

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032719\
 Data File : VL033468.D
 Acq On : 27 Mar 2019 14:45
 Operator : SY/AP
 Sample : K1560-15 0.1 PPB
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 28 07:27:36 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 26 16:00:50 2019
 QLast Update : Tue Mar 26 16:00:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	743685	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1749634	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	1722021	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.57	95	1366157	10.12	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.20%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	3.08	85	19229	0.177 ppbv	93
3) Chlorodifluoromethane	3.02	51	11346	0.133 ppbv	96
4) Chloromethane	3.17	50	3767	0.083 ppbv	91
5) Vinyl Chloride	3.29	62	5154	0.116 ppbv	95
6) Bromomethane	3.51	94	3181	0.111 ppbv	93
7) Chloroethane	3.60	64	1640	0.099 ppbv #	63
8) Dichlorotetrafluoroethane	3.22	85	15017	0.130 ppbv	97
9) Propene	3.04	41	4628	0.129 ppbv	98
10) Heptane	8.23	43	3654	0.038 ppbv #	27
11) Trichlorofluoromethane	4.00	101	17522	0.131 ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.55	101	6777	0.075 ppbv #	14
13) Ethanol	3.65	45	288	0.031 ppbv #	18
14) Bromoethene	3.79	108	3936	0.110 ppbv	92
15) Acetone	3.92	43	15424	0.172 ppbv	97
16) 1,3-Butadiene	3.36	39	1322	0.037 ppbv #	1
18) 1,1-Dichloroethene	4.35	96	2514	0.065 ppbv #	74
19) Isopropyl Alcohol	4.05	45	8950	0.158 ppbv	100
20) Methylene Chloride	4.41	84	8047	0.212 ppbv #	75
21) Allvl Chloride	4.47	41	3376	0.060 ppbv #	18
22) trans-1,2-Dichloroethene	4.96	96	4127	0.103 ppbv #	53
23) Vinyl Acetate	5.16	43	12176	0.096 ppbv #	86
24) 1,1-Dichloroethane	5.09	63	6715	0.069 ppbv	98
25) Ethyl Acetate	5.77	43	17511	0.106 ppbv #	63
26) Hexane	5.77	57	5131	0.070 ppbv #	24
27) Carbon Disulfide	4.62	76	3908	0.045 ppbv #	1
29) Chloroform	5.84	83	15134	0.120 ppbv	94
31) cis-1,2-Dichloroethene	5.64	61	6900	0.094 ppbv #	82
32) 1,1,1-Trichloroethane	6.62	97	13720	0.114 ppbv	95
34) 2-Butanone	5.35	43	7764	0.074 ppbv	94
35) Carbon Tetrachloride	7.14	117	5073	0.041 ppbv	93
36) Benzene	7.00	78	12885	0.088 ppbv	97
37) 1,2-Dichloroethane	6.41	62	10959	0.111 ppbv #	93
38) Trichloroethene	7.96	130	3591	0.065 ppbv #	21
39) 1,2-Dichloropropane	7.28	63	460050	8.000 ppbv #	23
42) Bromodichloromethane	7.91	83	13870	0.103 ppbv	86
43) Methyl Methacrylate	8.14	69	2402	0.040 ppbv #	1
44) 2,2,4-Trimethylpentane	7.98	57	12871	0.050 ppbv #	41
45) t-1,3-Dichloropropene	9.41	75	2546	0.035 ppbv	99
46) cis-1,3-Dichloropropene	8.83	75	3152	0.037 ppbv #	60
47) 1,1,2-Trichloroethane	9.61	97	1749	0.027 ppbv #	53
52) Tetrachloroethene	11.35	164	1517	0.027 ppbv	86

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 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

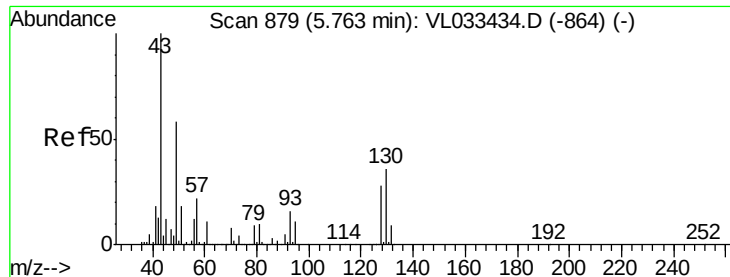
Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 28 07:27:36 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 26 16:00:50 2019
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 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

53) Toluene	9.93	91	6536	0.038	ppbv #	21
54) 1,2-Dibromoethane	10.76	107	5282	0.052	ppbv	96
56) 1,1,1,2-Tetrachloroethane	12.27	131	4158	0.053	ppbv #	10
57) Chlorobenzene	12.30	112	11162	0.083	ppbv #	96
58) Ethyl Benzene	12.86	91	7333	0.032	ppbv #	89
60) o-Xylene	13.85	91	6722	0.034	ppbv #	25
61) Styrene	13.68	104	4799	0.035	ppbv #	36
62) Isopropylbenzene	14.81	105	8309	0.030	ppbv #	30
63) 1,1,2,2-Tetrachloroethane	13.83	83	8725	0.060	ppbv #	24
64) n-propylbenzene	15.72	120	2415	0.034	ppbv #	1
66) Benzyl Chloride	17.15	91	2341	0.020	ppbv #	67
67) sec-Butylbenzene	17.45	105	11639	0.033	ppbv #	59
70) n-Butylbenzene	18.71	91	7346	0.024	ppbv #	6
71) 2-Chlorotoluene	15.61	91	8795	0.041	ppbv #	46
72) 4-Ethyltoluene	15.99	105	6463	0.029	ppbv #	56
73) 1,3,5-Trimethylbenzene	16.16	105	10409	0.049	ppbv #	84
74) 1,2,4-Trimethylbenzene	16.91	105	5050	0.022	ppbv #	84
75) 1,3-Dichlorobenzene	17.16	146	8083	0.057	ppbv #	5
76) 1,4-Dichlorobenzene	17.29	146	3011	0.022	ppbv #	24
77) 1,2-Dichlorobenzene	17.98	146	4962	0.037	ppbv #	23
80) Naphthalene,2-methyl-	25.11	142	2415	0.037	ppbv #	90

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampled :

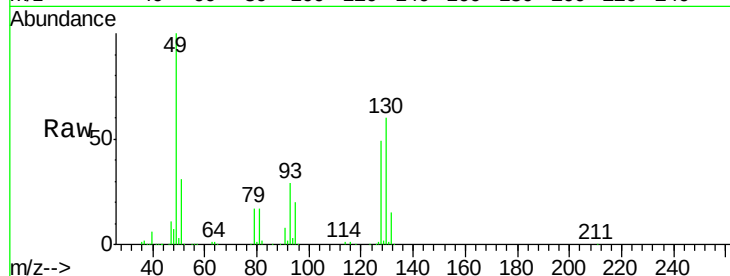
Tot Ion: 49 Resp: 743685

Ion Ratio Lower Upper

49 100

128 48.7 24.0 72.0

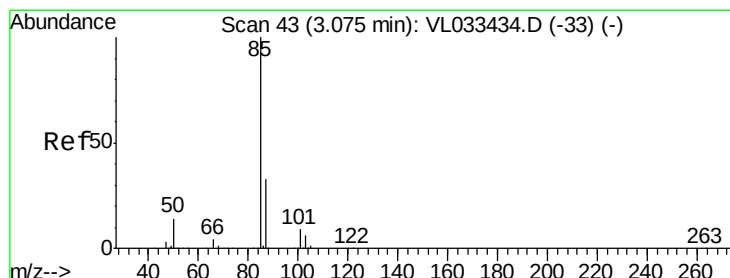
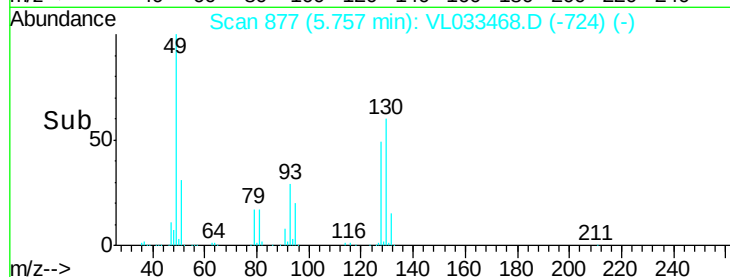
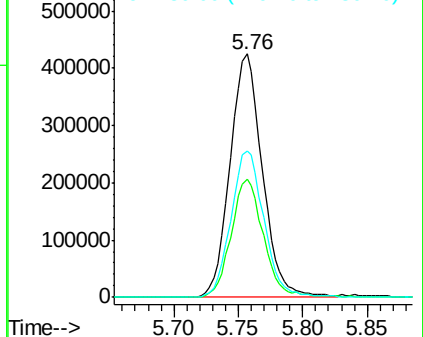
130 61.8 31.2 93.6



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.177 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033468.D

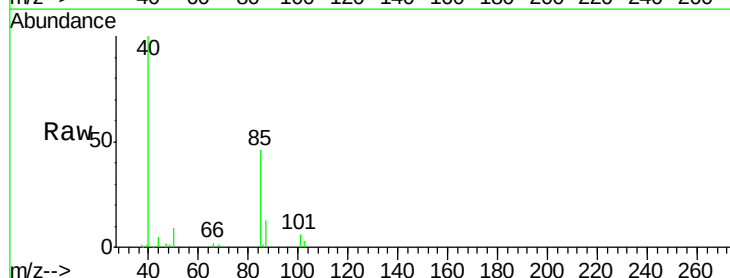
Acq: 27 Mar 2019 14:45

Tgt Ion: 85 Resp: 19229

Ion Ratio Lower Upper

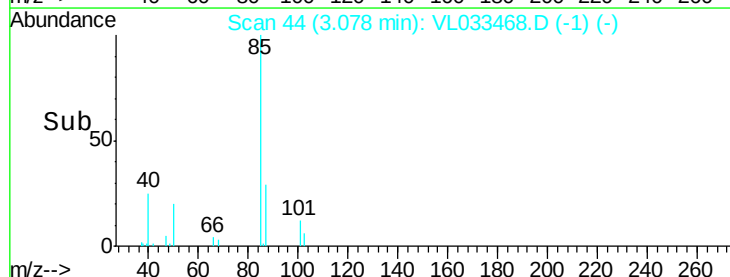
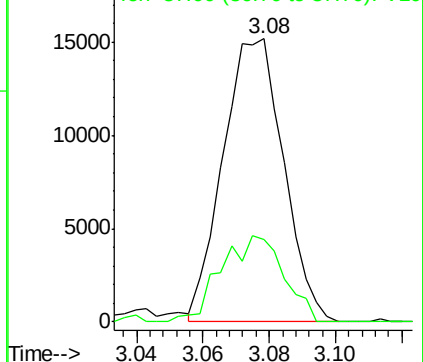
85 100

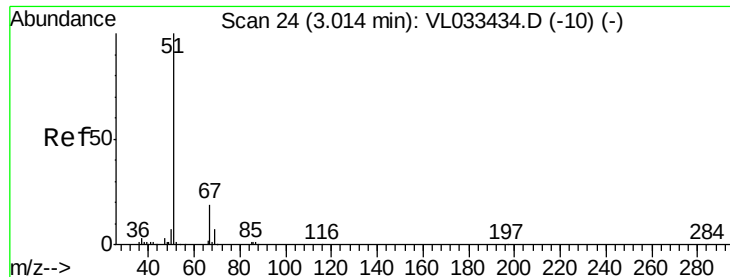
87 29.2 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.133 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

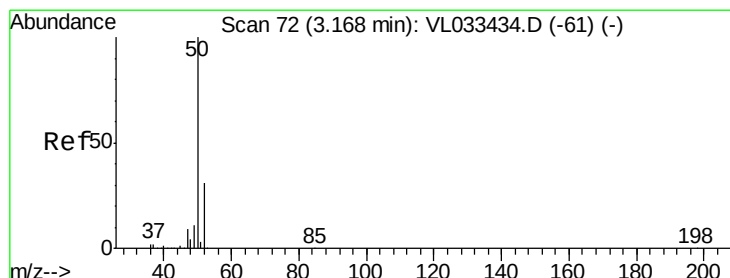
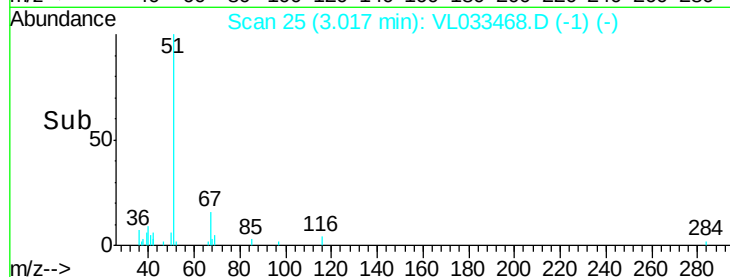
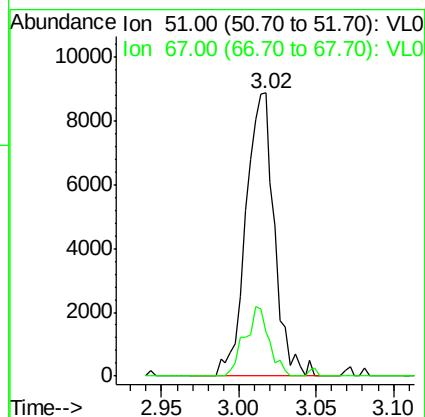
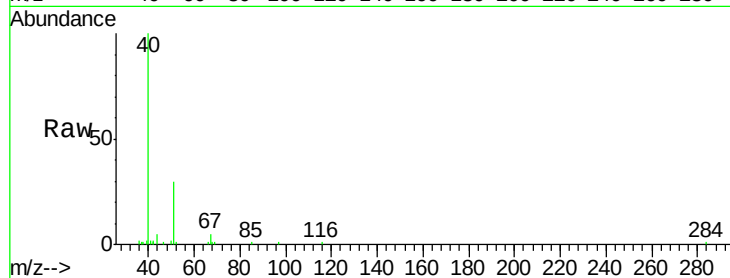
ClientSampleId :

Tot Ion: 51 Resp: 11346

Ion Ratio Lower Upper

51 100

67 21.5 15.7 23.5



#4

Chloromethane

Concen: 0.083 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL033468.D

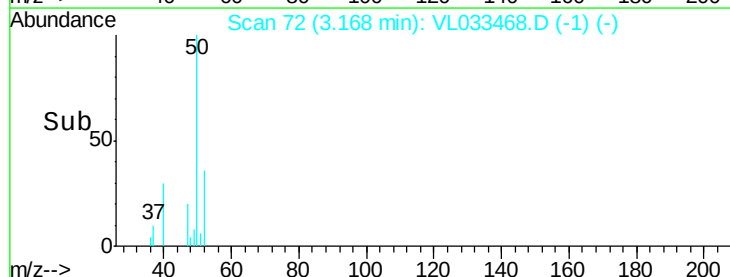
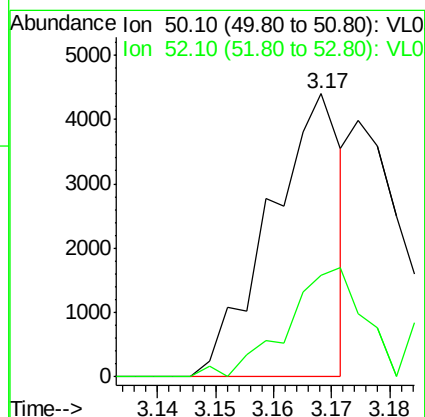
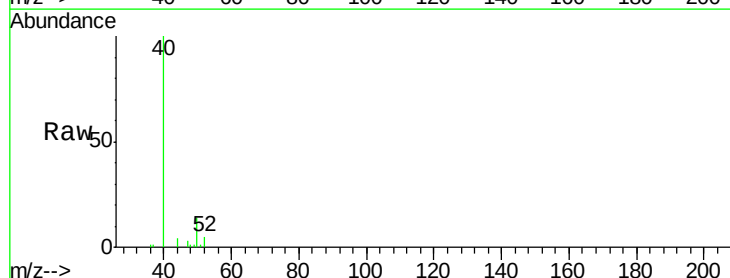
Acq: 27 Mar 2019 14:45

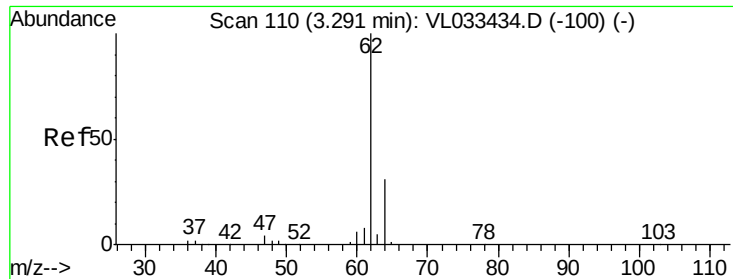
Tgt Ion: 50 Resp: 3767

Ion Ratio Lower Upper

50 100

52 36.1 25.0 37.6





#5

Vinyl Chloride

Concen: 0.116 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

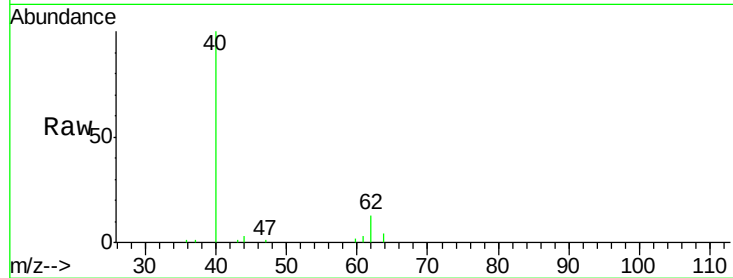
ClientSampleId :

Tot Ion: 62 Resp: 5154

Ion Ratio Lower Upper

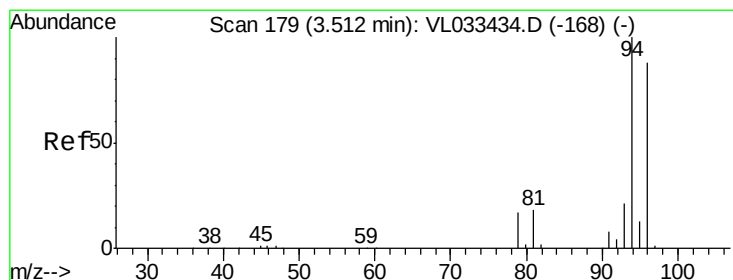
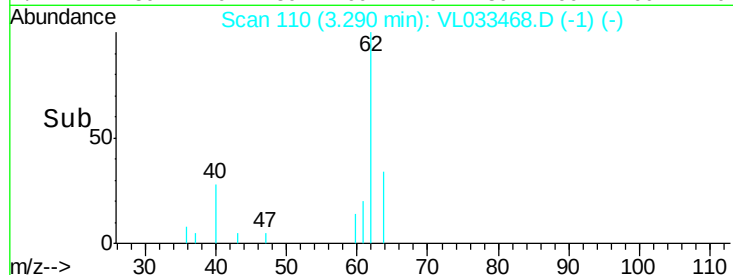
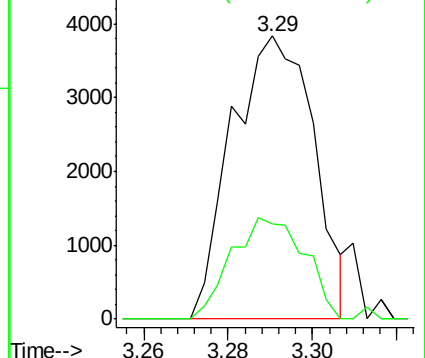
62 100

64 33.8 24.9 37.3



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.111 ppbv

RT: 3.51 min Scan# 179

Delta R.T. -0.00 min

Lab File: VL033468.D

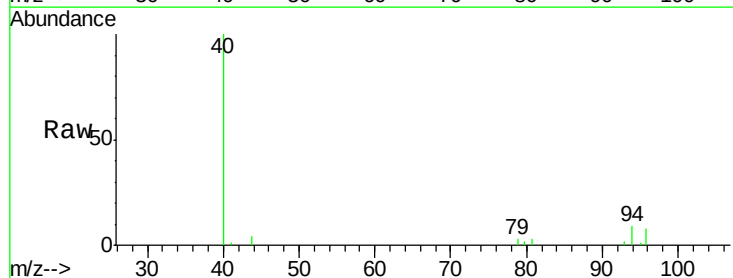
Acq: 27 Mar 2019 14:45

Tgt Ion: 94 Resp: 3181

Ion Ratio Lower Upper

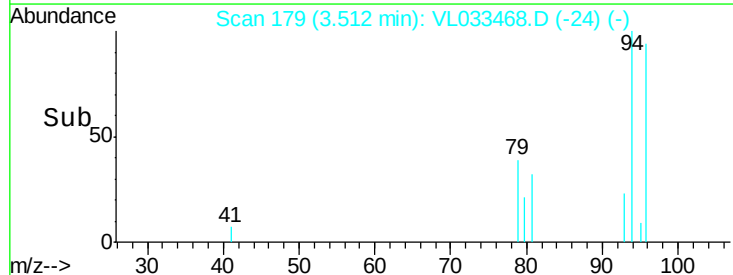
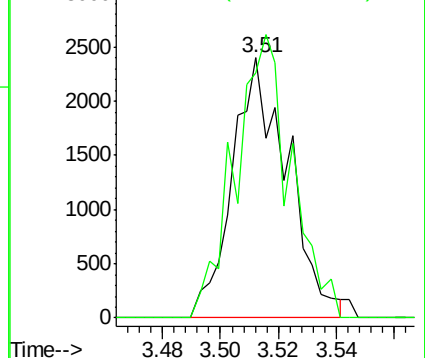
94 100

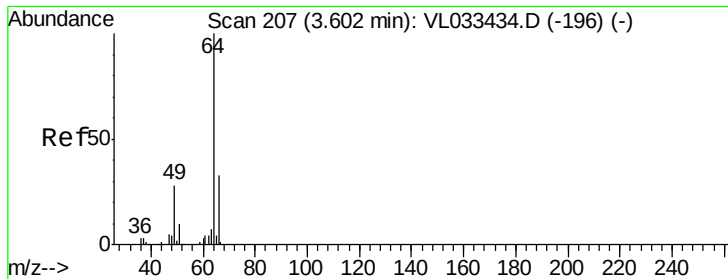
96 94.3 70.2 105.2



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 0.099 ppbv

RT: 3.60 min Scan# 207

Delta R.T. -0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

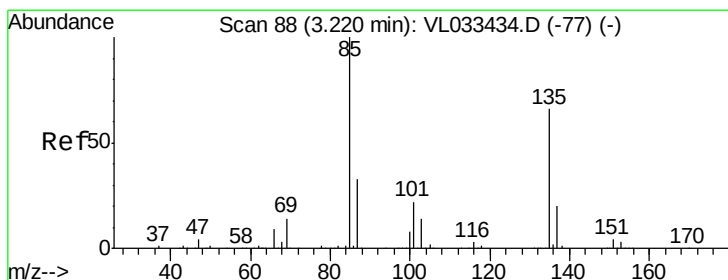
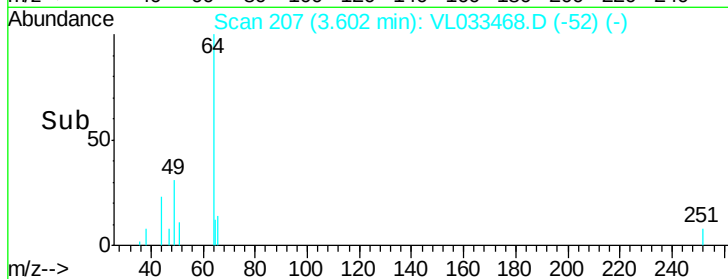
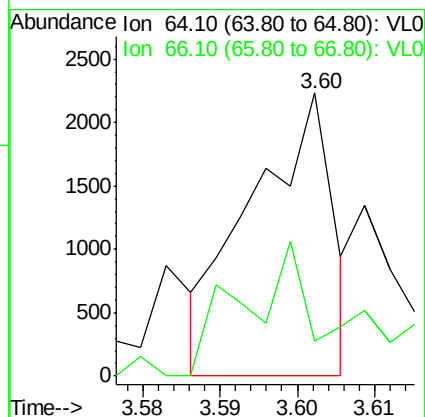
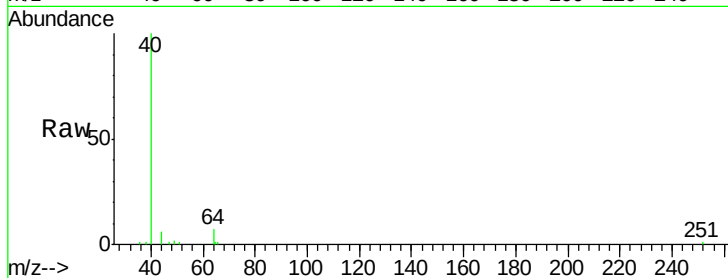
ClientSampleId :

Tot Ion: 64 Resp: 1640

Ion Ratio Lower Upper

64 100

66 12.5 26.7 40.1#



#8

Dichlorotetrafluoroethane

Concen: 0.130 ppbv

RT: 3.22 min Scan# 88

Delta R.T. -0.00 min

Lab File: VL033468.D

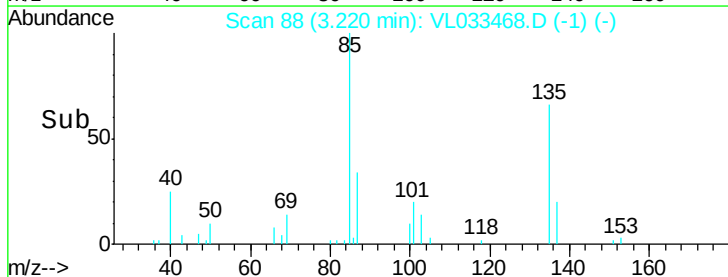
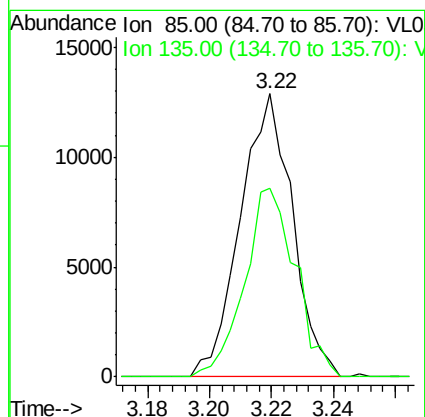
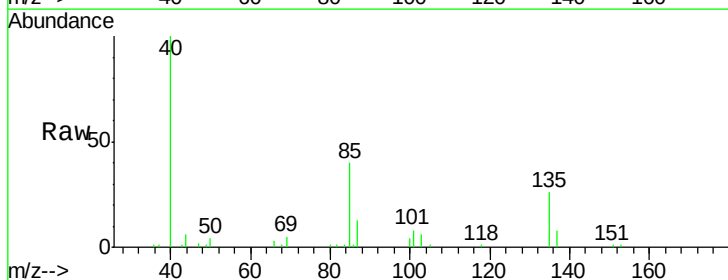
Acq: 27 Mar 2019 14:45

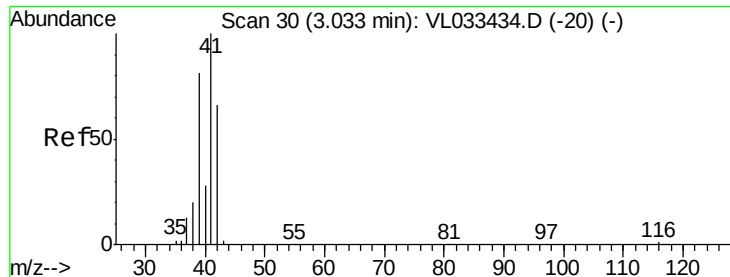
Tgt Ion: 85 Resp: 15017

Ion Ratio Lower Upper

85 100

135 65.1 54.0 81.0





#9

Propene

Concen: 0.129 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

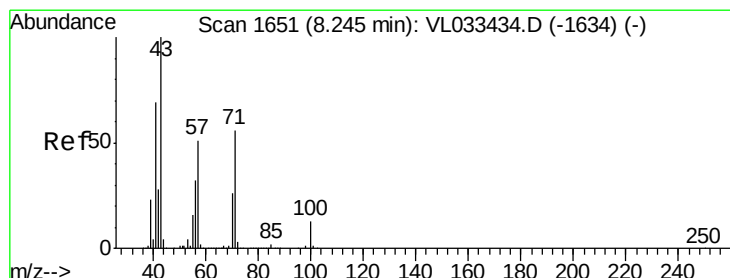
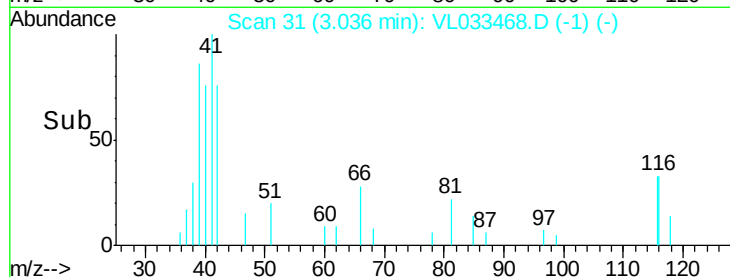
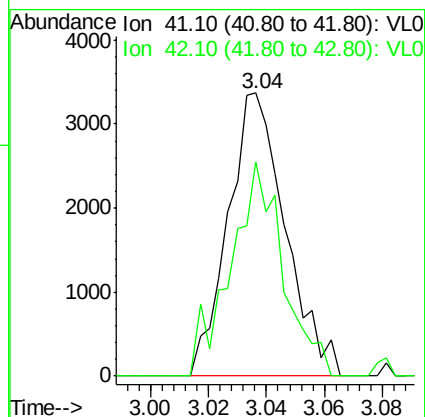
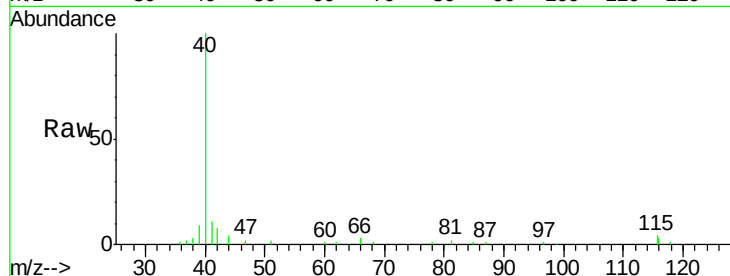
ClientSampleId :

Tot Ion: 41 Resp: 4628

Ion Ratio Lower Upper

41 100

42 69.1 53.9 80.9



#10

Heptane

Concen: 0.038 ppbv

RT: 8.23 min Scan# 1647

Delta R.T. -0.01 min

Lab File: VL033468.D

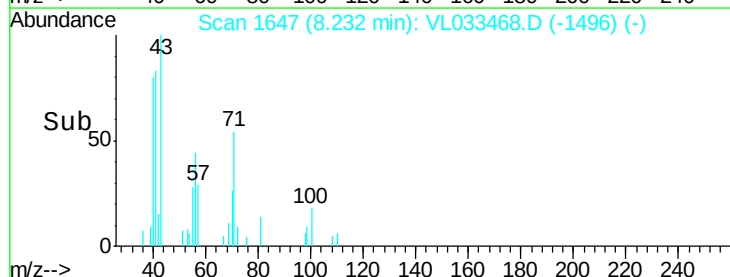
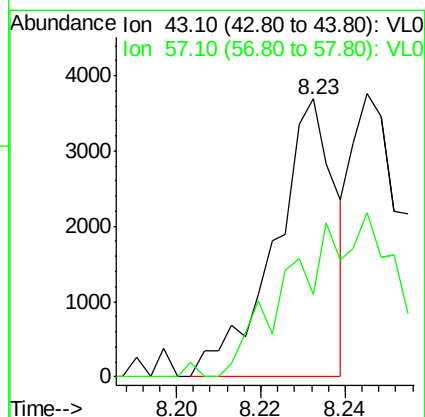
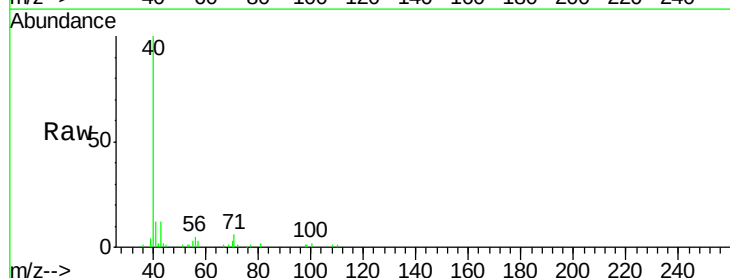
Acq: 27 Mar 2019 14:45

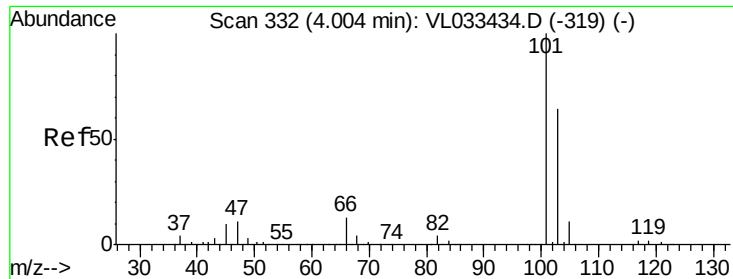
Tgt Ion: 43 Resp: 3654

Ion Ratio Lower Upper

43 100

57 0.0 40.6 60.8#

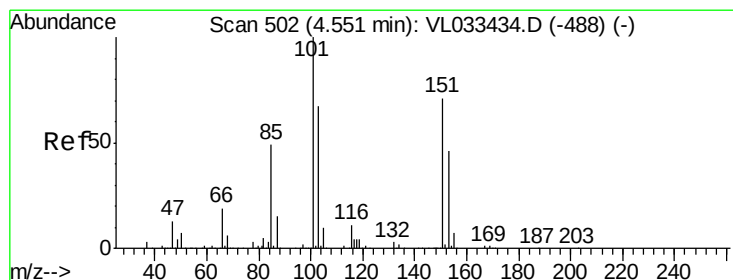
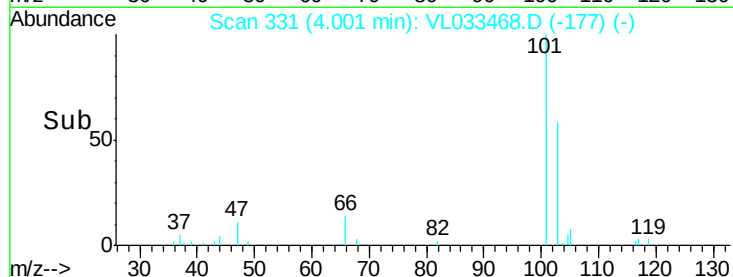
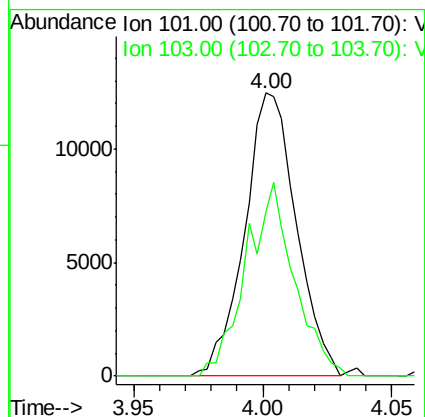
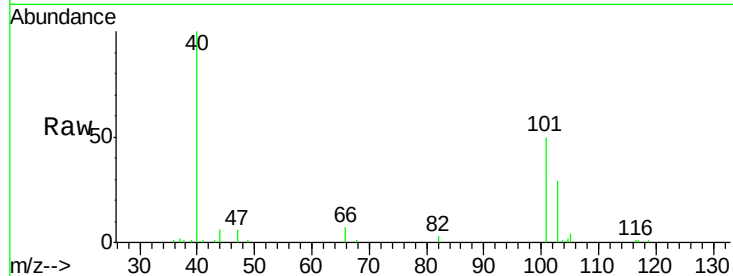




#11
 Trichlorofluoromethane
 Concen: 0.131 ppbv
 RT: 4.00 min Scan# 331
 Delta R.T. -0.00 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

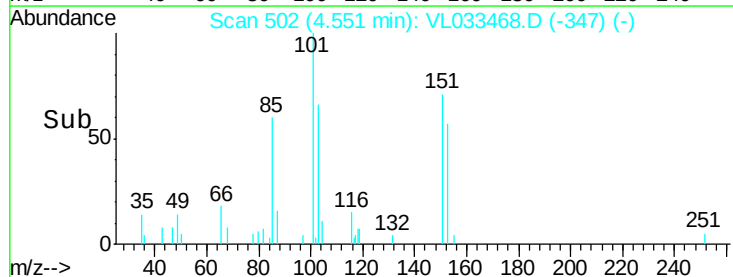
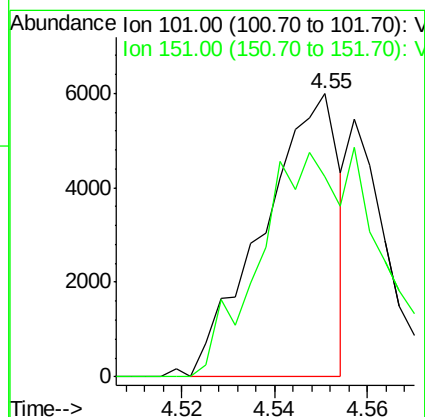
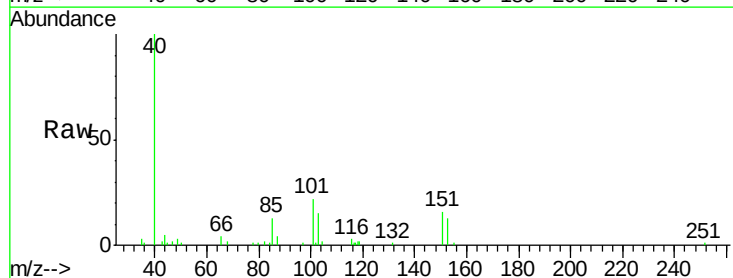
Instrument :
 MSVOA_L
 ClientSampled :

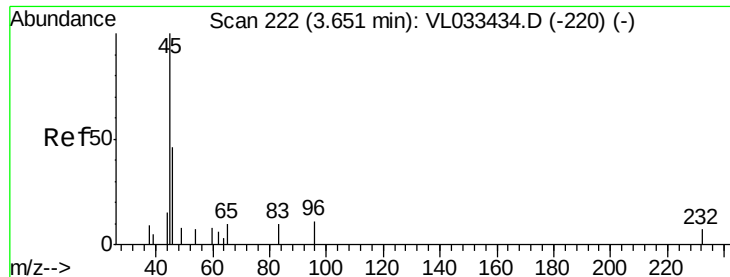
Tot Ion:101 Resp: 17522
 Ion Ratio Lower Upper
 101 100
 103 59.3 51.3 76.9



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.075 ppbv
 RT: 4.55 min Scan# 502
 Delta R.T. -0.00 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

Tgt Ion:101 Resp: 6777
 Ion Ratio Lower Upper
 101 100
 151 0.0 57.7 86.5#

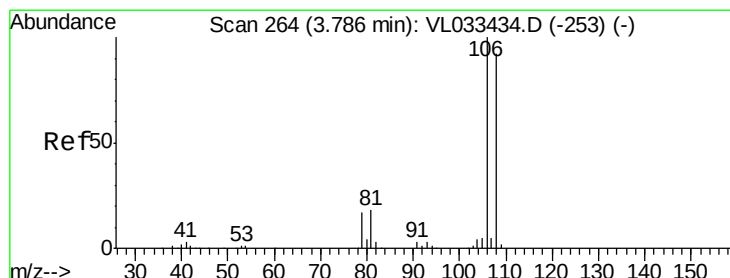
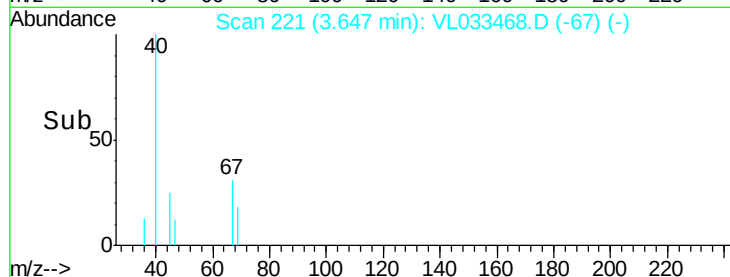
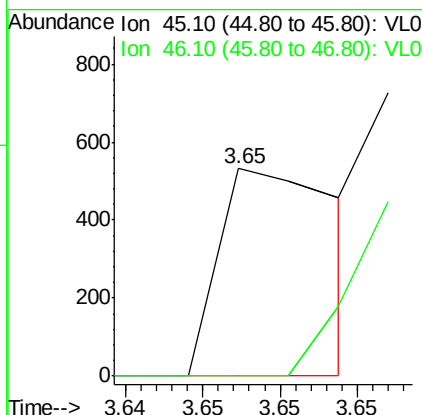
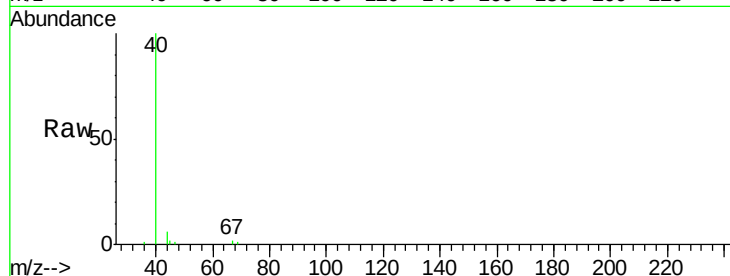




#13
Ethanol
Concen: 0.031 ppbv
RT: 3.65 min Scan# 221
Delta R.T. -0.00 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

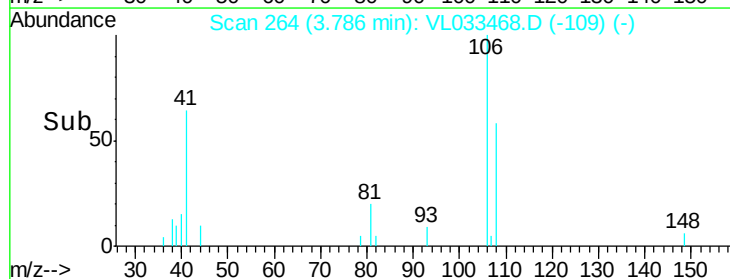
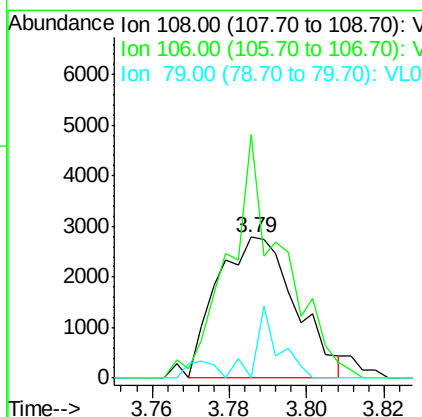
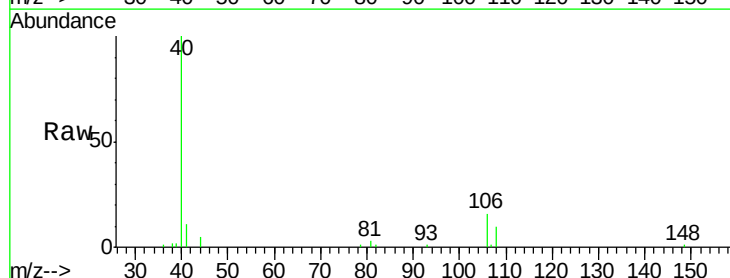
Instrument :
MSVOA_L
ClientSampleId :

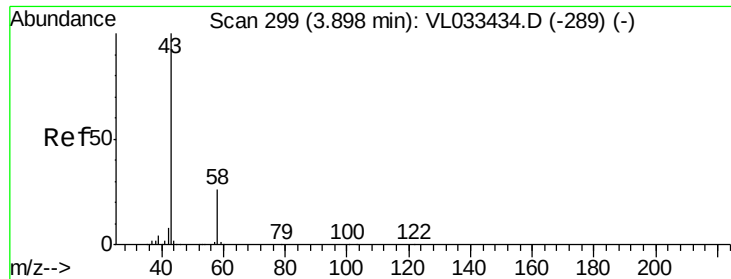
Tot Ion: 45 Resp: 288
Ion Ratio Lower Upper
45 100
46 0.0 25.4 101.8#



#14
Bromoethene
Concen: 0.110 ppbv
RT: 3.79 min Scan# 264
Delta R.T. -0.00 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Tgt Ion: 108 Resp: 3936
Ion Ratio Lower Upper
108 100
106 118.0 86.4 129.6
79 19.4 15.8 23.8





#15

Acetone

Concen: 0.172 ppbv

RT: 3.92 min Scan# 306

Delta R.T. 0.02 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

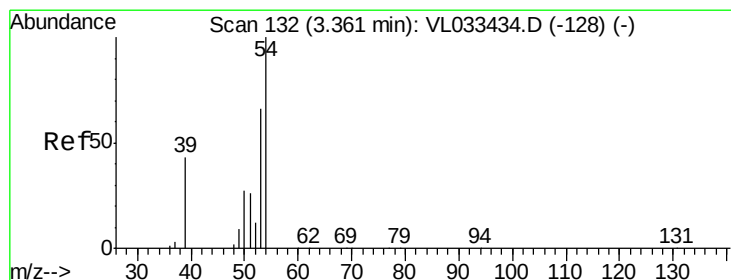
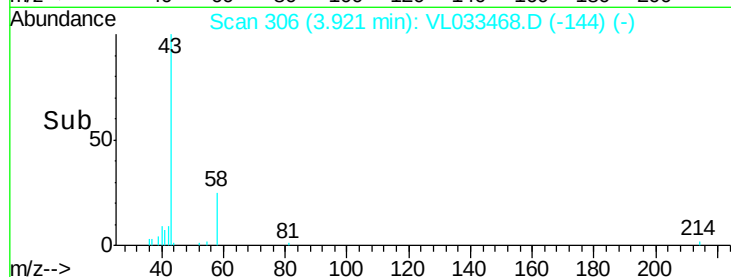
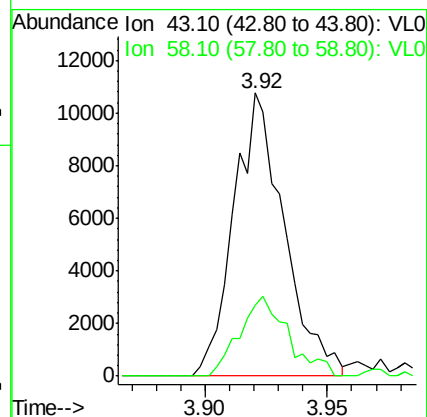
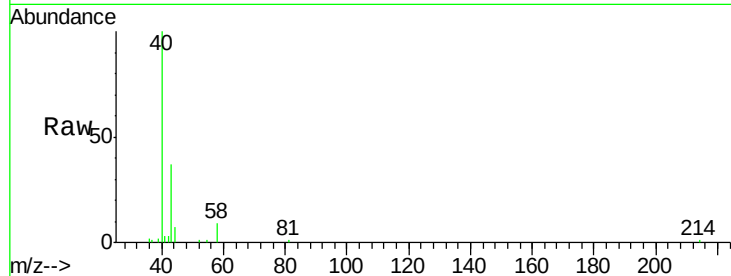
ClientSampleId :

Tot Ion: 43 Resp: 15424

Ion Ratio Lower Upper

43 100

58 27.0 20.5 30.7



#16

1,3-Butadiene

Concen: 0.037 ppbv

RT: 3.36 min Scan# 131

Delta R.T. -0.00 min

Lab File: VL033468.D

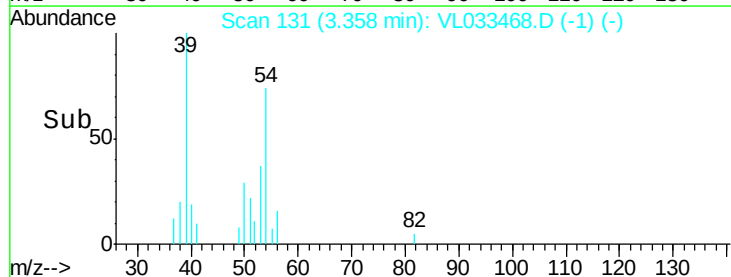
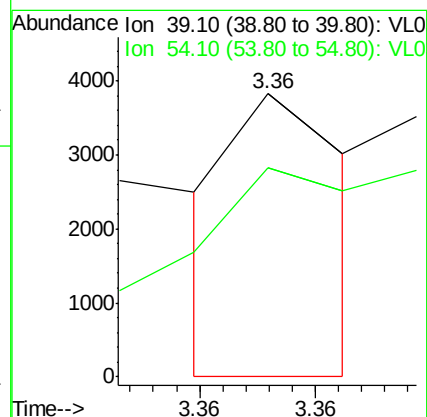
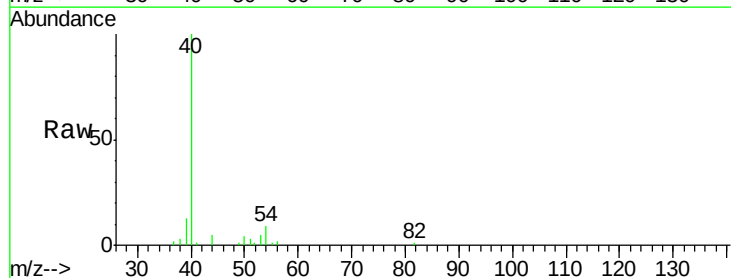
Acq: 27 Mar 2019 14:45

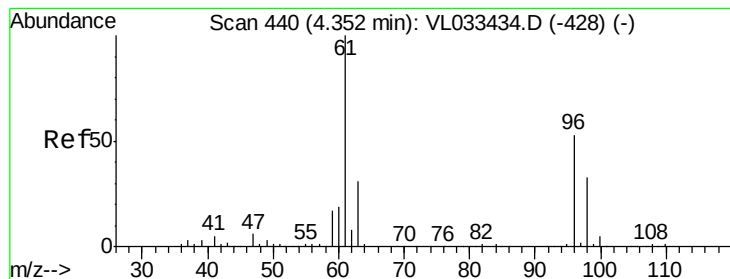
Tgt Ion: 39 Resp: 1322

Ion Ratio Lower Upper

39 100

54 321.3 69.4 104.2#





#18

1,1-Dichloroethene

Concen: 0.065 ppbv

RT: 4.35 min Scan# 440

Delta R.T. -0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

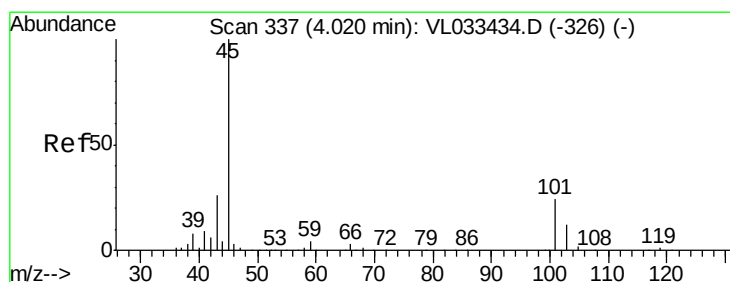
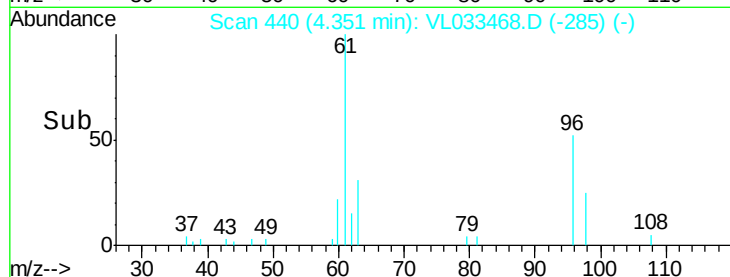
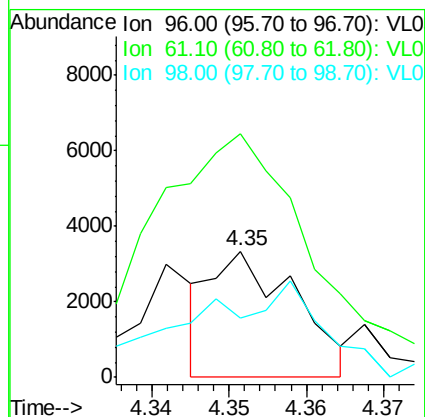
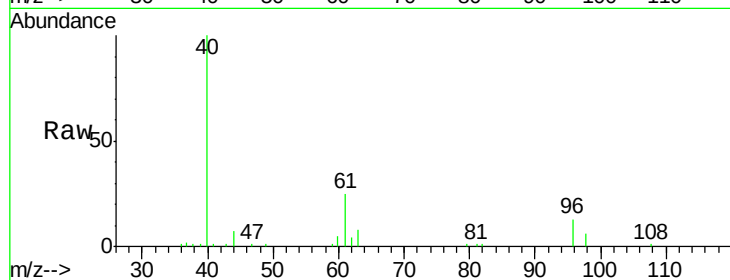
Tot Ion: 96 Resp: 2514

Ion Ratio Lower Upper

96 100

61 156.0 149.8 224.6

98 30.5 48.7 73.1#



#19

Isopropyl Alcohol

Concen: 0.158 ppbv

RT: 4.05 min Scan# 345

Delta R.T. 0.03 min

Lab File: VL033468.D

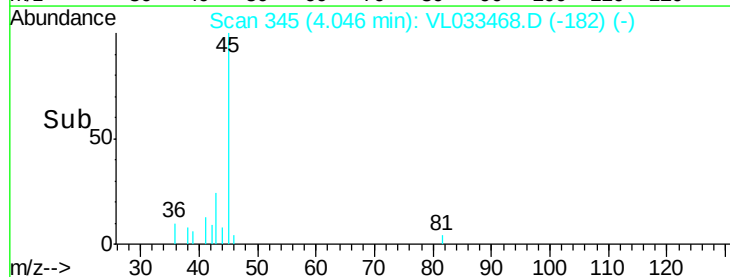
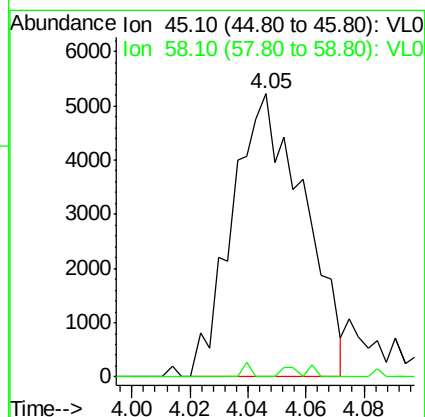
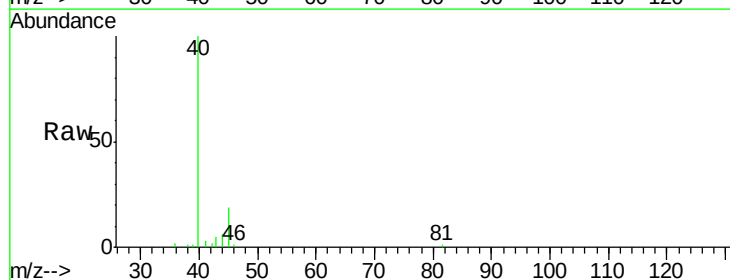
Acq: 27 Mar 2019 14:45

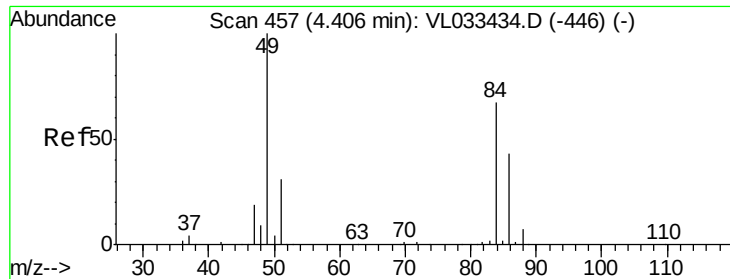
Tgt Ion: 45 Resp: 8950

Ion Ratio Lower Upper

45 100

58 1.8 1.4 2.2

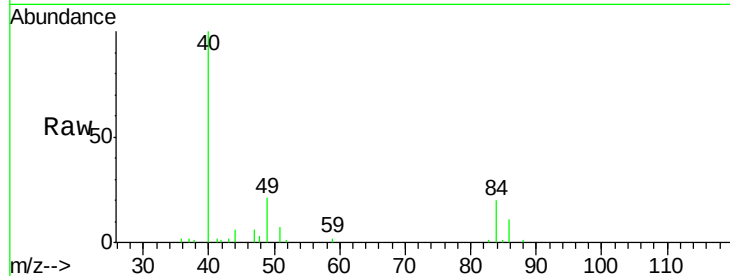




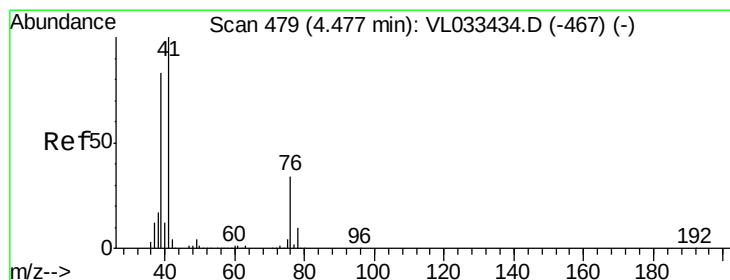
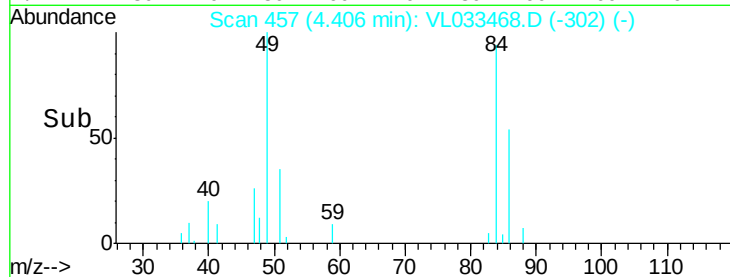
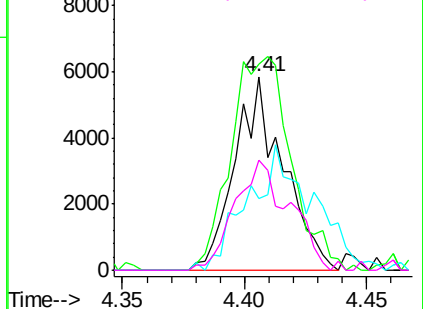
#20
Methylene Chloride
Concen: 0.212 ppbv
RT: 4.41 min Scan# 457
Delta R.T. -0.00 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion	84	Resp	8047
Ion Ratio	Lower	Upper	
84	100		
49	106.1	120.0	180.0#
51	37.1	36.7	55.1
86	57.0	51.9	77.9

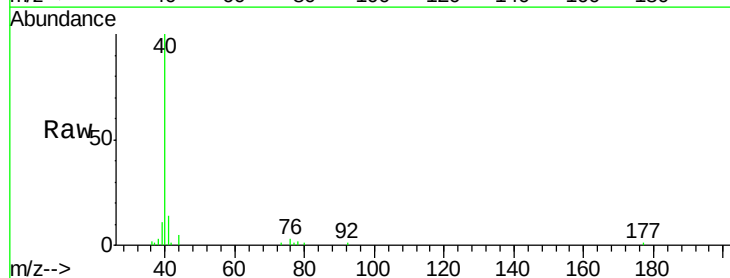


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

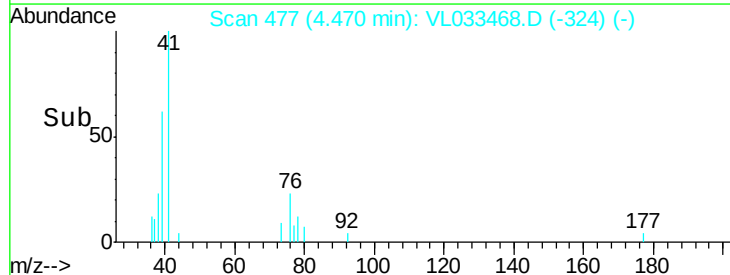
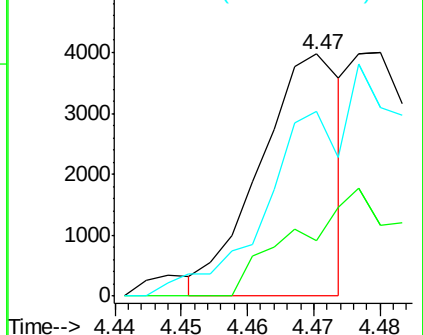


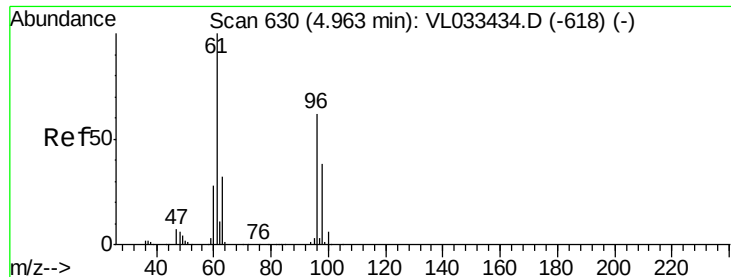
#21
Allyl Chloride
Concen: 0.060 ppbv
RT: 4.47 min Scan# 477
Delta R.T. -0.01 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Tgt Ion	41	Resp	3376
Ion Ratio	Lower	Upper	
41	100		
76	0.0	25.4	38.2#
39	0.0	65.3	97.9#



Abundance Ion 41.10 (40.80 to 41.80): VL0
Ion 76.10 (75.80 to 76.80): VL0
Ion 39.10 (38.80 to 39.80): VL0





#22

trans-1,2-Dichloroethene

Concen: 0.103 ppbv

RT: 4.96 min Scan# 629

Delta R.T. -0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

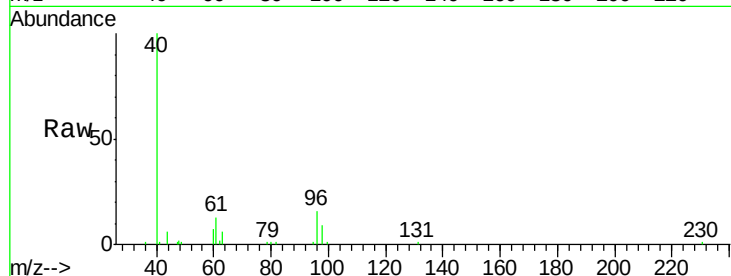
Tot Ion: 96 Resp: 4127

Ion Ratio Lower Upper

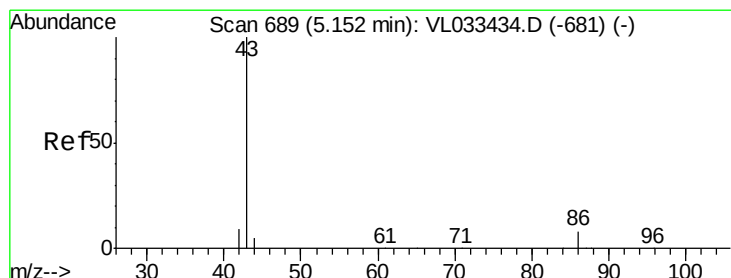
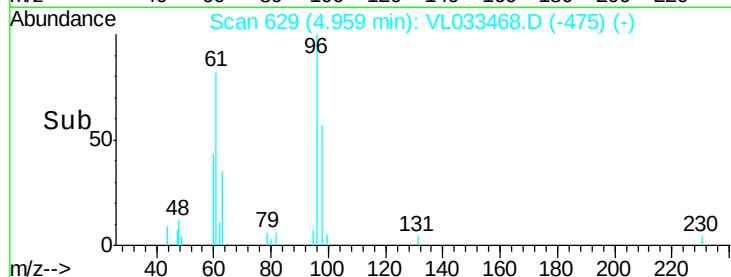
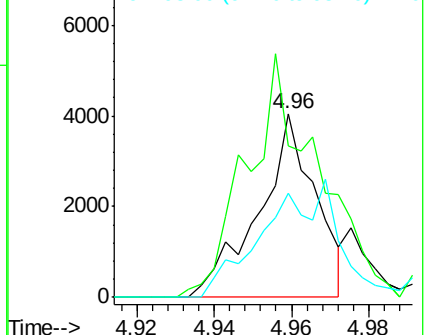
96 100

61 78.2 128.9 193.3#

98 56.8 49.5 74.3



Abundance Ion 96.00 (95.70 to 96.70): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 98.00 (97.70 to 98.70): VL0



#23

Vinyl Acetate

Concen: 0.096 ppbv

RT: 5.16 min Scan# 690

Delta R.T. 0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Tgt Ion: 43 Resp: 12176

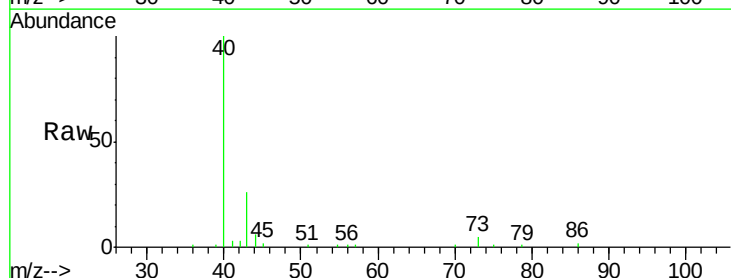
Ion Ratio Lower Upper

43 100

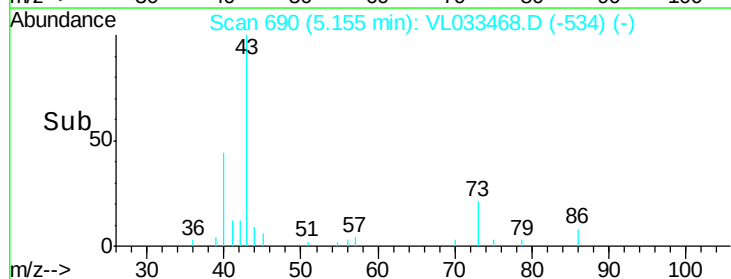
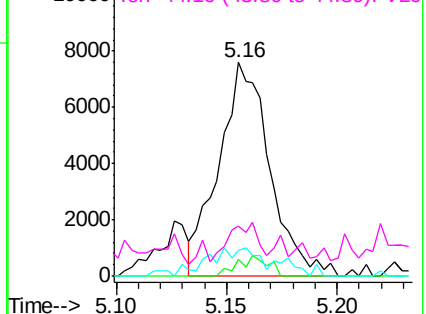
86 8.3 5.6 8.4

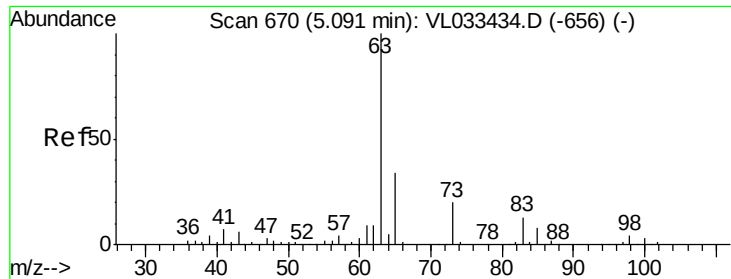
42 12.5 8.0 12.0#

44 19.2 3.9 5.9#



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

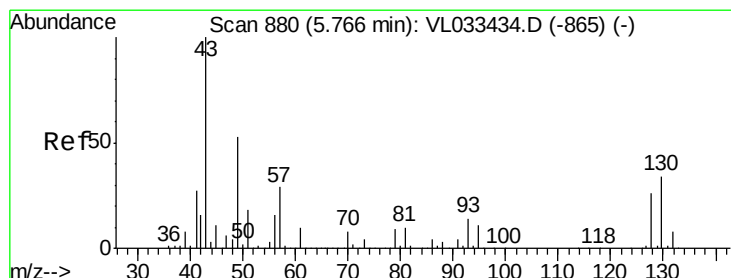
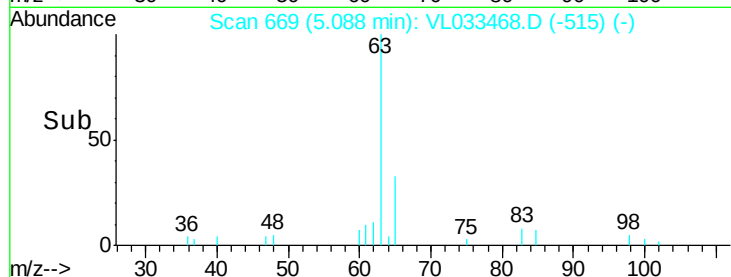
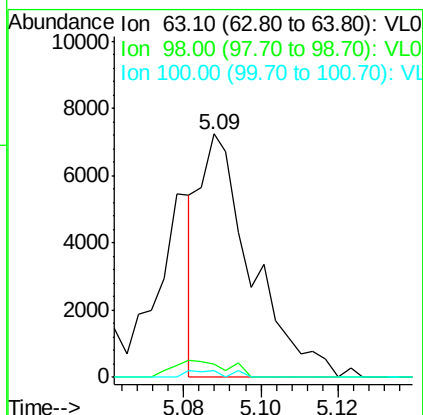
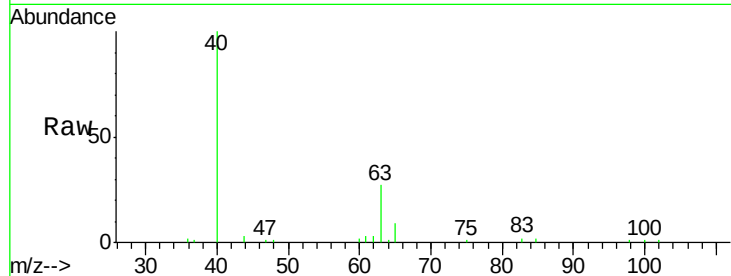




#24
1,1-Dichloroethane
Concen: 0.069 ppbv
RT: 5.09 min Scan# 669
Delta R.T. -0.00 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

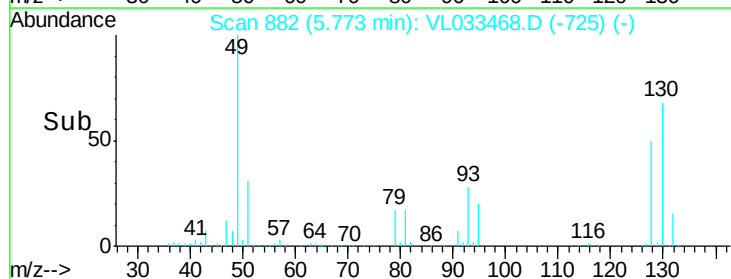
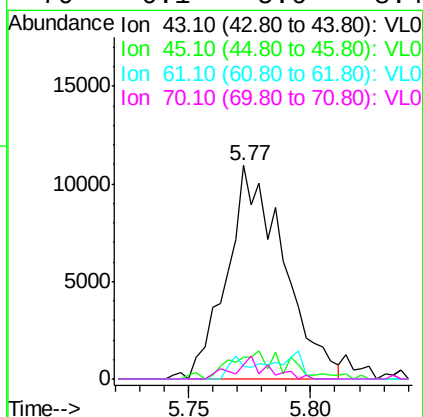
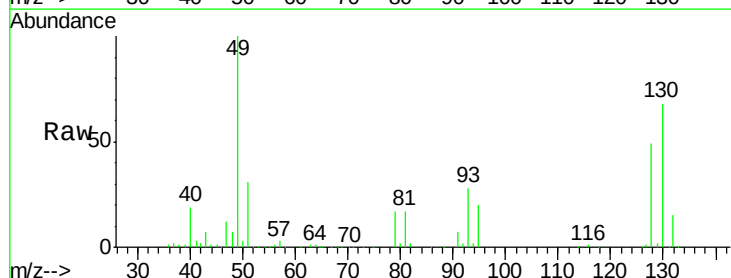
Instrument :
MSVOA_L
ClientSampleId :

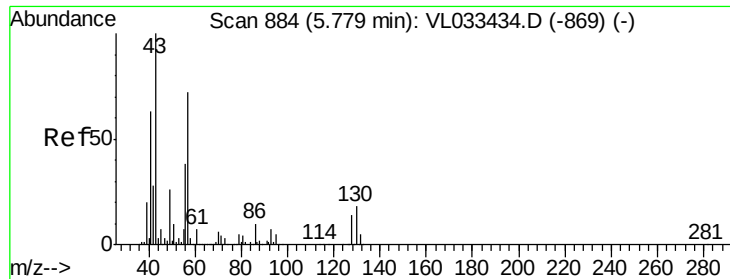
Tot Ion: 63 Resp: 6715
Ion Ratio Lower Upper
63 100
98 5.5 2.2 6.6
100 2.8 1.5 4.4



#25
Ethyl Acetate
Concen: 0.106 ppbv
RT: 5.77 min Scan# 882
Delta R.T. 0.01 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Tgt Ion: 43 Resp: 17511
Ion Ratio Lower Upper
43 100
45 13.7 7.8 11.6#
61 42.2 7.3 10.9#
70 6.1 5.6 8.4

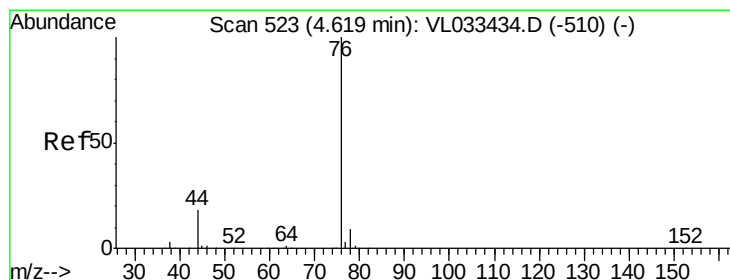
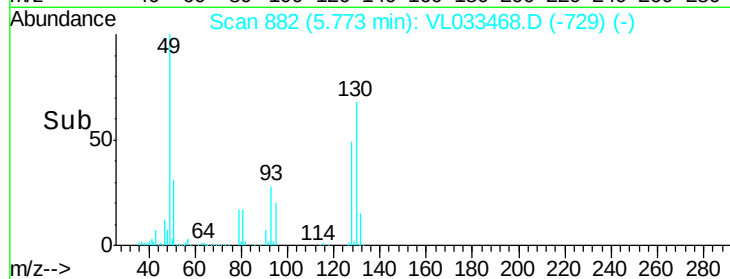
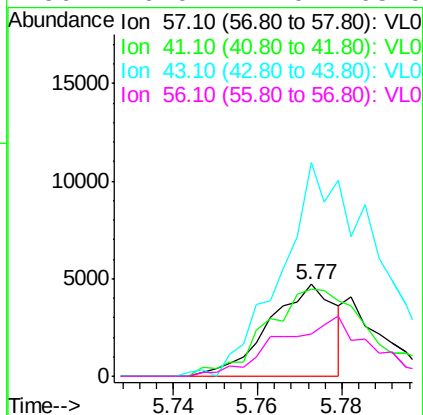
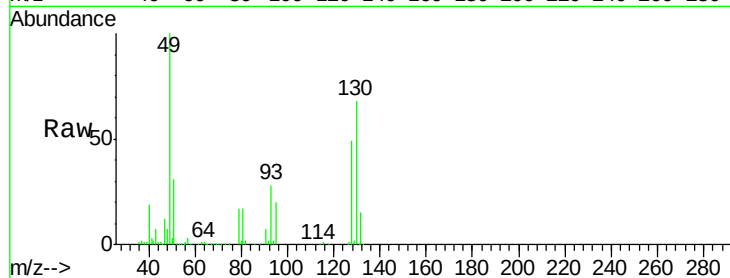




#26
Hexane
Concen: 0.070 ppbv
RT: 5.77 min Scan# 882
Delta R.T. -0.01 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

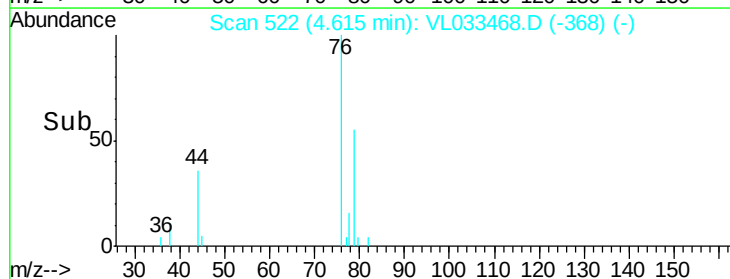
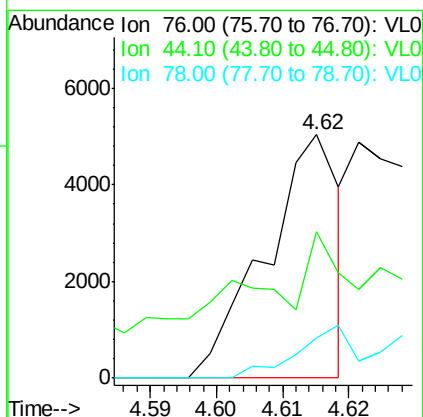
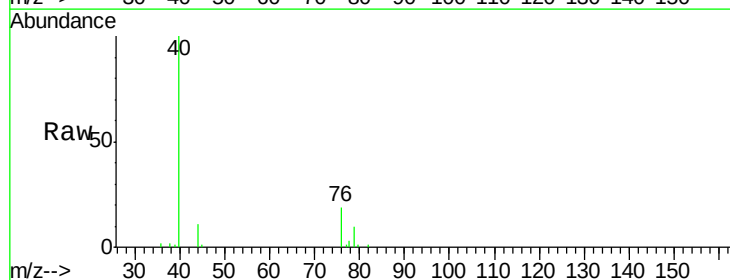
Instrument :
MSVOA_L
ClientSampleId :

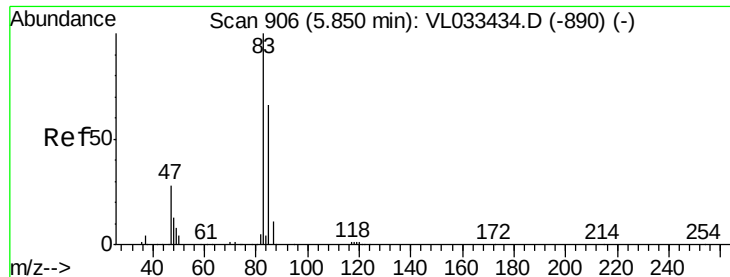
Tot Ion: 57 Resp: 5131
Ion Ratio Lower Upper
57 100
41 148.9 70.7 106.1#
43 360.2 182.6 274.0#
56 0.0 42.0 63.0#



#27
Carbon Disulfide
Concen: 0.045 ppbv
RT: 4.62 min Scan# 522
Delta R.T. -0.00 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Tgt Ion: 76 Resp: 3908
Ion Ratio Lower Upper
76 100
44 160.5 14.8 22.2#
78 0.0 7.6 11.4#

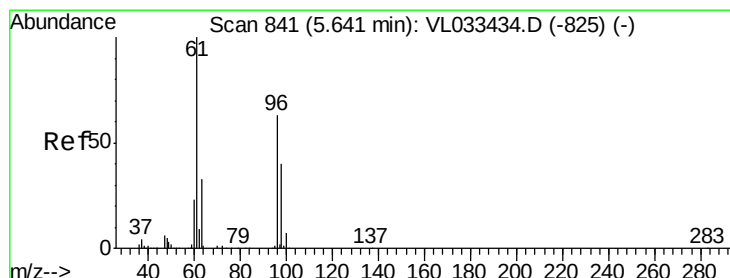
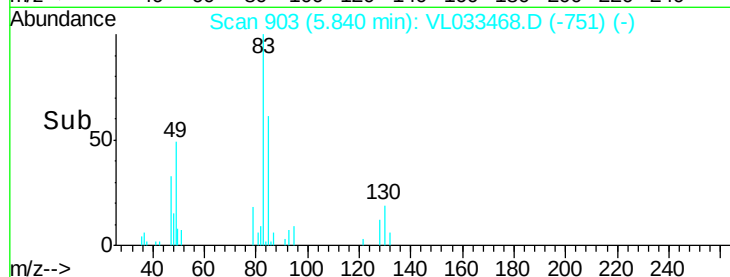
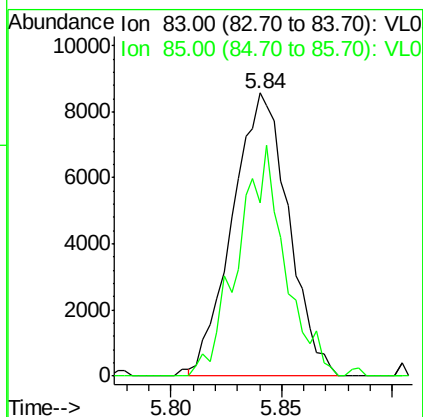
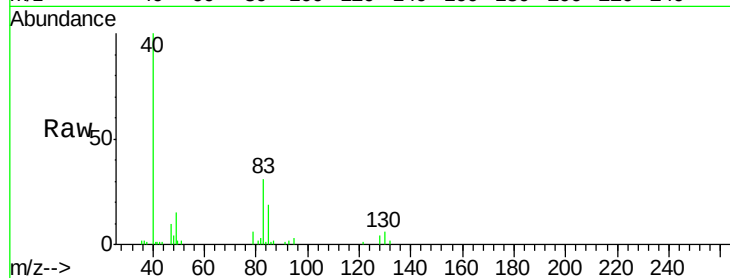




#29
Chloroform
Concen: 0.120 ppbv
RT: 5.84 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

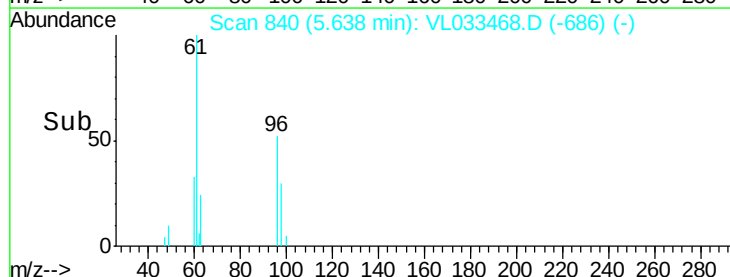
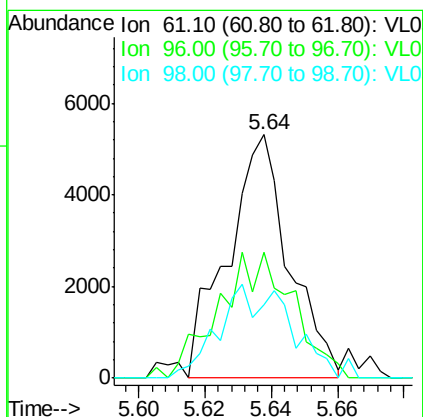
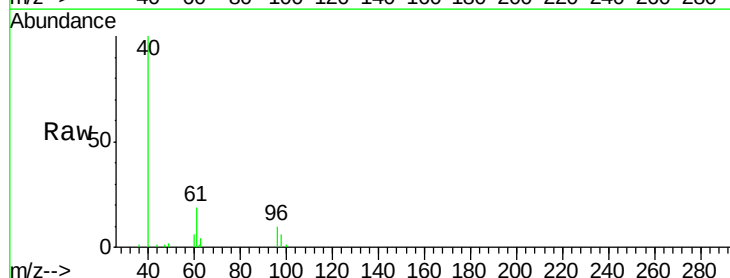
Instrument :
MSVOA_L
ClientSampleId :

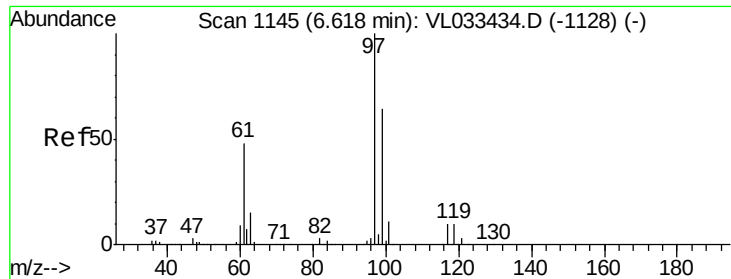
Tot Ion: 83 Resp: 15134
Ion Ratio Lower Upper
83 100
85 61.1 52.6 79.0



#31
cis-1,2-Dichloroethene
Concen: 0.094 ppbv
RT: 5.64 min Scan# 840
Delta R.T. -0.00 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Tgt Ion: 61 Resp: 6900
Ion Ratio Lower Upper
61 100
96 47.5 50.6 76.0#
98 31.2 32.2 48.2#





#32

1,1,1-Trichloroethane

Concen: 0.114 ppbv

RT: 6.62 min Scan# 1144

Delta R.T. -0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

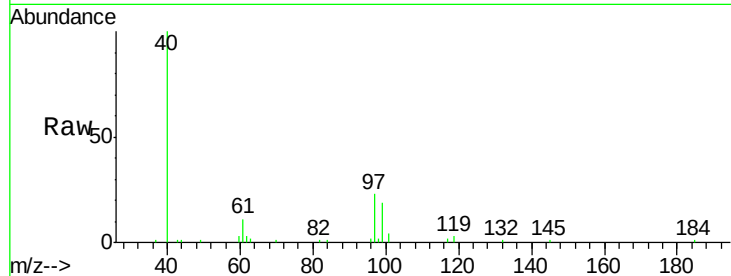
Tot Ion: 97 Resp: 13720

Ion Ratio Lower Upper

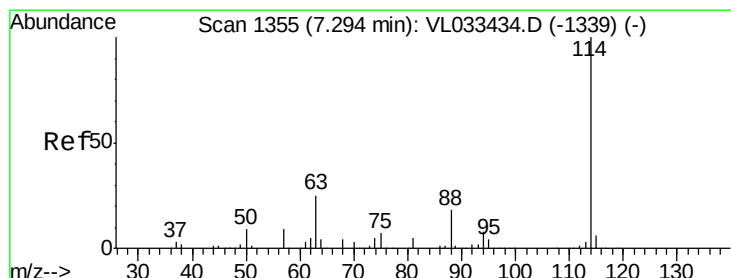
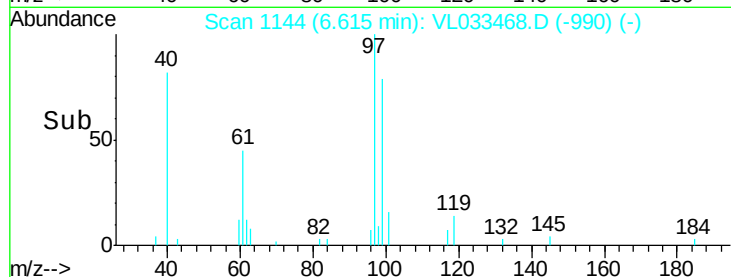
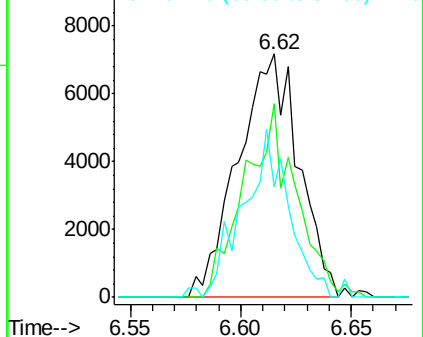
97 100

99 67.9 51.5 77.3

61 53.0 38.8 58.2



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 99.00 (98.70 to 99.70): VL0
Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.28 min Scan# 1352

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

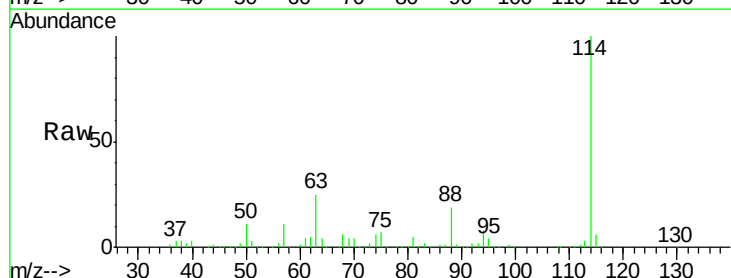
Tgt Ion: 114 Resp: 1749634

Ion Ratio Lower Upper

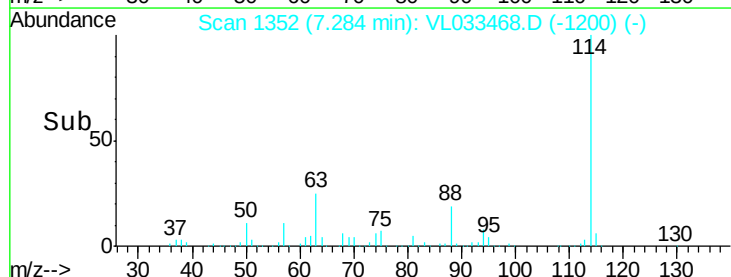
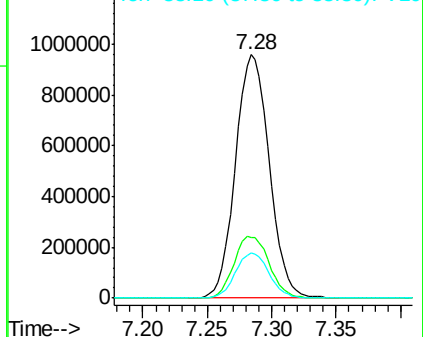
114 100

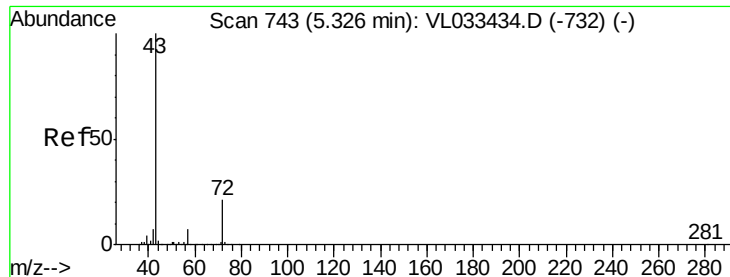
63 26.6 21.5 32.3

88 18.3 14.5 21.7



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





#34

2-Butanone

Concen: 0.074 ppbv

RT: 5.35 min Scan# 750

Delta R.T. 0.02 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

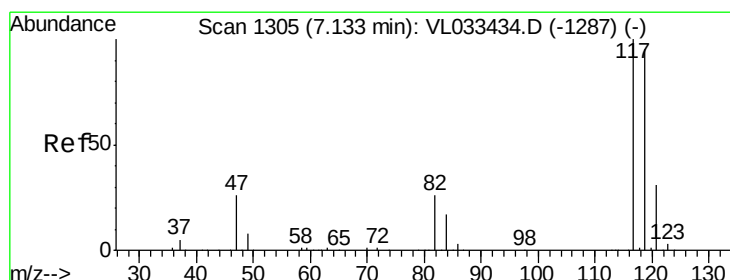
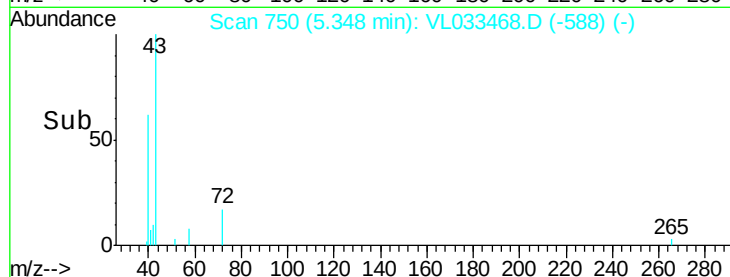
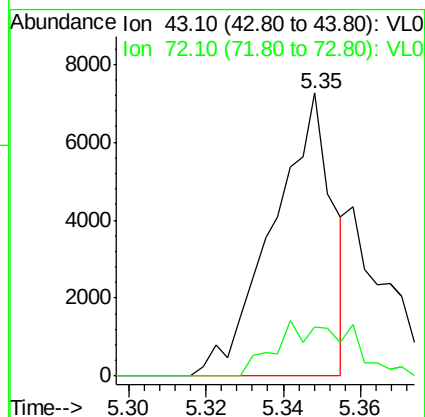
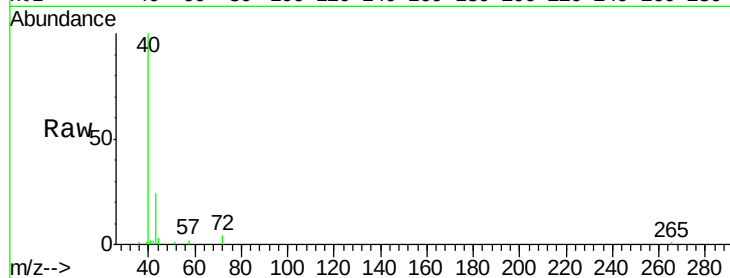
ClientSampleId :

Tot Ion: 43 Resp: 7764

Ion Ratio Lower Upper

43 100

72 24.9 17.4 26.2



#35

Carbon Tetrachloride

Concen: 0.041 ppbv

RT: 7.14 min Scan# 1306

Delta R.T. 0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

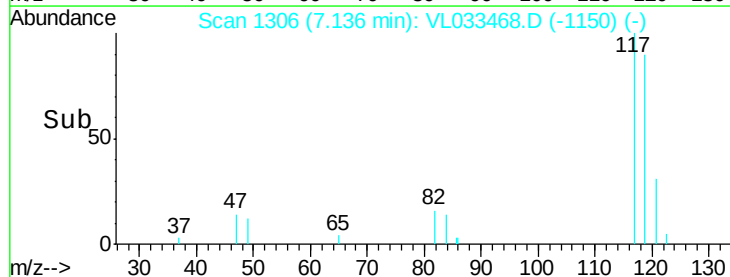
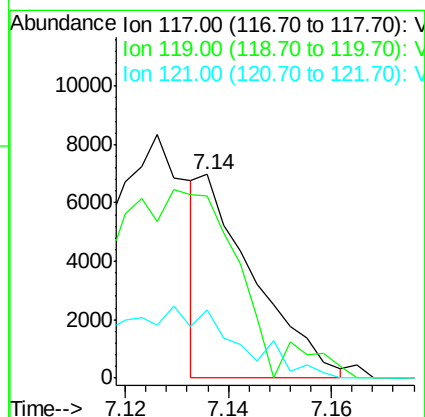
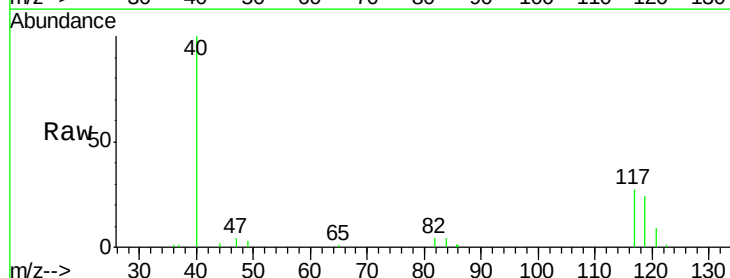
Tgt Ion: 117 Resp: 5073

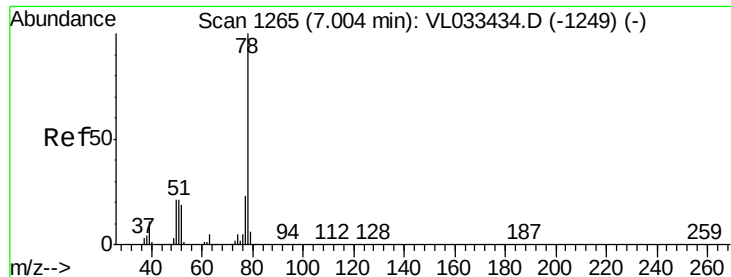
Ion Ratio Lower Upper

117 100

119 87.7 75.8 113.8

121 34.8 24.7 37.1





#36

Benzene

Concen: 0.088 ppbv

RT: 7.00 min Scan# 1263

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

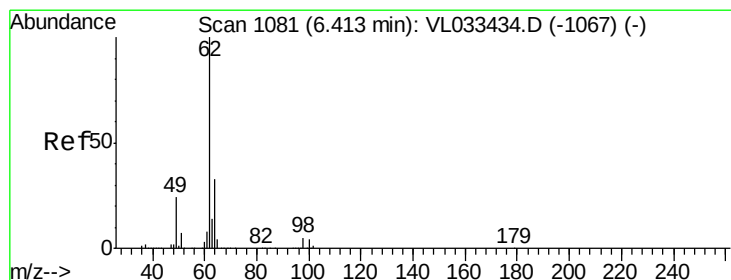
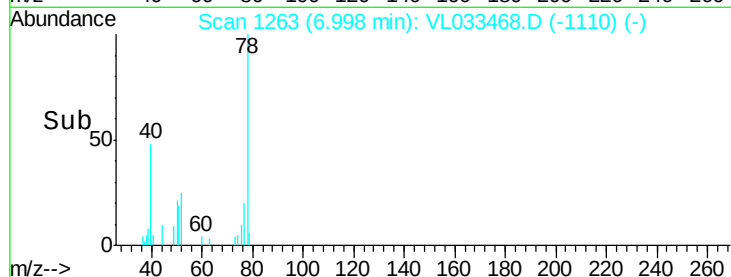
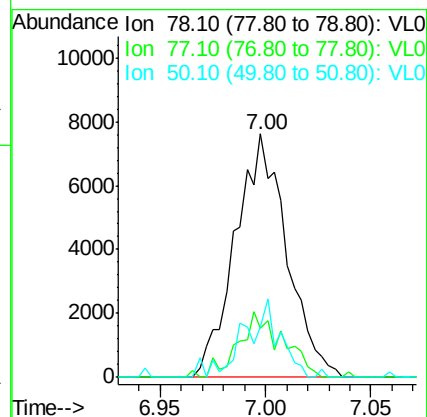
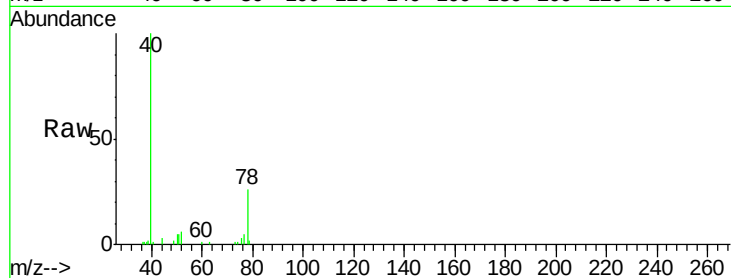
Tot Ion: 78 Resp: 12885

Ion Ratio Lower Upper

78 100

77 20.0 18.1 27.1

50 20.9 16.7 25.1



#37

1,2-Dichloroethane

Concen: 0.111 ppbv

RT: 6.41 min Scan# 1080

Delta R.T. -0.00 min

Lab File: VL033468.D

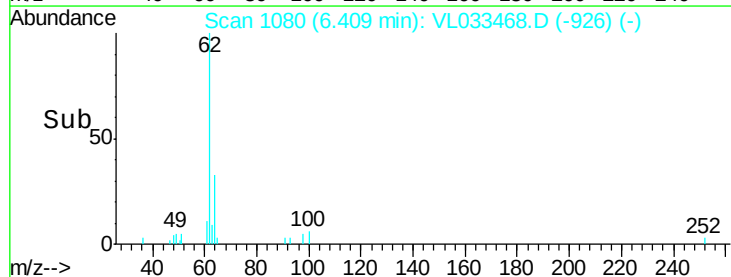
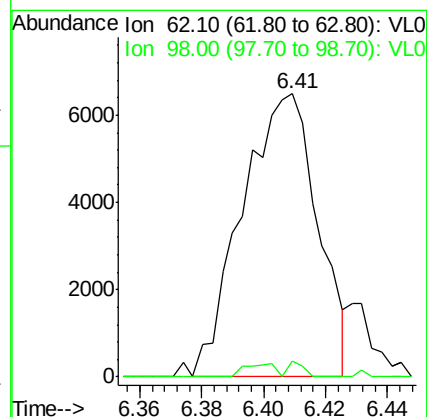
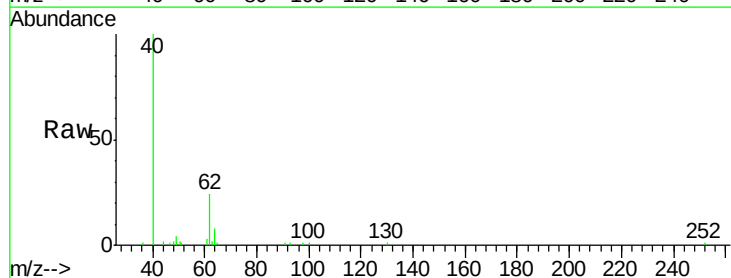
Acq: 27 Mar 2019 14:45

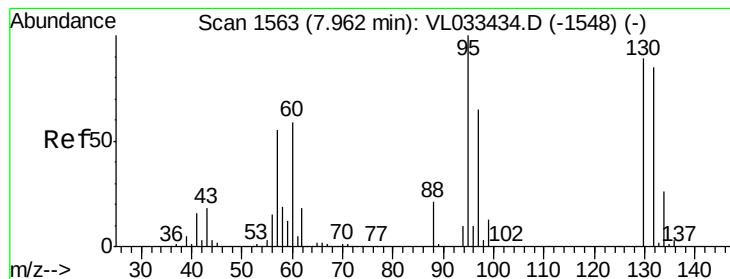
Tgt Ion: 62 Resp: 10959

Ion Ratio Lower Upper

62 100

98 3.0 4.4 6.6#





#38

Trichloroethene

Concen: 0.065 ppbv

RT: 7.96 min Scan# 1562

Delta R.T. -0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:130 Resp: 3591

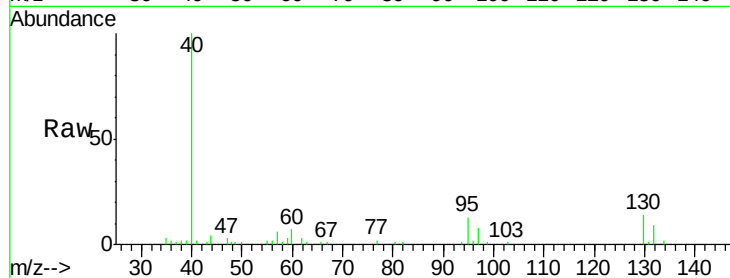
Ion Ratio Lower Upper

130 100

95 38.3 89.8 134.8#

132 14.5 76.6 115.0#

97 0.5 58.6 88.0#

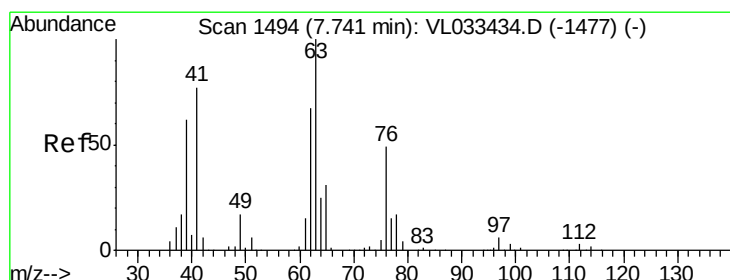
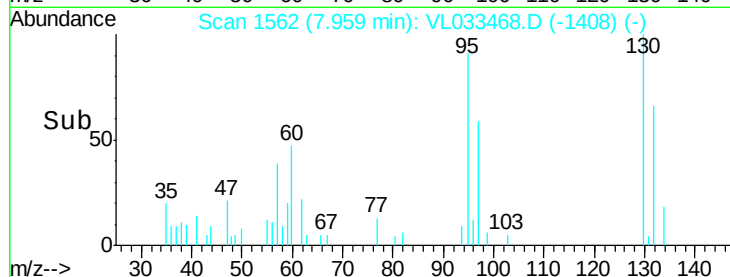
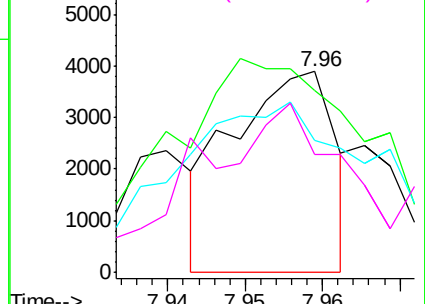


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 8.000 ppbv

RT: 7.28 min Scan# 1351

Delta R.T. -0.46 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

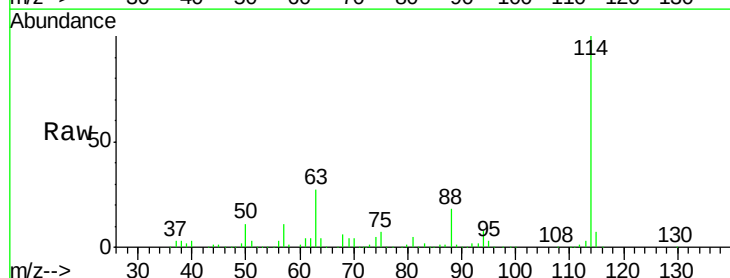
Tgt Ion: 63 Resp: 460050

Ion Ratio Lower Upper

63 100

41 0.0 61.2 91.8#

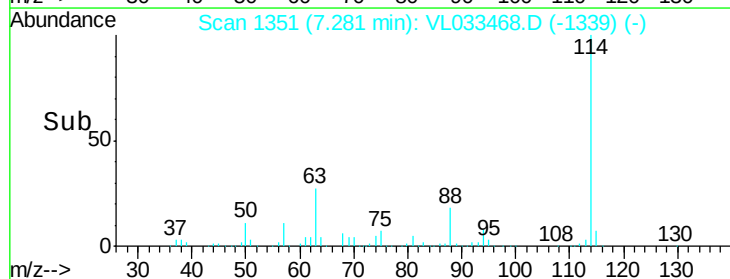
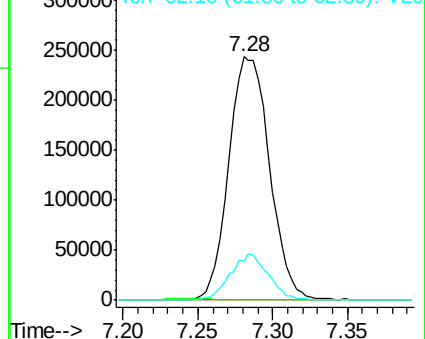
62 16.2 54.0 81.0#

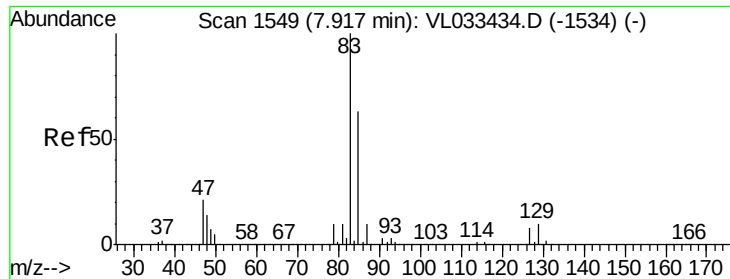


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#42

Bromodichloromethane

Concen: 0.103 ppbv

RT: 7.91 min Scan# 1546

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

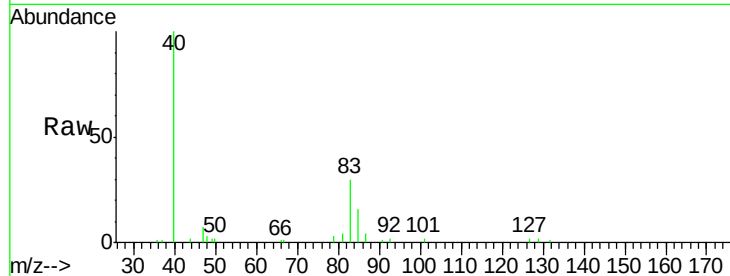
Tot Ion: 83 Resp: 13870

Ion Ratio Lower Upper

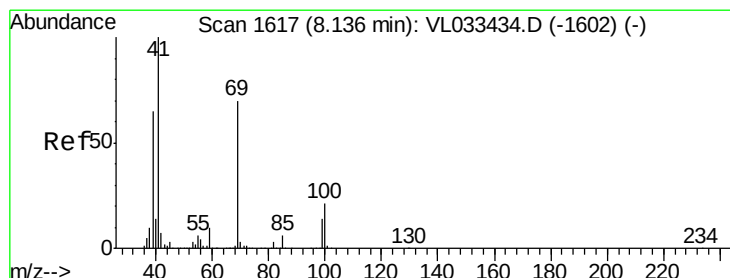
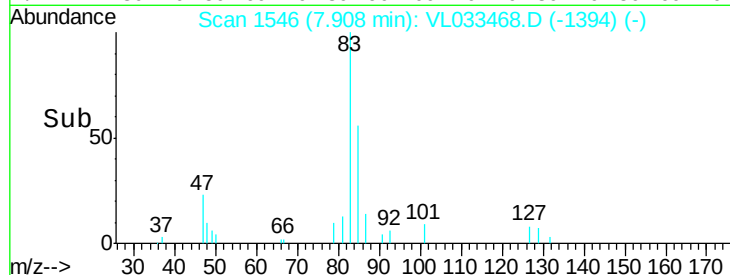
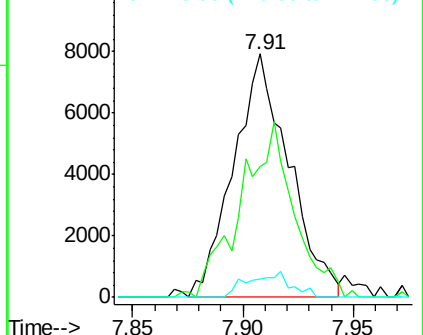
83 100

85 51.5 50.7 76.1

127 7.3 6.6 9.8



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0
Ion 126.90 (126.60 to 127.60): VL0



#43

Methyl Methacrylate

Concen: 0.040 ppbv

RT: 8.14 min Scan# 1617

Delta R.T. -0.00 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

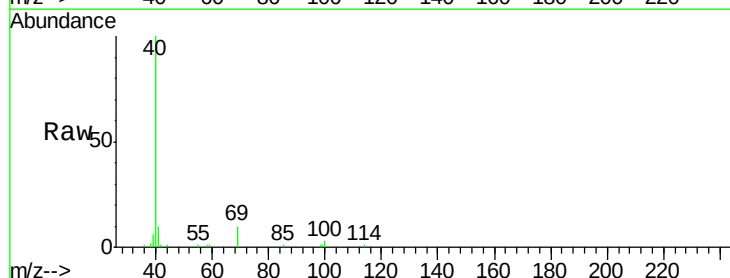
Tgt Ion: 69 Resp: 2402

Ion Ratio Lower Upper

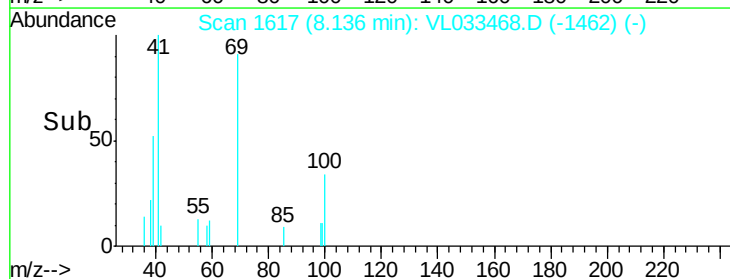
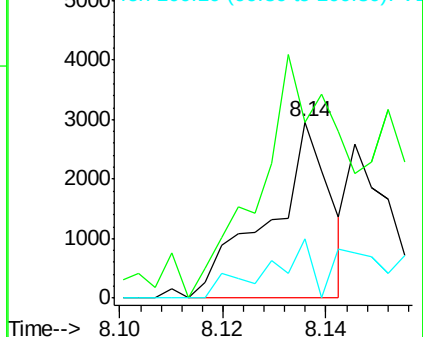
69 100

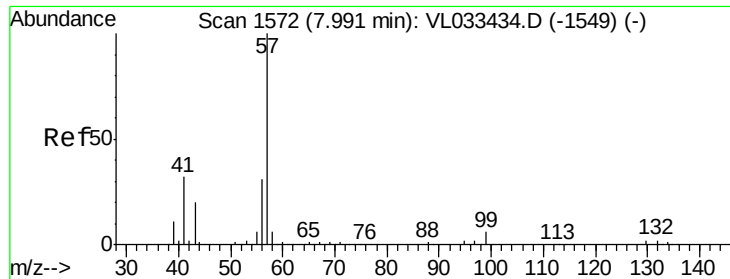
41 312.3 116.6 174.8#

100 57.2 24.4 36.6#



Abundance Ion 69.10 (68.80 to 69.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 100.10 (99.80 to 100.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.050 ppbv

RT: 7.98 min Scan# 1570

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampled :

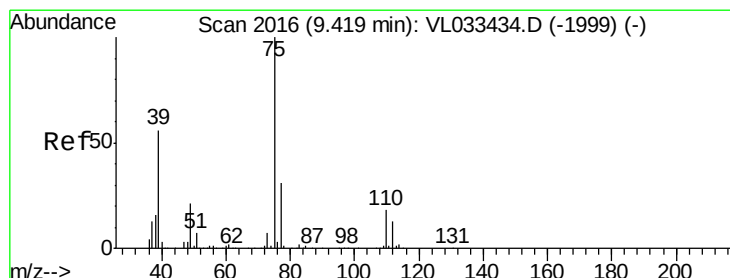
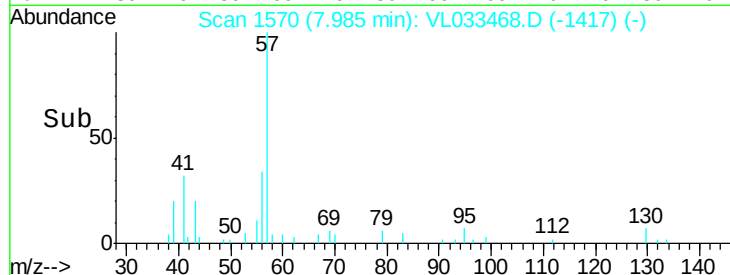
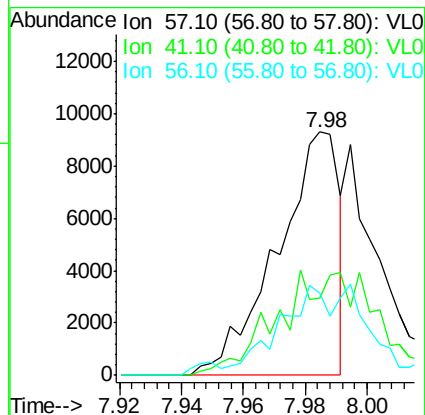
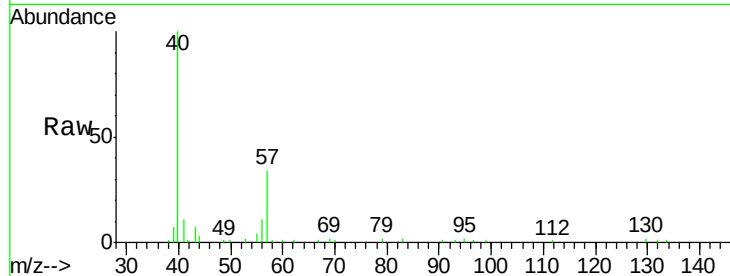
Tot Ion: 57 Resp: 12871

Ion Ratio Lower Upper

57 100

41 67.2 26.0 39.0#

56 0.0 24.6 37.0#



#45

t-1,3-Dichloropropene

Concen: 0.035 ppbv

RT: 9.41 min Scan# 2012

Delta R.T. -0.01 min

Lab File: VL033468.D

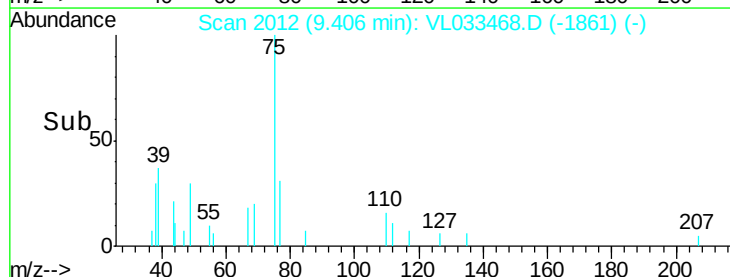
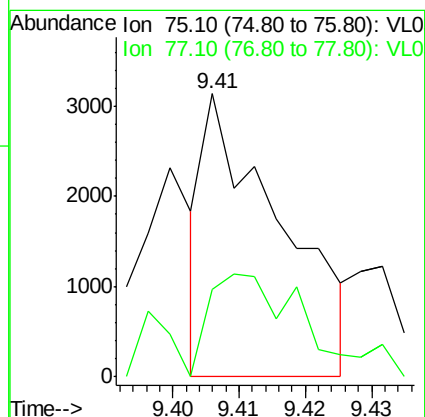
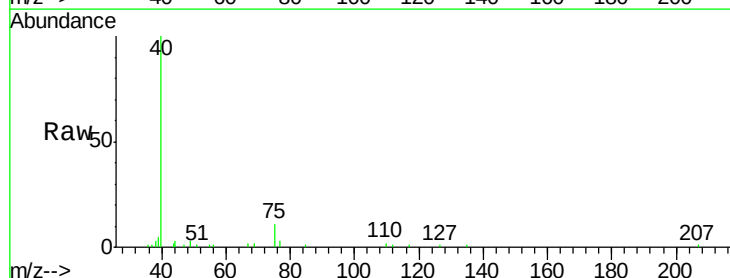
Acq: 27 Mar 2019 14:45

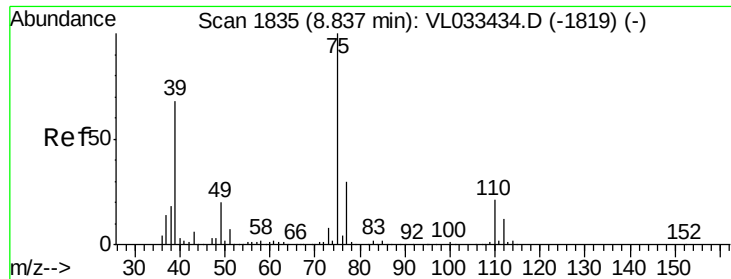
Tgt Ion: 75 Resp: 2546

Ion Ratio Lower Upper

75 100

77 30.9 24.5 36.7

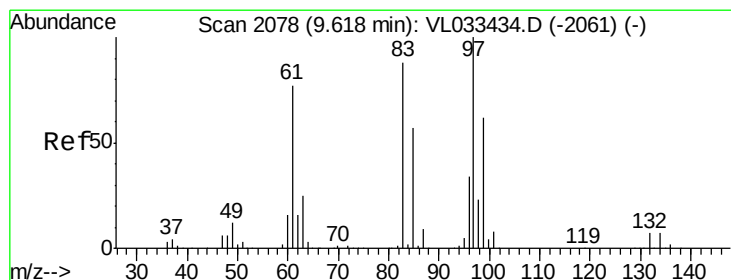
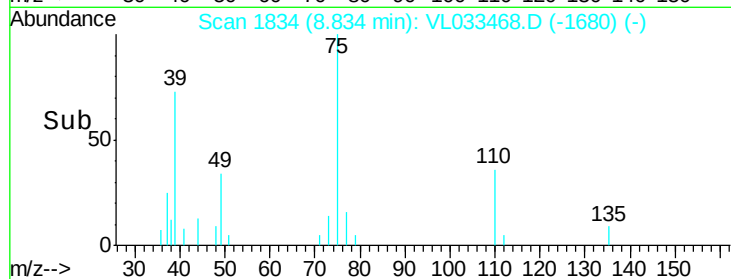
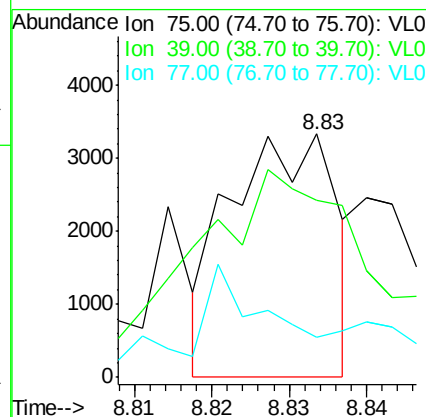
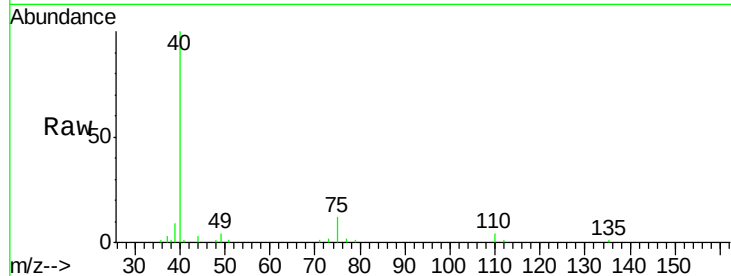




#46
 cis-1,3-Dichloropropene
 Concen: 0.037 ppbv
 RT: 8.83 min Scan# 1834
 Delta R.T. -0.00 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

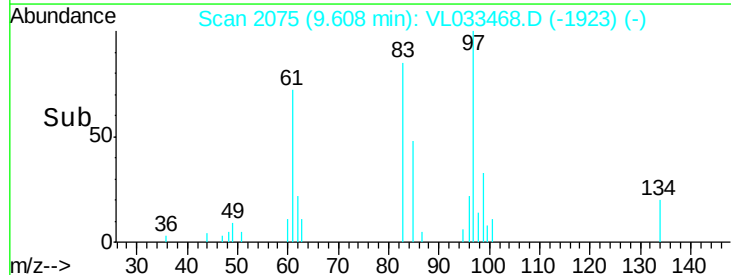
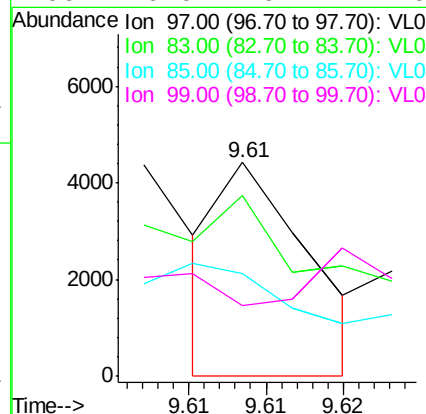
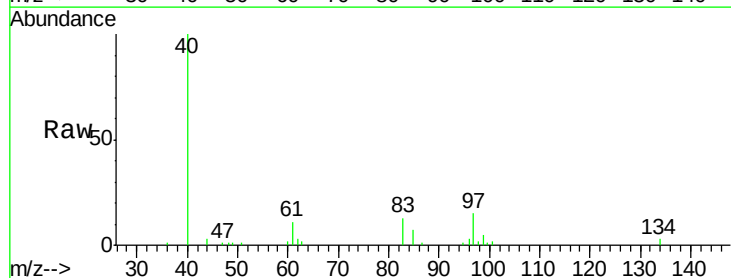
Instrument :
 MSVOA_L
 ClientSampleId :

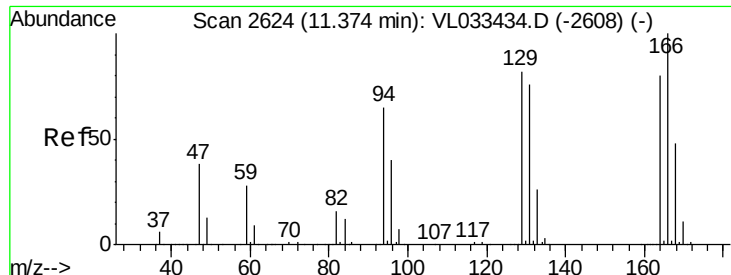
Tot Ion: 75 Resp: 3152
 Ion Ratio Lower Upper
 75 100
 39 32.9 54.1 81.1#
 77 12.5 23.9 35.9#



#47
 1,1,2-Trichloroethane
 Concen: 0.027 ppbv
 RT: 9.61 min Scan# 2075
 Delta R.T. -0.01 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

Tgt Ion: 97 Resp: 1749
 Ion Ratio Lower Upper
 97 100
 83 53.0 70.5 105.7#
 85 37.4 45.6 68.4#
 99 0.0 49.4 74.0#





#52

Tetrachloroethene

Concen: 0.027 ppbv

RT: 11.35 min Scan# 2618

Delta R.T. -0.02 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:164 Resp: 1517

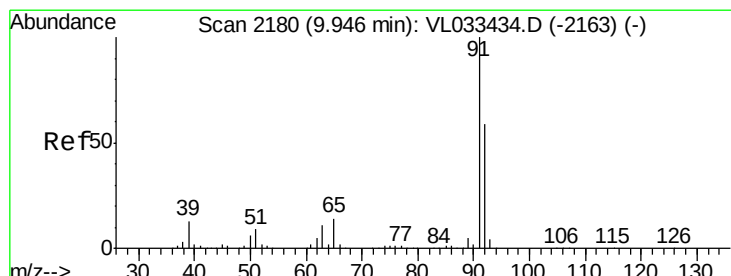
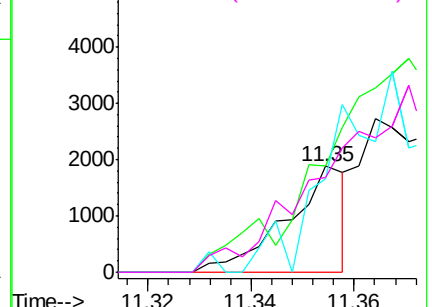
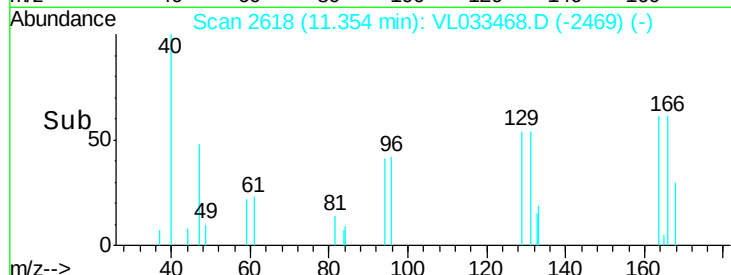
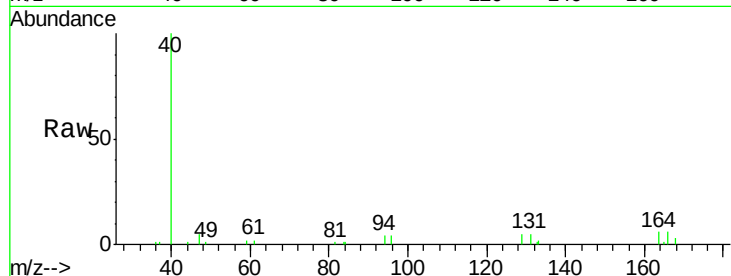
Ion Ratio Lower Upper

164 100

166 100.3 99.5 149.3

129 88.2 81.4 122.2

131 89.4 75.6 113.4



#53

Toluene

Concen: 0.038 ppbv

RT: 9.93 min Scan# 2176

Delta R.T. -0.01 min

Lab File: VL033468.D

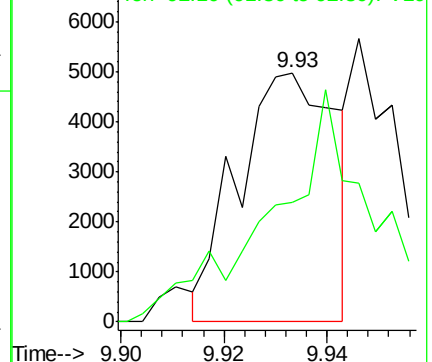
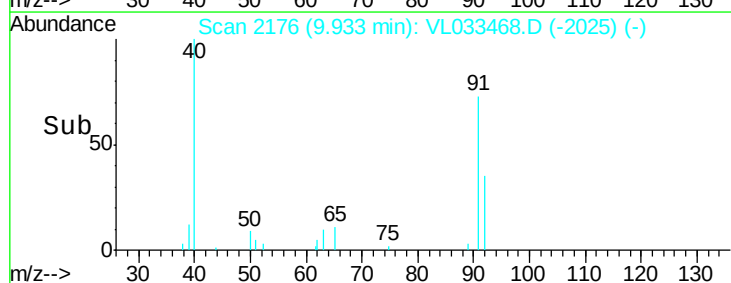
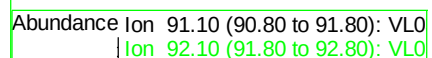
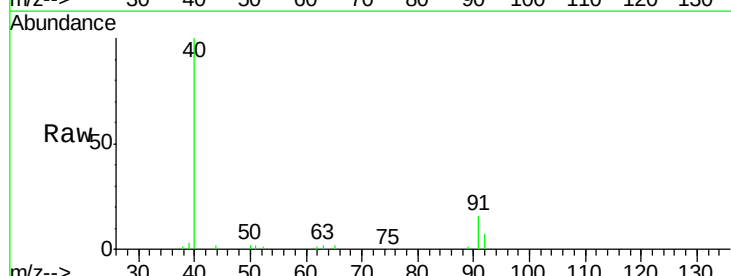
Acq: 27 Mar 2019 14:45

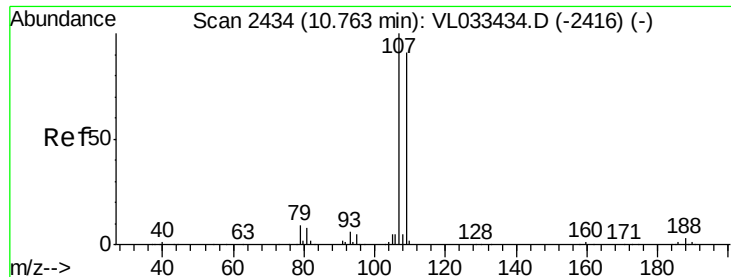
Tgt Ion: 91 Resp: 6536

Ion Ratio Lower Upper

91 100

92 0.0 47.4 71.0#

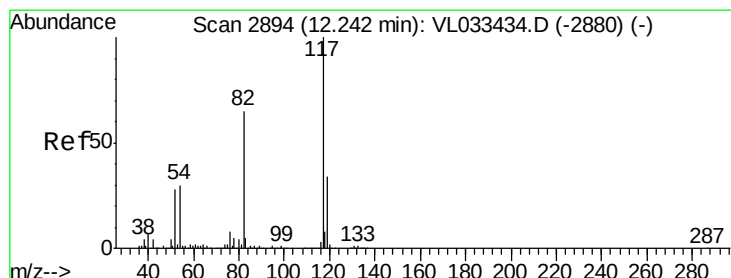
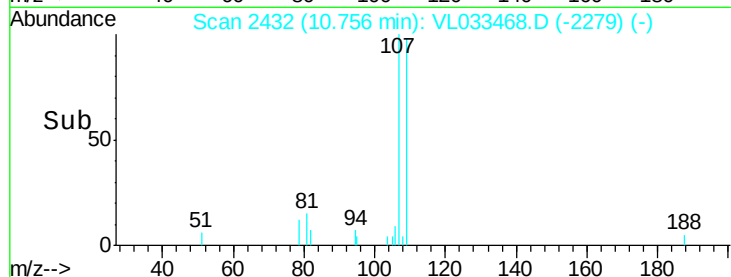
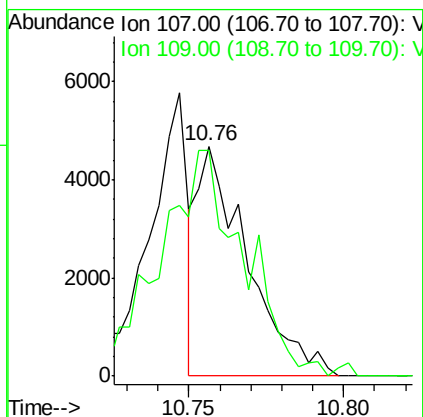
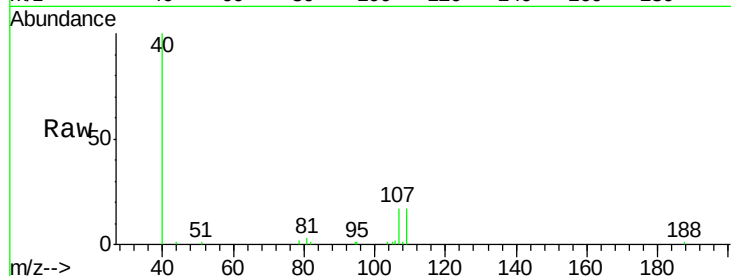




#54
1,2-Dibromoethane
Concen: 0.052 ppbv
RT: 10.76 min Scan# 2432
Delta R.T. -0.01 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

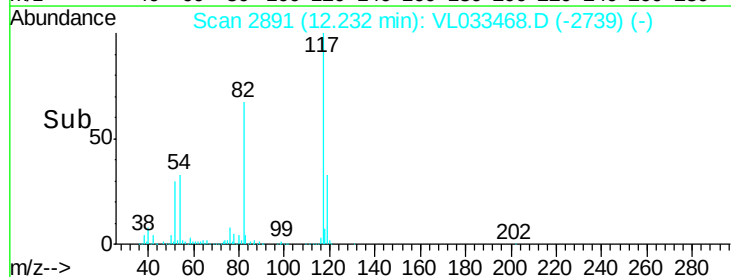
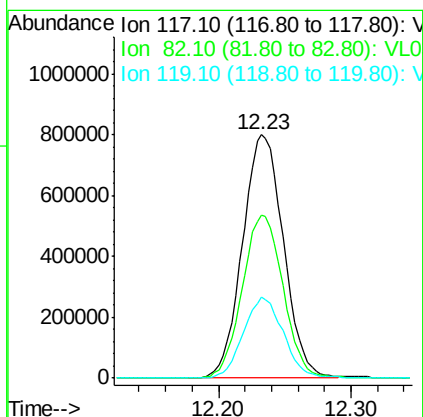
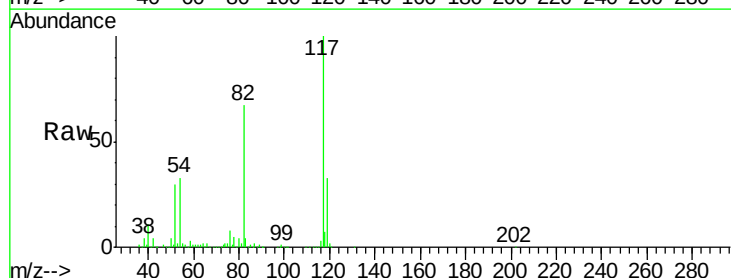
Instrument :
MSVOA_L
ClientSampleId :

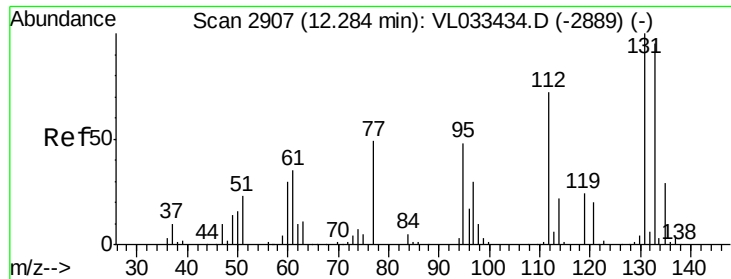
Tot Ion:107 Resp: 5282
Ion Ratio Lower Upper
107 100
109 94.3 72.7 109.1



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.23 min Scan# 2891
Delta R.T. -0.01 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Tgt Ion:117 Resp: 1722021
Ion Ratio Lower Upper
117 100
82 67.1 51.5 77.3
119 32.5 25.5 38.3





#56

1,1,1,2-Tetrachloroethane

Concen: 0.053 ppbv

RT: 12.27 min Scan# 2904

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

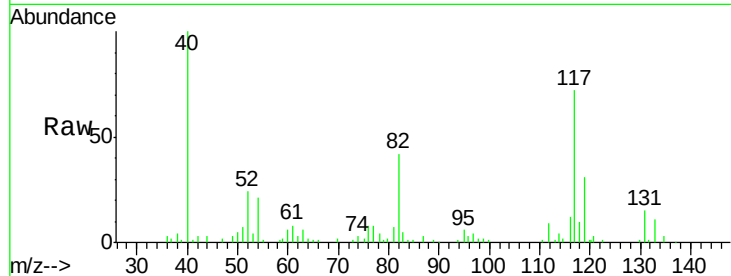
Tot Ion:131 Resp: 4158

Ion Ratio Lower Upper

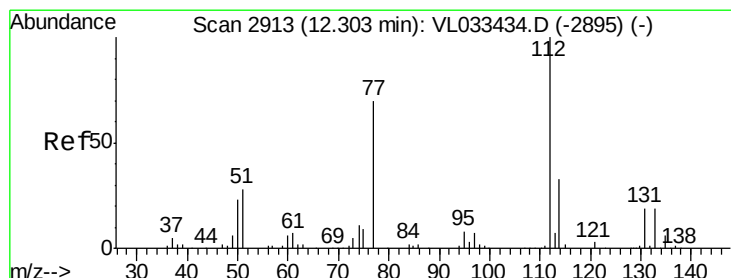
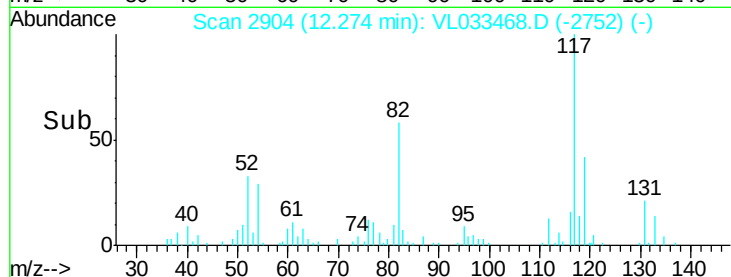
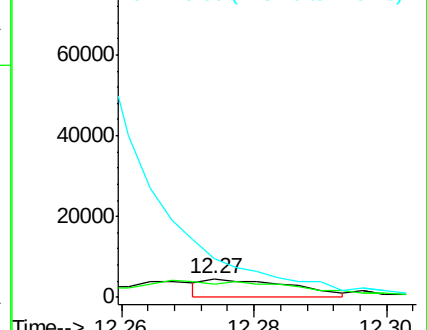
131 100

133 0.0 76.2 114.4#

119 0.0 45.0 67.6#



Abundance Ion 131.00 (130.70 to 131.70): V
Ion 133.00 (132.70 to 133.70): V
Ion 119.00 (118.70 to 119.70): V



#57

Chlorobenzene

Concen: 0.083 ppbv

RT: 12.30 min Scan# 2911

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

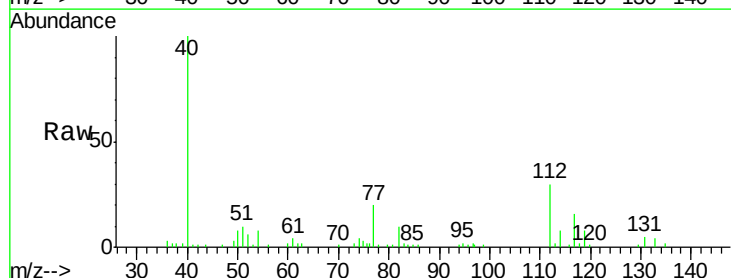
Tgt Ion:112 Resp: 11162

Ion Ratio Lower Upper

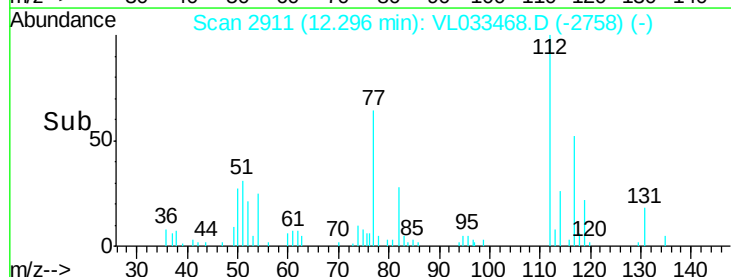
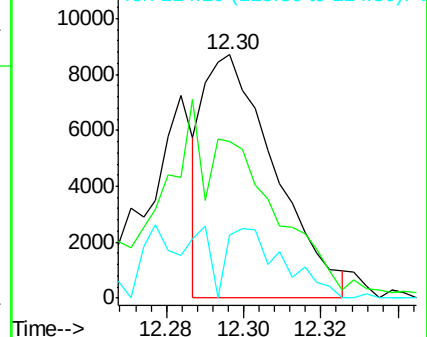
112 100

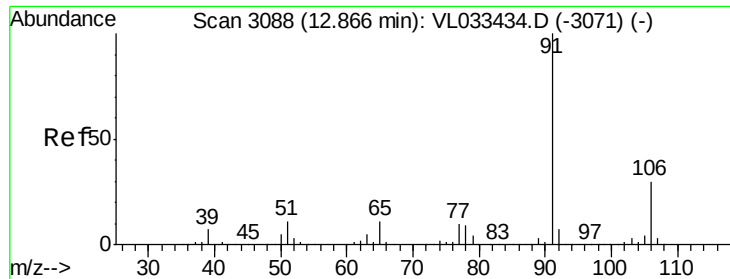
77 74.0 57.3 85.9

114 29.5 29.8 36.4#



Abundance Ion 112.10 (111.80 to 112.80): V
Ion 77.10 (76.80 to 77.80): V
Ion 114.10 (113.80 to 114.80): V





#58

Ethyl Benzene

Concen: 0.032 ppbv

RT: 12.86 min Scan# 3086

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

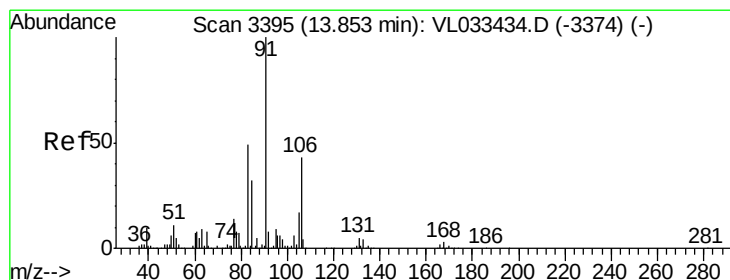
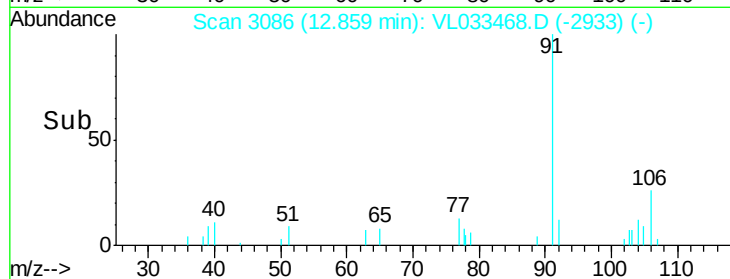
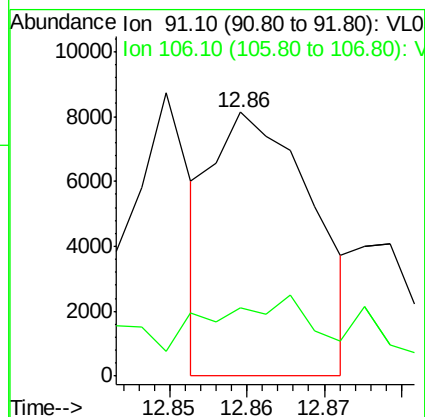
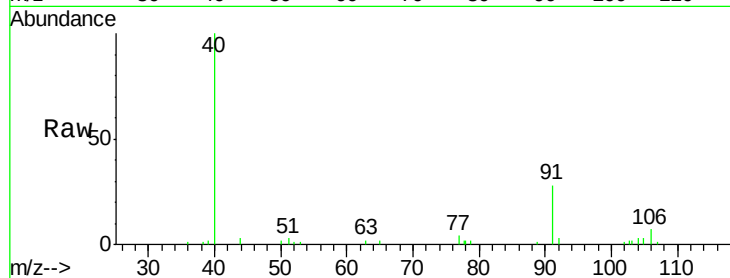
ClientSampled :

Tot Ion: 91 Resp: 7333

Ion Ratio Lower Upper

91 100

106 23.6 23.8 35.6#



#60

o-Xylene

Concen: 0.034 ppbv

RT: 13.85 min Scan# 3393

Delta R.T. -0.01 min

Lab File: VL033468.D

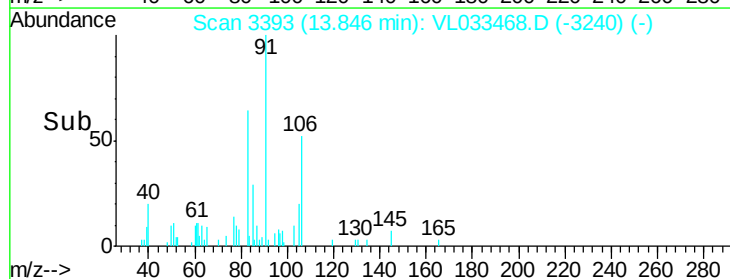
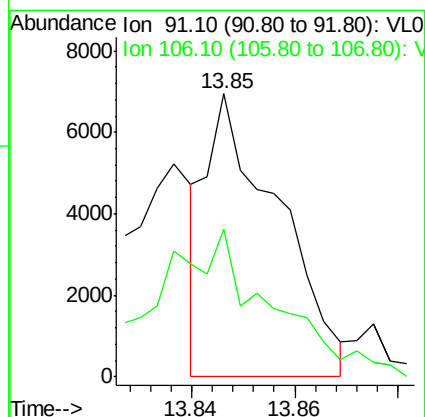
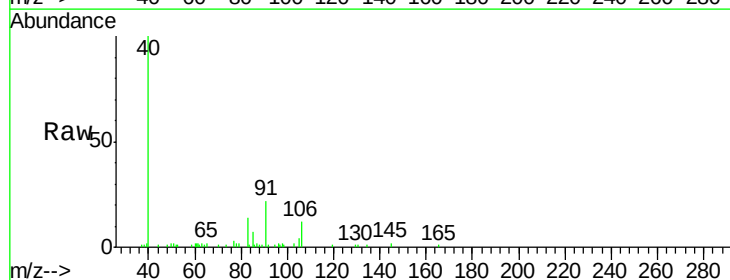
Acq: 27 Mar 2019 14:45

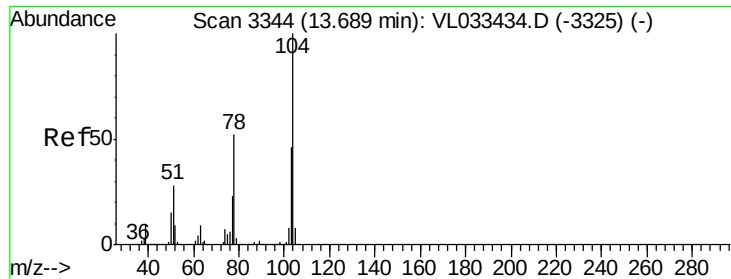
Tgt Ion: 91 Resp: 6722

Ion Ratio Lower Upper

91 100

106 91.0 21.4 64.3#





#61

Stvrene

Concen: 0.035 ppbv

RT: 13.68 min Scan# 3341

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

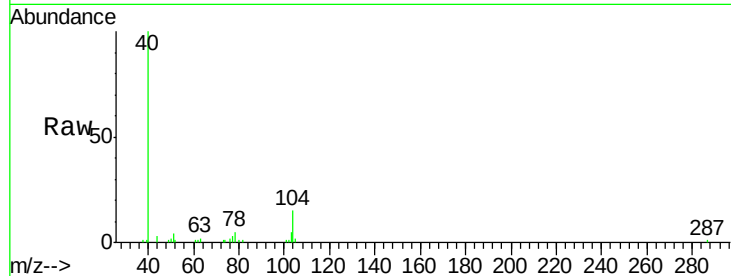
Tot Ion:104 Resp: 4799

Ion Ratio Lower Upper

104 100

78 0.0 43.2 64.8#

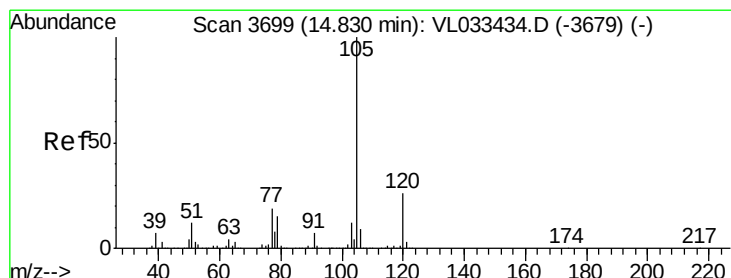
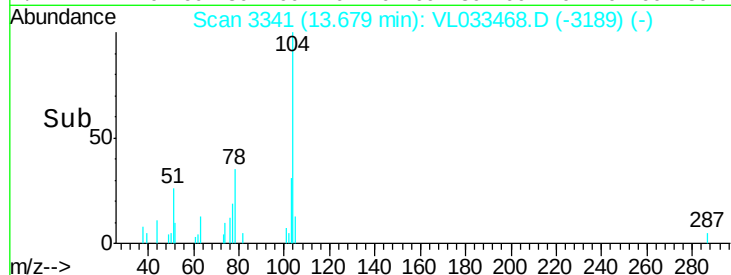
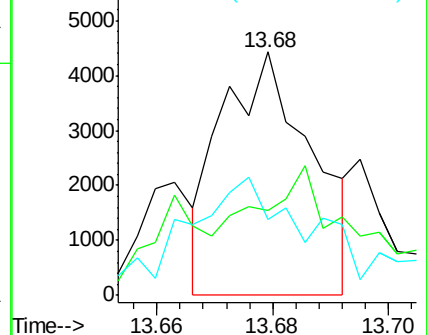
103 81.5 37.8 56.8#



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 0.030 ppbv

RT: 14.81 min Scan# 3694

Delta R.T. -0.02 min

Lab File: VL033468.D

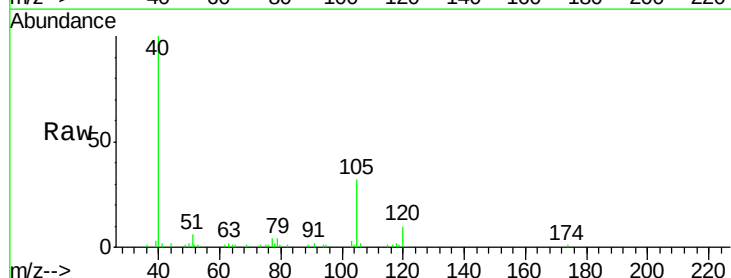
Acq: 27 Mar 2019 14:45

Tgt Ion:105 Resp: 8309

Ion Ratio Lower Upper

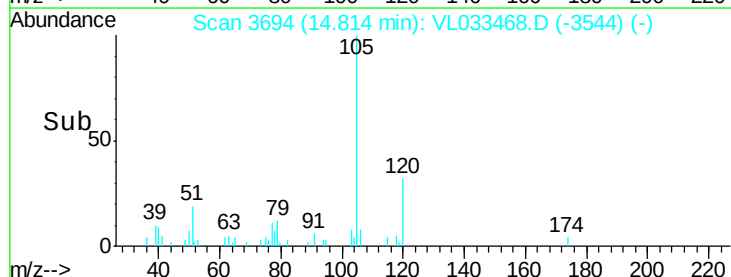
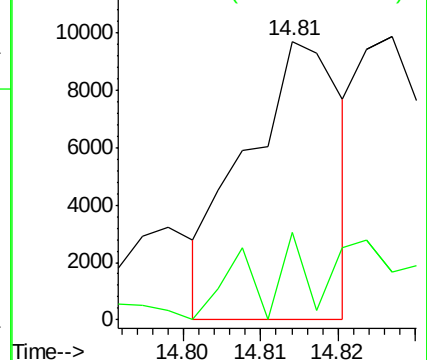
105 100

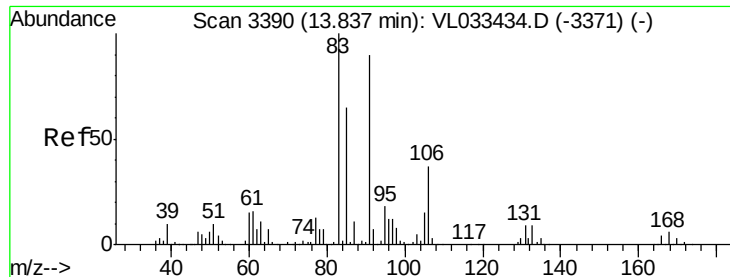
120 60.3 20.2 30.2#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

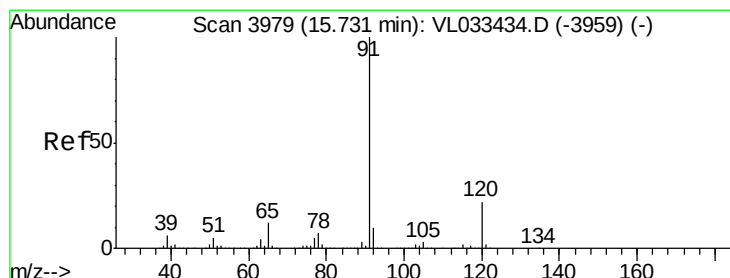
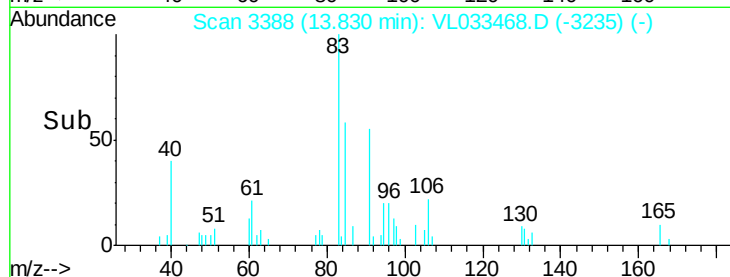
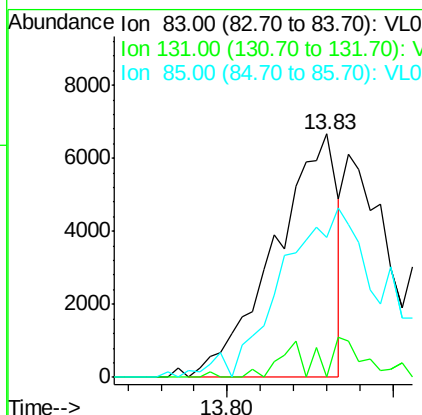
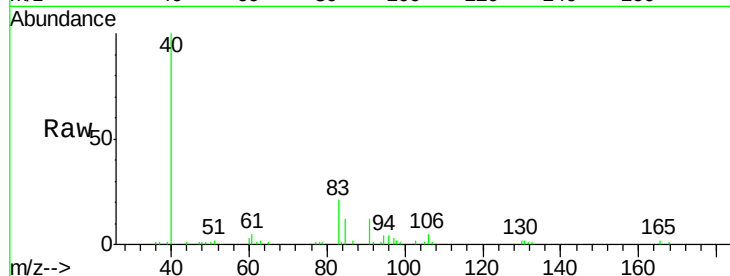




#63
 1,1,2,2-Tetrachloroethane
 Concen: 0.060 ppbv
 RT: 13.83 min Scan# 3388
 Delta R.T. -0.01 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

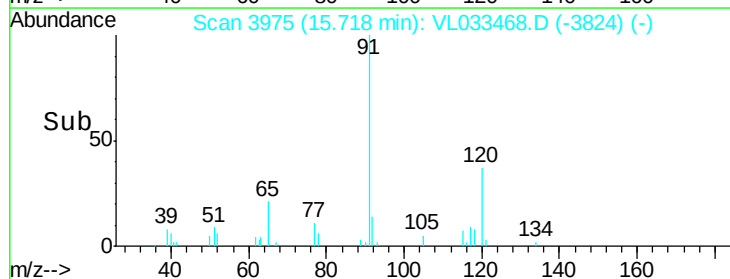
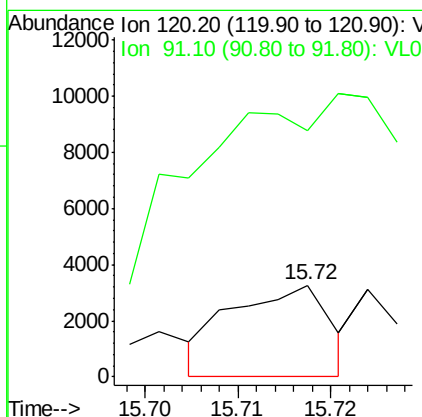
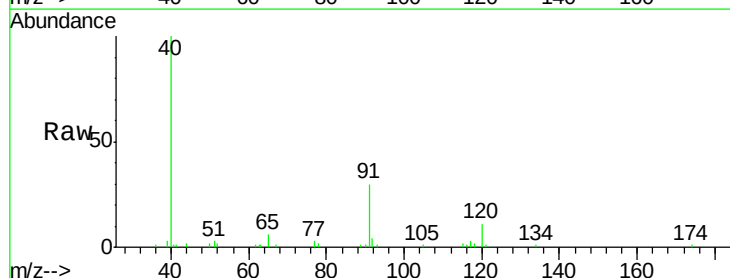
Instrument :
 MSVOA_L
 ClientSampled :

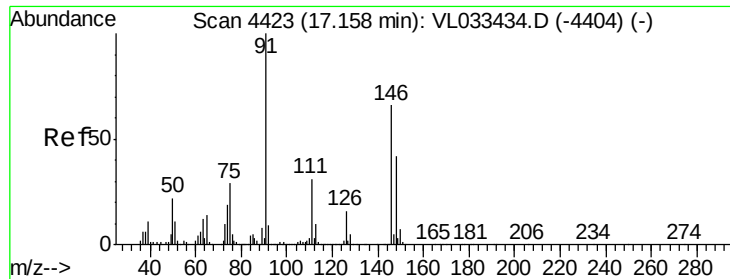
Tot Ion: 83 Resp: 8725
 Ion Ratio Lower Upper
 83 100
 131 0.0 4.7 14.0#
 85 0.0 32.7 98.1#



#64
 n-propylbenzene
 Concen: 0.034 ppbv
 RT: 15.72 min Scan# 3975
 Delta R.T. -0.01 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

Tgt Ion:120 Resp: 2415
 Ion Ratio Lower Upper
 120 100
 91 0.0 387.4 581.2#

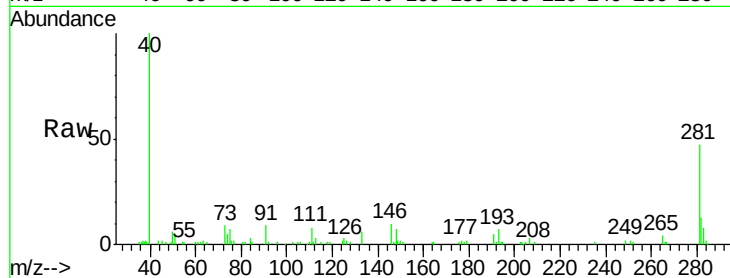




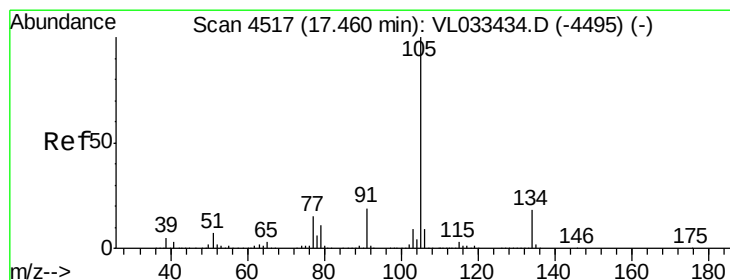
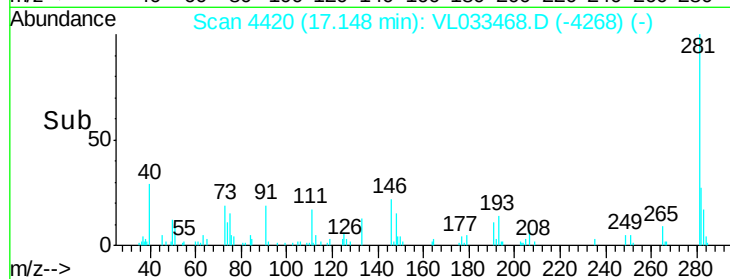
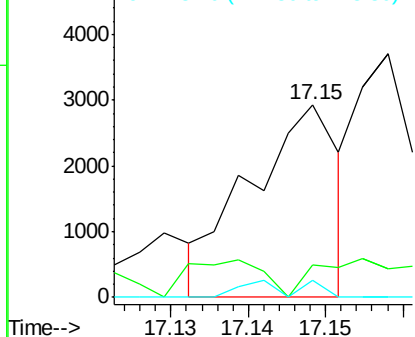
#66
Benzyl Chloride
Concen: 0.020 ppbv
RT: 17.15 min Scan# 4420
Delta R.T. -0.01 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 91 Resp: 2341
Ion Ratio Lower Upper
91 100
126 0.0 13.0 19.6#
128 0.0 4.2 6.2#

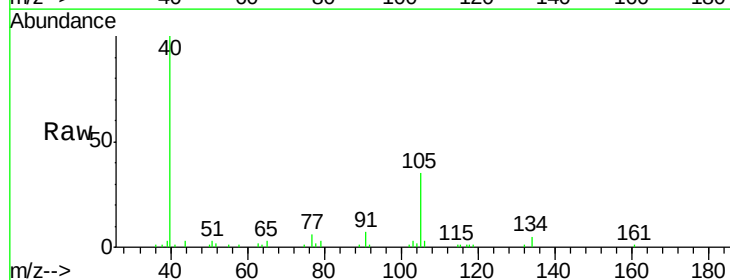


Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 126.10 (125.80 to 126.80): V
Ion 128.10 (127.80 to 128.80): V

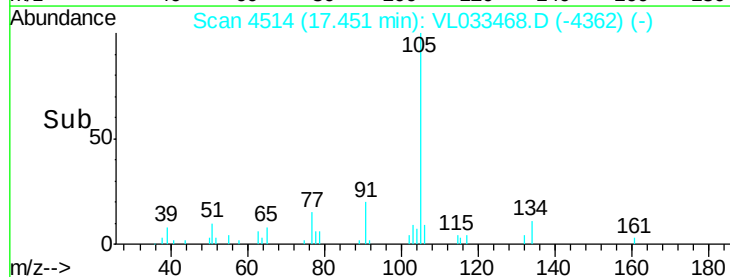
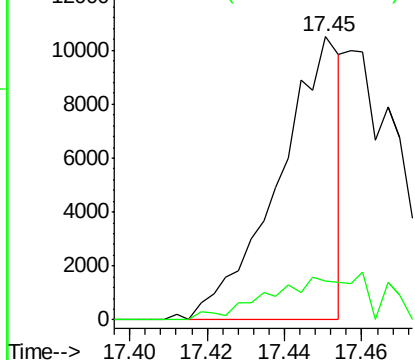


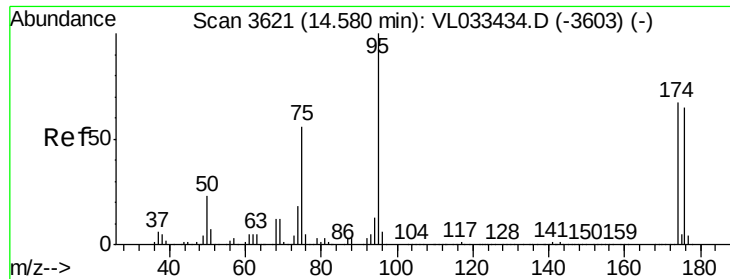
#67
sec-Butylbenzene
Concen: 0.033 ppbv
RT: 17.45 min Scan# 4514
Delta R.T. -0.01 min
Lab File: VL033468.D
Acq: 27 Mar 2019 14:45

Tgt Ion: 105 Resp: 11639
Ion Ratio Lower Upper
105 100
134 0.0 14.6 21.8#



Abundance Ion 105.10 (104.80 to 105.80): V
Ion 134.20 (133.90 to 134.90): V

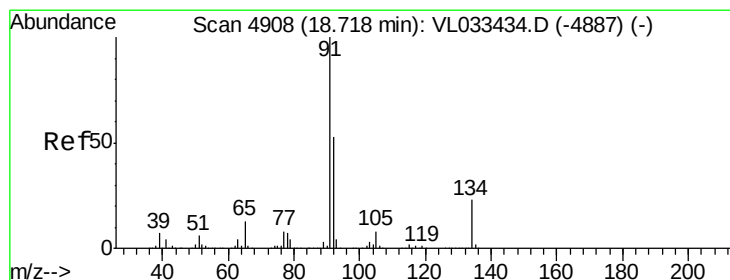
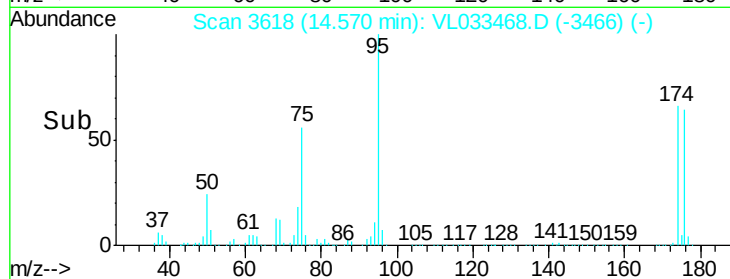
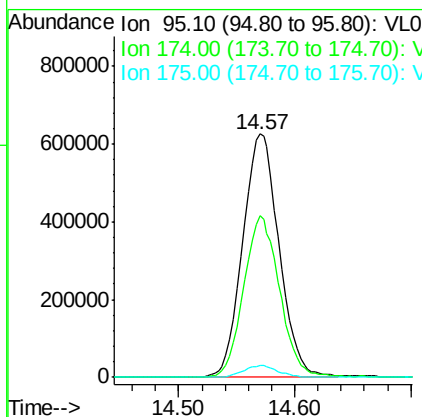
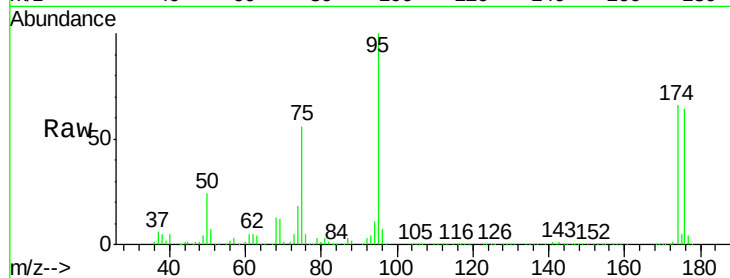




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.120 ppbv
 RT: 14.57 min Scan# 3618
 Delta R.T. -0.01 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

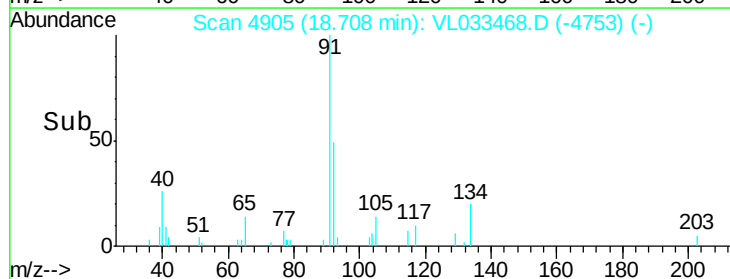
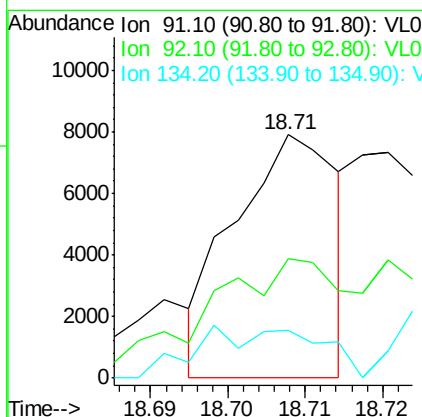
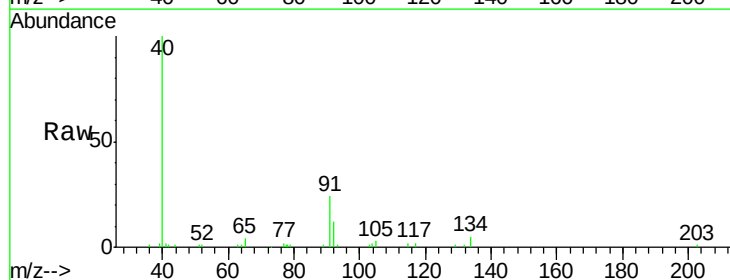
Instrument :
 MSVOA_L
 ClientSampleId :

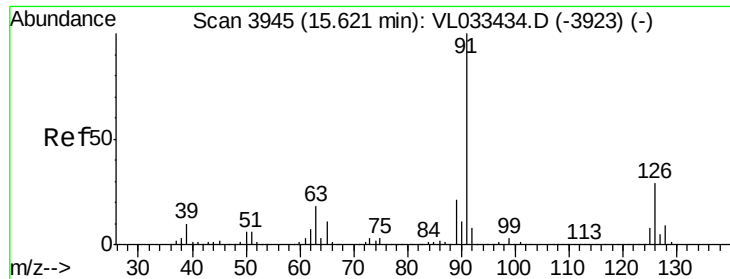
Tot Ion: 95 Resp: 1366157
 Ion Ratio Lower Upper
 95 100
 174 66.2 52.9 79.3
 175 4.7 3.8 5.6



#70
 n-Butylbenzene
 Concen: 0.024 ppbv
 RT: 18.71 min Scan# 4905
 Delta R.T. -0.01 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

Tgt Ion: 91 Resp: 7346
 Ion Ratio Lower Upper
 91 100
 92 134.5 42.6 64.0#
 134 0.0 17.5 26.3#





#71

2-Chlorotoluene

Concen: 0.041 ppbv

RT: 15.61 min Scan# 3942

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

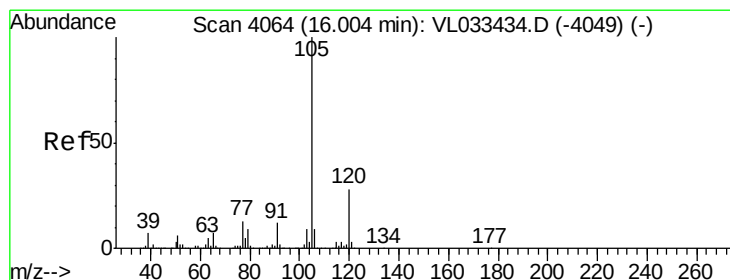
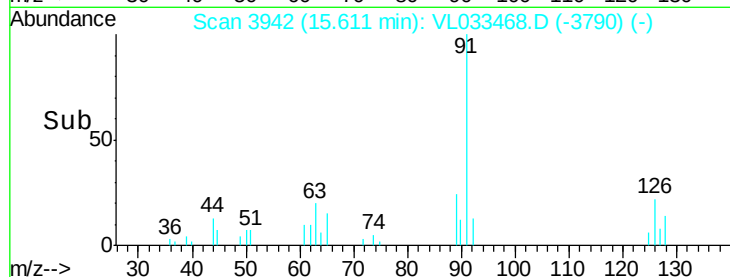
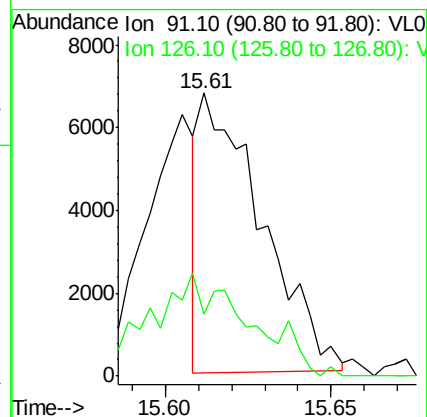
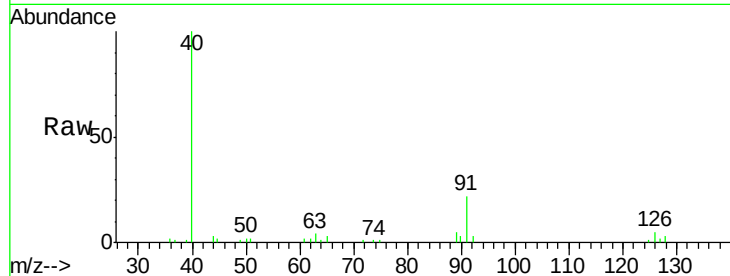
ClientSampleId :

Tot Ion: 91 Resp: 8795

Ion Ratio Lower Upper

91 100

126 58.1 11.7 46.9#



#72

4-Ethyltoluene

Concen: 0.029 ppbv

RT: 15.99 min Scan# 4060

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Tgt Ion:105 Resp: 6463

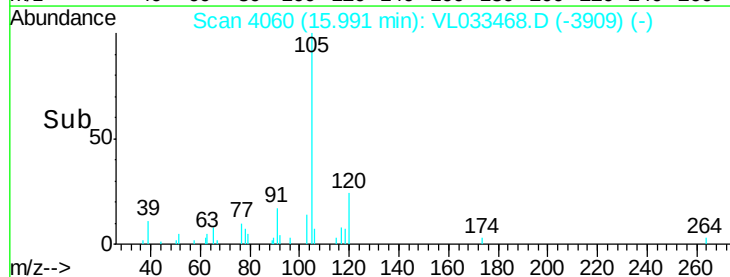
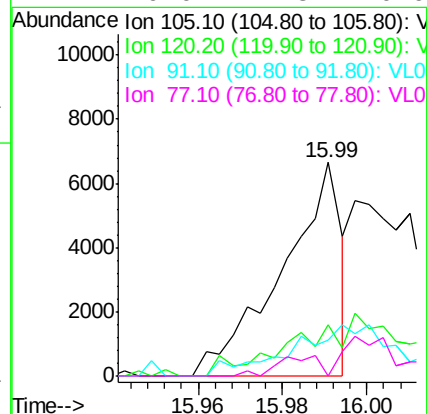
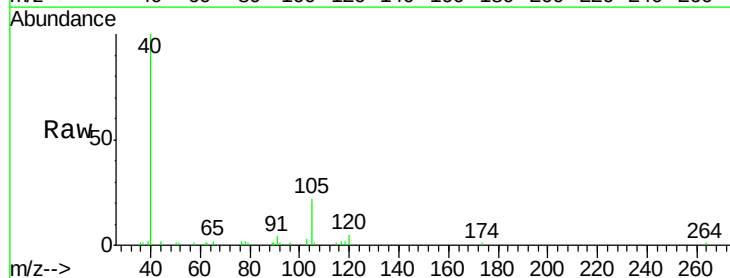
Ion Ratio Lower Upper

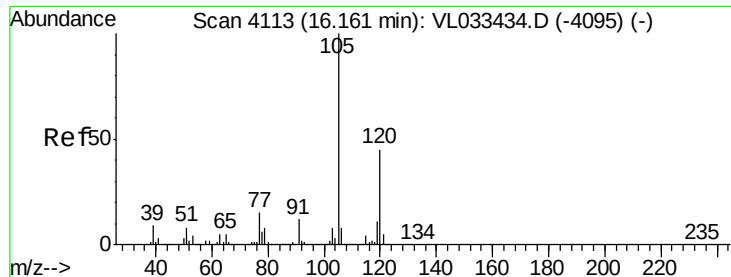
105 100

120 0.0 23.2 34.8#

91 0.0 10.4 15.6#

77 0.0 11.3 16.9#

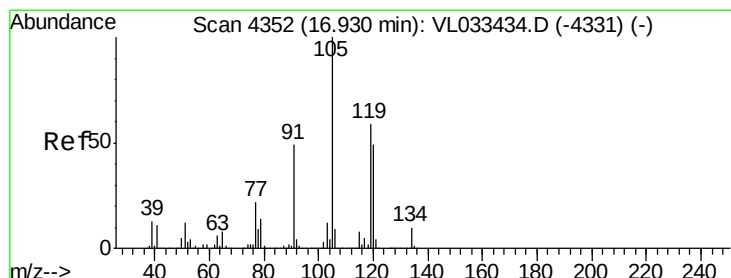
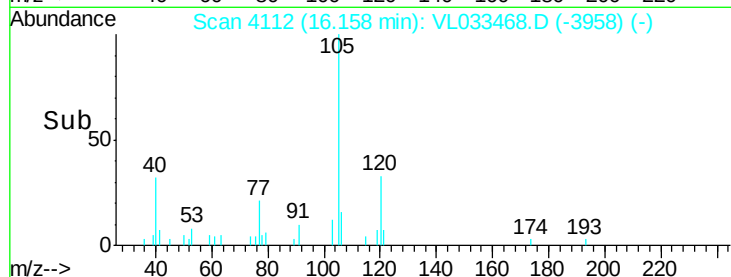
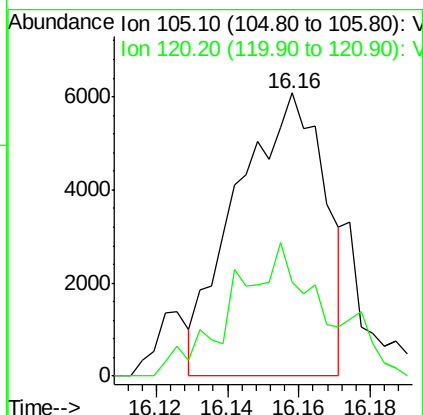
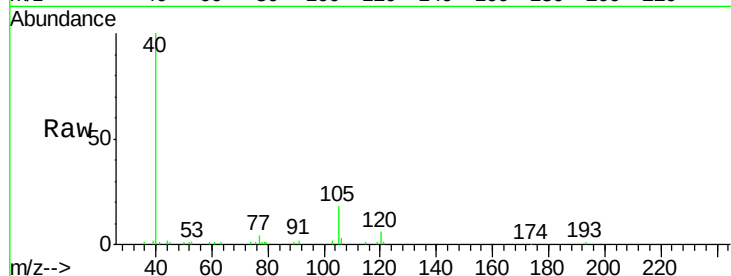




#73
 1,3,5-Trimethylbenzene
 Concen: 0.049 ppbv
 RT: 16.16 min Scan# 4112
 Delta R.T. -0.00 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

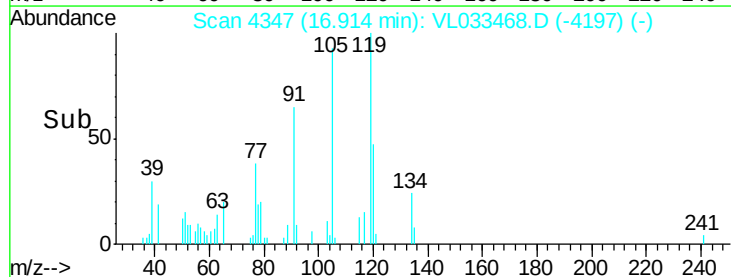
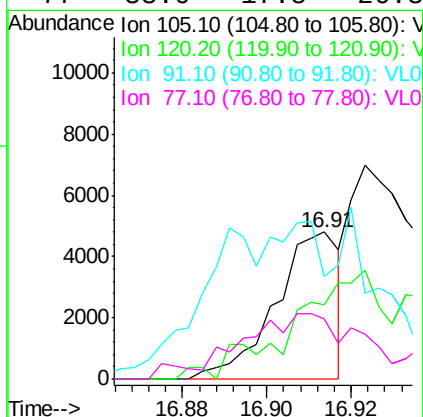
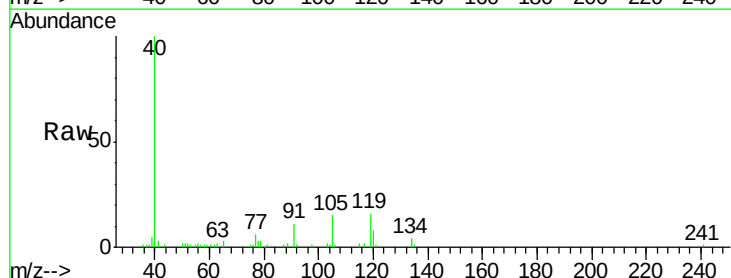
Instrument :
 MSVOA_L
 ClientSampleId :

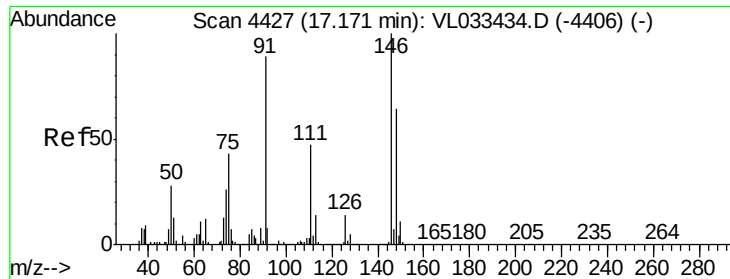
Tot Ion:105 Resp: 10409
 Ion Ratio Lower Upper
 105 100
 120 34.0 35.7 53.5#



#74
 1,2,4-Trimethylbenzene
 Concen: 0.022 ppbv
 RT: 16.91 min Scan# 4347
 Delta R.T. -0.02 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

Tgt Ion:105 Resp: 5050
 Ion Ratio Lower Upper
 105 100
 120 46.0 39.0 58.6
 91 33.1 40.0 60.0#
 77 33.0 17.5 26.3#





#75

1,3-Dichlorobenzene

Concen: 0.057 ppbv

RT: 17.16 min Scan# 4424

Delta R.T. -0.01 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

Instrument :

MSVOA_L

ClientSampleId :

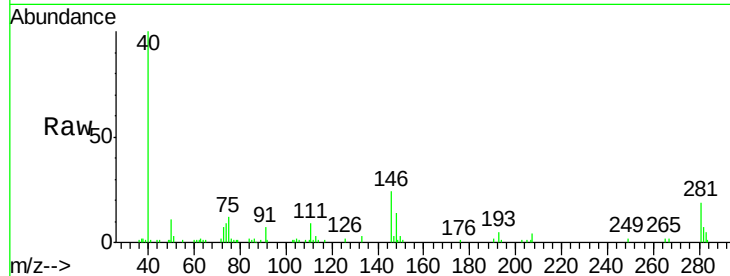
Tot Ion:146 Resp: 8083

Ion Ratio Lower Upper

146 100

111 106.9 22.9 68.8#

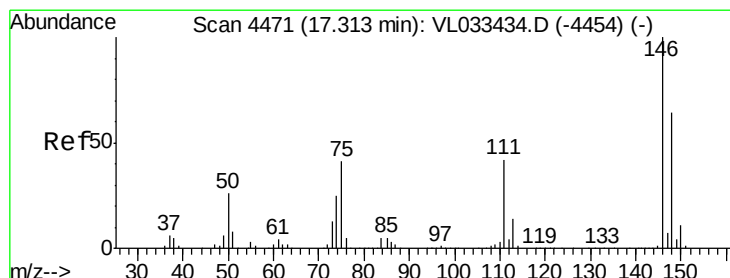
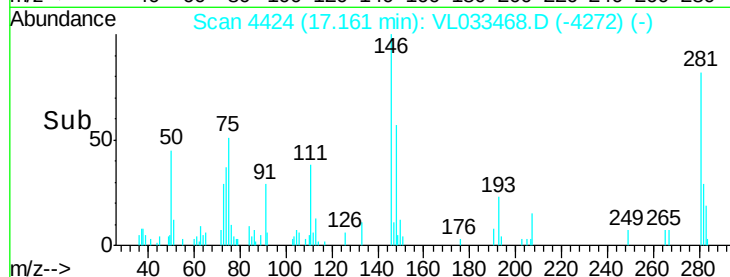
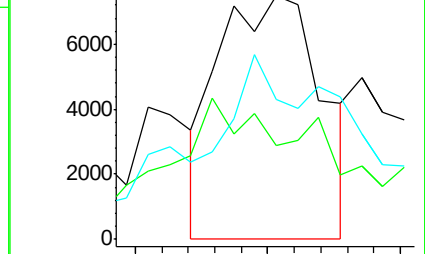
148 140.4 32.0 96.2#



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



#76

1,4-Dichlorobenzene

Concen: 0.022 ppbv

RT: 17.29 min Scan# 4465

Delta R.T. -0.02 min

Lab File: VL033468.D

Acq: 27 Mar 2019 14:45

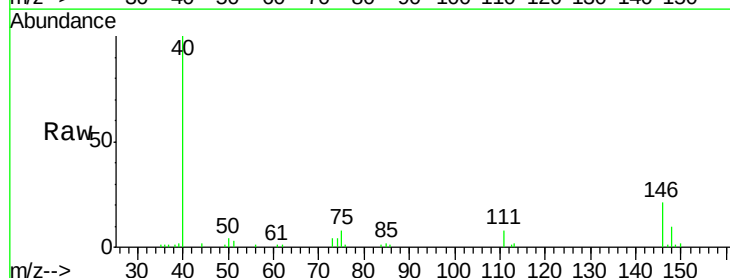
Tgt Ion:146 Resp: 3011

Ion Ratio Lower Upper

146 100

111 0.0 21.7 65.1#

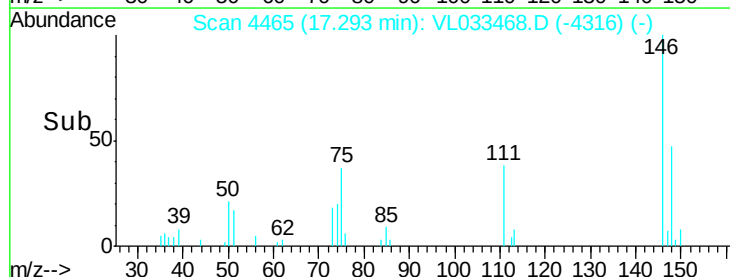
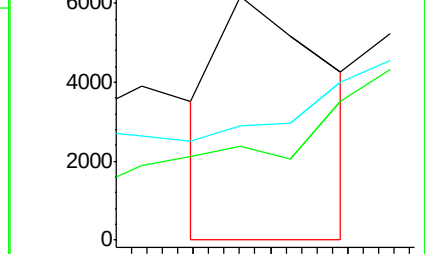
148 0.0 32.0 96.2#

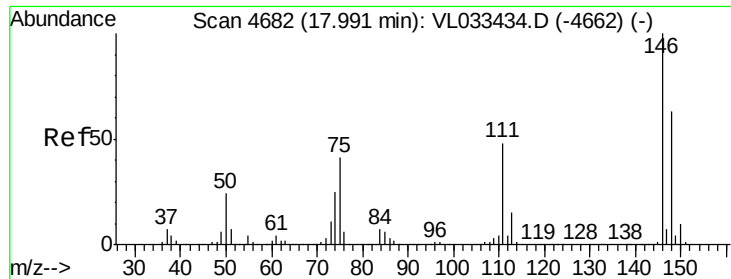


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

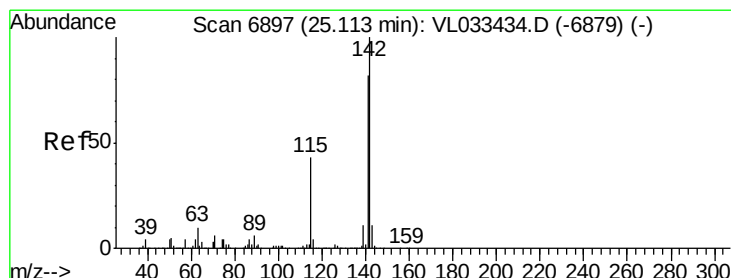
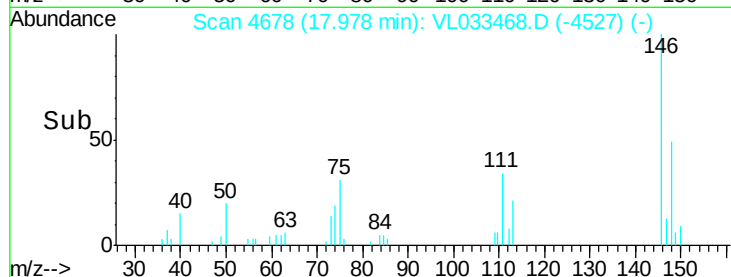
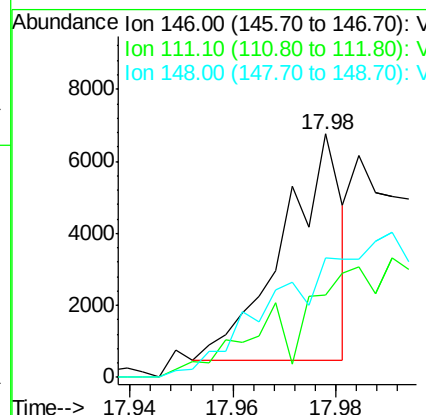
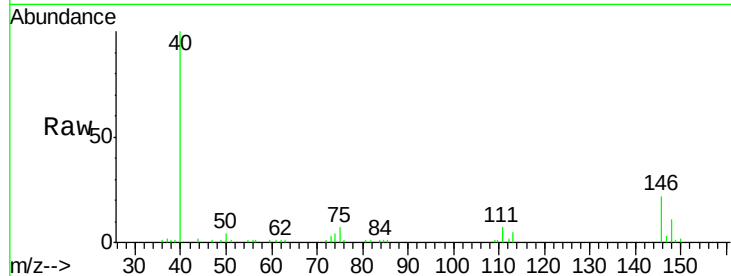




#77
 1,2-Dichlorobenzene
 Concen: 0.037 ppbv
 RT: 17.98 min Scan# 4678
 Delta R.T. -0.01 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:146 Resp: 4962
 Ion Ratio Lower Upper
 146 100
 111 0.0 23.5 70.5#
 148 0.0 32.0 96.0#



#80
 Naphthalene, 2-methyl-
 Concen: 0.037 ppbv
 RT: 25.11 min Scan# 6897
 Delta R.T. -0.00 min
 Lab File: VL033468.D
 Acq: 27 Mar 2019 14:45

Tgt Ion:142 Resp: 2415
 Ion Ratio Lower Upper
 142 100
 141 75.5 66.6 99.8
 115 34.0 34.4 51.6#

