

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL050219\
 Data File : VL033638.D
 Acq On : 2 May 2019 21:45
 Operator : SY/AP
 Sample : K2628-07
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 A-7

Quant Time: May 03 02:30:24 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL050119AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu May 02 06:29:02 2019
 QLast Update : Thu May 02 06:29:02 2019
 Response via : Initial Calibration

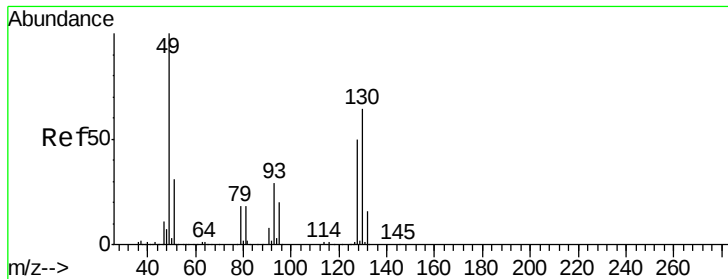
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	881326	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2099607	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	2078611	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.57	95	1736219	10.97	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	109.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.08	85	83863	0.631	ppbv	91
3) Chlorodifluoromethane	2.99	51	140290	1.331	ppbv #	69
4) Chloromethane	3.17	50	31686	0.552	ppbv	93
8) Dichlorotetrafluoroethane	3.22	85	2738	0.019	ppbv #	80
9) Propene	3.24	41	35034	1.161	ppbv	93
10) Heptane	8.24	43	1256	0.011	ppbv #	22
11) Trichlorofluoromethane	4.00	101	47917	0.304	ppbv	91
12) 1,1,2-Trichlorotrifluoroet	4.54	101	1550	0.014	ppbv #	1
13) Ethanol	3.65	45	1872833	136.901	ppbv	99
15) Acetone	3.90	43	343245	3.199	ppbv	99
16) 1,3-Butadiene	3.35	39	761	0.016	ppbv #	7
17) tert-Butyl alcohol	4.03	59	11232	0.121	ppbv	100
19) Isopropyl Alcohol	4.03	45	330573	4.489	ppbv #	95
20) Methylene Chloride	4.41	84	32973	0.789	ppbv	97
23) Vinyl Acetate	5.15	43	2831	0.018	ppbv #	33
25) Ethyl Acetate	5.77	43	45987	0.226	ppbv #	89
26) Hexane	5.78	57	53903	0.629	ppbv #	38
29) Chloroform	5.85	83	1888	0.012	ppbv #	60
34) 2-Butanone	5.33	43	17133	0.133	ppbv	97
35) Carbon Tetrachloride	7.13	117	5514	0.033	ppbv #	53
36) Benzene	7.00	78	7535	0.042	ppbv #	70
39) 1,2-Dichloropropane	7.28	63	559232	8.289	ppbv #	25
53) Toluene	9.94	91	106009	0.470	ppbv	98

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. 0.00 min

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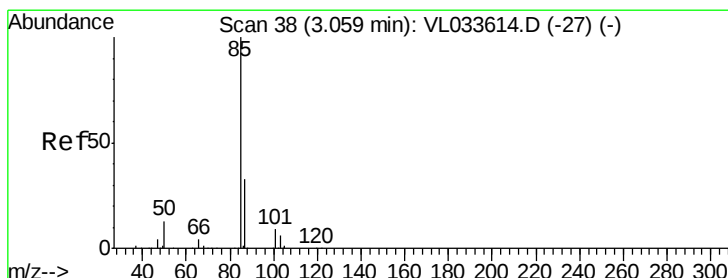
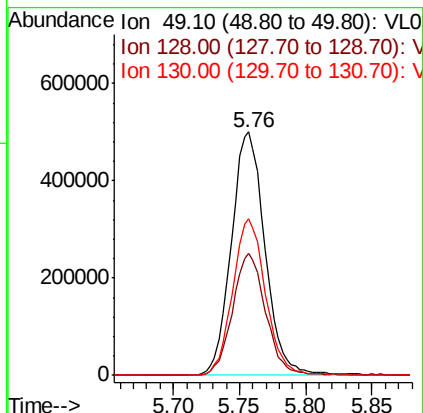
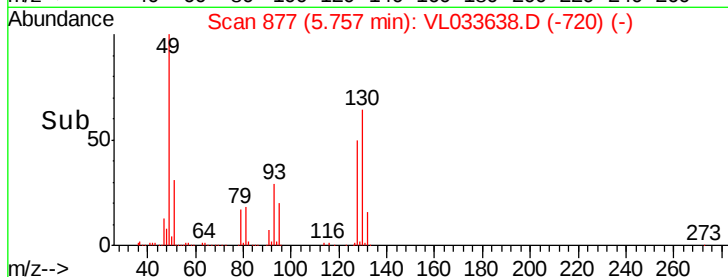
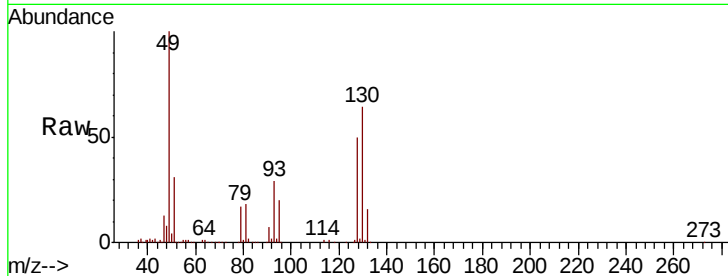
Tgt Ion: 49 Resp: 881326

Ion Ratio Lower Upper

49 100

128 49.6 25.0 75.0

130 63.1 31.9 95.9



#2

Dichlorodifluoromethane

Concen: 0.631 ppbv

RT: 3.08 min Scan# 43

Delta R.T. 0.02 min

Lab File: VL033638.D

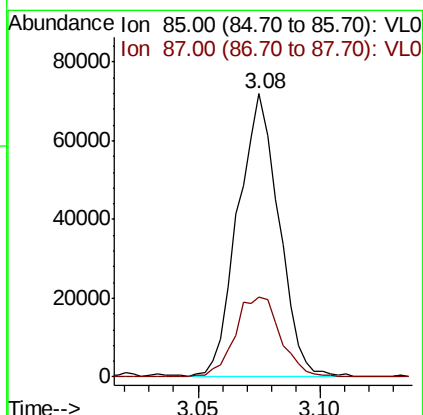
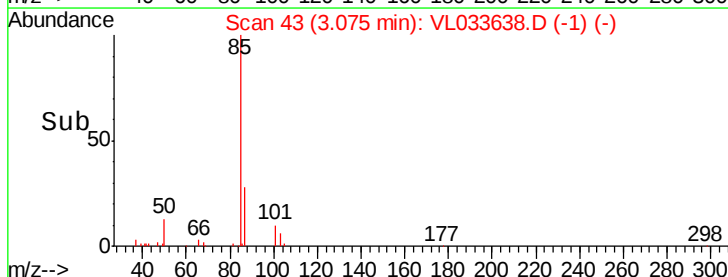
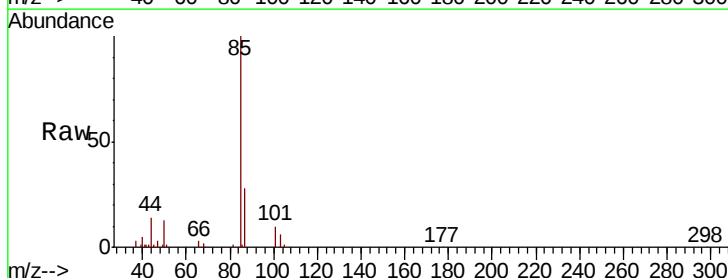
Acq: 2 May 2019 21:45

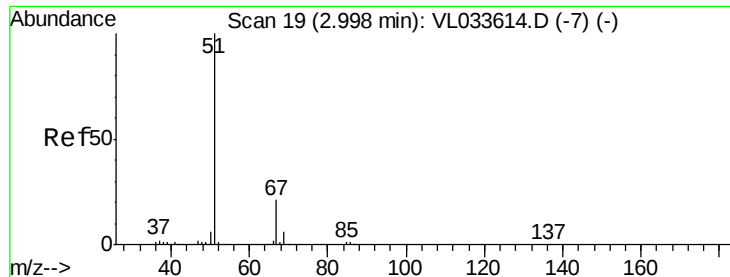
Tgt Ion: 85 Resp: 83863

Ion Ratio Lower Upper

85 100

87 28.4 26.8 40.2

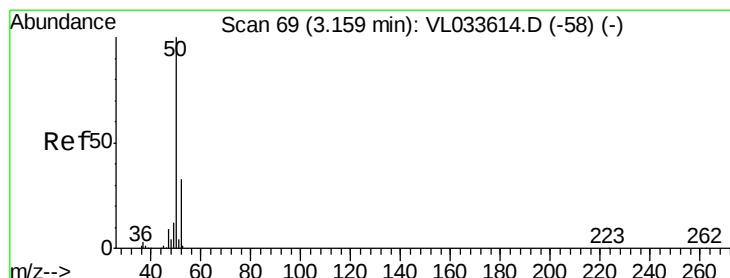
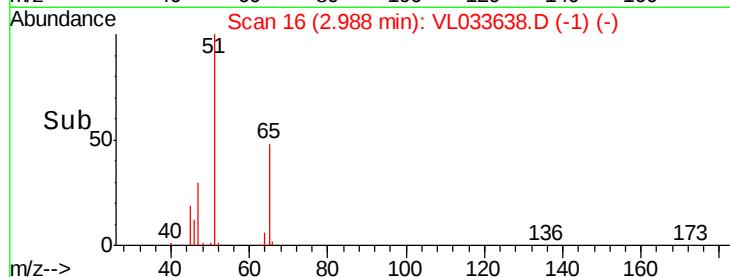
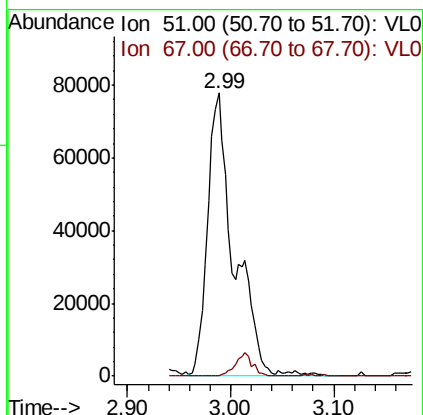
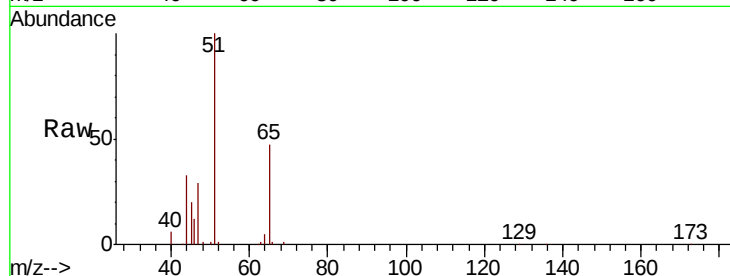




#3
Chlorodifluoromethane
Concen: 1.331 ppbv
RT: 2.99 min Scan# 16
Delta R.T. -0.01 min
Lab File: VL033638.D
Acq: 2 May 2019 21:45

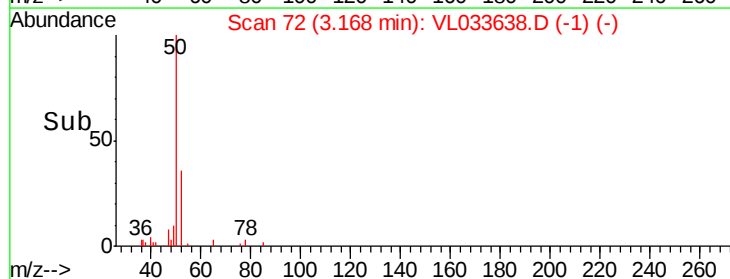
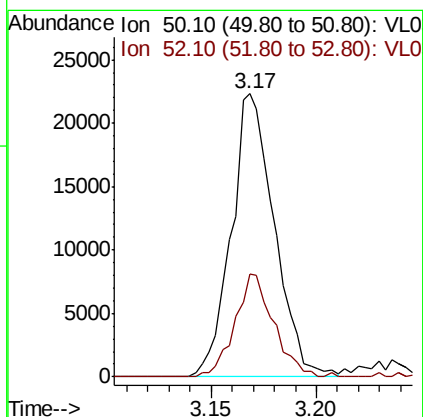
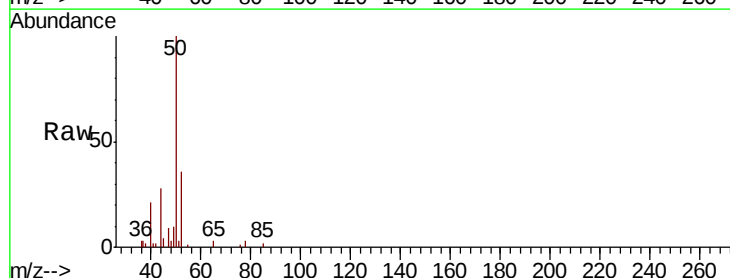
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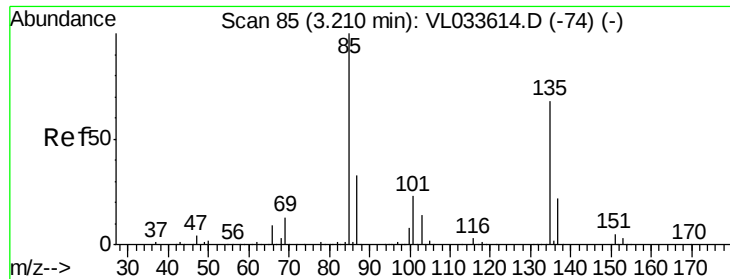
Tgt Ion: 51 Resp: 140290
Ion Ratio Lower Upper
51 100
67 5.2 15.6 23.4#



#4
Chloromethane
Concen: 0.552 ppbv
RT: 3.17 min Scan# 72
Delta R.T. 0.01 min
Lab File: VL033638.D
Acq: 2 May 2019 21:45

Tgt Ion: 50 Resp: 31686
Ion Ratio Lower Upper
50 100
52 36.5 26.0 39.0





#8

Dichlorotetrafluoroethane

Concen: 0.019 ppbv

RT: 3.22 min Scan# 87

Delta R.T. 0.01 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

Instrument :

MSVOA_L

ClientSampleId :

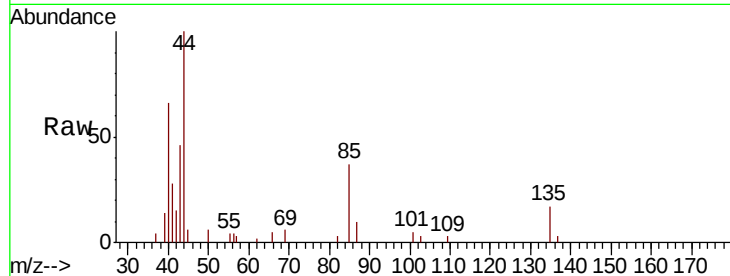
A-7

Tgt Ion: 85 Resp: 2738

Ion Ratio Lower Upper

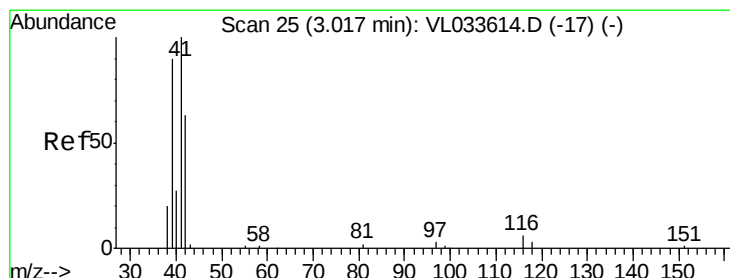
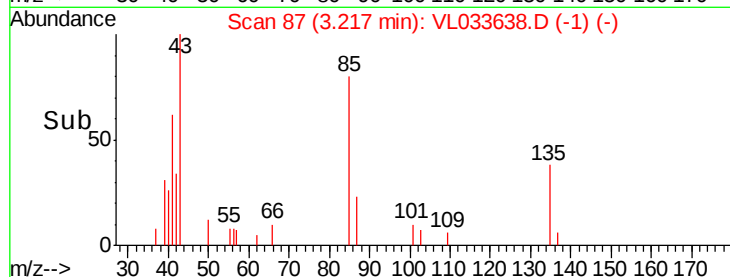
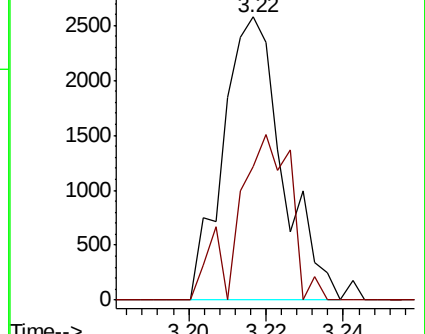
85 100

135 52.6 55.0 82.6#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



#9

Propene

Concen: 1.161 ppbv

RT: 3.24 min Scan# 93

Delta R.T. 0.22 min

Lab File: VL033638.D

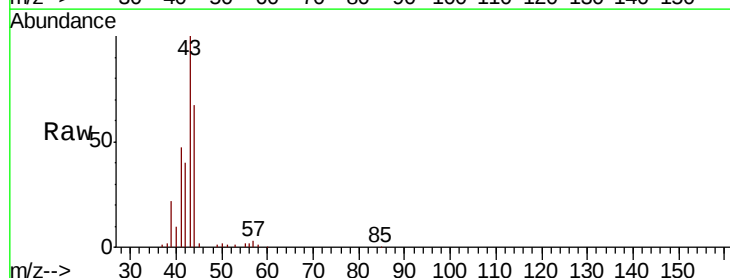
Acq: 2 May 2019 21:45

Tgt Ion: 41 Resp: 35034

Ion Ratio Lower Upper

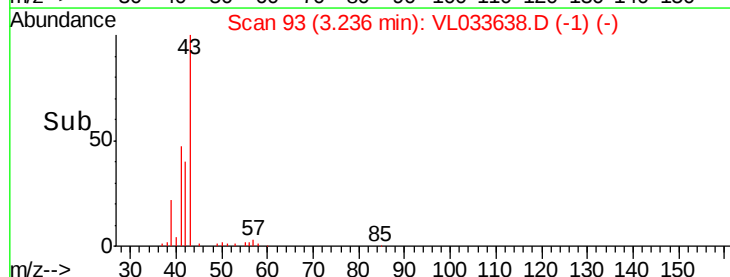
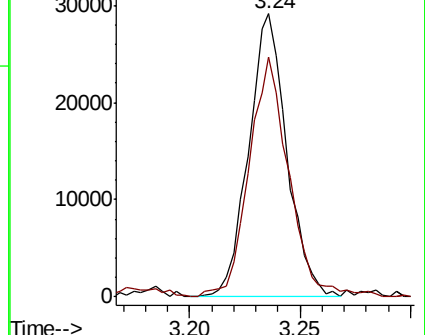
41 100

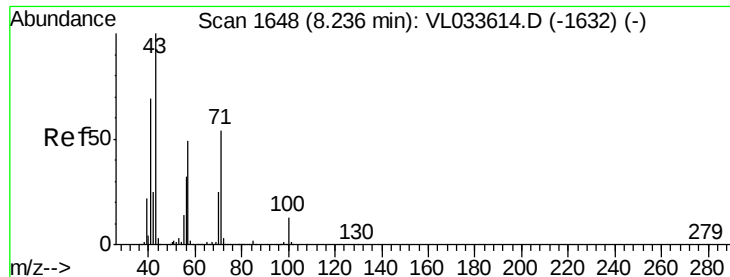
42 88.4 66.0 99.0



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

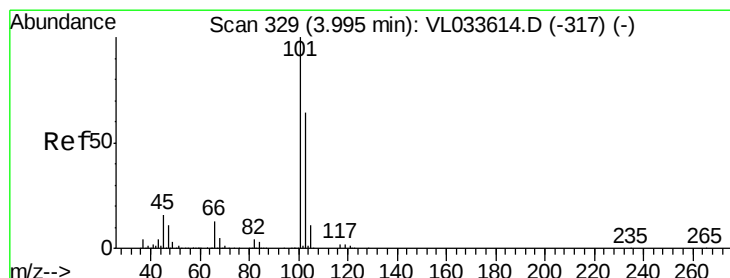
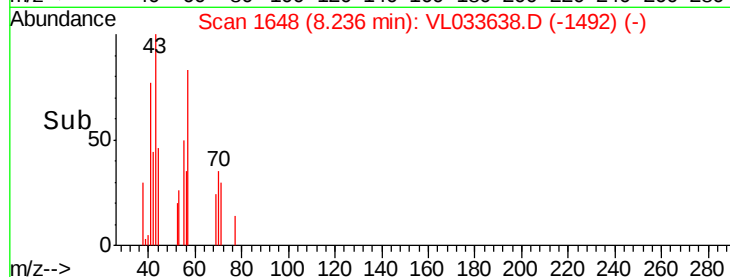
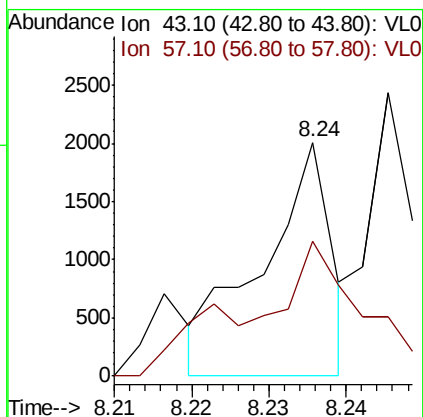
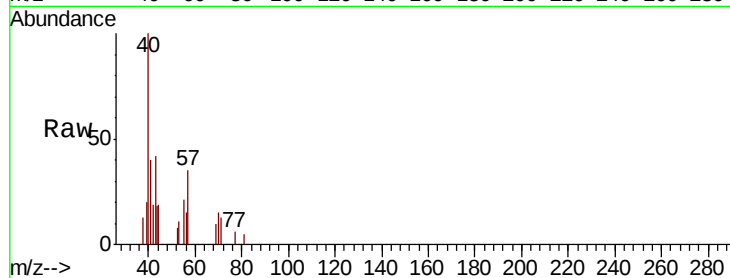




#10
 Heptane
 Concen: 0.011 ppbv
 RT: 8.24 min Scan# 1648
 Delta R.T. 0.00 min
 Lab File: VL033638.D
 Acq: 2 May 2019 21:45

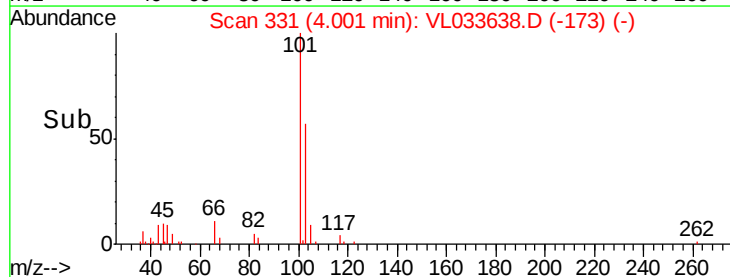
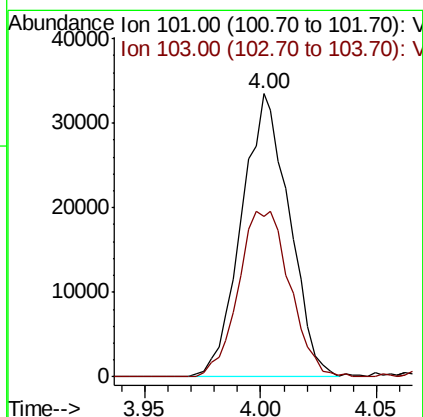
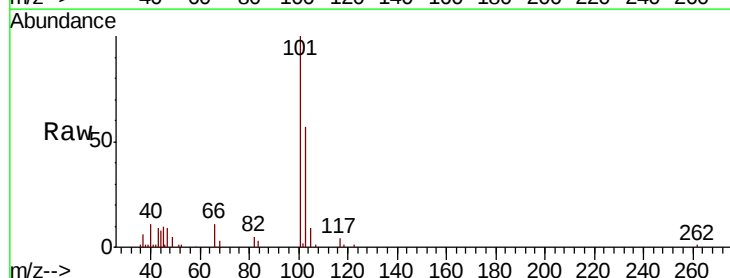
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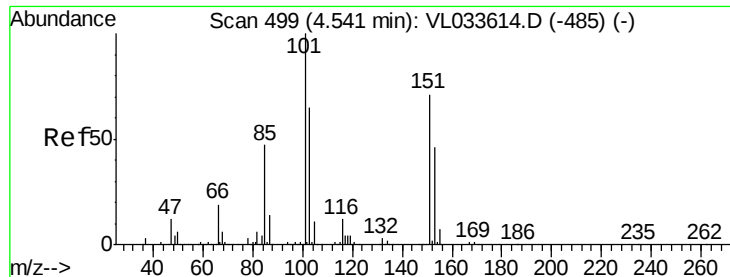
Tgt Ion: 43 Resp: 1256
 Ion Ratio Lower Upper
 43 100
 57 104.1 40.3 60.5#



#11
 Trichlorofluoromethane
 Concen: 0.304 ppbv
 RT: 4.00 min Scan# 331
 Delta R.T. 0.01 min
 Lab File: VL033638.D
 Acq: 2 May 2019 21:45

Tgt Ion: 101 Resp: 47917
 Ion Ratio Lower Upper
 101 100
 103 56.9 51.2 76.8

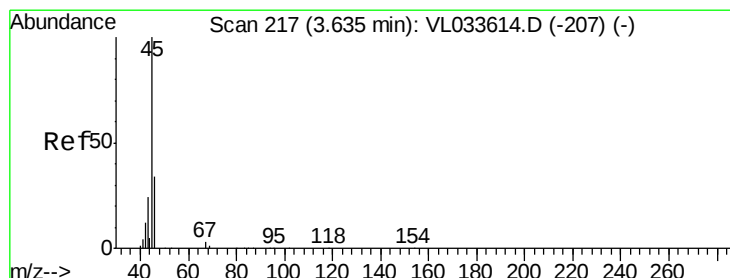
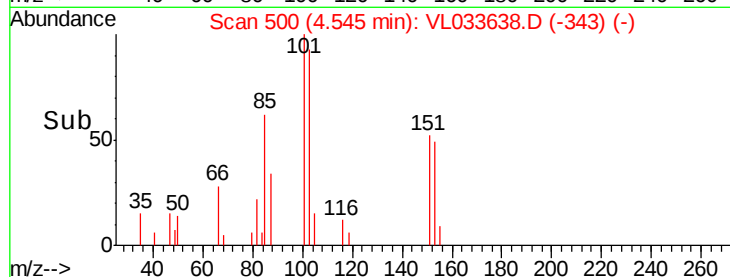
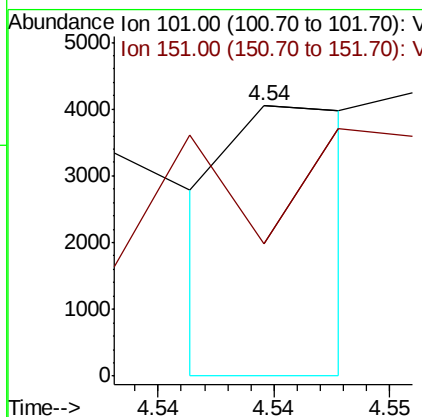
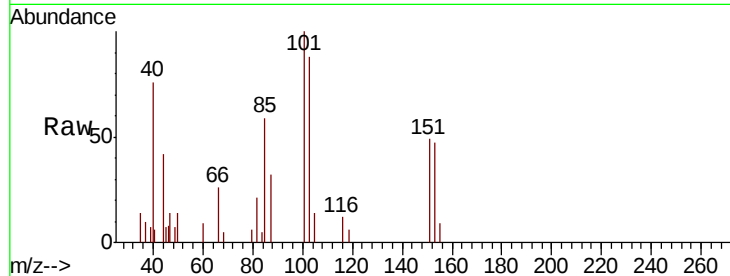




#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.014 ppbv
 RT: 4.54 min Scan# 500
 Delta R.T. 0.00 min
 Lab File: VL033638.D
 Acq: 2 May 2019 21:45

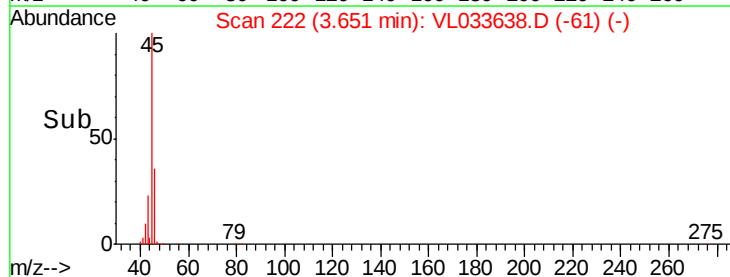
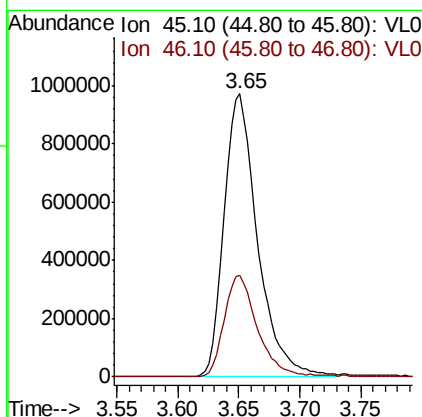
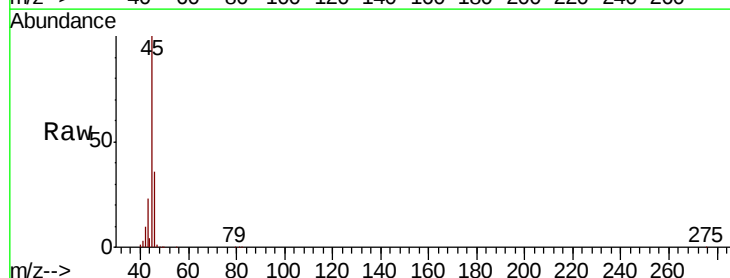
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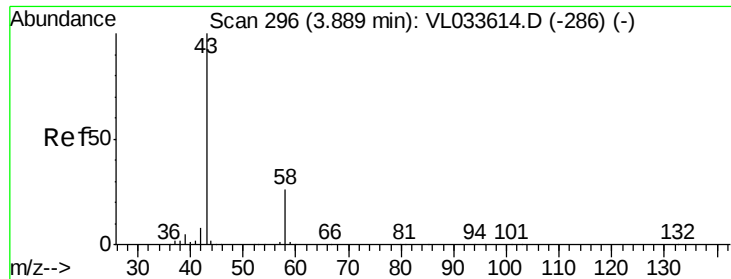
Tgt Ion: 101 Resp: 1550
 Ion Ratio Lower Upper
 101 100
 151 355.5 59.2 88.8#



#13
 Ethanol
 Concen: 136.901 ppbv
 RT: 3.65 min Scan# 222
 Delta R.T. 0.02 min
 Lab File: VL033638.D
 Acq: 2 May 2019 21:45

Tgt Ion: 45 Resp: 1872833
 Ion Ratio Lower Upper
 45 100
 46 35.9 14.6 58.2

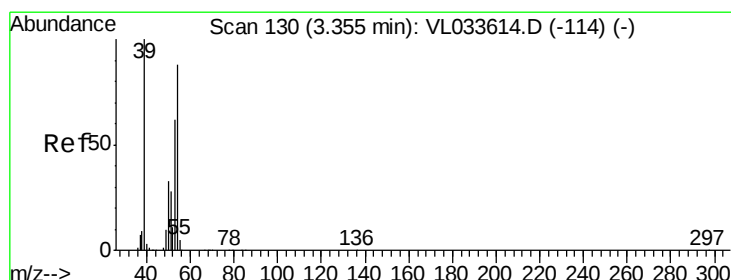
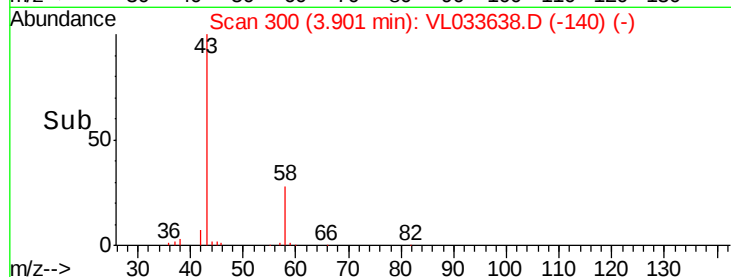
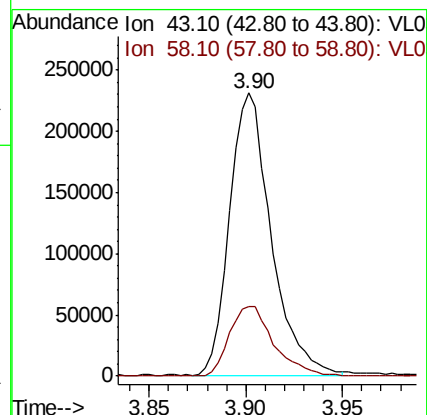
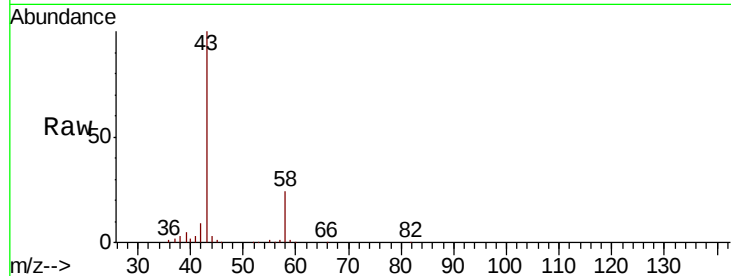




#15
Acetone
Concen: 3.199 ppbv
RT: 3.90 min Scan# 300
Delta R.T. 0.01 min
Lab File: VL033638.D
Acq: 2 May 2019 21:45

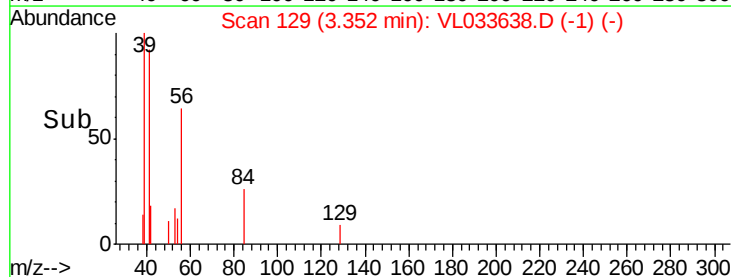
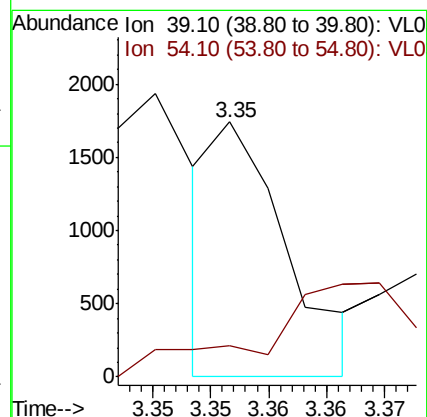
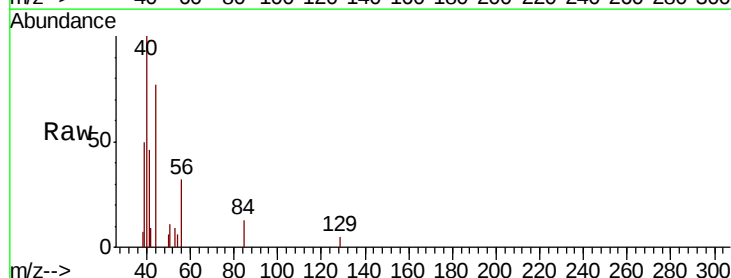
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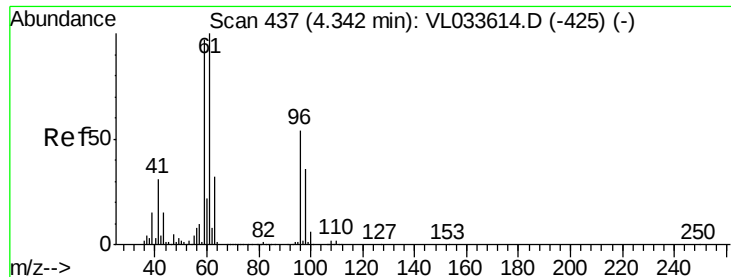
Tgt Ion: 43 Resp: 343245
Ion Ratio Lower Upper
43 100
58 26.8 21.2 31.8



#16
1,3-Butadiene
Concen: 0.016 ppbv
RT: 3.35 min Scan# 129
Delta R.T. -0.00 min
Lab File: VL033638.D
Acq: 2 May 2019 21:45

Tgt Ion: 39 Resp: 761
Ion Ratio Lower Upper
39 100
54 0.0 68.4 102.6#

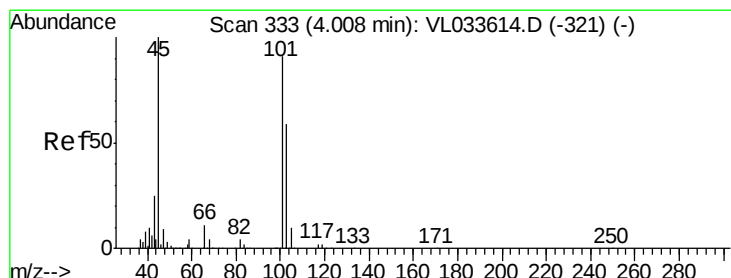
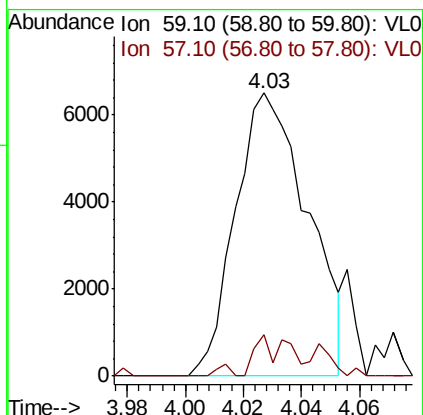
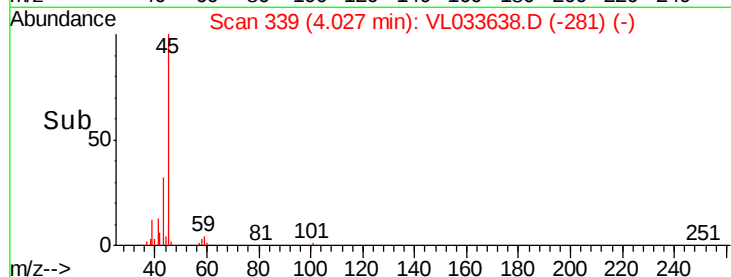
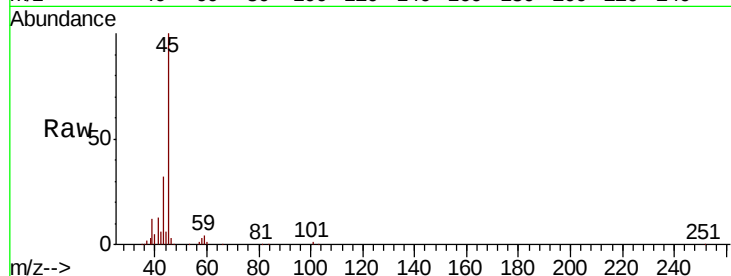




#17
 tert-Butyl alcohol
 Concen: 0.121 ppbv
 RT: 4.03 min Scan# 339
 Delta R.T. -0.32 min
 Lab File: VL033638.D
 Acq: 2 May 2019 21:45

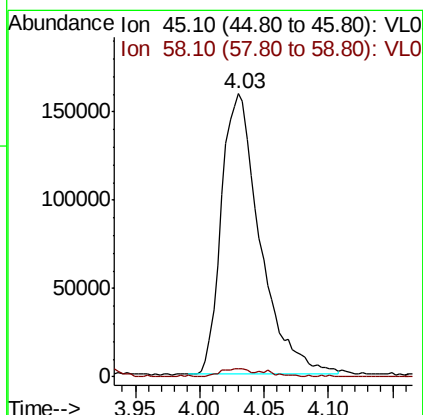
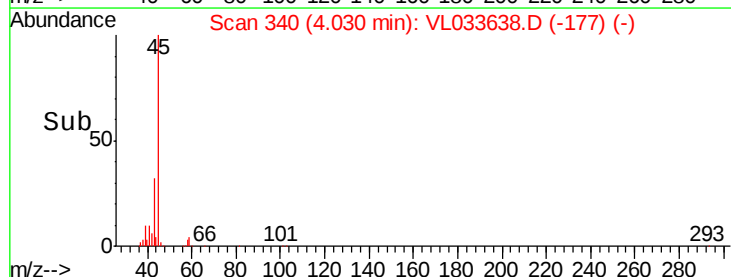
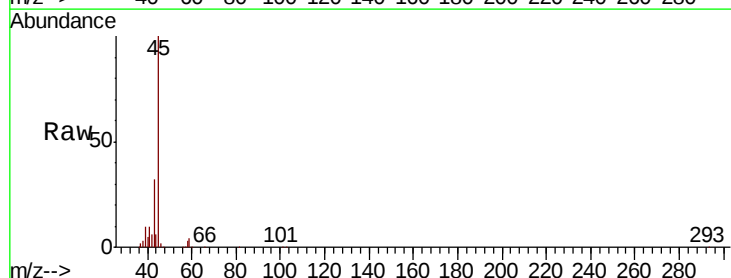
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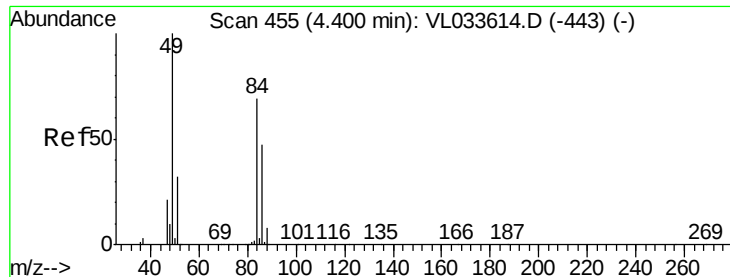
Tgt Ion: 59 Resp: 11232
 Ion Ratio Lower Upper
 59 100
 57 10.5 8.4 12.6



#19
 Isopropyl Alcohol
 Concen: 4.489 ppbv
 RT: 4.03 min Scan# 340
 Delta R.T. 0.02 min
 Lab File: VL033638.D
 Acq: 2 May 2019 21:45

Tgt Ion: 45 Resp: 330573
 Ion Ratio Lower Upper
 45 100
 58 3.9 1.8 2.6#

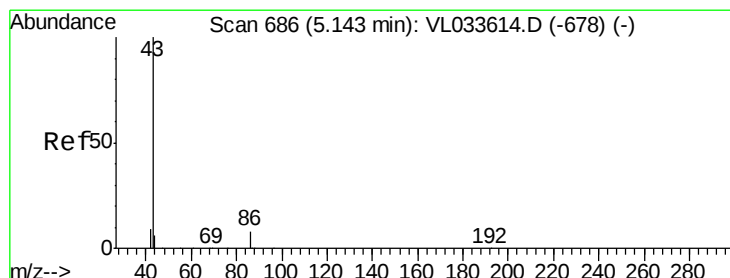
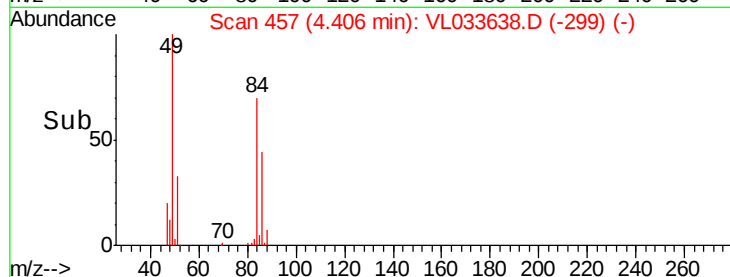
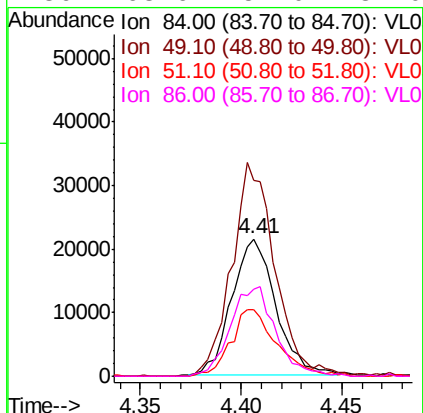
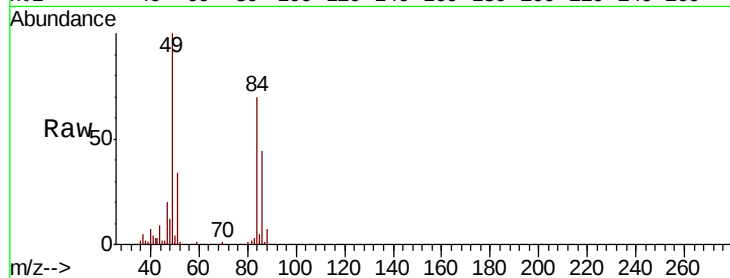




#20
Methylene Chloride
Concen: 0.789 ppbv
RT: 4.41 min Scan# 457
Delta R.T. 0.01 min
Lab File: VL033638.D
Acq: 2 May 2019 21:45

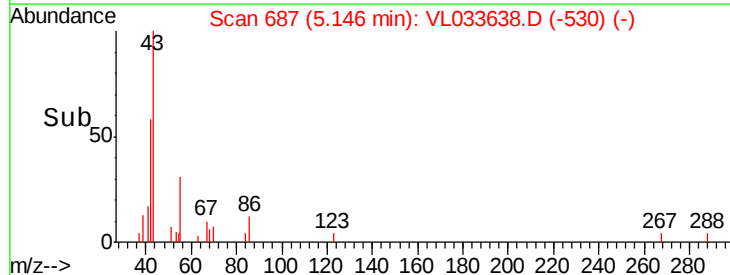
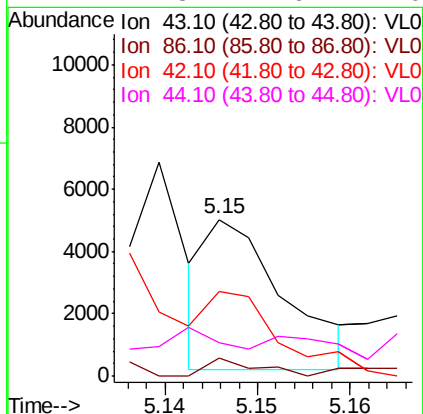
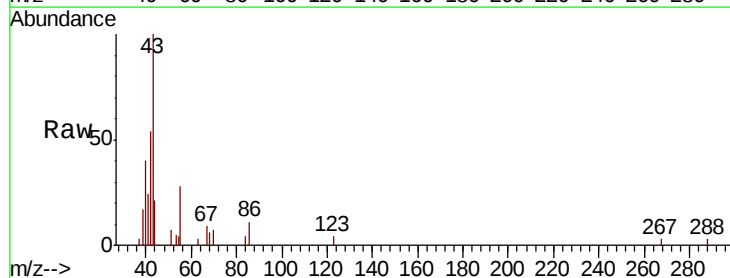
Instrument :
MSVOA_L
ClientSampleId :
A-7

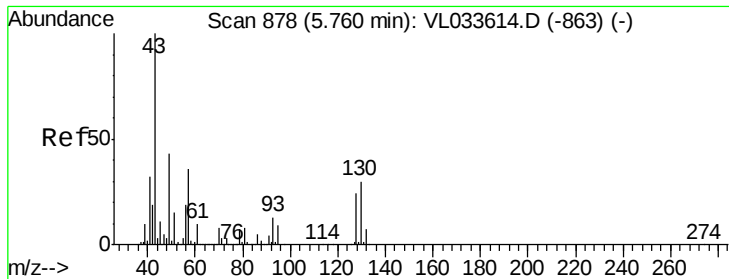
Tgt Ion:	84	Resp:	32973
Ion	Ratio	Lower	Upper
84	100		
49	144.1	116.2	174.2
51	49.3	37.0	55.6
86	63.6	54.0	81.0



#23
Vinyl Acetate
Concen: 0.018 ppbv
RT: 5.15 min Scan# 687
Delta R.T. 0.00 min
Lab File: VL033638.D
Acq: 2 May 2019 21:45

Tgt Ion:	43	Resp:	2831
Ion	Ratio	Lower	Upper
43	100		
86	16.8	5.8	8.8#
42	57.4	7.8	11.8#
44	1.3	4.6	7.0#





#25

Ethyl Acetate

Concen: 0.226 ppbv

RT: 5.77 min Scan# 881

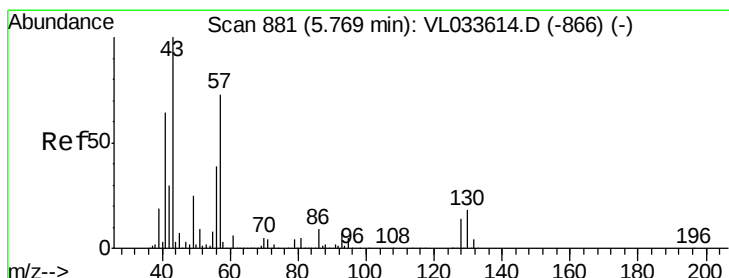
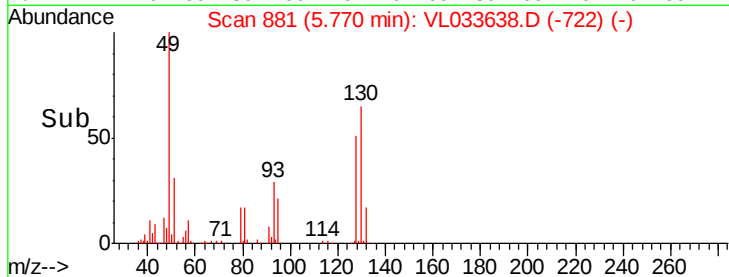
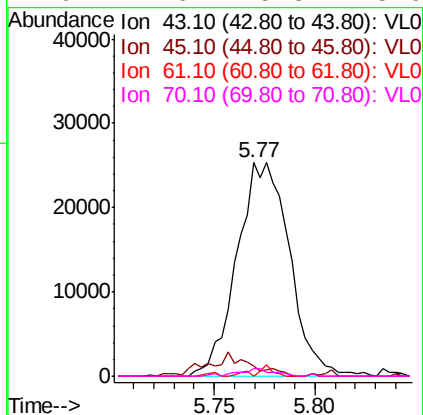
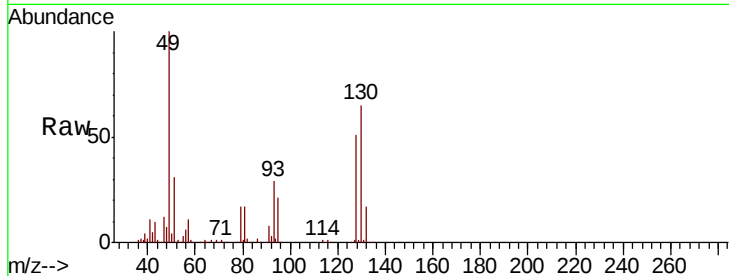
Delta R.T. 0.01 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

Instrument :
MSVOA_L
ClientSampleId :
A-7

Tgt Ion:	43	Resp:	45987
Ion	Ratio	Lower	Upper
43	100		
45	9.8	8.1	12.1
61	2.2	7.5	11.3#
70	2.6	5.8	8.6#



#26

Hexane

Concen: 0.629 ppbv

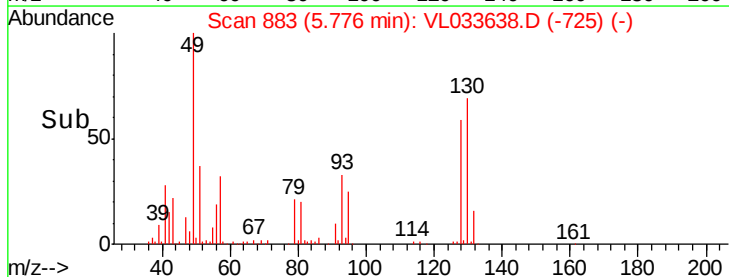
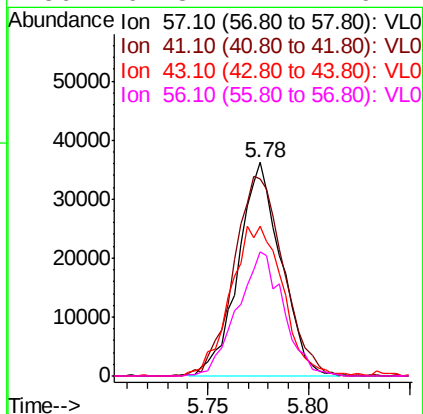
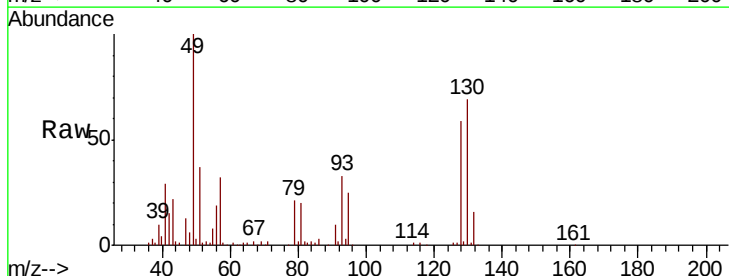
RT: 5.78 min Scan# 883

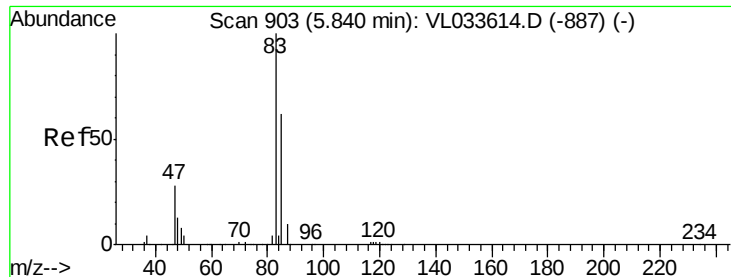
Delta R.T. 0.01 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

Tgt Ion:	57	Resp:	53903
Ion	Ratio	Lower	Upper
57	100		
41	108.3	70.6	106.0#
43	86.0	186.0	279.0#
56	62.3	42.7	64.1





#29

Chloroform

Concen: 0.012 ppbv

RT: 5.85 min Scan# 905

Delta R.T. 0.01 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

Instrument :

MSVOA_L

ClientSampleId :

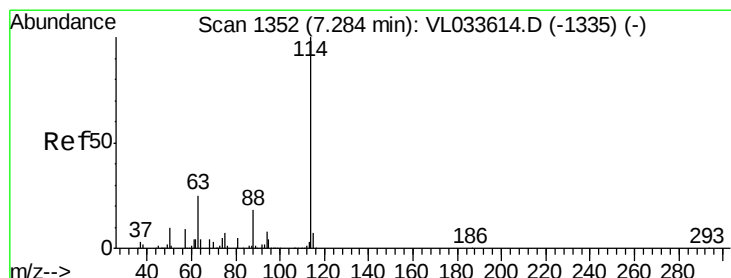
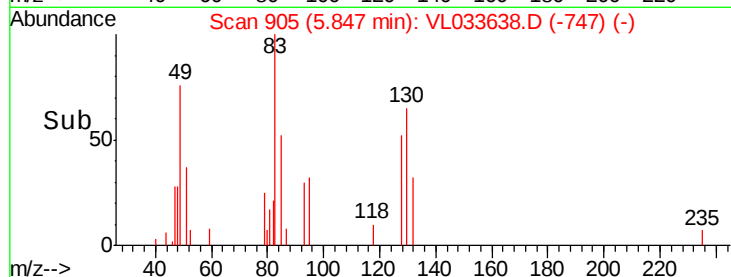
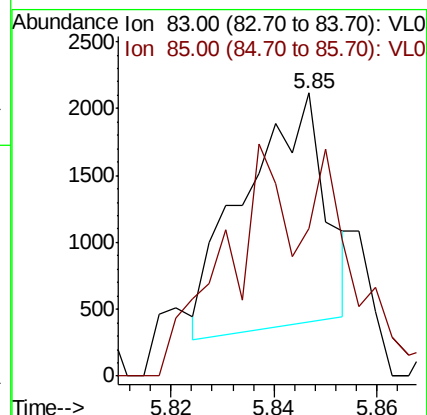
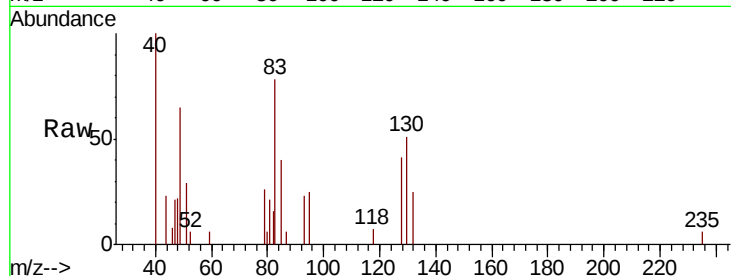
A-7

Tgt Ion: 83 Resp: 1888

Ion Ratio Lower Upper

83 100

85 31.4 49.9 74.9#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. 0.00 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

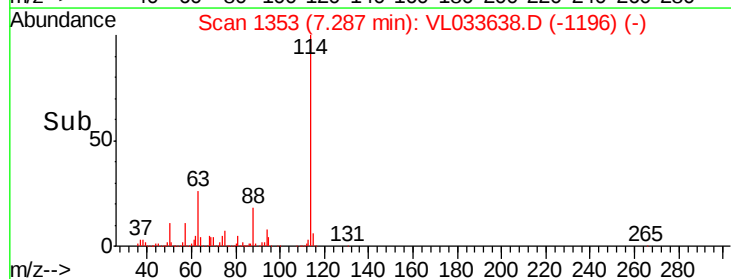
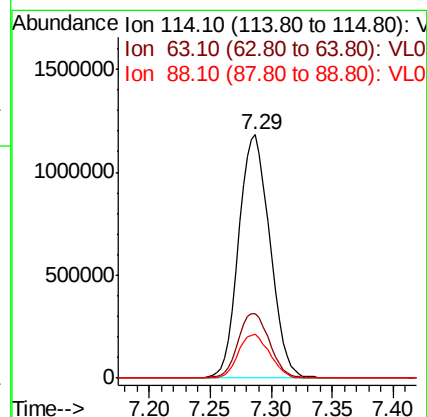
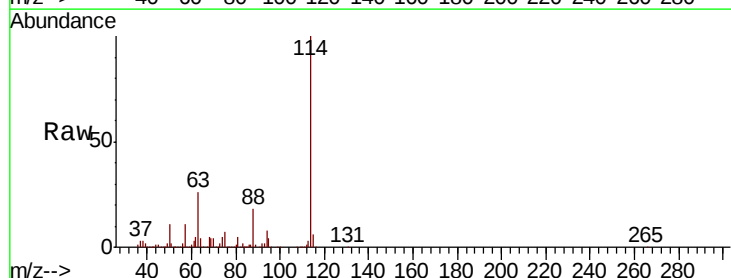
Tgt Ion: 114 Resp: 2099607

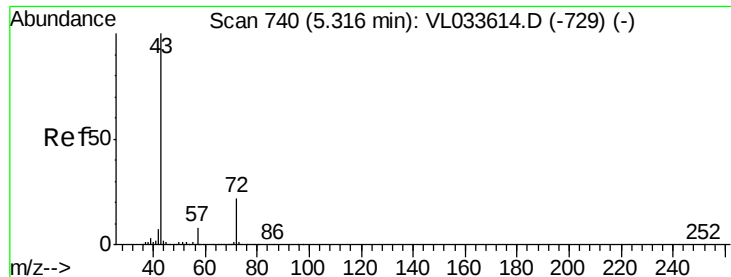
Ion Ratio Lower Upper

114 100

63 26.8 21.1 31.7

88 17.9 14.2 21.4





#34

2-Butanone

Concen: 0.133 ppbv

RT: 5.33 min Scan# 745

Delta R.T. 0.02 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

Instrument :

MSVOA_L

ClientSampleId :

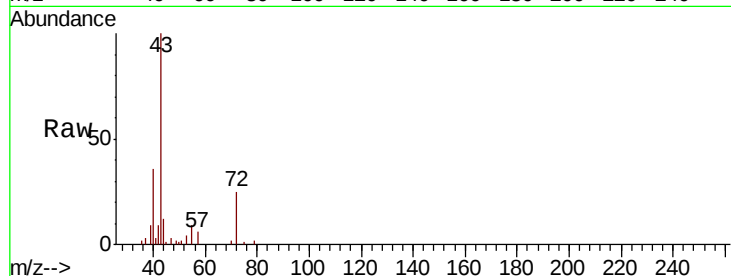
A-7

Tgt Ion: 43 Resp: 17133

Ion Ratio Lower Upper

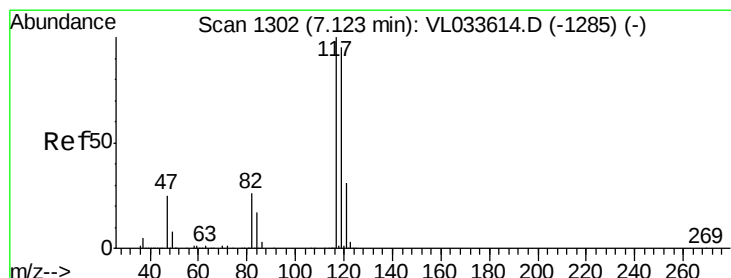
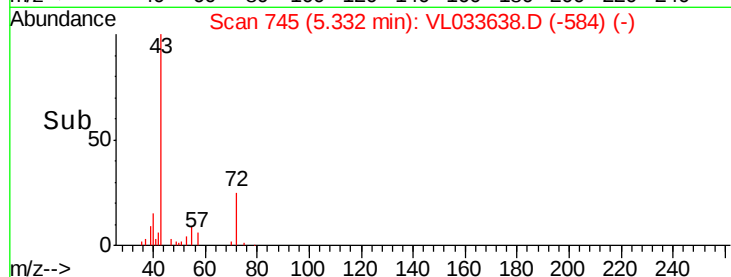
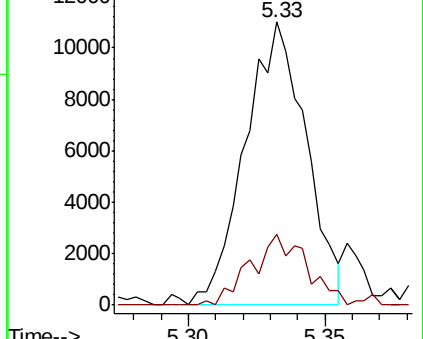
43 100

72 23.7 17.8 26.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#35

Carbon Tetrachloride

Concen: 0.033 ppbv

RT: 7.13 min Scan# 1303

Delta R.T. 0.00 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

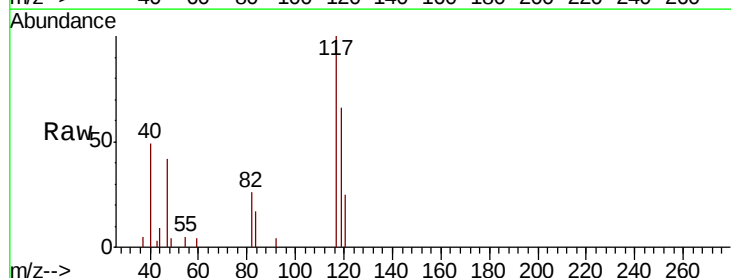
Tgt Ion: 117 Resp: 5514

Ion Ratio Lower Upper

117 100

119 41.4 76.2 114.4#

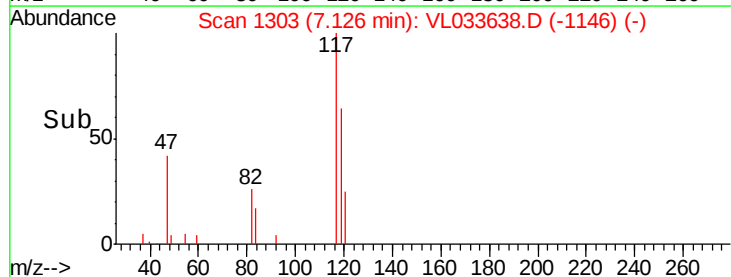
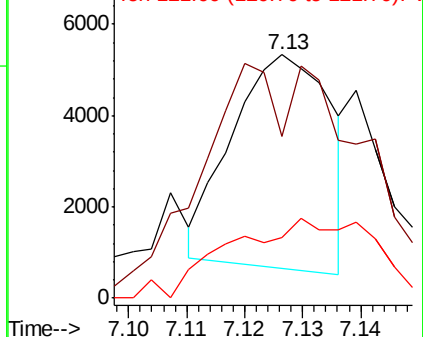
121 18.2 24.9 37.3#

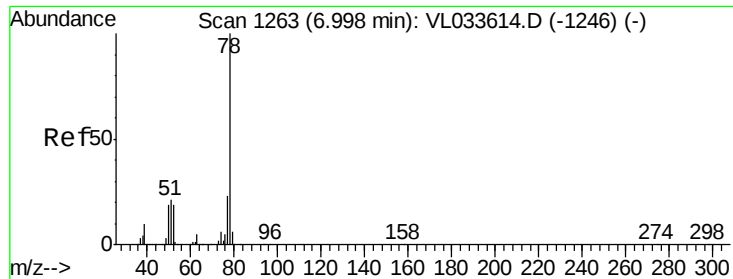


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V

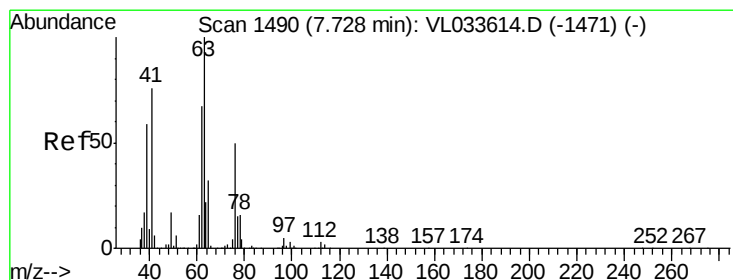
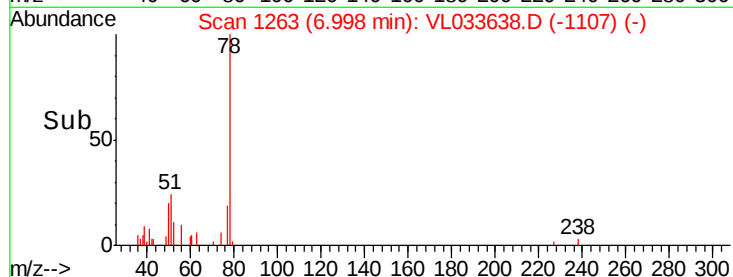
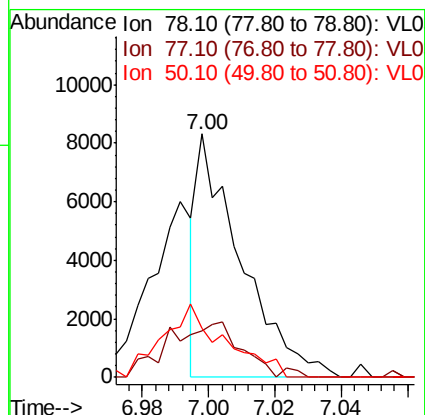
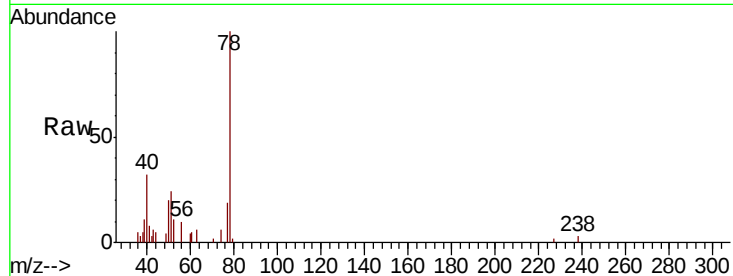




#36
Benzene
Concen: 0.042 ppbv
RT: 7.00 min Scan# 1263
Delta R.T. 0.00 min
Lab File: VL033638.D
Acq: 2 May 2019 21:45

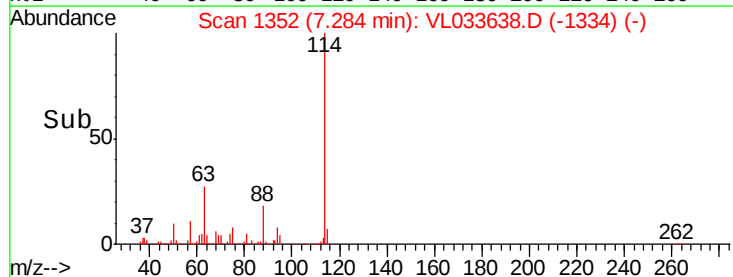
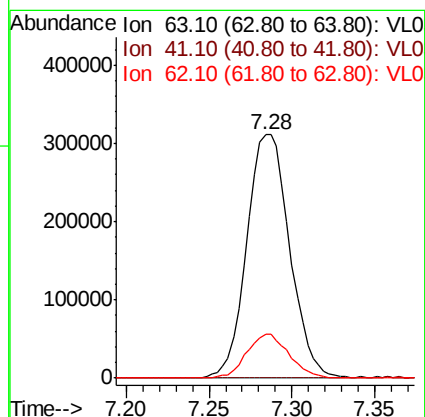
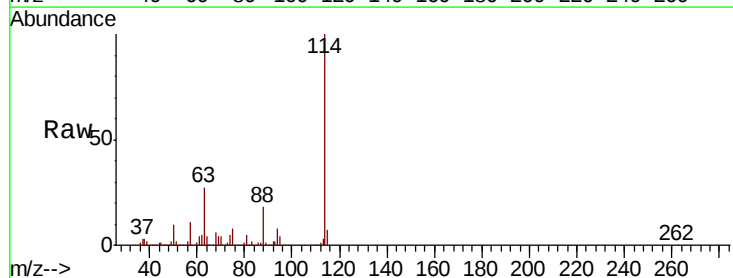
Instrument :
MSVOA_L
ClientSampled :
A-7

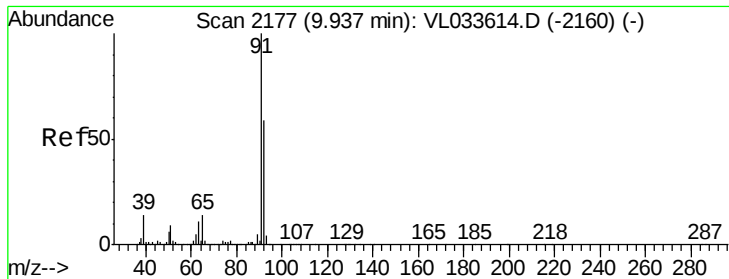
Tgt Ion: 78 Resp: 7535
Ion Ratio Lower Upper
78 100
77 18.9 18.1 27.1
50 44.4 15.1 22.7#



#39
1,2-Dichloropropane
Concen: 8.289 ppbv
RT: 7.28 min Scan# 1352
Delta R.T. -0.44 min
Lab File: VL033638.D
Acq: 2 May 2019 21:45

Tgt Ion: 63 Resp: 559232
Ion Ratio Lower Upper
63 100
41 0.0 60.9 91.3#
62 18.3 53.3 79.9#





#53

Toluene

Concen: 0.470 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. 0.01 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

Instrument :

MSVOA_L

ClientSampleId :

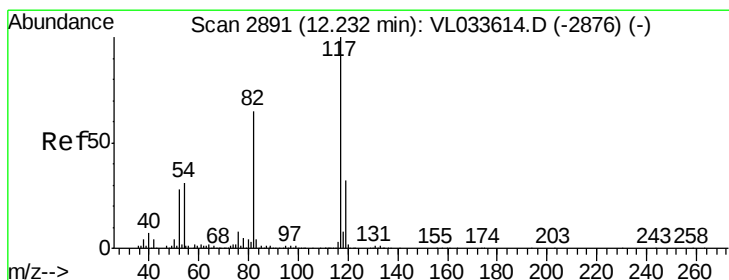
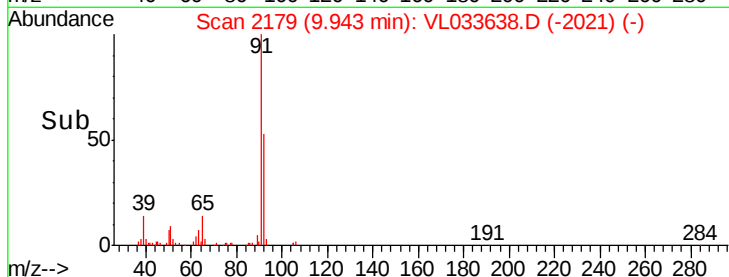
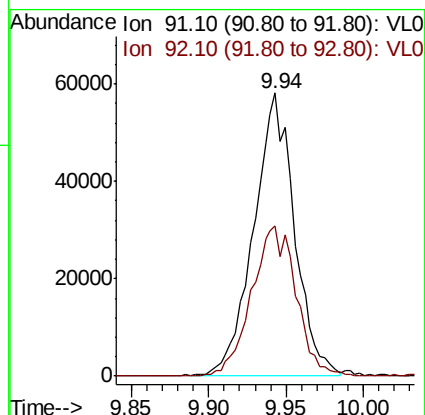
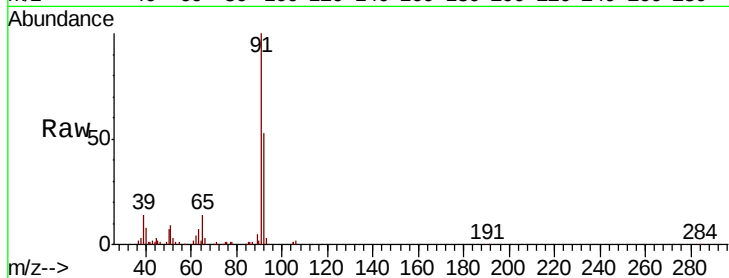
A-7

Tgt Ion: 91 Resp: 106009

Ion Ratio Lower Upper

91 100

92 57.9 47.8 71.6



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.23 min Scan# 2891

Delta R.T. 0.00 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

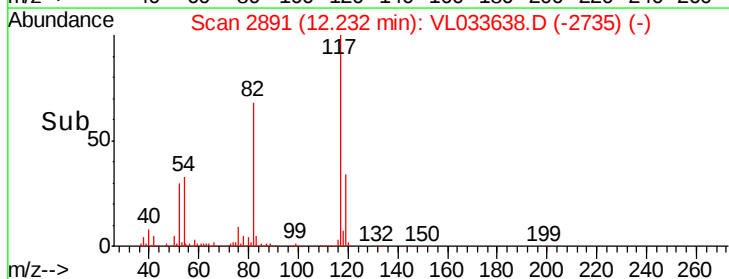
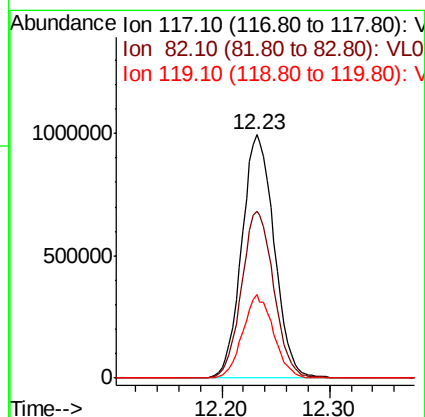
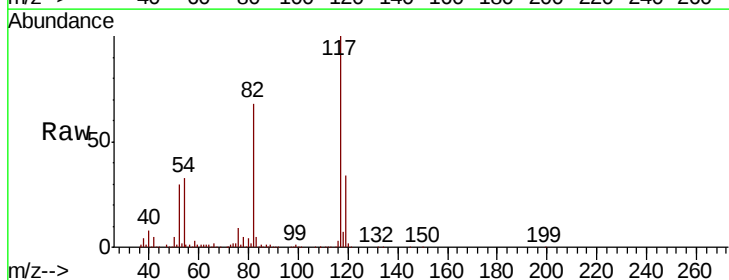
Tgt Ion: 117 Resp: 2078611

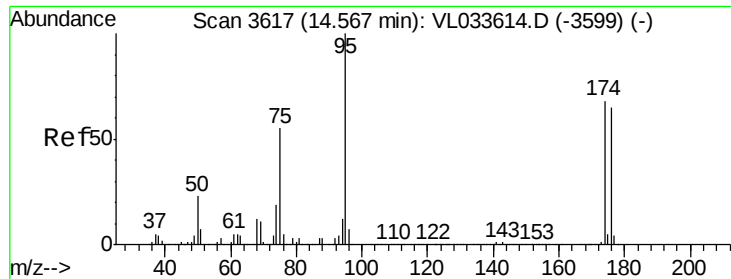
Ion Ratio Lower Upper

117 100

82 68.4 52.6 78.8

119 32.8 28.3 42.5





#68

1-Bromo-4-Fluorobenzene

Concen: 10.972 ppbv

RT: 14.57 min Scan# 3617

Delta R.T. 0.00 min

Lab File: VL033638.D

Acq: 2 May 2019 21:45

Instrument :

MSVOA_L

ClientSampleId :

A-7

Tgt Ion: 95 Resp: 1736219

Ion Ratio Lower Upper

95 100

174 65.8 53.9 80.9

175 4.7 4.0 6.0

