

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060322\
 Data File : VL039166.D
 Acq On : 3 Jun 2022 23:51
 Operator : SY/AP
 Sample : N3106-02 2X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

Quant Time: Jun 04 02:21:45 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 01 01:22:18 2022
 QLast Update : Wed Jun 01 01:22:18 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1133852	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2659982	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2503358	10.00	ppbv	0.00

System Monitoring Compounds

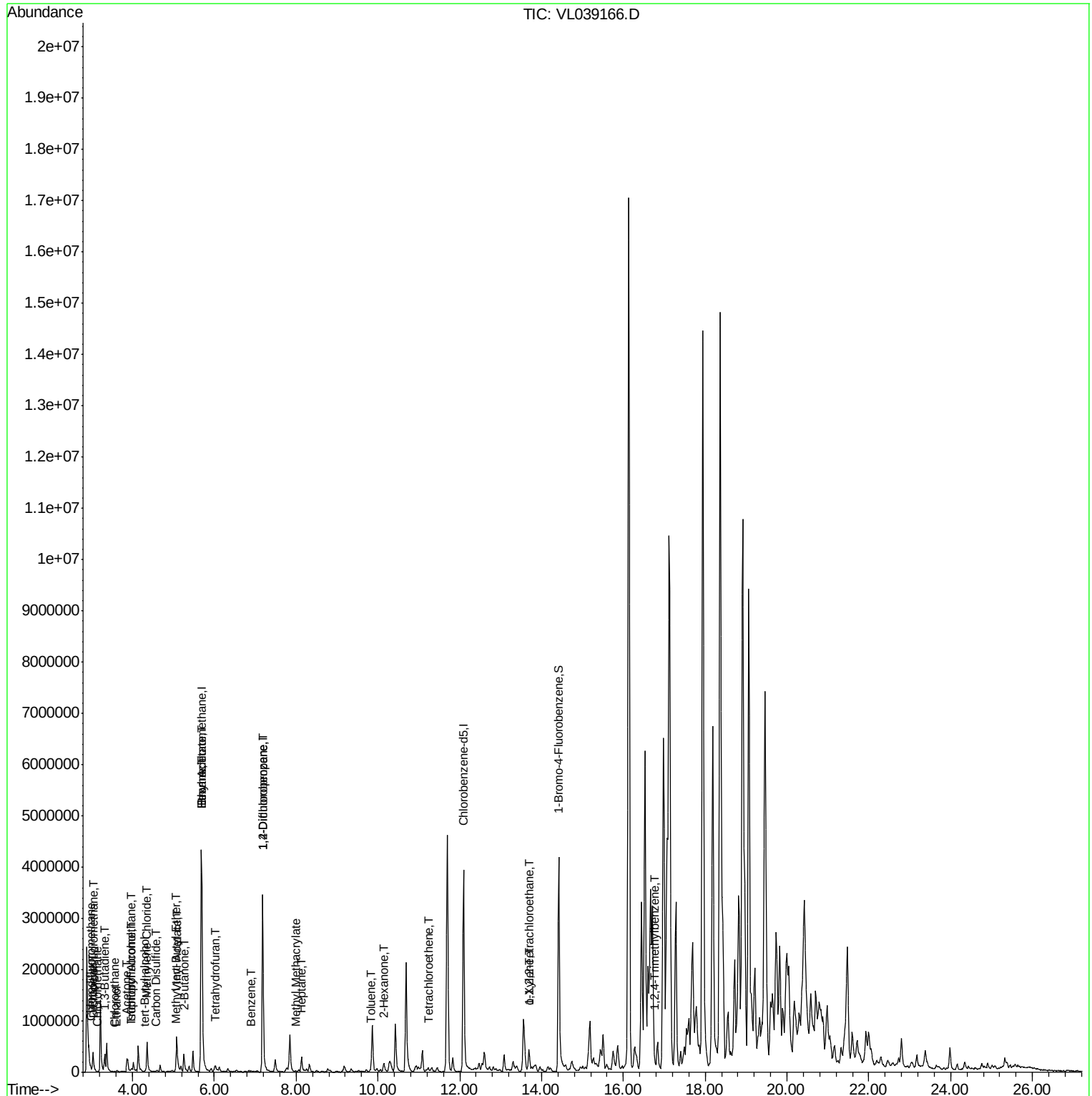
68) 1-Bromo-4-Fluorobenzene	14.42	95	2147492	10.38	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.80%

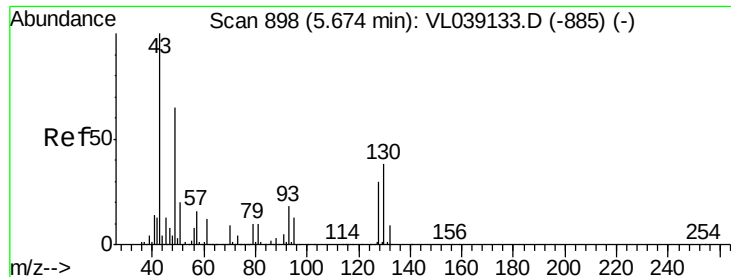
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	32166	0.162	ppbv	95
3) Chlorodifluoromethane	2.97	51	83403	0.578	ppbv #	66
4) Chloromethane	3.15	50	4559	0.062	ppbv #	69
7) Chloroethane	3.57	64	2365	0.098	ppbv #	70
9) Propene	3.03	41	60905	0.968	ppbv #	65
10) Heptane	8.13	43	127822	0.871	ppbv	97
11) Trichlorofluoromethane	3.96	101	19608	0.109	ppbv #	76
13) Ethanol	3.61	45	22437	6.540	ppbv #	100
15) Acetone	3.86	43	355857	3.013	ppbv #	84
16) 1,3-Butadiene	3.32	39	110131	1.735	ppbv #	18
17) tert-Butyl alcohol	4.31	59	13910	0.152	ppbv	96
19) Isopropyl Alcohol	3.98	45	54531	0.984	ppbv #	68
20) Methylene Chloride	4.36	84	237030	4.762	ppbv	95
23) Vinyl Acetate	5.08	43	1054946	10.795	ppbv	98
25) Ethyl Acetate	5.70	43	781299	2.935	ppbv #	79
26) Hexane	5.70	57	1070273	9.149	ppbv #	23
27) Carbon Disulfide	4.56	76	11183	0.092	ppbv #	95
28) Methyl tert-Butyl Ether	5.04	73	16175	0.125	ppbv #	52
34) 2-Butanone	5.26	43	441928	3.058	ppbv	97
36) Benzene	6.90	78	7153	0.033	ppbv #	80
39) 1,2-Dichloropropane	7.18	63	745834	8.683	ppbv #	26
41) Tetrahydrofuran	6.03	42	11081	0.127	ppbv	95
43) Methyl Methacrylate	8.00	69	2630	0.031	ppbv #	1
51) 2-Hexanone	10.14	43	76902	0.457	ppbv #	36
52) Tetrachloroethene	11.24	164	4604	0.055	ppbv	93
53) Toluene	9.82	91	12833	0.052	ppbv #	36
60) o-Xylene	13.70	91	11323	0.040	ppbv	81
63) 1,1,2,2-Tetrachloroethane	13.69	83	7334	0.046	ppbv #	20
74) 1,2,4-Trimethylbenzene	16.77	105	33921	0.101	ppbv #	48

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

```
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL060322\  
Data File : VL039166.D  
Acq On    : 3 Jun 2022 23:51  
Operator  : SY/AP  
Sample    : N3106-02 2X  
Misc      : 400mL/MSVOA L  
ALS Vial  : 1 Sample Multiplier: 1
```

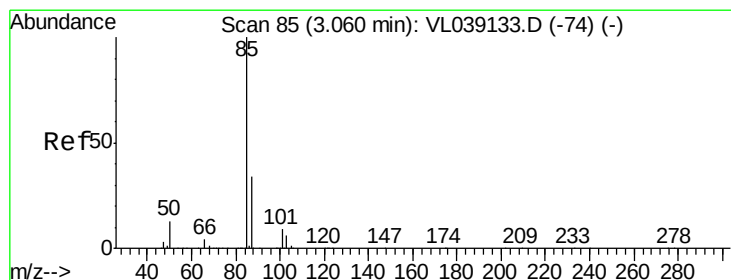
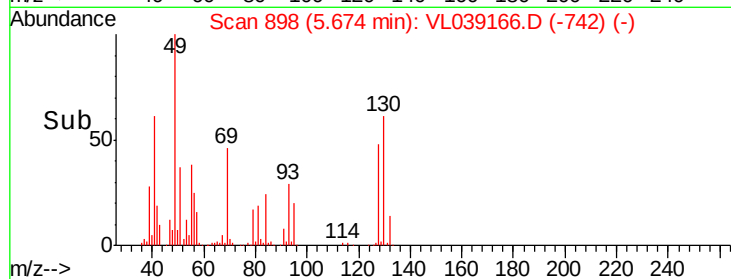
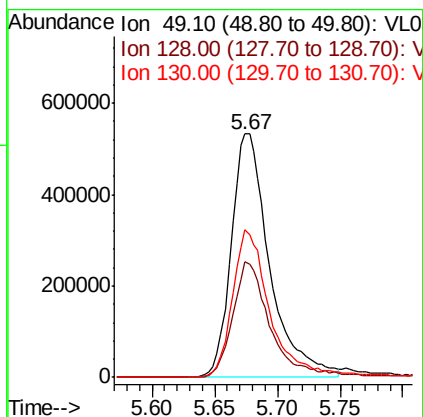
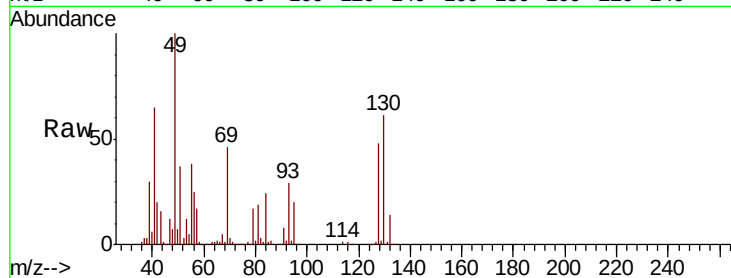
Quant Time: Jun 04 02:21:45 2022
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LWed Jun 01 01:22:18 2022
QLast Update : Wed Jun 01 01:22:18 2022
Response via : Initial Calibration





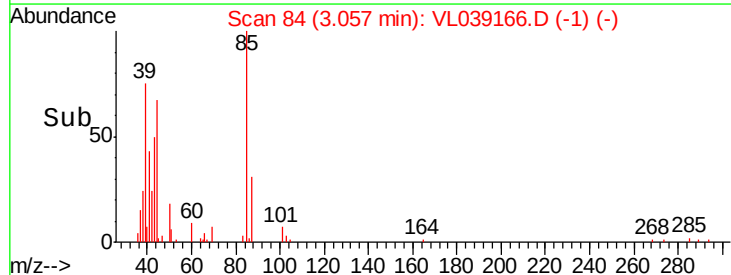
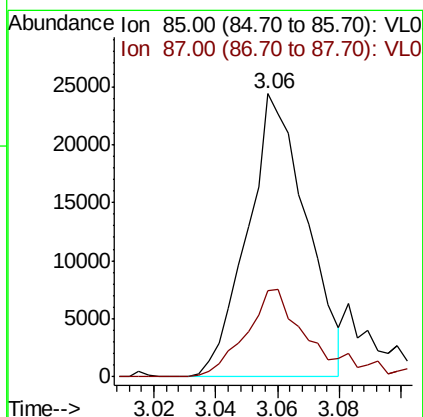
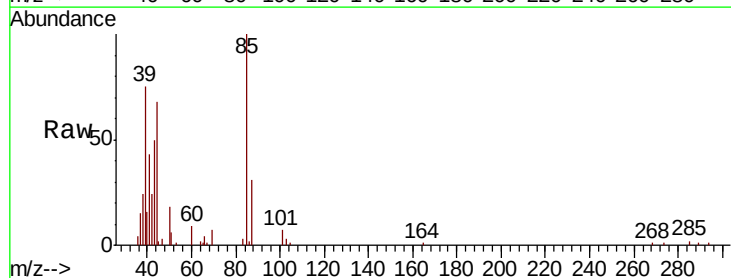
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.67
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 SV2
 Acq: 3 Jun 2022 23:51

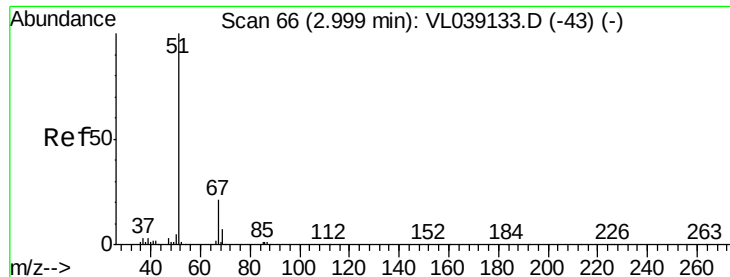
Tot Ion: 49 Resp: 1133852
 Ion Ratio Lower Upper
 49 100
 128 47.8 24.7 74.1
 130 60.8 31.4 94.0



#2
 Dichlorodifluoromethane
 Concen: 0.162 ppbv
 RT: 3.06 min Scan# 84
 Delta R.T. -0.00 min
 Lab File: VL039166.D
 Acq: 3 Jun 2022 23:51

Tgt Ion: 85 Resp: 32166
 Ion Ratio Lower Upper
 85 100
 87 30.7 26.9 40.3





#3

Chlorodifluoromethane

Concen: 0.578 ppbv

RT: 2.97 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

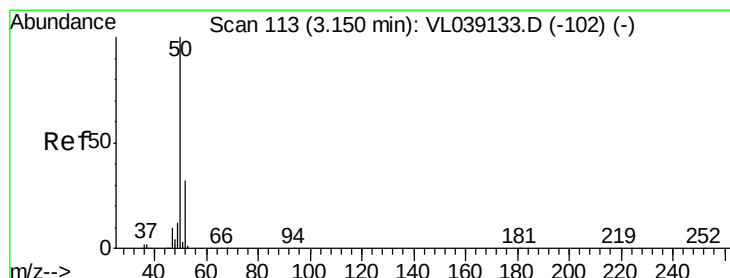
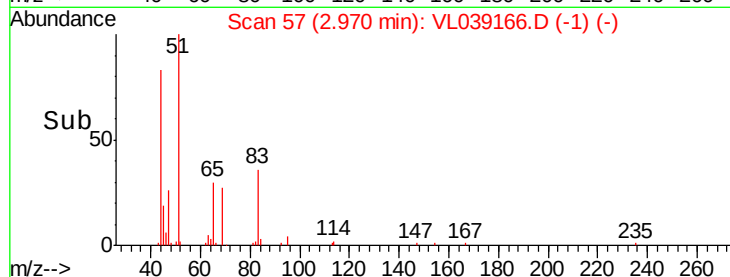
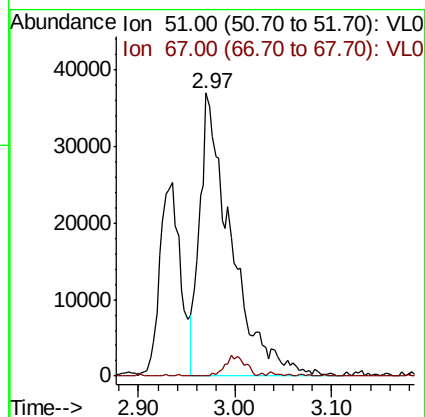
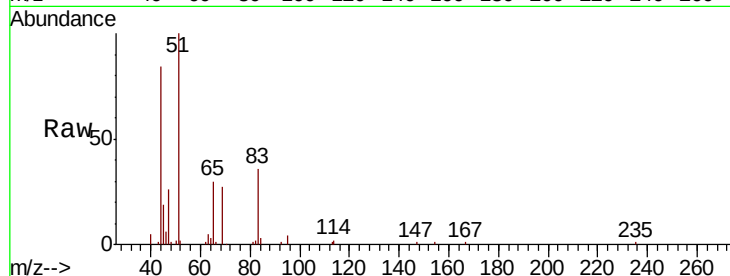
Acq: 3 Jun 2022 23:51 SV2

Tot Ion: 51 Resp: 83403

Ion Ratio Lower Upper

51 100

67 4.7 16.2 24.4#



#4

Chloromethane

Concen: 0.062 ppbv

RT: 3.15 min Scan# 113

Delta R.T. 0.00 min

Lab File: VL039166.D

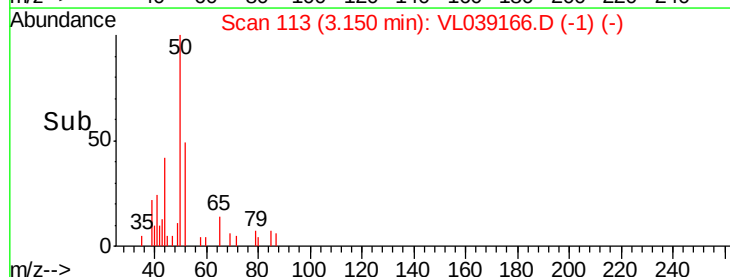
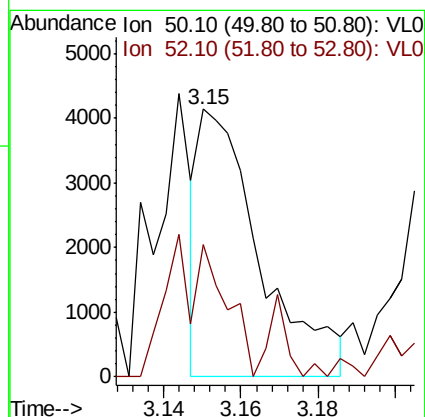
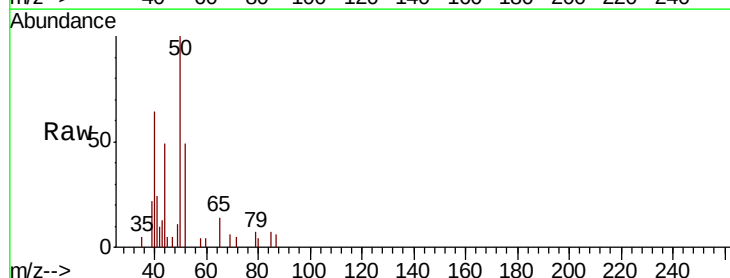
Acq: 3 Jun 2022 23:51

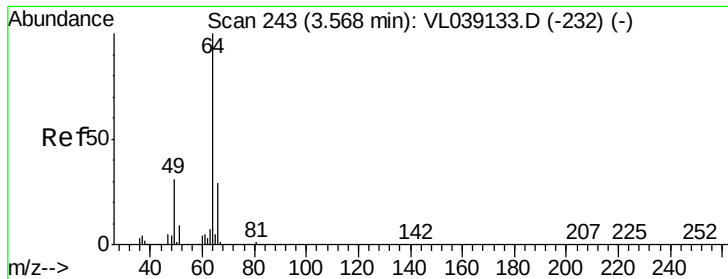
Tgt Ion: 50 Resp: 4559

Ion Ratio Lower Upper

50 100

52 50.0 25.9 38.9#





#7

Chloroethane

Concen: 0.098 ppbv

RT: 3.57 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

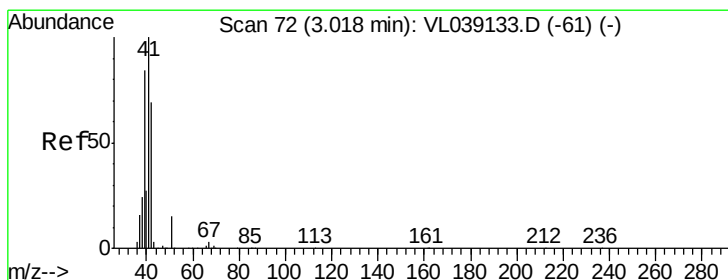
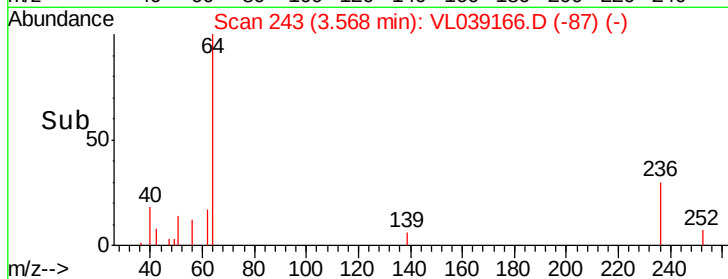
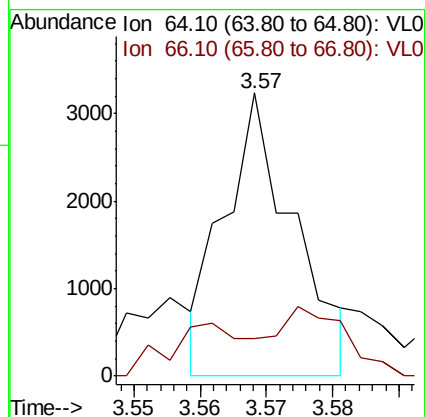
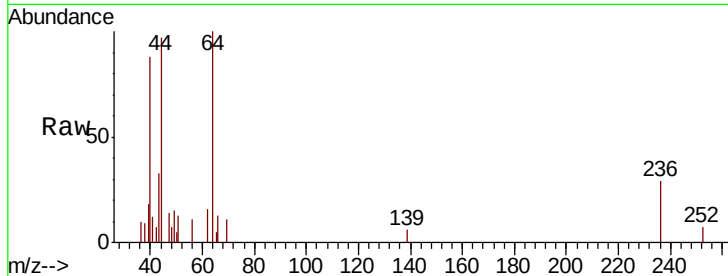
Acq: 3 Jun 2022 23:51 SV2

Tot Ion: 64 Resp: 2365

Ion Ratio Lower Upper

64 100

66 13.3 23.6 35.4#



#9

Propene

Concen: 0.968 ppbv

RT: 3.03 min Scan# 75

Delta R.T. 0.01 min

Lab File: VL039166.D

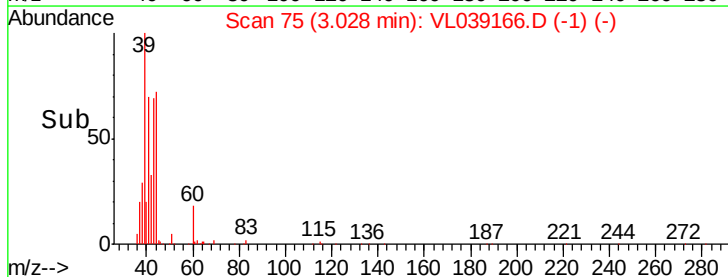
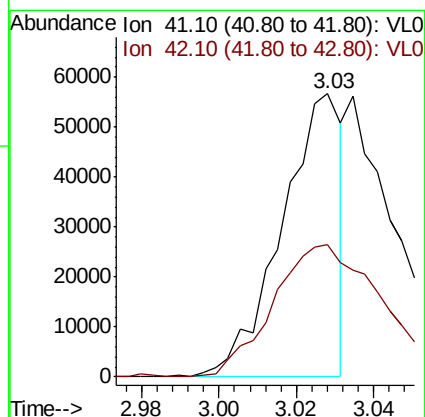
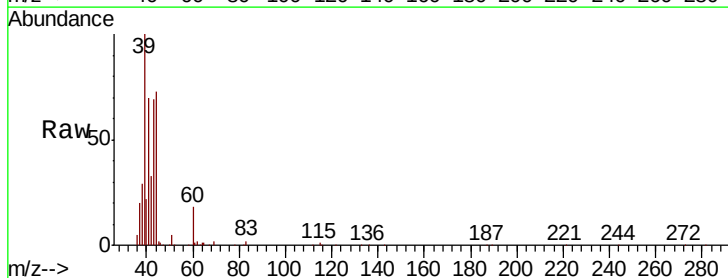
Acq: 3 Jun 2022 23:51

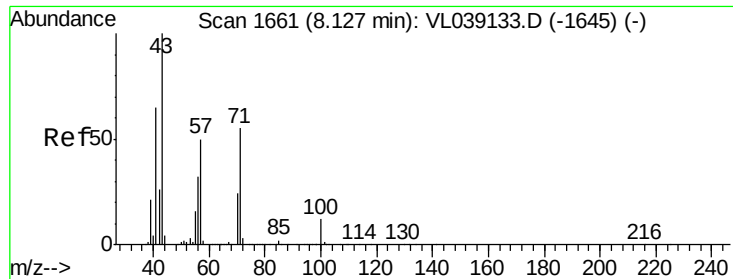
Tgt Ion: 41 Resp: 60905

Ion Ratio Lower Upper

41 100

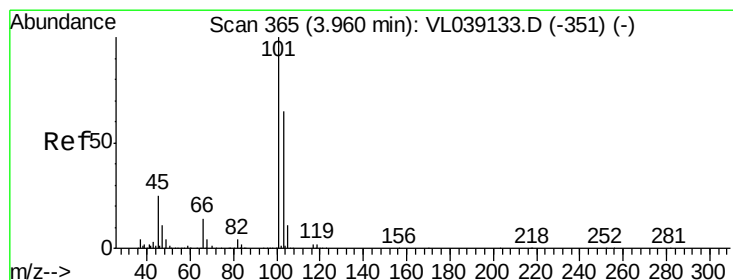
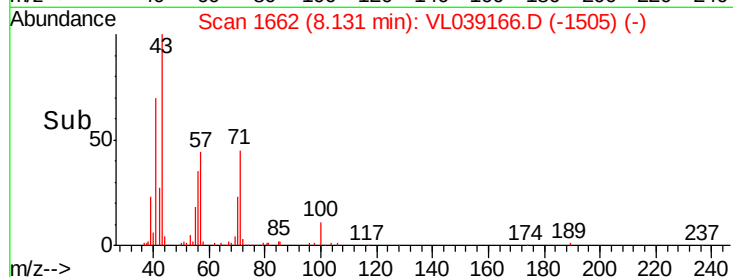
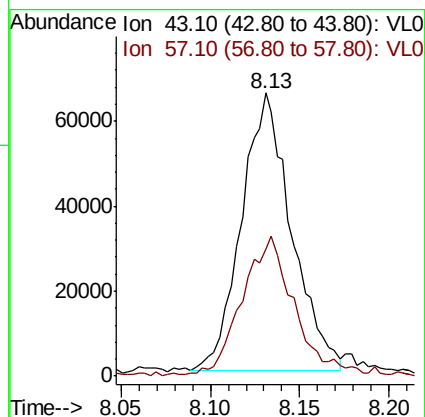
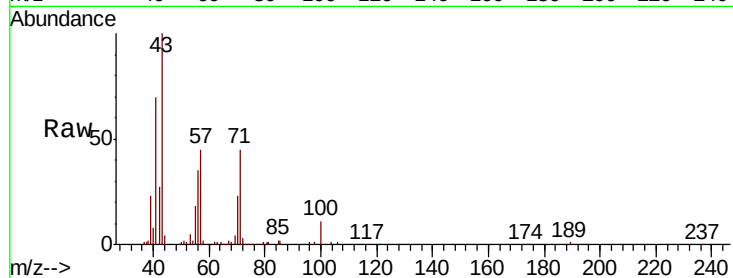
42 97.5 55.4 83.2#





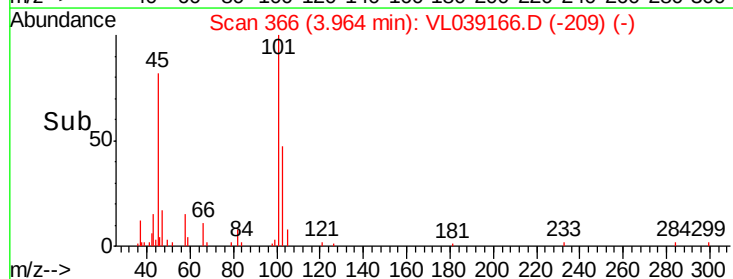
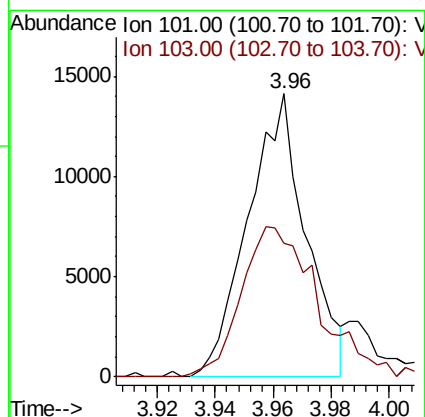
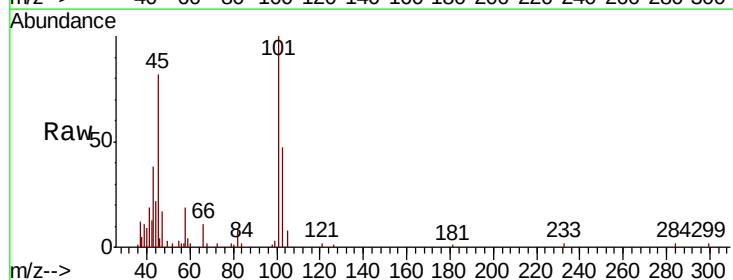
#10
 Heptane
 Concen: 0.871 ppbv
 RT: 8.13
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Jun 2022 23:51

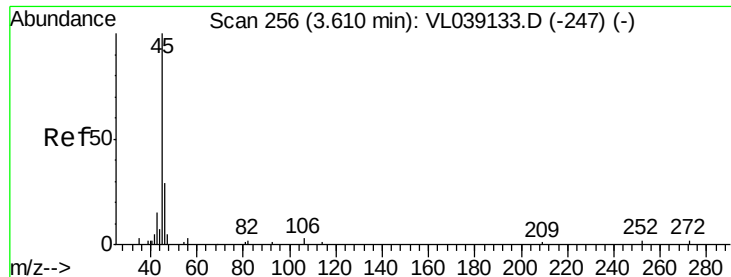
Tot Ion: 43 Resp: 127822
 Ion Ratio Lower Upper
 43 100
 57 53.8 41.4 62.2



#11
 Trichlorofluoromethane
 Concen: 0.109 ppbv
 RT: 3.96 min Scan# 366
 Delta R.T. 0.00 min
 Lab File: VL039166.D
 Acq: 3 Jun 2022 23:51

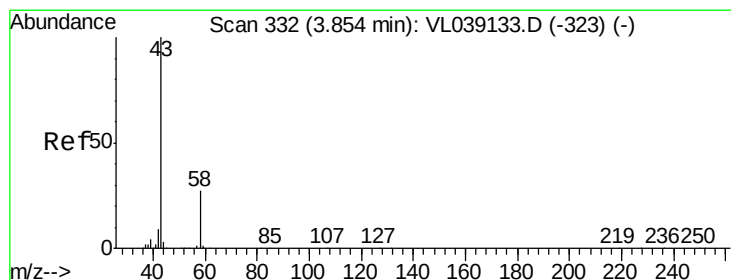
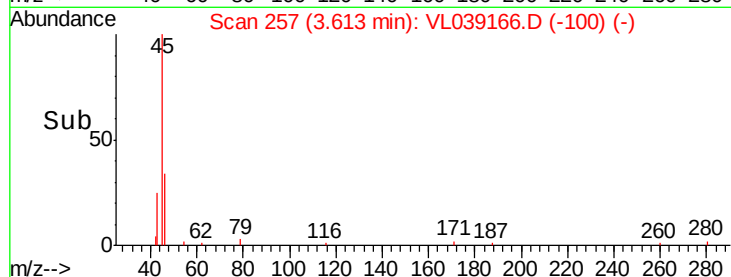
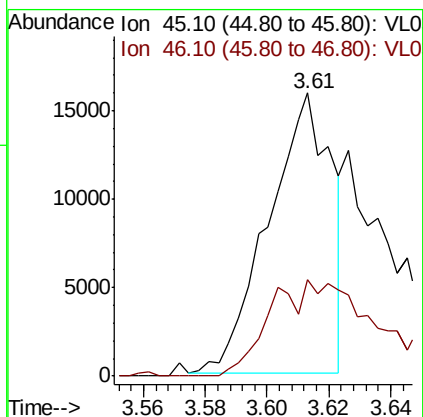
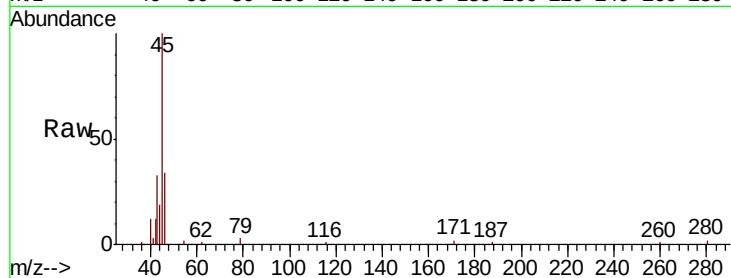
Tgt Ion:101 Resp: 19608
 Ion Ratio Lower Upper
 101 100
 103 46.0 51.7 77.5#





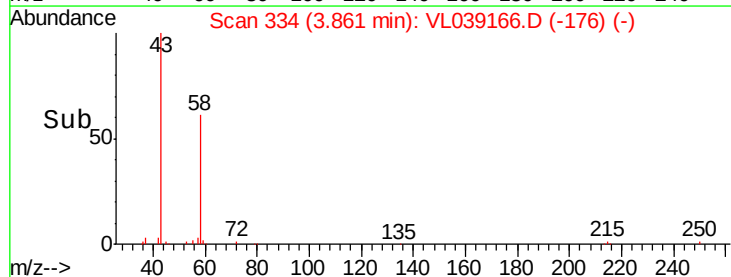
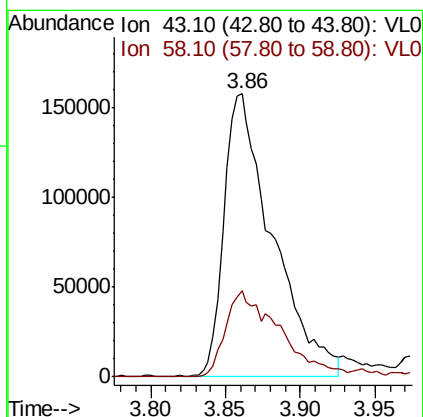
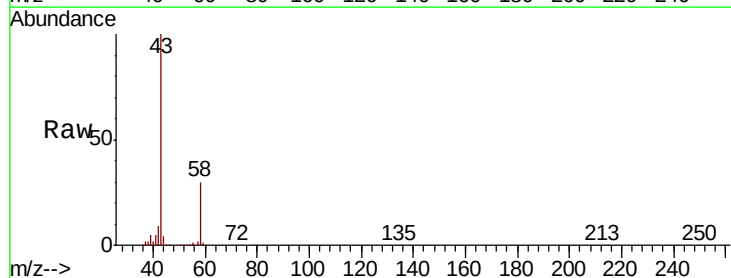
#13
Ethanol
Concen: 6.540 ppbv
RT: 3.61
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
SV2
Acq: 3 Jun 2022 23:51

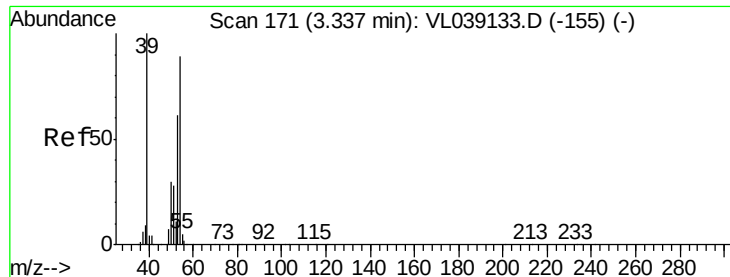
Tot Ion: 45 Resp: 22437
Ion Ratio Lower Upper
45 100
46 61.7 0.0 0.0#



#15
Acetone
Concen: 3.013 ppbv
RT: 3.86 min Scan# 334
Delta R.T. 0.01 min
Lab File: VL039166.D
Acq: 3 Jun 2022 23:51

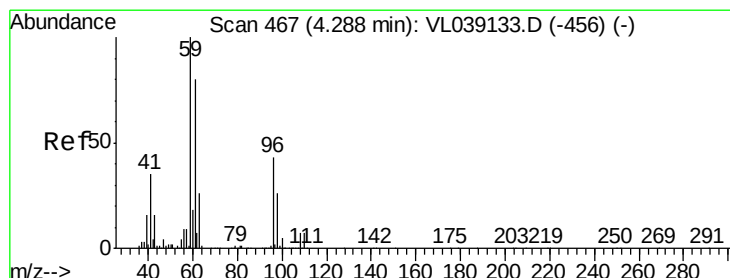
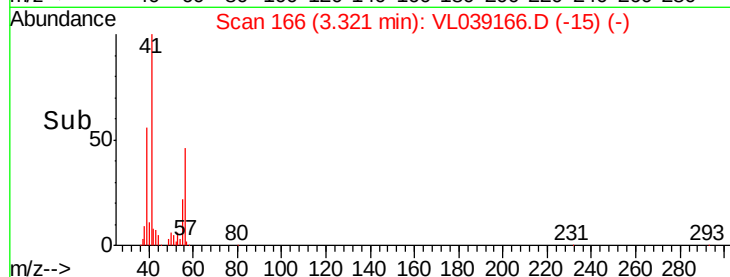
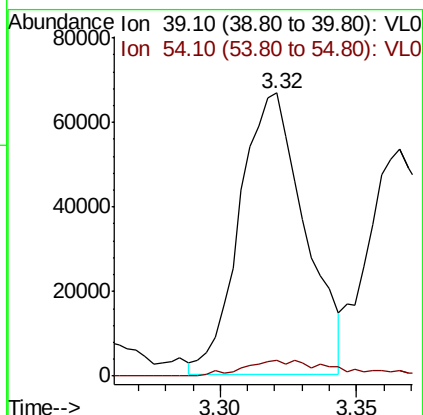
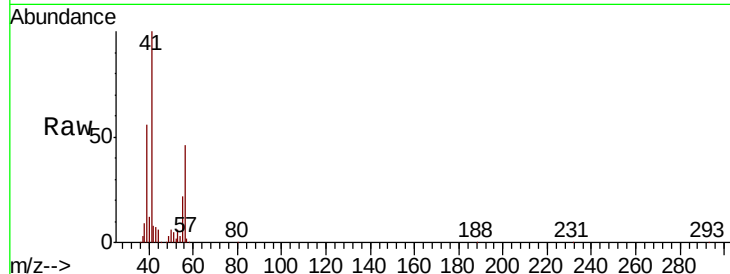
Tgt Ion: 43 Resp: 355857
Ion Ratio Lower Upper
43 100
58 36.4 22.5 33.7#





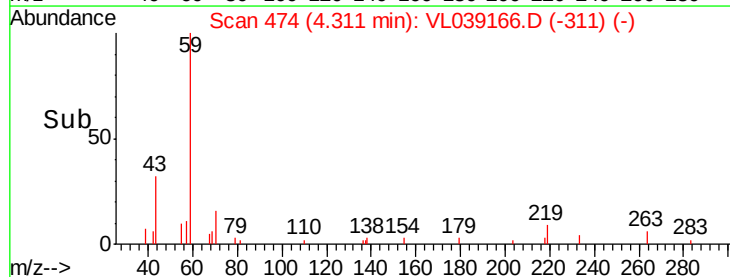
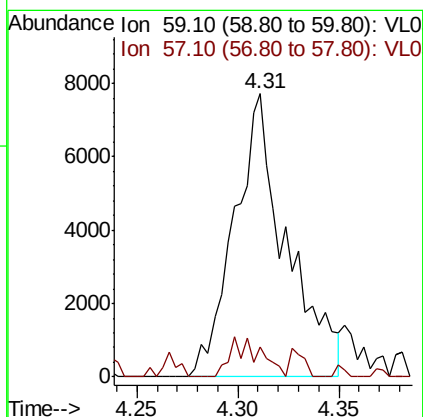
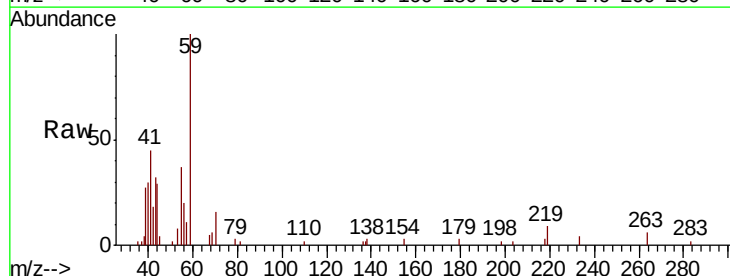
#16
 1,3-Butadiene
 Concen: 1.735 ppbv
 RT: 3.32
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV2
 Acq: 3 Jun 2022 23:51

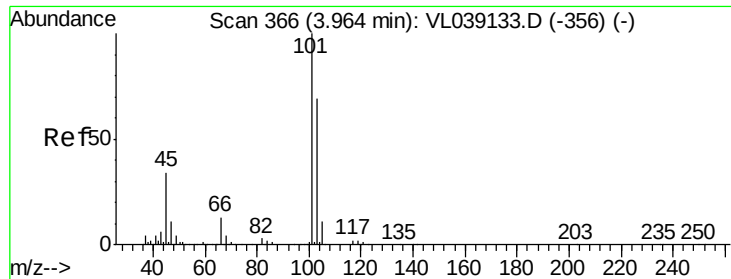
Tot Ion: 39 Resp: 110131
 Ion Ratio Lower Upper
 39 100
 54 8.9 65.8 98.6#



#17
 tert-Butyl alcohol
 Concen: 0.152 ppbv
 RT: 4.31 min Scan# 474
 Delta R.T. 0.02 min
 Lab File: VL039166.D
 Acq: 3 Jun 2022 23:51

Tgt Ion: 59 Resp: 13910
 Ion Ratio Lower Upper
 59 100
 57 12.9 9.1 13.7





#19

Isopropyl Alcohol

Concen: 0.984 ppbv

RT: 3.98 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

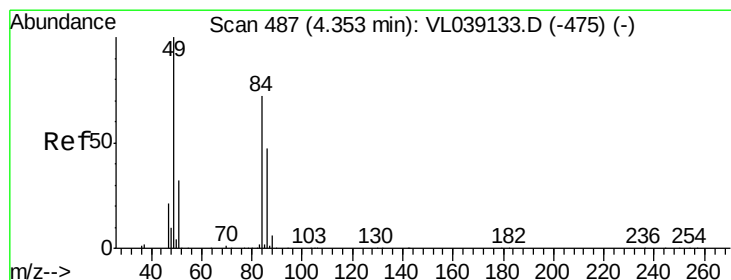
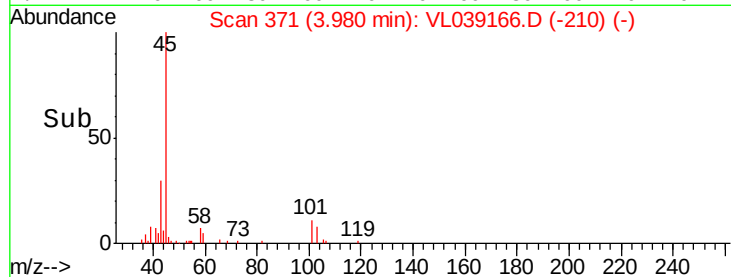
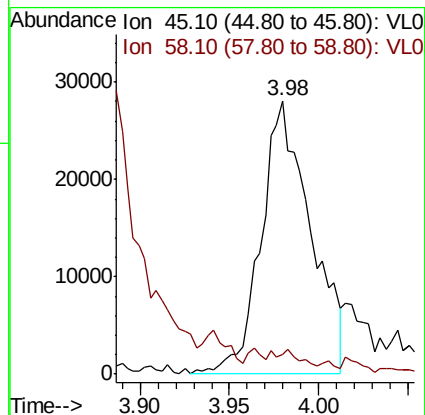
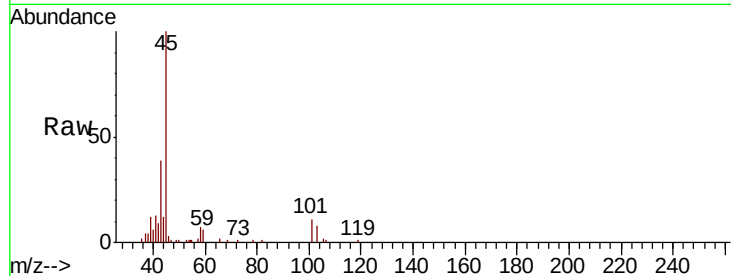
Acq: 3 Jun 2022 23:51

Tot Ion: 45 Resp: 54531

Ion Ratio Lower Upper

45 100

58 13.4 1.8 2.8#



#20

Methylene Chloride

Concen: 4.762 ppbv

RT: 4.36 min Scan# 488

Delta R.T. 0.00 min

Lab File: VL039166.D

Acq: 3 Jun 2022 23:51

Tgt Ion: 84 Resp: 237030

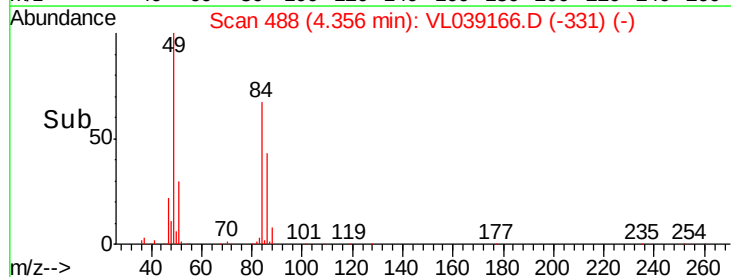
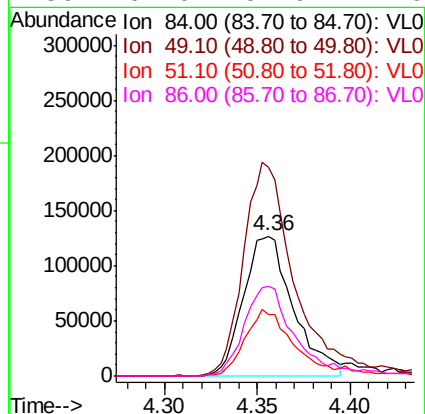
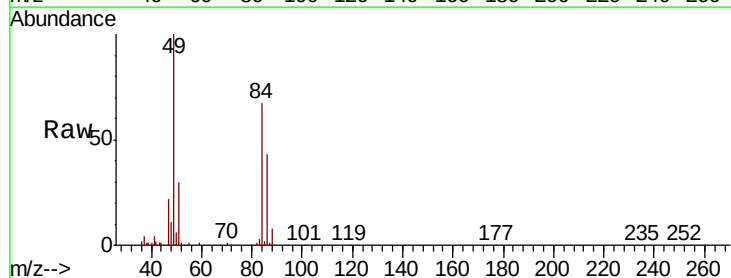
Ion Ratio Lower Upper

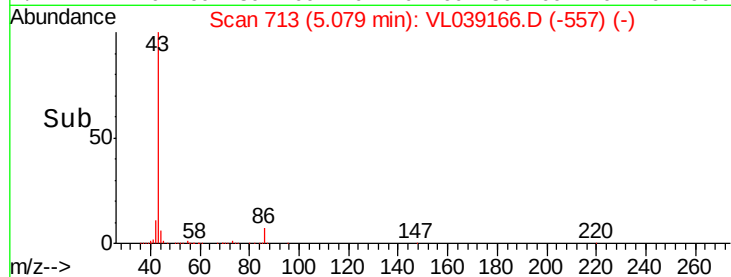
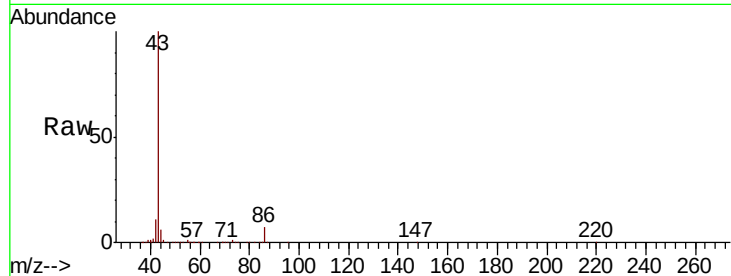
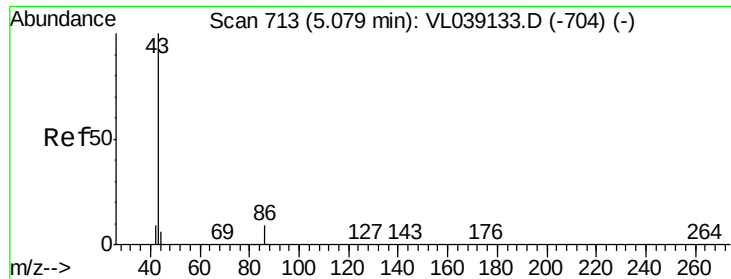
84 100

49 149.5 111.1 166.7

51 43.8 35.3 52.9

86 64.0 51.9 77.9





#23

Vinyl Acetate

Concen: 10.795 ppbv

RT: 5.08 Instrument: MSVOA_1

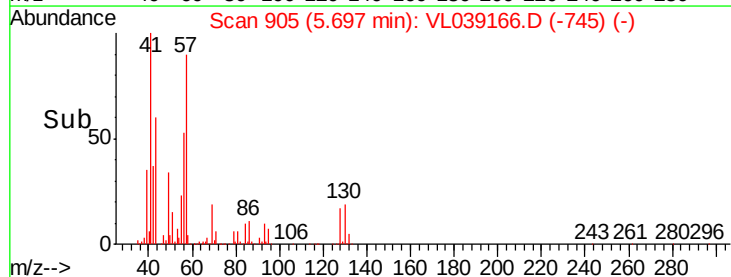
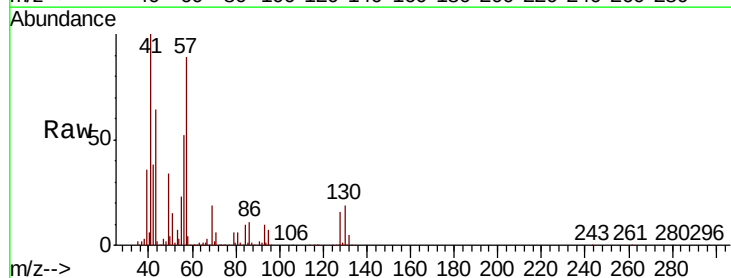
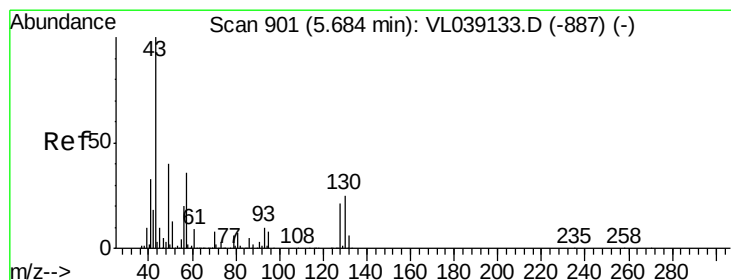
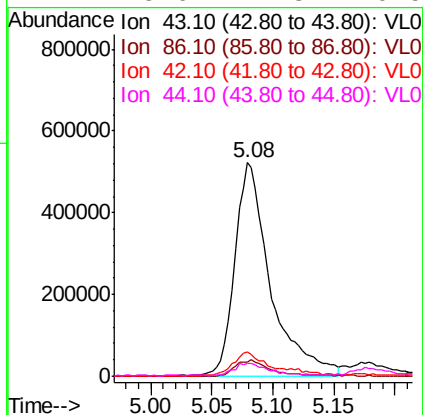
Delta R.T.

Lab File: ClientSampleId:

Acq: 3 Jun 2022 23:51 SV2

Tot Ion: 43 Resp: 1054946

Ion	Ratio	Lower	Upper
43	100		
86	6.8	6.0	9.0
42	11.3	8.2	12.4
44	5.6	4.3	6.5



#25

Ethyl Acetate

Concen: 2.935 ppbv

RT: 5.70 min Scan# 905

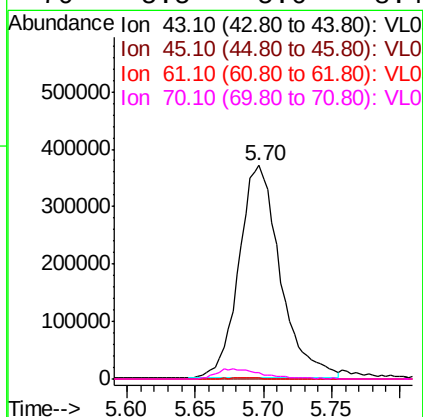
Delta R.T. 0.01 min

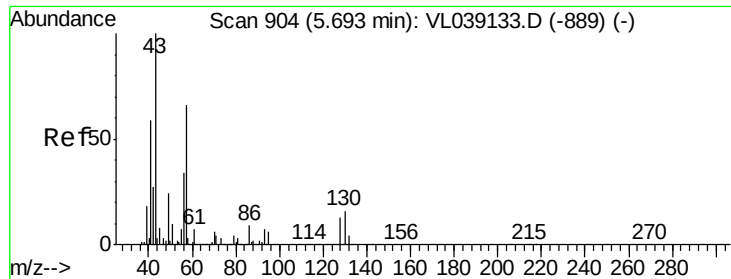
Lab File: VL039166.D

Acq: 3 Jun 2022 23:51

Tgt Ion: 43 Resp: 781299

Ion	Ratio	Lower	Upper
43	100		
45	0.3	8.2	12.2#
61	0.5	8.4	12.6#
70	5.5	5.6	8.4#

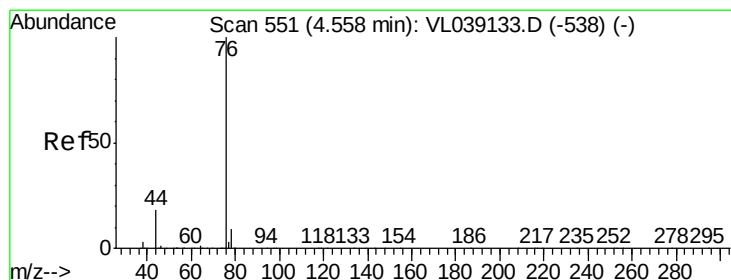
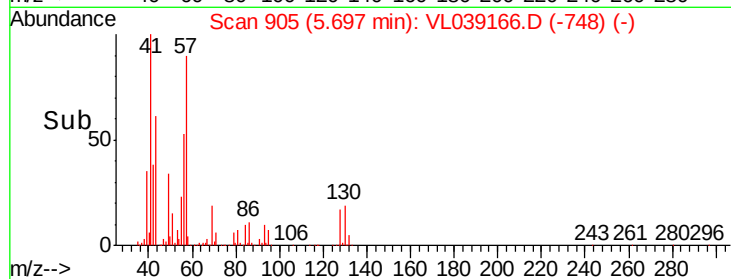
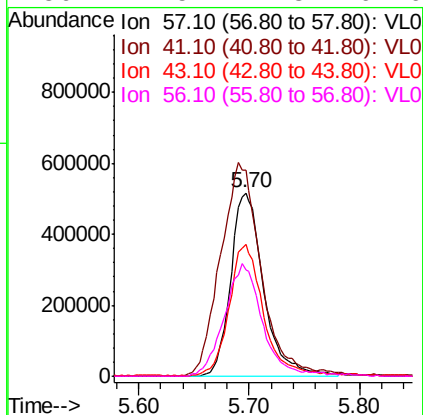
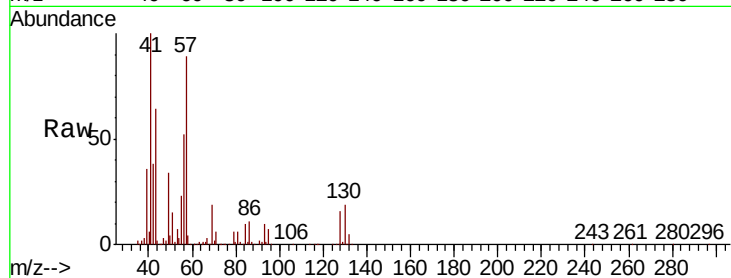




#26
Hexane
Concen: 9.149 ppbv
RT: 5.70
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Jun 2022 23:51

Tot Ion: 57 Resp: 1070273

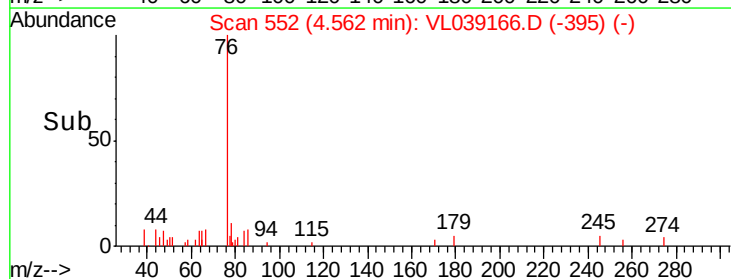
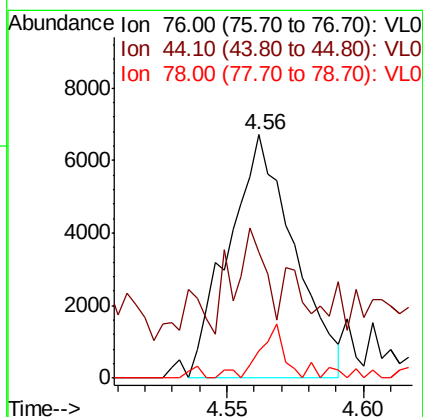
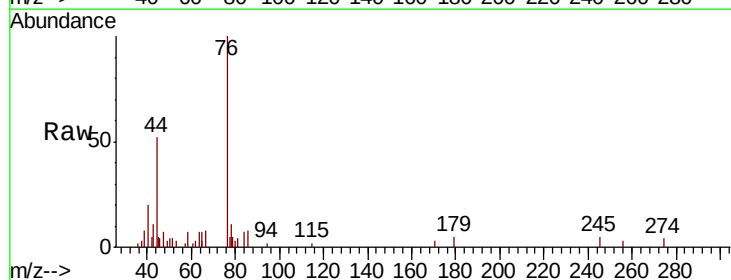
Ion	Ratio	Lower	Upper
57	100		
41	145.4	72.4	108.6#
43	75.5	187.0	280.6#
56	71.5	41.8	62.6#

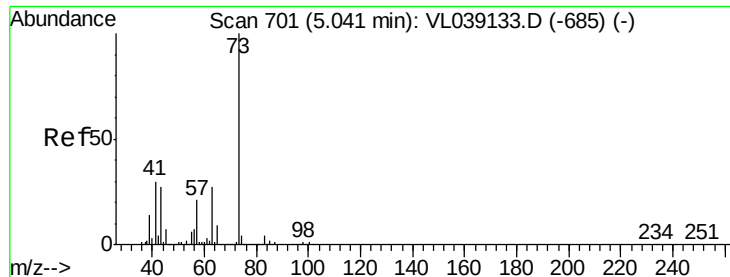


#27
Carbon Disulfide
Concen: 0.092 ppbv
RT: 4.56 min Scan# 552
Delta R.T. 0.00 min
Lab File: VL039166.D
Acq: 3 Jun 2022 23:51

Tgt Ion: 76 Resp: 11183

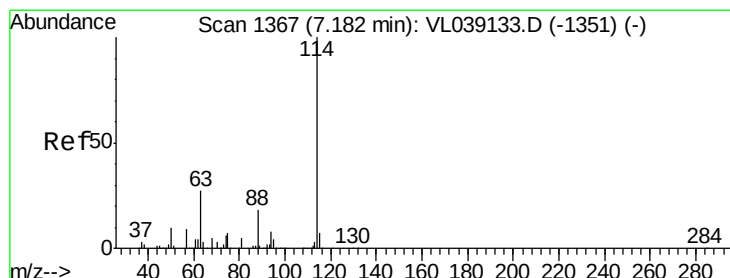
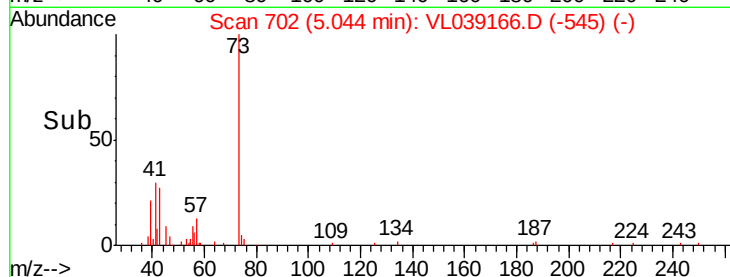
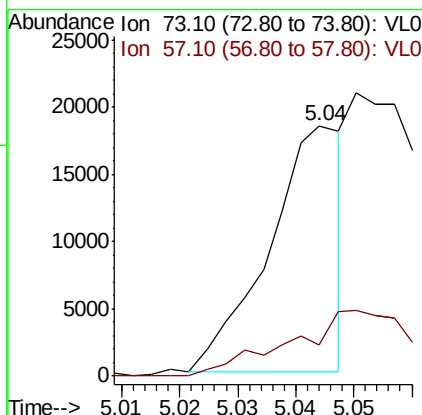
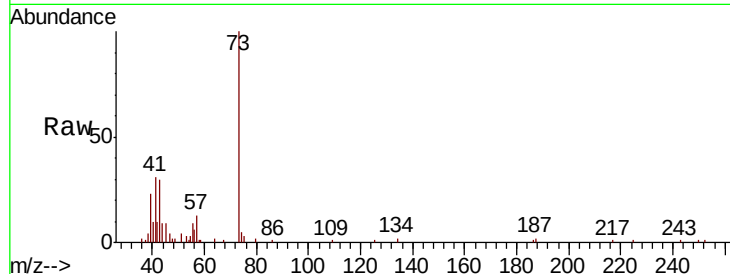
Ion	Ratio	Lower	Upper
76	100		
44	20.4	14.4	21.6
78	11.6	7.7	11.5#





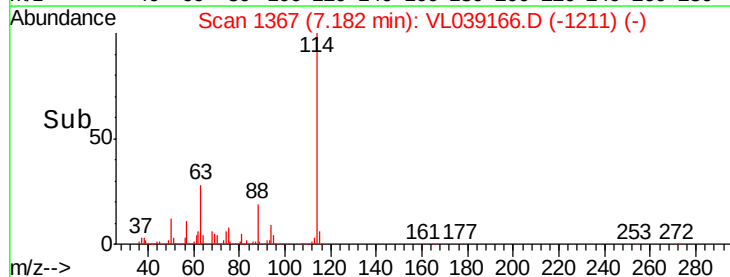
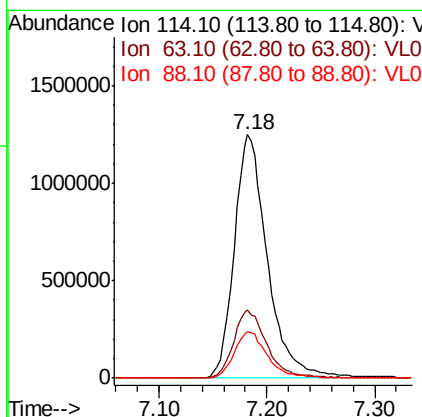
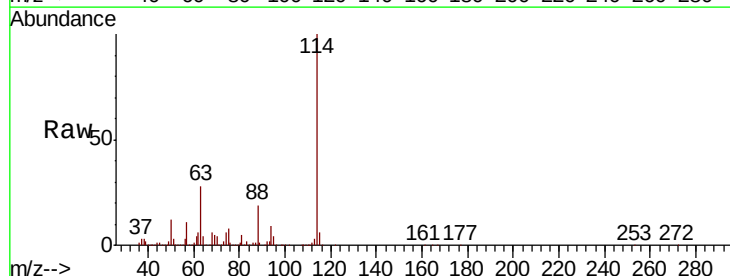
#28
Methyl tert-Butyl Ether
Concen: 0.125 ppbv
RT: 5.04
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Jun 2022 23:51

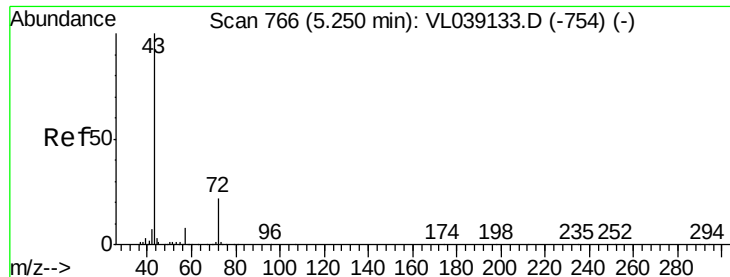
Tot Ion: 73 Resp: 16175
Ion Ratio Lower Upper
73 100
57 0.0 18.6 27.8#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1367
Delta R.T. 0.00 min
Lab File: VL039166.D
Acq: 3 Jun 2022 23:51

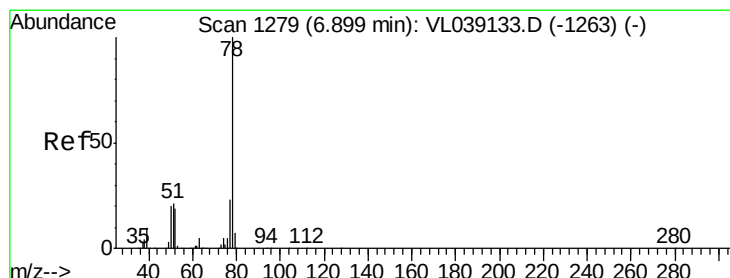
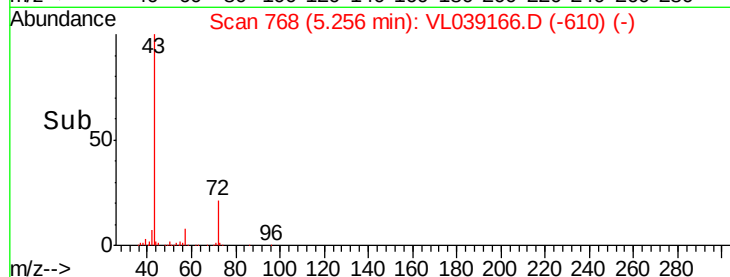
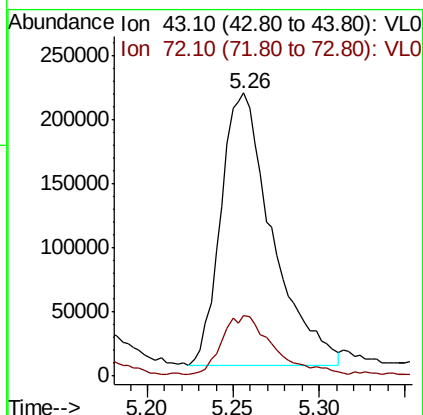
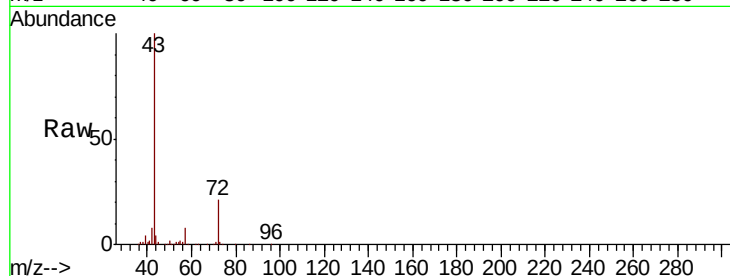
Tgt Ion: 114 Resp: 2659982
Ion Ratio Lower Upper
114 100
63 28.5 21.7 32.5
88 19.2 14.8 22.2





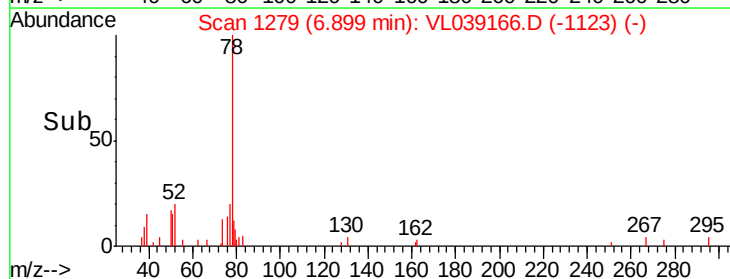
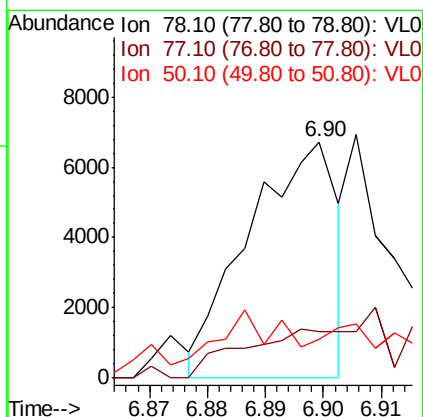
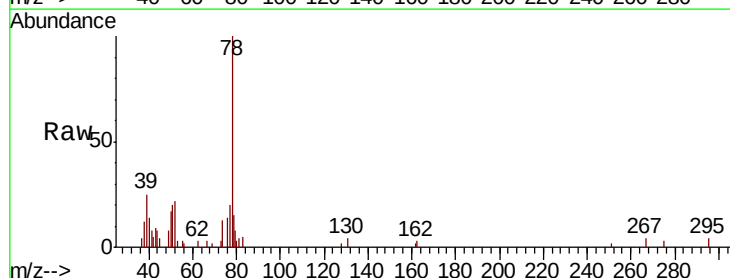
#34
 2-Butanone
 Concen: 3.058 ppbv
 RT: 5.26
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV2
 Acq: 3 Jun 2022 23:51

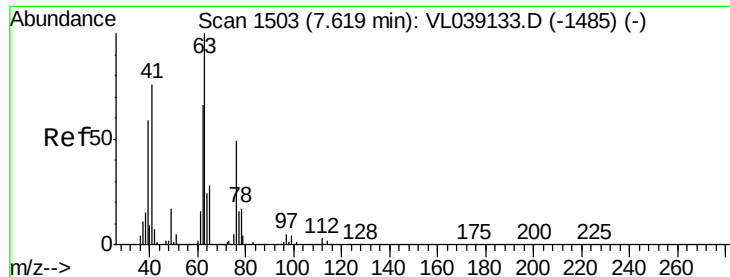
Tot Ion: 43 Resp: 441928
 Ion Ratio Lower Upper
 43 100
 72 24.3 18.2 27.2



#36
 Benzene
 Concen: 0.033 ppbv
 RT: 6.90 min Scan# 1279
 Delta R.T. 0.00 min
 Lab File: VL039166.D
 Acq: 3 Jun 2022 23:51

Tgt Ion: 78 Resp: 7153
 Ion Ratio Lower Upper
 78 100
 77 22.4 18.6 27.8
 50 0.9 15.8 23.8#





#39

1,2-Dichloropropane

Concen: 8.683 ppbv

RT: 7.18 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 3 Jun 2022 23:51 SV2

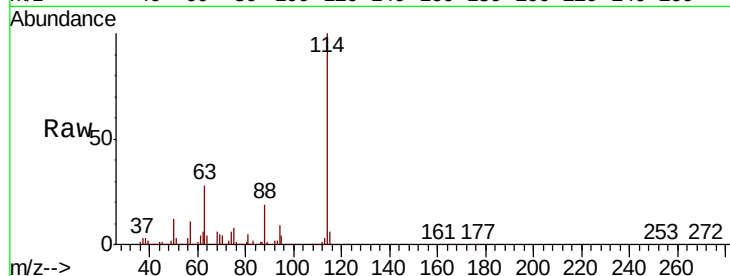
Tot Ion: 63 Resp: 745834

Ion Ratio Lower Upper

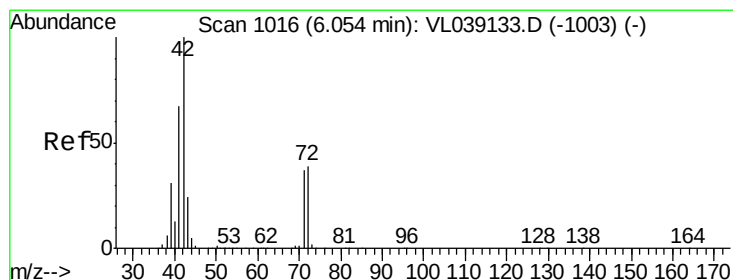
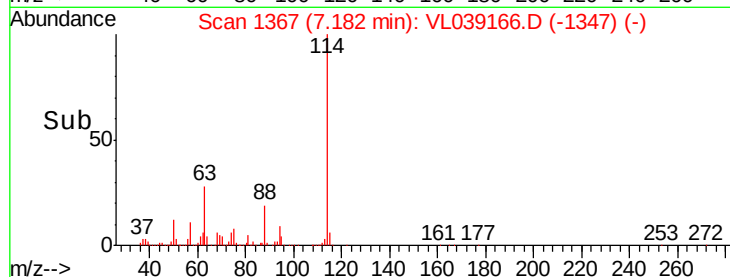
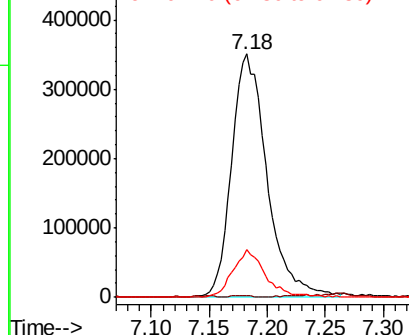
63 100

41 0.2 60.8 91.2#

62 19.7 52.9 79.3#



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: 0.127 ppbv

RT: 6.03 min Scan# 1009

Delta R.T. -0.02 min

Lab File: VL039166.D

Acq: 3 Jun 2022 23:51

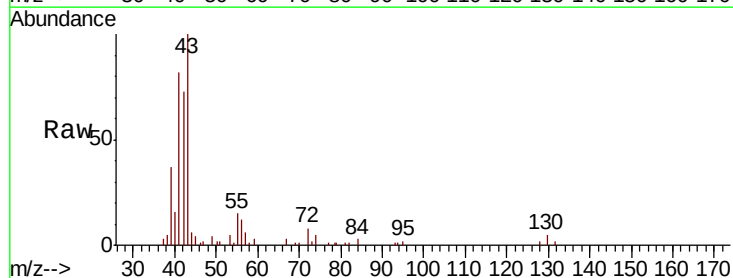
Tgt Ion: 42 Resp: 11081

Ion Ratio Lower Upper

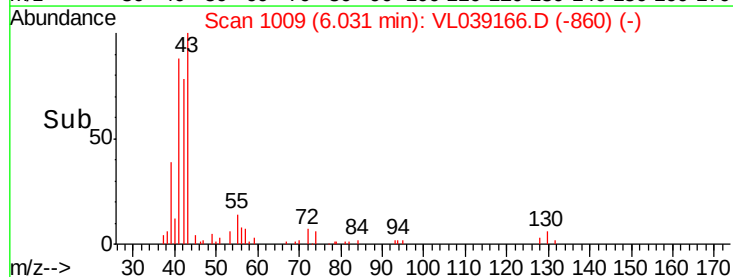
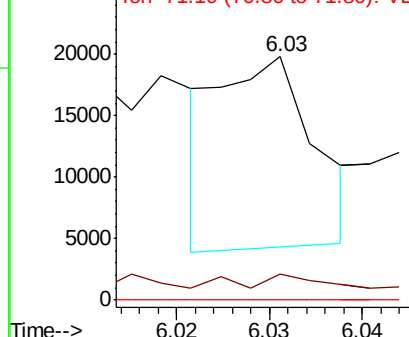
42 100

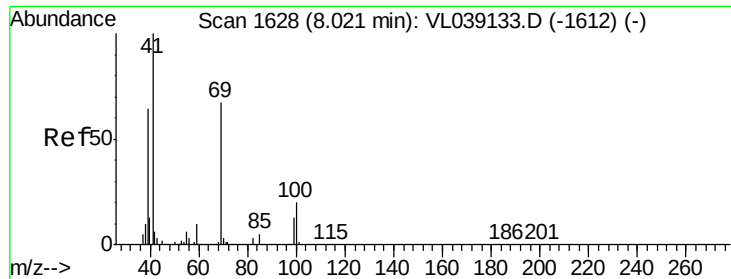
72 44.7 32.0 48.0

71 37.5 31.1 46.7



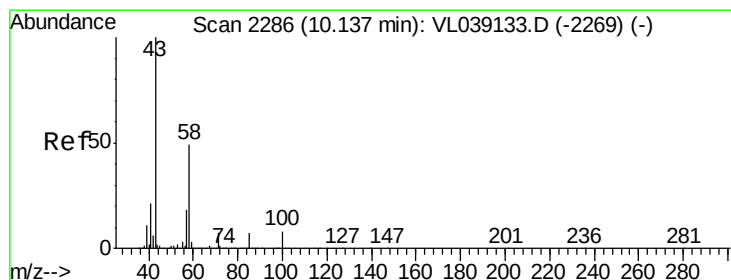
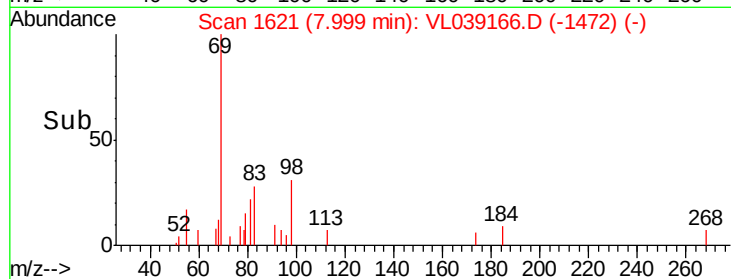
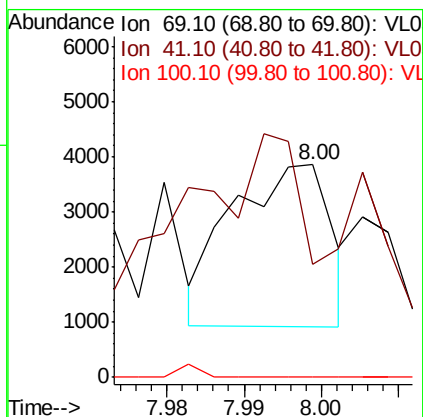
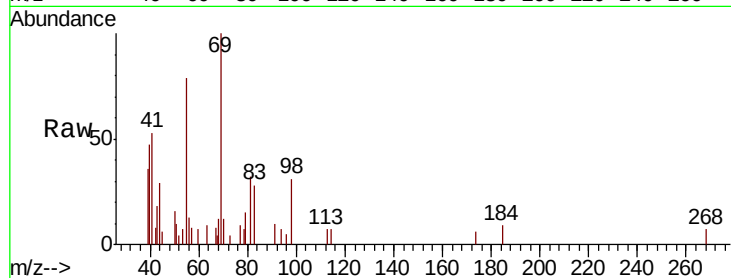
Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0





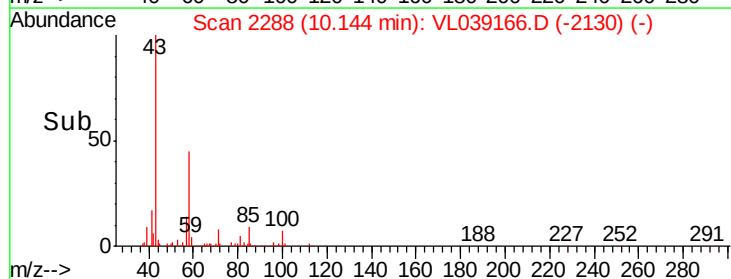
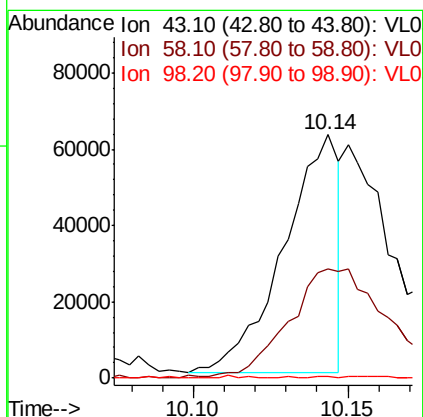
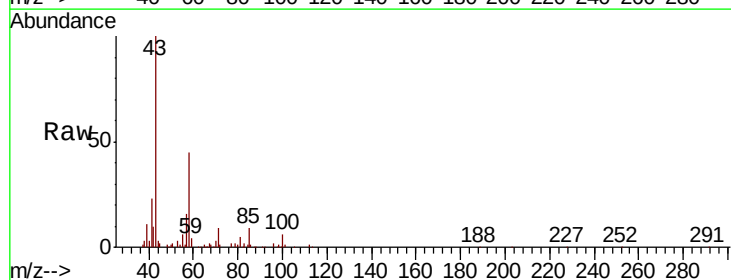
#43
Methvl Methacrylate
Concen: 0.031 ppbv
RT: 8.00
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
SV2
Acq: 3 Jun 2022 23:51

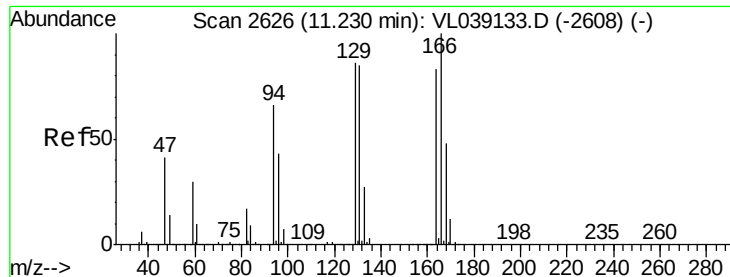
Tot Ion: 69 Resp: 2630
Ion Ratio Lower Upper
69 100
41 0.0 121.9 182.9#
100 0.0 24.1 36.1#



#51
2-Hexanone
Concen: 0.457 ppbv
RT: 10.14 min Scan# 2288
Delta R.T. 0.01 min
Lab File: VL039166.D
Acq: 3 Jun 2022 23:51

Tgt Ion: 43 Resp: 76902
Ion Ratio Lower Upper
43 100
58 94.4 40.0 60.0#
98 0.6 0.1 0.1#





#52

Tetrachloroethene

Concen: 0.055 ppbv

RT: 11.24 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 3 Jun 2022 23:51 SV2

Tot Ion:164 Resp: 4604

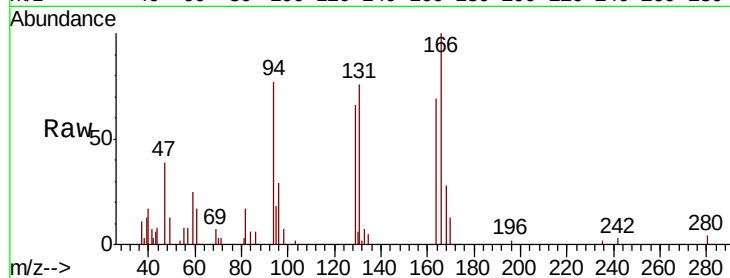
Ion Ratio Lower Upper

164 100

166 121.8 96.3 144.5

129 83.0 82.5 123.7

131 104.3 82.1 123.1

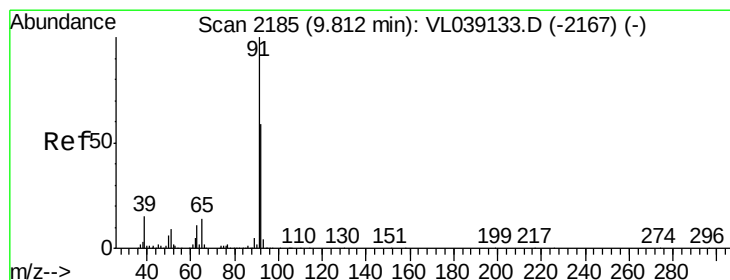
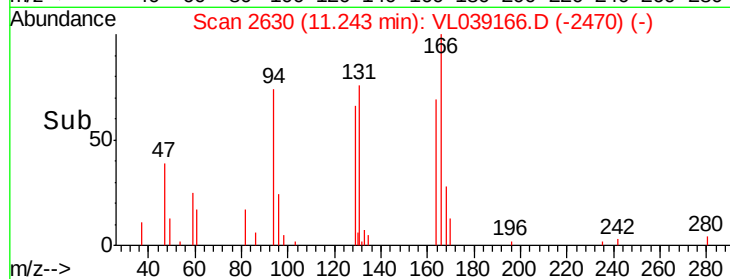
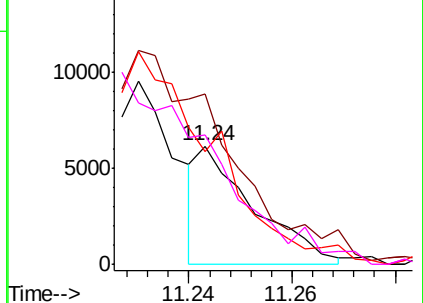


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.052 ppbv

RT: 9.82 min Scan# 2187

Delta R.T. 0.01 min

Lab File: VL039166.D

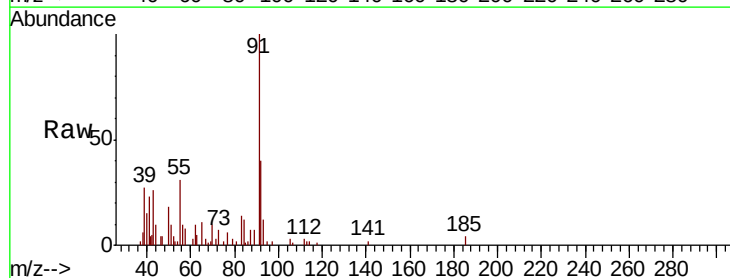
Acq: 3 Jun 2022 23:51

Tgt Ion: 91 Resp: 12833

Ion Ratio Lower Upper

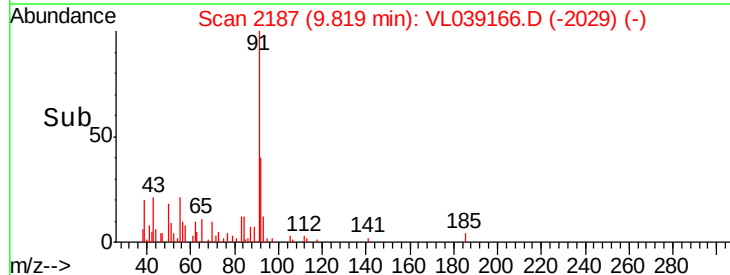
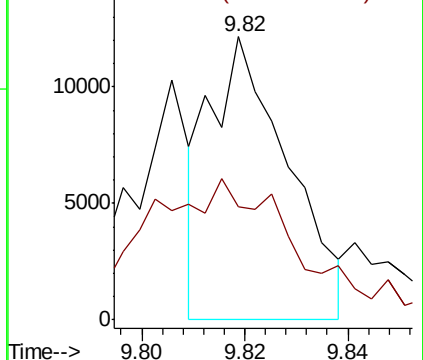
91 100

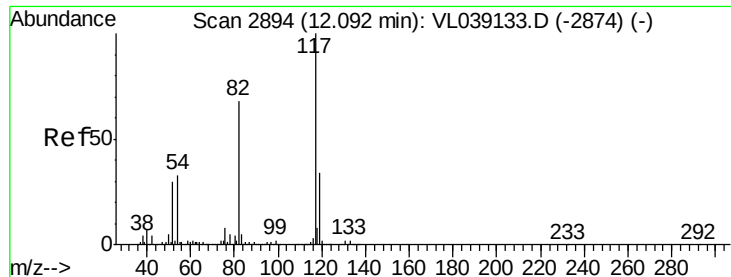
92 108.4 48.1 72.1#



Abundance Ion 91.10 (90.80 to 91.80): VL0

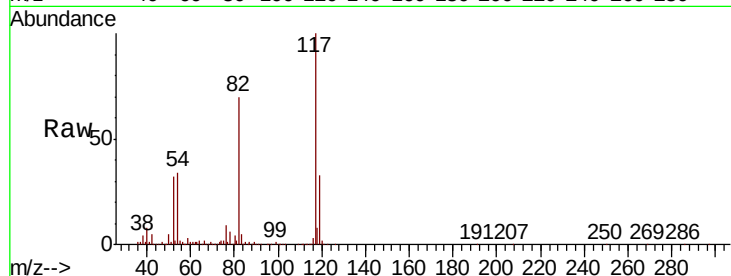
Ion 92.10 (91.80 to 92.80): VL0



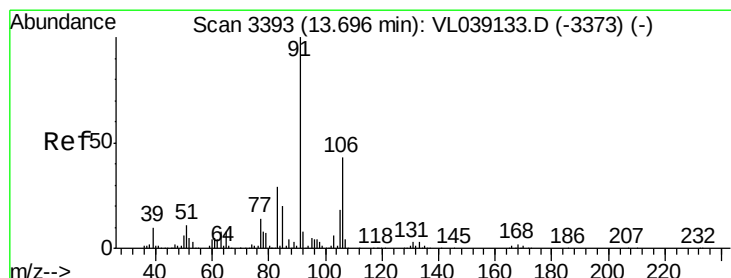
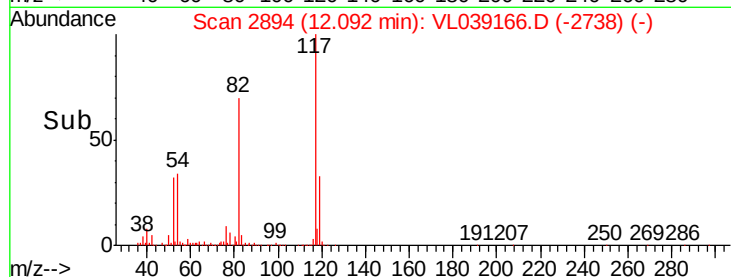
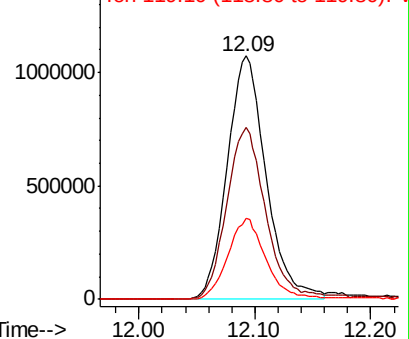


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min
Instrument: MSVOA_L
Delta R.T.:
Lab File: ClientSampleId :
SV2
Acq: 3 Jun 2022 23:51

Tot Ion:117 Resp: 2503358
Ion Ratio Lower Upper
117 100
82 72.1 55.1 82.7
119 33.3 24.7 37.1

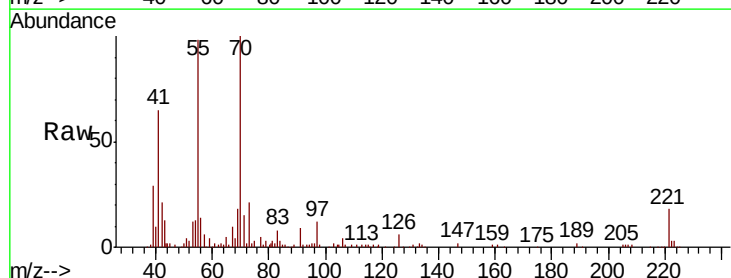


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

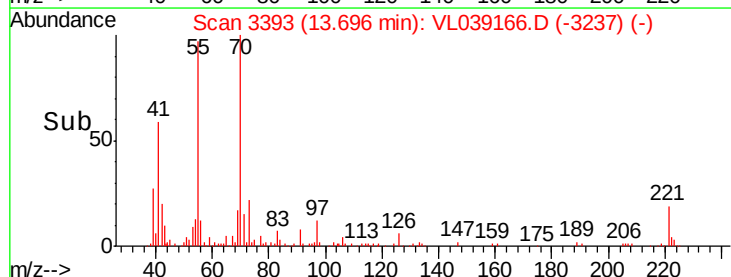
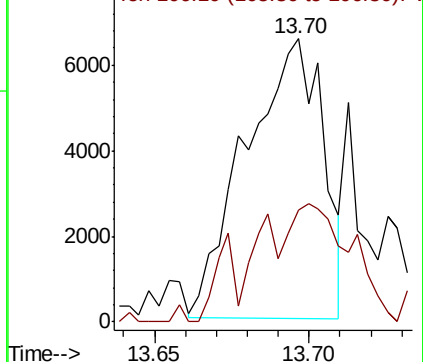


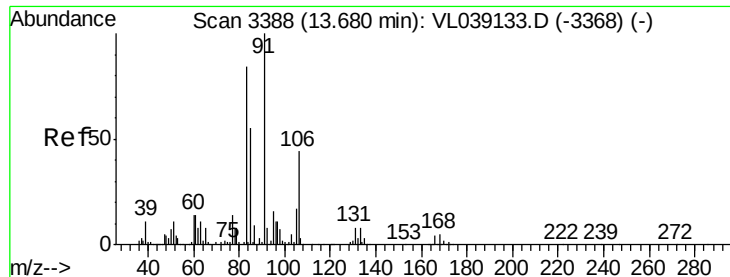
#60
o-Xylene
Concen: 0.040 ppbv
RT: 13.70 min Scan# 3393
Delta R.T.: 0.00 min
Lab File: VL039166.D
Acq: 3 Jun 2022 23:51

Tgt Ion: 91 Resp: 11323
Ion Ratio Lower Upper
91 100
106 57.0 22.3 66.9



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





#63

1,1,2,2-Tetrachloroethane

Concen: 0.046 ppbv

RT: 13.69

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 3 Jun 2022 23:51

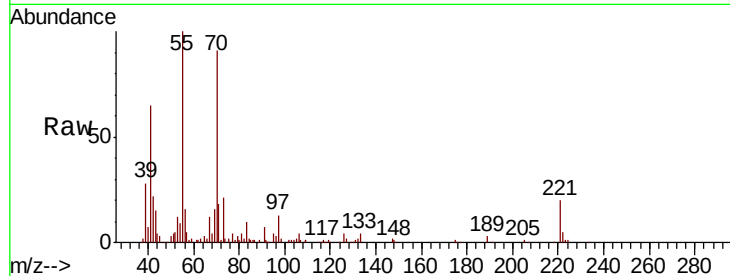
Tot Ion: 83 Resp: 7334

Ion Ratio Lower Upper

83 100

131 30.3 4.8 14.3#

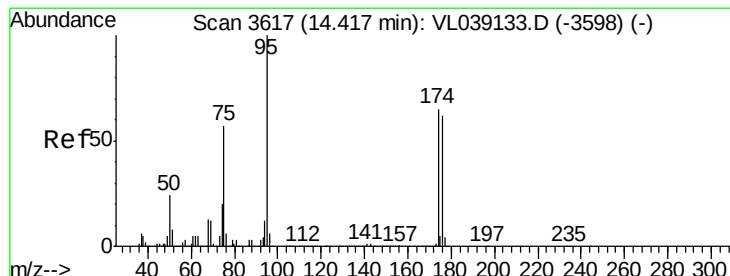
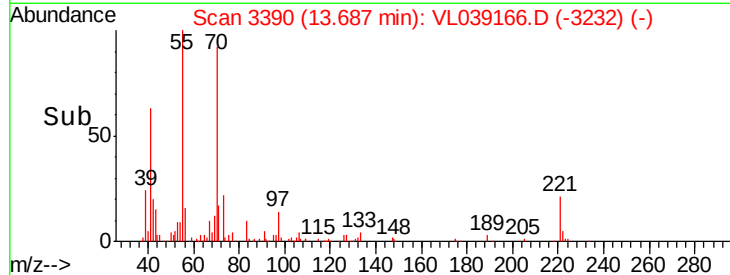
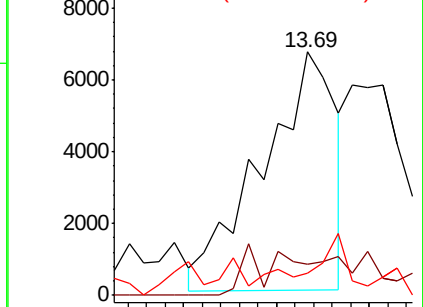
85 0.0 33.0 99.0#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VL0



#68

1-Bromo-4-Fluorobenzene

Concen: 10.376 ppbv

RT: 14.42 min Scan# 3618

Delta R.T. 0.00 min

Lab File: VL039166.D

Acq: 3 Jun 2022 23:51

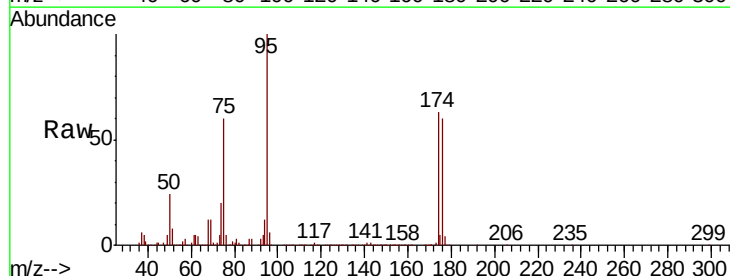
Tgt Ion: 95 Resp: 2147492

Ion Ratio Lower Upper

95 100

174 66.0 53.8 80.8

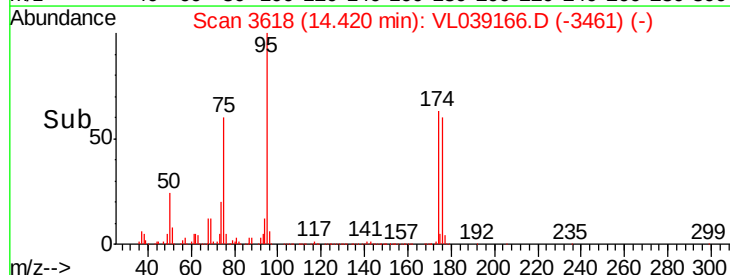
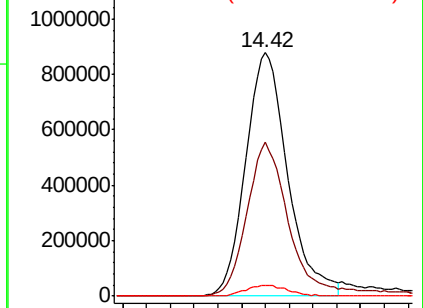
175 4.8 4.1 6.1

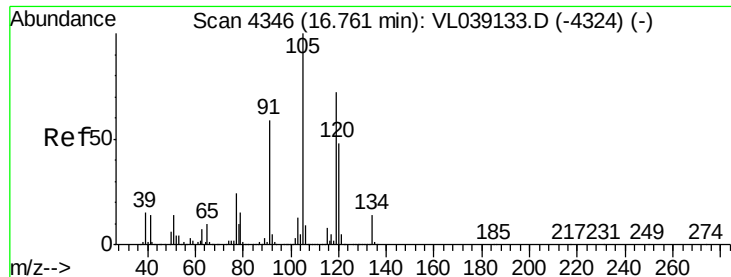


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.101 ppbv
 RT: 16.77
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 SV2
 Acq: 3 Jun 2022 23:51

Tot Ion:	105	Resp:	33921
Ion	Ratio	Lower	Upper
105	100		
120	17.6	38.1	57.1#
91	14.6	47.4	71.0#
77	0.0	19.5	29.3#

