

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032322\
 Data File : VL038741.D
 Acq On : 24 Mar 2022 7:46
 Operator : SY/AP
 Sample : N2052-01DL 5X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P95DL

Quant Time: Mar 24 08:20:26 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	5.67	49	869441	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2328098	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	1989880	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	1409651	9.24	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	92.40%

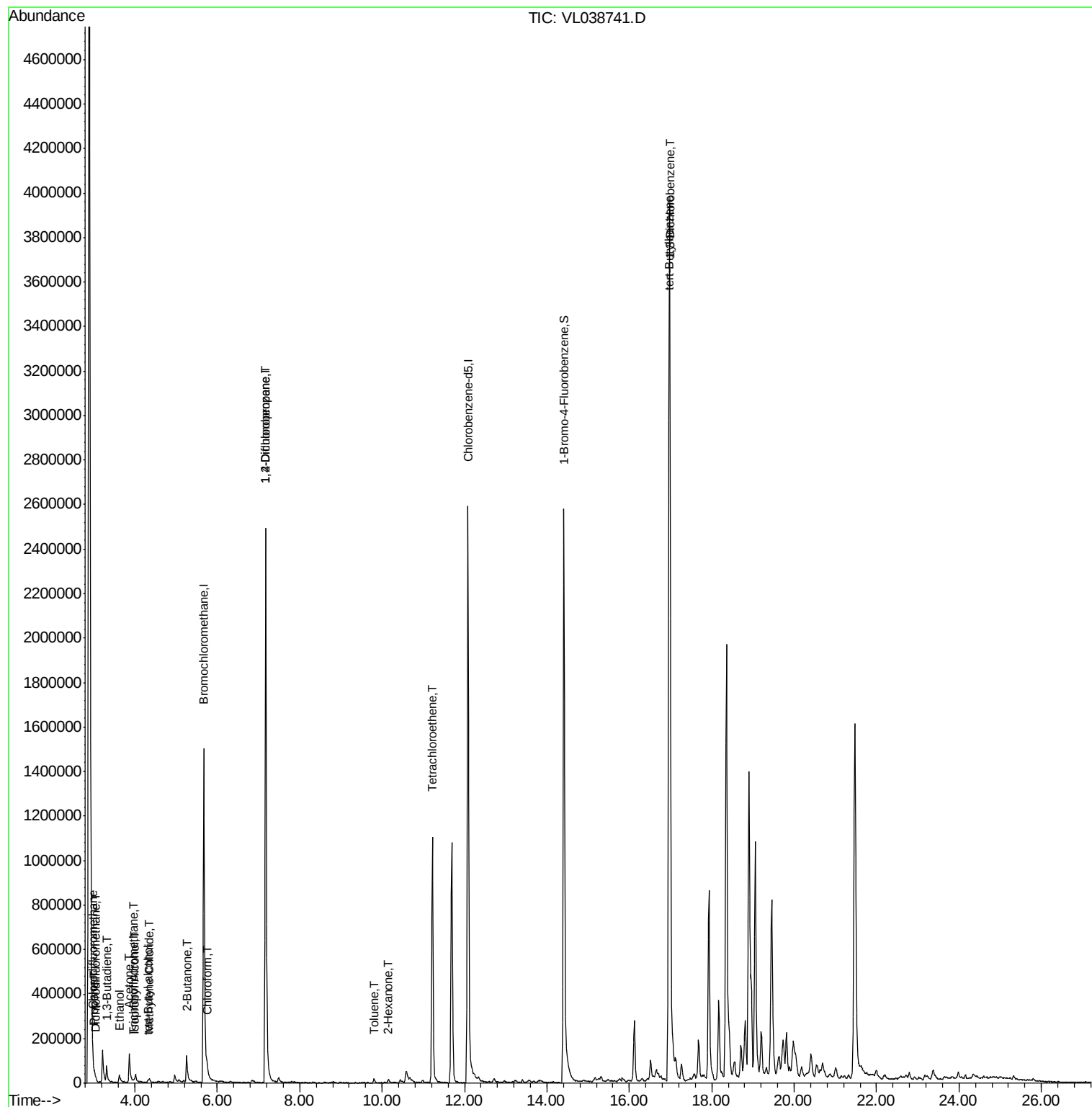
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	10460	0.089	ppbv #	83
3) Chlorodifluoromethane	2.99	51	4997	0.054	ppbv #	89
9) Propene	3.02	41	5701	0.129	ppbv #	15
11) Trichlorofluoromethane	3.96	101	4786	0.046	ppbv	88
13) Ethanol	3.62	45	45089	9.220	ppbv	93
15) Acetone	3.86	43	169903	2.265	ppbv #	77
16) 1,3-Butadiene	3.31	39	19072	0.448	ppbv #	15
17) tert-Butyl alcohol	4.31	59	5124	0.078	ppbv #	50
19) Isopropyl Alcohol	3.98	45	11132	0.268	ppbv #	1
20) Methylene Chloride	4.35	84	5933	0.188	ppbv #	75
29) Chloroform	5.75	83	35510	0.262	ppbv	96
34) 2-Butanone	5.25	43	167634	1.819	ppbv	94
39) 1,2-Dichloropropane	7.17	63	525554	7.482	ppbv #	29
51) 2-Hexanone	10.15	43	10379	0.084	ppbv #	56
52) Tetrachloroethene	11.22	164	320814	4.879	ppbv	98
53) Toluene	9.80	91	8928	0.046	ppbv #	60
65) tert-Butylbenzene	16.98	119	48723	0.187	ppbv #	25
75) 1,3-Dichlorobenzene	17.00	146	9682	0.067	ppbv #	7

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

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 24 Mar 2022 7:48

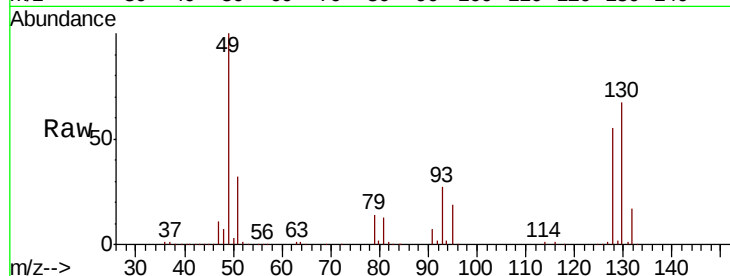
Tot Ion: 49 Resp: 869441

Ion Ratio Lower Upper

49 100

128 55.4 26.2 78.6

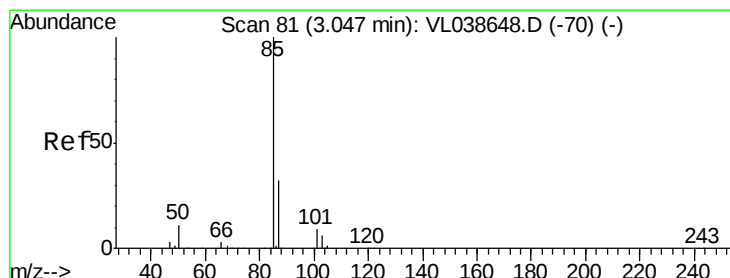
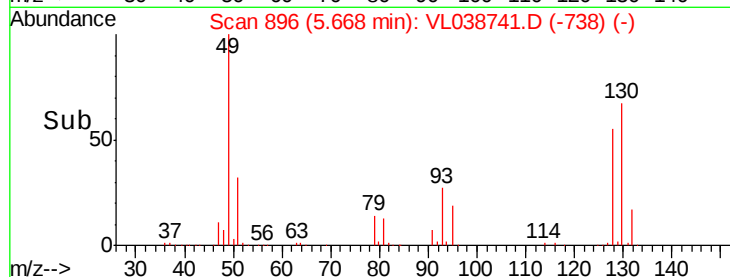
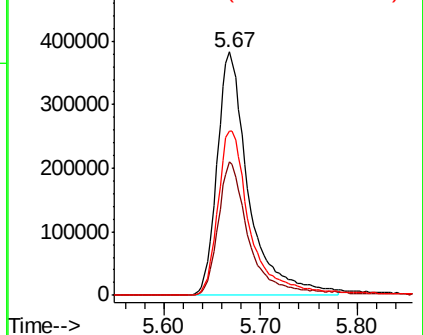
130 71.2 33.7 101.1



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: 0.089 ppbv

RT: 3.06 min Scan# 84

Delta R.T. 0.01 min

Lab File: VL038741.D

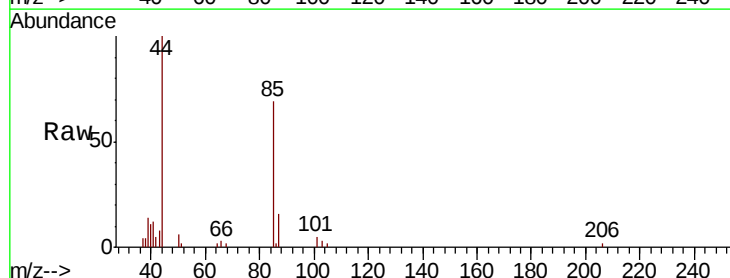
Acq: 24 Mar 2022 7:46

Tgt Ion: 85 Resp: 10460

Ion Ratio Lower Upper

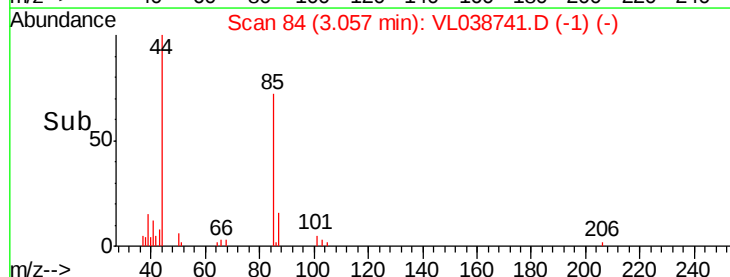
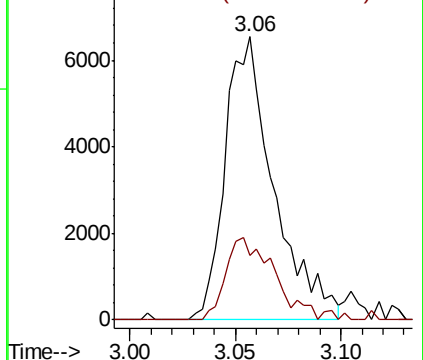
85 100

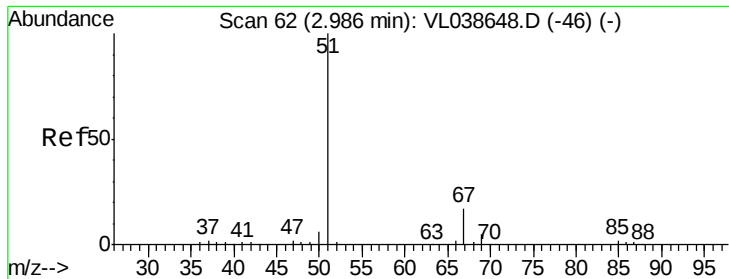
87 22.7 26.0 39.0#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.054 ppbv

RT: 2.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

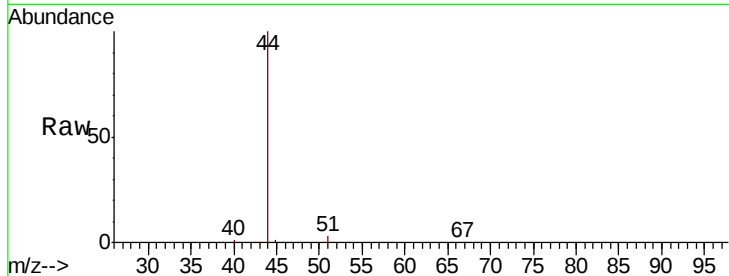
Acq: 24 Mar 2022 7:46

Tot Ion: 51 Resp: 4997

Ion Ratio Lower Upper

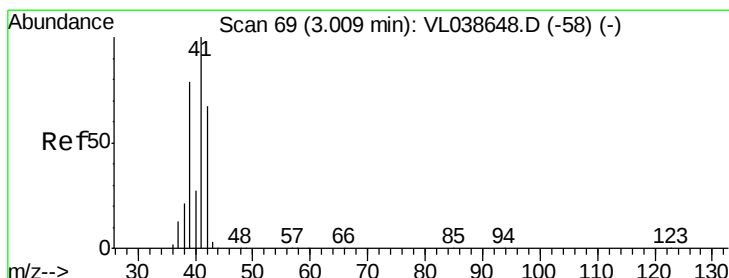
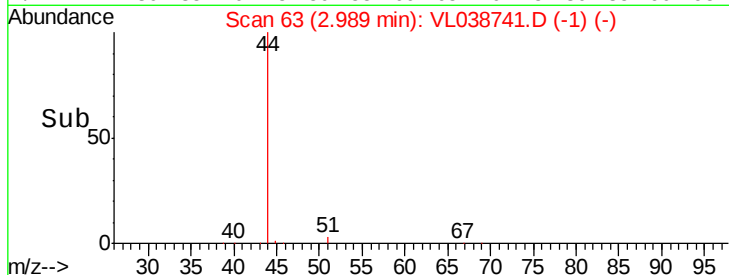
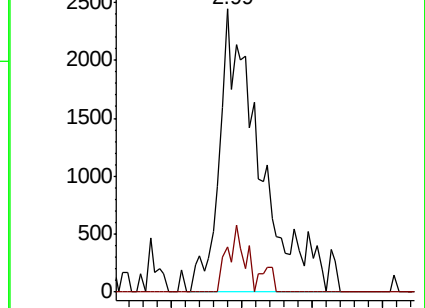
51 100

67 12.6 14.1 21.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#9

Propene

Concen: 0.129 ppbv

RT: 3.02 min Scan# 71

Delta R.T. 0.01 min

Lab File: VL038741.D

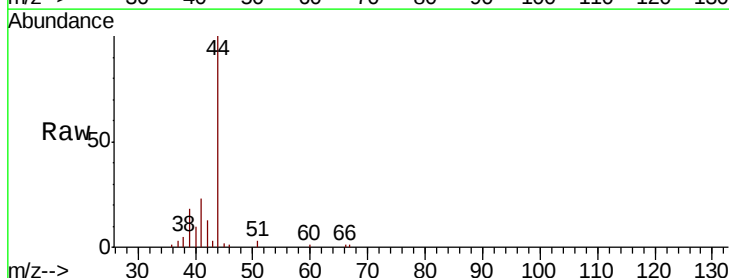
Acq: 24 Mar 2022 7:46

Tgt Ion: 41 Resp: 5701

Ion Ratio Lower Upper

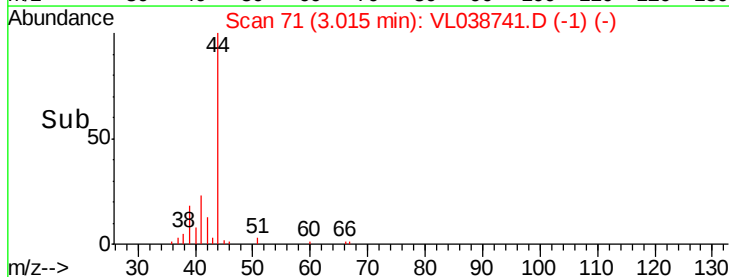
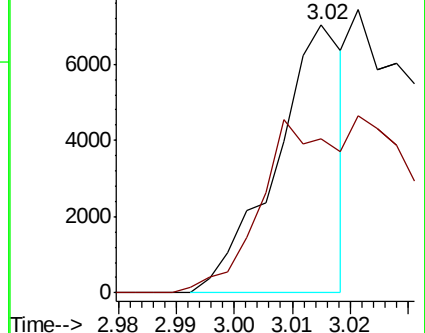
41 100

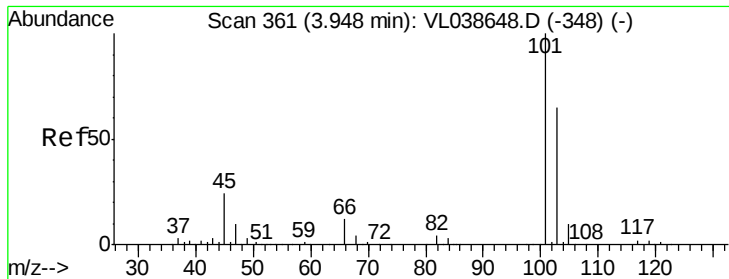
42 0.0 56.2 84.4#



Abundance Ion 41.10 (40.80 to 41.80): VL0

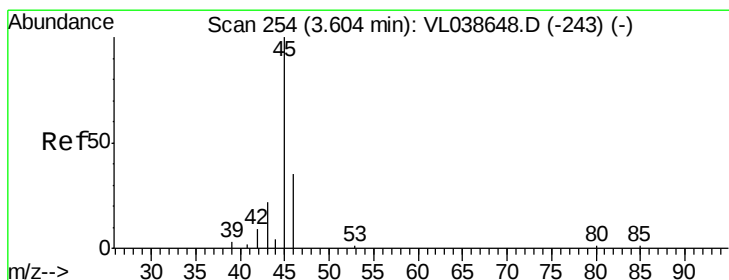
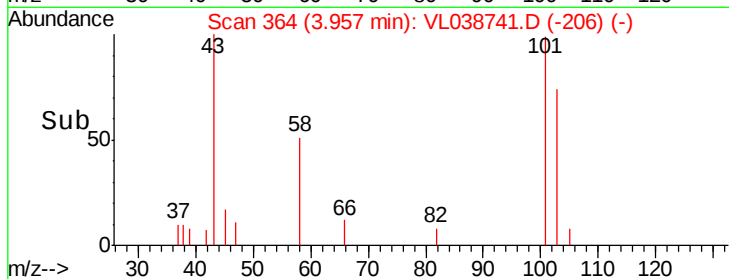
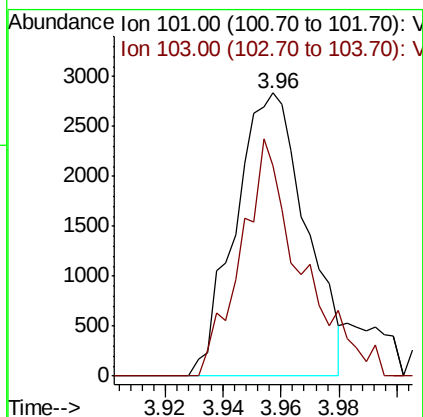
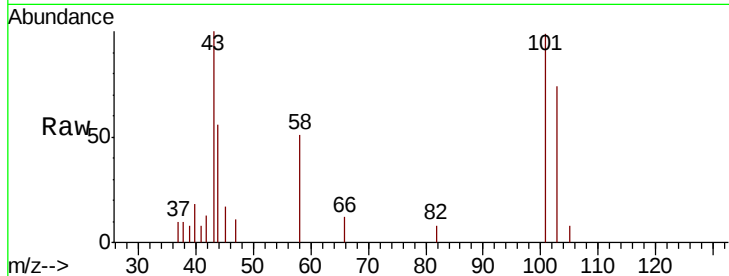
Ion 42.10 (41.80 to 42.80): VL0





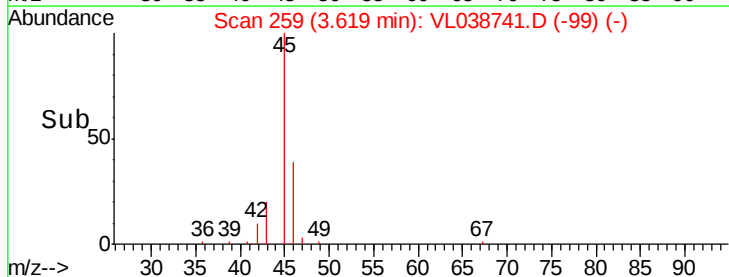
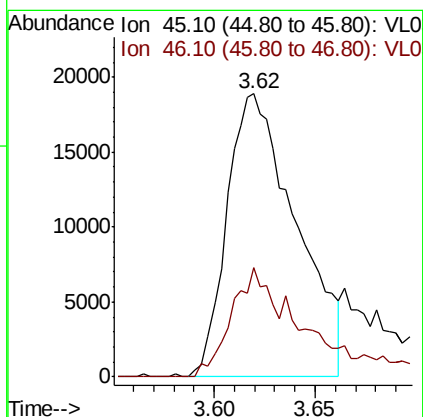
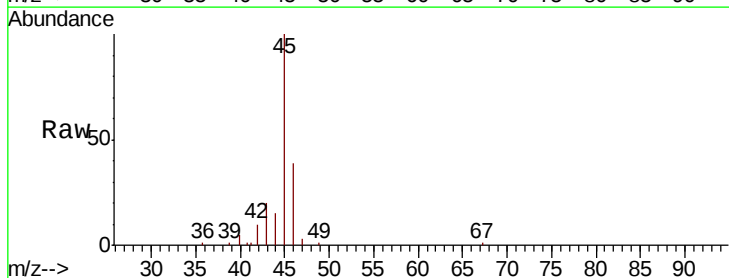
#11
 Trichlorofluoromethane
 Concen: 0.046 ppbv
 RT: 3.96
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 C0P95DL
 Acq: 24 Mar 2022 7:48

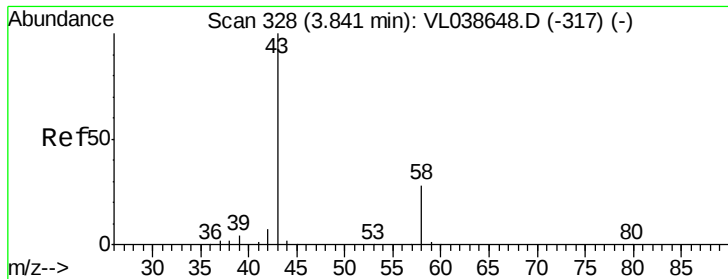
Tot Ion:101 Resp: 4786
 Ion Ratio Lower Upper
 101 100
 103 74.4 51.9 77.9



#13
 Ethanol
 Concen: 9.220 ppbv
 RT: 3.62 min Scan# 259
 Delta R.T. 0.02 min
 Lab File: VL038741.D
 Acq: 24 Mar 2022 7:46

Tgt Ion: 45 Resp: 45089
 Ion Ratio Lower Upper
 45 100
 46 42.0 15.1 60.5





#15

Acetone

Concen: 2.265 ppbv

RT: 3.86

Delta R.T.

Lab File:

Acq: 24 Mar 2022

Instrument :

MSVOA_L

ClientSampleId :

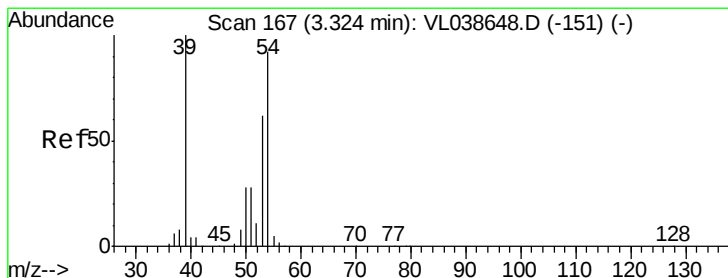
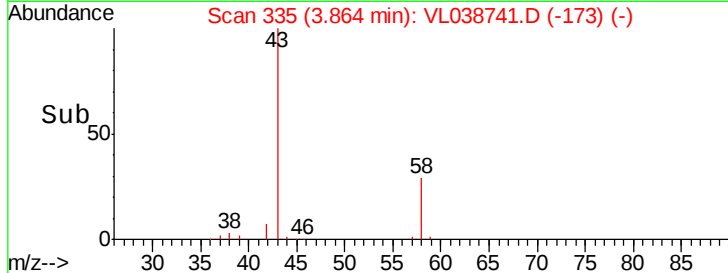
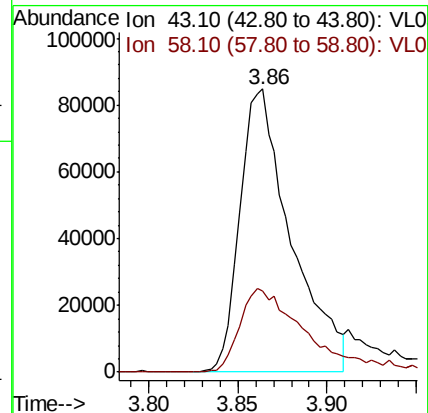
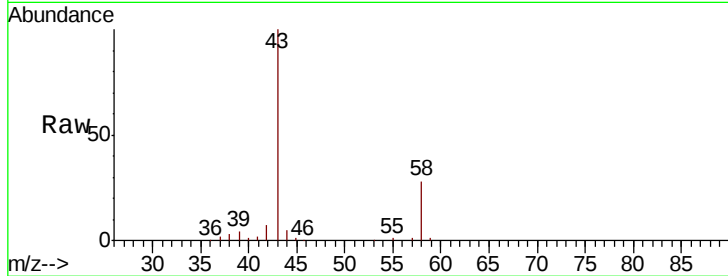
COP95DL

Tot Ion: 43 Resp: 169903

Ion Ratio Lower Upper

43 100

58 41.3 23.3 34.9#



#16

1,3-Butadiene

Concen: 0.448 ppbv

RT: 3.31 min Scan# 164

Delta R.T. -0.01 min

Lab File: VL038741.D

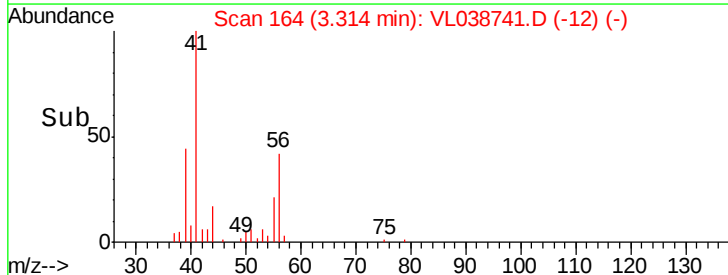
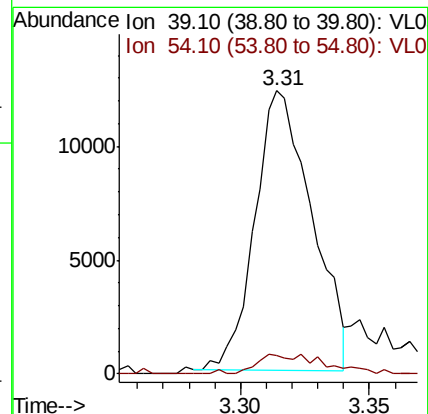
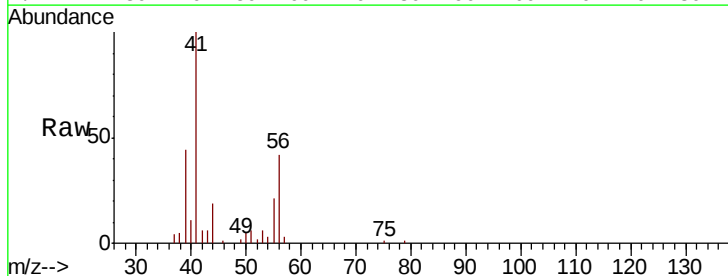
Acq: 24 Mar 2022 7:46

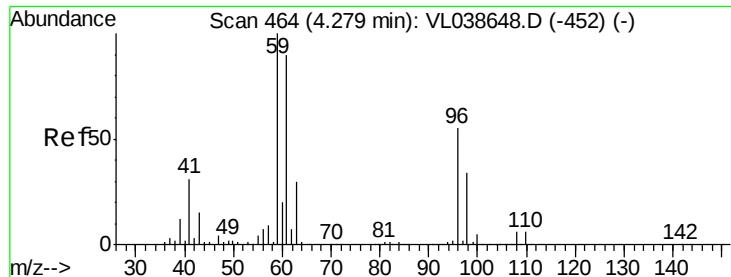
Tgt Ion: 39 Resp: 19072

Ion Ratio Lower Upper

39 100

54 8.1 69.1 103.7#





#17

tert-Butyl alcohol

Concen: 0.078 ppbv

RT: 4.31 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: C0P95DL

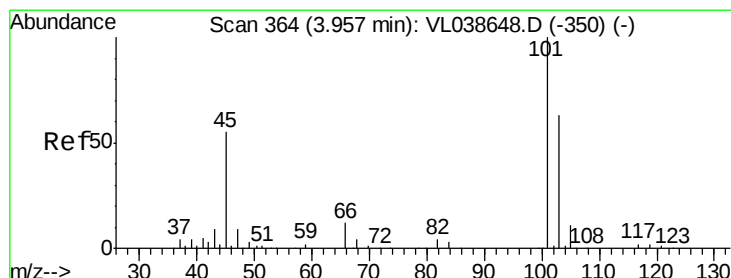
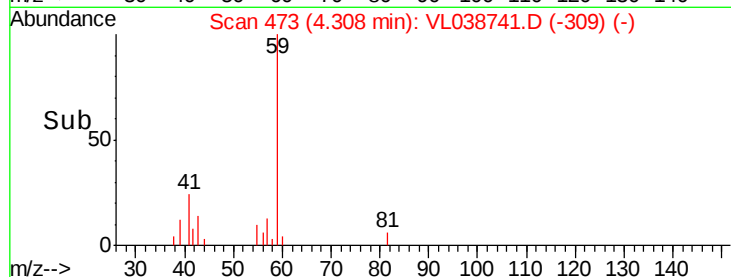
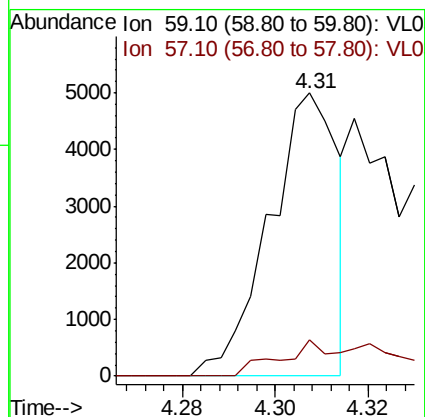
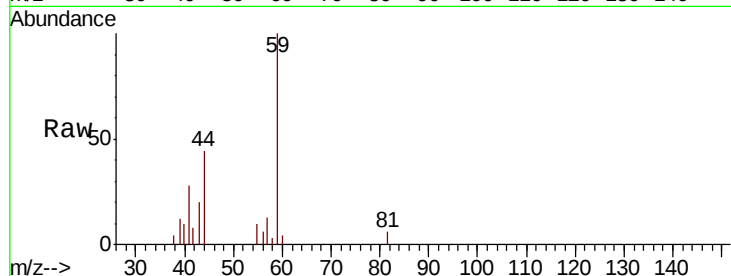
Acq: 24 Mar 2022 7:46

Tot Ion: 59 Resp: 5124

Ion Ratio Lower Upper

59 100

57 28.6 8.2 12.2#



#19

Isopropyl Alcohol

Concen: 0.268 ppbv

RT: 3.98 min Scan# 371

Delta R.T. 0.02 min

Lab File: VL038741.D

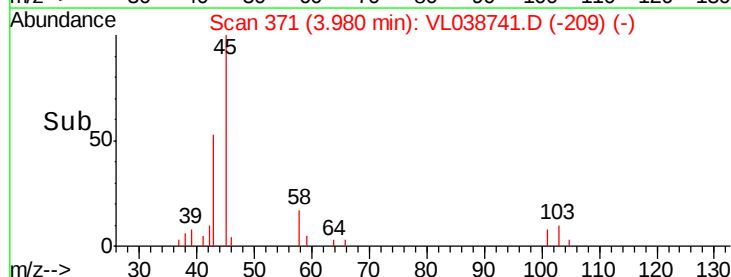
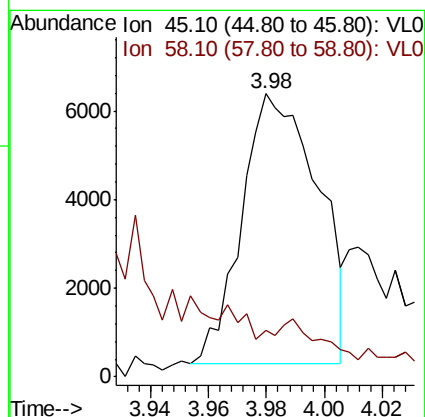
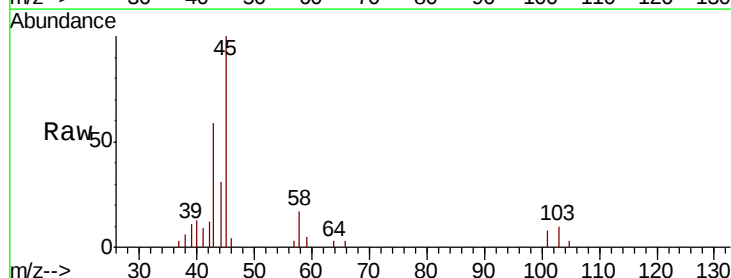
Acq: 24 Mar 2022 7:46

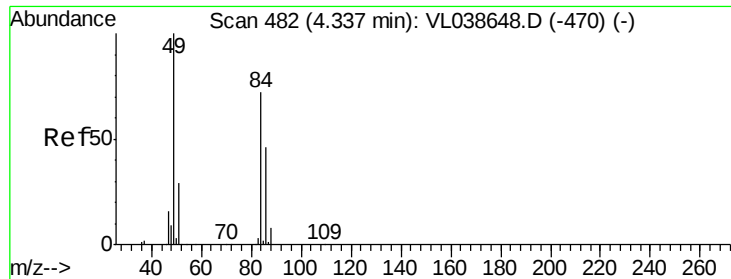
Tgt Ion: 45 Resp: 11132

Ion Ratio Lower Upper

45 100

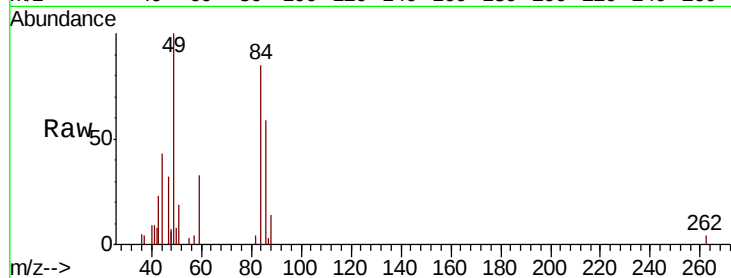
58 630.4 2.3 3.5#



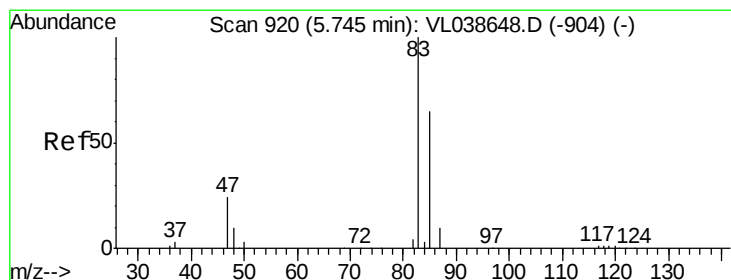
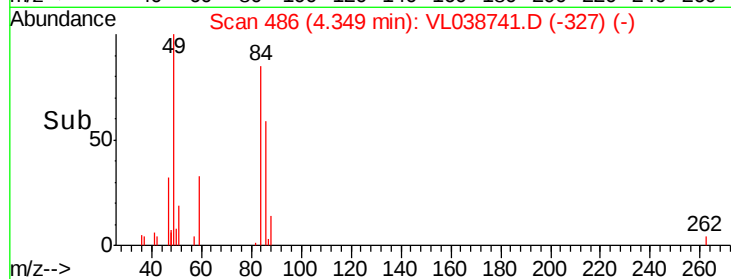
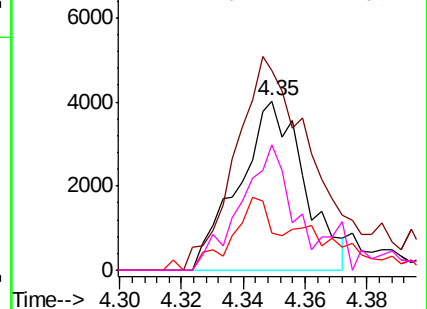


#20
Methvlene Chloride
Concen: 0.188 ppbv
RT: 4.35
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
COP95DL
Acq: 24 Mar 2022 7:48

Tot Ion: 84 Resp: 5933
Ion Ratio Lower Upper
84 100
49 104.4 111.2 166.8#
51 21.9 32.8 49.2#
86 74.0 51.4 77.0

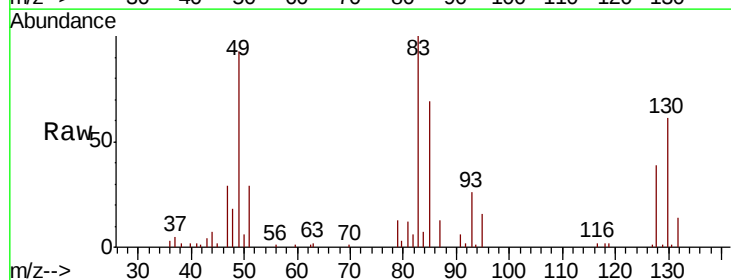


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

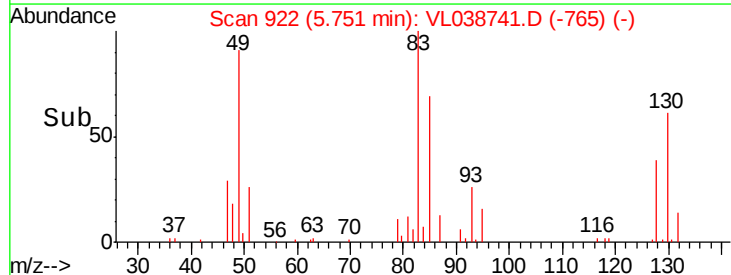
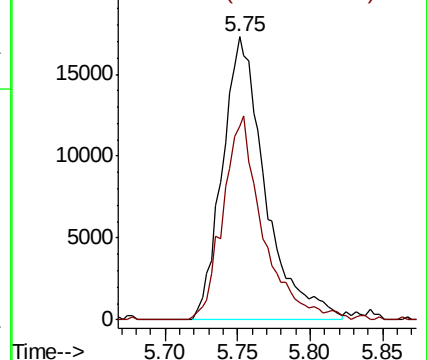


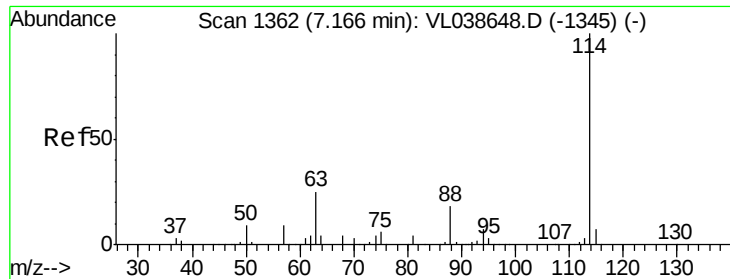
#29
Chloroform
Concen: 0.262 ppbv
RT: 5.75 min Scan# 922
Delta R.T. 0.01 min
Lab File: VL038741.D
Acq: 24 Mar 2022 7:46

Tgt Ion: 83 Resp: 35510
Ion Ratio Lower Upper
83 100
85 67.5 51.7 77.5



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: C0P95DL

Acq: 24 Mar 2022 7:48

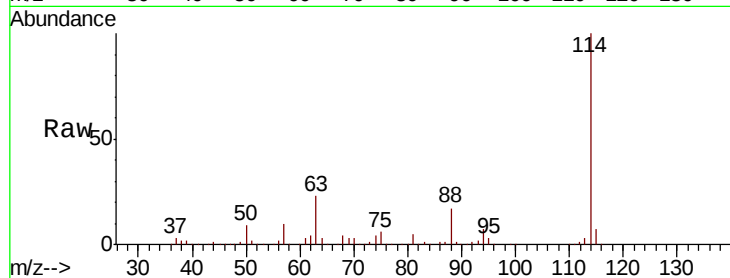
Tot Ion:114 Resp: 2328098

Ion Ratio Lower Upper

114 100

63 23.1 19.4 29.0

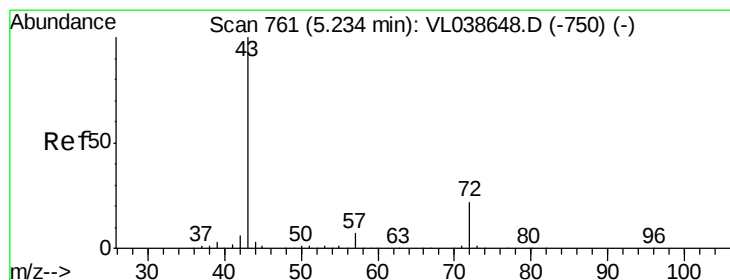
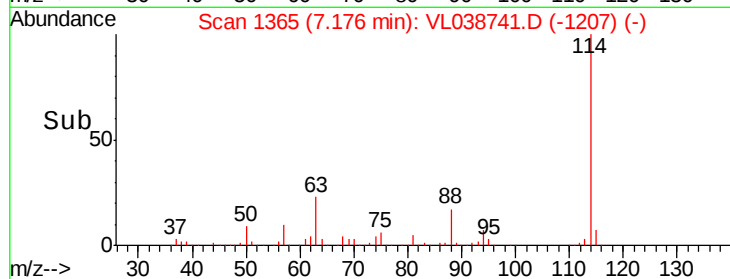
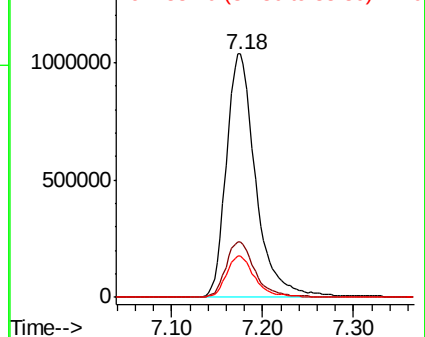
88 16.7 13.9 20.9



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 1.819 ppbv

RT: 5.25 min Scan# 767

Delta R.T. 0.02 min

Lab File: VL038741.D

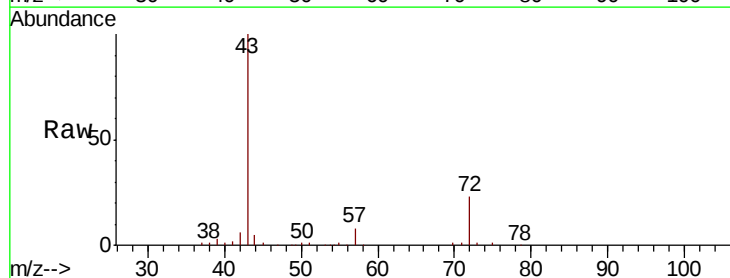
Acq: 24 Mar 2022 7:46

Tgt Ion: 43 Resp: 167634

Ion Ratio Lower Upper

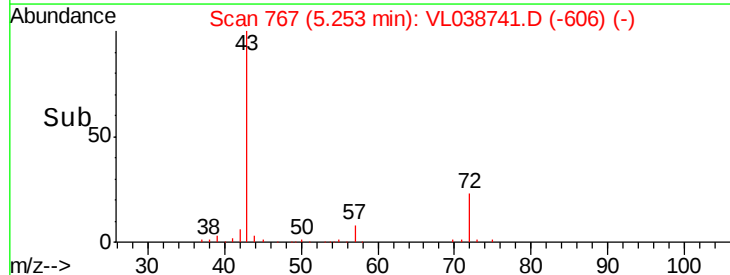
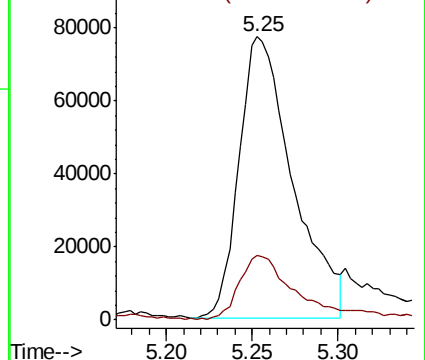
43 100

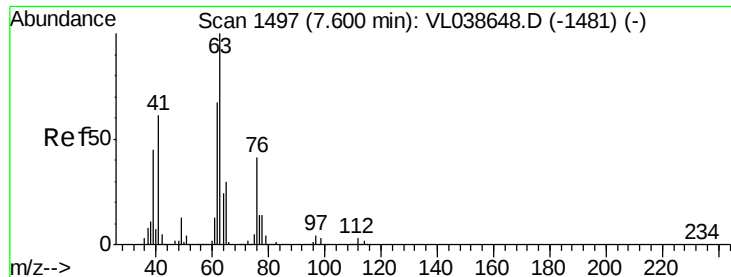
72 25.3 17.8 26.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

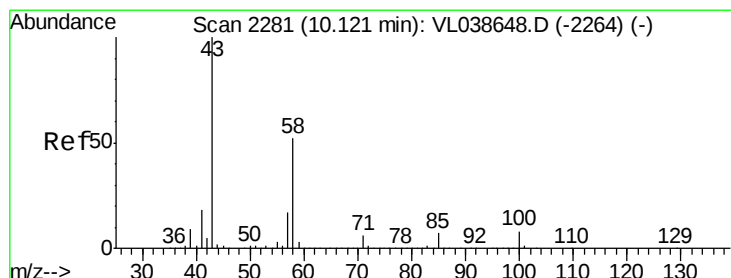
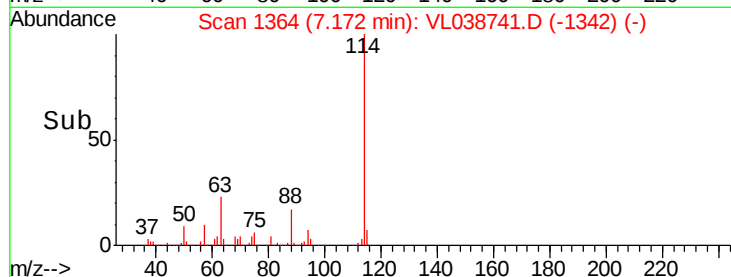
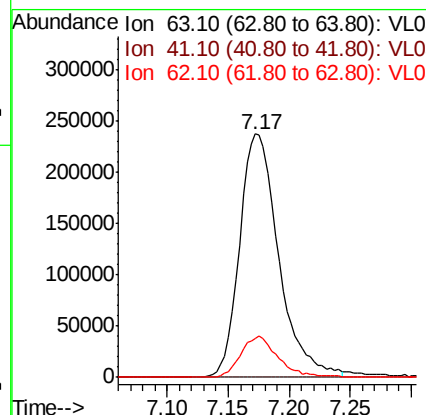
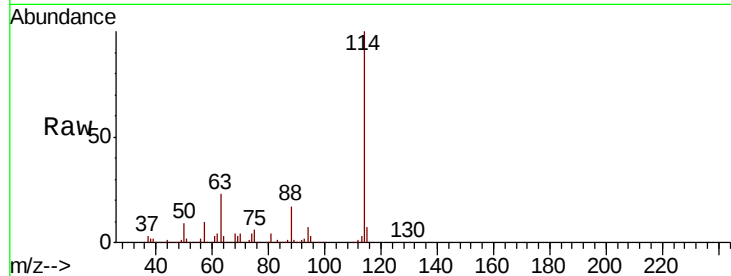
Ion 72.10 (71.80 to 72.80): VL0





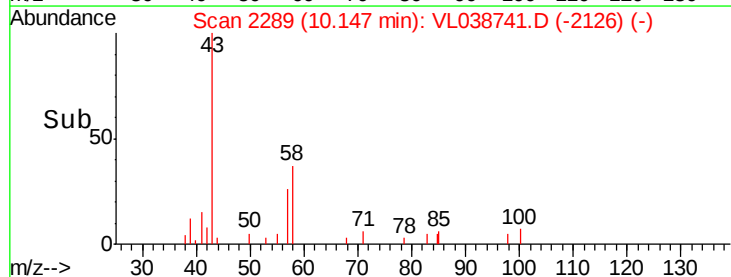
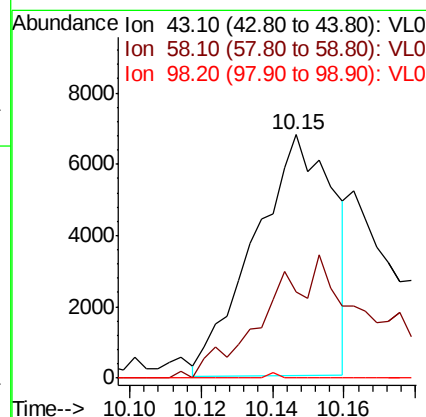
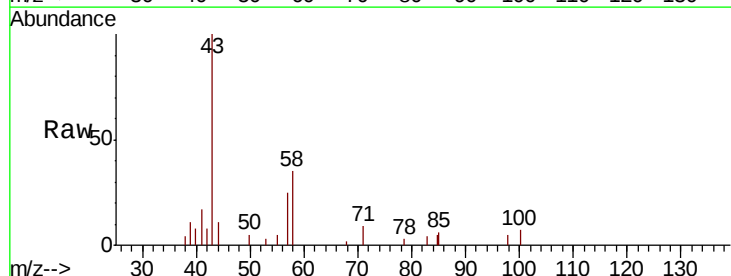
#39
 1,2-Dichloropropane
 Concen: 7.482 ppbv
 RT: 7.17
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 C0P95DL
 Acq: 24 Mar 2022 7:48

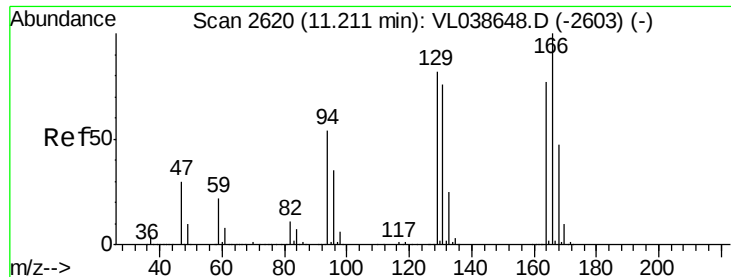
Tot Ion	Ratio	Lower	Upper
63	100		
41	0.3	49.0	73.6#
62	16.2	53.9	80.9#



#51
 2-Hexanone
 Concen: 0.084 ppbv
 RT: 10.15 min Scan# 2289
 Delta R.T. 0.03 min
 Lab File: VL038741.D
 Acq: 24 Mar 2022 7:46

Tgt Ion	Ratio	Lower	Upper
43	100		
58	82.7	41.2	61.8#
98	0.0	0.2	0.4#





#52

Tetrachloroethene

Concen: 4.879 ppbv

RT: 11.22

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 24 Mar 2022 7:48

Tot Ion:164 Resp: 320814

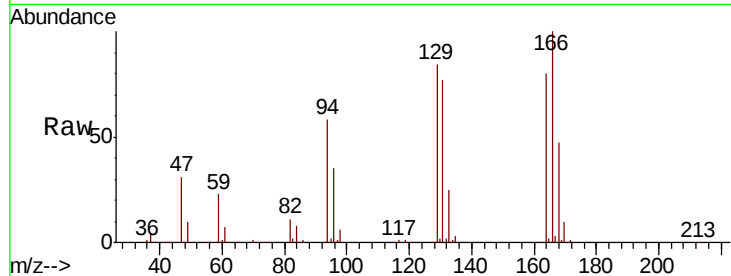
Ion Ratio Lower Upper

164 100

166 124.4 103.3 154.9

129 105.2 85.2 127.8

131 98.4 78.3 117.5

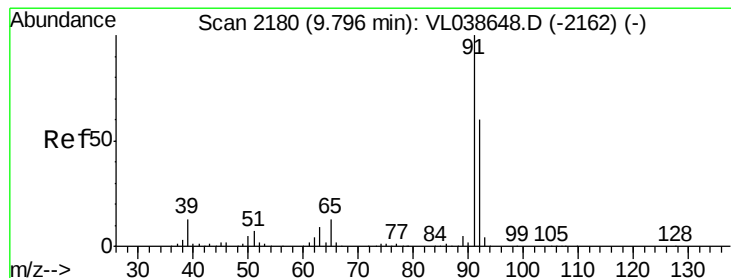
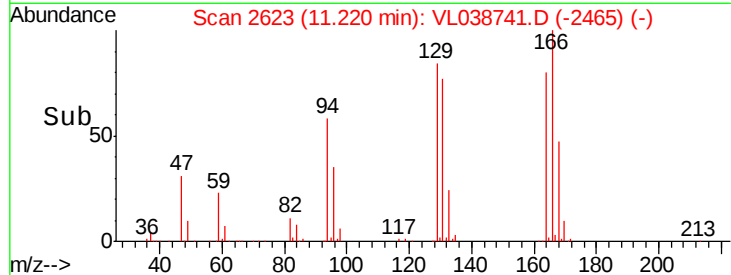
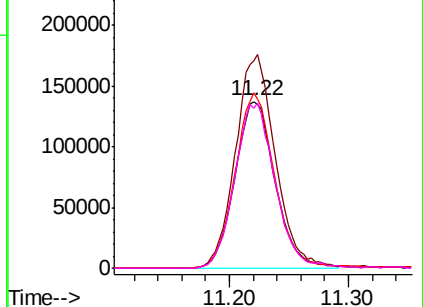


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.046 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. 0.01 min

Lab File: VL038741.D

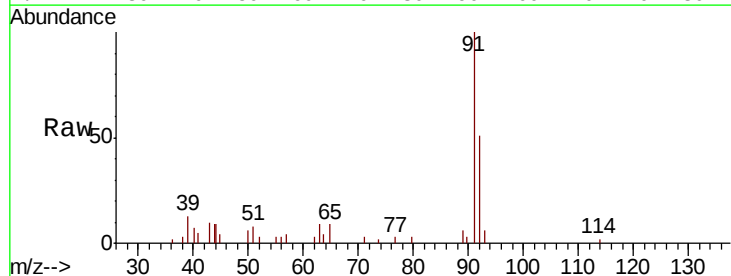
Acq: 24 Mar 2022 7:46

Tgt Ion: 91 Resp: 8928

Ion Ratio Lower Upper

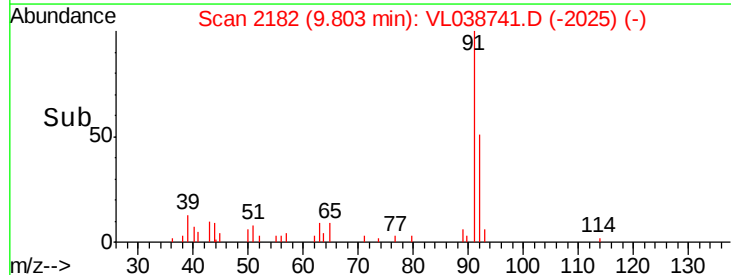
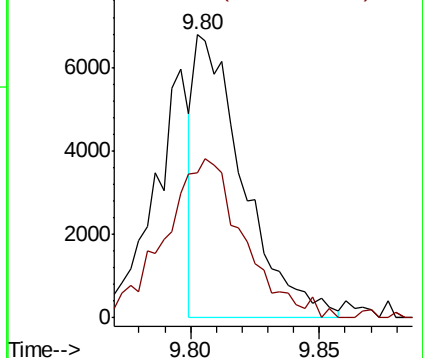
91 100

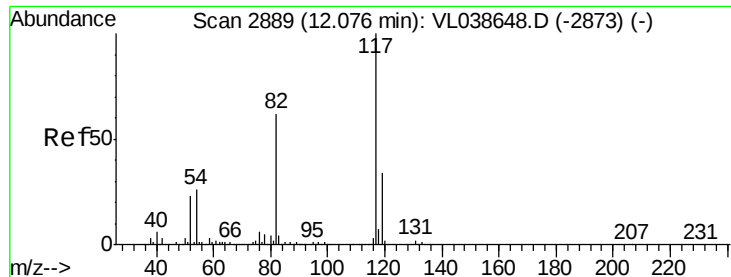
92 91.7 48.7 73.1#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 24 Mar 2022 7:40

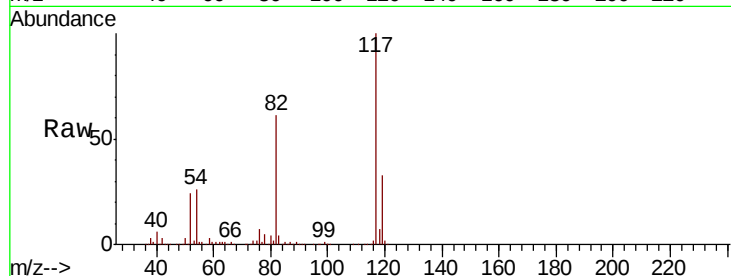
Tot Ion:117 Resp: 1989880

Ion Ratio Lower Upper

117 100

82 63.9 51.6 77.4

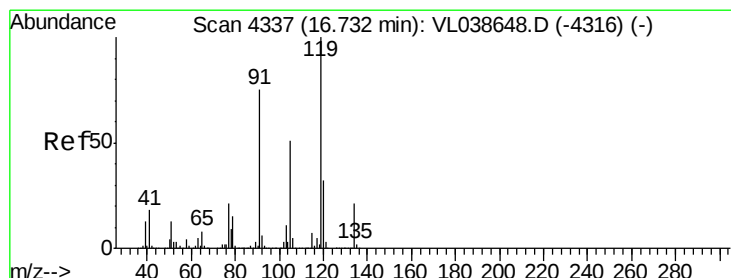
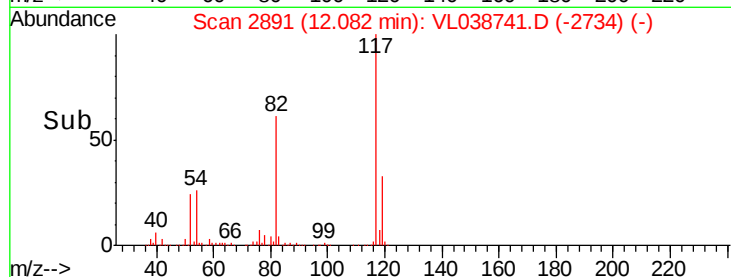
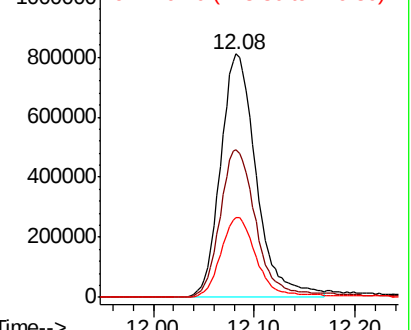
119 33.8 26.9 40.3



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



#65

tert-Butylbenzene

Concen: 0.187 ppbv

RT: 16.98 min Scan# 4413

Delta R.T. 0.24 min

Lab File: VL038741.D

Acq: 24 Mar 2022 7:46

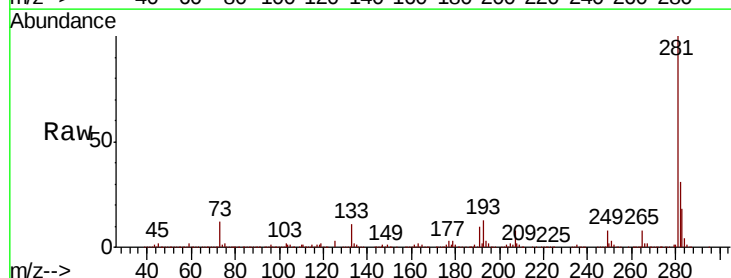
Tgt Ion:119 Resp: 48723

Ion Ratio Lower Upper

119 100

91 5.2 61.2 91.8#

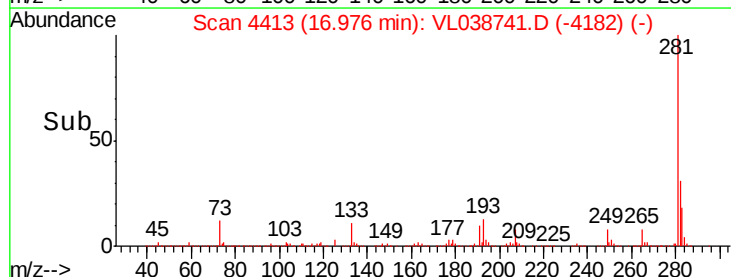
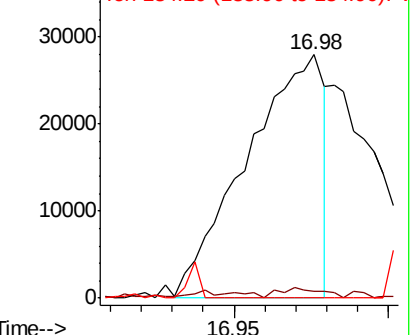
134 0.0 16.3 24.5#

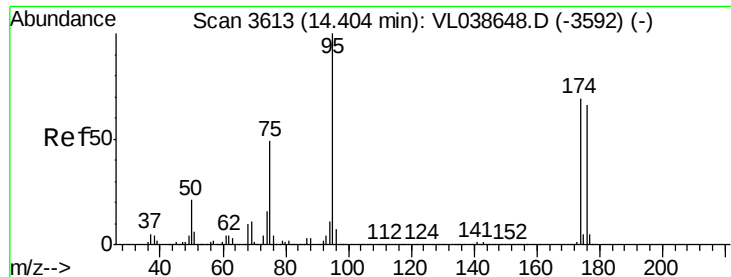


Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

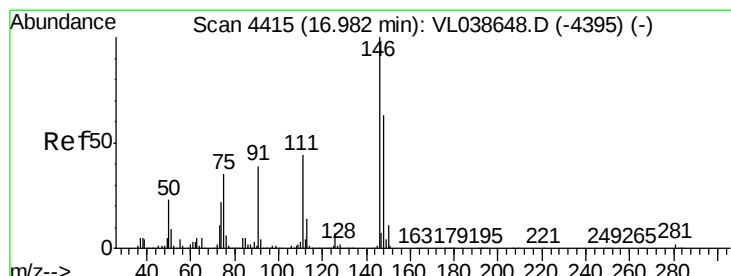
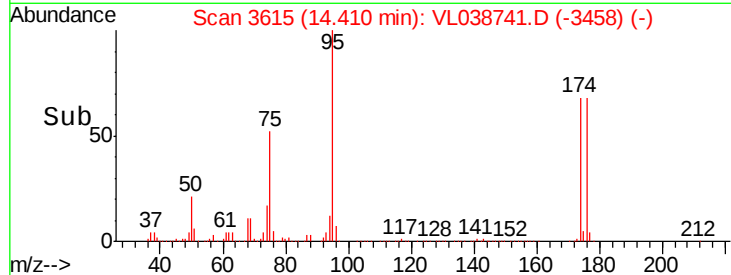
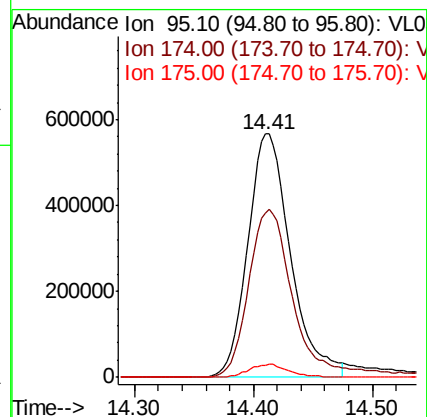
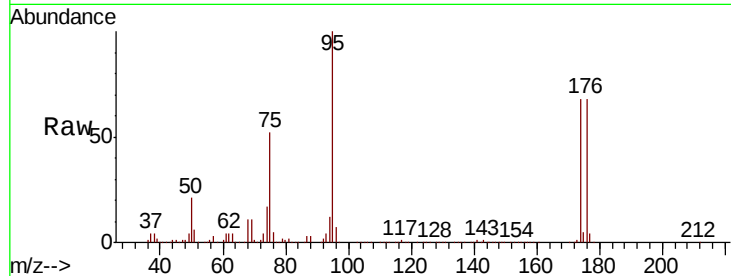
Ion 134.20 (133.90 to 134.90): V





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.240 ppbv
 RT: 14.41 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 C0P95DL
 Acq: 24 Mar 2022 7:46

Tot Ion: 95 Resp: 1409651
 Ion Ratio Lower Upper
 95 100
 174 75.6 56.1 84.1
 175 5.5 4.2 6.2



#75
 1,3-Dichlorobenzene
 Concen: 0.067 ppbv
 RT: 17.00 min Scan# 4419
 Delta R.T. 0.01 min
 Lab File: VL038741.D
 Acq: 24 Mar 2022 7:46

Tgt Ion: 146 Resp: 9682
 Ion Ratio Lower Upper
 146 100
 111 0.0 22.2 66.6#
 148 151.7 32.5 97.5#

