

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110320\
 Data File : VL035809.D
 Acq On : 3 Nov 2020 18:42
 Operator : SY/AP
 Sample : L4604-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Nov 04 05:15:34 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 04 02:40:06 2020
 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	5.65	49	1106849	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	5105112	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	4706811	10.00	ppbv	-0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	3388285	10.13	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.30%

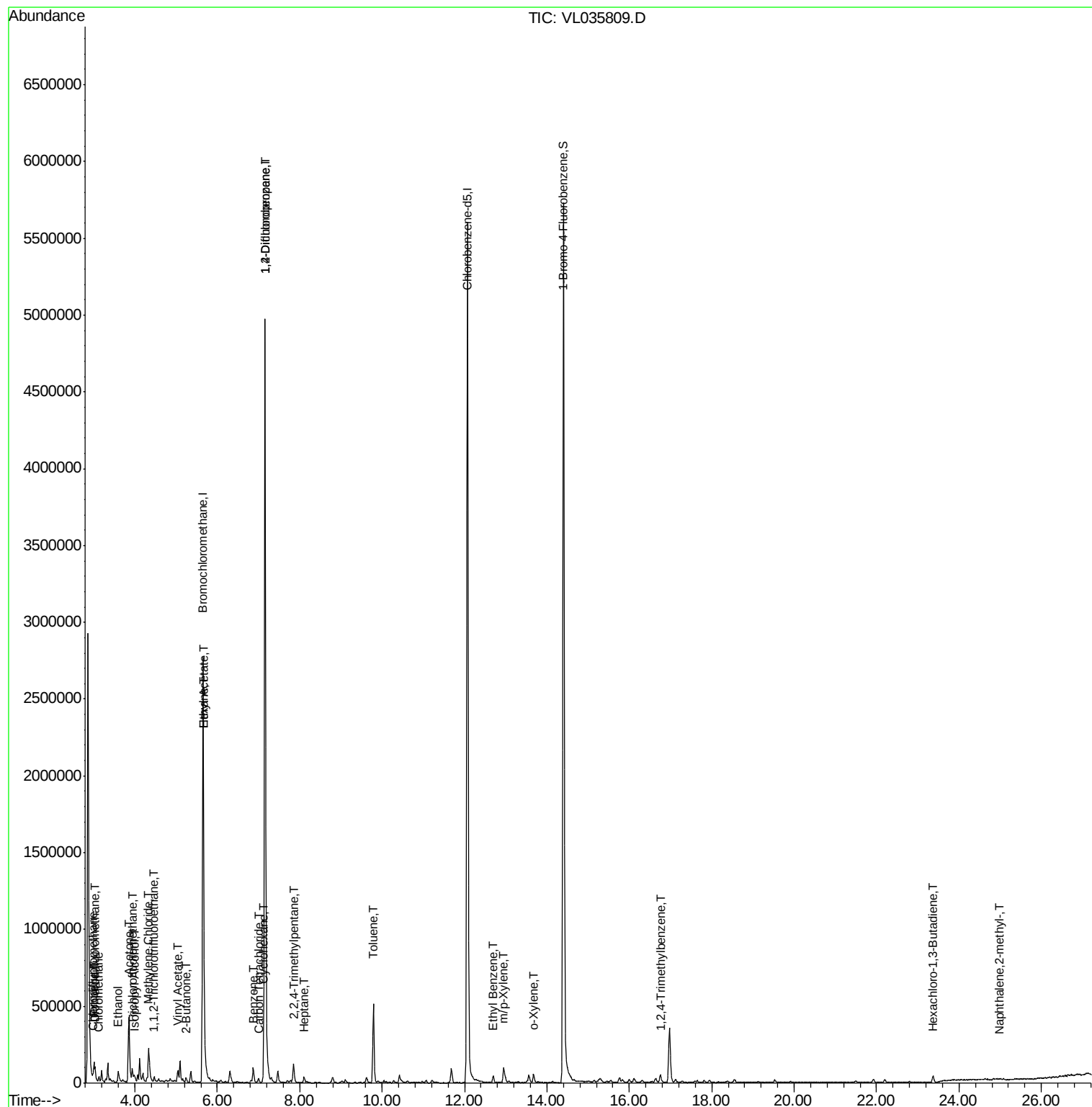
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.03	85	68136	0.327 ppbv	98
3) Chlorodifluoromethane	2.97	51	49629	0.374 ppbv	92
4) Chloromethane	3.12	50	33417	0.519 ppbv	98
9) Propene	3.00	41	36925	0.761 ppbv	87
10) Heptane	8.10	43	10217	0.076 ppbv #	51
11) Trichlorofluoromethane	3.93	101	58438	0.223 ppbv	91
12) 1,1,2-Trichlorotrifluoroet	4.47	101	13613	0.070 ppbv	94
13) Ethanol	3.59	45	94013	8.932 ppbv	96
15) Acetone	3.84	43	388980	3.287 ppbv #	88
19) Isopropyl Alcohol	3.97	45	28753	0.395 ppbv #	1
20) Methylene Chloride	4.33	84	117453	1.410 ppbv	99
23) Vinyl Acetate	5.05	43	11749	0.071 ppbv #	18
25) Ethyl Acetate	5.67	43	62065	0.266 ppbv #	78
26) Hexane	5.67	57	103201	0.803 ppbv #	47
30) Cyclohexane	7.12	84	22783	0.163 ppbv #	28
34) 2-Butanone	5.24	43	36050	0.218 ppbv	90
35) Carbon Tetrachloride	7.00	117	8860	0.032 ppbv	94
36) Benzene	6.87	78	95263	0.251 ppbv	95
39) 1,2-Dichloropropane	7.16	63	905943	7.090 ppbv #	30
44) 2,2,4-Trimethylpentane	7.85	57	118090	0.235 ppbv	93
53) Toluene	9.79	91	468967	1.024 ppbv	99
58) Ethyl Benzene	12.70	91	46000	0.080 ppbv #	88
59) m/p-Xylene	12.95	91	108975	0.225 ppbv	97
60) o-Xylene	13.67	91	43571	0.092 ppbv	98
74) 1,2,4-Trimethylbenzene	16.75	105	18410	0.033 ppbv #	65
78) Hexachloro-1,3-Butadiene	23.37	225	5229	0.032 ppbv #	12
80) Naphthalene,2-methyl-	24.99	142	5672	0.089 ppbv	91

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

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QLast Update : Wed Nov 04 02:40:06 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.02 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Instrument :

MSVOA_L

ClientSampleId :

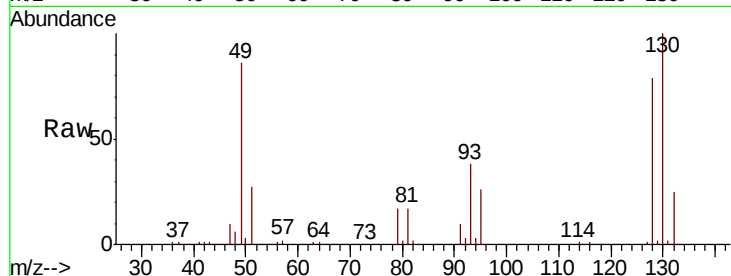
Tot Ion: 49 Resp: 1106849

Ion Ratio Lower Upper

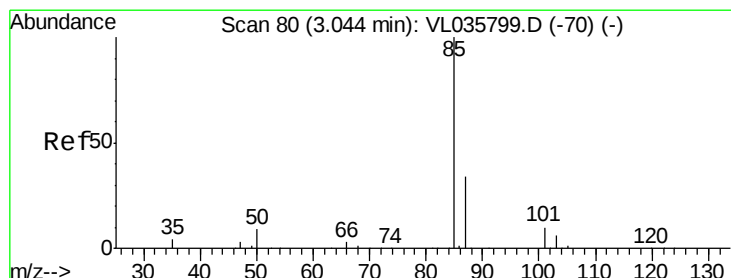
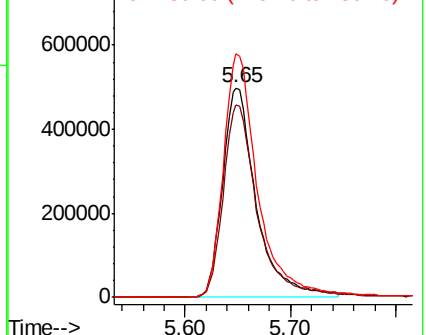
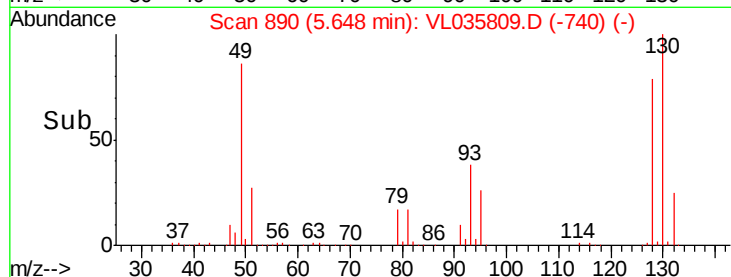
49 100

128 95.0 41.5 124.6

130 120.3 53.7 161.1



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: 0.327 ppbv

RT: 3.03 min Scan# 76

Delta R.T. -0.01 min

Lab File: VL035809.D

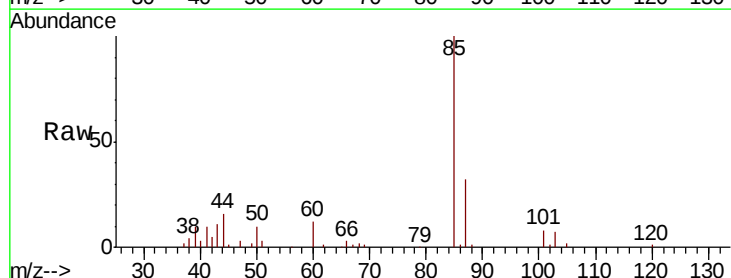
Acq: 3 Nov 2020 18:42

Tgt Ion: 85 Resp: 68136

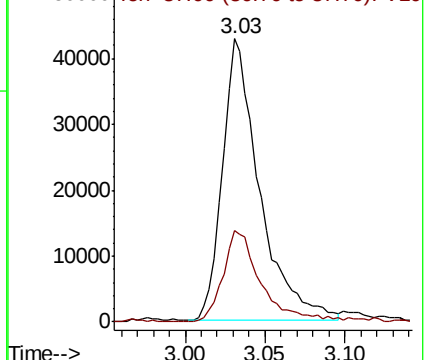
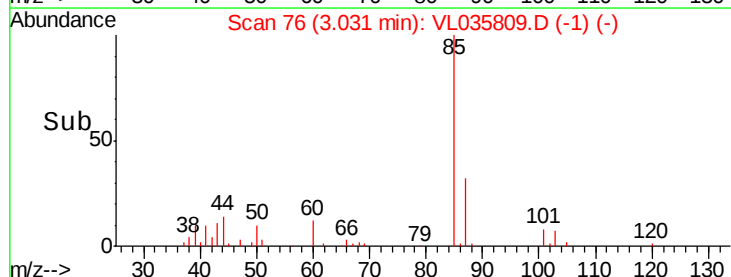
Ion Ratio Lower Upper

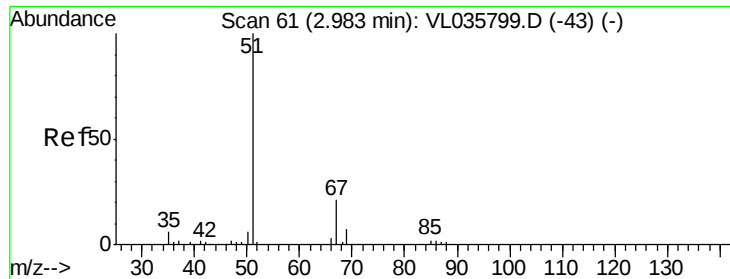
85 100

87 32.6 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: 0.374 ppbv

RT: 2.97 min Scan# 58

Delta R.T. -0.01 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Instrument :

MSVOA_L

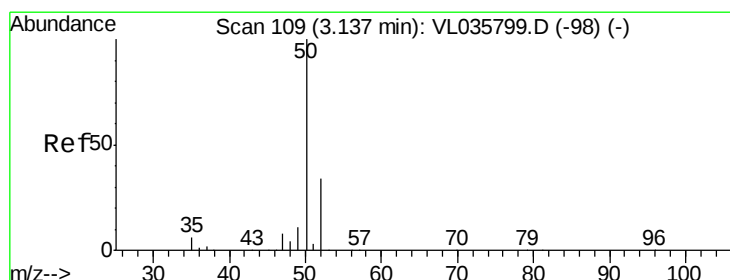
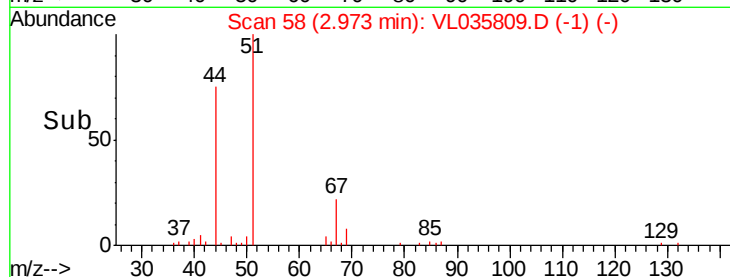
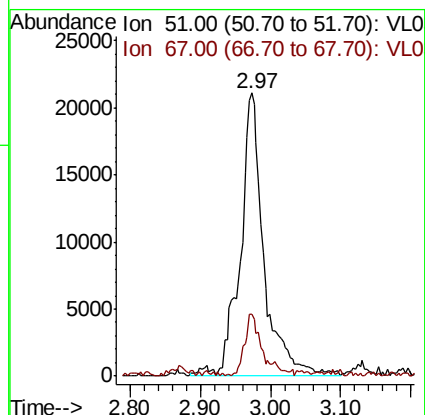
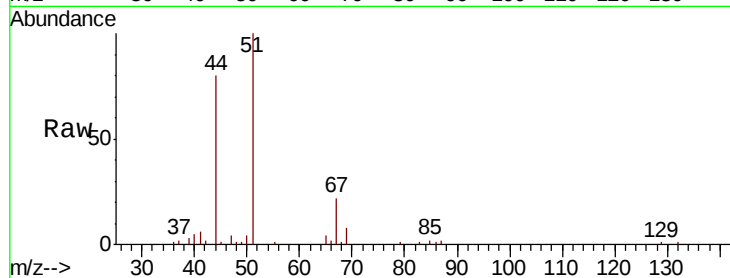
ClientSampleId :

Tot Ion: 51 Resp: 49629

Ion Ratio Lower Upper

51 100

67 17.4 17.0 25.4



#4

Chloromethane

Concen: 0.519 ppbv

RT: 3.12 min Scan# 105

Delta R.T. -0.01 min

Lab File: VL035809.D

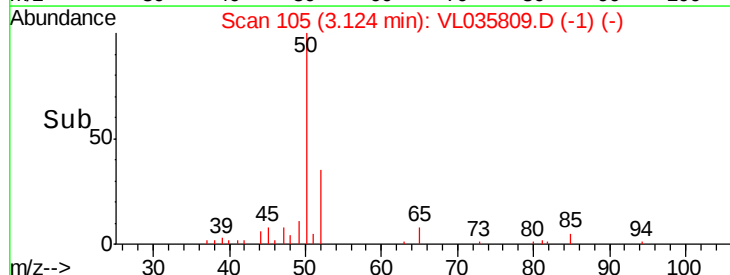
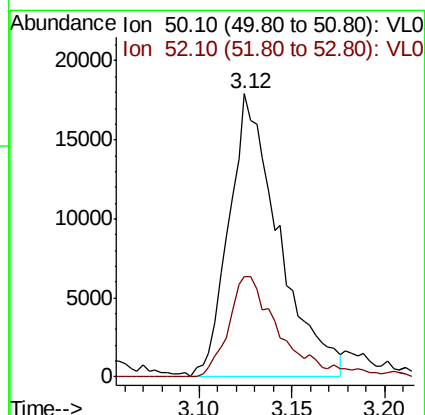
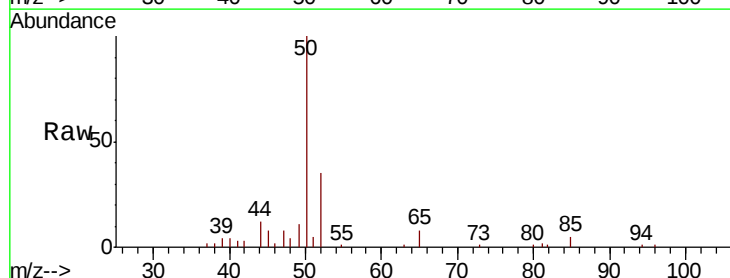
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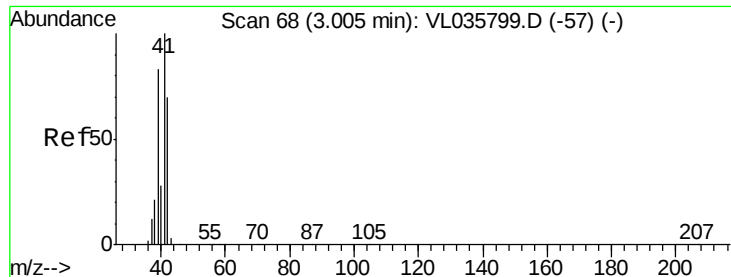
Tgt Ion: 50 Resp: 33417

Ion Ratio Lower Upper

50 100

52 35.3 27.1 40.7





#9

Propene

Concen: 0.761 ppbv

RT: 3.00 min Scan# 67

Delta R.T. -0.00 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Instrument :

MSVOA_L

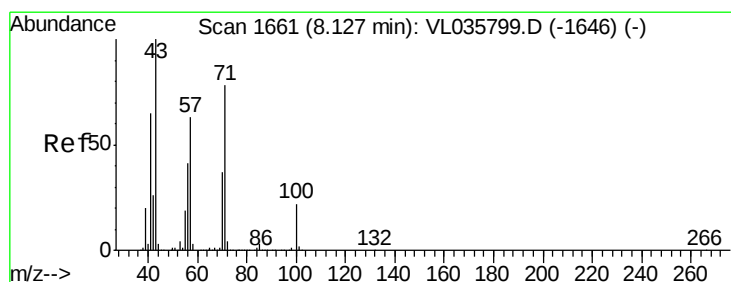
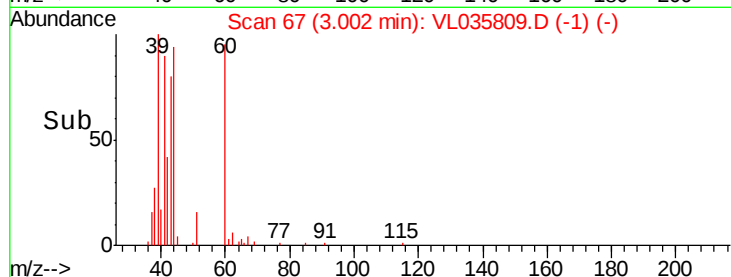
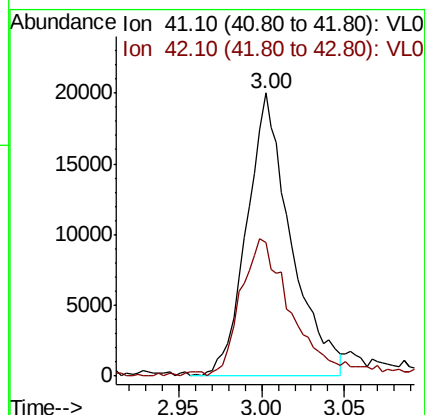
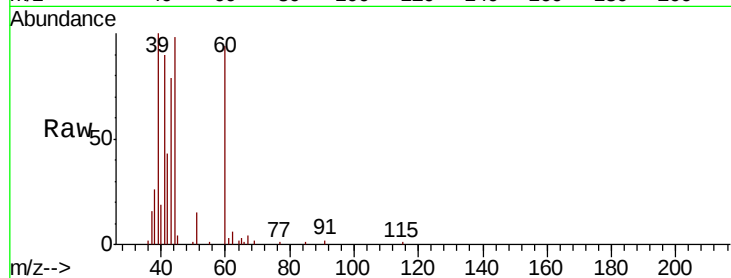
ClientSampleId :

Tot Ion: 41 Resp: 36925

Ion Ratio Lower Upper

41 100

42 59.2 56.2 84.4



#10

Heptane

Concen: 0.076 ppbv

RT: 8.10 min Scan# 1653

Delta R.T. -0.03 min

Lab File: VL035809.D

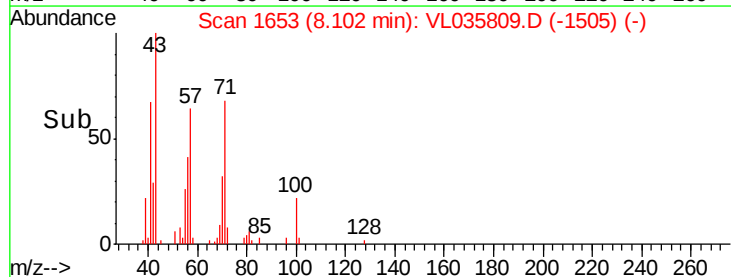
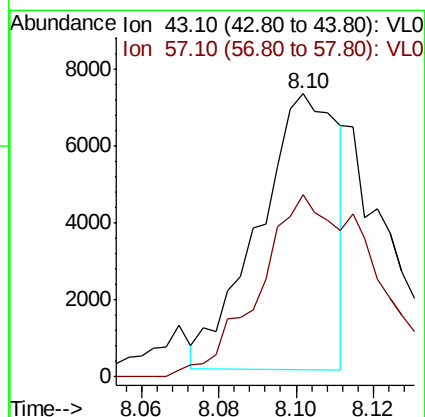
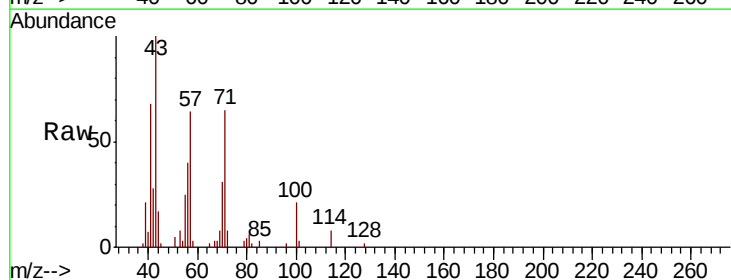
Acq: 3 Nov 2020 18:42

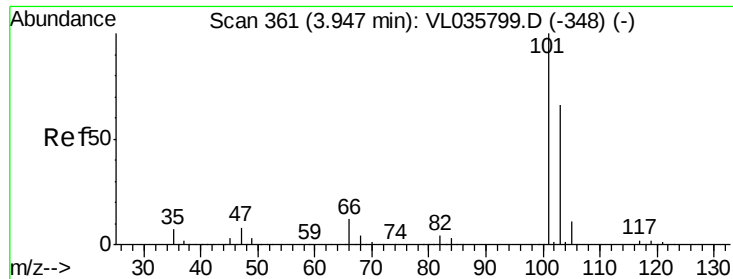
Tgt Ion: 43 Resp: 10217

Ion Ratio Lower Upper

43 100

57 100.1 50.0 75.0#

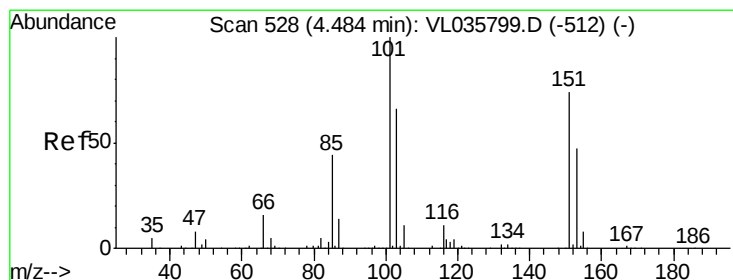
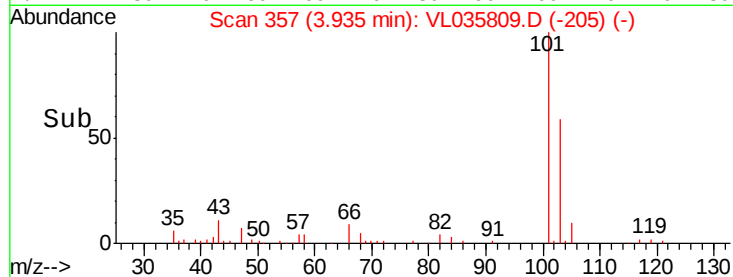
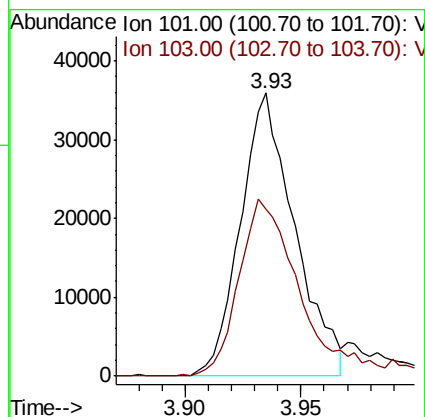
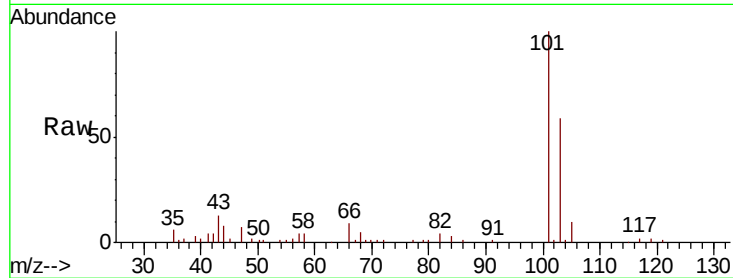




#11
 Trichlorofluoromethane
 Concen: 0.223 ppbv
 RT: 3.93 min Scan# 357
 Delta R.T. -0.01 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

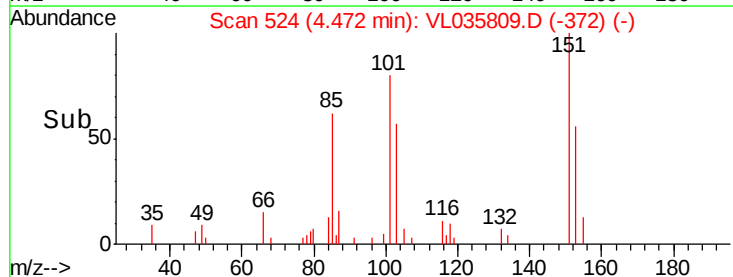
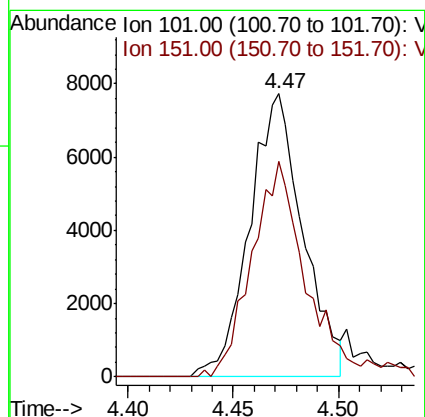
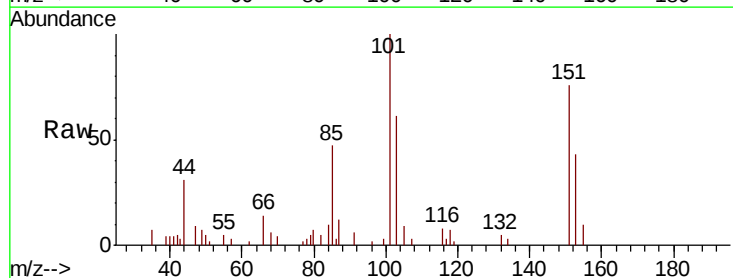
Instrument :
 MSVOA_L
 ClientSampleId :

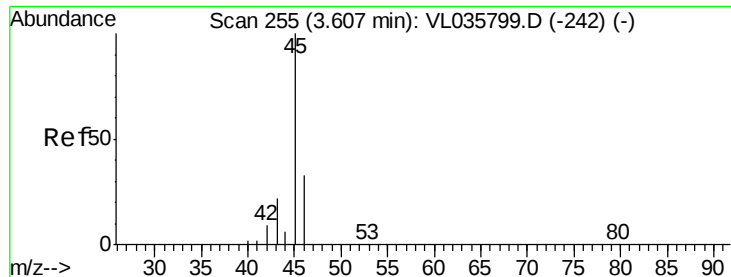
Tot Ion:101 Resp: 58438
 Ion Ratio Lower Upper
 101 100
 103 59.0 53.0 79.4



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.070 ppbv
 RT: 4.47 min Scan# 524
 Delta R.T. -0.01 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

Tgt Ion:101 Resp: 13613
 Ion Ratio Lower Upper
 101 100
 151 78.4 58.9 88.3

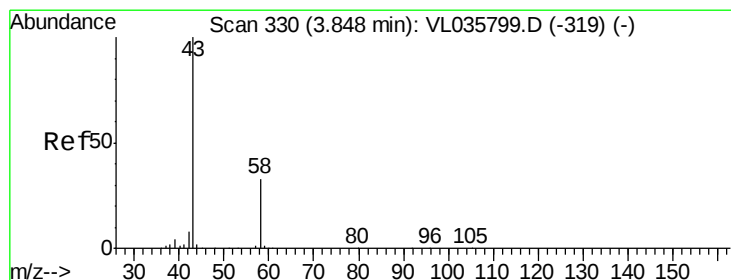
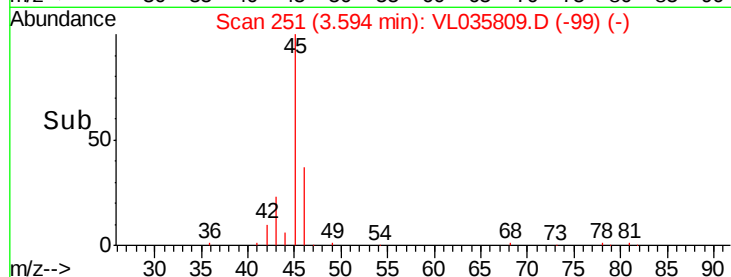
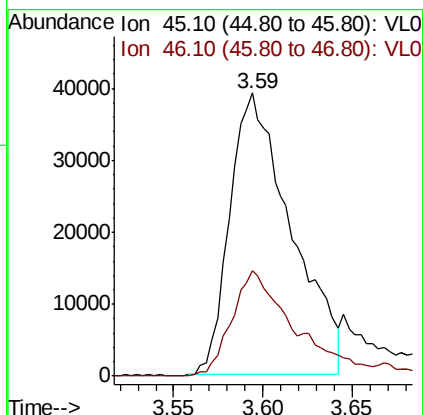
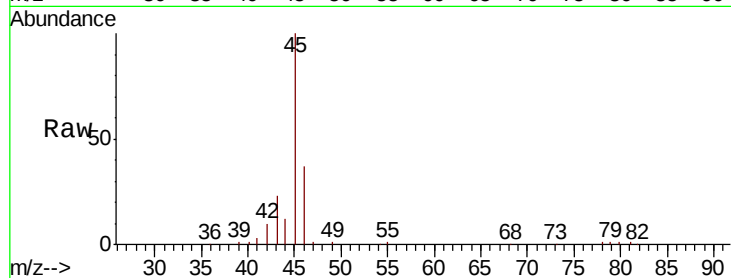




#13
Ethanol
Concen: 8.932 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL035809.D
Acq: 3 Nov 2020 18:42

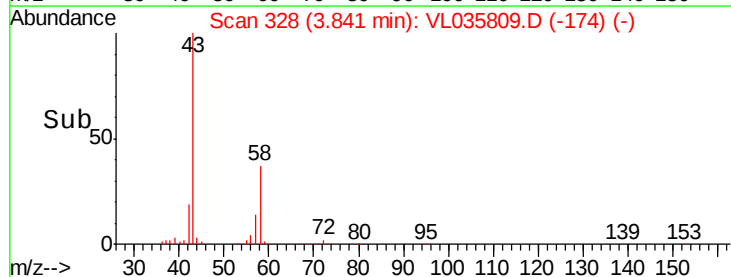
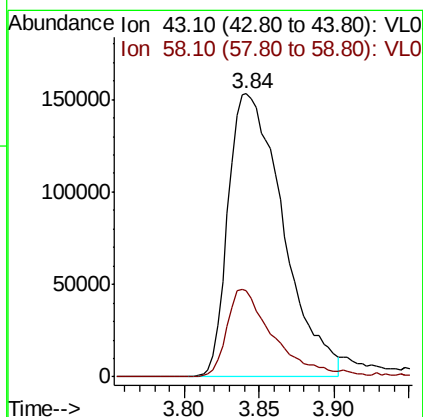
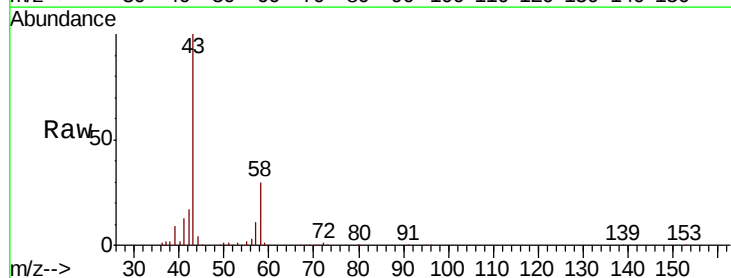
Instrument :
MSVOA_L
ClientSampled :

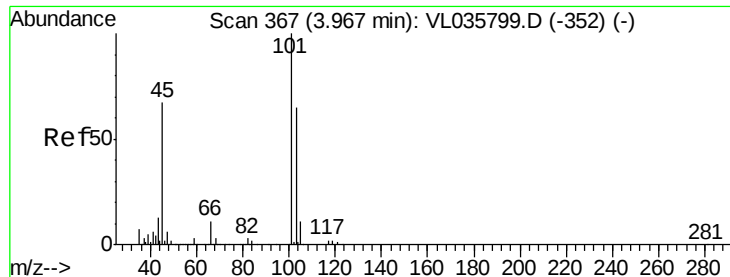
Tot Ion: 45 Resp: 94013
Ion Ratio Lower Upper
45 100
46 42.6 16.1 64.5



#15
Acetone
Concen: 3.287 ppbv
RT: 3.84 min Scan# 328
Delta R.T. -0.01 min
Lab File: VL035809.D
Acq: 3 Nov 2020 18:42

Tgt Ion: 43 Resp: 388980
Ion Ratio Lower Upper
43 100
58 27.3 27.5 41.3#





#19

Isopropyl Alcohol

Concen: 0.395 ppbv

RT: 3.97 min Scan# 369

Delta R.T. 0.01 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Instrument :

MSVOA_L

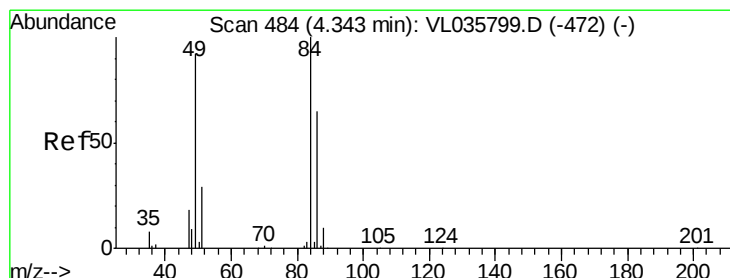
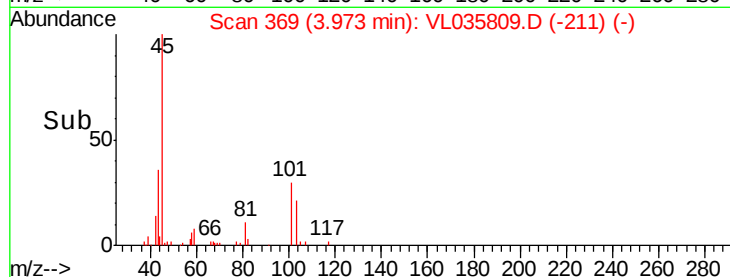
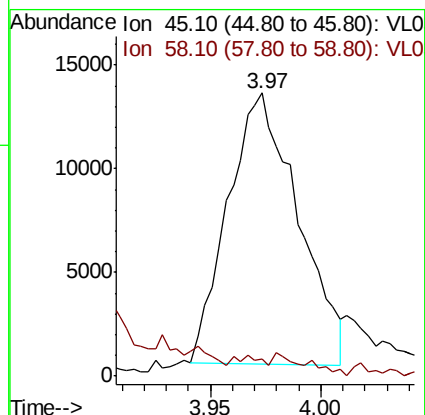
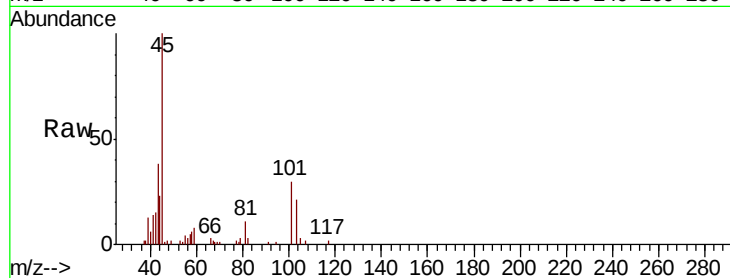
ClientSampleId :

Tot Ion: 45 Resp: 28753

Ion Ratio Lower Upper

45 100

58 378.2 2.6 3.8#



#20

Methylene Chloride

Concen: 1.410 ppbv

RT: 4.33 min Scan# 480

Delta R.T. -0.01 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Tgt Ion: 84 Resp: 117453

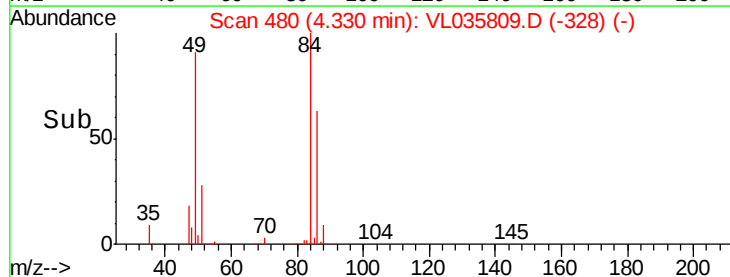
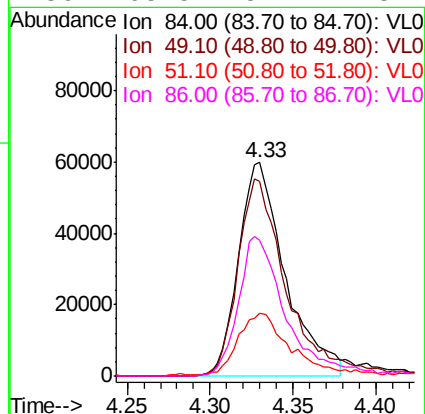
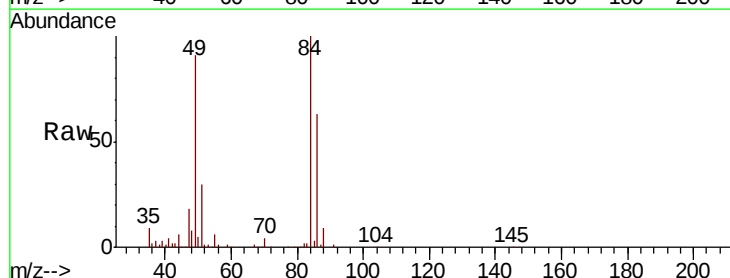
Ion Ratio Lower Upper

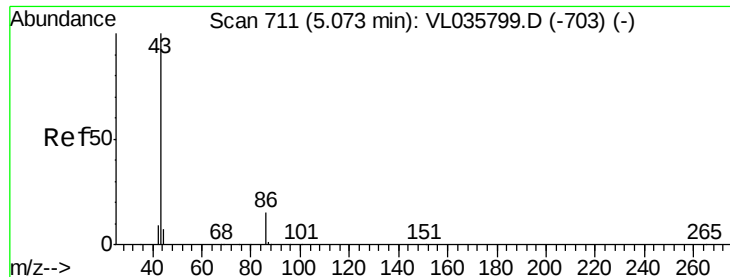
84 100

49 91.0 73.8 110.8

51 28.8 23.0 34.4

86 63.5 52.1 78.1

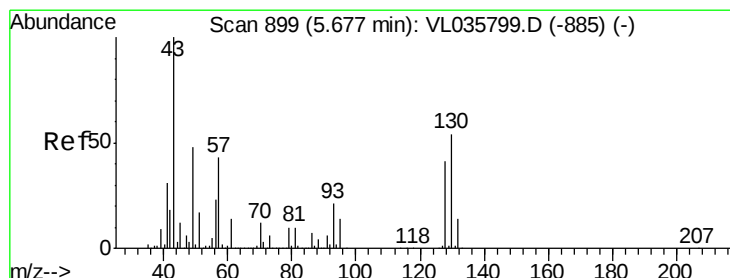
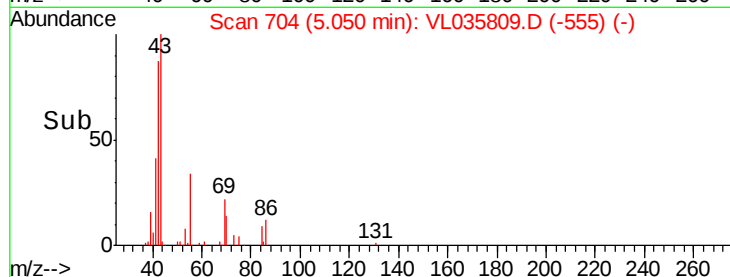
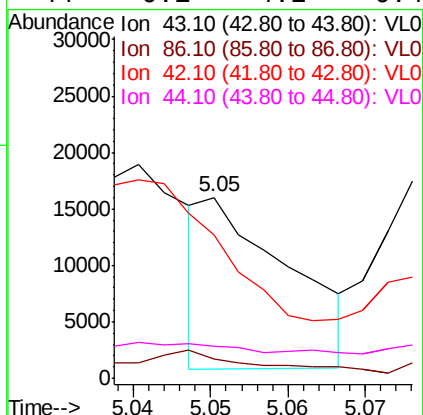
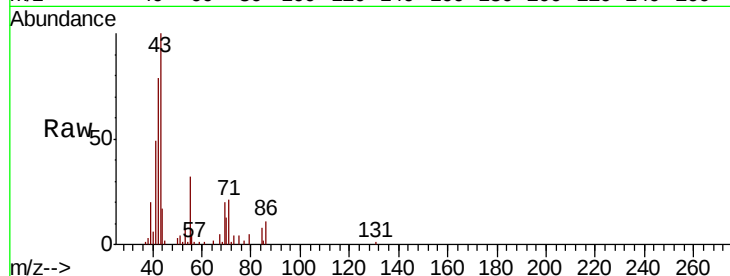




#23
 Vinyl Acetate
 Concen: 0.071 ppbv
 RT: 5.05 min Scan# 704
 Delta R.T. -0.02 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

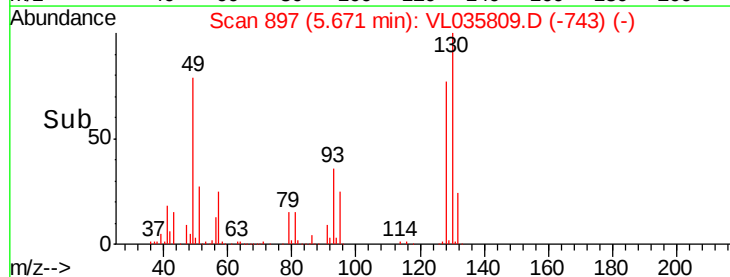
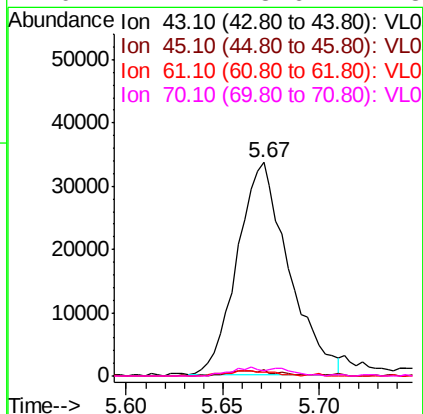
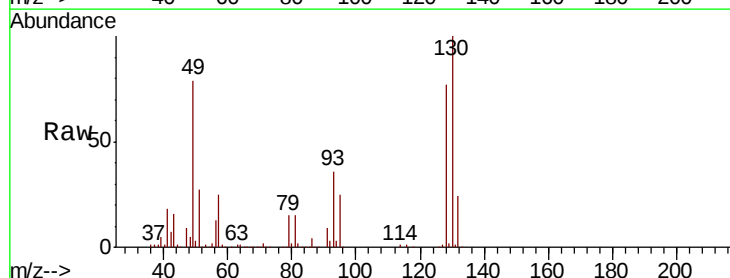
Instrument :
 MSVOA_L
 ClientSampleID :

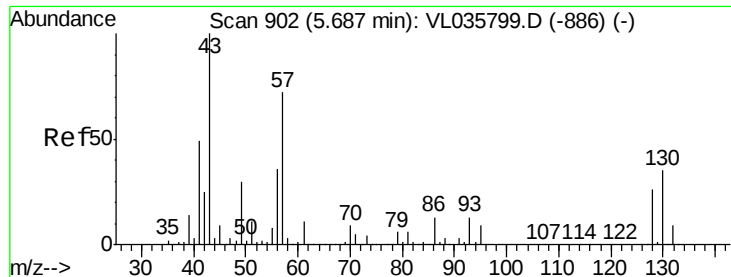
Tot Ion:	43	Resp:	11749
Ion	Ratio	Lower	Upper
43	100		
86	8.4	9.8	14.6#
42	88.1	8.1	12.1#
44	6.1	4.2	6.4



#25
 Ethyl Acetate
 Concen: 0.266 ppbv
 RT: 5.67 min Scan# 897
 Delta R.T. -0.01 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

Tgt Ion:	43	Resp:	62065
Ion	Ratio	Lower	Upper
43	100		
45	3.2	8.5	12.7#
61	2.3	10.7	16.1#
70	4.7	8.6	12.8#

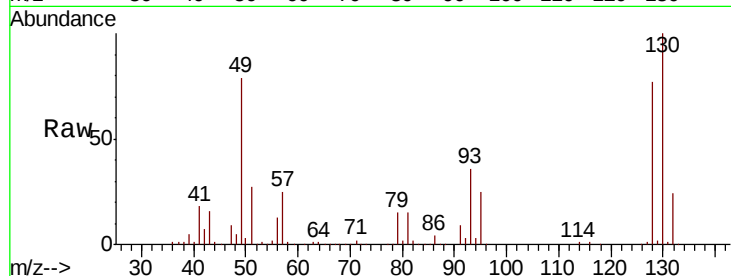




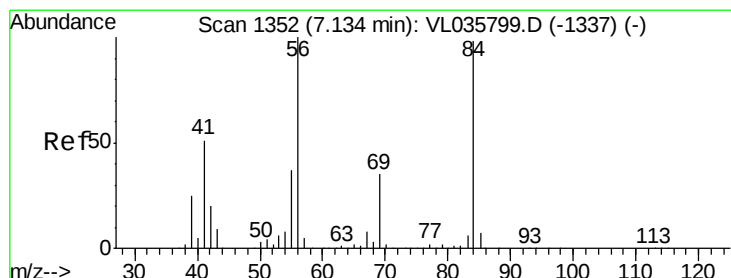
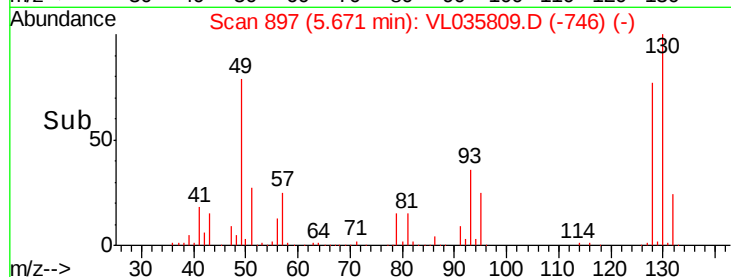
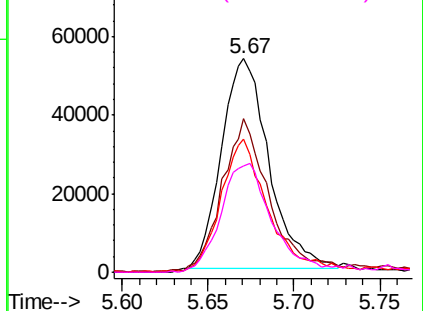
#26
Hexane
Concen: 0.803 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.02 min
Lab File: VL035809.D
Acq: 3 Nov 2020 18:42

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 57 Resp: 103201
Ion Ratio Lower Upper
57 100
41 76.9 58.9 88.3
43 64.4 150.2 225.2#
56 59.0 42.4 63.6

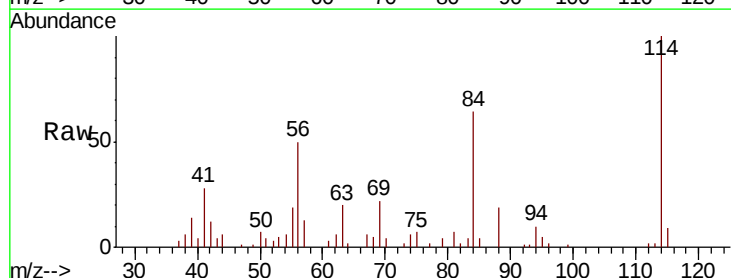


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

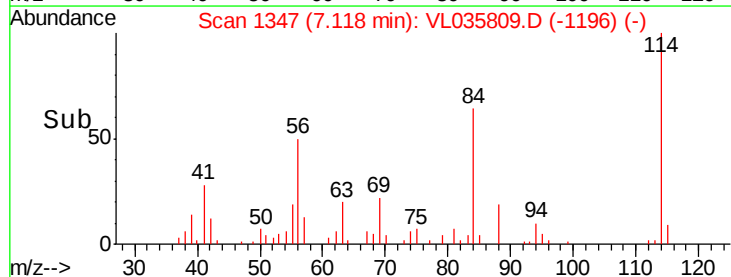
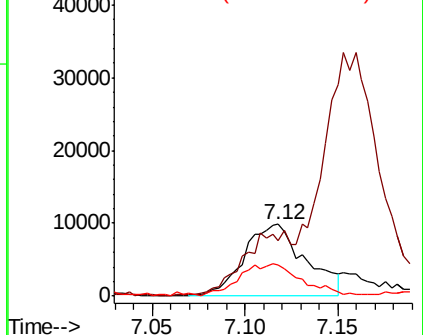


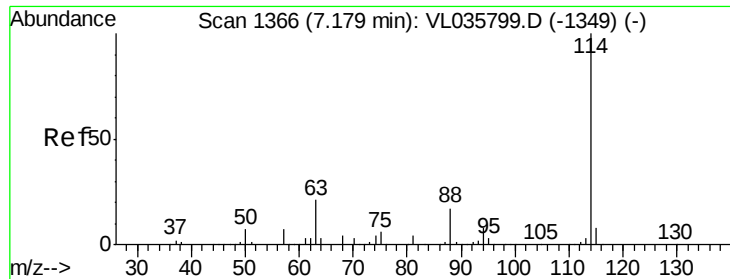
#30
Cyclohexane
Concen: 0.163 ppbv
RT: 7.12 min Scan# 1347
Delta R.T. -0.02 min
Lab File: VL035809.D
Acq: 3 Nov 2020 18:42

Tgt Ion: 84 Resp: 22783
Ion Ratio Lower Upper
84 100
56 0.0 86.4 129.6#
41 46.1 42.1 63.1



Abundance Ion 84.20 (83.90 to 84.90): VL0
Ion 56.10 (55.80 to 56.80): VL0
Ion 41.10 (40.80 to 41.80): VL0

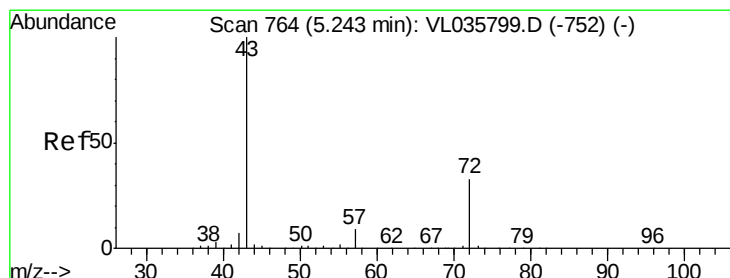
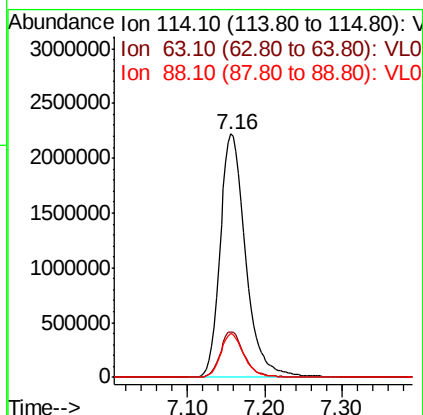
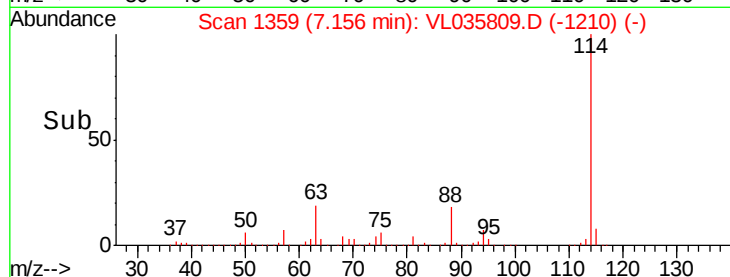
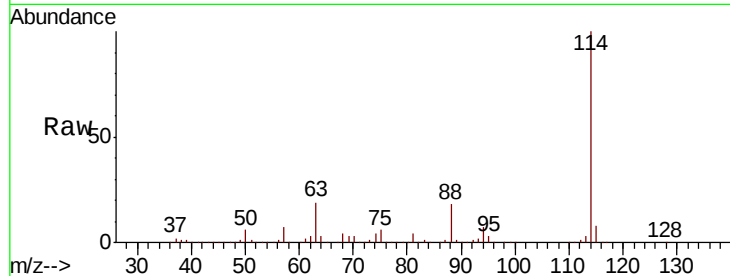




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1359
 Delta R.T. -0.02 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

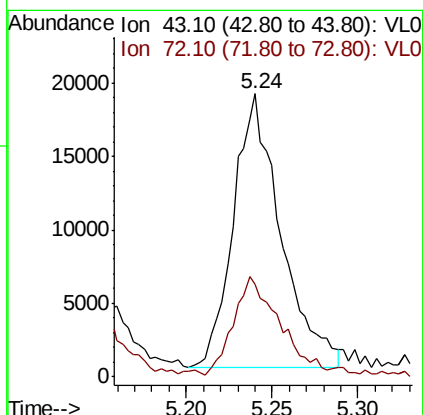
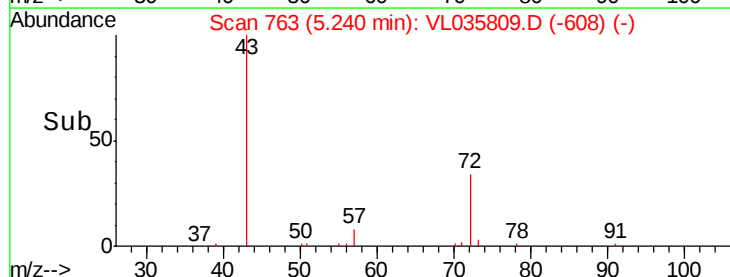
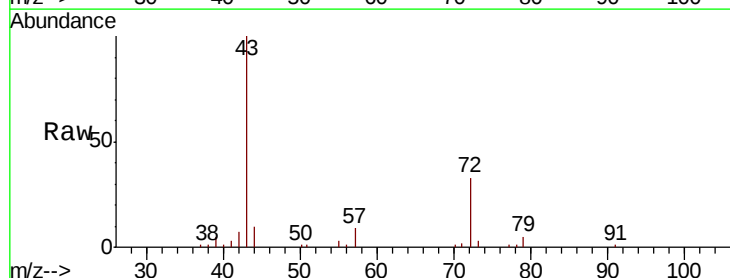
Instrument :
 MSVOA_L
 ClientSampled :

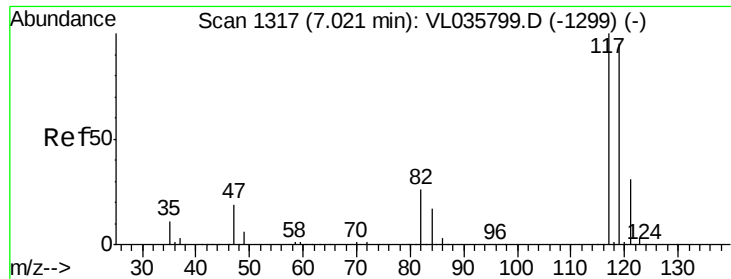
Tot Ion:114 Resp: 5105112
 Ion Ratio Lower Upper
 114 100
 63 17.9 16.1 24.1
 88 16.7 13.7 20.5



#34
 2-Butanone
 Concen: 0.218 ppbv
 RT: 5.24 min Scan# 763
 Delta R.T. -0.00 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

Tgt Ion: 43 Resp: 36050
 Ion Ratio Lower Upper
 43 100
 72 38.6 26.5 39.7





#35

Carbon Tetrachloride

Concen: 0.032 ppbv

RT: 7.00 min Scan# 1309

Delta R.T. -0.03 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Instrument :

MSVOA_L

ClientSampleId :

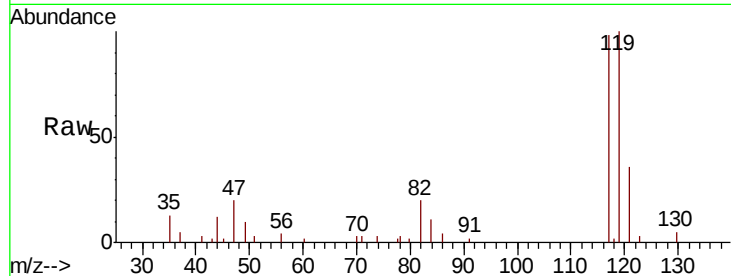
Tot Ion:117 Resp: 8860

Ion Ratio Lower Upper

117 100

119 99.8 75.6 113.4

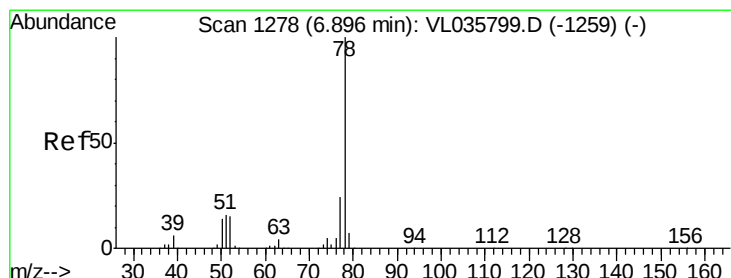
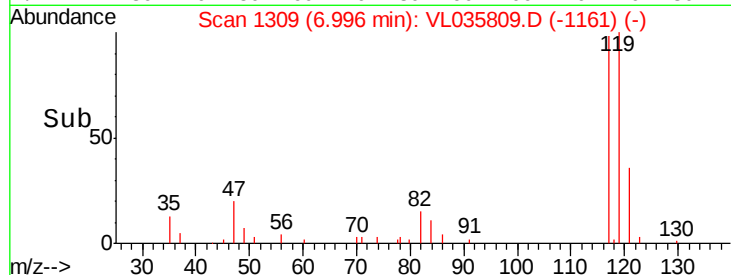
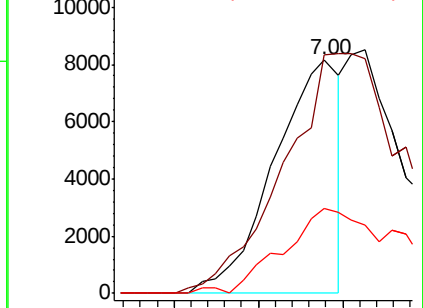
121 36.5 25.1 37.7



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.251 ppbv

RT: 6.87 min Scan# 1271

Delta R.T. -0.02 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

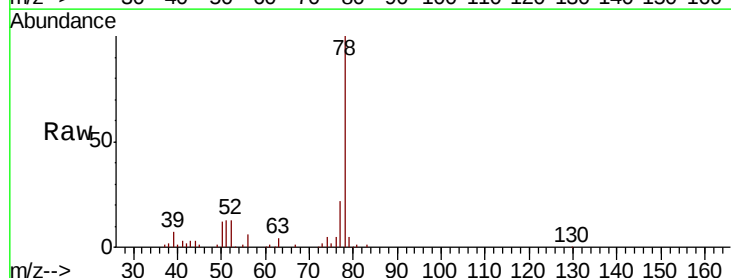
Tgt Ion: 78 Resp: 95263

Ion Ratio Lower Upper

78 100

77 22.1 19.3 28.9

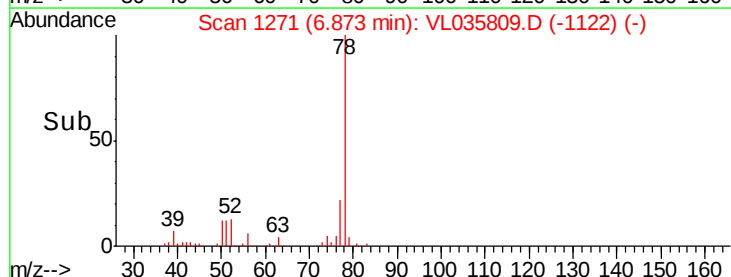
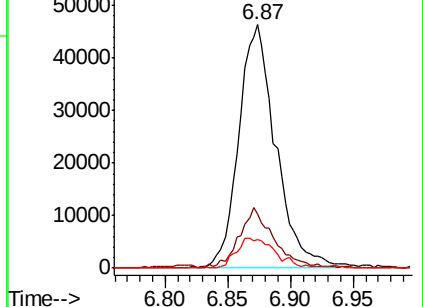
50 11.6 11.4 17.2

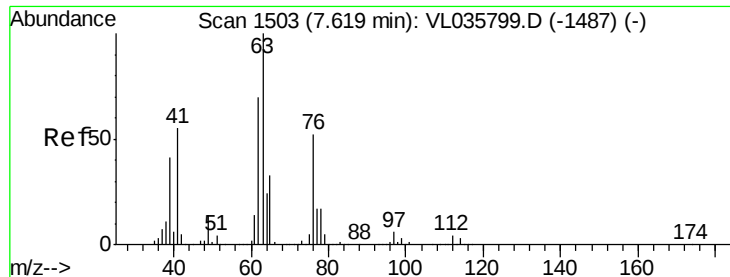


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

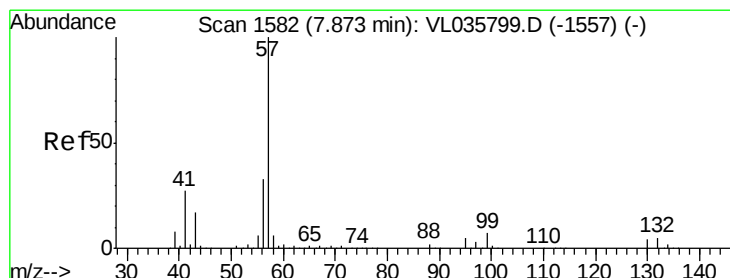
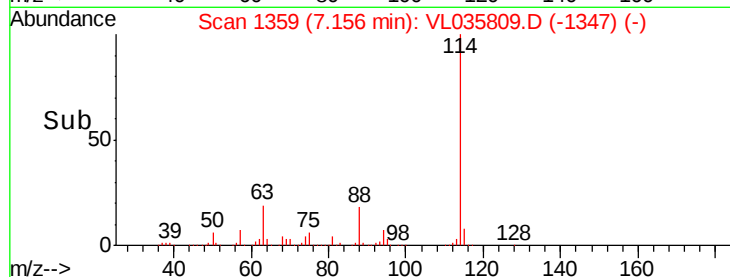
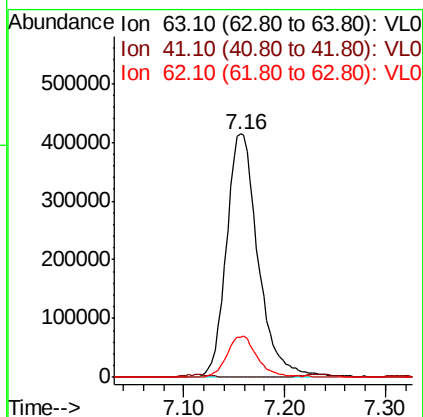
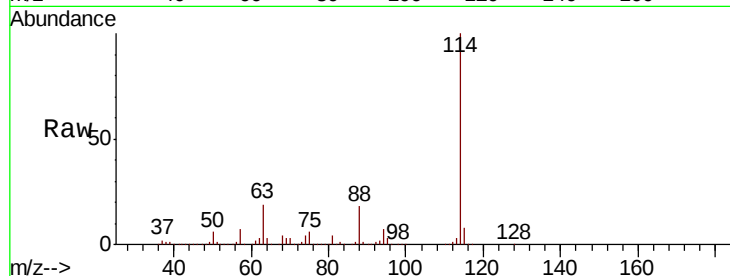




#39
 1,2-Dichloropropane
 Concen: 7.090 ppbv
 RT: 7.16 min Scan# 1359
 Delta R.T. -0.46 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

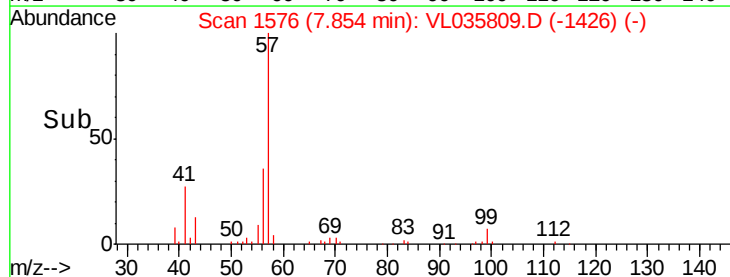
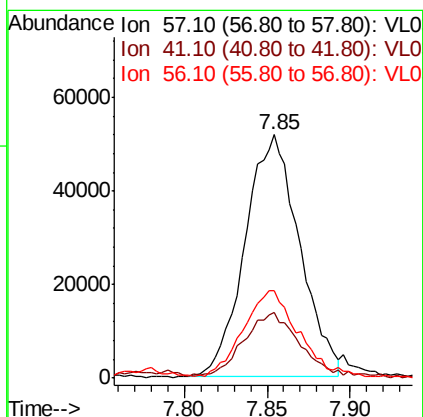
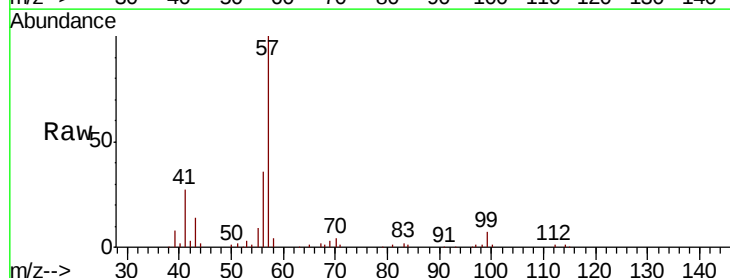
Instrument :
 MSVOA_L
 ClientSampled :

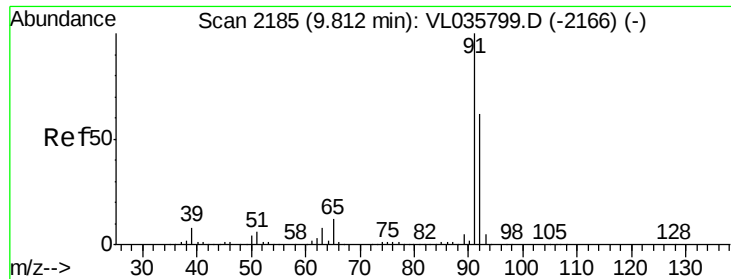
Tot Ion: 63 Resp: 905943
 Ion Ratio Lower Upper
 63 100
 41 0.0 43.8 65.6#
 62 16.4 56.2 84.2#



#44
 2,2,4-Trimethylpentane
 Concen: 0.235 ppbv
 RT: 7.85 min Scan# 1576
 Delta R.T. -0.02 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

Tgt Ion: 57 Resp: 118090
 Ion Ratio Lower Upper
 57 100
 41 27.5 21.0 31.4
 56 38.0 25.4 38.0





#53

Toluene

Concen: 1.024 ppbv

RT: 9.79 min Scan# 2177

Delta R.T. -0.03 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Instrument :

MSVOA_L

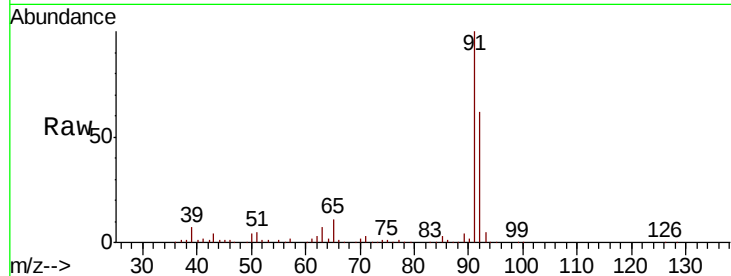
ClientSampleId :

Tot Ion: 91 Resp: 468967

Ion Ratio Lower Upper

91 100

92 61.6 49.8 74.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.79

200000

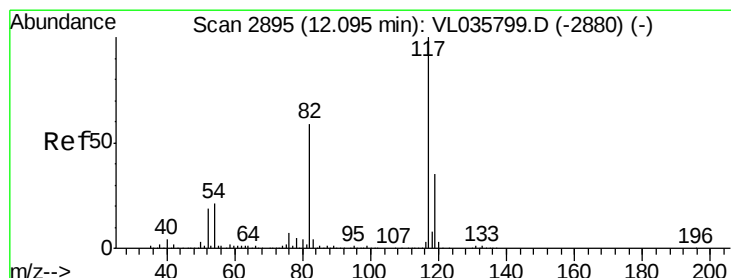
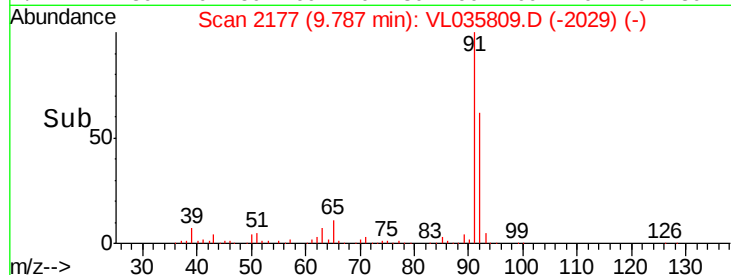
150000

100000

50000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2887

Delta R.T. -0.03 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

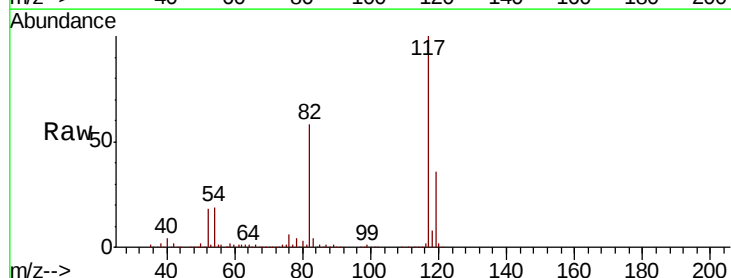
Tgt Ion: 117 Resp: 4706811

Ion Ratio Lower Upper

117 100

82 55.7 50.6 76.0

119 34.7 52.6 78.8#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

12.07

2000000

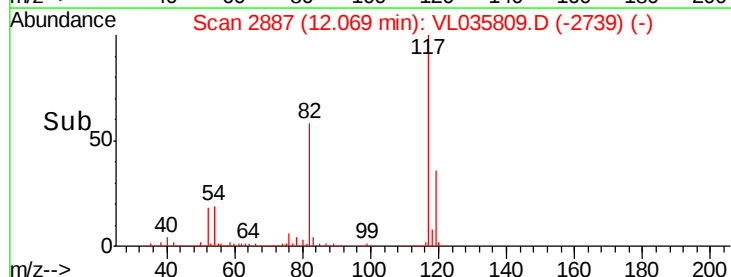
1500000

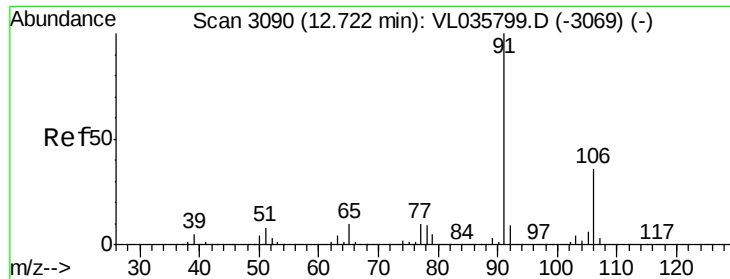
1000000

500000

0

Time-->





#58

Ethyl Benzene

Concen: 0.080 ppbv

RT: 12.70 min Scan# 3082

Delta R.T. -0.03 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Instrument :

MSVOA_L

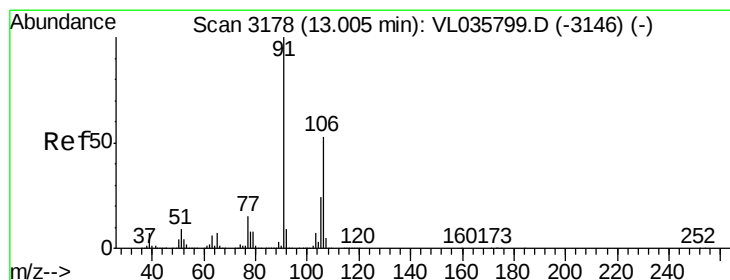
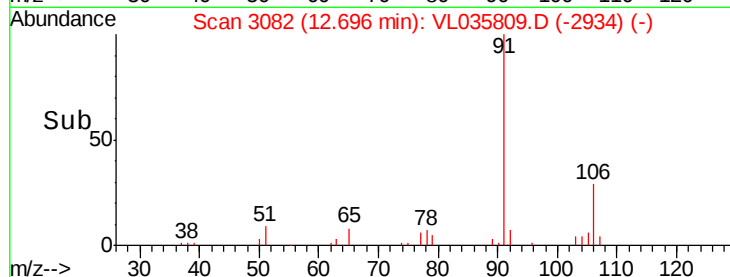
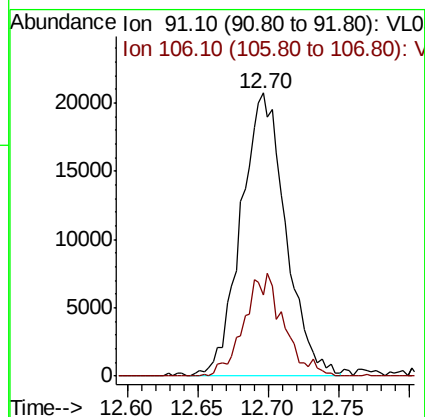
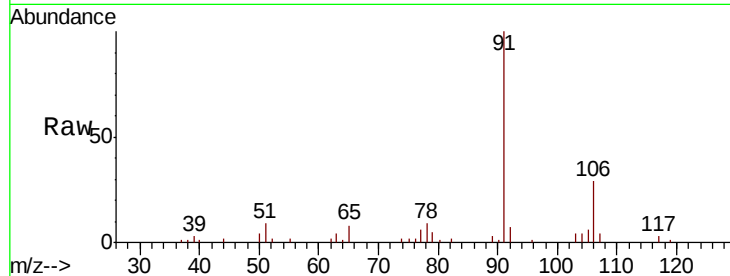
ClientSampled :

Tot Ion: 91 Resp: 46000

Ion Ratio Lower Upper

91 100

106 28.6 28.6 43.0#



#59

m/p-Xylene

Concen: 0.225 ppbv

RT: 12.95 min Scan# 3162

Delta R.T. -0.05 min

Lab File: VL035809.D

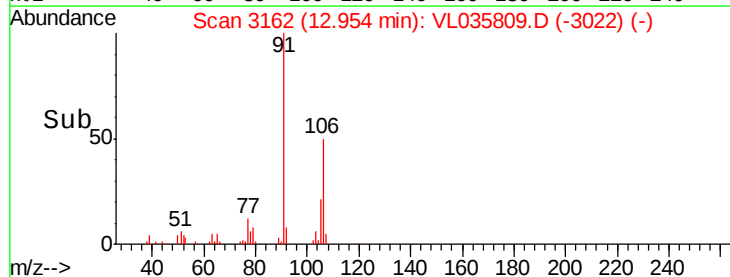
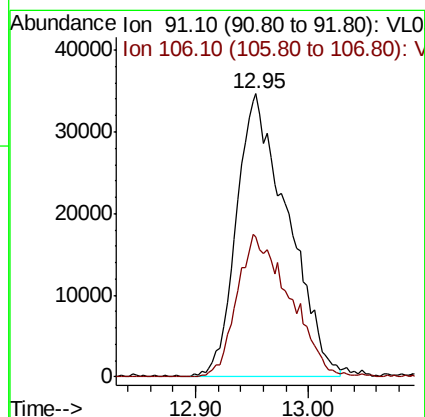
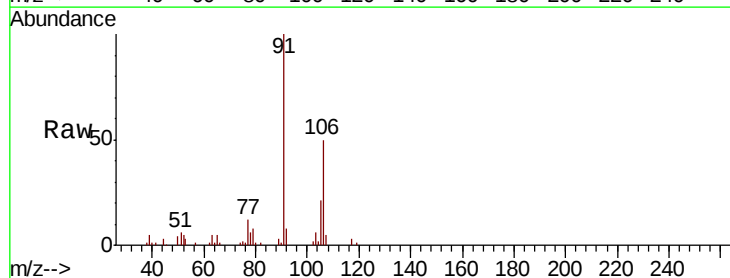
Acq: 3 Nov 2020 18:42

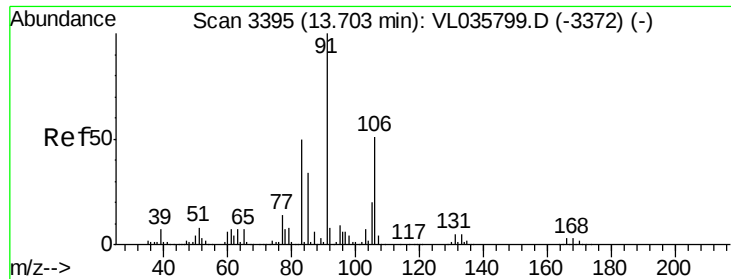
Tgt Ion: 91 Resp: 108975

Ion Ratio Lower Upper

91 100

106 51.8 39.5 59.3

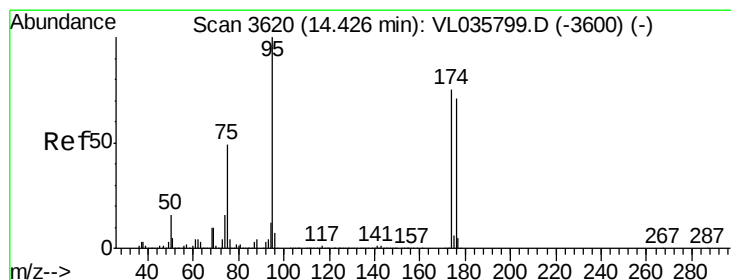
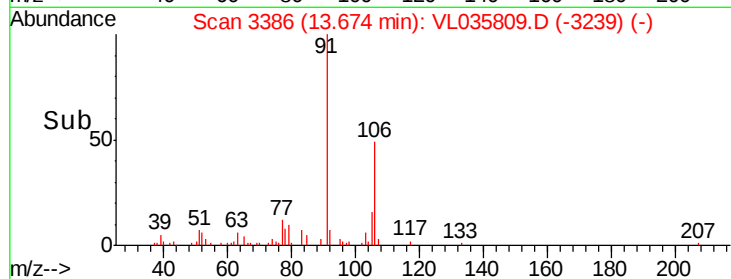
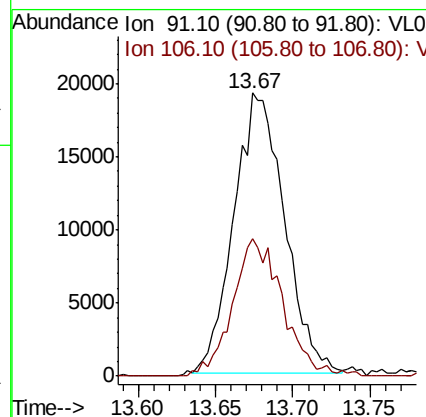
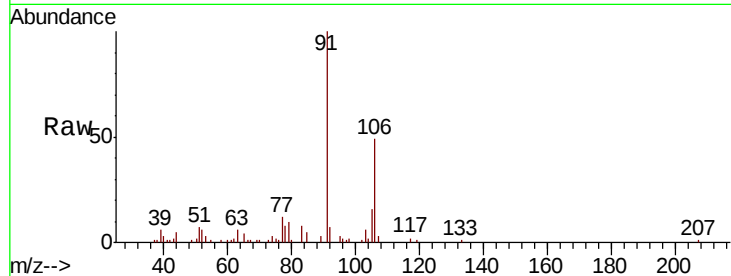




#60
o-Xylene
Concen: 0.092 ppbv
RT: 13.67 min Scan# 3386
Delta R.T. -0.03 min
Lab File: VL035809.D
Acq: 3 Nov 2020 18:42

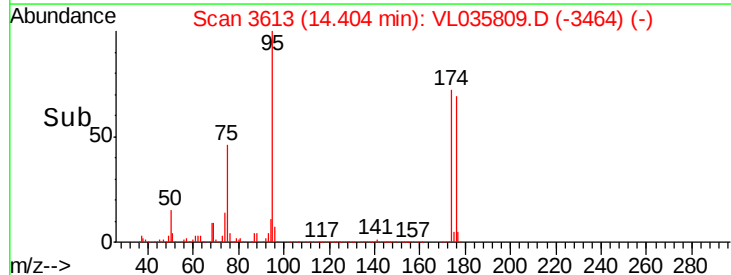
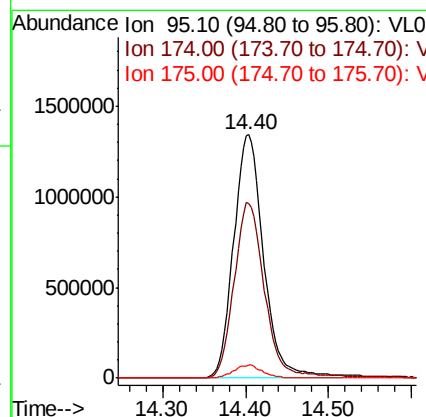
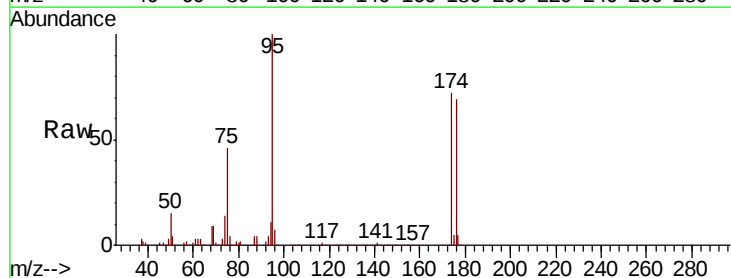
Instrument :
MSVOA_L
ClientSampled :

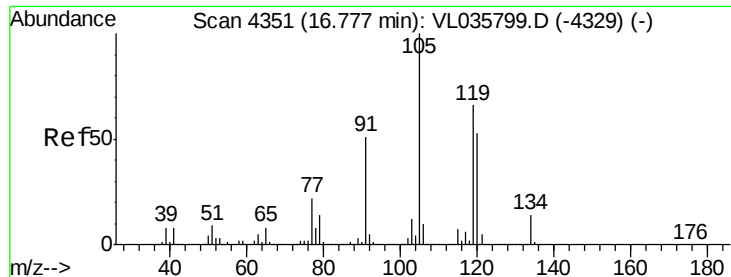
Tot Ion: 91 Resp: 43571
Ion Ratio Lower Upper
91 100
106 48.5 24.8 74.4



#68
1-Bromo-4-Fluorobenzene
Concen: 10.132 ppbv
RT: 14.40 min Scan# 3613
Delta R.T. -0.02 min
Lab File: VL035809.D
Acq: 3 Nov 2020 18:42

Tgt Ion: 95 Resp: 3388285
Ion Ratio Lower Upper
95 100
174 74.3 59.8 89.6
175 5.4 4.3 6.5





#74

1,2,4-Trimethylbenzene

Concen: 0.033 ppbv

RT: 16.75 min Scan# 4343

Delta R.T. -0.03 min

Lab File: VL035809.D

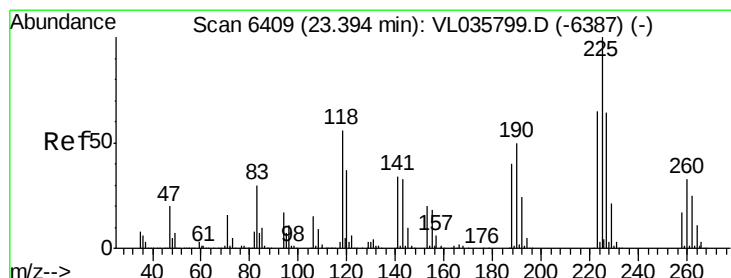
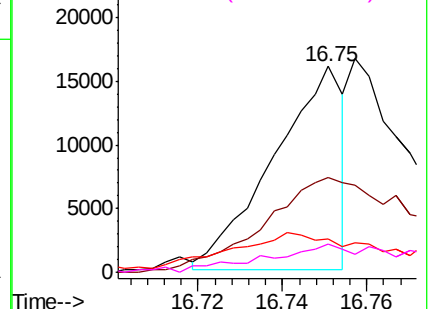
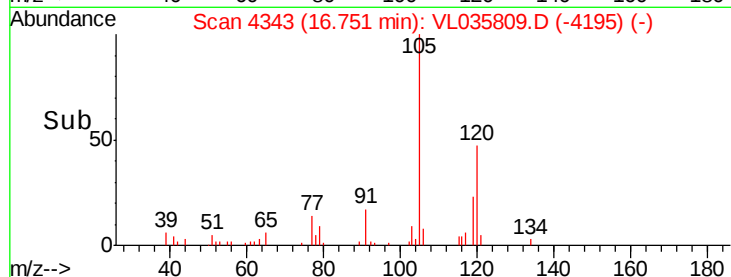
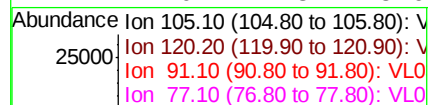
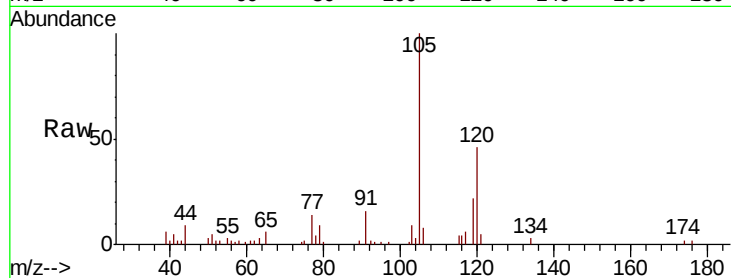
Acq: 3 Nov 2020 18:42

Instrument :

MSVOA_L

ClientSampled :

Tot Ion:	105	Resp:	18410
Ion	Ratio	Lower	Upper
105	100		
120	41.8	42.0	63.0#
91	9.3	41.0	61.6#
77	11.0	17.3	25.9#



#78

Hexachloro-1,3-Butadiene

Concen: 0.032 ppbv

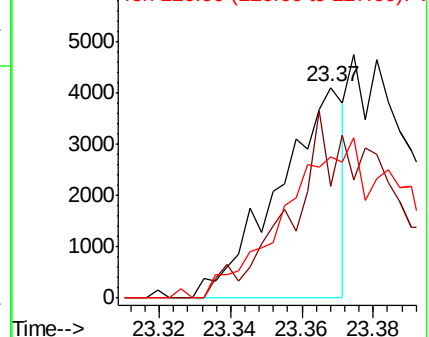
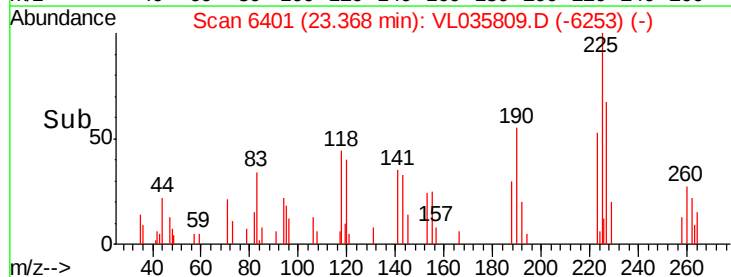
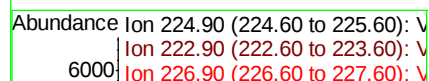
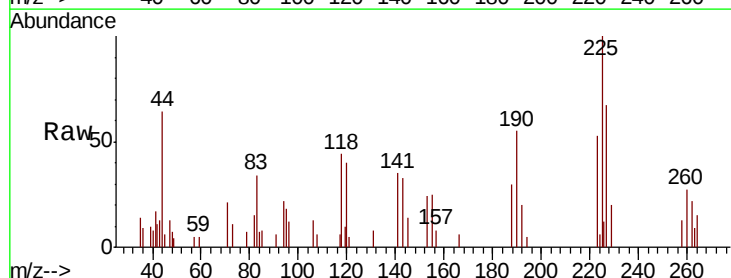
RT: 23.37 min Scan# 6401

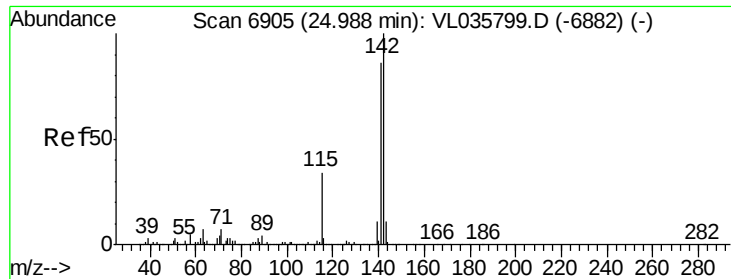
Delta R.T. -0.03 min

Lab File: VL035809.D

Acq: 3 Nov 2020 18:42

Tgt Ion:	225	Resp:	5229
Ion	Ratio	Lower	Upper
225	100		
223	137.6	51.0	76.6#
227	0.0	51.2	76.8#

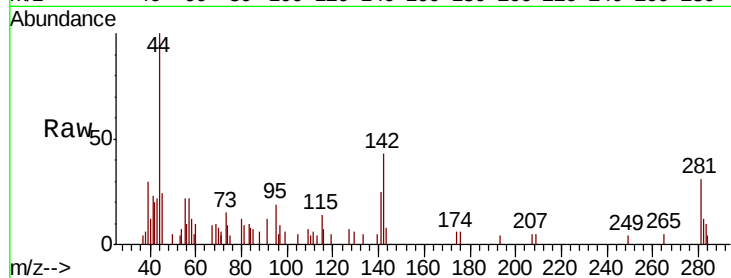




#80
 Naphthalene, 2-methyl-
 Concen: 0.089 ppbv
 RT: 24.99 min Scan# 6904
 Delta R.T. -0.00 min
 Lab File: VL035809.D
 Acq: 3 Nov 2020 18:42

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
142	100		
141	74.4	67.8	101.8
115	33.8	28.1	42.1



Abundance

Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

