

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL030619\  
 Data File : VL033252.D  
 Acq On : 6 Mar 2019 11:42  
 Operator : SY/AP  
 Sample : 0.4 PPB MDL  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 04:39:51 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030619AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Mar 06 08:43:44 2019  
 QLast Update : Wed Mar 06 08:43:44 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 991877   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 2196058  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 2160514  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

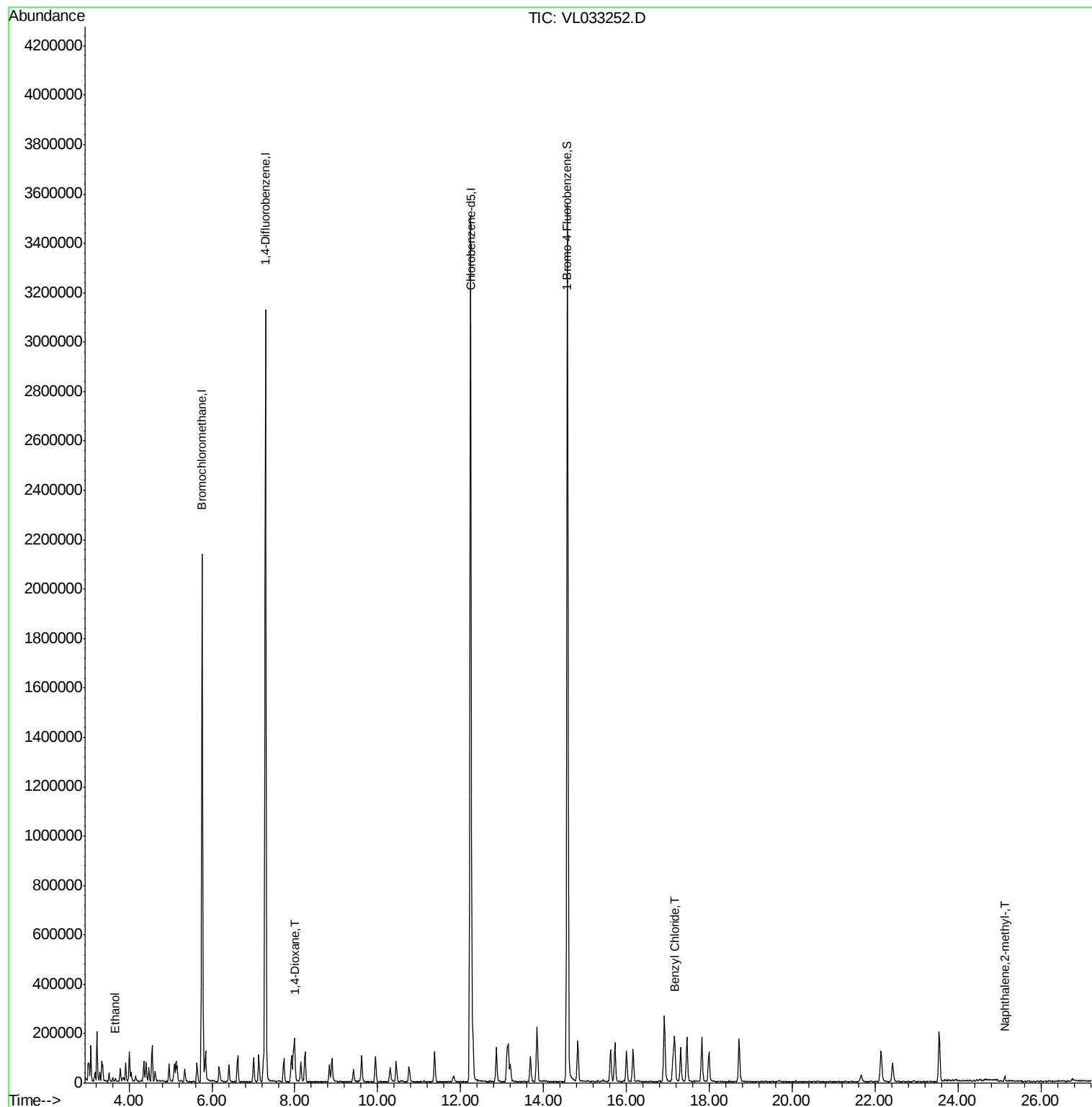
|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1690667  | 10.31    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 103.10% |

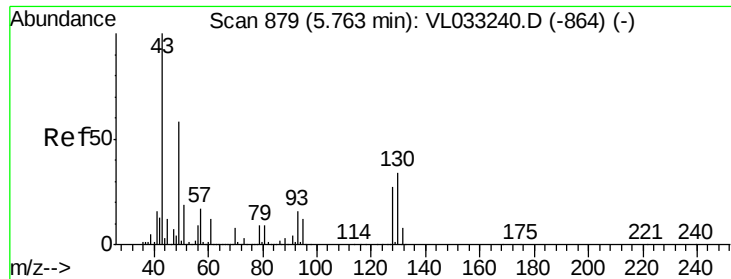
| Target Compounds          | R.T.  | QIon | Response | Conc  | Units | Ovalue |
|---------------------------|-------|------|----------|-------|-------|--------|
| 13) Ethanol               | 3.66  | 45   | 10553m   | 0.698 | ppbv  |        |
| 40) 1,4-Dioxane           | 8.00  | 88   | 10299m   | 0.345 | ppbv  |        |
| 66) Benzyl Chloride       | 17.16 | 91   | 28965m   | 0.259 | ppbv  |        |
| 80) Naphthalene,2-methyl- | 25.12 | 142  | 11700    | 0.120 | ppbv  | 97     |

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

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QLast Update : Wed Mar 06 08:43:44 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033252.D

Acq: 6 Mar 2019 11:42

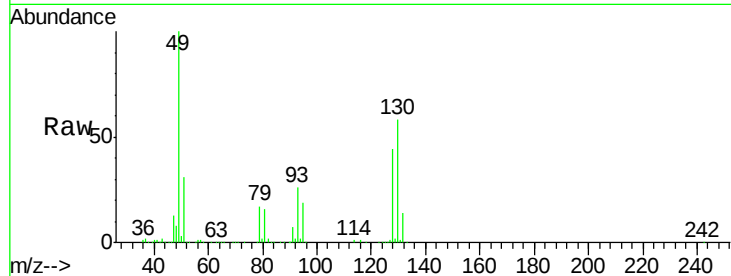
Tot Ion: 49 Resp: 991877

Ion Ratio Lower Upper

49 100

128 45.6 22.9 68.8

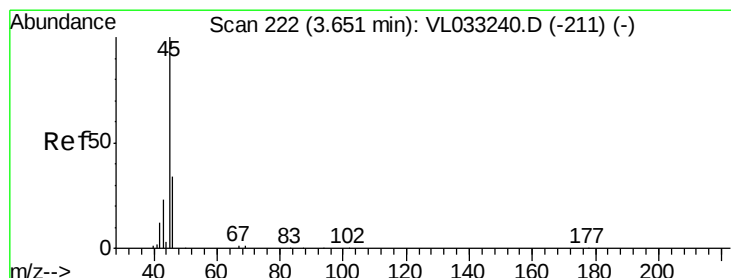
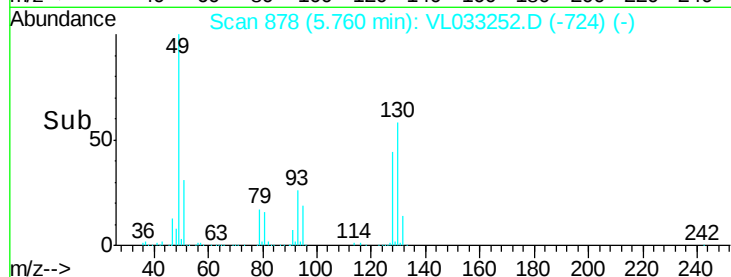
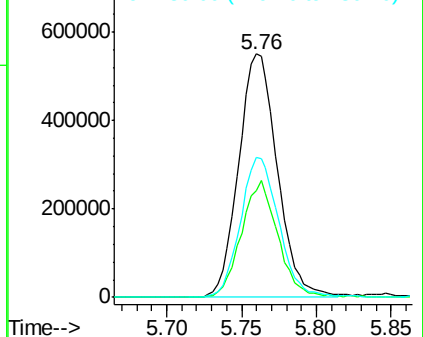
130 57.9 29.3 88.0



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



#13

Ethanol

Concen: 0.698 ppbv m

RT: 3.66 min Scan# 226

Delta R.T. 0.01 min

Lab File: VL033252.D

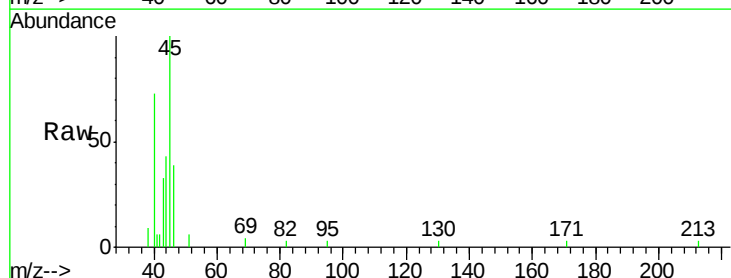
Acq: 6 Mar 2019 11:42

Tgt Ion: 45 Resp: 10553

Ion Ratio Lower Upper

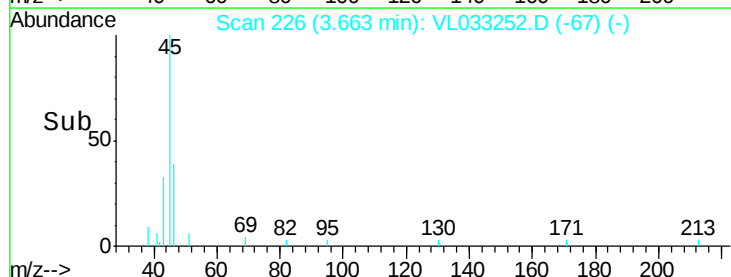
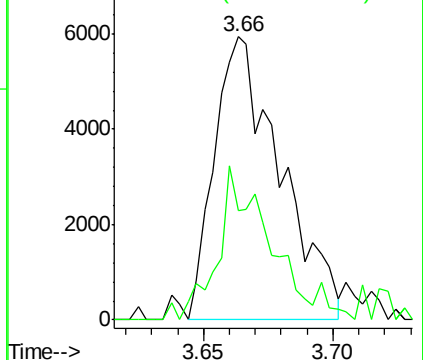
45 100

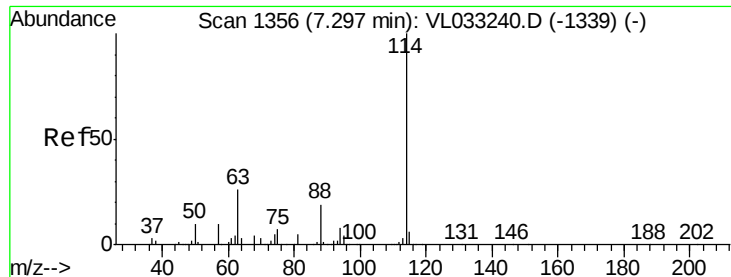
46 43.6 15.3 61.3



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.01 min

Lab File: VL033252.D

Acq: 6 Mar 2019 11:42

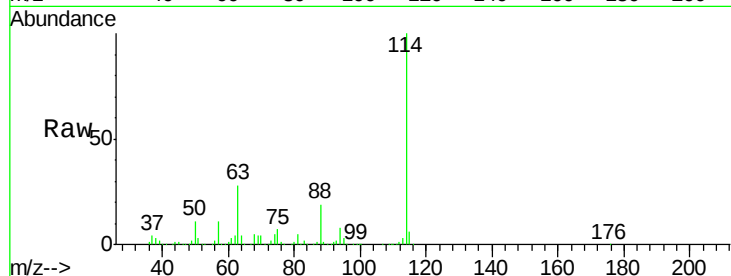
Tot Ion:114 Resp: 2196058

Ion Ratio Lower Upper

114 100

63 27.5 22.0 33.0

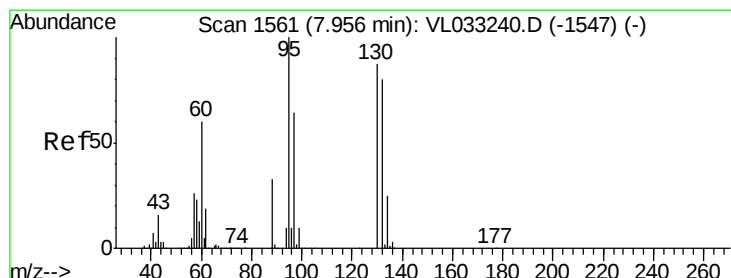
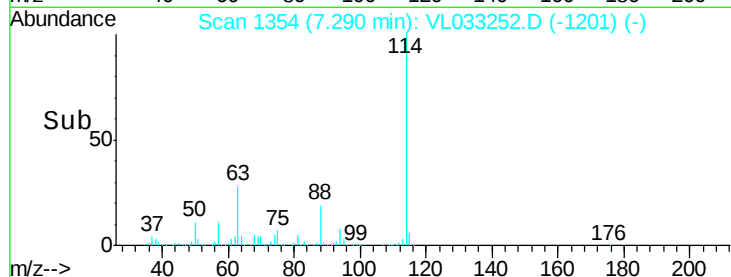
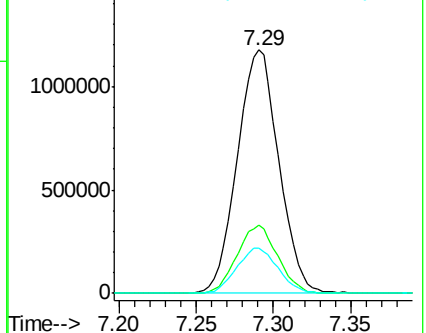
88 18.6 15.0 22.4



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



#40

1,4-Dioxane

Concen: 0.345 ppbv m

RT: 8.00 min Scan# 1576

Delta R.T. 0.05 min

Lab File: VL033252.D

Acq: 6 Mar 2019 11:42

Tgt Ion: 88 Resp: 10299

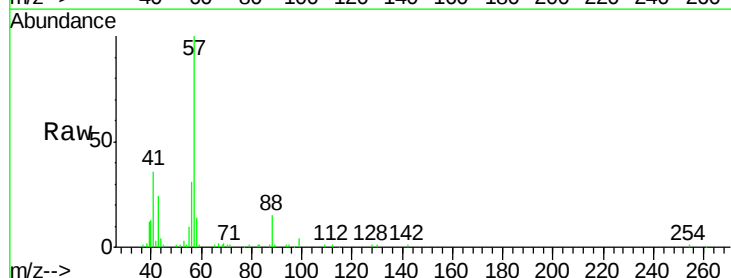
Ion Ratio Lower Upper

88 100

58 0.0 105.1 157.7#

43 0.0 0.0 0.0

57 0.0 0.0 0.0

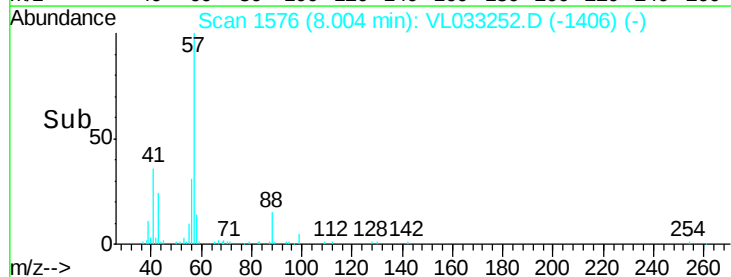
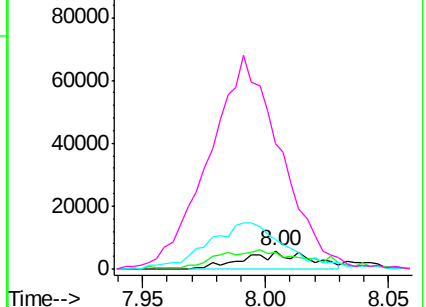


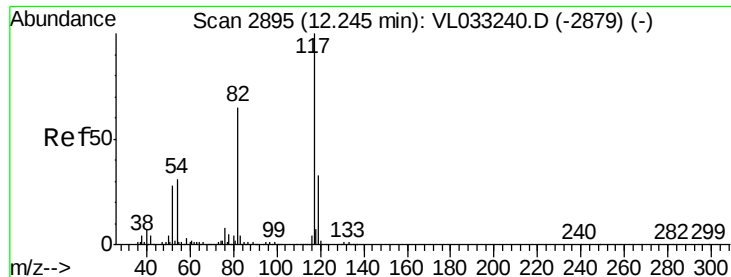
Abundance Ion 88.10 (87.80 to 88.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

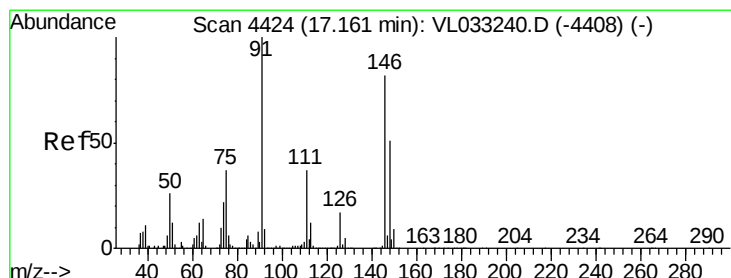
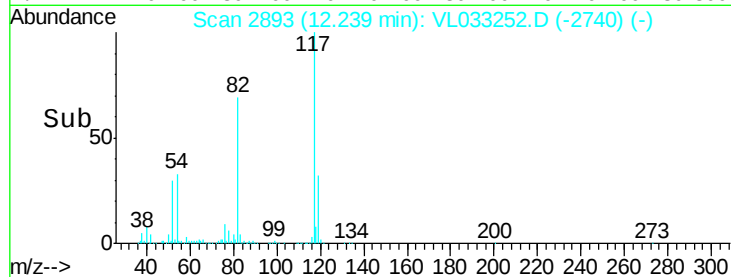
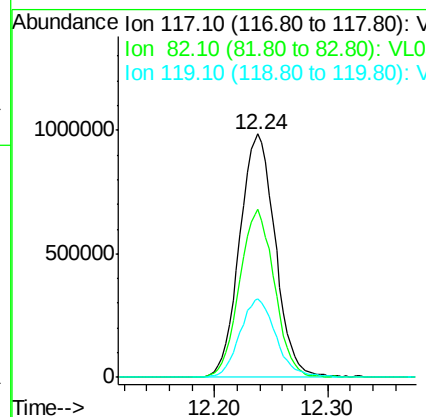
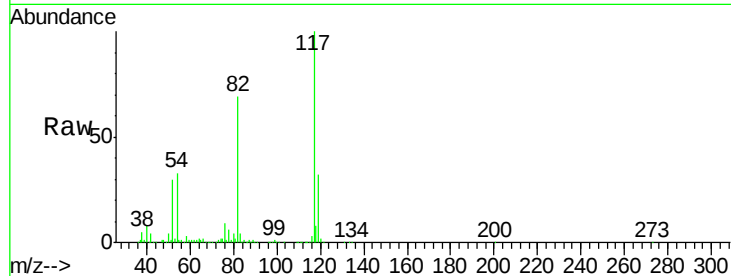
Ion 57.10 (56.80 to 57.80): VL0





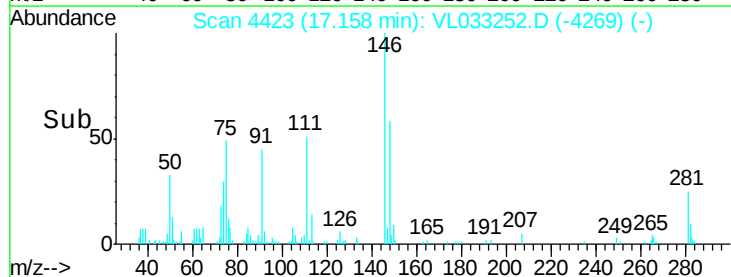
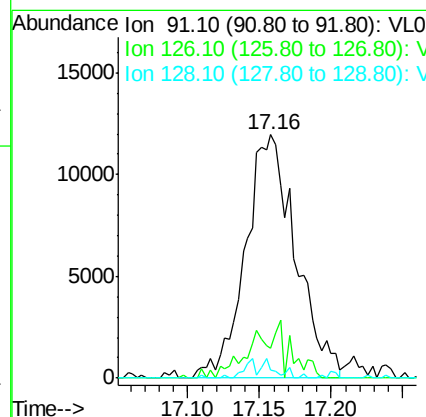
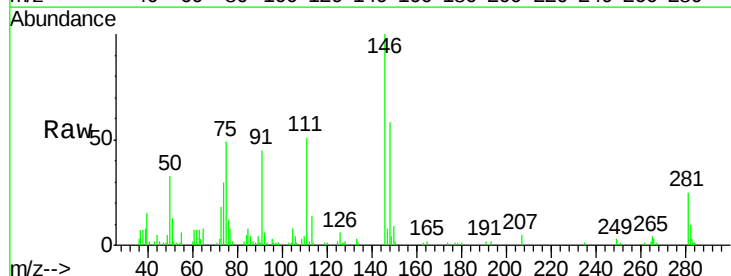
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.24 min Scan# 2893  
Delta R.T. -0.01 min  
Lab File: VL033252.D  
Acq: 6 Mar 2019 11:42

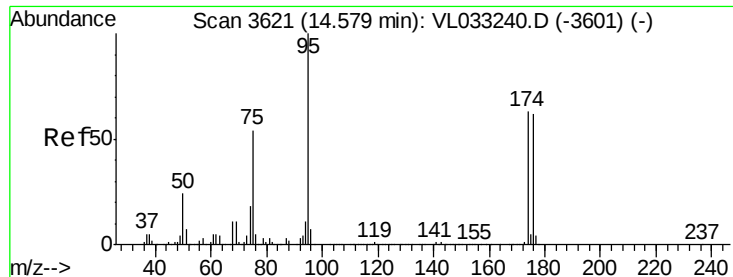
Tot Ion:117 Resp: 2160514  
Ion Ratio Lower Upper  
117 100  
82 68.1 51.8 77.8  
119 32.9 43.6 65.4#



#66  
Benzyl Chloride  
Concen: 0.259 ppbv m  
RT: 17.16 min Scan# 4423  
Delta R.T. -0.00 min  
Lab File: VL033252.D  
Acq: 6 Mar 2019 11:42

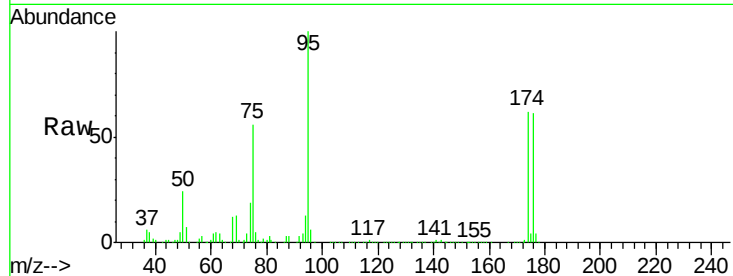
Tgt Ion: 91 Resp: 28965  
Ion Ratio Lower Upper  
91 100  
126 0.0 13.4 20.0#  
128 3.9 4.2 6.2#



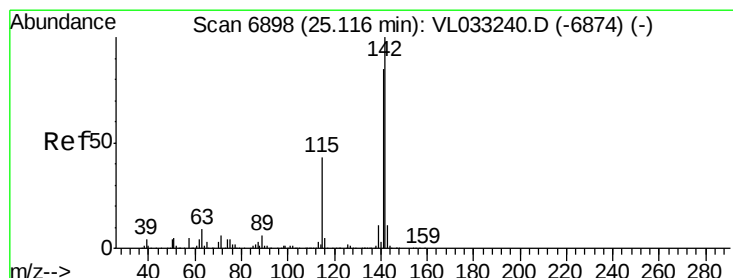
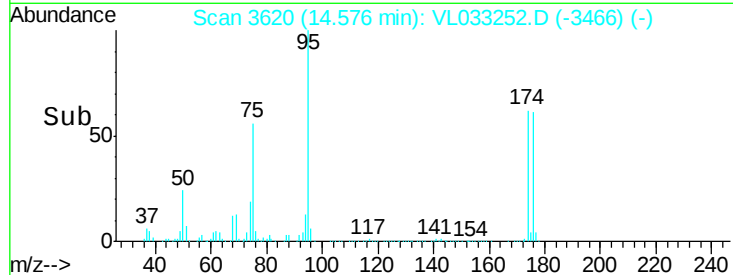
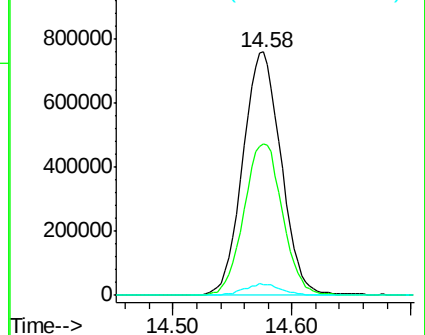


#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.313 ppbv  
 RT: 14.58 min Scan# 3620  
 Delta R.T. -0.00 min  
 Lab File: VL033252.D  
 Acq: 6 Mar 2019 11:42

Tot Ion: 95 Resp: 1690667  
 Ion Ratio Lower Upper  
 95 100  
 174 63.4 51.0 76.4  
 175 4.6 3.8 5.6

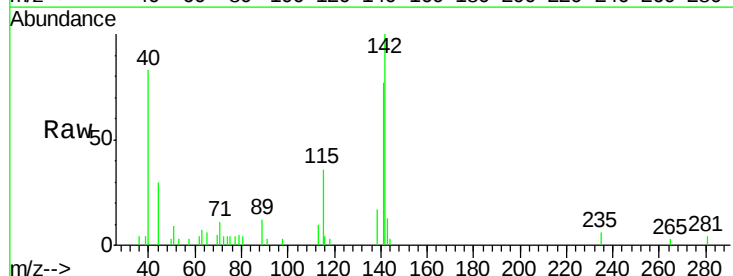


Abundance Ion 95.10 (94.80 to 95.80): VL0  
 Ion 174.00 (173.70 to 174.70): V  
 Ion 175.00 (174.70 to 175.70): V



#80  
 Naphthalene, 2-methyl-  
 Concen: 0.120 ppbv  
 RT: 25.12 min Scan# 6898  
 Delta R.T. -0.00 min  
 Lab File: VL033252.D  
 Acq: 6 Mar 2019 11:42

Tgt Ion: 142 Resp: 11700  
 Ion Ratio Lower Upper  
 142 100  
 141 83.6 68.0 102.0  
 115 47.0 34.1 51.1



Abundance Ion 142.00 (141.70 to 142.70): V  
 Ion 141.00 (140.70 to 141.70): V  
 Ion 115.00 (114.70 to 115.70): V

