

Data File : VL031419.D

Acq On : 22 Jan 2018 16:01

Operator : SY/AP

Sample : VSTDIC0.1

Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

Quant Time: Jan 22 16:45:53 2018

Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL012218AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Jan 22 16:42:46 2018

QLast Update : Mon Jan 22 16:42:46 2018

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.90	49	1291305	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.44	114	2988289	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.41	117	2971223	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.75	95	2414266	10.29	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.90%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.17	85	25281	0.10	ppbv	97
3) Chlorodifluoromethane	3.11	51	17978	0.09	ppbv	99
4) Chloromethane	3.27	50	4791	0.06	ppbv	98
5) Vinyl Chloride	3.40	62	7317	0.08	ppbv #	81
6) Bromomethane	3.62	94	3030	0.05	ppbv	82
7) Chloroethane	3.71	64	2519	0.07	ppbv	91
8) Dichlorotetrafluoroethane	3.32	85	22322	0.10	ppbv	97
9) Propene	3.13	41	3316	0.05	ppbv #	19
11) Trichlorofluoromethane	4.13	101	27092	0.10	ppbv	95
12) 1,1,2-Trichlorotrifluoroet	4.68	101	16522	0.10	ppbv	100
13) Ethanol	3.78	45	1125	0.03	ppbv #	38
14) Bromoethene	3.90	108	5841	0.08	ppbv #	97
15) Acetone	4.05	43	21316	0.10	ppbv	98
16) 1,3-Butadiene	3.47	39	5744	0.07	ppbv	97
18) 1,1-Dichloroethene	4.48	96	6601	0.09	ppbv	88
20) Methylene Chloride	4.53	84	4322	0.06	ppbv	90
21) Allyl Chloride	4.60	41	9861	0.09	ppbv	86
22) trans-1,2-Dichloroethene	5.09	96	2887	0.04	ppbv	93
23) Vinyl Acetate	5.31	43	19467	0.08	ppbv #	92
24) 1,1-Dichloroethane	5.22	63	18621	0.09	ppbv #	92
25) Ethyl Acetate	5.93	43	15038	0.04	ppbv #	76
26) Hexane	5.92	57	6881	0.04	ppbv #	1
27) Carbon Disulfide	4.76	76	7790	0.04	ppbv #	1
29) Chloroform	5.99	83	22603	0.09	ppbv	90
31) cis-1,2-Dichloroethene	5.78	61	7563	0.05	ppbv #	88
32) 1,1,1-Trichloroethane	6.76	97	13156	0.05	ppbv #	22
34) 2-Butanone	5.49	43	9327	0.04	ppbv #	55
35) Carbon Tetrachloride	7.29	117	22529	0.08	ppbv	89
36) Benzene	7.16	78	12565	0.04	ppbv	98
37) 1,2-Dichloroethane	6.56	62	20068	0.09	ppbv	100
38) Trichloroethene	8.12	130	5148	0.04	ppbv #	78
39) 1,2-Dichloropropane	7.44	63	813430	7.11	ppbv #	22
42) Bromodichloromethane	8.07	83	22164	0.08	ppbv #	82
44) 2,2,4-Trimethylpentane	8.15	57	18300	0.04	ppbv #	40
46) cis-1,3-Dichloropropene	9.00	75	9374	0.05	ppbv #	81
47) 1,1,2-Trichloroethane	9.78	97	7062	0.05	ppbv	93
49) Bromoform	13.37	173	11101	0.06	ppbv	94
50) 4-Methyl-2-Pentanone	9.07	43	16591	0.05	ppbv	100
52) Tetrachloroethene	11.54	164	8479	0.07	ppbv #	69
53) Toluene	10.11	91	19791	0.05	ppbv	97
54) 1,2-Dibromoethane	10.93	107	10004	0.05	ppbv	84

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Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

Quant Time: Jan 22 16:45:53 2018
Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL012218AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Jan 22 16:42:46 2018
QLast Update : Mon Jan 22 16:42:46 2018
Response via : Initial Calibration

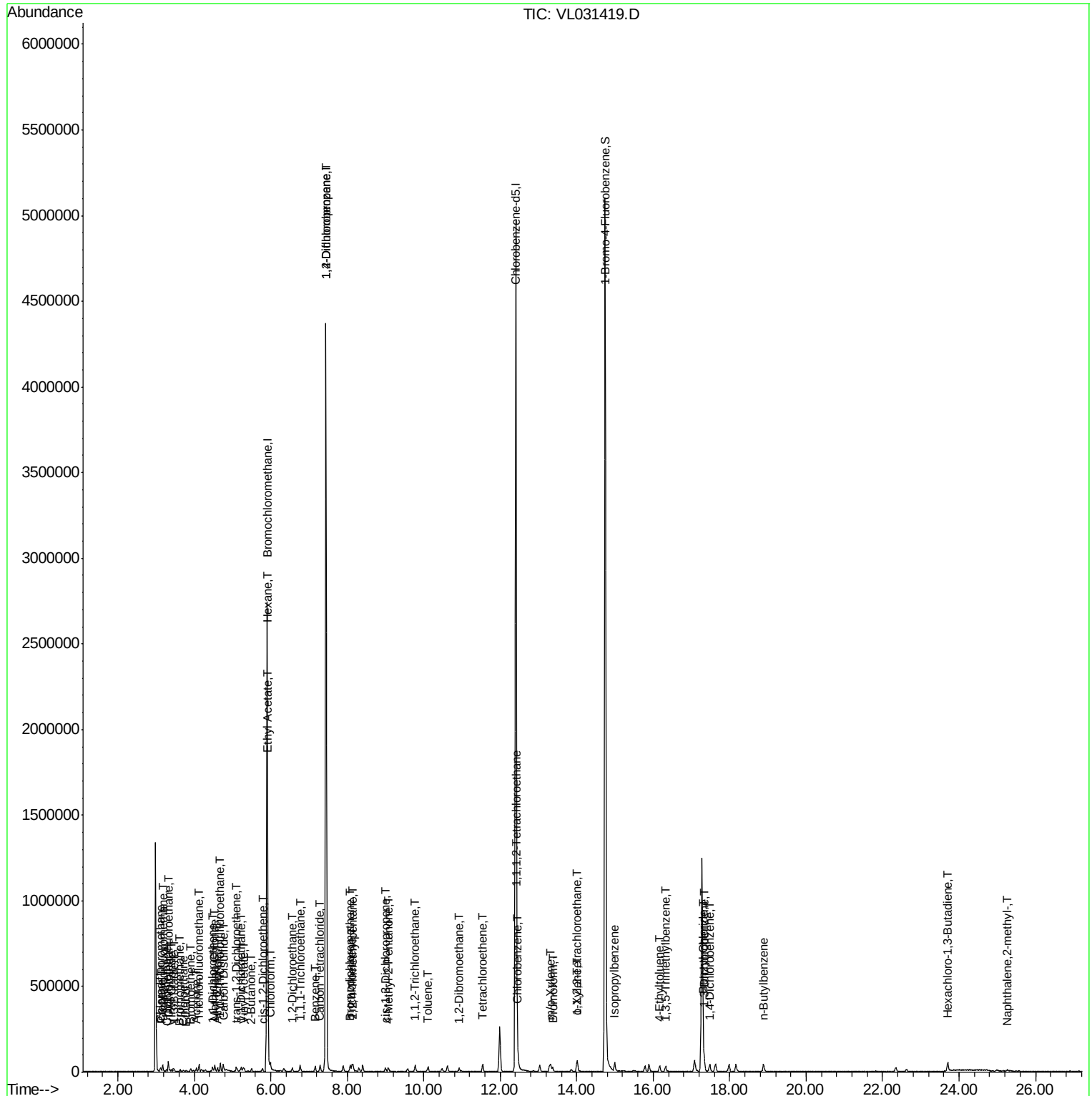
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,1,1,2-Tetrachloroethane	12.45	131	8010	0.05	ppbv #	29
57) Chlorobenzene	12.47	112	26324	0.09	ppbv #	75
59) m/p-Xylene	13.32	91	19328	0.05	ppbv #	1
60) o-Xylene	14.02	91	21775	0.05	ppbv	98
62) Isopropylbenzene	14.99	105	18059	0.04	ppbv #	50
63) 1,1,2,2-Tetrachloroethane	14.00	83	12330	0.04	ppbv #	18
66) Benzyl Chloride	17.32	91	1394	0.03	ppbv #	66
70) n-Butylbenzene	18.88	91	20436	0.04	ppbv #	65
72) 4-Ethyltoluene	16.17	105	22941	0.05	ppbv	97
73) 1,3,5-Trimethylbenzene	16.32	105	12577	0.03	ppbv	98
75) 1,3-Dichlorobenzene	17.34	146	21196	0.08	ppbv	89
76) 1,4-Dichlorobenzene	17.47	146	11043	0.04	ppbv #	23
78) Hexachloro-1,3-Butadiene	23.69	225	2536	0.03	ppbv #	18
80) Naphthalene,2-methyl-	25.26	142	2895	0.06	ppbv	90

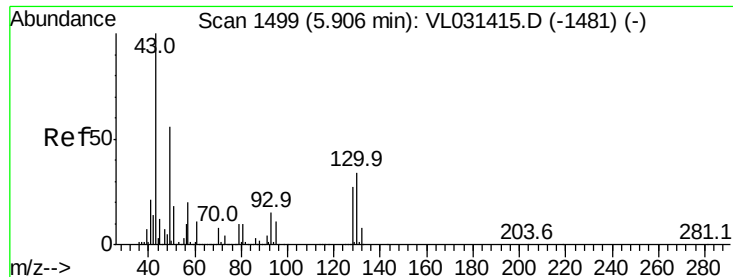
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALS Vial : 1 Sample Multiplier: 1

VSTDICC0.1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.90 min Scan# 1498

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

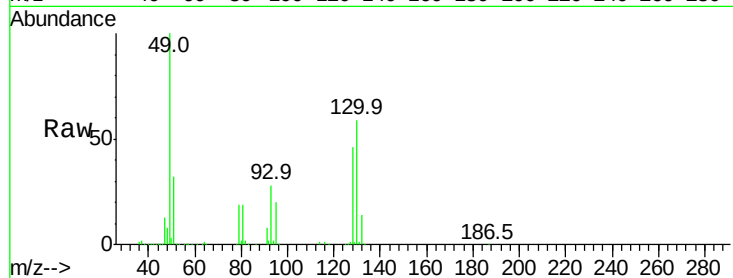
Tgt Ion: 49 Resp: 1291305

Ion Ratio Lower Upper

49 100

128 46.4 23.5 70.6

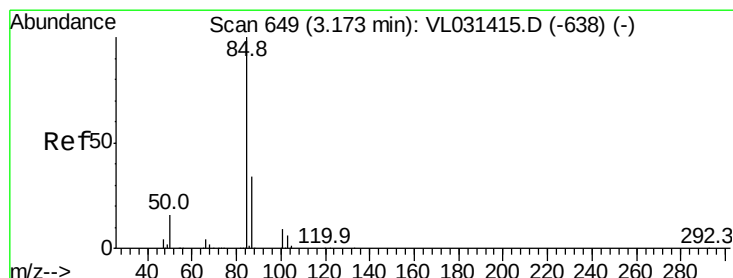
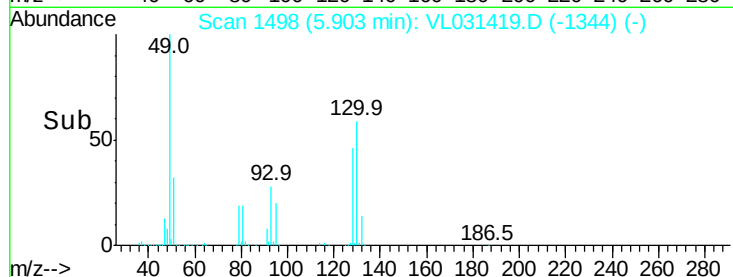
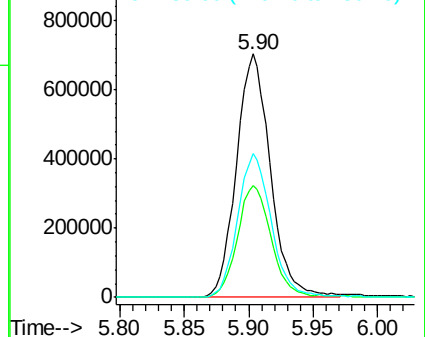
130 59.4 29.9 89.7



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: 0.10 ppbv

RT: 3.17 min Scan# 649

Delta R.T. -0.00 min

Lab File: VL031419.D

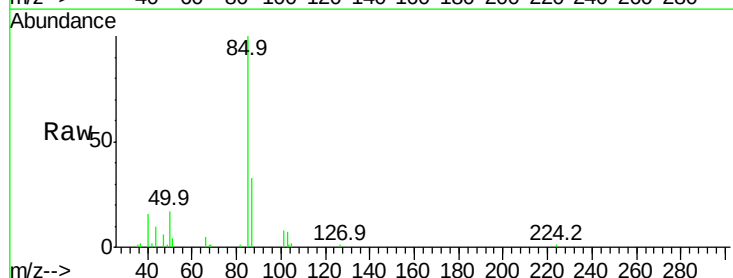
Acq: 22 Jan 2018 16:01

Tgt Ion: 85 Resp: 25281

Ion Ratio Lower Upper

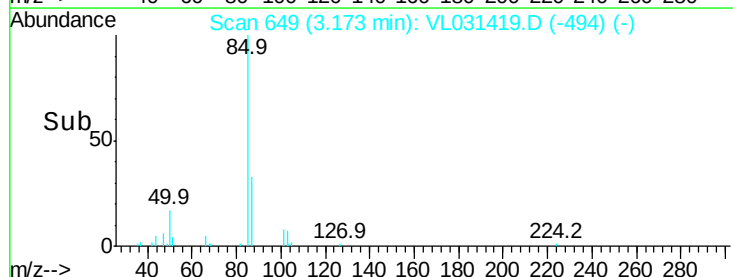
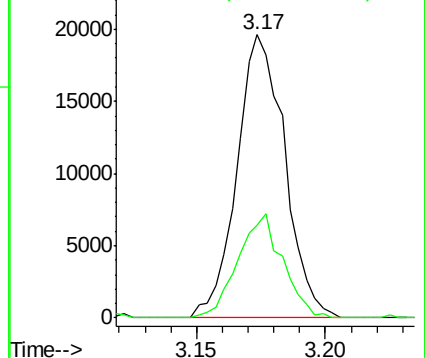
85 100

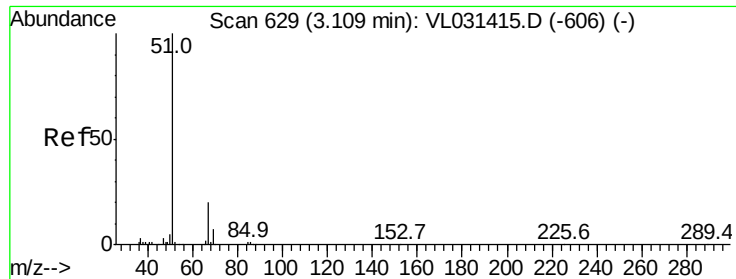
87 32.7 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.09 ppbv

RT: 3.11 min Scan# 630

Delta R.T. 0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

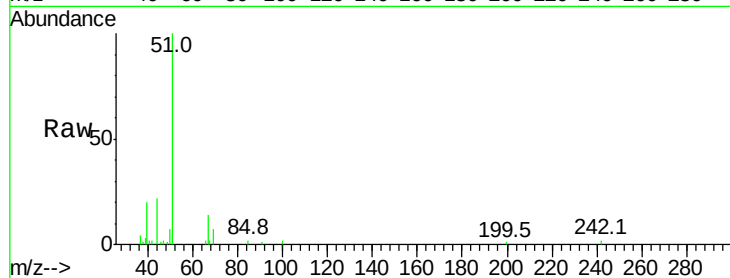
VSTDIC0.1

Tgt Ion: 51 Resp: 17978

Ion Ratio Lower Upper

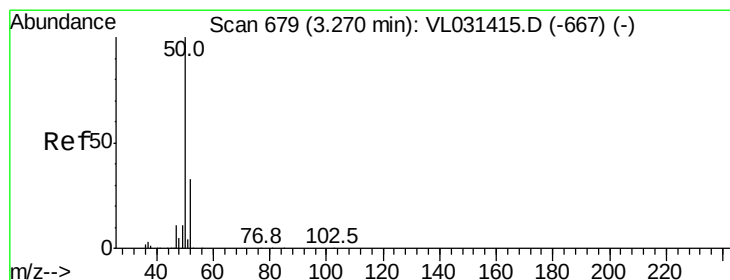
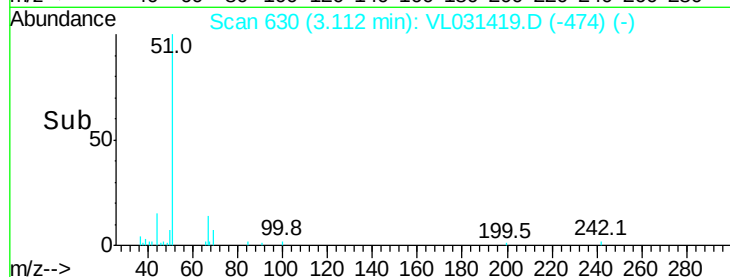
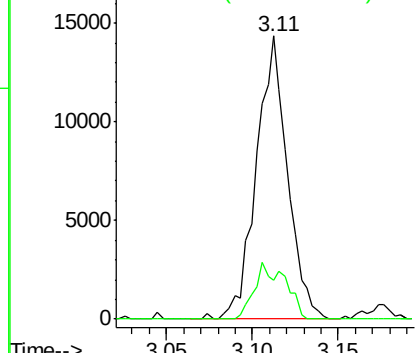
51 100

67 19.6 16.0 24.0



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.06 ppbv

RT: 3.27 min Scan# 679

Delta R.T. -0.00 min

Lab File: VL031419.D

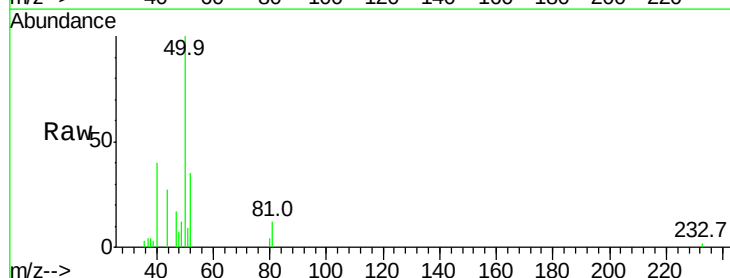
Acq: 22 Jan 2018 16:01

Tgt Ion: 50 Resp: 4791

Ion Ratio Lower Upper

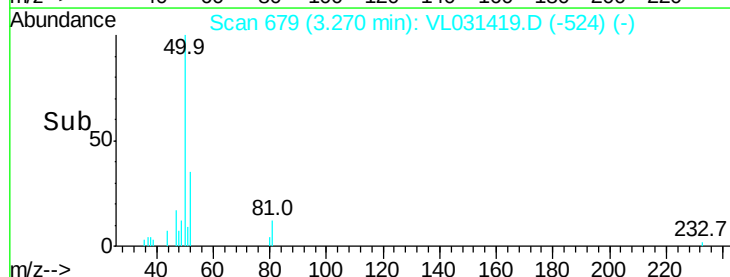
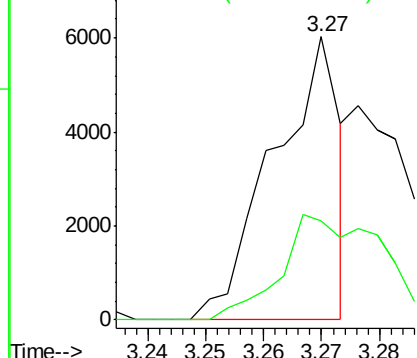
50 100

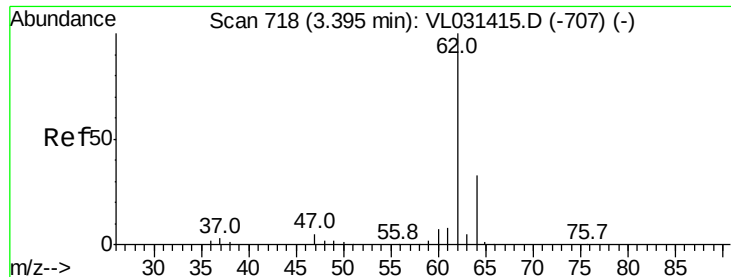
52 31.9 26.4 39.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.08 ppbv

RT: 3.40 min Scan# 718

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

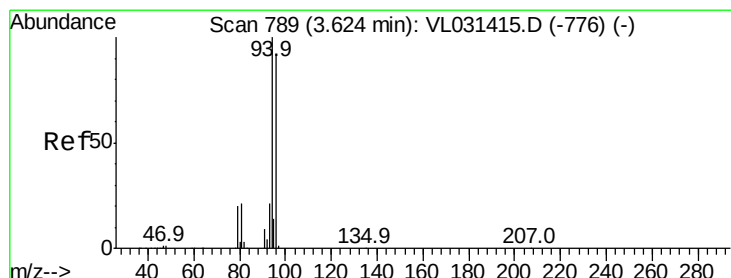
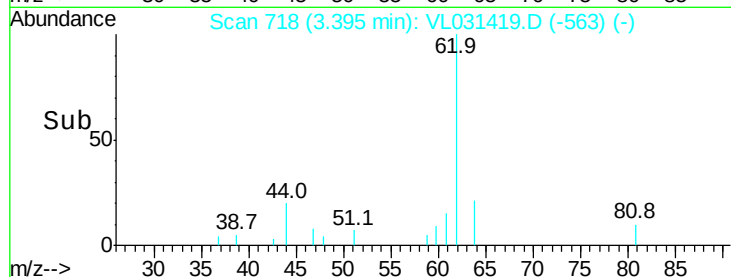
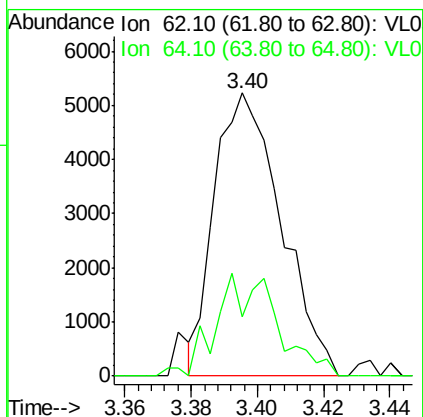
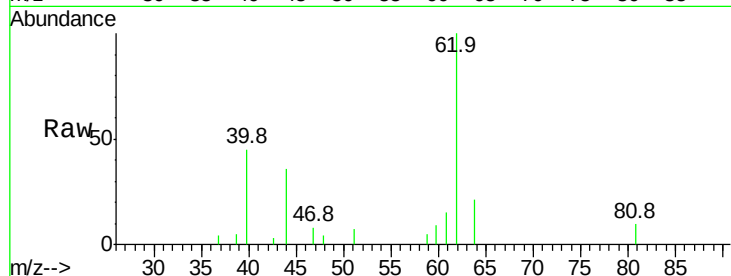
VSTDIC0.1

Tgt Ion: 62 Resp: 7317

Ion Ratio Lower Upper

62 100

64 20.9 25.4 38.0#



#6

Bromomethane

Concen: 0.05 ppbv

RT: 3.62 min Scan# 788

Delta R.T. -0.01 min

Lab File: VL031419.D

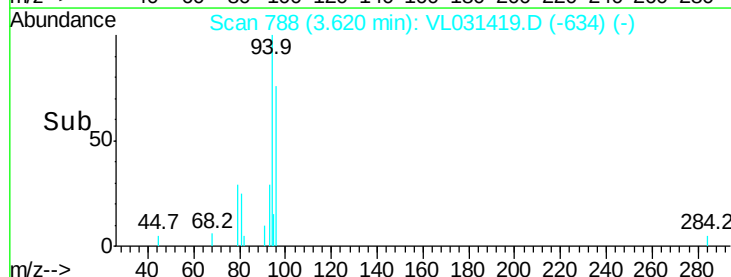
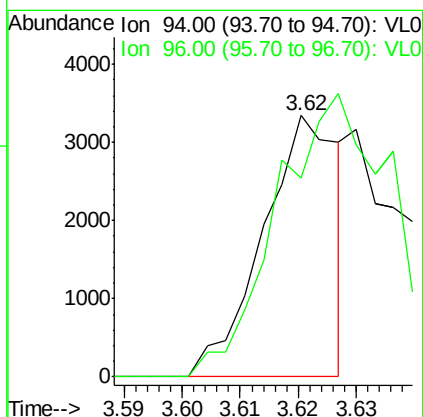
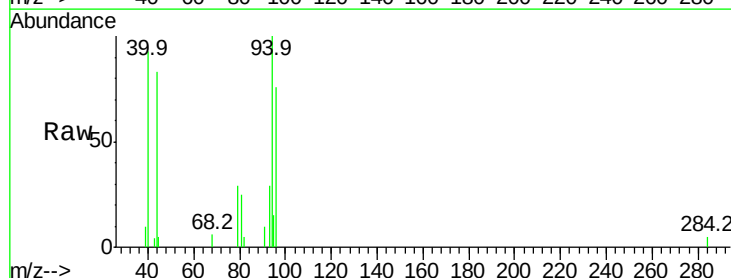
Acq: 22 Jan 2018 16:01

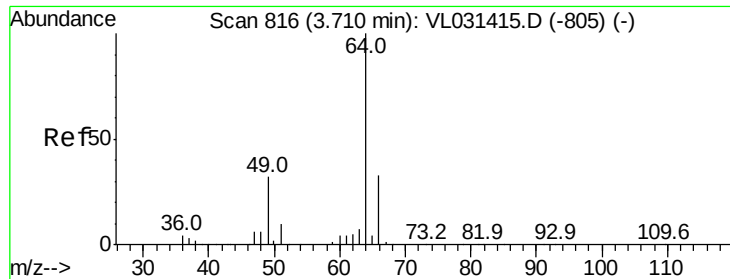
Tgt Ion: 94 Resp: 3030

Ion Ratio Lower Upper

94 100

96 76.1 75.1 112.7





#7

Chloroethane

Concen: 0.07 ppbv

RT: 3.71 min Scan# 816

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

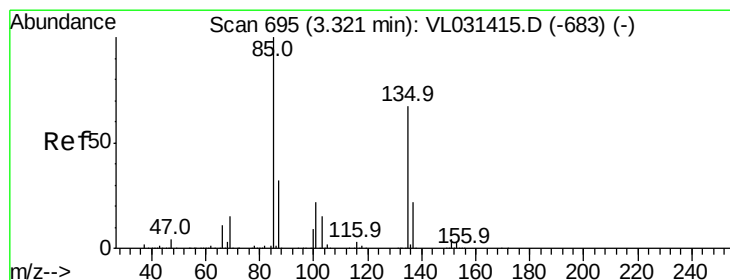
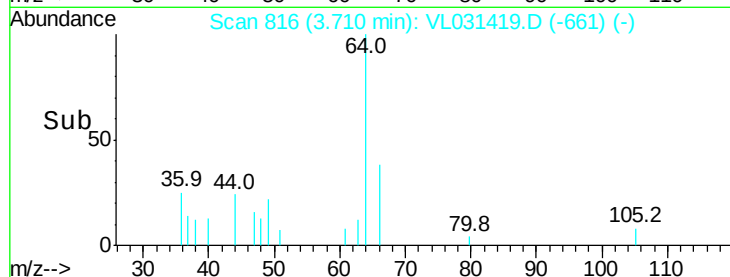
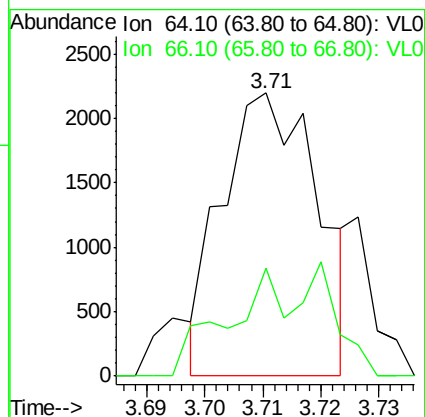
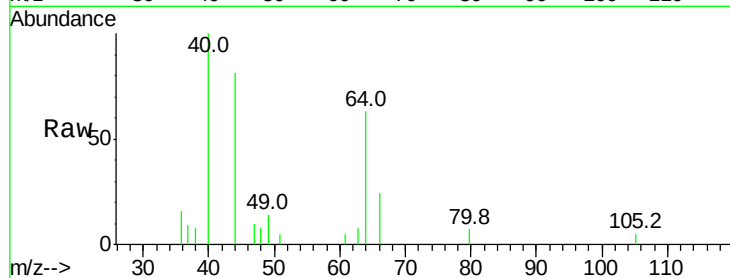
VSTDIC0.1

Tgt Ion: 64 Resp: 2519

Ion Ratio Lower Upper

64 100

66 37.9 26.3 39.5



#8

Dichlorotetrafluoroethane

Concen: 0.10 ppbv

RT: 3.32 min Scan# 695

Delta R.T. -0.00 min

Lab File: VL031419.D

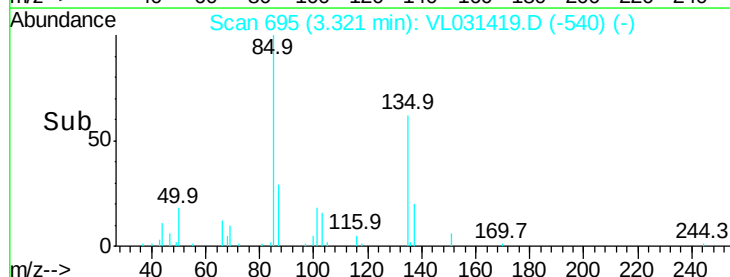
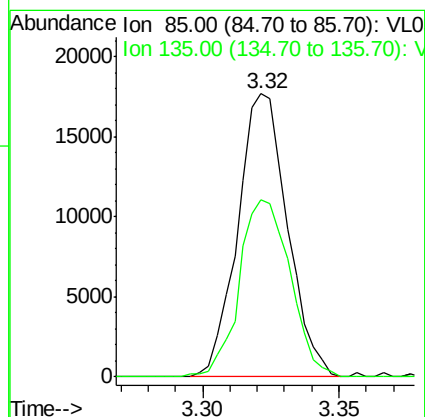
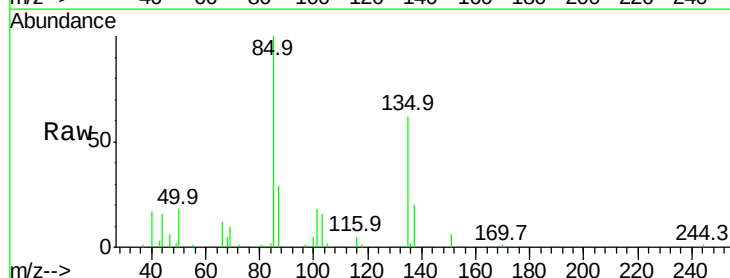
Acq: 22 Jan 2018 16:01

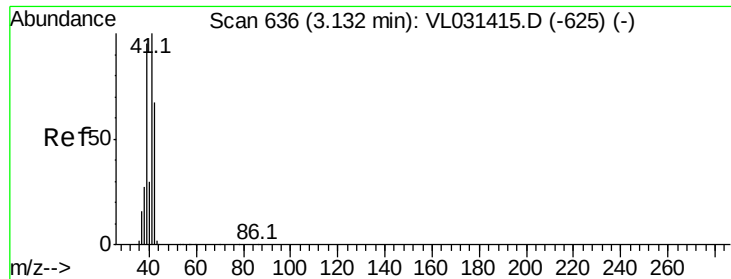
Tgt Ion: 85 Resp: 22322

Ion Ratio Lower Upper

85 100

135 64.0 53.3 79.9





#9

Propene

Concen: 0.05 ppbv

RT: 3.13 min Scan# 636

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

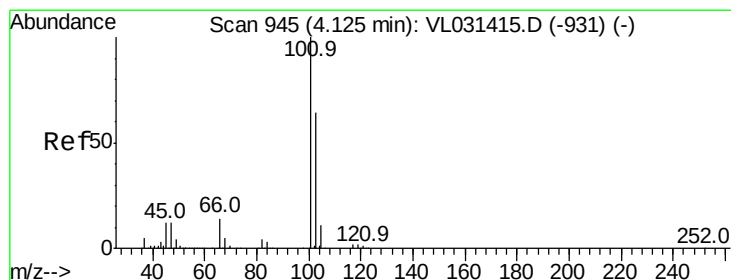
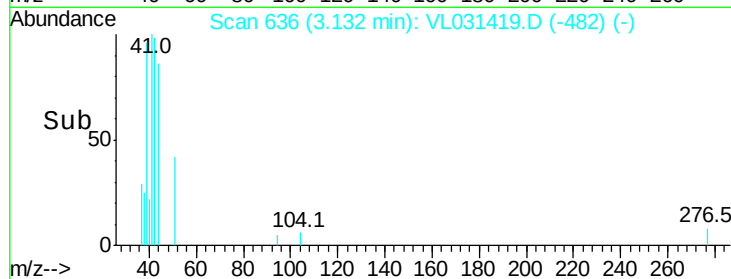
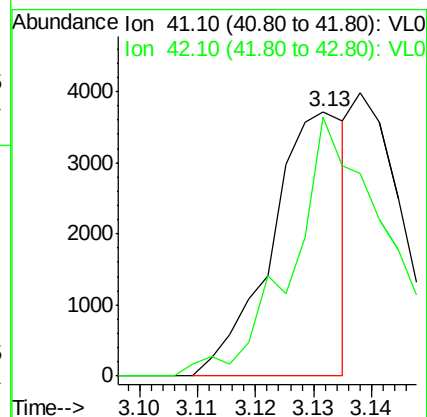
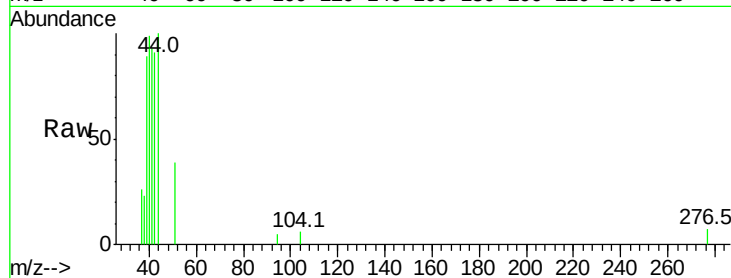
VSTDIC0.1

Tgt Ion: 41 Resp: 3316

Ion Ratio Lower Upper

41 100

42 134.3 54.6 82.0#



#11

Trichlorofluoromethane

Concen: 0.10 ppbv

RT: 4.13 min Scan# 945

Delta R.T. 0.00 min

Lab File: VL031419.D

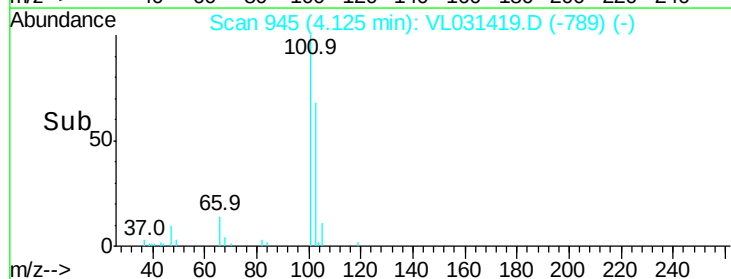
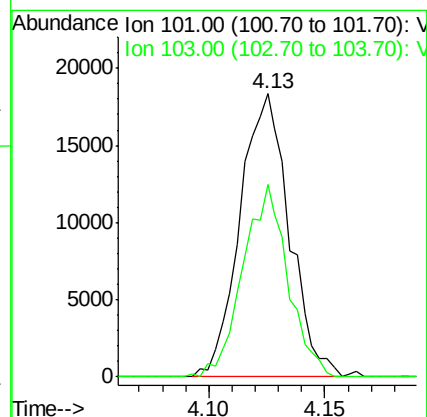
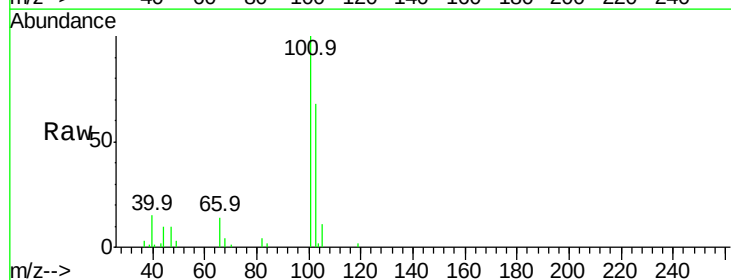
Acq: 22 Jan 2018 16:01

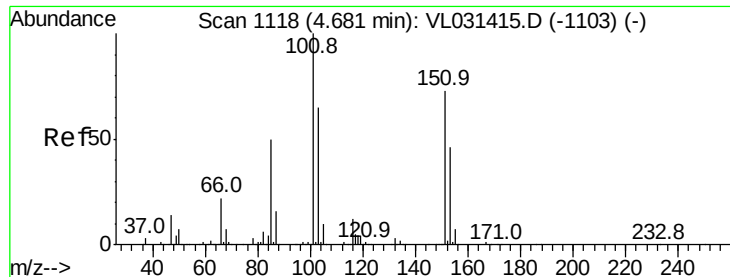
Tgt Ion: 101 Resp: 27092

Ion Ratio Lower Upper

101 100

103 70.0 53.1 79.7





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.10 ppbv

RT: 4.68 min Scan# 1119

Delta R.T. 0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

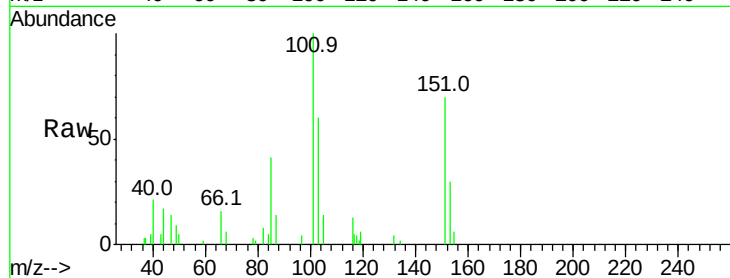
VSTDIC0.1

Tgt Ion:101 Resp: 16522

Ion Ratio Lower Upper

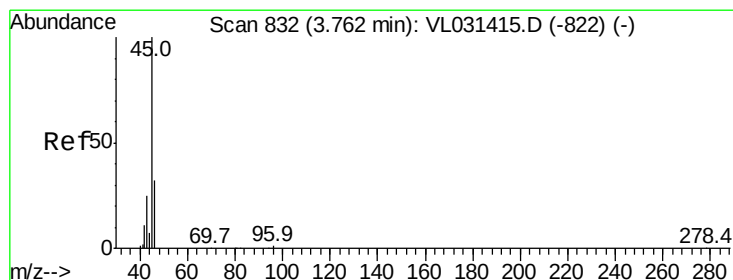
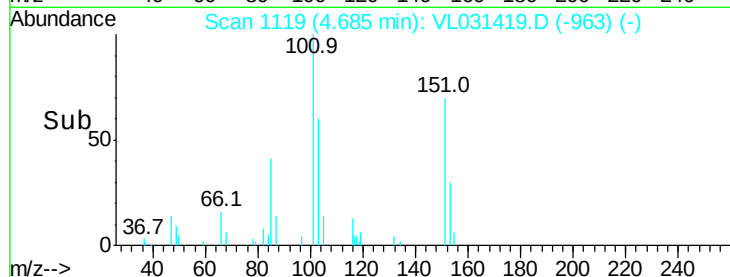
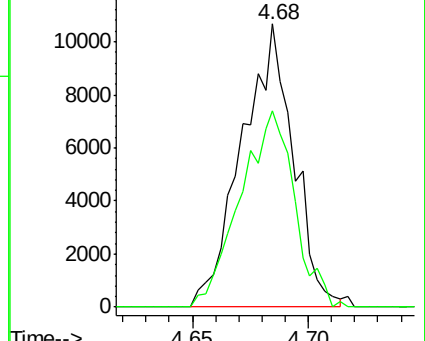
101 100

151 72.7 58.1 87.1



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 0.03 ppbv

RT: 3.78 min Scan# 839

Delta R.T. 0.02 min

Lab File: VL031419.D

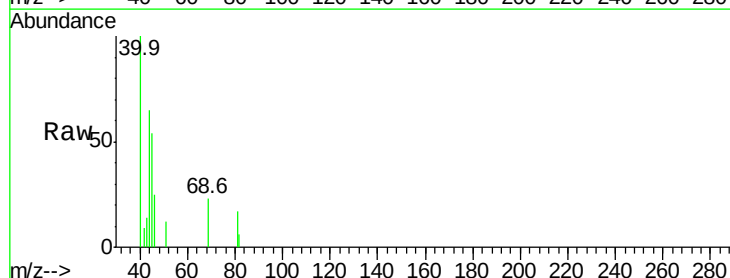
Acq: 22 Jan 2018 16:01

Tgt Ion: 45 Resp: 1125

Ion Ratio Lower Upper

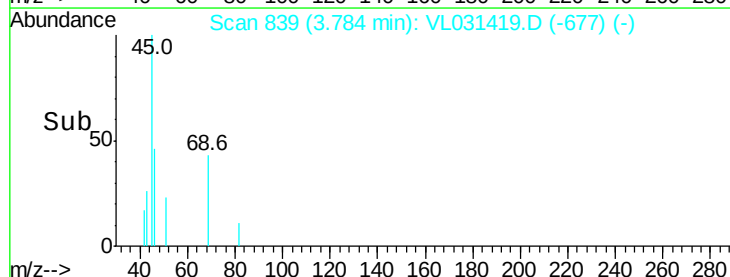
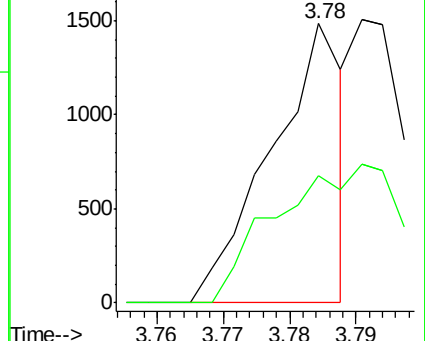
45 100

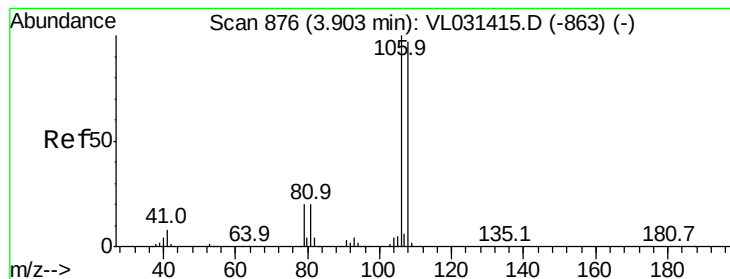
46 0.0 14.9 59.5#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#14

Bromoethene

Concen: 0.08 ppbv

RT: 3.90 min Scan# 876

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

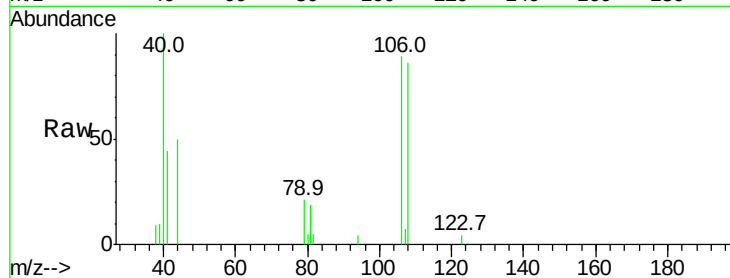
Tgt Ion:108 Resp: 5841

Ion Ratio Lower Upper

108 100

106 105.6 85.3 127.9

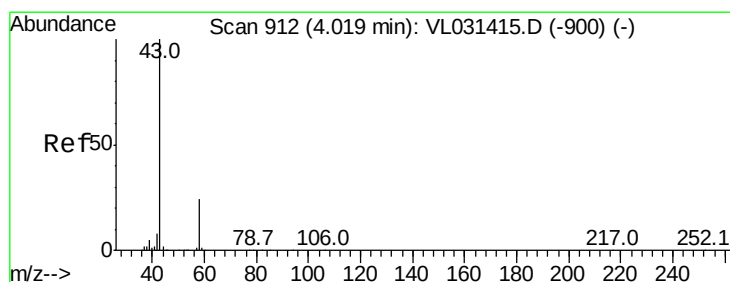
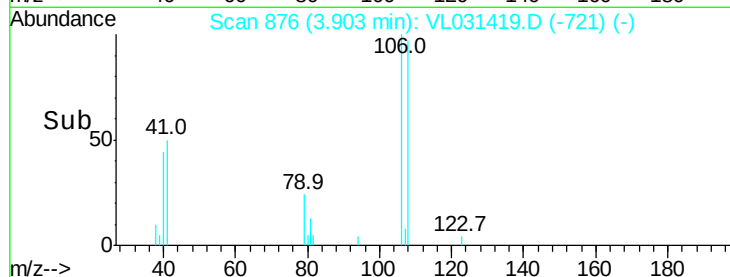
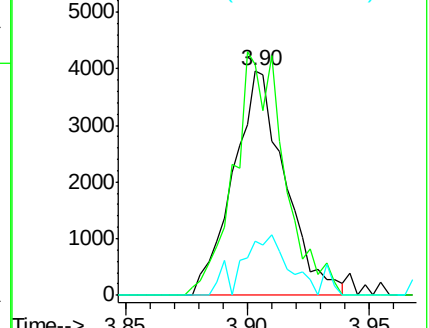
79 26.6 16.8 25.2#



Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0



#15

Acetone

Concen: 0.10 ppbv

RT: 4.05 min Scan# 921

Delta R.T. 0.03 min

Lab File: VL031419.D

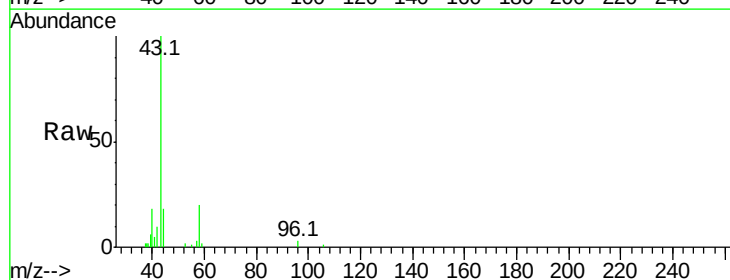
Acq: 22 Jan 2018 16:01

Tgt Ion: 43 Resp: 21316

Ion Ratio Lower Upper

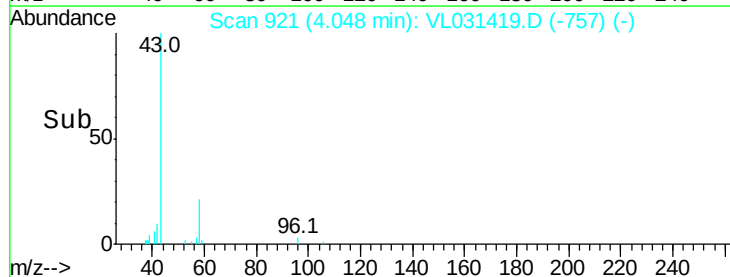
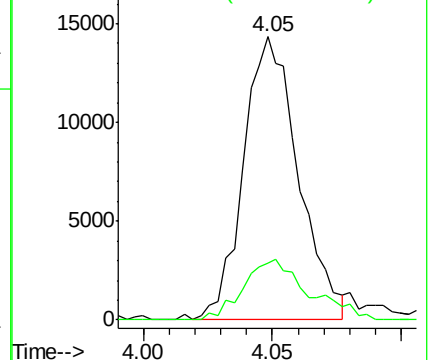
43 100

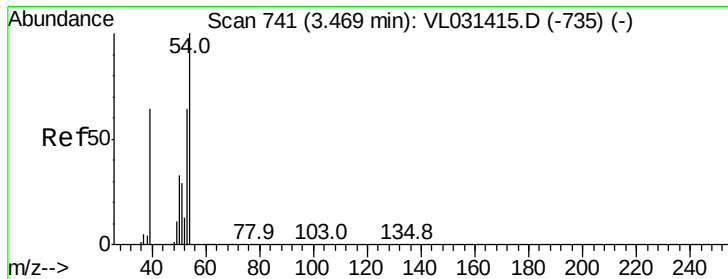
58 25.4 19.4 29.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#16

1,3-Butadiene

Concen: 0.07 ppbv

RT: 3.47 min Scan# 741

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

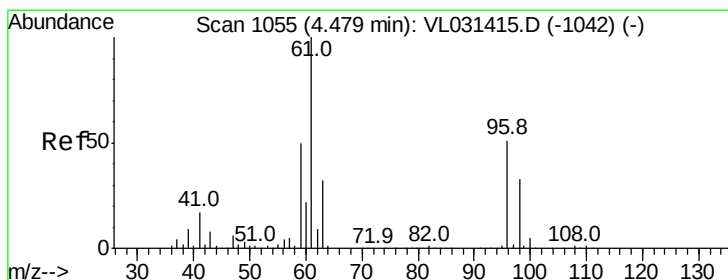
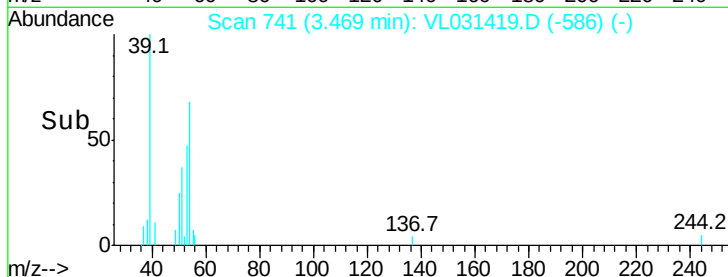
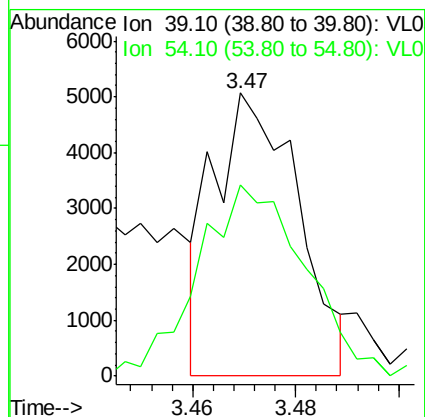
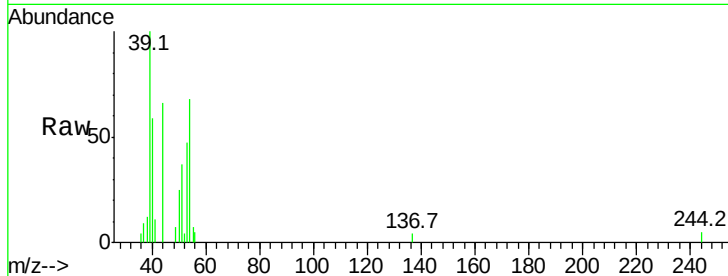
VSTDIC0.1

Tgt Ion: 39 Resp: 5744

Ion Ratio Lower Upper

39 100

54 86.9 67.0 100.6



#18

1,1-Dichloroethene

Concen: 0.09 ppbv

RT: 4.48 min Scan# 1054

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

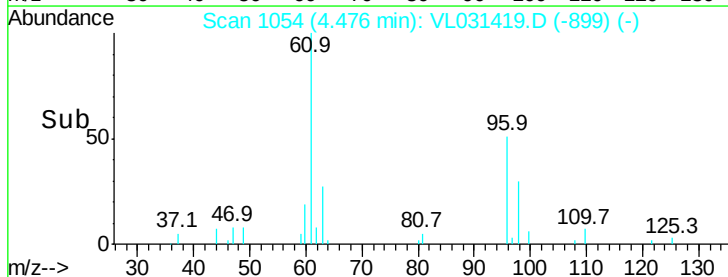
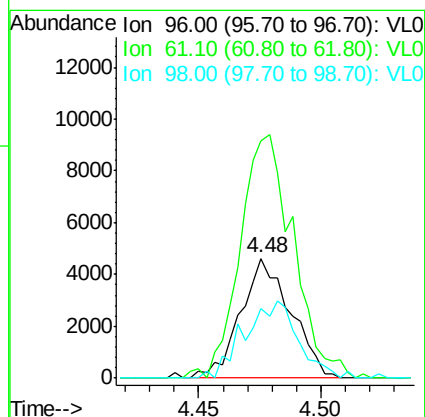
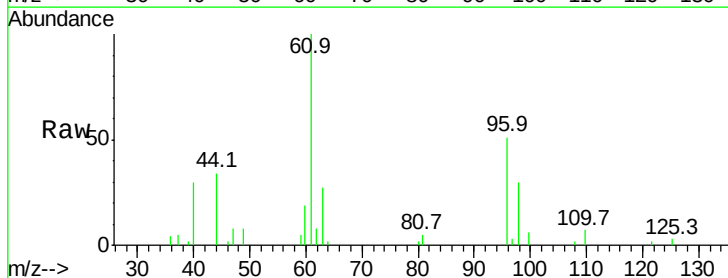
Tgt Ion: 96 Resp: 6601

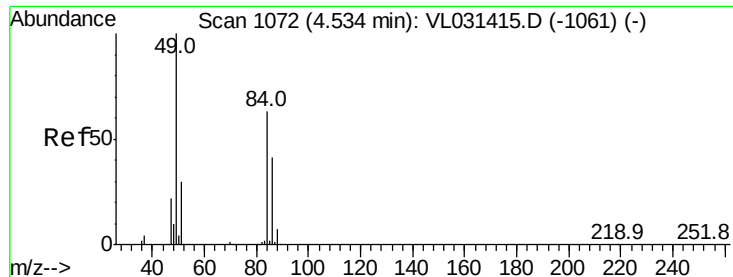
Ion Ratio Lower Upper

96 100

61 182.5 161.6 242.4

98 55.8 49.6 74.4

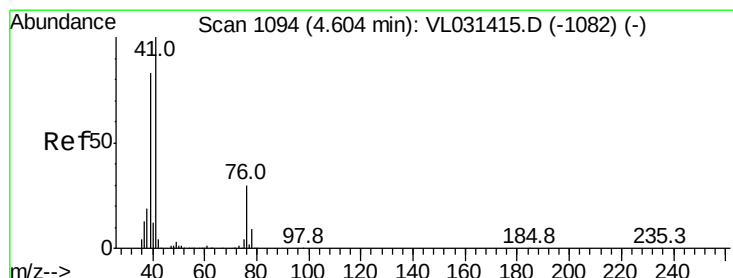
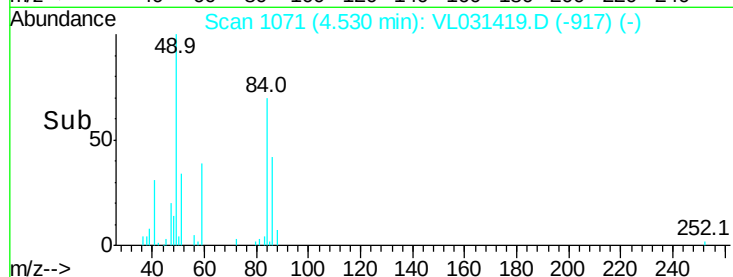
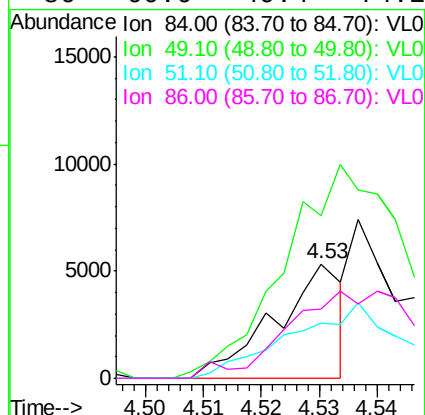
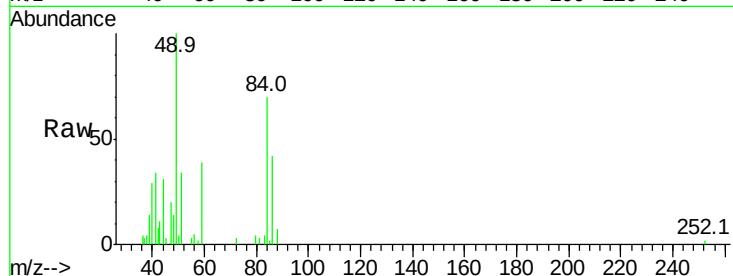




#20
Methylene Chloride
Concen: 0.06 ppbv
RT: 4.53 min Scan# 1071
Delta R.T. -0.01 min
Lab File: VL031419.D
Acq: 22 Jan 2018 16:01

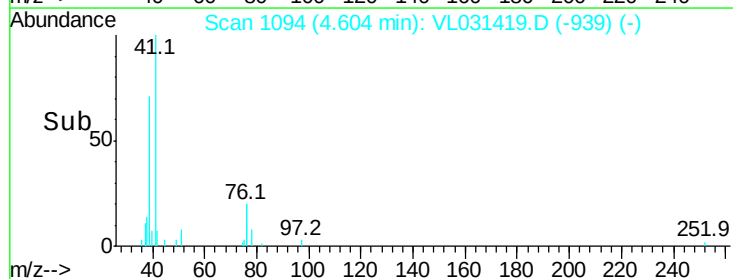
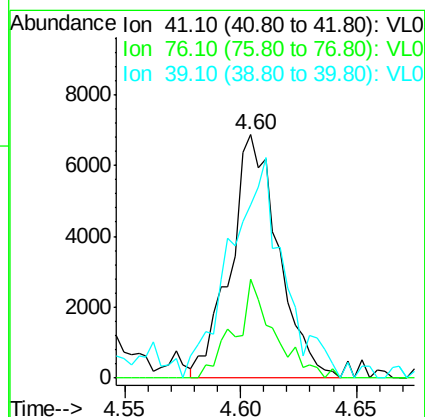
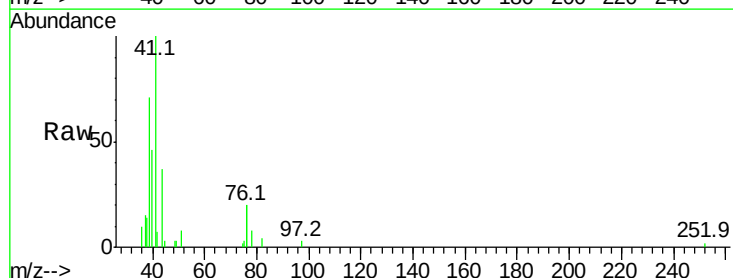
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

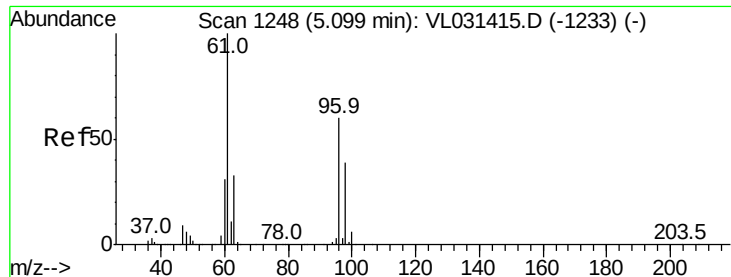
Tgt Ion:	84	Resp:	4322
Ion	Ratio	Lower	Upper
84	100		
49	135.9	123.4	185.0
51	48.4	35.6	53.4
86	60.0	49.4	74.2



#21
Allyl Chloride
Concen: 0.09 ppbv
RT: 4.60 min Scan# 1094
Delta R.T. -0.00 min
Lab File: VL031419.D
Acq: 22 Jan 2018 16:01

Tgt Ion:	41	Resp:	9861
Ion	Ratio	Lower	Upper
41	100		
76	33.5	24.2	36.2
39	103.0	69.8	104.8





#22

trans-1,2-Dichloroethene

Concen: 0.04 ppbv

RT: 5.09 min Scan# 1245

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

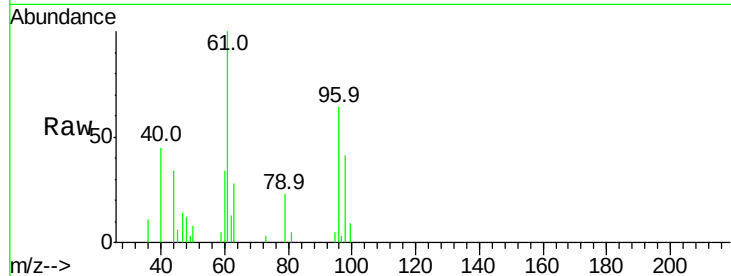
Tgt Ion: 96 Resp: 2887

Ion Ratio Lower Upper

96 100

61 157.2 135.0 202.4

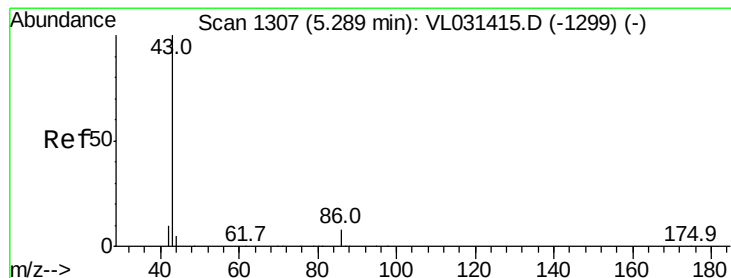
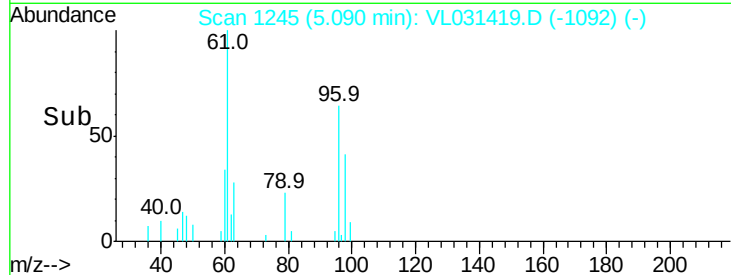
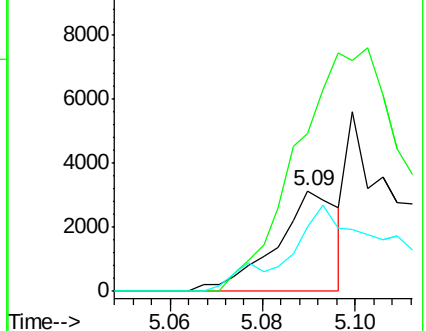
98 63.7 52.2 78.2



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#23

Vinyl Acetate

Concen: 0.08 ppbv

RT: 5.31 min Scan# 1312

Delta R.T. 0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Tgt Ion: 43 Resp: 19467

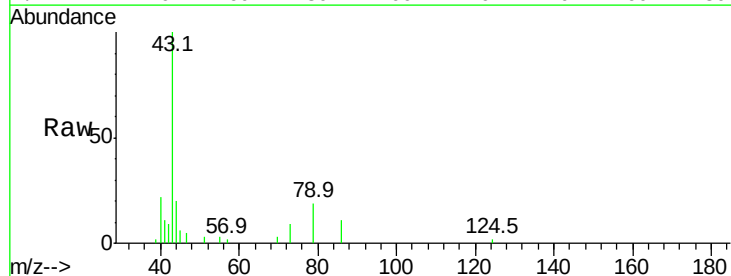
Ion Ratio Lower Upper

43 100

86 10.7 5.6 8.4#

42 9.3 8.6 12.8

44 9.7 4.2 6.4#

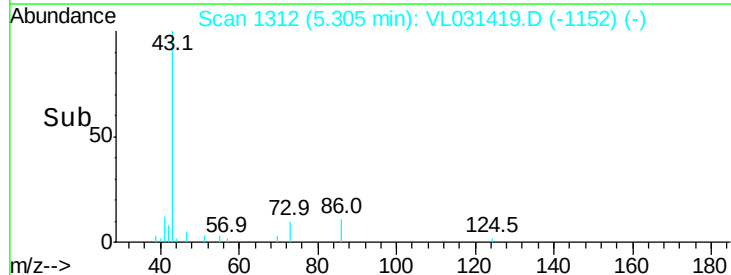
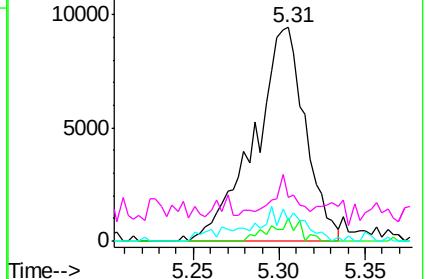


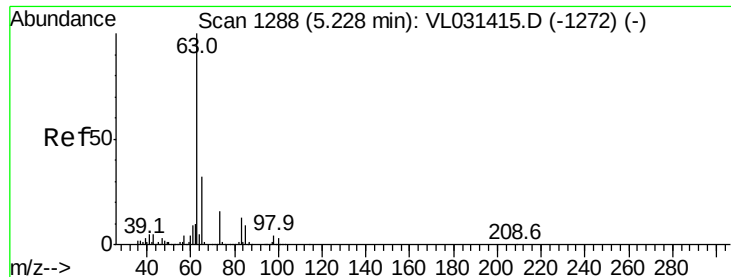
Abundance Ion 43.10 (42.80 to 43.80): VL0

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

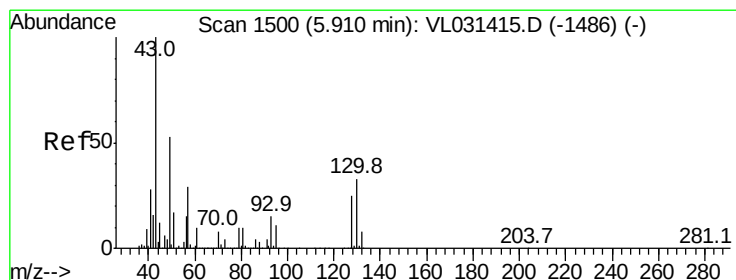
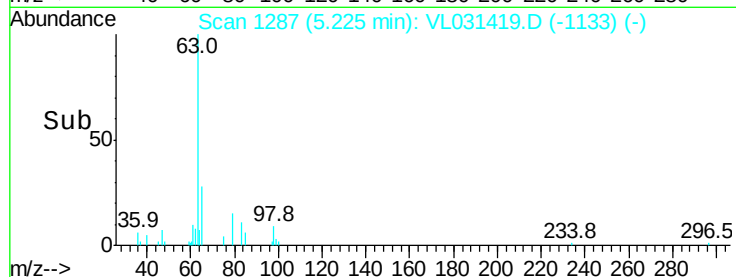
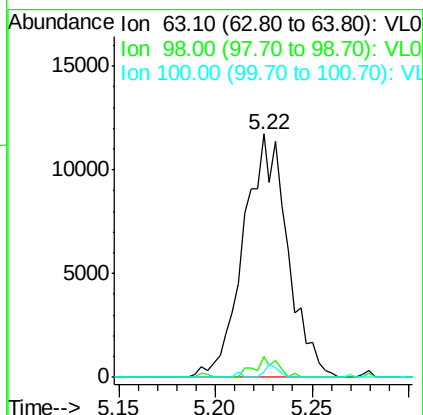
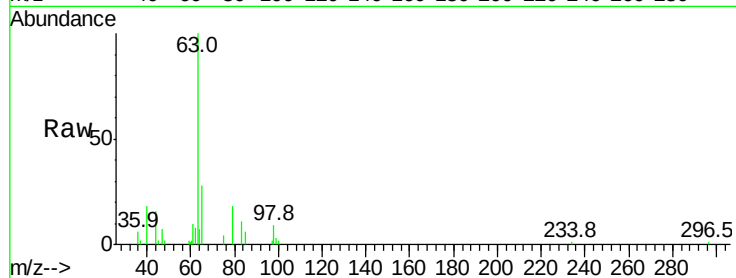




#24
 1,1-Dichloroethane
 Concen: 0.09 ppbv
 RT: 5.22 min Scan# 1287
 Delta R.T. -0.01 min
 Lab File: VL031419.D
 Acq: 22 Jan 2018 16:01

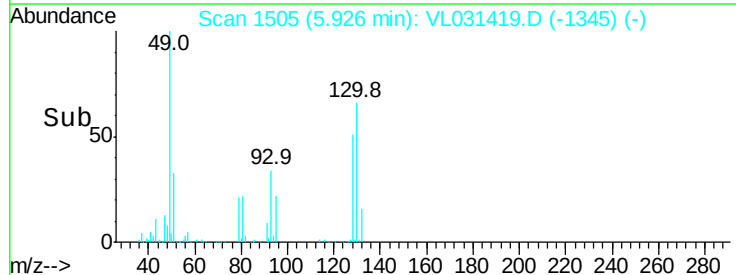
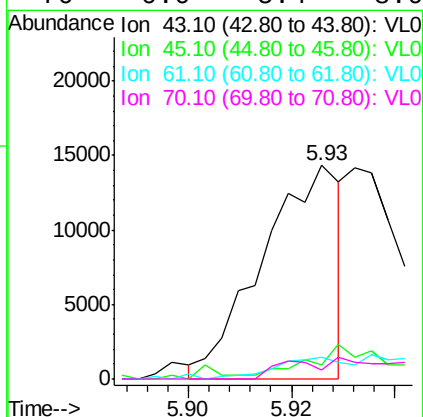
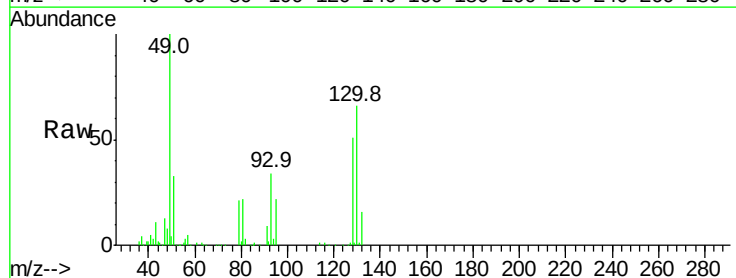
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

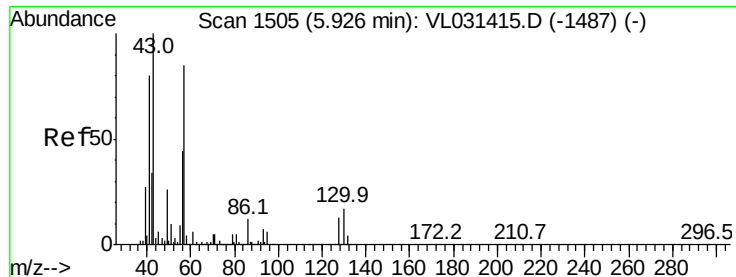
Tgt Ion: 63 Resp: 18621
 Ion Ratio Lower Upper
 63 100
 98 8.8 2.4 7.1#
 100 2.2 1.3 3.9



#25
 Ethyl Acetate
 Concen: 0.04 ppbv
 RT: 5.93 min Scan# 1505
 Delta R.T. 0.01 min
 Lab File: VL031419.D
 Acq: 22 Jan 2018 16:01

Tgt Ion: 43 Resp: 15038
 Ion Ratio Lower Upper
 43 100
 45 0.0 7.8 11.6#
 61 0.0 7.0 10.6#
 70 0.0 5.4 8.0#

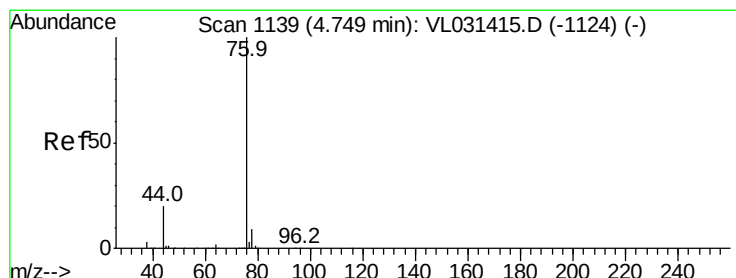
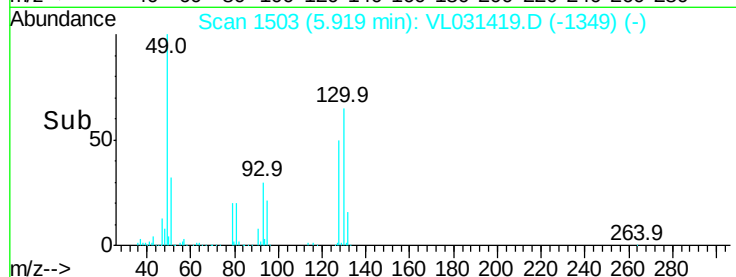
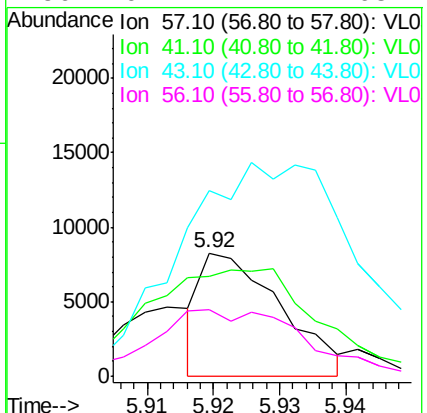
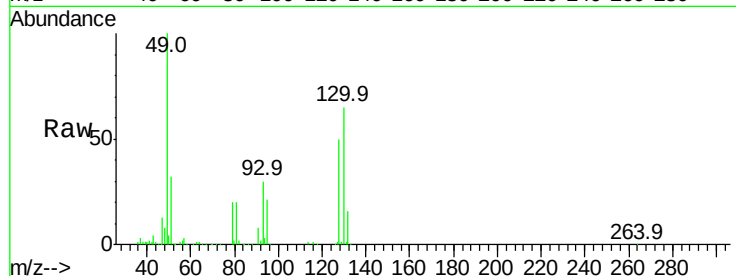




#26
Hexane
Concen: 0.04 ppbv
RT: 5.92 min Scan# 1503
Delta R.T. -0.01 min
Lab File: VL031419.D
Acq: 22 Jan 2018 16:01

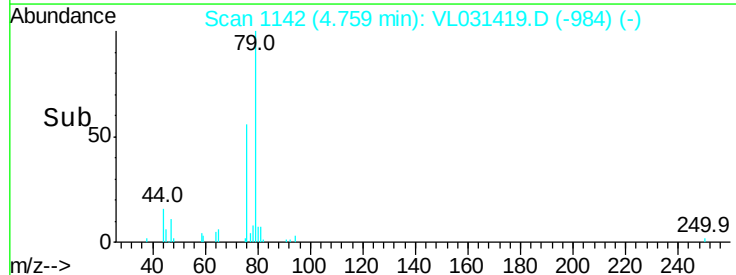
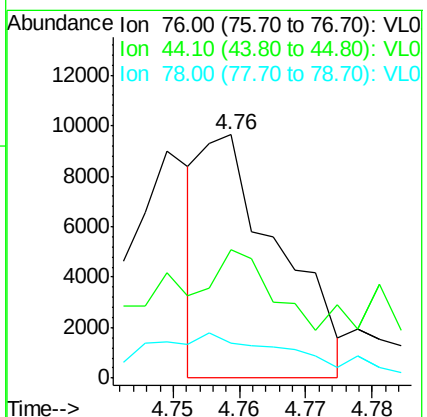
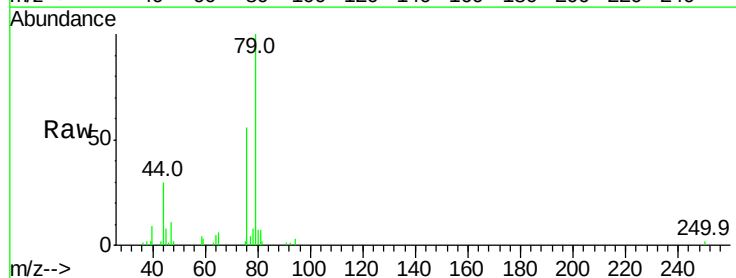
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

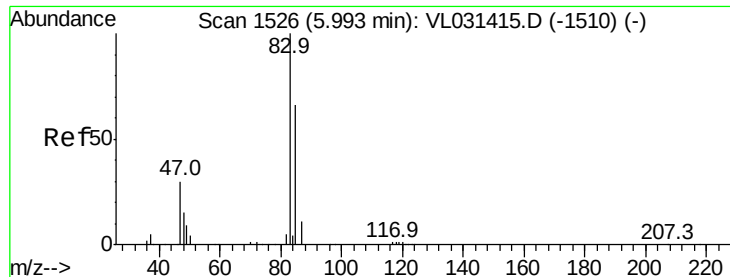
Tgt Ion: 57 Resp: 6881
Ion Ratio Lower Upper
57 100
41 193.1 77.1 115.7#
43 414.1 180.7 271.1#
56 107.4 42.2 63.2#



#27
Carbon Disulfide
Concen: 0.04 ppbv
RT: 4.76 min Scan# 1142
Delta R.T. 0.01 min
Lab File: VL031419.D
Acq: 22 Jan 2018 16:01

Tgt Ion: 76 Resp: 7790
Ion Ratio Lower Upper
76 100
44 109.1 16.7 25.1#
78 38.4 7.5 11.3#





#29

Chloroform

Concen: 0.09 ppbv

RT: 5.99 min Scan# 1524

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

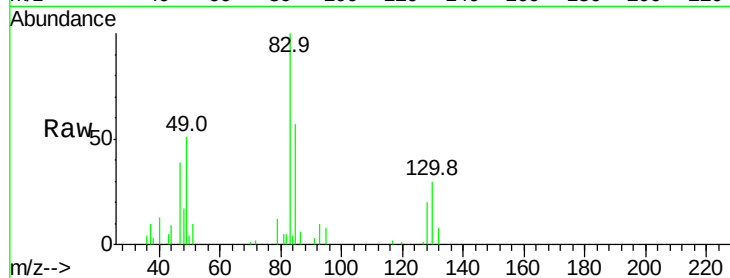
VSTDIC0.1

Tgt Ion: 83 Resp: 22603

Ion Ratio Lower Upper

83 100

85 56.6 51.3 76.9



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

15000

10000

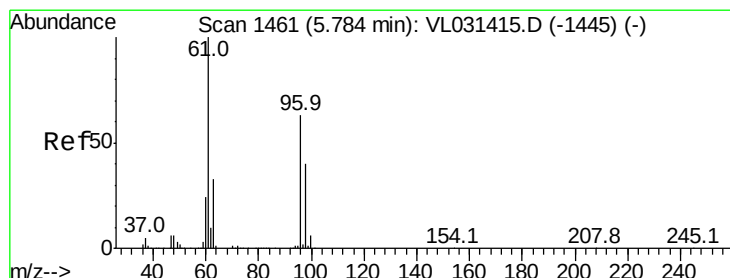
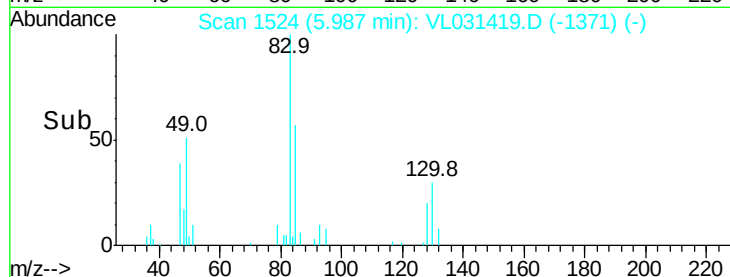
5000

0

5.95

6.00

Time-->



#31

cis-1,2-Dichloroethene

Concen: 0.05 ppbv

RT: 5.78 min Scan# 1459

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

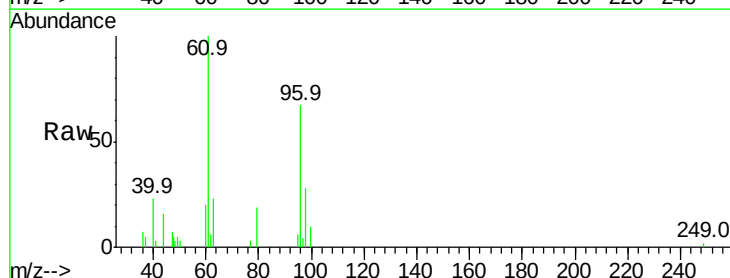
Tgt Ion: 61 Resp: 7563

Ion Ratio Lower Upper

61 100

96 69.5 51.3 76.9

98 28.9 33.6 50.4#



Abundance Ion 61.10 (60.80 to 61.80): VL0

Ion 96.00 (95.70 to 96.70): VL0

Ion 98.00 (97.70 to 98.70): VL0

8000

6000

4000

2000

0

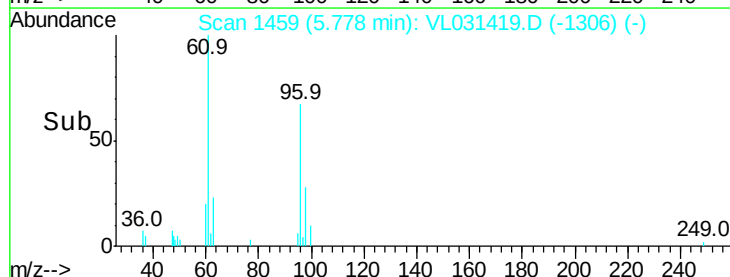
5.76

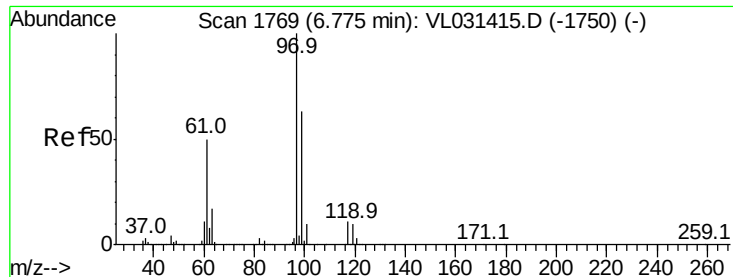
5.78

5.80

5.82

Time-->





#32

1,1,1-Trichloroethane

Concen: 0.05 ppbv

RT: 6.76 min Scan# 1766

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

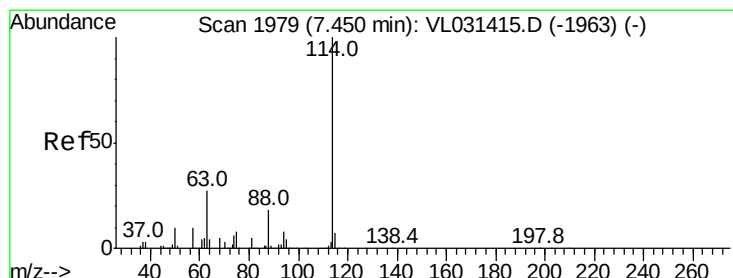
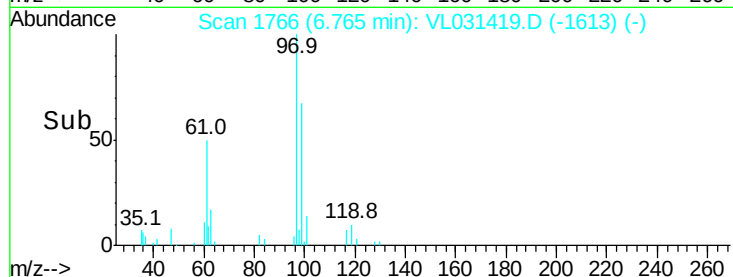
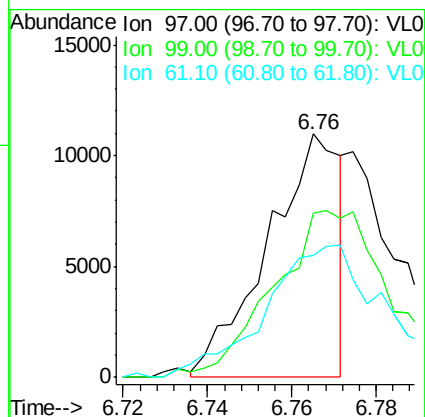
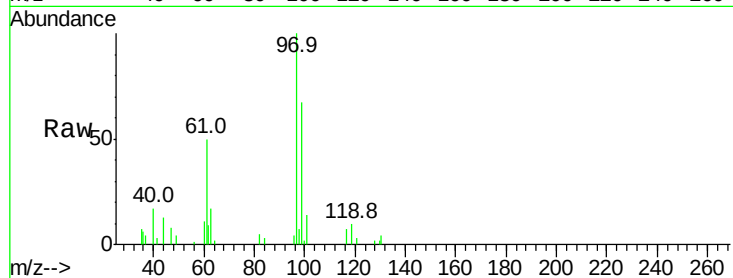
Tgt Ion: 97 Resp: 13156

Ion Ratio Lower Upper

97 100

99 0.0 51.9 77.9#

61 0.0 40.6 61.0#



#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.44 min Scan# 1977

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

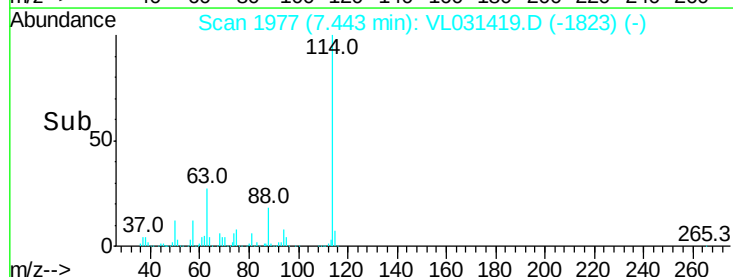
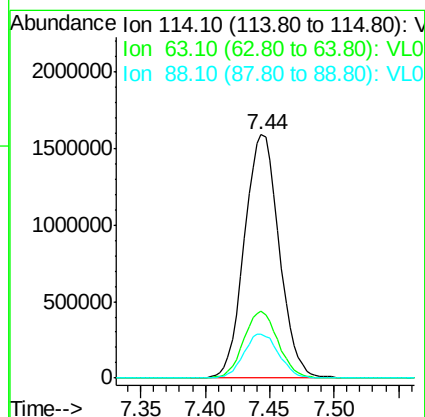
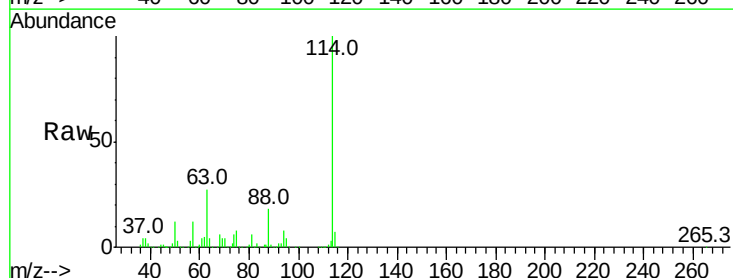
Tgt Ion: 114 Resp: 2988289

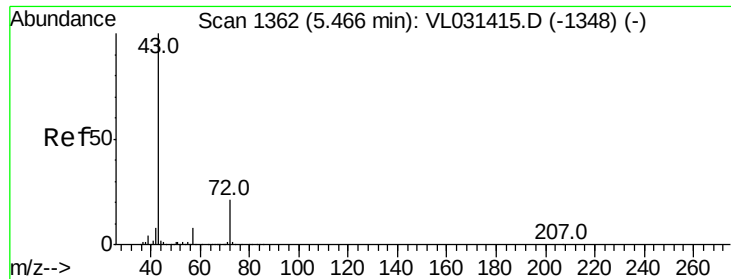
Ion Ratio Lower Upper

114 100

63 27.5 22.5 33.7

88 18.4 14.6 22.0





#34

2-Butanone

Concen: 0.04 ppbv

RT: 5.49 min Scan# 1370

Delta R.T. 0.02 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

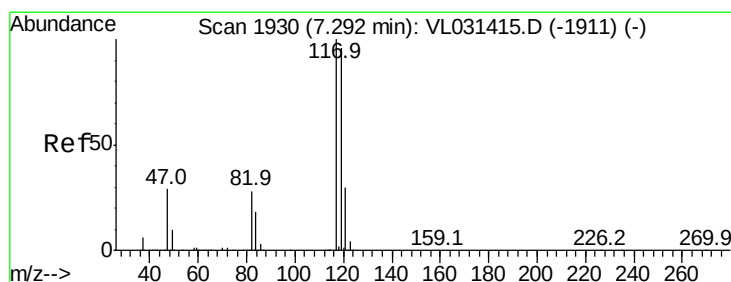
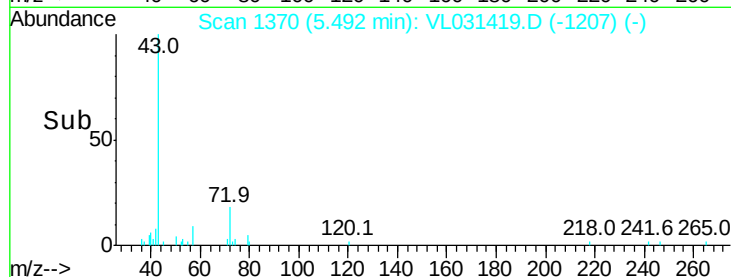
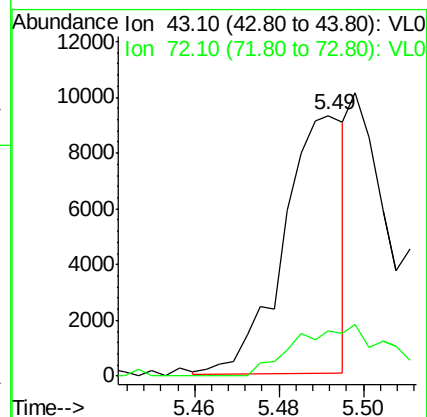
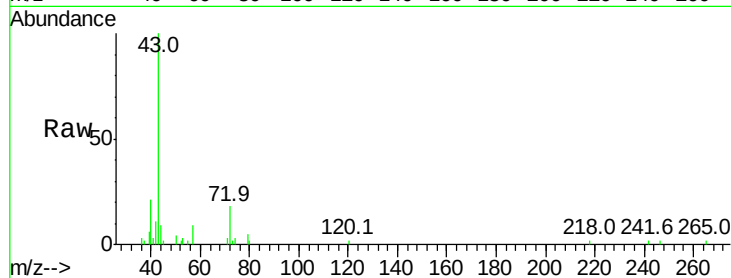
VSTDIC0.1

Tgt Ion: 43 Resp: 9327

Ion Ratio Lower Upper

43 100

72 0.0 16.8 25.2#



#35

Carbon Tetrachloride

Concen: 0.08 ppbv

RT: 7.29 min Scan# 1929

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

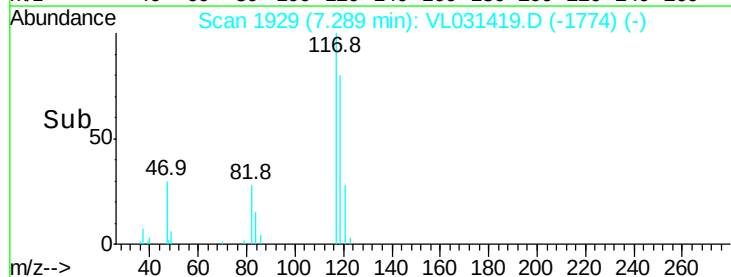
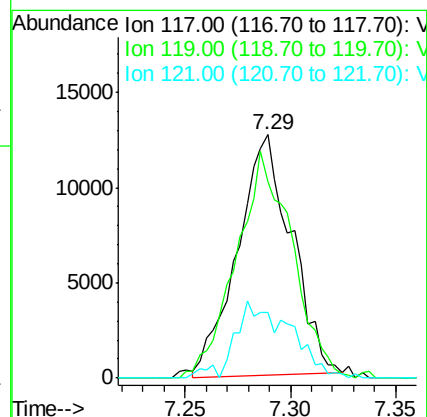
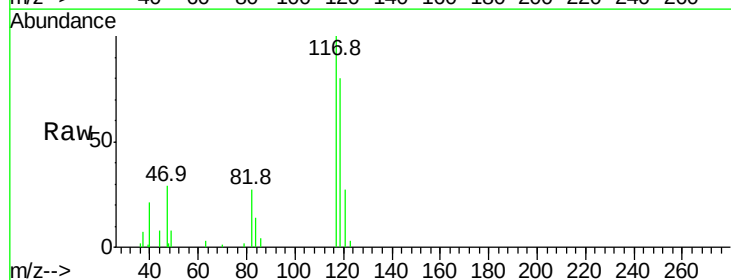
Tgt Ion: 117 Resp: 22529

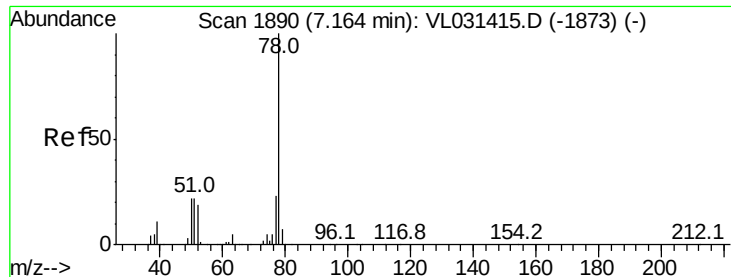
Ion Ratio Lower Upper

117 100

119 80.6 74.2 111.4

121 26.0 24.2 36.4

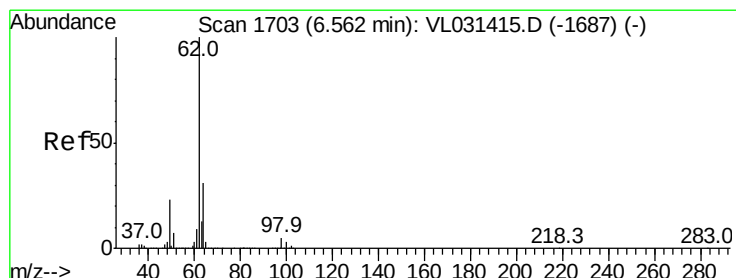
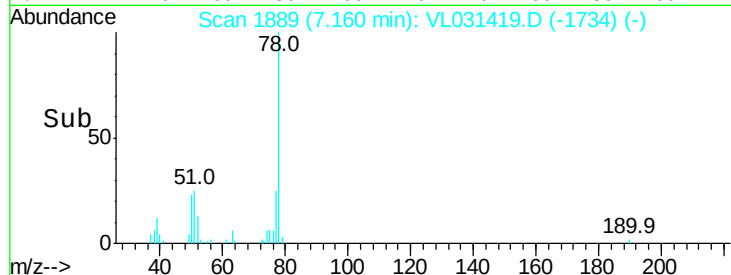
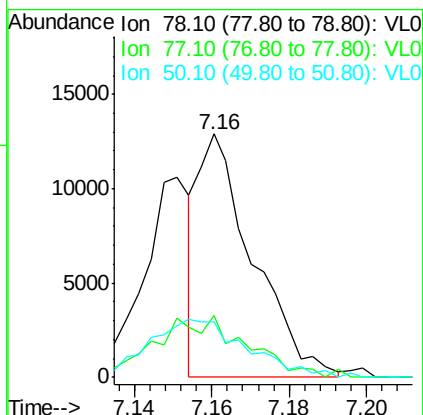
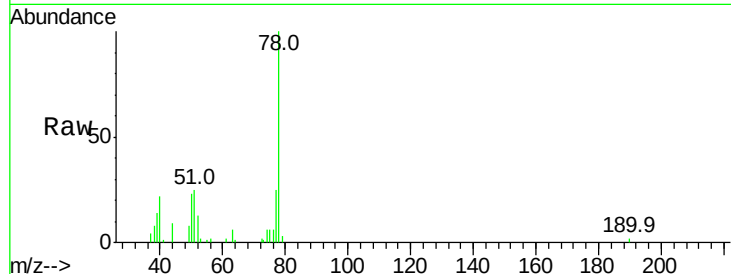




#36
Benzene
Concen: 0.04 ppbv
RT: 7.16 min Scan# 1889
Delta R.T. -0.00 min
Lab File: VL031419.D
Acq: 22 Jan 2018 16:01

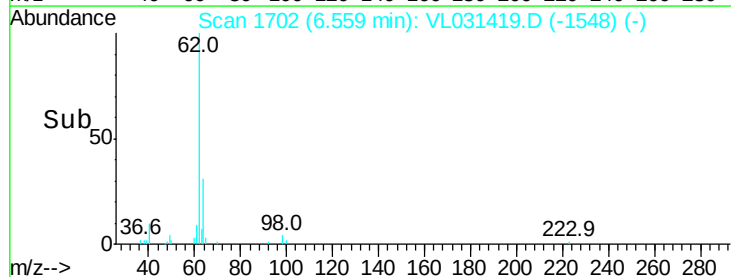
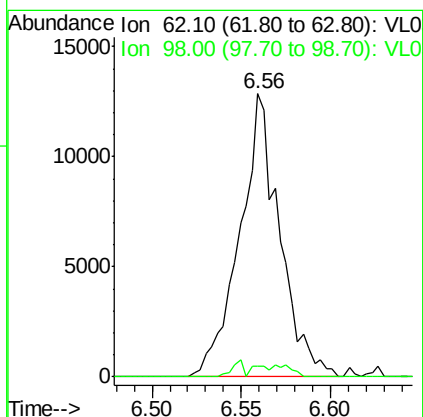
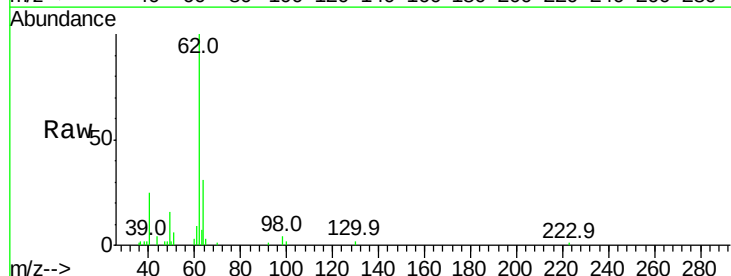
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

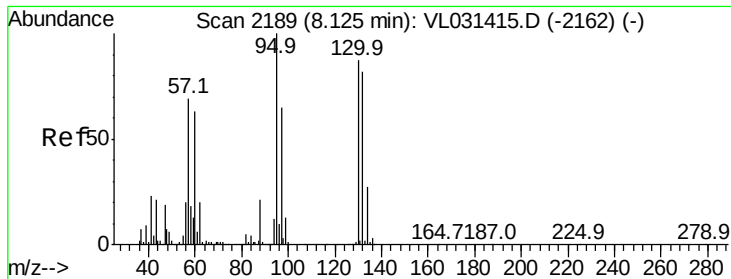
Tgt Ion: 78 Resp: 12565
Ion Ratio Lower Upper
78 100
77 22.6 18.7 28.1
50 21.6 18.4 27.6



#37
1,2-Dichloroethane
Concen: 0.09 ppbv
RT: 6.56 min Scan# 1702
Delta R.T. -0.01 min
Lab File: VL031419.D
Acq: 22 Jan 2018 16:01

Tgt Ion: 62 Resp: 20068
Ion Ratio Lower Upper
62 100
98 5.3 4.1 6.1





#38

Trichloroethene

Concen: 0.04 ppbv

RT: 8.12 min Scan# 2186

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion:130 Resp: 5148

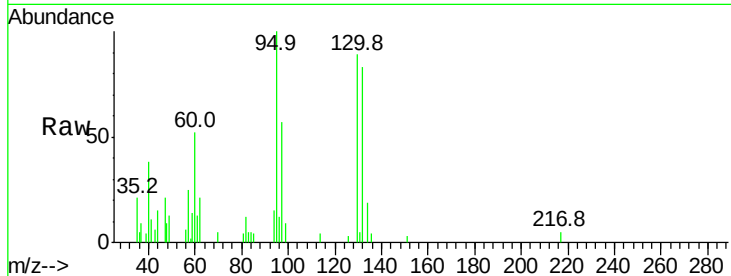
Ion Ratio Lower Upper

130 100

95 106.5 92.9 139.3

132 104.0 74.9 112.3

97 26.7 60.2 90.4#

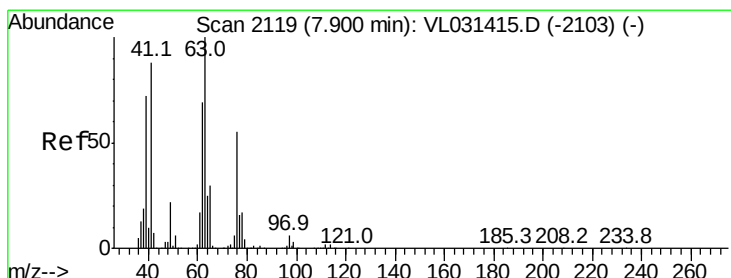
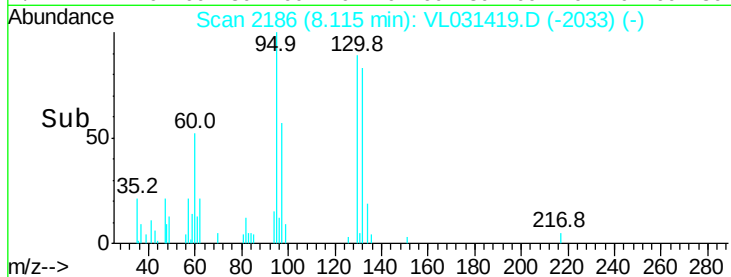
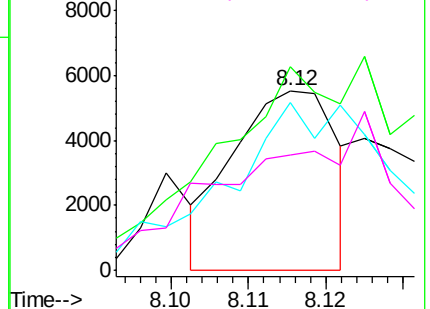


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 7.11 ppbv

RT: 7.44 min Scan# 1977

Delta R.T. -0.45 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

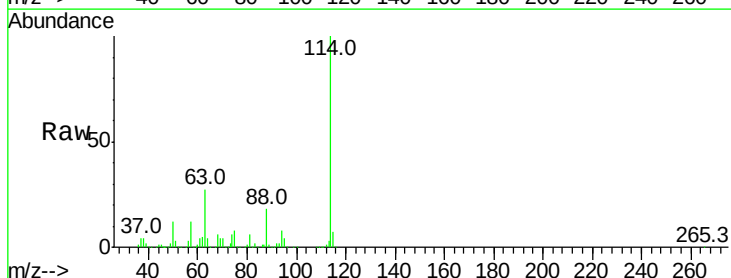
Tgt Ion: 63 Resp: 813430

Ion Ratio Lower Upper

63 100

41 0.1 67.6 101.4#

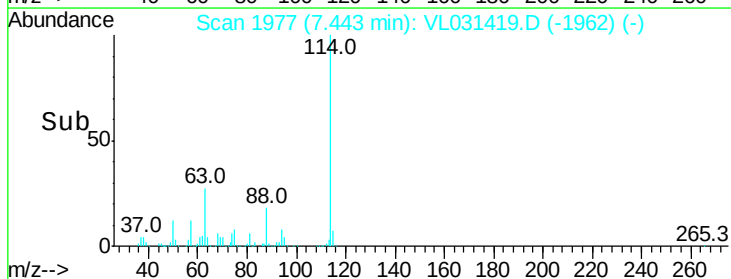
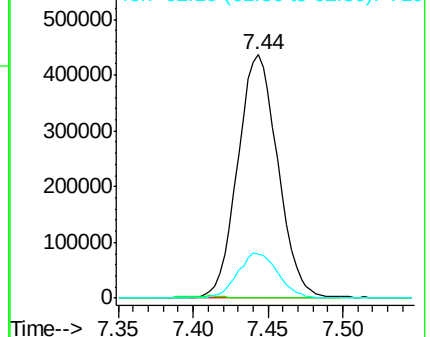
62 18.1 51.8 77.6#

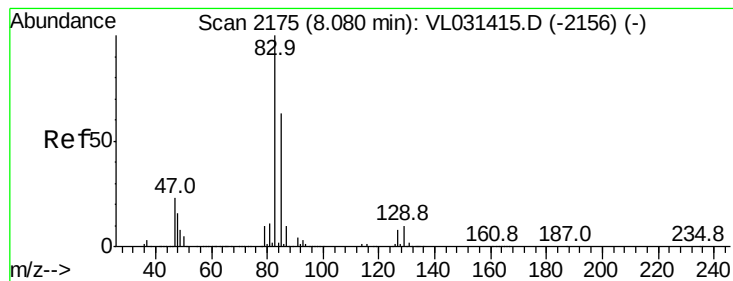


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#42

Bromodichloromethane

Concen: 0.08 ppbv

RT: 8.07 min Scan# 2173

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

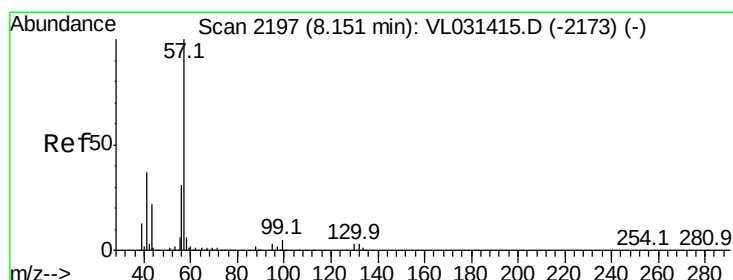
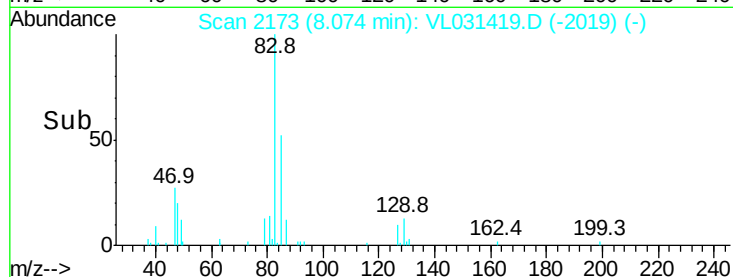
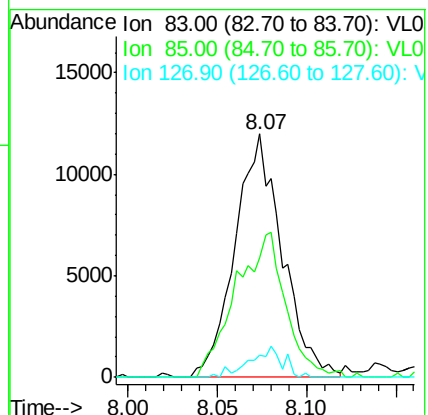
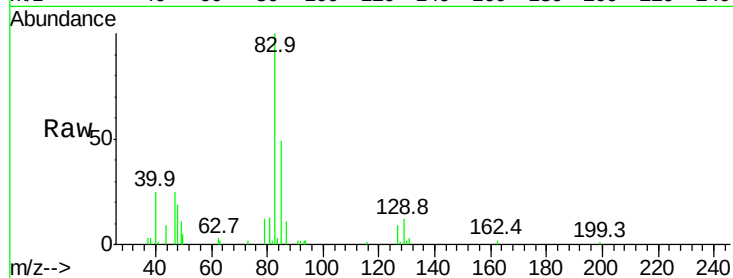
Tgt Ion: 83 Resp: 22164

Ion Ratio Lower Upper

83 100

85 48.9 52.1 78.1#

127 9.1 6.6 10.0



#44

2,2,4-Trimethylpentane

Concen: 0.04 ppbv

RT: 8.15 min Scan# 2197

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

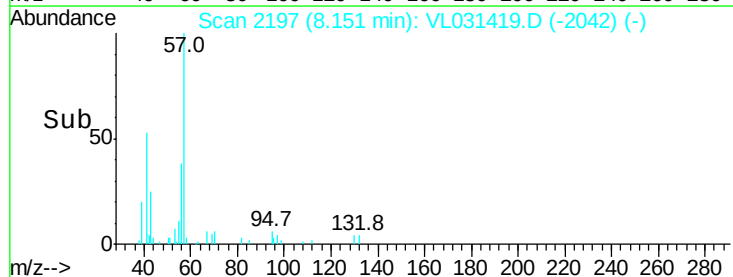
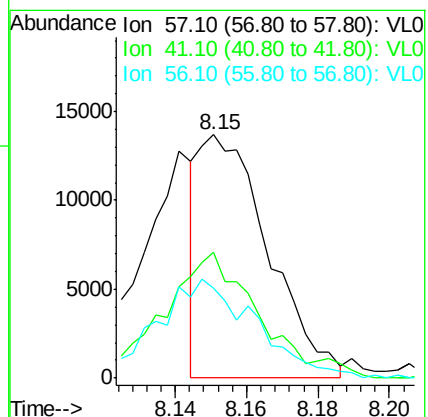
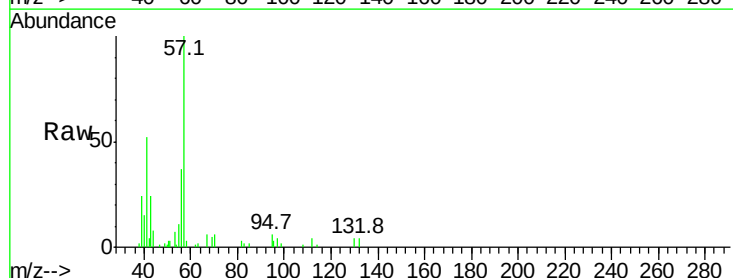
Tgt Ion: 57 Resp: 18300

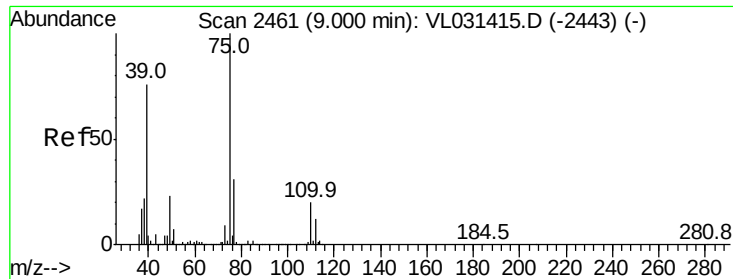
Ion Ratio Lower Upper

57 100

41 75.4 28.8 43.2#

56 59.7 24.6 37.0#





#46

cis-1,3-Dichloropropene

Concen: 0.05 ppbv

RT: 9.00 min Scan# 2461

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

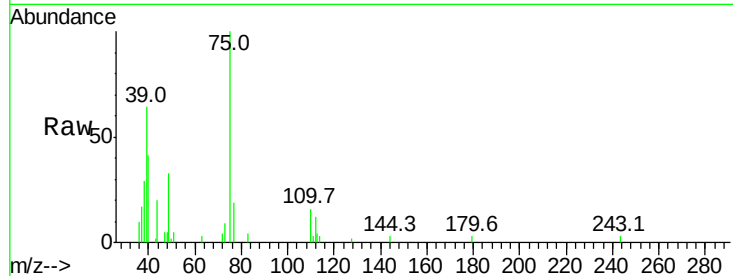
Tgt Ion: 75 Resp: 9374

Ion Ratio Lower Upper

75 100

39 59.9 59.4 89.0

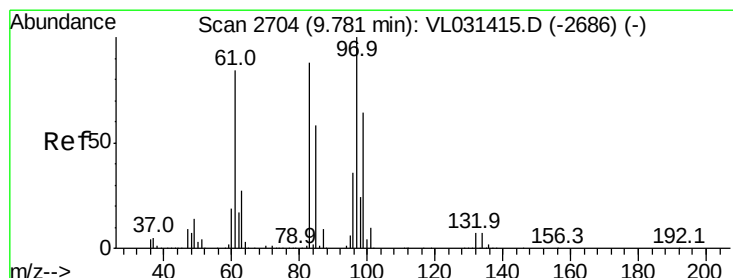
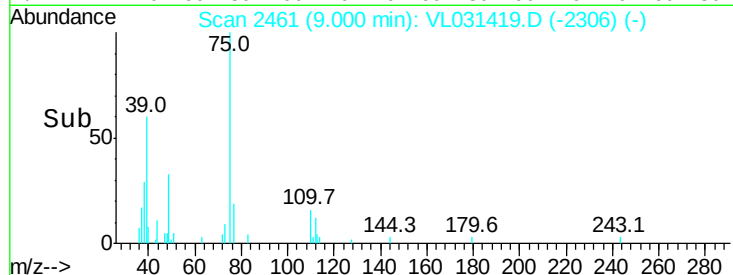
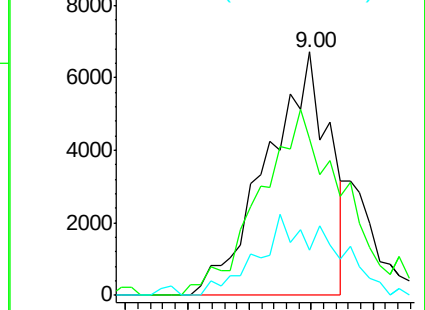
77 18.8 25.0 37.4#



Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0



#47

1,1,2-Trichloroethane

Concen: 0.05 ppbv

RT: 9.78 min Scan# 2703

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Tgt Ion: 97 Resp: 7062

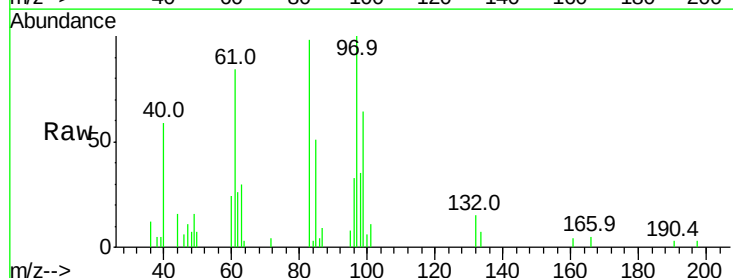
Ion Ratio Lower Upper

97 100

83 88.3 71.4 107.2

85 46.6 46.2 69.2

99 59.1 52.2 78.2

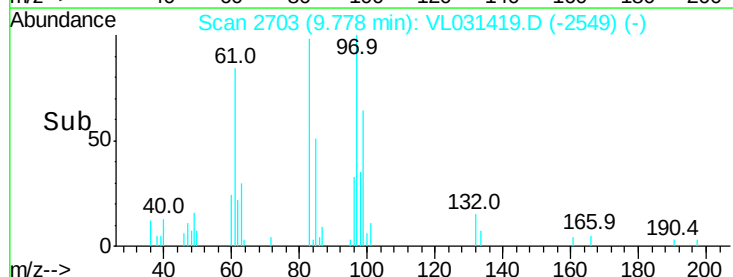
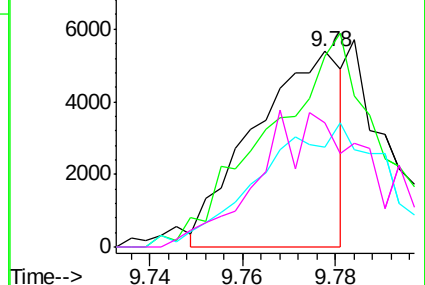


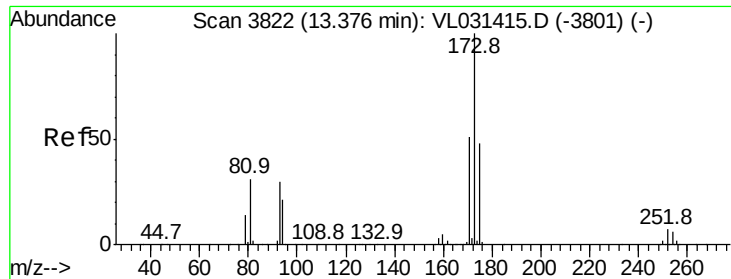
Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0





#49

Bromoform

Concen: 0.06 ppbv

RT: 13.37 min Scan# 3821

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

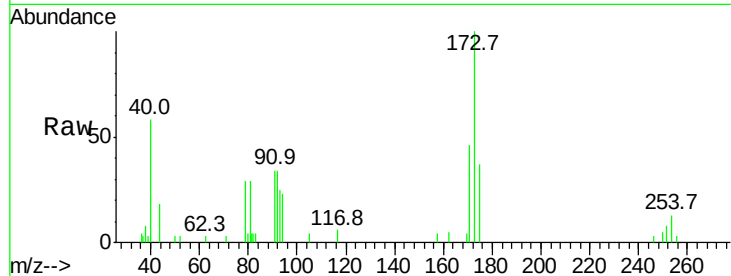
Tgt Ion:173 Resp: 11101

Ion Ratio Lower Upper

173 100

175 52.4 39.0 58.4

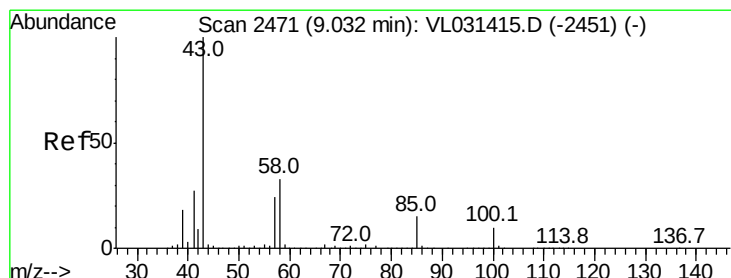
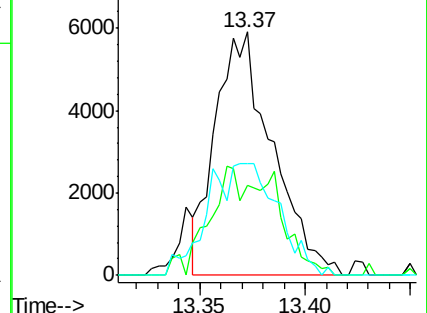
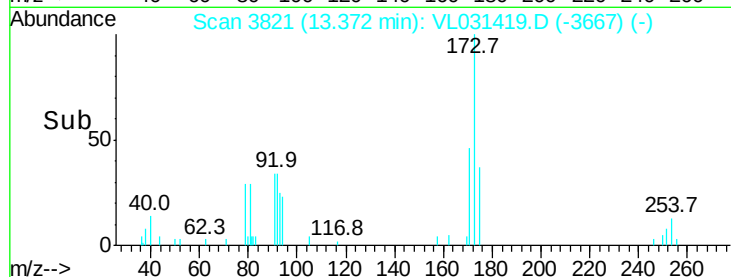
171 57.2 42.0 63.0



Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 0.05 ppbv

RT: 9.07 min Scan# 2483

Delta R.T. 0.04 min

Lab File: VL031419.D

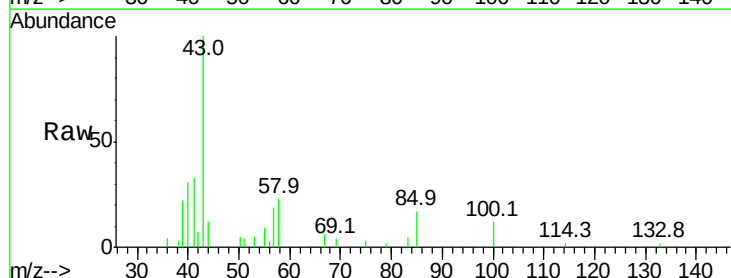
Acq: 22 Jan 2018 16:01

Tgt Ion: 43 Resp: 16591

Ion Ratio Lower Upper

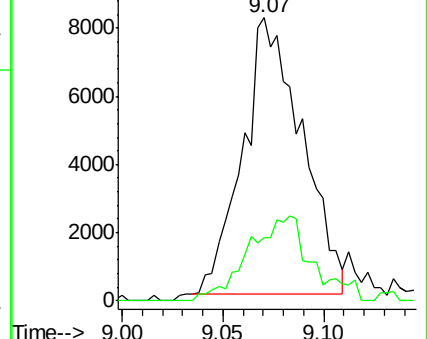
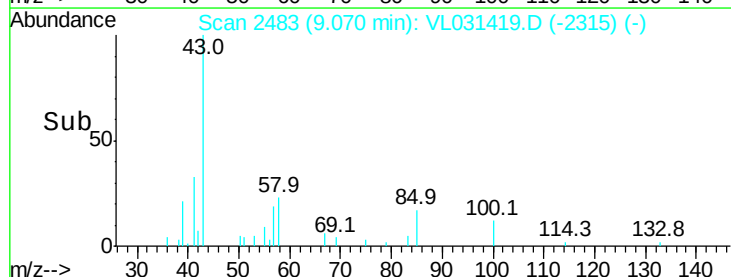
43 100

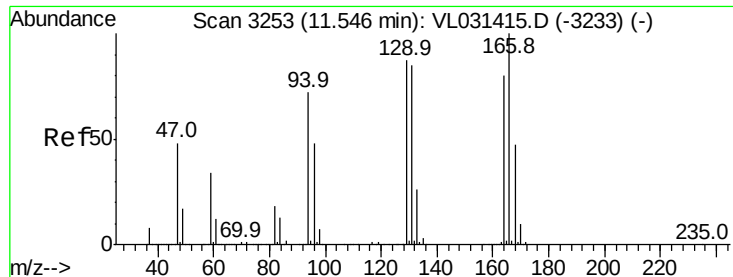
58 34.0 27.1 40.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#52

Tetrachloroethene

Concen: 0.07 ppbv

RT: 11.54 min Scan# 3251

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion:164 Resp: 8479

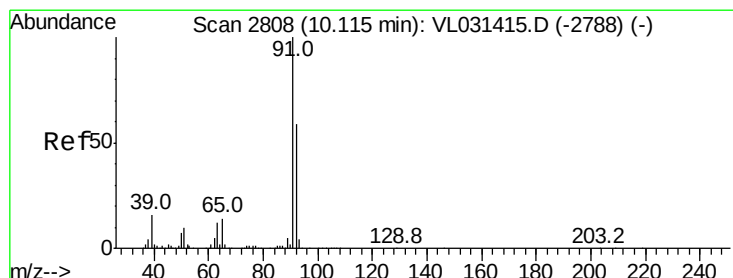
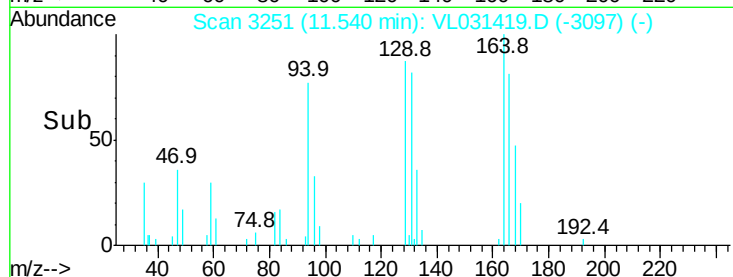
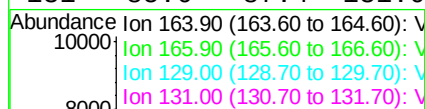
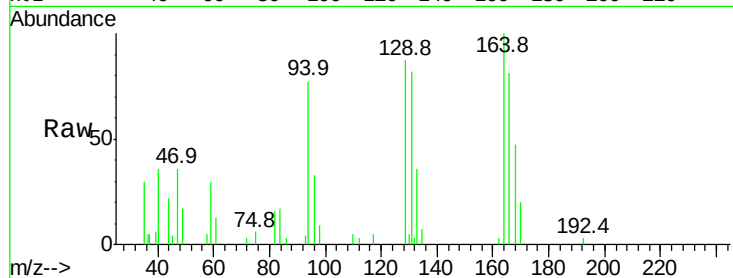
Ion Ratio Lower Upper

164 100

166 81.0 100.2 150.2#

129 82.2 91.4 137.0#

131 85.6 87.4 131.0#



#53

Toluene

Concen: 0.05 ppbv

RT: 10.11 min Scan# 2806

Delta R.T. -0.01 min

Lab File: VL031419.D

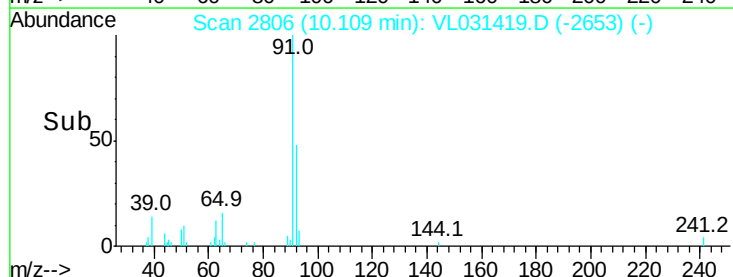
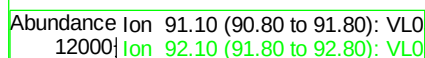
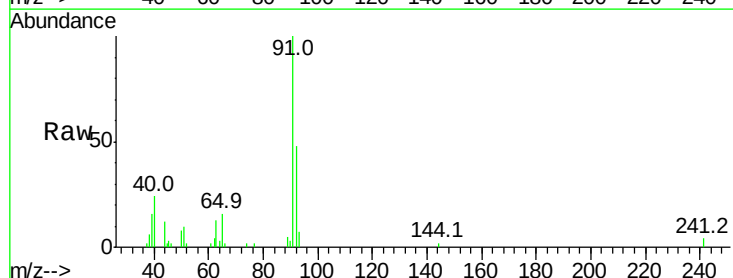
Acq: 22 Jan 2018 16:01

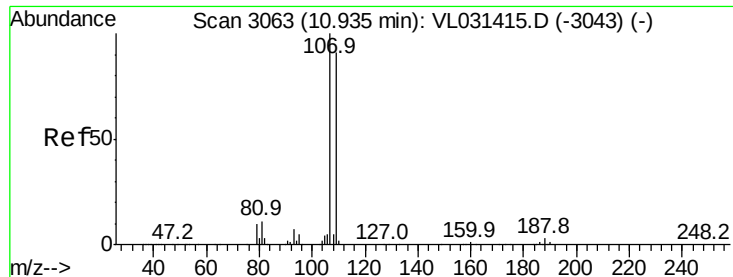
Tgt Ion: 91 Resp: 19791

Ion Ratio Lower Upper

91 100

92 62.1 47.8 71.6





#54

1,2-Dibromoethane

Concen: 0.05 ppbv

RT: 10.93 min Scan# 3060

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

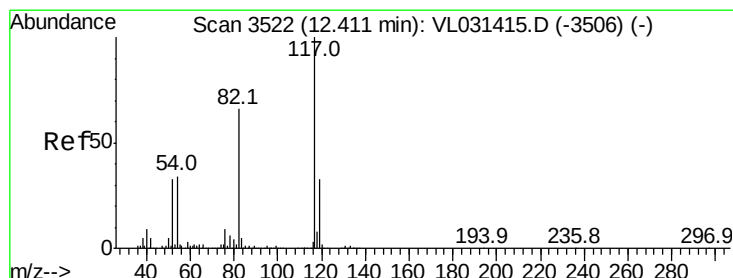
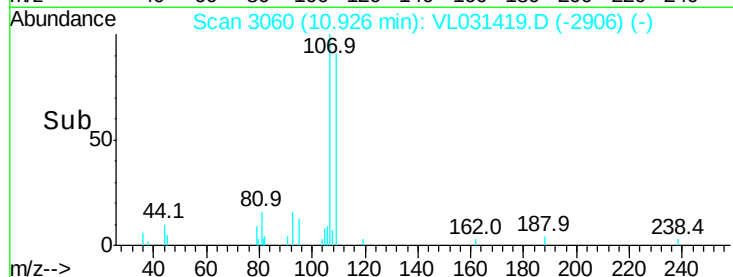
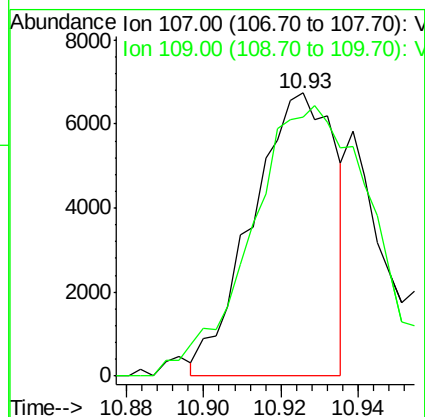
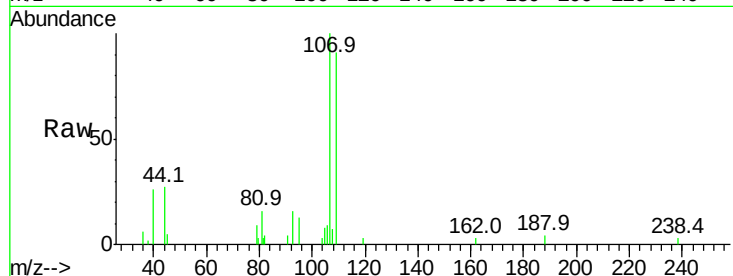
VSTDIC0.1

Tgt Ion:107 Resp: 10004

Ion Ratio Lower Upper

107 100

109 78.6 75.5 113.3



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.41 min Scan# 3521

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

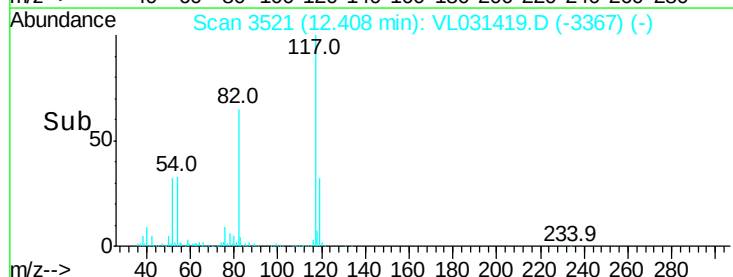
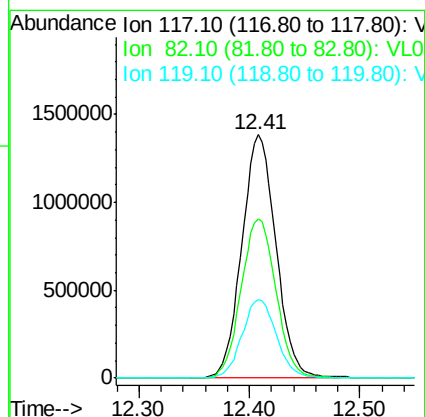
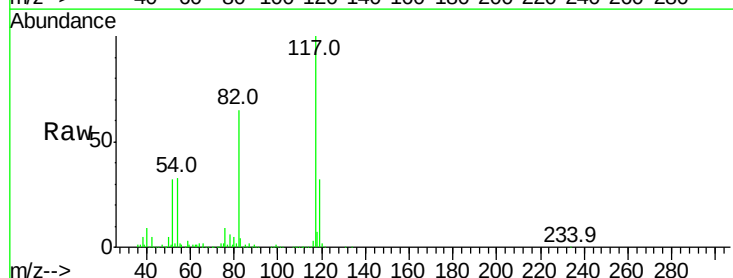
Tgt Ion:117 Resp: 2971223

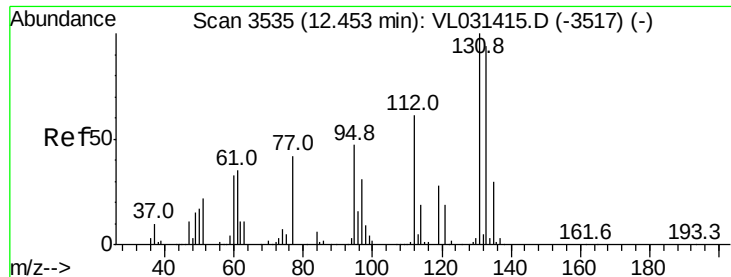
Ion Ratio Lower Upper

117 100

82 67.2 51.8 77.6

119 32.8 24.2 36.2

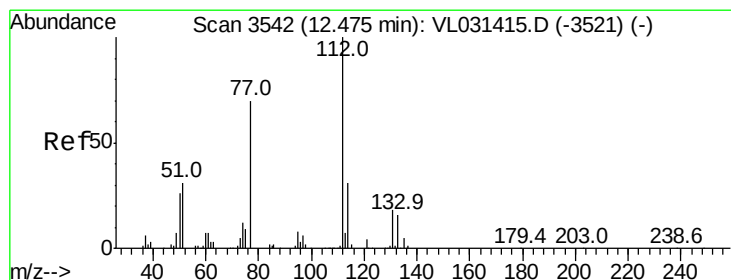
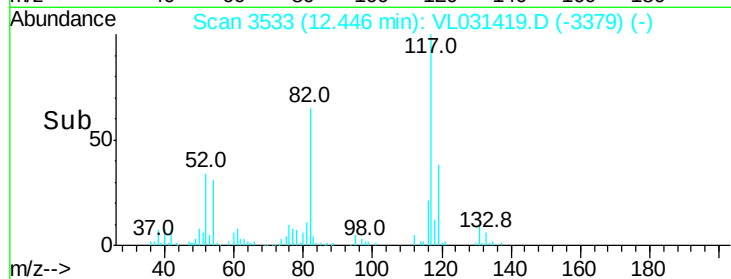
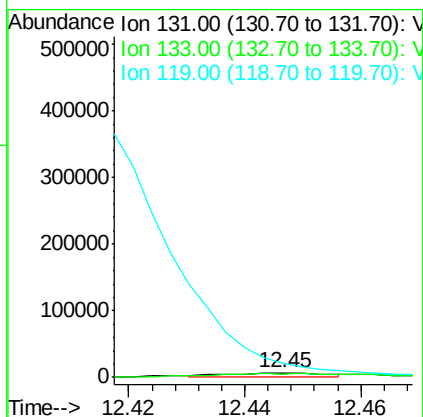
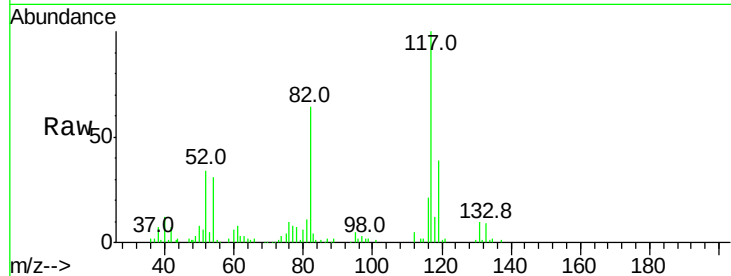




#56
 1,1,1,2-Tetrachloroethane
 Concen: 0.05 ppbv
 RT: 12.45 min Scan# 3533
 Delta R.T. -0.01 min
 Lab File: VL031419.D
 Acq: 22 Jan 2018 16:01

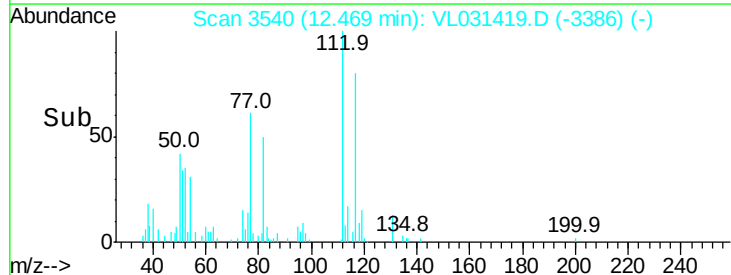
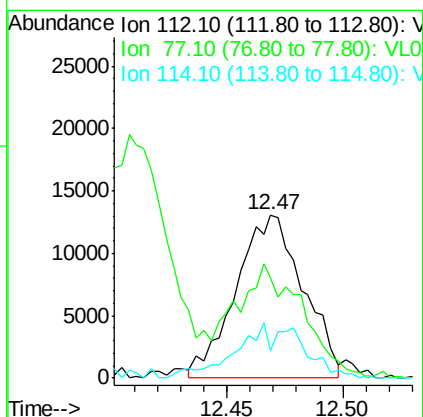
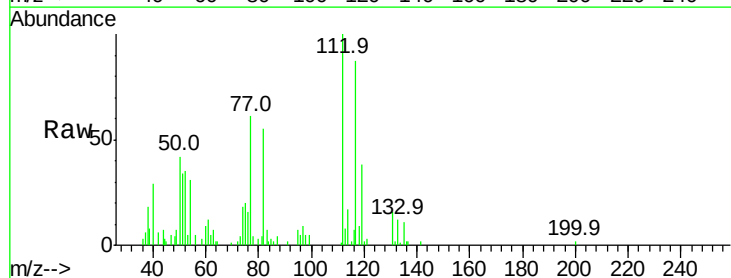
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

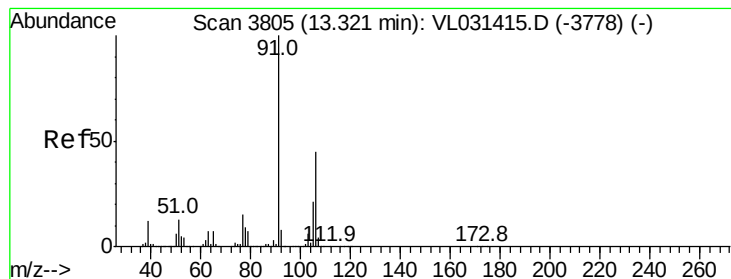
Tgt Ion:131 Resp: 8010
 Ion Ratio Lower Upper
 131 100
 133 160.5 76.9 115.3#
 119 0.0 47.7 71.5#



#57
 Chlorobenzene
 Concen: 0.09 ppbv
 RT: 12.47 min Scan# 3540
 Delta R.T. -0.01 min
 Lab File: VL031419.D
 Acq: 22 Jan 2018 16:01

Tgt Ion:112 Resp: 26324
 Ion Ratio Lower Upper
 112 100
 77 53.2 56.0 84.0#
 114 12.1 29.1 35.5#





#59

m/p-Xylene

Concen: 0.05 ppbv

RT: 13.32 min Scan# 3805

Delta R.T. 0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

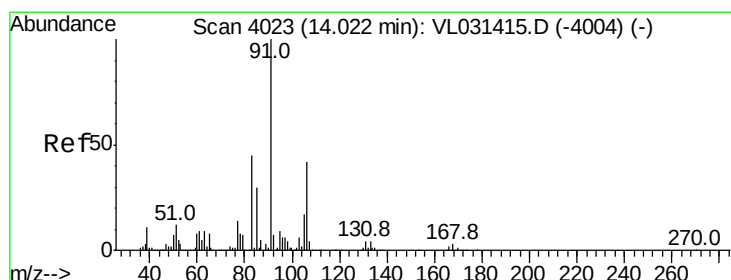
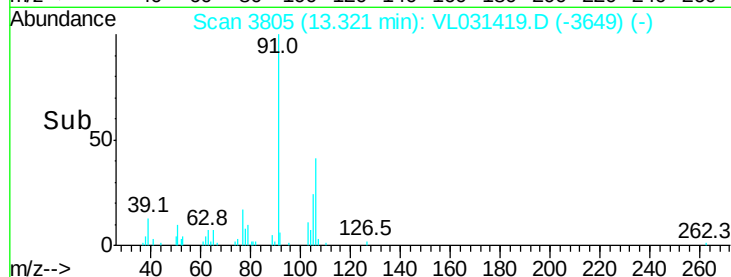
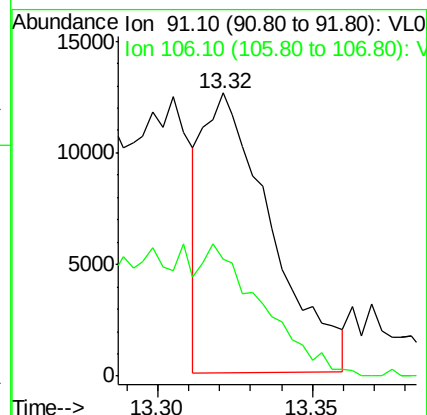
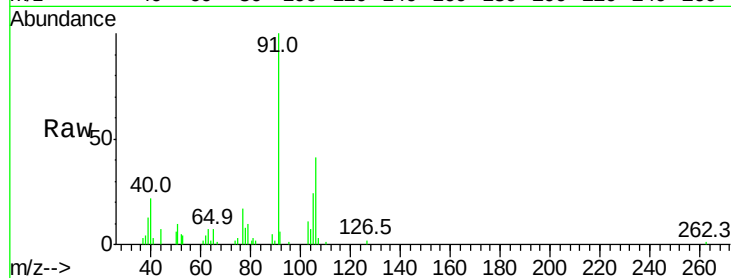
VSTDIC0.1

Tgt Ion: 91 Resp: 19328

Ion Ratio Lower Upper

91 100

106 110.7 35.6 53.4#



#60

o-Xylene

Concen: 0.05 ppbv

RT: 14.02 min Scan# 4022

Delta R.T. -0.01 min

Lab File: VL031419.D

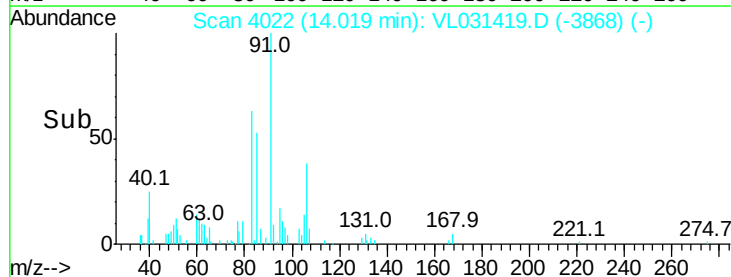
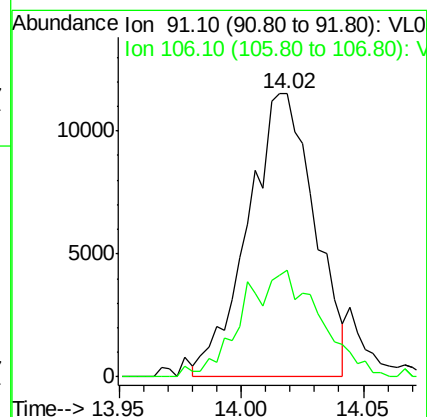
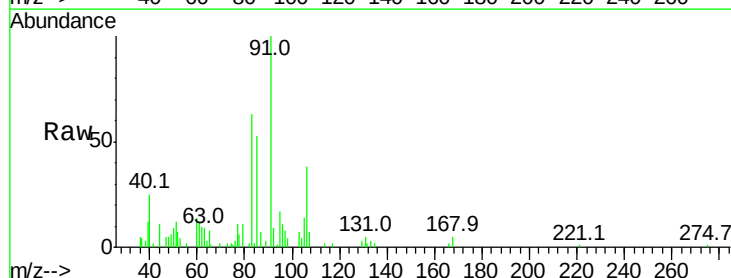
Acq: 22 Jan 2018 16:01

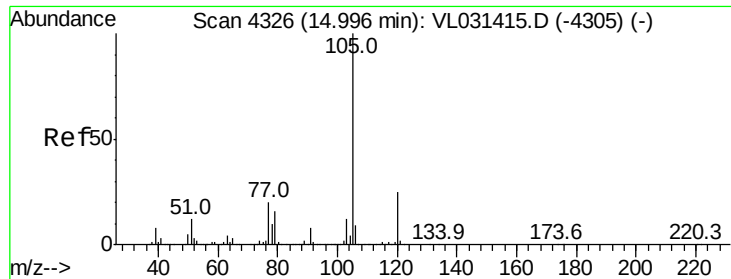
Tgt Ion: 91 Resp: 21775

Ion Ratio Lower Upper

91 100

106 44.1 21.3 64.0





#62

Isopropylbenzene

Concen: 0.04 ppbv

RT: 14.99 min Scan# 4324

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

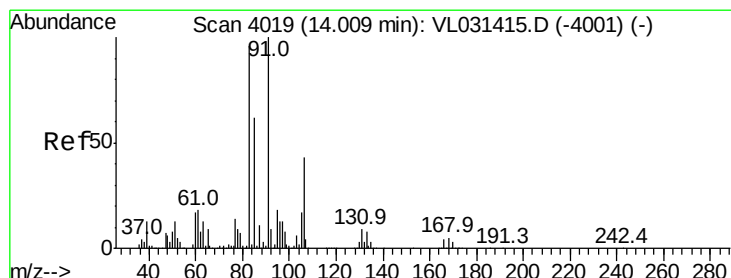
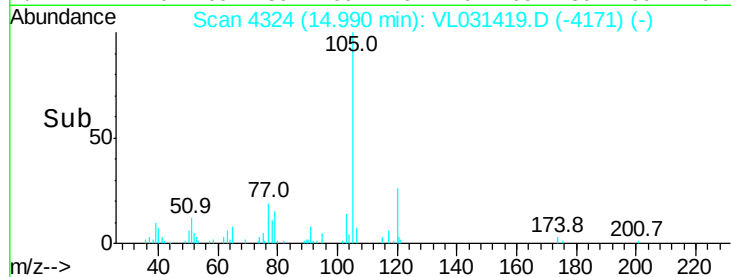
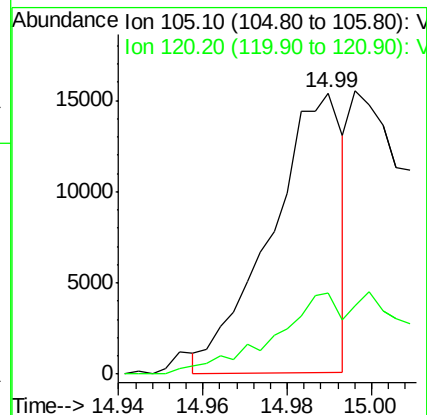
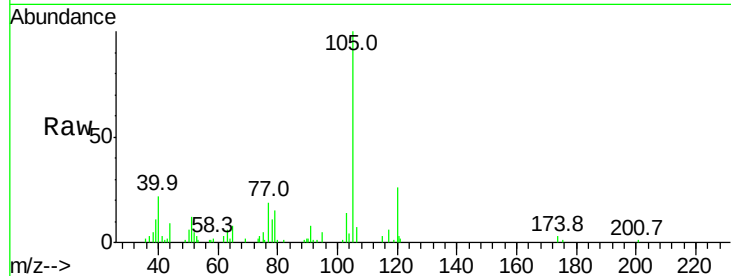
VSTDIC0.1

Tgt Ion:105 Resp: 18059

Ion Ratio Lower Upper

105 100

120 0.0 19.9 29.9#



#63

1,1,2,2-Tetrachloroethane

Concen: 0.04 ppbv

RT: 14.00 min Scan# 4017

Delta R.T. -0.01 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

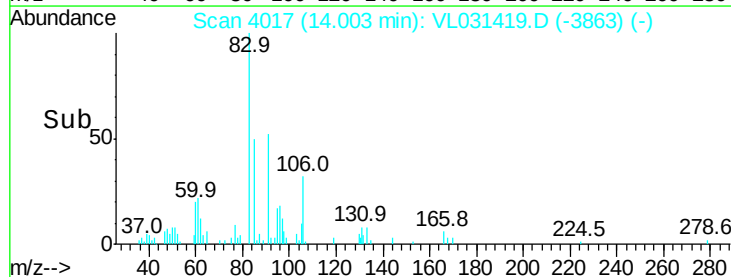
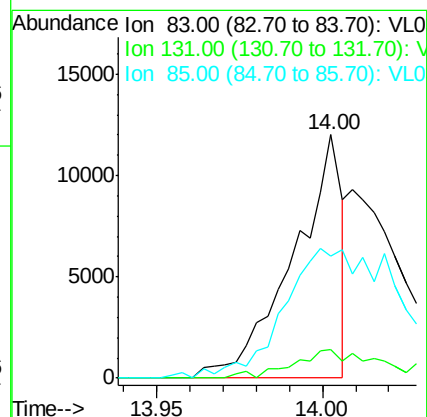
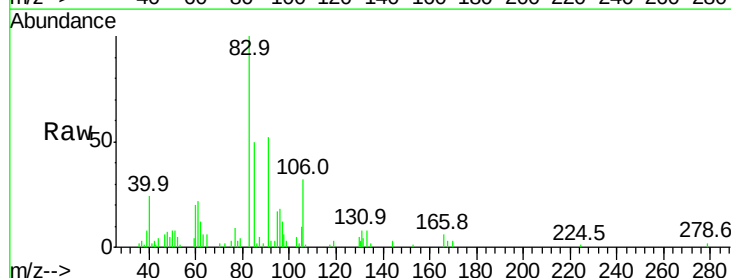
Tgt Ion: 83 Resp: 12330

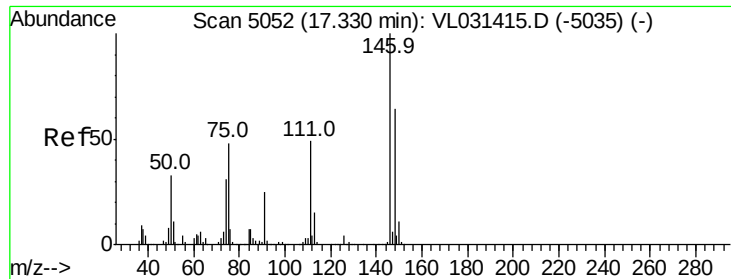
Ion Ratio Lower Upper

83 100

131 22.2 4.8 14.3#

85 134.4 32.4 97.0#

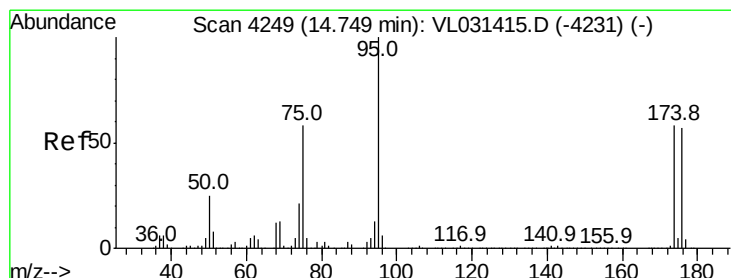
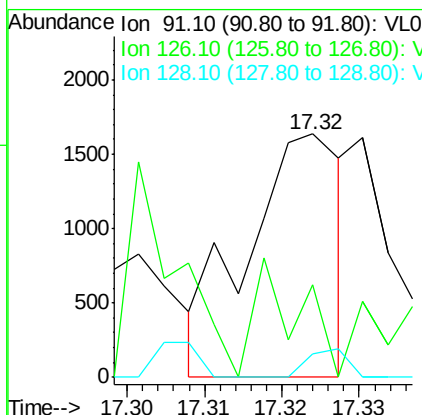
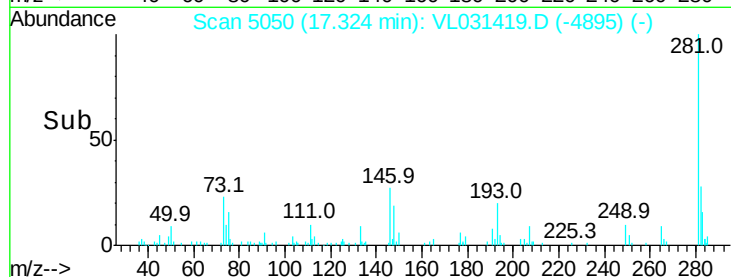
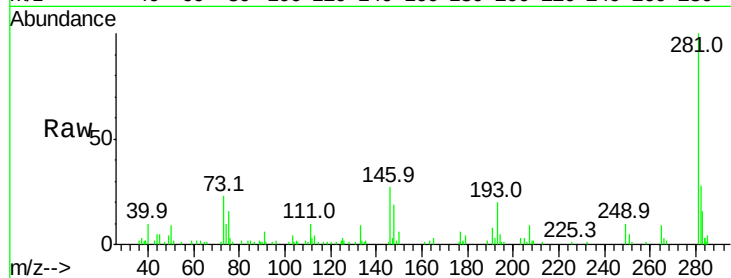




#66
Benzyl Chloride
Concen: 0.03 ppbv
RT: 17.32 min Scan# 5050
Delta R.T. -0.00 min
Lab File: VL031419.D
Acq: 22 Jan 2018 16:01

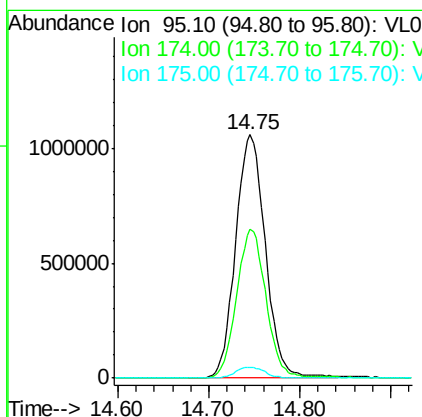
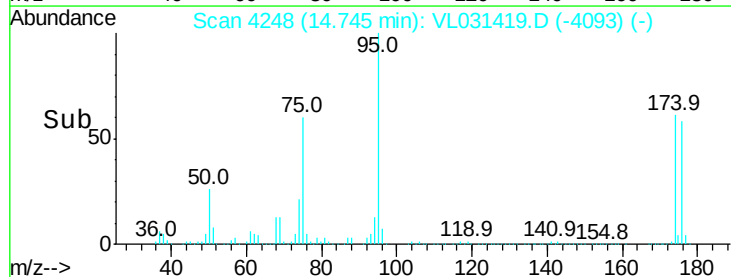
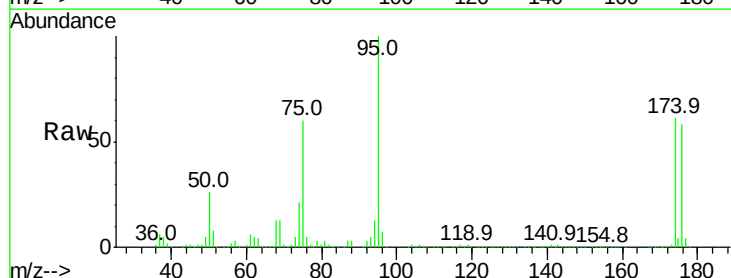
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

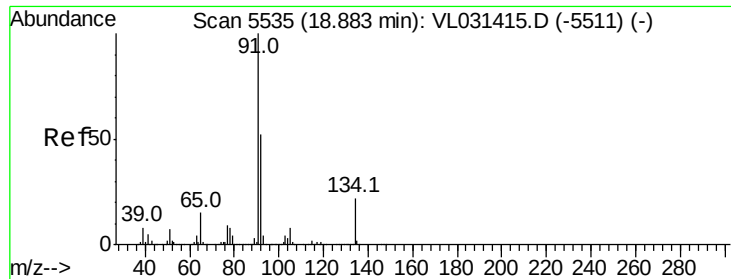
Tgt Ion: 91 Resp: 1394
Ion Ratio Lower Upper
91 100
126 0.0 13.8 20.8#
128 0.0 4.6 6.8#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.29 ppbv
RT: 14.75 min Scan# 4248
Delta R.T. -0.00 min
Lab File: VL031419.D
Acq: 22 Jan 2018 16:01

Tgt Ion: 95 Resp: 2414266
Ion Ratio Lower Upper
95 100
174 61.2 48.2 72.4
175 4.5 3.6 5.4





#70

n-Butylbenzene

Concen: 0.04 ppbv

RT: 18.88 min Scan# 5534

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

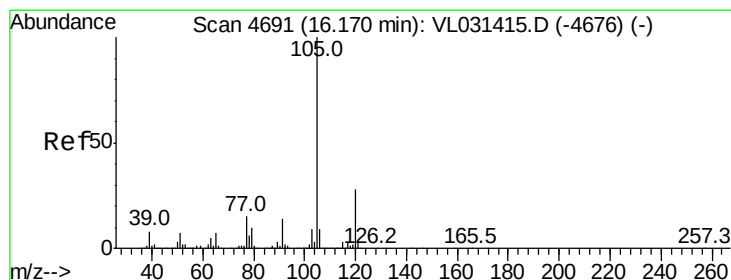
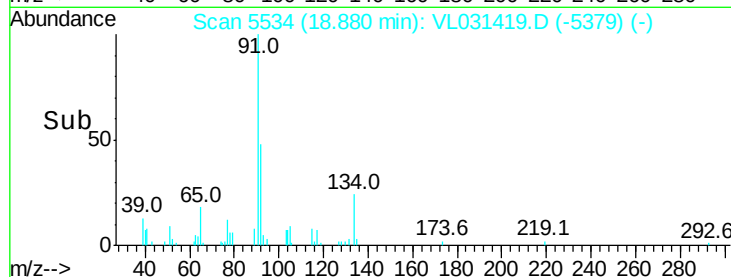
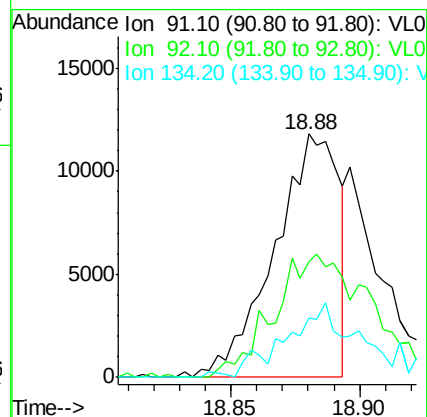
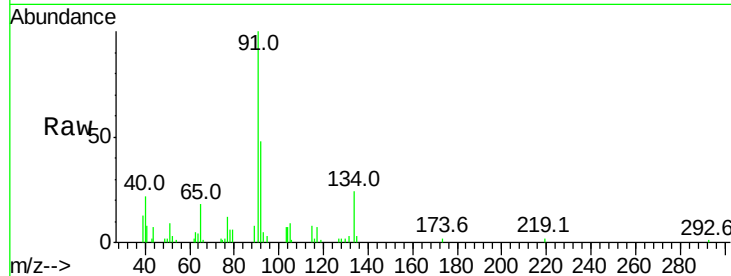
Tgt Ion: 91 Resp: 20436

Ion Ratio Lower Upper

91 100

92 79.1 42.2 63.4#

134 35.9 17.4 26.2#



#72

4-Ethyltoluene

Concen: 0.05 ppbv

RT: 16.17 min Scan# 4692

Delta R.T. 0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Tgt Ion: 105 Resp: 22941

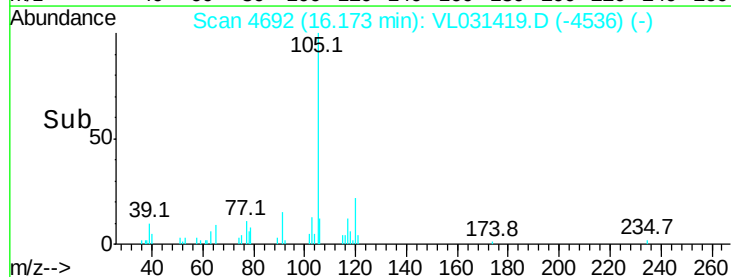
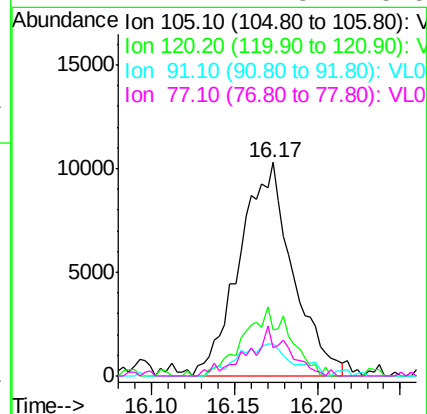
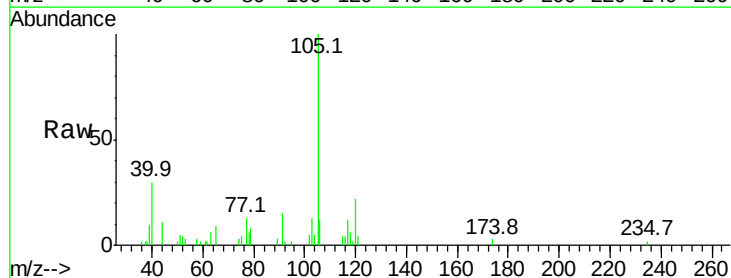
Ion Ratio Lower Upper

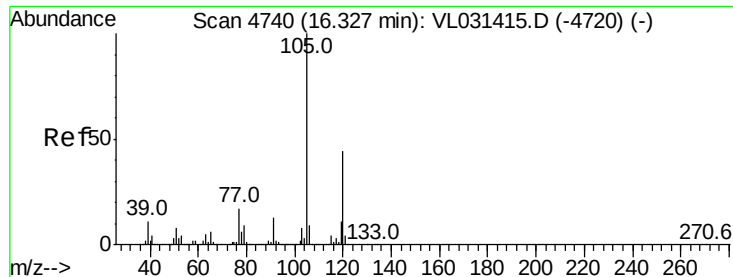
105 100

120 28.0 23.0 34.6

91 16.4 11.0 16.4

77 17.2 12.3 18.5





#73

1,3,5-Trimethylbenzene

Concen: 0.03 ppbv

RT: 16.32 min Scan# 4739

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

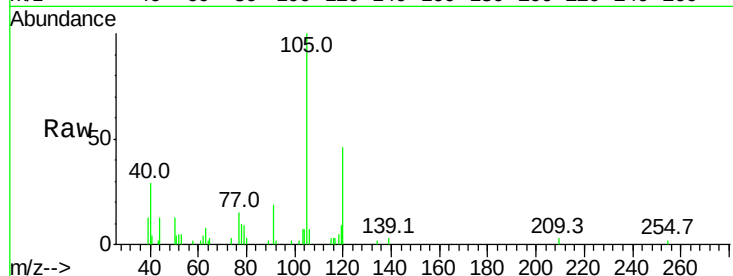
VSTDIC0.1

Tgt Ion:105 Resp: 12577

Ion Ratio Lower Upper

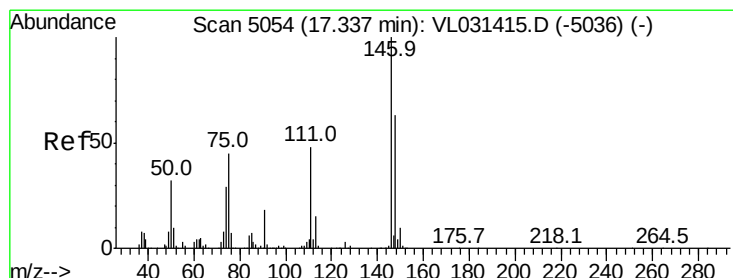
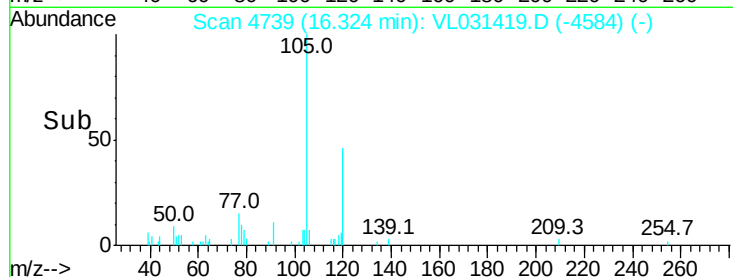
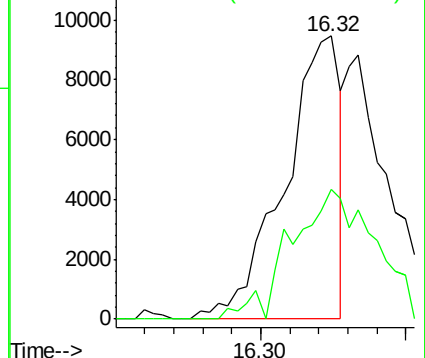
105 100

120 45.7 35.8 53.6



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#75

1,3-Dichlorobenzene

Concen: 0.08 ppbv

RT: 17.34 min Scan# 5054

Delta R.T. -0.00 min

Lab File: VL031419.D

Acq: 22 Jan 2018 16:01

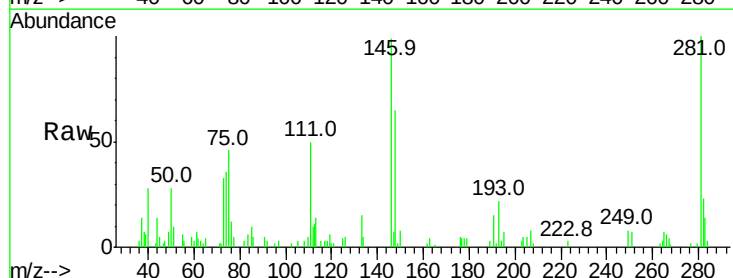
Tgt Ion:146 Resp: 21196

Ion Ratio Lower Upper

146 100

111 54.1 24.2 72.6

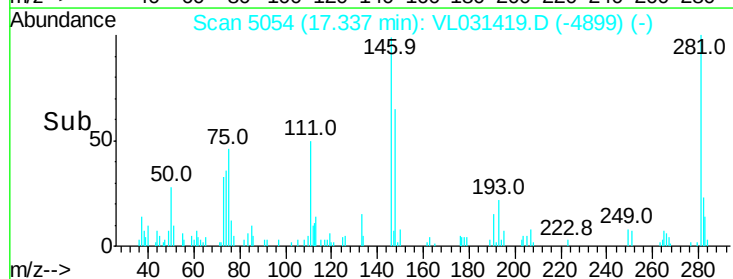
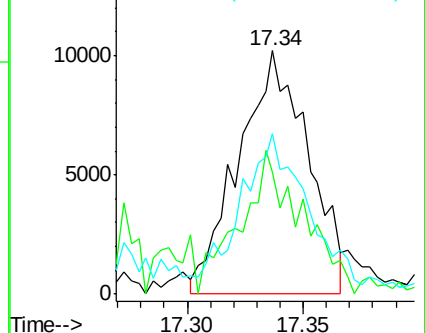
148 74.4 32.1 96.3

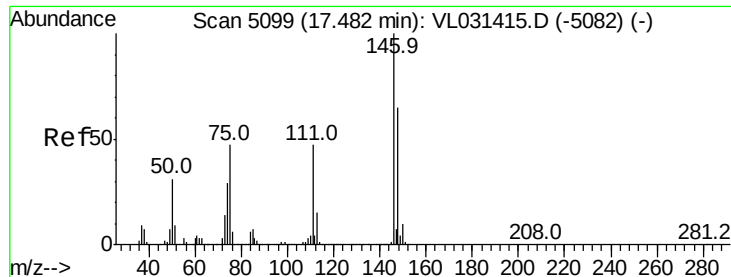


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

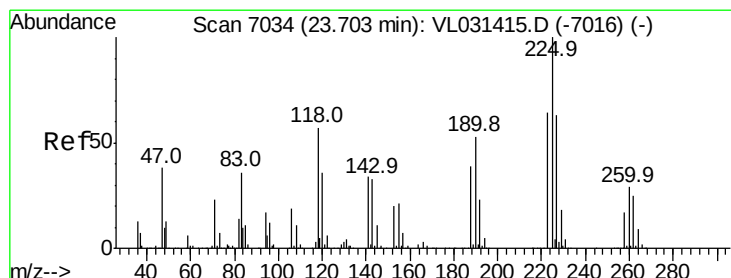
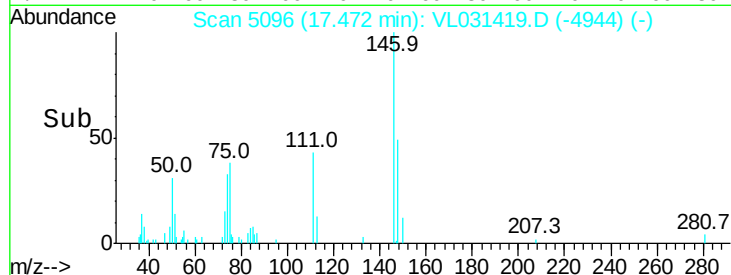
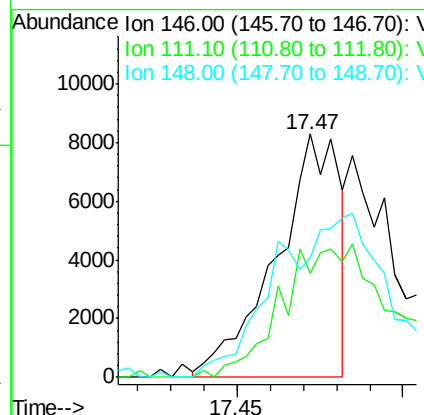
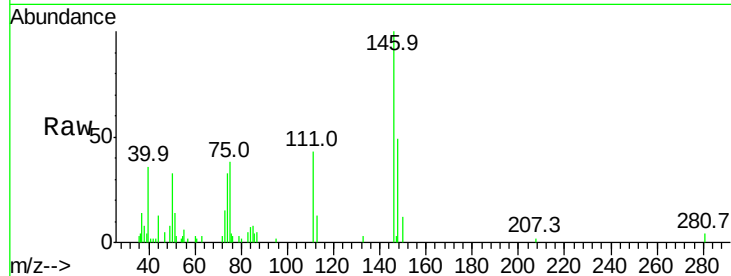




#76
 1,4-Dichlorobenzene
 Concen: 0.04 ppbv
 RT: 17.47 min Scan# 5096
 Delta R.T. -0.01 min
 Lab File: VL031419.D
 Acq: 22 Jan 2018 16:01

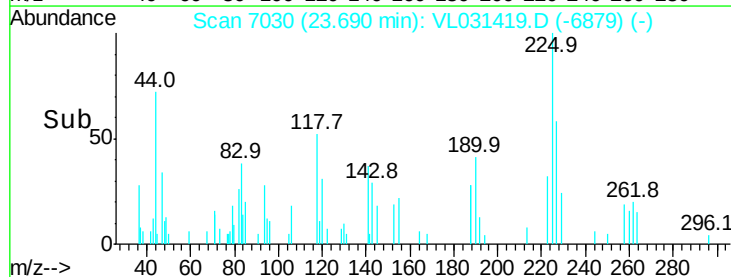
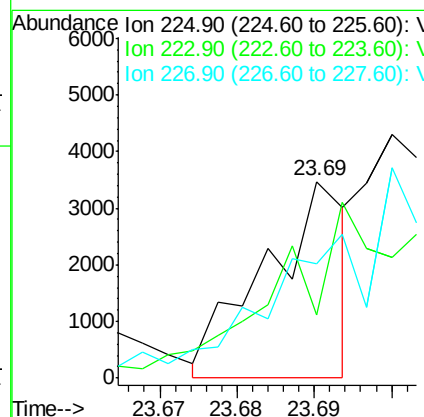
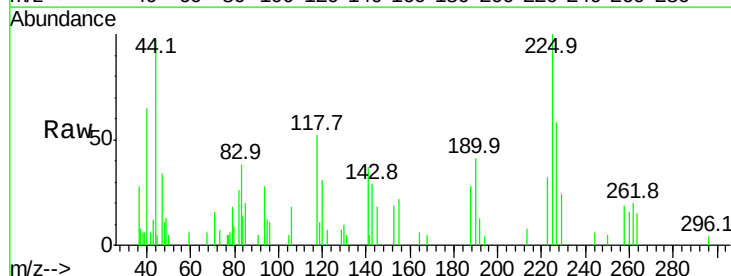
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

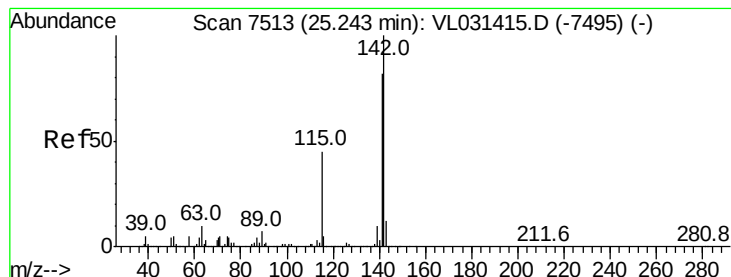
Tgt Ion:146 Resp: 11043
 Ion Ratio Lower Upper
 146 100
 111 0.0 23.3 69.9#
 148 0.0 32.4 97.2#



#78
 Hexachloro-1,3-Butadiene
 Concen: 0.03 ppbv
 RT: 23.69 min Scan# 7030
 Delta R.T. -0.02 min
 Lab File: VL031419.D
 Acq: 22 Jan 2018 16:01

Tgt Ion:225 Resp: 2536
 Ion Ratio Lower Upper
 225 100
 223 0.0 51.3 76.9#
 227 0.0 50.7 76.1#





#80

Naphthalene, 2-methyl-

Concen: 0.06 ppbv

RT: 25.26 min Scan# 7518

Delta R.T. 0.01 min

Lab File: VL031419.D

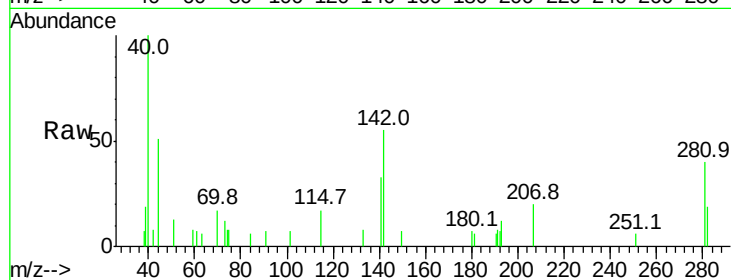
Acq: 22 Jan 2018 16:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1



Tgt Ion:	142	Resp:	2895
Ion	Ratio	Lower	Upper
142	100		
141	96.2	68.7	103.1
115	50.9	36.3	54.5

