

Data File : VU027539.D  
Acq On : 09 Oct 2018 22:18  
Operator : MD/SY  
Sample : J5367-01  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
DS-VB-16202

Quant Time: Oct 10 06:00:51 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U100118W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 02 02:04:34 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 105202   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 181442   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 159314   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 68226    | 50.00 | ug/l  | 0.00     |

#### System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 93601    | 53.28 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.56% |      |
| 35) Dibromofluoromethane  | 4.89   | 113 | 63103    | 50.75 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.50% |      |
| 50) Toluene-d8            | 7.57   | 98  | 231102   | 49.66 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.32%  |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 76136    | 44.02 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.04%  |      |

#### Target Compounds

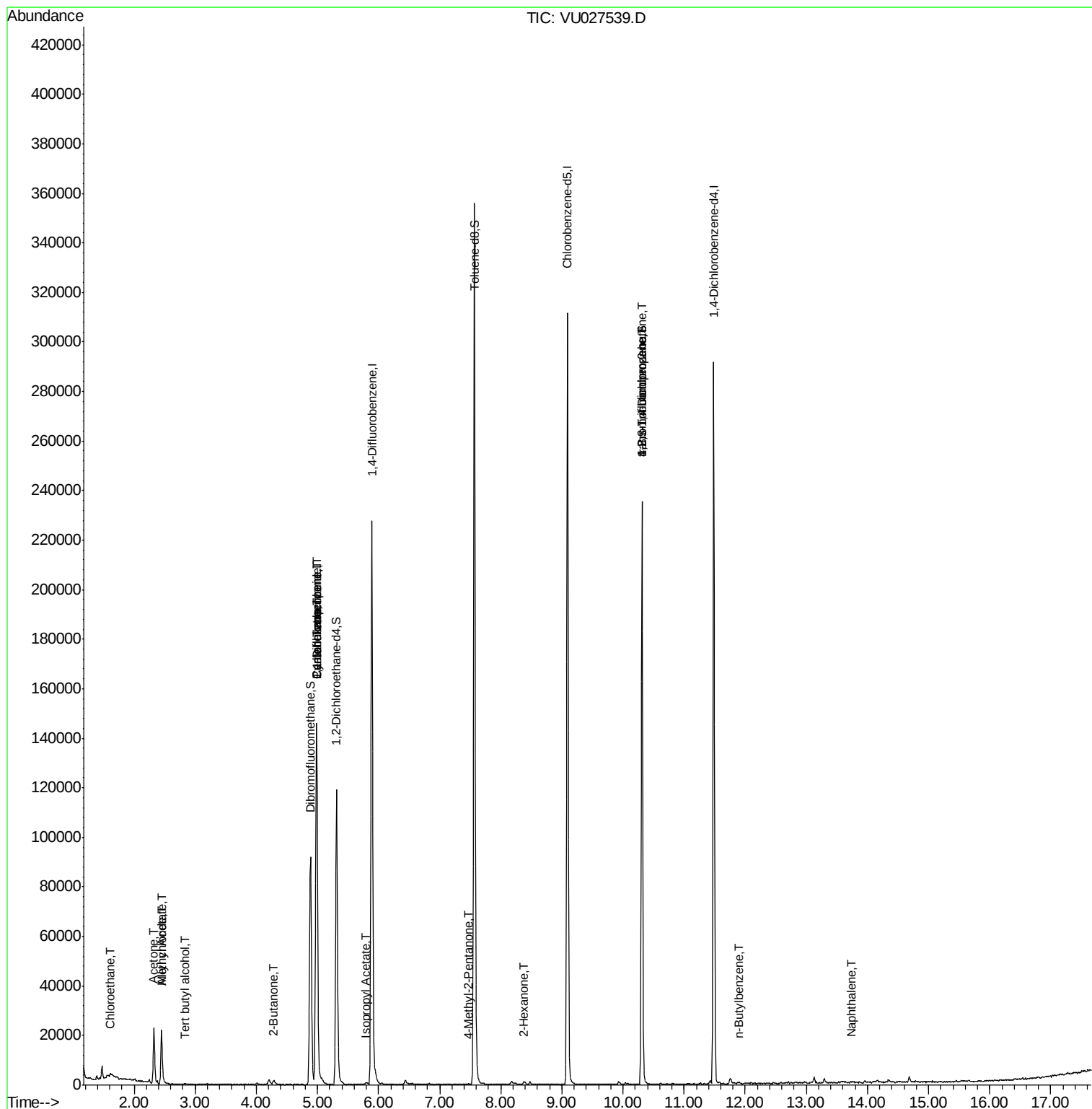
|                                |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 6) Chloroethane                | 1.62  | 64  | 541   | 0.466  | ug/l # | 44     |
| 11) Tert butyl alcohol         | 2.83  | 59  | 497   | 1.343  | ug/l # | 72     |
| 14) Allyl chloride             | 2.44  | 41  | 2090  | 0.792  | ug/l # | 61     |
| 16) Acetone                    | 2.32  | 43  | 24815 | 23.912 | ug/l   | 100    |
| 18) Methyl Acetate             | 2.45  | 43  | 5014  | 2.118  | ug/l # | 56     |
| 25) 2-Butanone                 | 4.28  | 43  | 3366  | 2.378  | ug/l   | 94     |
| 31) Cyclohexane                | 4.99  | 56  | 2876  | 0.787  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 4.99  | 75  | 9950  | 5.051  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 4.99  | 117 | 11308 | 6.354  | ug/l # | 18     |
| 43) Isopropyl Acetate          | 5.80  | 43  | 1234  | 0.312  | ug/l # | 63     |
| 51) 4-Methyl-2-Pentanone       | 7.47  | 43  | 557   | 0.217  | ug/l # | 66     |
| 59) 2-Hexanone                 | 8.38  | 43  | 1458  | 0.731  | ug/l   | 81     |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75  | 41329 | 23.369 | ug/l # | 37     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75  | 41329 | 61.158 | ug/l # | 100    |
| 89) n-Butylbenzene             | 11.89 | 91  | 164   | 1.985  | ug/l # | 33     |
| 95) Naphthalene                | 13.75 | 128 | 262   | 1.709  | ug/l # | 69     |

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

Data File : VU027539.D  
Acq On : 09 Oct 2018 22:18  
Operator : MD/SY  
Sample : J5367-01  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
DS-VB-16202

Quant Time: Oct 10 06:00:51 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U100118W.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 02 02:04:34 2018  
Response via : Initial Calibration

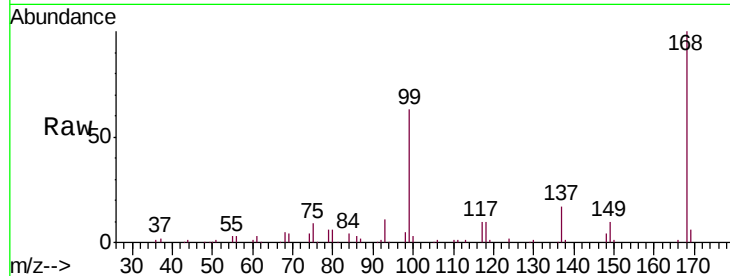




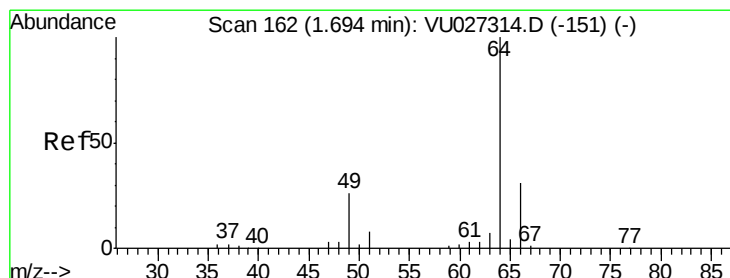
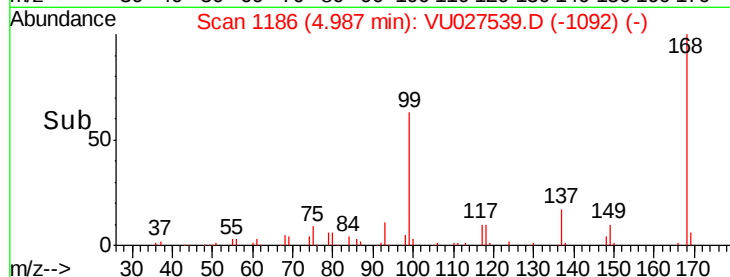
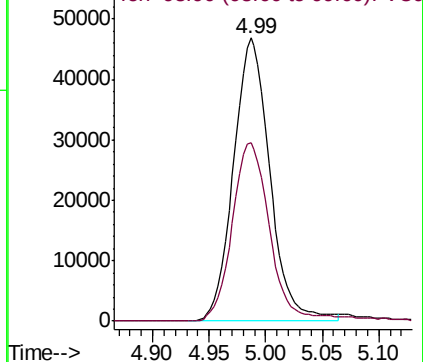
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 4.99 min Scan# 1186  
Delta R.T. 0.00 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

Instrument :  
MSVOA\_U  
ClientSampleId :  
DS-VB-16202

Tgt Ion: 168 Resp: 105202  
Ion Ratio Lower Upper  
168 100  
99 63.1 50.8 76.2

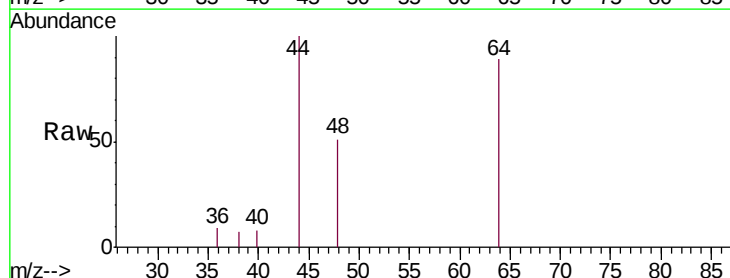


Abundance Ion 167.90 (167.60 to 168.60): VU027314.D (-1169) (-)  
Ion 98.90 (98.60 to 99.60): VU027314.D (-1169) (-)

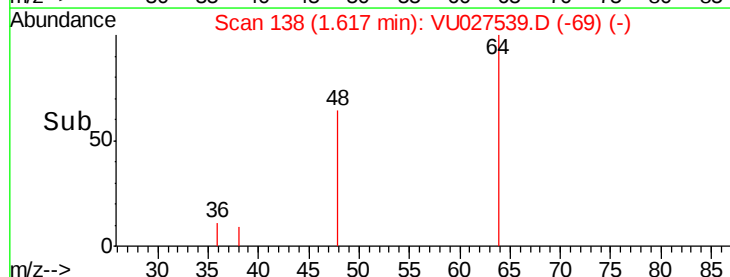
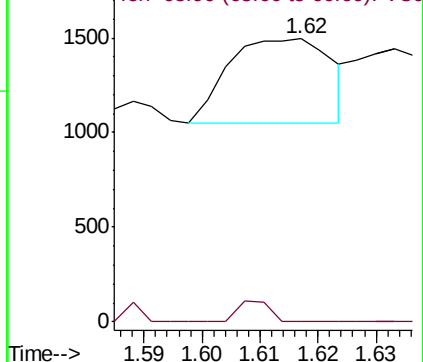


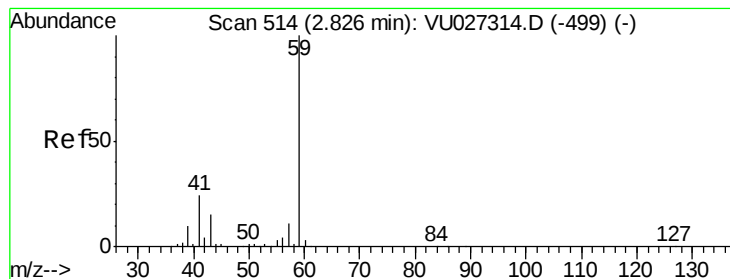
#6  
Chloroethane  
Concen: 0.466 ug/l  
RT: 1.62 min Scan# 138  
Delta R.T. -0.08 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

Tgt Ion: 64 Resp: 541  
Ion Ratio Lower Upper  
64 100  
66 0.0 24.6 36.8#



Abundance Ion 63.90 (63.60 to 64.60): VU027314.D (-151) (-)  
Ion 65.90 (65.60 to 66.60): VU027314.D (-151) (-)



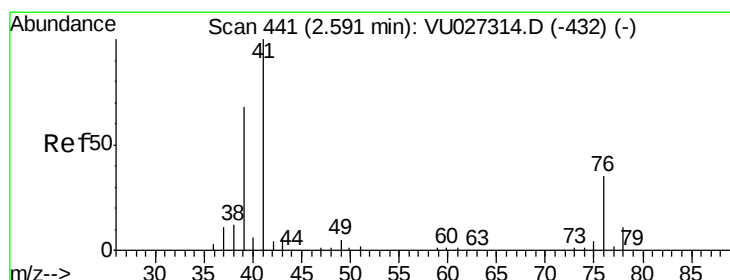
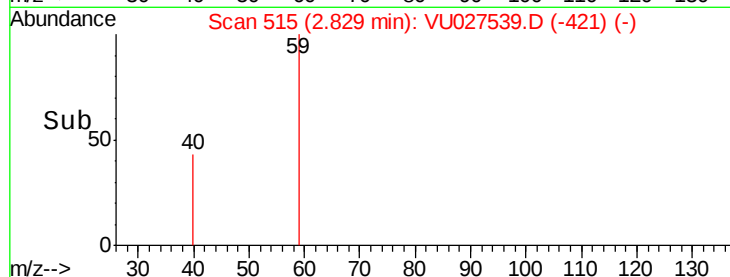
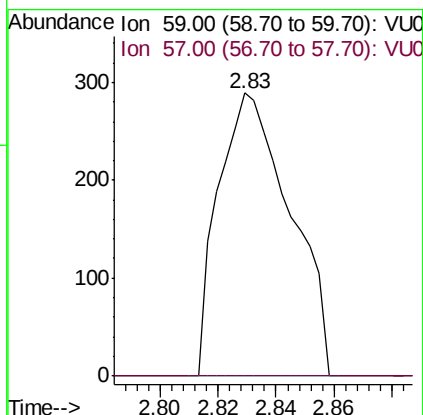
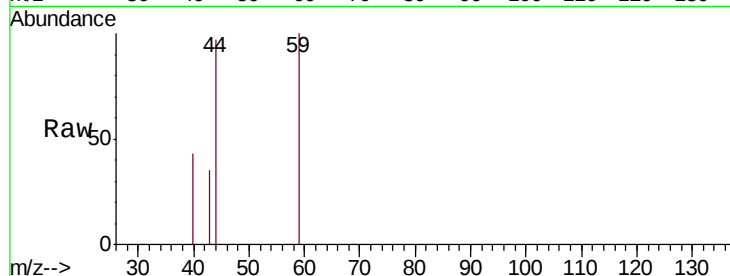


#11

Tert butyl alcohol  
 Concen: 1.343 ug/l  
 RT: 2.83 min Scan# 515  
 Delta R.T. 0.00 min  
 Lab File: VU027539.D  
 Acq: 09 Oct 2018 22:18

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 DS-VB-16202

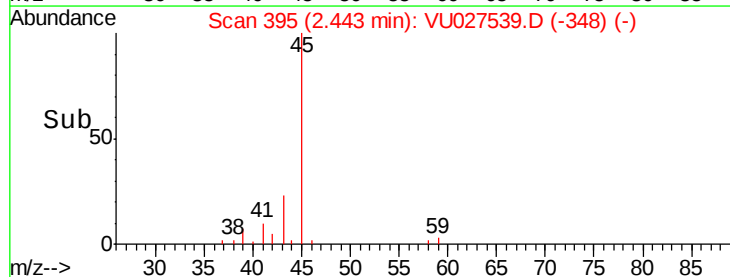
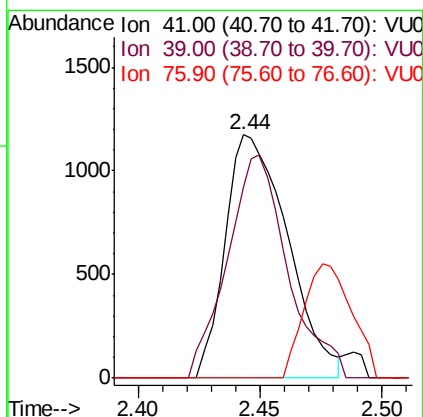
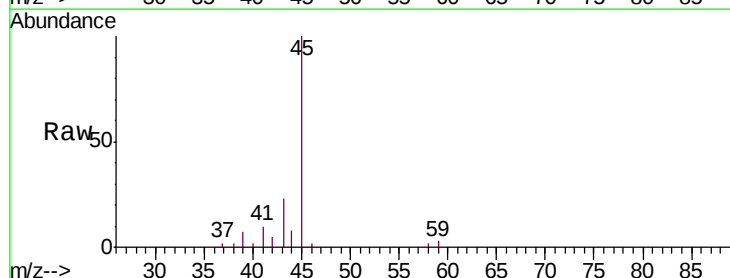
Tgt Ion: 59 Resp: 497  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.4 12.6#

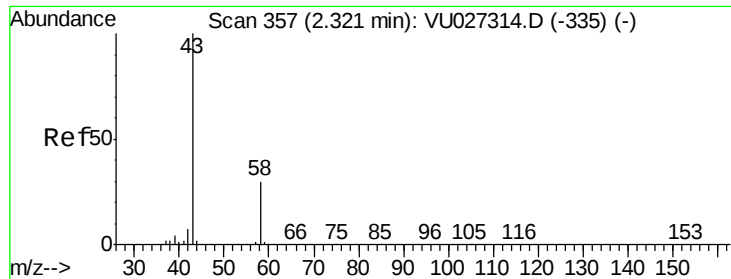


#14

Allyl chloride  
 Concen: 0.792 ug/l  
 RT: 2.44 min Scan# 395  
 Delta R.T. -0.15 min  
 Lab File: VU027539.D  
 Acq: 09 Oct 2018 22:18

Tgt Ion: 41 Resp: 2090  
 Ion Ratio Lower Upper  
 41 100  
 39 88.1 51.8 77.8#  
 76 0.0 25.9 38.9#





#16

Acetone

Concen: 23.912 ug/l

RT: 2.32 min Scan# 358

Delta R.T. 0.00 min

Lab File: VU027539.D

Acq: 09 Oct 2018 22:18

Instrument :

MSVOA\_U

ClientSampleId :

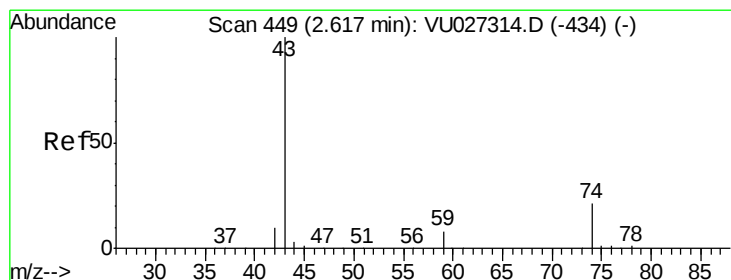
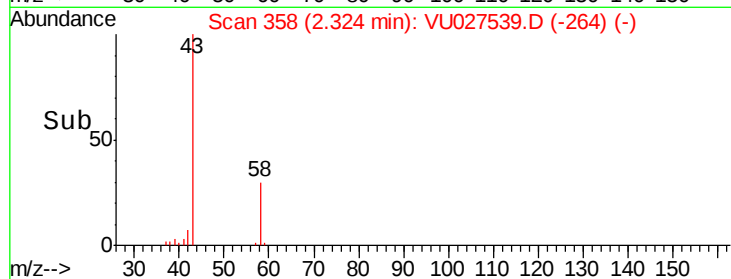
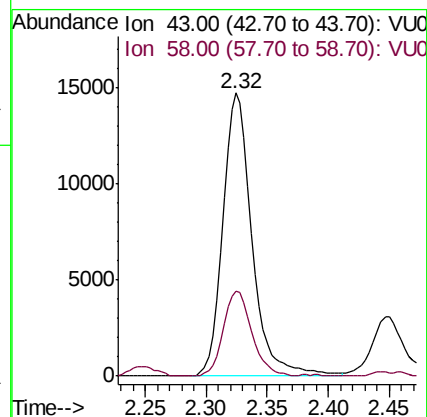
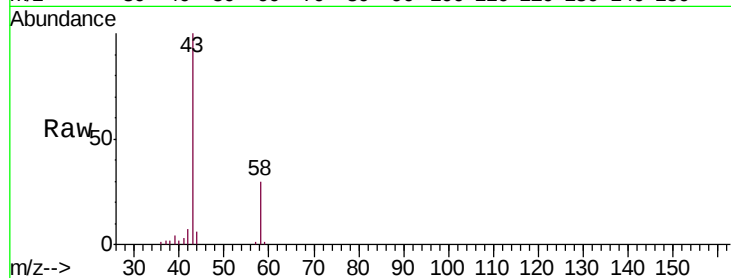
DS-VB-16202

Tgt Ion: 43 Resp: 24815

Ion Ratio Lower Upper

43 100

58 30.1 24.2 36.4



#18

Methyl Acetate

Concen: 2.118 ug/l

RT: 2.45 min Scan# 396

Delta R.T. -0.17 min

Lab File: VU027539.D

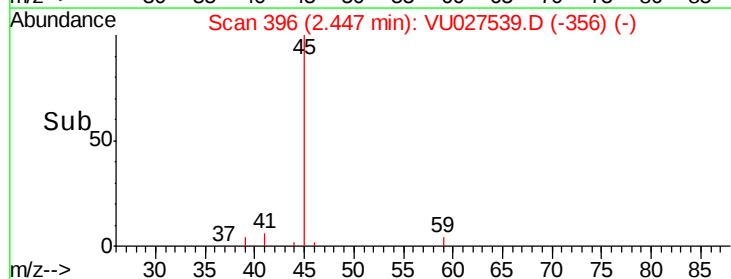
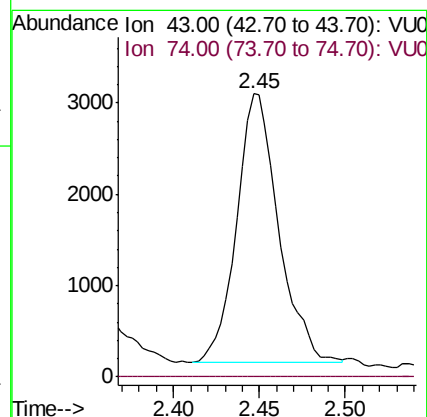
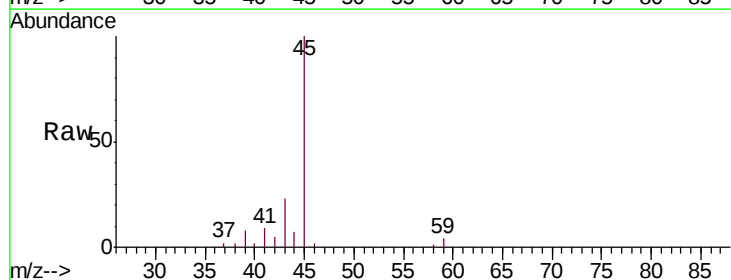
Acq: 09 Oct 2018 22:18

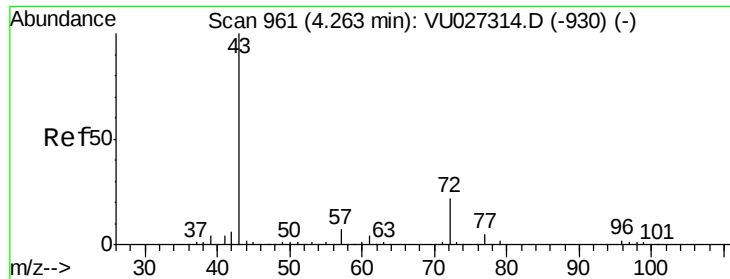
Tgt Ion: 43 Resp: 5014

Ion Ratio Lower Upper

43 100

74 0.0 16.5 24.7#

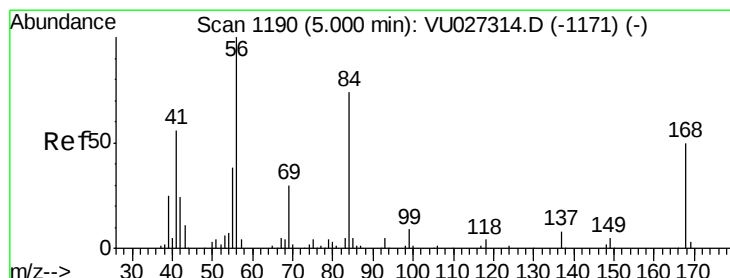
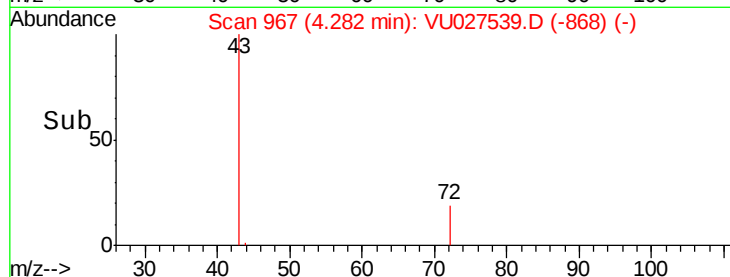
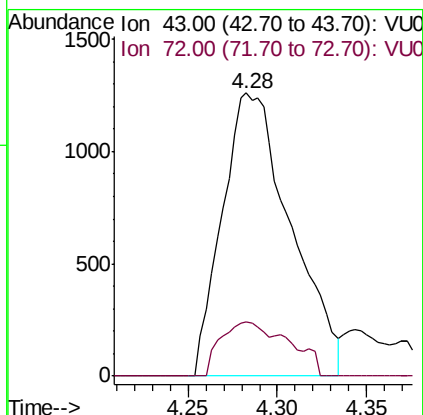
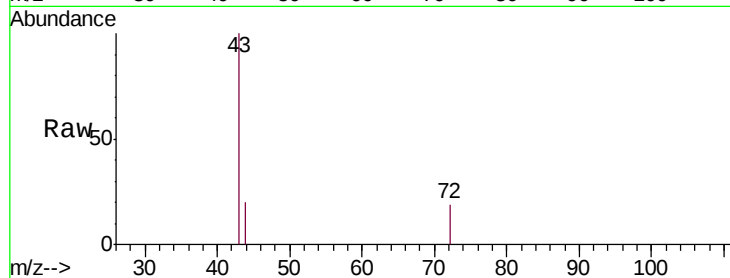




#25  
2-Butanone  
Concen: 2.378 ug/l  
RT: 4.28 min Scan# 967  
Delta R.T. 0.02 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

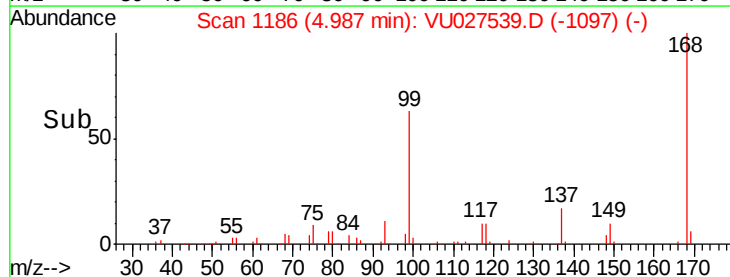
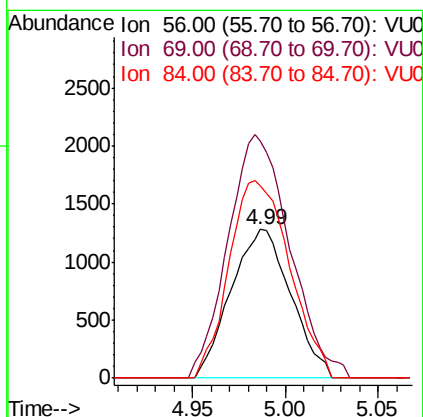
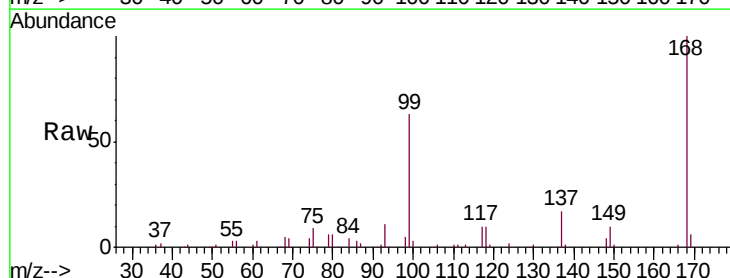
Instrument :  
MSVOA\_U  
ClientSampleId :  
DS-VB-16202

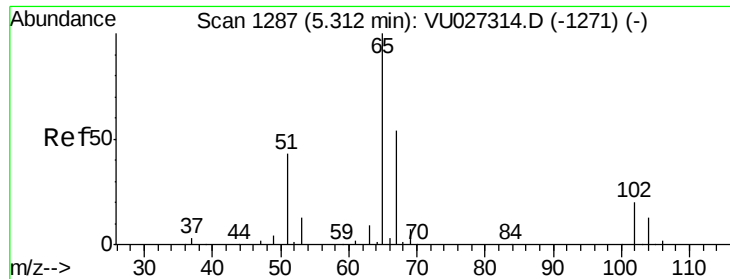
Tgt Ion: 43 Resp: 3366  
Ion Ratio Lower Upper  
43 100  
72 19.1 17.8 26.6



#31  
Cyclohexane  
Concen: 0.787 ug/l  
RT: 4.99 min Scan# 1186  
Delta R.T. -0.01 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

Tgt Ion: 56 Resp: 2876  
Ion Ratio Lower Upper  
56 100  
69 159.7 24.1 36.1#  
84 129.3 59.1 88.7#





#33

1,2-Dichloroethane-d4

Concen: 53.283 ug/l

RT: 5.31 min Scan# 1287

Delta R.T. 0.00 min

Lab File: VU027539.D

Acq: 09 Oct 2018 22:18

Instrument :

MSVOA\_U

ClientSampleId :

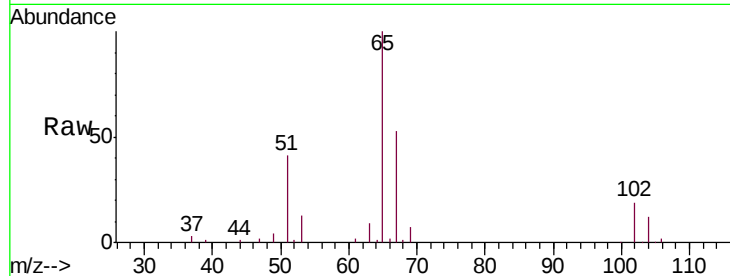
DS-VB-16202

Tgt Ion: 65 Resp: 93601

Ion Ratio Lower Upper

65 100

67 53.6 0.0 107.8

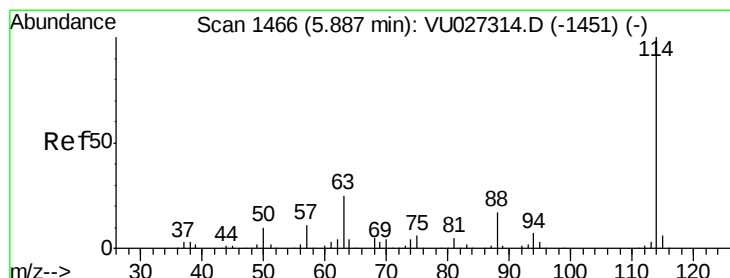
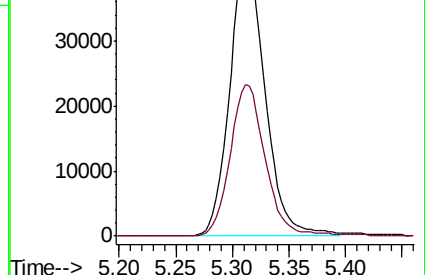
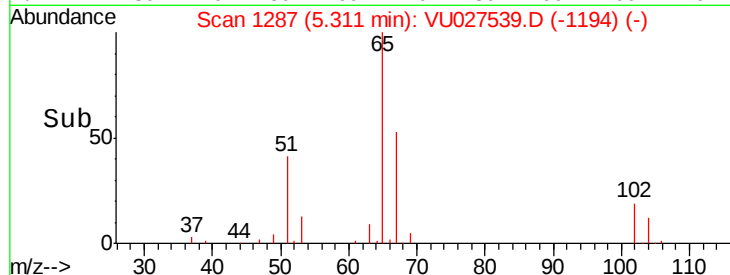


Abundance Ion 64.90 (64.60 to 65.60): VU027314.D (-1271) (-)

Ion 66.90 (66.60 to 67.60): VU027314.D (-1271) (-)

5.31

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.89 min Scan# 1467

Delta R.T. 0.00 min

Lab File: VU027539.D

Acq: 09 Oct 2018 22:18

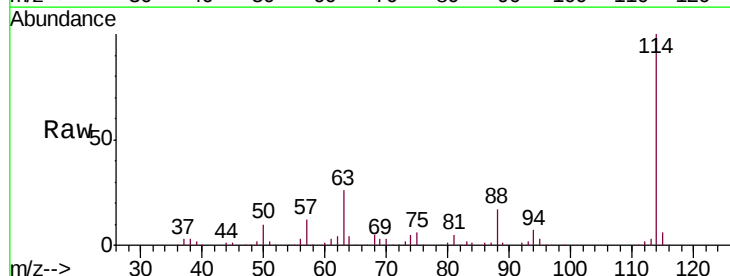
Tgt Ion: 114 Resp: 181442

Ion Ratio Lower Upper

114 100

63 26.2 0.0 50.2

88 16.8 0.0 33.8



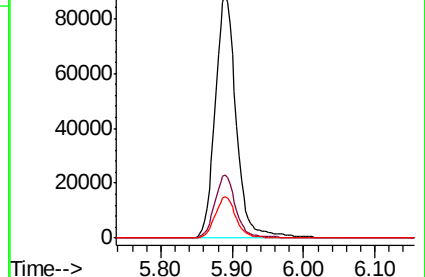
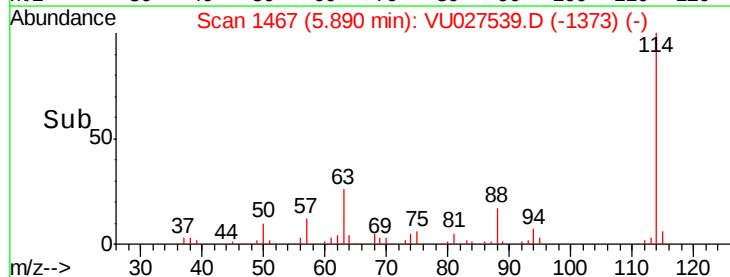
Abundance Ion 113.90 (113.60 to 114.60): VU027314.D (-1451) (-)

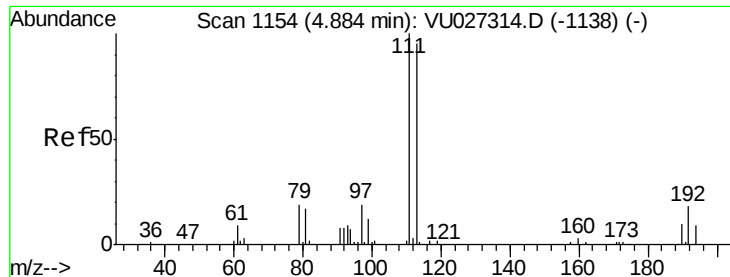
Ion 63.00 (62.70 to 63.70): VU027314.D (-1451) (-)

Ion 87.90 (87.60 to 88.60): VU027314.D (-1451) (-)

5.89

Time-->

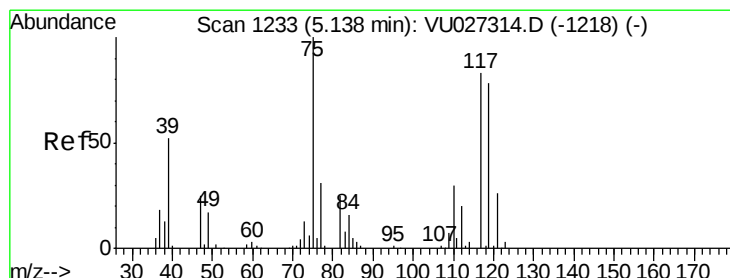
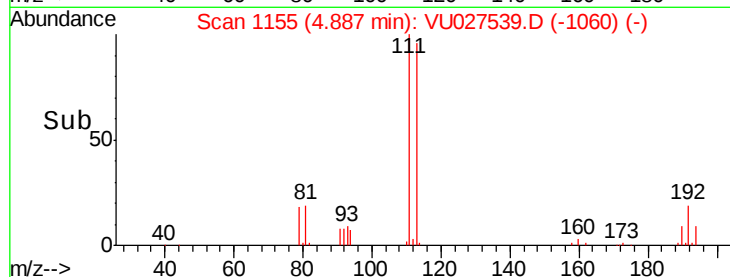
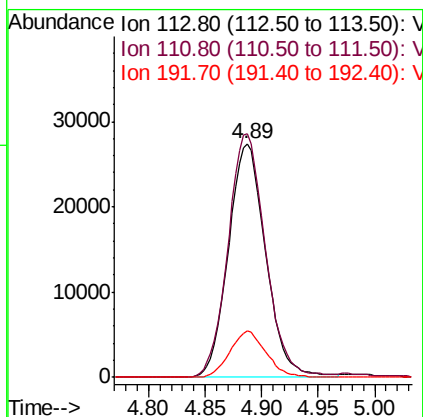
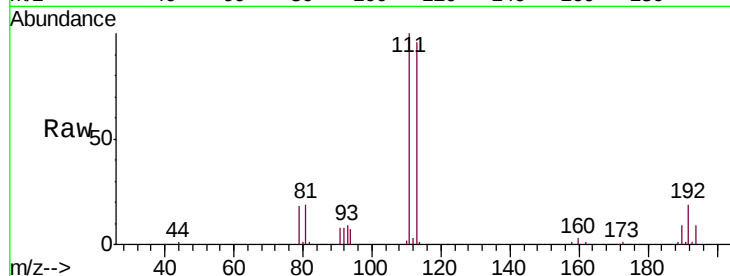




#35  
 Dibromofluoromethane  
 Concen: 50.747 ug/l  
 RT: 4.89 min Scan# 1155  
 Delta R.T. 0.00 min  
 Lab File: VU027539.D  
 Acq: 09 Oct 2018 22:18

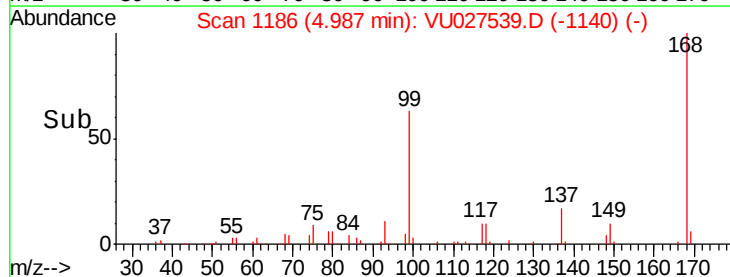
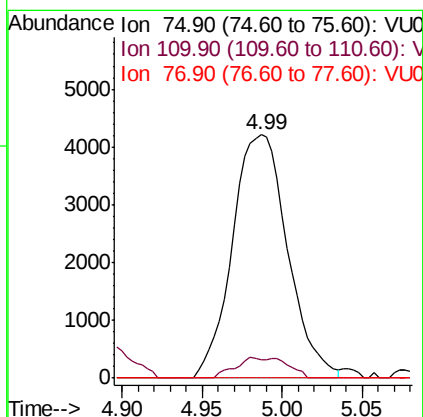
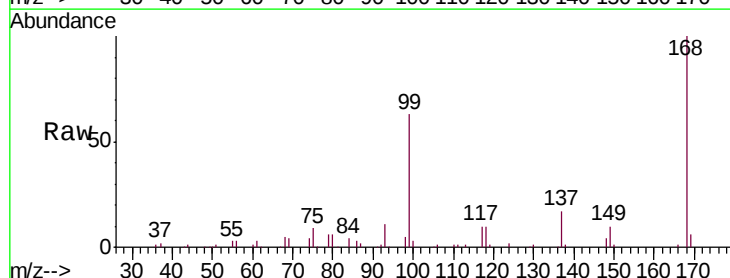
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 DS-VB-16202

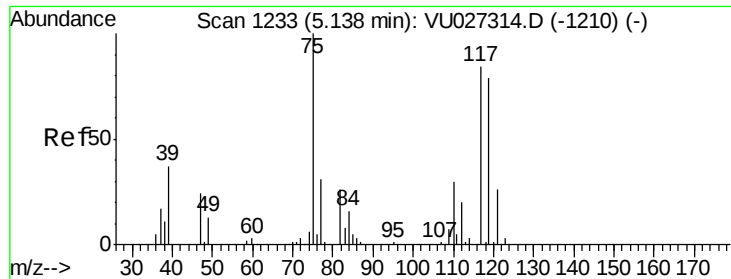
Tgt Ion:113 Resp: 63103  
 Ion Ratio Lower Upper  
 113 100  
 111 104.3 83.1 124.7  
 192 19.0 15.4 23.0



#36  
 1,1-Dichloropropene  
 Concen: 5.051 ug/l  
 RT: 4.99 min Scan# 1186  
 Delta R.T. -0.15 min  
 Lab File: VU027539.D  
 Acq: 09 Oct 2018 22:18

Tgt Ion: 75 Resp: 9950  
 Ion Ratio Lower Upper  
 75 100  
 110 7.9 15.5 46.5#  
 77 0.0 25.4 38.0#





#38

Carbon Tetrachloride

Concen: 6.354 ug/l

RT: 4.99 min Scan# 1186

Delta R.T. -0.15 min

Lab File: VU027539.D

Acq: 09 Oct 2018 22:18

Instrument :

MSVOA\_U

ClientSampleId :

DS-VB-16202

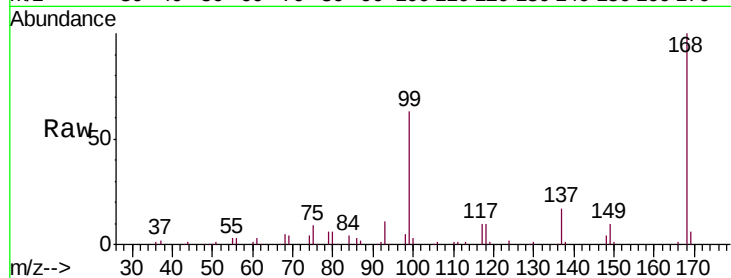
Tgt Ion: 117 Resp: 11308

Ion Ratio Lower Upper

117 100

119 5.8 74.5 111.7#

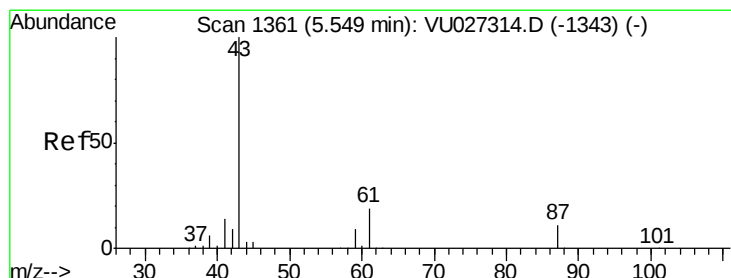
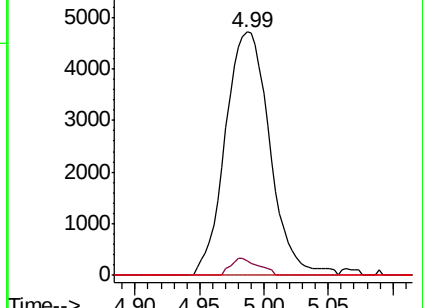
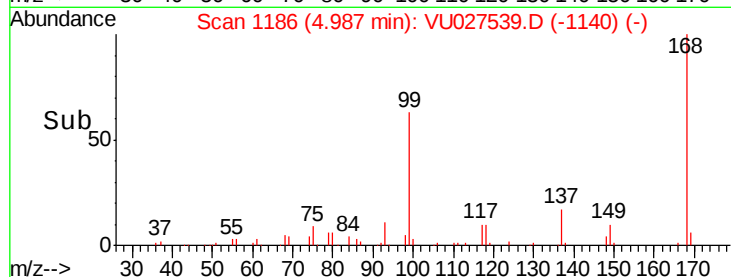
121 0.0 24.6 37.0#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 0.312 ug/l

RT: 5.80 min Scan# 1439

Delta R.T. 0.25 min

Lab File: VU027539.D

Acq: 09 Oct 2018 22:18

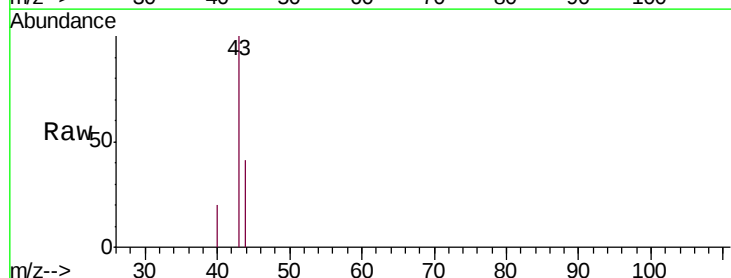
Tgt Ion: 43 Resp: 1234

Ion Ratio Lower Upper

43 100

61 0.0 15.3 22.9#

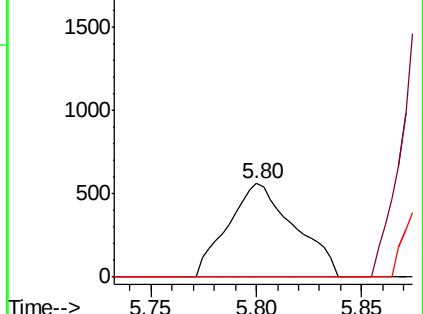
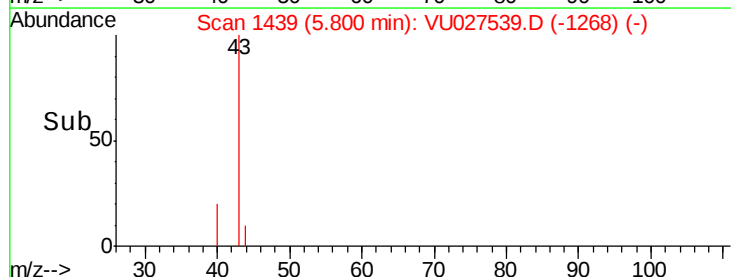
87 0.0 8.6 13.0#

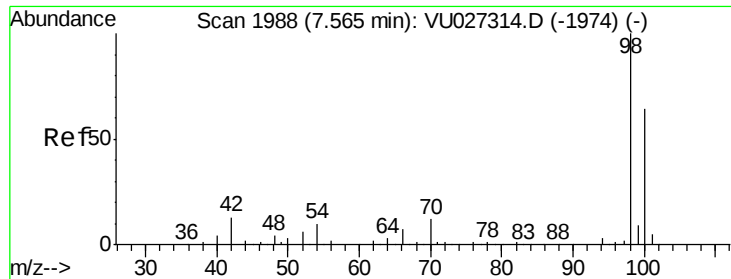


Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 87.00 (86.70 to 87.70): VU0

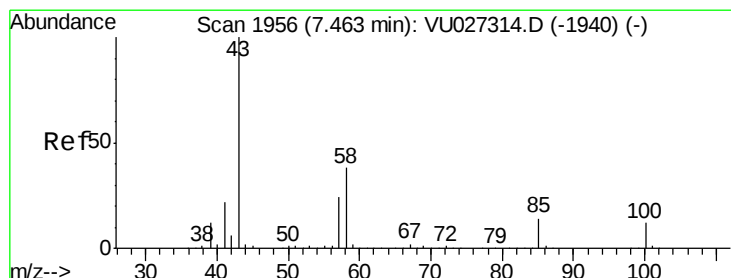
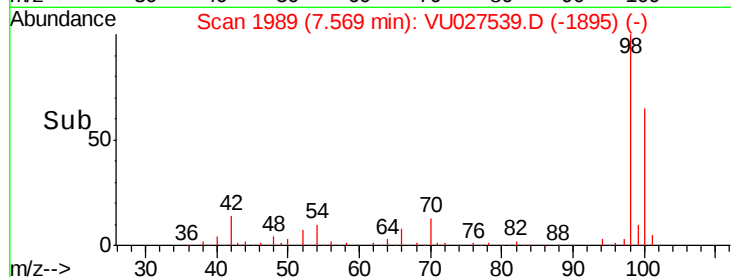
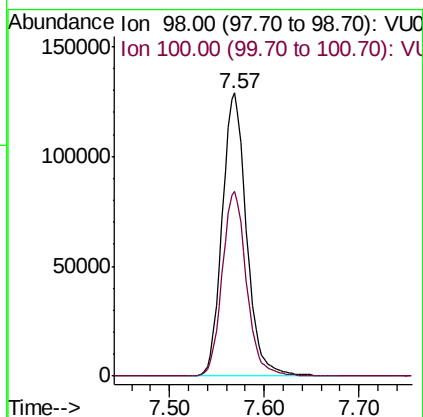
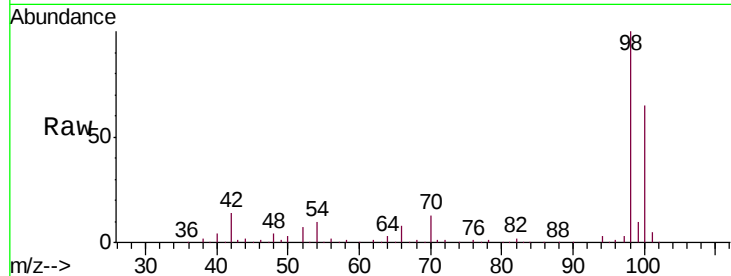




#50  
Toluene-d8  
Concen: 49.657 ug/l  
RT: 7.57 min Scan# 1989  
Delta R.T. 0.00 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

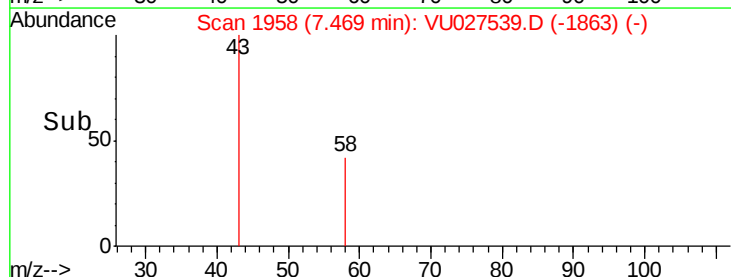
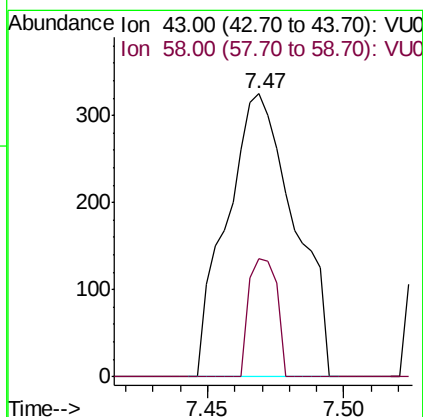
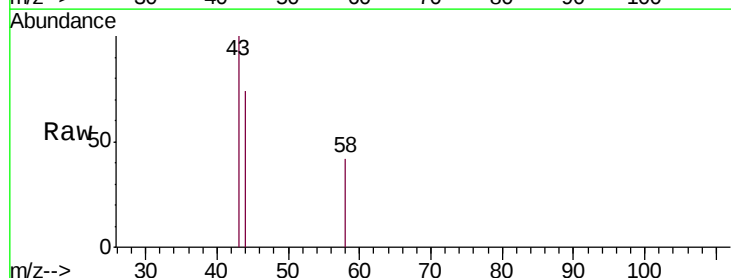
Instrument :  
MSVOA\_U  
ClientSampleId :  
DS-VB-16202

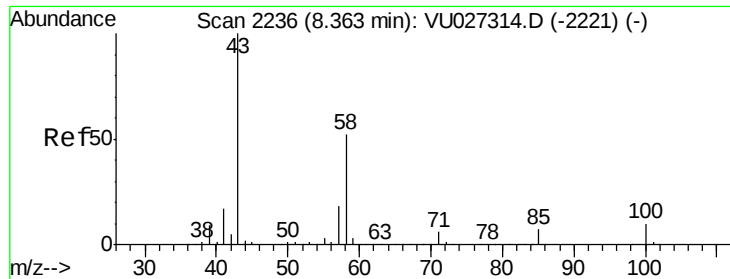
Tgt Ion: 98 Resp: 231102  
Ion Ratio Lower Upper  
98 100  
100 65.0 52.1 78.1



#51  
4-Methyl-2-Pentanone  
Concen: 0.217 ug/l  
RT: 7.47 min Scan# 1958  
Delta R.T. 0.01 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

Tgt Ion: 43 Resp: 557  
Ion Ratio Lower Upper  
43 100  
58 16.9 29.8 44.8#

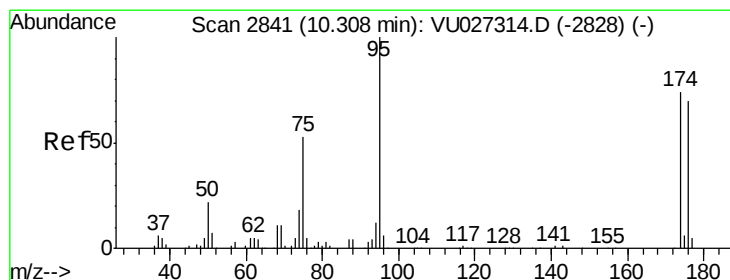
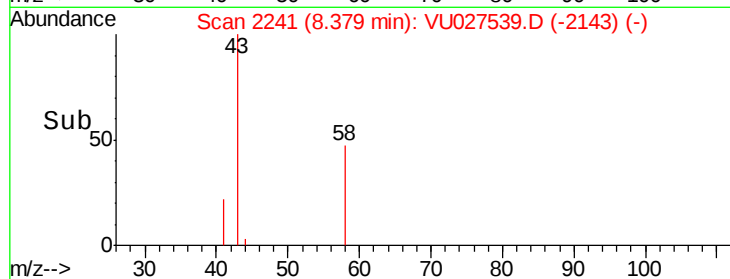
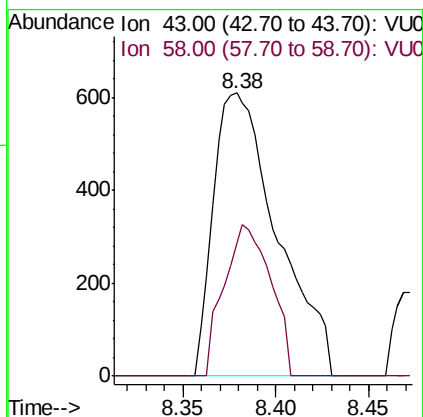
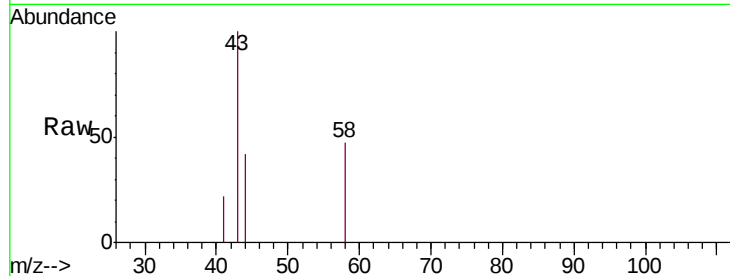




#59  
 2-Hexanone  
 Concen: 0.731 ug/l  
 RT: 8.38 min Scan# 2241  
 Delta R.T. 0.02 min  
 Lab File: VU027539.D  
 Acq: 09 Oct 2018 22:18

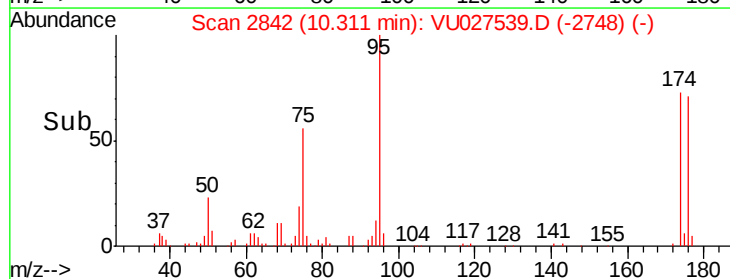
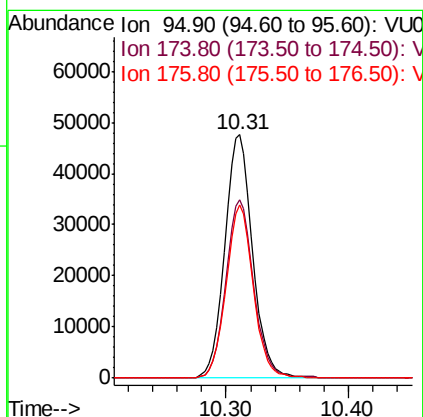
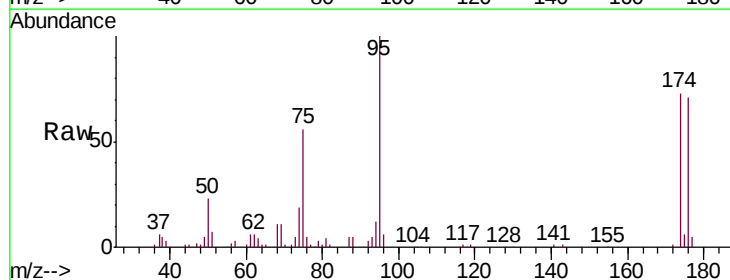
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 DS-VB-16202

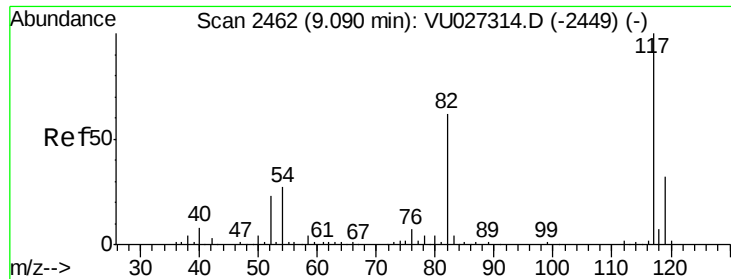
Tgt Ion: 43 Resp: 1458  
 Ion Ratio Lower Upper  
 43 100  
 58 38.9 26.1 78.3



#62  
 4-Bromofluorobenzene  
 Concen: 44.020 ug/l  
 RT: 10.31 min Scan# 2842  
 Delta R.T. 0.00 min  
 Lab File: VU027539.D  
 Acq: 09 Oct 2018 22:18

Tgt Ion: 95 Resp: 76136  
 Ion Ratio Lower Upper  
 95 100  
 174 73.6 0.0 147.8  
 176 69.6 0.0 140.8

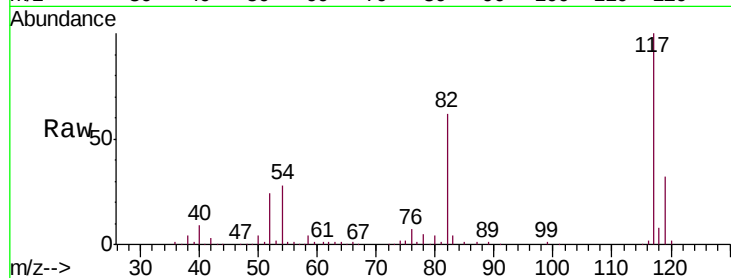




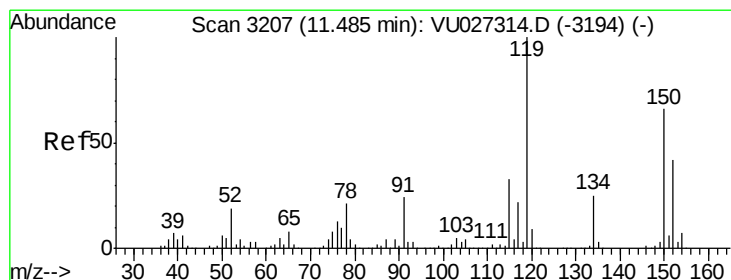
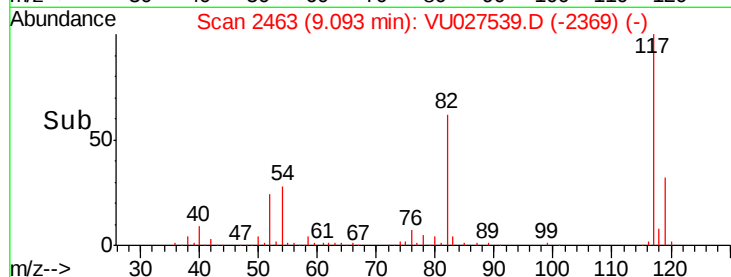
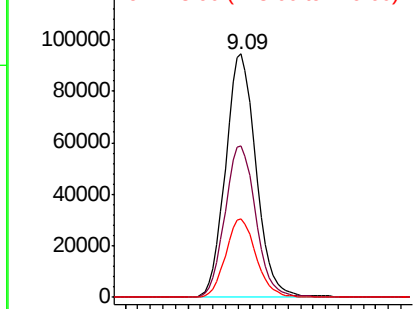
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.09 min Scan# 2463  
Delta R.T. 0.00 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

Instrument :  
MSVOA\_U  
ClientSampleId :  
DS-VB-16202

Tgt Ion:117 Resp: 159314  
Ion Ratio Lower Upper  
117 100  
82 62.4 49.2 73.8  
119 32.3 25.7 38.5

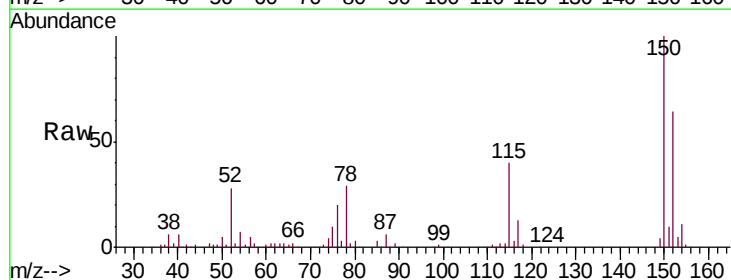


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VU0  
Ion 118.90 (118.60 to 119.60): V

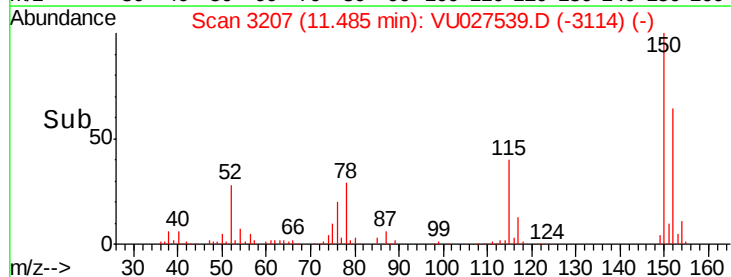
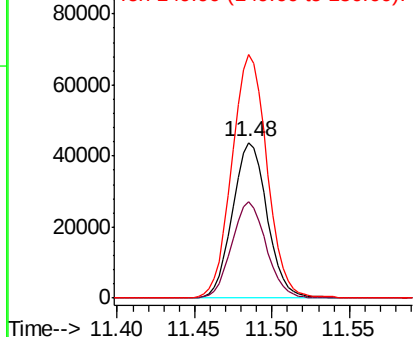


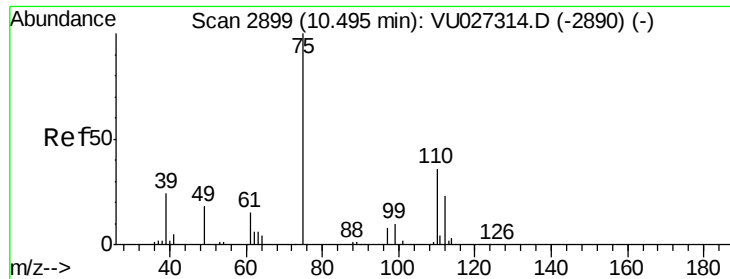
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 11.48 min Scan# 3207  
Delta R.T. -0.00 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

Tgt Ion:152 Resp: 68226  
Ion Ratio Lower Upper  
152 100  
115 61.7 43.4 130.2  
150 159.0 0.0 349.2



Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V

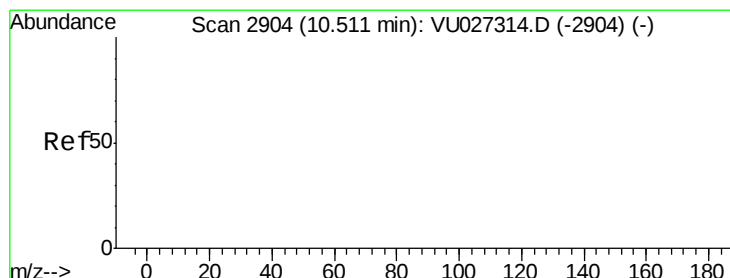
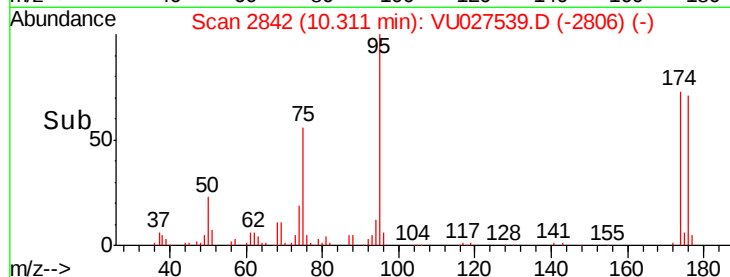
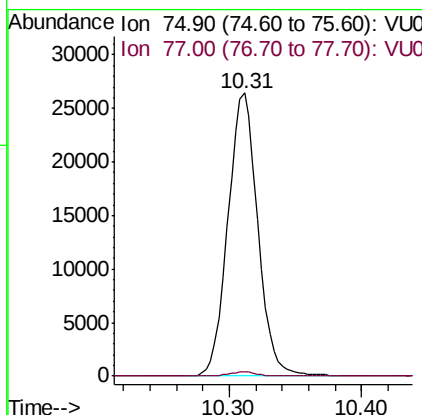
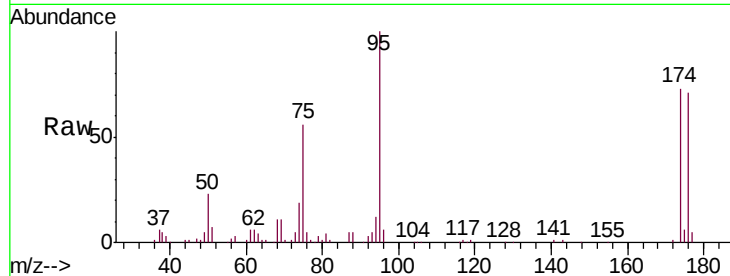




#76  
 1,2,3-Trichloropropane  
 Concen: 23.369 ug/l  
 RT: 10.31 min Scan# 2842  
 Delta R.T. -0.18 min  
 Lab File: VU027539.D  
 Acq: 09 Oct 2018 22:18

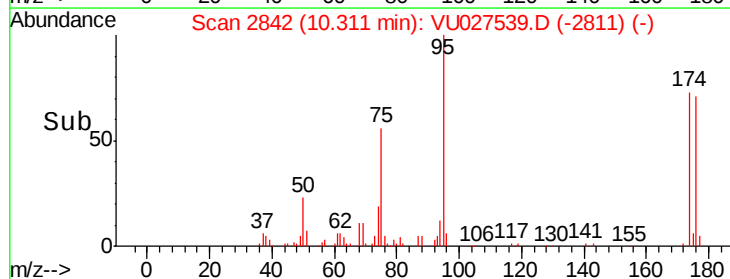
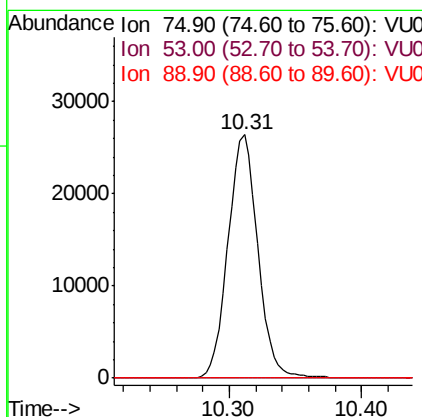
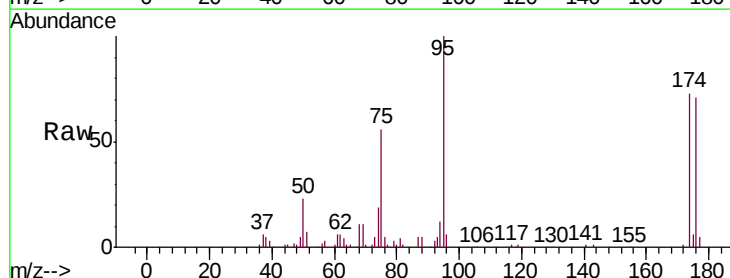
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 DS-VB-16202

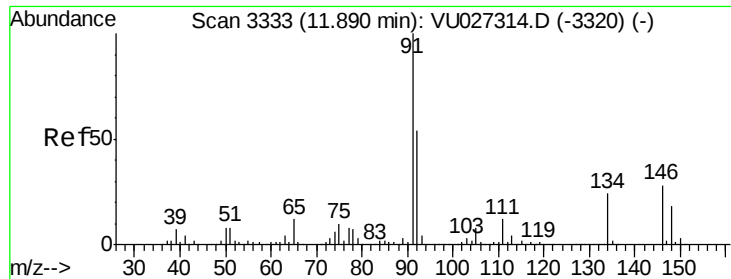
Tgt Ion: 75 Resp: 41329  
 Ion Ratio Lower Upper  
 75 100  
 77 1.3 20.3 60.9#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 61.158 ug/l  
 RT: 10.31 min Scan# 2842  
 Delta R.T. -0.20 min  
 Lab File: VU027539.D  
 Acq: 09 Oct 2018 22:18

Tgt Ion: 75 Resp: 41329  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 0.0 0.0  
 89 0.0 0.0 0.0

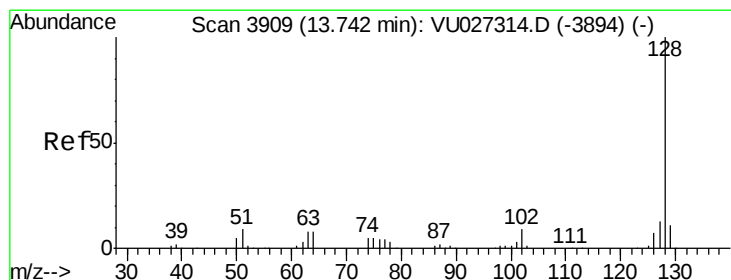
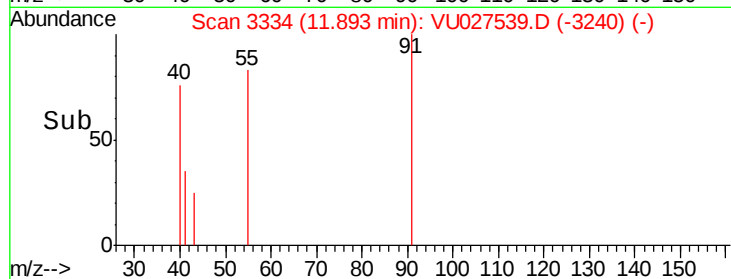
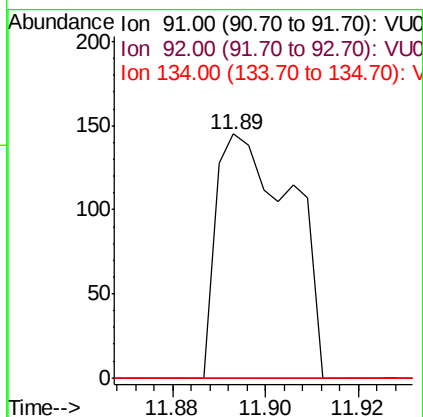
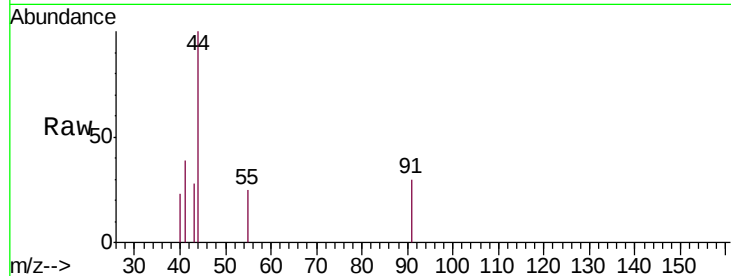




#89  
n-Butylbenzene  
Concen: 1.985 ug/l  
RT: 11.89 min Scan# 3334  
Delta R.T. 0.00 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

Instrument :  
MSVOA\_U  
ClientSampleId :  
DS-VB-16202

Tgt Ion: 91 Resp: 164  
Ion Ratio Lower Upper  
91 100  
92 0.0 27.0 81.0#  
134 0.0 11.7 35.1#



#95  
Naphthalene  
Concen: 1.709 ug/l  
RT: 13.75 min Scan# 3912  
Delta R.T. 0.01 min  
Lab File: VU027539.D  
Acq: 09 Oct 2018 22:18

Tgt Ion: 128 Resp: 262  
Ion Ratio Lower Upper  
128 100  
127 0.0 10.5 15.7#  
129 0.0 8.6 12.8#

