

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071818\
 Data File : VL032286.D
 Acq On : 19 Jul 2018 7:42
 Operator : SY/AP
 Sample : J3454-08DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

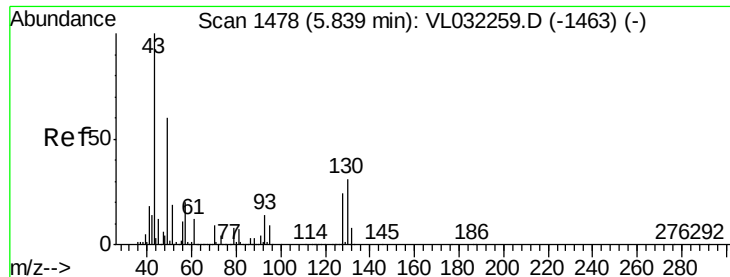
Quant Time: Jul 19 08:17:37 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL071818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jul 18 14:38:53 2018
 QLast Update : Wed Jul 18 14:38:53 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.84	49	1638520	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.37	114	3394149	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.32	117	4028333	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.66	95	3194703	9.78	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.80%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.13	85	7935	0.028 ppbv	93
3) Chlorodifluoromethane	3.04	51	114837	0.625 ppbv #	68
4) Chloromethane	3.23	50	7221	0.067 ppbv	94
9) Propene	3.10	41	6435	0.080 ppbv	97
13) Ethanol	3.71	45	152009	6.620 ppbv	97
15) Acetone	3.97	43	191415	1.116 ppbv	97
17) tert-Butyl alcohol	4.45	59	1125	0.021 ppbv #	72
19) Isopropyl Alcohol	4.12	45	15781	0.136 ppbv #	95
20) Methylene Chloride	4.48	84	18471	0.280 ppbv #	75
23) Vinyl Acetate	5.22	43	9702	0.032 ppbv #	88
25) Ethyl Acetate	5.85	43	214212	0.573 ppbv #	79
26) Hexane	5.85	57	284706	1.660 ppbv #	42
34) 2-Butanone	5.42	43	19582	0.084 ppbv	100
39) 1,2-Dichloropropane	7.37	63	949830	7.181 ppbv #	25
41) Tetrahydrofuran	5.85	42	122007	0.898 ppbv #	50
53) Toluene	10.03	91	14617	0.036 ppbv #	20
58) Ethyl Benzene	12.95	91	11476	0.020 ppbv	97

(#) = 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

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Instrument :
MSVOA_L
ClientSampleId :

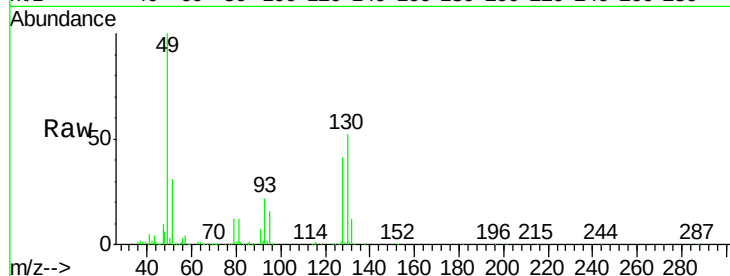
Tot Ion: 49 Resp: 1638520

Ion Ratio Lower Upper

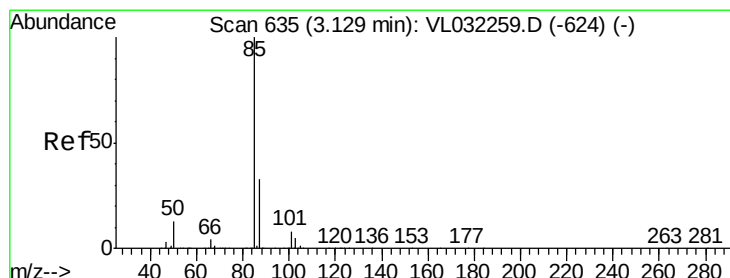
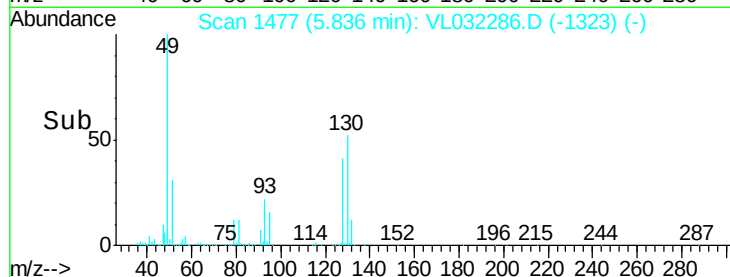
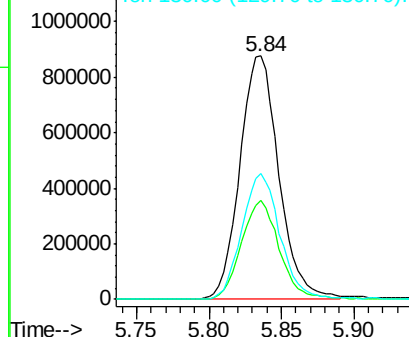
49 100

128 40.0 20.1 60.2

130 51.6 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: 0.028 ppbv

RT: 3.13 min Scan# 634

Delta R.T. -0.00 min

Lab File: VL032286.D

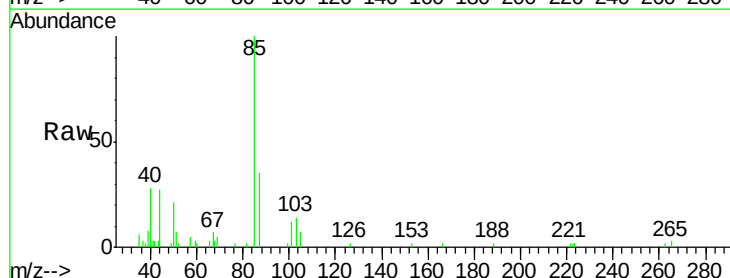
Acq: 19 Jul 2018 7:42

Tgt Ion: 85 Resp: 7935

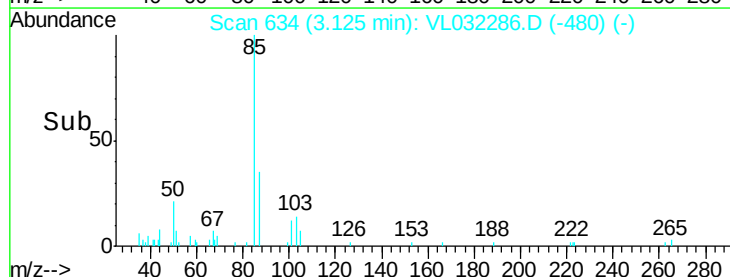
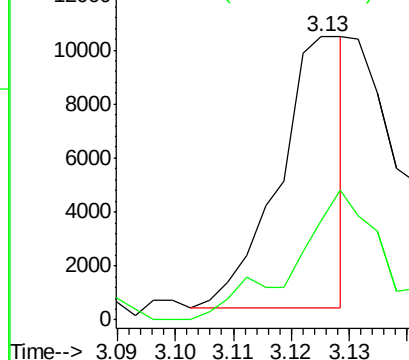
Ion Ratio Lower Upper

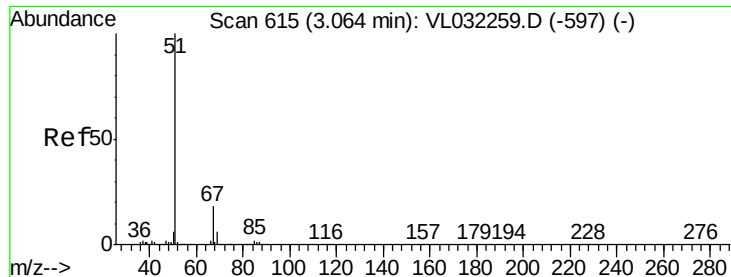
85 100

87 36.6 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: 0.625 ppbv

RT: 3.04 min Scan# 608

Delta R.T. -0.02 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Instrument :

MSVOA_L

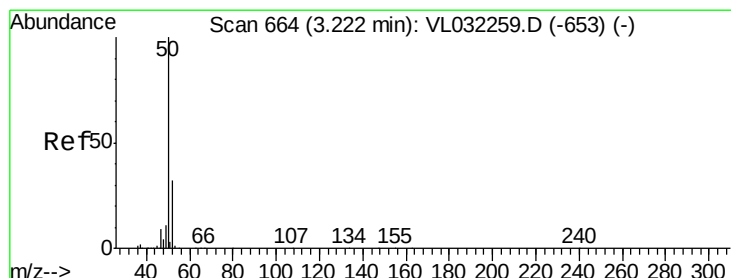
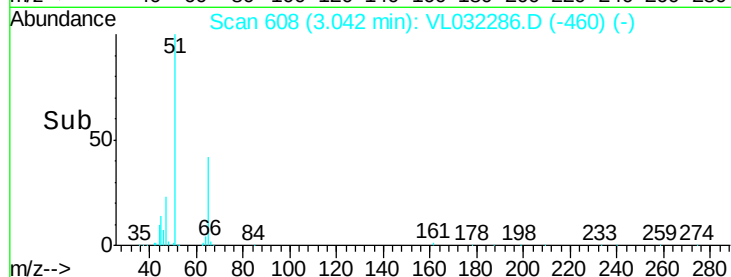
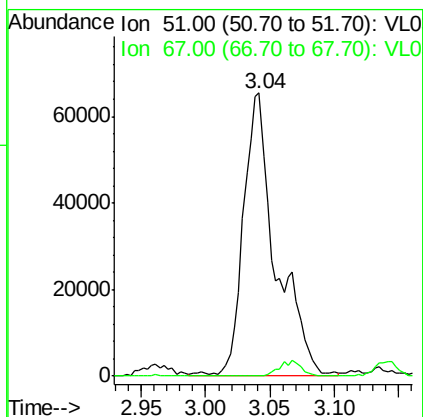
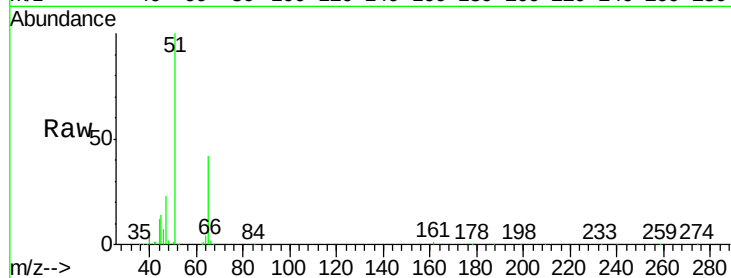
ClientSampleId :

Tot Ion: 51 Resp: 114837

Ion Ratio Lower Upper

51 100

67 3.8 14.2 21.4#



#4

Chloromethane

Concen: 0.067 ppbv

RT: 3.23 min Scan# 666

Delta R.T. 0.01 min

Lab File: VL032286.D

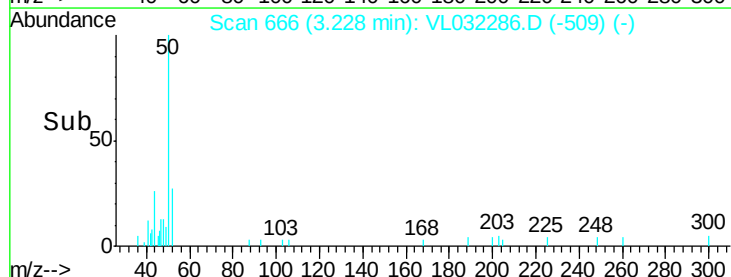
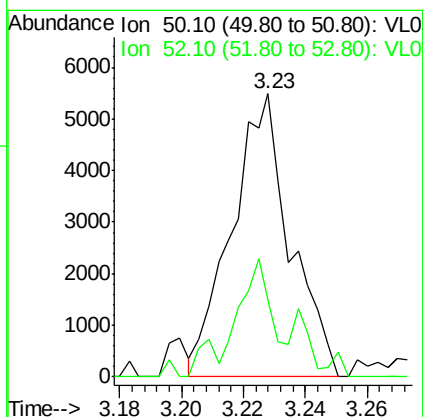
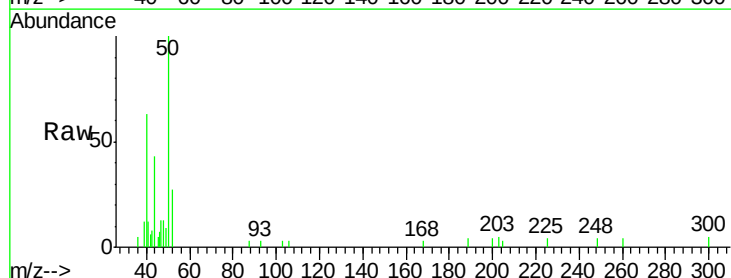
Acq: 19 Jul 2018 7:42

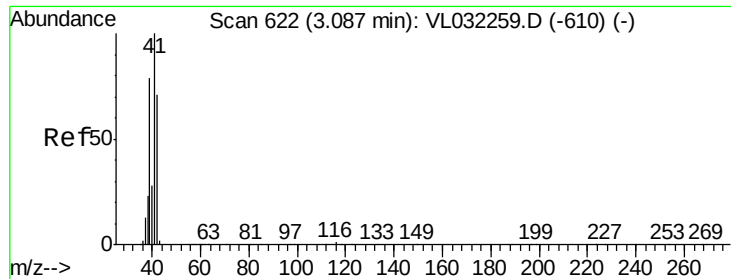
Tgt Ion: 50 Resp: 7221

Ion Ratio Lower Upper

50 100

52 28.2 25.3 37.9





#9

Propene

Concen: 0.080 ppbv

RT: 3.10 min Scan# 627

Delta R.T. 0.02 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Instrument :

MSVOA_L

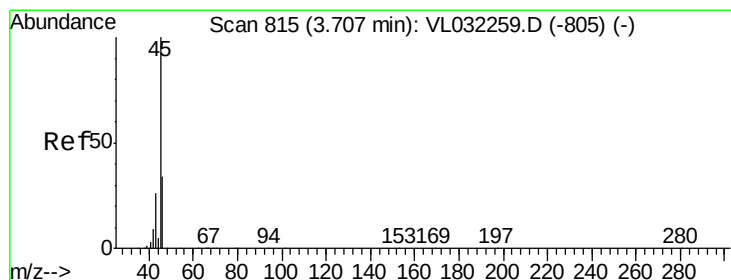
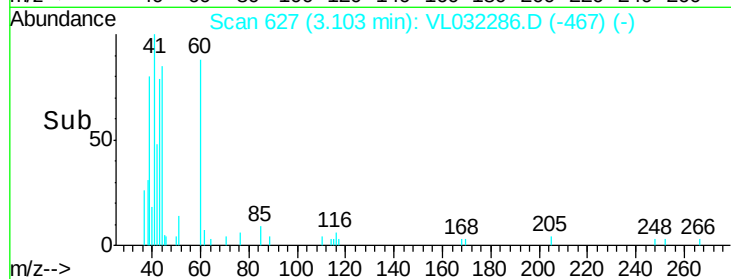
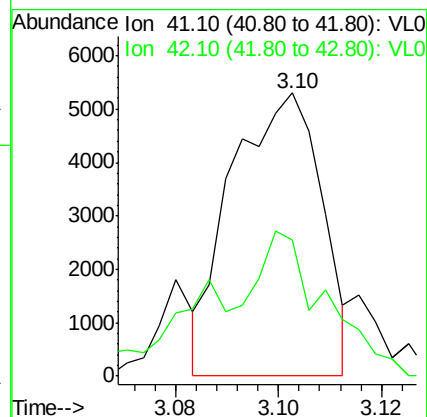
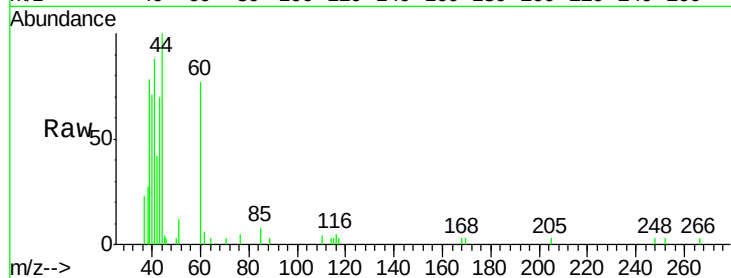
ClientSampleId :

Tot Ion: 41 Resp: 6435

Ion Ratio Lower Upper

41 100

42 72.8 56.2 84.4



#13

Ethanol

Concen: 6.620 ppbv

RT: 3.71 min Scan# 817

Delta R.T. 0.01 min

Lab File: VL032286.D

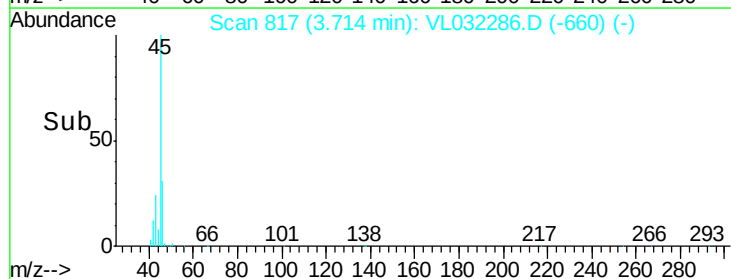
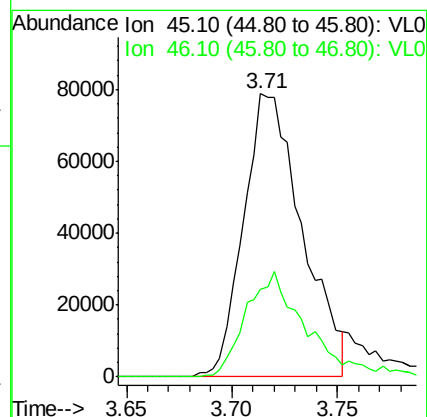
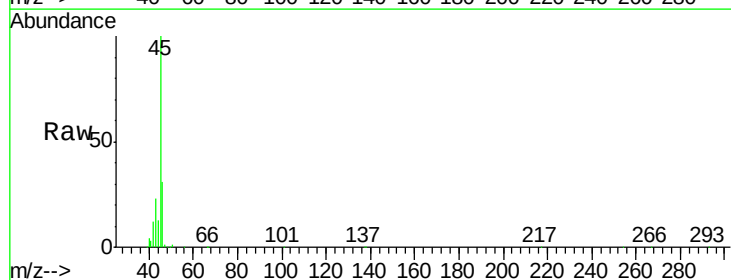
Acq: 19 Jul 2018 7:42

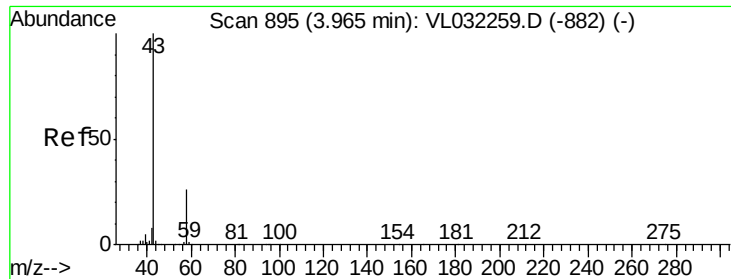
Tgt Ion: 45 Resp: 152009

Ion Ratio Lower Upper

45 100

46 39.9 15.2 60.8





#15

Acetone

Concen: 1.116 ppbv

RT: 3.97 min Scan# 898

Delta R.T. 0.01 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Instrument :

MSVOA_L

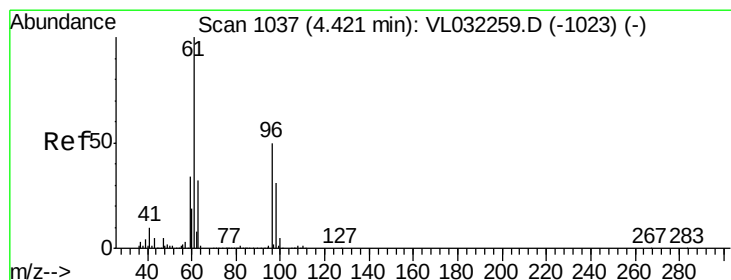
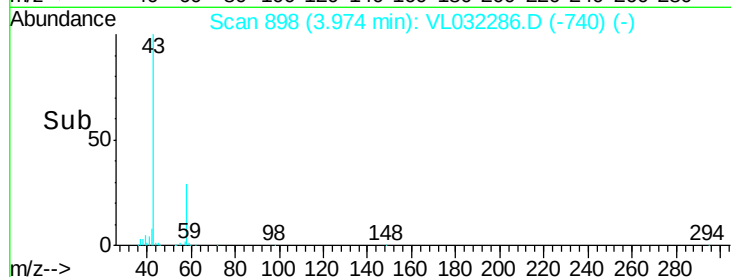
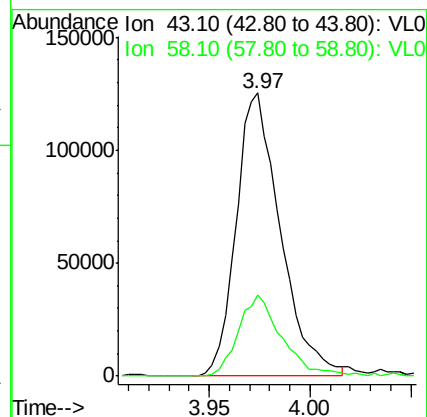
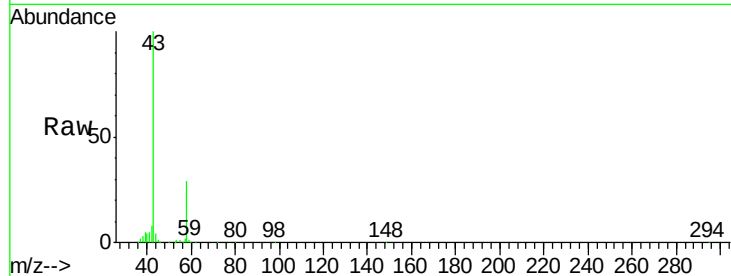
ClientSampleId :

Tot Ion: 43 Resp: 191415

Ion Ratio Lower Upper

43 100

58 28.9 21.8 32.6



#17

tert-Butyl alcohol

Concen: 0.021 ppbv

RT: 4.45 min Scan# 1046

Delta R.T. 0.03 min

Lab File: VL032286.D

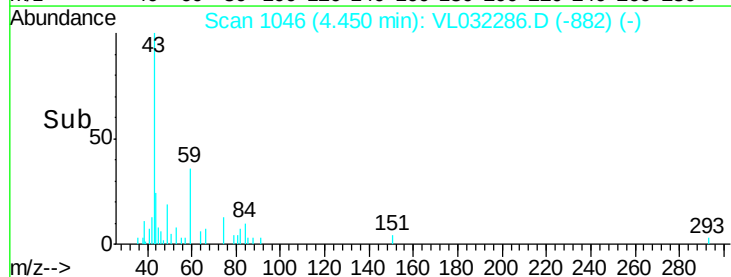
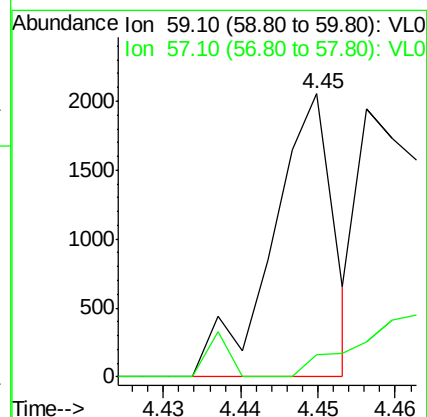
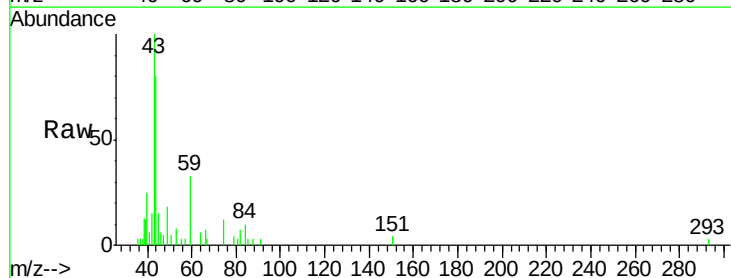
Acq: 19 Jul 2018 7:42

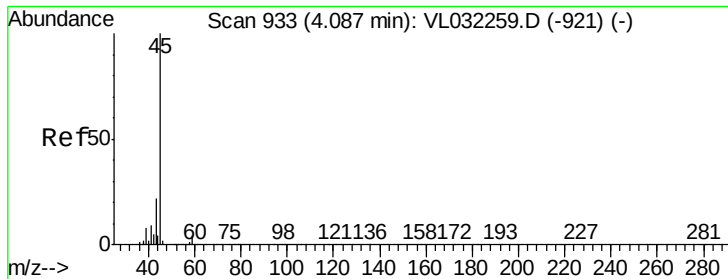
Tgt Ion: 59 Resp: 1125

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.4#





#19

Isopropyl Alcohol

Concen: 0.136 ppbv

RT: 4.12 min Scan# 942

Delta R.T. 0.03 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Instrument :

MSVOA_L

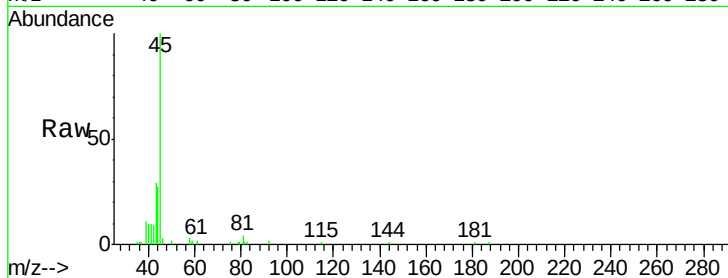
ClientSampleId :

Tot Ion: 45 Resp: 15781

Ion Ratio Lower Upper

45 100

58 0.0 1.5 2.3#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.12

20000

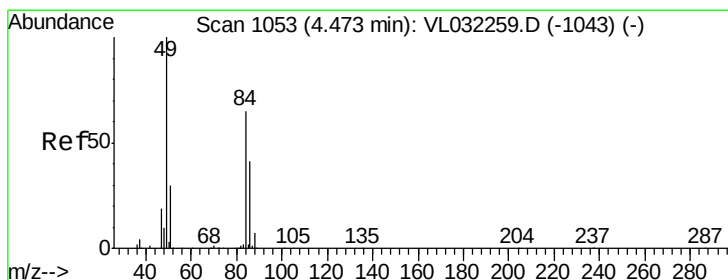
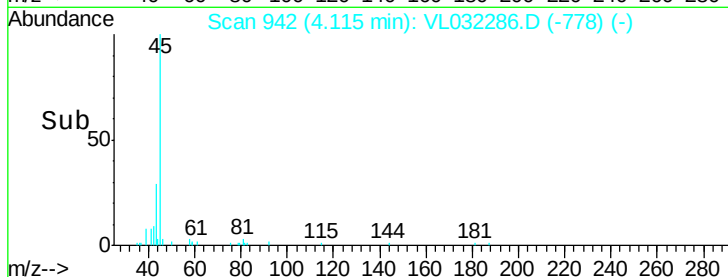
15000

10000

5000

0

Time-->



#20

Methylene Chloride

Concen: 0.280 ppbv

RT: 4.48 min Scan# 1054

Delta R.T. 0.00 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Tgt Ion: 84 Resp: 18471

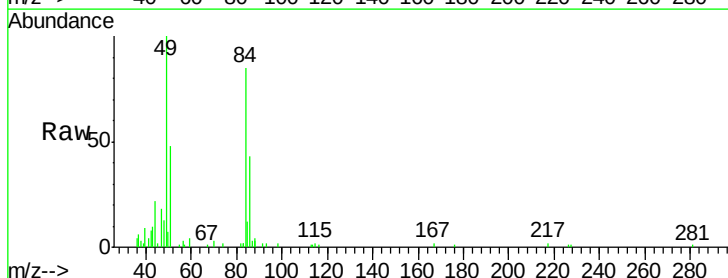
Ion Ratio Lower Upper

84 100

49 112.0 122.4 183.6#

51 54.2 36.8 55.2

86 50.4 50.7 76.1#



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

4.48

25000

20000

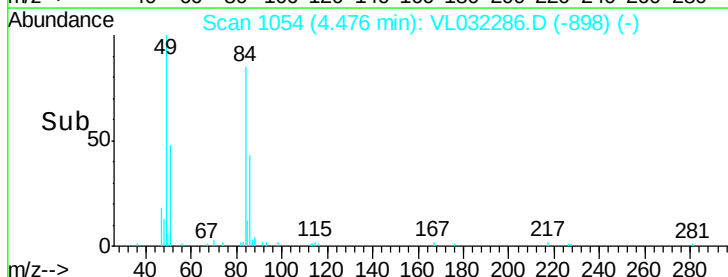
15000

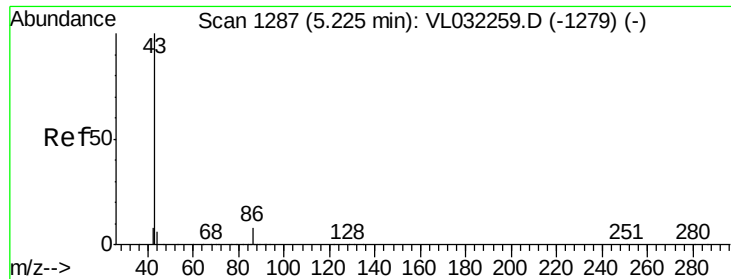
10000

5000

0

Time-->





#23

Vinyl Acetate

Concen: 0.032 ppbv

RT: 5.22 min Scan# 1286

Delta R.T. -0.00 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 43 Resp: 9702

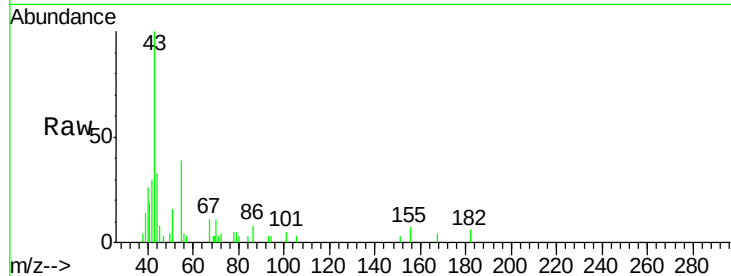
Ion Ratio Lower Upper

43 100

86 8.7 5.9 8.9

42 14.7 7.3 10.9#

44 0.0 4.4 6.6#

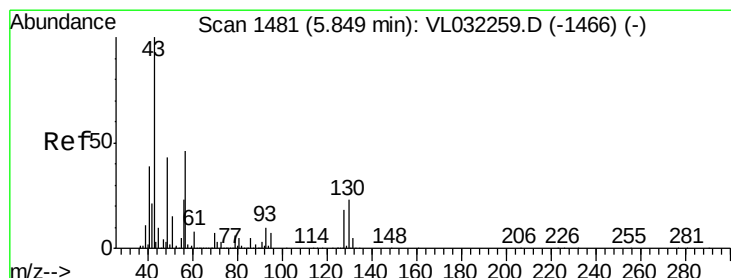
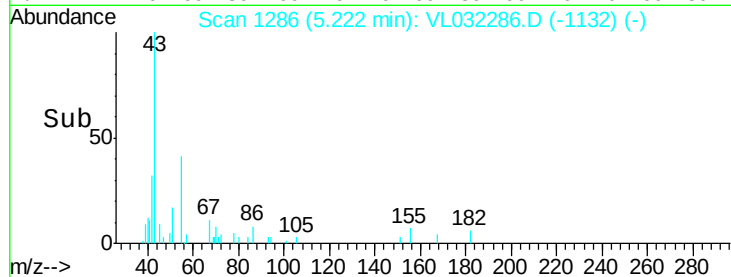
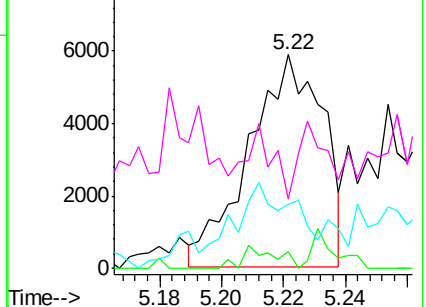


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.573 ppbv

RT: 5.85 min Scan# 1483

Delta R.T. 0.01 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Tgt Ion: 43 Resp: 214212

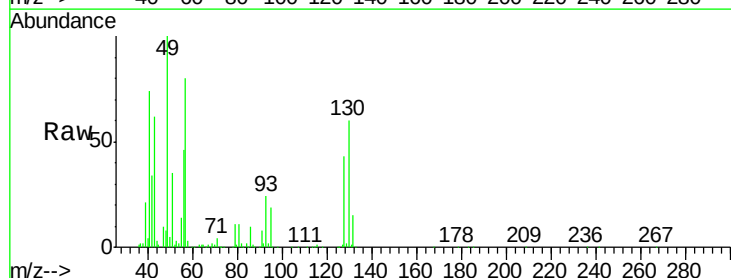
Ion Ratio Lower Upper

43 100

45 1.4 7.9 11.9#

61 0.7 7.6 11.4#

70 1.9 5.8 8.8#

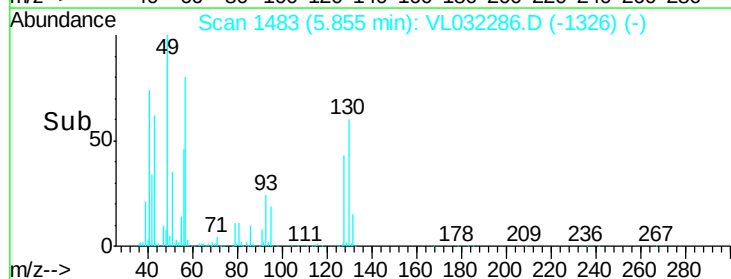
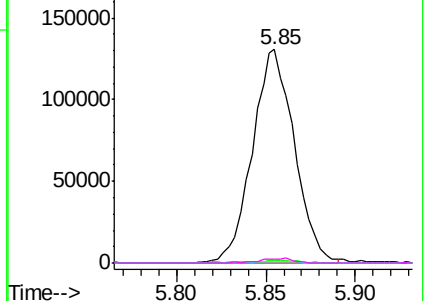


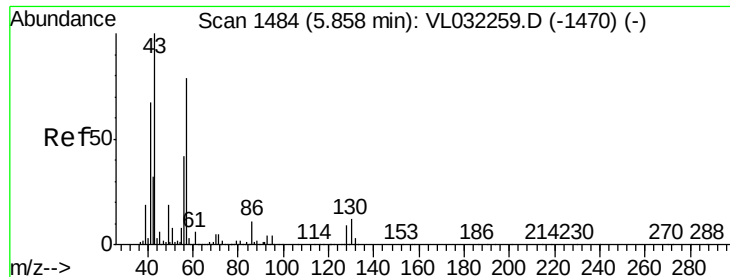
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0

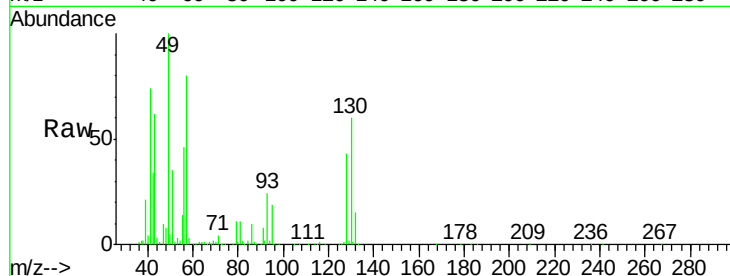




#26
Hexane
Concen: 1.660 ppbv
RT: 5.85 min Scan# 1483
Delta R.T. -0.00 min
Lab File: VL032286.D
Acq: 19 Jul 2018 7:42

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion	57	Resp	284706
Ion	Ratio	Lower	Upper
57	100		
41	91.9	67.9	101.9
43	76.1	175.9	263.9
56	56.6	41.9	62.9



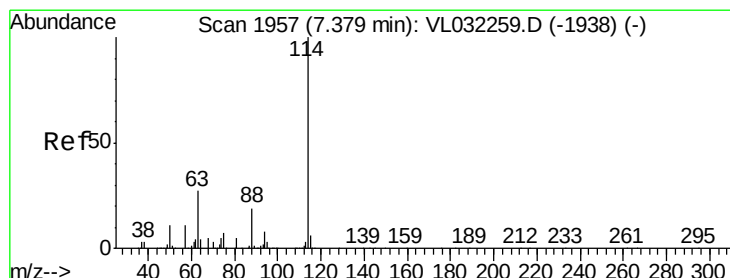
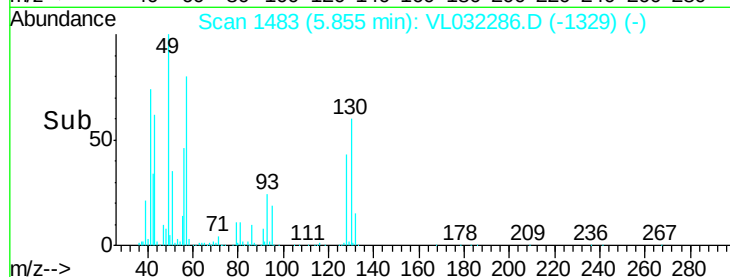
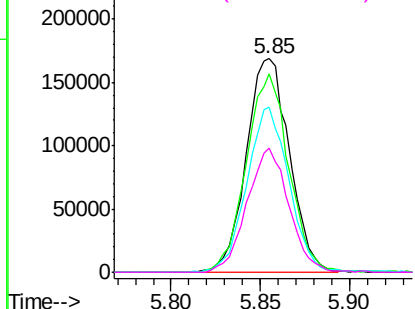
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

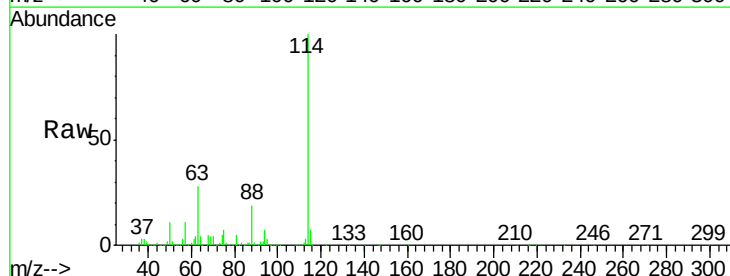
Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.37 min Scan# 1954
Delta R.T. -0.01 min
Lab File: VL032286.D
Acq: 19 Jul 2018 7:42

Tgt Ion	114	Resp	3394149
Ion	Ratio	Lower	Upper
114	100		
63	28.1	22.6	33.8
88	19.2	15.2	22.8

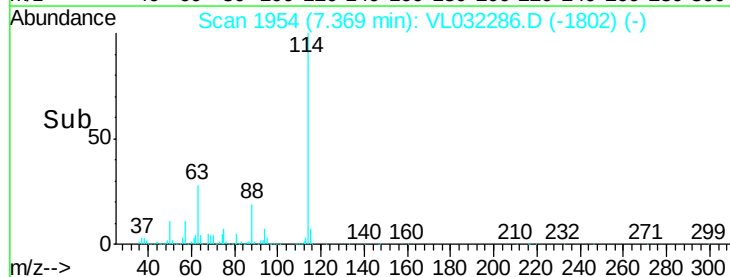
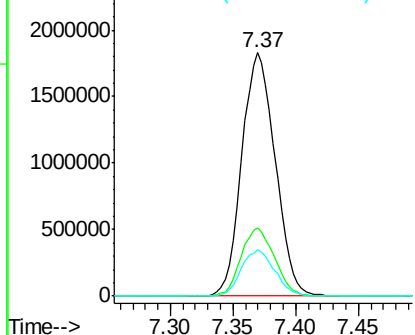


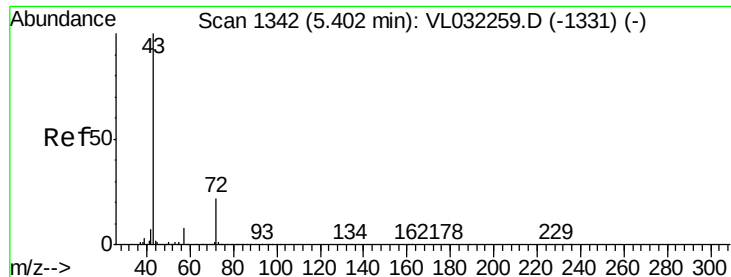
Abundance

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

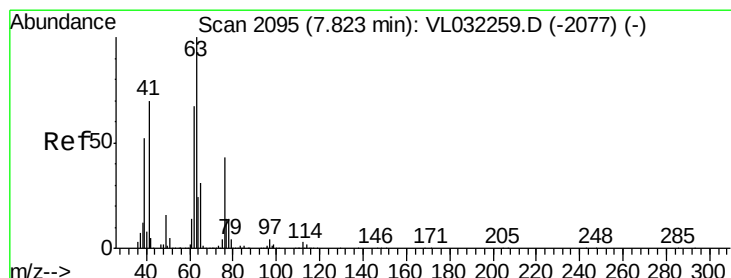
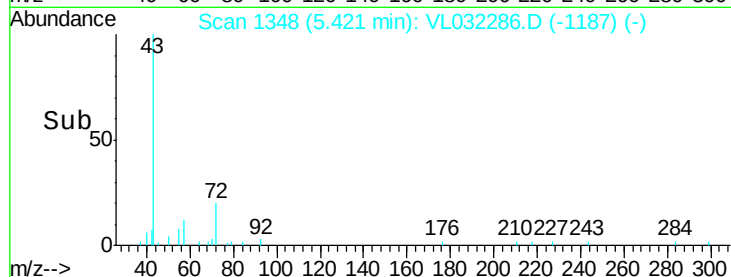
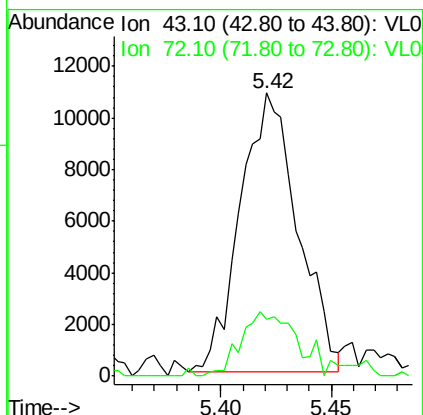
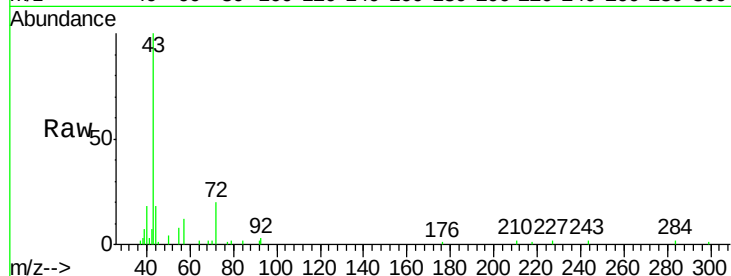




#34
 2-Butanone
 Concen: 0.084 ppbv
 RT: 5.42 min Scan# 1348
 Delta R.T. 0.02 min
 Lab File: VL032286.D
 Acq: 19 Jul 2018 7:42

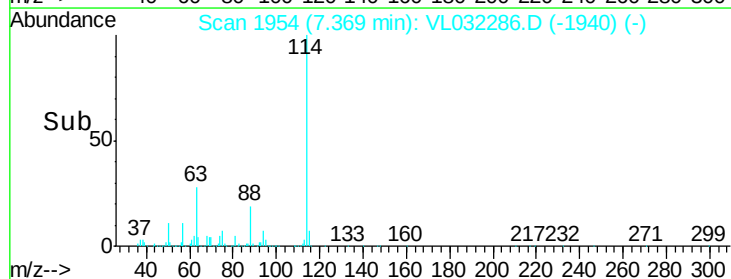
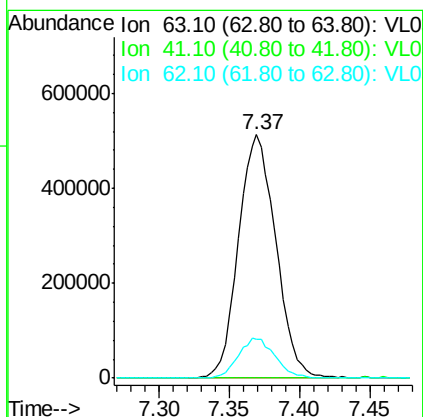
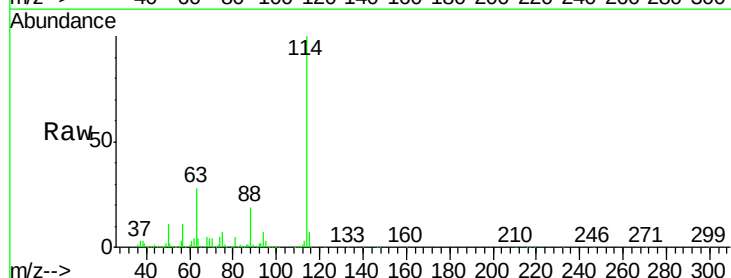
Instrument :
 MSVOA_L
 ClientSampleId :

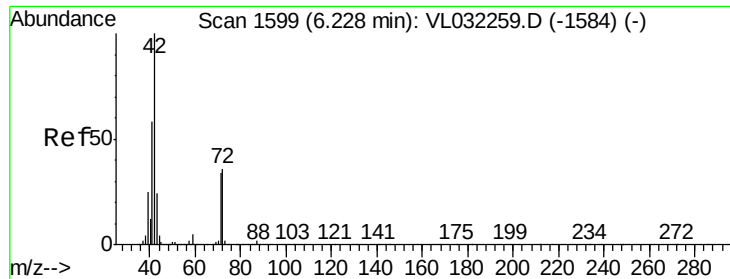
Tot Ion: 43 Resp: 19582
 Ion Ratio Lower Upper
 43 100
 72 22.3 17.7 26.5



#39
 1,2-Dichloropropane
 Concen: 7.181 ppbv
 RT: 7.37 min Scan# 1954
 Delta R.T. -0.45 min
 Lab File: VL032286.D
 Acq: 19 Jul 2018 7:42

Tgt Ion: 63 Resp: 949830
 Ion Ratio Lower Upper
 63 100
 41 0.0 55.8 83.6#
 62 16.0 53.8 80.8#





#41

Tetrahydrofuran

Concen: 0.898 ppbv

RT: 5.85 min Scan# 1482

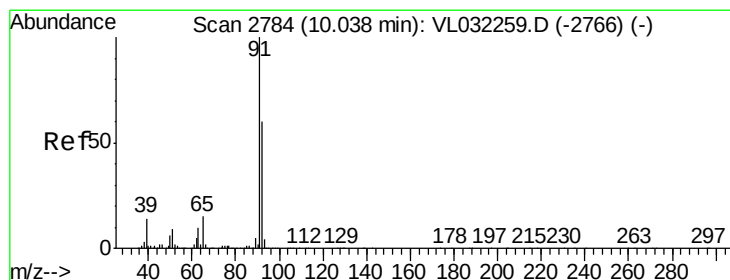
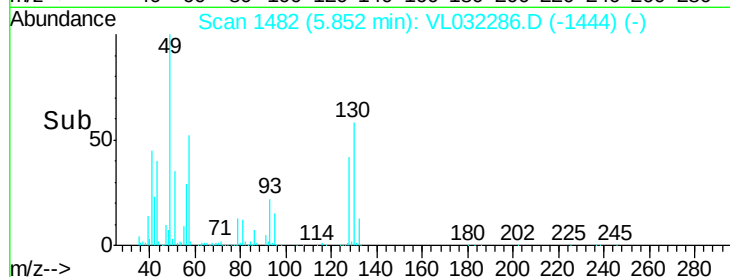
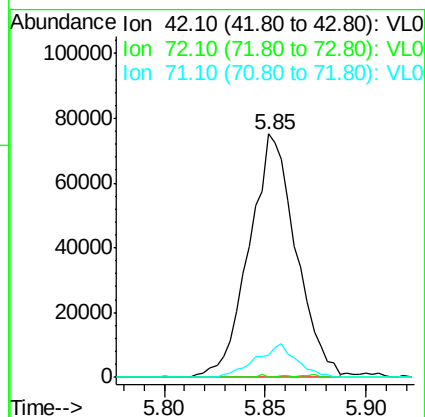
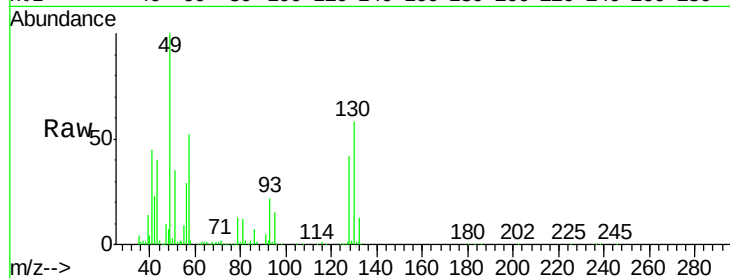
Delta R.T. -0.38 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:	42	Resp:	122007
Ion	Ratio	Lower	Upper
42	100		
72	0.7	29.4	44.0#
71	12.1	28.2	42.4#



#53

Toluene

Concen: 0.036 ppbv

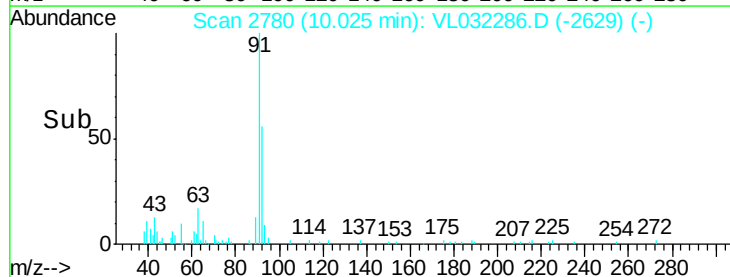
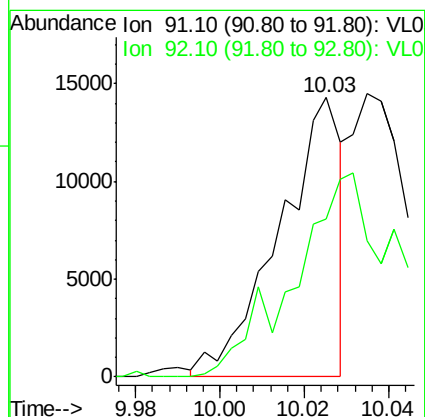
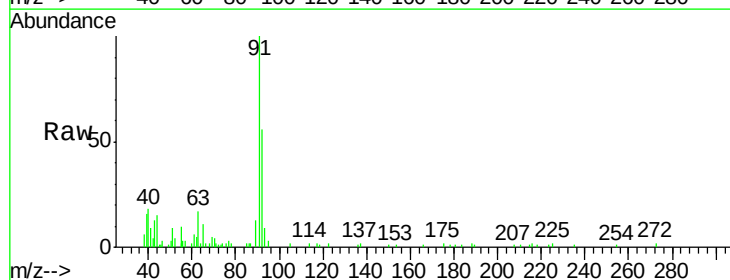
RT: 10.03 min Scan# 2780

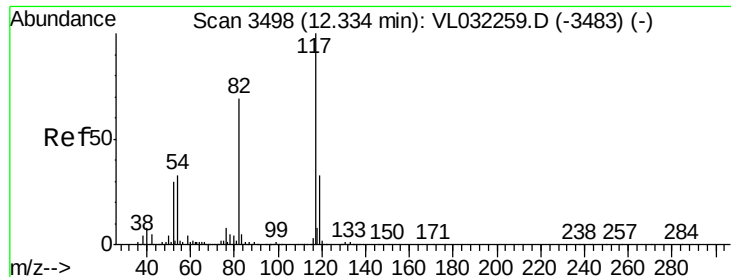
Delta R.T. -0.01 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Tgt Ion:	91	Resp:	14617
Ion	Ratio	Lower	Upper
91	100		
92	0.0	48.6	72.8#

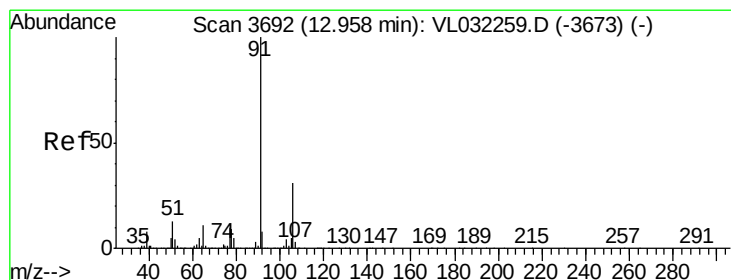
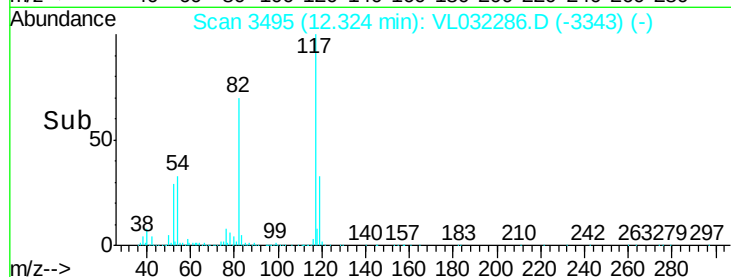
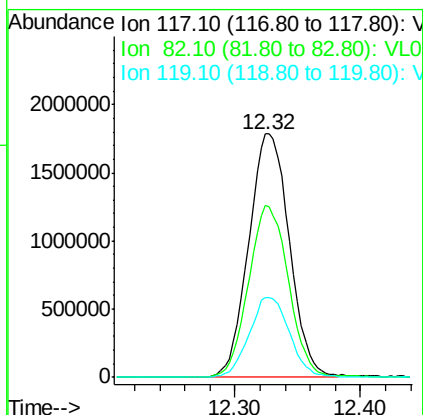
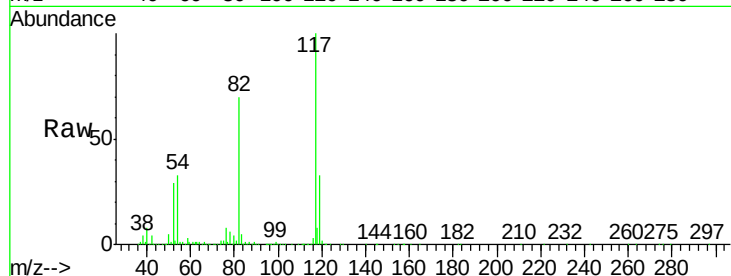




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.32 min Scan# 3495
Delta R.T. -0.01 min
Lab File: VL032286.D
Acq: 19 Jul 2018 7:42

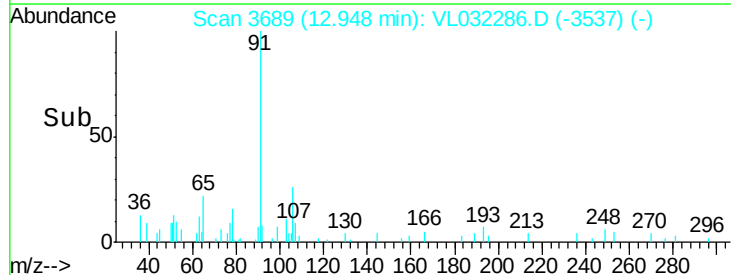
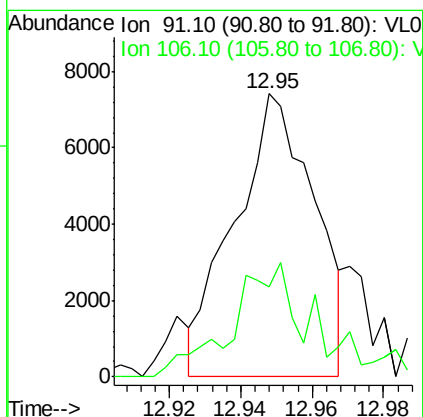
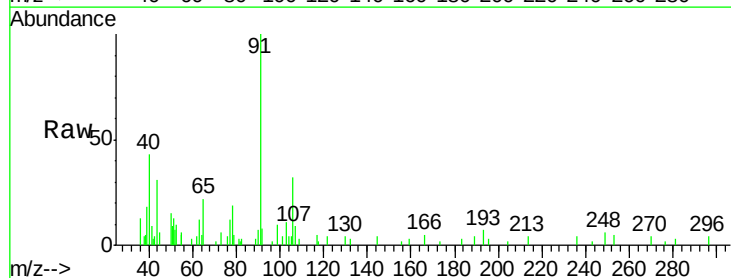
Instrument :
MSVOA_L
ClientSampleId :

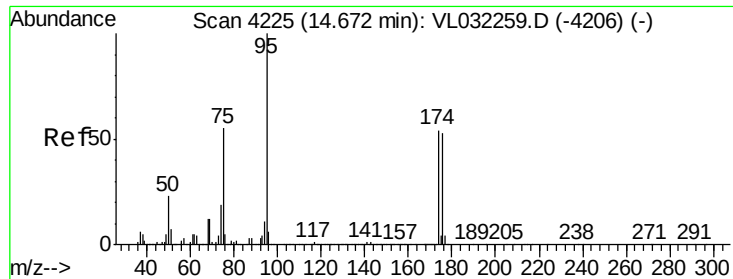
Tot Ion:117 Resp: 4028333
Ion Ratio Lower Upper
117 100
82 70.1 53.9 80.9
119 32.7 25.5 38.3



#58
Ethyl Benzene
Concen: 0.020 ppbv
RT: 12.95 min Scan# 3689
Delta R.T. -0.01 min
Lab File: VL032286.D
Acq: 19 Jul 2018 7:42

Tgt Ion: 91 Resp: 11476
Ion Ratio Lower Upper
91 100
106 29.0 24.5 36.7





#68

1-Bromo-4-Fluorobenzene

Concen: 9.781 ppbv

RT: 14.66 min Scan# 4222

Delta R.T. -0.01 min

Lab File: VL032286.D

Acq: 19 Jul 2018 7:42

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 95 Resp: 3194703

Ion Ratio Lower Upper

95 100

174 55.6 44.3 66.5

175 4.0 3.3 4.9

