

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL041218\
 Data File : VL031875.D
 Acq On : 12 Apr 2018 21:25
 Operator : SY/AP
 Sample : J2191-06
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF1-040218

Manual Integrations
 APPROVED

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 4/15/2018 3:08:09 PM

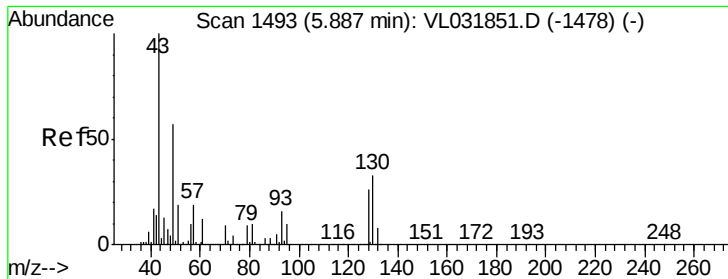
Quant Time: Apr 14 04:01:33 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL041218AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Apr 13 2018
 QLast Update : Fri Apr 13 16:50:02 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.89	49	1153037	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.43	114	2286088	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.39	117	2367207	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.73	95	1890959	9.93	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.17	85	232049	0.976	ppbv	100
3) Chlorodifluoromethane	3.10	51	52802	0.394	ppbv #	88
4) Chloromethane	3.26	50	20921	0.306	ppbv	98
5) Vinyl Chloride	3.39	62	51228	0.665	ppbv	99
7) Chloroethane	3.70	64	85177	2.772	ppbv	95
9) Propene	3.14	41	38300m	0.826	ppbv	
11) Trichlorofluoromethane	4.11	101	1292444	5.543	ppbv	100
12) 1,1,2-Trichlorotrifluoroet	4.67	101	482725	3.186	ppbv	98
13) Ethanol	3.76	45	42632m	2.709	ppbv	
15) Acetone	4.01	43	1510574	8.512	ppbv	98
18) 1,1-Dichloroethene	4.46	96	8476m	0.130	ppbv	
20) Methylene Chloride	4.52	84	2703415	41.826	ppbv	98
22) trans-1,2-Dichloroethene	5.08	96	9728m	0.144	ppbv	
24) 1,1-Dichloroethane	5.22	63	4606371	25.694	ppbv	99
26) Hexane	5.91	57	328741	2.547	ppbv #	45
31) cis-1,2-Dichloroethene	5.77	61	2056789	17.595	ppbv	99
32) 1,1,1-Trichloroethane	6.76	97	4160158	19.527	ppbv	100
34) 2-Butanone	5.47	43	49382	0.311	ppbv	97
35) Carbon Tetrachloride	7.27	117	13995m	0.070	ppbv	
36) Benzene	7.14	78	247735	1.205	ppbv	97
38) Trichloroethene	8.11	130	1610085	19.290	ppbv	97
52) Tetrachloroethene	11.53	164	69226	0.864	ppbv #	87
53) Toluene	10.10	91	68721	0.300	ppbv	95
59) m/p-Xylene	13.27	91	32967m	0.115	ppbv	
62) Isopropylbenzene	14.98	105	70642	0.193	ppbv	99

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.89 min Scan# 1495

Delta R.T. 0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF1-040218

Tot Ion: 49 Resp: 1153037

Ion Ratio Lower Upper

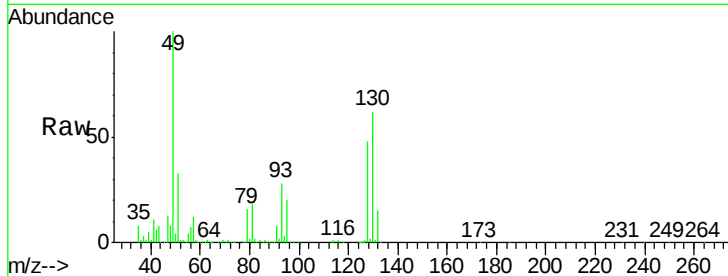
49 100

128 48.5 23.9 71.7

130 62.2 30.9 92.7

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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

5.89

800000

600000

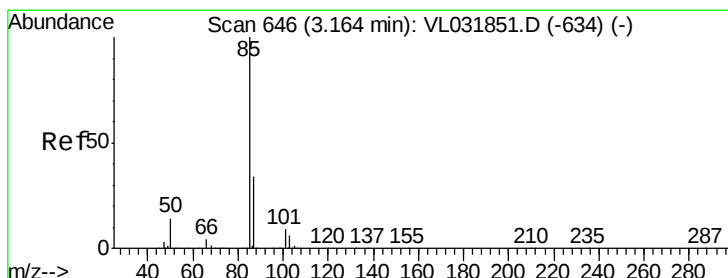
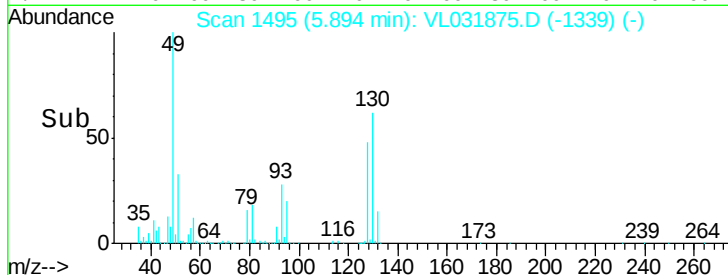
400000

200000

0

5.80 5.85 5.90 5.95

Time-->



#2

Dichlorodifluoromethane

Concen: 0.976 ppbv

RT: 3.17 min Scan# 647

Delta R.T. 0.00 min

Lab File: VL031875.D

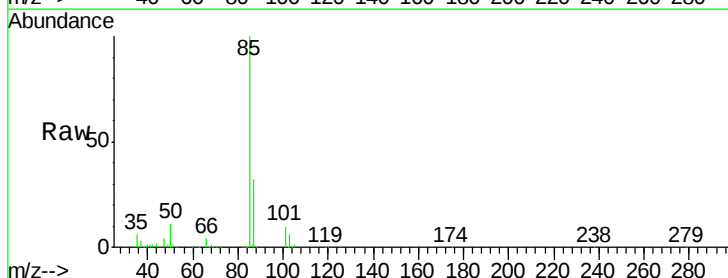
Acq: 12 Apr 2018 21:25

Tgt Ion: 85 Resp: 232049

Ion Ratio Lower Upper

85 100

87 32.2 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.17

200000

150000

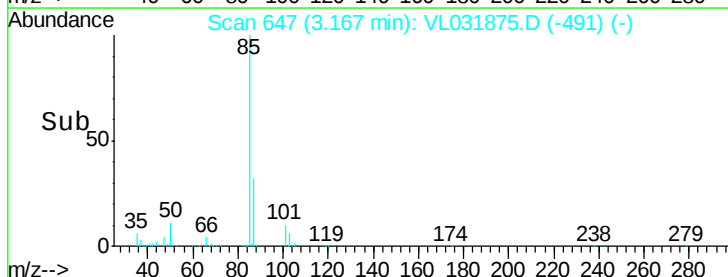
100000

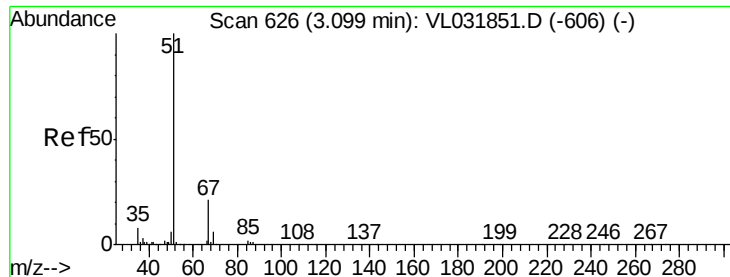
50000

0

3.15 3.20

Time-->





#3

Chlorodifluoromethane

Concen: 0.394 ppbv

RT: 3.10 min Scan# 626

Delta R.T. -0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF1-040218

Tot Ion: 51 Resp: 52802

Ion Ratio Lower Upper

51 100

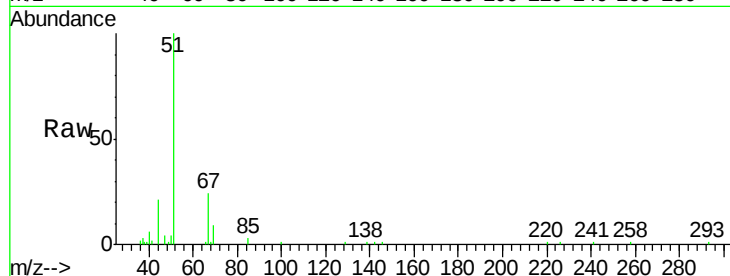
67 16.1 17.5 26.3#

Manual Integrations

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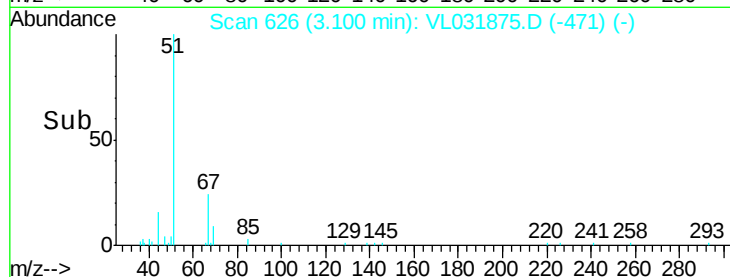


Abundance Ion 51.00 (50.70 to 51.70): VL0

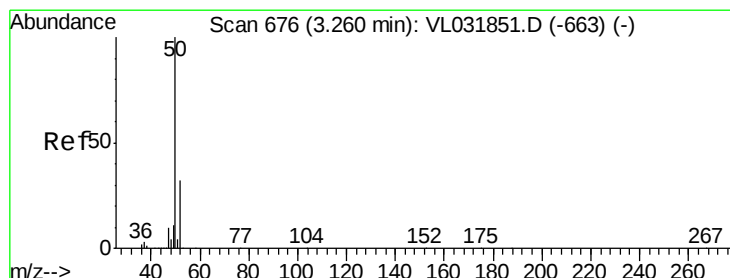
Ion 67.00 (66.70 to 67.70): VL0

3.10

Time-->



Time-->



#4

Chloromethane

Concen: 0.306 ppbv

RT: 3.26 min Scan# 677

Delta R.T. 0.00 min

Lab File: VL031875.D

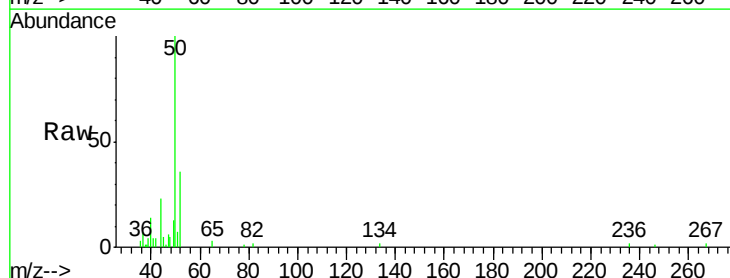
Acq: 12 Apr 2018 21:25

Tgt Ion: 50 Resp: 20921

Ion Ratio Lower Upper

50 100

52 36.1 28.1 42.1

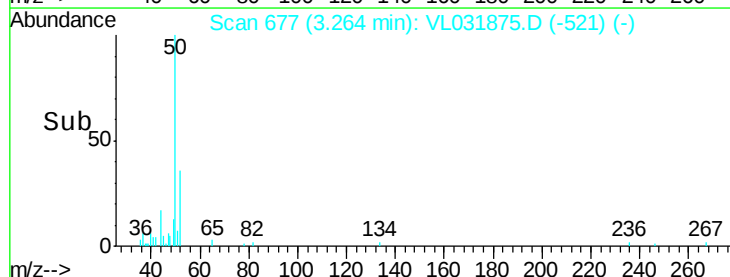


Abundance Ion 50.10 (49.80 to 50.80): VL0

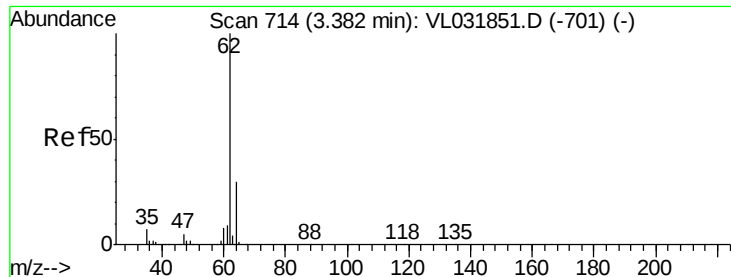
Ion 52.10 (51.80 to 52.80): VL0

3.26

Time-->



Time-->



#5

Vinyl Chloride

Concen: 0.665 ppbv

RT: 3.39 min Scan# 715

Delta R.T. 0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF1-040218

Tot Ion: 62 Resp: 51228

Ion Ratio Lower Upper

62 100

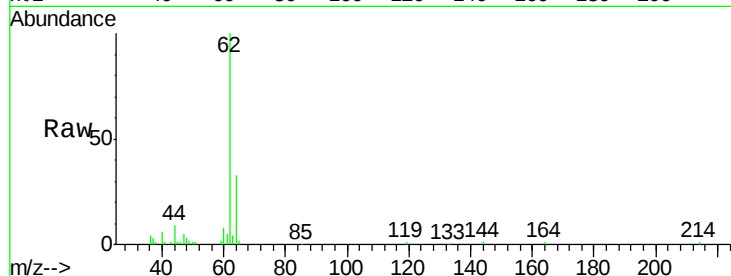
64 31.9 25.9 38.9

Manual Integrations

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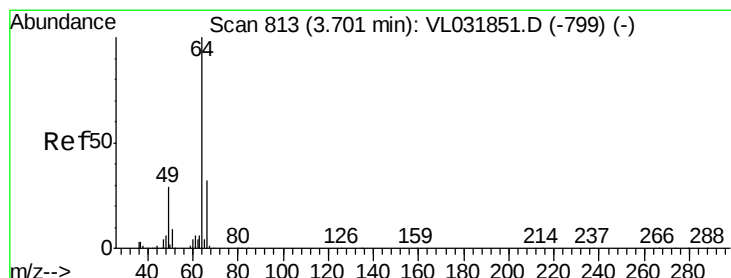
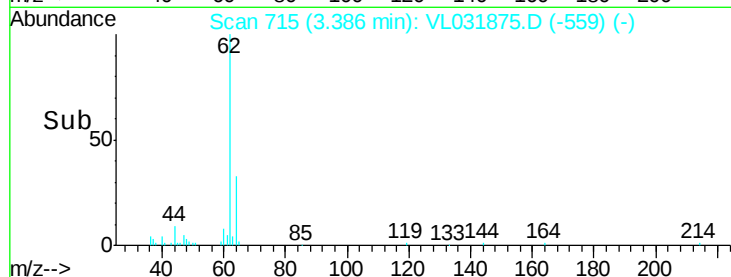
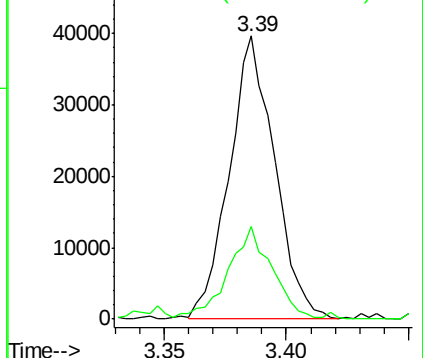
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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#7

Chloroethane

Concen: 2.772 ppbv

RT: 3.70 min Scan# 813

Delta R.T. 0.00 min

Lab File: VL031875.D

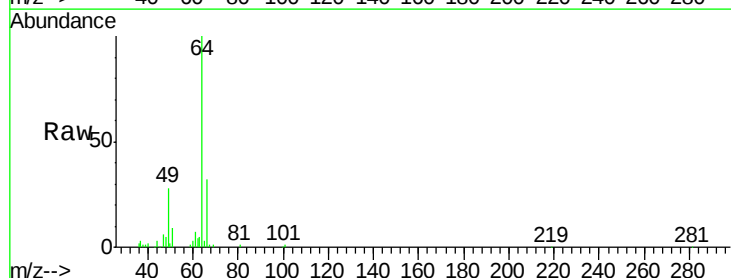
Acq: 12 Apr 2018 21:25

Tgt Ion: 64 Resp: 85177

Ion Ratio Lower Upper

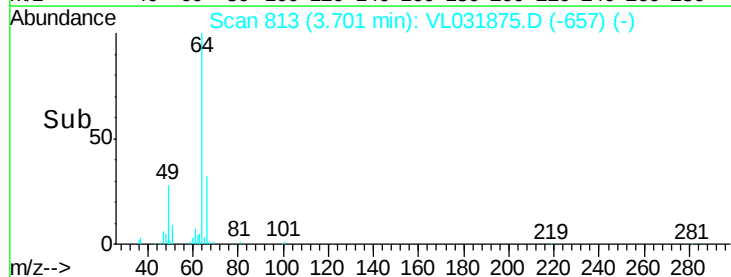
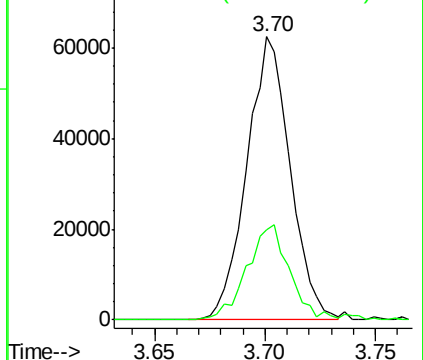
64 100

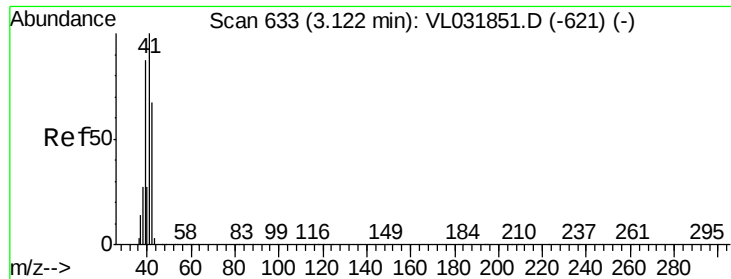
66 31.8 23.4 35.0



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#9

Propene

Concen: 0.826 ppbv m

RT: 3.14 min Scan# 639

Delta R.T. 0.02 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF1-040218

Tot Ion: 41 Resp: 38300

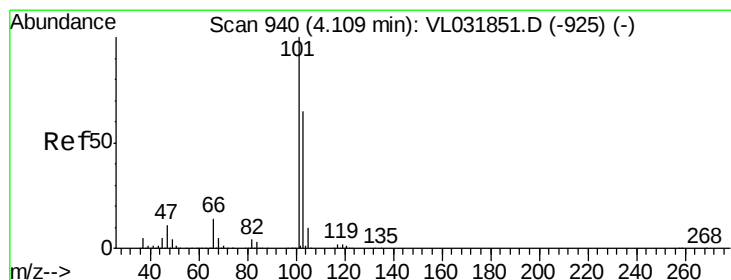
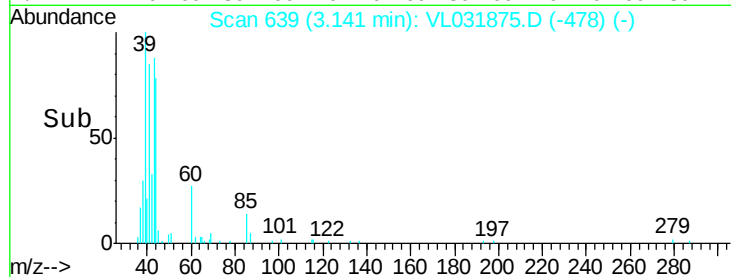
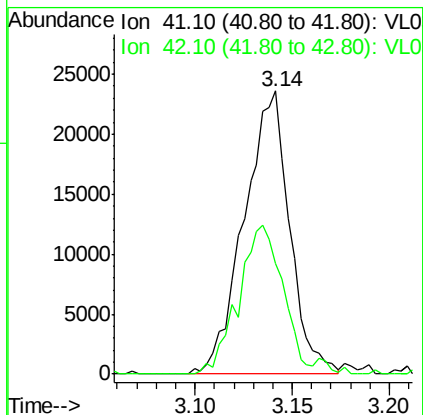
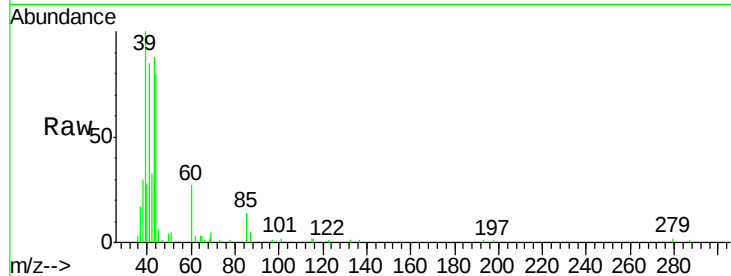
Ion Ratio Lower Upper

41 100

42 93.7 55.0 82.4#

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#11

Trichlorofluoromethane

Concen: 5.543 ppbv

RT: 4.11 min Scan# 941

Delta R.T. 0.00 min

Lab File: VL031875.D

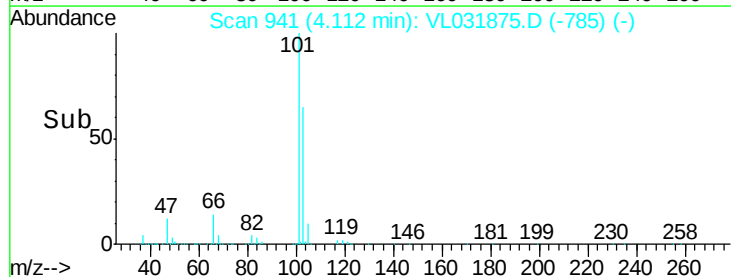
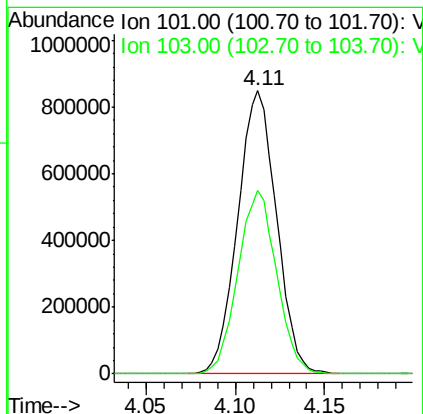
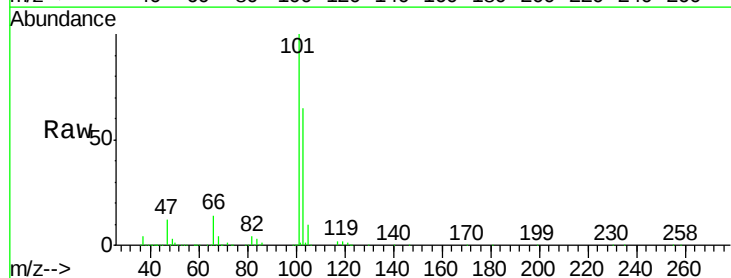
Acq: 12 Apr 2018 21:25

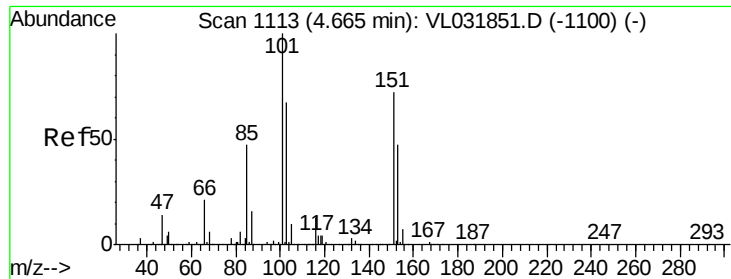
Tgt Ion: 101 Resp: 1292444

Ion Ratio Lower Upper

101 100

103 64.9 51.8 77.8





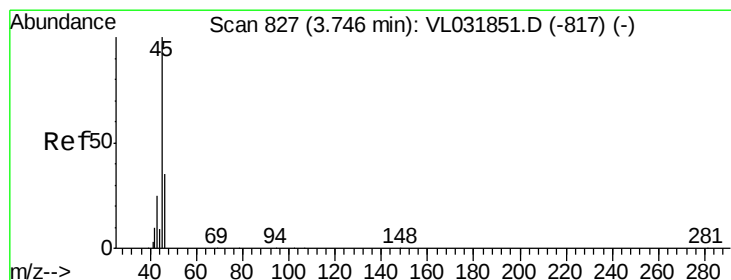
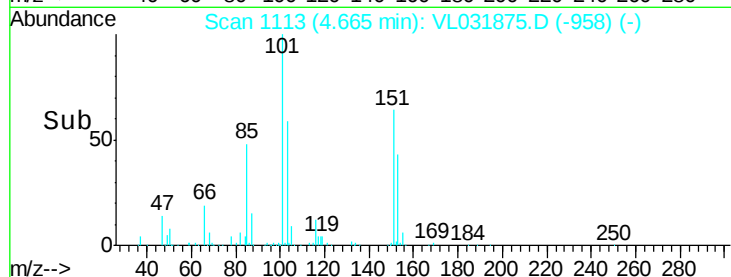
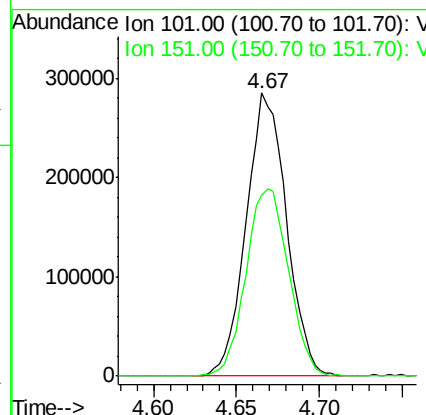
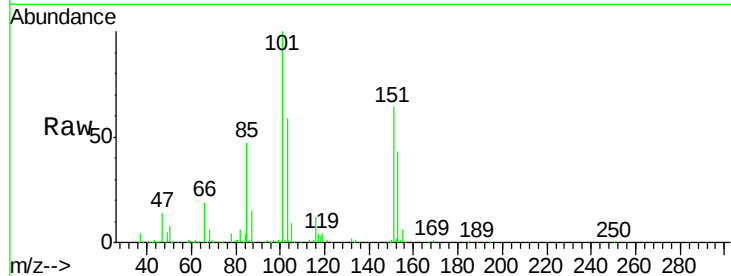
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 3.186 ppbv
 RT: 4.67 min Scan# 1113
 Delta R.T. -0.00 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF1-040218

Tot Ion	Ratio	Resp	Lower	Upper
101	100	482725		
151	69.8	57.0	85.6	

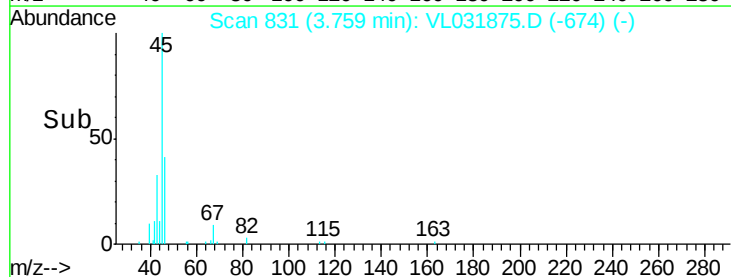
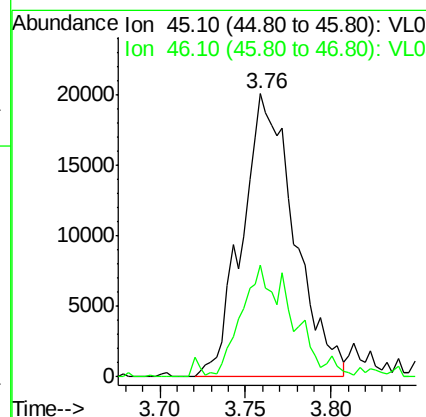
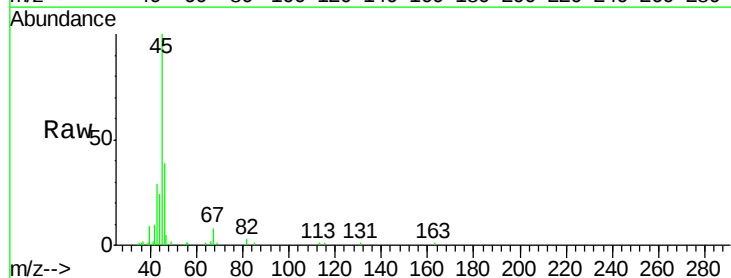
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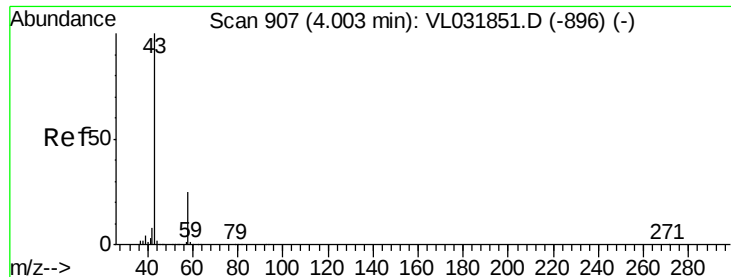
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#13
 Ethanol
 Concen: 2.709 ppbv m
 RT: 3.76 min Scan# 831
 Delta R.T. 0.01 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Tgt Ion	Ratio	Resp	Lower	Upper
45	100	42632		
46	41.0	14.6	58.6	





#15

Acetone

Concen: 8.512 ppbv

RT: 4.01 min Scan# 909

Delta R.T. 0.01 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF1-040218

Tot Ion: 43 Resp: 1510574

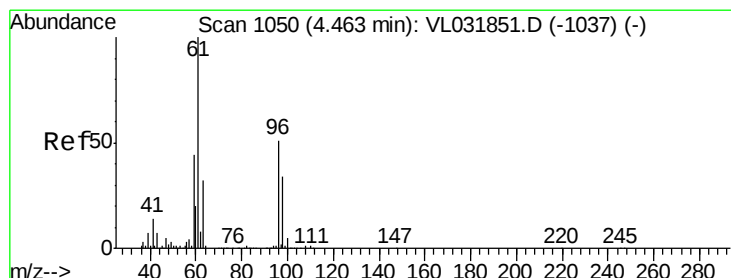
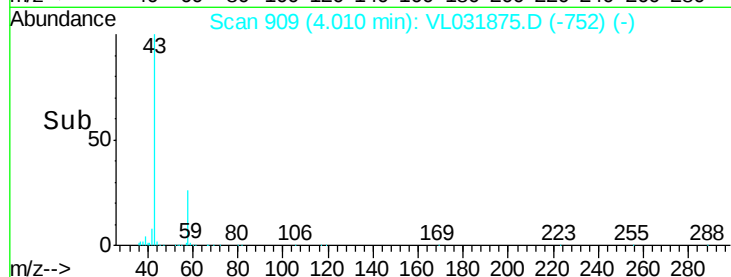
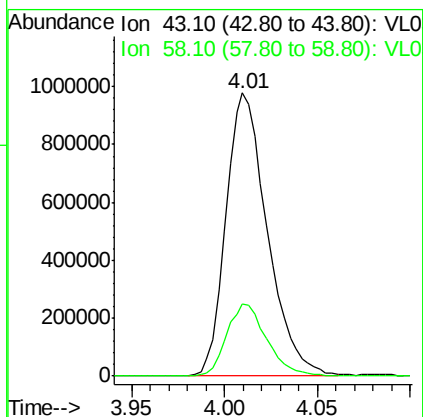
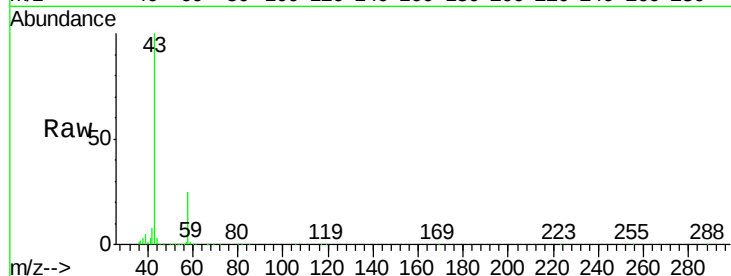
Ion Ratio Lower Upper

43 100

58 25.0 20.9 31.3

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#18

1,1-Dichloroethene

Concen: 0.130 ppbv m

RT: 4.46 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

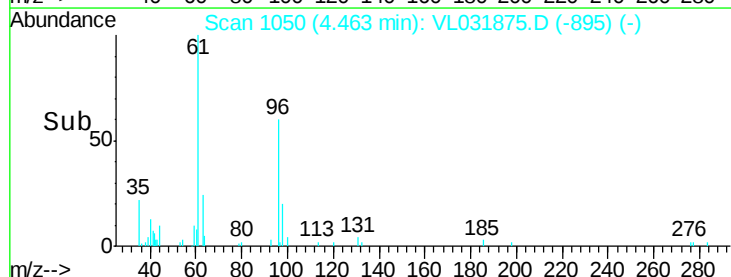
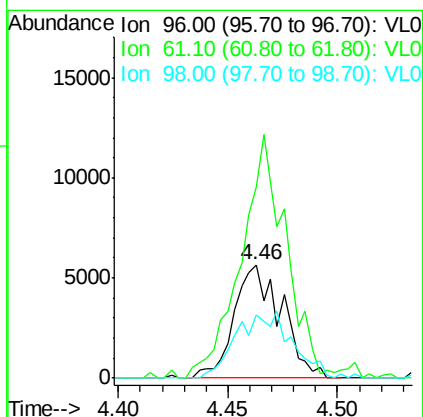
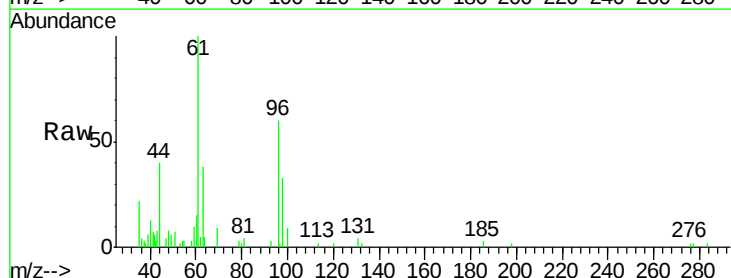
Tgt Ion: 96 Resp: 8476

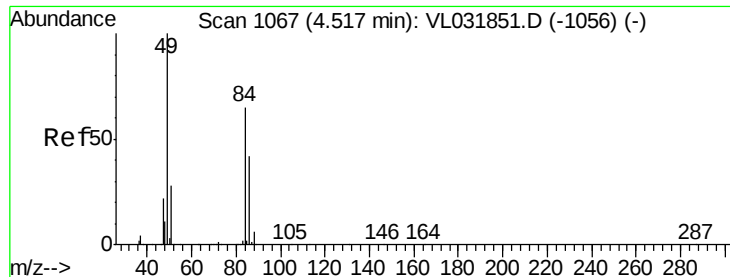
Ion Ratio Lower Upper

96 100

61 167.7 161.0 241.6

98 55.4 52.7 79.1





#20
Methylene Chloride
Concen: 41.826 ppbv
RT: 4.52 min Scan# 1068
Delta R.T. -0.00 min
Lab File: VL031875.D
Acq: 12 Apr 2018 21:25

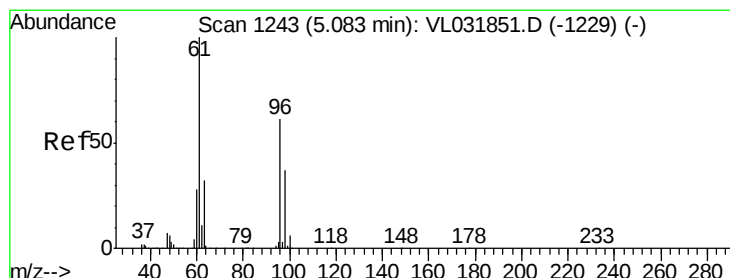
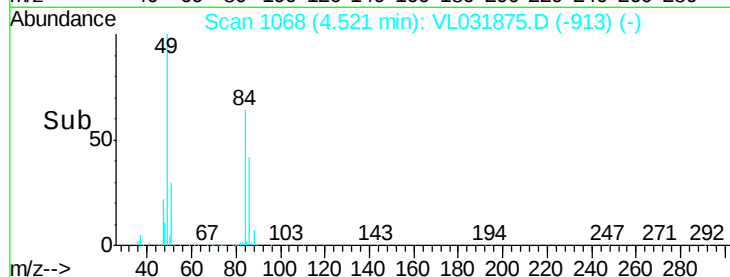
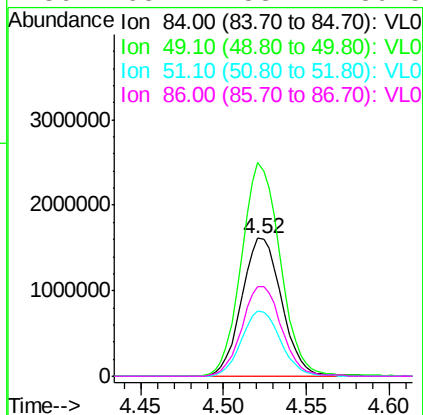
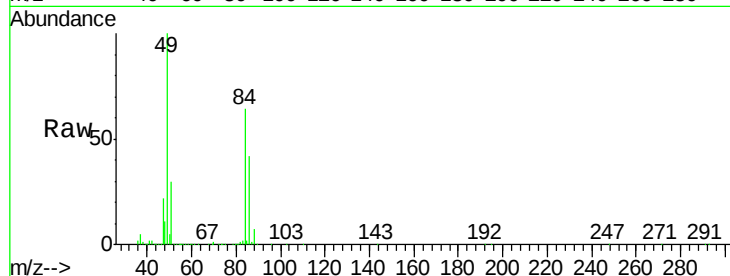
Instrument :
MSVOA_L
ClientSampleId :
SVE-INF1-040218

Tot Ion: 84 Resp: 2703415

Ion	Ratio	Lower	Upper
84	100		
49	155.0	125.6	188.4
51	47.1	36.4	54.6
86	65.1	53.7	80.5

Manual Integrations
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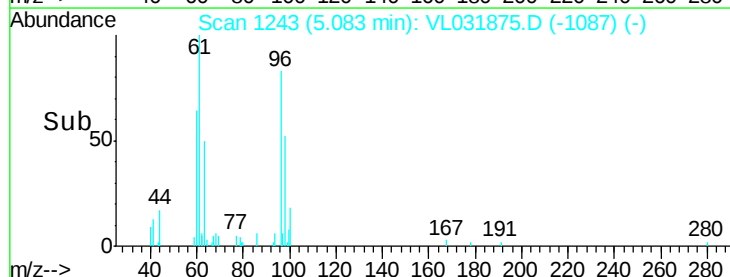
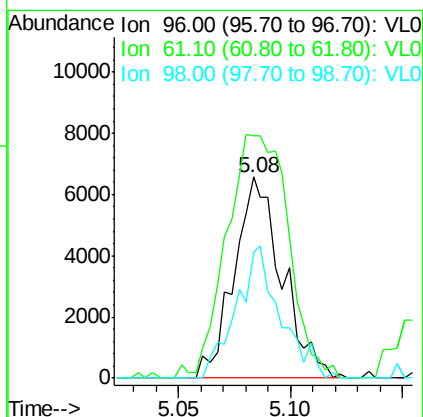
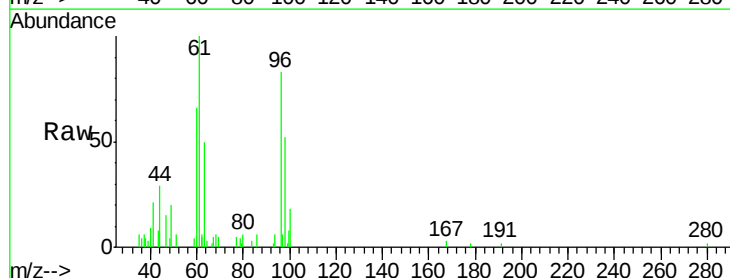
MMDadoda
4/15/2018 3:08:09 PM

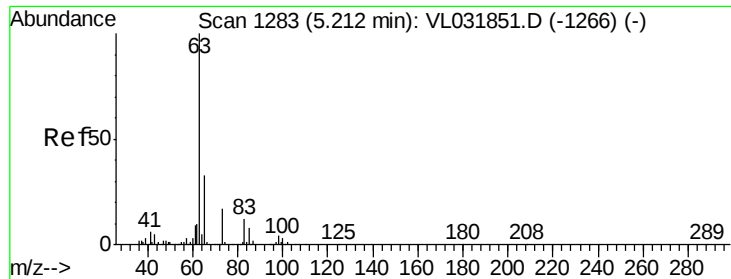


#22
trans-1,2-Dichloroethene
Concen: 0.144 ppbv m
RT: 5.08 min Scan# 1243
Delta R.T. 0.00 min
Lab File: VL031875.D
Acq: 12 Apr 2018 21:25

Tgt Ion: 96 Resp: 9728

Ion	Ratio	Lower	Upper
96	100		
61	120.7	131.1	196.7#
98	62.4	47.6	71.4





#24

1,1-Dichloroethane

Concen: 25.694 ppbv

RT: 5.22 min Scan# 1284

Delta R.T. 0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Instrument :

MSVOA_L

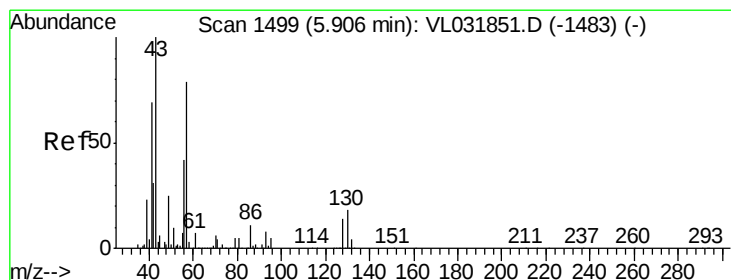
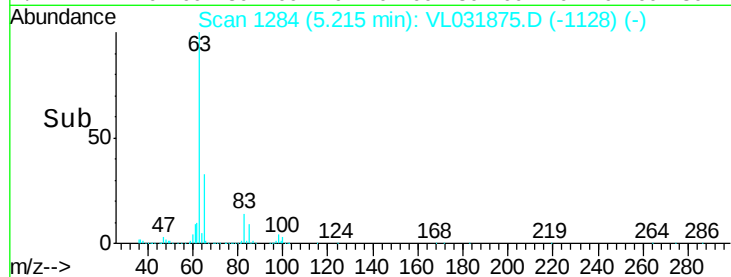
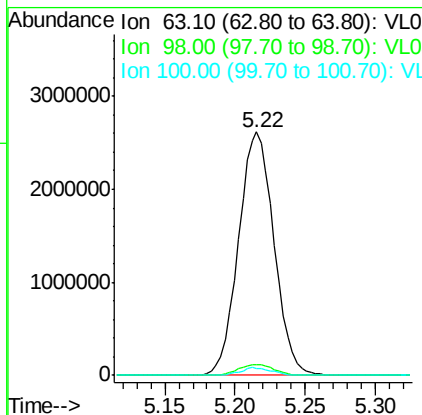
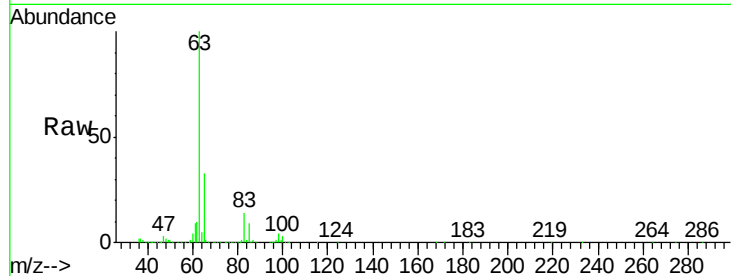
ClientSampleId :

SVE-INF1-040218

Tot Ion:	63	Resp:	4606371
Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.4	7.2
100	2.7	1.5	4.4

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#26

Hexane

Concen: 2.547 ppbv

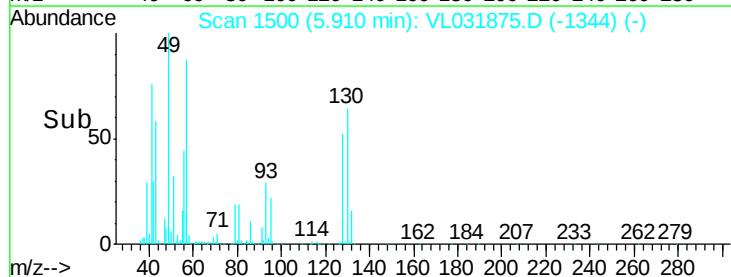
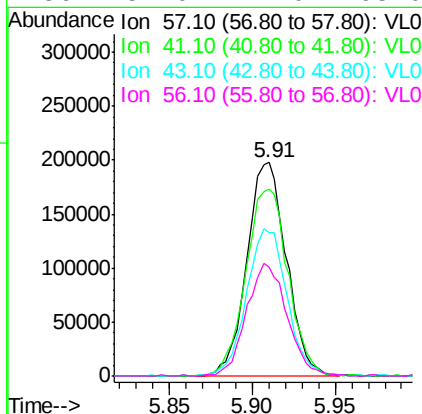
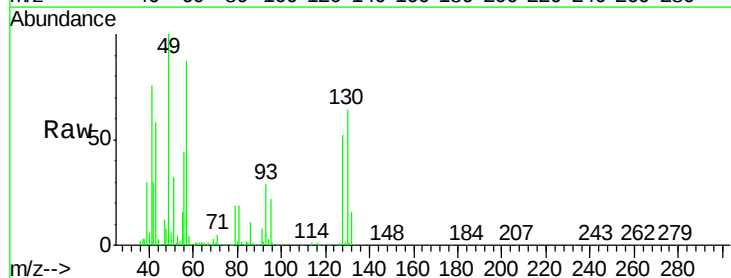
RT: 5.91 min Scan# 1500

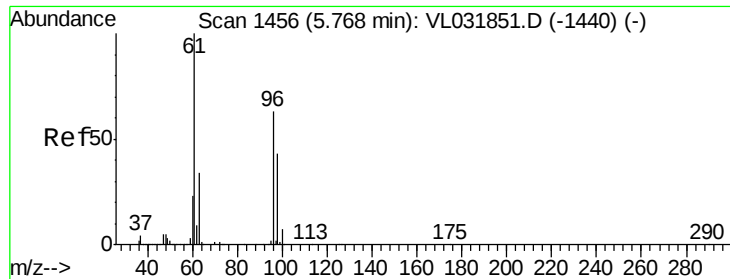
Delta R.T. 0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Tgt Ion:	57	Resp:	328741
Ion	Ratio	Lower	Upper
57	100		
41	94.0	72.0	108.0
43	70.8	169.8	254.8#
56	54.0	42.0	63.0





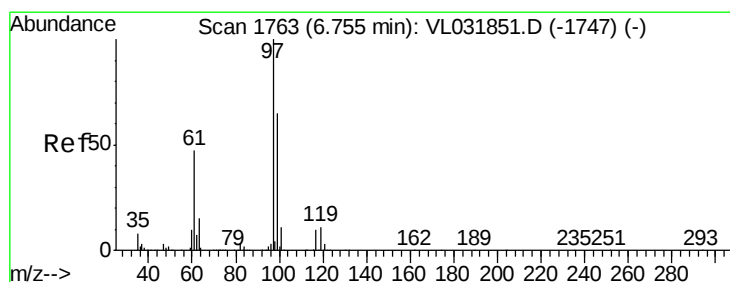
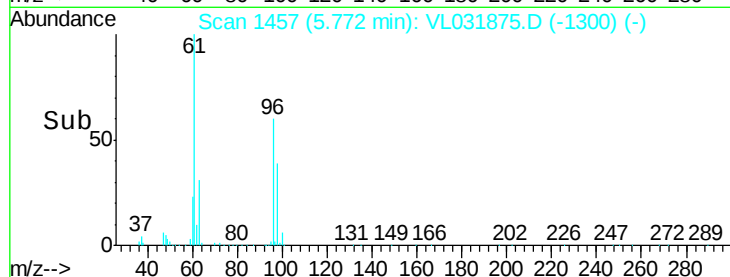
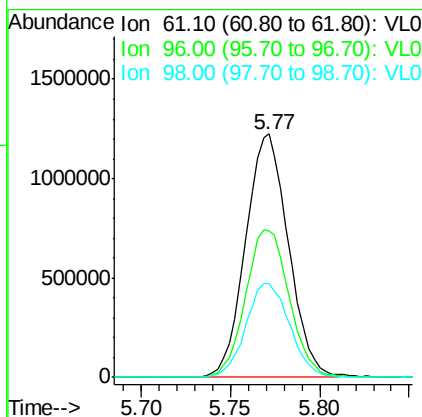
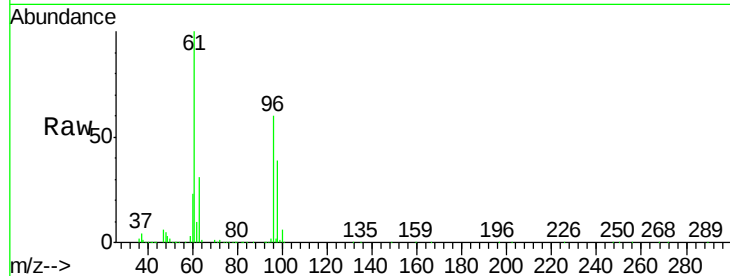
#31
 cis-1,2-Dichloroethene
 Concen: 17.595 ppbv
 RT: 5.77 min Scan# 1457
 Delta R.T. 0.01 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF1-040218

Tot Ion	Ratio	Lower	Upper
61	100		
96	59.9	47.6	71.4
98	38.6	30.3	45.5

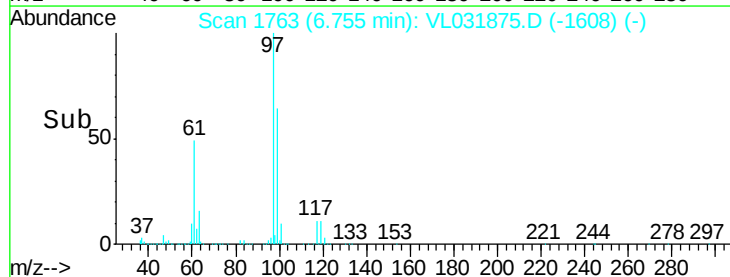
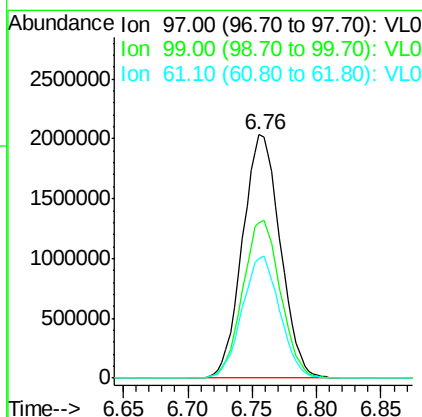
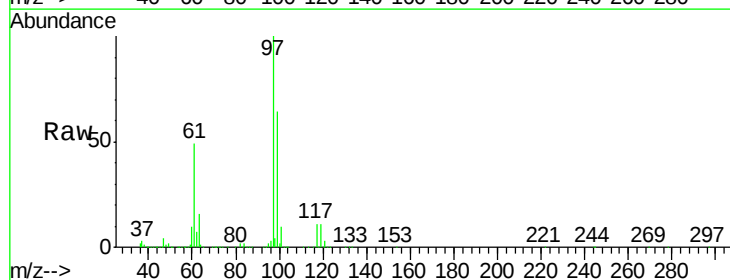
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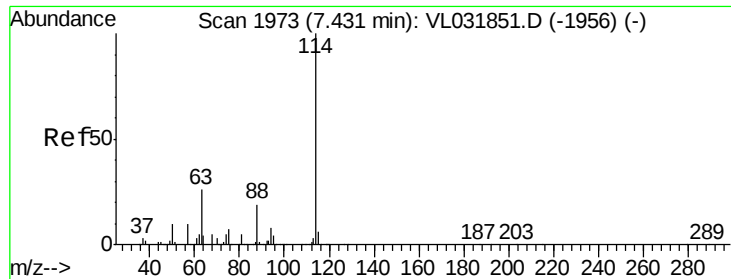
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#32
 1,1,1-Trichloroethane
 Concen: 19.527 ppbv
 RT: 6.76 min Scan# 1763
 Delta R.T. -0.00 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.9	51.5	77.3
61	49.8	40.0	60.0





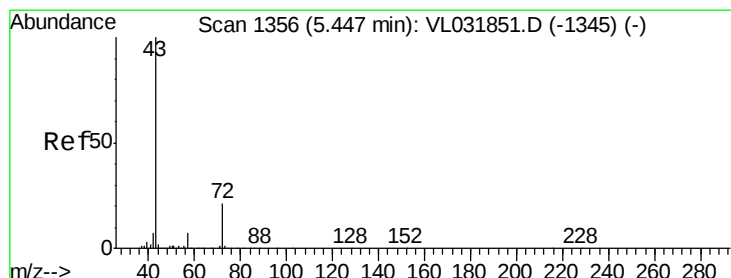
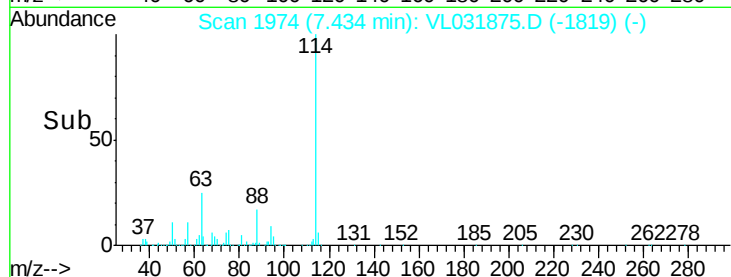
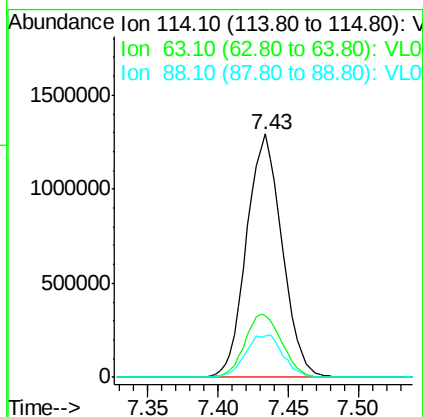
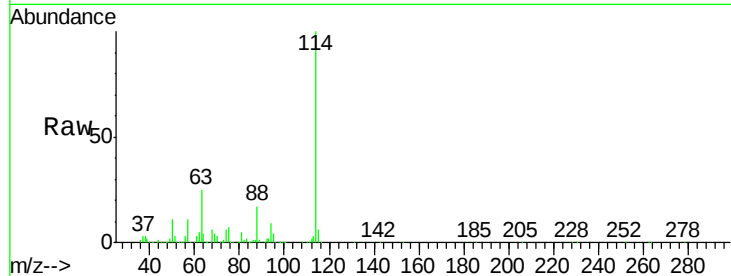
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.43 min Scan# 1974
 Delta R.T. -0.00 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF1-040218

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.0	21.8	32.6
88	18.4	14.6	22.0

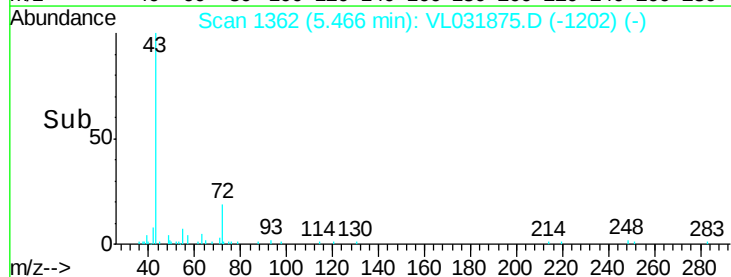
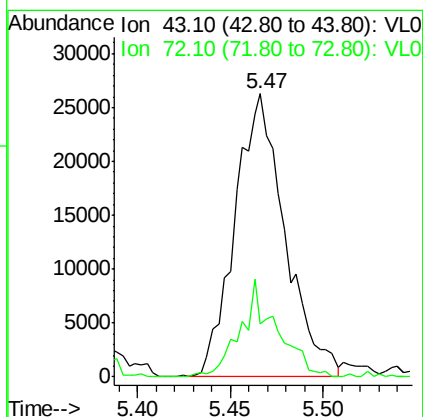
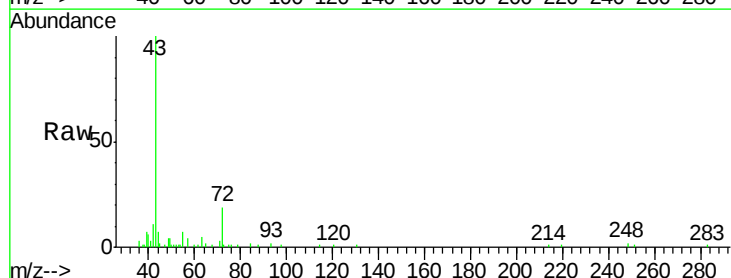
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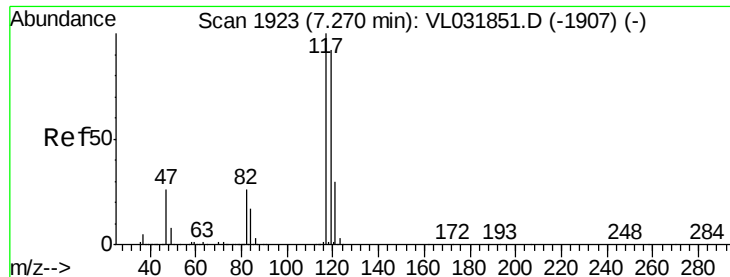
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#34
 2-Butanone
 Concen: 0.311 ppbv
 RT: 5.47 min Scan# 1362
 Delta R.T. 0.02 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Tgt Ion	Ratio	Lower	Upper
43	100		
72	24.7	18.6	27.8





#35

Carbon Tetrachloride

Concen: 0.070 ppbv m

RT: 7.27 min Scan# 1924

Delta R.T. -0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Instrument :

MSVOA_L

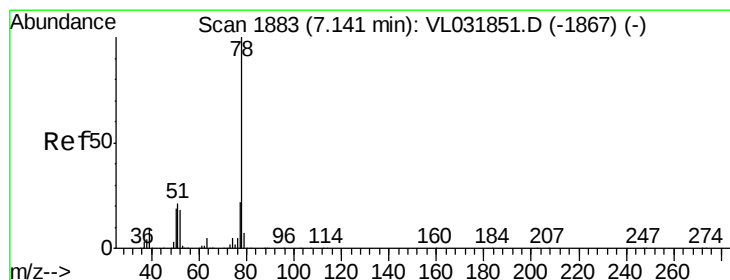
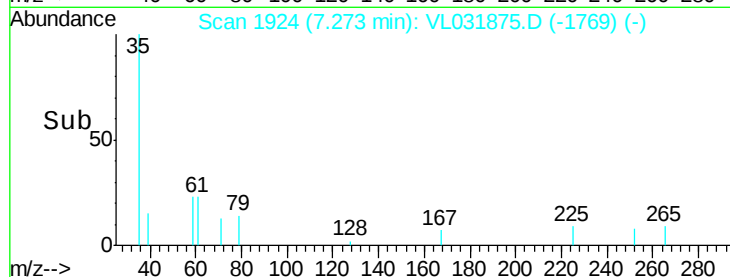
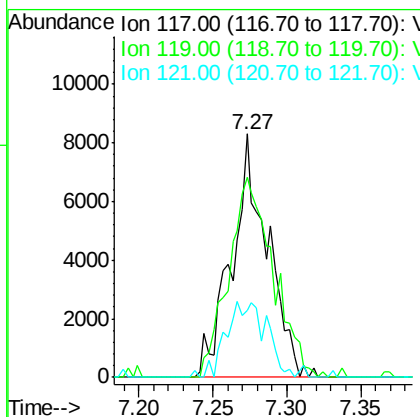
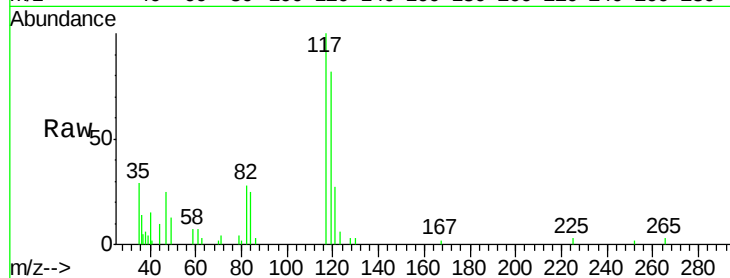
ClientSampleId :

SVE-INF1-040218

Tot Ion:	117	Resp:	13995
Ion Ratio	Lower	Upper	
117	100		
119	82.1	76.9	115.3
121	27.5	24.5	36.7

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#36

Benzene

Concen: 1.205 ppbv

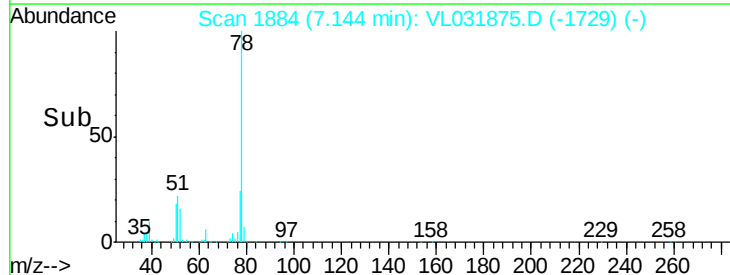
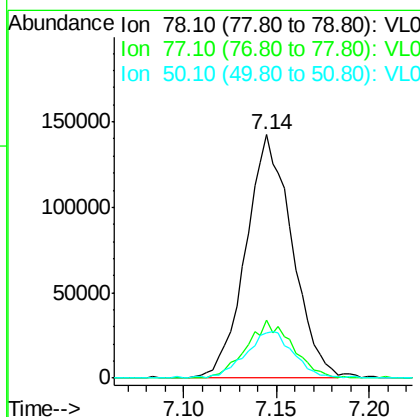
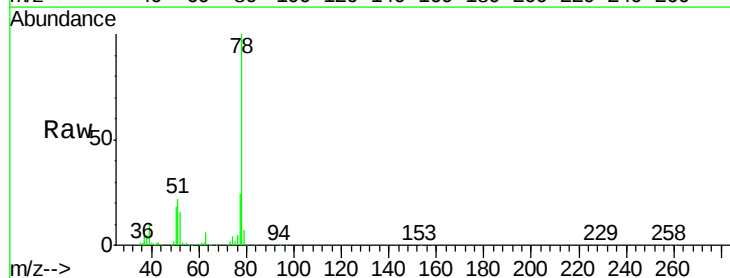
RT: 7.14 min Scan# 1884

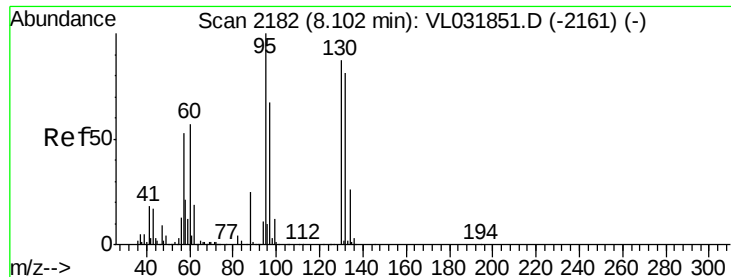
Delta R.T. -0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Tgt Ion:	78	Resp:	247735
Ion Ratio	Lower	Upper	
78	100		
77	23.5	19.2	28.8
50	18.2	16.7	25.1





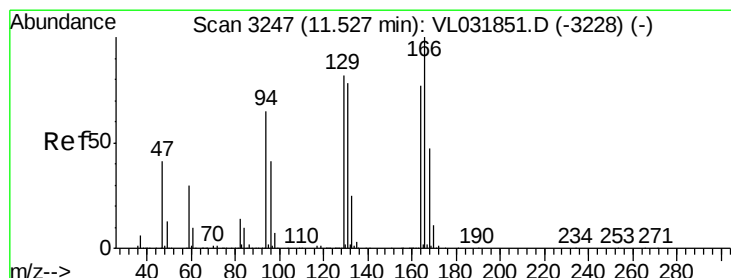
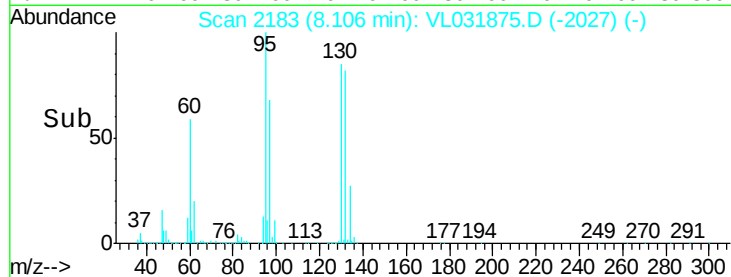
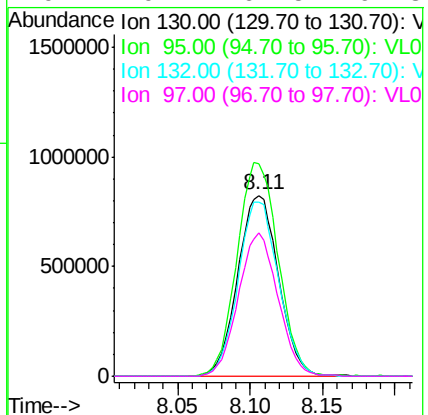
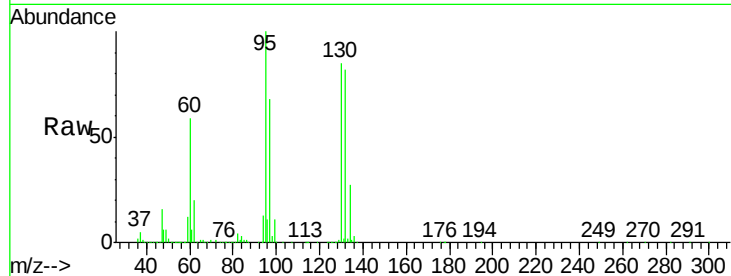
#38
 Trichloroethene
 Concen: 19.290 ppbv
 RT: 8.11 min Scan# 2183
 Delta R.T. 0.00 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF1-040218

Tot Ion:130 Resp: 1610085
 Ion Ratio Lower Upper
 130 100
 95 117.5 96.6 144.8
 132 95.9 79.1 118.7
 97 79.2 61.5 92.3

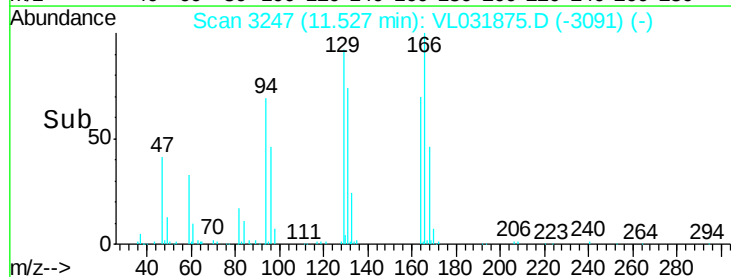
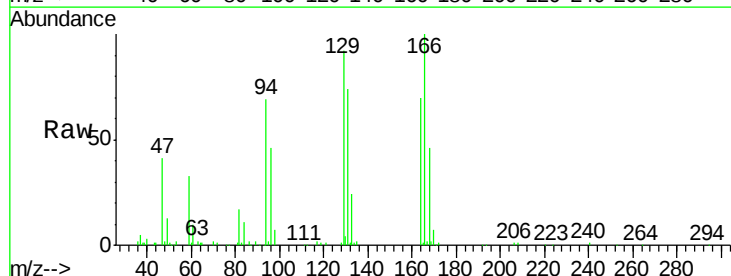
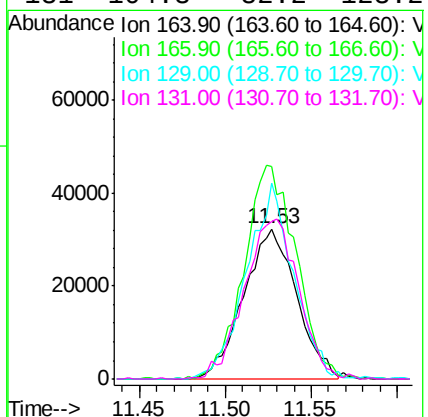
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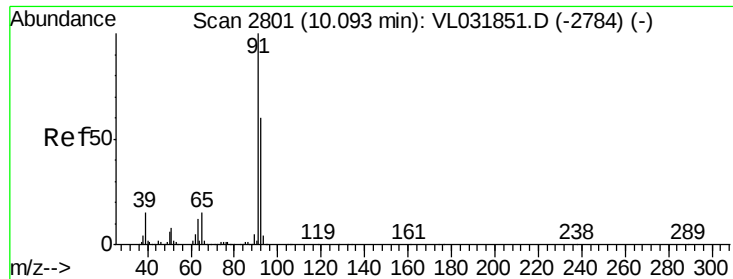
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#52
 Tetrachloroethene
 Concen: 0.864 ppbv
 RT: 11.53 min Scan# 3247
 Delta R.T. 0.00 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Tgt Ion:164 Resp: 69226
 Ion Ratio Lower Upper
 164 100
 166 140.4 98.2 147.4
 129 130.1 86.5 129.7#
 131 104.3 82.2 123.2





#53

Toluene

Concen: 0.300 ppbv

RT: 10.10 min Scan# 2802

Delta R.T. 0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

Instrument :

MSVOA_L

ClientSampleId :

SVE-INF1-040218

Tot Ion: 91 Resp: 68721

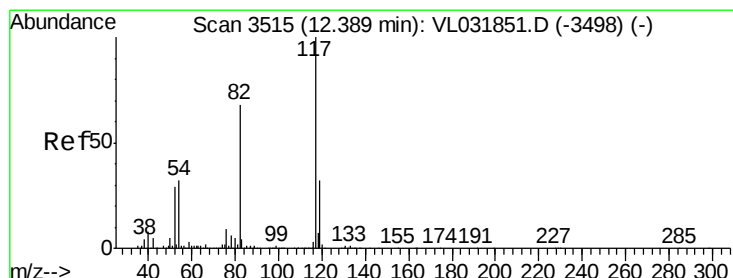
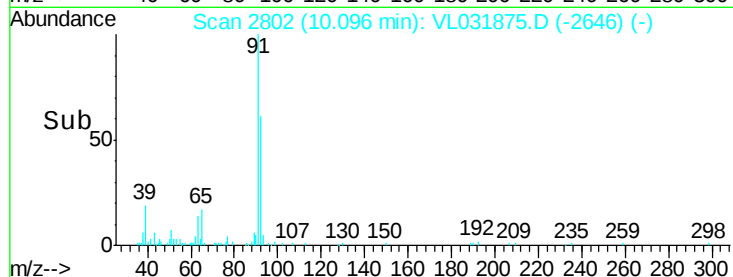
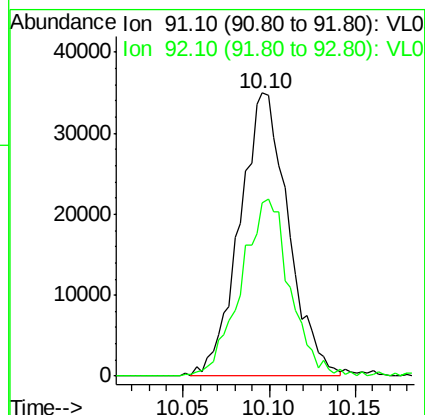
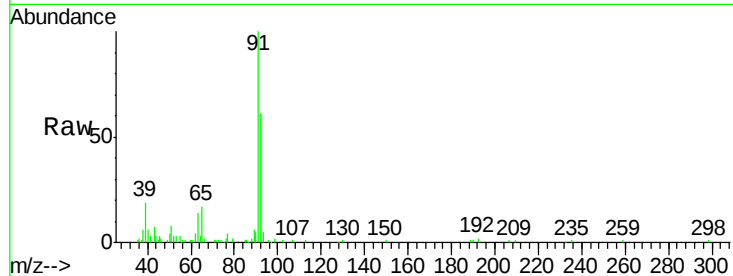
Ion Ratio Lower Upper

91 100

92 63.1 47.4 71.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.39 min Scan# 3516

Delta R.T. -0.00 min

Lab File: VL031875.D

Acq: 12 Apr 2018 21:25

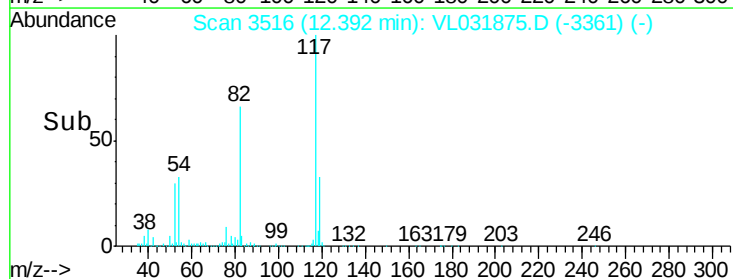
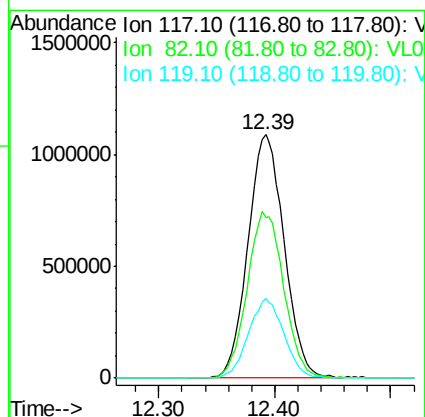
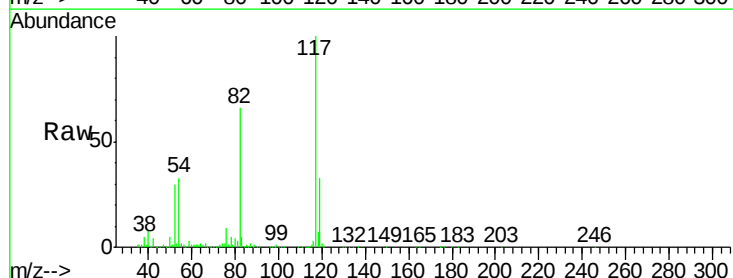
Tgt Ion: 117 Resp: 2367207

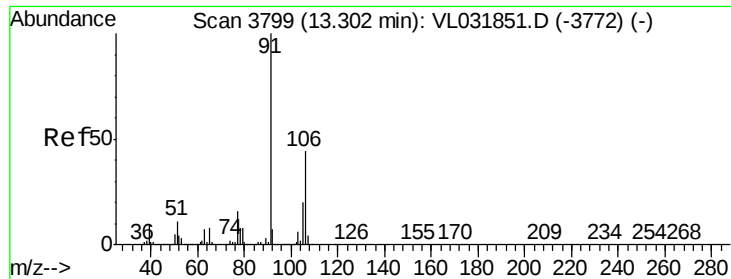
Ion Ratio Lower Upper

117 100

82 69.2 54.6 81.8

119 32.0 26.0 39.0





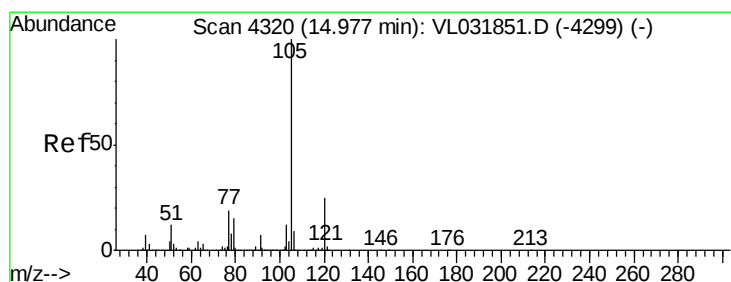
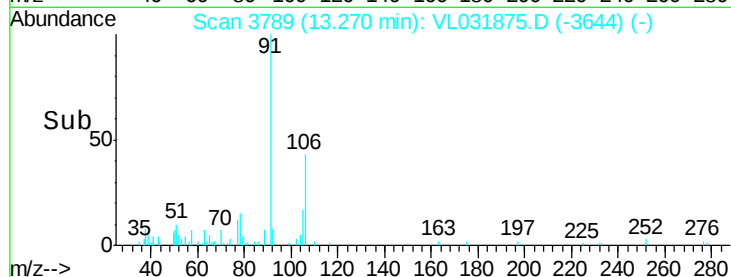
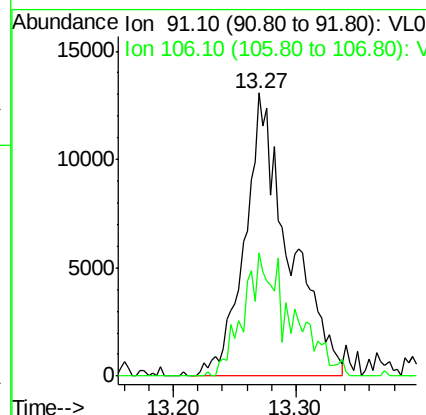
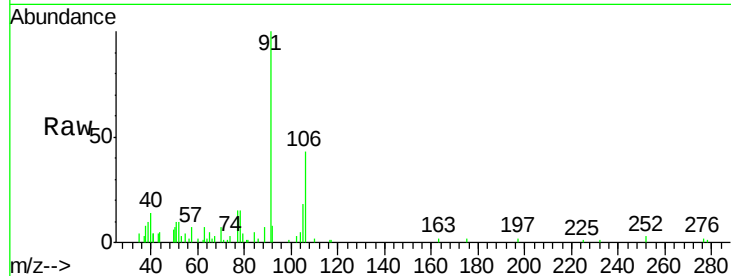
#59
m/p-Xylene
Concen: 0.115 ppbv m
RT: 13.27 min Scan# 3789
Delta R.T. -0.03 min
Lab File: VL031875.D
Acq: 12 Apr 2018 21:25

Instrument :
MSVOA_L
ClientSampleId :
SVE-INF1-040218

Tot Ion: 91 Resp: 32967
Ion Ratio Lower Upper
91 100
106 0.0 35.5 53.3#

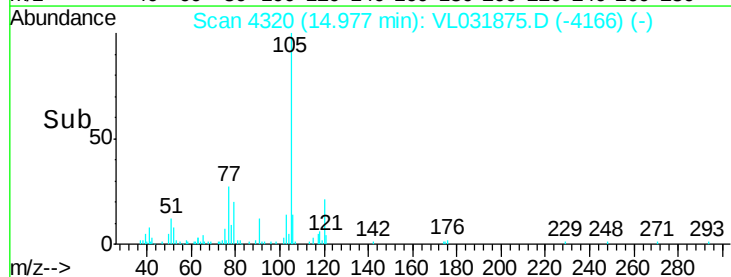
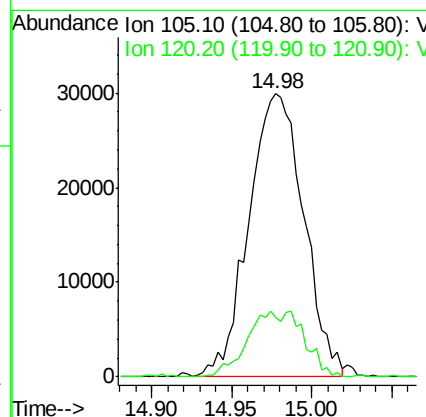
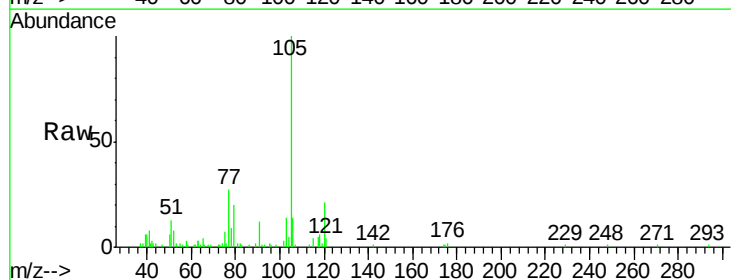
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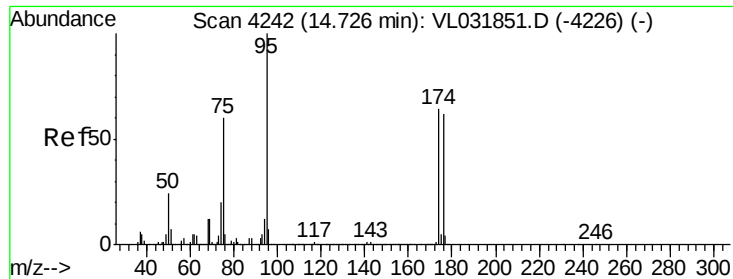
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#62
Isopropylbenzene
Concen: 0.193 ppbv
RT: 14.98 min Scan# 4320
Delta R.T. -0.00 min
Lab File: VL031875.D
Acq: 12 Apr 2018 21:25

Tgt Ion: 105 Resp: 70642
Ion Ratio Lower Upper
105 100
120 24.0 19.4 29.2





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.934 ppbv
 RT: 14.73 min Scan# 4243
 Delta R.T. -0.00 min
 Lab File: VL031875.D
 Acq: 12 Apr 2018 21:25

Instrument :
 MSVOA_L
 ClientSampleId :
 SVE-INF1-040218

Tot Ion	Ratio	Lower	Upper
95	100		
174	64.4	52.3	78.5
175	4.8	3.9	5.9

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