

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL073020\
 Data File : VL035291.D
 Acq On : 30 Jul 2020 22:33
 Operator : SY/AP
 Sample : L3216-15 0.03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-01-QT3-2020

Quant Time: Jul 31 05:08:56 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL072920AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 29 07:14:29 2020
 QLast Update : Wed Jul 29 07:14:29 2020
 Response via : Initial Calibration

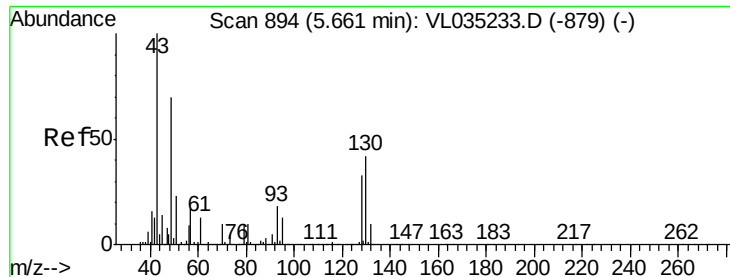
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1055172	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2628080	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2458766	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	2003927	10.20	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	5663	0.045	ppbv #	84
3) Chlorodifluoromethane	2.95	51	5923	0.051	ppbv	98
6) Bromomethane	3.44	94	1809	0.043	ppbv #	56
8) Dichlorotetrafluoroethane	3.16	85	8610	0.054	ppbv	96
12) 1,1,2-Trichlorotrifluoroet	4.47	101	5476	0.046	ppbv #	14
15) Acetone	3.85	43	27257	0.194	ppbv #	48
18) 1,1-Dichloroethene	4.27	96	1864	0.035	ppbv	95
20) Methylene Chloride	4.32	84	11777	0.184	ppbv #	55
22) trans-1,2-Dichloroethene	4.87	96	1976	0.039	ppbv #	30
24) 1,1-Dichloroethane	5.00	63	5717	0.043	ppbv #	92
27) Carbon Disulfide	4.54	76	6961	0.052	ppbv #	73
31) cis-1,2-Dichloroethene	5.55	61	2929	0.034	ppbv #	76
37) 1,2-Dichloroethane	6.30	62	5369	0.042	ppbv #	83
39) 1,2-Dichloropropane	7.19	63	730025	10.018	ppbv #	23

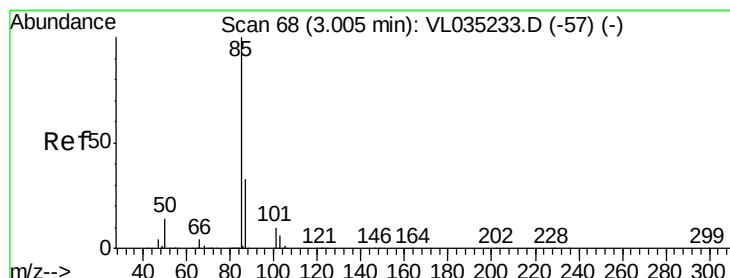
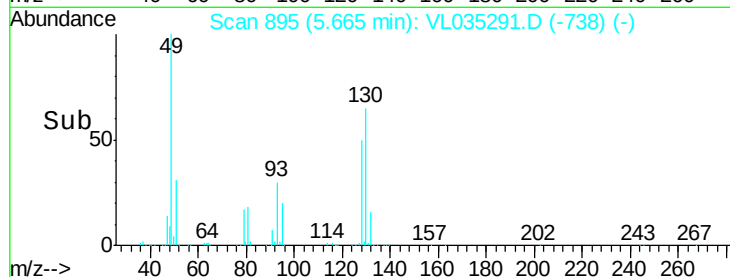
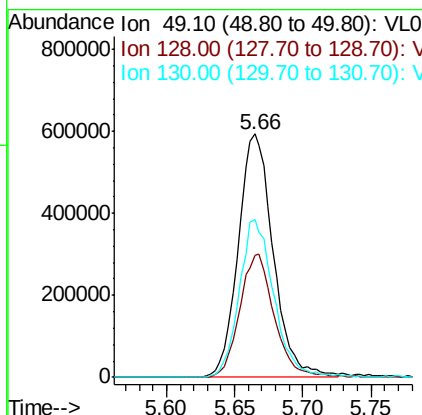
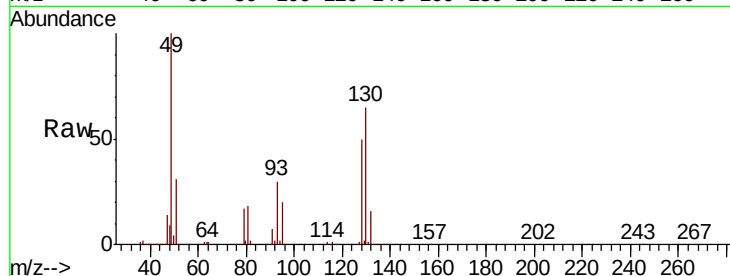
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.66 min Scan# 895
 Delta R.T. 0.00 min
 Lab File: VL035291.D
 Acq: 30 Jul 2020 22:33

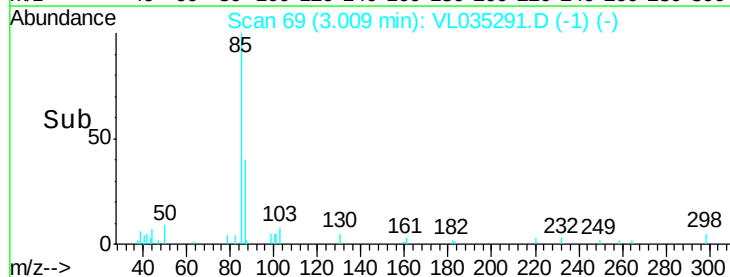
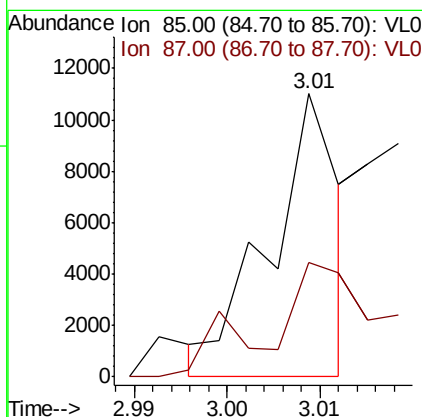
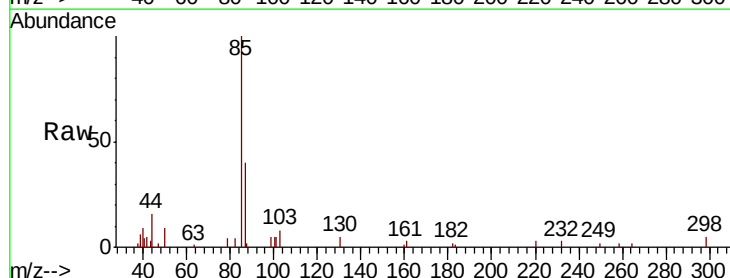
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-01-QT3-2020

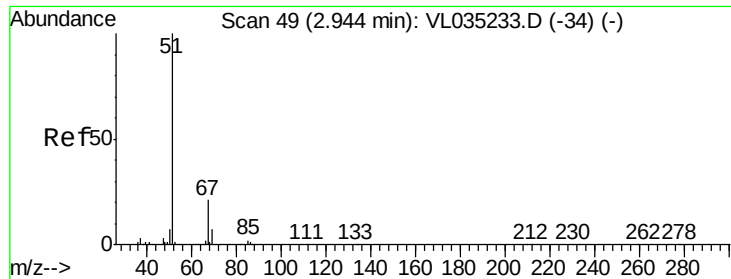
Tot Ion: 49 Resp: 1055172
 Ion Ratio Lower Upper
 49 100
 128 50.8 24.0 72.0
 130 64.3 30.7 92.1



#2
 Dichlorodifluoromethane
 Concen: 0.045 ppbv
 RT: 3.01 min Scan# 69
 Delta R.T. 0.00 min
 Lab File: VL035291.D
 Acq: 30 Jul 2020 22:33

Tgt Ion: 85 Resp: 5663
 Ion Ratio Lower Upper
 85 100
 87 42.8 26.7 40.1#

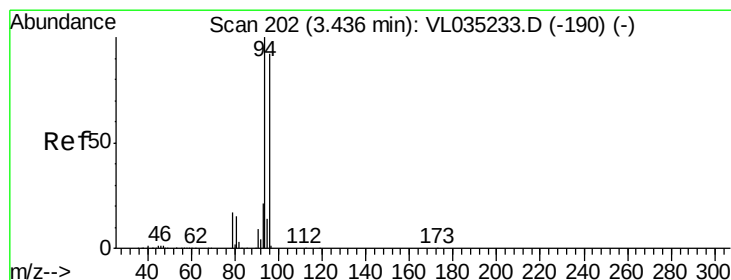
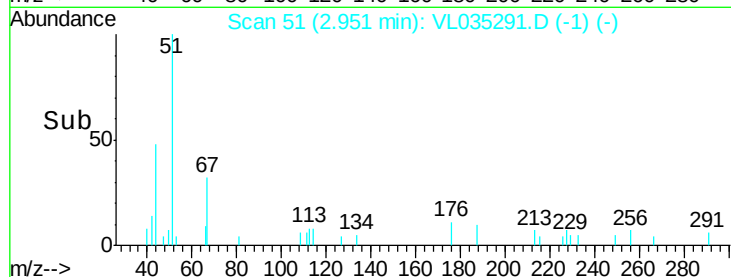
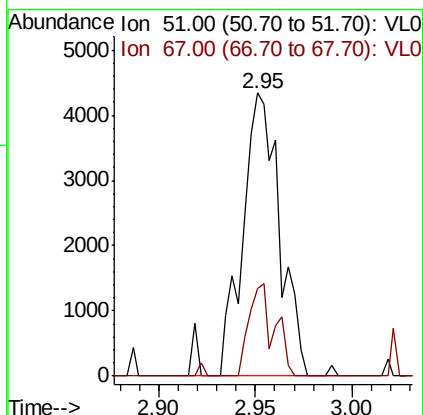
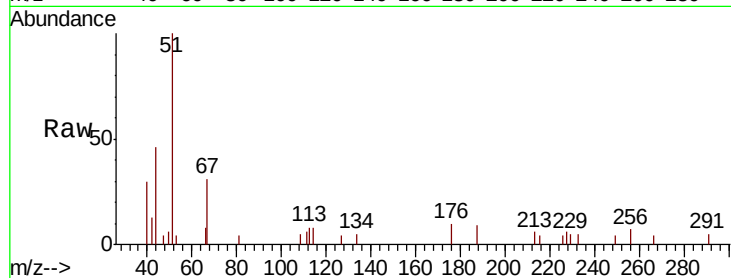




#3
 Chlorodifluoromethane
 Concen: 0.051 ppbv
 RT: 2.95 min Scan# 51
 Delta R.T. 0.01 min
 Lab File: VL035291.D
 Acq: 30 Jul 2020 22:33

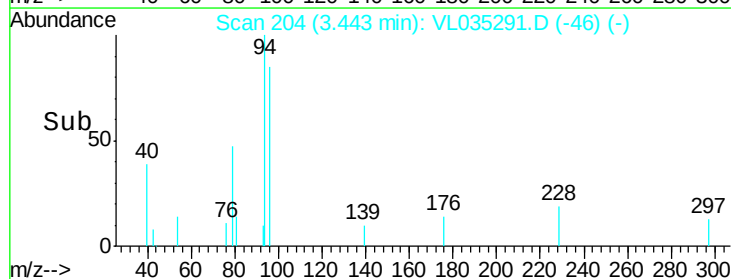
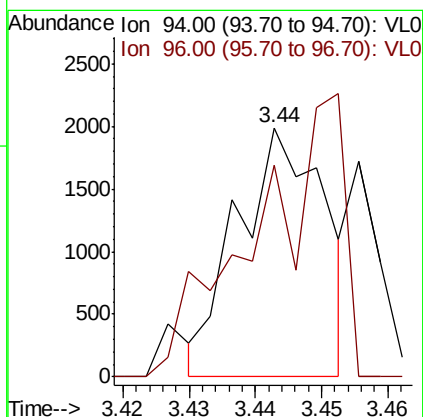
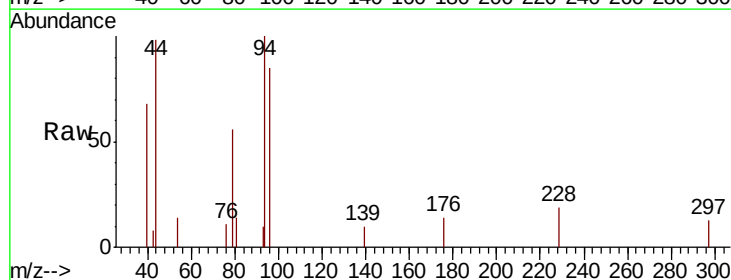
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-01-QT3-2020

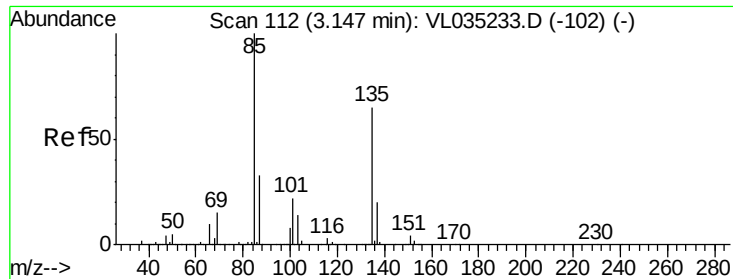
Tot Ion: 51 Resp: 5923
 Ion Ratio Lower Upper
 51 100
 67 21.7 16.6 25.0



#6
 Bromomethane
 Concen: 0.043 ppbv
 RT: 3.44 min Scan# 204
 Delta R.T. 0.01 min
 Lab File: VL035291.D
 Acq: 30 Jul 2020 22:33

Tgt Ion: 94 Resp: 1809
 Ion Ratio Lower Upper
 94 100
 96 49.9 73.2 109.8#





#8

Dichlorotetrafluoroethane

Concen: 0.054 ppbv

RT: 3.16 min Scan# 116

Delta R.T. 0.01 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

Instrument :

MSVOA_L

ClientSampleId :

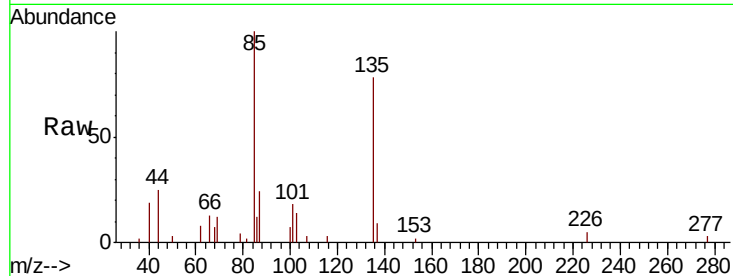
MDL-AIR-01-QT3-2020

Tot Ion: 85 Resp: 8610

Ion Ratio Lower Upper

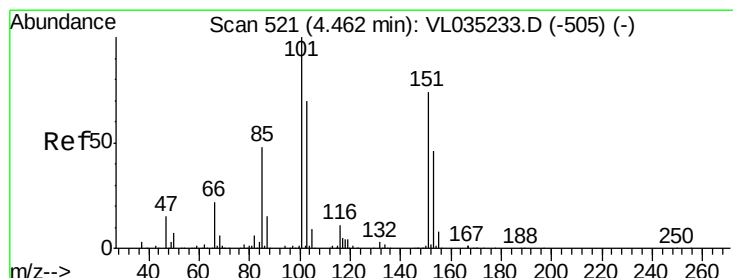
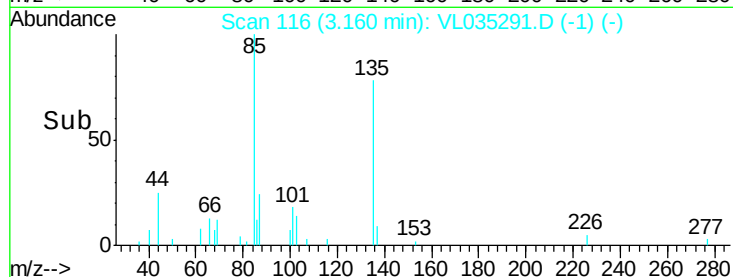
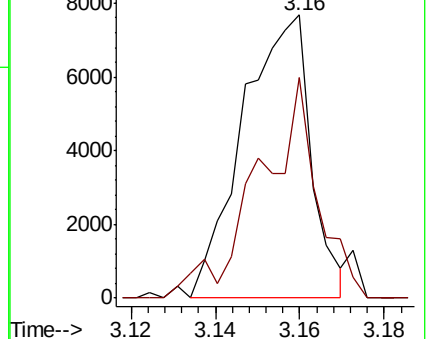
85 100

135 67.5 51.4 77.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.046 ppbv

RT: 4.47 min Scan# 522

Delta R.T. 0.00 min

Lab File: VL035291.D

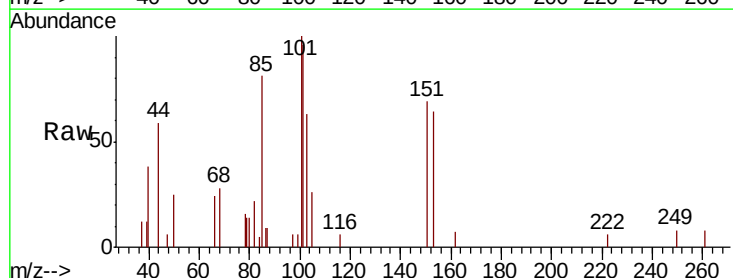
Acq: 30 Jul 2020 22:33

Tgt Ion: 101 Resp: 5476

Ion Ratio Lower Upper

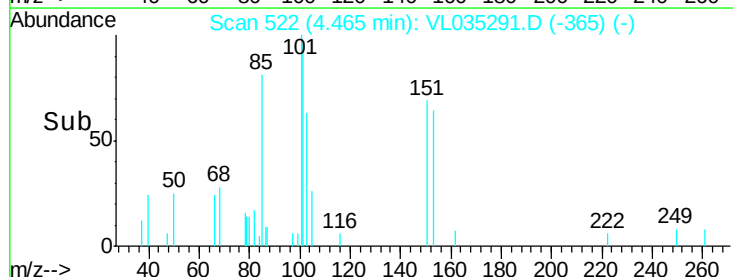
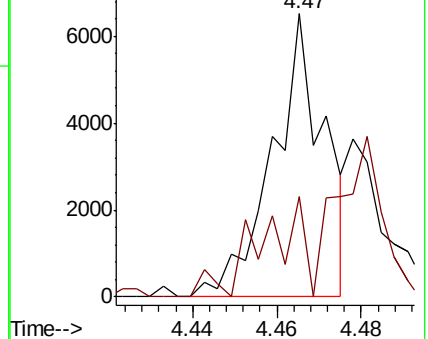
101 100

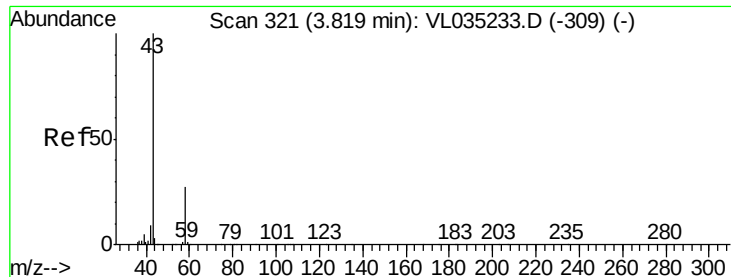
151 0.0 56.6 85.0#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#15

Acetone

Concen: 0.194 ppbv

RT: 3.85 min Scan# 331

Delta R.T. 0.03 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

Instrument :

MSVOA_L

ClientSampleId :

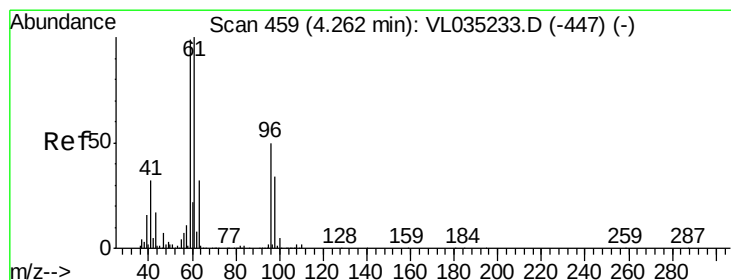
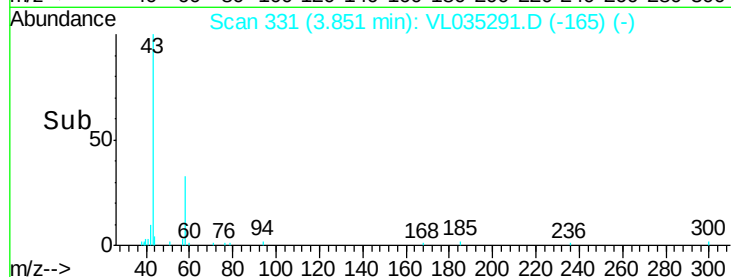
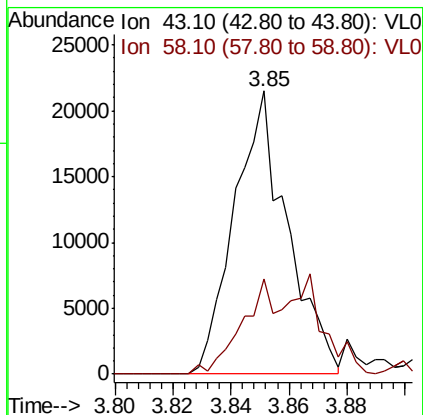
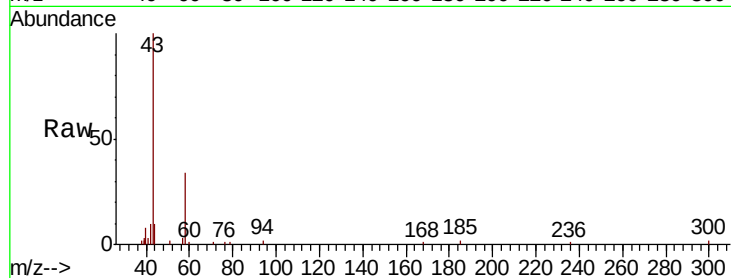
MDL-AIR-01-QT3-2020

Tot Ion: 43 Resp: 27257

Ion Ratio Lower Upper

43 100

58 0.0 21.8 32.6#



#18

1,1-Dichloroethene

Concen: 0.035 ppbv

RT: 4.27 min Scan# 461

Delta R.T. 0.01 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

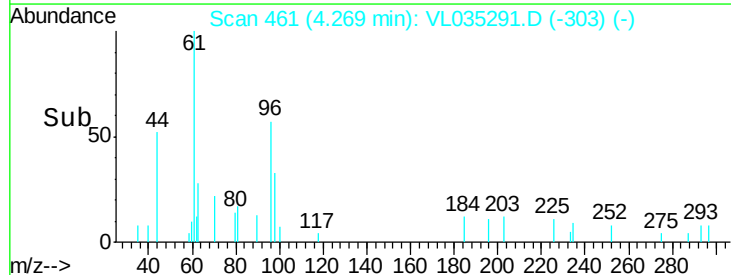
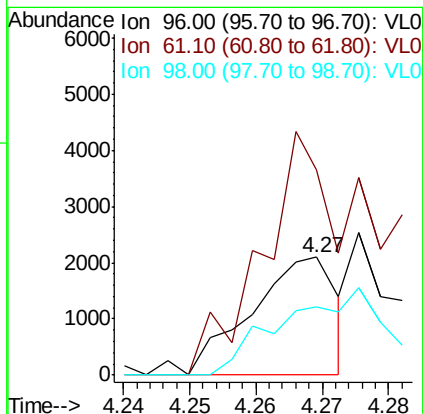
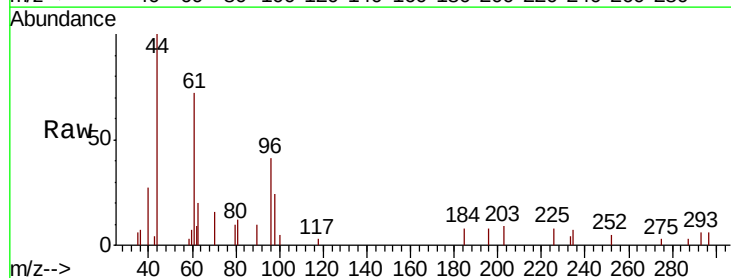
Tgt Ion: 96 Resp: 1864

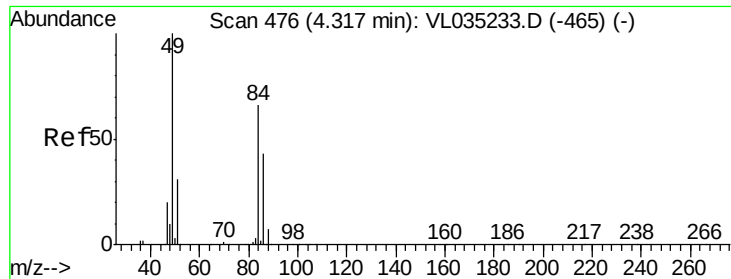
Ion Ratio Lower Upper

96 100

61 195.9 159.4 239.2

98 58.3 53.9 80.9





#20

Methylene Chloride

Concen: 0.184 ppbv

RT: 4.32 min Scan# 477

Delta R.T. 0.00 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-01-QT3-2020

Tot Ion: 84 Resp: 11777

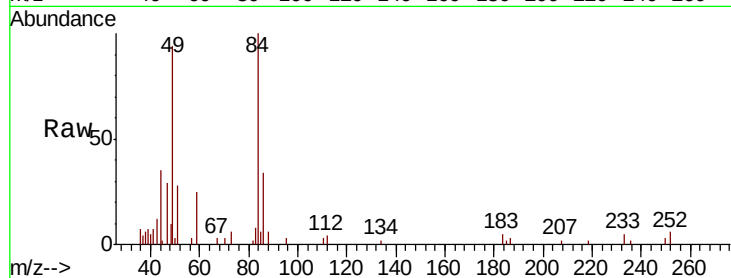
Ion Ratio Lower Upper

84 100

49 87.4 121.0 181.4#

51 24.3 37.7 56.5#

86 33.6 52.2 78.4#

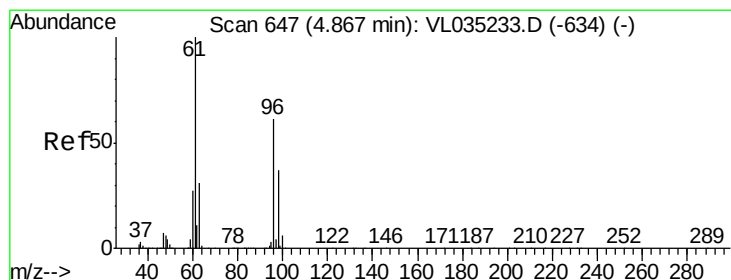
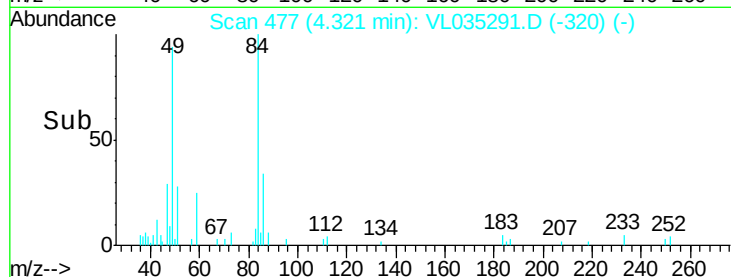
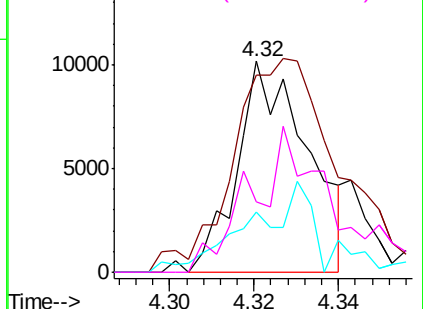


Abundance Ion 84.00 (83.70 to 84.70): VL0

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: 0.039 ppbv

RT: 4.87 min Scan# 649

Delta R.T. 0.01 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

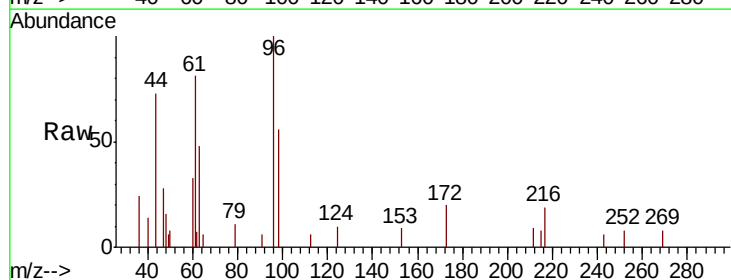
Tgt Ion: 96 Resp: 1976

Ion Ratio Lower Upper

96 100

61 37.7 131.6 197.4#

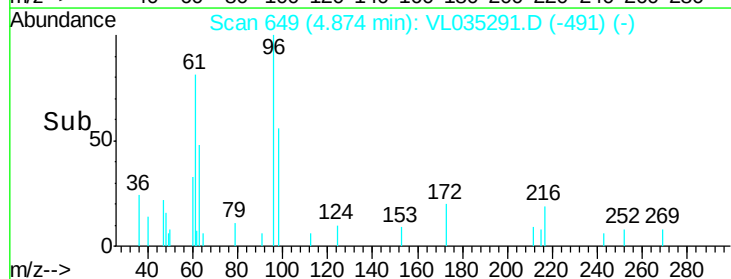
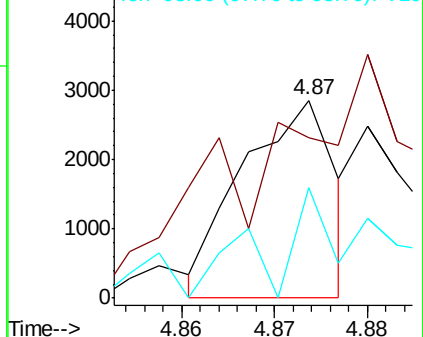
98 63.7 49.0 73.4

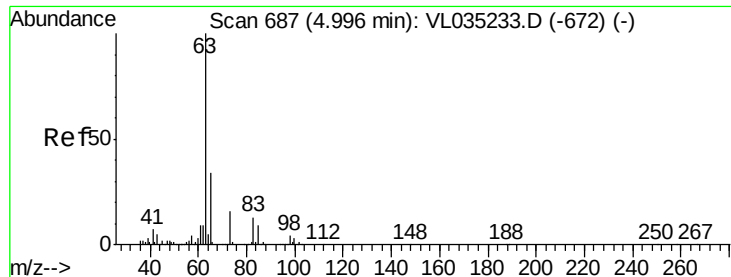


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#24

1,1-Dichloroethane

Concen: 0.043 ppbv

RT: 5.00 min Scan# 688

Delta R.T. 0.00 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

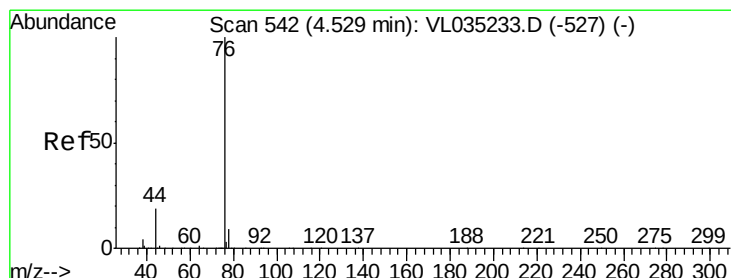
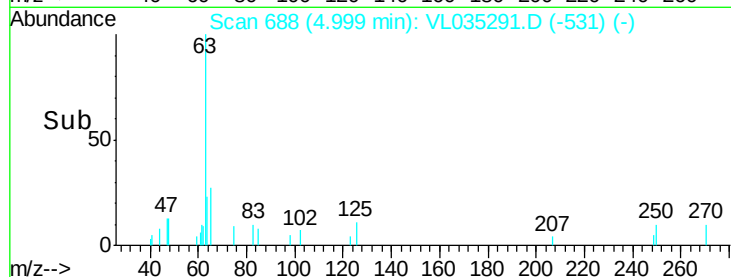
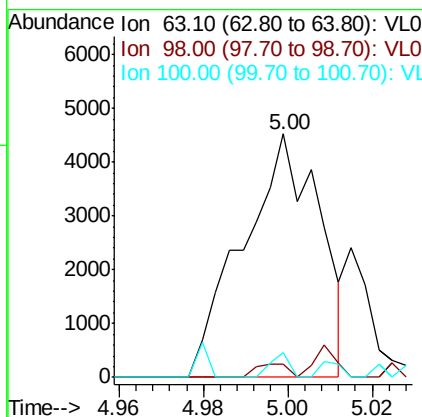
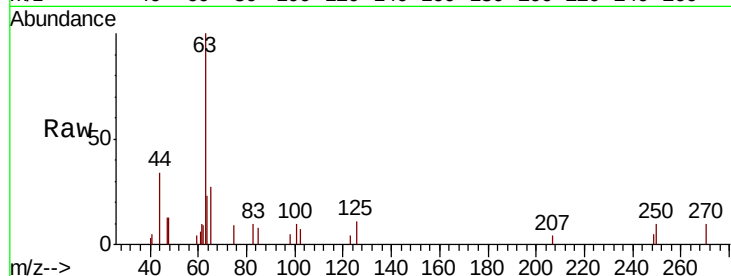
Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-01-QT3-2020

Tot Ion:	63	Resp:	5717
Ion	Ratio	Lower	Upper
63	100		
98	4.3	1.9	5.7
100	8.2	1.4	4.2#



#27

Carbon Disulfide

Concen: 0.052 ppbv

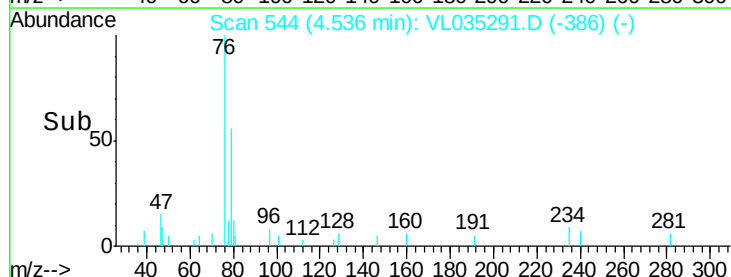
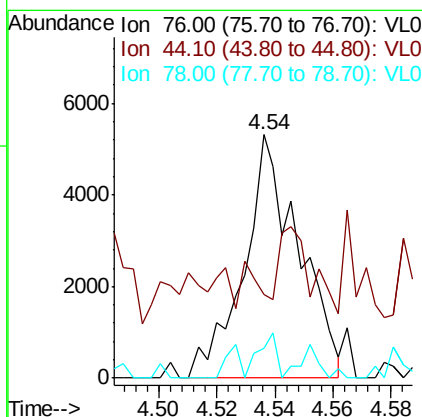
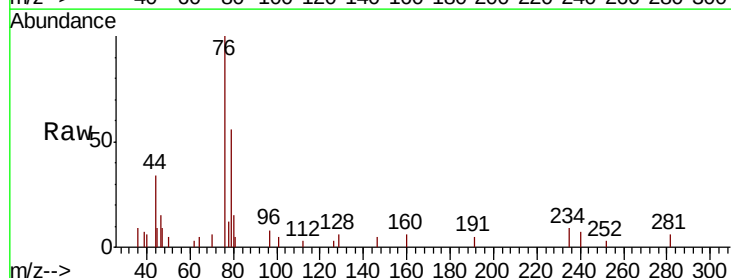
RT: 4.54 min Scan# 544

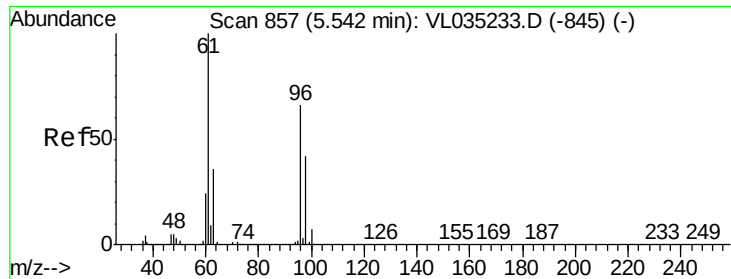
Delta R.T. 0.01 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

Tgt Ion:	76	Resp:	6961
Ion	Ratio	Lower	Upper
76	100		
44	0.0	14.7	22.1#
78	9.3	7.6	11.4





#31

cis-1,2-Dichloroethene

Concen: 0.034 ppbv

RT: 5.55 min Scan# 858

Delta R.T. 0.00 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-01-QT3-2020

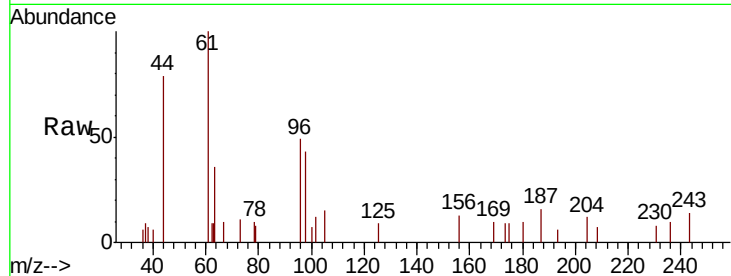
Tot Ion: 61 Resp: 2929

Ion Ratio Lower Upper

61 100

96 35.8 52.6 78.8#

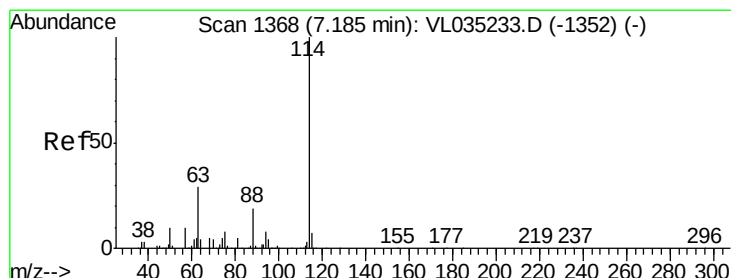
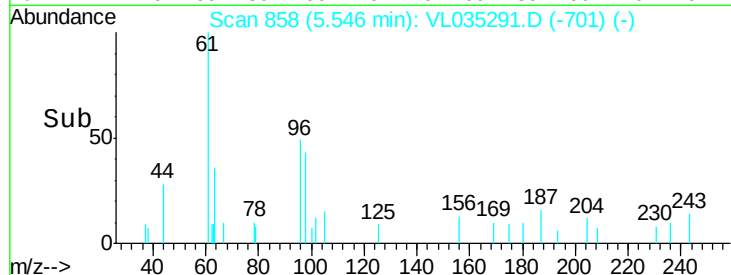
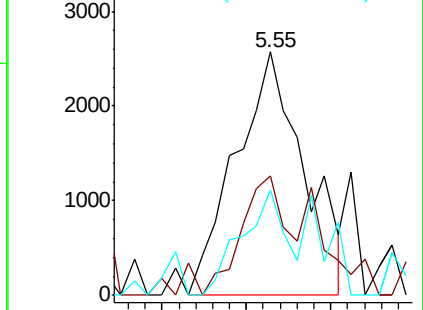
98 43.1 33.7 50.5



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



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. 0.00 min

Lab File: VL035291.D

Acq: 30 Jul 2020 22:33

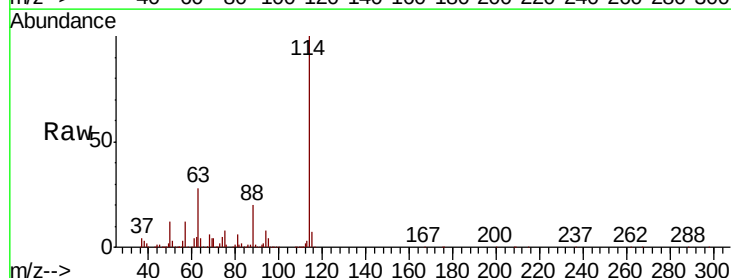
Tgt Ion: 114 Resp: 2628080

Ion Ratio Lower Upper

114 100

63 27.9 22.2 33.2

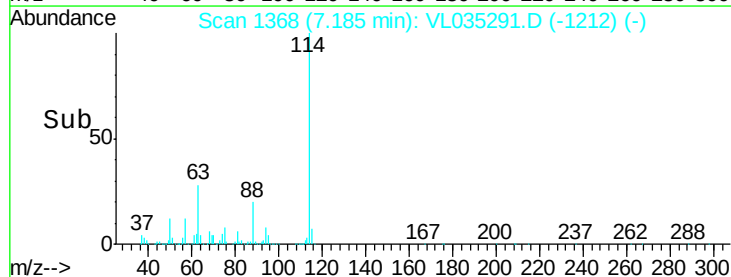
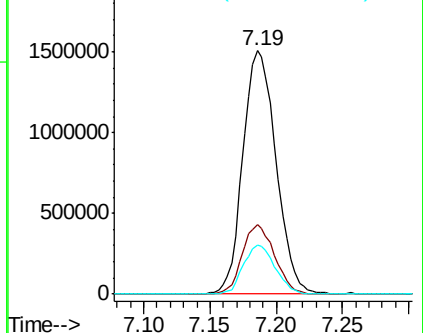
88 19.4 15.4 23.0

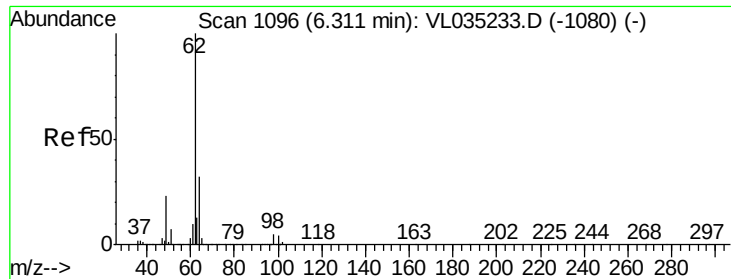


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

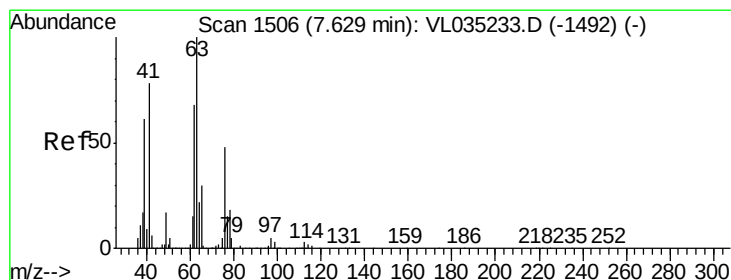
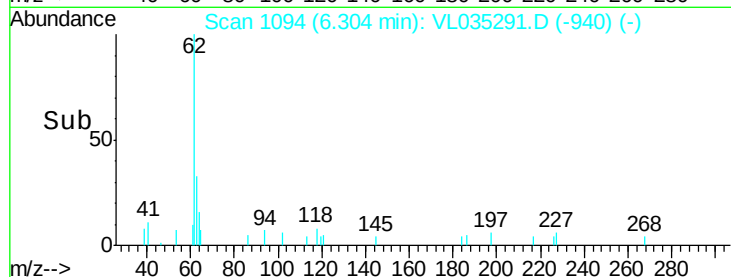
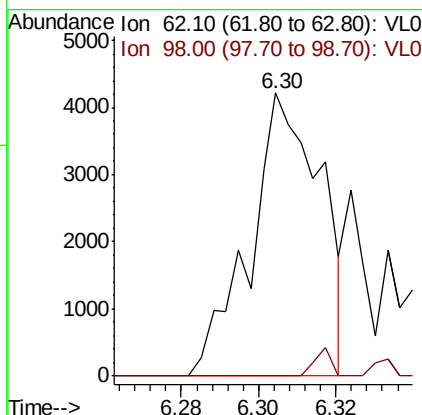
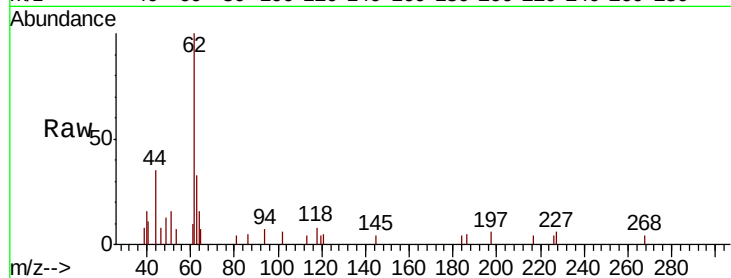




#37
 1,2-Dichloroethane
 Concen: 0.042 ppbv
 RT: 6.30 min Scan# 1094
 Delta R.T. -0.01 min
 Lab File: VL035291.D
 Acq: 30 Jul 2020 22:33

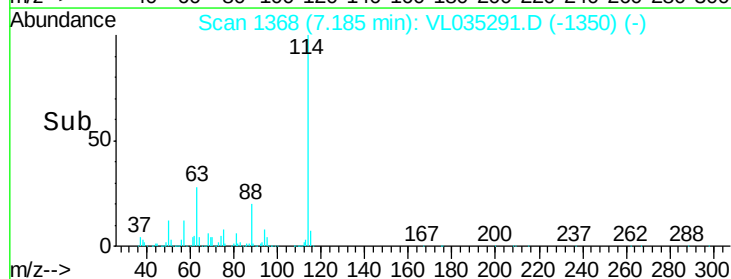
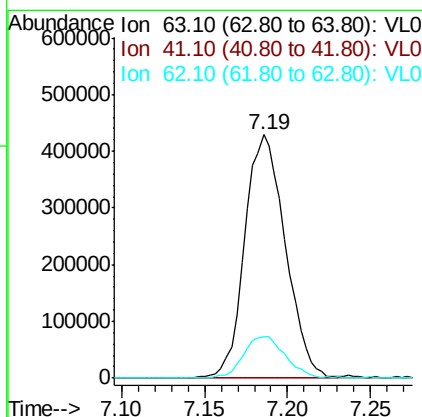
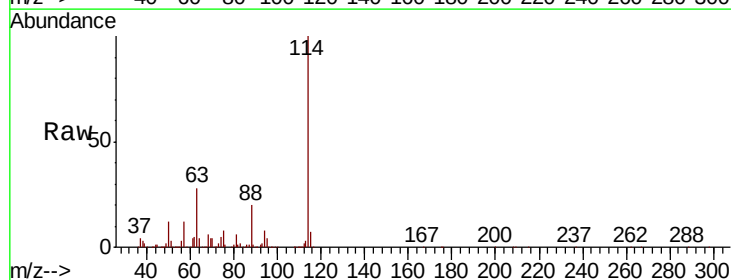
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-01-QT3-2020

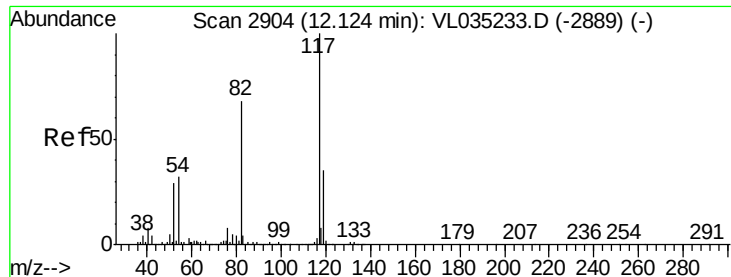
Tot Ion: 62 Resp: 5369
 Ion Ratio Lower Upper
 62 100
 98 0.0 4.5 6.7#



#39
 1,2-Dichloropropane
 Concen: 10.018 ppbv
 RT: 7.19 min Scan# 1368
 Delta R.T. -0.44 min
 Lab File: VL035291.D
 Acq: 30 Jul 2020 22:33

Tgt Ion: 63 Resp: 730025
 Ion Ratio Lower Upper
 63 100
 41 0.0 62.2 93.4#
 62 17.0 54.2 81.2#

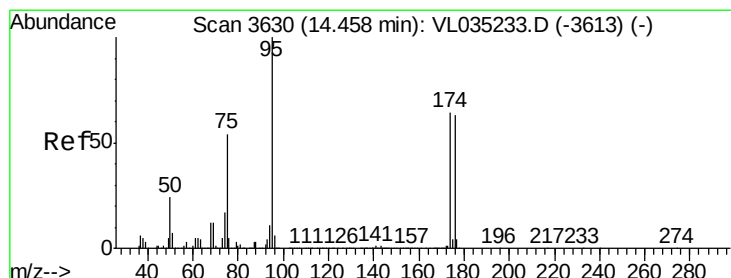
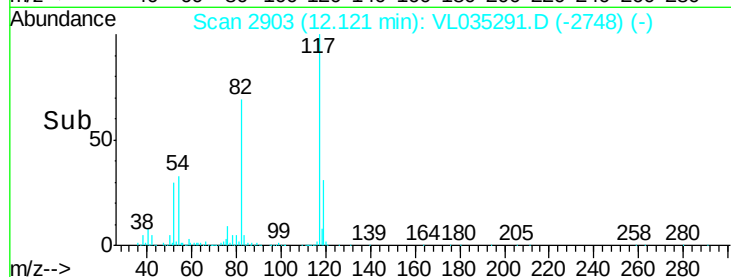
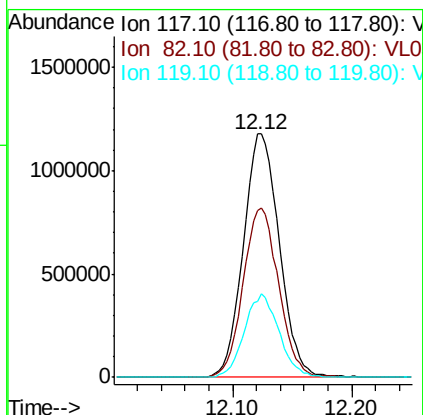
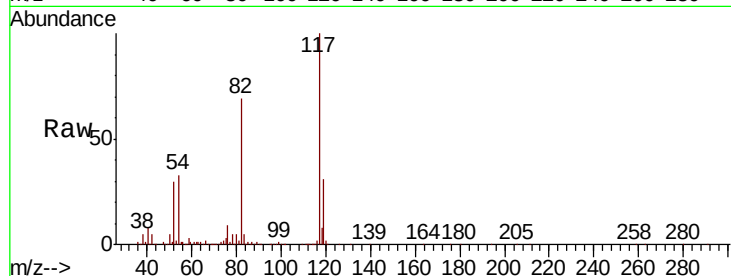




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.12 min Scan# 2903
Delta R.T. -0.00 min
Lab File: VL035291.D
Acq: 30 Jul 2020 22:33

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-01-QT3-2020

Tot Ion:117 Resp: 2458766
Ion Ratio Lower Upper
117 100
82 68.9 52.4 78.6
119 33.1 24.6 36.8



#68
1-Bromo-4-Fluorobenzene
Concen: 10.200 ppbv
RT: 14.46 min Scan# 3630
Delta R.T. 0.00 min
Lab File: VL035291.D
Acq: 30 Jul 2020 22:33

Tgt Ion: 95 Resp: 2003927
Ion Ratio Lower Upper
95 100
174 64.7 52.7 79.1
175 4.9 3.9 5.9

