

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL122018\
 Data File : VL033049.D
 Acq On : 21 Dec 2018 11:11
 Operator : SY/AP
 Sample : J6480-02DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Dec 22 05:37:10 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 07 09:35:17 2018
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

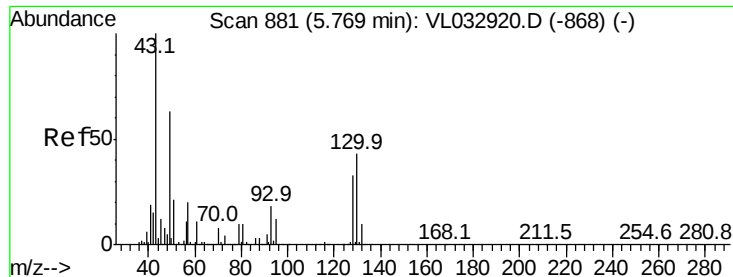
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	856519	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	1993427	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	1841216	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	1505420	11.07	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.70%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.08	85	35838	0.313 ppbv	99
3) Chlorodifluoromethane	3.02	51	29865	0.460 ppbv	100
4) Chloromethane	3.18	50	31582	0.836 ppbv	92
7) Chloroethane	3.61	64	505	0.037 ppbv #	41
9) Propene	3.25	41	15069	0.588 ppbv	91
11) Trichlorofluoromethane	4.01	101	44817	0.416 ppbv	88
12) 1,1,2-Trichlorotrifluoroet	4.56	101	5274	0.057 ppbv #	12
13) Ethanol	3.66	45	13149	1.489 ppbv #	40
15) Acetone	3.91	43	237134	3.226 ppbv	99
18) 1,1-Dichloroethene	4.36	96	1378	0.038 ppbv #	48
19) Isopropyl Alcohol	4.04	45	64037	1.387 ppbv #	92
20) Methylene Chloride	4.42	84	188276	5.240 ppbv	99
24) 1,1-Dichloroethane	5.10	63	25505	0.236 ppbv #	94
25) Ethyl Acetate	5.79	43	124041	0.714 ppbv #	79
26) Hexane	5.79	57	180445	2.250 ppbv #	43
32) 1,1,1-Trichloroethane	6.63	97	142666	0.942 ppbv	98
34) 2-Butanone	5.34	43	3031	0.035 ppbv #	52
35) Carbon Tetrachloride	7.14	117	7978	0.051 ppbv #	74
36) Benzene	7.01	78	4603	0.031 ppbv #	78
39) 1,2-Dichloropropane	7.30	63	508109	9.138 ppbv #	21
41) Tetrahydrofuran	5.79	42	72572	1.344 ppbv #	48
53) Toluene	9.96	91	18835	0.121 ppbv #	61

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.00 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

Instrument :
MSVOA_L
ClientSampleId :

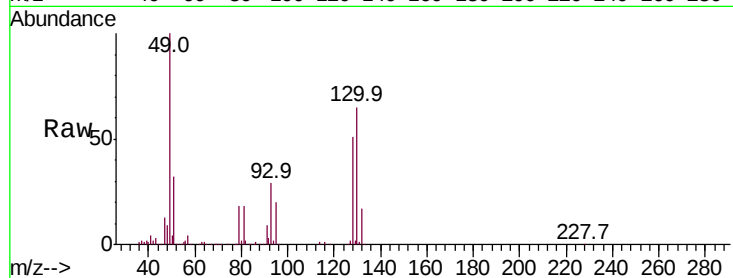
Tot Ion: 49 Resp: 856519

Ion Ratio Lower Upper

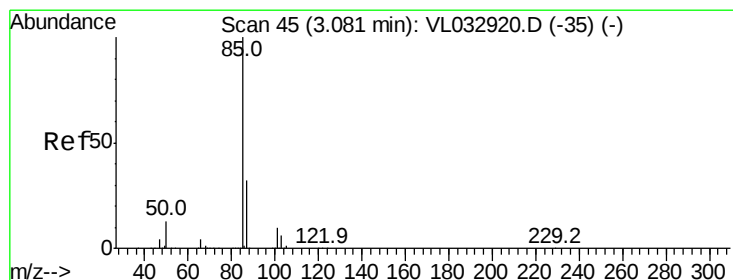
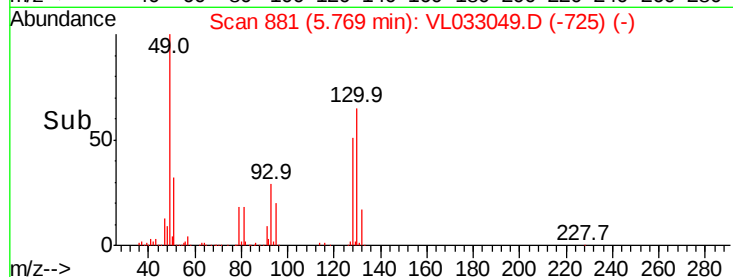
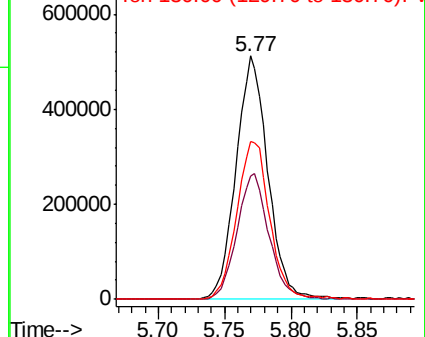
49 100

128 52.5 26.3 78.8

130 67.8 33.9 101.7



Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.313 ppbv

RT: 3.08 min Scan# 46

Delta R.T. 0.00 min

Lab File: VL033049.D

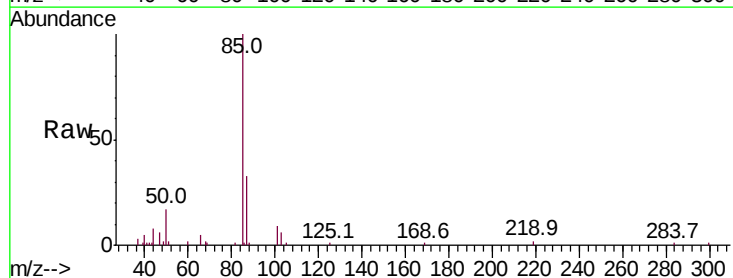
Acq: 21 Dec 2018 11:11

Tgt Ion: 85 Resp: 35838

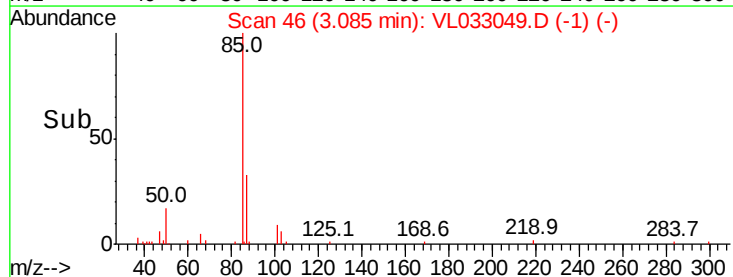
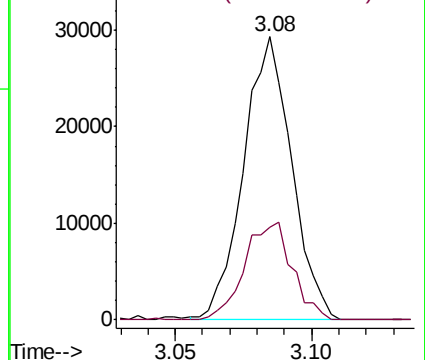
Ion Ratio Lower Upper

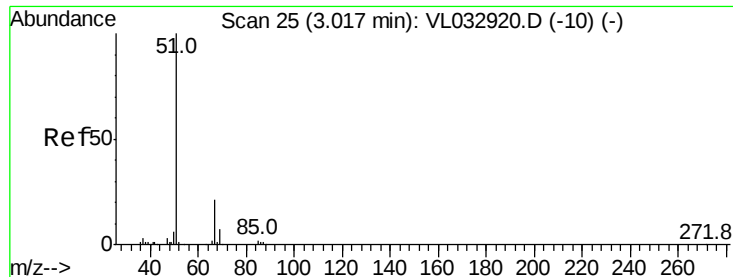
85 100

87 32.7 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.460 ppbv

RT: 3.02 min Scan# 26

Delta R.T. 0.00 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

Instrument :

MSVOA_L

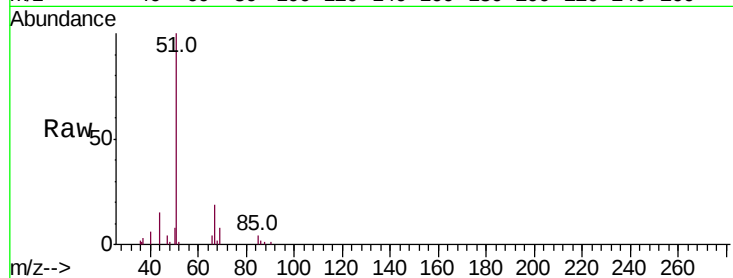
ClientSampleId :

Tot Ion: 51 Resp: 29865

Ion Ratio Lower Upper

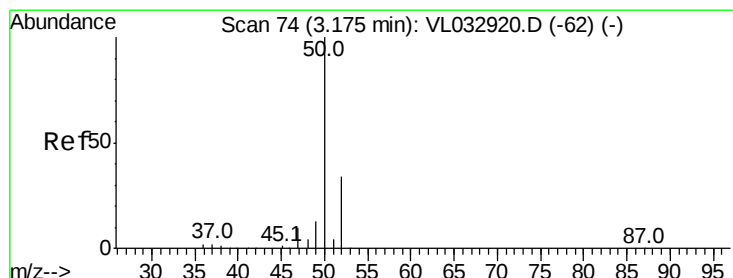
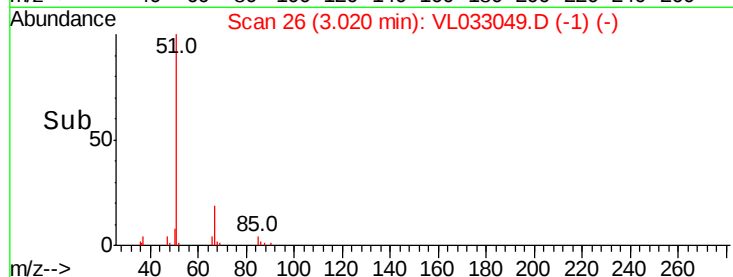
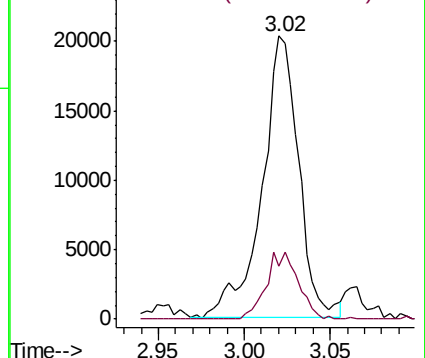
51 100

67 20.8 16.8 25.2



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.836 ppbv

RT: 3.18 min Scan# 76

Delta R.T. 0.01 min

Lab File: VL033049.D

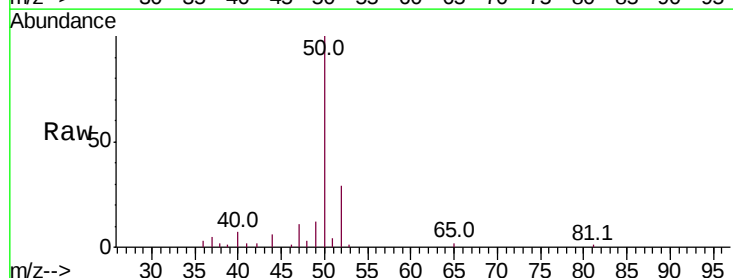
Acq: 21 Dec 2018 11:11

Tgt Ion: 50 Resp: 31582

Ion Ratio Lower Upper

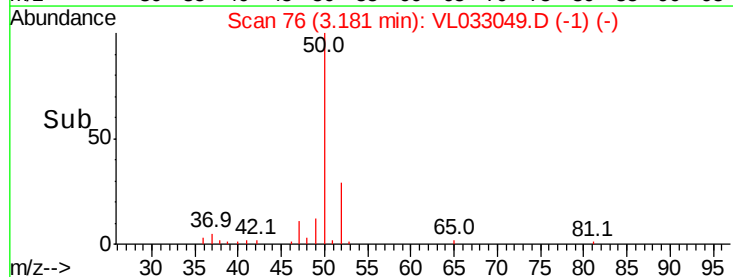
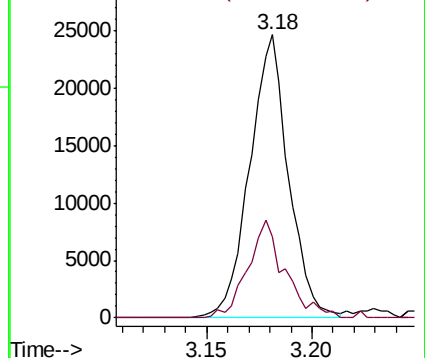
50 100

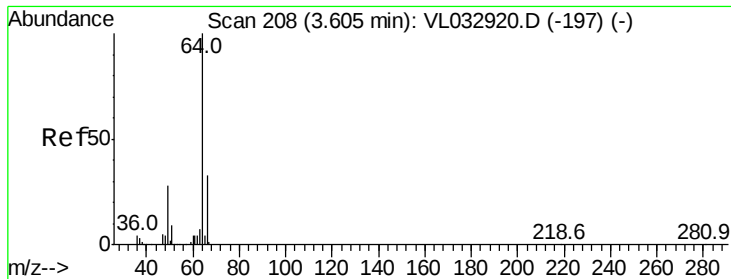
52 29.6 27.3 40.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#7

Chloroethane

Concen: 0.037 ppbv

RT: 3.61 min Scan# 209

Delta R.T. 0.00 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

Instrument :

MSVOA_L

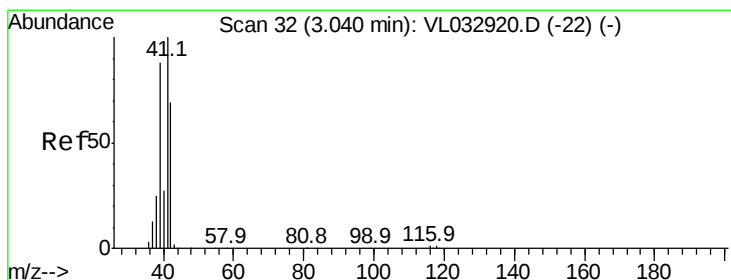
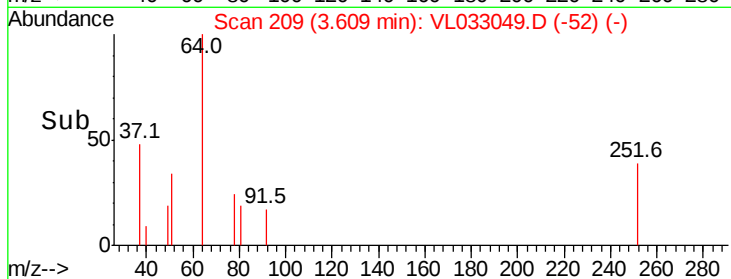
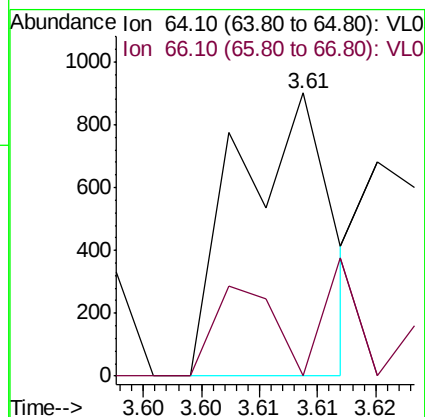
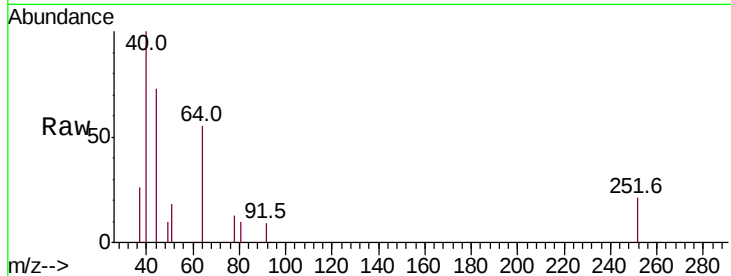
ClientSampled :

Tot Ion: 64 Resp: 505

Ion Ratio Lower Upper

64 100

66 0.0 26.6 40.0#



#9

Propene

Concen: 0.588 ppbv

RT: 3.25 min Scan# 96

Delta R.T. 0.21 min

Lab File: VL033049.D

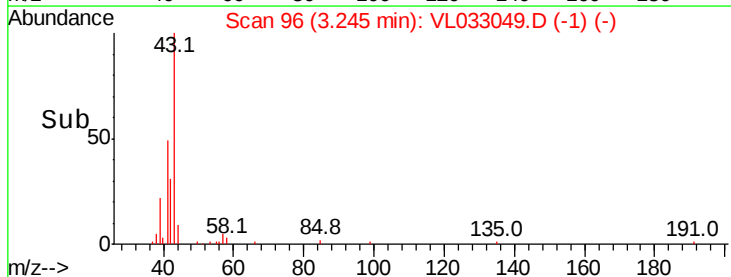
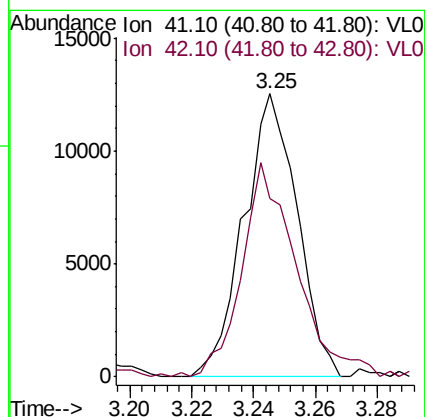
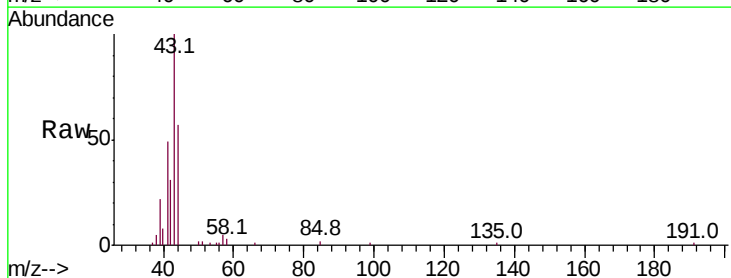
Acq: 21 Dec 2018 11:11

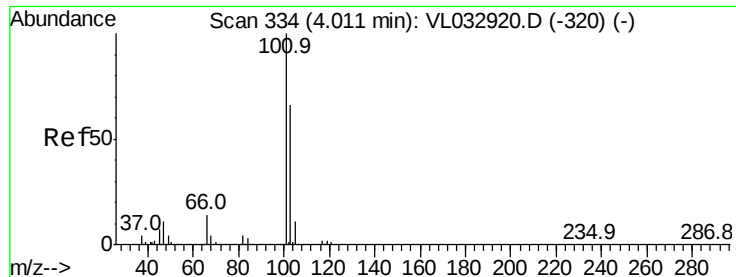
Tgt Ion: 41 Resp: 15069

Ion Ratio Lower Upper

41 100

42 77.3 56.2 84.2





#11

Trichlorofluoromethane

Concen: 0.416 ppbv

RT: 4.01 min Scan# 335

Delta R.T. 0.00 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

Instrument :

MSVOA_L

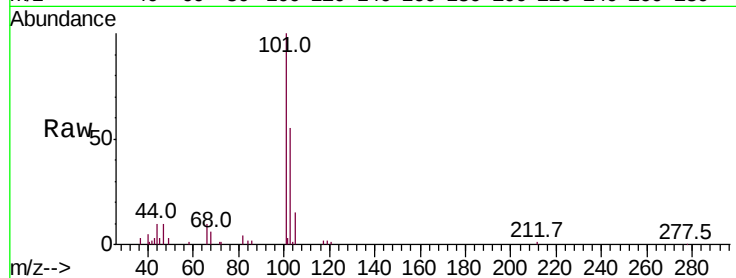
ClientSampleId :

Tot Ion:101 Resp: 44817

Ion Ratio Lower Upper

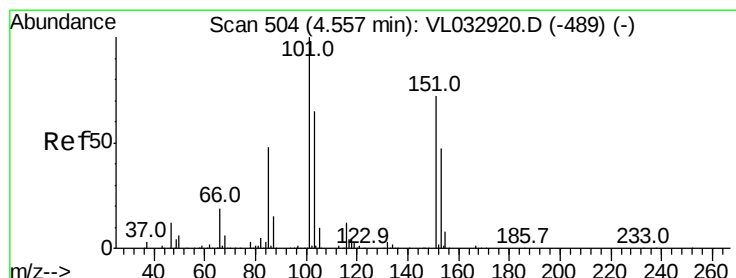
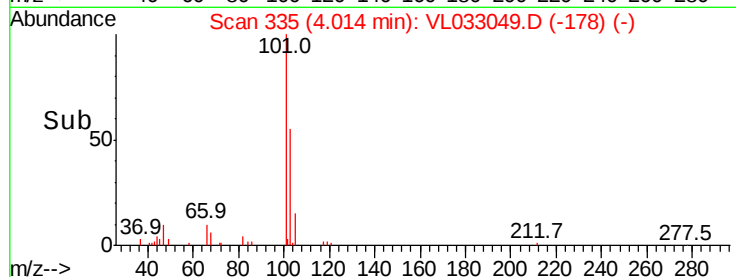
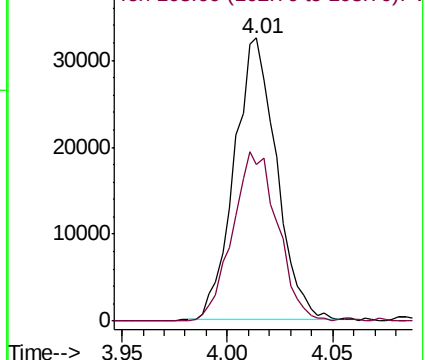
101 100

103 56.3 52.7 79.1



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.057 ppbv

RT: 4.56 min Scan# 504

Delta R.T. 0.00 min

Lab File: VL033049.D

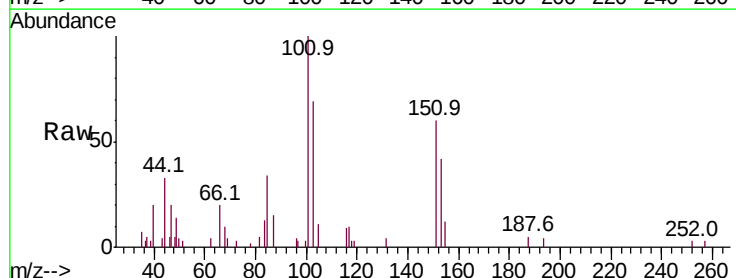
Acq: 21 Dec 2018 11:11

Tgt Ion:101 Resp: 5274

Ion Ratio Lower Upper

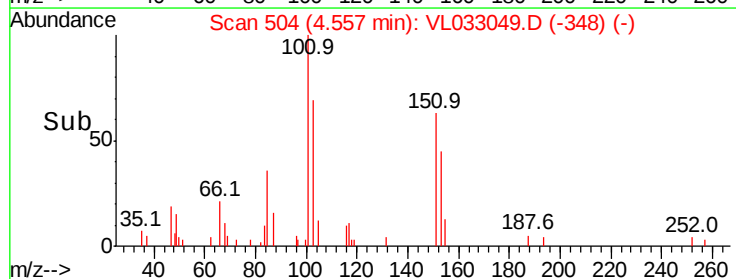
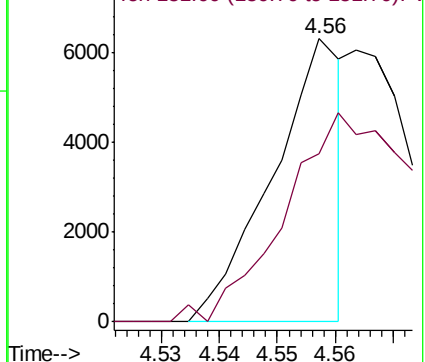
101 100

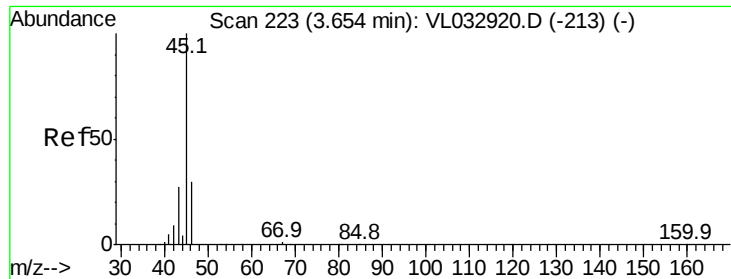
151 0.0 59.3 88.9#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 1.489 ppbv

RT: 3.66 min Scan# 224

Delta R.T. 0.00 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

Instrument :

MSVOA_L

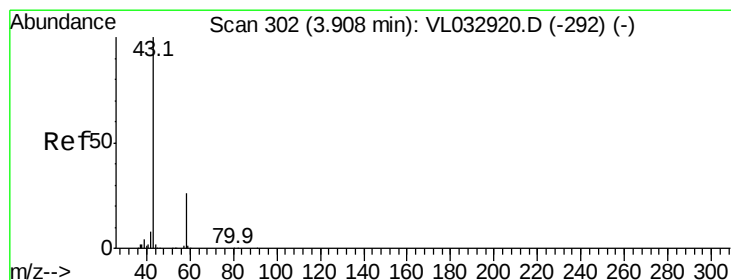
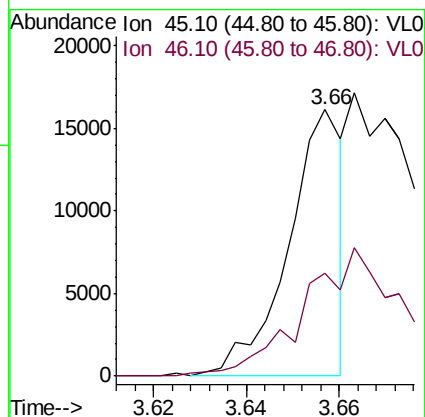
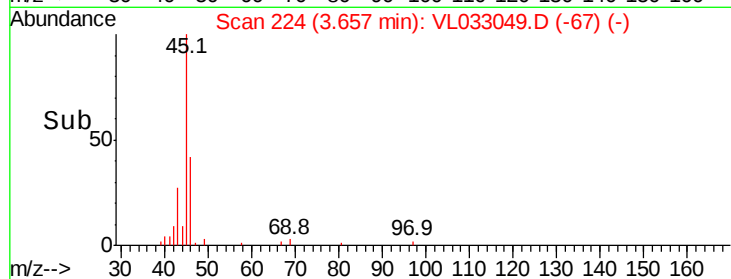
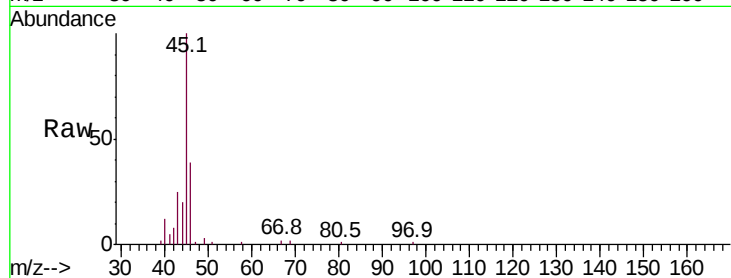
ClientSampleId :

Tot Ion: 45 Resp: 13149

Ion Ratio Lower Upper

45 100

46 0.0 13.8 55.4#



#15

Acetone

Concen: 3.226 ppbv

RT: 3.91 min Scan# 304

Delta R.T. 0.01 min

Lab File: VL033049.D

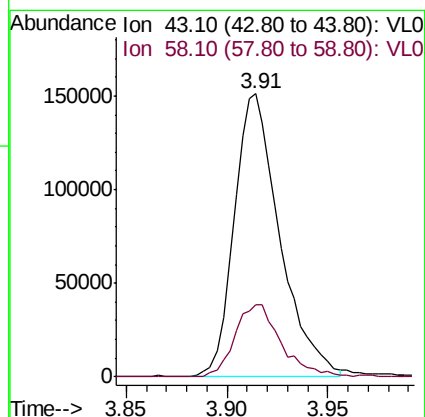
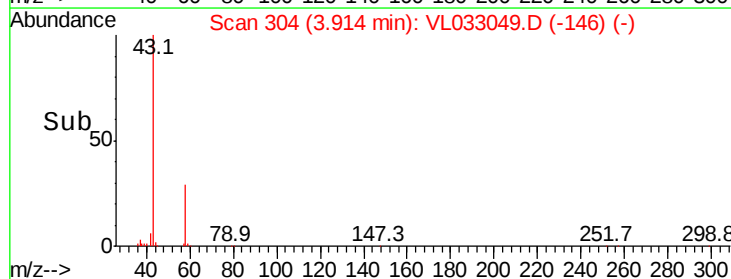
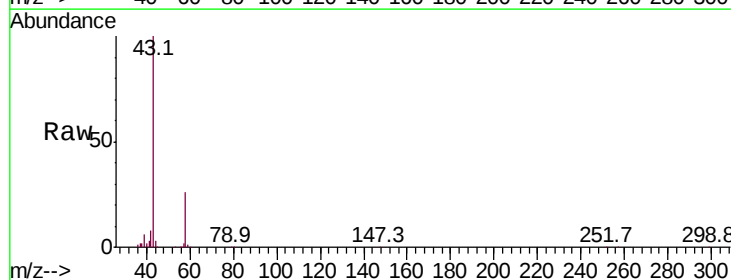
Acq: 21 Dec 2018 11:11

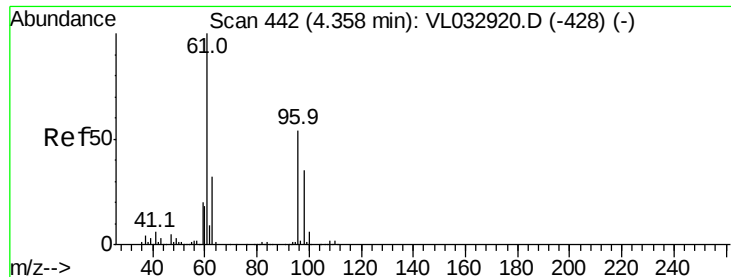
Tgt Ion: 43 Resp: 237134

Ion Ratio Lower Upper

43 100

58 26.4 20.6 30.8





#18

1,1-Dichloroethene

Concen: 0.038 ppbv

RT: 4.36 min Scan# 443

Delta R.T. 0.00 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

Instrument :

MSVOA_L

ClientSampleId :

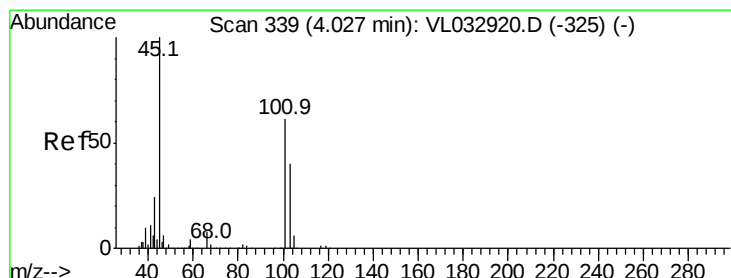
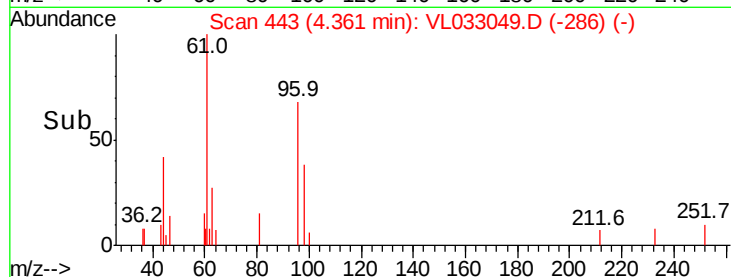
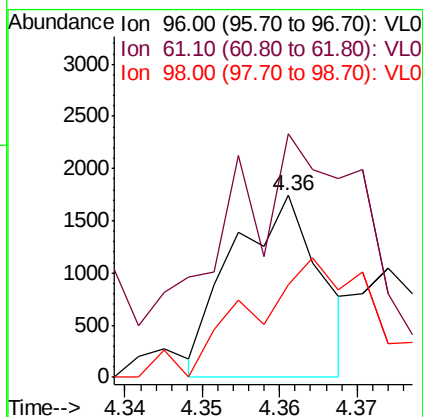
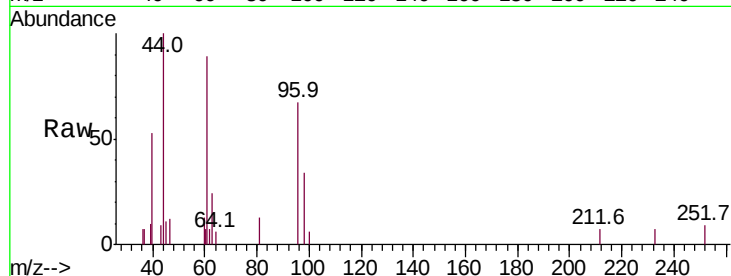
Tot Ion: 96 Resp: 1378

Ion Ratio Lower Upper

96 100

61 87.1 147.0 220.4#

98 56.5 50.7 76.1



#19

Isopropyl Alcohol

Concen: 1.387 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.02 min

Lab File: VL033049.D

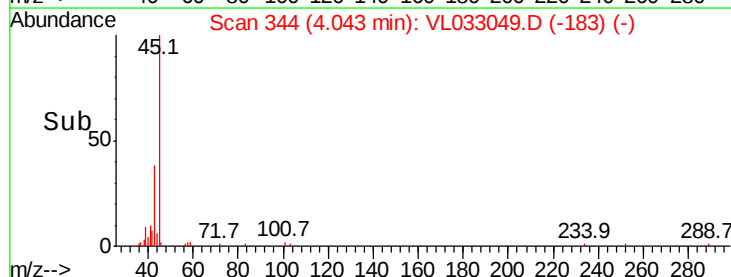
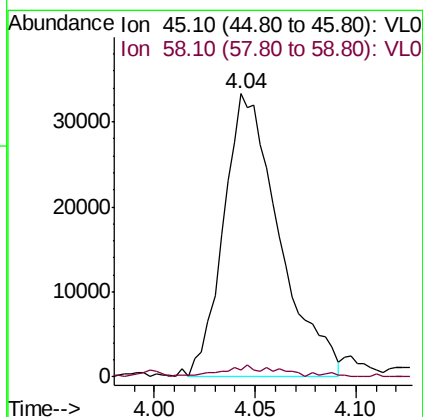
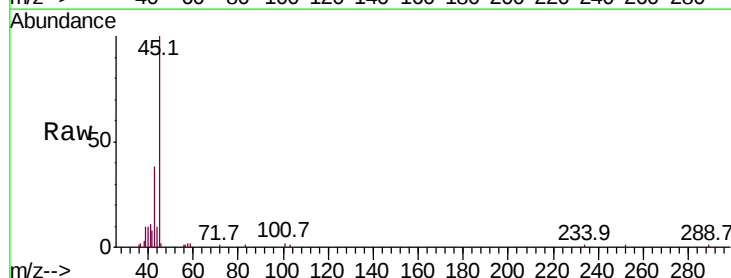
Acq: 21 Dec 2018 11:11

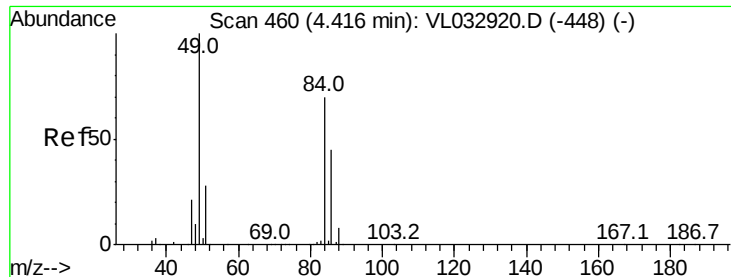
Tgt Ion: 45 Resp: 64037

Ion Ratio Lower Upper

45 100

58 4.7 1.4 2.2#

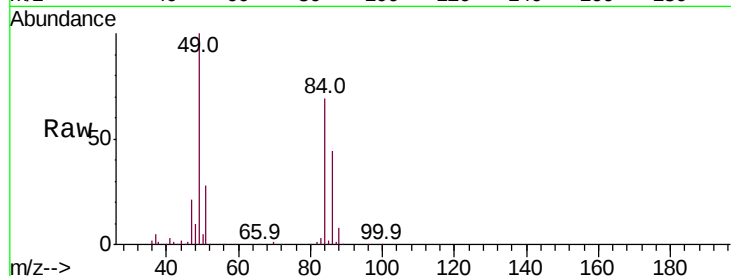




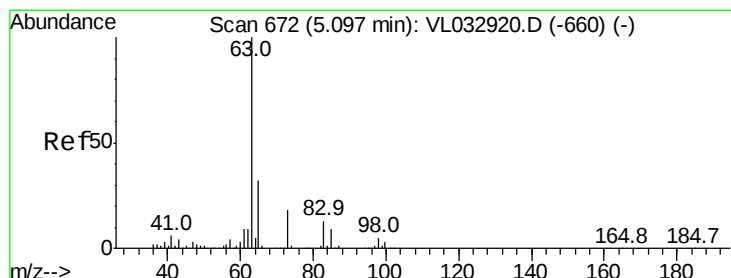
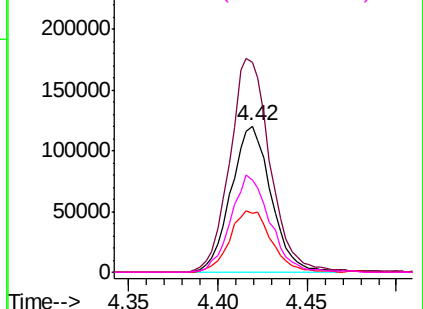
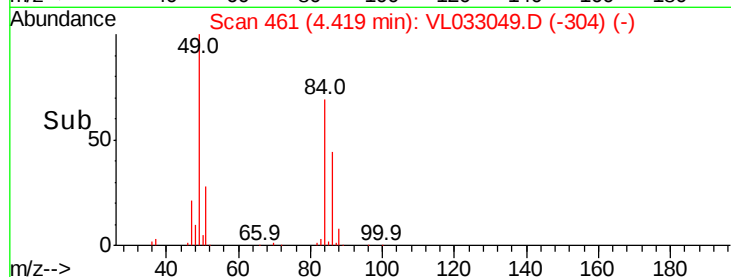
#20
Methvlene Chloride
Concen: 5.240 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.00 min
Lab File: VL033049.D
Acq: 21 Dec 2018 11:11

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 84 Resp: 188276
Ion Ratio Lower Upper
84 100
49 144.1 113.8 170.8
51 40.6 31.8 47.8
86 62.8 50.8 76.2

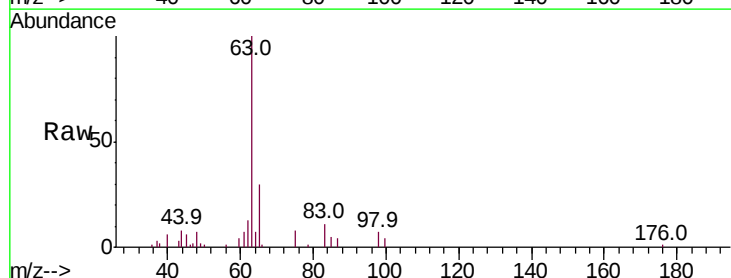


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

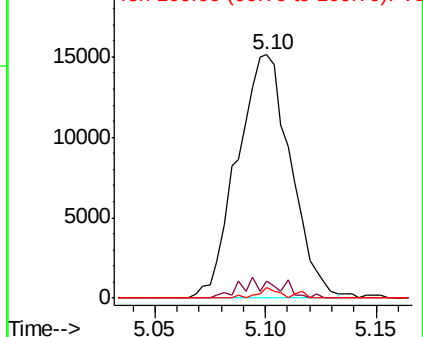
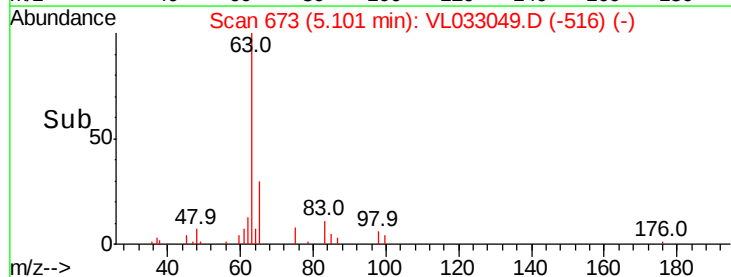


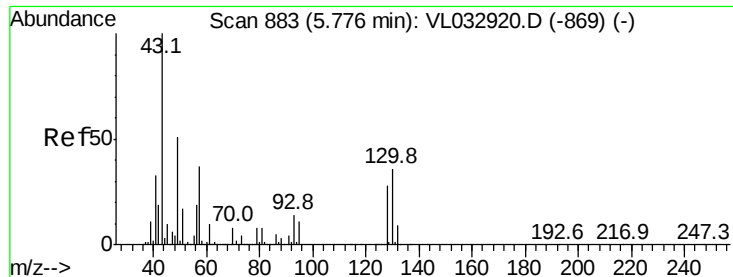
#24
1,1-Dichloroethane
Concen: 0.236 ppbv
RT: 5.10 min Scan# 673
Delta R.T. 0.00 min
Lab File: VL033049.D
Acq: 21 Dec 2018 11:11

Tgt Ion: 63 Resp: 25505
Ion Ratio Lower Upper
63 100
98 7.2 2.5 7.5
100 4.5 1.4 4.2#



Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 98.00 (97.70 to 98.70): VL0
Ion 100.00 (99.70 to 100.70): VL0

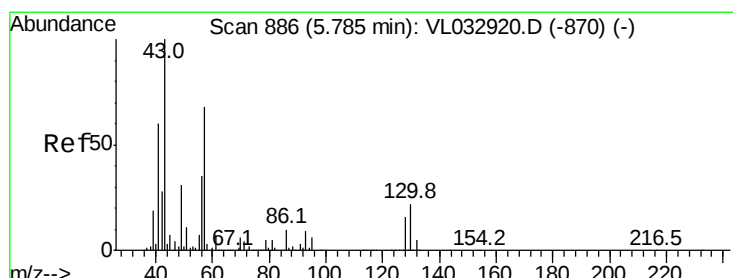
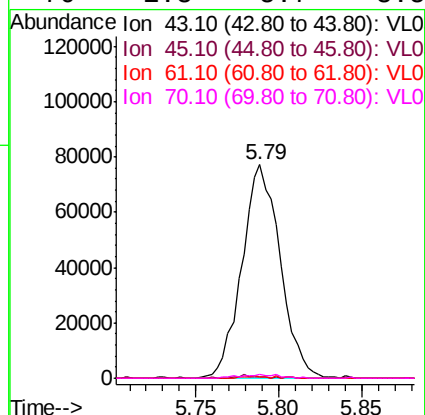
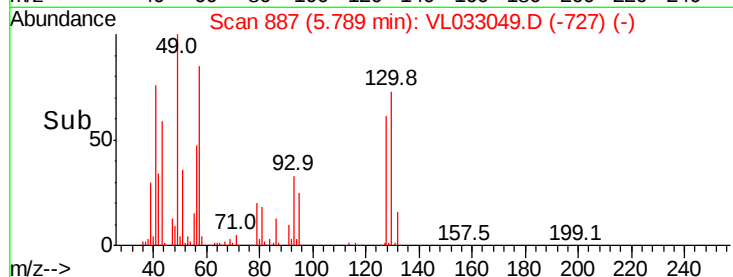
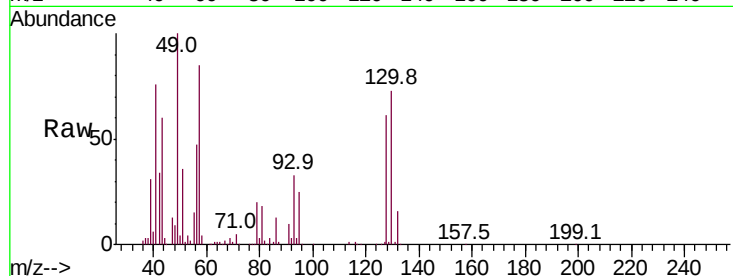




#25
Ethyl Acetate
Concen: 0.714 ppbv
RT: 5.79 min Scan# 887
Delta R.T. 0.01 min
Lab File: VL033049.D
Acq: 21 Dec 2018 11:11

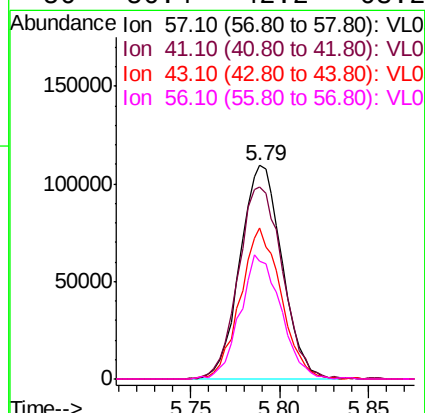
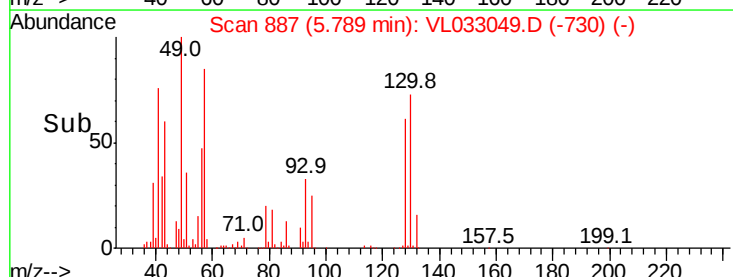
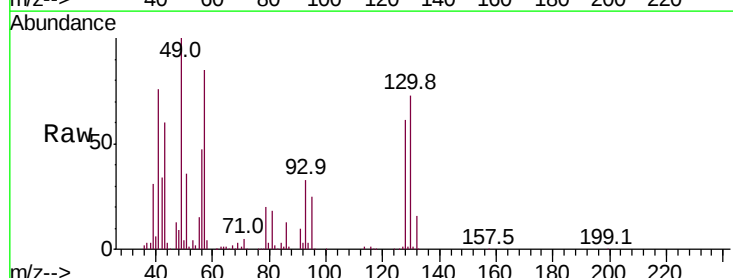
Instrument :
MSVOA_L
ClientSampleId :

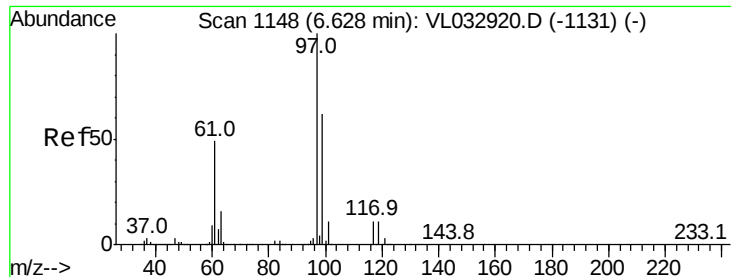
Tot Ion:	43	Resp:	124041
Ion	Ratio	Lower	Upper
43	100		
45	0.9	7.8	11.6#
61	0.7	7.4	11.2#
70	1.8	5.7	8.5#



#26
Hexane
Concen: 2.250 ppbv
RT: 5.79 min Scan# 887
Delta R.T. 0.00 min
Lab File: VL033049.D
Acq: 21 Dec 2018 11:11

Tgt Ion:	57	Resp:	180445
Ion	Ratio	Lower	Upper
57	100		
41	95.1	72.2	108.2
43	69.1	171.9	257.9#
56	56.4	42.2	63.2

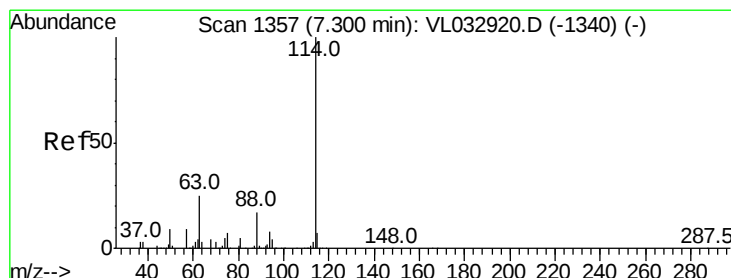
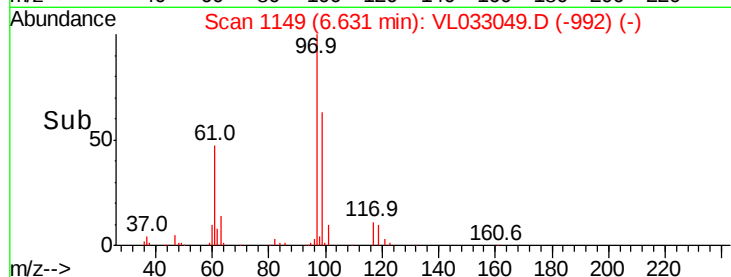
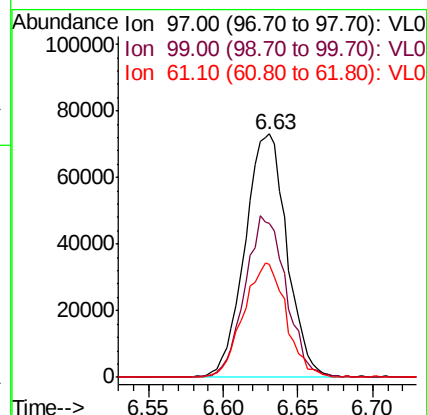
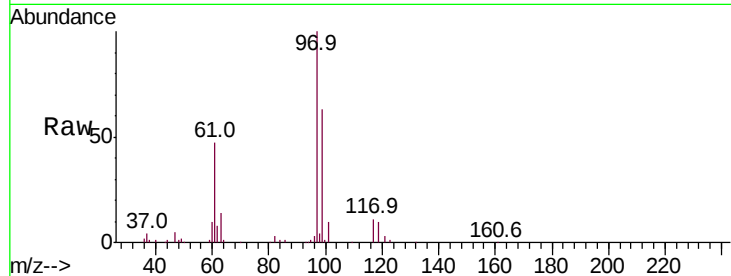




#32
 1,1,1-Trichloroethane
 Concen: 0.942 ppbv
 RT: 6.63 min Scan# 1149
 Delta R.T. 0.00 min
 Lab File: VL033049.D
 Acq: 21 Dec 2018 11:11

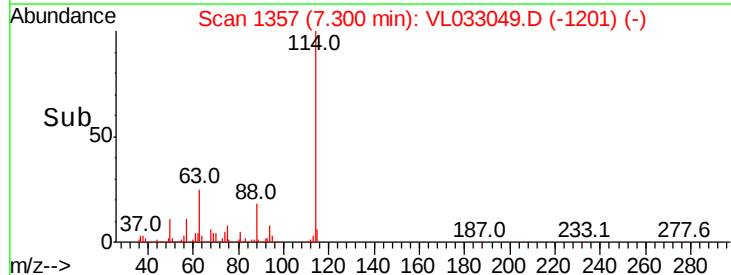
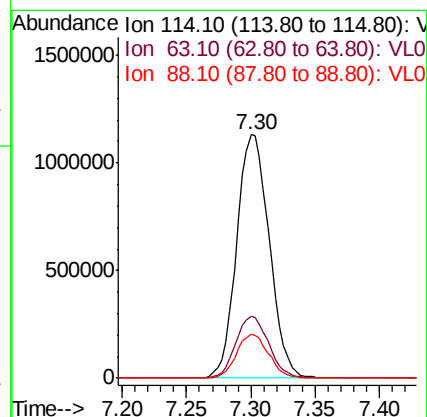
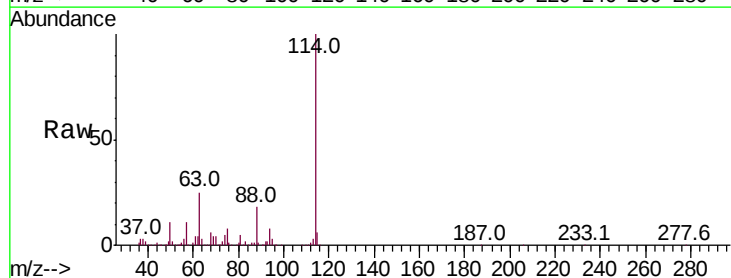
Instrument :
 MSVOA_L
 ClientSampleId :

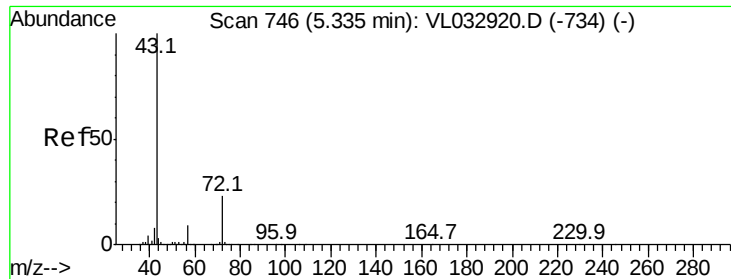
Tot Ion	Ratio	Lower	Upper
97	100		
99	65.0	51.1	76.7
61	47.7	39.3	58.9



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1357
 Delta R.T. 0.00 min
 Lab File: VL033049.D
 Acq: 21 Dec 2018 11:11

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.1	30.1
88	17.8	14.2	21.4

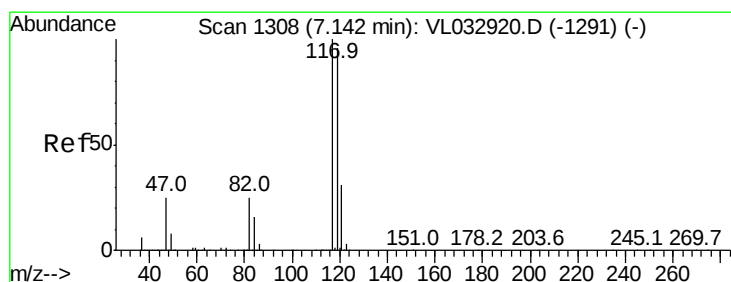
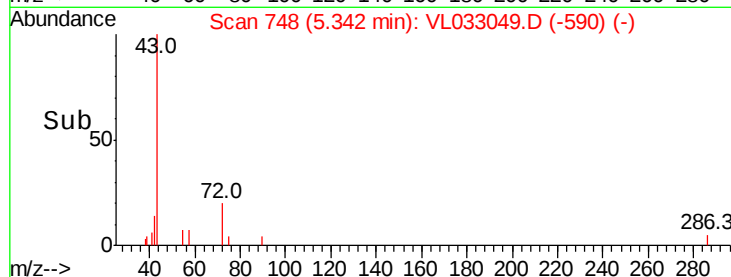
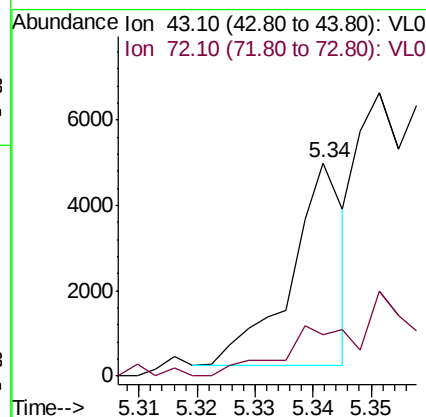
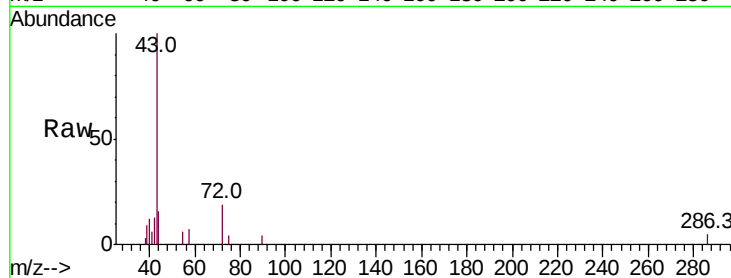




#34
2-Butanone
Concen: 0.035 ppbv
RT: 5.34 min Scan# 748
Delta R.T. 0.01 min
Lab File: VL033049.D
Acq: 21 Dec 2018 11:11

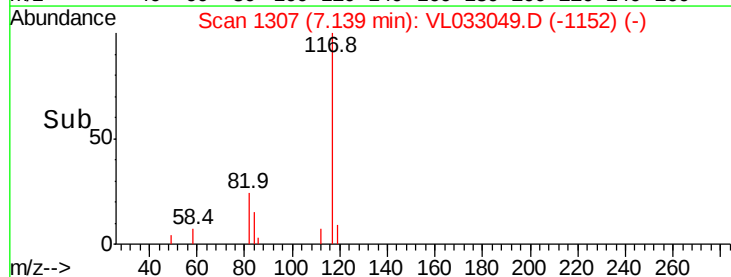
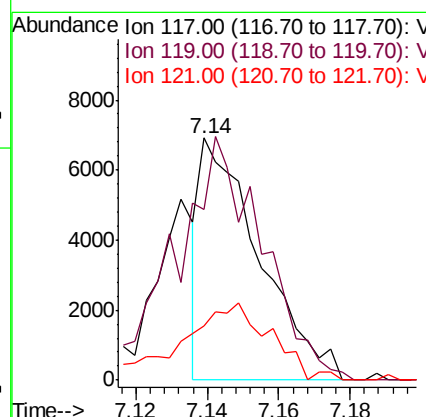
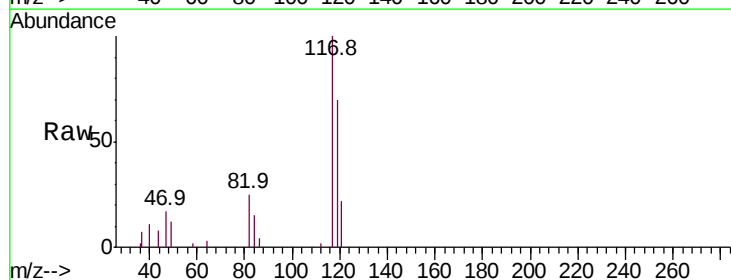
Instrument :
MSVOA_L
ClientSampleId :

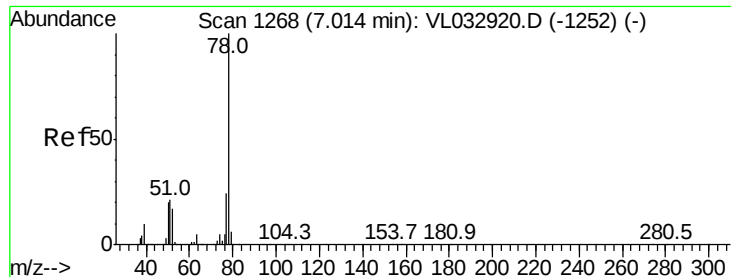
Tot Ion: 43 Resp: 3031
Ion Ratio Lower Upper
43 100
72 0.0 18.8 28.2#



#35
Carbon Tetrachloride
Concen: 0.051 ppbv
RT: 7.14 min Scan# 1307
Delta R.T. -0.00 min
Lab File: VL033049.D
Acq: 21 Dec 2018 11:11

Tgt Ion: 117 Resp: 7978
Ion Ratio Lower Upper
117 100
119 67.1 76.5 114.7#
121 22.2 24.5 36.7#





#36

Benzene

Concen: 0.031 ppbv

RT: 7.01 min Scan# 1267

Delta R.T. -0.00 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

Instrument :

MSVOA_L

ClientSampleId :

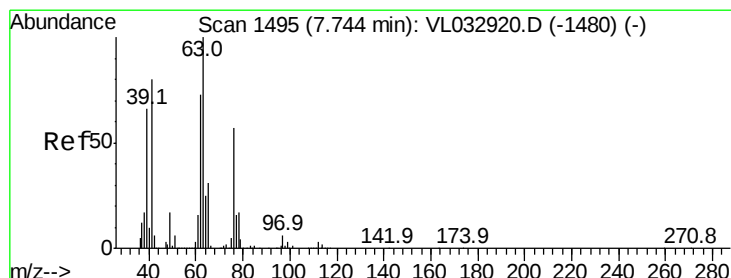
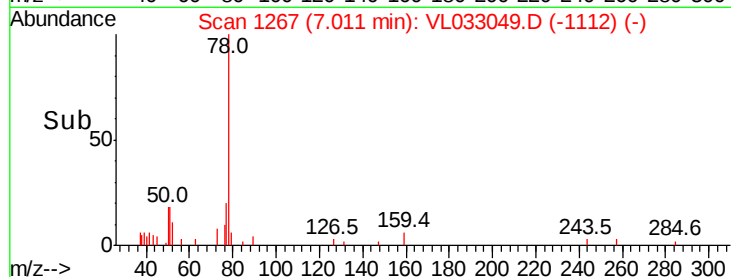
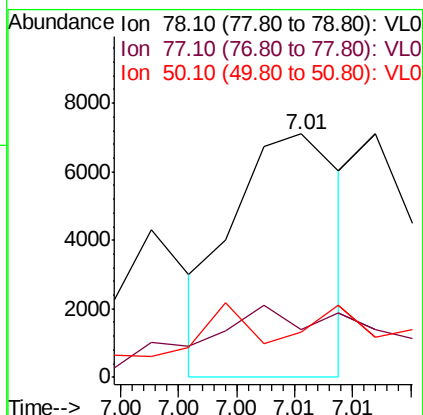
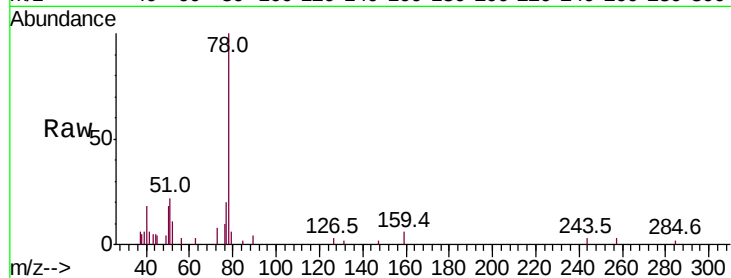
Tot Ion: 78 Resp: 4603

Ion Ratio Lower Upper

78 100

77 12.1 18.9 28.3#

50 10.4 16.1 24.1#



#39

1,2-Dichloropropane

Concen: 9.138 ppbv

RT: 7.30 min Scan# 1357

Delta R.T. -0.44 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

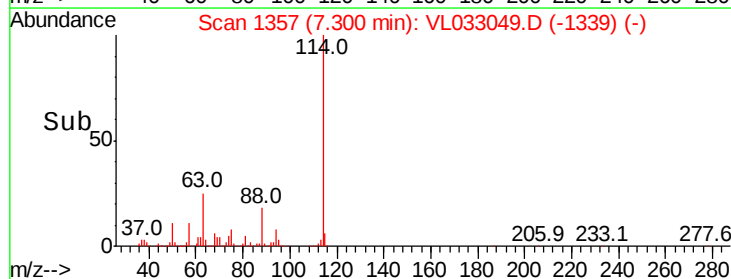
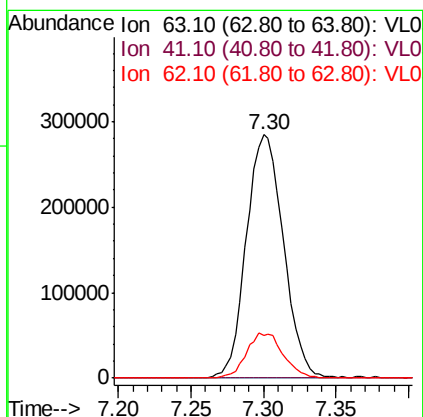
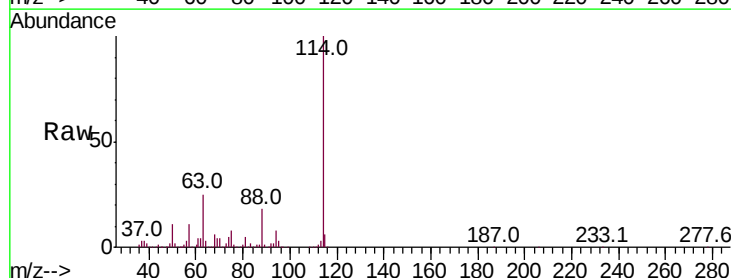
Tgt Ion: 63 Resp: 508109

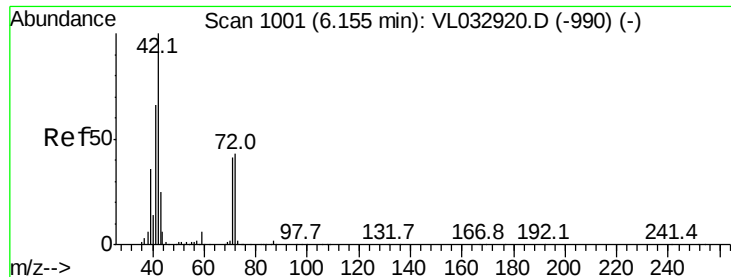
Ion Ratio Lower Upper

63 100

41 0.0 63.9 95.9#

62 17.4 58.8 88.2#





#41

Tetrahydrofuran

Concen: 1.344 ppbv

RT: 5.79 min Scan# 888

Delta R.T. -0.36 min

Lab File: VL033049.D

Acq: 21 Dec 2018 11:11

Instrument :

MSVOA_L

ClientSampleId :

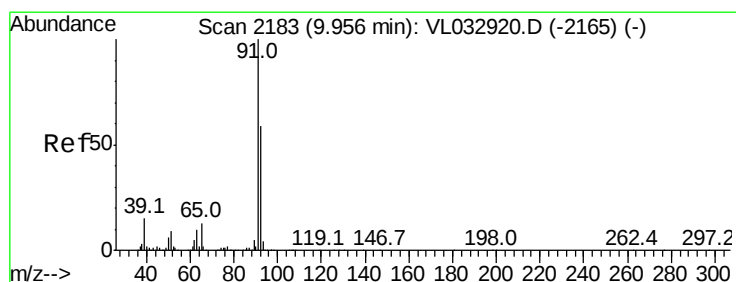
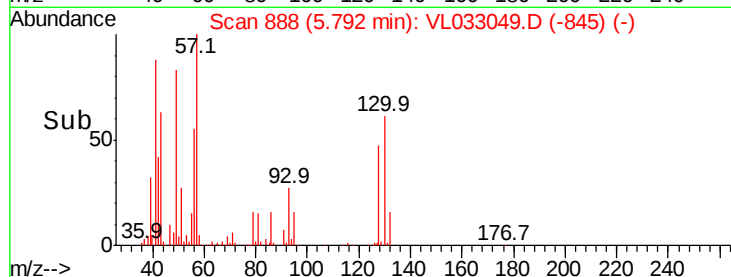
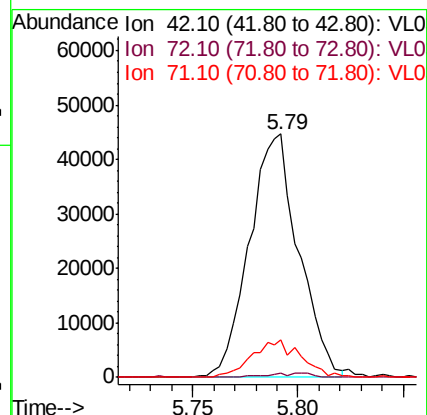
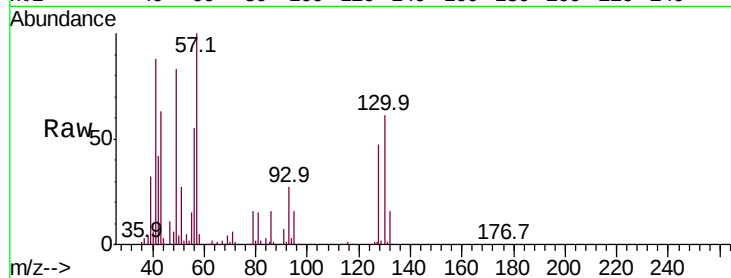
Tot Ion: 42 Resp: 72572

Ion Ratio Lower Upper

42 100

72 1.4 32.9 49.3#

71 15.3 32.0 48.0#



#53

Toluene

Concen: 0.121 ppbv

RT: 9.96 min Scan# 2183

Delta R.T. 0.00 min

Lab File: VL033049.D

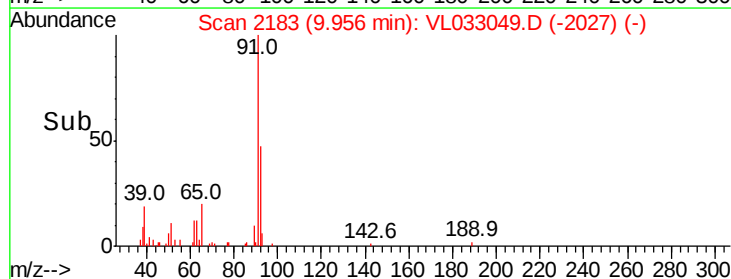
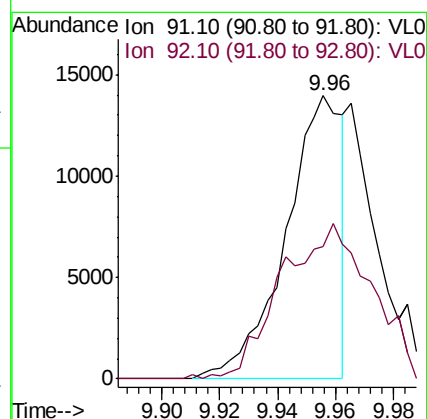
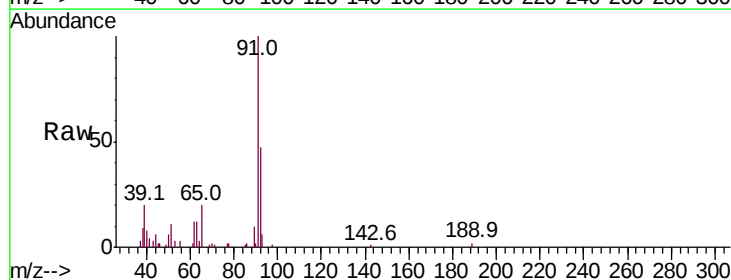
Acq: 21 Dec 2018 11:11

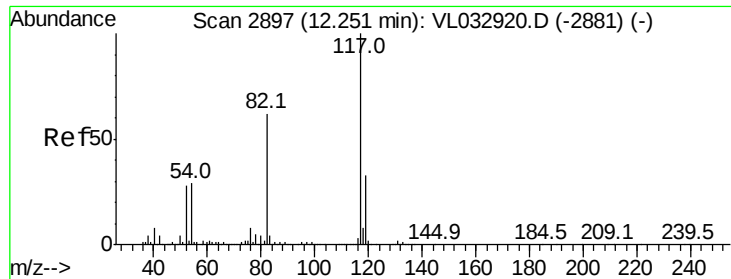
Tgt Ion: 91 Resp: 18835

Ion Ratio Lower Upper

91 100

92 88.3 47.4 71.0#

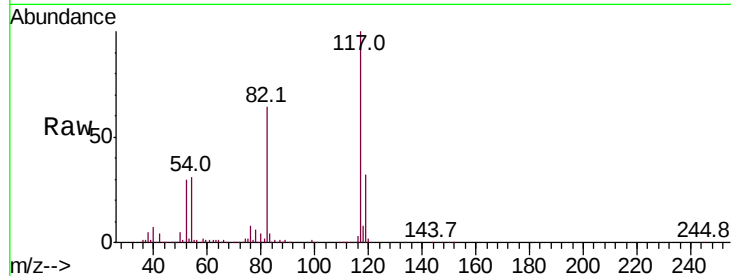




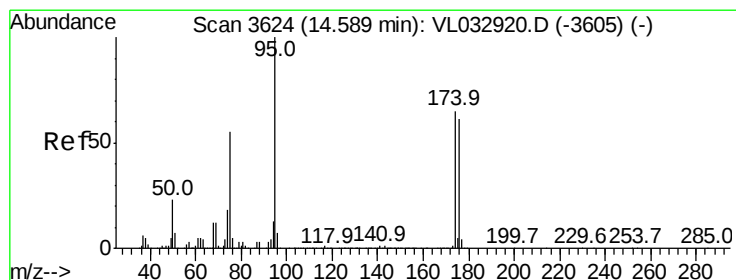
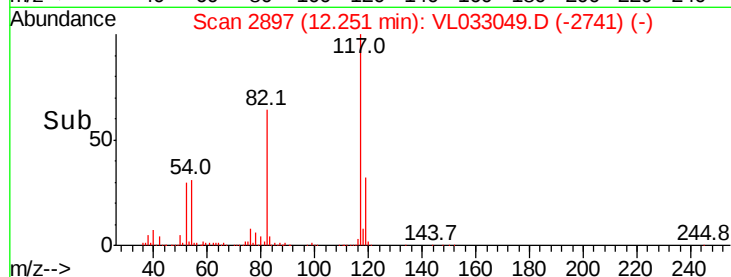
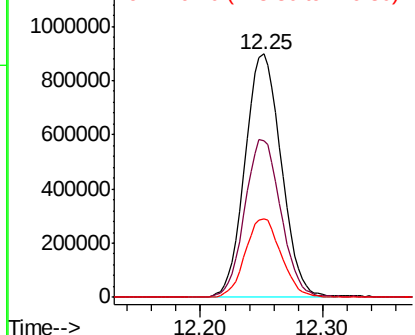
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2897
Delta R.T. 0.00 min
Lab File: VL033049.D
Acq: 21 Dec 2018 11:11

Instrument :
MSVOA_L
ClientSampled :

Tot Ion:117 Resp: 1841216
Ion Ratio Lower Upper
117 100
82 64.9 47.8 71.8
119 32.4 43.1 64.7#

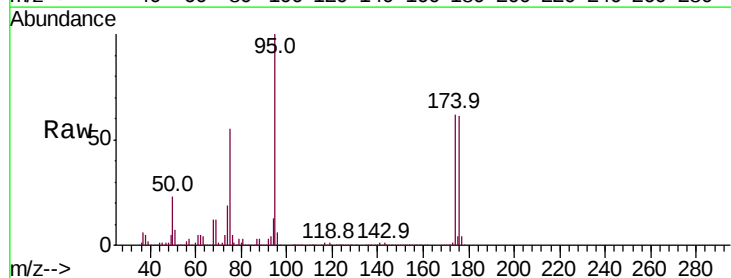


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 11.067 ppbv
RT: 14.59 min Scan# 3624
Delta R.T. 0.00 min
Lab File: VL033049.D
Acq: 21 Dec 2018 11:11

Tgt Ion: 95 Resp: 1505420
Ion Ratio Lower Upper
95 100
174 65.2 51.4 77.0
175 4.7 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0
Ion 174.00 (173.70 to 174.70): V
Ion 175.00 (174.70 to 175.70): V

