

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL021422\
 Data File : VL038342.D
 Acq On : 14 Feb 2022 15:39
 Operator : SY/AP
 Sample : N1442-01DL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Quant Time: Feb 15 00:39:43 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL012422AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Jan 24 14:12:48 2022
 QLast Update : Mon Jan 24 14:12:48 2022
 Response via : Initial Calibration

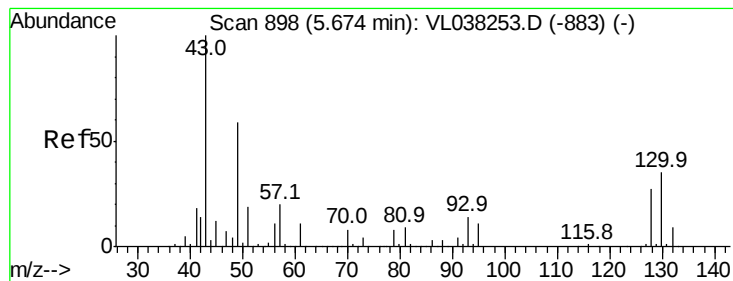
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	941823	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	2618918	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	2286063	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	1837107	10.59	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.99	51	72334	0.39	ppbv	98
9) Propene	3.02	41	21267	0.35	ppbv	85
10) Heptane	8.11	43	11906	0.08	ppbv	89
13) Ethanol	3.61	45	3637	0.56	ppbv #	1
15) Acetone	3.84	43	1402776	16.90	ppbv	97
20) Methylene Chloride	4.34	84	12323	0.26	ppbv	94
22) trans-1,2-Dichloroethene	4.87	96	2104	0.04	ppbv	87
23) Vinyl Acetate	5.06	43	5969	0.05	ppbv #	70
25) Ethyl Acetate	5.68	43	15712	0.07	ppbv #	77
26) Hexane	5.68	57	58312	0.54	ppbv #	38
29) Chloroform	5.74	83	72533	0.41	ppbv	86
31) cis-1,2-Dichloroethene	5.54	61	44764	0.47	ppbv	97
34) 2-Butanone	5.25	43	56699	0.66	ppbv	98
38) Trichloroethene	7.82	130	105675	1.22	ppbv	96
39) 1,2-Dichloropropane	7.16	63	674670	7.18	ppbv #	25
41) Tetrahydrofuran	6.07	42	1746	0.03	ppbv #	38
51) 2-Hexanone	10.13	43	6303	0.09	ppbv #	31
52) Tetrachloroethene	11.22	164	6866518	86.00	ppbv	91

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

SV1DL

Acq: 14 Feb 2022 15:39

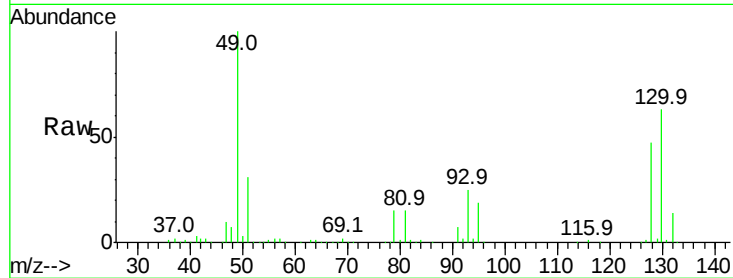
Tgt Ion: 49 Resp: 941823

Ion Ratio Lower Upper

49 100

128 50.5 24.5 73.5

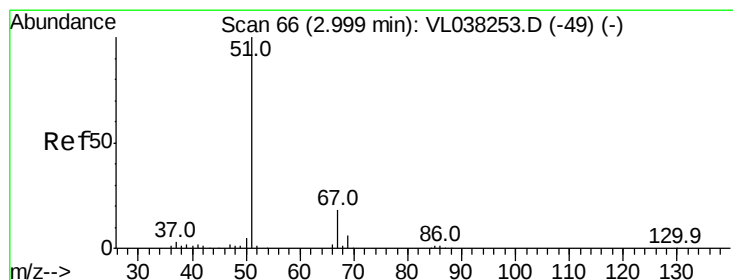
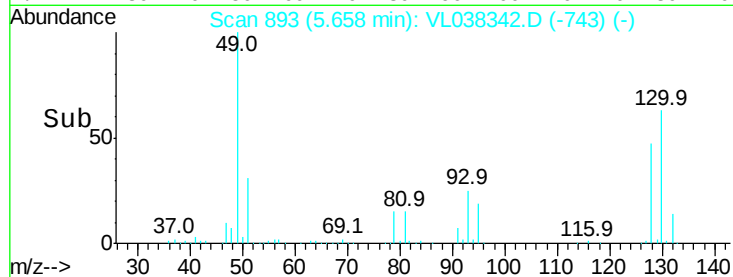
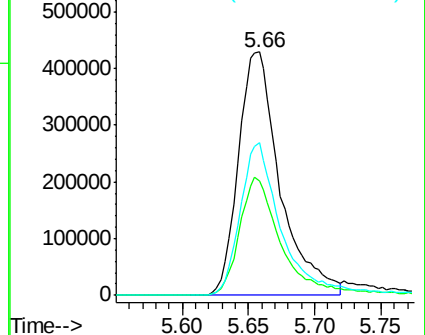
130 64.4 30.1 90.5



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



#3

Chlorodifluoromethane

Concen: 0.39 ppbv

RT: 2.99 min Scan# 62

Delta R.T. -0.01 min

Lab File: VL038342.D

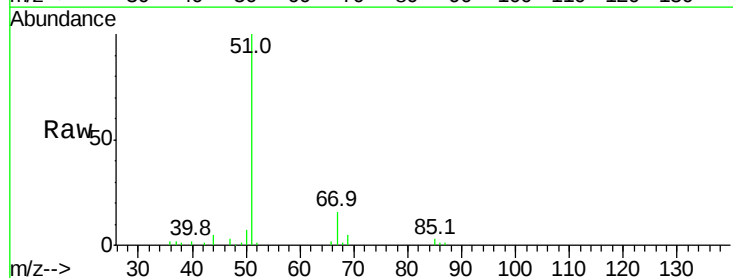
Acq: 14 Feb 2022 15:39

Tgt Ion: 51 Resp: 72334

Ion Ratio Lower Upper

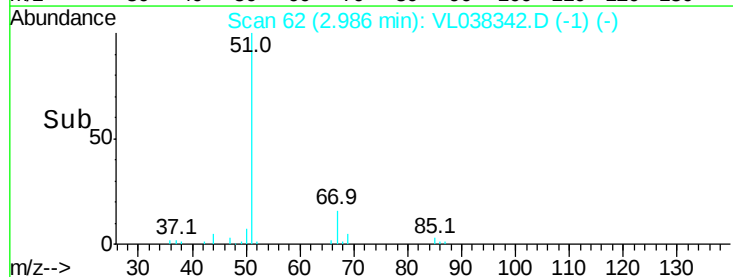
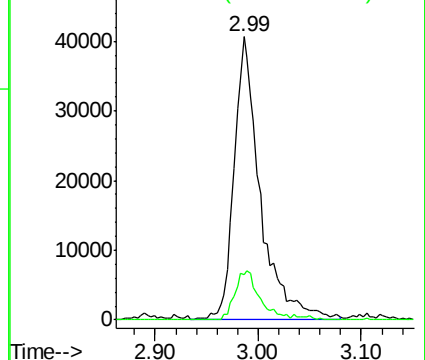
51 100

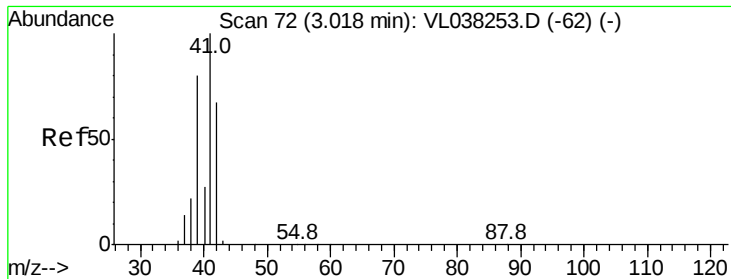
67 17.1 14.4 21.6



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#9

Propene

Concen: 0.35 ppbv

RT: 3.02 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

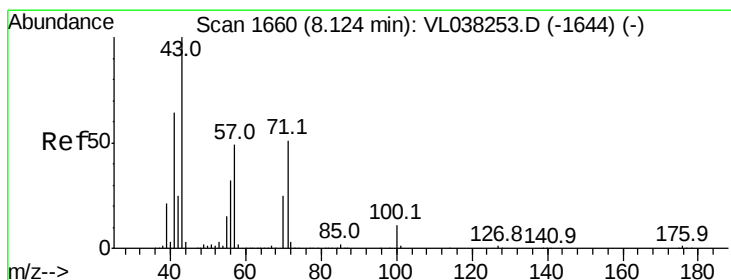
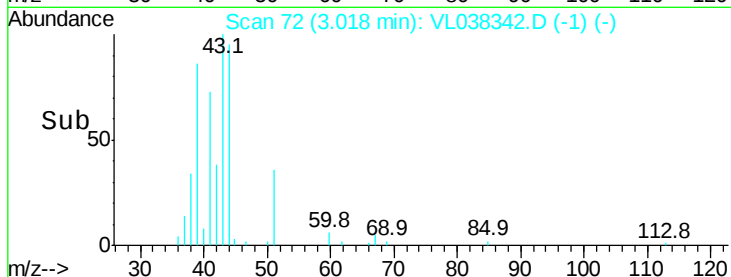
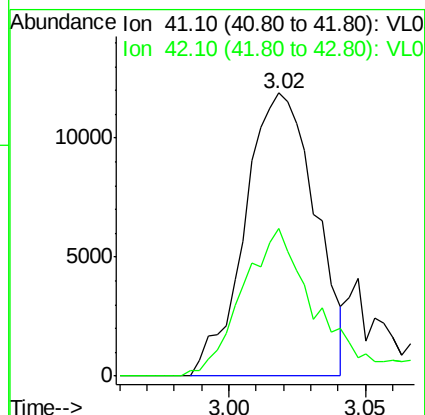
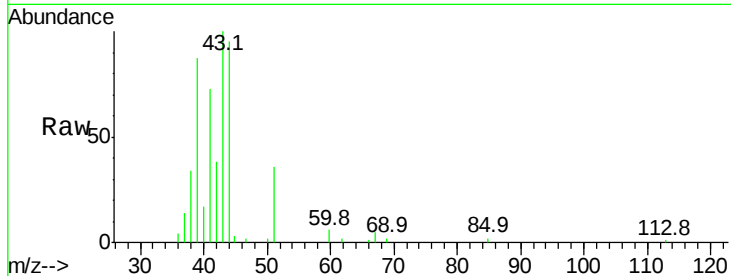
Acq: 14 Feb 2022 15:39

Tgt Ion: 41 Resp: 21267

Ion Ratio Lower Upper

41 100

42 56.5 54.9 82.3



#10

Heptane

Concen: 0.08 ppbv

RT: 8.11 min Scan# 1655

Delta R.T. -0.02 min

Lab File: VL038342.D

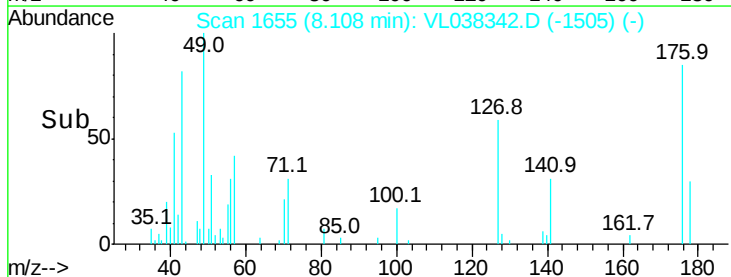
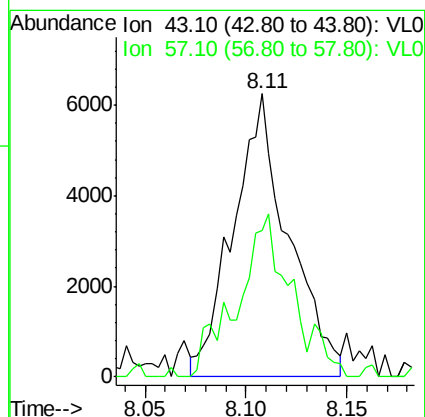
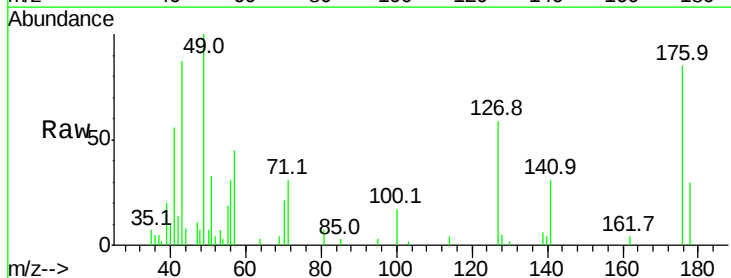
Acq: 14 Feb 2022 15:39

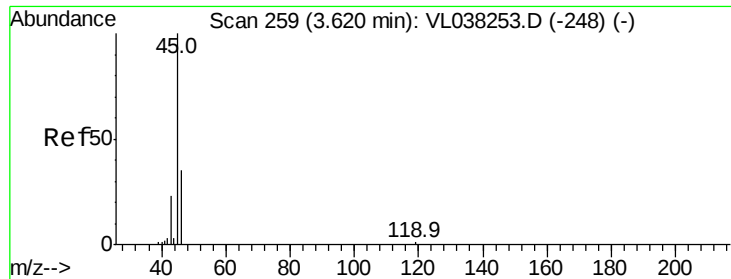
Tgt Ion: 43 Resp: 11906

Ion Ratio Lower Upper

43 100

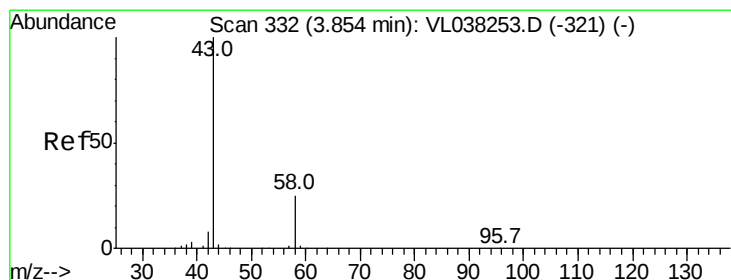
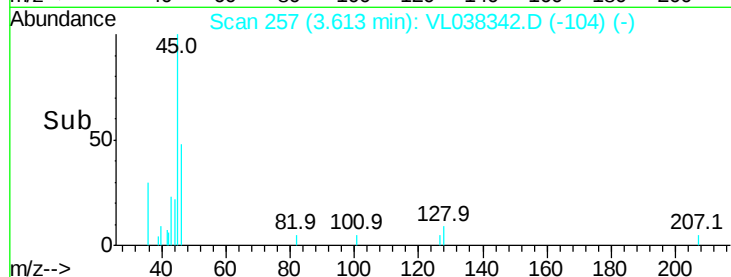
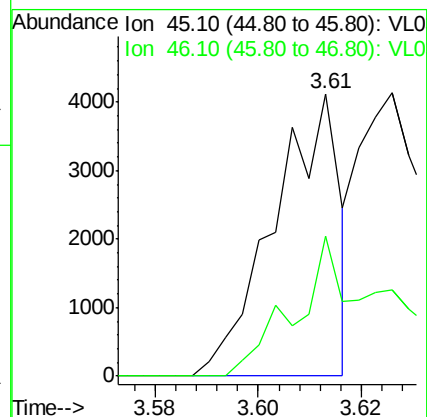
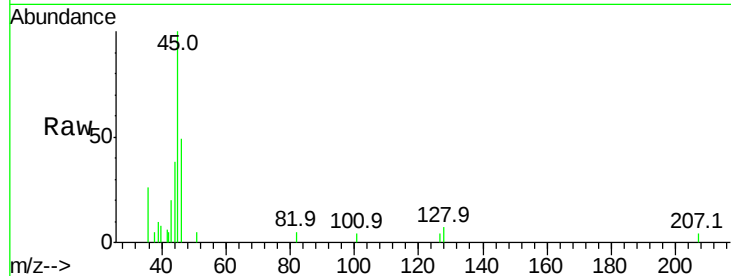
57 56.8 39.5 59.3





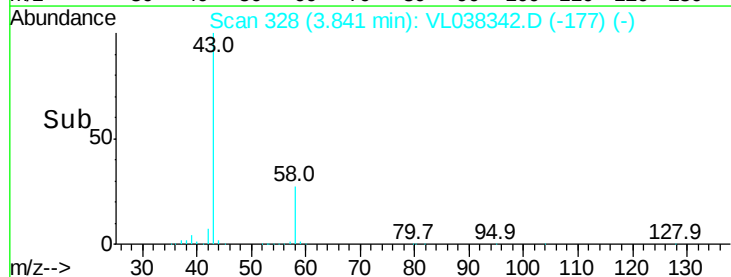
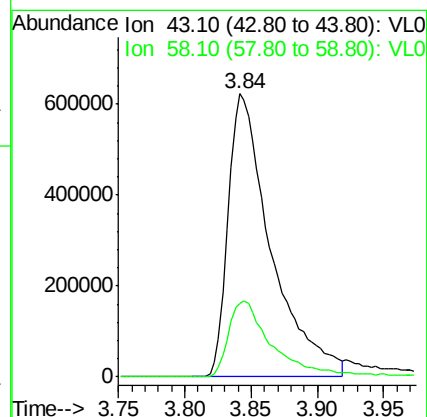
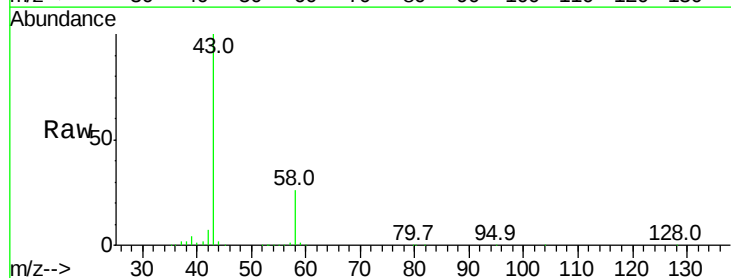
#13
Ethanol
Concen: 0.56 ppbv
RT: 3.61
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
SV1DL
Acq: 14 Feb 2022 15:39

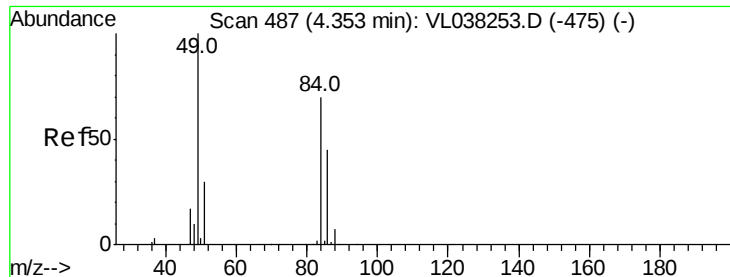
Tgt Ion: 45 Resp: 3637
Ion Ratio Lower Upper
45 100
46 100.0 15.4 61.6#



#15
Acetone
Concen: 16.90 ppbv
RT: 3.84 min Scan# 328
Delta R.T. -0.01 min
Lab File: VL038342.D
Acq: 14 Feb 2022 15:39

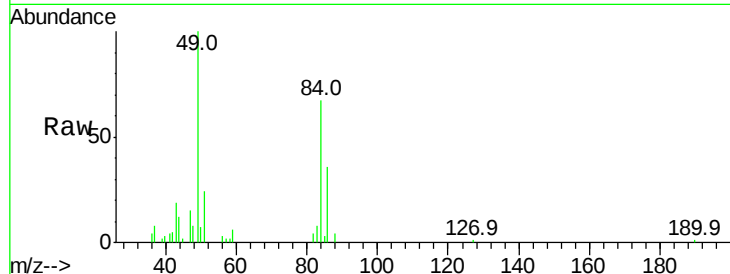
Tgt Ion: 43 Resp: 1402776
Ion Ratio Lower Upper
43 100
58 28.5 21.5 32.3



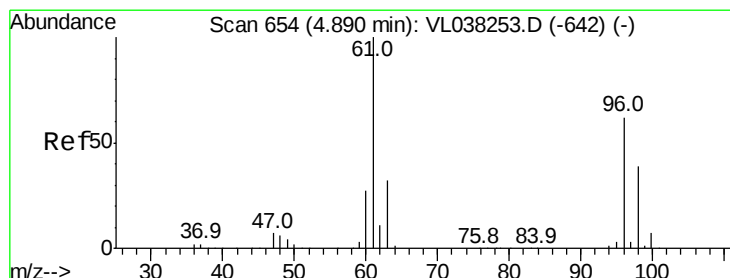
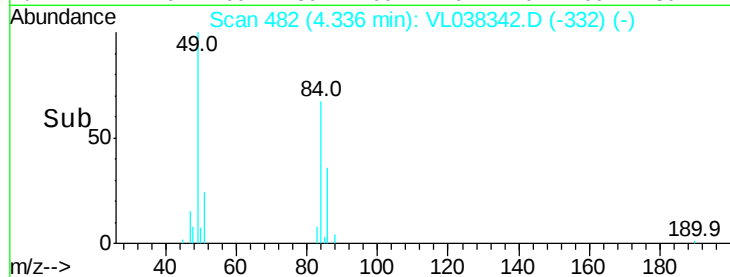
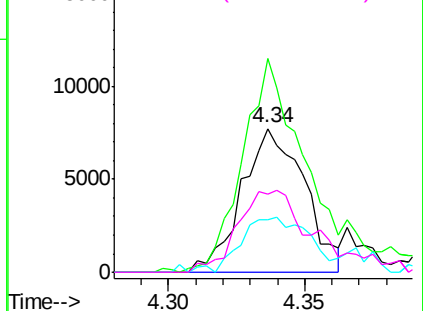


#20
Methylene Chloride
Concen: 0.26 ppbv
RT: 4.34
Delta R.T. MSVOA_L
Lab File: ClientSampleId : SV1DL
Acq: 14 Feb 2022 15:39

Tgt Ion:	84	Resp:	12323
Ion	Ratio	Lower	Upper
84	100		
49	145.9	115.0	172.6
51	36.4	35.0	52.6
86	54.0	51.4	77.0

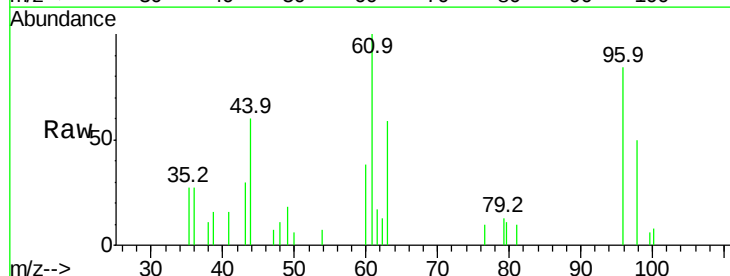


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

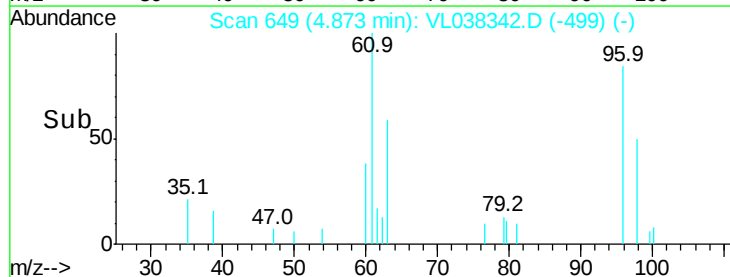
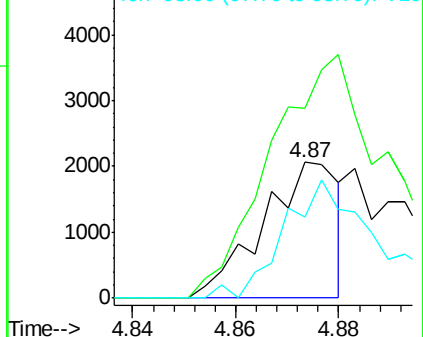


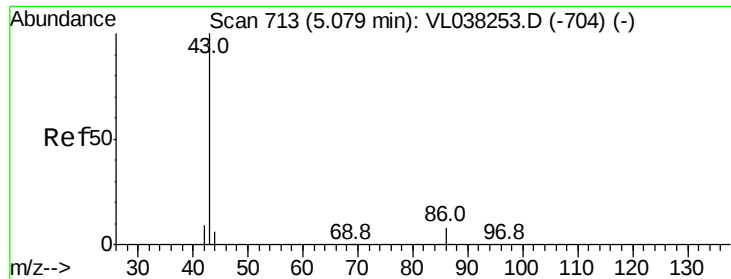
#22
trans-1,2-Dichloroethene
Concen: 0.04 ppbv
RT: 4.87 min Scan# 649
Delta R.T. -0.02 min
Lab File: VL038342.D
Acq: 14 Feb 2022 15:39

Tgt Ion:	96	Resp:	2104
Ion	Ratio	Lower	Upper
96	100		
61	139.7	128.8	193.2
98	59.4	49.8	74.8



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





#23

Vinyl Acetate

Concen: 0.05 ppbv

RT: 5.06 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

SV1DL

Acq: 14 Feb 2022 15:39

Tgt Ion: 43 Resp: 5969

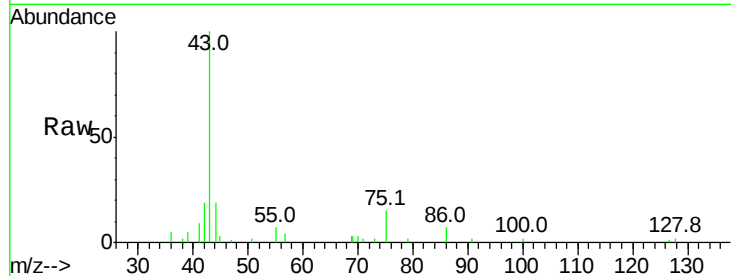
Ion Ratio Lower Upper

43 100

86 8.7 5.7 8.5#

42 0.0 7.7 11.5#

44 29.4 4.2 6.4#

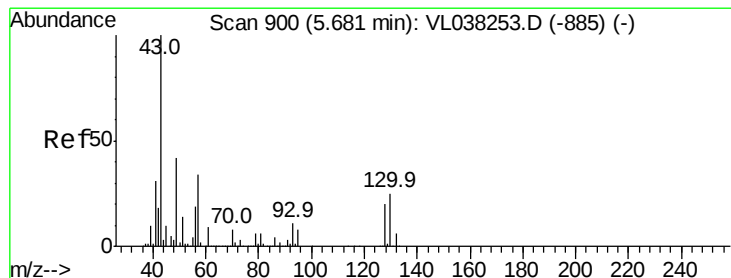
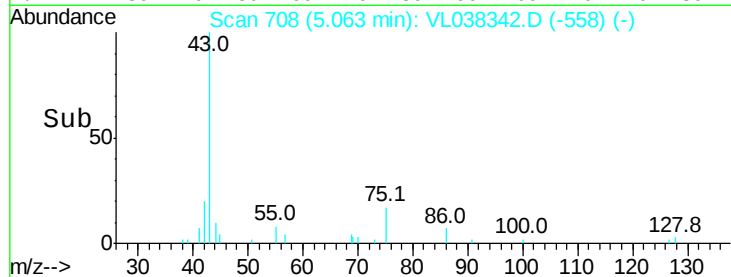
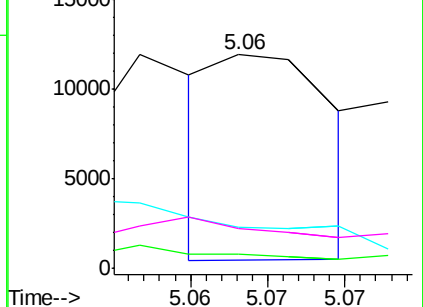


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.07 ppbv

RT: 5.68 min Scan# 901

Delta R.T. 0.00 min

Lab File: VL038342.D

Acq: 14 Feb 2022 15:39

Tgt Ion: 43 Resp: 15712

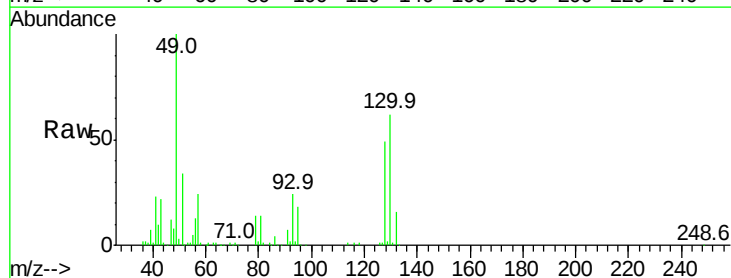
Ion Ratio Lower Upper

43 100

45 1.4 7.9 11.9#

61 0.0 7.8 11.8#

70 0.0 5.4 8.0#

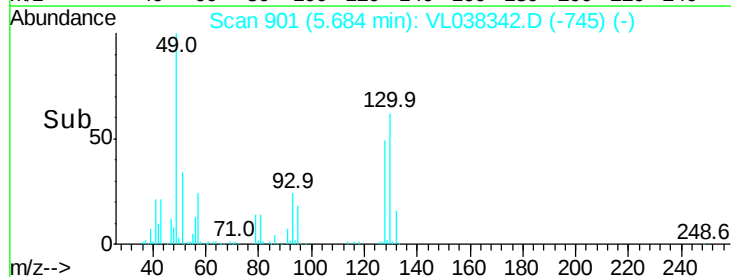
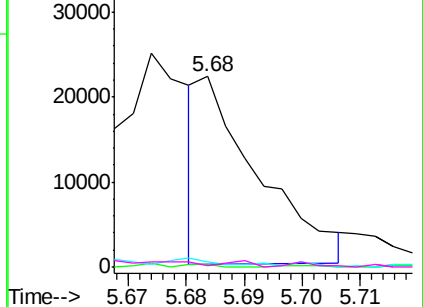


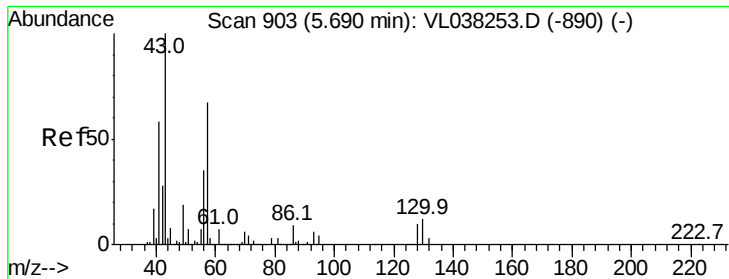
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

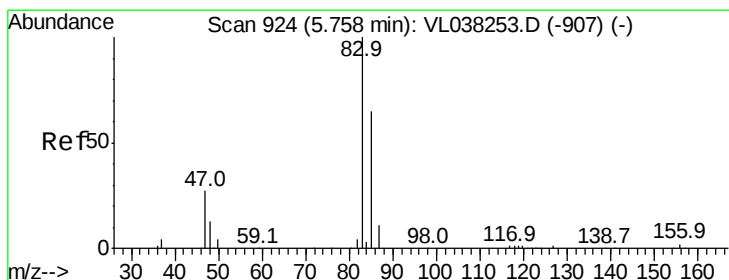
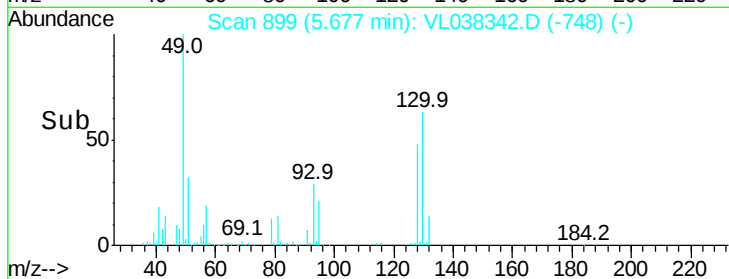
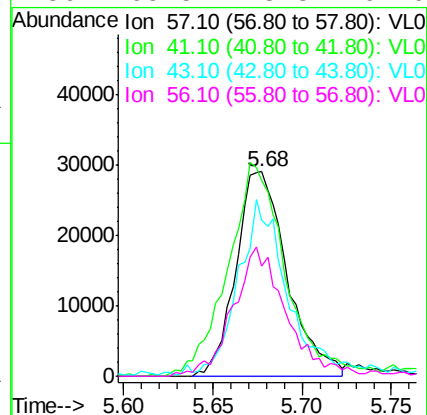
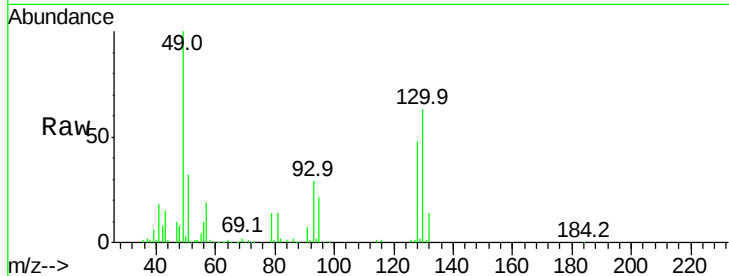
Ion 70.10 (69.80 to 70.80): VL0





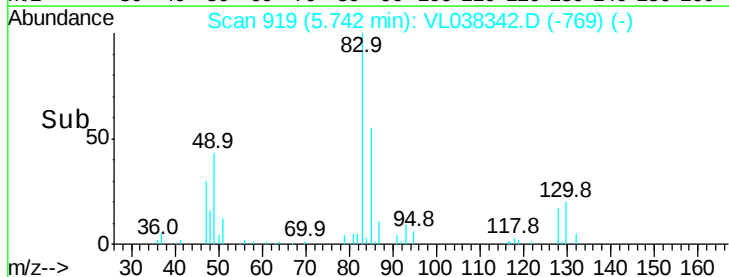
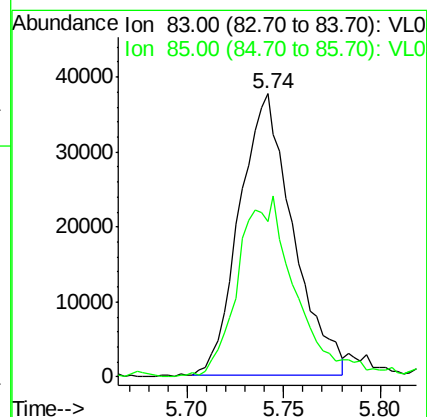
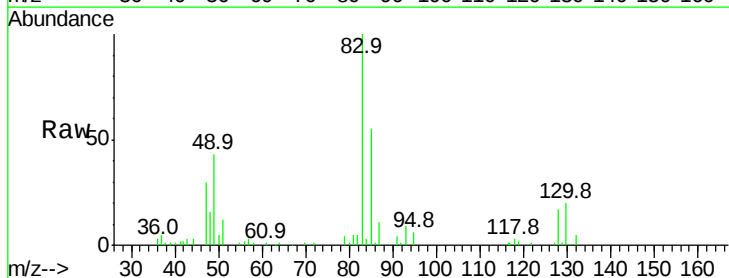
#26
Hexane
Concen: 0.54 ppbv
RT: 5.68
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 14 Feb 2022 15:39

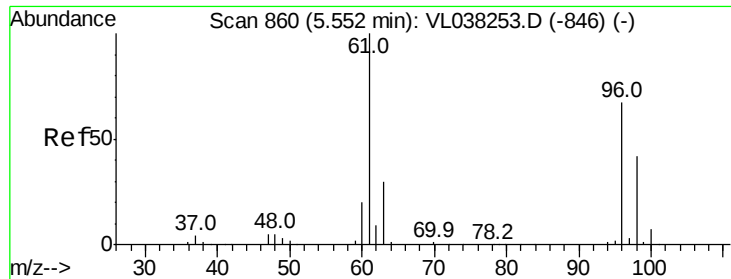
Tgt Ion:	57	Resp:	58312
Ion	Ratio	Lower	Upper
57	100		
41	123.5	72.8	109.2#
43	85.7	177.0	265.6#
56	65.5	43.3	64.9#



#29
Chloroform
Concen: 0.41 ppbv
RT: 5.74 min Scan# 919
Delta R.T. -0.02 min
Lab File: VL038342.D
Acq: 14 Feb 2022 15:39

Tgt Ion:	83	Resp:	72533
Ion	Ratio	Lower	Upper
83	100		
85	53.6	51.9	77.9





#31

cis-1,2-Dichloroethene

Concen: 0.47 ppbv

RT: 5.54 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 14 Feb 2022 15:39 SV1DL

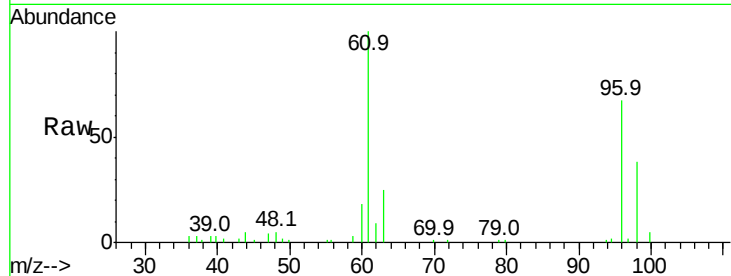
Tgt Ion: 61 Resp: 44764

Ion Ratio Lower Upper

61 100

96 66.8 53.3 79.9

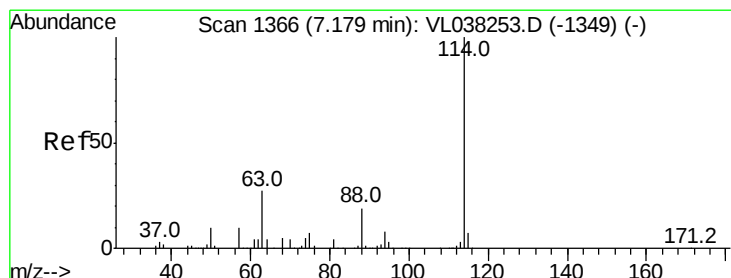
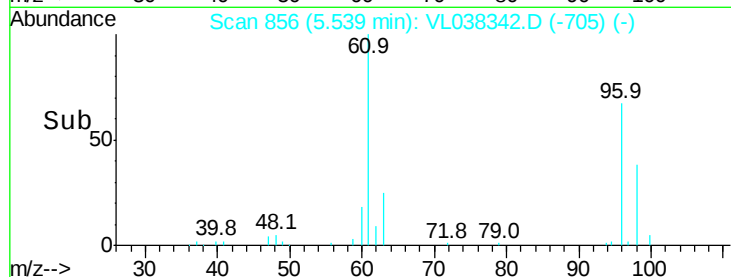
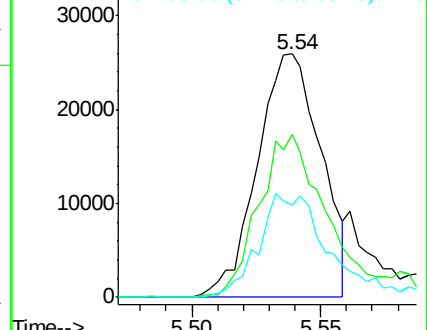
98 38.1 33.7 50.5



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: 10.00 ppbv

RT: 7.16 min Scan# 1360

Delta R.T. -0.02 min

Lab File: VL038342.D

Acq: 14 Feb 2022 15:39

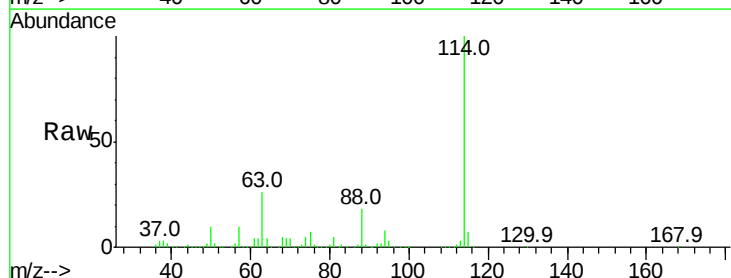
Tgt Ion: 114 Resp: 2618918

Ion Ratio Lower Upper

114 100

63 26.2 22.0 33.0

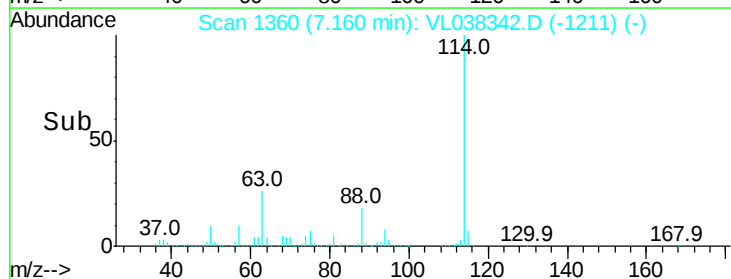
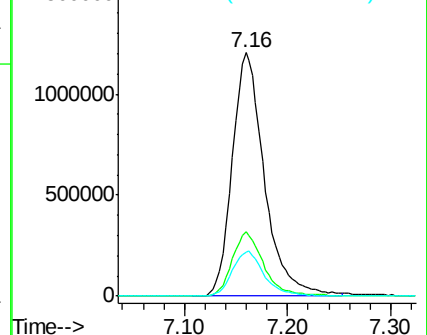
88 18.7 15.0 22.6

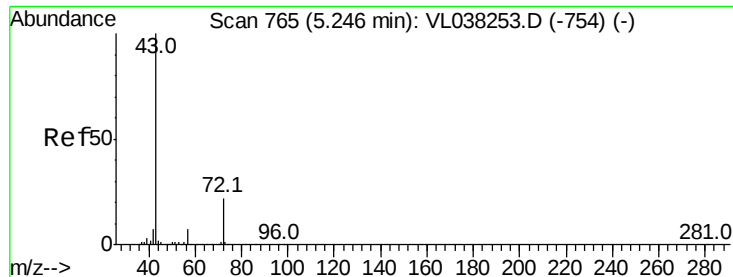


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

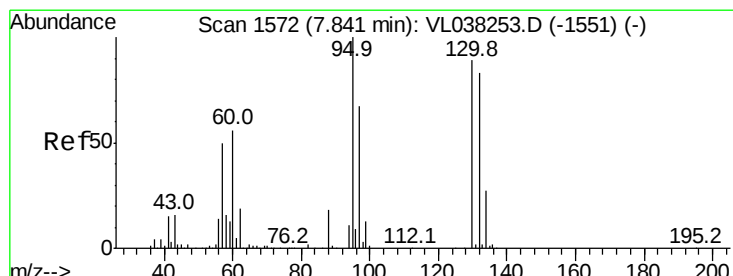
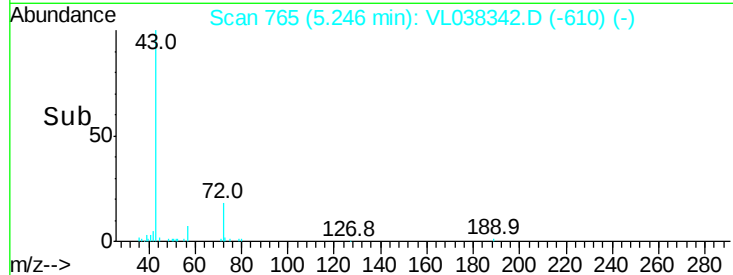
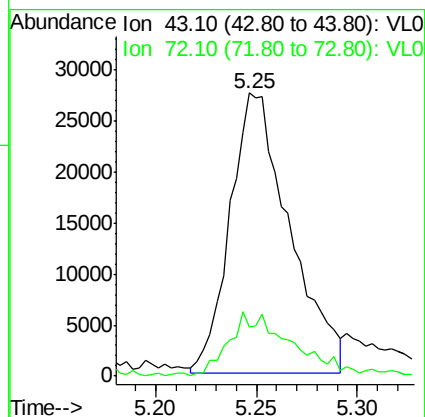
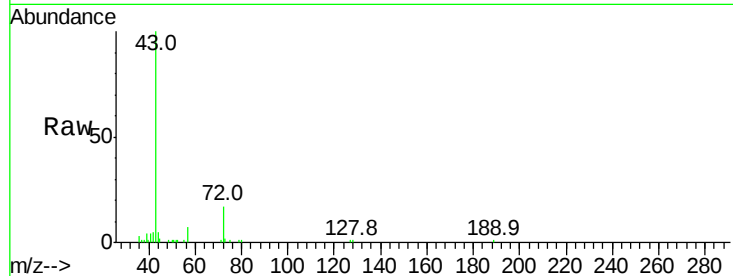
Ion 88.10 (87.80 to 88.80): VL0





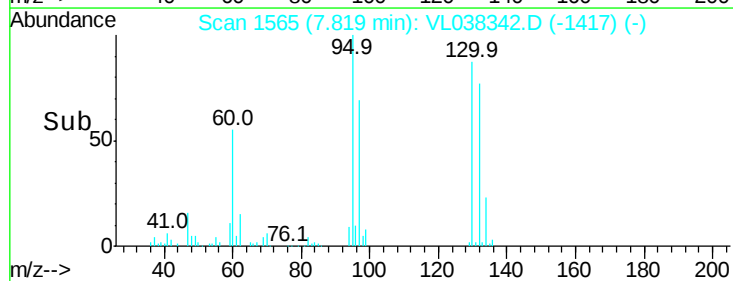
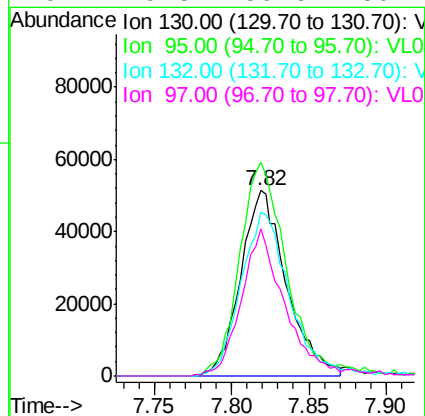
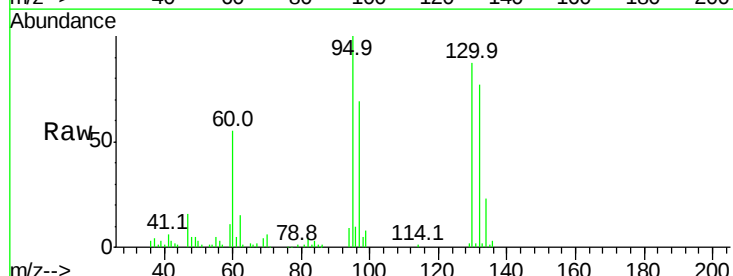
#34
 2-Butanone
 Concen: 0.66 ppbv
 RT: 5.25
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 14 Feb 2022 15:39

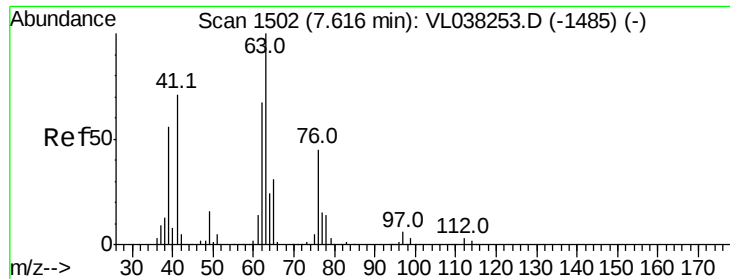
Tgt Ion: 43 Resp: 56699
 Ion Ratio Lower Upper
 43 100
 72 23.4 18.1 27.1



#38
 Trichloroethene
 Concen: 1.22 ppbv
 RT: 7.82 min Scan# 1565
 Delta R.T. -0.02 min
 Lab File: VL038342.D
 Acq: 14 Feb 2022 15:39

Tgt Ion:130 Resp: 105675
 Ion Ratio Lower Upper
 130 100
 95 115.3 89.4 134.2
 132 88.7 74.6 111.8
 97 79.5 59.6 89.4





#39

1,2-Dichloropropane

Concen: 7.18 ppbv

RT: 7.16 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 14 Feb 2022 15:39 SV1DL

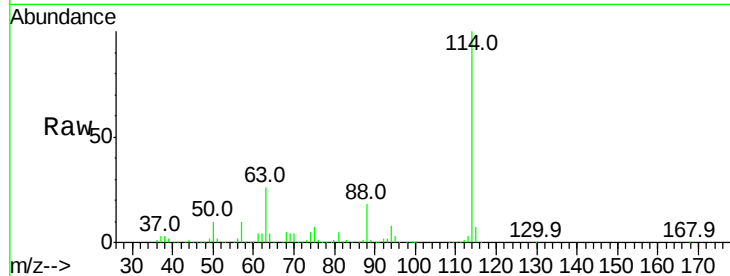
Tgt Ion: 63 Resp: 674670

Ion Ratio Lower Upper

63 100

41 0.0 56.6 85.0#

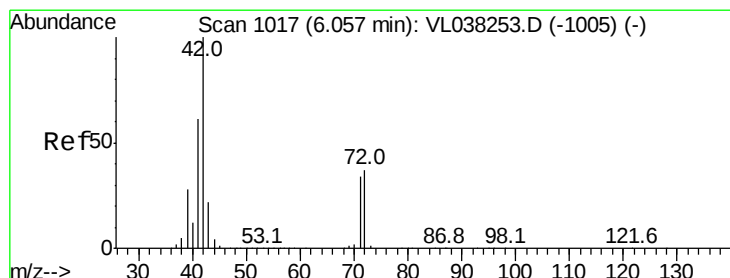
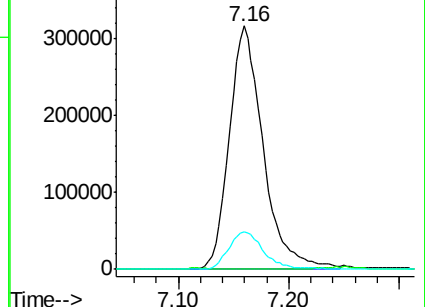
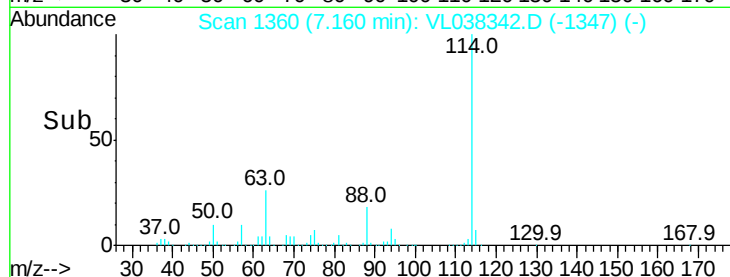
62 15.4 53.9 80.9#



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: 0.03 ppbv

RT: 6.07 min Scan# 1020

Delta R.T. 0.01 min

Lab File: VL038342.D

Acq: 14 Feb 2022 15:39

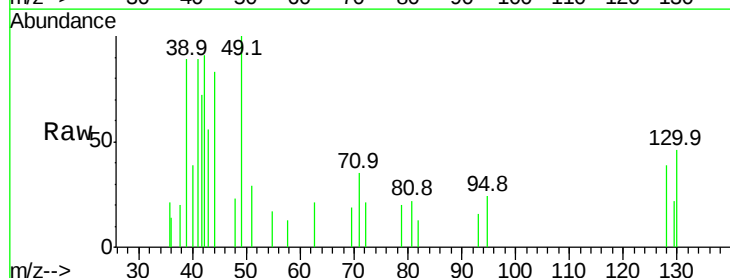
Tgt Ion: 42 Resp: 1746

Ion Ratio Lower Upper

42 100

72 0.0 29.7 44.5#

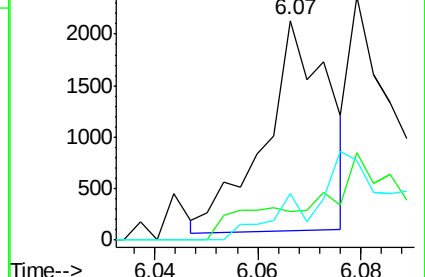
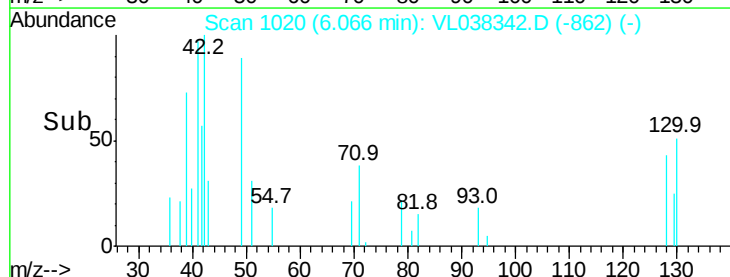
71 0.0 29.4 44.2#

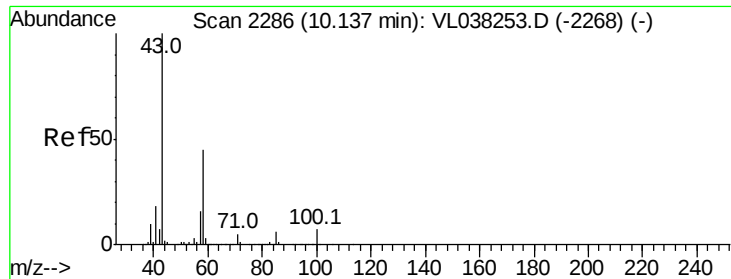


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





#51

2-Hexanone

Concen: 0.09 ppbv

RT: 10.13

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 14 Feb 2022 15:39

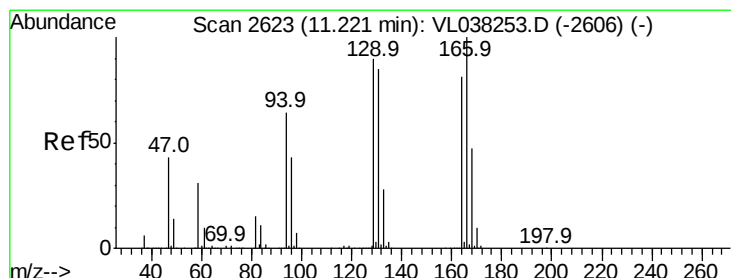
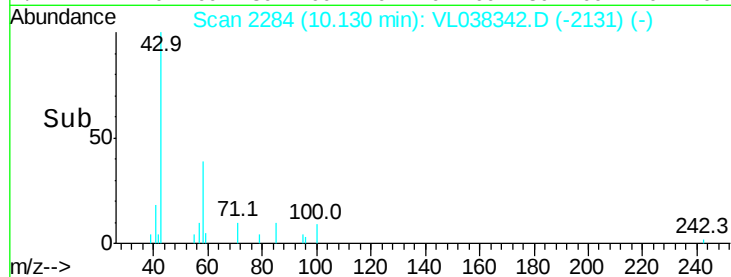
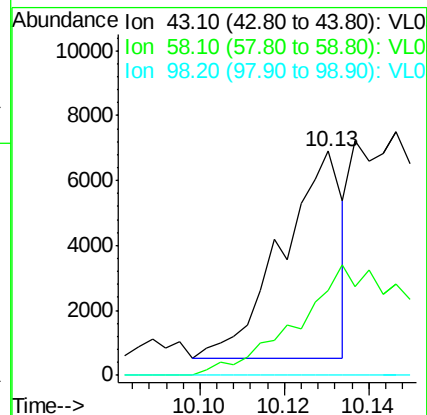
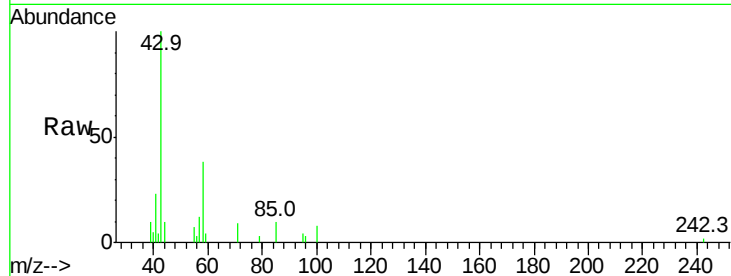
Tgt Ion: 43 Resp: 6303

Ion Ratio Lower Upper

43 100

58 0.0 37.0 55.4#

98 0.0 0.2 0.2#



#52

Tetrachloroethene

Concen: 86.00 ppbv

RT: 11.22 min Scan# 2623

Delta R.T. -0.00 min

Lab File: VL038342.D

Acq: 14 Feb 2022 15:39

Tgt Ion:164 Resp: 6866518

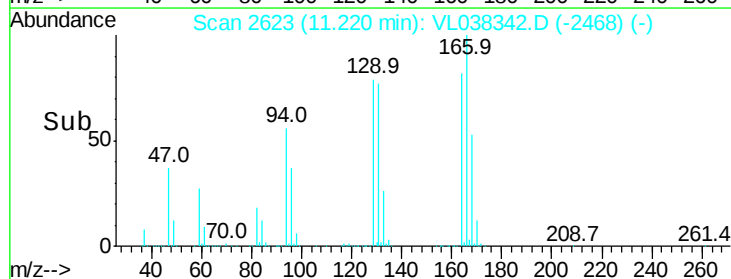
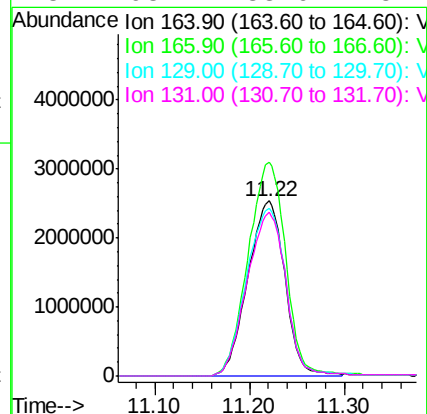
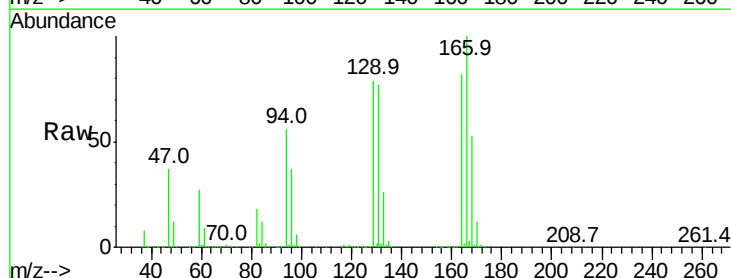
Ion Ratio Lower Upper

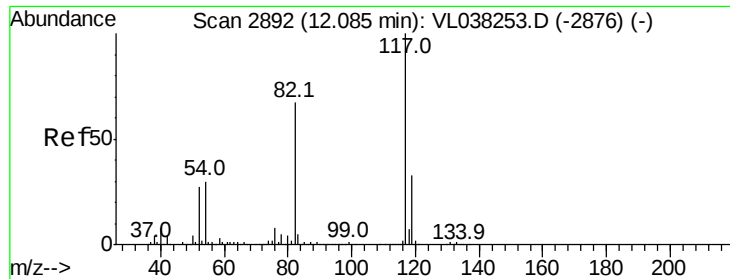
164 100

166 121.9 98.8 148.2

129 95.9 89.2 133.8

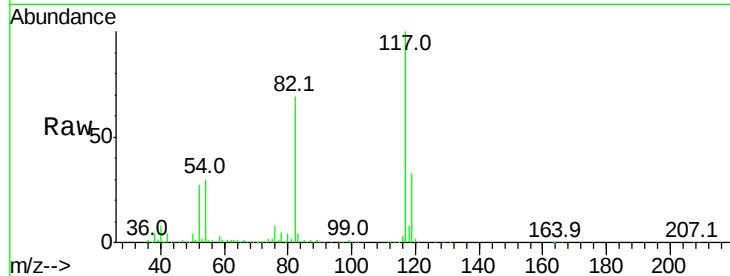
131 93.7 83.6 125.4



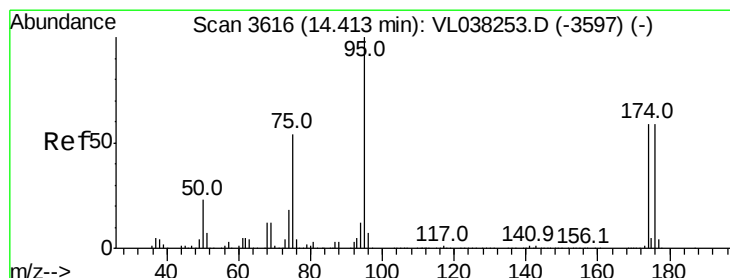
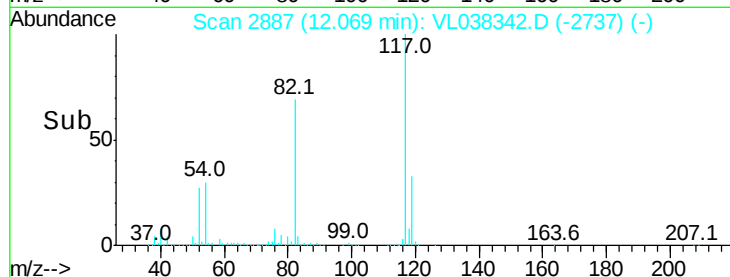
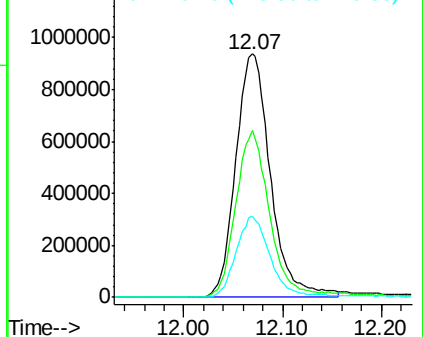


#55
 Chlorobenzene-d5
 Concen: 10.00 ppbv
 RT: 12.07 min
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 SV1DL
 Acq: 14 Feb 2022 15:39

Tgt Ion: 117 Resp: 2286063
 Ion Ratio Lower Upper
 117 100
 82 70.2 54.4 81.6
 119 34.0 45.9 68.9#

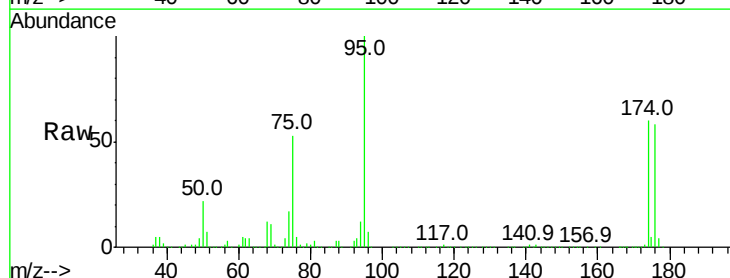


Abundance Ion 117.10 (116.80 to 117.80): V
 Ion 82.10 (81.80 to 82.80): V
 Ion 119.10 (118.80 to 119.80): V



#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.59 ppbv
 RT: 14.40 min Scan# 3611
 Delta R.T.: -0.02 min
 Lab File: VL038342.D
 Acq: 14 Feb 2022 15:39

Tgt Ion: 95 Resp: 1837107
 Ion Ratio Lower Upper
 95 100
 174 62.0 48.3 72.5
 175 4.3 3.5 5.3



Abundance Ion 95.10 (94.80 to 95.80): V
 Ion 174.00 (173.70 to 174.70): V
 Ion 175.00 (174.70 to 175.70): V

