

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL032422\
 Data File : VL038762.D
 Acq On : 25 Mar 2022 12:21
 Operator : SY/AP
 Sample : N2096-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-02-(SB-07)

Quant Time: Mar 25 23:21:51 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL032122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 21 17:09:26 2022
 QLast Update : Mon Mar 21 17:09:26 2022
 Response via : Initial Calibration

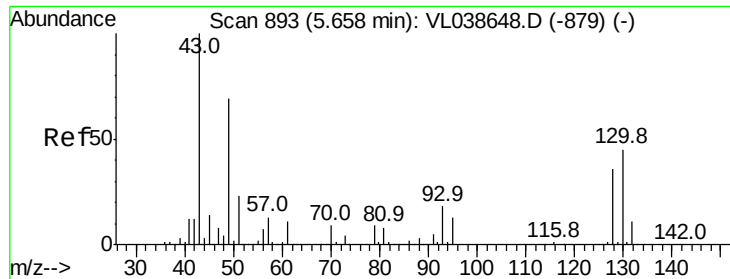
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	778317	10.00	ppbv	0.04
33) 1,4-Difluorobenzene	7.20	114	2032197	10.00	ppbv	0.04
55) Chlorobenzene-d5	12.11	117	1806511	10.00	ppbv	0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1323556	9.56	ppbv	0.04
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.07	85	24577	0.23	ppbv	91
3) Chlorodifluoromethane	3.01	51	47340	0.58	ppbv #	82
4) Chloromethane	3.17	50	23351	0.52	ppbv	98
9) Propene	3.03	41	238409	6.01	ppbv	93
10) Heptane	8.15	43	7071	0.07	ppbv #	32
11) Trichlorofluoromethane	3.97	101	42671	0.46	ppbv	89
12) 1,1,2-Trichlorotrifluoroet	4.51	101	2680	0.04	ppbv #	1
13) Ethanol	3.63	45	658462	150.41	ppbv	99
15) Acetone	3.87	43	825149	12.29	ppbv	95
16) 1,3-Butadiene	3.33	39	78866	2.07	ppbv #	35
17) tert-Butyl alcohol	4.32	59	5044	0.09	ppbv #	73
19) Isopropyl Alcohol	4.00	45	48125	1.29	ppbv #	1
20) Methylene Chloride	4.37	84	3145783	111.21	ppbv	98
21) Allyl Chloride	4.37	41	113634	2.35	ppbv #	27
23) Vinyl Acetate	5.08	43	20580	0.32	ppbv #	1
25) Ethyl Acetate	5.71	43	1525886	9.03	ppbv #	76
26) Hexane	5.71	57	2227334	29.43	ppbv #	39
27) Carbon Disulfide	4.58	76	62279	0.84	ppbv	98
30) Cyclohexane	7.16	84	11235	0.17	ppbv #	1
32) 1,1,1-Trichloroethane	6.54	97	7004	0.06	ppbv #	37
34) 2-Butanone	5.28	43	19102	0.24	ppbv #	89
35) Carbon Tetrachloride	7.04	117	18882	0.16	ppbv	98
36) Benzene	6.92	78	19391	0.12	ppbv	98
38) Trichloroethene	7.86	130	8277	0.13	ppbv #	87
39) 1,2-Dichloropropane	7.20	63	458660	7.48	ppbv #	28
41) Tetrahydrofuran	5.71	42	810358	13.54	ppbv #	49
44) 2,2,4-Trimethylpentane	7.90	57	16607	0.06	ppbv #	43
53) Toluene	9.84	91	21902	0.13	ppbv #	20
60) o-Xylene	13.72	91	8245	0.05	ppbv #	41
74) 1,2,4-Trimethylbenzene	16.79	105	25627	0.12	ppbv #	72

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.69 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2022 12:21 SV-02-(SB-07)

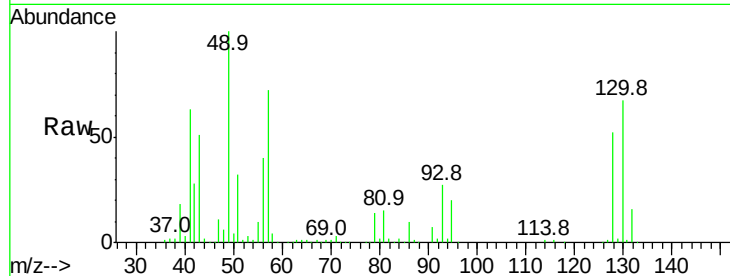
Tgt Ion: 49 Resp: 778317

Ion Ratio Lower Upper

49 100

128 54.0 26.2 78.6

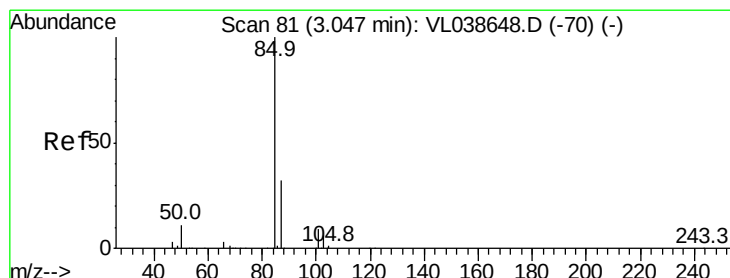
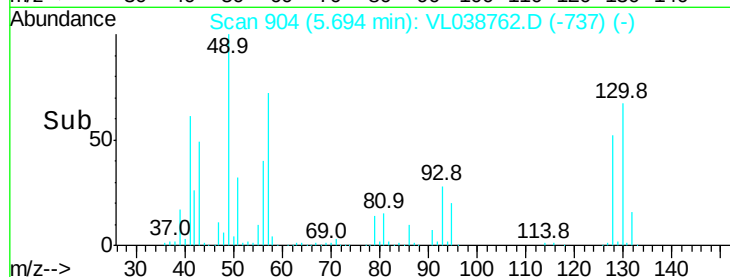
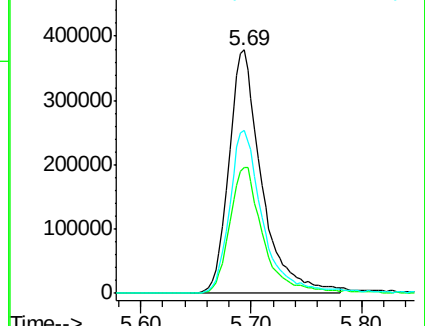
130 69.0 33.7 101.1



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



#2

Dichlorodifluoromethane

Concen: 0.23 ppbv

RT: 3.07 min Scan# 89

Delta R.T. 0.03 min

Lab File: VL038762.D

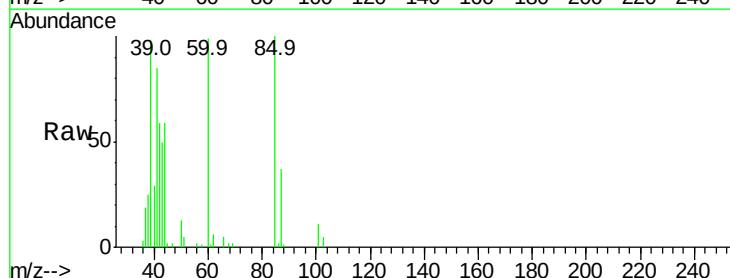
Acq: 25 Mar 2022 12:21

Tgt Ion: 85 Resp: 24577

Ion Ratio Lower Upper

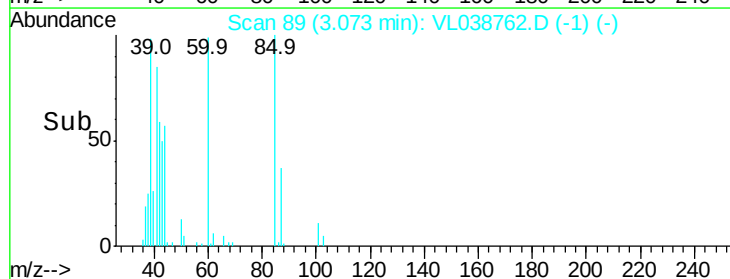
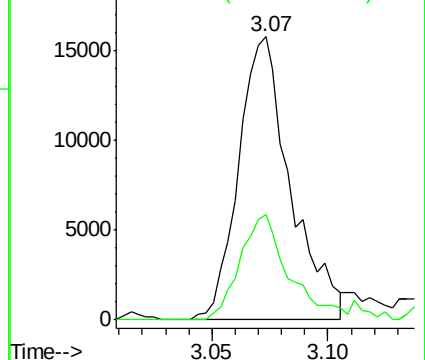
85 100

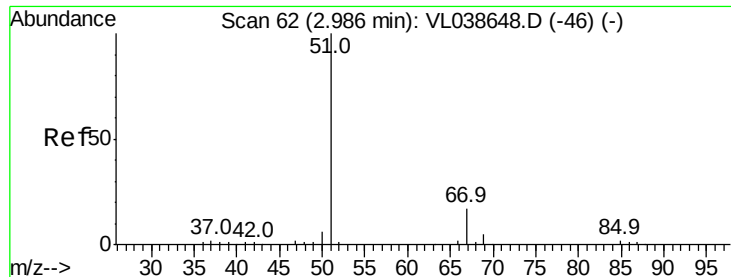
87 37.3 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.58 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

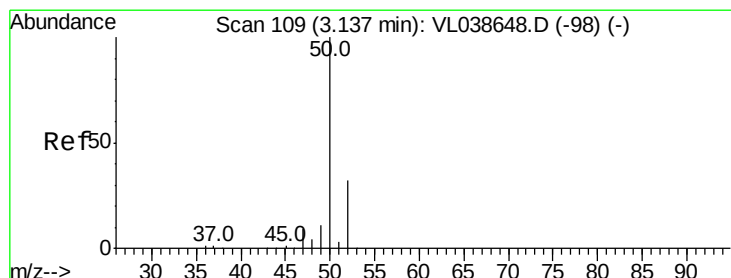
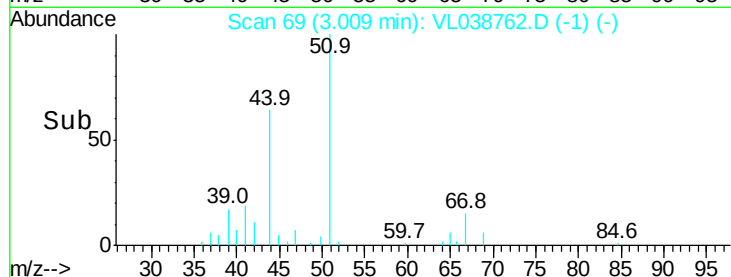
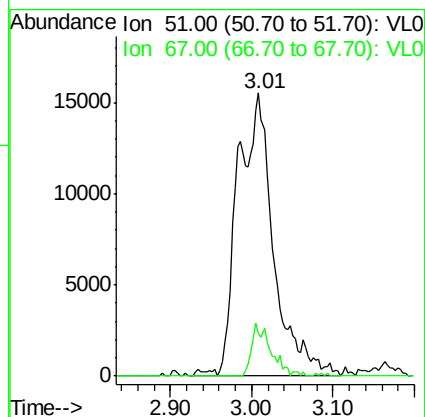
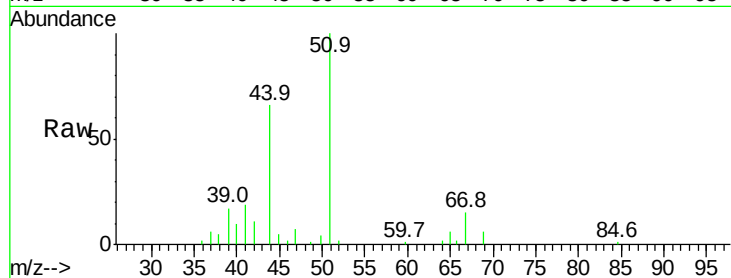
Acq: 25 Mar 2022 12:21

Tgt Ion: 51 Resp: 47340

Ion Ratio Lower Upper

51 100

67 9.8 14.1 21.1#



#4

Chloromethane

Concen: 0.52 ppbv

RT: 3.17 min Scan# 118

Delta R.T. 0.03 min

Lab File: VL038762.D

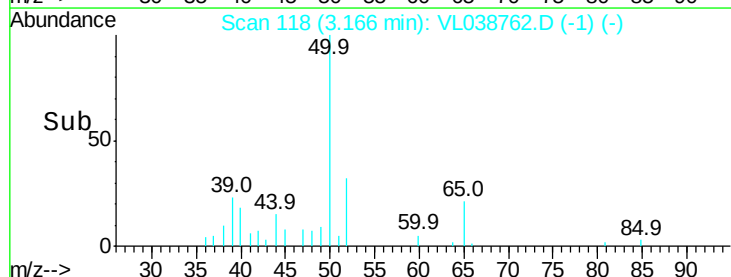
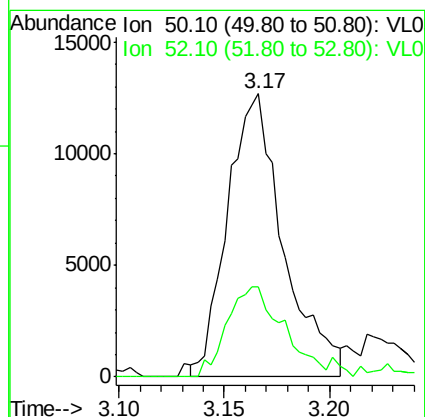
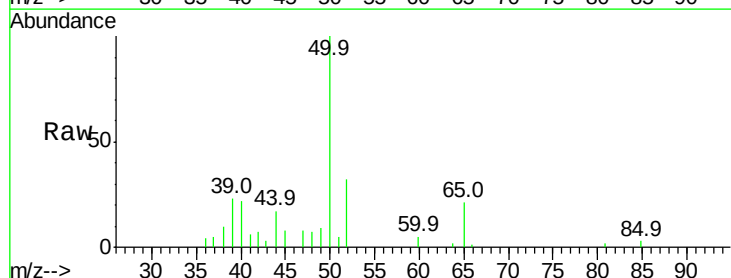
Acq: 25 Mar 2022 12:21

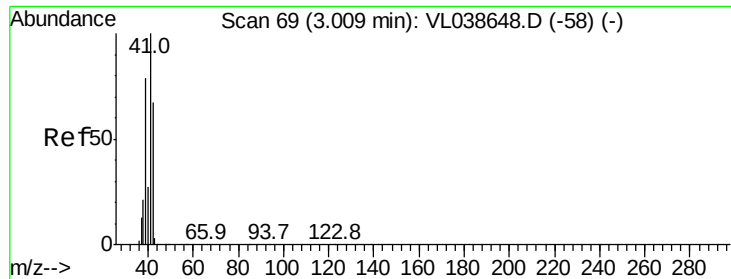
Tgt Ion: 50 Resp: 23351

Ion Ratio Lower Upper

50 100

52 33.2 25.5 38.3





#9

Propene

Concen: 6.01 ppbv

RT: 3.03 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: SV-02-(SB-07)

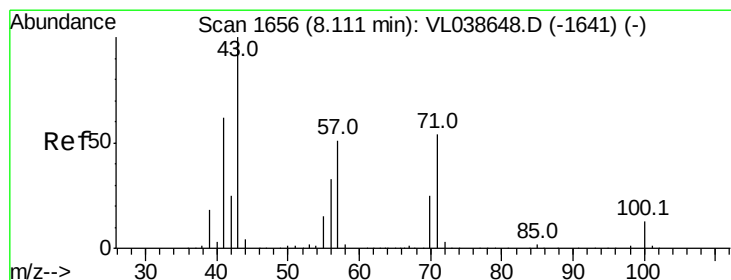
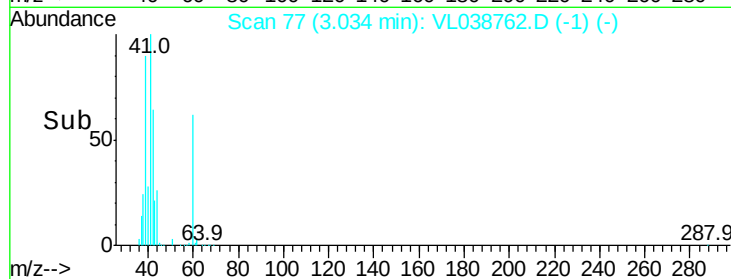
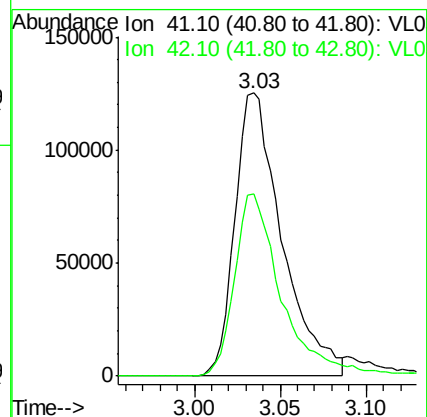
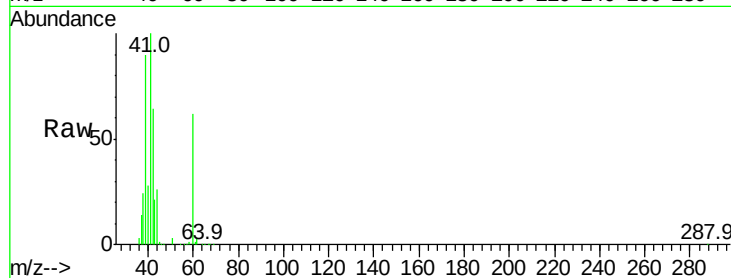
Acq: 25 Mar 2022 12:21

Tgt Ion: 41 Resp: 238409

Ion Ratio Lower Upper

41 100

42 64.7 56.2 84.4



#10

Heptane

Concen: 0.07 ppbv

RT: 8.15 min Scan# 1669

Delta R.T. 0.04 min

Lab File: VL038762.D

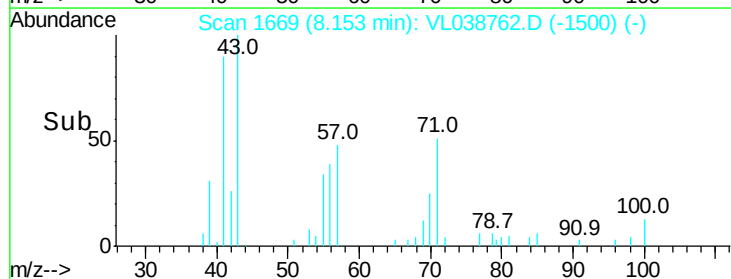
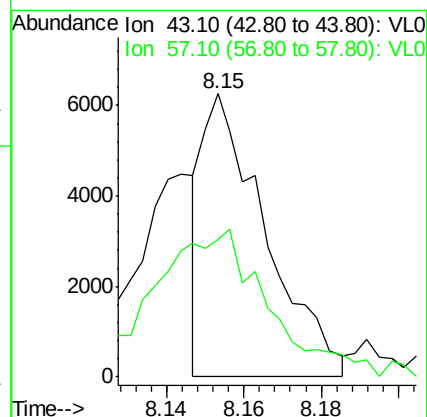
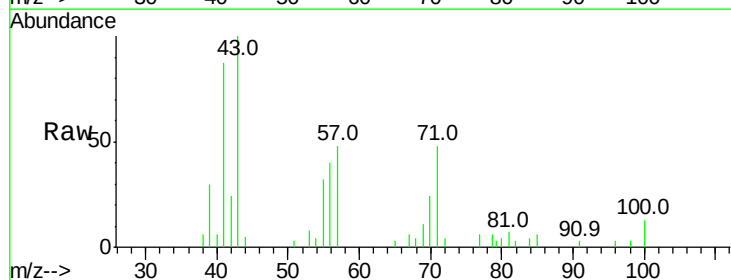
Acq: 25 Mar 2022 12:21

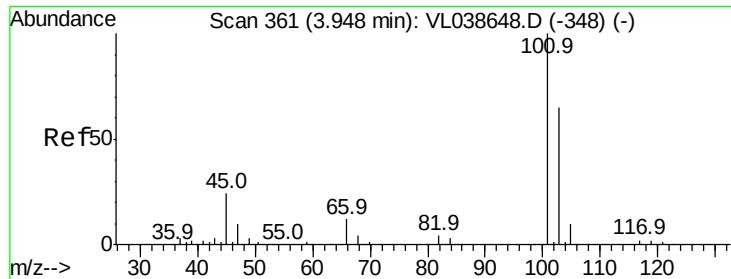
Tgt Ion: 43 Resp: 7071

Ion Ratio Lower Upper

43 100

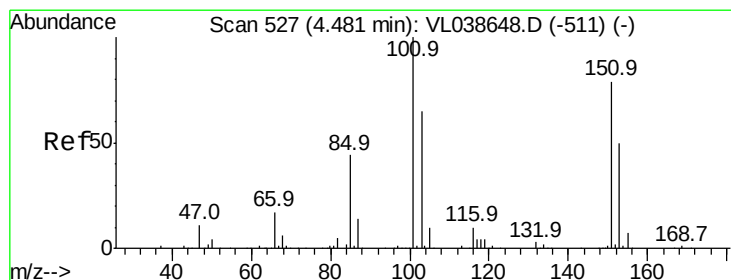
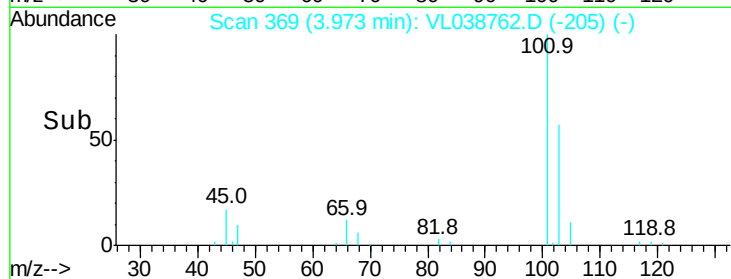
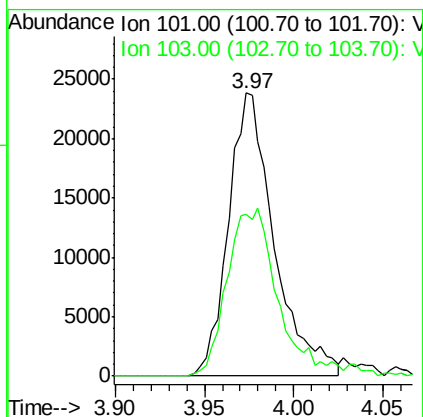
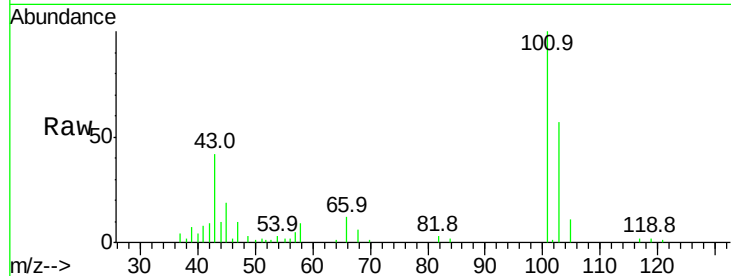
57 99.3 41.4 62.2#





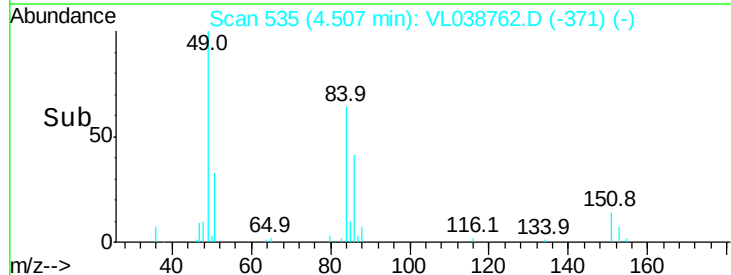
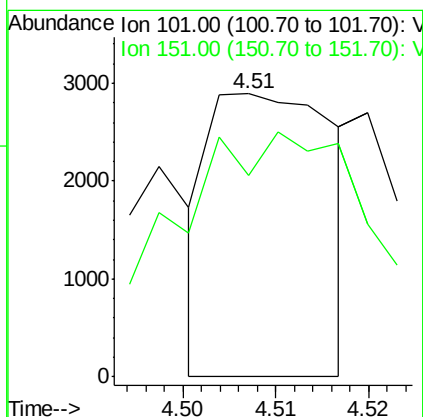
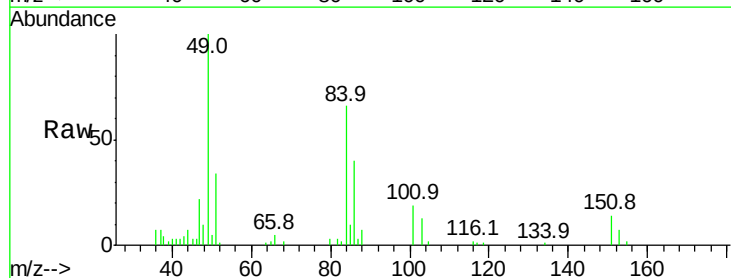
#11
 Trichlorofluoromethane
 Concen: 0.46 ppbv
 RT: 3.97
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 25 Mar 2022 12:21

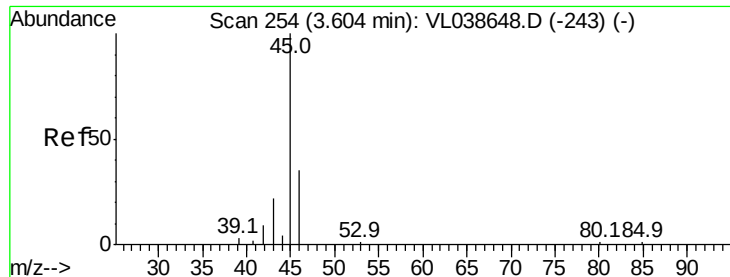
Tgt Ion:101 Resp: 42671
 Ion Ratio Lower Upper
 101 100
 103 56.5 51.9 77.9



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.04 ppbv
 RT: 4.51 min Scan# 535
 Delta R.T. 0.03 min
 Lab File: VL038762.D
 Acq: 25 Mar 2022 12:21

Tgt Ion:101 Resp: 2680
 Ion Ratio Lower Upper
 101 100
 151 177.0 62.9 94.3#





#13

Ethanol

Concen: 150.41 ppbv

RT: 3.63

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

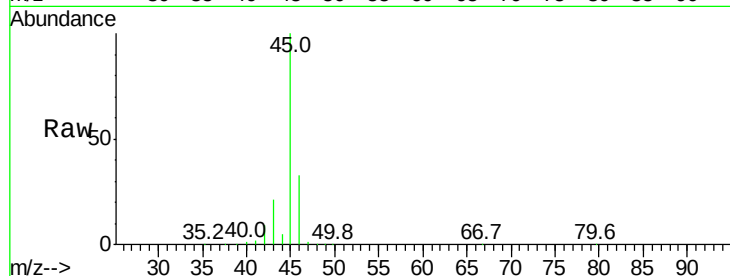
Acq: 25 Mar 2022 12:21

Tgt Ion: 45 Resp: 658462

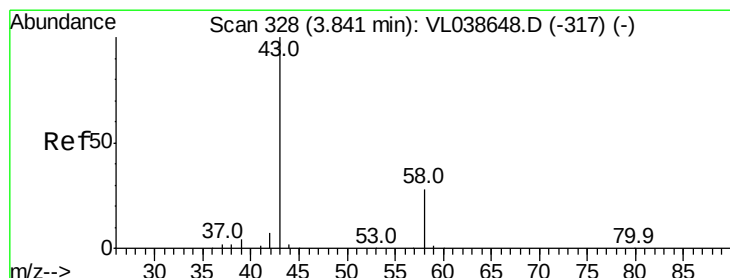
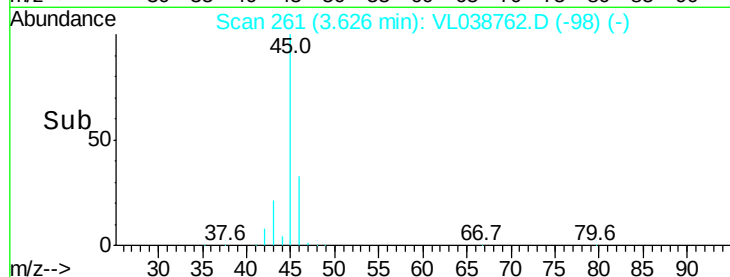
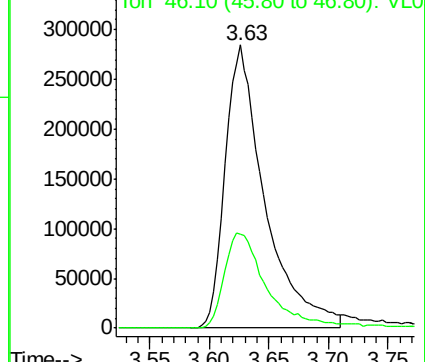
Ion Ratio Lower Upper

45 100

46 37.5 15.1 60.5



Abundance Ion 45.10 (44.80 to 45.80): VL0



#15

Acetone

Concen: 12.29 ppbv

RT: 3.87 min Scan# 337

Delta R.T. 0.03 min

Lab File: VL038762.D

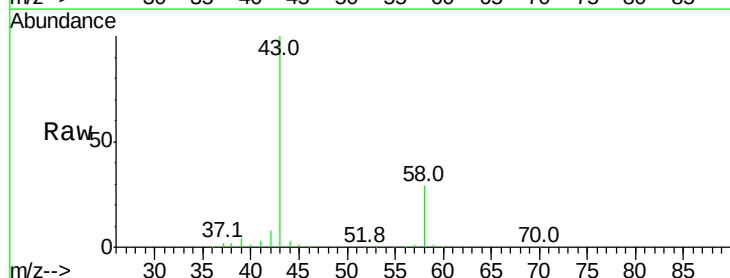
Acq: 25 Mar 2022 12:21

Tgt Ion: 43 Resp: 825149

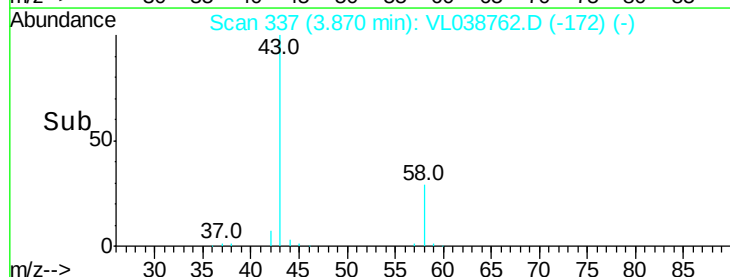
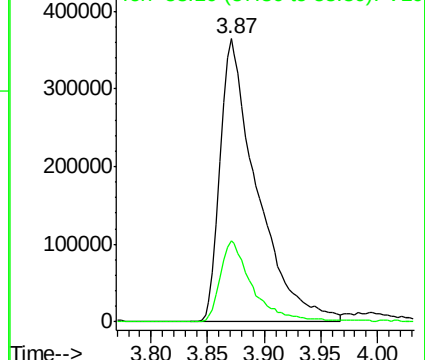
Ion Ratio Lower Upper

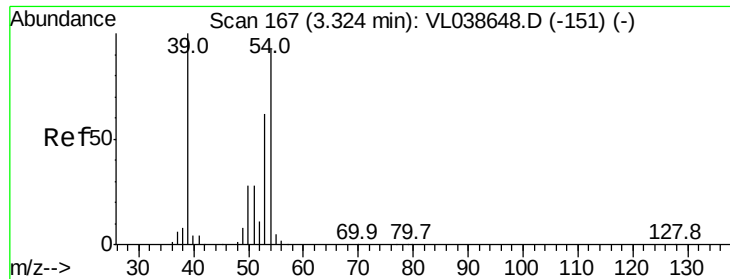
43 100

58 26.3 23.3 34.9



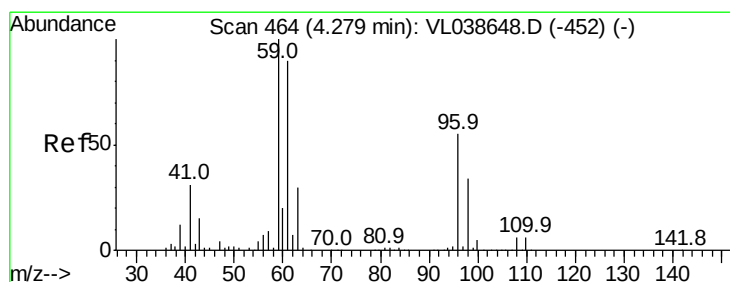
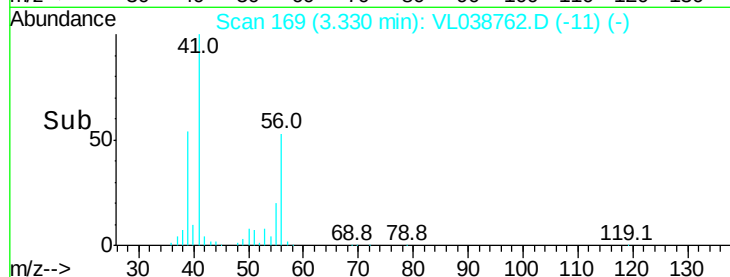
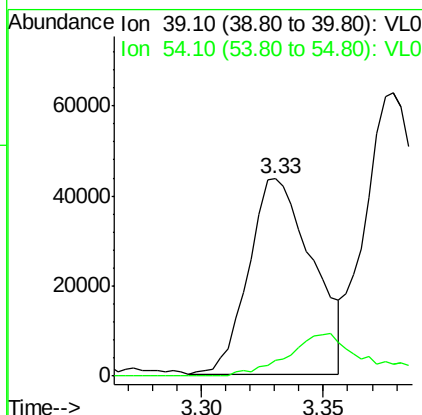
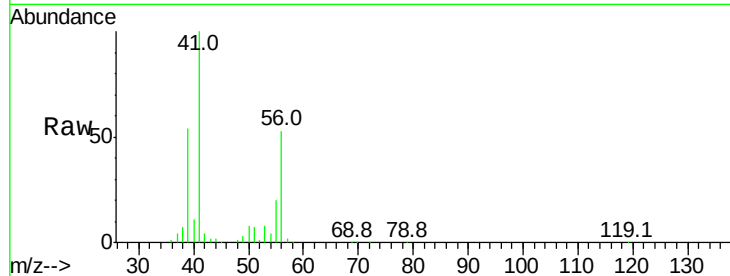
Abundance Ion 43.10 (42.80 to 43.80): VL0





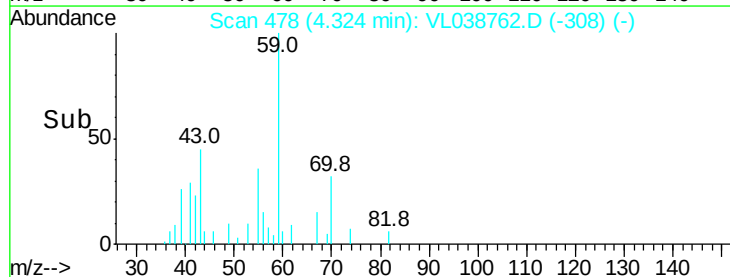
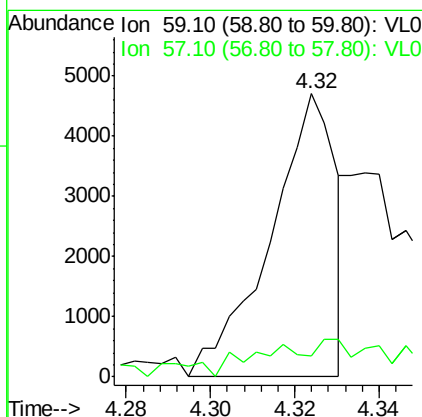
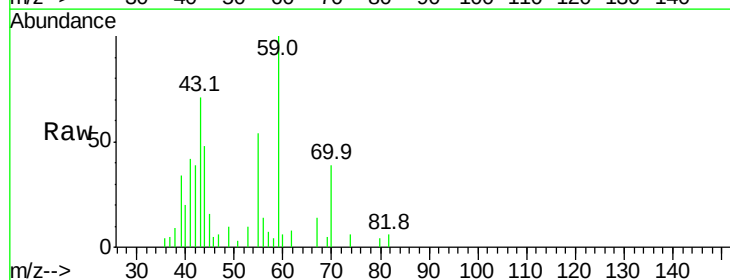
#16
 1,3-Butadiene
 Concen: 2.07 ppbv
 RT: 3.33
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV-02-(SB-07)
 Acq: 25 Mar 2022 12:21

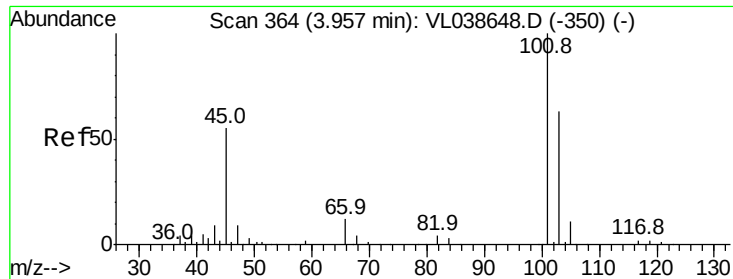
Tgt Ion: 39 Resp: 78866
 Ion Ratio Lower Upper
 39 100
 54 26.9 69.1 103.7#



#17
 tert-Butyl alcohol
 Concen: 0.09 ppbv
 RT: 4.32 min Scan# 478
 Delta R.T. 0.05 min
 Lab File: VL038762.D
 Acq: 25 Mar 2022 12:21

Tgt Ion: 59 Resp: 5044
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.2 12.2#





#19

Isopropyl Alcohol

Concen: 1.29 ppbv

RT: 4.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

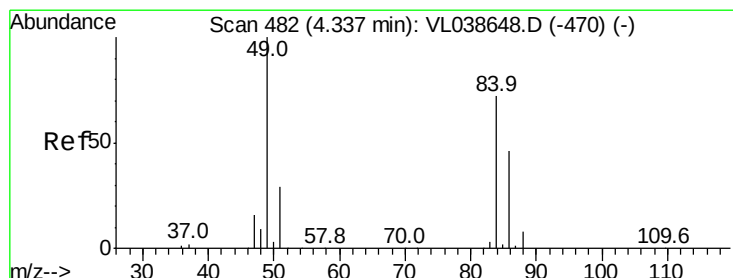
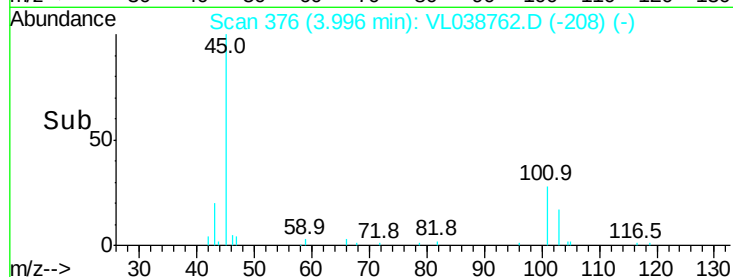
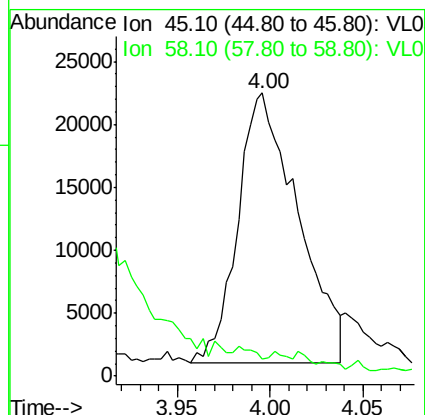
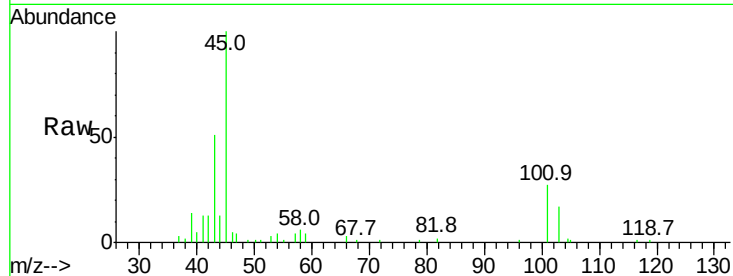
Acq: 25 Mar 2022 12:21

Tgt Ion: 45 Resp: 48125

Ion Ratio Lower Upper

45 100

58 450.9 2.3 3.5#



#20

Methylene Chloride

Concen: 111.21 ppbv

RT: 4.37 min Scan# 492

Delta R.T. 0.03 min

Lab File: VL038762.D

Acq: 25 Mar 2022 12:21

Tgt Ion: 84 Resp: 3145783

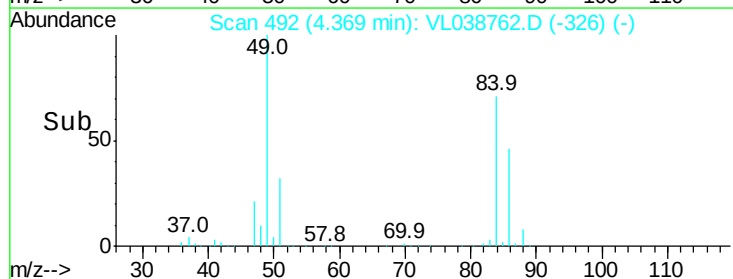
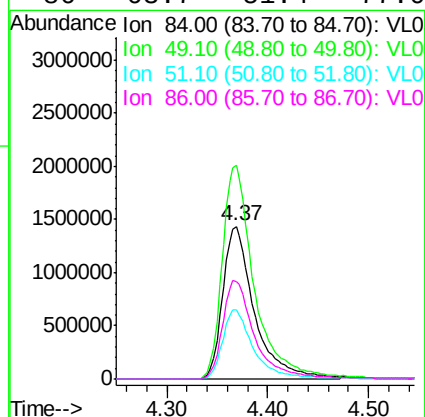
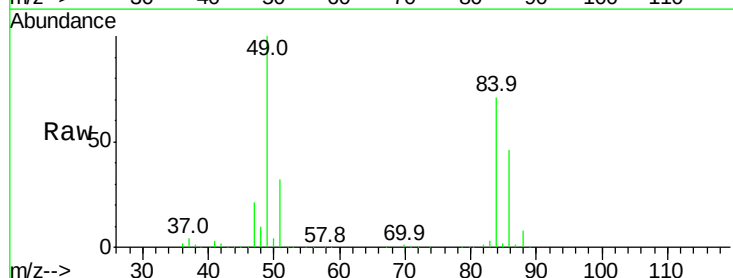
Ion Ratio Lower Upper

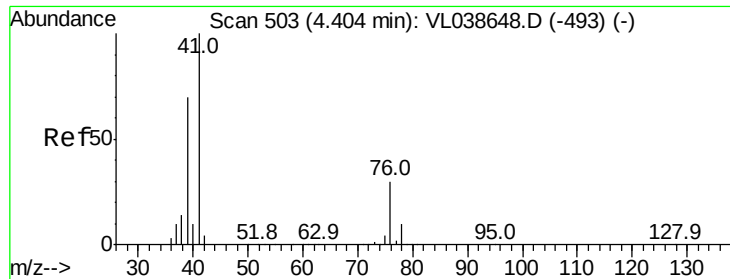
84 100

49 139.9 111.2 166.8

51 44.9 32.8 49.2

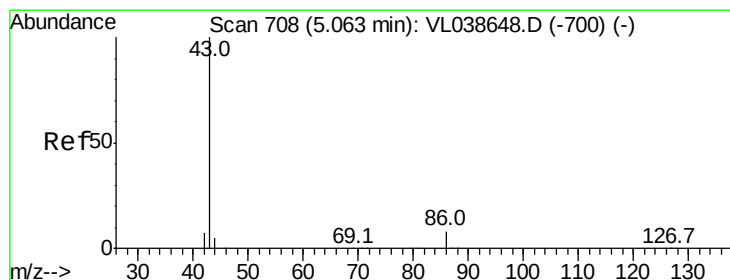
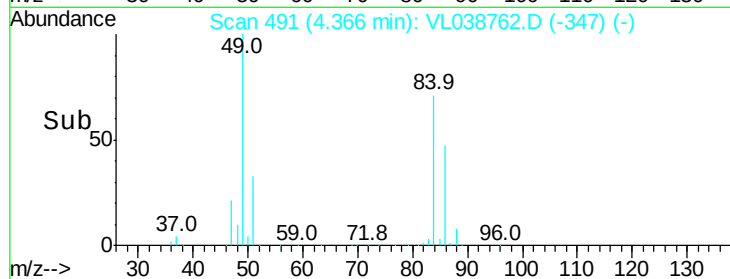
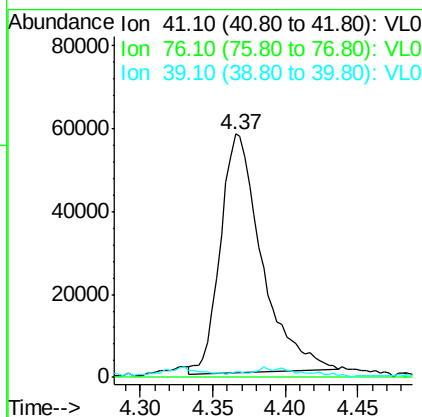
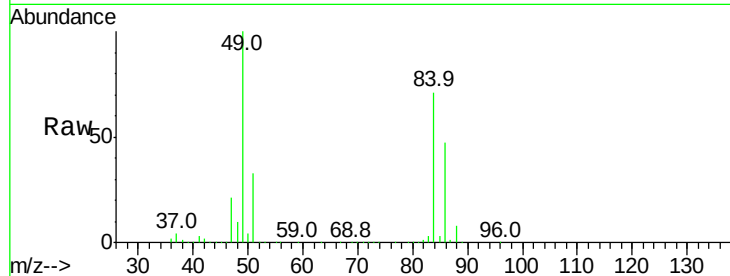
86 63.7 51.4 77.0





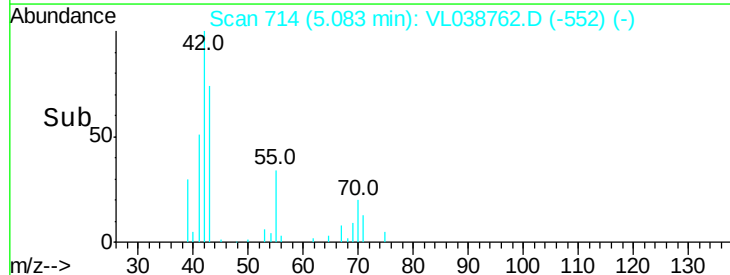
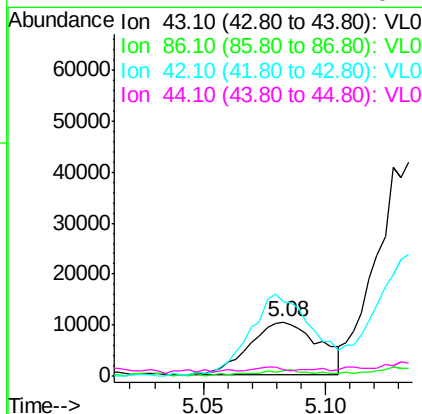
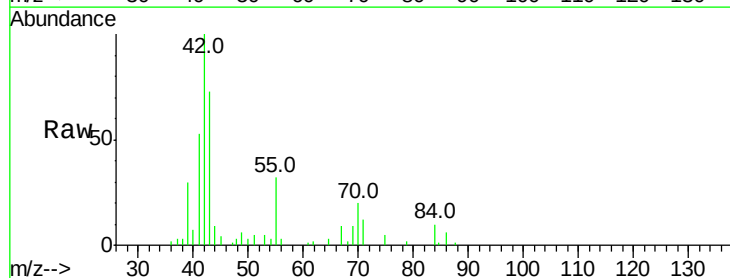
#21
 Allyl Chloride
 Concen: 2.35 ppbv
 RT: 4.37
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV-02-(SB-07)
 Acq: 25 Mar 2022 12:21

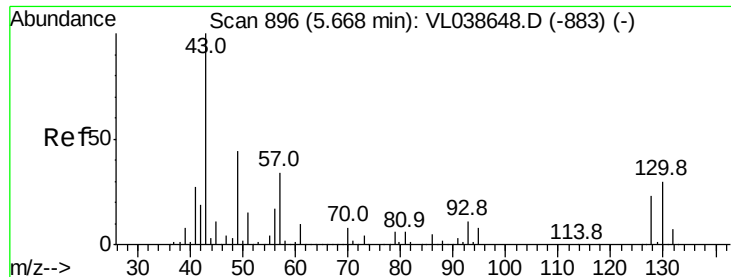
Tgt Ion: 41 Resp: 113634
 Ion Ratio Lower Upper
 41 100
 76 0.0 25.0 37.6#
 39 4.8 56.6 85.0#



#23
 Vinyl Acetate
 Concen: 0.32 ppbv
 RT: 5.08 min Scan# 714
 Delta R.T. 0.02 min
 Lab File: VL038762.D
 Acq: 25 Mar 2022 12:21

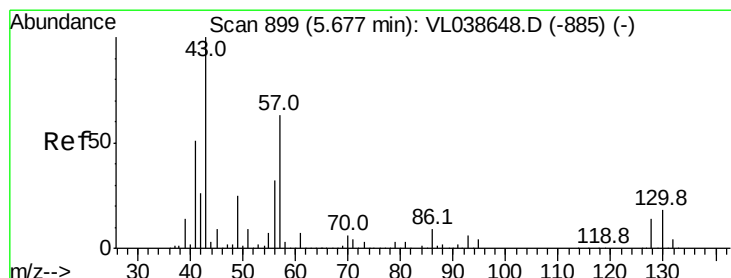
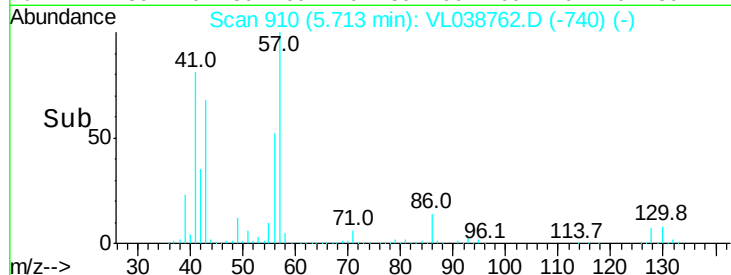
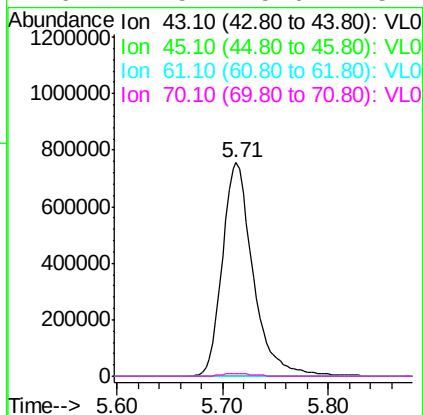
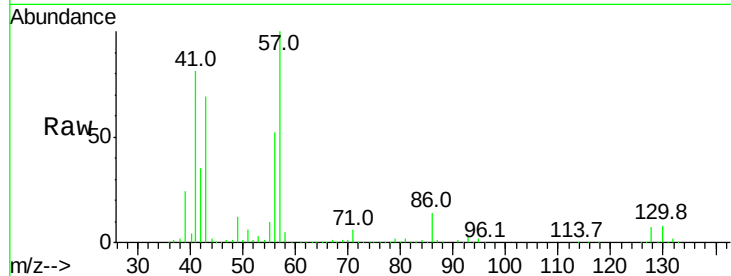
Tgt Ion: 43 Resp: 20580
 Ion Ratio Lower Upper
 43 100
 86 8.8 5.6 8.4#
 42 138.7 6.8 10.2#
 44 1.1 4.2 6.2#





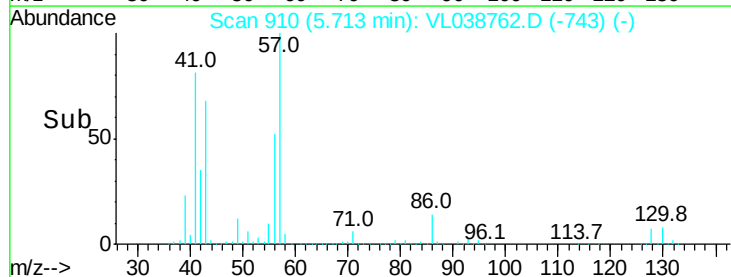
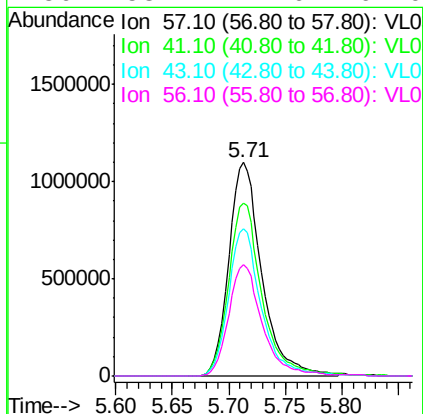
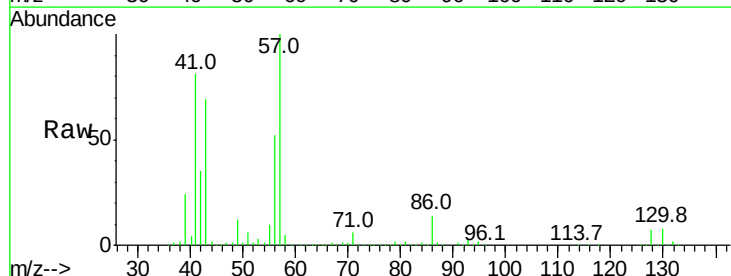
#25
Ethyl Acetate
Concen: 9.03 ppbv
RT: 5.71 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV-02-(SB-07)
Acq: 25 Mar 2022 12:21

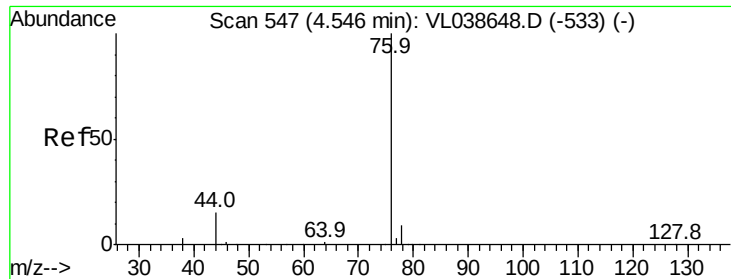
Tgt Ion: 43 Resp: 1525886
Ion Ratio Lower Upper
43 100
45 0.3 8.2 12.4#
61 0.3 8.3 12.5#
70 1.5 5.6 8.4#



#26
Hexane
Concen: 29.43 ppbv
RT: 5.71 min Scan# 910
Delta R.T.: 0.04 min
Lab File: VL038762.D
Acq: 25 Mar 2022 12:21

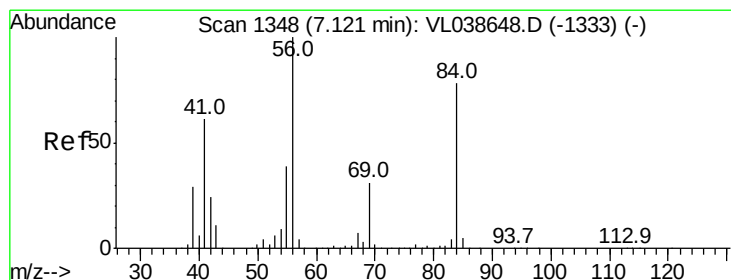
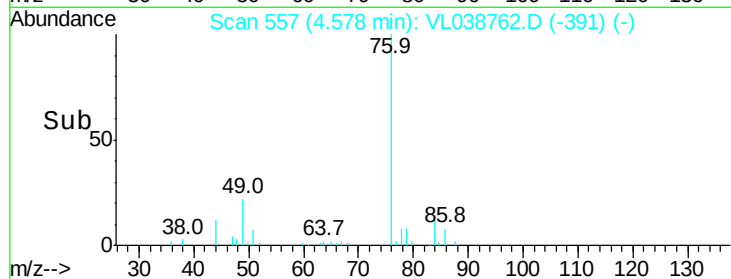
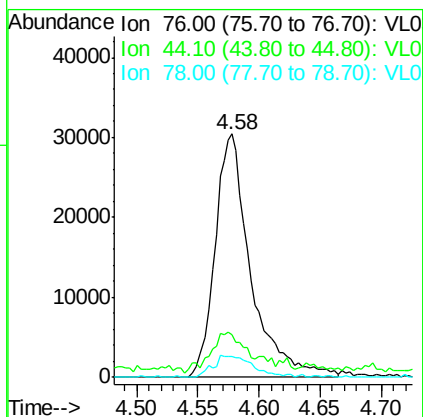
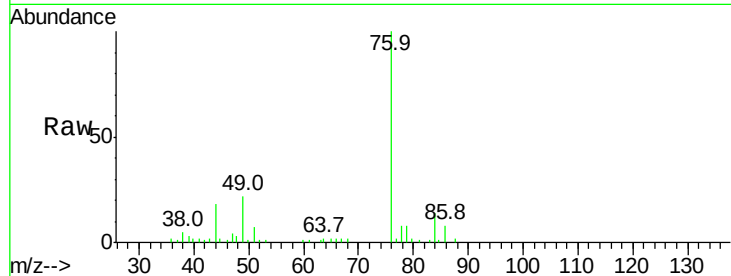
Tgt Ion: 57 Resp: 2227334
Ion Ratio Lower Upper
57 100
41 82.6 67.0 100.4
43 69.0 184.2 276.2#
56 53.7 42.6 64.0





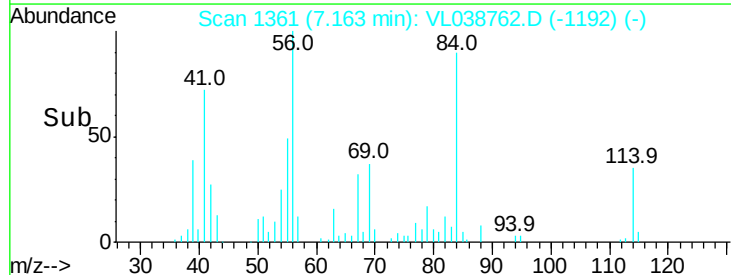
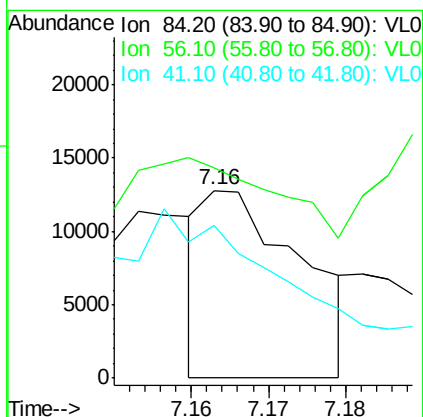
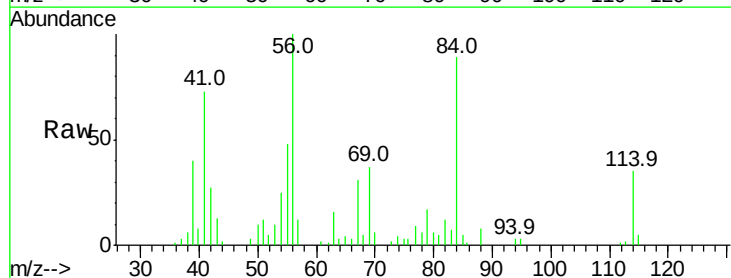
#27
Carbon Disulfide
Concen: 0.84 ppbv
RT: 4.58
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
SV-02-(SB-07)
Acq: 25 Mar 2022 12:21

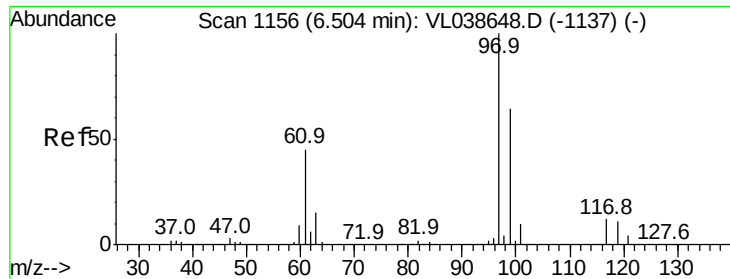
Tgt Ion: 76 Resp: 62279
Ion Ratio Lower Upper
76 100
44 16.7 12.4 18.6
78 10.1 7.8 11.8



#30
Cyclohexane
Concen: 0.17 ppbv
RT: 7.16 min Scan# 1361
Delta R.T. 0.04 min
Lab File: VL038762.D
Acq: 25 Mar 2022 12:21

Tgt Ion: 84 Resp: 11235
Ion Ratio Lower Upper
84 100
56 248.6 108.2 162.4#
41 228.8 61.8 92.6#





#32

1,1,1-Trichloroethane

Concen: 0.06 ppbv

RT: 6.54

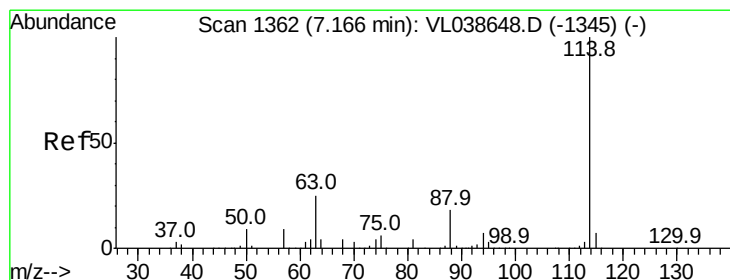
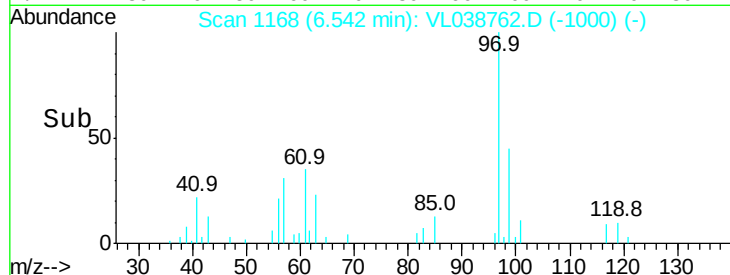
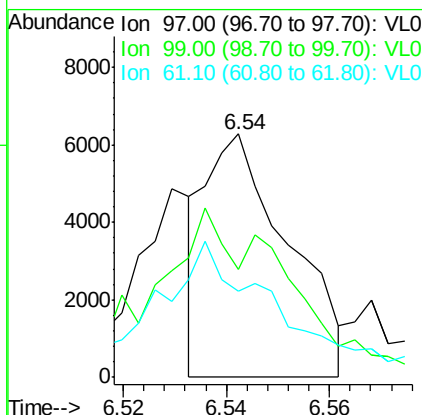
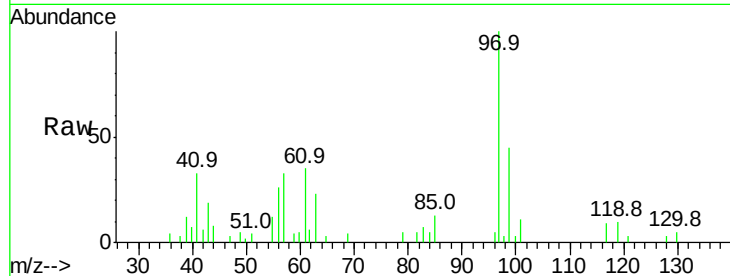
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2022 12:21

Tgt Ion: 97 Resp: 7004

Ion	Ratio	Lower	Upper
97	100		
99	116.5	51.8	77.8#
61	85.3	36.7	55.1#



#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.20 min Scan# 1373

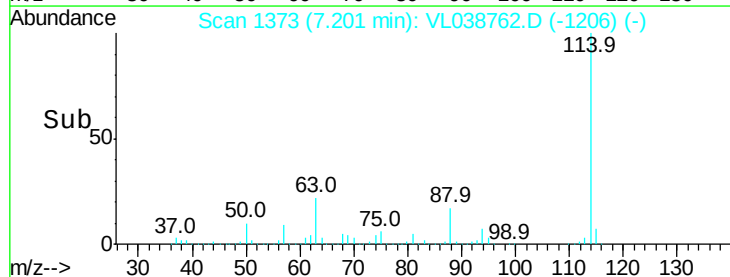
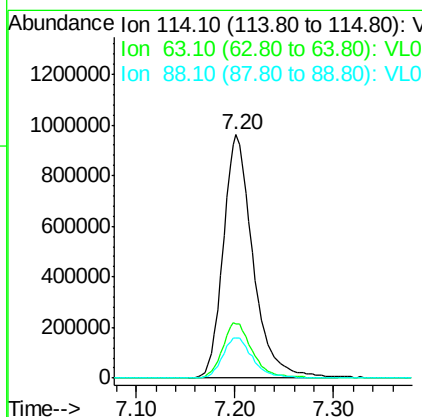
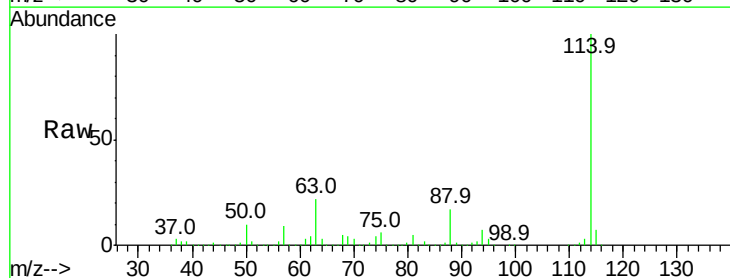
Delta R.T. 0.04 min

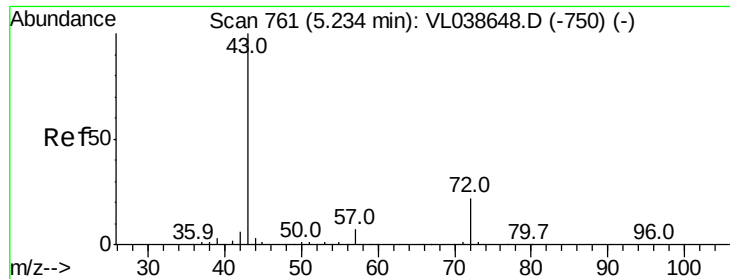
Lab File: VL038762.D

Acq: 25 Mar 2022 12:21

Tgt Ion: 114 Resp: 2032197

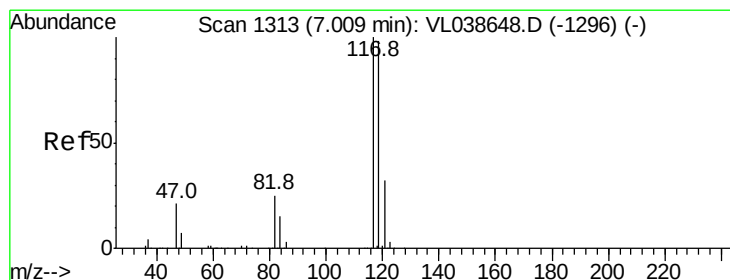
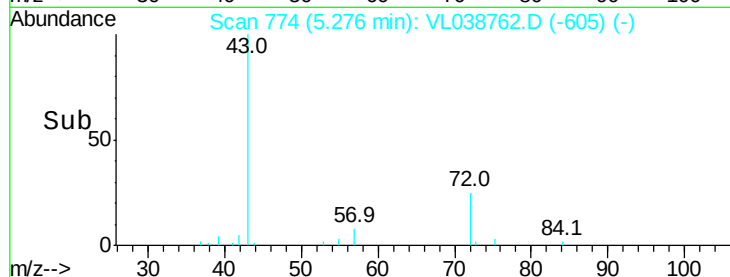
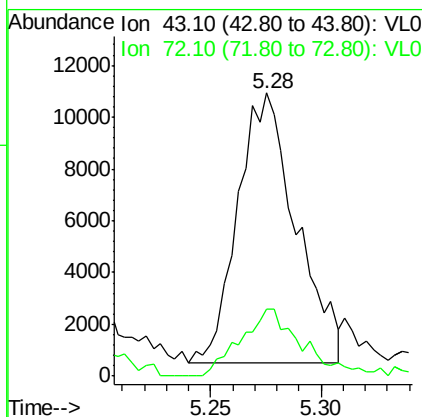
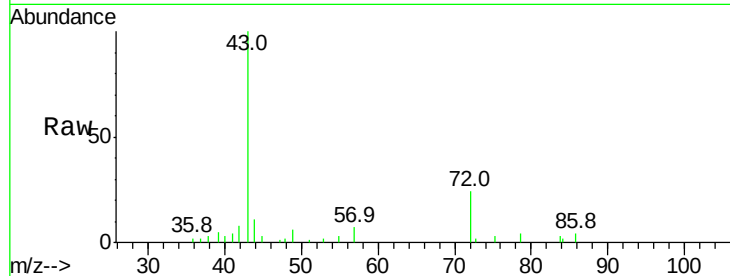
Ion	Ratio	Lower	Upper
114	100		
63	23.2	19.4	29.0
88	17.1	13.9	20.9





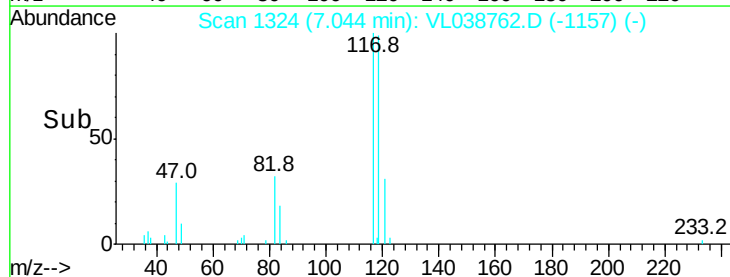
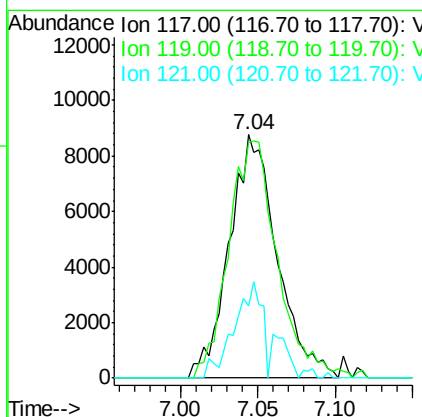
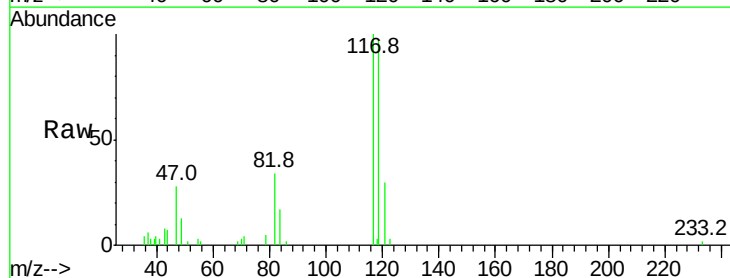
#34
 2-Butanone
 Concen: 0.24 ppbv
 RT: 5.28
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV-02-(SB-07)
 Acq: 25 Mar 2022 12:21

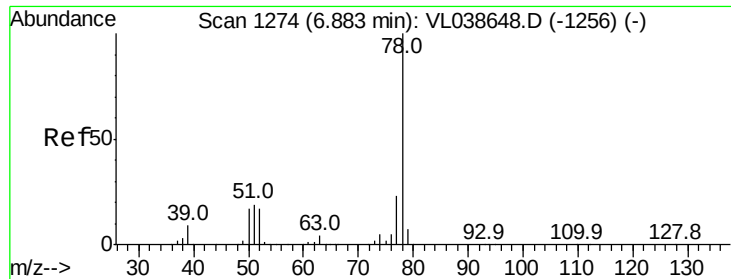
Tgt Ion: 43 Resp: 19102
 Ion Ratio Lower Upper
 43 100
 72 27.5 17.8 26.8#



#35
 Carbon Tetrachloride
 Concen: 0.16 ppbv
 RT: 7.04 min Scan# 1324
 Delta R.T. 0.04 min
 Lab File: VL038762.D
 Acq: 25 Mar 2022 12:21

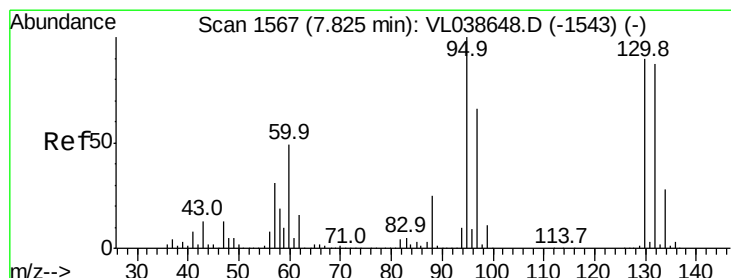
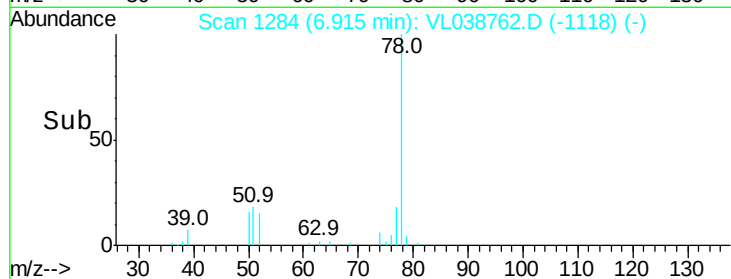
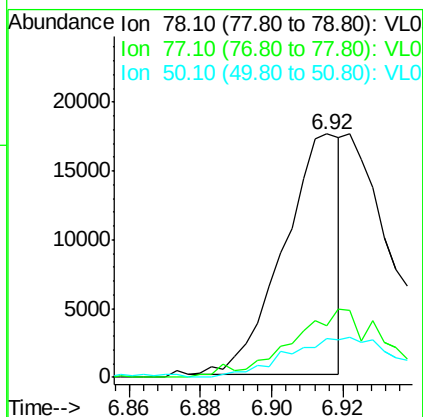
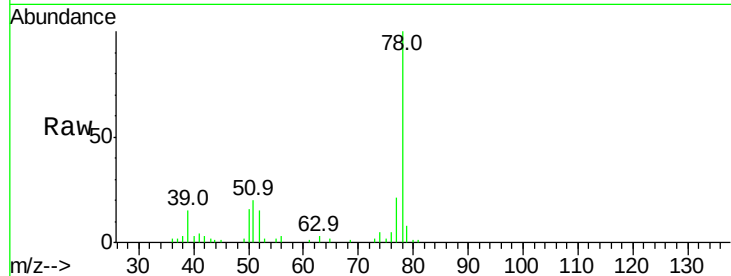
Tgt Ion: 117 Resp: 18882
 Ion Ratio Lower Upper
 117 100
 119 96.8 78.1 117.1
 121 29.8 25.8 38.6





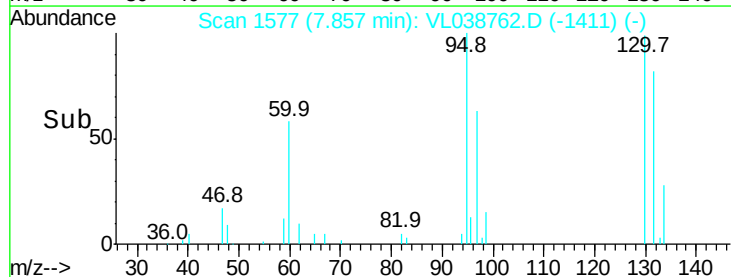
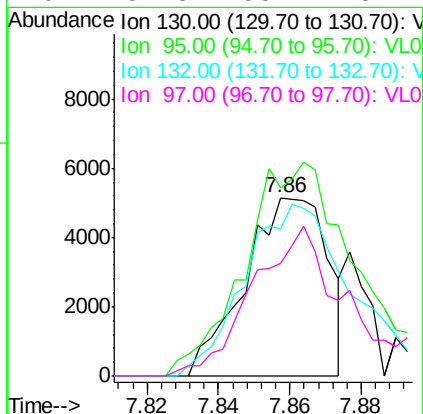
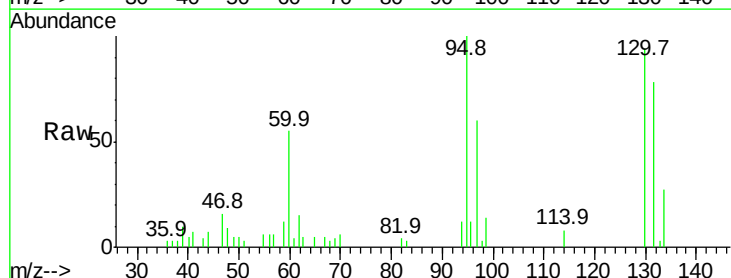
#36
Benzene
Concen: 0.12 ppbv
RT: 6.92
Instrument: MSVOA_L
Delta R.T.:
ClientSampleId:
Lab File: SV-02-(SB-07)
Acq: 25 Mar 2022 12:21

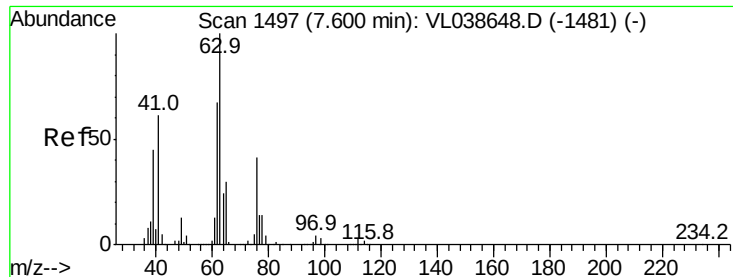
Tgt Ion: 78 Resp: 19391
Ion Ratio Lower Upper
78 100
77 21.6 18.1 27.1
50 16.2 13.6 20.4



#38
Trichloroethene
Concen: 0.13 ppbv
RT: 7.86 min Scan# 1577
Delta R.T.: 0.03 min
Lab File: VL038762.D
Acq: 25 Mar 2022 12:21

Tgt Ion:130 Resp: 8277
Ion Ratio Lower Upper
130 100
95 106.8 88.9 133.3
132 77.4 77.4 116.0
97 57.8 58.2 87.4#





#39

1,2-Dichloropropane

Concen: 7.48 ppbv

RT: 7.20 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2022 12:21 SV-02-(SB-07)

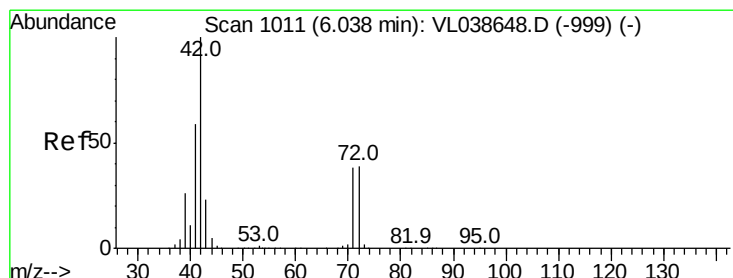
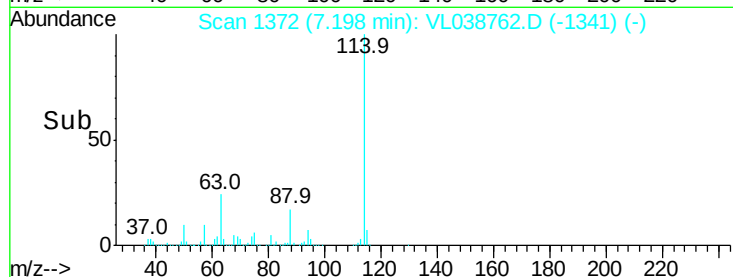
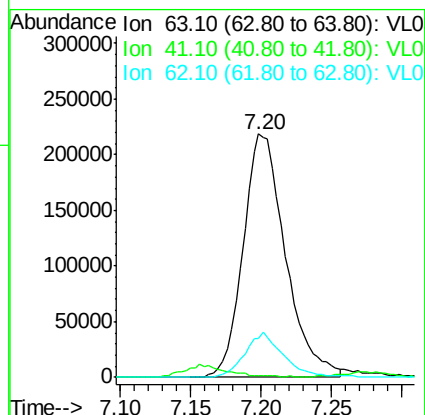
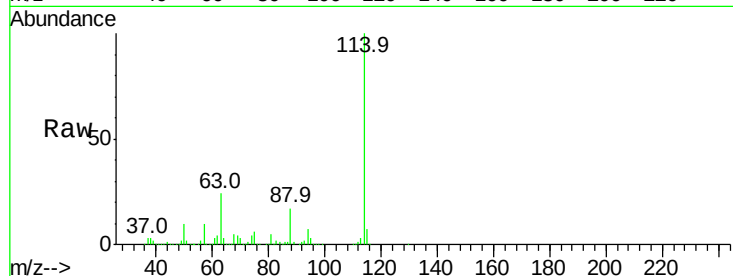
Tgt Ion: 63 Resp: 458660

Ion Ratio Lower Upper

63 100

41 0.0 49.0 73.6#

62 16.1 53.9 80.9#



#41

Tetrahydrofuran

Concen: 13.54 ppbv

RT: 5.71 min Scan# 910

Delta R.T. -0.32 min

Lab File: VL038762.D

Acq: 25 Mar 2022 12:21

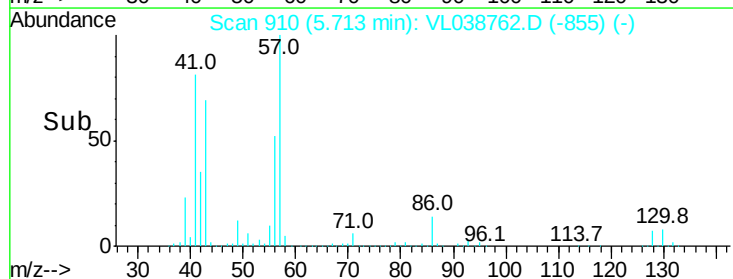
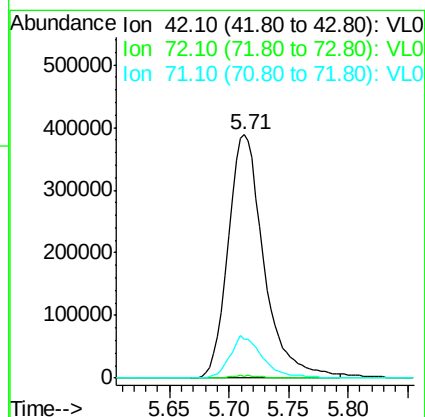
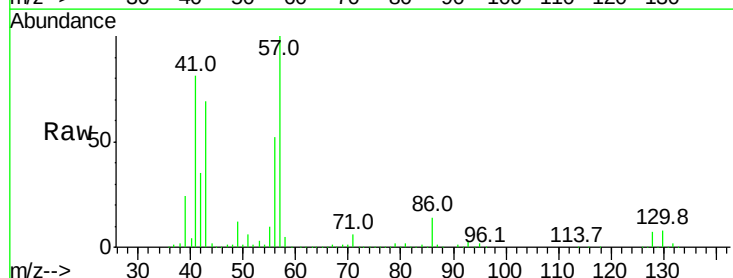
Tgt Ion: 42 Resp: 810358

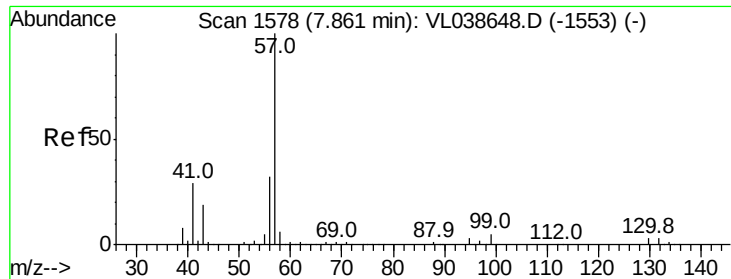
Ion Ratio Lower Upper

42 100

72 1.0 32.5 48.7#

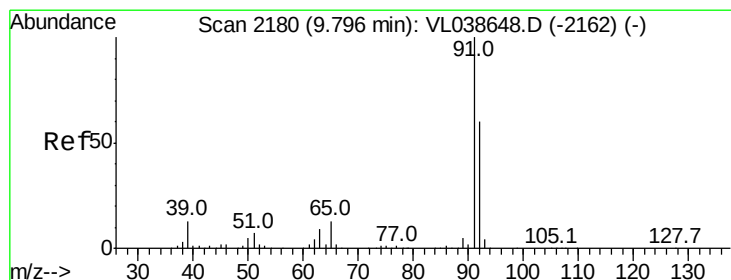
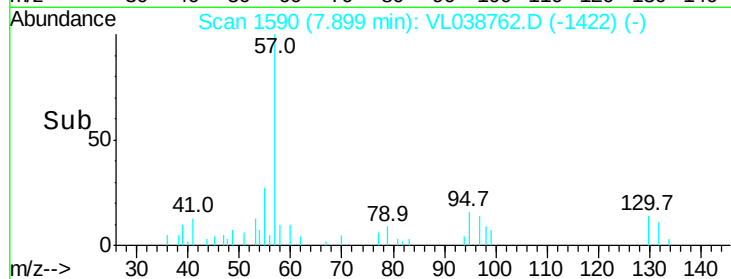
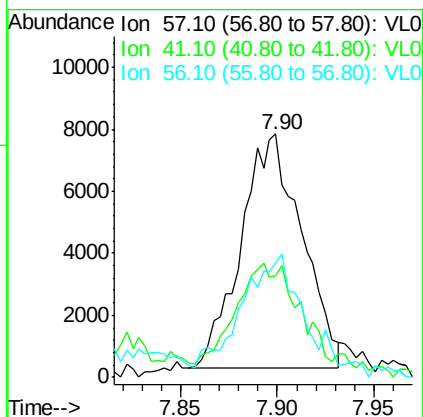
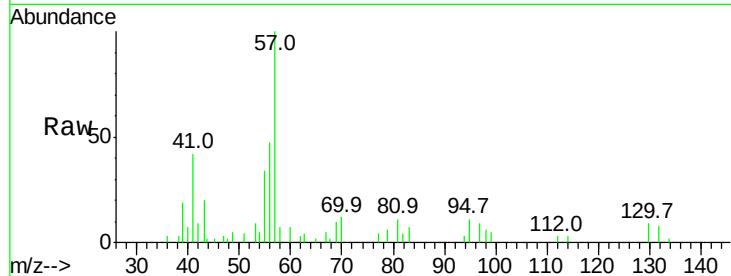
71 16.1 31.4 47.2#





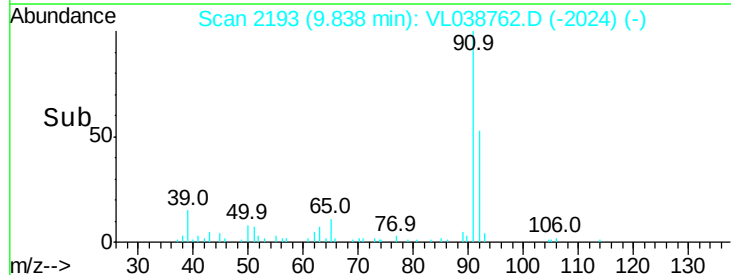
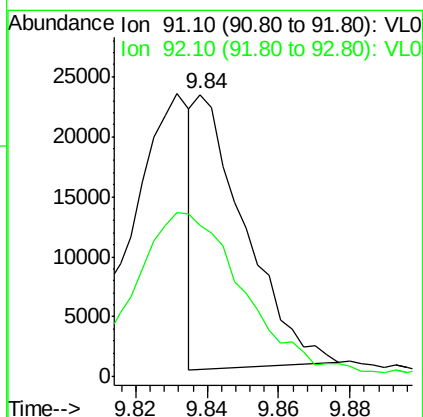
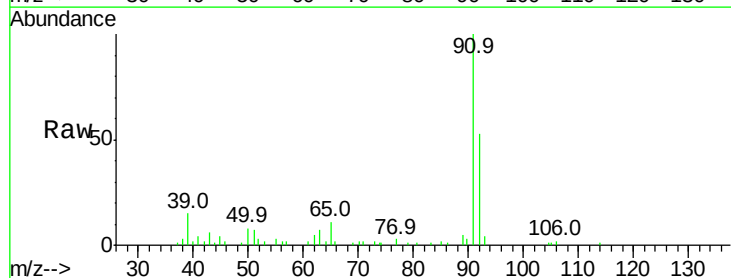
#44
 2,2,4-Trimethylpentane
 Concen: 0.06 ppbv
 RT: 7.90
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 25 Mar 2022 12:21

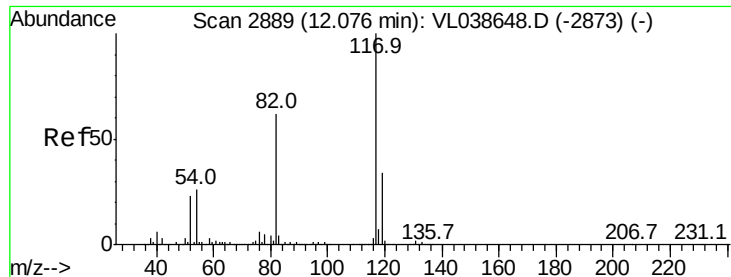
Tgt Ion: 57 Resp: 16607
 Ion Ratio Lower Upper
 57 100
 41 64.3 23.0 34.4#
 56 57.9 25.3 37.9#



#53
 Toluene
 Concen: 0.13 ppbv
 RT: 9.84 min Scan# 2193
 Delta R.T. 0.04 min
 Lab File: VL038762.D
 Acq: 25 Mar 2022 12:21

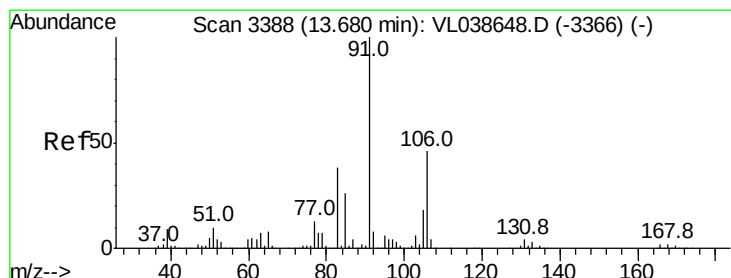
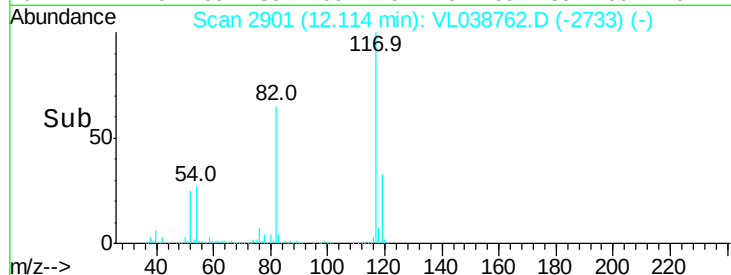
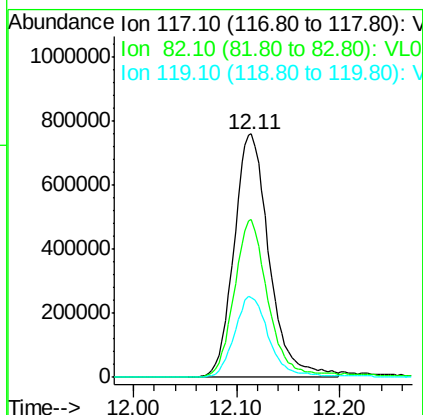
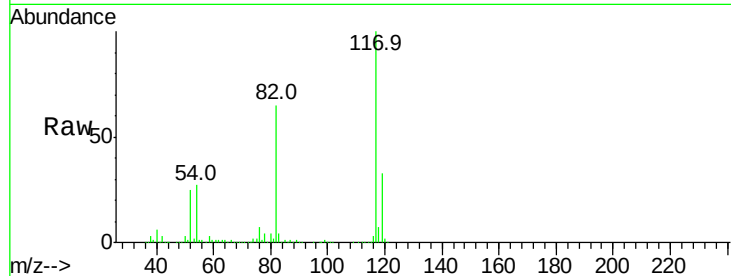
Tgt Ion: 91 Resp: 21902
 Ion Ratio Lower Upper
 91 100
 92 0.0 48.7 73.1#





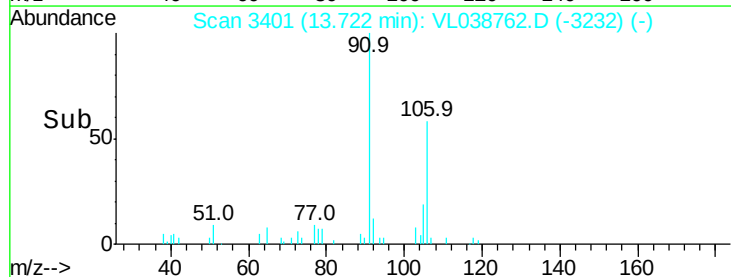
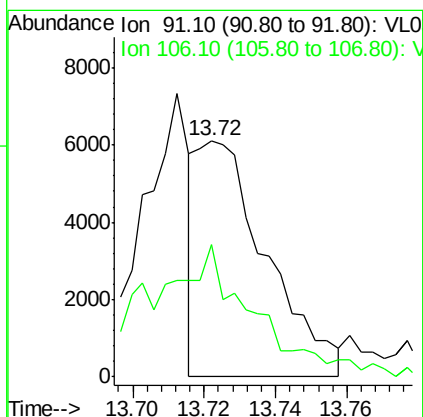
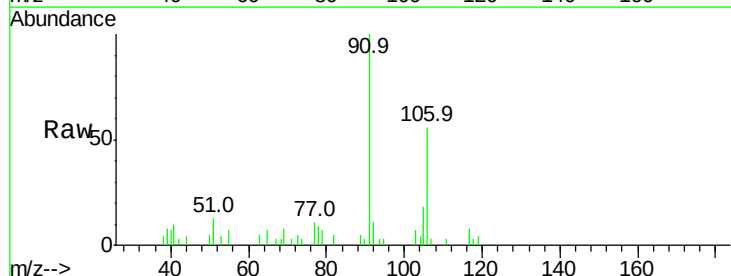
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.11 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV-02-(SB-07)
Acq: 25 Mar 2022 12:21

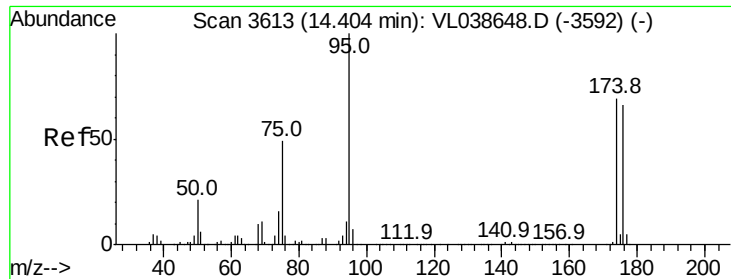
Tgt Ion: 117 Resp: 1806511
Ion Ratio Lower Upper
117 100
82 64.9 51.6 77.4
119 33.3 26.9 40.3



#60
o-Xylene
Concen: 0.05 ppbv
RT: 13.72 min Scan# 3401
Delta R.T.: 0.04 min
Lab File: VL038762.D
Acq: 25 Mar 2022 12:21

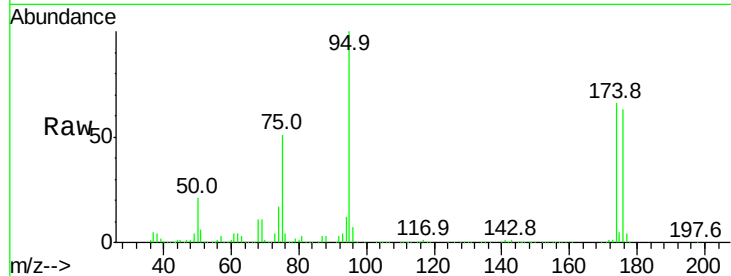
Tgt Ion: 91 Resp: 8245
Ion Ratio Lower Upper
91 100
106 86.3 23.5 70.5#



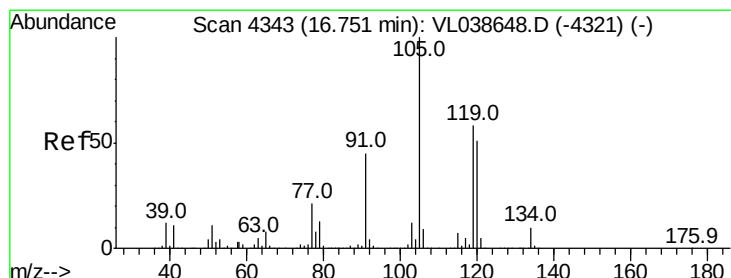
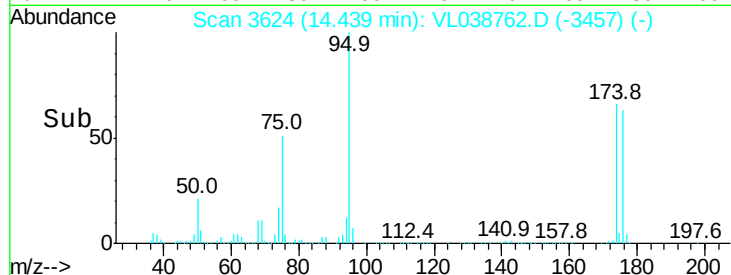
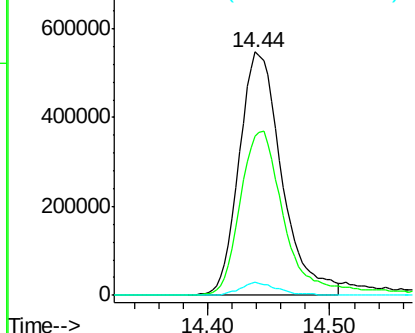


#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.56 ppbv
 RT: 14.44 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV-02-(SB-07)
 Acq: 25 Mar 2022 12:21

Tgt Ion: 95 Resp: 1323556
 Ion Ratio Lower Upper
 95 100
 174 72.4 56.1 84.1
 175 5.1 4.2 6.2

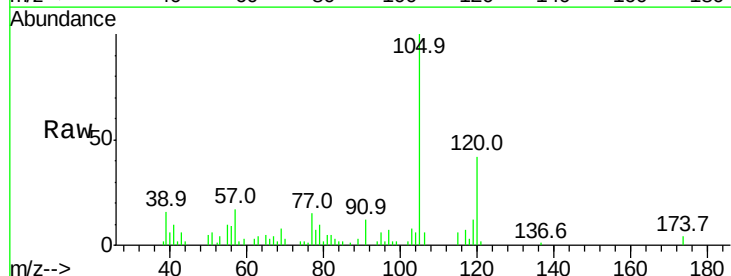


Abundance Ion 95.10 (94.80 to 95.80): VL0
 Ion 174.00 (173.70 to 174.70): V
 Ion 175.00 (174.70 to 175.70): V



#74
 1,2,4-Trimethylbenzene
 Concen: 0.12 ppbv
 RT: 16.79 min Scan# 4355
 Delta R.T. 0.04 min
 Lab File: VL038762.D
 Acq: 25 Mar 2022 12:21

Tgt Ion: 105 Resp: 25627
 Ion Ratio Lower Upper
 105 100
 120 44.8 40.5 60.7
 91 8.6 35.9 53.9#
 77 12.6 16.6 25.0#



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

