

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111220\
 Data File : VL035923.D
 Acq On : 12 Nov 2020 21:19
 Operator : SY/AP
 Sample : L4721-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-1

Manual Integrations
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 11/16/2020 2:28:32 PM

Quant Time: Nov 13 03:29:20 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 04
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1159588	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4044762	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3711660	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2817599	10.68	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	53557	0.245	ppbv	99
3) Chlorodifluoromethane	2.98	51	62266m	0.448	ppbv	
4) Chloromethane	3.13	50	37463	0.555	ppbv	93
9) Propene	3.01	41	74540	1.467	ppbv #	78
10) Heptane	8.12	43	18512m	0.132	ppbv	
11) Trichlorofluoromethane	3.94	101	69243	0.253	ppbv	93
13) Ethanol	3.63	45	16815351	1525.006	ppbv	97
15) Acetone	3.84	43	1599400	12.901	ppbv	96
17) tert-Butyl alcohol	4.34	59	125387m	0.763	ppbv	
19) Isopropyl Alcohol	4.01	45	6262070	82.197	ppbv #	98
20) Methylene Chloride	4.34	84	993986	11.390	ppbv	98
26) Hexane	5.68	57	747416	5.549	ppbv #	47
29) Chloroform	5.74	83	43410m	0.164	ppbv	
30) Cyclohexane	7.16	84	40575m	0.277	ppbv	
34) 2-Butanone	5.24	43	73284	0.558	ppbv	95
35) Carbon Tetrachloride	7.01	117	12729	0.059	ppbv	94
36) Benzene	6.88	78	107283	0.357	ppbv	96
38) Trichloroethene	7.83	130	5879	0.040	ppbv #	71
44) 2,2,4-Trimethylpentane	7.86	57	99835m	0.251	ppbv	
50) 4-Methyl-2-Pentanone	8.75	43	54343m	0.271	ppbv	
51) 2-Hexanone	10.14	43	23578	0.146	ppbv #	95
52) Tetrachloroethene	11.22	164	5800m	0.041	ppbv	
53) Toluene	9.80	91	1796065	4.950	ppbv	97
59) m/p-Xylene	12.97	91	127698	0.334	ppbv	100
60) o-Xylene	13.69	91	55944	0.150	ppbv	100
74) 1,2,4-Trimethylbenzene	16.76	105	75422m	0.170	ppbv	

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

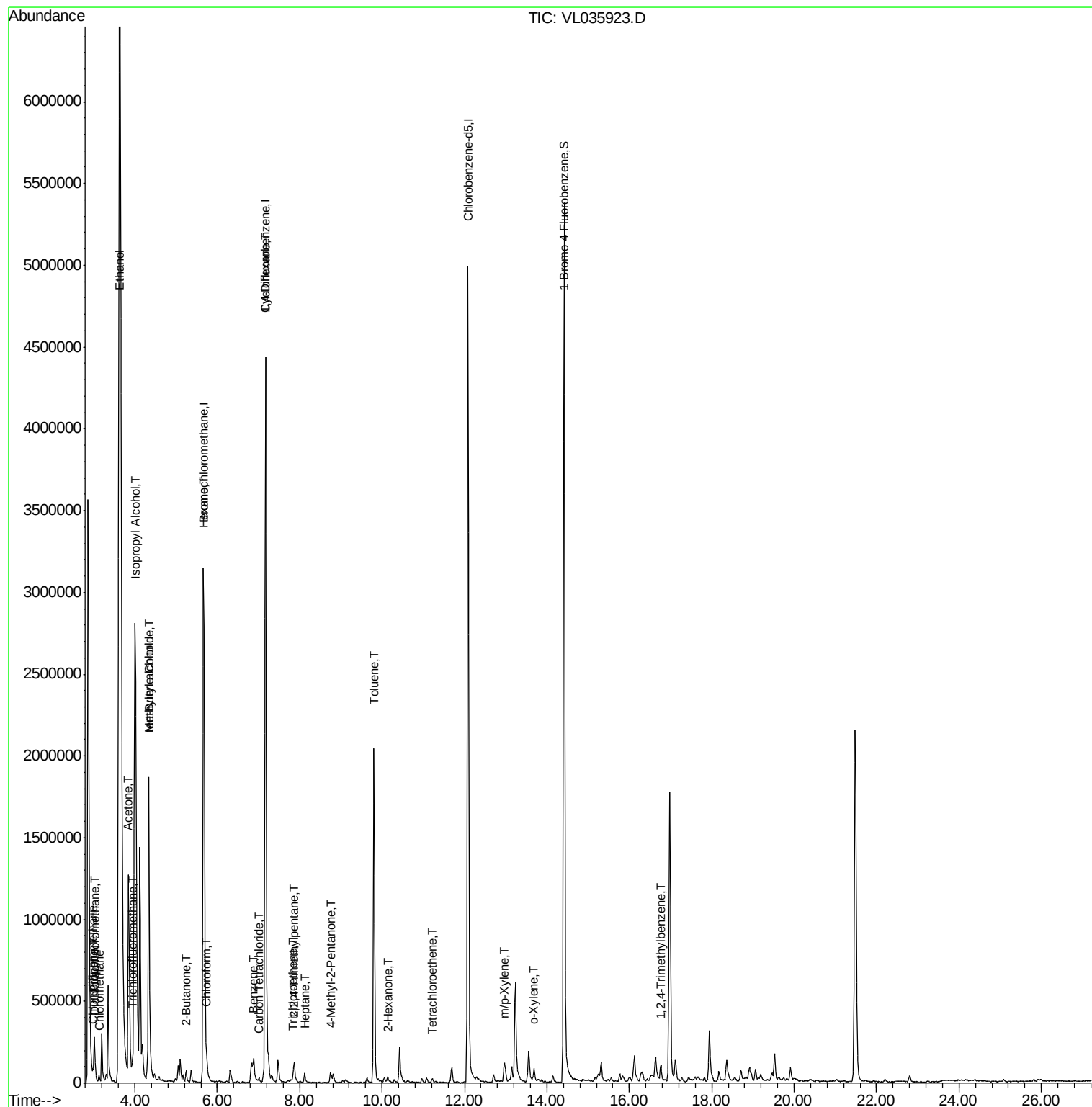
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL111220\
Data File : VL035923.D
Acq On : 12 Nov 2020 21:19
Operator : SY/AP
Sample : L4721-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

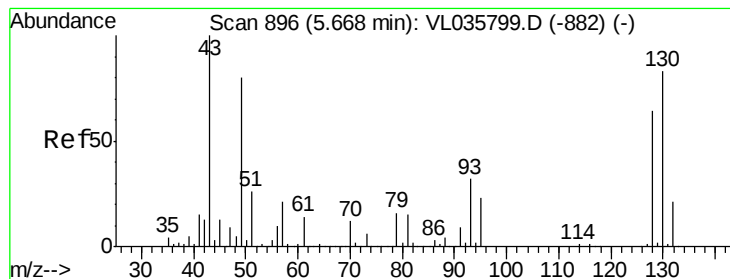
Instrument :
MSVOA_L
ClientSampleId :
LA-1

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Quant Time: Nov 13 03:29:20 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 04 02:40:06 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.01 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Instrument :

MSVOA_L

ClientSampleId :

LA-1

Tot Ion: 49 Resp: 1159588

Ion Ratio Lower Upper

49 100

128 75.9 41.5 124.6

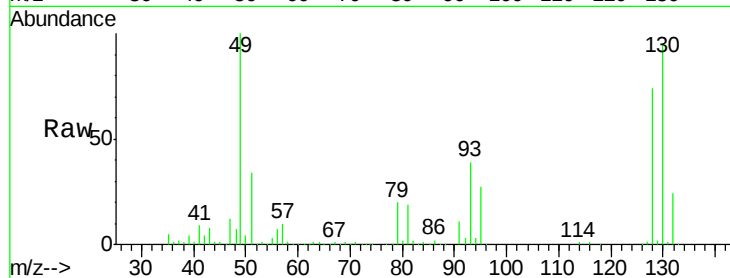
130 97.2 53.7 161.1

Manual Integrations

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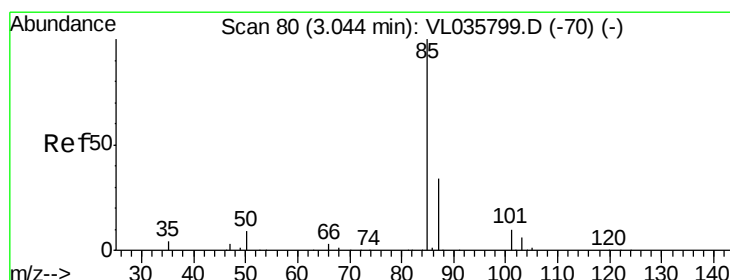
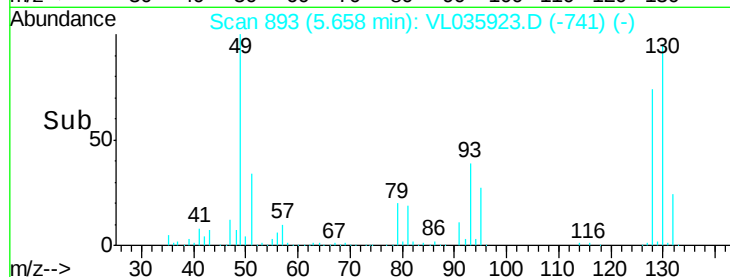
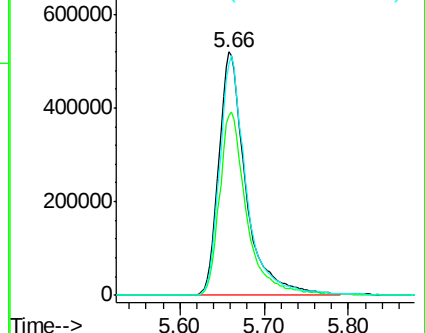
11/16/2020 2:28:32 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.245 ppbv

RT: 3.04 min Scan# 78

Delta R.T. -0.01 min

Lab File: VL035923.D

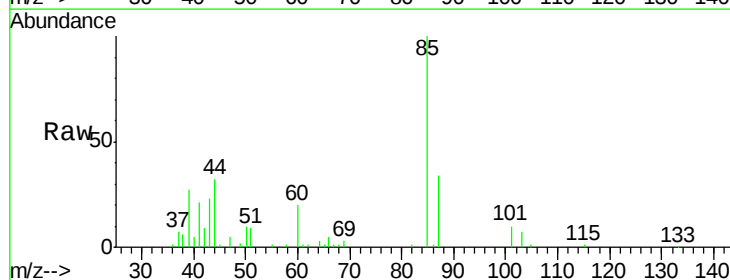
Acq: 12 Nov 2020 21:19

Tgt Ion: 85 Resp: 53557

Ion Ratio Lower Upper

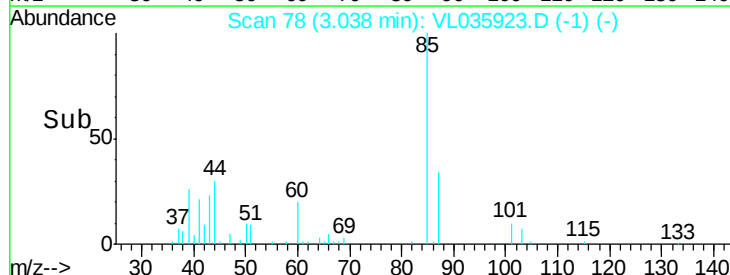
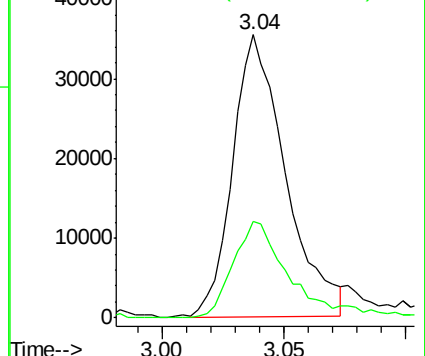
85 100

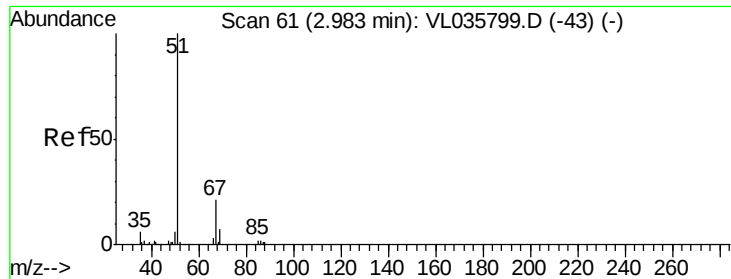
87 34.4 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.448 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.01 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Instrument :

MSVOA_L

ClientSampled :

LA-1

Tot Ion: 51 Resp: 62266

Ion Ratio Lower Upper

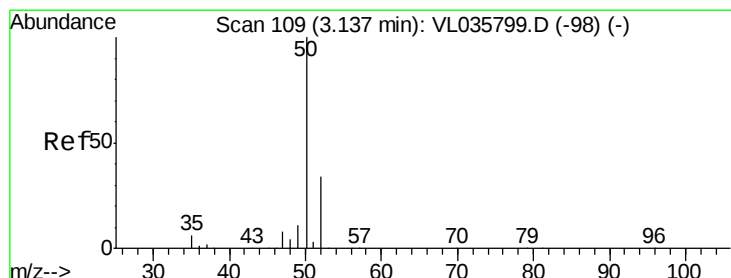
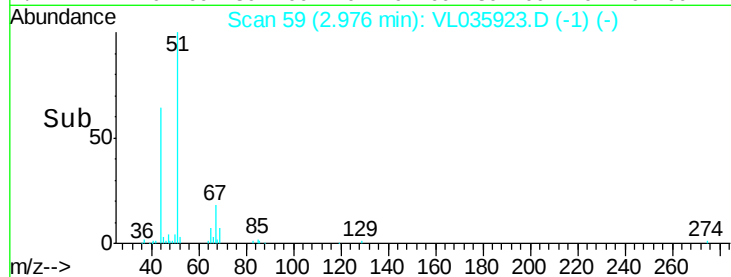
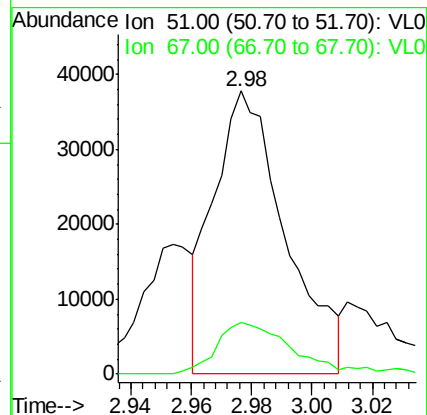
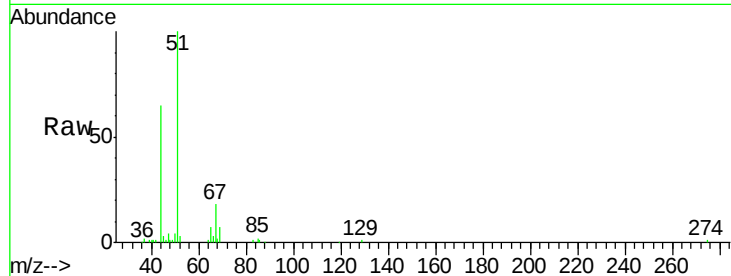
51 100

67 20.5 17.0 25.4

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#4

Chloromethane

Concen: 0.555 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.00 min

Lab File: VL035923.D

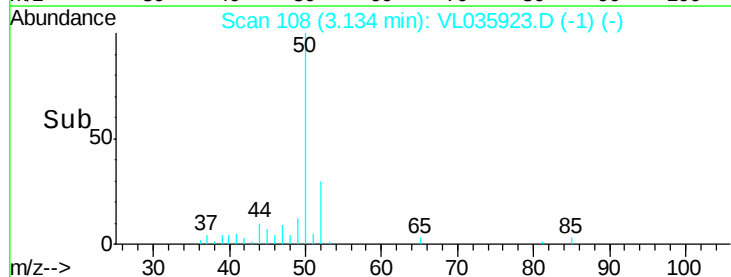
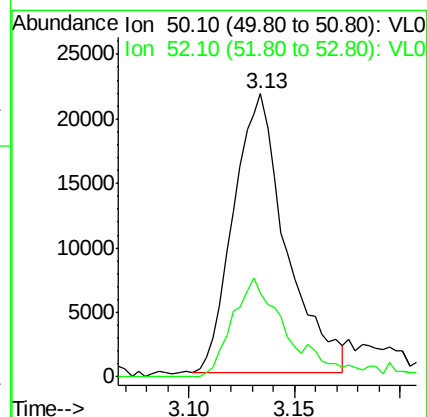
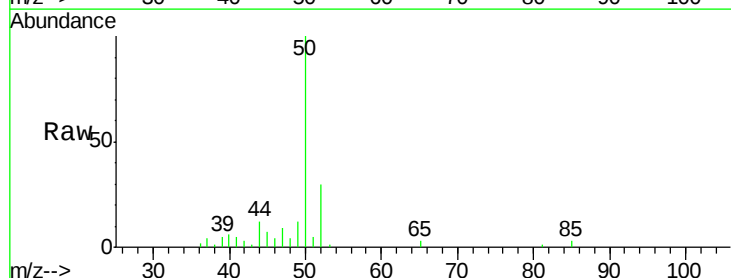
Acq: 12 Nov 2020 21:19

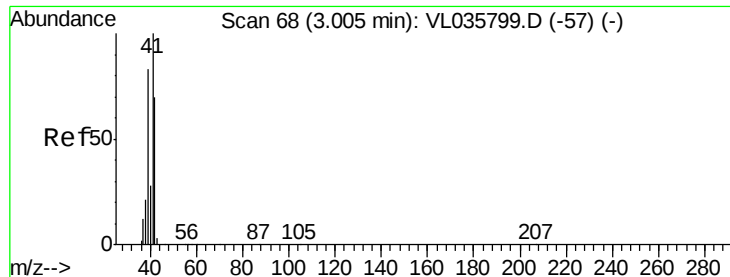
Tgt Ion: 50 Resp: 37463

Ion Ratio Lower Upper

50 100

52 30.1 27.1 40.7





#9

Propene

Concen: 1.467 ppbv

RT: 3.01 min Scan# 69

Delta R.T. 0.00 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Instrument :

MSVOA_L

ClientSampled :

LA-1

Tot Ion: 41 Resp: 74540

Ion Ratio Lower Upper

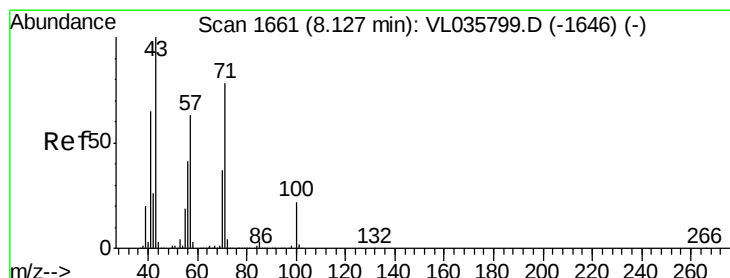
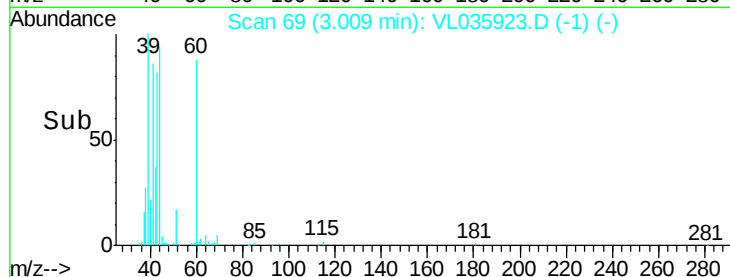
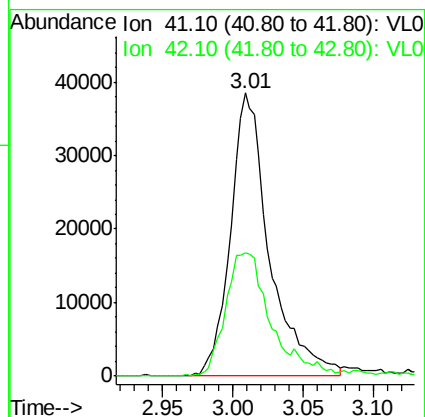
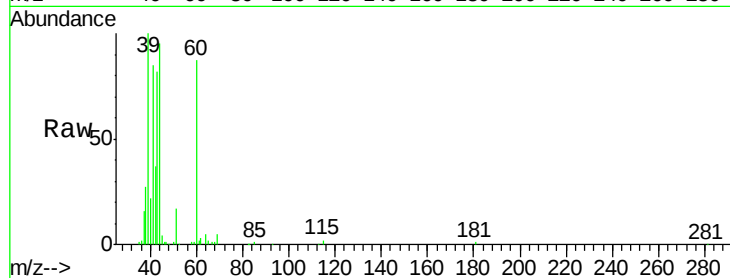
41 100

42 52.2 56.2 84.4#

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#10

Heptane

Concen: 0.132 ppbv m

RT: 8.12 min Scan# 1658

Delta R.T. -0.01 min

Lab File: VL035923.D

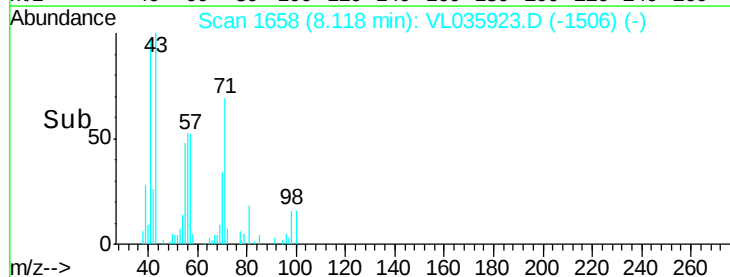
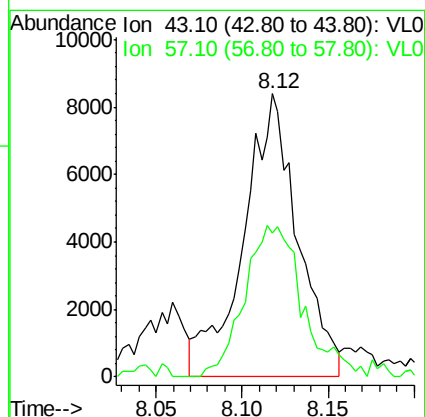
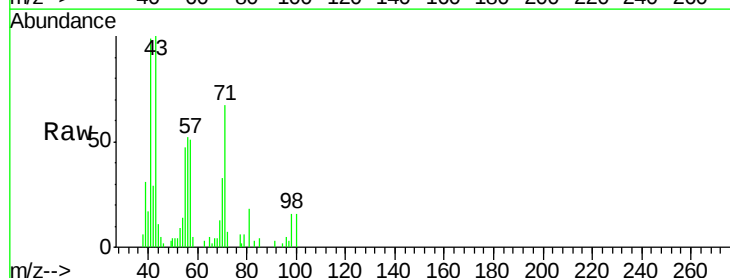
Acq: 12 Nov 2020 21:19

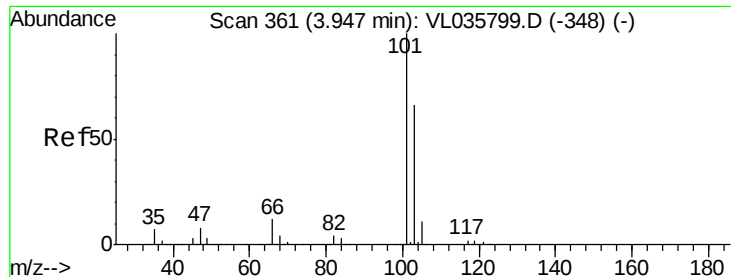
Tgt Ion: 43 Resp: 18512

Ion Ratio Lower Upper

43 100

57 58.8 50.0 75.0





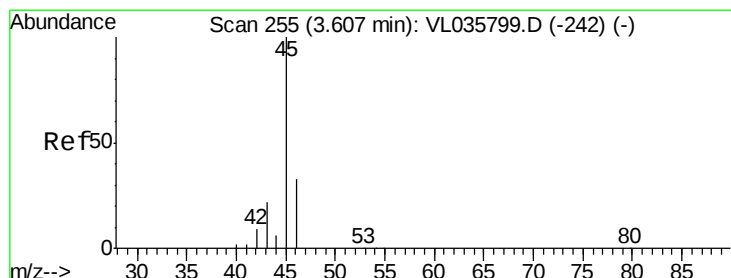
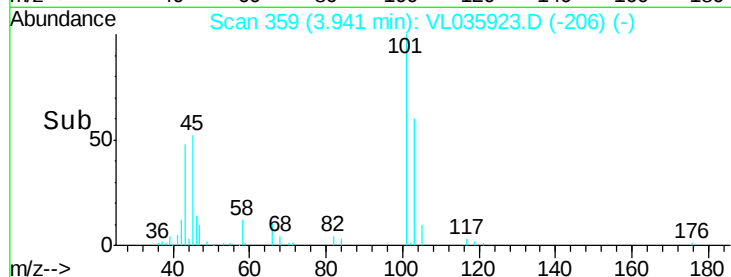
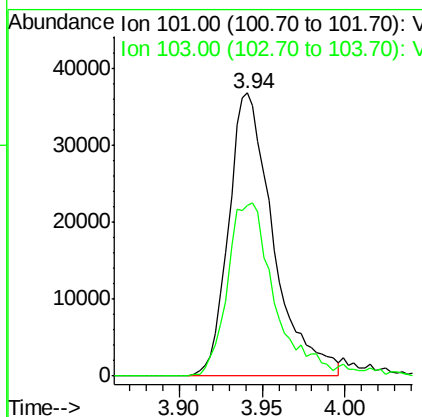
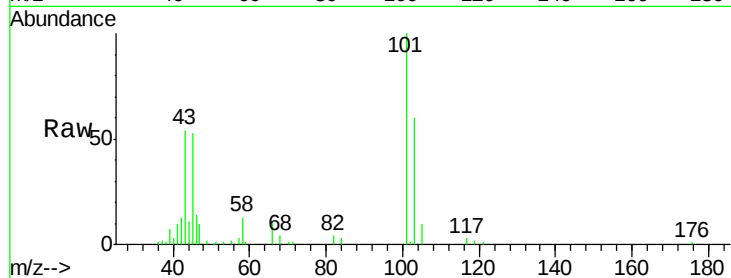
#11
Trichlorofluoromethane
Concen: 0.253 ppbv
RT: 3.94 min Scan# 359
Delta R.T. -0.01 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Instrument :
MSVOA_L
ClientSampleId :
LA-1

Tot Ion:101 Resp: 69243
Ion Ratio Lower Upper
101 100
103 60.4 53.0 79.4

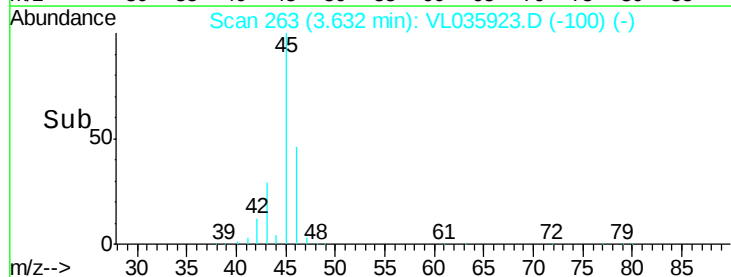
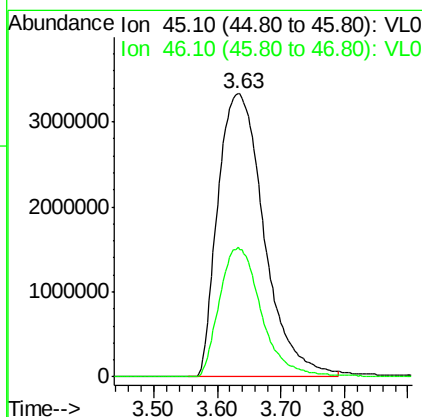
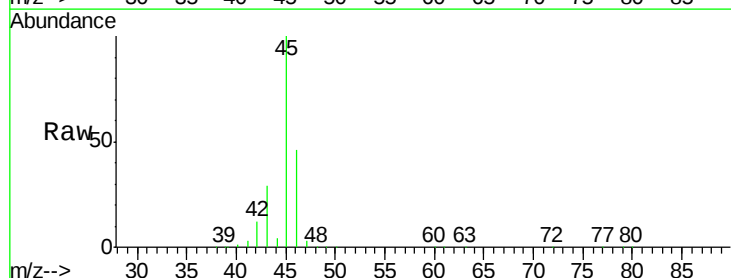
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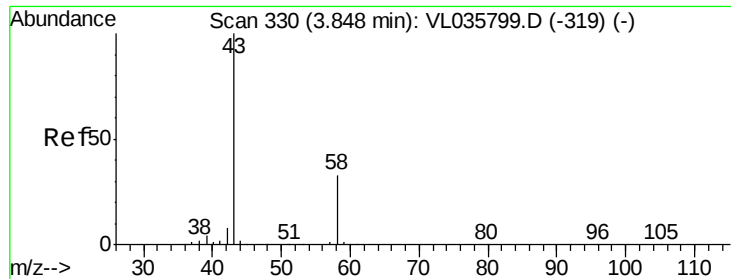
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#13
Ethanol
Concen: 1525.006 ppbv
RT: 3.63 min Scan# 263
Delta R.T. 0.03 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Tgt Ion: 45 Resp:16815351
Ion Ratio Lower Upper
45 100
46 41.9 16.1 64.5





#15

Acetone

Concen: 12.901 ppbv

RT: 3.84 min Scan# 327

Delta R.T. -0.01 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Instrument :

MSVOA_L

ClientSampled :

LA-1

Tot Ion: 43 Resp: 1599400

Ion Ratio Lower Upper

43 100

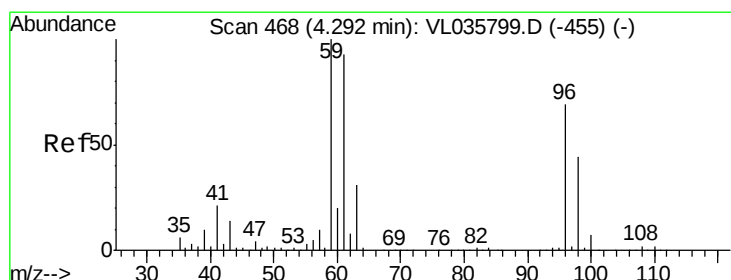
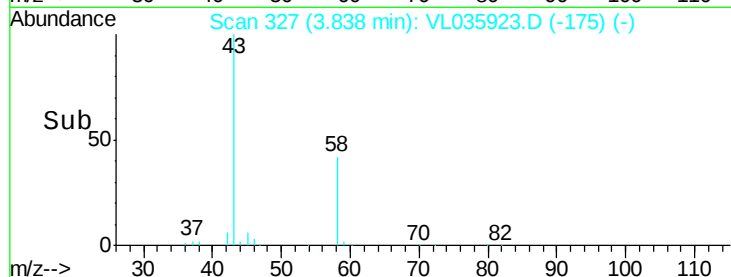
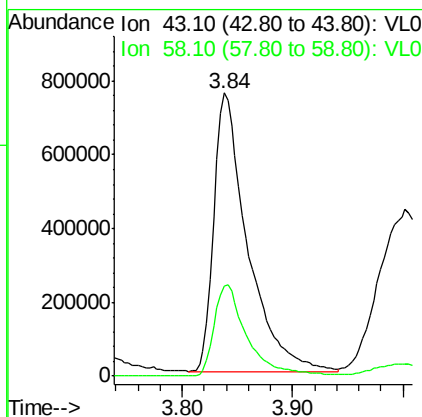
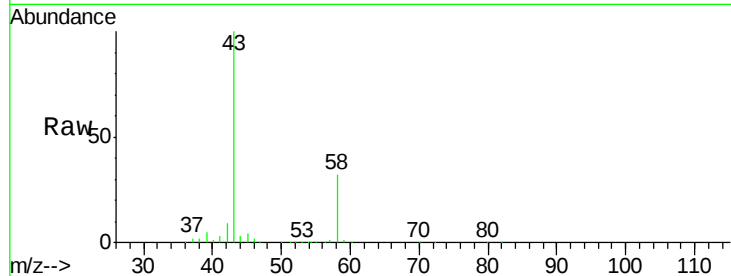
58 32.0 27.5 41.3

Manual Integrations

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#17

tert-Butyl alcohol

Concen: 0.763 ppbv m

RT: 4.34 min Scan# 483

Delta R.T. 0.05 min

Lab File: VL035923.D

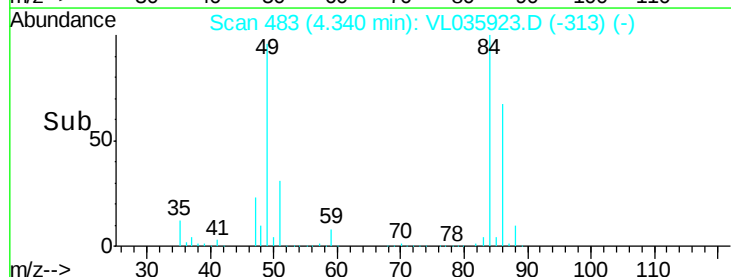
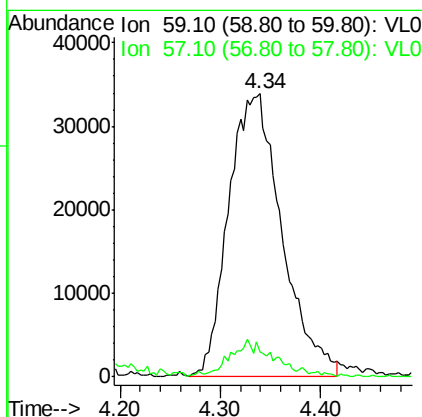
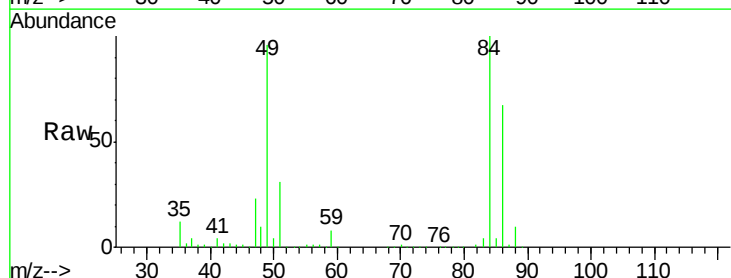
Acq: 12 Nov 2020 21:19

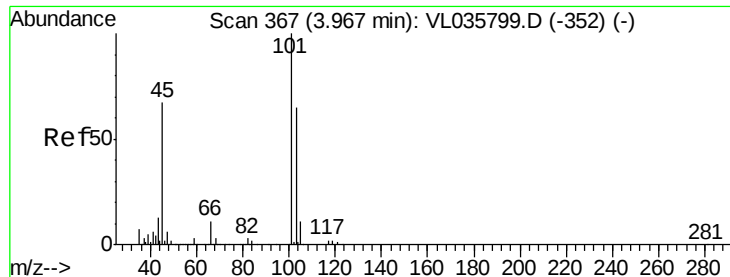
Tgt Ion: 59 Resp: 125387

Ion Ratio Lower Upper

59 100

57 22.5 8.2 12.4#





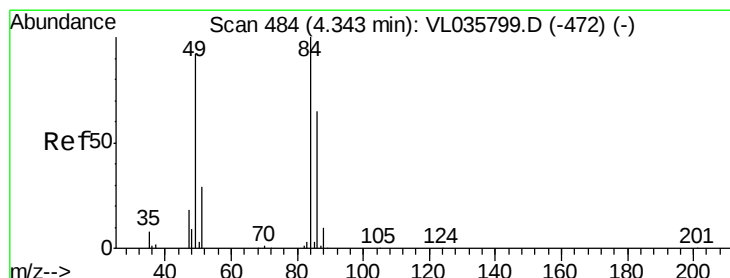
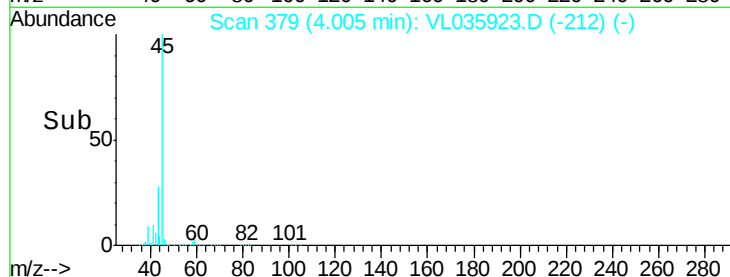
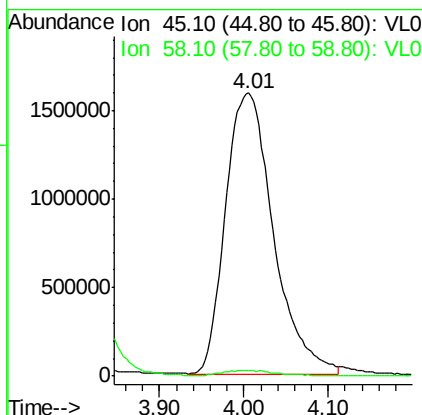
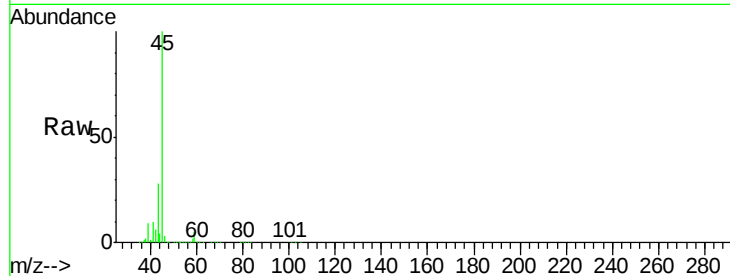
#19
Isopropyl Alcohol
Concen: 82.197 ppbv
RT: 4.01 min Scan# 379
Delta R.T. 0.04 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Instrument :
MSVOA_L
ClientSampled :
LA-1

Tot Ion: 45 Resp: 6262070
Ion Ratio Lower Upper
45 100
58 2.4 2.6 3.8#

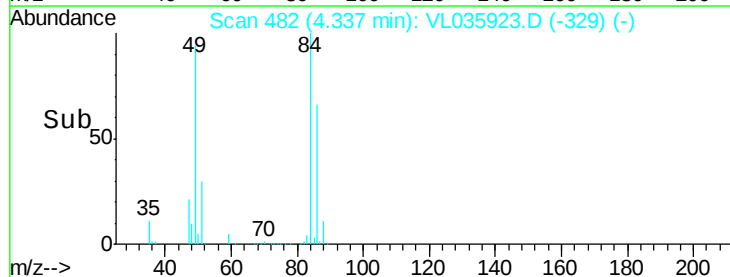
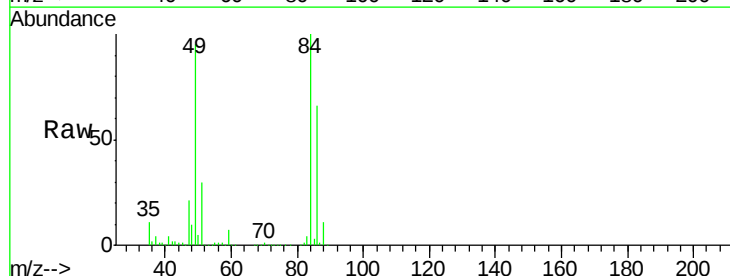
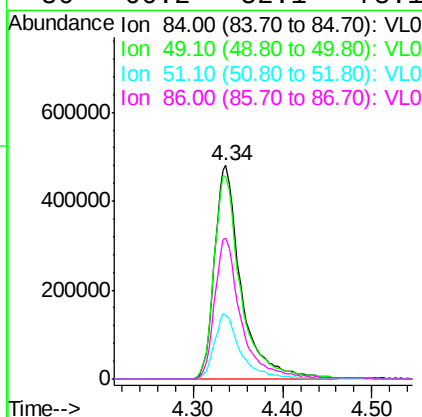
Manual Integrations
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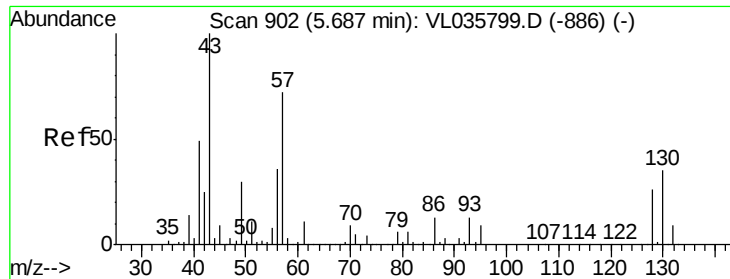
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#20
Methylene Chloride
Concen: 11.390 ppbv
RT: 4.34 min Scan# 482
Delta R.T. -0.01 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Tgt Ion: 84 Resp: 993986
Ion Ratio Lower Upper
84 100
49 94.3 73.8 110.8
51 29.8 23.0 34.4
86 66.2 52.1 78.1





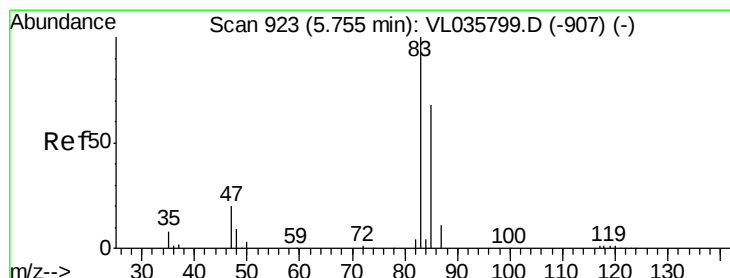
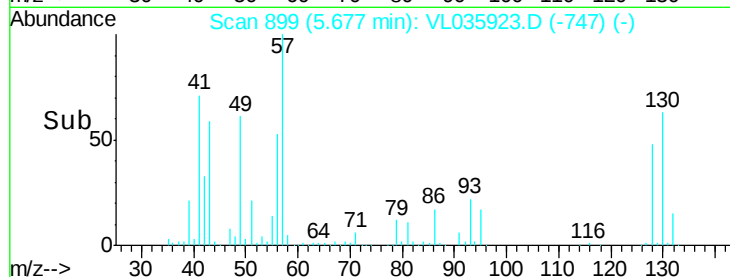
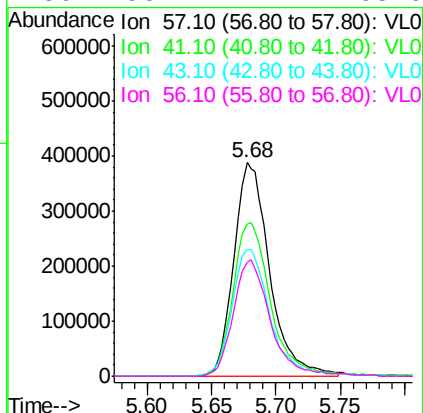
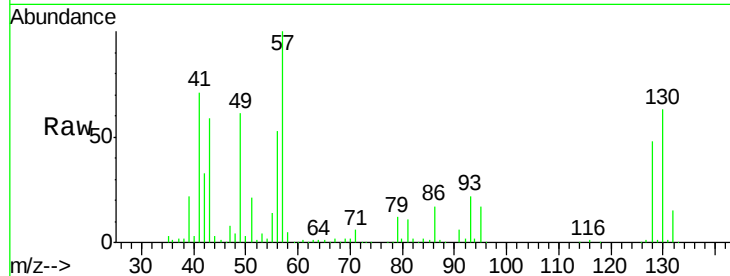
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Hexane
Concen: 5.549 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.01 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Instrument :
MSVOA_L
ClientSampled :
LA-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	77.3	58.9	88.3
43	63.3	150.2	225.2#
56	56.7	42.4	63.6

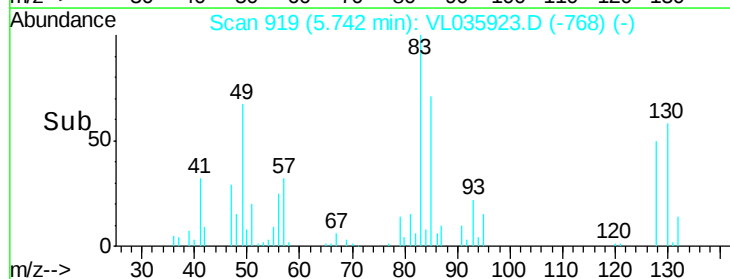
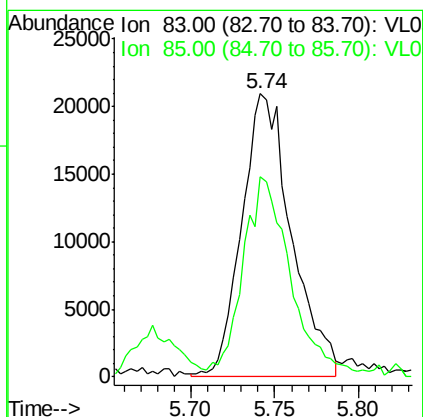
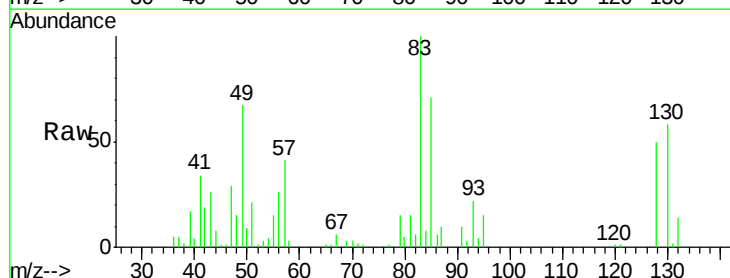
Manual Integrations
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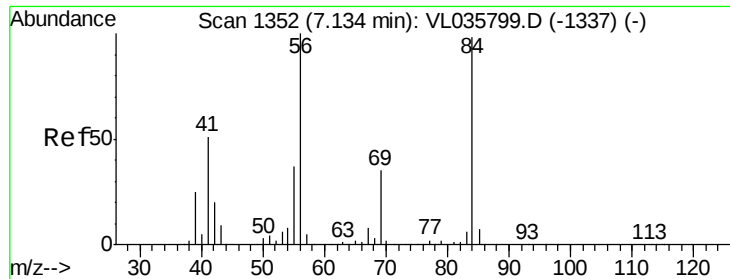
MMDadoda
11/16/2020 2:28:32 PM



#29
Chloroform
Concen: 0.164 ppbv m
RT: 5.74 min Scan# 919
Delta R.T. -0.01 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Tgt Ion	Ratio	Lower	Upper
83	100		
85	70.9	54.6	81.8





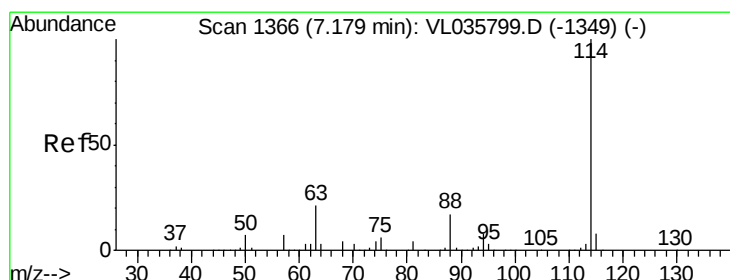
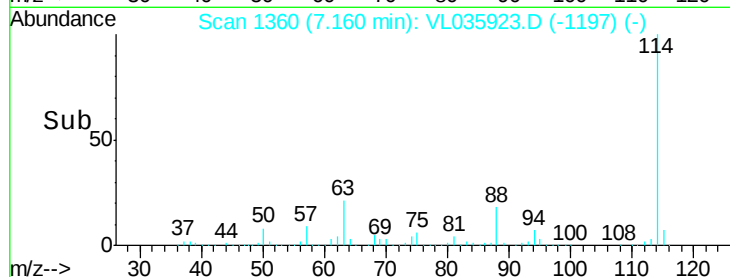
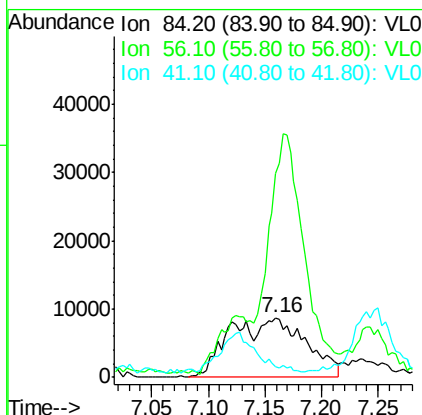
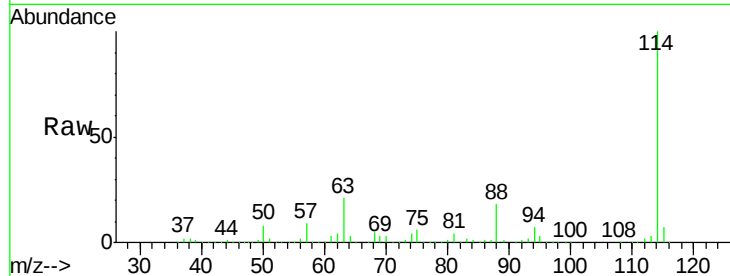
#30
Cvclohexane
Concen: 0.277 ppbv m
RT: 7.16 min Scan# 1360
Delta R.T. 0.03 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Instrument :
MSVOA_L
ClientSampleId :
LA-1

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	86.4	129.6#
41	0.0	42.1	63.1#

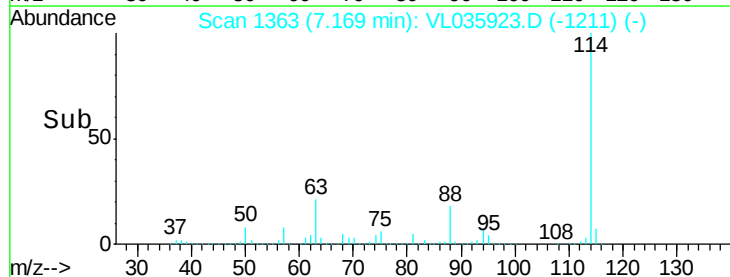
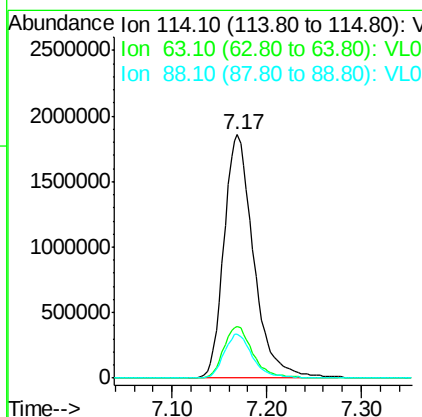
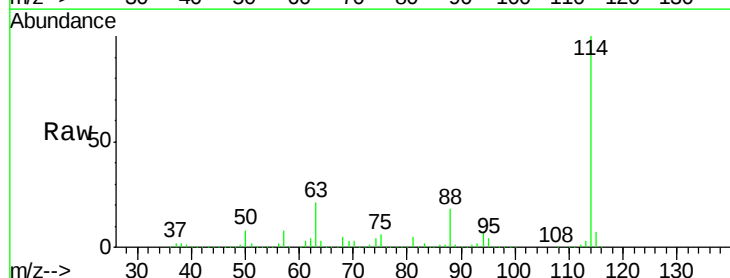
Manual Integrations
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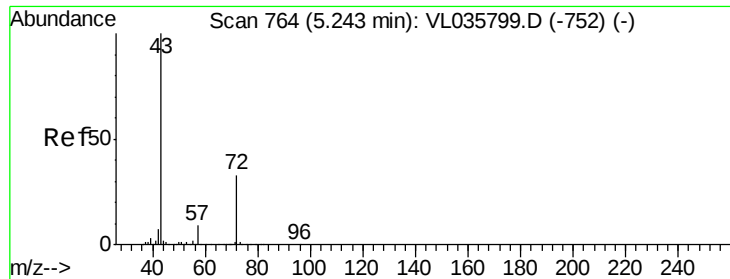
MMDadoda
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.01 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Tgt Ion	Ratio	Lower	Upper
114	100		
63	20.9	16.1	24.1
88	17.6	13.7	20.5





#34

2-Butanone

Concen: 0.558 ppbv

RT: 5.24 min Scan# 763

Delta R.T. -0.00 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Instrument :

MSVOA_L

ClientSampleId :

LA-1

Tot Ion: 43 Resp: 73284

Ion Ratio Lower Upper

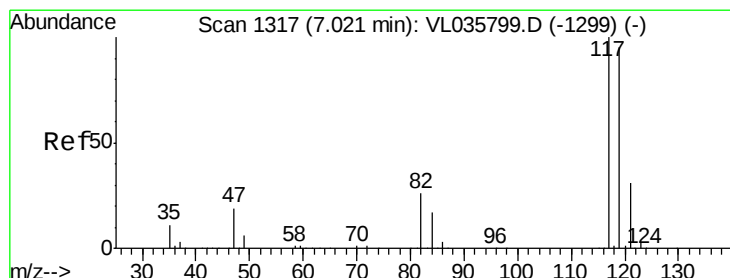
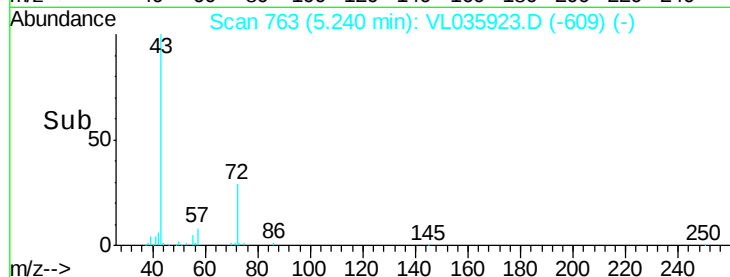
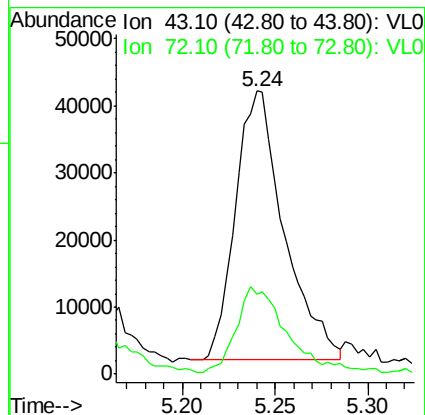
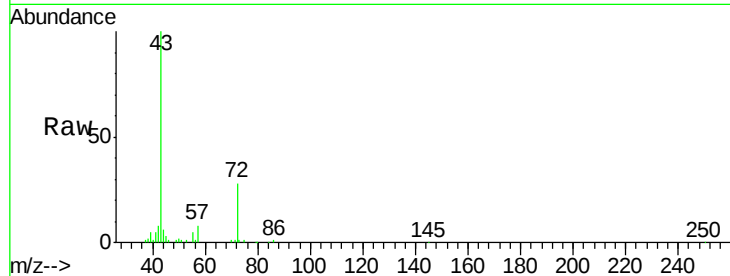
43 100

72 36.2 26.5 39.7

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#35

Carbon Tetrachloride

Concen: 0.059 ppbv

RT: 7.01 min Scan# 1313

Delta R.T. -0.01 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

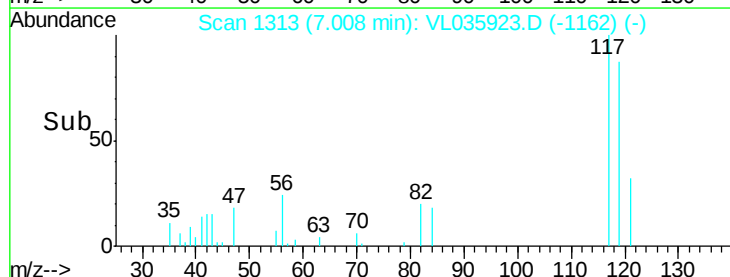
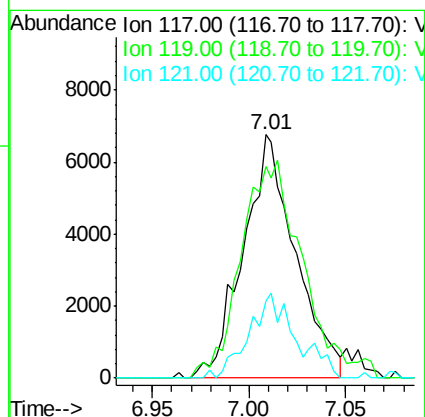
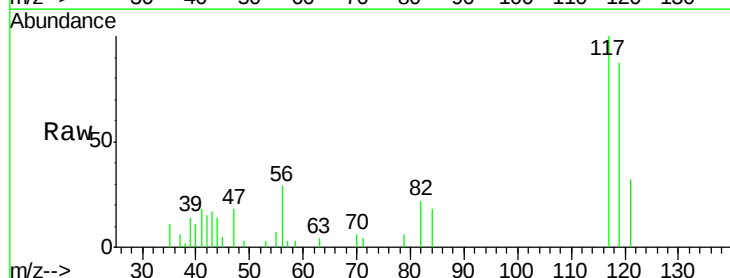
Tgt Ion: 117 Resp: 12729

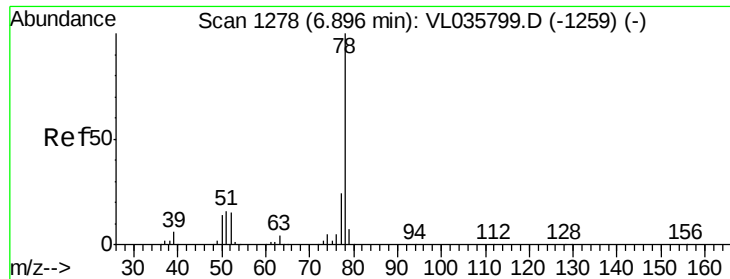
Ion Ratio Lower Upper

117 100

119 87.0 75.6 113.4

121 31.7 25.1 37.7





#36

Benzene

Concen: 0.357 ppbv

RT: 6.88 min Scan# 1274

Delta R.T. -0.01 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Instrument :

MSVOA_L

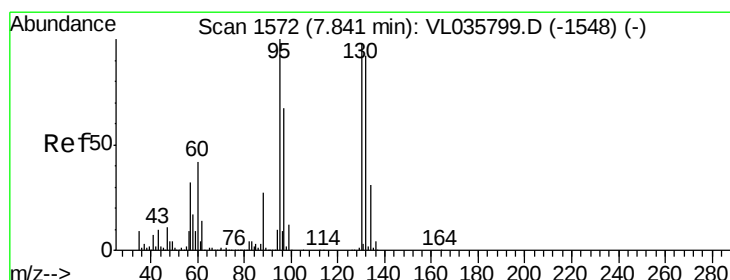
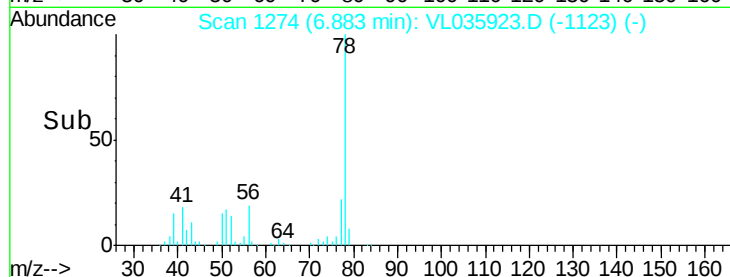
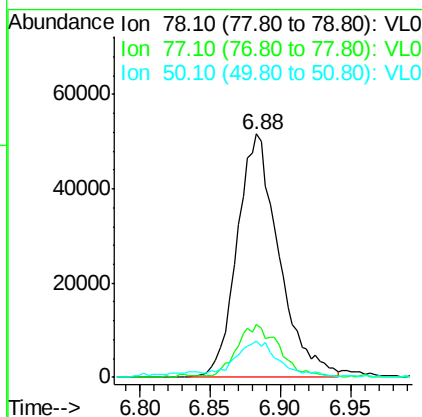
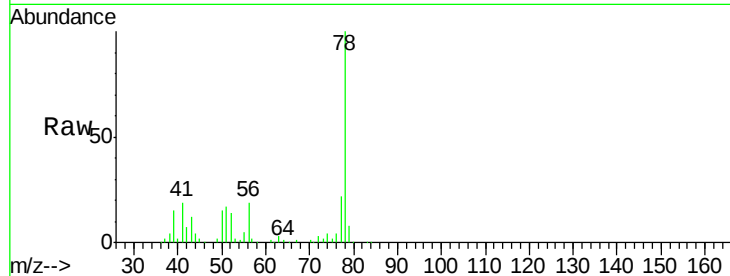
ClientSampled :

LA-1

Tot Ion:	78	Resp:	107283
Ion	Ratio	Lower	Upper
78	100		
77	21.3	19.3	28.9
50	14.7	11.4	17.2

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#38

Trichloroethene

Concen: 0.040 ppbv

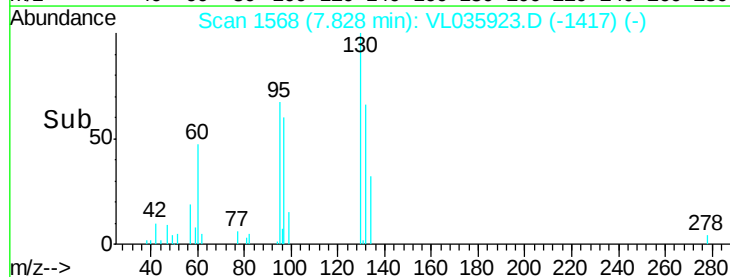
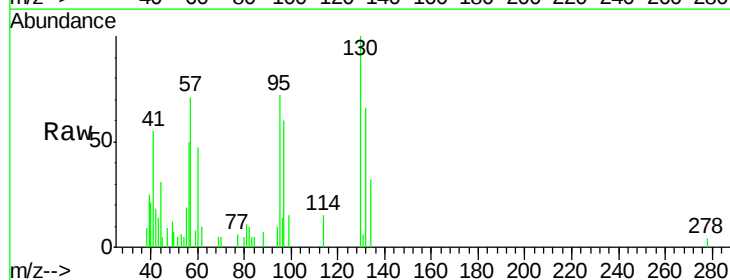
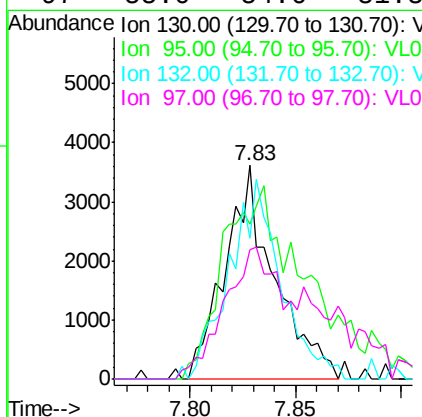
RT: 7.83 min Scan# 1568

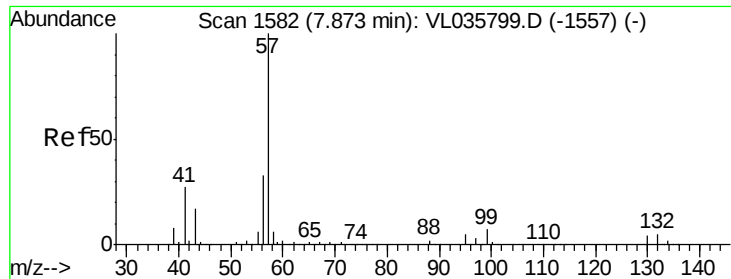
Delta R.T. -0.01 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Tgt Ion:	130	Resp:	5879
Ion	Ratio	Lower	Upper
130	100		
95	65.1	81.6	122.4#
132	65.7	75.1	112.7#
97	55.0	54.6	81.8





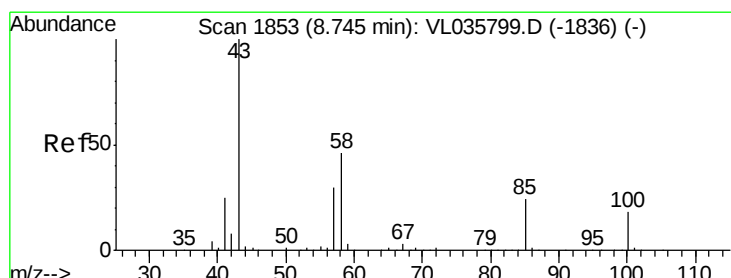
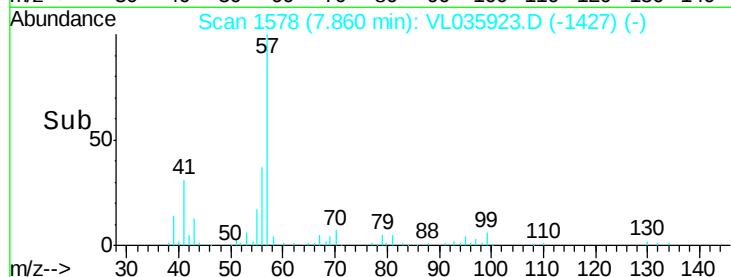
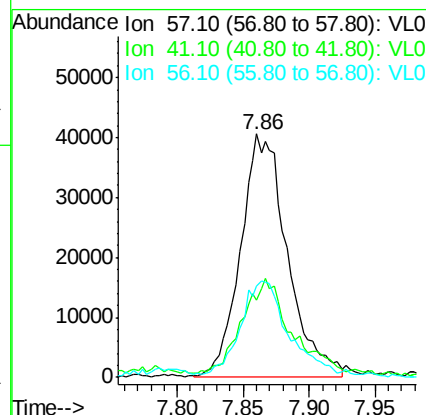
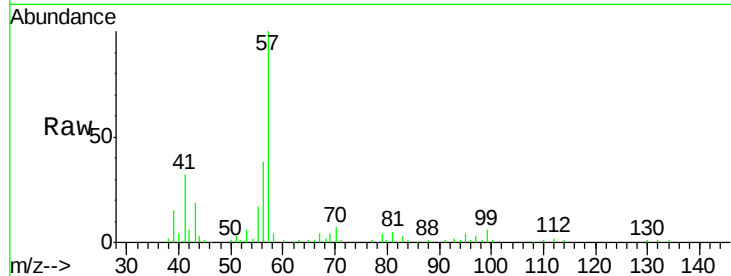
#44
 2,2,4-Trimethylpentane
 Concen: 0.251 ppbv m
 RT: 7.86 min Scan# 1578
 Delta R.T. -0.01 min
 Lab File: VL035923.D
 Acq: 12 Nov 2020 21:19

Instrument :
 MSVOA_L
 ClientSampled :
 LA-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	43.6	21.0	31.4#
56	43.2	25.4	38.0#

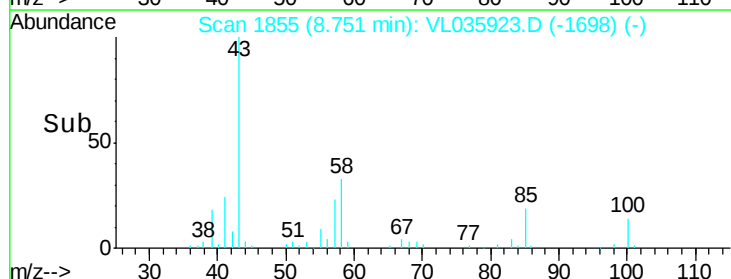
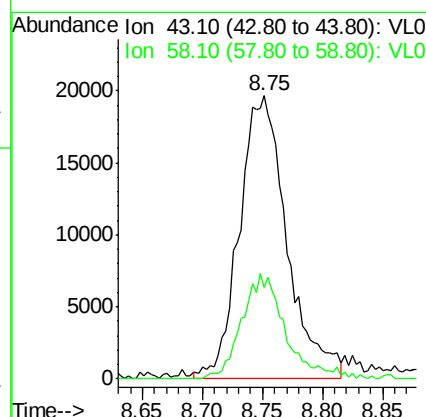
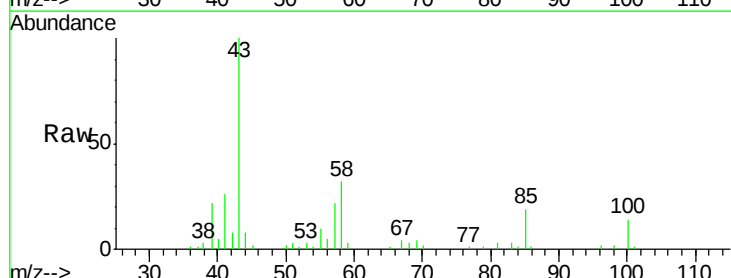
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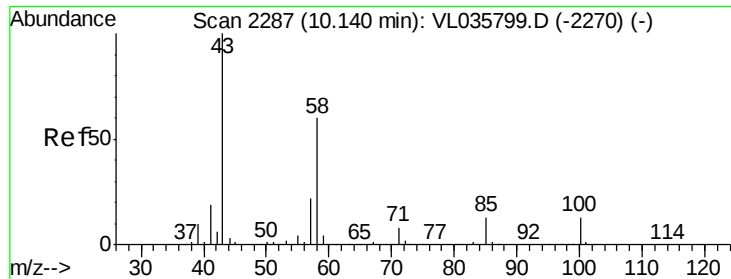
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#50
 4-Methyl-2-Pentanone
 Concen: 0.271 ppbv m
 RT: 8.75 min Scan# 1855
 Delta R.T. 0.01 min
 Lab File: VL035923.D
 Acq: 12 Nov 2020 21:19

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	36.0	54.0#





#51

2-Hexanone

Concen: 0.146 ppbv

RT: 10.14 min Scan# 2287

Delta R.T. -0.00 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Instrument :

MSVOA_L

ClientSampled :

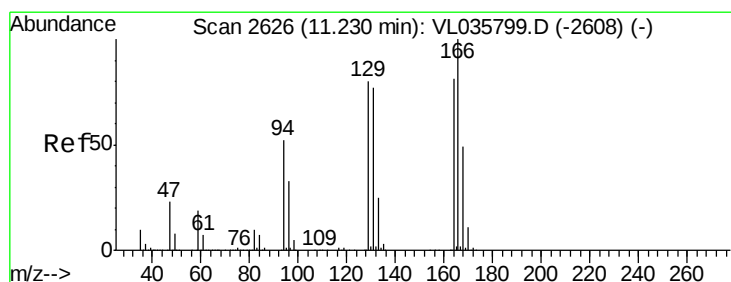
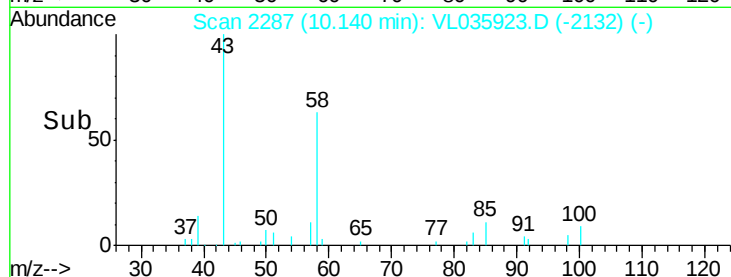
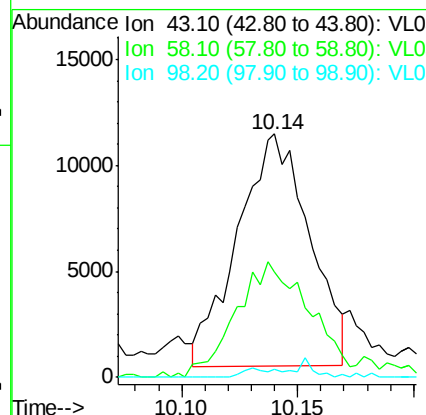
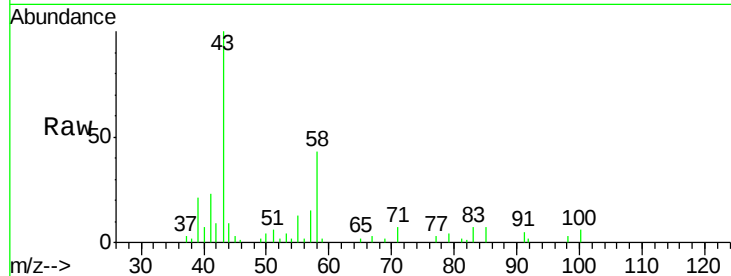
LA-1

Tot Ion: 43 Resp: 23578

Ion	Ratio	Lower	Upper
43	100		
58	56.3	48.3	72.5
98	3.9	0.6	0.8#

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#52

Tetrachloroethene

Concen: 0.041 ppbv m

RT: 11.22 min Scan# 2623

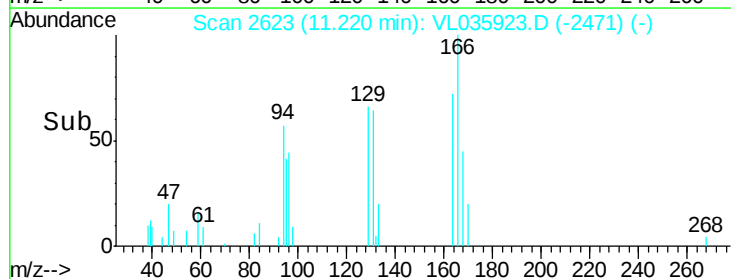
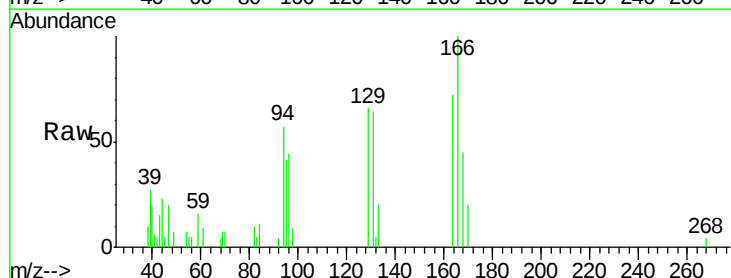
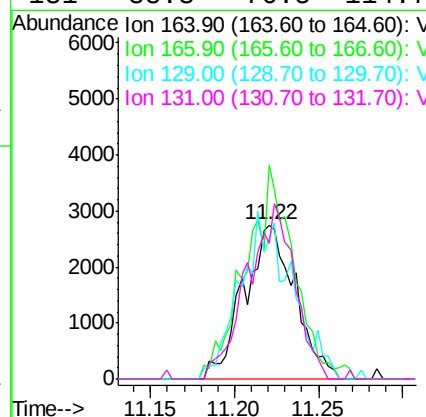
Delta R.T. -0.01 min

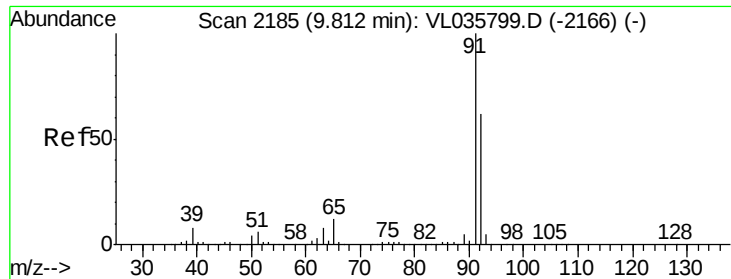
Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Tgt Ion: 164 Resp: 5800

Ion	Ratio	Lower	Upper
164	100		
166	138.7	99.3	148.9
129	91.3	79.3	118.9
131	88.3	76.5	114.7





#53

Toluene

Concen: 4.950 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

Instrument :

MSVOA_L

ClientSampled :

LA-1

Tot Ion: 91 Resp: 1796065

Ion Ratio Lower Upper

91 100

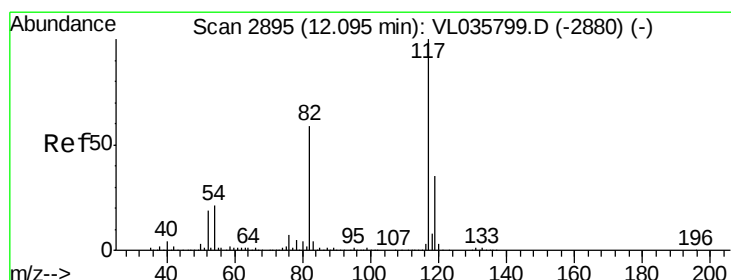
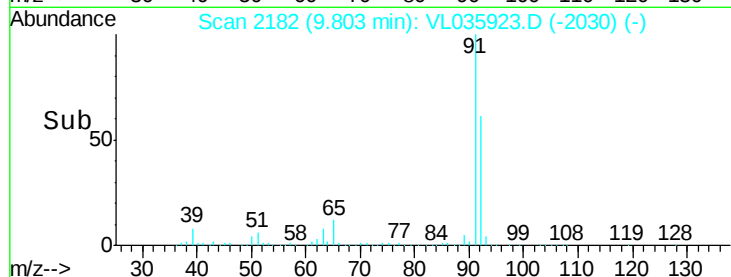
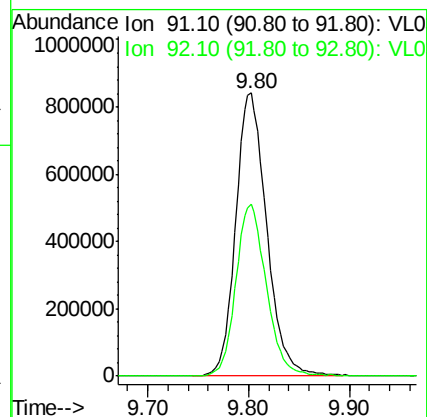
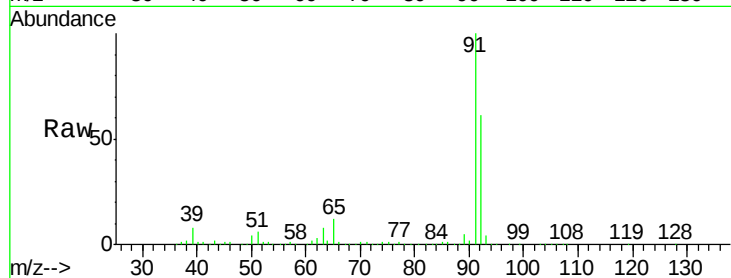
92 60.2 49.8 74.6

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL035923.D

Acq: 12 Nov 2020 21:19

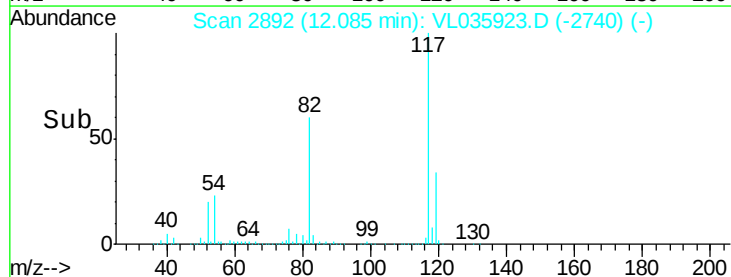
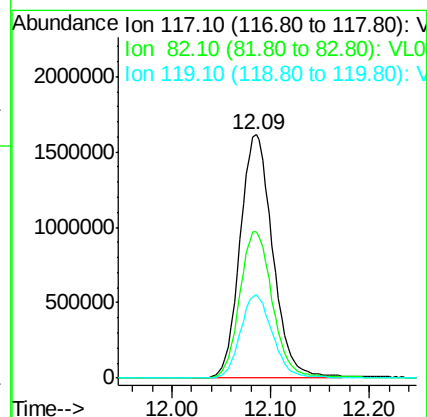
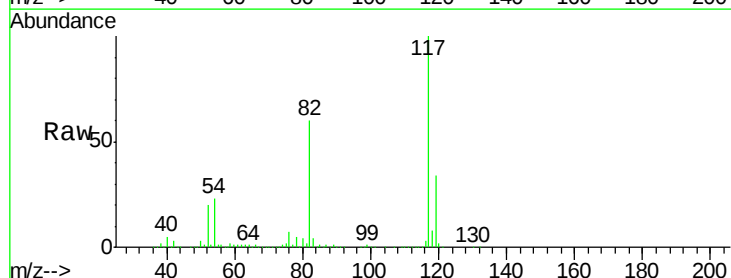
Tgt Ion: 117 Resp: 3711660

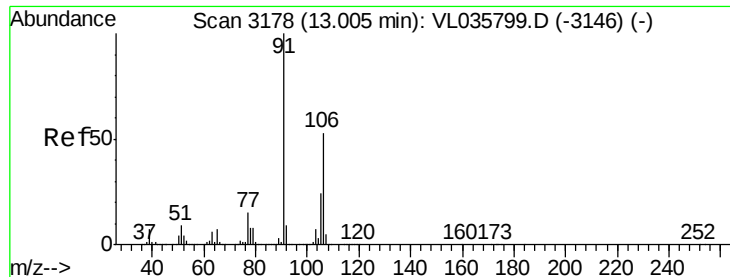
Ion Ratio Lower Upper

117 100

82 61.3 50.6 76.0

119 34.0 52.6 78.8#





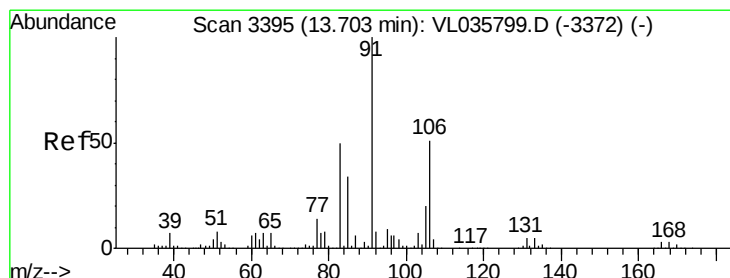
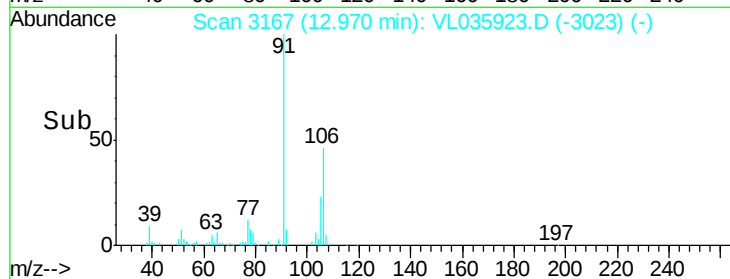
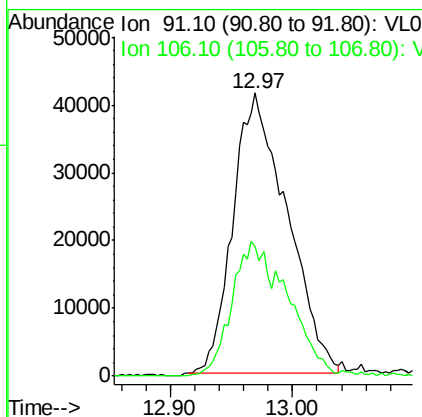
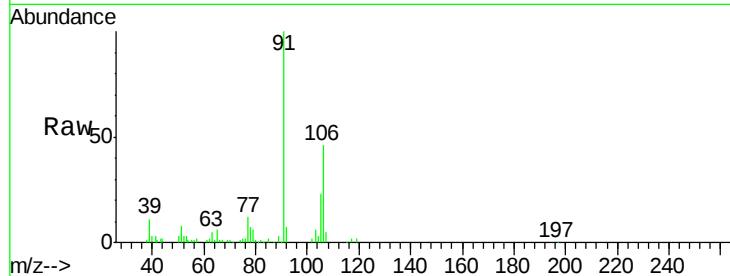
#59
m/p-Xylene
Concen: 0.334 ppbv
RT: 12.97 min Scan# 3167
Delta R.T. -0.04 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Instrument :
MSVOA_L
ClientSampled :
LA-1

Tot Ion: 91 Resp: 127698
Ion Ratio Lower Upper
91 100
106 49.4 39.5 59.3

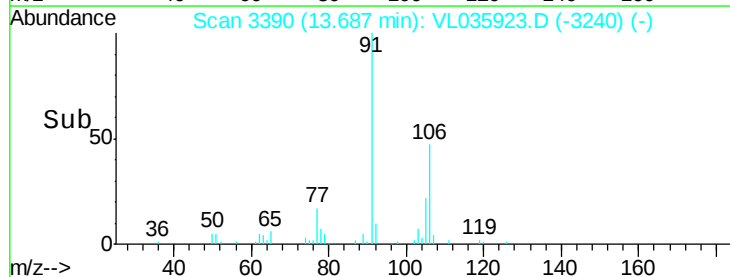
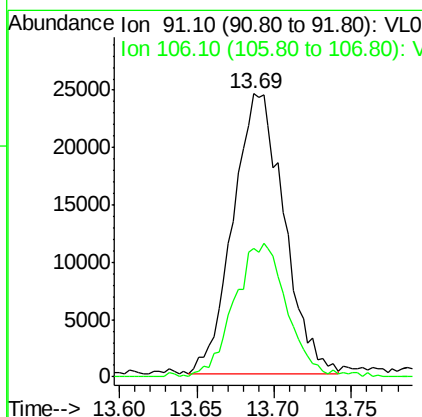
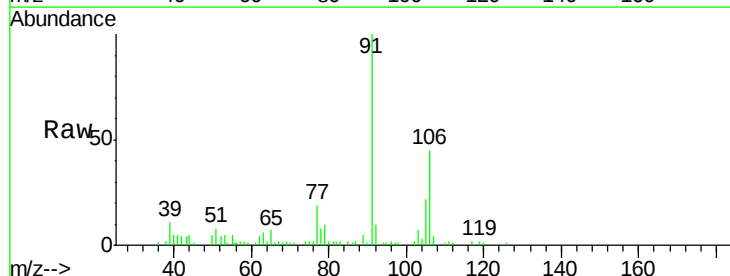
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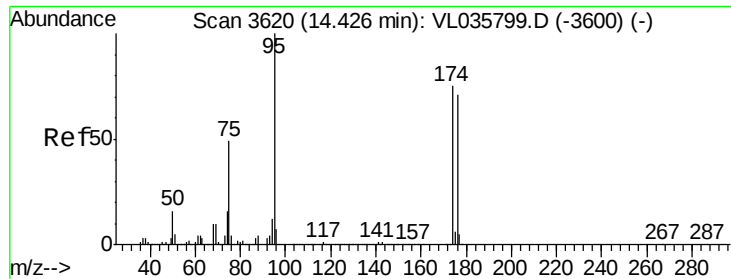
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#60
o-Xylene
Concen: 0.150 ppbv
RT: 13.69 min Scan# 3390
Delta R.T. -0.02 min
Lab File: VL035923.D
Acq: 12 Nov 2020 21:19

Tgt Ion: 91 Resp: 55944
Ion Ratio Lower Upper
91 100
106 49.6 24.8 74.4





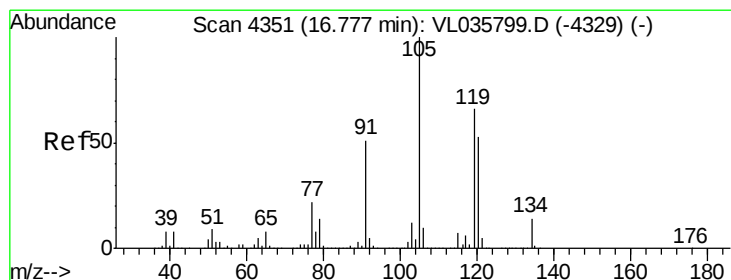
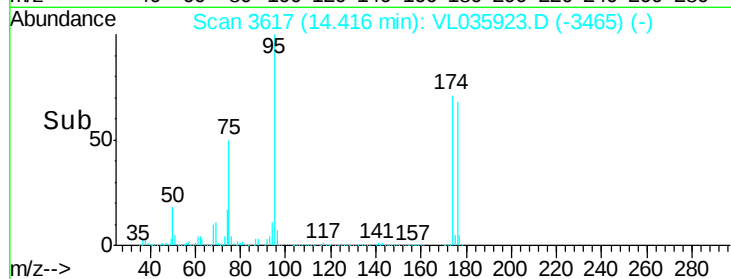
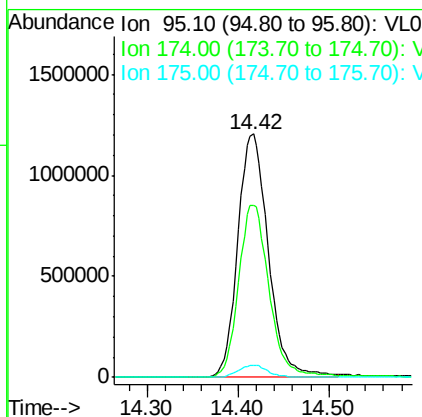
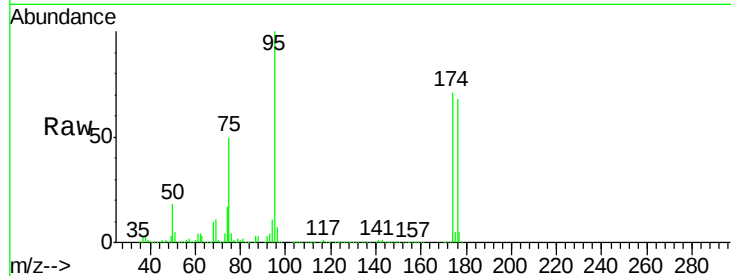
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.685 ppbv
 RT: 14.42 min Scan# 3617
 Delta R.T. -0.01 min
 Lab File: VL035923.D
 Acq: 12 Nov 2020 21:19

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-1

Tot Ion: 95 Resp: 2817599
 Ion Ratio Lower Upper
 95 100
 174 72.0 59.8 89.6
 175 5.1 4.3 6.5

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#74
 1,2,4-Trimethylbenzene
 Concen: 0.170 ppbv m
 RT: 16.76 min Scan# 4345
 Delta R.T. -0.02 min
 Lab File: VL035923.D
 Acq: 12 Nov 2020 21:19

Tgt Ion: 105 Resp: 75422
 Ion Ratio Lower Upper
 105 100
 120 41.7 42.0 63.0#
 91 11.8 41.0 61.6#
 77 13.7 17.3 25.9#

