

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061621\
 Data File : VL037191.D
 Acq On : 17 Jun 2021 4:58
 Operator : SY/AP
 Sample : M2742-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jun 17 05:27:39 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 16 14:06:32 2021
 QLast Update : Wed Jun 16 14:06:32 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1443807	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	4252431	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3731462	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2789612	9.87	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.70%

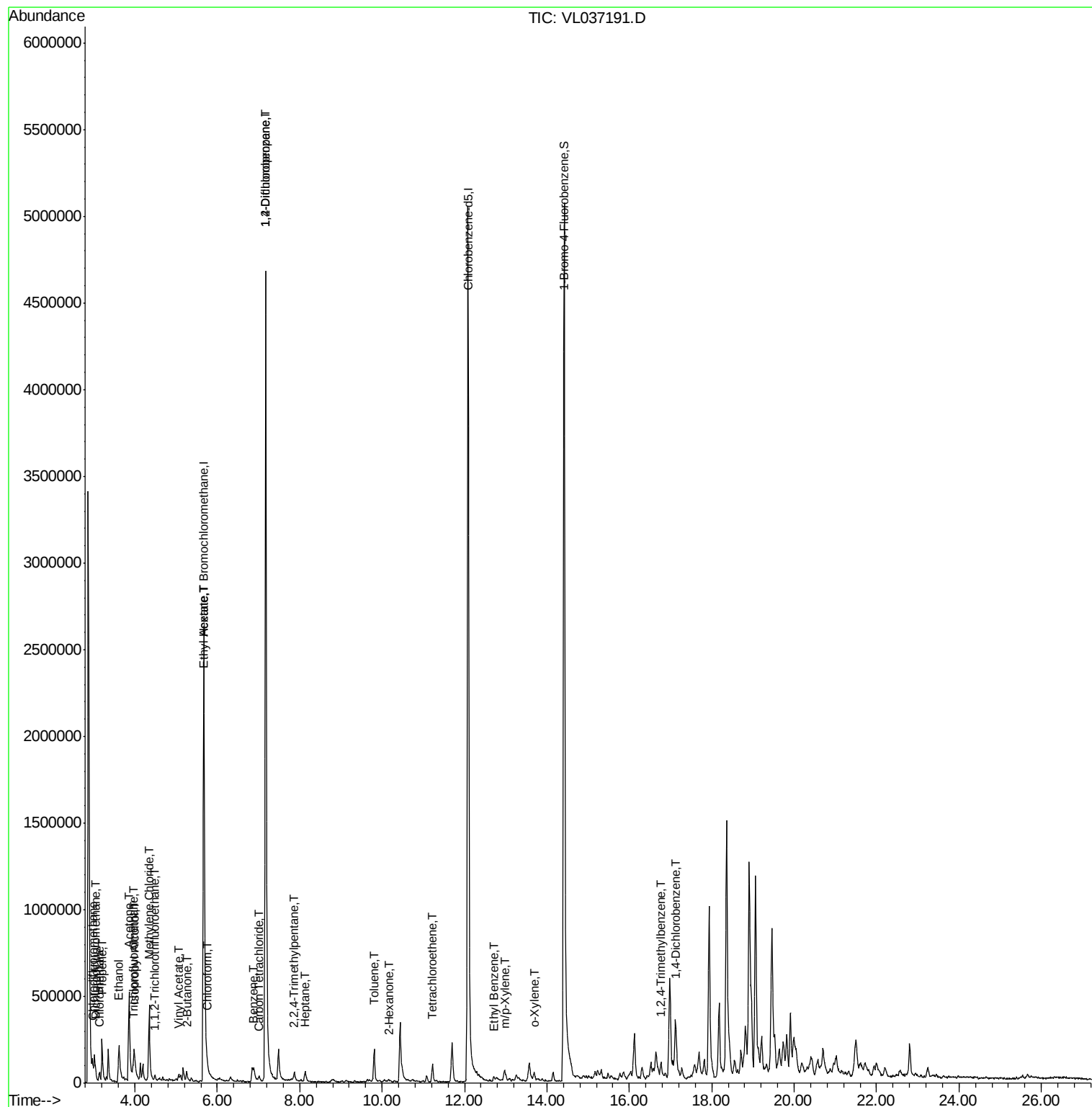
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	54606	0.217 ppbv #	81
3) Chlorodifluoromethane	2.99	51	148275	0.528 ppbv #	79
4) Chloromethane	3.14	50	26782	0.286 ppbv	91
9) Propene	3.20	41	65794	0.733 ppbv	86
10) Heptane	8.12	43	8819	0.041 ppbv #	27
11) Trichlorofluoromethane	3.95	101	52647	0.196 ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.48	101	8445	0.045 ppbv #	50
13) Ethanol	3.61	45	331296	23.858 ppbv	52
15) Acetone	3.85	43	719828	4.421 ppbv	100
19) Isopropyl Alcohol	3.98	45	214081	2.171 ppbv #	97
20) Methylene Chloride	4.35	84	181374	1.861 ppbv	98
23) Vinyl Acetate	5.07	43	14035	0.060 ppbv #	69
25) Ethyl Acetate	5.69	43	114285	0.324 ppbv #	90
26) Hexane	5.68	57	131677	0.739 ppbv #	52
29) Chloroform	5.75	83	13672	0.050 ppbv #	68
34) 2-Butanone	5.26	43	71436	0.432 ppbv	96
35) Carbon Tetrachloride	7.02	117	15275	0.054 ppbv	84
36) Benzene	6.89	78	15162	0.044 ppbv #	85
39) 1,2-Dichloropropane	7.17	63	1016723	7.957 ppbv #	22
44) 2,2,4-Trimethylpentane	7.87	57	22707	0.039 ppbv #	42
51) 2-Hexanone	10.16	43	3358	0.030 ppbv #	29
52) Tetrachloroethene	11.22	164	18641	0.117 ppbv #	86
53) Toluene	9.81	91	92405	0.225 ppbv #	58
58) Ethyl Benzene	12.71	91	12464	0.024 ppbv	95
59) m/p-Xylene	13.00	91	9393	0.022 ppbv #	30
60) o-Xylene	13.69	91	21951	0.053 ppbv	75
74) 1,2,4-Trimethylbenzene	16.76	105	36674	0.078 ppbv #	76
76) 1,4-Dichlorobenzene	17.13	146	18009	0.063 ppbv #	22

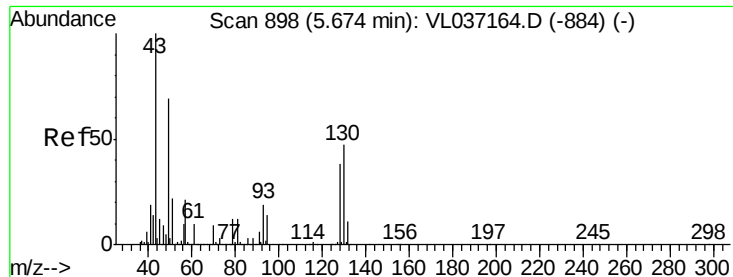
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061621\
Data File : VL037191.D
Acq On : 17 Jun 2021 4:58
Operator : SY/AP
Sample : M2742-03
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampled :

Quant Time: Jun 17 05:27:39 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061621AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jun 16 14:06:32 2021
QLast Update : Wed Jun 16 14:06:32 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

ClientSampleId :

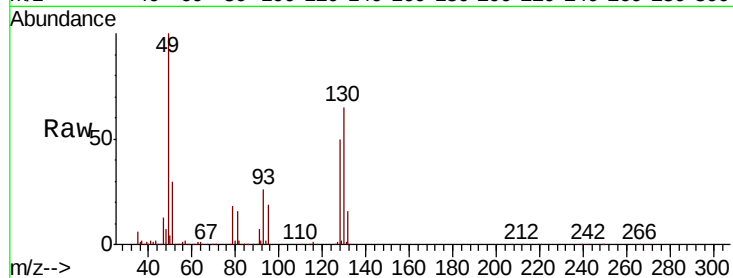
Tot Ion: 49 Resp: 1443807

Ion Ratio Lower Upper

49 100

128 54.7 29.3 88.0

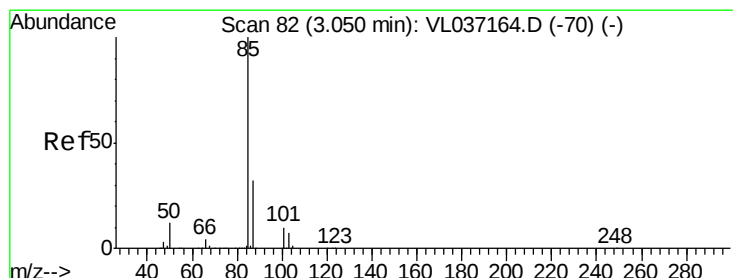
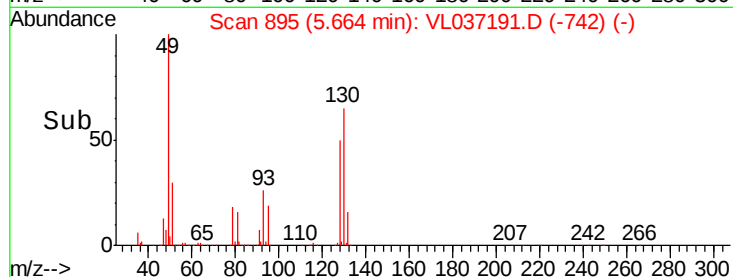
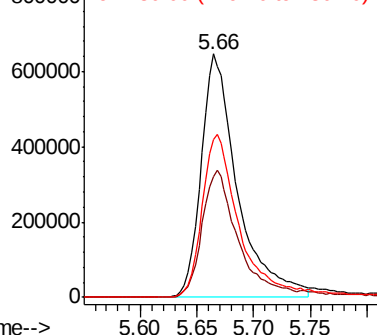
130 72.5 35.9 107.8



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: 0.217 ppbv

RT: 3.05 min Scan# 81

Delta R.T. -0.00 min

Lab File: VL037191.D

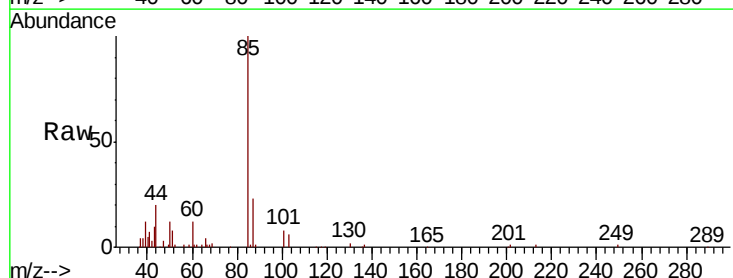
Acq: 17 Jun 2021 4:58

Tgt Ion: 85 Resp: 54606

Ion Ratio Lower Upper

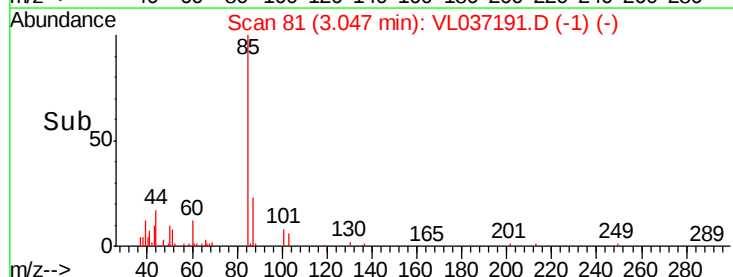
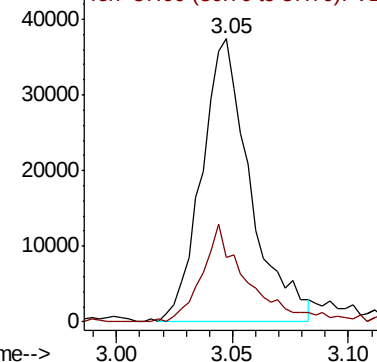
85 100

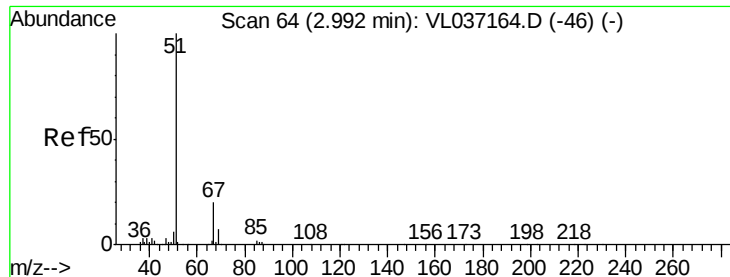
87 21.9 25.8 38.6#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.528 ppbv

RT: 2.99 min Scan# 62

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

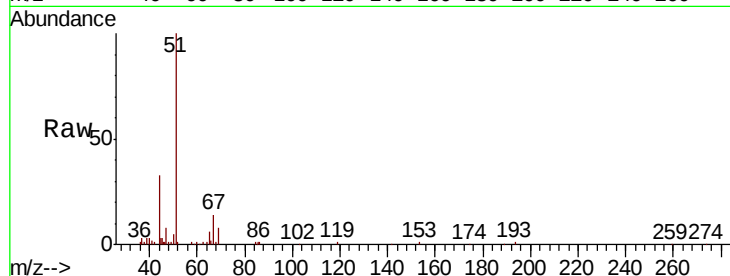
ClientSampleId :

Tot Ion: 51 Resp: 148275

Ion Ratio Lower Upper

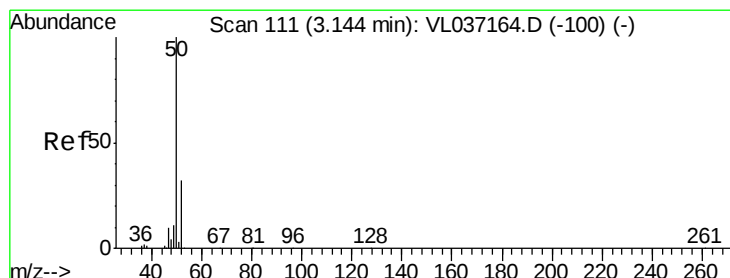
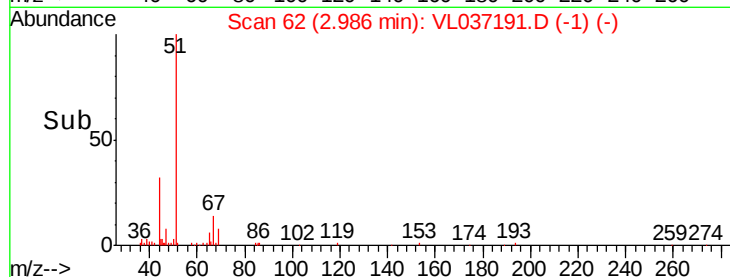
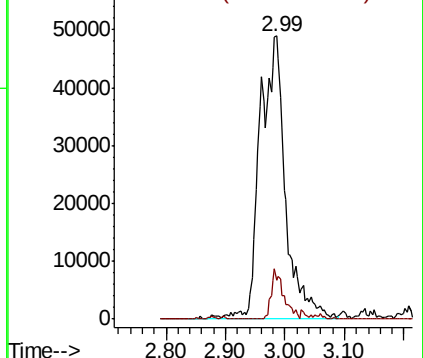
51 100

67 9.9 15.8 23.6#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.286 ppbv

RT: 3.14 min Scan# 109

Delta R.T. -0.01 min

Lab File: VL037191.D

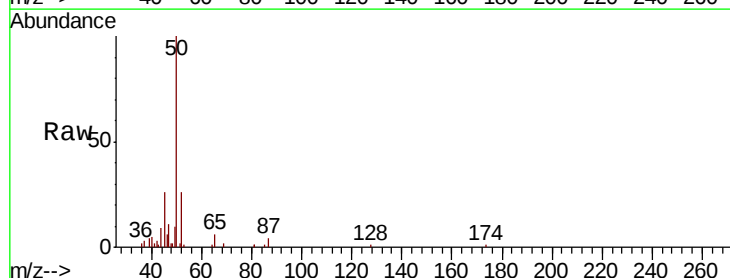
Acq: 17 Jun 2021 4:58

Tgt Ion: 50 Resp: 26782

Ion Ratio Lower Upper

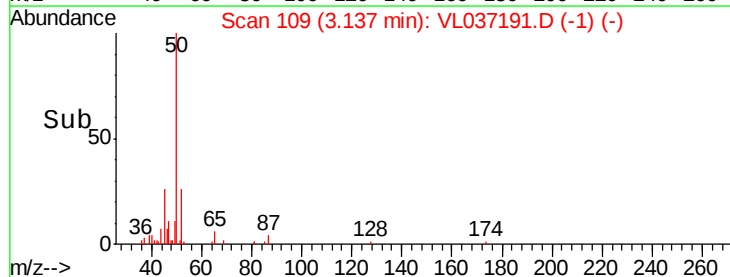
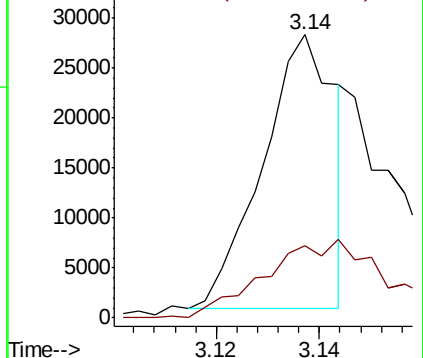
50 100

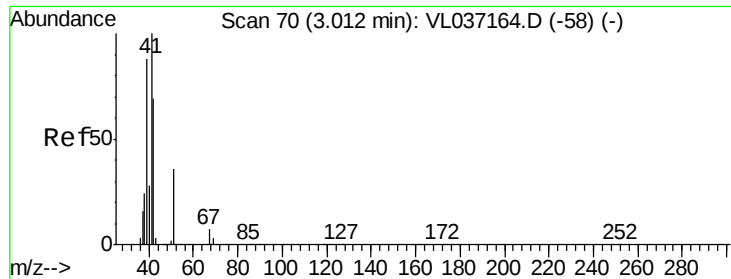
52 27.4 25.8 38.8



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.733 ppbv

RT: 3.20 min Scan# 130

Delta R.T. 0.19 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

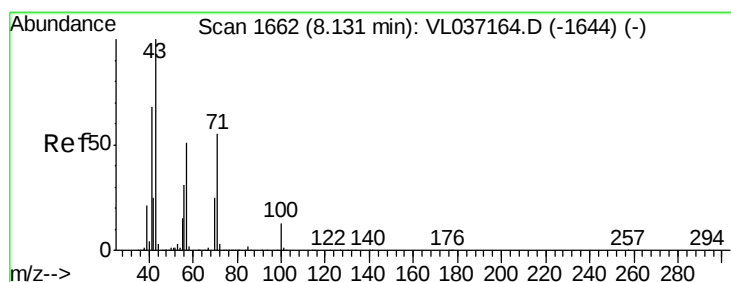
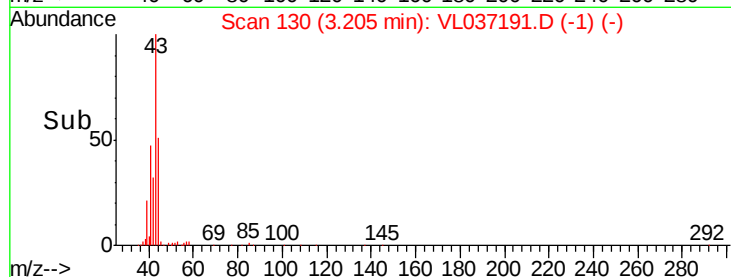
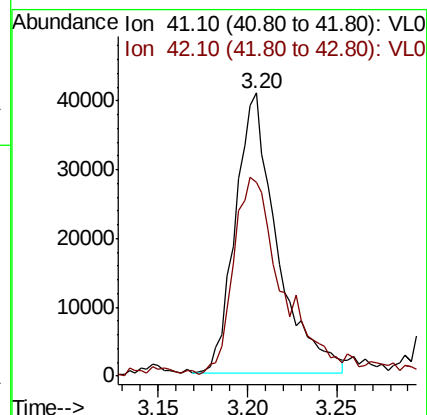
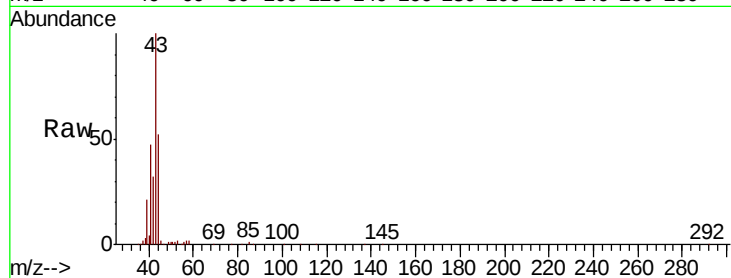
ClientSampleId :

Tot Ion: 41 Resp: 65794

Ion Ratio Lower Upper

41 100

42 79.8 54.5 81.7



#10

Heptane

Concen: 0.041 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. -0.01 min

Lab File: VL037191.D

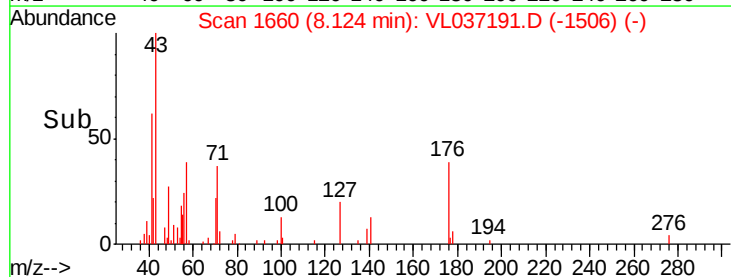
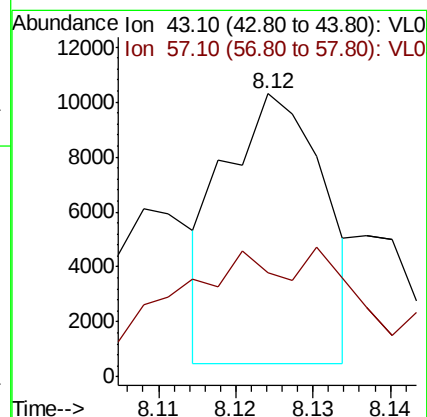
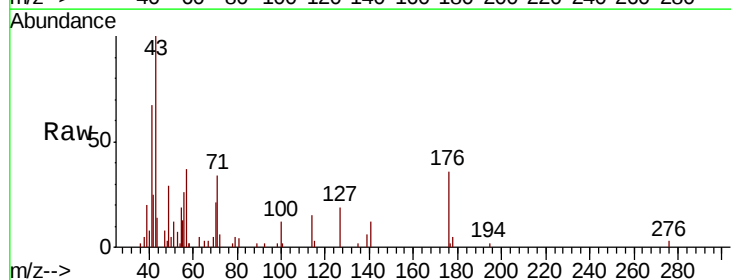
Acq: 17 Jun 2021 4:58

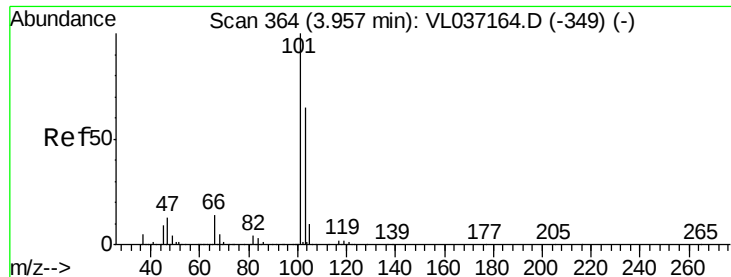
Tgt Ion: 43 Resp: 8819

Ion Ratio Lower Upper

43 100

57 0.0 40.6 61.0#

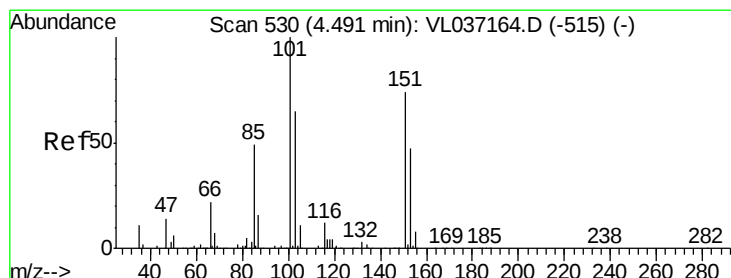
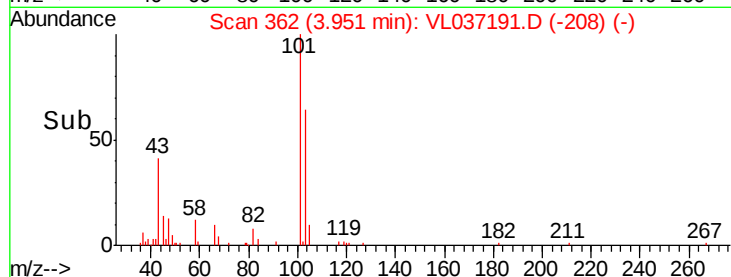
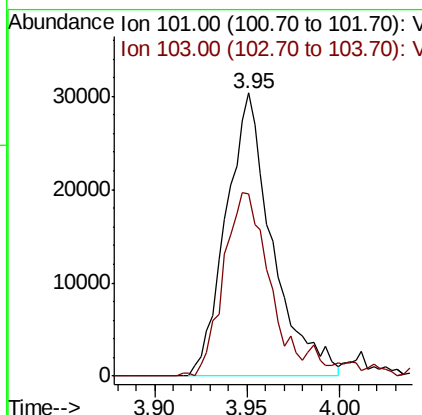
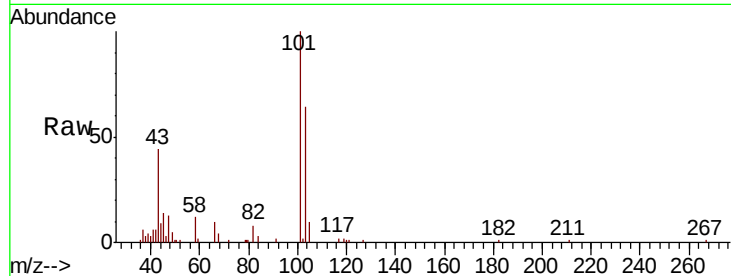




#11
 Trichlorofluoromethane
 Concen: 0.196 ppbv
 RT: 3.95 min Scan# 362
 Delta R.T. -0.01 min
 Lab File: VL037191.D
 Acq: 17 Jun 2021 4:58

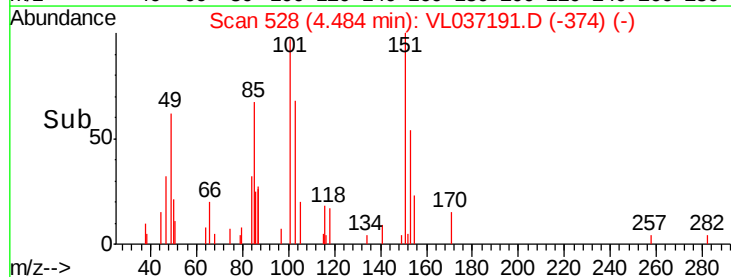
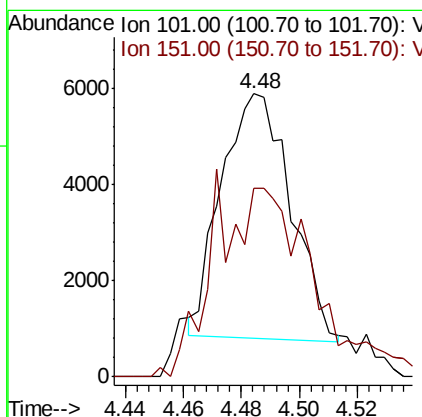
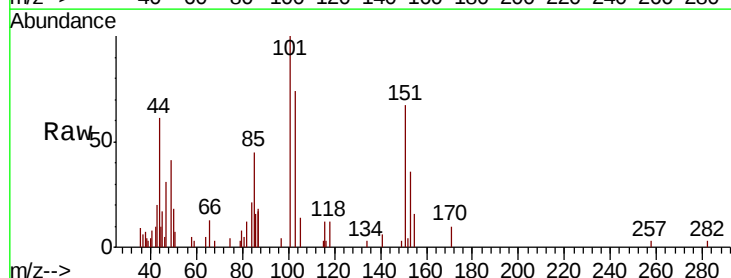
Instrument :
 MSVOA_L
 ClientSampleId :

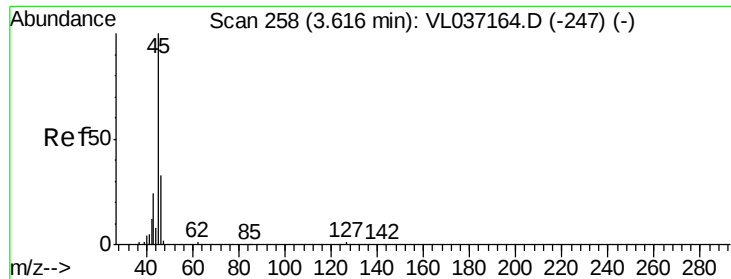
Tot Ion:101 Resp: 52647
 Ion Ratio Lower Upper
 101 100
 103 63.3 52.2 78.4



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.045 ppbv
 RT: 4.48 min Scan# 528
 Delta R.T. -0.01 min
 Lab File: VL037191.D
 Acq: 17 Jun 2021 4:58

Tgt Ion:101 Resp: 8445
 Ion Ratio Lower Upper
 101 100
 151 115.9 59.1 88.7#

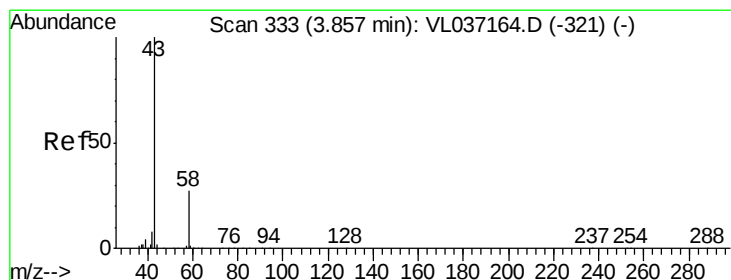
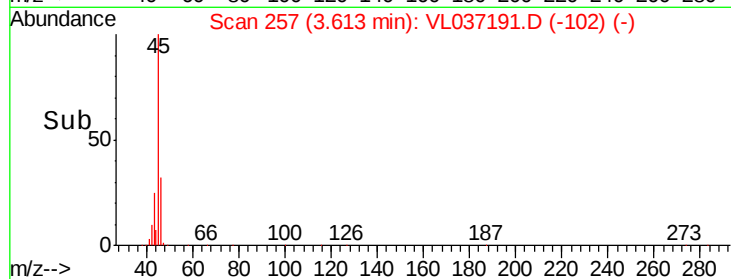
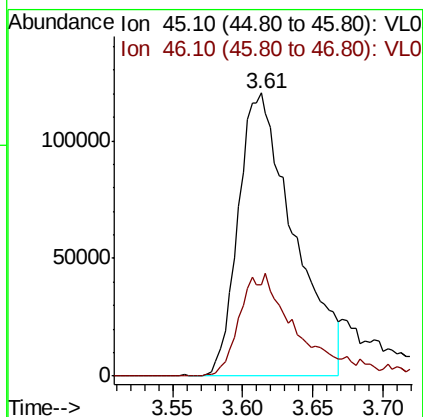
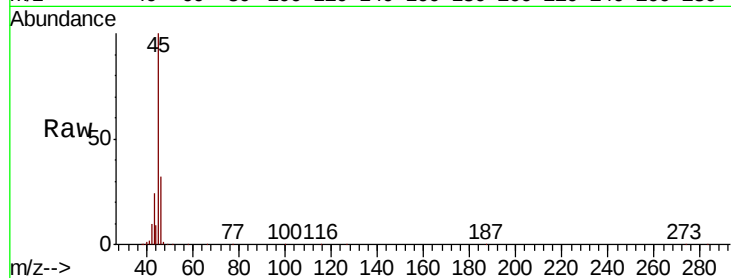




#13
Ethanol
Concen: 23.858 ppbv
RT: 3.61 min Scan# 257
Delta R.T. -0.00 min
Lab File: VL037191.D
Acq: 17 Jun 2021 4:58

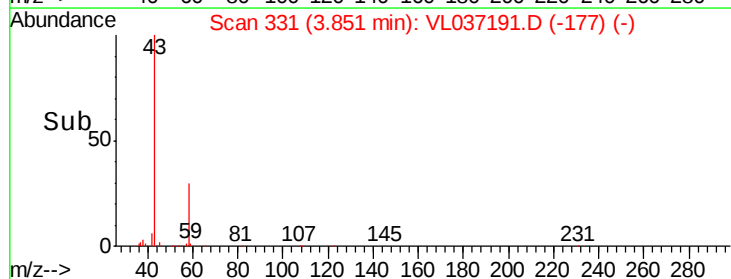
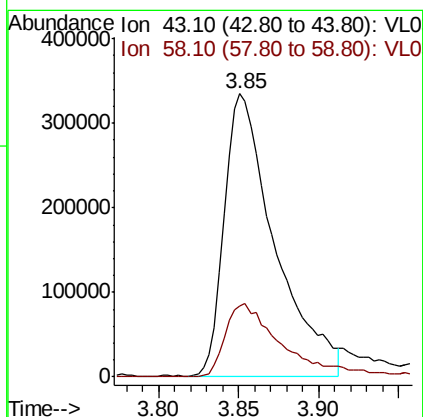
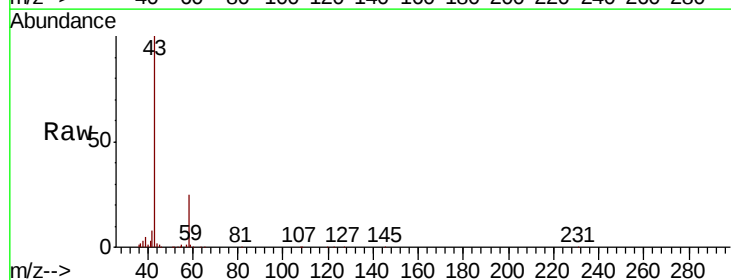
Instrument :
MSVOA_L
ClientSampleId :

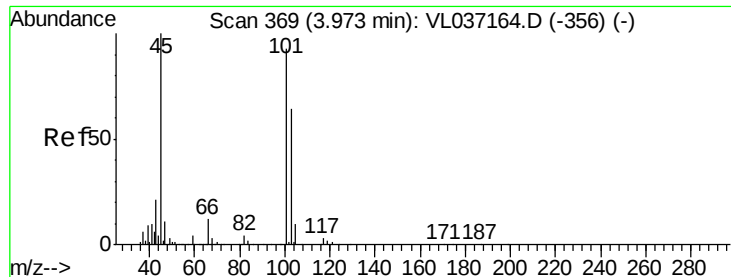
Tot Ion: 45 Resp: 331296
Ion Ratio Lower Upper
45 100
46 41.2 34.2 137.0



#15
Acetone
Concen: 4.421 ppbv
RT: 3.85 min Scan# 331
Delta R.T. -0.01 min
Lab File: VL037191.D
Acq: 17 Jun 2021 4:58

Tgt Ion: 43 Resp: 719828
Ion Ratio Lower Upper
43 100
58 29.7 23.7 35.5





#19

Isopropyl Alcohol

Concen: 2.171 ppbv

RT: 3.98 min Scan# 372

Delta R.T. 0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

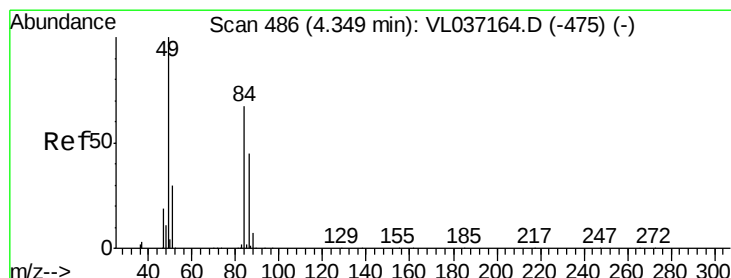
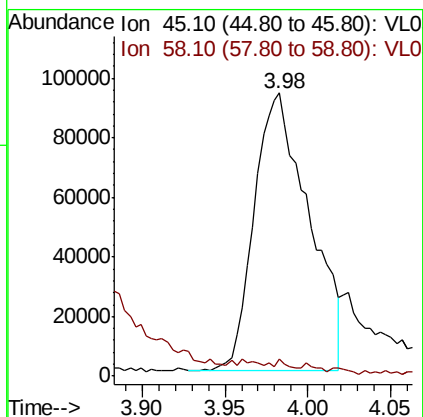
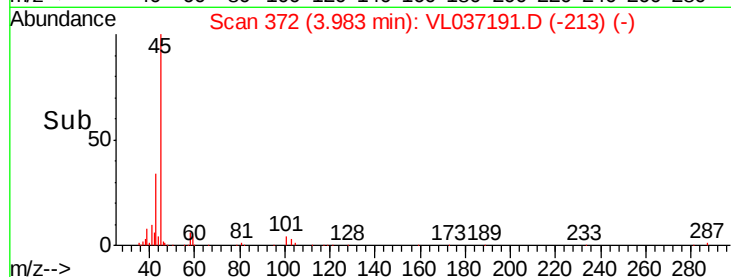
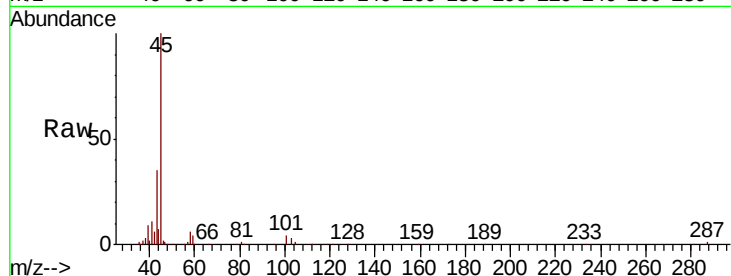
ClientSampleId :

Tot Ion: 45 Resp: 214081

Ion Ratio Lower Upper

45 100

58 3.9 2.4 3.6#



#20

Methylene Chloride

Concen: 1.861 ppbv

RT: 4.35 min Scan# 485

Delta R.T. -0.00 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Tgt Ion: 84 Resp: 181374

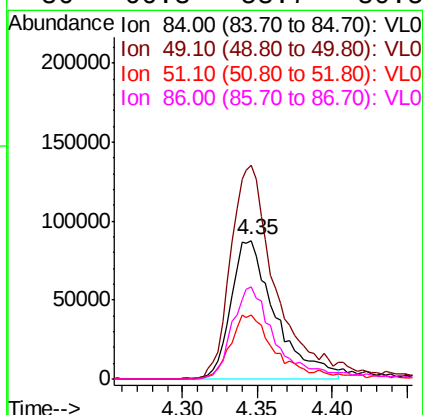
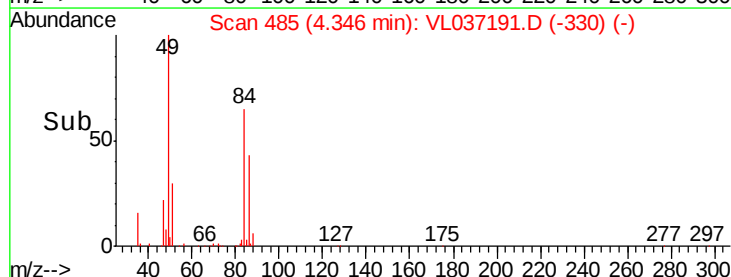
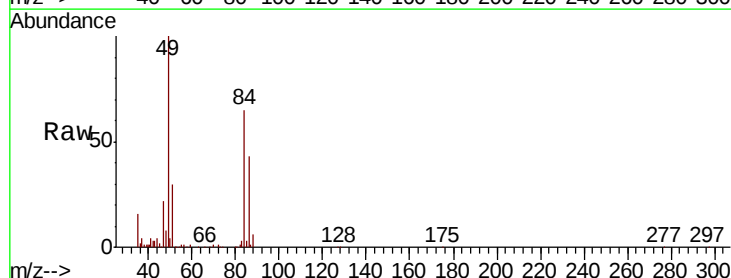
Ion Ratio Lower Upper

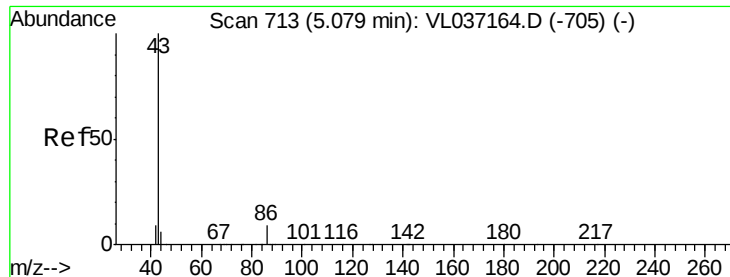
84 100

49 153.8 119.7 179.5

51 45.7 36.1 54.1

86 66.3 53.7 80.5





#23

Vinyl Acetate

Concen: 0.060 ppbv

RT: 5.07 min Scan# 710

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 43 Resp: 14035

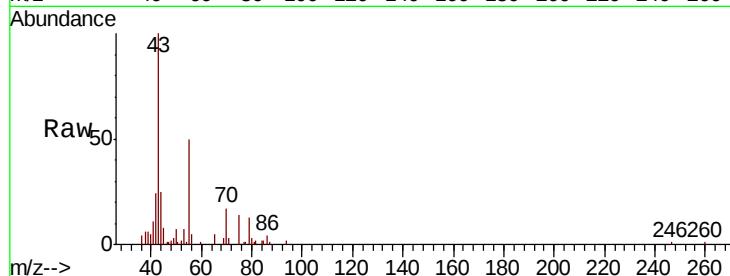
Ion Ratio Lower Upper

43 100

86 0.0 5.8 8.8#

42 0.0 8.2 12.2#

44 22.8 4.2 6.4#

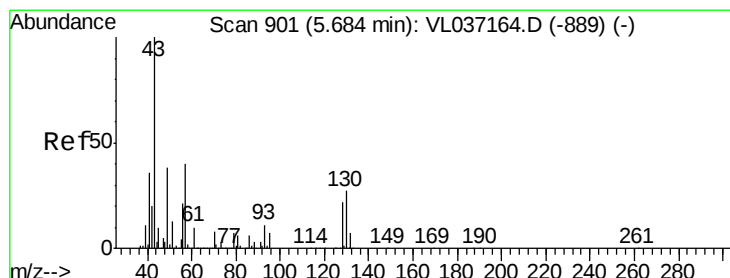
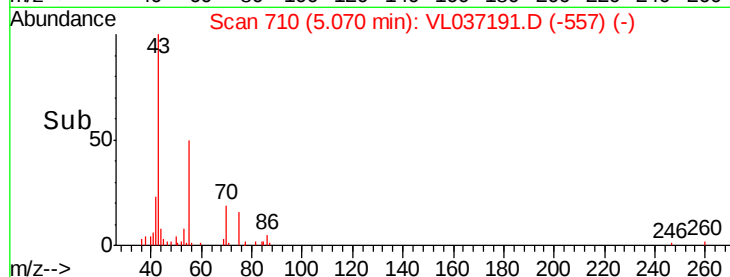
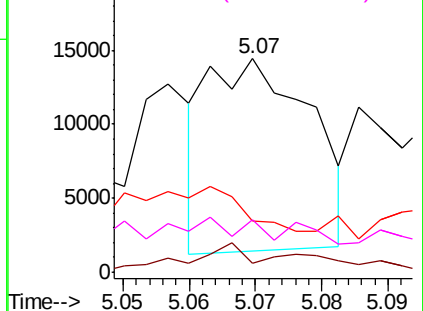


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.324 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Tgt Ion: 43 Resp: 114285

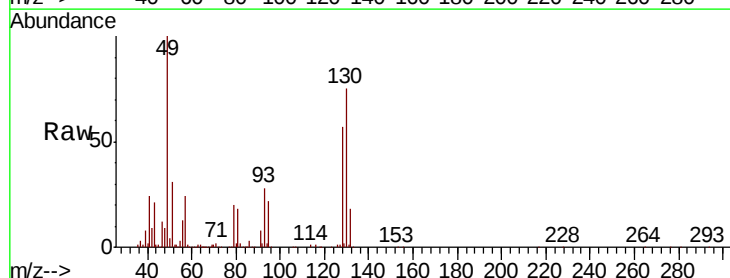
Ion Ratio Lower Upper

43 100

45 8.7 8.0 12.0

61 3.3 8.1 12.1#

70 4.0 5.5 8.3#

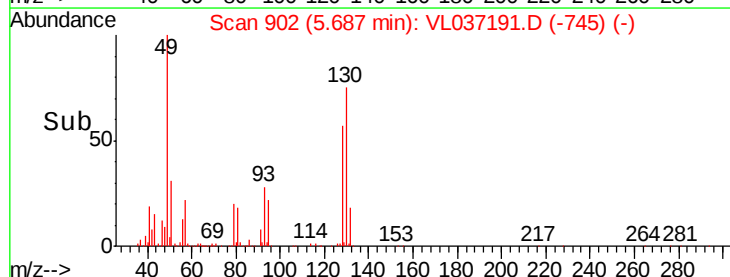
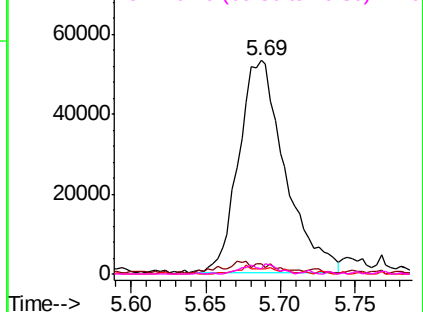


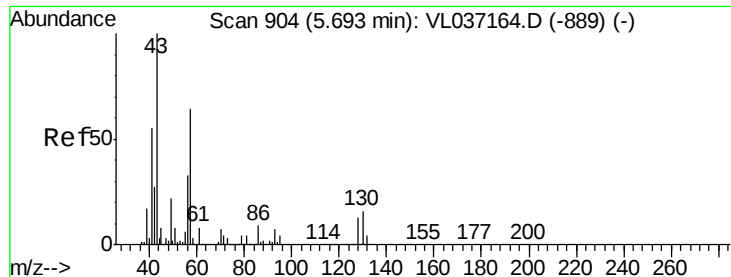
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0

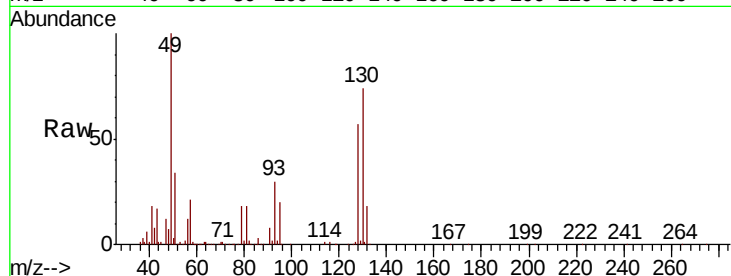




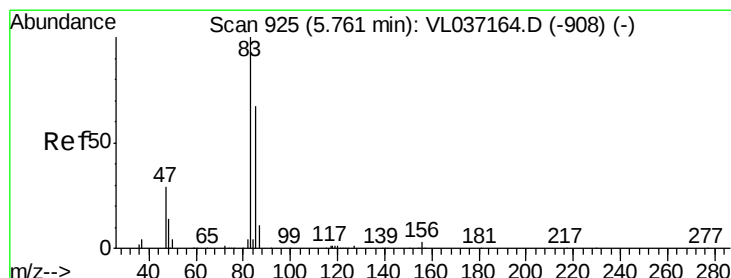
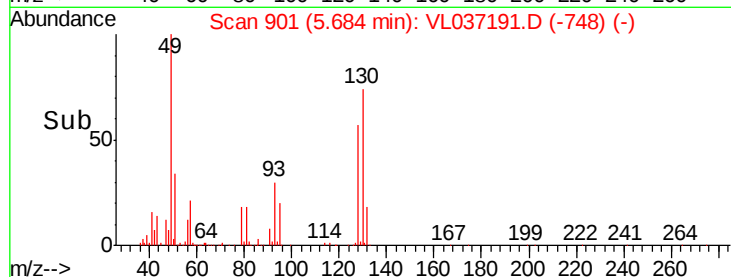
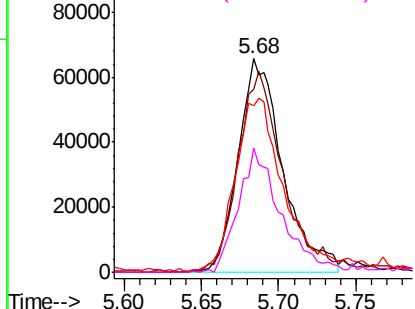
#26
Hexane
Concen: 0.739 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.01 min
Lab File: VL037191.D
Acq: 17 Jun 2021 4:58

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 57 Resp: 131677
Ion Ratio Lower Upper
57 100
41 98.7 73.5 110.3
43 92.8 170.7 256.1#
56 57.4 42.4 63.6

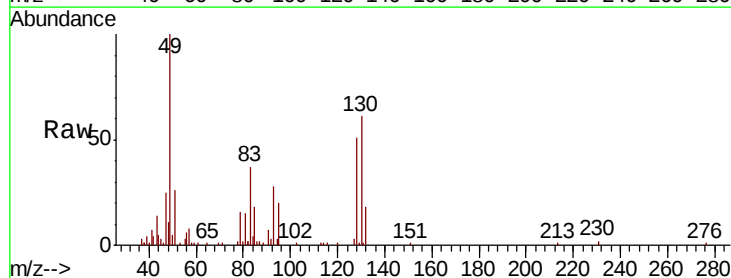


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

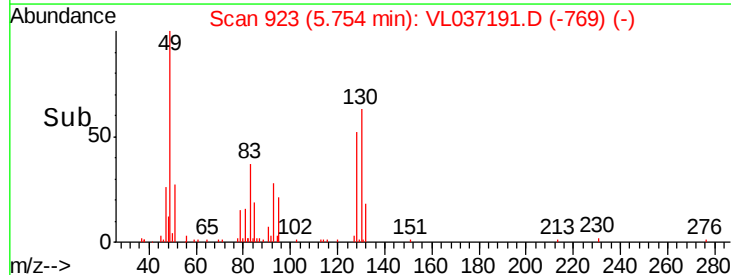
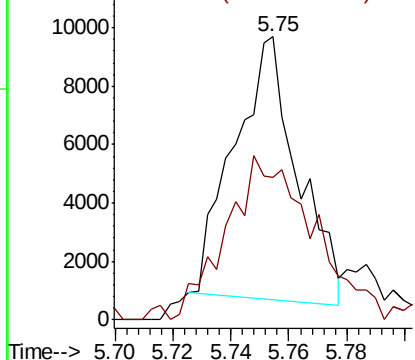


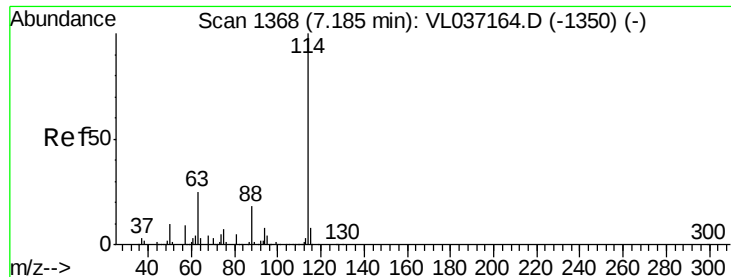
#29
Chloroform
Concen: 0.050 ppbv
RT: 5.75 min Scan# 923
Delta R.T. -0.01 min
Lab File: VL037191.D
Acq: 17 Jun 2021 4:58

Tgt Ion: 83 Resp: 13672
Ion Ratio Lower Upper
83 100
85 41.5 53.6 80.4#



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0

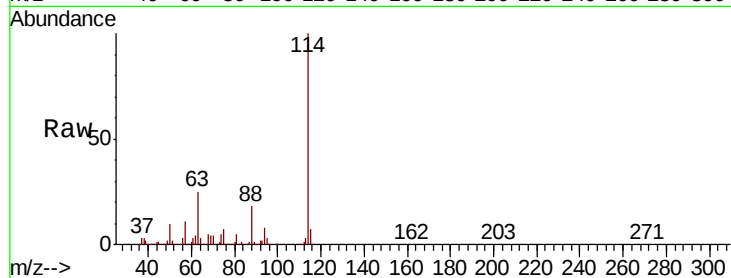




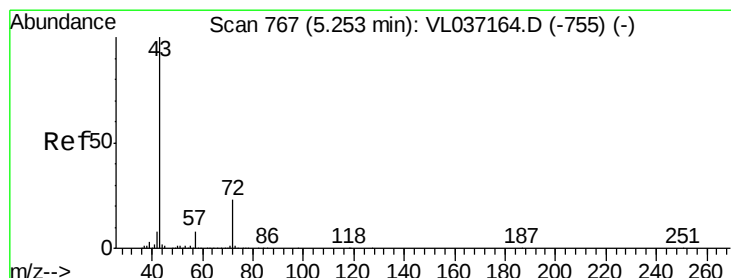
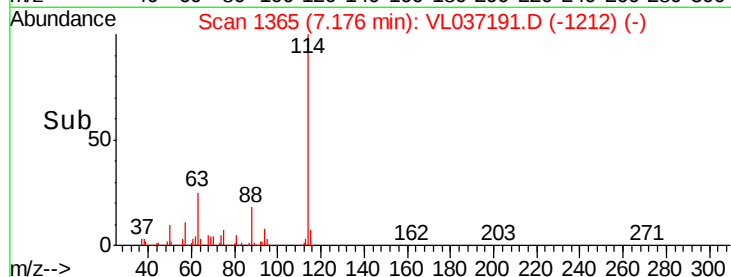
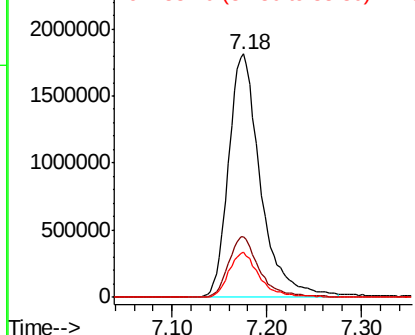
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1365
 Delta R.T. -0.01 min
 Lab File: VL037191.D
 Acq: 17 Jun 2021 4:58

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:114 Resp: 4252431
 Ion Ratio Lower Upper
 114 100
 63 24.6 19.6 29.4
 88 18.2 14.2 21.2

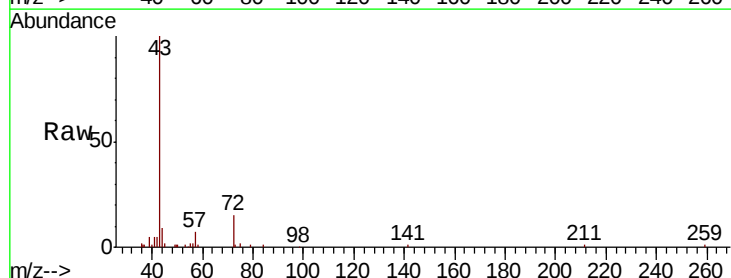


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

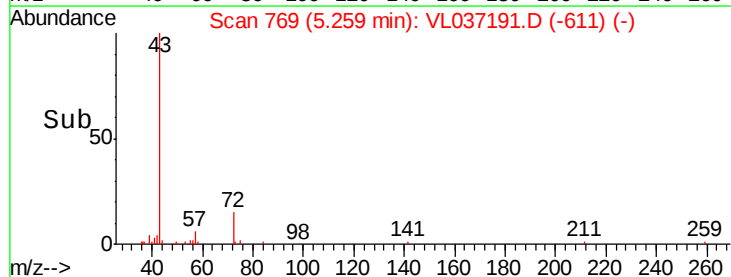
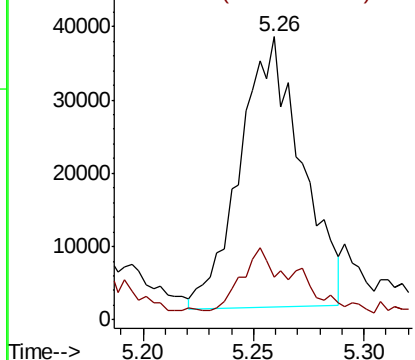


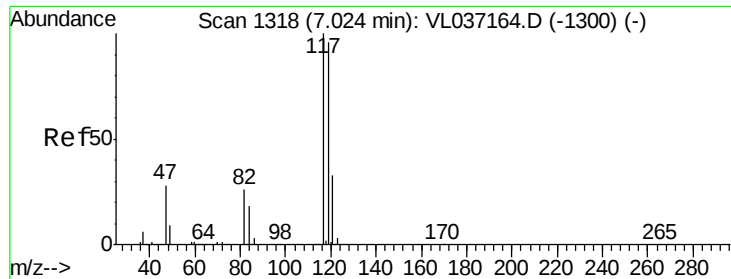
#34
 2-Butanone
 Concen: 0.432 ppbv
 RT: 5.26 min Scan# 769
 Delta R.T. 0.01 min
 Lab File: VL037191.D
 Acq: 17 Jun 2021 4:58

Tgt Ion: 43 Resp: 71436
 Ion Ratio Lower Upper
 43 100
 72 25.5 18.9 28.3



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





#35

Carbon Tetrachloride

Concen: 0.054 ppbv

RT: 7.02 min Scan# 1316

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

ClientSampleId :

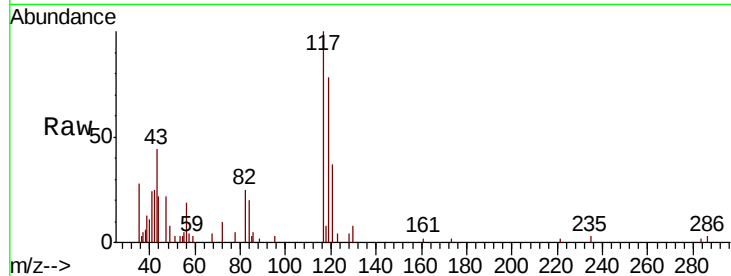
Tot Ion:117 Resp: 15275

Ion Ratio Lower Upper

117 100

119 77.7 76.6 114.8

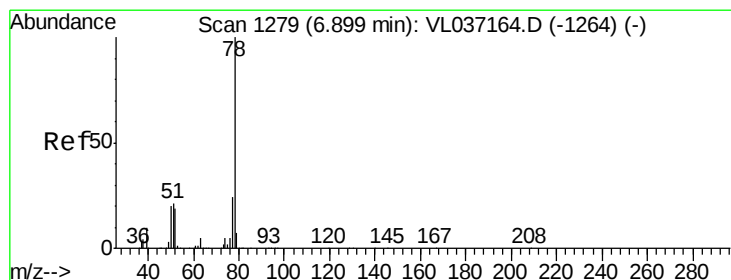
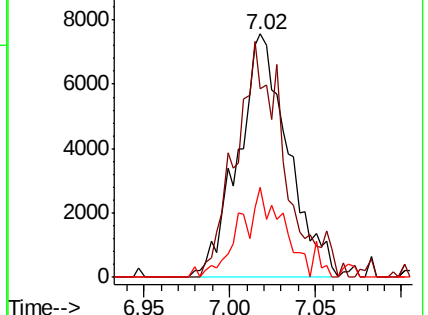
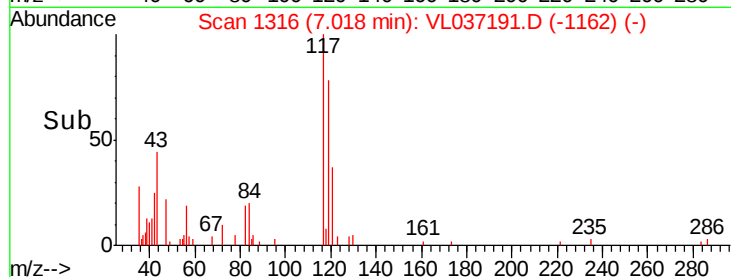
121 37.0 26.4 39.6



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: 0.044 ppbv

RT: 6.89 min Scan# 1277

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

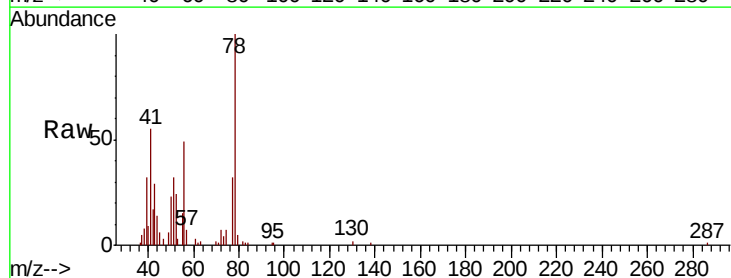
Tgt Ion: 78 Resp: 15162

Ion Ratio Lower Upper

78 100

77 36.3 19.0 28.6#

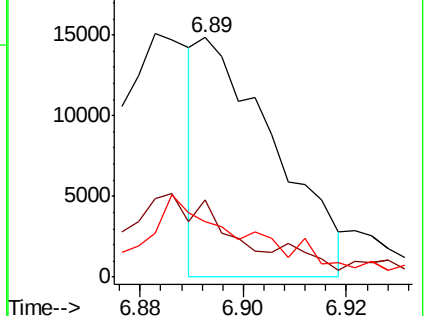
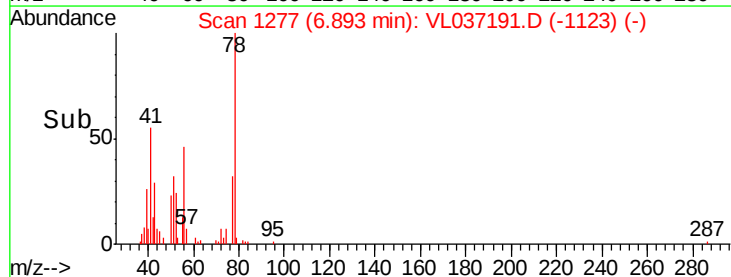
50 21.0 15.7 23.5

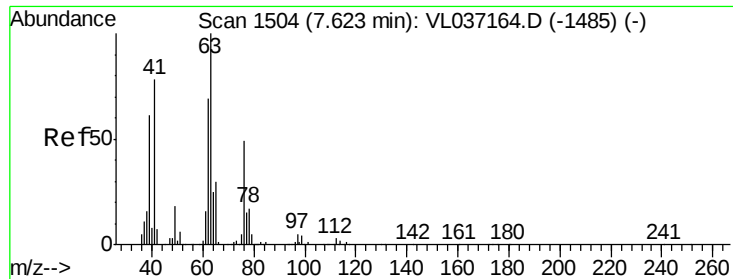


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

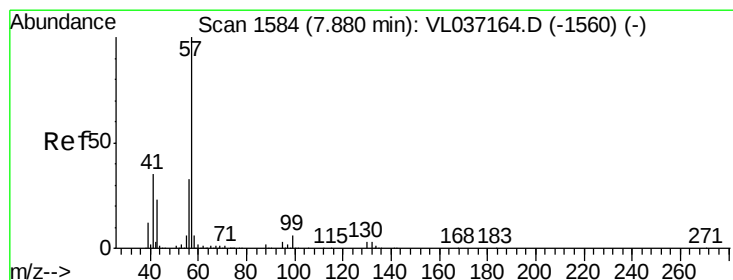
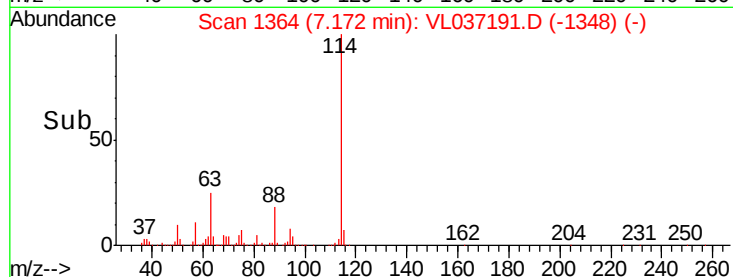
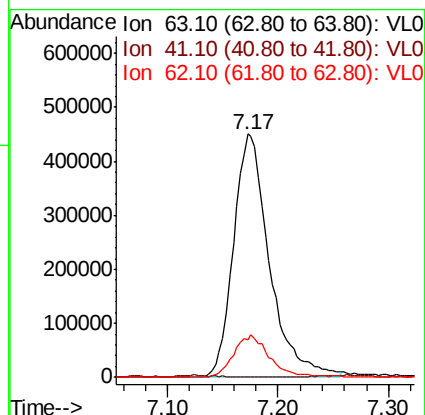
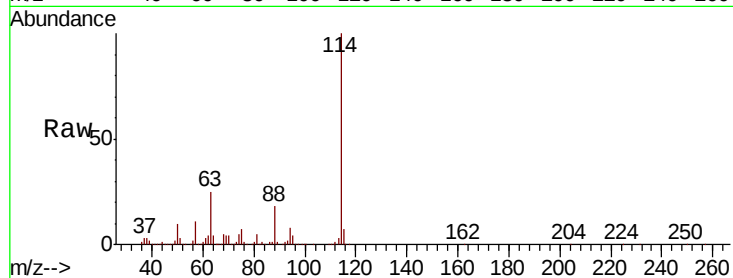




#39
 1,2-Dichloropropane
 Concen: 7.957 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. -0.45 min
 Lab File: VL037191.D
 Acq: 17 Jun 2021 4:58

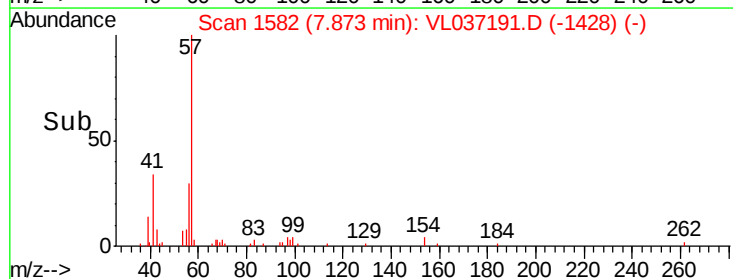
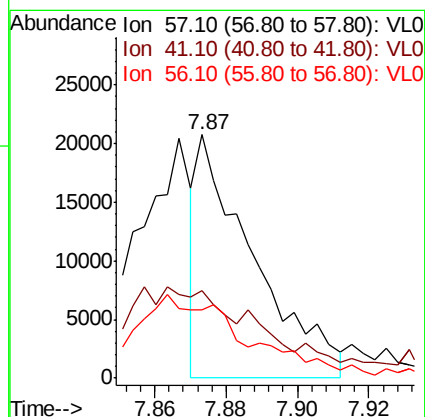
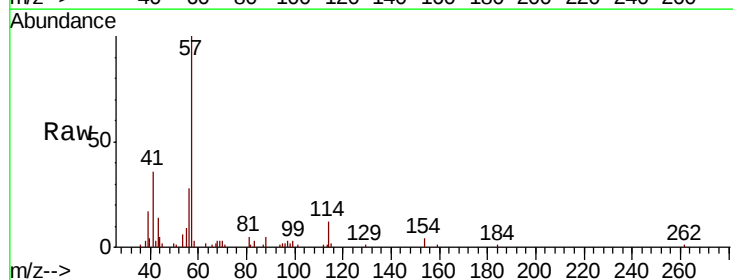
Instrument :
 MSVOA_L
 ClientSampleId :

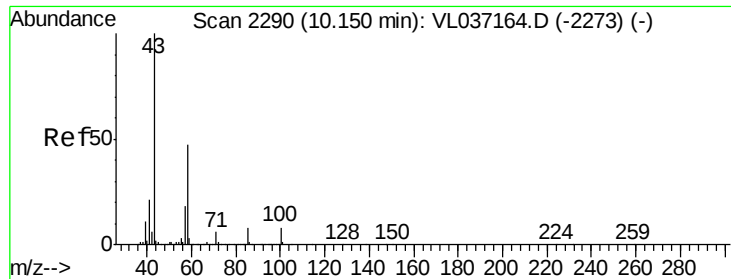
Tot Ion: 63 Resp: 1016723
 Ion Ratio Lower Upper
 63 100
 41 0.0 62.0 93.0#
 62 15.3 54.9 82.3#



#44
 2,2,4-Trimethylpentane
 Concen: 0.039 ppbv
 RT: 7.87 min Scan# 1582
 Delta R.T. -0.01 min
 Lab File: VL037191.D
 Acq: 17 Jun 2021 4:58

Tgt Ion: 57 Resp: 22707
 Ion Ratio Lower Upper
 57 100
 41 0.0 27.6 41.4#
 56 0.0 25.3 37.9#

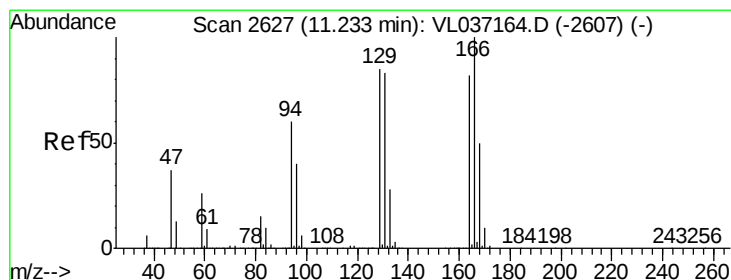
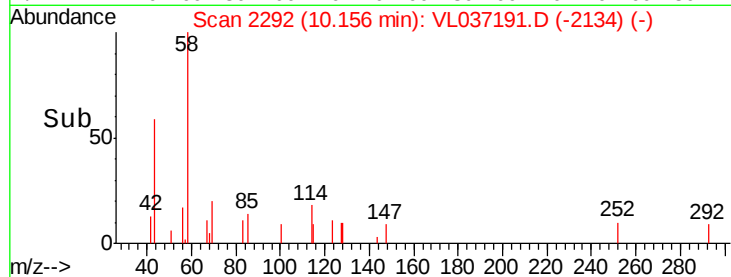
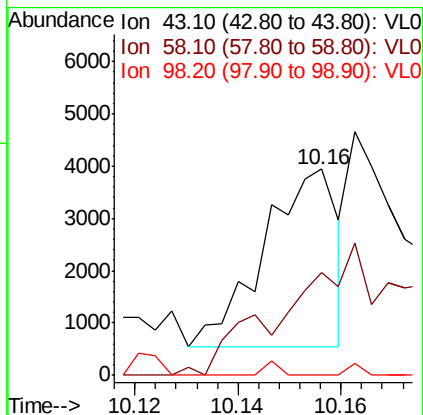
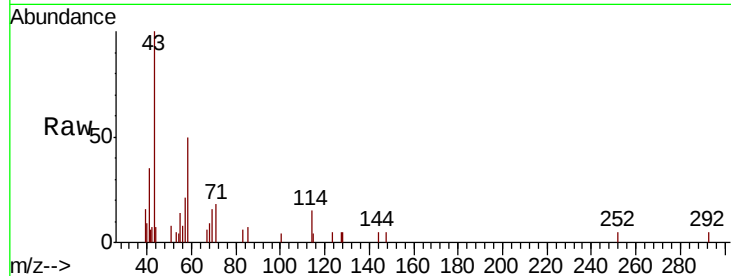




#51
2-Hexanone
Concen: 0.030 ppbv
RT: 10.16 min Scan# 2292
Delta R.T. 0.01 min
Lab File: VL037191.D
Acq: 17 Jun 2021 4:58

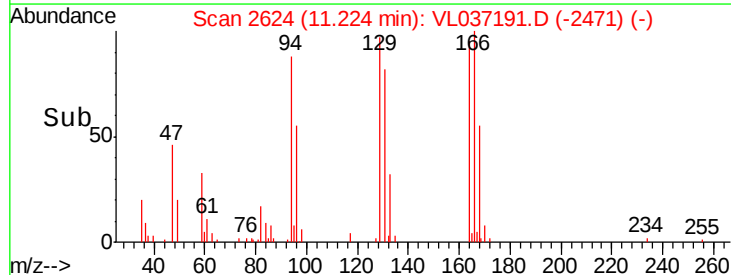
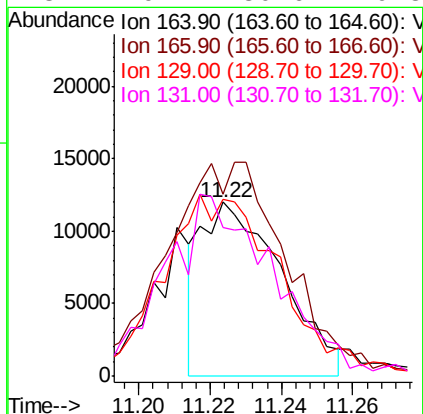
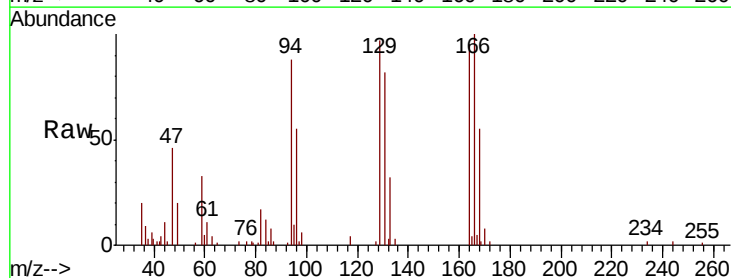
Instrument :
MSVOA_L
ClientSampleId :

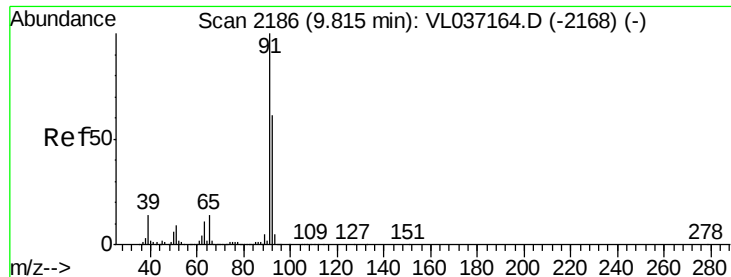
Tot Ion: 43 Resp: 3358
Ion Ratio Lower Upper
43 100
58 0.0 38.4 57.6#
98 2.8 0.3 0.5#



#52
Tetrachloroethene
Concen: 0.117 ppbv
RT: 11.22 min Scan# 2624
Delta R.T. -0.01 min
Lab File: VL037191.D
Acq: 17 Jun 2021 4:58

Tgt Ion: 164 Resp: 18641
Ion Ratio Lower Upper
164 100
166 103.6 97.6 146.4
129 100.9 82.9 124.3
131 79.4 80.6 120.8#





#53

Toluene

Concen: 0.225 ppbv

RT: 9.81 min Scan# 2183

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

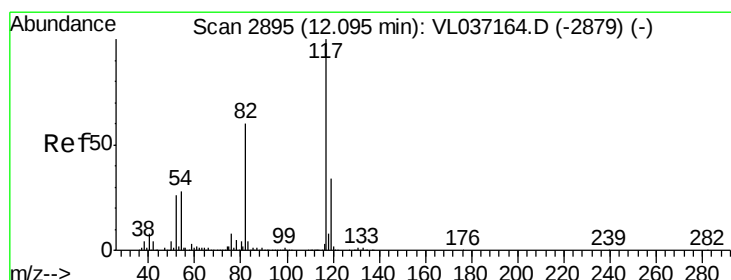
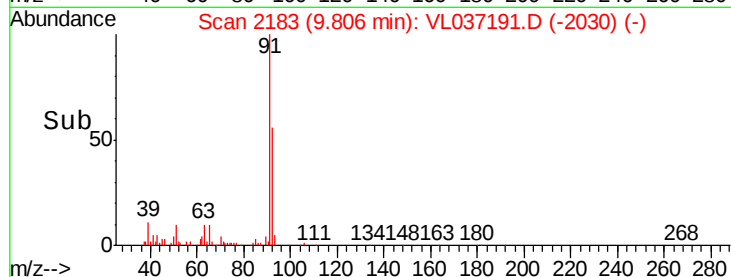
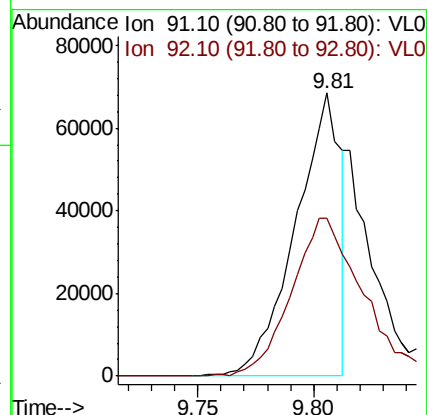
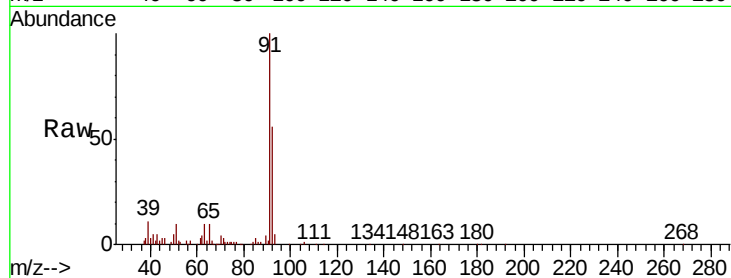
ClientSampleId :

Tot Ion: 91 Resp: 92405

Ion Ratio Lower Upper

91 100

92 91.9 48.3 72.5#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

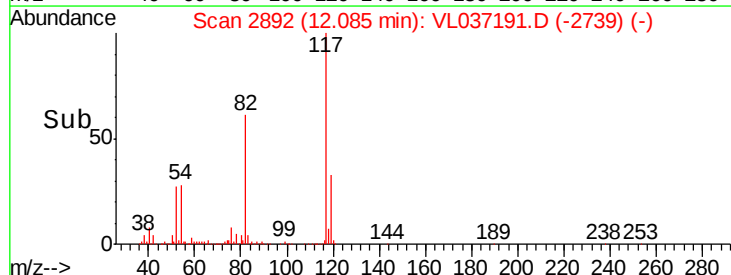
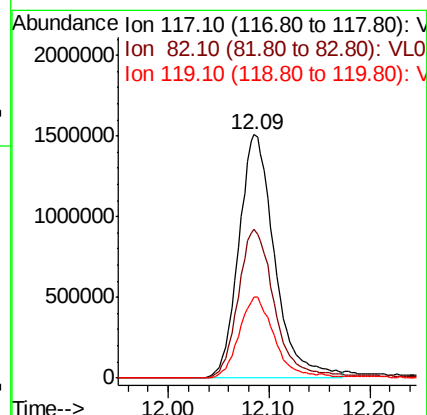
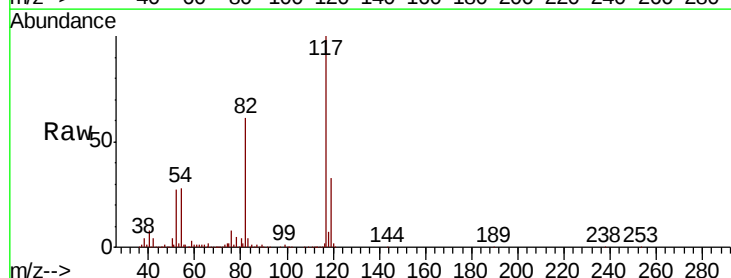
Tgt Ion: 117 Resp: 3731462

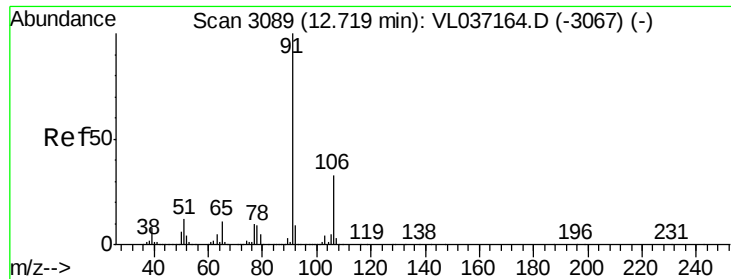
Ion Ratio Lower Upper

117 100

82 64.2 51.7 77.5

119 33.9 47.6 71.4#





#58

Ethyl Benzene

Concen: 0.024 ppbv

RT: 12.71 min Scan# 3087

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

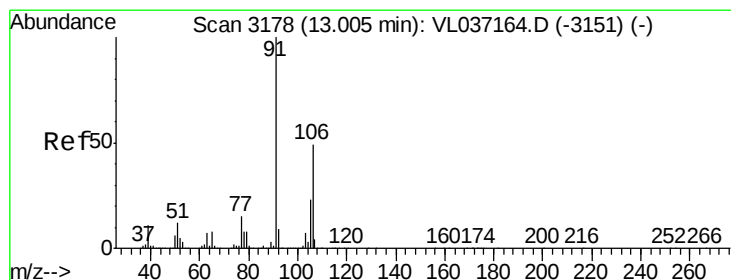
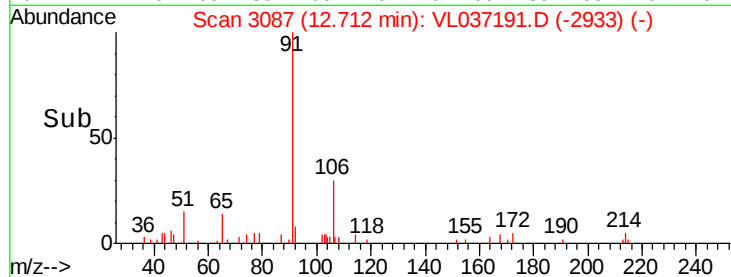
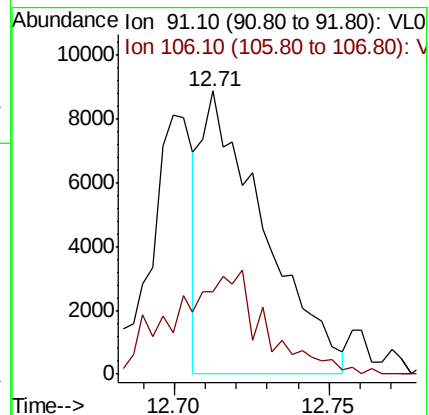
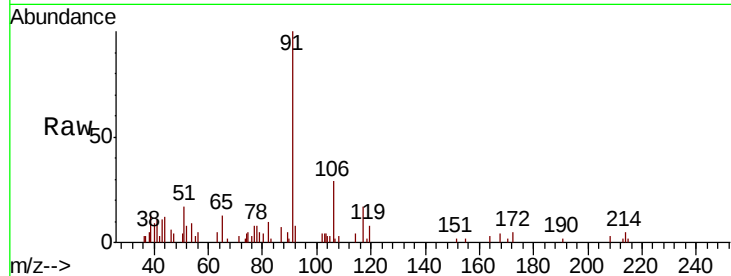
ClientSampleId :

Tot Ion: 91 Resp: 12464

Ion Ratio Lower Upper

91 100

106 29.9 26.3 39.5



#59

m/p-Xylene

Concen: 0.022 ppbv

RT: 13.00 min Scan# 3175

Delta R.T. -0.01 min

Lab File: VL037191.D

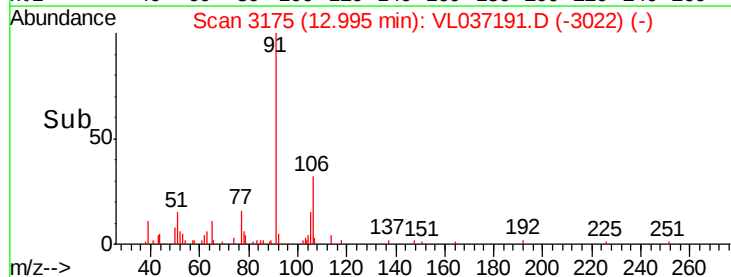
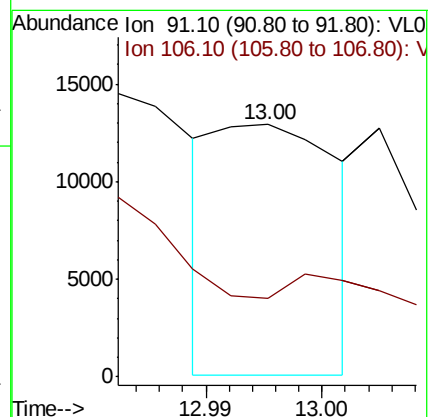
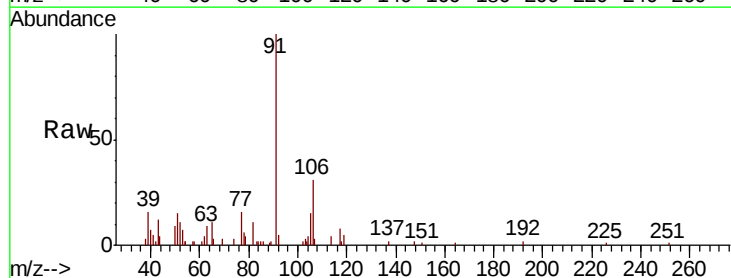
Acq: 17 Jun 2021 4:58

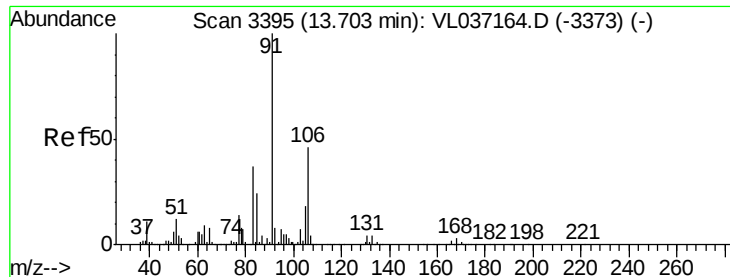
Tgt Ion: 91 Resp: 9393

Ion Ratio Lower Upper

91 100

106 0.0 37.0 55.4#

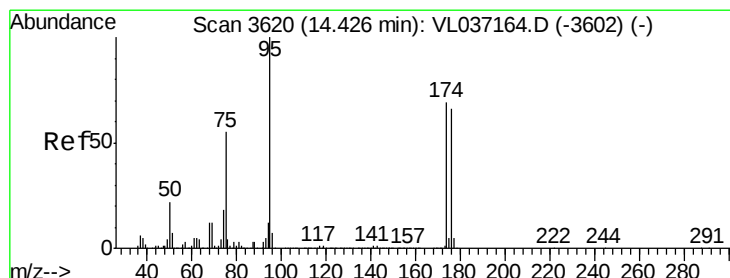
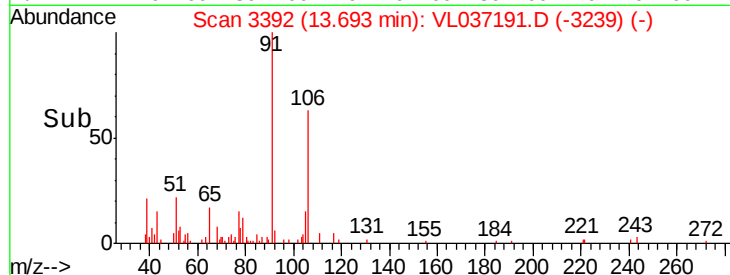
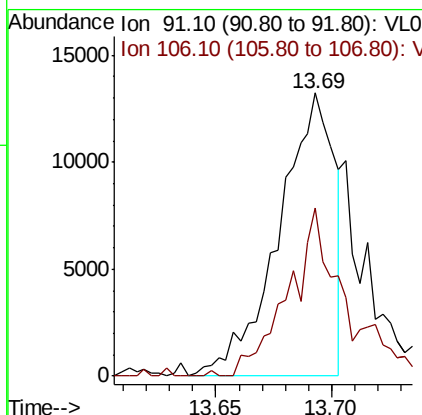
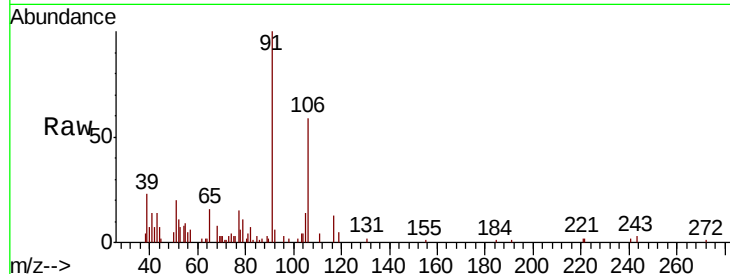




#60
o-Xylene
Concen: 0.053 ppbv
RT: 13.69 min Scan# 3392
Delta R.T. -0.01 min
Lab File: VL037191.D
Acq: 17 Jun 2021 4:58

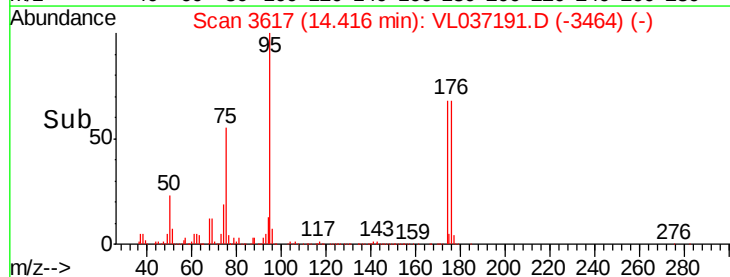
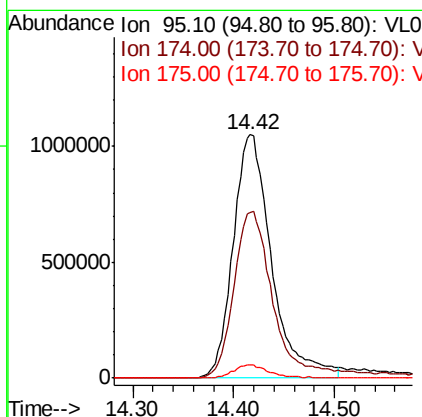
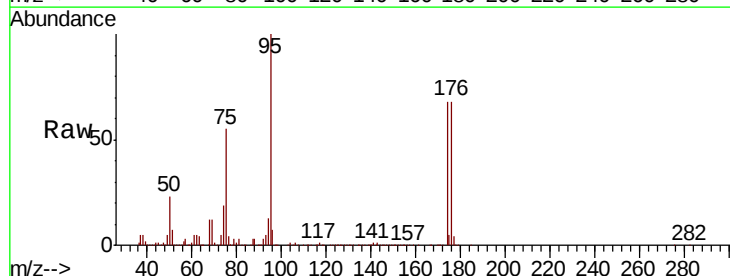
Instrument :
MSVOA_L
ClientSampled :

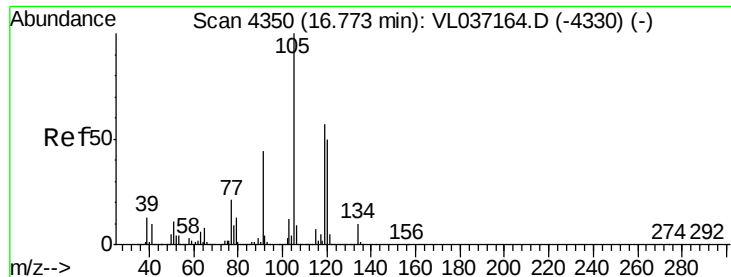
Tot Ion: 91 Resp: 21951
Ion Ratio Lower Upper
91 100
106 62.2 23.0 69.0



#68
1-Bromo-4-Fluorobenzene
Concen: 9.866 ppbv
RT: 14.42 min Scan# 3617
Delta R.T. -0.01 min
Lab File: VL037191.D
Acq: 17 Jun 2021 4:58

Tgt Ion: 95 Resp: 2789612
Ion Ratio Lower Upper
95 100
174 74.0 57.0 85.4
175 5.5 4.4 6.6





#74

1,2,4-Trimethylbenzene

Concen: 0.078 ppbv

RT: 16.76 min Scan# 4347

Delta R.T. -0.01 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:105 Resp: 36674

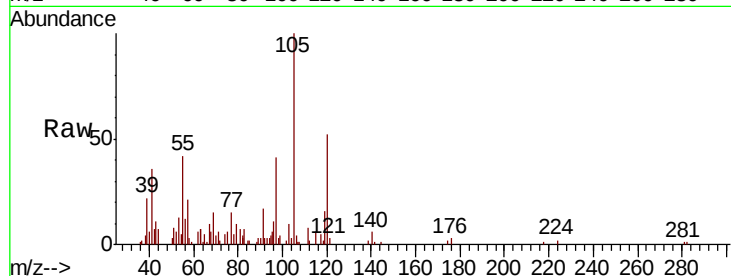
Ion Ratio Lower Upper

105 100

120 49.4 39.8 59.8

91 14.7 37.0 55.4#

77 9.1 17.0 25.4#



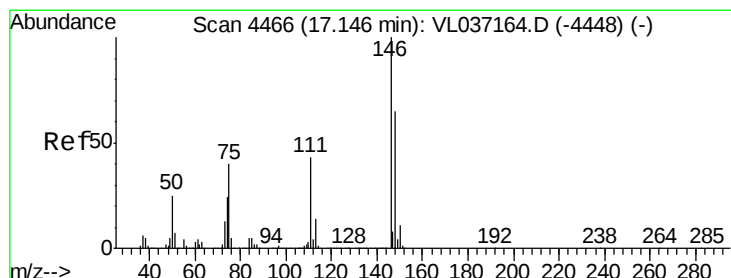
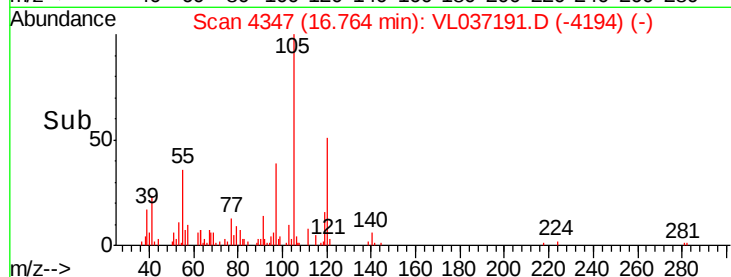
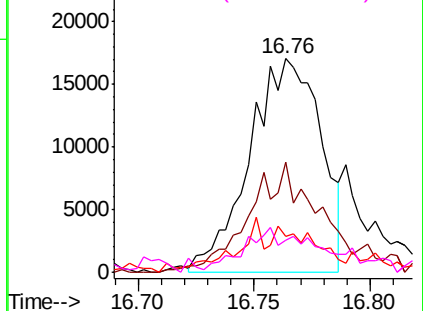
Abundance

Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VLO

Ion 77.10 (76.80 to 77.80): VLO



#76

1,4-Dichlorobenzene

Concen: 0.063 ppbv

RT: 17.13 min Scan# 4461

Delta R.T. -0.02 min

Lab File: VL037191.D

Acq: 17 Jun 2021 4:58

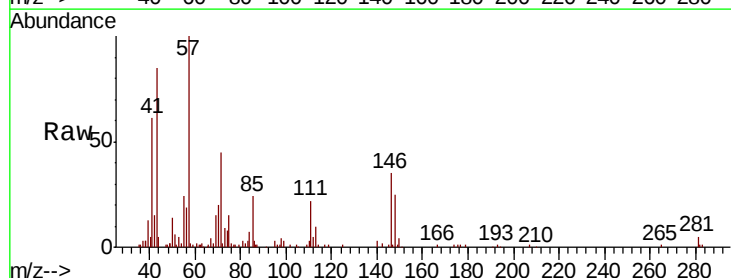
Tgt Ion:146 Resp: 18009

Ion Ratio Lower Upper

146 100

111 0.0 22.7 68.0#

148 0.0 33.7 101.1#



Abundance

Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

