

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060221\
 Data File : VL037102.D
 Acq On : 2 Jun 2021 15:11
 Operator : SY/AP
 Sample : VIBLK
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jun 03 03:20:51 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 12:00:15 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

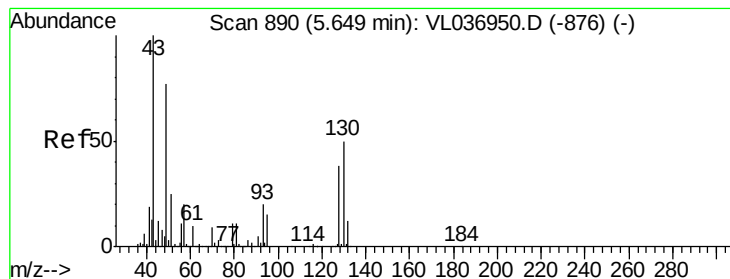
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1375796	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4066944	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3502915	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2711658	10.30	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.98	51	15528	0.062	ppbv #	92
4) Chloromethane	3.13	50	4562	0.053	ppbv	99
8) Dichlorotetrafluoroethane	3.18	85	13784	0.063	ppbv	99
9) Propene	3.00	41	4753	0.053	ppbv #	1
11) Trichlorofluoromethane	3.94	101	7984	0.037	ppbv	90
12) 1,1,2-Trichlorotrifluoroet	4.47	101	6716	0.044	ppbv #	64
13) Ethanol	3.61	45	1315	0.109	ppbv #	35
15) Acetone	3.86	43	33582	0.238	ppbv #	45
18) 1,1-Dichloroethene	4.28	96	3168	0.045	ppbv #	70
20) Methylene Chloride	4.33	84	16613	0.220	ppbv	86
22) trans-1,2-Dichloroethene	4.87	96	2510	0.037	ppbv #	55
25) Ethyl Acetate	5.68	43	29170	0.086	ppbv #	80
26) Hexane	5.67	57	19746	0.114	ppbv #	55
29) Chloroform	5.74	83	9285	0.038	ppbv	95
39) 1,2-Dichloropropane	7.16	63	943779	6.994	ppbv #	26
52) Tetrachloroethene	11.20	164	4473	0.032	ppbv #	65
73) 1,3,5-Trimethylbenzene	15.98	105	24925	0.057	ppbv	99
74) 1,2,4-Trimethylbenzene	16.75	105	31191	0.069	ppbv #	66

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. 0.00 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Instrument :

MSVOA_L

ClientSampleId :

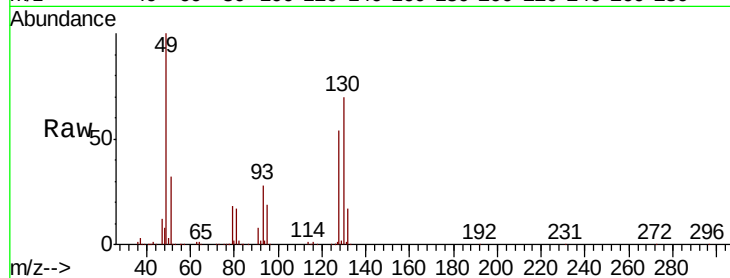
Tot Ion: 49 Resp: 1375796

Ion Ratio Lower Upper

49 100

128 57.0 26.9 80.7

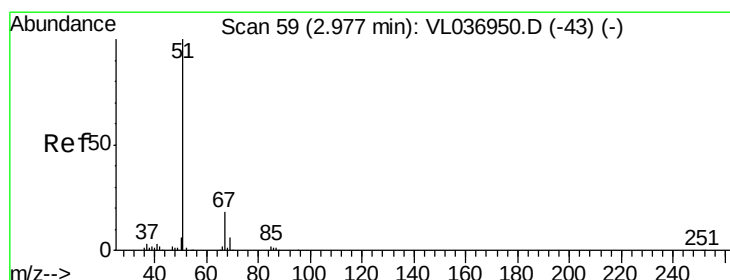
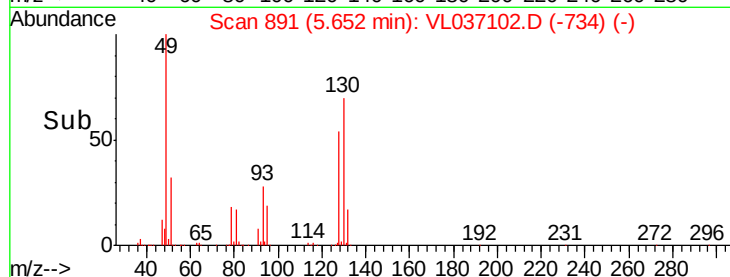
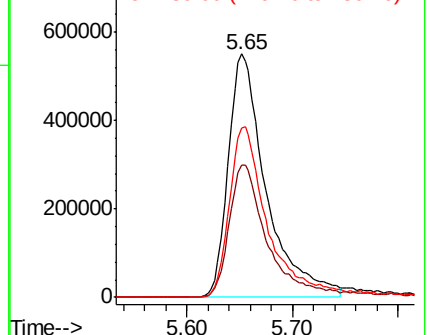
130 75.0 33.8 101.4



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: 0.062 ppbv

RT: 2.98 min Scan# 60

Delta R.T. 0.00 min

Lab File: VL037102.D

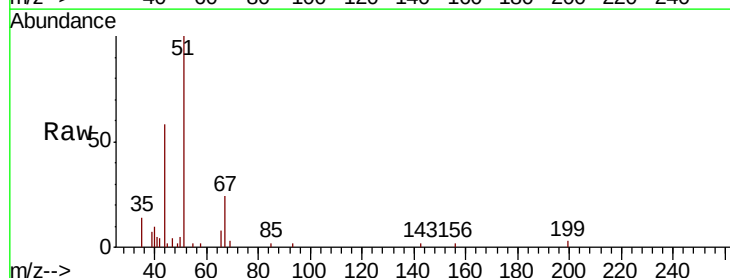
Acq: 2 Jun 2021 15:11

Tgt Ion: 51 Resp: 15528

Ion Ratio Lower Upper

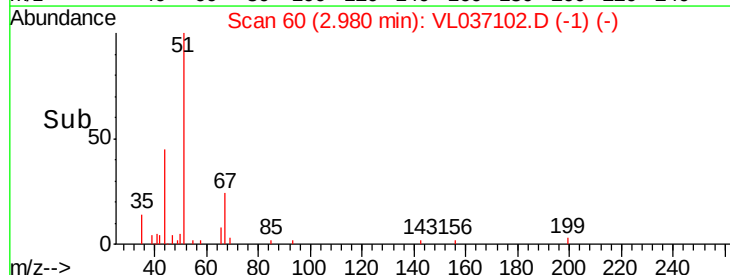
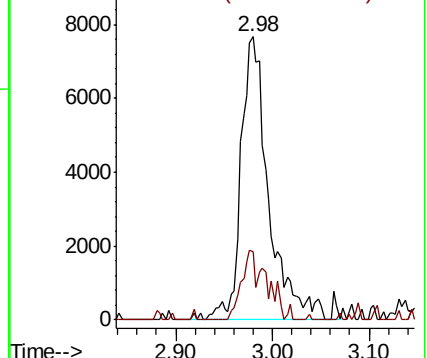
51 100

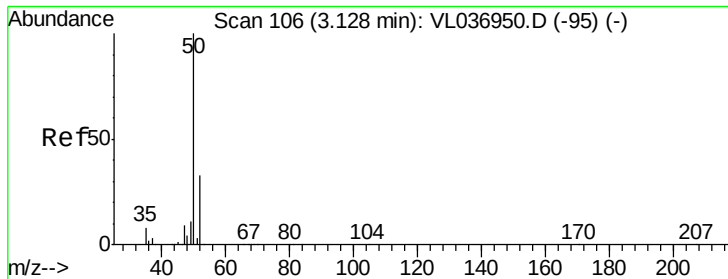
67 22.0 14.6 21.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.053 ppbv

RT: 3.13 min Scan# 108

Delta R.T. 0.01 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Instrument :

MSVOA_L

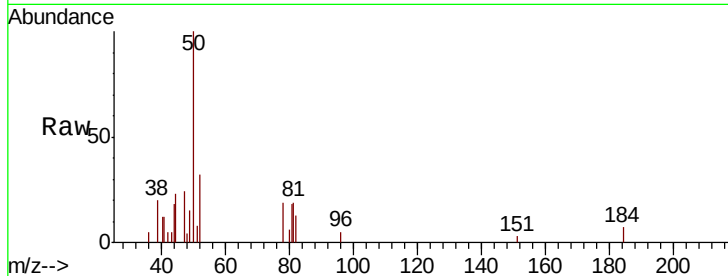
ClientSampleId :

Tot Ion: 50 Resp: 4562

Ion Ratio Lower Upper

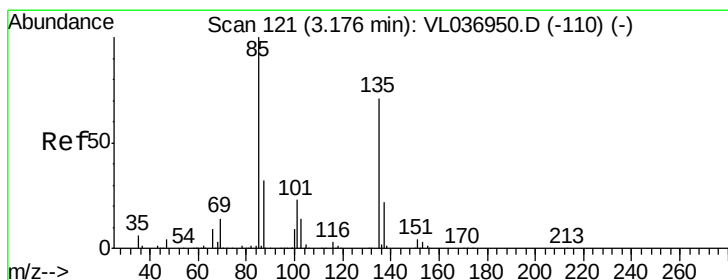
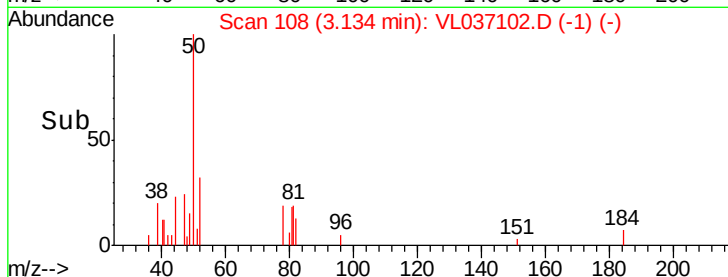
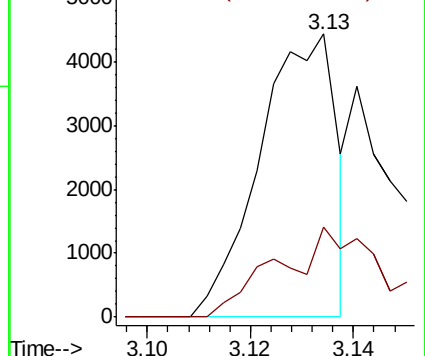
50 100

52 31.9 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.063 ppbv

RT: 3.18 min Scan# 122

Delta R.T. 0.00 min

Lab File: VL037102.D

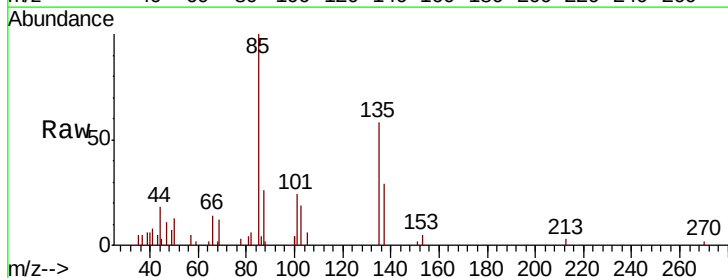
Acq: 2 Jun 2021 15:11

Tgt Ion: 85 Resp: 13784

Ion Ratio Lower Upper

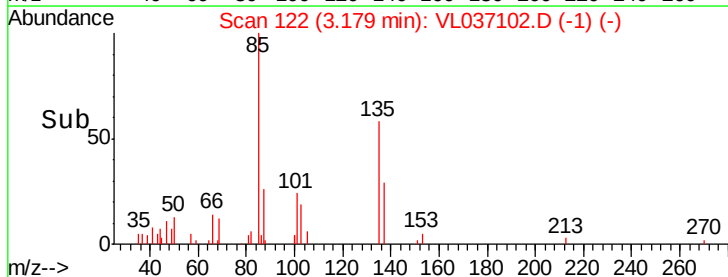
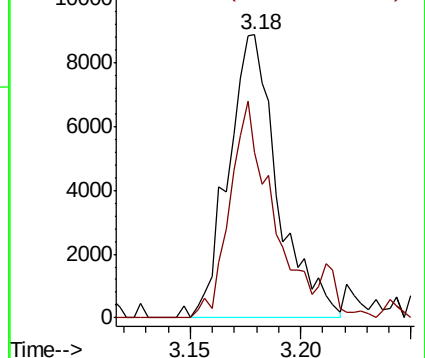
85 100

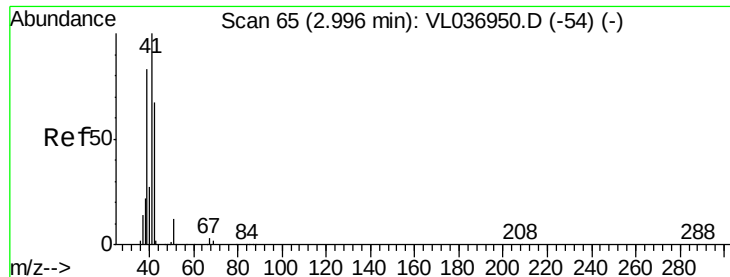
135 72.7 57.7 86.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 0.053 ppbv

RT: 3.00 min Scan# 66

Delta R.T. 0.00 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Instrument :

MSVOA_L

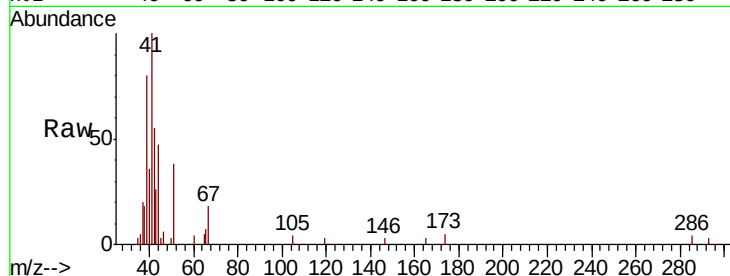
ClientSampleId :

Tot Ion: 41 Resp: 4753

Ion Ratio Lower Upper

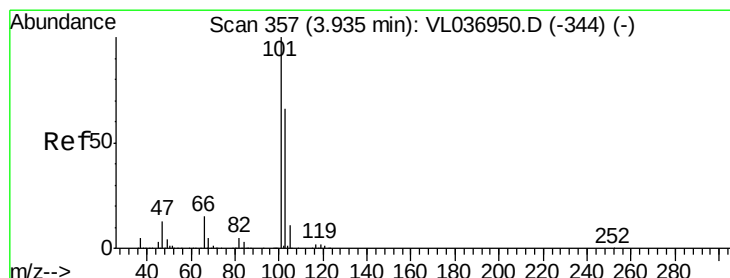
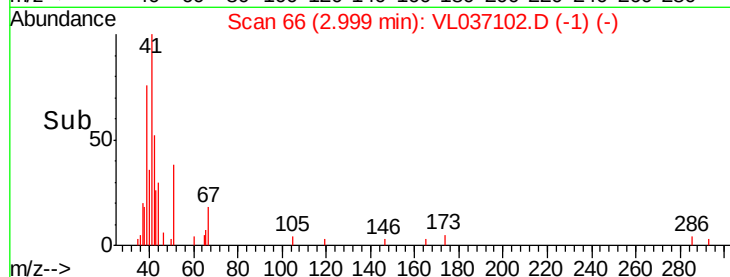
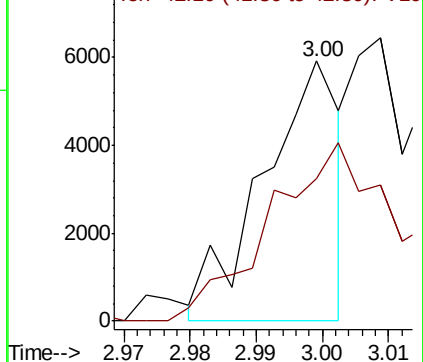
41 100

42 155.6 53.9 80.9#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#11

Trichlorofluoromethane

Concen: 0.037 ppbv

RT: 3.94 min Scan# 358

Delta R.T. 0.00 min

Lab File: VL037102.D

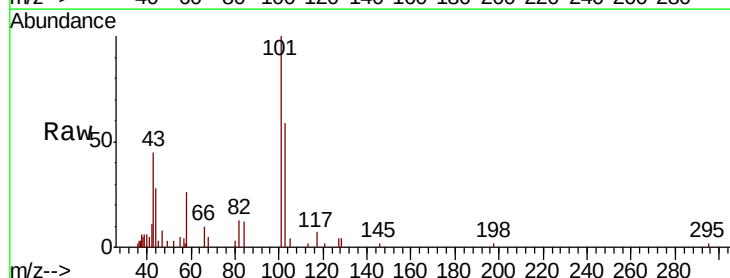
Acq: 2 Jun 2021 15:11

Tgt Ion: 101 Resp: 7984

Ion Ratio Lower Upper

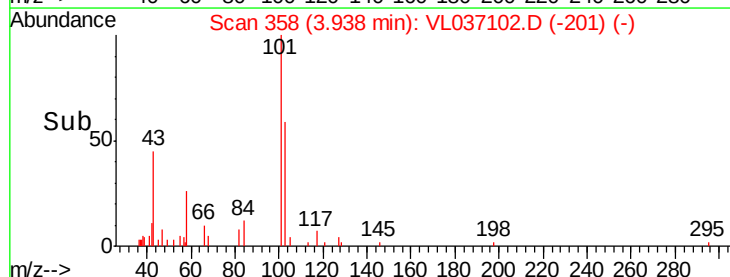
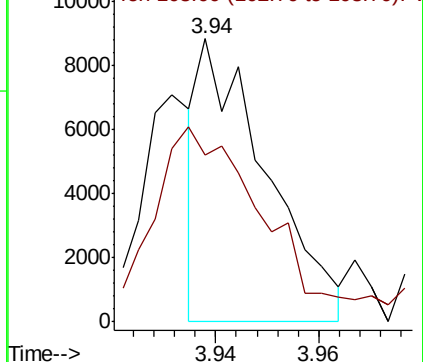
101 100

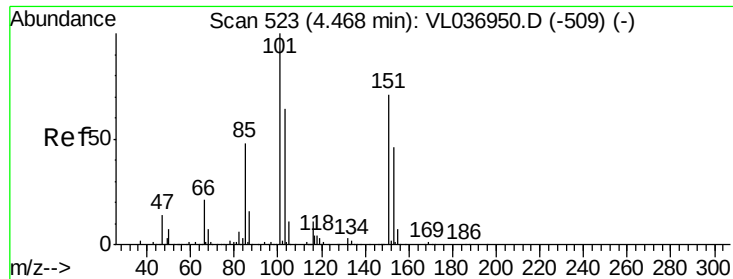
103 57.6 52.6 79.0



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: 0.044 ppbv

RT: 4.47 min Scan# 522

Delta R.T. -0.00 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Instrument :

MSVOA_L

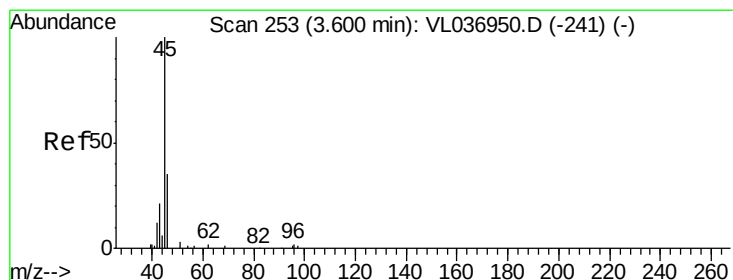
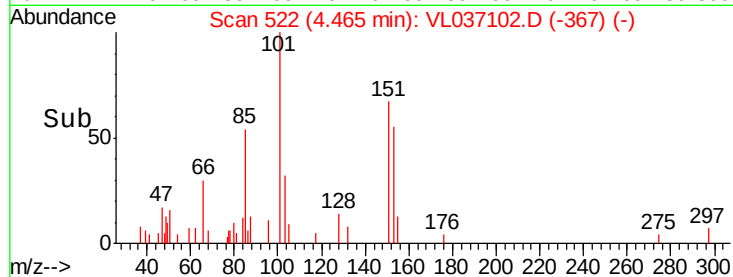
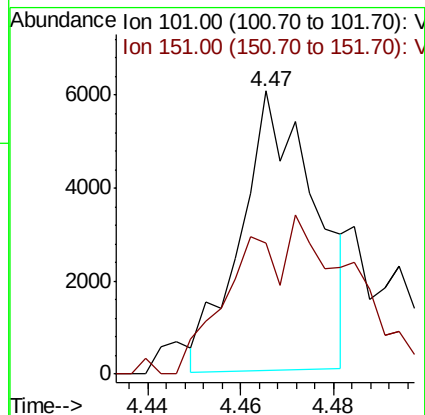
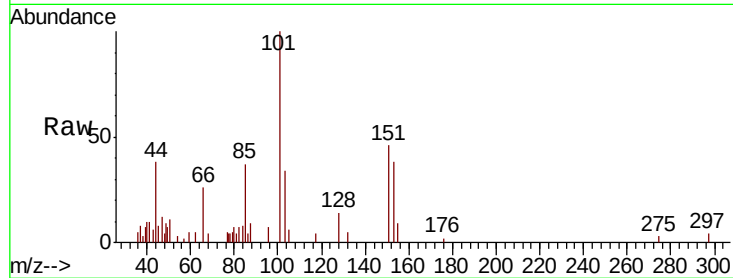
ClientSampled :

Tot Ion:101 Resp: 6716

Ion Ratio Lower Upper

101 100

151 102.4 57.7 86.5#



#13

Ethanol

Concen: 0.109 ppbv

RT: 3.61 min Scan# 256

Delta R.T. 0.01 min

Lab File: VL037102.D

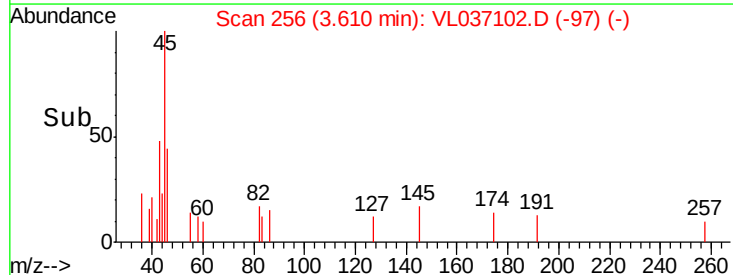
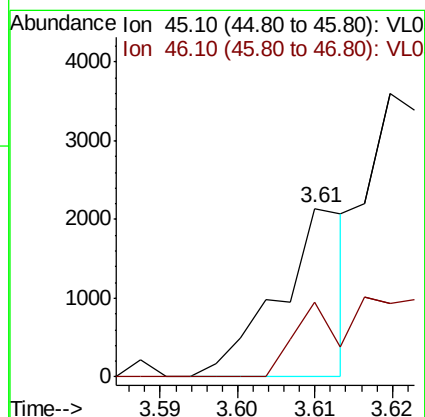
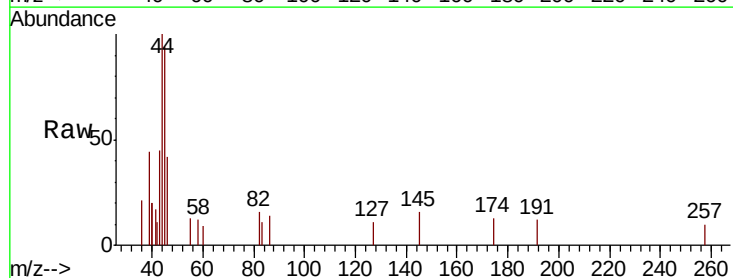
Acq: 2 Jun 2021 15:11

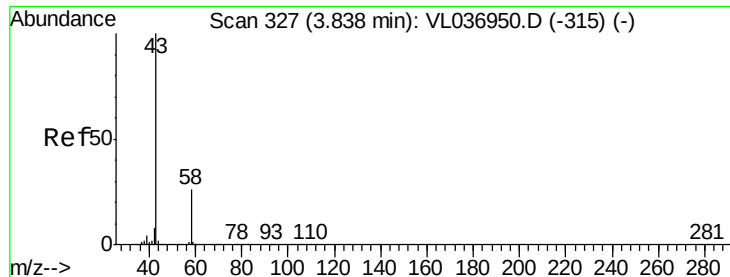
Tgt Ion: 45 Resp: 1315

Ion Ratio Lower Upper

45 100

46 0.0 16.3 65.3#





#15

Acetone

Concen: 0.238 ppbv

RT: 3.86 min Scan# 335

Delta R.T. 0.03 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Instrument :

MSVOA_L

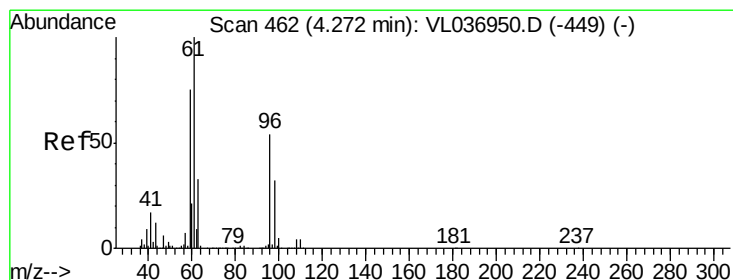
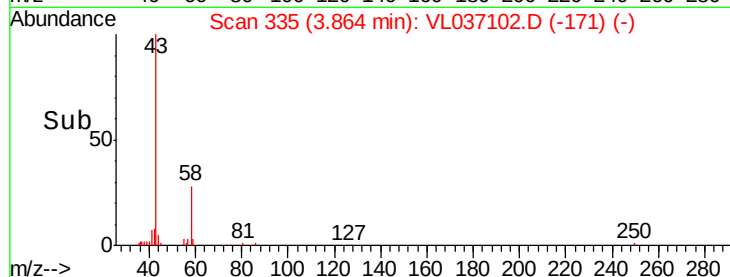
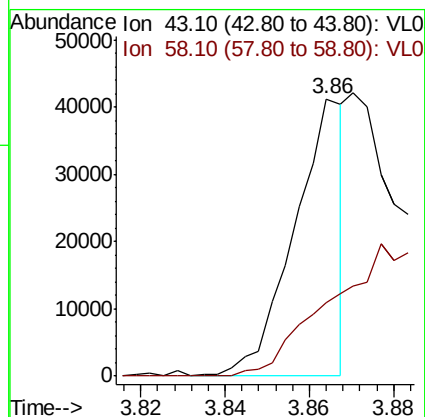
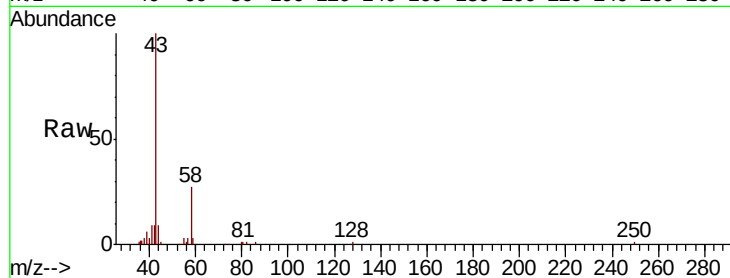
ClientSampleId :

Tot Ion: 43 Resp: 33582

Ion Ratio Lower Upper

43 100

58 0.0 24.0 36.0#



#18

1,1-Dichloroethene

Concen: 0.045 ppbv

RT: 4.28 min Scan# 463

Delta R.T. 0.00 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

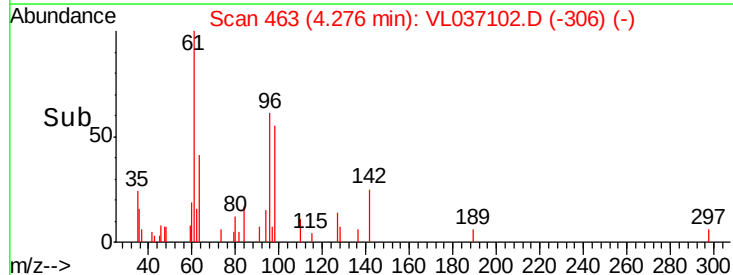
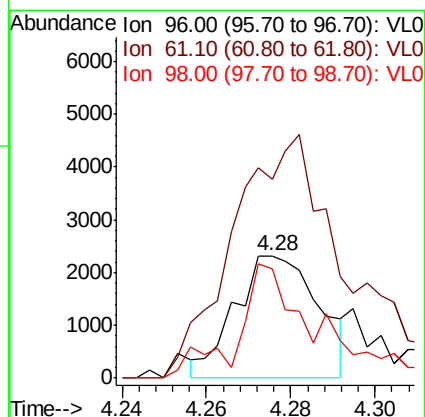
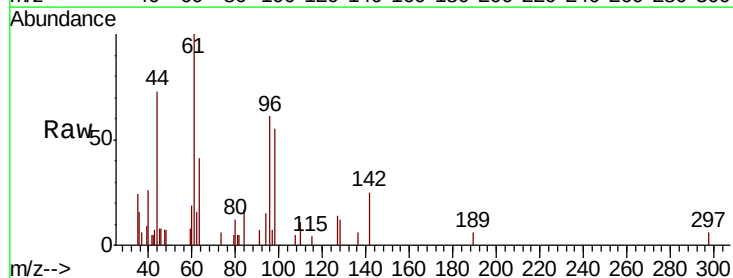
Tgt Ion: 96 Resp: 3168

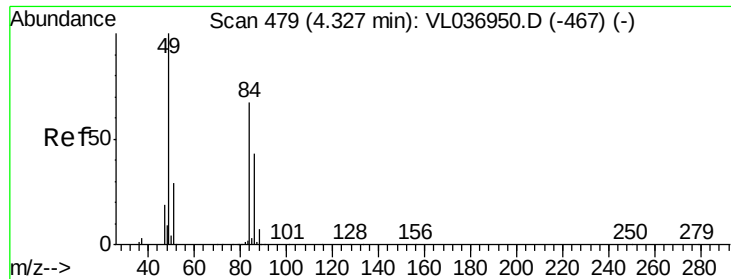
Ion Ratio Lower Upper

96 100

61 138.0 148.2 222.4#

98 75.2 47.8 71.6#

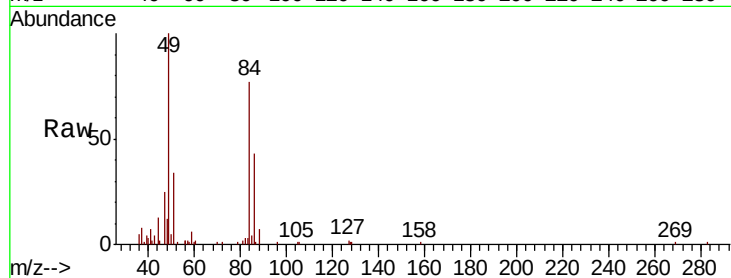




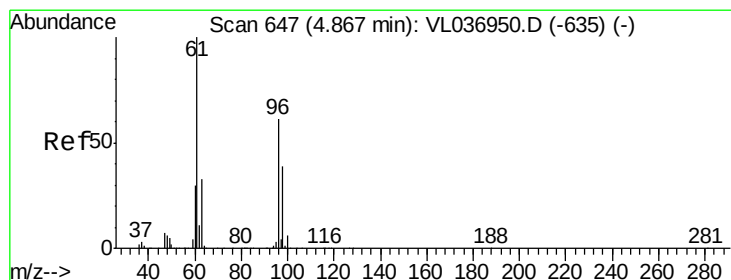
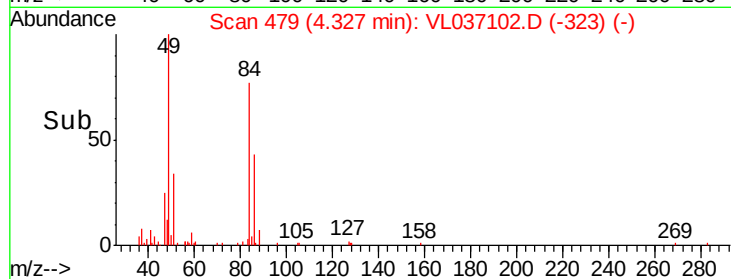
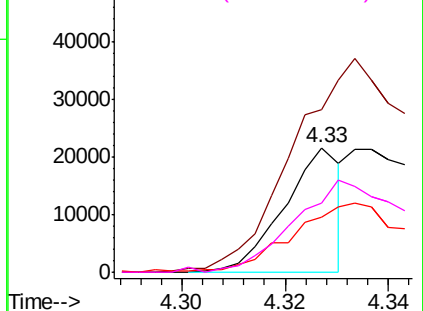
#20
Methylene Chloride
Concen: 0.220 ppbv
RT: 4.33 min Scan# 479
Delta R.T. 0.00 min
Lab File: VL037102.D
Acq: 2 Jun 2021 15:11

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:	84	Resp:	16613
Ion	Ratio	Lower	Upper
84	100		
49	127.5	119.8	179.6
51	43.0	35.1	52.7
86	52.0	50.9	76.3

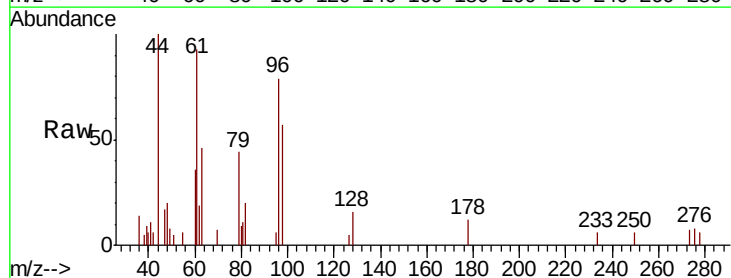


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

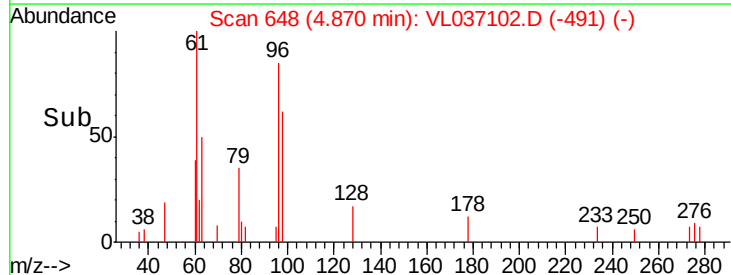
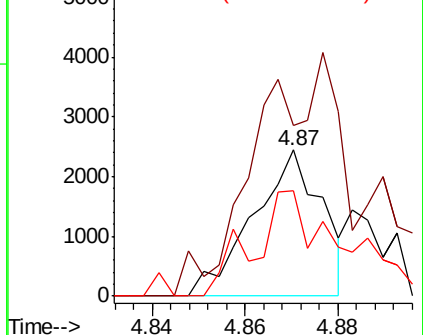


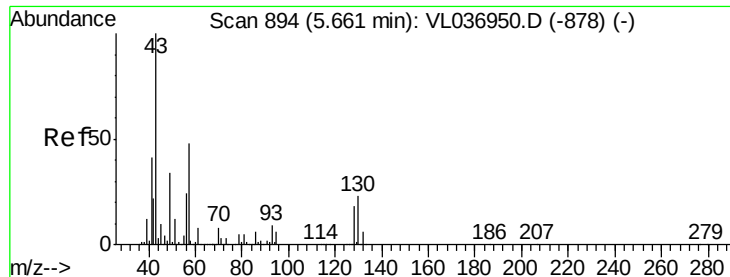
#22
trans-1,2-Dichloroethene
Concen: 0.037 ppbv
RT: 4.87 min Scan# 648
Delta R.T. 0.00 min
Lab File: VL037102.D
Acq: 2 Jun 2021 15:11

Tgt Ion:	96	Resp:	2510
Ion	Ratio	Lower	Upper
96	100		
61	86.4	130.6	196.0#
98	72.3	50.8	76.2



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

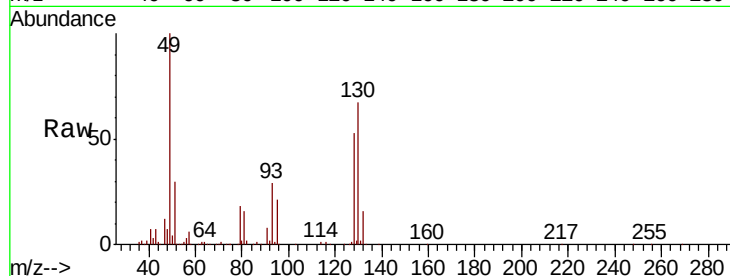




#25
Ethyl Acetate
Concen: 0.086 ppbv
RT: 5.68 min Scan# 899
Delta R.T. 0.02 min
Lab File: VL037102.D
Acq: 2 Jun 2021 15:11

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion	43	Resp:	29170
Ion	Ratio	Lower	Upper
43	100		
45	0.0	7.8	11.8#
61	0.0	7.8	11.8#
70	7.2	5.6	8.4



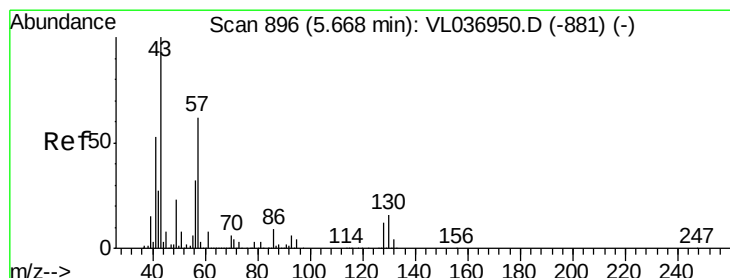
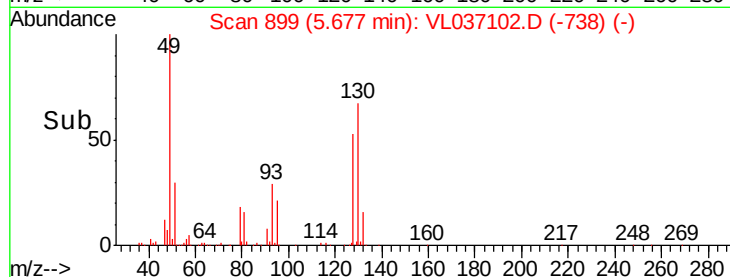
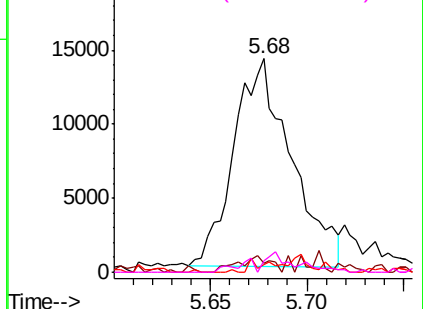
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

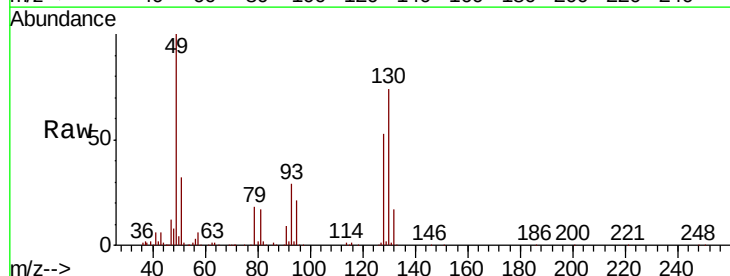
Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26
Hexane
Concen: 0.114 ppbv
RT: 5.67 min Scan# 898
Delta R.T. 0.01 min
Lab File: VL037102.D
Acq: 2 Jun 2021 15:11

Tgt Ion	57	Resp:	19746
Ion	Ratio	Lower	Upper
57	100		
41	171.2	70.5	105.7#
43	167.1	165.8	248.8
56	83.8	42.2	63.4#



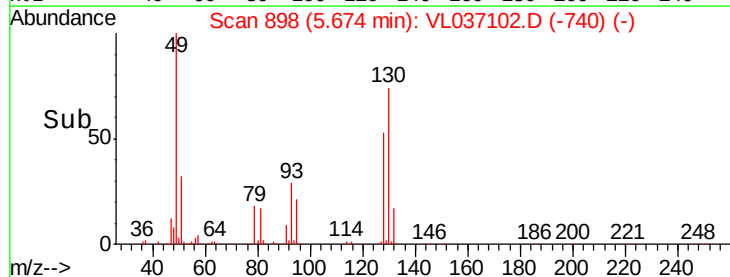
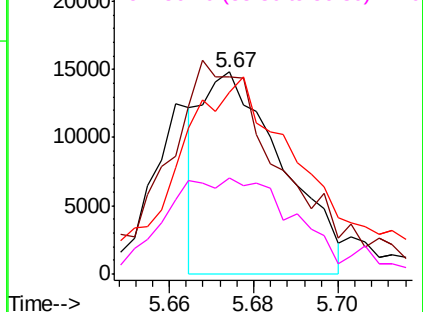
Abundance

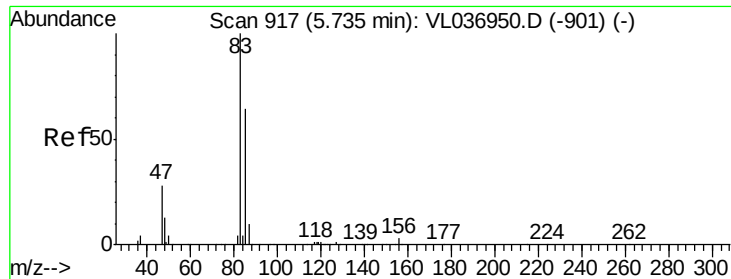
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0

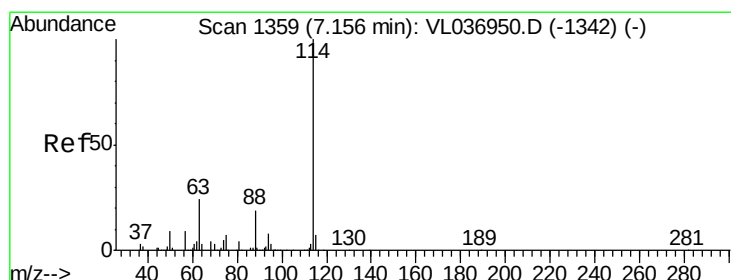
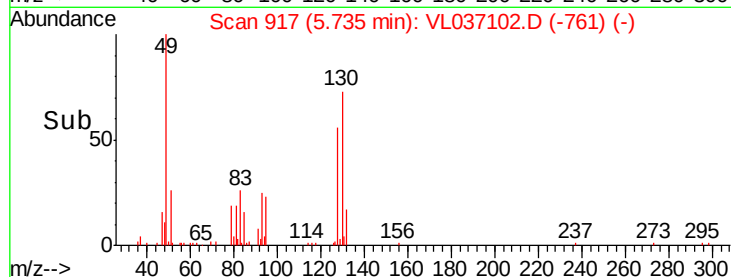
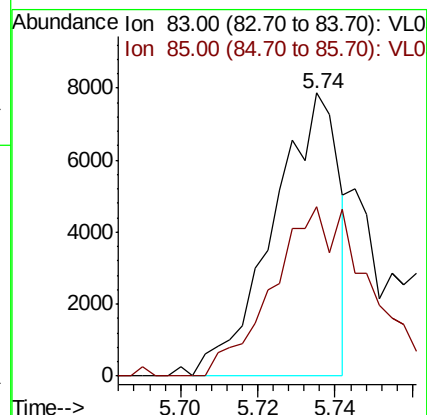
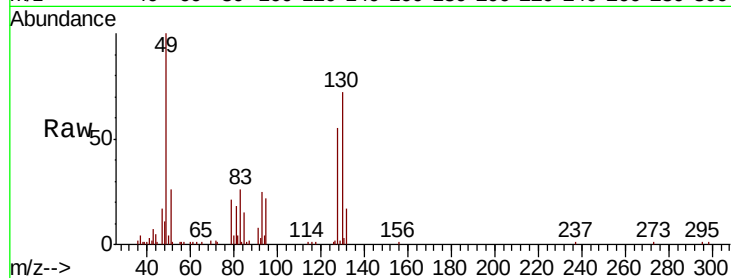




#29
Chloroform
Concen: 0.038 ppbv
RT: 5.74 min Scan# 917
Delta R.T. 0.00 min
Lab File: VL037102.D
Acq: 2 Jun 2021 15:11

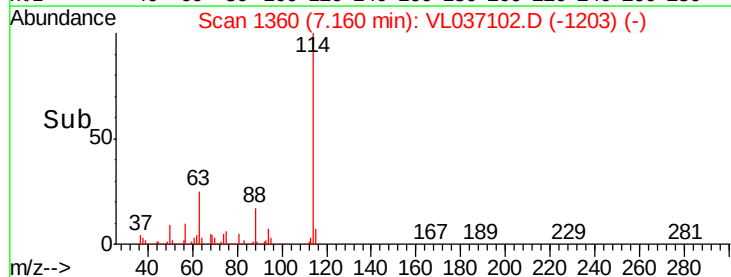
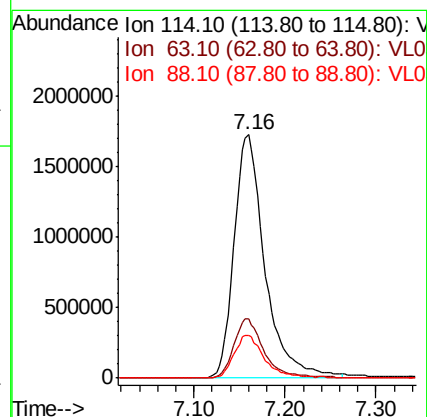
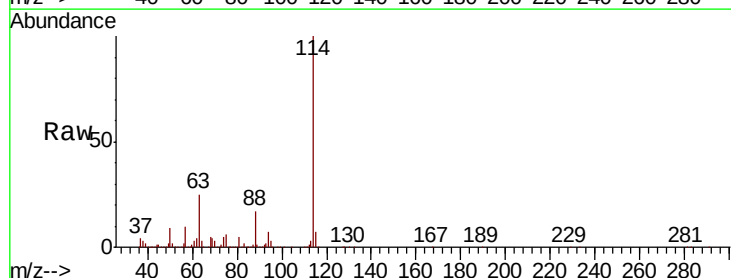
Instrument :
MSVOA_L
ClientSampleId :

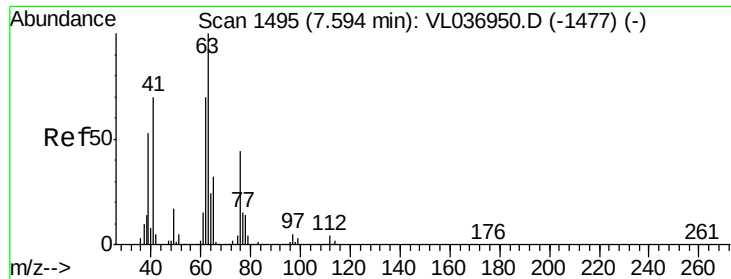
Tot Ion: 83 Resp: 9285
Ion Ratio Lower Upper
83 100
85 60.3 51.1 76.7



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1360
Delta R.T. 0.00 min
Lab File: VL037102.D
Acq: 2 Jun 2021 15:11

Tgt Ion: 114 Resp: 4066944
Ion Ratio Lower Upper
114 100
63 24.3 19.6 29.4
88 17.9 14.6 21.8





#39

1,2-Dichloropropane

Concen: 6.994 ppbv

RT: 7.16 min Scan# 1359

Delta R.T. -0.44 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Instrument :

MSVOA_L

ClientSampled :

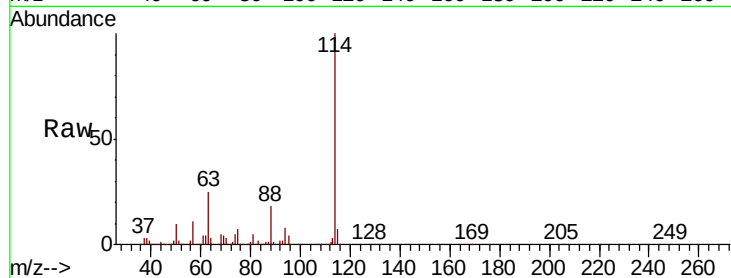
Tot Ion: 63 Resp: 943779

Ion Ratio Lower Upper

63 100

41 0.1 55.7 83.5#

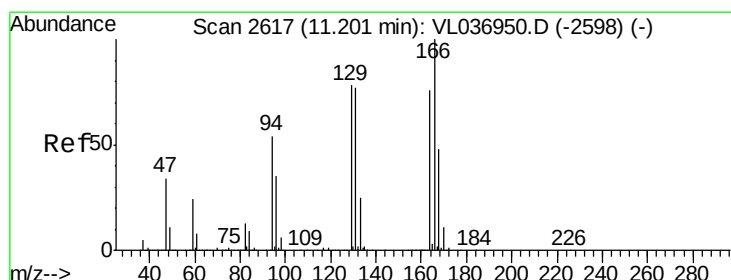
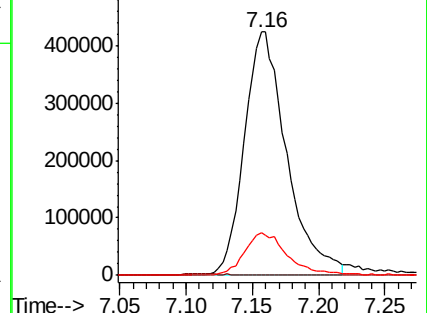
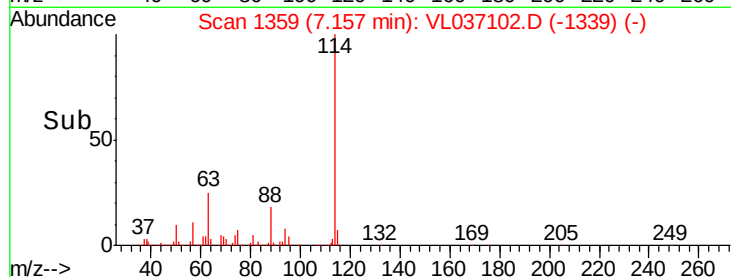
62 17.7 56.2 84.4#



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



#52

Tetrachloroethene

Concen: 0.032 ppbv

RT: 11.20 min Scan# 2618

Delta R.T. 0.00 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Tgt Ion:164 Resp: 4473

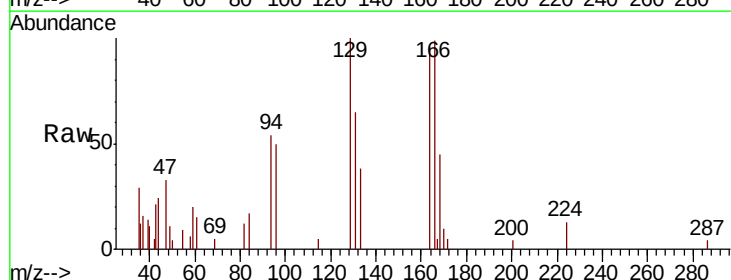
Ion Ratio Lower Upper

164 100

166 92.8 105.5 158.3#

129 79.3 81.8 122.8#

131 51.1 81.2 121.8#

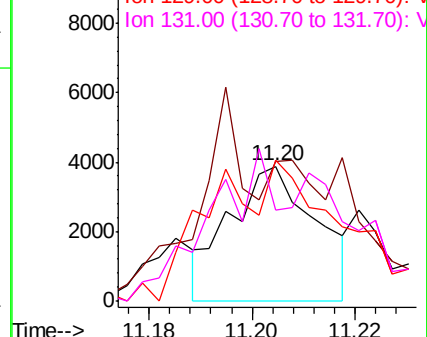
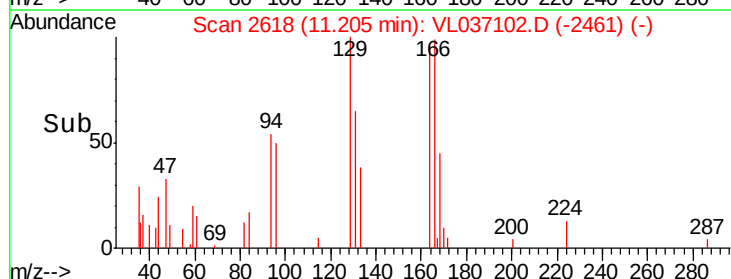


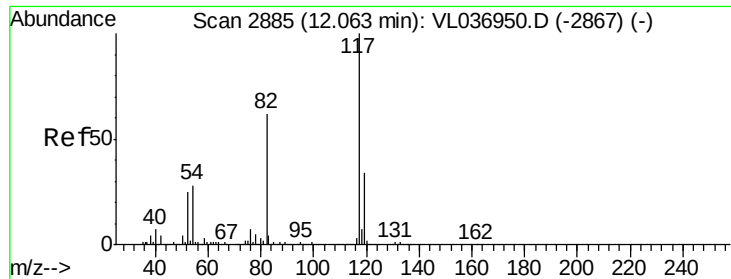
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

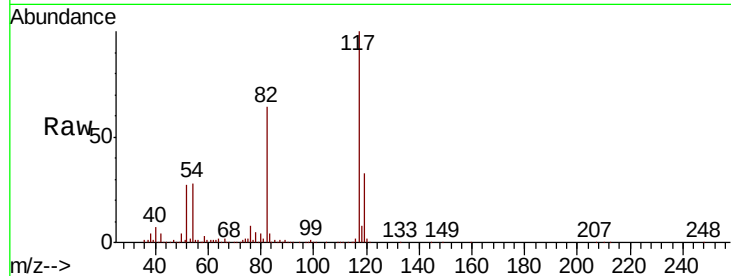




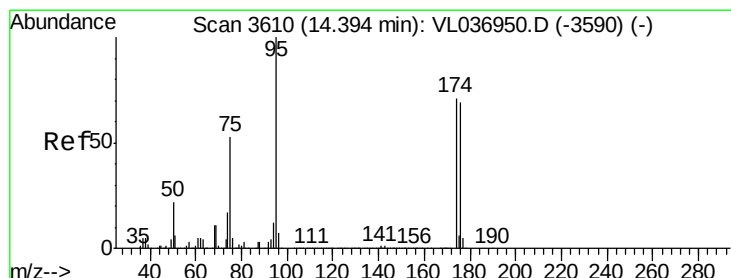
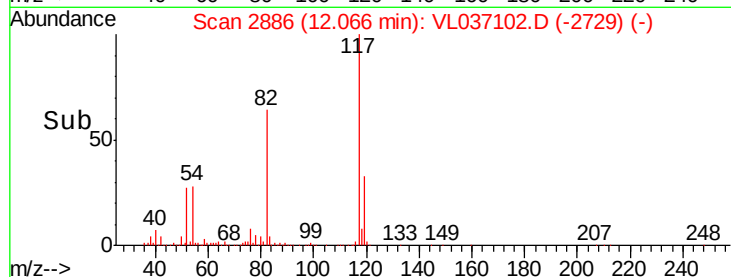
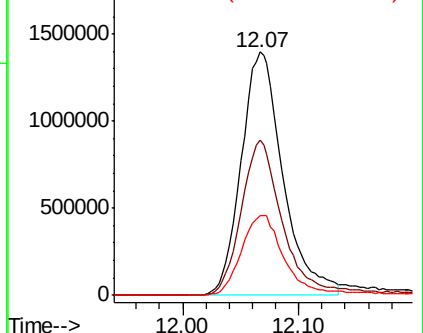
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2886
Delta R.T. 0.00 min
Lab File: VL037102.D
Acq: 2 Jun 2021 15:11

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 3502915
Ion Ratio Lower Upper
117 100
82 66.8 52.6 79.0
119 34.9 46.6 70.0#

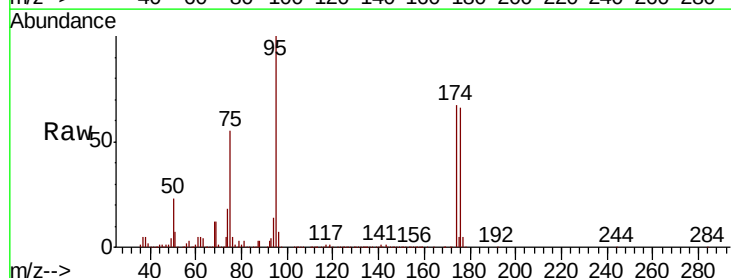


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

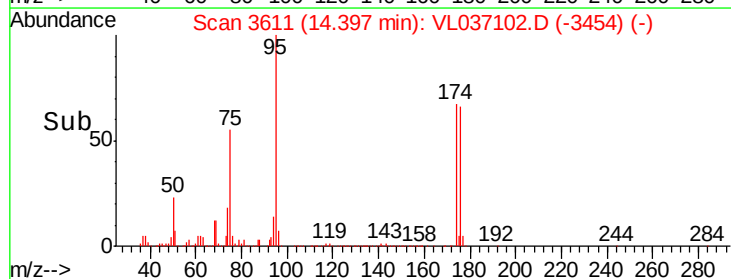
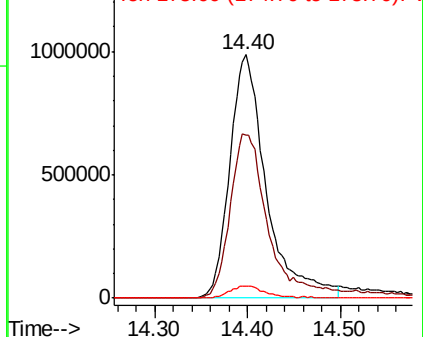


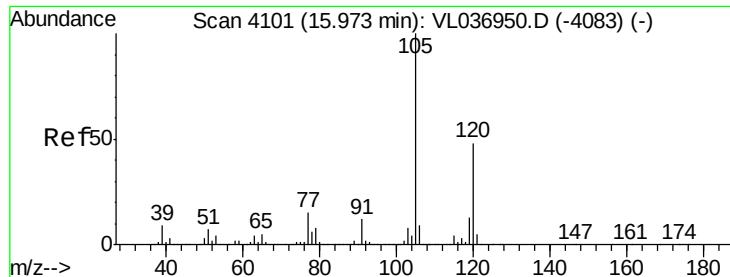
#68
1-Bromo-4-Fluorobenzene
Concen: 10.305 ppbv
RT: 14.40 min Scan# 3611
Delta R.T. 0.00 min
Lab File: VL037102.D
Acq: 2 Jun 2021 15:11

Tgt Ion: 95 Resp: 2711658
Ion Ratio Lower Upper
95 100
174 74.0 58.4 87.6
175 5.0 4.4 6.6



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





#73

1,3,5-Trimethylbenzene

Concen: 0.057 ppbv

RT: 15.98 min Scan# 4104

Delta R.T. 0.01 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Instrument :

MSVOA_L

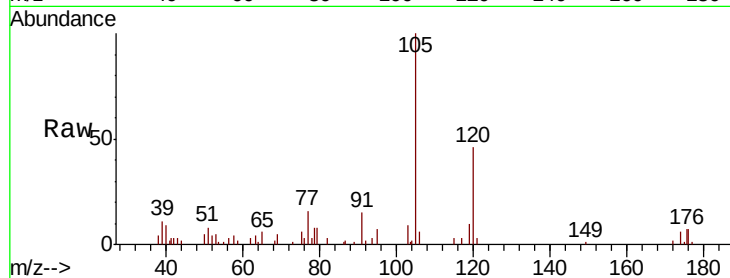
ClientSampleId :

Tot Ion:105 Resp: 24925

Ion Ratio Lower Upper

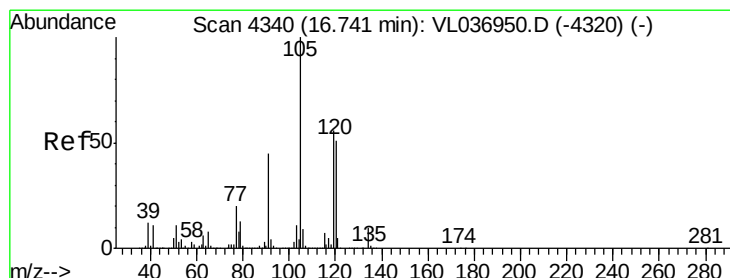
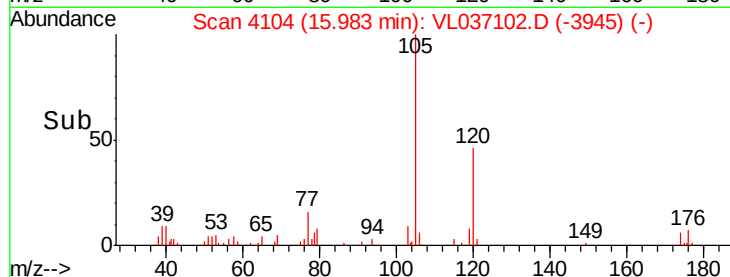
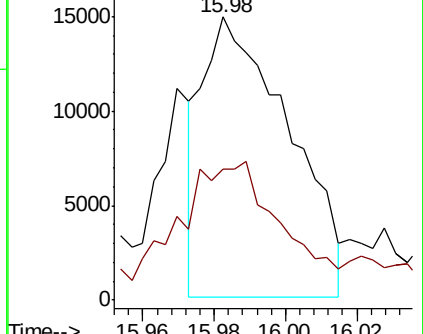
105 100

120 47.8 38.6 58.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.069 ppbv

RT: 16.75 min Scan# 4342

Delta R.T. 0.01 min

Lab File: VL037102.D

Acq: 2 Jun 2021 15:11

Tgt Ion:105 Resp: 31191

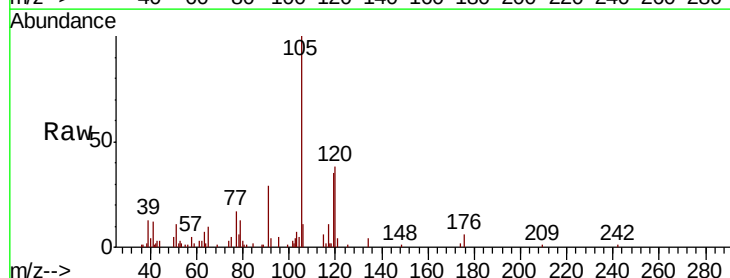
Ion Ratio Lower Upper

105 100

120 39.0 40.6 61.0#

91 6.1 37.4 56.0#

77 12.8 16.2 24.4#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

