

Data File : VL033181.D
Acq On : 6 Feb 2019 17:10
Operator : SY/AP
Sample : K1289-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
1000

Quant Time: Feb 20 06:18:37 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL020519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 20 06:00:52 2019
QLast Update : Wed Feb 20 06:00:52 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	886770	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2197099	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.24	117	2600113	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.58 95 2546461 12.57 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 125.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	3.02	51	4627	0.043	ppbv	92
4) Chloromethane	3.17	50	1928	0.034	ppbv	89
5) Vinyl Chloride	3.29	62	952233	16.175	ppbv	99
7) Chloroethane	3.29	64	298568	15.513	ppbv #	42
9) Propene	3.04	41	712086	13.806	ppbv	100
13) Ethanol	3.66	45	10397	0.593	ppbv	69
14) Bromoethene	3.79	108	19472	0.475	ppbv #	97
15) Acetone	3.91	43	32868	0.329	ppbv	90
16) 1,3-Butadiene	3.04	39	600841	12.670	ppbv #	5
17) tert-Butyl alcohol	4.35	59	42602	2.220	ppbv #	75
18) 1,1-Dichloroethene	4.35	96	619014	14.537	ppbv	96
20) Methylene Chloride	4.41	84	51579	1.298	ppbv	98
24) 1,1-Dichloroethane	5.09	63	3129227	25.550	ppbv	99
25) Ethyl Acetate	5.78	43	1961611	8.733	ppbv #	76
26) Hexane	5.78	57	2828753	26.825	ppbv #	42
32) 1,1,1-Trichloroethane	6.62	97	23980	0.135	ppbv	94
34) 2-Butanone	5.78	43	1947820	13.977	ppbv #	54
39) 1,2-Dichloropropane	7.29	63	580654	6.603	ppbv #	26
41) Tetrahydrofuran	5.78	42	1030577	11.962	ppbv #	50
47) 1,1,2-Trichloroethane	9.61	97	1632113	17.897	ppbv	97
48) Dibromochloromethane	10.45	129	2422637	16.862	ppbv	100
53) Toluene	9.95	91	3638780	13.800	ppbv	100
54) 1,2-Dibromoethane	10.76	107	2477961	17.315	ppbv	97
57) Chlorobenzene	12.30	112	3806568	16.545	ppbv	98

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

Data File : VL033181.D

Acq On : 6 Feb 2019 17:10

Operator : SY/AP

Sample : K1289-01

Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument : MSVOA_L
ClientSampleId : 1000

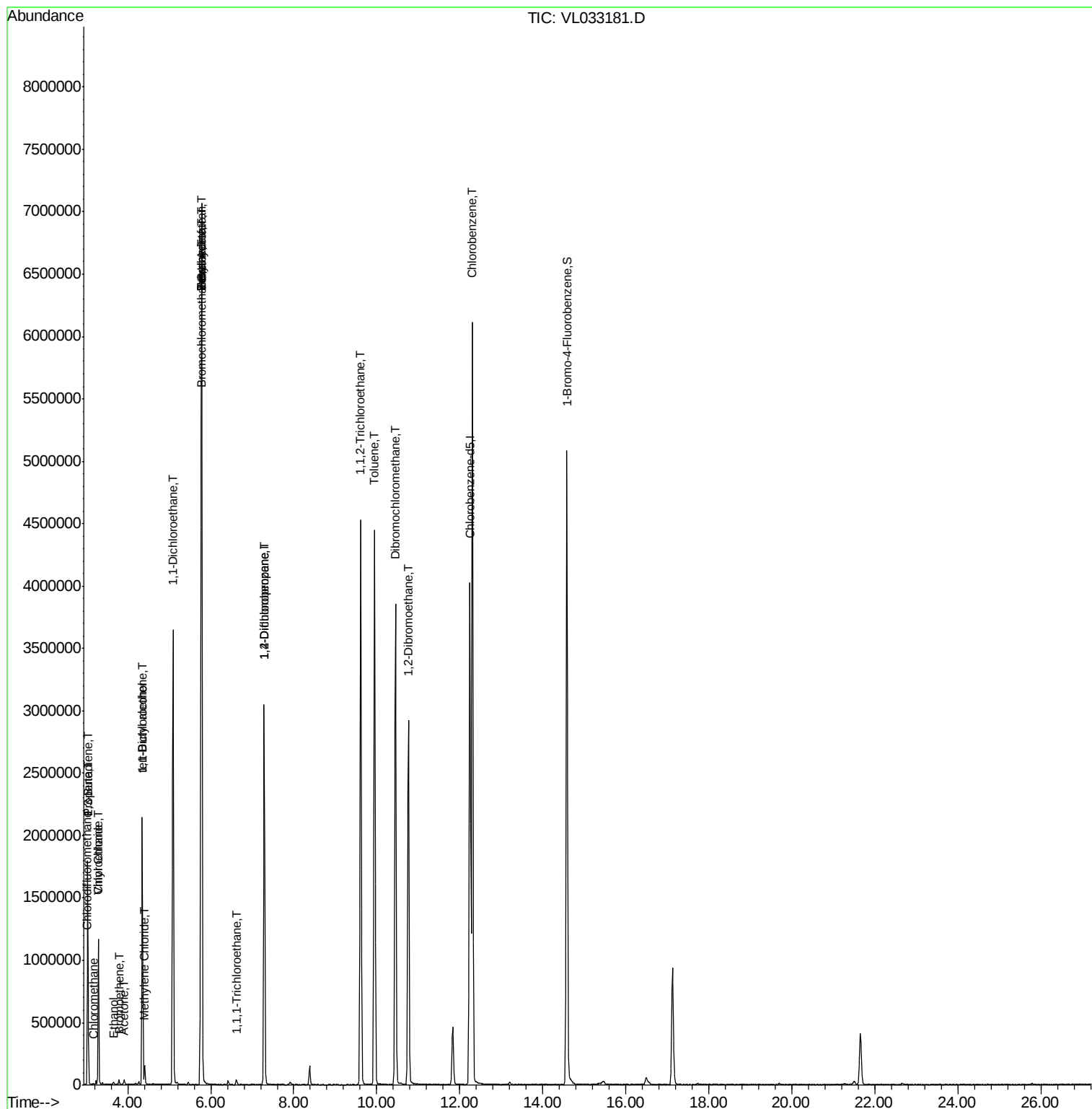
Quant Time: Feb 20 06:18:37 2019

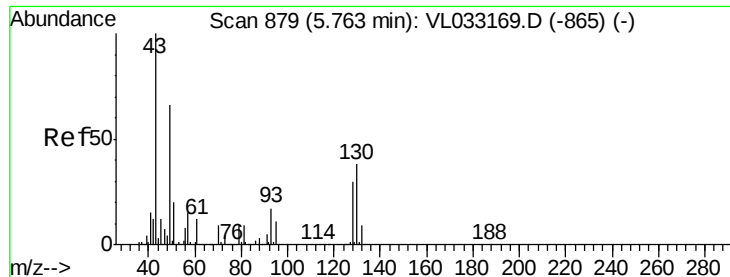
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL020519AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LWed Feb 20 06:00:52 2019

QLast Update : Wed Feb 20 06:00:52 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampleId :

1000

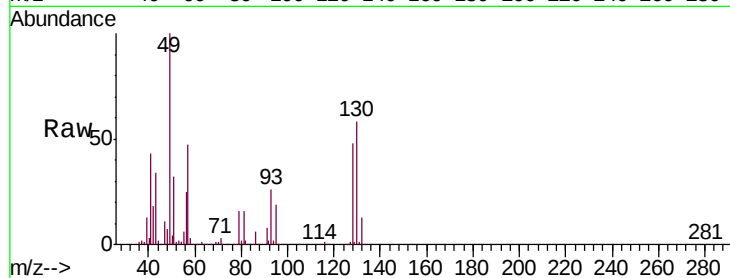
Tgt Ion: 49 Resp: 886770

Ion Ratio Lower Upper

49 100

128 46.3 23.6 71.0

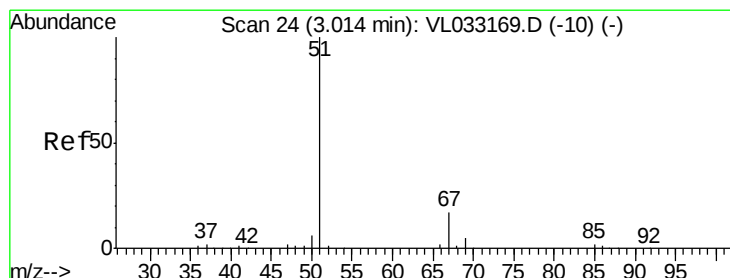
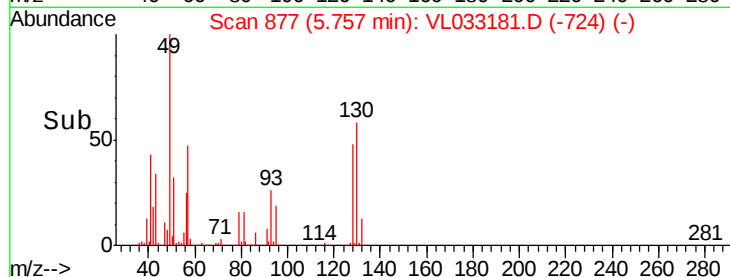
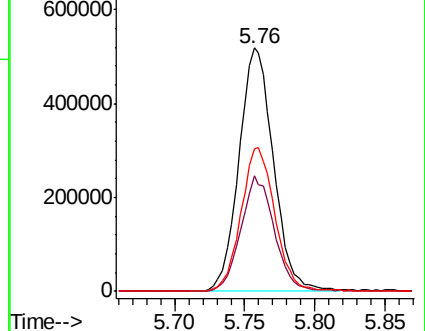
130 58.7 30.3 91.0



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



#3

Chlorodifluoromethane

Concen: 0.043 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.00 min

Lab File: VL033181.D

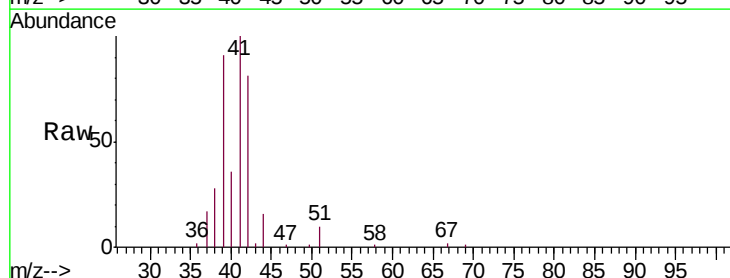
Acq: 6 Feb 2019 17:10

Tgt Ion: 51 Resp: 4627

Ion Ratio Lower Upper

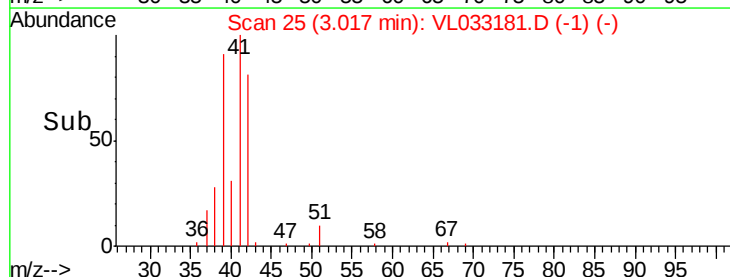
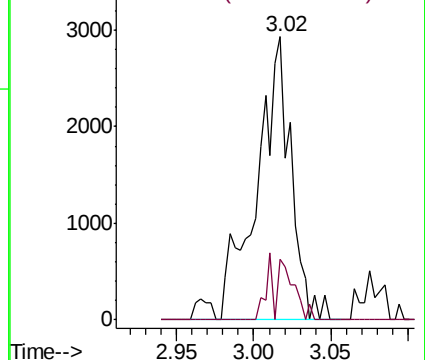
51 100

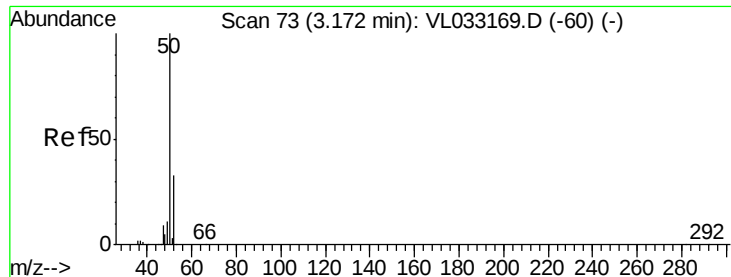
67 14.2 14.0 21.0



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.034 ppbv

RT: 3.17 min Scan# 71

Delta R.T. -0.01 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampleId :

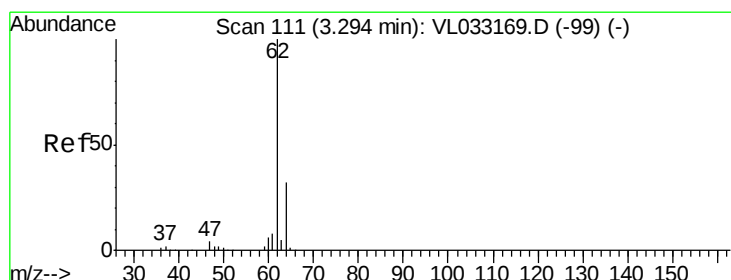
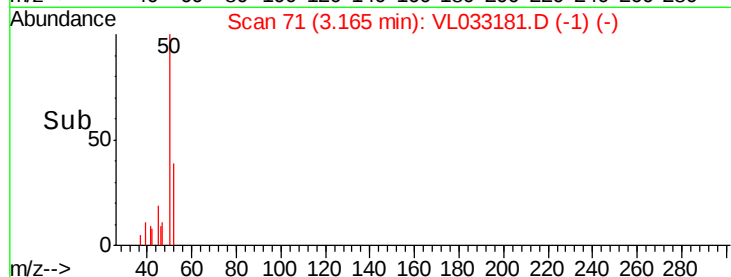
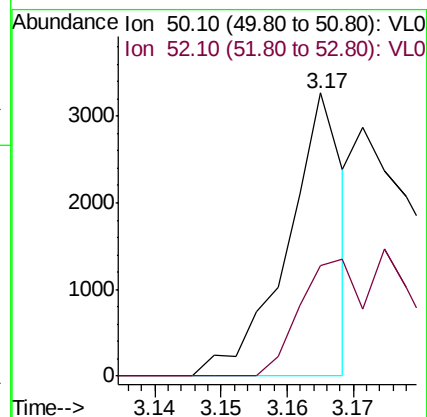
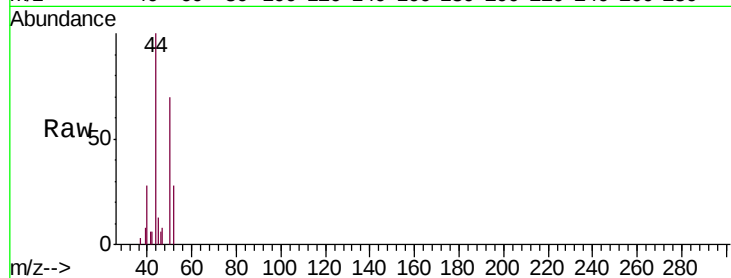
1000

Tgt Ion: 50 Resp: 1928

Ion Ratio Lower Upper

50 100

52 39.2 26.5 39.7



#5

Vinyl Chloride

Concen: 16.175 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033181.D

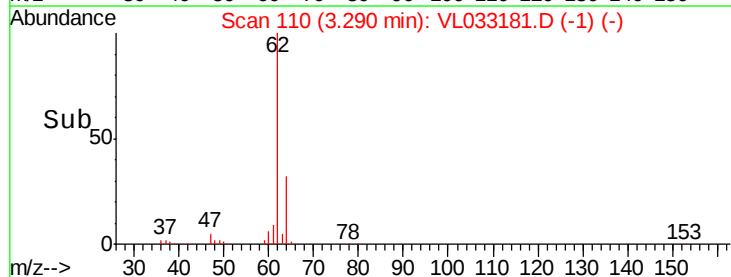
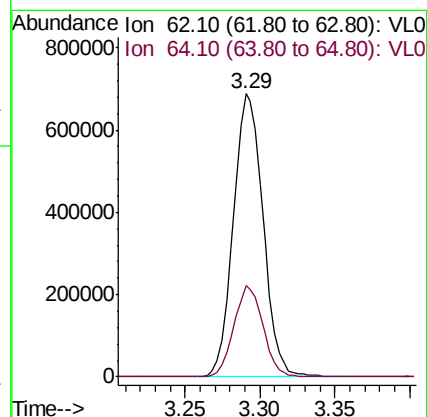
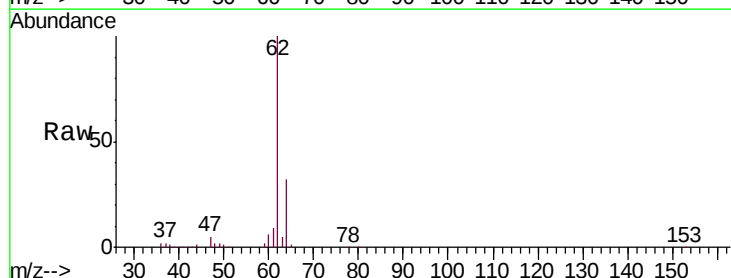
Acq: 6 Feb 2019 17:10

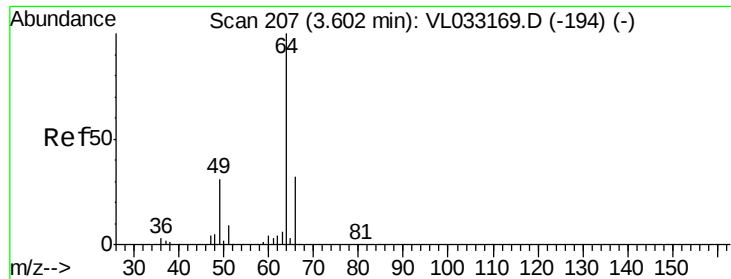
Tgt Ion: 62 Resp: 952233

Ion Ratio Lower Upper

62 100

64 32.4 25.6 38.4





#7

Chloroethane

Concen: 15.513 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.31 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampleId :

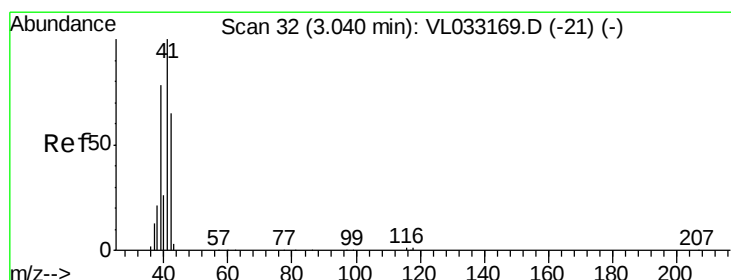
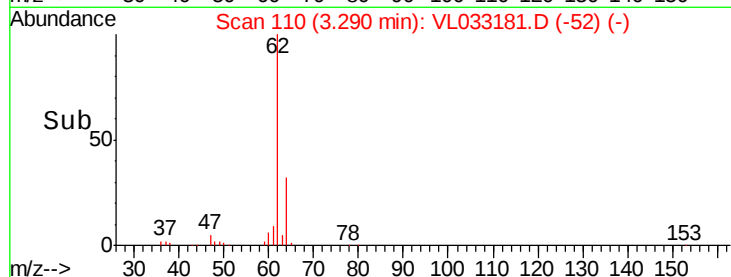
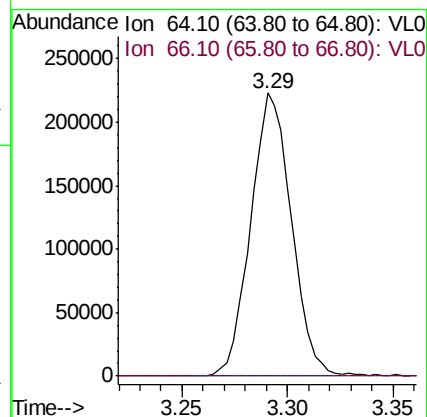
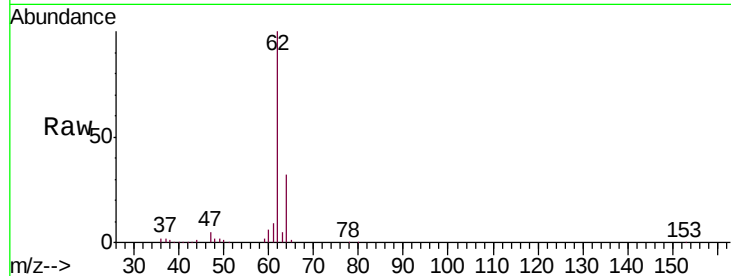
1000

Tgt Ion: 64 Resp: 298568

Ion Ratio Lower Upper

64 100

66 0.0 26.0 39.0#



#9

Propene

Concen: 13.806 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.00 min

Lab File: VL033181.D

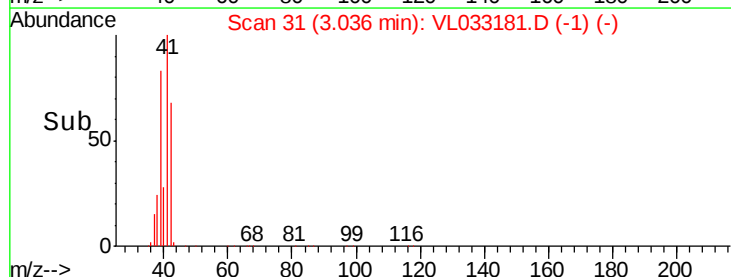
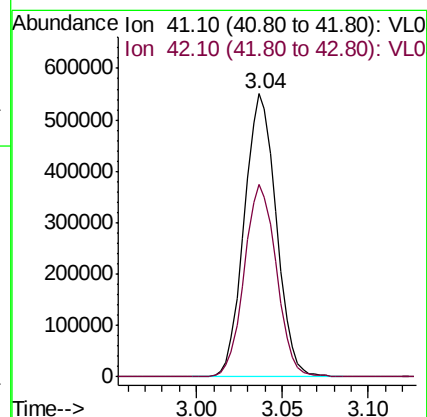
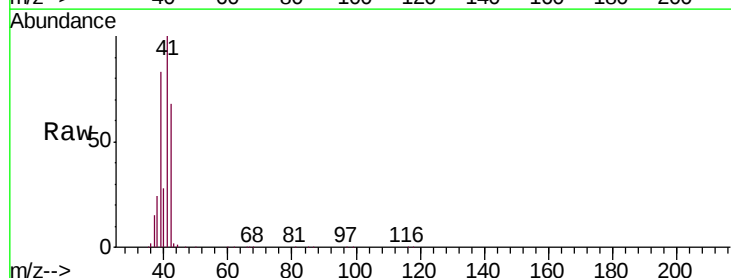
Acq: 6 Feb 2019 17:10

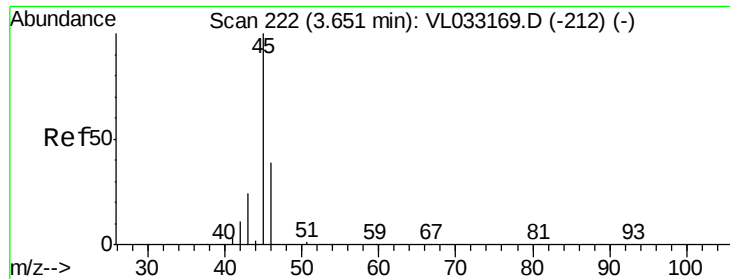
Tgt Ion: 41 Resp: 712086

Ion Ratio Lower Upper

41 100

42 68.4 55.0 82.6





#13

Ethanol

Concen: 0.593 ppbv

RT: 3.66 min Scan# 224

Delta R.T. 0.01 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampled :

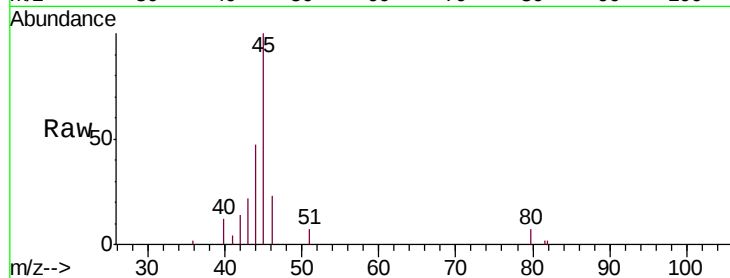
1000

Tgt Ion: 45 Resp: 10397

Ion Ratio Lower Upper

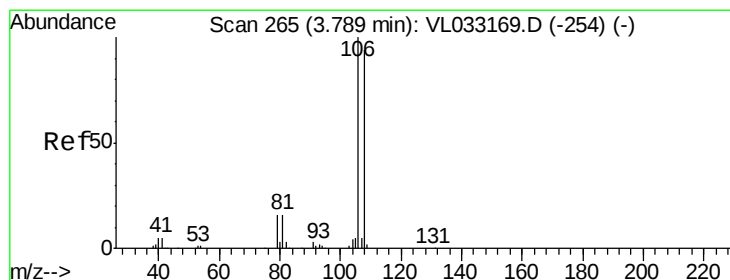
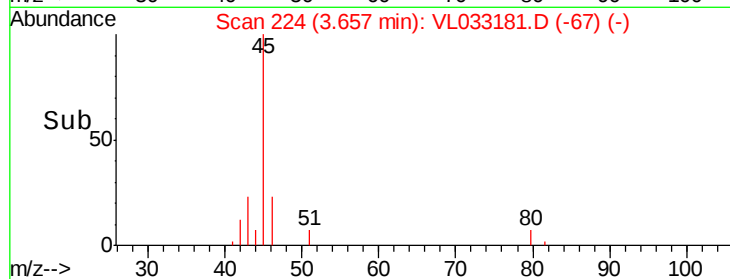
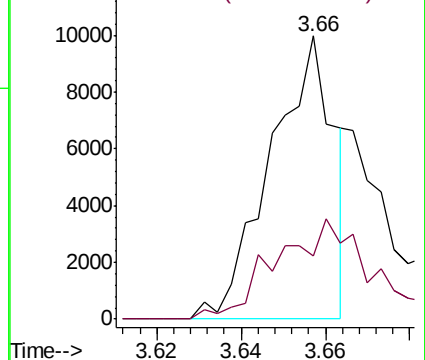
45 100

46 56.1 15.0 60.2



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0



#14

Bromoethene

Concen: 0.475 ppbv

RT: 3.79 min Scan# 266

Delta R.T. 0.00 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

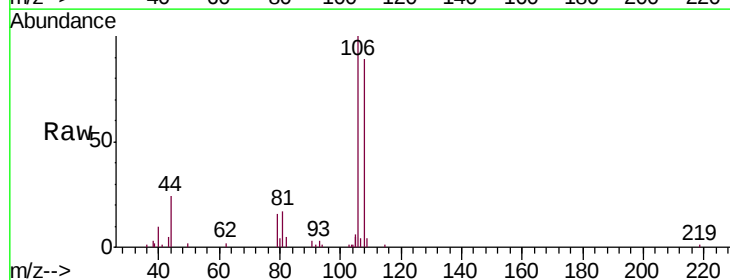
Tgt Ion: 108 Resp: 19472

Ion Ratio Lower Upper

108 100

106 105.2 86.0 129.0

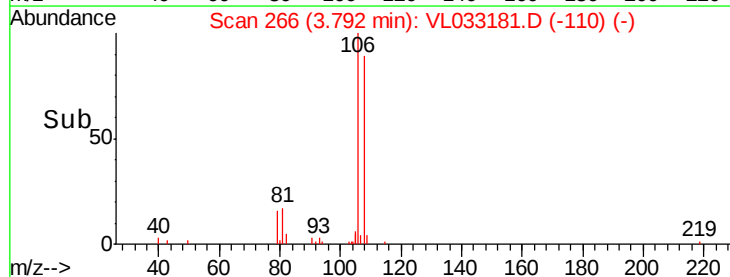
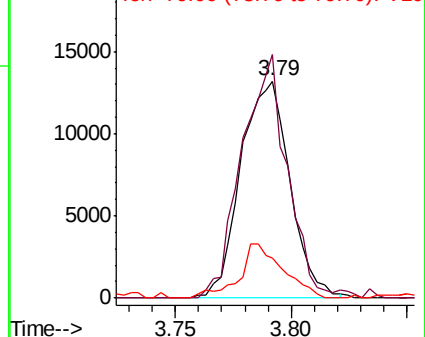
79 22.2 14.5 21.7#

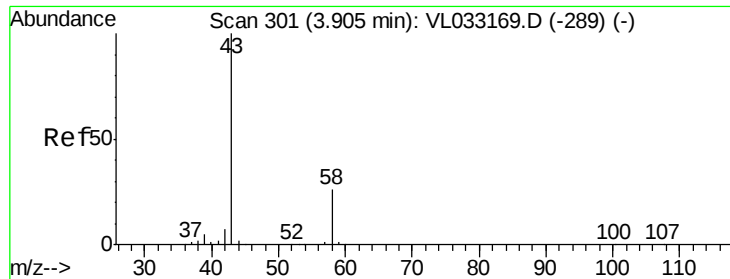


Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0





#15

Acetone

Concen: 0.329 ppbv

RT: 3.91 min Scan# 303

Delta R.T. 0.01 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampleId :

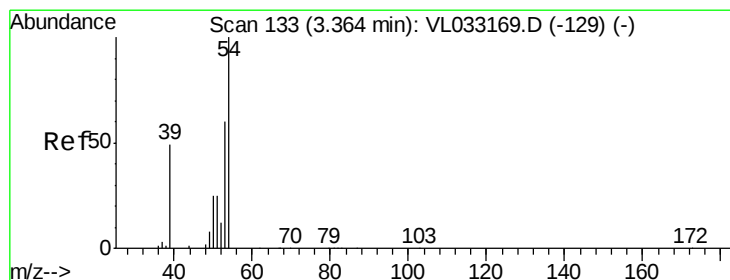
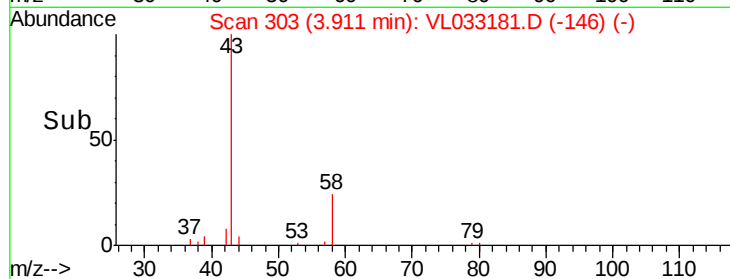
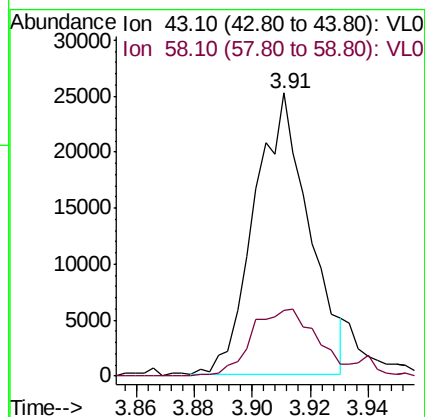
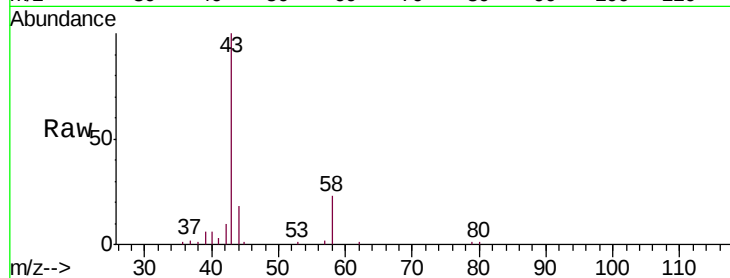
1000

Tgt Ion: 43 Resp: 32868

Ion Ratio Lower Upper

43 100

58 31.4 21.1 31.7



#16

1,3-Butadiene

Concen: 12.670 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.33 min

Lab File: VL033181.D

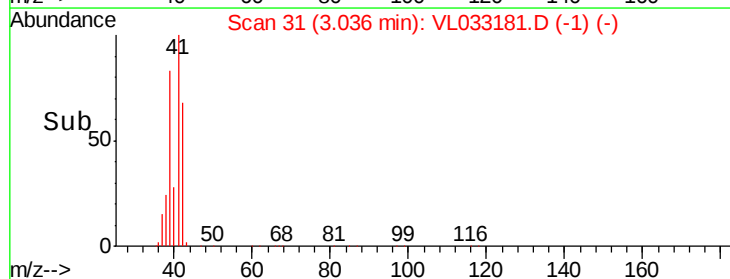
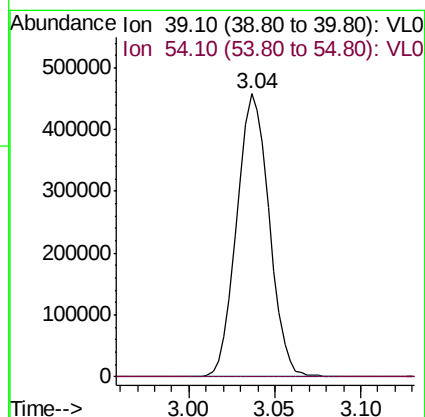
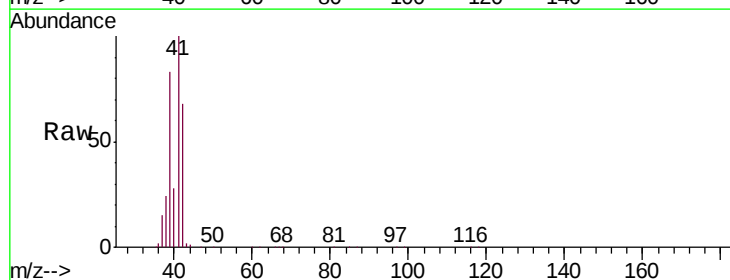
Acq: 6 Feb 2019 17:10

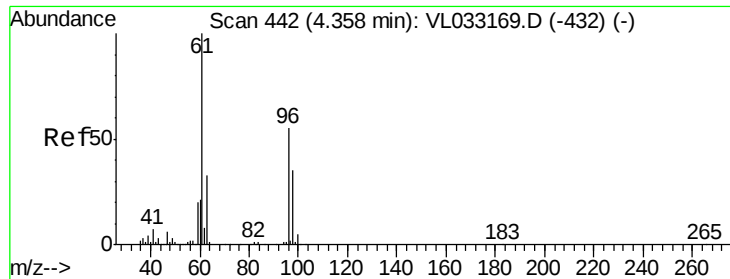
Tgt Ion: 39 Resp: 600841

Ion Ratio Lower Upper

39 100

54 0.0 71.3 106.9#

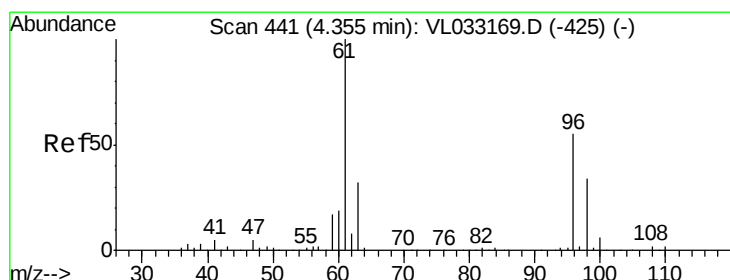
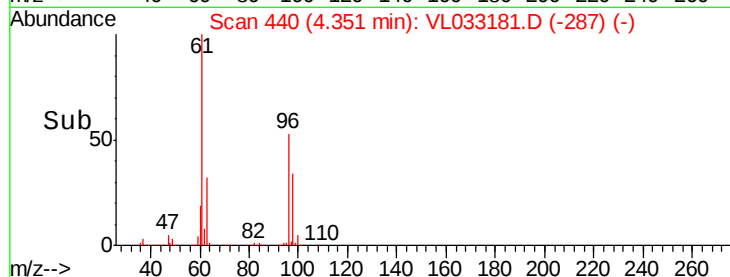
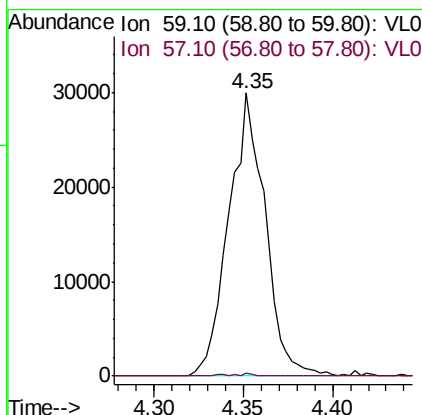
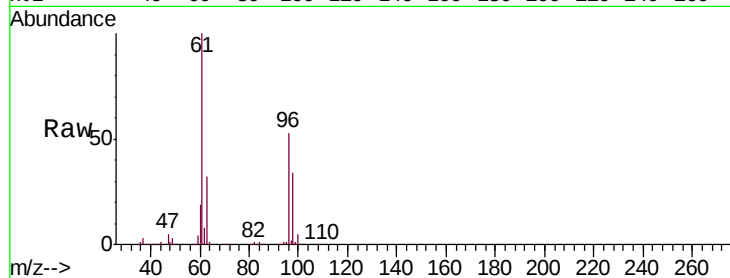




#17
tert-Butyl alcohol
Concen: 2.220 ppbv
RT: 4.35 min Scan# 440
Delta R.T. -0.01 min
Lab File: VL033181.D
Acq: 6 Feb 2019 17:10

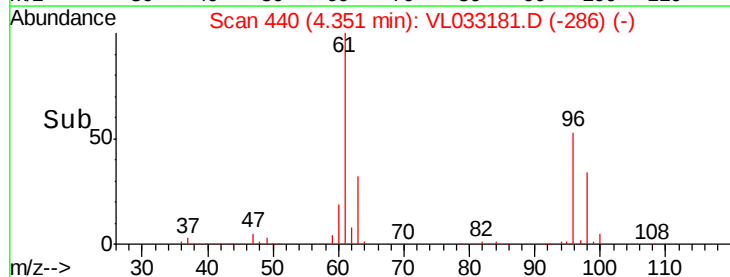
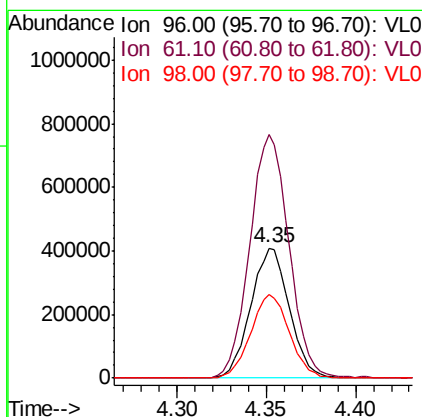
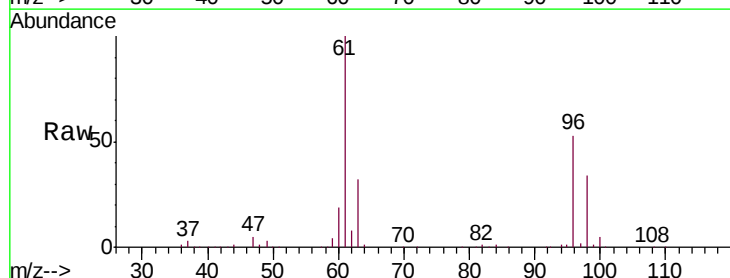
Instrument :
MSVOA_L
ClientSampleId :
1000

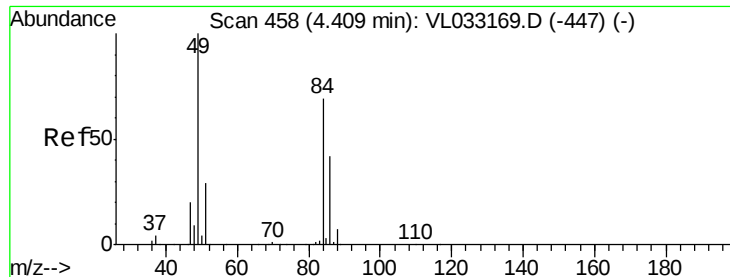
Tgt Ion: 59 Resp: 42602
Ion Ratio Lower Upper
59 100
57 0.5 7.6 11.4#



#18
1,1-Dichloroethene
Concen: 14.537 ppbv
RT: 4.35 min Scan# 440
Delta R.T. -0.00 min
Lab File: VL033181.D
Acq: 6 Feb 2019 17:10

Tgt Ion: 96 Resp: 619014
Ion Ratio Lower Upper
96 100
61 187.2 145.0 217.6
98 64.4 50.0 75.0

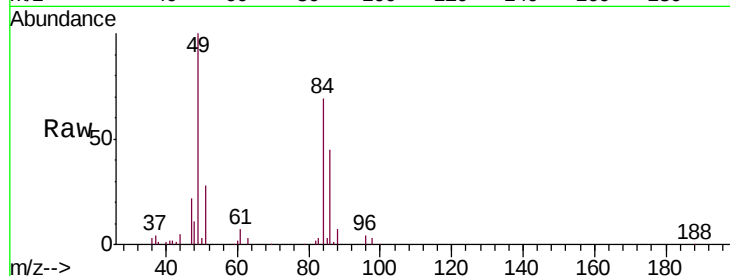




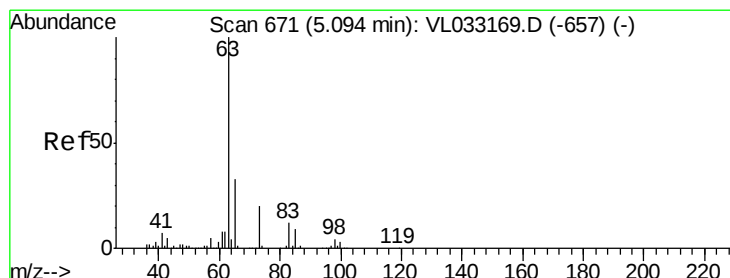
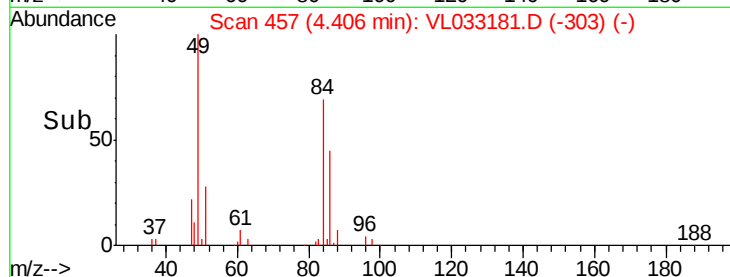
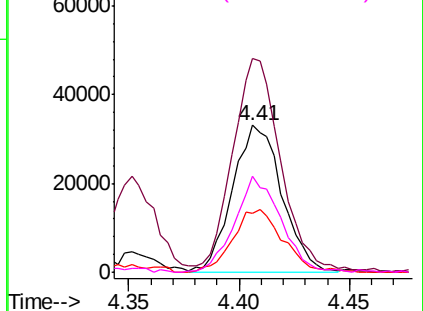
#20
Methylene Chloride
Concen: 1.298 ppbv
RT: 4.41 min Scan# 457
Delta R.T. -0.00 min
Lab File: VL033181.D
Acq: 6 Feb 2019 17:10

Instrument :
MSVOA_L
ClientSampleId :
1000

Tgt Ion: 84 Resp: 51579
Ion Ratio Lower Upper
84 100
49 144.6 115.8 173.8
51 40.5 33.0 49.6
86 64.8 48.2 72.2

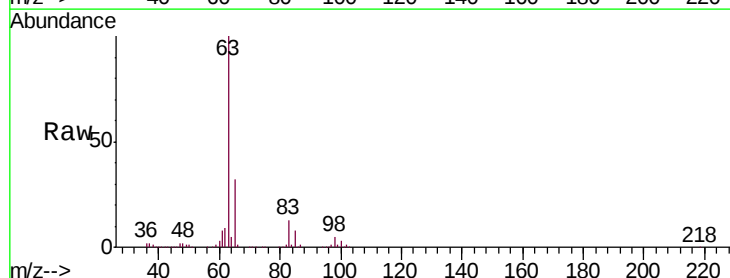


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

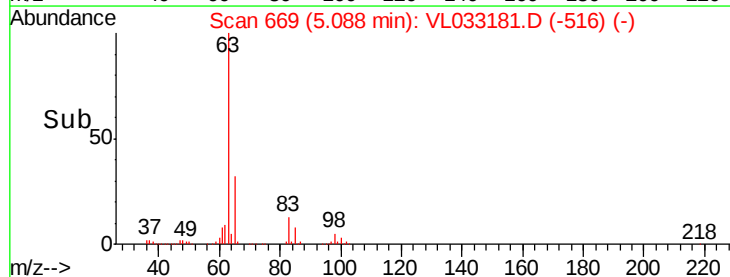
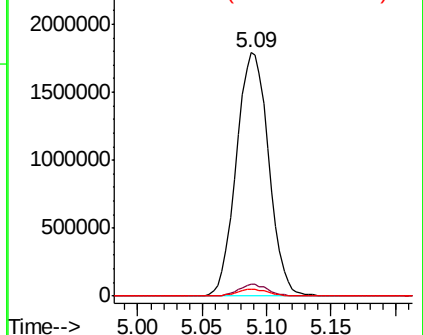


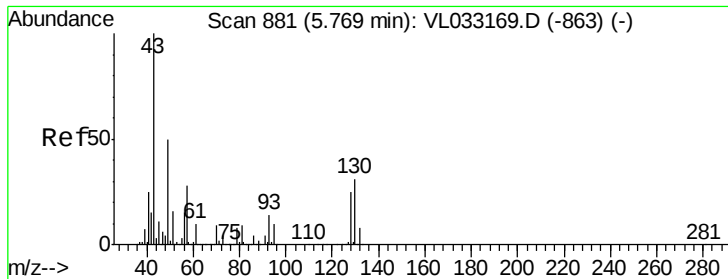
#24
1,1-Dichloroethane
Concen: 25.550 ppbv
RT: 5.09 min Scan# 669
Delta R.T. -0.01 min
Lab File: VL033181.D
Acq: 6 Feb 2019 17:10

Tgt Ion: 63 Resp: 3129227
Ion Ratio Lower Upper
63 100
98 4.8 2.1 6.5
100 2.7 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



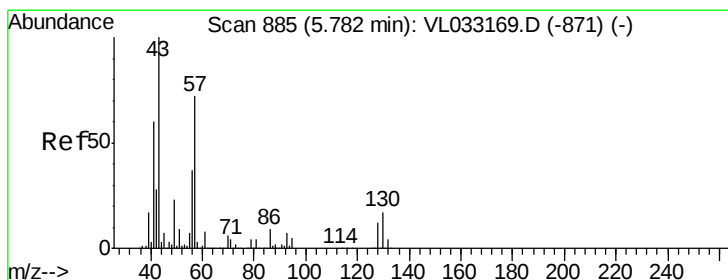
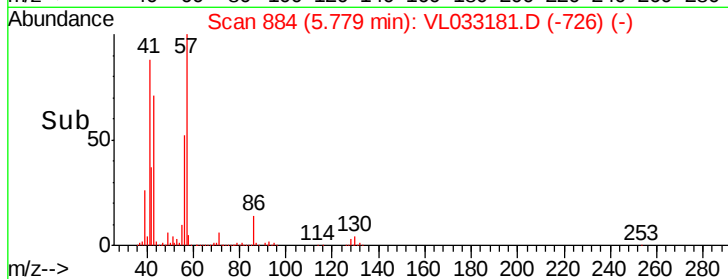
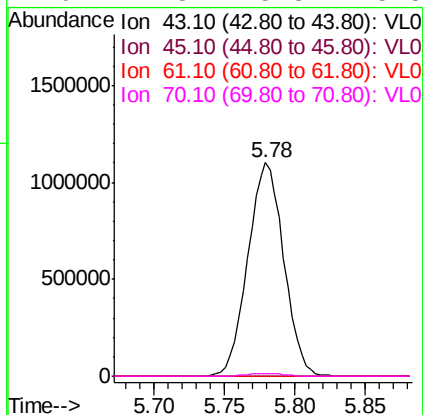
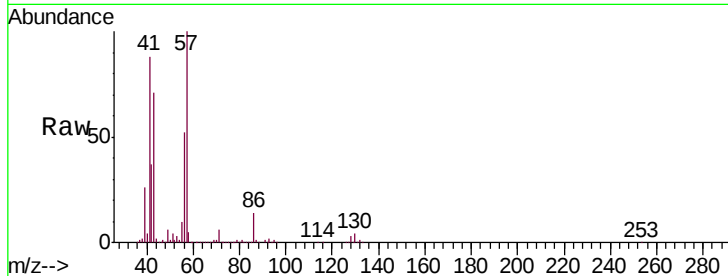


#25
Ethyl Acetate
Concen: 8.733 ppbv
RT: 5.78 min Scan# 884
Delta R.T. 0.01 min
Lab File: VL033181.D
Acq: 6 Feb 2019 17:10

Instrument :
MSVOA_L
ClientSampleId :
1000

Tgt Ion: 43 Resp: 1961611

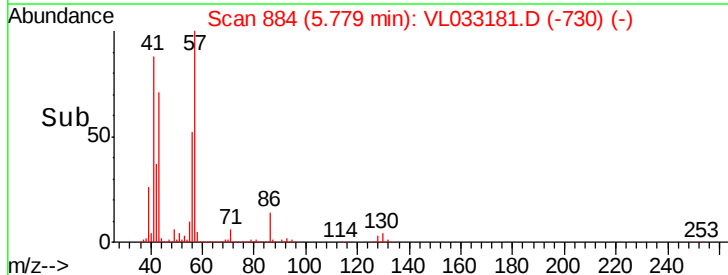
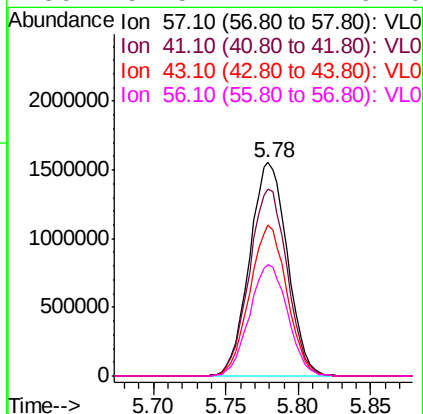
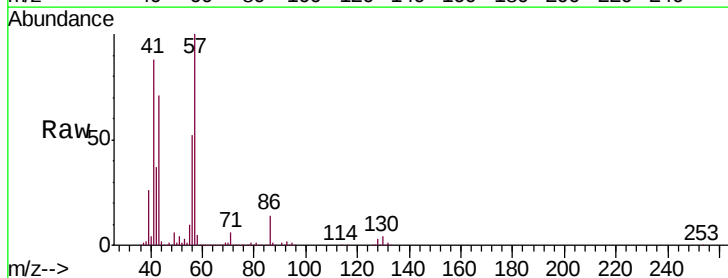
Ion	Ratio	Lower	Upper
43	100		
45	0.1	7.9	11.9#
61	0.1	7.5	11.3#
70	1.3	5.8	8.8#

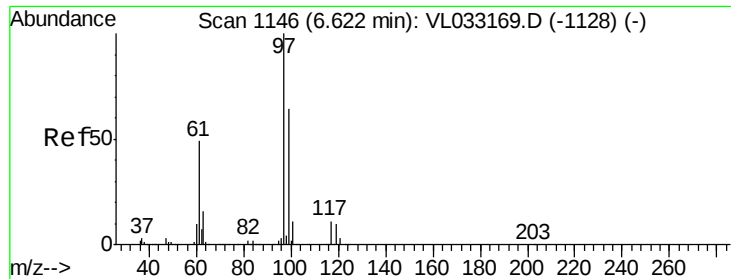


#26
Hexane
Concen: 26.825 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.00 min
Lab File: VL033181.D
Acq: 6 Feb 2019 17:10

Tgt Ion: 57 Resp: 2828753

Ion	Ratio	Lower	Upper
57	100		
41	88.0	69.4	104.2
43	69.5	176.7	265.1#
56	52.5	41.4	62.0





#32

1,1,1-Trichloroethane

Concen: 0.135 ppbv

RT: 6.62 min Scan# 1146

Delta R.T. -0.00 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampleId :

1000

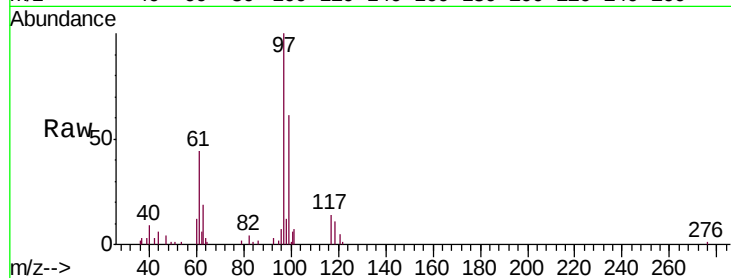
Tgt Ion: 97 Resp: 23980

Ion Ratio Lower Upper

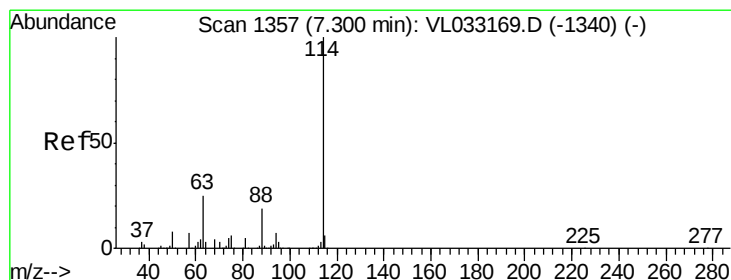
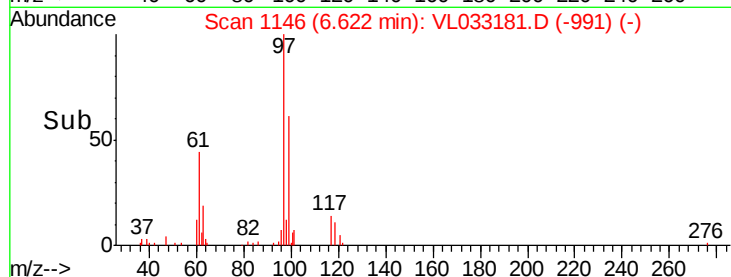
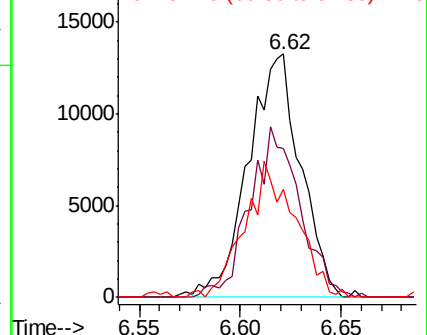
97 100

99 67.3 51.4 77.2

61 55.1 38.8 58.2



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



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.01 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

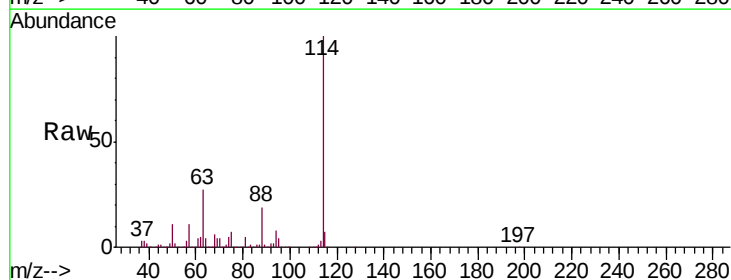
Tgt Ion: 114 Resp: 2197099

Ion Ratio Lower Upper

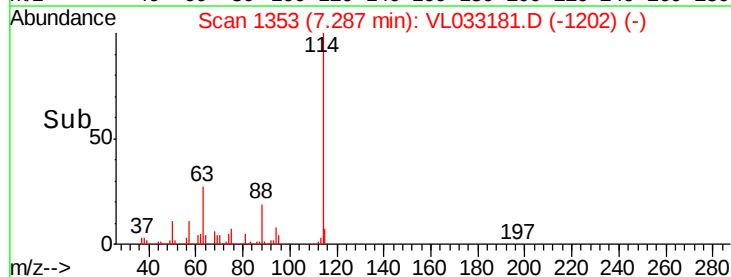
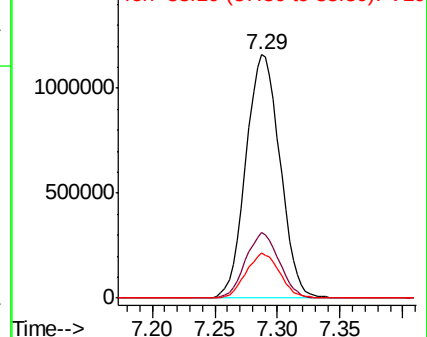
114 100

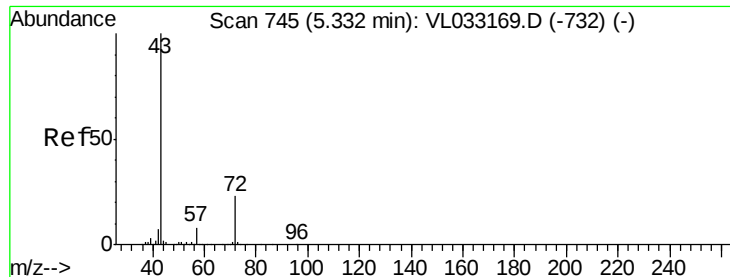
63 26.5 20.8 31.2

88 18.3 14.6 22.0



Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0

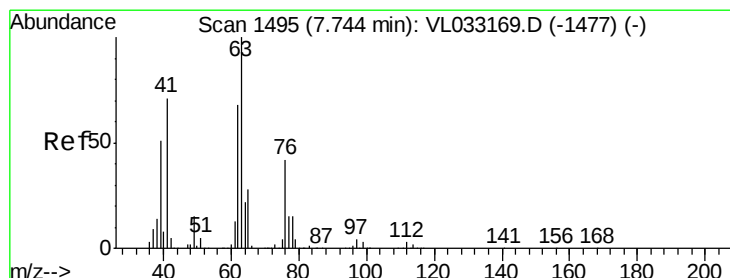
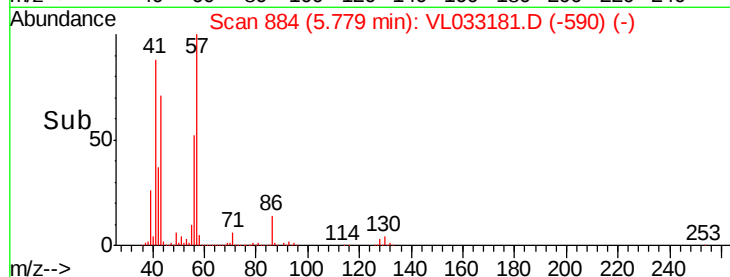
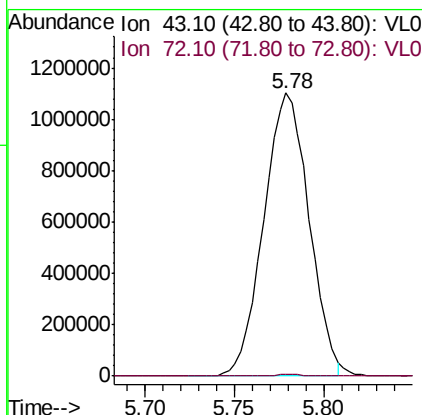
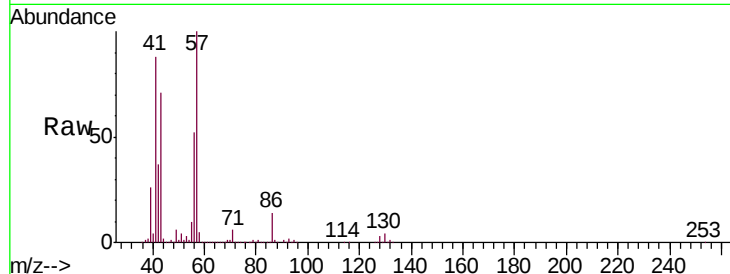




#34
 2-Butanone
 Concen: 13.977 ppbv
 RT: 5.78 min Scan# 884
 Delta R.T. 0.45 min
 Lab File: VL033181.D
 Acq: 6 Feb 2019 17:10

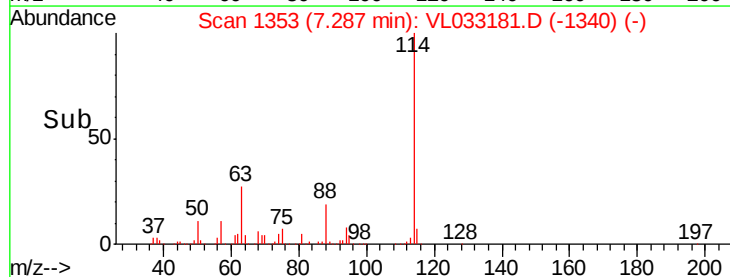
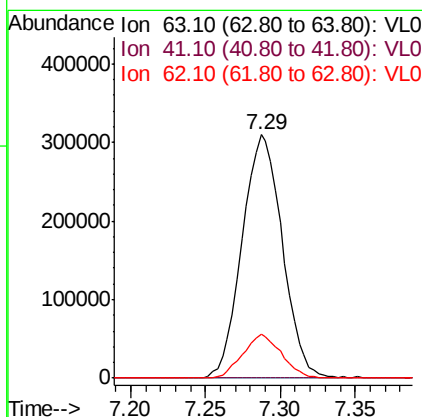
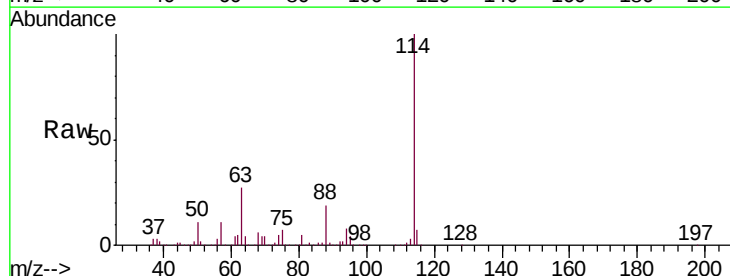
Instrument :
 MSVOA_L
 ClientSampleId :
 1000

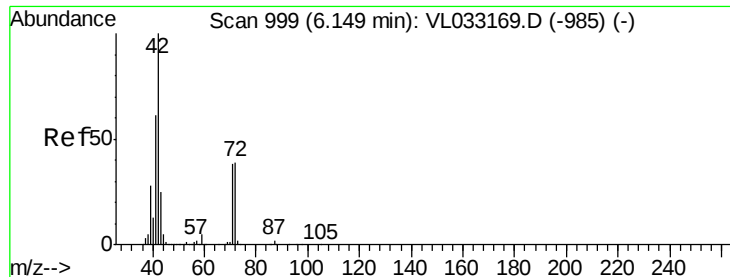
Tgt Ion: 43 Resp: 1947820
 Ion Ratio Lower Upper
 43 100
 72 0.0 17.8 26.6#



#39
 1,2-Dichloropropane
 Concen: 6.603 ppbv
 RT: 7.29 min Scan# 1353
 Delta R.T. -0.46 min
 Lab File: VL033181.D
 Acq: 6 Feb 2019 17:10

Tgt Ion: 63 Resp: 580654
 Ion Ratio Lower Upper
 63 100
 41 0.1 56.4 84.6#
 62 17.9 54.2 81.4#





#41

Tetrahydrofuran

Concen: 11.962 ppbv

RT: 5.78 min Scan# 884

Delta R.T. -0.37 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampleId :

1000

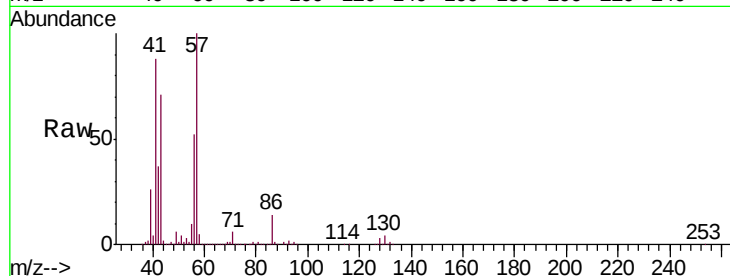
Tgt Ion: 42 Resp: 1030577

Ion Ratio Lower Upper

42 100

72 0.9 31.4 47.2#

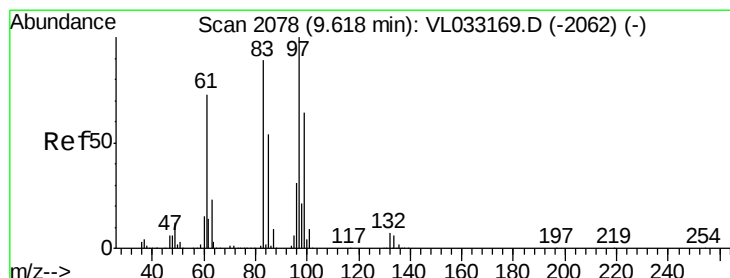
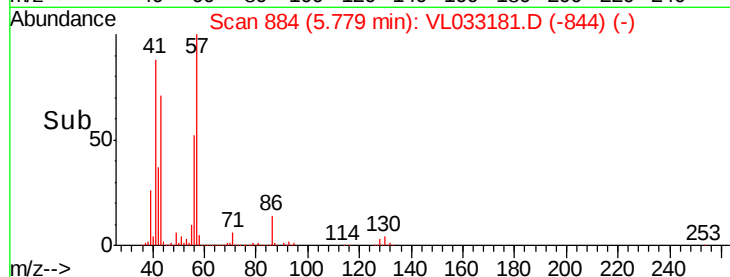
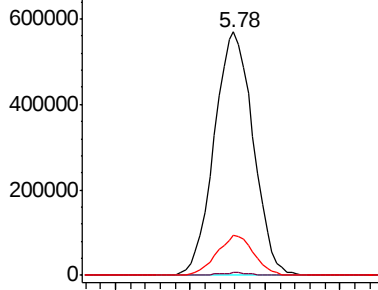
71 15.8 30.2 45.2#



Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0



#47

1,1,2-Trichloroethane

Concen: 17.897 ppbv

RT: 9.61 min Scan# 2076

Delta R.T. -0.01 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Tgt Ion: 97 Resp: 1632113

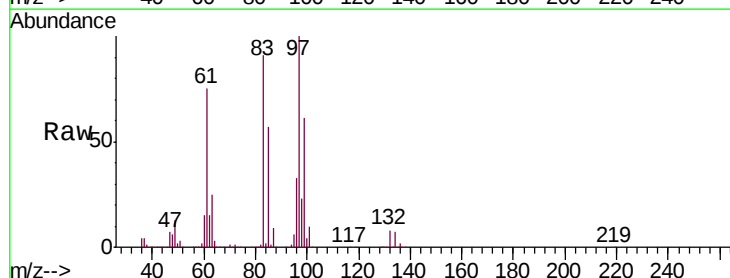
Ion Ratio Lower Upper

97 100

83 91.2 71.4 107.2

85 57.2 43.5 65.3

99 60.8 51.4 77.0

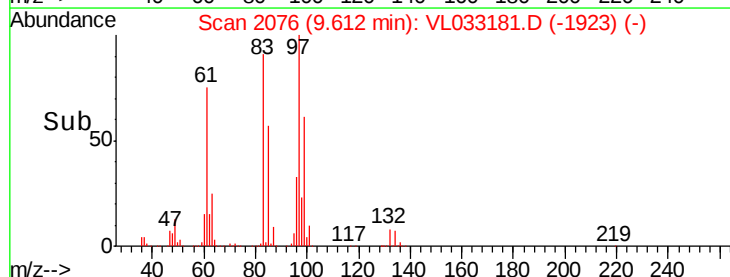
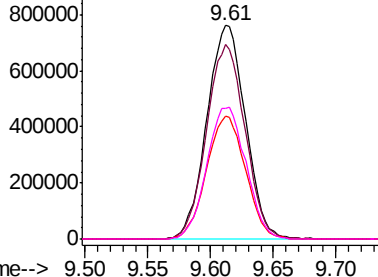


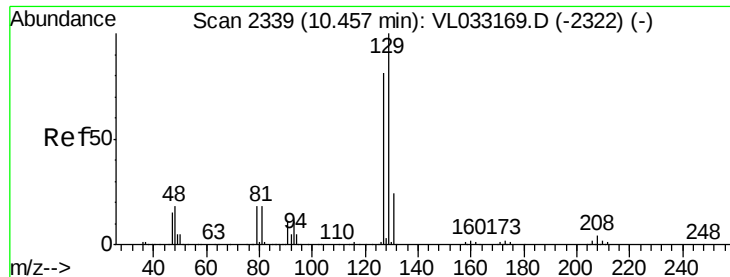
Abundance Ion 97.00 (96.70 to 97.70): VL0

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





#48

Dibromochloromethane

Concen: 16.862 ppbv

RT: 10.45 min Scan# 2336

Delta R.T. -0.01 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampleId :

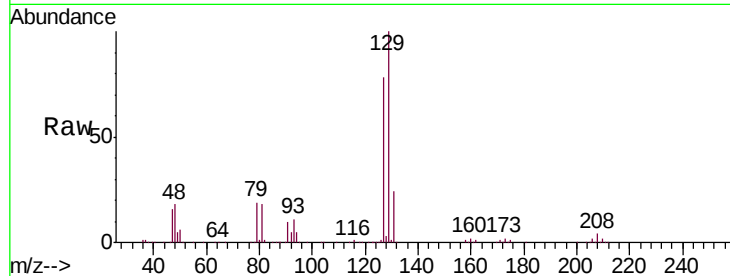
1000

Tgt Ion:129 Resp: 2422637

Ion Ratio Lower Upper

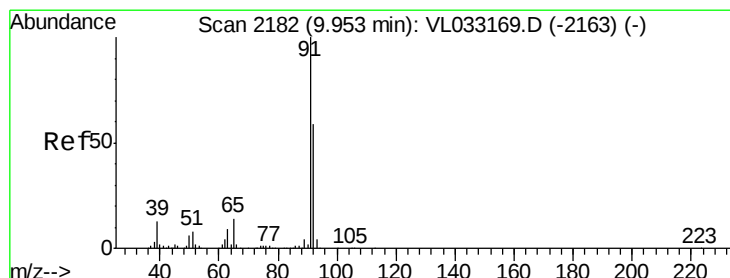
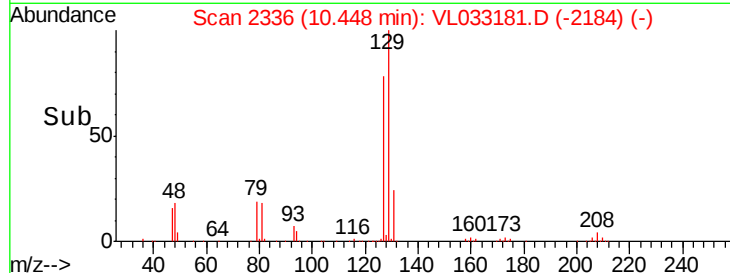
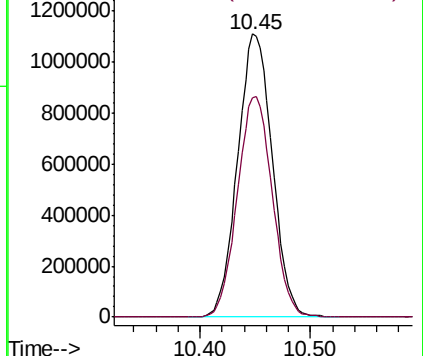
129 100

127 78.5 39.1 117.3



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#53

Toluene

Concen: 13.800 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.01 min

Lab File: VL033181.D

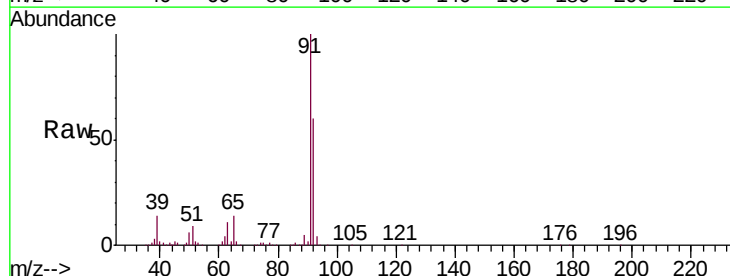
Acq: 6 Feb 2019 17:10

Tgt Ion: 91 Resp: 3638780

Ion Ratio Lower Upper

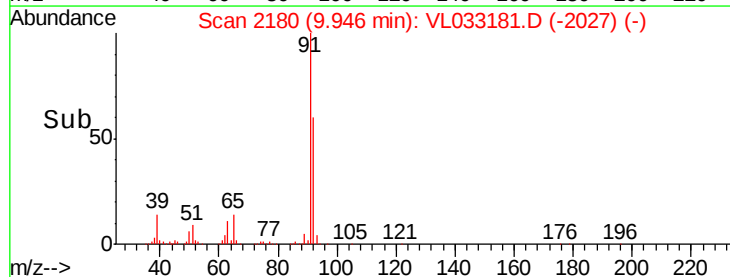
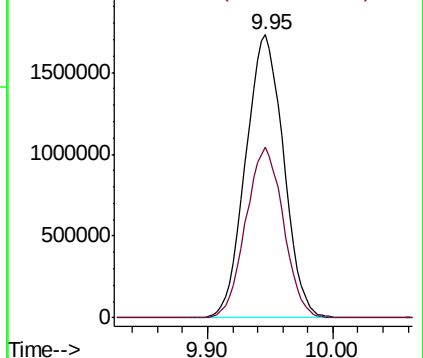
91 100

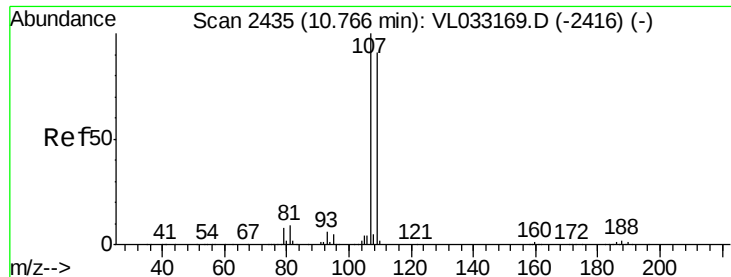
92 59.9 48.0 72.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

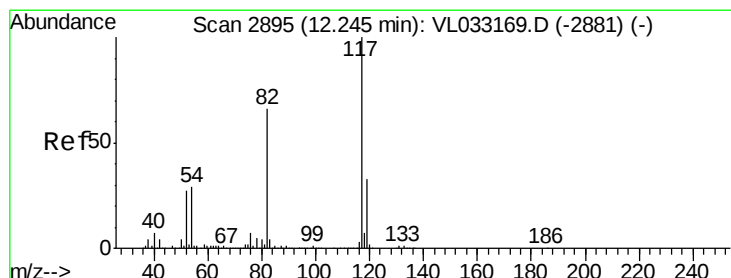
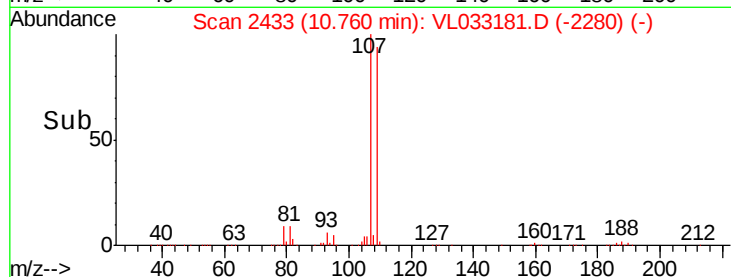
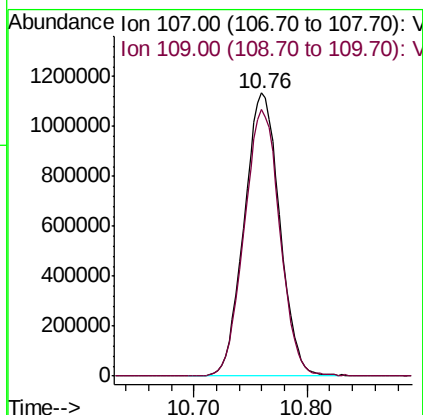
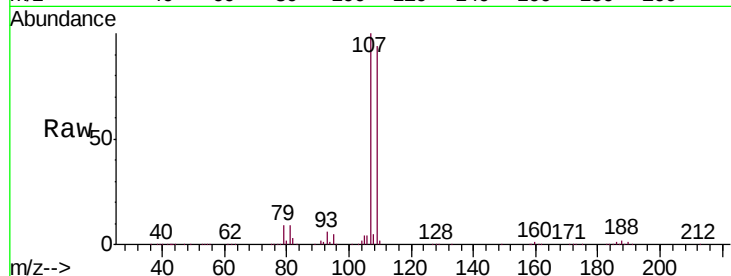




#54
 1,2-Dibromoethane
 Concen: 17.315 ppbv
 RT: 10.76 min Scan# 2433
 Delta R.T. -0.01 min
 Lab File: VL033181.D
 Acq: 6 Feb 2019 17:10

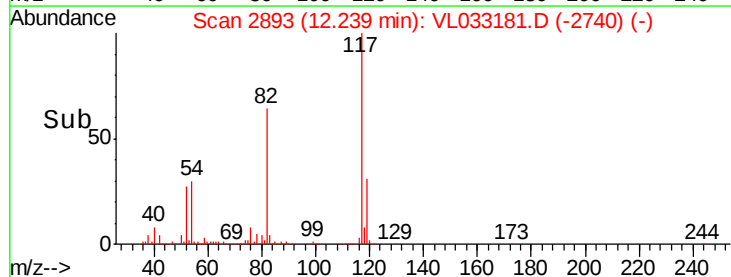
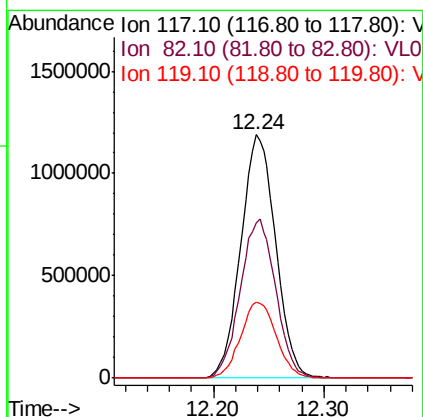
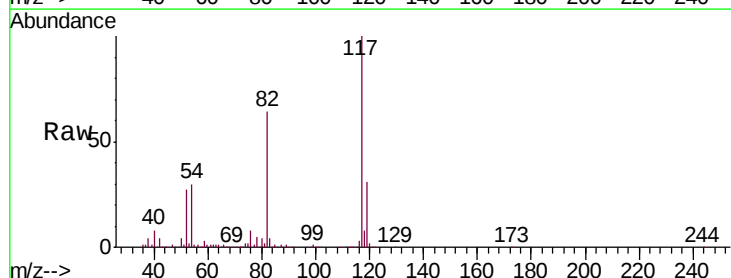
Instrument :
 MSVOA_L
 ClientSampleId :
 1000

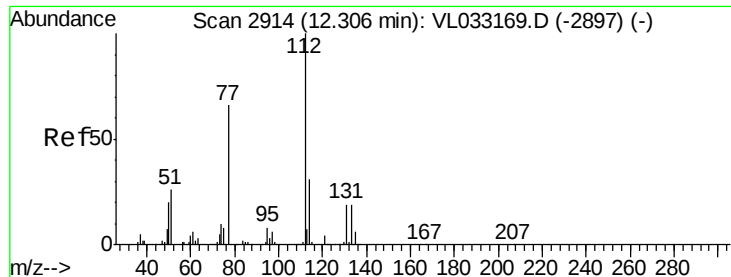
Tgt Ion:107 Resp: 2477961
 Ion Ratio Lower Upper
 107 100
 109 94.2 73.2 109.8



#55
 Chlorobenzene-d5
 Concen: 10.000 ppbv
 RT: 12.24 min Scan# 2893
 Delta R.T. -0.01 min
 Lab File: VL033181.D
 Acq: 6 Feb 2019 17:10

Tgt Ion:117 Resp: 2600113
 Ion Ratio Lower Upper
 117 100
 82 66.5 53.8 80.8
 119 32.2 46.9 70.3#





#57

Chlorobenzene

Concen: 16.545 ppbv

RT: 12.30 min Scan# 2913

Delta R.T. -0.00 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

Instrument :

MSVOA_L

ClientSampleId :

1000

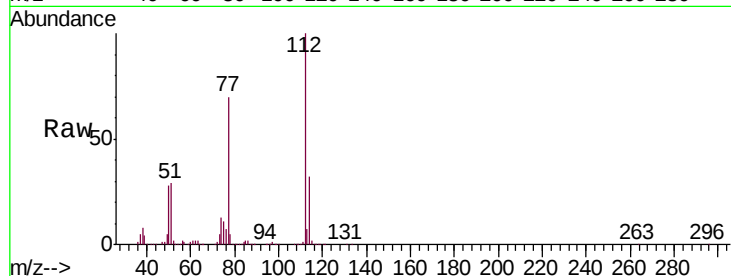
Tgt Ion: 112 Resp: 3806568

Ion Ratio Lower Upper

112 100

77 69.5 54.0 81.0

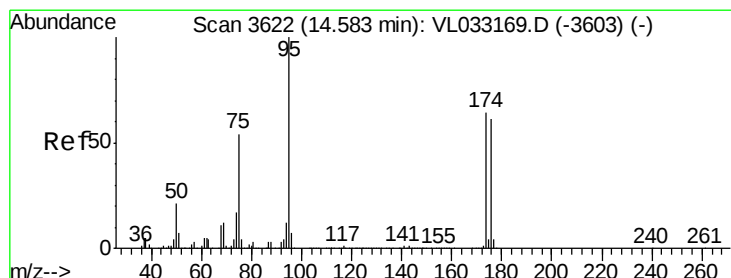
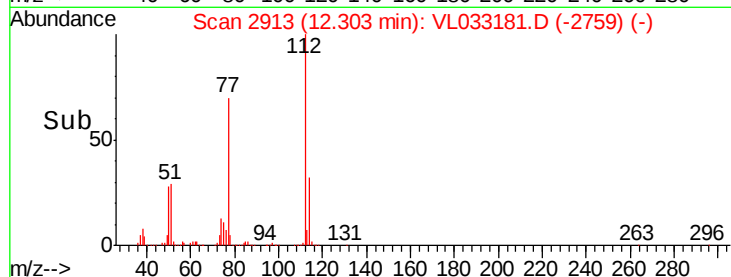
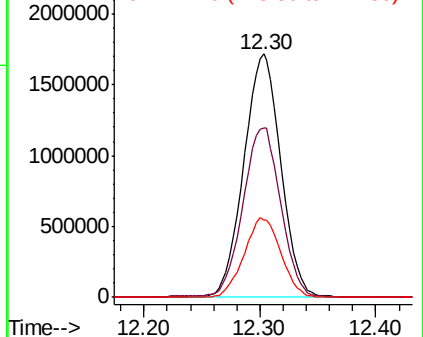
114 31.9 27.9 34.1



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 12.567 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. -0.00 min

Lab File: VL033181.D

Acq: 6 Feb 2019 17:10

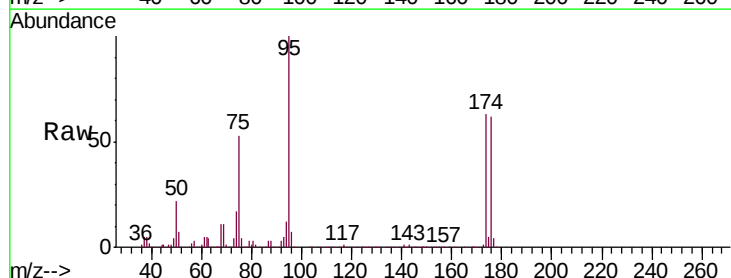
Tgt Ion: 95 Resp: 2546461

Ion Ratio Lower Upper

95 100

174 63.8 51.1 76.7

175 4.6 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

