

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071818\
 Data File : VL032281.D
 Acq On : 19 Jul 2018 4:27
 Operator : SY/AP
 Sample : J3454-06
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jul 19 07:47:48 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	1657115	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.37	114	3356263	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.33	117	3984177	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.66	95	3140639	9.72	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.20%

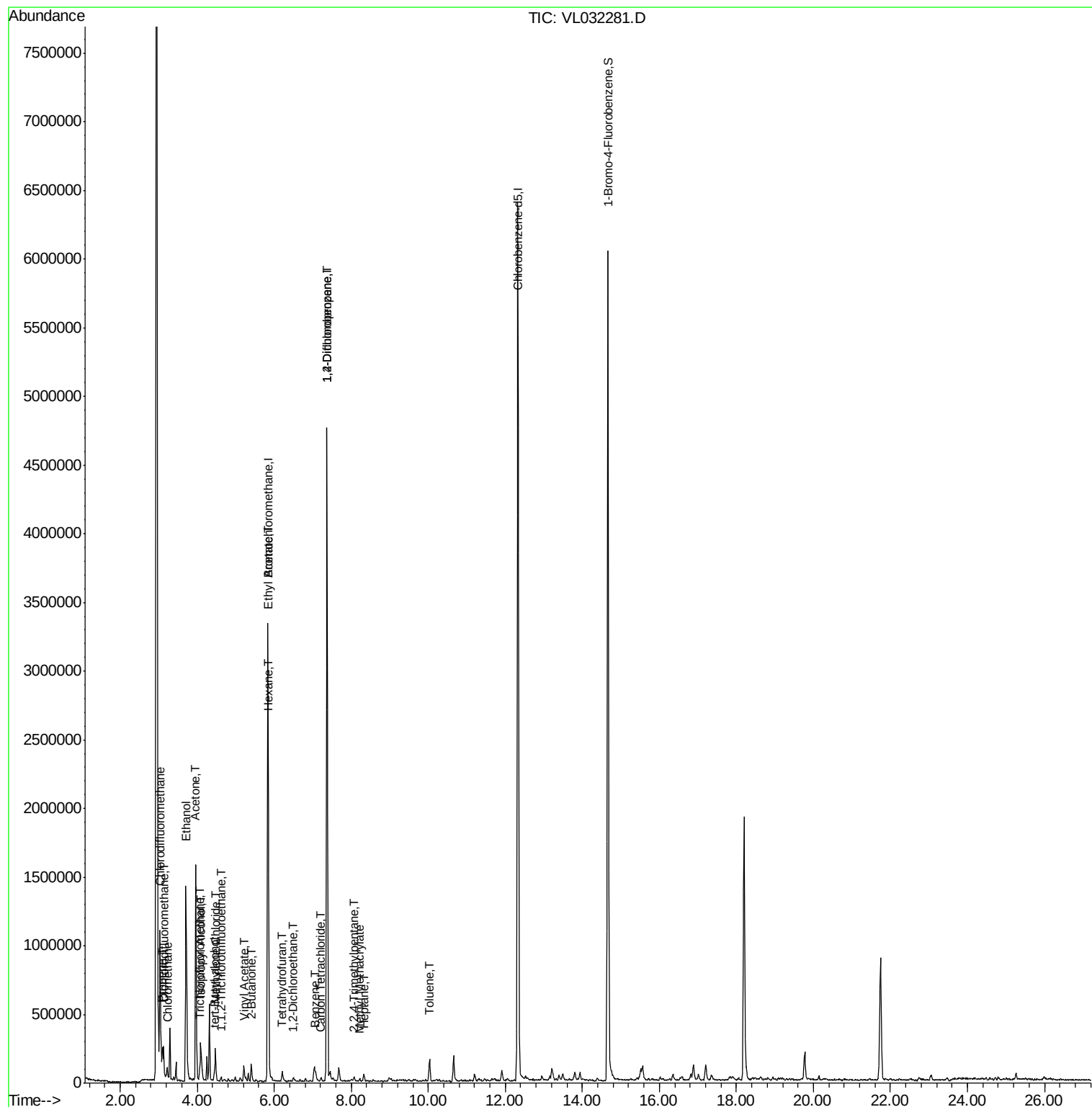
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.13	85	129811	0.461 ppbv	98
3) Chlorodifluoromethane	3.04	51	706692	3.800 ppbv #	64
4) Chloromethane	3.22	50	59680	0.545 ppbv	92
9) Propene	3.10	41	30594	0.376 ppbv	83
10) Heptane	8.32	43	10385	0.040 ppbv #	27
11) Trichlorofluoromethane	4.07	101	55855	0.254 ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.62	101	11141	0.079 ppbv	98
13) Ethanol	3.71	45	1658430	71.416 ppbv	97
15) Acetone	3.96	43	1550164	8.938 ppbv	97
17) tert-Butyl alcohol	4.44	59	6422	0.117 ppbv #	72
19) Isopropyl Alcohol	4.09	45	335713	2.862 ppbv #	1
20) Methylene Chloride	4.47	84	77678	1.163 ppbv	93
23) Vinyl Acetate	5.22	43	35847	0.115 ppbv #	92
25) Ethyl Acetate	5.85	43	232733	0.616 ppbv #	92
26) Hexane	5.86	57	204310	1.178 ppbv #	57
34) 2-Butanone	5.40	43	137558	0.597 ppbv	99
35) Carbon Tetrachloride	7.22	117	11412	0.049 ppbv #	85
36) Benzene	7.08	78	9693	0.029 ppbv	94
37) 1,2-Dichloroethane	6.49	62	5208	0.027 ppbv #	85
39) 1,2-Dichloropropane	7.37	63	937830	7.170 ppbv #	26
41) Tetrahydrofuran	6.21	42	11020	0.082 ppbv #	39
43) Methyl Methacrylate	8.22	69	3011	0.022 ppbv #	1
44) 2,2,4-Trimethylpentane	8.07	57	14414	0.025 ppbv #	18
53) Toluene	10.04	91	100027	0.250 ppbv	99

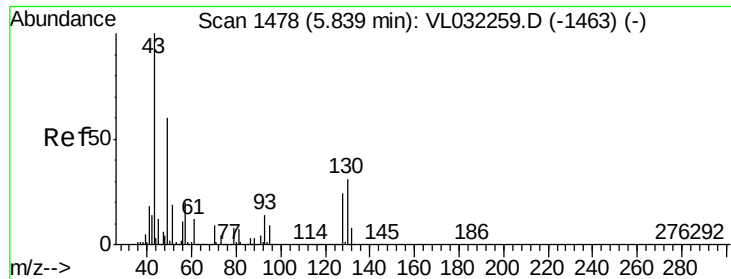
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Jul 18 14:38:53 2018
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.84 min Scan# 1477

Delta R.T. -0.00 min

Lab File: VL032281.D

Acq: 19 Jul 2018 4:27

Instrument :

MSVOA_L

ClientSampleId :

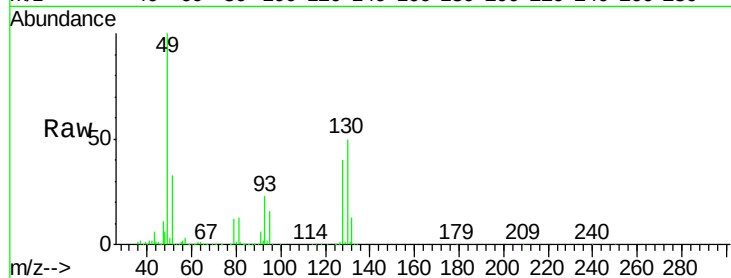
Tot Ion: 49 Resp: 1657115

Ion Ratio Lower Upper

49 100

128 39.6 20.1 60.2

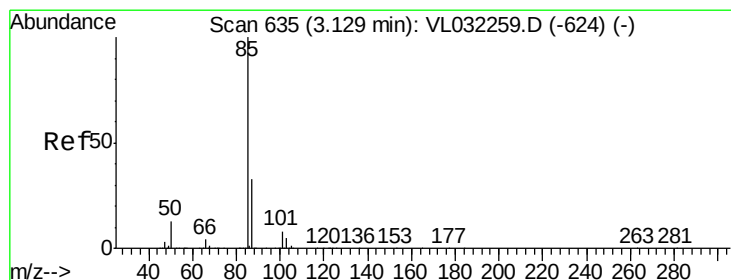
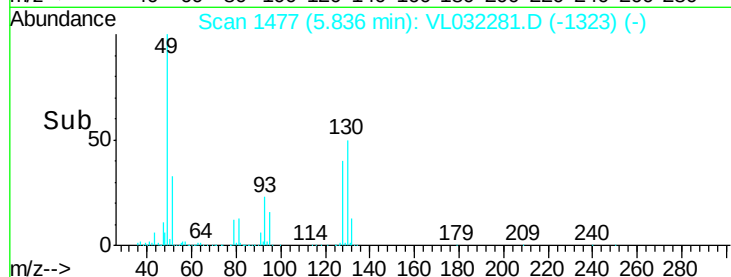
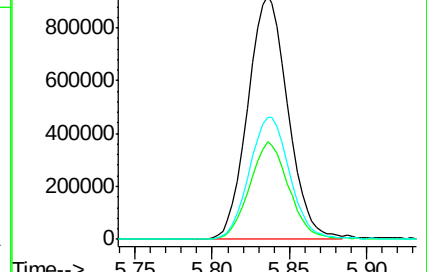
130 51.5 25.9 77.6



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: 0.461 ppbv

RT: 3.13 min Scan# 635

Delta R.T. -0.00 min

Lab File: VL032281.D

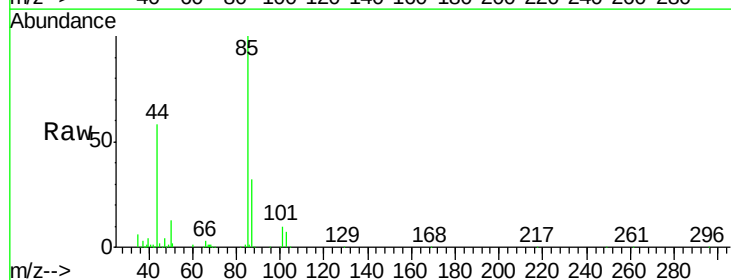
Acq: 19 Jul 2018 4:27

Tgt Ion: 85 Resp: 129811

Ion Ratio Lower Upper

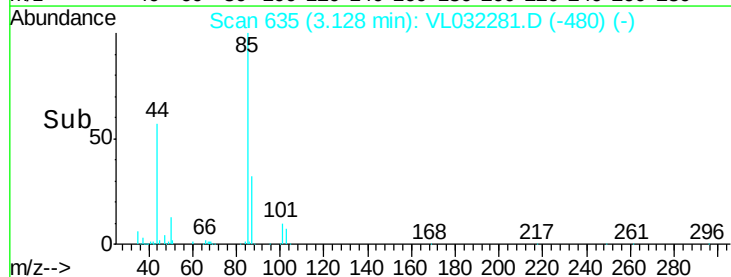
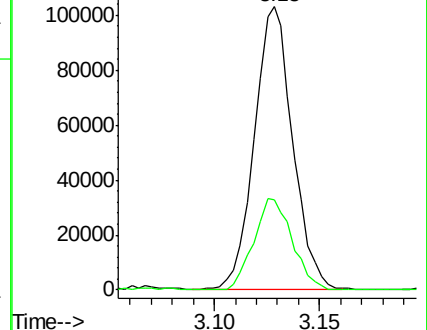
85 100

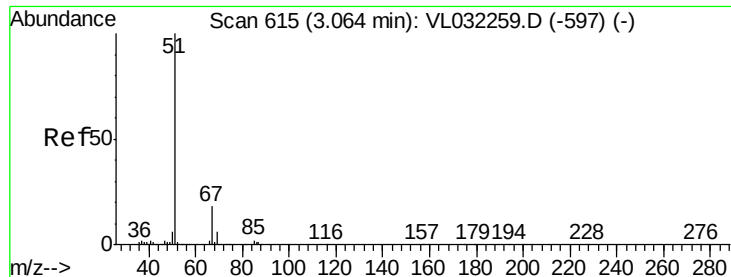
87 31.7 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 3.800 ppbv

RT: 3.04 min Scan# 608

Delta R.T. -0.02 min

Lab File: VL032281.D

Acq: 19 Jul 2018 4:27

Instrument :

MSVOA_L

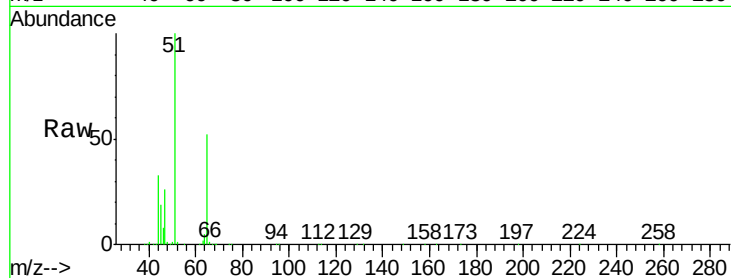
ClientSampleId :

Tot Ion: 51 Resp: 706692

Ion Ratio Lower Upper

51 100

67 2.1 14.2 21.4#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.04

400000

300000

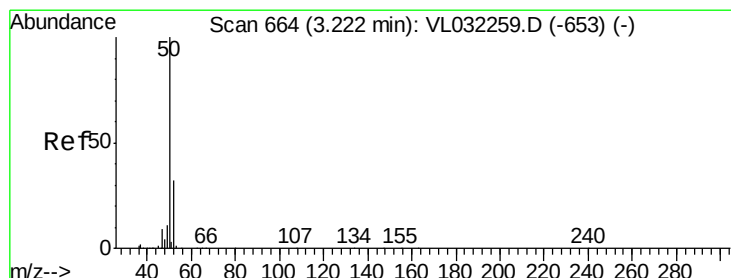
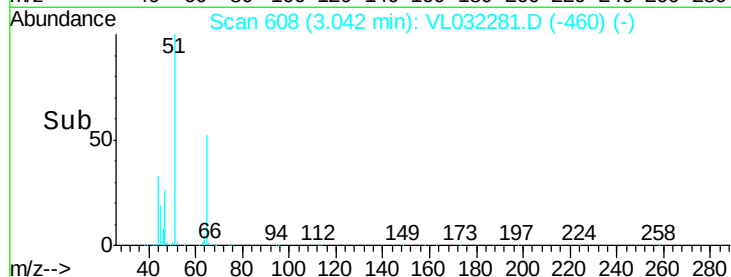
200000

100000

0

Time-->

3.00 3.10 3.20



#4

Chloromethane

Concen: 0.545 ppbv

RT: 3.22 min Scan# 665

Delta R.T. 0.00 min

Lab File: VL032281.D

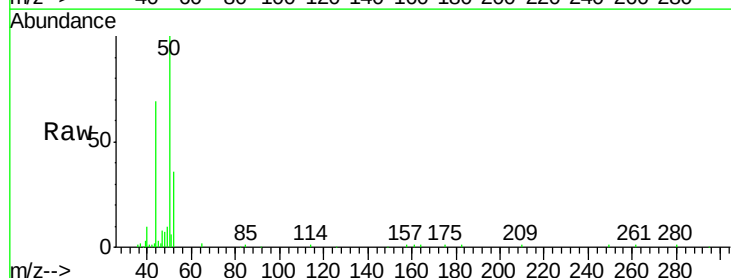
Acq: 19 Jul 2018 4:27

Tgt Ion: 50 Resp: 59680

Ion Ratio Lower Upper

50 100

52 36.1 25.3 37.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.22

40000

30000

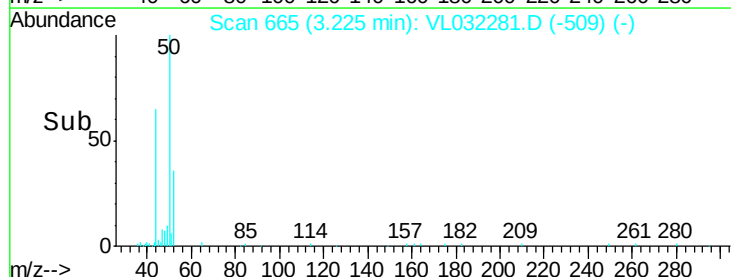
20000

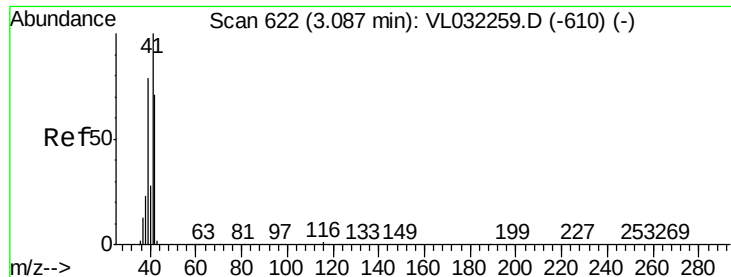
10000

0

Time-->

3.20 3.25





#9

Propene

Concen: 0.376 ppbv

RT: 3.10 min Scan# 627

Delta R.T. 0.02 min

Lab File: VL032281.D

Acq: 19 Jul 2018 4:27

Instrument :

MSVOA_L

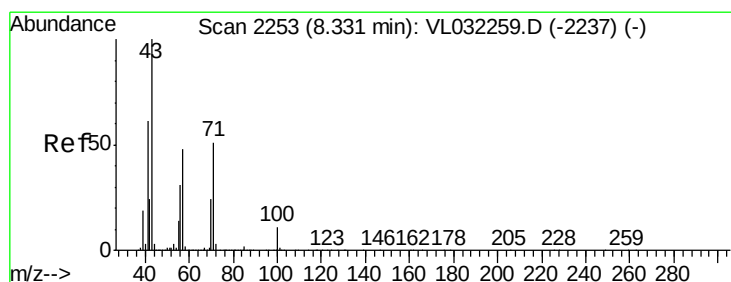
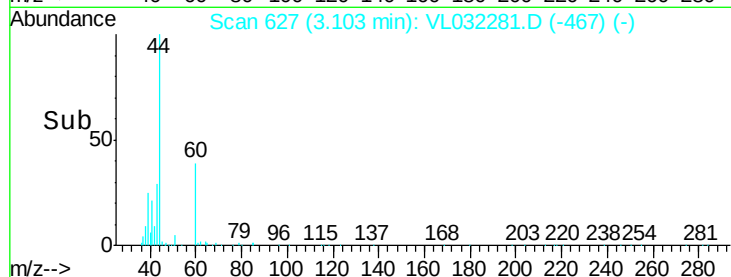
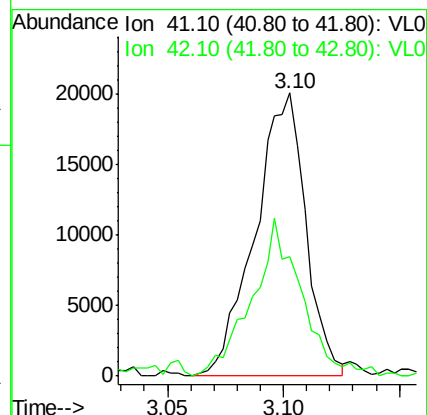
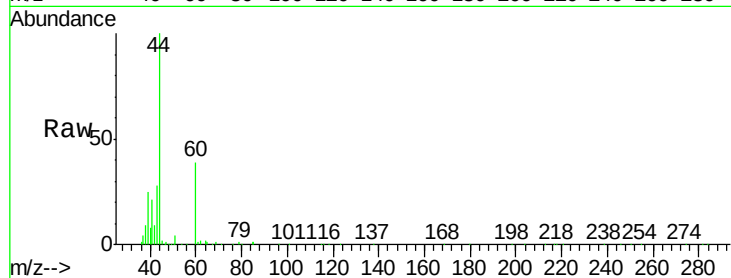
ClientSampleId :

Tot Ion: 41 Resp: 30594

Ion Ratio Lower Upper

41 100

42 56.3 56.2 84.4



#10

Heptane

Concen: 0.040 ppbv

RT: 8.32 min Scan# 2251

Delta R.T. -0.01 min

Lab File: VL032281.D

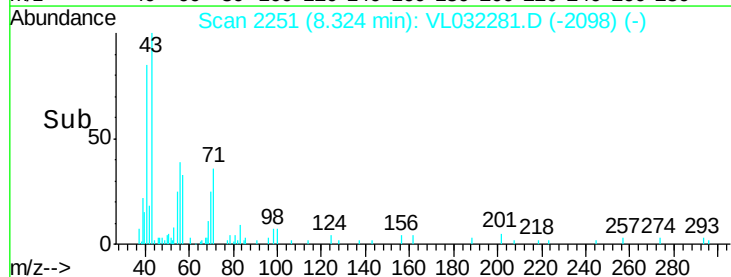
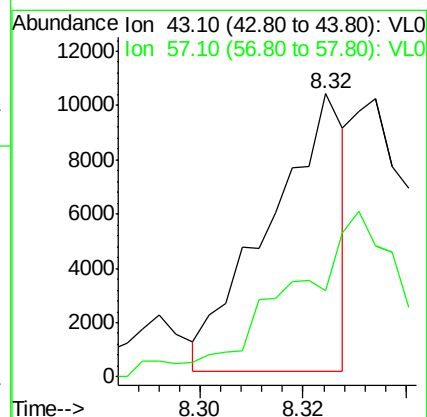
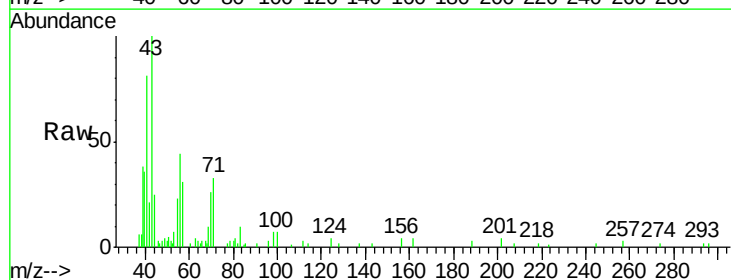
Acq: 19 Jul 2018 4:27

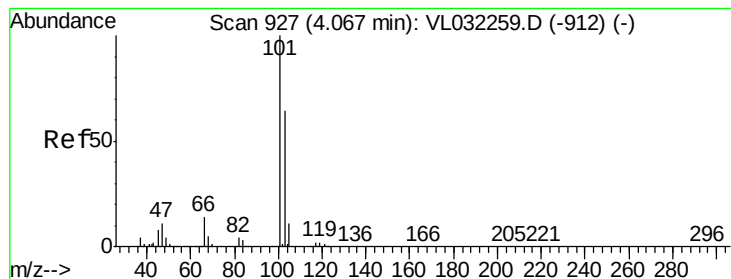
Tgt Ion: 43 Resp: 10385

Ion Ratio Lower Upper

43 100

57 0.0 39.9 59.9#

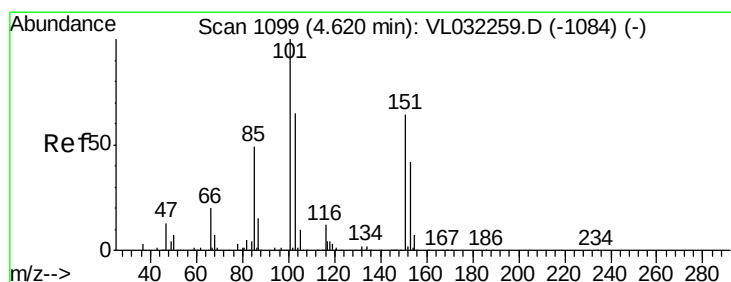
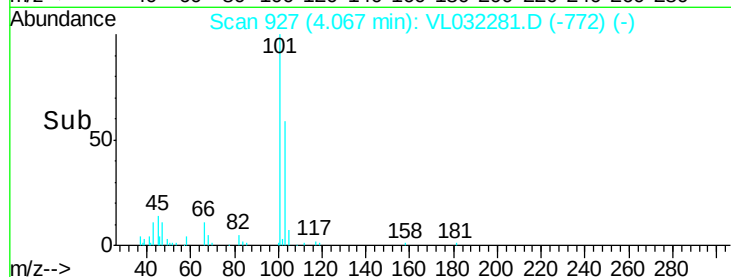
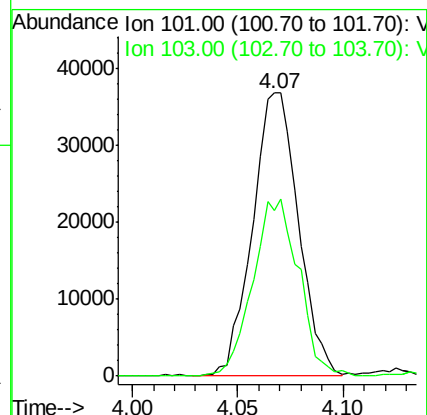
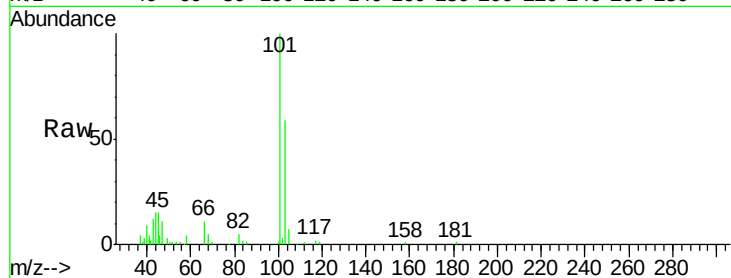




#11
 Trichlorofluoromethane
 Concen: 0.254 ppbv
 RT: 4.07 min Scan# 927
 Delta R.T. -0.00 min
 Lab File: VL032281.D
 Acq: 19 Jul 2018 4:27

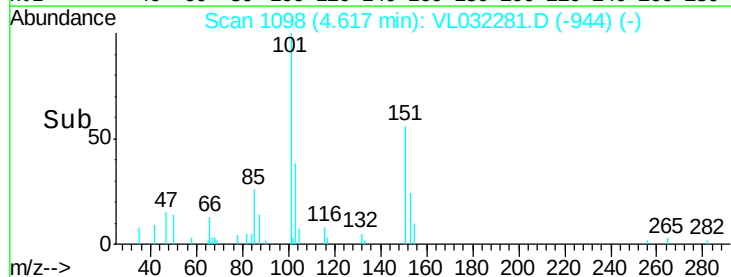
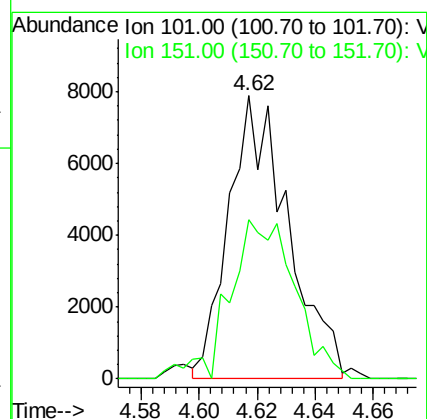
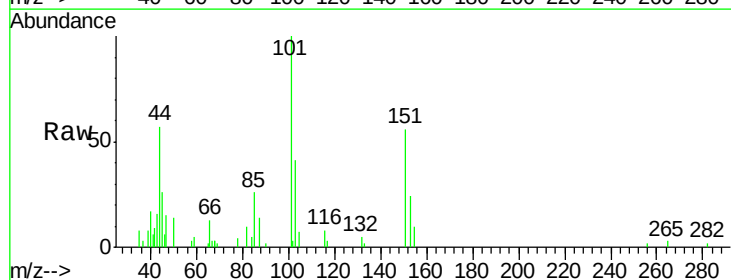
Instrument :
 MSVOA_L
 ClientSampleId :

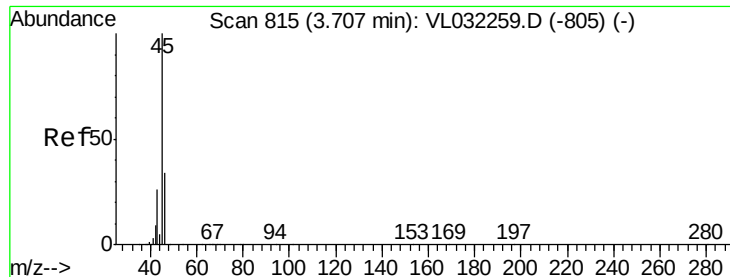
Tot Ion:101 Resp: 55855
 Ion Ratio Lower Upper
 101 100
 103 58.6 51.5 77.3



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.079 ppbv
 RT: 4.62 min Scan# 1098
 Delta R.T. -0.00 min
 Lab File: VL032281.D
 Acq: 19 Jul 2018 4:27

Tgt Ion:101 Resp: 11141
 Ion Ratio Lower Upper
 101 100
 151 62.6 51.3 76.9

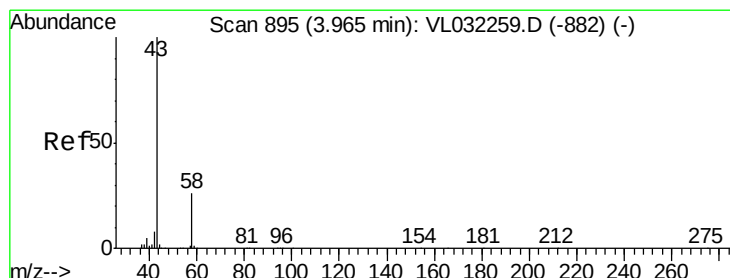
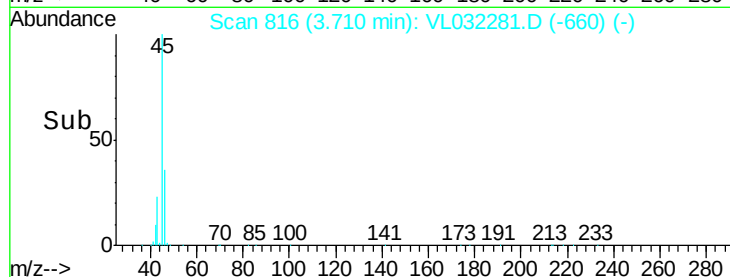
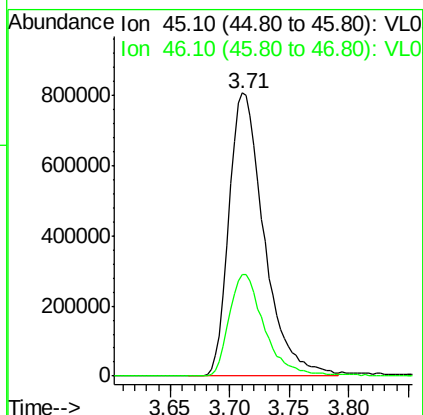
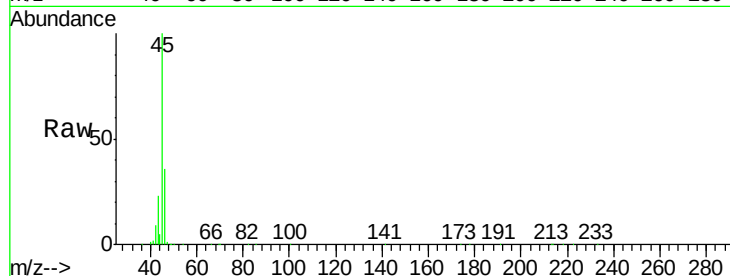




#13
Ethanol
Concen: 71.416 ppbv
RT: 3.71 min Scan# 816
Delta R.T. 0.00 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

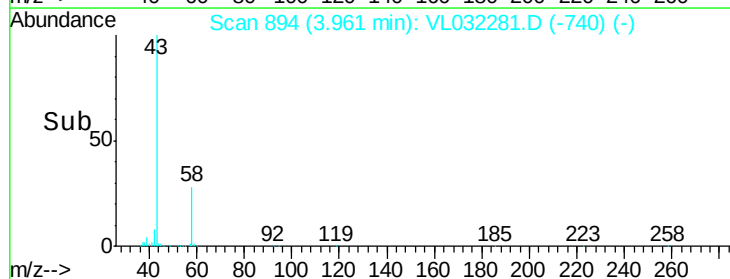
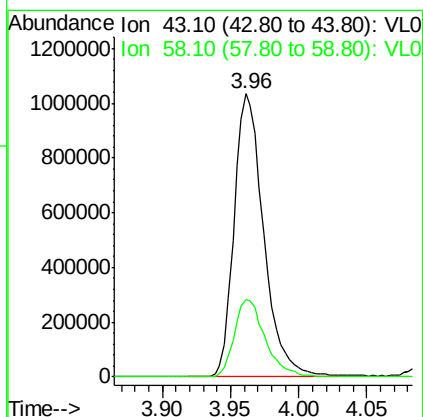
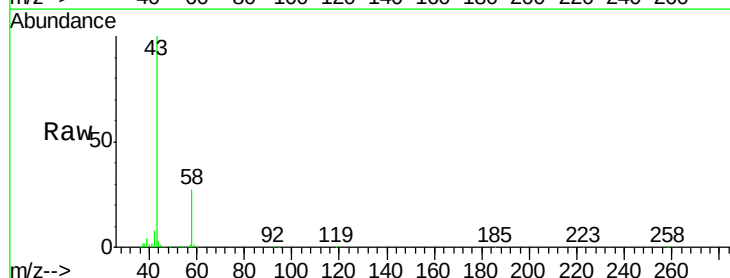
Instrument :
MSVOA_L
ClientSampleId :

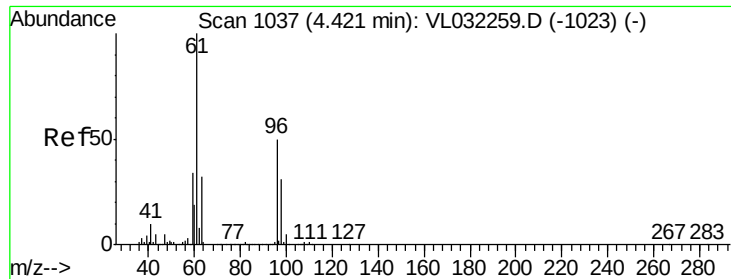
Tot Ion: 45 Resp: 1658430
Ion Ratio Lower Upper
45 100
46 36.4 15.2 60.8



#15
Acetone
Concen: 8.938 ppbv
RT: 3.96 min Scan# 894
Delta R.T. -0.00 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

Tgt Ion: 43 Resp: 1550164
Ion Ratio Lower Upper
43 100
58 28.9 21.8 32.6





#17

tert-Butyl alcohol

Concen: 0.117 ppbv

RT: 4.44 min Scan# 1043

Delta R.T. 0.02 min

Lab File: VL032281.D

Acq: 19 Jul 2018 4:27

Instrument :

MSVOA_L

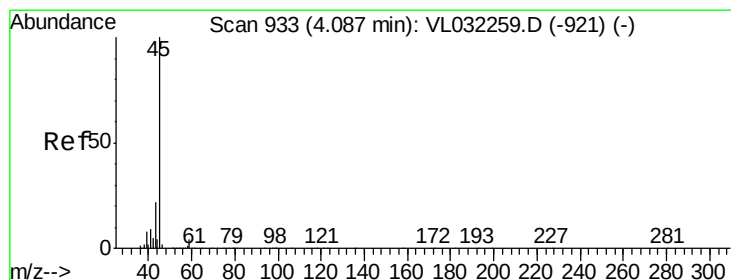
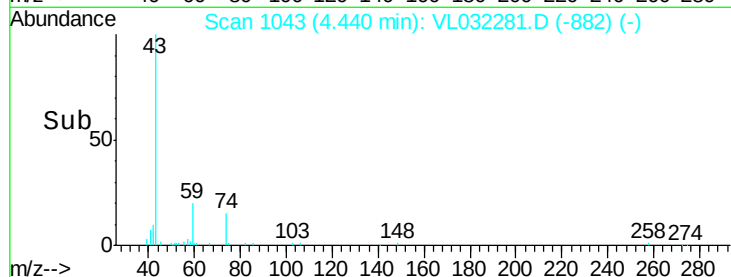
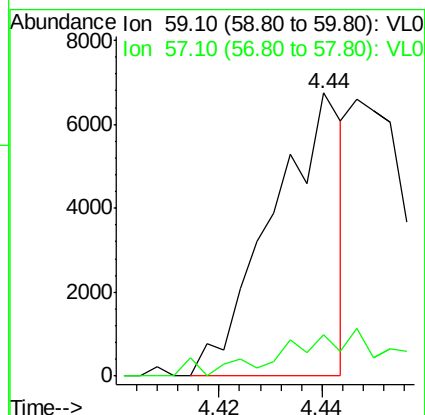
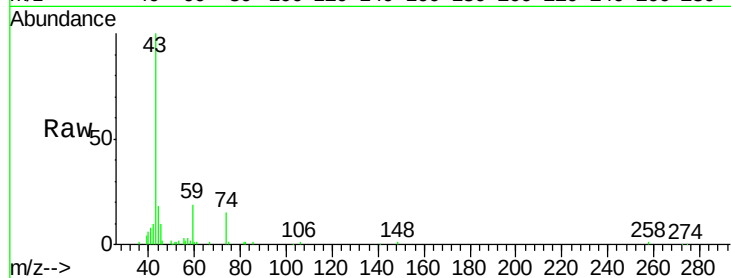
ClientSampleId :

Tot Ion: 59 Resp: 6422

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.4#



#19

Isopropyl Alcohol

Concen: 2.862 ppbv

RT: 4.09 min Scan# 935

Delta R.T. 0.01 min

Lab File: VL032281.D

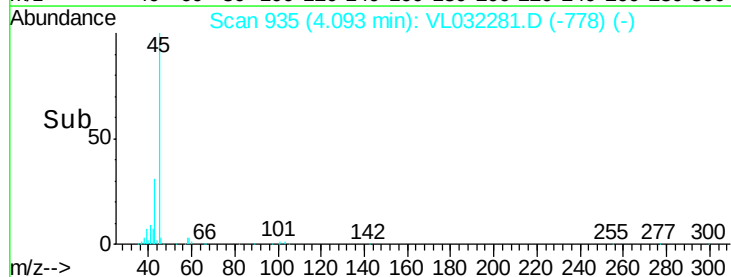
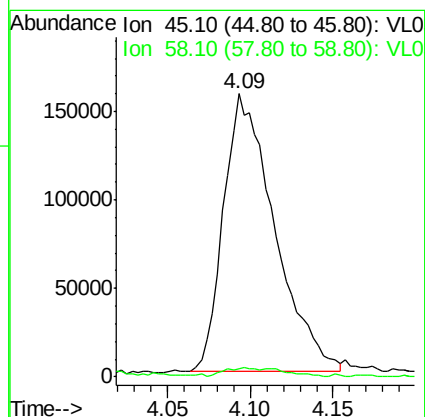
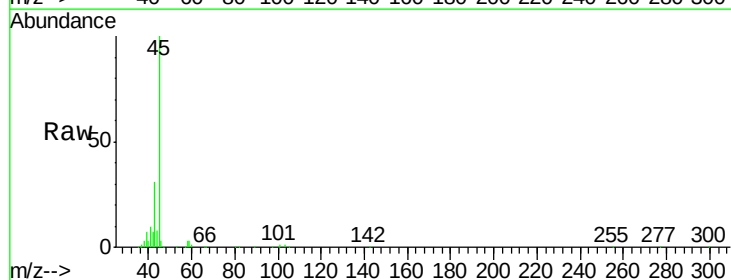
Acq: 19 Jul 2018 4:27

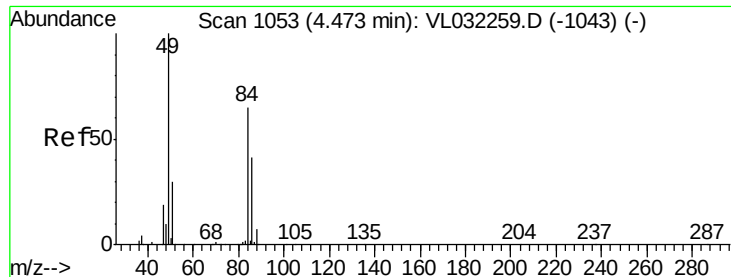
Tgt Ion: 45 Resp: 335713

Ion Ratio Lower Upper

45 100

58 133.2 1.5 2.3#

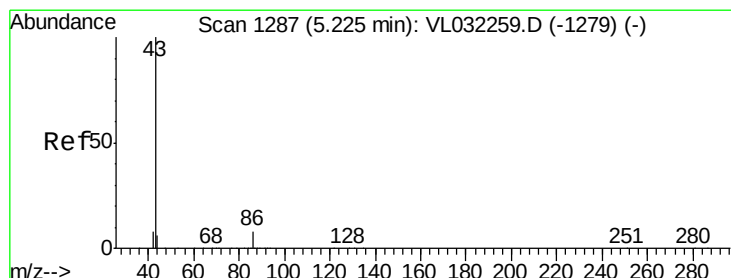
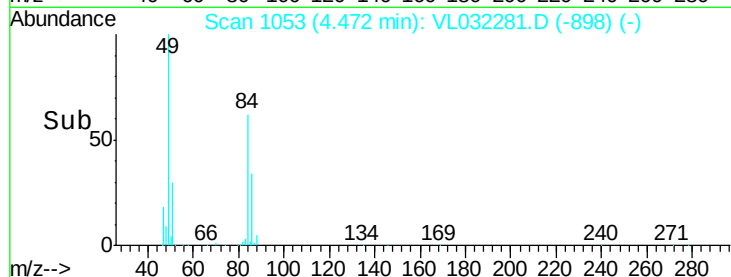
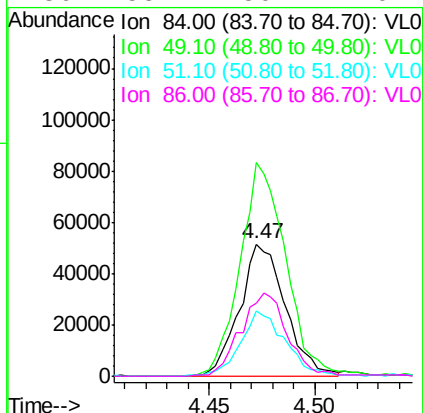
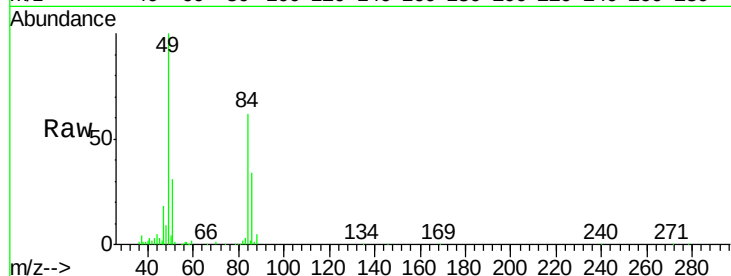




#20
Methvlene Chloride
Concen: 1.163 ppbv
RT: 4.47 min Scan# 1053
Delta R.T. -0.00 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

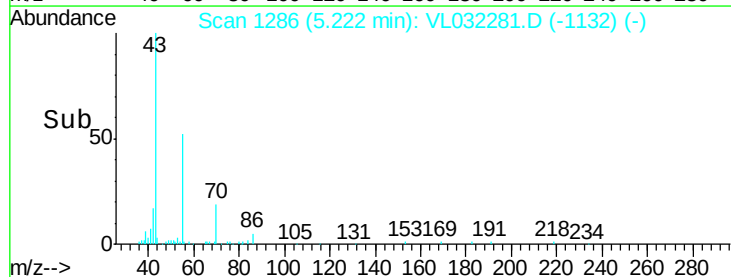
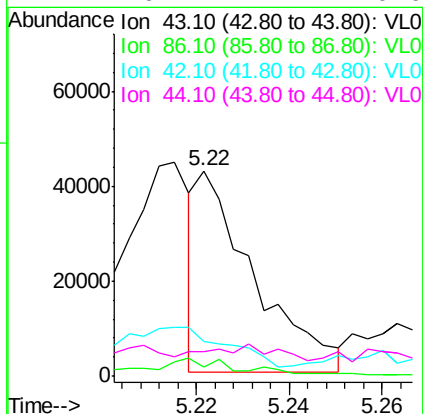
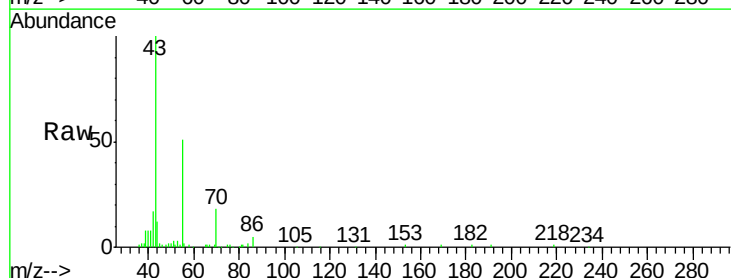
Instrument :
MSVOA_L
ClientSampleId :

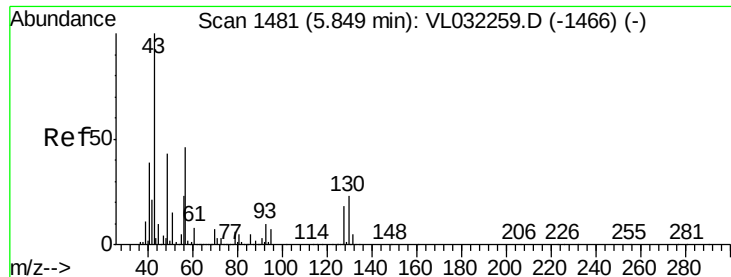
Tot Ion:	84	Resp:	77678
Ion	Ratio	Lower	Upper
84	100		
49	161.7	122.4	183.6
51	48.7	36.8	55.2
86	55.7	50.7	76.1



#23
Vinyl Acetate
Concen: 0.115 ppbv
RT: 5.22 min Scan# 1286
Delta R.T. -0.00 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

Tgt Ion:	43	Resp:	35847
Ion	Ratio	Lower	Upper
43	100		
86	3.6	5.9	8.9#
42	8.2	7.3	10.9
44	0.4	4.4	6.6#

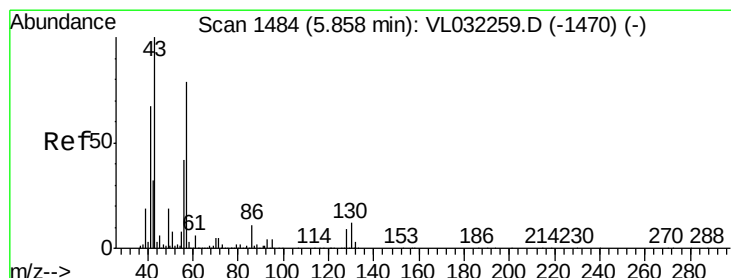
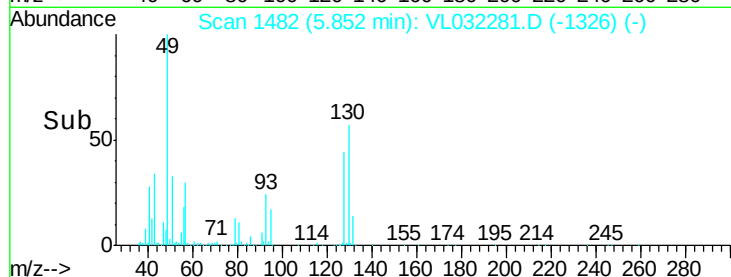
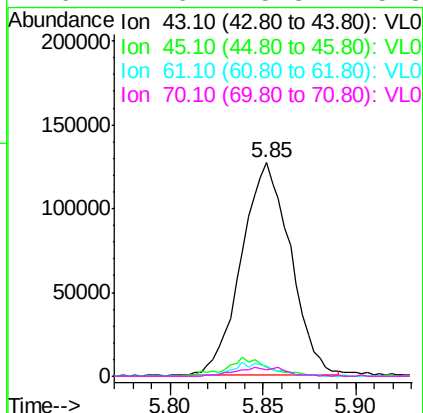
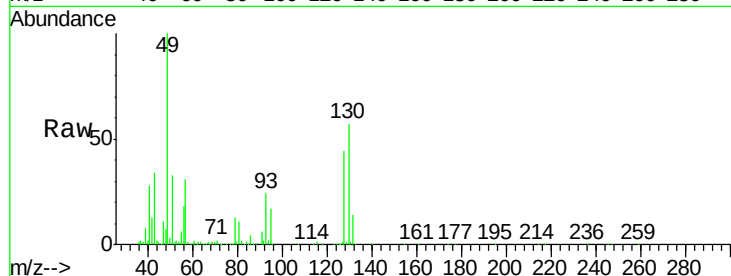




#25
Ethyl Acetate
Concen: 0.616 ppbv
RT: 5.85 min Scan# 1482
Delta R.T. 0.00 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

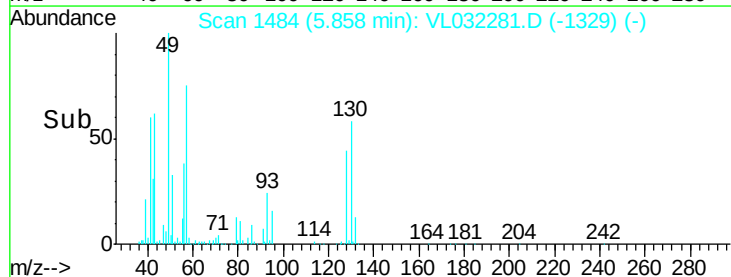
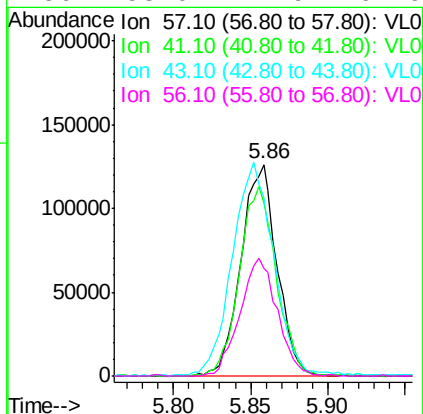
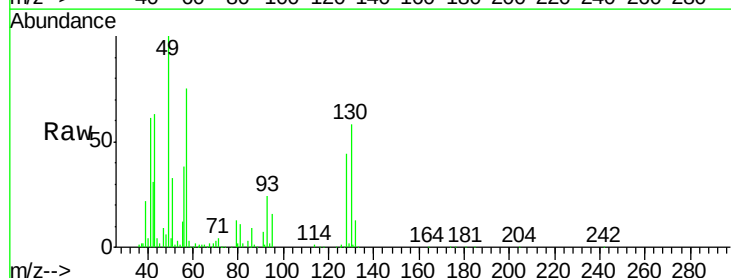
Instrument :
MSVOA_L
ClientSampleId :

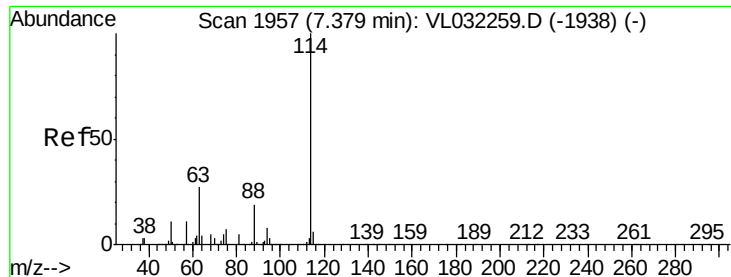
Tot Ion:	43	Resp:	232733
Ion	Ratio	Lower	Upper
43	100		
45	7.9	7.9	11.9#
61	5.6	7.6	11.4#
70	4.6	5.8	8.8#



#26
Hexane
Concen: 1.178 ppbv
RT: 5.86 min Scan# 1484
Delta R.T. -0.00 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

Tgt Ion:	57	Resp:	204310
Ion	Ratio	Lower	Upper
57	100		
41	92.5	67.9	101.9
43	116.1	175.9	263.9#
56	58.0	41.9	62.9



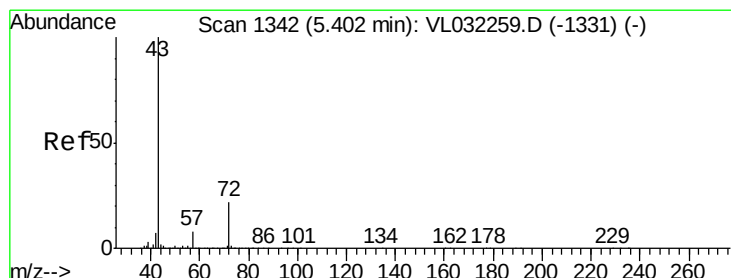
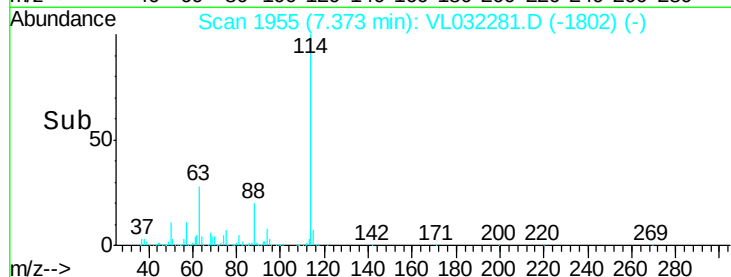
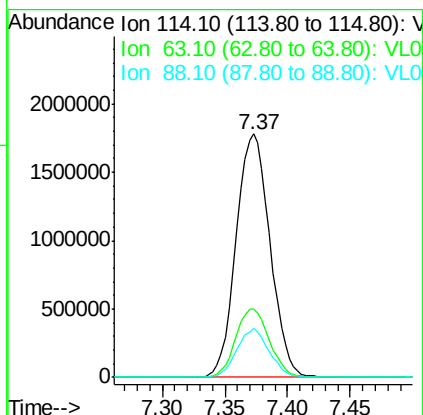
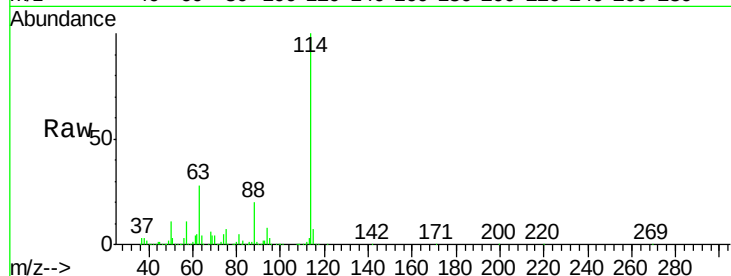


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.37 min Scan# 1955
 Delta R.T. -0.01 min
 Lab File: VL032281.D
 Acq: 19 Jul 2018 4:27

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:114 Resp: 3356263

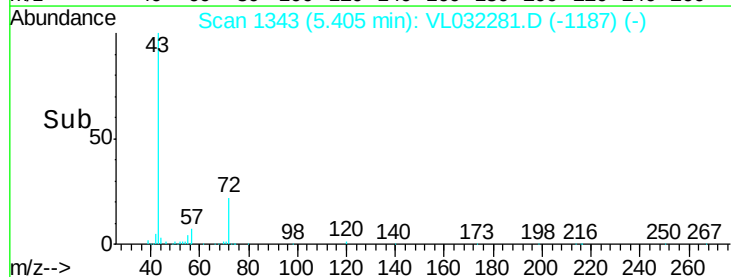
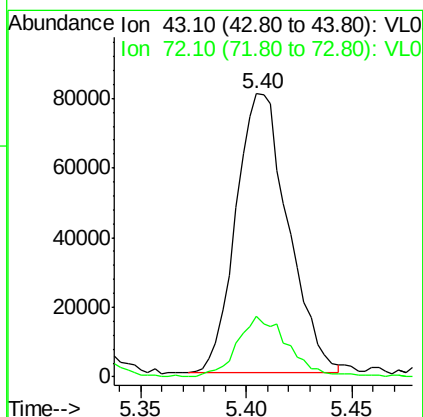
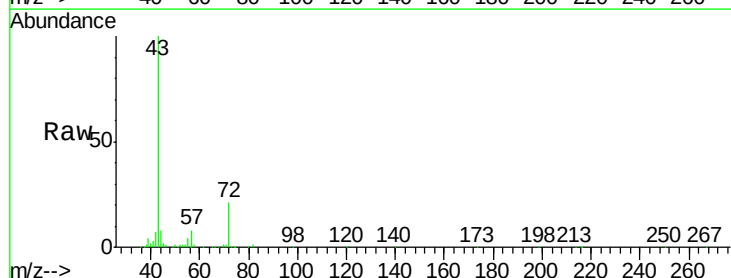
Ion	Ratio	Lower	Upper
114	100		
63	28.0	22.6	33.8
88	19.0	15.2	22.8

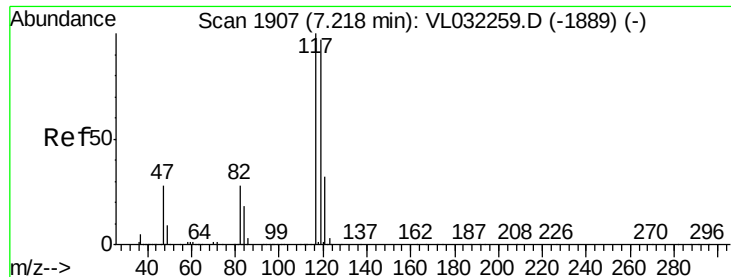


#34
 2-Butanone
 Concen: 0.597 ppbv
 RT: 5.40 min Scan# 1343
 Delta R.T. 0.00 min
 Lab File: VL032281.D
 Acq: 19 Jul 2018 4:27

Tgt Ion: 43 Resp: 137558

Ion	Ratio	Lower	Upper
43	100		
72	21.7	17.7	26.5

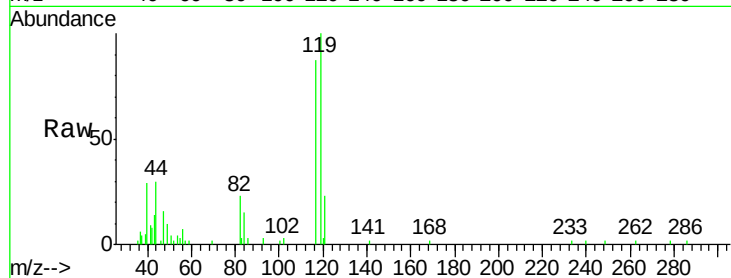




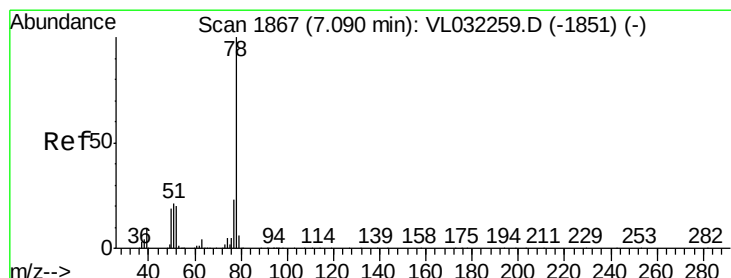
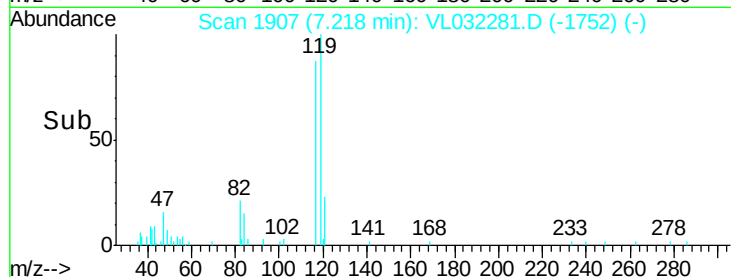
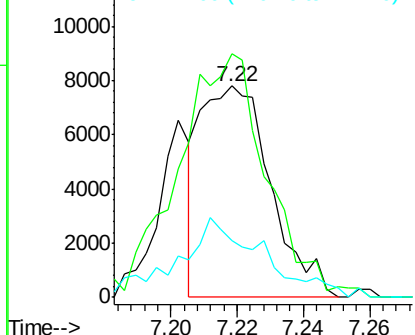
#35
Carbon Tetrachloride
Concen: 0.049 ppbv
RT: 7.22 min Scan# 1907
Delta R.T. -0.00 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 11412
Ion Ratio Lower Upper
117 100
119 110.4 77.4 116.0
121 22.8 25.4 38.2#

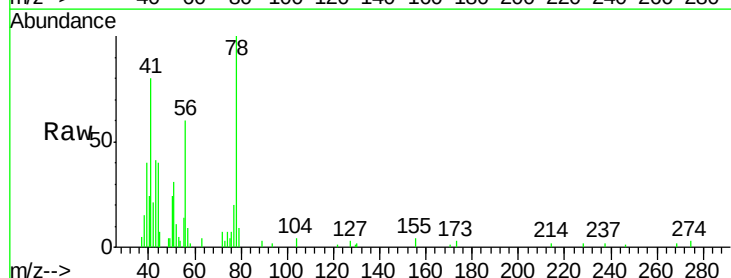


Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V

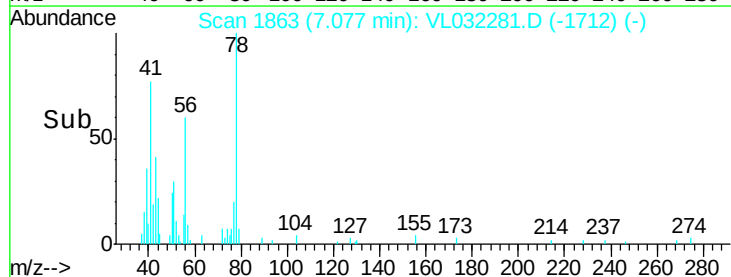
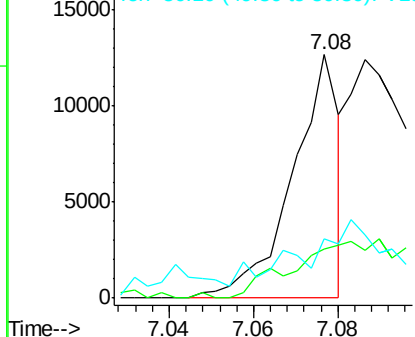


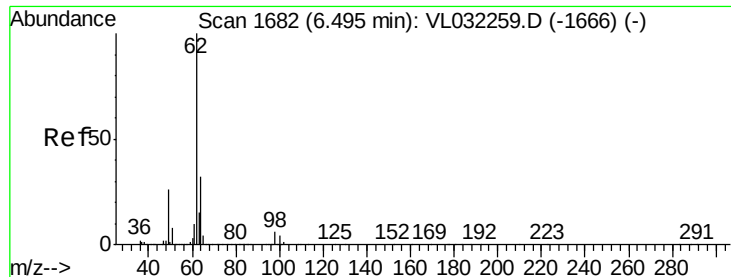
#36
Benzene
Concen: 0.029 ppbv
RT: 7.08 min Scan# 1863
Delta R.T. -0.01 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

Tgt Ion: 78 Resp: 9693
Ion Ratio Lower Upper
78 100
77 20.1 18.6 27.8
50 16.1 15.0 22.6



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

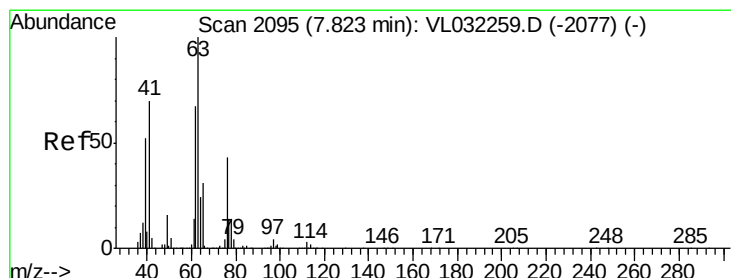
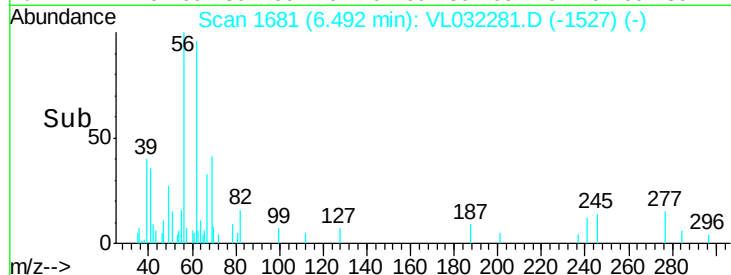
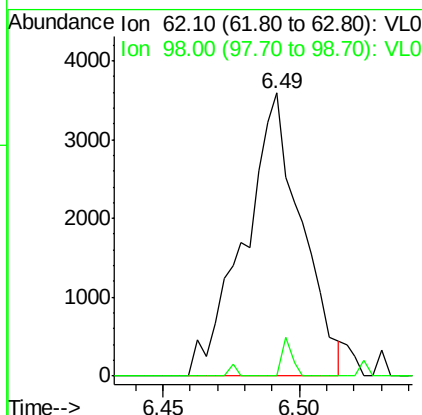
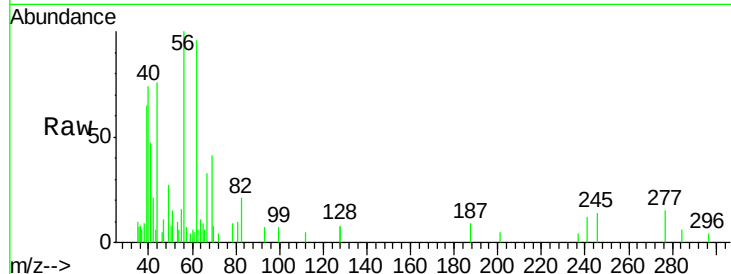




#37
 1,2-Dichloroethane
 Concen: 0.027 ppbv
 RT: 6.49 min Scan# 1681
 Delta R.T. -0.00 min
 Lab File: VL032281.D
 Acq: 19 Jul 2018 4:27

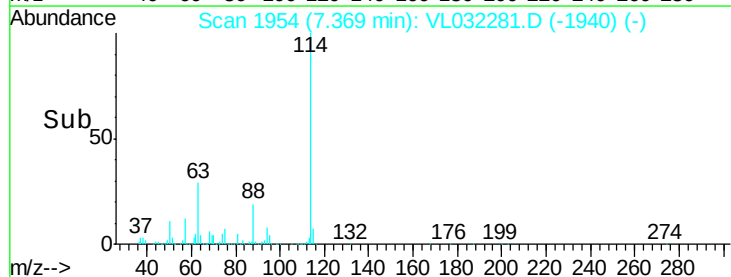
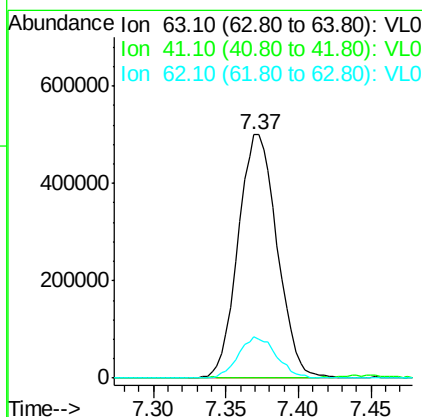
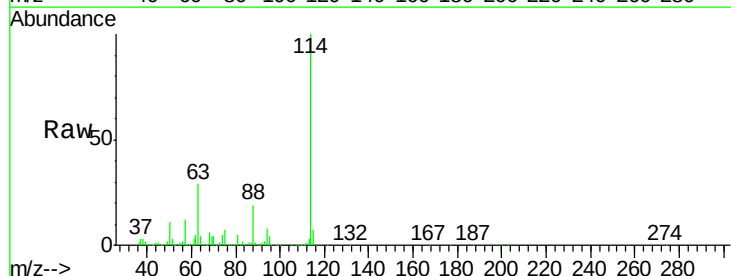
Instrument :
 MSVOA_L
 ClientSampleId :

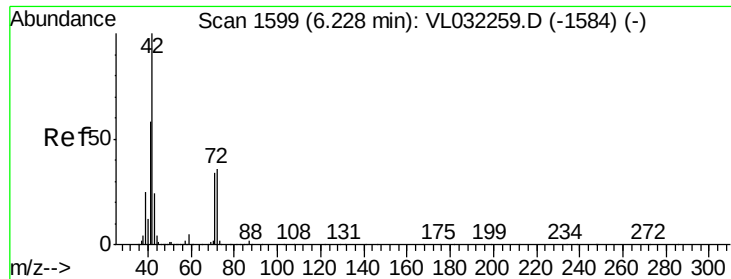
Tot Ion: 62 Resp: 5208
 Ion Ratio Lower Upper
 62 100
 98 0.9 4.9 7.3#



#39
 1,2-Dichloropropane
 Concen: 7.170 ppbv
 RT: 7.37 min Scan# 1954
 Delta R.T. -0.45 min
 Lab File: VL032281.D
 Acq: 19 Jul 2018 4:27

Tgt Ion: 63 Resp: 937830
 Ion Ratio Lower Upper
 63 100
 41 0.0 55.8 83.6#
 62 16.9 53.8 80.8#





#41

Tetrahydrofuran

Concen: 0.082 ppbv

RT: 6.21 min Scan# 1593

Delta R.T. -0.02 min

Lab File: VL032281.D

Acq: 19 Jul 2018 4:27

Instrument :

MSVOA_L

ClientSampleId :

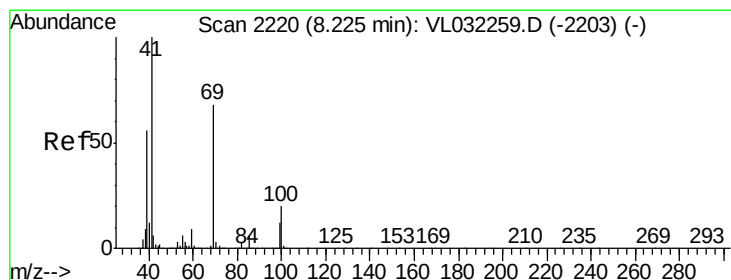
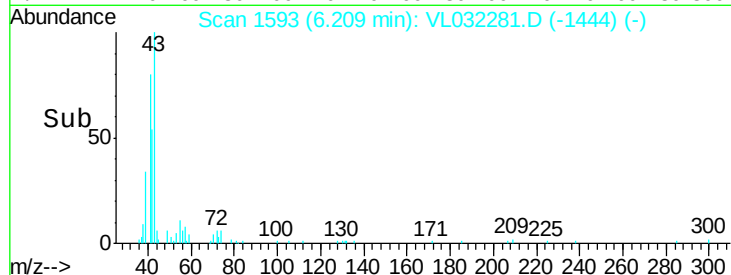
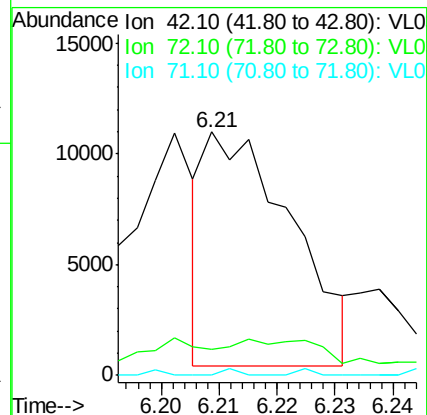
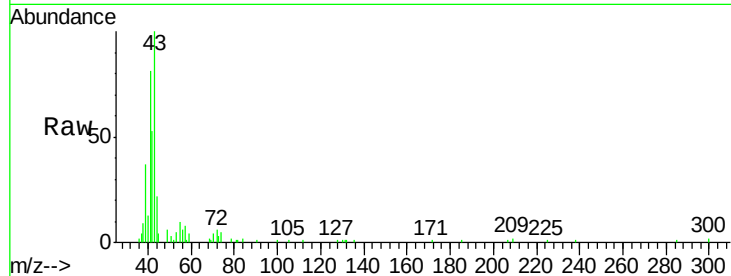
Tot Ion: 42 Resp: 11020

Ion Ratio Lower Upper

42 100

72 0.0 29.4 44.0#

71 0.0 28.2 42.4#



#43

Methyl Methacrylate

Concen: 0.022 ppbv

RT: 8.22 min Scan# 2217

Delta R.T. -0.01 min

Lab File: VL032281.D

Acq: 19 Jul 2018 4:27

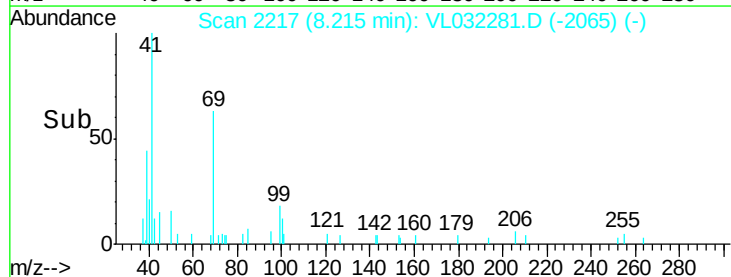
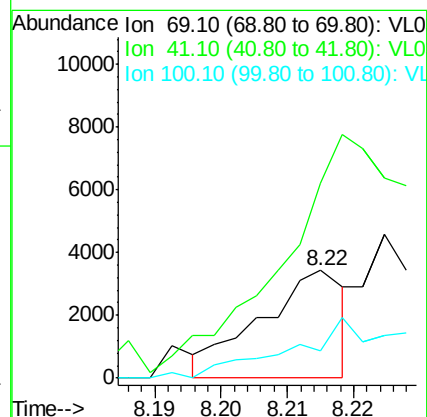
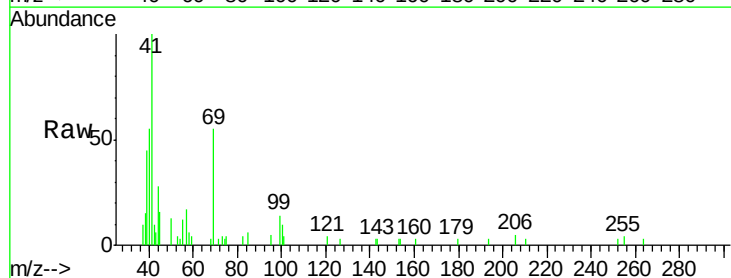
Tgt Ion: 69 Resp: 3011

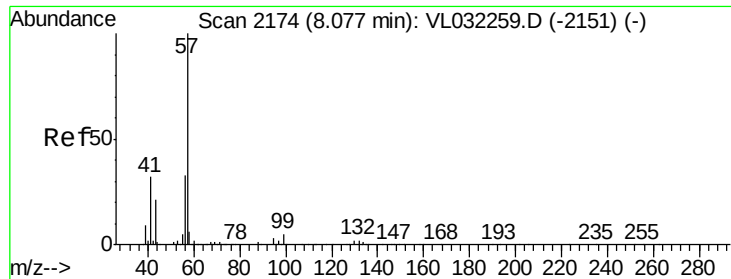
Ion Ratio Lower Upper

69 100

41 518.4 118.6 177.8#

100 100.0 23.3 34.9#





#44

2,2,4-Trimethylpentane

Concen: 0.025 ppbv

RT: 8.07 min Scan# 2173

Delta R.T. -0.00 min

Lab File: VL032281.D

Acq: 19 Jul 2018 4:27

Instrument :

MSVOA_L

ClientSampleId :

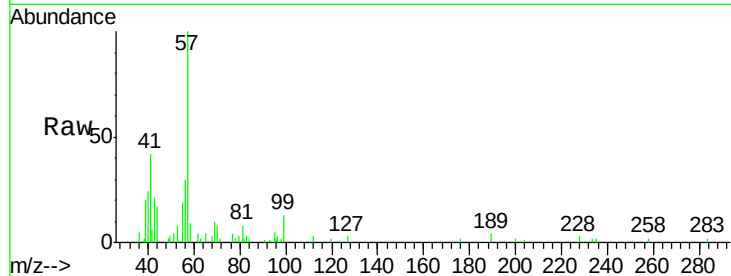
Tot Ion: 57 Resp: 14414

Ion Ratio Lower Upper

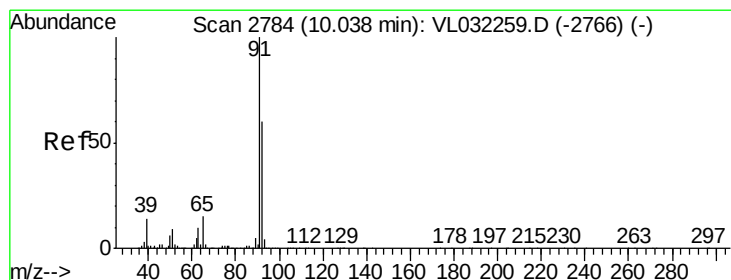
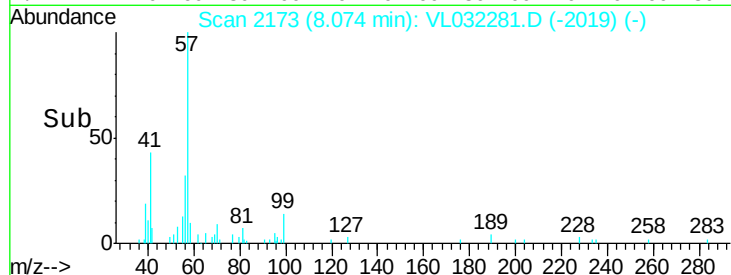
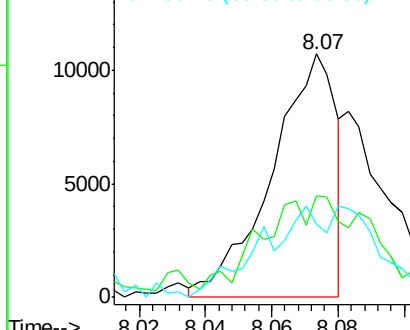
57 100

41 76.5 24.4 36.6#

56 76.2 25.7 38.5#



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



#53

Toluene

Concen: 0.250 ppbv

RT: 10.04 min Scan# 2784

Delta R.T. -0.00 min

Lab File: VL032281.D

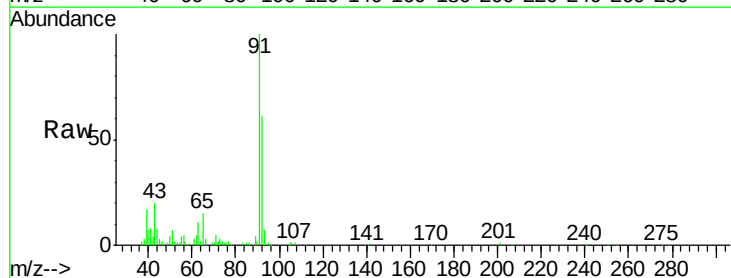
Acq: 19 Jul 2018 4:27

Tgt Ion: 91 Resp: 100027

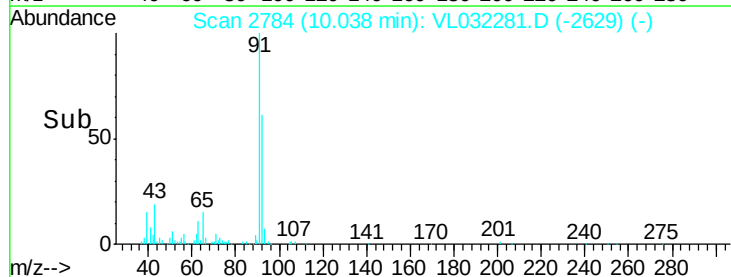
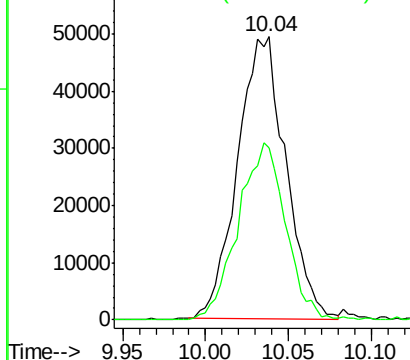
Ion Ratio Lower Upper

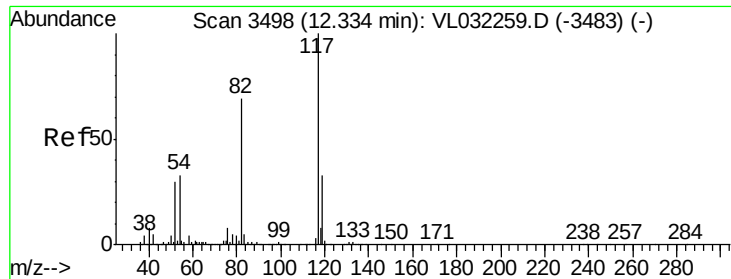
91 100

92 61.7 48.6 72.8



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 92.10 (91.80 to 92.80): VL0

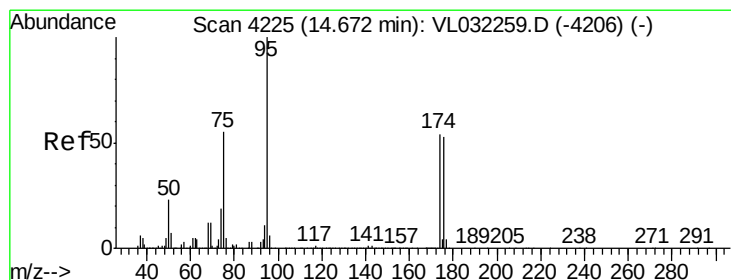
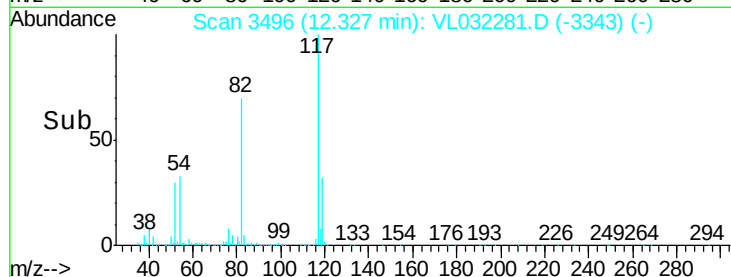
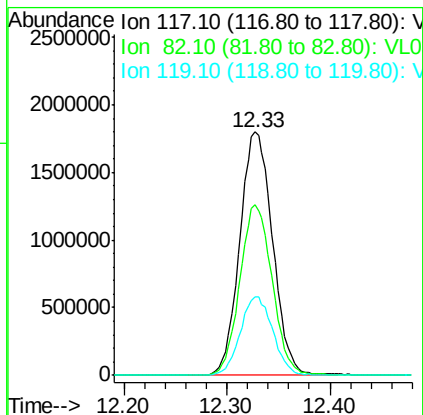
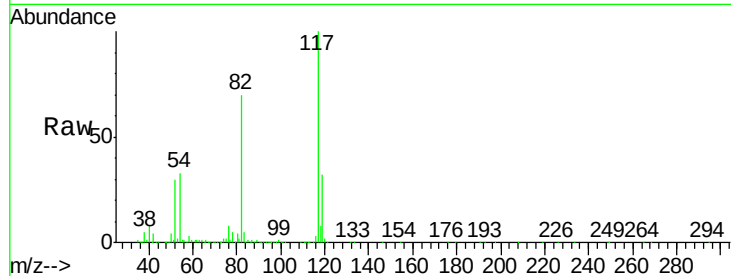




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.33 min Scan# 3496
Delta R.T. -0.01 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 3984177
Ion Ratio Lower Upper
117 100
82 69.5 53.9 80.9
119 32.1 25.5 38.3



#68
1-Bromo-4-Fluorobenzene
Concen: 9.722 ppbv
RT: 14.66 min Scan# 4223
Delta R.T. -0.01 min
Lab File: VL032281.D
Acq: 19 Jul 2018 4:27

Tgt Ion: 95 Resp: 3140639
Ion Ratio Lower Upper
95 100
174 55.8 44.3 66.5
175 3.8 3.3 4.9

