

Data File : VL031869.D

Acq On : 12 Apr 2018 17:27

Operator : SY/AP

Sample : J2191-02

Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF2-040218

Quant Time: Apr 14 01:36:21 2018

Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL041218AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Apr 13 16:50:02 2018

QLast Update : Fri Apr 13 16:50:02 2018

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.89	49	1091855	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.43	114	2203002	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.39	117	2212158	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.73	95	1743654	9.80	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.00%

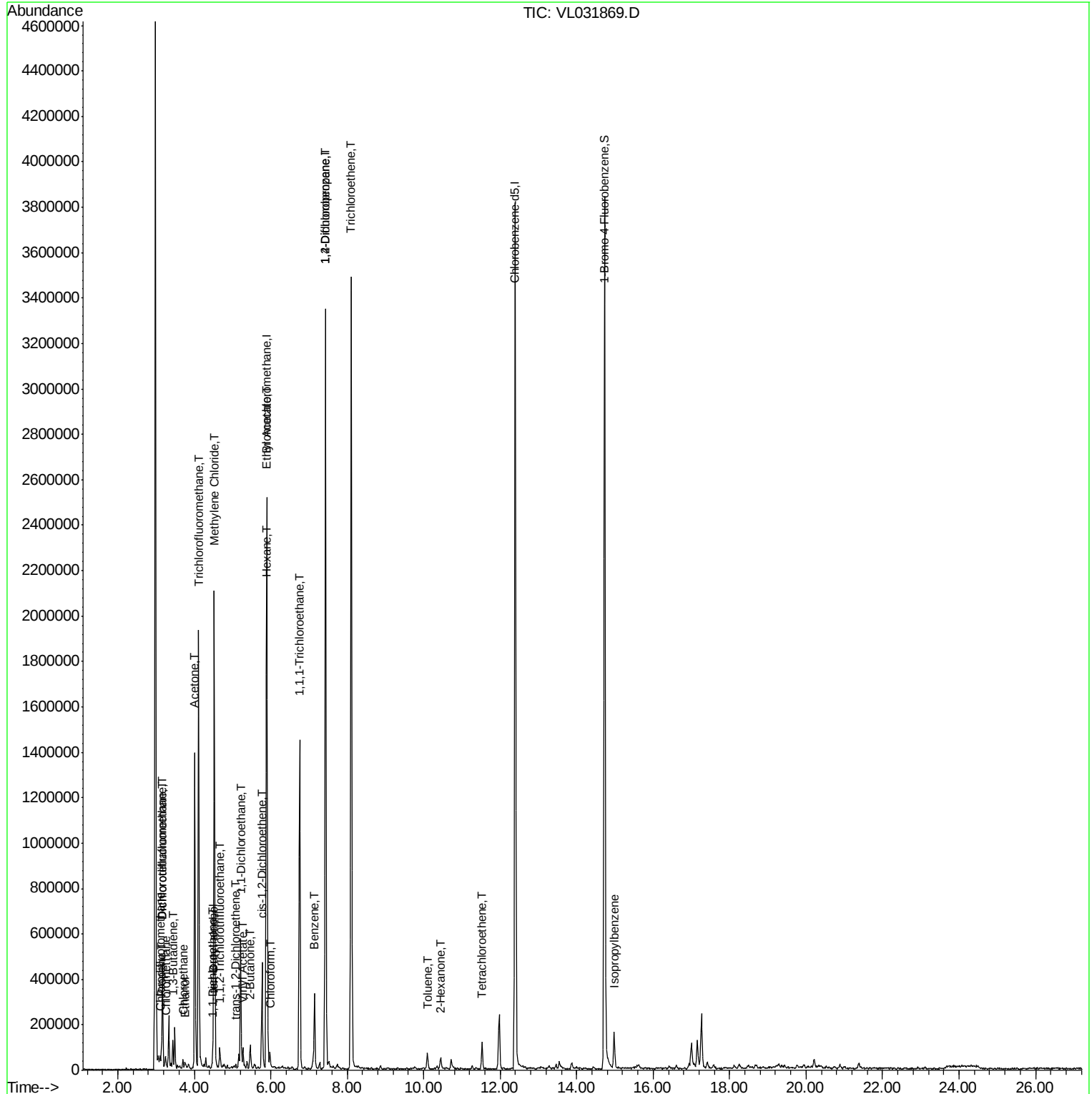
Target Compounds

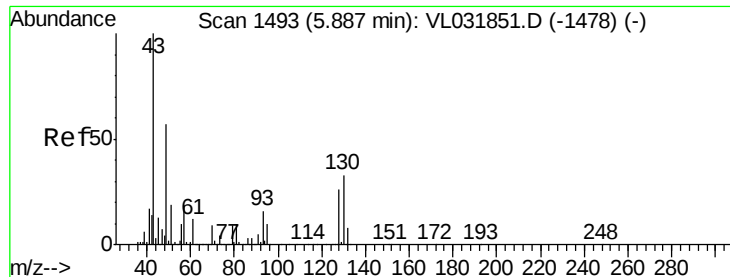
						Qvalue
2) Dichlorodifluoromethane	3.17	85	315891	1.40	ppbv	99
3) Chlorodifluoromethane	3.10	51	51083	0.40	ppbv #	86
4) Chloromethane	3.26	50	9033	0.14	ppbv #	74
7) Chloroethane	3.70	64	23326	0.80	ppbv #	87
8) Dichlorotetrafluoroethane	3.17	85	315891	1.71	ppbv #	17
9) Propene	3.14	41	13843	0.32	ppbv #	54
11) Trichlorofluoromethane	4.11	101	1306031	5.92	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.67	101	29219	0.20	ppbv	99
13) Ethanol	3.76	45	23878	1.60	ppbv	86
15) Acetone	4.01	43	1420500	8.45	ppbv	99
16) 1,3-Butadiene	3.43	39	35784	0.58	ppbv #	16
17) tert-Butyl alcohol	4.48	59	35953	0.52	ppbv #	60
18) 1,1-Dichloroethene	4.46	96	2276	0.04	ppbv #	59
20) Methylene Chloride	4.52	84	742514	12.13	ppbv	92
22) trans-1,2-Dichloroethene	5.08	96	5061	0.08	ppbv #	72
23) Vinyl Acetate	5.27	43	63533	0.37	ppbv #	85
24) 1,1-Dichloroethane	5.22	63	432744	2.55	ppbv	99
25) Ethyl Acetate	5.90	43	30687	0.12	ppbv #	84
26) Hexane	5.91	57	81894	0.67	ppbv #	43
29) Chloroform	5.98	83	31098	0.15	ppbv	96
31) cis-1,2-Dichloroethene	5.77	61	254211	2.30	ppbv	99
32) 1,1,1-Trichloroethane	6.76	97	910634	4.51	ppbv	99
34) 2-Butanone	5.46	43	115523	0.76	ppbv	99
36) Benzene	7.14	78	243061	1.23	ppbv	98
38) Trichloroethene	8.10	130	999588	12.43	ppbv	99
39) 1,2-Dichloropropane	7.43	63	600092	8.15	ppbv #	21
51) 2-Hexanone	10.43	43	11425	0.07	ppbv #	29
52) Tetrachloroethene	11.52	164	13034	0.17	ppbv #	69
53) Toluene	10.10	91	46901	0.21	ppbv	94
62) Isopropylbenzene	14.98	105	59479	0.17	ppbv #	57

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.89 min Scan# 1494

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF2-040218

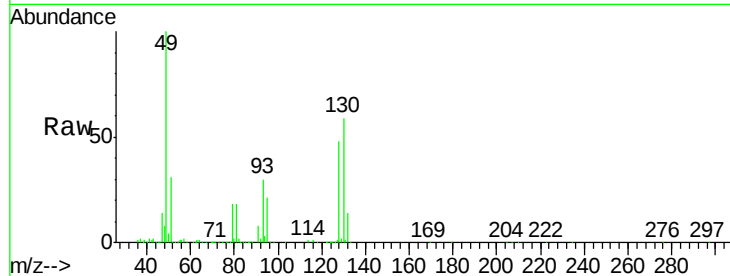
Tgt Ion: 49 Resp: 1091855

Ion Ratio Lower Upper

49 100

128 48.4 23.9 71.7

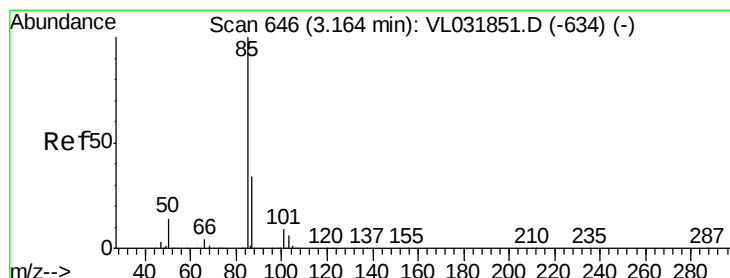
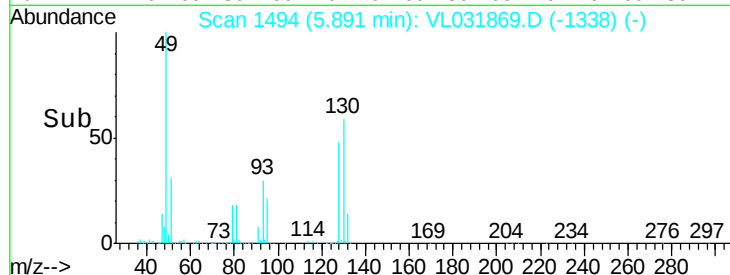
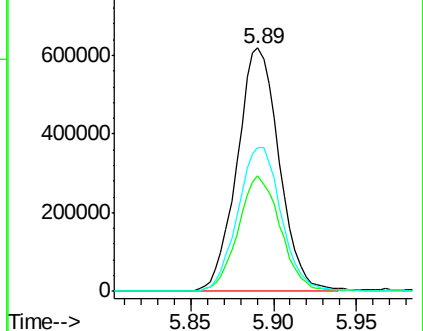
130 61.9 30.9 92.7



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: 1.40 ppbv

RT: 3.17 min Scan# 647

Delta R.T. 0.00 min

Lab File: VL031869.D

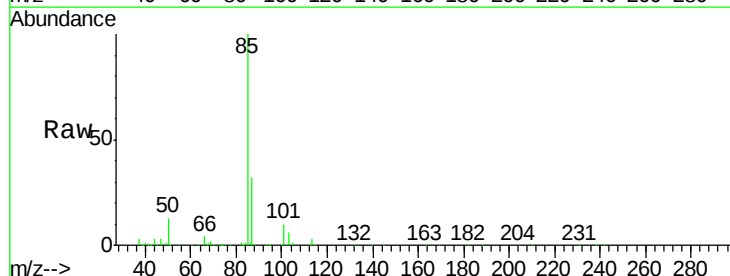
Acq: 12 Apr 2018 17:27

Tgt Ion: 85 Resp: 315891

Ion Ratio Lower Upper

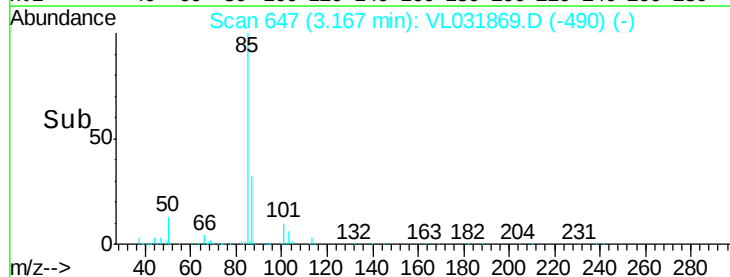
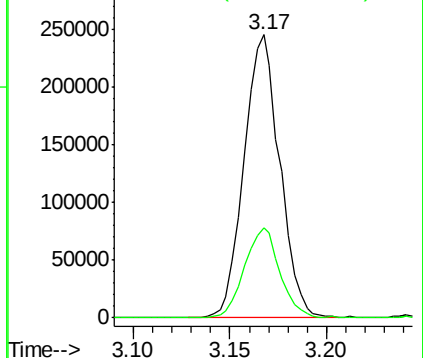
85 100

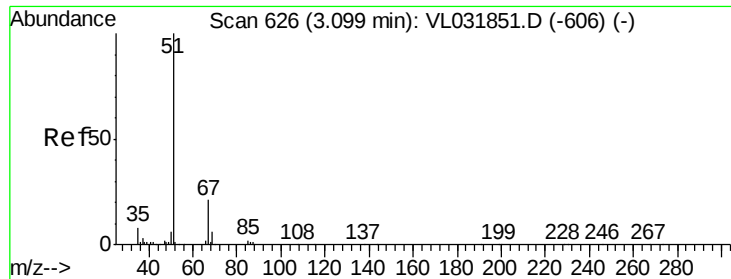
87 31.6 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.40 ppbv

RT: 3.10 min Scan# 627

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

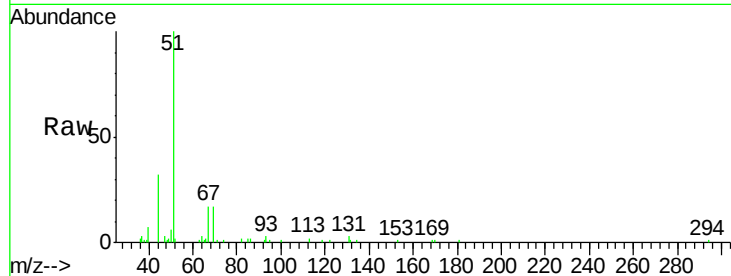
SVE-INF2-040218

Tgt Ion: 51 Resp: 51083

Ion Ratio Lower Upper

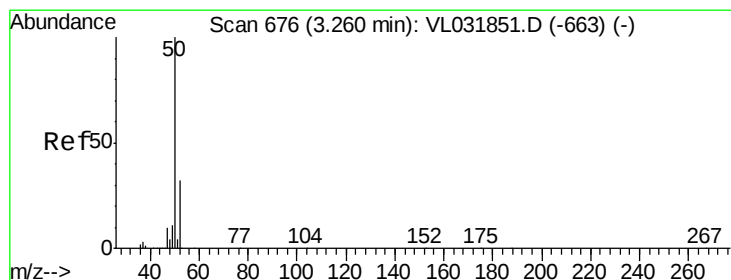
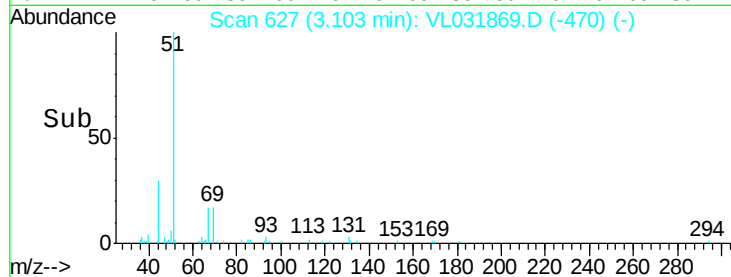
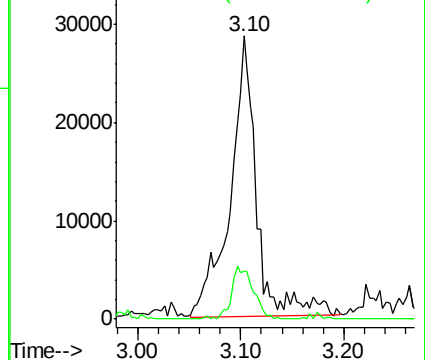
51 100

67 15.4 17.5 26.3#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.14 ppbv

RT: 3.26 min Scan# 677

Delta R.T. 0.00 min

Lab File: VL031869.D

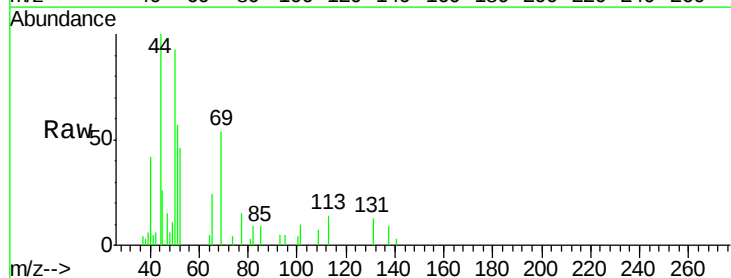
Acq: 12 Apr 2018 17:27

Tgt Ion: 50 Resp: 9033

Ion Ratio Lower Upper

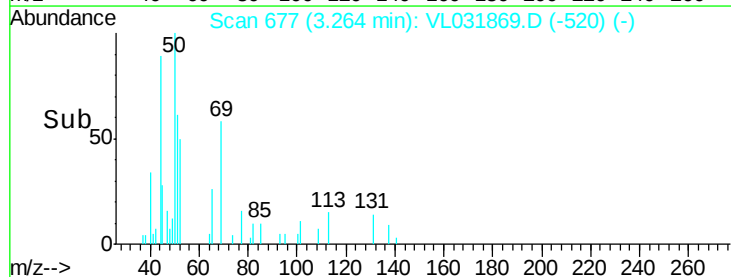
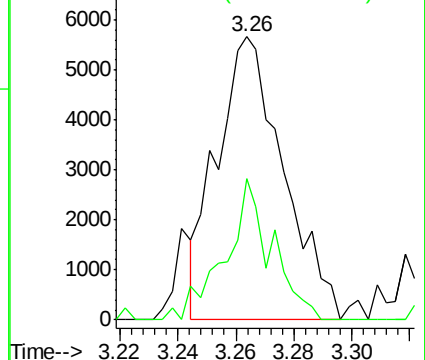
50 100

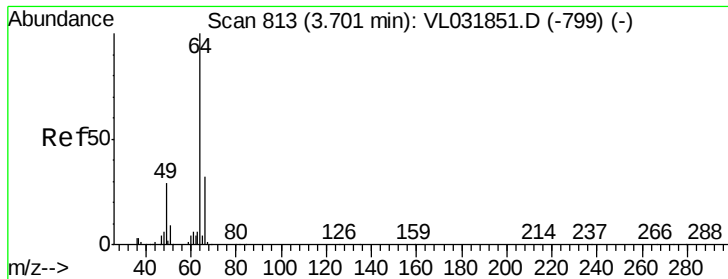
52 50.0 28.1 42.1#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#7

Chloroethane

Concen: 0.80 ppbv

RT: 3.70 min Scan# 813

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

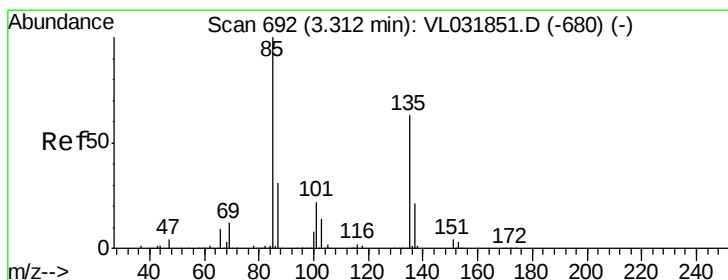
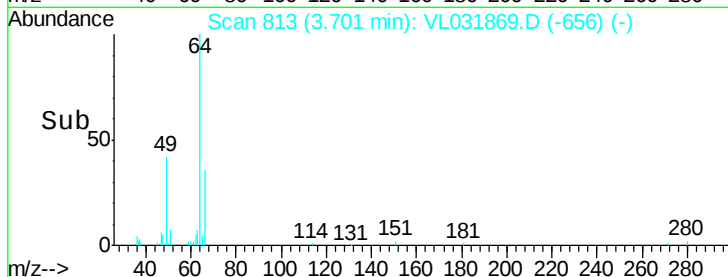
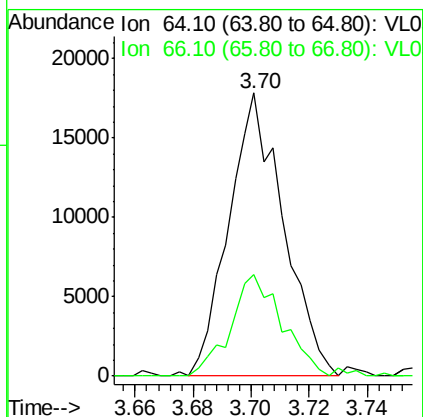
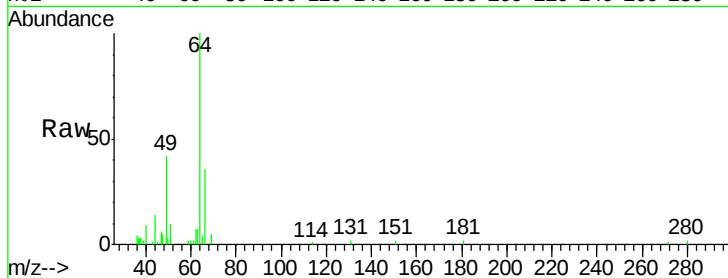
SVE-INF2-040218

Tgt Ion: 64 Resp: 23326

Ion Ratio Lower Upper

64 100

66 36.0 23.4 35.0#



#8

Dichlorotetrafluoroethane

Concen: 1.71 ppbv

RT: 3.17 min Scan# 647

Delta R.T. -0.14 min

Lab File: VL031869.D

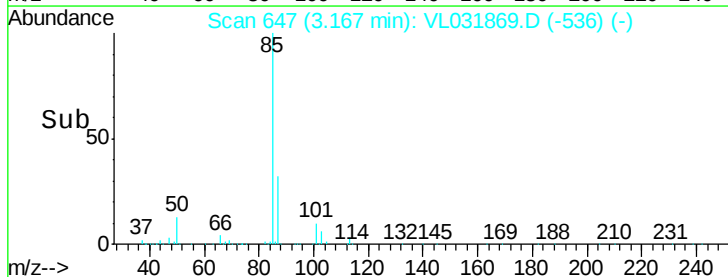
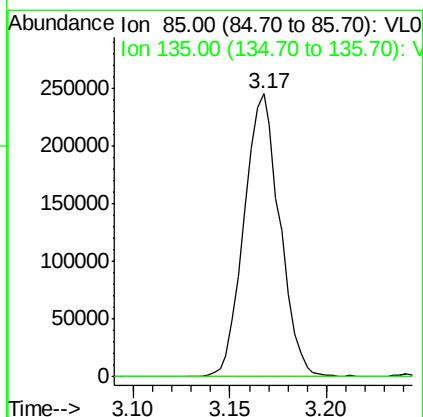
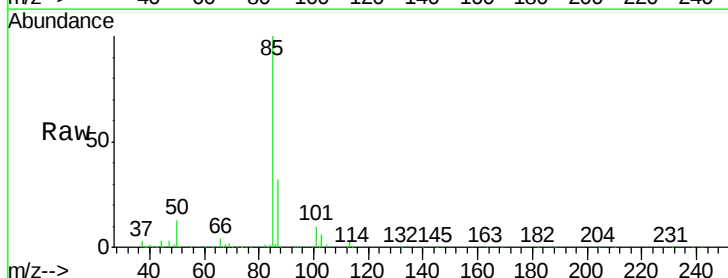
Acq: 12 Apr 2018 17:27

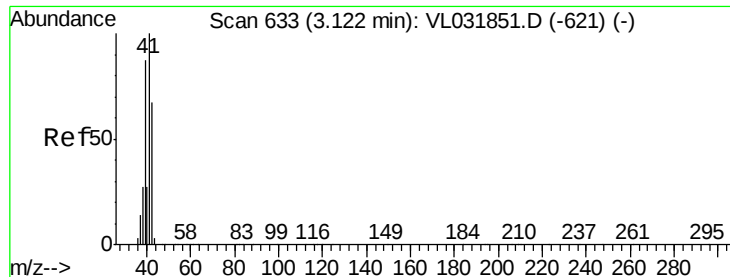
Tgt Ion: 85 Resp: 315891

Ion Ratio Lower Upper

85 100

135 0.0 52.7 79.1#





#9

Propene

Concen: 0.32 ppbv

RT: 3.14 min Scan# 637

Delta R.T. 0.01 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

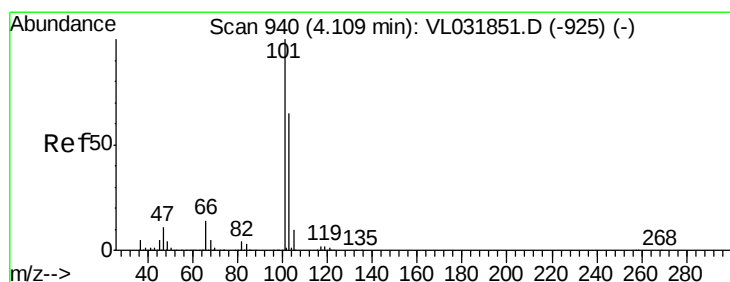
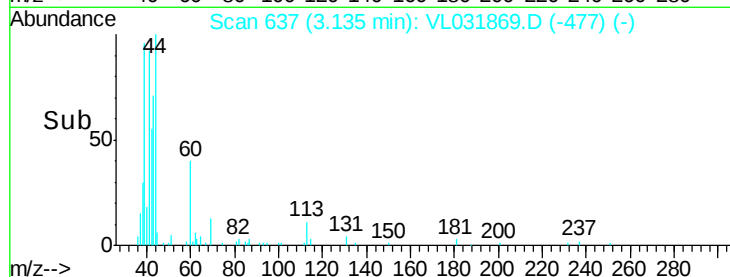
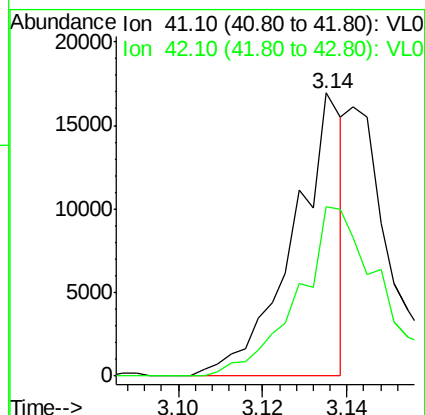
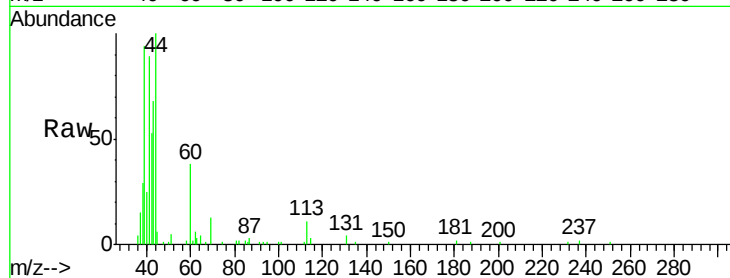
SVE-INF2-040218

Tgt Ion: 41 Resp: 13843

Ion Ratio Lower Upper

41 100

42 106.4 55.0 82.4#



#11

Trichlorofluoromethane

Concen: 5.92 ppbv

RT: 4.11 min Scan# 941

Delta R.T. 0.00 min

Lab File: VL031869.D

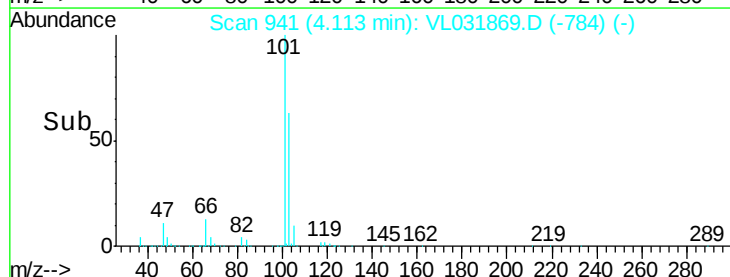
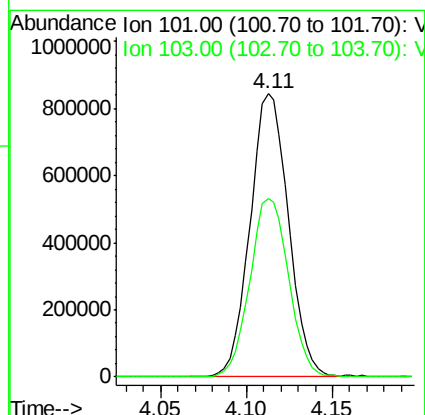
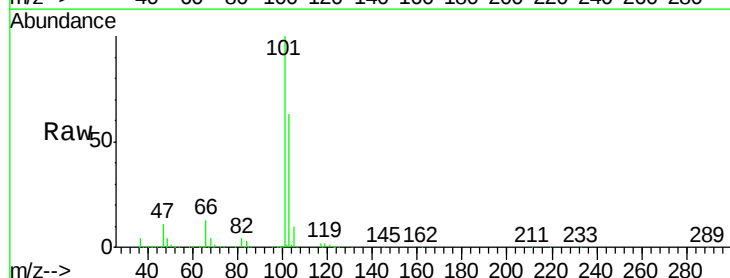
Acq: 12 Apr 2018 17:27

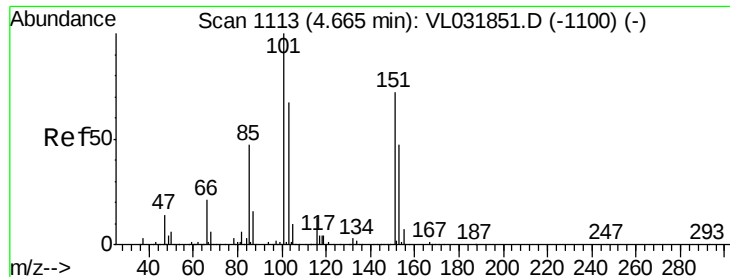
Tgt Ion: 101 Resp: 1306031

Ion Ratio Lower Upper

101 100

103 63.2 51.8 77.8





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.20 ppbv

RT: 4.67 min Scan# 1113

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

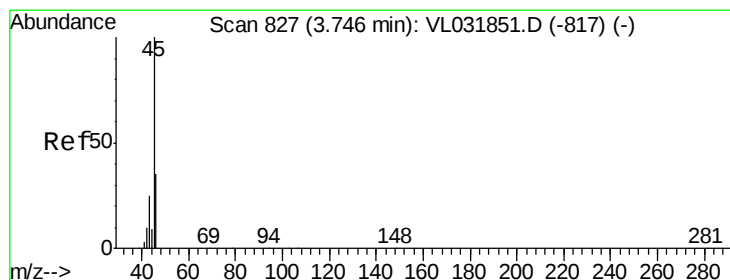
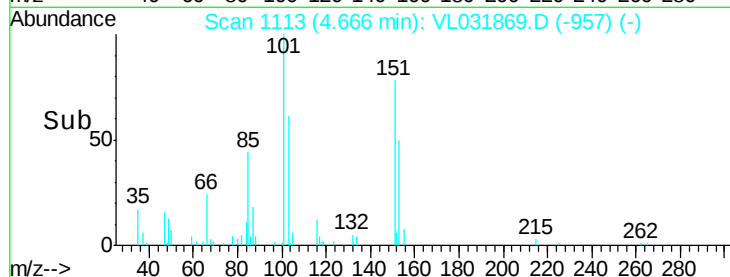
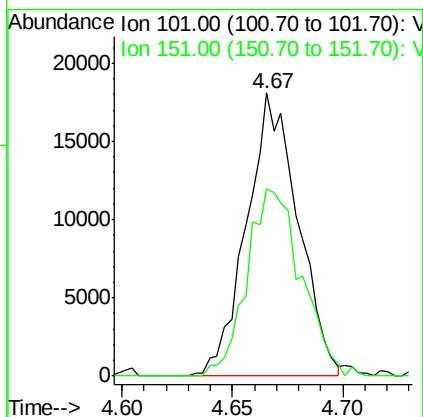
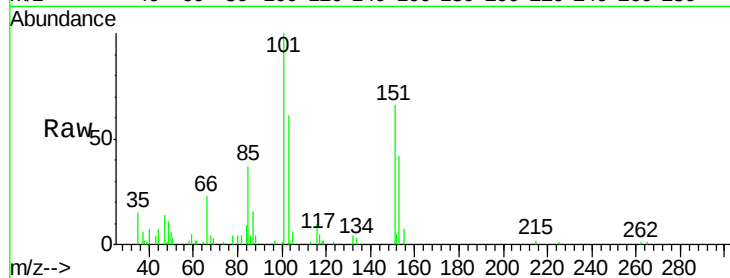
SVE-INF2-040218

Tgt Ion: 101 Resp: 29219

Ion Ratio Lower Upper

101 100

151 70.2 57.0 85.6



#13

Ethanol

Concen: 1.60 ppbv

RT: 3.76 min Scan# 831

Delta R.T. 0.01 min

Lab File: VL031869.D

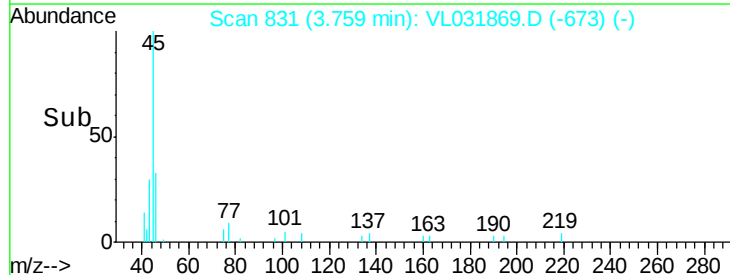
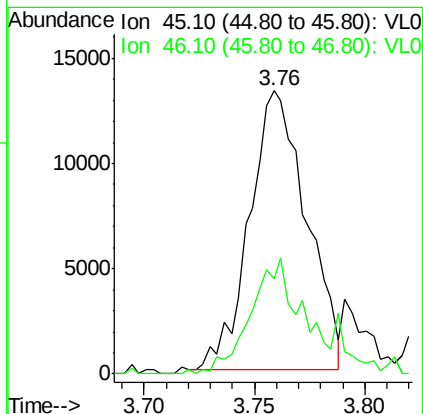
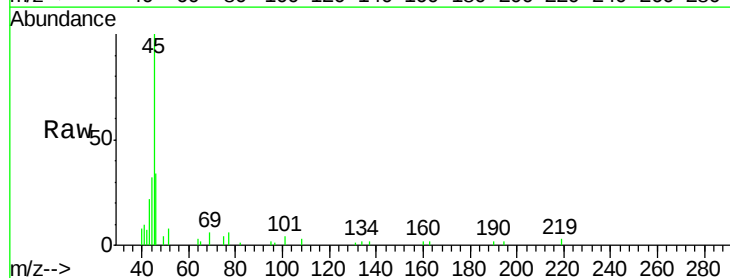
Acq: 12 Apr 2018 17:27

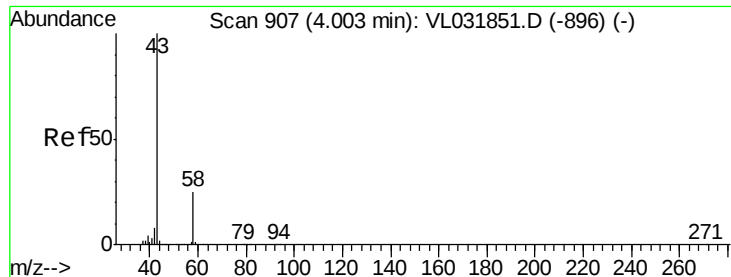
Tgt Ion: 45 Resp: 23878

Ion Ratio Lower Upper

45 100

46 44.6 14.6 58.6





#15

Acetone

Concen: 8.45 ppbv

RT: 4.01 min Scan# 908

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

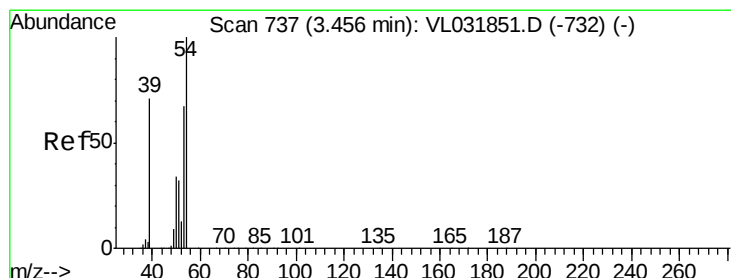
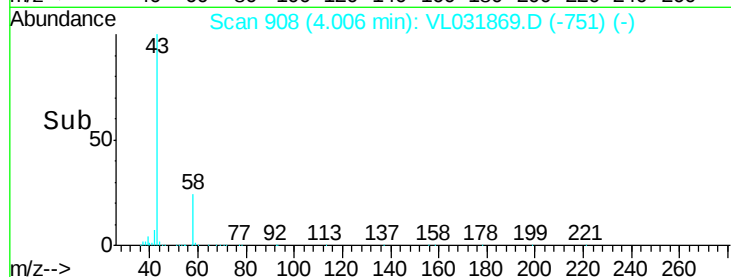
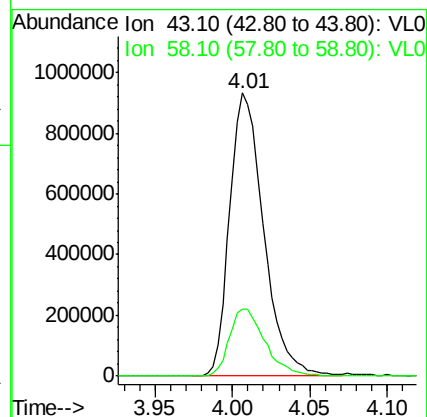
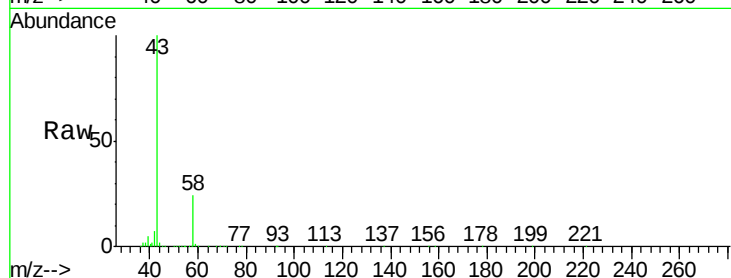
SVE-INF2-040218

Tgt Ion: 43 Resp: 1420500

Ion Ratio Lower Upper

43 100

58 25.5 20.9 31.3



#16

1,3-Butadiene

Concen: 0.58 ppbv

RT: 3.43 min Scan# 730

Delta R.T. -0.02 min

Lab File: VL031869.D

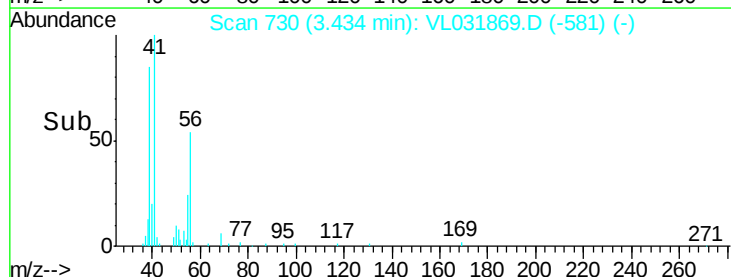
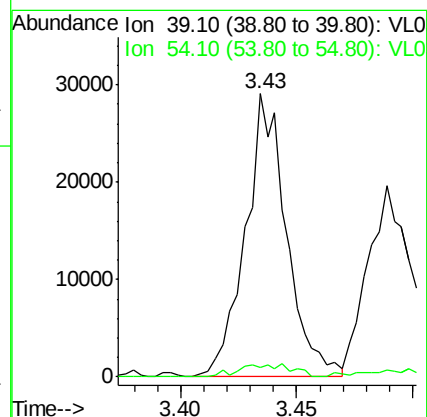
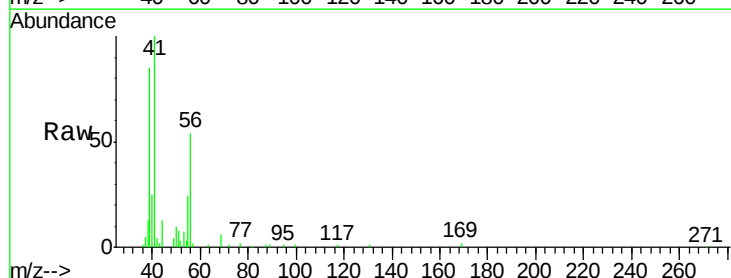
Acq: 12 Apr 2018 17:27

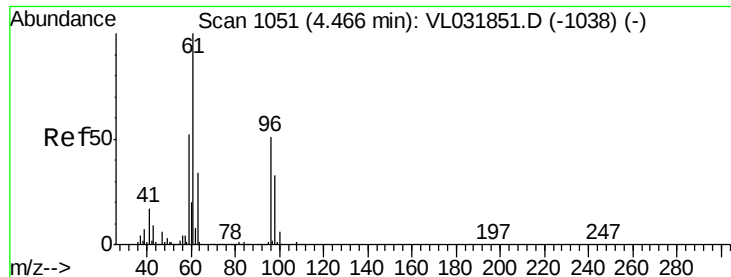
Tgt Ion: 39 Resp: 35784

Ion Ratio Lower Upper

39 100

54 5.7 63.3 94.9#

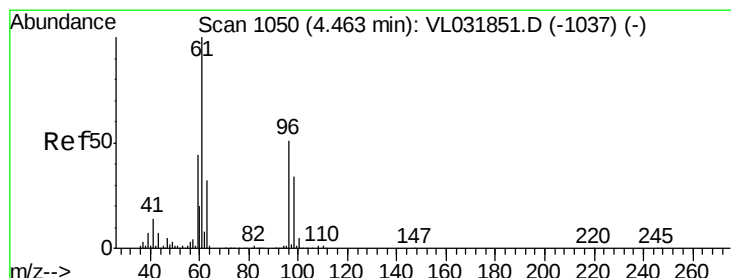
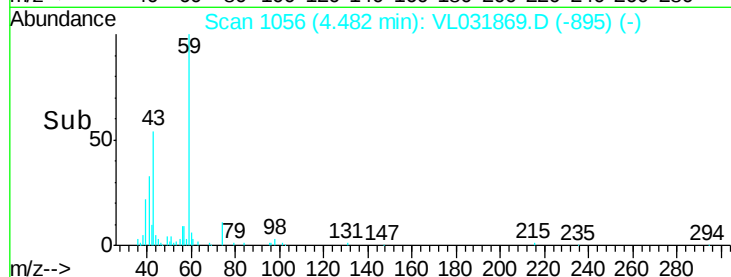
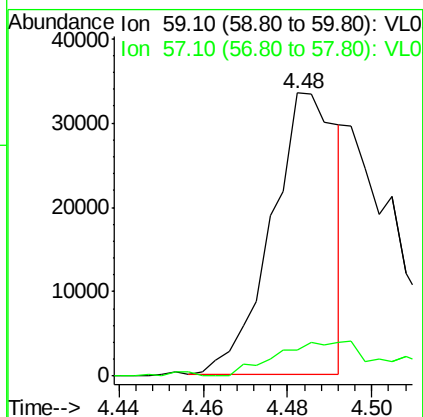
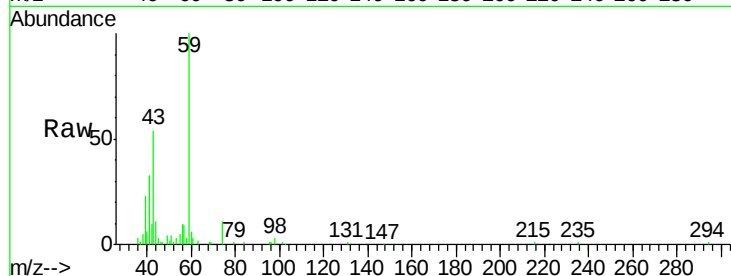




#17
 tert-Butyl alcohol
 Concen: 0.52 ppbv
 RT: 4.48 min Scan# 1056
 Delta R.T. 0.02 min
 Lab File: VL031869.D
 Acq: 12 Apr 2018 17:27

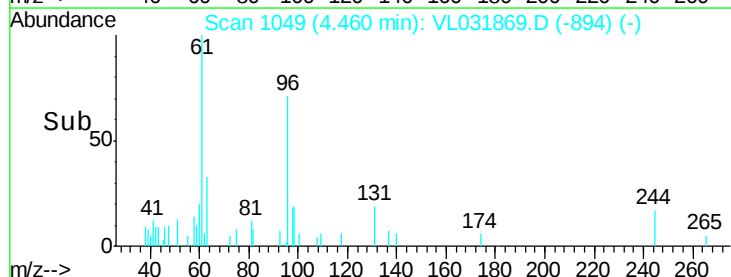
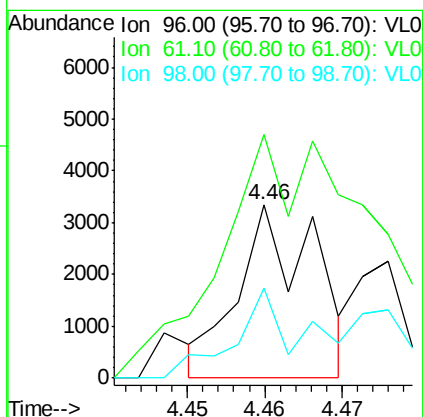
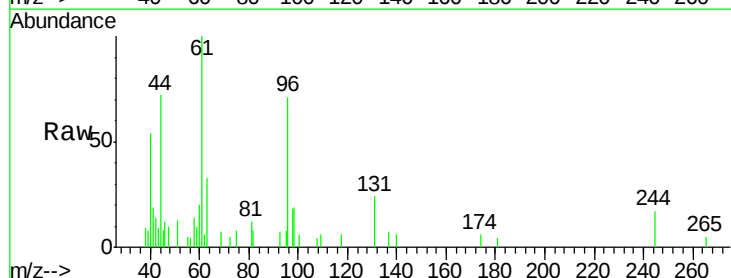
Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF2-040218

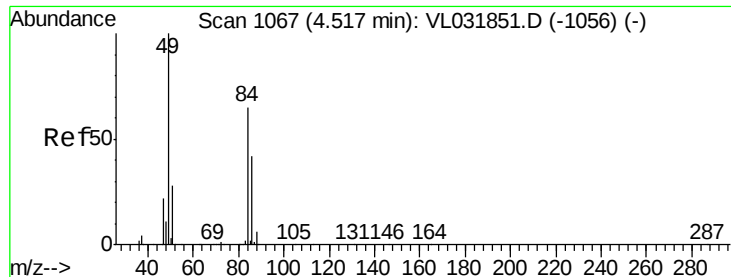
Tgt Ion: 59 Resp: 35953
 Ion Ratio Lower Upper
 59 100
 57 25.8 8.5 12.7#



#18
 1,1-Dichloroethene
 Concen: 0.04 ppbv
 RT: 4.46 min Scan# 1049
 Delta R.T. -0.00 min
 Lab File: VL031869.D
 Acq: 12 Apr 2018 17:27

Tgt Ion: 96 Resp: 2276
 Ion Ratio Lower Upper
 96 100
 61 129.5 161.0 241.6#
 98 47.5 52.7 79.1#

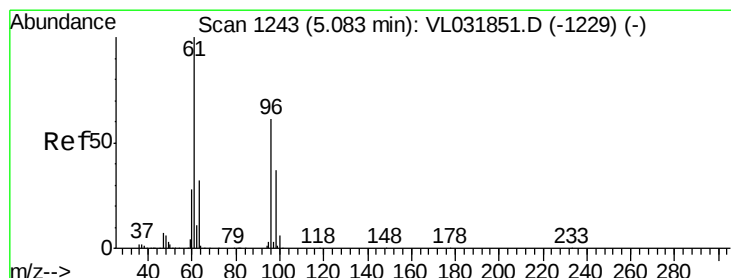
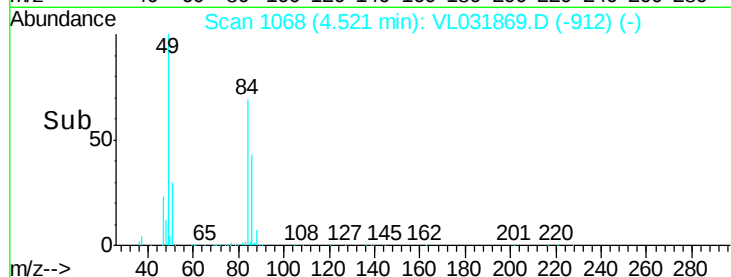
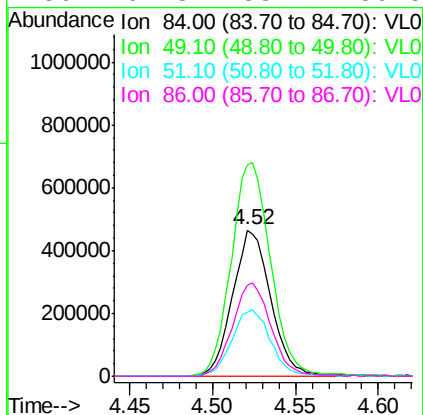
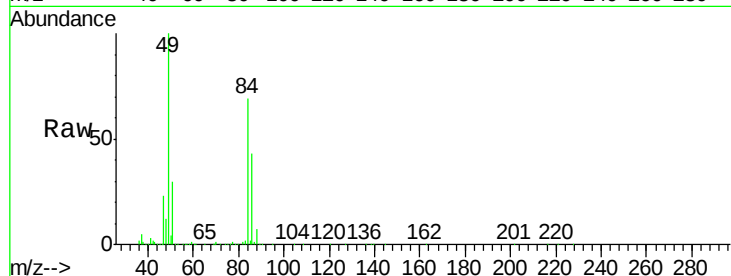




#20
Methylene Chloride
Concen: 12.13 ppbv
RT: 4.52 min Scan# 1068
Delta R.T. 0.00 min
Lab File: VL031869.D
Acq: 12 Apr 2018 17:27

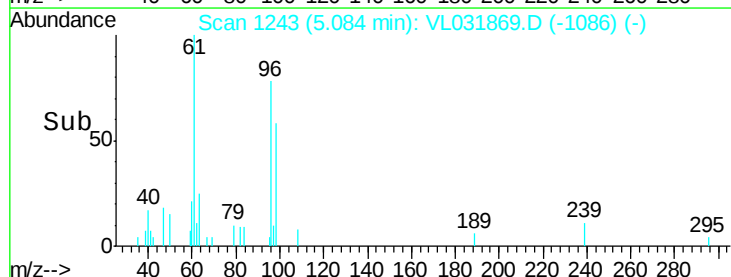
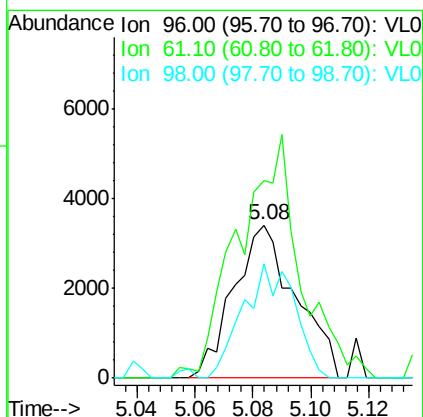
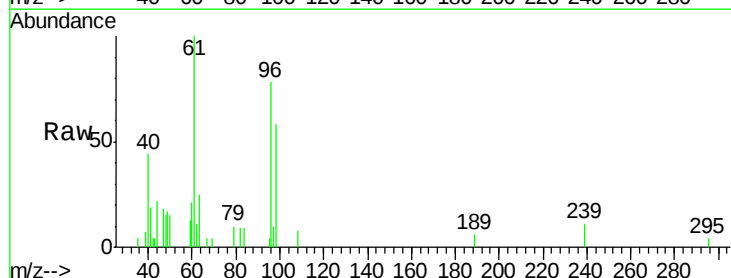
Instrument :
MSVOA_L
ClientSampleId :
SVE-INF2-040218

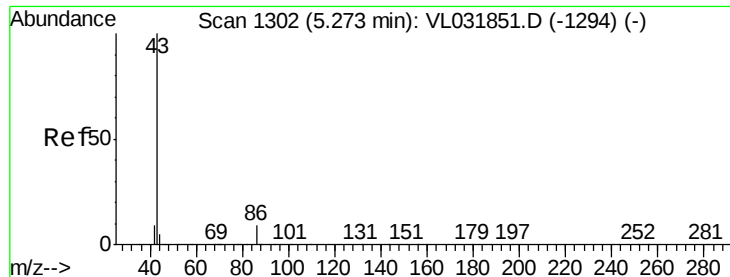
Tgt Ion:	84	Resp:	742514
Ion	Ratio	Lower	Upper
84	100		
49	144.2	125.6	188.4
51	43.1	36.4	54.6
86	61.8	53.7	80.5



#22
trans-1,2-Dichloroethene
Concen: 0.08 ppbv
RT: 5.08 min Scan# 1243
Delta R.T. 0.00 min
Lab File: VL031869.D
Acq: 12 Apr 2018 17:27

Tgt Ion:	96	Resp:	5061
Ion	Ratio	Lower	Upper
96	100		
61	123.0	131.1	196.7#
98	74.7	47.6	71.4#





#23

Vinyl Acetate

Concen: 0.37 ppbv

RT: 5.27 min Scan# 1301

Delta R.T. -0.01 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF2-040218

Tgt Ion: 43 Resp: 63533

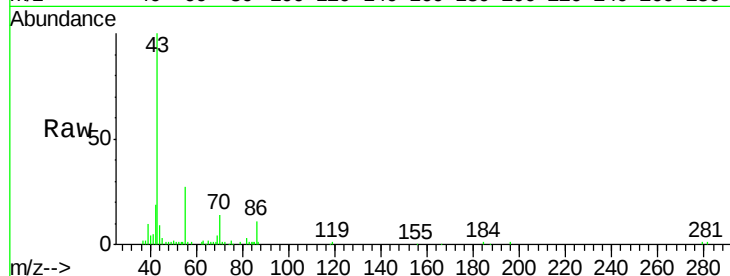
Ion Ratio Lower Upper

43 100

86 11.5 5.8 8.8#

42 18.7 8.5 12.7#

44 7.5 4.2 6.4#

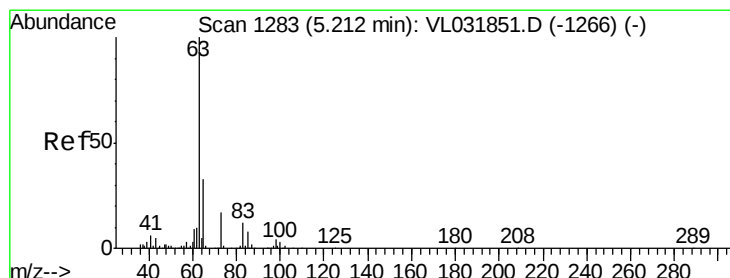
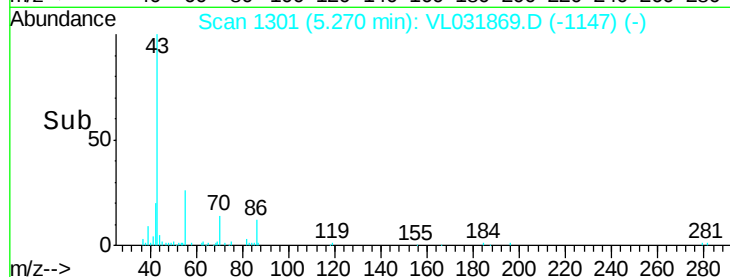
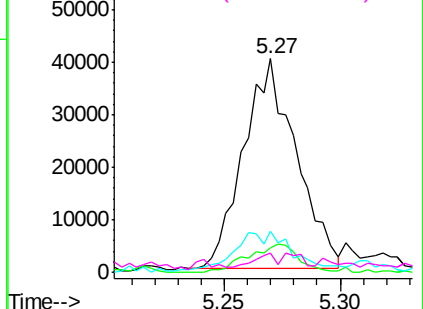


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 2.55 ppbv

RT: 5.22 min Scan# 1284

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

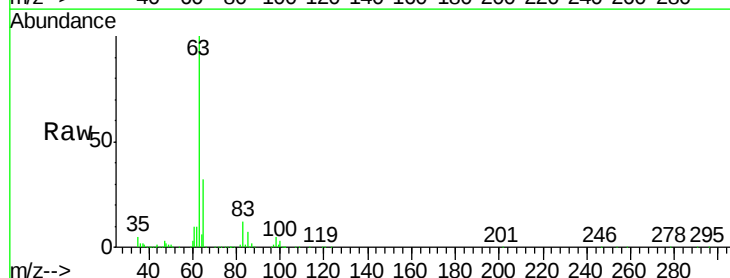
Tgt Ion: 63 Resp: 432744

Ion Ratio Lower Upper

63 100

98 4.5 2.4 7.2

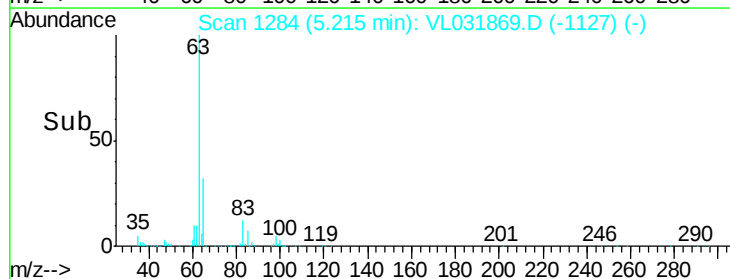
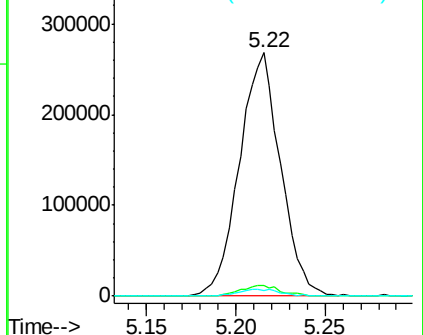
100 2.5 1.5 4.4

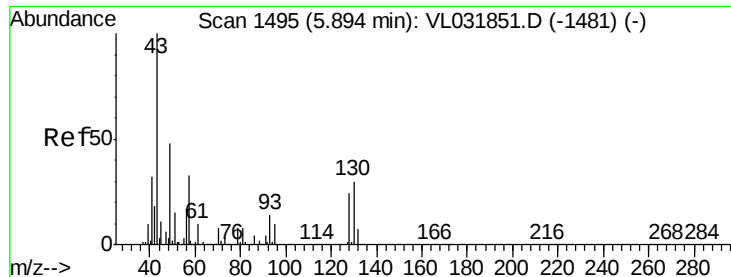


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0

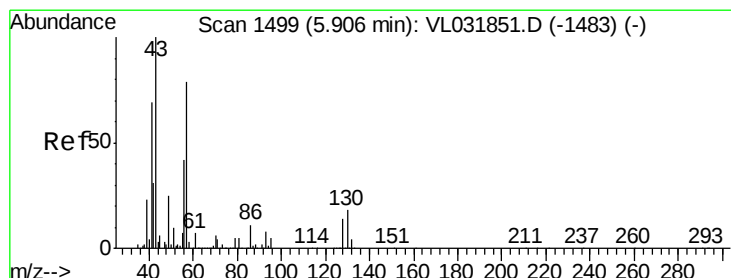
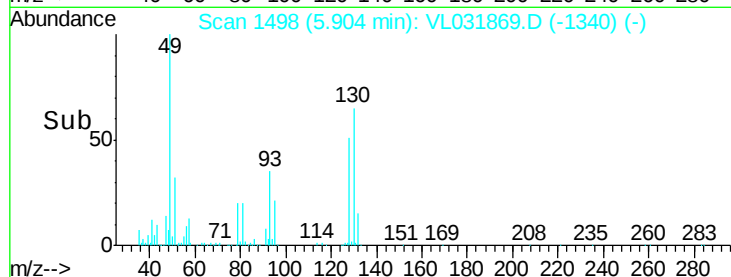
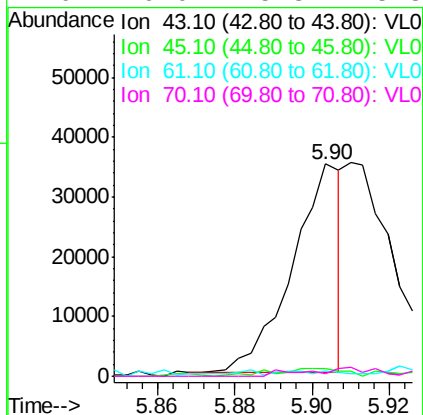
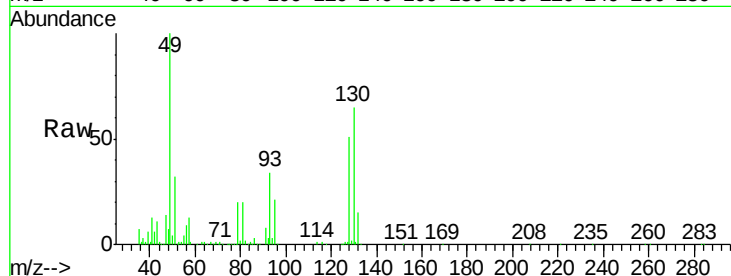




#25
Ethyl Acetate
Concen: 0.12 ppbv
RT: 5.90 min Scan# 1498
Delta R.T. 0.01 min
Lab File: VL031869.D
Acq: 12 Apr 2018 17:27

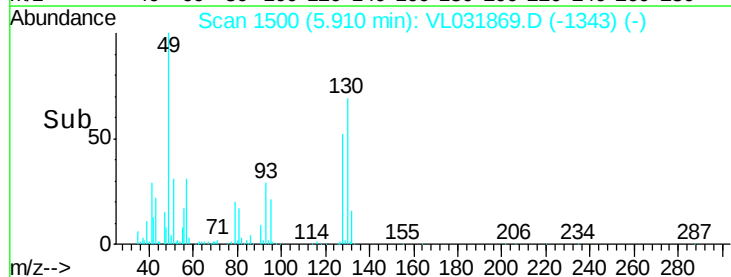
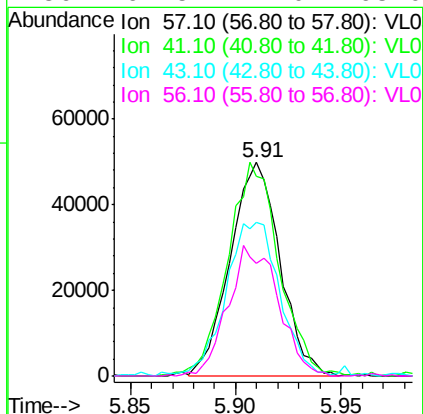
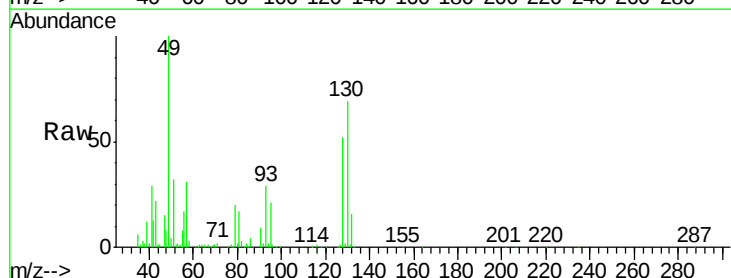
Instrument :
MSVOA_L
ClientSampleId :
SVE-INF2-040218

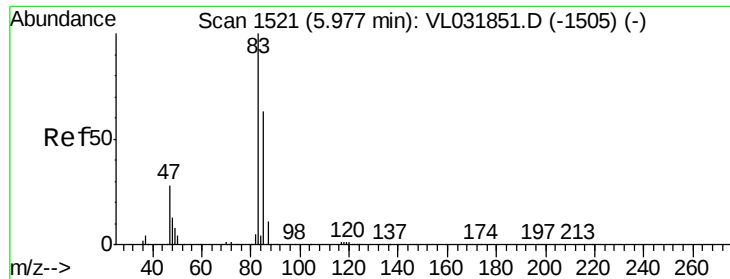
Tgt Ion:	43	Resp:	30687
Ion	Ratio	Lower	Upper
43	100		
45	8.4	7.8	11.8
61	0.0	7.2	10.8#
70	0.0	5.8	8.8#



#26
Hexane
Concen: 0.67 ppbv
RT: 5.91 min Scan# 1500
Delta R.T. 0.00 min
Lab File: VL031869.D
Acq: 12 Apr 2018 17:27

Tgt Ion:	57	Resp:	81894
Ion	Ratio	Lower	Upper
57	100		
41	104.3	72.0	108.0
43	77.8	169.8	254.8#
56	61.5	42.0	63.0





#29

Chloroform

Concen: 0.15 ppbv

RT: 5.98 min Scan# 1521

Delta R.T. -0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

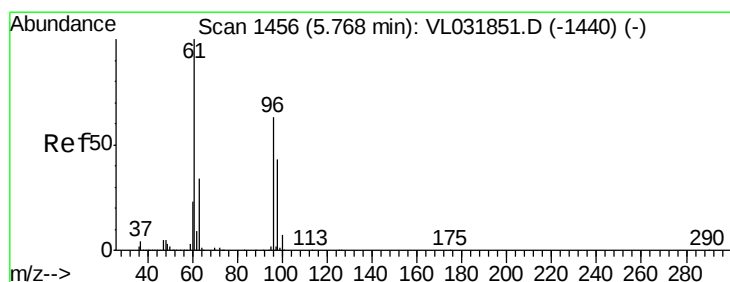
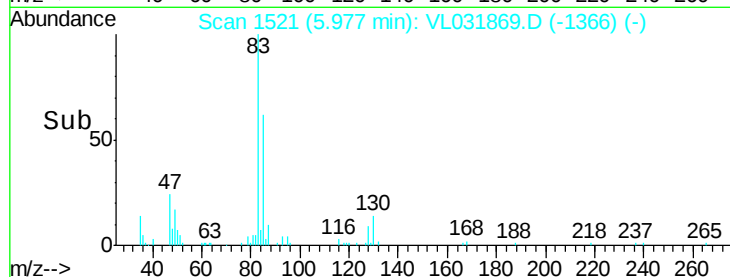
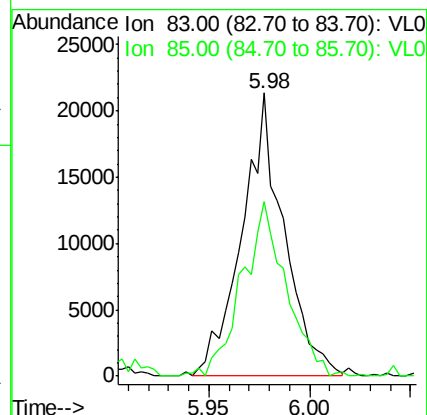
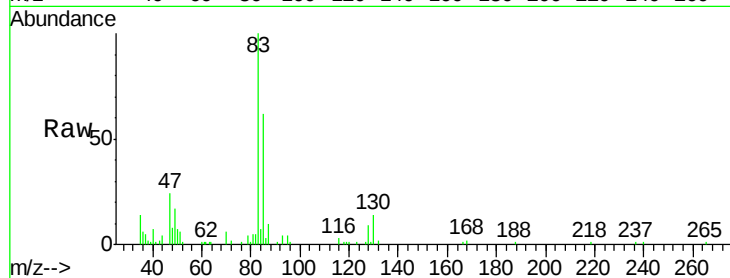
SVE-INF2-040218

Tgt Ion: 83 Resp: 31098

Ion Ratio Lower Upper

83 100

85 60.8 51.4 77.0



#31

cis-1,2-Dichloroethene

Concen: 2.30 ppbv

RT: 5.77 min Scan# 1457

Delta R.T. 0.01 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

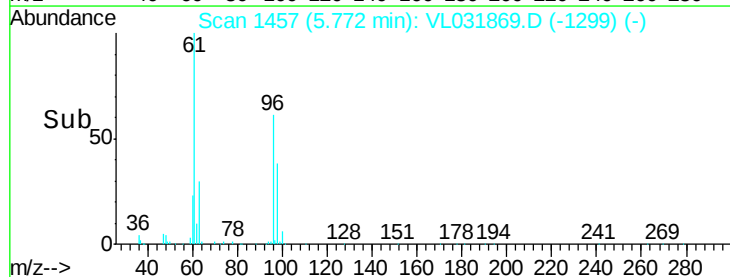
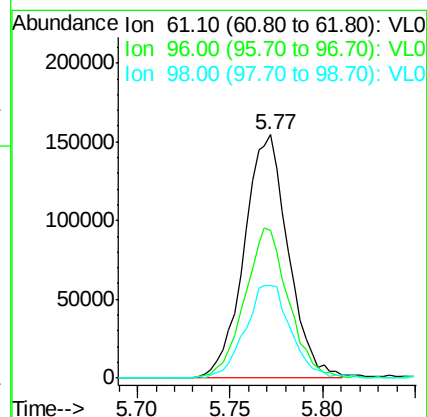
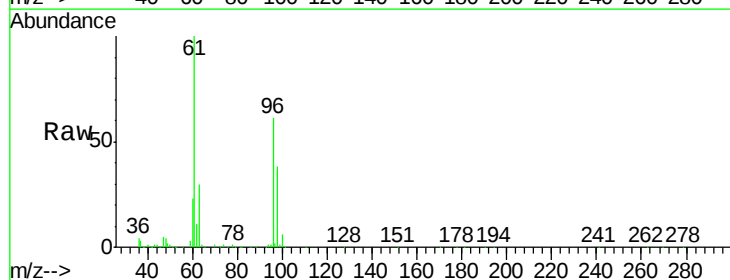
Tgt Ion: 61 Resp: 254211

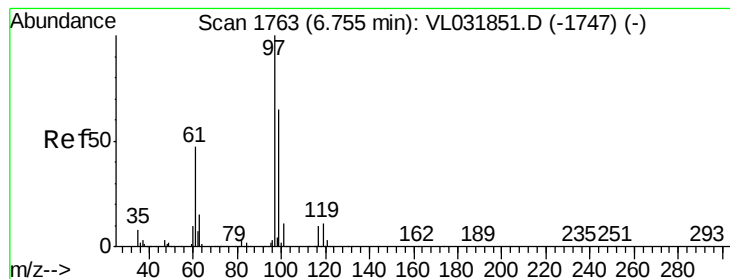
Ion Ratio Lower Upper

61 100

96 60.7 47.6 71.4

98 38.0 30.3 45.5





#32

1,1,1-Trichloroethane

Concen: 4.51 ppbv

RT: 6.76 min Scan# 1763

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF2-040218

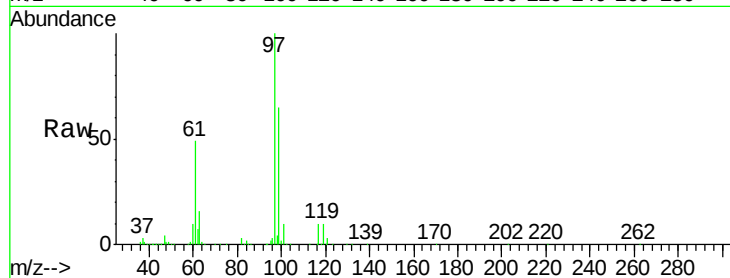
Tgt Ion: 97 Resp: 910634

Ion Ratio Lower Upper

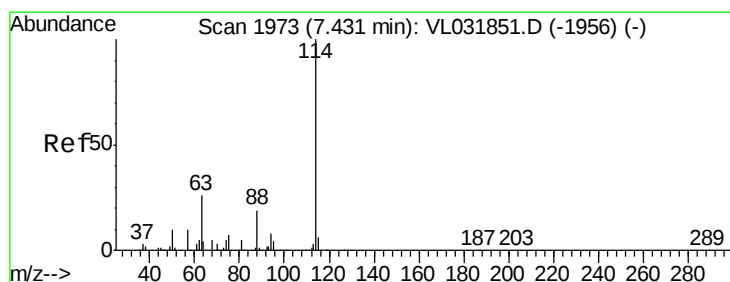
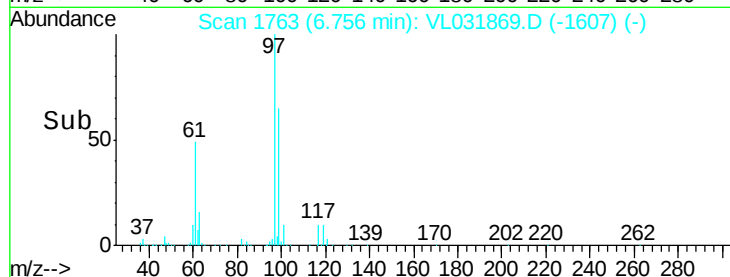
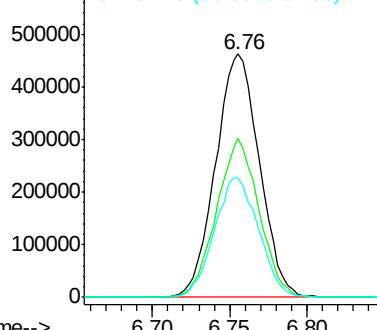
97 100

99 63.3 51.5 77.3

61 49.8 40.0 60.0



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



#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.43 min Scan# 1973

Delta R.T. -0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

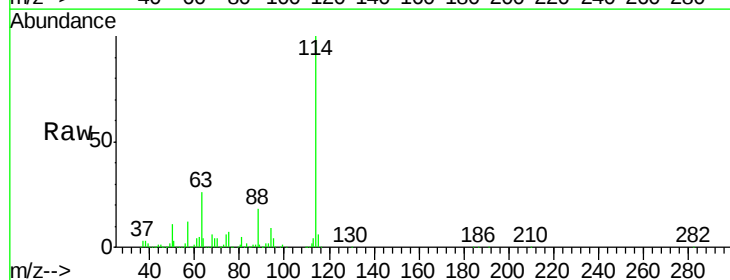
Tgt Ion: 114 Resp: 2203002

Ion Ratio Lower Upper

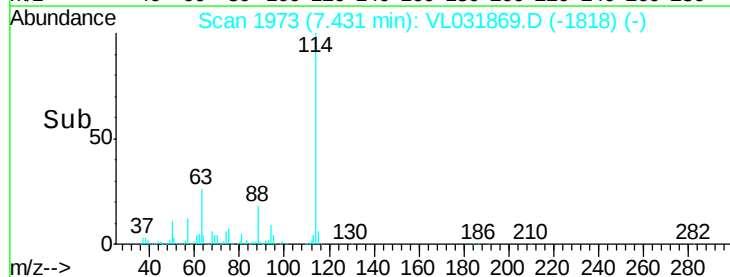
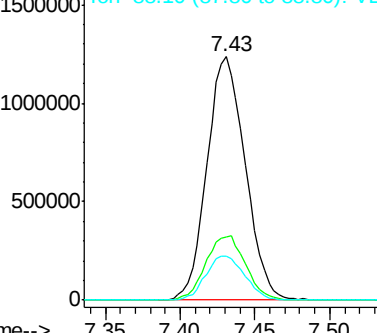
114 100

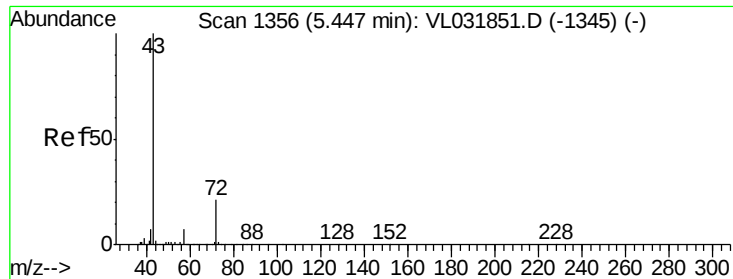
63 27.5 21.8 32.6

88 18.6 14.6 22.0



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

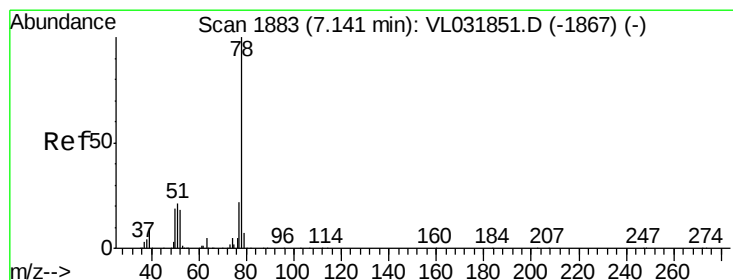
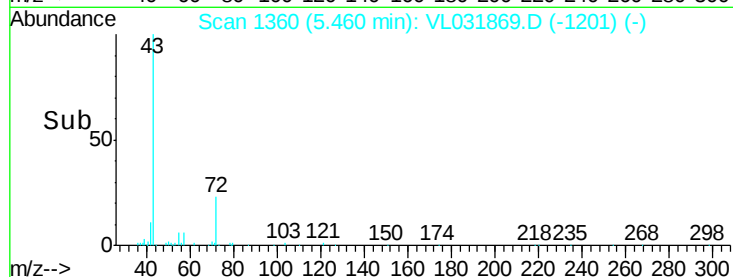
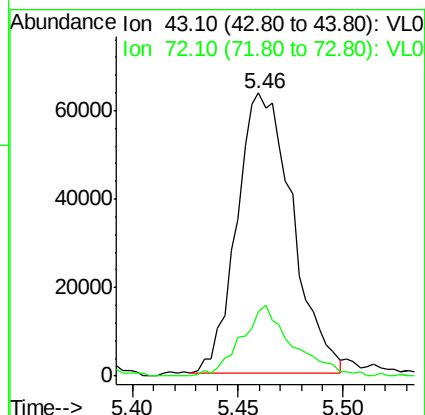
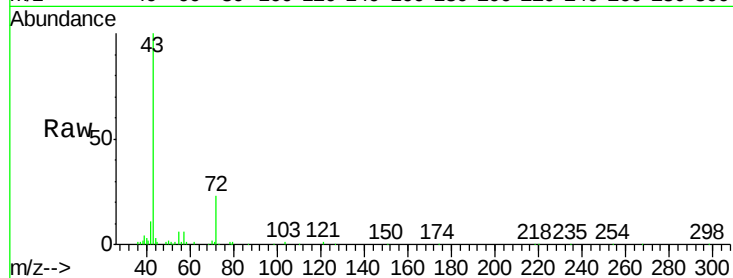




#34
 2-Butanone
 Concen: 0.76 ppbv
 RT: 5.46 min Scan# 1360
 Delta R.T. 0.01 min
 Lab File: VL031869.D
 Acq: 12 Apr 2018 17:27

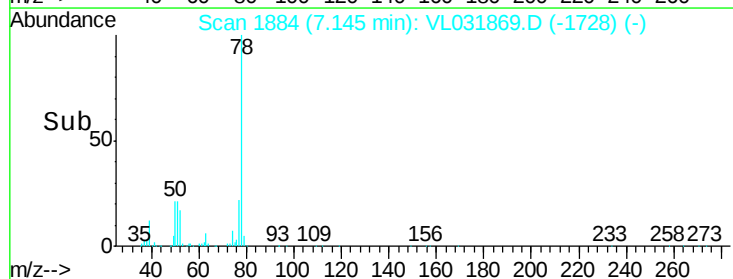
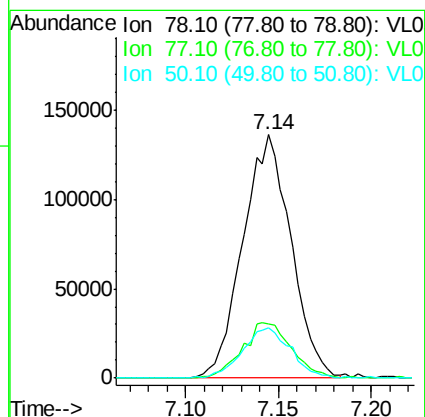
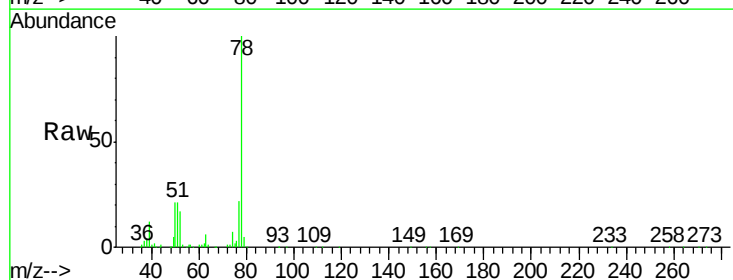
Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF2-040218

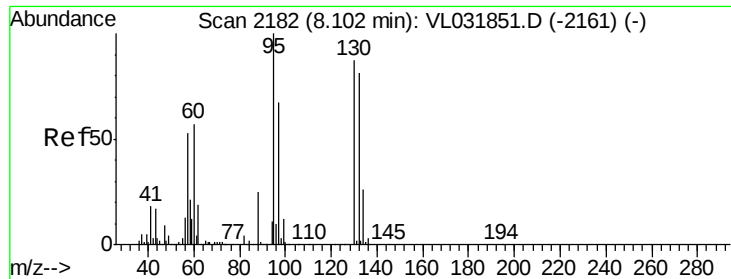
Tgt Ion: 43 Resp: 115523
 Ion Ratio Lower Upper
 43 100
 72 23.8 18.6 27.8



#36
 Benzene
 Concen: 1.23 ppbv
 RT: 7.14 min Scan# 1884
 Delta R.T. 0.00 min
 Lab File: VL031869.D
 Acq: 12 Apr 2018 17:27

Tgt Ion: 78 Resp: 243061
 Ion Ratio Lower Upper
 78 100
 77 22.0 19.2 28.8
 50 20.7 16.7 25.1

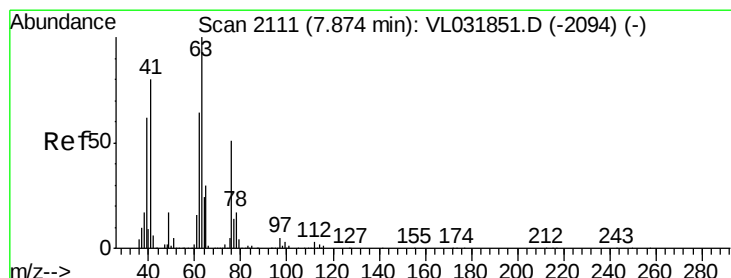
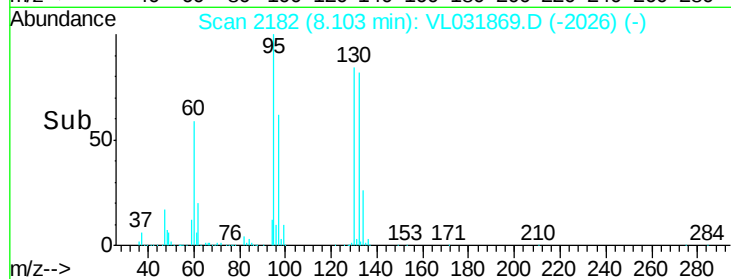
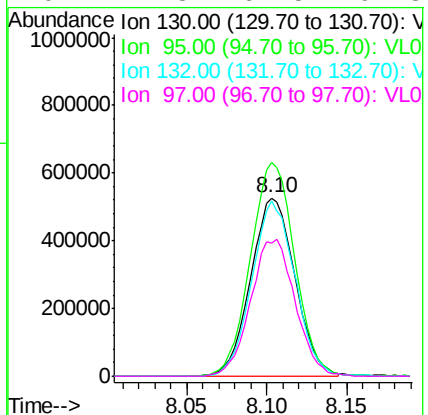
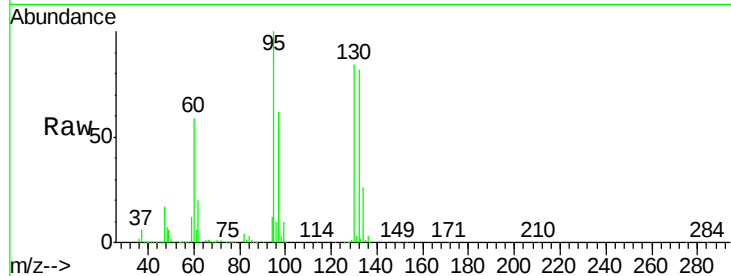




#38
 Trichloroethene
 Concen: 12.43 ppbv
 RT: 8.10 min Scan# 2182
 Delta R.T. 0.00 min
 Lab File: VL031869.D
 Acq: 12 Apr 2018 17:27

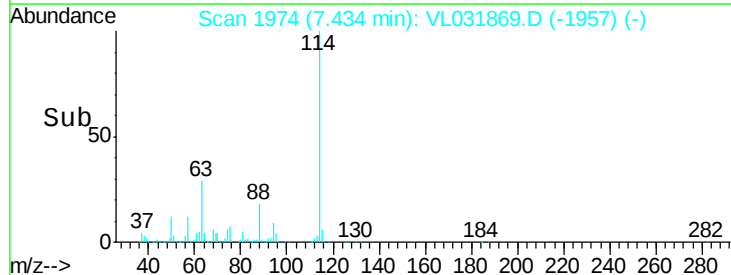
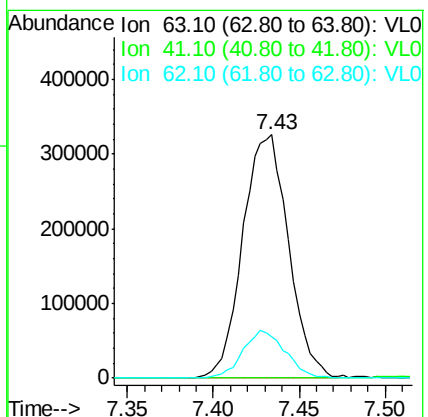
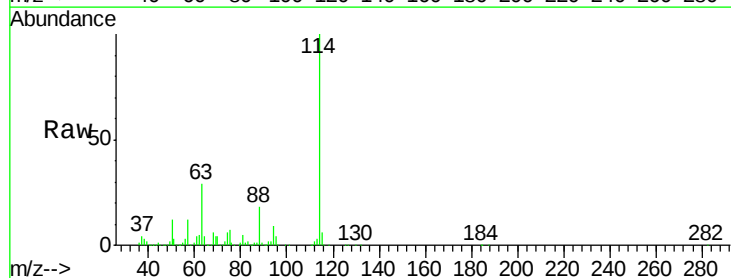
Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF2-040218

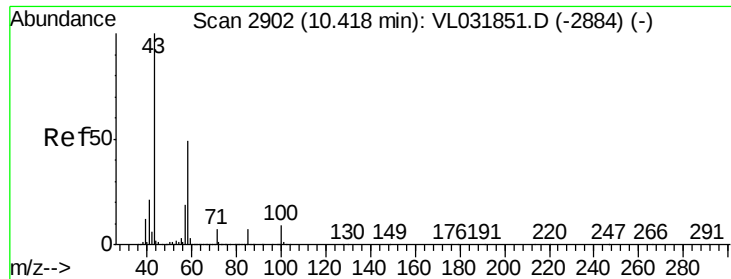
Tgt Ion: 130 Resp: 999588
 Ion Ratio Lower Upper
 130 100
 95 119.7 96.6 144.8
 132 98.2 79.1 118.7
 97 74.8 61.5 92.3



#39
 1,2-Dichloropropane
 Concen: 8.15 ppbv
 RT: 7.43 min Scan# 1974
 Delta R.T. -0.45 min
 Lab File: VL031869.D
 Acq: 12 Apr 2018 17:27

Tgt Ion: 63 Resp: 600092
 Ion Ratio Lower Upper
 63 100
 41 0.0 65.8 98.6#
 62 17.0 55.0 82.6#





#51

2-Hexanone

Concen: 0.07 ppbv

RT: 10.43 min Scan# 2906

Delta R.T. 0.01 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF2-040218

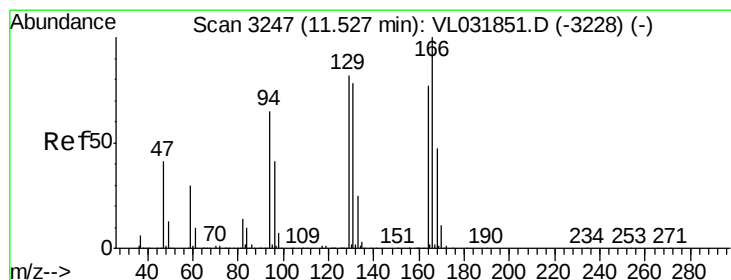
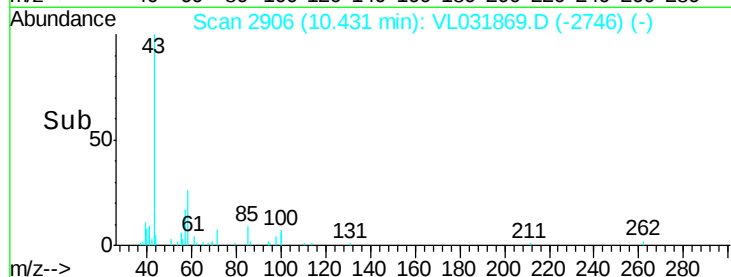
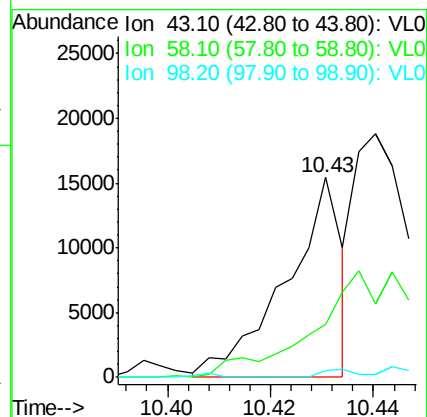
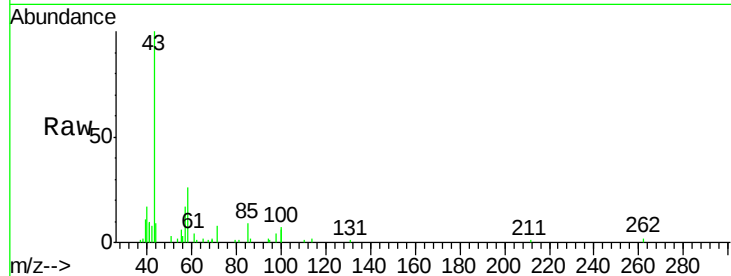
Tgt Ion: 43 Resp: 11425

Ion Ratio Lower Upper

43 100

58 0.0 38.5 57.7#

98 0.0 0.2 0.4#



#52

Tetrachloroethene

Concen: 0.17 ppbv

RT: 11.52 min Scan# 3246

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Tgt Ion: 164 Resp: 13034

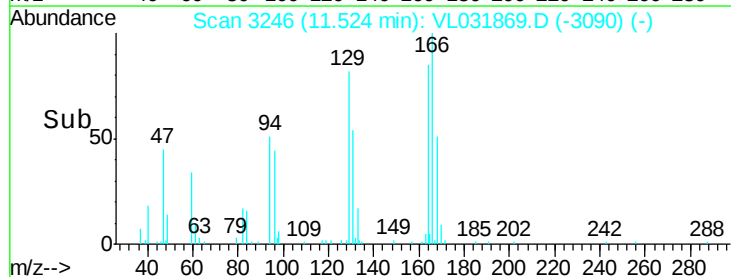
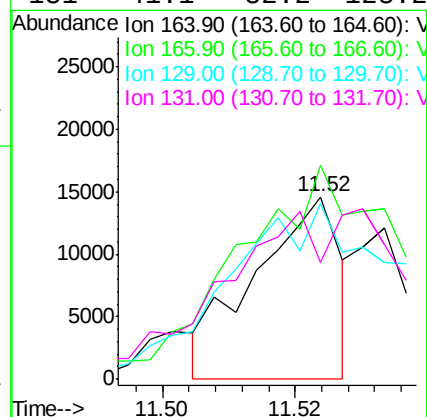
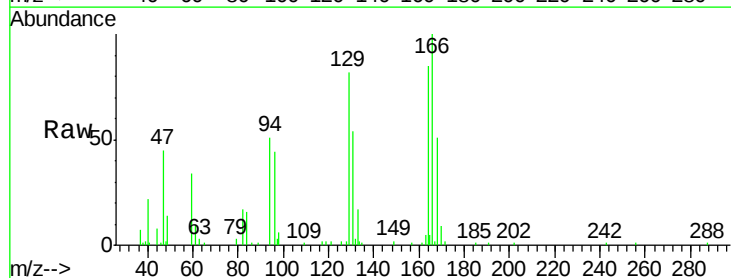
Ion Ratio Lower Upper

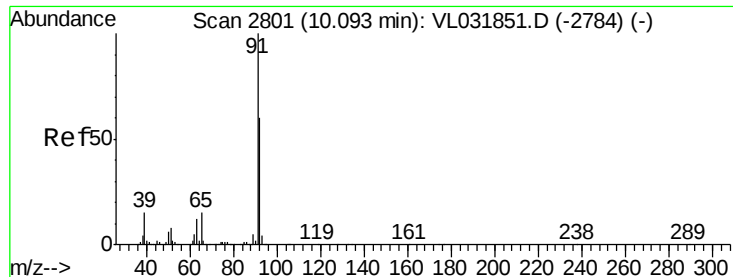
164 100

166 107.2 98.2 147.4

129 84.9 86.5 129.7#

131 41.1 82.2 123.2#





#53

Toluene

Concen: 0.21 ppbv

RT: 10.10 min Scan# 2802

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

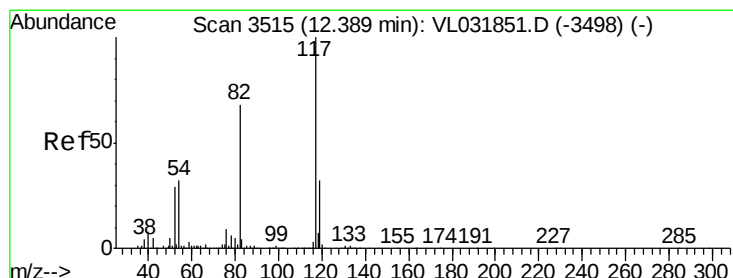
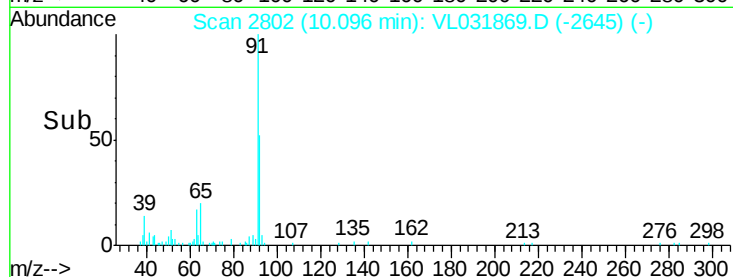
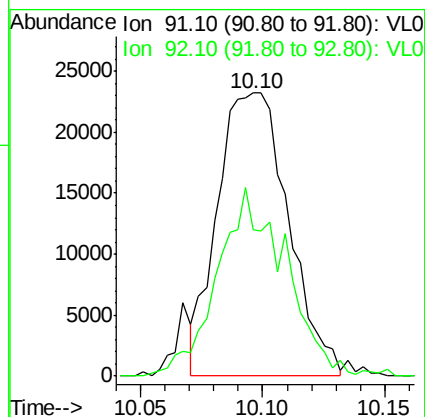
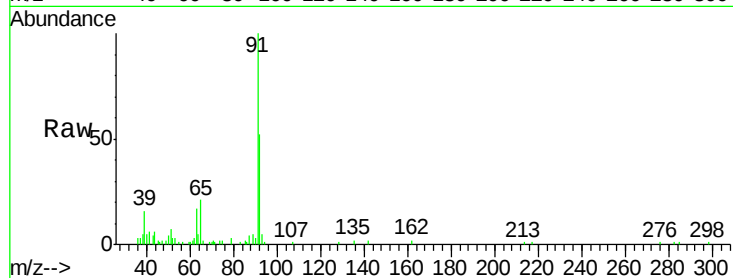
SVE-INF2-040218

Tgt Ion: 91 Resp: 46901

Ion Ratio Lower Upper

91 100

92 64.1 47.4 71.2



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.39 min Scan# 3515

Delta R.T. -0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

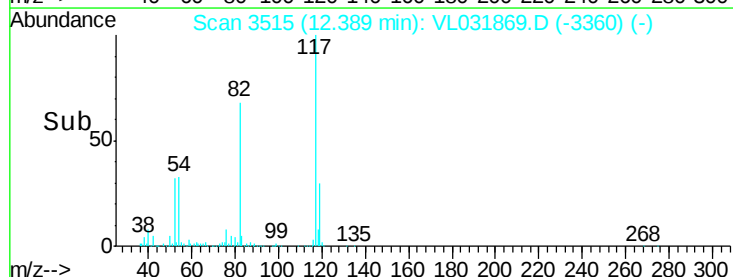
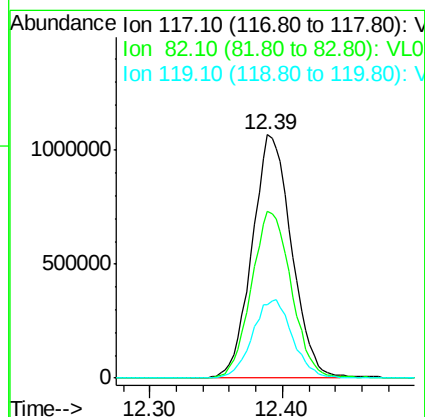
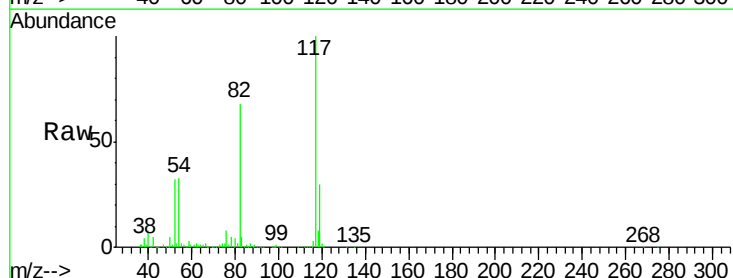
Tgt Ion: 117 Resp: 2212158

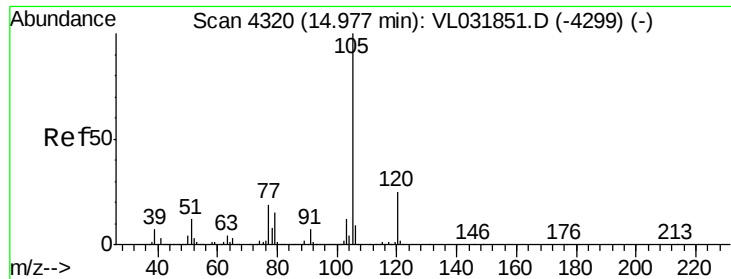
Ion Ratio Lower Upper

117 100

82 70.1 54.6 81.8

119 32.7 26.0 39.0





#62

Isopropylbenzene

Concen: 0.17 ppbv

RT: 14.98 min Scan# 4321

Delta R.T. 0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Instrument :

MSVOA_L

ClientSampleId :

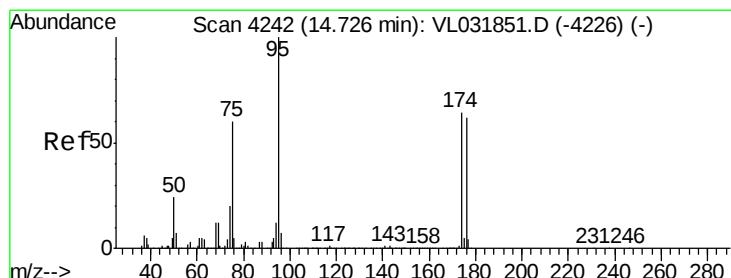
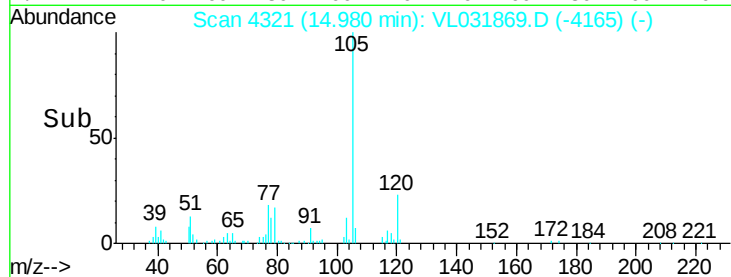
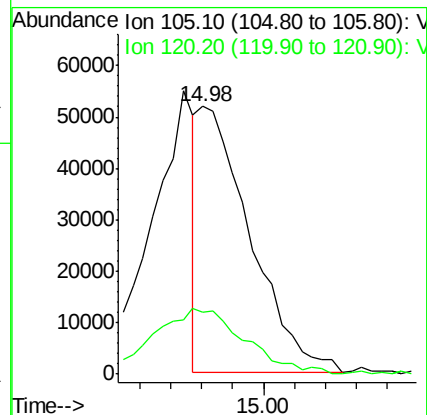
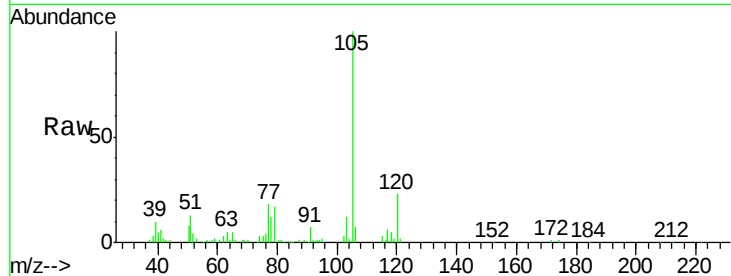
SVE-INF2-040218

Tgt Ion: 105 Resp: 59479

Ion Ratio Lower Upper

105 100

120 45.8 19.4 29.2#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.80 ppbv

RT: 14.73 min Scan# 4242

Delta R.T. -0.00 min

Lab File: VL031869.D

Acq: 12 Apr 2018 17:27

Tgt Ion: 95 Resp: 1743654

Ion Ratio Lower Upper

95 100

174 65.8 52.3 78.5

175 4.7 3.9 5.9

