

Date : 17-OCT-2015 03:56

Client ID: 1167-

Instrument: HP09464.i

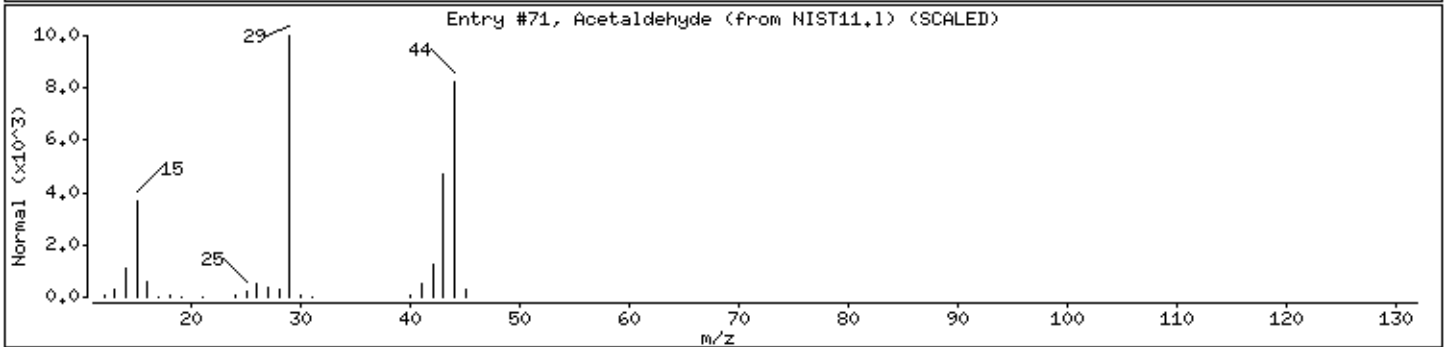
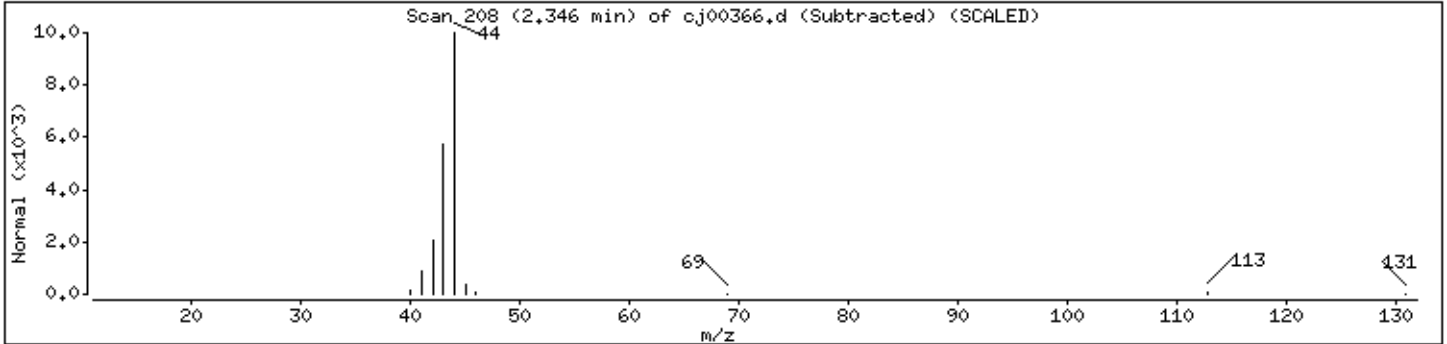
Sample Info: 8087713;500;C1528830AB;1167-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetaldehyde	75-07-0	NIST11.1	71	56	C2H4O	44



Date : 17-OCT-2015 03:56

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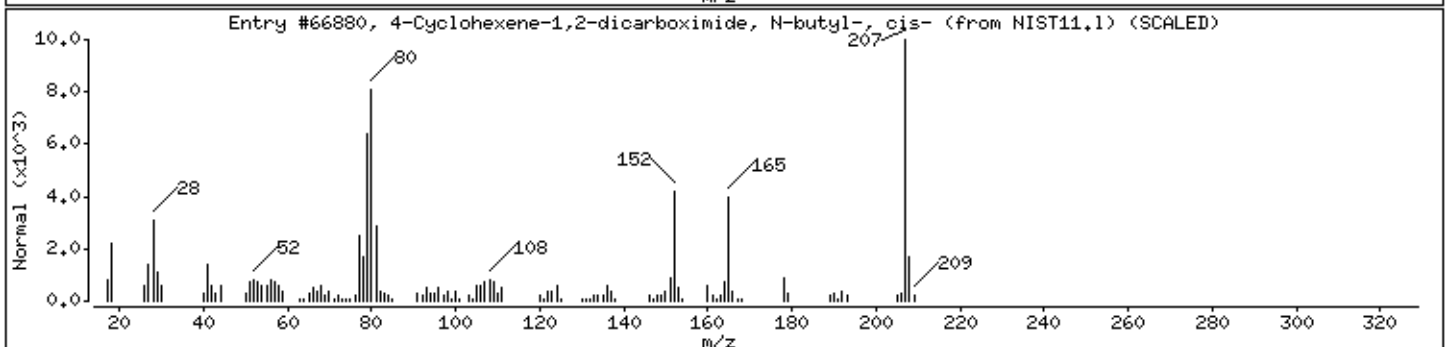
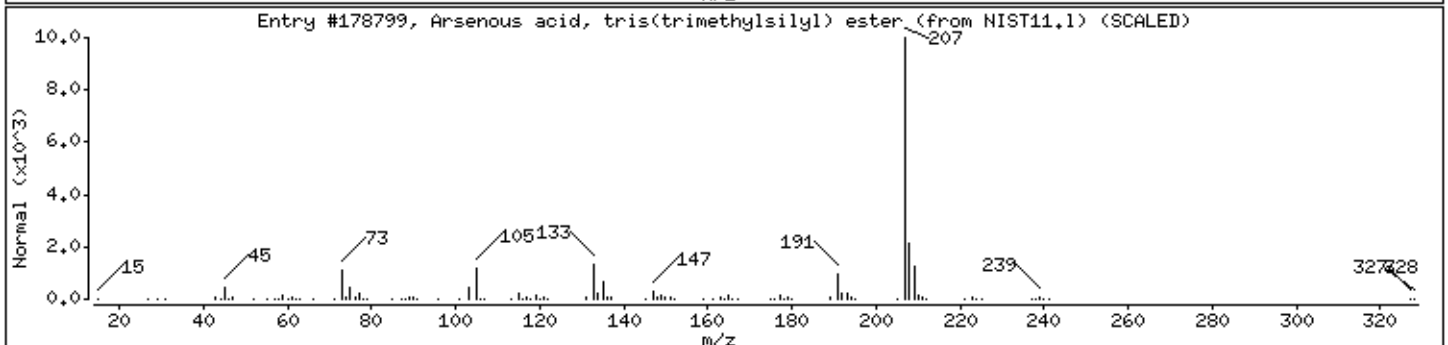
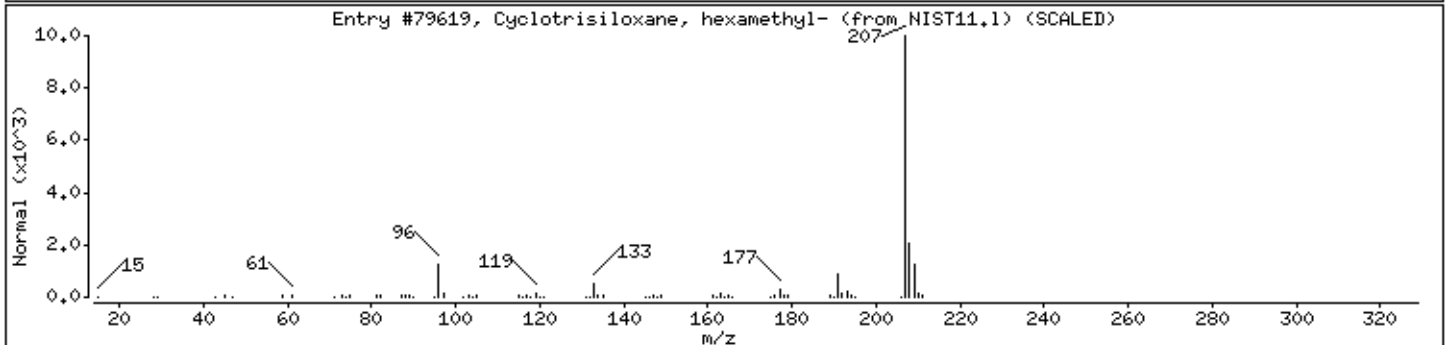
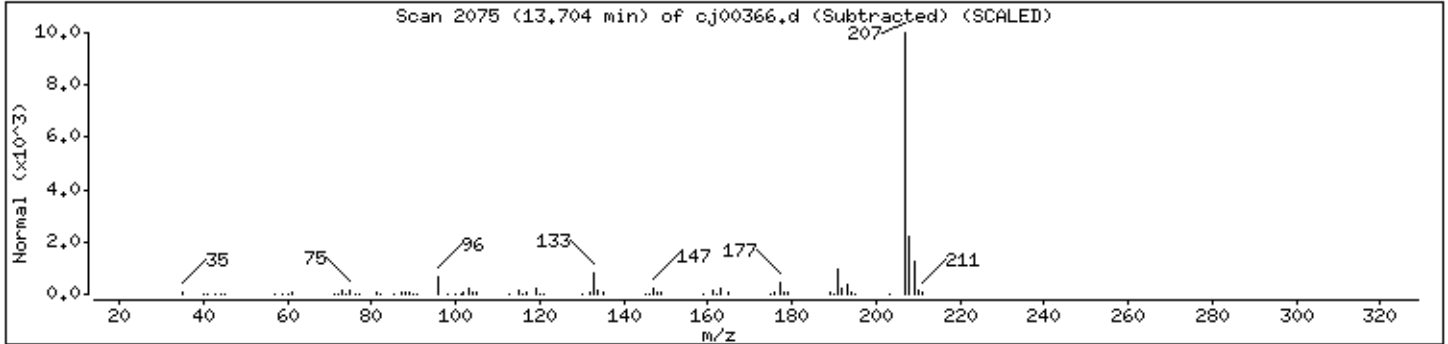
Sample Info: 8087713;500;C1528830AB;1167-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST11.1	79619	91	C6H18O3Si3	222
Arsenous acid, tris(trimethylsilyl) este	55429-29-3	NIST11.1	178799	64	C9H27AsO3Si3	342
4-Cyclohexene-1,2-dicarboximide, N-butyl	28916-00-9	NIST11.1	66880	42	C12H17N02	207



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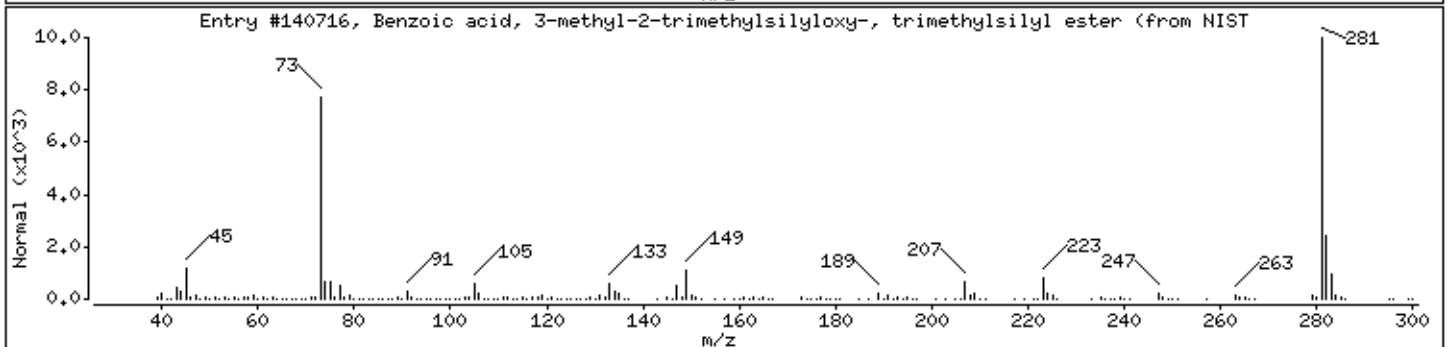
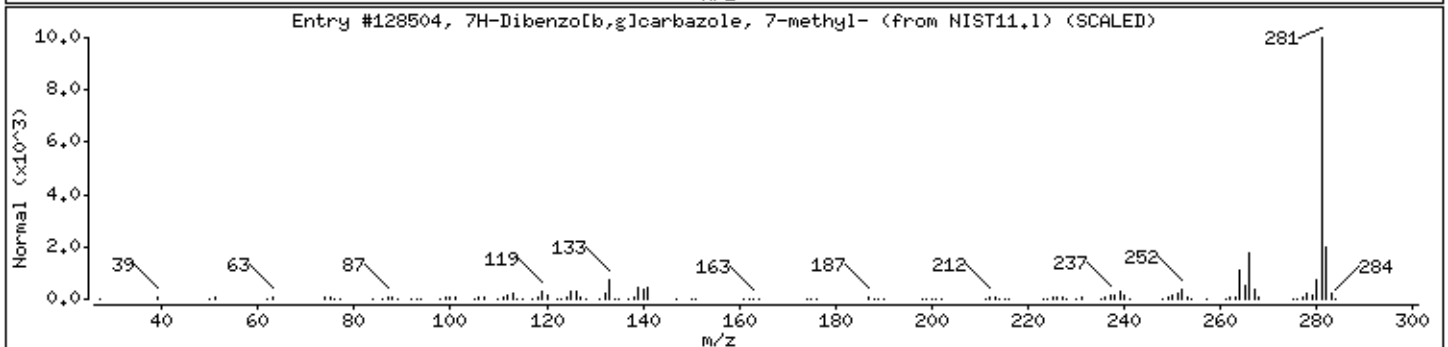
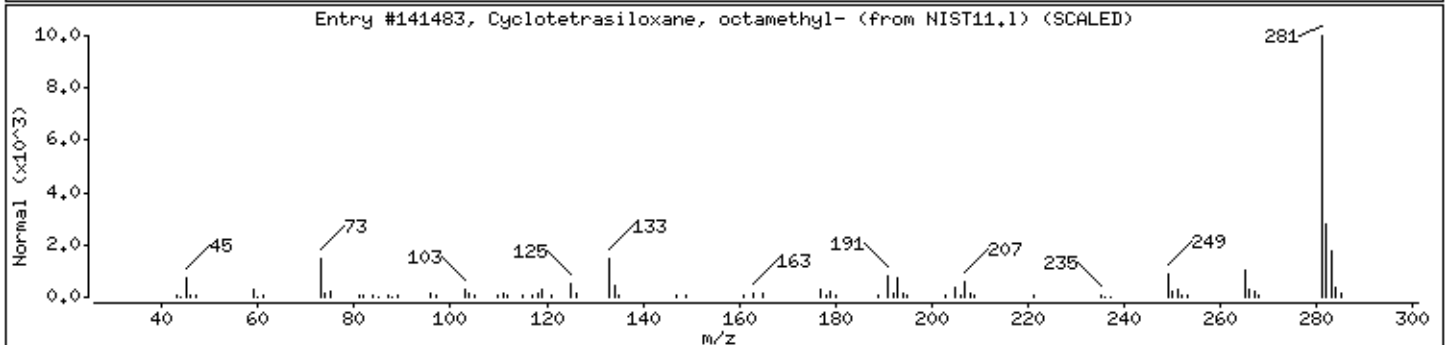
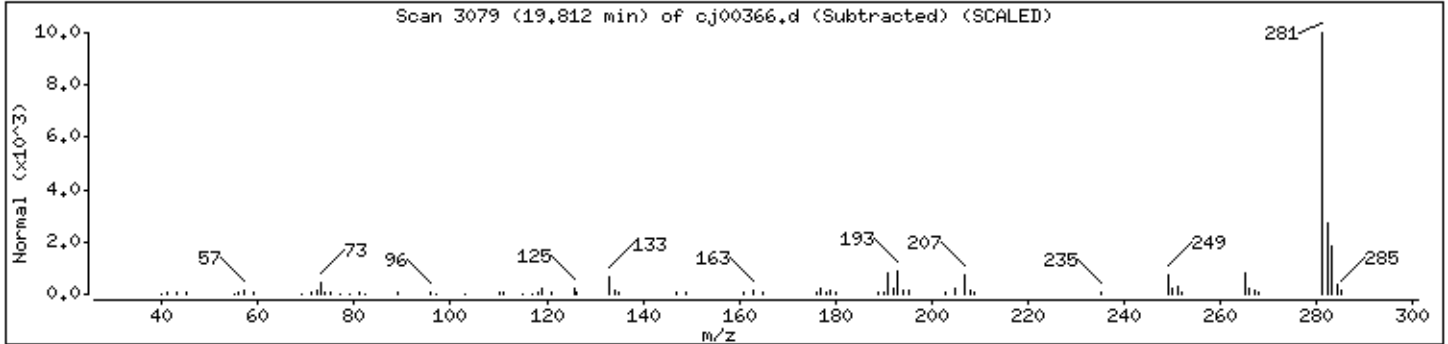
Sample Info: 8087713;500;C1528830AB;1167-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST11.1	141483	90	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST11.1	128504	64	C21H15N	281
Benzoic acid, 3-methyl-2-trimethylsilyloxy-	1000153-57-1	NIST11.1	140716	64	C14H24O3Si2	296



Date : 17-OCT-2015 03:56

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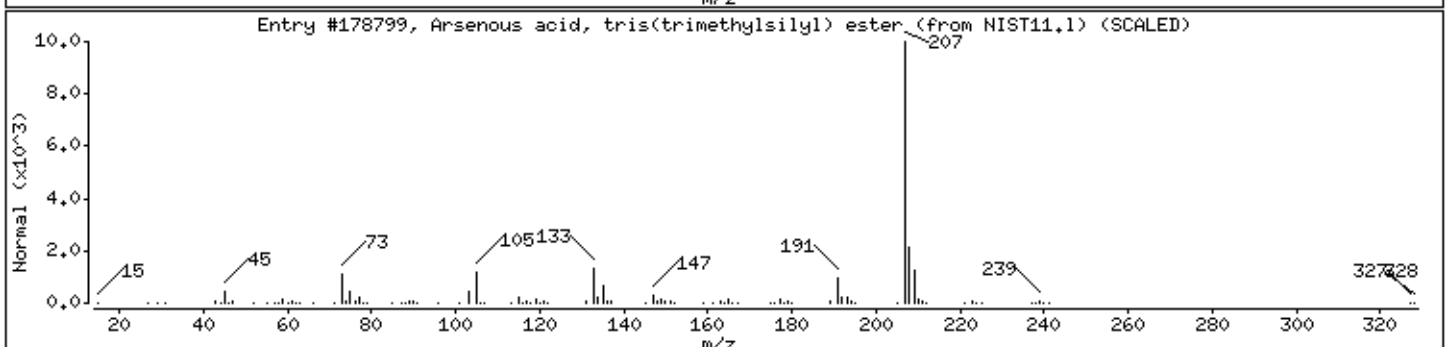
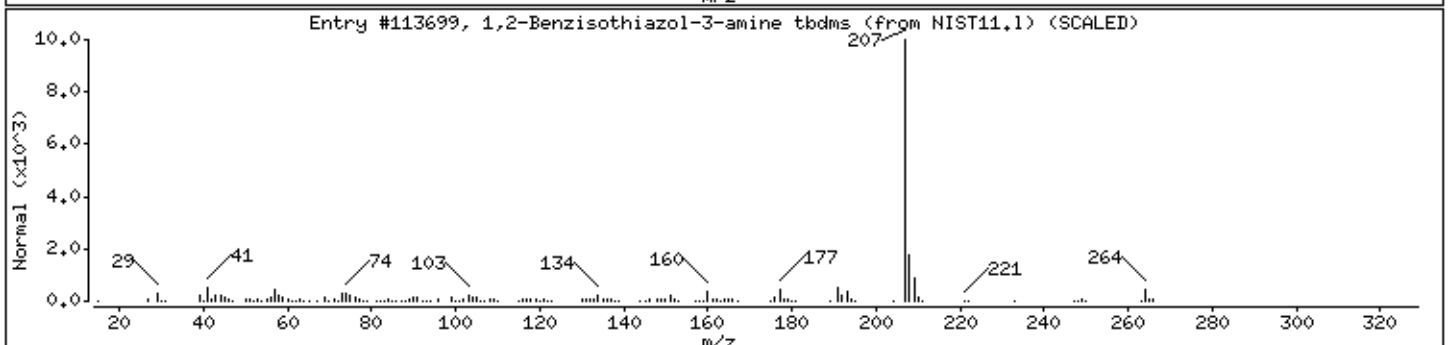
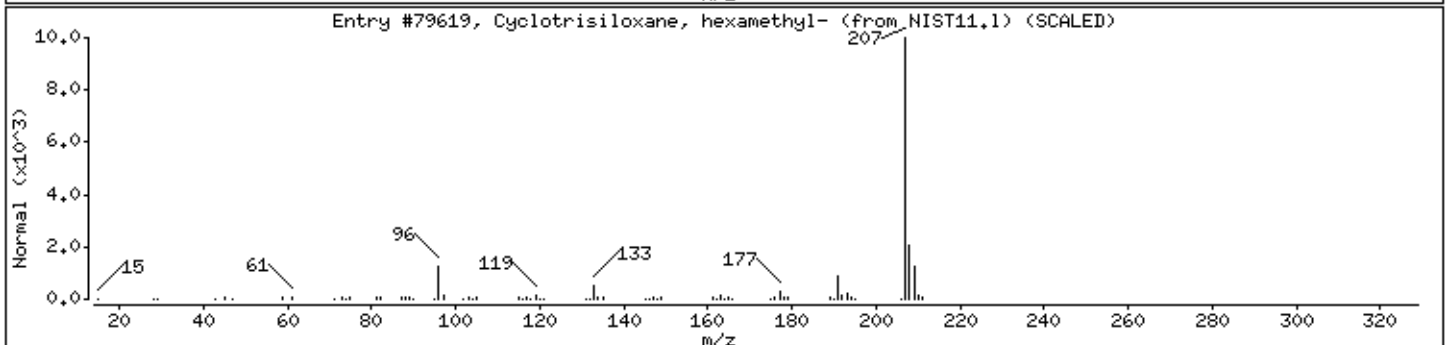
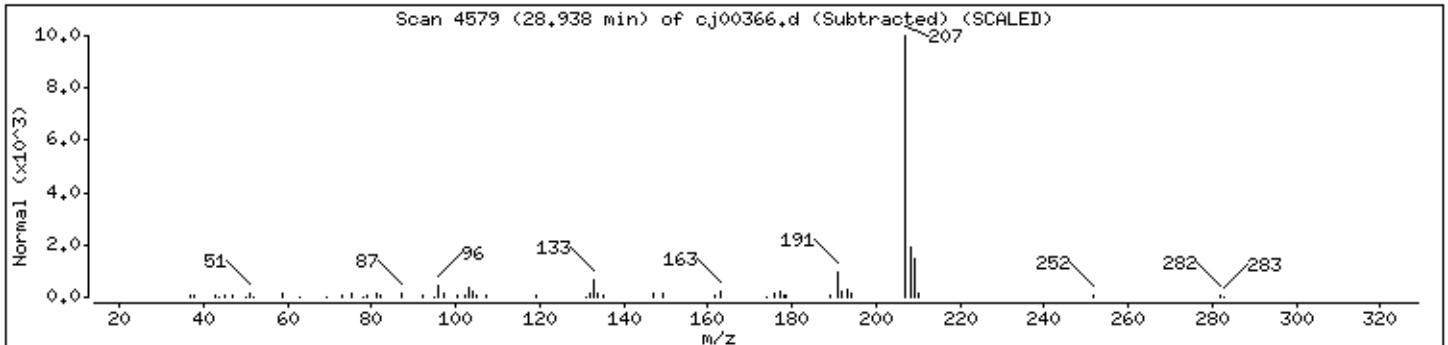
Sample Info: 8087713;500;C1528830AB;1167-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST11.1	79619	78	C6H18O3Si3	222
1,2-Benzisothiazol-3-amine tbdms	1000332-57-2	NIST11.1	113699	72	C13H20N2SSi	264
Arsenous acid, tris(trimethylsilyl) este	55429-29-3	NIST11.1	178799	64	C9H27AsO3Si3	342





1167-DL

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 8087713DL

Data file: /chem/HP09464.i/15oct19.b/cj00391.d Injection date and time: 19-OCT-2015 20:18
Data file Sample Info. Line: 8087713DL;50;C1528830AC;1167-DL;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AC
Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Blank Data file reference: /chem/HP09464.i/15oct19.b/cj00386.d

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time (Last Method Edit): 19-OCT-2015 16:04
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct19.b/cj00385.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 27.4 psia Canister Pressure before dilution (Ya): 13.7 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 50 cc

Analysis Comments:

Table with 8 columns: Internal Standards, RT (+/-RT), Scan, QIon, Area(+/- %Change), Conc. (on column), QC Flag, QC Limits. Rows include Bromochloromethane, 1,4-Difluorobenzene, and Chlorobenzene-d5.

Table with 11 columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit, LOQ. Lists various compounds like Dichlorodifluoromethane, Chlorodifluoromethane, Freon 114, etc.

1167-DL

Lancaster Laboratories, Inc. Analysis Summary for GC/MS Volatiles in Air 8087713DL

Data file: /chem/HP09464.i/15oct19.b/cj00391.d Injection date and time: 19-OCT-2015 20:18
Data file Sample Info. Line: 8087713DL;50;C1528830AC;1167-DL;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AC
Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Blank Data file reference: /chem/HP09464.i/15oct19.b/cj00386.d

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time (Last Method Edit): 19-OCT-2015 16:04
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct19.b/cj00385.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

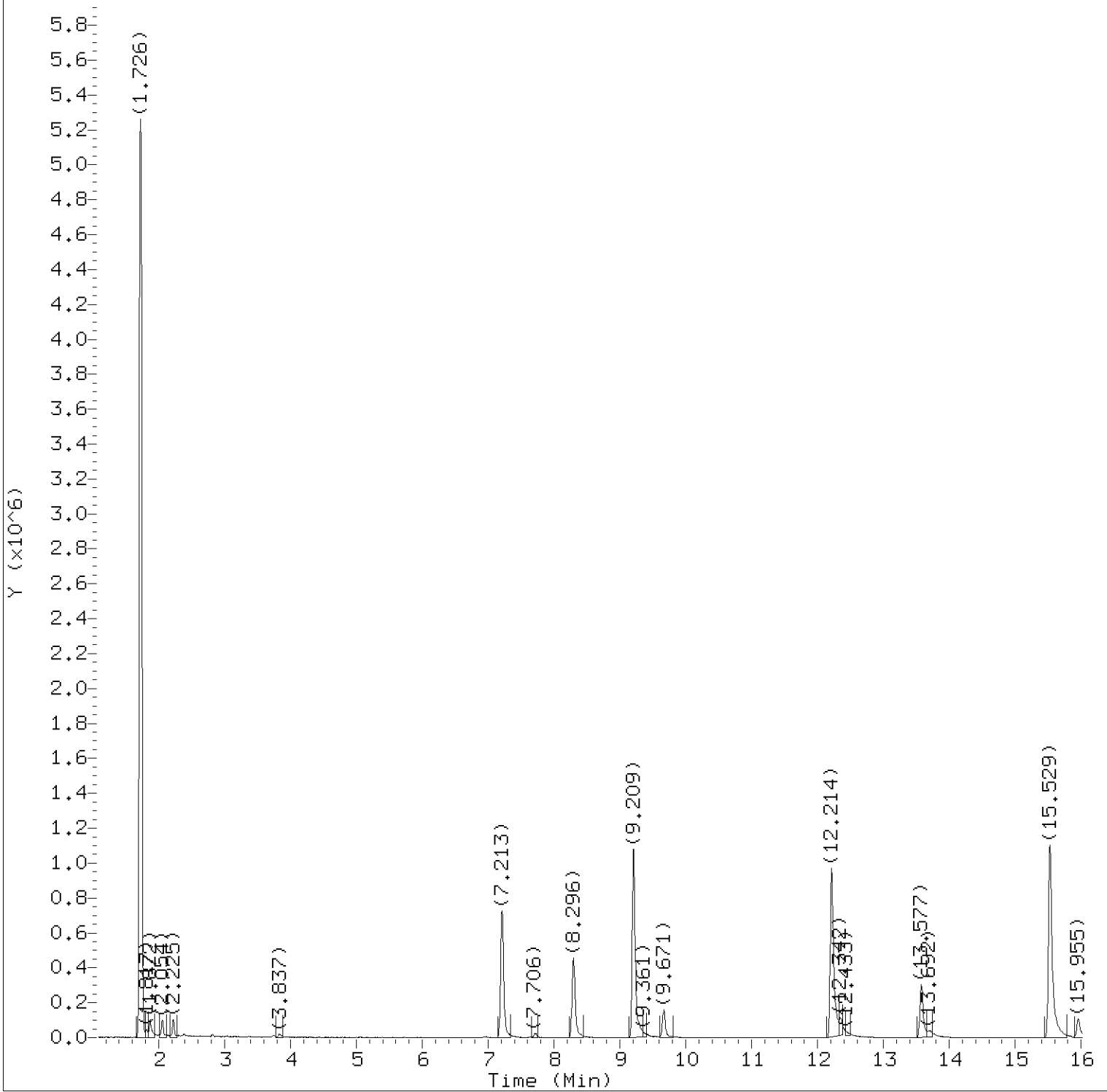
Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 27.4 psia Canister Pressure before dilution (Ya): 13.7 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 50 cc

Table with columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit (in sample), LOQ. Lists various compounds like 70) 1,2-Dibromoethane, 72) Chlorobenzene, etc.

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Christine M. Ratcliff on 10/22/2015 at 09:47. Parallax ID: cmr00412



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: 292

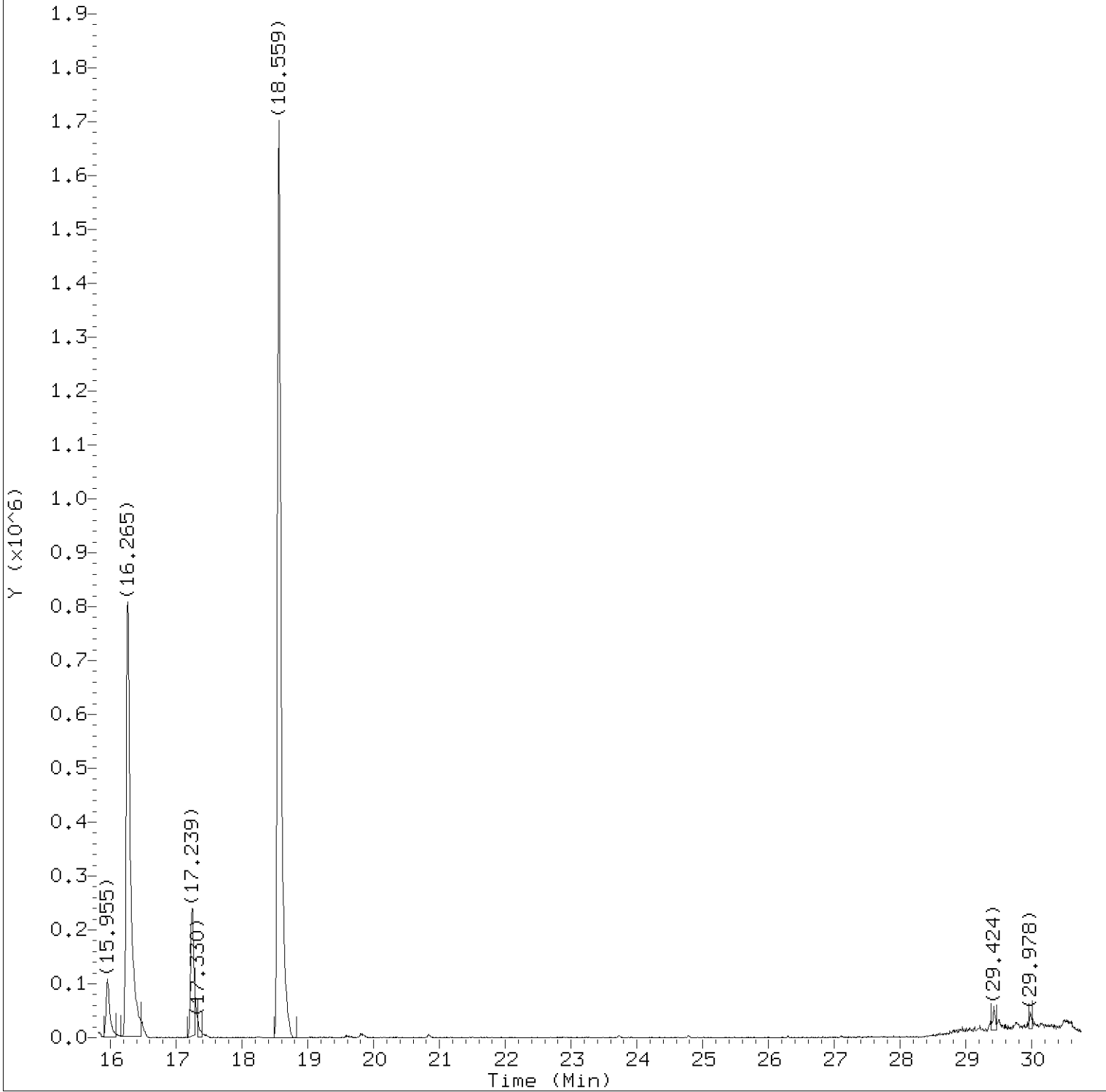
Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Sample Name: 1167-DL

Lab Sample ID: 8087713DL

Digitally signed by Jacob E. Bailey  
on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: 292

Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Sample Name: 1167-DL

Lab Sample ID: 8087713DL

Digitally signed by Jacob E. Bailey  
on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04

Sublist used: 292

Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

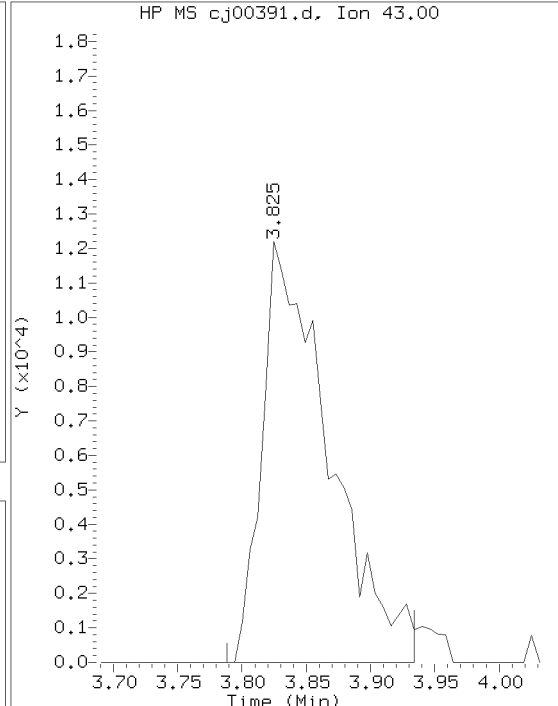
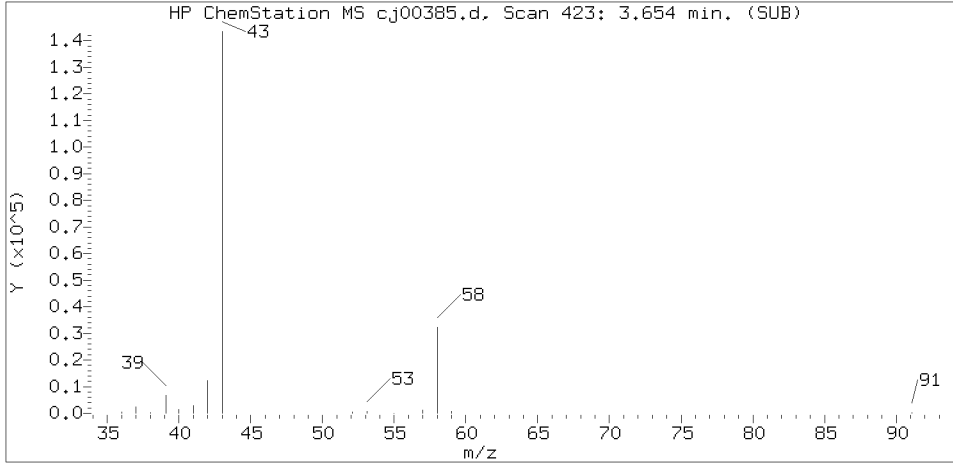
Sample Name: 1167-DL

Lab Sample ID: 8087713DL

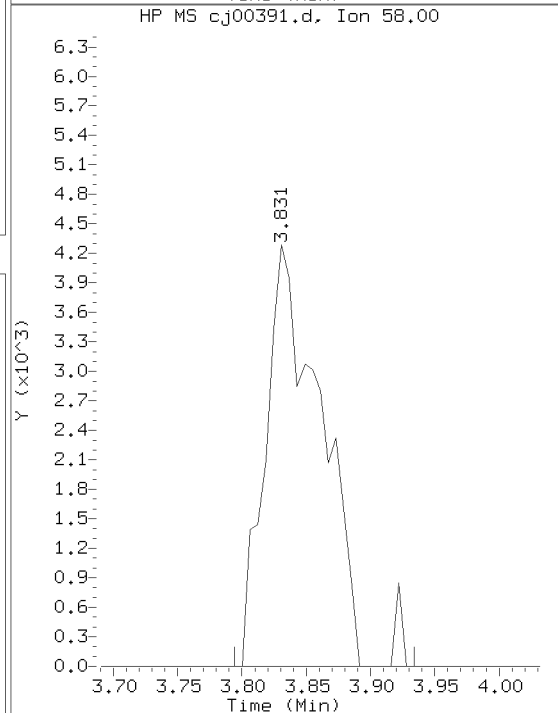
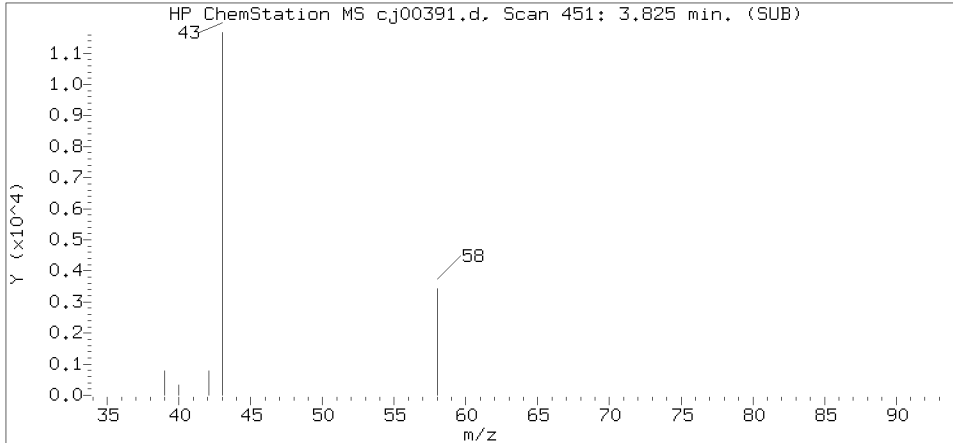
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
19) Acetone	(1)	3.825	43	44269	1.805
40)*Bromochloromethane	(1)	7.213	130	596360	10.000
43) 1,1,1-Trichloroethane	(1)	7.724	97	35269	0.275
51)*1,4-Difluorobenzene	(2)	9.202	114	1700506	10.000
52) Trichloroethene	(2)	9.671	130	102867	1.444
61) Toluene	(3)	12.354	91	98422	0.739
67) Tetrachloroethene	(3)	13.570	166	209993	1.851
71)*Chlorobenzene-d5	(3)	15.529	117	1706233	10.000
74) Ethylbenzene	(3)	15.955	91	213445	1.450
75) m/p-Xylene	(3)	16.265	91	1365227	11.216
76) o-Xylene	(3)	17.251	91	405083	3.162

\* = Compound is an internal standard.

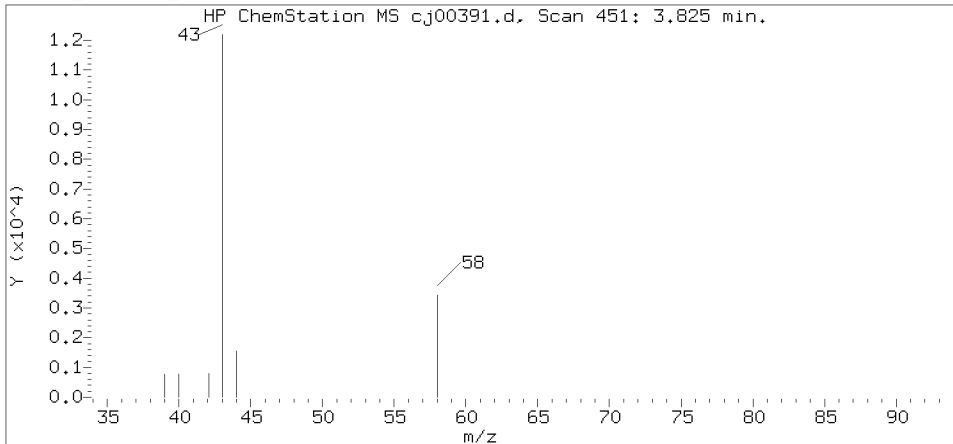
Reference Standard Spectrum for Acetone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

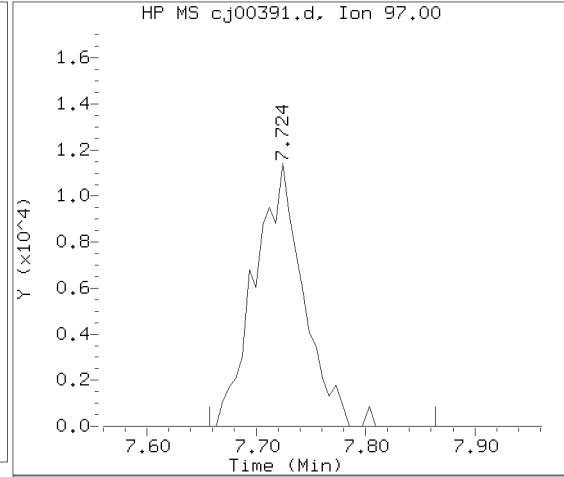
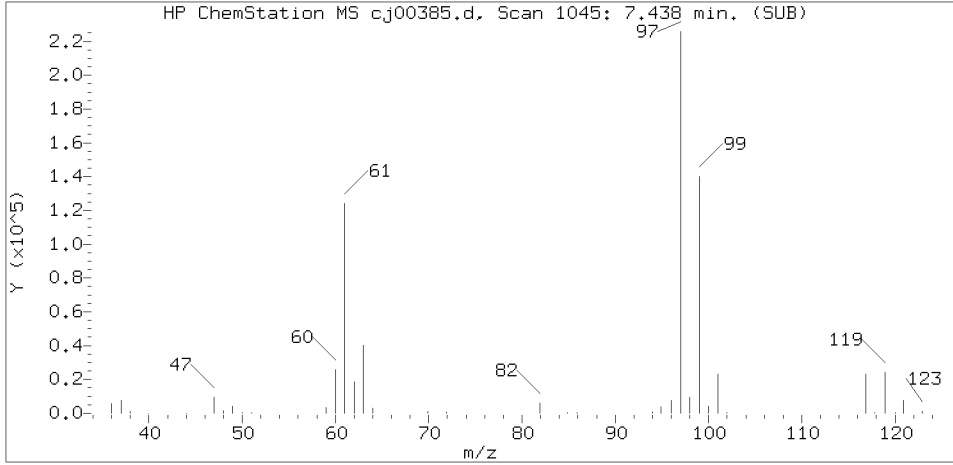
Sublist used: 292

Sample Name: 1167-DL

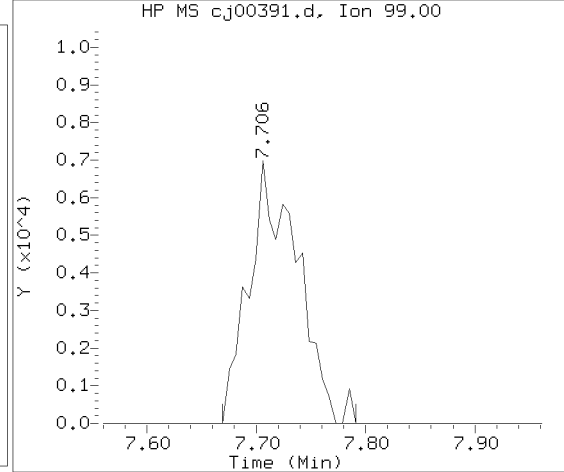
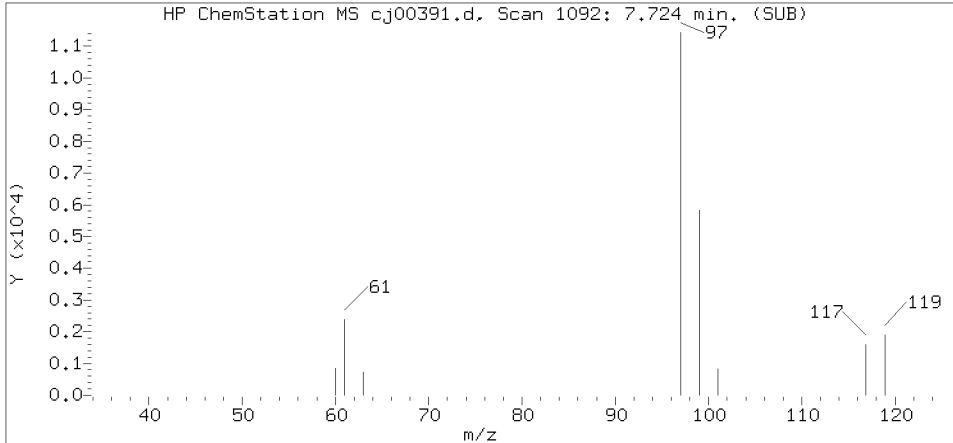
Lab Sample ID: 8087713DL

Compound Number : 19  
 Compound Name : Acetone  
 Scan Number : 451  
 Retention Time (minutes): 3.825  
 Relative Retention Time : -0.00547  
 Quant Ion : 43.00  
 Area (flag) : 44269  
 Concentration (ppb(v)) : 1.8050

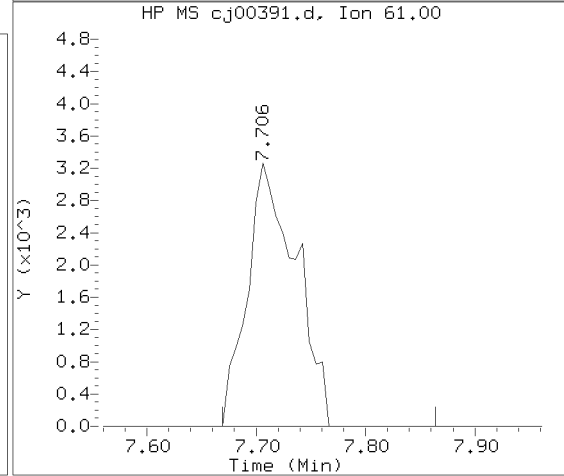
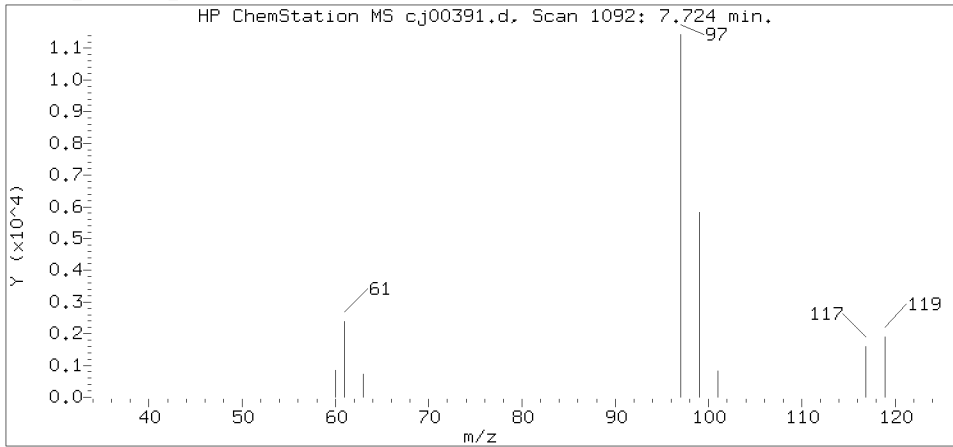
Reference Standard Spectrum for 1,1,1-Trichloroethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Sample Name: 1167-DL

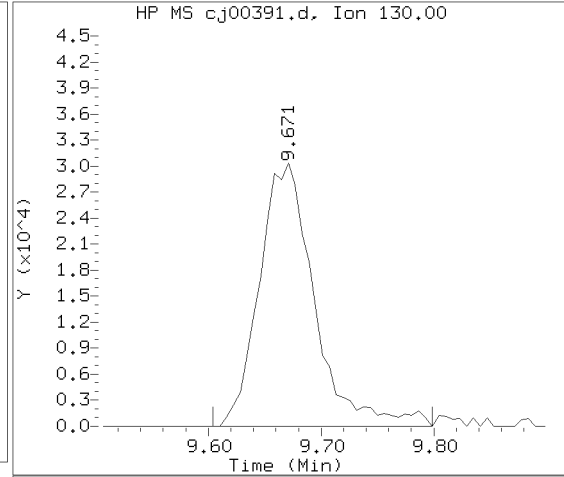
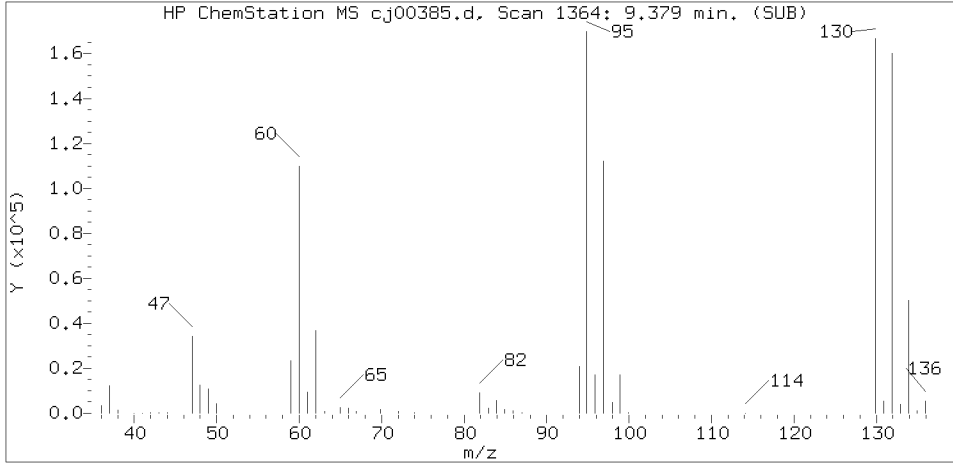
Lab Sample ID: 8087713DL

Compound Number : 43  
 Compound Name : 1,1,1-Trichloroethane  
 Scan Number : 1092  
 Retention Time (minutes): 7.724  
 Relative Retention Time : -0.00078  
 Quant Ion : 97.00  
 Area (flag) : 35269  
 Concentration (ppb(v)) : 0.2746

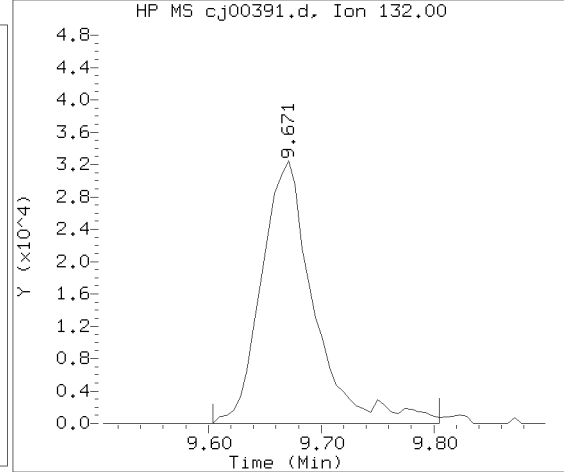
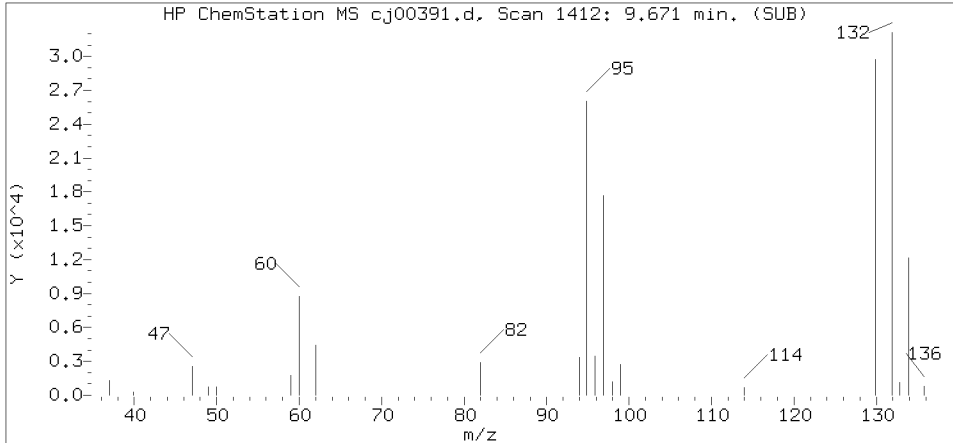
Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 211 of 1243

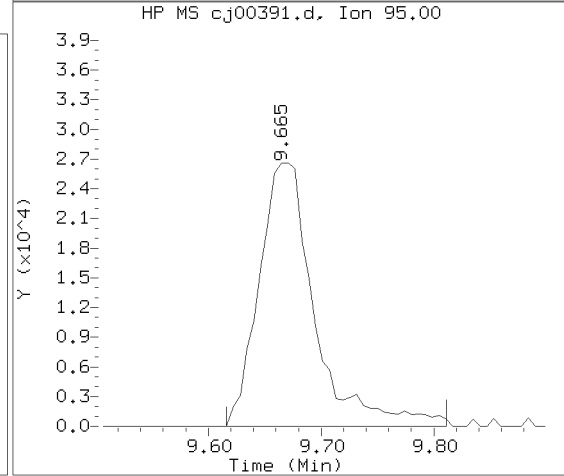
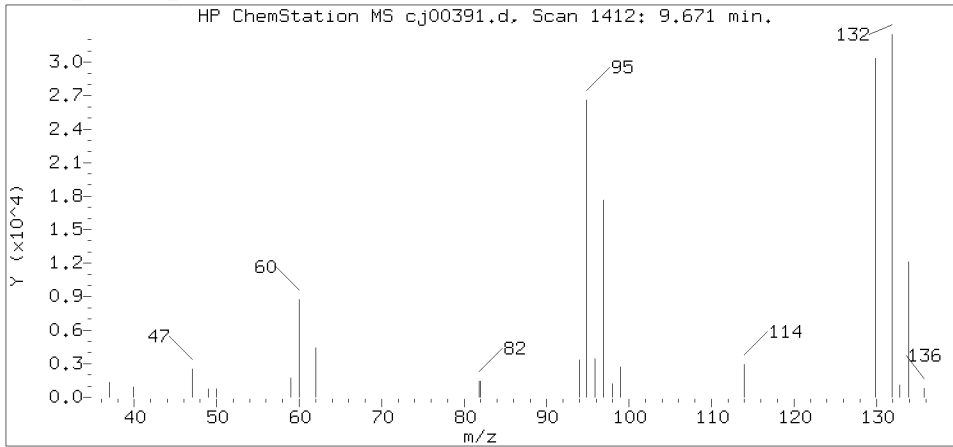
Reference Standard Spectrum for Trichloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Sample Name: 1167-DL

Lab Sample ID: 8087713DL

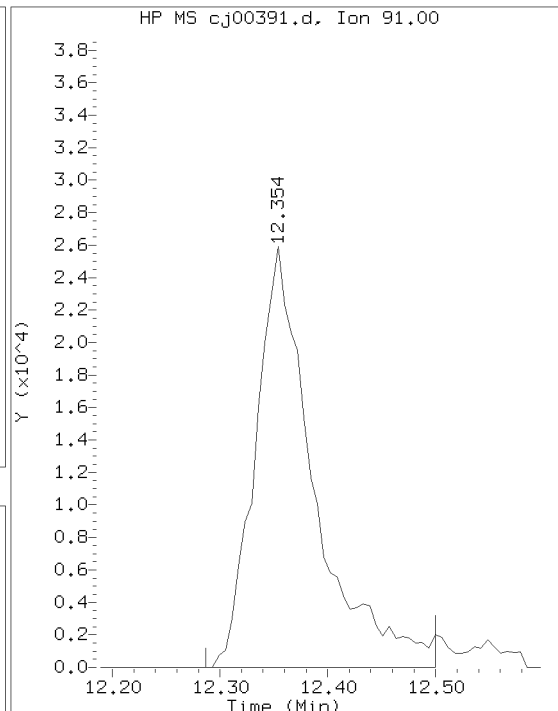
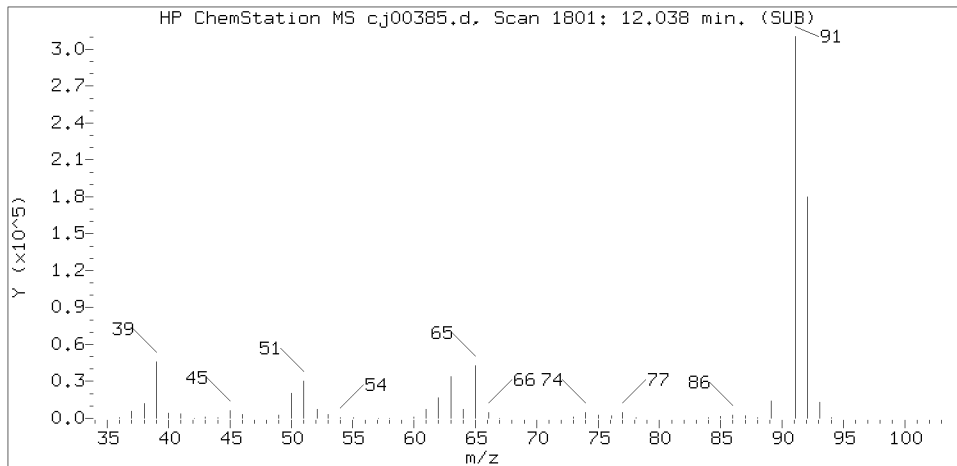
Compound Number : 52  
 Compound Name : Trichloroethene  
 Scan Number : 1412  
 Retention Time (minutes): 9.671  
 Relative Retention Time :-0.00132  
 Quant Ion : 130.00  
 Area (flag) : 102867  
 Concentration (ppb(v)) : 1.4437

Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

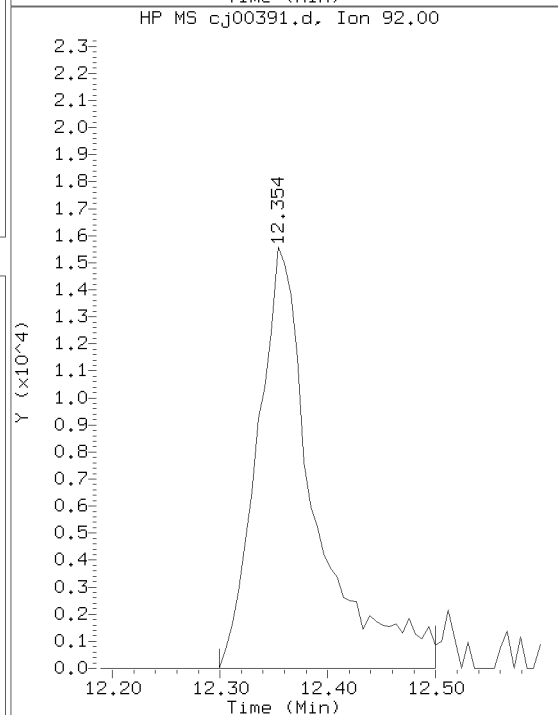
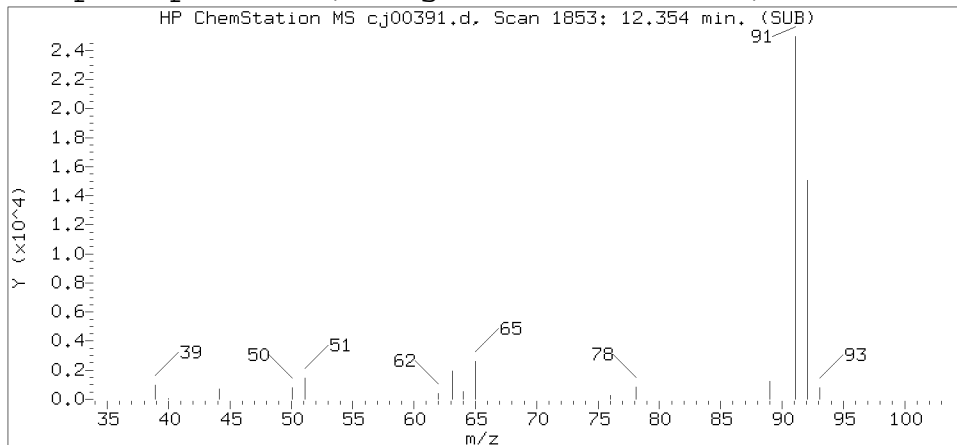
Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 212 of 1243



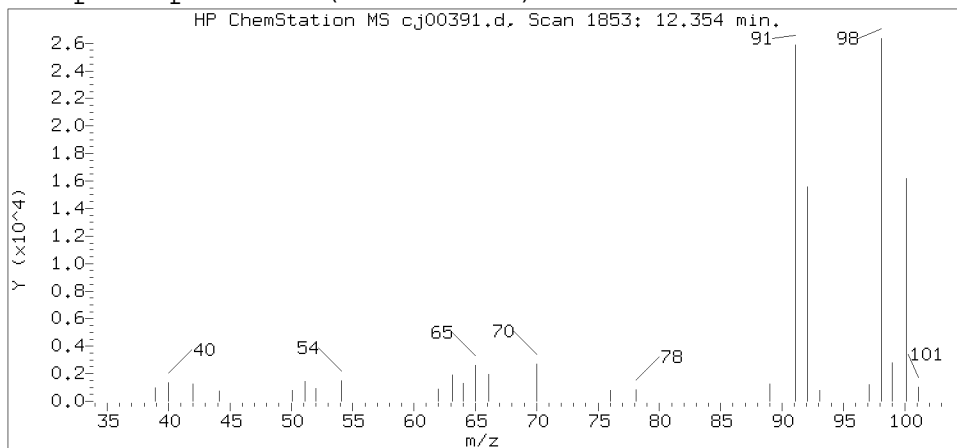
Reference Standard Spectrum for Toluene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Sample Name: 1167-DL

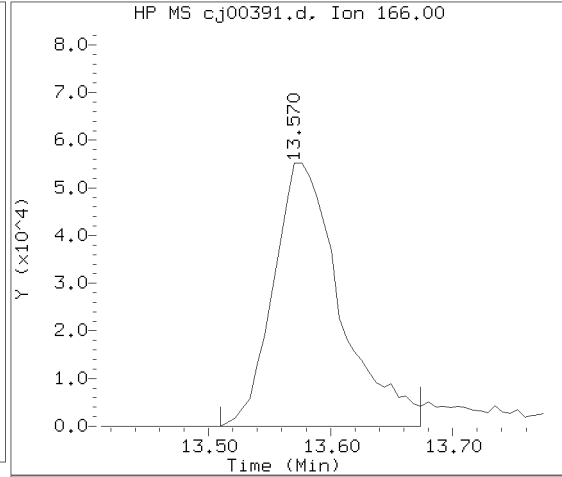
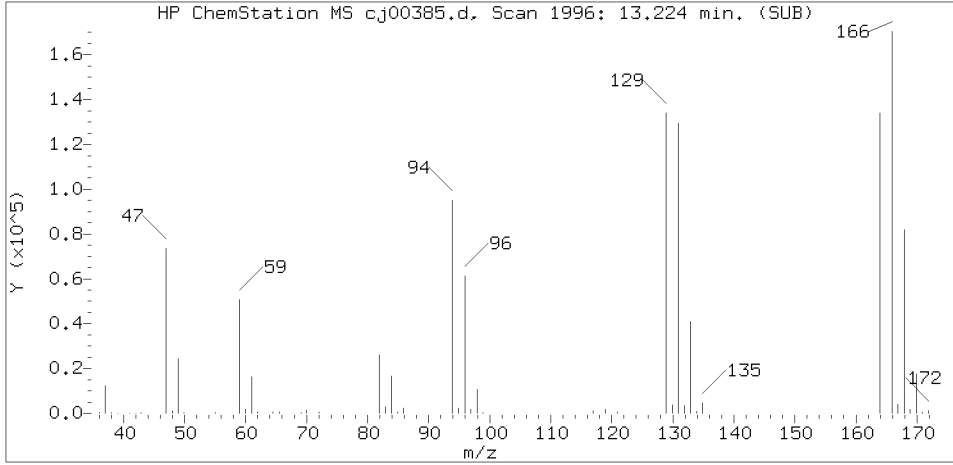
Lab Sample ID: 8087713DL

Compound Number : 61  
 Compound Name : Toluene  
 Scan Number : 1853  
 Retention Time (minutes): 12.354  
 Relative Retention Time : -0.00008  
 Quant Ion : 91.00  
 Area (flag) : 98422  
 Concentration (ppb(v)) : 0.7388

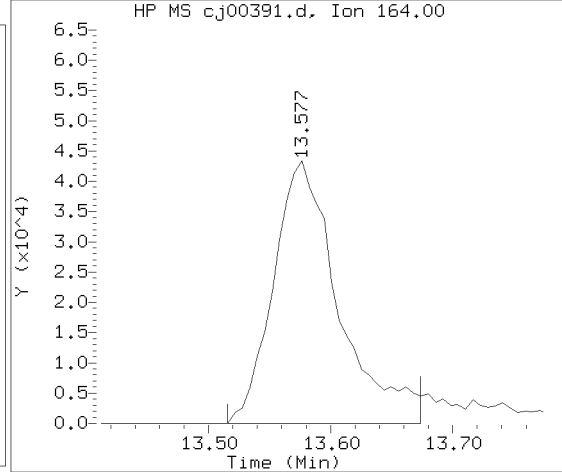
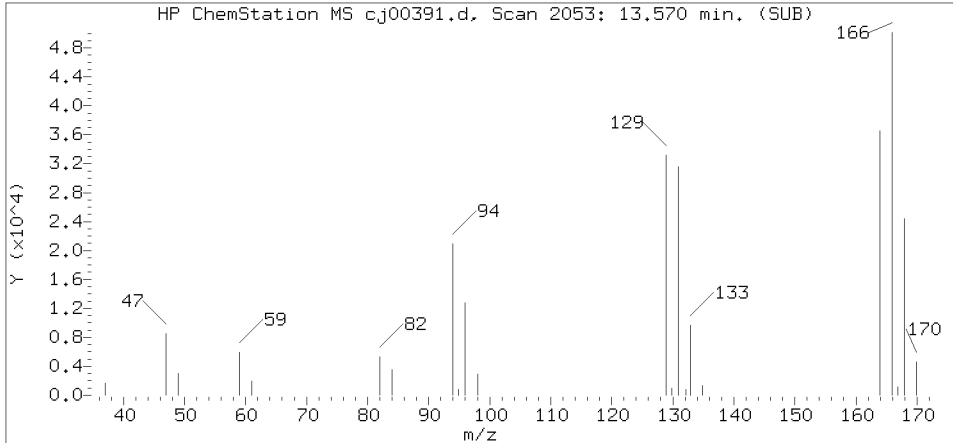
Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445

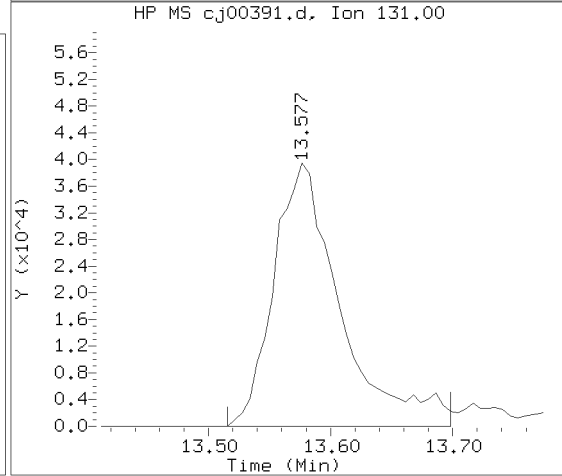
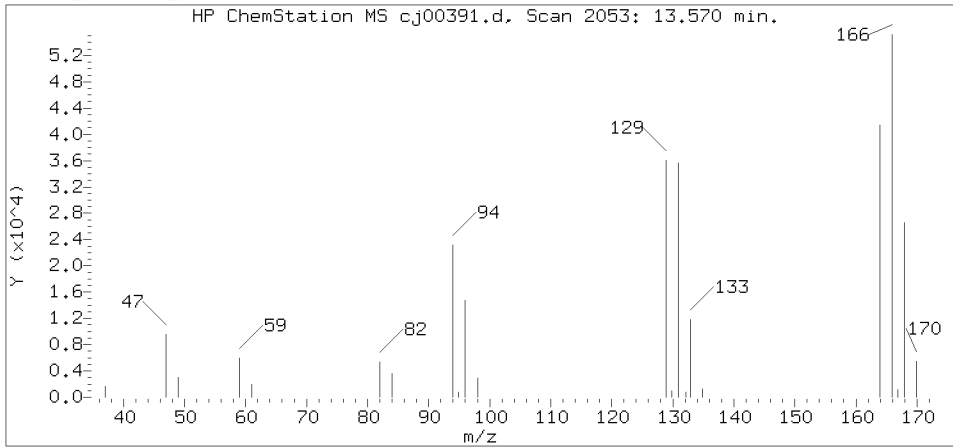
Reference Standard Spectrum for Tetrachloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Sample Name: 1167-DL

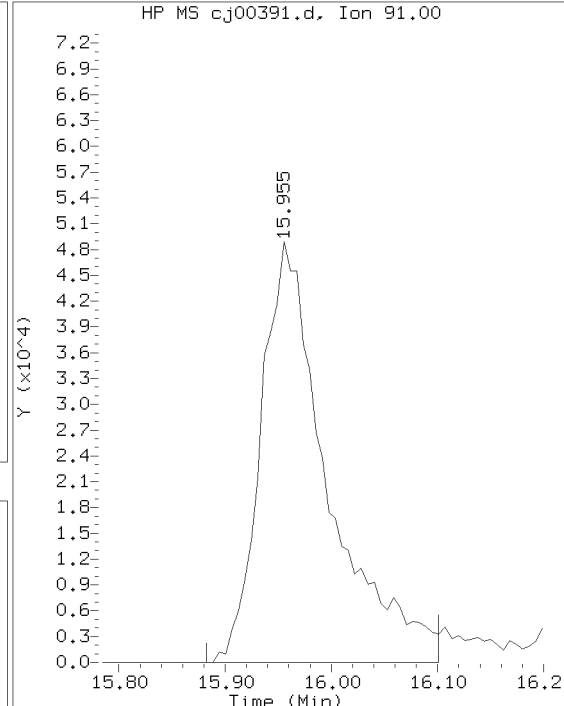
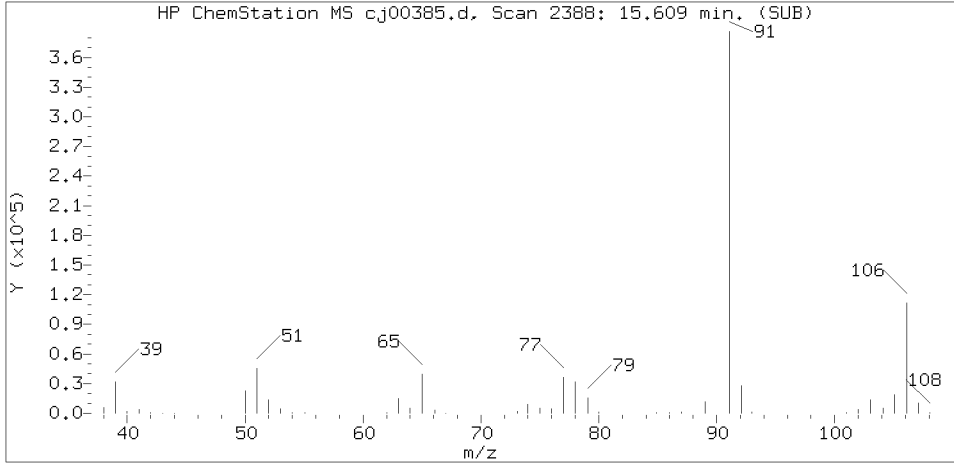
Lab Sample ID: 8087713DL

Compound Number : 67  
 Compound Name : Tetrachloroethene  
 Scan Number : 2053  
 Retention Time (minutes): 13.570  
 Relative Retention Time : 0.00073  
 Quant Ion : 166.00  
 Area (flag) : 209993  
 Concentration (ppb(v)) : 1.8514

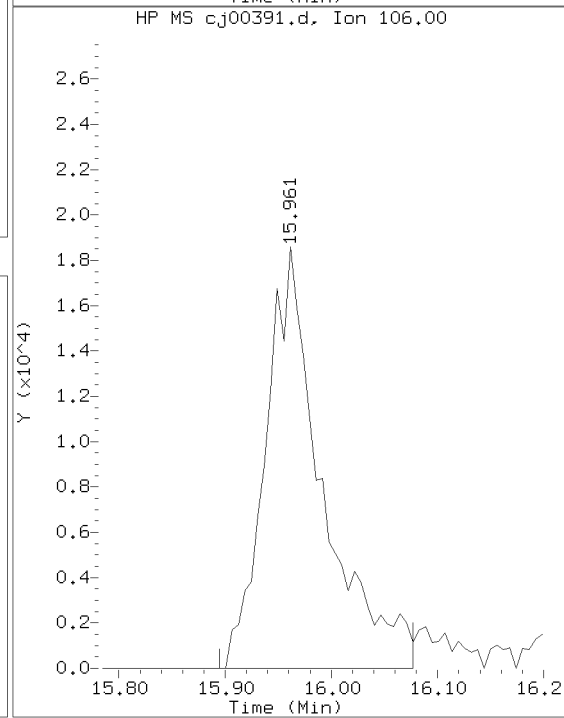
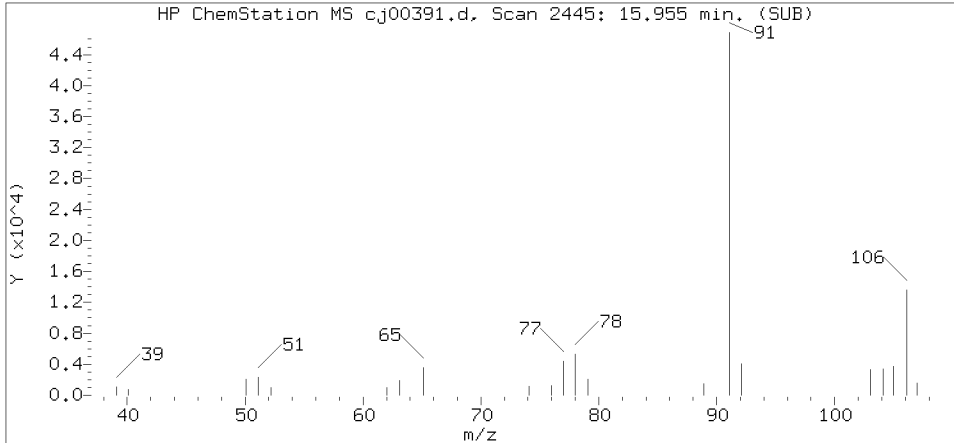
Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 214 of 1243

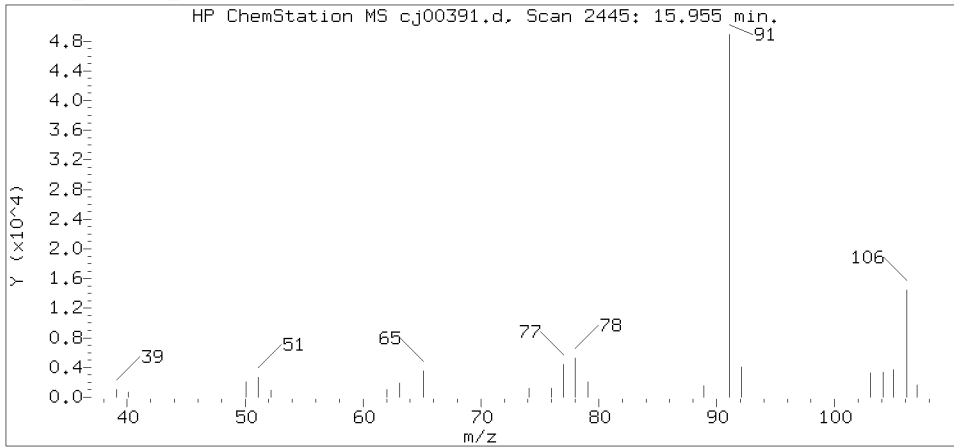
Reference Standard Spectrum for Ethylbenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

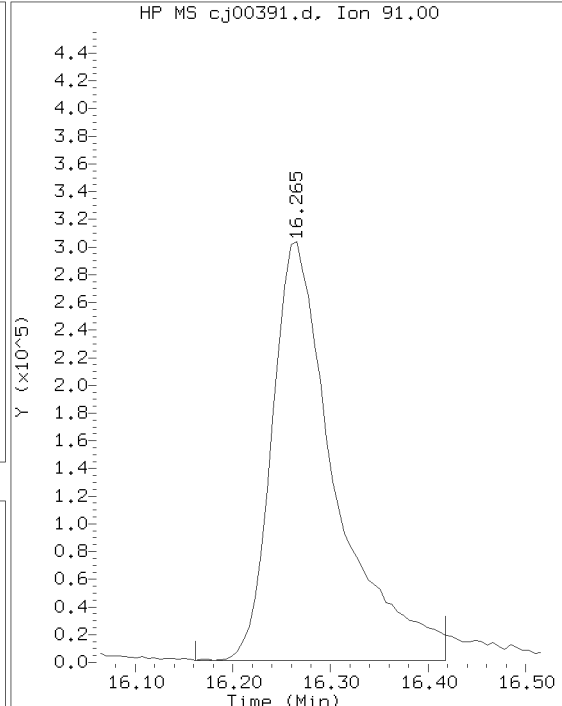
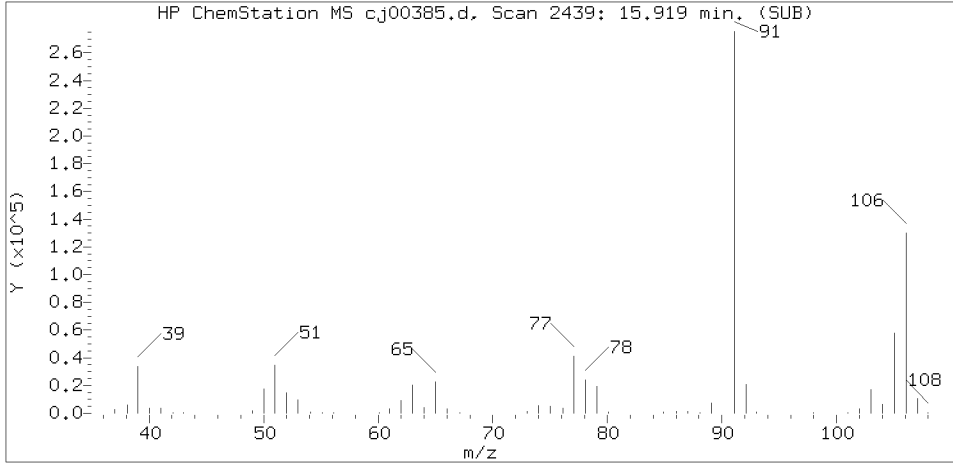
Sample Name: 1167-DL                      Lab Sample ID: 8087713DL

Compound Number : 74  
 Compound Name : Ethylbenzene  
 Scan Number : 2445  
 Retention Time (minutes): 15.955  
 Relative Retention Time : 0.00001  
 Quant Ion : 91.00  
 Area (flag) : 213445  
 Concentration (ppb(v)) : 1.4501

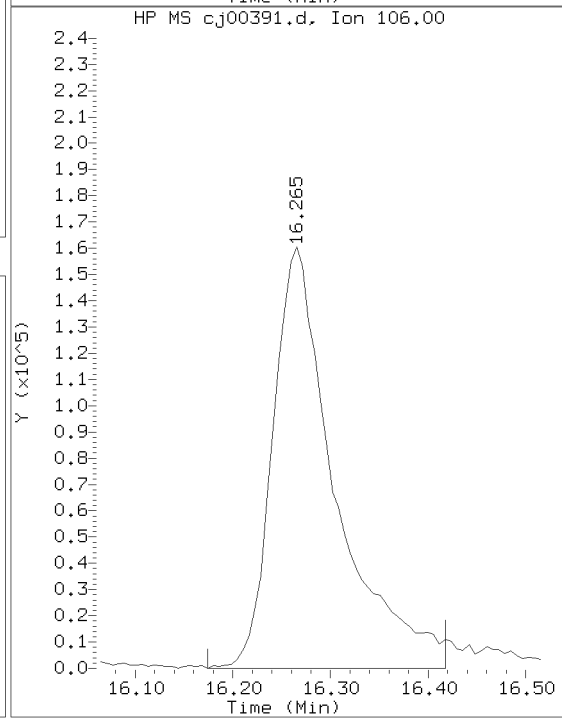
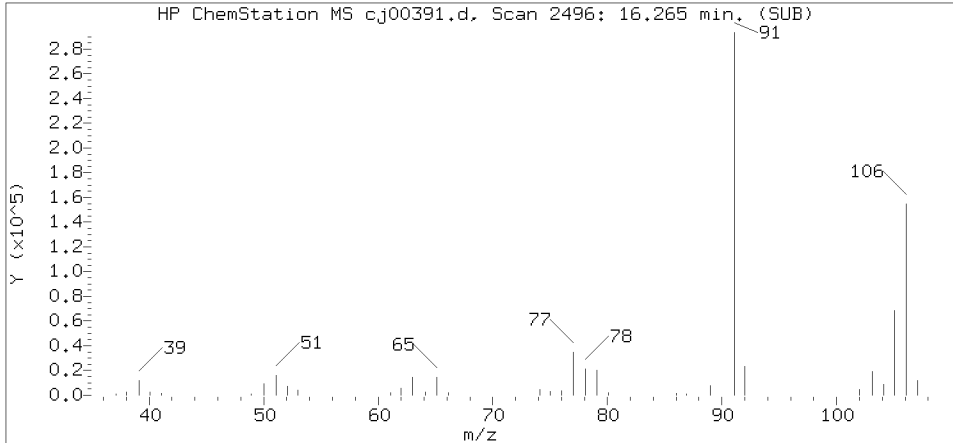
Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user: jeb07445  
 SSX23 Page 215 of 1243

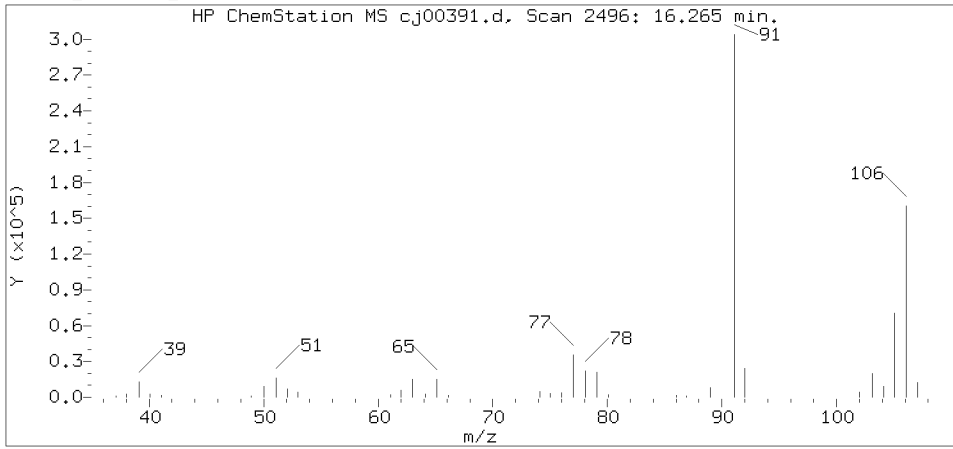
Reference Standard Spectrum for m/p-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Sample Name: 1167-DL

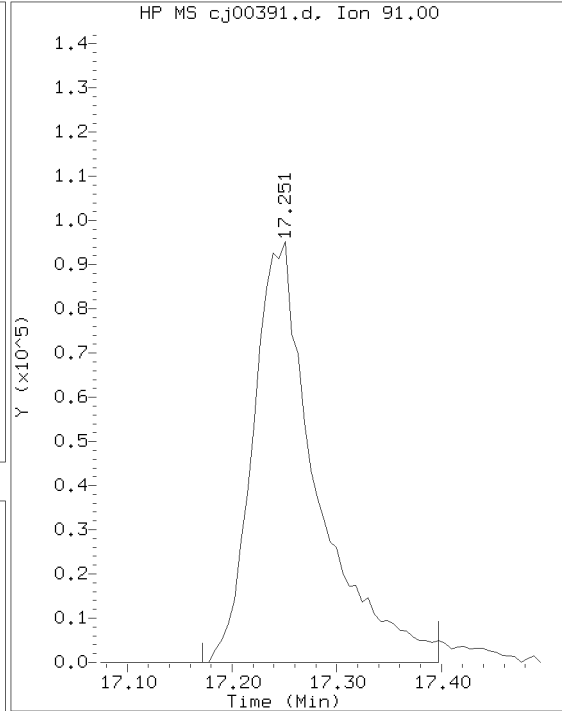
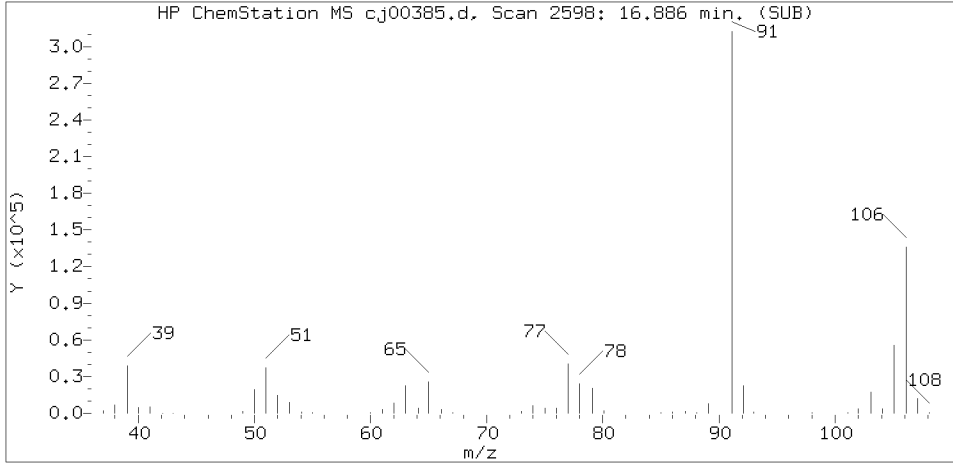
Lab Sample ID: 8087713DL

Compound Number : 75  
 Compound Name : m/p-Xylene  
 Scan Number : 2496  
 Retention Time (minutes): 16.265  
 Relative Retention Time : 0.00041  
 Quant Ion : 91.00  
 Area (flag) : 1365227  
 Concentration (ppb(v)) : 11.2157

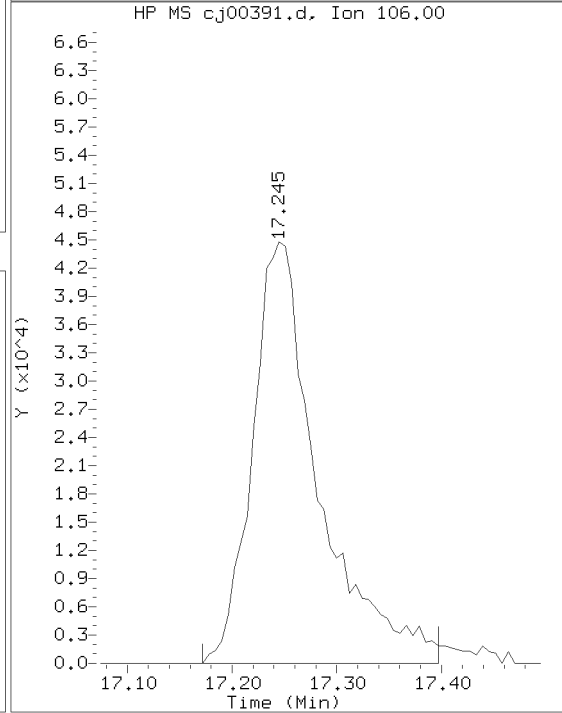
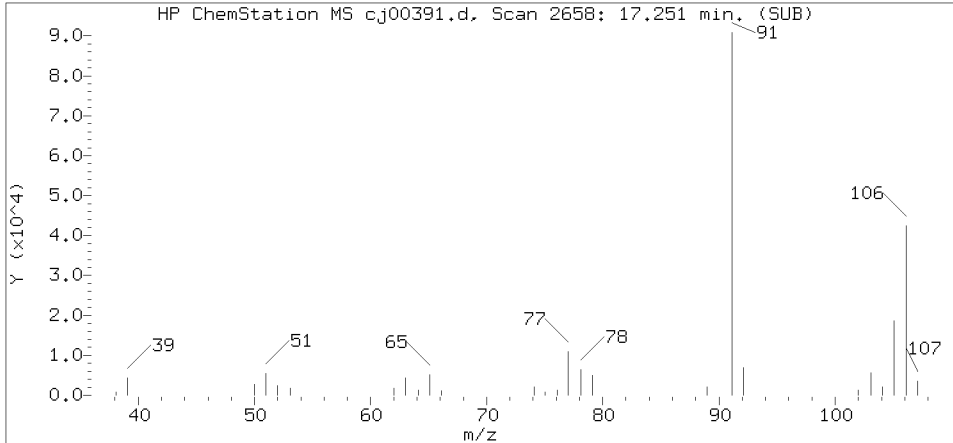
Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 216 of 1243

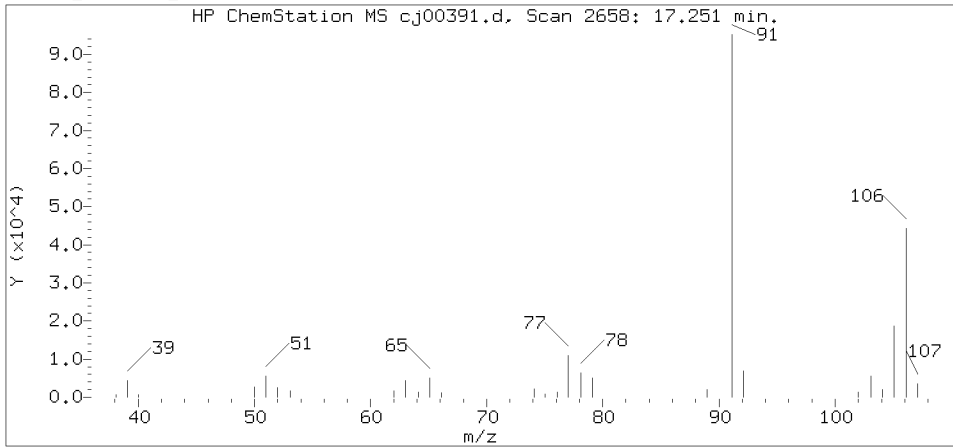
Reference Standard Spectrum for o-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00391.d  
 Injection date and time: 19-OCT-2015 20:18

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 20:58 Automation

Sample Name: 1167-DL

Lab Sample ID: 8087713DL

Compound Number : 76  
 Compound Name : o-Xylene  
 Scan Number : 2658  
 Retention Time (minutes): 17.251  
 Relative Retention Time : -0.00074  
 Quant Ion : 91.00  
 Area (flag) : 405083  
 Concentration (ppb(v)) : 3.1618

Sublist used: 292

Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 217 of 1243

985--

Lancaster Laboratories, Inc.  
 Analysis Summary for GC/MS Volatiles in Air 8087714

Data file: /chem/HP09464.i/15oct16.b/cj00367.d Injection date and time: 17-OCT-2015 04:43  
 Data file Sample Info. Line: 8087714;500;C1528830AB;985--;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AB  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292  
 Calibration date and time (Last Method Edit): 21-OCT-2015 16:54  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 26.8 psia Canister Pressure before dilution (Ya): 13.4 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 500 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	7.207(-0.006)	1007	130	760839 (-5)	10.00		480075 - 1120173
51) 1,4-Difluorobenzene	9.203(-0.012)	1335	114	2069655 (-21)	10.00		1574006 - 3672680
71) Chlorobenzene-d5	15.524(-0.006)	2374	117	1705114 (-29)	10.00		1433482 - 3344790

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Limit (in sample)	LOQ
2) Dichlorodifluoromethane	(1)	1.896(-0.001)	85	122468	0.547	0.55		0.2	1
3) Chlorodifluoromethane	(1)			Not Detected				0.2	1
4) Freon 114	(1)			Not Detected				0.2	1
5) Chloromethane	(1)			Not Detected				0.2	1
6) Vinyl Chloride	(1)			Not Detected				0.2	1
7) 1,3-Butadiene	(1)			Not Detected				0.4	2
8) Bromomethane	(1)			Not Detected				0.2	1
9) Chloroethane	(1)			Not Detected				0.2	1
11) Dichlorofluoromethane	(1)			Not Detected				0.2	1
12) Trichlorofluoromethane	(1)	3.028(-0.002)	101	71983	0.298	0.30		0.2	1
13) Pentane	(1)			Not Detected				0.2	1
17) 1,1-Dichloroethene	(1)			Not Detected				0.2	1
18) Freon 113	(1)	3.740(-0.002)	103	432615	4.520	4.52		0.5	2
19) Acetone	(1)	3.788(-0.001)	43	523150	16.719	16.72		0.5	2
21) Carbon Disulfide	(1)			Not Detected				0.5	1
24) 3-Chloropropene	(1)			Not Detected				0.2	1
25) Methylene Chloride	(1)			Not Detected				0.2	1
28) trans-1,2-Dichloroethene	(1)			Not Detected				0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected				0.2	1
30) Hexane	(1)			Not Detected				0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected				0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected				0.2	1
37) 2-Butanone	(1)	6.891(-0.002)	72	31303	2.060	2.06		0.5	2
42) Chloroform	(1)			Not Detected				0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected				0.2	1
45) Carbon Tetrachloride	(1)			Not Detected				0.2	1
46) Benzene	(2)			Not Detected				0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected				0.2	1
48) Isooctane	(2)			Not Detected				0.2	1
50) Heptane	(2)			Not Detected				0.2	1
52) Trichloroethene	(2)	9.665( 0.000)	130	775629	8.944	8.94		0.2	1
54) 1,2-Dichloropropane	(2)			Not Detected				0.2	1
55) Dibromomethane	(2)			Not Detected				0.2	1
58) Bromodichloromethane	(2)			Not Detected				0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected				0.2	1
60) 4-Methyl-2-Pentanone	(2)			Not Detected				0.5	2
61) Toluene	(3)	12.354(-0.000)	91	323617	2.431	2.43		0.2	1
62) Octane	(3)			Not Detected				0.2	1
63) trans-1,3-Dichloropropene	(3)			Not Detected				0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected				0.2	1
67) Tetrachloroethene	(3)	13.577(-0.000)	166	913342	8.058	8.06		0.2	1
68) 2-Hexanone	(3)			Not Detected				0.5	2
69) Dibromochloromethane	(3)			Not Detected				0.2	1

985--

Lancaster Laboratories, Inc.  
 Analysis Summary for GC/MS Volatiles in Air 8087714

Data file: /chem/HP09464.i/15oct16.b/cj00367.d Injection date and time: 17-OCT-2015 04:43  
 Data file Sample Info. Line: 8087714;500;C1528830AB;985--;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AB  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292  
 Calibration date and time (Last Method Edit): 21-OCT-2015 16:54  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 26.8 psia Canister Pressure before dilution (Ya): 13.4 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 500 cc

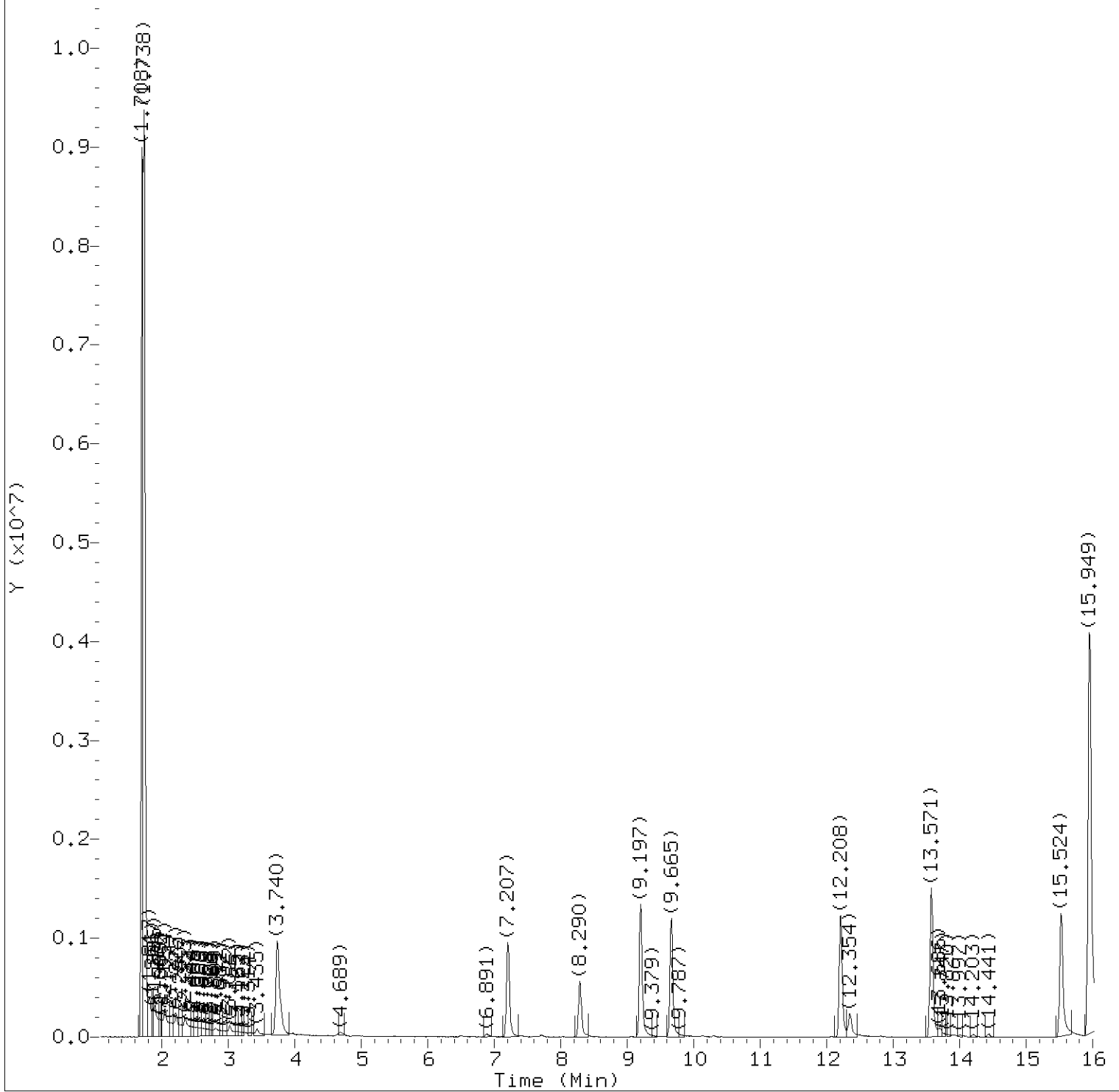
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
70) 1,2-Dibromoethane	(3)			Not Detected					0.2	1
72) Chlorobenzene	(3)			Not Detected					0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.2	1
74) Ethylbenzene	(3)	15.949( 0.000)	91	7323480	49.788	49.79			0.2	1
75) m/p-Xylene	(3)	16.272(-0.000)	91	20232889	166.328	166.33		E	0.2	1
76) o-Xylene	(3)	17.239( 0.000)	91	6716932	52.462	52.46			0.2	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.2	1
80) Cumene	(3)	18.249( 0.000)	105	96663	0.588	0.59		J	0.2	1
81) Bromobenzene	(3)			Not Detected					0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.2	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.2	1
86) 4-Ethyltoluene	(3)	19.666( 0.000)	105	50397MA	0.275	0.27		J	0.2	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.2	1
90) 1,2,4-Trimethylbenzene	(3)	20.834( 0.000)	105	34441	0.210	0.21		J	0.2	1
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.2	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.2	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.2	1

E = Compound concentration above calibration range. M = Compound was manually integrated. A = User selected an alternate peak.

Total number of targets = 62

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41. Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Michele J. Smith on 10/30/2015 at 15:42. Parallax ID: mjs00758



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54

Sublist used: 292

Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

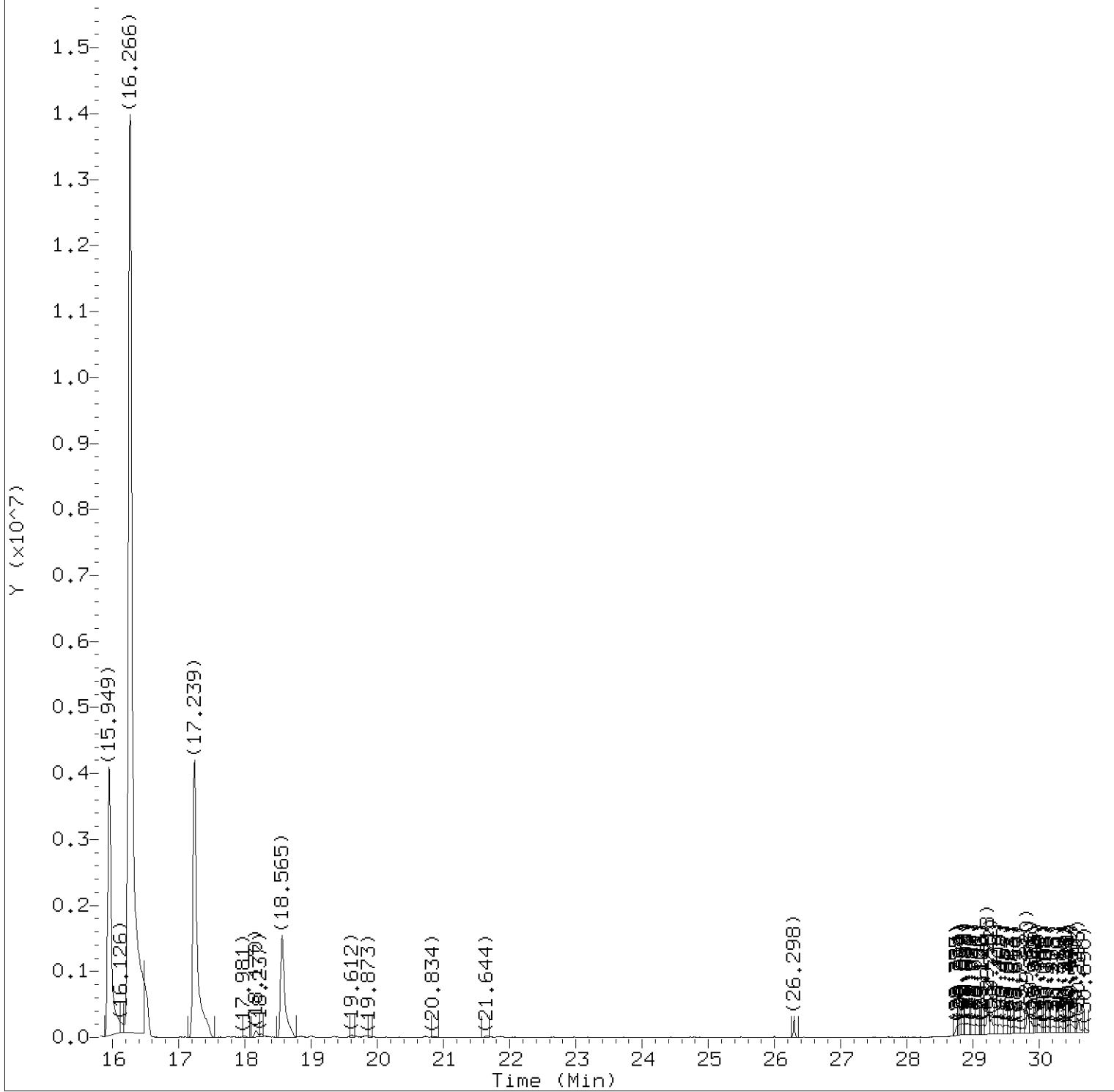
Sample Name: 985--

Lab Sample ID: 8087714

Digitally signed by Jeffrey B. Smith  
on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54

Sublist used: 292

Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

Lab Sample ID: 8087714

Digitally signed by Jeffrey B. Smith  
on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sublist used: 292

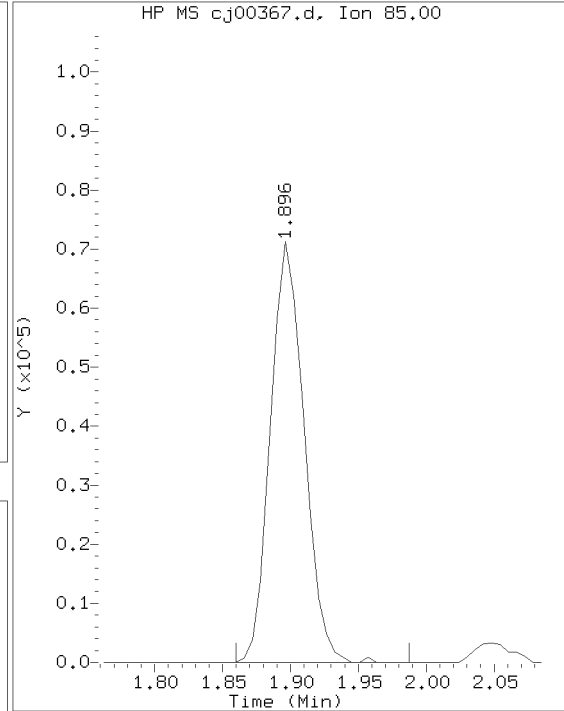
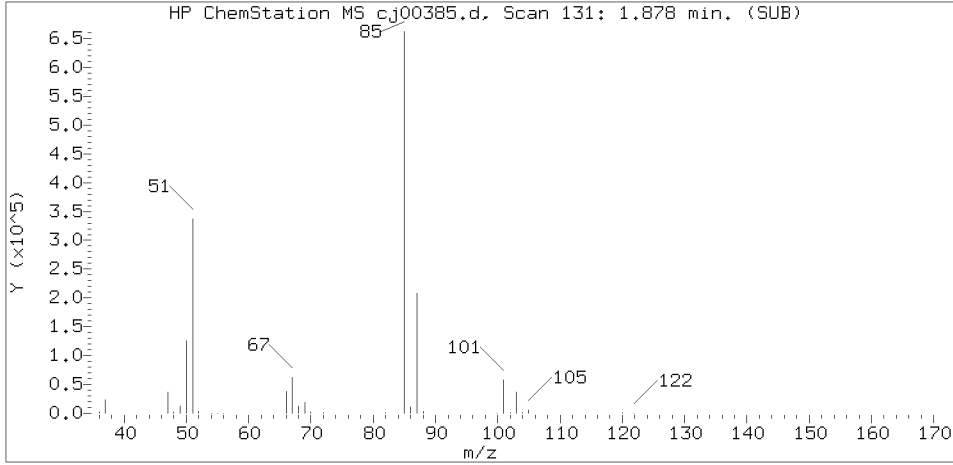
Sample Name: 985--

Lab Sample ID: 8087714

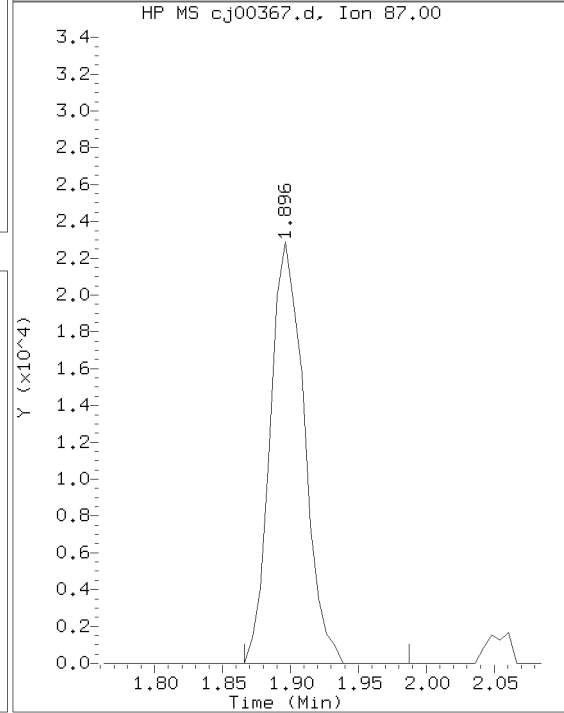
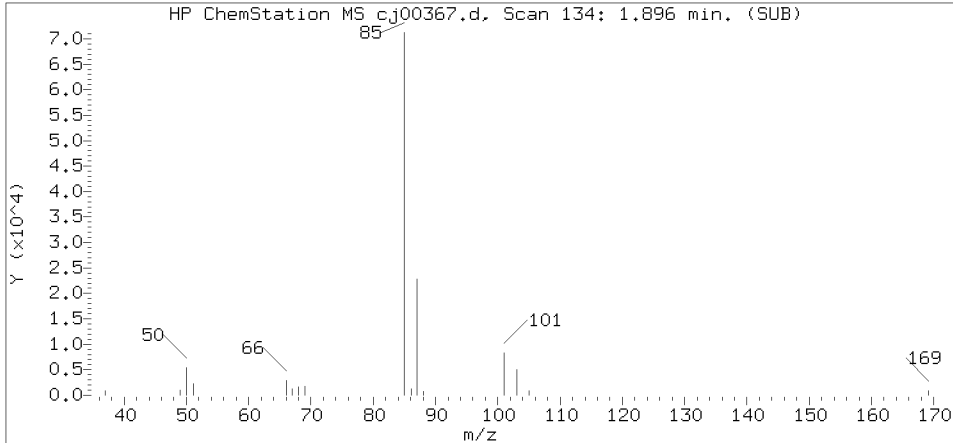
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	1.896	85	122468	0.547
12) Trichlorofluoromethane	(1)	3.028	101	71983	0.298
18) Freon 113	(1)	3.740	103	432615	4.520
19) Acetone	(1)	3.788	43	523150	16.719
37) 2-Butanone	(1)	6.891	72	31303	2.060
40)*Bromochloromethane	(1)	7.207	130	760839	10.000
51)*1,4-Difluorobenzene	(2)	9.203	114	2069655	10.000
52) Trichloroethene	(2)	9.665	130	775629	8.944
61) Toluene	(3)	12.354	91	323617	2.431
67) Tetrachloroethene	(3)	13.577	166	913342	8.058
71)*Chlorobenzene-d5	(3)	15.524	117	1705114	10.000
74) Ethylbenzene	(3)	15.949	91	7323480	49.788
75) m/p-Xylene	(3)	16.272	91	20232889	166.328
76) o-Xylene	(3)	17.239	91	6716932	52.462
80) Cumene	(3)	18.249	105	96663	0.588
86) 4-Ethyltoluene	(3)	19.666	105	50397MA	0.275
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	34441	0.210

M = Compound was manually integrated.  
 A = User selected an alternate hit.  
 \* = Compound is an internal standard.

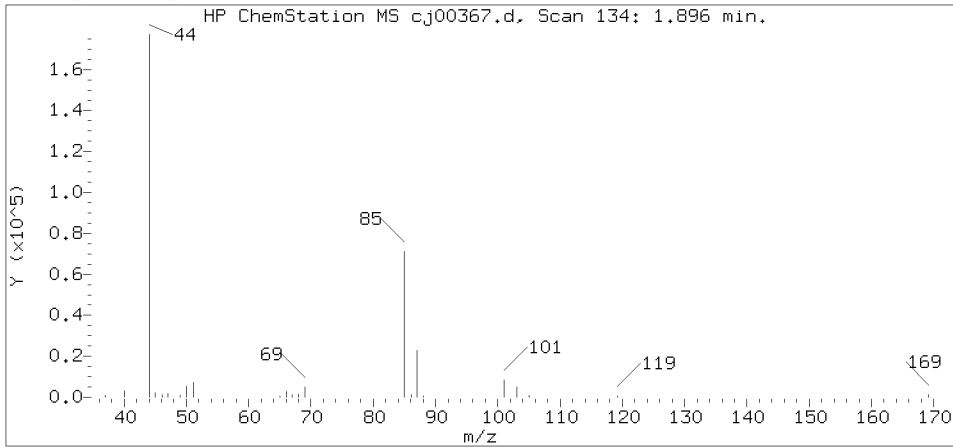
Reference Standard Spectrum for Dichlorodifluoromethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

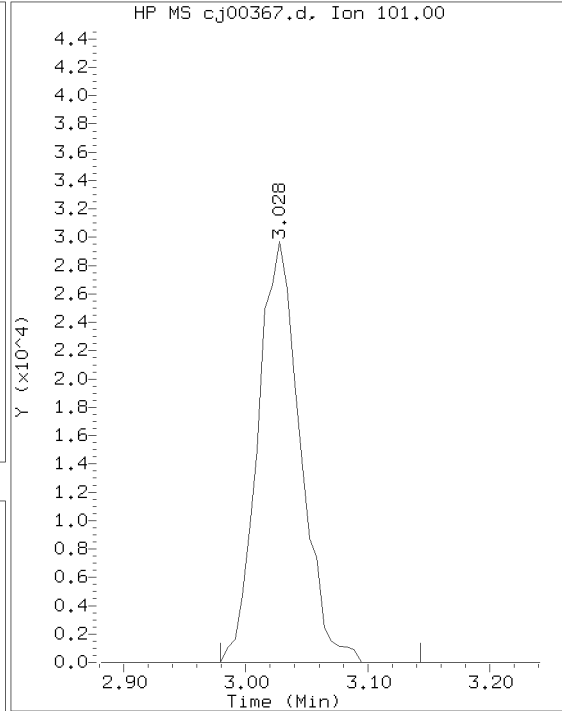
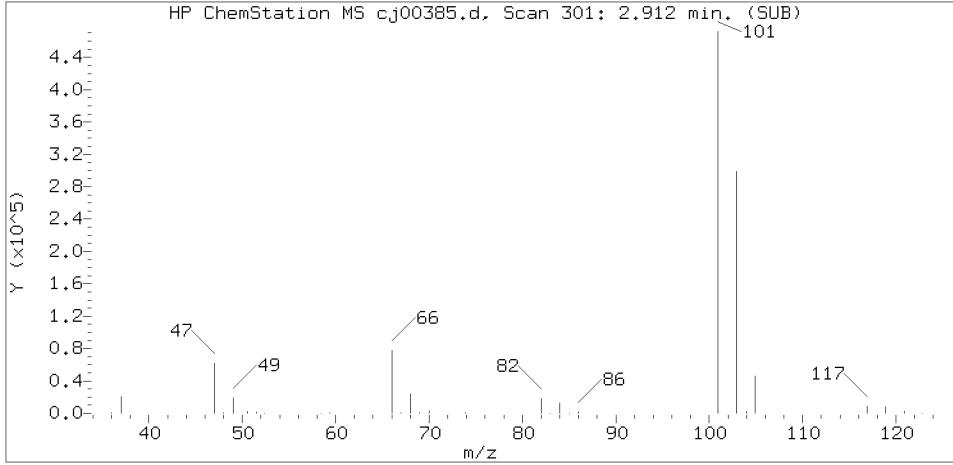
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985-- Lab Sample ID: 8087714

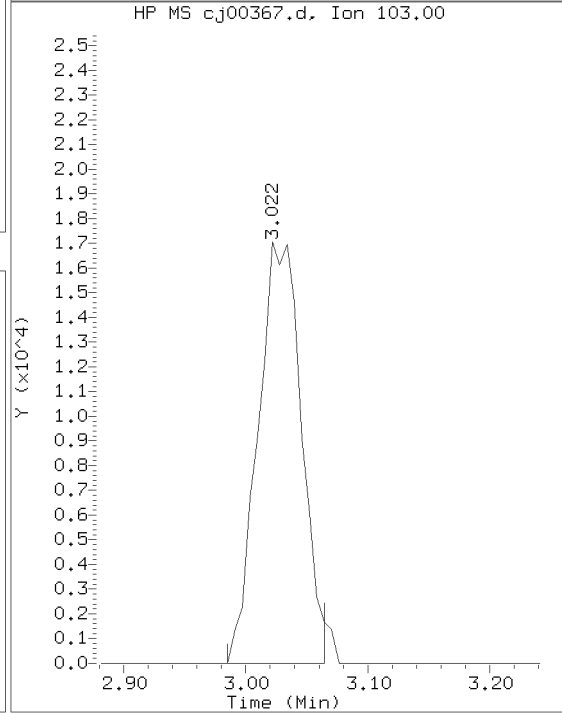
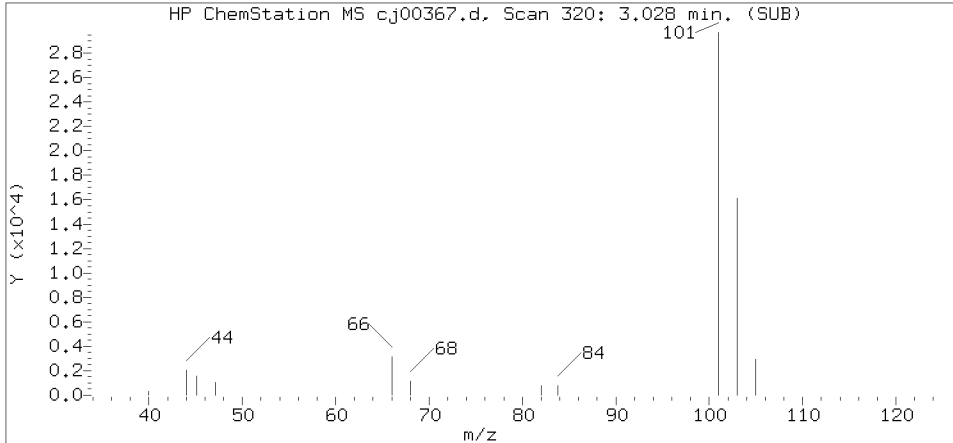
Compound Number : 2  
 Compound Name : Dichlorodifluoromethane  
 Scan Number : 134  
 Retention Time (minutes): 1.896  
 Relative Retention Time : -0.00149  
 Quant Ion : 85.00  
 Area (flag) : 122468  
 Concentration (ppb(v)) : 0.5470

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.  
 Target 3.5 esignature user ID: jbs01304

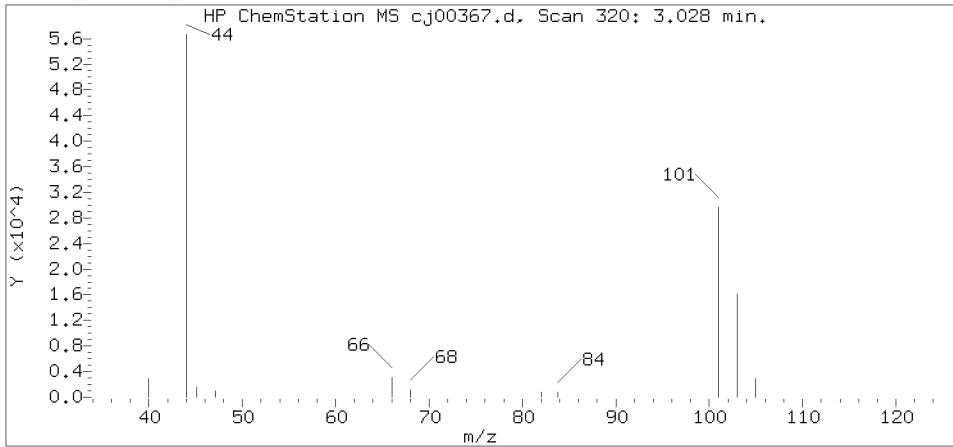
Reference Standard Spectrum for Trichlorofluoromethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

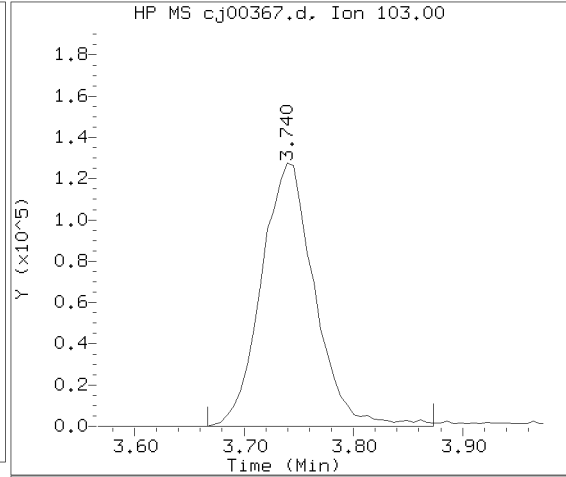
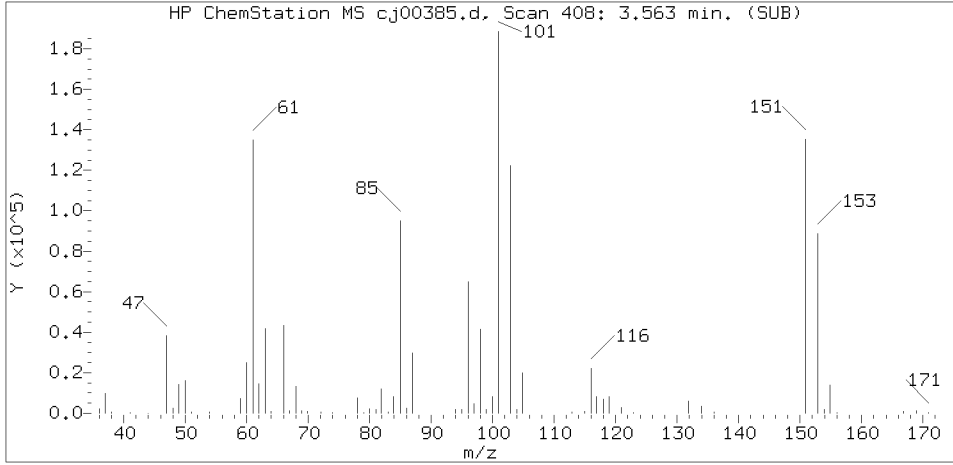
Sublist used: 292

Sample Name: 985--

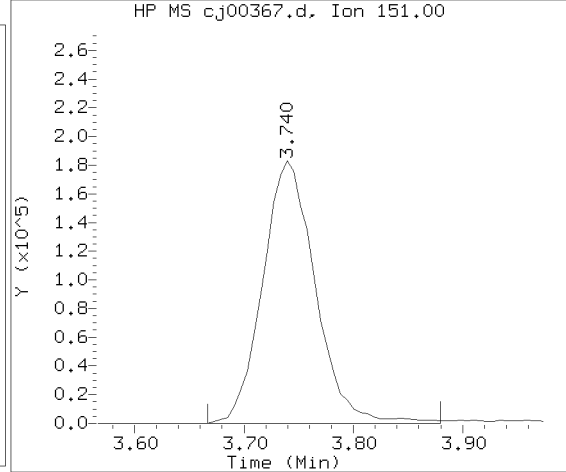
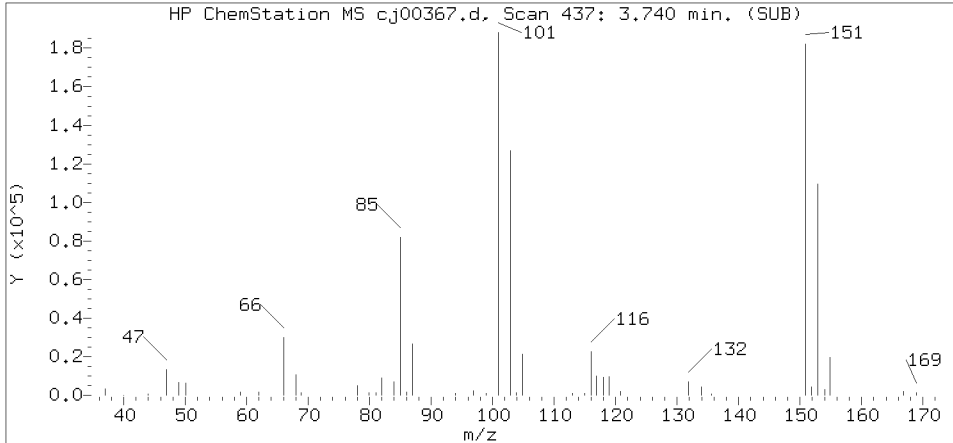
Lab Sample ID: 8087714

Compound Number : 12  
 Compound Name : Trichlorofluoromethane  
 Scan Number : 320  
 Retention Time (minutes): 3.028  
 Relative Retention Time : -0.00220  
 Quant Ion : 101.00  
 Area (flag) : 71983  
 Concentration (ppb(v)) : 0.2982

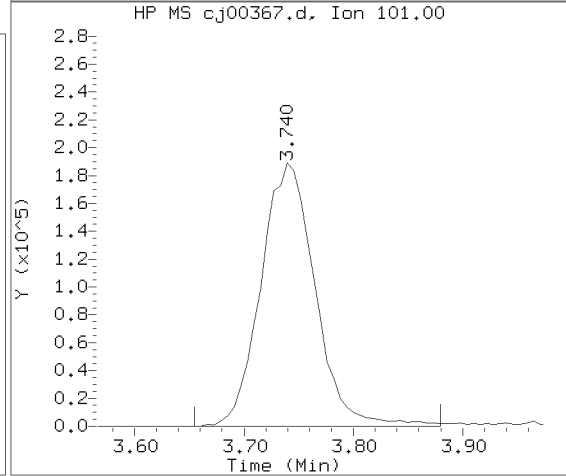
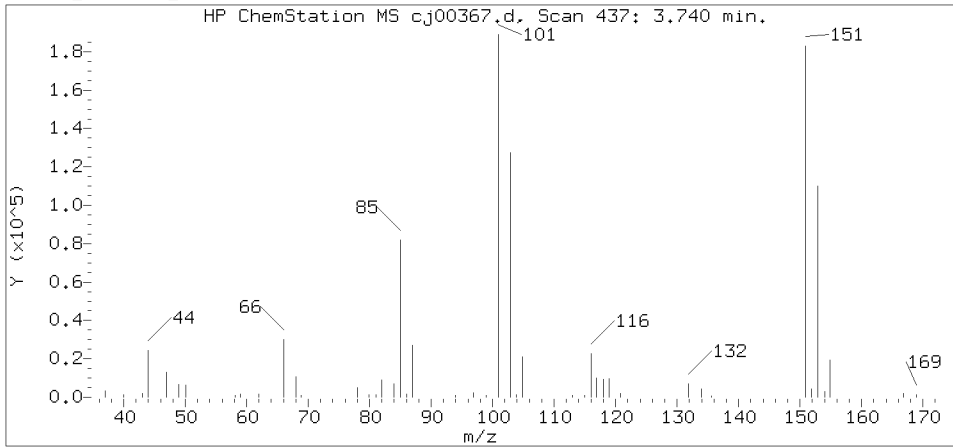
Reference Standard Spectrum for Freon 113



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

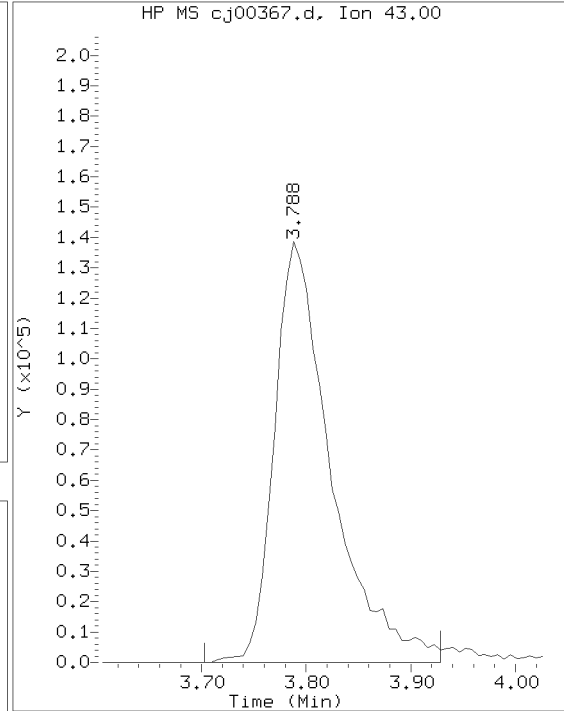
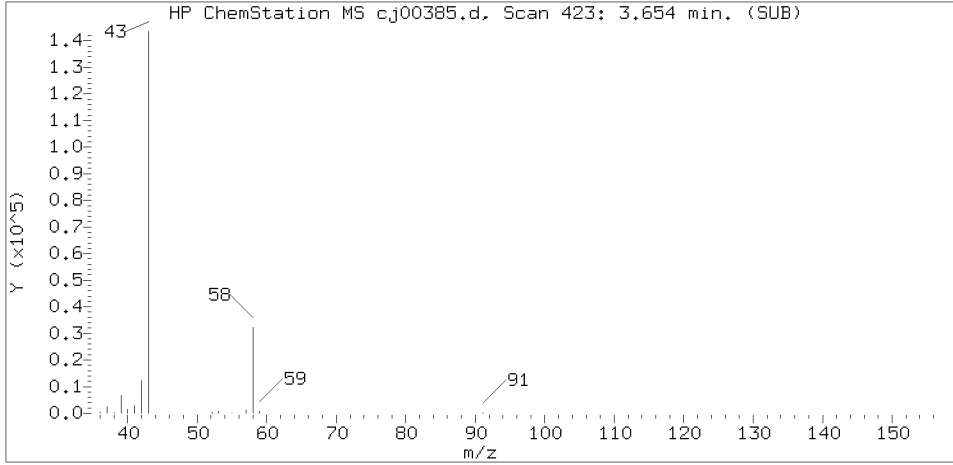
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

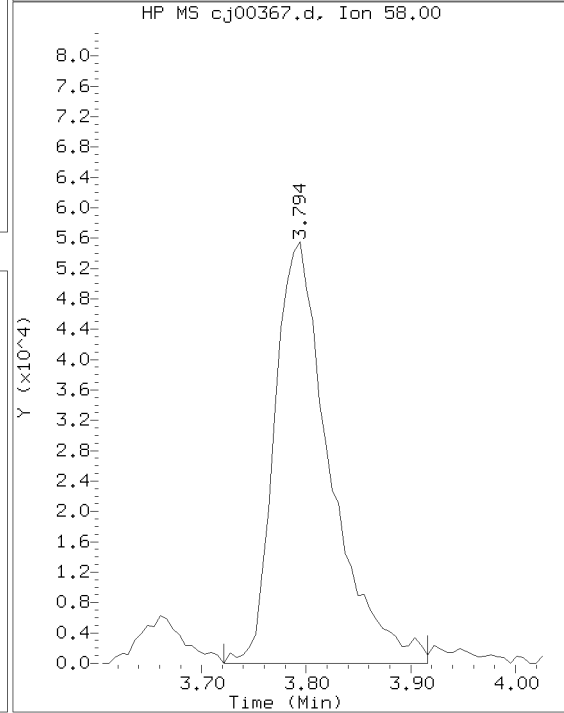
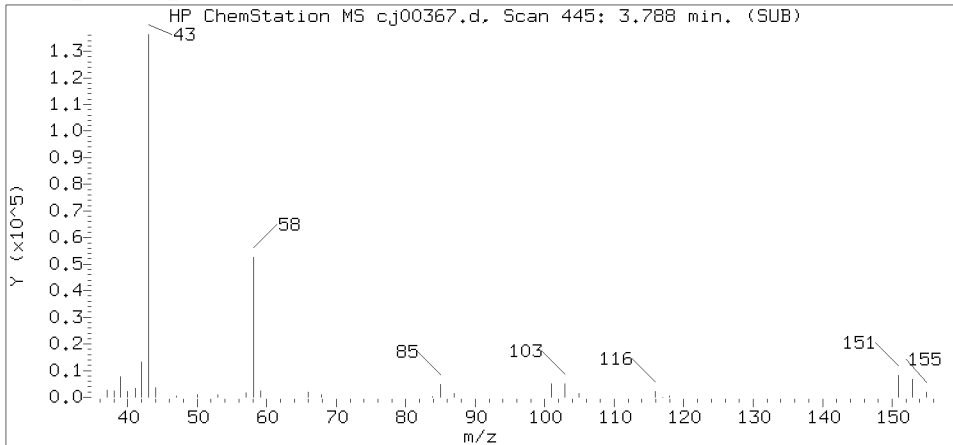
Lab Sample ID: 8087714

Compound Number : 18  
 Compound Name : Freon 113  
 Scan Number : 437  
 Retention Time (minutes): 3.740  
 Relative Retention Time : -0.00211  
 Quant Ion : 103.00  
 Area (flag) : 432615  
 Concentration (ppb(v)) : 4.5204

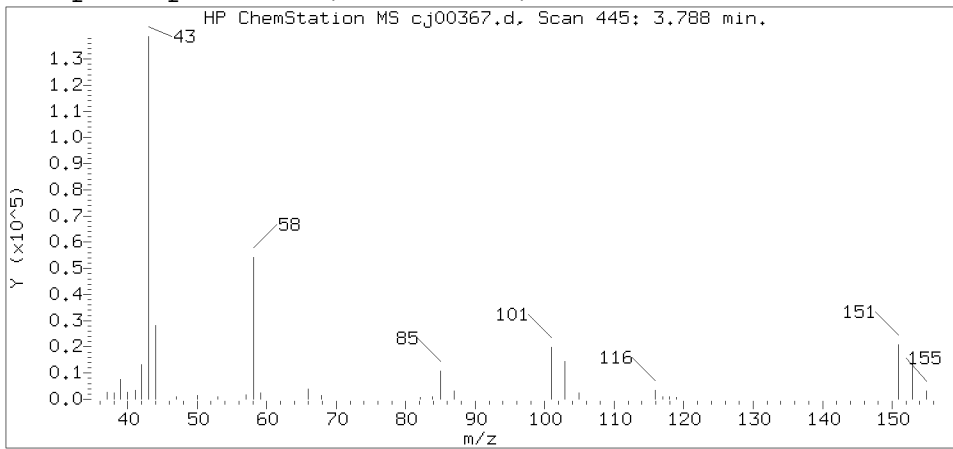
Reference Standard Spectrum for Acetone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

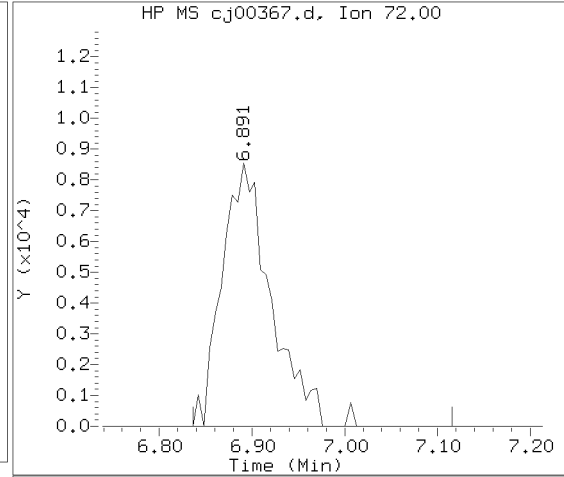
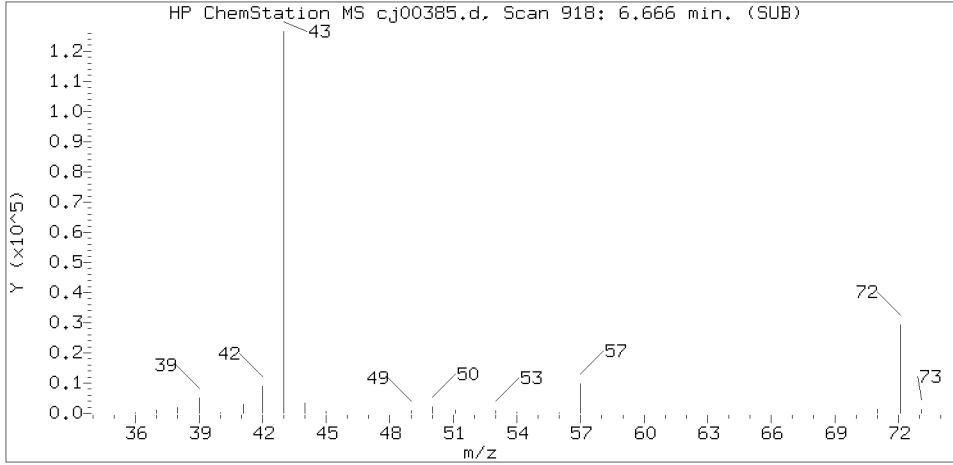
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

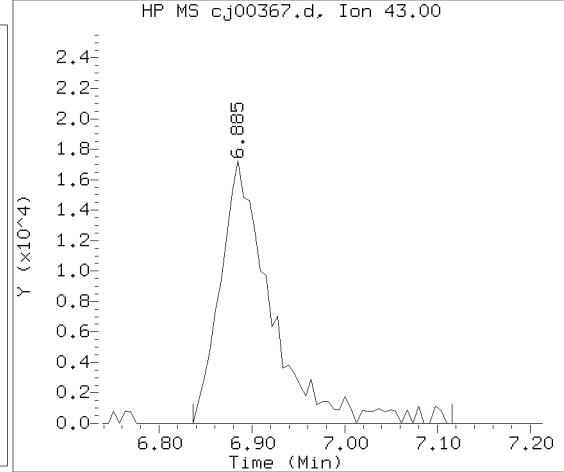
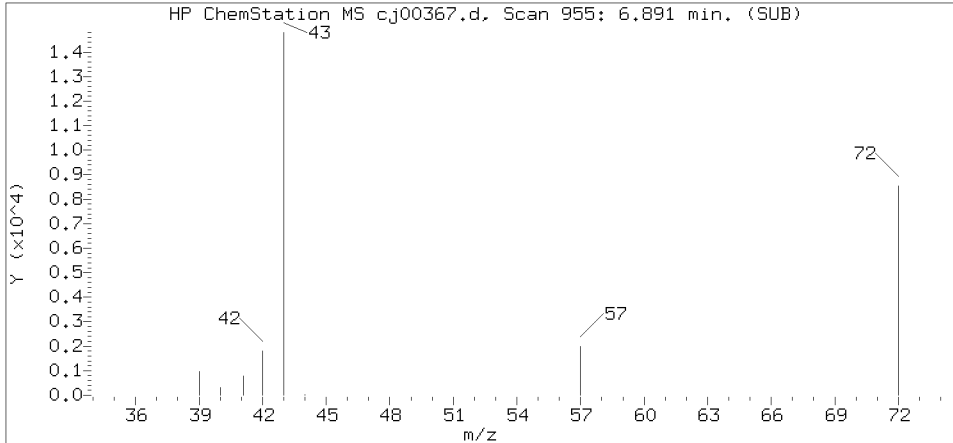
Lab Sample ID: 8087714

Compound Number : 19  
 Compound Name : Acetone  
 Scan Number : 445  
 Retention Time (minutes): 3.788  
 Relative Retention Time : -0.00126  
 Quant Ion : 43.00  
 Area (flag) : 523150  
 Concentration (ppb(v)) : 16.7191

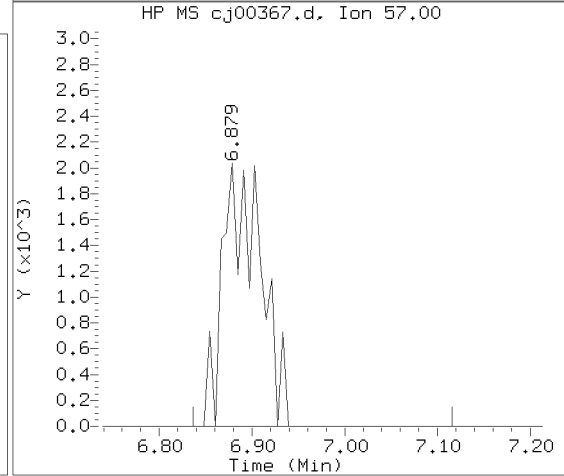
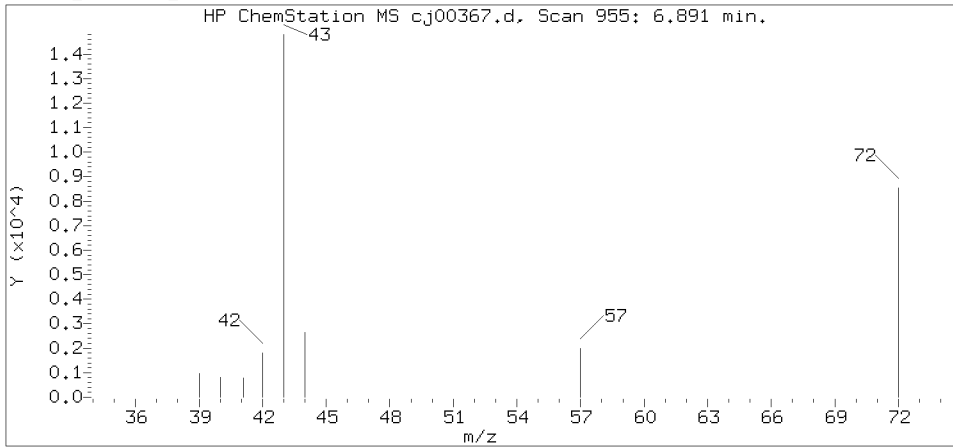
Reference Standard Spectrum for 2-Butanone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

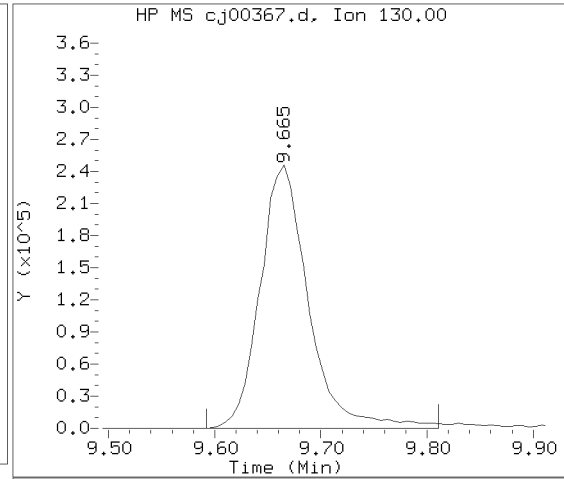
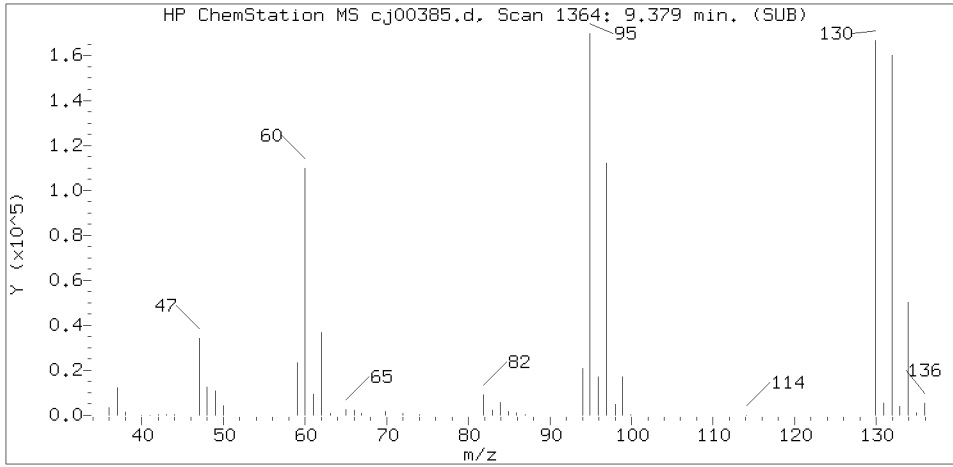
Lab Sample ID: 8087714

Compound Number : 37  
 Compound Name : 2-Butanone  
 Scan Number : 955  
 Retention Time (minutes): 6.891  
 Relative Retention Time : -0.00257  
 Quant Ion : 72.00  
 Area (flag) : 31303  
 Concentration (ppb(v)) : 2.0595

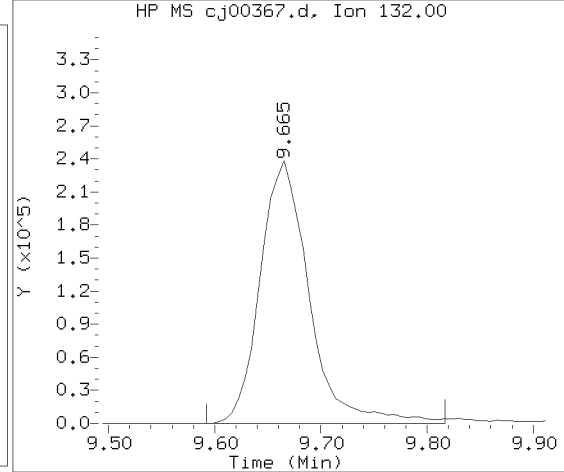
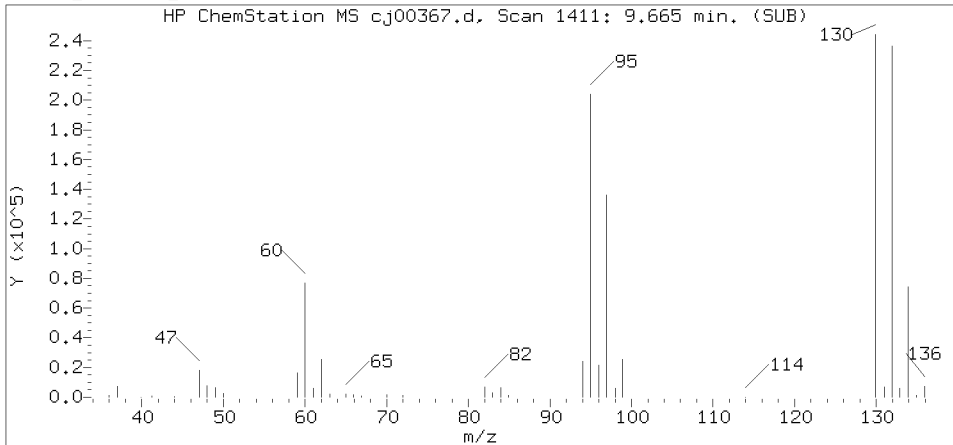
Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304  
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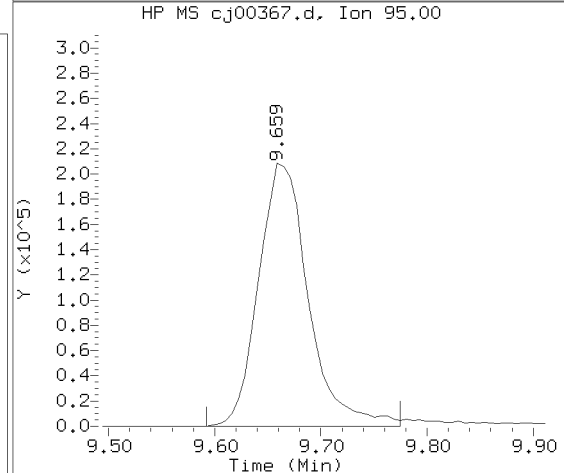
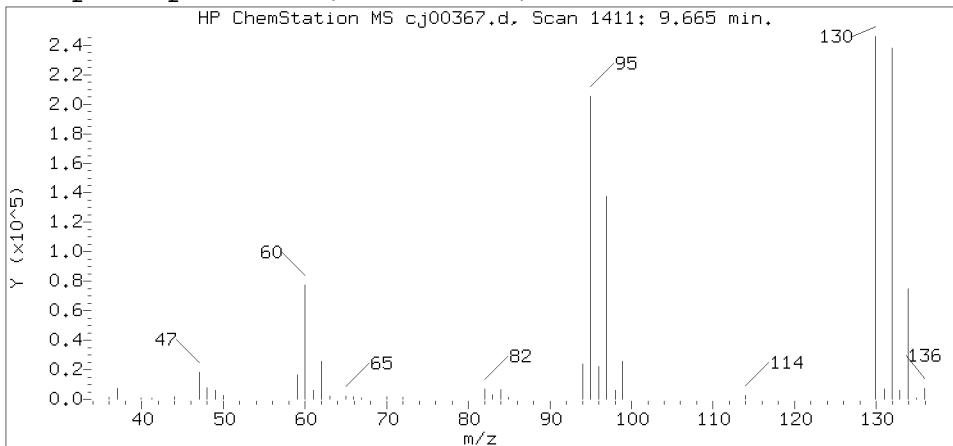
Reference Standard Spectrum for Trichloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54  
Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

Lab Sample ID: 8087714

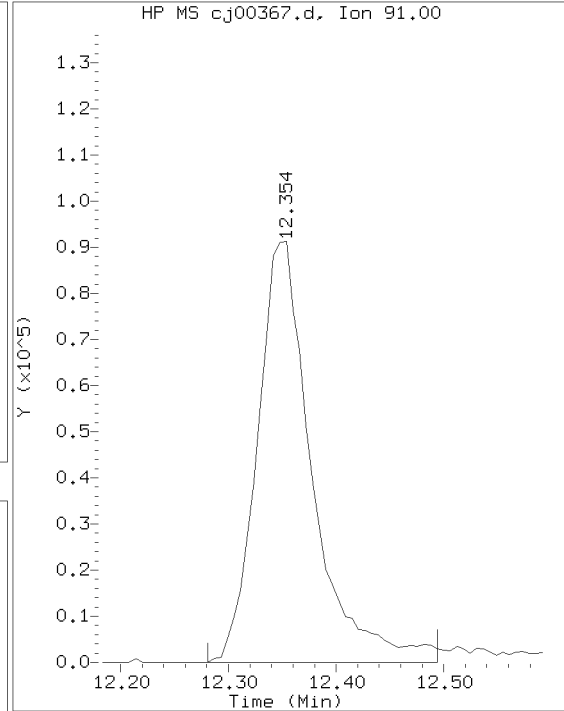
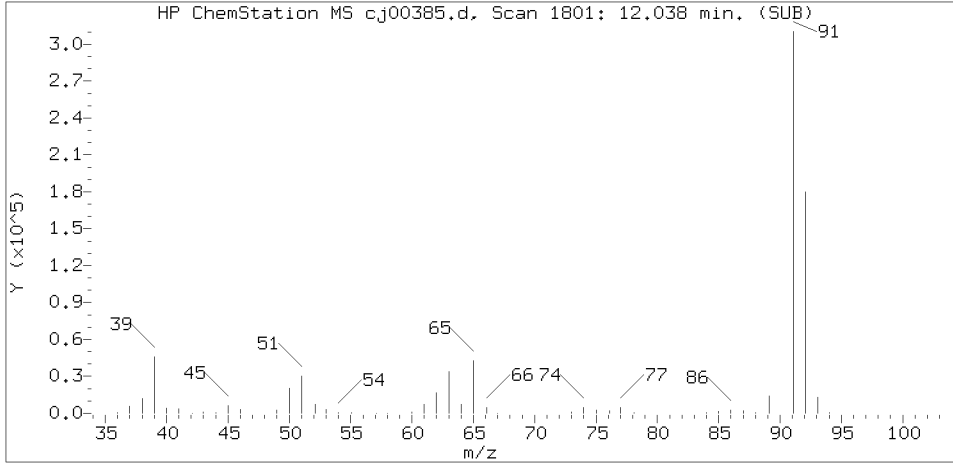
Compound Number : 52  
Compound Name : Trichloroethene  
Scan Number : 1411  
Retention Time (minutes): 9.665  
Relative Retention Time : 0.00007  
Quant Ion : 130.00  
Area (flag) : 775629  
Concentration (ppb(v)) : 8.9438

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.

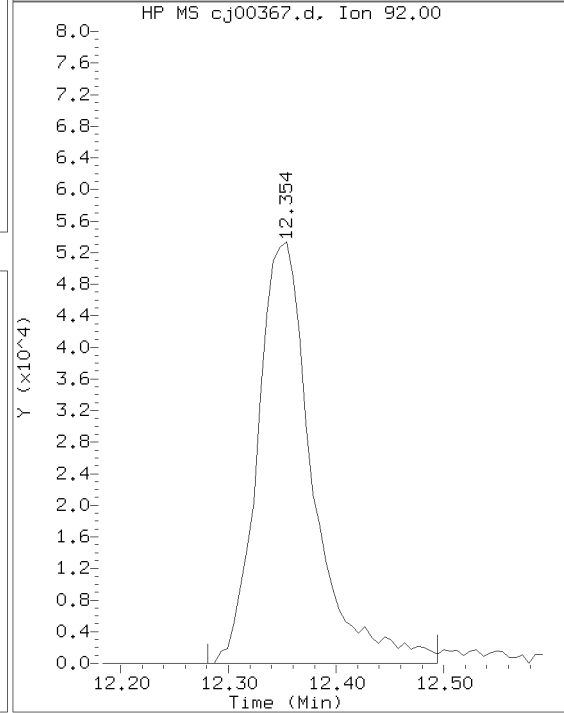
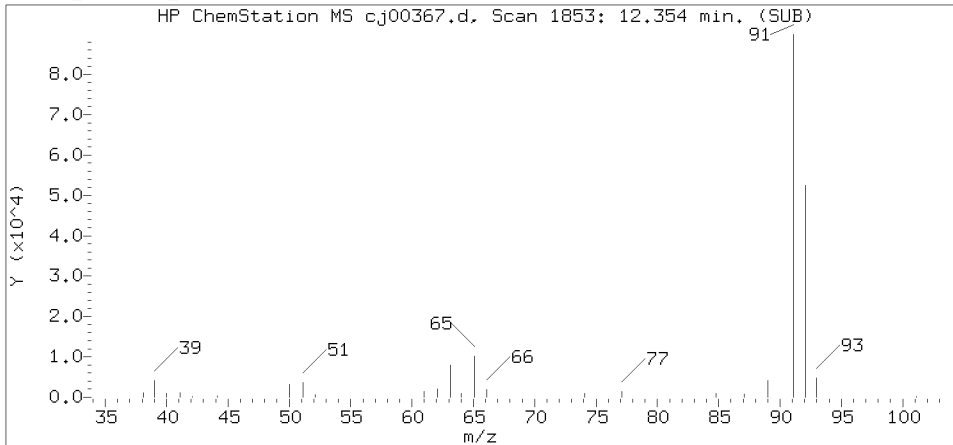
Target 3.5 esignature user ID: jbs01304  
SSX23 Page 228 of 1243



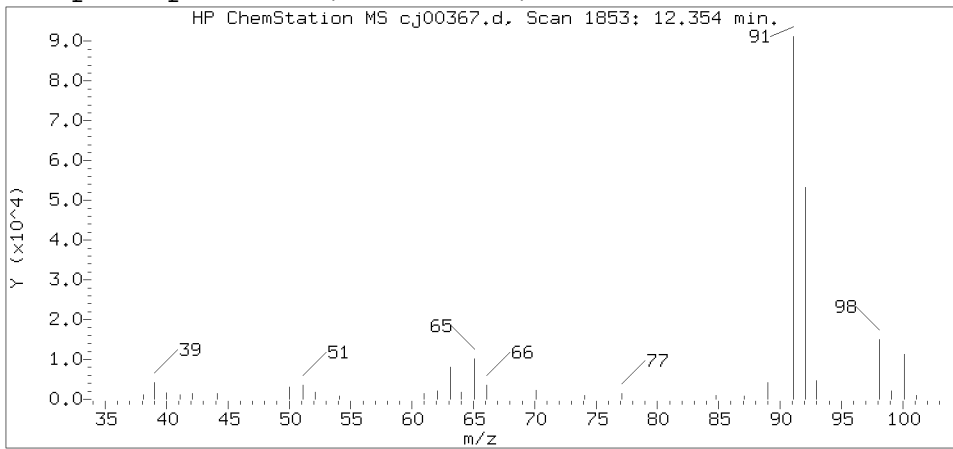
Reference Standard Spectrum for Toluene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

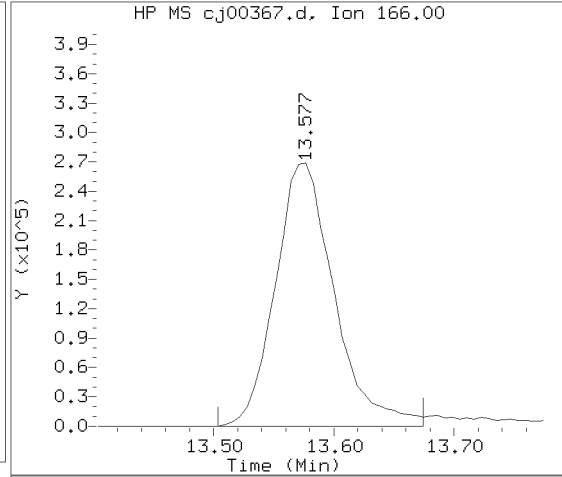
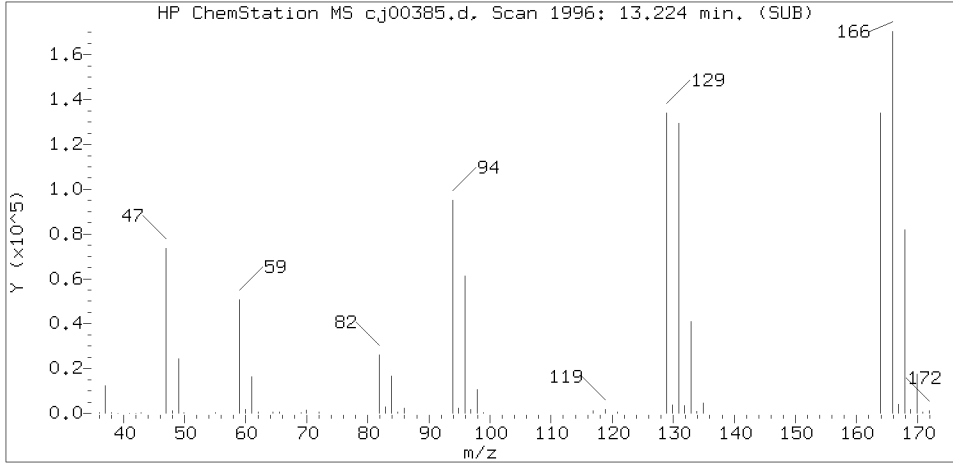
Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

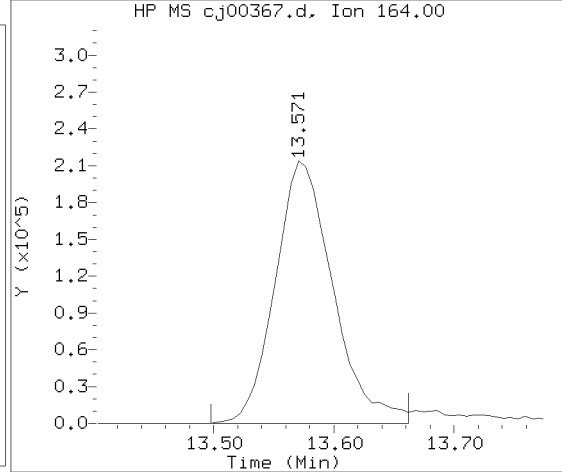
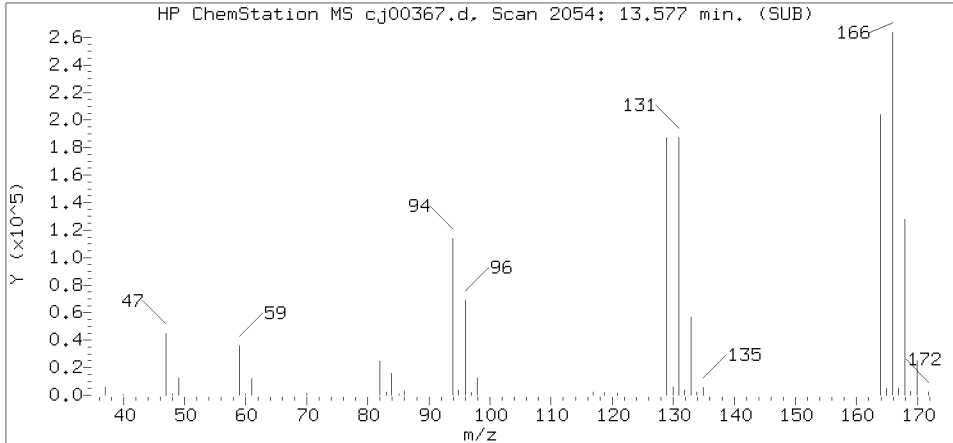
Sample Name: 985-- Lab Sample ID: 8087714

Compound Number : 61  
 Compound Name : Toluene  
 Scan Number : 1853  
 Retention Time (minutes): 12.354  
 Relative Retention Time : -0.00048  
 Quant Ion : 91.00  
 Area (flag) : 323617  
 Concentration (ppb(v)) : 2.4307

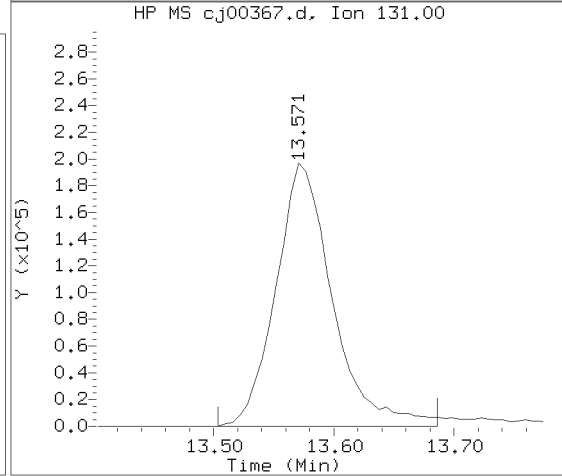
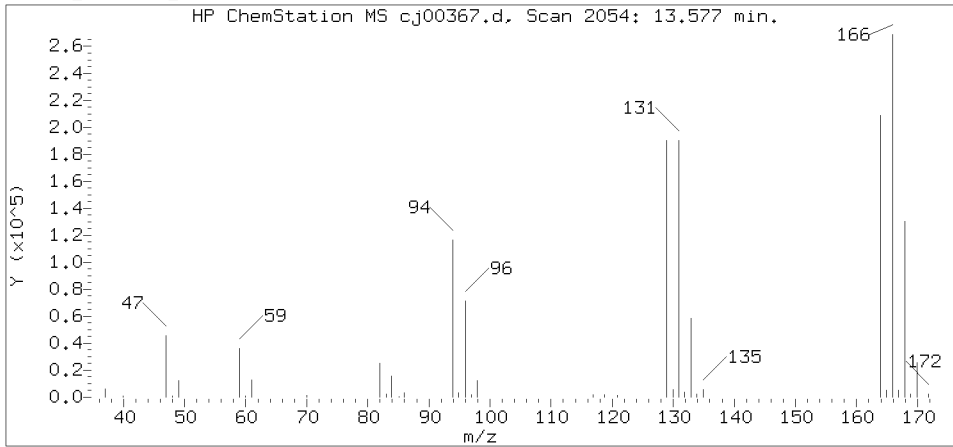
Reference Standard Spectrum for Tetrachloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

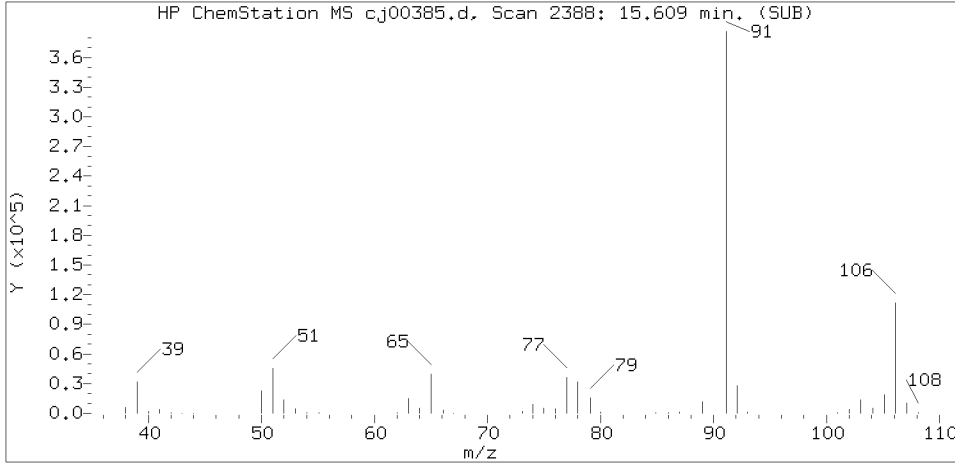
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

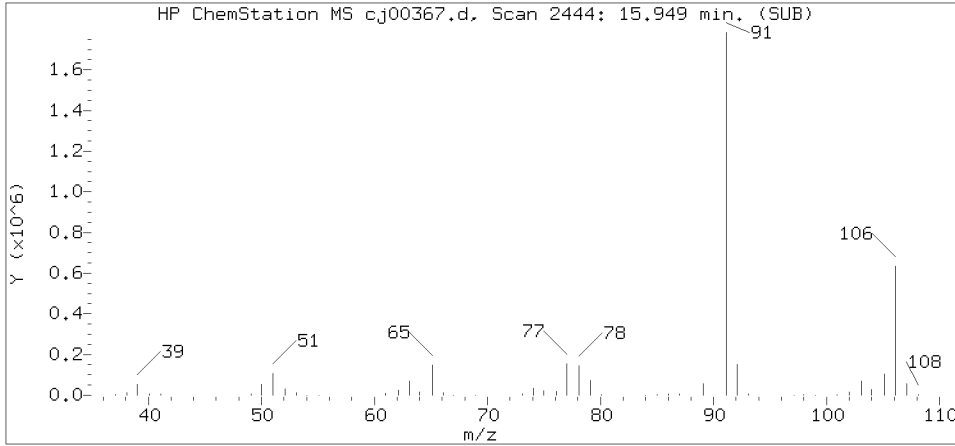
Lab Sample ID: 8087714

Compound Number : 67  
 Compound Name : Tetrachloroethene  
 Scan Number : 2054  
 Retention Time (minutes): 13.577  
 Relative Retention Time : -0.00005  
 Quant Ion : 166.00  
 Area (flag) : 913342  
 Concentration (ppb(v)) : 8.0576

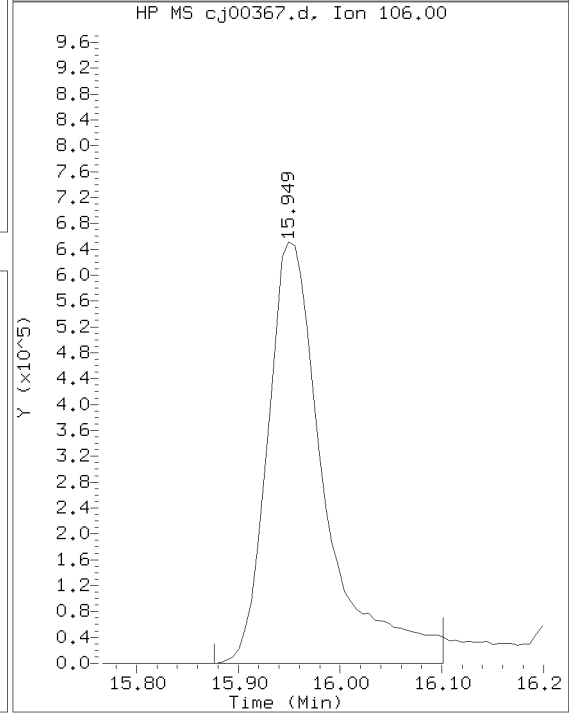
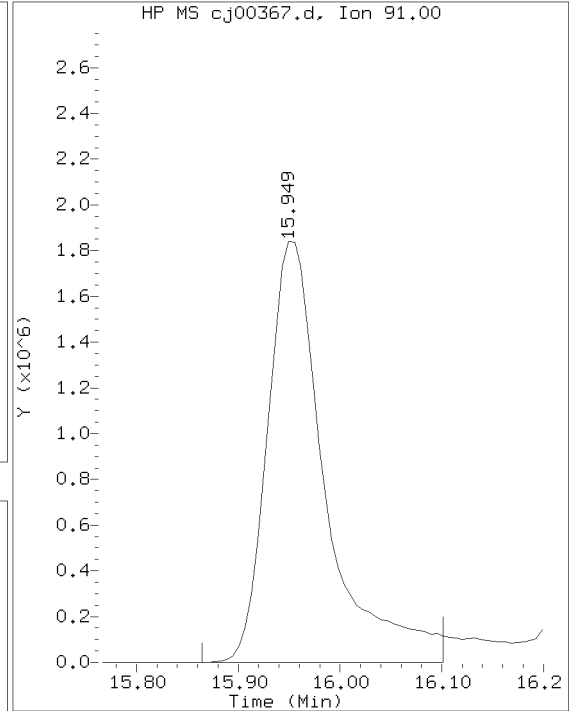
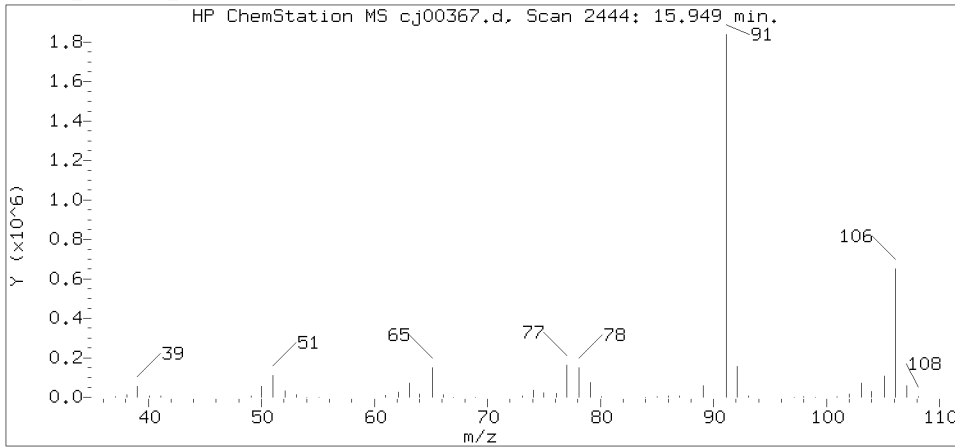
Reference Standard Spectrum for Ethylbenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

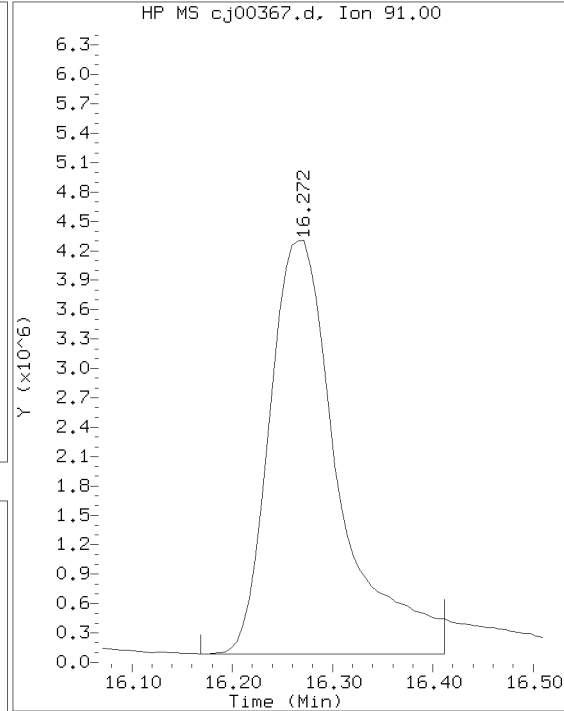
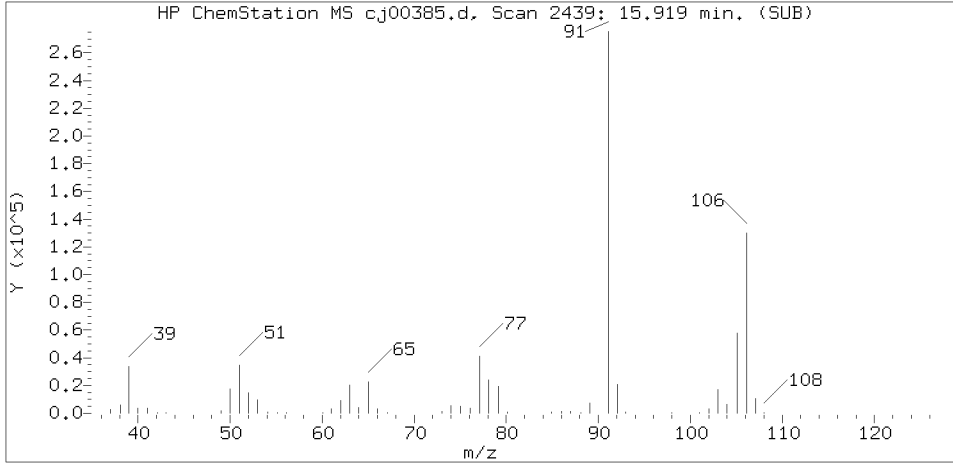
Lab Sample ID: 8087714

Compound Number : 74  
 Compound Name : Ethylbenzene  
 Scan Number : 2444  
 Retention Time (minutes): 15.949  
 Relative Retention Time : 0.00040  
 Quant Ion : 91.00  
 Area (flag) : 7323480  
 Concentration (ppb(v)) : 49.7879

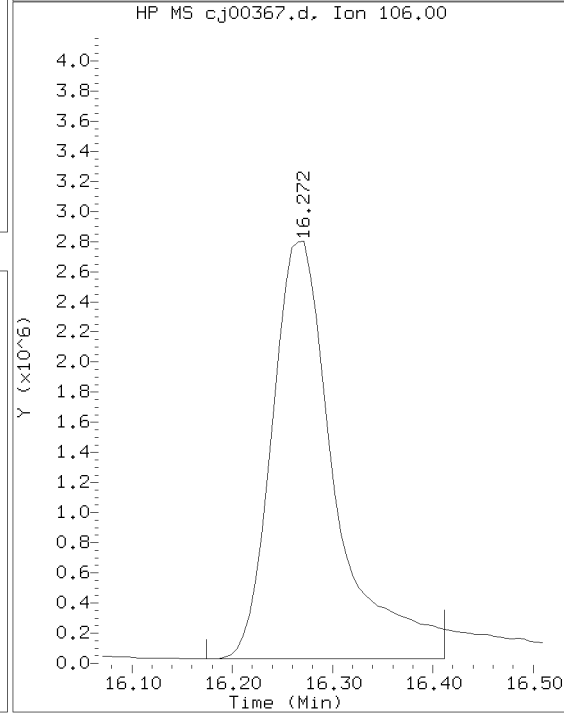
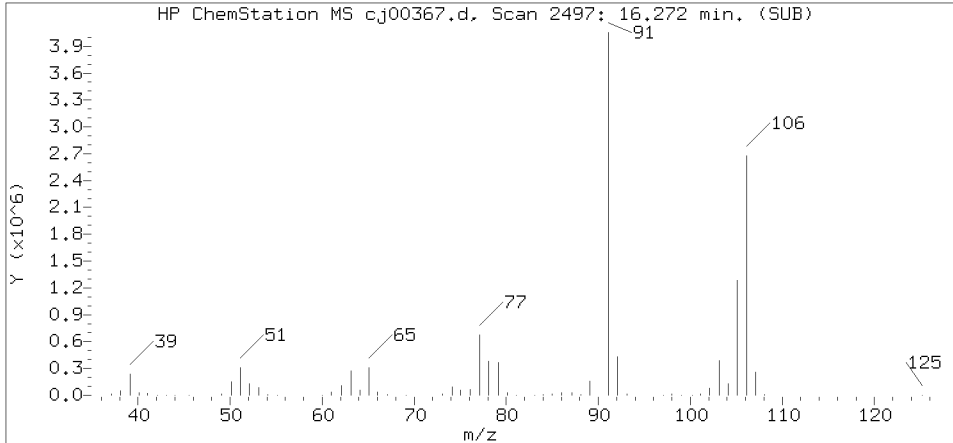
Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304  
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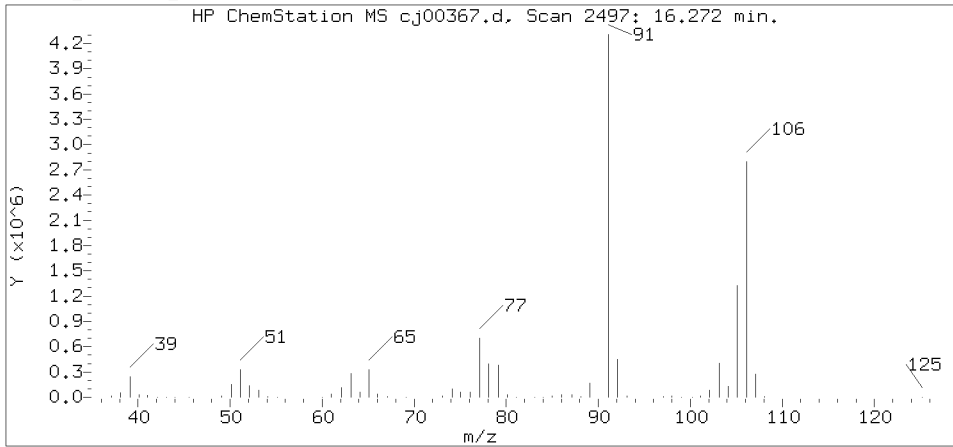
Reference Standard Spectrum for m/p-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

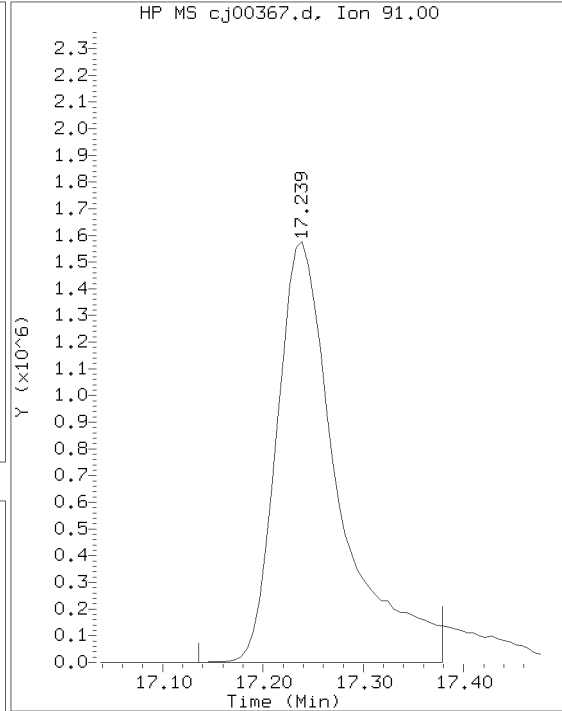
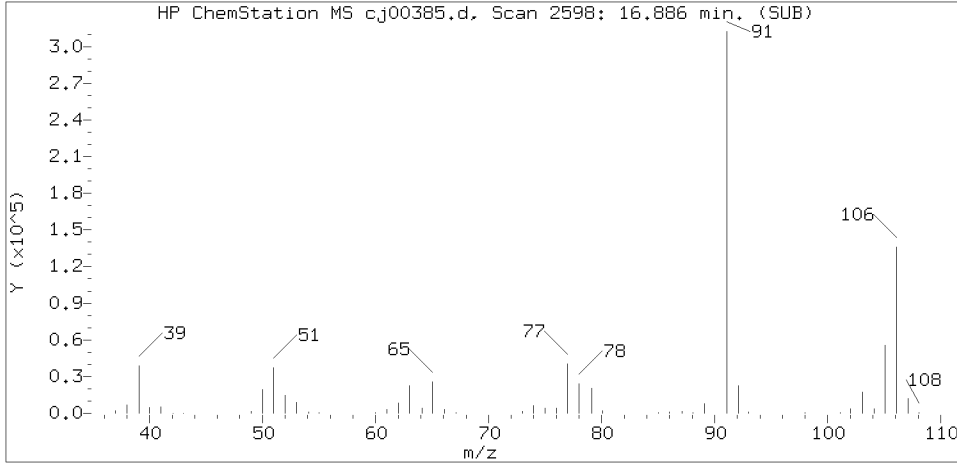
Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

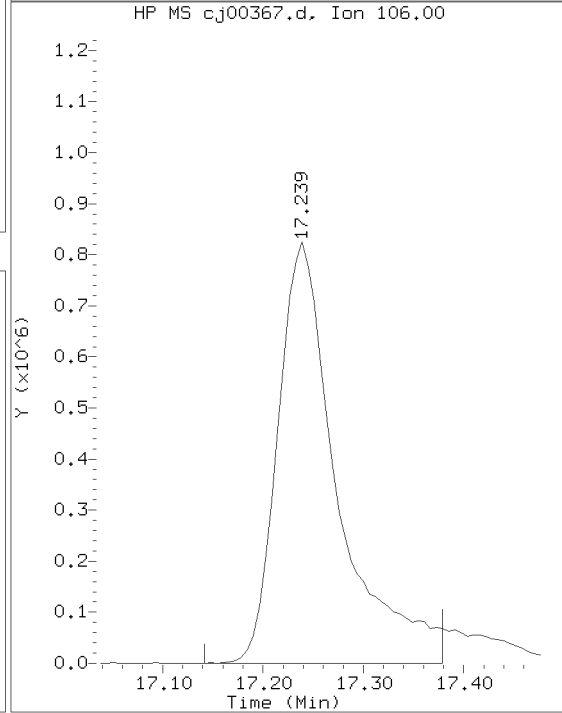
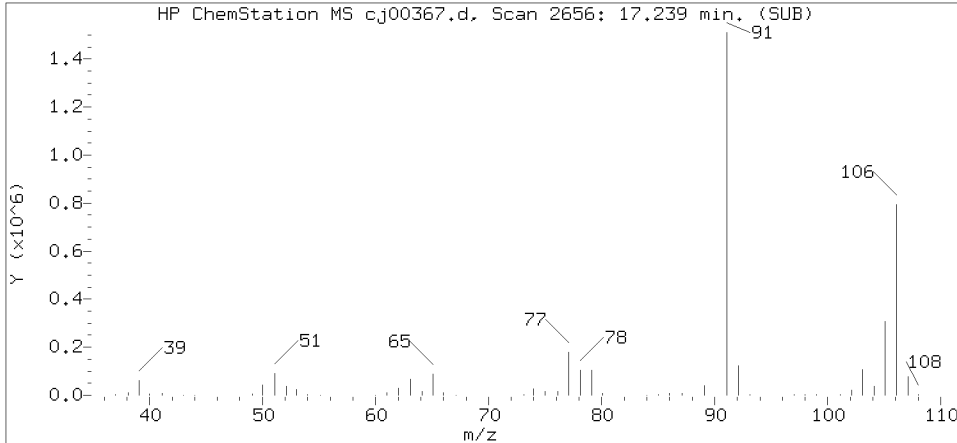
Sample Name: 985-- Lab Sample ID: 8087714

Compound Number : 75  
 Compound Name : m/p-Xylene  
 Scan Number : 2497  
 Retention Time (minutes): 16.272  
 Relative Retention Time : -0.00037  
 Quant Ion : 91.00  
 Area (flag) : 20232889  
 Concentration (ppb(v)) : 166.3277

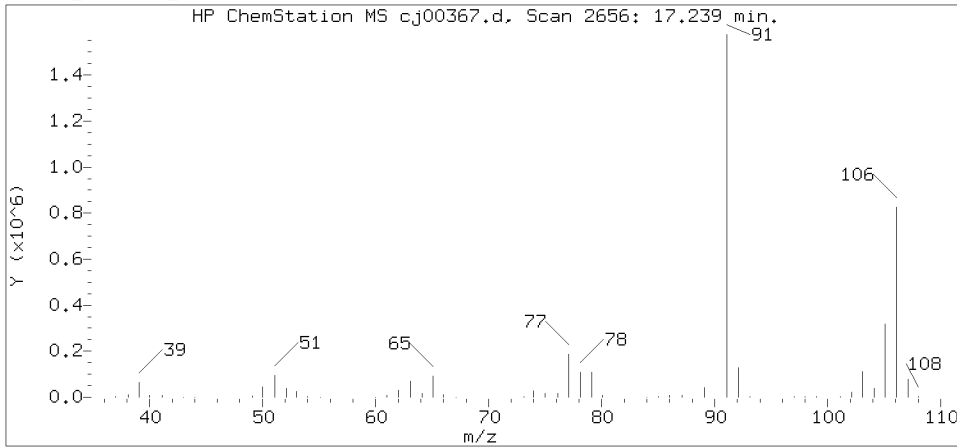
Reference Standard Spectrum for o-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

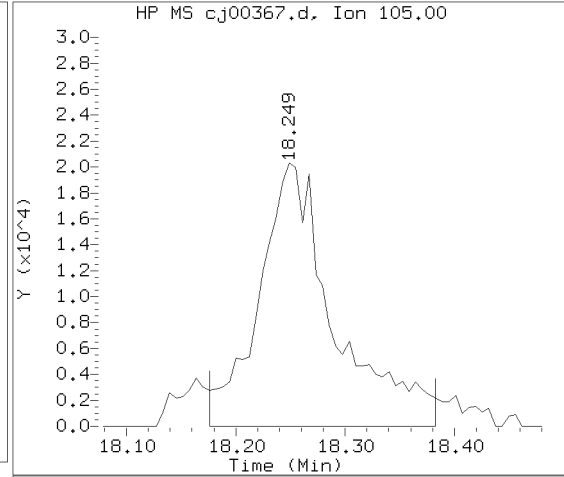
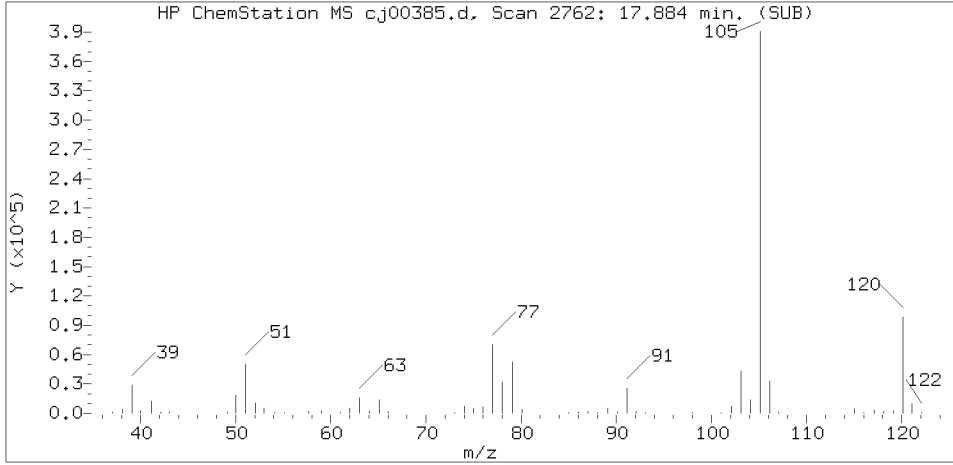
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

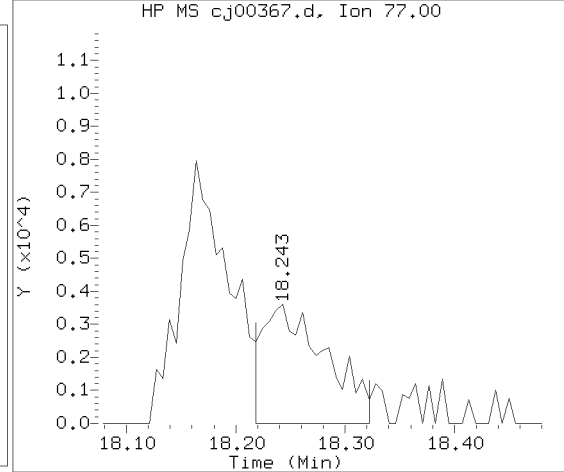
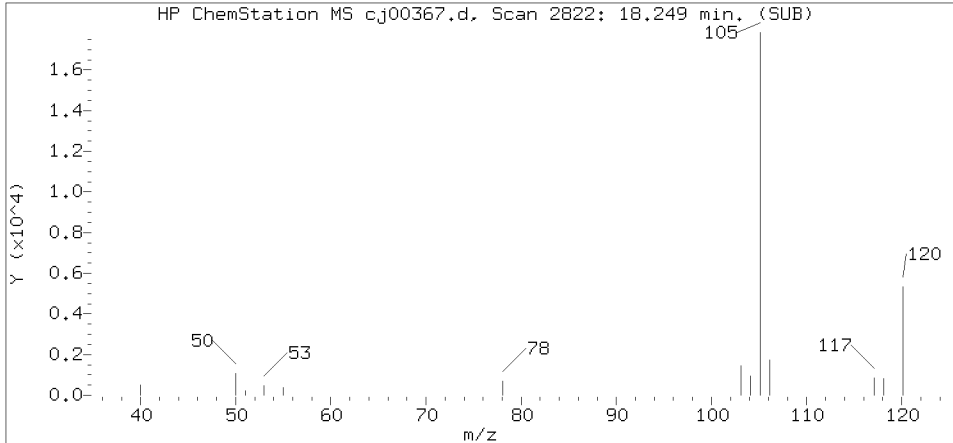
Lab Sample ID: 8087714

Compound Number : 76  
 Compound Name : o-Xylene  
 Scan Number : 2656  
 Retention Time (minutes): 17.239  
 Relative Retention Time : 0.00004  
 Quant Ion : 91.00  
 Area (flag) : 6716932  
 Concentration (ppb(v)) : 52.4624

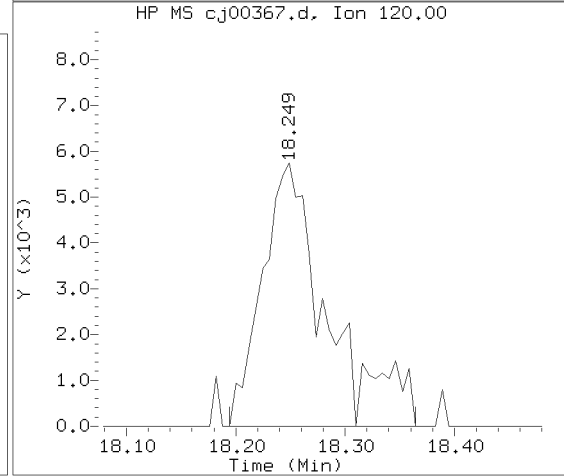
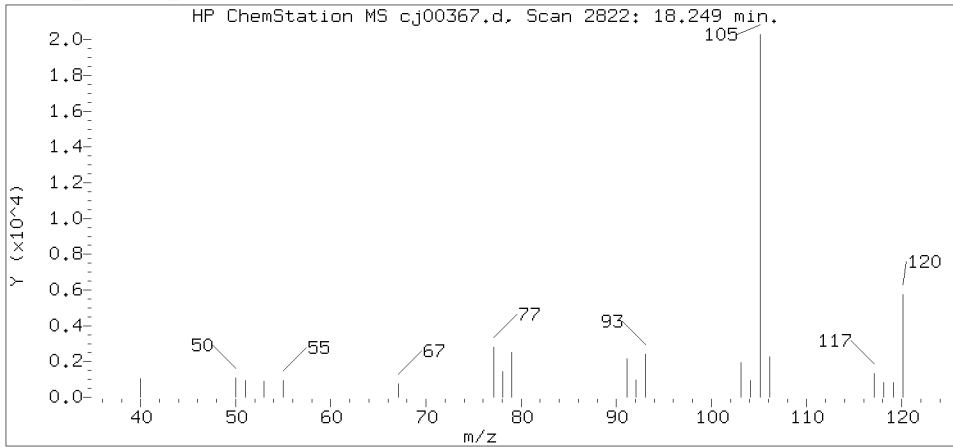
Reference Standard Spectrum for Cumene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

Lab Sample ID: 8087714

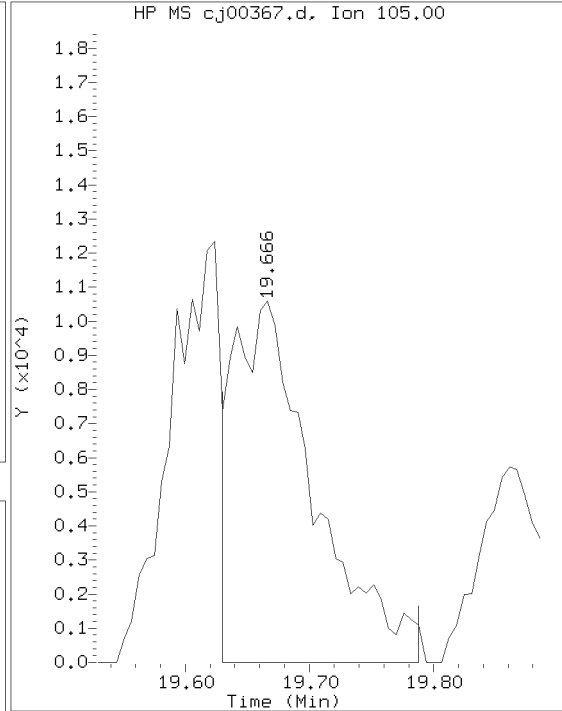
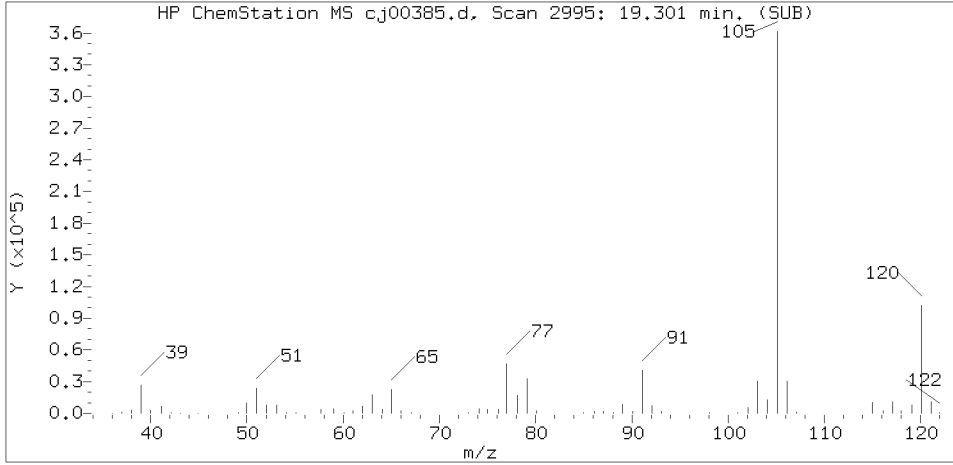
Compound Number : 80  
 Compound Name : Cumene  
 Scan Number : 2822  
 Retention Time (minutes): 18.249  
 Relative Retention Time : 0.00007  
 Quant Ion : 105.00  
 Area (flag) : 96663  
 Concentration (ppb(v)) : 0.5878

Sublist used: 292

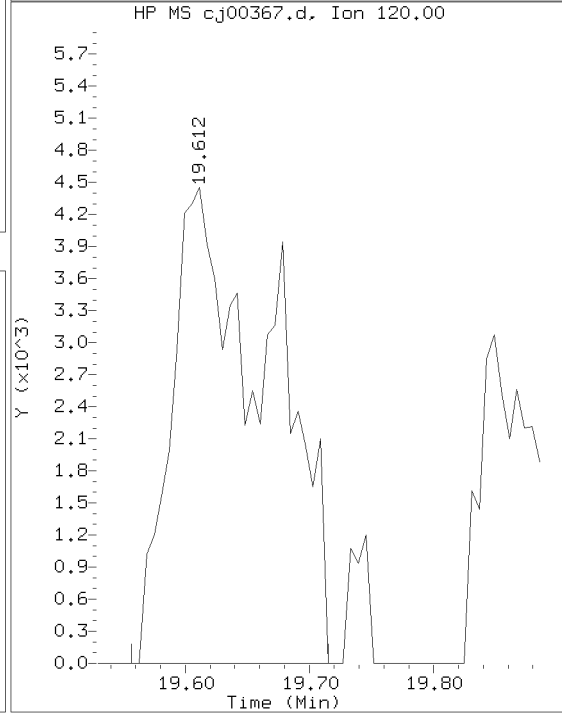
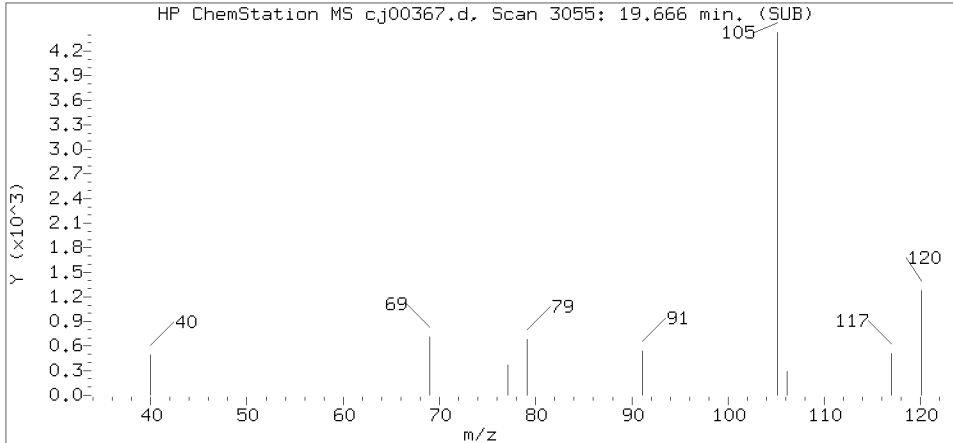
Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304  
 SSX23 Page 234 of 1243

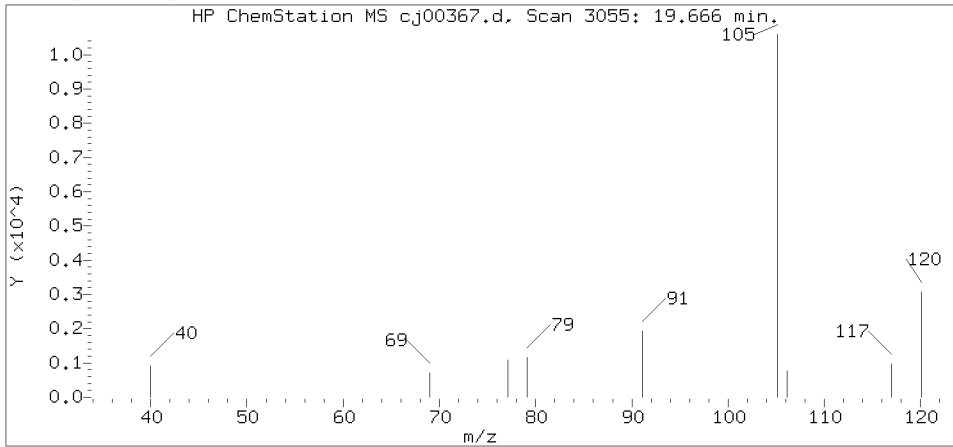
Reference Standard Spectrum for 4-Ethyltoluene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

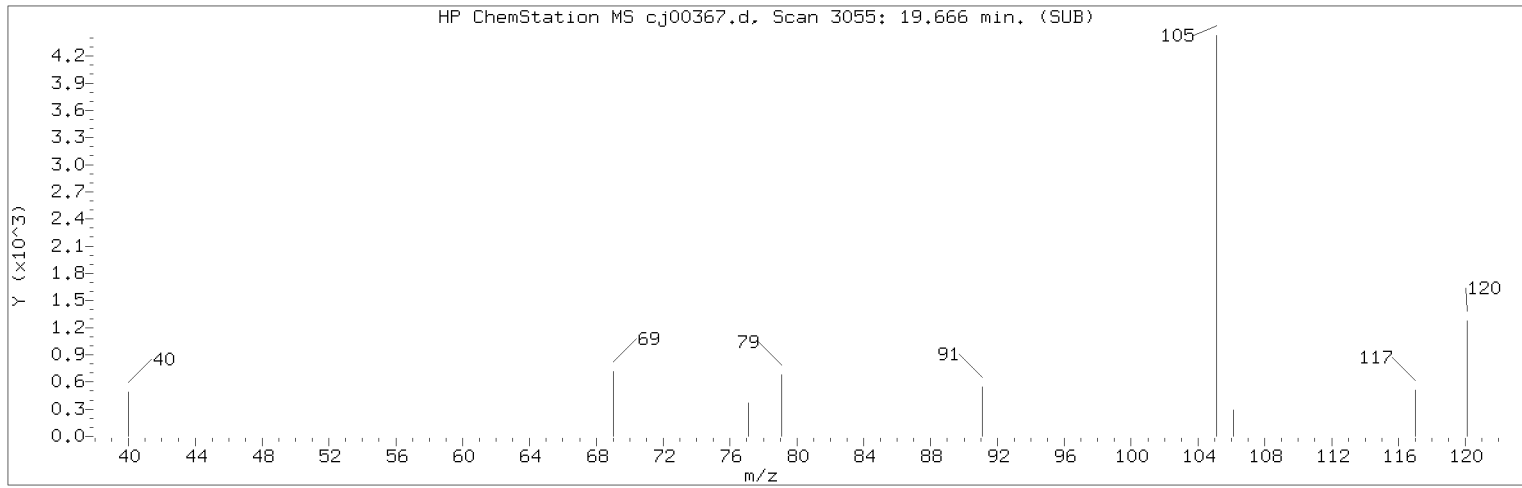
Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

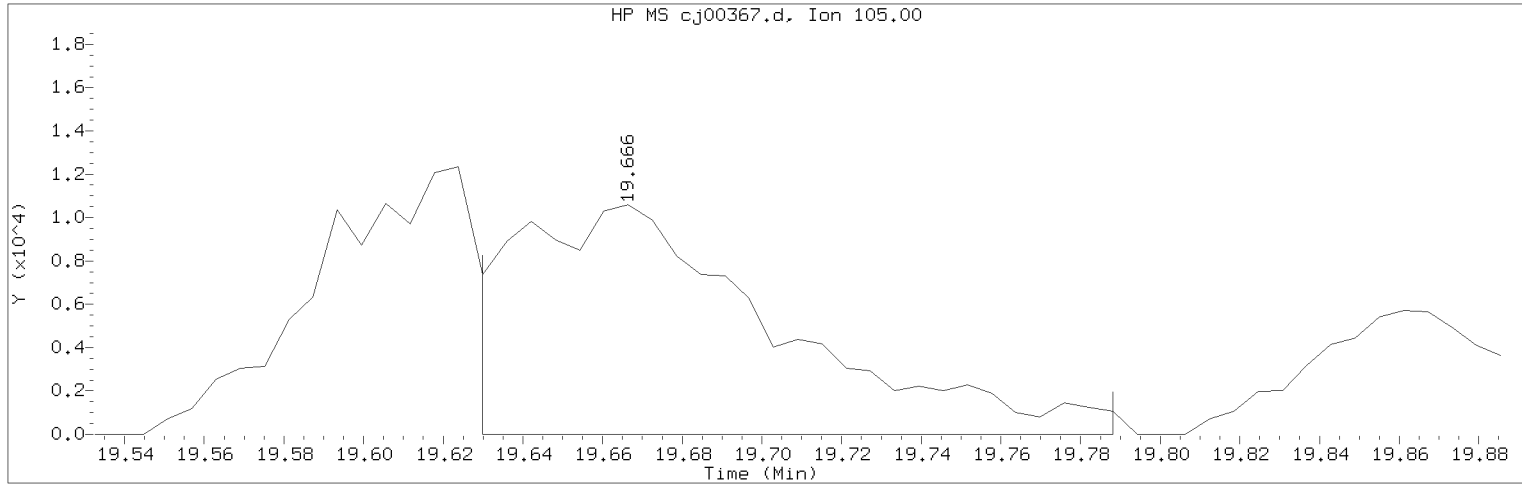
Sample Name: 985-- Lab Sample ID: 8087714

Compound Number : 86  
 Compound Name : 4-Ethyltoluene  
 Scan Number : 3055  
 Retention Time (minutes): 19.666  
 Relative Retention Time : 0.00050  
 Quant Ion : 105.00  
 Area (flag) : 50397AM  
 Concentration (ppb(v)) : 0.2748

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct16.b/cj00367.d Instrument ID: HP09464.i  
Injection date and time: 17-OCT-2015 04:43 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292  
Calibration date and time: 21-OCT-2015 16:54  
Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985-- Lab Sample ID: 8087714

Compound Number : 86  
Compound Name : 4-Ethyltoluene  
Scan Number : 3055  
Retention Time (minutes): 19.666  
Quant Ion : 105.00  
Area (flag) : 50397AM  
Concentration (ppb(v)) : 0.2748  
Integration start scan : 3048 Integration stop scan: 3074  
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

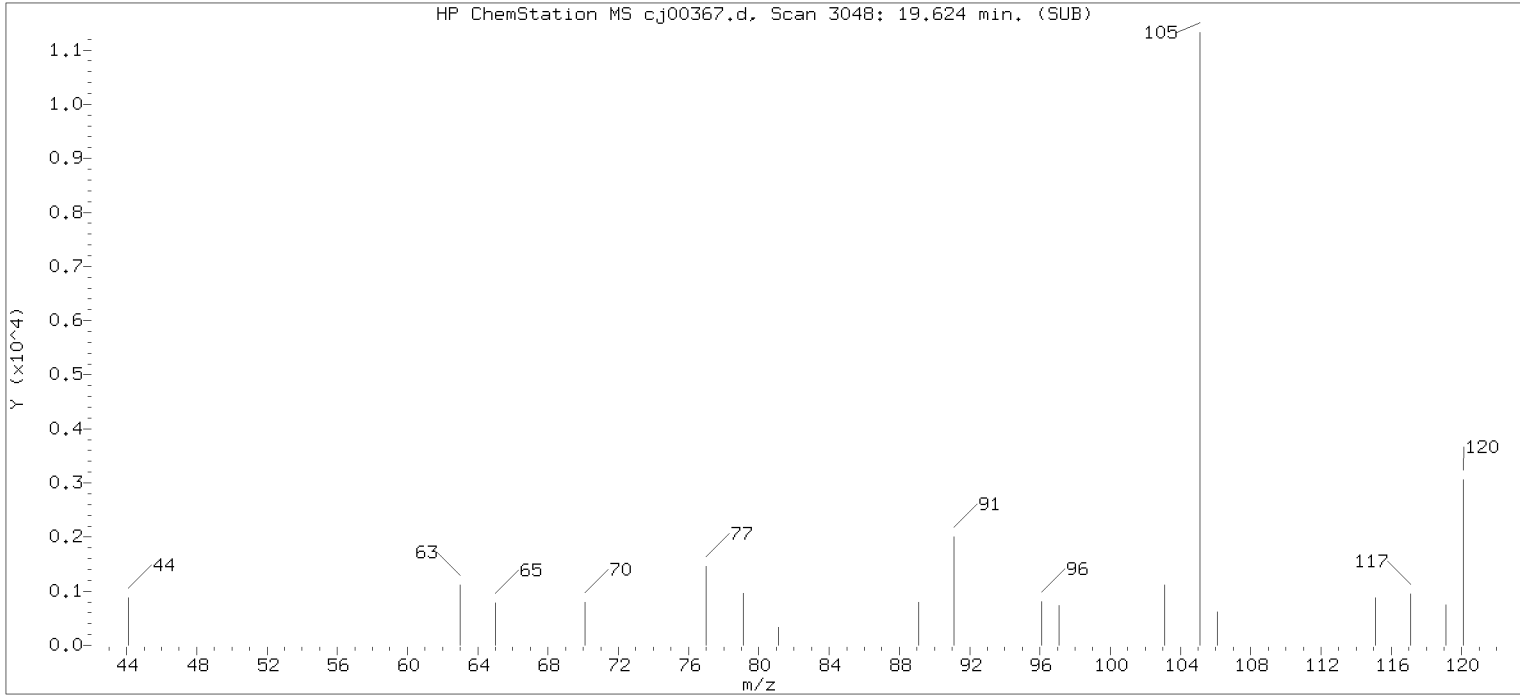
Analyst responsible for change: Digitally signed by Jeffrey B. Smith  
on 10/29/2015 at 11:41.  
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Michele J. Smith on 10/30/2015 at 15:42.  
Parallax ID: mjs00758



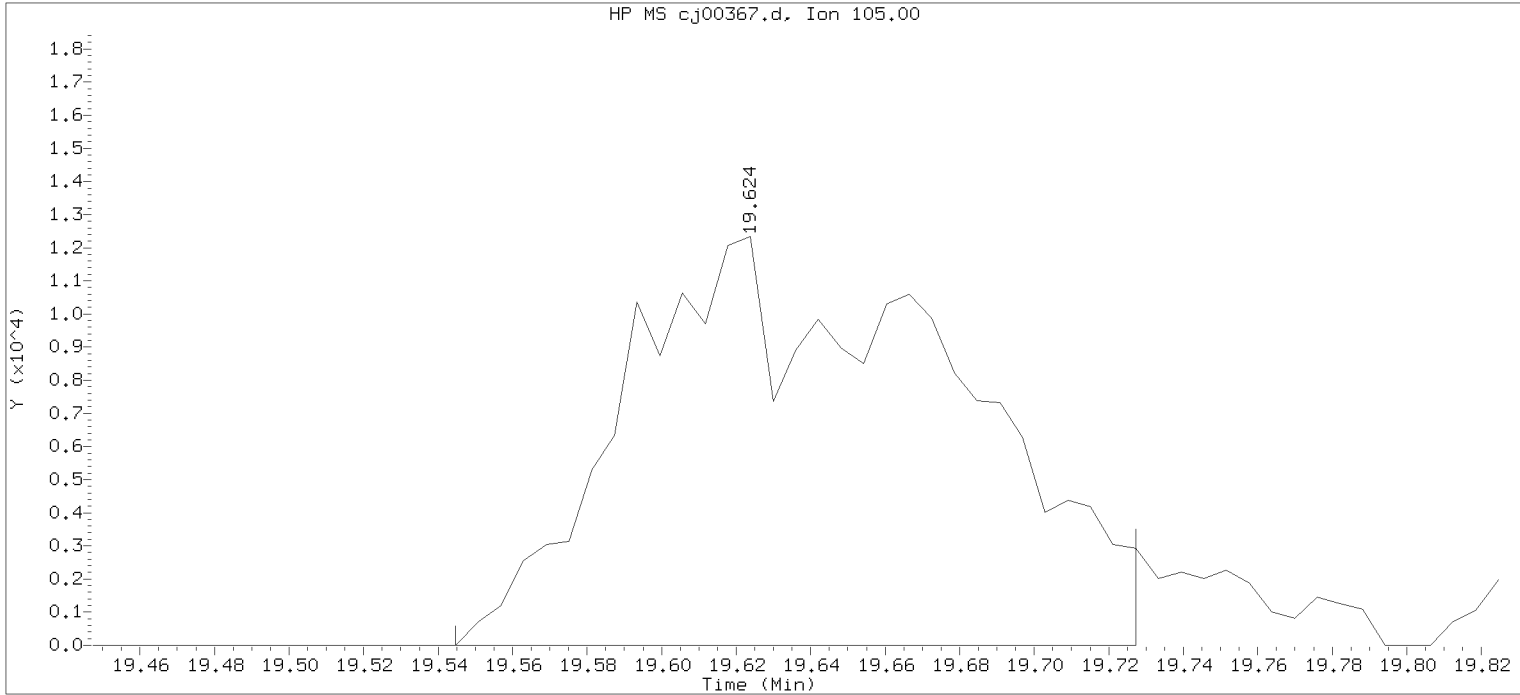
Sample Spectrum (Background Subtracted)

HP ChemStation MS cj00367.d. Scan 3048: 19.624 min. (SUB)



Original Integration of Quant Ion

HP MS cj00367.d. Ion 105.00



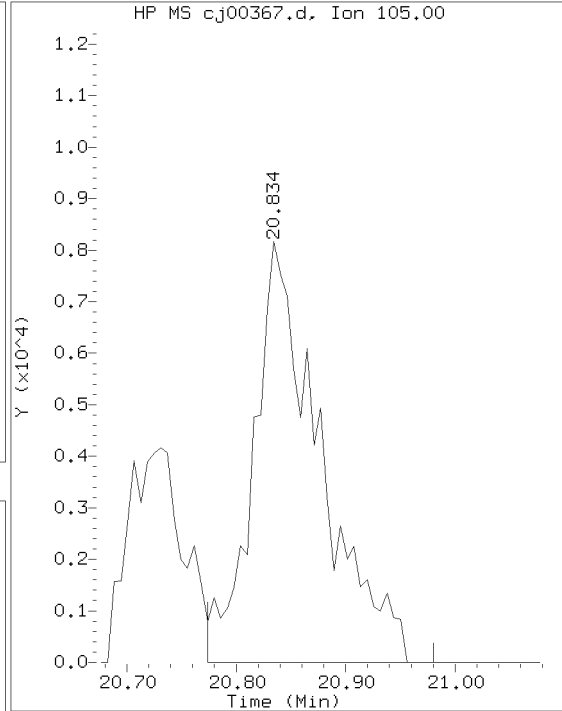
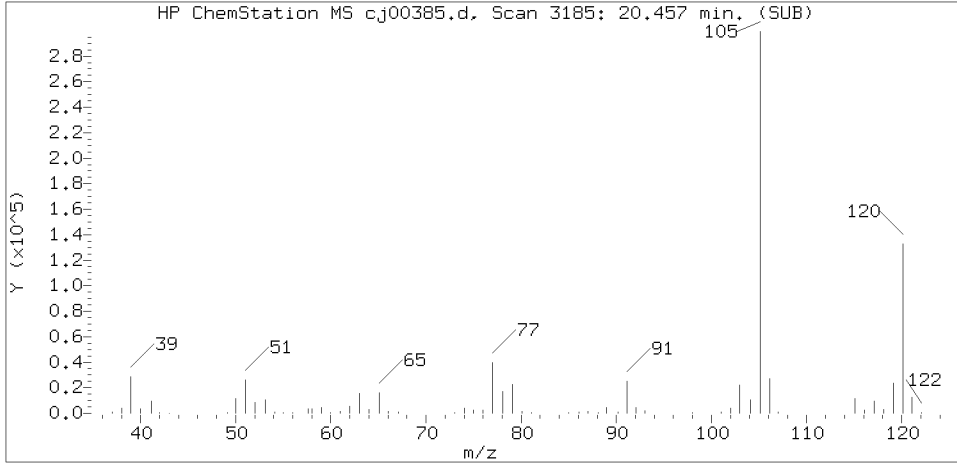
Data File: /chem/HP09464.i/15oct16.b/cj00367.d Instrument ID: HP09464.i  
Injection date and time: 17-OCT-2015 04:43 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292  
Calibration date and time: 16-OCT-2015 16:10  
Date, time and analyst ID of latest file update: 17-Oct-2015 05:23 Automation

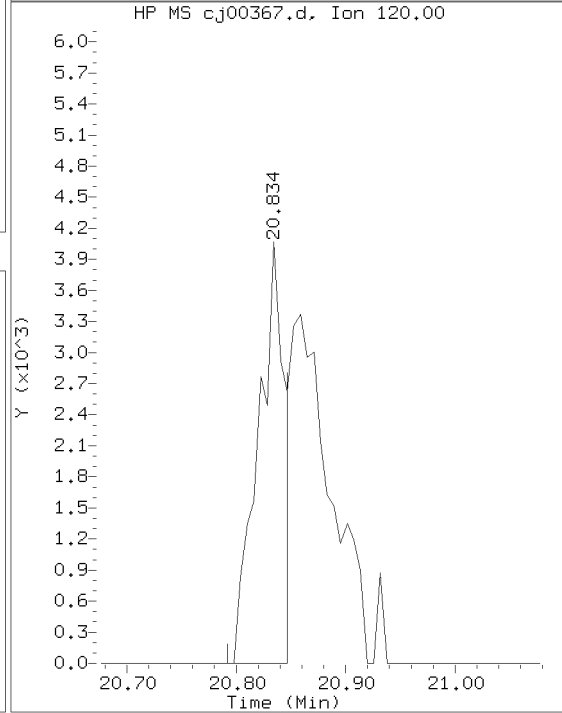
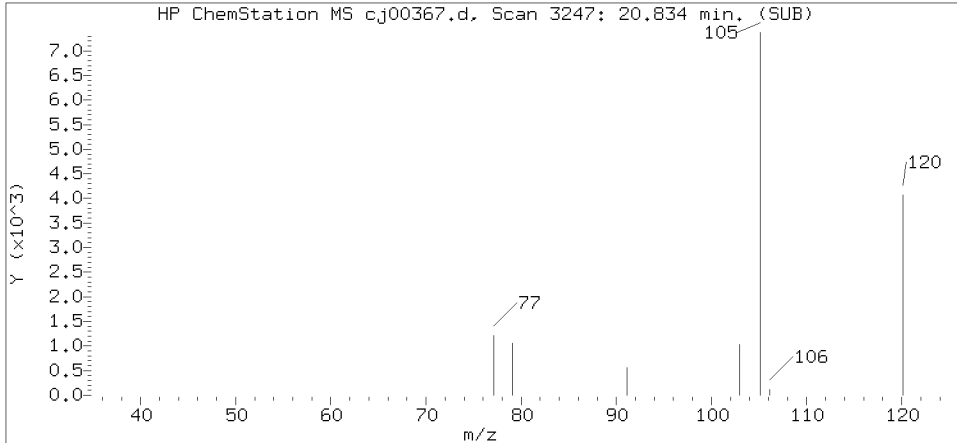
Sample Name: 985-- Lab Sample ID: 8087714

Compound Number : 86  
Compound Name : 4-Ethyltoluene  
Scan Number : 3048  
Retention Time (minutes): 19.624  
Quant Ion : 105.00  
Area : 75468  
Concentration (ppb(v)) : 0.4116  
Integration start scan : 3034 Integration stop scan: 3064  
Y at integration start : 0 Y at integration end: 0

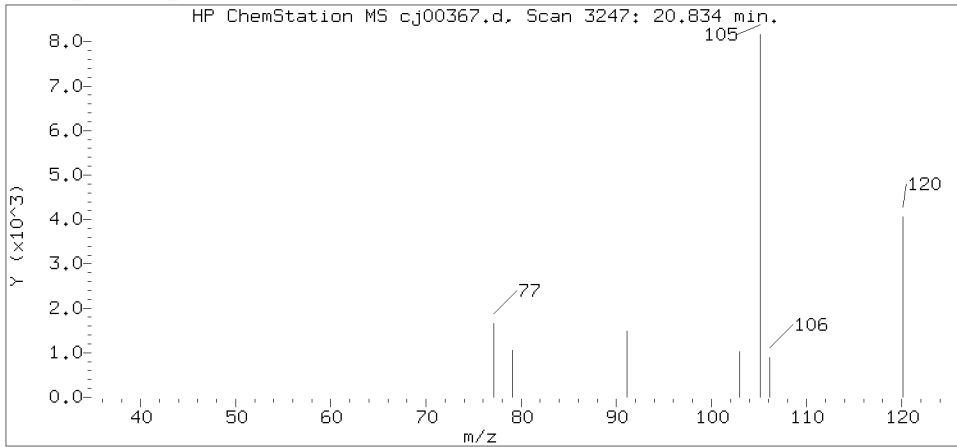
Reference Standard Spectrum for 1,2,4-Trimethylbenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
 Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985-- Lab Sample ID: 8087714

Compound Number : 90  
 Compound Name : 1,2,4-Trimethylbenzene  
 Scan Number : 3247  
 Retention Time (minutes): 20.834  
 Relative Retention Time : 0.00053  
 Quant Ion : 105.00  
 Area (flag) : 34441  
 Concentration (ppb(v)) : 0.2101

SDG No.:

Sample Media:	CANISTER	Lab Sample ID:	8087714
Canister ID:	985	Lab File ID:	cj00367.d
Pressure Received:	26.8 psia	Date Collected:	10/10/2015
Final Pressure:	13.4 psia	Date Received:	10/14/2015
Nominal Volume:	250 cc	Analyzed Date:	10/17/2015
Injection Volume:	500 cc	Analyzed Time:	04:43
Instrument ID:	09464	Dilution Factor:	1

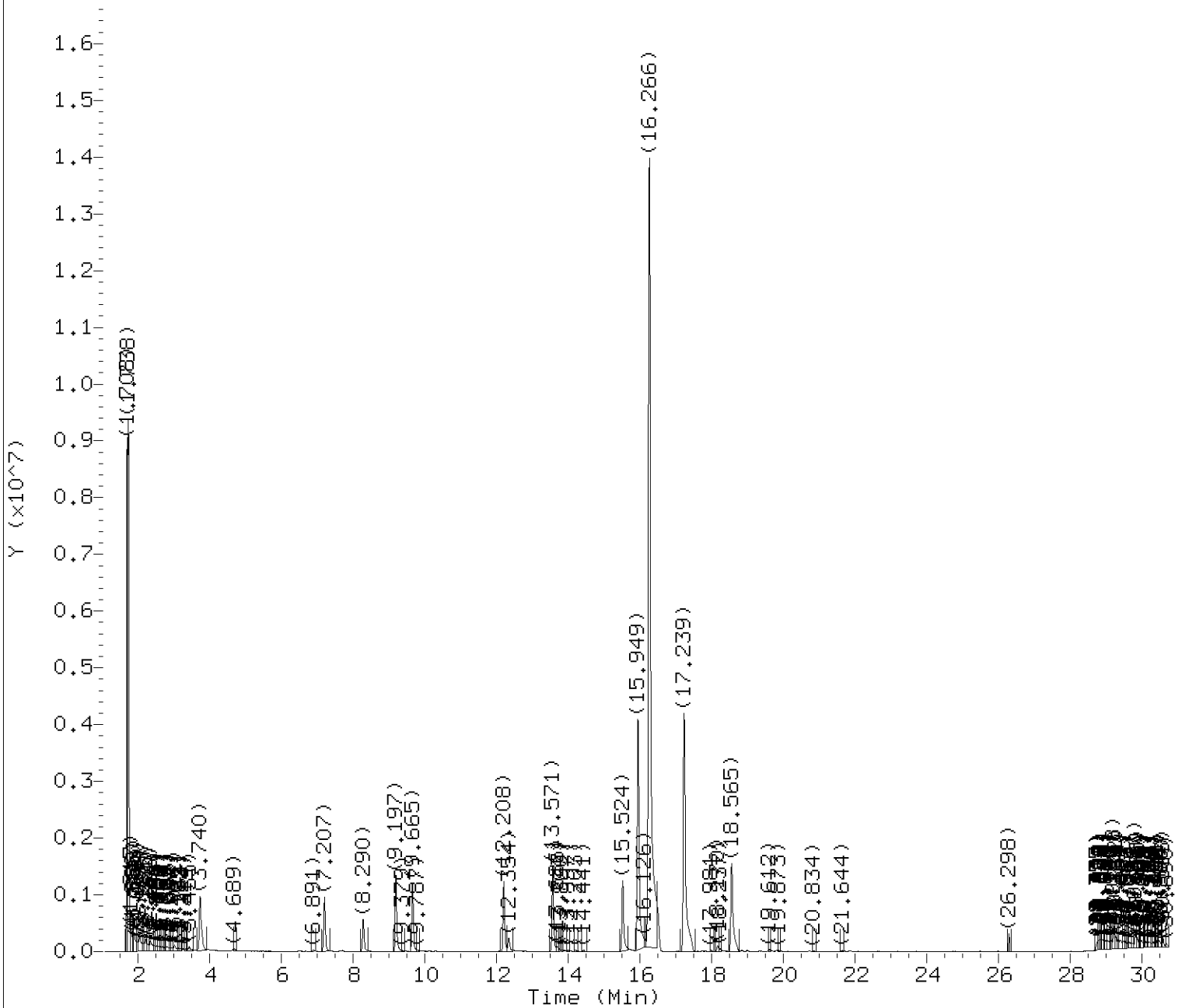
Number TICs Found: 5

Concentration Units: ppb(v)

CAS NUMBER	COMPOUND	RT	EST. CONC.	Q
811-97-2	Norflurane	1.82	4	J
75-37-6	Ethane, 1,1-difluoro-	1.87	2	J
106-97-8	Butane	2.22	3	J
75-07-0	Acetaldehyde	2.35	3	J
91-20-3	Naphthalene	26.30	1	J
TOTVOATIC	Total Tics		12	J

Abbreviations:

B = The compound was found in blank with a result greater than the limit being reported.  
J = The result is between the MDL and LOQ.



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54

Sublist used: 292

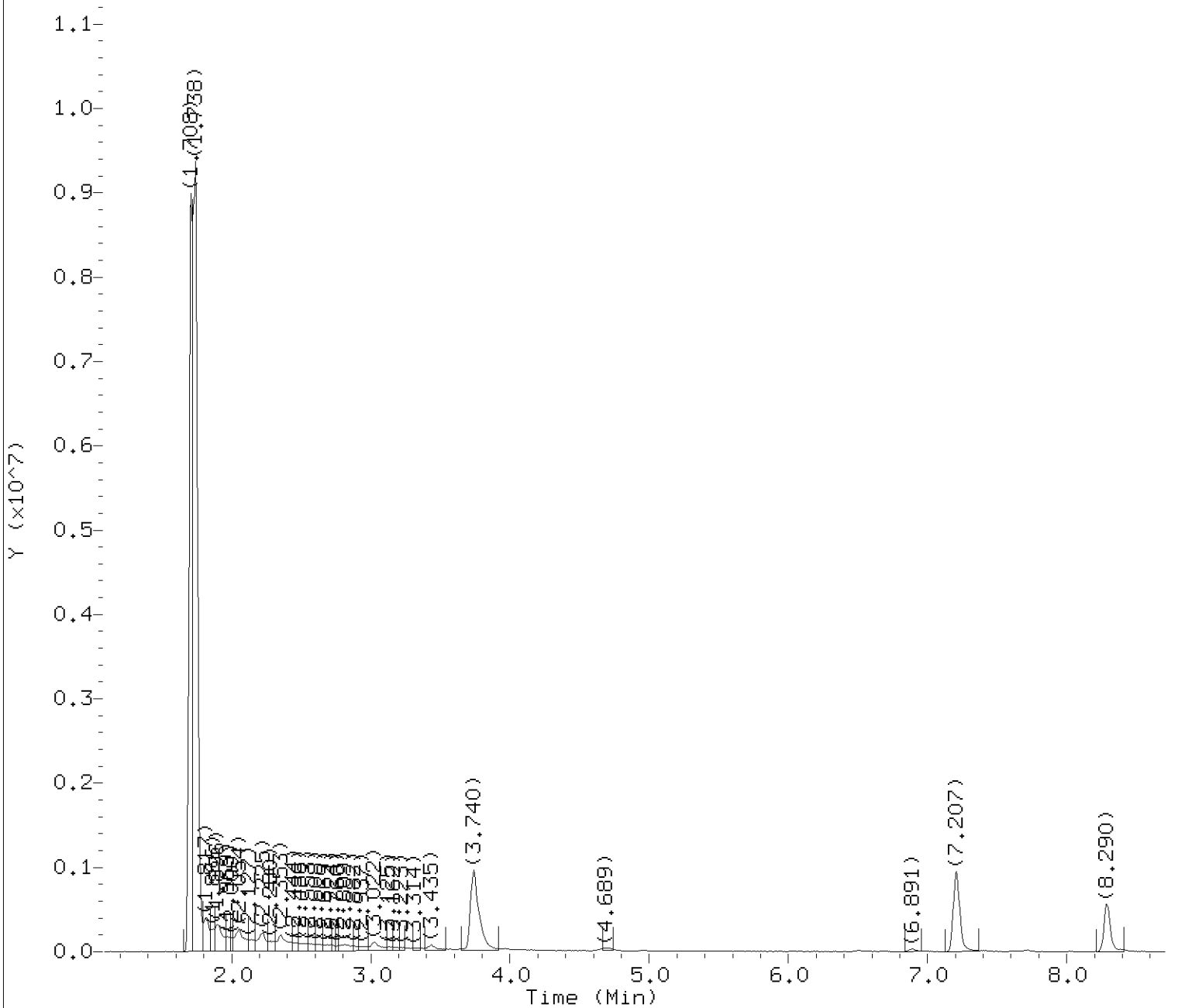
Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

Lab Sample ID: 8087714

Chromatogram Start Time (min.): 1.087  
Chromatogram End Time (min.): 30.751

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54  
Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

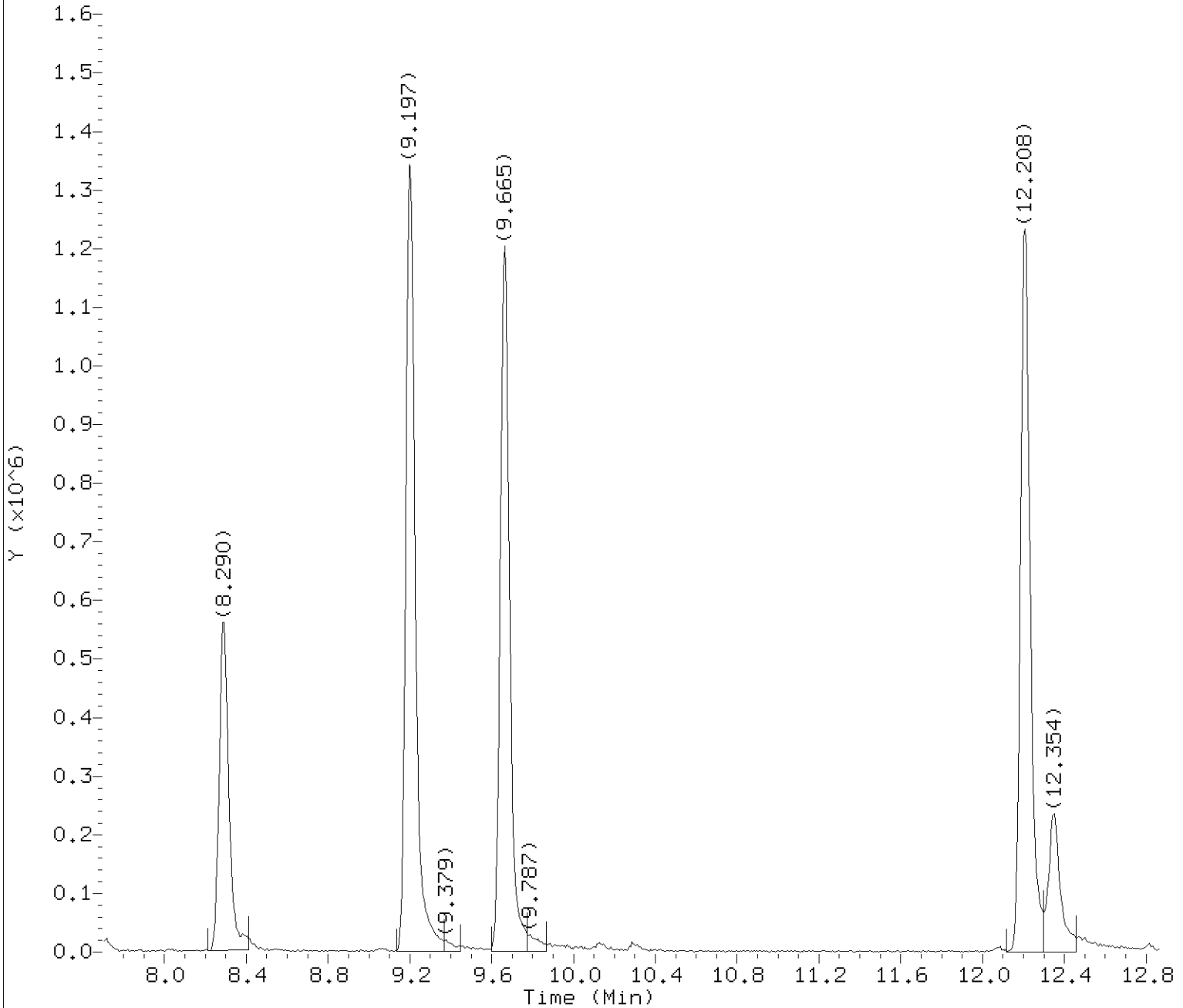
Sublist used: 292

Sample Name: 985--

Lab Sample ID: 8087714

Internal Standard referenced: Bromochloromethane at 7.207 minutes  
Chromatogram Start Time (min.): 1.087  
Chromatogram End Time (min.): 8.205

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54

Sublist used: 292

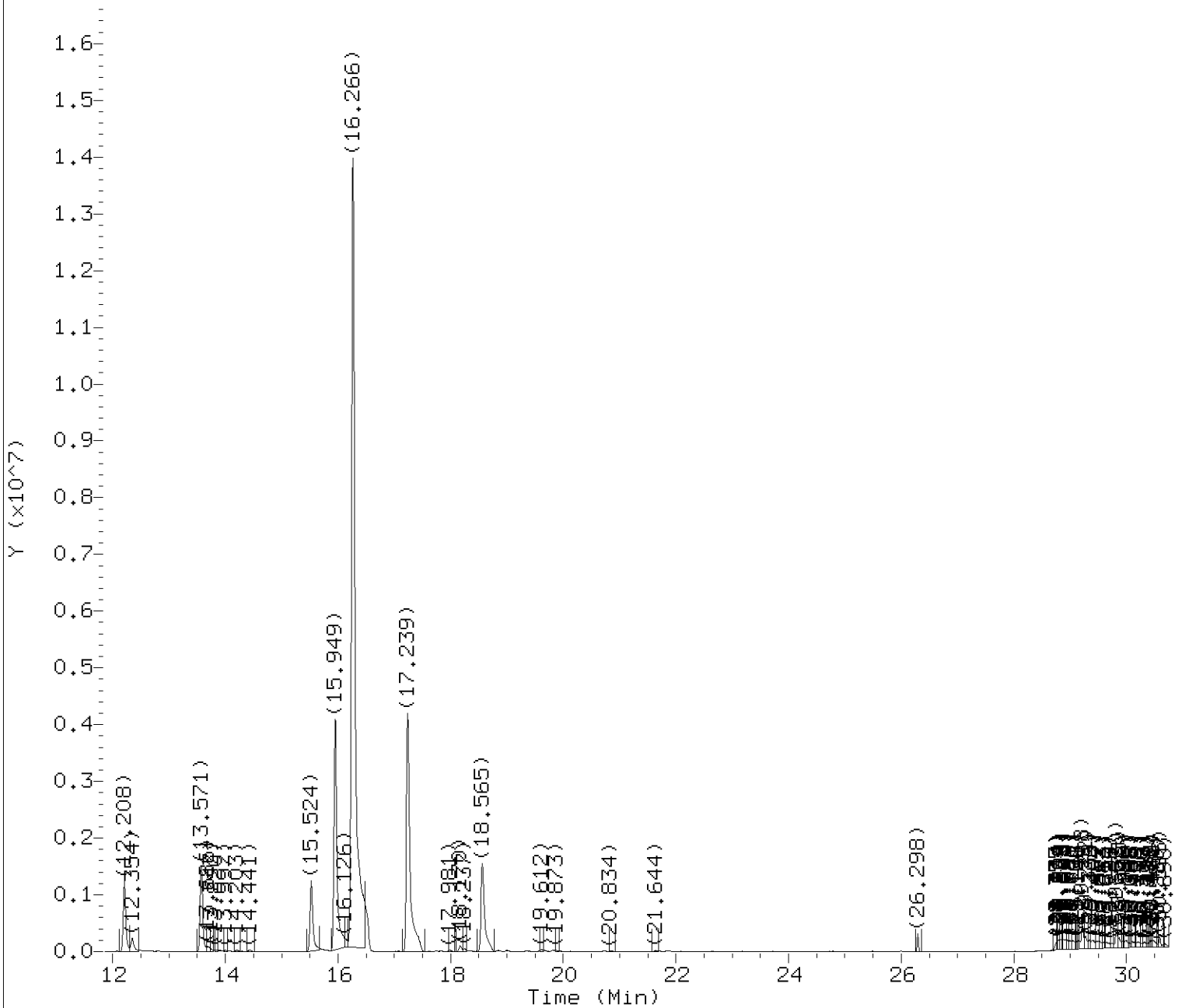
Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sample Name: 985--

Lab Sample ID: 8087714

Internal Standard referenced: 1,4-Difluorobenzene at 9.203 minutes  
Chromatogram Start Time (min.): 8.205  
Chromatogram End Time (min.): 12.363

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00367.d  
Injection date and time: 17-OCT-2015 04:43

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54  
Date, time and analyst ID of latest file update: 29-Oct-2015 11:24 jbs01304

Sublist used: 292

Sample Name: 985--

Lab Sample ID: 8087714

Internal Standard referenced: Chlorobenzene-d5 at 15.524 minutes  
Chromatogram Start Time (min.): 12.363  
Chromatogram End Time (min.): 30.751

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.  
Target 3.5 esignature user ID: jbs01304

Lancaster Laboratories, Inc.

Data file : /chem/HP09464.i/15oct16.b/cj00367.d  
Lab Smp Id: 8087714 Client Smp ID: 985--  
Inj Date : 17-OCT-2015 04:43  
Operator : jeb07445 Inst ID: HP09464.i  
Smp Info : 8087714;500;C1528830AB;985--;0;0;SAMPLE;  
Misc Info : cj00353;292.sub;250;13.4226;26.8452;985;  
Comment :  
Method : /chem/HP09464.i/15oct16.b/to-15.m  
Meth Date : 26-Oct-2015 14:20 jbs01304 Quant Type: ISTD  
Cal Date : 16-OCT-2015 04:03 Cal File: cj00329.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 292.sub  
Target Version: 3.50  
Processing Host: d30cs01

Concentration Formula: Amt \* DF \* (Xa/Ya)\*(IVn/IVa) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Xa	26.84520	canister pressure absolute after dilutio
Ya	13.42260	canister pressure absolute before diluti
IVn	250.00000	nominal injection volume
IVa	500.00000	actual injection volume

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 40 Bromochloromethane	7.207	3116817	10.000
* 71 Chlorobenzene-d5	15.524	4537339	10.000

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL(ppb(v))	FINAL(ppb(v))	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====
Norflurane				CAS #: 811-97-2			
1.817	1116806	3.58316217	3.583162	72	NIST11.1	4174	40



RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL(ppb(v))	FINAL(ppb(v))		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Ethane, 1,1-difluoro-					CAS #: 75-37-6		
1.866	468809	1.50412709	1.504127	38	NIST11.1	364	40
Butane					CAS #: 106-97-8		
2.225	861618	2.76441774	2.764418	42	NIST11.1	232	40
Acetaldehyde					CAS #: 75-07-0		
2.353	987973	3.16981285	3.169813	74	NIST11.1	71	40
Naphthalene					CAS #: 91-20-3		
26.298	487076	1.07348294	1.073483	94	NIST11.1	11942	71

Date : 17-OCT-2015 04:43

Client ID: 985--

Instrument: HP09464.i

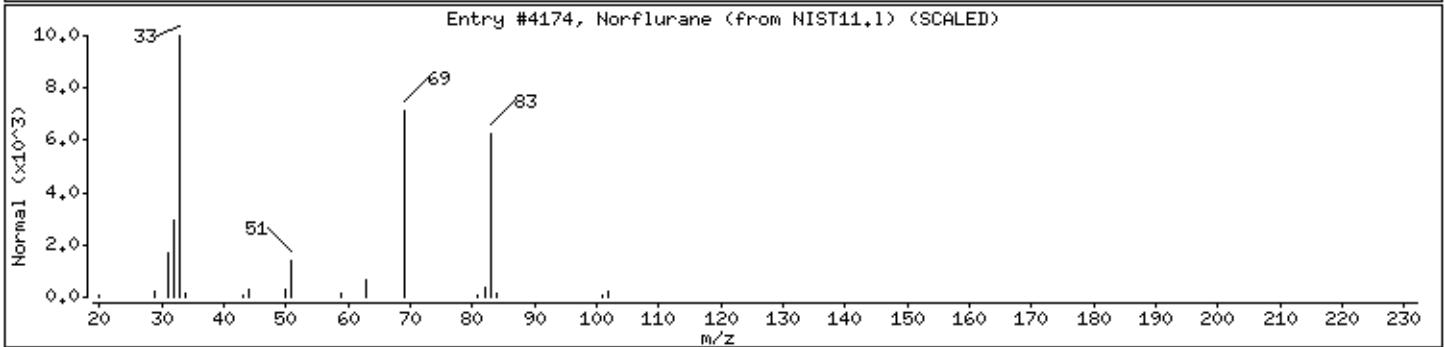
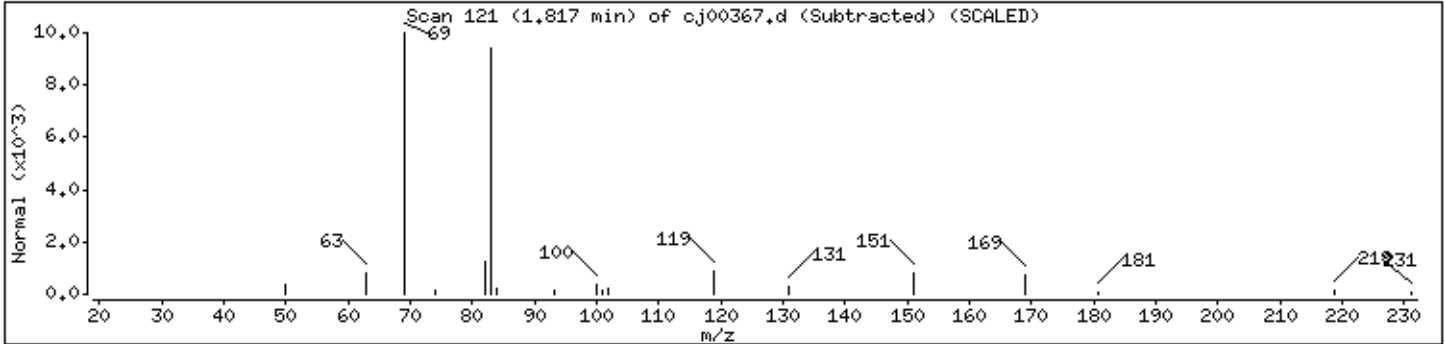
Sample Info: 8087714;500;C1528830AB;985--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Norflurane	811-97-2	NIST11.1	4174	72	C2H2F4	102



Date : 17-OCT-2015 04:43

Client ID: 985--

Instrument: HP09464.i

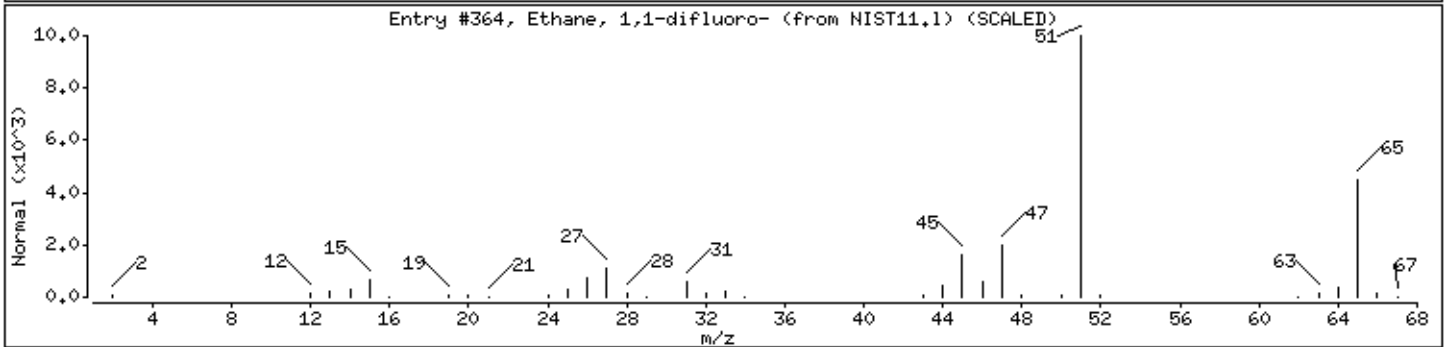
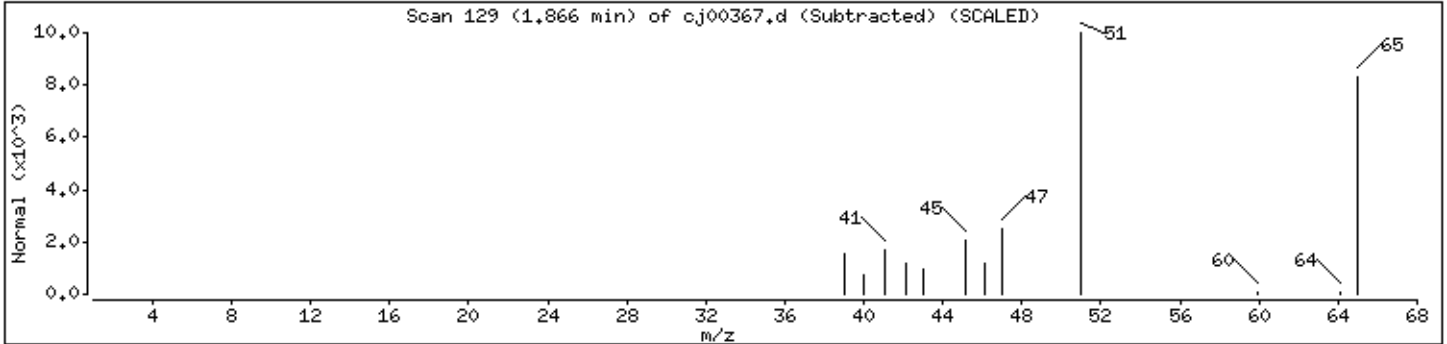
Sample Info: 8087714;500;C1528830AB;985--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,1-difluoro-	75-37-6	NIST11.1	364	38	C2H4F2	66



Date : 17-OCT-2015 04:43

Client ID: 985--

Instrument: HP09464.i

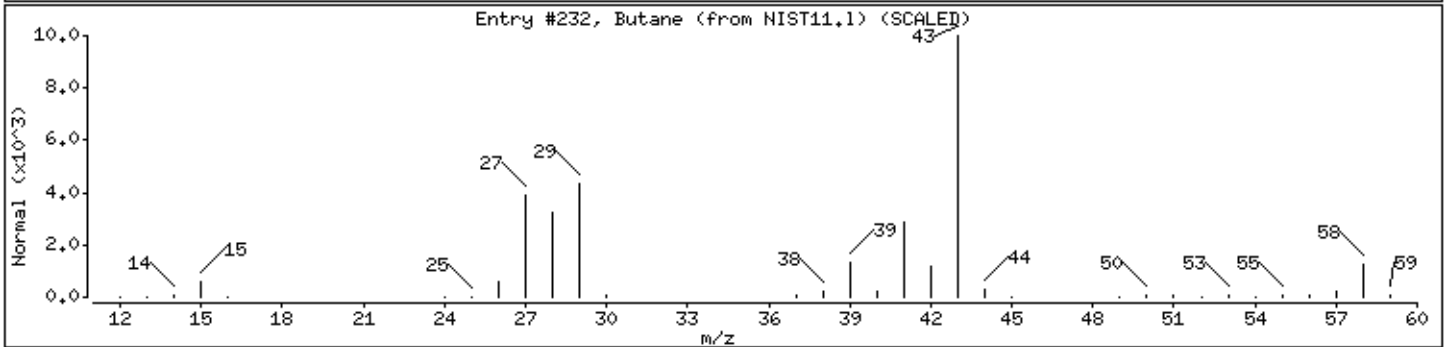
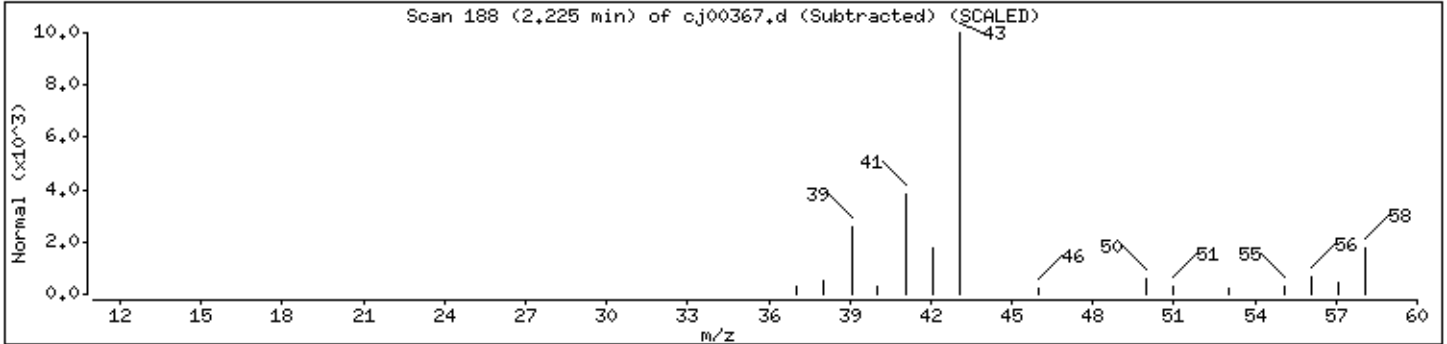
Sample Info: 8087714;500;C1528830AB;985--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Butane	106-97-8	NIST11.1	232	42	C4H10	58



Date : 17-OCT-2015 04:43

Client ID: 985--

Instrument: HP09464.i

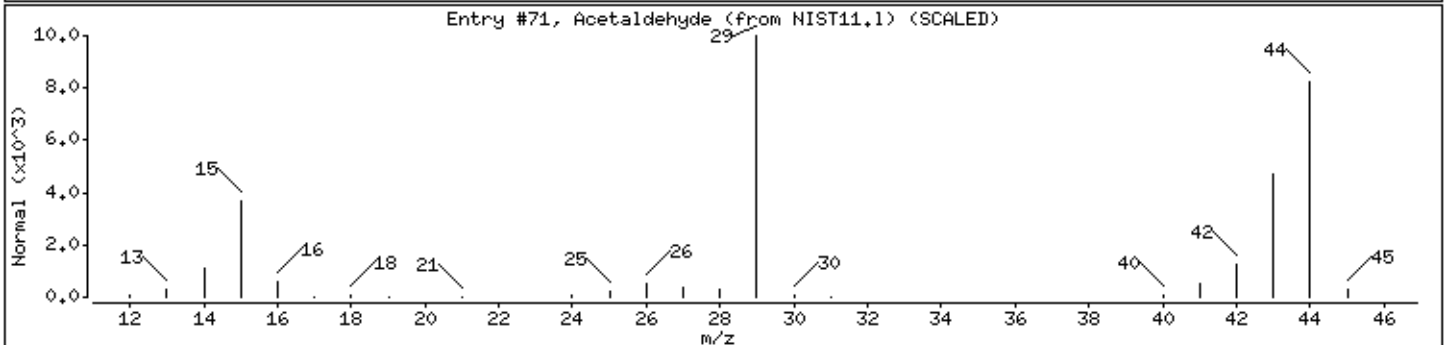
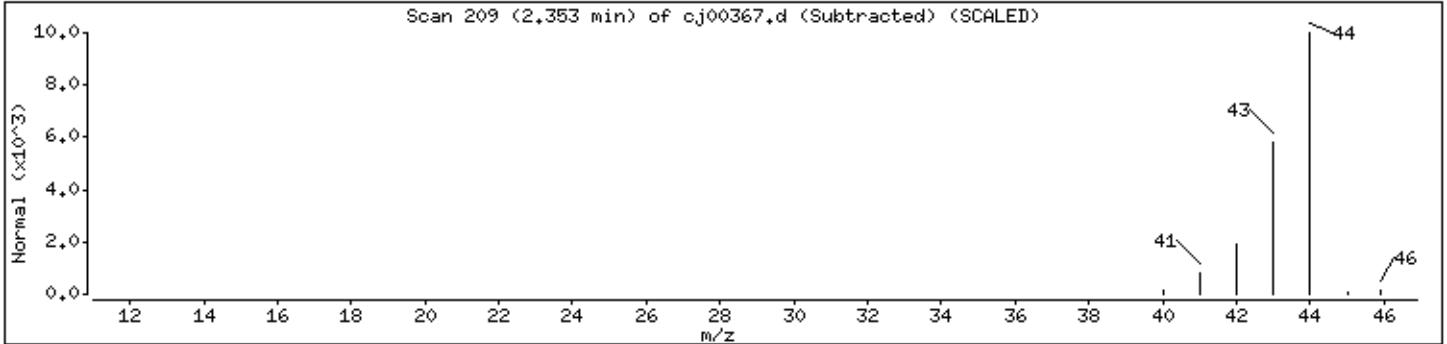
Sample Info: 8087714;500;C1528830AB;985--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetaldehyde	75-07-0	NIST11.1	71	74	C2H4O	44



Date : 17-OCT-2015 04:43

Client ID: 985--

Instrument: HP09464,i

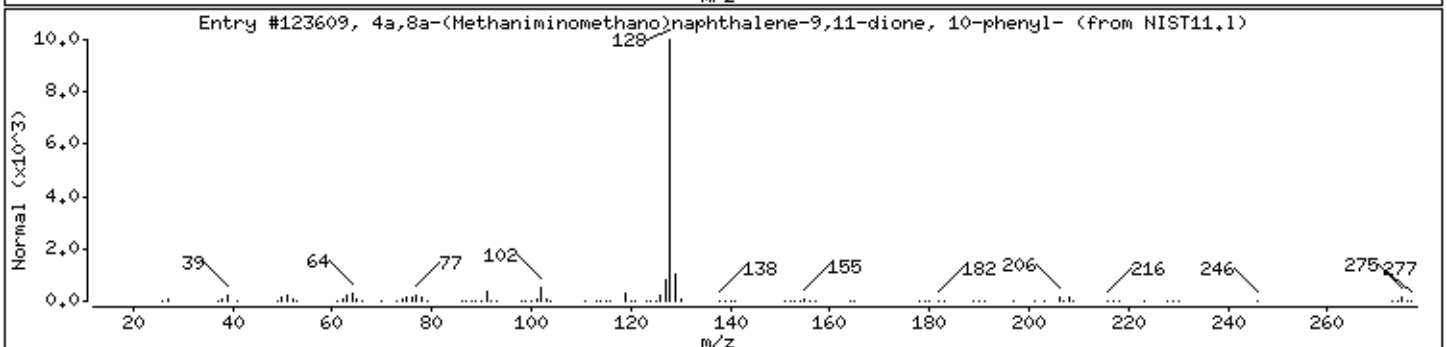
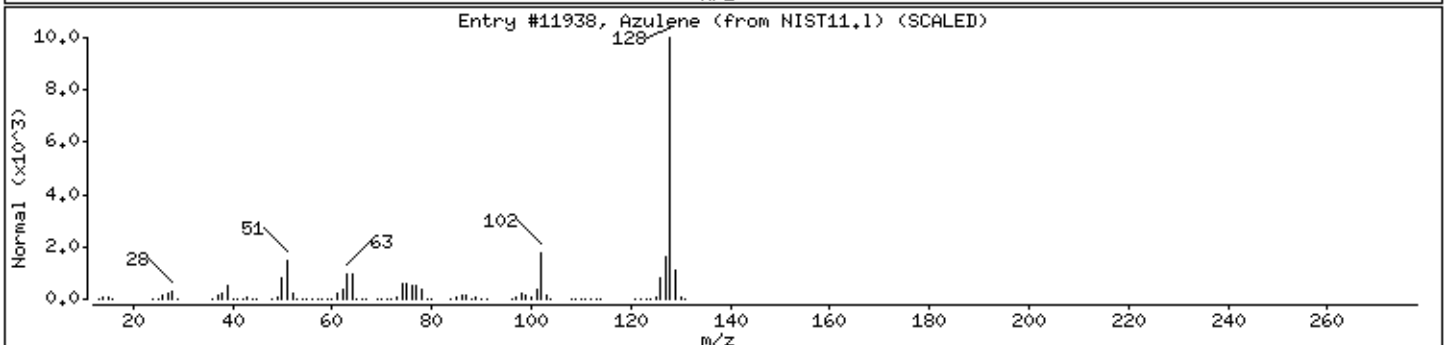
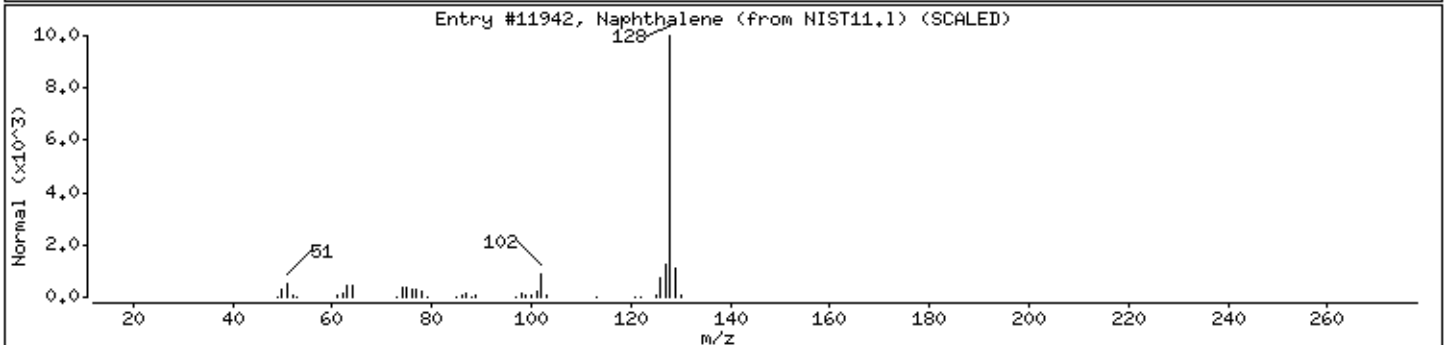
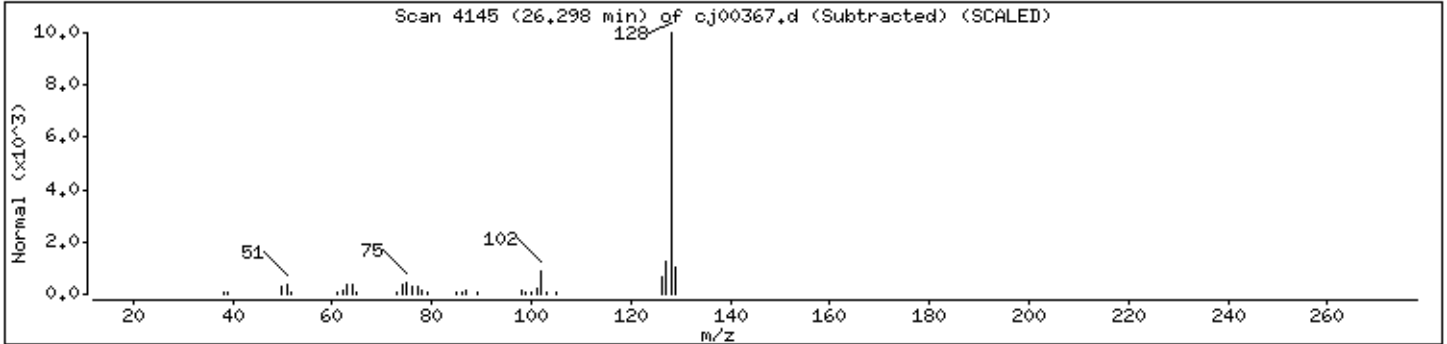
Sample Info: 8087714;500;C1528830AB;985--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene	91-20-3	NIST11.1	11942	94	C10H8	128
Azulene	275-51-4	NIST11.1	11938	91	C10H8	128
4a,8a-(Methaniminomethano)naphthalene-9,	69915-10-2	NIST11.1	123609	78	C18H13N02	275



985--DL

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 8087714DL

Data file: /chem/HP09464.i/15oct19.b/cj00392.d Injection date and time: 19-OCT-2015 21:00
Data file Sample Info. Line: 8087714DL;50;C1528830AC;985--DL;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AC
Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Blank Data file reference: /chem/HP09464.i/15oct19.b/cj00386.d

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time (Last Method Edit): 19-OCT-2015 16:04
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct19.b/cj00385.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 26.8 psia Canister Pressure before dilution (Ya): 13.4 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 50 cc

Analysis Comments:

Table with 8 columns: Internal Standards, RT (+/-RT), Scan, QIon, Area(+/- %Change), Conc. (on column), QC Flag, QC Limits. Rows include Bromochloromethane, 1,4-Difluorobenzene, and Chlorobenzene-d5.

Table with 11 columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit, LOQ. Lists various compounds like Dichlorodifluoromethane, Freon 114, Acetone, etc.

985--DL

Lancaster Laboratories, Inc. Analysis Summary for GC/MS Volatiles in Air 8087714DL

Data file: /chem/HP09464.i/15oct19.b/cj00392.d Injection date and time: 19-OCT-2015 21:00
Data file Sample Info. Line: 8087714DL;50;C1528830AC;985--DL;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AC
Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Blank Data file reference: /chem/HP09464.i/15oct19.b/cj00386.d

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time (Last Method Edit): 19-OCT-2015 16:04
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct19.b/cj00385.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 26.8 psia Canister Pressure before dilution (Ya): 13.4 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 50 cc

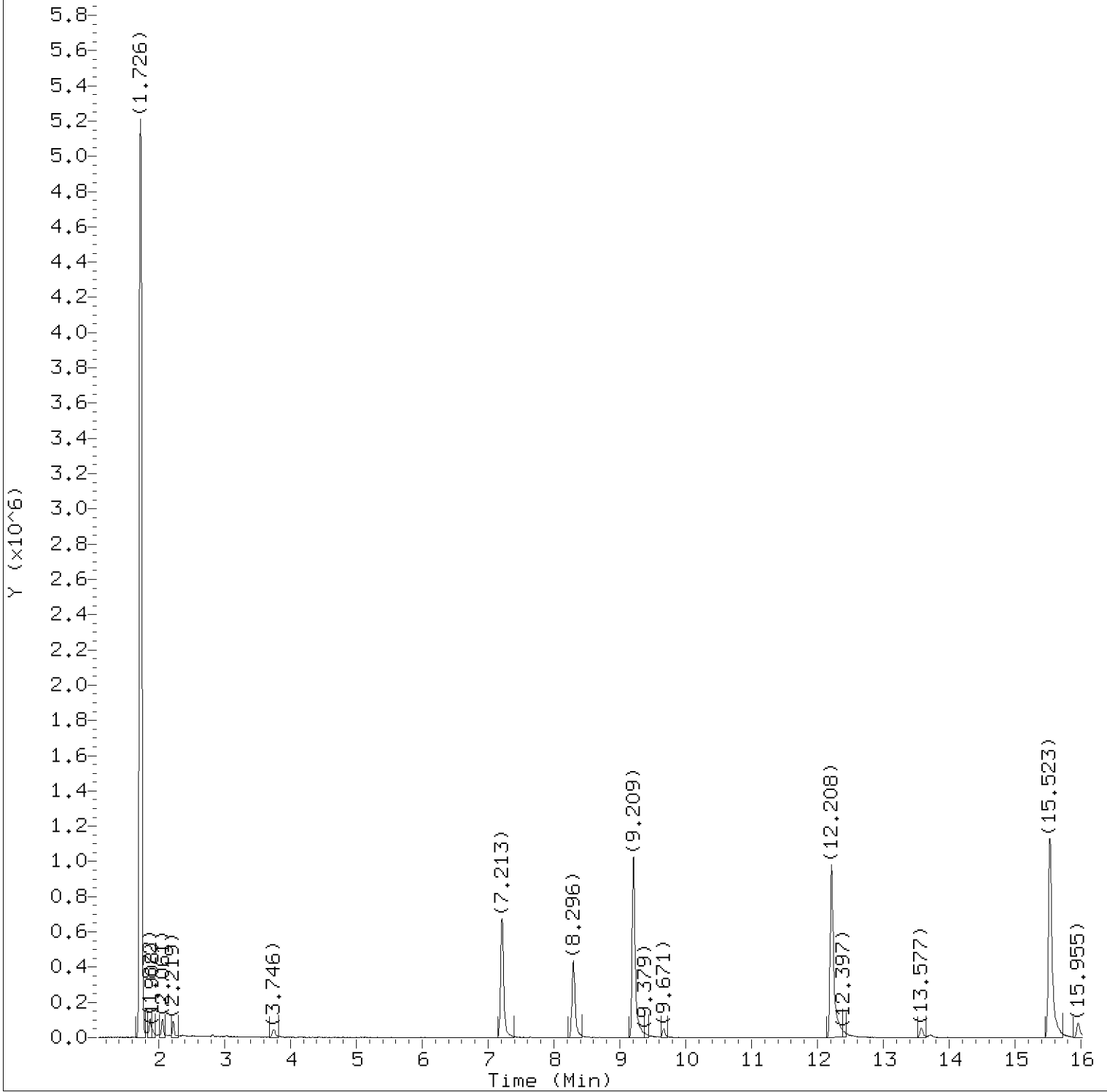
Table with columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit, LOQ (in sample). Lists various compounds like 70) 1,2-Dibromoethane, 72) Chlorobenzene, etc.

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Christine M. Ratcliff on 10/22/2015 at 09:47. Parallax ID: cmr00412





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: 292

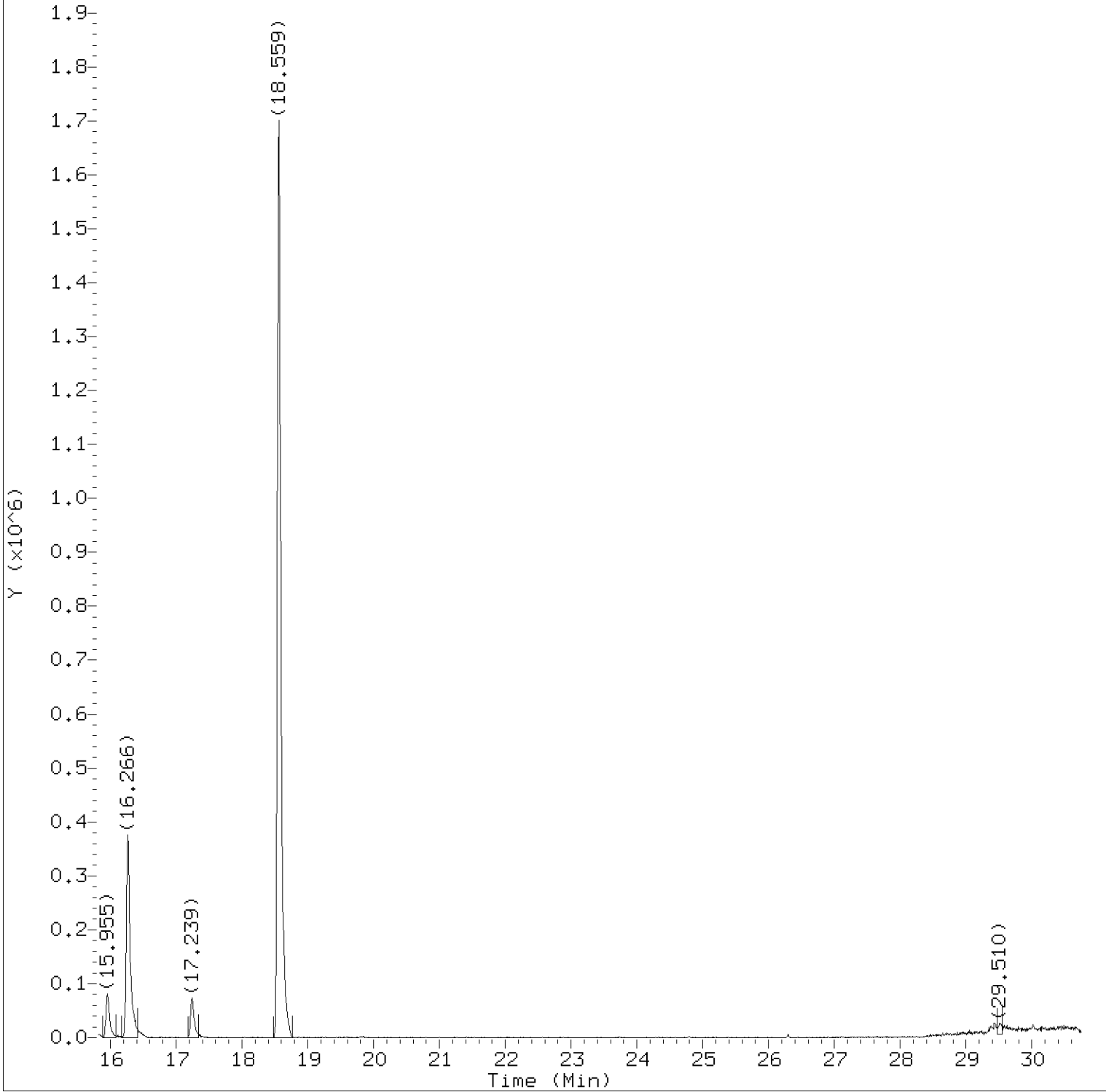
Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Sample Name: 985--DL

Lab Sample ID: 8087714DL

Digitally signed by Jacob E. Bailey  
on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: 292

Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Sample Name: 985--DL

Lab Sample ID: 8087714DL

Digitally signed by Jacob E. Bailey  
on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
 Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04

Sublist used: 292

Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

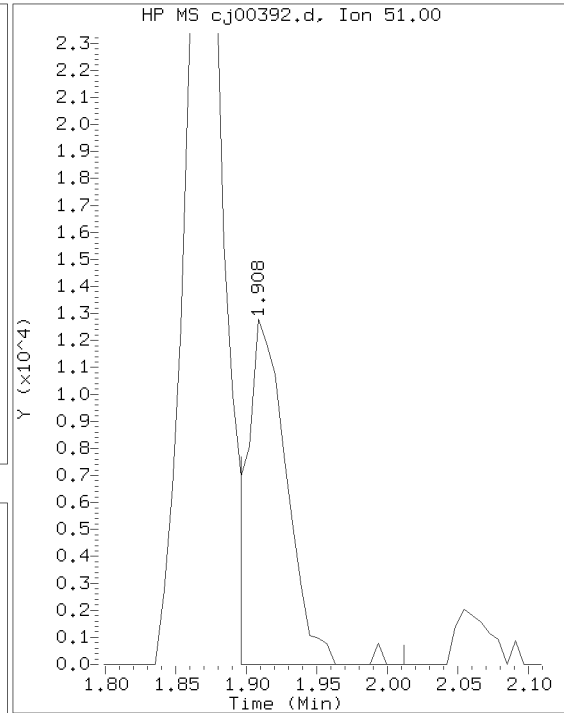
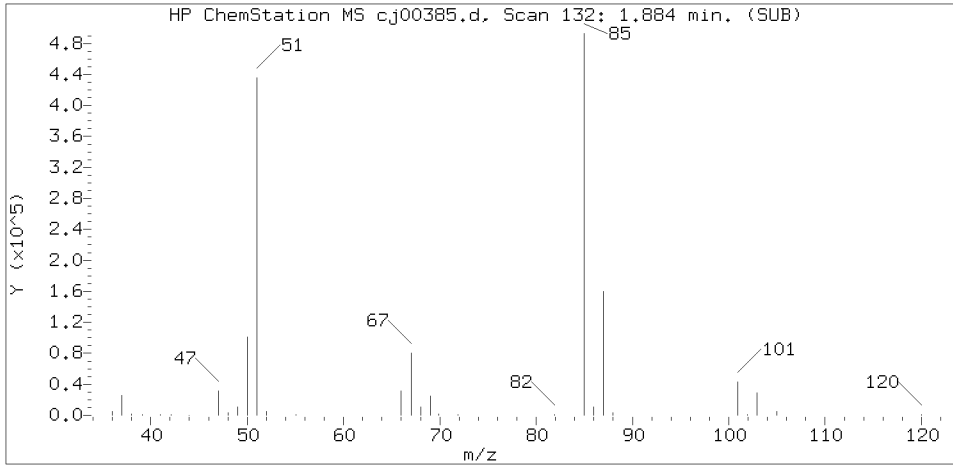
Sample Name: 985--DL

Lab Sample ID: 8087714DL

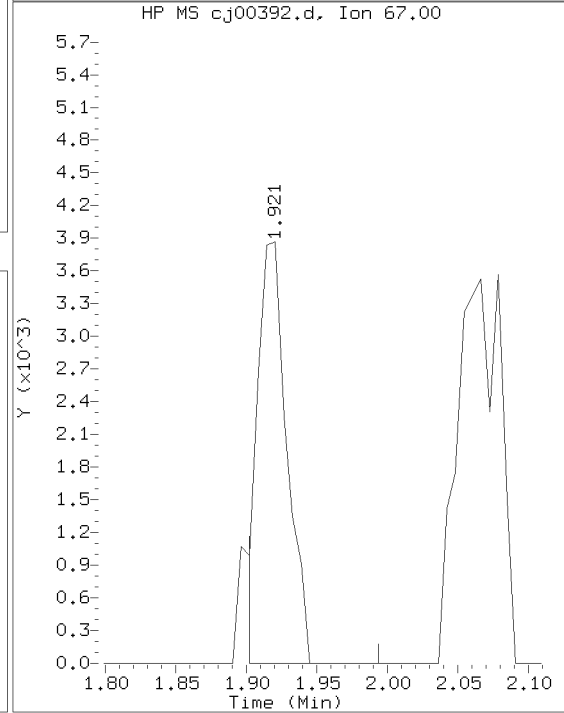
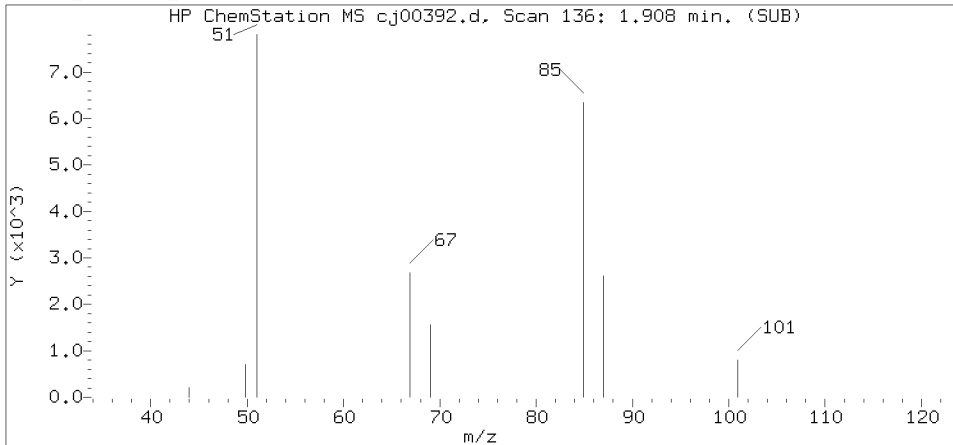
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
3) Chlorodifluoromethane	(1)	1.908	51	24226	0.470
19) Acetone	(1)	3.813	43	17051	0.757
40)*Bromochloromethane	(1)	7.213	130	547638	10.000
51)*1,4-Difluorobenzene	(2)	9.203	114	1679722	10.000
52) Trichloroethene	(2)	9.665	130	29123	0.414
67) Tetrachloroethene	(3)	13.577	166	34562	0.307
71)*Chlorobenzene-d5	(3)	15.523	117	1692963	10.000
74) Ethylbenzene	(3)	15.961	91	154822	1.060
75) m/p-Xylene	(3)	16.266	91	569564	4.716
76) o-Xylene	(3)	17.245	91	123063	0.968

\* = Compound is an internal standard.

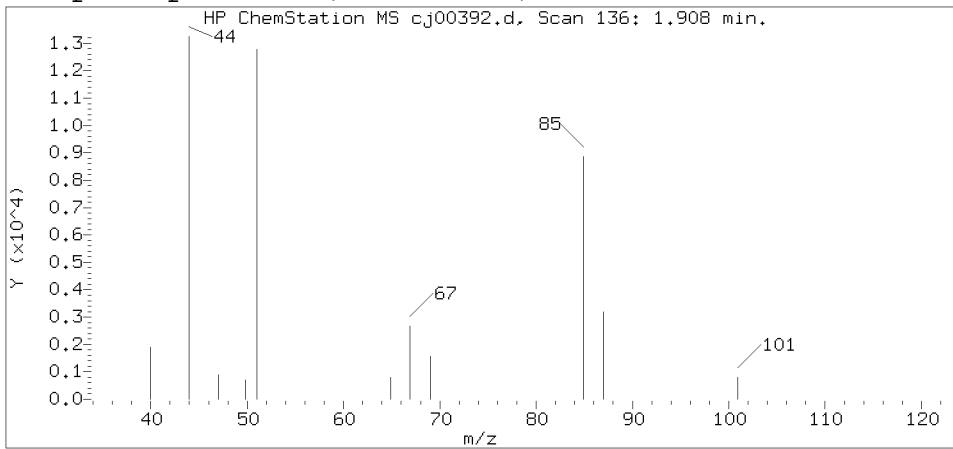
Reference Standard Spectrum for Chlorodifluoromethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
 Injection date and time: 19-OCT-2015 21:00

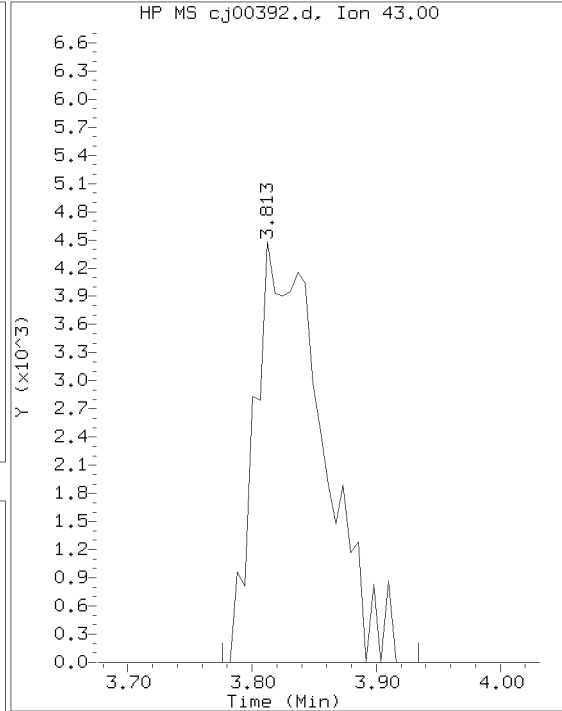
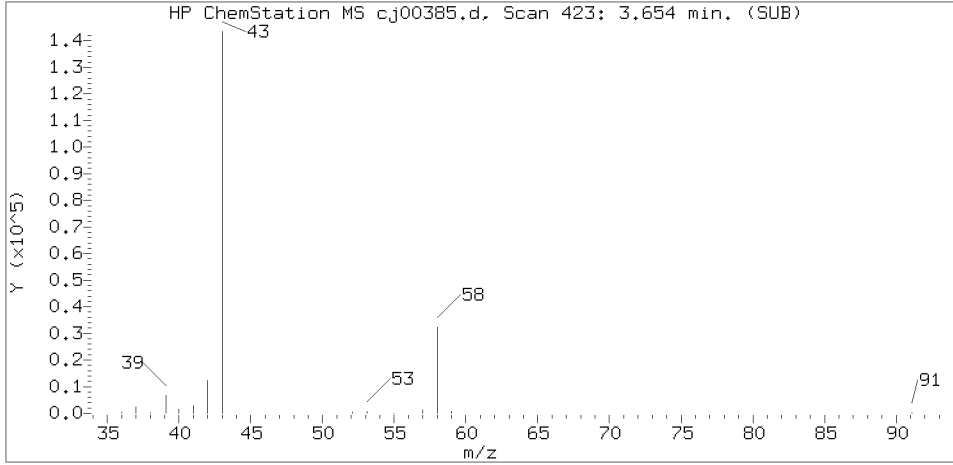
Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

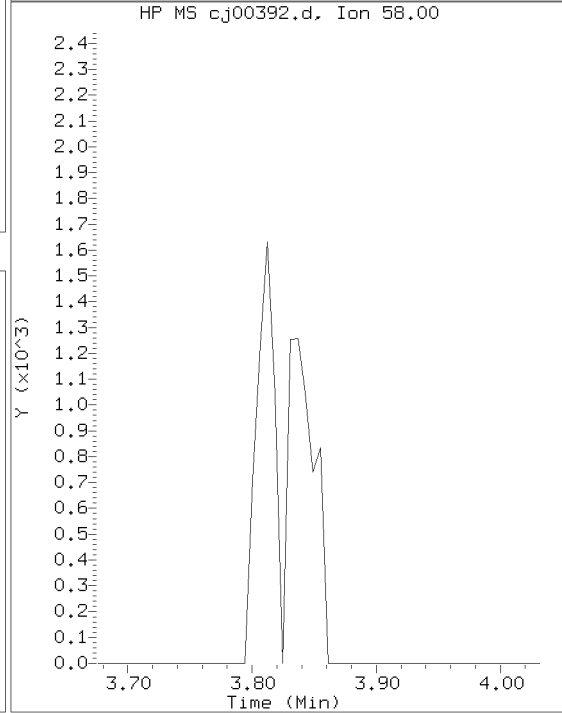
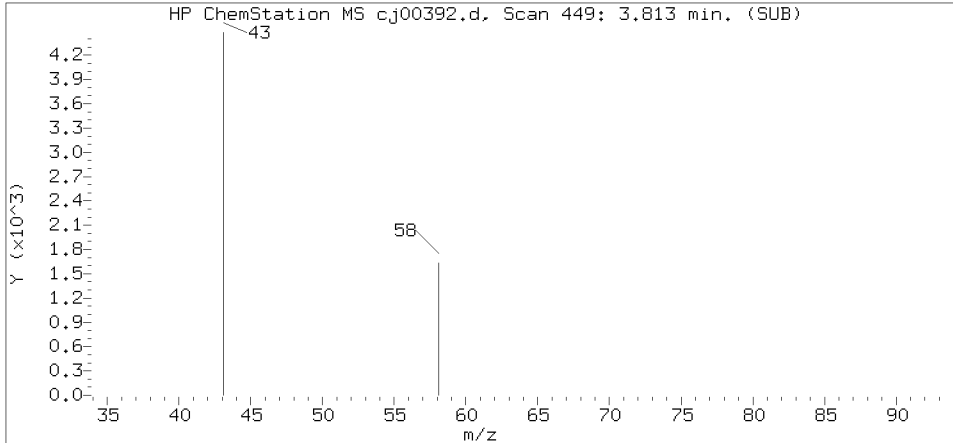
Sample Name: 985--DL                      Lab Sample ID: 8087714DL

Compound Number : 3  
 Compound Name : Chlorodifluoromethane  
 Scan Number : 136  
 Retention Time (minutes): 1.908  
 Relative Retention Time : 0.00104  
 Quant Ion : 51.00  
 Area (flag) : 24226  
 Concentration (ppb(v)) : 0.4704

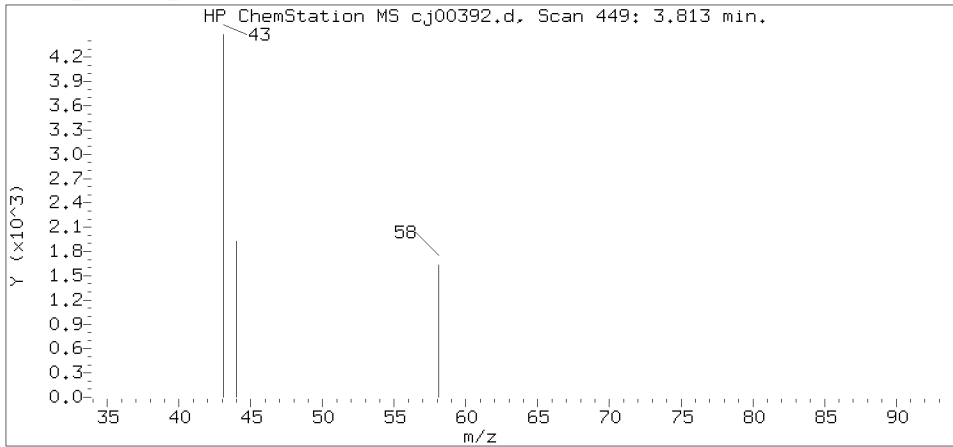
Reference Standard Spectrum for Acetone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
 Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

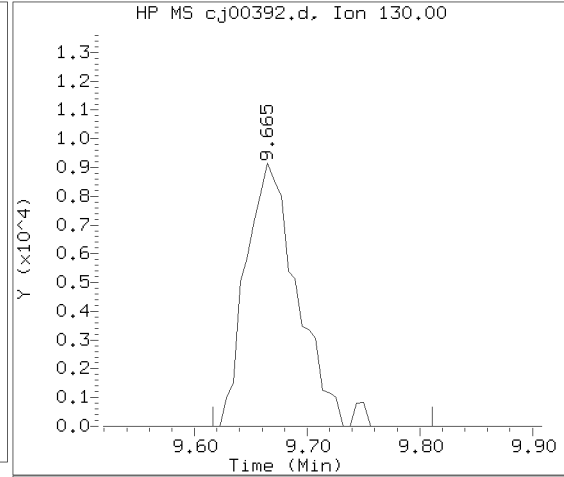
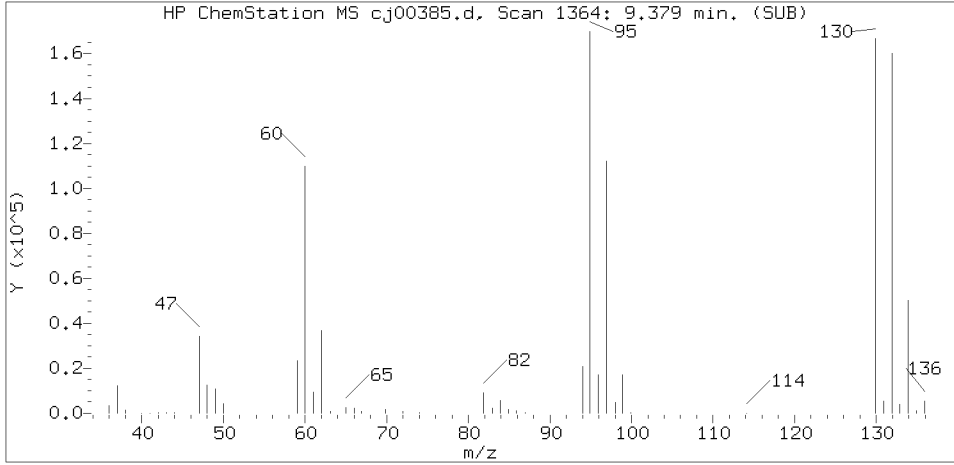
Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Sample Name: 985--DL

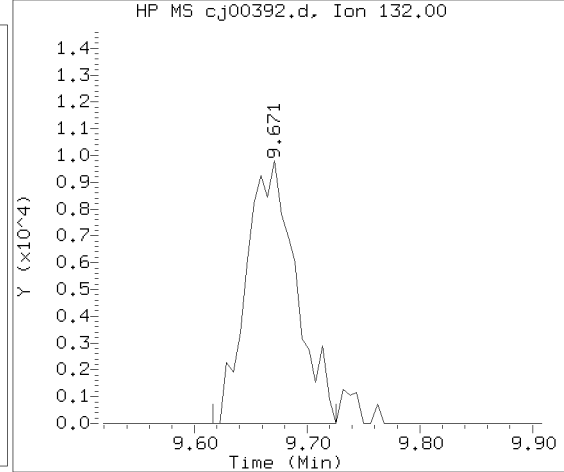
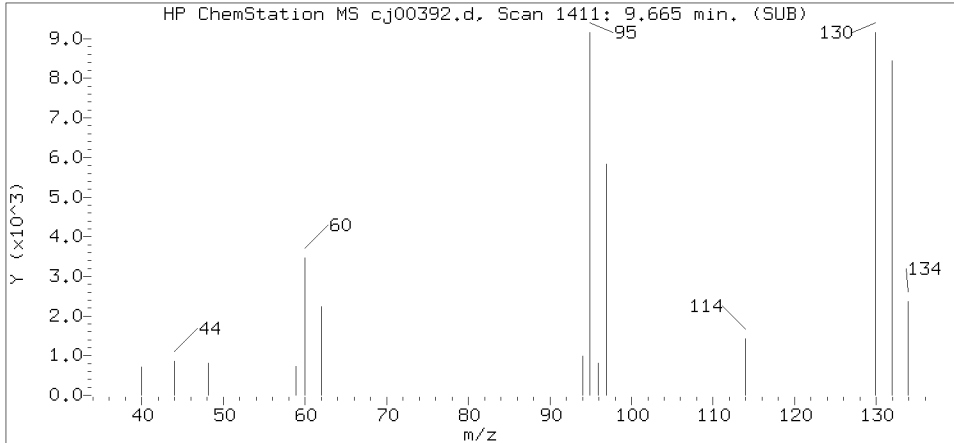
Lab Sample ID: 8087714DL

Compound Number : 19  
 Compound Name : Acetone  
 Scan Number : 449  
 Retention Time (minutes): 3.813  
 Relative Retention Time : -0.00379  
 Quant Ion : 43.00  
 Area (flag) : 17051  
 Concentration (ppb(v)) : 0.7571

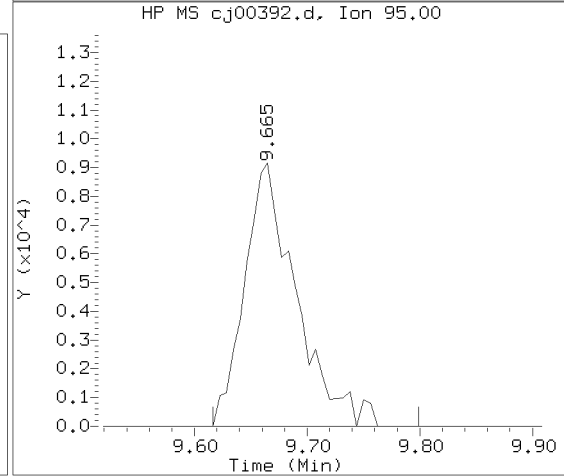
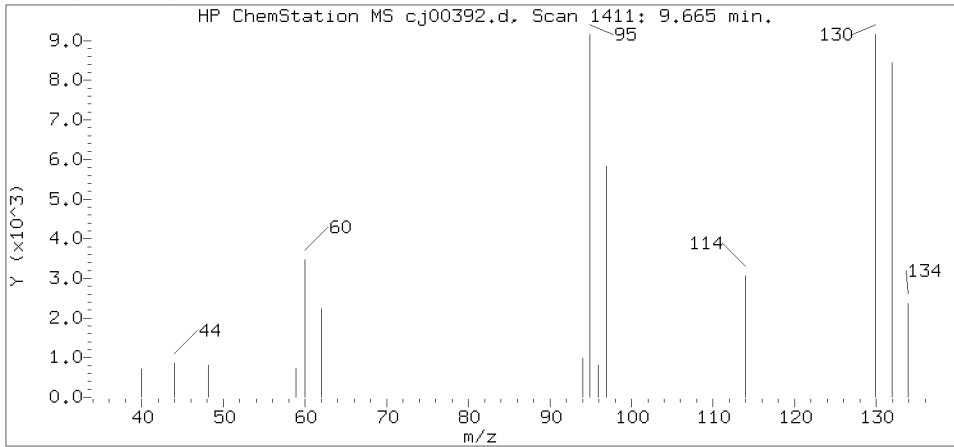
Reference Standard Spectrum for Trichloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
 Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

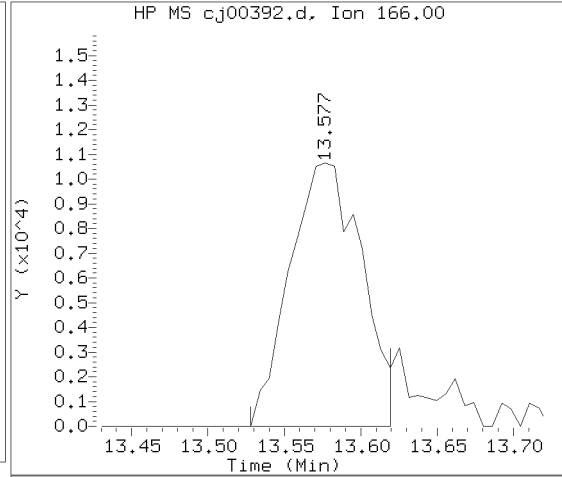
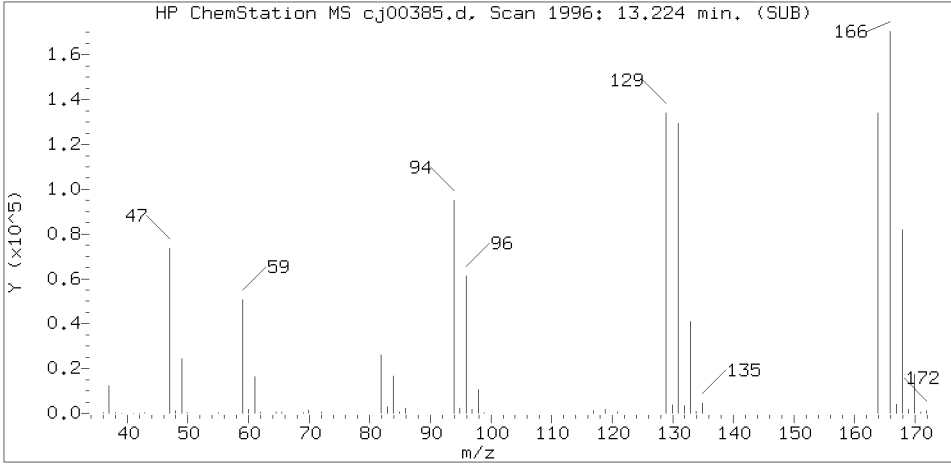
Sublist used: 292

Sample Name: 985--DL

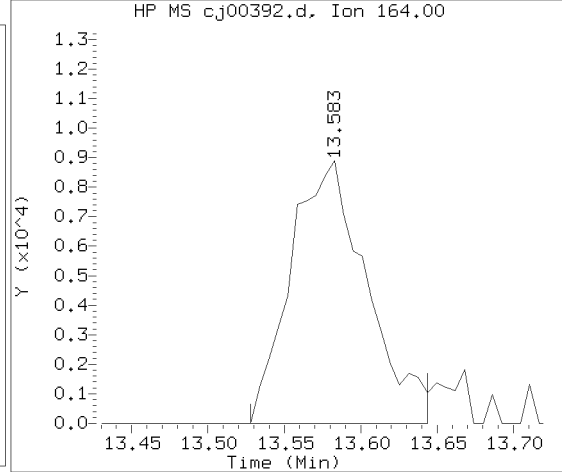
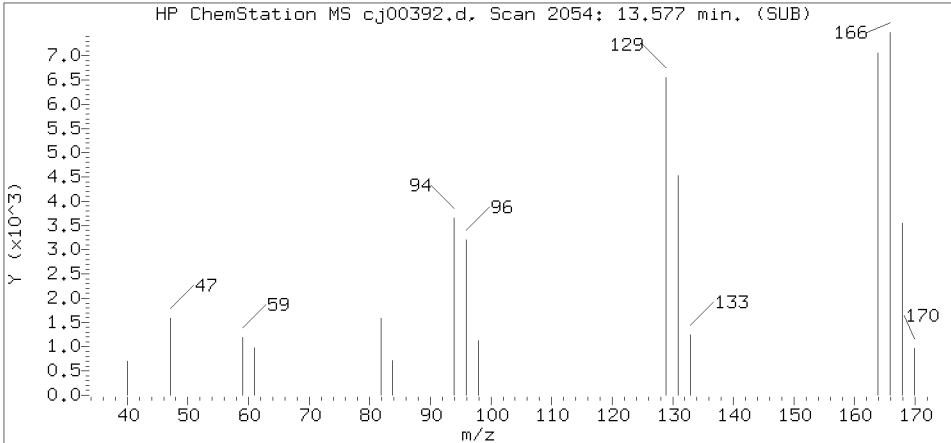
Lab Sample ID: 8087714DL

Compound Number : 52  
 Compound Name : Trichloroethene  
 Scan Number : 1411  
 Retention Time (minutes): 9.665  
 Relative Retention Time : -0.00066  
 Quant Ion : 130.00  
 Area (flag) : 29123  
 Concentration (ppb(v)) : 0.4138

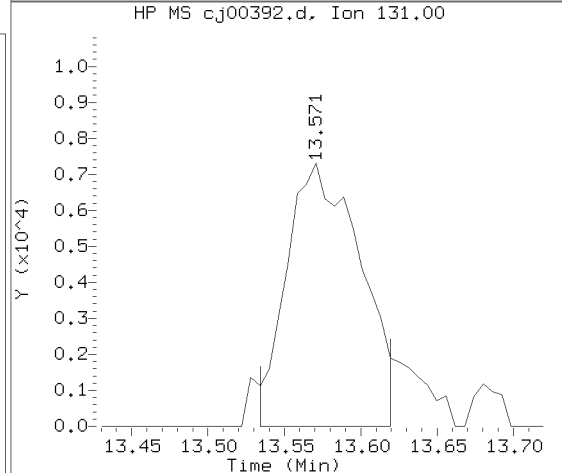
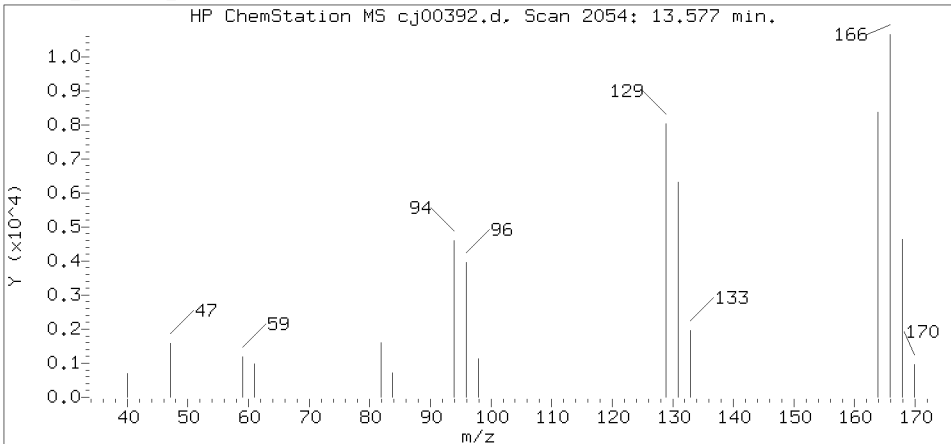
Reference Standard Spectrum for Tetrachloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
 Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Sample Name: 985--DL

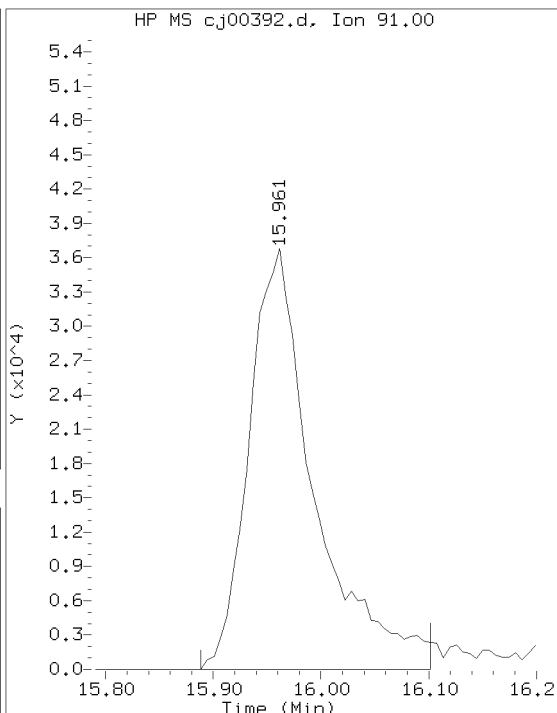
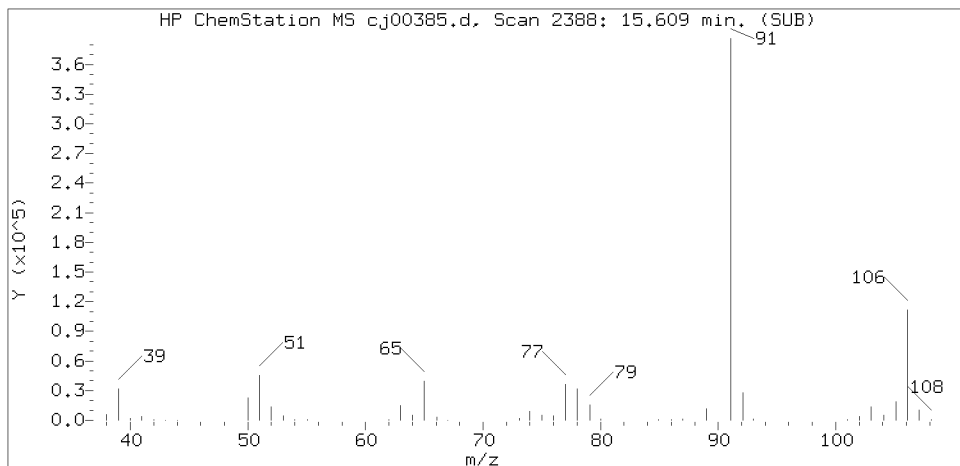
Lab Sample ID: 8087714DL

Compound Number : 67  
 Compound Name : Tetrachloroethene  
 Scan Number : 2054  
 Retention Time (minutes): 13.577  
 Relative Retention Time : -0.00000  
 Quant Ion : 166.00  
 Area (flag) : 34562  
 Concentration (ppb(v)) : 0.3071

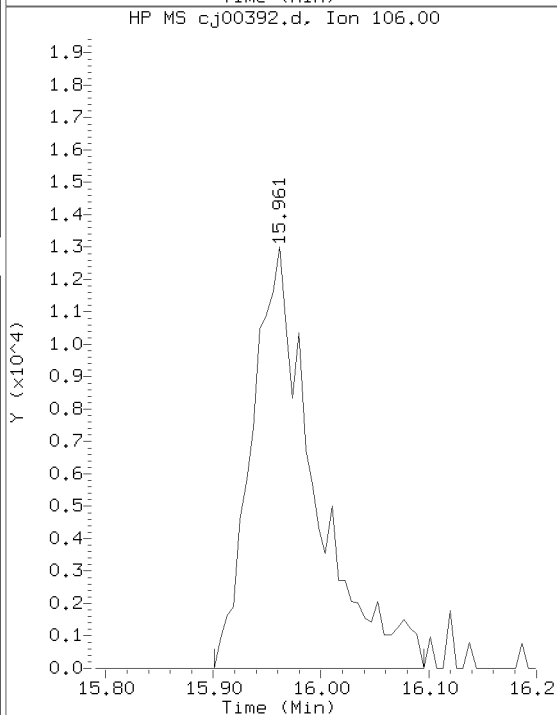
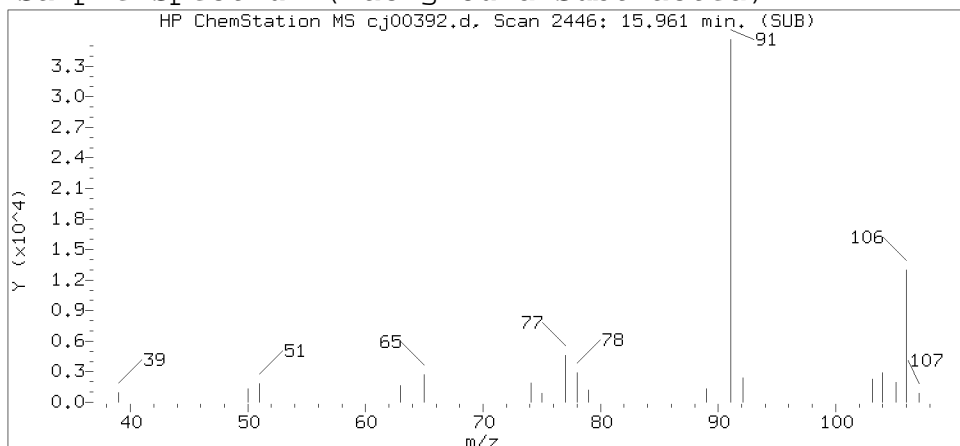
Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 259 of 1243

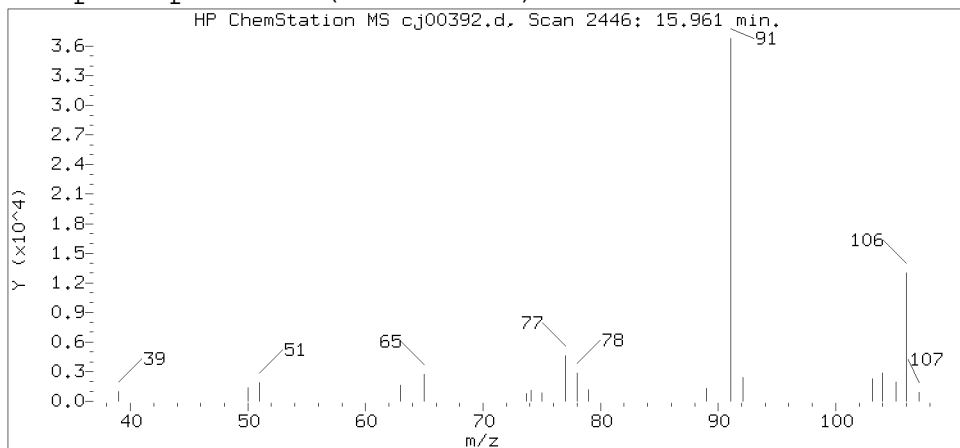
# Reference Standard Spectrum for Ethylbenzene



## Sample Spectrum (Background Subtracted)



## Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04  
Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Sublist used: 292

Sample Name: 985--DL

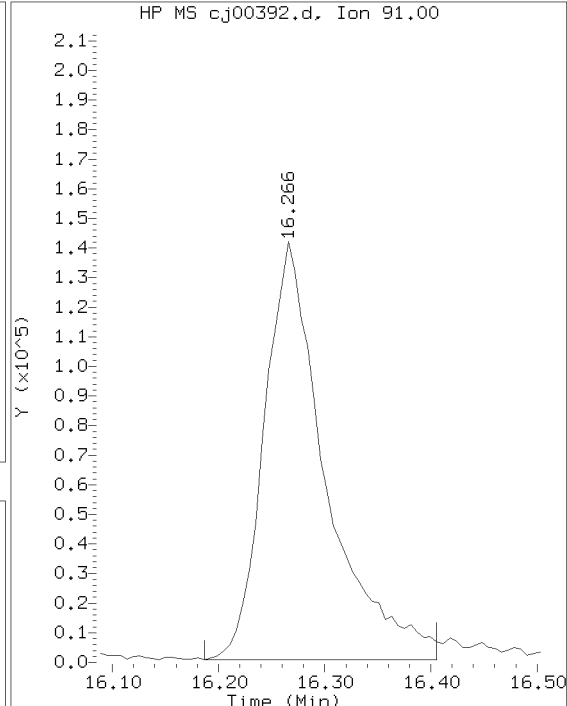
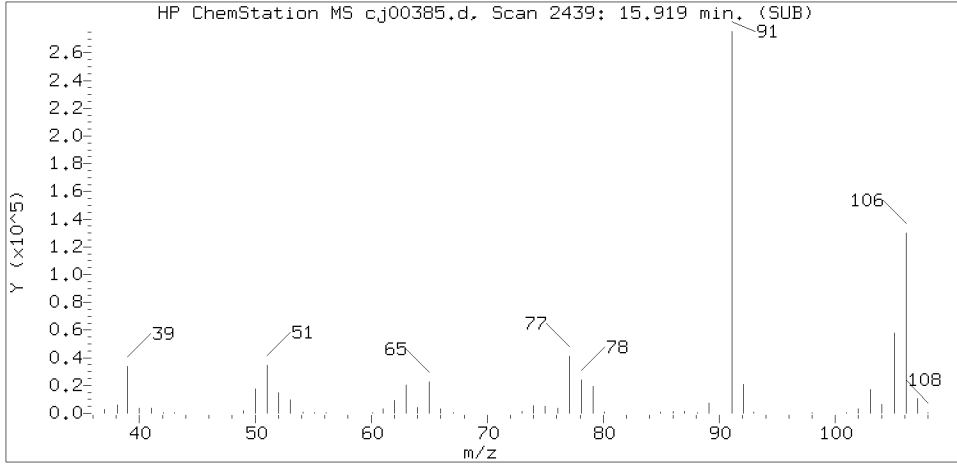
Lab Sample ID: 8087714DL

Compound Number : 74  
Compound Name : Ethylbenzene  
Scan Number : 2446  
Retention Time (minutes): 15.961  
Relative Retention Time : -0.00078  
Quant Ion : 91.00  
Area (flag) : 154822  
Concentration (ppb(v)) : 1.0601

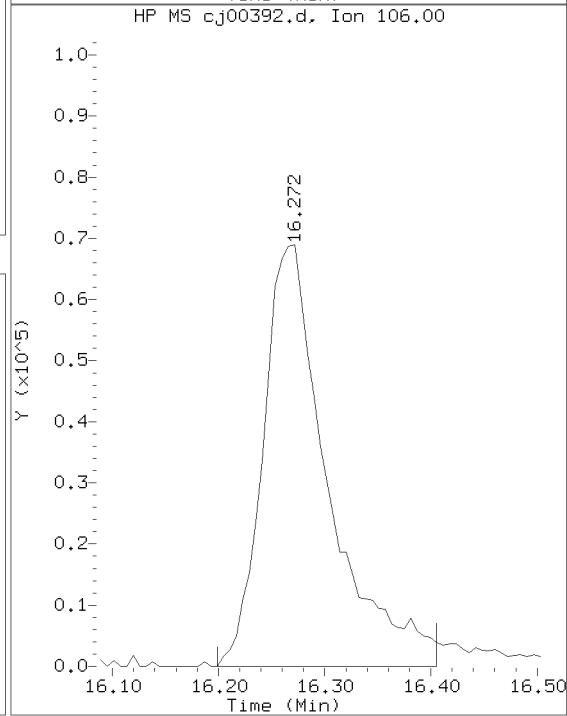
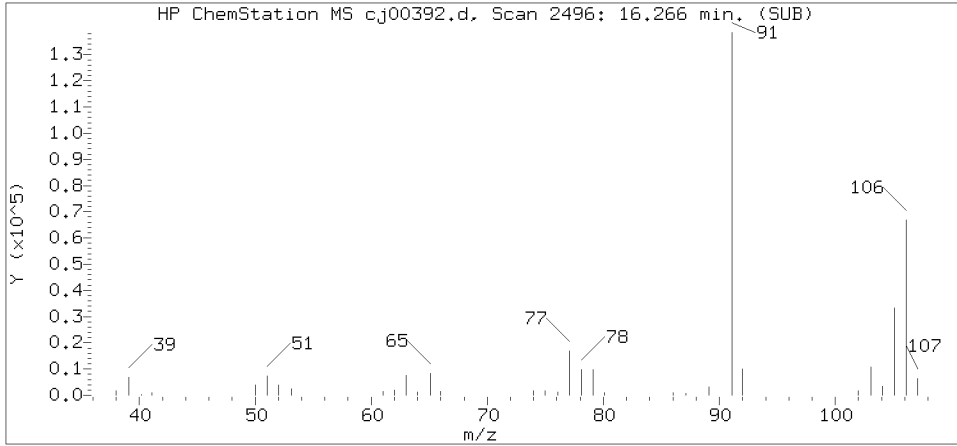
Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.  
Target 3.5 esignature user ID: jeb07445



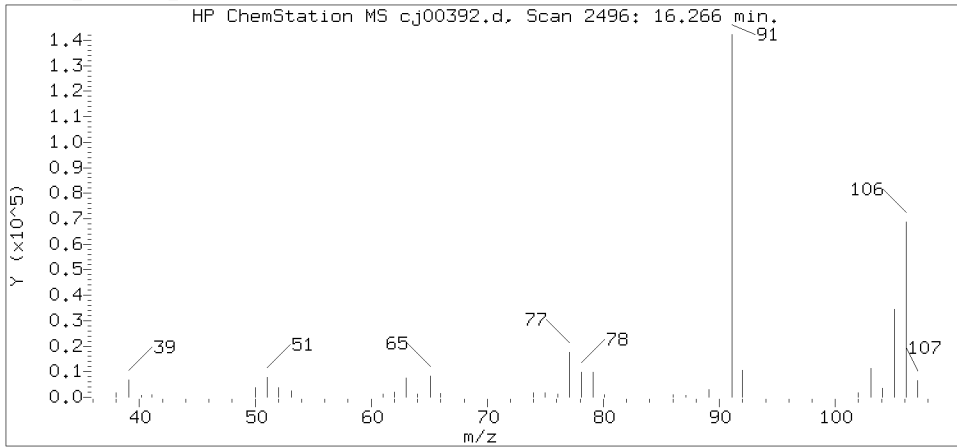
Reference Standard Spectrum for m/p-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04  
Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Sample Name: 985--DL

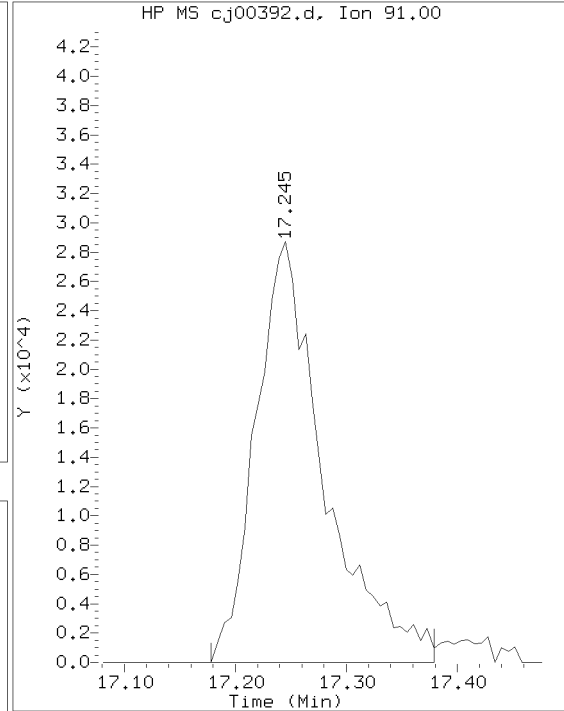
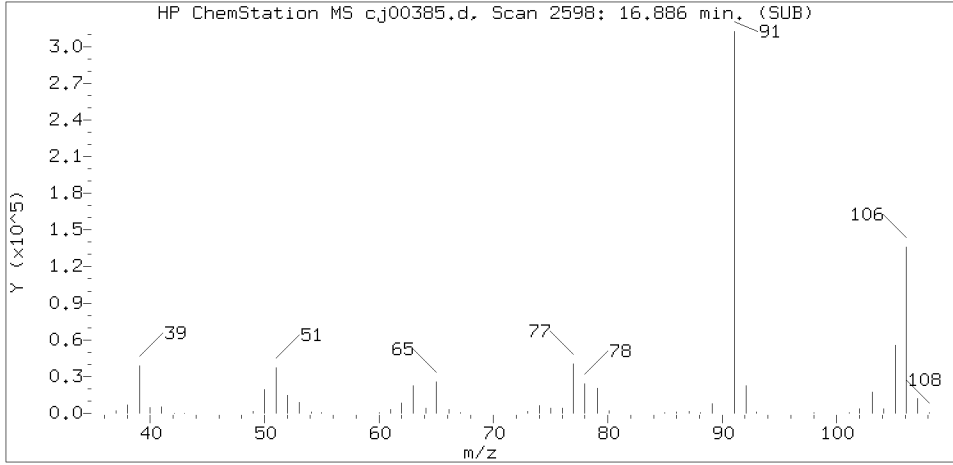
Lab Sample ID: 8087714DL

Compound Number : 75  
Compound Name : m/p-Xylene  
Scan Number : 2496  
Retention Time (minutes): 16.266  
Relative Retention Time : 0.00000  
Quant Ion : 91.00  
Area (flag) : 569564  
Concentration (ppb(v)) : 4.7158

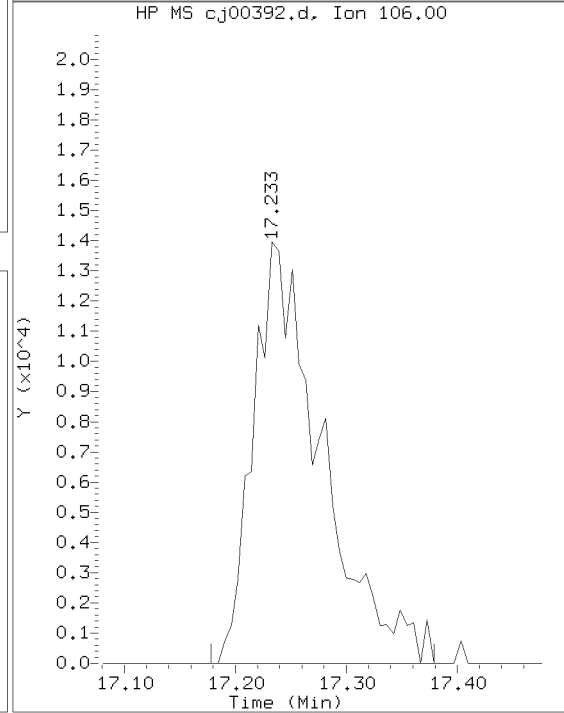
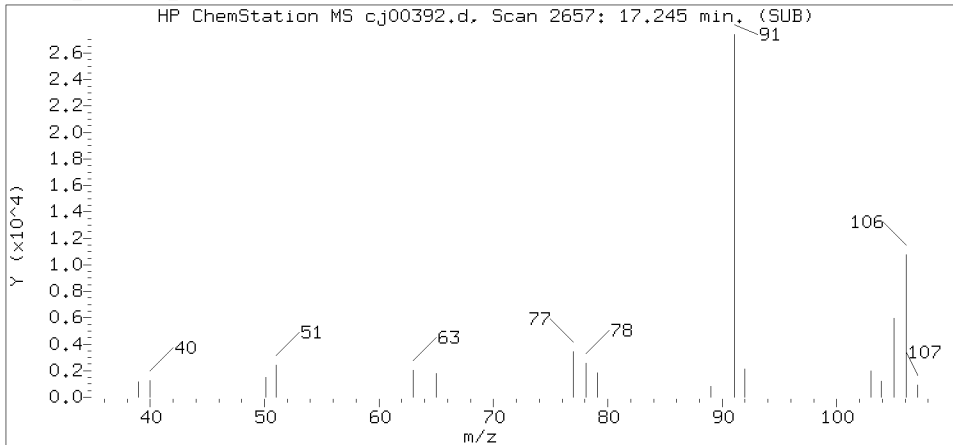
Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445  
SSX23 Page 261 of 1243

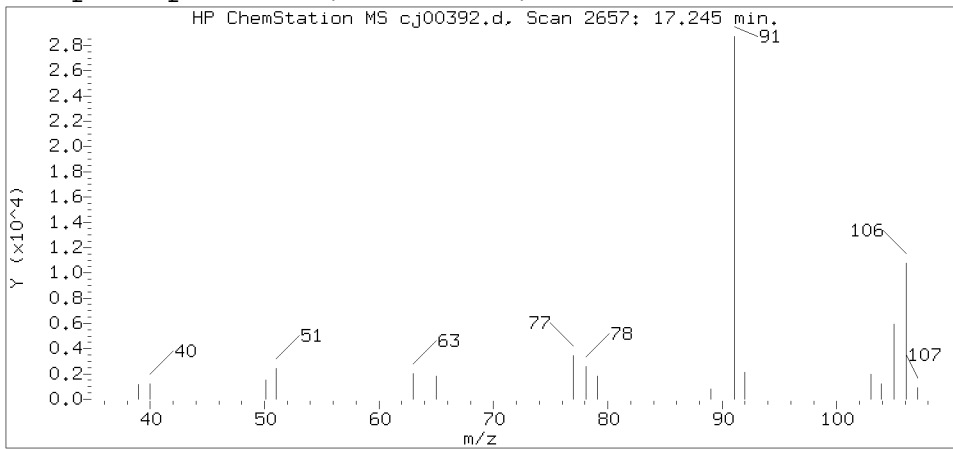
Reference Standard Spectrum for o-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00392.d  
 Injection date and time: 19-OCT-2015 21:00

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 19-OCT-2015 16:04  
 Date, time and analyst ID of latest file update: 19-Oct-2015 21:40 Automation

Sample Name: 985--DL

Lab Sample ID: 8087714DL

Compound Number : 76  
 Compound Name : o-Xylene  
 Scan Number : 2657  
 Retention Time (minutes): 17.245  
 Relative Retention Time : -0.00078  
 Quant Ion : 91.00  
 Area (flag) : 123063  
 Concentration (ppb(v)) : 0.9681

Digitally signed by Jacob E. Bailey on 10/20/2015 at 16:57.

Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 262 of 1243

1014-

Lancaster Laboratories, Inc.  
 Analysis Summary for GC/MS Volatiles in Air 8087715

Data file: /chem/HP09464.i/15oct16.b/cj00368.d Injection date and time: 17-OCT-2015 05:30  
 Data file Sample Info. Line: 8087715;500;C1528830AB;1014-;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AB  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292  
 Calibration date and time (Last Method Edit): 16-OCT-2015 16:10  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 26.7 psia Canister Pressure before dilution (Ya): 13.4 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 500 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	7.207(-0.006)	1007	130	747606 (-7)	10.00		480075 - 1120173
51) 1,4-Difluorobenzene	9.196(-0.006)	1334	114	2409308 (-8)	10.00		1574006 - 3672680
71) Chlorobenzene-d5	15.517(0.000)	2373	117	1766076 (-26)	10.00		1433482 - 3344790

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Qual.	Limit (in sample)	LOQ
2) Dichlorodifluoromethane	(1)	1.896(-0.001)	85	102279	0.465	0.46		J	0.2	1
3) Chlorodifluoromethane	(1)			Not Detected					0.2	1
4) Freon 114	(1)			Not Detected					0.2	1
5) Chloromethane	(1)			Not Detected					0.2	1
6) Vinyl Chloride	(1)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.2	1
9) Chloroethane	(1)			Not Detected					0.2	1
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)	3.137(-0.001)	43	20051	0.497	0.50		J	0.2	1
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)	3.782(-0.000)	43	1045542	34.005	34.01			0.5	2
21) Carbon Disulfide	(1)			Not Detected					0.5	1
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)	6.879(-0.000)	72	83936	5.620	5.62			0.5	2
42) Chloroform	(1)	7.414(-0.000)	83	89509	0.632	0.63		J	0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
45) Carbon Tetrachloride	(1)			Not Detected					0.2	1
46) Benzene	(2)	8.400(-0.000)	78	54977	0.373	0.37		J	0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
48) Isooctane	(2)			Not Detected					0.2	1
50) Heptane	(2)	9.056(-0.000)	43	24347	0.637	0.64		J	0.2	1
52) Trichloroethene	(2)	9.665(-0.000)	130	203900	2.020	2.02			0.2	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
55) Dibromomethane	(2)			Not Detected					0.2	1
58) Bromodichloromethane	(2)			Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.2	1
60) 4-Methyl-2-Pentanone	(2)			Not Detected					0.5	2
61) Toluene	(3)	12.342(-0.000)	91	261775	1.898	1.90			0.2	1
62) Octane	(3)	12.810(-0.000)	43	19860	0.547	0.55		J	0.2	1
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
67) Tetrachloroethene	(3)			Not Detected					0.2	1
68) 2-Hexanone	(3)	13.996(-0.000)	43	31017	0.972	0.97		J	0.5	2
69) Dibromochloromethane	(3)			Not Detected					0.2	1

1014-

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 8087715

Data file: /chem/HP09464.i/15oct16.b/cj00368.d Injection date and time: 17-OCT-2015 05:30
Data file Sample Info. Line: 8087715;500;C1528830AB;1014-;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AB
Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time (Last Method Edit): 16-OCT-2015 16:10
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

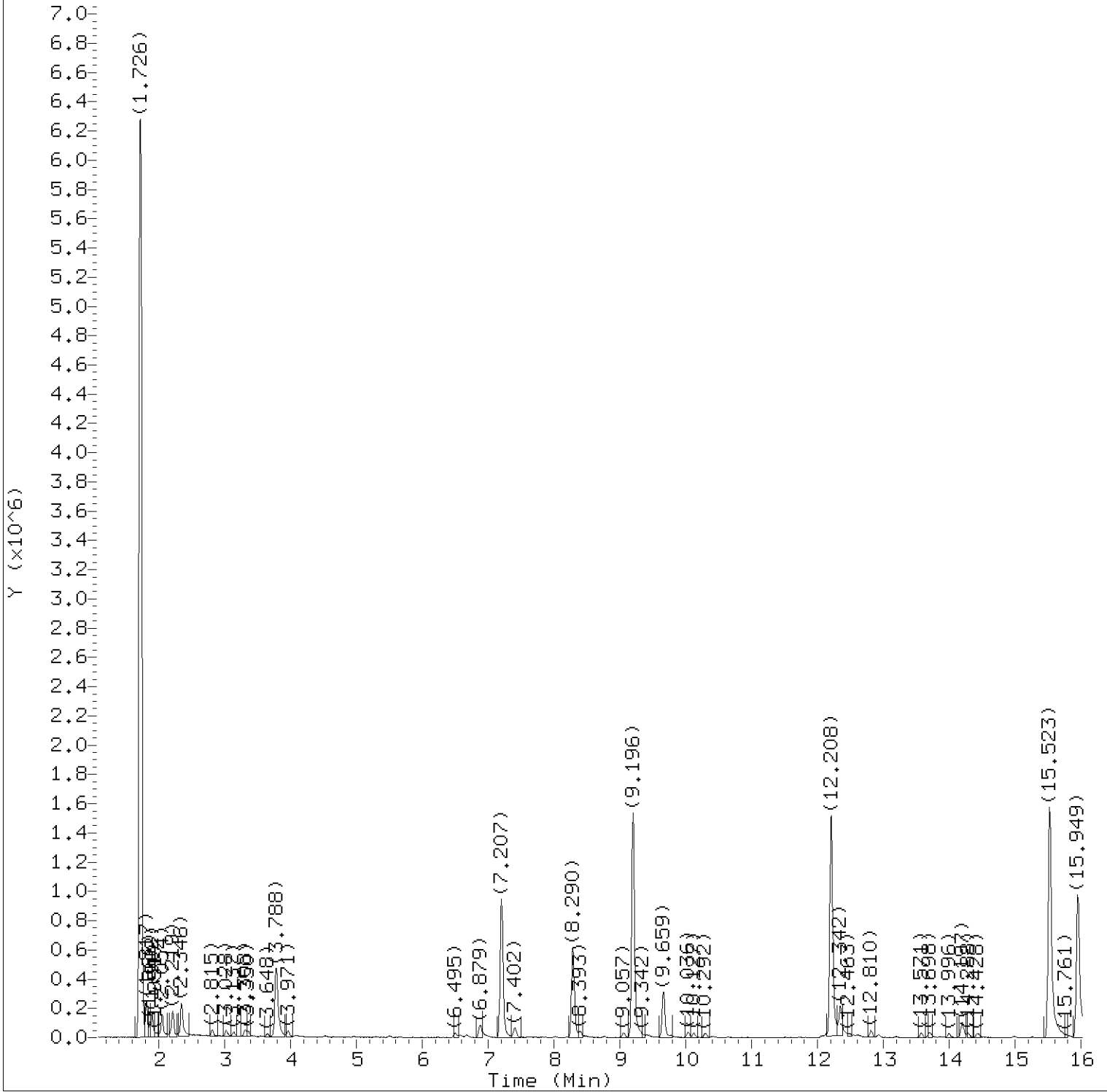
Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 26.7 psia Canister Pressure before dilution (Ya): 13.4 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 500 cc

Table with columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit, LOQ (in sample). Lists various compounds like 70) 1,2-Dibromoethane, 72) Chlorobenzene, etc.

Total number of targets = 62

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41. Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Michele J. Smith on 10/30/2015 at 15:42. Parallax ID: mjs00758



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 16-OCT-2015 16:10

Sublist used: 292

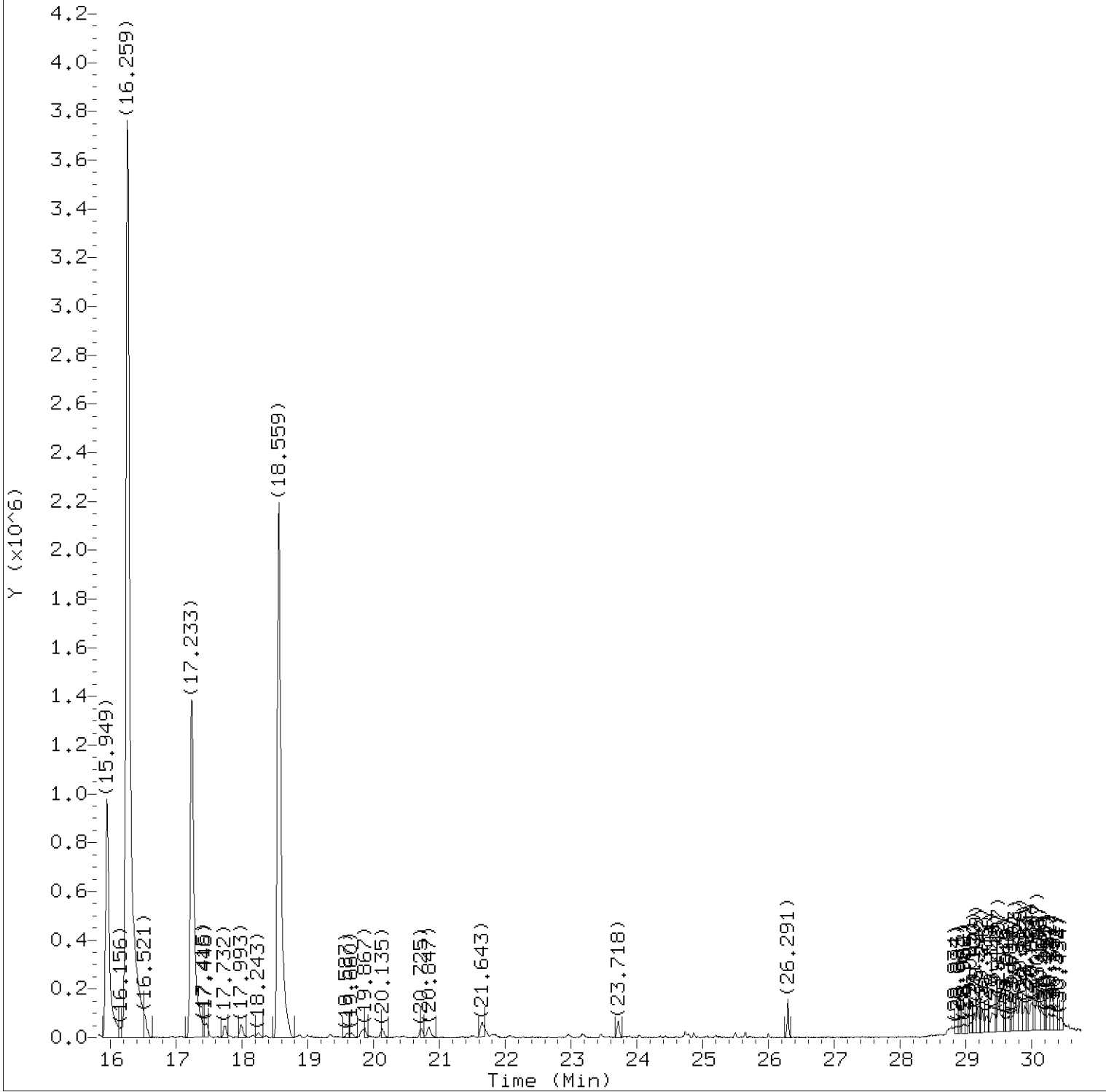
Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

Lab Sample ID: 8087715

Digitally signed by Jeffrey B. Smith  
on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 16-OCT-2015 16:10

Sublist used: 292

Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

Lab Sample ID: 8087715

Digitally signed by Jeffrey B. Smith  
on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sublist used: 292

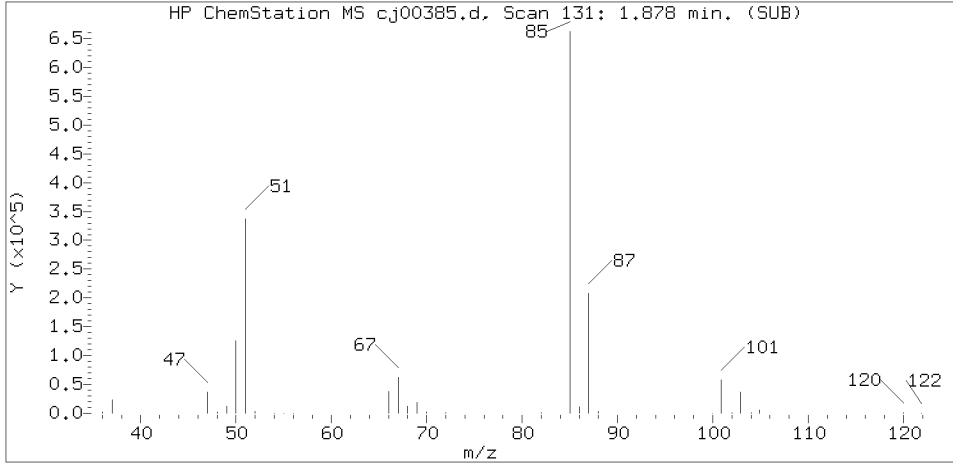
Sample Name: 1014-

Lab Sample ID: 8087715

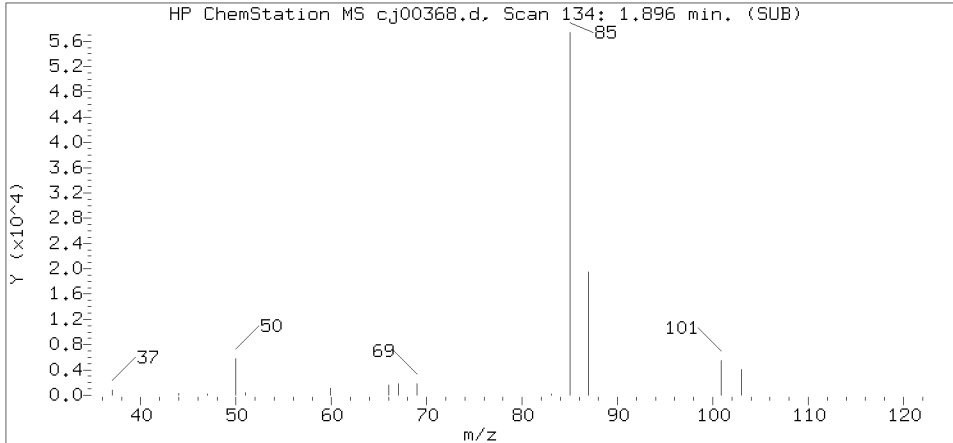
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	1.896	85	102279	0.465
13) Pentane	(1)	3.137	43	20051	0.497
19) Acetone	(1)	3.782	43	1045542	34.005
37) 2-Butanone	(1)	6.879	72	83936	5.620
40)*Bromochloromethane	(1)	7.207	130	747606	10.000
42) Chloroform	(1)	7.414	83	89509	0.632
46) Benzene	(2)	8.400	78	54977	0.373
50) Heptane	(2)	9.057	43	24347	0.637
51)*1,4-Difluorobenzene	(2)	9.196	114	2409308	10.000
52) Trichloroethene	(2)	9.665	130	203900	2.020
61) Toluene	(3)	12.342	91	261775	1.898
62) Octane	(3)	12.810	43	19860	0.547
68) 2-Hexanone	(3)	13.996	43	31017	0.972
71)*Chlorobenzene-d5	(3)	15.517	117	1766076	10.000
74) Ethylbenzene	(3)	15.949	91	1752028	11.500
75) m/p-Xylene	(3)	16.259	91	5772465	45.815
76) o-Xylene	(3)	17.239	91	2171160	16.372
80) Cumene	(3)	18.255	105	36616	0.215
87) 1,3,5-Trimethylbenzene	(3)	19.867	105	52858	0.323
90) 1,2,4-Trimethylbenzene	(3)	20.840	105	72055	0.424

\* = Compound is an internal standard.

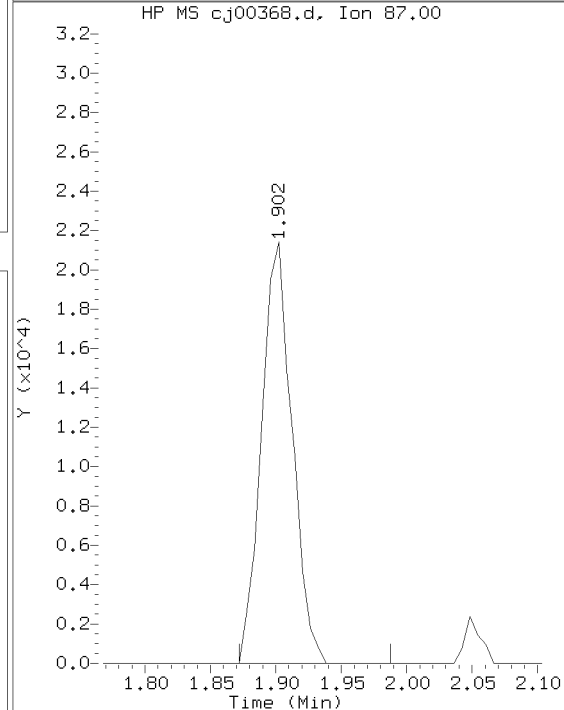
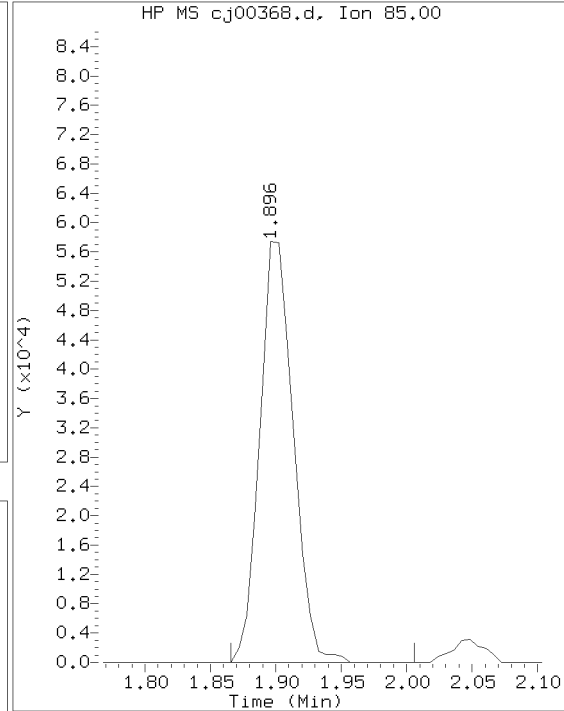
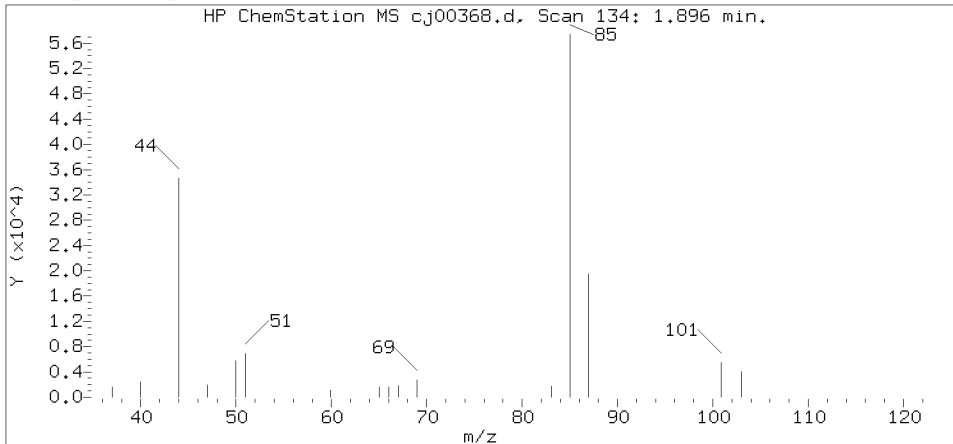
Reference Standard Spectrum for Dichlorodifluoromethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

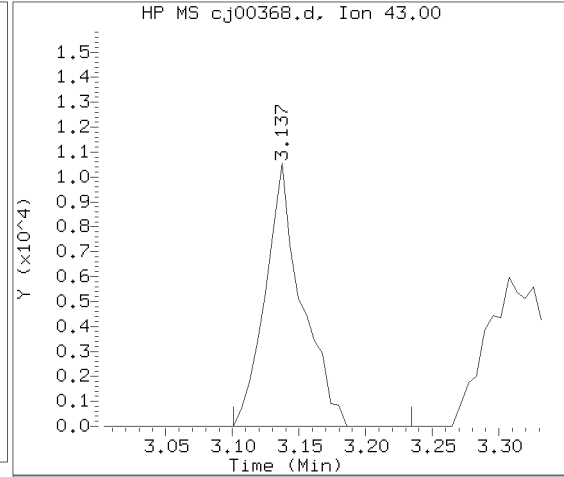
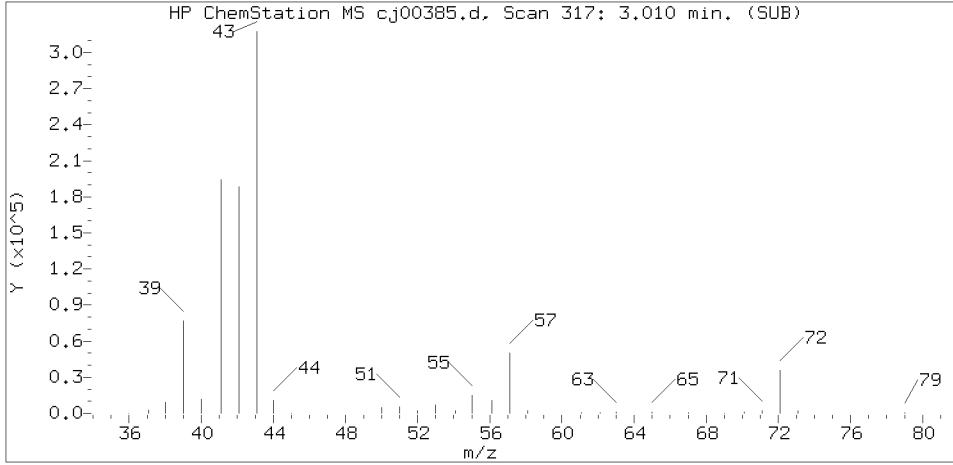
Sample Name: 1014-

Lab Sample ID: 8087715

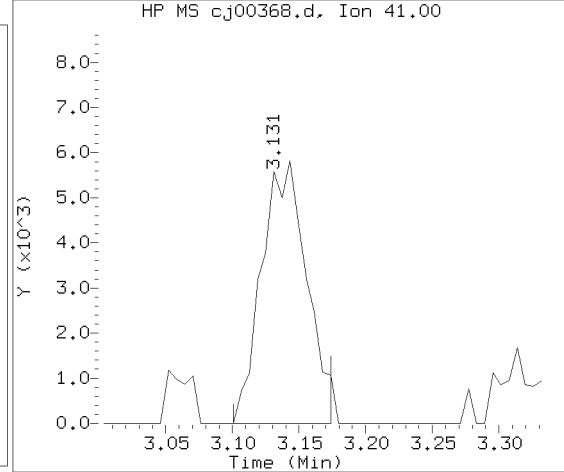
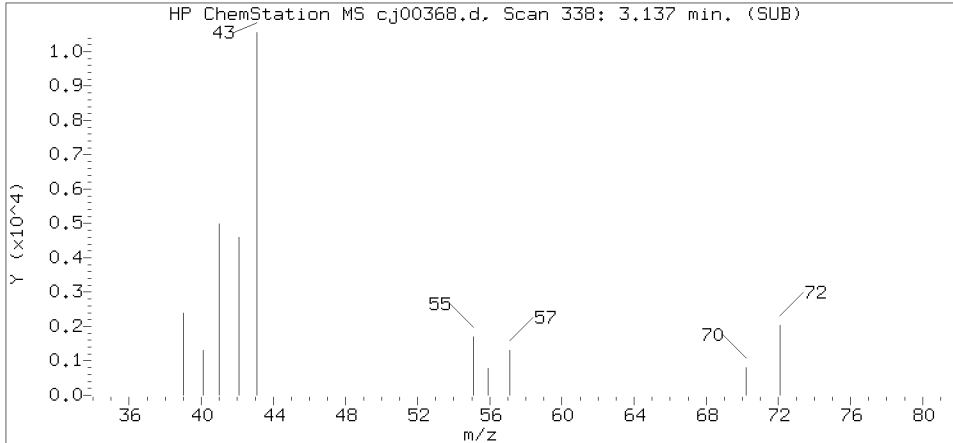
Compound Number : 2  
 Compound Name : Dichlorodifluoromethane  
 Scan Number : 134  
 Retention Time (minutes): 1.896  
 Relative Retention Time : -0.00148  
 Quant Ion : 85.00  
 Area (flag) : 102279  
 Concentration (ppb(v)) : 0.4649



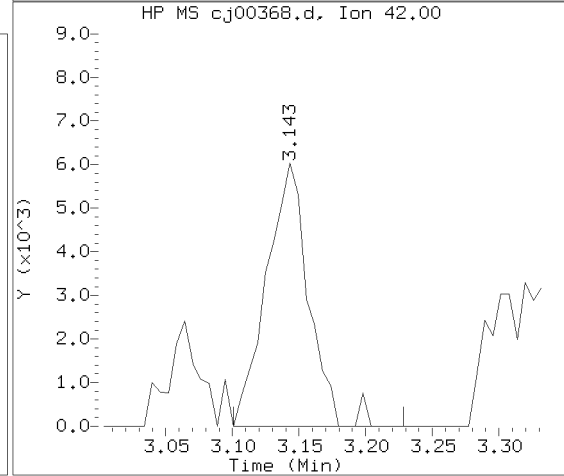
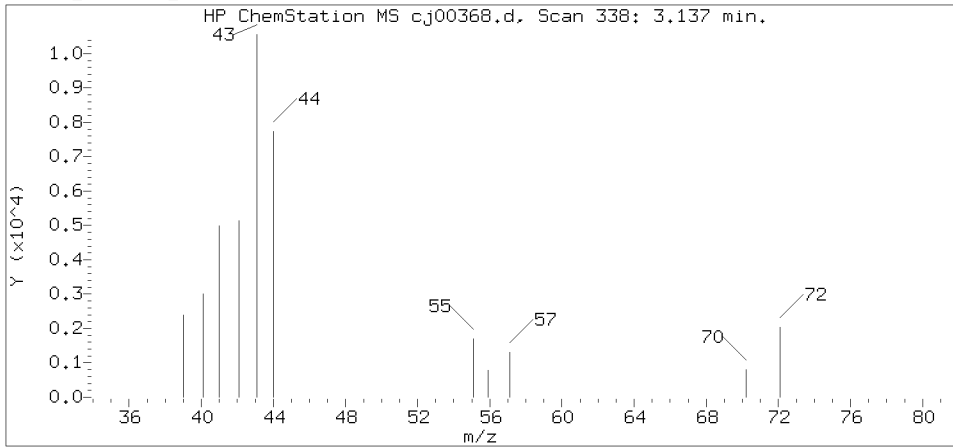
Reference Standard Spectrum for Pentane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

Lab Sample ID: 8087715

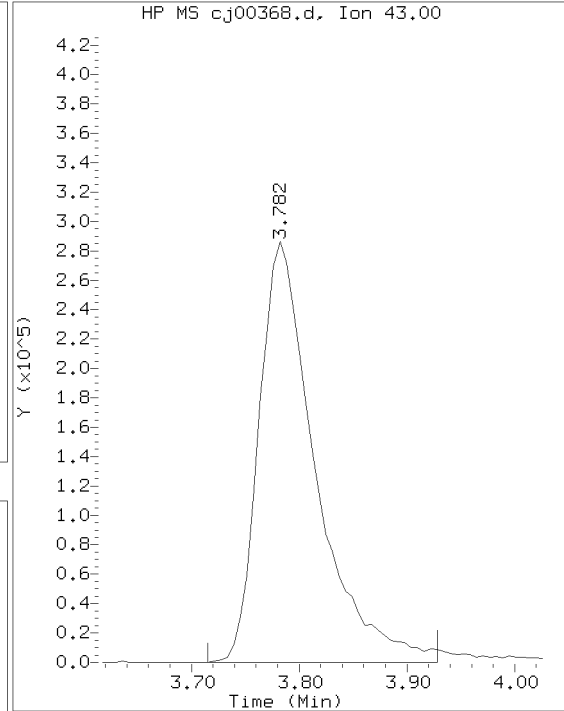
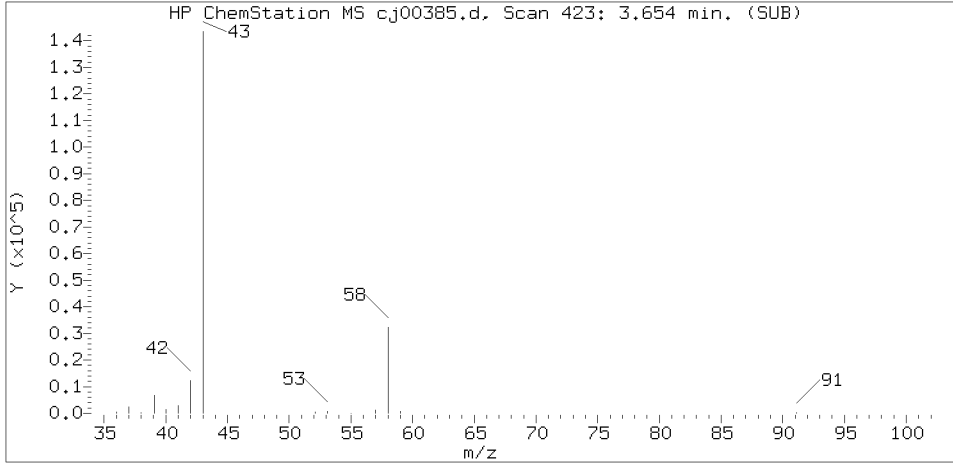
Compound Number : 13  
 Compound Name : Pentane  
 Scan Number : 338  
 Retention Time (minutes): 3.137  
 Relative Retention Time : -0.00133  
 Quant Ion : 43.00  
 Area (flag) : 20051  
 Concentration (ppb(v)) : 0.4974

Sublist used: 292

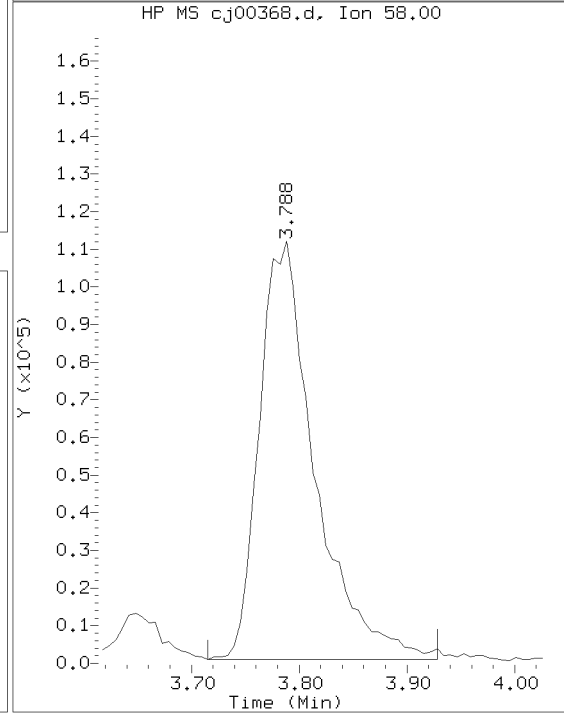
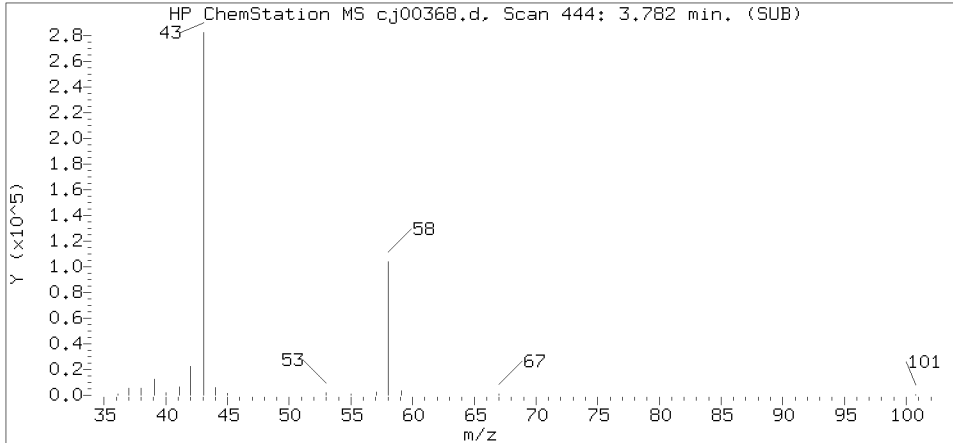
Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304  
 SSX23 Page 269 of 1243

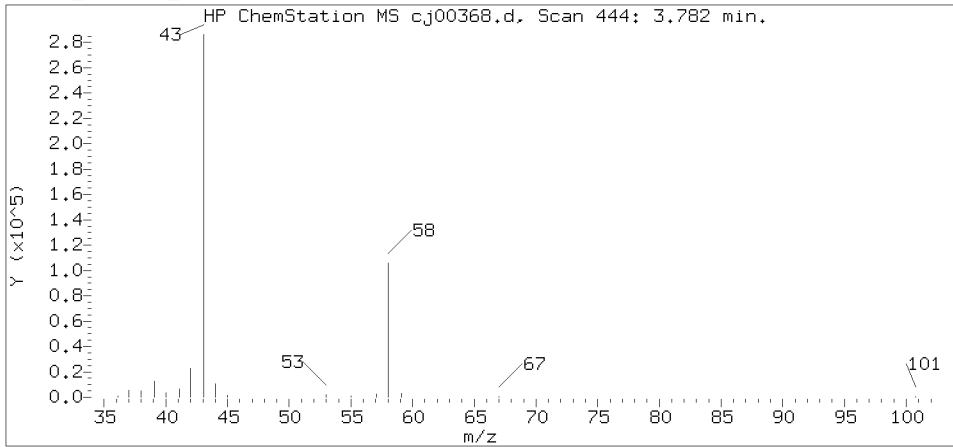
Reference Standard Spectrum for Acetone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

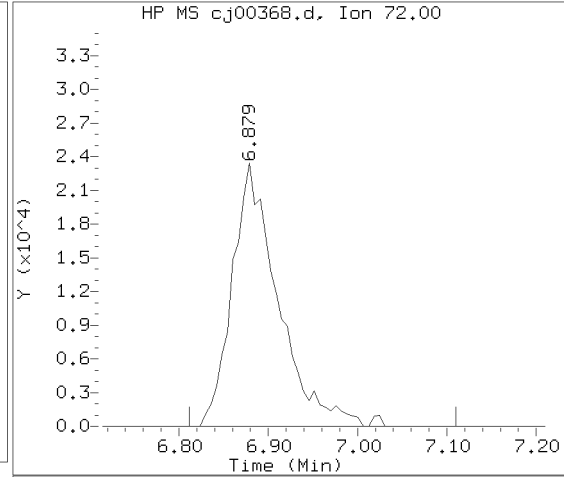
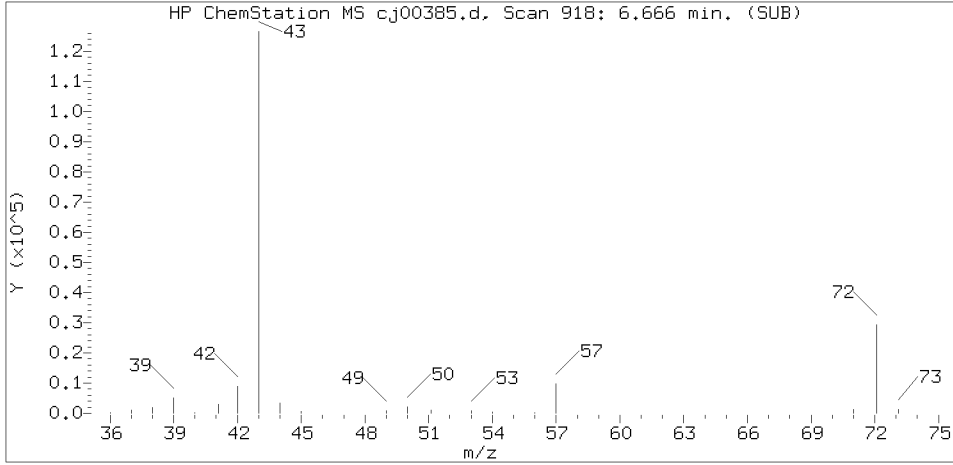
Sublist used: 292

Sample Name: 1014-

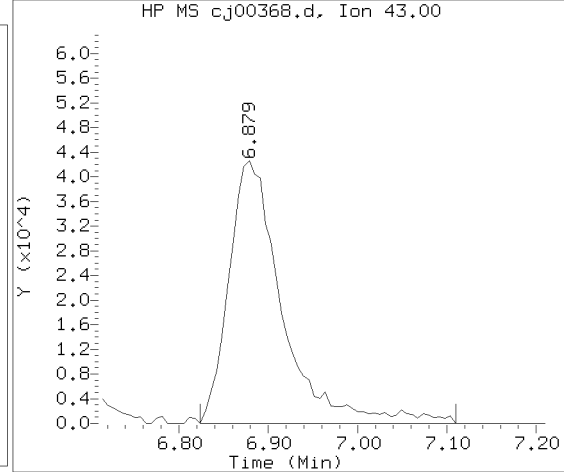
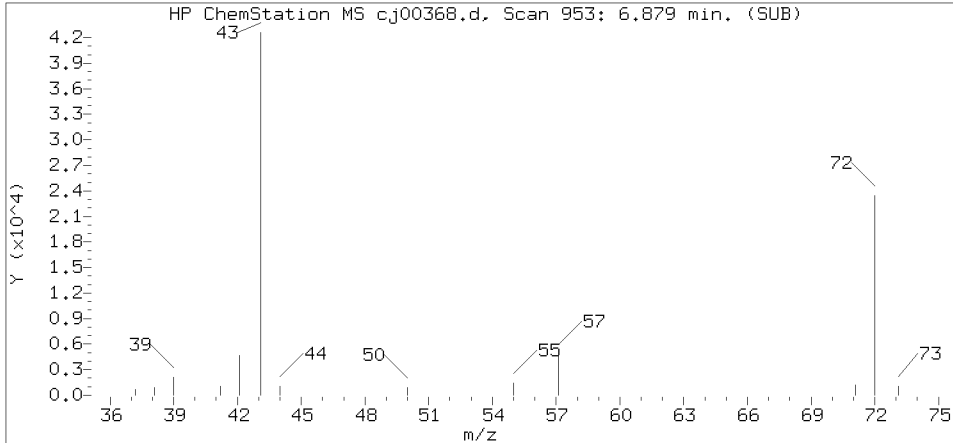
Lab Sample ID: 8087715

Compound Number : 19  
 Compound Name : Acetone  
 Scan Number : 444  
 Retention Time (minutes): 3.782  
 Relative Retention Time : -0.00041  
 Quant Ion : 43.00  
 Area (flag) : 1045542  
 Concentration (ppb(v)) : 34.0055

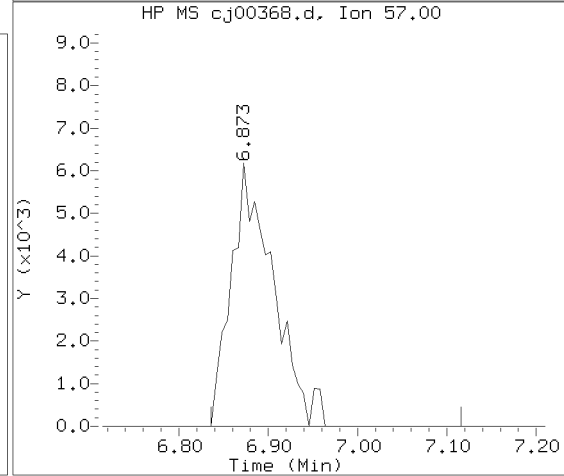
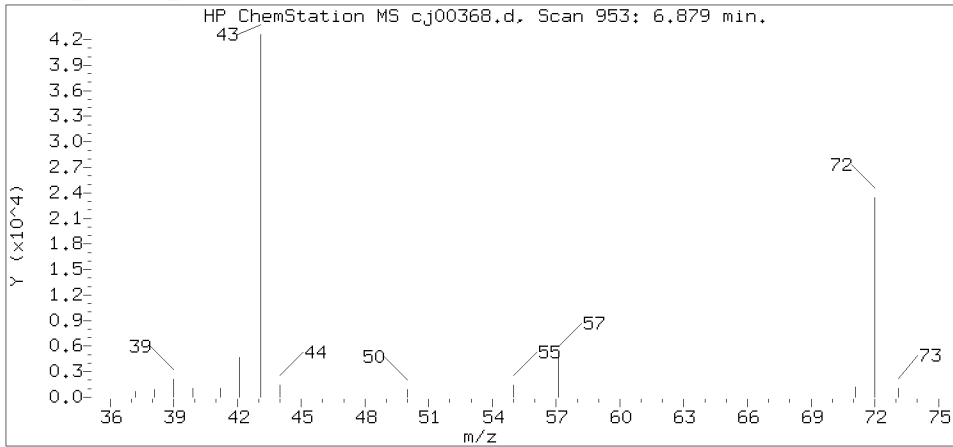
Reference Standard Spectrum for 2-Butanone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

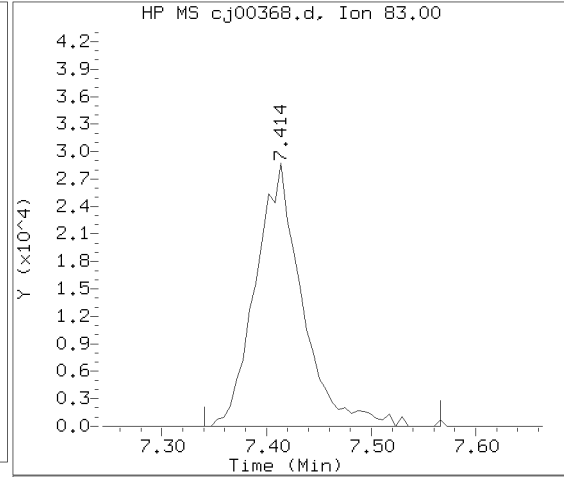
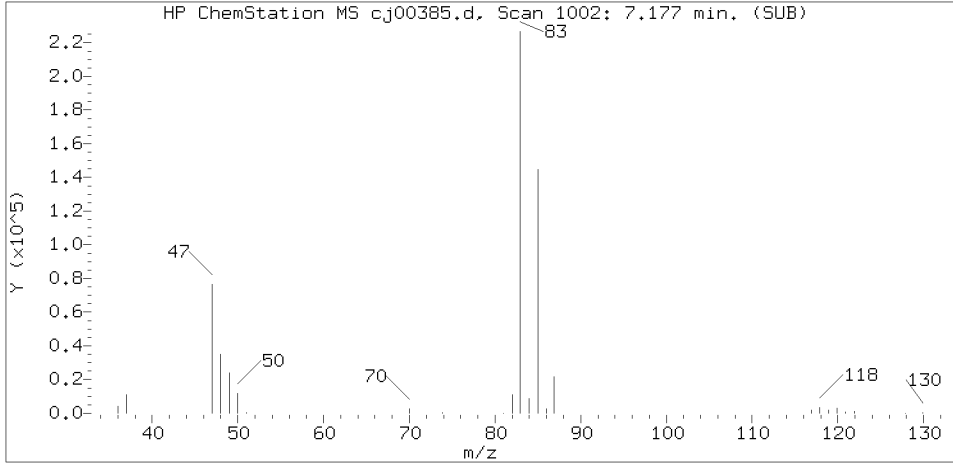
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

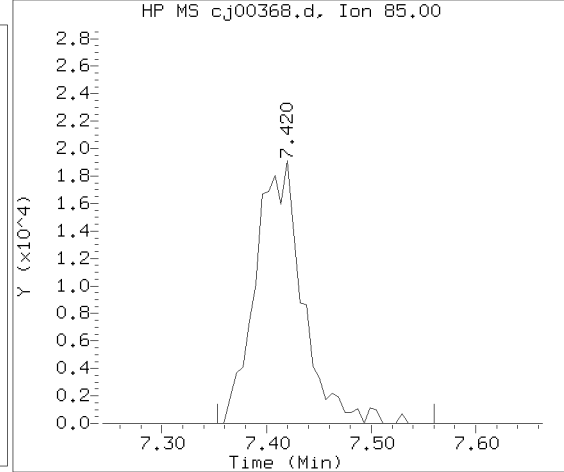
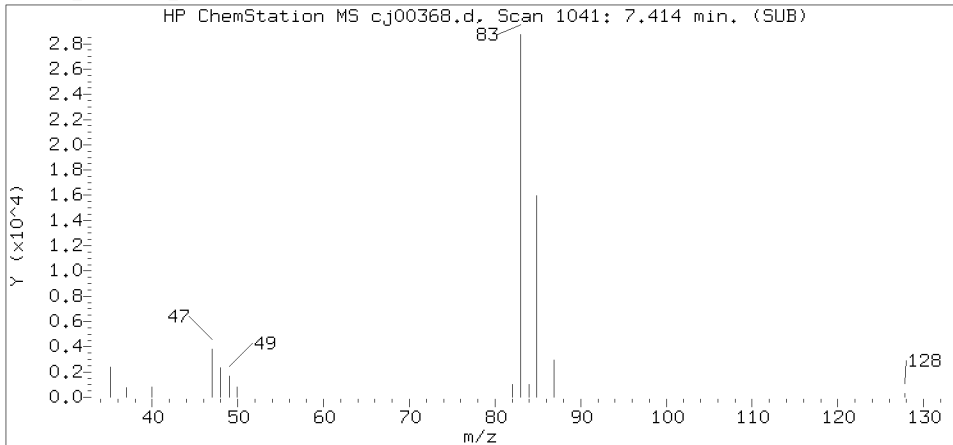
Lab Sample ID: 8087715

Compound Number : 37  
 Compound Name : 2-Butanone  
 Scan Number : 953  
 Retention Time (minutes): 6.879  
 Relative Retention Time :-0.00088  
 Quant Ion : 72.00  
 Area (flag) : 83936  
 Concentration (ppb(v)) : 5.6202

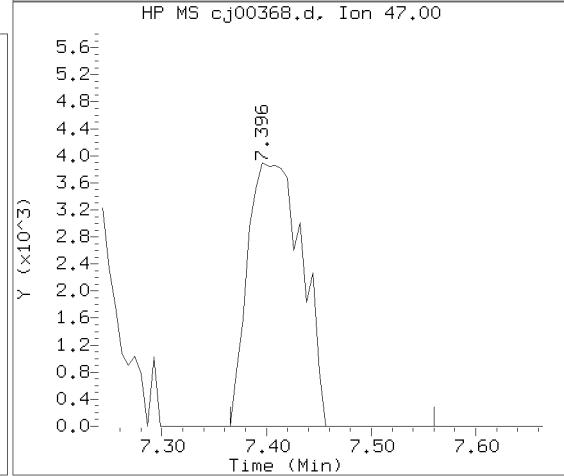
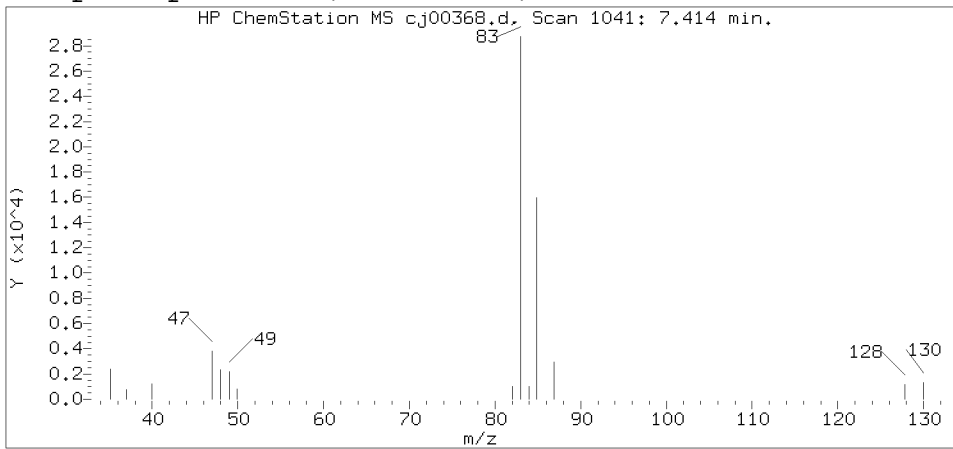
Reference Standard Spectrum for Chloroform



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

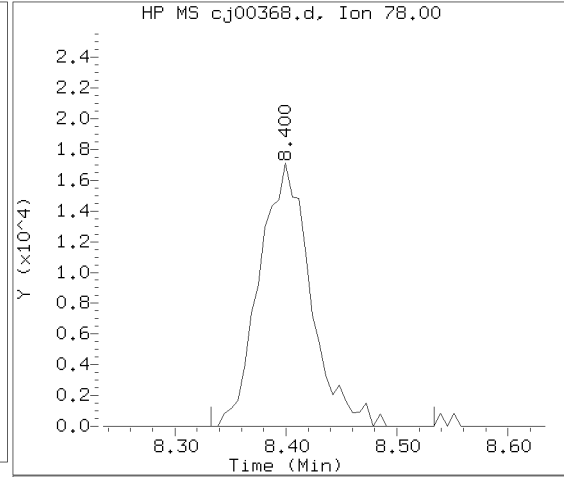
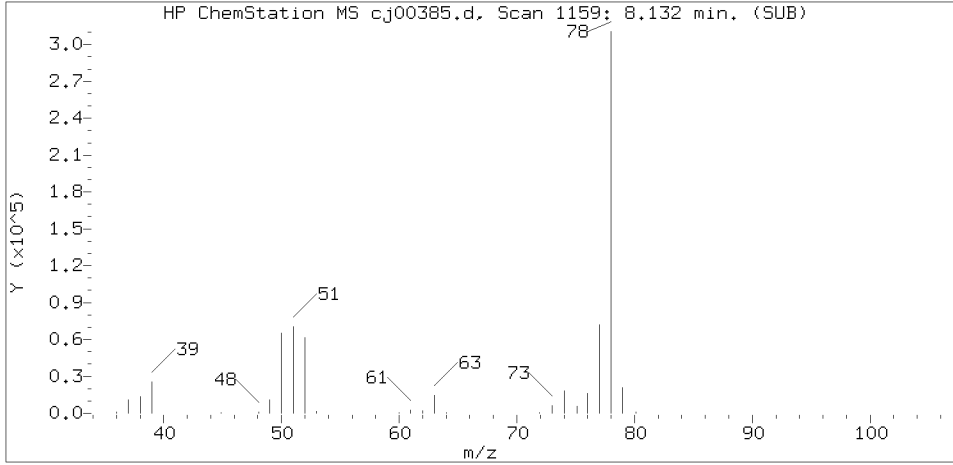
Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

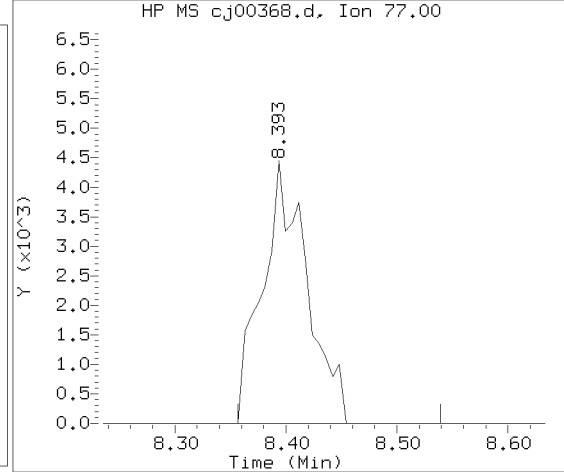
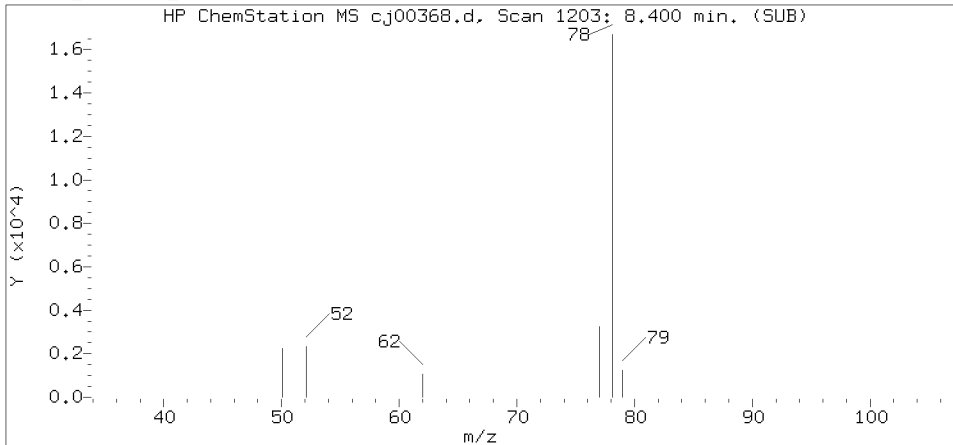
Sample Name: 1014- Lab Sample ID: 8087715

Compound Number : 42  
 Compound Name : Chloroform  
 Scan Number : 1041  
 Retention Time (minutes): 7.414  
 Relative Retention Time : -0.00082  
 Quant Ion : 83.00  
 Area (flag) : 89509  
 Concentration (ppb(v)) : 0.6317

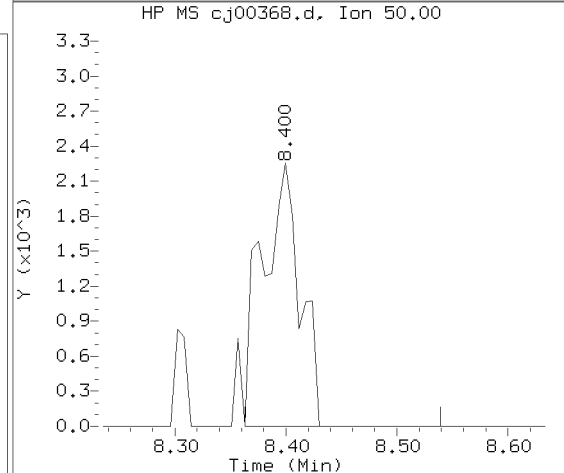
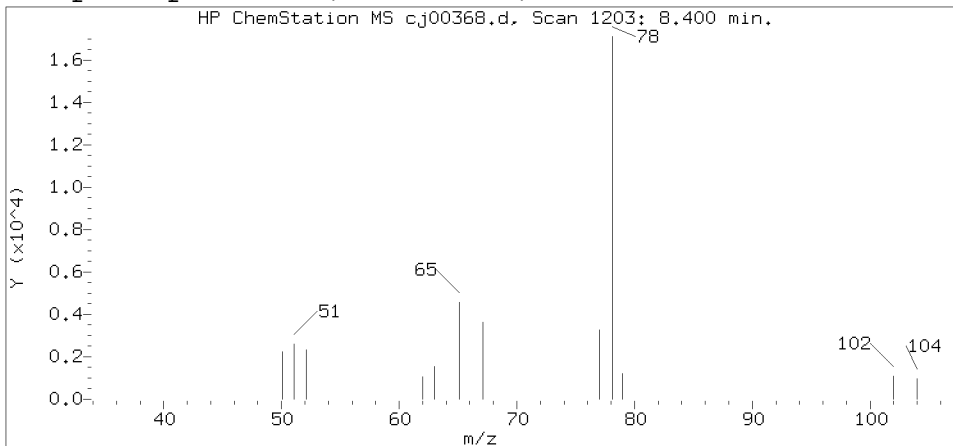
Reference Standard Spectrum for Benzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

Lab Sample ID: 8087715

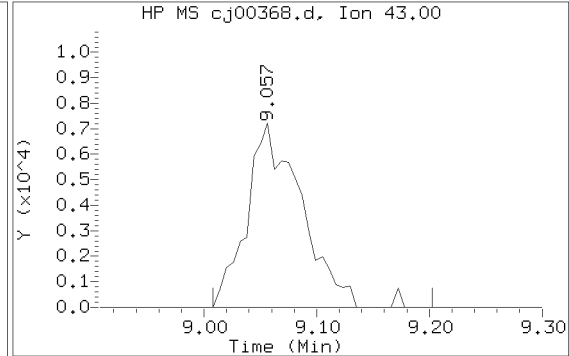
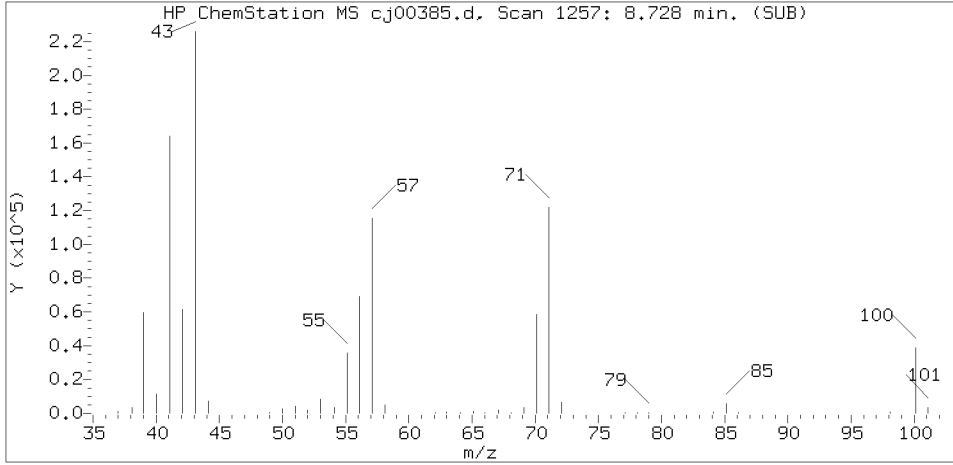
Compound Number : 46  
 Compound Name : Benzene  
 Scan Number : 1203  
 Retention Time (minutes): 8.400  
 Relative Retention Time : -0.00006  
 Quant Ion : 78.00  
 Area (flag) : 54977  
 Concentration (ppb(v)) : 0.3728

Sublist used: 292

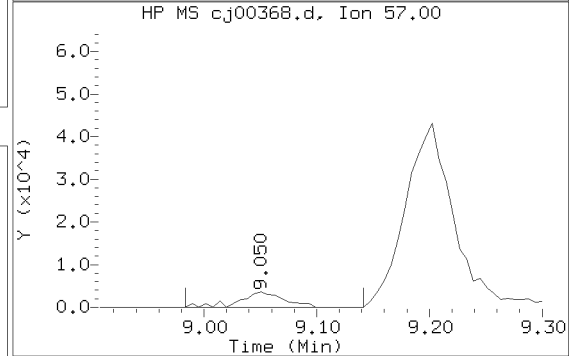
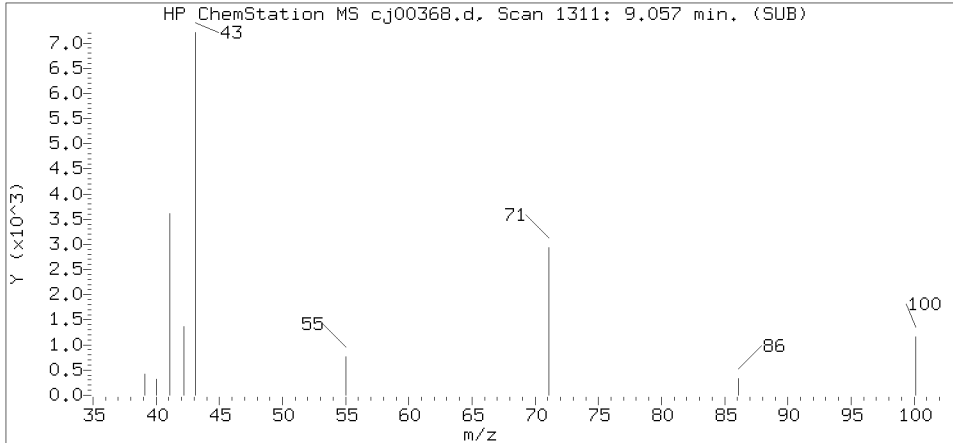
Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304  
 SSX23 Page 273 of 1243

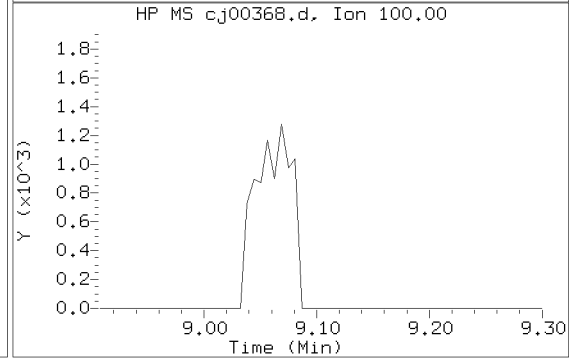
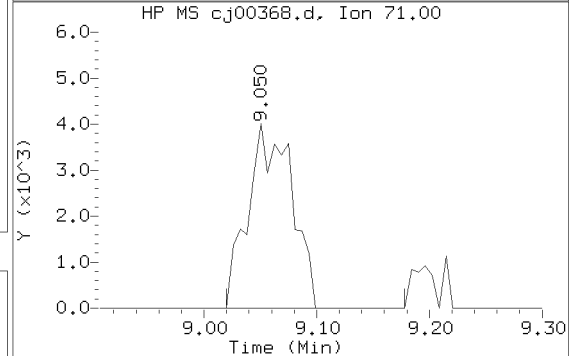
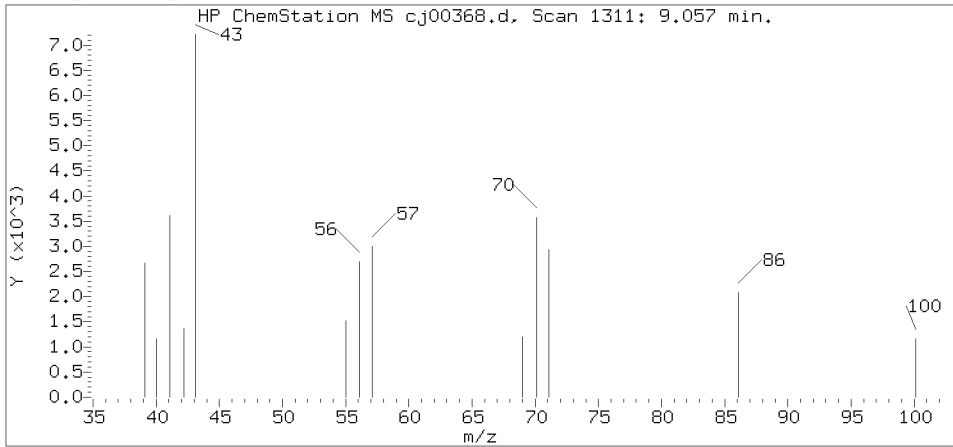
Reference Standard Spectrum for Heptane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

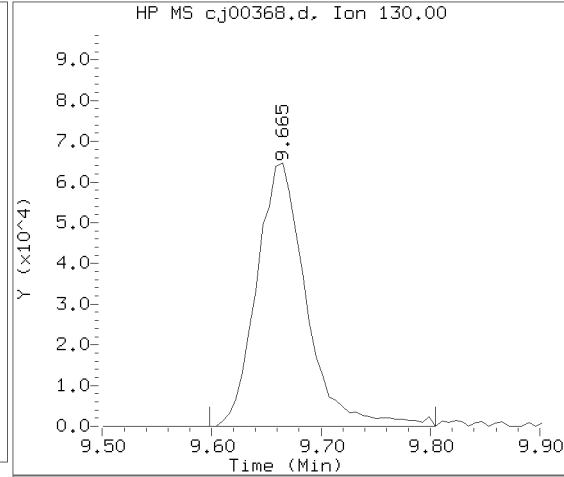
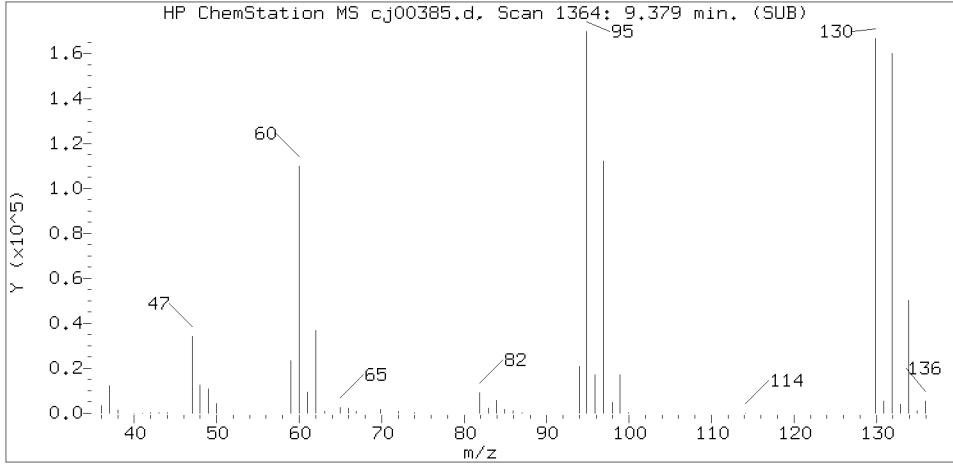
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

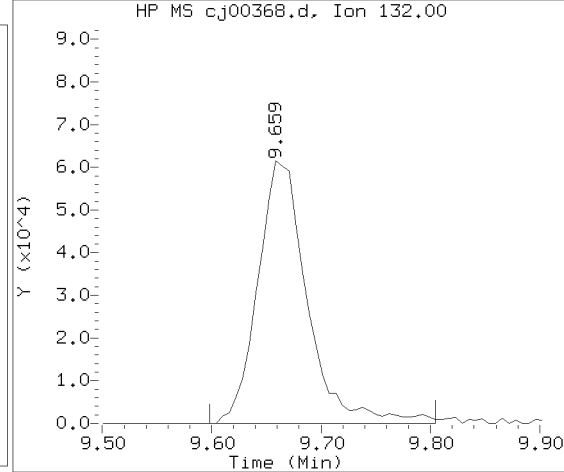
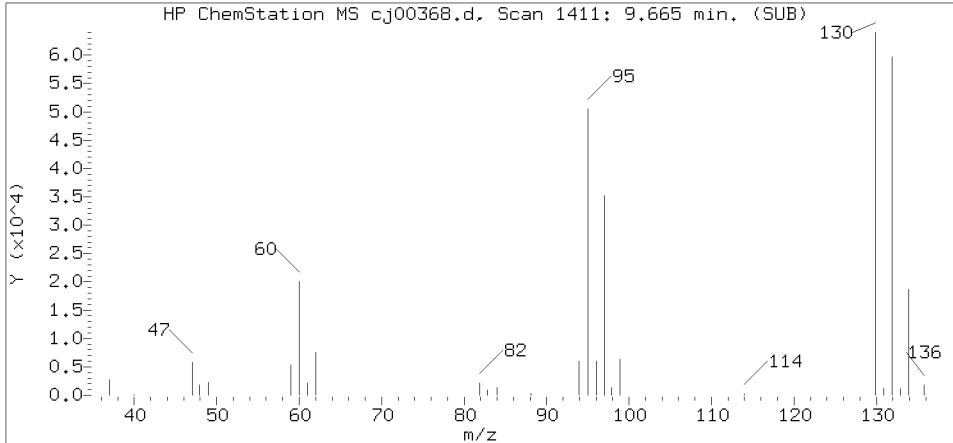
Lab Sample ID: 8087715

Compound Number : 50  
 Compound Name : Heptane  
 Scan Number : 1311  
 Retention Time (minutes): 9.057  
 Relative Retention Time : -0.00067  
 Quant Ion : 43.00  
 Area (flag) : 24347  
 Concentration (ppb(v)) : 0.6368

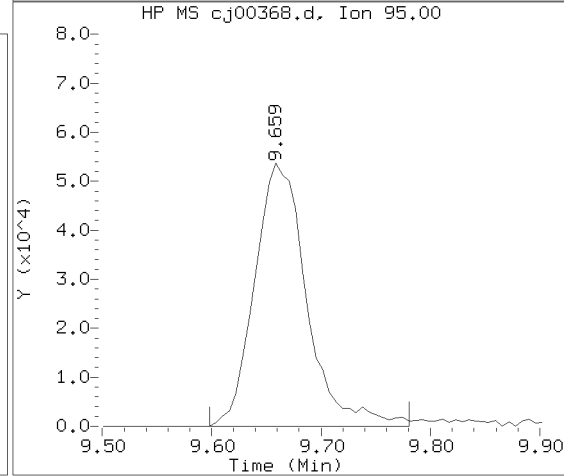
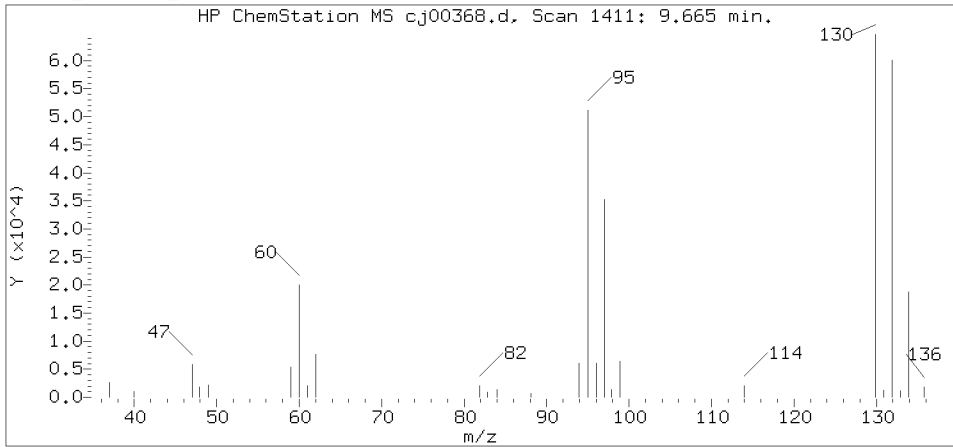
Reference Standard Spectrum for Trichloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

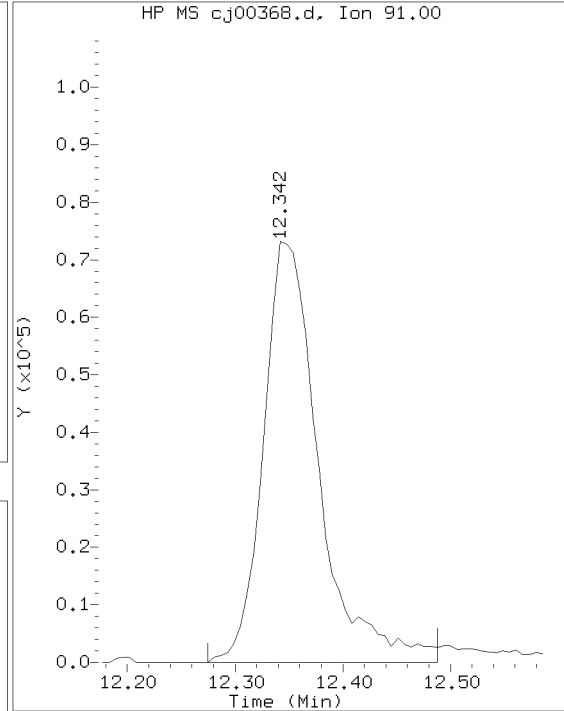
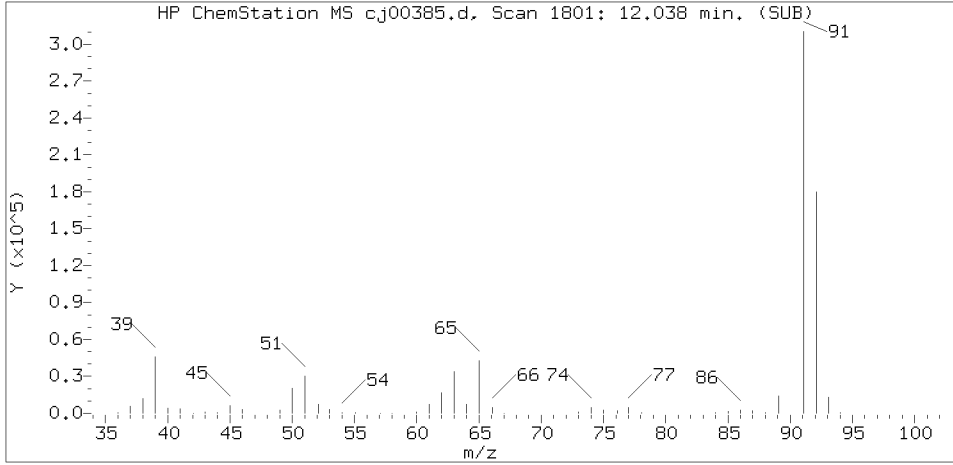
Sample Name: 1014-

Lab Sample ID: 8087715

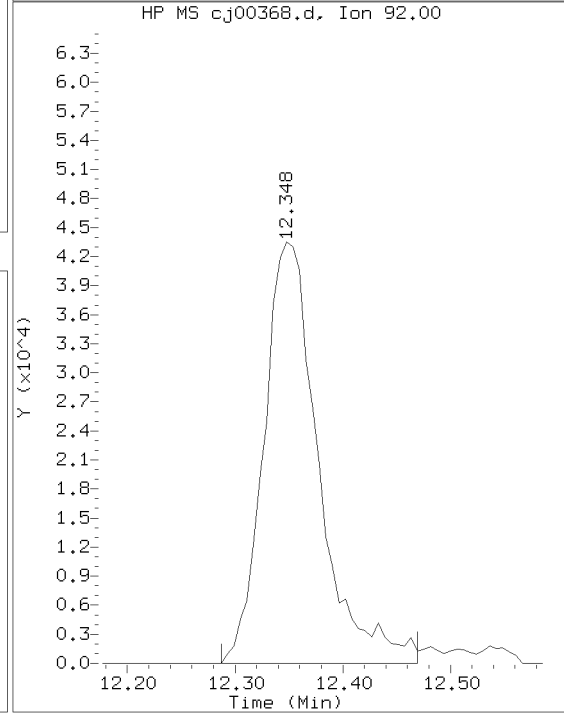
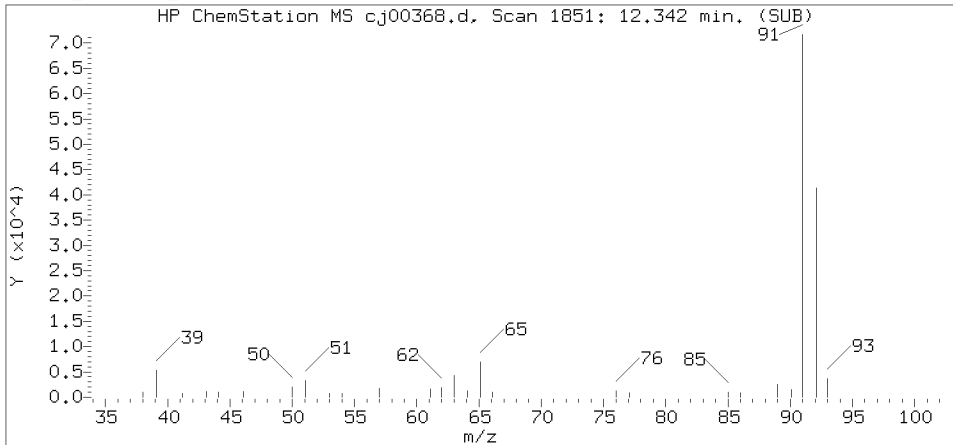
Compound Number : 52  
 Compound Name : Trichloroethene  
 Scan Number : 1411  
 Retention Time (minutes): 9.665  
 Relative Retention Time : -0.00063  
 Quant Ion : 130.00  
 Area (flag) : 203900  
 Concentration (ppb(v)) : 2.0197

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.  
 Target 3.5 esignature user ID: jbs01304

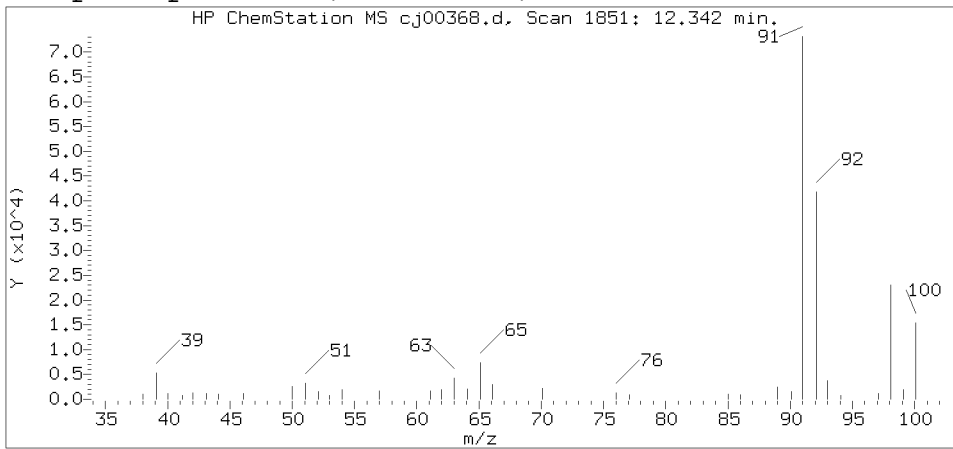
Reference Standard Spectrum for Toluene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

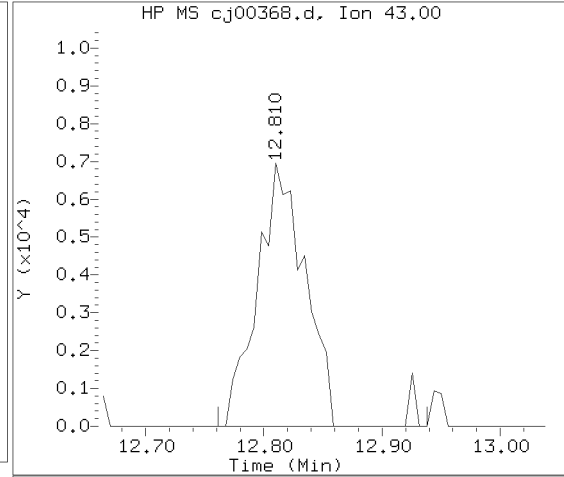
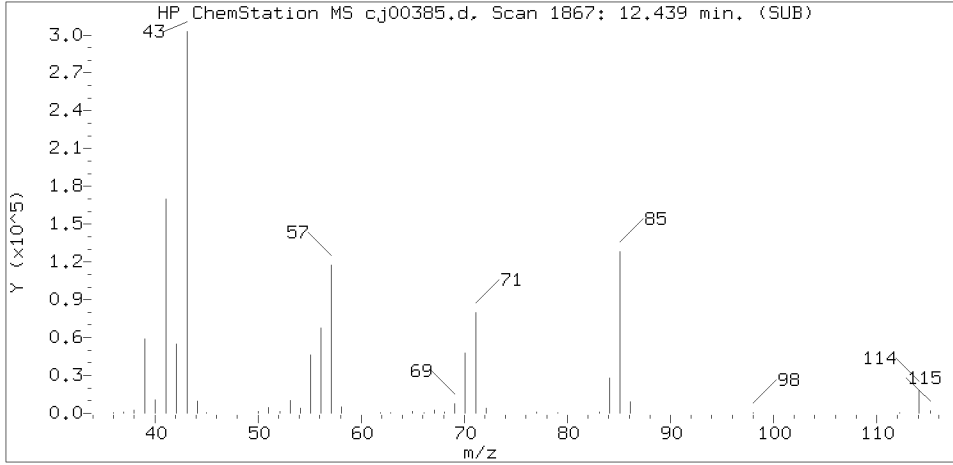
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014- Lab Sample ID: 8087715

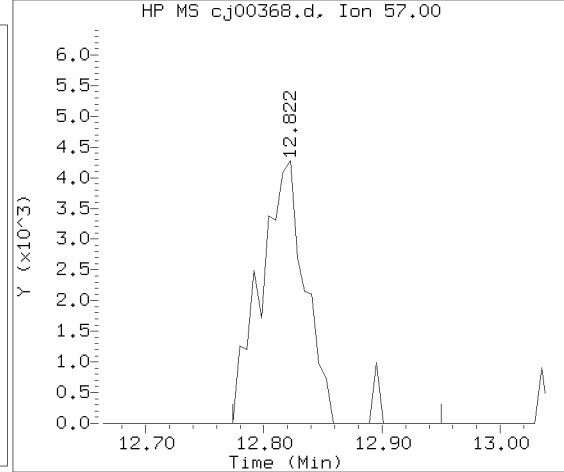
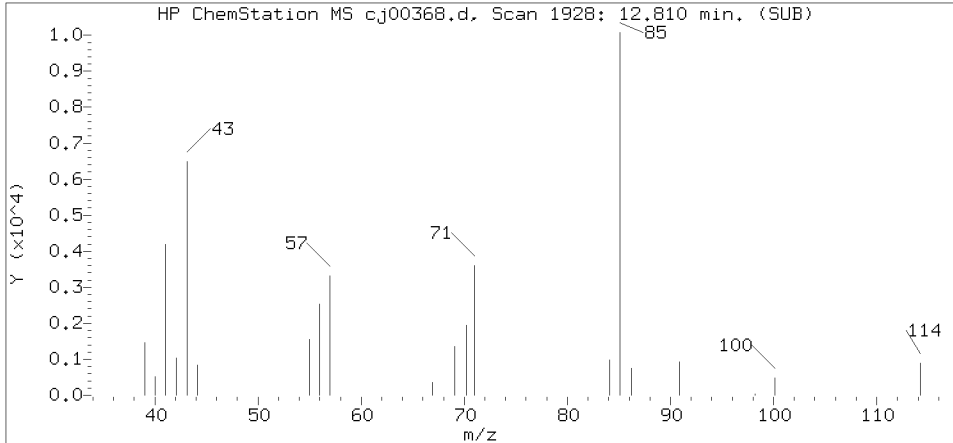
Compound Number : 61  
 Compound Name : Toluene  
 Scan Number : 1851  
 Retention Time (minutes): 12.342  
 Relative Retention Time : -0.00000  
 Quant Ion : 91.00  
 Area (flag) : 261775  
 Concentration (ppb(v)) : 1.8983



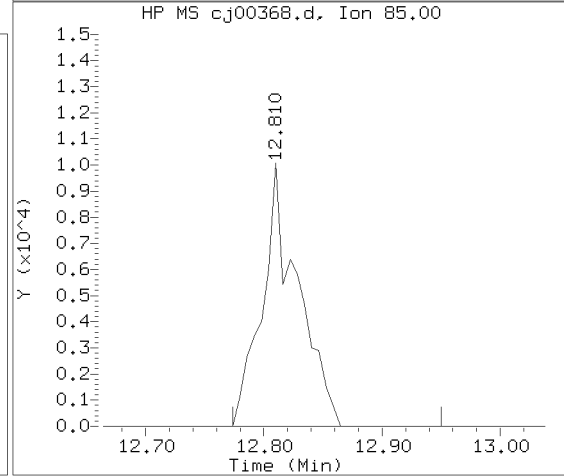
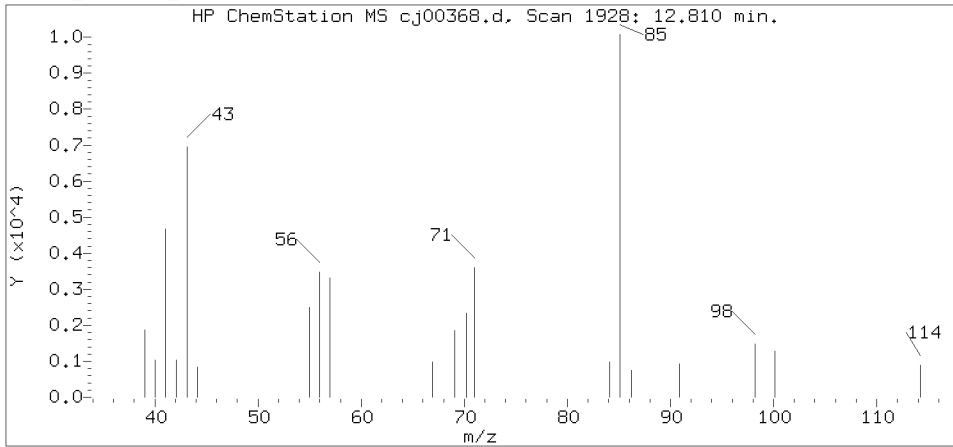
Reference Standard Spectrum for Octane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

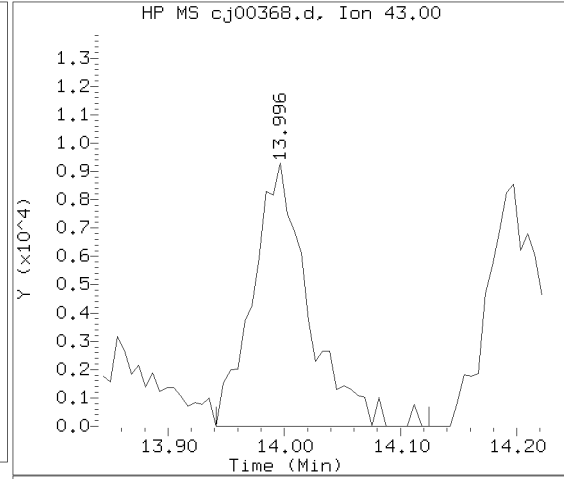
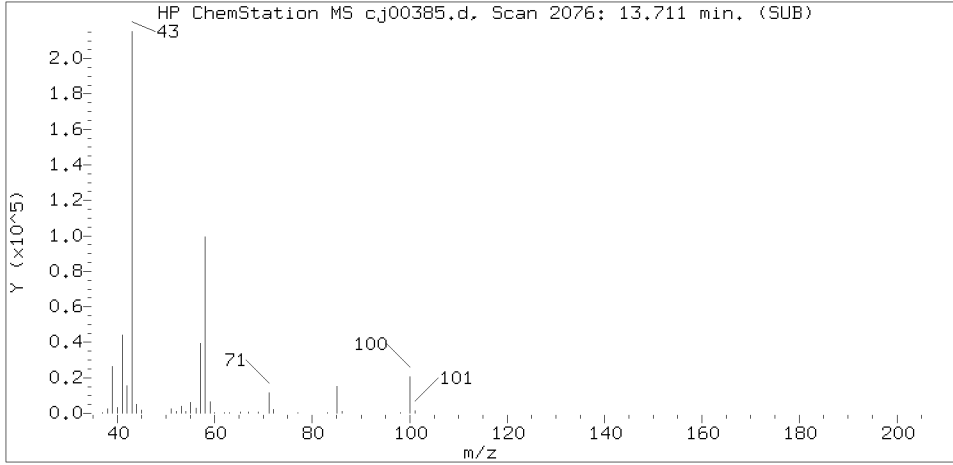
Sample Name: 1014-

Lab Sample ID: 8087715

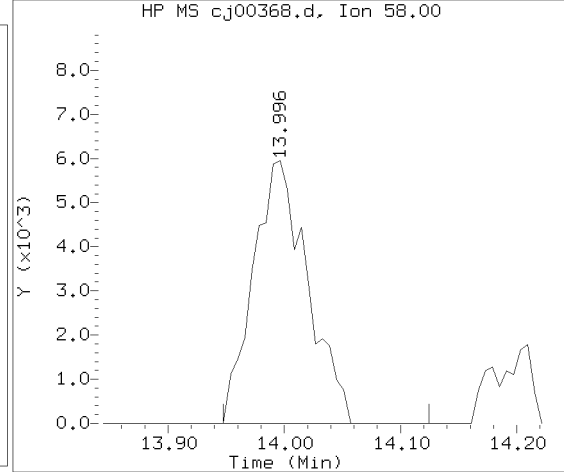
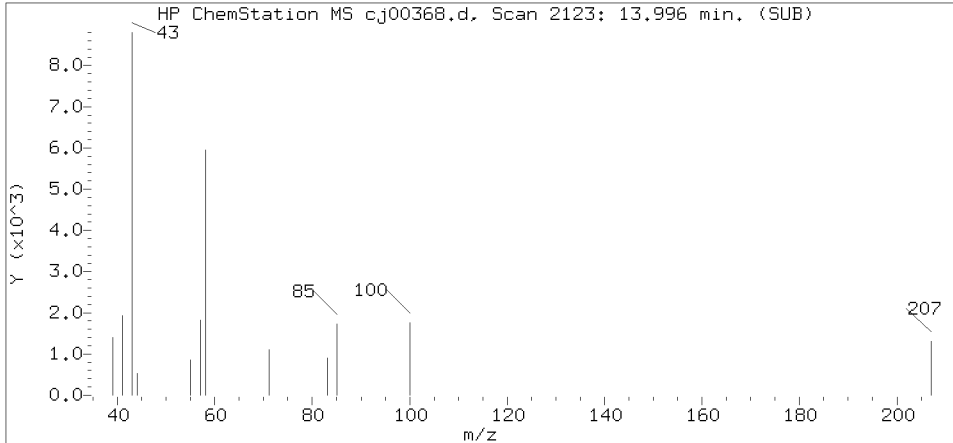
Compound Number : 62  
 Compound Name : Octane  
 Scan Number : 1928  
 Retention Time (minutes): 12.810  
 Relative Retention Time : -0.00000  
 Quant Ion : 43.00  
 Area (flag) : 19860  
 Concentration (ppb(v)) : 0.5465

Sublist used: 292

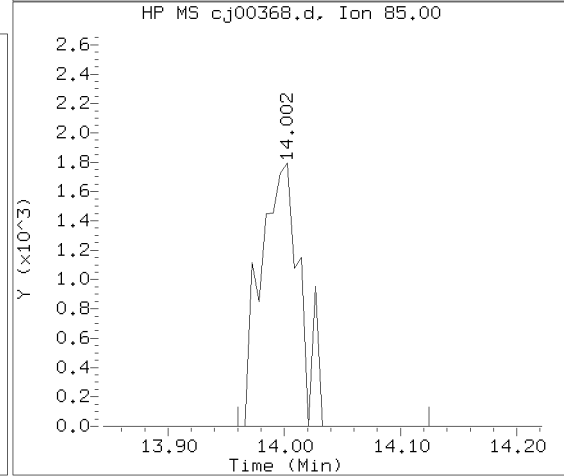
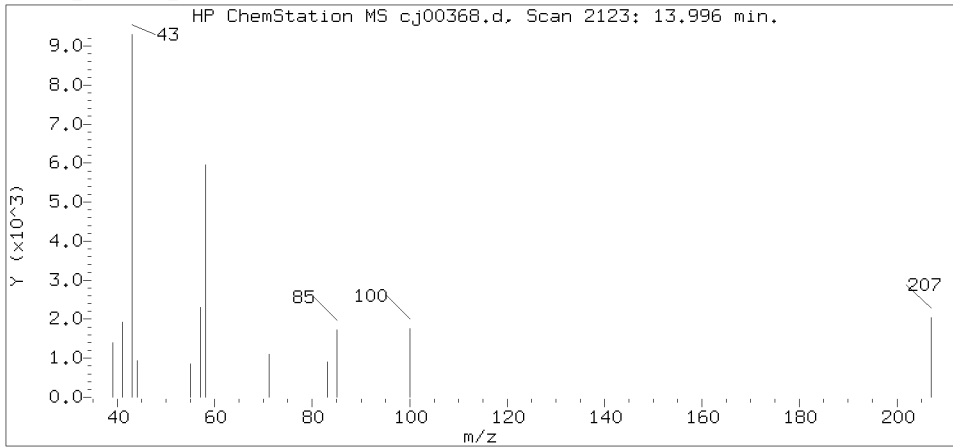
Reference Standard Spectrum for 2-Hexanone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

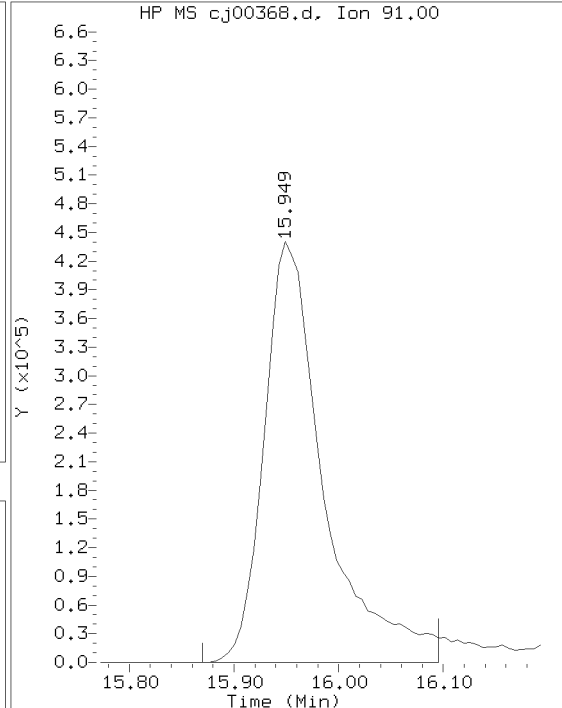
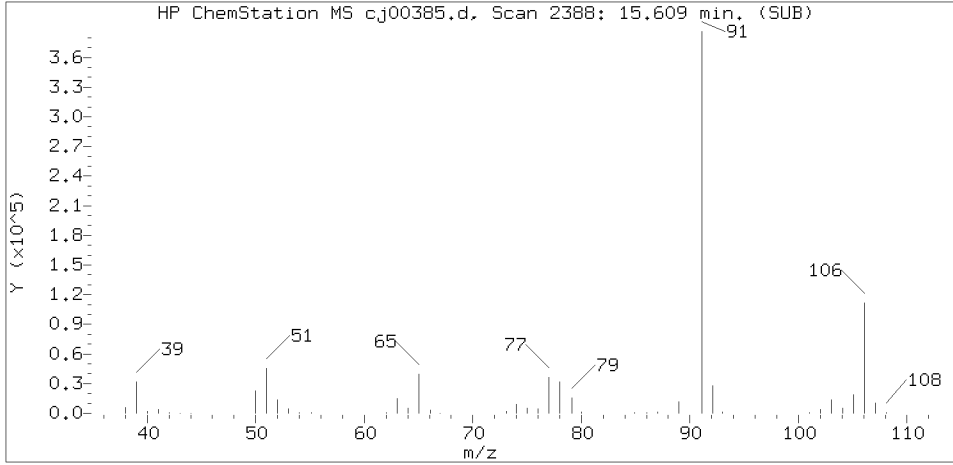
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

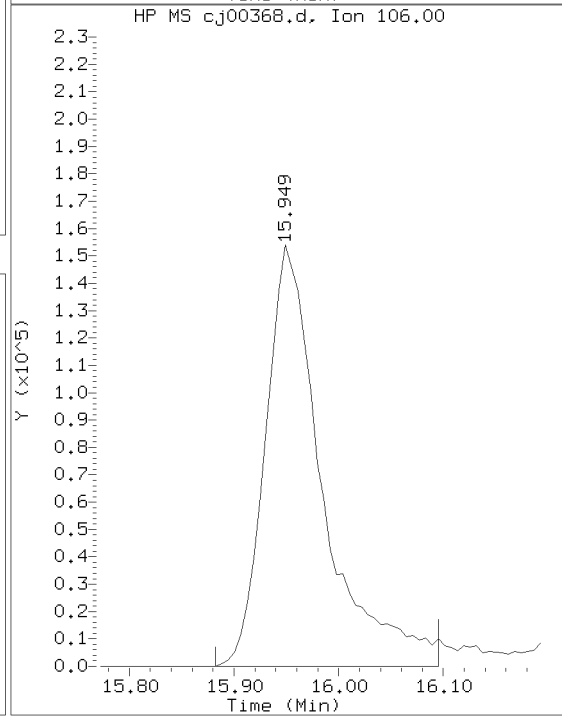
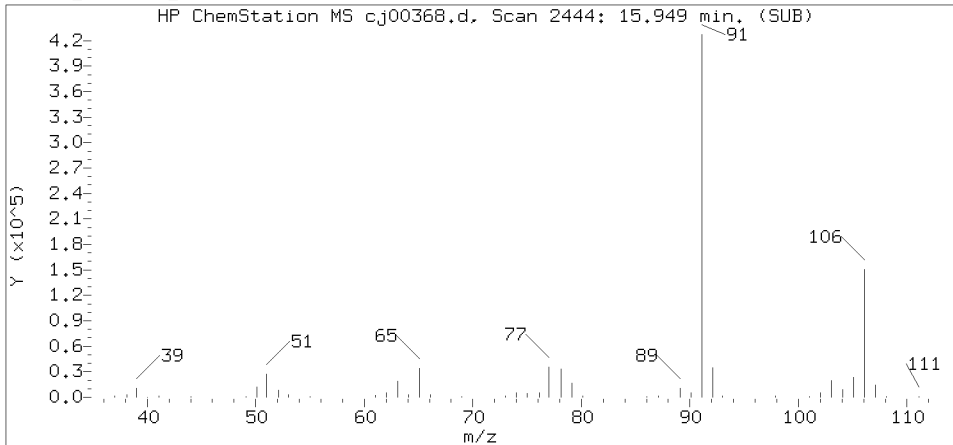
Lab Sample ID: 8087715

Compound Number : 68  
 Compound Name : 2-Hexanone  
 Scan Number : 2123  
 Retention Time (minutes): 13.996  
 Relative Retention Time : -0.00079  
 Quant Ion : 43.00  
 Area (flag) : 31017  
 Concentration (ppb(v)) : 0.9722

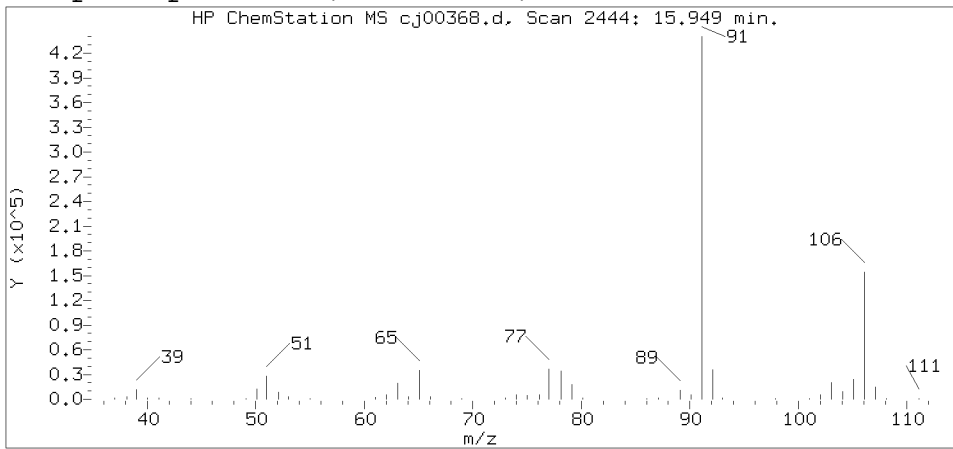
Reference Standard Spectrum for Ethylbenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

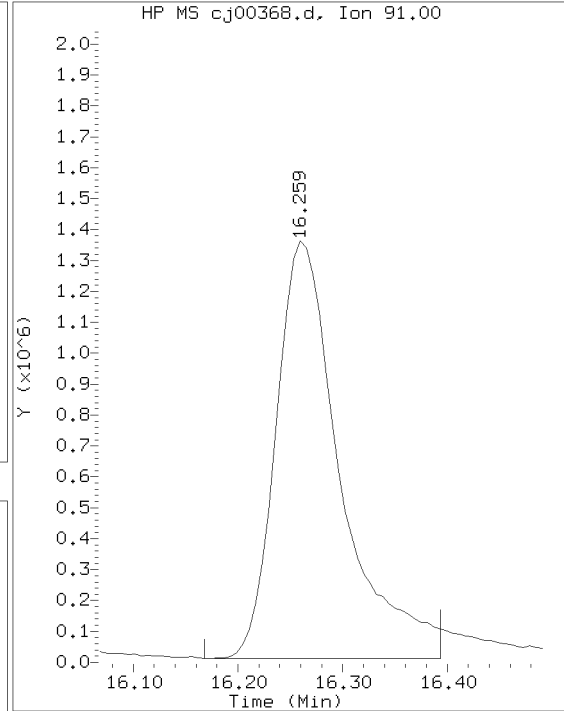
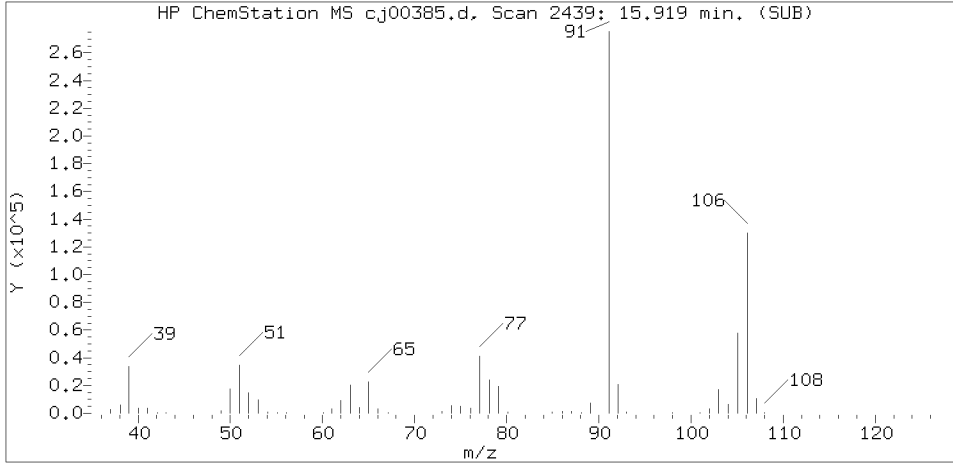
Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

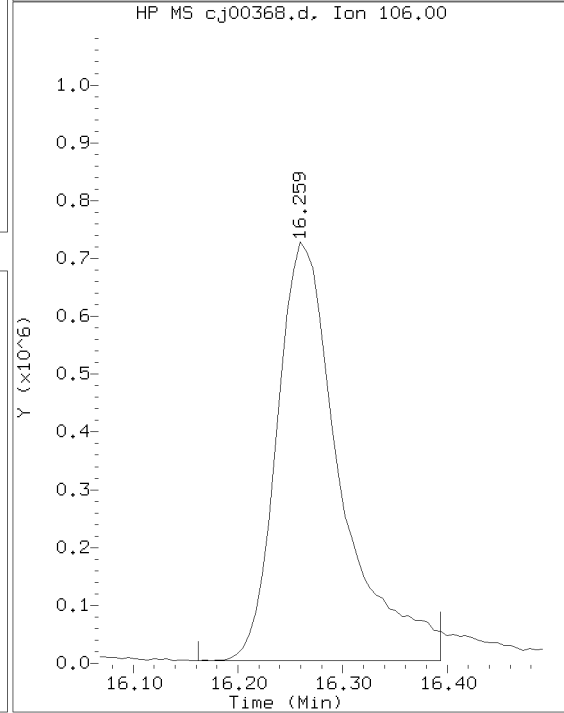
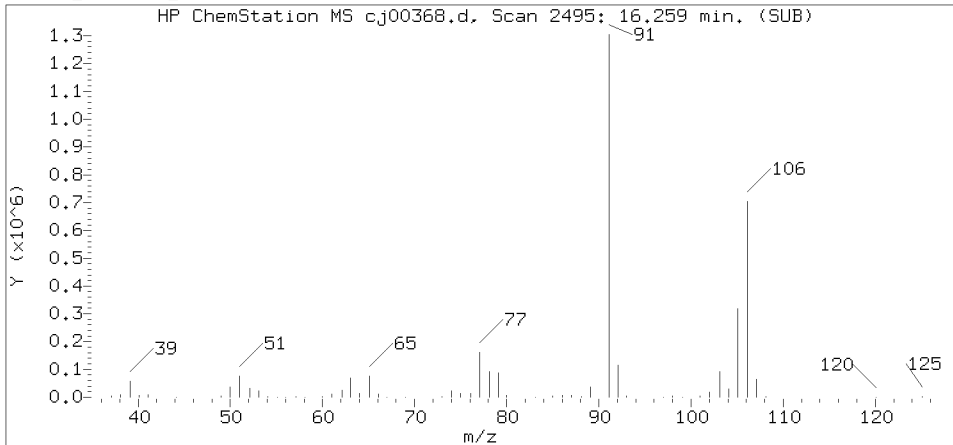
Sample Name: 1014- Lab Sample ID: 8087715

Compound Number : 74  
 Compound Name : Ethylbenzene  
 Scan Number : 2444  
 Retention Time (minutes): 15.949  
 Relative Retention Time : 0.00000  
 Quant Ion : 91.00  
 Area (flag) : 1752028  
 Concentration (ppb(v)) : 11.4998

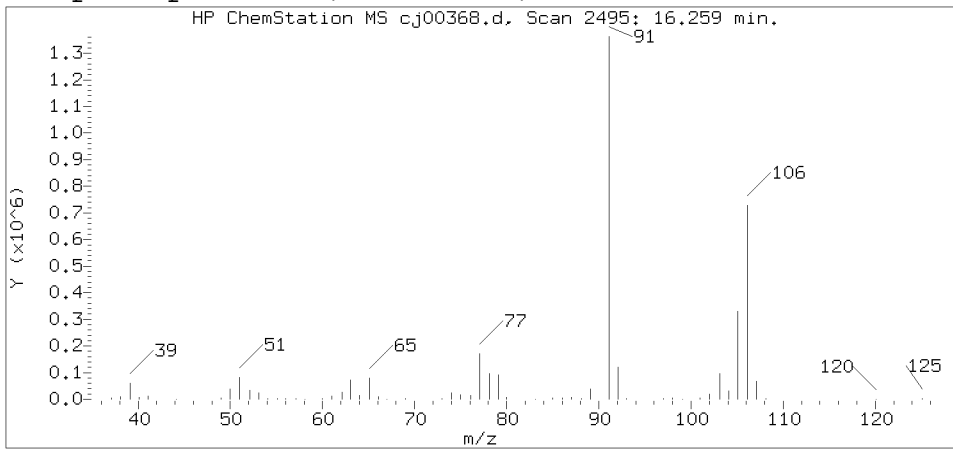
Reference Standard Spectrum for m/p-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

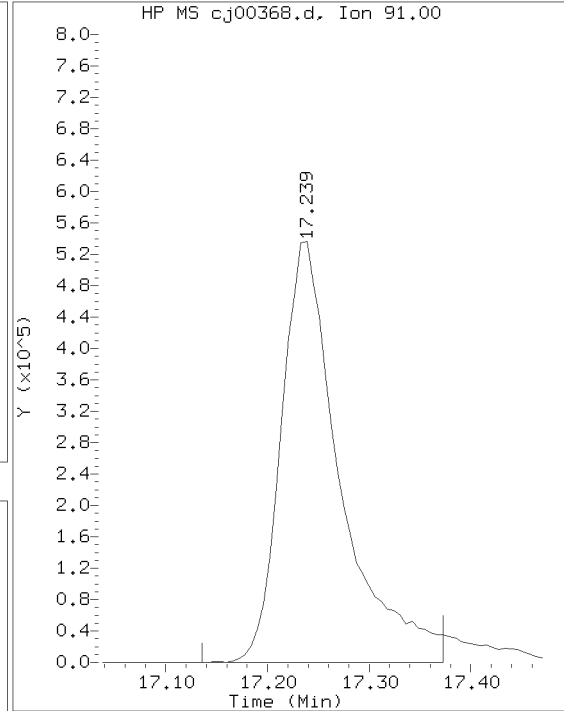
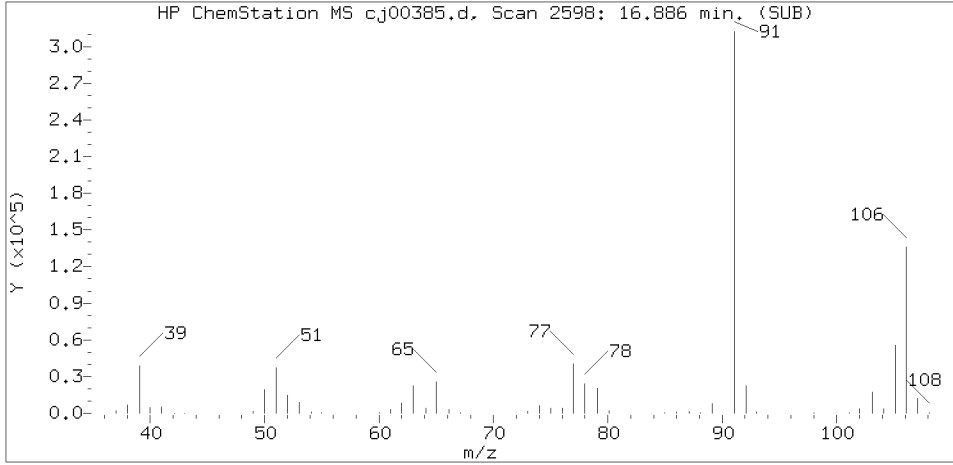
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

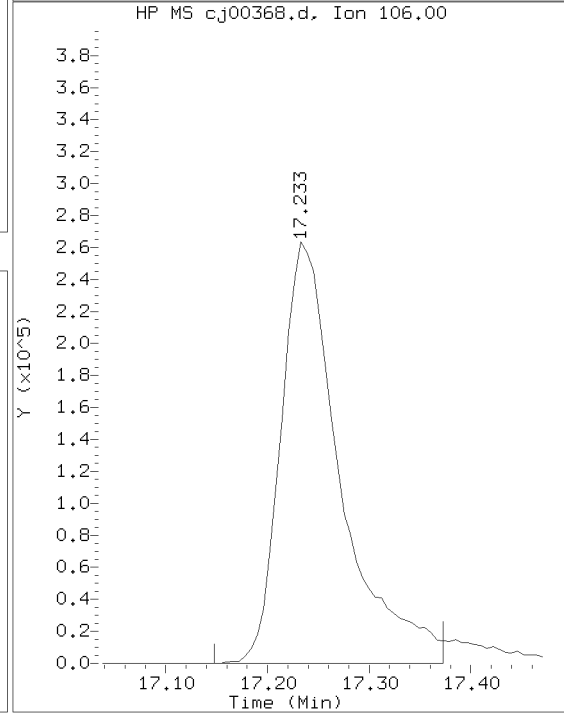
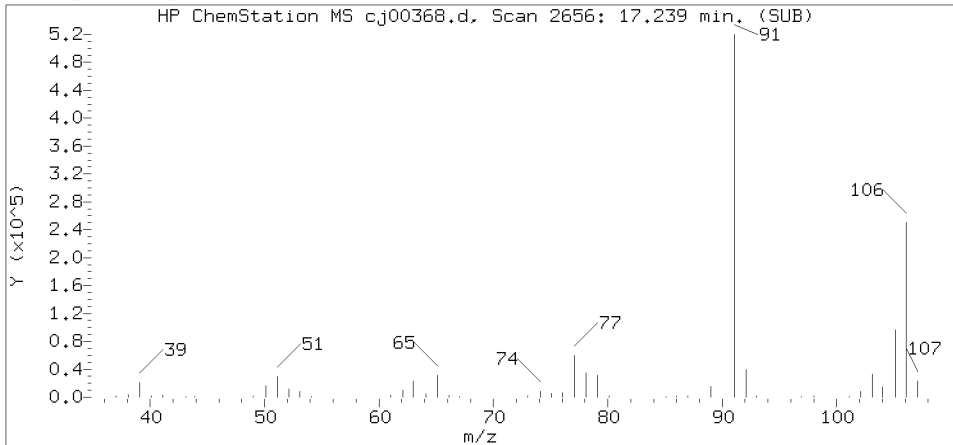
Lab Sample ID: 8087715

Compound Number : 75  
 Compound Name : m/p-Xylene  
 Scan Number : 2495  
 Retention Time (minutes): 16.259  
 Relative Retention Time : 0.00000  
 Quant Ion : 91.00  
 Area (flag) : 5772465  
 Concentration (ppb(v)) : 45.8155

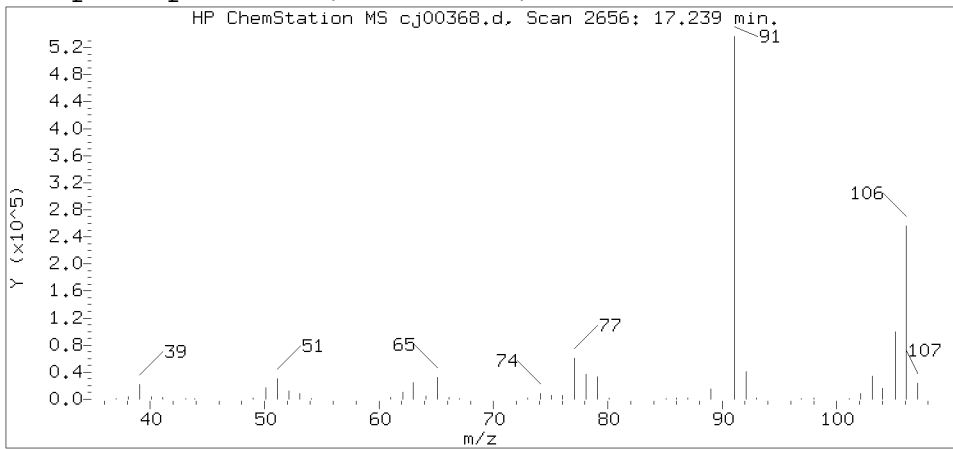
Reference Standard Spectrum for o-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

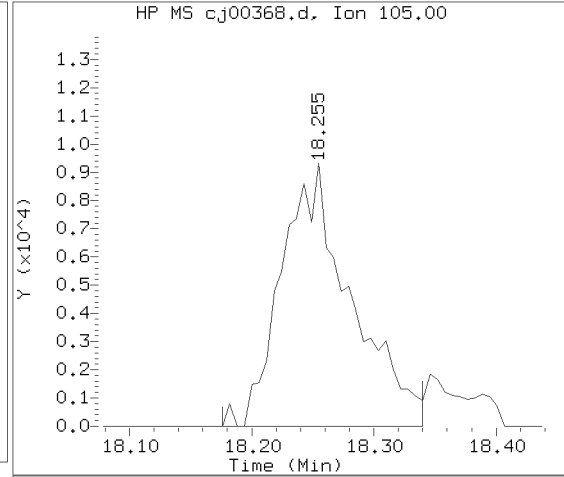
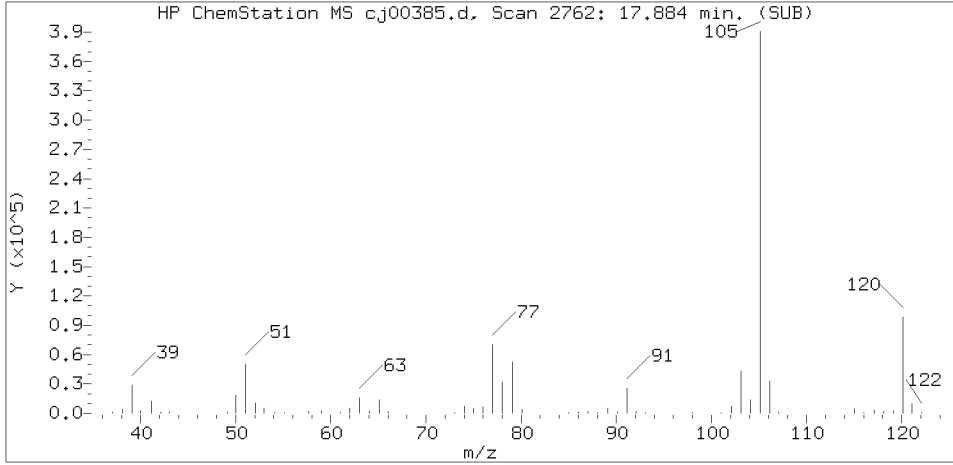
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

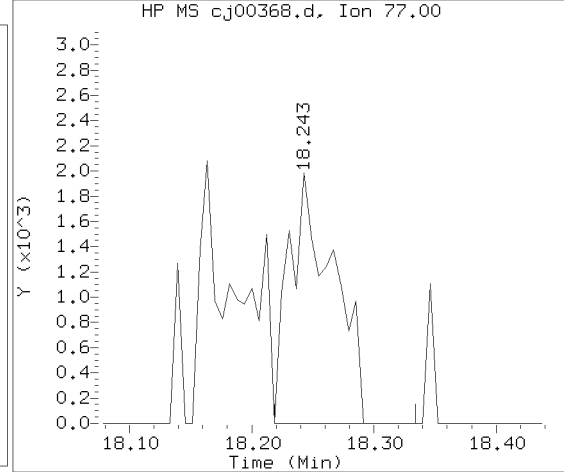
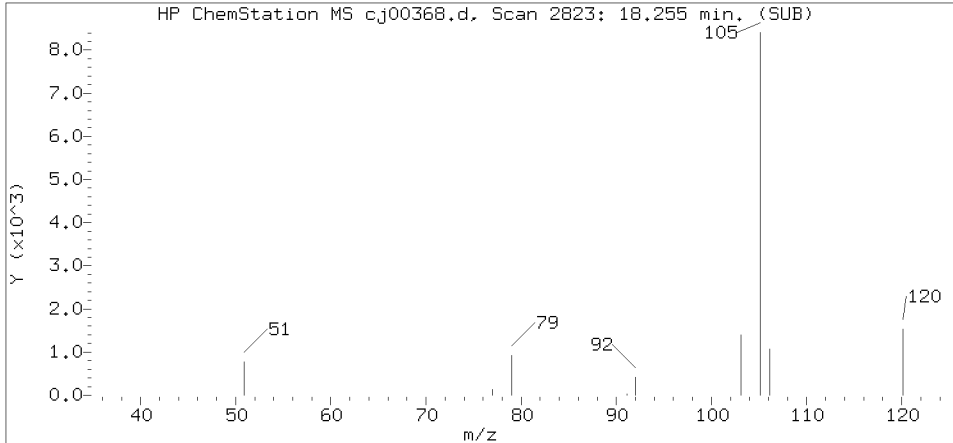
Lab Sample ID: 8087715

Compound Number : 76  
 Compound Name : o-Xylene  
 Scan Number : 2656  
 Retention Time (minutes): 17.239  
 Relative Retention Time : -0.00039  
 Quant Ion : 91.00  
 Area (flag) : 2171160  
 Concentration (ppb(v)) : 16.3724

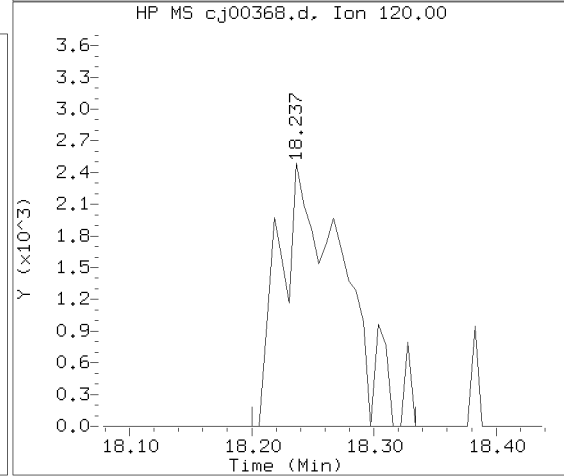
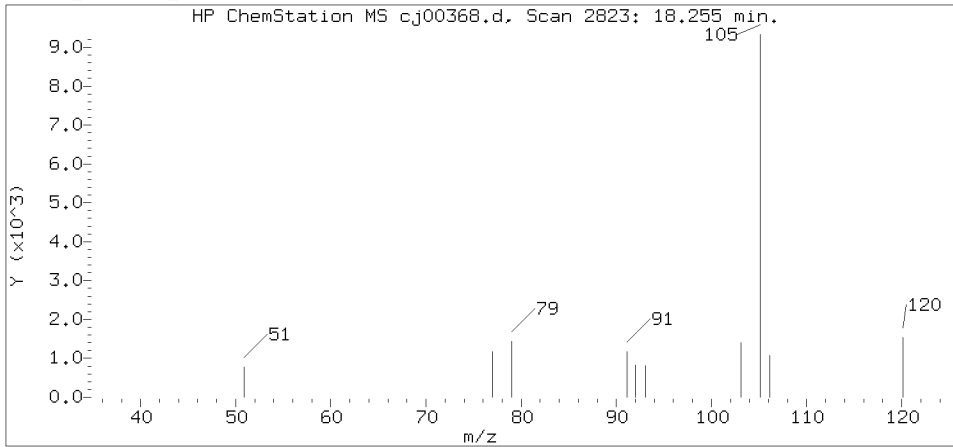
Reference Standard Spectrum for Cumene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

Lab Sample ID: 8087715

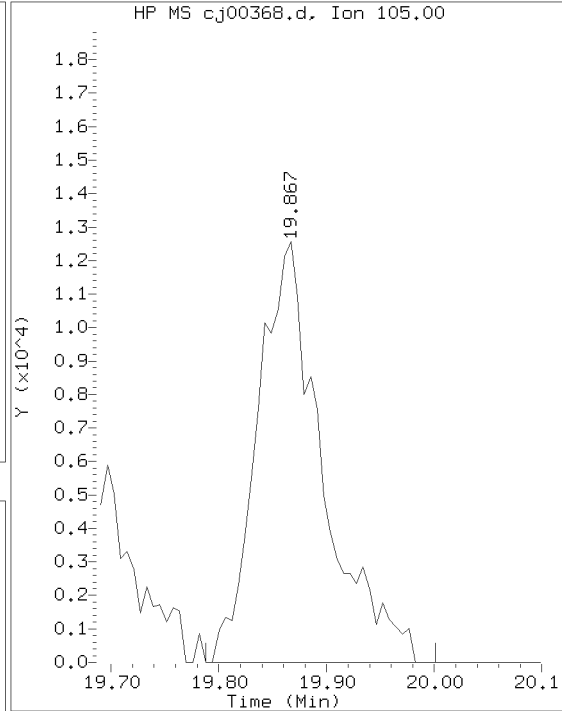
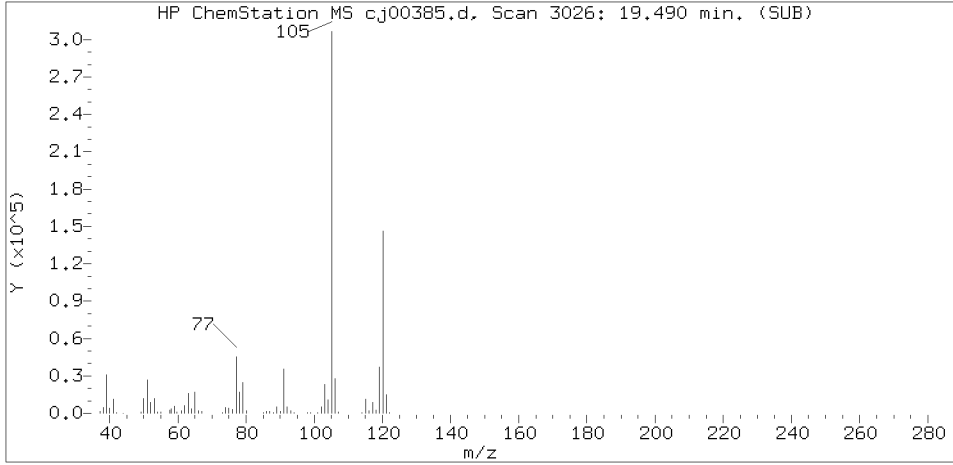
Compound Number : 80  
 Compound Name : Cumene  
 Scan Number : 2823  
 Retention Time (minutes): 18.255  
 Relative Retention Time : -0.00078  
 Quant Ion : 105.00  
 Area (flag) : 36616  
 Concentration (ppb(v)) : 0.2150

Sublist used: 292

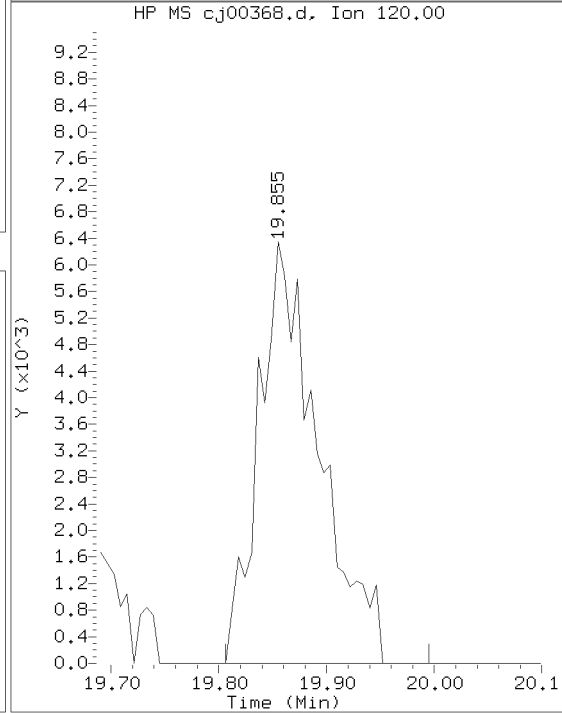
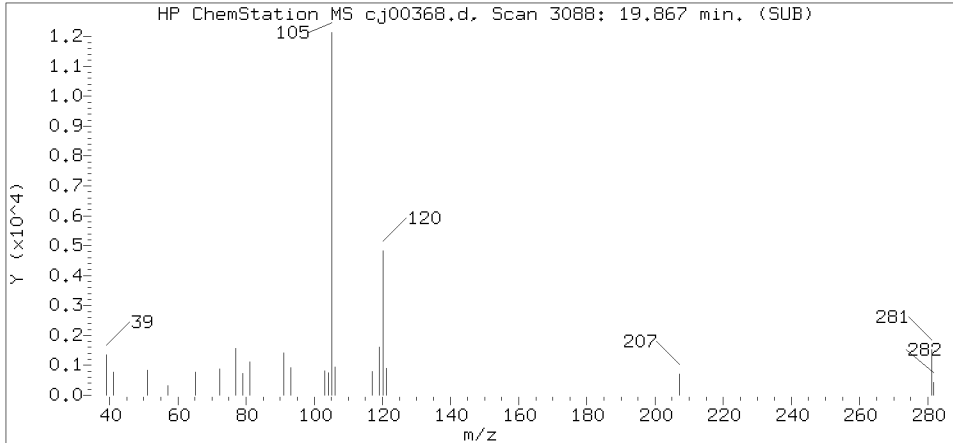
Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304  
 SSX23 Page 282 of 1243

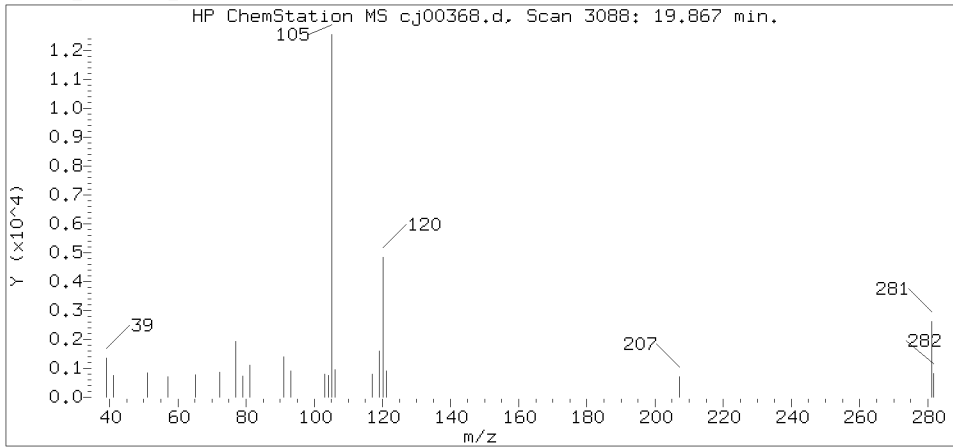
Reference Standard Spectrum for 1,3,5-Trimethylbenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

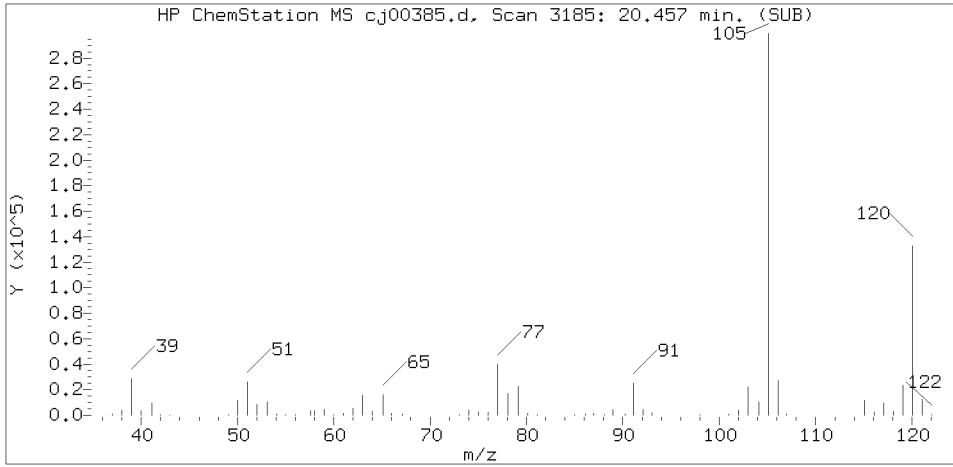
Sublist used: 292

Sample Name: 1014-

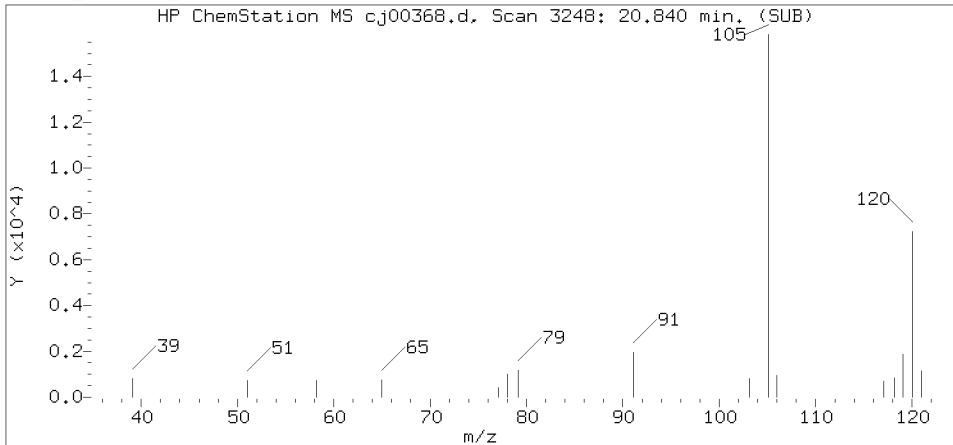
Lab Sample ID: 8087715

Compound Number : 87  
 Compound Name : 1,3,5-Trimethylbenzene  
 Scan Number : 3088  
 Retention Time (minutes): 19.867  
 Relative Retention Time : -0.00078  
 Quant Ion : 105.00  
 Area (flag) : 52858  
 Concentration (ppb(v)) : 0.3232

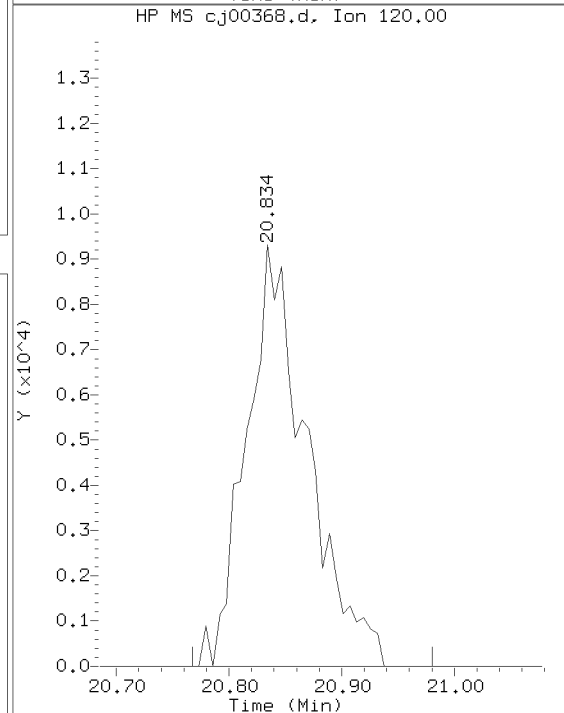
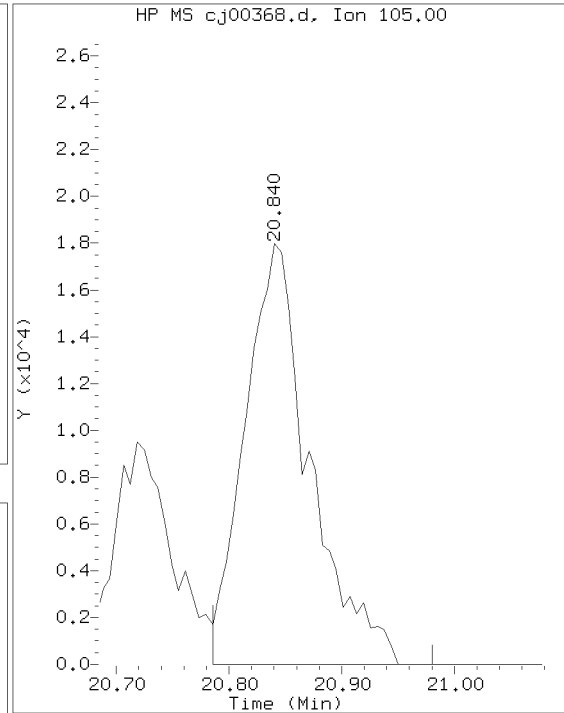
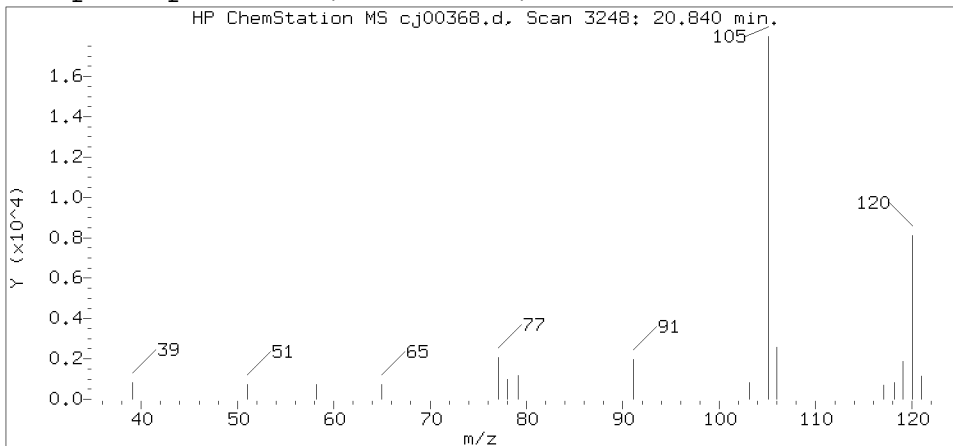
Reference Standard Spectrum for 1,2,4-Trimethylbenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
 Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 16-OCT-2015 16:10  
 Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014- Lab Sample ID: 8087715

Compound Number : 90  
 Compound Name : 1,2,4-Trimethylbenzene  
 Scan Number : 3248  
 Retention Time (minutes): 20.840  
 Relative Retention Time : -0.00039  
 Quant Ion : 105.00  
 Area (flag) : 72055  
 Concentration (ppb(v)) : 0.4244





SDG No.:

Sample Media:	CANISTER	Lab Sample ID:	8087715
Canister ID:	1014	Lab File ID:	cj00368.d
Pressure Received:	26.7 psia	Date Collected:	10/10/2015
Final Pressure:	13.4 psia	Date Received:	10/14/2015
Nominal Volume:	250 cc	Analyzed Date:	10/17/2015
Injection Volume:	500 cc	Analyzed Time:	05:30
Instrument ID:	09464	Dilution Factor:	1

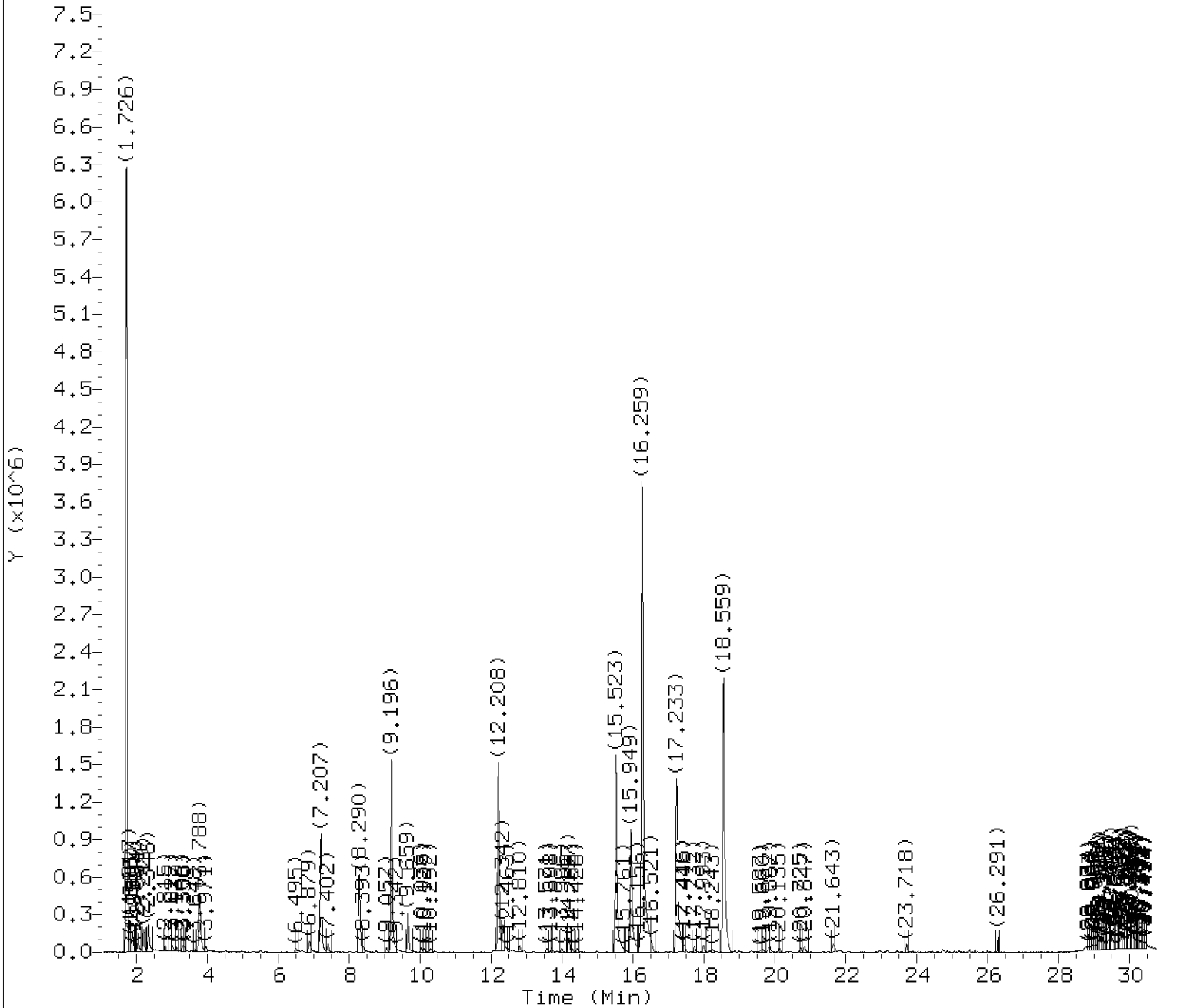
Number TICs Found: 3

Concentration Units: ppb(v)

CAS NUMBER	COMPOUND	RT	EST. CONC.	Q
811-97-2	Norflurane	1.82	2	J
106-97-8	Butane	2.22	2	J
75-07-0	Acetaldehyde	2.35	2	J
TOTVOATIC	Total Tics		5	J

Abbreviations:

B = The compound was found in blank with a result greater than the limit being reported.  
J = The result is between the MDL and LOQ.



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 16-OCT-2015 16:10

Sublist used: 292

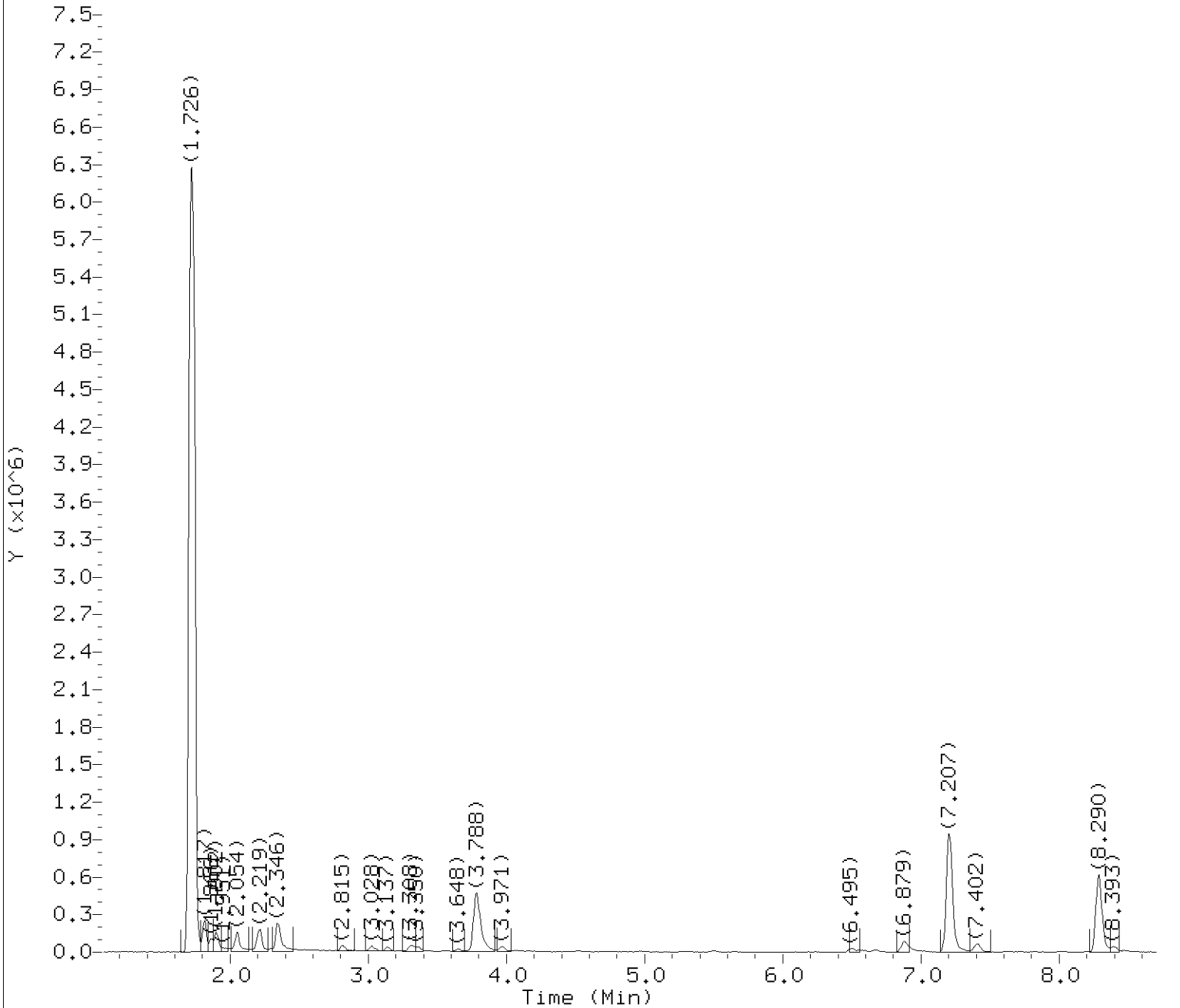
Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

Lab Sample ID: 8087715

Chromatogram Start Time (min.): 1.087  
Chromatogram End Time (min.): 30.751

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 16-OCT-2015 16:10

Sublist used: 292

Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

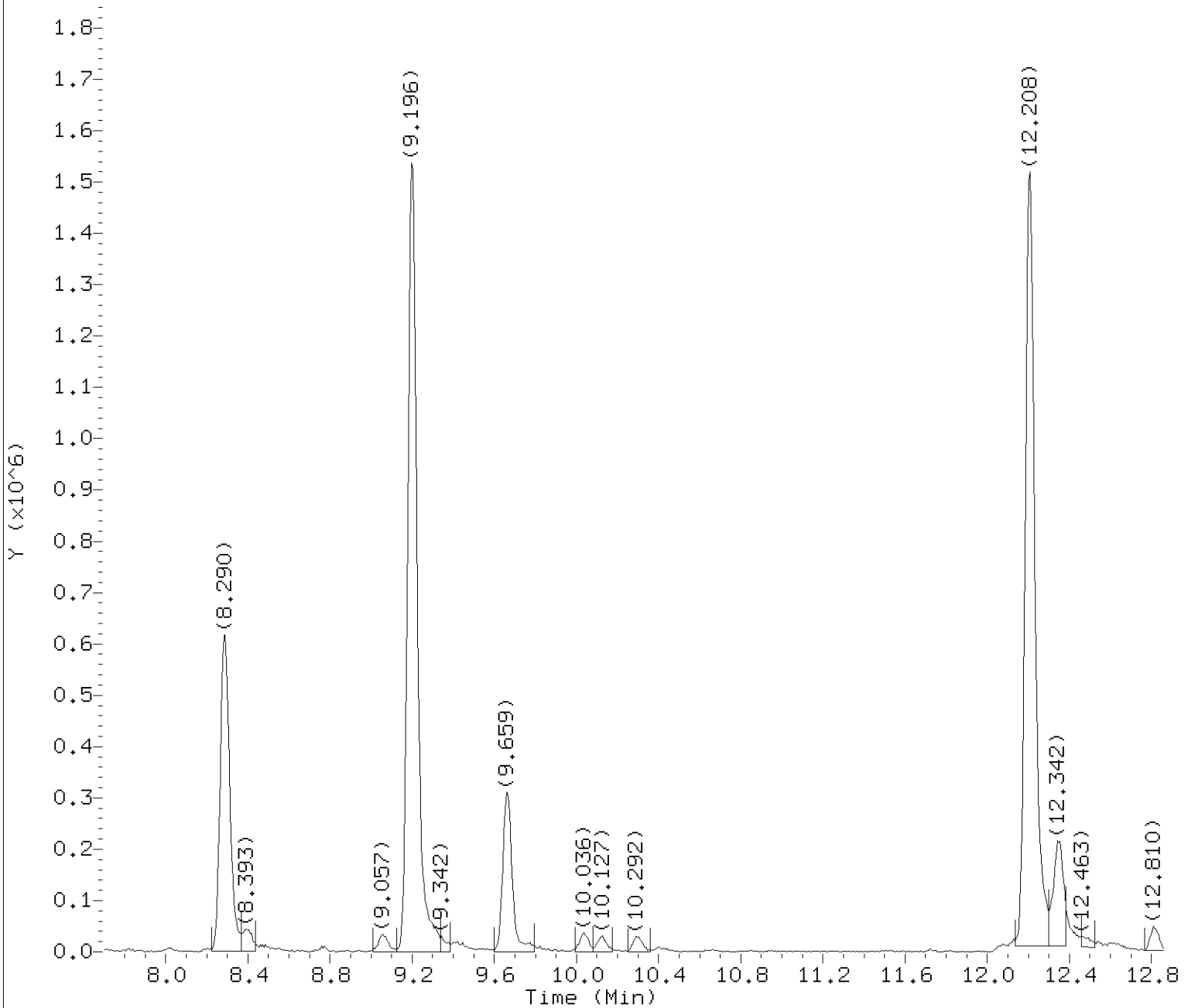
Lab Sample ID: 8087715

Internal Standard referenced: Bromochloromethane at 7.207 minutes

Chromatogram Start Time (min.): 1.087

Chromatogram End Time (min.): 8.202

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 16-OCT-2015 16:10

Sublist used: 292

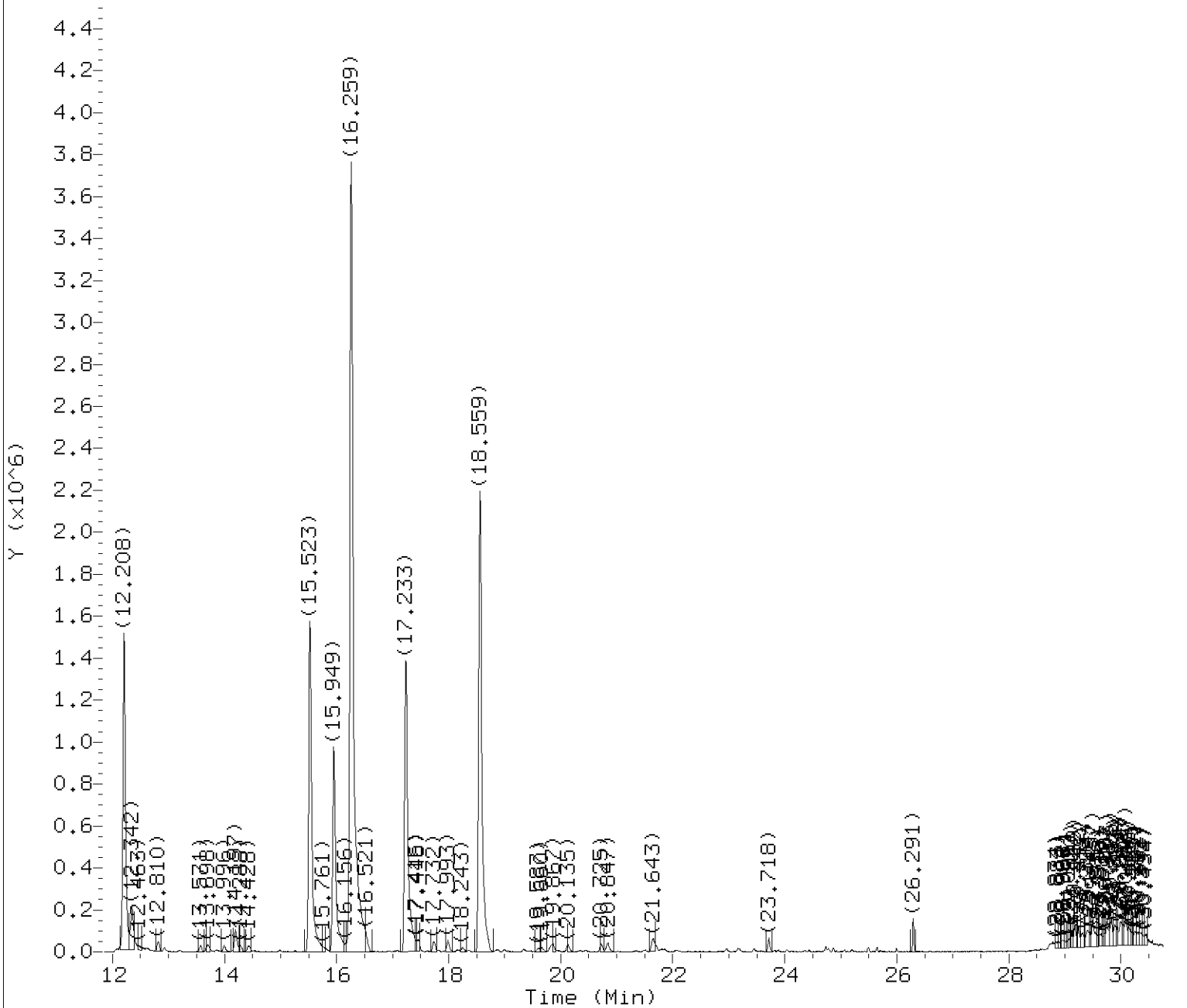
Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sample Name: 1014-

Lab Sample ID: 8087715

Internal Standard referenced: 1,4-Difluorobenzene at 9.196 minutes  
Chromatogram Start Time (min.): 8.202  
Chromatogram End Time (min.): 12.357

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00368.d  
Injection date and time: 17-OCT-2015 05:30

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 16-OCT-2015 16:10  
Date, time and analyst ID of latest file update: 29-Oct-2015 11:27 jbs01304

Sublist used: 292

Sample Name: 1014-

Lab Sample ID: 8087715

Internal Standard referenced: Chlorobenzene-d5 at 15.517 minutes  
Chromatogram Start Time (min.): 12.357  
Chromatogram End Time (min.): 30.751

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.  
Target 3.5 esignature user ID: jbs01304

Lancaster Laboratories, Inc.

Data file : /chem/HP09464.i/15oct16.b/cj00368.d  
Lab Smp Id: 8087715 Client Smp ID: 1014-  
Inj Date : 17-OCT-2015 05:30  
Operator : jeb07445 Inst ID: HP09464.i  
Smp Info : 8087715;500;C1528830AB;1014-;0;0;SAMPLE;  
Misc Info : cj00353;292.sub;250;13.3735;26.7470;1014;  
Comment :  
Method : /chem/HP09464.i/15oct16.b/to-15.m  
Meth Date : 29-Oct-2015 11:25 jbs01304 Quant Type: ISTD  
Cal Date : 16-OCT-2015 10:21 Cal File: cj00337.d  
Als bottle: 19  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 292.sub  
Target Version: 3.50  
Processing Host: d30cs01

Concentration Formula: Amt \* DF \* (Xa/Ya)\*(IVn/IVa) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Xa	26.74700	canister pressure absolute after dilutio
Ya	13.37350	canister pressure absolute before diluti
IVn	250.00000	nominal injection volume
IVa	500.00000	actual injection volume

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 40 Bromochloromethane	7.207	3120847	10.000

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL(ppb(v))	FINAL(ppb(v))		LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====
Norflurane					CAS #: 811-97-2		
1.817	511258	1.63820178	1.638202	72	NIST11.1	4174	40(L)
Butane					CAS #: 106-97-8		
2.219	483617	1.54963429	1.549634	8	NIST11.1	233	40(L)

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL(ppb(v))	FINAL(ppb(v))	QUAL	LIBRARY	LIB ENTRY	CPND #
2.346	685928	2.19789003	2.197890	9	NIST11.1	72	40(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Date : 17-OCT-2015 05:30

Client ID: 1014-

Instrument: HP09464.i

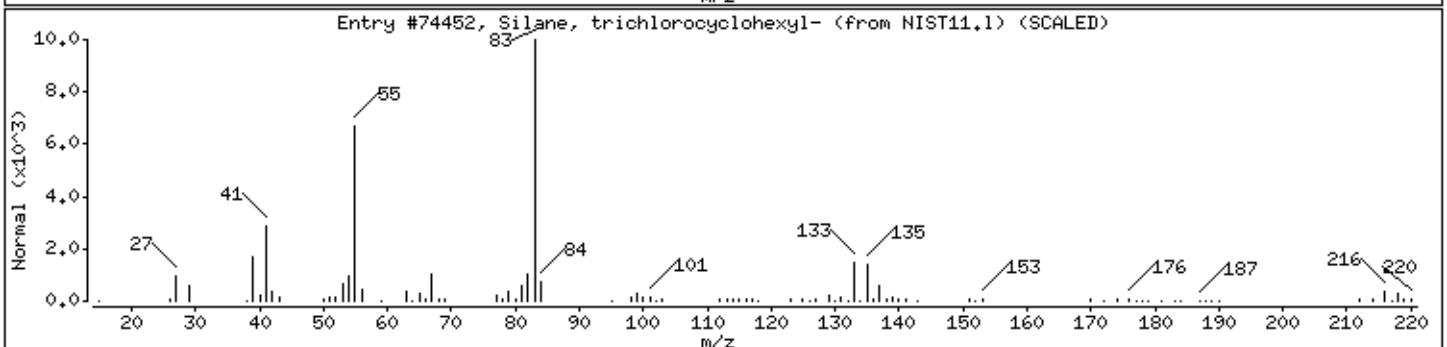
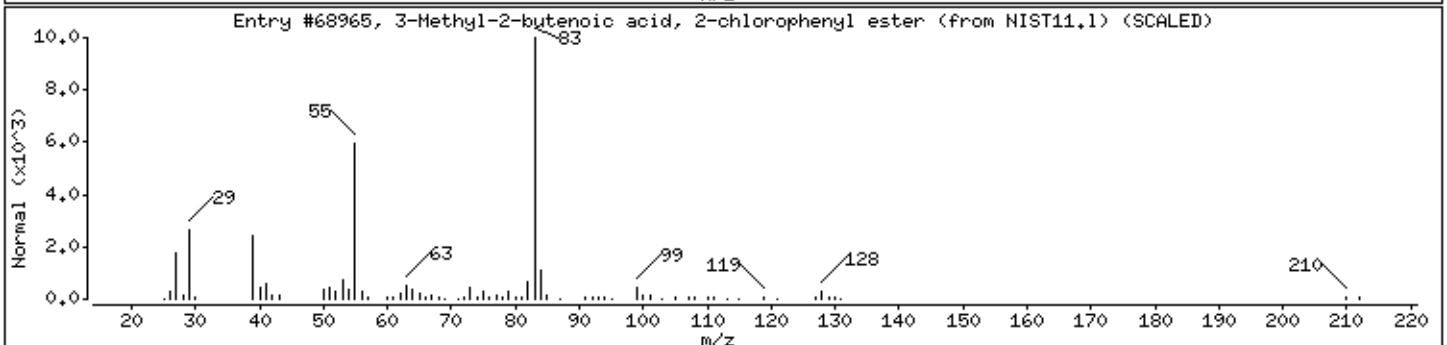
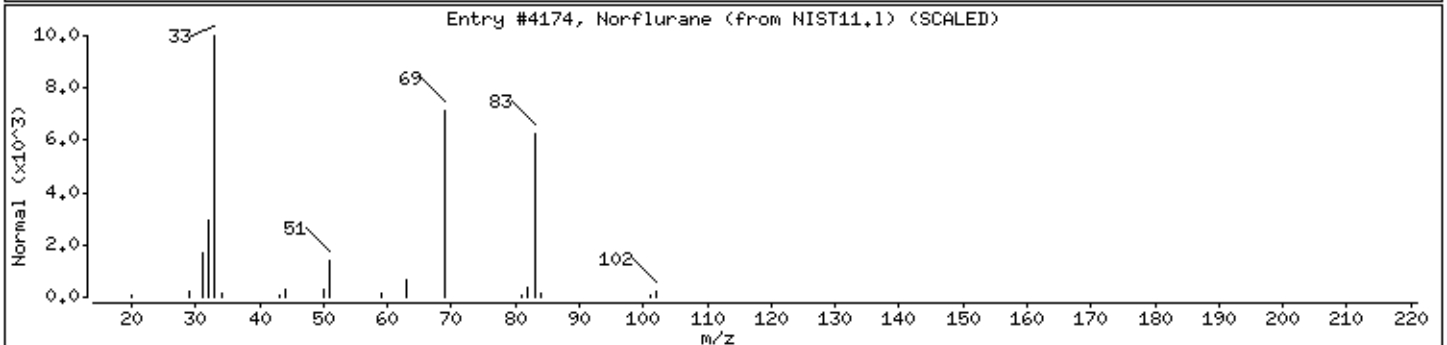
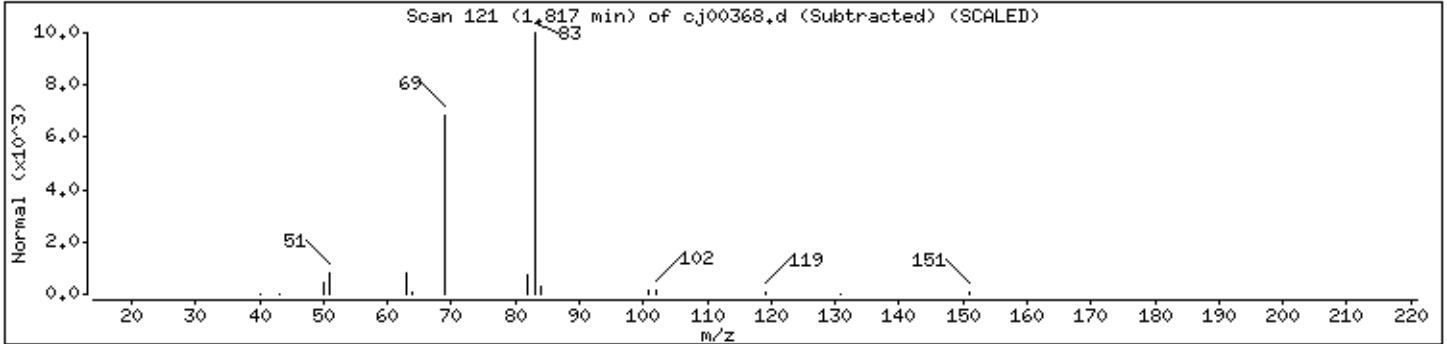
Sample Info: 8087715;500;C1528830AB;1014-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Norflurane	811-97-2	NIST11.1	4174	72	C2H2F4	102
3-Methyl-2-butenoic acid, 2-chlorophenyl	142337-52-8	NIST11.1	68965	4	C11H11ClO2	210
Silane, trichlorocyclohexyl-	98-12-4	NIST11.1	74452	4	C6H11Cl3Si	216





Date : 17-OCT-2015 05:30

Client ID: 1014-

Instrument: HP09464.i

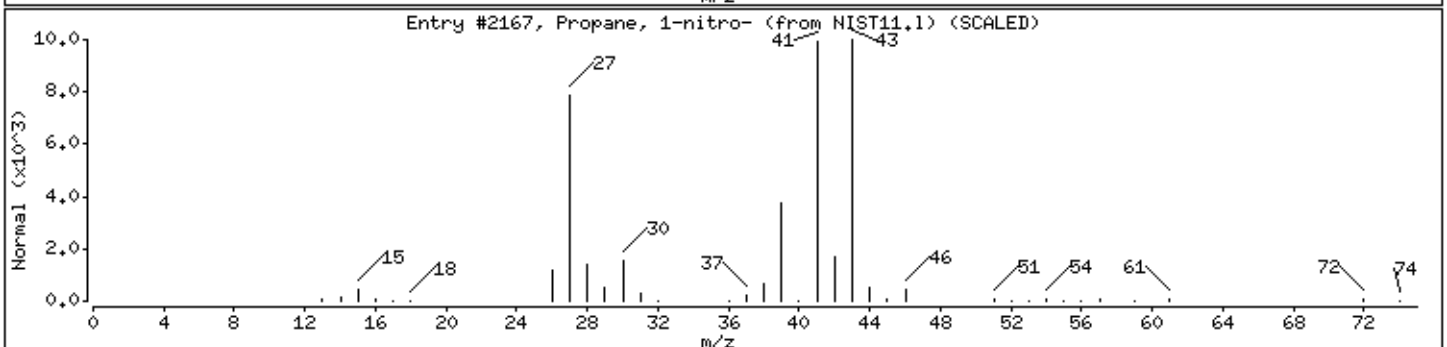
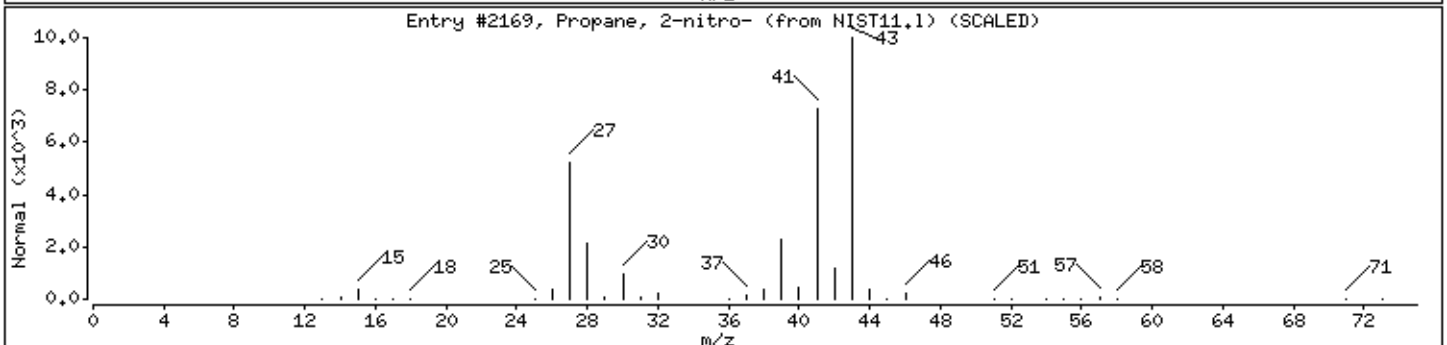
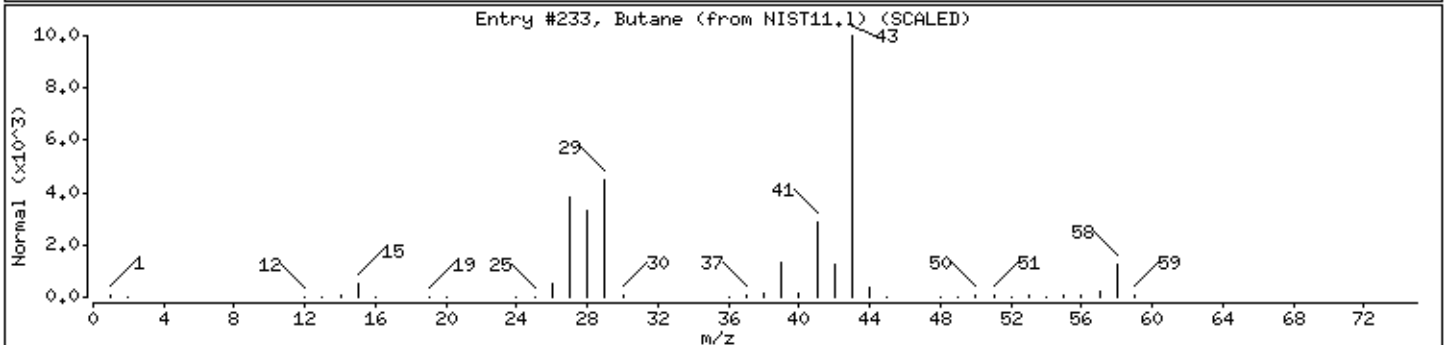
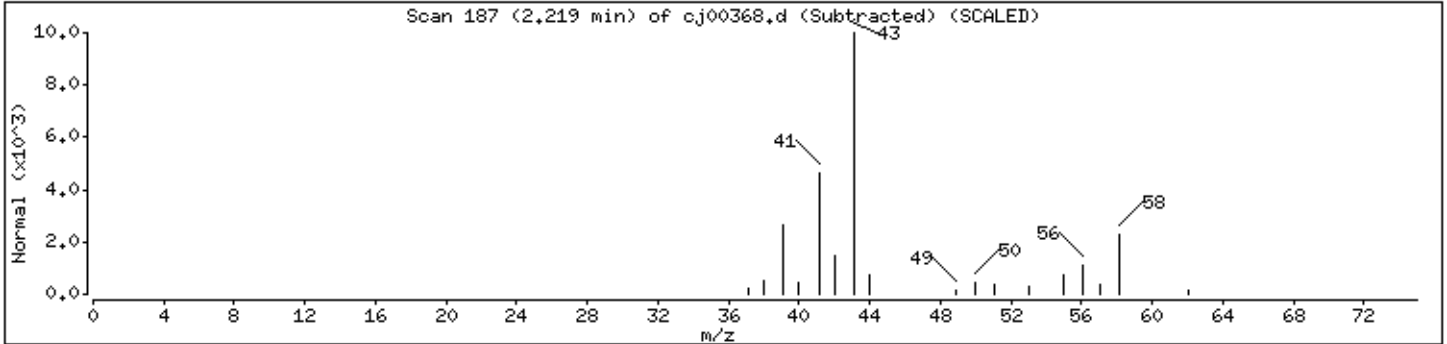
Sample Info: 8087715;500;C1528830AB;1014-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Butane	106-97-8	NIST11.1	233	8	C4H10	58
Propane, 2-nitro-	79-46-9	NIST11.1	2169	9	C3H7NO2	89
Propane, 1-nitro-	108-03-2	NIST11.1	2167	9	C3H7NO2	89



Date : 17-OCT-2015 05:30

Client ID: 1014-

Instrument: HP09464.i

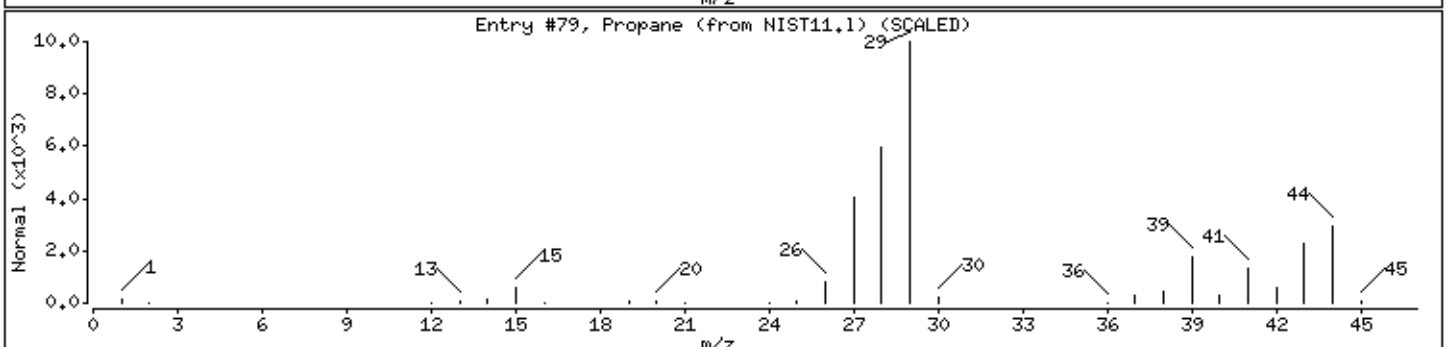
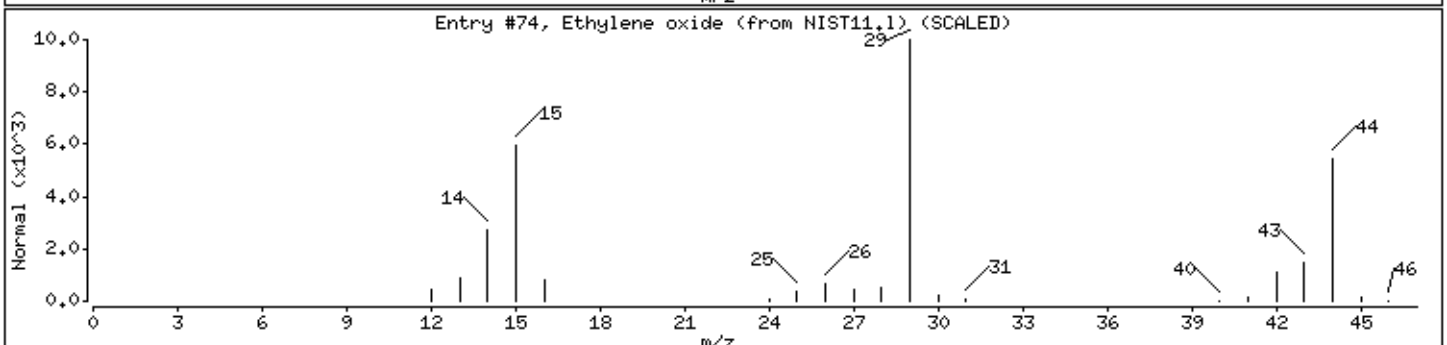
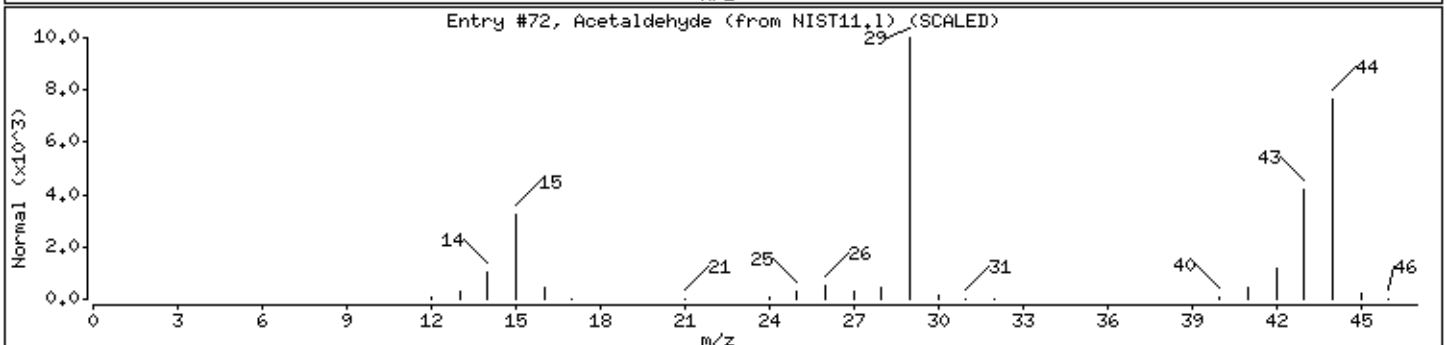
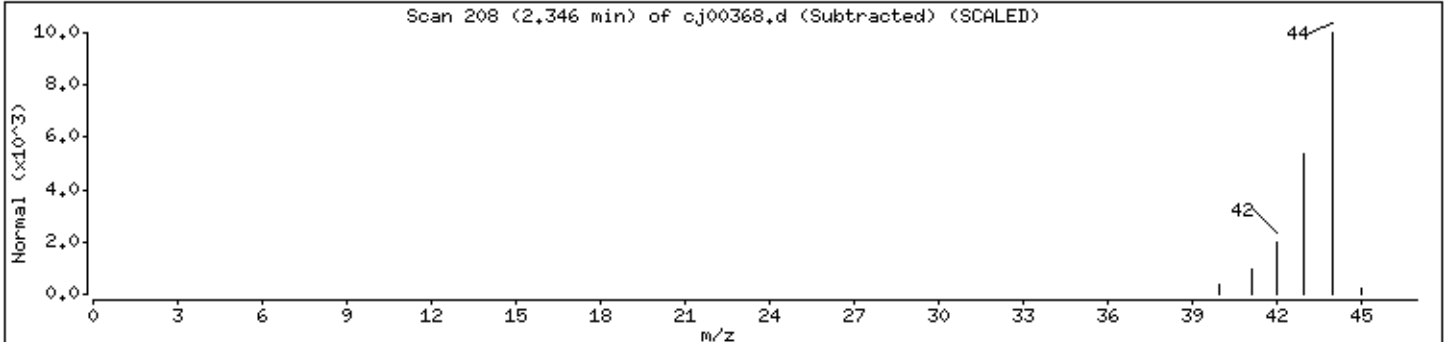
Sample Info: 8087715;500;C1528830AB;1014-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetaldehyde	75-07-0	NIST11.1	72	9	C2H4O	44
Ethylene oxide	75-21-8	NIST11.1	74	5	C2H4O	44
Propane	74-98-6	NIST11.1	79	5	C3H8	44



988--

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Volatiles in Air 8087716

Data file: /chem/HP09464.i/15oct16.b/cj00369.d Injection date and time: 17-OCT-2015 06:17  
 Data file Sample Info. Line: 8087716;500;C1528830AB;988--;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AB  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292  
 Calibration date and time (Last Method Edit): 29-OCT-2015 11:25  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 27.4 psia Canister Pressure before dilution (Ya): 13.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 500 cc

## Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	7.207(-0.006)	1007	130	762341 (-5)	10.00		480075 - 1120173
51) 1,4-Difluorobenzene	9.202(-0.012)	1335	114	2224884 (-15)	10.00		1574006 - 3672680
71) Chlorobenzene-d5	15.523(-0.006)	2374	117	1993347 (-17)	10.00		1433482 - 3344790

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Qual.	Limit (in sample)	LOQ
2) Dichlorodifluoromethane	(1)			Not Detected					0.2	1
3) Chlorodifluoromethane	(1)			Not Detected					0.2	1
4) Freon 114	(1)			Not Detected					0.2	1
5) Chloromethane	(1)			Not Detected					0.2	1
6) Vinyl Chloride	(1)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.2	1
9) Chloroethane	(1)			Not Detected					0.2	1
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)	3.022(-0.001)	101	67948	0.281	0.28		J	0.2	1
13) Pentane	(1)	3.131(-0.000)	43	472990	11.506	11.51			0.2	1
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)	3.800(-0.002)	43	401606	12.809	12.81			0.5	2
21) Carbon Disulfide	(1)	3.964(-0.001)	76	94367	0.582	0.58		J	0.5	1
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)	5.498(-0.001)	57	144815	2.962	2.96			0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)	6.891(-0.002)	72	66254	4.351	4.35			0.5	2
42) Chloroform	(1)	7.396( 0.001)	83	33417	0.231	0.23		J	0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
45) Carbon Tetrachloride	(1)			Not Detected					0.2	1
46) Benzene	(2)	8.393( 0.001)	78	38183	0.280	0.28		J	0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
48) Isooctane	(2)			Not Detected					0.2	1
50) Heptane	(2)	9.062(-0.000)	43	25008	0.708	0.71		J	0.2	1
52) Trichloroethene	(2)	9.659( 0.000)	130	3318368	35.594	35.59			0.2	1
54) 1,2-Dichloropropane	(2)	10.066( 0.001)	63	58811	1.557	1.56			0.2	1
55) Dibromomethane	(2)			Not Detected					0.2	1
58) Bromodichloromethane	(2)			Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.2	1
60) 4-Methyl-2-Pentanone	(2)			Not Detected					0.5	2
61) Toluene	(3)	12.354(-0.000)	91	474097	3.046	3.05			0.2	1
62) Octane	(3)			Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
67) Tetrachloroethene	(3)			Not Detected					0.2	1
68) 2-Hexanone	(3)			Not Detected					0.5	2
69) Dibromochloromethane	(3)			Not Detected					0.2	1

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Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 8087716

Data file: /chem/HP09464.i/15oct16.b/cj00369.d Injection date and time: 17-OCT-2015 06:17
Data file Sample Info. Line: 8087716;500;C1528830AB;988--;0;0;SAMPLE; Instrument ID: HP09464.i Batch: C1528830AB
Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time (Last Method Edit): 29-OCT-2015 11:25
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

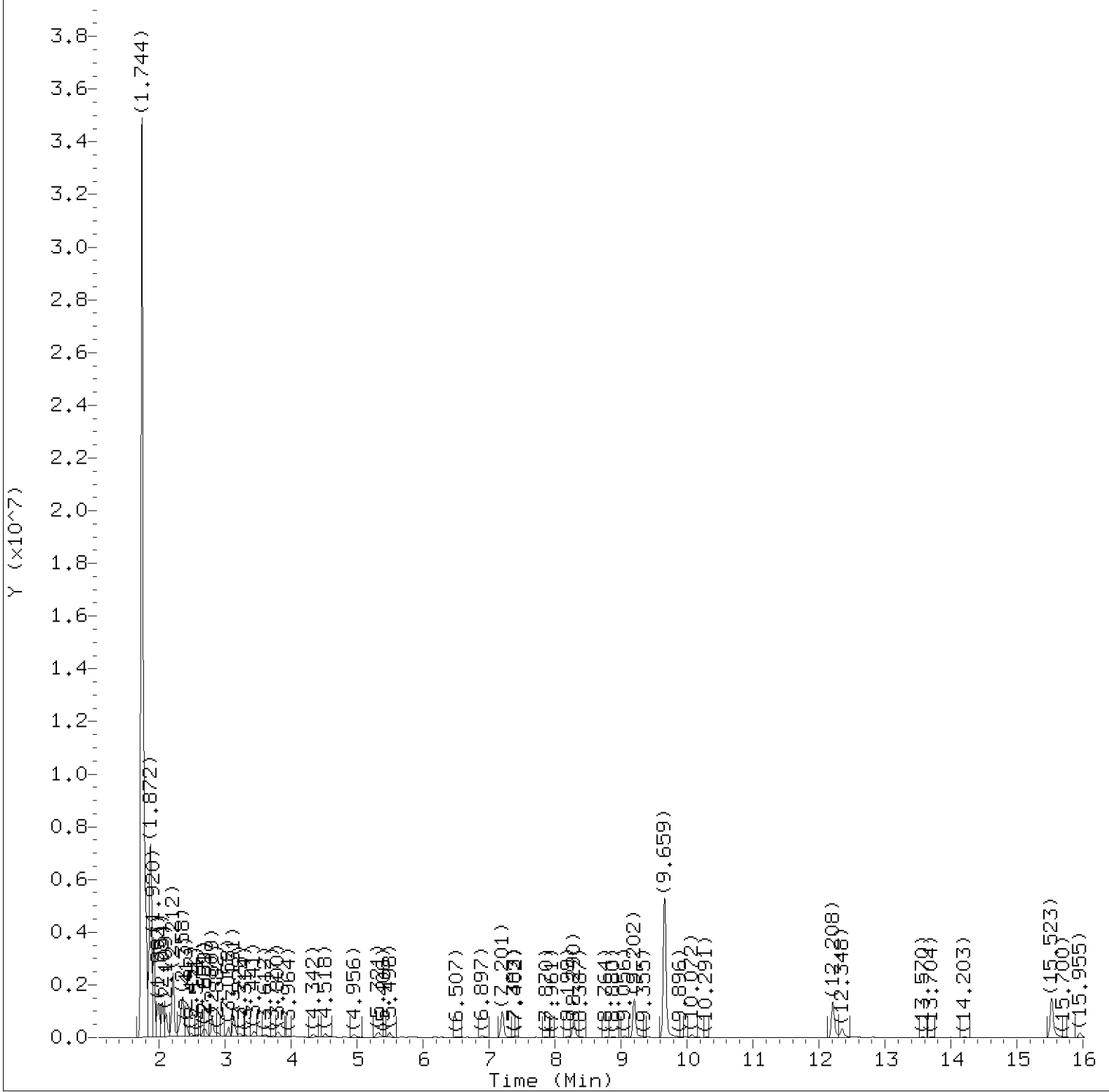
Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 27.4 psia Canister Pressure before dilution (Ya): 13.7 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 500 cc

Table with columns: 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). Lists compounds like 70) 1,2-Dibromoethane, 72) Chlorobenzene, etc.

Total number of targets = 62

Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27. Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Michele J. Smith on 11/10/2015 at 13:29. Parallax ID: mjs00758



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 29-OCT-2015 11:25

Sublist used: 292

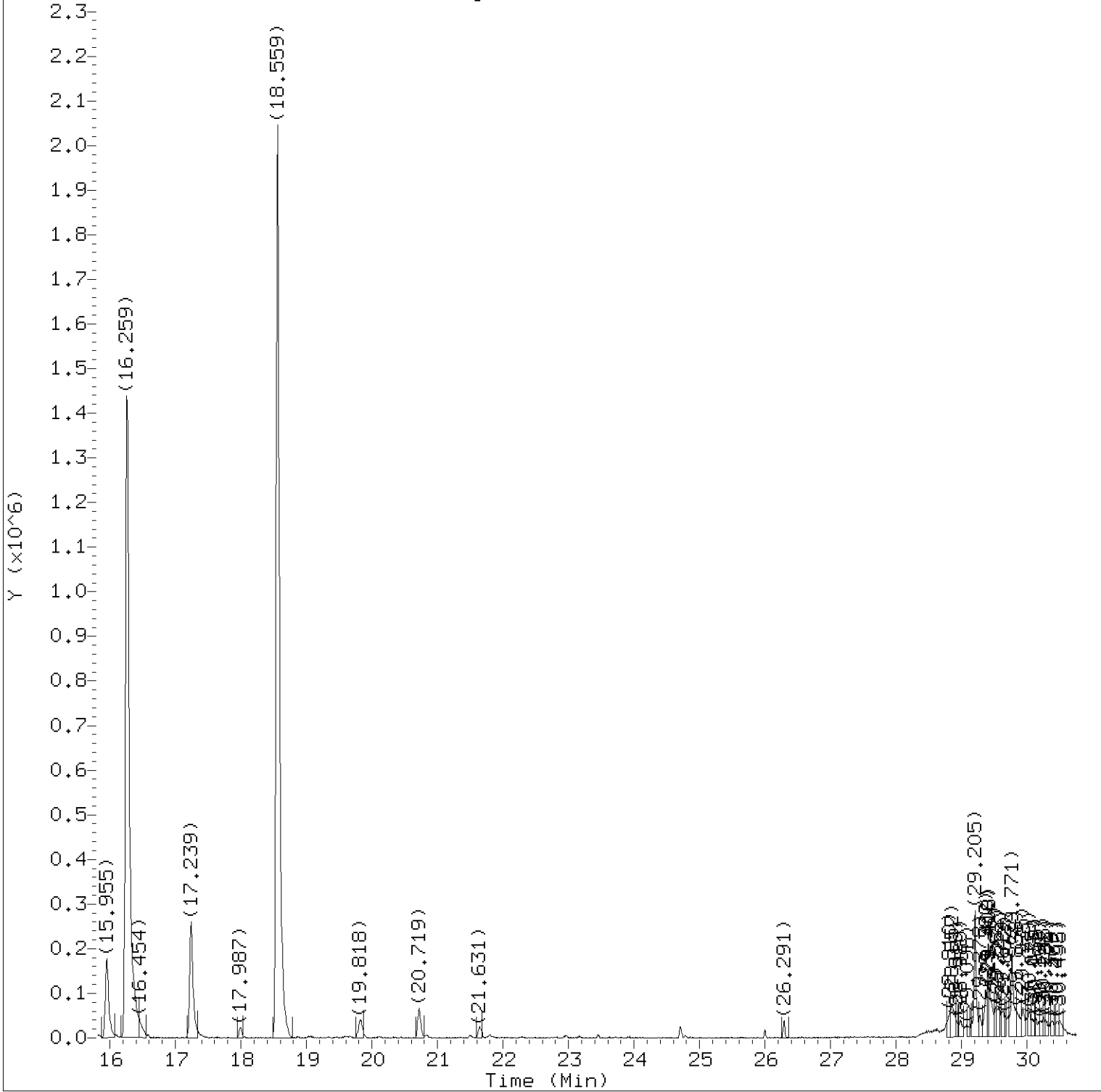
Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

Lab Sample ID: 8087716

Digitally signed by Jeffrey B. Smith  
on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 29-OCT-2015 11:25

Sublist used: 292

Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

Lab Sample ID: 8087716

Digitally signed by Jeffrey B. Smith  
on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sublist used: 292

Sample Name: 988--

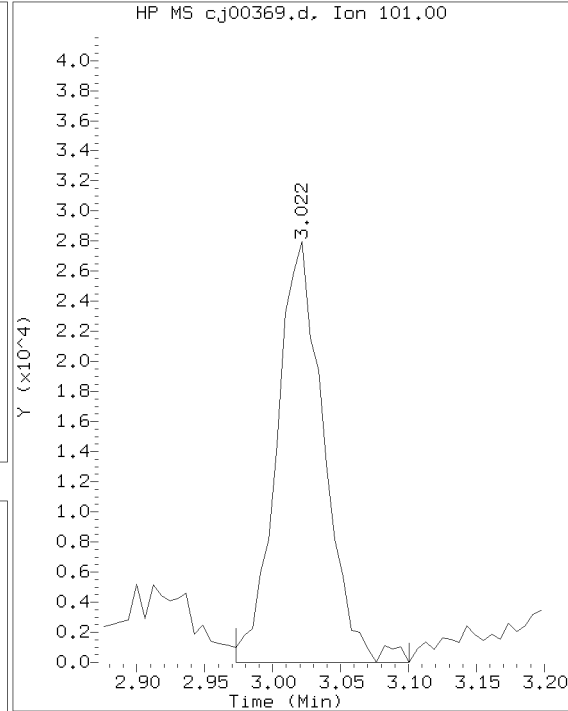
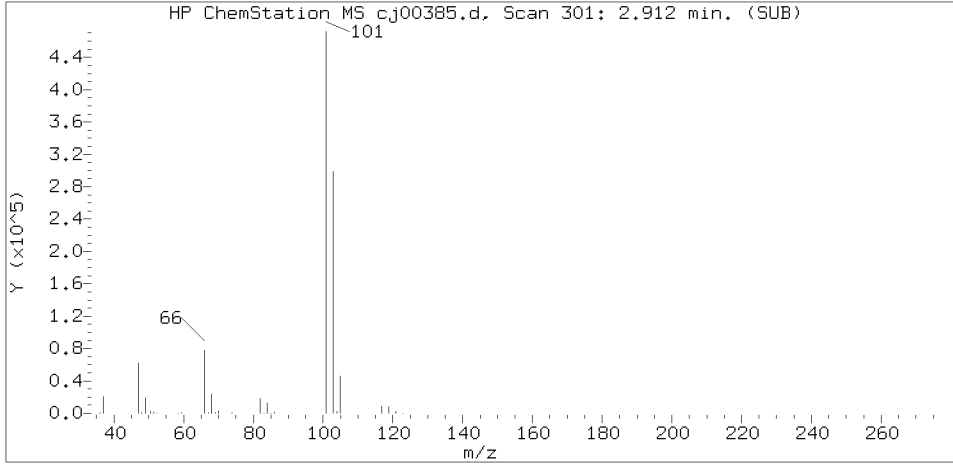
Lab Sample ID: 8087716

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
12) Trichlorofluoromethane	(1)	3.022	101	67948	0.281
13) Pentane	(1)	3.131	43	472990	11.506
19) Acetone	(1)	3.800	43	401606	12.809
21) Carbon Disulfide	(1)	3.964	76	94367	0.582
30) Hexane	(1)	5.498	57	144815	2.962
37) 2-Butanone	(1)	6.891	72	66254	4.351
40)*Bromochloromethane	(1)	7.207	130	762341	10.000
42) Chloroform	(1)	7.396	83	33417	0.231
46) Benzene	(2)	8.393	78	38183	0.280
50) Heptane	(2)	9.063	43	25008	0.708
51)*1,4-Difluorobenzene	(2)	9.202	114	2224884	10.000
52) Trichloroethene	(2)	9.659	130	3318368	35.594
54) 1,2-Dichloropropane	(2)	10.066	63	58811	1.557
61) Toluene	(3)	12.354	91	474097	3.046
71)*Chlorobenzene-d5	(3)	15.523	117	1993347	10.000
74) Ethylbenzene	(3)	15.955	91	309775	1.801
75) m/p-Xylene	(3)	16.265	91	2221063	15.618
76) o-Xylene	(3)	17.239	91	378855	2.531

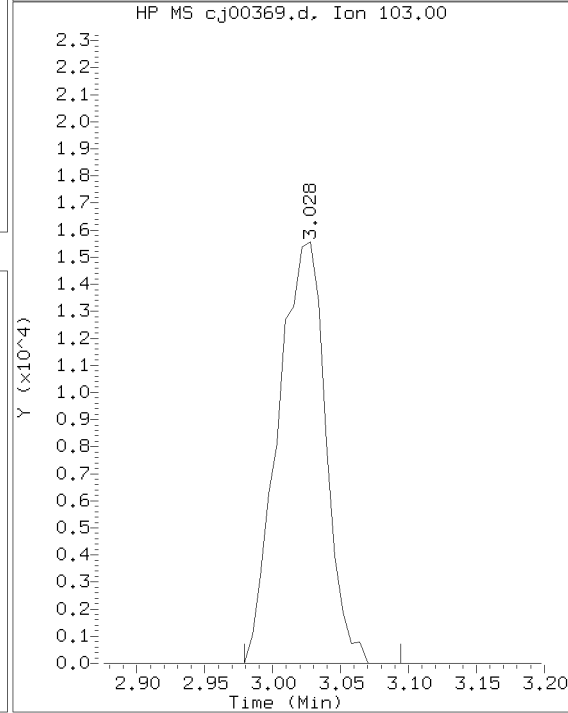
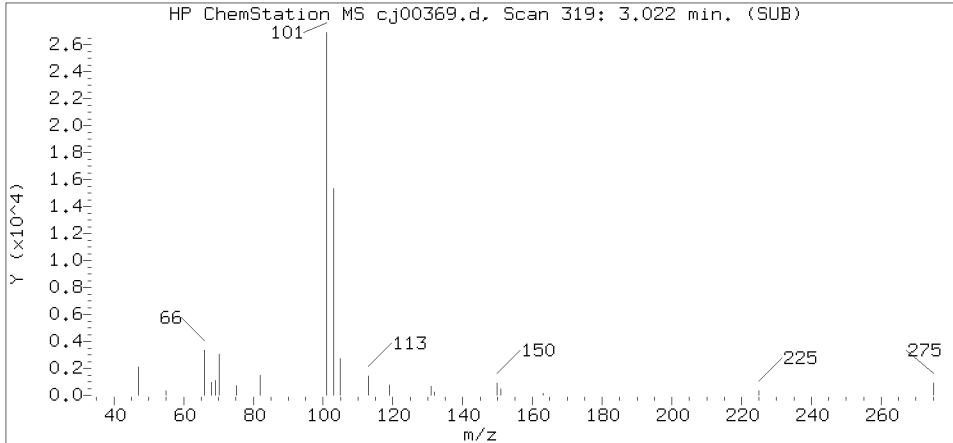
\* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith  
 on 11/10/2015 at 11:27.  
 Target 3.5 esignature user ID: jbs01304

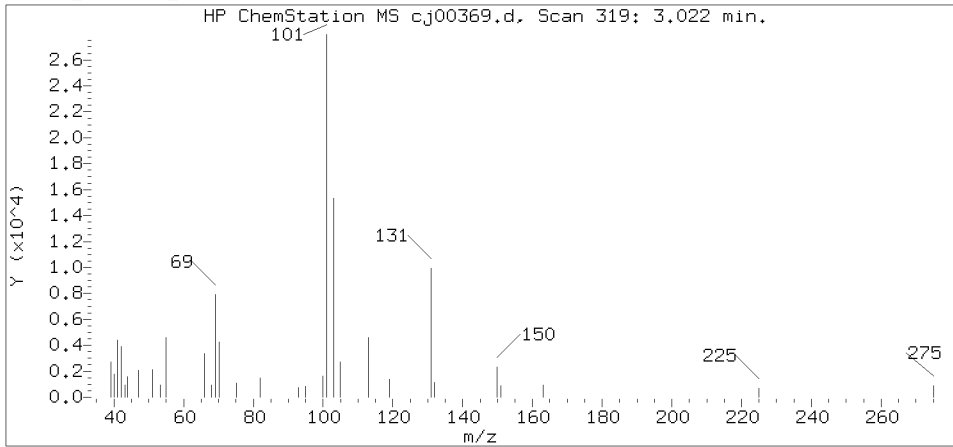
Reference Standard Spectrum for Trichlorofluoromethane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sublist used: 292

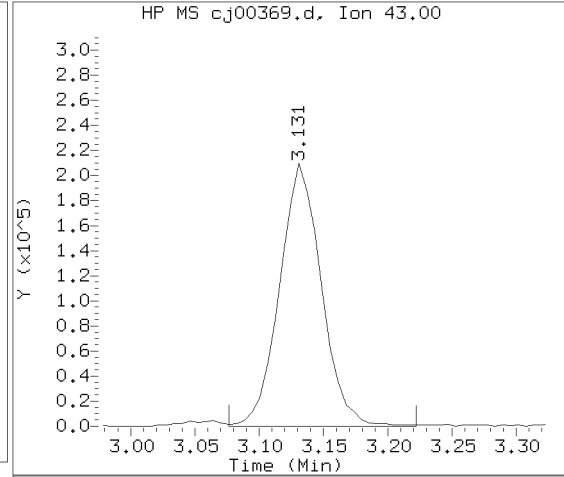
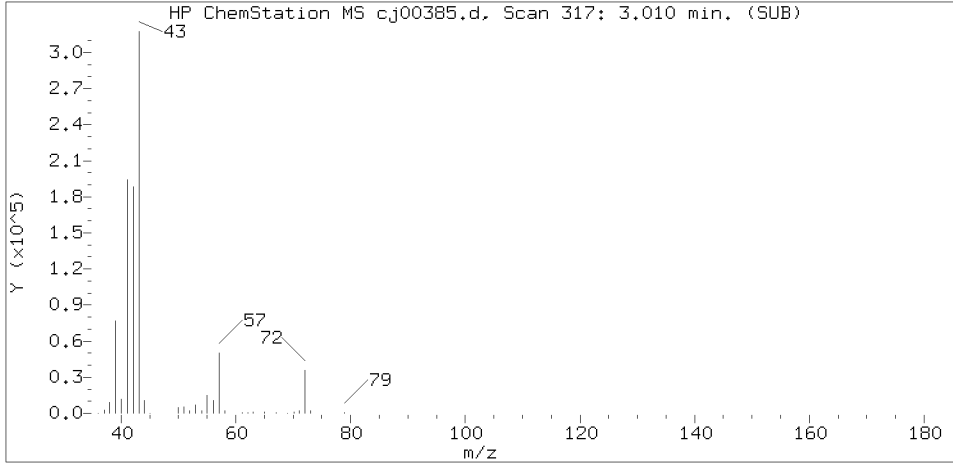
Sample Name: 988--

Lab Sample ID: 8087716

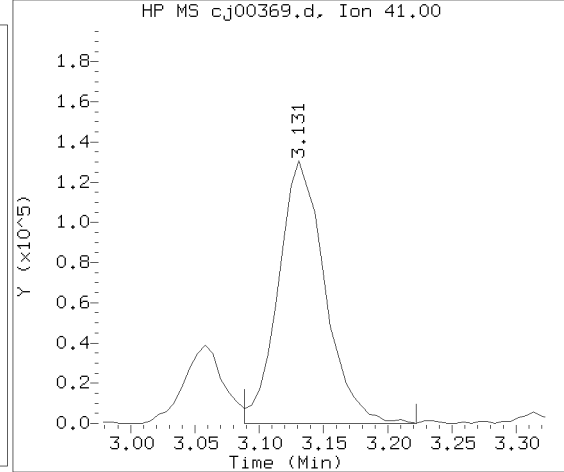
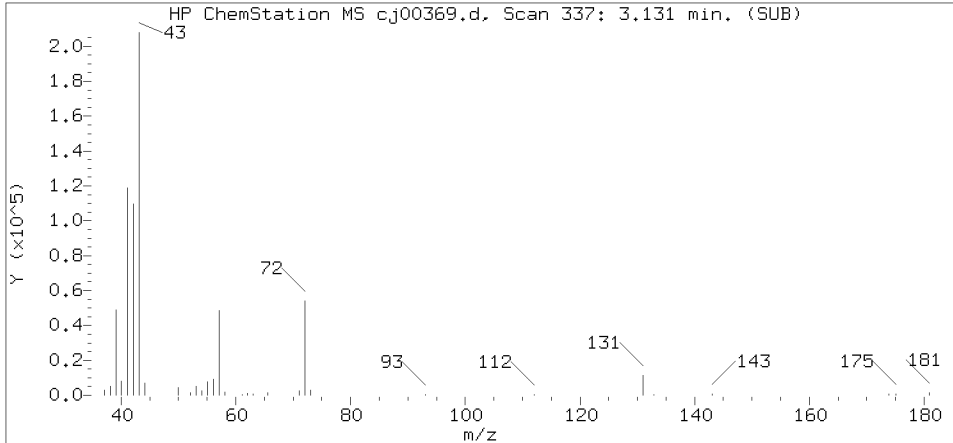
Compound Number : 12  
 Compound Name : Trichlorofluoromethane  
 Scan Number : 319  
 Retention Time (minutes): 3.022  
 Relative Retention Time : -0.00134  
 Quant Ion : 101.00  
 Area (flag) : 67948  
 Concentration (ppb(v)) : 0.2809



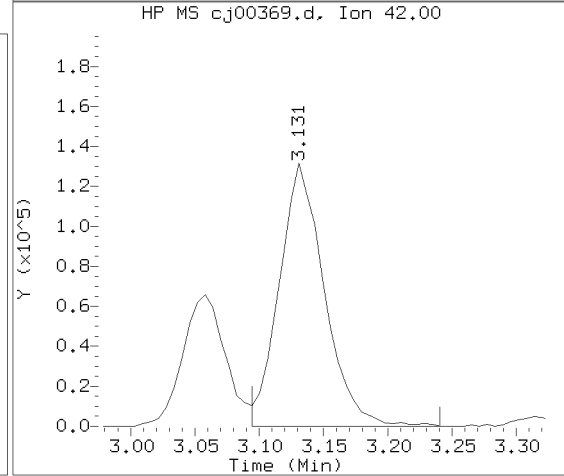
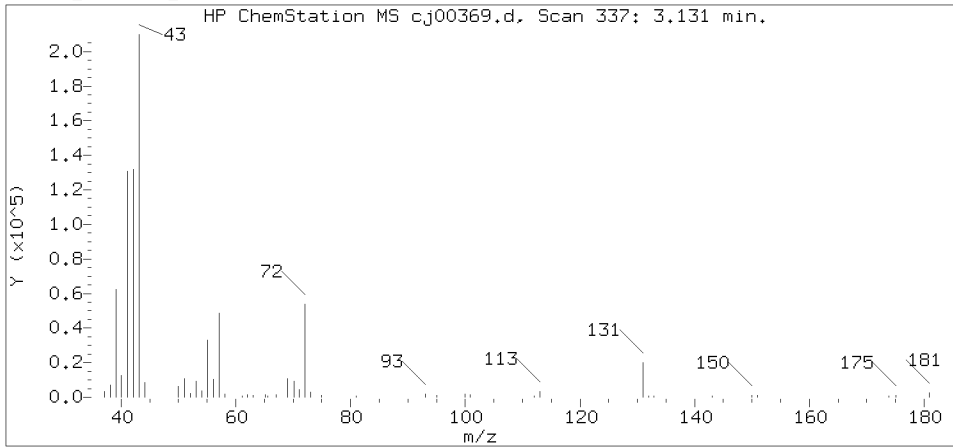
Reference Standard Spectrum for Pentane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

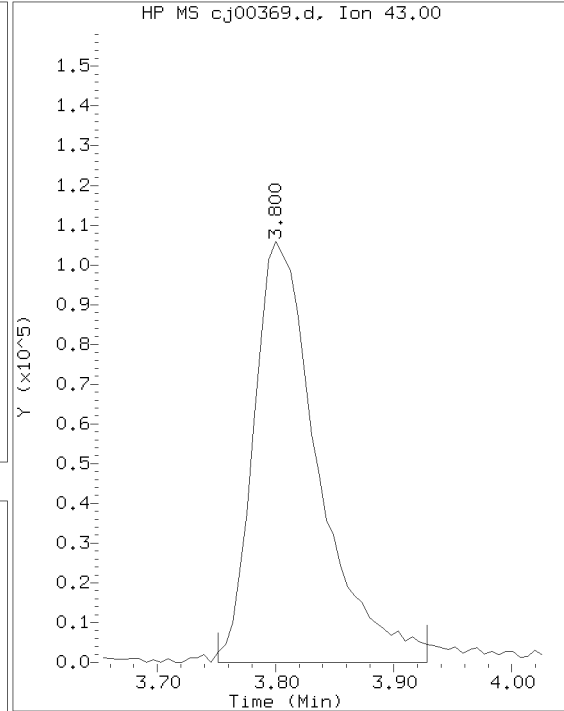
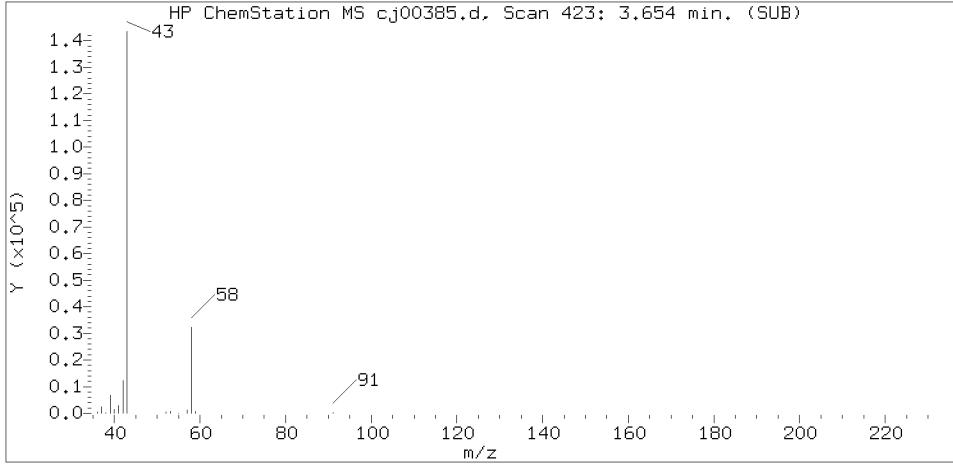
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

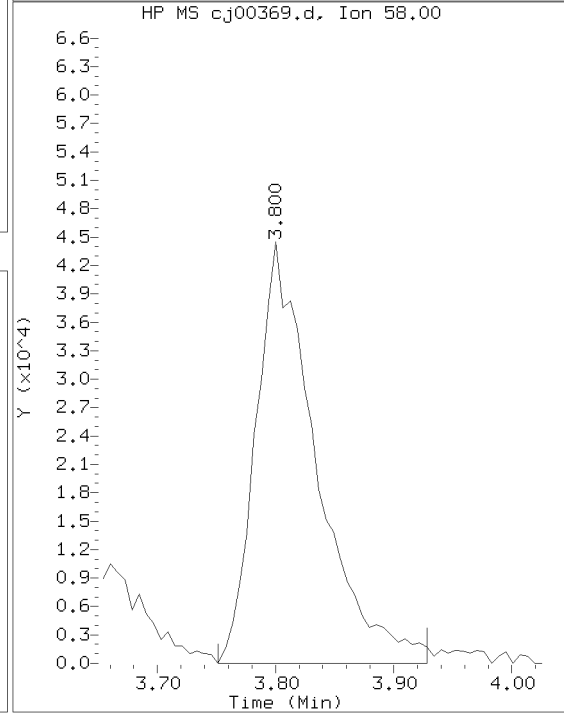
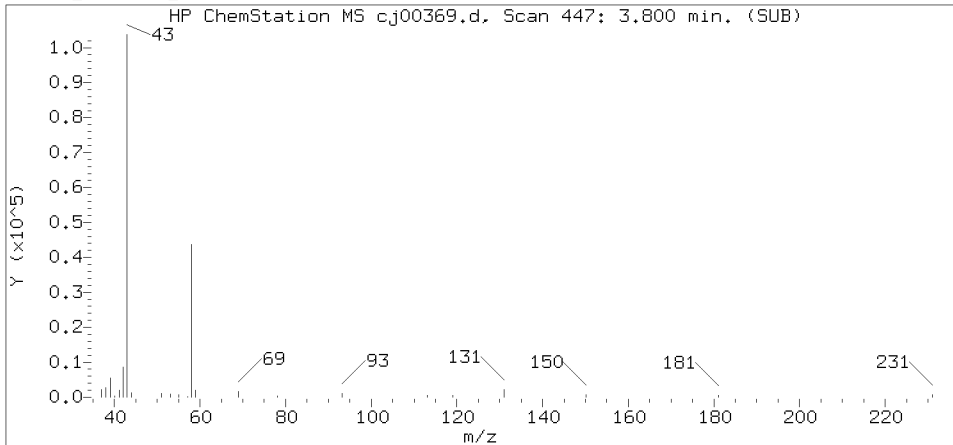
Lab Sample ID: 8087716

Compound Number : 13  
 Compound Name : Pentane  
 Scan Number : 337  
 Retention Time (minutes): 3.131  
 Relative Retention Time : -0.00048  
 Quant Ion : 43.00  
 Area (flag) : 472990  
 Concentration (ppb(v)) : 11.5061

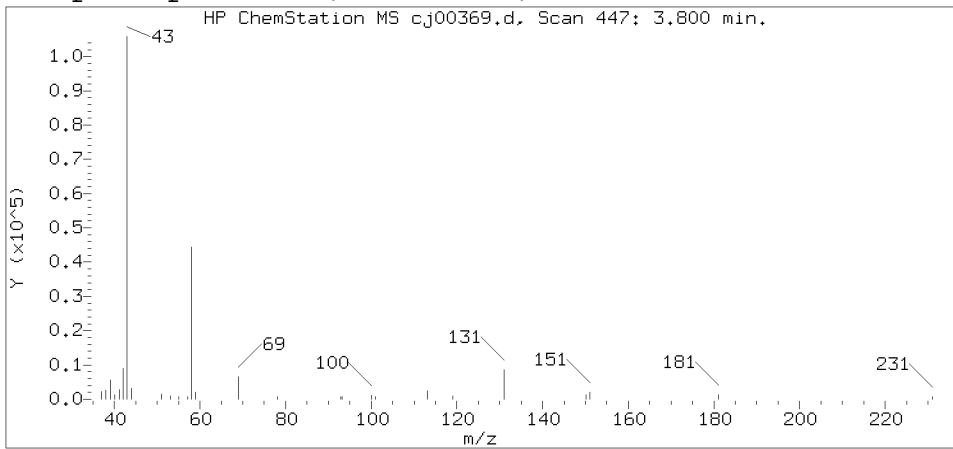
Reference Standard Spectrum for Acetone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

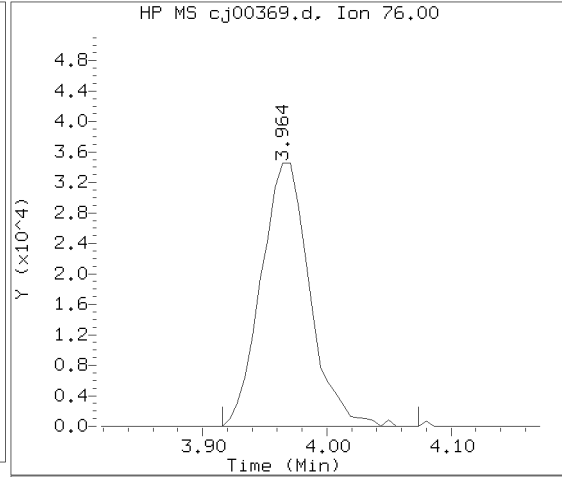
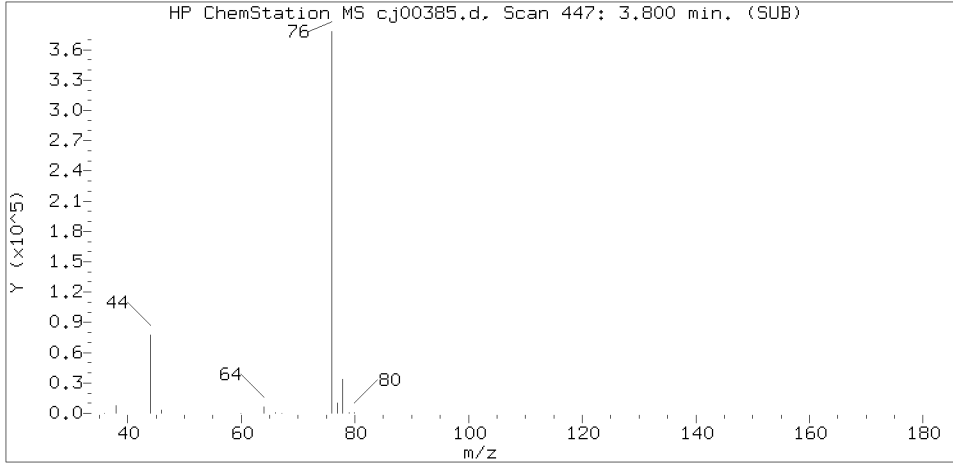
Lab Sample ID: 8087716

Compound Number : 19  
 Compound Name : Acetone  
 Scan Number : 447  
 Retention Time (minutes): 3.800  
 Relative Retention Time :-0.00293  
 Quant Ion : 43.00  
 Area (flag) : 401606  
 Concentration (ppb(v)) : 12.8095

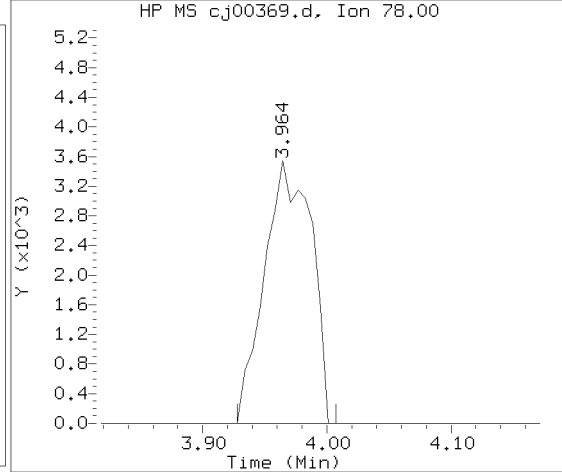
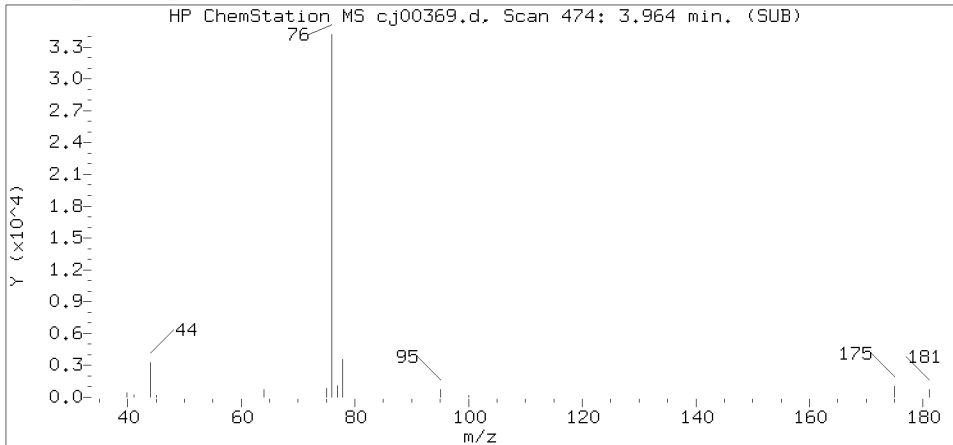
Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304  
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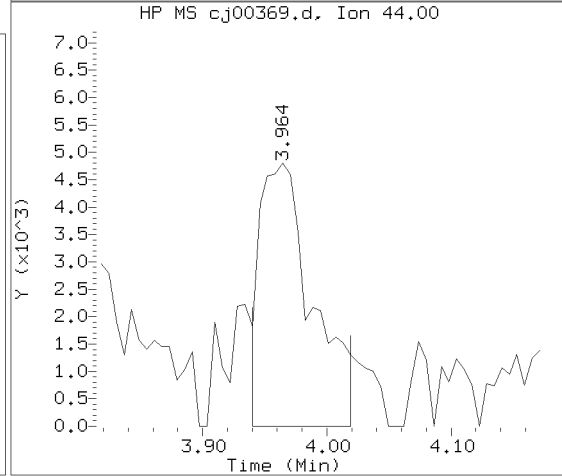
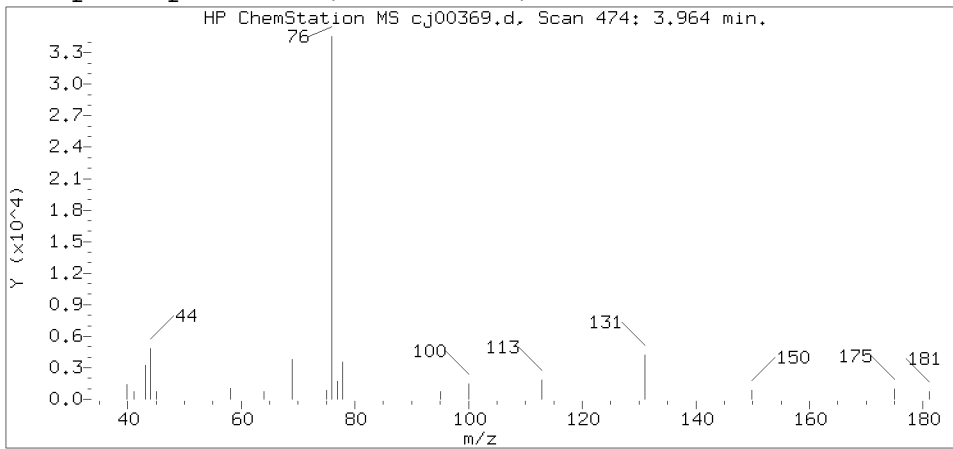
Reference Standard Spectrum for Carbon Disulfide



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

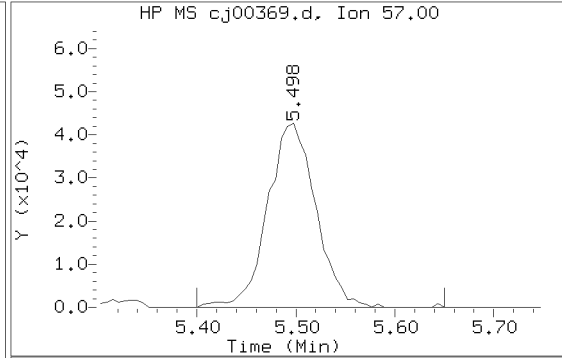
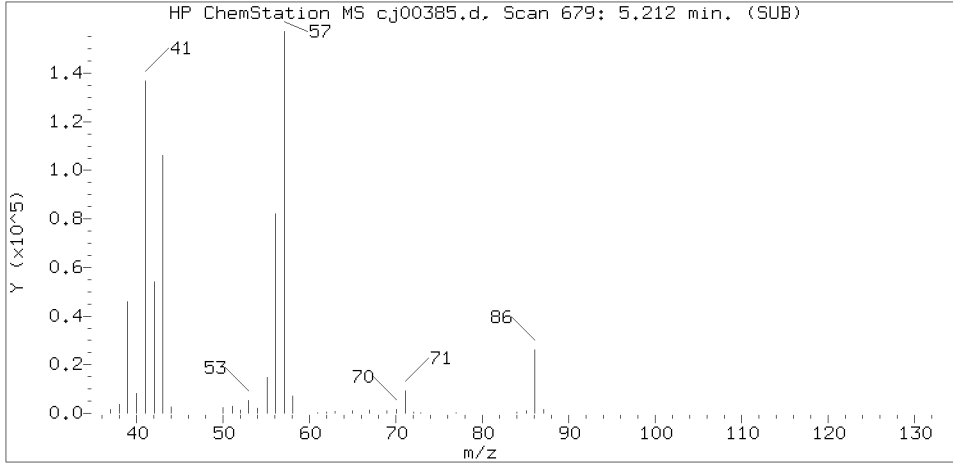
Lab Sample ID: 8087716

Compound Number : 21  
 Compound Name : Carbon Disulfide  
 Scan Number : 474  
 Retention Time (minutes): 3.964  
 Relative Retention Time : -0.00122  
 Quant Ion : 76.00  
 Area (flag) : 94367  
 Concentration (ppb(v)) : 0.5825

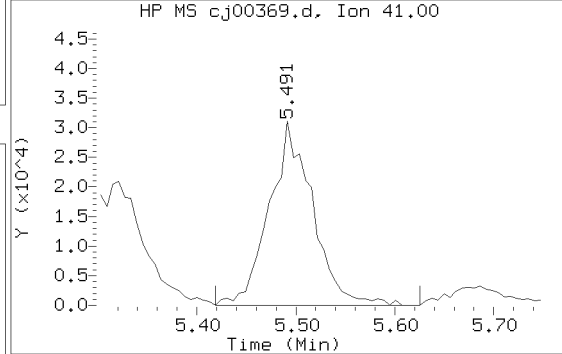
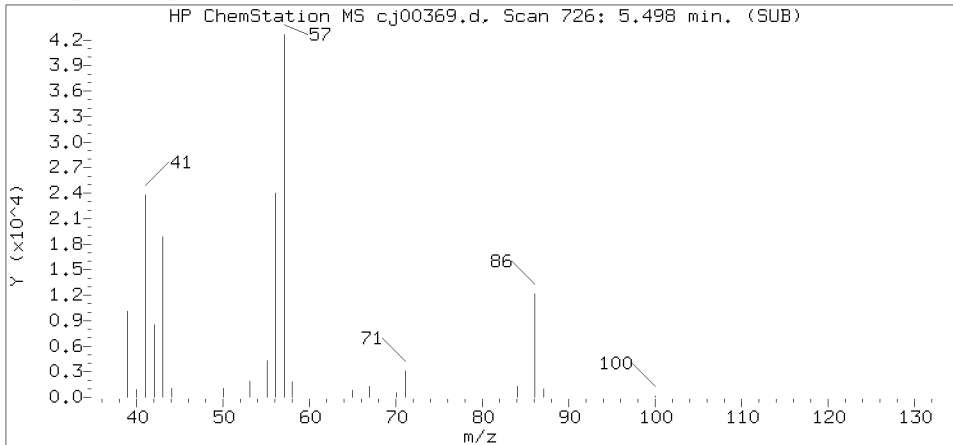
Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304  
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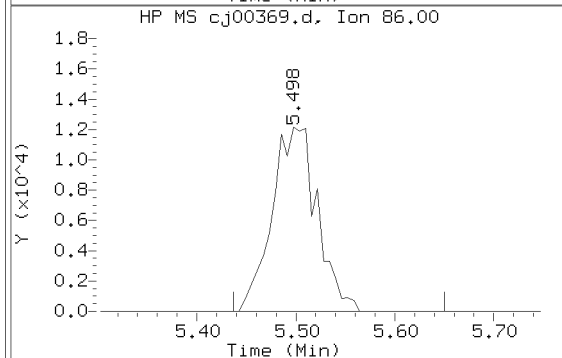
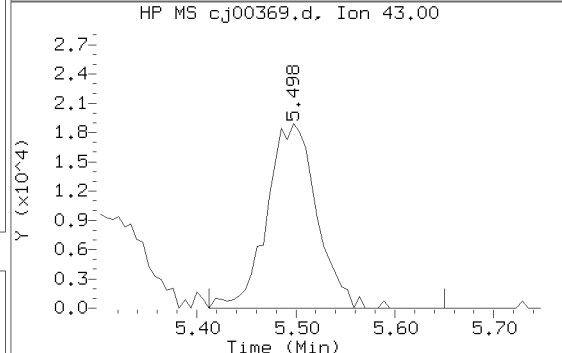
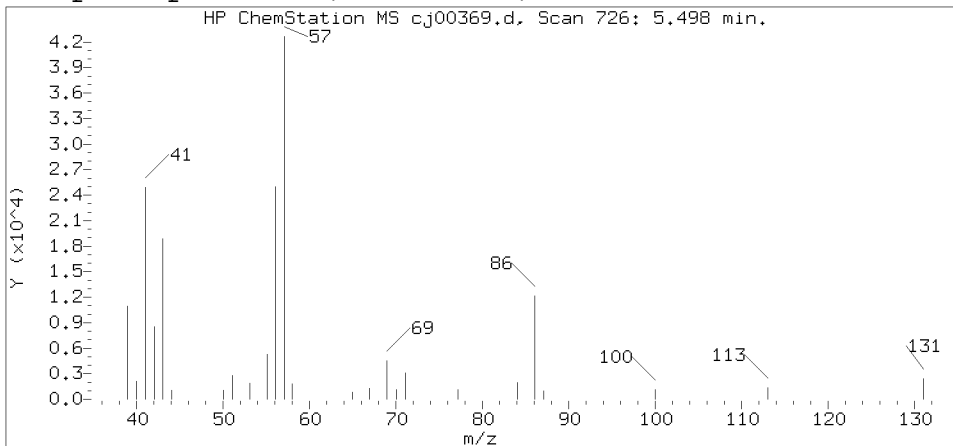
Reference Standard Spectrum for Hexane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

Lab Sample ID: 8087716

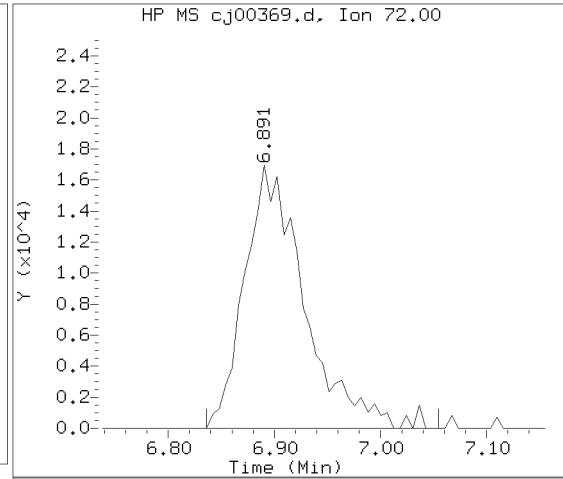
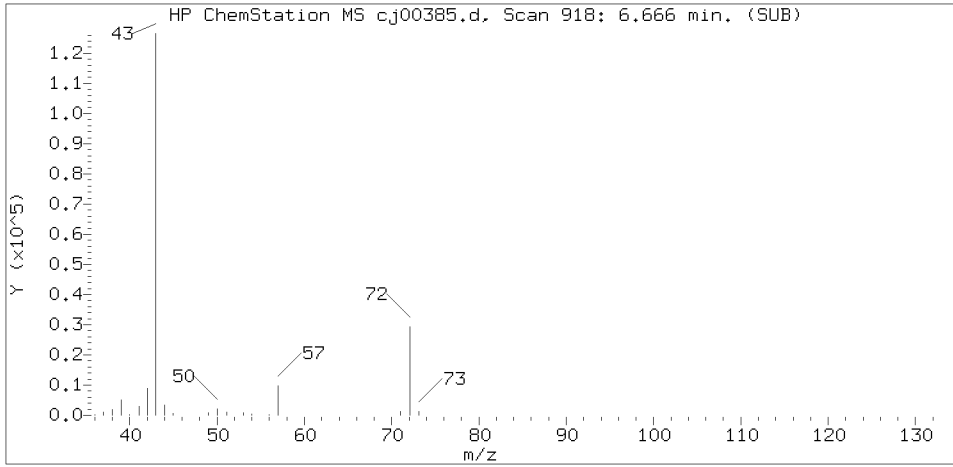
Compound Number : 30  
 Compound Name : Hexane  
 Scan Number : 726  
 Retention Time (minutes): 5.498  
 Relative Retention Time : -0.00105  
 Quant Ion : 57.00  
 Area (flag) : 144815  
 Concentration (ppb(v)) : 2.9621

Sublist used: 292

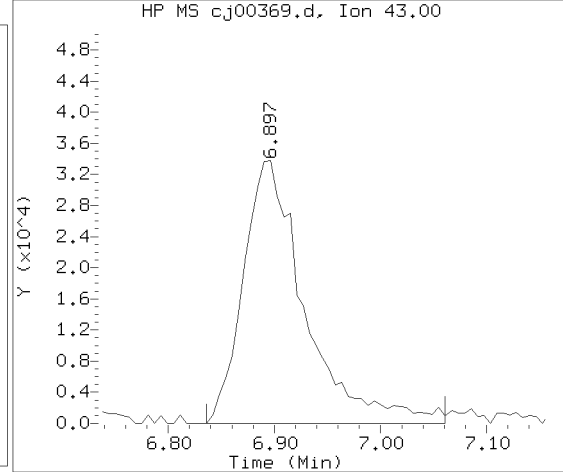
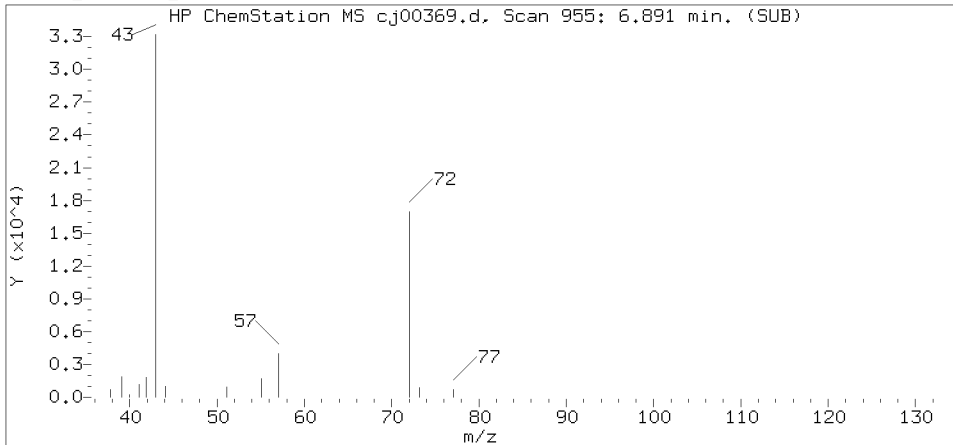
Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304  
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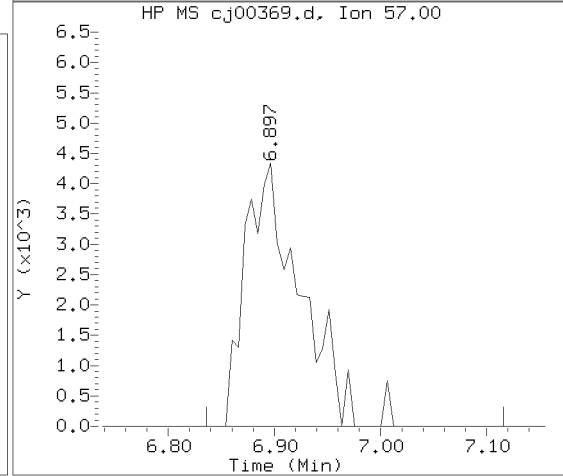
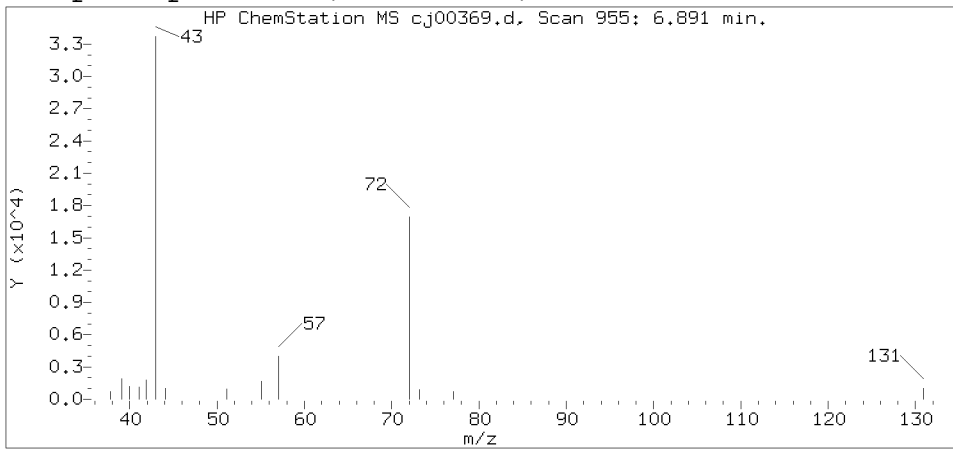
Reference Standard Spectrum for 2-Butanone



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

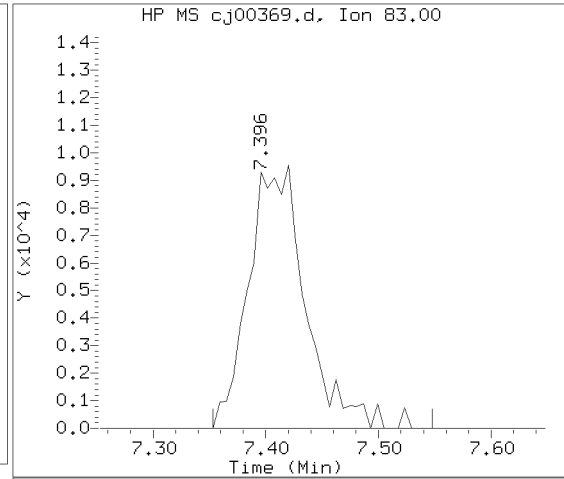
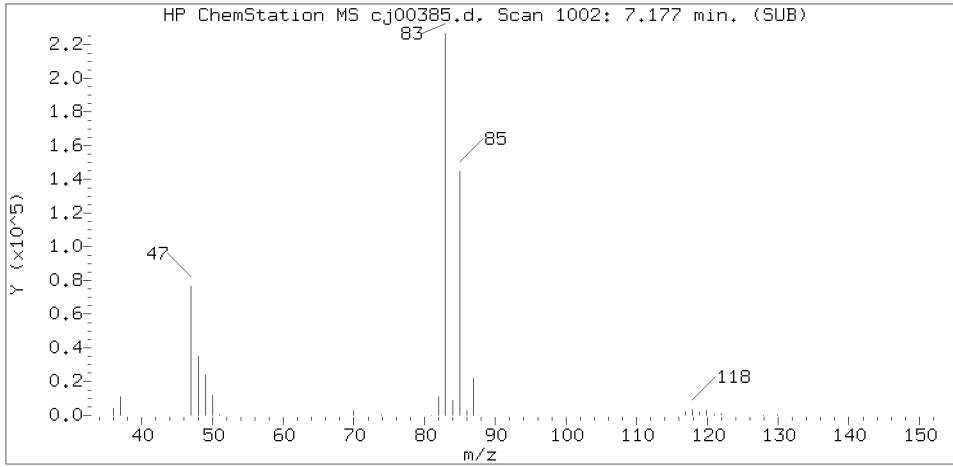
Sublist used: 292

Sample Name: 988--

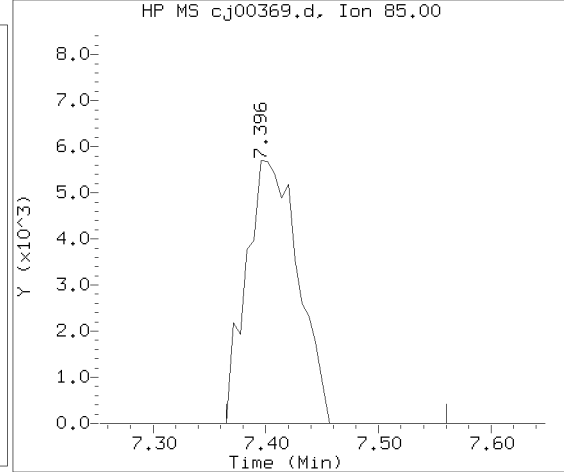
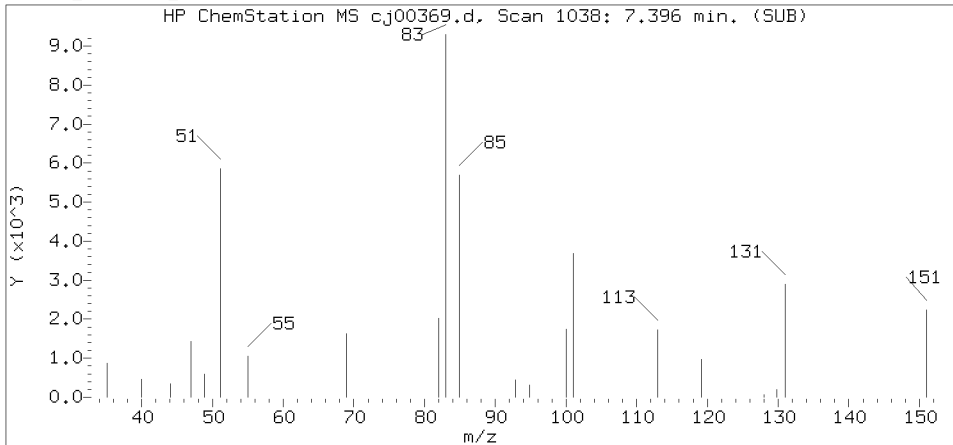
Lab Sample ID: 8087716

Compound Number : 37  
 Compound Name : 2-Butanone  
 Scan Number : 955  
 Retention Time (minutes): 6.891  
 Relative Retention Time : -0.00257  
 Quant Ion : 72.00  
 Area (flag) : 66254  
 Concentration (ppb(v)) : 4.3505

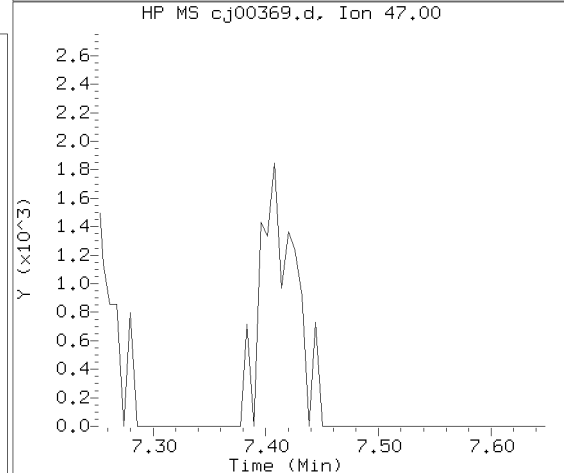
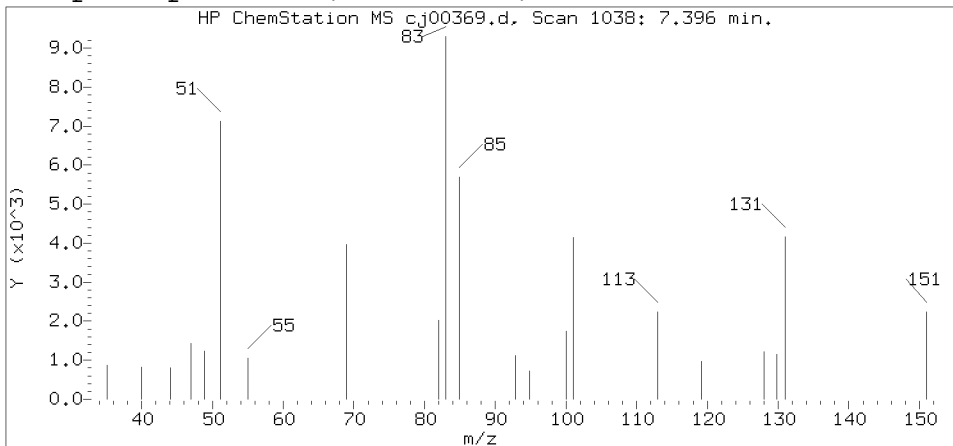
Reference Standard Spectrum for Chloroform



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

Lab Sample ID: 8087716

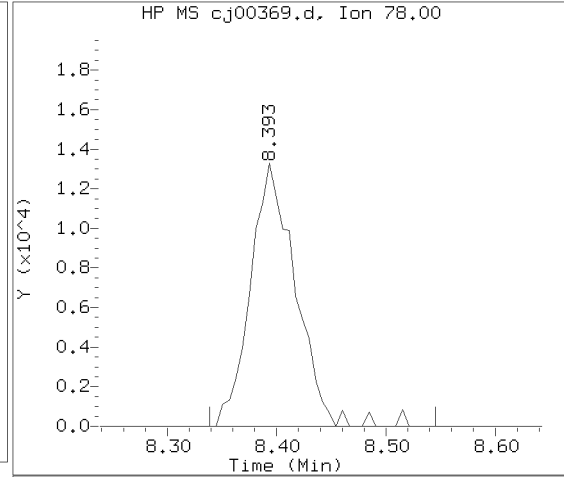
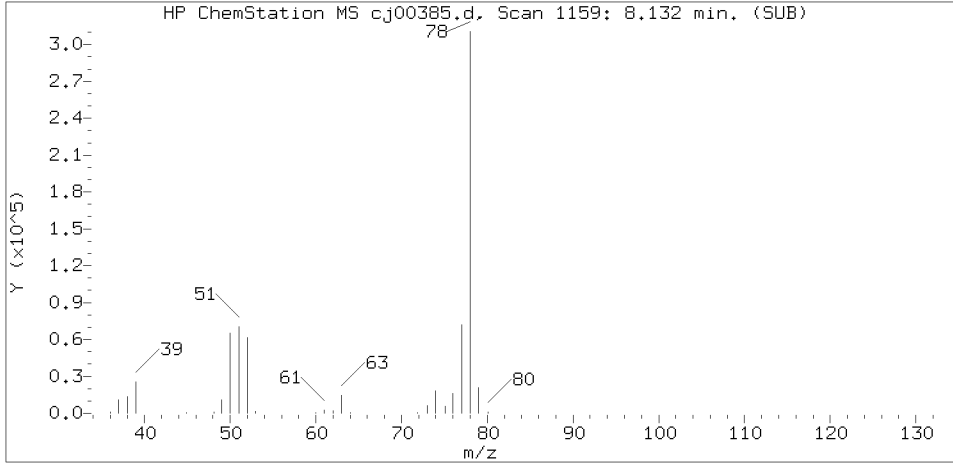
Compound Number : 42  
 Compound Name : Chloroform  
 Scan Number : 1038  
 Retention Time (minutes): 7.396  
 Relative Retention Time : 0.00171  
 Quant Ion : 83.00  
 Area (flag) : 33417  
 Concentration (ppb(v)) : 0.2313

Sublist used: 292

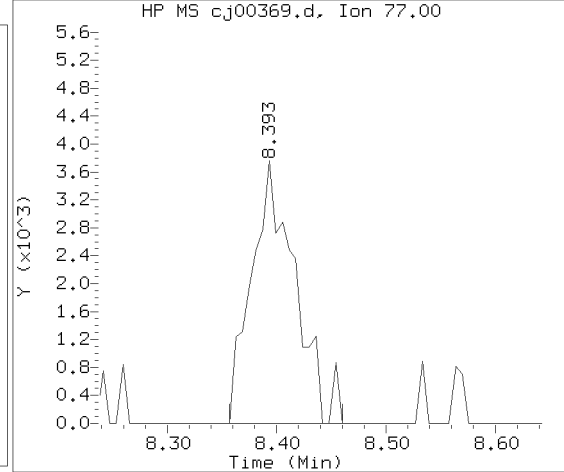
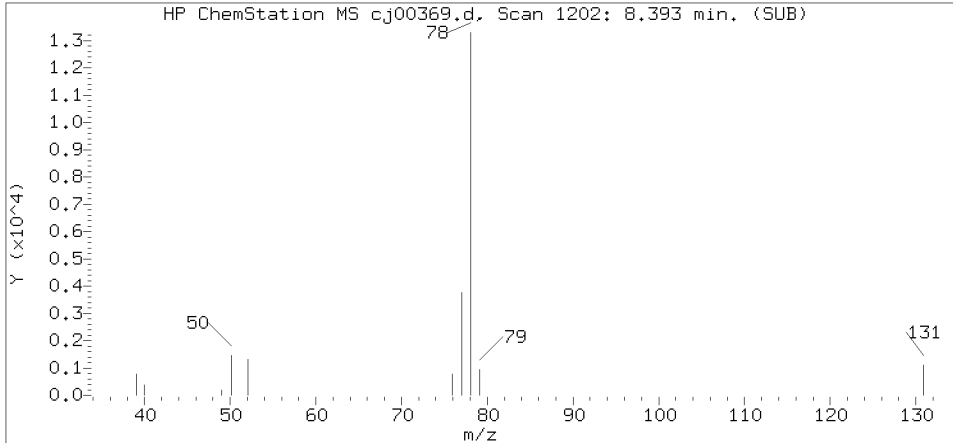
Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304  
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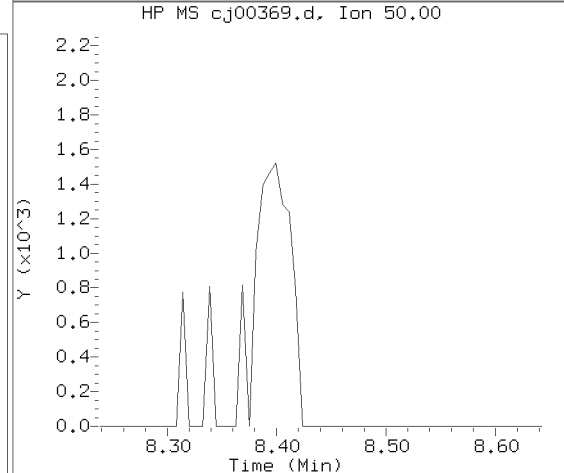
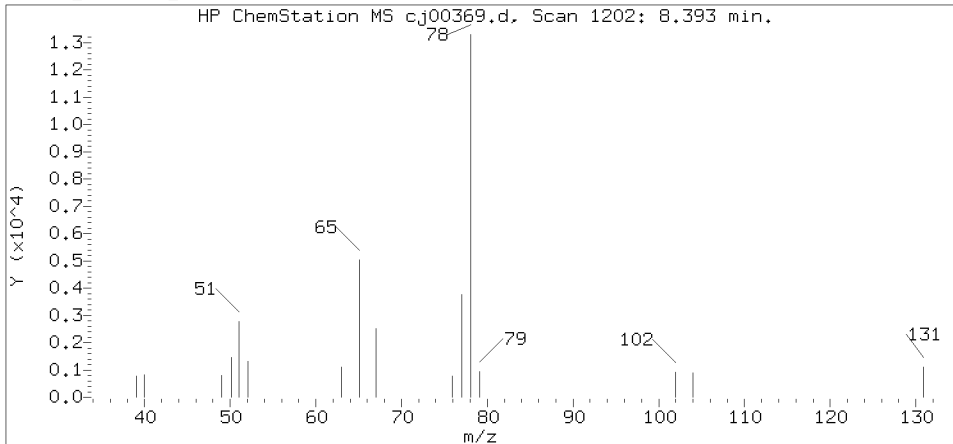
Reference Standard Spectrum for Benzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

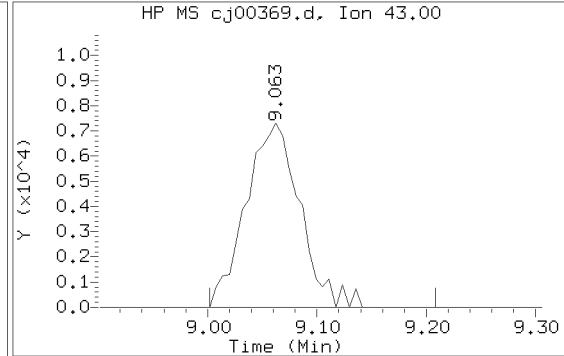
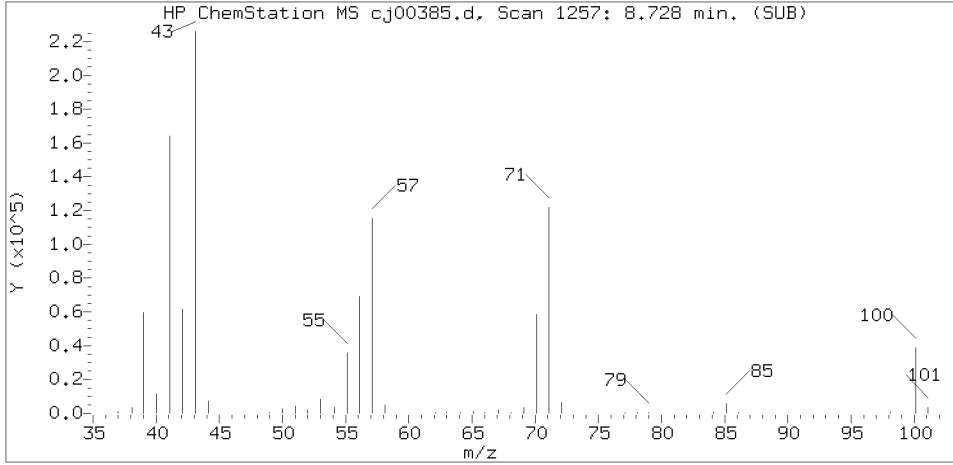
Lab Sample ID: 8087716

Compound Number : 46  
 Compound Name : Benzene  
 Scan Number : 1202  
 Retention Time (minutes): 8.393  
 Relative Retention Time : 0.00121  
 Quant Ion : 78.00  
 Area (flag) : 38183  
 Concentration (ppb(v)) : 0.2804

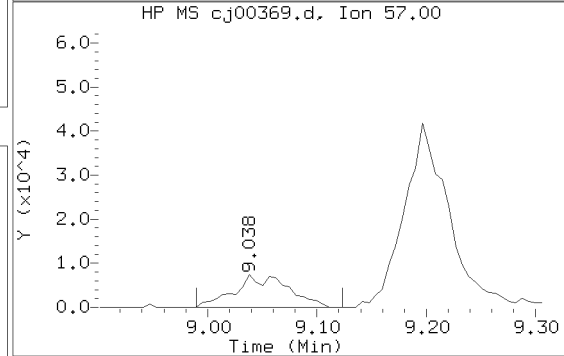
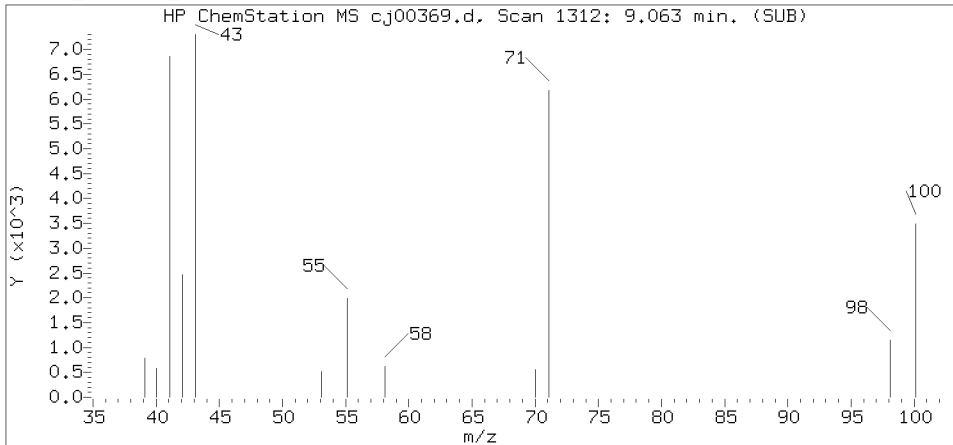
Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304  
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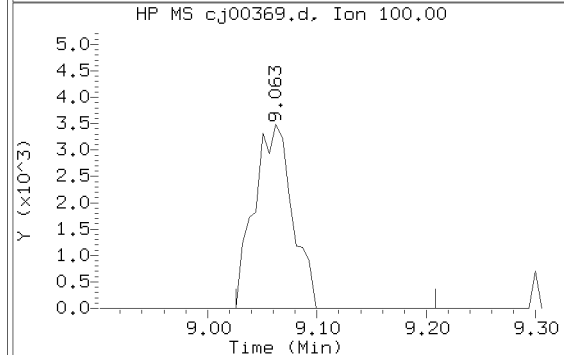
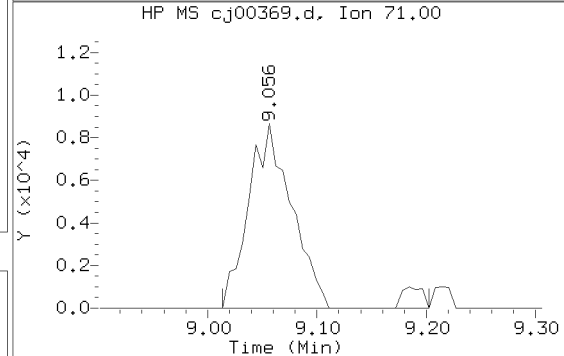
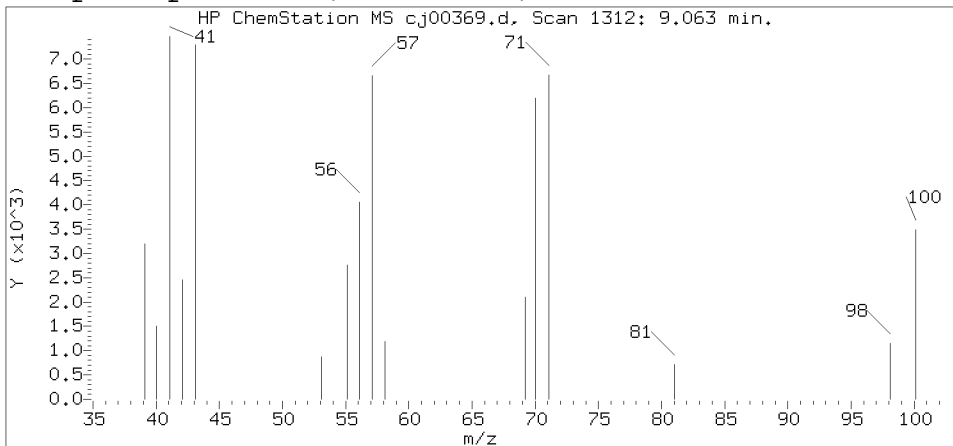
Reference Standard Spectrum for Heptane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

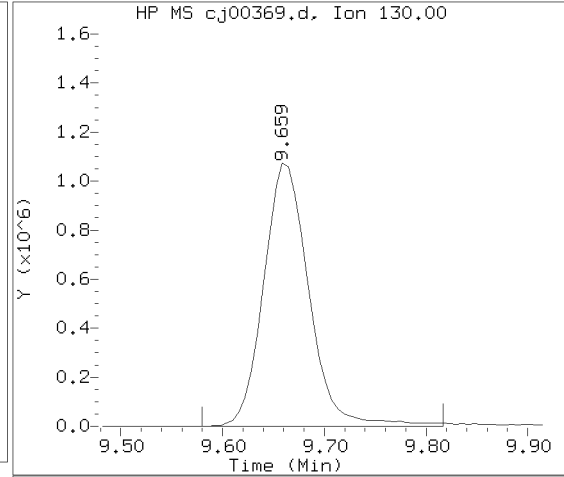
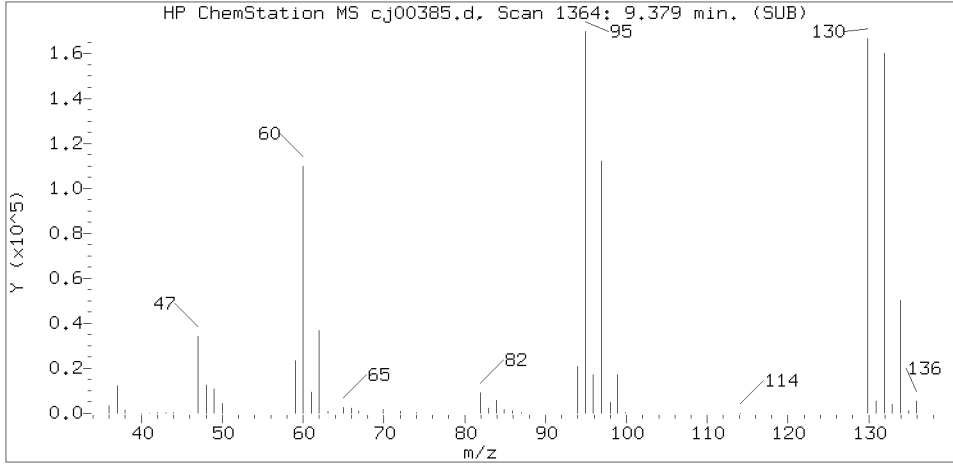
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988-- Lab Sample ID: 8087716

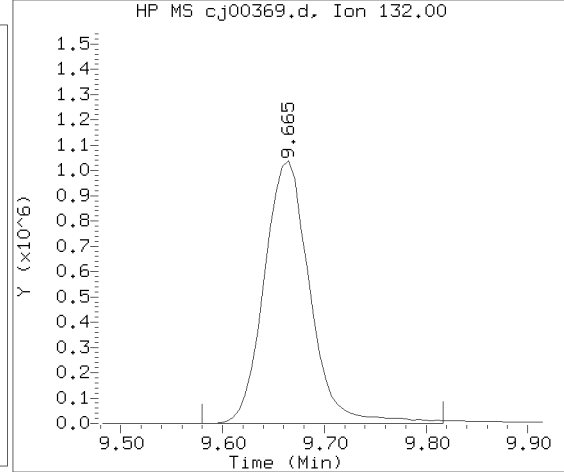
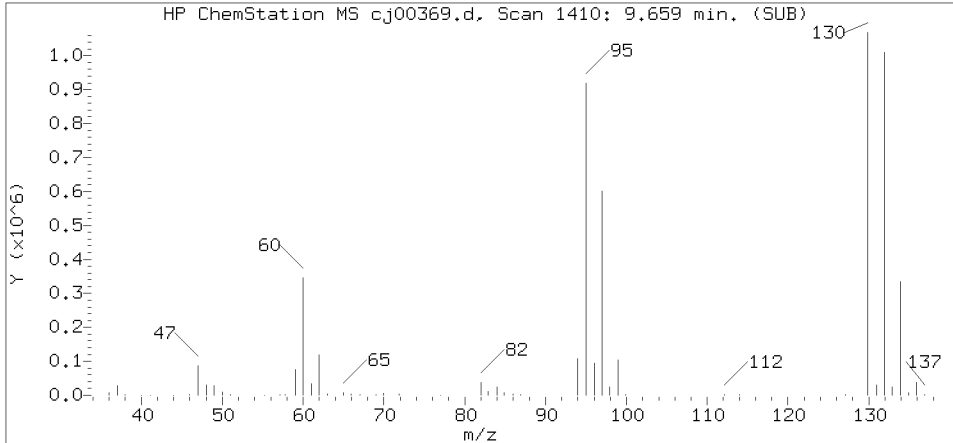
Compound Number : 50  
 Compound Name : Heptane  
 Scan Number : 1312  
 Retention Time (minutes): 9.063  
 Relative Retention Time : -0.00068  
 Quant Ion : 43.00  
 Area (flag) : 25008  
 Concentration (ppb(v)) : 0.7083



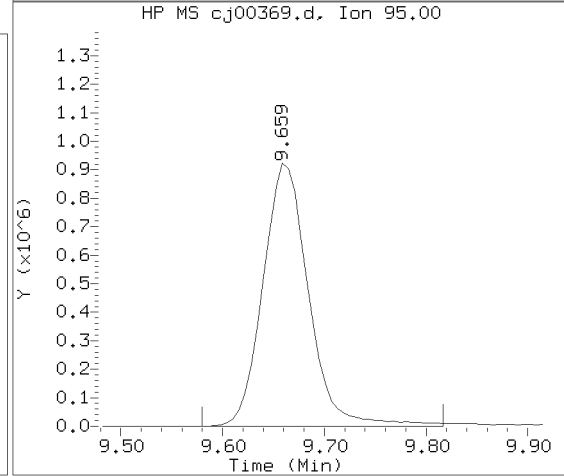
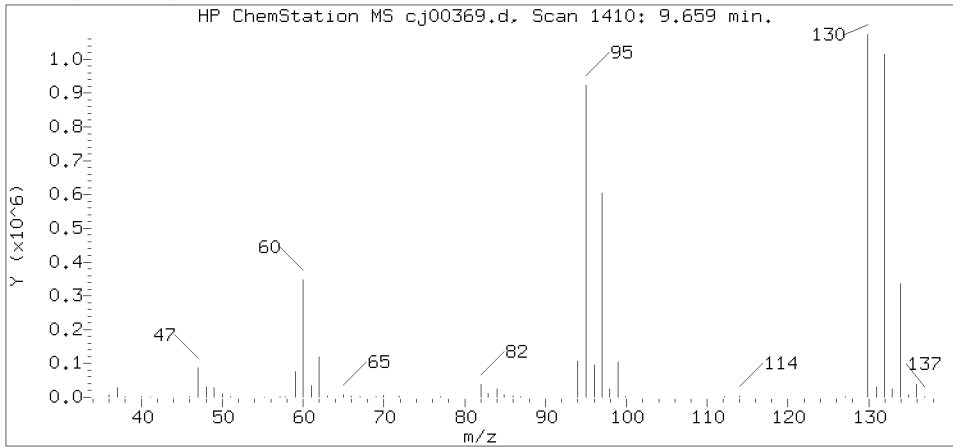
Reference Standard Spectrum for Trichloroethene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

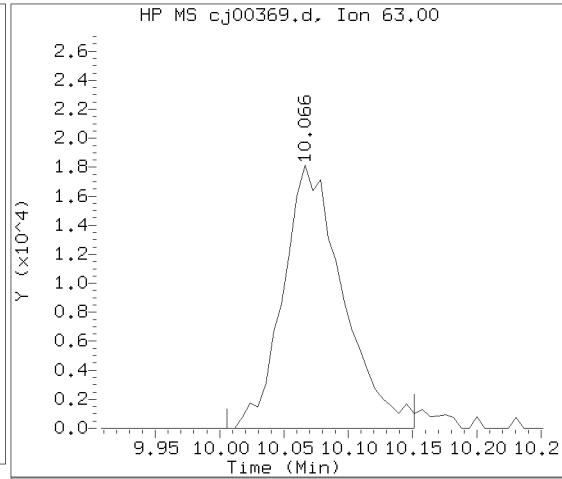
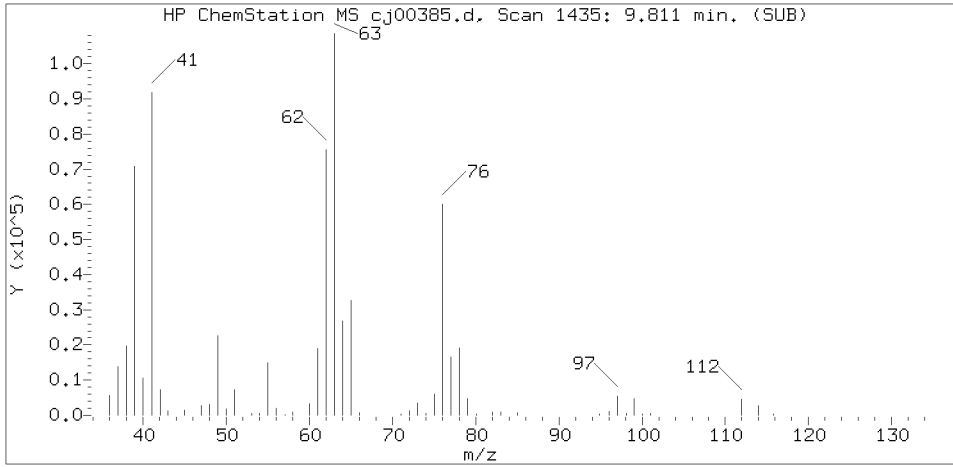
Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

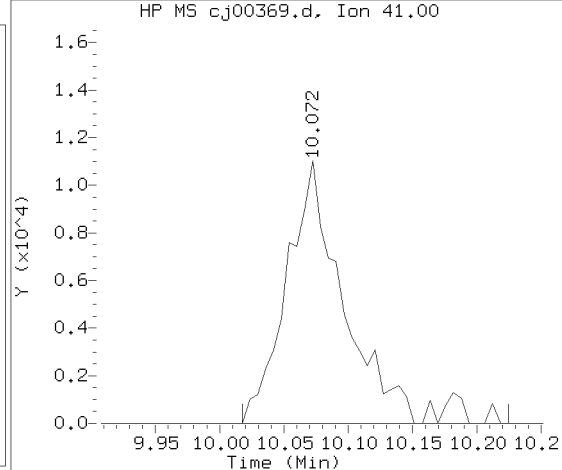
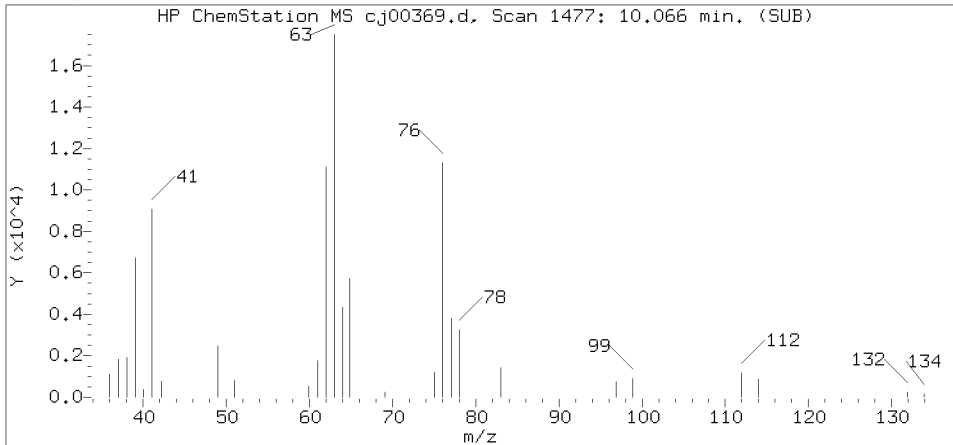
Lab Sample ID: 8087716

Compound Number : 52  
 Compound Name : Trichloroethene  
 Scan Number : 1410  
 Retention Time (minutes): 9.659  
 Relative Retention Time : 0.00073  
 Quant Ion : 130.00  
 Area (flag) : 3318368  
 Concentration (ppb(v)) : 35.5945

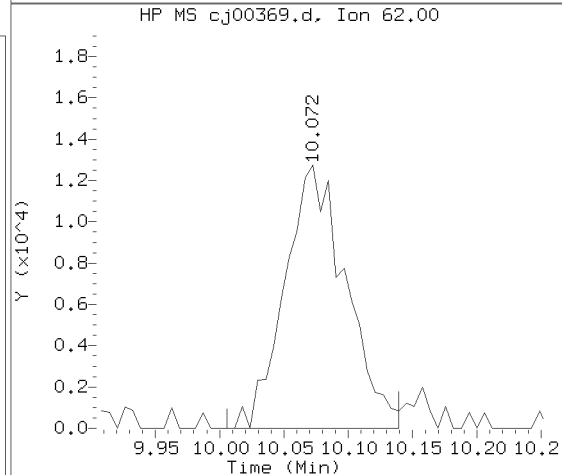
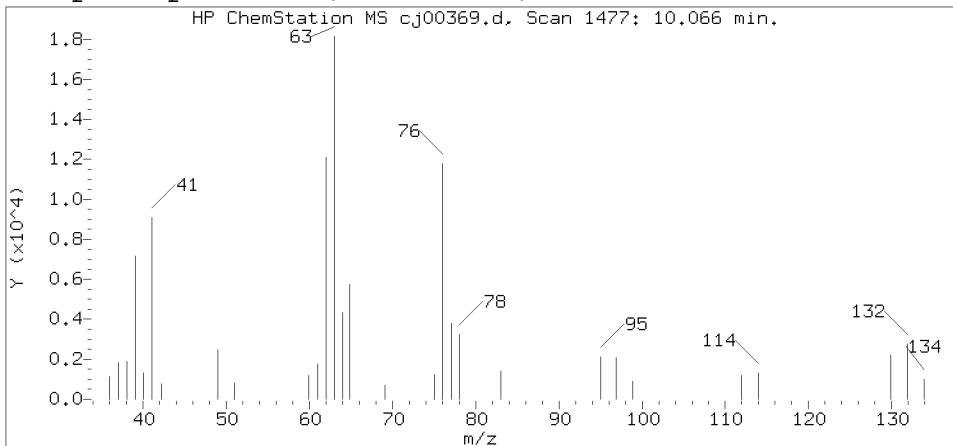
Reference Standard Spectrum for 1,2-Dichloropropane



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 29-OCT-2015 11:25  
Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

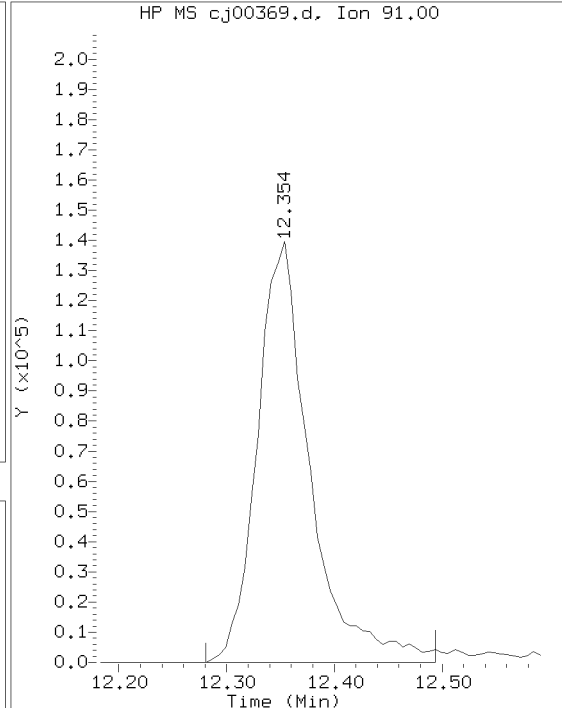
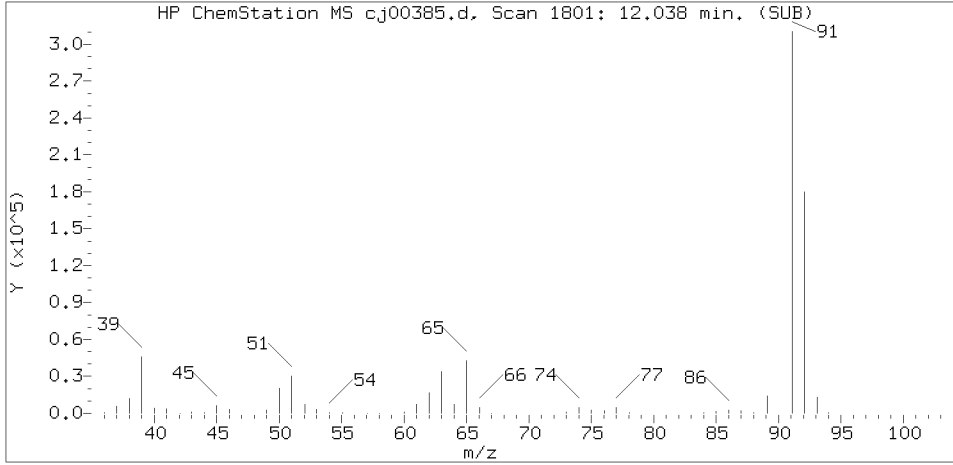
Sample Name: 988--

Lab Sample ID: 8087716

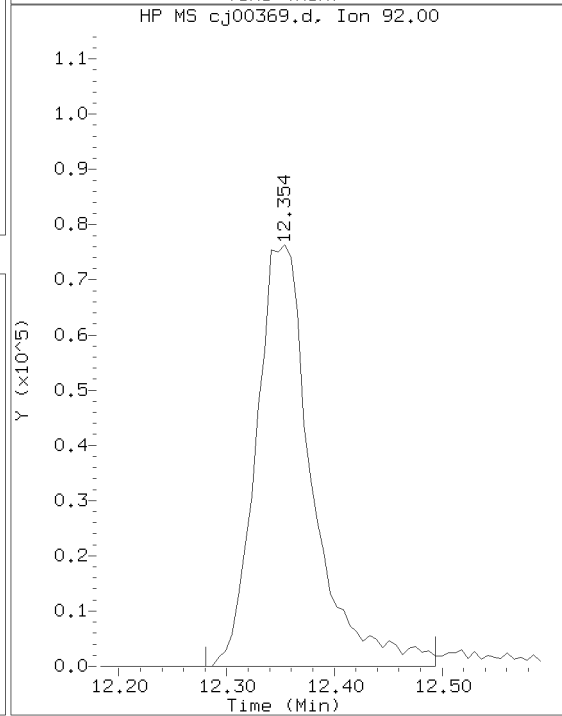
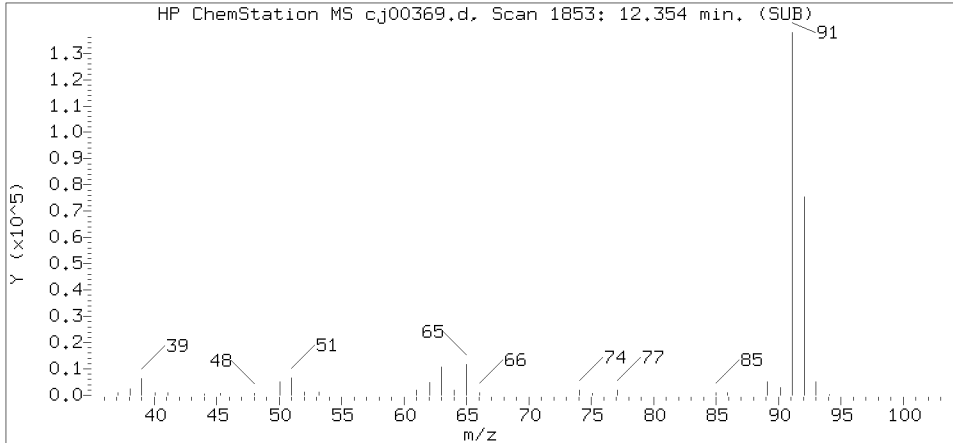
Compound Number : 54  
Compound Name : 1,2-Dichloropropane  
Scan Number : 1477  
Retention Time (minutes): 10.066  
Relative Retention Time : 0.00145  
Quant Ion : 63.00  
Area (flag) : 58811  
Concentration (ppb(v)) : 1.5573

Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.  
Target 3.5 esignature user ID: jbs01304

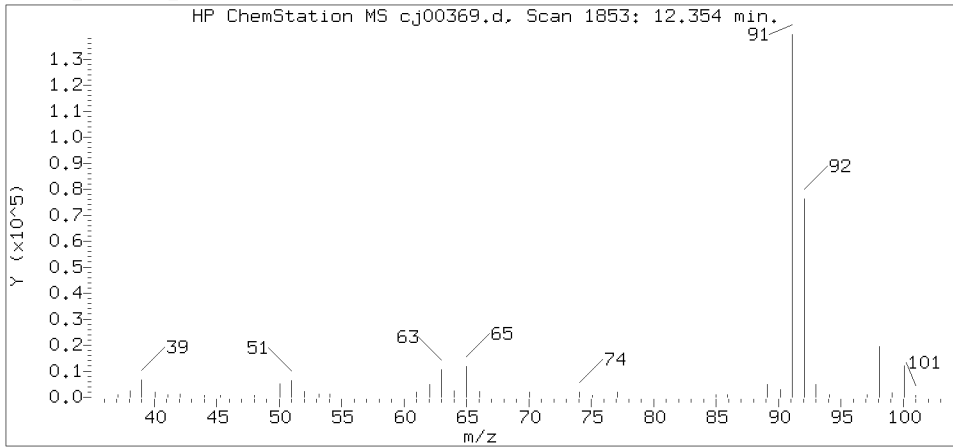
Reference Standard Spectrum for Toluene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

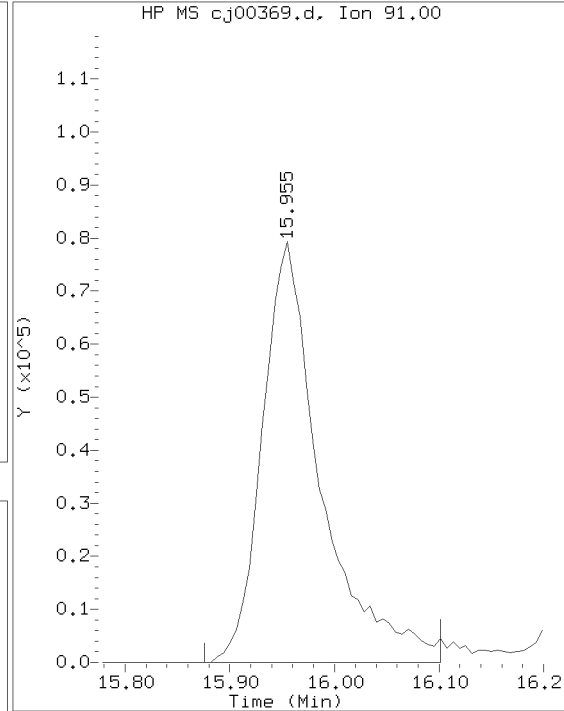
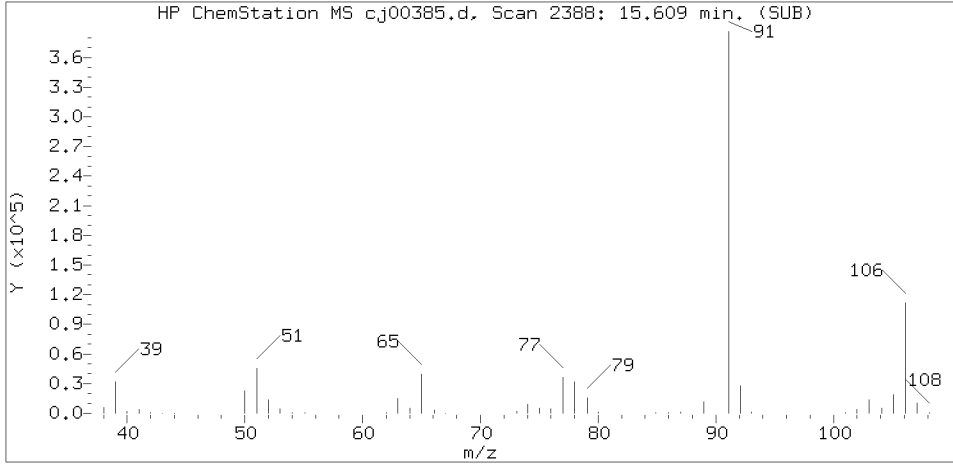
Lab Sample ID: 8087716

Compound Number : 61  
 Compound Name : Toluene  
 Scan Number : 1853  
 Retention Time (minutes): 12.354  
 Relative Retention Time : -0.00047  
 Quant Ion : 91.00  
 Area (flag) : 474097  
 Concentration (ppb(v)) : 3.0460

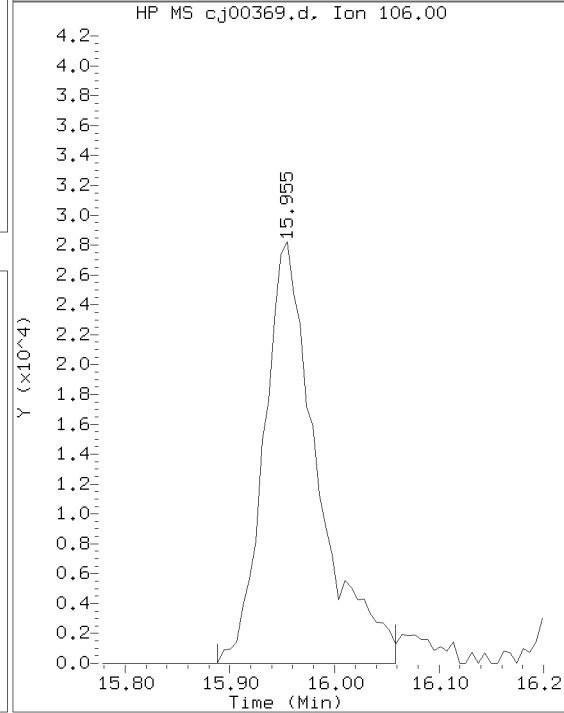
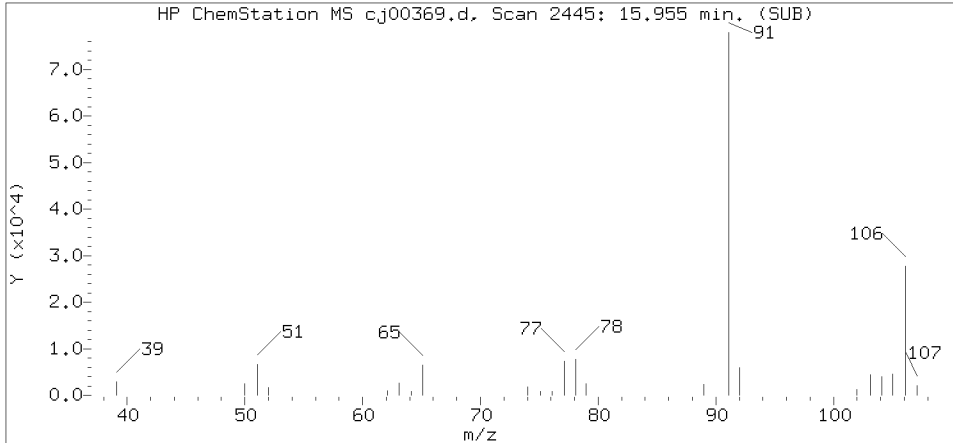
Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304  
 SSX23 Page 311 of 1243

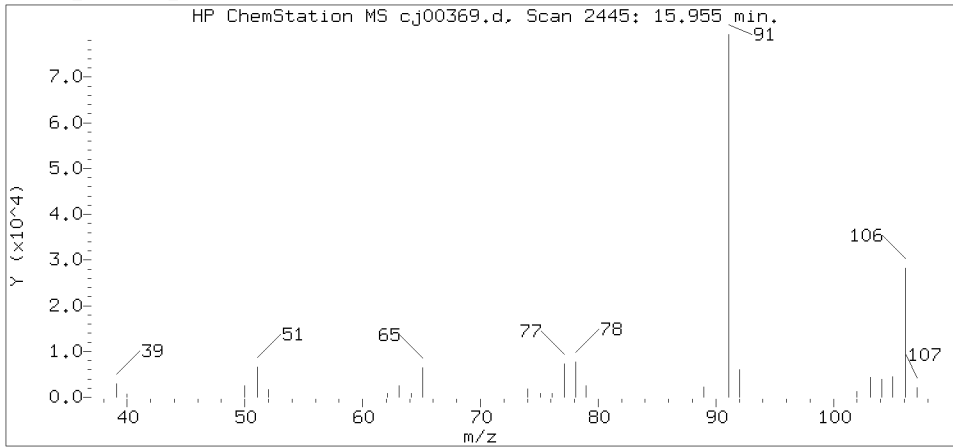
Reference Standard Spectrum for Ethylbenzene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

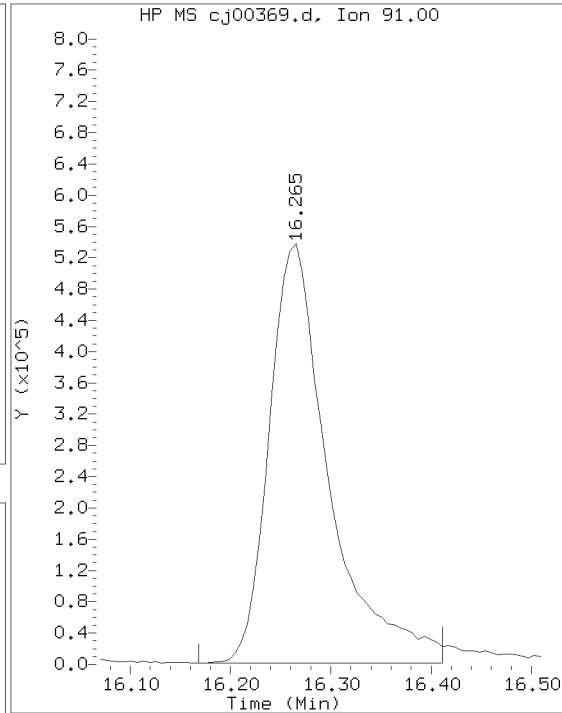
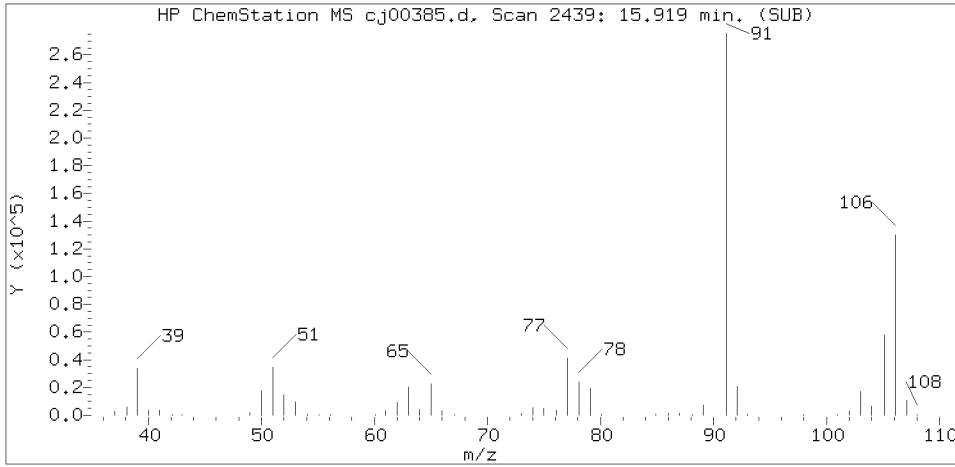
Lab Sample ID: 8087716

Compound Number : 74  
 Compound Name : Ethylbenzene  
 Scan Number : 2445  
 Retention Time (minutes): 15.955  
 Relative Retention Time : 0.00001  
 Quant Ion : 91.00  
 Area (flag) : 309775  
 Concentration (ppb(v)) : 1.8015

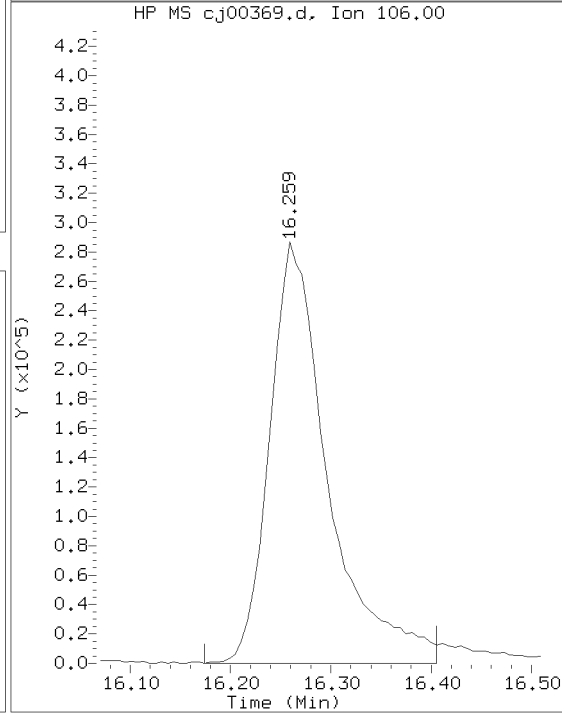
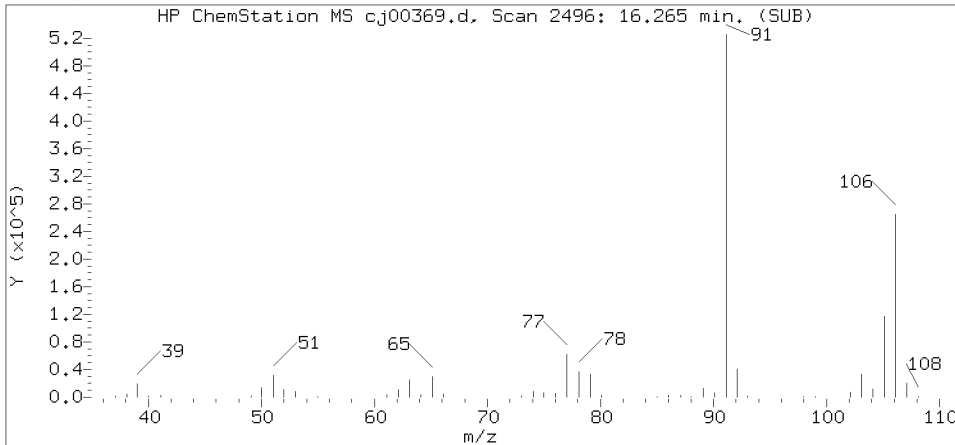
Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304  
 SSX23 Page 312 of 1243

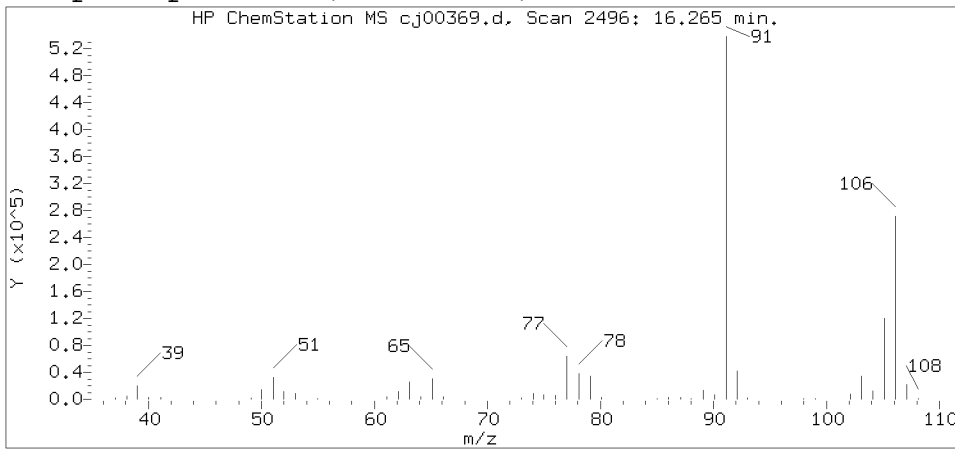
Reference Standard Spectrum for m/p-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 29-OCT-2015 11:25  
Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

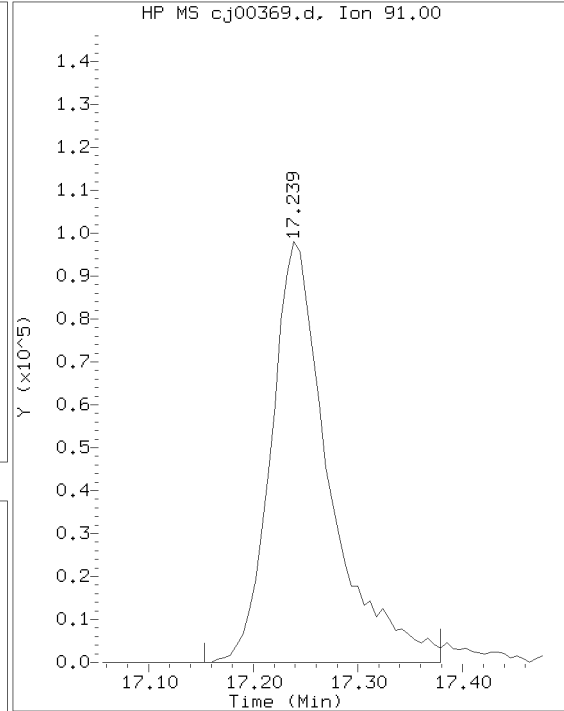
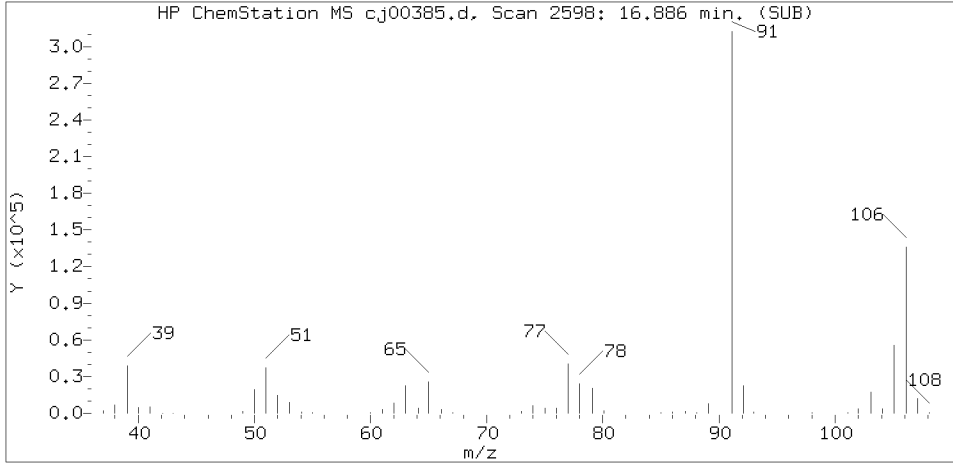
Lab Sample ID: 8087716

Compound Number : 75  
Compound Name : m/p-Xylene  
Scan Number : 2496  
Retention Time (minutes): 16.265  
Relative Retention Time : 0.00002  
Quant Ion : 91.00  
Area (flag) : 2221063  
Concentration (ppb(v)) : 15.6185

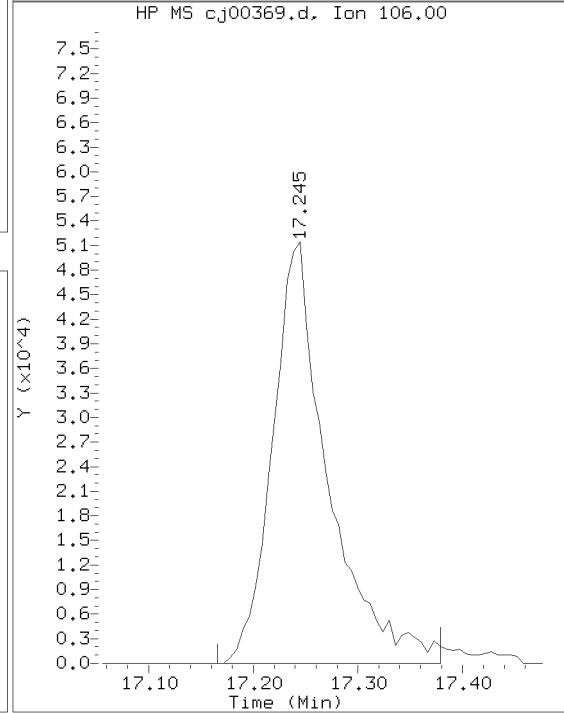
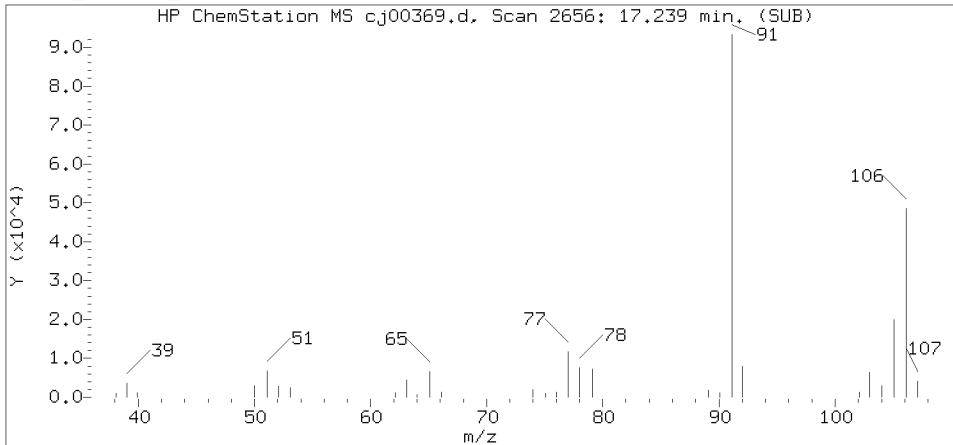
Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.

Target 3.5 esignature user ID: jbs01304  
SSX23 Page 313 of 1243

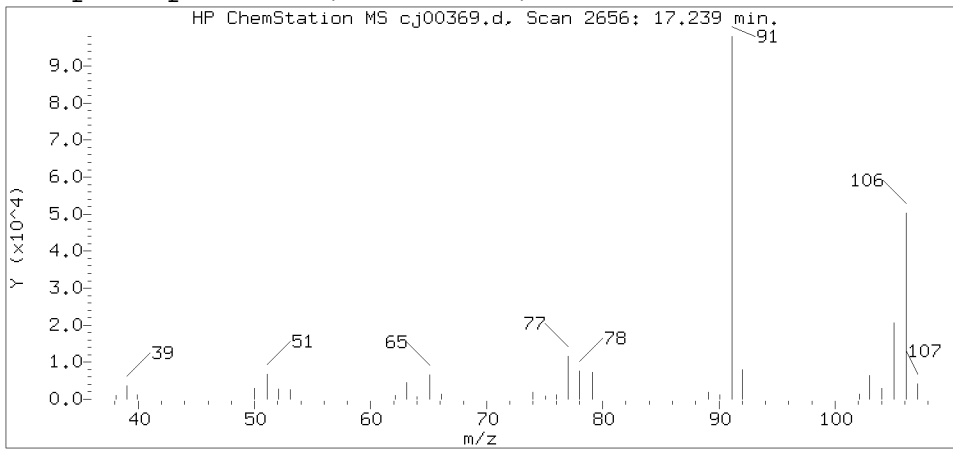
Reference Standard Spectrum for o-Xylene



Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
 Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 29-OCT-2015 11:25  
 Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

Lab Sample ID: 8087716

Compound Number : 76  
 Compound Name : o-Xylene  
 Scan Number : 2656  
 Retention Time (minutes): 17.239  
 Relative Retention Time : 0.00004  
 Quant Ion : 91.00  
 Area (flag) : 378855  
 Concentration (ppb(v)) : 2.5312

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Target 3.5 esignature user ID: jbs01304  
 SSX23 Page 314 of 1243

SDG No.:

Sample Media:	CANISTER	Lab Sample ID:	8087716
Canister ID:	988	Lab File ID:	cj00369.d
Pressure Received:	27.4 psia	Date Collected:	10/12/2015
Final Pressure:	13.7 psia	Date Received:	10/14/2015
Nominal Volume:	250 cc	Analyzed Date:	10/17/2015
Injection Volume:	500 cc	Analyzed Time:	06:17
Instrument ID:	09464	Dilution Factor:	1

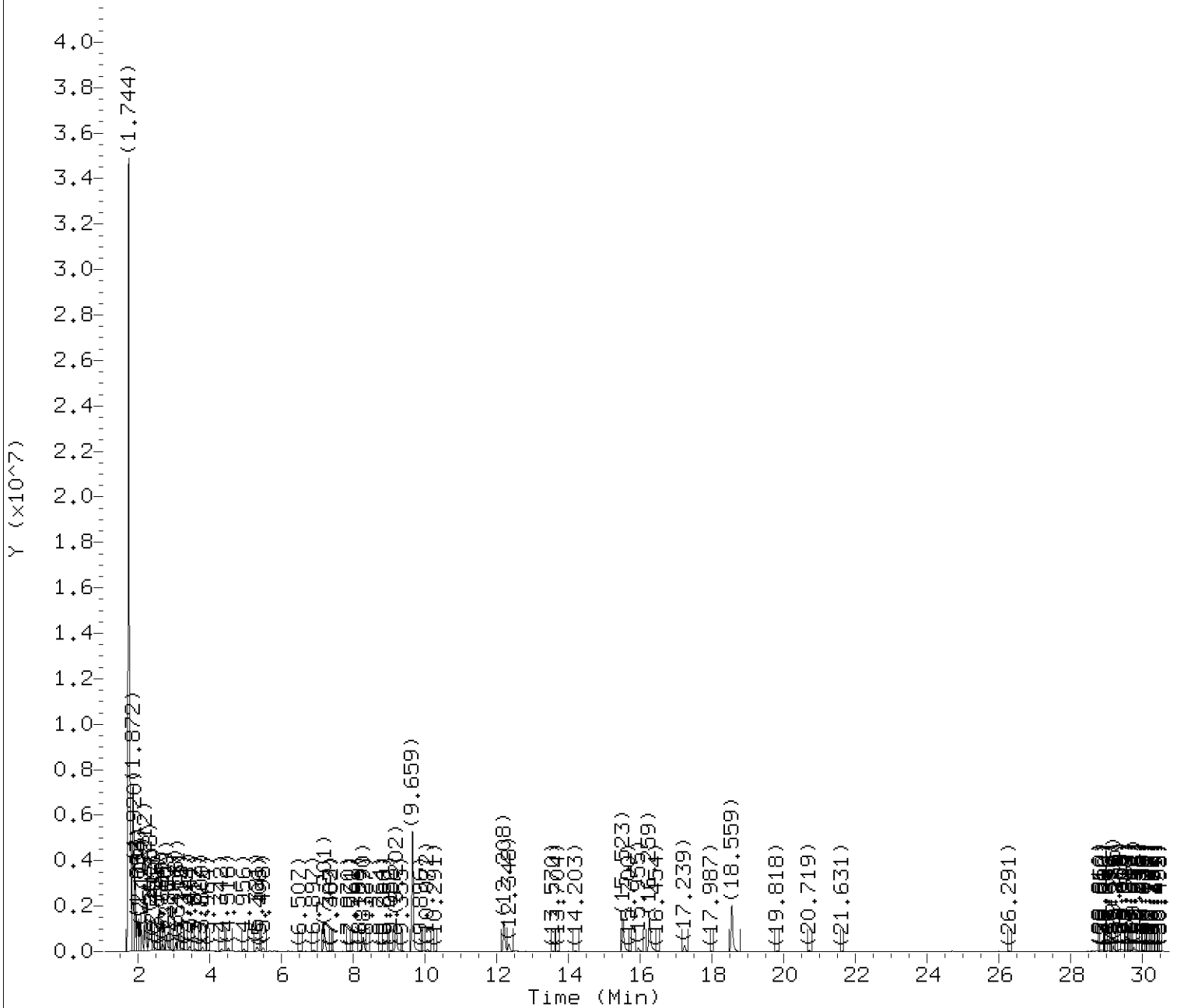
Number TICs Found: 12

Concentration Units: ppb(v)

CAS NUMBER	COMPOUND	RT	EST. CONC.	Q
116-15-4	Propene, hexafluoro-	1.74	300	J
	Unknown	1.99	12	J
	Unknown	2.36	17	J
	Unknown	2.41	3	J
1630-94-0	Cyclopropane, 1,1-dimethyl-	2.68	2	J
	Unknown	2.70	2	J
78-78-4	Butane, 2-methyl-	2.81	6	J
	Unknown	2.88	1	J
	Unknown	3.44	2	J
96-47-9	Furan, tetrahydro-2-methyl-	4.52	1	J
	Unknown	4.96	1	J
592-41-6	1-Hexene	5.32	3	J
TOTVOATIC	Total Tics		350	J

Abbreviations:

B = The compound was found in blank with a result greater than the limit being reported.  
J = The result is between the MDL and LOQ.



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 29-OCT-2015 11:25

Sublist used: 292

Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

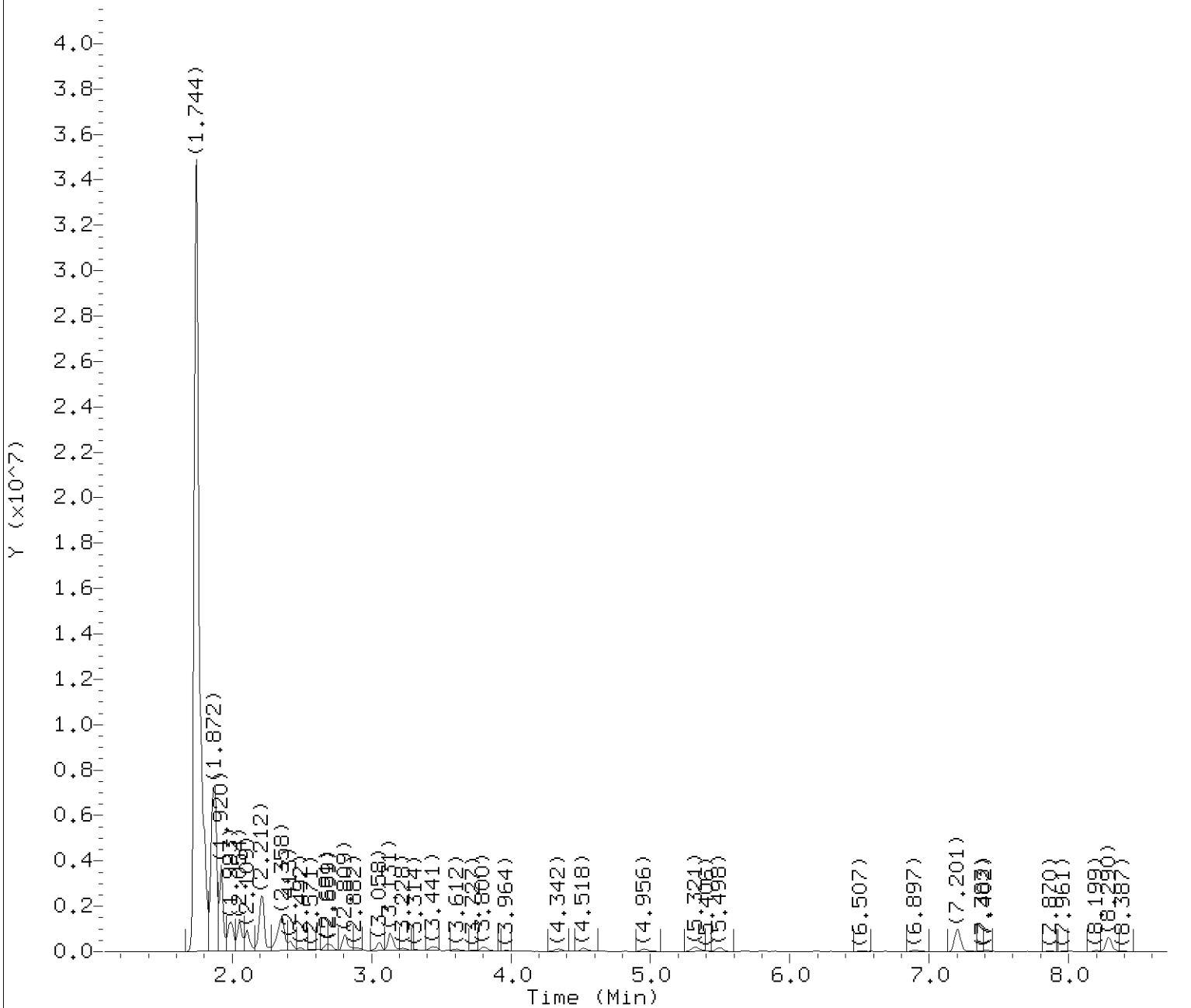
Sample Name: 988--

Lab Sample ID: 8087716

Chromatogram Start Time (min.): 1.087  
Chromatogram End Time (min.): 30.750

Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.  
Target 3.5 esignature user ID: jbs01304





Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 29-OCT-2015 11:25

Sublist used: 292

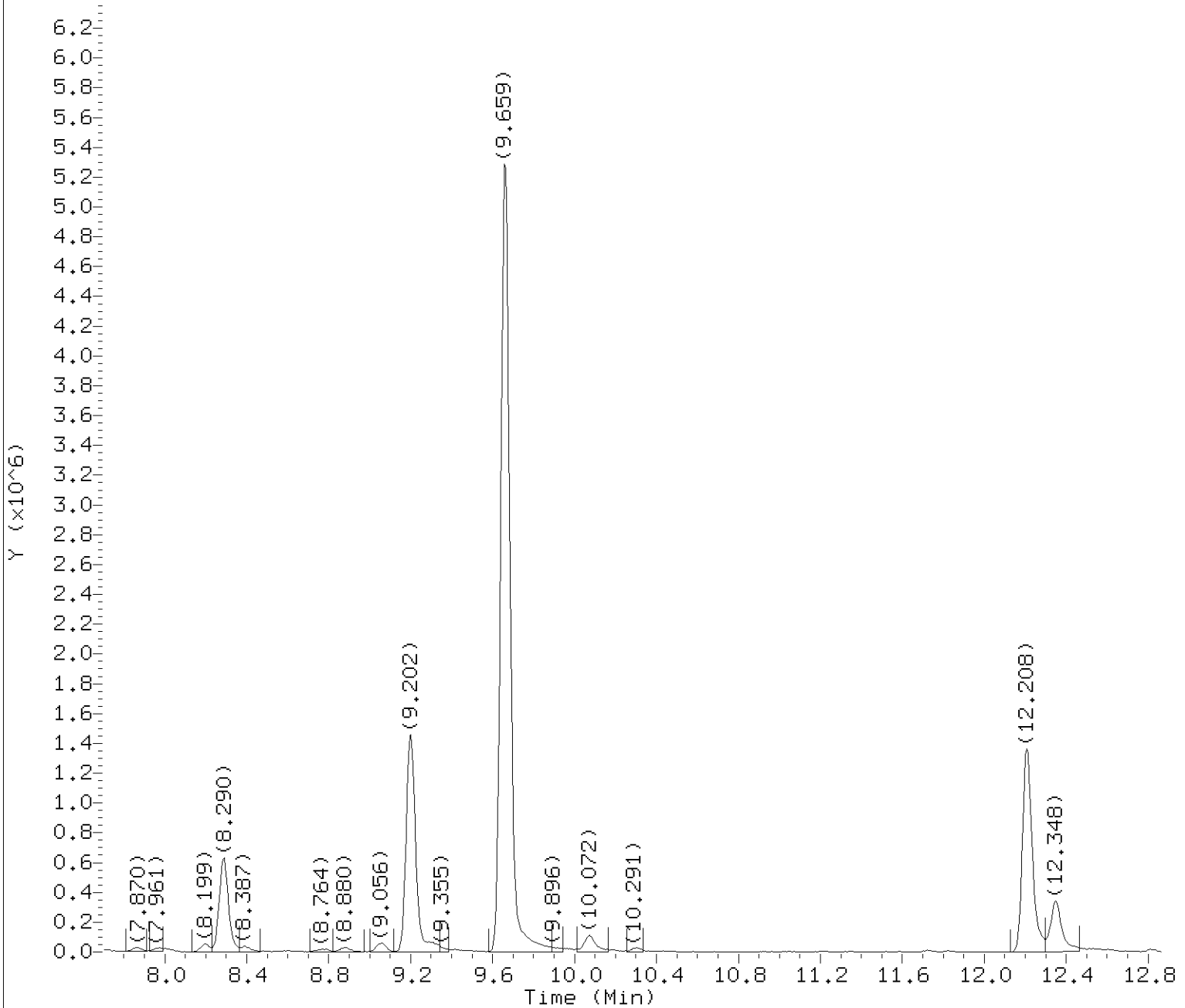
Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

Lab Sample ID: 8087716

Internal Standard referenced: Bromochloromethane at 7.207 minutes  
Chromatogram Start Time (min.): 1.087  
Chromatogram End Time (min.): 8.205

Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 29-OCT-2015 11:25  
Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

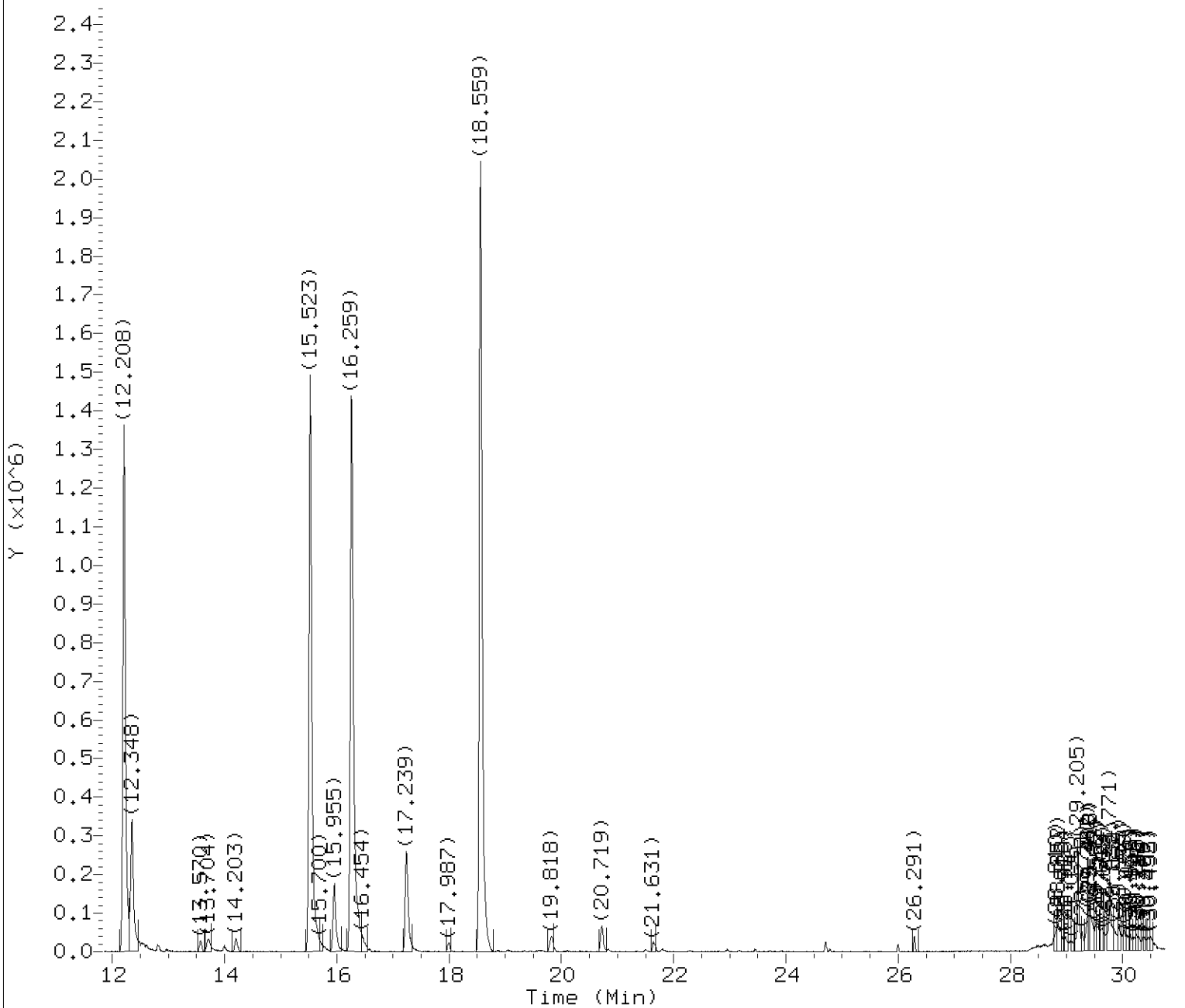
Sublist used: 292

Sample Name: 988--

Lab Sample ID: 8087716

Internal Standard referenced: 1,4-Difluorobenzene at 9.202 minutes  
Chromatogram Start Time (min.): 8.205  
Chromatogram End Time (min.): 12.363

Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00369.d  
Injection date and time: 17-OCT-2015 06:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 29-OCT-2015 11:25

Sublist used: 292

Date, time and analyst ID of latest file update: 10-Nov-2015 11:26 jbs01304

Sample Name: 988--

Lab Sample ID: 8087716

Internal Standard referenced: Chlorobenzene-d5 at 15.523 minutes

Chromatogram Start Time (min.): 12.363

Chromatogram End Time (min.): 30.750

Digitally signed by Jeffrey B. Smith on 11/10/2015 at 11:27.  
Target 3.5 esignature user ID: jbs01304

Lancaster Laboratories, Inc.

Data file : /chem/HP09464.i/15oct16.b/cj00369.d  
Lab Smp Id: 8087716 Client Smp ID: 988--  
Inj Date : 17-OCT-2015 06:17  
Operator : jeb07445 Inst ID: HP09464.i  
Smp Info : 8087716;500;C1528830AB;988--;0;0;SAMPLE;  
Misc Info : cj00353;292.sub;250;13.7174;27.4348;988;  
Comment :  
Method : /chem/HP09464.i/15oct16.b/to-15.m  
Meth Date : 29-Oct-2015 11:25 jbs01304 Quant Type: ISTD  
Cal Date : 16-OCT-2015 04:03 Cal File: cj00329.d  
Als bottle: 20  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 292.sub  
Target Version: 3.50  
Processing Host: d30cs01

Concentration Formula: Amt \* DF \* (Xa/Ya)\*(IVn/IVa) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Xa	27.43480	canister pressure absolute after dilutio
Ya	13.71740	canister pressure absolute before diluti
IVn	250.00000	nominal injection volume
IVa	500.00000	actual injection volume

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Bromochloromethane	7.207	3123117	10.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ppb(v))	FINAL(ppb(v))	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====
Propene, hexafluoro-					CAS #: 116-15-4		
1.744	95178650	304.755269	304.7552693	25	NIST11.1	24004	40
Unknown					CAS #:		
1.993	3733910	11.9557158	11.95571583	0		0	40

RT	CONCENTRATIONS				QUANT		CPND #
	AREA	ON-COL(ppb(v))	FINAL(ppb(v))	QUAL	LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown					CAS #:		
2.358	5195379	16.6352337	16.63523370	0		0	40
Unknown					CAS #:		
2.413	1078124	3.45207652	3.452077	0		0	40
Cyclopropane, 1,1-dimethyl-					CAS #: 1630-94-0		
2.681	479470	1.53523026	1.535230	47	NIST11.1	578	40
Unknown					CAS #:		
2.699	644294	2.06298342	2.062983	0		0	40
Butane, 2-methyl-					CAS #: 78-78-4		
2.809	1862865	5.96476035	5.964760	72	NIST11.1	714	40
Unknown					CAS #:		
2.882	354234	1.13423226	1.134232	0		0	40
Unknown					CAS #:		
3.441	636148	2.03690157	2.036902	0		0	40
Furan, tetrahydro-2-methyl-					CAS #: 96-47-9		
4.518	434766	1.39209019	1.392090	64	NIST11.1	1810	40
Unknown					CAS #:		
4.956	381970	1.22304217	1.223042	0		0	40
1-Hexene					CAS #: 592-41-6		
5.321	813141	2.60361941	2.603619	47	NIST11.1	1453	40

Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464.i

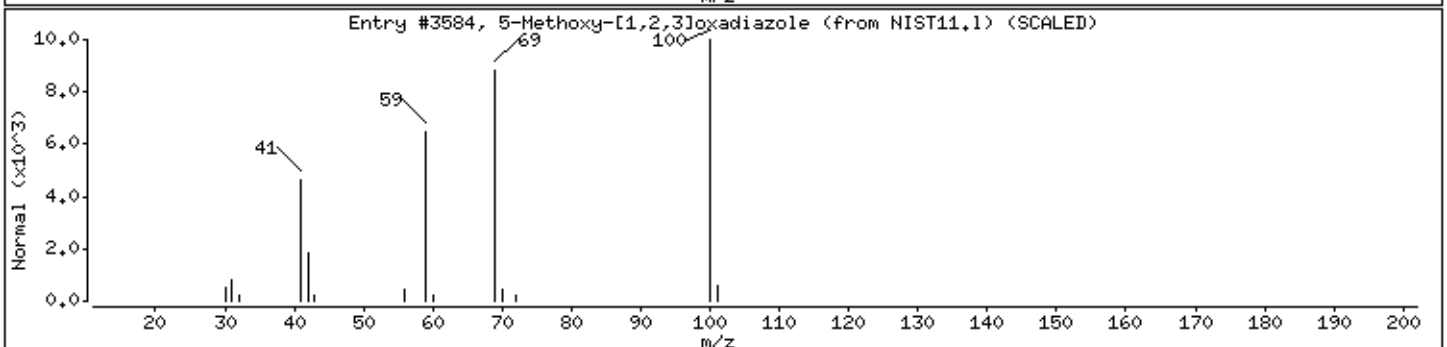
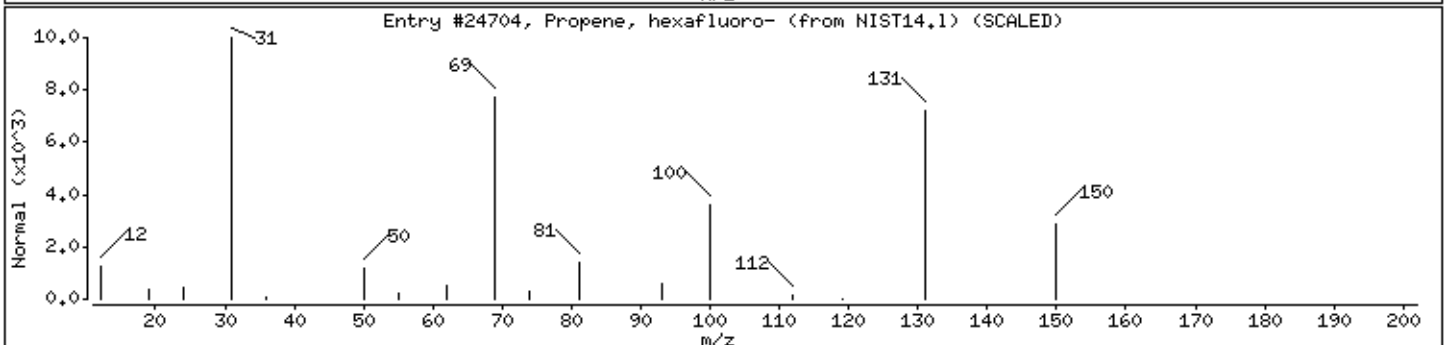
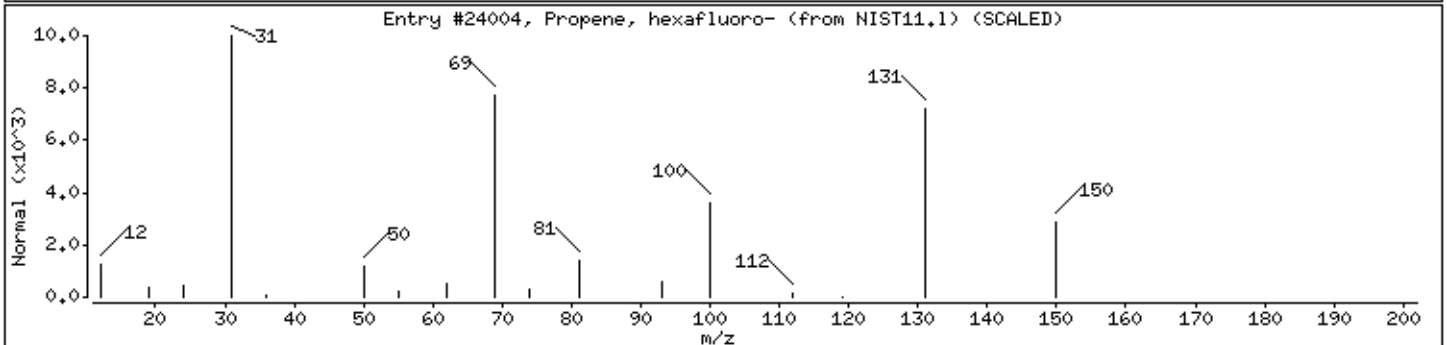
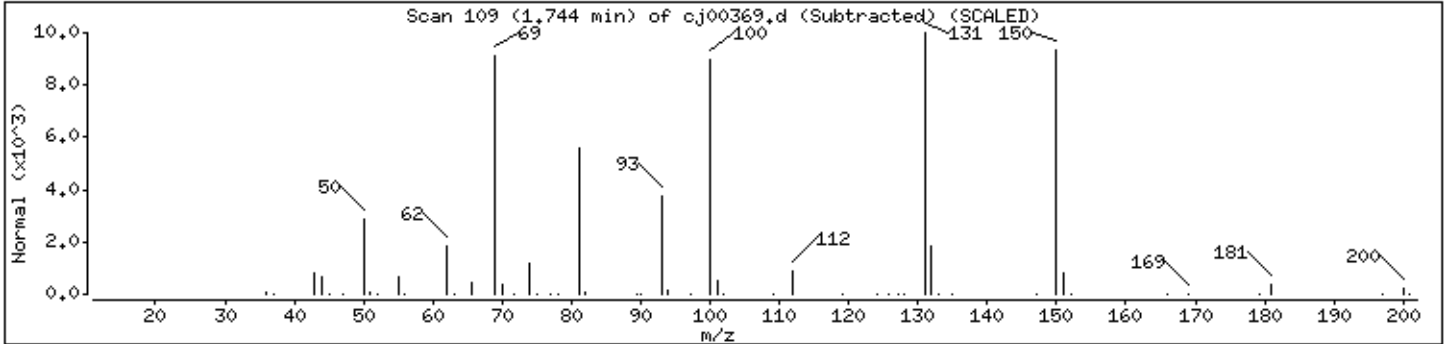
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propene, hexafluoro-	116-15-4	NIST11.1	24004	25	C3F6	150
Propene, hexafluoro-	116-15-4	NIST14.1	24704	25	C3F6	150
5-Methoxy-[1,2,3]oxadiazole	1000322-54-7	NIST11.1	3584	12	C3H4N2O2	100



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464,i

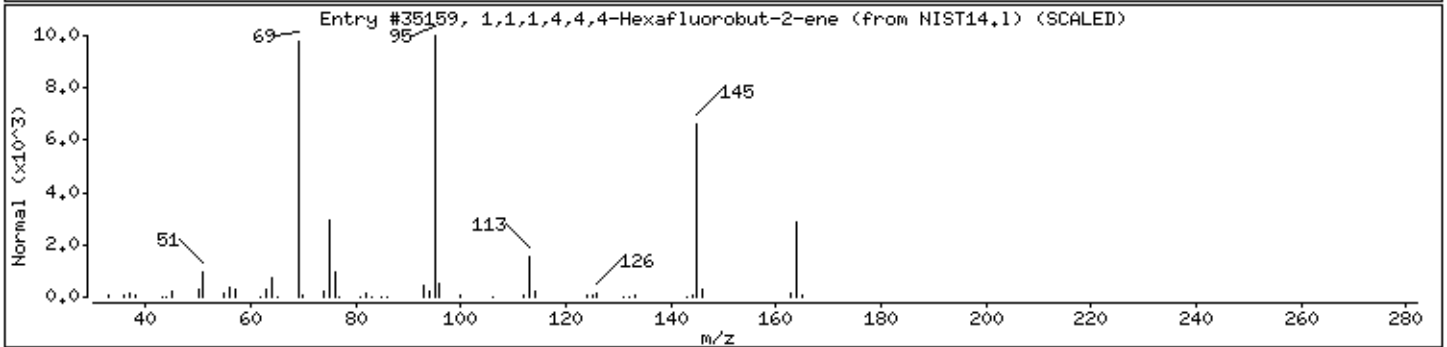
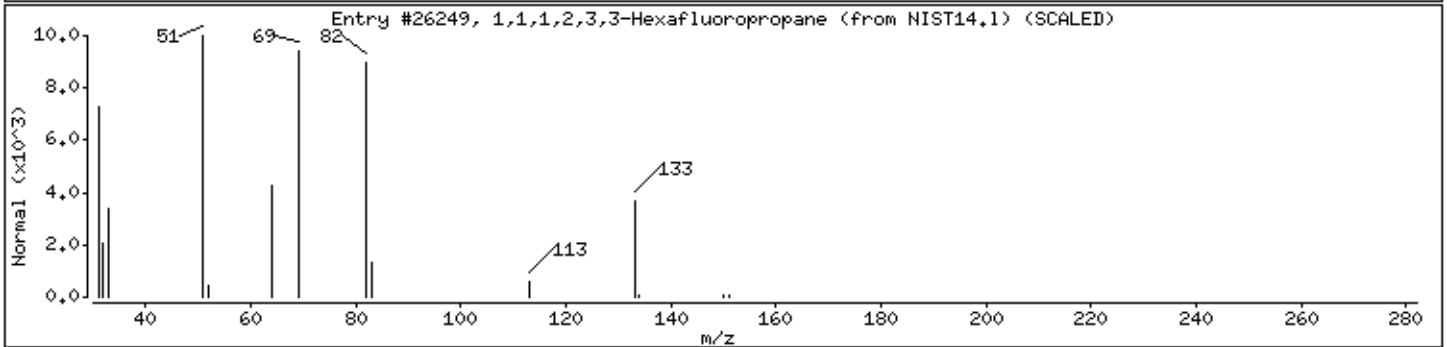
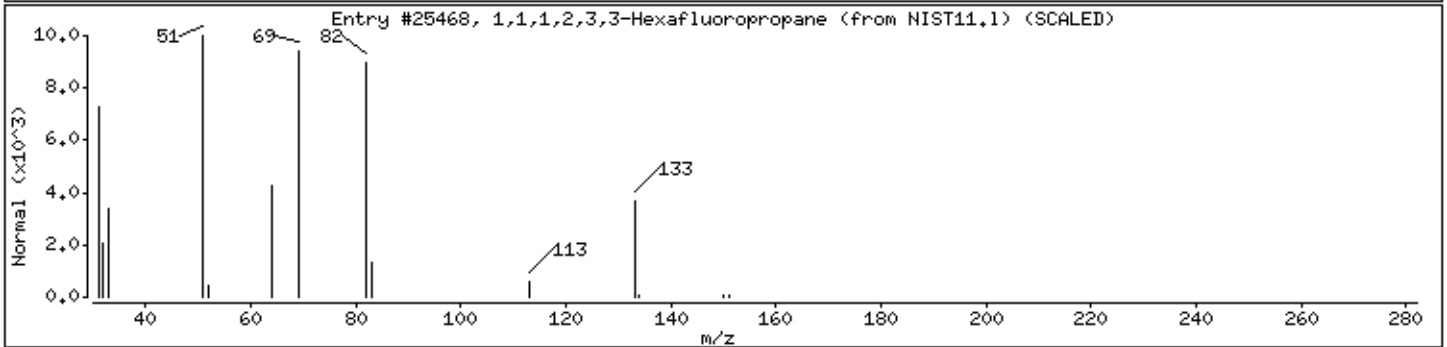
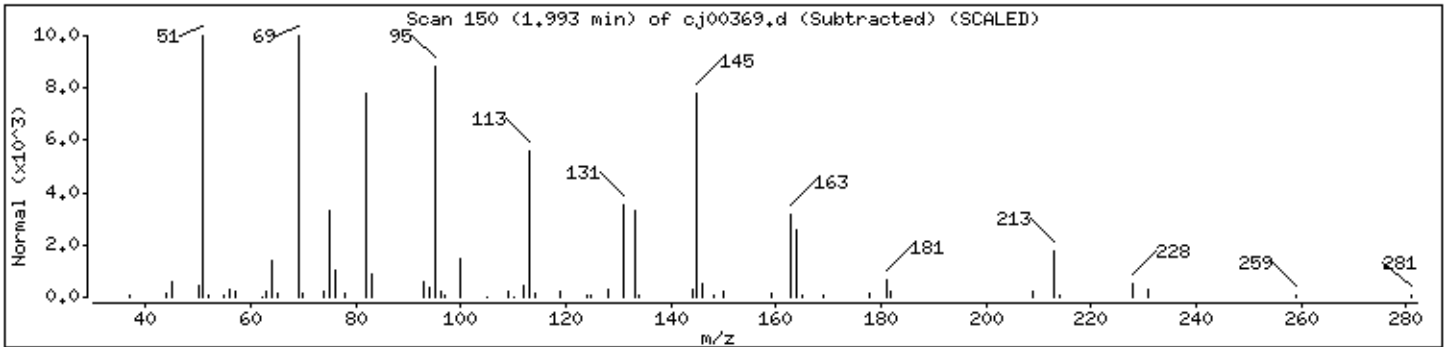
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,2,3,3-Hexafluoropropane	431-63-0	NIST11.1	25468	40	C3H2F6	152
1,1,1,2,3,3-Hexafluoropropane	431-63-0	NIST14.1	26249	40	C3H2F6	152
1,1,1,4,4,4-Hexafluorobut-2-ene	1000394-40-0	NIST14.1	35159	38	C4H2F6	164



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464.i

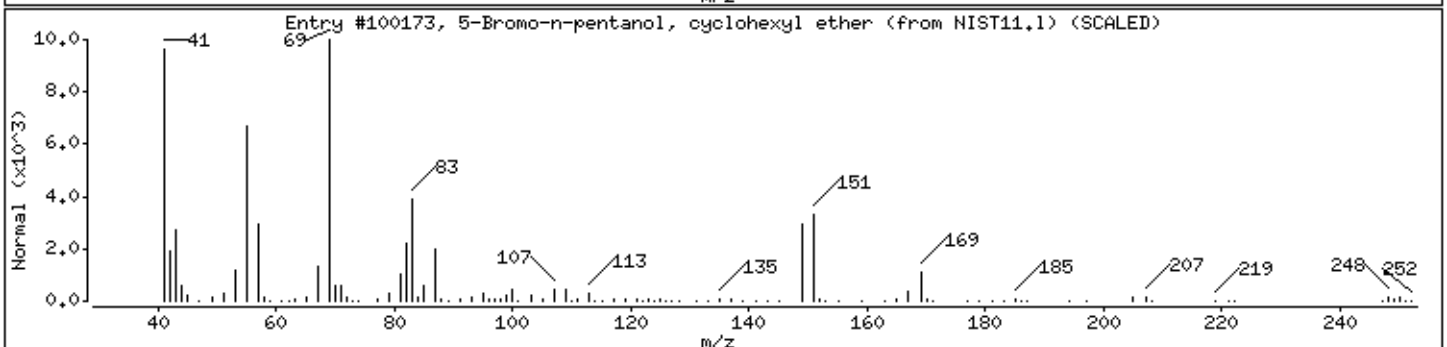
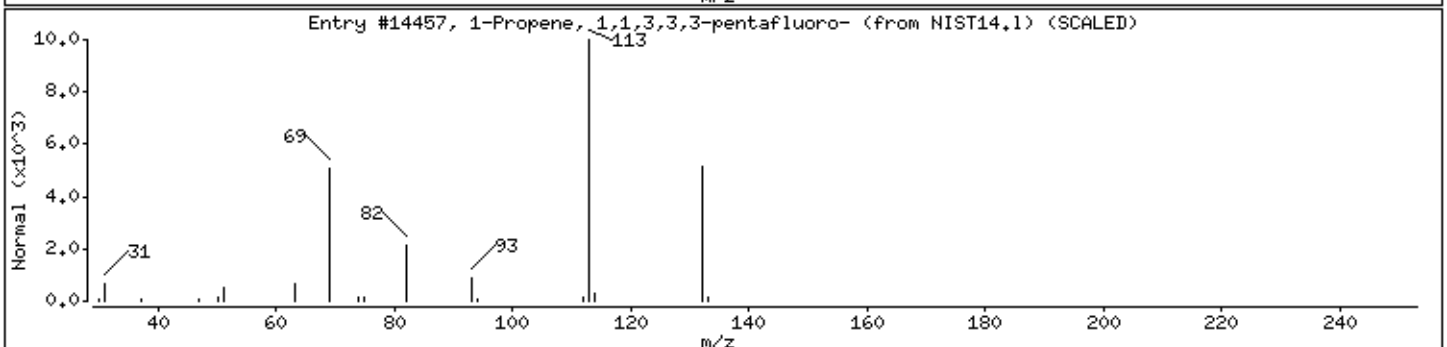
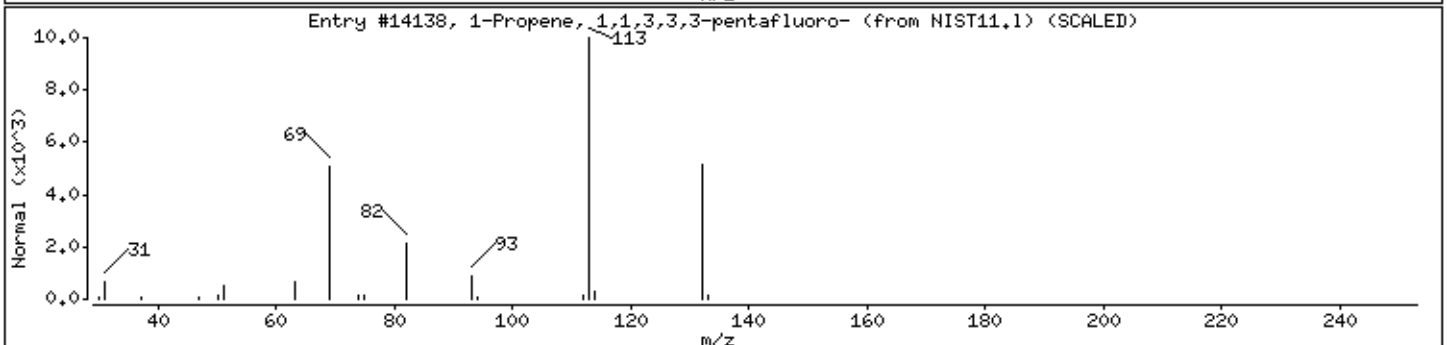
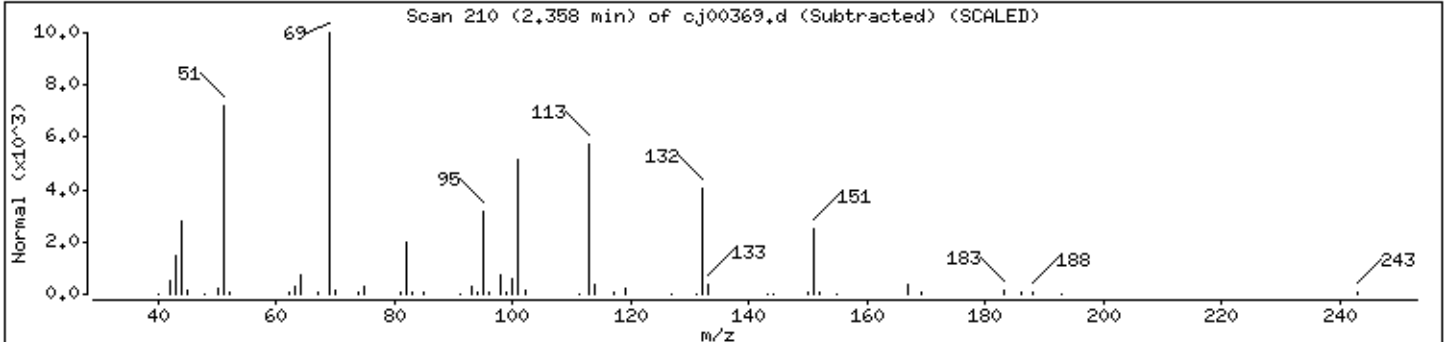
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Propene, 1,1,3,3,3-pentafluoro-	690-27-7	NIST11.1	14138	14	C3HF5	132
1-Propene, 1,1,3,3,3-pentafluoro-	690-27-7	NIST14.1	14457	14	C3HF5	132
5-Bromo-n-pentanol, cyclohexyl ether	100048-84-8	NIST11.1	100173	10	C11H21BrO	248





Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464,i

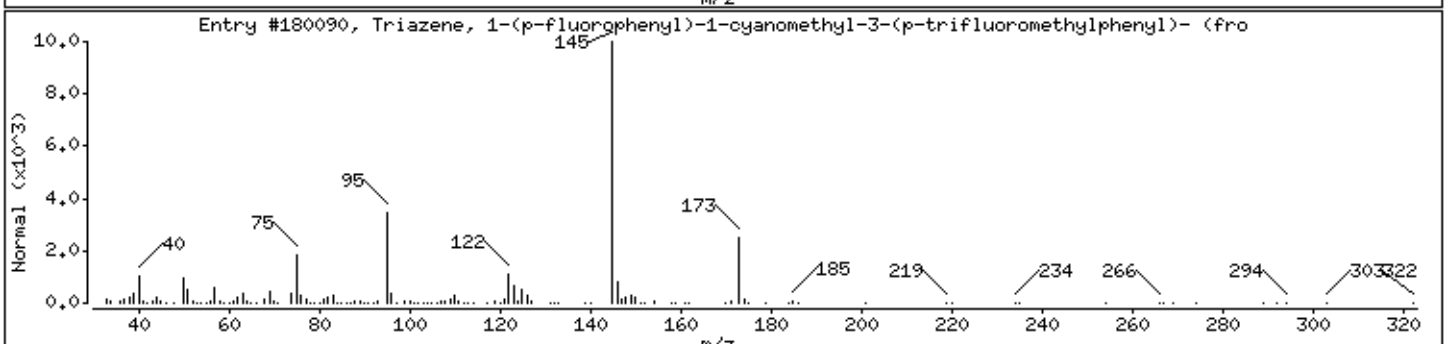
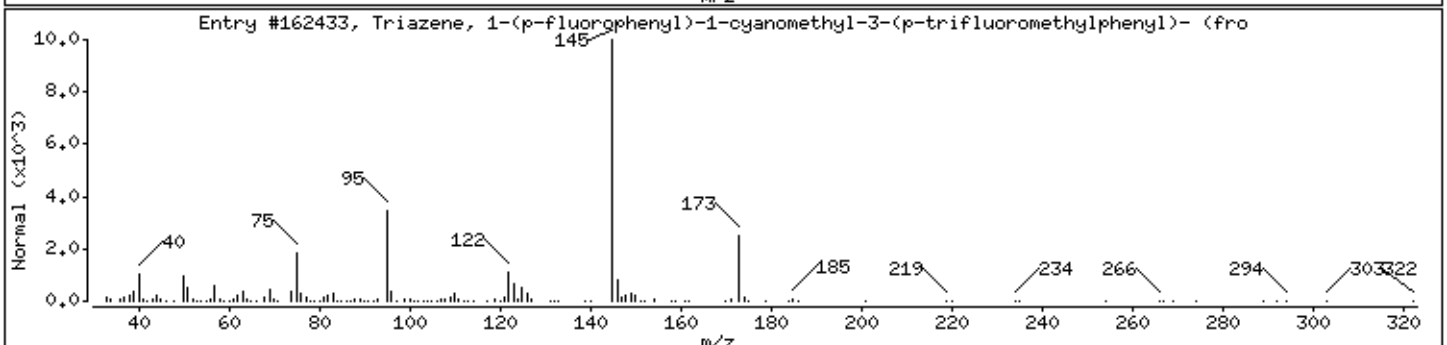
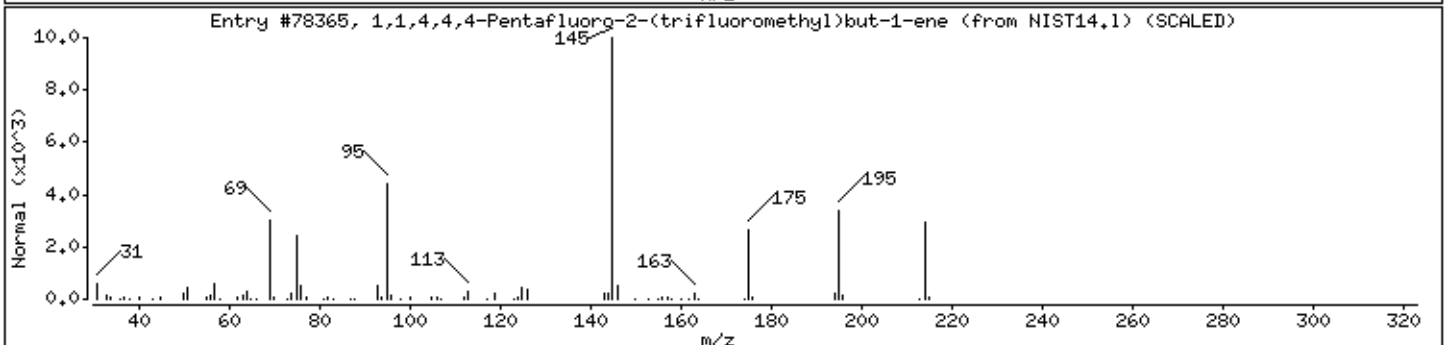
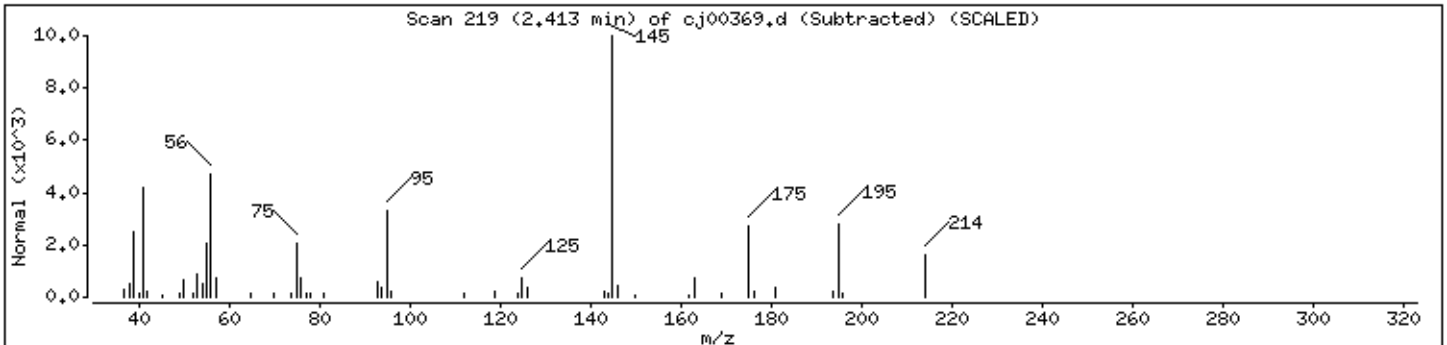
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,4,4,4-Pentafluoro-2-(trifluoromethyl	1000394-35-3	NIST14.1	78365	38	C5H2F8	214
Triazene, 1-(p-fluorophenyl)-1-cyanometh	1000274-66-5	NIST11.1	162433	25	C15H10F4N4	322
Triazene, 1-(p-fluorophenyl)-1-cyanometh	1000274-66-5	NIST14.1	180090	25	C15H10F4N4	322



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464.i

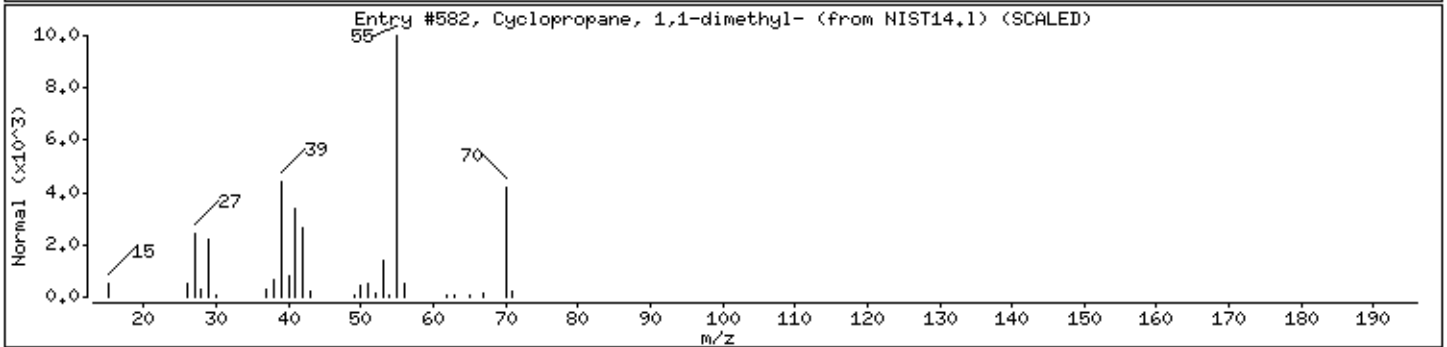
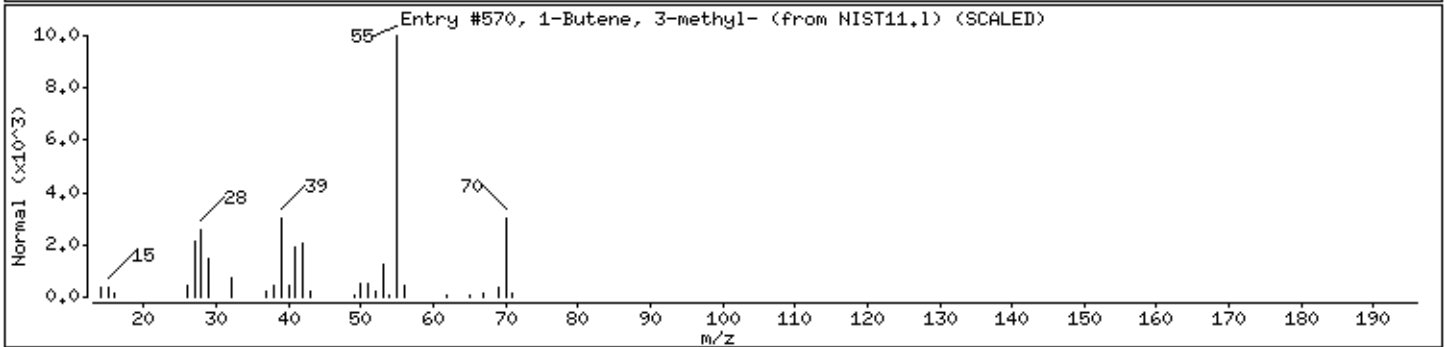
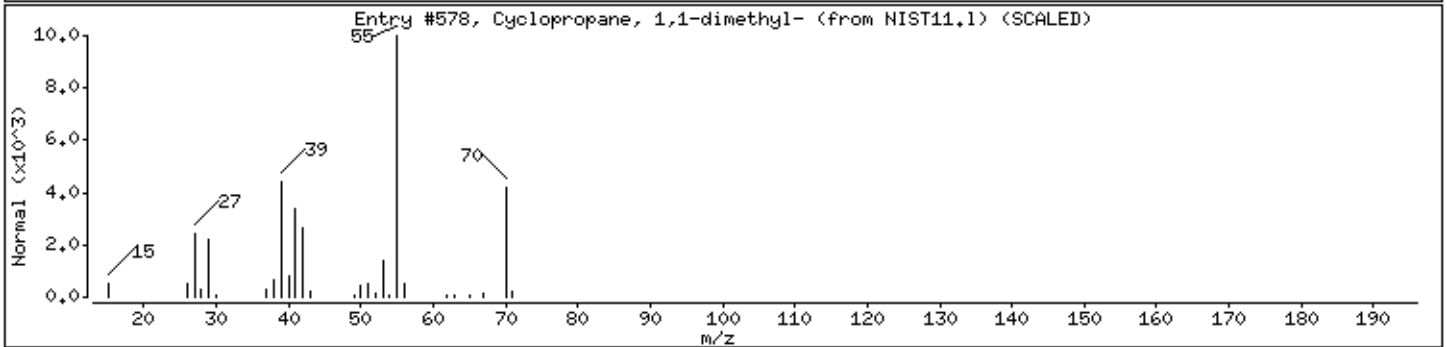
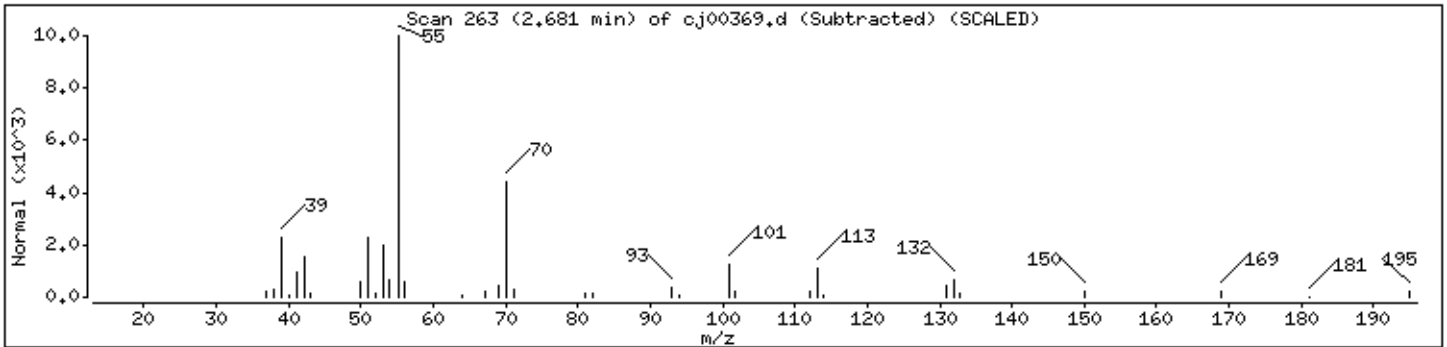
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopropane, 1,1-dimethyl-	1630-94-0	NIST11.1	578	47	C5H10	70
1-Butene, 3-methyl-	563-45-1	NIST11.1	570	47	C5H10	70
Cyclopropane, 1,1-dimethyl-	1630-94-0	NIST14.1	582	47	C5H10	70



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464,i

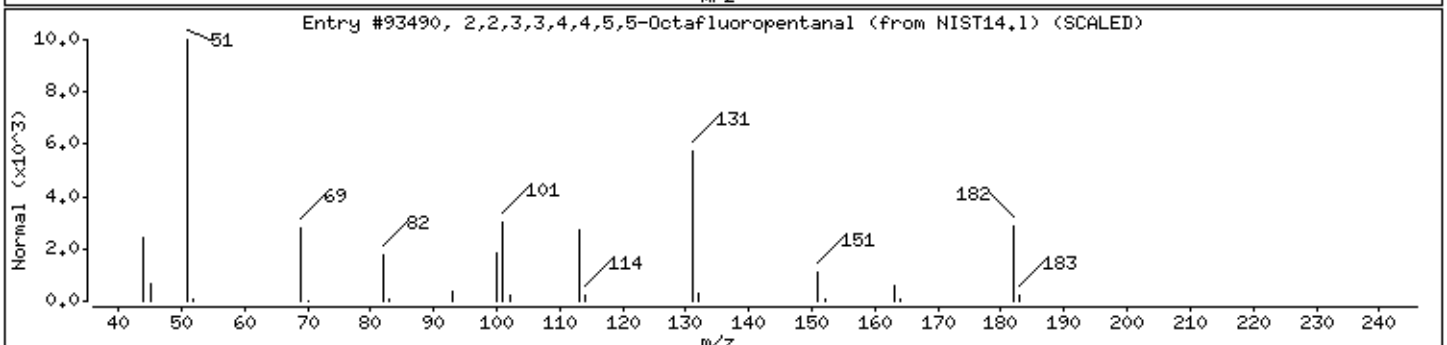
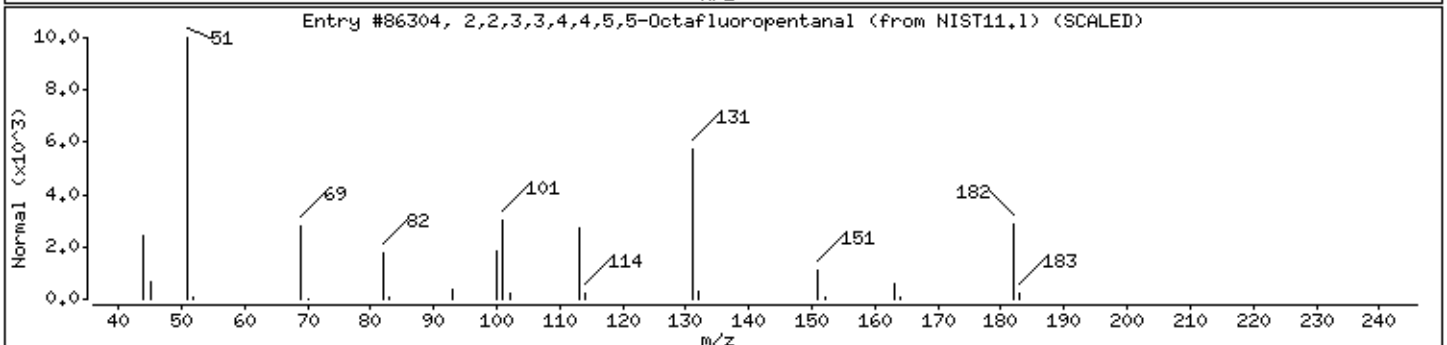
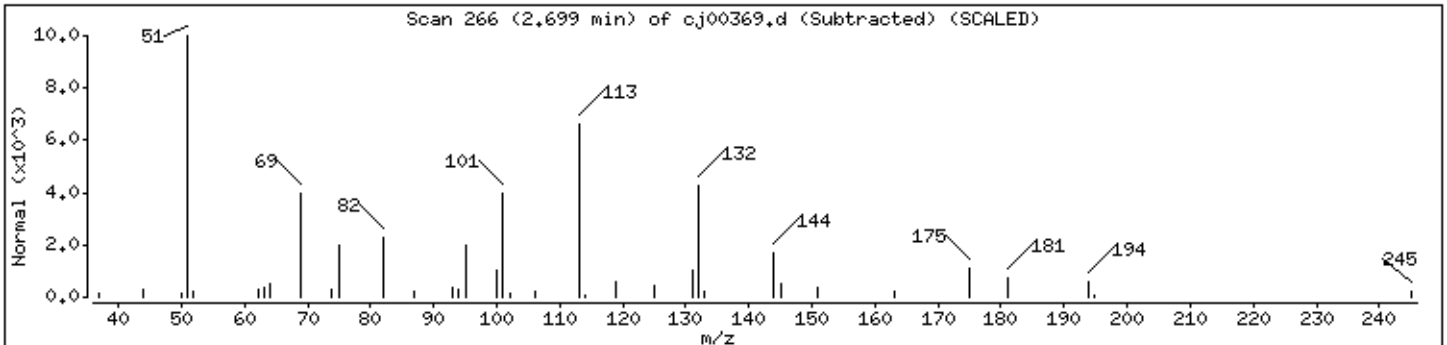
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,2,3,3,4,4,5,5-Octafluoropentanal	2648-47-7	NIST11.1	86304	45	C5H2F8O	230
2,2,3,3,4,4,5,5-Octafluoropentanal	2648-47-7	NIST14.1	93490	45	C5H2F8O	230



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464.i

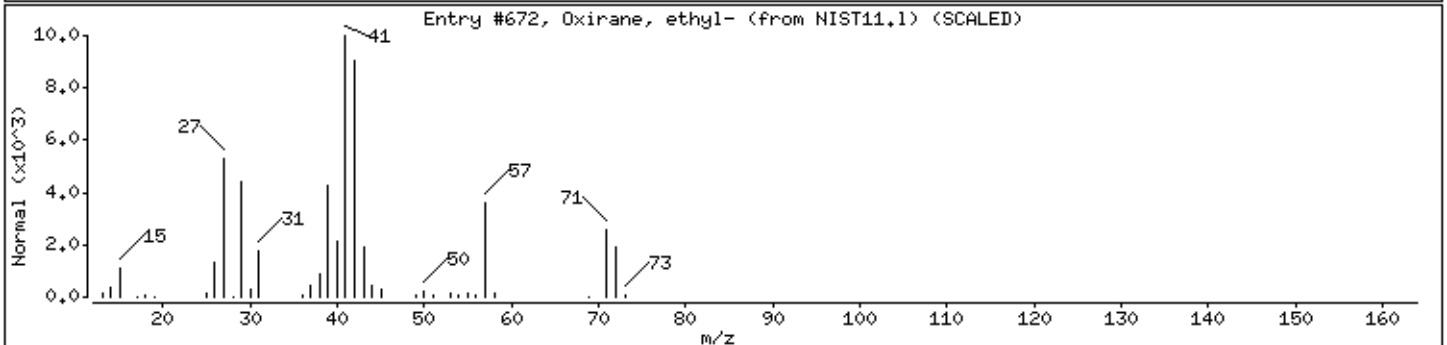
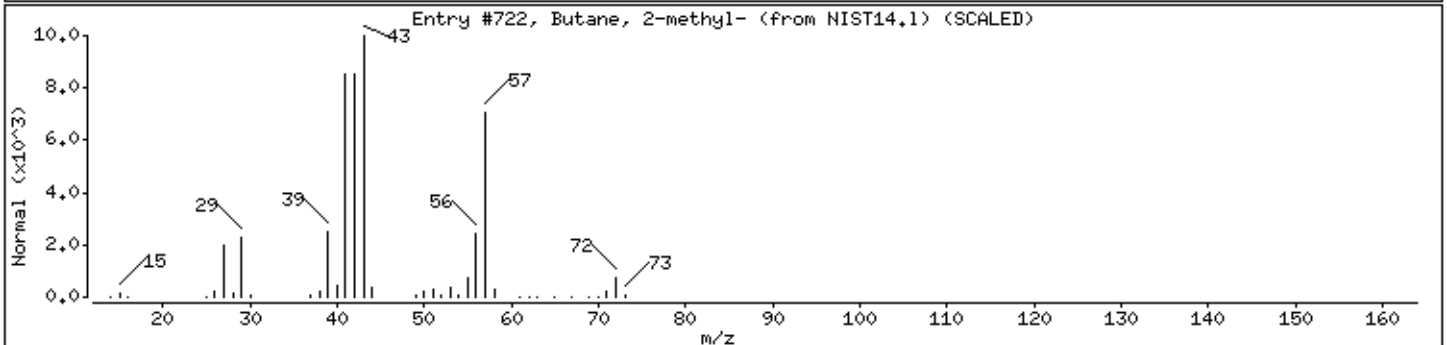
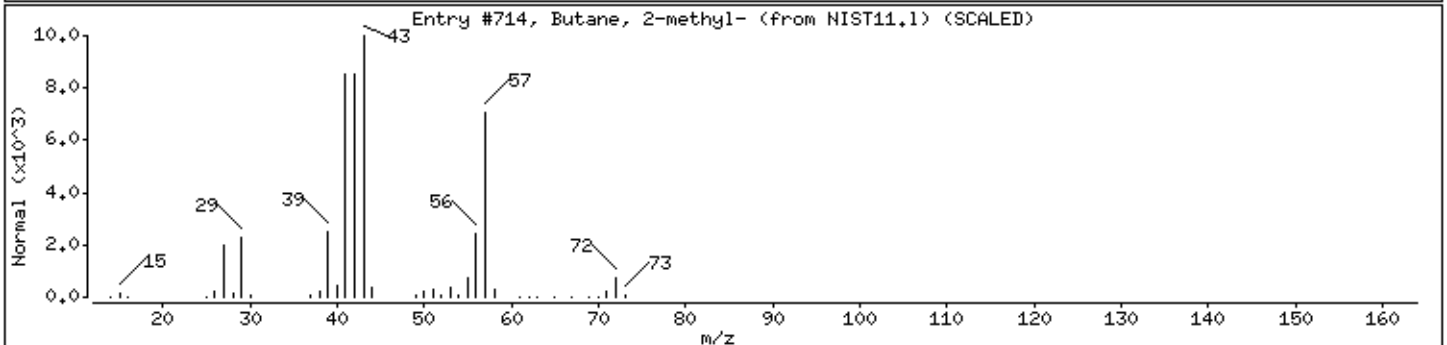
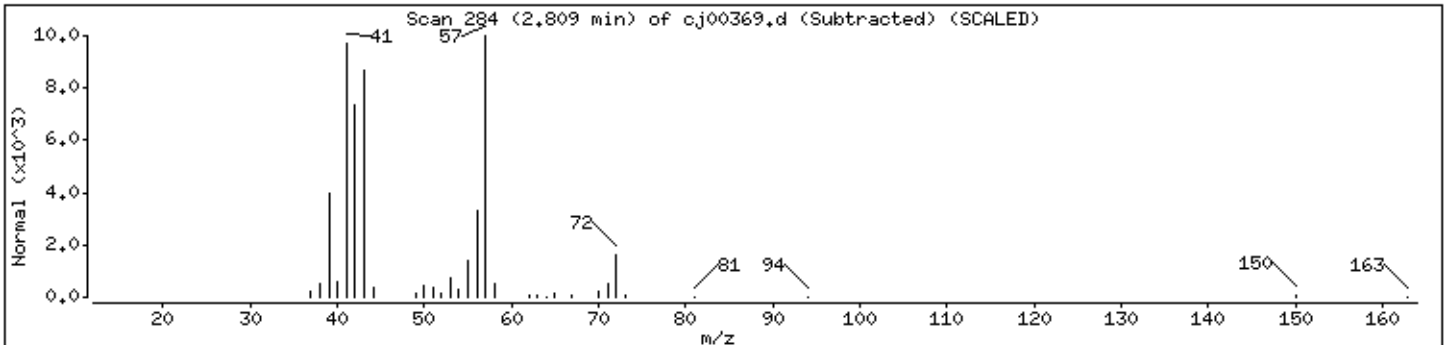
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Butane, 2-methyl-	78-78-4	NIST11.1	714	72	C5H12	72
Butane, 2-methyl-	78-78-4	NIST14.1	722	72	C5H12	72
Oxirane, ethyl-	106-88-7	NIST11.1	672	53	C4H8O	72



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464.i

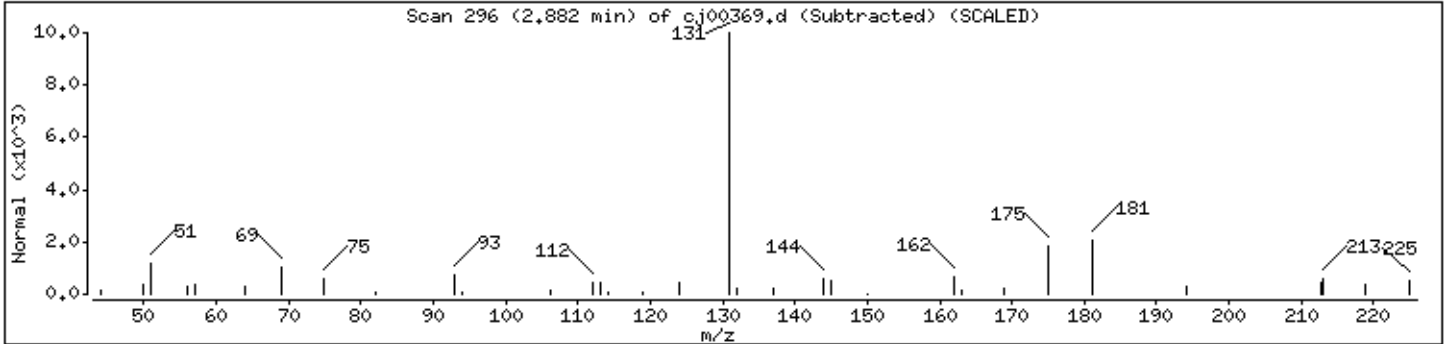
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Unknown			0	0		0



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464,i

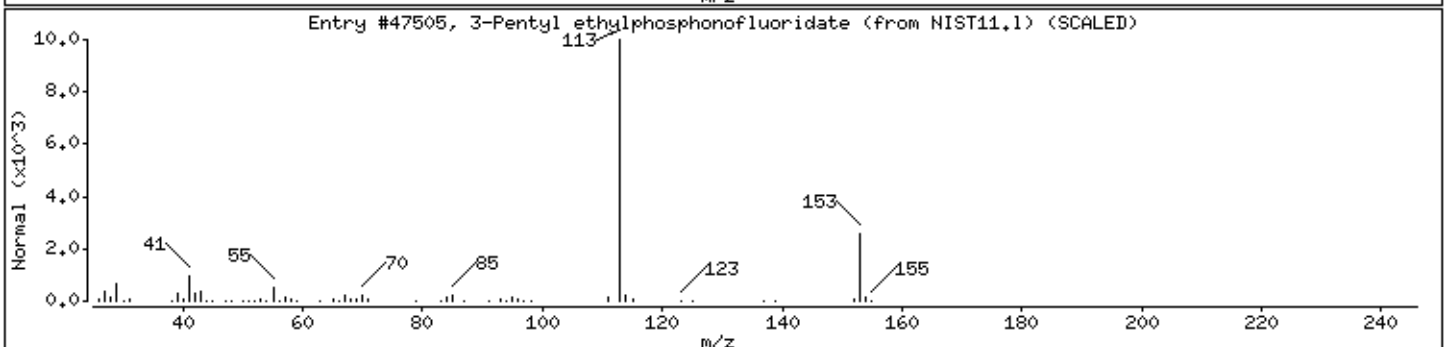
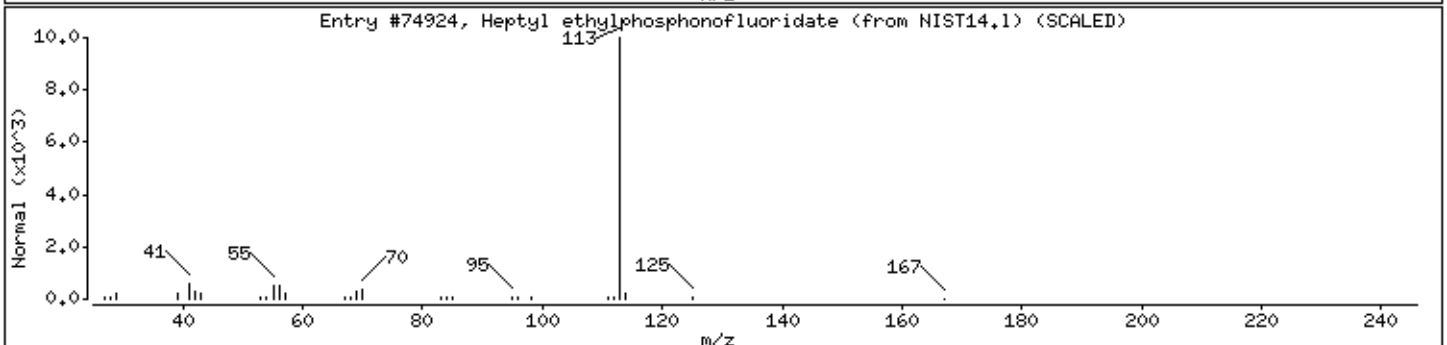
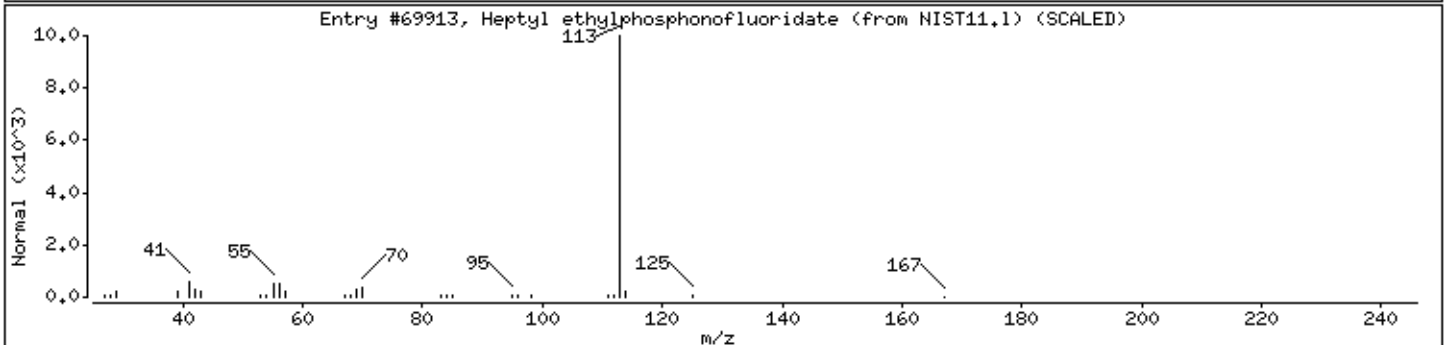
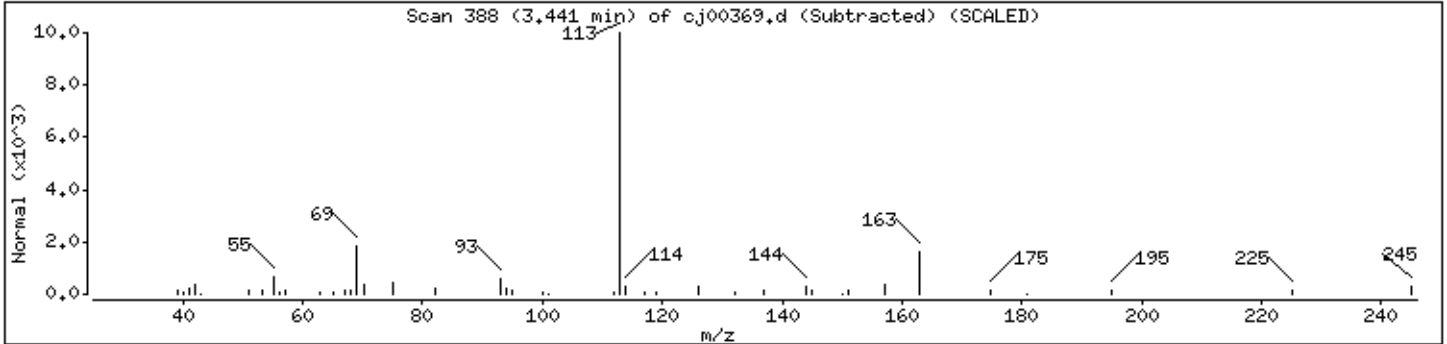
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Heptyl ethylphosphonofluoridate	162085-85-0	NIST11.1	69913	42	C9H20F02P	210
Heptyl ethylphosphonofluoridate	162085-85-0	NIST14.1	74924	42	C9H20F02P	210
3-Pentyl ethylphosphonofluoridate	1000298-47-6	NIST11.1	47505	40	C7H16F02P	182



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464.i

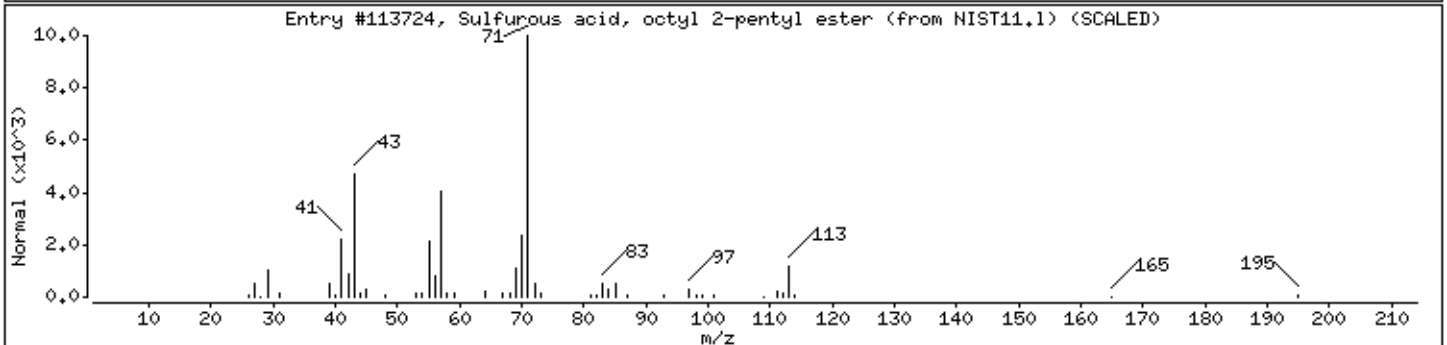
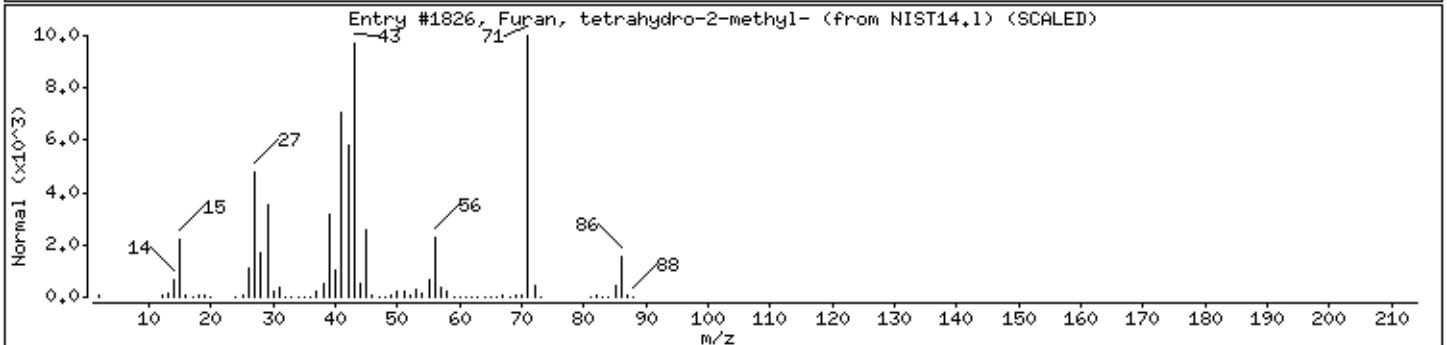
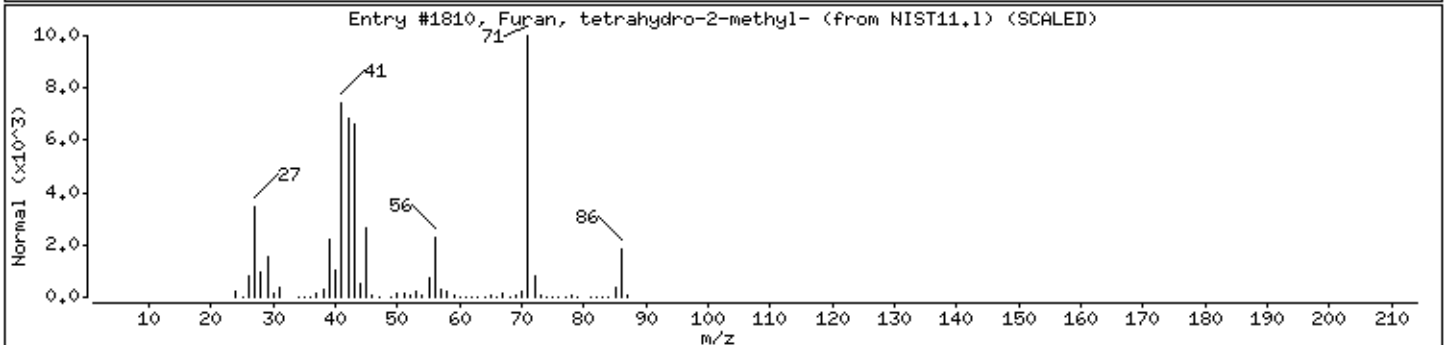
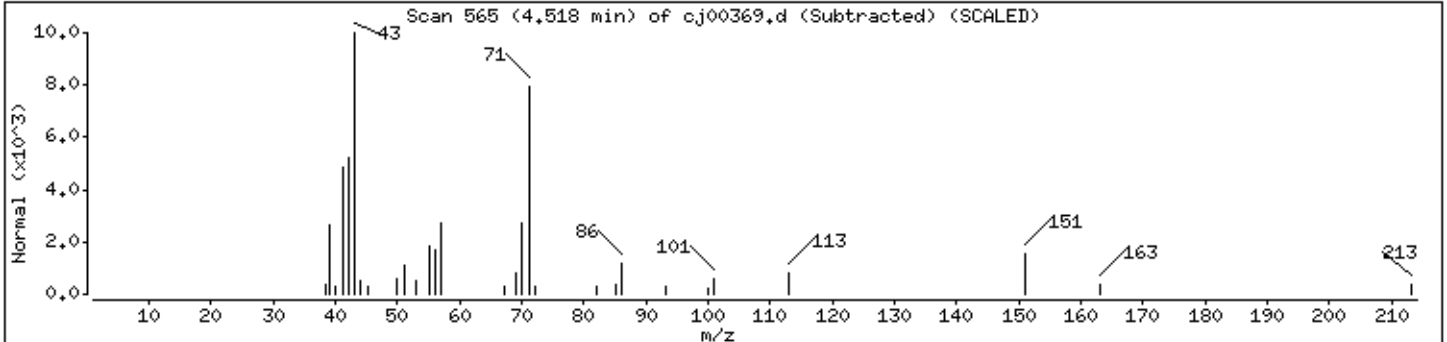
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Furan, tetrahydro-2-methyl-	96-47-9	NIST11.1	1810	64	C5H10O	86
Furan, tetrahydro-2-methyl-	96-47-9	NIST14.1	1826	64	C5H10O	86
Sulfurous acid, octyl 2-pentyl ester	1000309-15-7	NIST11.1	113724	43	C13H28O3S	264



Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464.i

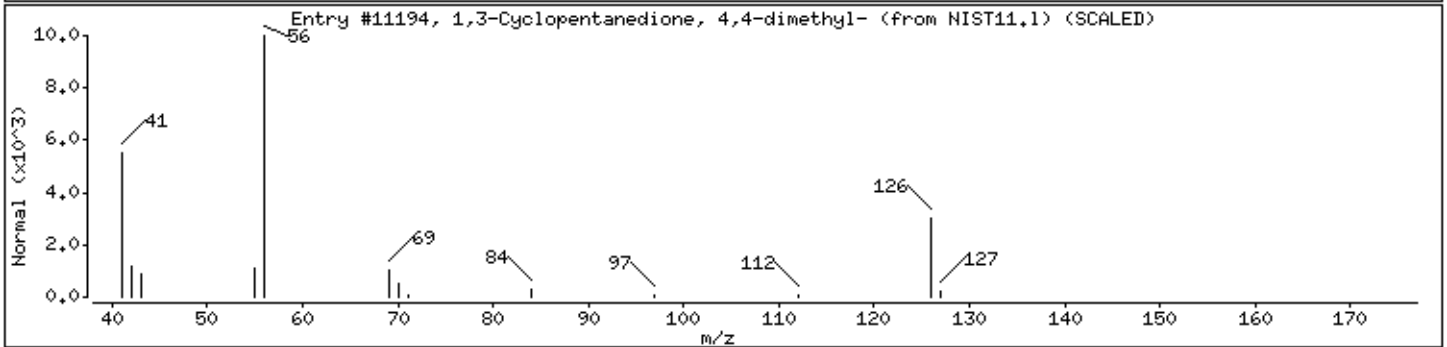
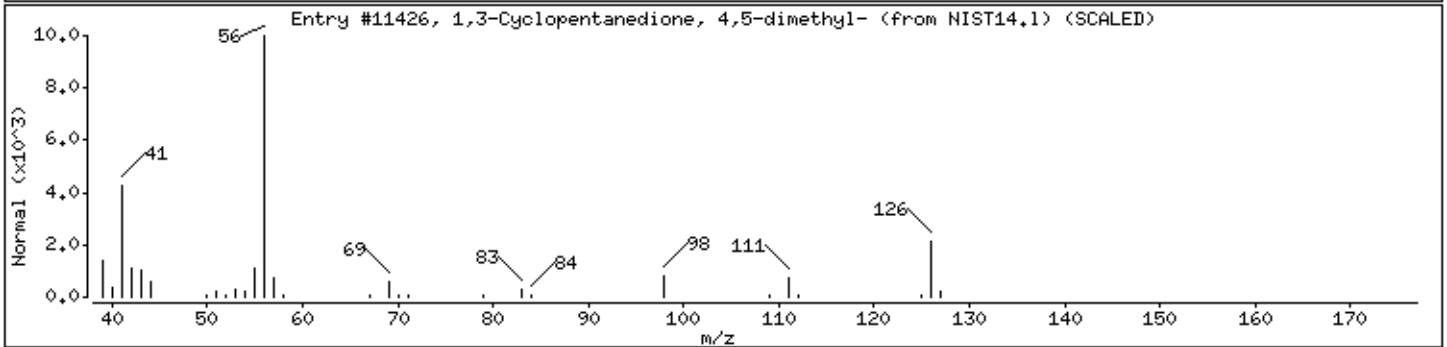
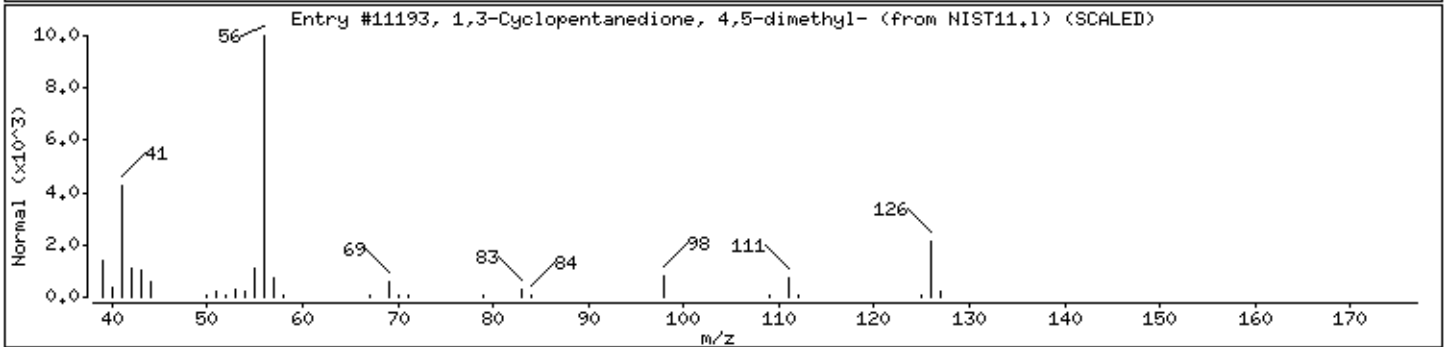
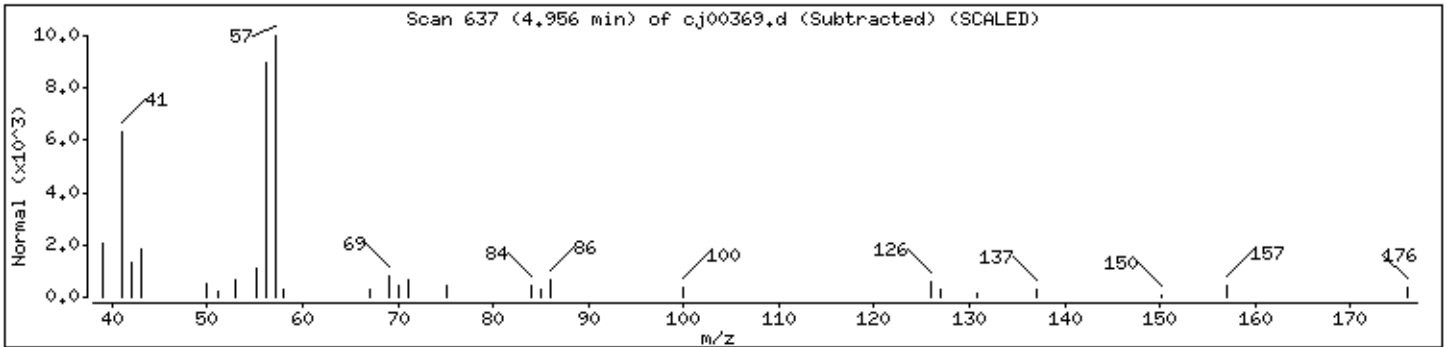
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Cyclopentanedione, 4,5-dimethyl-	35029-05-1	NIST11.1	11193	58	C7H10O2	126
1,3-Cyclopentanedione, 4,5-dimethyl-	35029-05-1	NIST14.1	11426	58	C7H10O2	126
1,3-Cyclopentanedione, 4,4-dimethyl-	4683-51-6	NIST11.1	11194	50	C7H10O2	126





Date : 17-OCT-2015 06:17

Client ID: 988--

Instrument: HP09464.i

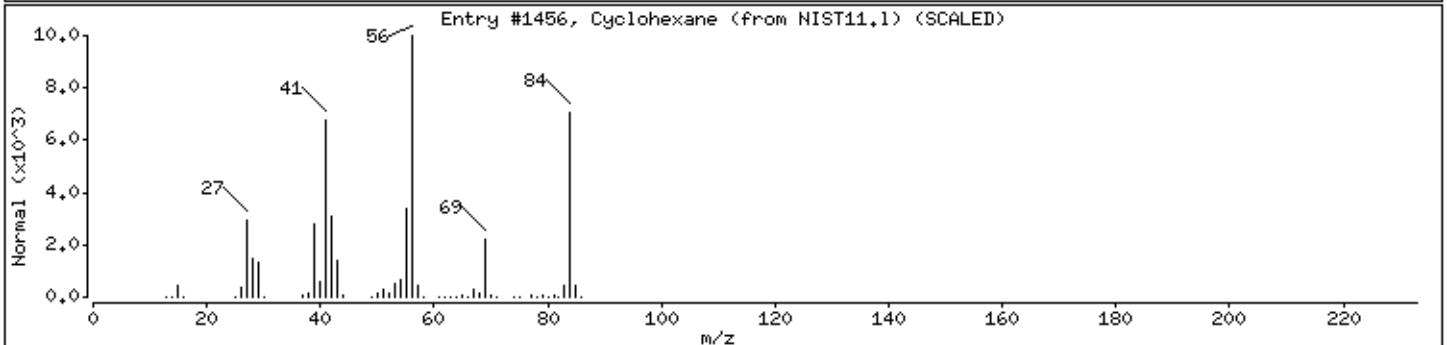
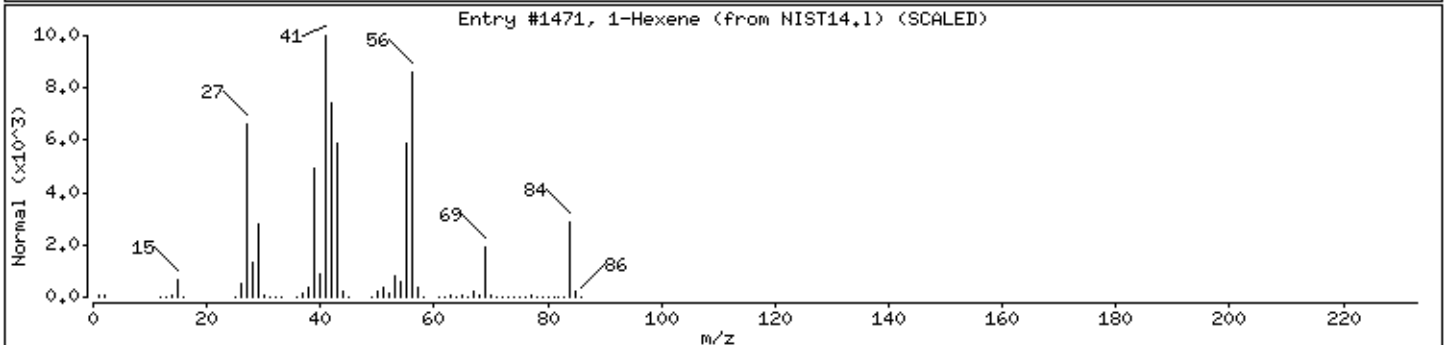
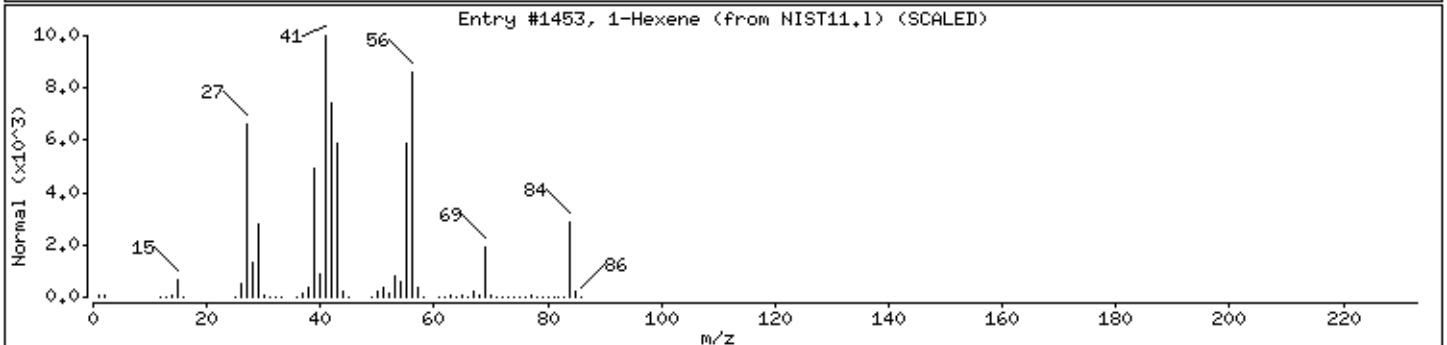
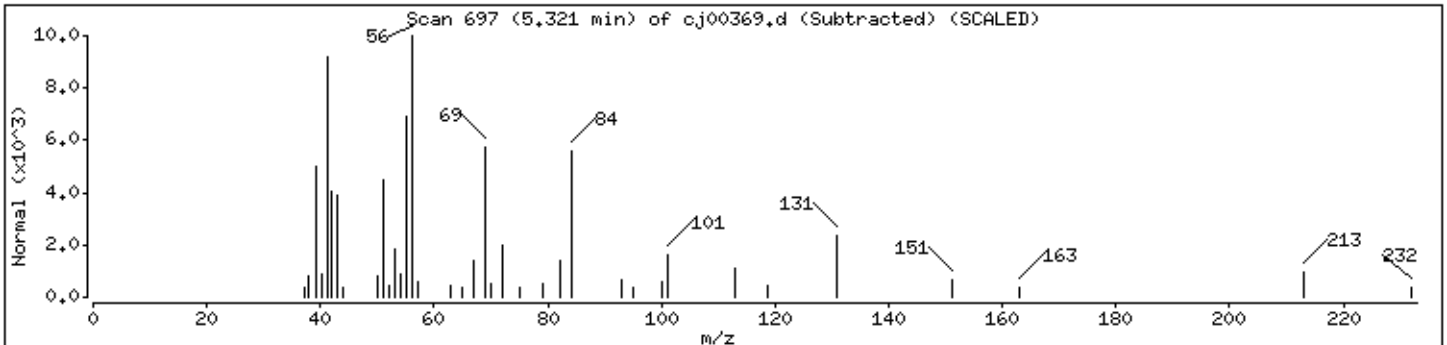
Sample Info: 8087716;500;C1528830AB;988--;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Hexene	592-41-6	NIST11.1	1453	47	C6H12	84
1-Hexene	592-41-6	NIST14.1	1471	47	C6H12	84
Cyclohexane	110-82-7	NIST11.1	1456	46	C6H12	84



**Standards Data**

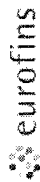
**Volatile Organics in Air by GC/MS**

## Theoretical Standard Concentrations for EPA Method TO-14/15.

Compound Name	Cas No	VSTD001	VSTD002	VSTD005	VSTD010	VSTD025	VSTD70
Bromochloromethane	74-97-5	10.00	10.00	10.00	10.00	10.00	10.00
Propene	115-07-1	1.06	2.12	5.30	10.60	26.50	74.2
Dichlorodifluoromethane	75-71-8	1.02	2.04	5.10	10.20	25.50	
Chlorodifluoromethane	75-45-6	1.05	2.10	5.25	10.50	26.25	
Freon 114	76-14-2	0.96	1.92	4.80	9.60	24.00	
Chloromethane	74-87-3	1.00	2.00	5.00	10.00	25.00	
Vinyl Chloride	75-01-4	1.00	2.00	5.00	10.00	25.00	70.0
1,3-Butadiene	106-99-0	1.03	2.06	5.15	10.30	25.75	
Bromomethane	74-83-9	1.00	2.00	5.00	10.00	25.00	
Chloroethane	75-00-3	0.96	1.92	4.80	9.60	24.00	
Bromoethene	593-60-2	1.04	2.08	5.20	10.40	26.00	
Dichlorofluoromethane	75-43-4	1.06	2.12	5.30	10.60	26.50	
Trichlorofluoromethane	75-69-4	1.05	2.10	5.25	10.50	26.25	
Pentane	109-66-0	1.05	2.10	5.25	10.50	26.25	73.5
Ethanol	9003-99-0	1.05	2.10	5.25	10.50	26.25	
Acrolein	107-02-8	1.09	2.18	5.45	10.90	27.25	
1,1-Dichloroethene	75-35-4	1.05	2.10	5.25	10.50	26.25	73.5
Freon 113	76-13-1	1.07	2.14	5.35	10.70	26.75	
Acetone	67-64-1	1.05	2.10	5.25	10.50	26.25	73.5
Methyl Iodide	74-88-4	1.05	2.10	5.25	10.50	26.25	
Carbon Disulfide	75-15-0	1.00	2.00	5.00	10.00	25.00	
Acetonitrile	75-05-8	1.10	2.20	5.50	11.00	27.50	
3-Chloropropene	107-05-1	1.10	2.20	5.50	11.00	27.50	
Methylene Chloride	75-09-2	1.10	2.20	5.50	11.00	27.50	77.0
tert-Butyl Alcohol	75-65-0	1.12	2.24	5.60	11.20	28.00	78.4
Acrylonitrile	107-13-1	1.05	2.10	5.25	10.50	26.25	
trans-1,2-Dichloroethene	156-60-5	0.98	1.96	4.90	9.80	24.50	68.6
Methyl t-Butyl Ether	1634-04-4	1.04	2.08	5.20	10.40	26.00	
Hexane	110-54-3	1.01	2.02	5.05	10.10	25.25	70.7
1,1-Dichloroethane	75-34-3	1.03	2.06	5.15	10.30	25.75	72.1
Vinyl Acetate	108-05-4	1.10	2.20	5.50	11.00	27.50	
Di-Isopropyl Ether	108-20-3	1.03	2.06	5.15	10.30	25.75	
Ethyl Tert-Butyl Ether	637-92-3	1.02	2.04	5.10	10.20	25.50	
cis-1,2-Dichloroethene	156-59-2	1.03	2.06	5.15	10.30	25.75	72.1
2-Butanone	78-93-3	1.05	2.10	5.25	10.50	26.25	73.5
Ethyl Acetate	141-78-6	1.03	2.06	5.15	10.30	25.75	
Methyl Acrylate	96-33-3	1.03	2.06	5.15	10.30	25.75	
Tetrahydrofuran	77392-70-2	1.05	2.10	5.25	10.50	26.25	
Chloroform	67-66-3	1.03	2.06	5.15	10.30	25.75	
1,1,1-Trichloroethane	71-55-6	1.03	2.06	5.15	10.30	25.75	72.1
Cyclohexane	68411-77-8	1.02	2.04	5.10	10.20	25.50	
Carbon Tetrachloride	56-23-5	1.05	2.10	5.25	10.50	26.25	73.5
1,4-Difluorobenzene	540-36-3	10.00	10.00	10.00	10.00	10.00	10.00
1,2-Dichloroethane	107-06-2	1.04	2.08	5.20	10.40	26.00	72.8
Benzene	71-43-2	1.05	2.10	5.25	10.50	26.25	73.5
Isooctane	540-84-1	1.07	2.14	5.35	10.70	26.75	74.9
Tert Amyl Methyl Ether	64257-84-7	1.03	2.06	5.15	10.30	25.75	
Heptane	142-82-5	1.04	2.08	5.20	10.40	26.00	72.8

**Theoretical Standard Concentrations for EPA Method TO-14/15.**

Trichloroethene	79-01-6	1.01	2.02	5.05	10.10	25.25	70.7
Ethyl Acrylate	140-88-5	1.07	2.14	5.35	10.70	26.75	
1,2-Dichloropropane	78-87-5	1.03	2.06	5.15	10.30	25.75	
Methyl Methacrylate	80-62-6	1.02	2.04	5.10	10.20	25.50	
Dibromomethane	74-95-3	1.03	2.06	5.15	10.30	25.75	
1,4-Dioxane	123-91-1	1.01	2.02	5.05	10.10	25.25	
Bromodichloromethane	75-27-4	1.01	2.02	5.05	10.10	25.25	
cis-1,3-Dichloropropene	10061-01-5	1.10	2.20	5.50	11.00	27.50	
4-Methyl-2-Pentanone	108-10-1	1.01	2.02	5.05	10.10	25.25	
Chlorobenzene d5	3114-55-4	10.00	10.00	10.00	10.00	10.00	10.00
Toluene	108-88-3	1.03	2.06	5.15	10.30	25.75	72.1
Octane	111-65-9	1.04	2.08	5.20	10.40	26.00	
trans-1,3-Dichloropropene	10061-02-6	1.01	2.02	5.05	10.10	25.25	
Ethyl Methacrylate	97-63-2	1.03	2.06	5.15	10.30	25.75	
1,1,2-Trichloroethane	79-00-5	1.03	2.06	5.15	10.30	25.75	72.1
Tetrachloroethene	127-18-4	0.98	1.96	4.90	9.80	24.50	68.6
2-Hexanone	591-78-6	1.09	2.18	5.45	10.90	27.25	
Dibromochloromethane	124-48-1	1.02	2.04	5.10	10.20	25.50	
1,2-Dibromoethane	106-93-4	1.02	2.04	5.10	10.20	25.50	
Chlorobenzene	108-90-7	1.05	2.10	5.25	10.50	26.25	
1,1,1,2-Tetrachloroethane	630-20-6	1.05	2.10	5.25	10.50	26.25	
Ethylbenzene	100-41-4	1.04	2.08	5.20	10.40	26.00	72.8
m/p-Xylene	1330-20-7	0.96	1.92	4.80	9.60	24.00	67.2
o-Xylene	95-47-6	1.02	2.04	5.10	10.20	25.50	71.4
Styrene	100-42-5	1.00	2.00	5.00	10.00	25.00	
Bromoform	75-25-2	0.98	1.96	4.90	9.80	24.50	
Cumene	98-82-8	1.02	2.04	5.10	10.20	25.50	
1,1,2,2-Tetrachloroethane	79-34-5	1.02	2.04	5.10	10.20	25.50	
1,2,3-Trichloropropane	96-18-4	1.04	2.08	5.20	10.40	26.00	
n-Propylbenzene	74296-31-4	0.99	1.98	4.95	9.90	24.75	
2-Chlorotoluene	95-49-8	1.03	2.06	5.15	10.30	25.75	
Bromobenzene	108-86-1	1.05	2.10	5.25	10.50	26.25	
4-Ethyltoluene	622-96-8	1.01	2.02	5.05	10.10	25.25	
1,3,5-Trimethylbenzene	108-67-8	1.00	2.00	5.00	10.00	25.00	
Alpha Methyl Styrene	611-15-1	1.03	2.06	5.15	10.30	25.75	
tert-Butylbenzene	98-06-6	1.01	2.02	5.05	10.10	25.25	
1,2,4-Trimethylbenzene	95-63-6	1.01	2.02	5.05	10.10	25.25	
sec-Butylbenzene	68411-44-9	1.01	2.02	5.05	10.10	25.25	
1,3-Dichlorobenzene	541-73-1	1.04	2.08	5.20	10.40	26.00	
1,4-Dichlorobenzene	106-46-7	1.00	2.00	5.00	10.00	25.00	
p-Isopropyltoluene	99-87-6	1.03	2.06	5.15	10.30	25.75	
Benzyl chloride	100-44-7	1.04	2.08	5.20	10.40	26.00	
1,2-Dichlorobenzene	95-50-1	1.01	2.02	5.05	10.10	25.25	
n-Butylbenzene	74296-32-5	1.05	2.10	5.25	10.50	26.25	
Hexachloroethane	67-72-1	1.05	2.10	5.25	10.50	26.25	
1,2-Dibromo-3-Chloropropane	96-12-8	1.05	2.10	5.25	10.50	26.25	
1,2,4-Trichlorobenzene	120-82-1	0.98	1.96	4.90	9.80	24.50	
Hexachlorobutadiene	87-68-3	1.00	2.00	5.00	10.00	25.00	
Naphthalene	91-20-3	1.08	2.16	5.40	10.80	27.00	



Lancaster Laboratories  
Environmental

FORM 06  
VOLATILE ORGANICS IN AIR  
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015  
Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:

RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d  
RRF 70 = cj00329.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
Propene	0.209	0.269	0.229	0.229	0.270	0.219	0.238	11	AVG
Dichlorodifluoromethane	2.834	3.648	2.882	2.680	2.670	****	2.943	14	AVG
Chlorodifluoromethane	0.860	1.210	0.915	0.828	0.890	****	0.940	16	AVG
Freon 114	2.418	3.375	2.609	2.365	2.475	****	2.648	16	AVG
Chloromethane	0.114	0.179	0.136	0.134	0.149	0.127	0.140	16	AVG
Vinyl Chloride	0.530	0.783	0.610	0.579	0.684	0.555	0.623	15	AVG
1,3-Butadiene	0.256	0.480	0.388	0.364	0.430	****	0.384	22	AVG
Bromomethane	0.765	1.132	0.881	0.822	0.939	****	0.908	16	AVG
Chloroethane	0.317	0.428	0.342	0.311	0.364	****	0.352	13	AVG
Bromoethene	0.712	1.057	0.842	0.812	0.951	0.802	0.863	14	AVG
Dichlorofluoromethane	1.461	2.137	1.620	1.469	1.532	****	1.644	17	AVG
Trichlorofluoromethane	2.923	4.109	3.165	2.824	2.842	****	3.172	17	AVG
Pentane	0.444	0.668	0.532	0.504	0.588	0.500	0.539	15	AVG
Ethanol	****	0.136	0.122	0.125	0.126	0.126	0.127	4	AVG
Freon123a	1.019	1.514	1.131	1.090	1.036	****	1.158	18	AVG
Acrolein	0.130	0.107	0.109	0.130	0.118	****	0.119	9	AVG
1,1-Dichloroethene	0.826	1.376	1.046	0.990	1.066	0.899	1.034	18	AVG
Freon 113	1.124	1.627	1.229	1.140	1.169	****	1.258	17	AVG
Acetone	0.578	0.405	0.394	0.417	0.310	0.364	0.411	22	AVG
Methyl Iodide	2.406	3.367	2.677	2.489	2.623	****	2.713	14	AVG
Carbon Disulfide	1.994	2.568	2.068	1.908	2.088	****	2.125	12	AVG
Isopropanol	0.749	0.453	0.407	0.413	0.455	0.441	0.486	27	AVG
Acetonitrile	0.205	0.060	0.073	0.086	0.061	0.076	0.094	59	AVG*

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
# Average RRF for all compounds must be greater than 0.010.

SDG No.:

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015  
Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:

RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d  
RRF 70 = cj00329.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
3-Chloropropene	0.251	0.348	0.292	0.273	0.300	****	0.293	12	AVG
Methylene Chloride	0.584	0.859	0.652	0.589	0.596	0.568	0.641	17	AVG
tert-Butyl Alcohol	0.675	0.741	0.690	0.717	0.789	0.774	0.731	6	AVG
Acrylonitrile	****	0.232	0.199	0.237	0.184	0.253	0.221	13	AVG
trans-1,2-Dichloroethene	0.791	1.181	0.867	0.826	0.822	0.768	0.876	18	AVG
Methyl t-Butyl Ether	1.121	1.155	1.119	1.178	1.014	1.205	1.132	6	AVG
Hexane	0.426	0.803	0.647	0.645	0.665	0.661	0.641	19	AVG
1,1-Dichloroethane	0.969	1.443	1.094	1.067	0.984	0.929	1.081	17	AVG
Vinyl Acetate	0.094	0.076	0.109	0.133	0.108	0.156	0.113	25	AVG
Di-Isopropyl Ether	0.485	0.653	0.651	0.730	0.638	0.715	0.645	13	AVG
Ethyl Tert-Butyl Ether	0.726	0.797	0.893	0.999	0.923	1.061	0.900	14	AVG
cis-1,2-Dichloroethene	0.684	1.029	0.812	0.812	0.771	0.727	0.806	15	AVG
2-Butanone	0.234	0.176	0.193	0.209	0.171	0.215	0.200	12	AVG
Ethyl Acetate	0.094	0.070	0.088	0.103	0.081	0.109	0.091	16	AVG
Methyl Acrylate	0.598	0.433	0.479	0.551	0.425	0.551	0.506	14	AVG
Tetrahydrofuran	0.232	0.195	0.215	0.235	0.194	0.232	0.217	9	AVG
Chloroform	1.827	2.599	1.921	1.886	1.677	1.461	1.895	20	AVG
1,1,1-Trichloroethane	1.958	2.938	2.229	2.176	1.935	1.685	2.153	20	AVG
Cyclohexane	0.488	0.880	0.718	0.726	0.717	0.683	0.702	18	AVG
Carbon Tetrachloride	2.367	3.428	2.594	2.437	2.056	1.725	2.435	24	AVG
Benzene	0.544	0.811	0.584	0.601	0.620	0.512	0.612	17	AVG
1,2-Dichloroethane	0.351	0.477	0.343	0.347	0.332	0.279	0.355	18	AVG
Isooctane	0.344	0.708	0.568	0.625	0.666	0.543	0.576	22	AVG

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
# Average RRF for all compounds must be greater than 0.010.



Lancaster Laboratories  
Environmental

FORM 06  
VOLATILE ORGANICS IN AIR  
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015

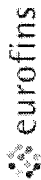
Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:

RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d  
RRF 70 = cj00329.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.289	0.334	0.316	0.345	0.352	0.372	0.335	9	AVG
Heptane	0.092	0.193	0.154	0.171	0.184	0.158	0.159	23	AVG
Trichloroethene	0.361	0.570	0.393	0.403	0.422	0.366	0.419	18	AVG
Ethyl Acrylate	0.189	0.164	0.159	0.178	0.168	0.173	0.172	6	AVG
1,2-Dichloropropane	0.158	0.206	0.164	0.178	0.162	0.150	0.170	12	AVG
Dibromomethane	0.448	0.530	0.383	0.389	0.398	0.356	0.417	15	AVG
1,4-Dioxane	0.143	0.116	0.112	0.119	0.135	****	0.125	11	AVG
Methyl Methacrylate	0.139	0.126	0.122	0.137	0.124	0.131	0.130	5	AVG
Bromodichloromethane	0.610	0.838	0.609	0.614	0.608	0.467	0.624	19	AVG
cis-1,3-Dichloropropene	0.270	0.362	0.317	0.362	0.359	0.322	0.332	11	AVG
4-Methyl-2-Pentanone	0.173	0.151	0.148	0.161	0.172	0.150	0.159	7	AVG
Toluene	0.730	0.857	0.763	0.892	0.778	0.665	0.781	11	AVG
Octane	0.108	0.202	0.215	0.249	0.255	0.205	0.206	26	AVG
trans-1,3-Dichloropropene	0.430	0.439	0.397	0.442	0.399	0.358	0.411	8	AVG
Ethyl Methacrylate	0.201	0.199	0.214	0.238	0.246	0.215	0.219	9	AVG
1,1,2-Trichloroethane	0.334	0.380	0.326	0.348	0.321	0.288	0.333	9	AVG
Tetrachloroethene	0.516	0.754	0.612	0.647	0.806	0.654	0.665	16	AVG
2-Hexanone	****	0.159	0.183	0.197	0.197	0.166	0.181	10	AVG
Dibromochloromethane	0.614	0.821	0.638	0.646	0.624	0.507	0.642	16	AVG
1,2-Dibromoethane	0.603	0.629	0.547	0.602	0.550	0.486	0.570	9	AVG
Chlorobenzene	0.790	0.861	0.763	0.804	0.771	0.669	0.776	8	AVG
1,1,1,2-Tetrachloroethane	0.476	0.561	0.477	0.498	0.461	0.431	0.484	9	AVG
Ethylbenzene	0.807	0.809	0.845	0.999	0.921	0.795	0.863	9	AVG

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
# Average RRF for all compounds must be greater than 0.010.



Lancaster Laboratories  
Environmental

FORM 06  
VOLATILE ORGANICS IN AIR  
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015

Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:

RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d  
RRF 70 = cj00329.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
m/p-Xylene	0.666	0.654	0.675	0.792	0.754	0.739	0.713	8	AVG
o-Xylene	0.789	0.711	0.707	0.829	0.738	0.732	0.751	6	AVG
Styrene	0.680	0.641	0.629	0.741	0.683	0.664	0.673	6	AVG
Bromoform	0.854	0.907	0.812	0.866	0.811	0.724	0.829	8	AVG
Cumene	0.860	0.867	0.913	1.103	1.064	0.980	0.964	11	AVG
Bromobenzene	0.578	0.559	0.506	0.561	0.517	0.530	0.542	5	AVG
1,1,2,2-Tetrachloroethane	0.749	0.685	0.637	0.666	0.546	0.521	0.634	14	AVG
1,2,3-Trichloropropane	0.289	0.250	0.235	0.250	0.210	0.222	0.243	11	AVG
n-Propylbenzene	0.298	0.302	0.299	0.359	0.346	***	0.321	9	AVG
2-Chlorotoluene	0.331	0.363	0.345	0.388	0.354	***	0.356	6	AVG
4-Ethyltoluene	1.035	1.011	1.053	1.235	1.113	1.006	1.075	8	AVG
1,3,5-Trimethylbenzene	0.888	0.883	0.870	1.029	0.972	0.914	0.926	7	AVG
Alpha Methyl Styrene	0.495	0.469	0.513	0.572	0.578	***	0.525	9	AVG
tert-Butylbenzene	0.842	0.821	0.862	0.986	1.014	0.964	0.915	9	AVG
1,2,4-Trimethylbenzene	0.949	0.909	0.950	1.030	1.009	0.922	0.961	5	AVG
sec-Butylbenzene	1.195	1.159	1.182	1.384	1.432	***	1.270	10	AVG
1,3-Dichlorobenzene	1.047	0.995	0.931	0.960	0.919	0.866	0.953	7	AVG
1,4-Dichlorobenzene	1.102	1.002	0.975	1.032	0.984	0.915	1.002	6	AVG
p-Isopropyltoluene	1.101	1.073	1.087	1.288	1.295	1.101	1.158	9	AVG
Benzyl Chloride	1.085	0.841	0.916	0.980	0.923	0.944	0.948	9	AVG
1,2-Dichlorobenzene	0.994	0.897	0.876	0.932	0.885	0.834	0.903	6	AVG
n-Butylbenzene	1.007	0.857	0.859	0.996	1.054	0.885	0.943	9	AVG
Hexachloroethane	0.522	0.545	0.471	0.501	0.406	0.425	0.478	11	AVG

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
# Average RRF for all compounds must be greater than 0.010.



SDG No.:

Instrument ID: 09464      Calibration Start Date: 10/16/2015      Calibration End Date: 10/16/2015  
 Calibration Start Time: 01:09      Calibration End Time: 10:21

LAB FILE IDs:  
 RRF 1 = cj00337.d      RRF 2 = cj00325.d      RRF 5 = cj00326.d      RRF 10 = cj00327.d      RRF 25 = cj00328.d  
 RRF 70 = cj00329.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.673	0.446	0.437	0.473	0.424	****	0.491	21	AVG
1,2,4-Trichlorobenzene	0.537	0.549	0.493	0.588	0.400	0.426	0.499	15	AVG
Hexachlorobutadiene	0.472	0.593	0.526	0.673	0.463	****	0.546	16	AVG
Naphthalene	1.197	1.059	1.012	1.150	0.742	****	1.032	17	AVG

Average % RSD: 14

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
 # Average RRF for all compounds must be greater than 0.010.



Lancaster Laboratories  
Environmental

FORM 03  
VOLATILE ORGANICS IN AIR  
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 09464      LCS File ID: cj00340.d      LCSD File ID: cj00341.d  
Batch: C1528830AA      LCS Injected: 10/16/2015      LCSD Injected: 10/16/2015  
Method: EPA TO-15      LCS Client ID: LCSC06      LCSD Client ID: LCSDC06  
Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb (v))	LCSD CONC. (ppb (v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Propene	10.20	8.38	10.46	82	103	41-129	22	25	YES
Dichlorodifluoromethane	10.10	8.71	9.74	86	96	61-149	11	25	YES
Chlorodifluoromethane	10.70	8.60	9.76	80	91	70-130	13	25	YES
Freon 114	10.30	7.42	8.69	72	84	63-123	16	25	YES
Chloromethane	10.30	9.19	11.13	89	108	54-118	19	25	YES
Vinyl Chloride	10.10	8.26	10.06	82	100	70-130	20	25	YES
1,3-Butadiene	10.20	8.55	10.04	84	98	57-138	16	25	YES
Bromomethane	9.80	8.06	9.61	82	98	70-130	17	25	YES
Chloroethane	9.70	7.74	9.27	80	96	63-119	18	25	YES
Bromoethene	10.60	8.89	10.34	84	98	70-130	15	25	YES
Dichlorofluoromethane	10.50	8.32	9.60	79	91	70-130	14	25	YES
Trichlorofluoromethane	10.10	8.80	9.81	87	97	70-130	11	25	YES
Pentane	10.50	8.95	10.32	85	98	70-130	14	25	YES
Ethanol	5.80	3.73	4.27	64	74	10-175	14	25	YES
Acrolein	7.50	4.40	5.03	59	67	43-141	13	25	YES
1,1-Dichloroethene	10.00	8.40	9.72	84	97	61-128	15	25	YES
Freon 113	9.70	7.64	8.77	79	90	63-114	14	25	YES
Acetone	10.70	7.44	8.65	70	81	61-134	15	25	YES
Methyl Iodide	10.50	7.38	8.25	70	79	70-130	11	25	YES
Carbon Disulfide	10.00	7.80	8.89	78	89	55-121	13	25	YES
Isopropanol	9.60	6.68	8.05	70	84	55-152	19	25	YES
Acetonitrile	9.90	5.21	6.08	53*	61*	70-130	15	25	NO
3-Chloropropene	11.00	8.29	9.27	75	84	70-130	11	25	YES
Methylene Chloride	11.00	8.29	9.34	75	85	70-130	12	25	YES
tert-Butyl Alcohol	11.00	8.64	9.98	79	91	70-130	14	25	YES
Acrylonitrile	10.50	6.70	7.78	64*	74	70-130	15	25	NO
trans-1,2-Dichloroethene	10.00	8.19	9.31	82	93	66-121	13	25	YES
Methyl t-Butyl Ether	10.20	7.76	9.17	76	90	52-129	17	25	YES
Hexane	10.20	8.41	9.45	82	93	63-117	12	25	YES
1,1-Dichloroethane	10.10	7.87	8.65	78	86	67-124	9	25	YES
Vinyl Acetate	7.60	4.92	6.43	65	85	45-162	26*	25	NO
Di-Isopropyl Ether	10.40	8.22	9.71	79	93	70-130	17	25	YES
Ethyl Tert-Butyl Ether	10.10	8.25	9.61	82	95	70-130	15	25	YES
cis-1,2-Dichloroethene	10.50	8.36	9.37	80	89	65-121	11	25	YES
2-Butanone	10.40	8.12	9.57	78	92	60-135	16	25	YES
Ethyl Acetate	11.00	10.53	12.66	96	115	51-131	18	25	YES

COMMENTS:

① ME Sub 10/21/15  
② Advisory for 10/21/15

SDG No.:

Instrument ID: 09464      LCS File ID: cj00340.d      LCSD File ID: cj00341.d  
 Batch: C1528830AA      LCS Injected: 10/16/2015      LCSD Injected: 10/16/2015  
 Method: EPA TO-15      LCS Client ID: LCSC06      LCSD Client ID: LCSDC06  
 Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Methyl Acrylate	10.40	7.60	8.82	73	85	70-130	15	25	YES
Tetrahydrofuran	10.00	7.83	9.08	78	91	53-134	15	25	YES
Chloroform	10.10	7.88	8.69	78	86	70-130	10	25	YES
1,1,1-Trichloroethane	10.30	8.45	9.09	82	88	70-130	7	25	YES
Cyclohexane	10.30	9.01	10.02	88	97	63-123	11	25	YES
Carbon Tetrachloride	10.40	9.16	9.64	88	93	70-130	5	25	YES
Benzene	10.60	7.83	9.41	74	89	70-130	18	25	YES
1,2-Dichloroethane	10.40	7.85	9.27	75	89	70-130	17	25	YES
Isooctane	10.50	8.69	10.08	83	96	70-130	15	25	YES
Tert-Amyl Methyl Ether	10.70	8.63	10.65	81	100	70-130	21	25	YES
Heptane	10.50	8.48	10.20	81	97	56-123	18	25	YES
Trichloroethene	10.30	7.82	9.09	76	88	70-130	15	25	YES
Ethyl Acrylate	10.80	8.60	10.25	80	95	70-130	17	25	YES
1,2-Dichloropropane	10.30	7.60	9.28	74	90	70-130	20	25	YES
Dibromomethane	10.50	7.58	8.78	72	84	70-130	15	25	YES
1,4-Dioxane	10.30	8.09	10.31	79	100	43-149	24	25	YES
Methyl Methacrylate	10.10	7.91	9.40	78	93	59-146	17	25	YES
Bromodichloromethane	10.30	8.03	9.41	78	91	62-129	16	25	YES
cis-1,3-Dichloropropene	9.50	6.47	8.00	68	84	64-136	21	25	YES
4-Methyl-2-Pentanone	10.20	8.34	10.02	82	98	53-140	18	25	YES
Toluene	10.60	8.13	10.07	77	95	70-130	21	25	YES
Octane	10.30	8.82	10.64	86	103	70-130	19	25	YES
trans-1,3-Dichloropropene	10.10	6.98	8.84	69	88	61-126	24	25	YES
Ethyl Methacrylate	10.10	8.40	10.85	83	107	70-130	25*	25	NO
1,1,2-Trichloroethane	10.60	7.99	9.84	75	93	59-131	21	25	YES
Tetrachloroethene	10.70	7.32	8.81	68*	82	70-130	19	25	NO
2-Hexanone	10.90	8.76	11.01	80	101	47-150	23	25	YES
Dibromochloromethane	9.80	7.84	9.39	80	96	65-127	18	25	YES
1,2-Dibromoethane	10.00	7.18	8.95	72	89	65-126	22	25	YES
Chlorobenzene	10.60	7.84	9.84	74	93	70-130	23	25	YES
1,1,1,2-Tetrachloroethane	10.60	7.87	9.50	74	90	70-130	19	25	YES
Ethylbenzene	10.60	8.28	9.92	78	94	70-130	18	25	YES
m/p-Xylene	9.80	7.38	9.11	75	93	70-130	21	25	YES
o-Xylene	10.70	8.00	9.84	75	92	70-130	21	25	YES
Xylene (total)	20.50	15.38	18.95	75	92	70-130	21	25	YES
Styrene	10.40	7.82	9.70	75	93	64-130	21	25	YES

COMMENTS:

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SDG No.:

Instrument ID: 09464      LCS File ID: cj00340.d      LCSD File ID: cj00341.d  
 Batch: C1528830AA      LCS Injected: 10/16/2015      LCSD Injected: 10/16/2015  
 Method: EPA TO-15      LCS Client ID: LCSC06      LCSD Client ID: LCSDC06  
 Dilution Factor: 1

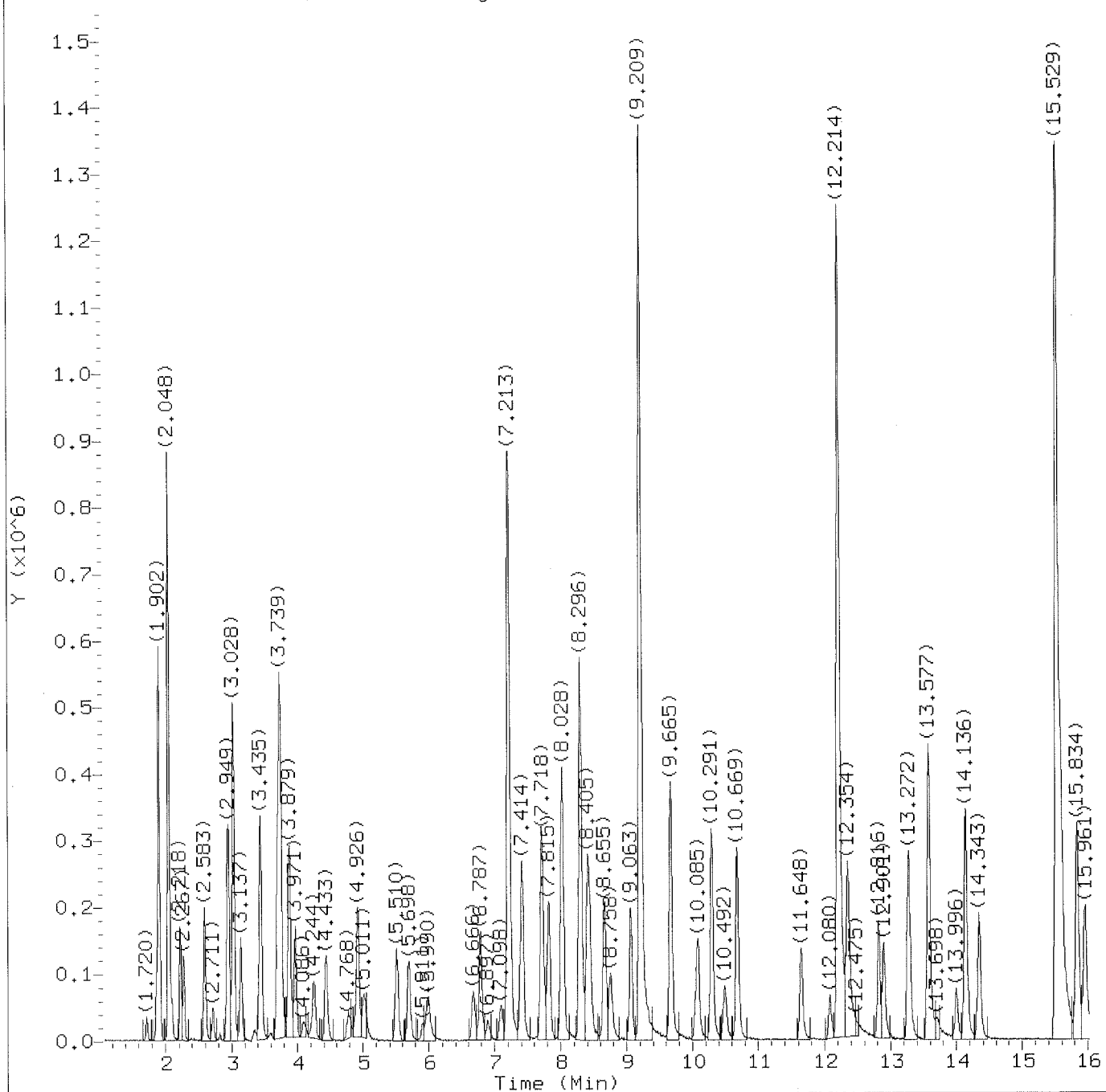
COMPOUND	SPIKE LEVEL	LCS CONC. (ppb (v))	LCSD CONC. (ppb (v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Bromoform	10.00	7.51	9.15	75	91	64-141	20	25	YES
Cumene	10.40	7.98	9.93	77	96	70-130	22	25	YES
Bromobenzene	10.60	7.71	9.38	73	88	70-130	20	25	YES
1,1,2,2-Tetrachloroethane	10.70	7.81	9.66	73	90	58-133	21	25	YES
1,2,3-Trichloropropane	10.20	7.59	9.15	74	90	70-130	19	25	YES
n-Propylbenzene	10.00	7.65	9.30	76	93	70-130	20	25	YES
2-Chlorotoluene	10.30	7.84	9.62	76	93	70-130	20	25	YES
4-Ethyltoluene	10.10	8.05	9.78	80	97	59-126	19	25	YES
1,3,5-Trimethylbenzene	10.30	7.88	9.77	77	95	61-132	21	25	YES
Alpha Methyl Styrene	9.90	7.48	8.73	76	88	70-130	15	25	YES
tert-Butylbenzene	10.20	7.39	8.74	72	86	70-130	17	25	YES
1,2,4-Trimethylbenzene	10.20	7.99	9.55	78	94	60-128	18	25	YES
sec-Butylbenzene	10.10	7.36	8.89	73	88	70-130	19	25	YES
1,3-Dichlorobenzene	10.50	7.71	9.28	73	88	63-125	19	25	YES
1,4-Dichlorobenzene	10.20	7.35	8.81	72	86	63-127	18	25	YES
p-Isopropyltoluene	10.10	7.70	9.34	76	92	70-130	19	25	YES
Benzyl Chloride	8.50	5.94	7.43	70	87	50-160	22	25	YES
1,2-Dichlorobenzene	10.10	7.14	8.95	71	89	62-132	23	25	YES
n-Butylbenzene	10.20	7.16	8.70	70	85	70-130	19	25	YES
Hexachloroethane	10.90	7.79	9.27	71	85	70-130	17	25	YES
1,2-Dibromo-3-chloropropane	9.60	5.45	7.02	57 *	73	70-130	25 *	25	NO
1,2,4-Trichlorobenzene	9.60	4.11	6.91	43	72	37-119	51 *	25	NO
Hexachlorobutadiene	9.90	4.45	7.26	45	73	43-120	48 *	25	NO
Naphthalene	10.40	4.27	7.02	41	68	35-153	49 *	25	NO

COMMENTS:

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Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d  
Injection date and time: 16-OCT-2015 01:09

Instrument ID: HP09464.i  
Analyst ID: jeb07445

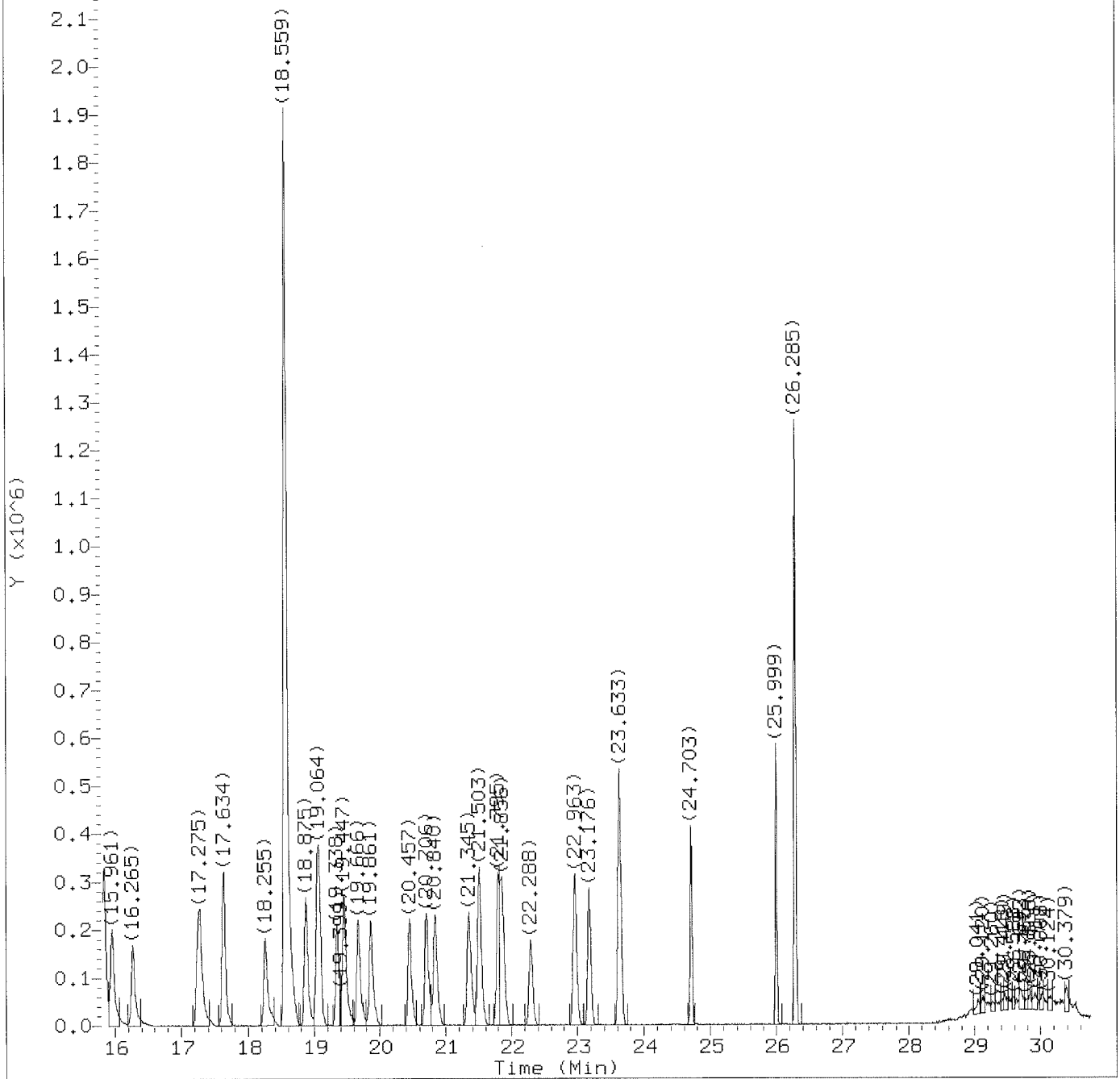
Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD002

Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d

Injection date and time: 16-OCT-2015 01:09

Instrument ID: HP09464.i

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m

Calibration date and time: 16-OCT-2015 17:40

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD002

Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d  
 Injection date and time: 16-OCT-2015 01:09

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	38690	2.398
2) Dichlorodifluoromethane	(1)	1.902	85	505249	2.529
3) Chlorodifluoromethane	(1)	1.914	51	172458	2.701
4) Freon 114	(1)	2.048	85	439879	2.447
5) Chloromethane	(1)	2.097	52	24292	2.562
6) Vinyl Chloride	(1)	2.218	62	106378	2.514
7) 1,3-Butadiene	(1)	2.267	54	67133	2.577
8) Bromomethane	(1)	2.590	94	153671	2.493
9) Chloroethane	(1)	2.717	64	55725	2.330
10) Bromoethene	(1)	2.936	106	149278	2.549
11) Dichlorofluoromethane	(1)	2.955	67	307496	2.755
12) Trichlorofluoromethane	(1)	3.028	101	585789	2.720
13) Pentane	(1)	3.143	43	95173	2.600
14) Ethanol	(1)	3.344	45	19413	2.250
15) Freon123a	(1)	3.435	67	226131	2.876
16) Acrolein	(1)	3.587	56	15839	1.965
17) 1,1-Dichloroethene	(1)	3.697	61	196185	2.795
18) Freon 113	(1)	3.733	103	236403	2.768
19) Acetone	(1)	3.825	43	57772	2.069
20) Methyl Iodide	(1)	3.885	142	480062	2.607
21) Carbon Disulfide	(1)	3.971	76	348636	2.416
22) Isopropanol	(1)	4.092	45	71398	2.163
23) Acetonitrile	(1)	4.208	40	8949M	1.409
24) 3-Chloropropene	(1)	4.250	76	51968	2.612
25) Methylene Chloride	(1)	4.433	84	128251	2.945
26) tert-Butyl Alcohol	(1)	4.786	59	112635	2.270
27) Acrylonitrile	(1)	4.883	53	33018	2.201
28) trans-1,2-Dichloroethene	(1)	4.926	61	157209	2.644
29) Methyl t-Butyl Ether	(1)	5.023	73	163144	2.123
30) Hexane	(1)	5.510	57	110055	2.528
31) 1,1-Dichloroethane	(1)	5.704	63	201859	2.751
32) Vinyl Acetate	(1)	5.905	86	11414	1.494
33) Di-Isopropyl Ether	(1)	5.996	45	91307	2.084
36) 1,2-Dichloroethene (total)	(1)		61	301108	5.274
34) Ethyl Tert-Butyl Ether	(1)	6.666	59	110447	1.808
35) cis-1,2-Dichloroethene	(1)	6.781	61	143899	2.630
37) 2-Butanone	(1)	6.897	72	25161	1.855
38) Ethyl Acetate	(1)	7.085	70	9800	1.590

M = Compound was manually integrated.

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d  
 Injection date and time: 16-OCT-2015 01:09

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.110	55	60621	1.764
40) *Bromochloromethane	(1)	7.213	130	678891	10.000
41) Tetrahydrofuran	(1)	7.383	42	27844	1.889
42) Chloroform	(1)	7.408	83	363473	2.825
43) 1,1,1-Trichloroethane	(1)	7.718	97	410868	2.810
44) Cyclohexane	(1)	7.821	56	121920	2.558
45) Carbon Tetrachloride	(1)	8.022	117	488738	2.957
46) Benzene	(2)	8.405	78	353029	2.783
47) 1,2-Dichloroethane	(2)	8.442	62	205820	2.798
48) Isooctane	(2)	8.661	57	314232	2.633
49) Tert-Amyl Methyl Ether	(2)	8.764	73	142725	2.058
50) Heptane	(2)	9.056	43	83172	2.529
51) *1,4-Difluorobenzene	(2)	9.209	114	2072547	10.000
52) Trichloroethene	(2)	9.659	130	238618	2.748
53) Ethyl Acrylate	(2)	10.036	55	72618	2.039
54) 1,2-Dichloropropane	(2)	10.085	63	87935	2.500
55) Dibromomethane	(2)	10.291	174	226200	2.615
56) 1,4-Dioxane	(2)	10.492	88	48731	1.882
57) Methyl Methacrylate	(2)	10.492	69	53399	1.985
58) Bromodichloromethane	(2)	10.675	83	350932	2.712
59) cis-1,3-Dichloropropene	(2)	11.648	75	164967	2.397
60) 4-Methyl-2-Pentanone	(2)	12.080	43	63098	1.911
61) Toluene	(3)	12.354	91	331965	2.261
64) 1,3-Dichloropropene (total)	(3)		75	331597	4.555
62) Octane	(3)	12.816	43	79136	2.045
63) trans-1,3-Dichloropropene	(3)	12.895	75	166630	2.158
65) Ethyl Methacrylate	(3)	13.278	69	77108	1.873
66) 1,1,2-Trichloroethane	(3)	13.278	97	147255	2.352
67) Tetrachloroethene	(3)	13.577	166	278035	2.224
68) 2-Hexanone	(3)	13.996	43	65128	1.917
69) Dibromochloromethane	(3)	14.136	127	315059	2.611
70) 1,2-Dibromoethane	(3)	14.343	107	241211	2.252
71) *Chlorobenzene-d5	(3)	15.529	117	1880680	10.000
72) Chlorobenzene	(3)	15.590	112	340112	2.329
73) 1,1,1,2-Tetrachloroethane	(3)	15.846	131	221503	2.434
74) Ethylbenzene	(3)	15.955	91	316457	1.951
75) m/p-Xylene	(3)	16.272	91	236263	1.761
77) Xylene (total)	(3)		91	508882	3.691

\* = Compound is an internal standard.

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Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d  
 Injection date and time: 16-OCT-2015 01:09

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD002

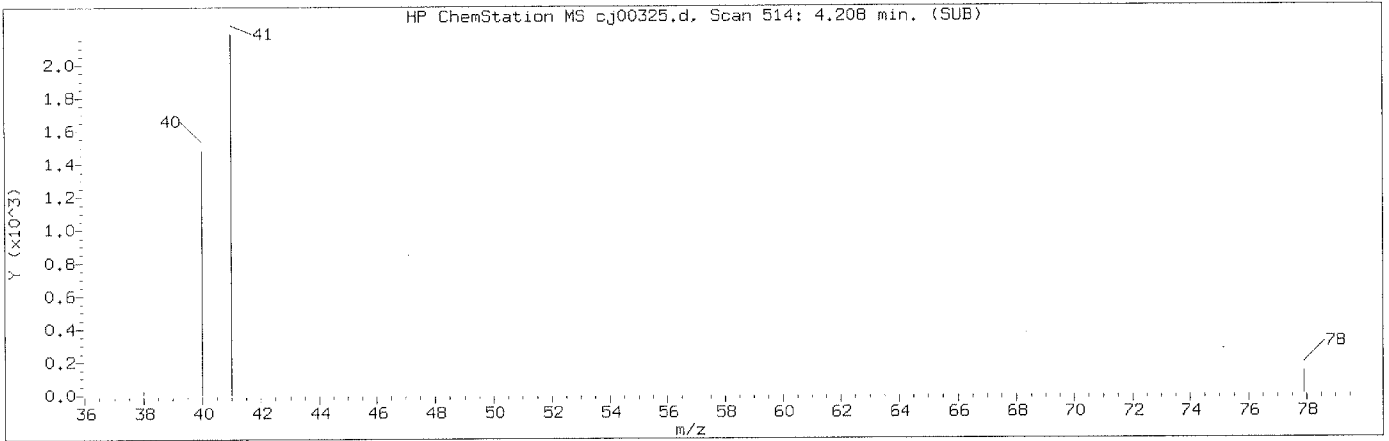
Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.245	91	272619	1.931
78) Styrene	(3)	17.281	104	241026	1.904
79) Bromoform	(3)	17.634	173	334259	2.144
80) Cumene	(3)	18.255	105	332753	1.835
81) Bromobenzene	(3)	18.869	156	220779	2.167
82) 1,1,2,2-Tetrachloroethane	(3)	19.046	83	262714	2.203
83) 1,2,3-Trichloropropane	(3)	19.076	110	97932	2.146
84) n-Propylbenzene	(3)	19.338	120	112296	1.863
85) 2-Chlorotoluene	(3)	19.447	126	140480	2.098
86) 4-Ethyltoluene	(3)	19.678	105	384102	1.899
87) 1,3,5-Trimethylbenzene	(3)	19.861	105	332226	1.908
88) Alpha Methyl Styrene	(3)	20.451	118	181751	1.839
89) tert-Butylbenzene	(3)	20.706	119	312002	1.813
90) 1,2,4-Trimethylbenzene	(3)	20.840	105	345467	1.911
91) sec-Butylbenzene	(3)	21.345	105	440336	1.843
92) 1,3-Dichlorobenzene	(3)	21.503	146	389331	2.171
93) 1,4-Dichlorobenzene	(3)	21.802	146	377046	2.002
94) p-Isopropyltoluene	(3)	21.856	119	415653	1.909
95) Benzyl Chloride	(3)	22.288	91	329092	2.022
96) 1,2-Dichlorobenzene	(3)	22.957	146	340610	2.006
97) n-Butylbenzene	(3)	23.176	91	338637	1.909
98) Hexachloroethane	(3)	23.633	117	215080	2.392
99) 1,2-Dibromo-3-chloropropane	(3)	24.709	157	175982	1.907
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	202430	2.158
101) Hexachlorobutadiene	(3)	26.285	225	223168	2.175
102) Naphthalene	(3)	26.297	128	430091	2.216

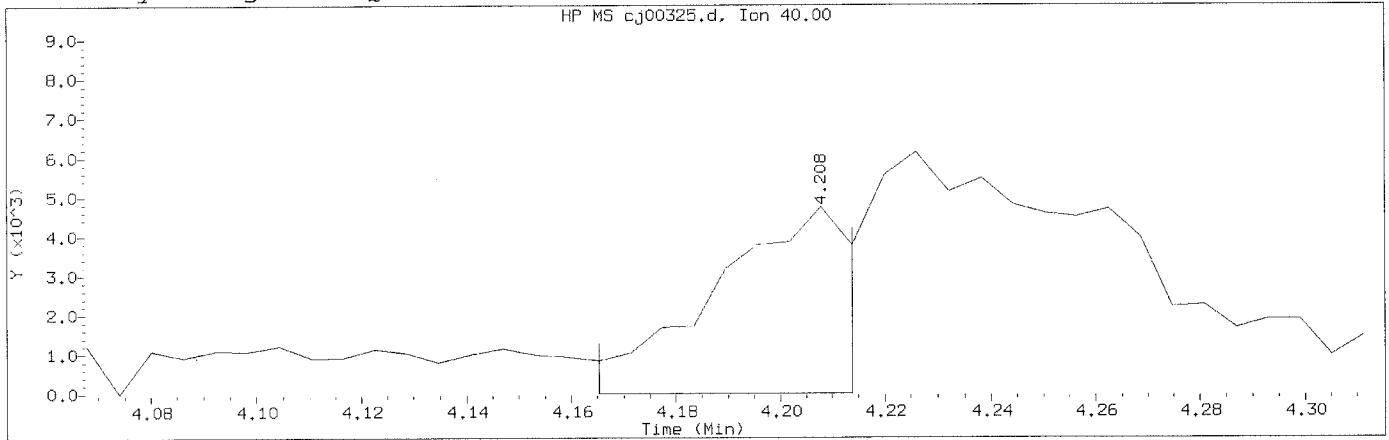
page 3 of 3

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 Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00325.d  
Injection date and time: 16-OCT-2015 01:09

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD002

Lab Sample ID: VSTD002

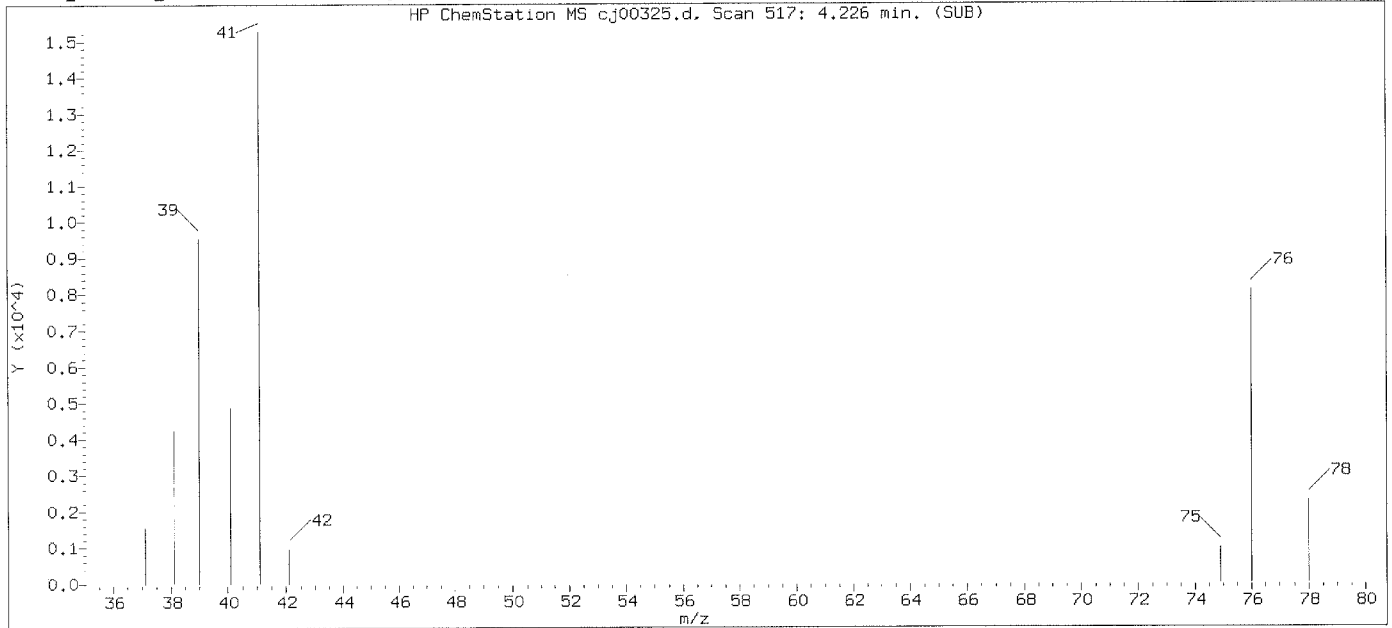
Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 514  
Retention Time (minutes): 4.208  
Quant Ion : 40.00  
Area (flag) : 8949M  
Concentration (ppb(v)) : 1.4085  
Integration start scan : 506      Integration stop scan: 514  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

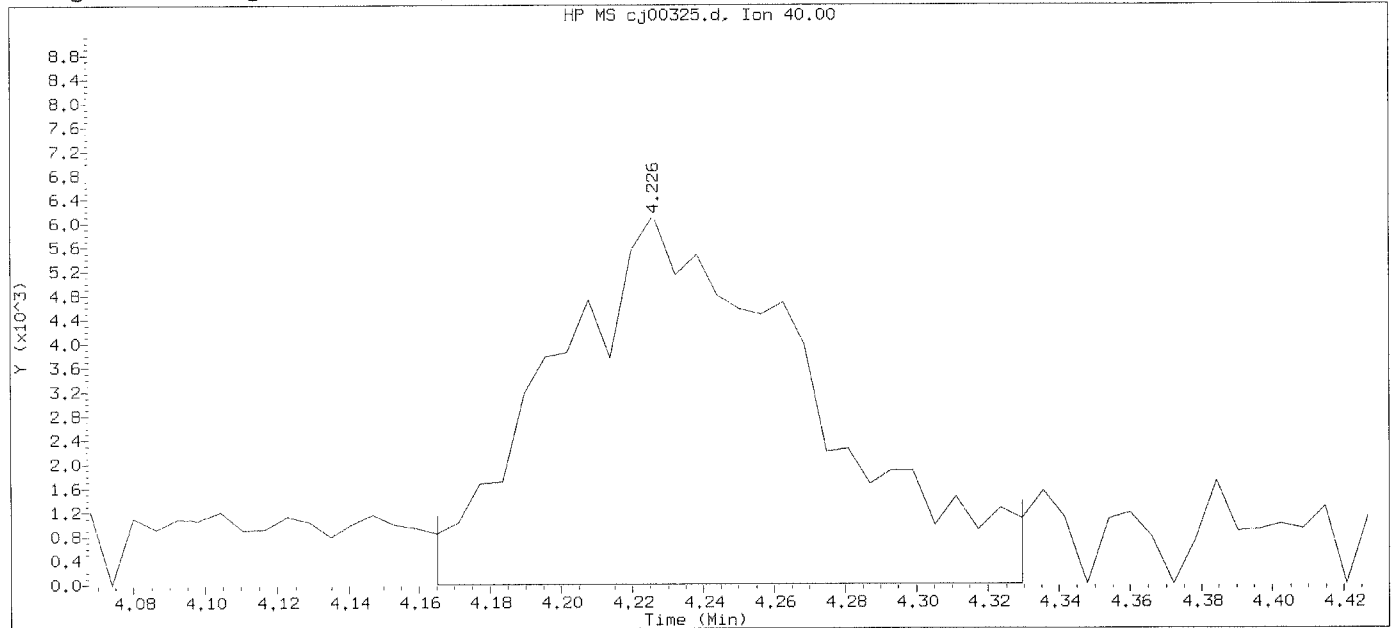
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp/1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00325.d

Instrument ID: HP09464.i

Injection date and time: 16-OCT-2015 01:09

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m

Sublist used: all

Calibration date and time: 15-OCT-2015 19:21

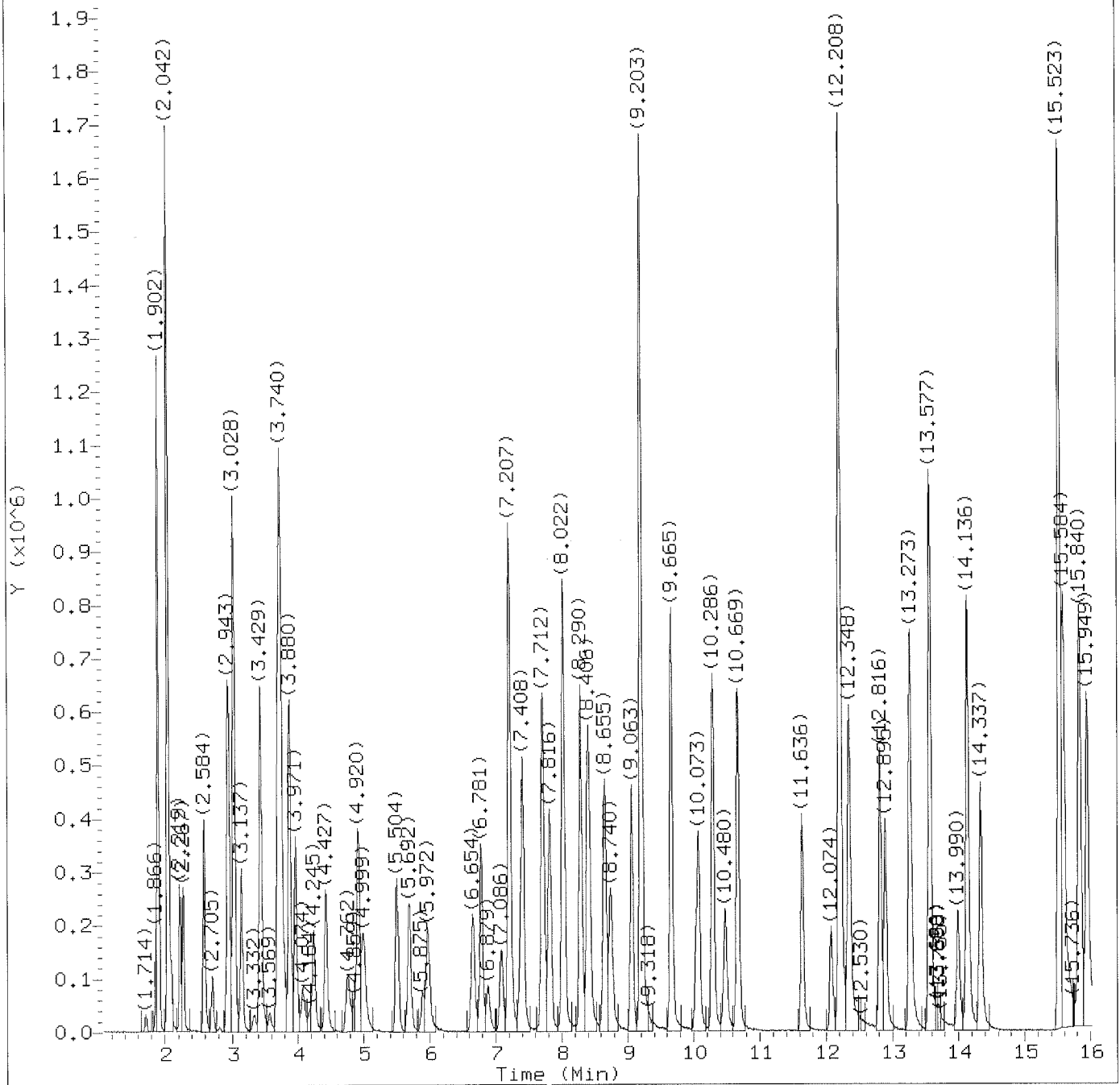
Date, time and analyst ID of latest file update: 16-Oct-2015 01:49 Automation

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 517  
Retention Time (minutes): 4.226  
Quant Ion : 40.00  
Area : 30607  
Concentration (ppb(v)) : 3.0300  
Integration start scan : 506 Integration stop scan: 533  
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d  
Injection date and time: 16-OCT-2015 01:51

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

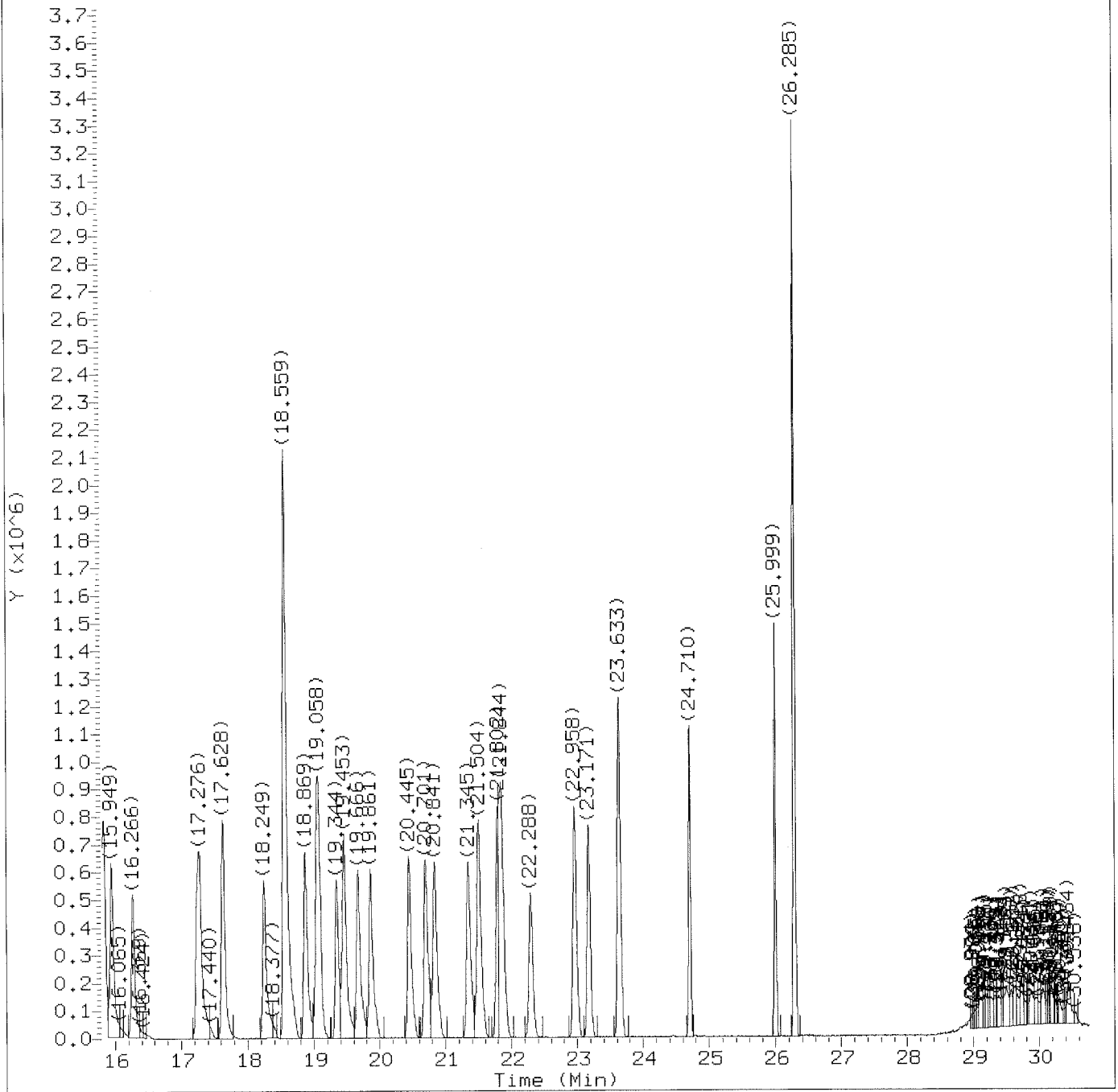
Sublist used: all

Sample Name: VSTD005

Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d

Injection date and time: 16-OCT-2015 01:51

Instrument ID: HP09464.i

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m

Calibration date and time: 16-OCT-2015 17:40

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD005

Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey

on 10/16/2015 at 17:41.

Target 3.5 esignature user ID: jeb07445

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Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d  
 Injection date and time: 16-OCT-2015 01:51

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	86160	5.107
2) Dichlorodifluoromethane	(1)	1.902	85	1043620	4.995
3) Chlorodifluoromethane	(1)	1.915	51	341106	5.108
4) Freon 114	(1)	2.042	85	889126	4.729
5) Chloromethane	(1)	2.091	52	48233	4.863
6) Vinyl Chloride	(1)	2.219	62	216592	4.894
7) 1,3-Butadiene	(1)	2.267	54	142001	5.212
8) Bromomethane	(1)	2.584	94	312811	4.853
9) Chloroethane	(1)	2.711	64	116708	4.666
10) Bromoethene	(1)	2.930	106	310780	5.075
11) Dichlorofluoromethane	(1)	2.949	67	609612	5.223
12) Trichlorofluoromethane	(1)	3.022	101	1179737	5.237
13) Pentane	(1)	3.137	43	198149	5.175
14) Ethanol	(1)	3.314	45	45513	5.045
15) Freon123a	(1)	3.429	67	441855	5.374
16) Acrolein	(1)	3.569	56	42066	4.989
17) 1,1-Dichloroethene	(1)	3.697	61	390038	5.313
18) Freon 113	(1)	3.740	103	466828	5.227
19) Acetone	(1)	3.807	43	146921	5.032
20) Methyl Iodide	(1)	3.880	142	997892	5.181
21) Carbon Disulfide	(1)	3.971	76	734290	4.866
22) Isopropanol	(1)	4.074	45	167564	4.854
23) Acetonitrile	(1)	4.178	40	28527M	4.293
24) 3-Chloropropene	(1)	4.238	76	114167	5.486
25) Methylene Chloride	(1)	4.427	84	254796	5.595
26) tert-Butyl Alcohol	(1)	4.768	59	274330	5.285
27) Acrylonitrile	(1)	4.859	53	74203	4.730
28) trans-1,2-Dichloroethene	(1)	4.926	61	301654	4.851
29) Methyl t-Butyl Ether	(1)	4.993	73	413252	5.141
30) Hexane	(1)	5.504	57	231975	5.095
31) 1,1-Dichloroethane	(1)	5.686	63	399964	5.211
32) Vinyl Acetate	(1)	5.893	86	42383	5.304
33) Di-Isopropyl Ether	(1)	5.966	45	238083	5.197
36) 1,2-Dichloroethene (total)	(1)		61	598740	10.043
34) Ethyl Tert-Butyl Ether	(1)	6.654	59	323184	5.059
35) cis-1,2-Dichloroethene	(1)	6.781	61	297086	5.192
37) 2-Butanone	(1)	6.879	72	71806	5.063
38) Ethyl Acetate	(1)	7.079	70	32033	4.969

M = Compound was manually integrated.

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 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d  
 Injection date and time: 16-OCT-2015 01:51

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.098	55	175146	4.873
40) *Bromochloromethane	(1)	7.207	130	710013	10.000
41) Tetrahydrofuran	(1)	7.365	42	80212	5.202
42) Chloroform	(1)	7.414	83	702277	5.219
43) 1,1,1-Trichloroethane	(1)	7.712	97	814910	5.330
44) Cyclohexane	(1)	7.816	56	260144	5.218
45) Carbon Tetrachloride	(1)	8.022	117	966822	5.593
46) Benzene	(2)	8.400	78	741151	5.010
47) 1,2-Dichloroethane	(2)	8.430	62	431040	5.024
48) Isooctane	(2)	8.655	57	735120	5.281
49) Tert-Amyl Methyl Ether	(2)	8.746	73	393242	4.862
50) Heptane	(2)	9.063	43	193820	5.053
51) *1,4-Difluorobenzene	(2)	9.203	114	2416994	10.000
52) Trichloroethene	(2)	9.665	130	479301	4.733
53) Ethyl Acrylate	(2)	10.030	55	205364	4.945
54) 1,2-Dichloropropane	(2)	10.073	63	204223	4.978
55) Dibromomethane	(2)	10.286	174	476863	4.728
56) 1,4-Dioxane	(2)	10.456	88	136187	4.509
57) Methyl Methacrylate	(2)	10.492	69	150636	4.801
58) Bromodichloromethane	(2)	10.669	83	743553	4.927
59) cis-1,3-Dichloropropene	(2)	11.636	75	421832	5.256
60) 4-Methyl-2-Pentanone	(2)	12.074	43	180958	4.699
61) Toluene	(3)	12.348	91	836866	5.033
64) 1,3-Dichloropropene (total)	(3)		75	848900	10.140
62) Octane	(3)	12.816	43	238001	5.432
63) trans-1,3-Dichloropropene	(3)	12.889	75	427068	4.885
65) Ethyl Methacrylate	(3)	13.260	69	235151	5.044
66) 1,1,2-Trichloroethane	(3)	13.273	97	357876	5.048
67) Tetrachloroethene	(3)	13.577	166	638759	4.512
68) 2-Hexanone	(3)	13.990	43	212864	5.534
69) Dibromochloromethane	(3)	14.136	127	692872	5.071
70) 1,2-Dibromoethane	(3)	14.337	107	593557	4.894
71) *Chlorobenzene-d5	(3)	15.523	117	2129391	10.000
72) Chlorobenzene	(3)	15.590	112	853148	5.160
73) 1,1,1,2-Tetrachloroethane	(3)	15.834	131	532695	5.170
74) Ethylbenzene	(3)	15.949	91	936142	5.096
75) m/p-Xylene	(3)	16.266	91	690266	4.544
77) Xylene (total)	(3)		91	1457676	9.343

\* = Compound is an internal standard.

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d  
 Injection date and time: 16-OCT-2015 01:51

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD005

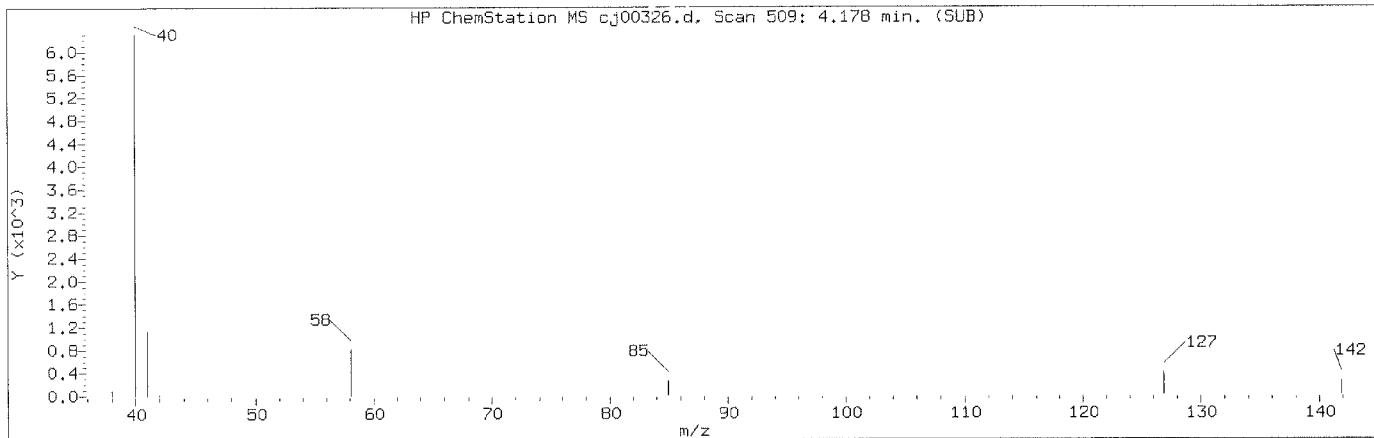
Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.239	91	767410	4.800
78) Styrene	(3)	17.282	104	669466	4.671
79) Bromoform	(3)	17.628	173	847361	4.800
80) Cumene	(3)	18.249	105	991314	4.827
81) Bromobenzene	(3)	18.869	156	565124	4.900
82) 1,1,2,2-Tetrachloroethane	(3)	19.046	83	692213	5.126
83) 1,2,3-Trichloropropane	(3)	19.076	110	259706	5.026
84) n-Propylbenzene	(3)	19.338	120	315035	4.615
85) 2-Chlorotoluene	(3)	19.460	126	378093	4.987
86) 4-Ethyltoluene	(3)	19.666	105	1132641	4.946
87) 1,3,5-Trimethylbenzene	(3)	19.861	105	926274	4.698
88) Alpha Methyl Styrene	(3)	20.451	118	562454	5.027
89) tert-Butylbenzene	(3)	20.701	119	926700	4.757
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	1021283	4.989
91) sec-Butylbenzene	(3)	21.345	105	1271329	4.700
92) 1,3-Dichlorobenzene	(3)	21.504	146	1031398	5.081
93) 1,4-Dichlorobenzene	(3)	21.796	146	1037837	4.866
94) p-Isopropyltoluene	(3)	21.856	119	1191899	4.835
95) Benzyl Chloride	(3)	22.294	91	1014471	5.505
96) 1,2-Dichlorobenzene	(3)	22.958	146	942207	4.901
97) n-Butylbenzene	(3)	23.171	91	959848	4.779
98) Hexachloroethane	(3)	23.633	117	526107	5.167
99) 1,2-Dibromo-3-chloropropane	(3)	24.710	157	488890	4.680
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	514515	4.844
101) Hexachlorobutadiene	(3)	26.279	225	560207	4.822
102) Naphthalene	(3)	26.291	128	1163777	5.296

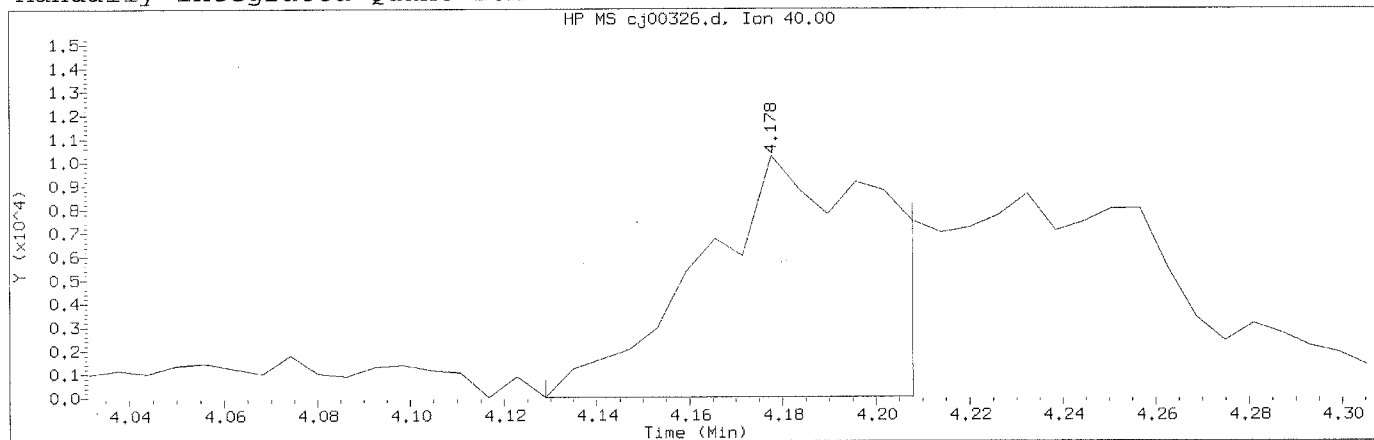
Digitally signed by Jacob E. Bailey  
 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00326.d      Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 01:51      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m      Sublist used: all  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD005      Lab Sample ID: VSTD005

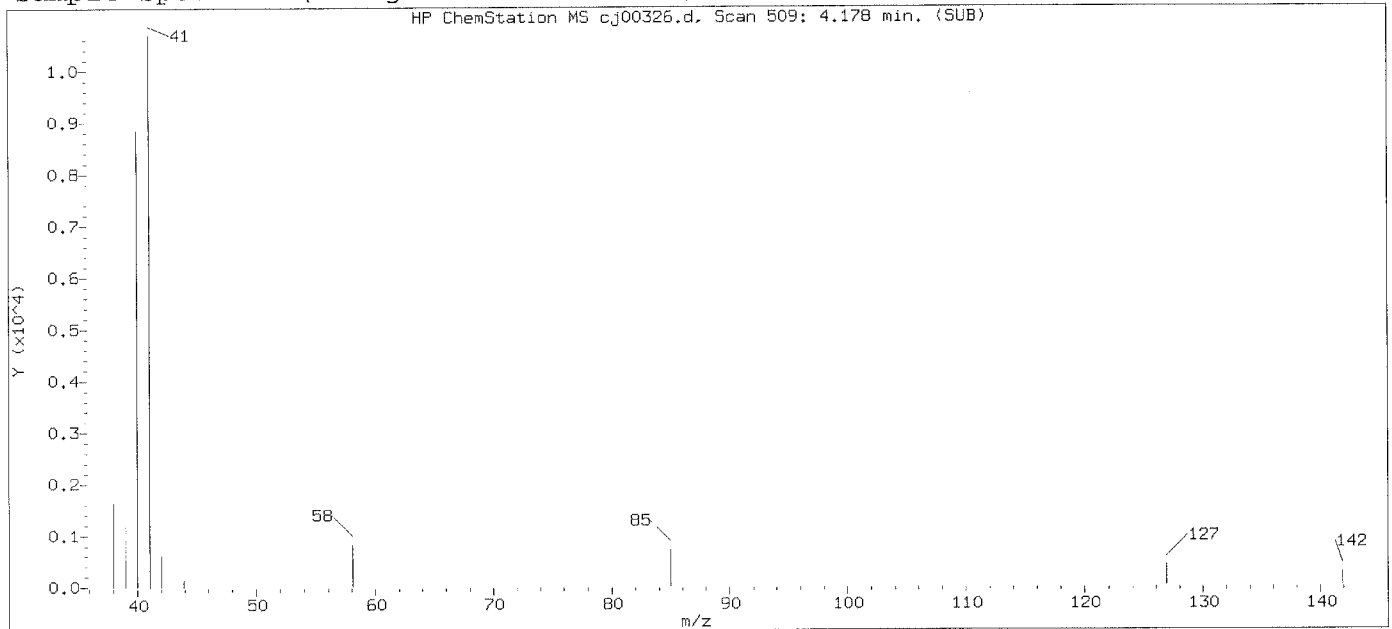
Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 509  
Retention Time (minutes): 4.178  
Quant Ion : 40.00  
Area (flag) : 28527M  
Concentration (ppb(v)) : 4.2931  
Integration start scan : 500      Integration stop scan: 513  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

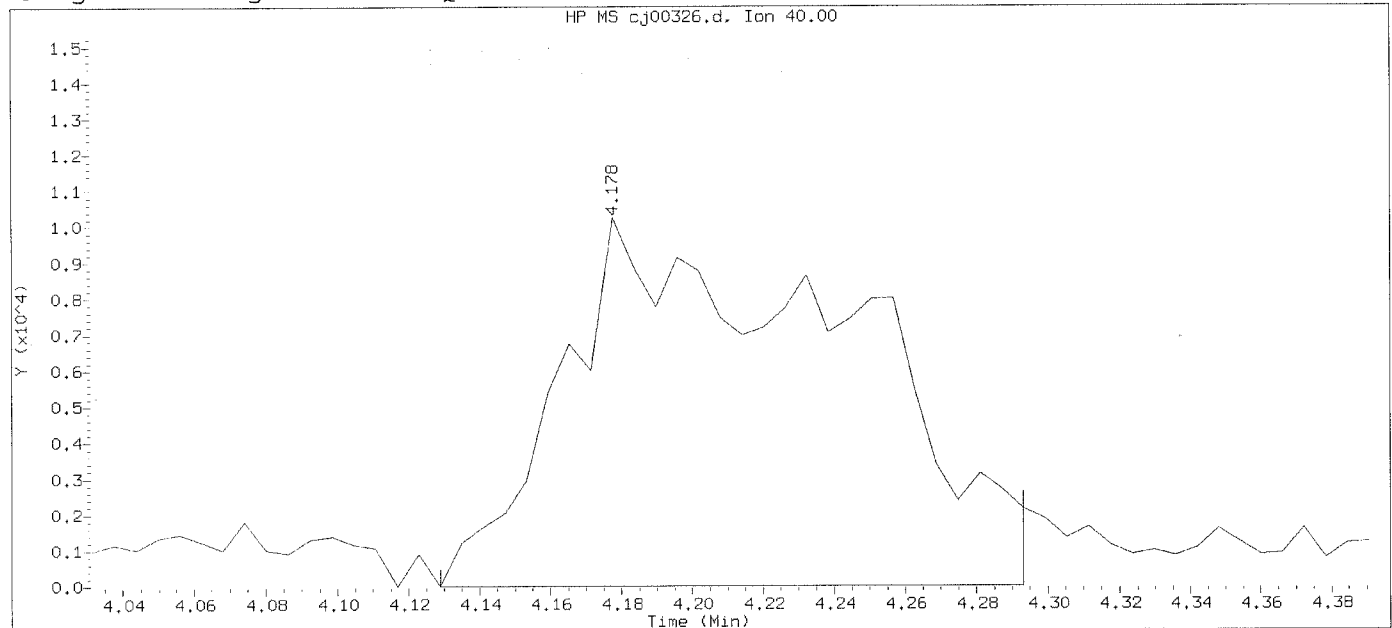
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mqp/258 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



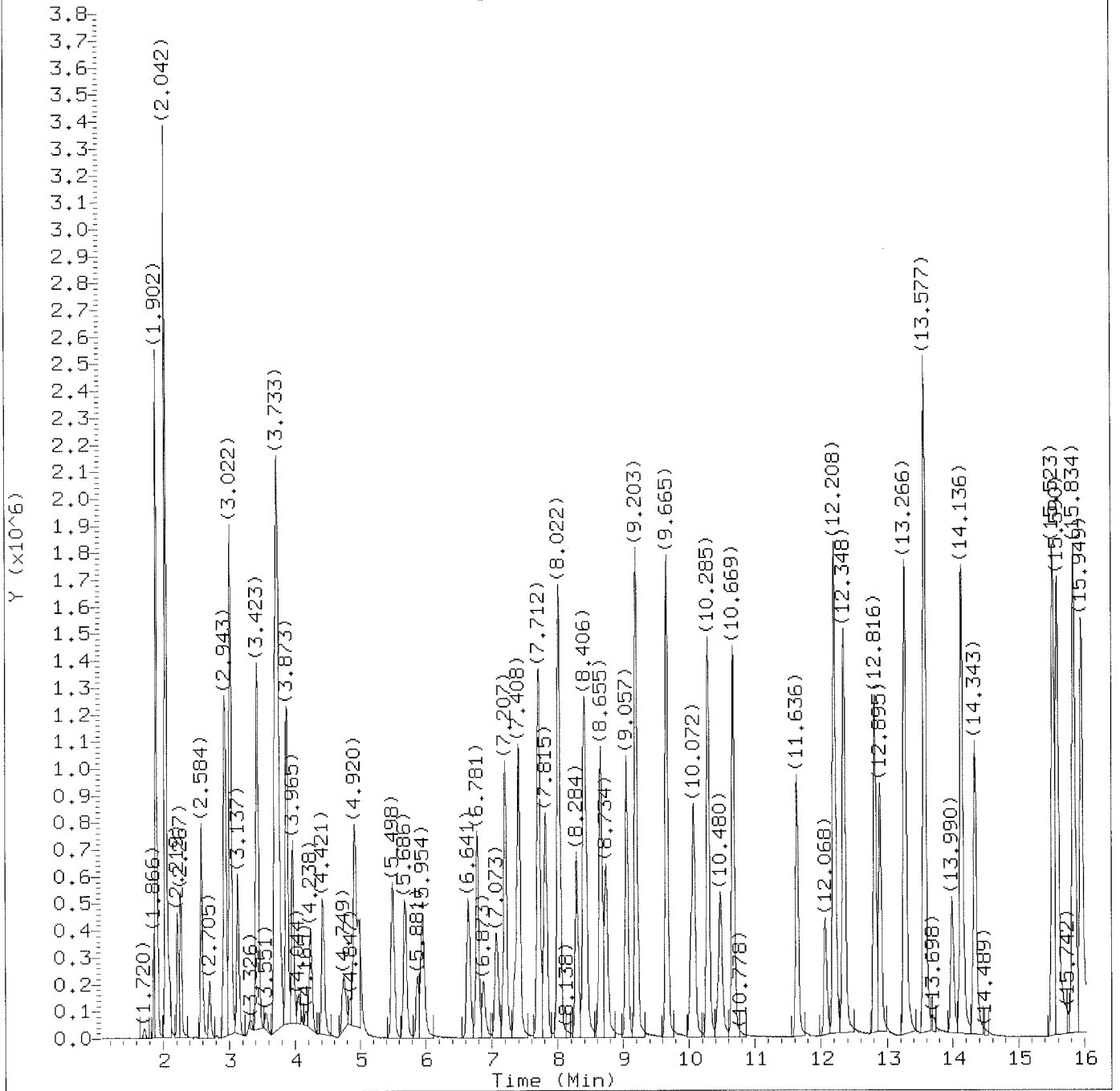
Data File: /chem/HP09464.i/15oct15.b/cj00326.d      Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 01:51      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m      Sublist used: all  
Calibration date and time: 15-OCT-2015 19:21  
Date, time and analyst ID of latest file update: 16-Oct-2015 02:31 Automation

Sample Name: VSTD005      Lab Sample ID: VSTD005

Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 509  
Retention Time (minutes): 4.178  
Quant Ion : 40.00  
Area : 57423  
Concentration (ppb(v)) : 5.4355  
Integration start scan : 500      Integration stop scan: 527  
Y at integration start : 0      Y at integration end: 0

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d  
Injection date and time: 16-OCT-2015 02:34

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

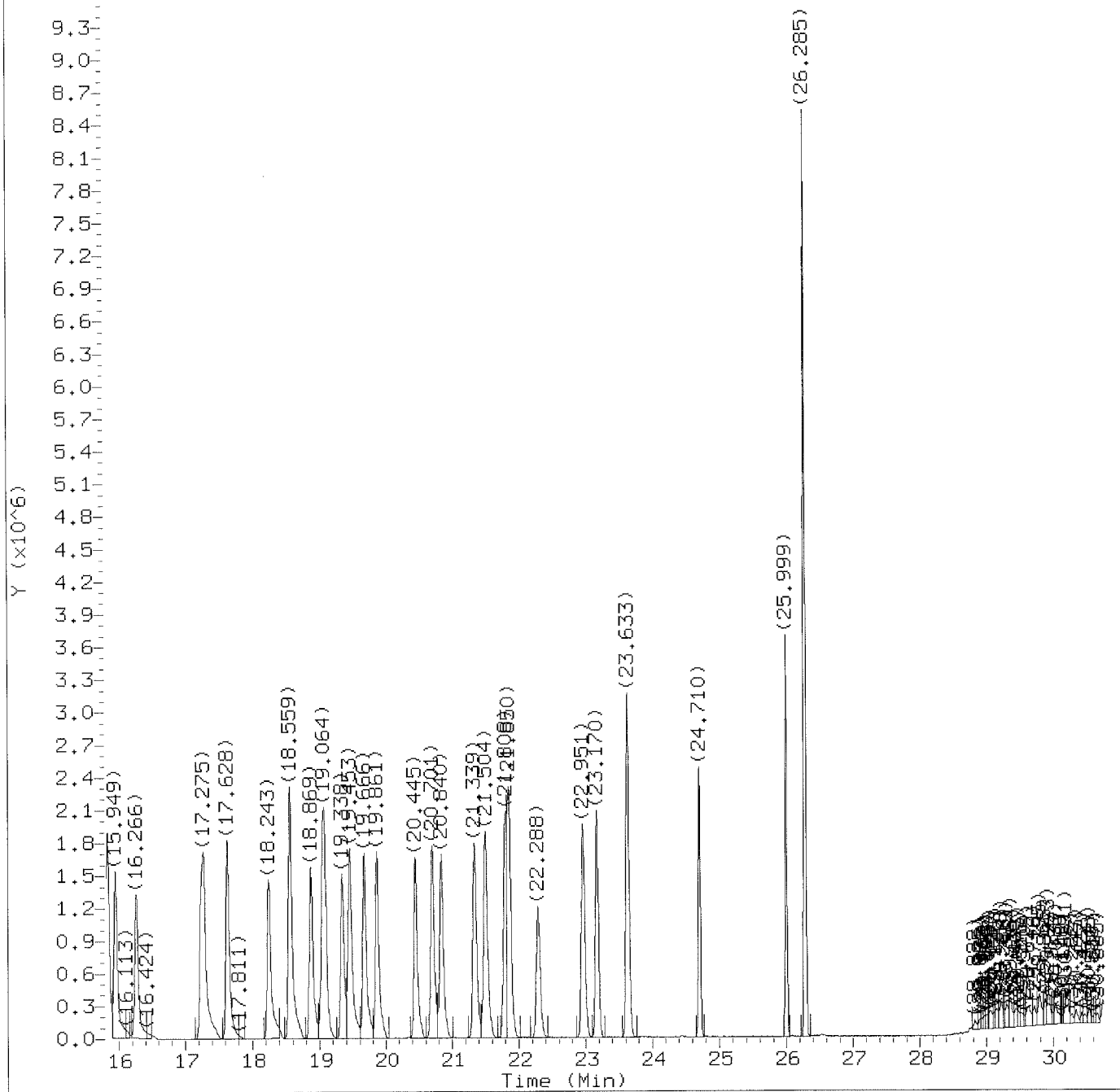
Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d  
Injection date and time: 16-OCT-2015 02:34

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d  
 Injection date and time: 16-OCT-2015 02:34

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	184361	10.233
2) Dichlorodifluoromethane	(1)	1.902	85	2072764	9.289
3) Chlorodifluoromethane	(1)	1.908	51	658847	9.239
4) Freon 114	(1)	2.042	85	1721206	8.572
5) Chloromethane	(1)	2.091	52	101633	9.596
6) Vinyl Chloride	(1)	2.219	62	438992	9.288
7) 1,3-Butadiene	(1)	2.267	54	284259	9.770
8) Bromomethane	(1)	2.584	94	623277	9.055
9) Chloroethane	(1)	2.705	64	226158	8.466
10) Bromoethene	(1)	2.930	106	640204	9.789
11) Dichlorofluoromethane	(1)	2.949	67	1180714	9.473
12) Trichlorofluoromethane	(1)	3.022	101	2248347	9.347
13) Pentane	(1)	3.137	43	401573	9.822
14) Ethanol	(1)	3.301	45	99313	10.308
15) Freon123a	(1)	3.429	67	908974	10.352
16) Acrolein	(1)	3.557	56	107269	11.913
17) 1,1-Dichloroethene	(1)	3.685	61	787873M	10.050
18) Freon 113	(1)	3.733	103	924755	9.696
19) Acetone	(1)	3.788	43	331660	10.636
20) Methyl Iodide	(1)	3.873	142	1981725	9.635
21) Carbon Disulfide	(1)	3.965	76	1446365	8.976
22) Isopropanol	(1)	4.068	45	363086	9.849
23) Acetonitrile	(1)	4.178	40	71716M	10.106
24) 3-Chloropropene	(1)	4.238	76	227971	10.259
25) Methylene Chloride	(1)	4.427	84	491128	10.099
26) tert-Butyl Alcohol	(1)	4.749	59	608854	10.985
27) Acrylonitrile	(1)	4.847	53	188688	11.262
28) trans-1,2-Dichloroethene	(1)	4.920	61	613646	9.241
29) Methyl t-Butyl Ether	(1)	4.987	73	929220	10.824
30) Hexane	(1)	5.504	57	494039	10.160
31) 1,1-Dichloroethane	(1)	5.686	63	833357	10.168
32) Vinyl Acetate	(1)	5.881	86	110958	13.004
33) Di-Isopropyl Ether	(1)	5.954	45	570014	11.651
36) 1,2-Dichloroethene (total)	(1)		61	1247915	19.620
34) Ethyl Tert-Butyl Ether	(1)	6.641	59	772810	11.327
35) cis-1,2-Dichloroethene	(1)	6.781	61	634269	10.379
37) 2-Butanone	(1)	6.873	72	166471	10.990
38) Ethyl Acetate	(1)	7.055	70	80550	11.700

M = Compound was manually integrated.

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d  
 Injection date and time: 16-OCT-2015 02:34

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.079	55	435644	11.351
40) *Bromochloromethane	(1)	7.201	130	758229	10.000
41) Tetrahydrofuran	(1)	7.347	42	186736	11.341
42) Chloroform	(1)	7.408	83	1473310	10.252
43) 1,1,1-Trichloroethane	(1)	7.706	97	1699448	10.408
44) Cyclohexane	(1)	7.809	56	561457	10.546
45) Carbon Tetrachloride	(1)	8.022	117	1940382	10.512
46) Benzene	(2)	8.400	78	1617781	10.309
47) 1,2-Dichloroethane	(2)	8.430	62	924878	10.163
48) Isooctane	(2)	8.655	57	1715341	11.618
49) Tert-Amyl Methyl Ether	(2)	8.740	73	909700	10.604
50) Heptane	(2)	9.063	43	455834	11.205
51) *1,4-Difluorobenzene	(2)	9.203	114	2563691	10.000
52) Trichloroethene	(2)	9.665	130	1043790	9.717
53) Ethyl Acrylate	(2)	10.024	55	487812	11.075
54) 1,2-Dichloropropane	(2)	10.072	63	469903	10.799
55) Dibromomethane	(2)	10.291	174	1026461	9.594
56) 1,4-Dioxane	(2)	10.450	88	307679	9.604
57) Methyl Methacrylate	(2)	10.480	69	357556	10.743
58) Bromodichloromethane	(2)	10.669	83	1623627	10.143
59) cis-1,3-Dichloropropene	(2)	11.642	75	1021429	11.998
60) 4-Methyl-2-Pentanone	(2)	12.068	43	417479	10.220
61) Toluene	(3)	12.348	91	2118528	11.766
64) 1,3-Dichloropropene (total)	(3)		75	2050003	22.861
62) Octane	(3)	12.816	43	598327	12.610
63) trans-1,3-Dichloropropene	(3)	12.895	75	1028574	10.863
65) Ethyl Methacrylate	(3)	13.266	69	566259	11.216
66) 1,1,2-Trichloroethane	(3)	13.272	97	826213	10.761
67) Tetrachloroethene	(3)	13.577	166	1461934	9.537
68) 2-Hexanone	(3)	13.990	43	495671	11.899
69) Dibromochloromethane	(3)	14.136	127	1519932	10.271
70) 1,2-Dibromoethane	(3)	14.343	107	1416602	10.785
71) *Chlorobenzene-d5	(3)	15.523	117	2306014	10.000
72) Chlorobenzene	(3)	15.590	112	1946315	10.870
73) 1,1,1,2-Tetrachloroethane	(3)	15.834	131	1205094	10.800
74) Ethylbenzene	(3)	15.949	91	2396506	12.047
75) m/p-Xylene	(3)	16.259	91	1754118	10.662
77) Xylene (total)	(3)		91	3703692	21.922

\* = Compound is an internal standard.

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d  
 Injection date and time: 16-OCT-2015 02:34

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010

Lab Sample ID: VSTD010

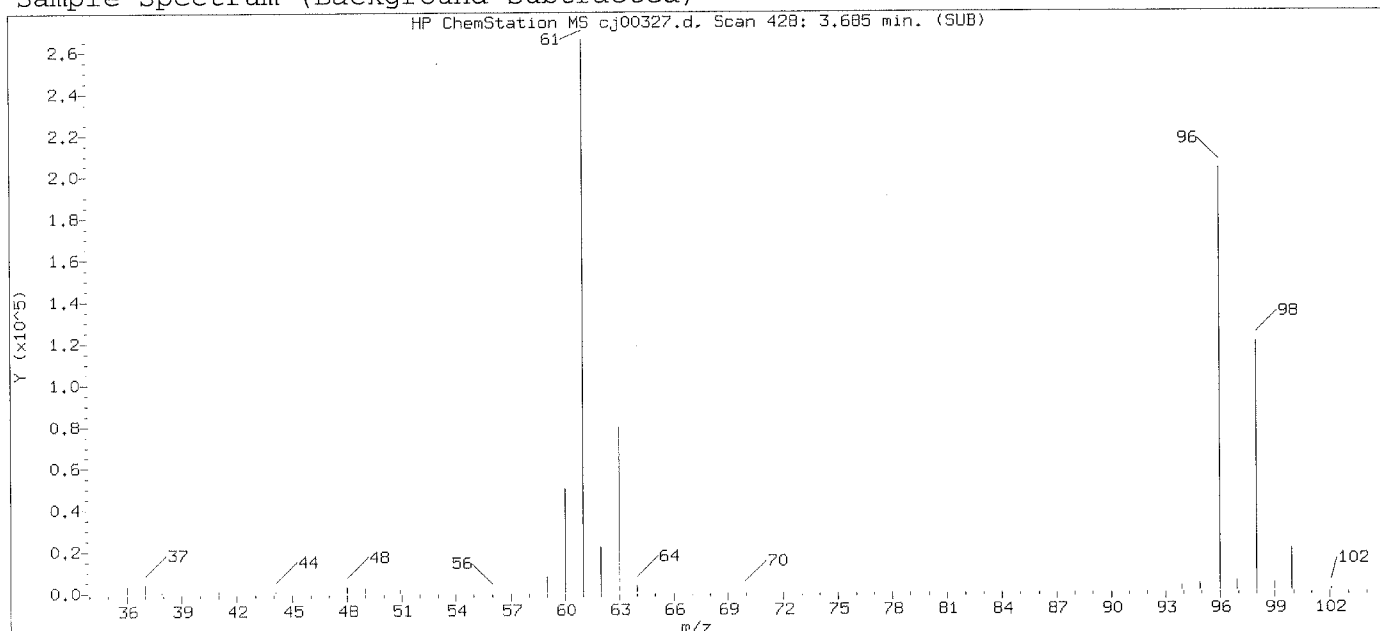
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.239	91	1949574	11.259
78) Styrene	(3)	17.282	104	1709822	11.015
79) Bromoform	(3)	17.628	173	1956353	10.234
80) Cumene	(3)	18.243	105	2594042	11.665
81) Bromobenzene	(3)	18.869	156	1357386	10.867
82) 1,1,2,2-Tetrachloroethane	(3)	19.046	83	1566404	10.712
83) 1,2,3-Trichloropropane	(3)	19.082	110	599717	10.718
84) n-Propylbenzene	(3)	19.338	120	819223	11.082
85) 2-Chlorotoluene	(3)	19.459	126	921014	11.219
86) 4-Ethyltoluene	(3)	19.666	105	2875396	11.595
87) 1,3,5-Trimethylbenzene	(3)	19.861	105	2371779	11.108
88) Alpha Methyl Styrene	(3)	20.445	118	1358626	11.212
89) tert-Butylbenzene	(3)	20.701	119	2296566	10.885
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	2398271	10.817
91) sec-Butylbenzene	(3)	21.339	105	3222726	11.001
92) 1,3-Dichlorobenzene	(3)	21.504	146	2303039	10.476
93) 1,4-Dichlorobenzene	(3)	21.802	146	2379236	10.301
94) p-Isopropyltoluene	(3)	21.856	119	3059833	11.462
95) Benzyl Chloride	(3)	22.294	91	2351281	11.781
96) 1,2-Dichlorobenzene	(3)	22.951	146	2169597	10.422
97) n-Butylbenzene	(3)	23.170	91	2412296	11.092
98) Hexachloroethane	(3)	23.627	117	1212567	10.996
99) 1,2-Dibromo-3-chloropropane	(3)	24.710	157	1146439	10.133
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	1329381	11.556
101) Hexachlorobutadiene	(3)	26.279	225	1552083	12.335
102) Naphthalene	(3)	26.297	128	2864299	12.036

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

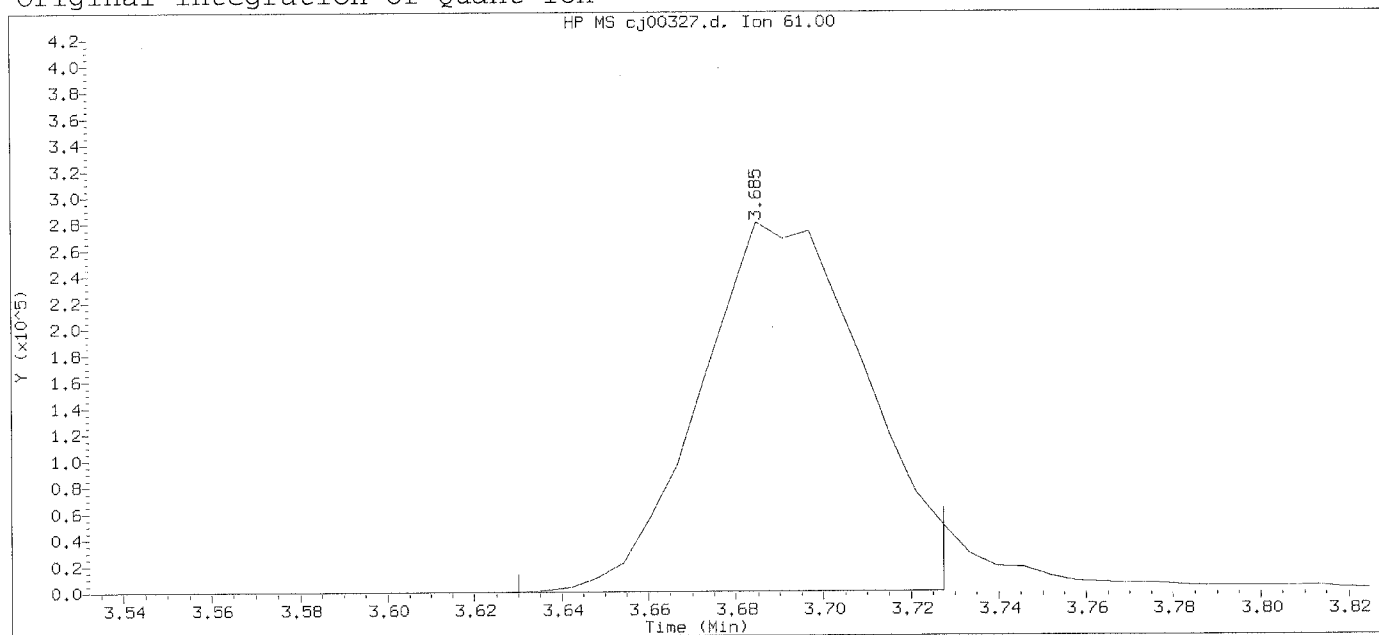




Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00327.d  
 Injection date and time: 16-OCT-2015 02:34

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 15-OCT-2015 19:21  
 Date, time and analyst ID of latest file update: 16-Oct-2015 03:14 Automation

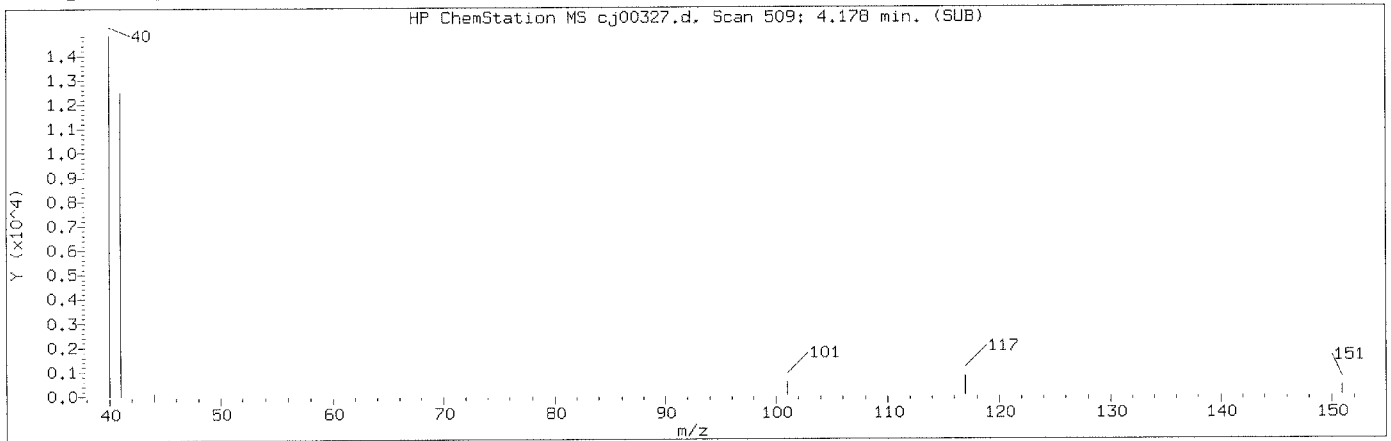
Sample Name: VSTD010

Lab Sample ID: VSTD010

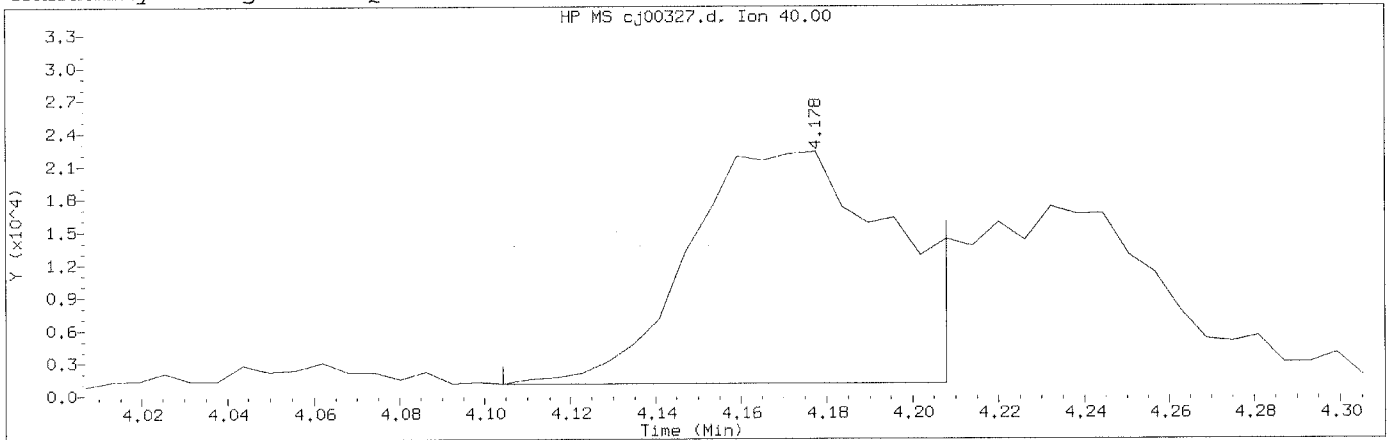
Compound Number	: 17		
Compound Name	: 1,1-Dichloroethene		
Scan Number	: 428		
Retention Time (minutes)	: 3.685		
Quant Ion	: 61.00		
Area	: 731532		
Concentration (ppb(v))	: 8.0209		
Integration start scan	: 418	Integration stop scan:	434
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00327.d  
Injection date and time: 16-OCT-2015 02:34

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

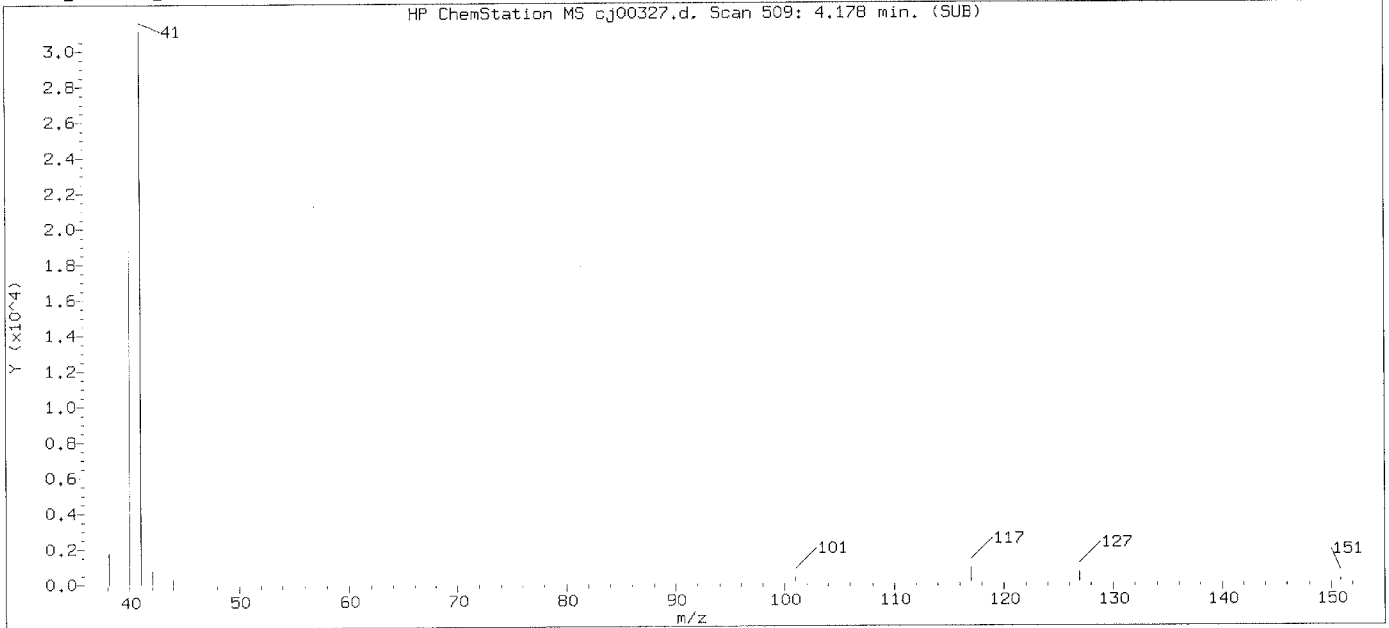
Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 509  
Retention Time (minutes): 4.178  
Quant Ion : 40.00  
Area (flag) : 71716M  
Concentration (ppb(v)) : 10.1065  
Integration start scan : 496      Integration stop scan: 513  
Y at integration start : 1035      Y at integration end: 1035

Reason for manual integration: improper integration

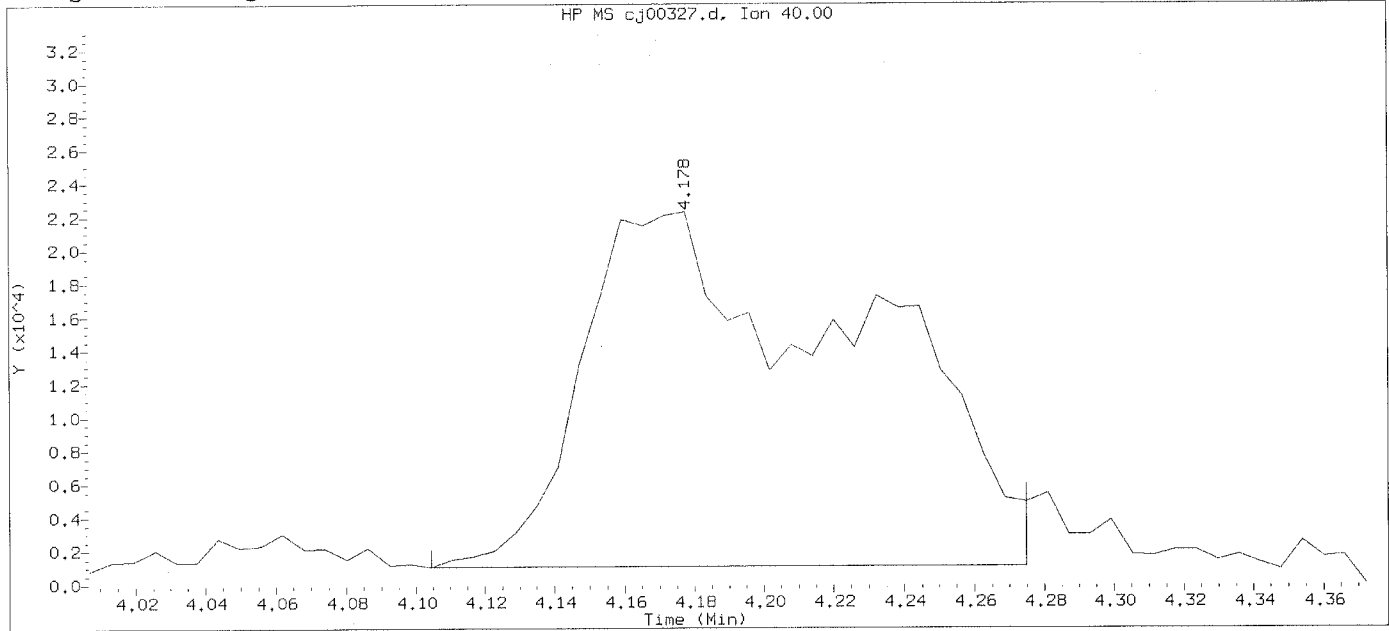
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp/758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00327.d  
Injection date and time: 16-OCT-2015 02:34

Instrument ID: HP09464.i  
Analyst ID: jeb07445

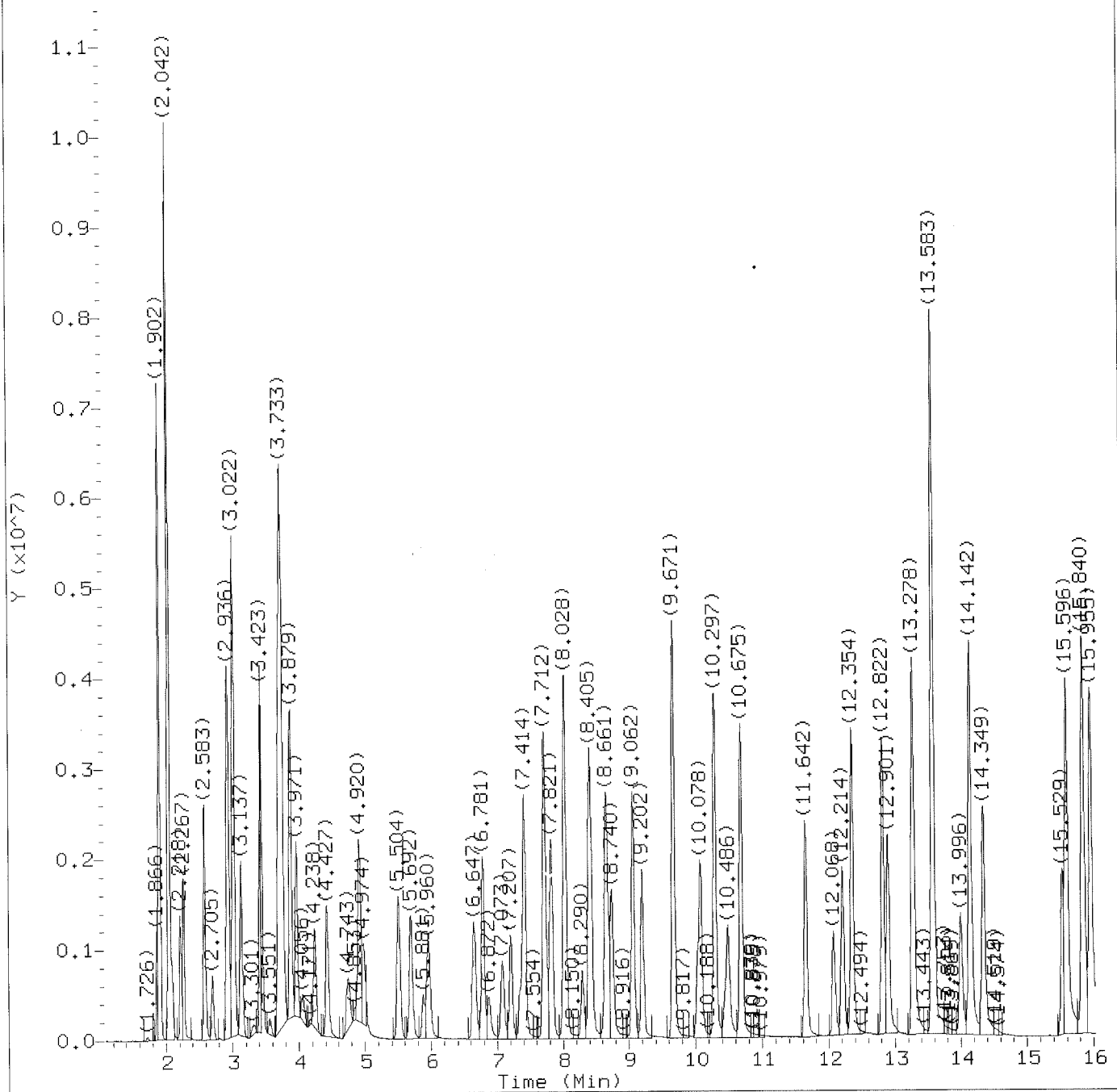
Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 15-OCT-2015 19:21  
Date, time and analyst ID of latest file update: 16-Oct-2015 03:14 Automation

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 509  
Retention Time (minutes): 4.178  
Quant Ion : 40.00  
Area : 116362  
Concentration (ppb(v)) : 10.3140  
Integration start scan : 496 Integration stop scan: 524  
Y at integration start : 1035 Y at integration end: 1035

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d  
Injection date and time: 16-OCT-2015 03:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

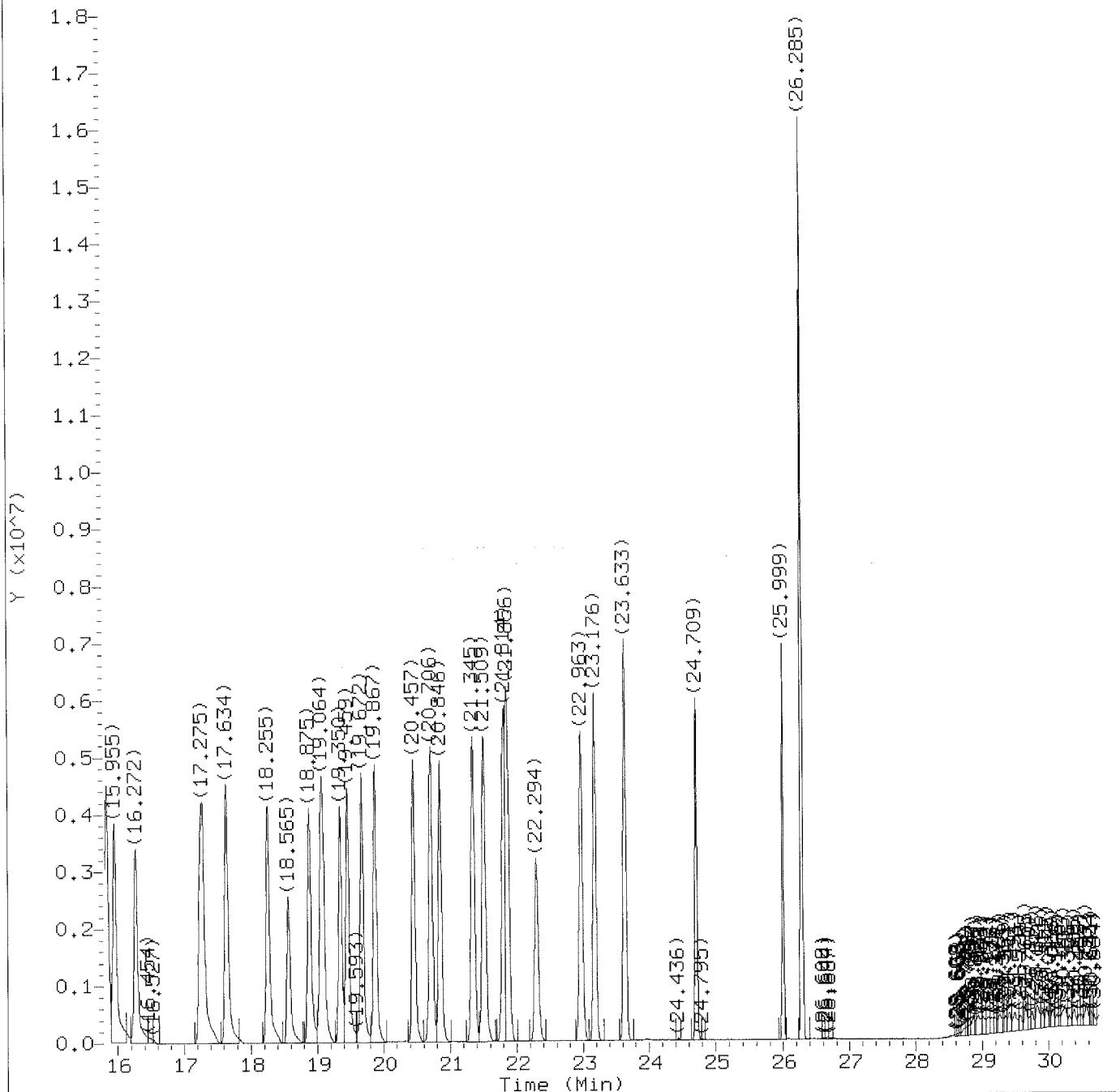
Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d  
Injection date and time: 16-OCT-2015 03:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d  
 Injection date and time: 16-OCT-2015 03:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	615882	30.113
2) Dichlorodifluoromethane	(1)	1.902	85	5860227	23.137
3) Chlorodifluoromethane	(1)	1.914	51	2010336	24.835
4) Freon 114	(1)	2.042	85	5111808	22.427
5) Chloromethane	(1)	2.091	52	319678	26.589
6) Vinyl Chloride	(1)	2.218	62	1470881	27.414
7) 1,3-Butadiene	(1)	2.267	54	952876	28.851
8) Bromomethane	(1)	2.583	94	2021277	25.869
9) Chloroethane	(1)	2.705	64	751880	24.795
10) Bromoethene	(1)	2.924	106	2127914	28.662
11) Dichlorofluoromethane	(1)	2.949	67	3495307	24.704
12) Trichlorofluoromethane	(1)	3.022	101	6420810	23.514
13) Pentane	(1)	3.137	43	1329480	28.645
14) Ethanol	(1)	3.289	45	285529	26.107
15) Freon123a	(1)	3.429	67	2451963	24.600
16) Acrolein	(1)	3.557	56	277088	27.108
17) 1,1-Dichloroethene	(1)	3.691	61	2409304	27.073
18) Freon 113	(1)	3.739	103	2691618	24.861
19) Acetone	(1)	3.782	43	700488	19.789
20) Methyl Iodide	(1)	3.879	142	5926483	25.384
21) Carbon Disulfide	(1)	3.971	76	4493868	24.567
22) Isopropanol	(1)	4.062	45	1134476	27.109
23) Acetonitrile	(1)	4.177	40	144974	17.998
24) 3-Chloropropene	(1)	4.244	76	710996	28.185
25) Methylene Chloride	(1)	4.427	84	1411006	25.560
26) tert-Butyl Alcohol	(1)	4.743	59	1901716	30.225
27) Acrylonitrile	(1)	4.853	53	415037	21.822
28) trans-1,2-Dichloroethene	(1)	4.920	61	1732805	22.987
29) Methyl t-Butyl Ether	(1)	4.987	73	2268831	23.282
30) Hexane	(1)	5.504	57	1446219	26.200
31) 1,1-Dichloroethane	(1)	5.692	63	2179790	23.429
32) Vinyl Acetate	(1)	5.887	86	255323	26.360
33) Di-Isopropyl Ether	(1)	5.960	45	1414655	25.472
36) 1,2-Dichloroethene (total)	(1)		61	3440511	47.604
34) Ethyl Tert-Butyl Ether	(1)	6.647	59	2025425	26.153
35) cis-1,2-Dichloroethene	(1)	6.781	61	1707706	24.618
37) 2-Butanone	(1)	6.872	72	386608	22.485
38) Ethyl Acetate	(1)	7.061	70	180002	23.032

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d  
 Injection date and time: 16-OCT-2015 03:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.085	55	942185	21.626
40) *Bromochloromethane	(1)	7.207	130	860713	10.000
41) Tetrahydrofuran	(1)	7.347	42	439259	23.501
42) Chloroform	(1)	7.414	83	3717542	22.789
43) 1,1,1-Trichloroethane	(1)	7.712	97	4289373	23.142
44) Cyclohexane	(1)	7.815	56	1574701	26.056
45) Carbon Tetrachloride	(1)	8.028	117	4645586	22.170
46) Benzene	(2)	8.399	78	4290174	26.589
47) 1,2-Dichloroethane	(2)	8.436	62	2276094	24.324
48) Isooctane	(2)	8.661	57	4698448	30.949
49) Tert-Amyl Methyl Ether	(2)	8.740	73	2388138	27.074
50) Heptane	(2)	9.069	43	1264056	30.218
51) *1,4-Difluorobenzene	(2)	9.202	114	2636016	10.000
52) Trichloroethene	(2)	9.671	130	2806778	25.411
53) Ethyl Acrylate	(2)	10.036	55	1186459	26.197
54) 1,2-Dichloropropane	(2)	10.078	63	1101033	24.608
55) Dibromomethane	(2)	10.297	174	2703754	24.578
56) 1,4-Dioxane	(2)	10.450	88	896593	27.218
57) Methyl Methacrylate	(2)	10.486	69	831765	24.306
58) Bromodichloromethane	(2)	10.675	83	4044556	24.574
59) cis-1,3-Dichloropropene	(2)	11.642	75	2601141	29.716
60) 4-Methyl-2-Pentanone	(2)	12.074	43	1148049	27.332
61) Toluene	(3)	12.354	91	4998838	25.651
64) 1,3-Dichloropropene (total)	(3)		75	5113709	54.234
62) Octane	(3)	12.822	43	1652265	32.174
63) trans-1,3-Dichloropropene	(3)	12.901	75	2512568	24.518
65) Ethyl Methacrylate	(3)	13.266	69	1579843	28.912
66) 1,1,2-Trichloroethane	(3)	13.278	97	2063039	24.828
67) Tetrachloroethene	(3)	13.583	166	4925618	29.687
68) 2-Hexanone	(3)	13.996	43	1343108	29.790
69) Dibromochloromethane	(3)	14.142	127	3970479	24.791
70) 1,2-Dibromoethane	(3)	14.349	107	3503076	24.641
71) *Chlorobenzene-d5	(3)	15.529	117	2495822	10.000
72) Chlorobenzene	(3)	15.596	112	5053547	26.077
73) 1,1,1,2-Tetrachloroethane	(3)	15.840	131	3022086	25.024
74) Ethylbenzene	(3)	15.955	91	5973486	27.744
75) m/p-Xylene	(3)	16.265	91	4518528M	25.377
77) Xylene (total)	(3)		91	9216435	50.445

M = Compound was manually integrated.

\* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d  
 Injection date and time: 16-OCT-2015 03:17

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD025

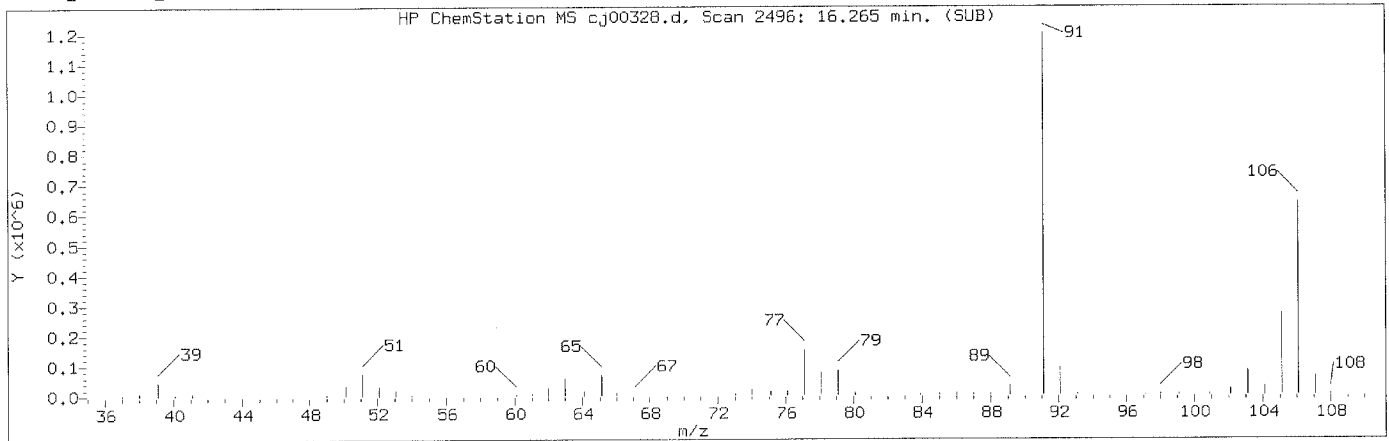
Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.245	91	4697907	25.068
78) Styrene	(3)	17.288	104	4262252	25.371
79) Bromoform	(3)	17.634	173	4957672	23.963
80) Cumene	(3)	18.255	105	6771138	28.132
81) Bromobenzene	(3)	18.875	156	3386461	25.050
82) 1,1,2,2-Tetrachloroethane	(3)	19.052	83	3477587	21.973
83) 1,2,3-Trichloropropane	(3)	19.088	110	1365631	22.550
84) n-Propylbenzene	(3)	19.344	120	2134267	26.676
85) 2-Chlorotoluene	(3)	19.459	126	2275620	25.611
86) 4-Ethyltoluene	(3)	19.672	105	7013666	26.132
87) 1,3,5-Trimethylbenzene	(3)	19.867	105	6065111	26.245
88) Alpha Methyl Styrene	(3)	20.457	118	3716197	28.336
89) tert-Butylbenzene	(3)	20.706	119	6389883	27.984
90) 1,2,4-Trimethylbenzene	(3)	20.846	105	6358664	26.500
91) sec-Butylbenzene	(3)	21.345	105	9025261	28.465
92) 1,3-Dichlorobenzene	(3)	21.509	146	5966329	25.075
93) 1,4-Dichlorobenzene	(3)	21.802	146	6138326	24.556
94) p-Isopropyltoluene	(3)	21.862	119	8324678	28.812
95) Benzyl Chloride	(3)	22.300	91	5990540	27.733
96) 1,2-Dichlorobenzene	(3)	22.963	146	5574450	24.741
97) n-Butylbenzene	(3)	23.176	91	6903454	29.328
98) Hexachloroethane	(3)	23.633	117	2658878	22.279
99) 1,2-Dibromo-3-chloropropane	(3)	24.709	157	2778120	22.688
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	2444541	19.634
101) Hexachlorobutadiene	(3)	26.279	225	2891518	21.233
102) Naphthalene	(3)	26.297	128	4998065	19.404

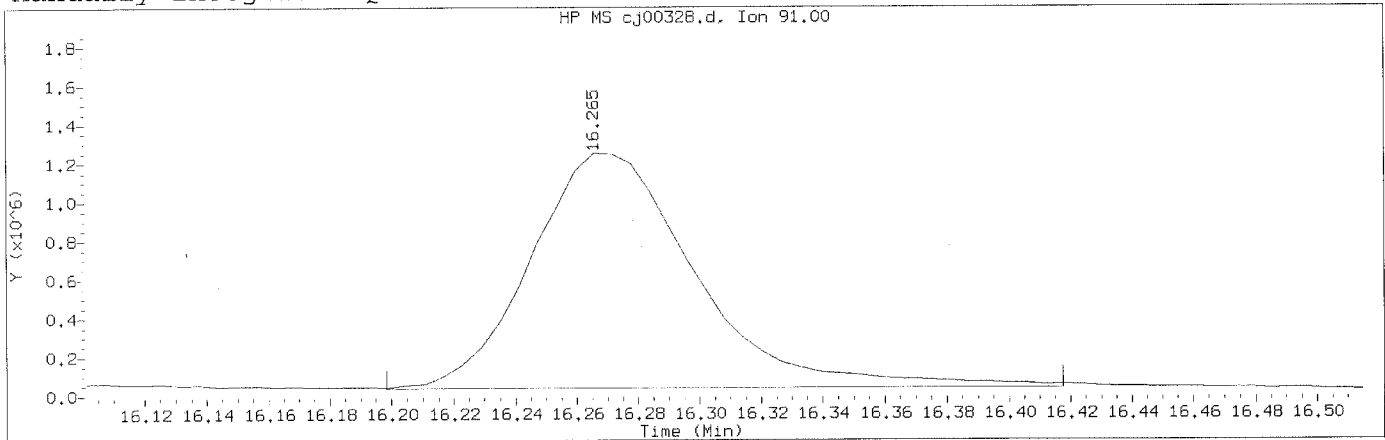
Digitally signed by Jacob E. Bailey  
 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00328.d  
Injection date and time: 16-OCT-2015 03:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

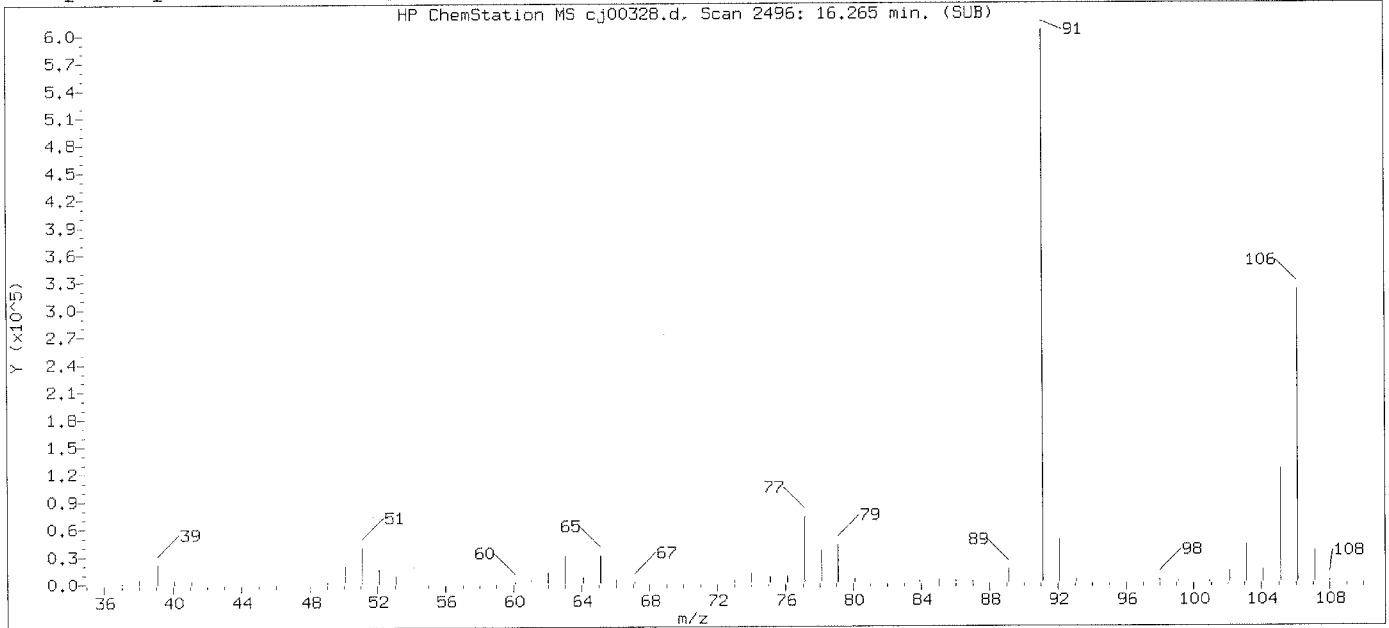
Compound Number : 75  
Compound Name : m/p-Xylene  
Scan Number : 2496  
Retention Time (minutes): 16.265  
Quant Ion : 91.00  
Area (flag) : 4518528M  
Concentration (ppb(v)) : 25.3772  
Integration start scan : 2484      Integration stop scan: 2520  
Y at integration start : 37539      Y at integration end: 37539

Reason for manual integration: improper integration

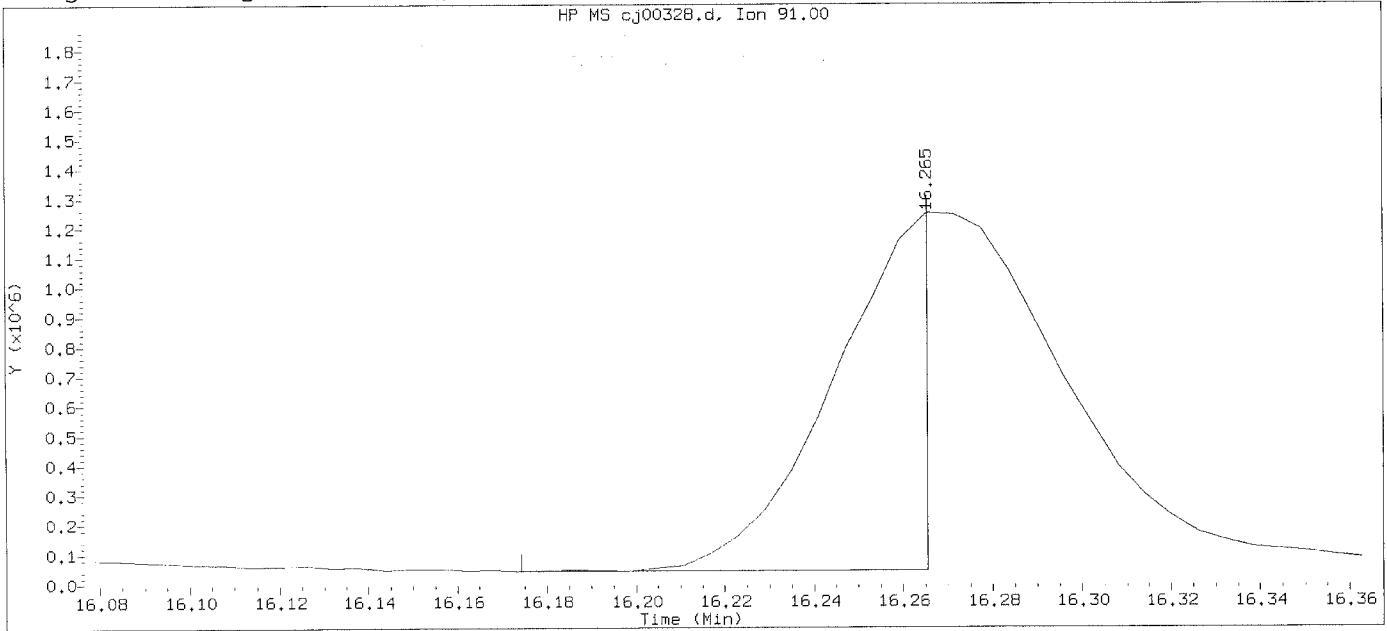
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp/258 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00328.d  
Injection date and time: 16-OCT-2015 03:17

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 15-OCT-2015 19:21  
Date, time and analyst ID of latest file update: 16-Oct-2015 03:58 Automation

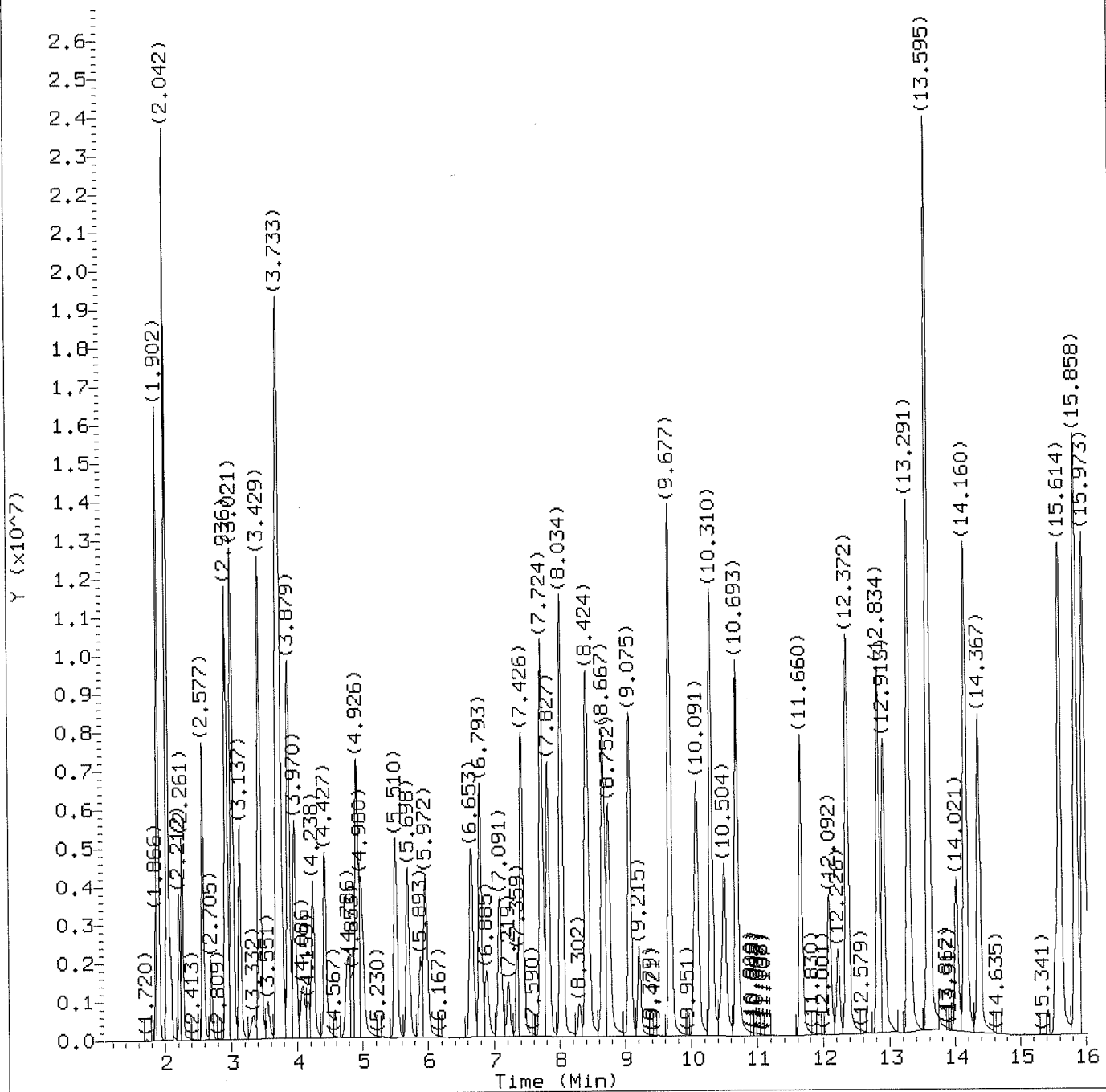
Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compound Number : 75  
Compound Name : m/p-Xylene  
Scan Number : 2496  
Retention Time (minutes): 16.265  
Quant Ion : 91.00  
Area : 1699236  
Concentration (ppb(v)) : 8.3539  
Integration start scan : 2480 Integration stop scan: 2495  
Y at integration start : 43496 Y at integration end: 43496

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Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d  
Injection date and time: 16-OCT-2015 04:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 21-OCT-2015 17:25  
Date, time and analyst ID of latest file update: 21-Oct-2015 17:25 jeb07445

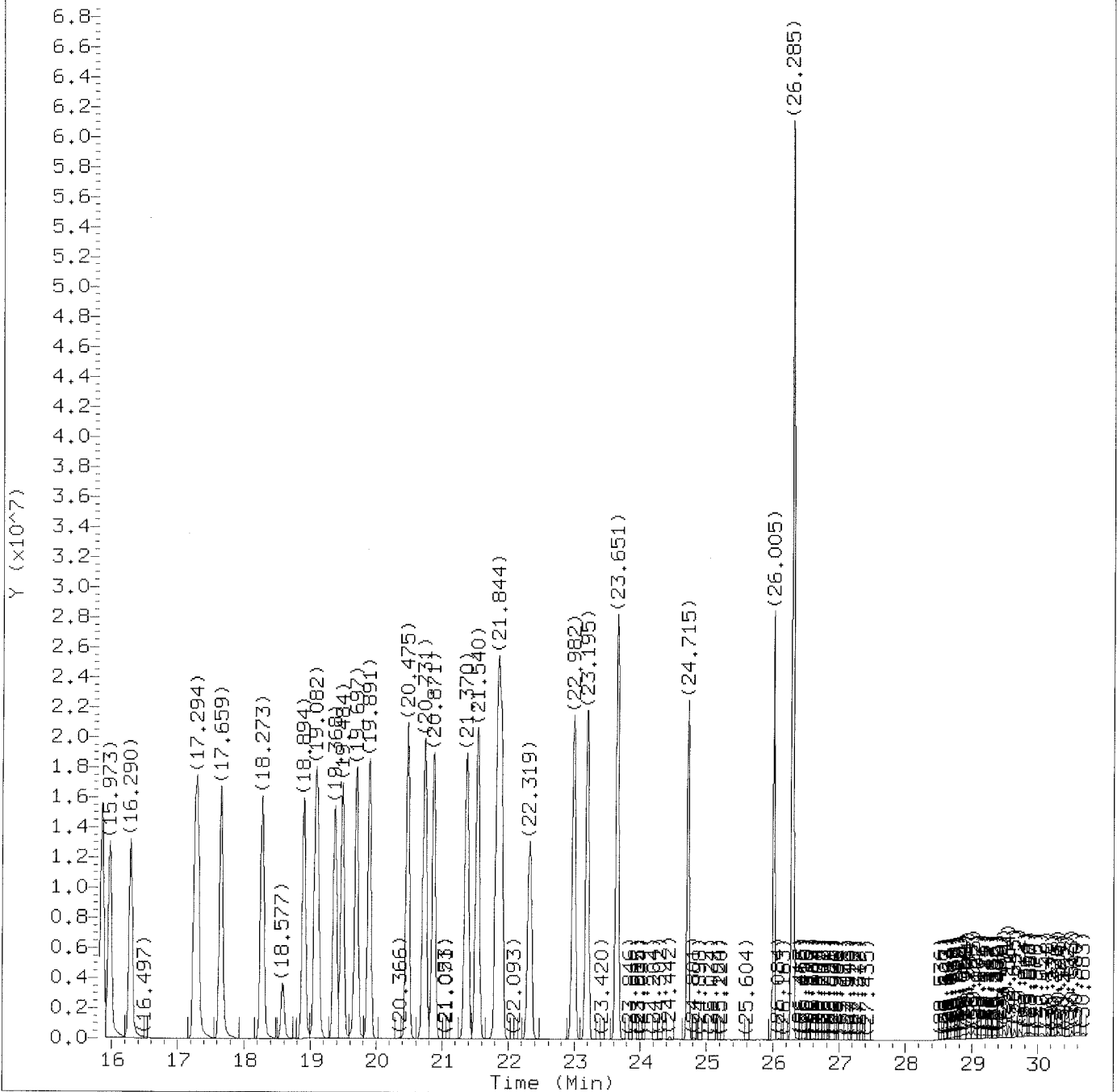
Sublist used: all

Sample Name: VSTD070

Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 17:26.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d  
Injection date and time: 16-OCT-2015 04:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:42  
Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sublist used: all

Sample Name: VSTD070

Lab Sample ID: VSTD070

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on 10/21/2015 at 16:42.  
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d  
 Injection date and time: 16-OCT-2015 04:03

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:42  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sublist used: all

Sample Name: VSTD070

Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.859	41	1758753	68.541
2) Dichlorodifluoromethane	(1)	1.902	85	11309966	35.591
3) Chlorodifluoromethane	(1)	1.908	51	5279471	51.985
4) Freon 114	(1)	2.042	85	10786086	37.718
5) Chloromethane	(1)	2.085	52	958666	63.555
6) Vinyl Chloride	(1)	2.212	62	4191695	62.270
7) 1,3-Butadiene	(1)	2.261	54	2791412	67.367
8) Bromomethane	(1)	2.577	94	6023979	61.450
9) Chloroethane	(1)	2.705	64	2337636	61.444
10) Bromoethene	(1)	2.924	106	6300971	67.647
11) Dichlorofluoromethane	(1)	2.942	67	9297256	52.374
12) Trichlorofluoromethane	(1)	3.021	101	14780364	43.144
13) Pentane	(1)	3.137	43	3965116	68.094
14) Ethanol	(1)	3.307	45	999693	72.856
15) Freon123a	(1)	3.429	67	7646726	61.148
16) Acrolein	(1)	3.551	56	1195720	93.239
17) 1,1-Dichloroethene	(1)	3.691	61	7133718	63.893
18) Freon 113	(1)	3.739	103	8432135	62.078
19) Acetone	(1)	3.776	43	2888953	65.051
20) Methyl Iodide	(1)	3.879	142	16278204	55.573
21) Carbon Disulfide	(1)	3.970	76	12558200	54.720
22) Isopropanol	(1)	4.086	45	3864559	73.606
23) Acetonitrile	(1)	4.171	40	632948	62.630
24) 3-Chloropropene	(1)	4.238	76	2449241	77.388
25) Methylene Chloride	(1)	4.427	84	4725971	68.236
26) tert-Butyl Alcohol	(1)	4.792	59	6554822	83.037
27) Acrylonitrile	(1)	4.859	53	2012010	84.319
28) trans-1,2-Dichloroethene	(1)	4.920	61	5689263	60.156
29) Methyl t-Butyl Ether	(1)	4.986	73	9473645	77.487
30) Hexane	(1)	5.504	57	5050096	72.922
31) 1,1-Dichloroethane	(1)	5.698	63	7234848	61.980
32) Vinyl Acetate	(1)	5.893	86	1294887	106.557
33) Di-Isopropyl Ether	(1)	5.972	45	5563788	79.849
36) 1,2-Dichloroethene (total)	(1)		61	11352163	125.223
34) Ethyl Tert-Butyl Ether	(1)	6.653	59	8178465	84.171
35) cis-1,2-Dichloroethene	(1)	6.793	61	5662900	65.067
37) 2-Butanone	(1)	6.891	72	1710089	79.273
38) Ethyl Acetate	(1)	7.073	70	845320	86.213

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Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d  
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Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:42

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sample Name: VSTD070

Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.097	55	4291296	78.507
40) *Bromochloromethane	(1)	7.219	130	1079862	10.000
41) Tetrahydrofuran	(1)	7.359	42	1837542	78.358
42) Chloroform	(1)	7.426	83	11372937	55.569
43) 1,1,1-Trichloroethane	(1)	7.724	97	13116996	56.408
44) Cyclohexane	(1)	7.827	56	5262768	69.409
45) Carbon Tetrachloride	(1)	8.034	117	13690084	52.075
46) Benzene	(2)	8.412	78	13283513	61.497
47) 1,2-Dichloroethane	(2)	8.448	62	7179259	57.312
48) Isooctane	(2)	8.667	57	14347809	70.599
49) Tert-Amyl Methyl Ether	(2)	8.752	73	9462058	80.131
50) Heptane	(2)	9.075	43	4052734	72.372
51) *1,4-Difluorobenzene	(2)	9.215	114	3528811	10.000
52) Trichloroethene	(2)	9.677	130	9119706	61.676
53) Ethyl Acrylate	(2)	10.048	55	4581298	75.563
54) 1,2-Dichloropropane	(2)	10.091	63	3821129	63.796
55) Dibromomethane	(2)	10.310	174	9069804	61.588
56) 1,4-Dioxane	(2)	10.462	88	3010738	68.275
57) Methyl Methacrylate	(2)	10.504	69	3307327	72.195
58) Bromodichloromethane	(2)	10.693	83	11641173	52.836
59) cis-1,3-Dichloropropene	(2)	11.660	75	8760317	74.759
60) 4-Methyl-2-Pentanone	(2)	12.092	43	3751773	66.722
61) Toluene	(3)	12.372	91	16279554	61.406
64) 1,3-Dichloropropene (total)	(3)		75	17343254	136.325
62) Octane	(3)	12.834	43	5076427	72.662
63) trans-1,3-Dichloropropene	(3)	12.913	75	8582937	61.566
65) Ethyl Methacrylate	(3)	13.284	69	5255033	70.692
66) 1,1,2-Trichloroethane	(3)	13.297	97	7058837	62.444
67) Tetrachloroethene	(3)	13.601	166	15235052	67.497
68) 2-Hexanone	(3)	14.021	43	4307091	70.223
69) Dibromochloromethane	(3)	14.160	127	12280376	56.363
70) 1,2-Dibromoethane	(3)	14.367	107	11791480	60.970
71) *Chlorobenzene-d5	(3)	15.541	117	3395332	10.000
72) Chlorobenzene	(3)	15.614	112	16701772	63.351
73) 1,1,1,2-Tetrachloroethane	(3)	15.858	131	10759278	65.487
74) Ethylbenzene	(3)	15.973	91	19644374	67.068
75) m/p-Xylene	(3)	16.290	91	16850765	69.566
77) Xylene (total)	(3)		91	34607054	139.213

\* = Compound is an internal standard.

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 on 10/21/2015 at 16:42.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d  
 Injection date and time: 16-OCT-2015 04:03

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m

Sublist used: all

Calibration date and time: 21-OCT-2015 16:42

Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sample Name: VSTD070

Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.263	91	17756289	69.647
78) Styrene	(3)	17.306	104	15787705	69.080
79) Bromoform	(3)	17.659	173	16873013	59.949
80) Cumene	(3)	18.273	105	23752820	72.542
81) Bromobenzene	(3)	18.900	156	13216839	71.864
82) 1,1,2,2-Tetrachloroethane	(3)	19.070	83	12634883	58.683
83) 1,2,3-Trichloropropane	(3)	19.106	110	5481874	66.538
84) n-Propylbenzene	(3)	19.368	120	10121080	92.990
85) 2-Chlorotoluene	(3)	19.484	126	9817926	81.222
86) 4-Ethyltoluene	(3)	19.697	105	24143941	66.124
87) 1,3,5-Trimethylbenzene	(3)	19.891	105	21721560	69.093
88) Alpha Methyl Styrene	(3)	20.475	118	15874116	88.975
89) tert-Butylbenzene	(3)	20.731	119	23140721	74.494
90) 1,2,4-Trimethylbenzene	(3)	20.871	105	22125576	67.780
91) sec-Butylbenzene	(3)	21.370	105	28848520	66.881
92) 1,3-Dichlorobenzene	(3)	21.534	146	21411349	66.148
93) 1,4-Dichlorobenzene	(3)	21.826	146	21746028	63.947
94) p-Isopropyltoluene	(3)	21.887	119	26957049	68.582
95) Benzyl Chloride	(3)	22.319	91	23336642M	72.479
96) 1,2-Dichlorobenzene	(3)	22.982	146	20015481	65.300
97) n-Butylbenzene	(3)	23.195	91	22095429	68.999
98) Hexachloroethane	(3)	23.651	117	10599975	65.288
99) 1,2-Dibromo-3-chloropropane	(3)	24.722	157	10531811	63.224
100) 1,2,4-Trichlorobenzene	(3)	26.005	180	9923880	58.591
101) Hexachlorobutadiene	(3)	26.285	225	10459476	56.459
102) Naphthalene	(3)	26.303	128	13298157	37.951

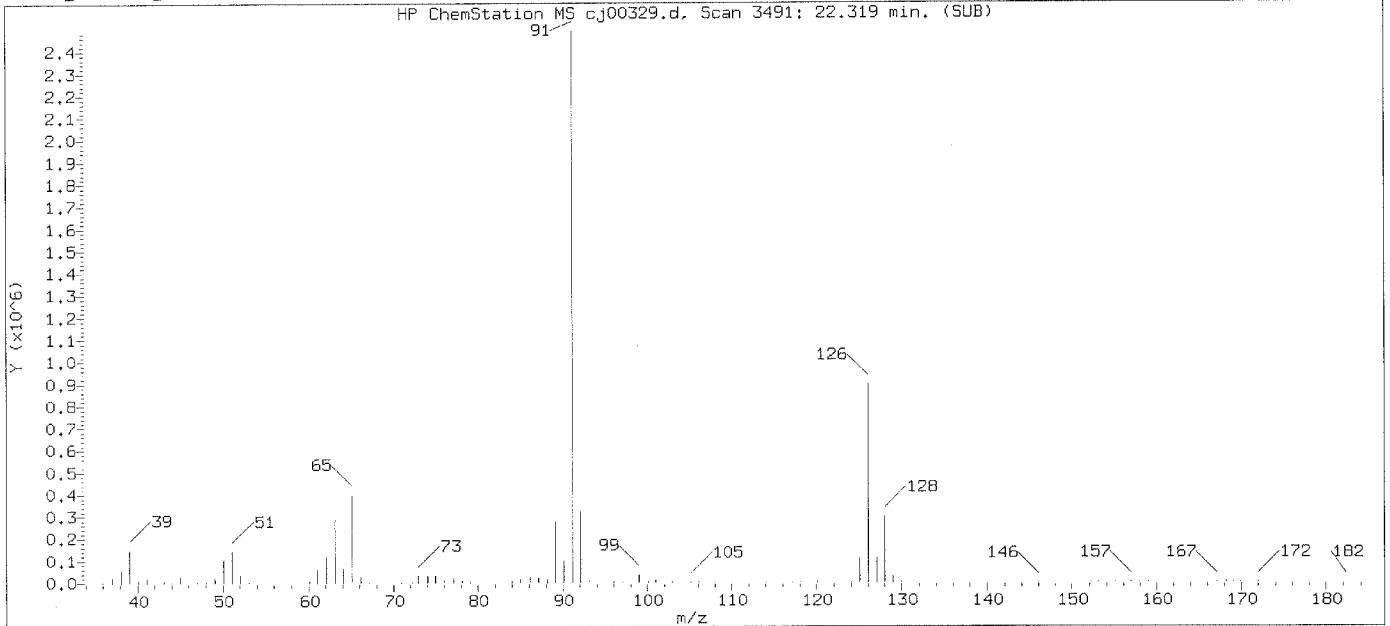
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey  
 on 10/21/2015 at 16:42.  
 Target 3.5 esignature user ID: jeb07445

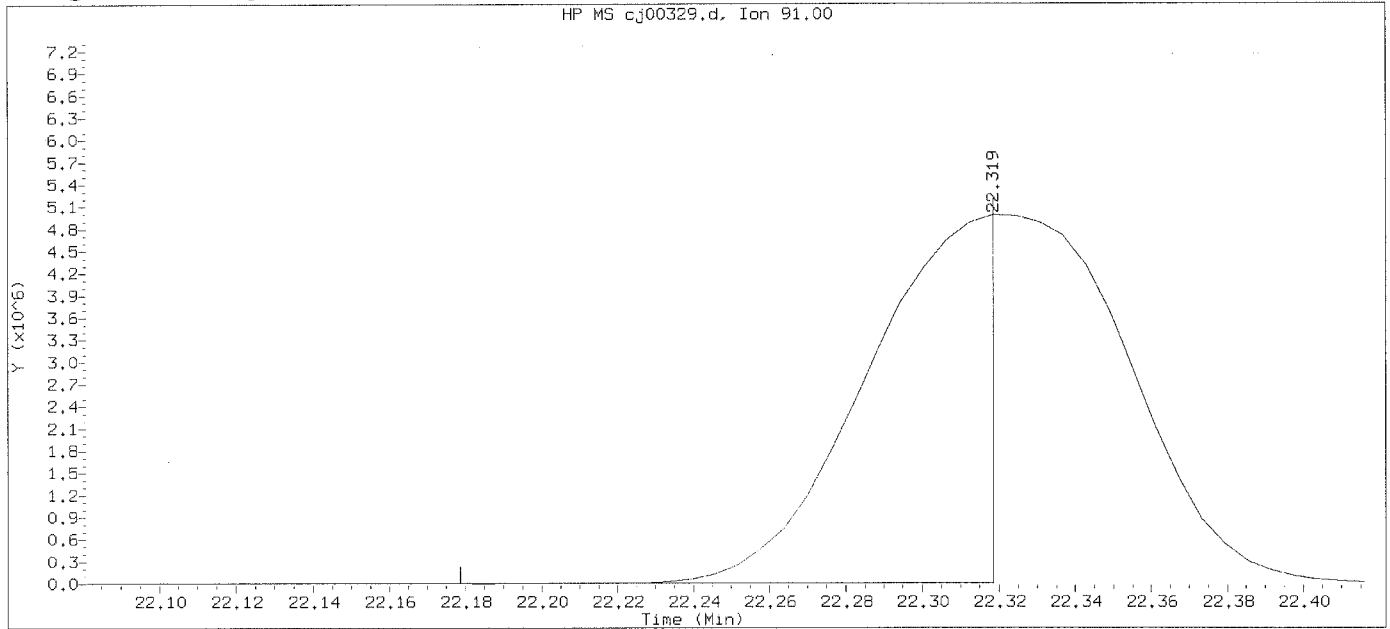




Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



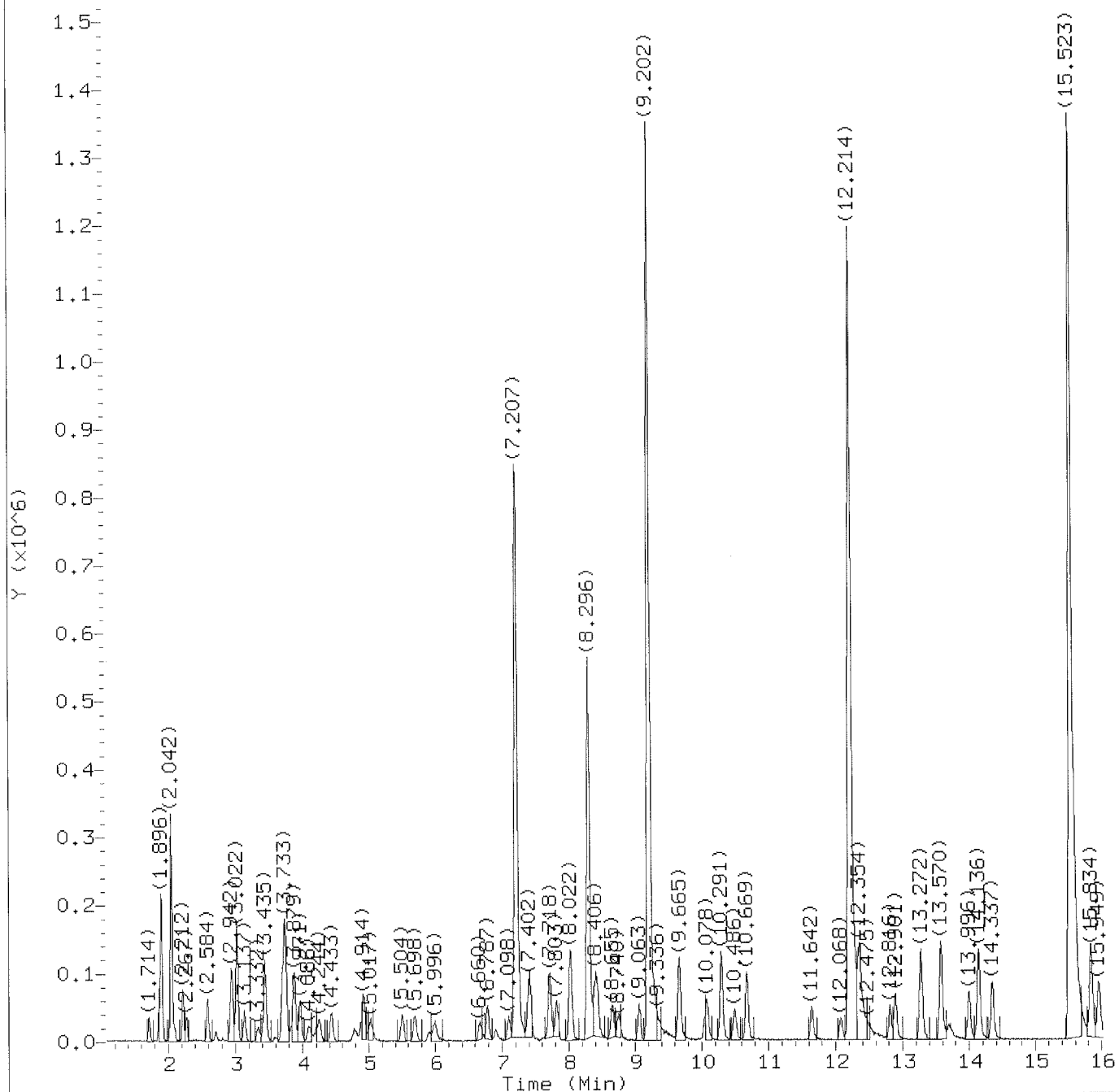
Data File: /chem/HP09464.i/15oct15.b/cj00329.d      Instrument ID: HP09464.i  
 Injection date and time: 16-OCT-2015 04:03      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m      Sublist used: all  
 Calibration date and time: 15-OCT-2015 19:21  
 Date, time and analyst ID of latest file update: 16-Oct-2015 04:43 Automation

Sample Name: VSTD070      Lab Sample ID: VSTD070

Compound Number : 95  
 Compound Name : Benzyl Chloride  
 Scan Number : 3491  
 Retention Time (minutes): 22.319  
 Quant Ion : 91.00  
 Area : 11054687  
 Concentration (ppb(v)) : 33.0743  
 Integration start scan : 3467      Integration stop scan: 3490  
 Y at integration start : 4375      Y at integration end: 4375

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 Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d  
Injection date and time: 16-OCT-2015 10:21

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

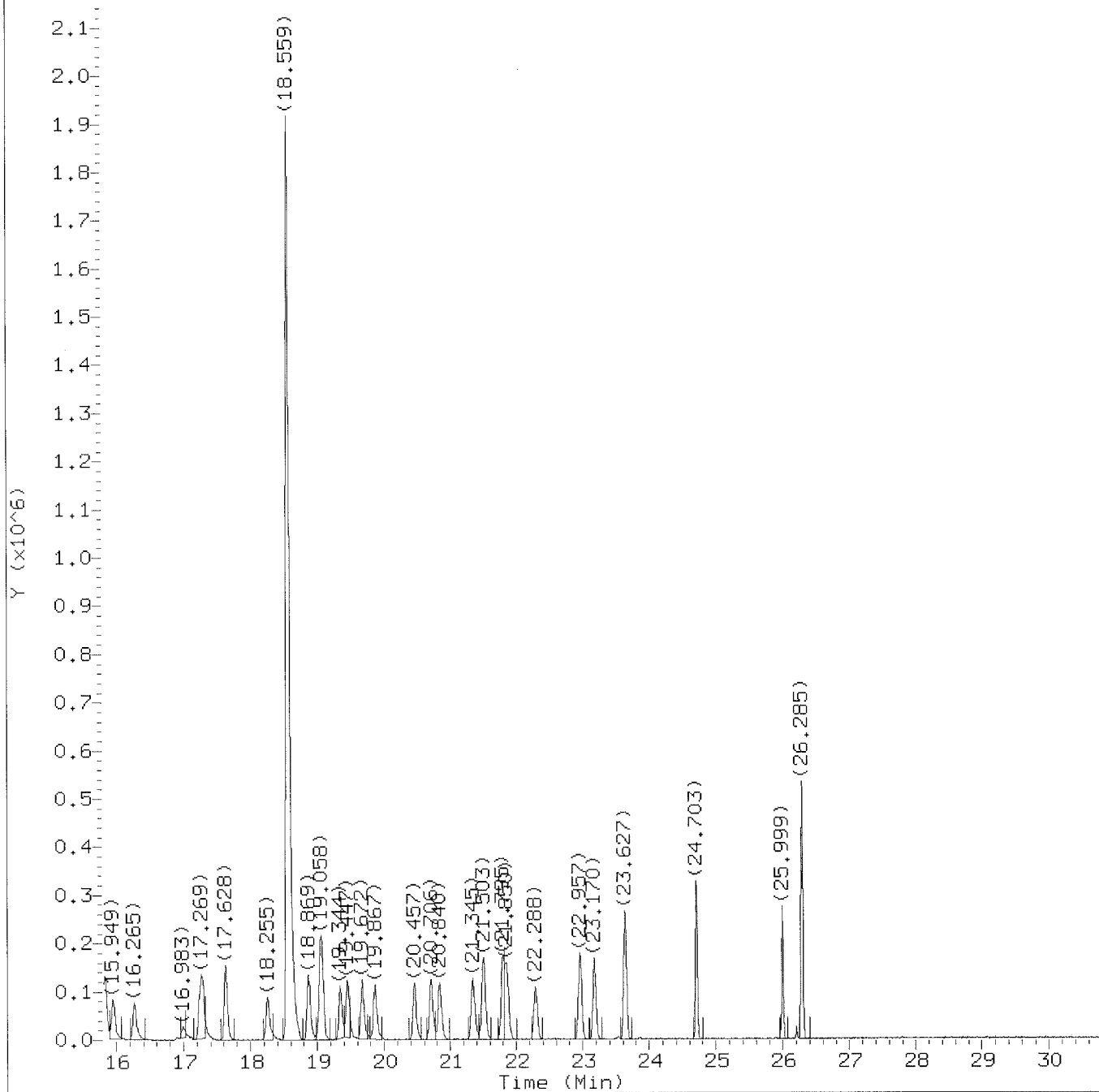
Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d  
Injection date and time: 16-OCT-2015 10:21

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40  
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d  
 Injection date and time: 16-OCT-2015 10:21

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.860	41	14303	0.932
2) Dichlorodifluoromethane	(1)	1.896	85	186562	0.982
3) Chlorodifluoromethane	(1)	1.908	51	58304	0.960
4) Freon 114	(1)	2.042	85	149838	0.877
5) Chloromethane	(1)	2.091	52	7353	0.815
6) Vinyl Chloride	(1)	2.212	62	34184	0.850
7) 1,3-Butadiene	(1)	2.267	54	17040	0.688
8) Bromomethane	(1)	2.584	94	49364	0.842
9) Chloroethane	(1)	2.711	64	19639	0.864
10) Bromoethene	(1)	2.924	106	47815	0.859
11) Dichlorofluoromethane	(1)	2.949	67	99991	0.942
12) Trichlorofluoromethane	(1)	3.022	101	198096	0.967
13) Pentane	(1)	3.131	43	30083	0.864
14) Ethanol	(1)	3.332	45	45154	5.505
15) Freon123a	(1)	3.435	67	72353	0.968
16) Acrolein	(1)	3.587	56	9156	1.194
17) 1,1-Dichloroethene	(1)	3.703	61	56014	0.839
18) Freon 113	(1)	3.739	103	77651	0.956
19) Acetone	(1)	3.825	43	39148	1.475
20) Methyl Iodide	(1)	3.873	142	163075	0.931
21) Carbon Disulfide	(1)	3.964	76	128727	0.938
22) Isopropanol	(1)	4.086	45	56080	1.787
23) Acetonitrile	(1)	4.196	40	14570M	2.412
24) 3-Chloropropene	(1)	4.256	76	17851	0.944
25) Methylene Chloride	(1)	4.433	84	41445	1.001
26) tert-Butyl Alcohol	(1)	4.780	59	48809	1.034
27) Acrylonitrile	(1)	4.877	53	30265	2.122
28) trans-1,2-Dichloroethene	(1)	4.932	61	50024	0.885
29) Methyl t-Butyl Ether	(1)	5.029	73	75268	1.030
30) Hexane	(1)	5.510	57	27796	0.671
31) 1,1-Dichloroethane	(1)	5.698	63	64410	0.923
32) Vinyl Acetate	(1)	5.917	86	6647	0.915
33) Di-Isopropyl Ether	(1)	5.984	45	32230	0.774
36) 1,2-Dichloroethene (total)	(1)		61	95522	1.759
34) Ethyl Tert-Butyl Ether	(1)	6.672	59	47796	0.823
35) cis-1,2-Dichloroethene	(1)	6.787	61	45498	0.875
37) 2-Butanone	(1)	6.903	72	15847	1.229
38) Ethyl Acetate	(1)	7.091	70	6262	1.068

M = Compound was manually integrated.

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d  
 Injection date and time: 16-OCT-2015 10:21

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40  
 Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.098	55	39727	1.216
40) *Bromochloromethane	(1)	7.213	130	645499	10.000
41) Tetrahydrofuran	(1)	7.383	42	15724	1.122
42) Chloroform	(1)	7.414	83	121499	0.993
43) 1,1,1-Trichloroethane	(1)	7.718	97	130171	0.936
44) Cyclohexane	(1)	7.815	56	32140	0.709
45) Carbon Tetrachloride	(1)	8.016	117	160429	1.021
46) Benzene	(2)	8.406	78	117684	0.934
47) 1,2-Dichloroethane	(2)	8.436	62	75179	1.029
48) Isooctane	(2)	8.667	57	75802	0.639
49) Tert-Amyl Methyl Ether	(2)	8.764	73	61354	0.890
50) Heptane	(2)	9.075	43	19665	0.602
51) *1,4-Difluorobenzene	(2)	9.202	114	2059102	10.000
52) Trichloroethene	(2)	9.665	130	75103	0.870
53) Ethyl Acrylate	(2)	10.042	55	41618	1.176
54) 1,2-Dichloropropane	(2)	10.078	63	33515	0.959
55) Dibromomethane	(2)	10.291	174	94914	1.105
56) 1,4-Dioxane	(2)	10.474	88	29805	1.158
57) Methyl Methacrylate	(2)	10.498	69	29127	1.090
58) Bromodichloromethane	(2)	10.669	83	126915	0.987
59) cis-1,3-Dichloropropene	(2)	11.642	75	61122	0.894
60) 4-Methyl-2-Pentanone	(2)	12.074	43	35979	1.097
61) Toluene	(3)	12.354	91	140865	0.963
64) 1,3-Dichloropropene (total)	(3)		75	142456	1.951
62) Octane	(3)	12.810	43	21011	0.545
63) trans-1,3-Dichloropropene	(3)	12.889	75	81334	1.058
65) Ethyl Methacrylate	(3)	13.272	69	38832	0.947
66) 1,1,2-Trichloroethane	(3)	13.272	97	64431	1.033
67) Tetrachloroethene	(3)	13.570	166	94657	0.760
68) 2-Hexanone	(3)	13.996	43	72023	2.129
69) Dibromochloromethane	(3)	14.136	127	117390	0.977
70) 1,2-Dibromoethane	(3)	14.337	107	115258	1.080
71) *Chlorobenzene-d5	(3)	15.523	117	1873092	10.000
72) Chlorobenzene	(3)	15.590	112	155386	1.068
73) 1,1,1,2-Tetrachloroethane	(3)	15.840	131	93589	1.033
74) Ethylbenzene	(3)	15.961	91	157206	0.973
75) m/p-Xylene	(3)	16.278	91	119683	0.896
77) Xylene (total)	(3)		91	270348	1.967

\* = Compound is an internal standard.

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d  
 Injection date and time: 16-OCT-2015 10:21

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 17:40

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD001

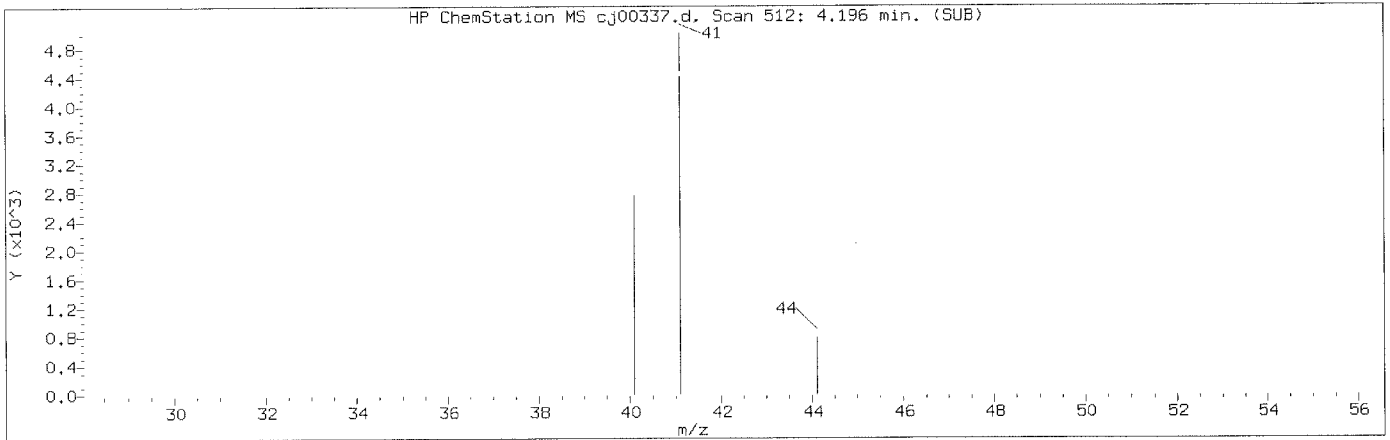
Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.239	91	150665	1.071
78) Styrene	(3)	17.281	104	127416	1.011
79) Bromoform	(3)	17.622	173	156754	1.010
80) Cumene	(3)	18.249	105	164215	0.909
81) Bromobenzene	(3)	18.863	156	113752	1.121
82) 1,1,2,2-Tetrachloroethane	(3)	19.040	83	143115	1.205
83) 1,2,3-Trichloropropane	(3)	19.082	110	56240	1.237
84) n-Propylbenzene	(3)	19.344	120	55260	0.920
85) 2-Chlorotoluene	(3)	19.459	126	63828	0.957
86) 4-Ethyltoluene	(3)	19.672	105	195744	0.972
87) 1,3,5-Trimethylbenzene	(3)	19.867	105	166298	0.959
88) Alpha Methyl Styrene	(3)	20.457	118	95507	0.970
89) tert-Butylbenzene	(3)	20.700	119	159359	0.930
90) 1,2,4-Trimethylbenzene	(3)	20.846	105	179526	0.997
91) sec-Butylbenzene	(3)	21.345	105	226031	0.950
92) 1,3-Dichlorobenzene	(3)	21.510	146	204017	1.143
93) 1,4-Dichlorobenzene	(3)	21.795	146	206359	1.100
94) p-Isopropyltoluene	(3)	21.856	119	212506	0.980
95) Benzyl Chloride	(3)	22.288	91	211280	1.303
96) 1,2-Dichlorobenzene	(3)	22.957	146	188016	1.112
97) n-Butylbenzene	(3)	23.176	91	198137	1.122
98) Hexachloroethane	(3)	23.627	117	102761	1.147
99) 1,2-Dibromo-3-chloropropane	(3)	24.709	157	132289	1.440
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	98520	1.054
101) Hexachlorobutadiene	(3)	26.279	225	88445	0.865
102) Naphthalene	(3)	26.297	128	242239	1.253

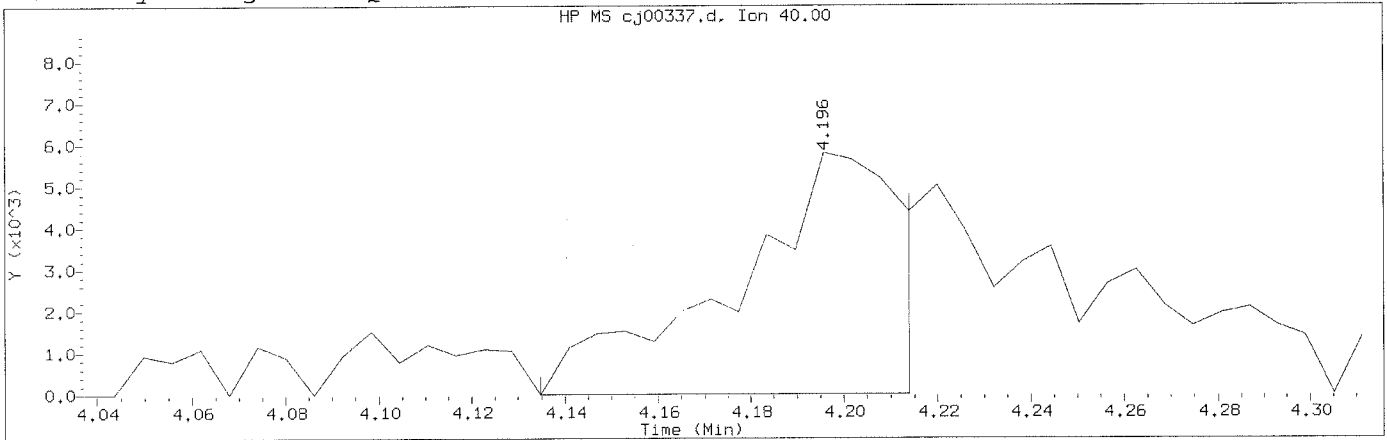
page 3 of 3

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 on 10/16/2015 at 17:41.  
 Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00337.d  
Injection date and time: 16-OCT-2015 10:21

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 17:40

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD001

Lab Sample ID: VSTD001

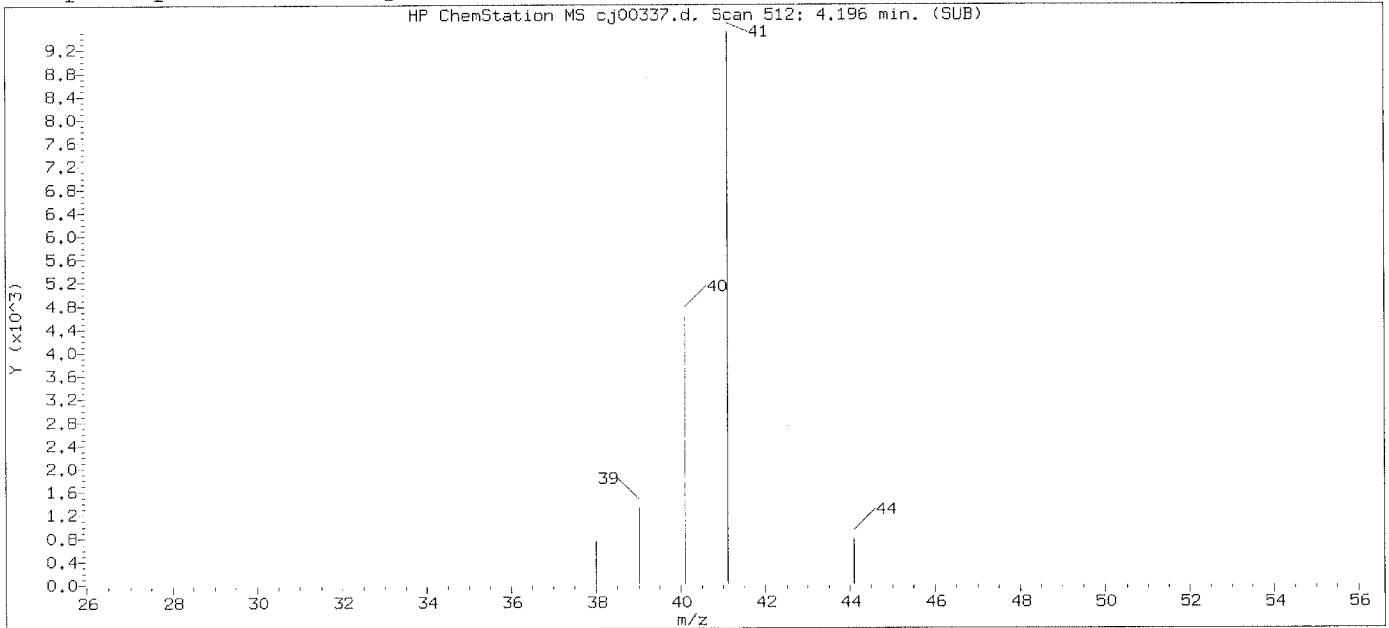
Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 512  
Retention Time (minutes): 4.196  
Quant Ion : 40.00  
Area (flag) : 14570M  
Concentration (ppb(v)) : 2.4118  
Integration start scan : 501      Integration stop scan: 514  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

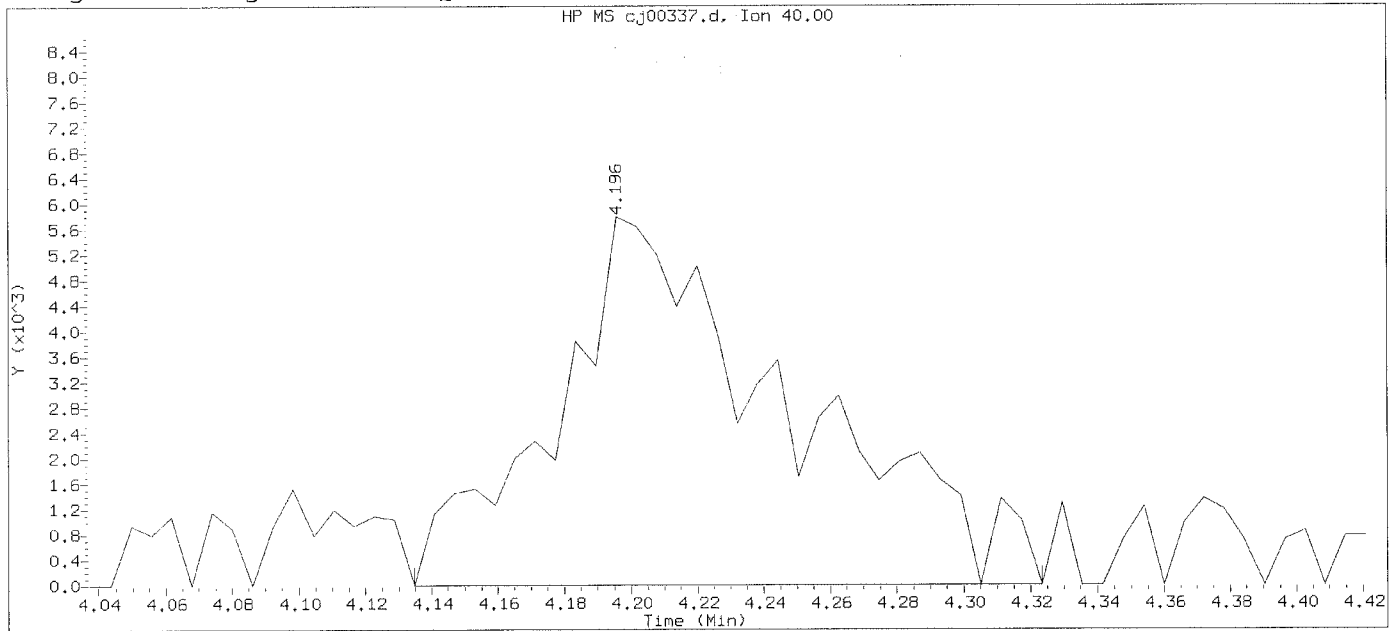
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mqp1258 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00337.d      Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 10:21      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m      Sublist used: all  
Calibration date and time: 16-OCT-2015 10:05  
Date, time and analyst ID of latest file update: 16-Oct-2015 11:01 Automation

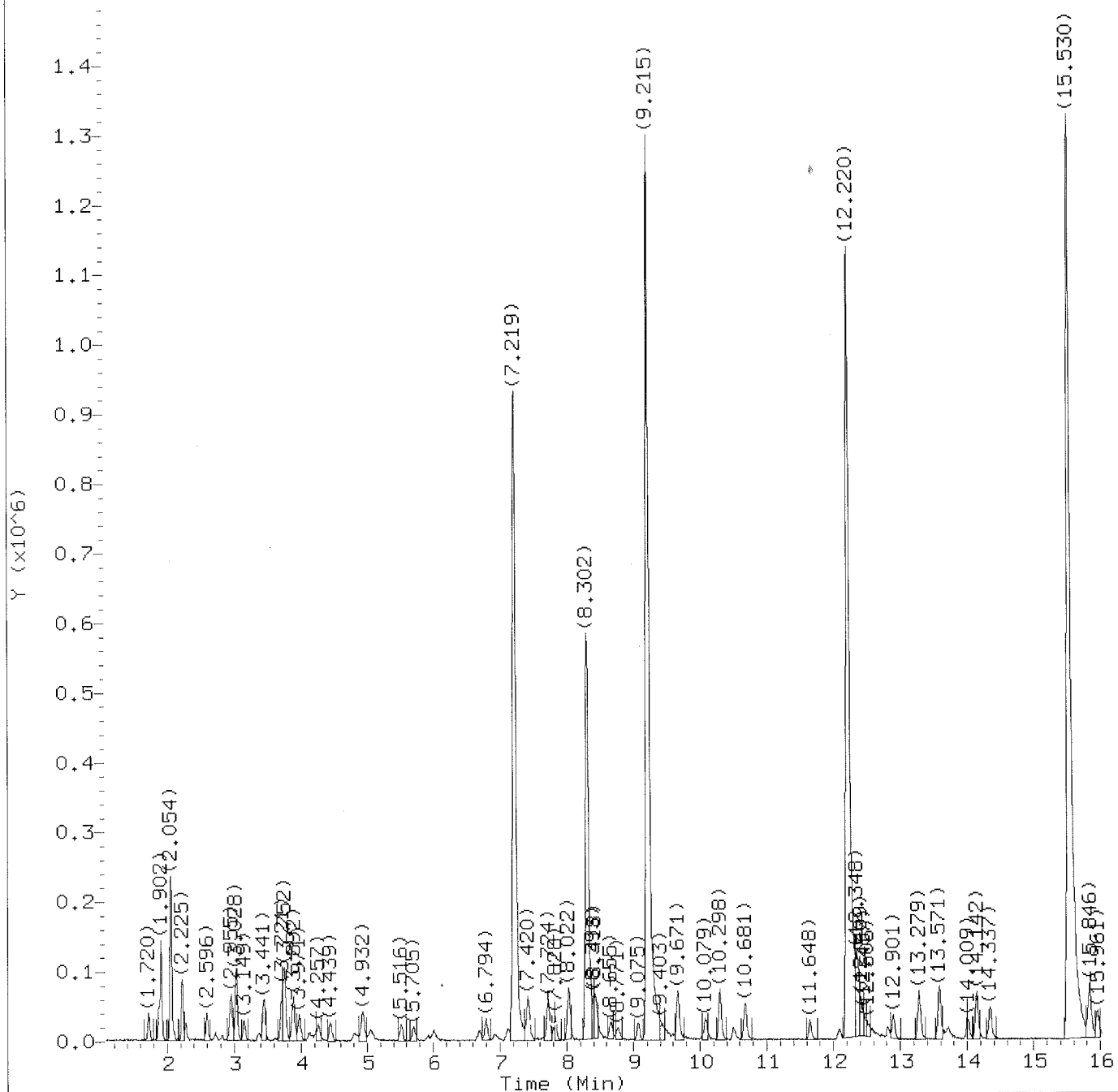
Sample Name: VSTD001

Lab Sample ID: VSTD001

Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 512  
Retention Time (minutes): 4.196  
Quant Ion : 40.00  
Area : 28717  
Concentration (ppb(v)) : 2.9562  
Integration start scan : 501      Integration stop scan: 532  
Y at integration start : 0      Y at integration end: 0

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.  
Target 3.5 esignature user ID: jeb07445





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d  
Injection date and time: 16-OCT-2015 08:37

Instrument ID: HP09464.i  
Analyst ID: jeb07445

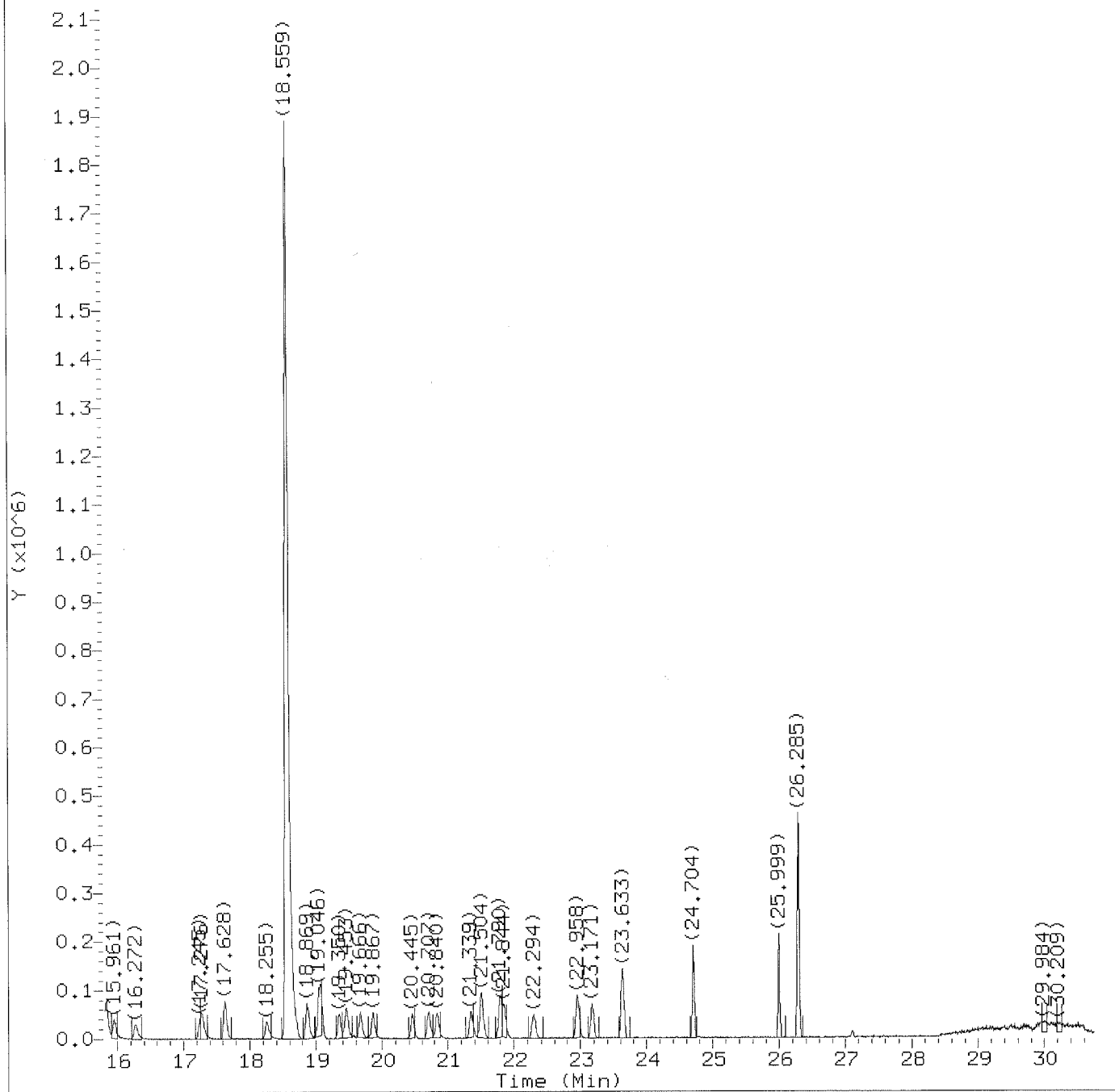
Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 18:12  
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sublist used: all

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d  
Injection date and time: 16-OCT-2015 08:37

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 18:12  
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sublist used: all

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 18:17.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d  
 Injection date and time: 16-OCT-2015 08:37

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 18:12

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	8444	0.478
2) Dichlorodifluoromethane	(1)	1.902	85	120373	0.550
3) Chlorodifluoromethane	(1)	1.915	51	39377	0.563
4) Freon 114	(1)	2.048	85	94620	0.480
5) Chloromethane	(1)	2.097	52	4811	0.463
6) Vinyl Chloride	(1)	2.225	62	25375	0.547
7) 1,3-Butadiene	(1)	2.280	54	13983	0.490
8) Bromomethane	(1)	2.584	94	32181	0.476
9) Chloroethane	(1)	2.718	64	13051	0.498
10) Bromoethene	(1)	2.937	106	33086	0.516
11) Dichlorofluoromethane	(1)	2.955	67	66943	0.547
12) Trichlorofluoromethane	(1)	3.028	101	118130	0.500
13) Pentane	(1)	3.143	43	20601	0.513
14) Ethanol	(1)	3.356	45	22181	2.346
15) Freon123a	(1)	3.435	67	47240	0.548
16) Acrolein	(1)	3.600	56	5528	0.626
17) 1,1-Dichloroethene	(1)	3.703	61	39882	0.518
18) Freon 113	(1)	3.752	103	49181	0.525
19) Acetone	(1)	3.861	43	23723	0.775
20) Methyl Iodide	(1)	3.892	142	101625	0.504
21) Carbon Disulfide	(1)	3.977	76	82945	0.525
22) Isopropanol	(1)	4.129	45	30222	0.835
23) Acetonitrile	(1)	4.232	40	13291	1.909
24) 3-Chloropropene	(1)	4.263	76	9616	0.441
25) Methylene Chloride	(1)	4.439	84	25526	0.535
26) tert-Butyl Alcohol	(1)	4.835	59	36685M	0.674
27) Acrylonitrile	(1)	4.902	53	13854	0.843
28) trans-1,2-Dichloroethene	(1)	4.938	61	30716	0.471
29) Methyl t-Butyl Ether	(1)	5.048	73	41252	0.490
30) Hexane	(1)	5.510	57	18026	0.378
31) 1,1-Dichloroethane	(1)	5.717	63	35716	0.444
32) Vinyl Acetate	(1)	5.930	86	2293M	0.274
33) Di-Isopropyl Ether	(1)	5.997	45	8567	0.178
36) 1,2-Dichloroethene (total)	(1)		61	47497	0.751
34) Ethyl Tert-Butyl Ether	(1)	6.690	59	22331	0.334
35) cis-1,2-Dichloroethene	(1)	6.794	61	16781	0.280
37) 2-Butanone	(1)	6.921	72	8478	0.570
38) Ethyl Acetate	(1)	7.110	70	3781	0.560

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey  
 on 10/16/2015 at 18:17.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d  
 Injection date and time: 16-OCT-2015 08:37

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 18:12  
 Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sublist used: all

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.128	55	20454	0.543
40) *Bromochloromethane	(1)	7.219	130	744063	10.000
41) Tetrahydrofuran	(1)	7.414	42	9056	0.560
42) Chloroform	(1)	7.420	83	66557	0.472
43) 1,1,1-Trichloroethane	(1)	7.718	97	72333	0.451
44) Cyclohexane	(1)	7.828	56	19178	0.367
45) Carbon Tetrachloride	(1)	8.022	117	88838	0.490
46) Benzene	(2)	8.418	78	71052	0.526
47) 1,2-Dichloroethane	(2)	8.454	62	42360	0.541
48) Isooctane	(2)	8.679	57	39830	0.314
49) Tert-Amyl Methyl Ether	(2)	8.759	73	28645	0.388
50) Heptane	(2)	9.063	43	10053	0.287
51) *1,4-Difluorobenzene	(2)	9.215	114	2205333	10.000
52) Trichloroethene	(2)	9.671	130	41398	0.448
53) Ethyl Acrylate	(2)	10.042	55	21258	0.561
54) 1,2-Dichloropropane	(2)	10.091	63	18614	0.497
55) Dibromomethane	(2)	10.292	174	51806	0.563
56) 1,4-Dioxane	(2)	10.498	88	7095	0.257
57) Methyl Methacrylate	(2)	10.498	69	11887	0.415
58) Bromodichloromethane	(2)	10.675	83	63857	0.464
59) cis-1,3-Dichloropropene	(2)	11.648	75	33812	0.462
60) 4-Methyl-2-Pentanone	(2)	12.086	43	16744	0.476
61) Toluene	(3)	12.360	91	81660	0.526
64) 1,3-Dichloropropene (total)	(3)		75	77078	0.992
62) Octane	(3)	12.810	43	7967	0.195
63) trans-1,3-Dichloropropene	(3)	12.901	75	43266	0.530
65) Ethyl Methacrylate	(3)	13.273	69	17845	0.410
66) 1,1,2-Trichloroethane	(3)	13.279	97	38127	0.576
67) Tetrachloroethene	(3)	13.571	166	44307	0.335
68) 2-Hexanone	(3)	14.009	43	34068	0.948
69) Dibromochloromethane	(3)	14.142	127	66117	0.518
70) 1,2-Dibromoethane	(3)	14.343	107	67033	0.592
71) *Chlorobenzene-d5	(3)	15.530	117	1988373	10.000
72) Chlorobenzene	(3)	15.590	112	75032	0.486
73) 1,1,1,2-Tetrachloroethane	(3)	15.846	131	50647	0.526
74) Ethylbenzene	(3)	15.961	91	83272	0.485
75) m/p-Xylene	(3)	16.272	91	63822	0.450
77) Xylene (total)	(3)		91	125938	0.866

\* = Compound is an internal standard.

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 on 10/16/2015 at 18:17.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d  
 Injection date and time: 16-OCT-2015 08:37

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 18:12  
 Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sublist used: all

Sample Name: mdlv0.5

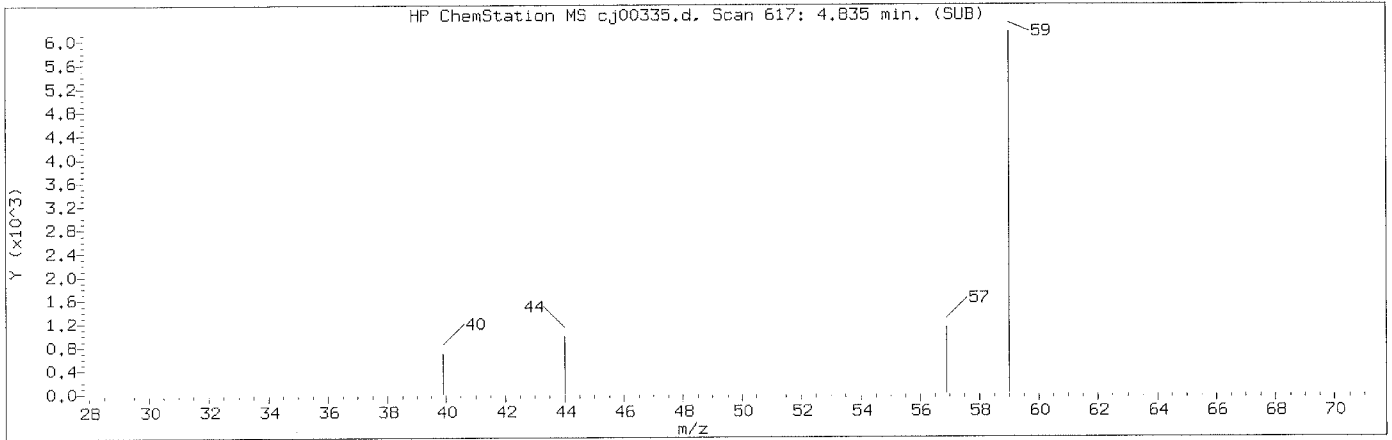
Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.245	91	62116	0.416
78) Styrene	(3)	17.282	104	54915	0.410
79) Bromoform	(3)	17.622	173	81829	0.496
80) Cumene	(3)	18.255	105	71956	0.375
81) Bromobenzene	(3)	18.869	156	63452	0.589
82) 1,1,2,2-Tetrachloroethane	(3)	19.040	83	78991	0.626
83) 1,2,3-Trichloropropane	(3)	19.070	110	29794	0.618
84) n-Propylbenzene	(3)	19.344	120	27790	0.436
85) 2-Chlorotoluene	(3)	19.466	126	36902	0.521
86) 4-Ethyltoluene	(3)	19.666	105	91627	0.429
87) 1,3,5-Trimethylbenzene	(3)	19.861	105	80796	0.439
88) Alpha Methyl Styrene	(3)	20.457	118	40446	0.387
89) tert-Butylbenzene	(3)	20.713	119	77437	0.426
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	85598	0.448
91) sec-Butylbenzene	(3)	21.345	105	106872	0.423
92) 1,3-Dichlorobenzene	(3)	21.510	146	109296	0.577
93) 1,4-Dichlorobenzene	(3)	21.802	146	109625	0.550
94) p-Isopropyltoluene	(3)	21.863	119	99457	0.432
95) Benzyl Chloride	(3)	22.294	91	104101	0.605
96) 1,2-Dichlorobenzene	(3)	22.958	146	100676	0.561
97) n-Butylbenzene	(3)	23.177	91	93925	0.501
98) Hexachloroethane	(3)	23.627	117	55416	0.583
99) 1,2-Dibromo-3-chloropropane	(3)	24.710	157	79063	0.810
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	86587	0.873
101) Hexachlorobutadiene	(3)	26.279	225	74351	0.685
102) Naphthalene	(3)	26.297	128	215915	1.052

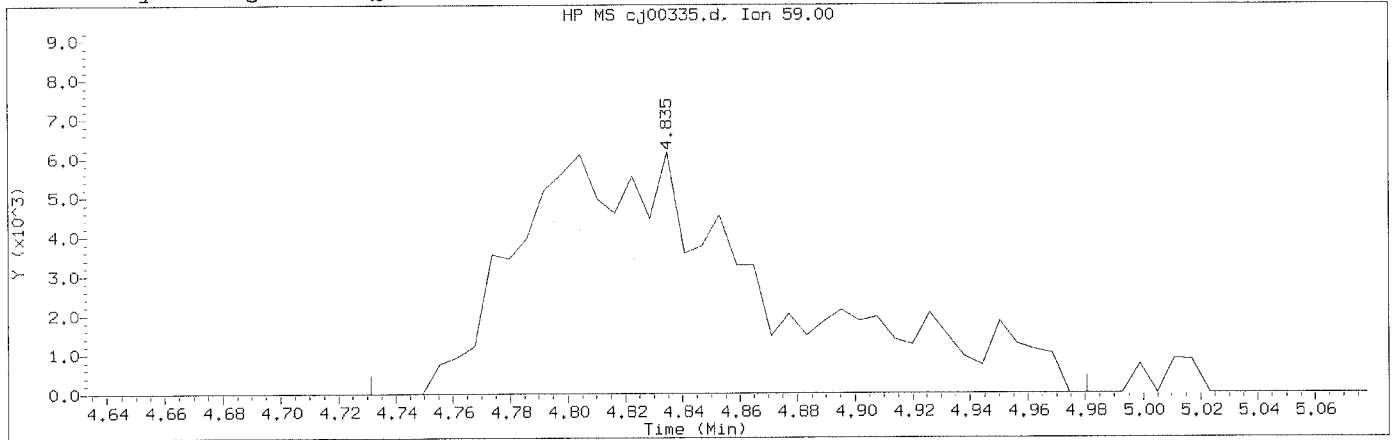
page 3 of 3

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 Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00335.d                      Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 08:37                      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m                      Sublist used: all  
Calibration date and time: 16-OCT-2015 18:12  
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5                      Lab Sample ID: mdlv0.5

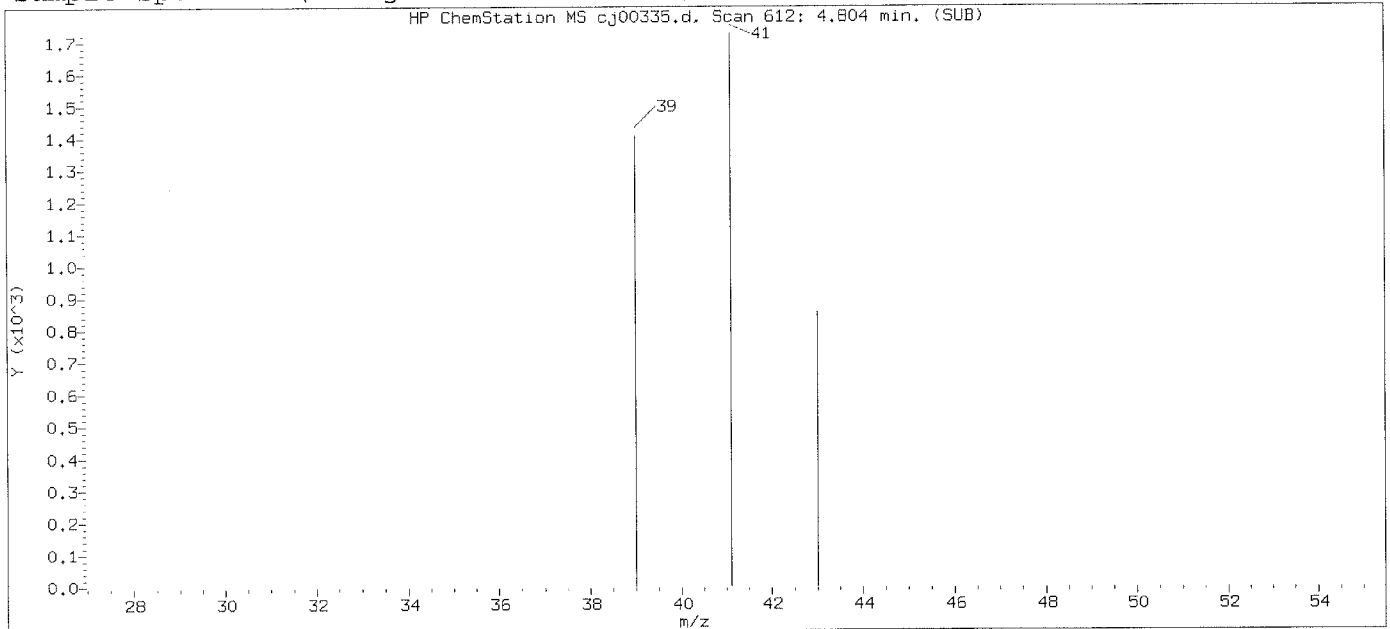
Compound Number                      : 26  
Compound Name                         : tert-Butyl Alcohol  
Scan Number                            : 617  
Retention Time (minutes): 4.835  
Quant Ion                                : 59.00  
Area (flag)                             : 36685M  
Concentration (ppb(v))                : 0.6745  
Integration start scan                : 599                      Integration stop scan: 640  
Y at integration start                 : 0                        Y at integration end: 0

Reason for manual integration: improper integration

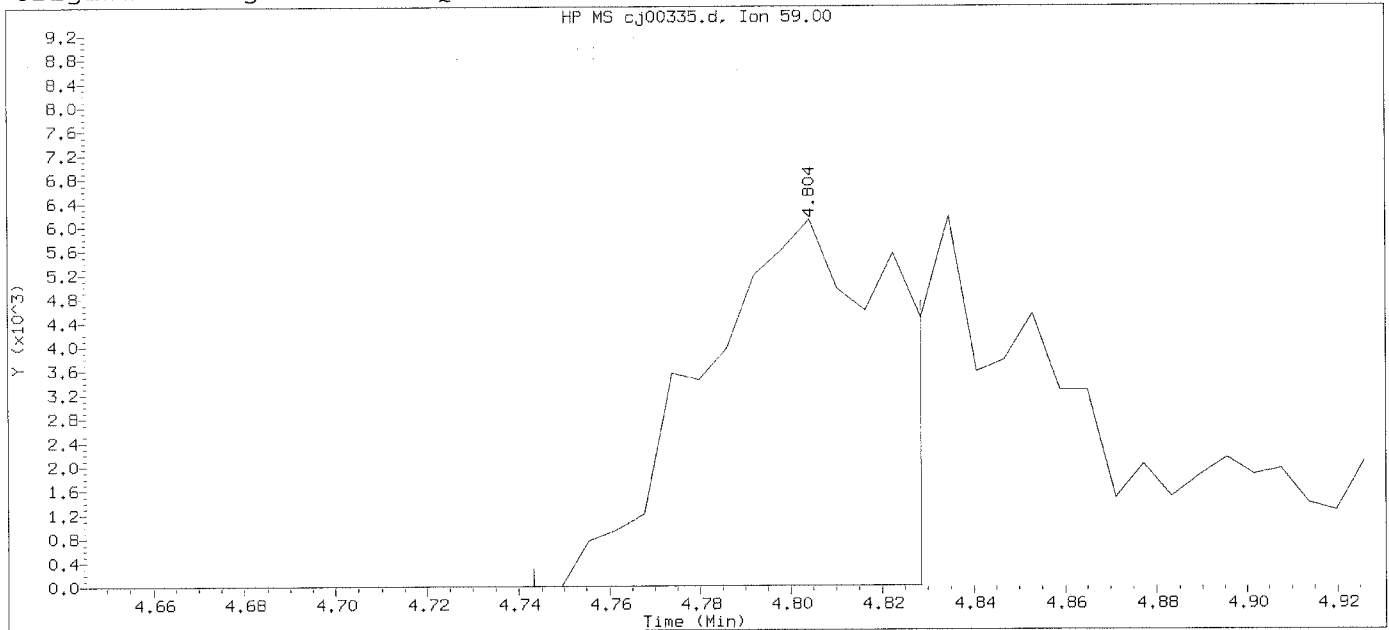
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00335.d  
Injection date and time: 16-OCT-2015 08:37

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 15-OCT-2015 19:21  
Date, time and analyst ID of latest file update: 16-Oct-2015 09:17 Automation

Sublist used: all

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

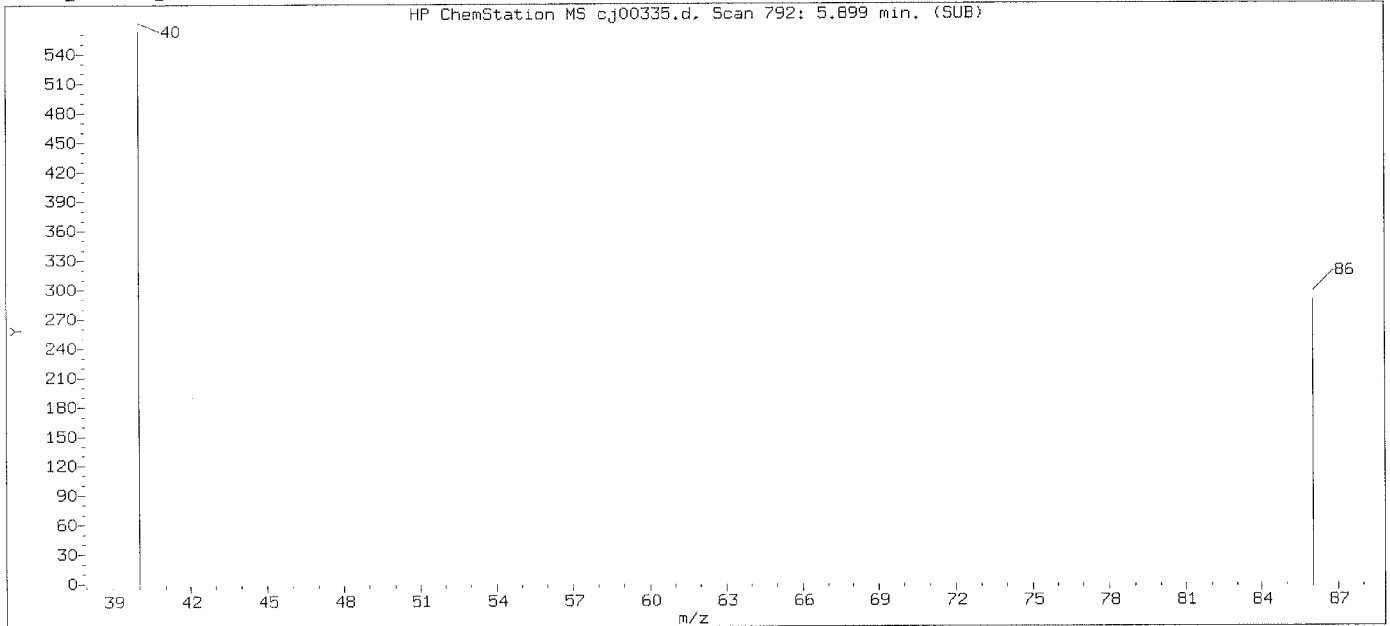
Compound Number : 26  
Compound Name : tert-Butyl Alcohol  
Scan Number : 612  
Retention Time (minutes): 4.804  
Quant Ion : 59.00  
Area : 17534  
Concentration (ppb(v)) : 0.2809  
Integration start scan : 601 Integration stop scan: 615  
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jeb07445

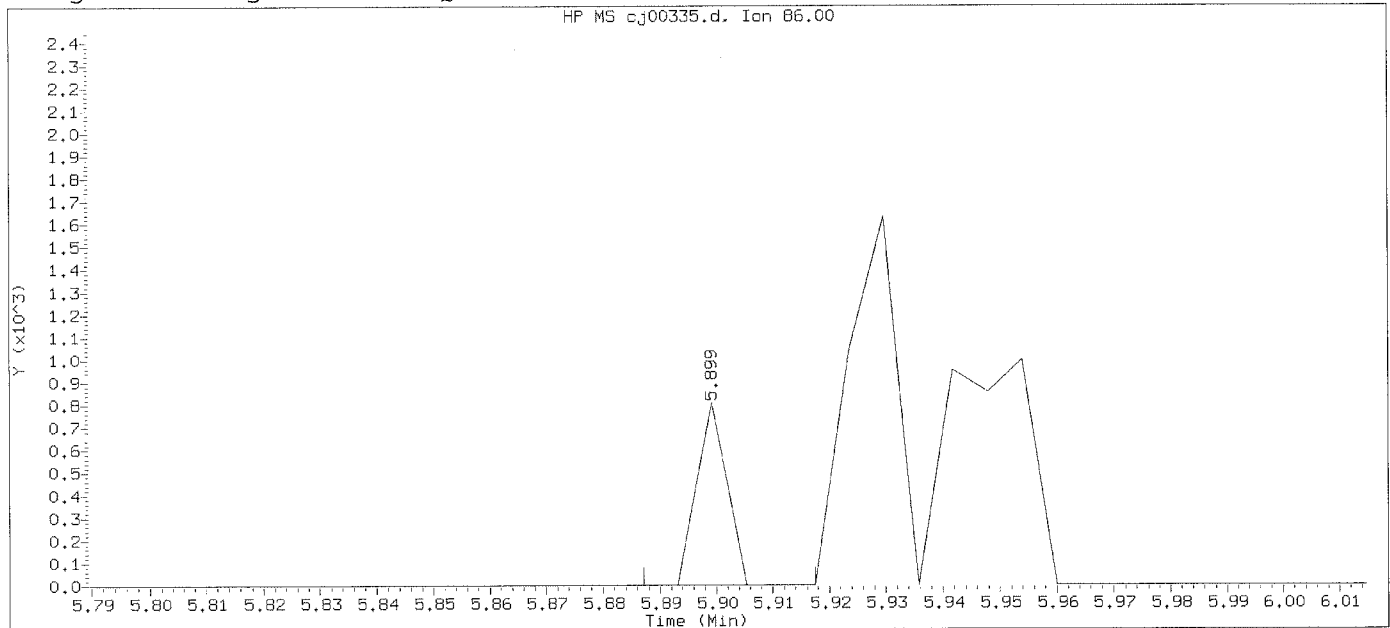




Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



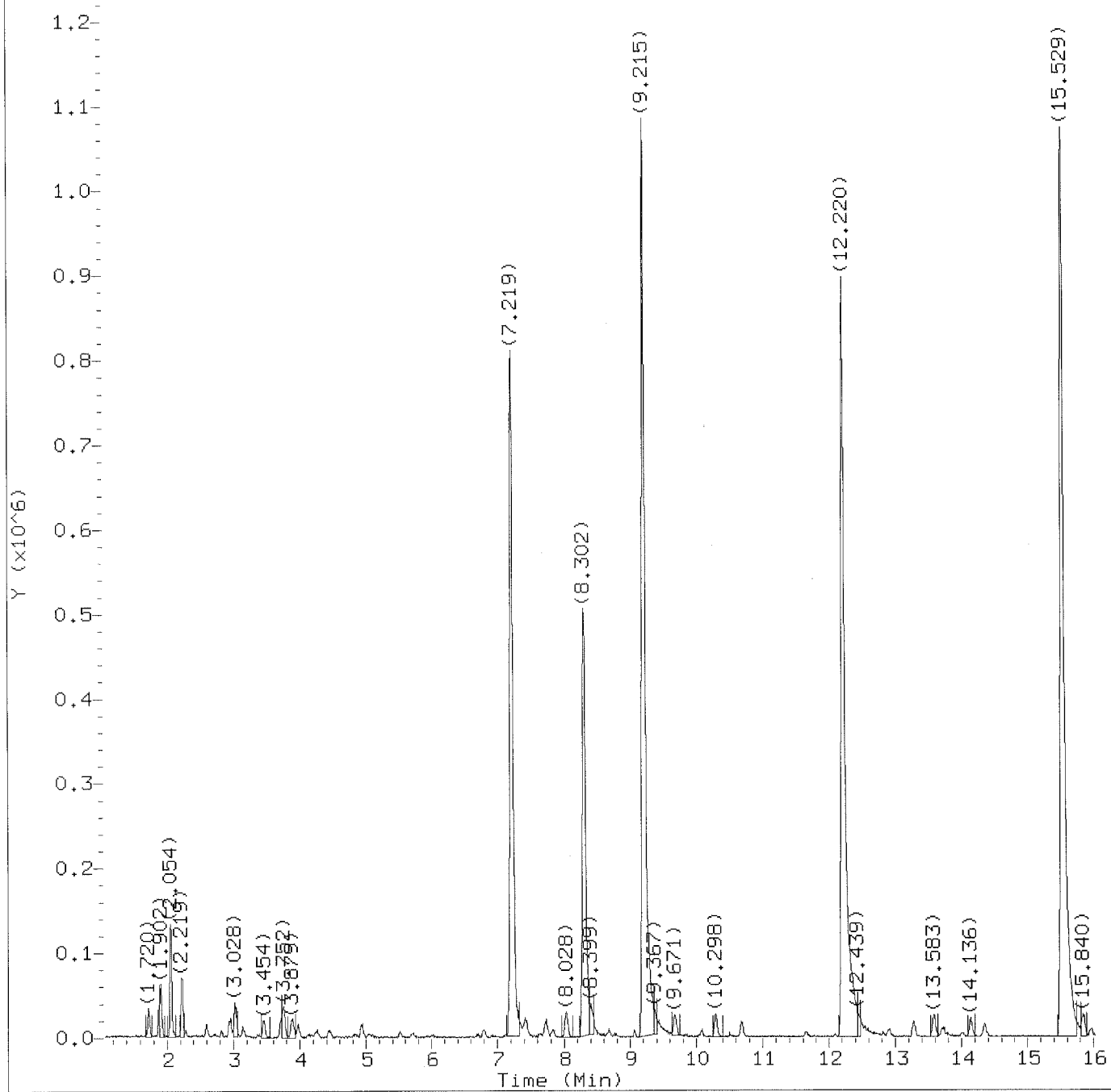
Data File: /chem/HP09464.i/15oct15.b/cj00335.d                      Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 08:37                      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m                      Sublist used: all  
Calibration date and time: 15-OCT-2015 19:21  
Date, time and analyst ID of latest file update: 16-Oct-2015 09:17 Automation

Sample Name: mdlv0.5                      Lab Sample ID: mdlv0.5

Compound Number                      : 32  
Compound Name                         : Vinyl Acetate  
Scan Number                            : 792  
Retention Time (minutes): 5.899  
Quant Ion                               : 86.00  
Area                                    : 295  
Concentration (ppb(v))                : 0.0260  
Integration start scan                : 789                      Integration stop scan: 794  
Y at integration start                : 0                        Y at integration end: 0

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Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d  
Injection date and time: 16-OCT-2015 09:19

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 18:12  
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

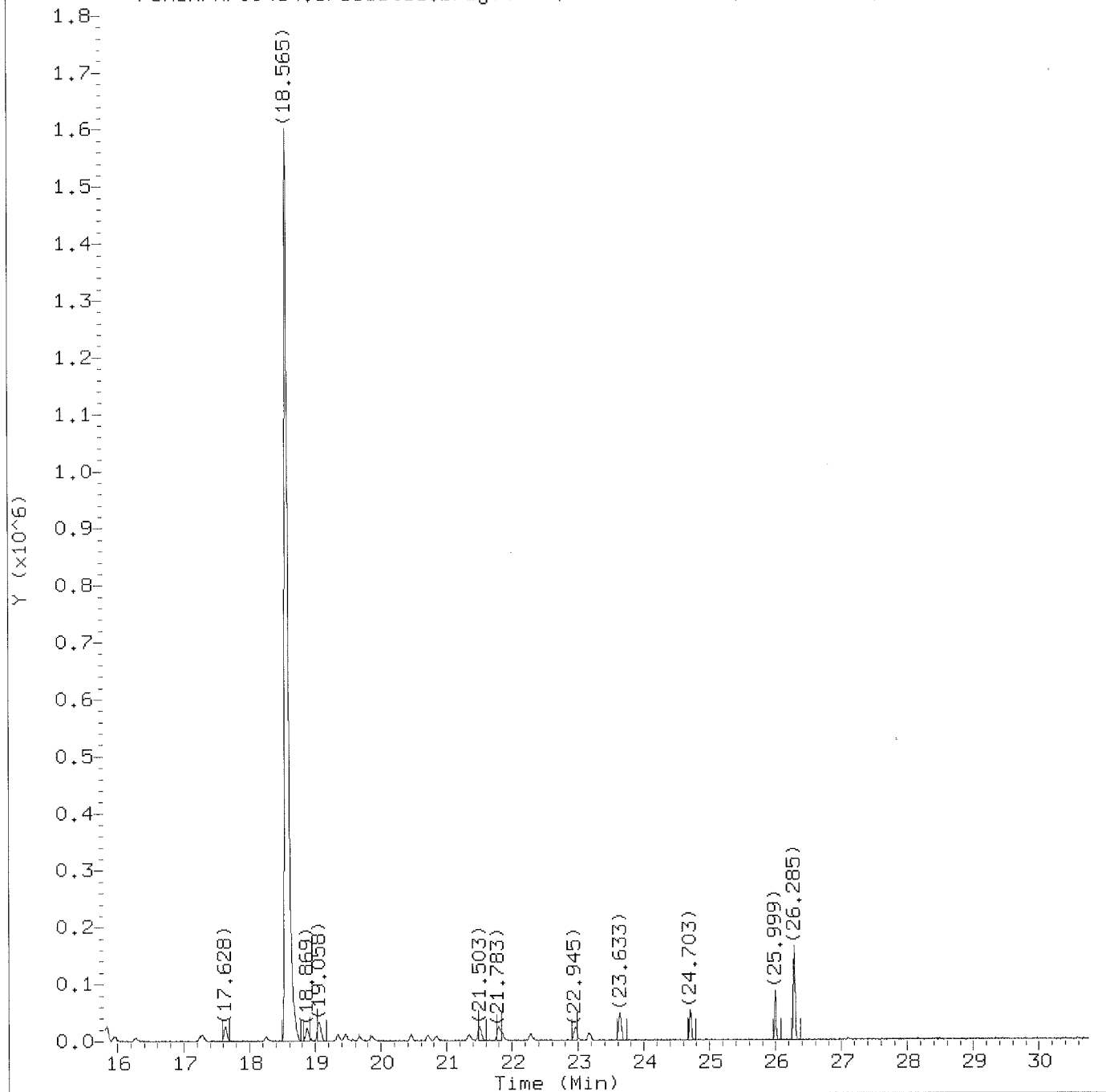
Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

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on 10/16/2015 at 18:17.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d  
Injection date and time: 16-OCT-2015 09:19

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 18:12  
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

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on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d  
 Injection date and time: 16-OCT-2015 09:19

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 18:12  
 Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	4369	0.290
2) Dichlorodifluoromethane	(1)	1.902	85	53765	0.289
3) Chlorodifluoromethane	(1)	1.914	51	13347	0.224
4) Freon 114	(1)	2.048	85	36561	0.218
5) Chloromethane	(1)	2.103	52	865M	0.098
6) Vinyl Chloride	(1)	2.225	62	8325	0.211
7) 1,3-Butadiene	(1)	2.273	54	3572M	0.147
8) Bromomethane	(1)	2.596	94	12883	0.224
9) Chloroethane	(1)	2.724	64	3865M	0.173
10) Bromoethene	(1)	2.936	106	12154	0.223
11) Dichlorofluoromethane	(1)	2.961	67	23249	0.223
12) Trichlorofluoromethane	(1)	3.028	101	46852	0.233
13) Pentane	(1)	3.137	43	7623	0.223
14) Ethanol	(1)	3.393	45	6839M	0.850
15) Freon123a	(1)	3.454	67	16125	0.220
17) 1,1-Dichloroethene	(1)	3.703	61	15168	0.232
18) Freon 113	(1)	3.752	103	17746	0.223
19) Acetone	(1)	3.867	43	6722	0.258
20) Methyl Iodide	(1)	3.879	142	35457	0.206
21) Carbon Disulfide	(1)	3.983	76	30793	0.229
22) Isopropanol	(1)	4.129	45	8496	0.276
23) Acetonitrile	(1)	4.244	40	7000	1.181
24) 3-Chloropropene	(1)	4.263	76	2477M	0.134
25) Methylene Chloride	(1)	4.451	84	10255	0.253
26) tert-Butyl Alcohol	(1)	4.828	59	9698	0.210
27) Acrylonitrile	(1)	4.926	53	2852M	0.204
28) trans-1,2-Dichloroethene	(1)	4.944	61	10951	0.197
29) Methyl t-Butyl Ether	(1)	5.054	73	11716	0.163
30) Hexane	(1)	5.516	57	5241	0.129
31) 1,1-Dichloroethane	(1)	5.711	63	12544	0.183
33) Di-Isopropyl Ether	(1)	6.033	45	3050M	0.075
36) 1,2-Dichloroethene (total)	(1)		61	17946	0.335
34) Ethyl Tert-Butyl Ether	(1)	6.702	59	6049	0.106
35) cis-1,2-Dichloroethene	(1)	6.781	61	6995	0.137
37) 2-Butanone	(1)	6.939	72	299M	0.024
39) Methyl Acrylate	(1)	7.146	55	3080M	0.096
40) *Bromochloromethane	(1)	7.219	130	633154	10.000
42) Chloroform	(1)	7.432	83	24622	0.205

M = Compound was manually integrated.  
 \* = Compound is an internal standard.

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 on 10/16/2015 at 18:17.  
 Target 3.5 esignature user ID: jeb07445