	.001	Telodrin	3.775	361054	.004	Telodrin
4.393	30934	.001	Hept. epoxide	4.144	752273	.005	Hept. epoxide
	0		g. Chlordane	4.308	316749	.002	g. Chlordane
4.583	69666	.002	a. Chlordane	4.422	245843	.002	a. Chlordane
4.705	93097	.003	Endosulfan I	4.473	242378	.002	Endosulfan I
4.65	13610		4,4'-DDE	4.555	175966	.001	4,4'-DDE
4.9	1397009	.035	Dieldrin	4.701	261758	.002	Dieldrin
	0		Endrin	4.924	7384384	.058	Endrin
5.111	9356	.01	Kepone	5.008	136860	.031	Kepone
5.218	47983	.001	Endosulfan II	5.1	1134218	.009	Endosulfan II
5.324	966388	.029	4,4'-DDT	5.242	2001351	.018	4,4'-DDT
	0		Endrin aldehyde	5.317	149344	.002	Endrin aldehyde
5.843	28124	.001	Endo. sulfate	5.547	33434		Endo. sulfate
	0		Methoxychlor	5.742	250238	.005	Methoxychlor
5.79	18867	.001	Mirex	5.836	312388	.005	Mirex
	0		Endrin ketone	5.881	508764	.004	Endrin ketone
6.7	4957366	.211	DCB	6.685	15455770	.202	DCB

Files:
Area File: 05pest18306007.052.BND
Area File: 05pest18306007B.052.BND
Method A: 05pest18306007.052.BND
Method B: 05pest18306007B.052.BND
Calibration File A: 05pest18306007.052.BND
Calibration File B: 05pest18306007B.052.BND
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/13/2018 11:46:05 AM
File Reported On: 11/13/2018 at 11:46:30 AM

9861921 RI F ABGKP05 T 182980006A 10589 SW-846 8081B

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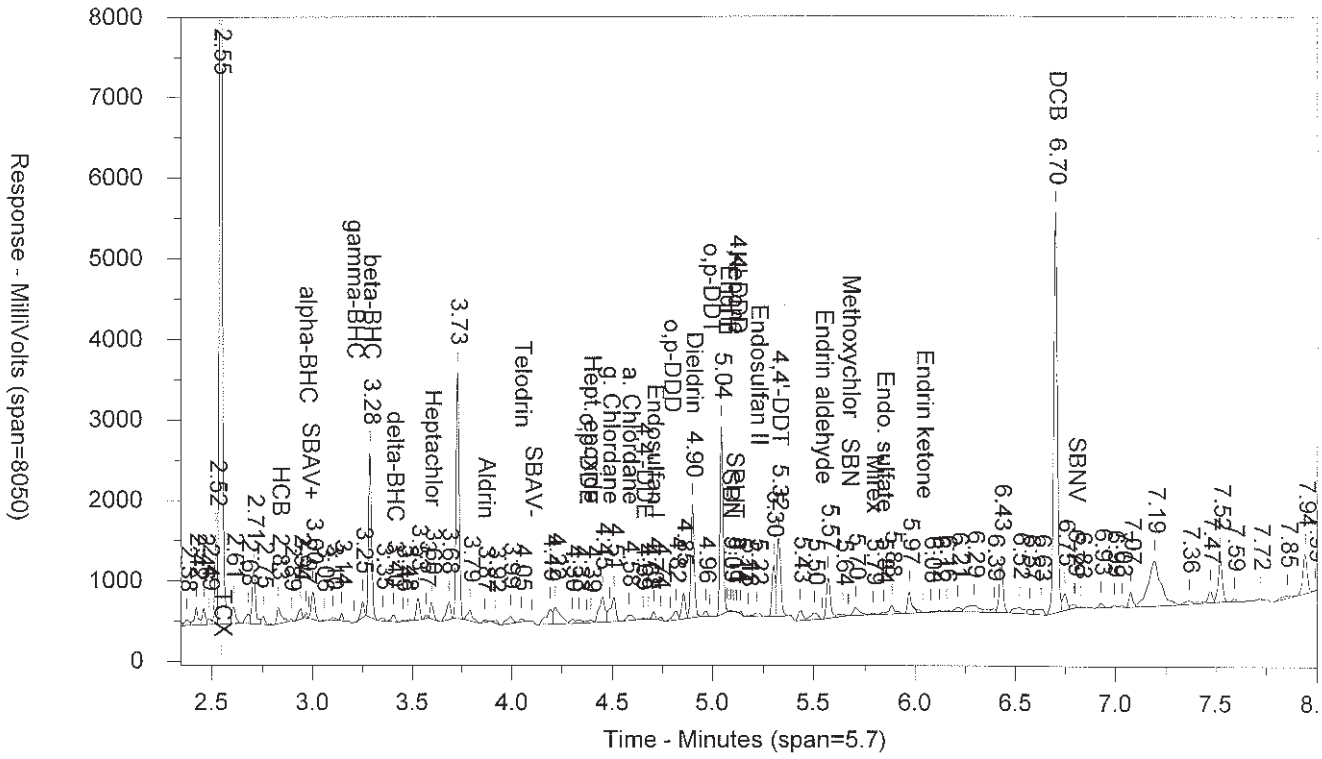

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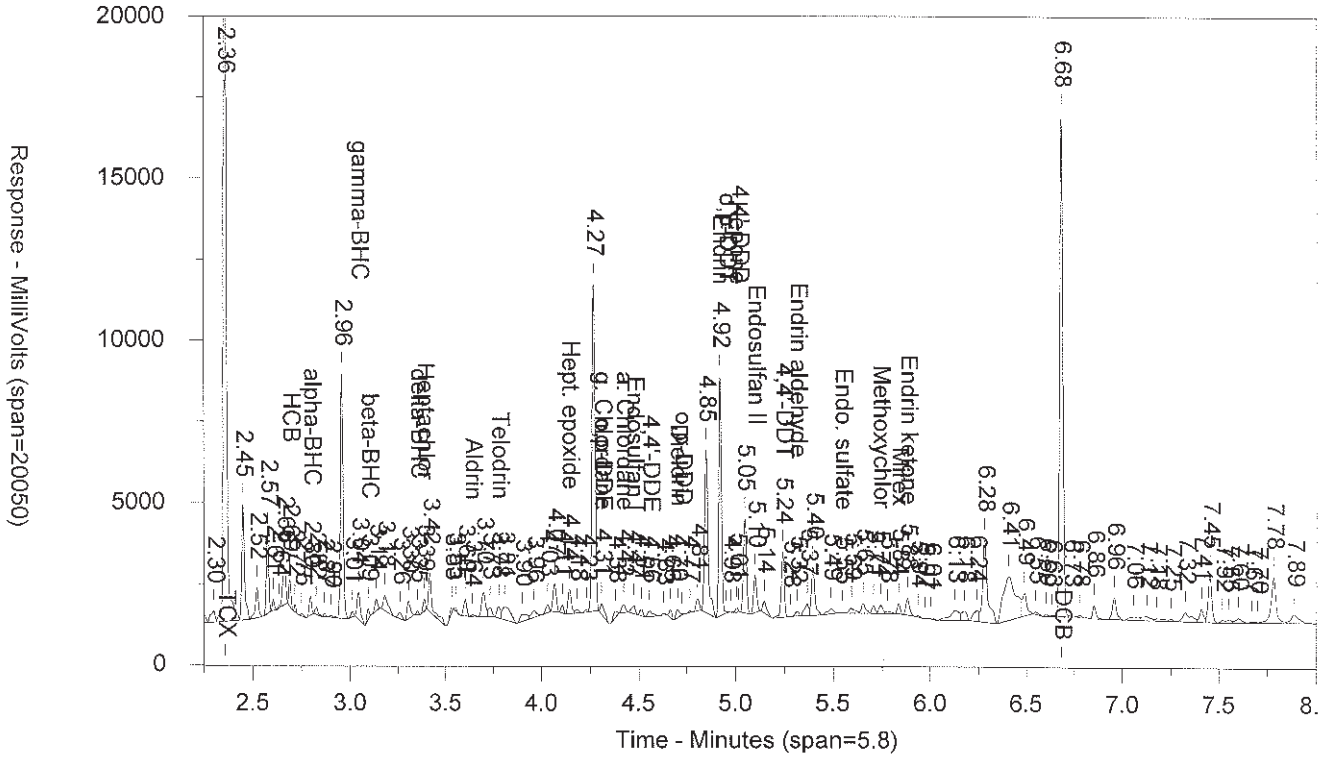

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Data Summary

Sample Name: 9861921R F GKP05 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 250 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on Nov 15, 2018 13:39:15
Instrument H9147A
Result file 06PEST18261045.016.RAW
Calibration file 06PEST1826103
Method file 06PESTD

%SSR(TCX) 67% (44 - 124) Conc: 0.200279
%SSR(DCB) 80% (32 - 149) Conc: 0.238809

Analysis Report (B)

Injected on Nov 15, 2018 13:39:15
Instrument H9147B
Result file 06PEST18261045B.016.RAW
Calibration file 06PEST1826103B
Method file 06PESTDB

%SSR(TCX) 69% (44 - 124) Conc: 0.207664
%SSR(DCB) 86% (32 - 149) Conc: 0.257083

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	1.80	1.81	1.84	779970	0.200279
Alpha BHC	2.34	2.35	2.38	9727	0.001472
Beta BHC	2.92	2.95	2.96	7202	0.002308
Delta BHC	3.20	3.22	3.24	6500	0.000972
Heptachlor Epoxide	3.84	3.86	3.88	3357	0.000574
Endosulfan I	4.17	4.20	4.21	9637	0.001698
Dieldrin	4.40	4.41	4.44	8973	0.001367
p,p-DDD	4.76	4.77	4.80	9448	0.001837
Endosulfan II	4.86	4.89	4.90	22174	0.003685
p,p-DDT	4.96	4.98	5.00	11362	0.002299
Endrin Aldehyde	5.04	5.04	5.07	2798	0.000544
Methoxychlor	5.46	5.50	5.50	4276	0.001736
Decachlorobiphenyl	6.36	6.38	6.42	1130375	0.238809

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.60	2.60	2.64	2154200	0.207664
Beta BHC	3.59	3.60	3.63	111019	0.014424
Delta BHC	3.83	3.85	3.87	28370	0.001582
Heptachlor	3.90	3.90	3.94	12457	0.000776
Aldrin	4.18	4.20	4.22	7695	0.000488
Telodrin	4.29	4.29	4.33	47006	0.00466
Heptachlor Epoxide	4.55	4.59	4.59	16817	0.00114
Gamma Chlordane	4.80	4.82	4.84	46144	0.00308
Alpha Chlordane	4.84	4.87	4.88	71372	0.00492
p,p-DDE	4.95	4.96	4.99	20604	0.001442
o,p-DDD	5.03	5.05	5.07	21281	0.002635
Dieldrin	5.07	5.08	5.11	27846	0.001826
Endrin	5.25	5.29	5.29	33552	0.002671
p,p-DDD	5.34	5.35	5.38	22910	0.001988
Endrin Aldehyde	5.52	5.55	5.56	6452	0.000581
Methoxychlor	5.87	5.91	5.91	12259	0.002407
Mirex	6.37	6.38	6.41	4136	0.000509
Decachlorobiphenyl	7.03	7.04	7.09	1900864	0.257083

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.01	<0.02	<0.04			
☐	Total Endosulfans (I + II)					<0.02			
☐	Tetrachloro-m-xylene	B	0.207664	0.03	0.06	0.06		3.62	
☑	Tetrachloro-m-xylene-D1	A	0.200279	0.03	0.06	0.06			
☑	Tetrachloro-m-xylene-D2	B	0.207664	0.03	0.06	0.06			
☐	HCB			<0.006	<0.014	<0.02			
☑	Alpha BHC			<0.006	<0.014	<0.02	D2		
☑	Gamma BHC - Lindane			<0.004	<0.014	<0.02	D1		
☑	Beta BHC			<0.0068	<0.014	<0.02	D1		
☑	Heptachlor			<0.004	<0.014	<0.02	D1		
☑	Delta BHC			<0.0068	<0.014	<0.02	D1		
☑	Aldrin			<0.004	<0.014	<0.02	D1		
☐	Telodrin					<0.02			
☑	Heptachlor Epoxide			<0.0046	<0.014	<0.02	D1		
☑	Gamma Chlordane			<0.014	<0.04	<0.04	D1		
☐	o,p-DDE			<0.014	<0.028	<0.04			
☑	Alpha Chlordane			<0.006	<0.014	<0.02	D1		
☑	Endosulfan I			<0.0086	<0.018	<0.02	D2		
☑	p,p-DDE			<0.01	<0.02	<0.04	D1		
☑	Dieldrin			<0.0106	<0.02	<0.04	D1		
☐	o,p-DDD			<0.01	<0.02	<0.04			
☑	Endrin			<0.0162	<0.04	<0.04	D1		
☐	o,p-DDT			<0.0102	<0.02	<0.04			
☐	Kepone					<0.4			

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:14

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Data Summary

Sample Name: 9861921R F GKP05 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 250 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 15, 2018 13:39:15
Instrument	H9147A
Result file	06PEST18261045.016.RAW
Calibration file	06PEST1826103
Method file	06PESTD

Analysis Report (B)

Injected on	Nov 15, 2018 13:39:15
Instrument	H9147B
Result file	06PEST18261045B.016.RAW
Calibration file	06PEST1826103B
Method file	06PESTDB

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☑ p,p-DDD			<0.01	<0.02	<0.04	D1		
☑ Endosulfan II			<0.03	<0.06	<0.06	D2		
☑ p,p-DDT			<0.0104	<0.02	<0.04	D2		
☑ Endrin Aldehyde			<0.04	<0.08	<0.2	D1		
☑ Endosulfan Sulfate			<0.0116	<0.024	<0.04	D1		
☑ Methoxychlor			<0.06	<0.14	<0.2	D1		
☑ Endrin Ketone			<0.01	<0.02	<0.04	D1		
☐ Mirex			<0.02	<0.08	<0.1			
☐ Decachlorobiphenyl	B	0.257083	0.03	0.06	0.06		7.37	
☑ Decachlorobiphenyl-D1	A	0.238809	0.03	0.06	0.06			
☑ Decachlorobiphenyl-D2	B	0.257083	0.03	0.06	0.06			

Multiple Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
☑ Chlordane			<0.32	<0.64	<1	D1		5	
☑ Toxaphene			<0.6	<1.2	<2	D1		5	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L. Tomayko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:14

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861921R** F GKP05 ID: AB **Batchnumber: 183180015A**
Sample Amount: 250 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:39:15
Instrument : CP06--H9147A
Result file : 06PEST18261045.016.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

%SSR(TCX) : 67% (44-124) Conc.: 0.200279
%SSR(DCB) : 80% (32-149) Conc.: 0.238809

Peak name	Min	R.T.	Max	Height	Amount
TCX	1.80	1.81	1.84	779970	0.200279
alpha-BHC	2.34	2.35	2.38	9727	0.001472
beta-BHC	2.92	2.95	2.96	7202	0.002308
delta-BHC	3.20	3.22	3.24	6500	0.000972
Hept. epoxide	3.84	3.86	3.88	3357	0.000574
Endosulfan I	4.17	4.20	4.21	9637	0.001698
Dieldrin	4.40	4.41	4.44	8973	0.001367
4,4'-DDD	4.76	4.77	4.80	9448	0.001837
Endosulfan II	4.86	4.89	4.90	22174	0.003685
4,4'-DDT	4.96	4.98	5.00	11362	0.002299
Endrin aldehyde	5.04	5.04	5.07	2798	0.000544
Methoxychlor	5.46	5.50	5.50	4276	0.001736
DCB	6.36	6.38	6.42	1130375	0.238809

Analysis Report (B)

Injected on : Nov 15, 2018 13:39:15
Instrument : CP06--H9147B
Result file : 06PEST18261045B.016.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

%SSR(TCX) 69% (44-124) Conc.: 0.207664
%SSR(DCB) 86% (32-149) Conc.: 0.257083

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.60	2.60	2.64	2154200	0.207664
beta-BHC	3.59	3.60	3.63	111019	0.014424
delta-BHC	3.83	3.85	3.87	28370	0.001582
Heptachlor	3.90	3.90	3.94	12457	0.000776
Aldrin	4.18	4.20	4.22	7695	0.000488
Telodrin	4.29	4.29	4.33	47006	0.004660
Hept. epoxide	4.55	4.59	4.59	16817	0.001140
g. Chlordane	4.80	4.82	4.84	46144	0.003080
a. Chlordane	4.84	4.87	4.88	71372	0.004920
4,4'-DDE	4.95	4.96	4.99	20604	0.001442
o,p-DDD	5.03	5.05	5.07	21281	0.002635
Dieldrin	5.07	5.08	5.11	27846	0.001826
Endrin	5.25	5.29	5.29	33552	0.002671
4,4'-DDD	5.34	5.35	5.38	22910	0.001988
Endrin aldehyde	5.52	5.55	5.56	6452	0.000581
Methoxychlor	5.87	5.91	5.91	12259	0.002407
Mirex	6.37	6.38	6.41	4136	0.000509
DCB	7.03	7.04	7.09	1900864	0.257083

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	B	0.207664	0.06	0.03		3.62	
☐ HCB			<0.02	<0.006			
☑ alpha-BHC			<0.02	<0.006			
☑ gamma-BHC			<0.02	<0.004			
☑ beta-BHC			<0.02	<0.0068			
☑ Heptachlor			<0.02	<0.004			
☑ delta-BHC			<0.02	<0.0068			
☑ Aldrin			<0.02	<0.004			
☐ Telodrin			<0.02				
☑ Hept. epoxide			<0.02	<0.0046			
☑ g. Chlordane			<0.04	<0.014			
☐ o,p-DDE			<0.04	<0.014			
☑ a. Chlordane			<0.02	<0.006			
☑ Endosulfan I			<0.02	<0.0086			
☑ 4,4'-DDE			<0.04	<0.01			
☑ Dieldrin			<0.04	<0.0106			
☐ o,p-DDD			<0.04	<0.01			
☑ Endrin			<0.04	<0.0162			
☐ o,p-DDT			<0.04	<0.0102			
☐ Kepone			<0.4				
☑ 4,4'-DDD			<0.04	<0.01			
☑ Endosulfan II			<0.06	<0.03			
☑ 4,4'-DDT			<0.04	<0.0104			

%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-Single Component Data Summary

Sample Name: **9861921R** F GKP05 ID: AB **Batchnumber: 183180015A**
Sample Amount: 250 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:39:15
Instrument : CP06--H9147A
Result file : 06PEST18261045.016.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

Analysis Report (B)

Injected on : Nov 15, 2018 13:39:15
Instrument : CP06--H9147B
Result file : 06PEST18261045B.016.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☑ Endrin aldehyde			<0.2	<0.04			
☑ Endo. sulfate			<0.04	<0.0116			
☑ Methoxychlor			<0.2	<0.06			
☑ Endrin ketone			<0.04	<0.01			
☐ Mirex			<0.1	<0.02			
☐ DCB	B	0.257083	0.06	0.03		7.37	
☐ Total DDTs			<0.04	<0.01			
☐ Total Endosulfans	A	0.000000	<0.02				

Units: ug/l

Reviewed by: DJS 15222
Date: 11/16/18

Verified by: Valerie L. Tomaszko, Principal Specialist
Date: NOV 19 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: **9861921R** F GKP05 ID: AB **Batchnumber: 183180015A**
Sample Amount: 250 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:39:15
Instrument : CP06--H9147A
Result file : 06PEST18261045.016.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

%SSR(TCX) : 67% (44-124) Conc.: 0.200279
%SSR(DCB) : 80% (32-149) Conc.: 0.238809

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak	
Aroclor-1016					**4**	**33.50**		
+ 2.60	2.60	2.66	13425.22	0.108752			2	
2.60	2.66	2.66	27694.15	0.224338			2	
2.82	2.83	2.88	20860.92	0.302154			3	
+ 2.82	2.87	2.88	15245.25	0.220815			3	
3.13	3.15	3.19	21699.26	0.174897			5	
3.25	3.26	3.31	36499.75	0.381967			6	
Height Summation:			**106754.08**					
Amount Avg CF:				**0.270839** Linear:				
Aroclor-1221					**1**			
2.08	2.13	2.14	18246.17	0.355195			1	
Height Summation:			**18246.17**					
Amount Avg CF:				**0.355195** Linear:				
Aroclor-1248					**4**	**110.50**		
3.34	3.40	3.40	28958.68	0.314257			2	
3.55	3.55	3.61	11012.81	0.067678			3	
3.90	3.92	3.96	4052.114	0.019866			5	
4.40	4.41	4.46	8973.131	0.076567			6	
Height Summation:			**52996.735**					
Amount Avg CF:				**0.119592** Linear:				
Aroclor-1254					**5**	**29.92**		
3.91	3.92	3.97	4052.114	0.019331			1	
4.03	4.04	4.09	5514.167	0.021902			2	
4.40	4.41	4.46	8973.131	0.020988			4	
4.57	4.63	4.63	5103.352	0.018606			5	
4.94	4.98	5.00	11361.64	0.035498			6	
Height Summation:			**35004.404**					
Amount Avg CF:				**0.023265** Linear:				
Aroclor-1260					**2**	**30.12**		
4.52	4.54	4.58	6373.944	0.022024			1	
4.94	4.98	5.00	11361.64	0.033943			3	
Height Summation:			**17735.584**					
Amount Avg CF:				**0.027984** Linear:				
T. Chlordane					**4**	**82.66**		
2.85	2.87	2.91	15245.25	0.102728			1	
3.85	3.86	3.91	3357.202	0.025124			2	
4.03	4.04	4.09	5514.167	0.010108			3	
4.87	4.89	4.93	22173.52	0.105323			5	
Height Summation:			**46290.139**					
Amount Avg CF:				**0.060821** Linear:				
Toxaphene					**3**	**70.19**		
4.76	4.77	4.82	9447.503	0.119055			1	
5.02	5.04	5.08	2797.506	0.037764			2	
5.46	5.50	5.52	4276.296	0.040501			5	
Height Summation:			**16521.305**					
Amount Avg CF:				**0.065773** Linear:				

LMDL

Analysis Report (B)

Injected on : Nov 15, 2018 13:39:15
Instrument : CP06--H9147B
Result file : 06PEST18261045B.016.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

%SSR(TCX) : 69% (44-124) Conc.: 0.207664
%SSR(DCB) : 86% (32-149) Conc.: 0.257083

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak	
Aroclor-1016					**5**	**48.83**		
3.29	3.31	3.35	48479.5	0.191272			2	
3.50	3.52	3.56	29638.87	0.225074			3	
* 3.81	3.85	3.87	28369.95	0.054541			4	
* 3.84	3.85	3.90	28369.95	0.090049			5	
3.94	3.96	4.00	42220.55	0.169209			6	
Height Summation:			**177078.82**					
Amount Avg CF:				**0.146029** Linear:				
Aroclor-1221					**3**	**54.23**		
2.76	2.79	2.82	7612.081	0.09818			1	
2.84	2.86	2.90	20153.26	0.263864			2	
2.93	2.93	2.99	88911.3	0.352771			3	
Height Summation:			**116676.641**					
Amount Avg CF:				**0.238272** Linear:				
Aroclor-1248					**5**	**34.86**		
3.81	3.85	3.87	28369.95	0.110403			1	
4.03	4.05	4.09	18756.34	0.05865			2	
4.61	4.63	4.67	26142.65	0.063319			4	
4.72	4.75	4.78	22228.61	0.059362			5	
+ 5.02	5.05	5.08	21281.31	0.086628			6	
5.02	5.08	5.08	27846.08	0.113351			6	
Height Summation:			**123343.63**					
Amount Avg CF:				**0.081017** Linear:				
Aroclor-1254					**4**	**25.23**		
4.55	4.59	4.61	16816.99	0.034964			1	
4.73	4.75	4.79	22228.61	0.030899			2	
+ 5.02	5.05	5.08	21281.31	0.024884			3	
5.02	5.08	5.08	27846.08	0.03256			3	
5.25	5.29	5.31	33551.76	0.051412			4	
Height Summation:			**100443.44**					
Amount Avg CF:				**0.037459** Linear:				
Aroclor-1260					**2**	**61.30**		
5.15	5.20	5.21	32904.08	0.054581			1	
5.38	5.41	5.44	35884.89	0.138092			2	
+ 5.38	5.44	5.44	14996.04	0.057708			2	
Height Summation:			**68788.97**					
Amount Avg CF:				**0.096336** Linear:				
T. Chlordane					**5**	**169.91**		
3.69	3.74	3.75	286991.7	0.721851 ✓			1	
4.57	4.59	4.63	16816.99	0.044563 LMDL			2	
+ 4.79	4.79	4.85	22444.79	0.013726 X			3	
4.79	4.82	4.85	46143.73	0.028219			3	
4.83	4.87	4.89	71372.49	0.067221			4	
5.48	5.51	5.54	13158.58	0.032476			5	
Height Summation:			**434483.49**					
Amount Avg CF:				**0.178866** Linear:				

LMDL

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861921R** F GKP05 ID: AB **Batchnumber: 183180015A**
Sample Amount: 250 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:39:15
Instrument : CP06--H9147A
Result file : 06PEST18261045.016.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

Analysis Report (B)

Injected on : Nov 15, 2018 13:39:15
Instrument : CP06--H9147B
Result file : 06PEST18261045B.016.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

	Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Toxaphene						**2**	**65.64**	
	5.47	5.51	5.53	13158.58	0.068815 LMDL			1
	5.65	5.66	5.71	5302.188	0.025184 LMDL			2

Height Summation: **18460.768**
Amount Avg CF: **0.047** Linear:

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 59.88	5	20	
Aroclor-1221			0	0		39.40	2	20	
Aroclor-1248			0	0		38.46	5	20	
Aroclor-1254			0	0		** 46.75	4	20	
Aroclor-1260			0	0		** 109.96	5	20	
T. Chlordane			1	0.32		** 98.50	5	20	
Total PCBs			0	0					
Toxaphene			2	0.6		33.29	5	30	

Units: ug/l

9861921R F ABGKP05 T 183180015A 10589 SW-846 8081B

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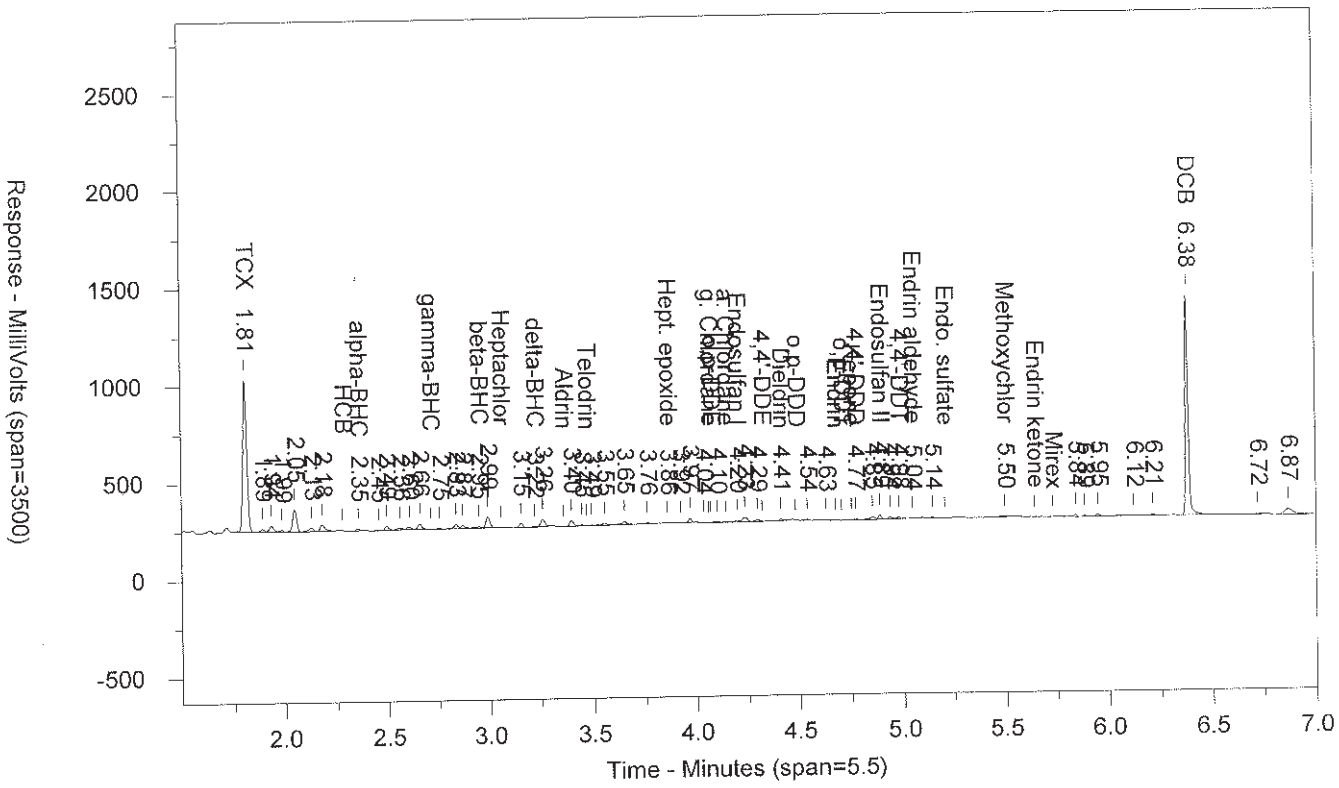

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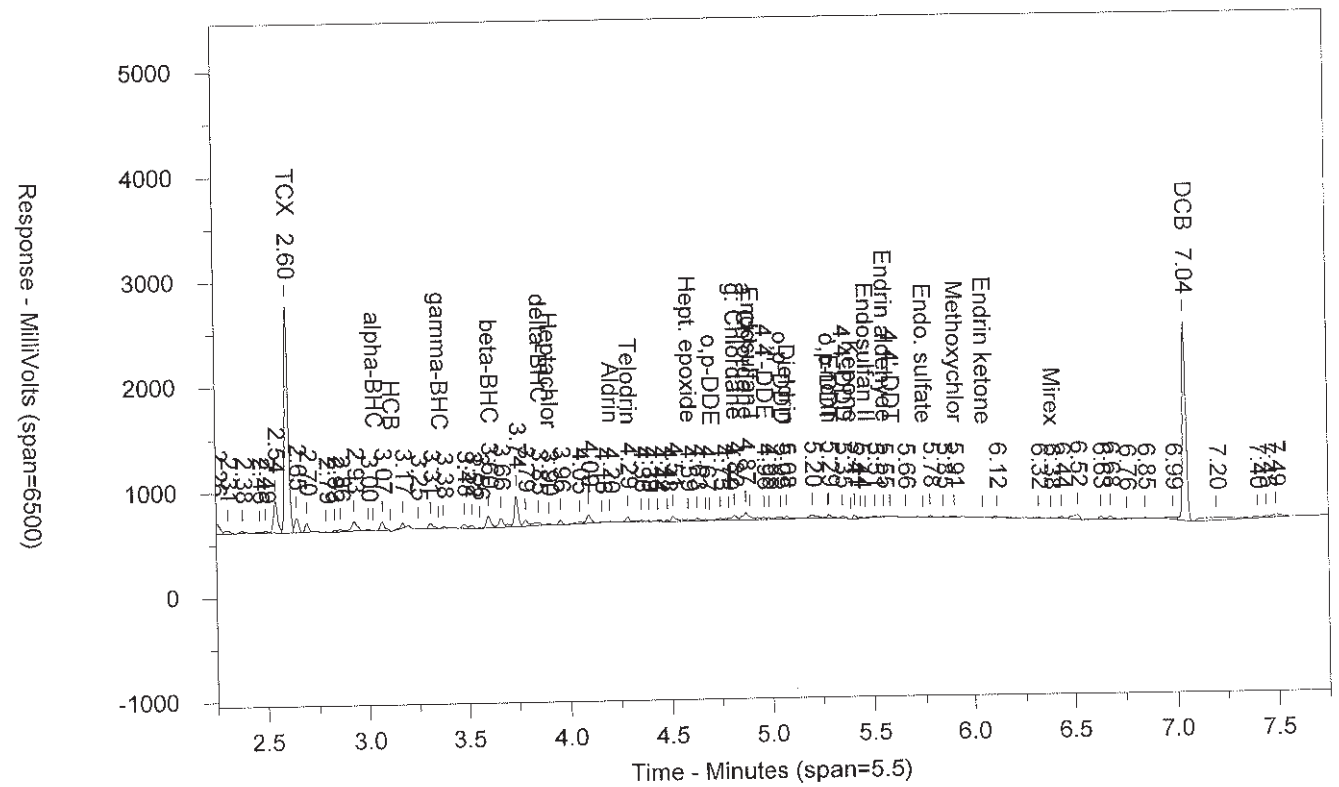

LANCASTER LABORATORIES

Sample Number: 9861921R F ABGKP05 T 183180015A 10589 SW-846 8081B
Injected On: 11/15/2018 1:39:15 PM Sample Weight: 250
Instrument ID: CP6-9147 Dilution Factor: 5
Oven Parameters: 150c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min; hold 1.5 min
Column A ID: DB-CLP 30m x 0.32mm x 0.5um
Column B ID: DB-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
1.808	779970	.2	TCX	2.604	2154200	.208	TCX
2.354	9727	.001	alpha-BHC		0		alpha-BHC
2.947	7202	.002	beta-BHC	3.602	111019	.014	beta-BHC
3.219	6500	.001	delta-BHC	3.854	28370	.002	delta-BHC
3.859	3357	.001	Hept. epoxide	4.585	16817	.001	Hept. epoxide
	0		Heptachlor	3.904	12457	.001	Heptachlor
4.197	9637	.002	Endosulfan I		0		Endosulfan I
	0		Aldrin	4.2	7695		Aldrin
	0		Telodrin	4.288	47006	.005	Telodrin
4.411	8973	.001	Dieldrin	5.078	27846	.002	Dieldrin
4.77	9448	.002	4,4'-DDD	5.35	22910	.002	4,4'-DDD
	0		g. Chlordane	4.817	46144	.003	g. Chlordane
	0		a. Chlordane	4.873	71372	.005	a. Chlordane
4.889	22174	.004	Endosulfan II		0		Endosulfan II
	0		4,4'-DDE	4.963	20604	.001	4,4'-DDE
4.979	11362	.002	4,4'-DDT		0		4,4'-DDT
5.043	2798	.001	Endrin aldehyde	5.553	6452	.001	Endrin aldehyde
	0		o,p-DDD	5.048	21281	.003	o,p-DDD
	0		Endrin	5.285	33552	.003	Endrin
5.496	4276	.002	Methoxychlor	5.906	12259	.002	Methoxychlor
6.379	1130375	.239	DCB	7.044	1900864	.257	DCB
	0		Mirex	6.385	4136	.001	Mirex

Files:
Area File: 06pest18261045.016.RAW
Area File: 06pest18261045B.016.RAW
Method A: 06PESTD.MET
Method B: 06PESTDB.MET
Calibration File A: 06pest1826103.CAL
Calibration File B: 06pest1826103b.CAL
Format A: pestD6.FMTA
Format B: pestD6.FMTA
Area File Created On: 11/15/2018 1:47:14 PM
File Reported On: 11/15/2018 at 2:08:02 PM

9861921R F ABGKP05 T 183180015A 10589 SW-846 8081B

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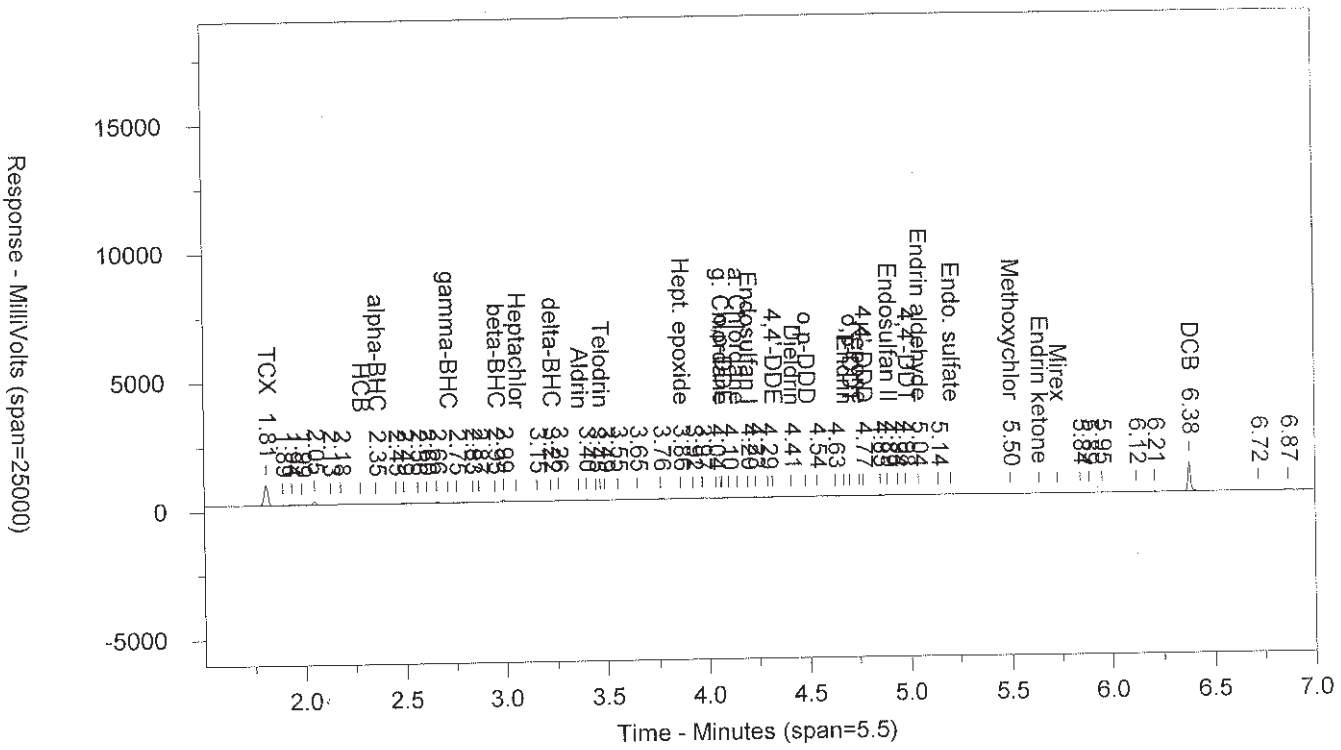

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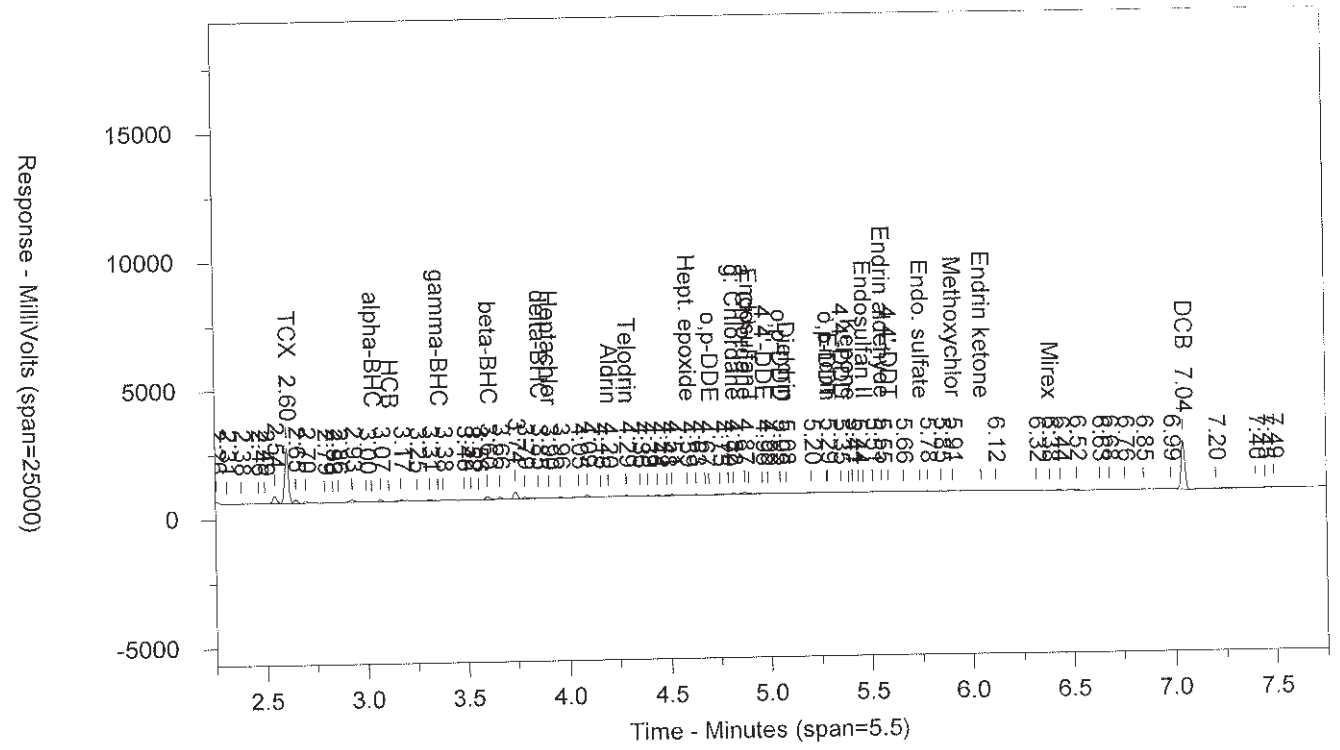

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Data Summary

Sample Name: 9861922 RI F GKP02 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 250 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 10, 2018 00:24:06
Instrument	H9190A
Result file	05PEST18306007.053.BND
Calibration file	05PEST1830603
Method file	05PEST18306007

%SSR(TCX) 74% (44 - 124) Conc: 0.223507
%SSR(DCB) 62% (32 - 149) Conc: 0.183691

Analysis Report (B)

Injected on	Nov 10, 2018 00:24:06
Instrument	H9190B
Result file	05PEST18306007B.053.BND
Calibration file	05PEST1830603B
Method file	05PEST18306007B

%SSR(TCX) 68% (44 - 124) Conc: 0.205761
%SSR(DCB) 58% (32 - 149) Conc: 0.174053

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.53	2.55	2.57	11075659	0.223507
HCB	2.81	2.83	2.85	179922	0.003416
Alpha BHC	2.94	2.94	2.98	76626	0.001117
Beta BHC	3.25	3.29	3.29	1797482	0.069793
Delta BHC	3.40	3.40	3.44	47489	0.000882
Heptachlor	3.58	3.60	3.62	114136	0.002336
Aldrin	3.84	3.87	3.88	36439	0.000805
Telodrin	4.03	4.05	4.06	28164	0.001039
Heptachlor Epoxide	4.36	4.40	4.40	45874	0.001145
Gamma Chlordane	4.47	4.49	4.51	213956	0.005405
Alpha Chlordane	4.57	4.60	4.61	62347	0.001554
Endosulfan I	4.68	4.71	4.72	191996	0.005107
Dieldrin	4.87	4.90	4.91	50962	0.001261
Endrin	5.05	5.06	5.09	15943	0.000432
Kepone	5.08	5.11	5.12	36742	0.011631
p,p-DDT	5.31	5.32	5.35	299111	0.009001
Decachlorobiphenyl	6.67	6.70	6.73	4393552	0.183691

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.34	2.36	2.38	42974948	0.205761
HCB	2.66	2.69	2.70	767775	0.004349
Gamma BHC - Lindane	3.02	3.05	3.06	482528	0.002073
Beta BHC	3.09	3.10	3.13	650614	0.006653
Heptachlor	3.36	3.39	3.40	150591	0.000821
Aldrin	3.62	3.64	3.66	25939	0.000149
Telodrin	3.76	3.78	3.80	534782	0.005978
Heptachlor Epoxide	4.12	4.15	4.16	528797	0.003806
Gamma Chlordane	4.28	4.31	4.32	455527	0.003127
Alpha Chlordane	4.40	4.42	4.44	213174	0.00148
Endosulfan I	4.45	4.48	4.48	644258	0.005044
p,p-DDE	4.55	4.56	4.59	107037	0.00076
Dieldrin	4.67	4.68	4.70	156391	0.001081
o,p-DDD	4.70	4.70	4.74	208008	0.003327
Endrin	4.90	4.94	4.94	60738	0.000469
Kepone	4.97	4.98	5.01	50747	0.028788
p,p-DDD	5.00	5.01	5.04	75163	0.000677
p,p-DDT	5.23	5.25	5.27	890282	0.007697
Endrin Aldehyde	5.31	5.33	5.35	73656	0.000751
Methoxychlor	5.72	5.75	5.76	45391	0.000842
Mirex	5.83	5.84	5.87	40895	0.000592
Endrin Ketone	5.88	5.89	5.92	453465	0.003779
Decachlorobiphenyl	6.66	6.69	6.72	13467342	0.174053

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.004	<0.008	<0.016			
☐	Total Endosulfans (I + II)	A	0.005107			<0.008	J	0.00	
☐	Tetrachloro-m-xylene	A	0.223507	0.012	0.024	0.024		8.27	
☑	Tetrachloro-m-xylene-D1	A	0.223507	0.012	0.024	0.024			
☑	Tetrachloro-m-xylene-D2	B	0.205761	0.012	0.024	0.024			
☐	HCB	B	0.004349	0.0024	<0.0056	<0.008	J	24.03	
☑	Alpha BHC			<0.0024	<0.0056	<0.008	D1		
☑	Gamma BHC - Lindane			<0.0016	<0.0056	<0.008	D1		
☑	Beta BHC			<0.0068	<0.0136	<0.0136	VD1		2706
☑	Delta BHC			<0.0027	<0.0056	<0.008	D1		
☑	Heptachlor			<0.0016	<0.0056	<0.008	D1		
☑	Aldrin			<0.0016	<0.0056	<0.008	D1		
☐	Telodrin					<0.008			
☐	o,p-DDE			<0.0056	<0.0112	<0.016			
☑	Heptachlor Epoxide			<0.0018	<0.0056	<0.008	D1		
☑	Gamma Chlordane			<0.0056	<0.016	<0.016	D1		
☑	Alpha Chlordane			<0.0024	<0.0056	<0.008	D1		
☑	p,p-DDE			<0.004	<0.008	<0.016	D1		
☑	Endosulfan I	A	0.005107	0.0034	<0.0072	<0.008	JD1	1.24	

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:36:56

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Data Summary

Sample Name: 9861922 RI F GKP02 Sample ID: AB **Batchnumber: 182980006A**
Sample Amount: 250 mL Total Volume: 2 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 10, 2018 00:24:06
Instrument	H9190A
Result file	05PEST18306007.053.BND
Calibration file	05PEST1830603
Method file	05PEST18306007

Analysis Report (B)

Injected on	Nov 10, 2018 00:24:06
Instrument	H9190B
Result file	05PEST18306007B.053.BND
Calibration file	05PEST1830603B
Method file	05PEST18306007B

Single Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐ o,p-DDD			<0.004	<0.008	<0.016			
☑ Dieldrin			<0.0042	<0.008	<0.016	D1		
☐ o,p-DDT			<0.0041	<0.008	<0.016			
☑ Endrin			<0.0065	<0.016	<0.016	D1		
☐ Kepone					<0.16			
☑ p,p-DDD			<0.004	<0.008	<0.016	D1		
☑ Endosulfan II			<0.012	<0.024	<0.024	D1		
☑ p,p-DDT	A	0.009001	0.0042	0.008	<0.016	JD1	15.62	
☑ Endrin Aldehyde			<0.016	<0.032	<0.08	D1		
☑ Methoxychlor			<0.024	<0.056	<0.08	D1		
☐ Mirex			<0.008	<0.032	<0.04			
☑ Endosulfan Sulfate			<0.0046	<0.0096	<0.016	D1		
☑ Endrin Ketone			<0.004	<0.008	<0.016	D1		
☐ Decachlorobiphenyl	A	0.183691	0.012	0.024	0.024		5.39	
☑ Decachlorobiphenyl-D1	A	0.183691	0.012	0.024	0.024			
☑ Decachlorobiphenyl-D2	B	0.174053	0.012	0.024	0.024			

Multiple Component Summary

Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
☑ Chlordane			<0.128	<0.256	<0.4	D1		4	
☑ Toxaphene			<0.24	<0.48	<0.8	D1		4	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L. Tomayko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 13:36:56

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861922** RI F GKP02 ID: AB **Batchnumber: 182980006A**
Sample Amount: 250 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 10, 2018 00:24:06
Instrument : CP05--H9190A
Result file : 05pest18306007.053.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.053.BND

%SSR(TCX) : 74% (44-124) Conc.: 0.223507
%SSR(DCB) : 62% (32-149) Conc.: 0.183691

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.53	2.55	2.57	11075659	0.223507
HCB	2.81	2.83	2.85	179922	0.003416
alpha-BHC	2.94	2.94	2.98	76626	0.001117
beta-BHC	3.25	3.29	3.29	1797482	0.069793
delta-BHC	3.40	3.40	3.44	47489	0.000882
Heptachlor	3.58	3.60	3.62	114136	0.002336
Aldrin	3.84	3.87	3.88	36439	0.000805
Telodrin	4.03	4.05	4.06	28164	0.001039
Hept. epoxide	4.36	4.40	4.40	45874	0.001145
g. Chlordane	4.47	4.49	4.51	213956	0.005405
a. Chlordane	4.57	4.60	4.61	62347	0.001554
Endosulfan I	4.68	4.71	4.72	191996	0.005107
Dieldrin	4.87	4.90	4.91	50962	0.001261
Endrin	5.05	5.06	5.09	15943	0.000432
Kepone	5.08	5.11	5.12	36742	0.011631
4,4'-DDT	5.31	5.32	5.35	299111	0.009001
DCB	6.67	6.70	6.73	4393552	0.183691

Analysis Report (B)

Injected on : Nov 10, 2018 00:24:06
Instrument : CP05--H9190B
Result file : 05pest18306007B.053.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.053.BND

%SSR(TCX) : 68% (44-124) Conc.: 0.205761
%SSR(DCB) : 58% (32-149) Conc.: 0.174053

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.34	2.36	2.38	42974948	0.205761
HCB	2.66	2.69	2.70	767775	0.004349
gamma-BHC	3.02	3.05	3.06	482528	0.002073
beta-BHC	3.09	3.10	3.13	650614	0.006653
Heptachlor	3.36	3.39	3.40	150591	0.000821
Aldrin	3.62	3.64	3.66	25939	0.000149
Telodrin	3.76	3.78	3.80	534782	0.005978
Hept. epoxide	4.12	4.15	4.16	528797	0.003806
g. Chlordane	4.28	4.31	4.32	455527	0.003127
a. Chlordane	4.40	4.42	4.44	213174	0.001480
Endosulfan I	4.45	4.48	4.48	644258	0.005044
4,4'-DDE	4.55	4.56	4.59	107037	0.000760
Dieldrin	4.67	4.68	4.70	156391	0.001081
o,p-DDD	4.70	4.70	4.74	208008	0.003327
Endrin	4.90	4.94	4.94	60738	0.000469
Kepone	4.97	4.98	5.01	50747	0.028788
4,4'-DDD	5.00	5.01	5.04	75163	0.000677
4,4'-DDT	5.23	5.25	5.27	890282	0.007697
Endrin aldehyde	5.31	5.33	5.35	73656	0.000751
Methoxychlor	5.72	5.75	5.76	45391	0.000842
Mirex	5.83	5.84	5.87	40895	0.000592
Endrin ketone	5.88	5.89	5.92	453465	0.003779
DCB	6.66	6.69	6.72	13467342	0.174053

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	A	0.223507	0.024	0.012		8.27	
☐ HCB	B	0.004349	<0.008	0.0024	J	24.03	
☑ alpha-BHC			<0.008	<0.0024			
☑ gamma-BHC			<0.008	<0.0016			
☑ beta-BHC	B	0.006653	<0.008	~~0.0027~~	J 0.0068	165.19	** (8) 2701 disp [illegible]
☑ delta-BHC			<0.008	<0.0027			
☑ Heptachlor			<0.008	<0.0016			
☑ Aldrin			<0.008	<0.0016			
☐ Telodrin	A	0.001039	<0.008			140.77	**
☐ o,p-DDE			<0.016	<0.0056			
☑ Hept. epoxide			<0.008	<0.0018			
☑ g. Chlordane			<0.016	<0.0056			
☑ a. Chlordane			<0.008	<0.0024			
☑ 4,4'-DDE			<0.016	<0.004			
☑ Endosulfan I	(A)	0.005107	<0.008	0.0034	J	1.25	Bias CU
☐ o,p-DDD			<0.016	<0.004			
☑ Dieldrin			<0.016	<0.0042			
☐ o,p-DDT			<0.016	<0.0041			
☑ Endrin			<0.016	<0.0065			

Jamie L. Brillhart
Senior Chemist

%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

NOV 13 2018

Printed on: 11/13/2018 12:14:35

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861922** RI F GKP02 ID: AB **Batchnumber: 182980006A**
Sample Amount: 250 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 10, 2018 00:24:06
Instrument : CP05--H9190A
Result file : 05pest18306007.053.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.053.BND

Analysis Report (B)

Injected on : Nov 10, 2018 00:24:06
Instrument : CP05--H9190B
Result file : 05pest18306007B.053.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.053.BND

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ Kepone	A	0.011631	<0.16			84.89	**
☑ 4,4'-DDD			<0.016	<0.004			LMRL
☑ Endosulfan II			<0.024	<0.012			
☑ 4,4'-DDT	A	0.009001	<0.016	0.0042	J	15.61	CCV IDS 2x
☑ Endrin aldehyde			<0.08	<0.016			
☑ Methoxychlor			<0.08	<0.024			
☐ Mirex			<0.04	<0.008			
☑ Endo. sulfate			<0.016	<0.0046			
☑ Endrin ketone			<0.016	<0.004			
☐ DCB	A	0.183691	0.024	0.012		5.39	
☐ Total DDTs	A	0.009001	<0.016	0.004	J	0.00	
☐ Total Endosulfans	A	0.005107	<0.008			0.00	

Units: ug/l

Reviewed by: Jamie L. Brillhart, Senior Chemist

Date: NOV 13 2018

Verified by: Valerie L. Tomayko, Principal Specialist

Date: NOV 19 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

Printed on: 11/13/2018 12:14:35

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861922** RI F GKP02 ID: AB **Batchnumber: 182980006A**
Sample Amount: 250 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 10, 2018 00:24:06
Instrument : CP05--H9190A
Result file : 05pest18306007.053.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.053.BND

%SSR(TCX) : 74% (44-124) Conc.: 0.223507
%SSR(DCB) : 62% (32-149) Conc.: 0.183691

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**83.77**	
2.78	2.83	2.84	179921.5468	0.228763			1
3.04	3.06	3.10	19557.12695	0.0177			2
3.20	3.25	3.26	172958.8593	0.532174			3
3.40	3.45	3.46	44480.37890	0.052722			4
3.51	3.53	3.57	346603.2812	0.392606			5
+ 3.56	3.57	3.62	39357.46875	0.066281			6
3.56	3.60	3.62	114136.4921	0.192215			6
Height Summation:			**877657.685547**				
Amount Avg CF:			**0.23603**	Linear:			
Aroclor-1221					**2**	**15.94**	
2.66	2.68	2.70	98488.15625	0.219705			1
2.80	2.83	2.84	179921.5468	0.175203			3
Height Summation:			**278409.703125**				
Amount Avg CF:			**0.197454**	Linear:			
Aroclor-1248					**6**	**103.32**	
3.38	3.40	3.44	47489.32421	0.056347			1
3.66	3.68	3.72	109728.8671	0.238134			2
3.85	3.87	3.91	36439.24218	0.033405			3
4.21	4.22	4.27	267512.2812	0.215429			4
+ 4.21	4.26	4.27	85804.74218	0.069099			4
+ 4.39	4.40	4.45	45874.49609	0.054446			5
4.39	4.43	4.45	407258.8125	0.483357			5
4.71	4.76	4.77	9089.448242	0.014249			6
Height Summation:			**877517.975586**				
Amount Avg CF:			**0.173487**	Linear:			
Aroclor-1254					**6**	**112.52**	
+ 4.39	4.40	4.45	45874.49609	0.028825			1
4.39	4.43	4.45	407258.8125	0.255895			1
4.62	4.68	4.68	28752.02539	0.024144			2
4.71	4.76	4.77	9089.448242	0.004377			3
4.93	4.96	4.99	72463.21093	0.046835			4
5.06	5.11	5.12	36742.45703	0.0345			5
5.27	5.30	5.33	357093.2187	0.208759			6
+ 5.27	5.32	5.33	299111.125	0.174862			6
+ 5.27	5.32	5.33	299111.125	0.174862			6
Height Summation:			**911399.172852**				
Amount Avg CF:			**0.095752**	Linear:			

Analysis Report (B)

Injected on : Nov 10, 2018 00:24:06
Instrument : CP05--H9190B
Result file : 05pest18306007B.053.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.053.BND

%SSR(TCX) : 68% (44-124) Conc.: 0.205761
%SSR(DCB) : 58% (32-149) Conc.: 0.174053

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**154.22**	
+ 2.66	2.66	2.72	687024.5	0.286039			1
2.66	2.69	2.72	767774.6875	0.319659			1
E 2.93	2.96	2.99	6544838.5	1.966478			2
3.11	3.14	3.17	360121.3125	0.259736			3
3.27	3.31	3.33	237973.9687	0.040838			4
3.37	3.39	3.43	150590.8906	0.051579			5
+ 3.37	3.42	3.43	512086.75	0.175396			5
Height Summation:			**8061299.359375**				
Amount Avg CF:			**0.527658**	Linear:			
Aroclor-1221					**2**	**71.09**	
2.63	2.66	2.67	687024.5	0.810024			2
2.67	2.69	2.71	767774.6875	0.268082			3
Height Summation:			**1454799.1875**				
Amount Avg CF:			**0.539053**	Linear:			
Aroclor-1248					**6**	**51.56**	
3.27	3.31	3.33	237973.9687	0.080645			1
3.53	3.54	3.59	364466.3125	0.13009			2
3.75	3.78	3.81	534782.125	0.153047			3
3.85	3.88	3.91	19028.9375	0.006523			4
+ 4.11	4.12	4.17	777931.375	0.192969			5
4.11	4.15	4.17	528797	0.13117			5
4.30	4.31	4.36	455526.625	0.143559			6
Height Summation:			**2140574.96875**				
Amount Avg CF:			**0.107506**	Linear:			
Aroclor-1254					**5**	**75.20**	
+ 4.11	4.12	4.17	777931.375	0.199788			1
4.11	4.15	4.17	528797	0.135806			1
+ 4.27	4.27	4.33	8403945	1.912217			2
4.27	4.31	4.33	455526.625	0.10365			2
+ 4.64	4.64	4.70	57822.80078	0.009105			3
4.64	4.68	4.70	156391.1718	0.024627			3
+ 4.81	4.82	4.87	178689.2968	0.039216			4
4.81	4.85	4.87	98845.125	0.021693			4
5.21	5.25	5.27	890282.125	0.183869			6
Height Summation:			**2129842.046875**				
Amount Avg CF:			**0.093929**	Linear:			
Aroclor-1260					**5**	**110.58**	
4.79	4.82	4.85	178689.2968	0.040975			1
4.95	4.98	5.01	50746.78906	0.009749			2
5.21	5.25	5.27	890282.125	0.164667			3
5.48	5.49	5.54	154870.0312	0.045534			4
5.65	5.66	5.71	144922.8906	0.020759			5
+ 5.65	5.71	5.71	146677.5	0.02101			5
Height Summation:			**1419511.132813**				
Amount Avg CF:			**0.056337**	Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861922** RI F GKP02 ID: AB **Batchnumber: 182980006A**
Sample Amount: 250 mL Total Volume: 2 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 10, 2018 00:24:06
Instrument : CP05--H9190A
Result file : 05pest18306007.053.BND
Calibration file : 05PEST1830603.CAL
Method file : 05pest18306007.053.BND

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1260					**5**	**85.71**	
+ 4.85	4.86	4.91	209623.5156	0.143398			1
4.85	4.90	4.91	50961.70703	0.034862			1
+ 5.06	5.06	5.12	15943.03808	0.008075			2
5.06	5.11	5.12	36742.45703	0.01861			2
5.27	5.30	5.33	357093.2187	0.171906			3
+ 5.27	5.32	5.33	299111.125	0.143993			3
+ 5.27	5.32	5.33	299111.125	0.143993			3
5.53	5.57	5.59	47561.77343	0.040955			4
5.94	5.97	6.00	200788.9375	0.141541			6
Height Summation:			**693148.09375**				
Amount Avg CF:			**0.081575**	Linear:			
Chlordane					**6**	**122.00**	
3.50	3.53	3.56	346603.2812	0.2509			1
3.94	4.00	4.00	106776.8281	0.07678			2
+ 4.29	4.30	4.35	42953.80468	0.047699			3
4.29	4.33	4.35	32923.82421	0.036561			3
4.45	4.49	4.51	213955.9218	0.051411			4
+ 4.45	4.51	4.51	238380.1093	0.05728			4
4.55	4.60	4.61	62347.21875	0.010833			5
5.15	5.18	5.22	22431.91210	0.016303			6
Height Summation:			**785038.986328**				
Amount Avg CF:			**0.073798**	Linear:			
Toxaphene					**6**	**81.31**	
5.06	5.11	5.12	36742.45703	0.061469			1
5.20	5.22	5.26	34154.71875	0.036462			2
+ 5.29	5.30	5.35	357093.2187	0.421928			3
5.29	5.32	5.35	299111.125	0.353418			3
5.29	5.32	5.35	299111.125	0.353418			3
5.45	5.51	5.51	59986.61328	0.069683			4
5.68	5.70	5.74	155625.2812	0.209238			5
+ 5.68	5.74	5.74	35509.17578	0.047742			5
Height Summation:			**884731.320313**				
Amount Avg CF:			**0.180615**	Linear:			

Analysis Report (B)

Injected on : Nov 10, 2018 00:24:06
Instrument : CP05--H9190B
Result file : 05pest18306007B.053.BND
Calibration file : 05PEST1830603B.CAL
Method file : 05pest18306007B.053.BND

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Chlordane					**5**	**105.50**	
3.23	3.26	3.29	176874.5468	0.03459			1
3.74	3.78	3.80	534782.125	0.109928			2
4.08	4.12	4.14	777931.375	0.223916			3
+ 4.27	4.27	4.33	8403945	0.506754			4
4.27	4.31	4.33	455526.625	0.027468			4
4.39	4.42	4.45	213173.7968	0.017009			5
Height Summation:			**2158288.46875**				
Amount Avg CF:			**0.082582**	Linear:			
Toxaphene					**6**	**94.01**	
+ 4.64	4.64	4.70	57822.80078	0.033161			1
4.64	4.68	4.70	156391.1718	0.089688			1
4.87	4.89	4.93	18009.88671	0.010003			2
5.04	5.05	5.10	721249.25	0.22105			3
+ 5.31	5.32	5.37	299111.125	0.084105			4
5.31	5.33	5.37	73656.17968	0.020711			4
5.36	5.38	5.42	428221.75	0.205017			5
+ 5.36	5.41	5.42	32284.35742	0.015457			5
5.66	5.71	5.72	146677.5	0.045989			6
Height Summation:			**1544205.738281**				
Amount Avg CF:			**0.098743**	Linear:			

(B) ADD SUM LMN LMN

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		** 76.37	4	40	
Aroclor-1221			0	0		** 92.76	3	5	
Aroclor-1248			0	0		** 46.96	4	30	
Aroclor-1254			0	0		1.92	4	40	
Aroclor-1260			0	0		36.60	4	40	
Chlordane			0.4	0.128		11.23	4	40	
Toxaphene			0.8	0.24		** 58.61	4	40	

Units: ug/l

Janice L. Shinaut
Senior Chemist

NOV 13 2018

9861922 RI F ABGKP02 T 182980006A 10589 SW-846 8081B

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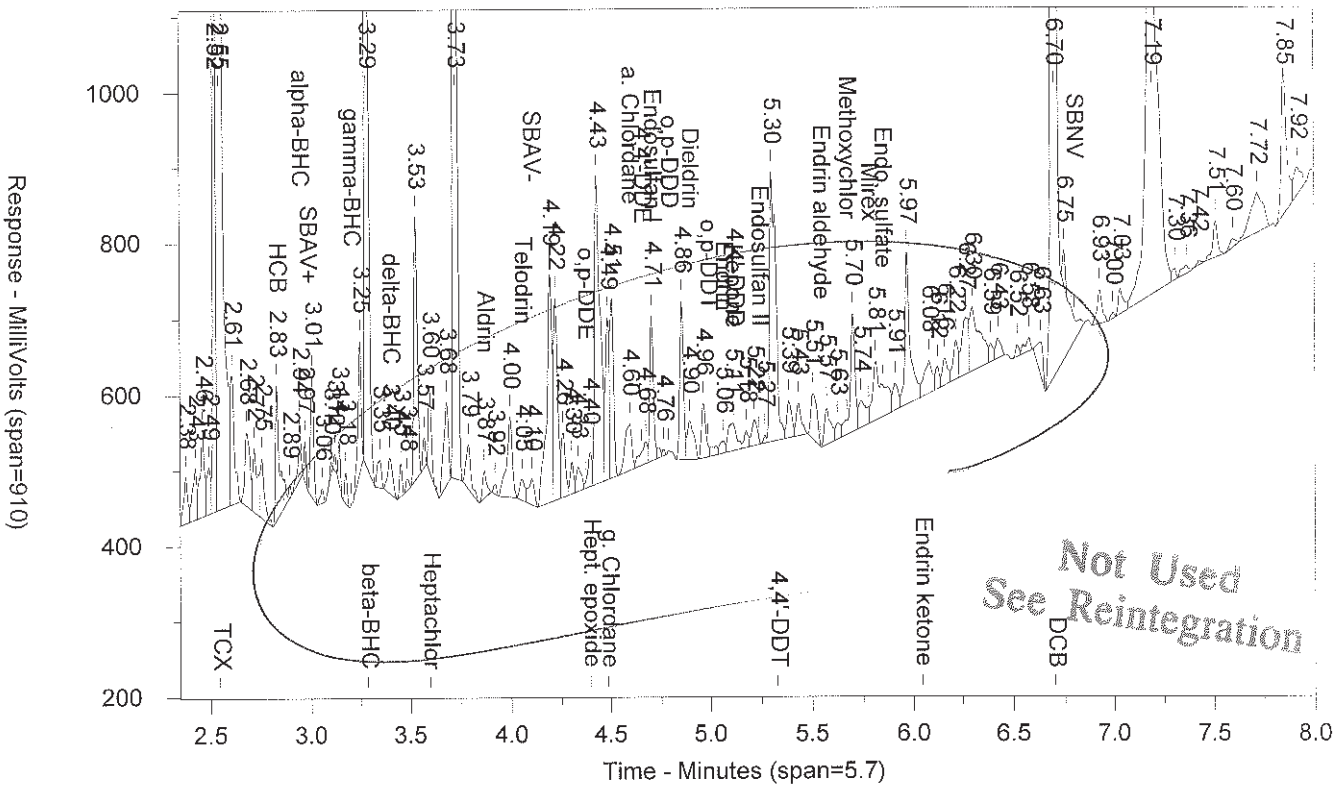

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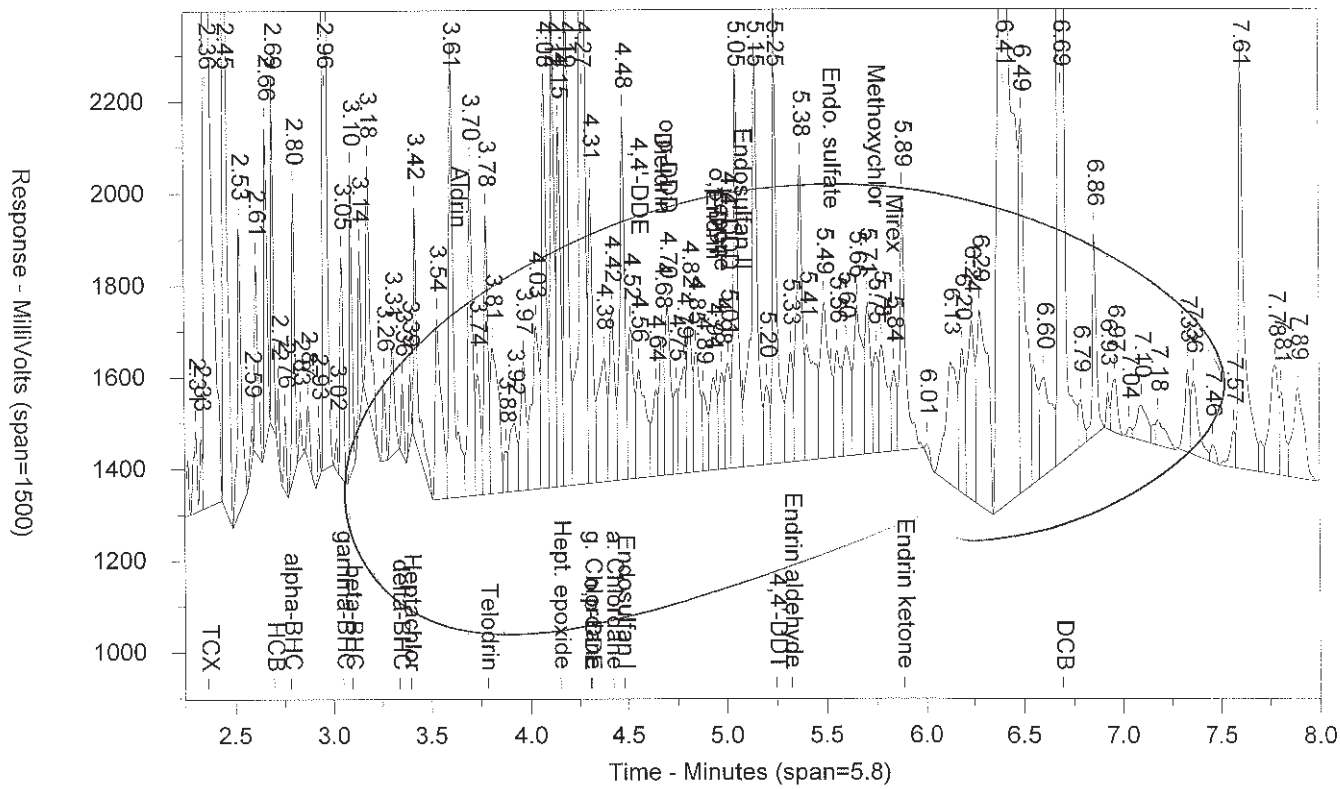

LANCASTER LABORATORIES

Sample Number: 9861922 RI F ABGKP02 T 182980006A 10589 SW-846 8081B
Injected On: 11/10/2018 12:24:06 AM 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
2.546	11075660	.224	TCX	2.363	42974950	.206	TCX
2.829	179922	.003	HCB	2.695	767775	.004	HCB
2.944	76626	.001	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.049	482528	.002	gamma-BHC
3.285	1797482	.07	beta-BHC	3.096	650614	.007	beta-BHC
3.597	114137	.002	Heptachlor	3.395	150591	.001	Heptachlor
3.397	47489	.001	delta-BHC		0		delta-BHC
4.055	28164	.001	Telodrin	3.781	608307	.007	Telodrin
3.867	36439	.001	Aldrin		0		Aldrin
4.397	45875	.001	Hept. epoxide	4.15	784322	.006	Hept. epoxide
4.486	213956	.005	g. Chlordane	4.313	641810	.004	g. Chlordane
4.596	62347	.002	a. Chlordane	4.423	371538	.003	a. Chlordane
4.706	191996	.005	Endosulfan I	4.48	790450	.006	Endosulfan I
	0		4,4'-DDE	4.559	236046	.002	4,4'-DDE
4.896	50962	.001	Dieldrin	4.676	302957	.002	Dieldrin
	0		o,p-DDD	4.704	368908	.006	o,p-DDD
5.063	15943		Endrin	4.939	203105	.002	Endrin
5.112	36742	.012	Kepone	4.983	210398	.031	Kepone
	0		4,4'-DDD	5.013	229709	.002	4,4'-DDD
	0		4,4'-DDT	5.248	1016787	.009	4,4'-DDT
	0		Endrin aldehyde	5.326	238061	.002	Endrin aldehyde
	0		Methoxychlor	5.752	220384	.004	Methoxychlor
	0		Mirex	5.842	177398	.003	Mirex
	0		Endrin ketone	5.887	557325	.005	Endrin ketone
6.701	4393552	.184	DCB	6.69	13570640	.175	DCB

Files:
Area File: 05pest18306007.053.RAW
Area File: 05pest18306007B.053.RAW
Method A: 05PESTD.MET
Method B: 05PESTDB.MET
Calibration File A: 05pest1830603.cal
Calibration File B: 05pest1830603b.cal
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/10/2018 12:32:07 AM
File Reported On: 11/13/2018 at 3:56:51 AM

Not Used
See Reintegration

9861922 RI F ABGKP02 T 182980006A 10589 SW-846 8081B

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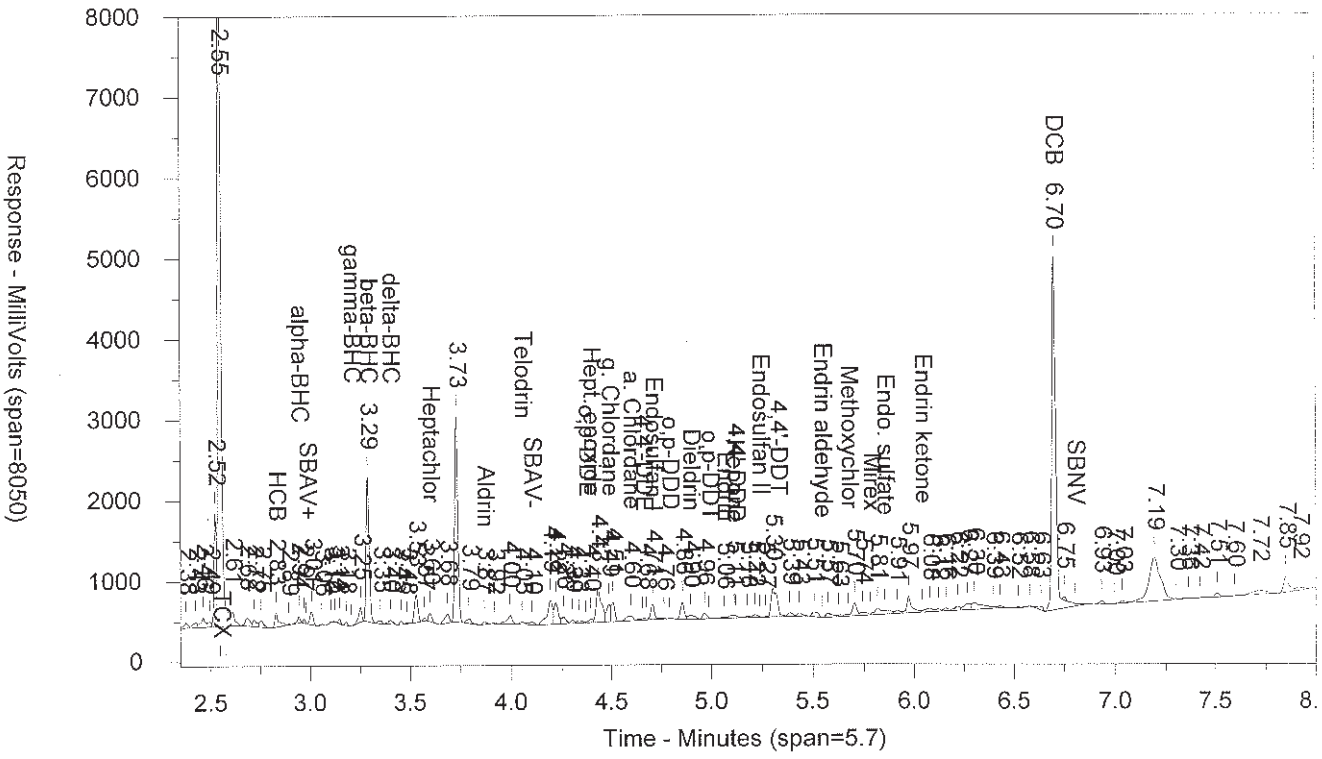

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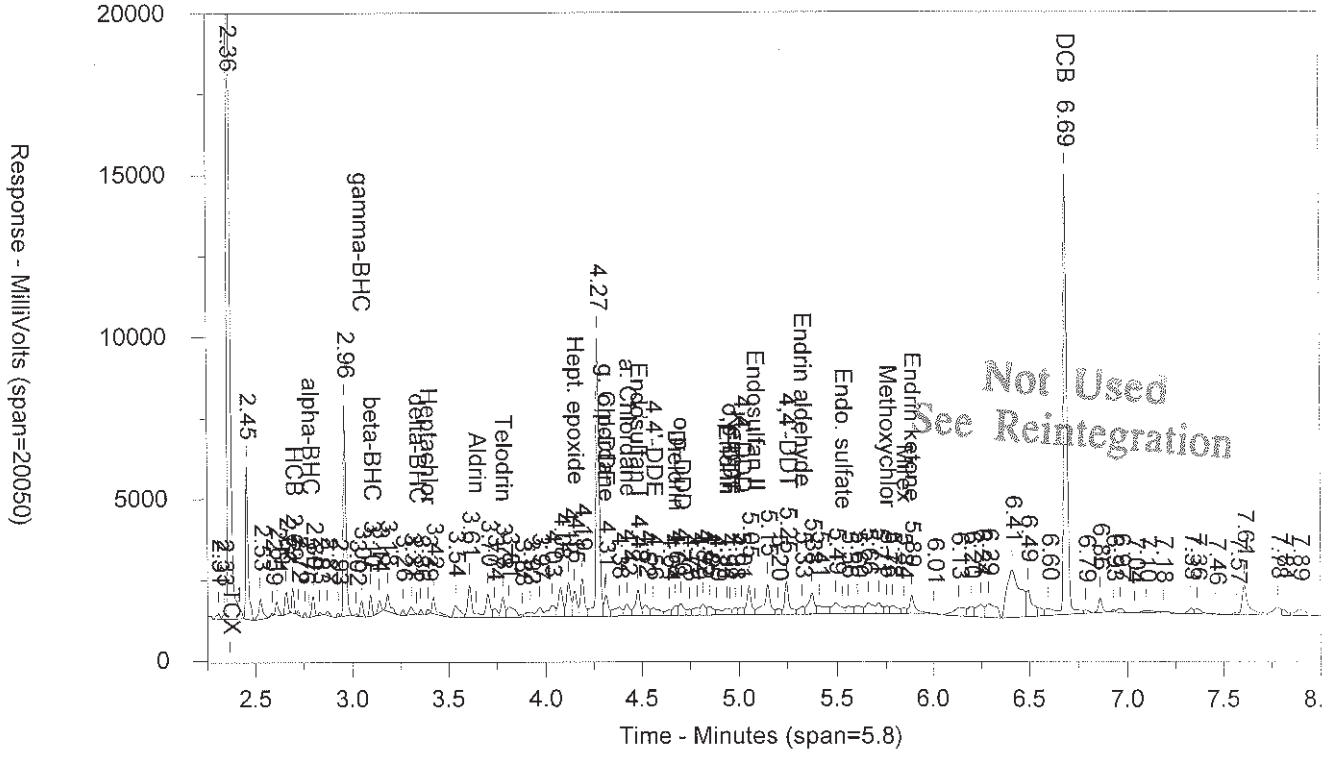

9861922 RI F ABGKP02 T 182980006A 10589 SW-846 8081B

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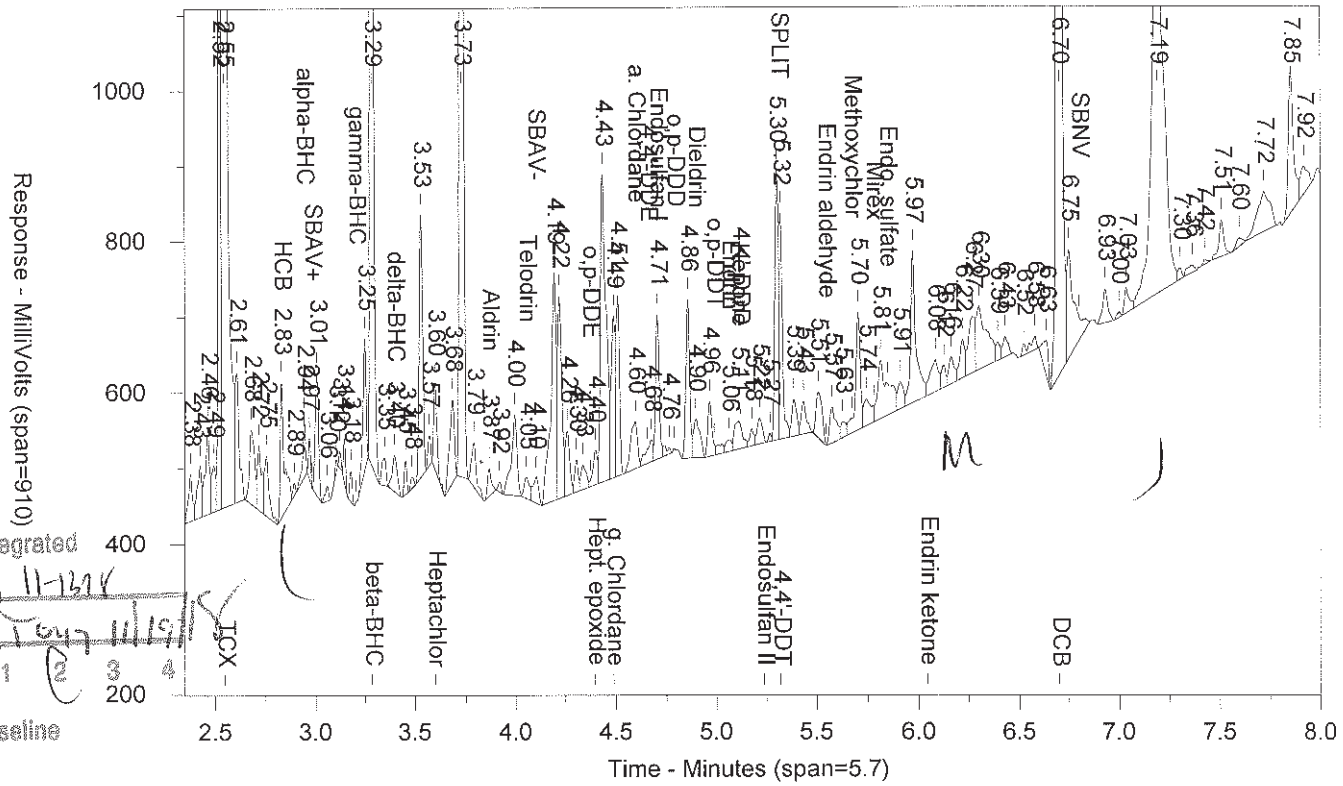

M = Manually Integrated

Analyst

Approved by

Circle Reason 1 2 3 4

1 = Missed Peak
2 = Improper Baseline
3 = RT Update
4 = Other

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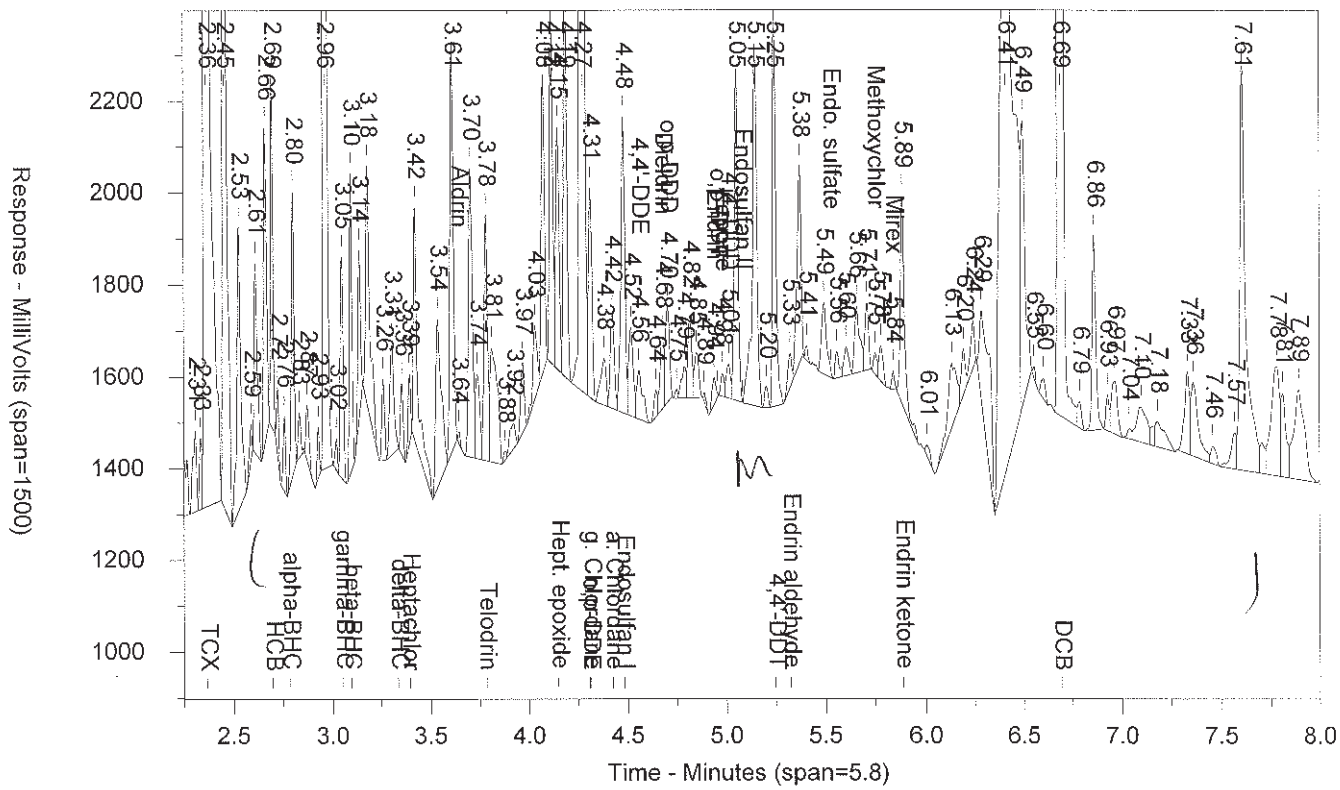


LANCASTER LABORATORIES

Sample Number: 9861922 RI F ABGKP02 T 182980006A 10589 SW-846 8081B
Injected On: 11/10/2018 12:24:06 AM 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

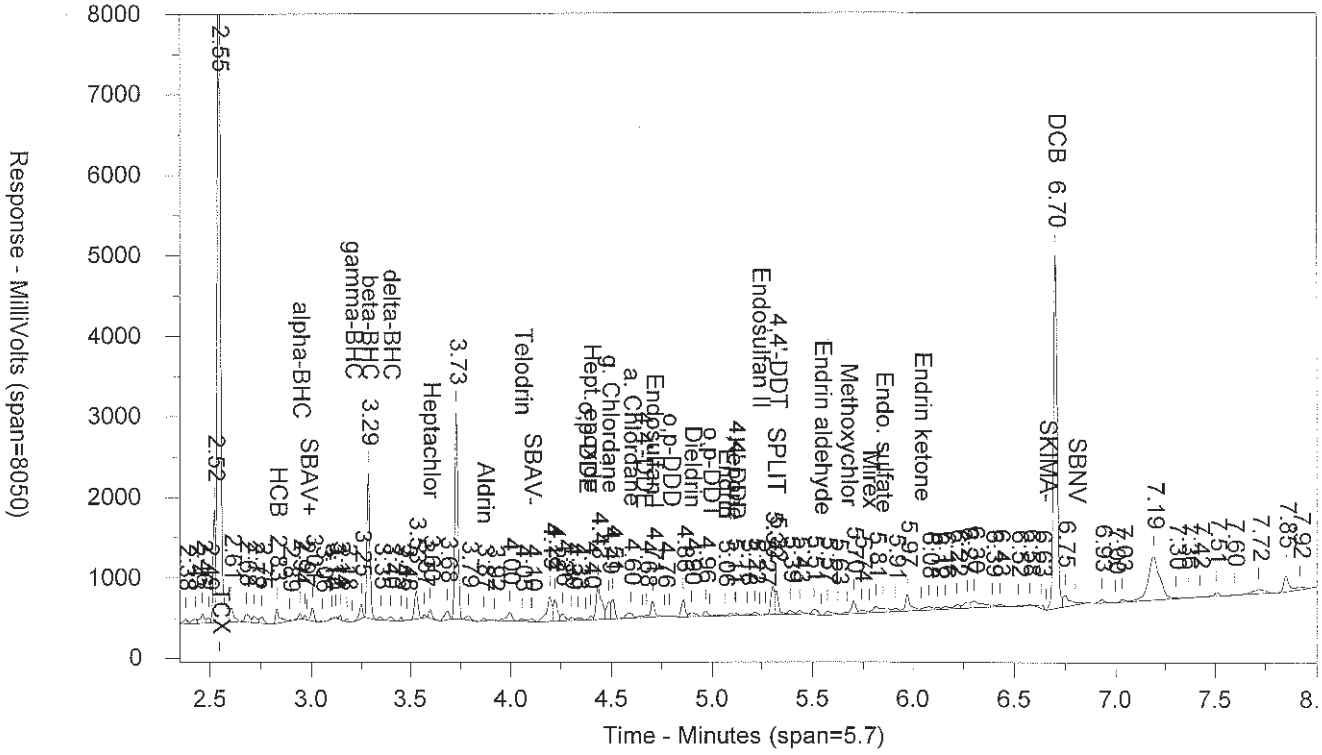
Analyst: 2306

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
2.546	11075660	.224	TCX	2.363	42974950	.206	TCX
2.829	179922	.003	HCB	2.695	767775	.004	HCB
2.944	76626	.001	alpha-BHC		0		alpha-BHC
	0		gamma-BHC	3.049	482528	.002	gamma-BHC
3.285	1797482	.07	beta-BHC	3.096	650614	.007	beta-BHC
3.597	114137	.002	Heptachlor	3.395	150591	.001	Heptachlor
3.397	47489	.001	delta-BHC		0		delta-BHC
3.867	36439	.001	Aldrin	3.643	25939		Aldrin
4.055	28164	.001	Telodrin	3.781	534782	.006	Telodrin
4.397	45875	.001	Hept. epoxide	4.15	528797	.004	Hept. epoxide
4.486	213956	.005	g. Chlordane	4.313	455527	.003	g. Chlordane
4.596	62347	.002	a. Chlordane	4.423	213174	.001	a. Chlordane
4.706	191996	.005	Endosulfan I	4.48	644258	.005	Endosulfan I
	0		4,4'-DDE	4.559	107037	.001	4,4'-DDE
4.896	50962	.001	Dieldrin	4.676	156391	.001	Dieldrin
	0		o,p-DDD	4.704	208008	.003	o,p-DDD
5.063	15943		Endrin	4.939	60738		Endrin
5.112	36742	.012	Kepone	4.983	50747	.029	Kepone
	0		4,4'-DDD	5.013	75163	.001	4,4'-DDD
5.319	299111	.009	4,4'-DDT	5.248	890282	.008	4,4'-DDT
	0		Endrin aldehyde	5.326	73656	.001	Endrin aldehyde
	0		Methoxychlor	5.752	45391	.001	Methoxychlor
	0		Mirex	5.842	40895	.001	Mirex
	0		Endrin ketone	5.887	453465	.004	Endrin ketone
6.701	4393552	.184	DCB	6.69	13467340	.174	DCB

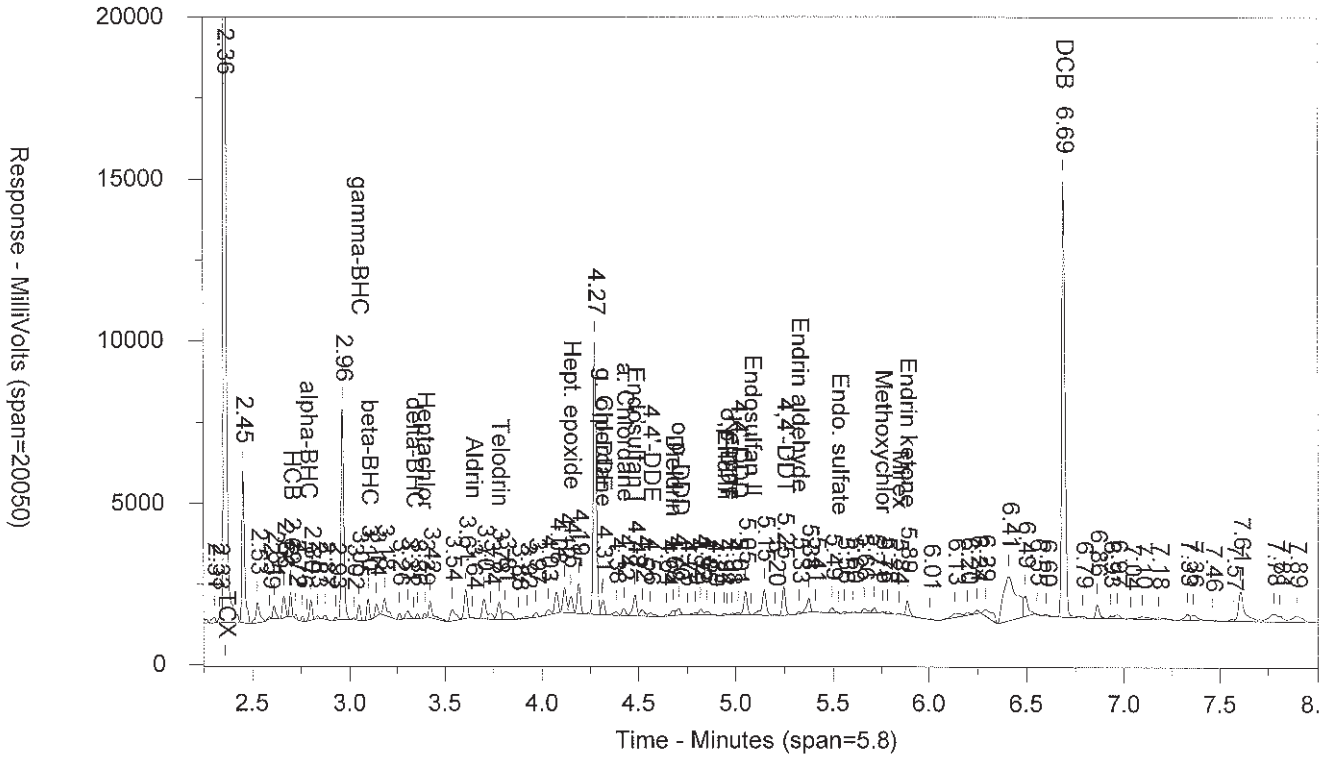
Files:
Area File: 05pest18306007.053.BND
Area File: 05pest18306007B.053.BND
Method A: 05pest18306007.053.BND
Method B: 05pest18306007B.053.BND
Calibration File A: 05pest18306007.053.BND
Calibration File B: 05pest18306007B.053.BND
Format A: pestD5.FMTA
Format B: pestD5.FMTB
Area File Created On: 11/13/2018 11:48:40 AM
File Reported On: 11/13/2018 at 11:49:04 AM

9861922 RI F ABGKP02 T 182980006A 10589 SW-846 8081B

\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007.053.BND



\\USLAN-CHROMPERFECT\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP5\05pest18306007B.053.BND



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Data Summary

Sample Name: 9861922R F GKP02 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 246 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY

Analyses: 10589

Analysis Report (A)

Injected on Nov 15, 2018 13:51:21
Instrument H9147A
Result file 06PEST18261045.017.RAW
Calibration file 06PEST1826103
Method file 06PESTD

%SSR(TCX) * 27% (44 - 124) Conc: 0.083478
%SSR(DCB) * 26% (32 - 149) Conc: 0.079503

Analysis Report (B)

Injected on Nov 15, 2018 13:51:21
Instrument H9147B
Result file 06PEST18261045B.017.RAW
Calibration file 06PEST1826103B
Method file 06PESTDB

%SSR(TCX) * 29% (44 - 124) Conc: 0.087311
%SSR(DCB) * 31% (32 - 149) Conc: 0.093701

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	1.80	1.81	1.84	319895	0.083478
HCB	2.26	2.26	2.30	12852	0.002442
Alpha BHC	2.34	2.35	2.38	21977	0.003381
Beta BHC	2.92	2.95	2.96	13785	0.004489
Delta BHC	3.20	3.22	3.24	15276	0.002323
Heptachlor Epoxide	3.84	3.84	3.88	5206	0.000904
o,p-DDE	4.05	4.09	4.09	12172	0.003119
Dieldrin	4.40	4.41	4.44	7577	0.001173
Endosulfan II	4.86	4.89	4.90	17253	0.002914
p,p-DDT	4.96	4.98	5.00	6360	0.001308
Decachlorobiphenyl	6.36	6.38	6.42	370298	0.079503

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	2.60	2.60	2.64	891227	0.087311
Beta BHC	3.59	3.60	3.63	47424	0.006262
Delta BHC	3.83	3.85	3.87	40216	0.002278
Heptachlor	3.90	3.90	3.94	20224	0.001281
Telodrin	4.29	4.31	4.33	32891	0.003314
Heptachlor Epoxide	4.55	4.58	4.59	22059	0.001519
Gamma Chlordane	4.80	4.81	4.84	36043	0.002445
Alpha Chlordane	4.84	4.87	4.88	51221	0.003588
p,p-DDE	4.95	4.99	4.99	23810	0.001693
o,p-DDD	5.03	5.07	5.07	18084	0.002276
Endrin	5.25	5.28	5.29	39808	0.00322
p,p-DDD	5.34	5.35	5.38	16084	0.001419
p,p-DDT	5.56	5.59	5.60	5557	0.0005
Mirex	6.37	6.40	6.41	14782	0.001849
Decachlorobiphenyl	7.03	7.04	7.09	681737	0.093701

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
☐	Total DDTs			<0.0102	<0.0203	<0.0407			
☐	Total Endosulfans (I + II)					<0.0203			
☐	Tetrachloro-m-xylene	B	0.087311	0.0305	0.061	0.061		4.49	
☑	Tetrachloro-m-xylene-D1	A	0.083478	0.0305	0.061	0.061			
☑	Tetrachloro-m-xylene-D2	B	0.087311	0.0305	0.061	0.061			
☐	HCB			<0.0061	<0.0142	<0.0203			
☑	Alpha BHC			<0.0061	<0.0142	<0.0203	D2		
☑	Gamma BHC - Lindane			<0.0041	<0.0142	<0.0203	D1		
☑	Beta BHC			<0.0069	<0.0142	<0.0203	D1		
☑	Heptachlor			<0.0041	<0.0142	<0.0203	D1		
☑	Delta BHC			<0.0069	<0.0142	<0.0203	D2		
☑	Aldrin			<0.0041	<0.0142	<0.0203	D1		
☐	Telodrin					<0.0203			
☑	Heptachlor Epoxide			<0.0047	<0.0142	<0.0203	D1		
☑	Gamma Chlordane			<0.0142	<0.0407	<0.0407	D1		
☐	o,p-DDE			<0.0142	<0.0285	<0.0407			
☑	Alpha Chlordane			<0.0061	<0.0142	<0.0203	D1		
☑	Endosulfan I			<0.0087	<0.0183	<0.0203	D1		
☑	p,p-DDE			<0.0102	<0.0203	<0.0407	D1		
☑	Dieldrin			<0.0108	<0.0203	<0.0407	D2		
☐	o,p-DDD			<0.0102	<0.0203	<0.0407			
☑	Endrin			<0.0165	<0.0407	<0.0407	D1		
☐	o,p-DDT			<0.0104	<0.0203	<0.0407			
☐	Kepone					<0.4065			
☑	p,p-DDD			<0.0102	<0.0203	<0.0407	D1		
☑	Endosulfan II			<0.0305	<0.061	<0.061	D2		
☑	p,p-DDT			<0.0106	<0.0203	<0.0407	D2		

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:20

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Data Summary

Sample Name: 9861922R F GKP02 Sample ID: AB **Batchnumber: 183180015A**
Sample Amount: 246 ml Total Volume: 5 ml Analyst: 15222 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on	Nov 15, 2018 13:51:21
Instrument	H9147A
Result file	06PEST18261045.017.RAW
Calibration file	06PEST1826103
Method file	06PESTD

Analysis Report (B)

Injected on	Nov 15, 2018 13:51:21
Instrument	H9147B
Result file	06PEST18261045B.017.RAW
Calibration file	06PEST1826103B
Method file	06PESTDB

Single Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	Comments
✓	Endrin Aldehyde			<0.0407	<0.0813	<0.2033	D1		
✓	Endosulfan Sulfate			<0.0118	<0.0244	<0.0407	D1		
✓	Methoxychlor			<0.061	<0.1423	<0.2033	D1		
✓	Endrin Ketone			<0.0102	<0.0203	<0.0407	D1		
	Mirex			<0.0203	<0.0813	<0.1016			
	Decachlorobiphenyl	B	0.093701	0.0305	0.061	0.061		16.39	
✓	Decachlorobiphenyl-D1	A	0.079503	0.0305	0.061	0.061			
✓	Decachlorobiphenyl-D2	B	0.093701	0.0305	0.061	0.061			

Multiple Component Summary

	Compound Name	Column	Amount Found	DL	LOD	LOQ	Qualifiers	%RPD	No Req. Hits	Comments
✓	Chlordane			<0.3252	<0.6504	<1.0163	D1		5	
✓	Toxaphene			<0.6098	<1.2195	<2.0325	D1		5	

Units: ug/l

%RPD = High - Low Amount divided by the Average times 100

Valerie L Tomayko
Principal Specialist

NOV 19 2018

Reviewed and digitally signed by Dylan Schreiner on 11/19/2018 12:26:20

Eurofins Lancaster Laboratories-Single Component Data Summary

Sample Name: **9861922R** F GKP02 ID: AB **Batchnumber: 183180015A**
Sample Amount: 246 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:51:21
Instrument : CP06--H9147A
Result file : 06PEST18261045.017.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

%SSR(TCX) : *27% (44-124) Conc.: 0.083478
%SSR(DCB) : *26% (32-149) Conc.: 0.079503

Peak name	Min	R.T.	Max	Height	Amount
TCX	1.80	1.81	1.84	319895	0.083478
HCB	2.26	2.26	2.30	12852	0.002442
alpha-BHC	2.34	2.35	2.38	21977	0.003381
beta-BHC	2.92	2.95	2.96	13785	0.004489
delta-BHC	3.20	3.22	3.24	15276	0.002323
Hept. epoxide	3.84	3.84	3.88	5206	0.000904
o,p-DDE	4.05	4.09	4.09	12172	0.003119
Dieldrin	4.40	4.41	4.44	7577	0.001173
Endosulfan II	4.86	4.89	4.90	17253	0.002914
4,4'-DDT	4.96	4.98	5.00	6360	0.001308
DCB	6.36	6.38	6.42	370298	0.079503

Analysis Report (B)

Injected on : Nov 15, 2018 13:51:21
Instrument : CP06--H9147B
Result file : 06PEST18261045B.017.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

%SSR(TCX) : *29% (44-124) Conc.: 0.087311
%SSR(DCB) : *31% (32-149) Conc.: 0.093701

Peak name	Min	R.T.	Max	Height	Amount
TCX	2.60	2.60	2.64	891227	0.087311
beta-BHC	3.59	3.60	3.63	47424	0.006262
delta-BHC	3.83	3.85	3.87	40216	0.002278
Heptachlor	3.90	3.90	3.94	20224	0.001281
Telodrin	4.29	4.31	4.33	32891	0.003314
Hept. epoxide	4.55	4.58	4.59	22059	0.001519
g. Chlordane	4.80	4.81	4.84	36043	0.002445
a. Chlordane	4.84	4.87	4.88	51221	0.003588
4,4'-DDE	4.95	4.99	4.99	23810	0.001693
o,p-DDD	5.03	5.07	5.07	18084	0.002276
Endrin	5.25	5.28	5.29	39808	0.003220
4,4'-DDD	5.34	5.35	5.38	16084	0.001419
4,4'-DDT	5.56	5.59	5.60	5557	0.000500
Mirex	6.37	6.40	6.41	14782	0.001849
DCB	7.03	7.04	7.09	681737	0.093701

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☐ TCX	B	0.087311	0.061	0.0305		4.49	
☐ HCB			<0.0203	<0.0061			
☑ alpha-BHC			<0.0203	<0.0061			
☑ gamma-BHC			<0.0203	<0.0041			
☑ beta-BHC			<0.0203	<0.0069			
☑ Heptachlor			<0.0203	<0.0041			
☑ delta-BHC			<0.0203	<0.0069			
☑ Aldrin			<0.0203	<0.0041			
☐ Telodrin			<0.0203				
☑ Hept. epoxide			<0.0203	<0.0047			
☑ g. Chlordane			<0.0407	<0.0142			
☐ o,p-DDE			<0.0407	<0.0142			
☑ a. Chlordane			<0.0203	<0.0061			
☑ Endosulfan I			<0.0203	<0.0087			
☑ 4,4'-DDE			<0.0407	<0.0102			
☑ Dieldrin			<0.0407	<0.0108			
☐ o,p-DDD			<0.0407	<0.0102			
☑ Endrin			<0.0407	<0.0165			
☐ o,p-DDT			<0.0407	<0.0104			
☐ Kepone			<0.4065				
☑ 4,4'-DDD			<0.0407	<0.0102			
☑ Endosulfan II			<0.061	<0.0305			
☑ 4,4'-DDT			<0.0407	<0.0106			
☑ Endrin aldehyde			<0.2033	<0.0407			
☑ Endo. sulfate			<0.0407	<0.0118			
☑ Methoxychlor			<0.2033	<0.061			

%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-Single Component Data Summary

Sample Name: **9861922R** F GKP02 ID: AB **Batchnumber: 183180015A**
Sample Amount: 246 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:51:21
Instrument : CP06--H9147A
Result file : 06PEST18261045.017.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

Analysis Report (B)

Injected on : Nov 15, 2018 13:51:21
Instrument : CP06--H9147B
Result file : 06PEST18261045B.017.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

Summary Report

Compound Name	Column	Amount Found	LOQ	DL	Qualifiers	%RPD	Comments
☑ Endrin ketone			<0.0407	<0.0102			
☐ Mirex			<0.1016	<0.0203			
☐ DCB	B	0.093701	0.061	0.0305		16.39	
☐ Total DDTs			<0.0407	<0.0102			
☐ Total Endosulfans	A	0.000000	<0.0203				

Units: ug/l

Valerie L. Tomayko
Principal Specialist

Reviewed by: DSS 152272
Date: 11/16/18

Verified by:
Date: NOV 19 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: **9861922R** F GKP02 ID: AB **Batchnumber: 183180015A**
Sample Amount: 246 ml Total Volume: 5 ml Analyst: 2306 SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:51:21
Instrument : CP06--H9147A
Result file : 06PEST18261045.017.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET
%SSR(TCX) : *27% (44-124) Conc.: 0.083478
%SSR(DCB) : *26% (32-149) Conc.: 0.079503

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**29.68**	
2.25	2.26	2.31	12851.7	0.166131			1
+ 2.60	2.60	2.66	15949.02	0.131296			2
2.60	2.66	2.66	34838.02	0.286796			2
2.82	2.84	2.88	19538.77	0.287605			3
3.13	3.15	3.19	19832.71	0.162452			5
3.25	3.26	3.31	17161.44	0.182513			6
+ 3.25	3.31	3.31	5593.563	0.059488			6
Height Summation:			**104222.64**				
Amount Avg CF:				**0.217099** Linear:			
Aroclor-1221					**2**	**83.73**	
2.08	2.12	2.14	24092.13	0.476623			1
2.26	2.26	2.32	12851.7	0.122136			3
Height Summation:			**36943.83**				
Amount Avg CF:				**0.299379** Linear:			
Aroclor-1248					**3**	**72.25**	
3.34	3.40	3.40	48640.26	0.536422			2
3.55	3.56	3.61	65418.03	0.408557			3
4.40	4.41	4.46	7577.14	0.065707			6
Height Summation:			**121635.43**				
Amount Avg CF:				**0.336895** Linear:			
Aroclor-1254					**3**	**59.68**	
+ 4.03	4.03	4.09	5657.253	0.022836			2
4.03	4.09	4.09	12172.36	0.049135			2
4.40	4.41	4.46	7577.14	0.018011			4
4.94	4.98	5.00	6360.062	0.020194			6
Height Summation:			**26109.562**				
Amount Avg CF:				**0.029113** Linear:			
Aroclor-1260					**2**	**13.02**	
4.52	4.54	4.58	4572.073	0.016055			1
4.94	4.98	5.00	6360.062	0.01931			3
Height Summation:			**10932.135**				
Amount Avg CF:				**0.017682** Linear:			
T. Chlordane					**3**	**55.47**	
+ 4.03	4.03	4.09	5657.253	0.010539 X			3
4.03	4.09	4.09	12172.36	0.022675			3
4.87	4.89	4.93	17252.95	0.083283 LMPC			5
4.87	4.89	4.93	17252.95	0.083283			5
Height Summation:			**46678.26**				
Amount Avg CF:				**0.06308** Linear:			
Toxaphene					**2**	**8.73**	
5.02	5.03	5.08	3972.814	0.054502 LMPC			2
5.46	5.51	5.52	6407.862	0.061676 LMPC			5
Height Summation:			**10380.676**				
Amount Avg CF:				**0.058089** Linear:			

Analysis Report (B)

Injected on : Nov 15, 2018 13:51:21
Instrument : CP06--H9147B
Result file : 06PEST18261045B.017.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET
%SSR(TCX) : *29% (44-124) Conc.: 0.087311
%SSR(DCB) : *31% (32-149) Conc.: 0.093701

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**5**	**37.95**	
3.29	3.30	3.35	59708.64	0.239407			2
3.50	3.52	3.56	26355.85	0.203398			3
+ 3.50	3.55	3.56	16084.71	0.124132			3
* 3.84	3.85	3.90	40216.2	0.129725			5
* 3.81	3.85	3.87	40216.2	0.078572			4
3.94	3.96	4.00	45095.93	0.183671			6
Height Summation:			**211592.82**				
Amount Avg CF:				**0.166955** Linear:			
Aroclor-1221					**3**	**58.08**	
2.76	2.79	2.82	6080.629	0.079703			1
2.84	2.86	2.90	23707.61	0.315448			2
2.93	2.93	2.99	81627.55	0.329137			3
Height Summation:			**111415.789**				
Amount Avg CF:				**0.241429** Linear:			
Aroclor-1248					**6**	**93.81**	
3.81	3.85	3.87	40216.2	0.159049			1
+ 4.03	4.05	4.09	36809.14	0.116972			2
4.03	4.09	4.09	164054.5	0.521333			2
4.20	4.24	4.26	182386	0.508242			3
4.61	4.63	4.67	30434.04	0.074912			4
4.72	4.75	4.78	23875.53	0.064797			5
5.02	5.03	5.08	18828.15	0.077888			6
+ 5.02	5.07	5.08	18083.7	0.074809			6
Height Summation:			**459794.42**				
Amount Avg CF:				**0.23437** Linear:			
Aroclor-1254					**6**	**53.11**	
4.55	4.58	4.61	22058.87	0.046609			1
4.73	4.75	4.79	23875.53	0.033728			2
5.02	5.03	5.08	18828.15	0.022373			3
+ 5.02	5.07	5.08	18083.7	0.021489			3
5.25	5.28	5.31	39807.6	0.06199			4
5.45	5.51	5.51	14228.29	0.037359			5
5.56	5.59	5.62	5557.302	0.008429			6
Height Summation:			**124355.742**				
Amount Avg CF:				**0.035081** Linear:			
Aroclor-1260					**3**	**100.40**	
5.15	5.20	5.21	22529.3	0.037979			1
5.38	5.40	5.44	26864.02	0.105059			2
+ 5.38	5.44	5.44	24175.12	0.094543			2
5.56	5.59	5.62	5557.302	0.006882			3
Height Summation:			**54950.622**				
Amount Avg CF:				**0.049973** Linear:			

Eurofins Lancaster Laboratories-Multiple Component Data Summary

Sample Name: **9861922R** F GKP02 ID: AB **Batchnumber: 183180015A**
Sample Amount: 246 ml Total Volume: 5 ml Analyst: 2306 .SDG: TID07 State: NY
Analyses: 10589

Analysis Report (A)

Injected on : Nov 15, 2018 13:51:21
Instrument : CP06--H9147A
Result file : 06PEST18261045.017.RAW
Calibration file : 06PEST1826103.CAL
Method file : 06PESTD.MET

Analysis Report (B)

Injected on : Nov 15, 2018 13:51:21
Instrument : CP06--H9147B
Result file : 06PEST18261045B.017.RAW
Calibration file : 06PEST1826103B.CAL
Method file : 06PESTDB.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
T. Chlordane					**5**	**179.22**	
+ 3.69	3.70	3.75	27809.91	0.071086 X			1
3.69	3.74	3.75	343894.9	0.87904 ✓			1
4.57	4.58	4.63	22058.87	0.059403) LMQL			2
4.79	4.81	4.85	36043.45	0.022401) LMQL			3
4.83	4.87	4.89	51221.11	0.049026) LMQL			4
+ 4.83	4.89	4.89	17252.95	0.016514 X			4
5.48	5.51	5.54	14228.29	0.035687 LMQL			5
Height Summation:			**467446.62**				
Amount Avg CF:				**0.209112** Linear:			
Toxaphene					**3**	**69.40**	
5.47	5.51	5.53	14228.29	0.07562) LMQL			1
5.65	5.65	5.71	4984.287	0.024059) LMQL			2
6.03	6.07	6.09	5285.545	0.0263			5
Height Summation:			**24498.122**				
Amount Avg CF:				**0.041993** Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			0	0		26.11	5	20	
Aroclor-1221			0	0		21.43	2	20	
Aroclor-1248			0	0		35.89	5	20	
Aroclor-1254			0	0		18.59	4	20	
Aroclor-1260			0	0		** 95.46	5	20	
T. Chlordane			1.0163	0.3252		** 107.30	5	20	
Total PCBs			0	0					
Toxaphene			2.0325	0.6098		32.17	5	30	

Units: ug/l

9861922R F ABGKP02 T 183180015A 10589 SW-846 8081B

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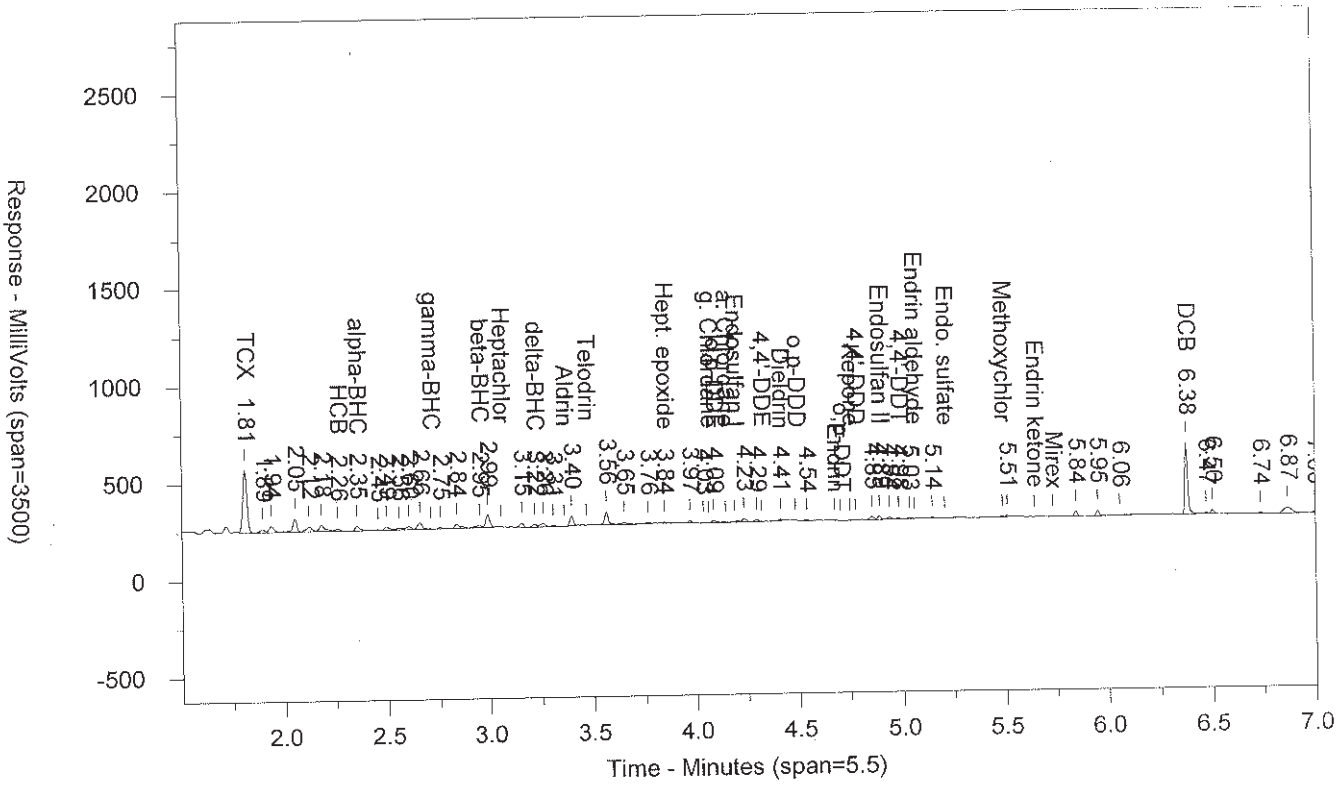

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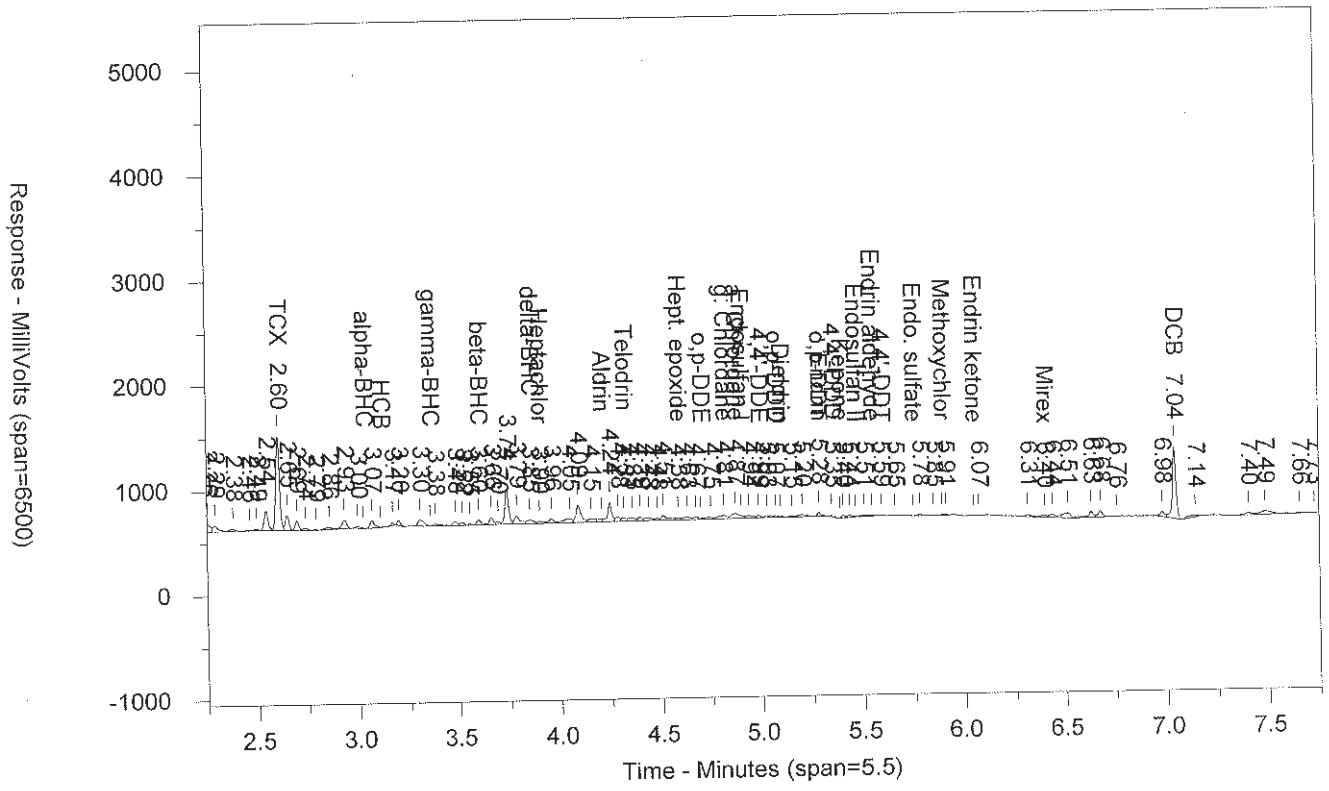

LANCASTER LABORATORIES

Sample Number: 9861922R F ABGKP02 T 183180015A 10589 SW-846 8081B
Injected On: 11/15/2018 1:51:21 PM Sample Weight: 246
Instrument ID: CP6-9147 Dilution Factor: 5
Oven Parameters: 150c to 200 @ 45c/min, to 230 @ 15c/min, to 330 @ 30c/min; hold 1.5 min
Column A ID: DB-CLP 30m x 0.32mm x 0.5um
Column B ID: DB-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
1.809	319895	.083	TCX	2.602	891227	.087	TCX
2.258	12852	.002	HCB		0		HCB
2.353	21977	.003	alpha-BHC		0		alpha-BHC
2.95	13785	.004	beta-BHC	3.598	47424	.006	beta-BHC
3.215	15276	.002	delta-BHC	3.851	40216	.002	delta-BHC
3.844	5206	.001	Hept. epoxide	4.583	22059	.002	Hept. epoxide
	0		Heptachlor	3.898	20224	.001	Heptachlor
4.086	12172	.003	o,p-DDE		0		o,p-DDE
	0		Telodrin	4.313	32891	.003	Telodrin
4.411	7577	.001	Dieldrin		0		Dieldrin
	0		g. Chlordane	4.81	36043	.002	g. Chlordane
	0		a. Chlordane	4.869	51221	.004	a. Chlordane
4.889	17253	.003	Endosulfan II		0		Endosulfan II
4.979	6360	.001	4,4'-DDT	5.586	5557	.001	4,4'-DDT
	0		4,4'-DDE	4.985	23810	.002	4,4'-DDE
	0		o,p-DDD	5.069	18084	.002	o,p-DDD
	0		Endrin	5.283	39808	.003	Endrin
	0		4,4'-DDD	5.348	16084	.001	4,4'-DDD
6.378	370298	.08	DCB	7.04	681737	.094	DCB
	0		Mirex	6.398	14782	.002	Mirex

Files:
Area File: 06pest18261045.017.RAW
Area File: 06pest18261045B.017.RAW
Method A: 06PESTD.MET
Method B: 06PESTDB.MET
Calibration File A: 06pest1826103.CAL
Calibration File B: 06pest1826103b.CAL
Format A: pestD6.FMTA
Format B: pestD6.FMTA
Area File Created On: 11/15/2018 1:59:19 PM
File Reported On: 11/15/2018 at 2:08:12 PM

9861922R F ABGKP02 T 183180015A 10589 SW-846 8081B

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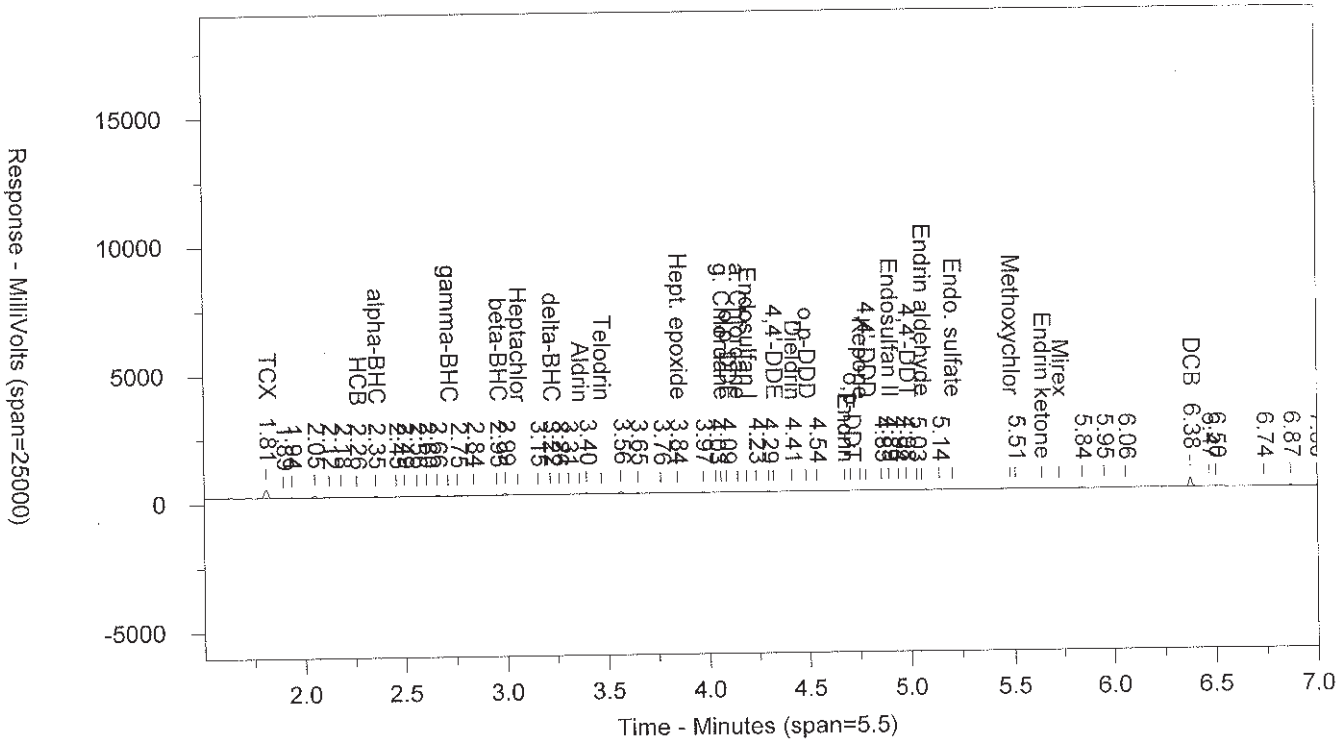

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