

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
 Data File : VL031286.D
 Acq On : 21 Dec 2017 1:56
 Operator : SY/AP
 Sample : I7005-07DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-SV-6DL

Manual Integrations
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 12/22/2017 4:55:04 PM

Quant Time: Dec 22 06:17:50 2017
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL121317AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Dec 14 2017
 QLast Update : Thu Dec 14 04:29:58 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.91	49	1473110	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.45	114	3615760	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.41	117	3503888	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.75	95	2989253	11.99	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	119.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl Chloride	3.40	62	10296	0.11	ppbv	90
9) Propene	3.13	41	179061	2.18	ppbv	97
10) Heptane	8.40	43	31273	0.12	ppbv #	85
11) Trichlorofluoromethane	4.13	101	65846	0.32	ppbv	98
13) Ethanol	3.78	45	22648	0.96	ppbv	92
15) Acetone	4.03	43	530752	2.73	ppbv #	64
17) tert-Butyl alcohol	4.52	59	28969	0.27	ppbv #	89
20) Methylene Chloride	4.54	84	15091	0.23	ppbv	92
26) Hexane	5.93	57	33642	0.18	ppbv #	5
27) Carbon Disulfide	4.75	76	21854	0.12	ppbv #	75
32) 1,1,1-Trichloroethane	6.77	97	40401m	0.15	ppbv	
34) 2-Butanone	5.47	43	1661747	6.51	ppbv	100
36) Benzene	7.16	78	68641	0.18	ppbv	96
38) Trichloroethene	8.13	130	24055m	0.16	ppbv	
44) 2,2,4-Trimethylpentane	8.15	57	552911	0.96	ppbv	97
51) 2-Hexanone	10.46	43	133027m	0.45	ppbv	
52) Tetrachloroethene	11.55	164	1889193	13.36	ppbv	97
53) Toluene	10.11	91	603398	1.45	ppbv	100
58) Ethyl Benzene	13.04	91	607610	1.05	ppbv	99
59) m/p-Xylene	13.30	91	2233955	4.82	ppbv	99
60) o-Xylene	14.03	91	1666021	3.57	ppbv	97
62) Isopropylbenzene	15.01	105	215342	0.35	ppbv	97
64) n-propylbenzene	15.91	120	75473	0.46	ppbv	75
67) sec-Butylbenzene	17.64	105	125983	0.17	ppbv	96
72) 4-Ethyltoluene	16.18	105	323410	0.63	ppbv #	87
73) 1,3,5-Trimethylbenzene	16.34	105	543158	1.19	ppbv	99
74) 1,2,4-Trimethylbenzene	17.11	105	460217	0.96	ppbv #	79

(#) = qualifier out of range (m) = manual integration (+) = signals summed

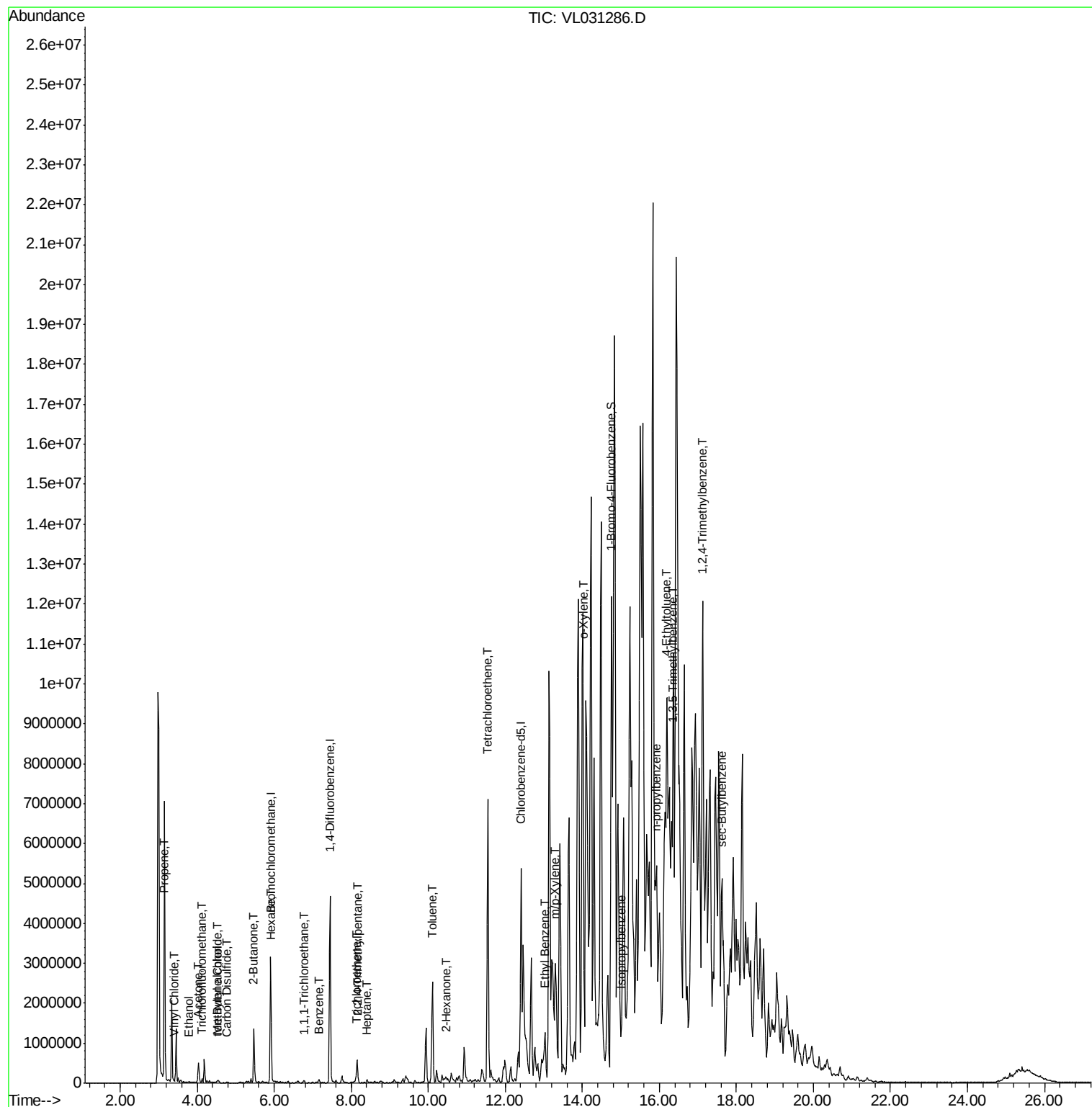
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
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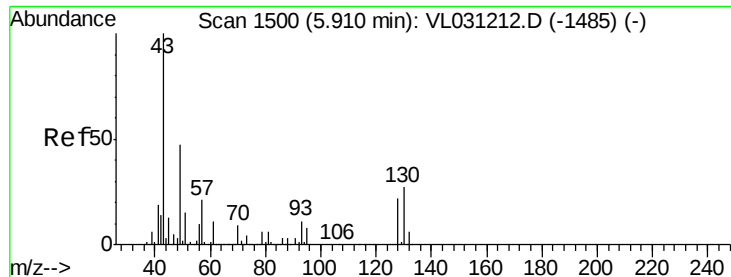
Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-6DL

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Quant Time: Dec 22 06:17:50 2017
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL121317AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Dec
QLast Update : Thu Dec 14 04:29:58 2017
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.91 min Scan# 1499

Delta R.T. -0.00 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-6DL

Tot Ion: 49 Resp: 1473110

Ion Ratio Lower Upper

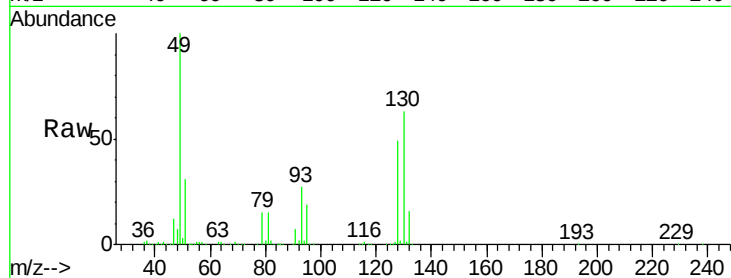
49 100

128 50.1 23.2 69.5

130 64.2 29.6 88.8

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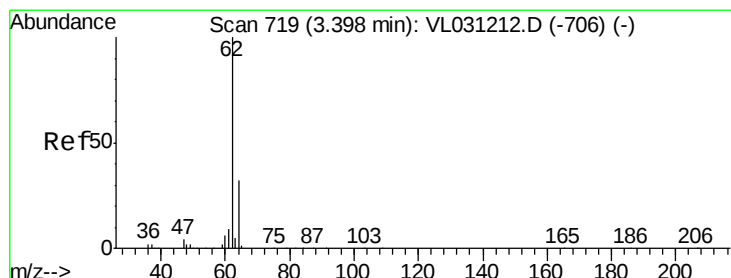
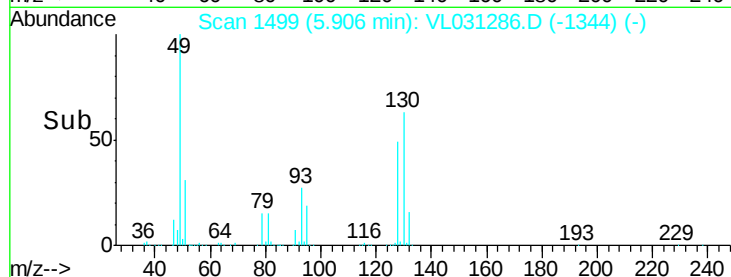
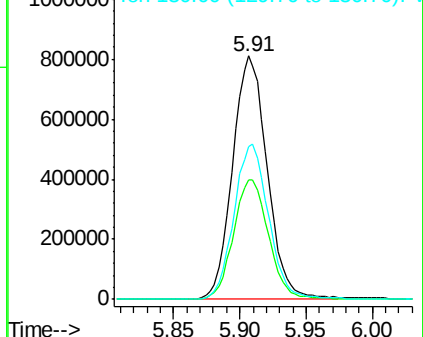
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#5

Vinyl Chloride

Concen: 0.11 ppbv

RT: 3.40 min Scan# 719

Delta R.T. 0.00 min

Lab File: VL031286.D

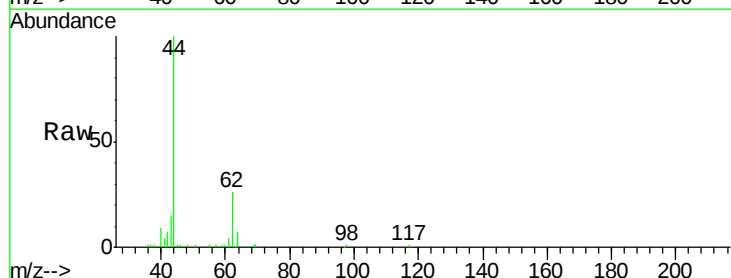
Acq: 21 Dec 2017 1:56

Tgt Ion: 62 Resp: 10296

Ion Ratio Lower Upper

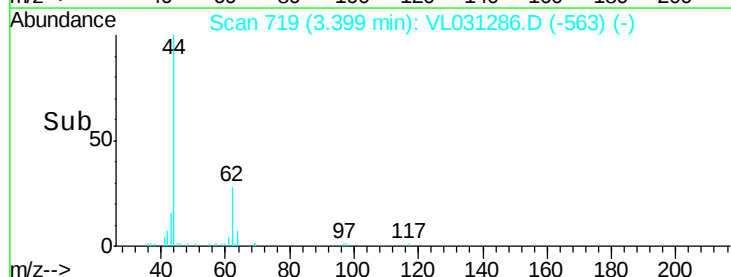
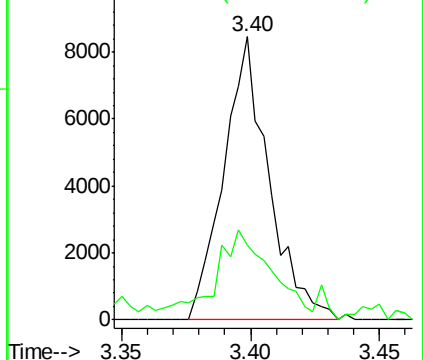
62 100

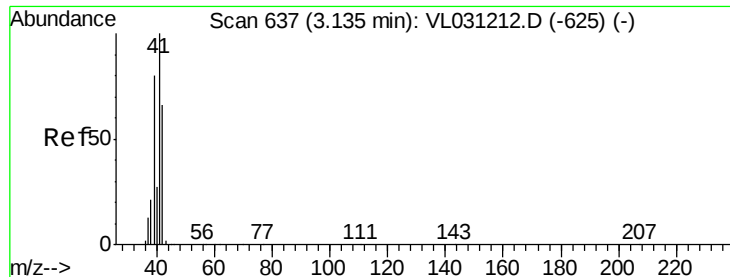
64 26.5 25.9 38.9



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0





#9

Propene

Concen: 2.18 ppbv

RT: 3.13 min Scan# 637

Delta R.T. 0.00 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-6DL

Tot Ion: 41 Resp: 179061

Ion Ratio Lower Upper

41 100

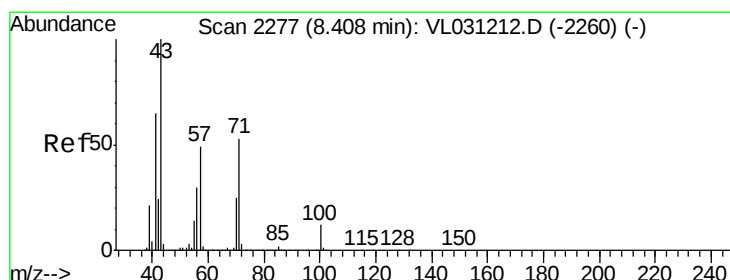
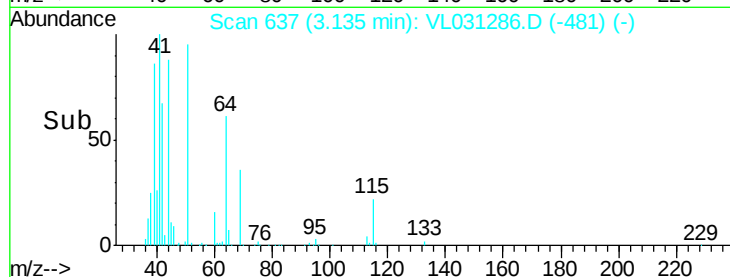
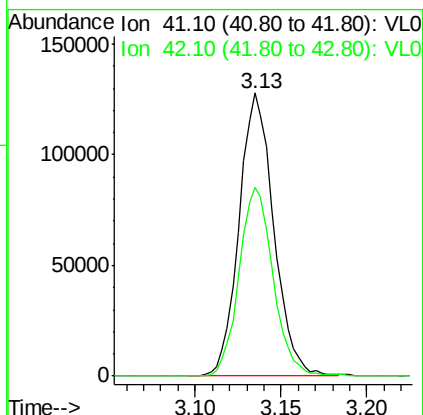
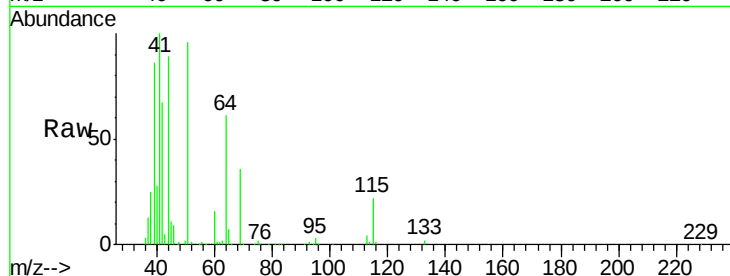
42 65.7 54.3 81.5

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#10

Heptane

Concen: 0.12 ppbv

RT: 8.40 min Scan# 2276

Delta R.T. -0.00 min

Lab File: VL031286.D

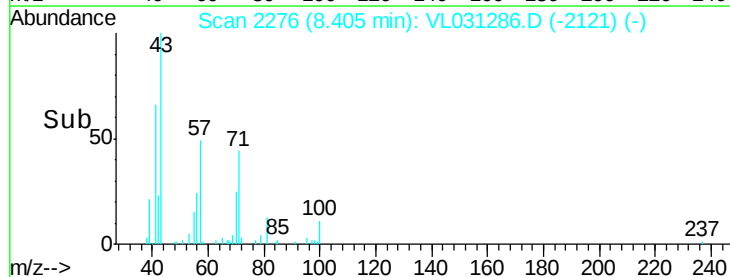
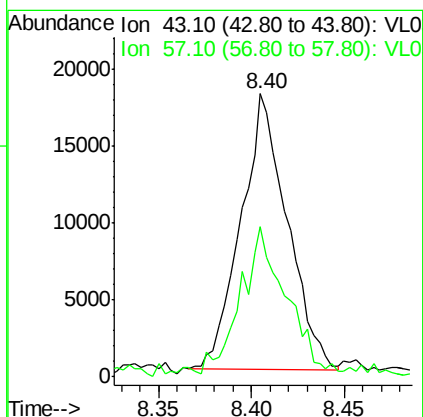
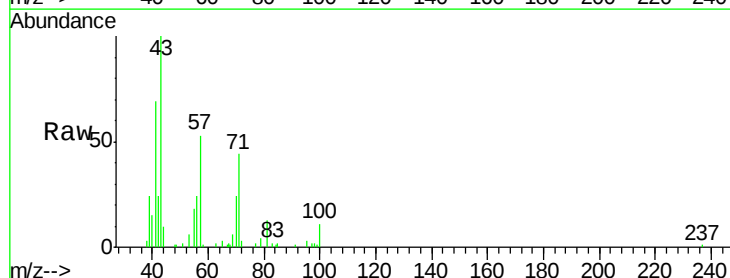
Acq: 21 Dec 2017 1:56

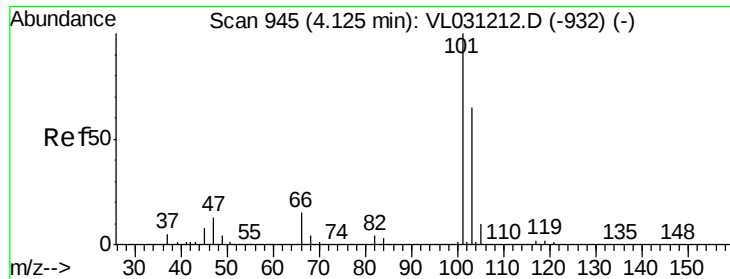
Tgt Ion: 43 Resp: 31273

Ion Ratio Lower Upper

43 100

57 59.9 39.8 59.8#





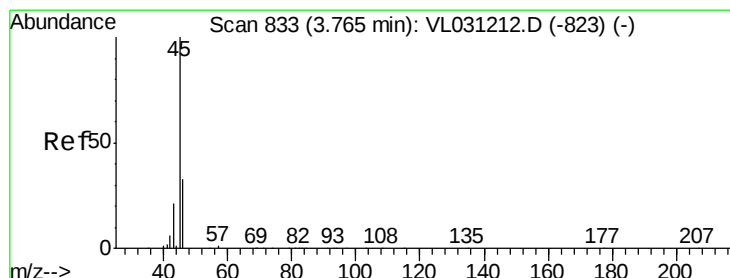
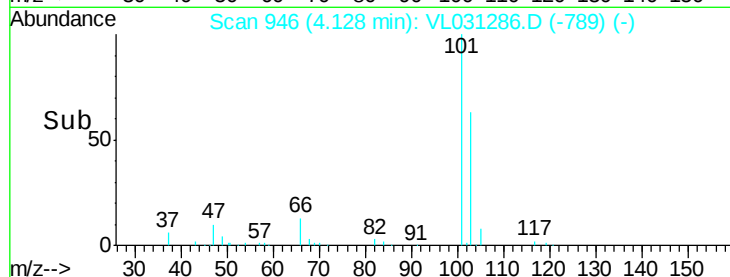
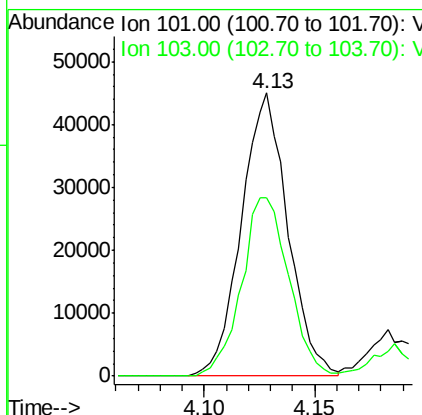
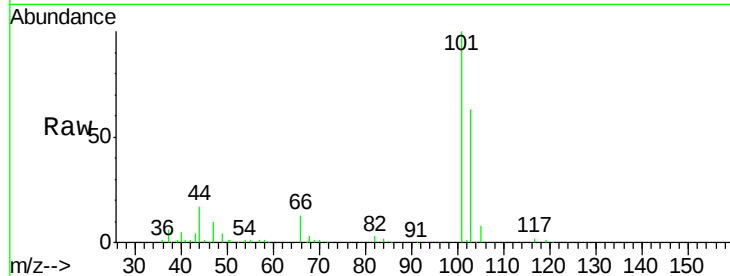
#11
Trichlorofluoromethane
Concen: 0.32 ppbv
RT: 4.13 min Scan# 946
Delta R.T. 0.00 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Instrument :
MSVOA_L
ClientSampled :
EP1-SV-6DL

Tot Ion:101 Resp: 65846
Ion Ratio Lower Upper
101 100
103 63.1 51.8 77.8

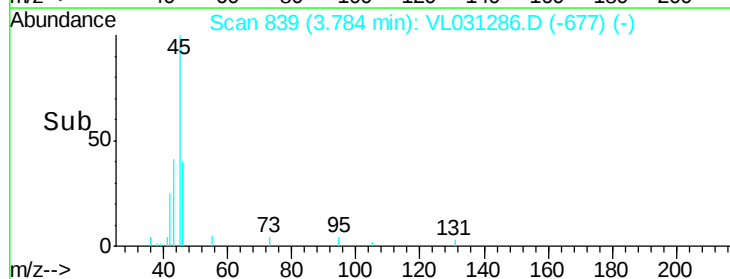
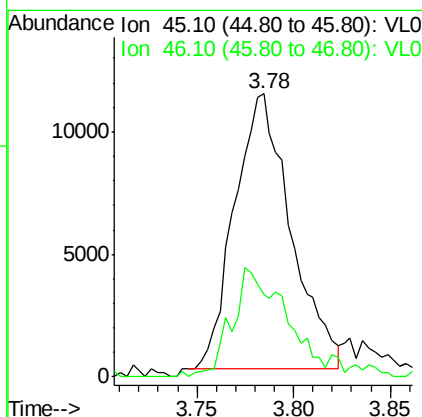
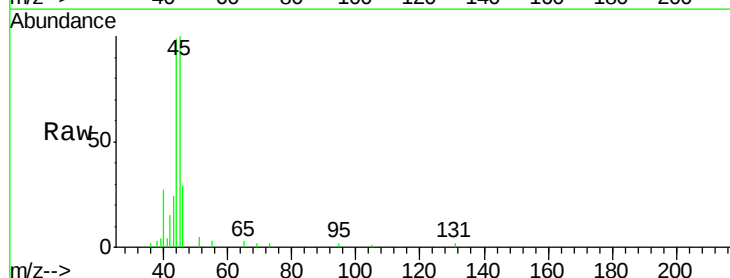
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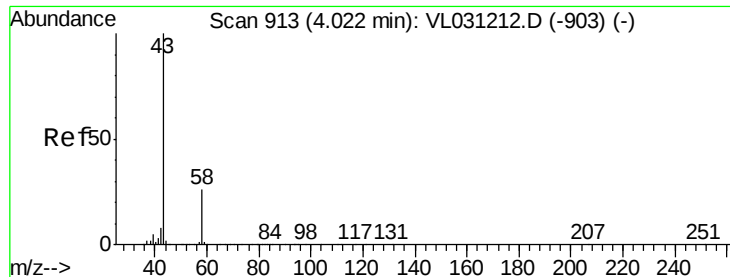
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#13
Ethanol
Concen: 0.96 ppbv
RT: 3.78 min Scan# 839
Delta R.T. 0.02 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Tgt Ion: 45 Resp: 22648
Ion Ratio Lower Upper
45 100
46 41.4 14.6 58.4





#15

Acetone

Concen: 2.73 ppbv

RT: 4.03 min Scan# 914

Delta R.T. 0.00 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-6DL

Tot Ion: 43 Resp: 530752

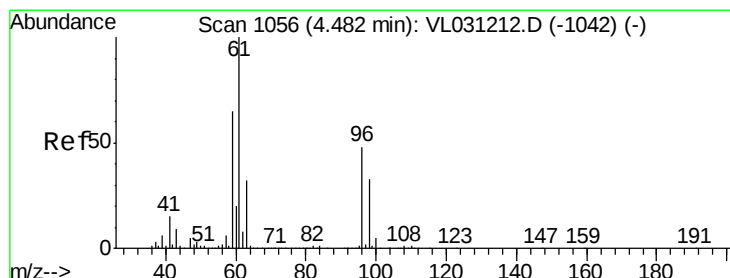
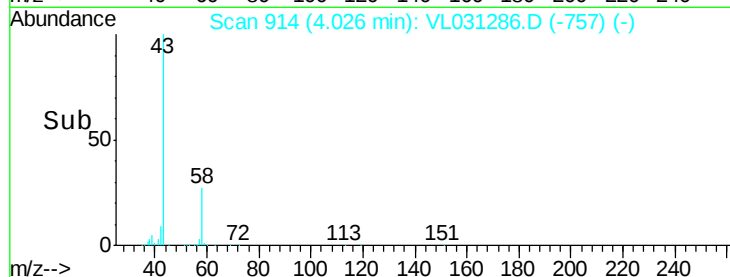
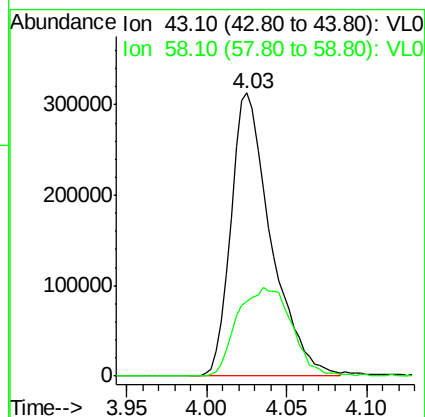
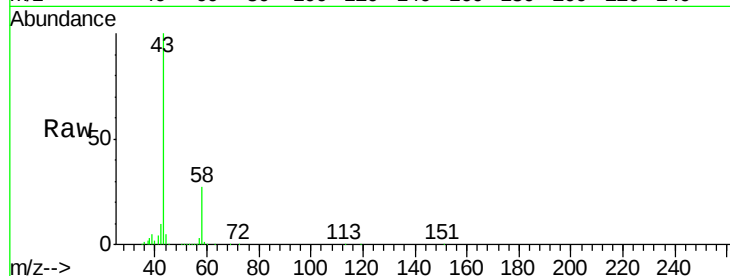
Ion Ratio Lower Upper

43 100

58 43.7 20.3 30.5#

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#17

tert-Butyl alcohol

Concen: 0.27 ppbv

RT: 4.52 min Scan# 1067

Delta R.T. 0.04 min

Lab File: VL031286.D

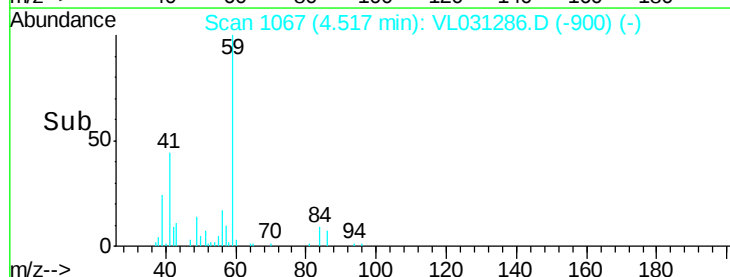
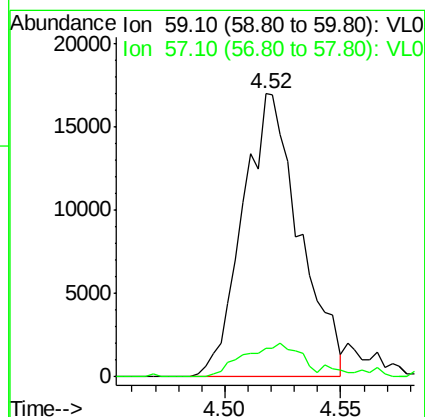
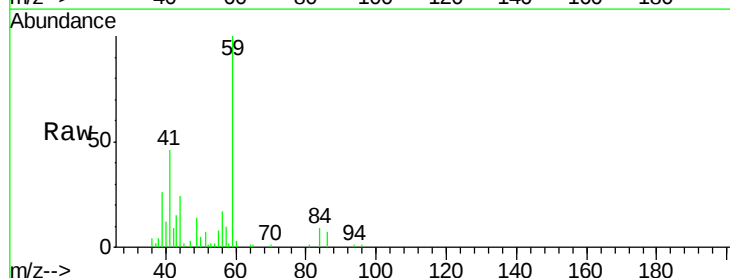
Acq: 21 Dec 2017 1:56

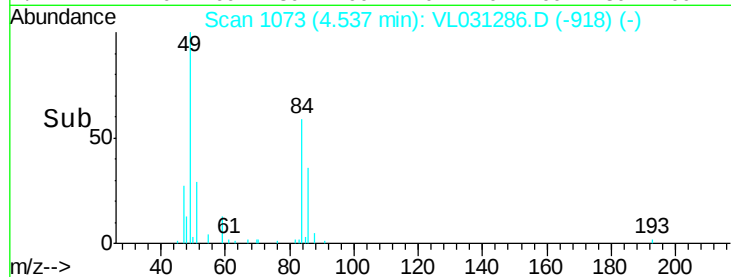
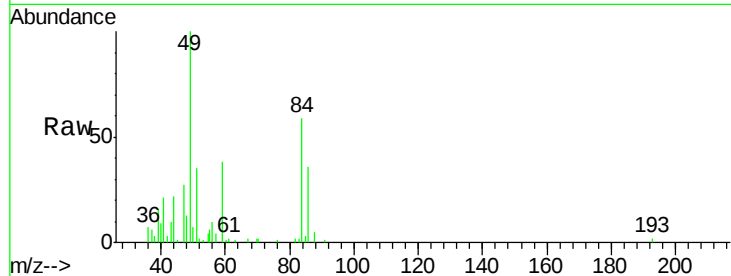
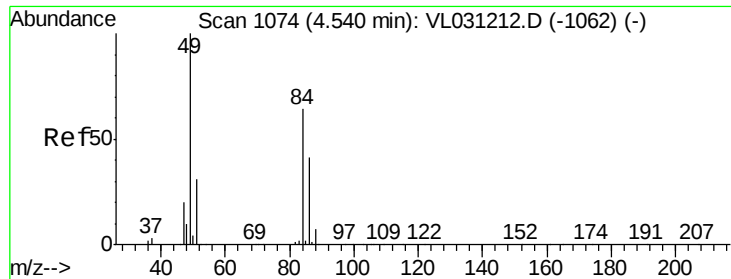
Tgt Ion: 59 Resp: 28969

Ion Ratio Lower Upper

59 100

57 14.3 8.2 12.2#





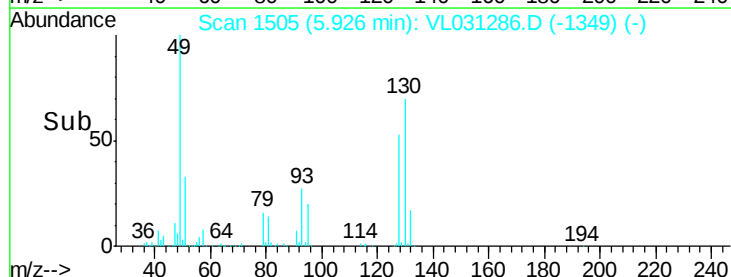
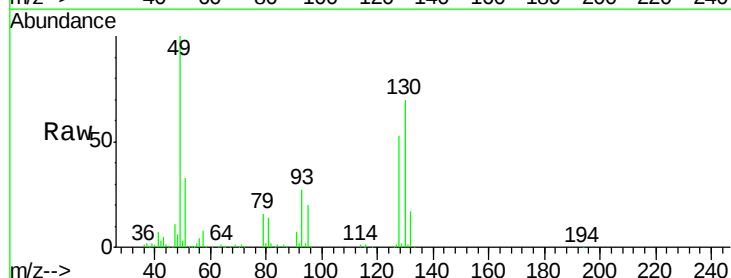
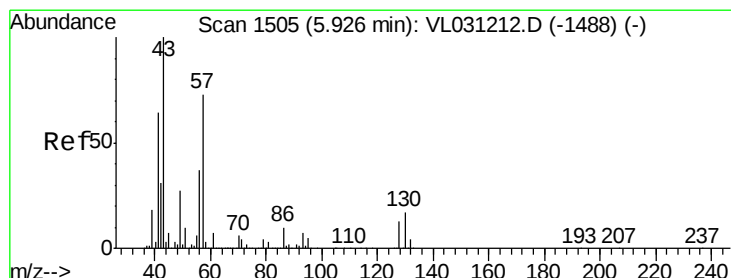
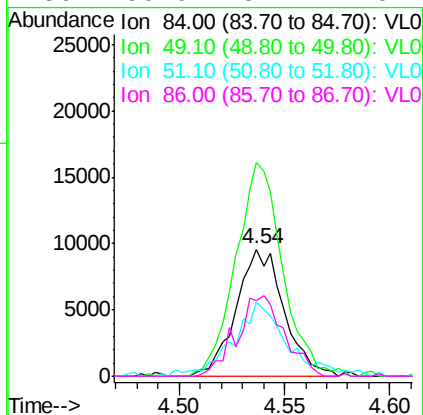
#20
Methvlene Chloride
Concen: 0.23 ppbv
RT: 4.54 min Scan# 1073
Delta R.T. -0.00 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Tot Ion:	84	Resp:	15091
Ion	Ratio	Lower	Upper
84	100		
49	168.2	125.8	188.6
51	57.8	39.3	58.9
86	59.9	51.1	76.7

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-6DL

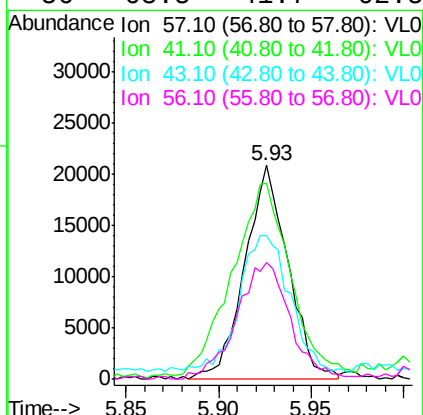
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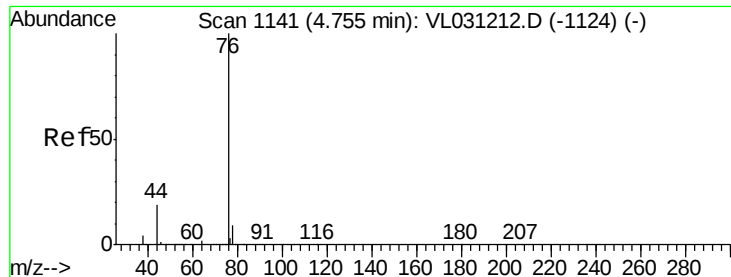
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#26
Hexane
Concen: 0.18 ppbv
RT: 5.93 min Scan# 1505
Delta R.T. 0.00 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Tgt Ion:	57	Resp:	33642
Ion	Ratio	Lower	Upper
57	100		
41	122.1	70.3	105.5#
43	0.0	173.8	260.8#
56	68.5	41.7	62.5#





#27

Carbon Disulfide

Concen: 0.12 ppbv

RT: 4.75 min Scan# 1140

Delta R.T. -0.00 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Instrument :

MSVOA_L

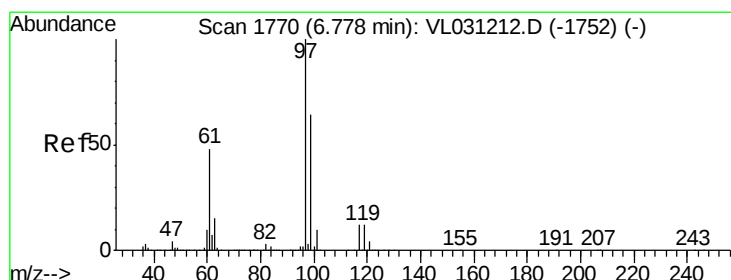
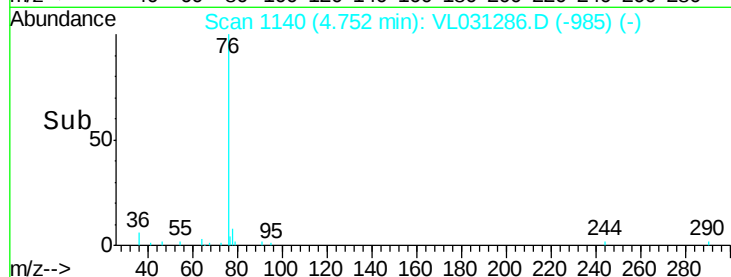
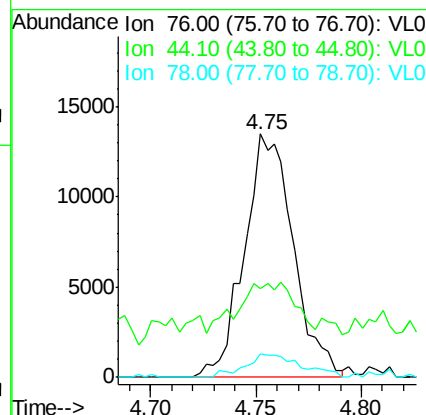
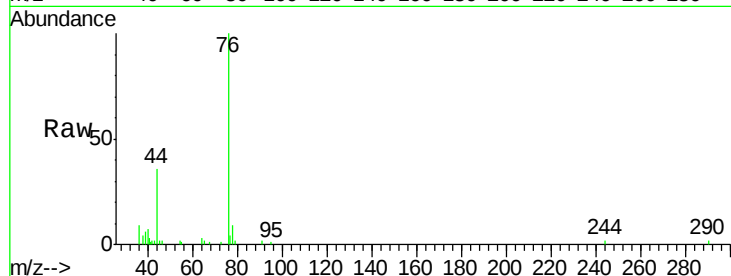
ClientSampleId :

EP1-SV-6DL

Tot Ion:	76	Resp:	21854
Ion	Ratio	Lower	Upper
76	100		
44	35.7	16.0	24.0#
78	10.9	7.5	11.3

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#32

1,1,1-Trichloroethane

Concen: 0.15 ppbv m

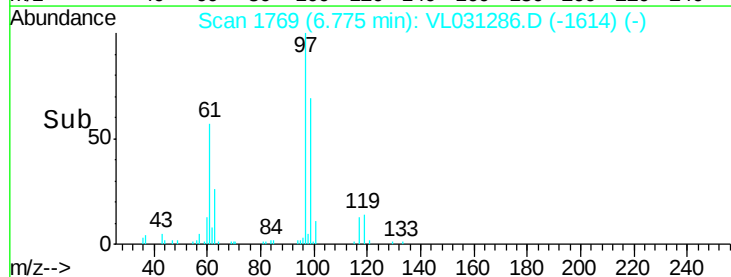
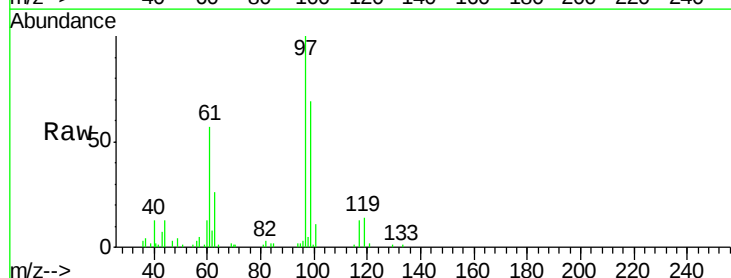
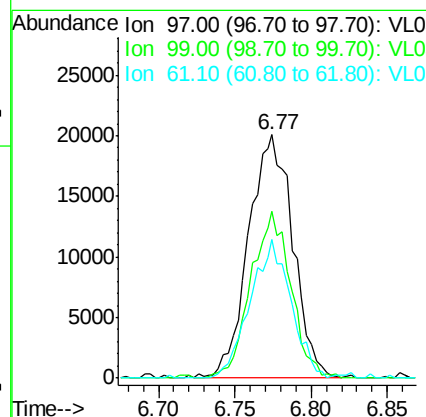
RT: 6.77 min Scan# 1769

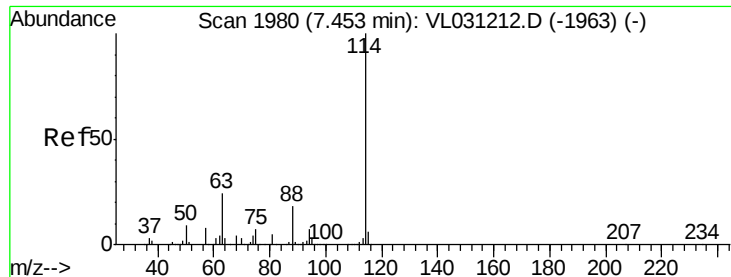
Delta R.T. -0.00 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Tgt Ion:	97	Resp:	40401
Ion	Ratio	Lower	Upper
97	100		
99	62.2	51.4	77.0
61	53.1	38.4	57.6





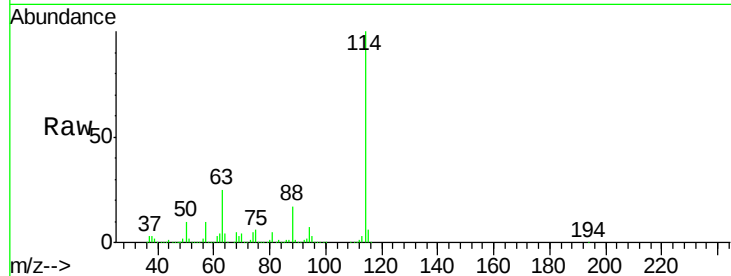
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.45 min Scan# 1978
 Delta R.T. -0.01 min
 Lab File: VL031286.D
 Acq: 21 Dec 2017 1:56

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-SV-6DL

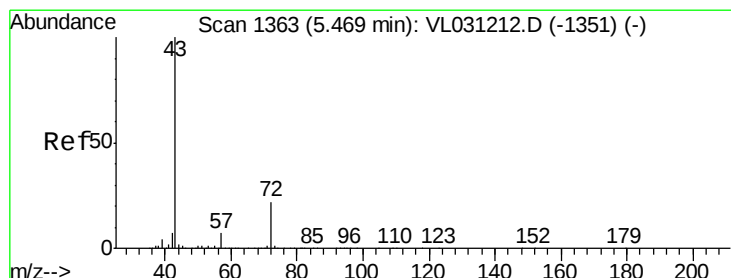
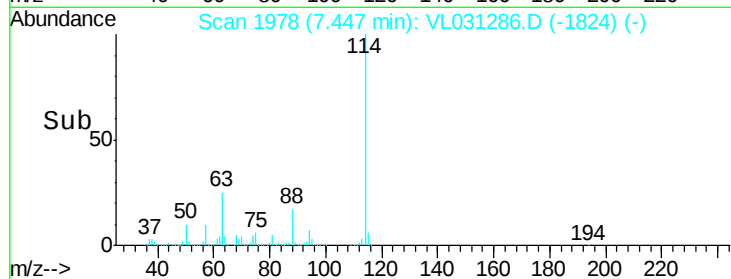
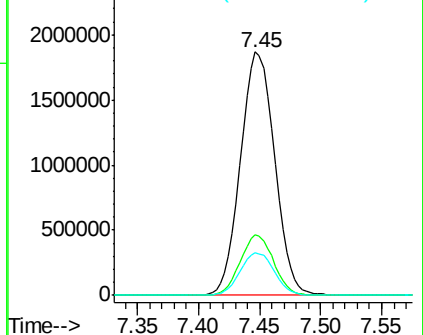
Tot Ion	Ratio	Lower	Upper
114	100		
63	24.4	19.8	29.8
88	17.5	14.2	21.4

Manual Integrations
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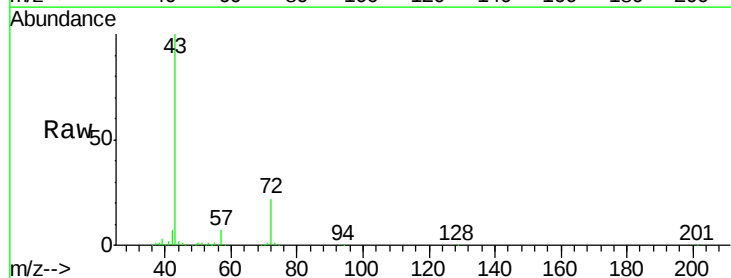


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

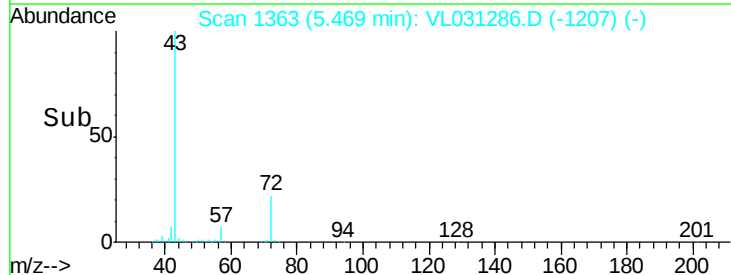
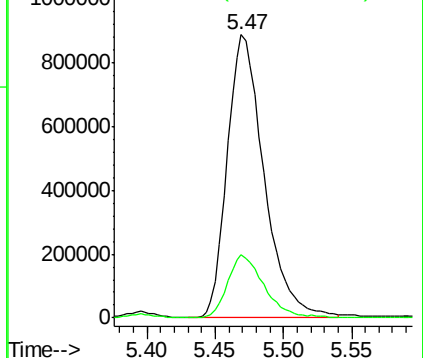


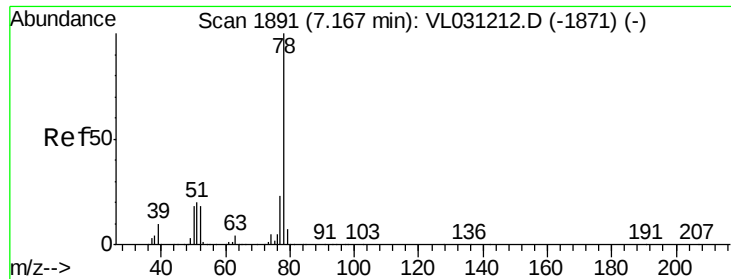
#34
 2-Butanone
 Concen: 6.51 ppbv
 RT: 5.47 min Scan# 1363
 Delta R.T. 0.00 min
 Lab File: VL031286.D
 Acq: 21 Dec 2017 1:56

Tgt Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.1	27.1



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





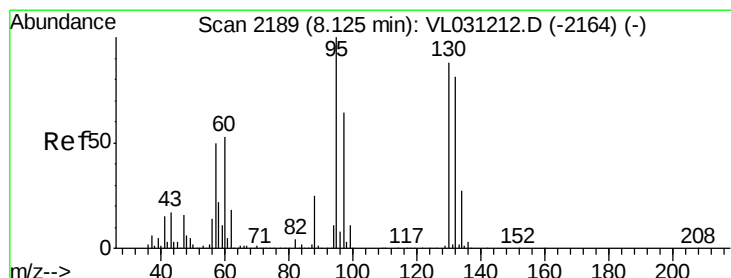
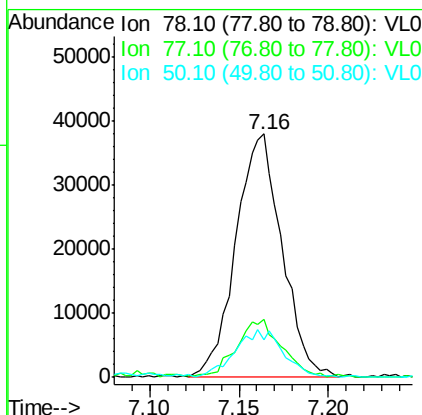
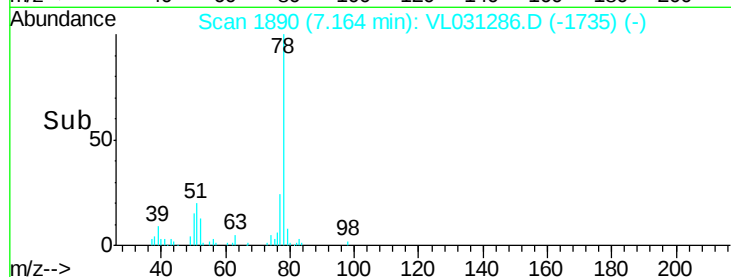
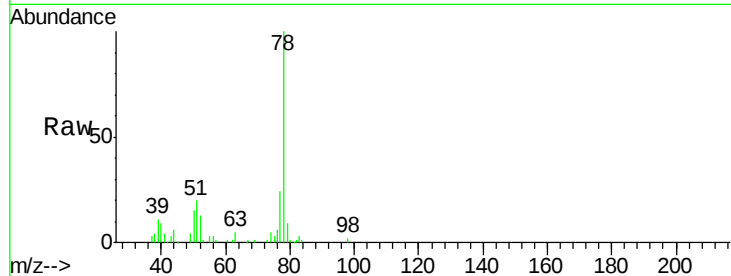
#36
Benzene
Concen: 0.18 ppbv
RT: 7.16 min Scan# 1890
Delta R.T. -0.00 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-6DL

Tot Ion	Ratio	Lower	Upper
78	100		
77	23.2	18.1	27.1
50	15.3	14.6	21.8

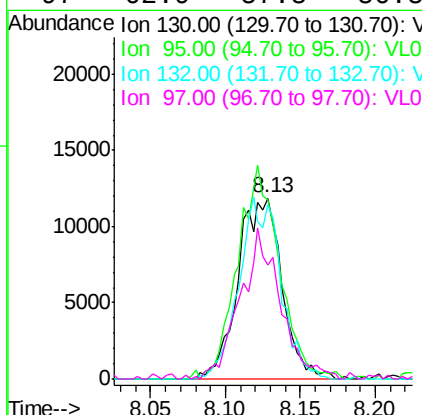
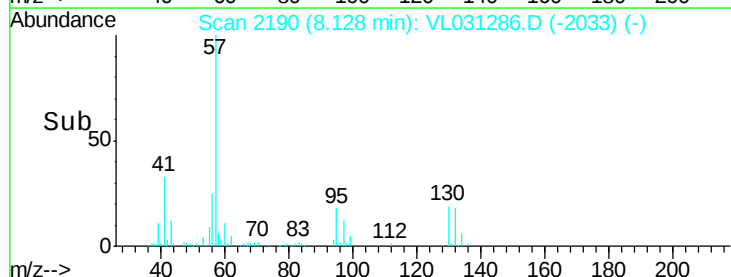
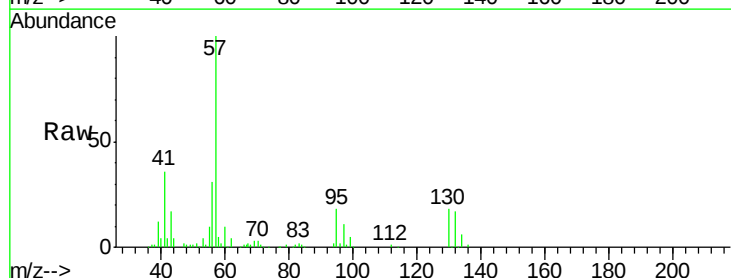
Manual Integrations
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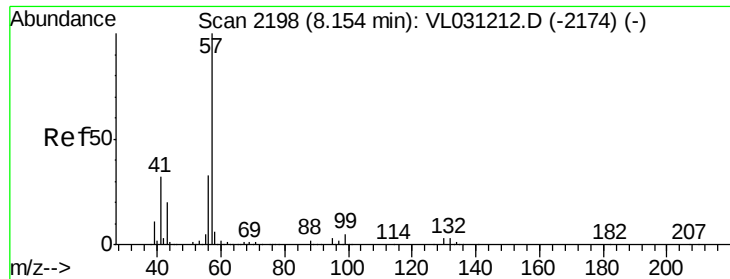
MMDadoda
12/22/2017 4:55:04 PM



#38
Trichloroethene
Concen: 0.16 ppbv m
RT: 8.13 min Scan# 2190
Delta R.T. 0.00 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Tgt Ion	Ratio	Lower	Upper
130	100		
95	99.3	90.6	135.8
132	96.0	73.5	110.3
97	62.9	57.8	86.8





#44

2,2,4-Trimethylpentane

Concen: 0.96 ppbv

RT: 8.15 min Scan# 2198

Delta R.T. 0.00 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Instrument :

MSVOA_L

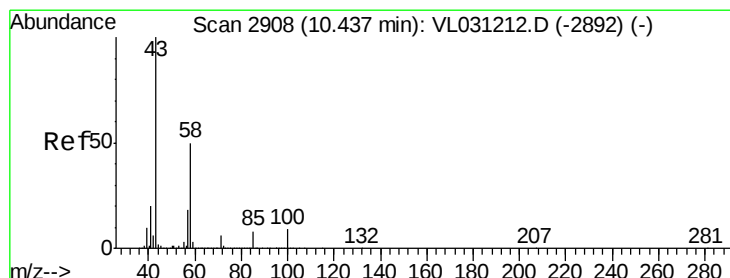
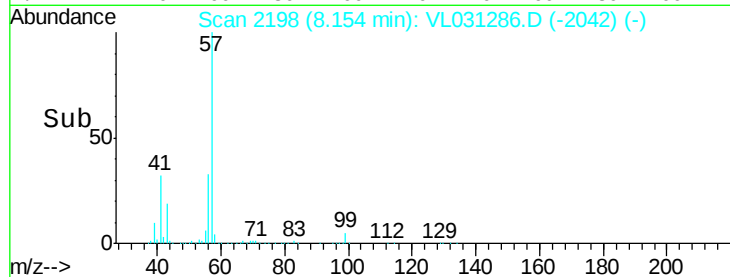
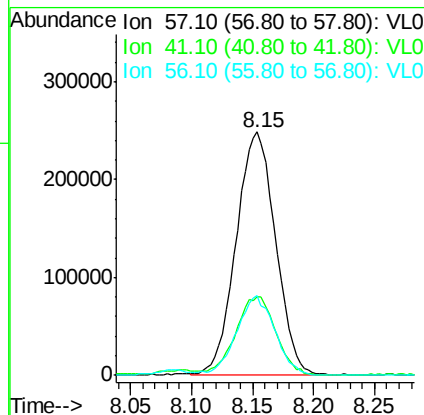
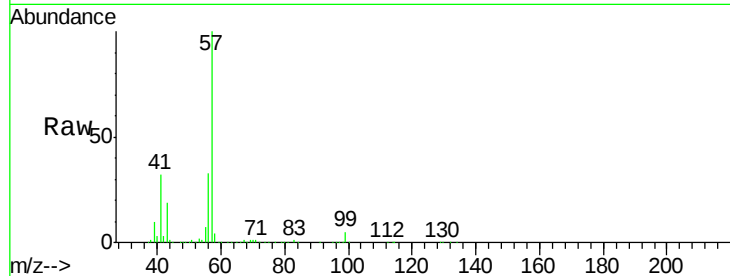
ClientSampleId :

EP1-SV-6DL

Tot Ion:	57	Resp:	552911
Ion Ratio	Lower	Upper	
57	100		
41	34.9	25.5	38.3
56	32.1	25.0	37.6

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#51

2-Hexanone

Concen: 0.45 ppbv m

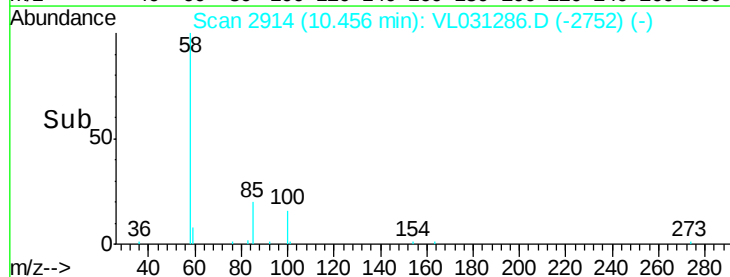
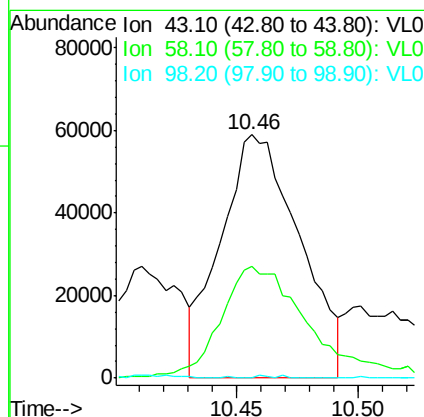
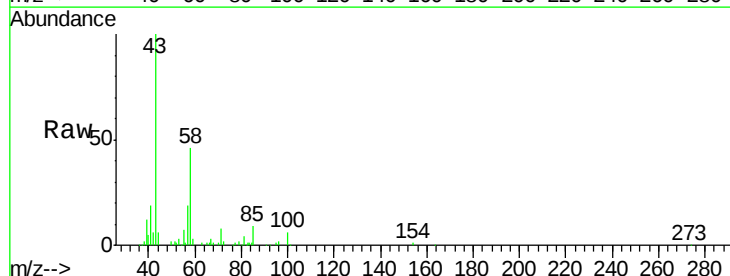
RT: 10.46 min Scan# 2914

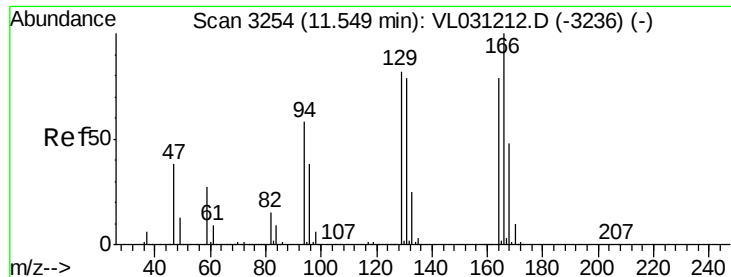
Delta R.T. 0.02 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Tgt Ion:	43	Resp:	133027
Ion Ratio	Lower	Upper	
43	100		
58	0.0	39.8	59.6#
98	0.8	0.0	0.0#





#52

Tetrachloroethene

Concen: 13.36 ppbv

RT: 11.55 min Scan# 3253

Delta R.T. -0.00 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-6DL

Tot Ion:164 Resp: 1889193

Ion Ratio Lower Upper

164 100

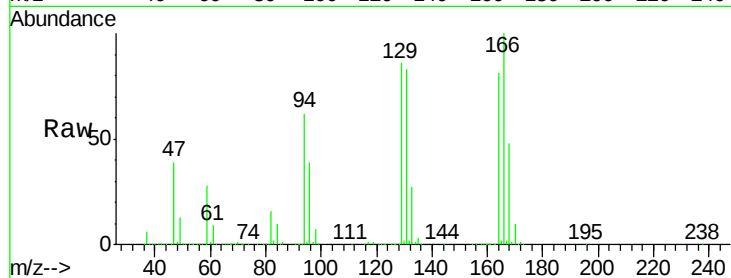
166 124.2 100.6 151.0

129 106.8 82.9 124.3

131 103.6 79.2 118.8

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12/22/2017 4:55:04 PM

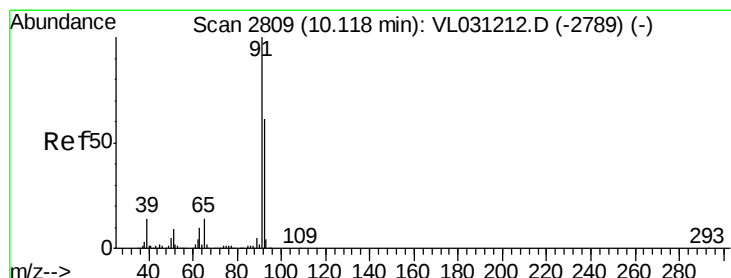
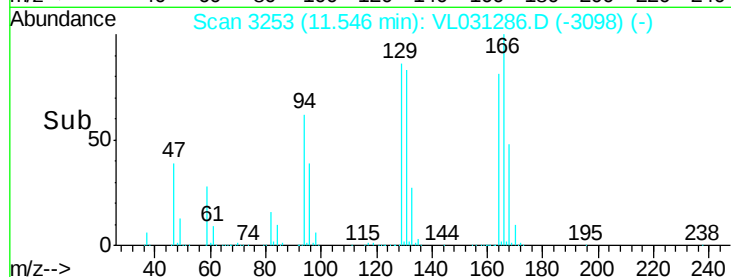
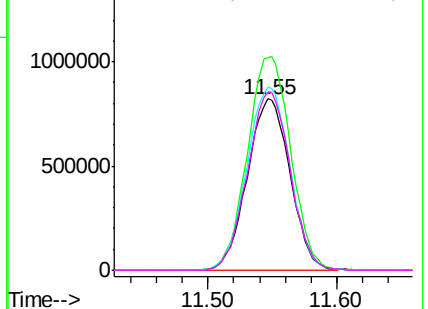


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 1.45 ppbv

RT: 10.11 min Scan# 2807

Delta R.T. -0.01 min

Lab File: VL031286.D

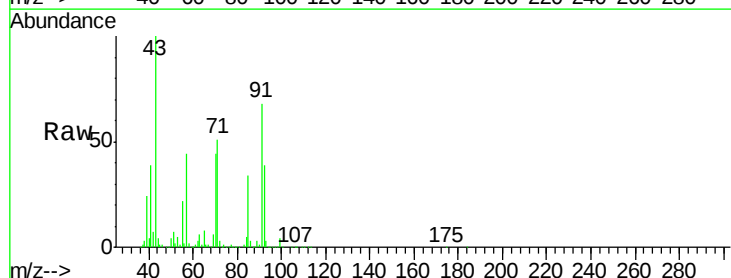
Acq: 21 Dec 2017 1:56

Tgt Ion: 91 Resp: 603398

Ion Ratio Lower Upper

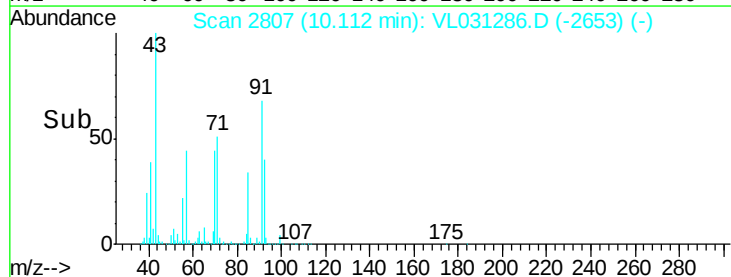
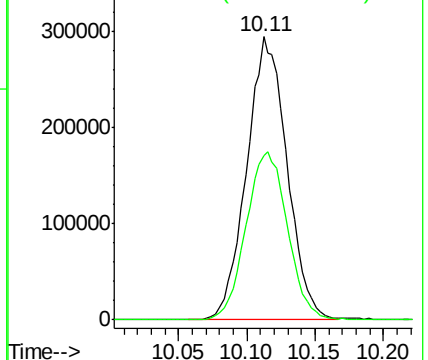
91 100

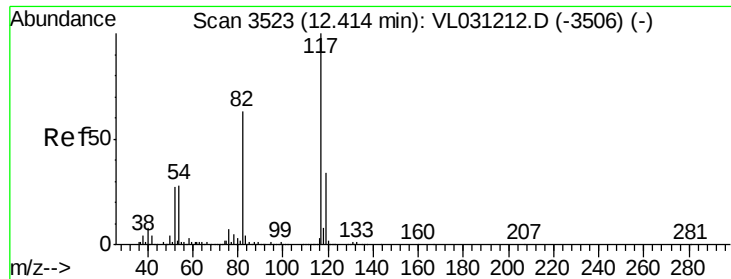
92 61.2 49.1 73.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





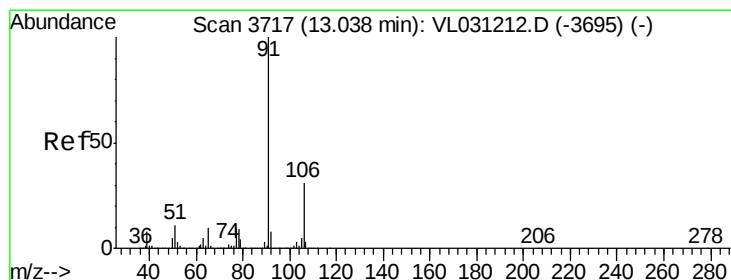
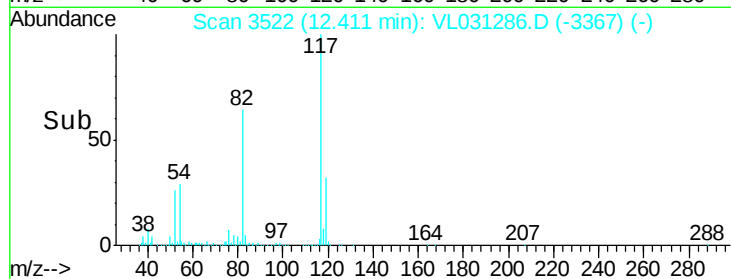
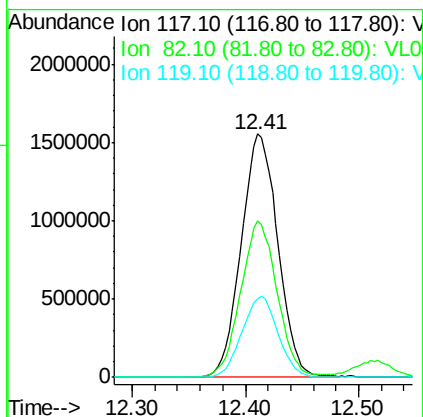
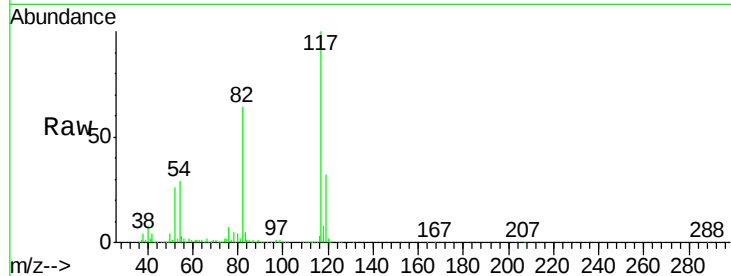
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.41 min Scan# 3522
Delta R.T. -0.00 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-6DL

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.1	48.1	72.1
119	33.0	23.1	34.7

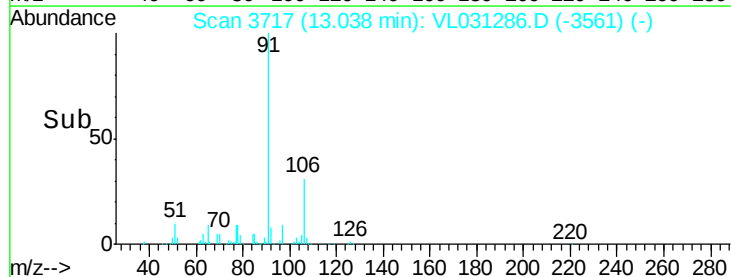
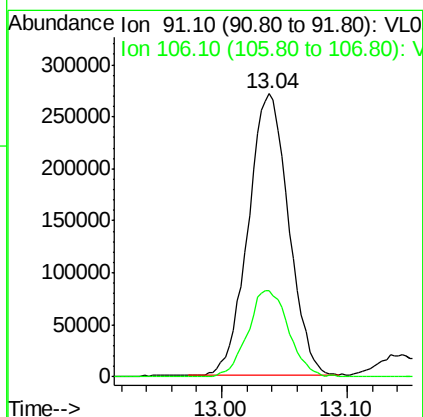
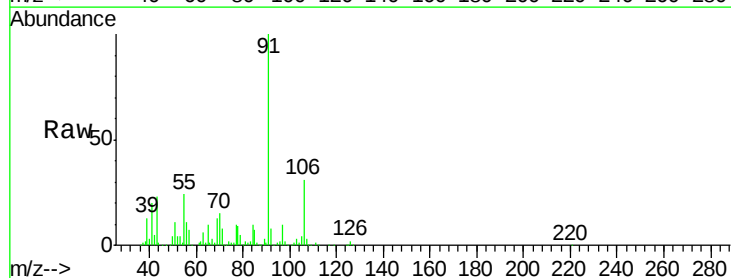
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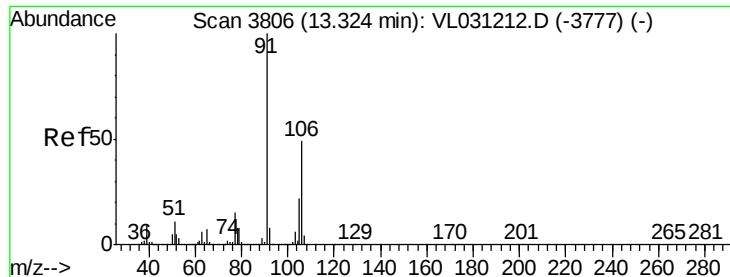
MMDadoda
12/22/2017 4:55:04 PM



#58
Ethyl Benzene
Concen: 1.05 ppbv
RT: 13.04 min Scan# 3717
Delta R.T. 0.00 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Tgt Ion	Ratio	Lower	Upper
91	100		
106	30.7	25.1	37.7





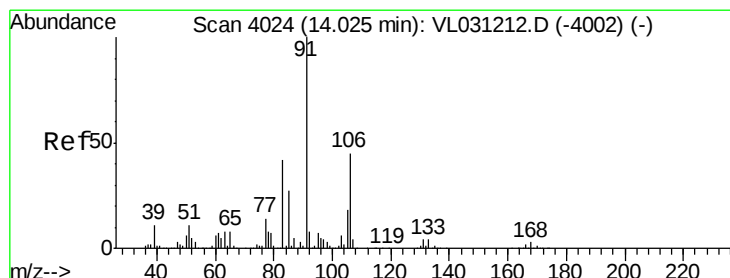
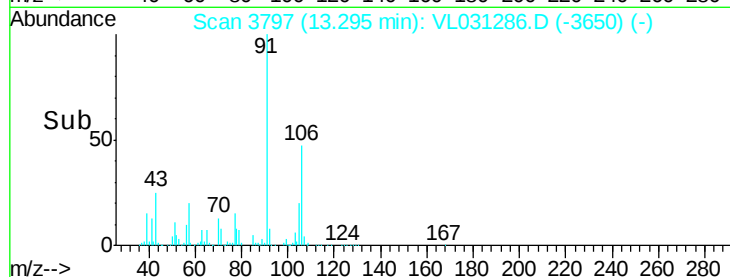
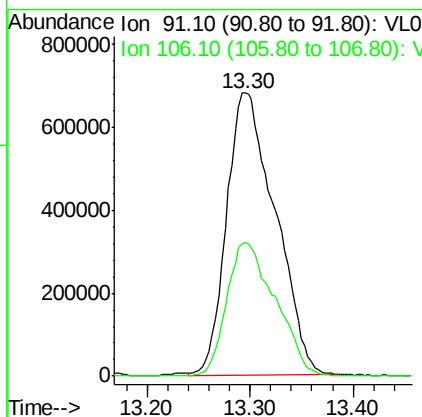
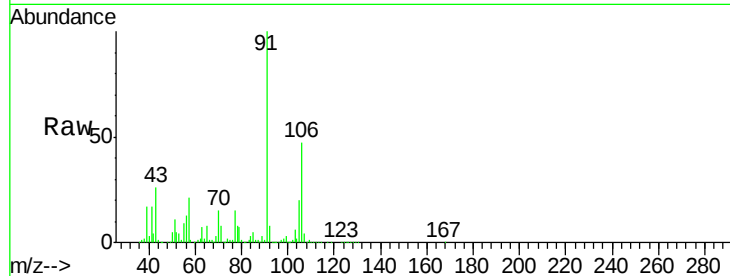
#59
m/p-Xylene
Concen: 4.82 ppbv
RT: 13.30 min Scan# 3797
Delta R.T. -0.03 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-6DL

Tot Ion: 91 Resp: 2233955
Ion Ratio Lower Upper
91 100
106 47.5 38.5 57.7

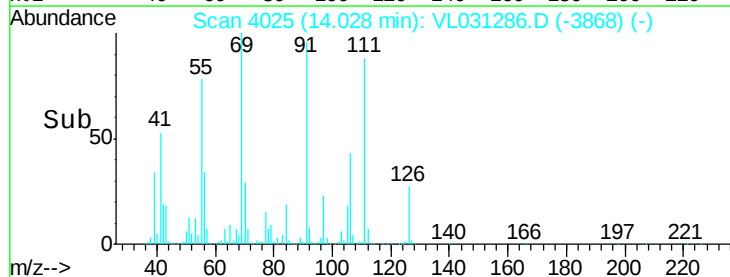
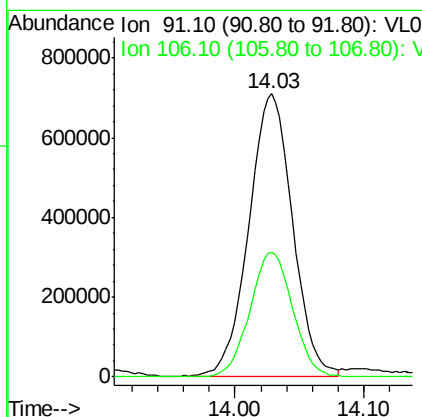
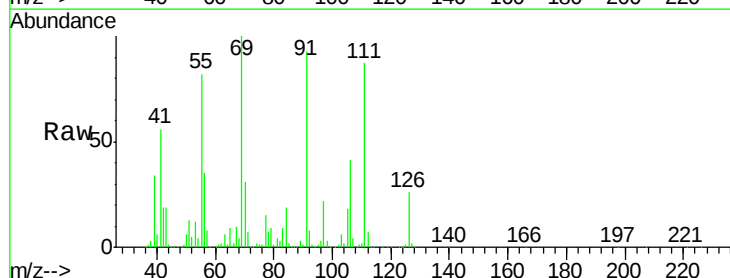
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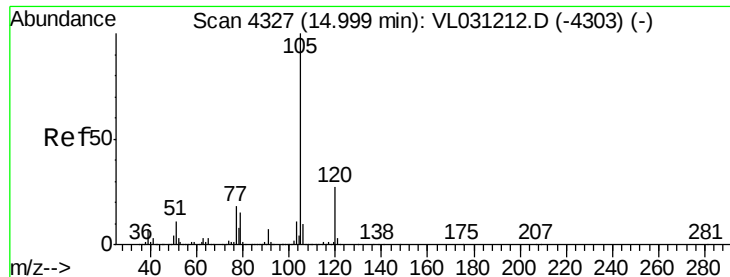
MMDadoda
12/22/2017 4:55:04 PM



#60
o-Xylene
Concen: 3.57 ppbv
RT: 14.03 min Scan# 4025
Delta R.T. 0.00 min
Lab File: VL031286.D
Acq: 21 Dec 2017 1:56

Tgt Ion: 91 Resp: 1666021
Ion Ratio Lower Upper
91 100
106 43.6 22.7 68.1





#62

Isopropylbenzene

Concen: 0.35 ppbv

RT: 15.01 min Scan# 4329

Delta R.T. 0.01 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-6DL

Tot Ion:105 Resp: 215342

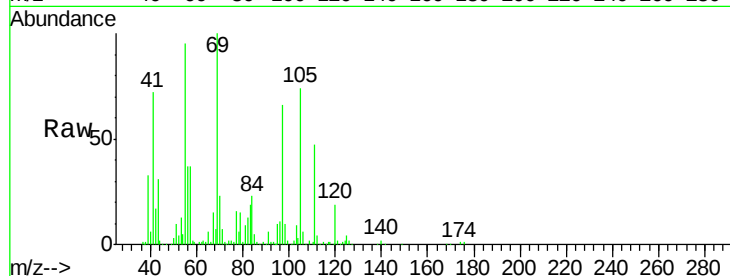
Ion Ratio Lower Upper

105 100

120 25.0 21.0 31.6

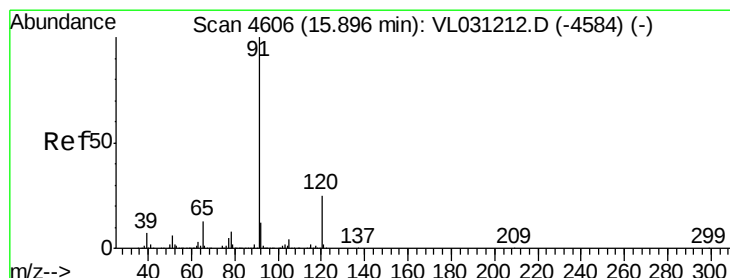
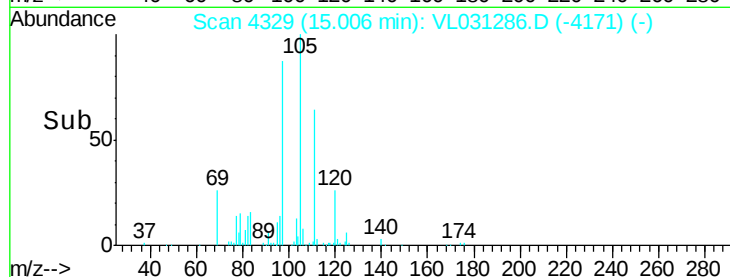
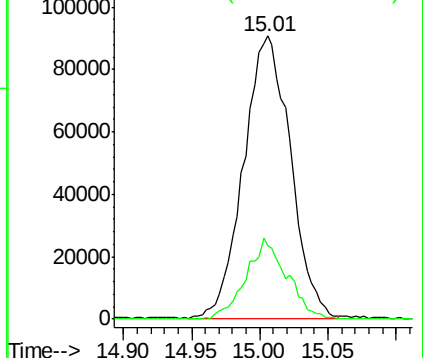
Manual Integrations
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#64

n-propylbenzene

Concen: 0.46 ppbv

RT: 15.91 min Scan# 4609

Delta R.T. 0.01 min

Lab File: VL031286.D

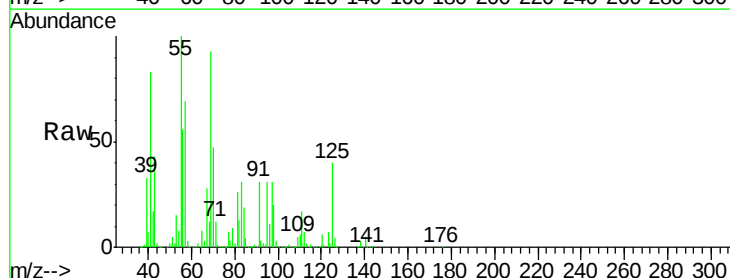
Acq: 21 Dec 2017 1:56

Tgt Ion:120 Resp: 75473

Ion Ratio Lower Upper

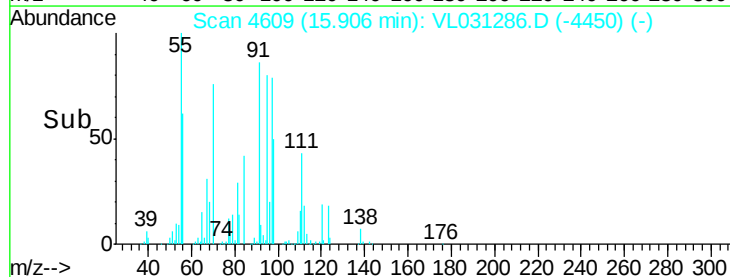
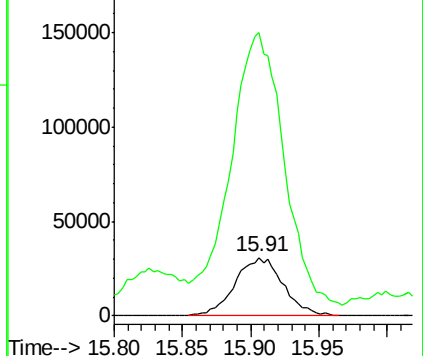
120 100

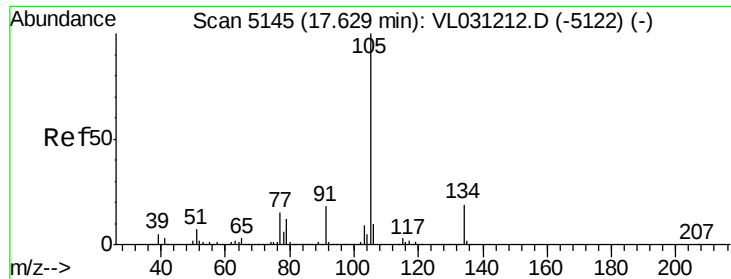
91 503.7 352.1 528.1



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0





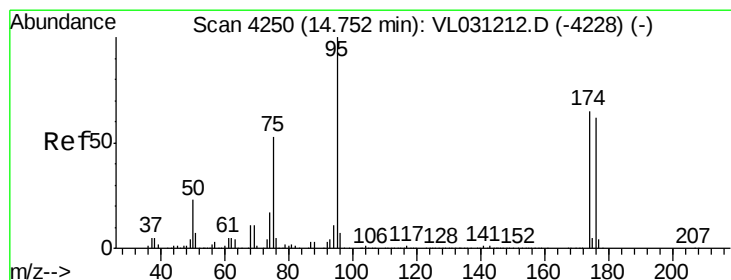
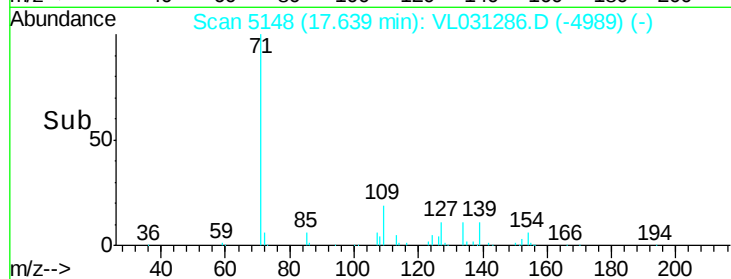
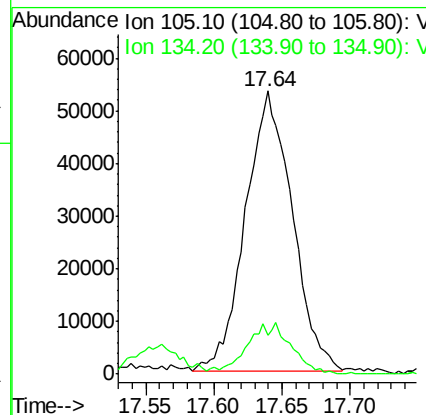
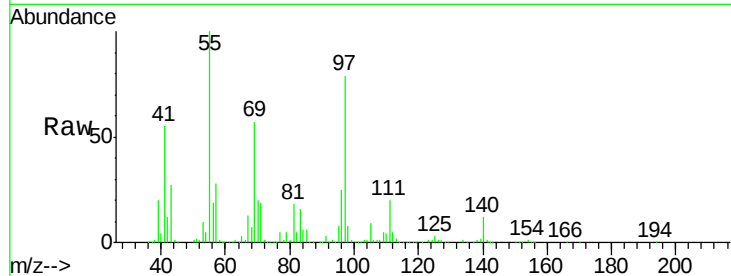
#67
 sec-Butylbenzene
 Concen: 0.17 ppbv
 RT: 17.64 min Scan# 5148
 Delta R.T. 0.01 min
 Lab File: VL031286.D
 Acq: 21 Dec 2017 1:56

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-SV-6DL

Tot Ion	Ratio	Lower	Upper
105	100		
134	17.4	15.3	22.9

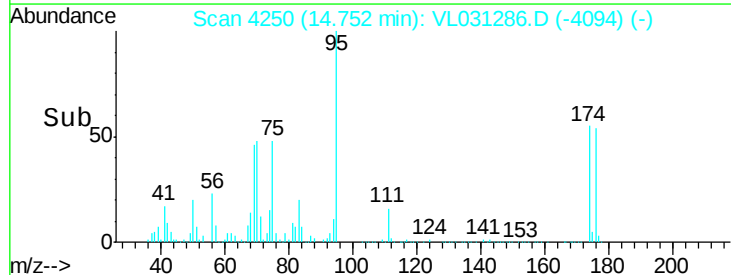
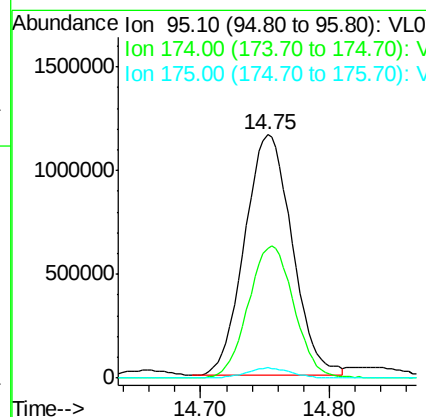
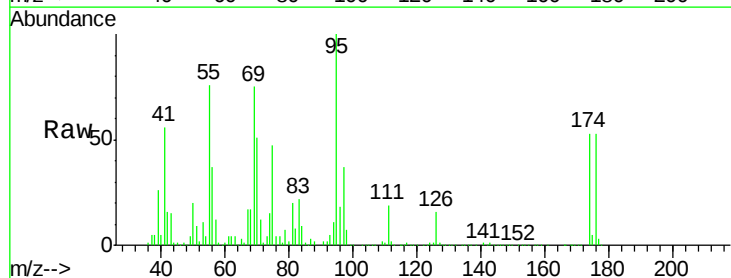
Manual Integrations
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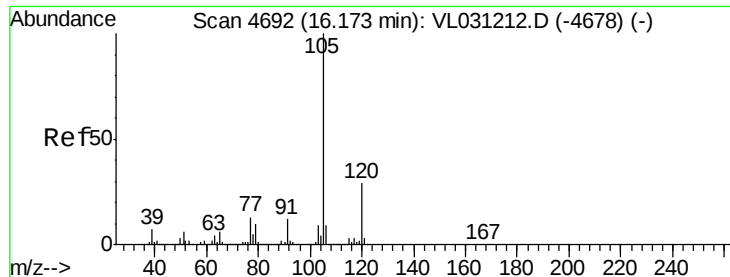
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 12/22/2017 4:55:04 PM



#68
 1-Bromo-4-Fluorobenzene
 Concen: 11.99 ppbv
 RT: 14.75 min Scan# 4250
 Delta R.T. 0.00 min
 Lab File: VL031286.D
 Acq: 21 Dec 2017 1:56

Tgt Ion	Ratio	Lower	Upper
95	100		
174	53.4	52.5	78.7
175	4.0	4.1	6.1





#72

4-Ethyltoluene

Concen: 0.63 ppbv

RT: 16.18 min Scan# 4695

Delta R.T. 0.01 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Instrument :

MSVOA_L

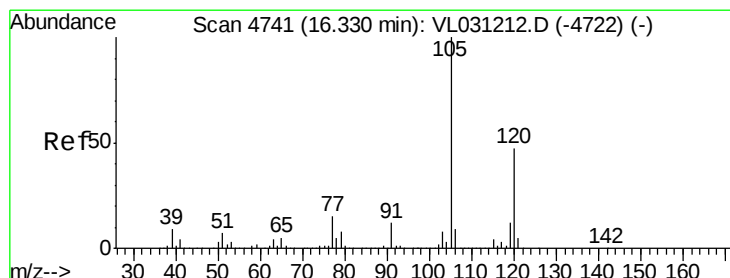
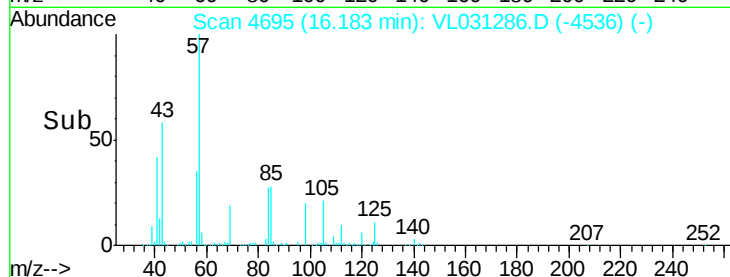
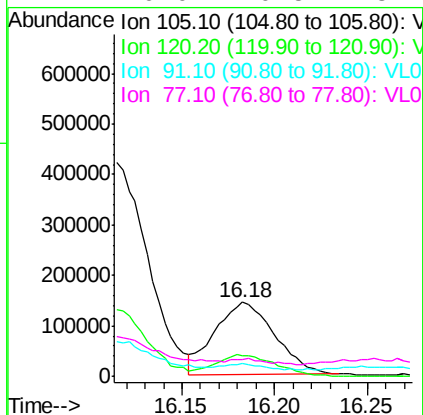
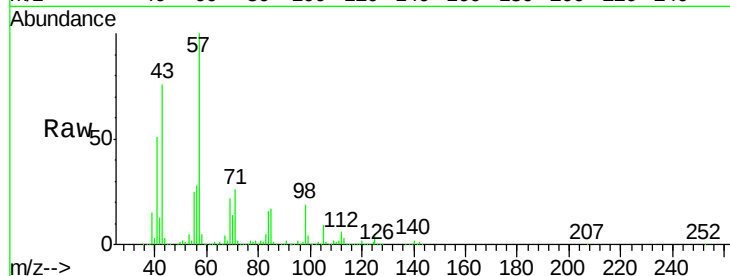
ClientSampleId :

EP1-SV-6DL

Tot Ion	Ratio	Lower	Upper
105	100		
120	28.7	24.2	36.2
91	18.5	9.8	14.8
77	0.0	10.5	15.7

Manual Integrations
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MMDadoda
12/22/2017 4:55:04 PM



#73

1,3,5-Trimethylbenzene

Concen: 1.19 ppbv

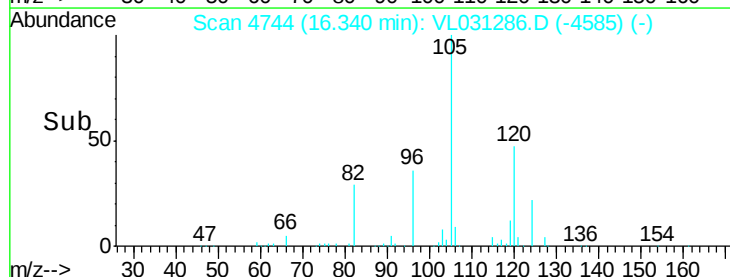
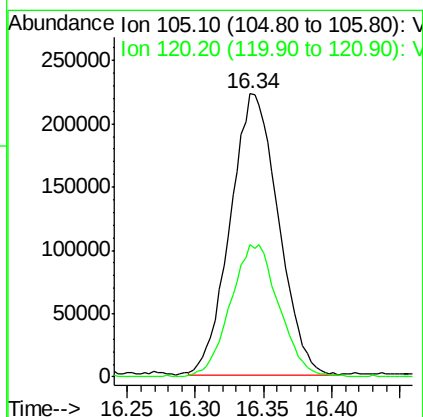
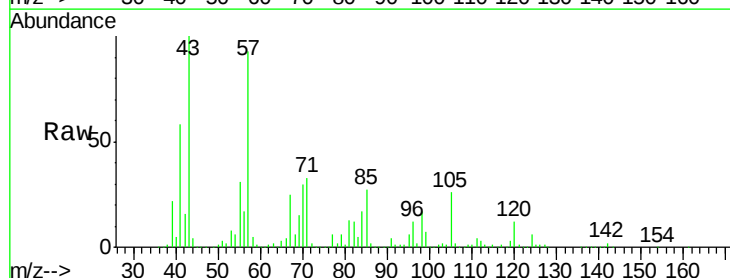
RT: 16.34 min Scan# 4744

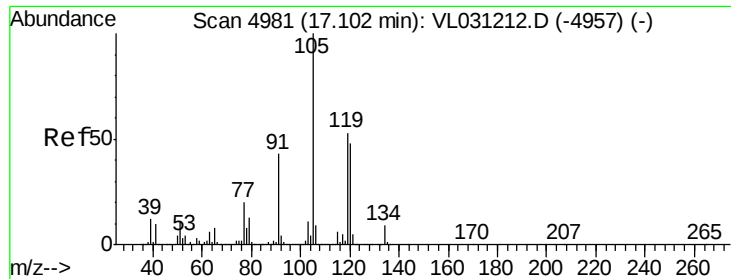
Delta R.T. 0.01 min

Lab File: VL031286.D

Acq: 21 Dec 2017 1:56

Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.6	37.8	56.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.96 ppbv
 RT: 17.11 min Scan# 4984
 Delta R.T. 0.01 min
 Lab File: VL031286.D
 Acq: 21 Dec 2017 1:56

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-SV-6DL

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	44.5	38.6	58.0
91	15.1	34.2	51.4#
77	24.3	16.1	24.1#

Manual Integrations
 APPROVED

MMDadoda
 12/22/2017 4:55:04 PM

