

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111621\
 Data File : VL038035.D
 Acq On : 16 Nov 2021 11:50
 Operator : SY/AP
 Sample : M4526-01DL 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Nov 17 06:40:24 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov 16 09:59:16 2021
 QLast Update : Tue Nov 16 09:59:16 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	876844	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	2631817	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.07	117	2390322	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	1701854	9.85	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.50%

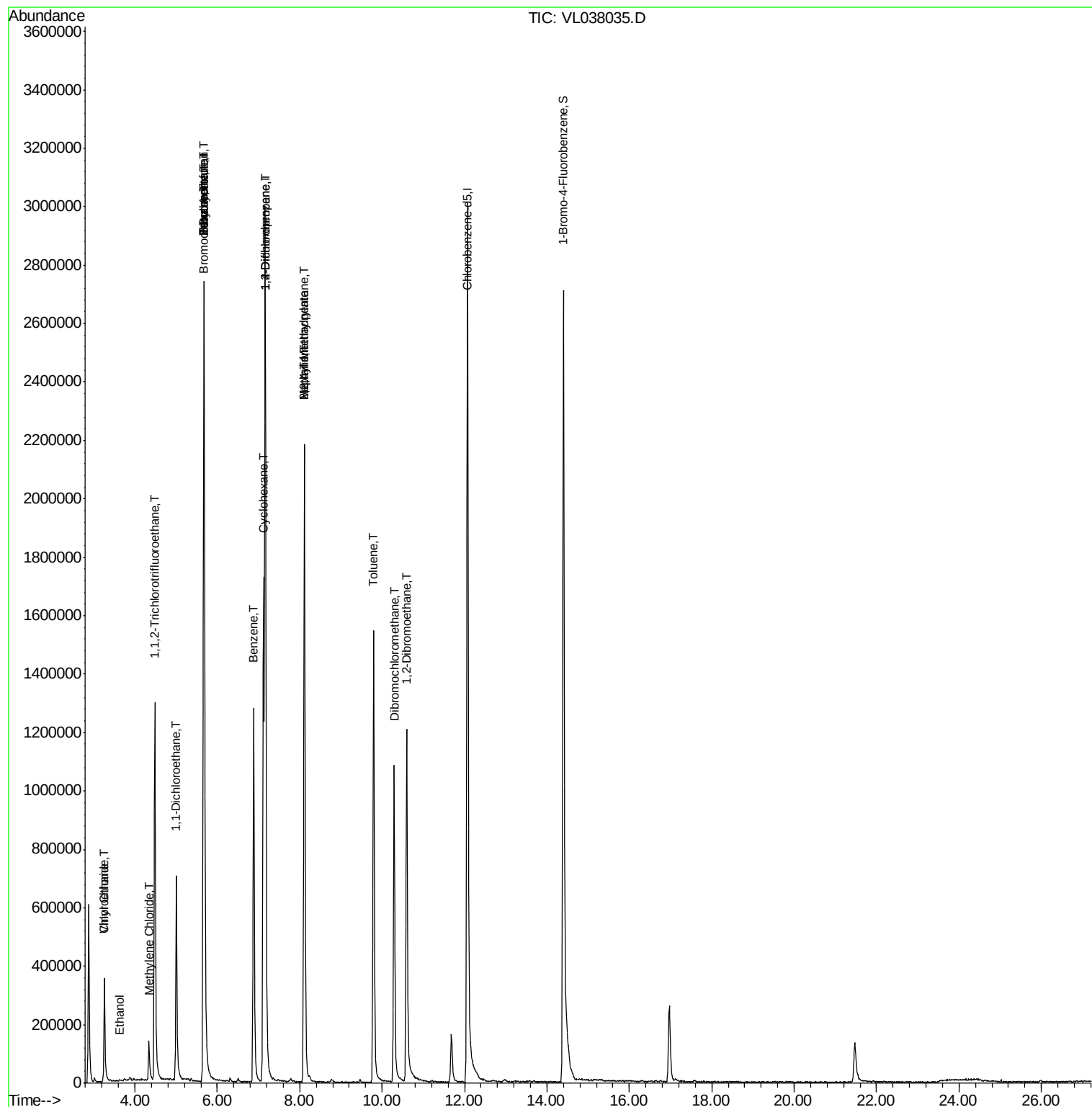
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl Chloride	3.26	62	390574	5.017	ppbv	95
7) Chloroethane	3.26	64	120296	4.393	ppbv #	46
10) Heptane	8.11	43	1161980	5.491	ppbv	100
12) 1,1,2-Trichlorotrifluoroet	4.48	101	544554	3.986	ppbv	97
13) Ethanol	3.62	45	812	0.107	ppbv #	100
20) Methylene Chloride	4.35	84	23183	0.383	ppbv	85
24) 1,1-Dichloroethane	5.01	63	709683	5.329	ppbv	99
25) Ethyl Acetate	5.68	43	720606	2.971	ppbv #	76
26) Hexane	5.68	57	1056912	8.675	ppbv #	45
30) Cyclohexane	7.12	84	714046	5.204	ppbv	99
34) 2-Butanone	5.68	43	695087	8.007	ppbv #	53
36) Benzene	6.88	78	1260423	5.035	ppbv	98
39) 1,2-Dichloropropane	7.17	63	609553	6.299	ppbv #	30
41) Tetrahydrofuran	5.68	42	374694	6.015	ppbv #	51
43) Methyl Methacrylate	8.11	69	9524	0.107	ppbv #	1
44) 2,2,4-Trimethylpentane	8.11	57	574592	1.336	ppbv #	1
48) Dibromochloromethane	10.29	129	774654	4.847	ppbv	98
53) Toluene	9.80	91	1440325	4.920	ppbv	100
54) 1,2-Dibromoethane	10.60	107	1207055	8.765	ppbv	97

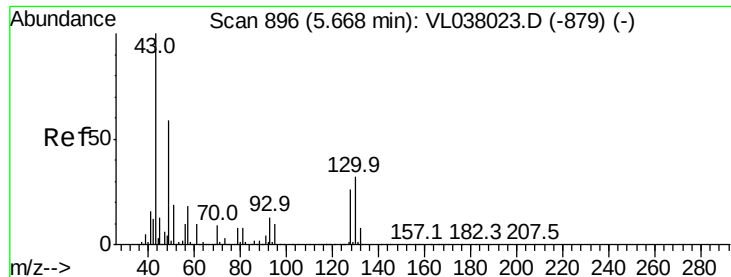
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Nov 2021 11:50

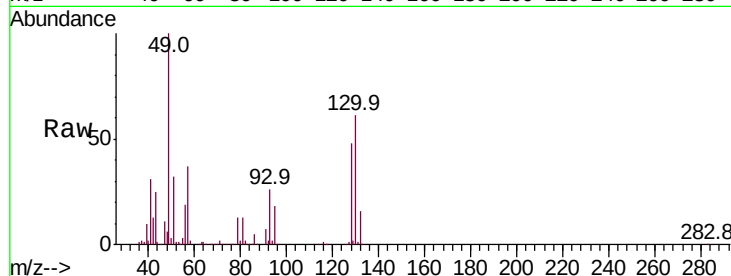
Tot Ion: 49 Resp: 876844

Ion Ratio Lower Upper

49 100

128 51.2 23.4 70.2

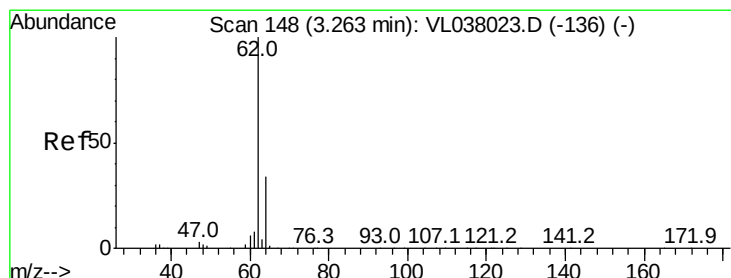
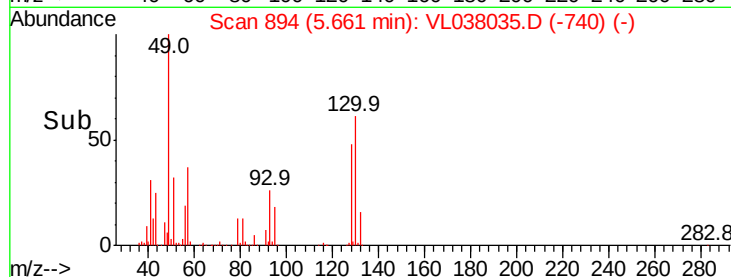
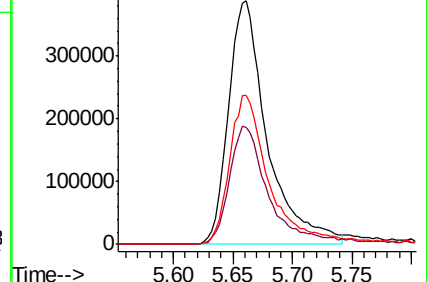
130 65.4 29.1 87.3



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



#5

Vinyl Chloride

Concen: 5.017 ppbv

RT: 3.26 min Scan# 147

Delta R.T. -0.00 min

Lab File: VL038035.D

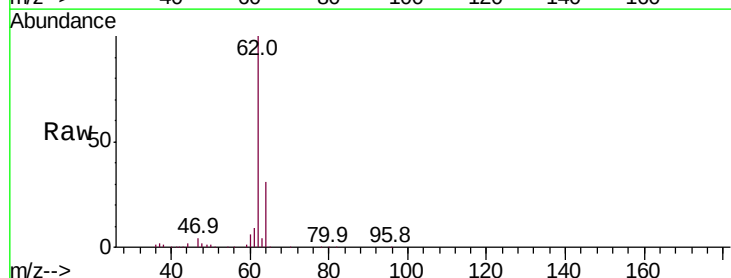
Acq: 16 Nov 2021 11:50

Tgt Ion: 62 Resp: 390574

Ion Ratio Lower Upper

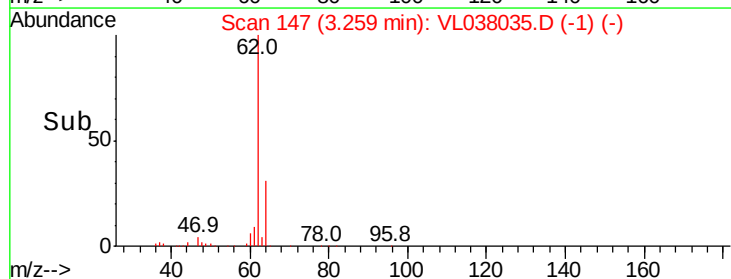
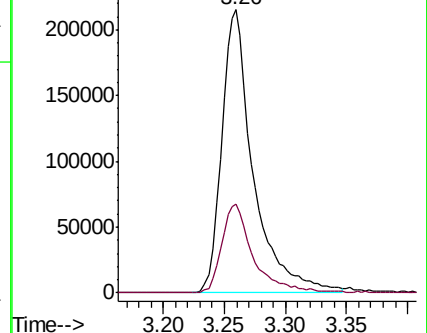
62 100

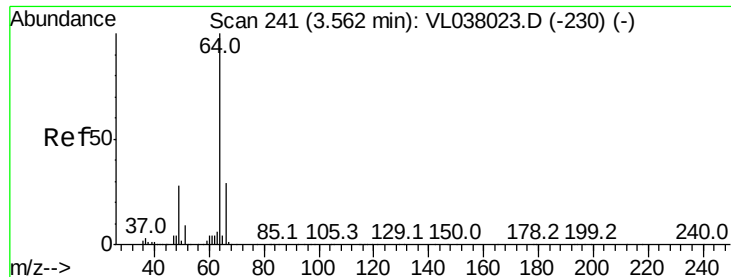
64 31.2 27.4 41.0



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0





#7

Chloroethane

Concen: 4.393 ppbv

RT: 3.26 Instrument: MSVOA_1

Delta R.T.:

Lab File:

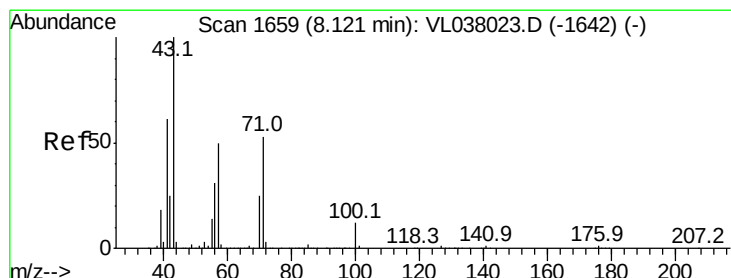
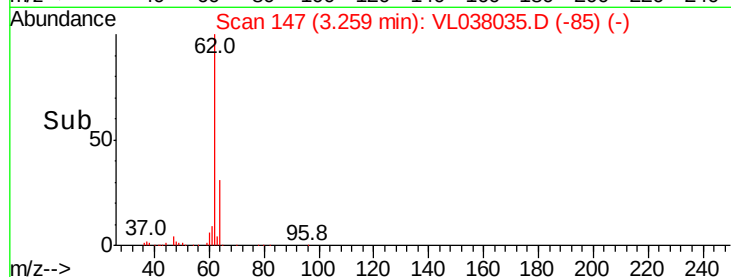
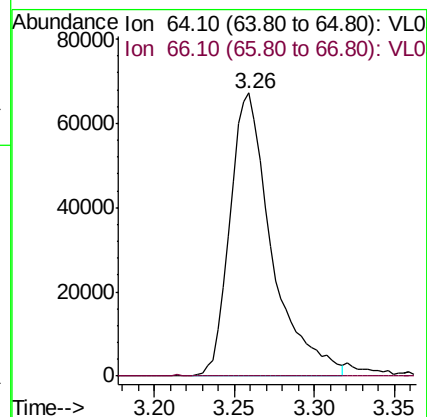
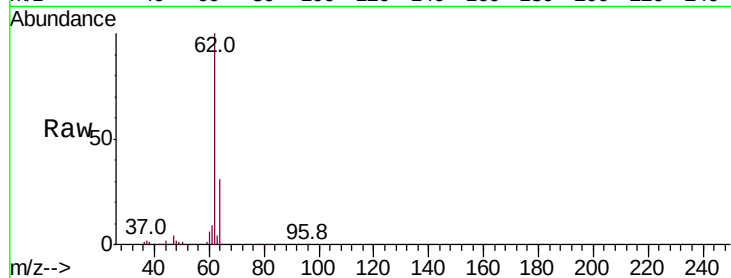
Acq: 16 Nov 2021 11:50

Tot Ion: 64 Resp: 120296

Ion Ratio Lower Upper

64 100

66 0.0 23.1 34.7#



#10

Heptane

Concen: 5.491 ppbv

RT: 8.11 min Scan# 1656

Delta R.T. -0.01 min

Lab File: VL038035.D

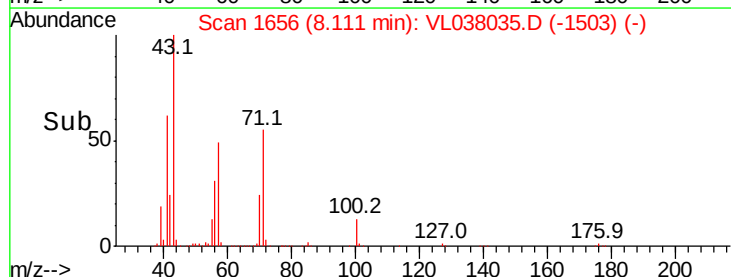
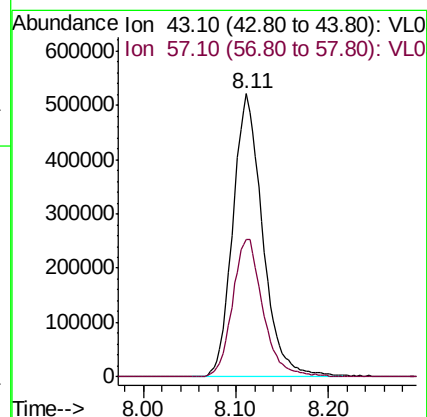
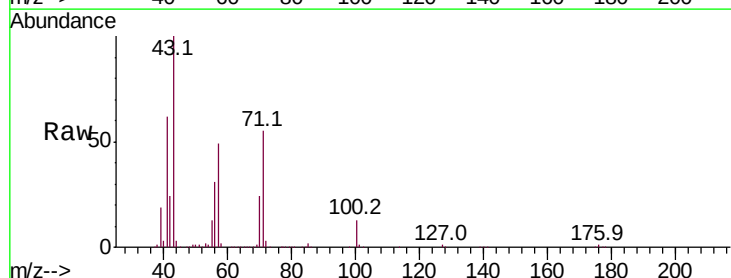
Acq: 16 Nov 2021 11:50

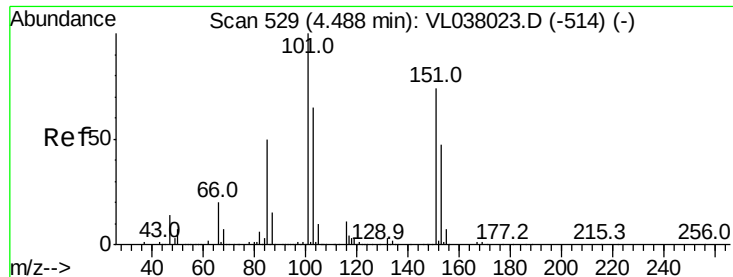
Tgt Ion: 43 Resp: 1161980

Ion Ratio Lower Upper

43 100

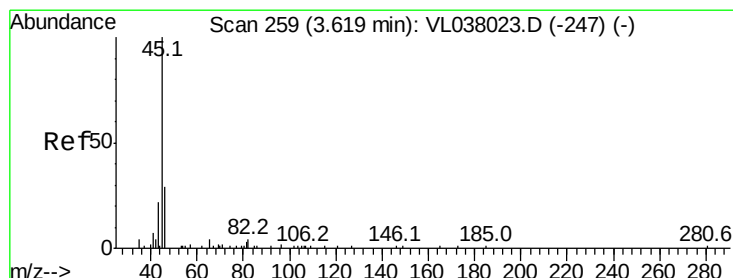
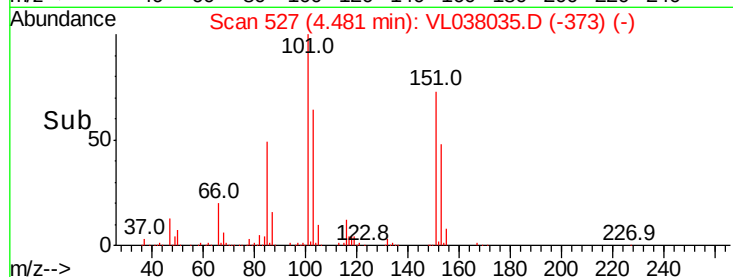
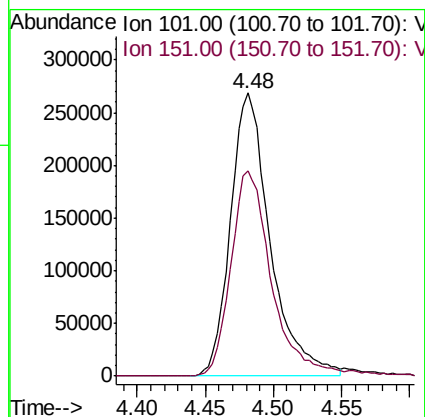
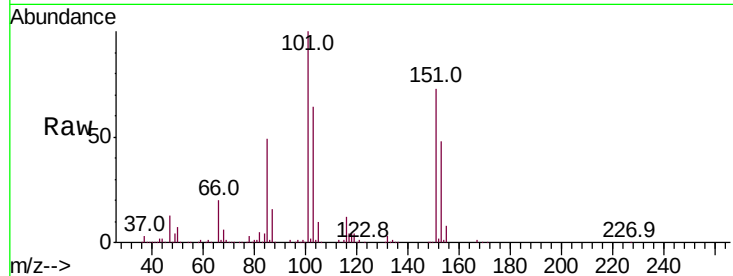
57 50.0 40.2 60.2





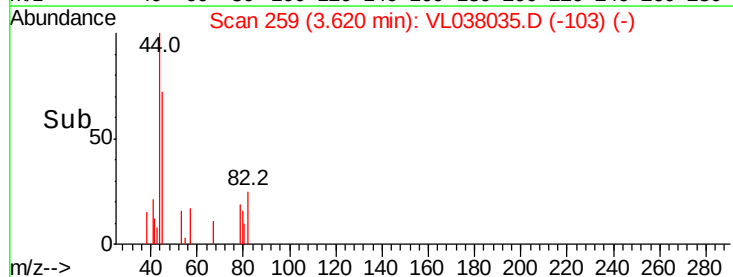
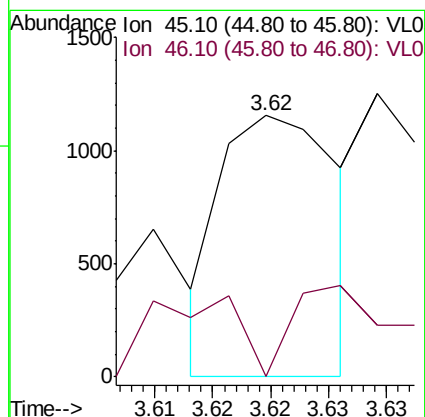
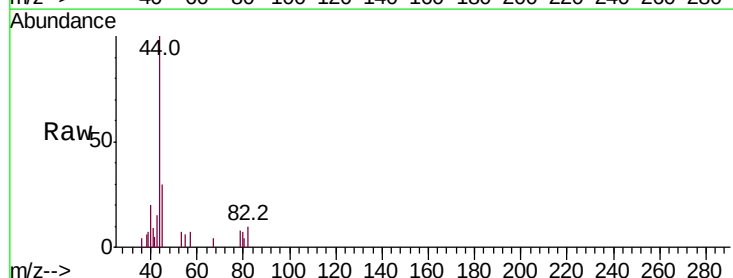
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 3.986 ppbv
 RT: 4.48
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 16 Nov 2021 11:50

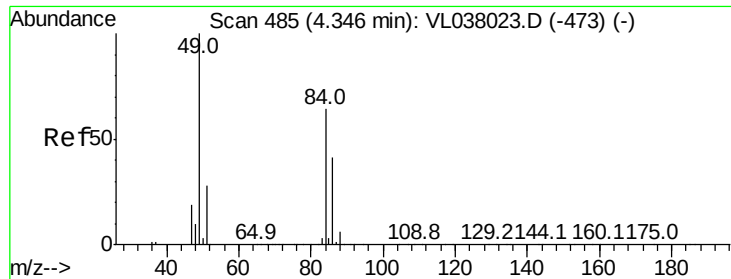
Tot Ion:101 Resp: 544554
 Ion Ratio Lower Upper
 101 100
 151 75.1 57.8 86.8



#13
 Ethanol
 Concen: 0.107 ppbv
 RT: 3.62 min Scan# 259
 Delta R.T. 0.00 min
 Lab File: VL038035.D
 Acq: 16 Nov 2021 11:50

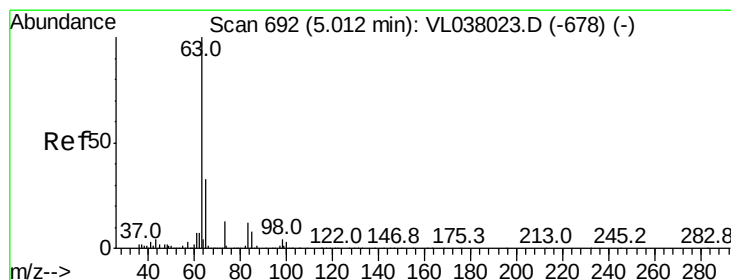
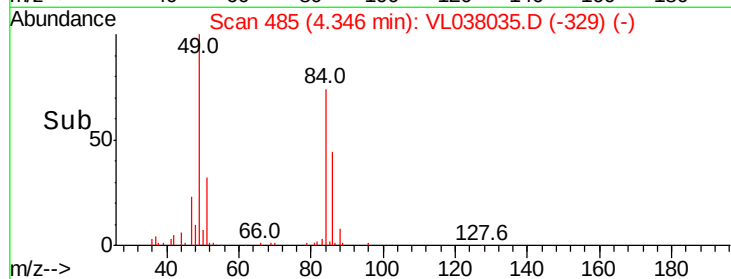
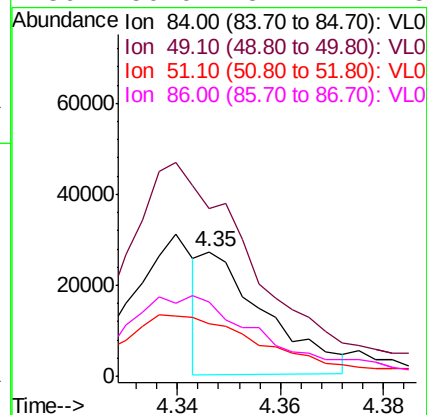
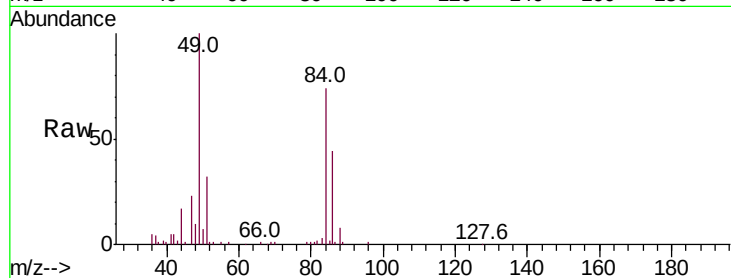
Tgt Ion: 45 Resp: 812
 Ion Ratio Lower Upper
 45 100
 46 0.0 0.0 0.0





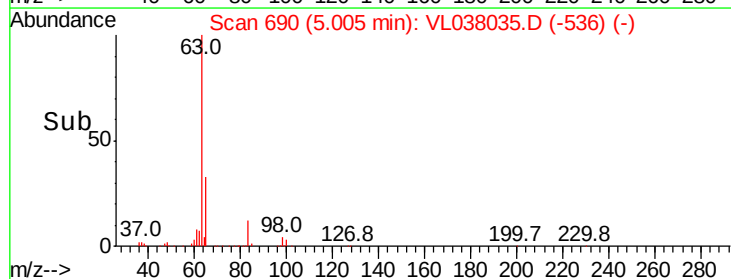
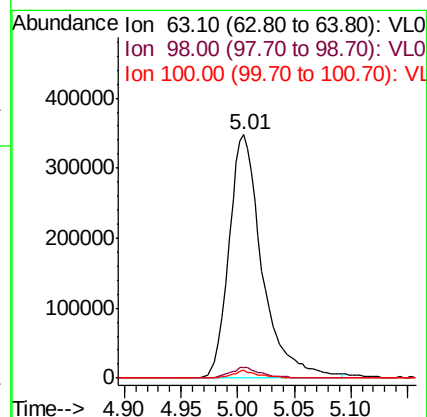
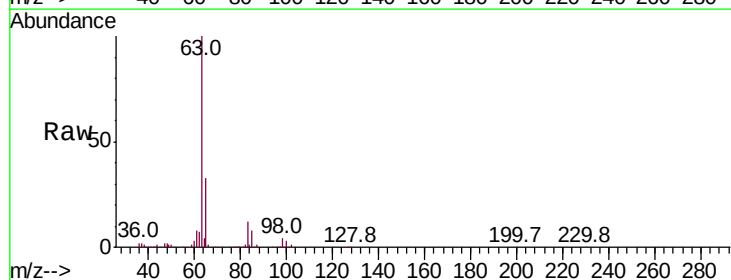
#20
Methylene Chloride
Concen: 0.383 ppbv
RT: 4.35
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 16 Nov 2021 11:50

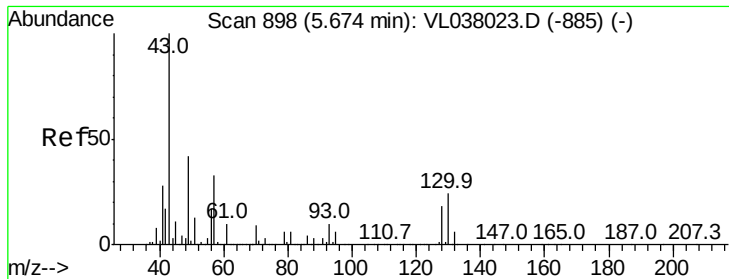
Tot Ion:	84	Resp:	23183
Ion	Ratio	Lower	Upper
84	100		
49	131.0	125.1	187.7
51	40.8	35.3	52.9
86	56.0	51.7	77.5



#24
1,1-Dichloroethane
Concen: 5.329 ppbv
RT: 5.01 min Scan# 690
Delta R.T. -0.01 min
Lab File: VL038035.D
Acq: 16 Nov 2021 11:50

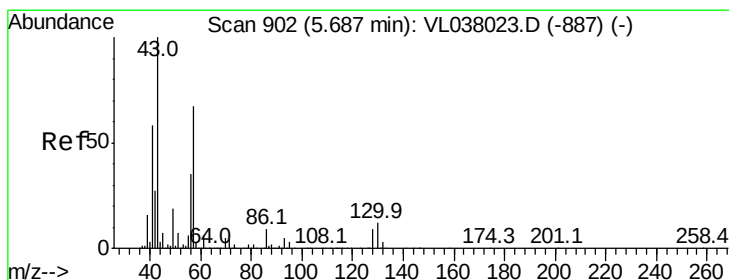
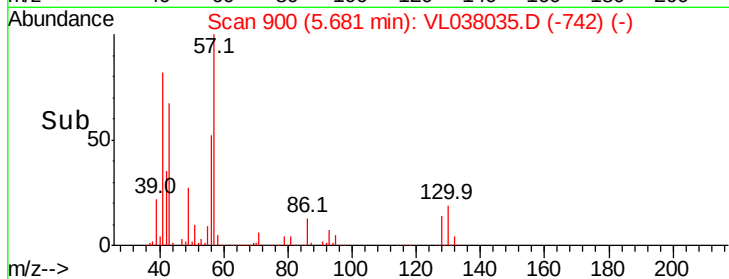
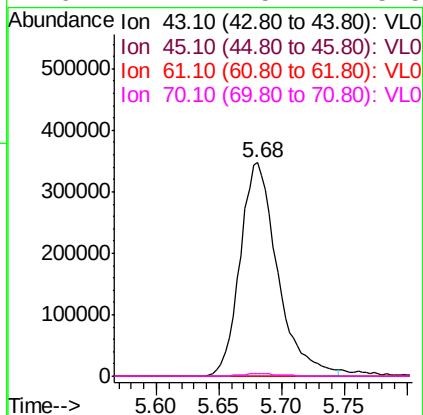
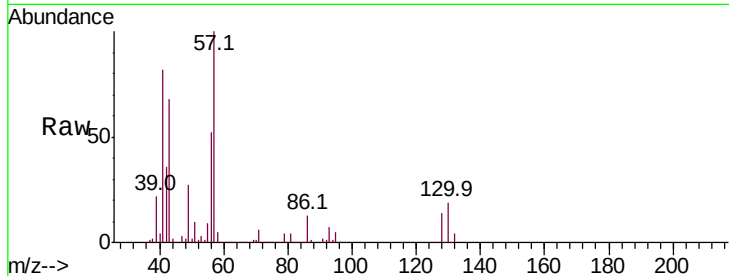
Tgt Ion:	63	Resp:	709683
Ion	Ratio	Lower	Upper
63	100		
98	4.4	2.3	6.9
100	3.3	1.5	4.4





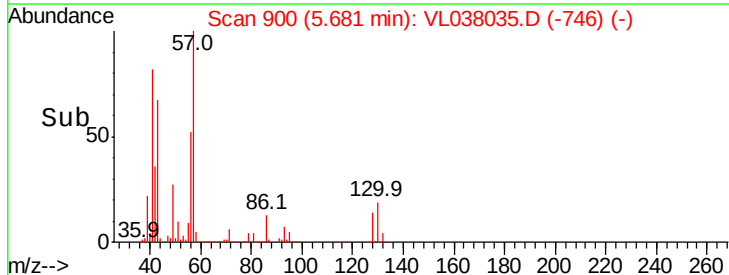
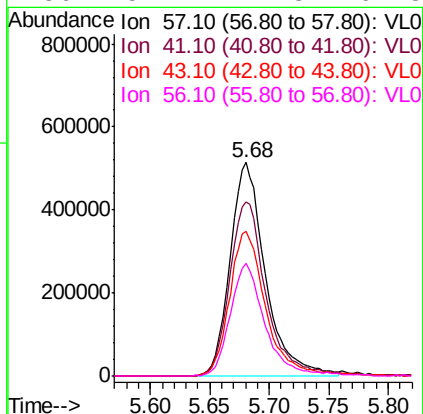
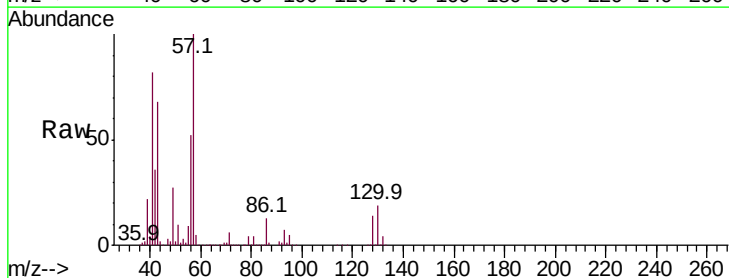
#25
Ethyl Acetate
Concen: 2.971 ppbv
RT: 5.68 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 16 Nov 2021 11:50

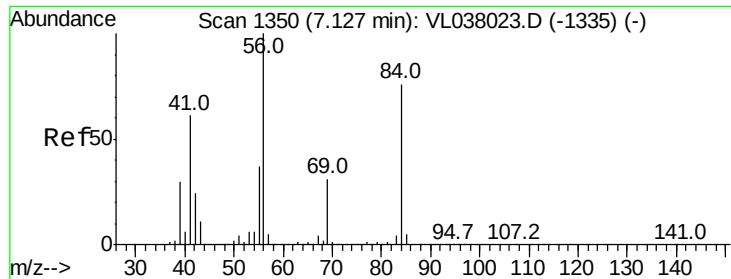
Tot Ion:	43	Resp:	720606
Ion	Ratio	Lower	Upper
43	100		
45	0.1	8.0	12.0#
61	0.1	8.3	12.5#
70	1.4	5.7	8.5#



#26
Hexane
Concen: 8.675 ppbv
RT: 5.68 min Scan# 900
Delta R.T. -0.01 min
Lab File: VL038035.D
Acq: 16 Nov 2021 11:50

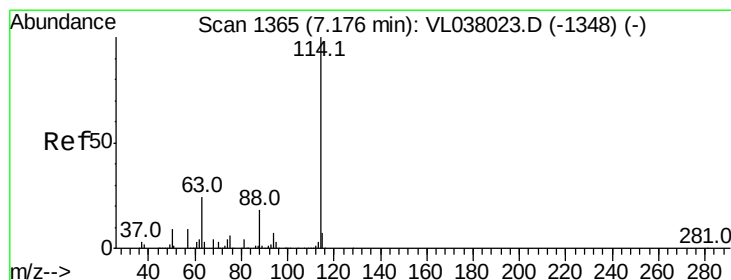
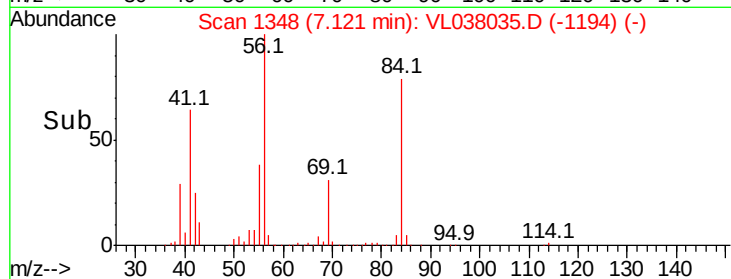
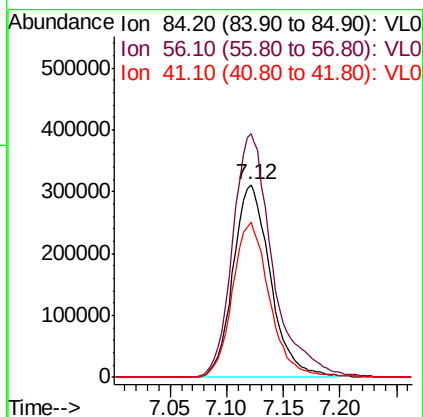
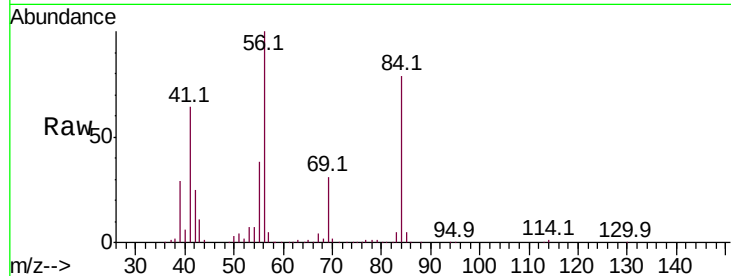
Tgt Ion:	57	Resp:	1056912
Ion	Ratio	Lower	Upper
57	100		
41	85.0	70.8	106.2
43	69.9	169.4	254.0#
56	52.4	41.8	62.8





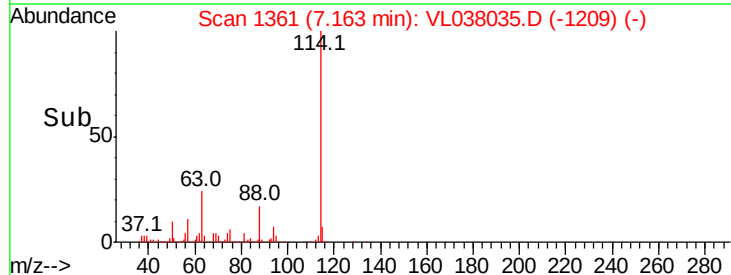
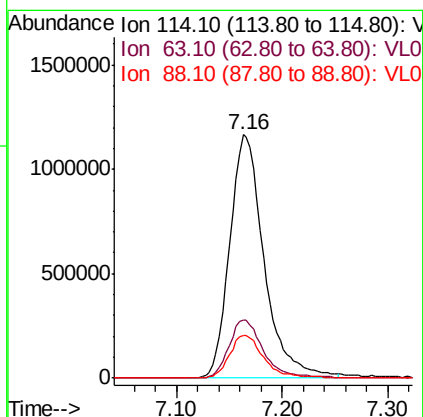
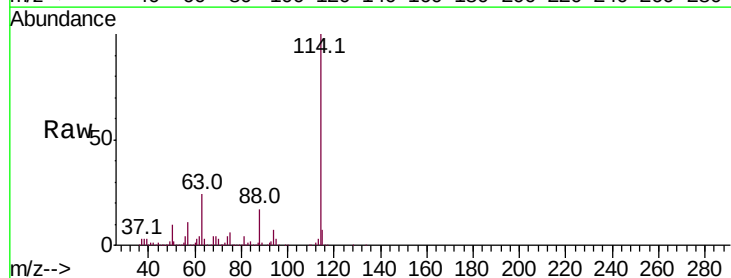
#30
Cyclohexane
Concen: 5.204 ppbv
RT: 7.12 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 16 Nov 2021 11:50

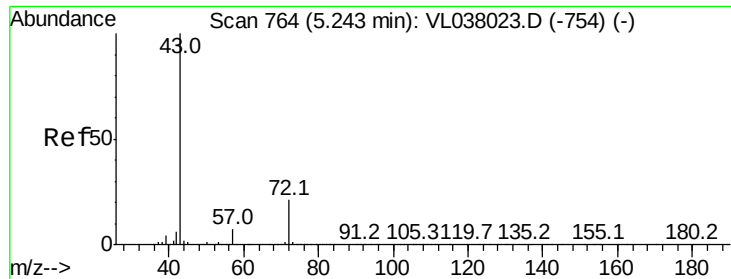
Tot Ion	84	Resp	714046
Ion	Ratio	Lower	Upper
84	100		
56	136.1	109.5	164.3
41	80.6	65.1	97.7



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1361
Delta R.T.: -0.01 min
Lab File: VL038035.D
Acq: 16 Nov 2021 11:50

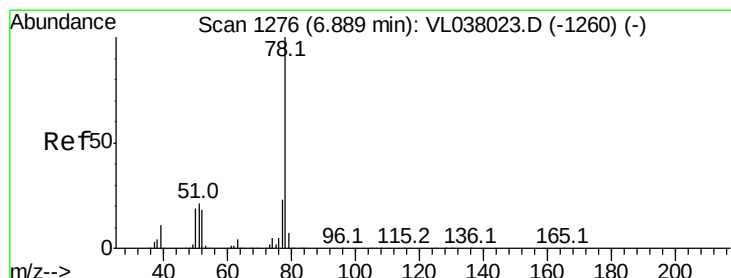
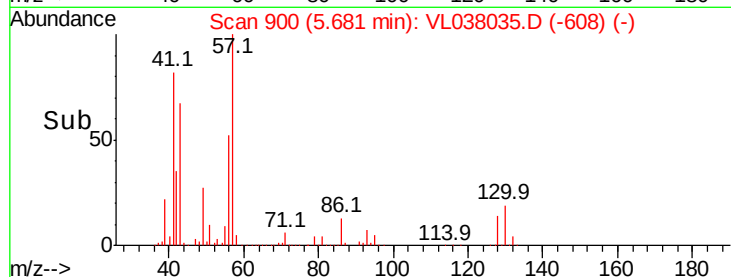
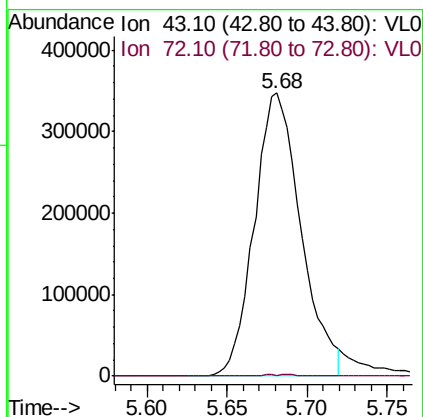
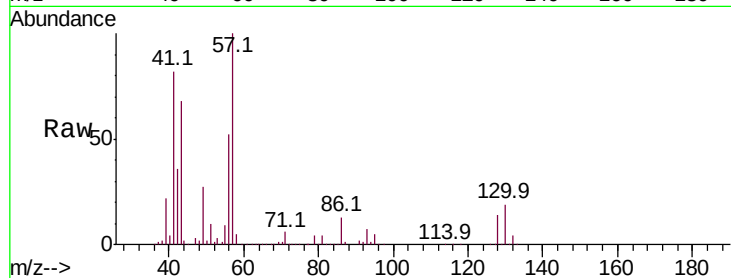
Tgt Ion	114	Resp	2631817
Ion	Ratio	Lower	Upper
114	100		
63	24.4	19.8	29.6
88	17.9	14.6	21.8





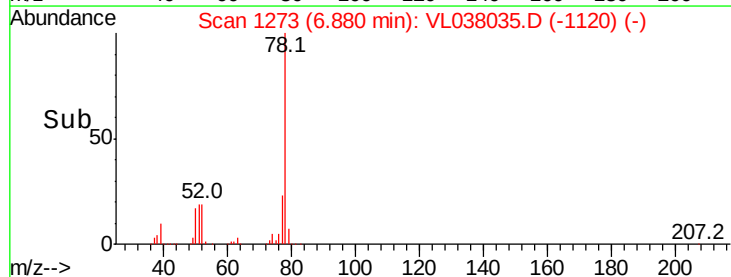
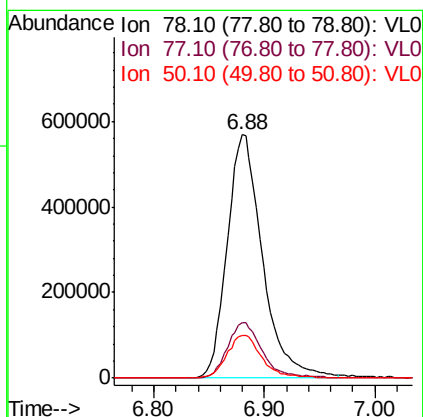
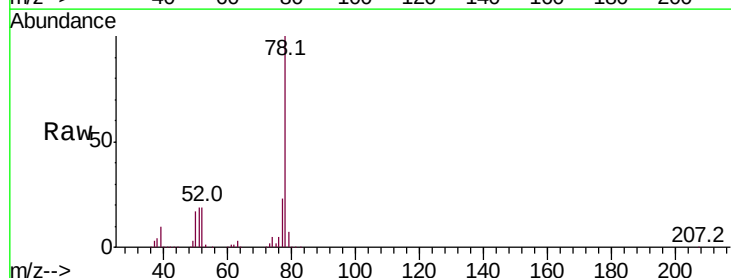
#34
 2-Butanone
 Concen: 8.007 ppbv
 RT: 5.68
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 16 Nov 2021 11:50

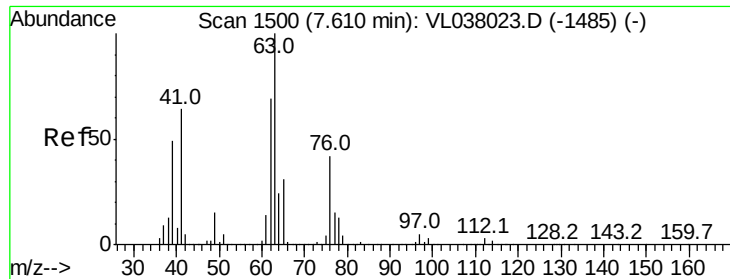
Tot Ion: 43 Resp: 695087
 Ion Ratio Lower Upper
 43 100
 72 0.0 18.2 27.2#



#36
 Benzene
 Concen: 5.035 ppbv
 RT: 6.88 min Scan# 1273
 Delta R.T. -0.01 min
 Lab File: VL038035.D
 Acq: 16 Nov 2021 11:50

Tgt Ion: 78 Resp: 1260423
 Ion Ratio Lower Upper
 78 100
 77 22.6 18.8 28.2
 50 17.5 14.9 22.3





#39

1,2-Dichloropropane

Concen: 6.299 ppbv

RT: 7.17 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 16 Nov 2021 11:50

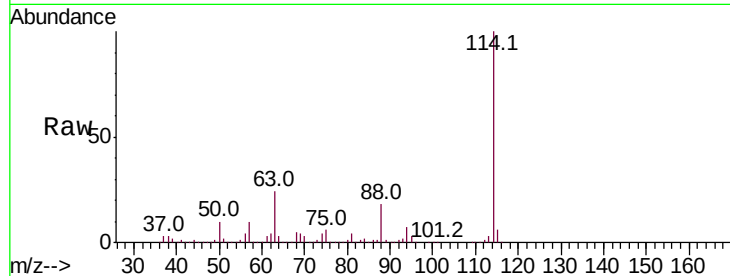
Tot Ion: 63 Resp: 609553

Ion Ratio Lower Upper

63 100

41 4.7 51.1 76.7#

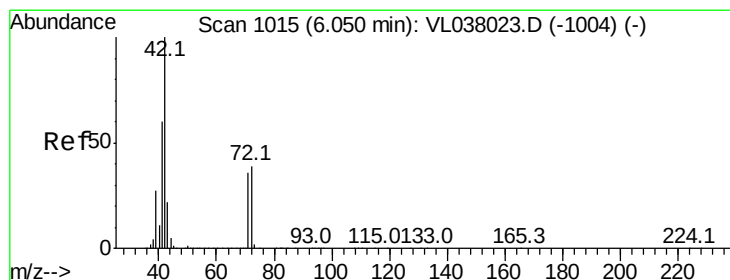
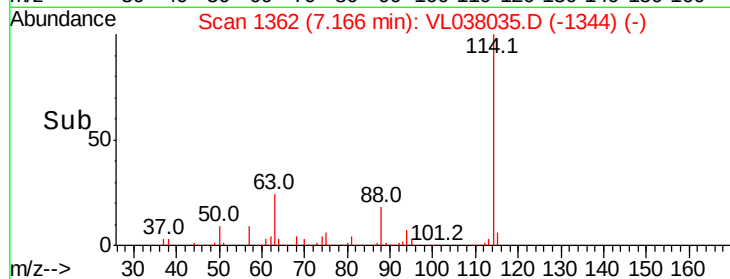
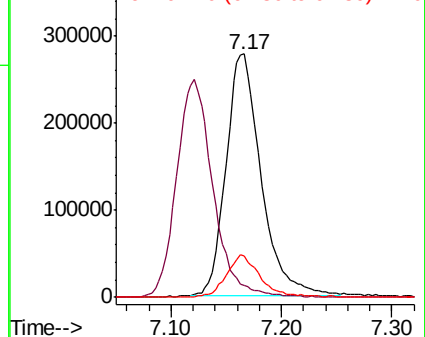
62 16.7 55.2 82.8#



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



#41

Tetrahydrofuran

Concen: 6.015 ppbv

RT: 5.68 min Scan# 900

Delta R.T. -0.37 min

Lab File: VL038035.D

Acq: 16 Nov 2021 11:50

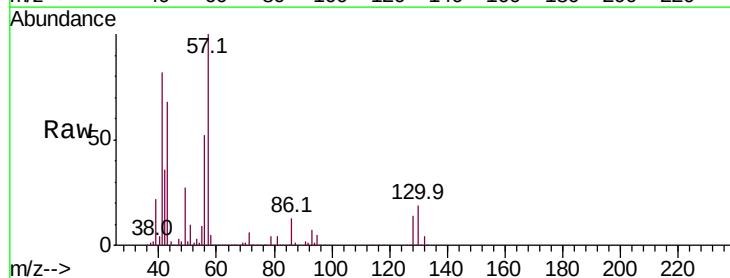
Tgt Ion: 42 Resp: 374694

Ion Ratio Lower Upper

42 100

72 0.9 31.3 46.9#

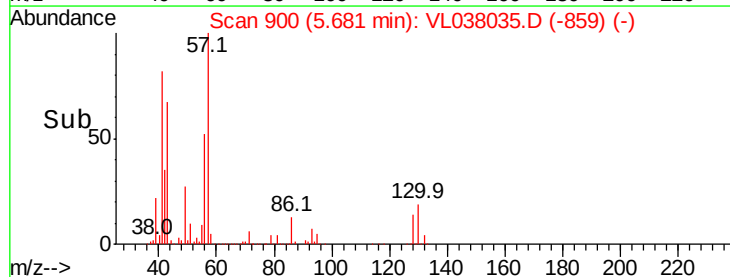
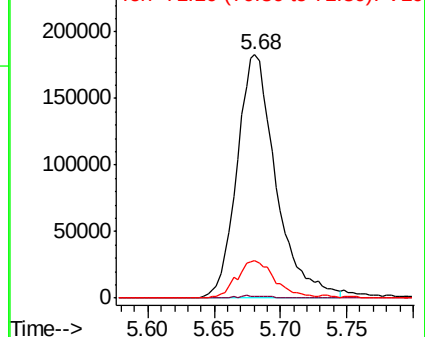
71 16.0 29.7 44.5#

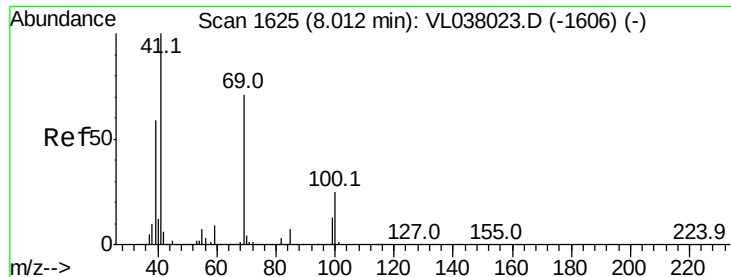


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

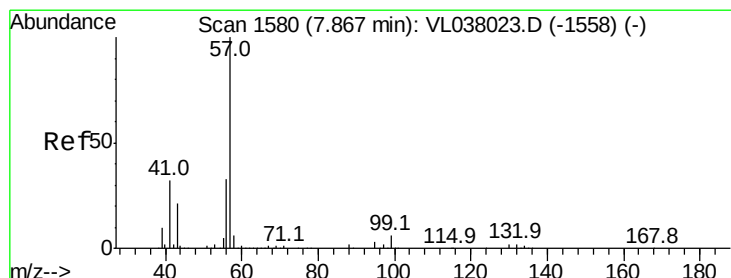
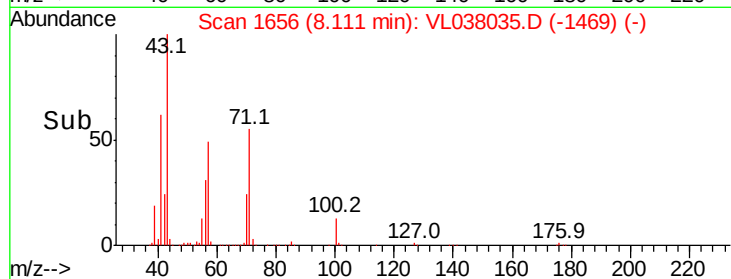
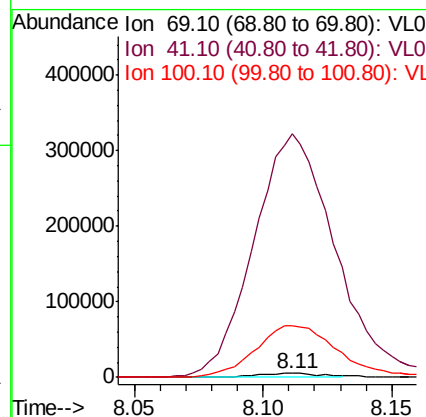
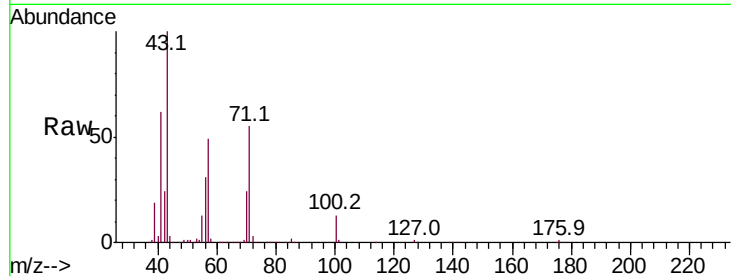
Ion 71.10 (70.80 to 71.80): VL0





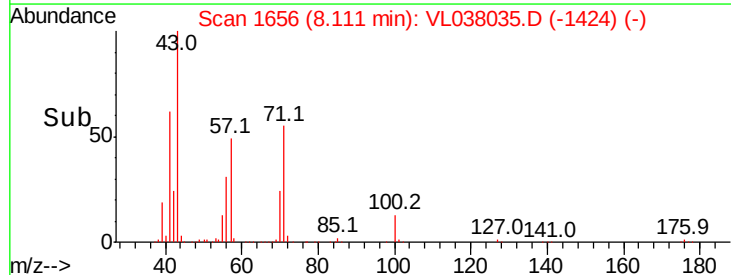
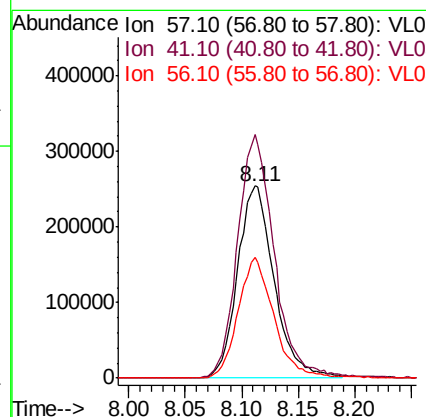
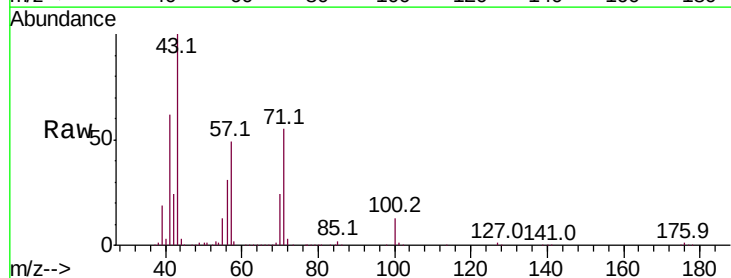
#43
Methvl Methacrylate
Concen: 0.107 ppbv
RT: 8.11 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 16 Nov 2021 11:50

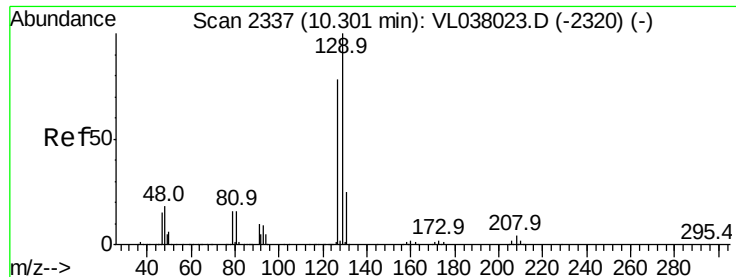
Tot Ion: 69 Resp: 9524
Ion Ratio Lower Upper
69 100
41 7687.7 116.6 174.8#
100 1648.5 27.0 40.6#



#44
2,2,4-Trimethylpentane
Concen: 1.336 ppbv
RT: 8.11 min Scan# 1656
Delta R.T.: 0.24 min
Lab File: VL038035.D
Acq: 16 Nov 2021 11:50

Tgt Ion: 57 Resp: 574592
Ion Ratio Lower Upper
57 100
41 127.4 26.2 39.2#
56 61.7 25.5 38.3#





#48

Dibromochloromethane

Concen: 4.847 ppbv

RT: 10.29

Delta R.T. MSVOA_L

Lab File:

ClientSampleId:

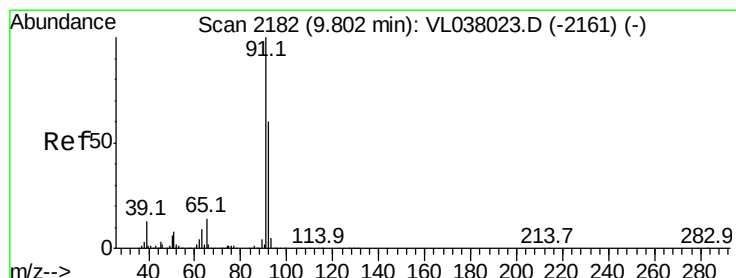
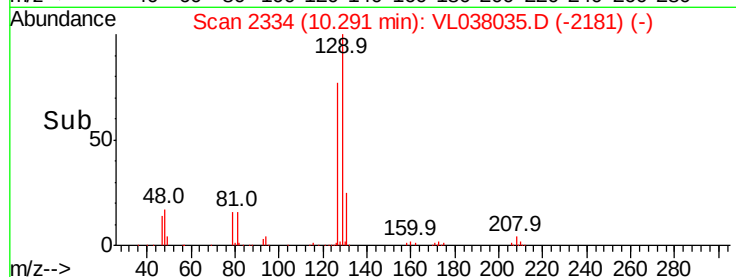
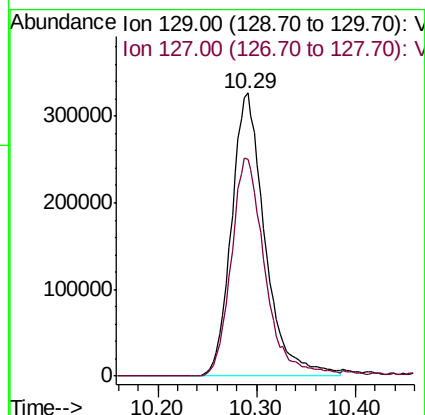
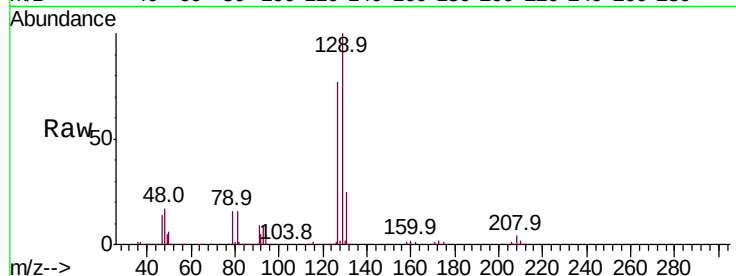
Acq: 16 Nov 2021 11:50

Tot Ion:129 Resp: 774654

Ion Ratio Lower Upper

129 100

127 78.7 40.1 120.3



#53

Toluene

Concen: 4.920 ppbv

RT: 9.80 min Scan# 2180

Delta R.T. -0.01 min

Lab File: VL038035.D

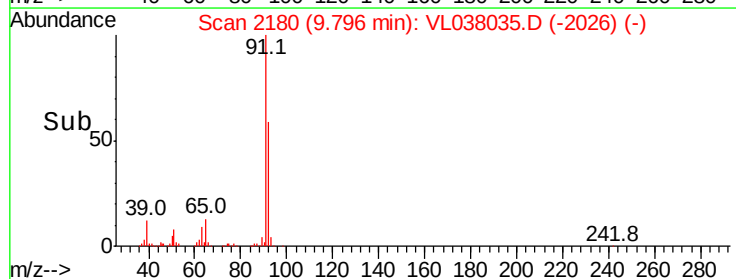
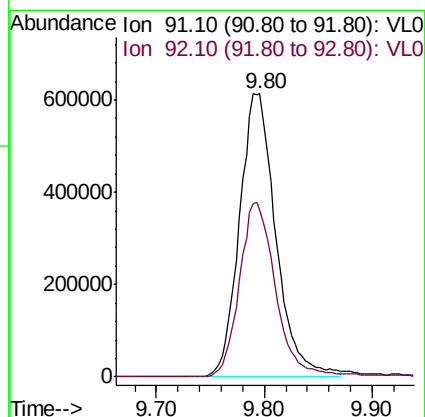
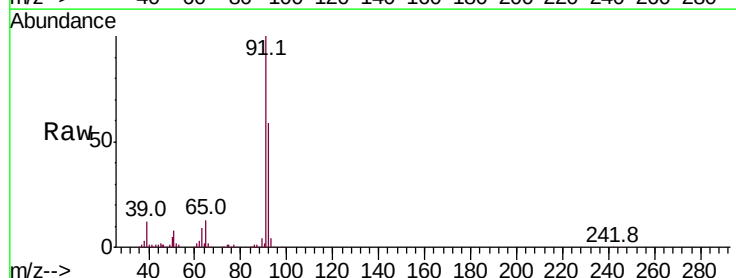
Acq: 16 Nov 2021 11:50

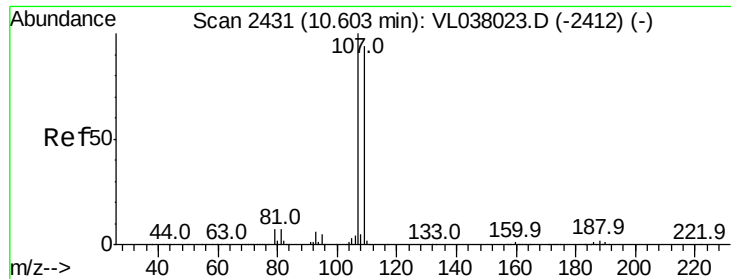
Tgt Ion: 91 Resp: 1440325

Ion Ratio Lower Upper

91 100

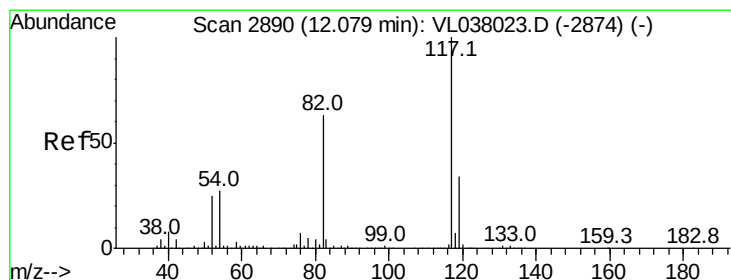
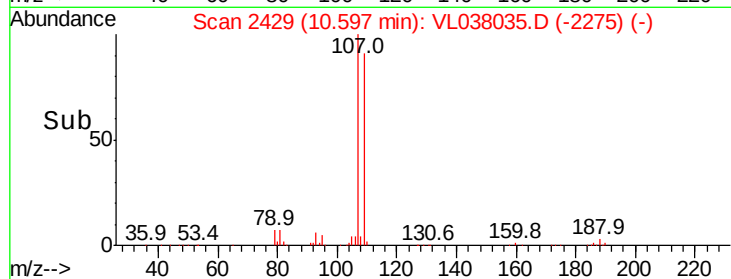
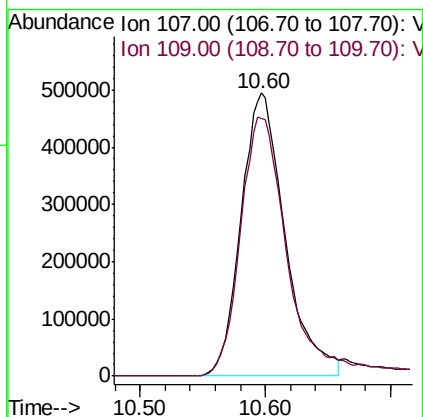
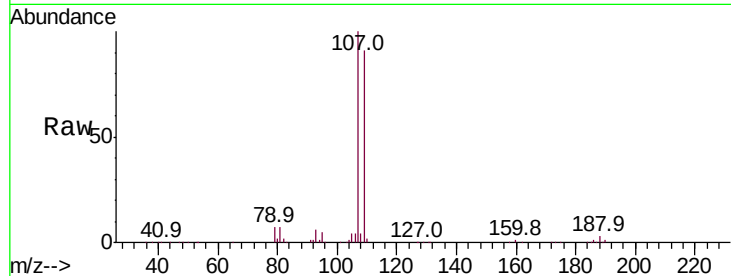
92 62.1 49.5 74.3





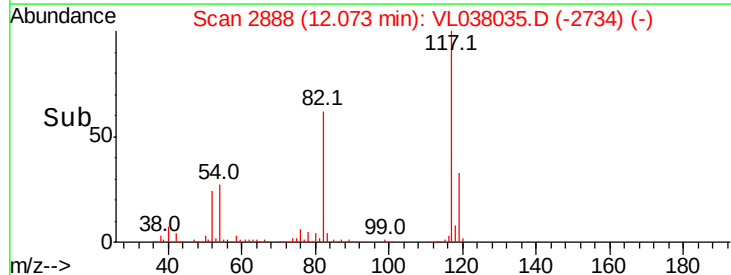
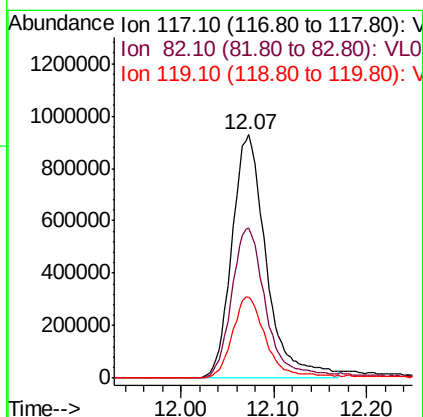
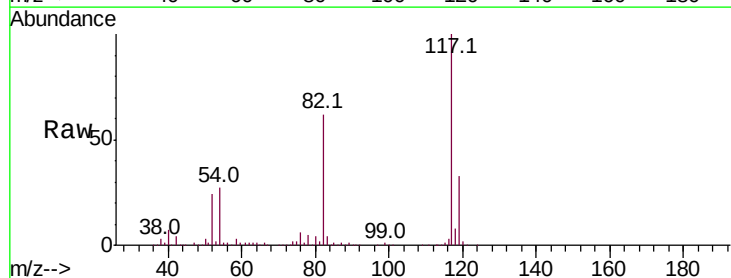
#54
 1,2-Dibromoethane
 Concen: 8.765 ppbv
 RT: 10.60
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 16 Nov 2021 11:50

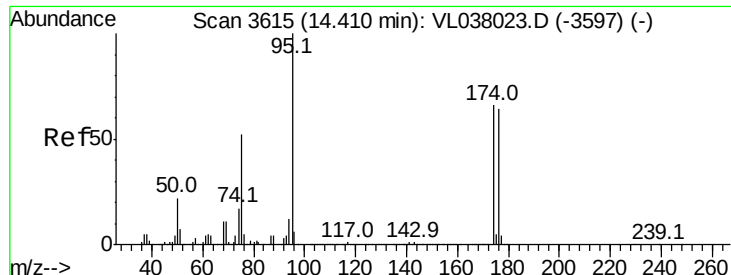
Tot Ion:107 Resp: 1207055
 Ion Ratio Lower Upper
 107 100
 109 91.1 75.0 112.6



#55
 Chlorobenzene-d5
 Concen: 10.000 ppbv
 RT: 12.07 min Scan# 2888
 Delta R.T. -0.01 min
 Lab File: VL038035.D
 Acq: 16 Nov 2021 11:50

Tgt Ion:117 Resp: 2390322
 Ion Ratio Lower Upper
 117 100
 82 65.6 50.0 75.0
 119 34.3 44.6 67.0#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.854 ppbv

RT: 14.40

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Nov 2021 11:30

Tot Ion: 95 Resp: 1701854

Ion Ratio Lower Upper

95 100

174 69.3 55.0 82.6

175 5.2 4.2 6.2

