

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071818\
 Data File : VL032279.D
 Acq On : 19 Jul 2018 3:08
 Operator : SY/AP
 Sample : J3454-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jul 19 04:12:31 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL071818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jul 18 14:38:53 2018
 QLast Update : Wed Jul 18 14:38:53 2018
 Response via : Initial Calibration

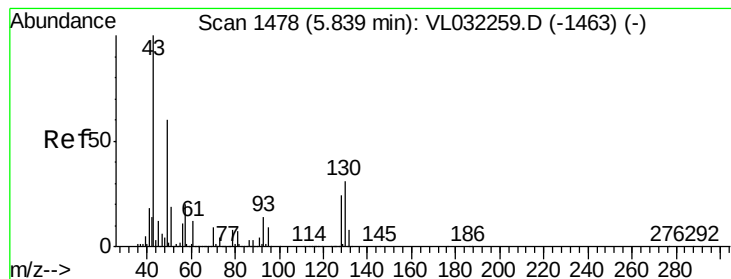
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.84	49	1707028	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.37	114	3311337	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.33	117	4004084	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.67	95	3168488	9.76	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.60%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.13	85	142381	0.491	ppbv 97
3) Chlorodifluoromethane	3.04	51	684169	3.571	ppbv # 65
4) Chloromethane	3.22	50	63631	0.564	ppbv 98
8) Dichlorotetrafluoroethane	3.27	85	5429	0.023	ppbv # 76
9) Propene	3.10	41	30144	0.360	ppbv 89
10) Heptane	8.33	43	13289	0.050	ppbv # 38
11) Trichlorofluoromethane	4.07	101	54120	0.238	ppbv 94
12) 1,1,2-Trichlorotrifluoroet	4.62	101	5754	0.040	ppbv # 10
13) Ethanol	3.71	45	1797819	75.155	ppbv 98
15) Acetone	3.96	43	1550898	8.681	ppbv 96
16) 1,3-Butadiene	3.40	39	6853	0.075	ppbv # 5
17) tert-Butyl alcohol	4.45	59	10496	0.186	ppbv # 72
19) Isopropyl Alcohol	4.10	45	360698	2.985	ppbv # 1
20) Methylene Chloride	4.47	84	85703	1.246	ppbv 91
23) Vinyl Acetate	5.21	43	89472	0.279	ppbv # 77
25) Ethyl Acetate	5.85	43	235672	0.606	ppbv # 91
26) Hexane	5.86	57	198580	1.111	ppbv # 59
34) 2-Butanone	5.41	43	148752	0.655	ppbv 97
35) Carbon Tetrachloride	7.22	117	9548	0.042	ppbv 90
36) Benzene	7.08	78	16940	0.052	ppbv # 86
37) 1,2-Dichloroethane	6.49	62	4356	0.023	ppbv # 82
39) 1,2-Dichloropropane	7.37	63	943648	7.313	ppbv # 25
41) Tetrahydrofuran	6.21	42	13763	0.104	ppbv # 51
43) Methyl Methacrylate	8.22	69	5458	0.041	ppbv # 1
53) Toluene	10.03	91	101193	0.256	ppbv 98
59) m/p-Xylene	13.24	91	17067	0.035	ppbv # 31
60) o-Xylene	13.94	91	33835	0.071	ppbv 94

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.84 min Scan# 1477

Delta R.T. -0.00 min

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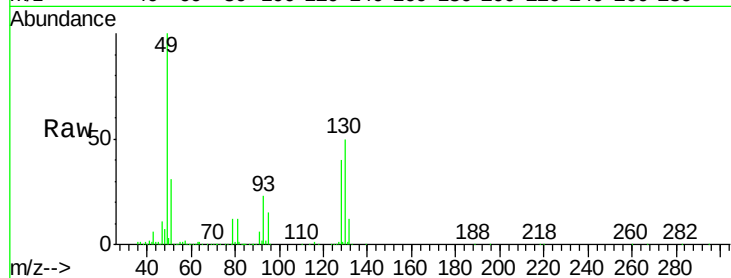
Tot Ion: 49 Resp: 1707028

Ion Ratio Lower Upper

49 100

128 39.6 20.1 60.2

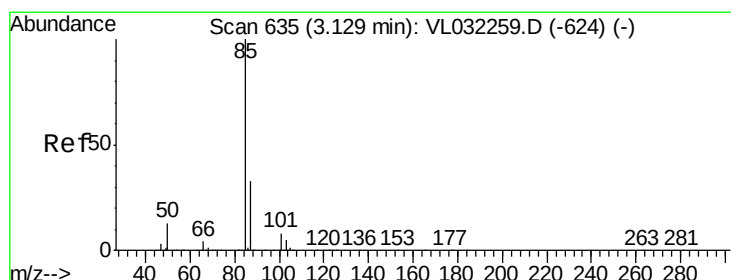
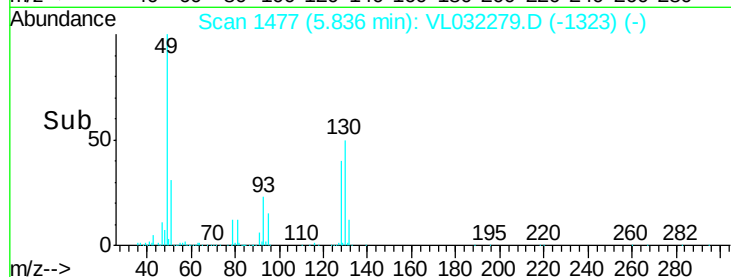
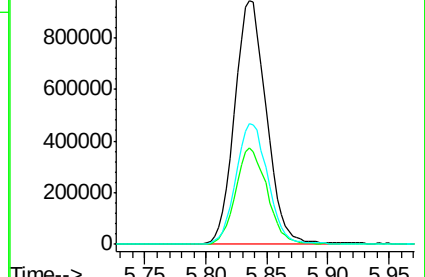
130 50.4 25.9 77.6



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.491 ppbv

RT: 3.13 min Scan# 635

Delta R.T. -0.00 min

Lab File: VL032279.D

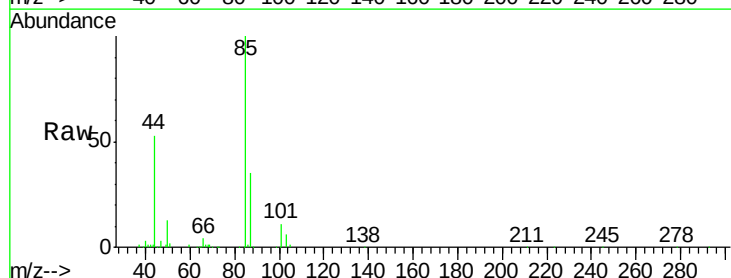
Acq: 19 Jul 2018 3:08

Tgt Ion: 85 Resp: 142381

Ion Ratio Lower Upper

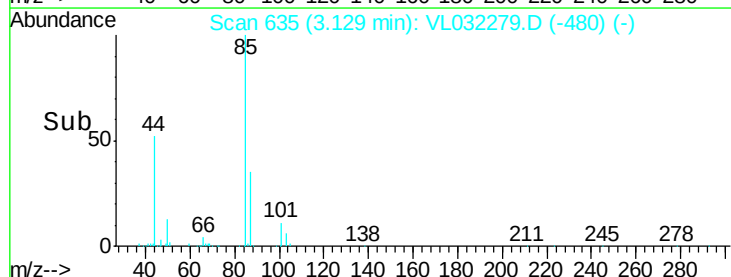
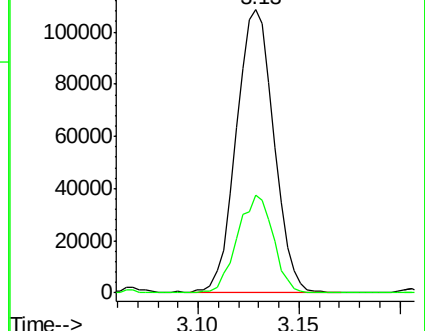
85 100

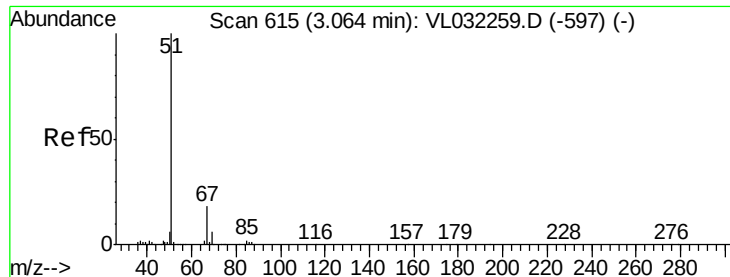
87 34.7 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

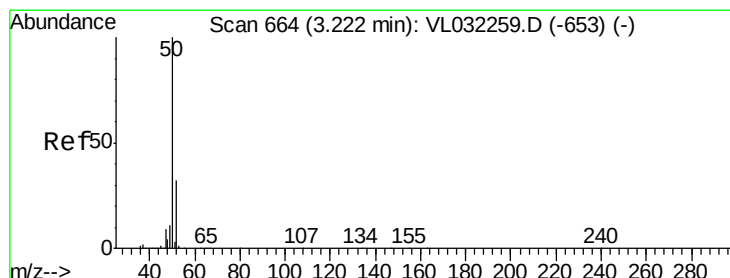
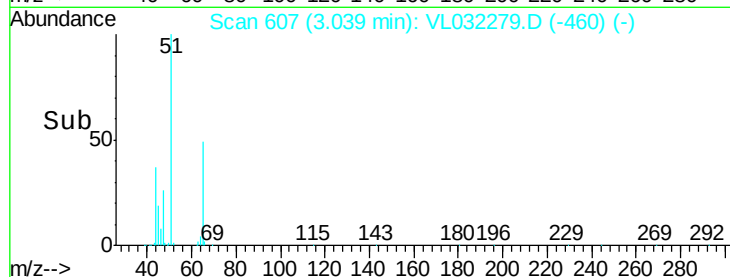
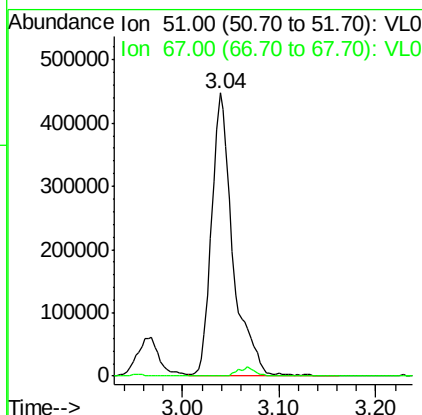
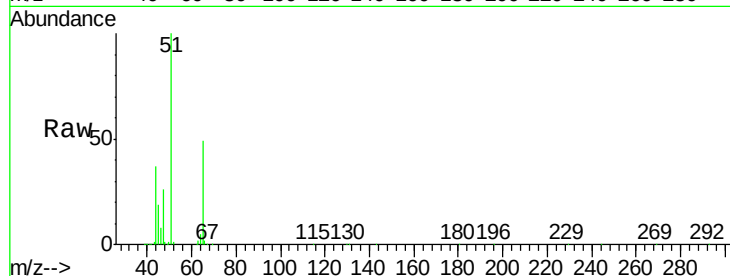




#3
 Chlorodifluoromethane
 Concen: 3.571 ppbv
 RT: 3.04 min Scan# 607
 Delta R.T. -0.03 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

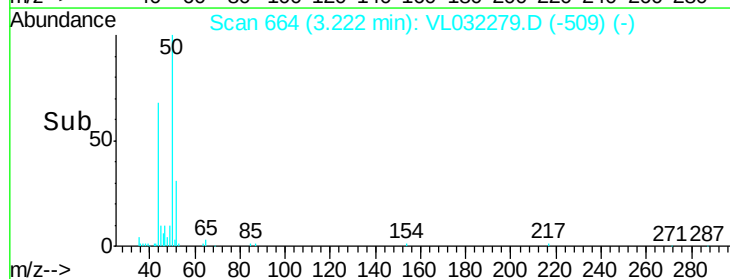
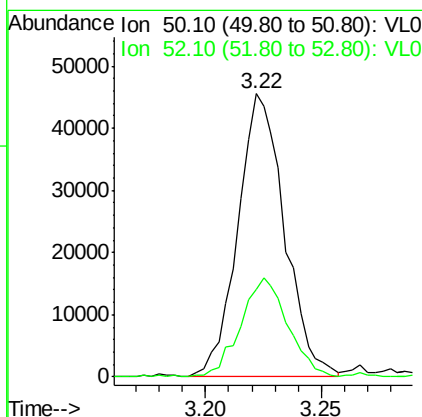
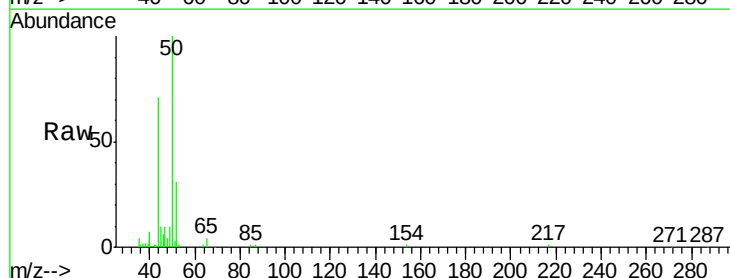
Instrument :
 MSVOA_L
 ClientSampleId :

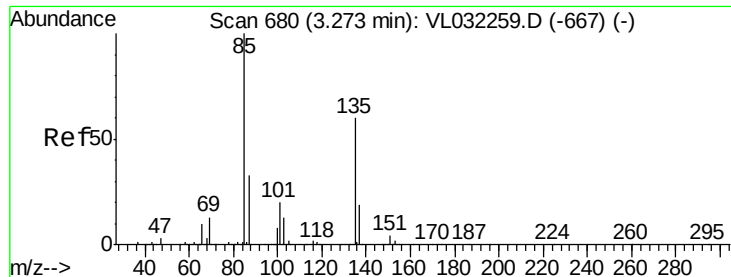
Tot Ion: 51 Resp: 684169
 Ion Ratio Lower Upper
 51 100
 67 2.6 14.2 21.4#



#4
 Chloromethane
 Concen: 0.564 ppbv
 RT: 3.22 min Scan# 664
 Delta R.T. -0.00 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

Tgt Ion: 50 Resp: 63631
 Ion Ratio Lower Upper
 50 100
 52 30.7 25.3 37.9





#8

Dichlorotetrafluoroethane

Concen: 0.023 ppbv

RT: 3.27 min Scan# 678

Delta R.T. -0.01 min

Lab File: VL032279.D

Acq: 19 Jul 2018 3:08

Instrument :

MSVOA_L

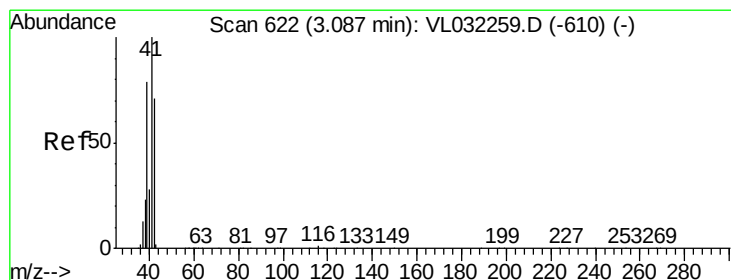
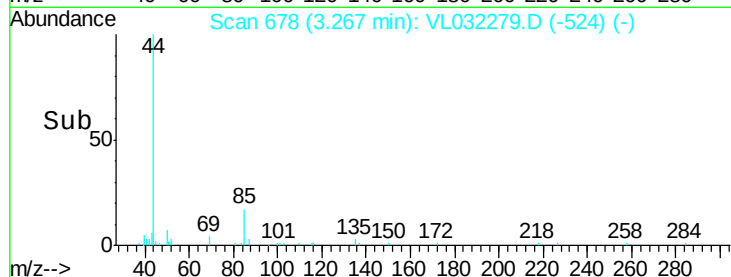
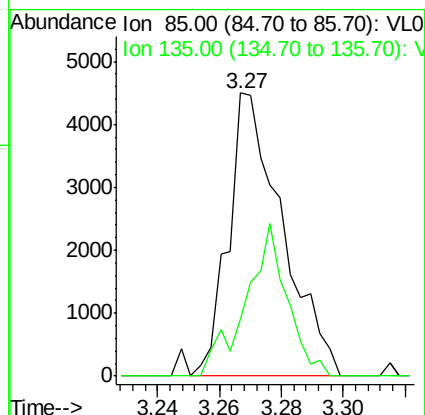
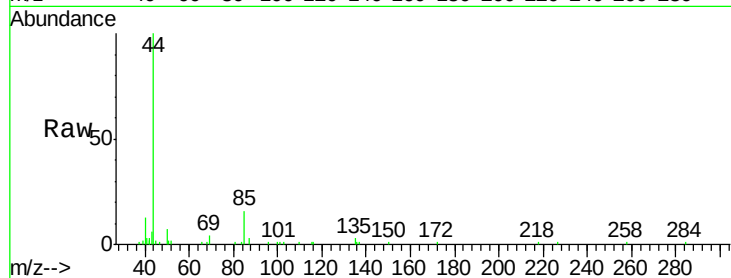
ClientSampled :

Tot Ion: 85 Resp: 5429

Ion Ratio Lower Upper

85 100

135 41.6 47.8 71.8#



#9

Propene

Concen: 0.360 ppbv

RT: 3.10 min Scan# 626

Delta R.T. 0.01 min

Lab File: VL032279.D

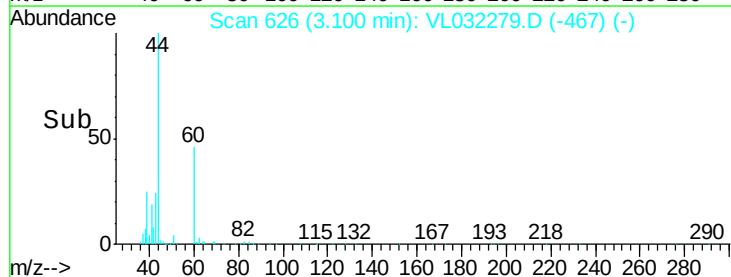
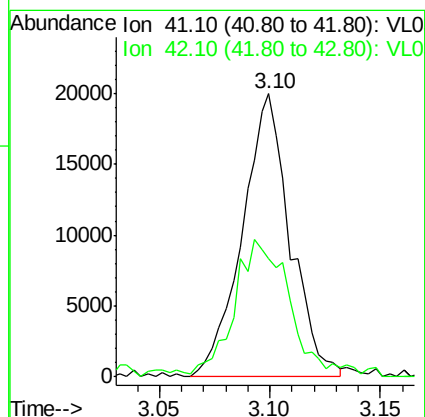
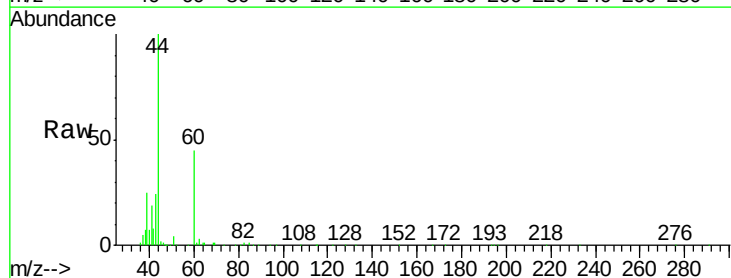
Acq: 19 Jul 2018 3:08

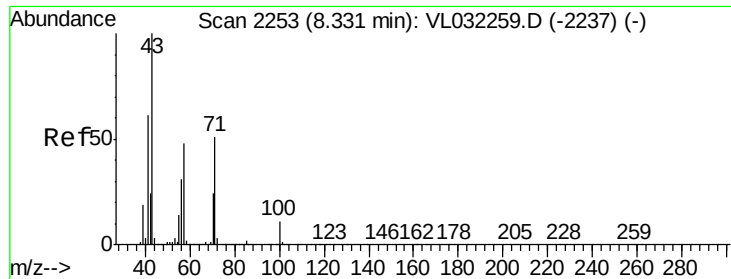
Tgt Ion: 41 Resp: 30144

Ion Ratio Lower Upper

41 100

42 61.0 56.2 84.4

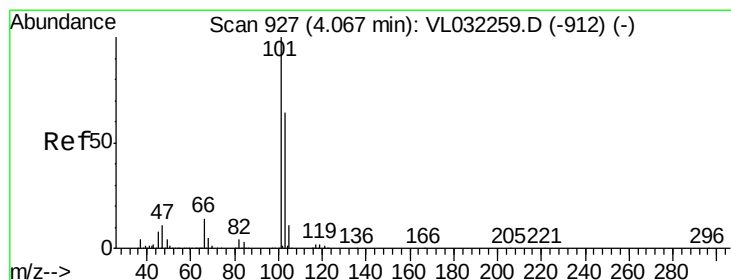
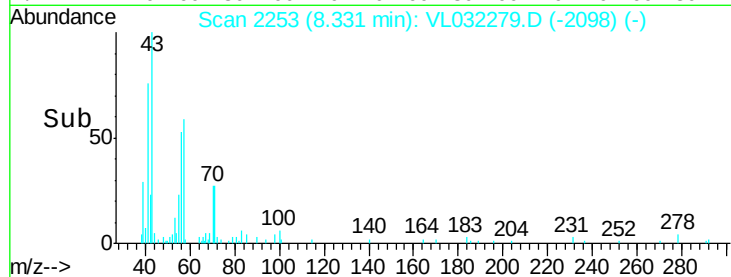
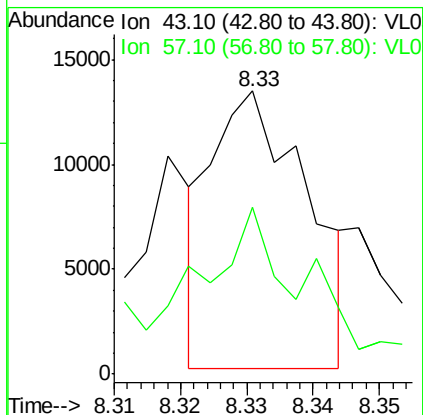
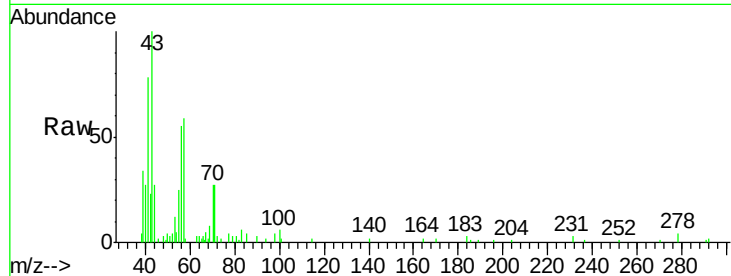




#10
 Heptane
 Concen: 0.050 ppbv
 RT: 8.33 min Scan# 2253
 Delta R.T. -0.00 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

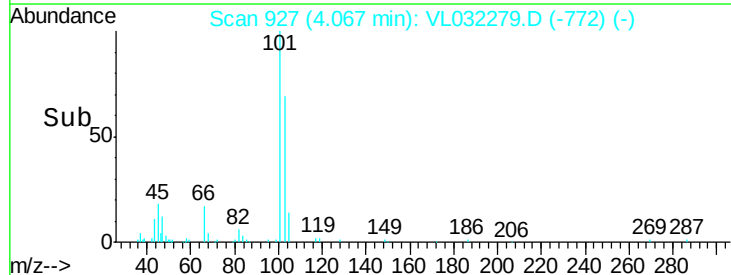
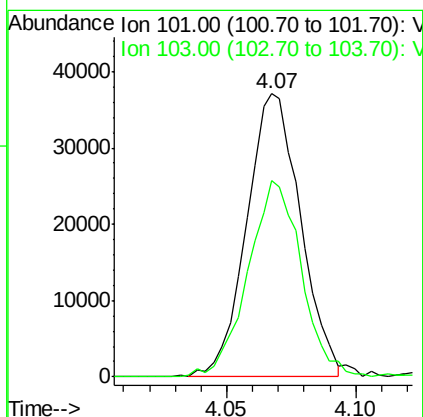
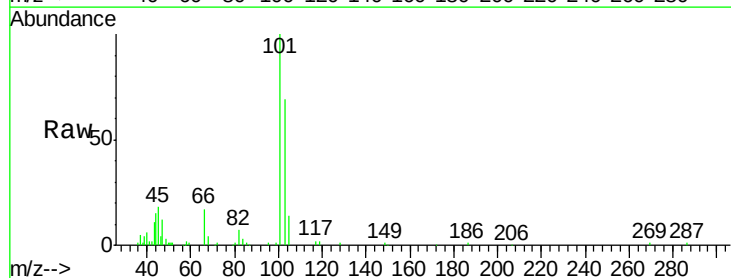
Instrument :
 MSVOA_L
 ClientSampleId :

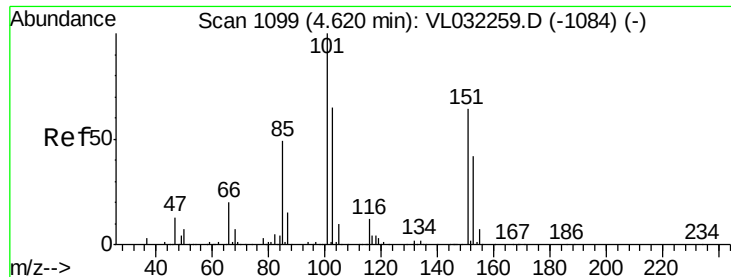
Tot Ion: 43 Resp: 13289
 Ion Ratio Lower Upper
 43 100
 57 92.6 39.9 59.9#



#11
 Trichlorofluoromethane
 Concen: 0.238 ppbv
 RT: 4.07 min Scan# 927
 Delta R.T. -0.00 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

Tgt Ion:101 Resp: 54120
 Ion Ratio Lower Upper
 101 100
 103 68.8 51.5 77.3

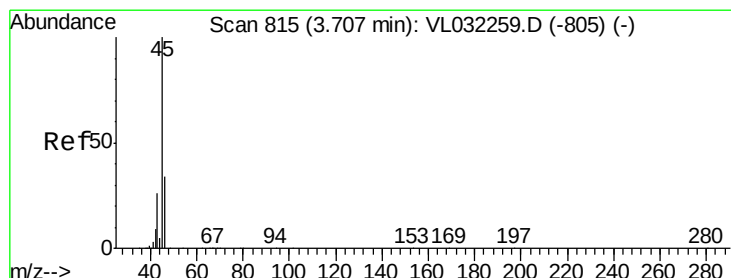
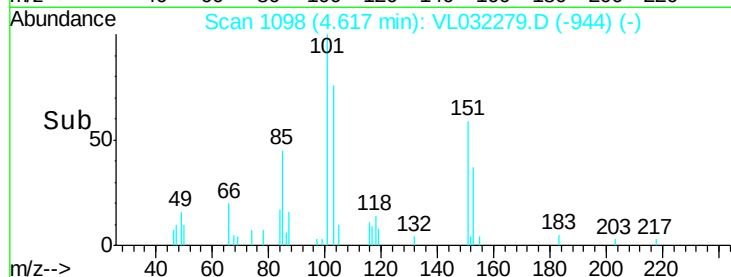
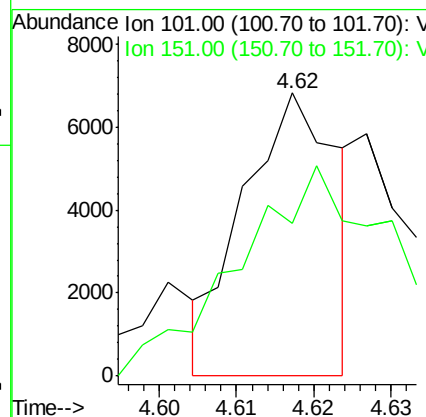
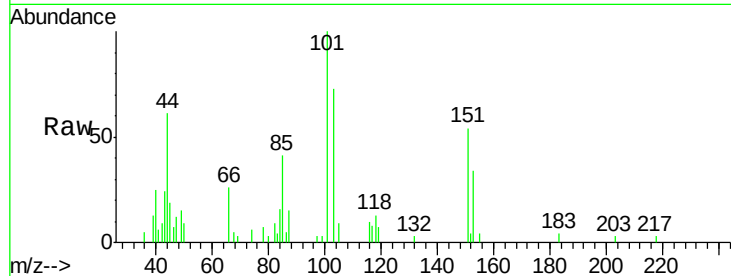




#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.040 ppbv
 RT: 4.62 min Scan# 1098
 Delta R.T. -0.00 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

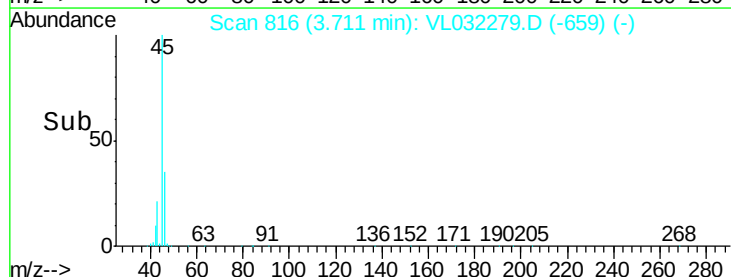
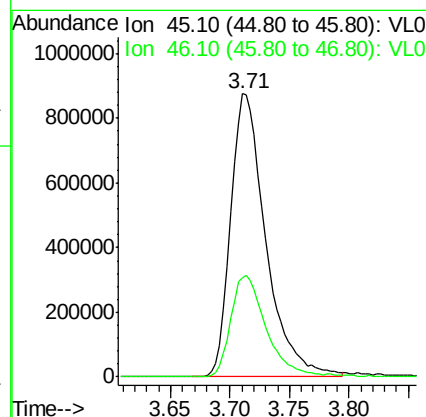
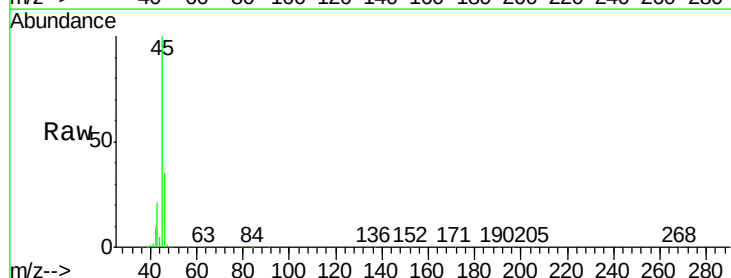
Instrument :
 MSVOA_L
 ClientSampleId :

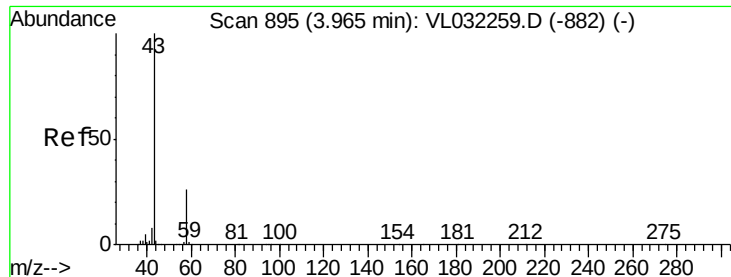
Tot Ion:101 Resp: 5754
 Ion Ratio Lower Upper
 101 100
 151 134.4 51.3 76.9#



#13
 Ethanol
 Concen: 75.155 ppbv
 RT: 3.71 min Scan# 816
 Delta R.T. 0.00 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

Tgt Ion: 45 Resp: 1797819
 Ion Ratio Lower Upper
 45 100
 46 36.6 15.2 60.8





#15

Acetone

Concen: 8.681 ppbv

RT: 3.96 min Scan# 894

Delta R.T. -0.00 min

Lab File: VL032279.D

Acq: 19 Jul 2018 3:08

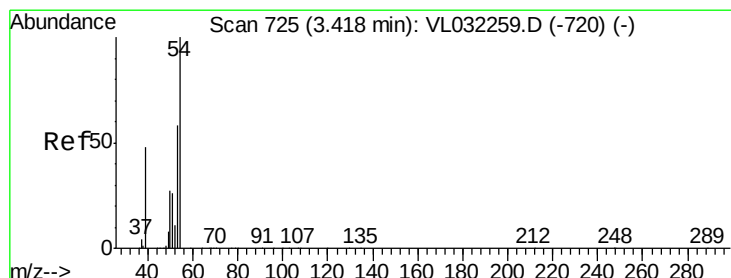
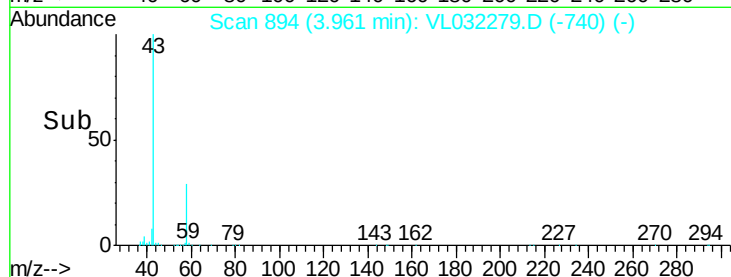
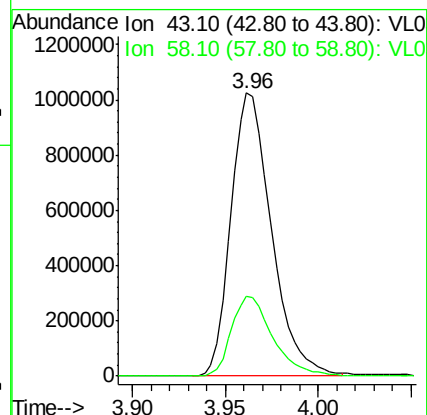
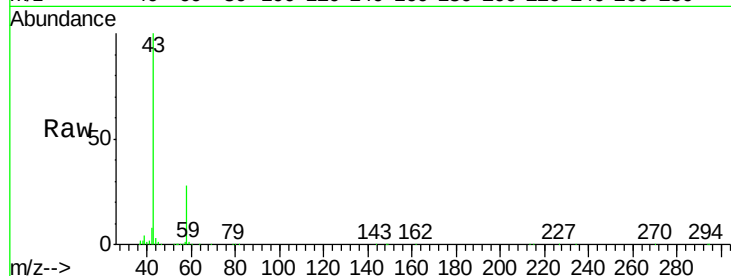
Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 43 Resp: 1550898

Ion Ratio Lower Upper

43 100

58 29.1 21.8 32.6



#16

1,3-Butadiene

Concen: 0.075 ppbv

RT: 3.40 min Scan# 718

Delta R.T. -0.02 min

Lab File: VL032279.D

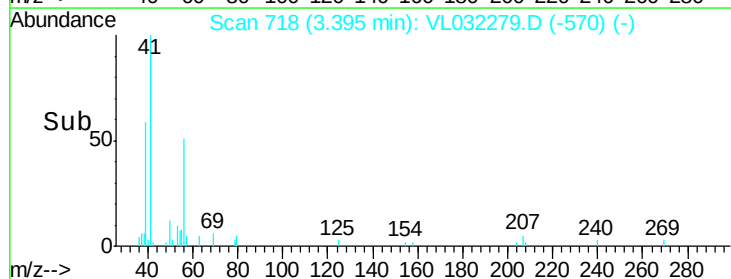
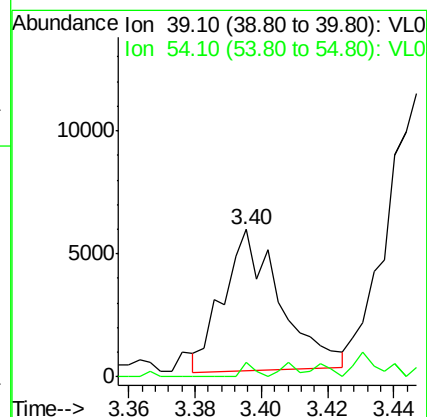
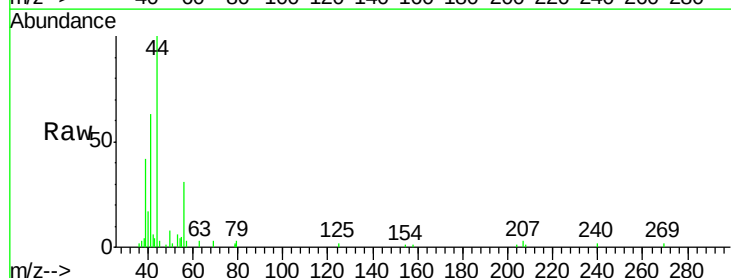
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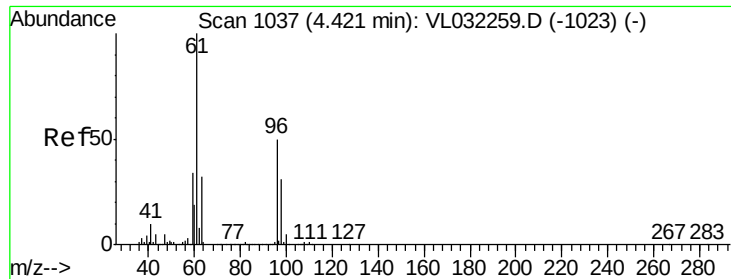
Tgt Ion: 39 Resp: 6853

Ion Ratio Lower Upper

39 100

54 0.0 70.6 105.8#

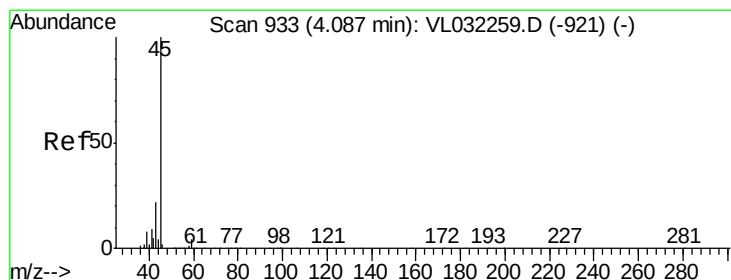
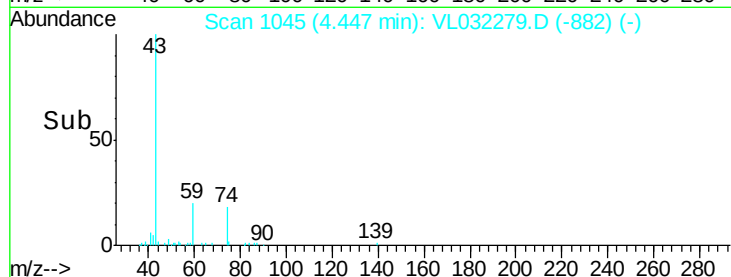
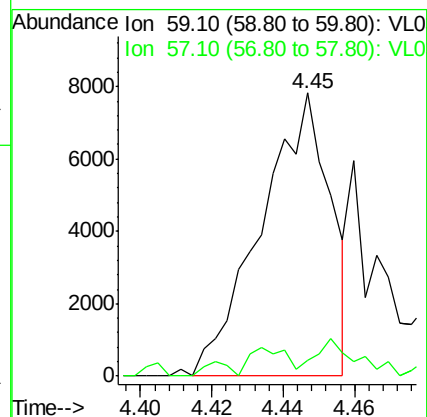
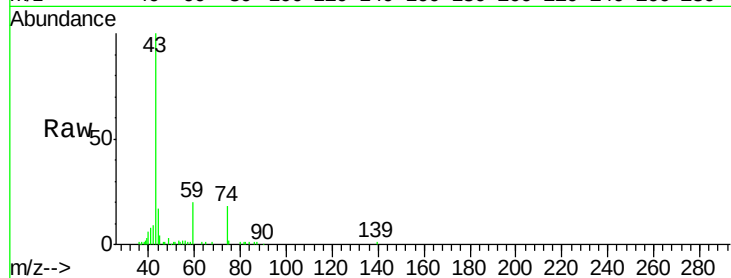




#17
tert-Butyl alcohol
Concen: 0.186 ppbv
RT: 4.45 min Scan# 1045
Delta R.T. 0.03 min
Lab File: VL032279.D
Acq: 19 Jul 2018 3:08

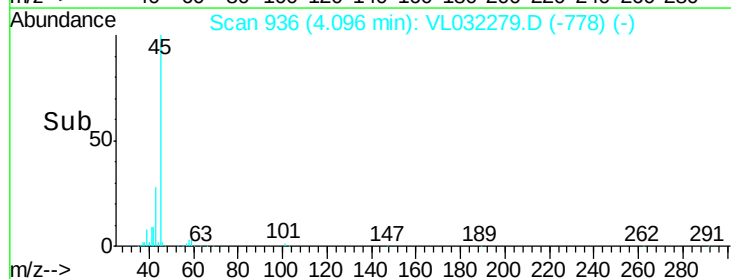
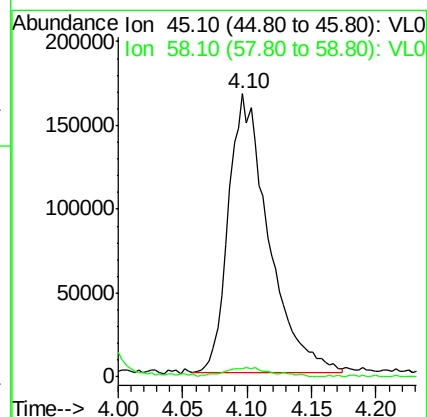
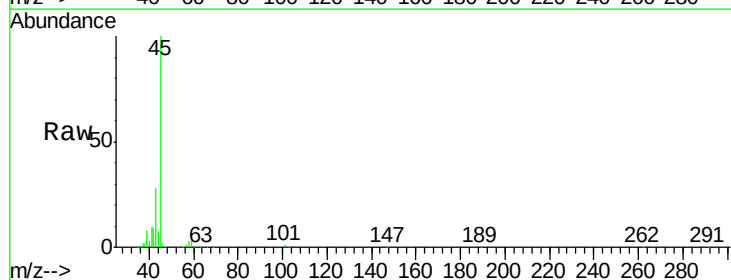
Instrument :
MSVOA_L
ClientSampleId :

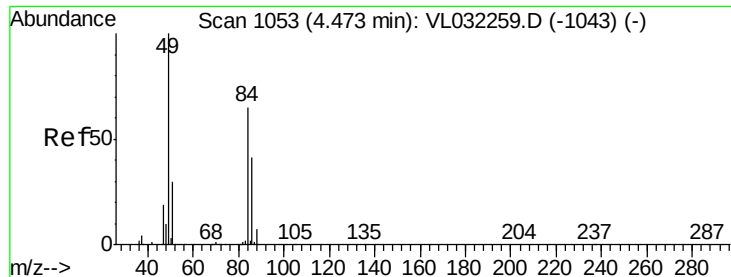
Tot Ion: 59 Resp: 10496
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.4#



#19
Isopropyl Alcohol
Concen: 2.985 ppbv
RT: 4.10 min Scan# 936
Delta R.T. 0.01 min
Lab File: VL032279.D
Acq: 19 Jul 2018 3:08

Tgt Ion: 45 Resp: 360698
Ion Ratio Lower Upper
45 100
58 124.6 1.5 2.3#

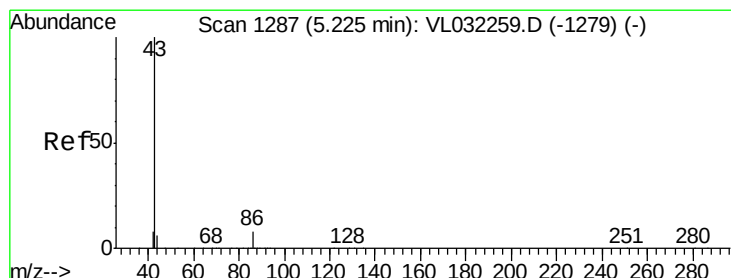
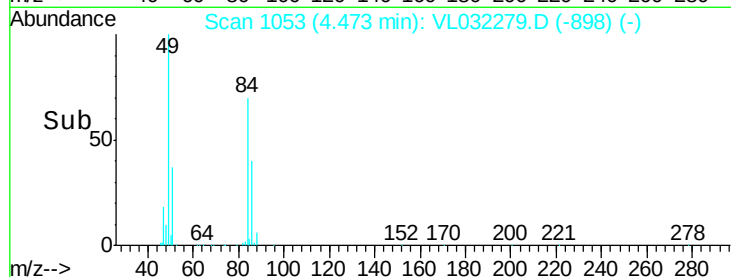
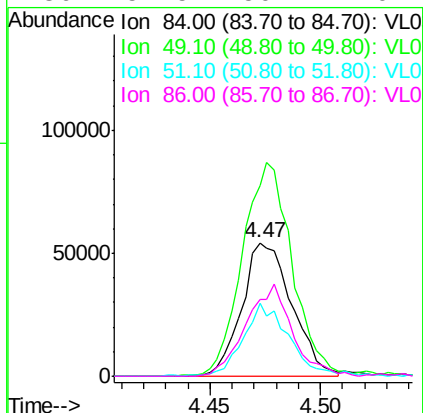
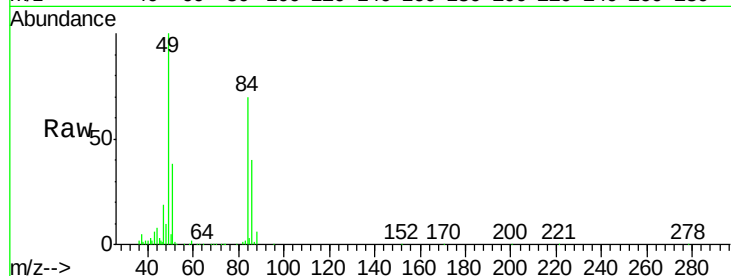




#20
Methvlene Chloride
Concen: 1.246 ppbv
RT: 4.47 min Scan# 1053
Delta R.T. -0.00 min
Lab File: VL032279.D
Acq: 19 Jul 2018 3:08

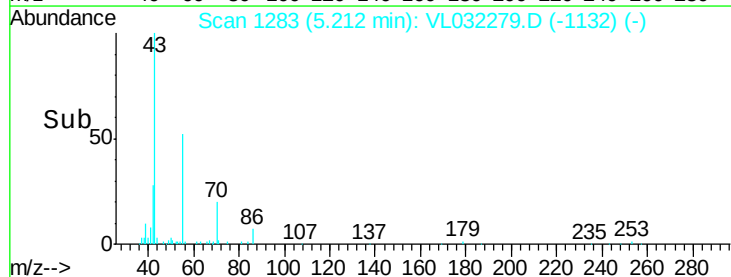
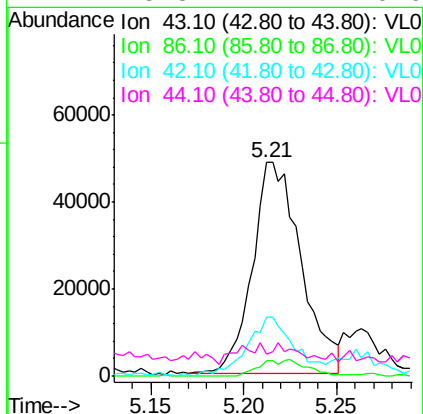
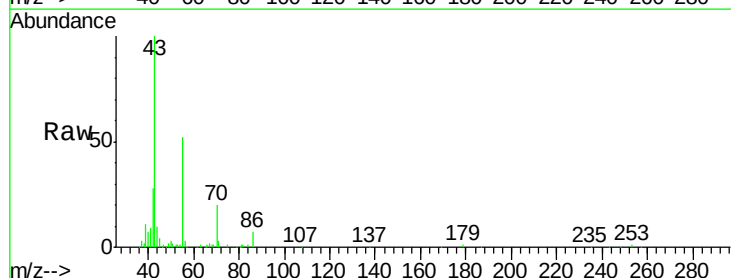
Instrument :
MSVOA_L
ClientSampleId :

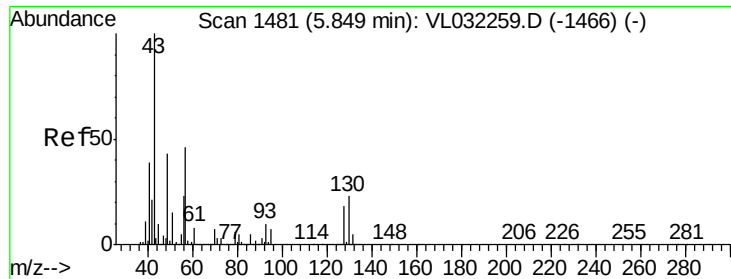
Tot Ion:	84	Resp:	85703
Ion	Ratio	Lower	Upper
84	100		
49	142.4	122.4	183.6
51	54.7	36.8	55.2
86	57.5	50.7	76.1



#23
Vinyl Acetate
Concen: 0.279 ppbv
RT: 5.21 min Scan# 1283
Delta R.T. -0.01 min
Lab File: VL032279.D
Acq: 19 Jul 2018 3:08

Tgt Ion:	43	Resp:	89472
Ion	Ratio	Lower	Upper
43	100		
86	7.1	5.9	8.9
42	27.5	7.3	10.9#
44	3.8	4.4	6.6#

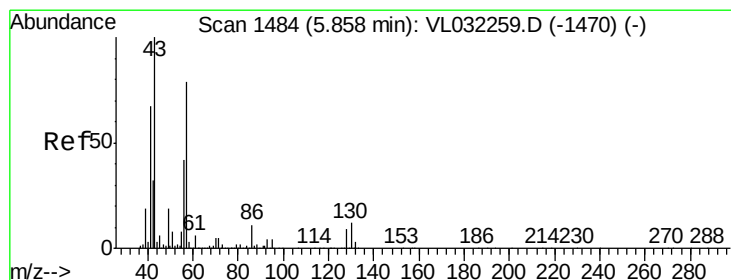
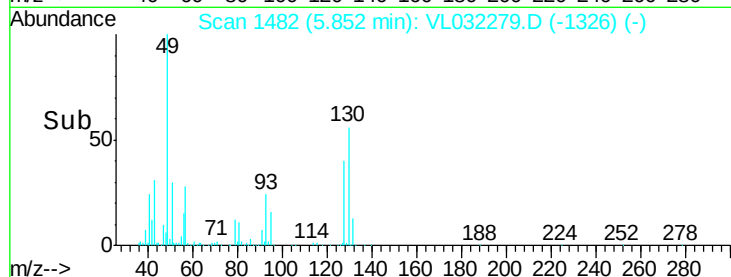
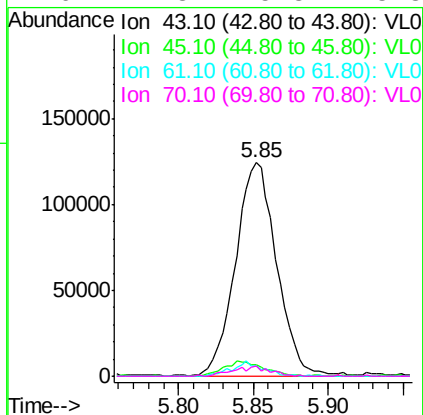
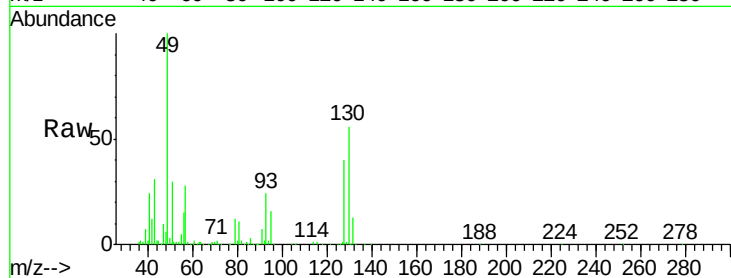




#25
Ethyl Acetate
Concen: 0.606 ppbv
RT: 5.85 min Scan# 1482
Delta R.T. 0.00 min
Lab File: VL032279.D
Acq: 19 Jul 2018 3:08

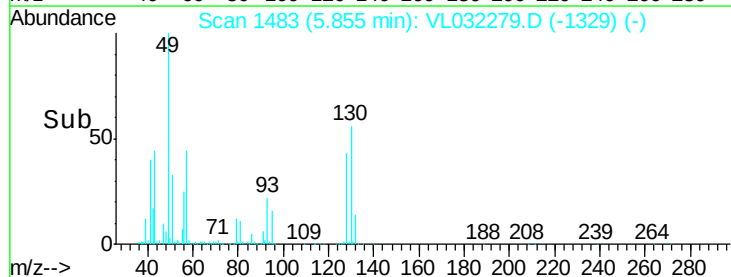
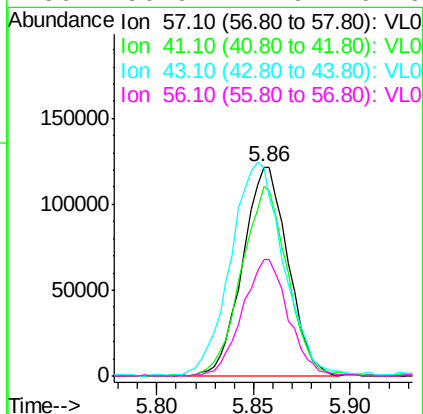
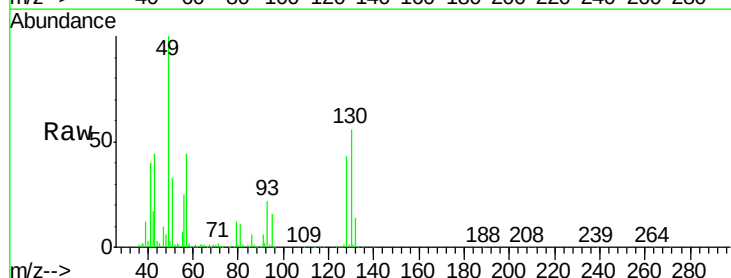
Instrument :
MSVOA_L
ClientSampleId :

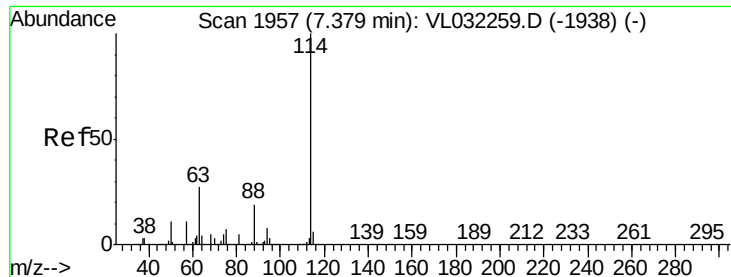
Tot Ion:	43	Resp:	235672
Ion	Ratio	Lower	Upper
43	100		
45	7.3	7.9	11.9#
61	5.5	7.6	11.4#
70	4.3	5.8	8.8#



#26
Hexane
Concen: 1.111 ppbv
RT: 5.86 min Scan# 1483
Delta R.T. -0.00 min
Lab File: VL032279.D
Acq: 19 Jul 2018 3:08

Tgt Ion:	57	Resp:	198580
Ion	Ratio	Lower	Upper
57	100		
41	92.6	67.9	101.9
43	120.4	175.9	263.9#
56	56.9	41.9	62.9



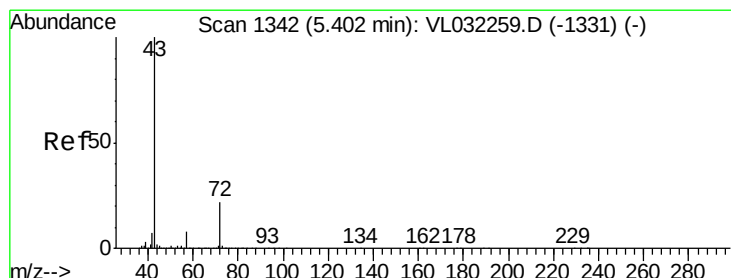
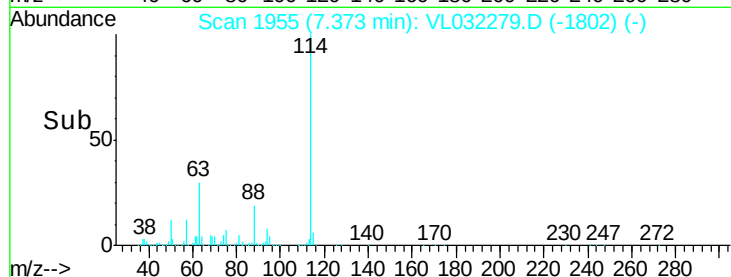
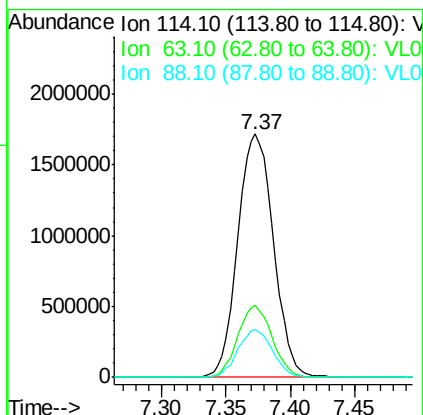
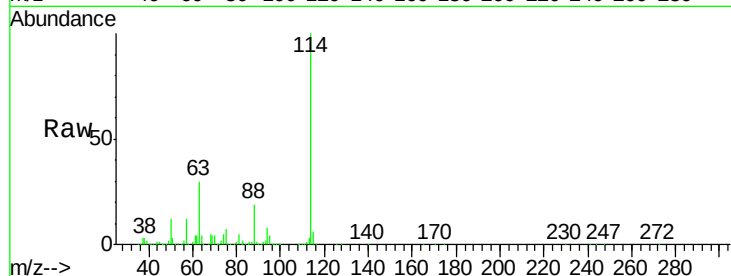


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.37 min Scan# 1955
 Delta R.T. -0.01 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:114 Resp: 3311337

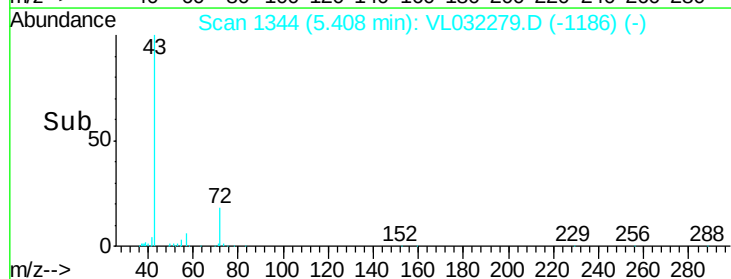
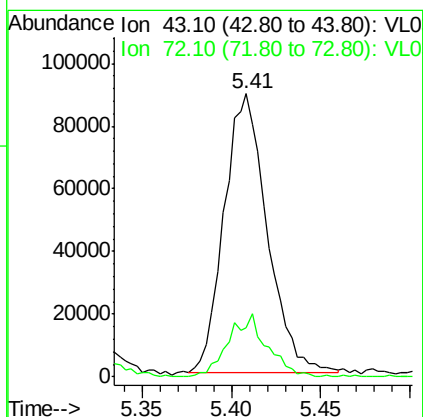
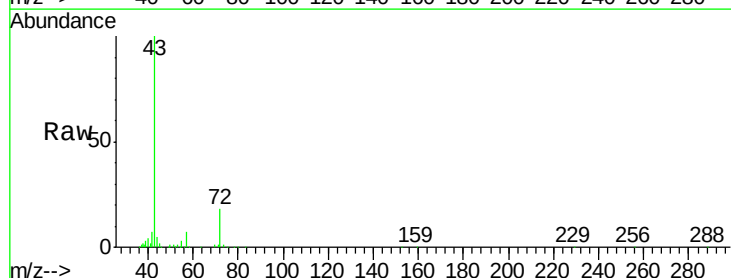
Ion	Ratio	Lower	Upper
114	100		
63	28.8	22.6	33.8
88	19.1	15.2	22.8

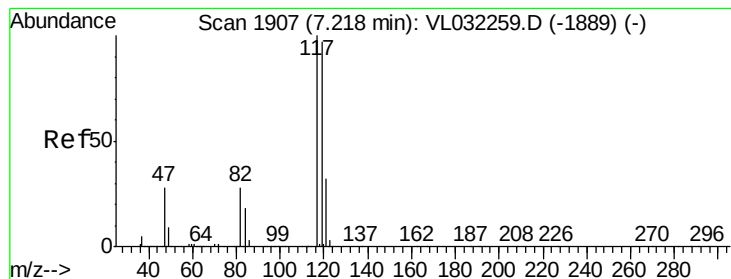


#34
 2-Butanone
 Concen: 0.655 ppbv
 RT: 5.41 min Scan# 1344
 Delta R.T. 0.01 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

Tgt Ion: 43 Resp: 148752

Ion	Ratio	Lower	Upper
43	100		
72	20.7	17.7	26.5





#35

Carbon Tetrachloride

Concen: 0.042 ppbv

RT: 7.22 min Scan# 1906

Delta R.T. -0.00 min

Lab File: VL032279.D

Acq: 19 Jul 2018 3:08

Instrument :

MSVOA_L

ClientSampleId :

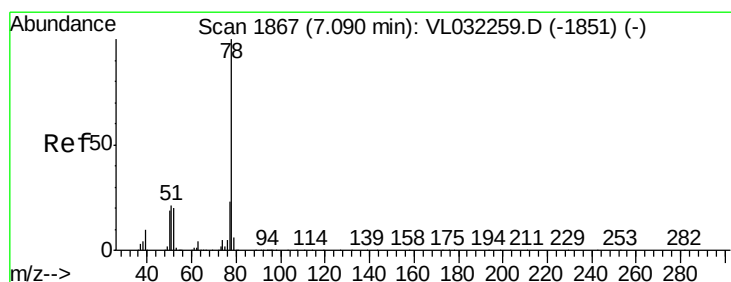
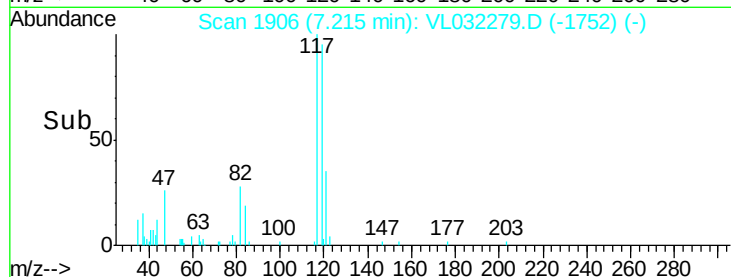
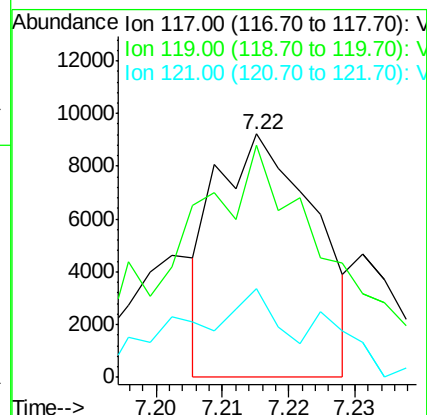
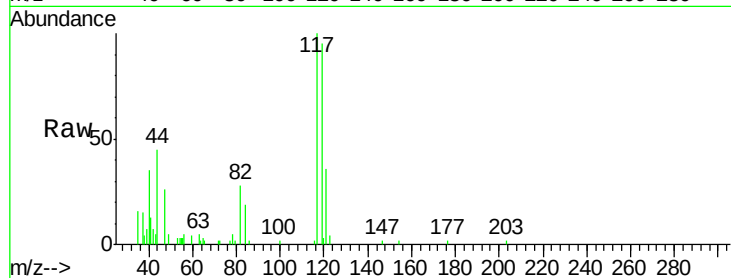
Tot Ion:117 Resp: 9548

Ion Ratio Lower Upper

117 100

119 84.2 77.4 116.0

121 29.8 25.4 38.2



#36

Benzene

Concen: 0.052 ppbv

RT: 7.08 min Scan# 1865

Delta R.T. -0.01 min

Lab File: VL032279.D

Acq: 19 Jul 2018 3:08

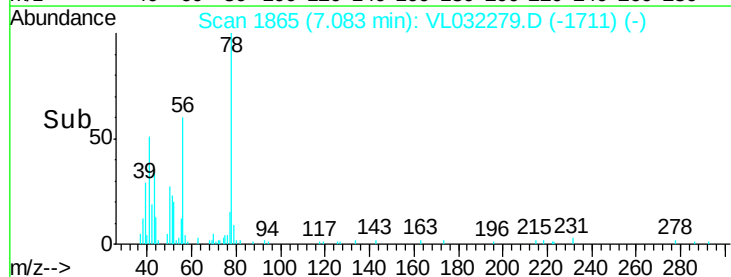
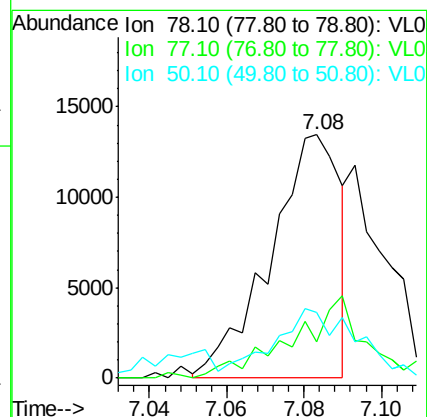
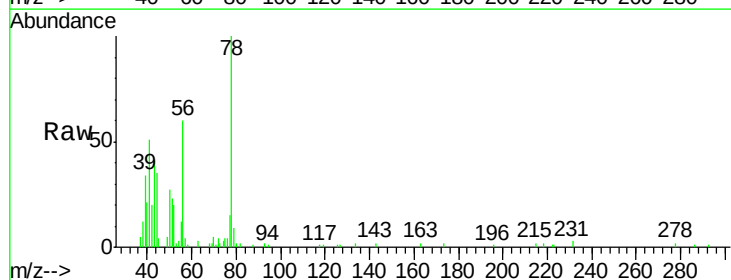
Tgt Ion: 78 Resp: 16940

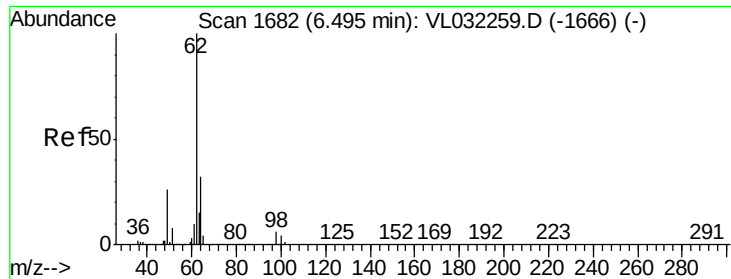
Ion Ratio Lower Upper

78 100

77 14.1 18.6 27.8#

50 15.3 15.0 22.6

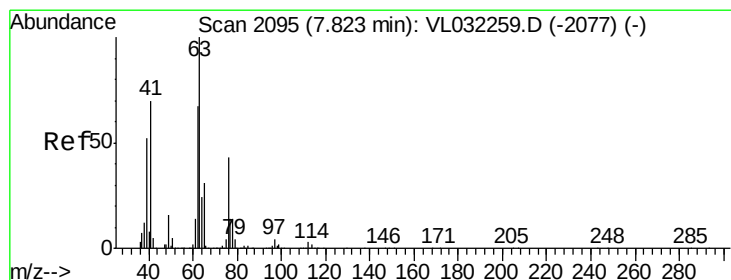
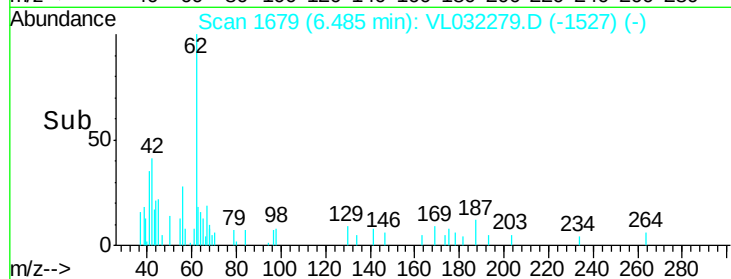
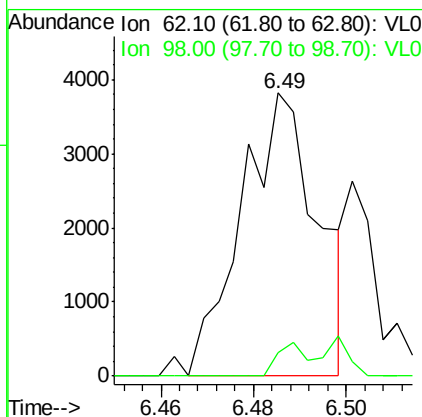
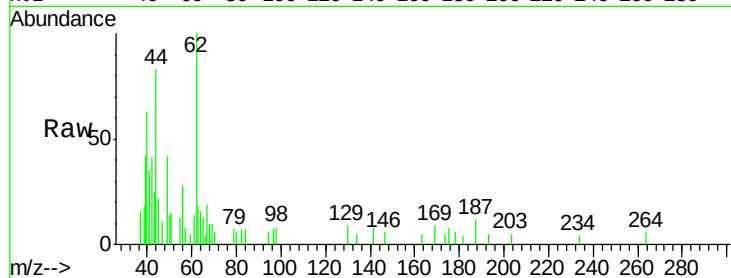




#37
 1,2-Dichloroethane
 Concen: 0.023 ppbv
 RT: 6.49 min Scan# 1679
 Delta R.T. -0.01 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

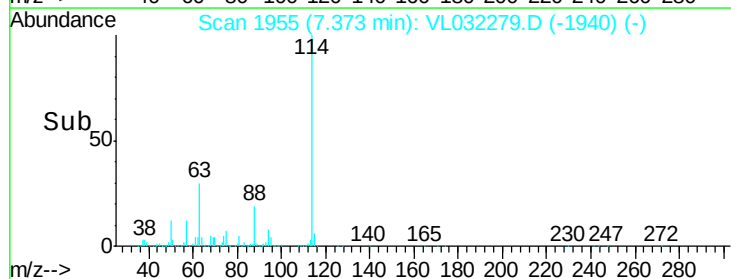
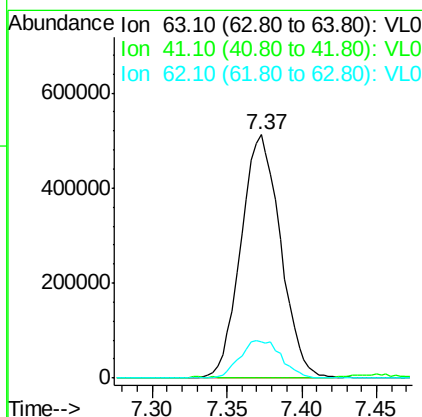
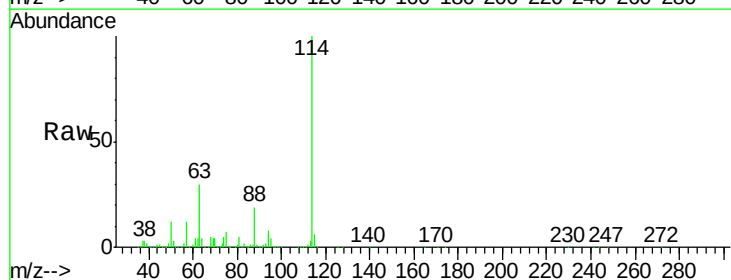
Instrument :
 MSVOA_L
 ClientSampleId :

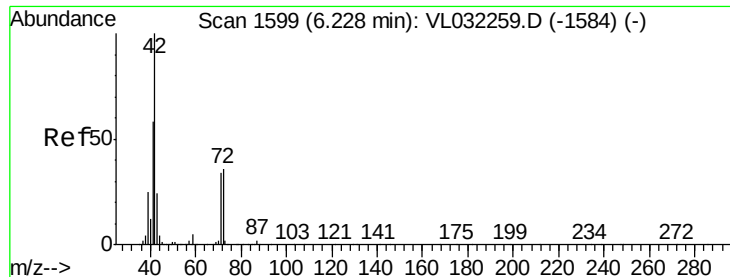
Tot Ion: 62 Resp: 4356
 Ion Ratio Lower Upper
 62 100
 98 0.0 4.9 7.3#



#39
 1,2-Dichloropropane
 Concen: 7.313 ppbv
 RT: 7.37 min Scan# 1955
 Delta R.T. -0.45 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

Tgt Ion: 63 Resp: 943648
 Ion Ratio Lower Upper
 63 100
 41 0.0 55.8 83.6#
 62 14.9 53.8 80.8#





#41

Tetrahydrofuran

Concen: 0.104 ppbv

RT: 6.21 min Scan# 1594

Delta R.T. -0.02 min

Lab File: VL032279.D

Acq: 19 Jul 2018 3:08

Instrument :

MSVOA_L

ClientSampleId :

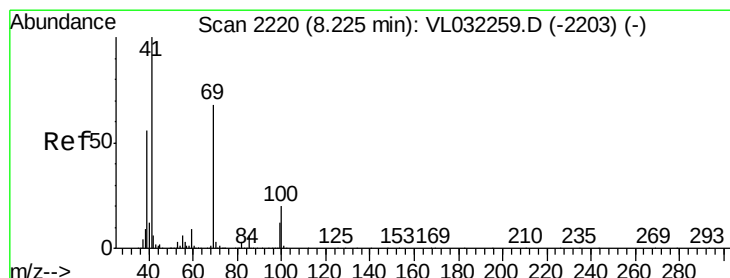
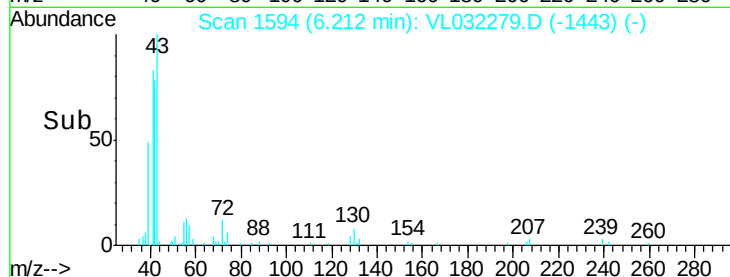
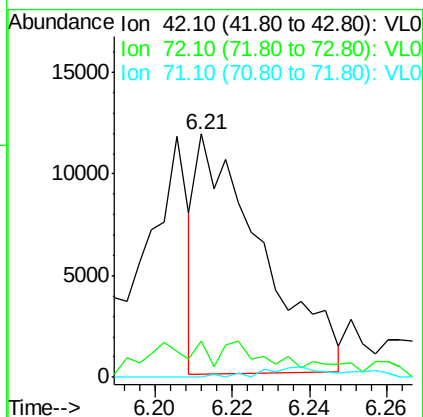
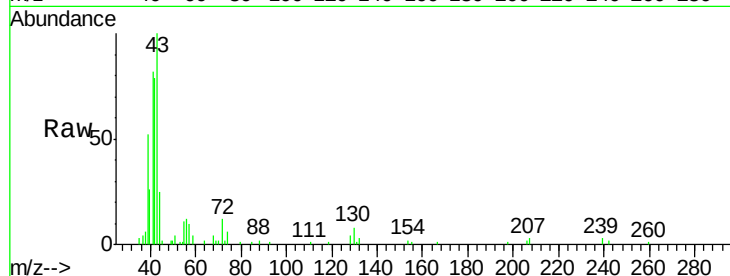
Tot Ion: 42 Resp: 13763

Ion Ratio Lower Upper

42 100

72 14.0 29.4 44.0#

71 0.0 28.2 42.4#



#43

Methyl Methacrylate

Concen: 0.041 ppbv

RT: 8.22 min Scan# 2218

Delta R.T. -0.01 min

Lab File: VL032279.D

Acq: 19 Jul 2018 3:08

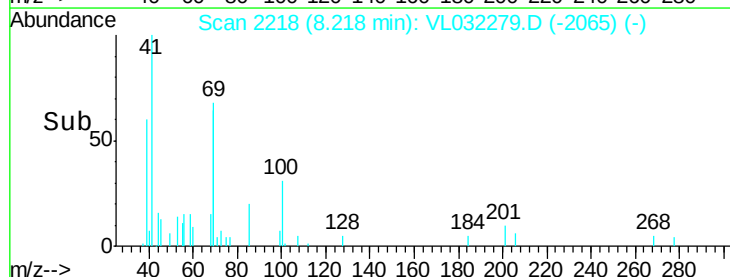
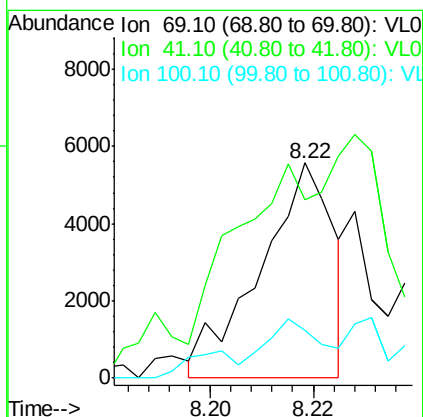
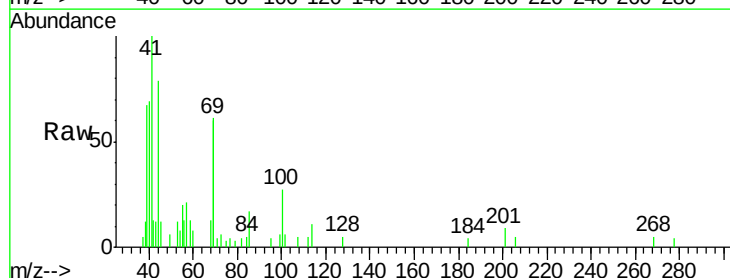
Tgt Ion: 69 Resp: 5458

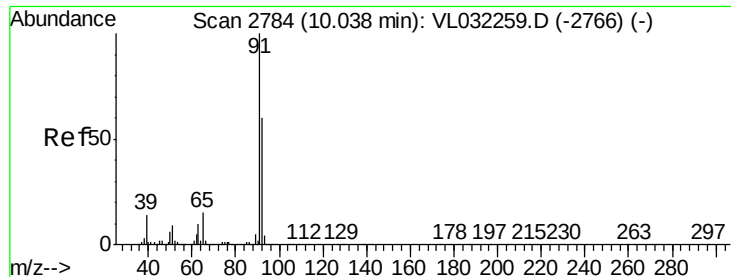
Ion Ratio Lower Upper

69 100

41 0.0 118.6 177.8#

100 0.0 23.3 34.9#





#53

Toluene

Concen: 0.256 ppbv

RT: 10.03 min Scan# 2782

Delta R.T. -0.01 min

Lab File: VL032279.D

Acq: 19 Jul 2018 3:08

Instrument :

MSVOA_L

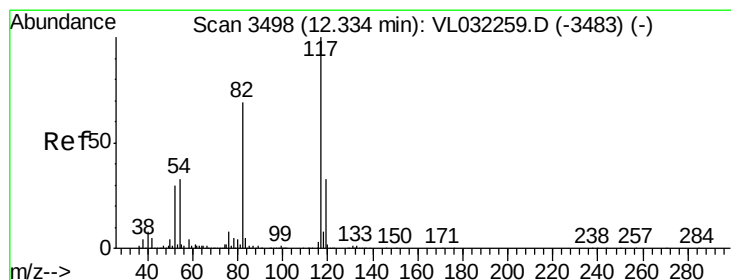
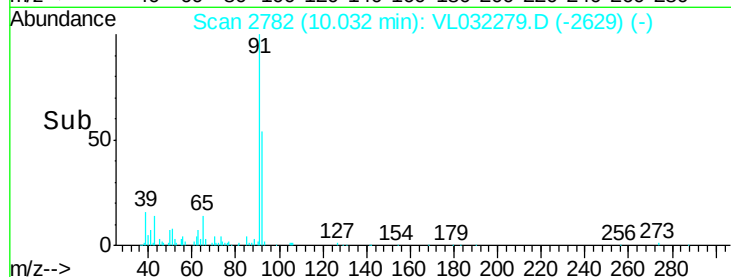
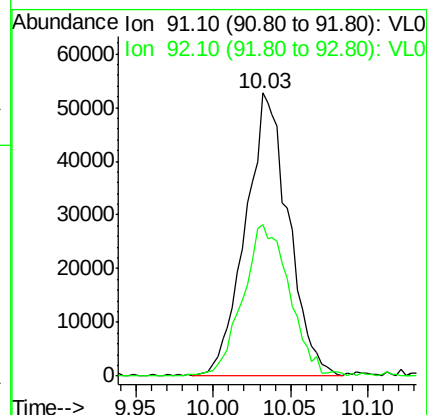
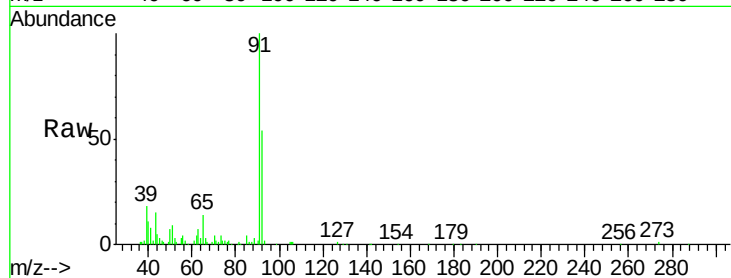
ClientSampled :

Tot Ion: 91 Resp: 101193

Ion Ratio Lower Upper

91 100

92 59.3 48.6 72.8



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.33 min Scan# 3497

Delta R.T. -0.00 min

Lab File: VL032279.D

Acq: 19 Jul 2018 3:08

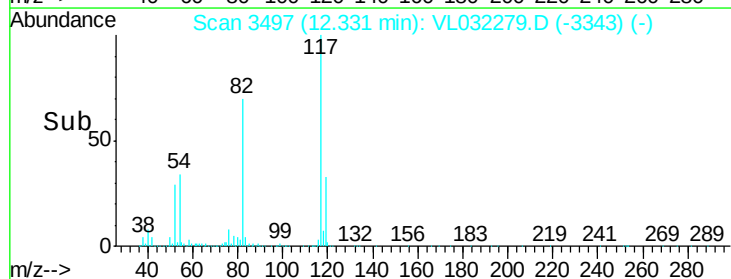
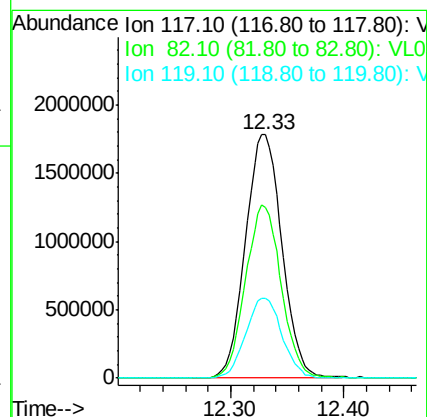
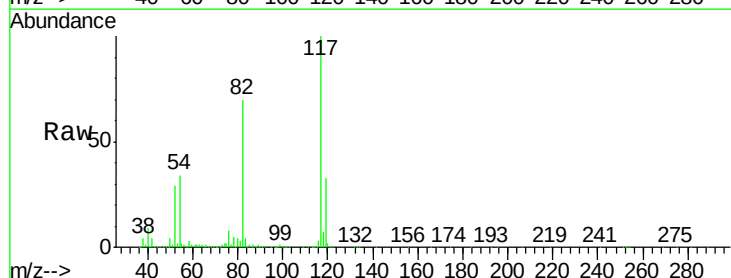
Tgt Ion: 117 Resp: 4004084

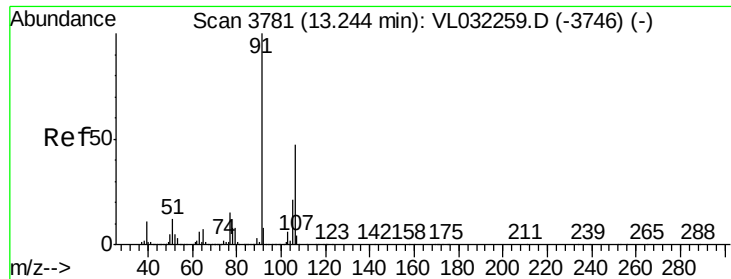
Ion Ratio Lower Upper

117 100

82 69.7 53.9 80.9

119 32.9 25.5 38.3

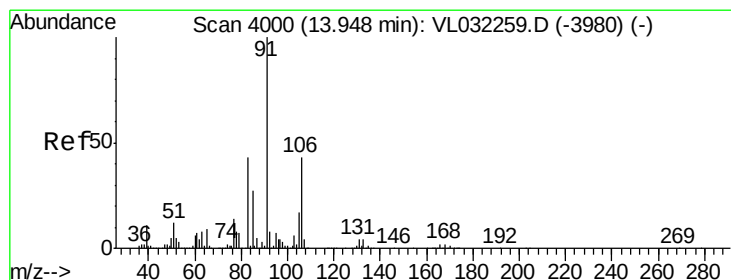
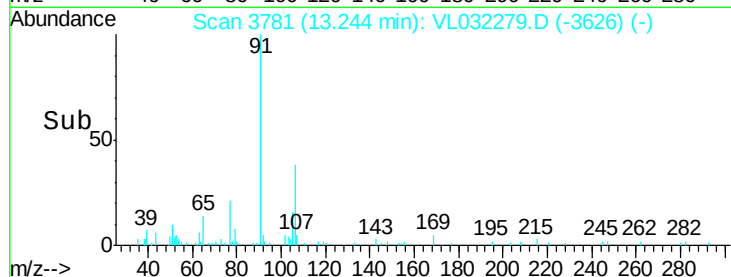
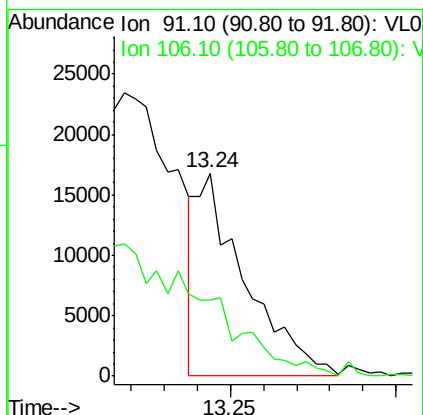
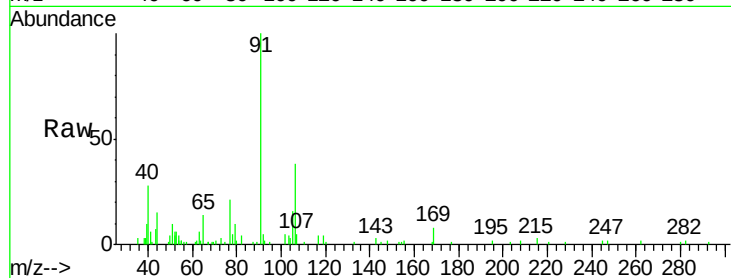




#59
m/p-Xylene
Concen: 0.035 ppbv
RT: 13.24 min Scan# 3781
Delta R.T. -0.00 min
Lab File: VL032279.D
Acq: 19 Jul 2018 3:08

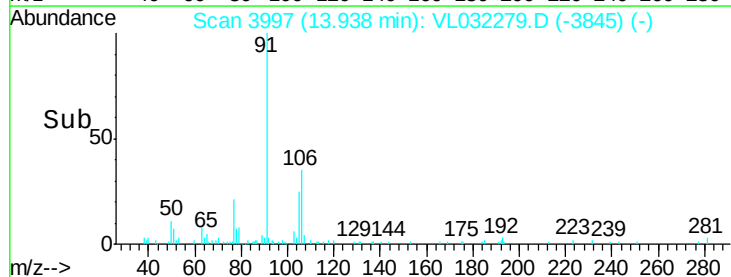
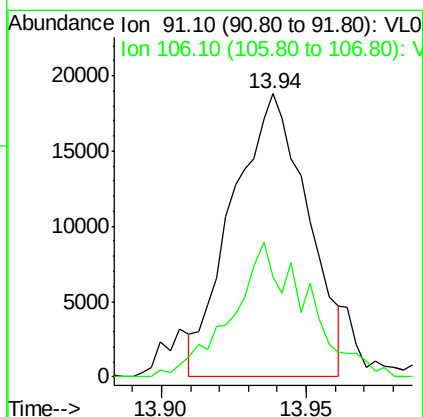
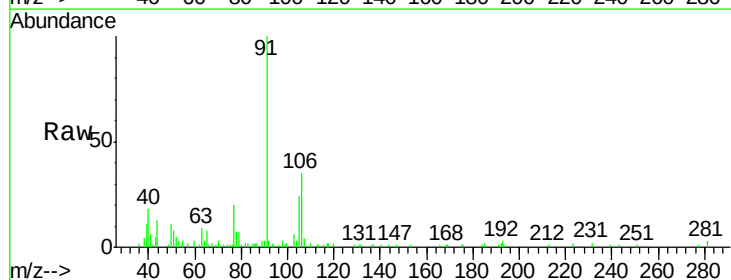
Instrument :
MSVOA_L
ClientSampleId :

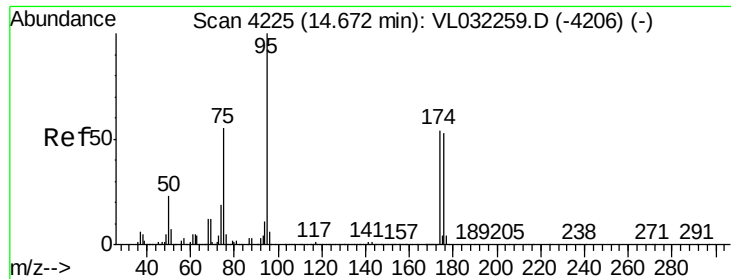
Tot Ion: 91 Resp: 17067
Ion Ratio Lower Upper
91 100
106 0.0 36.2 54.2#



#60
o-Xylene
Concen: 0.071 ppbv
RT: 13.94 min Scan# 3997
Delta R.T. -0.01 min
Lab File: VL032279.D
Acq: 19 Jul 2018 3:08

Tgt Ion: 91 Resp: 33835
Ion Ratio Lower Upper
91 100
106 47.2 21.7 65.1





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.760 ppbv
 RT: 14.67 min Scan# 4223
 Delta R.T. -0.01 min
 Lab File: VL032279.D
 Acq: 19 Jul 2018 3:08

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion: 95 Resp: 3168488

Ion	Ratio	Lower	Upper
95	100		
174	55.7	44.3	66.5
175	4.1	3.3	4.9

