

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL012422\  
 Data File : VL038275.D  
 Acq On : 25 Jan 2022 00:59  
 Operator : SY/AP  
 Sample : N1244-02DL 10X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SG-2DL

Quant Time: Jan 25 01:56:29 2022  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL012422AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Jan 24 14:12:48 2022  
 QLast Update : Mon Jan 24 14:12:48 2022  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.68  | 49   | 823770   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.19  | 114  | 2211466  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.10 | 117  | 1885667  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.43  | 95    | 1407592  | 9.83     | ppbv | 0.01   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 98.30% |

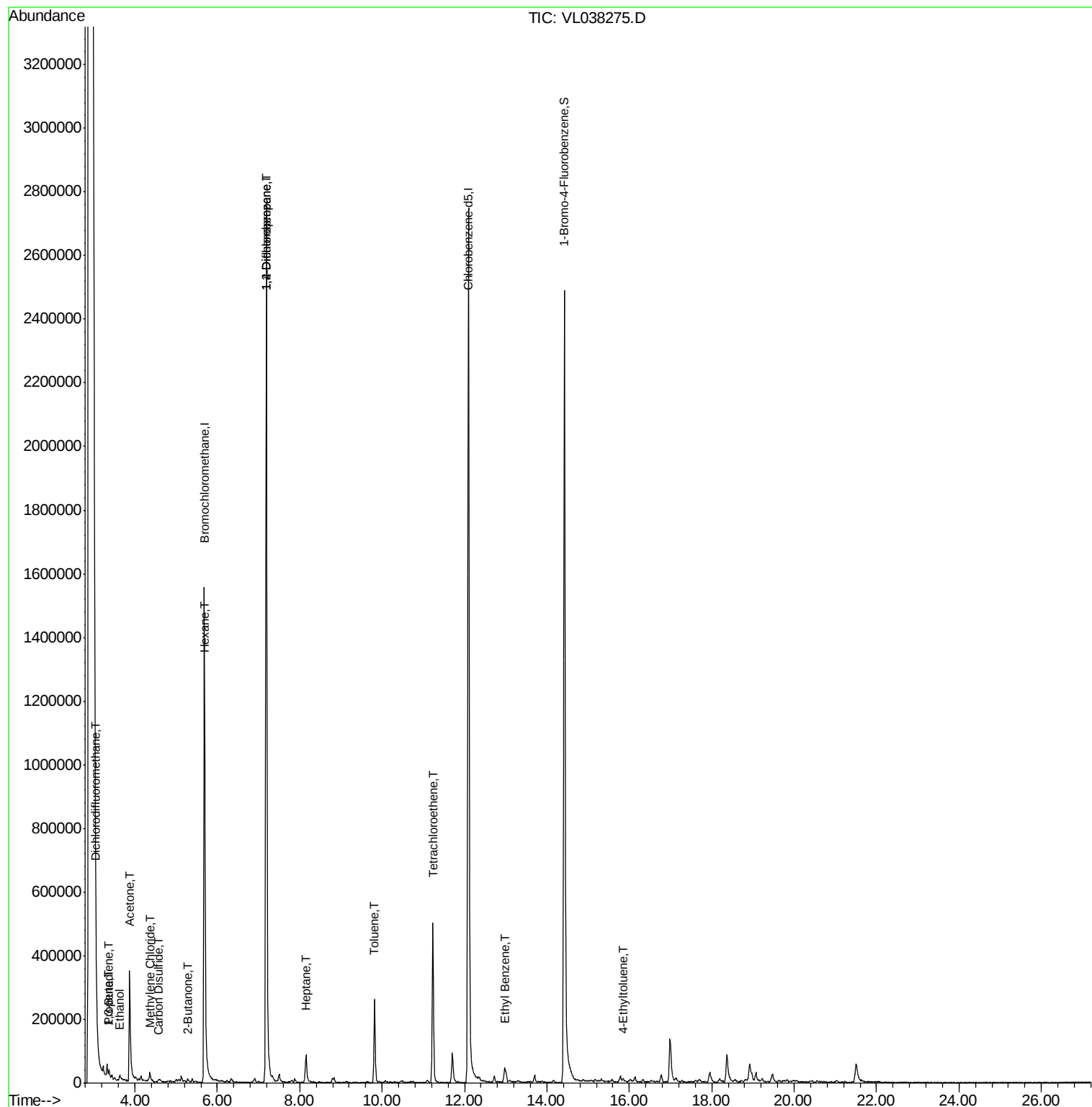
| Target Compounds           |       |     |        |       |        | Qvalue |
|----------------------------|-------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane | 3.06  | 85  | 6213   | 0.035 | ppbv   | 93     |
| 9) Propene                 | 3.37  | 41  | 3880   | 0.073 | ppbv   | 87     |
| 10) Heptane                | 8.14  | 43  | 5463   | 0.040 | ppbv # | 33     |
| 13) Ethanol                | 3.64  | 45  | 13736  | 2.397 | ppbv # | 48     |
| 15) Acetone                | 3.87  | 43  | 454629 | 6.261 | ppbv   | 98     |
| 16) 1,3-Butadiene          | 3.36  | 39  | 1626   | 0.031 | ppbv # | 53     |
| 20) Methylene Chloride     | 4.37  | 84  | 7741   | 0.183 | ppbv # | 85     |
| 26) Hexane                 | 5.70  | 57  | 15490  | 0.164 | ppbv # | 41     |
| 27) Carbon Disulfide       | 4.57  | 76  | 4570   | 0.041 | ppbv # | 27     |
| 34) 2-Butanone             | 5.27  | 43  | 3558   | 0.049 | ppbv # | 53     |
| 39) 1,2-Dichloropropane    | 7.19  | 63  | 594843 | 7.500 | ppbv # | 25     |
| 52) Tetrachloroethene      | 11.23 | 164 | 124107 | 1.841 | ppbv   | 97     |
| 53) Toluene                | 9.82  | 91  | 211419 | 0.976 | ppbv   | 98     |
| 58) Ethyl Benzene          | 12.97 | 91  | 16743  | 0.060 | ppbv   | 94     |
| 72) 4-Ethyltoluene         | 15.85 | 105 | 7654   | 0.033 | ppbv # | 84     |

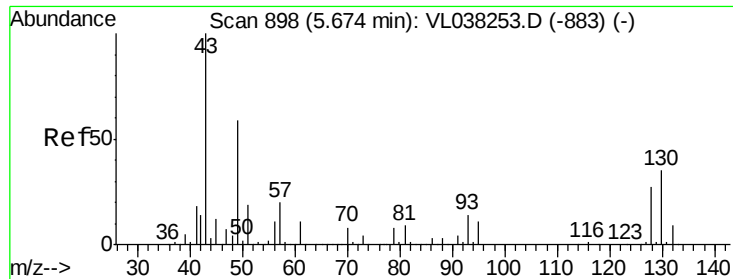
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_L\METHODS\VL012422AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Jan 24 14:12:48 2022  
QLast Update : Mon Jan 24 14:12:48 2022  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 Instrument: MSVOA\_1

Delta R.T. ClientSampleId:

Lab File: SG-2DL

Acq: 25 Jan 2022 00:59

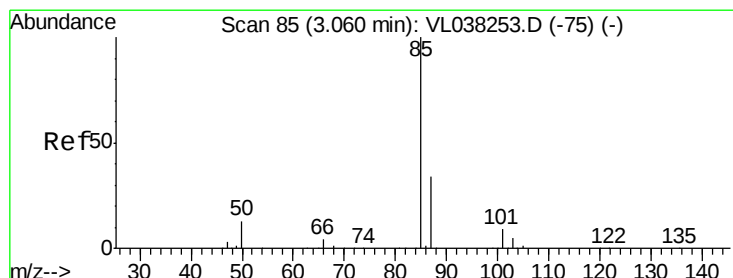
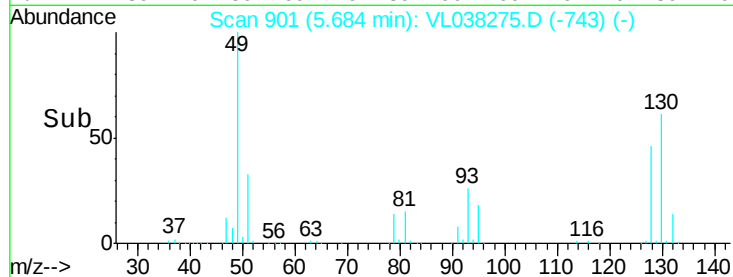
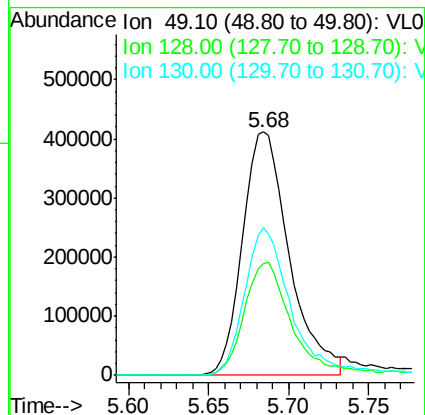
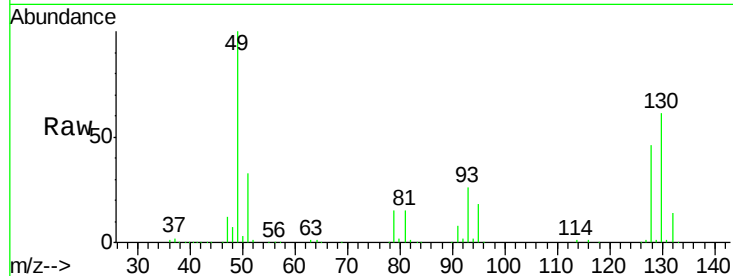
Tgt Ion: 49 Resp: 823770

Ion Ratio Lower Upper

49 100

128 49.1 24.5 73.5

130 63.4 30.1 90.5



#2

Dichlorodifluoromethane

Concen: 0.035 ppbv

RT: 3.06 min Scan# 85

Delta R.T. -0.00 min

Lab File: VL038275.D

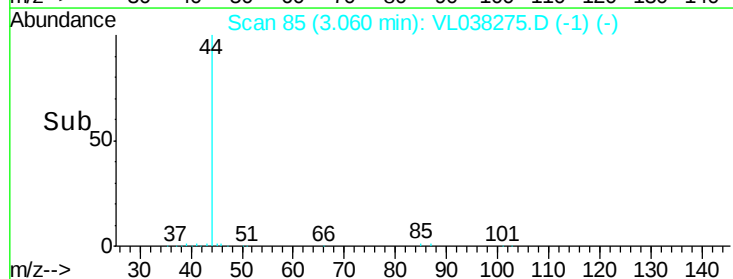
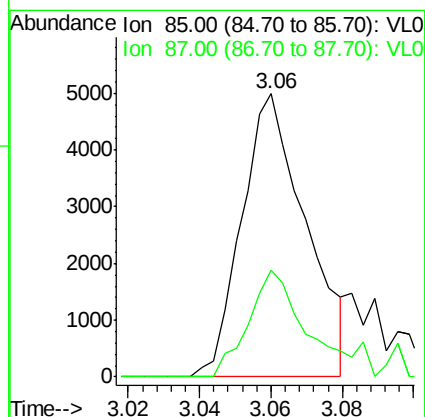
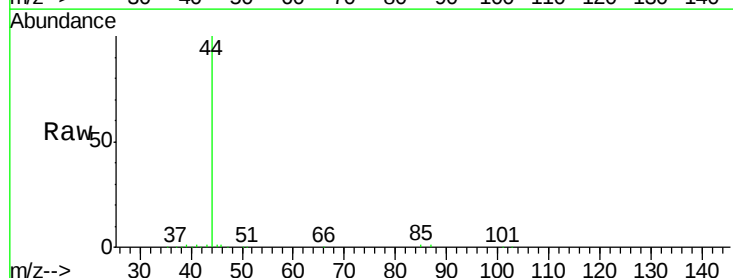
Acq: 25 Jan 2022 00:59

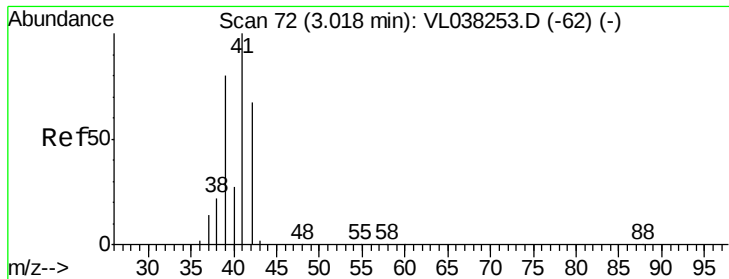
Tgt Ion: 85 Resp: 6213

Ion Ratio Lower Upper

85 100

87 37.5 27.0 40.6





#9

Propene

Concen: 0.073 ppbv

RT: 3.37 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

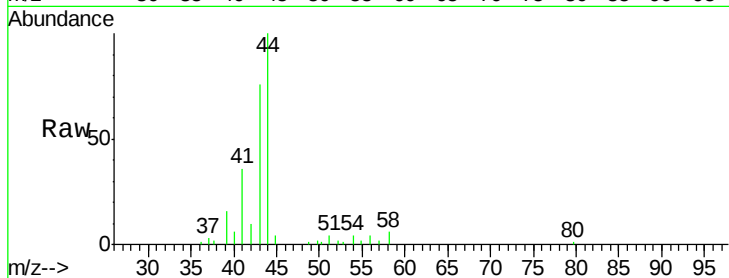
Acq: 25 Jan 2022 00:59 SG-2DL

Tgt Ion: 41 Resp: 3880

Ion Ratio Lower Upper

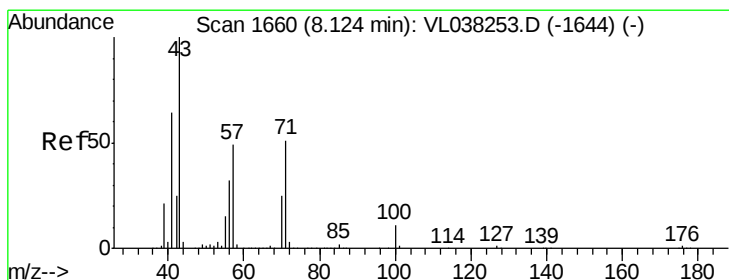
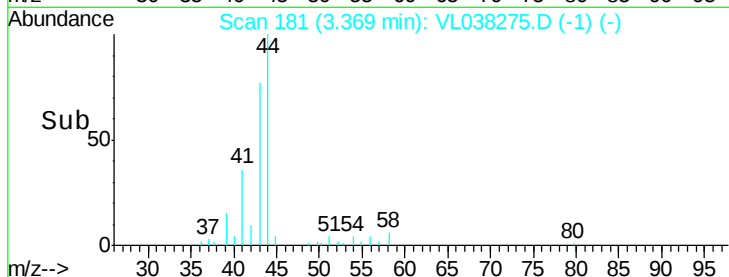
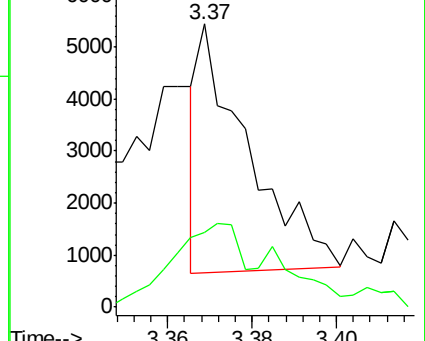
41 100

42 78.8 54.9 82.3



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.040 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. 0.02 min

Lab File: VL038275.D

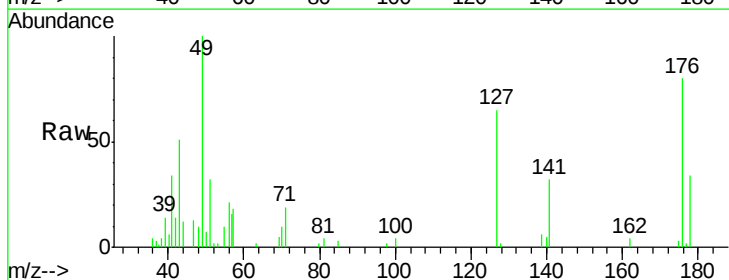
Acq: 25 Jan 2022 00:59

Tgt Ion: 43 Resp: 5463

Ion Ratio Lower Upper

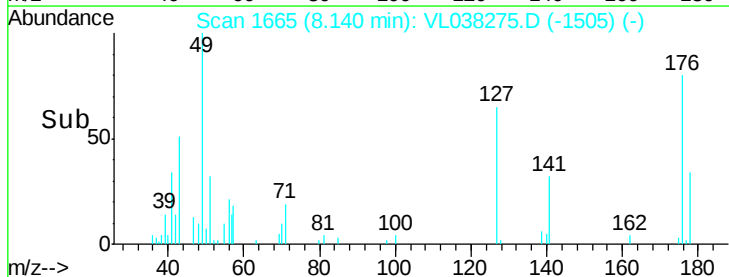
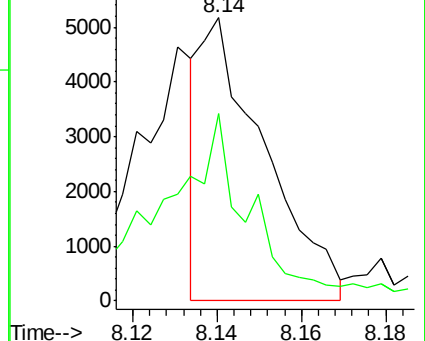
43 100

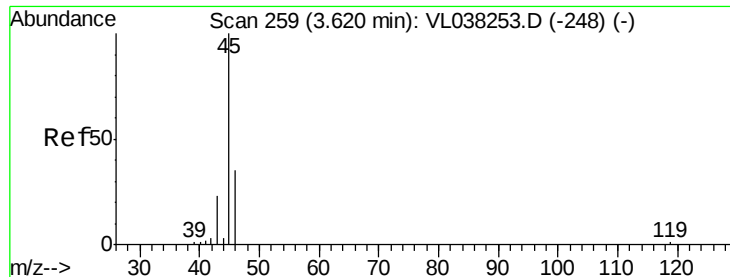
57 95.5 39.5 59.3#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#13

Ethanol

Concen: 2.397 ppbv

RT: 3.64

Delta R.T.

Lab File:

Acq: 25 Jan 2022 00:59

Instrument:

MSVOA\_1

ClientSampleId:

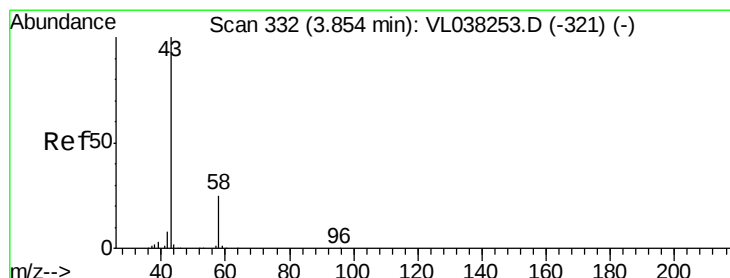
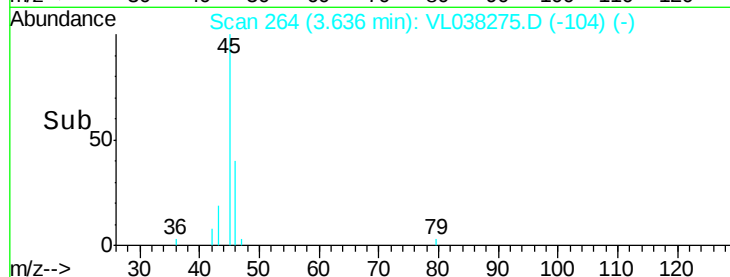
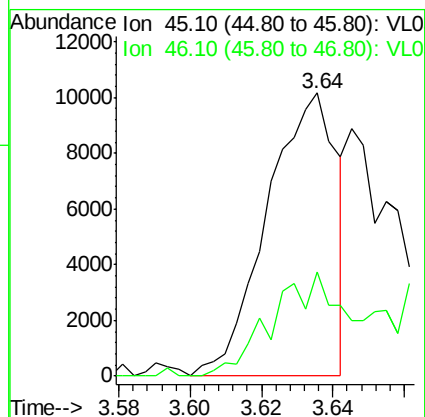
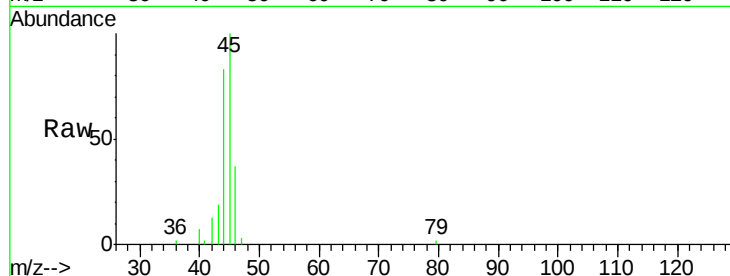
SG-2DL

Tgt Ion: 45 Resp: 13736

Ion Ratio Lower Upper

45 100

46 70.0 15.4 61.6#



#15

Acetone

Concen: 6.261 ppbv

RT: 3.87 min Scan# 338

Delta R.T. 0.02 min

Lab File: VL038275.D

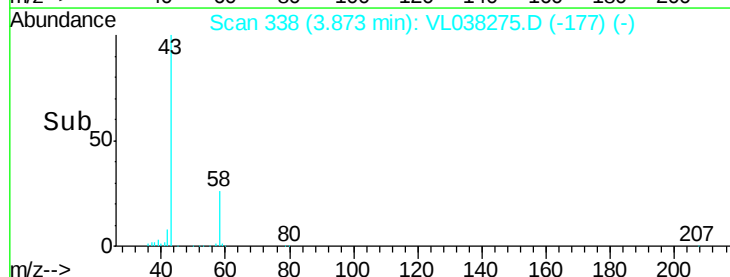
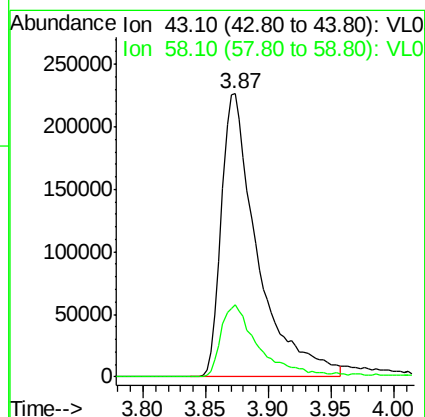
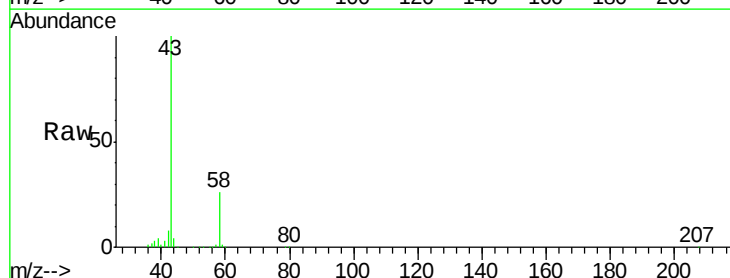
Acq: 25 Jan 2022 00:59

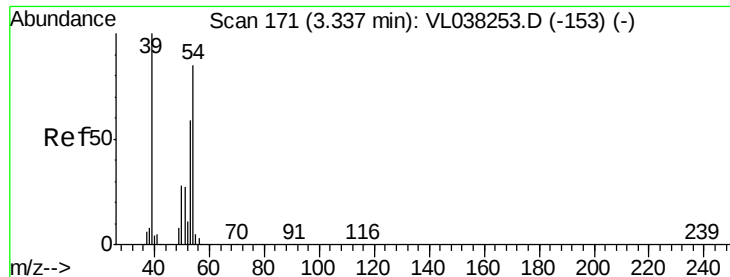
Tgt Ion: 43 Resp: 454629

Ion Ratio Lower Upper

43 100

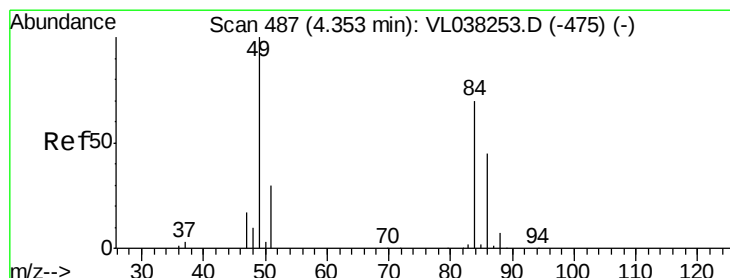
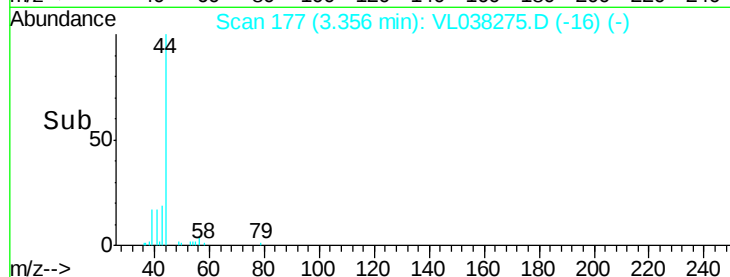
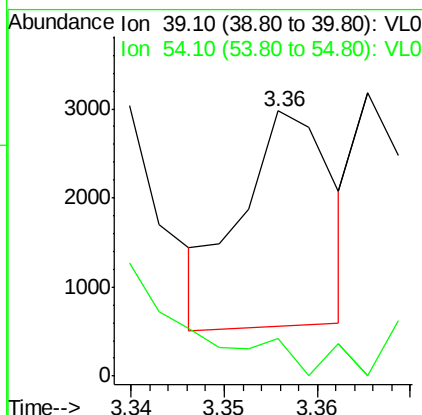
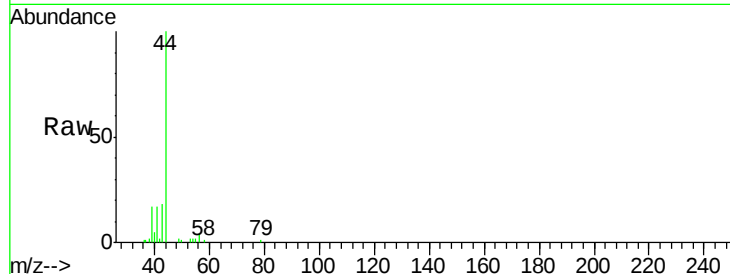
58 28.1 21.5 32.3





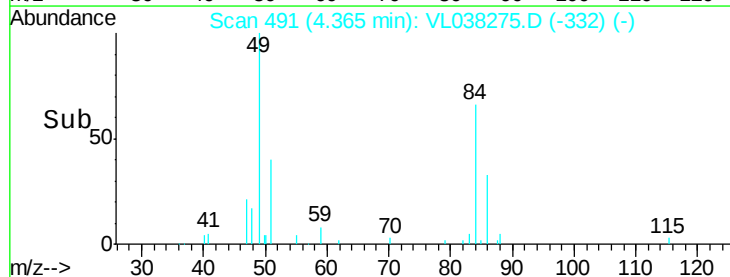
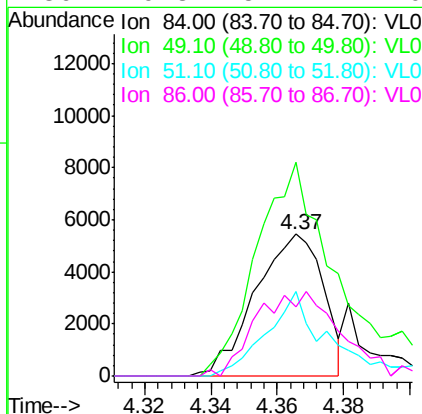
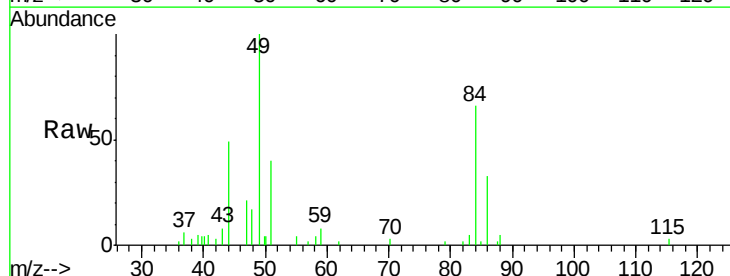
#16  
 1,3-Butadiene  
 Concen: 0.031 ppbv  
 RT: 3.36  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 25 Jan 2022 00:59

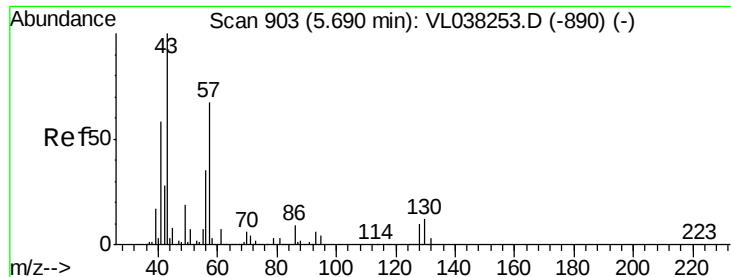
Tgt Ion: 39 Resp: 1626  
 Ion Ratio Lower Upper  
 39 100  
 54 119.5 62.6 94.0#



#20  
 Methylene Chloride  
 Concen: 0.183 ppbv  
 RT: 4.37 min Scan# 491  
 Delta R.T. 0.01 min  
 Lab File: VL038275.D  
 Acq: 25 Jan 2022 00:59

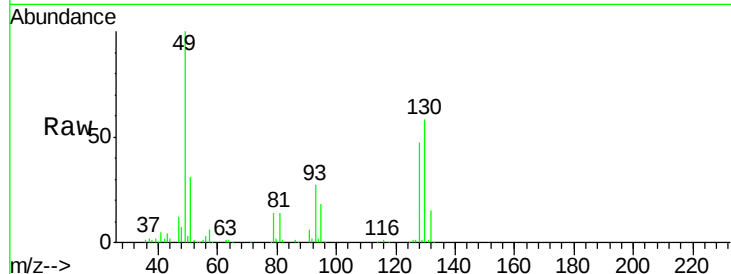
Tgt Ion: 84 Resp: 7741  
 Ion Ratio Lower Upper  
 84 100  
 49 157.1 115.0 172.6  
 51 59.8 35.0 52.6#  
 86 49.3 51.4 77.0#



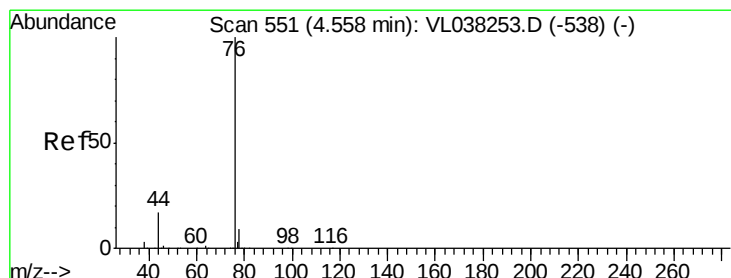
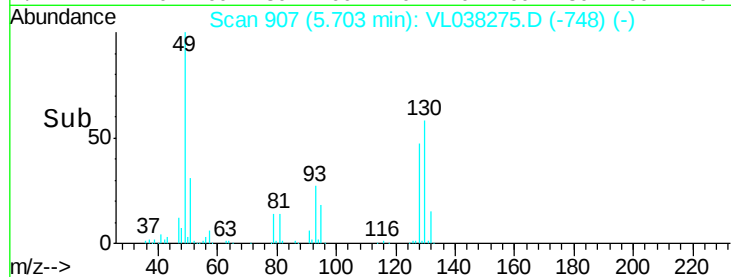
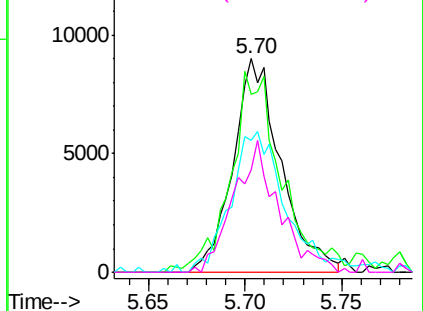


#26  
Hexane  
Concen: 0.164 ppbv  
RT: 5.70  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 25 Jan 2022 00:59

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 15490  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 109.2 | 72.8  | 109.2# |
| 43       | 78.4  | 177.0 | 265.6# |
| 56       | 58.1  | 43.3  | 64.9   |

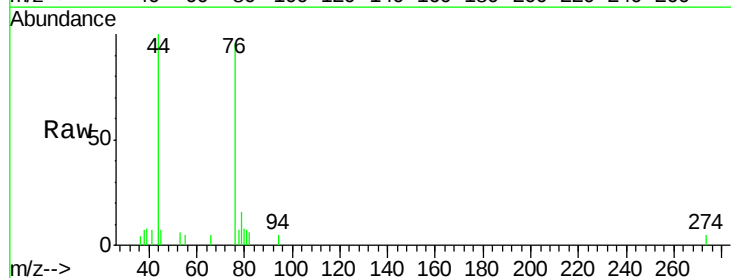


Abundance Ion 57.10 (56.80 to 57.80): VL0  
Ion 41.10 (40.80 to 41.80): VL0  
Ion 43.10 (42.80 to 43.80): VL0  
Ion 56.10 (55.80 to 56.80): VL0

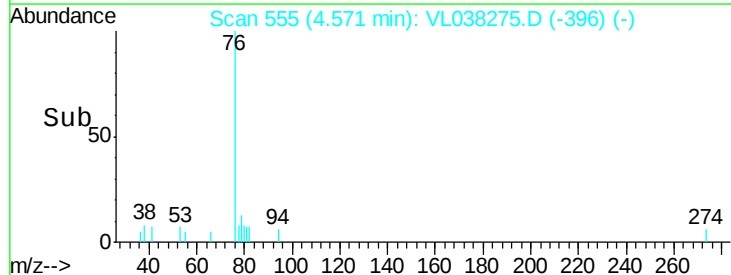
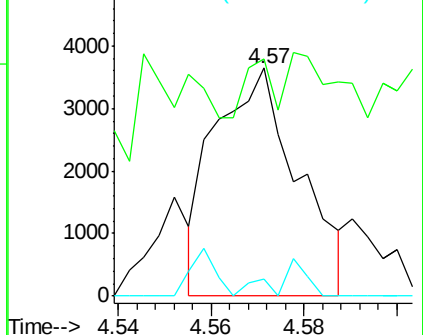


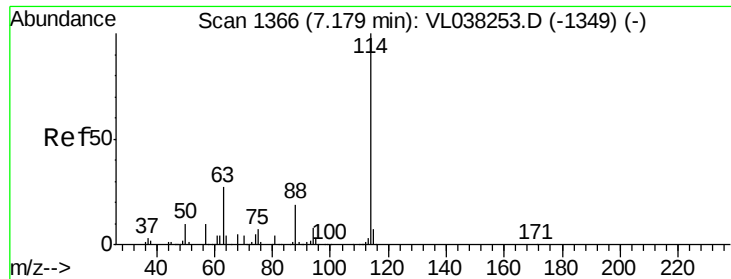
#27  
Carbon Disulfide  
Concen: 0.041 ppbv  
RT: 4.57 min Scan# 555  
Delta R.T. 0.01 min  
Lab File: VL038275.D  
Acq: 25 Jan 2022 00:59

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 76    | Resp: | 4570  |
| Ion      | Ratio | Lower | Upper |
| 76       | 100   |       |       |
| 44       | 61.9  | 14.8  | 22.2# |
| 78       | 0.0   | 7.9   | 11.9# |



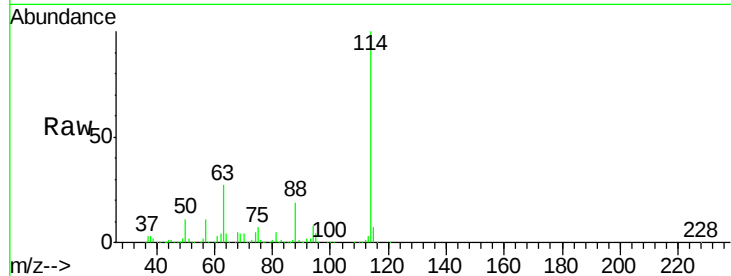
Abundance Ion 76.00 (75.70 to 76.70): VL0  
Ion 44.10 (43.80 to 44.80): VL0  
Ion 78.00 (77.70 to 78.70): VL0



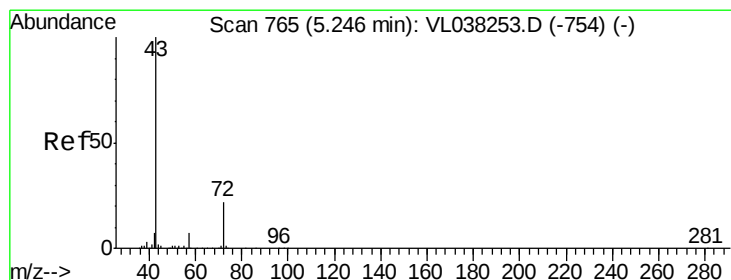
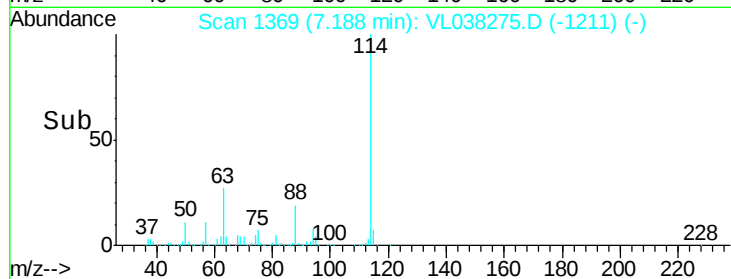
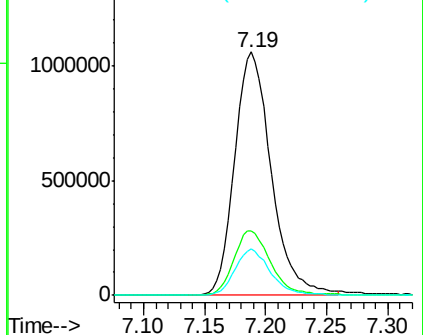


#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.19  
 Instrument: MSVOA\_1  
 Delta R.T.:  
 Lab File: ClientSampleId :  
 Acq: 25 Jan 2022 00:59

Tgt Ion: 114 Resp: 2211466  
 Ion Ratio Lower Upper  
 114 100  
 63 27.3 22.0 33.0  
 88 18.8 15.0 22.6

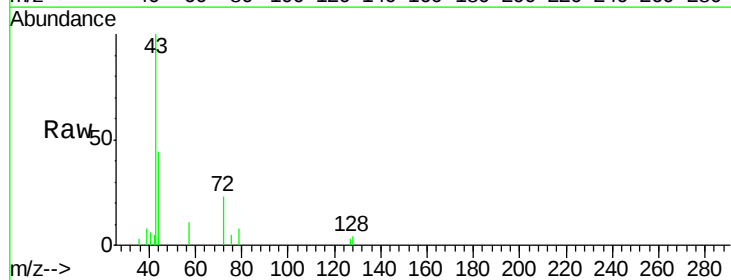


Abundance Ion 114.10 (113.80 to 114.80): V  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

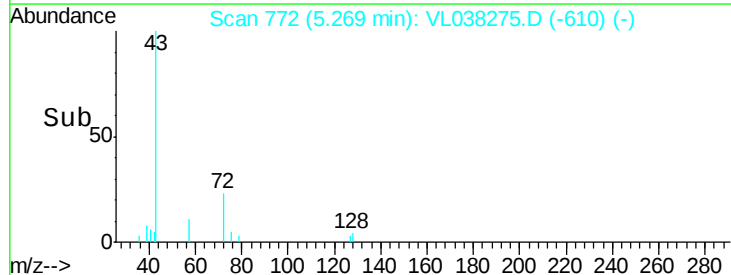
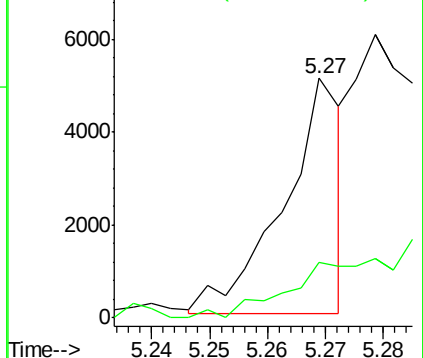


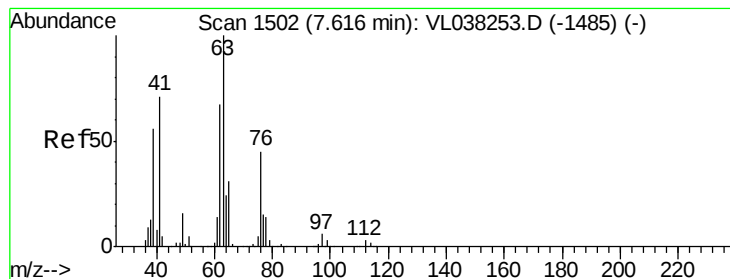
#34  
 2-Butanone  
 Concen: 0.049 ppbv  
 RT: 5.27 min Scan# 772  
 Delta R.T. 0.02 min  
 Lab File: VL038275.D  
 Acq: 25 Jan 2022 00:59

Tgt Ion: 43 Resp: 3558  
 Ion Ratio Lower Upper  
 43 100  
 72 0.0 18.1 27.1#



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





#39

1,2-Dichloropropane

Concen: 7.500 ppbv

RT: 7.19 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 25 Jan 2022 00:59 SG-2DL

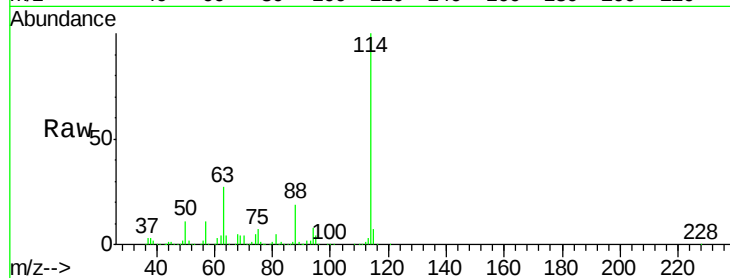
Tgt Ion: 63 Resp: 594843

Ion Ratio Lower Upper

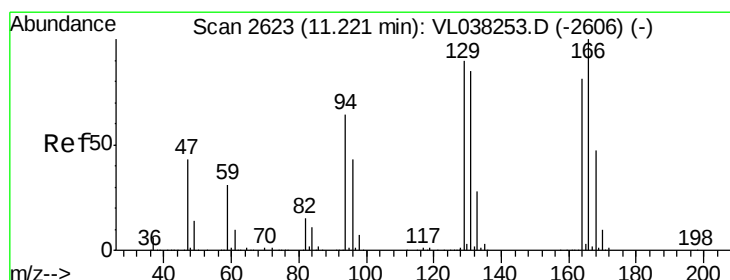
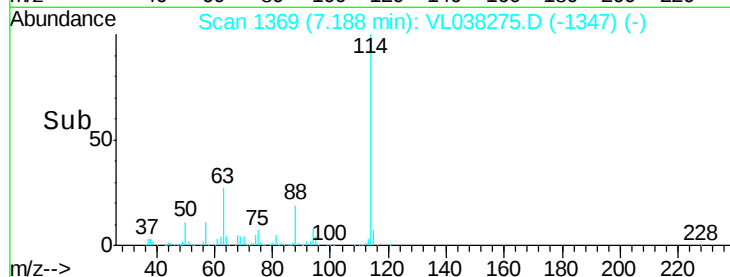
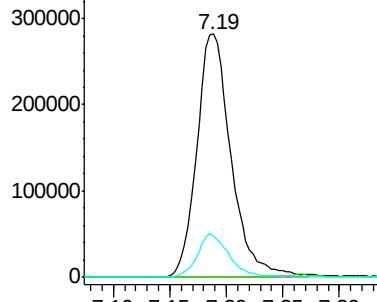
63 100

41 0.0 56.6 85.0#

62 16.7 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



#52

Tetrachloroethene

Concen: 1.841 ppbv

RT: 11.23 min Scan# 2627

Delta R.T. 0.01 min

Lab File: VL038275.D

Acq: 25 Jan 2022 00:59

Tgt Ion: 164 Resp: 124107

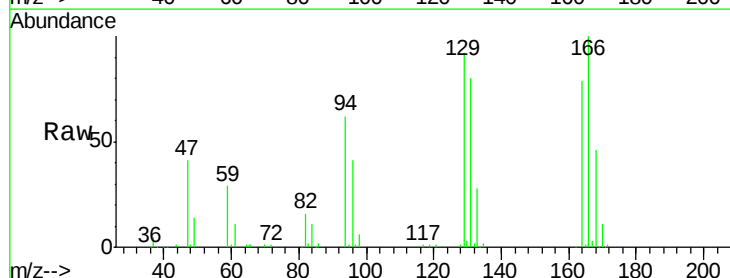
Ion Ratio Lower Upper

164 100

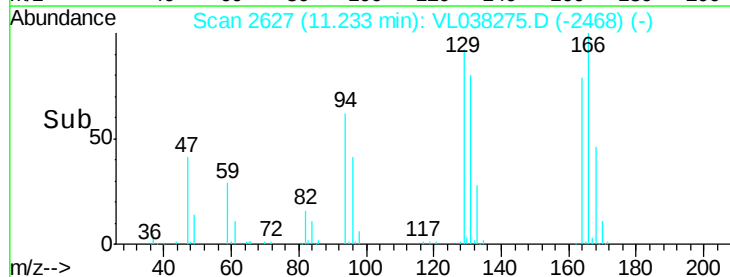
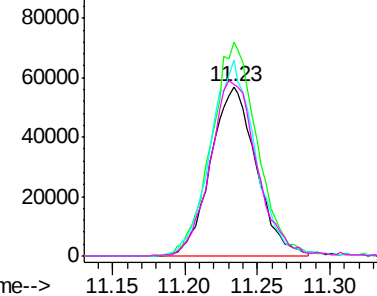
166 125.5 98.8 148.2

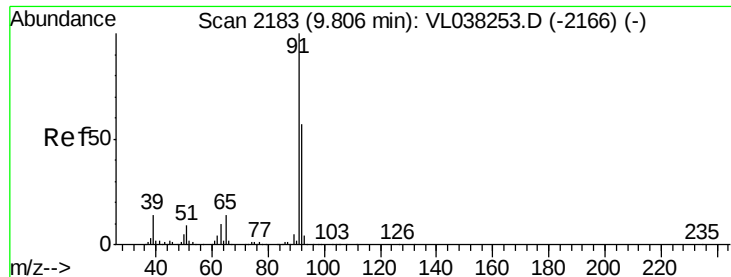
129 115.8 89.2 133.8

131 100.8 83.6 125.4



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: 0.976 ppbv

RT: 9.82 Instrument: MSVOA\_1

Delta R.T. 0.01 min

Lab File: ClientSampleId: SG-2DL

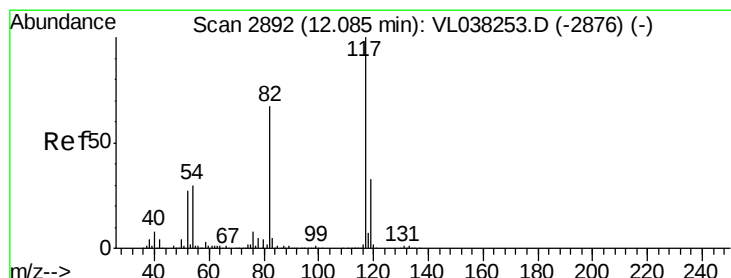
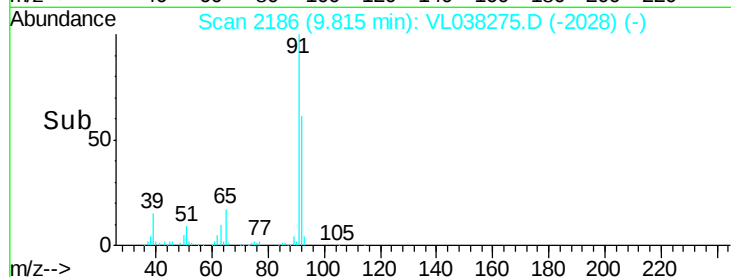
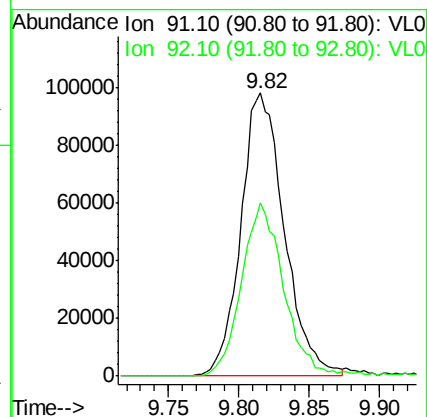
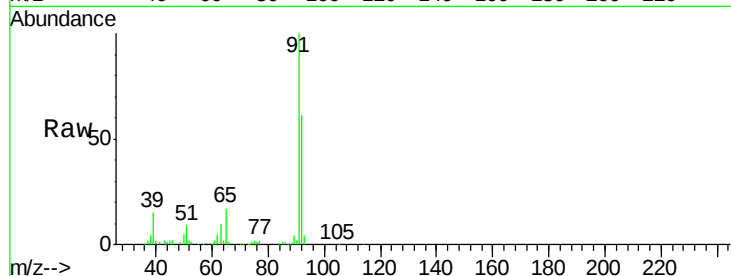
Acq: 25 Jan 2022 00:59

Tgt Ion: 91 Resp: 211419

Ion Ratio Lower Upper

91 100

92 60.4 47.4 71.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2895

Delta R.T. 0.01 min

Lab File: VL038275.D

Acq: 25 Jan 2022 00:59

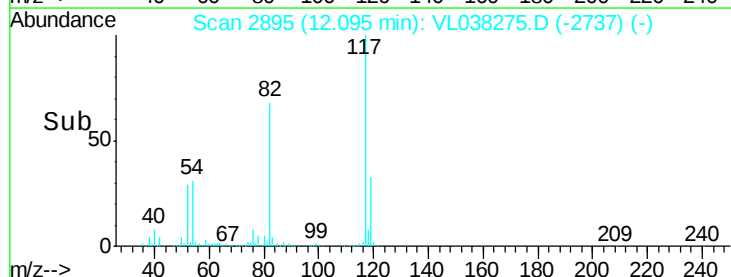
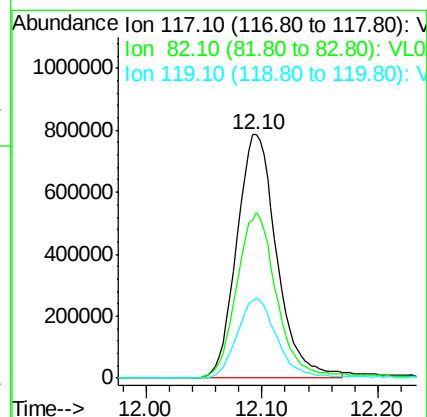
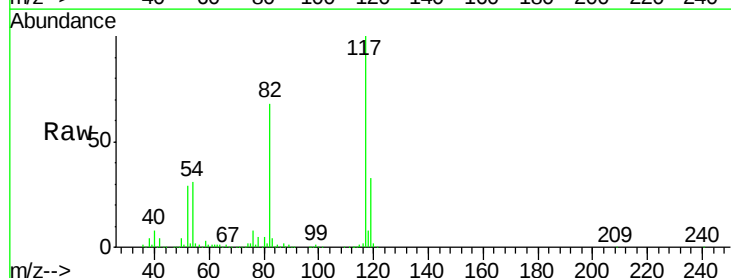
Tgt Ion: 117 Resp: 1885667

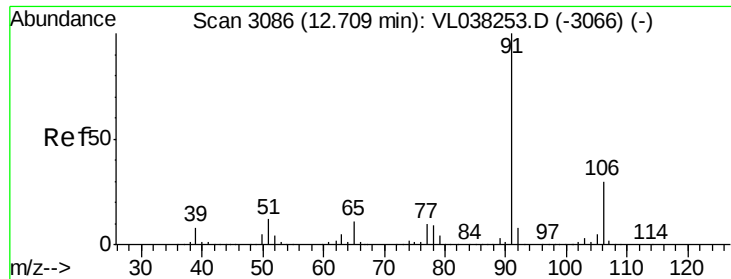
Ion Ratio Lower Upper

117 100

82 69.4 54.4 81.6

119 33.0 45.9 68.9#





#58

Ethyl Benzene

Concen: 0.060 ppbv

RT: 12.97

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

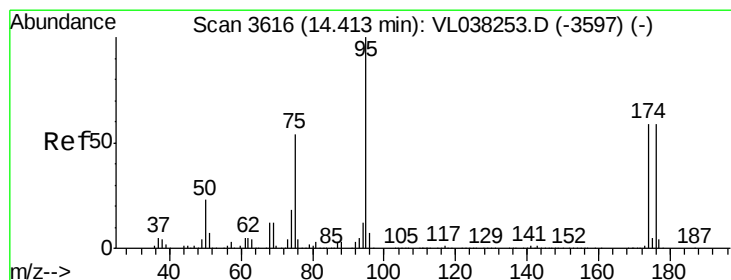
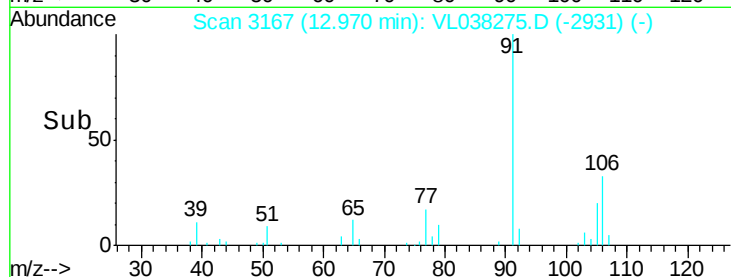
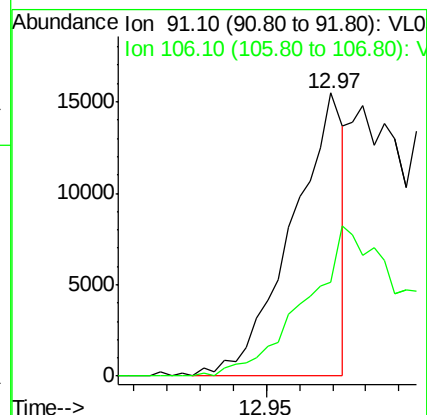
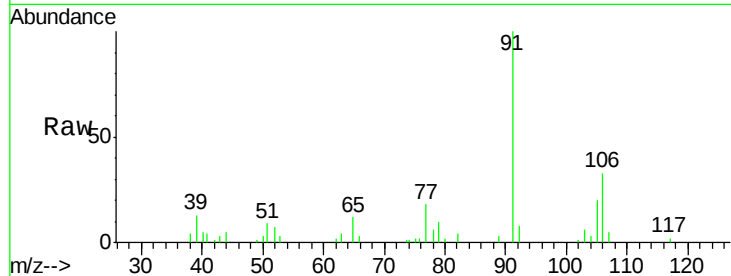
Acq: 25 Jan 2022 00:59

Tgt Ion: 91 Resp: 16743

Ion Ratio Lower Upper

91 100

106 33.3 24.1 36.1



#68

1-Bromo-4-Fluorobenzene

Concen: 9.835 ppbv

RT: 14.43 min Scan# 3620

Delta R.T. 0.01 min

Lab File: VL038275.D

Acq: 25 Jan 2022 00:59

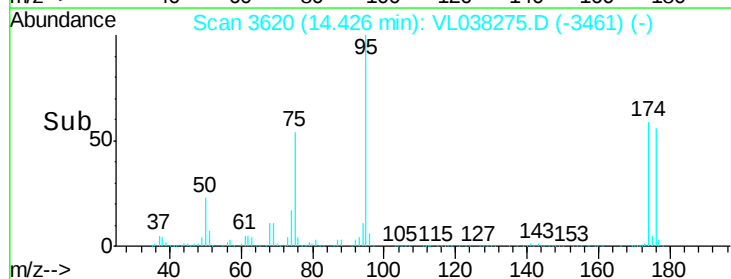
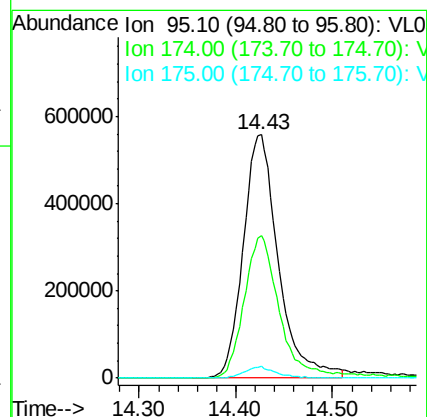
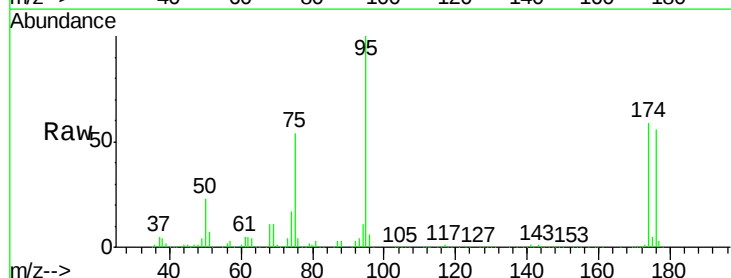
Tgt Ion: 95 Resp: 1407592

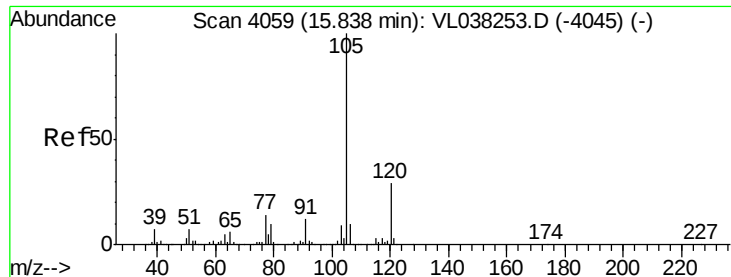
Ion Ratio Lower Upper

95 100

174 61.1 48.3 72.5

175 4.6 3.5 5.3





#72  
 4-Ethyltoluene  
 Concen: 0.033 ppbv  
 RT: 15.85  
 Delta R.T: MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 25 Jan 2022 00:39

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 7654  |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 35.4  | 23.8  | 35.8  |
| 91       | 15.2  | 10.2  | 15.4  |
| 77       | 0.0   | 11.7  | 17.5# |

