

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081621\
 Data File : VL037476.D
 Acq On : 17 Aug 2021 00:35
 Operator : SY/AP
 Sample : M2262-14 0.03LOQ
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 17 02:24:04 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Aug 17 02:13:47 2021
 QLast Update : Tue Aug 17 02:13:47 2021
 Response via : Initial Calibration

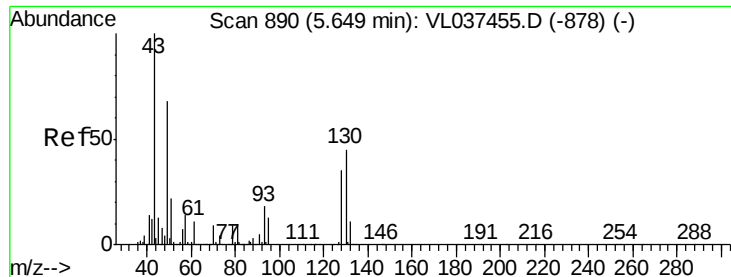
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1361397	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4103513	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3456427	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2475442	10.08	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.98	51	14281	0.055	ppbv #	81
7) Chloroethane	3.55	64	1168	0.036	ppbv #	64
8) Dichlorotetrafluoroethane	3.18	85	13212	0.059	ppbv	100
9) Propene	3.00	41	5774	0.062	ppbv #	16
11) Trichlorofluoromethane	3.94	101	7614	0.037	ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.48	101	4905	0.033	ppbv #	56
13) Ethanol	3.61	45	877	0.097	ppbv #	39
14) Bromoethene	3.73	108	2108	0.031	ppbv #	33
15) Acetone	3.87	43	28003	0.202	ppbv #	1
20) Methylene Chloride	4.34	84	6995	0.101	ppbv #	60
21) Allyl Chloride	4.39	41	4477	0.040	ppbv #	42
22) trans-1,2-Dichloroethene	4.87	96	2268	0.033	ppbv #	36
24) 1,1-Dichloroethane	5.00	63	6085	0.041	ppbv #	89
37) 1,2-Dichloroethane	6.29	62	5693	0.033	ppbv #	86
39) 1,2-Dichloropropane	7.16	63	956671	7.217	ppbv #	29
63) 1,1,2,2-Tetrachloroethane	13.66	83	9466	0.033	ppbv #	68
66) Benzyl Chloride	16.97	91	915	0.041	ppbv #	62

(#) = 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: VL037476.D

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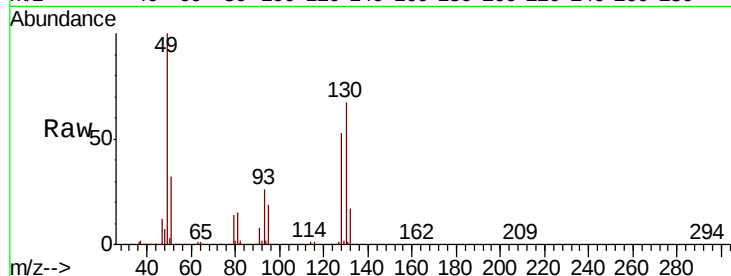
Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 49 Resp: 1361397

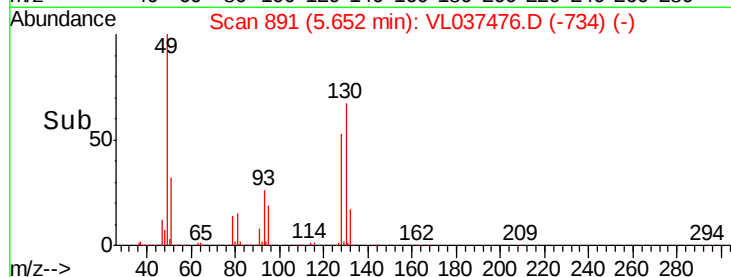
Ion	Ratio	Lower	Upper
49	100		
128	55.8	27.5	82.4
130	69.6	34.0	101.8



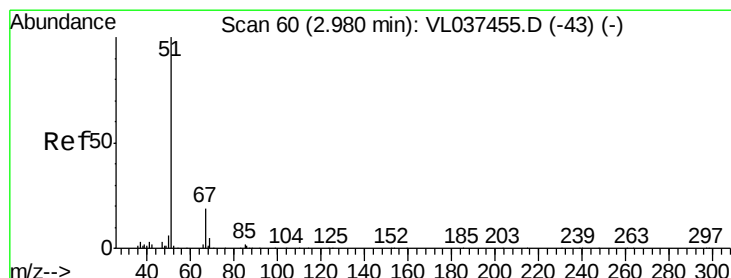
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



Time--> 5.55 5.60 5.65 5.70 5.75



#3

Chlorodifluoromethane

Concen: 0.055 ppbv

RT: 2.98 min Scan# 59

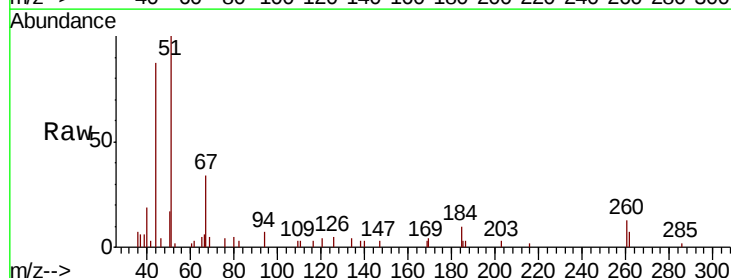
Delta R.T. -0.00 min

Lab File: VL037476.D

Acq: 17 Aug 2021 00:35

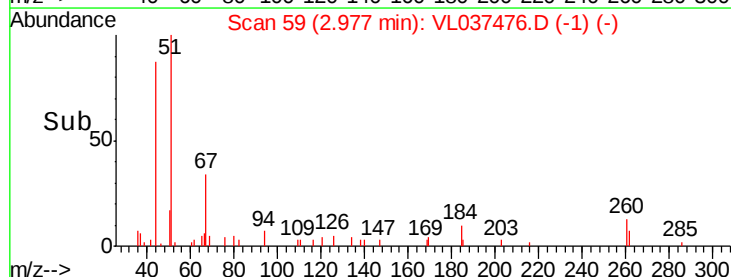
Tgt Ion: 51 Resp: 14281

Ion	Ratio	Lower	Upper
51	100		
67	26.2	14.2	21.2

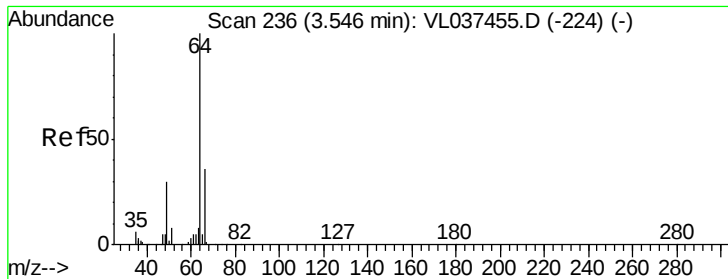


Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



Time--> 2.90 2.95 3.00 3.05 3.10



#7

Chloroethane

Concen: 0.036 ppbv

RT: 3.55 min Scan# 236

Delta R.T. 0.00 min

Lab File: VL037476.D

Acq: 17 Aug 2021 00:35

Instrument :

MSVOA_L

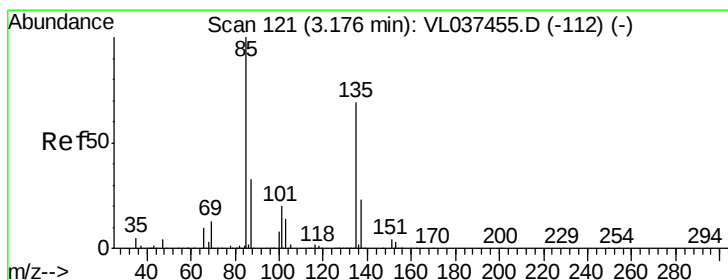
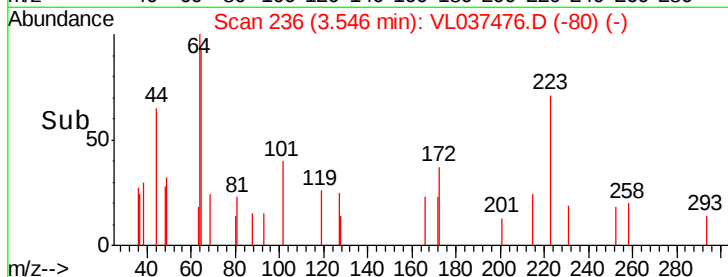
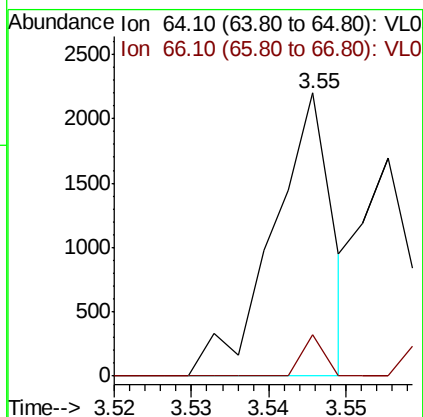
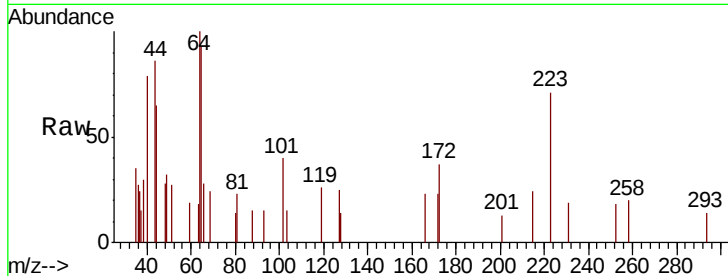
ClientSampleId :

Tot Ion: 64 Resp: 1168

Ion Ratio Lower Upper

64 100

66 14.7 28.6 43.0#



#8

Dichlorotetrafluoroethane

Concen: 0.059 ppbv

RT: 3.18 min Scan# 122

Delta R.T. 0.00 min

Lab File: VL037476.D

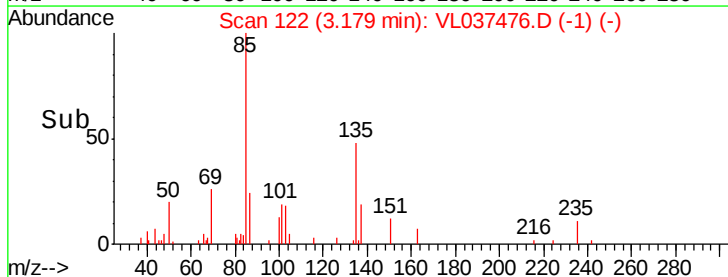
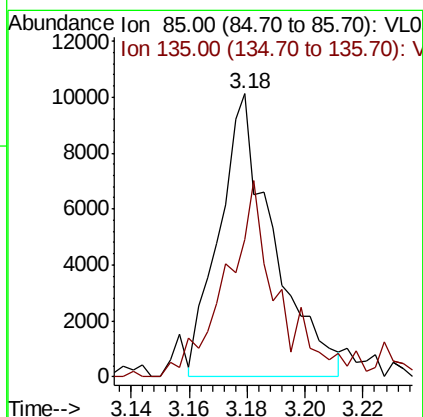
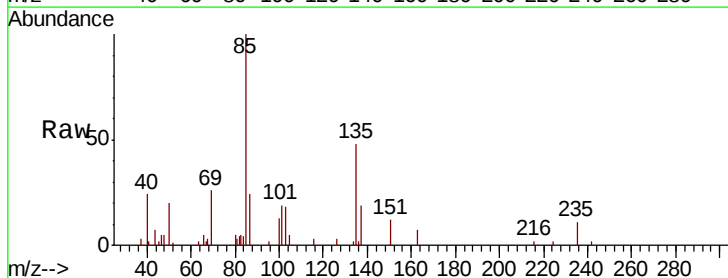
Acq: 17 Aug 2021 00:35

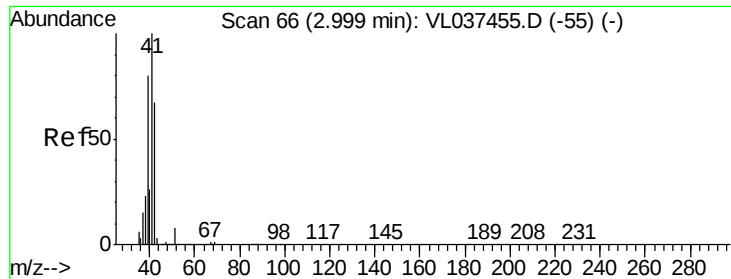
Tgt Ion: 85 Resp: 13212

Ion Ratio Lower Upper

85 100

135 73.5 58.8 88.2





#9

Propene

Concen: 0.062 ppbv

RT: 3.00 min Scan# 67

Delta R.T. 0.00 min

Lab File: VL037476.D

Acq: 17 Aug 2021 00:35

Instrument :

MSVOA_L

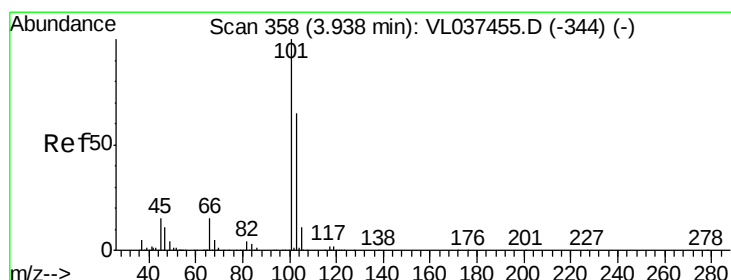
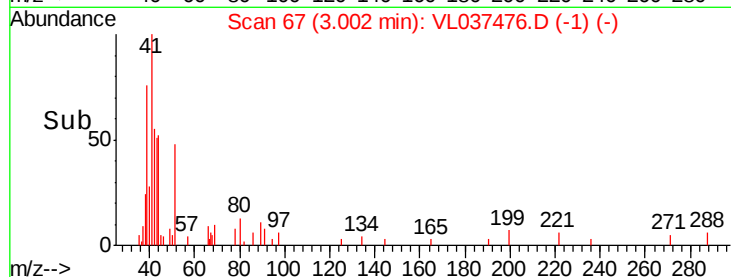
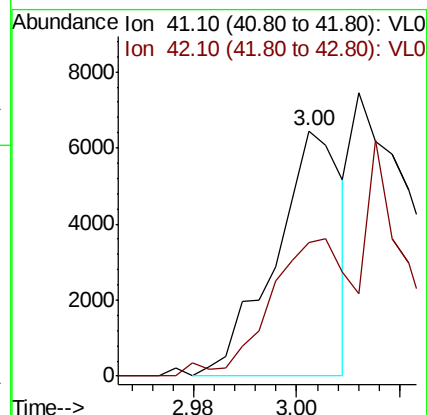
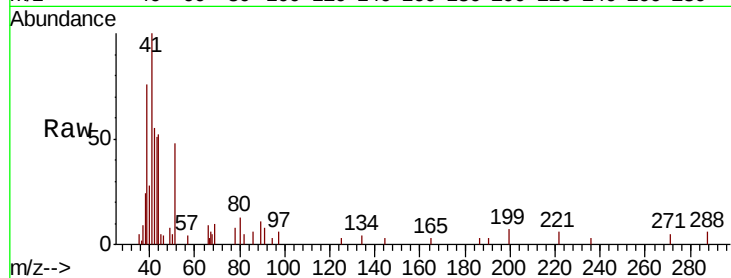
ClientSampleId :

Tot Ion: 41 Resp: 5774

Ion Ratio Lower Upper

41 100

42 0.0 53.7 80.5#



#11

Trichlorofluoromethane

Concen: 0.037 ppbv

RT: 3.94 min Scan# 358

Delta R.T. 0.00 min

Lab File: VL037476.D

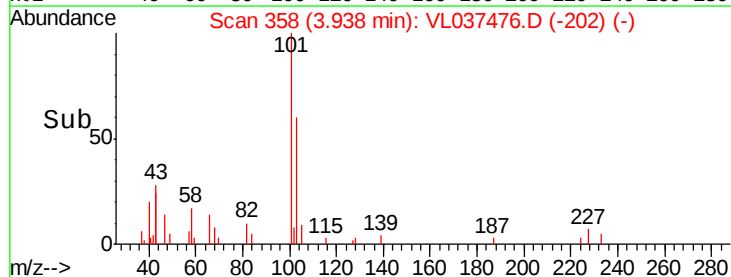
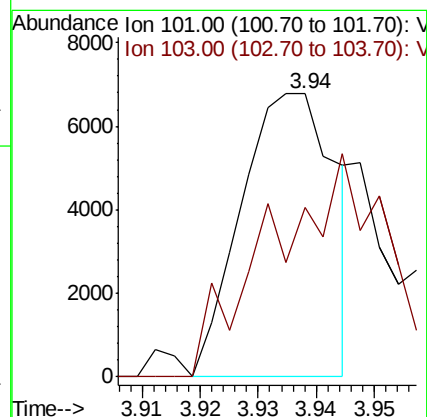
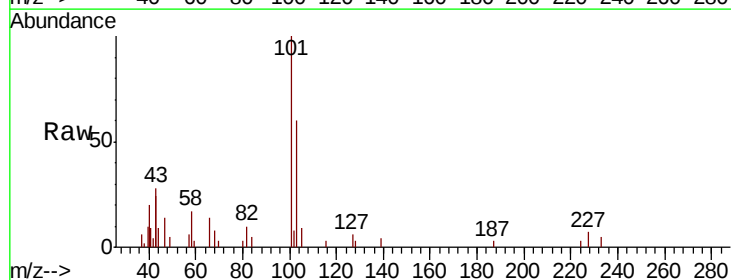
Acq: 17 Aug 2021 00:35

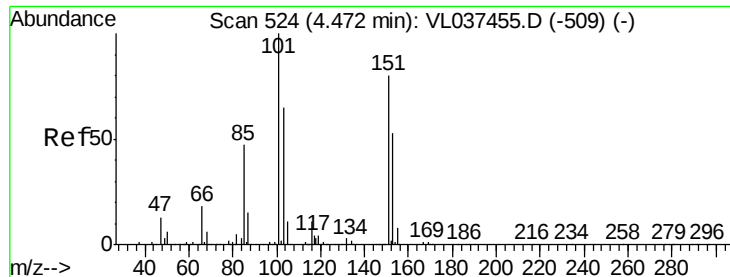
Tgt Ion: 101 Resp: 7614

Ion Ratio Lower Upper

101 100

103 60.1 51.8 77.6





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.033 ppbv

RT: 4.48 min Scan# 526

Delta R.T. 0.01 min

Lab File: VL037476.D

Acq: 17 Aug 2021 00:35

Instrument :

MSVOA_L

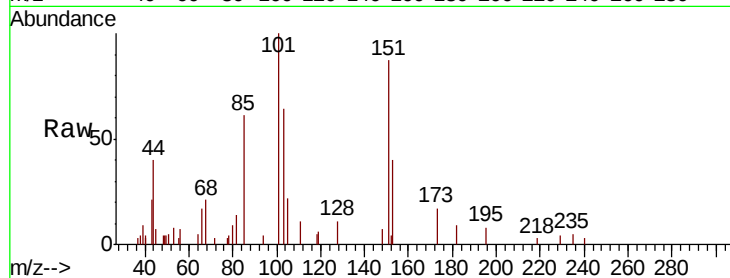
ClientSampled :

Tot Ion:101 Resp: 4905

Ion Ratio Lower Upper

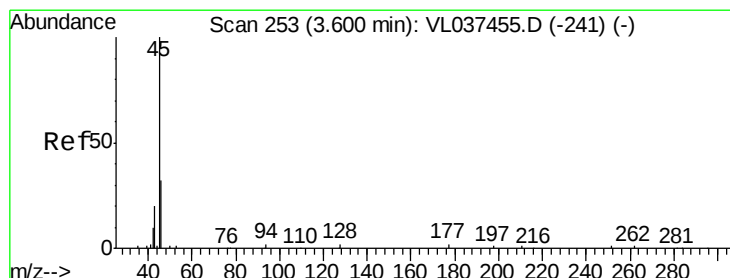
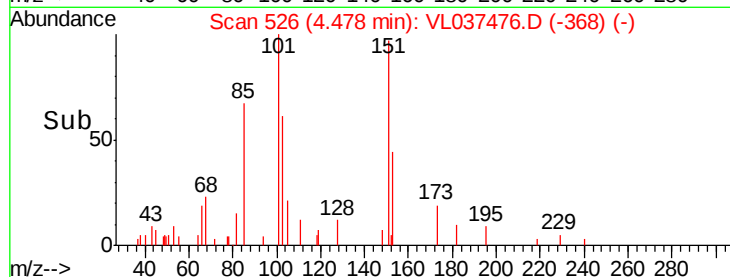
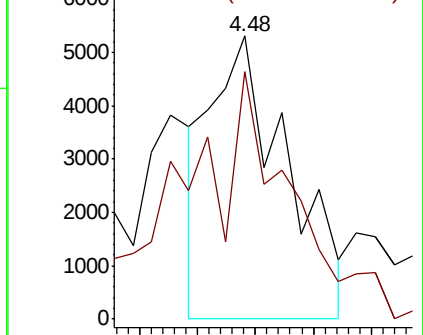
101 100

151 118.6 63.7 95.5#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 0.097 ppbv

RT: 3.61 min Scan# 257

Delta R.T. 0.01 min

Lab File: VL037476.D

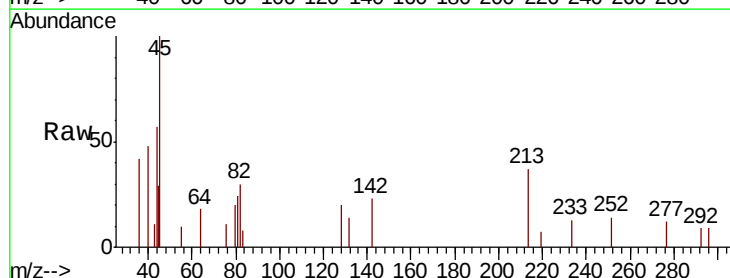
Acq: 17 Aug 2021 00:35

Tgt Ion: 45 Resp: 877

Ion Ratio Lower Upper

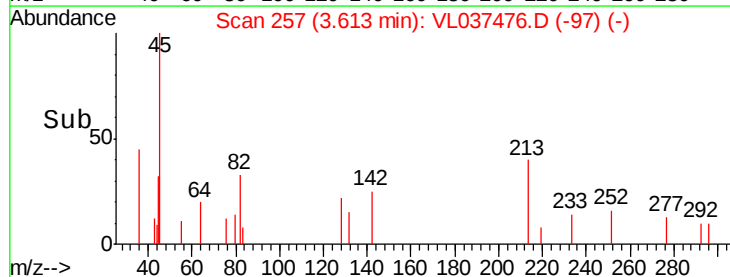
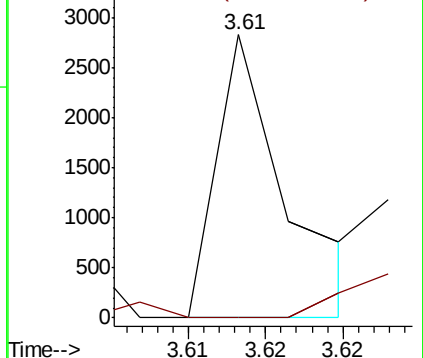
45 100

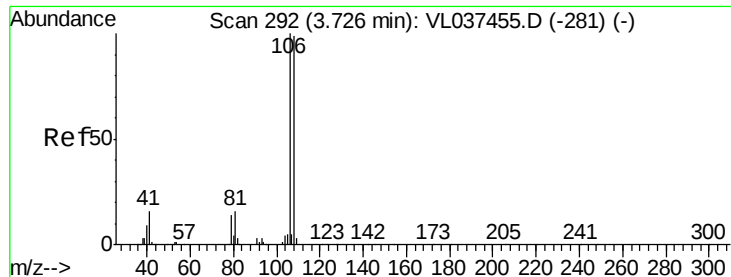
46 0.0 14.1 56.5#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#14

Bromoethene

Concen: 0.031 ppbv

RT: 3.73 min Scan# 293

Delta R.T. 0.00 min

Lab File: VL037476.D

Acq: 17 Aug 2021 00:35

Instrument :

MSVOA_L

ClientSampleId :

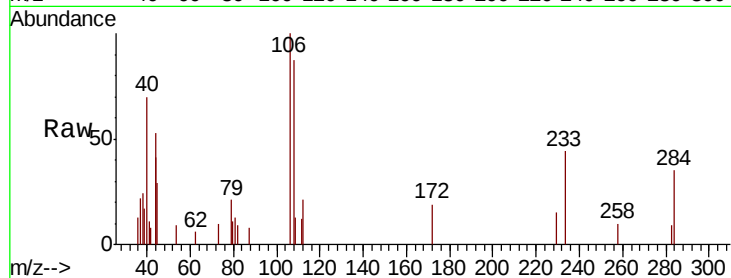
Tot Ion:108 Resp: 2108

Ion Ratio Lower Upper

108 100

106 180.7 85.8 128.8#

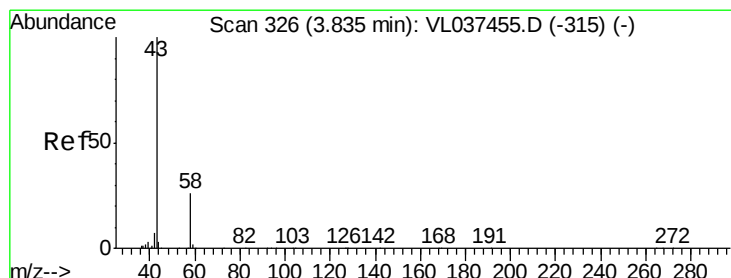
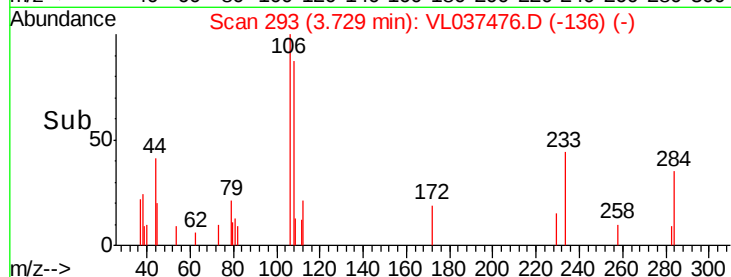
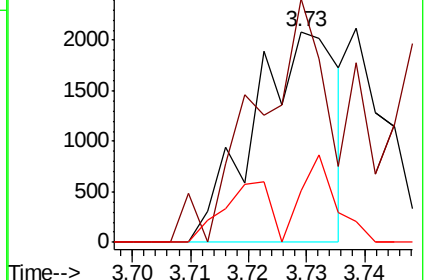
79 34.7 12.6 18.8#



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): V



#15

Acetone

Concen: 0.202 ppbv

RT: 3.87 min Scan# 337

Delta R.T. 0.04 min

Lab File: VL037476.D

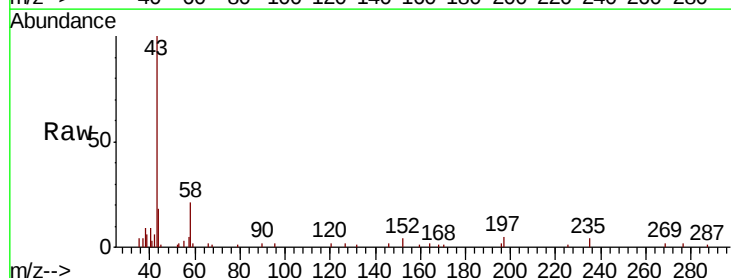
Acq: 17 Aug 2021 00:35

Tgt Ion: 43 Resp: 28003

Ion Ratio Lower Upper

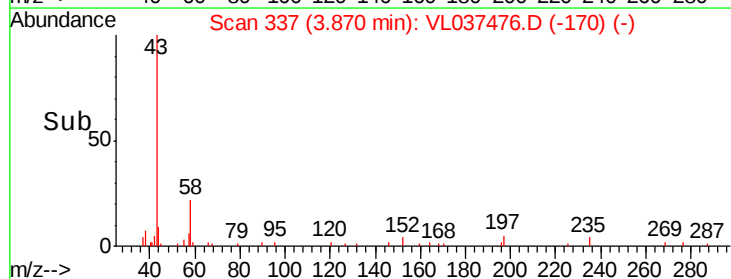
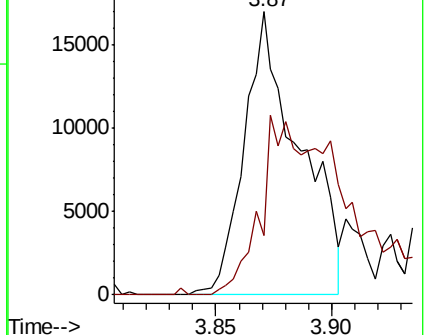
43 100

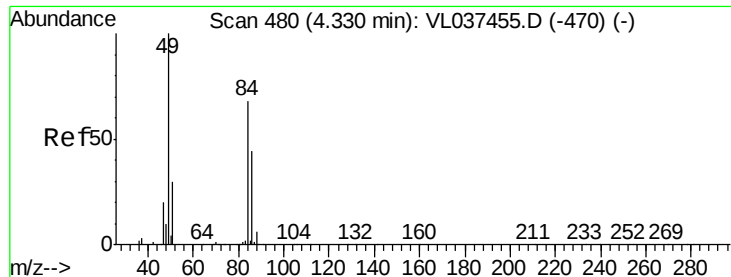
58 106.8 24.8 37.2#



Abundance Ion 43.10 (42.80 to 43.80): V

Ion 58.10 (57.80 to 58.80): V

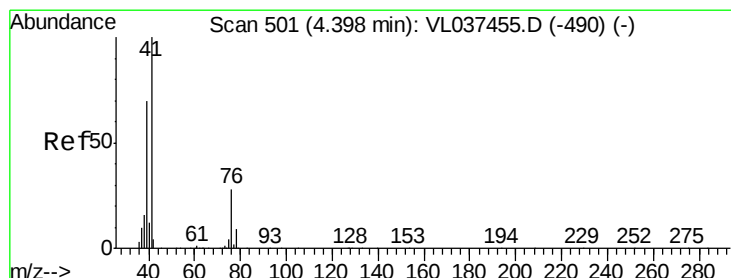
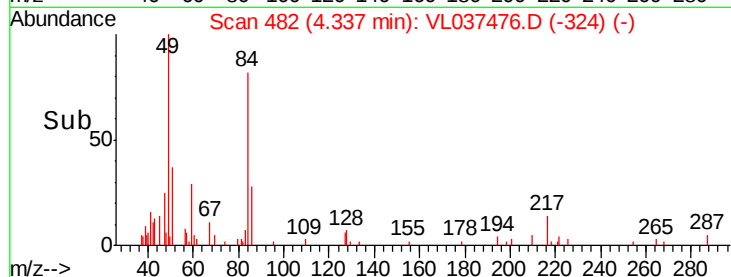
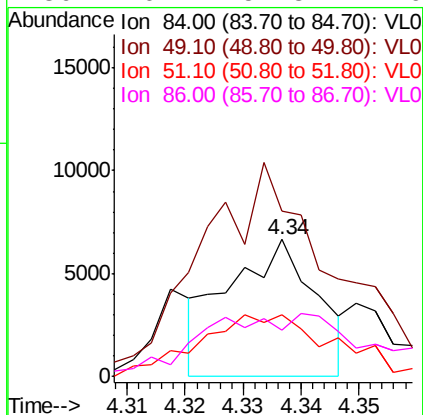
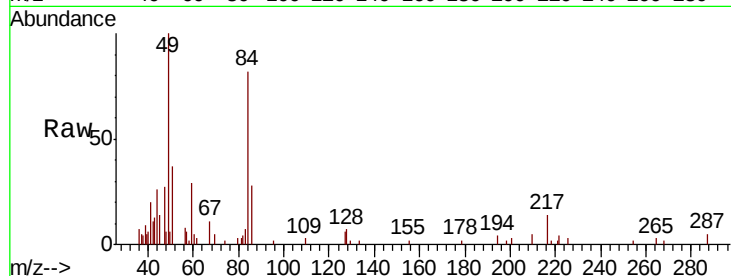




#20
Methylene Chloride
Concen: 0.101 ppbv
RT: 4.34 min Scan# 482
Delta R.T. 0.01 min
Lab File: VL037476.D
Acq: 17 Aug 2021 00:35

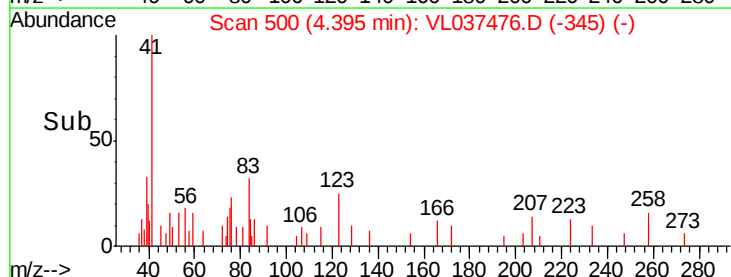
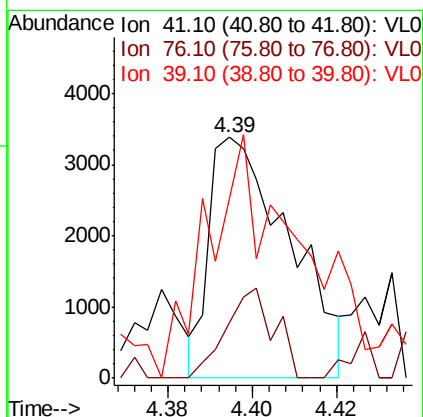
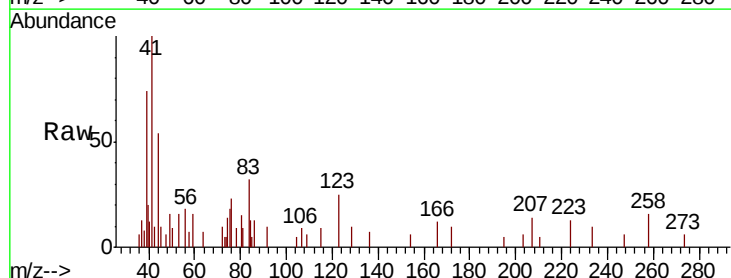
Instrument :
MSVOA_L
ClientSampled :

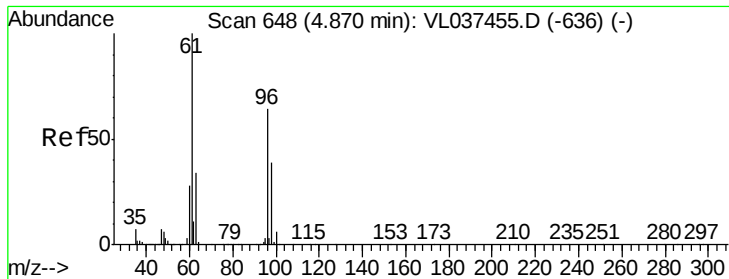
Tot Ion:	84	Resp:	6995
Ion	Ratio	Lower	Upper
84	100		
49	95.7	118.2	177.2#
51	49.3	36.6	55.0
86	16.4	51.8	77.6#



#21
Allyl Chloride
Concen: 0.040 ppbv
RT: 4.39 min Scan# 500
Delta R.T. -0.00 min
Lab File: VL037476.D
Acq: 17 Aug 2021 00:35

Tgt Ion:	41	Resp:	4477
Ion	Ratio	Lower	Upper
41	100		
76	28.6	21.8	32.6
39	137.1	56.8	85.2#





#22

trans-1,2-Dichloroethene

Concen: 0.033 ppbv

RT: 4.87 min Scan# 648

Delta R.T. 0.00 min

Lab File: VL037476.D

Acq: 17 Aug 2021 00:35

Instrument :

MSVOA_L

ClientSampleId :

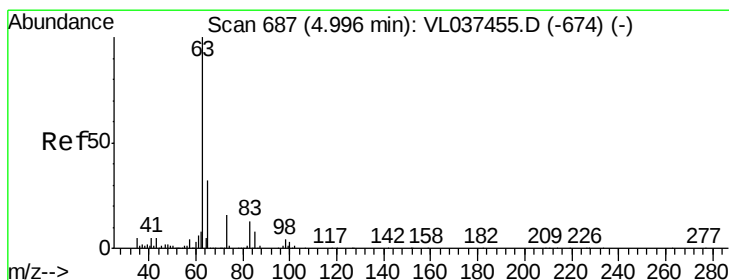
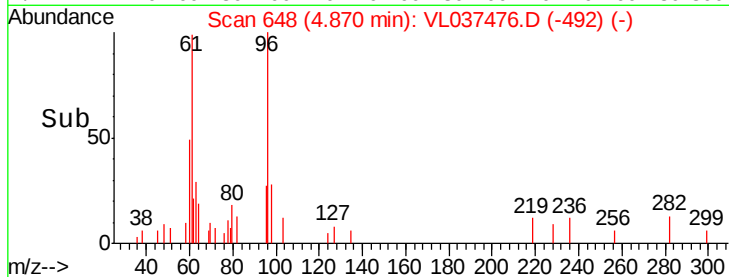
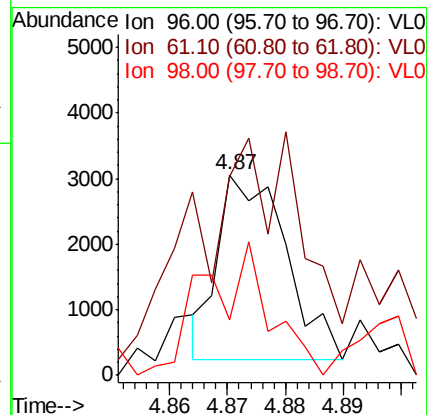
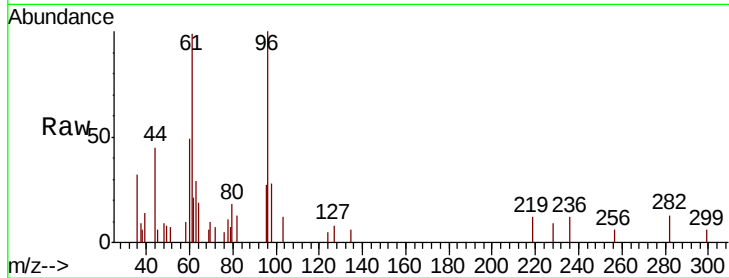
Tot Ion: 96 Resp: 2268

Ion Ratio Lower Upper

96 100

61 71.4 125.5 188.3#

98 16.3 49.0 73.4#



#24

1,1-Dichloroethane

Concen: 0.041 ppbv

RT: 5.00 min Scan# 689

Delta R.T. 0.01 min

Lab File: VL037476.D

Acq: 17 Aug 2021 00:35

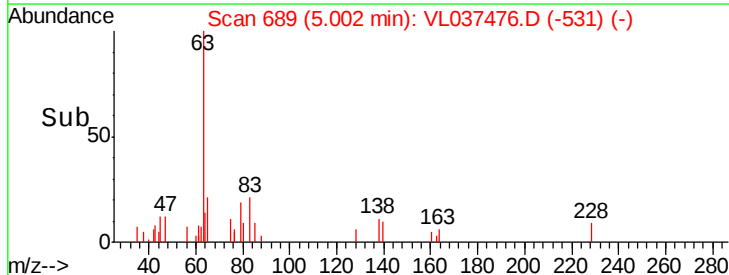
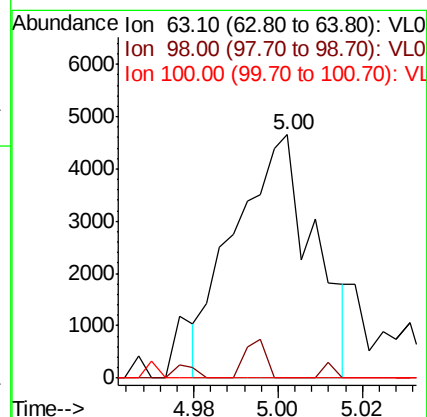
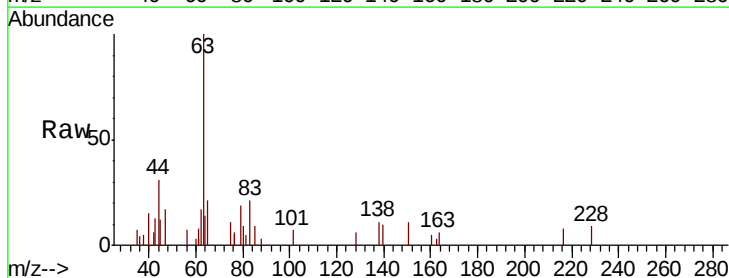
Tgt Ion: 63 Resp: 6085

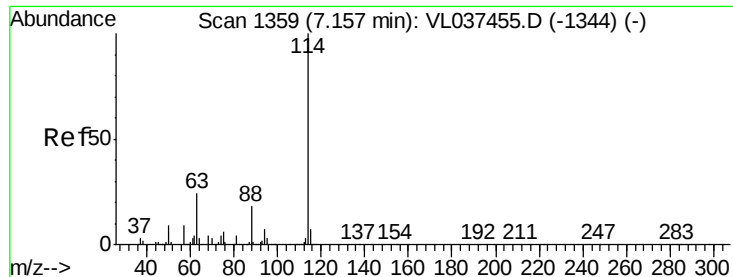
Ion Ratio Lower Upper

63 100

98 0.0 2.1 6.3#

100 0.0 1.6 4.7#

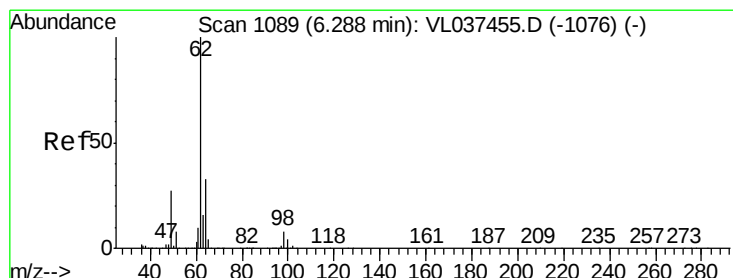
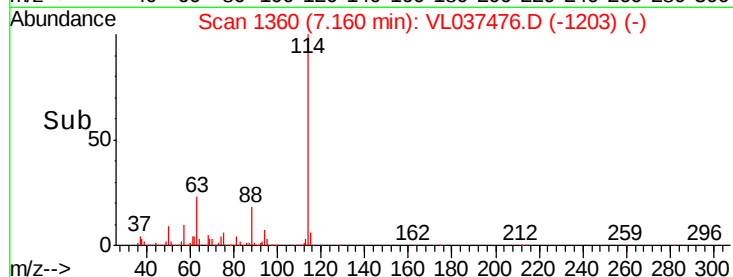
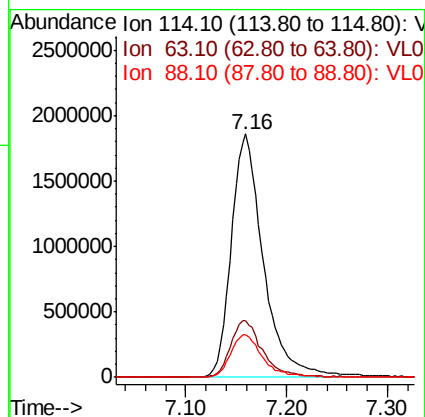
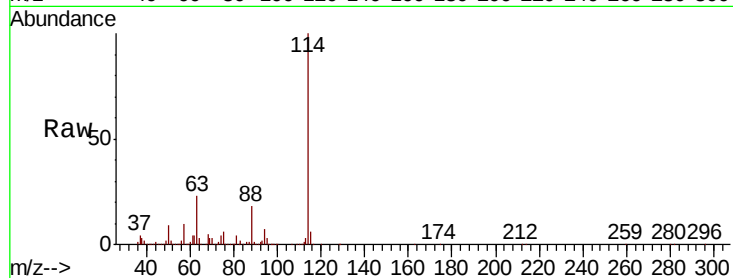




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1360
 Delta R.T. 0.00 min
 Lab File: VL037476.D
 Acq: 17 Aug 2021 00:35

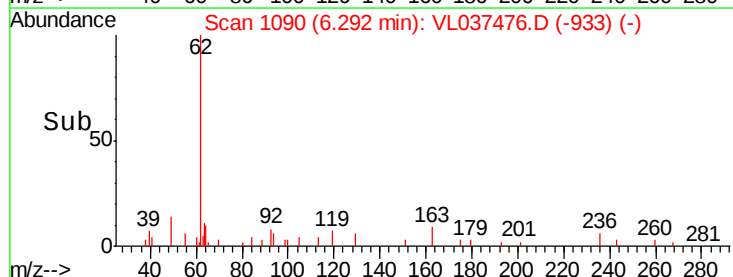
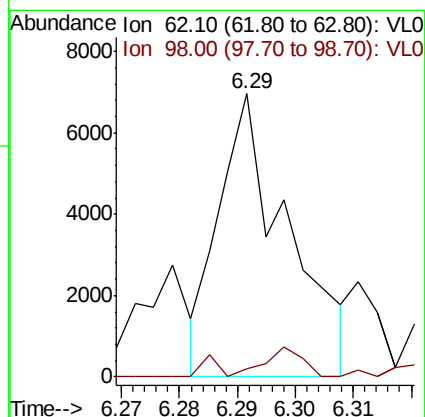
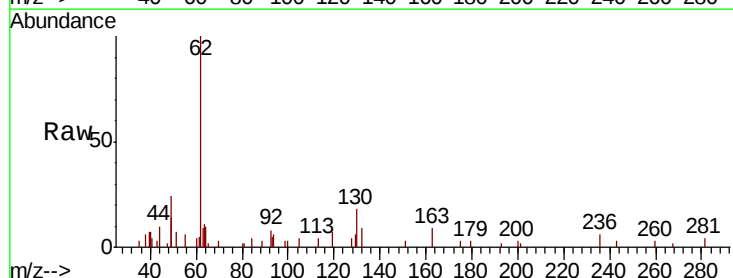
Instrument :
 MSVOA_L
 ClientSampleId :

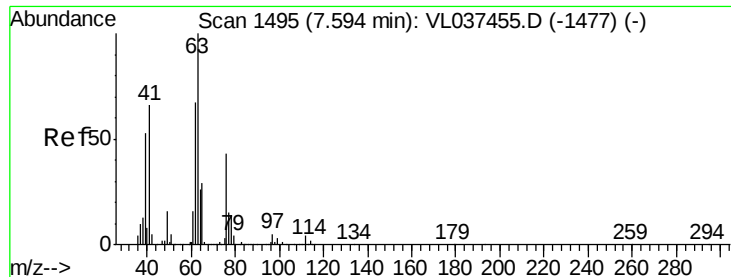
Tot Ion:114 Resp: 4103513
 Ion Ratio Lower Upper
 114 100
 63 23.7 19.3 28.9
 88 18.0 14.2 21.4



#37
 1,2-Dichloroethane
 Concen: 0.033 ppbv
 RT: 6.29 min Scan# 1090
 Delta R.T. 0.00 min
 Lab File: VL037476.D
 Acq: 17 Aug 2021 00:35

Tgt Ion: 62 Resp: 5693
 Ion Ratio Lower Upper
 62 100
 98 12.2 6.0 9.0#

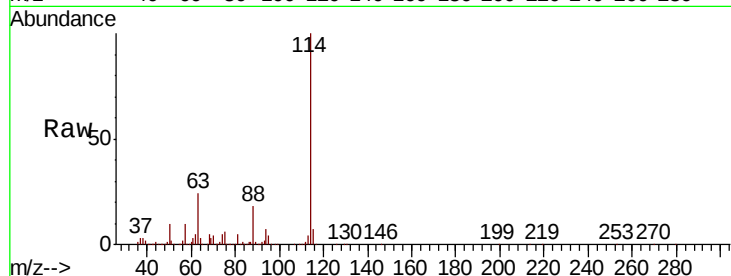




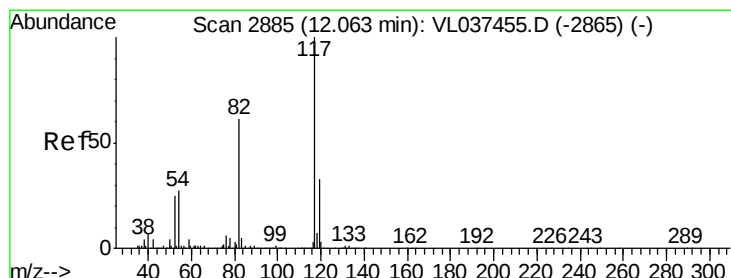
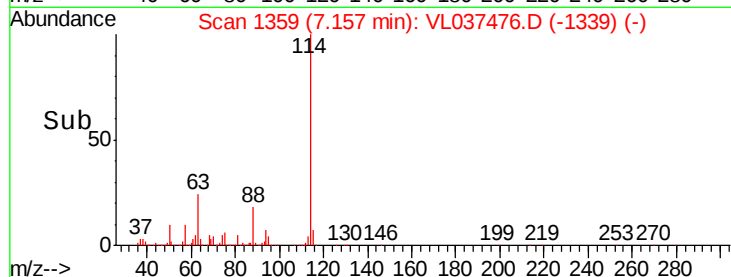
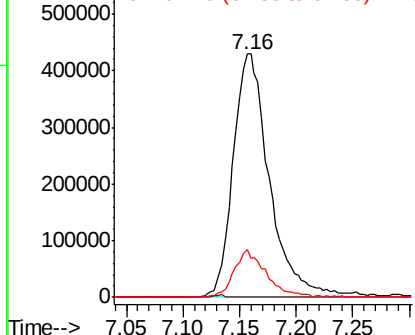
#39
 1,2-Dichloropropane
 Concen: 7.217 ppbv
 RT: 7.16 min Scan# 1359
 Delta R.T. -0.44 min
 Lab File: VL037476.D
 Acq: 17 Aug 2021 00:35

Instrument :
 MSVOA_L
 ClientSampled :

Tot Ion	63	Resp	956671
Ion Ratio	Lower	Upper	
63	100		
41	0.1	52.4	78.6#
62	19.6	53.6	80.4#

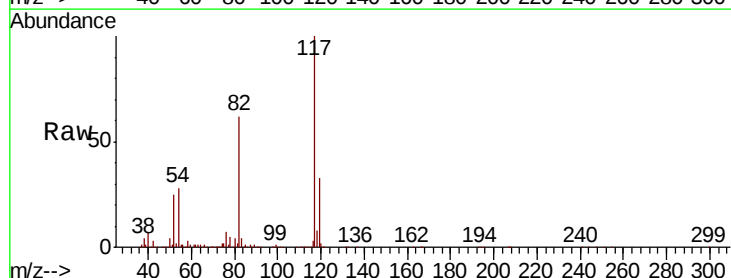


Abundance Ion 63.10 (62.80 to 63.80): VL0
 Ion 41.10 (40.80 to 41.80): VL0
 Ion 62.10 (61.80 to 62.80): VL0

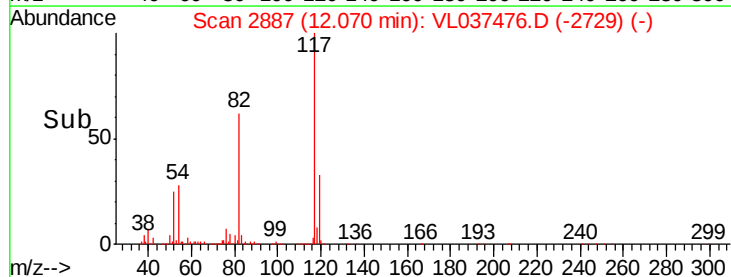
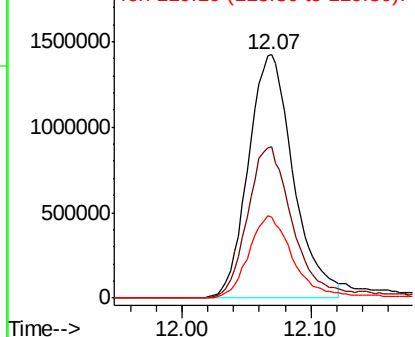


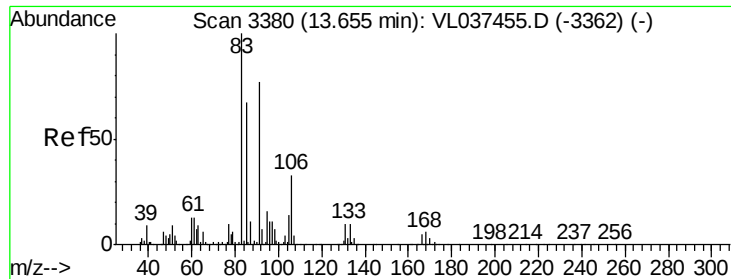
#55
 Chlorobenzene-d5
 Concen: 10.000 ppbv
 RT: 12.07 min Scan# 2887
 Delta R.T. 0.01 min
 Lab File: VL037476.D
 Acq: 17 Aug 2021 00:35

Tgt Ion	117	Resp	3456427
Ion Ratio	Lower	Upper	
117	100		
82	66.6	52.9	79.3
119	34.7	24.8	37.2



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

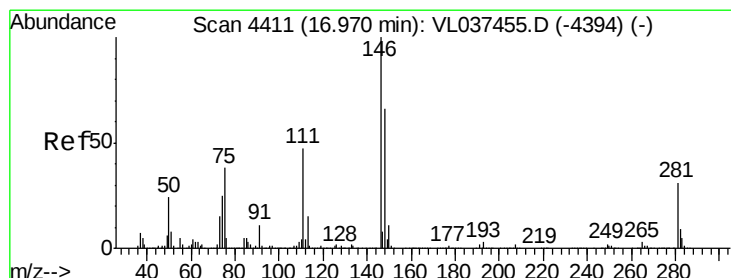
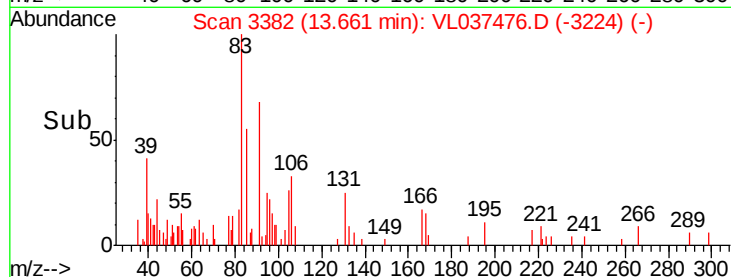
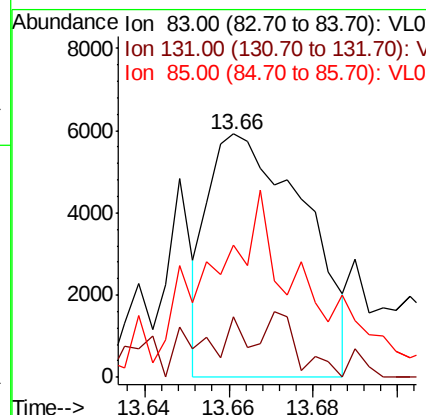
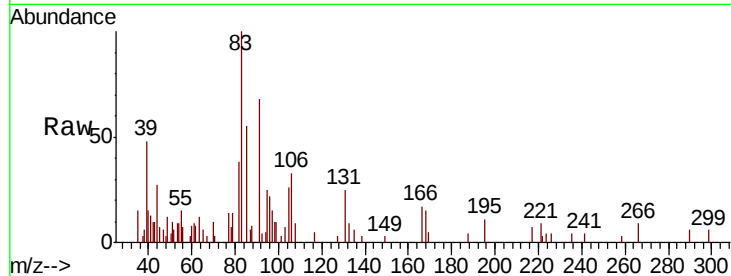




#63
 1,1,2,2-Tetrachloroethane
 Concen: 0.033 ppbv
 RT: 13.66 min Scan# 3382
 Delta R.T. 0.01 min
 Lab File: VL037476.D
 Acq: 17 Aug 2021 00:35

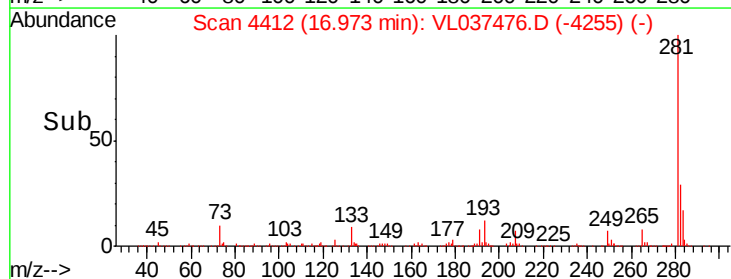
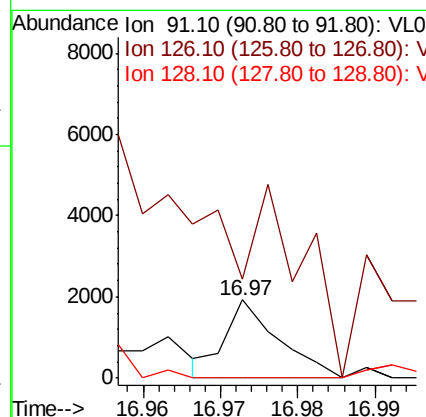
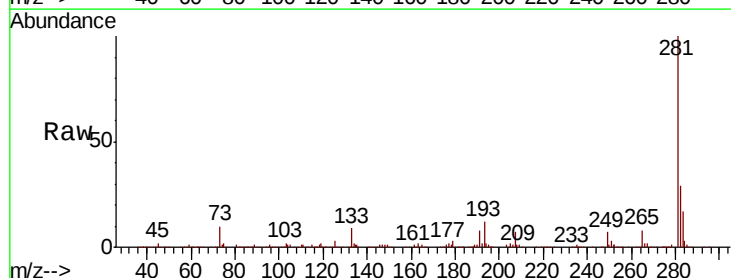
Instrument :
 MSVOA_L
 ClientSampleId :

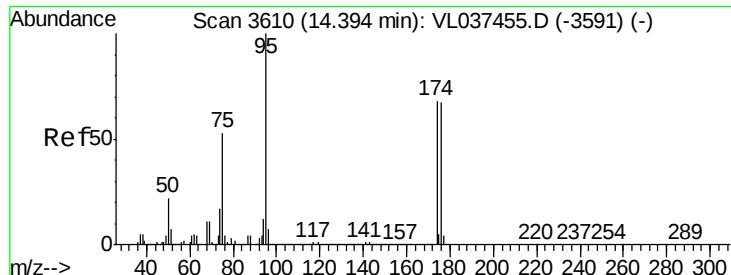
Tot Ion: 83 Resp: 9466
 Ion Ratio Lower Upper
 83 100
 131 30.7 5.0 15.0#
 85 90.5 33.8 101.3



#66
 Benzyl Chloride
 Concen: 0.041 ppbv
 RT: 16.97 min Scan# 4412
 Delta R.T. 0.00 min
 Lab File: VL037476.D
 Acq: 17 Aug 2021 00:35

Tgt Ion: 91 Resp: 915
 Ion Ratio Lower Upper
 91 100
 126 0.0 15.9 23.9#
 128 14.0 5.4 8.0#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.081 ppbv

RT: 14.40 min Scan# 3611

Delta R.T. 0.00 min

Lab File: VL037476.D

Acq: 17 Aug 2021 00:35

Instrument :

MSVOA_L

ClientSampleId :

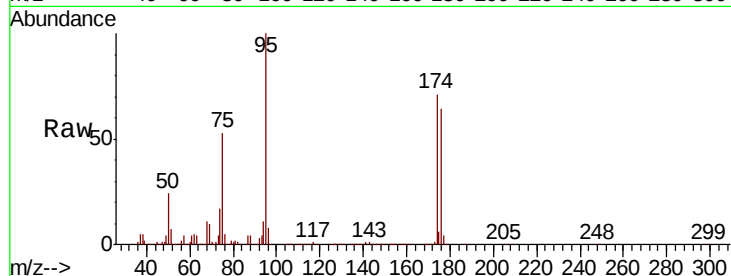
Tot Ion: 95 Resp: 2475442

Ion Ratio Lower Upper

95 100

174 76.7 59.6 89.4

175 5.4 4.6 7.0



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

