

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111821\  
 Data File : VL038074.D  
 Acq On : 19 Nov 2021 4:12  
 Operator : SY/AP  
 Sample : M4751-02DL 40X  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SVP-2DL

Quant Time: Nov 22 05:25:08 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Nov 18 13:16:09 2021  
 QLast Update : Thu Nov 18 13:16:09 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 753314   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.17  | 114  | 2230434  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.08 | 117  | 1913716  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.40  | 95    | 1445677  | 10.47    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 104.70% |

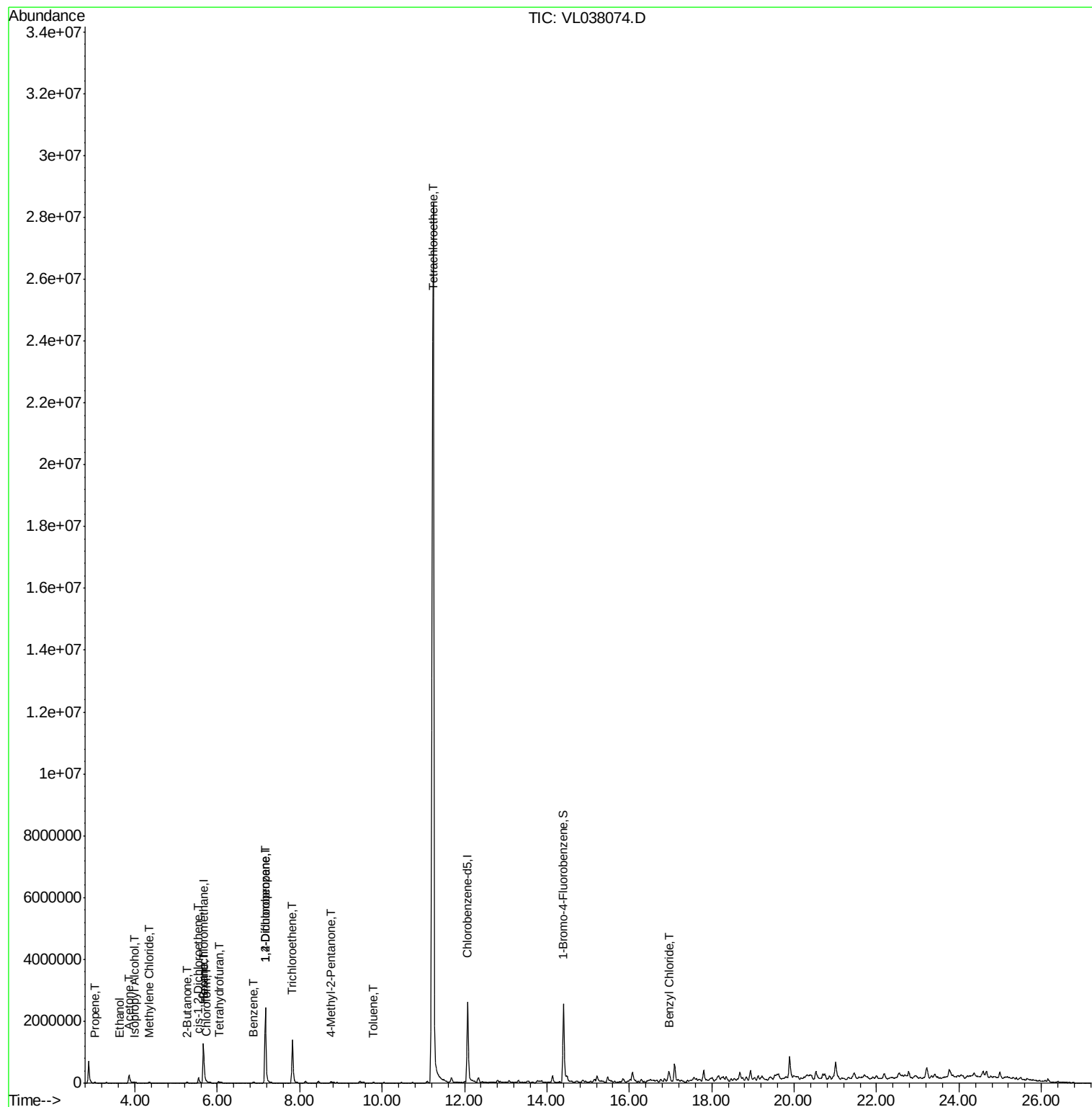
| Target Compounds           | R.T.  | QIon | Response | Conc    | Units  | Ovalue |
|----------------------------|-------|------|----------|---------|--------|--------|
| 9) Propene                 | 3.02  | 41   | 6733     | 0.116   | ppbv # | 42     |
| 13) Ethanol                | 3.62  | 45   | 5202     | 0.924   | ppbv # | 41     |
| 15) Acetone                | 3.85  | 43   | 431781   | 6.611   | ppbv   | 99     |
| 19) Isopropyl Alcohol      | 3.98  | 45   | 9005     | 0.191   | ppbv # | 95     |
| 20) Methylene Chloride     | 4.34  | 84   | 4716     | 0.129   | ppbv   | 90     |
| 26) Hexane                 | 5.68  | 57   | 4122     | 0.039   | ppbv # | 1      |
| 29) Chloroform             | 5.75  | 83   | 11318    | 0.073   | ppbv   | 84     |
| 31) cis-1,2-Dichloroethene | 5.54  | 61   | 109886   | 1.104   | ppbv   | 89     |
| 34) 2-Butanone             | 5.26  | 43   | 41978    | 0.467   | ppbv   | 98     |
| 36) Benzene                | 6.88  | 78   | 27337    | 0.123   | ppbv # | 91     |
| 38) Trichloroethene        | 7.83  | 130  | 522911   | 6.231   | ppbv   | 97     |
| 39) 1,2-Dichloropropane    | 7.17  | 63   | 534961   | 6.268   | ppbv # | 26     |
| 41) Tetrahydrofuran        | 6.05  | 42   | 6476     | 0.116   | ppbv # | 56     |
| 50) 4-Methyl-2-Pentanone   | 8.76  | 43   | 42325    | 0.310   | ppbv   | 91     |
| 52) Tetrachloroethene      | 11.24 | 164  | 10746816 | 130.542 | ppbv   | 88     |
| 53) Toluene                | 9.80  | 91   | 23310    | 0.091   | ppbv   | 95     |
| 66) Benzyl Chloride        | 16.98 | 91   | 524      | 0.033   | ppbv # | 63     |

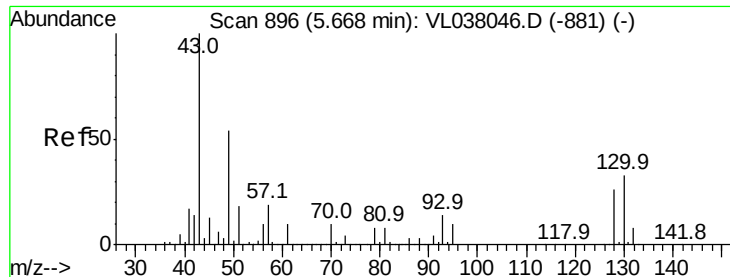
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL111821\  
Data File : VL038074.D  
Acq On : 19 Nov 2021 4:12  
Operator : SY/AP  
Sample : M4751-02DL 40X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SVP-2DL

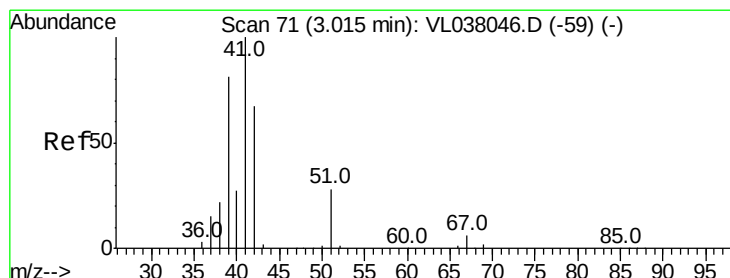
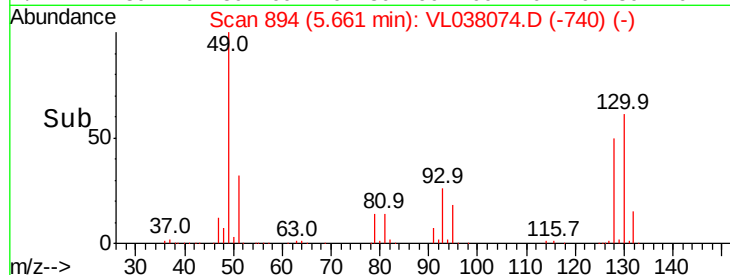
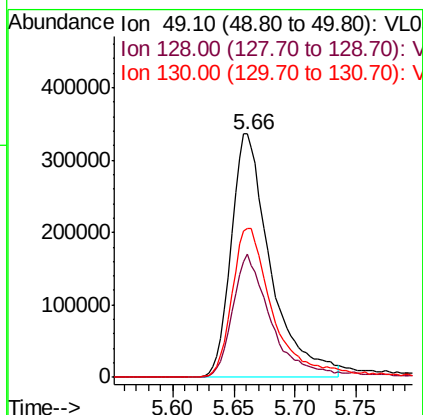
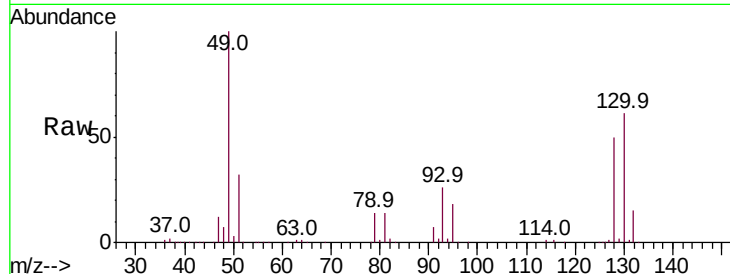
Quant Time: Nov 22 05:25:08 2021  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111821AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Nov 18 13:16:09 2021  
QLast Update : Thu Nov 18 13:16:09 2021  
Response via : Initial Calibration





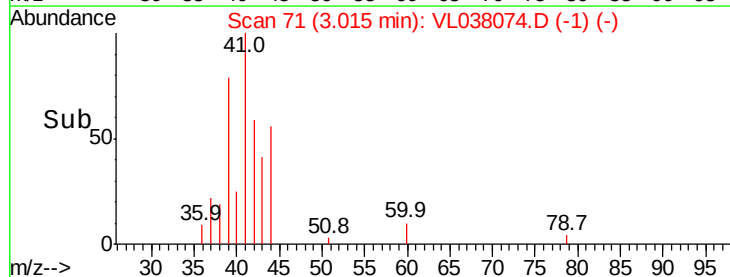
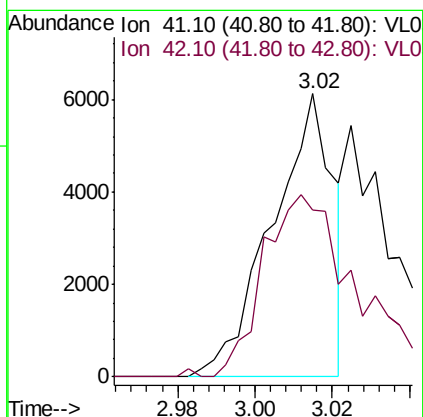
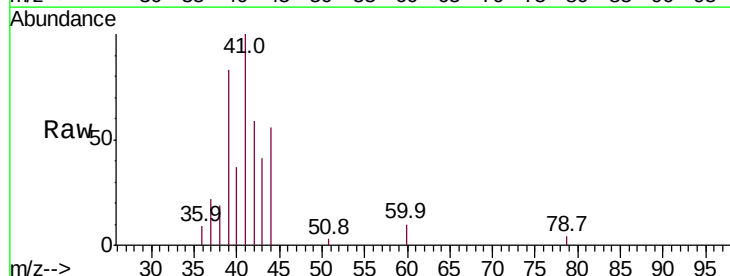
#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.66  
 Instrument: MSVOA\_1  
 Delta R.T.:  
 Lab File: ClientSampleId:  
 SVP-2DL  
 Acq: 19 Nov 2021 4:12

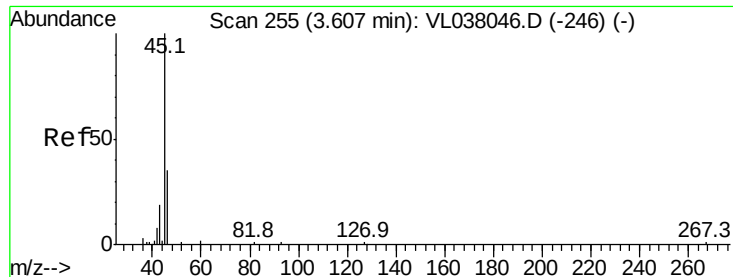
Tot Ion: 49 Resp: 75314  
 Ion Ratio Lower Upper  
 49 100  
 128 51.4 26.5 79.5  
 130 66.2 32.5 97.4



#9  
 Propene  
 Concen: 0.116 ppbv  
 RT: 3.02 min Scan# 71  
 Delta R.T.: 0.00 min  
 Lab File: VL038074.D  
 Acq: 19 Nov 2021 4:12

Tgt Ion: 41 Resp: 6733  
 Ion Ratio Lower Upper  
 41 100  
 42 113.7 53.8 80.8#





#13

Ethanol

Concen: 0.924 ppbv

RT: 3.62 Instrument: MSVOA\_1

Delta R.T. 0.00 min

Lab File: ClientSampleId:

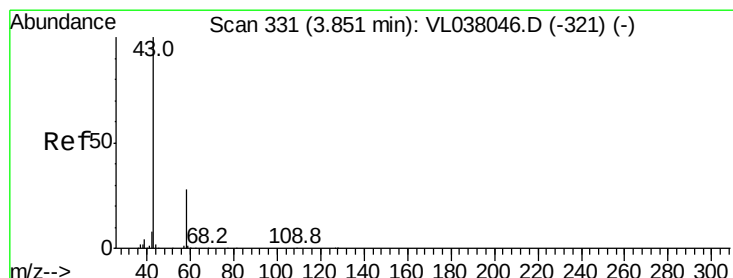
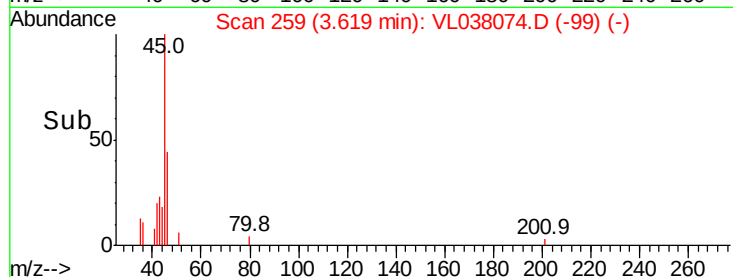
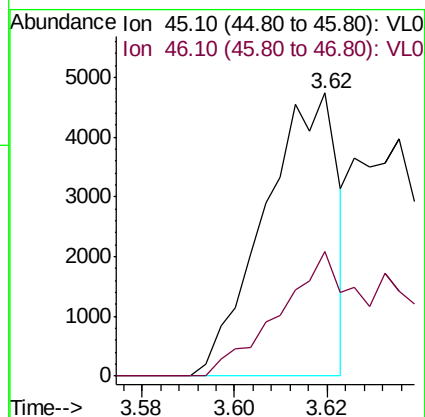
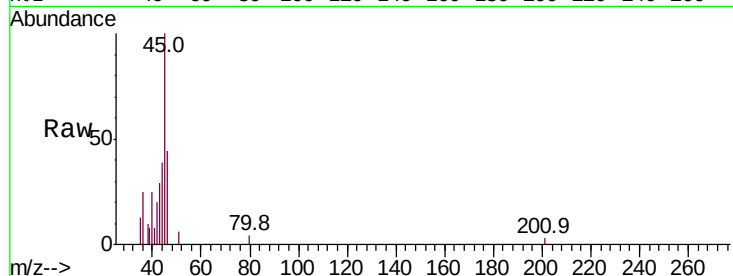
Acq: 19 Nov 2021 4:12

Tot Ion: 45 Resp: 5202

Ion Ratio Lower Upper

45 100

46 82.2 17.6 70.2#



#15

Acetone

Concen: 6.611 ppbv

RT: 3.85 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL038074.D

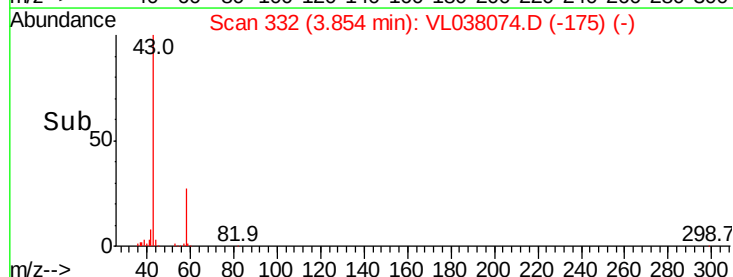
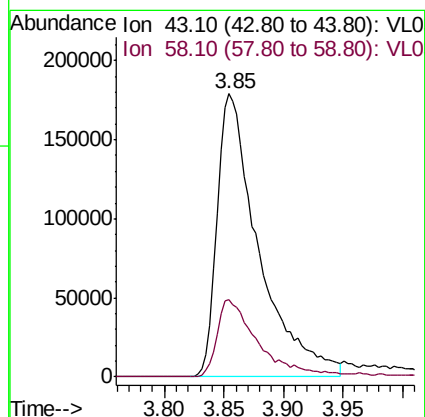
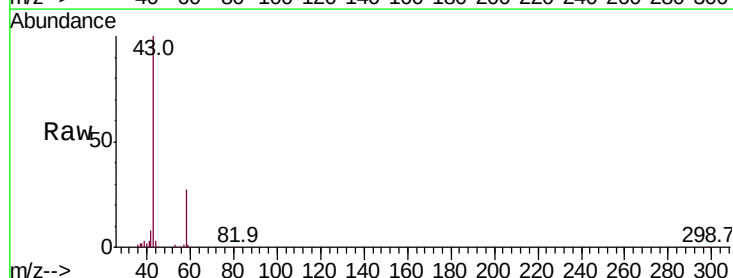
Acq: 19 Nov 2021 4:12

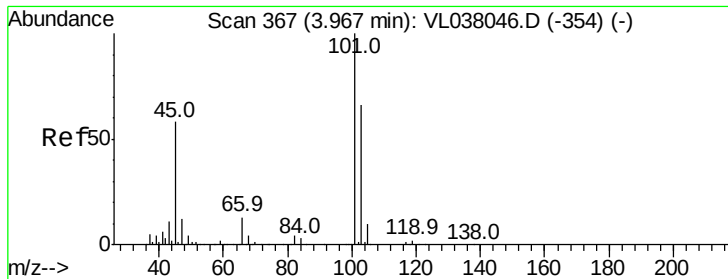
Tgt Ion: 43 Resp: 431781

Ion Ratio Lower Upper

43 100

58 28.5 22.4 33.6





#19

Isopropyl Alcohol

Concen: 0.191 ppbv

RT: 3.98 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

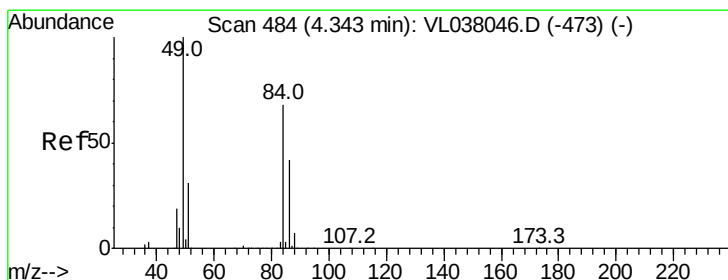
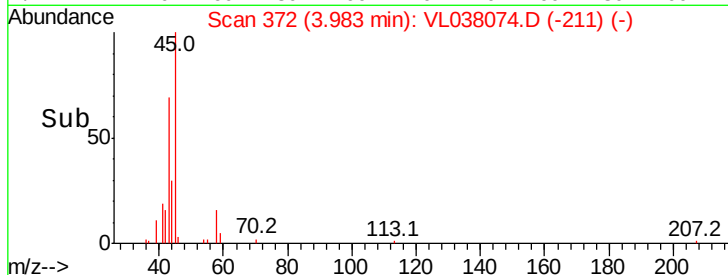
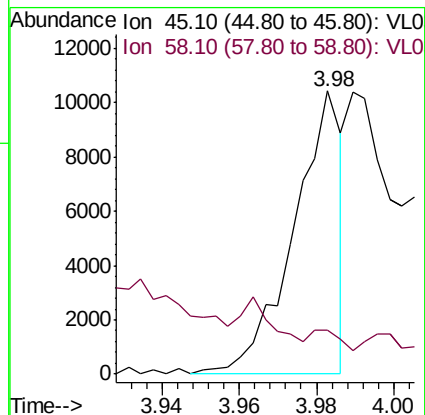
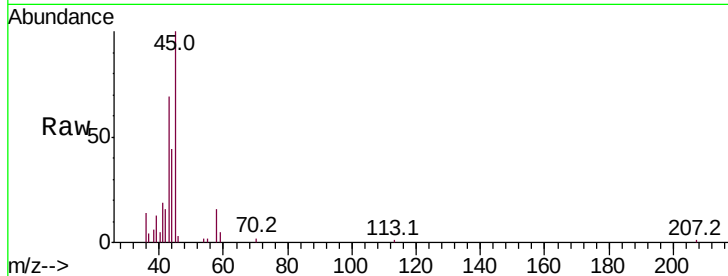
Acq: 19 Nov 2021 4:12

Tot Ion: 45 Resp: 9005

Ion Ratio Lower Upper

45 100

58 0.0 1.4 2.0#



#20

Methylene Chloride

Concen: 0.129 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.00 min

Lab File: VL038074.D

Acq: 19 Nov 2021 4:12

Tgt Ion: 84 Resp: 4716

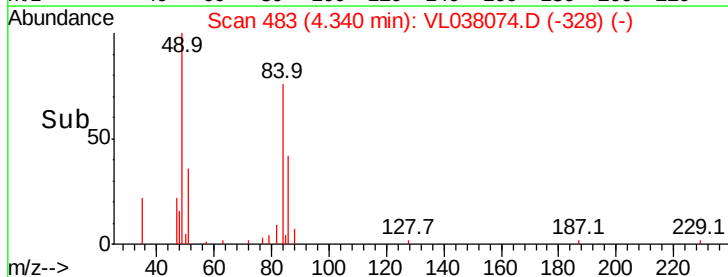
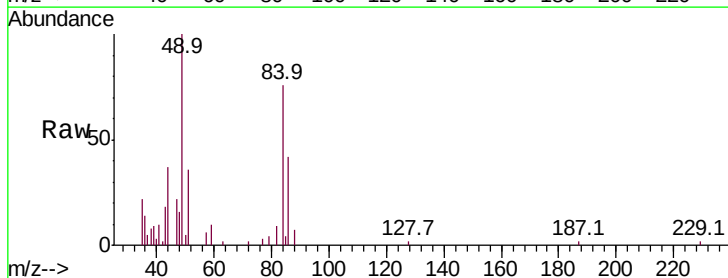
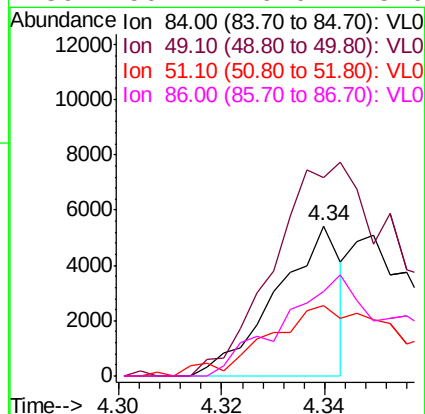
Ion Ratio Lower Upper

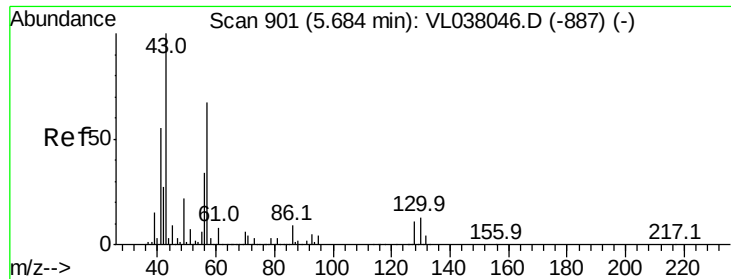
84 100

49 132.2 118.2 177.2

51 40.8 36.8 55.2

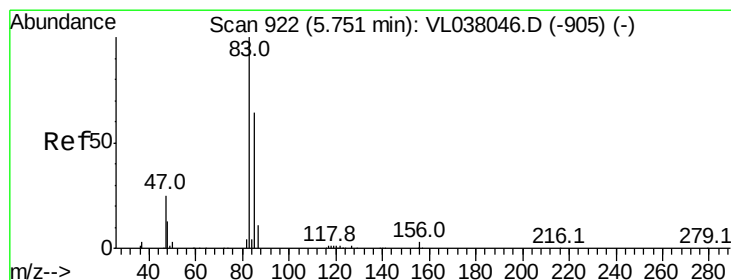
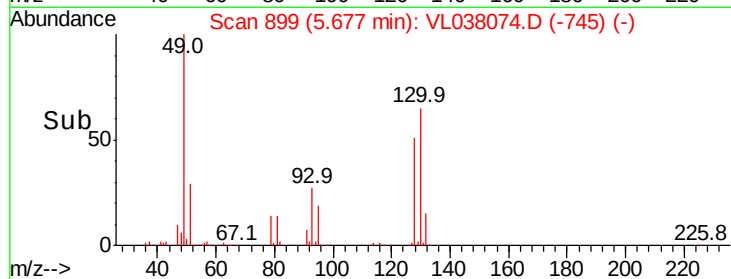
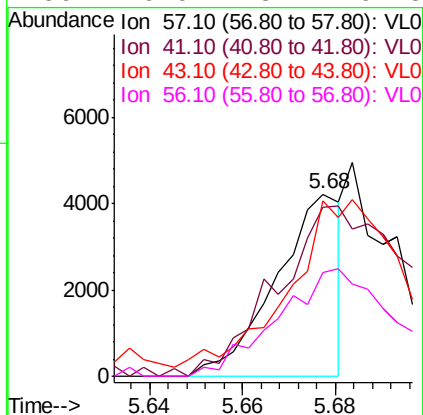
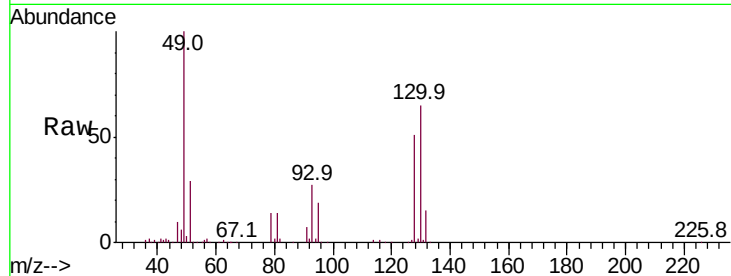
86 56.1 49.0 73.6





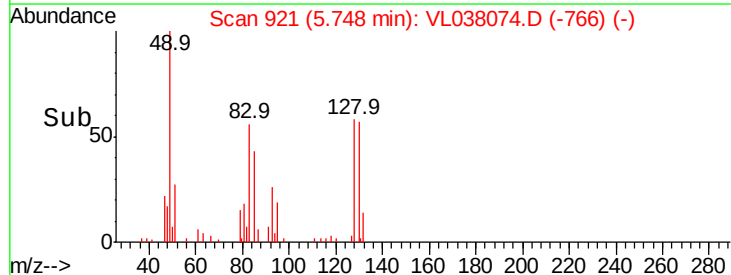
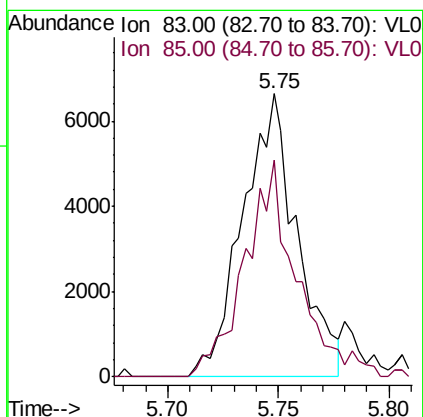
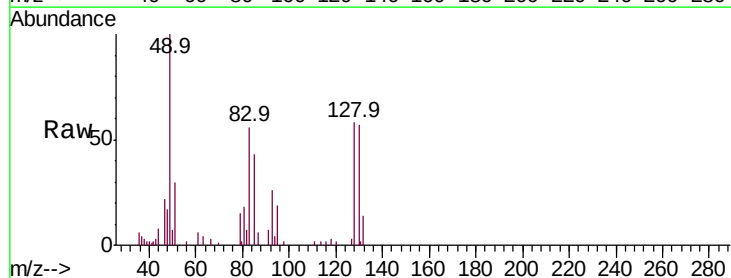
#26  
Hexane  
Concen: 0.039 ppbv  
RT: 5.68  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId:  
Acq: 19 Nov 2021 4:12

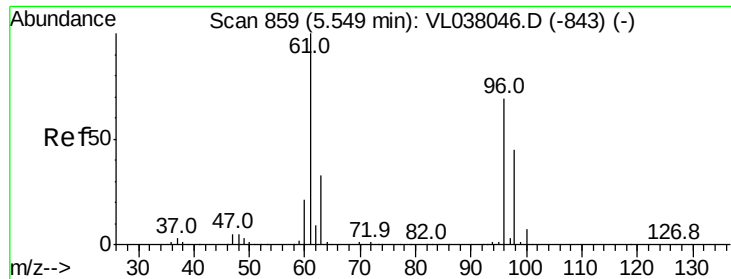
Tot Ion: 57 Resp: 4122  
Ion Ratio Lower Upper  
57 100  
41 0.0 71.4 107.2#  
43 0.0 174.6 261.8#  
56 0.0 43.2 64.8#



#29  
Chloroform  
Concen: 0.073 ppbv  
RT: 5.75 min Scan# 921  
Delta R.T. -0.00 min  
Lab File: VL038074.D  
Acq: 19 Nov 2021 4:12

Tgt Ion: 83 Resp: 11318  
Ion Ratio Lower Upper  
83 100  
85 76.6 51.0 76.6





#31

cis-1,2-Dichloroethene

Concen: 1.104 ppbv

RT: 5.54 Instrument: MSVOA\_1

Delta R.T. ClientSampleId:

Lab File: SVP-2DL

Acq: 19 Nov 2021 4:12

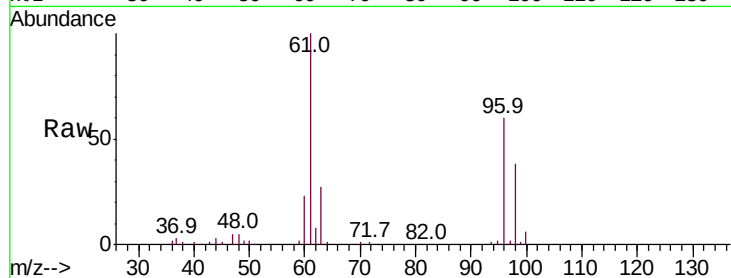
Tot Ion: 61 Resp: 109886

Ion Ratio Lower Upper

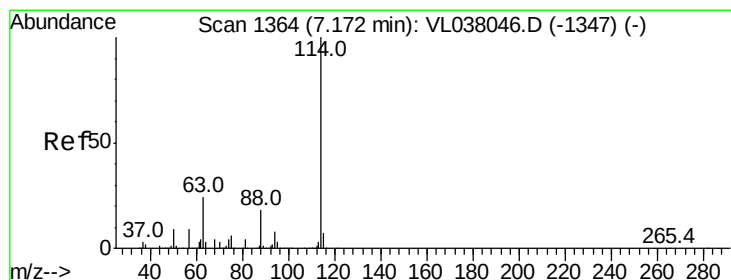
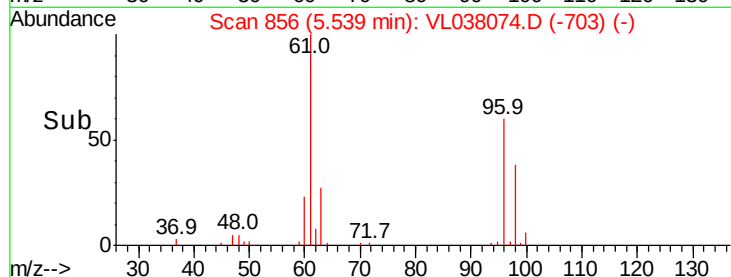
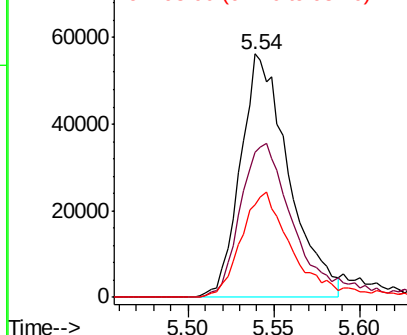
61 100

96 59.6 55.4 83.2

98 38.0 35.7 53.5



Abundance Ion 61.10 (60.80 to 61.80): VL0  
Ion 96.00 (95.70 to 96.70): VL0  
Ion 98.00 (97.70 to 98.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1362

Delta R.T. -0.01 min

Lab File: VL038074.D

Acq: 19 Nov 2021 4:12

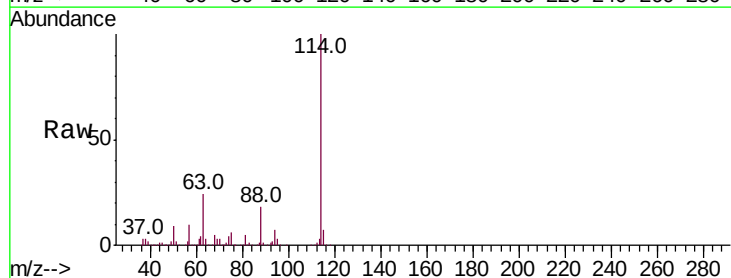
Tgt Ion:114 Resp: 2230434

Ion Ratio Lower Upper

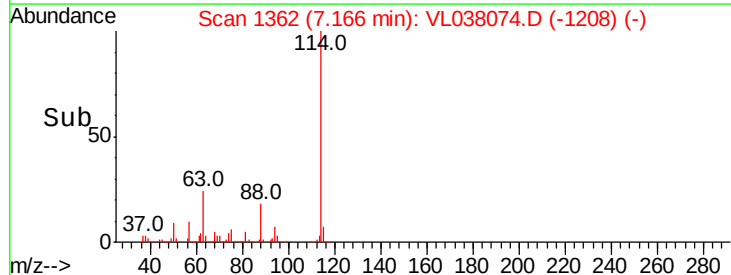
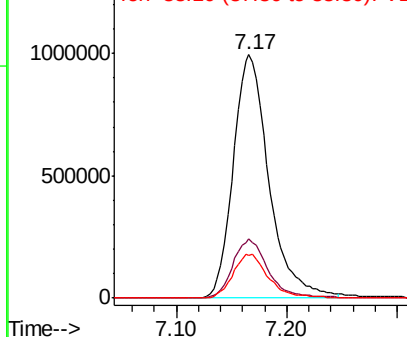
114 100

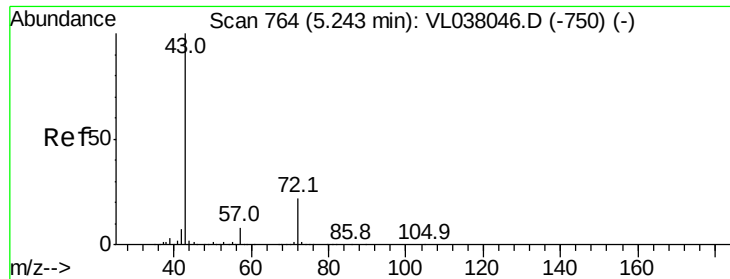
63 24.3 19.7 29.5

88 18.2 14.4 21.6



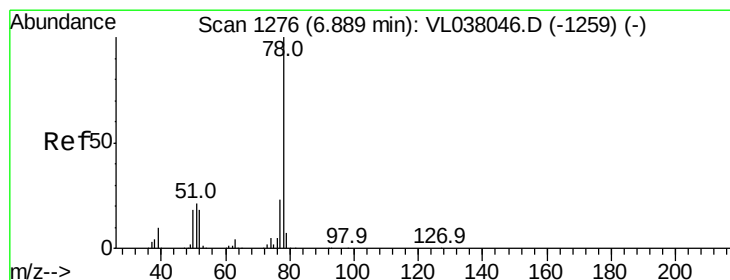
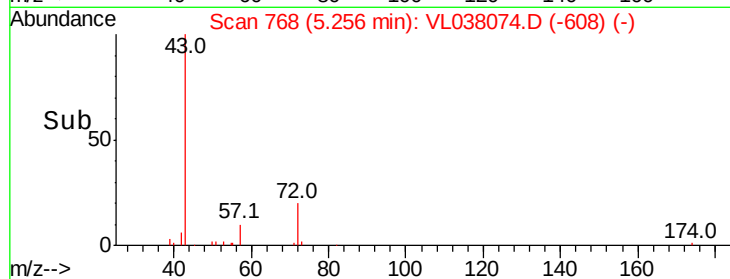
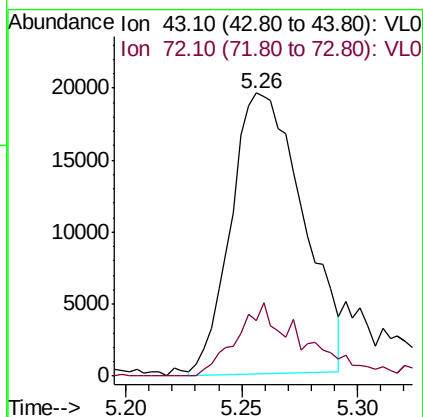
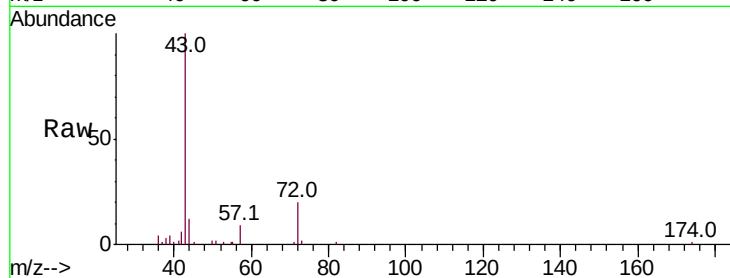
Abundance Ion 114.10 (113.80 to 114.80): V  
Ion 63.10 (62.80 to 63.80): VL0  
Ion 88.10 (87.80 to 88.80): VL0





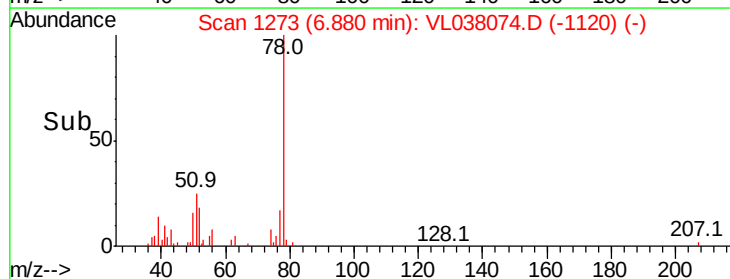
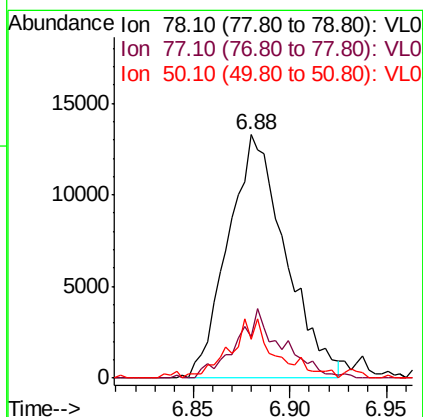
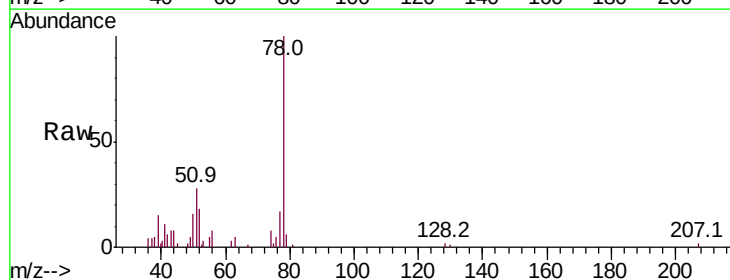
#34  
 2-Butanone  
 Concen: 0.467 ppbv  
 RT: 5.26  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 SVP-2DL  
 Acq: 19 Nov 2021 4:12

Tot Ion: 43 Resp: 41978  
 Ion Ratio Lower Upper  
 43 100  
 72 24.3 18.8 28.2

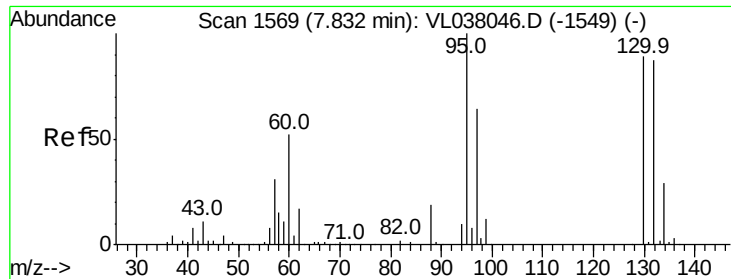


#36  
 Benzene  
 Concen: 0.123 ppbv  
 RT: 6.88 min Scan# 1273  
 Delta R.T. -0.01 min  
 Lab File: VL038074.D  
 Acq: 19 Nov 2021 4:12

Tgt Ion: 78 Resp: 27337  
 Ion Ratio Lower Upper  
 78 100  
 77 17.2 18.2 27.4#  
 50 16.0 14.7 22.1

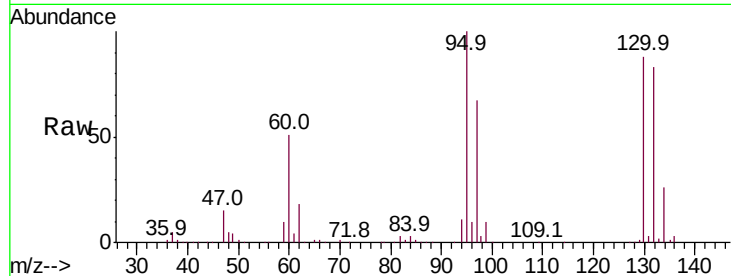






#38  
 Trichloroethene  
 Concen: 6.231 ppbv  
 RT: 7.83  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 SVP-2DL  
 Acq: 19 Nov 2021 4:12

|             |       |            |
|-------------|-------|------------|
| Tot Ion:130 | Resp: | 522911     |
| Ion Ratio   | Lower | Upper      |
| 130         | 100   |            |
| 95          | 113.6 | 89.4 134.2 |
| 132         | 94.8  | 78.2 117.2 |
| 97          | 76.2  | 57.0 85.4  |

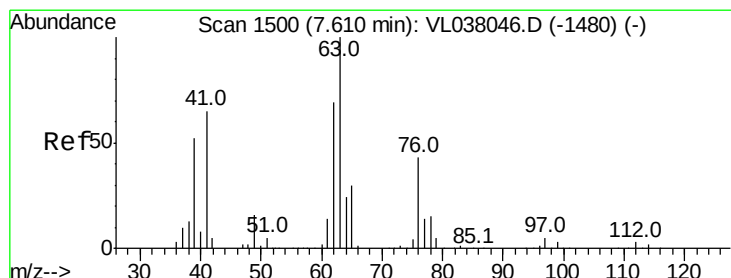
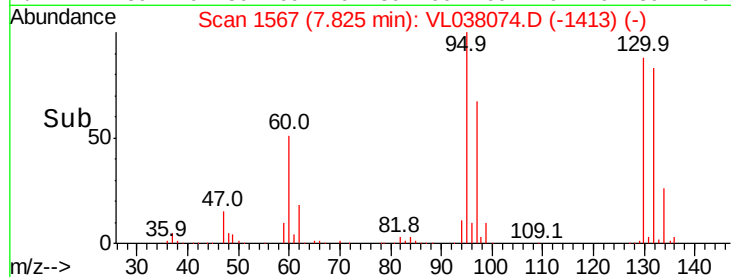
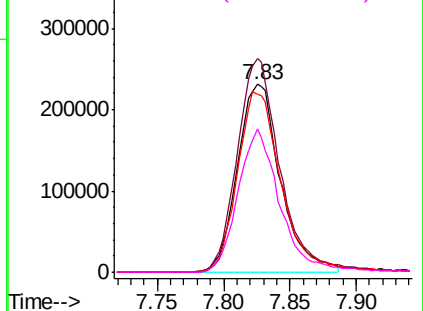


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

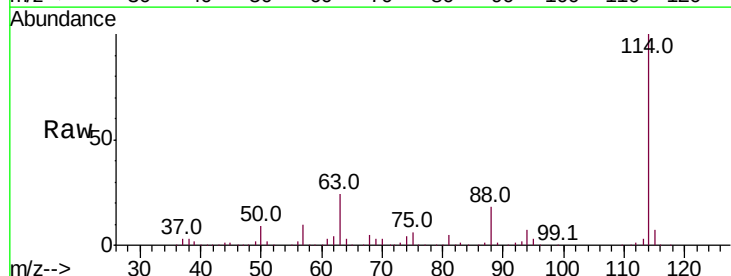
Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39  
 1,2-Dichloropropane  
 Concen: 6.268 ppbv  
 RT: 7.17 min Scan# 1362  
 Delta R.T. -0.44 min  
 Lab File: VL038074.D  
 Acq: 19 Nov 2021 4:12

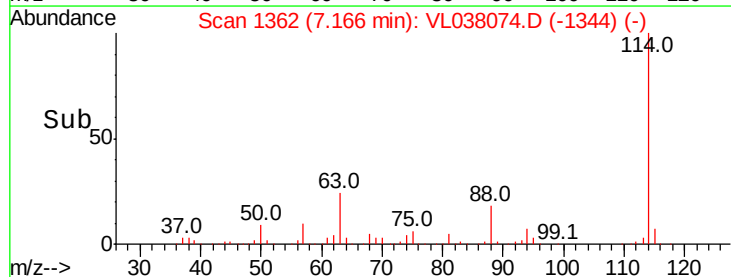
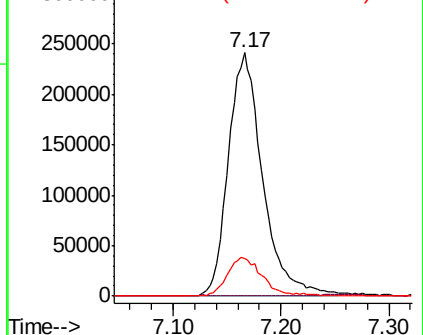
|             |       |            |
|-------------|-------|------------|
| Tgt Ion: 63 | Resp: | 534961     |
| Ion Ratio   | Lower | Upper      |
| 63          | 100   |            |
| 41          | 0.0   | 52.3 78.5# |
| 62          | 15.6  | 55.1 82.7# |

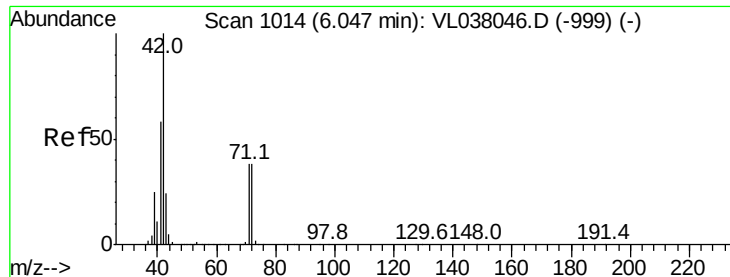


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#41

Tetrahydrofuran

Concen: 0.116 ppbv

RT: 6.05 Instrument: MSVOA\_1

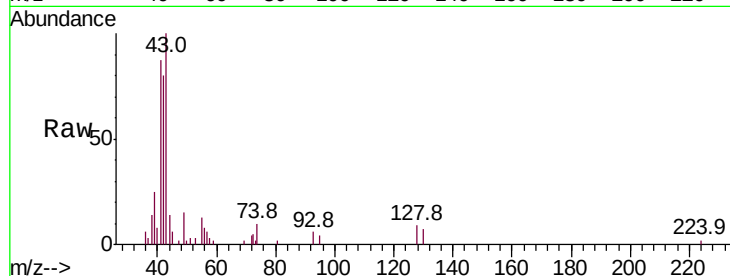
Delta R.T. ClientSampleId:

Lab File: SVP-2DL

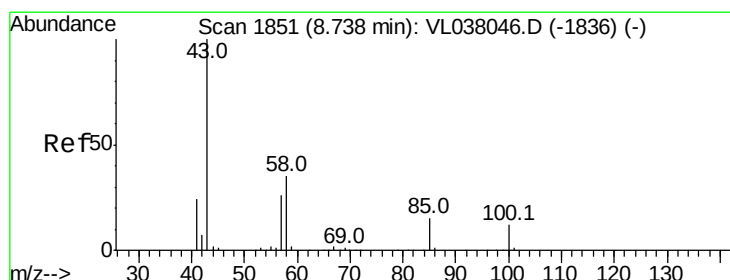
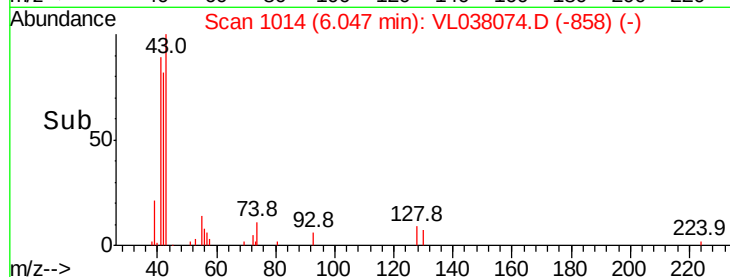
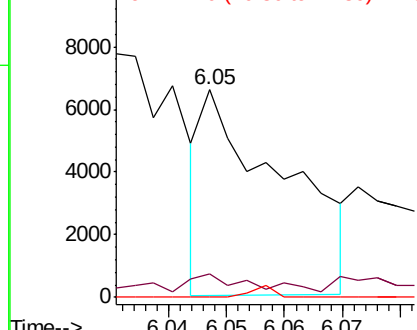
Acq: 19 Nov 2021 4:12

Tot Ion: 42 Resp: 6476

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 42  | 100   |       |       |
| 72  | 22.9  | 31.7  | 47.5# |
| 71  | 1.5   | 30.6  | 46.0# |



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



#50

4-Methyl-2-Pentanone

Concen: 0.310 ppbv

RT: 8.76 min Scan# 1857

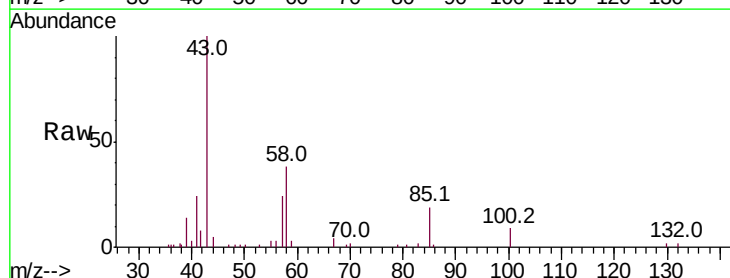
Delta R.T. 0.02 min

Lab File: VL038074.D

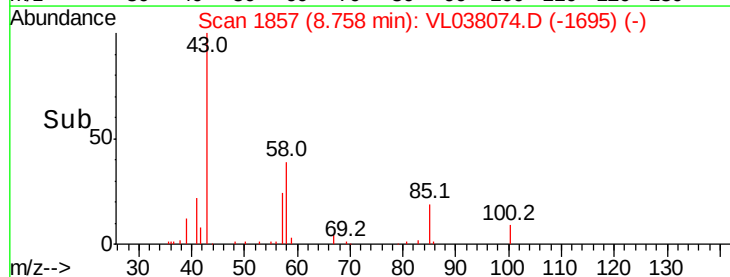
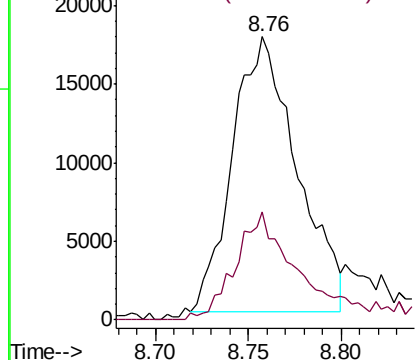
Acq: 19 Nov 2021 4:12

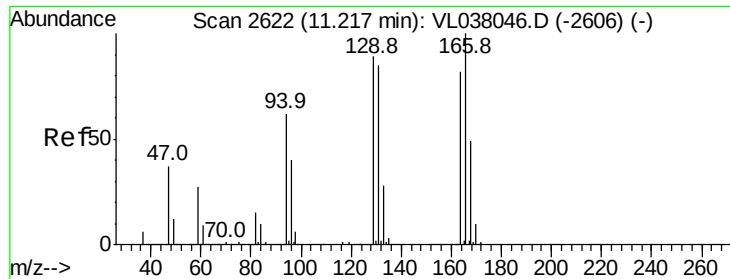
Tgt Ion: 43 Resp: 42325

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 42.2  | 29.4  | 44.2  |



Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 58.10 (57.80 to 58.80): VL0





#52

Tetrachloroethene

Concen: 130.542 ppbv

RT: 11.24

Delta R.T.

Lab File:

Acq: 19 Nov 2021

Instrument:

MSVOA\_L

ClientSampleId:

SVP-2DL

Tot Ion:164 Resp:10746816

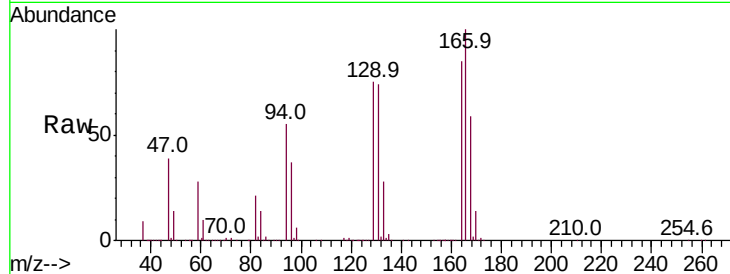
Ion Ratio Lower Upper

164 100

166 118.3 97.2 145.8

129 88.3 86.9 130.3

131 87.7 82.8 124.2

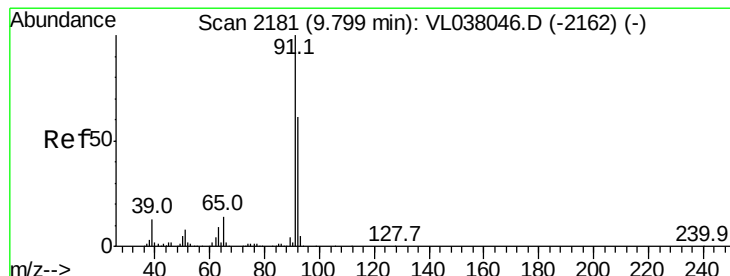
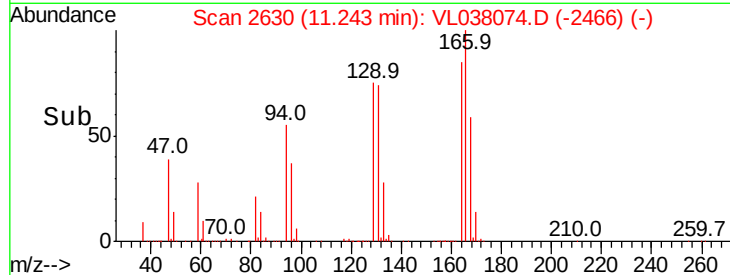
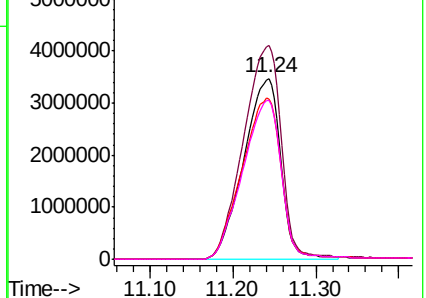


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.091 ppbv

RT: 9.80 min Scan# 2180

Delta R.T. -0.00 min

Lab File: VL038074.D

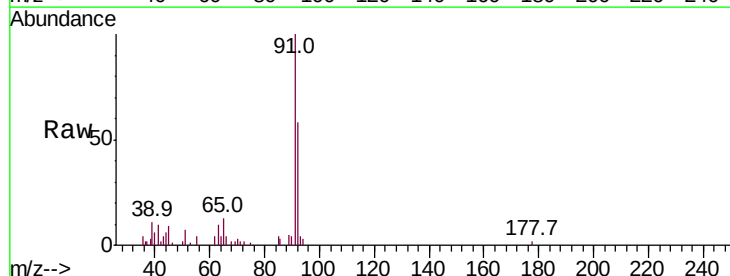
Acq: 19 Nov 2021 4:12

Tgt Ion: 91 Resp: 23310

Ion Ratio Lower Upper

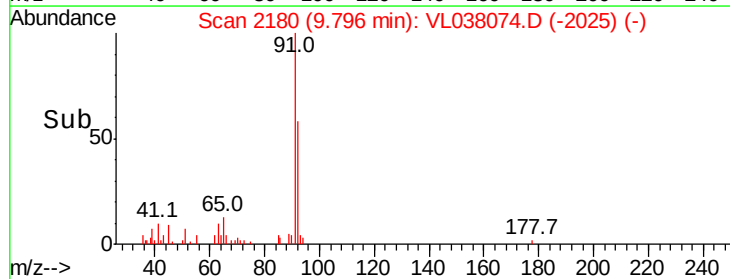
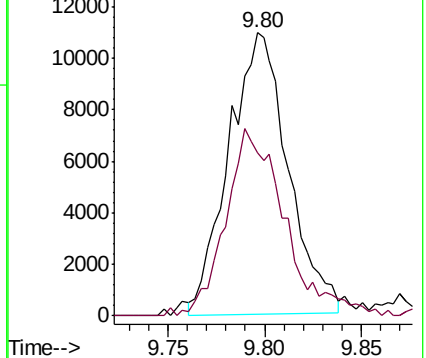
91 100

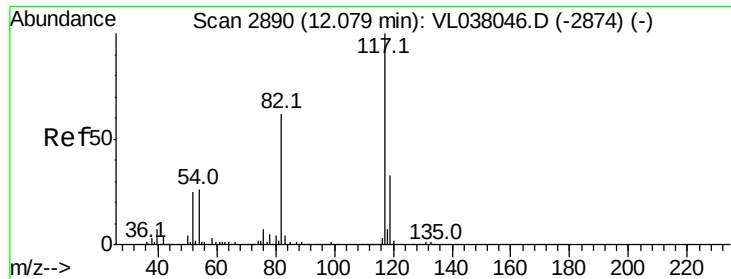
92 66.3 49.7 74.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

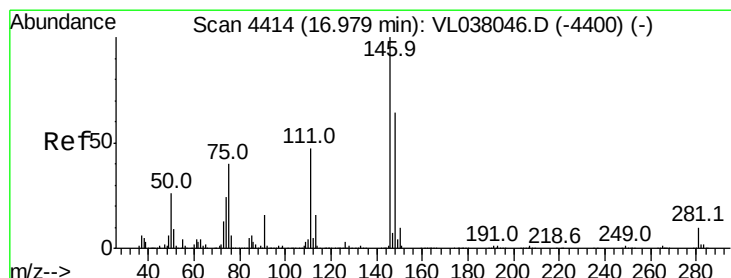
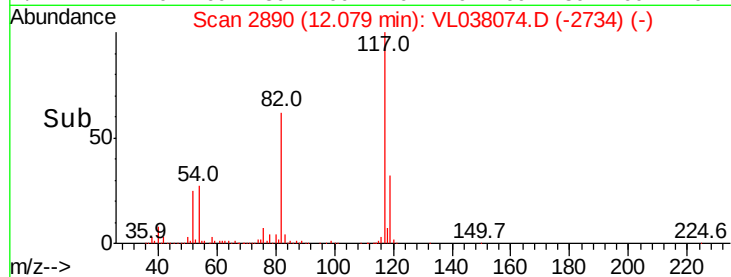
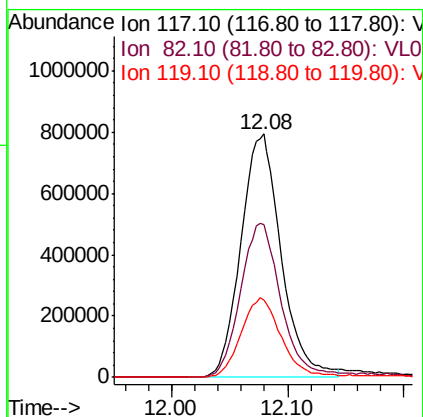
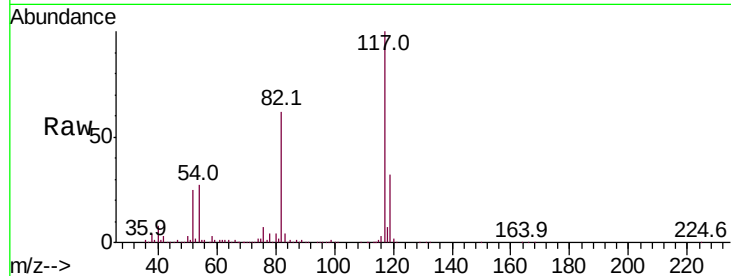
Ion 92.10 (91.80 to 92.80): VL0





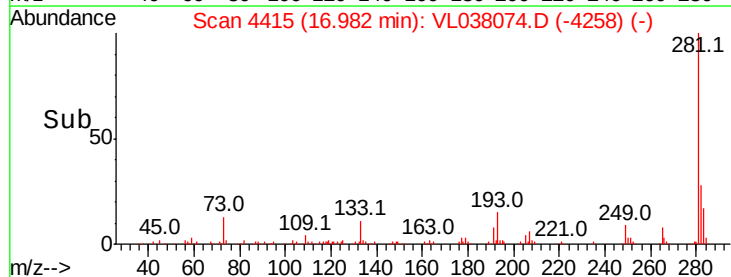
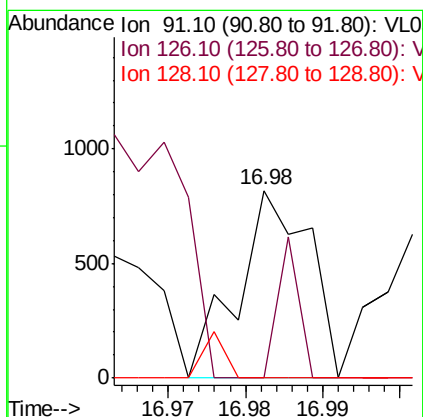
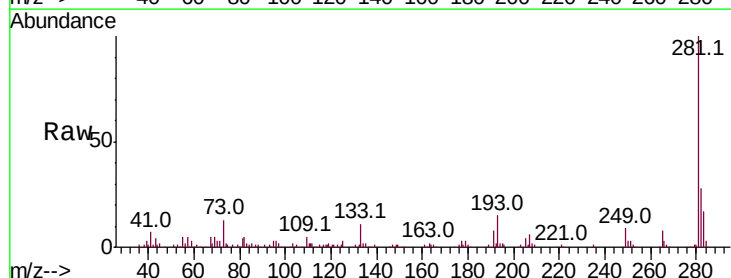
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.08 min  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId:  
SVP-2DL  
Acq: 19 Nov 2021 4:12

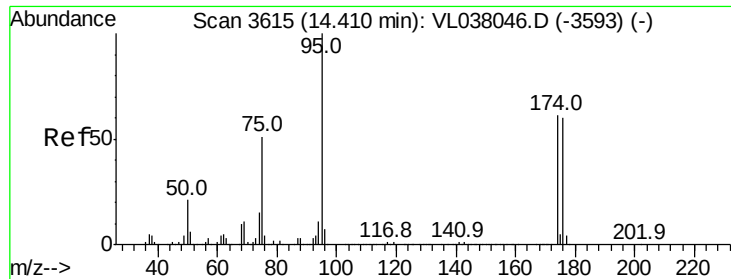
Tot Ion: 117 Resp: 1913716  
Ion Ratio Lower Upper  
117 100  
82 66.1 52.8 79.2  
119 34.1 26.8 40.2



#66  
Benzyl Chloride  
Concen: 0.033 ppbv  
RT: 16.98 min Scan# 4415  
Delta R.T.: 0.00 min  
Lab File: VL038074.D  
Acq: 19 Nov 2021 4:12

Tgt Ion: 91 Resp: 524  
Ion Ratio Lower Upper  
91 100  
126 0.0 15.5 23.3#  
128 0.0 5.6 8.4#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.473 ppbv

RT: 14.40 Instrument:

Delta R.T MSVOA\_L

Lab File: ClientSampleId:

SVP-2DL

Acq: 19 Nov 2021 4.12

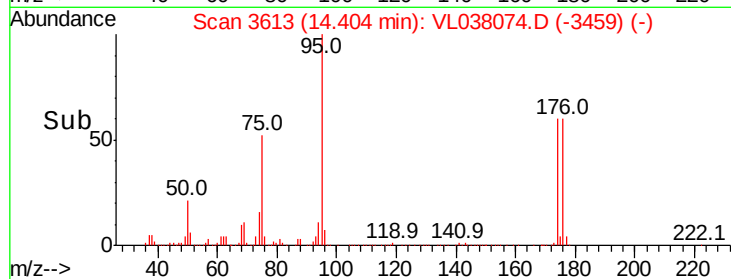
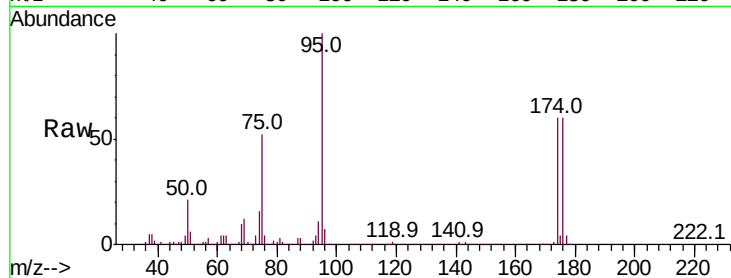
Tot Ion: 95 Resp: 1445677

Ion Ratio Lower Upper

95 100

174 64.6 53.1 79.7

175 4.5 4.0 6.0



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

