

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL030122\  
 Data File : VL038458.D  
 Acq On : 1 Mar 2022 19:50  
 Operator : SY/AP  
 Sample : N1720-03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 OA1

Quant Time: Mar 02 03:07:00 2022  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL022222AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Feb 22 19:45:51 2022  
 QLast Update : Tue Feb 22 19:45:51 2022  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.67  | 49   | 872861   | 10.00 | ppbv  | 0.02     |
| 33) 1,4-Difluorobenzene | 7.18  | 114  | 2029925  | 10.00 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 12.09 | 117  | 1717657  | 10.00 | ppbv  | 0.03     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.41  | 95    | 1322651  | 9.31     | ppbv | 0.03   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 93.10% |

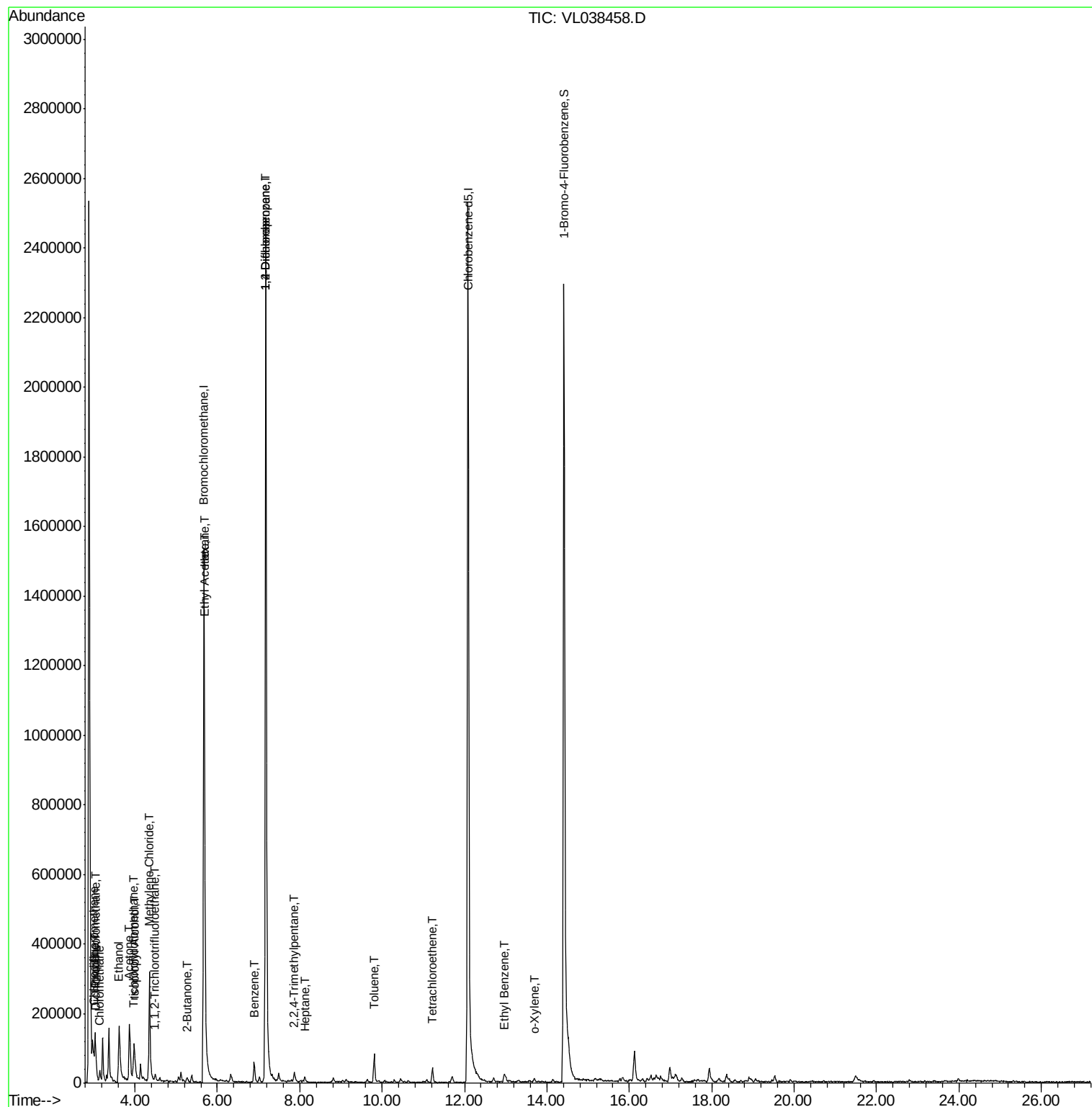
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|-------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.06  | 85   | 35825    | 0.26  | ppbv   | 100    |
| 3) Chlorodifluoromethane       | 3.00  | 51   | 143076   | 0.93  | ppbv # | 80     |
| 4) Chloromethane               | 3.15  | 50   | 16730    | 0.31  | ppbv   | 93     |
| 9) Propene                     | 3.03  | 41   | 38446    | 0.76  | ppbv # | 82     |
| 10) Heptane                    | 8.12  | 43   | 4577     | 0.04  | ppbv # | 64     |
| 11) Trichlorofluoromethane     | 3.96  | 101  | 28033    | 0.21  | ppbv   | 86     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.49  | 101  | 5386     | 0.06  | ppbv # | 73     |
| 13) Ethanol                    | 3.61  | 45   | 230153   | 45.32 | ppbv   | 100    |
| 15) Acetone                    | 3.86  | 43   | 229880   | 3.10  | ppbv   | 97     |
| 19) Isopropyl Alcohol          | 3.98  | 45   | 135878   | 3.16  | ppbv # | 93     |
| 20) Methylene Chloride         | 4.35  | 84   | 131529   | 3.58  | ppbv   | 95     |
| 25) Ethyl Acetate              | 5.69  | 43   | 99548    | 0.50  | ppbv # | 83     |
| 26) Hexane                     | 5.69  | 57   | 120109   | 1.33  | ppbv # | 45     |
| 34) 2-Butanone                 | 5.26  | 43   | 7890     | 0.12  | ppbv # | 82     |
| 36) Benzene                    | 6.89  | 78   | 48575    | 0.27  | ppbv   | 98     |
| 39) 1,2-Dichloropropane        | 7.18  | 63   | 547058   | 7.69  | ppbv # | 24     |
| 44) 2,2,4-Trimethylpentane     | 7.87  | 57   | 16485    | 0.05  | ppbv # | 40     |
| 52) Tetrachloroethene          | 11.23 | 164  | 3328     | 0.06  | ppbv # | 62     |
| 53) Toluene                    | 9.81  | 91   | 54213    | 0.28  | ppbv   | 94     |
| 58) Ethyl Benzene              | 12.96 | 91   | 8630     | 0.04  | ppbv   | 90     |
| 60) o-Xylene                   | 13.69 | 91   | 6603     | 0.03  | ppbv # | 32     |

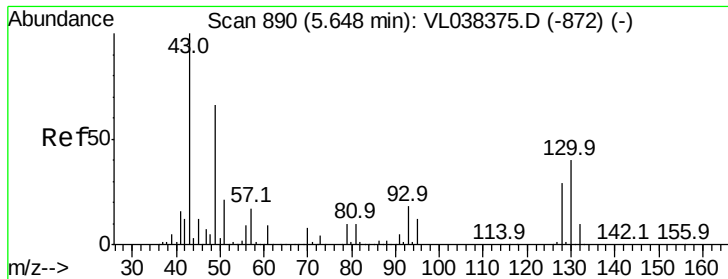
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_L\DATA\VL030122\  
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MSVOA\_L  
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OA1

Quant Time: Mar 02 03:07:00 2022  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_L\METHODS\VL022222AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Feb 22 19:45:51 2022  
QLast Update : Tue Feb 22 19:45:51 2022  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

Acq: 1 Mar 2022 19:50

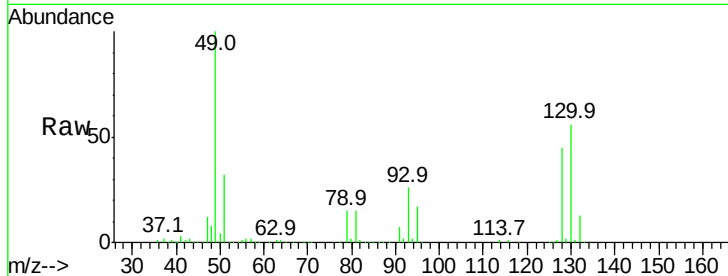
Tgt Ion: 49 Resp: 872861

Ion Ratio Lower Upper

49 100

128 46.1 24.3 72.9

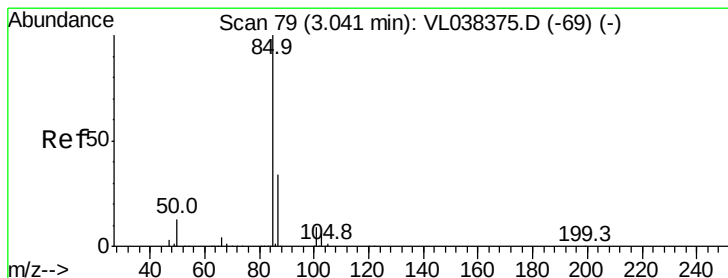
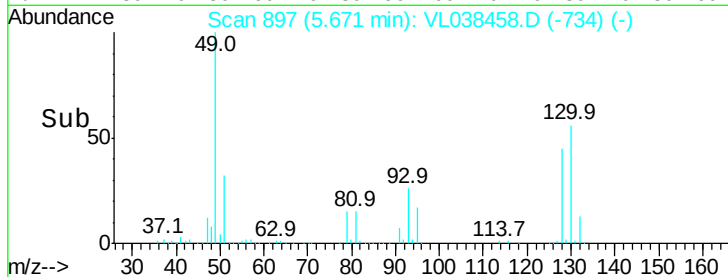
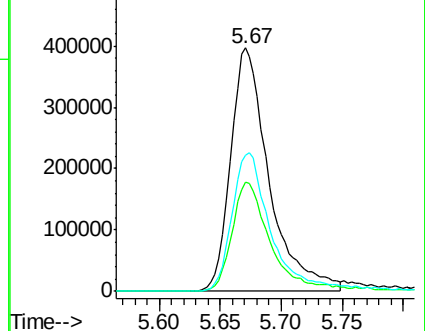
130 59.8 30.1 90.5



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



#2

Dichlorodifluoromethane

Concen: 0.26 ppbv

RT: 3.06 min Scan# 85

Delta R.T. 0.02 min

Lab File: VL038458.D

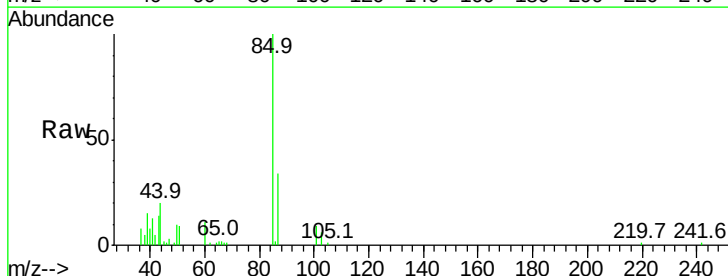
Acq: 1 Mar 2022 19:50

Tgt Ion: 85 Resp: 35825

Ion Ratio Lower Upper

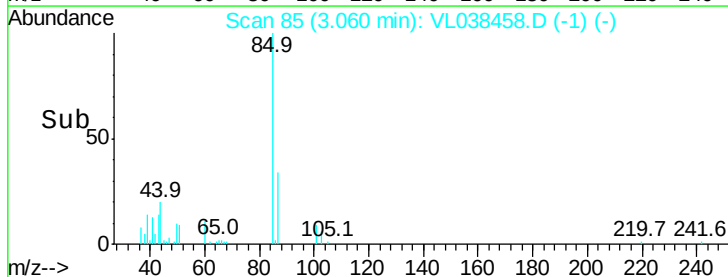
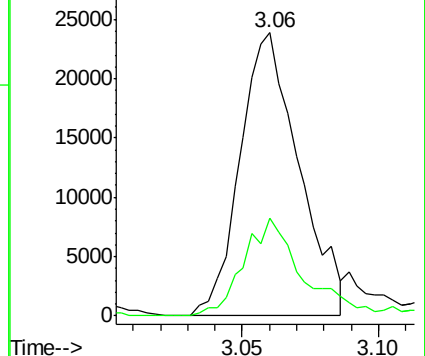
85 100

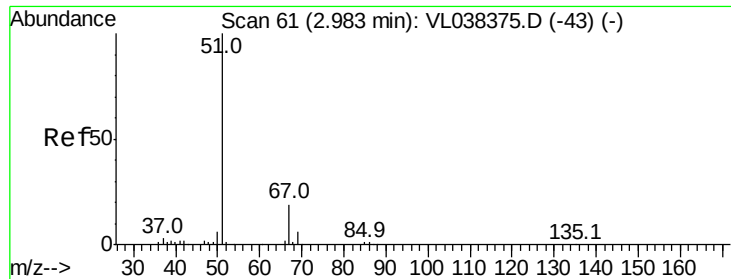
87 34.5 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.93 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

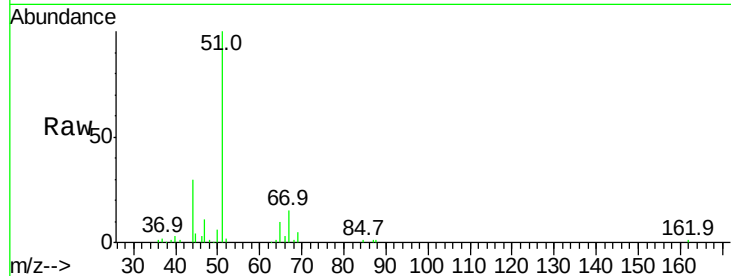
Acq: 1 Mar 2022 19:50

Tgt Ion: 51 Resp: 143076

Ion Ratio Lower Upper

51 100

67 9.7 14.7 22.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.00

50000

40000

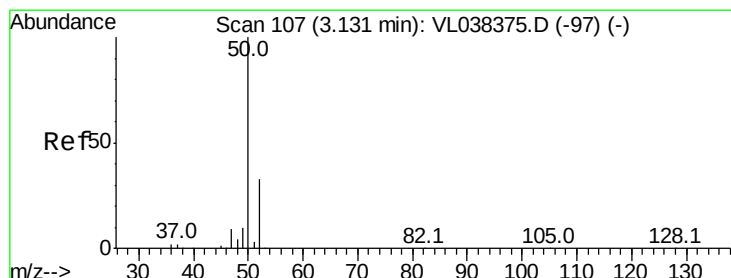
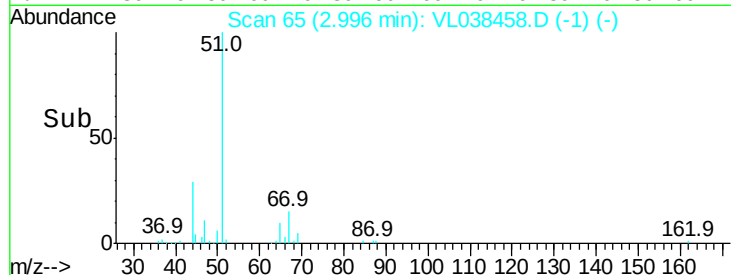
30000

20000

10000

0

Time--> 2.80 2.90 3.00 3.10



#4

Chloromethane

Concen: 0.31 ppbv

RT: 3.15 min Scan# 112

Delta R.T. 0.02 min

Lab File: VL038458.D

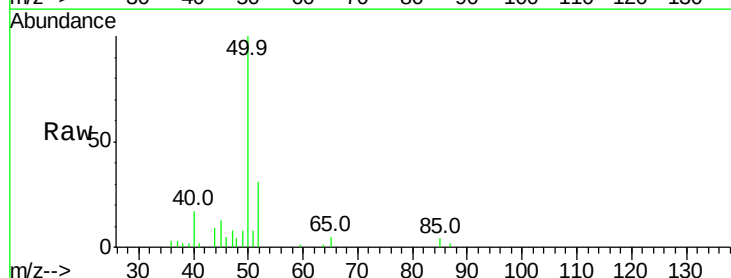
Acq: 1 Mar 2022 19:50

Tgt Ion: 50 Resp: 16730

Ion Ratio Lower Upper

50 100

52 29.1 26.5 39.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.15

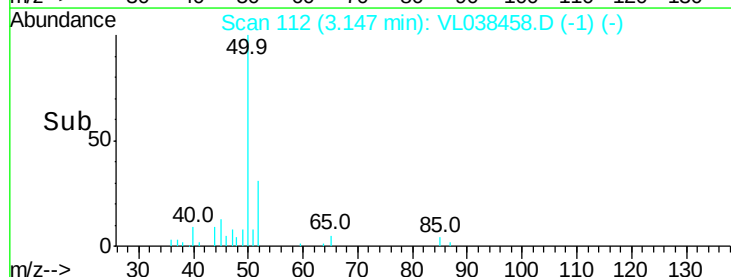
15000

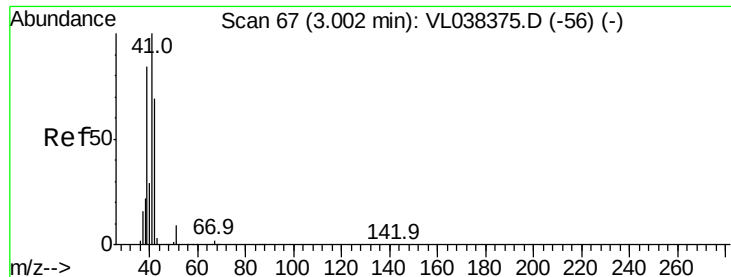
10000

5000

0

Time--> 3.12 3.14 3.16





#9

Propene

Concen: 0.76 ppbv

RT: 3.03 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

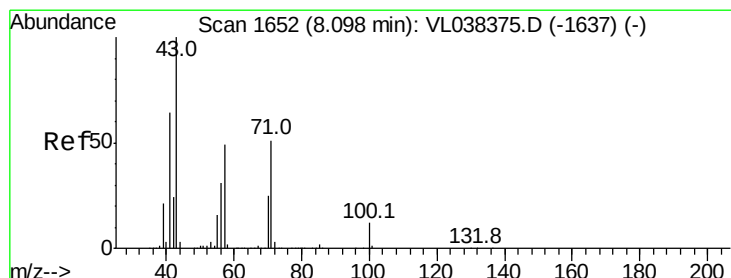
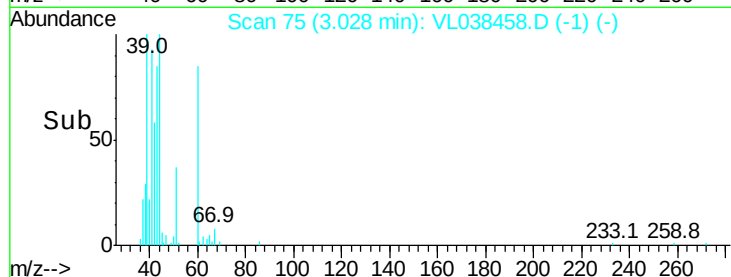
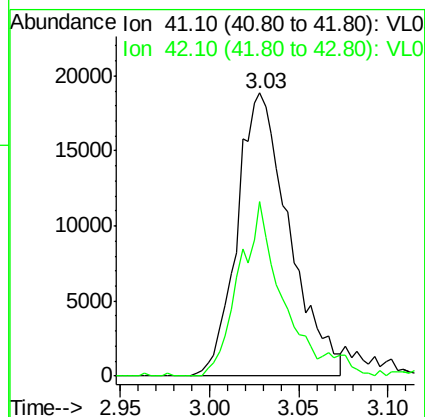
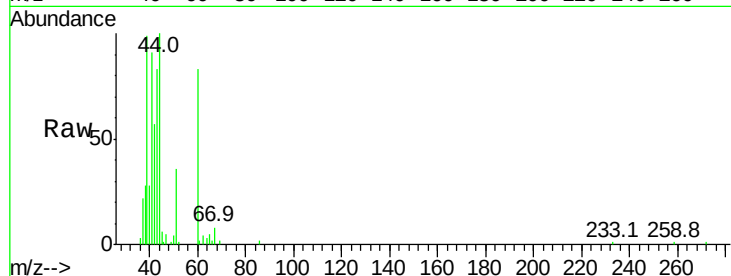
Acq: 1 Mar 2022 19:50

Tgt Ion: 41 Resp: 38446

Ion Ratio Lower Upper

41 100

42 53.5 54.6 82.0#



#10

Heptane

Concen: 0.04 ppbv

RT: 8.12 min Scan# 1659

Delta R.T. 0.02 min

Lab File: VL038458.D

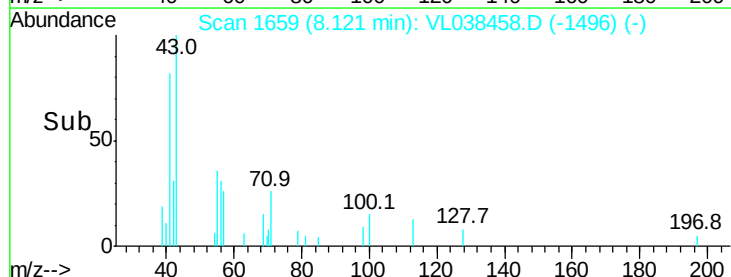
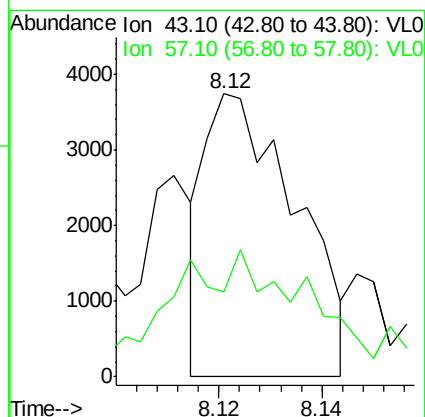
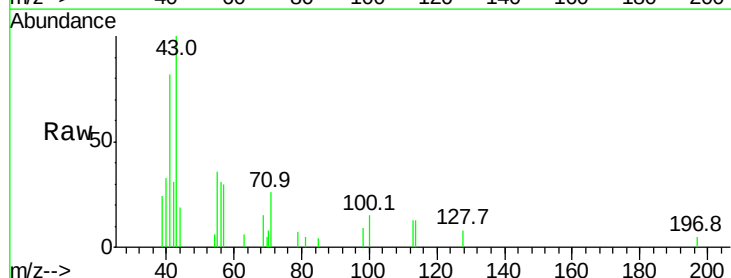
Acq: 1 Mar 2022 19:50

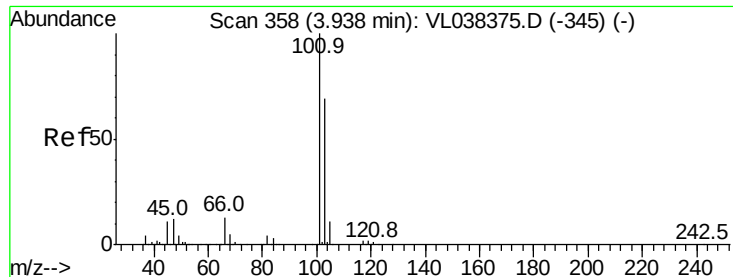
Tgt Ion: 43 Resp: 4577

Ion Ratio Lower Upper

43 100

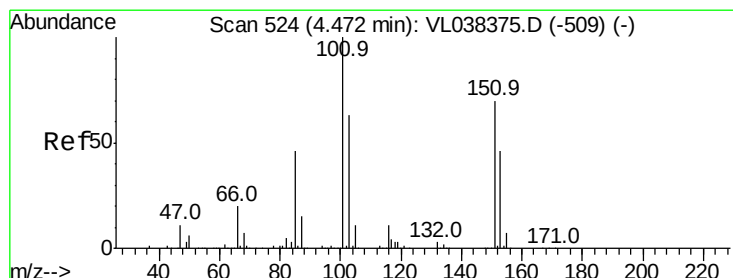
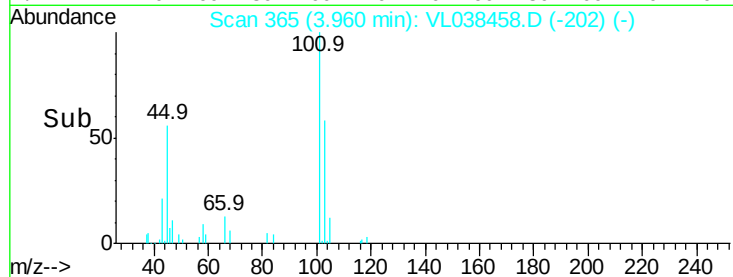
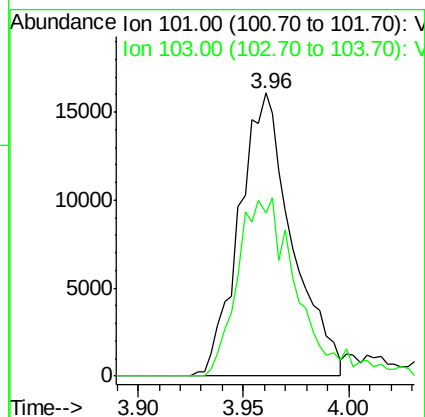
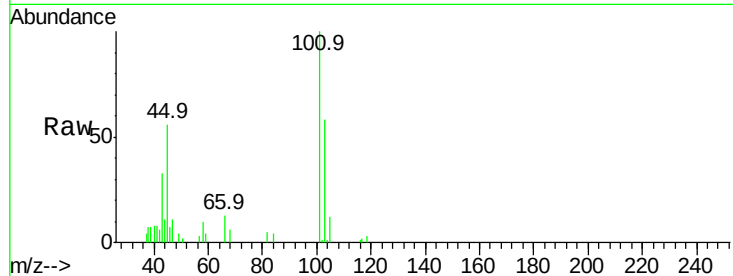
57 74.7 39.8 59.8#





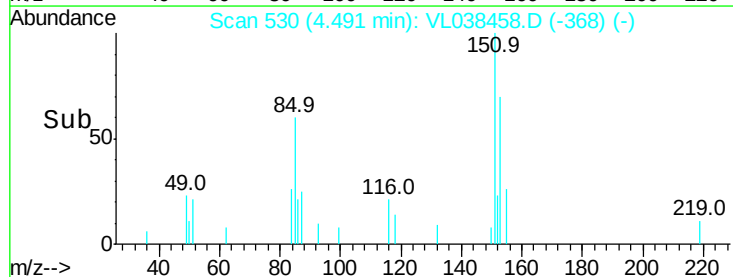
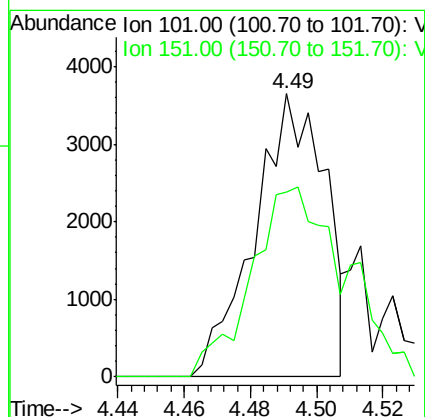
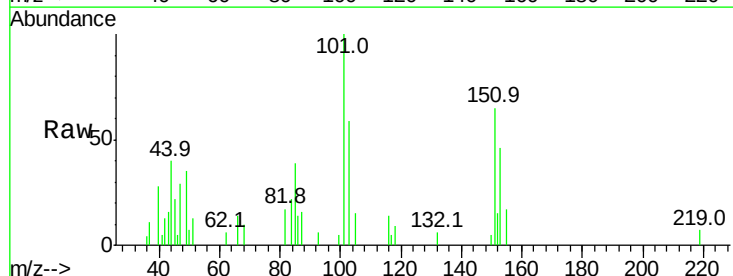
#11  
 Trichlorofluoromethane  
 Concen: 0.21 ppbv  
 RT: 3.96  
 Delta R.T. MSVOA\_1  
 Lab File: ClientSampleId :  
 Acq: 1 Mar 2022 19:50

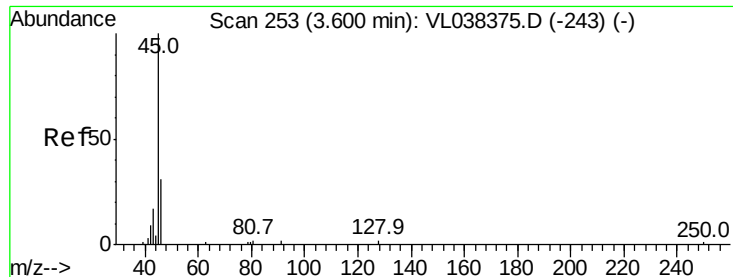
Tgt Ion:101 Resp: 28033  
 Ion Ratio Lower Upper  
 101 100  
 103 57.6 55.0 82.4



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 0.06 ppbv  
 RT: 4.49 min Scan# 530  
 Delta R.T. 0.02 min  
 Lab File: VL038458.D  
 Acq: 1 Mar 2022 19:50

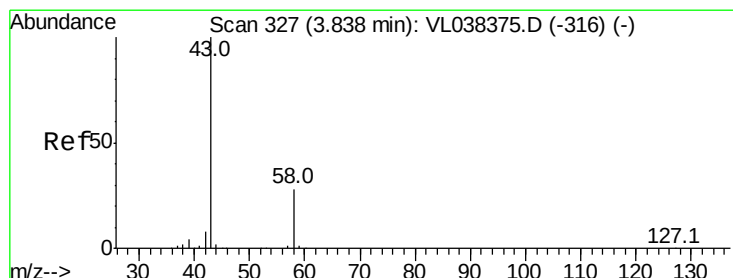
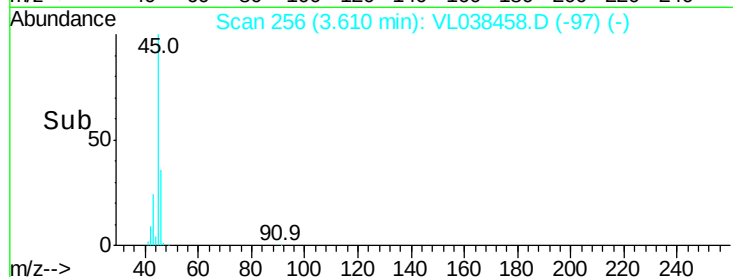
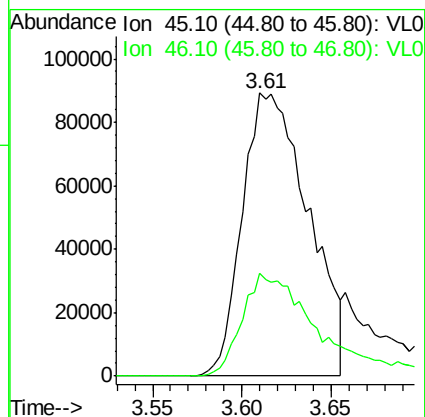
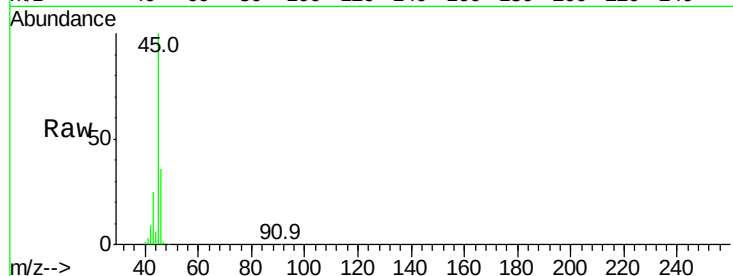
Tgt Ion:101 Resp: 5386  
 Ion Ratio Lower Upper  
 101 100  
 151 92.2 55.9 83.9#





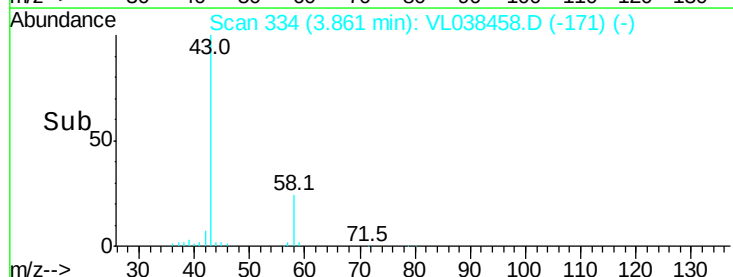
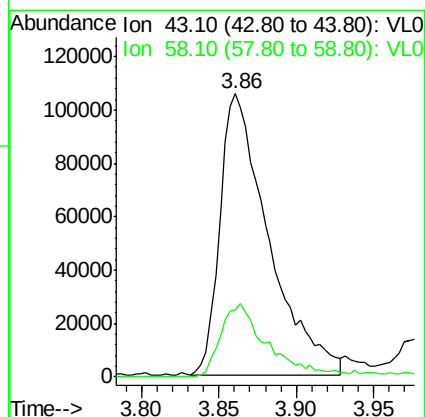
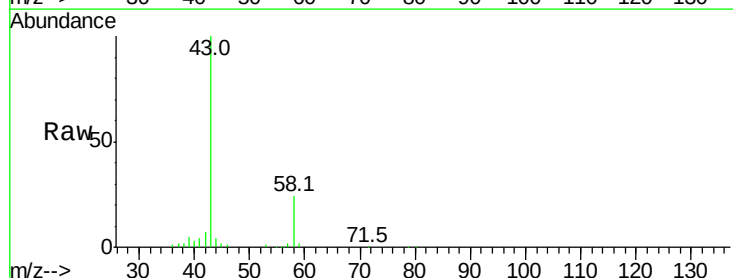
#13  
Ethanol  
Concen: 45.32 ppbv  
RT: 3.61  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 1 Mar 2022 19:50

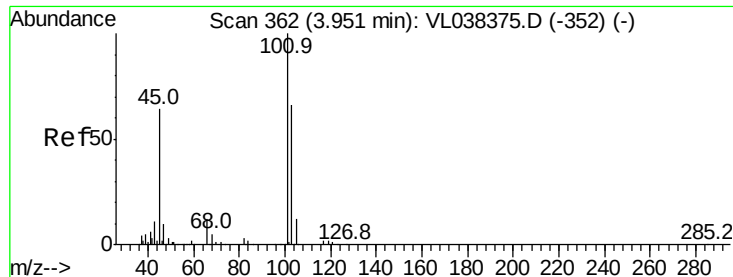
Tgt Ion: 45 Resp: 230153  
Ion Ratio Lower Upper  
45 100  
46 45.6 18.2 72.8



#15  
Acetone  
Concen: 3.10 ppbv  
RT: 3.86 min Scan# 334  
Delta R.T. 0.02 min  
Lab File: VL038458.D  
Acq: 1 Mar 2022 19:50

Tgt Ion: 43 Resp: 229880  
Ion Ratio Lower Upper  
43 100  
58 25.4 21.7 32.5





#19

Isopropyl Alcohol

Concen: 3.16 ppbv

RT: 3.98 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

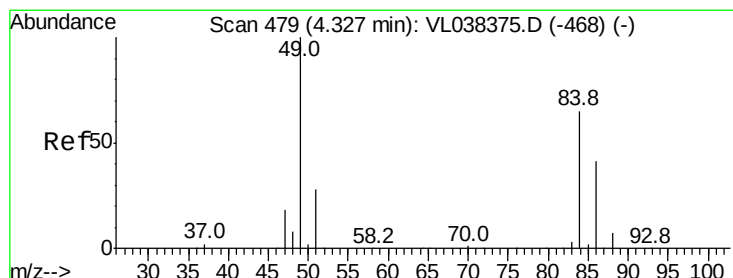
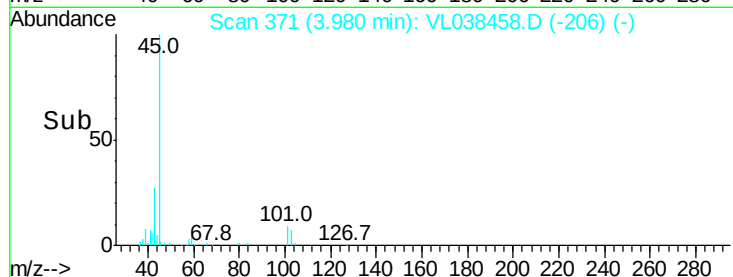
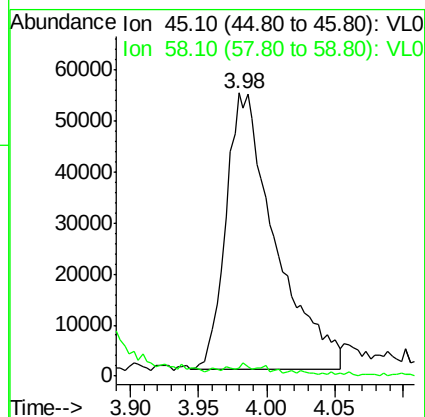
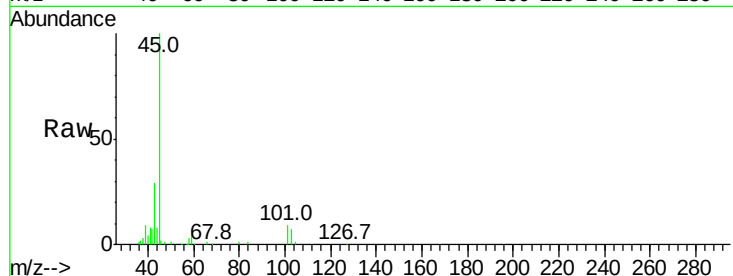
Acq: 1 Mar 2022 19:50

Tgt Ion: 45 Resp: 135878

Ion Ratio Lower Upper

45 100

58 4.7 1.8 2.8#



#20

Methylene Chloride

Concen: 3.58 ppbv

RT: 4.35 min Scan# 487

Delta R.T. 0.03 min

Lab File: VL038458.D

Acq: 1 Mar 2022 19:50

Tgt Ion: 84 Resp: 131529

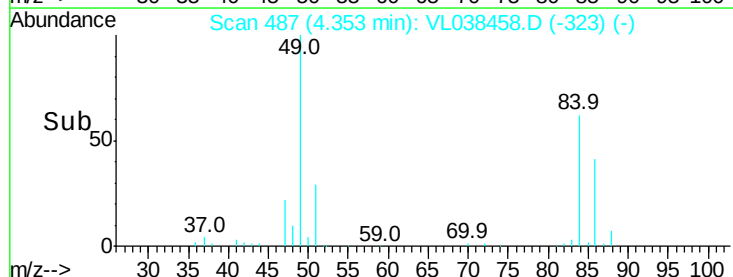
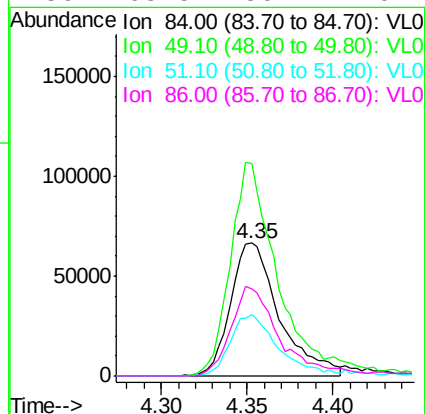
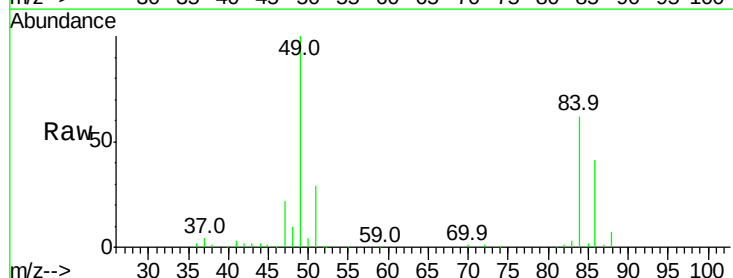
Ion Ratio Lower Upper

84 100

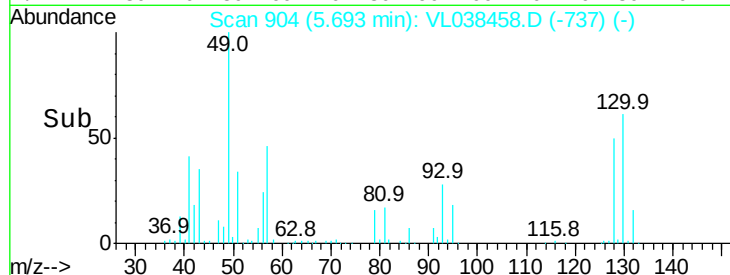
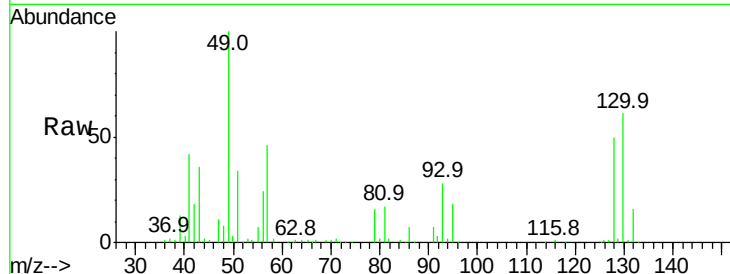
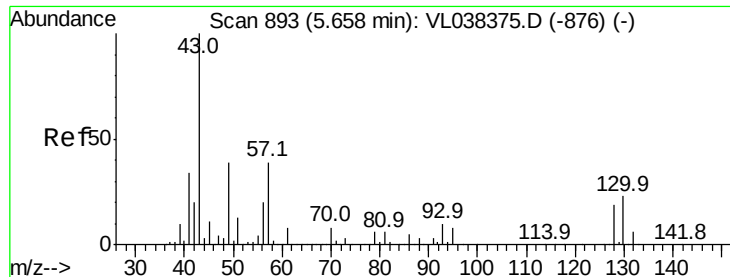
49 159.4 122.4 183.6

51 46.2 33.3 49.9

86 65.5 50.7 76.1

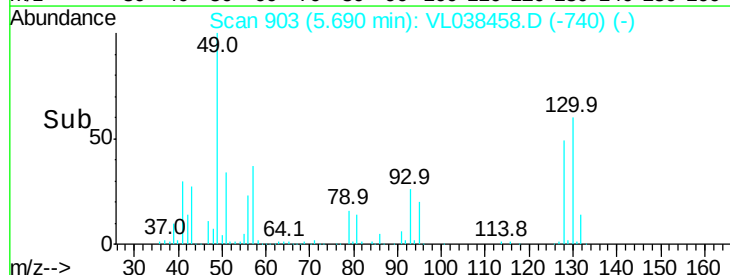
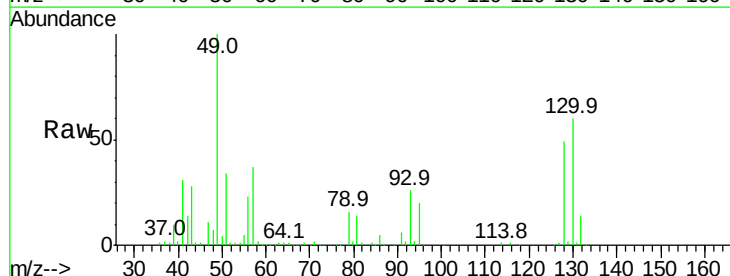
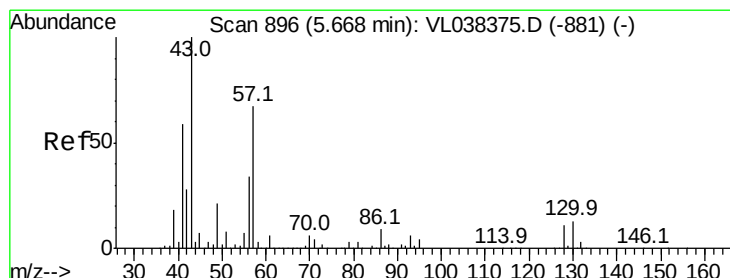
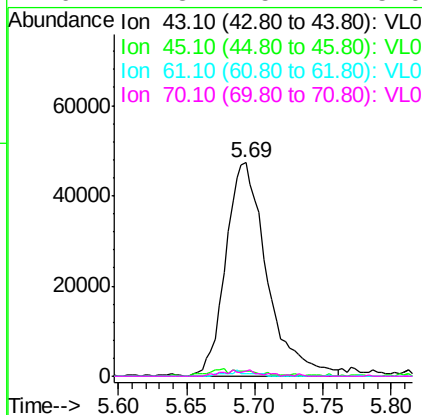






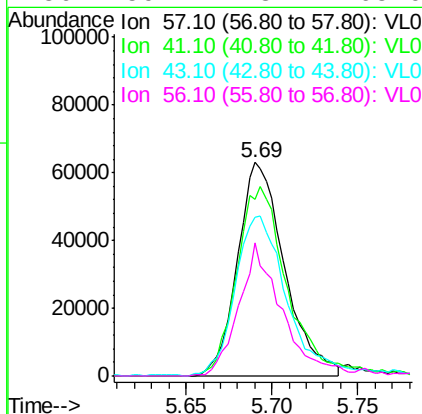
#25  
Ethyl Acetate  
Concen: 0.50 ppbv  
RT: 5.69  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId :  
Acq: 1 Mar 2022 19:50

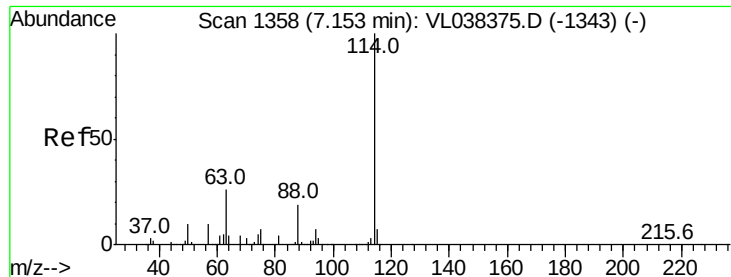
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 99548 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 4.1   | 7.8   | 11.6# |
| 61       | 1.4   | 7.5   | 11.3# |
| 70       | 2.3   | 5.4   | 8.0#  |



#26  
Hexane  
Concen: 1.33 ppbv  
RT: 5.69 min Scan# 903  
Delta R.T.: 0.02 min  
Lab File: VL038458.D  
Acq: 1 Mar 2022 19:50

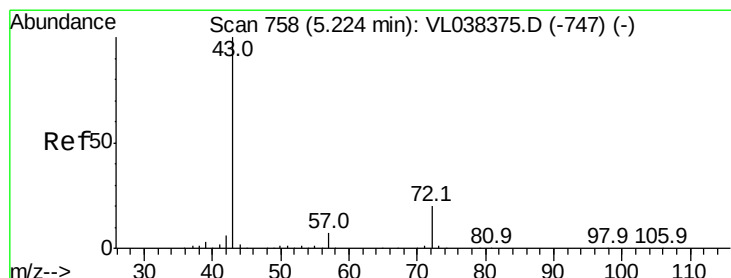
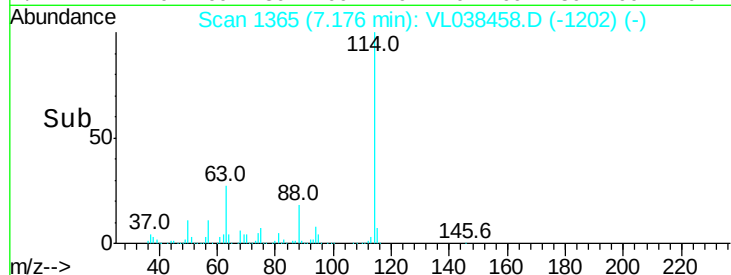
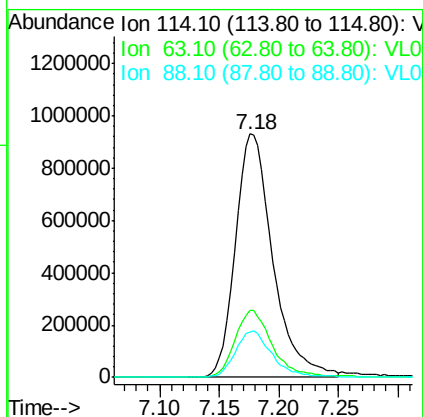
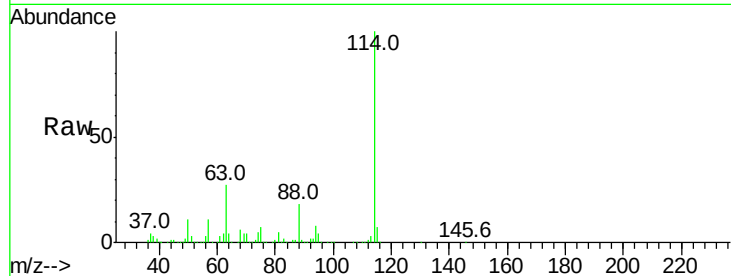
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 120109 |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 97.7  | 73.1  | 109.7  |
| 43       | 86.6  | 181.0 | 271.4# |
| 56       | 59.2  | 43.4  | 65.0   |





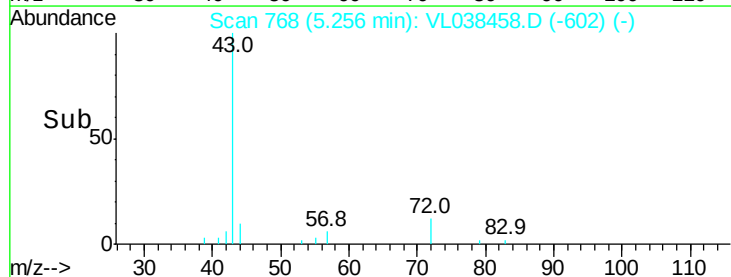
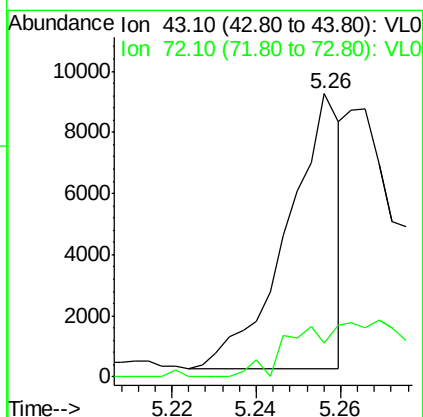
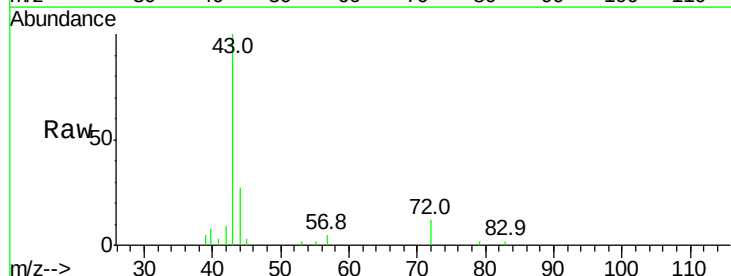
#33  
 1,4-Difluorobenzene  
 Concen: 10.00 ppbv  
 RT: 7.18  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 1 Mar 2022 19:50

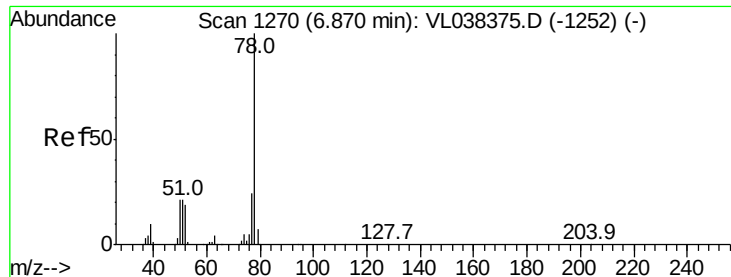
Tgt Ion: 114 Resp: 2029925  
 Ion Ratio Lower Upper  
 114 100  
 63 28.0 22.2 33.2  
 88 19.1 15.2 22.8



#34  
 2-Butanone  
 Concen: 0.12 ppbv  
 RT: 5.26 min Scan# 768  
 Delta R.T. 0.03 min  
 Lab File: VL038458.D  
 Acq: 1 Mar 2022 19:50

Tgt Ion: 43 Resp: 7890  
 Ion Ratio Lower Upper  
 43 100  
 72 13.2 17.4 26.2#





#36

Benzene

Concen: 0.27 ppbv

RT: 6.89 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

Acq: 1 Mar 2022 19:50

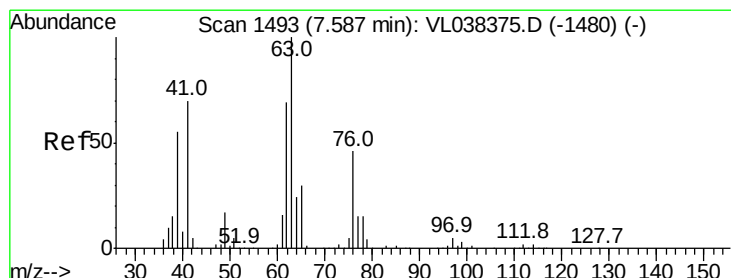
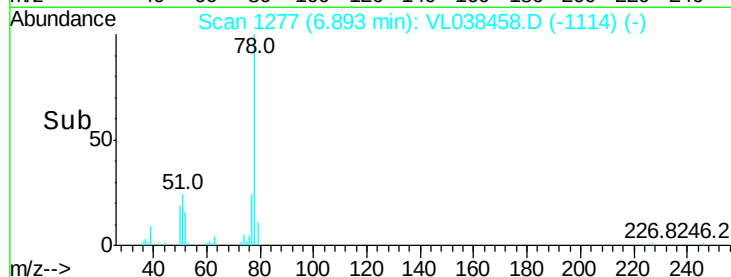
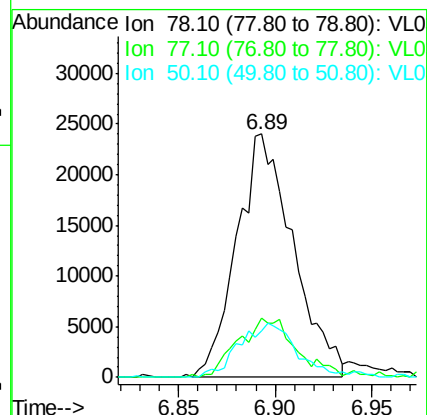
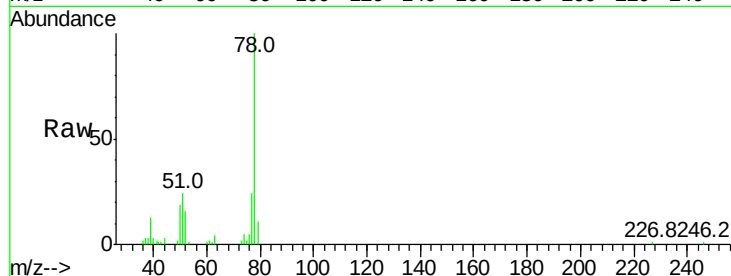
Tgt Ion: 78 Resp: 48575

Ion Ratio Lower Upper

78 100

77 23.4 19.0 28.6

50 19.2 16.6 24.8



#39

1,2-Dichloropropane

Concen: 7.69 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.41 min

Lab File: VL038458.D

Acq: 1 Mar 2022 19:50

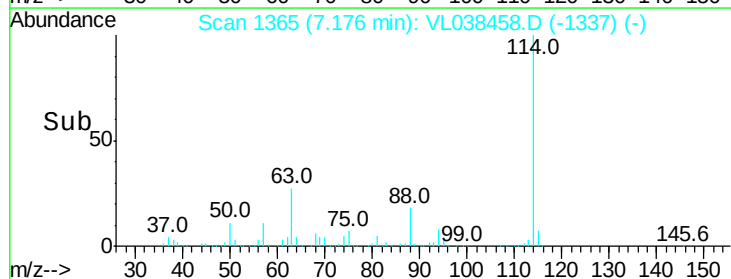
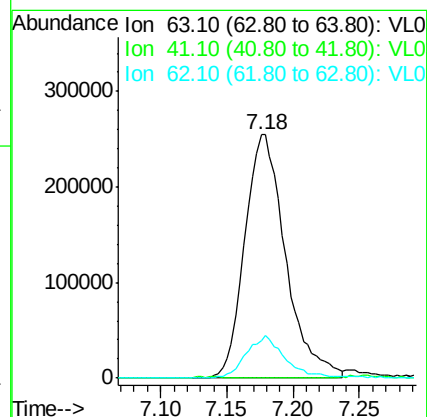
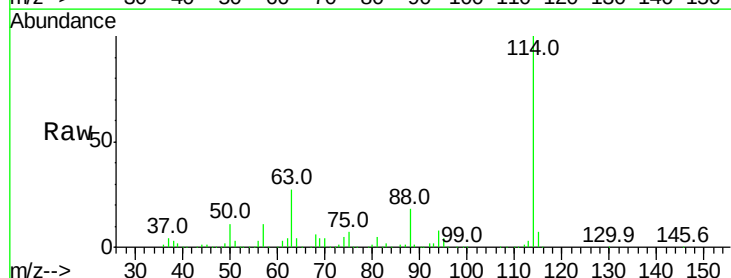
Tgt Ion: 63 Resp: 547058

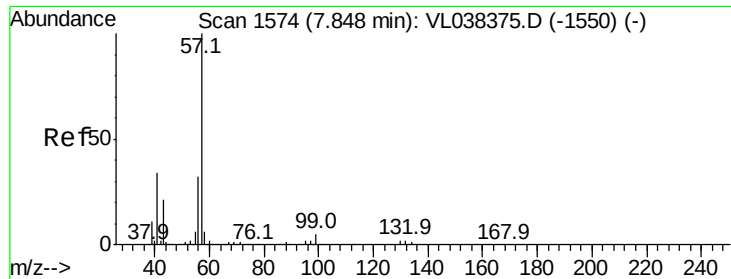
Ion Ratio Lower Upper

63 100

41 0.0 56.1 84.1#

62 15.5 55.5 83.3#





#44

2,2,4-Trimethylpentane

Concen: 0.05 ppbv

RT: 7.87 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

Acq: 1 Mar 2022 19:50

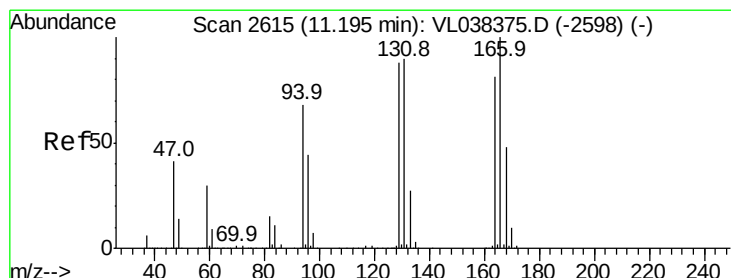
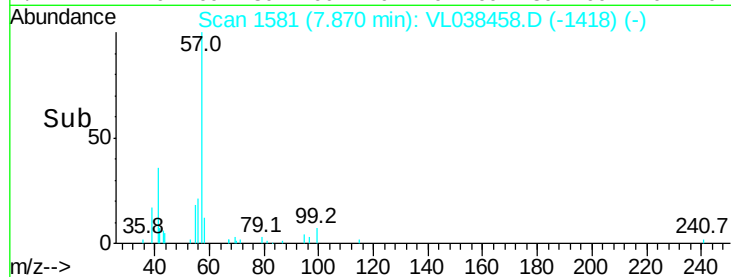
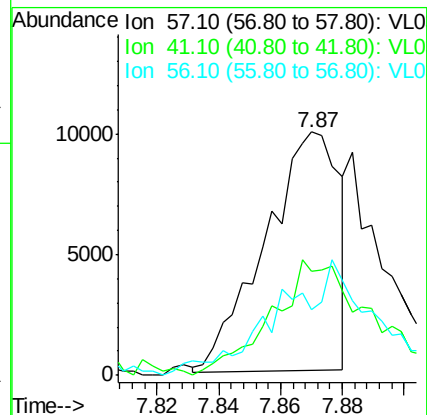
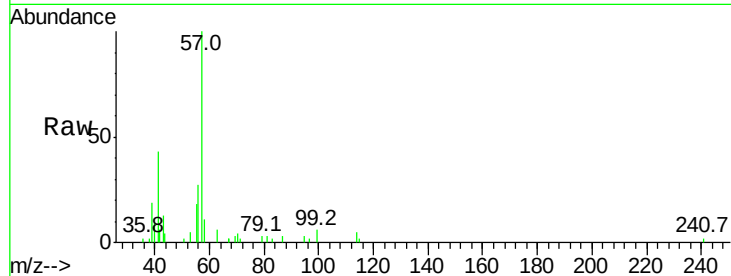
Tgt Ion: 57 Resp: 16485

Ion Ratio Lower Upper

57 100

41 69.1 26.6 39.8#

56 0.0 25.0 37.6#



#52

Tetrachloroethene

Concen: 0.06 ppbv

RT: 11.23 min Scan# 2625

Delta R.T. 0.03 min

Lab File: VL038458.D

Acq: 1 Mar 2022 19:50

Tgt Ion: 164 Resp: 3328

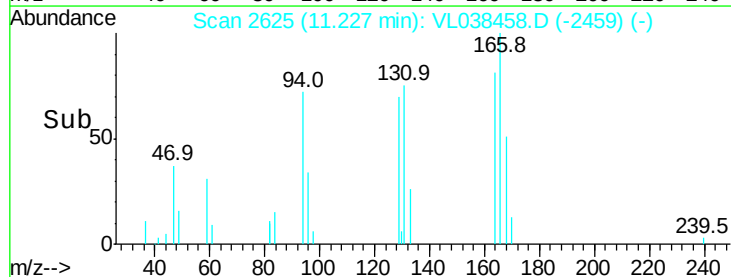
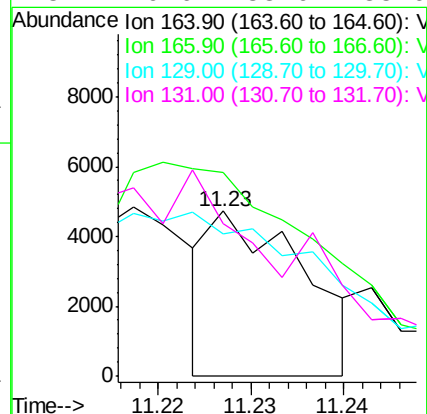
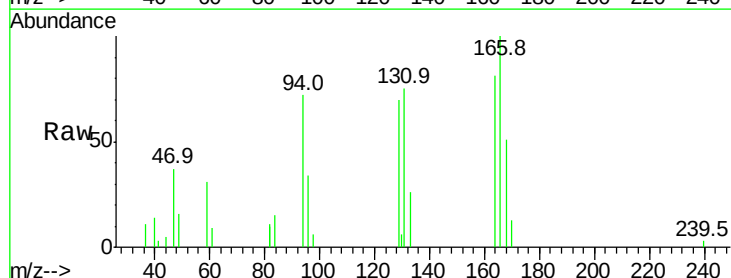
Ion Ratio Lower Upper

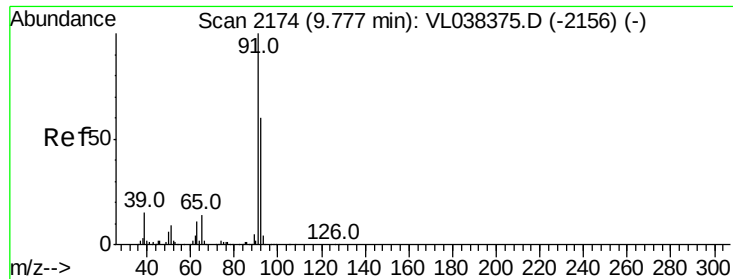
164 100

166 97.4 98.6 148.0#

129 50.3 86.9 130.3#

131 70.6 88.6 133.0#





#53

Toluene

Concen: 0.28 ppbv

RT: 9.81 Instrument: MSVOA\_1

Delta R.T.

Lab File: ClientSampleId:

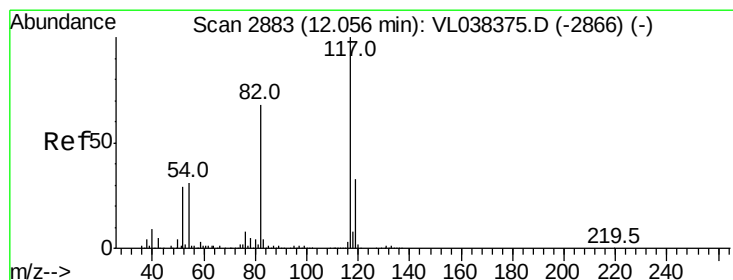
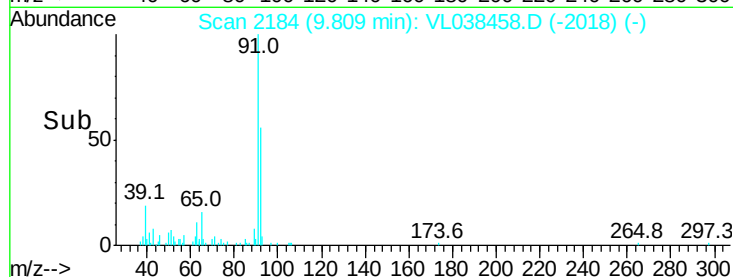
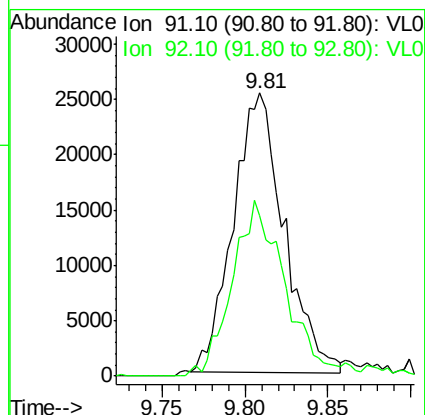
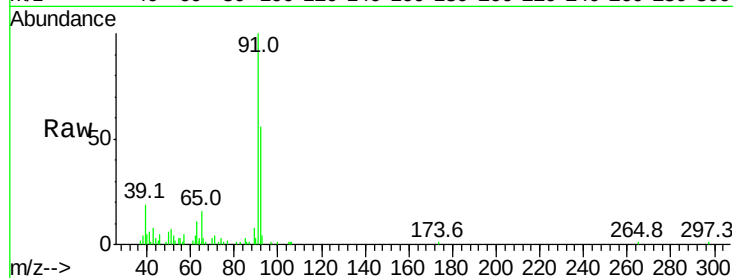
Acq: 1 Mar 2022 19:50

Tgt Ion: 91 Resp: 54213

Ion Ratio Lower Upper

91 100

92 65.0 48.2 72.4



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.09 min Scan# 2892

Delta R.T. 0.03 min

Lab File: VL038458.D

Acq: 1 Mar 2022 19:50

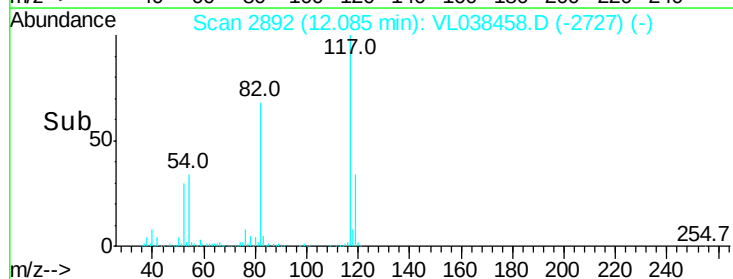
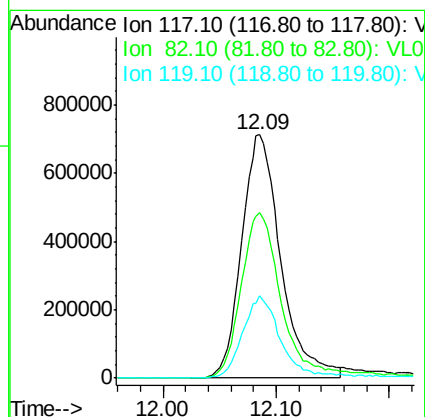
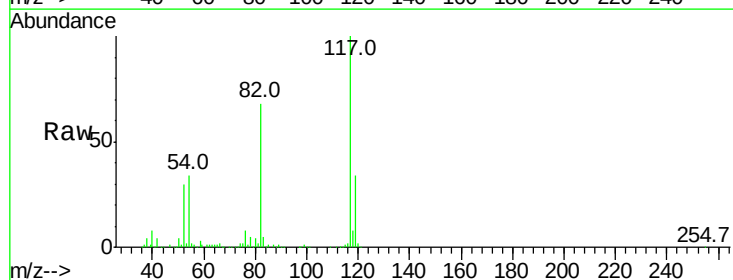
Tgt Ion: 117 Resp: 1717657

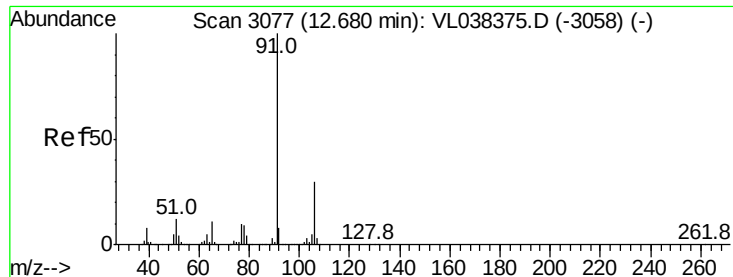
Ion Ratio Lower Upper

117 100

82 74.1 54.9 82.3

119 34.5 46.1 69.1#





#58

Ethyl Benzene

Concen: 0.04 ppbv

RT: 12.96

Delta R.T. MSVOA\_1

Lab File: ClientSampleId :

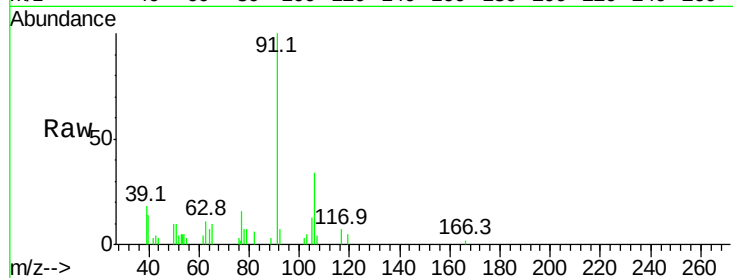
Acq: 1 Mar 2022 19:50

Tgt Ion: 91 Resp: 8630

Ion Ratio Lower Upper

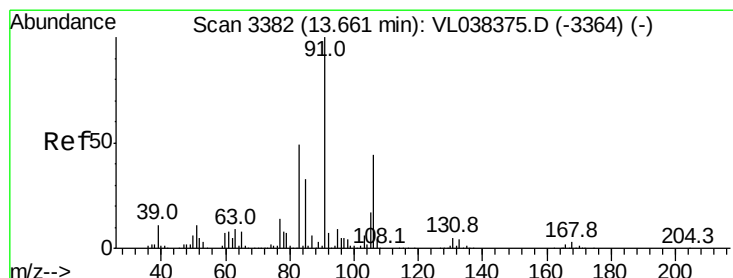
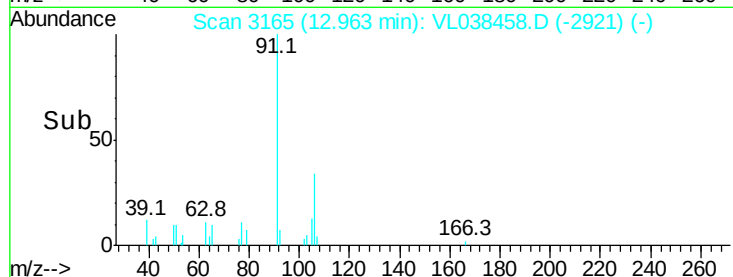
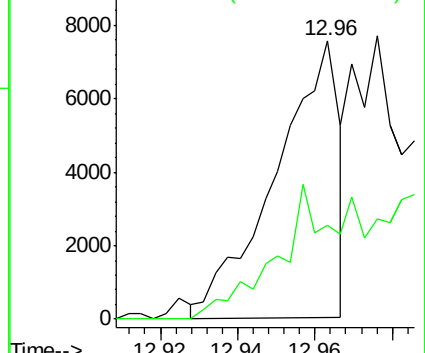
91 100

106 35.4 24.0 36.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 0.03 ppbv

RT: 13.69 min Scan# 3391

Delta R.T. 0.03 min

Lab File: VL038458.D

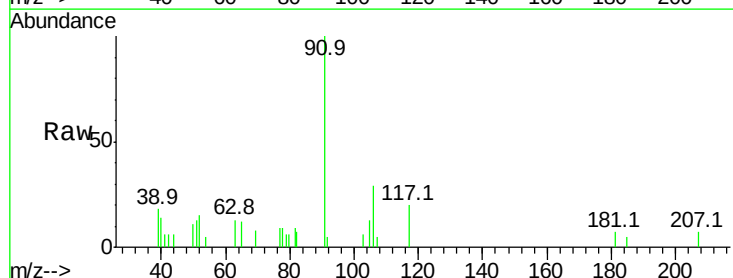
Acq: 1 Mar 2022 19:50

Tgt Ion: 91 Resp: 6603

Ion Ratio Lower Upper

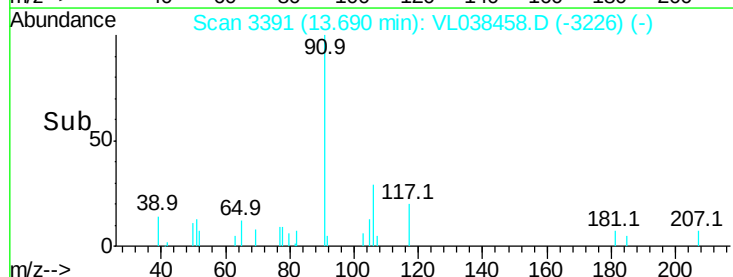
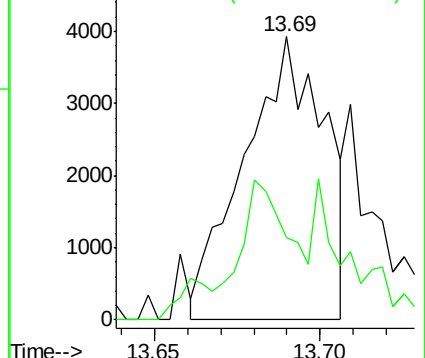
91 100

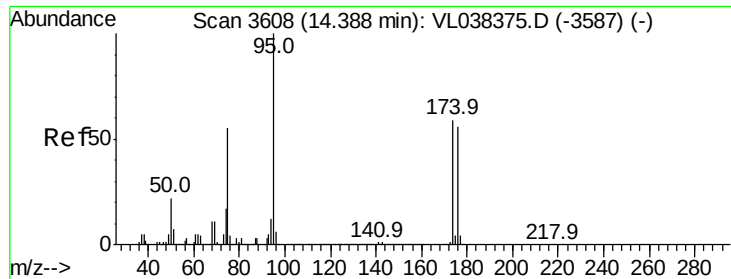
106 0.0 21.9 65.5#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#68

1-Bromo-4-Fluorobenzene

Concen: 9.31 ppbv

RT: 14.41 Instrument:

Delta R.T MSVOA\_L

Lab File: ClientSampleId :

Acq: 1 Mar 2022 19:30

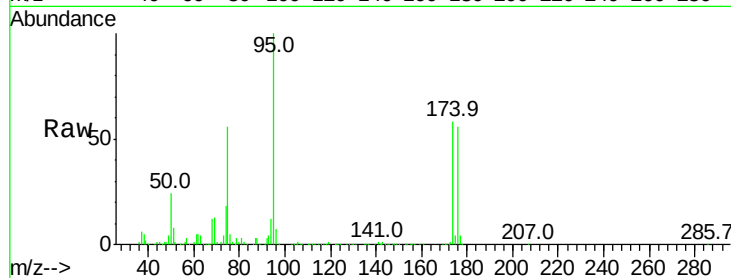
Tgt Ion: 95 Resp: 1322651

Ion Ratio Lower Upper

95 100

174 63.8 49.0 73.4

175 4.6 3.6 5.4



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

