

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL041322\  
 Data File : VL038907.D  
 Acq On : 13 Apr 2022 17:35  
 Operator : SY/AP  
 Sample : N2383-01  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 1

Quant Time: Apr 14 08:24:25 2022  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Apr 06 06:12:53 2022  
 QLast Update : Wed Apr 06 06:12:53 2022  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.67  | 49   | 1026538  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.18  | 114  | 2422011  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.09 | 117  | 2057524  | 10.00 | ppbv  | 0.01     |

System Monitoring Compounds

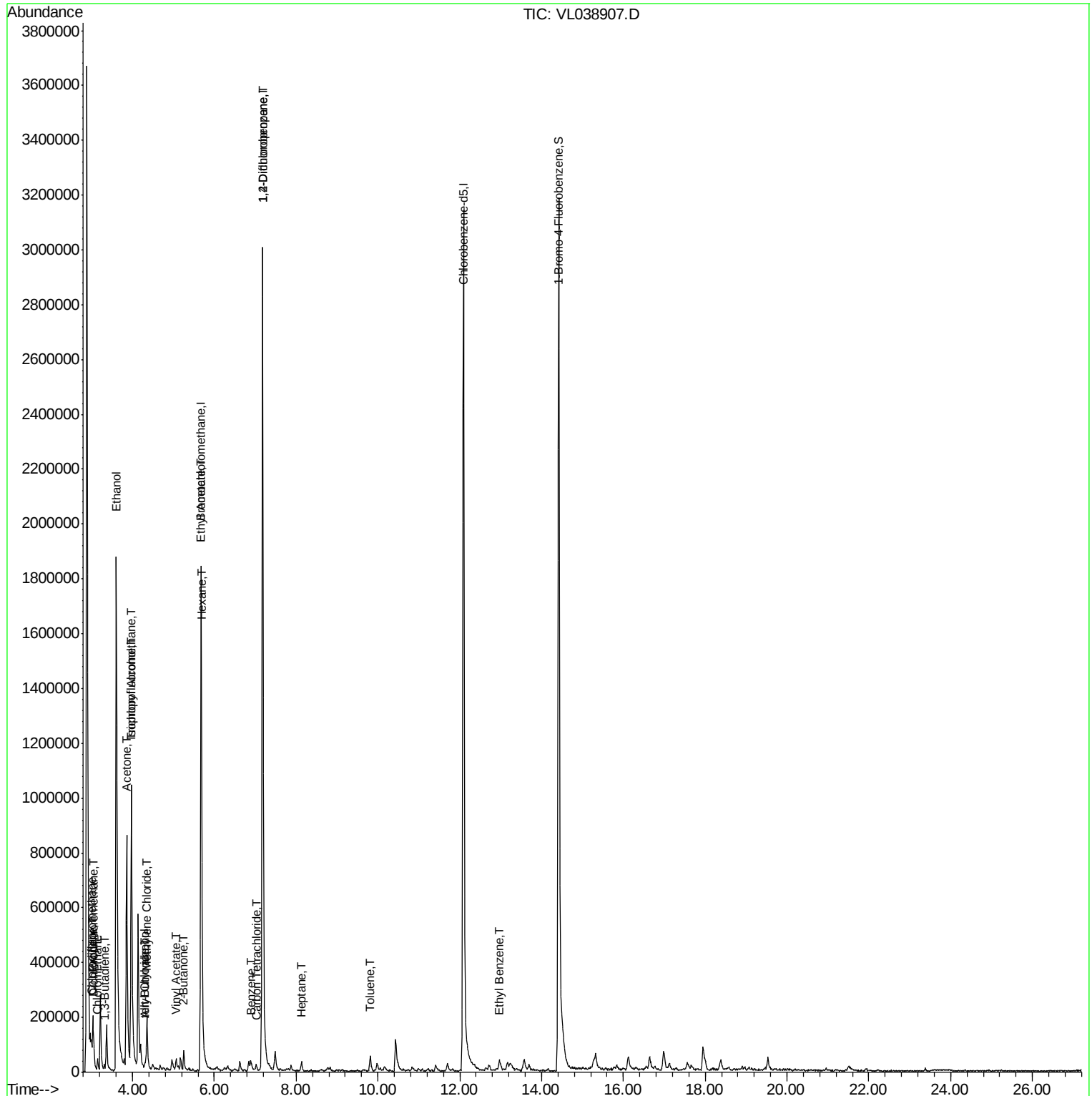
|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.42  | 95    | 1719087  | 11.01    | ppbv | 0.01    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 110.10% |

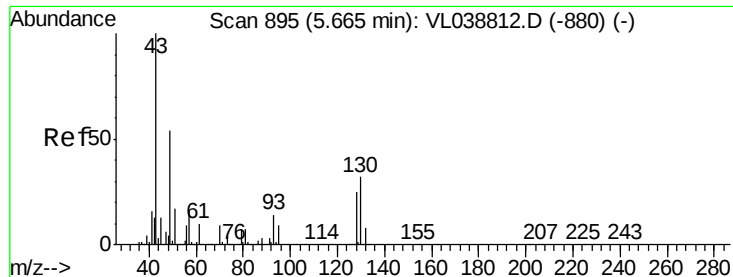
| Target Compounds           | R.T.  | QIon | Response | Conc    | Units  | Ovalue |
|----------------------------|-------|------|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane | 3.05  | 85   | 50164    | 0.345   | ppbv   | 98     |
| 3) Chlorodifluoromethane   | 3.00  | 51   | 169564   | 1.353   | ppbv # | 90     |
| 4) Chloromethane           | 3.14  | 50   | 18691    | 0.288   | ppbv   | 99     |
| 9) Propene                 | 3.03  | 41   | 41195    | 0.621   | ppbv # | 69     |
| 10) Heptane                | 8.13  | 43   | 10533    | 0.063   | ppbv # | 70     |
| 11) Trichlorofluoromethane | 3.96  | 101  | 46934    | 0.401   | ppbv   | 95     |
| 13) Ethanol                | 3.60  | 45   | 2507606  | 622.524 | ppbv # | 100    |
| 15) Acetone                | 3.85  | 43   | 1099075  | 10.754  | ppbv   | 99     |
| 16) 1,3-Butadiene          | 3.31  | 39   | 2554     | 0.044   | ppbv # | 81     |
| 17) tert-Butyl alcohol     | 4.30  | 59   | 4768     | 0.052   | ppbv # | 72     |
| 19) Isopropyl Alcohol      | 3.97  | 45   | 1246802  | 23.869  | ppbv # | 100    |
| 20) Methylene Chloride     | 4.35  | 84   | 42361    | 1.143   | ppbv   | 96     |
| 21) Allyl Chloride         | 4.30  | 41   | 2553     | 0.033   | ppbv # | 1      |
| 23) Vinyl Acetate          | 5.08  | 43   | 11489    | 0.115   | ppbv # | 90     |
| 25) Ethyl Acetate          | 5.69  | 43   | 76423    | 0.295   | ppbv # | 89     |
| 26) Hexane                 | 5.69  | 57   | 86986    | 0.737   | ppbv # | 46     |
| 34) 2-Butanone             | 5.25  | 43   | 88256    | 0.922   | ppbv # | 88     |
| 35) Carbon Tetrachloride   | 7.02  | 117  | 4591     | 0.032   | ppbv # | 63     |
| 36) Benzene                | 6.90  | 78   | 21265    | 0.097   | ppbv # | 69     |
| 39) 1,2-Dichloropropane    | 7.18  | 63   | 657824   | 7.806   | ppbv # | 27     |
| 53) Toluene                | 9.81  | 91   | 20871    | 0.082   | ppbv # | 20     |
| 58) Ethyl Benzene          | 12.97 | 91   | 16219    | 0.053   | ppbv   | 93     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL041322\  
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Sample : N2383-01  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 08:24:25 2022  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_LWed Apr 06 06:12:53 2022  
QLast Update : Wed Apr 06 06:12:53 2022  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 13 Apr 2022 17:35

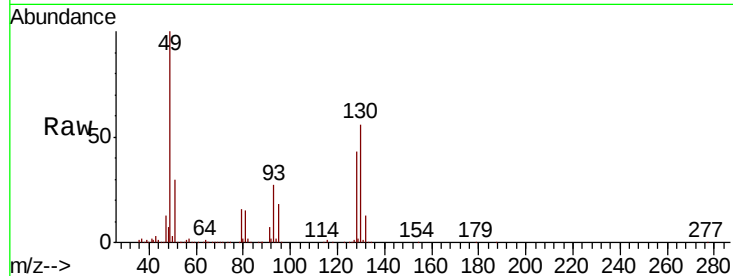
Tot Ion: 49 Resp: 1026538

Ion Ratio Lower Upper

49 100

128 45.4 24.1 72.3

130 58.4 30.9 92.8



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

5.67

600000

500000

400000

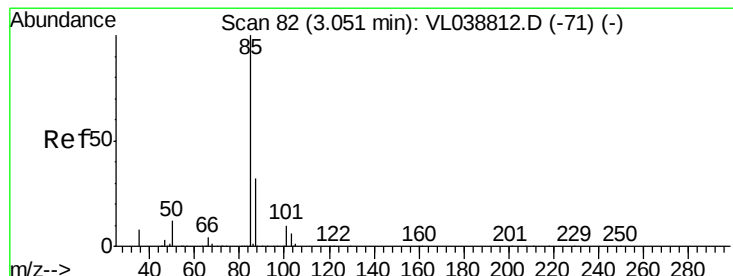
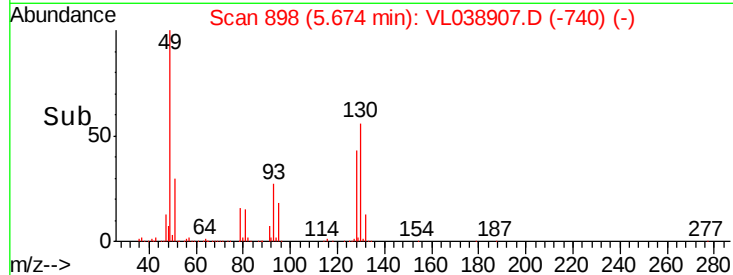
300000

200000

100000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 0.345 ppbv

RT: 3.05 min Scan# 83

Delta R.T. 0.00 min

Lab File: VL038907.D

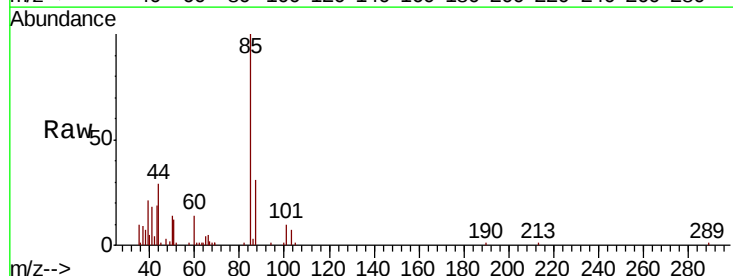
Acq: 13 Apr 2022 17:35

Tgt Ion: 85 Resp: 50164

Ion Ratio Lower Upper

85 100

87 31.3 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.05

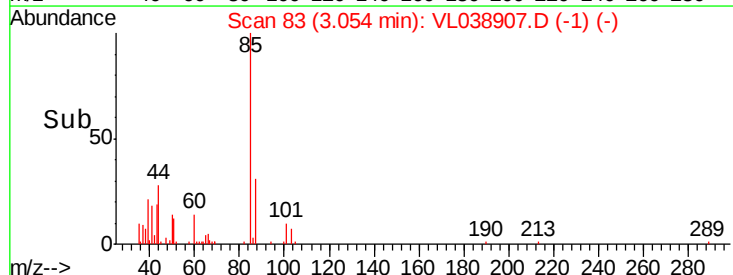
30000

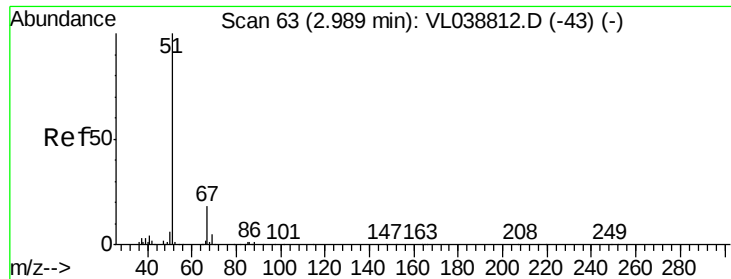
20000

10000

0

Time-->





#3

Chlorodifluoromethane

Concen: 1.353 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

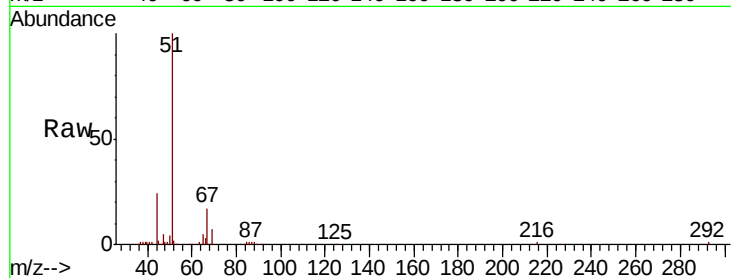
Acq: 13 Apr 2022 17:35

Tot Ion: 51 Resp: 169564

Ion Ratio Lower Upper

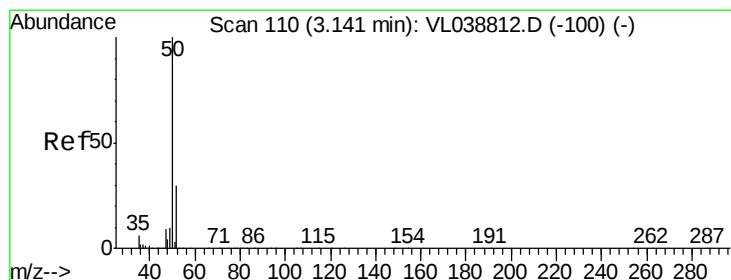
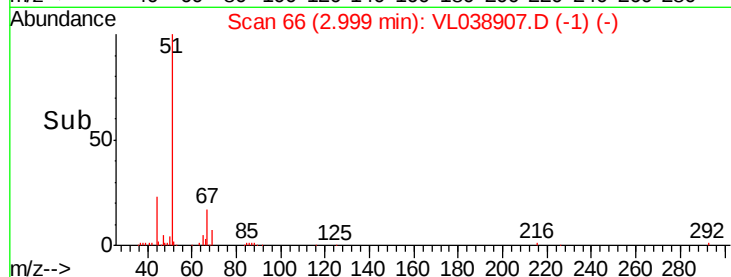
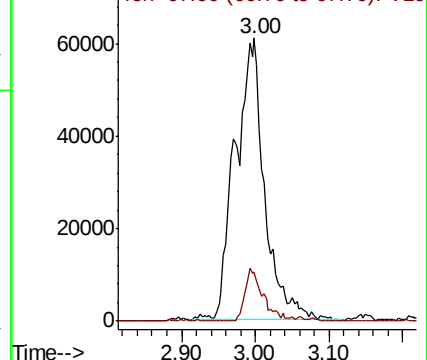
51 100

67 12.3 13.4 20.0#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.288 ppbv

RT: 3.14 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL038907.D

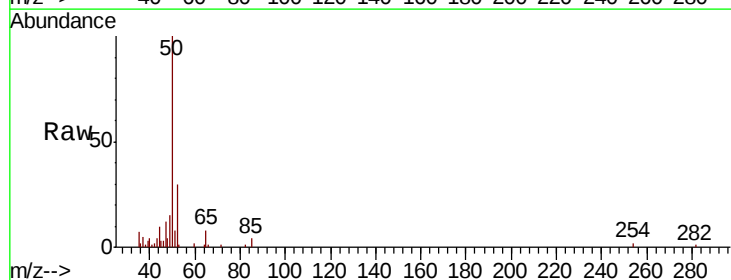
Acq: 13 Apr 2022 17:35

Tgt Ion: 50 Resp: 18691

Ion Ratio Lower Upper

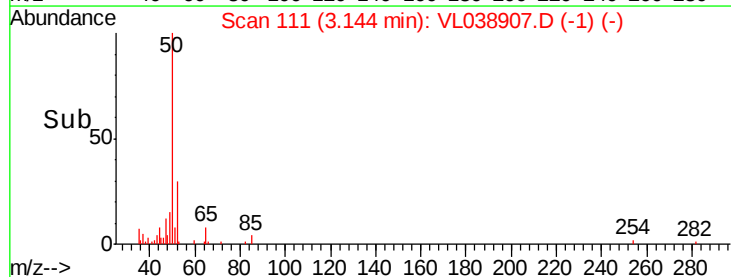
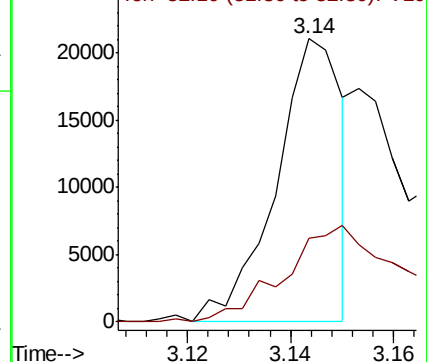
50 100

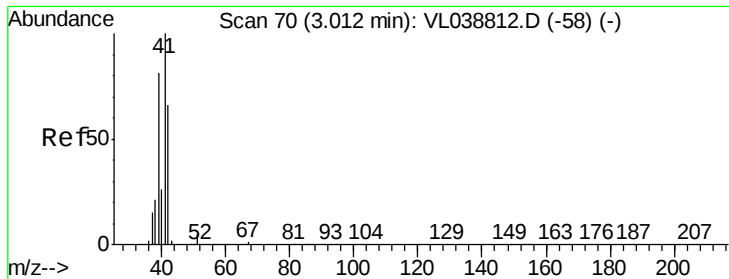
52 29.8 24.3 36.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.621 ppbv

RT: 3.03 Instrument :

Delta R.T. MSVOA\_1

Lab File: ClientSampleId :

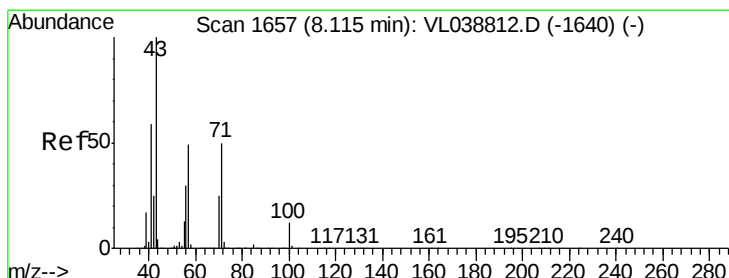
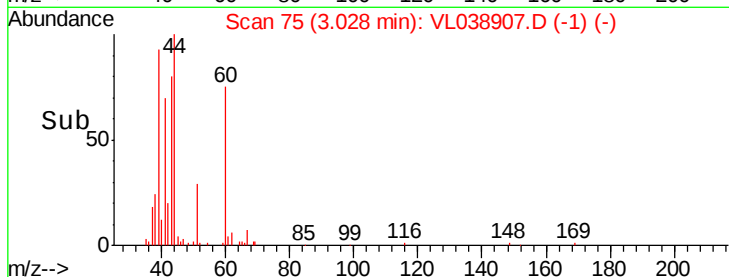
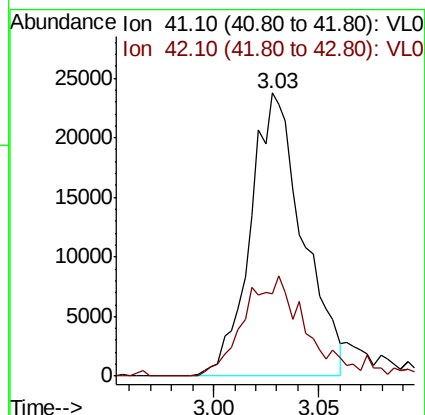
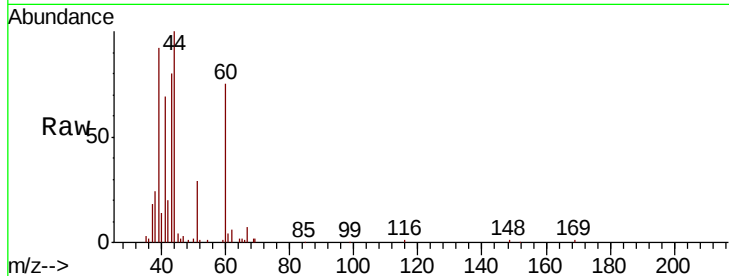
Acq: 13 Apr 2022 17:35

Tot Ion: 41 Resp: 41195

Ion Ratio Lower Upper

41 100

42 42.5 54.2 81.4#



#10

Heptane

Concen: 0.063 ppbv

RT: 8.13 min Scan# 1662

Delta R.T. 0.02 min

Lab File: VL038907.D

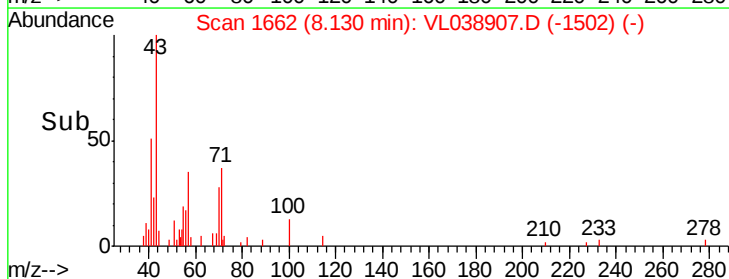
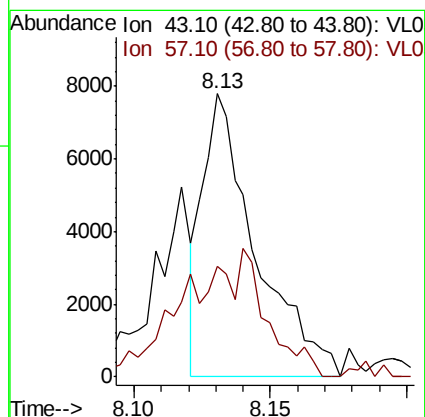
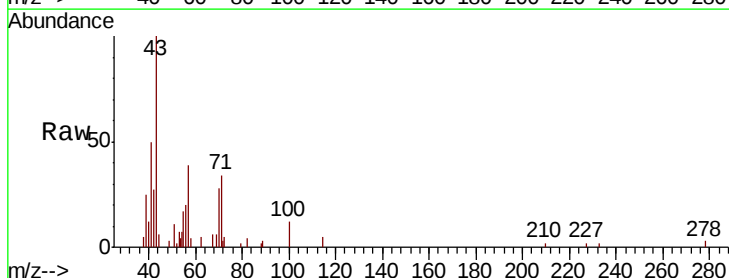
Acq: 13 Apr 2022 17:35

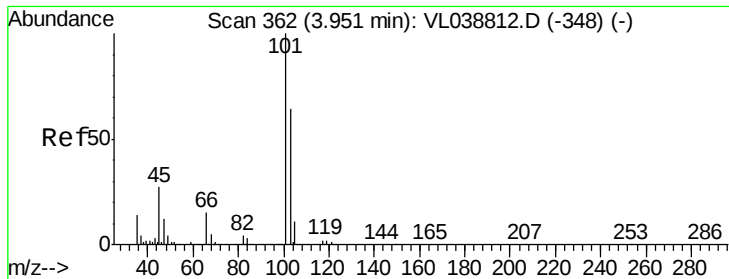
Tgt Ion: 43 Resp: 10533

Ion Ratio Lower Upper

43 100

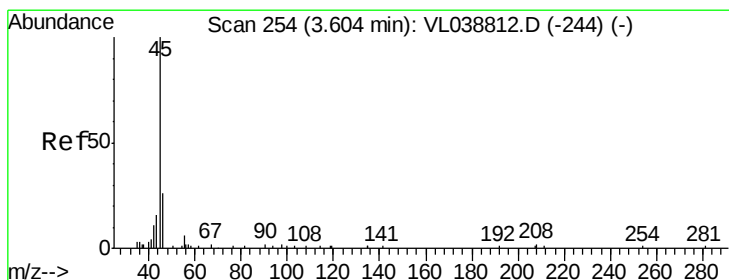
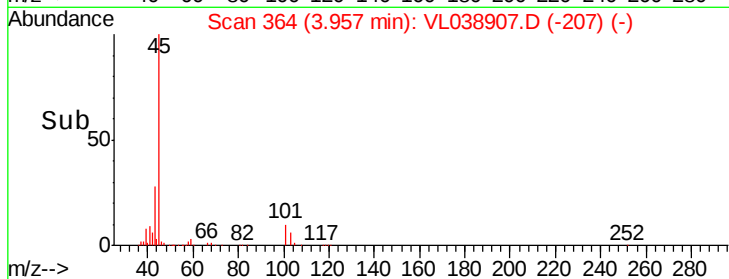
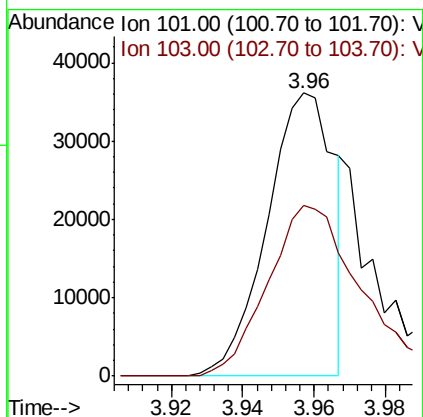
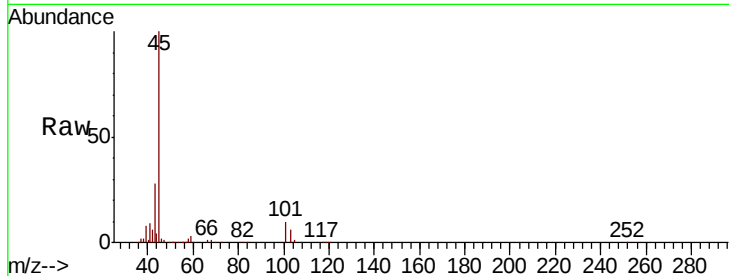
57 69.6 39.3 58.9#





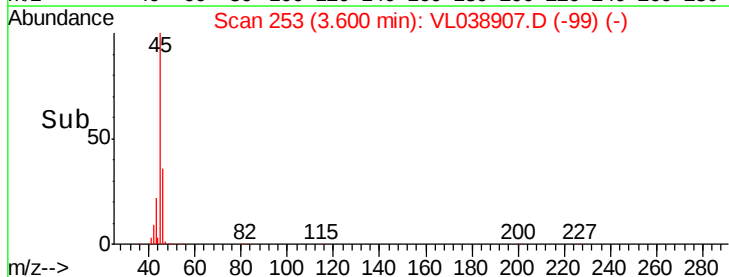
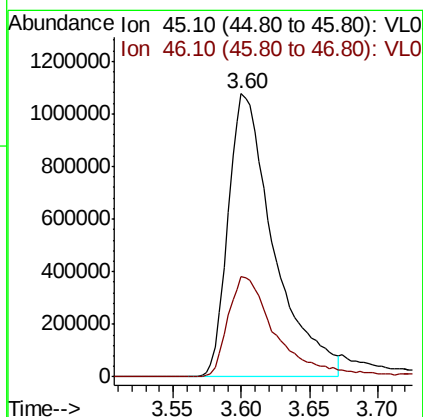
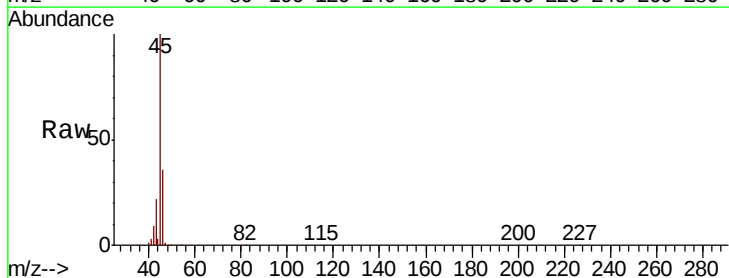
#11  
 Trichlorofluoromethane  
 Concen: 0.401 ppbv  
 RT: 3.96  
 Instrument: MSVOA\_1  
 Delta R.T.:  
 Lab File: ClientSampleId:  
 Acq: 13 Apr 2022 17:35

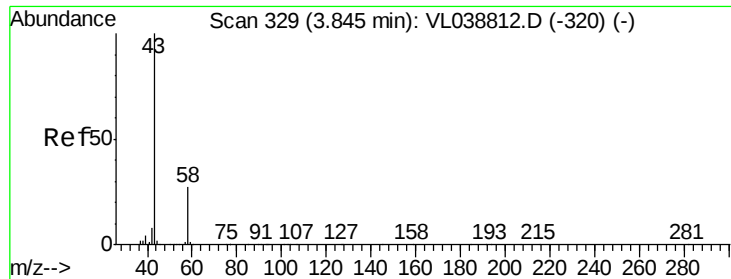
Tot Ion: 101 Resp: 46934  
 Ion Ratio Lower Upper  
 101 100  
 103 60.2 51.4 77.0



#13  
 Ethanol  
 Concen: 622.524 ppbv  
 RT: 3.60 min Scan# 253  
 Delta R.T. -0.00 min  
 Lab File: VL038907.D  
 Acq: 13 Apr 2022 17:35

Tgt Ion: 45 Resp: 2507606  
 Ion Ratio Lower Upper  
 45 100  
 46 38.7 0.0 0.0#





#15

Acetone

Concen: 10.754 ppbv

RT: 3.85 Instrument :

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

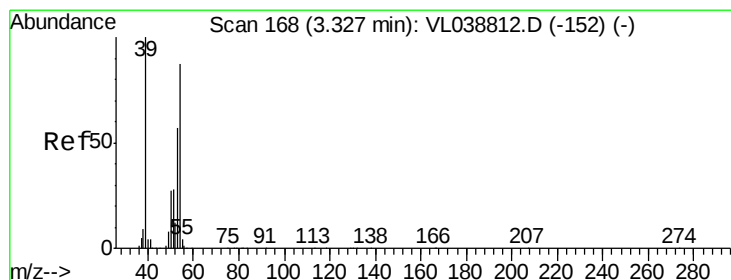
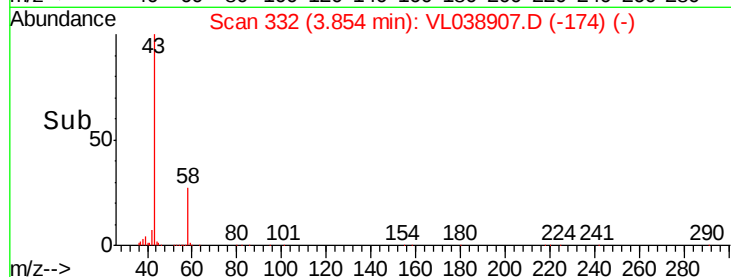
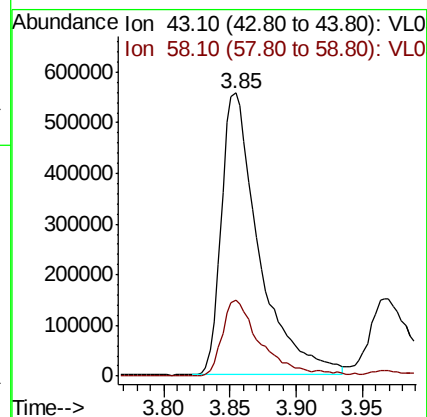
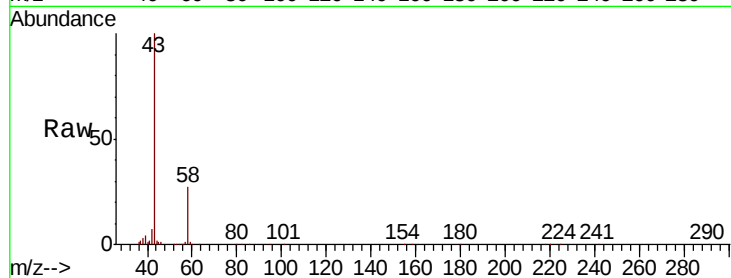
Acq: 13 Apr 2022 17:35

Tot Ion: 43 Resp: 1099075

Ion Ratio Lower Upper

43 100

58 27.8 22.5 33.7



#16

1,3-Butadiene

Concen: 0.044 ppbv

RT: 3.31 min Scan# 164

Delta R.T. -0.01 min

Lab File: VL038907.D

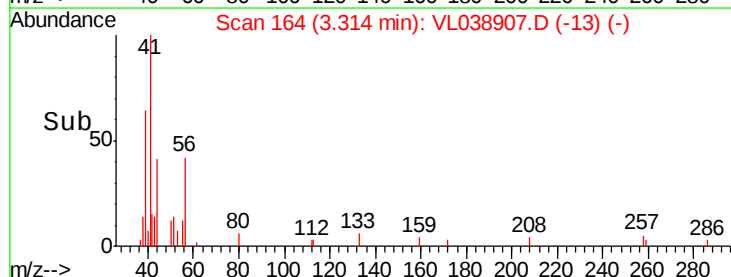
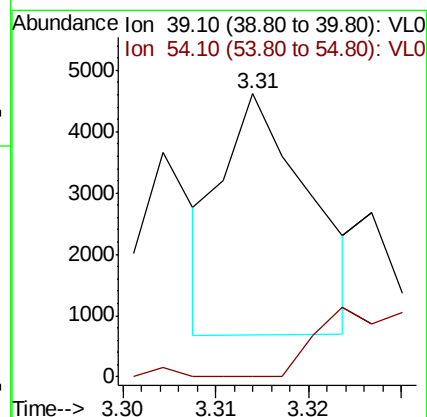
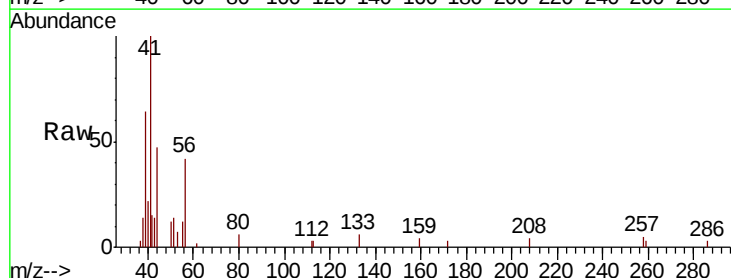
Acq: 13 Apr 2022 17:35

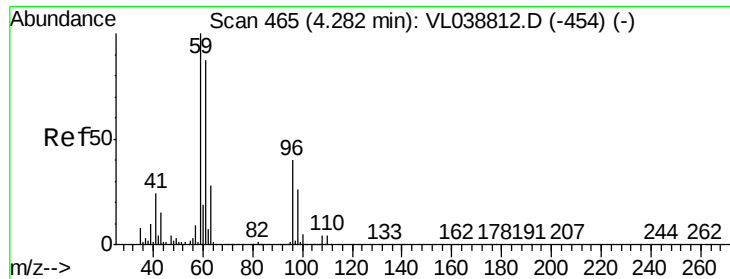
Tgt Ion: 39 Resp: 2554

Ion Ratio Lower Upper

39 100

54 64.4 64.8 97.2#





#17

tert-Butyl alcohol

Concen: 0.052 ppbv

RT: 4.30 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

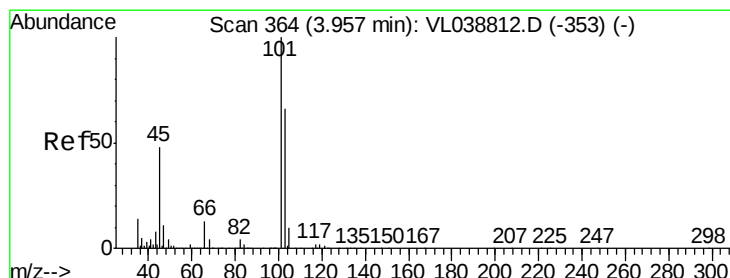
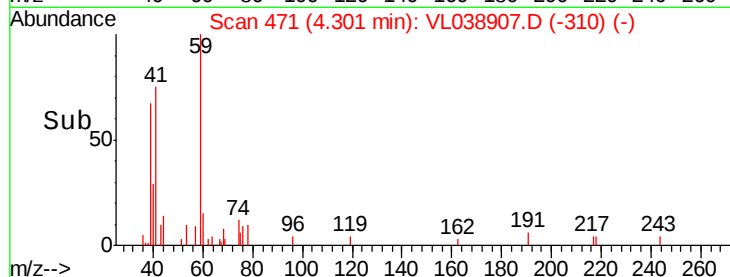
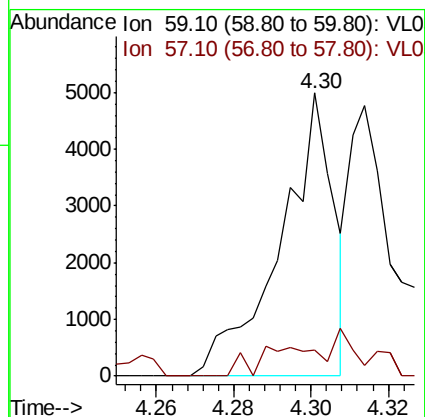
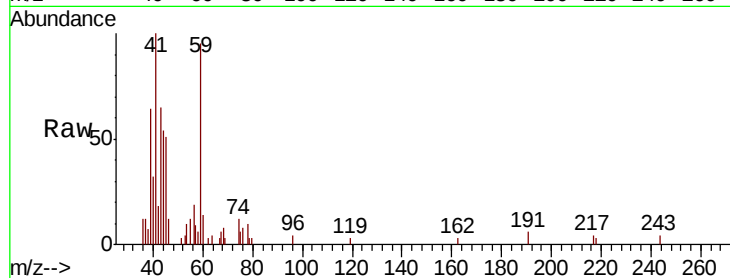
Acq: 13 Apr 2022 17:35

Tot Ion: 59 Resp: 4768

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#



#19

Isopropyl Alcohol

Concen: 23.869 ppbv

RT: 3.97 min Scan# 368

Delta R.T. 0.01 min

Lab File: VL038907.D

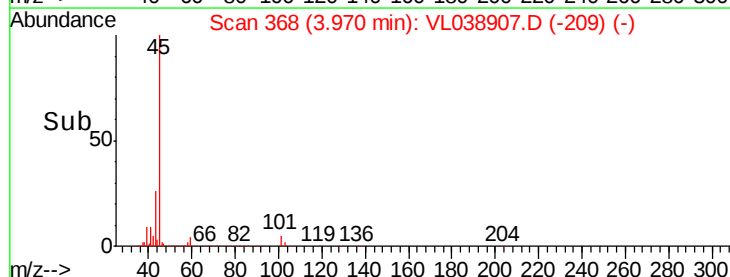
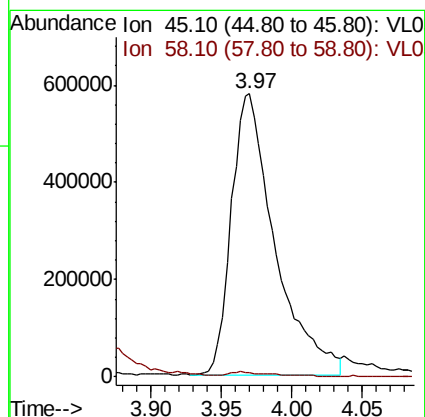
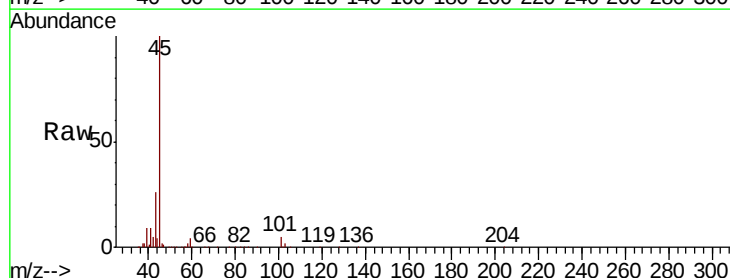
Acq: 13 Apr 2022 17:35

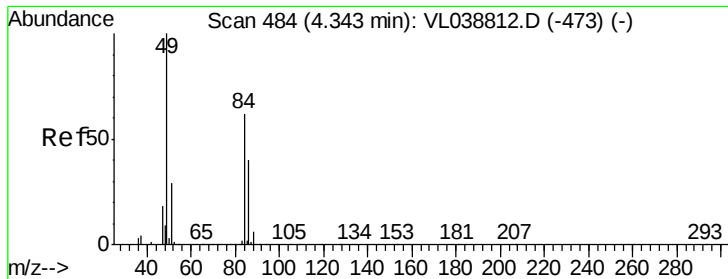
Tgt Ion: 45 Resp: 1246802

Ion Ratio Lower Upper

45 100

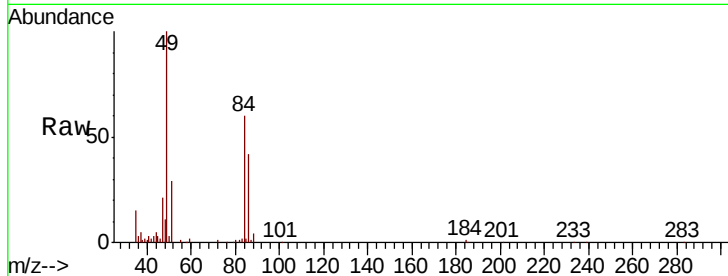
58 2.4 0.0 0.0#





#20  
Methylene Chloride  
Concen: 1.143 ppbv  
RT: 4.35  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 13 Apr 2022 17:35

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 42361 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 166.2 | 129.4 | 194.0 |
| 51       | 43.7  | 37.4  | 56.2  |
| 86       | 67.3  | 51.4  | 77.2  |



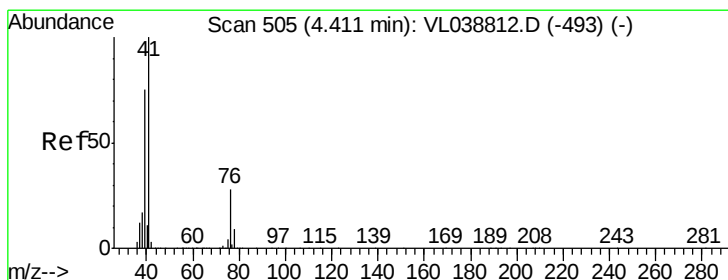
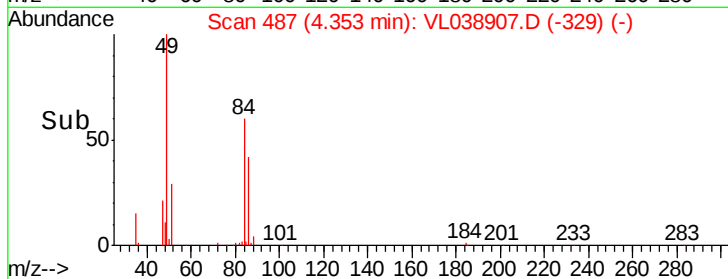
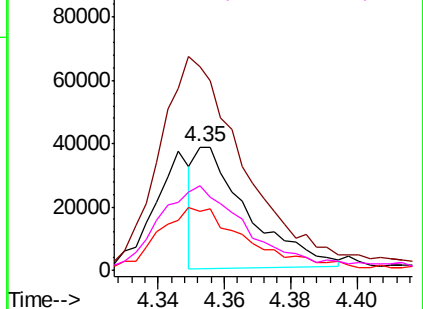
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

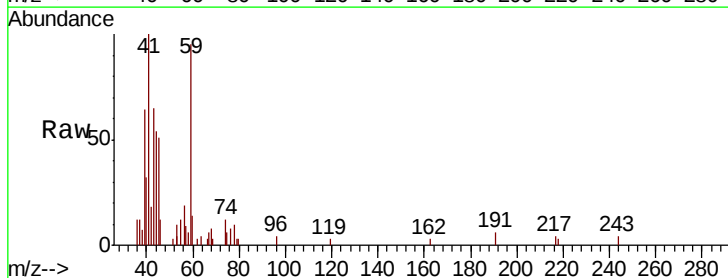
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#21  
Allyl Chloride  
Concen: 0.033 ppbv  
RT: 4.30 min Scan# 471  
Delta R.T. -0.11 min  
Lab File: VL038907.D  
Acq: 13 Apr 2022 17:35

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 2553  |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 76       | 70.4  | 23.7  | 35.5# |
| 39       | 315.8 | 62.0  | 93.0# |

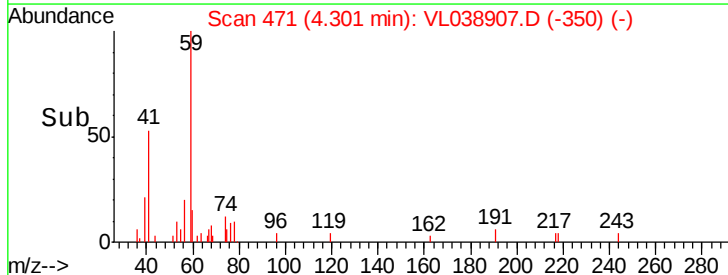
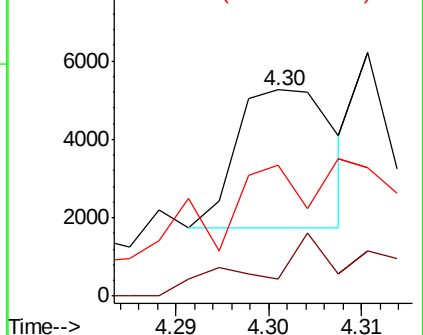


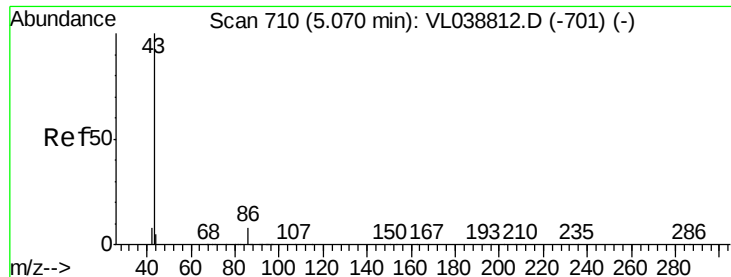
Abundance

Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

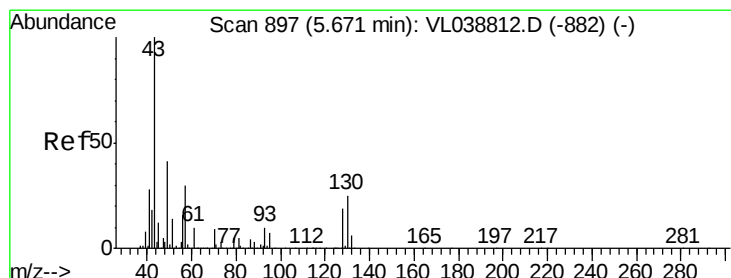
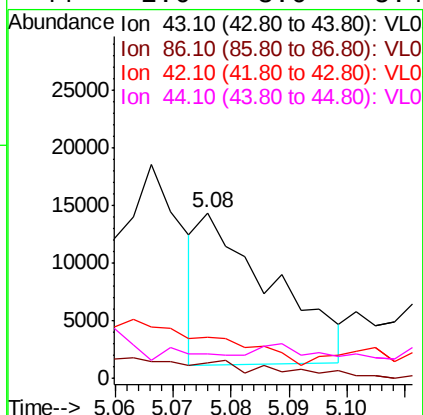
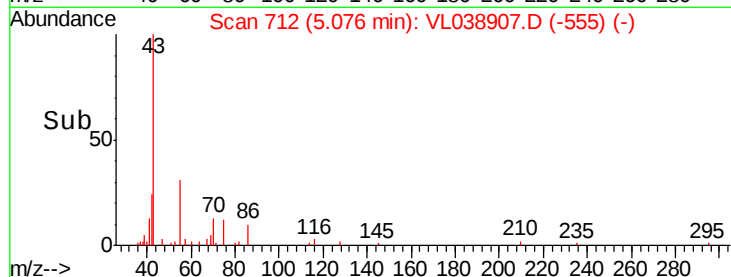
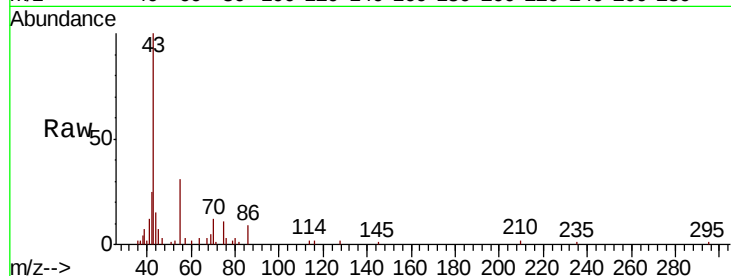
Ion 39.10 (38.80 to 39.80): VL0





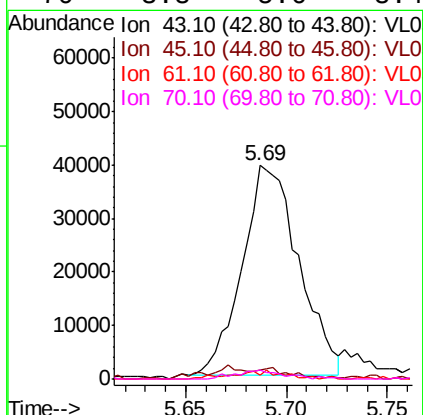
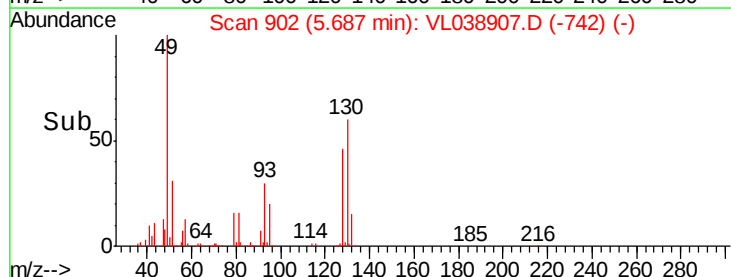
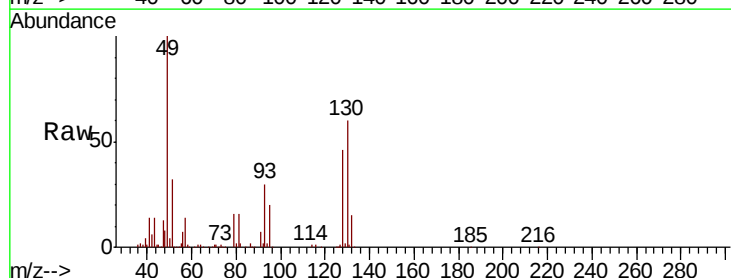
#23  
 Vinyl Acetate  
 Concen: 0.115 ppbv  
 RT: 5.08  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 13 Apr 2022 17:35

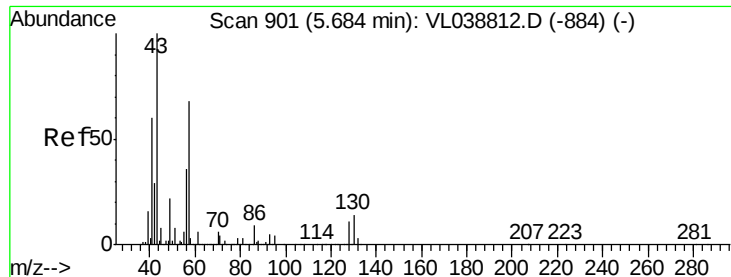
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 11489 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 6.6   | 5.8   | 8.6   |
| 42       | 16.1  | 7.8   | 11.6# |
| 44       | 2.6   | 3.6   | 5.4#  |



#25  
 Ethyl Acetate  
 Concen: 0.295 ppbv  
 RT: 5.69 min Scan# 902  
 Delta R.T. 0.02 min  
 Lab File: VL038907.D  
 Acq: 13 Apr 2022 17:35

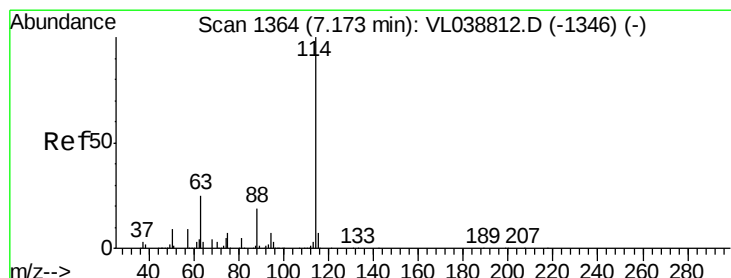
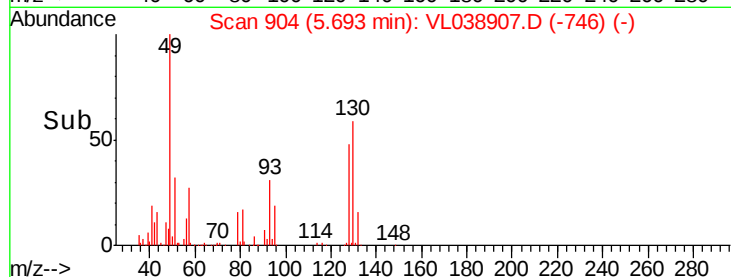
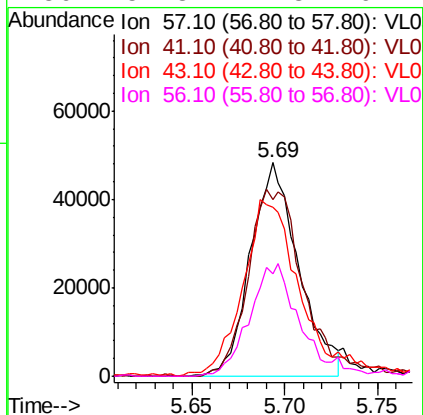
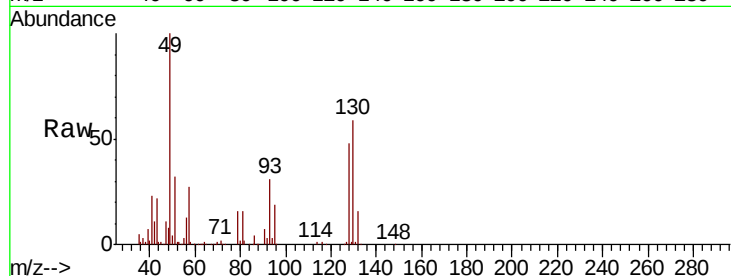
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 76423 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 8.2   | 8.4   | 12.6# |
| 61       | 3.6   | 7.9   | 11.9# |
| 70       | 3.8   | 5.6   | 8.4#  |





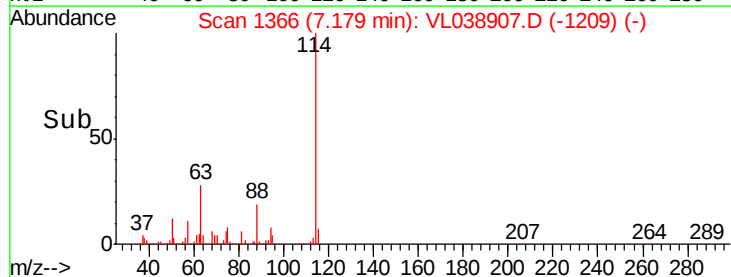
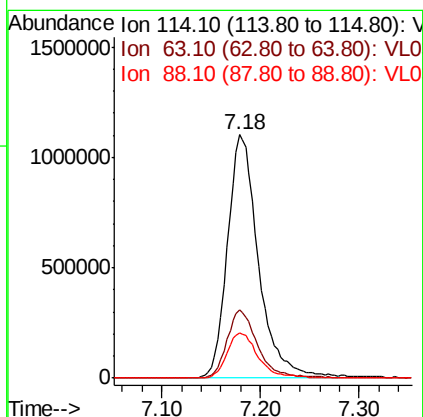
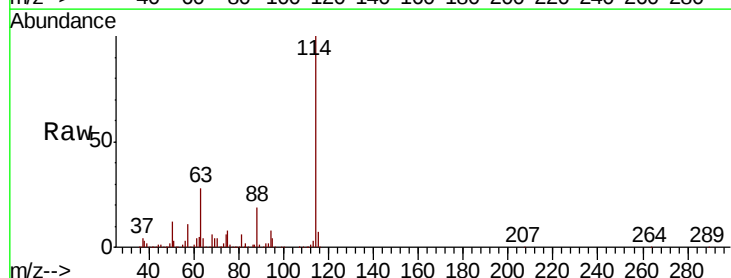
#26  
Hexane  
Concen: 0.737 ppbv  
RT: 5.69  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 13 Apr 2022 17:35

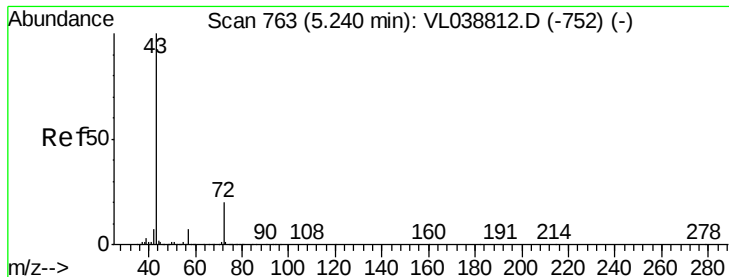
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 57    | Resp: | 86986  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 103.8 | 72.0  | 108.0  |
| 43       | 99.0  | 186.6 | 280.0# |
| 56       | 57.8  | 42.8  | 64.2   |



#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.18 min Scan# 1366  
Delta R.T. 0.01 min  
Lab File: VL038907.D  
Acq: 13 Apr 2022 17:35

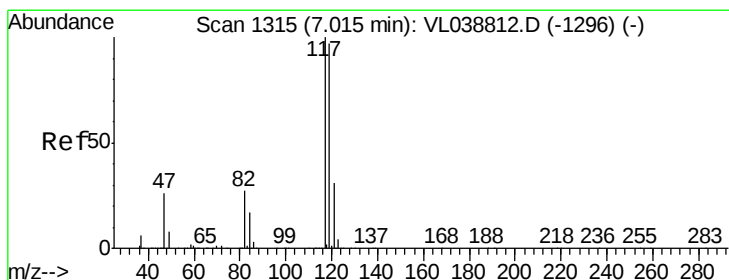
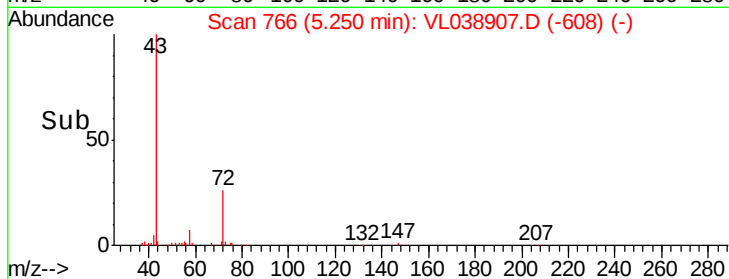
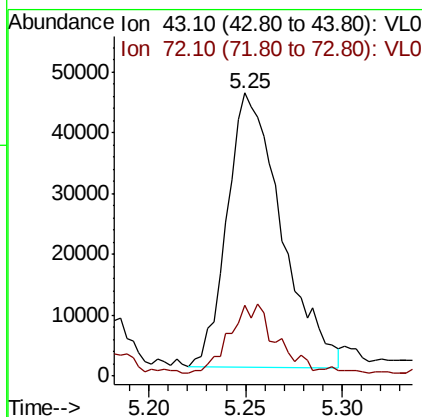
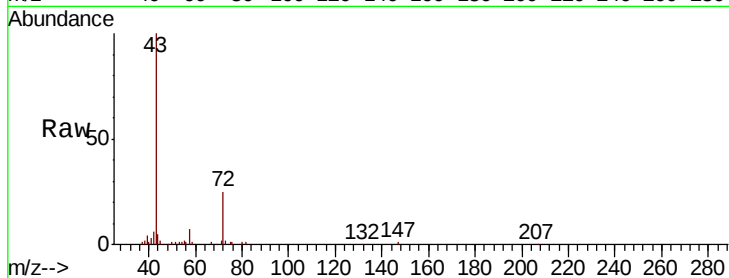
|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 114   | Resp: | 2422011 |
| Ion      | Ratio | Lower | Upper   |
| 114      | 100   |       |         |
| 63       | 28.0  | 19.8  | 29.8    |
| 88       | 19.0  | 14.2  | 21.4    |





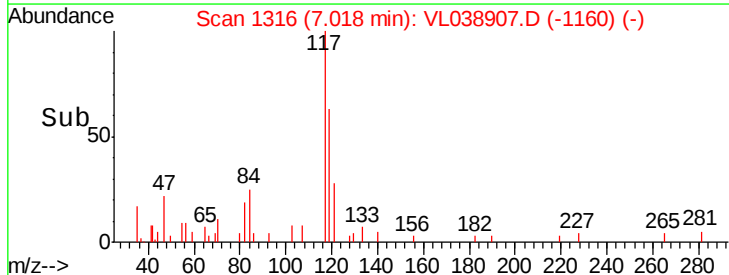
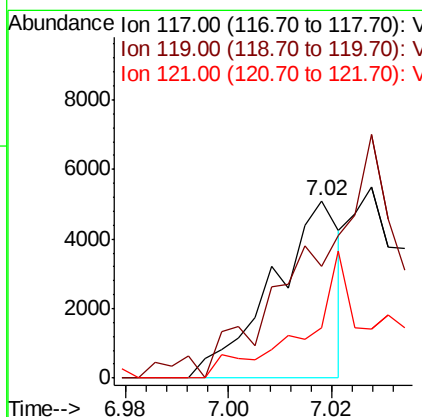
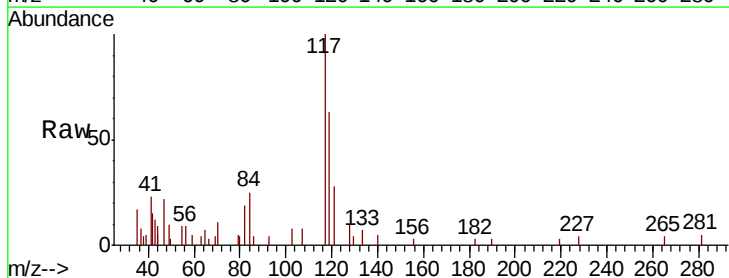
#34  
2-Butanone  
Concen: 0.922 ppbv  
RT: 5.25 Instrument : MSVOA\_1  
Delta R.T.: ClientSampleId :  
Lab File: 1  
Acq: 13 Apr 2022 17:35

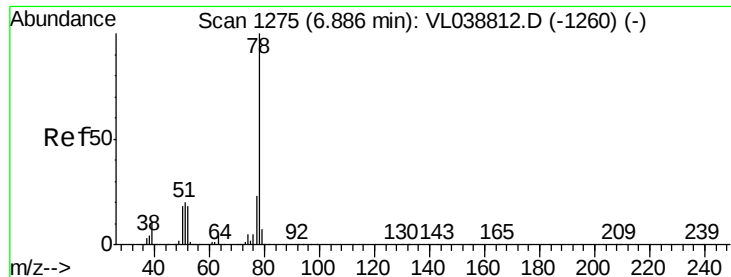
Tot Ion: 43 Resp: 88256  
Ion Ratio Lower Upper  
43 100  
72 26.7 16.9 25.3#



#35  
Carbon Tetrachloride  
Concen: 0.032 ppbv  
RT: 7.02 min Scan# 1316  
Delta R.T. 0.00 min  
Lab File: VL038907.D  
Acq: 13 Apr 2022 17:35

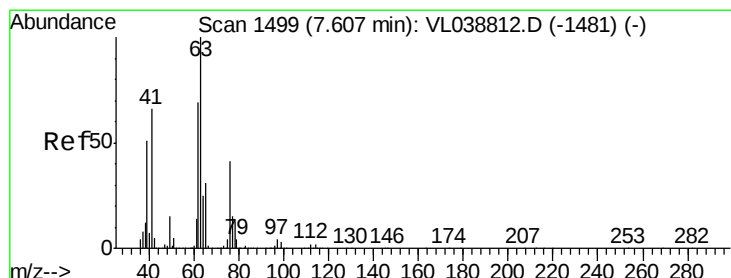
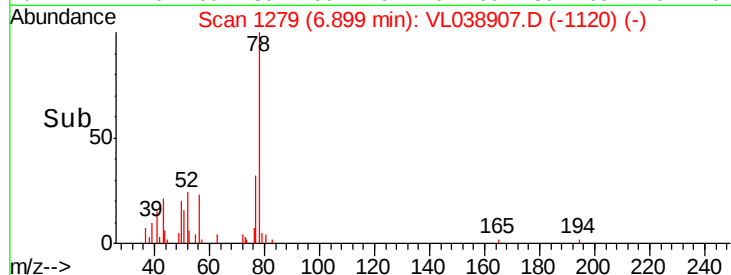
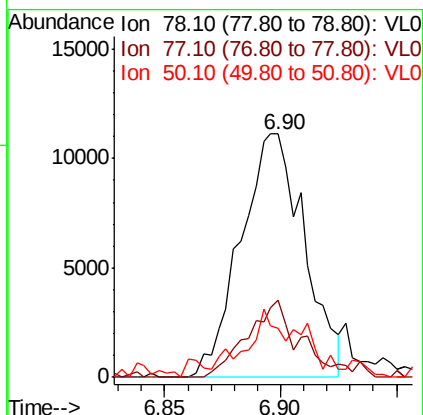
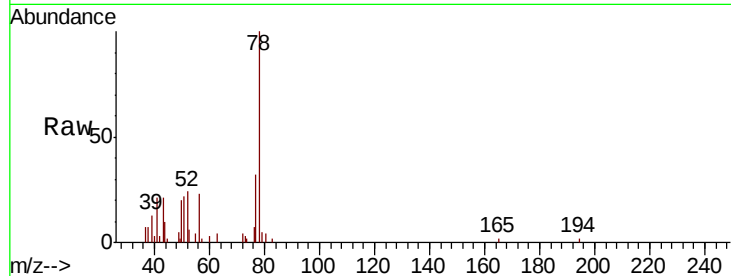
Tgt Ion: 117 Resp: 4591  
Ion Ratio Lower Upper  
117 100  
119 50.7 77.7 116.5#  
121 28.4 24.5 36.7





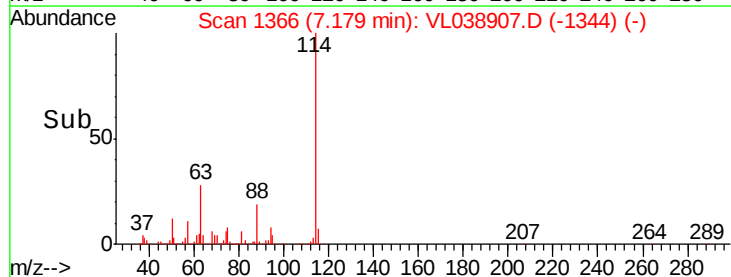
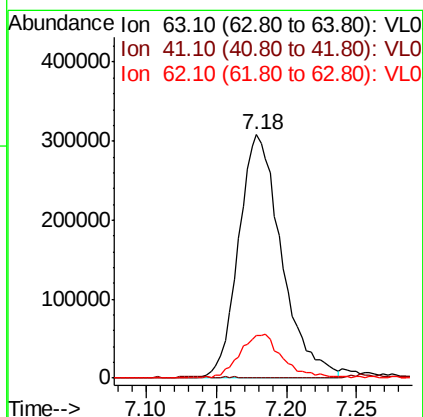
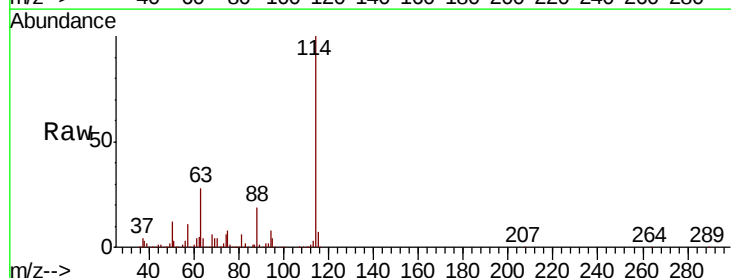
#36  
Benzene  
Concen: 0.097 ppbv  
RT: 6.90  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 13 Apr 2022 17:35

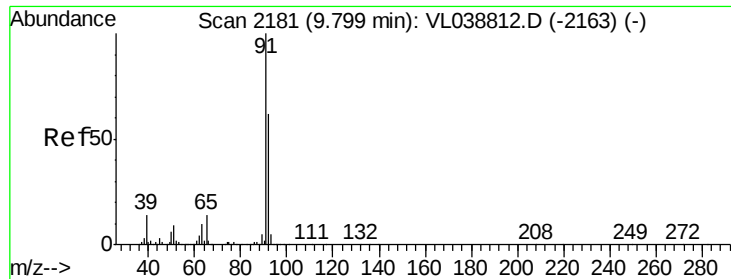
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 32.0  | 18.2  | 27.2# |
| 50      | 38.2  | 14.0  | 21.0# |



#39  
1,2-Dichloropropane  
Concen: 7.806 ppbv  
RT: 7.18 min Scan# 1366  
Delta R.T. -0.43 min  
Lab File: VL038907.D  
Acq: 13 Apr 2022 17:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 0.1   | 53.0  | 79.6# |
| 62      | 17.5  | 55.0  | 82.4# |





#53

Toluene

Concen: 0.082 ppbv

RT: 9.81 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

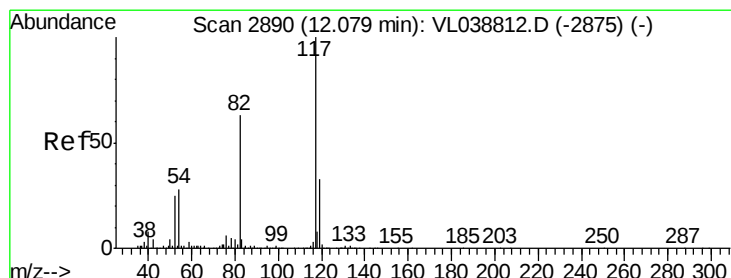
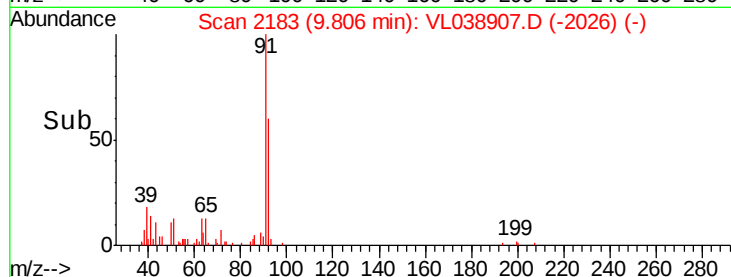
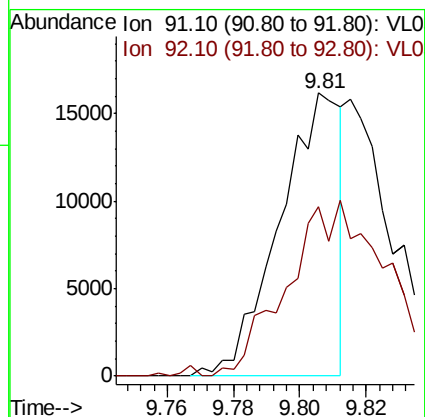
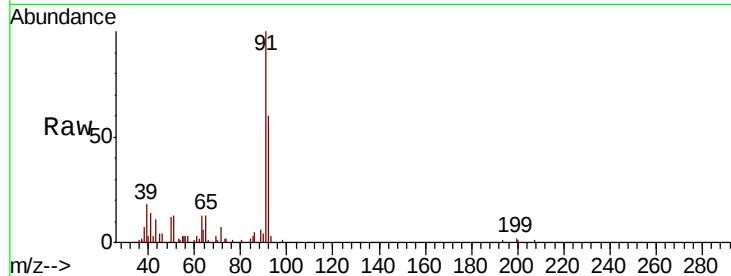
Acq: 13 Apr 2022 17:35

Tot Ion: 91 Resp: 20871

Ion Ratio Lower Upper

91 100

92 0.0 49.2 73.8#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2894

Delta R.T. 0.01 min

Lab File: VL038907.D

Acq: 13 Apr 2022 17:35

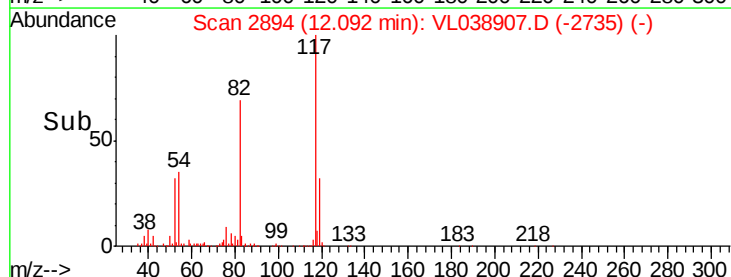
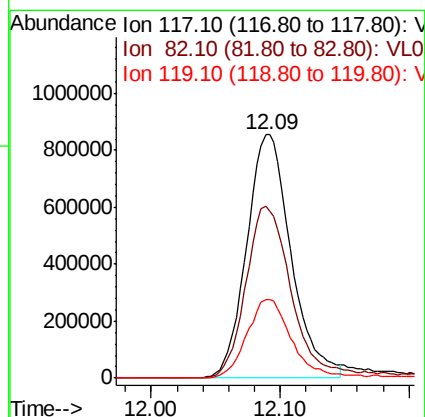
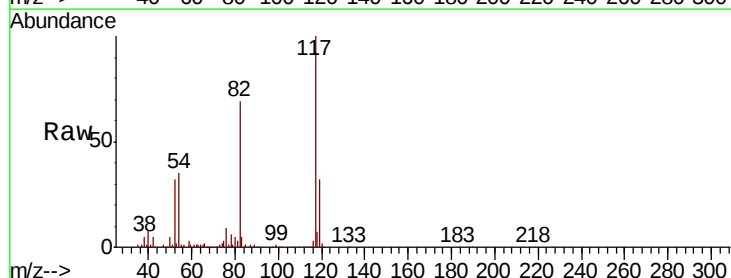
Tgt Ion: 117 Resp: 2057524

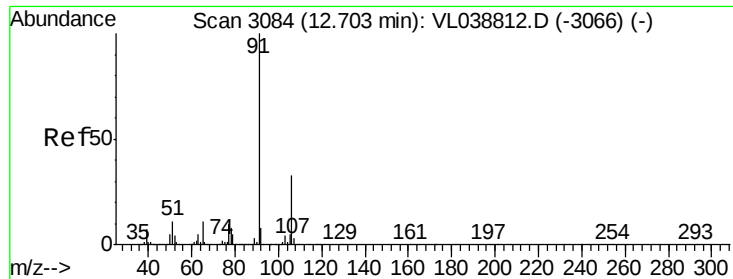
Ion Ratio Lower Upper

117 100

82 76.8 53.0 79.6

119 33.9 24.9 37.3





#58

Ethyl Benzene

Concen: 0.053 ppbv

RT: 12.97

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

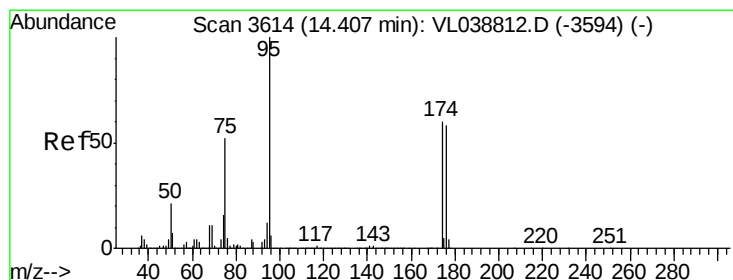
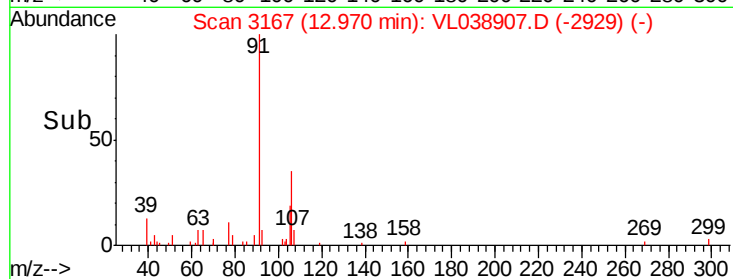
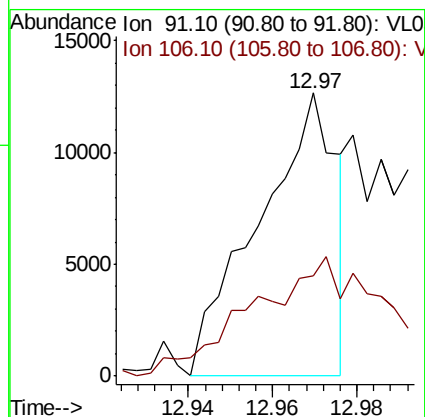
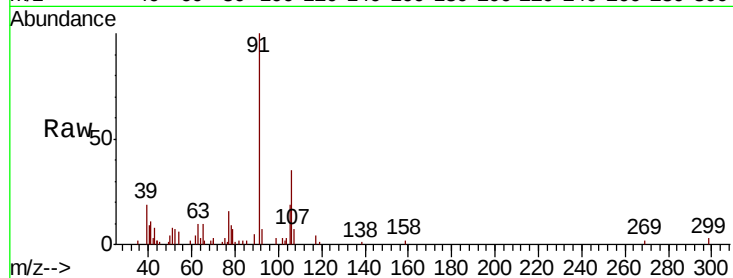
Acq: 13 Apr 2022 17:35

Tot Ion: 91 Resp: 16219

Ion Ratio Lower Upper

91 100

106 29.2 26.7 40.1



#68

1-Bromo-4-Fluorobenzene

Concen: 11.015 ppbv

RT: 14.42 min Scan# 3618

Delta R.T. 0.01 min

Lab File: VL038907.D

Acq: 13 Apr 2022 17:35

Tgt Ion: 95 Resp: 1719087

Ion Ratio Lower Upper

95 100

174 64.6 52.0 78.0

175 4.6 4.0 6.0

