

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032822\  
 Data File : VL038787.D  
 Acq On : 29 Mar 2022 1:38  
 Operator : SY/AP  
 Sample : N2136-01DL 5X  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA1DL

Quant Time: Mar 29 06:13:27 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   | 5.66  | 49   | 818582   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.17  | 114  | 2105784  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.07 | 117  | 1824949  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.40  | 95    | 1347244  | 9.63     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 96.30% |

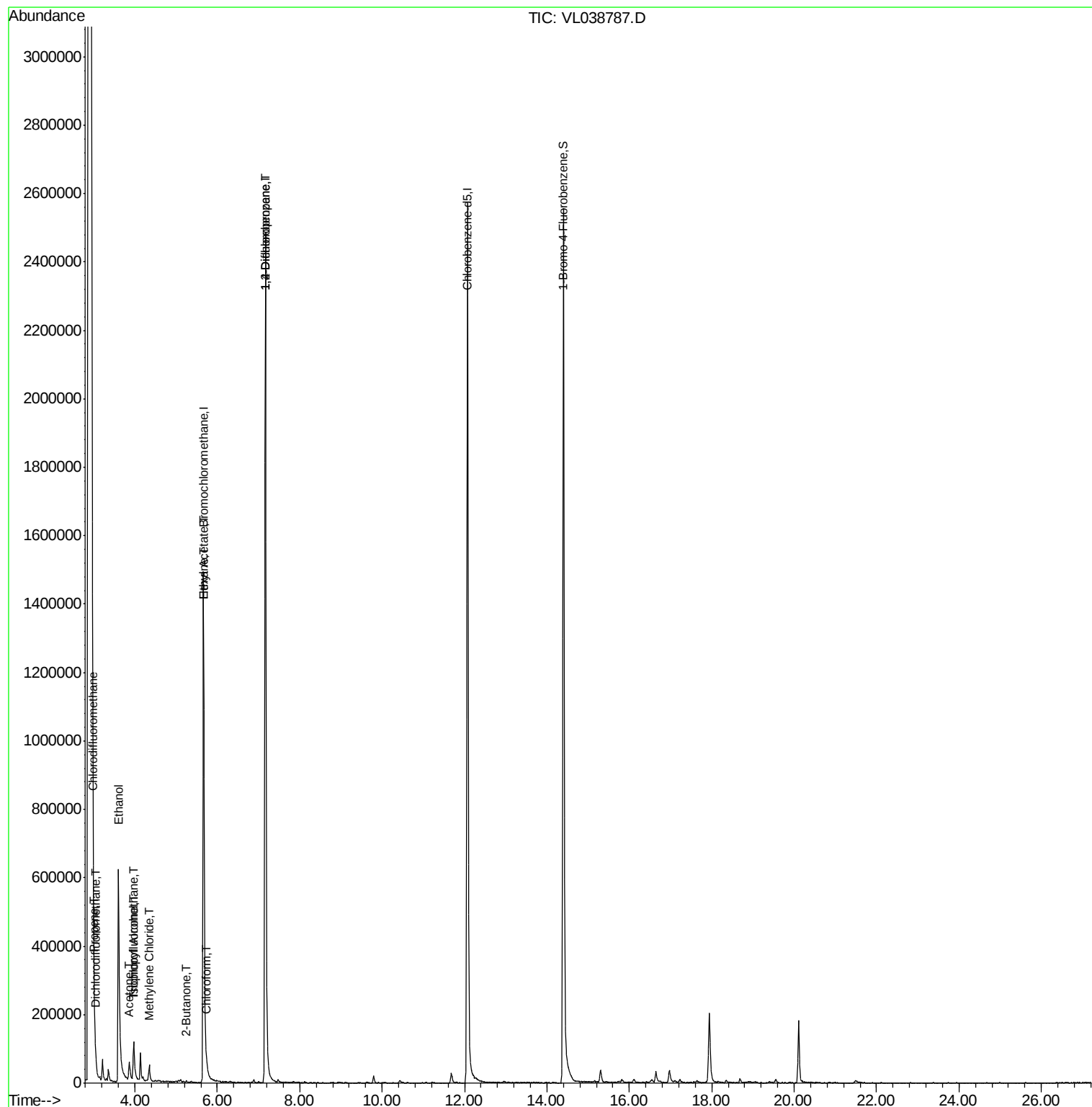
| Target Compounds           | R.T. | QIon | Response | Conc    | Units  | Ovalue |
|----------------------------|------|------|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane | 3.06 | 85   | 14201    | 0.129   | ppbv   | 95     |
| 3) Chlorodifluoromethane   | 3.00 | 51   | 14575    | 0.169   | ppbv # | 79     |
| 9) Propene                 | 3.02 | 41   | 10139    | 0.243   | ppbv   | 83     |
| 11) Trichlorofluoromethane | 3.95 | 101  | 2934     | 0.030   | ppbv   | 93     |
| 13) Ethanol                | 3.60 | 45   | 859314   | 186.634 | ppbv   | 94     |
| 15) Acetone                | 3.86 | 43   | 62271    | 0.882   | ppbv   | 100    |
| 19) Isopropyl Alcohol      | 3.97 | 45   | 162523   | 4.150   | ppbv   | 100    |
| 20) Methylene Chloride     | 4.35 | 84   | 19577    | 0.658   | ppbv   | 95     |
| 25) Ethyl Acetate          | 5.68 | 43   | 8338     | 0.047   | ppbv # | 90     |
| 26) Hexane                 | 5.68 | 57   | 12807    | 0.161   | ppbv # | 51     |
| 29) Chloroform             | 5.75 | 83   | 11795    | 0.093   | ppbv   | 90     |
| 34) 2-Butanone             | 5.25 | 43   | 4035     | 0.048   | ppbv # | 88     |
| 39) 1,2-Dichloropropane    | 7.17 | 63   | 499441   | 7.861   | ppbv # | 29     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032822\  
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Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1DL

Quant Time: Mar 29 06:13:27 2022  
Quant Method : Z:\V0ASRV\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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument: MSVOA\_1

Delta R.T. ClientSampleId:

Lab File: IA1DL

Acq: 29 Mar 2022 1:38

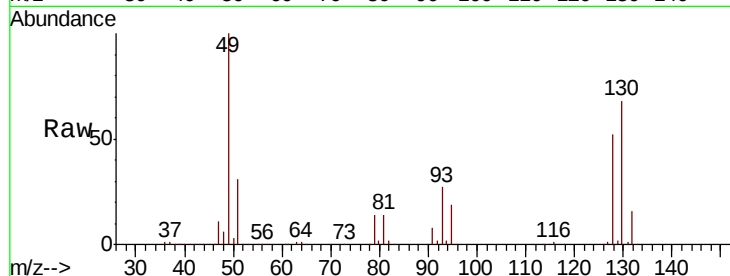
Tot Ion: 49 Resp: 818582

Ion Ratio Lower Upper

49 100

128 56.0 26.2 78.6

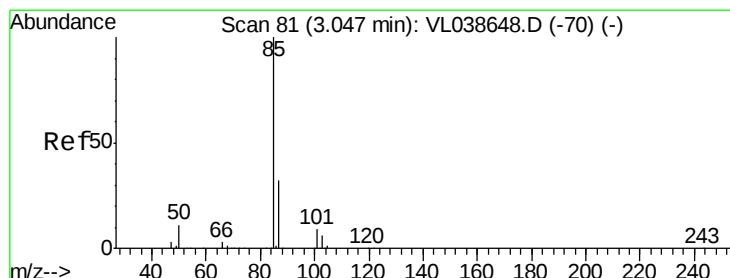
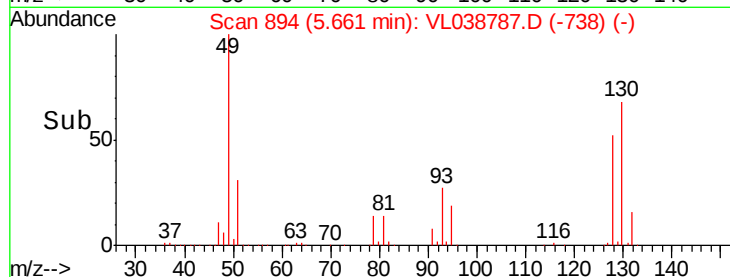
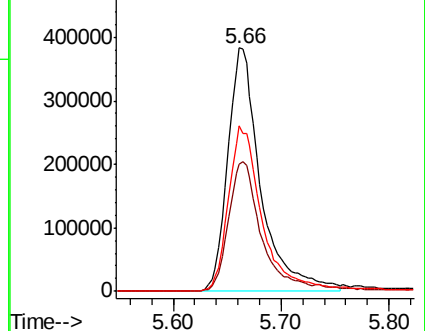
130 71.1 33.7 101.1



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: 0.129 ppbv

RT: 3.06 min Scan# 84

Delta R.T. 0.01 min

Lab File: VL038787.D

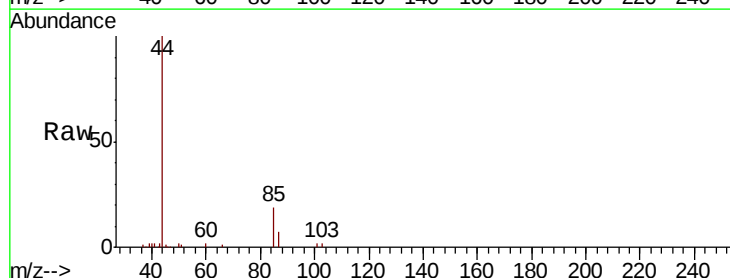
Acq: 29 Mar 2022 1:38

Tgt Ion: 85 Resp: 14201

Ion Ratio Lower Upper

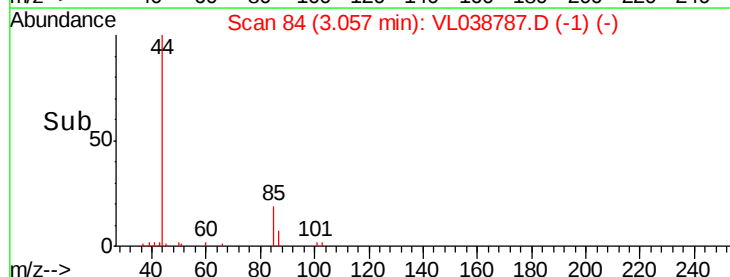
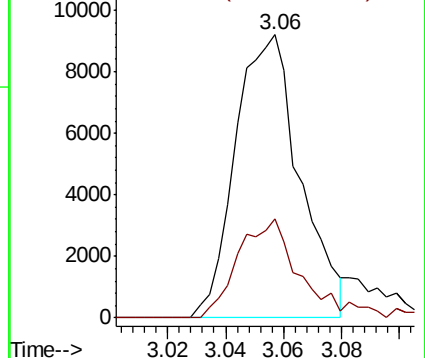
85 100

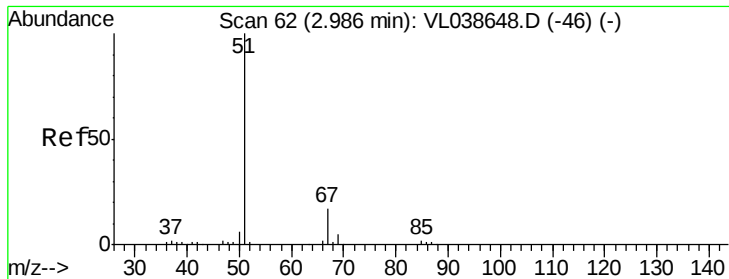
87 35.0 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.169 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

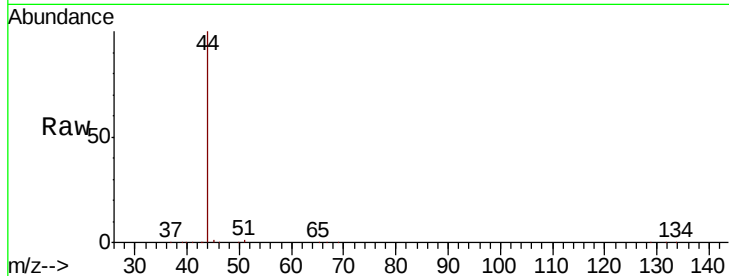
Acq: 29 Mar 2022 1:38

Tot Ion: 51 Resp: 14575

Ion Ratio Lower Upper

51 100

67 8.5 14.1 21.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.00

6000

5000

4000

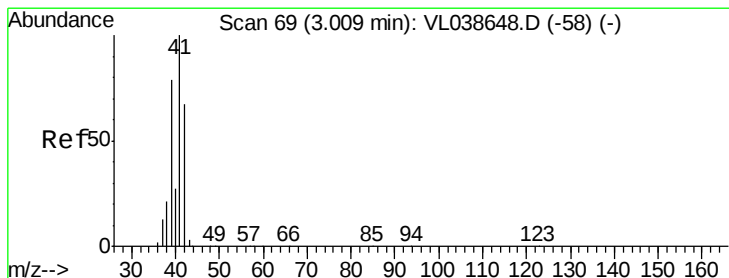
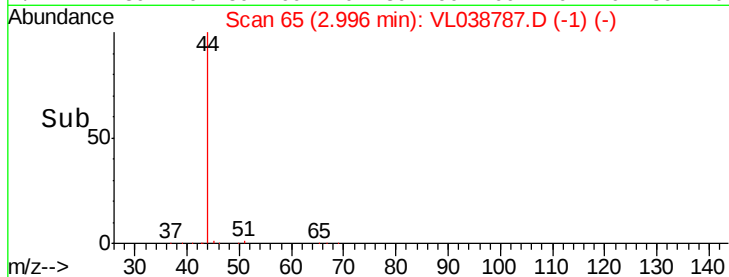
3000

2000

1000

0

Time-->



#9

Propene

Concen: 0.243 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.01 min

Lab File: VL038787.D

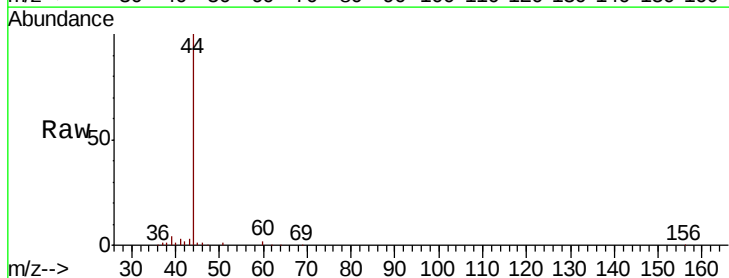
Acq: 29 Mar 2022 1:38

Tgt Ion: 41 Resp: 10139

Ion Ratio Lower Upper

41 100

42 56.5 56.2 84.4



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.02

6000

5000

4000

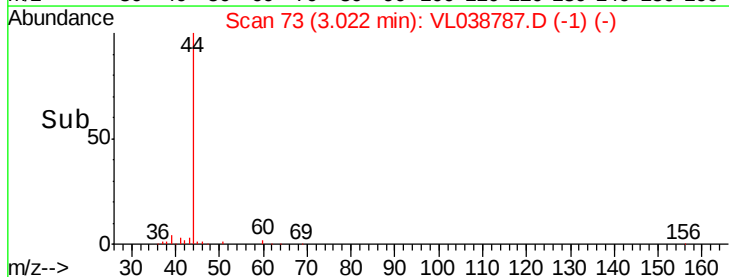
3000

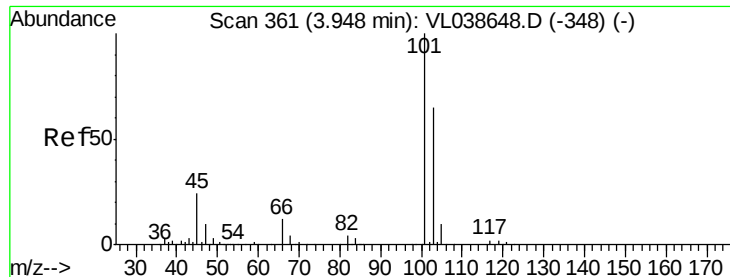
2000

1000

0

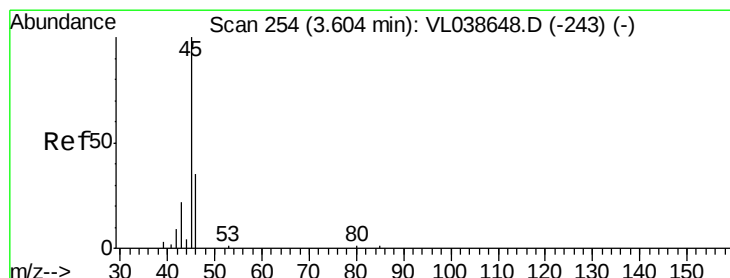
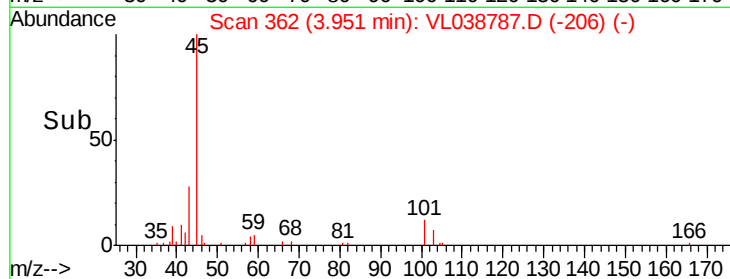
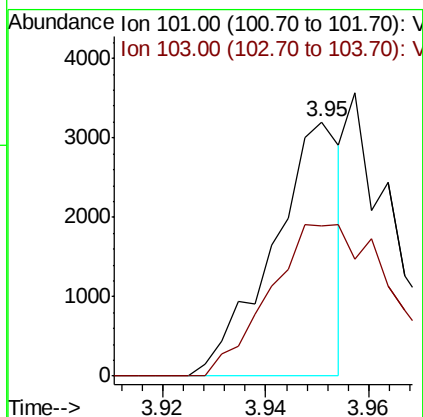
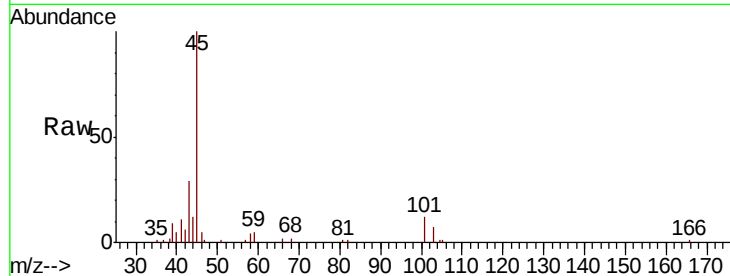
Time-->





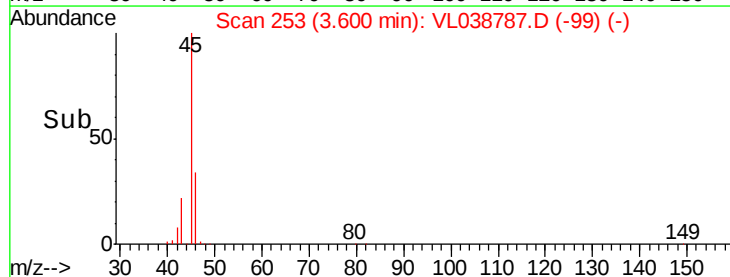
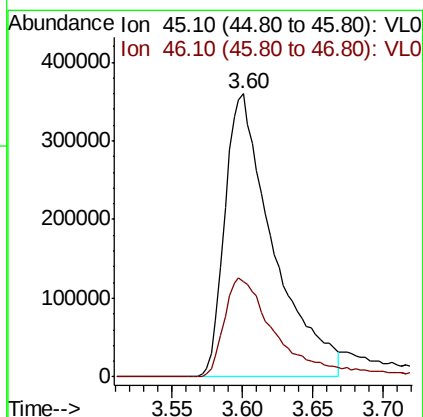
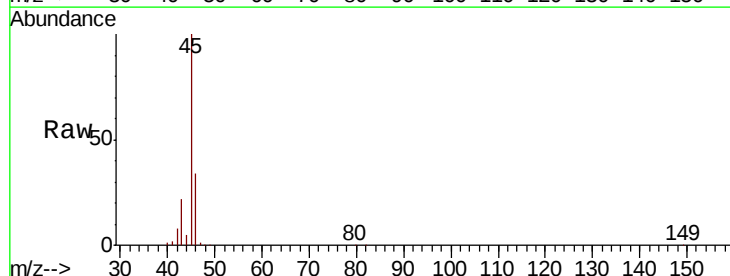
#11  
 Trichlorofluoromethane  
 Concen: 0.030 ppbv  
 RT: 3.95  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 29 Mar 2022 1:38

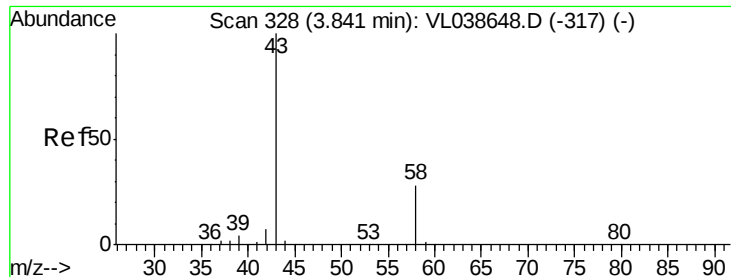
Tot Ion:101 Resp: 2934  
 Ion Ratio Lower Upper  
 101 100  
 103 59.2 51.9 77.9



#13  
 Ethanol  
 Concen: 186.634 ppbv  
 RT: 3.60 min Scan# 253  
 Delta R.T. -0.00 min  
 Lab File: VL038787.D  
 Acq: 29 Mar 2022 1:38

Tgt Ion: 45 Resp: 859314  
 Ion Ratio Lower Upper  
 45 100  
 46 41.1 15.1 60.5





#15

Acetone

Concen: 0.882 ppbv

RT: 3.86 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

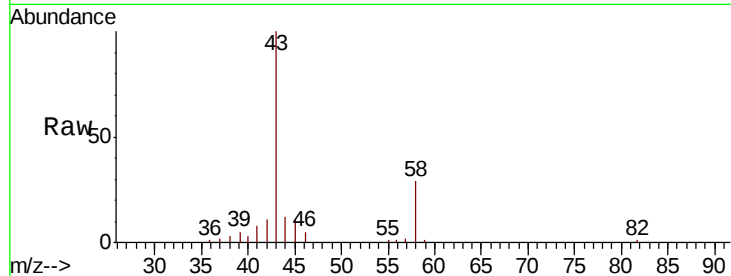
Acq: 29 Mar 2022 1:38

Tot Ion: 43 Resp: 62271

Ion Ratio Lower Upper

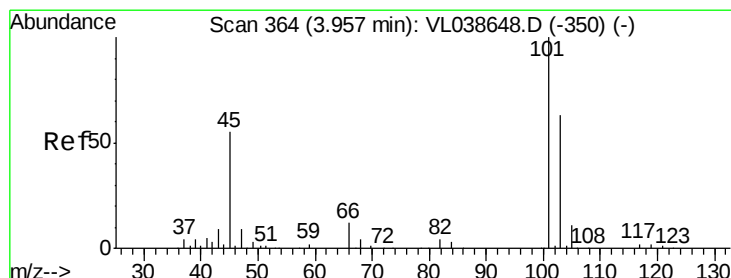
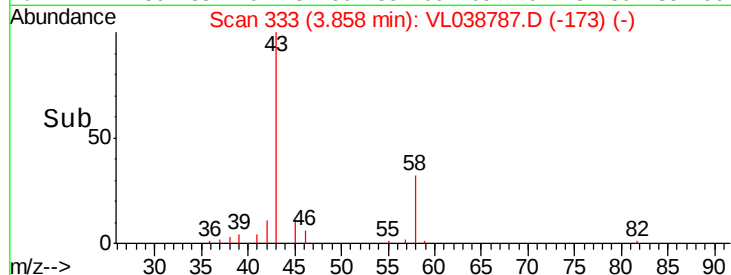
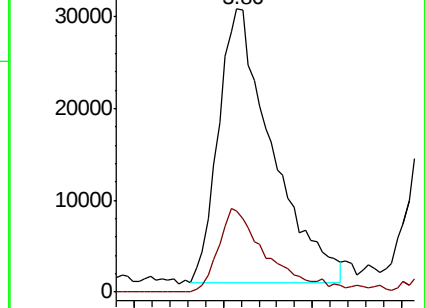
43 100

58 29.1 23.3 34.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 4.150 ppbv

RT: 3.97 min Scan# 367

Delta R.T. 0.01 min

Lab File: VL038787.D

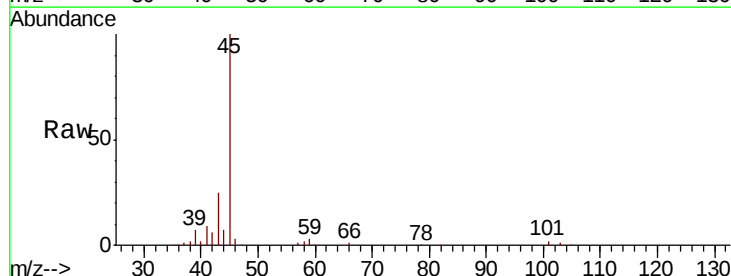
Acq: 29 Mar 2022 1:38

Tgt Ion: 45 Resp: 162523

Ion Ratio Lower Upper

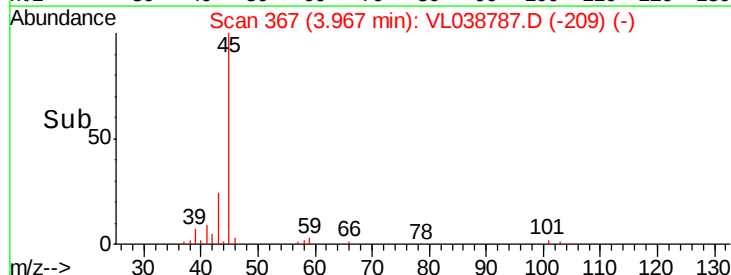
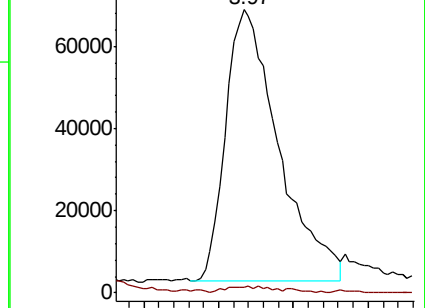
45 100

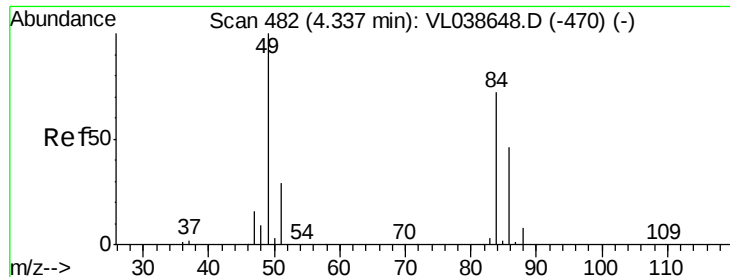
58 3.1 2.3 3.5



Abundance Ion 45.10 (44.80 to 45.80): VL0

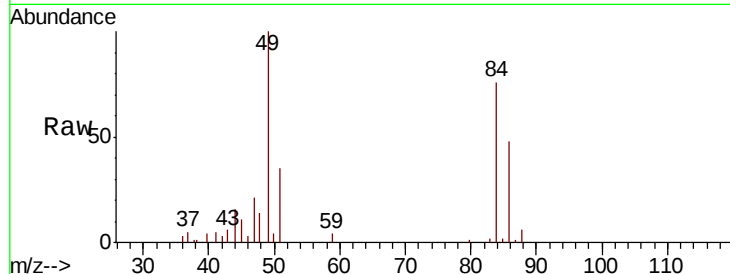
Ion 58.10 (57.80 to 58.80): VL0



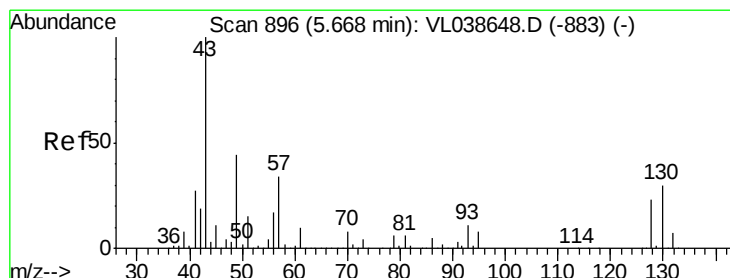
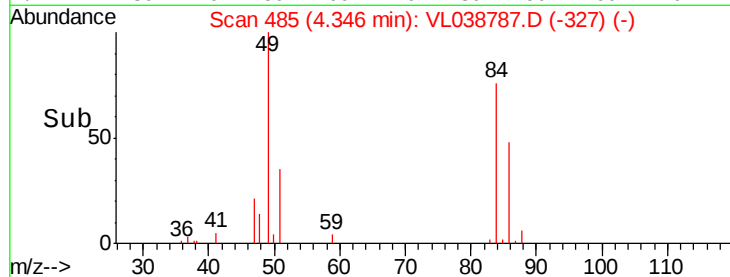
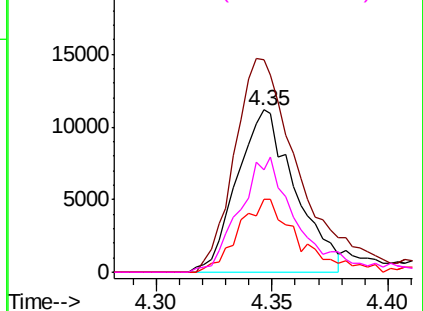


#20  
Methvlene Chloride  
Concen: 0.658 ppbv  
RT: 4.35  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 29 Mar 2022 1:38

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 19577 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 130.9 | 111.2 | 166.8 |
| 51       | 45.4  | 32.8  | 49.2  |
| 86       | 62.9  | 51.4  | 77.0  |

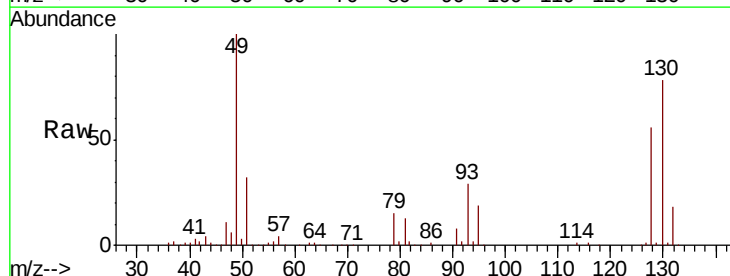


Abundance Ion 84.00 (83.70 to 84.70): VL0  
Ion 49.10 (48.80 to 49.80): VL0  
Ion 51.10 (50.80 to 51.80): VL0  
Ion 86.00 (85.70 to 86.70): VL0

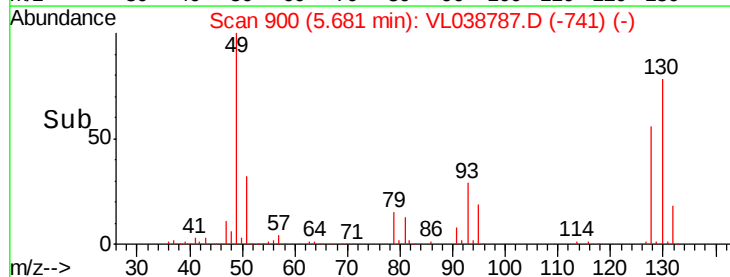
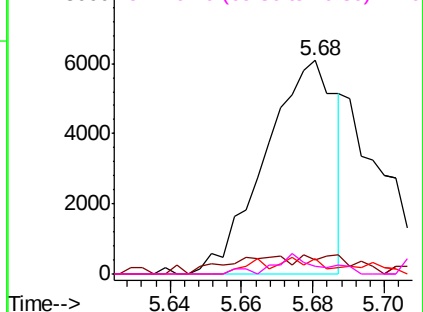


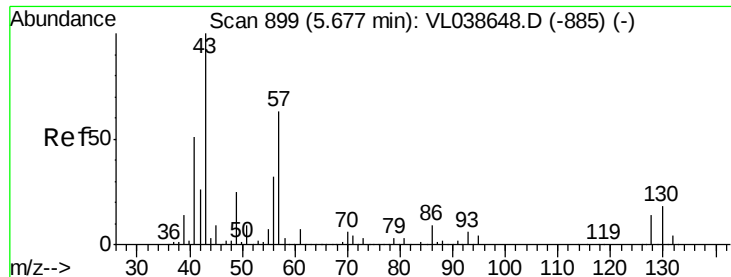
#25  
Ethyl Acetate  
Concen: 0.047 ppbv  
RT: 5.68 min Scan# 900  
Delta R.T. 0.01 min  
Lab File: VL038787.D  
Acq: 29 Mar 2022 1:38

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 8338  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 18.4  | 8.2   | 12.4# |
| 61       | 8.9   | 8.3   | 12.5  |
| 70       | 7.1   | 5.6   | 8.4   |



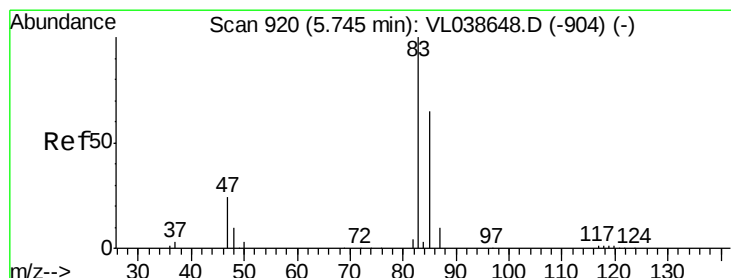
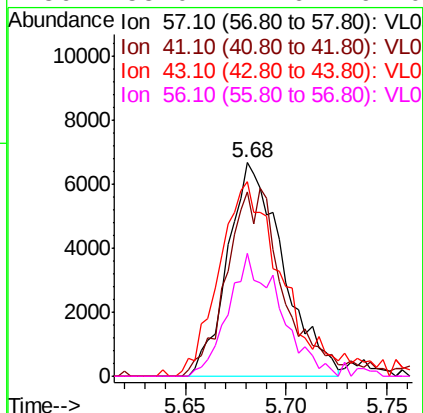
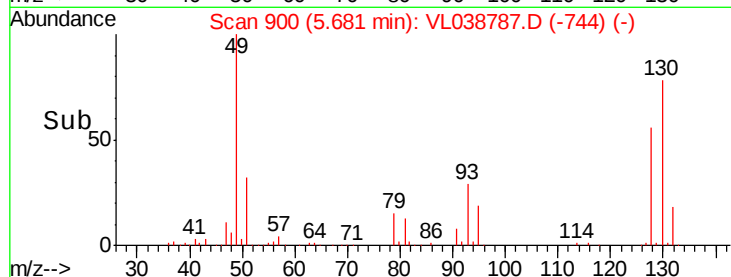
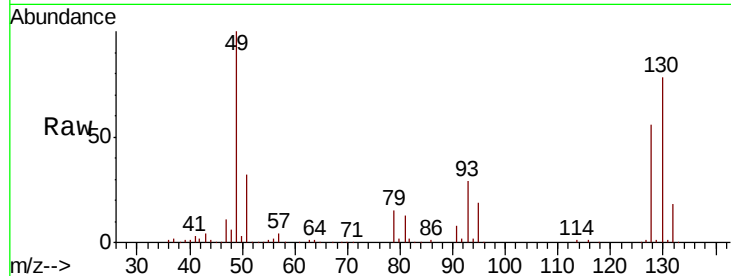
Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 45.10 (44.80 to 45.80): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 70.10 (69.80 to 70.80): VL0





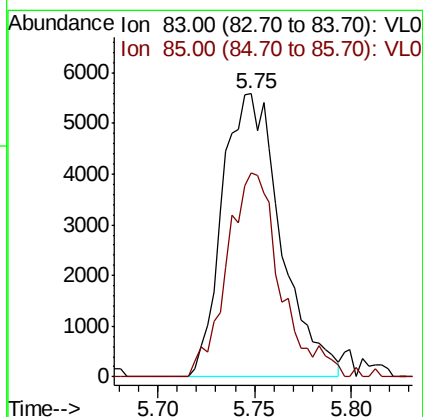
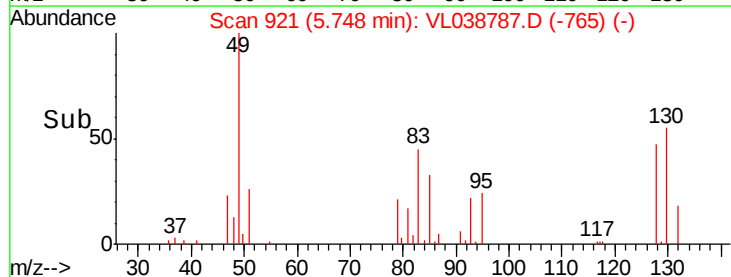
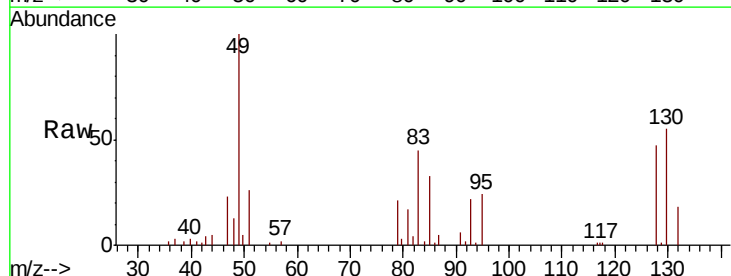
#26  
Hexane  
Concen: 0.161 ppbv  
RT: 5.68  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 29 Mar 2022 1:38

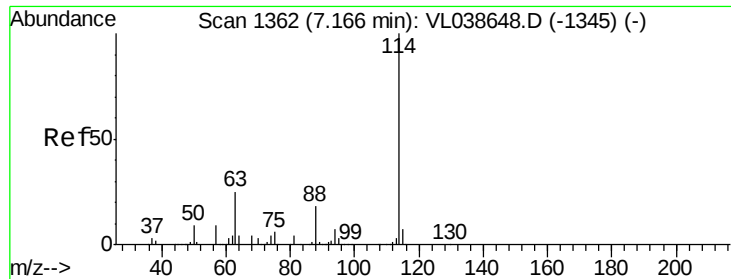
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 57    | Resp: | 12807  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 93.8  | 67.0  | 100.4  |
| 43       | 109.7 | 184.2 | 276.2# |
| 56       | 55.0  | 42.6  | 64.0   |



#29  
Chloroform  
Concen: 0.093 ppbv  
RT: 5.75 min Scan# 921  
Delta R.T. 0.00 min  
Lab File: VL038787.D  
Acq: 29 Mar 2022 1:38

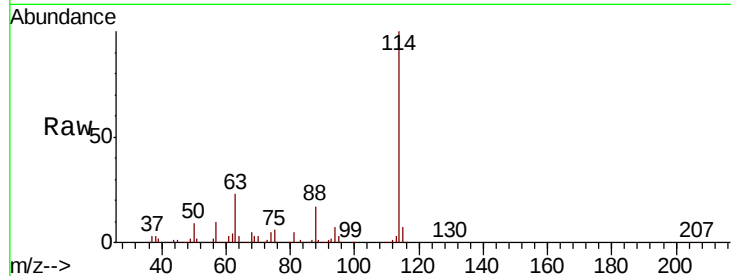
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 11795 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 72.2  | 51.7  | 77.5  |



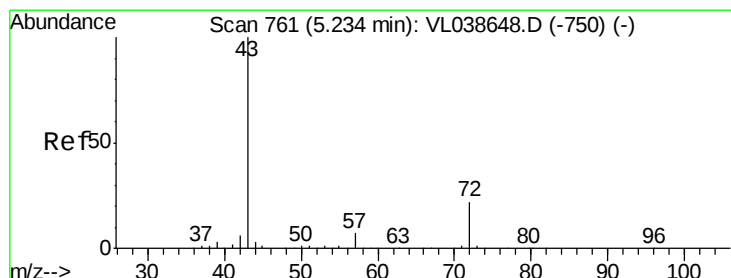
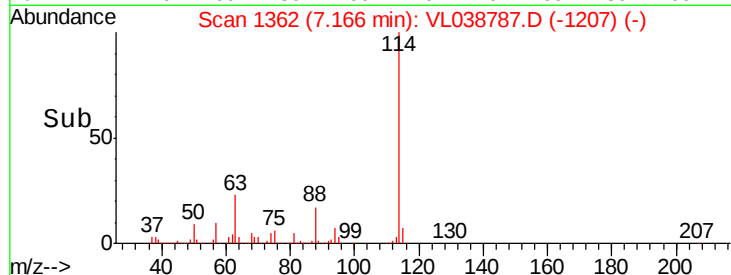
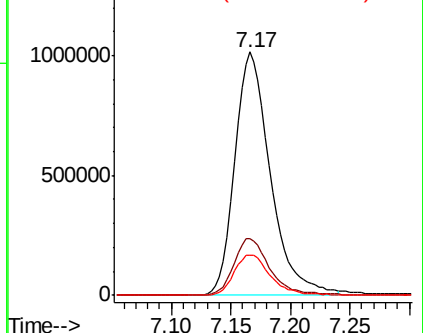


#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.17  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 29 Mar 2022 1:38

Tot Ion: 114 Resp: 2105784  
 Ion Ratio Lower Upper  
 114 100  
 63 24.1 19.4 29.0  
 88 17.4 13.9 20.9

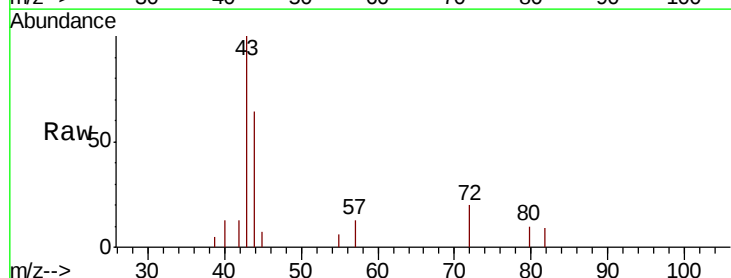


Abundance Ion 114.10 (113.80 to 114.80): VL0  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

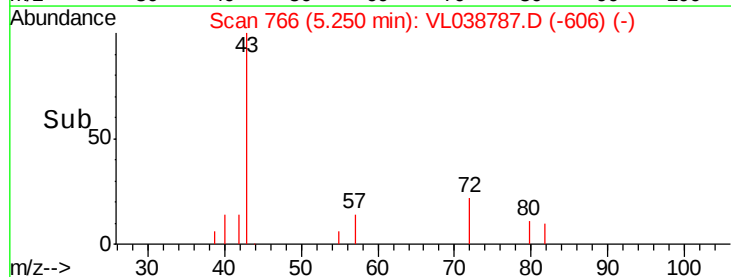
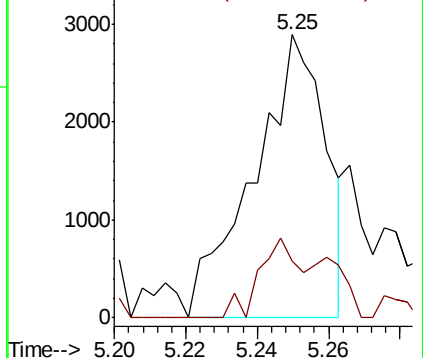


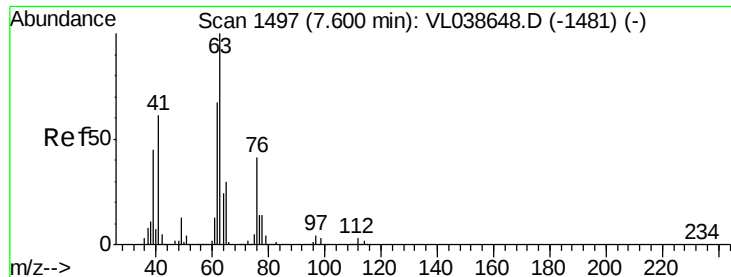
#34  
 2-Butanone  
 Concen: 0.048 ppbv  
 RT: 5.25 min Scan# 766  
 Delta R.T. 0.02 min  
 Lab File: VL038787.D  
 Acq: 29 Mar 2022 1:38

Tgt Ion: 43 Resp: 4035  
 Ion Ratio Lower Upper  
 43 100  
 72 27.9 17.8 26.8#



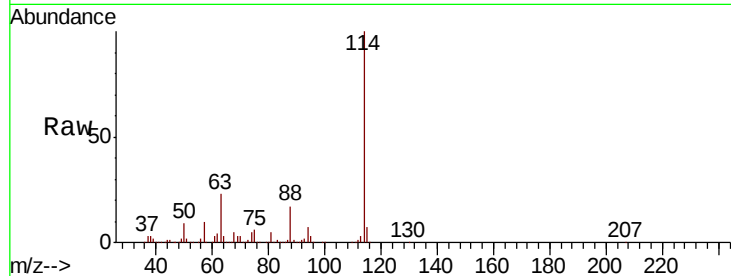
Abundance Ion 43.10 (42.80 to 43.80): VL0  
 Ion 72.10 (71.80 to 72.80): VL0



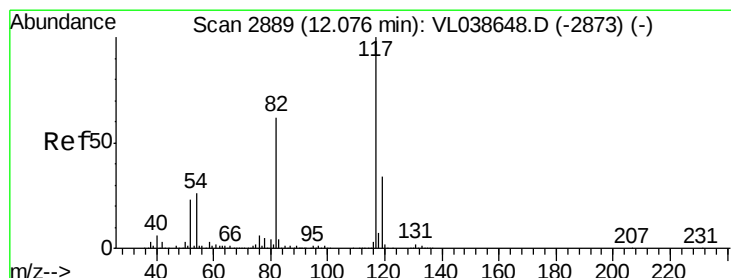
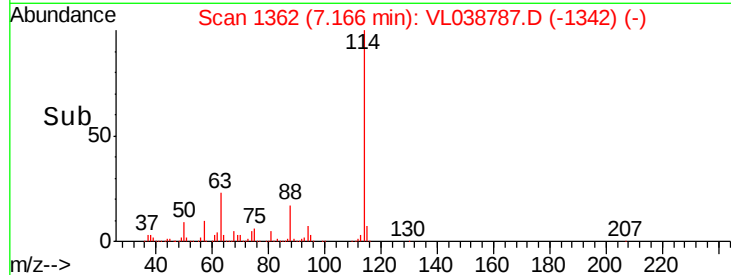
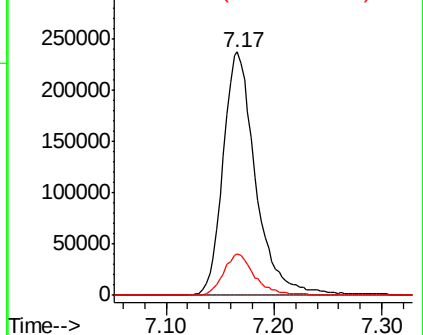


#39  
 1,2-Dichloropropane  
 Concen: 7.861 ppbv  
 RT: 7.17  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 29 Mar 2022 1:38

| Tot Ion   | 63    | Resp  | 499441 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 63        | 100   |       |        |
| 41        | 0.0   | 49.0  | 73.6#  |
| 62        | 16.8  | 53.9  | 80.9#  |

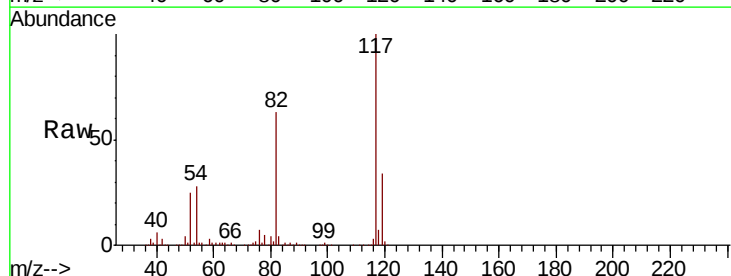


Abundance Ion 63.10 (62.80 to 63.80): VL0  
 Ion 41.10 (40.80 to 41.80): VL0  
 Ion 62.10 (61.80 to 62.80): VL0

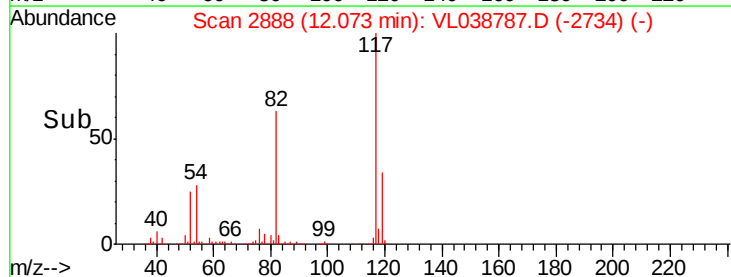
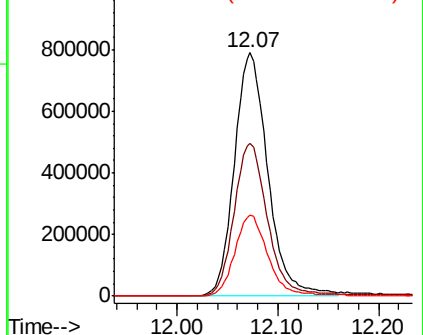


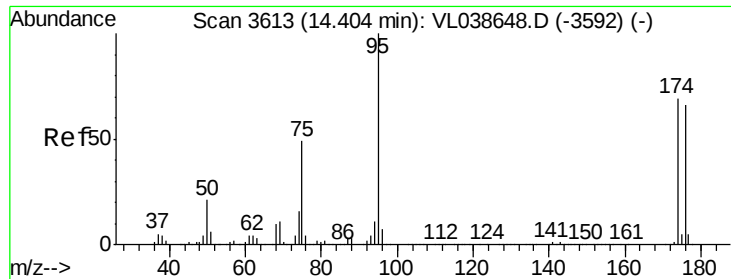
#55  
 Chlorobenzene-d5  
 Concen: 10.000 ppbv  
 RT: 12.07 min Scan# 2888  
 Delta R.T. -0.00 min  
 Lab File: VL038787.D  
 Acq: 29 Mar 2022 1:38

| Tgt Ion   | 117   | Resp  | 1824949 |
|-----------|-------|-------|---------|
| Ion Ratio | Lower | Upper |         |
| 117       | 100   |       |         |
| 82        | 64.6  | 51.6  | 77.4    |
| 119       | 33.3  | 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





#68

1-Bromo-4-Fluorobenzene

Concen: 9.629 ppbv

RT: 14.40

Delta R.T: MSVOA\_L

Lab File: ClientSampleId :

Acq: 29 Mar 2022 1:38

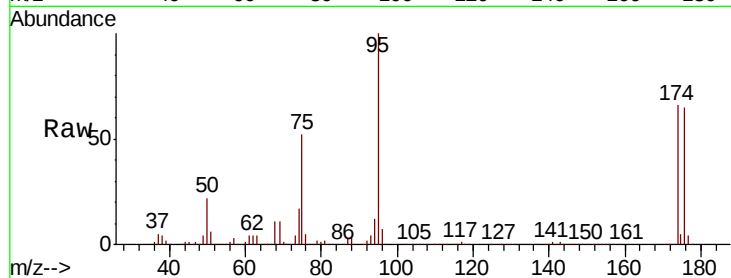
Tot Ion: 95 Resp: 1347244

Ion Ratio Lower Upper

95 100

174 70.6 56.1 84.1

175 5.0 4.2 6.2



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

