

Data Path : W:\HPCHEM1\MSVOA W\DATA\VW051018\  
 Data File : VW002394.D  
 Acq On : 10 May 2018 21:02  
 Operator : JC/SY  
 Sample : J2730-09RE  
 Misc : 5.403G/5ML/MSVOA W/SOIL  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: May 11 04:55:29 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_W\METHOD\82W050818S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 08 03:57:58 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 55842    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 134435   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 46846    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 3464     | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |        |         |      |
|---------------------------|--------|-----|----------|--------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 61361    | 103.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 206.94% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 60754    | 70.51  | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 141.02% |      |
| 50) Toluene-d8            | 10.33  | 98  | 89938    | 27.37  | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 54.74%  |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 6164     | 5.19   | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 10.38%  |      |

## Target Compounds

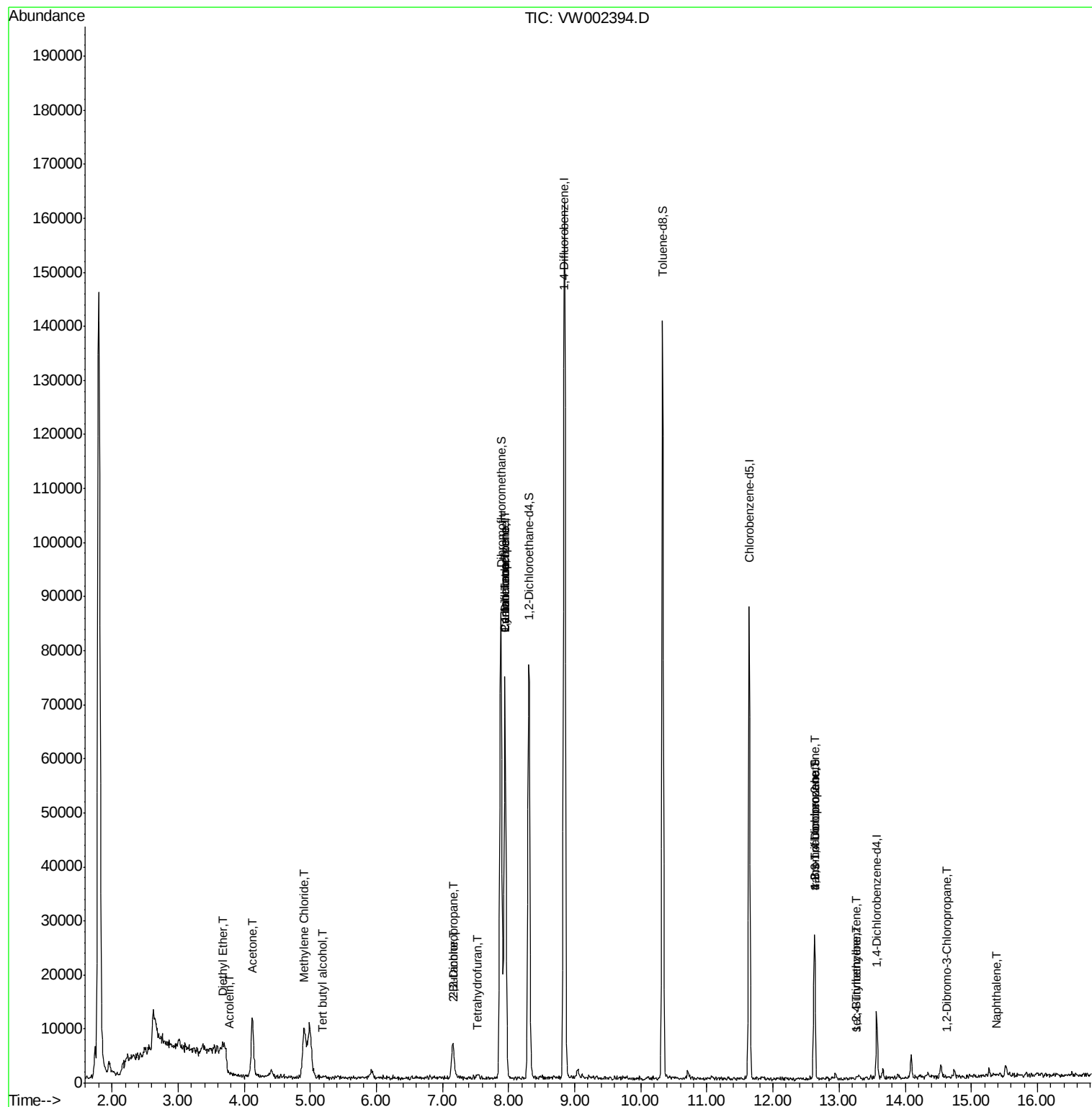
|                                |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 8) Diethyl Ether               | 3.68  | 74  | 779   | 2.41   | ug/l   | 90     |
| 11) Tert butyl alcohol         | 5.18  | 59  | 538   | 12.48  | ug/l # | 85     |
| 13) Acrolein                   | 3.78  | 56  | 98    | 2.72   | ug/l   | 94     |
| 16) Acetone                    | 4.12  | 43  | 19032 | 164.33 | ug/l   | 95     |
| 20) Methylene Chloride         | 4.91  | 84  | 8764  | 15.70  | ug/l   | 95     |
| 25) 2-Butanone                 | 7.17  | 43  | 724   | 4.21   | ug/l # | 49     |
| 26) 2,2-Dichloropropane        | 7.15  | 77  | 556   | 1.13   | ug/l # | 50     |
| 29) Tetrahydrofuran            | 7.53  | 42  | 382   | 3.39   | ug/l # | 33     |
| 31) Cyclohexane                | 7.95  | 56  | 1382  | 1.57   | ug/l # | 58     |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 4527  | 3.72   | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 5707  | 4.85   | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75  | 3315  | 107.92 | ug/l # | 1      |
| 81) trans-1,4-Dichloro-2-buten | 12.63 | 75  | 3315  | 284.27 | ug/l # | 10     |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105 | 344   | 1.75   | ug/l   | 75     |
| 85) sec-Butylbenzene           | 13.26 | 105 | 344   | 1.48   | ug/l # | 56     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.63 | 75  | 21    | 2.79   | ug/l # | 1      |
| 95) Naphthalene                | 15.37 | 128 | 612   | 4.57   | ug/l # | 68     |

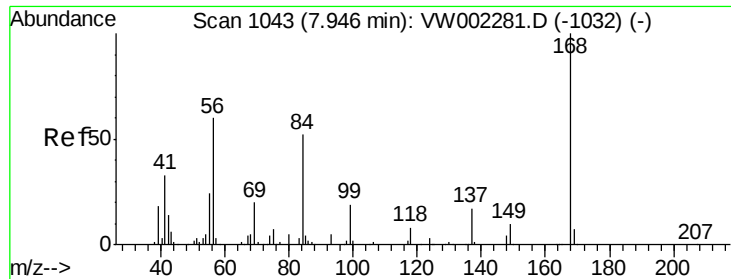
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : W:\HPCHEM1\MSVOA W\DATA\VW051018\  
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Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: May 11 04:55:29 2018  
Quant Method : W:\HPCHEM1\MSVOA\_W\METHOD\82W050818S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 08 03:57:58 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 7.95 min Scan# 1044

Delta R.T. 0.01 min

Lab File: VW002394.D

Acq: 10 May 2018 21:02

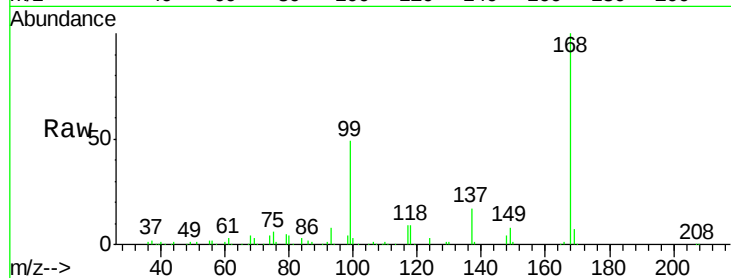
Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion:168 Resp: 55842

Ion Ratio Lower Upper

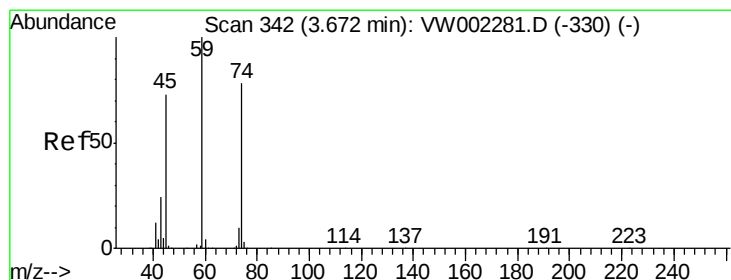
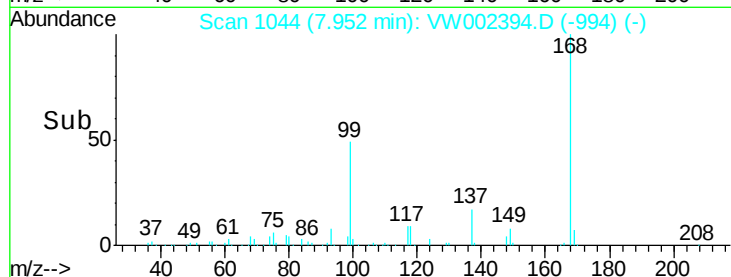
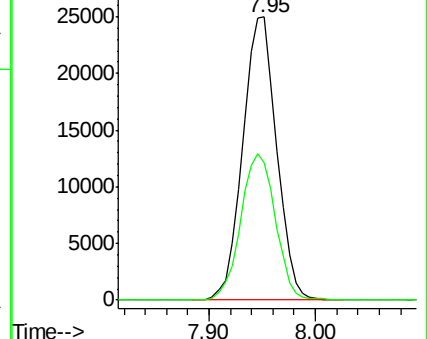
168 100

99 48.7 43.7 65.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#8

Diethyl Ether

Concen: 2.41 ug/l

RT: 3.68 min Scan# 343

Delta R.T. 0.01 min

Lab File: VW002394.D

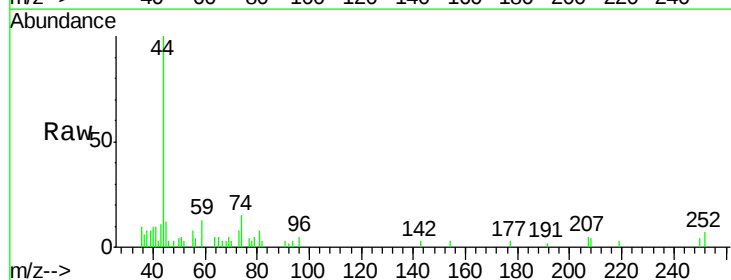
Acq: 10 May 2018 21:02

Tgt Ion: 74 Resp: 779

Ion Ratio Lower Upper

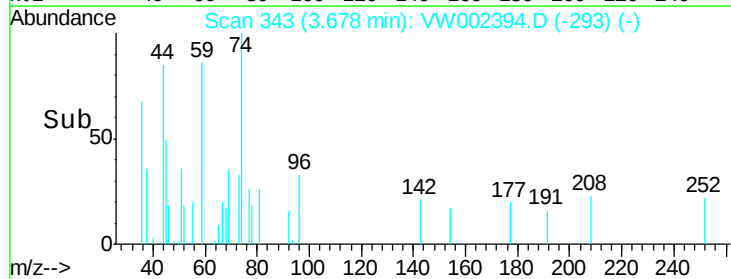
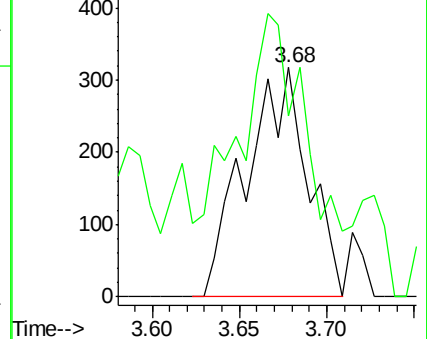
74 100

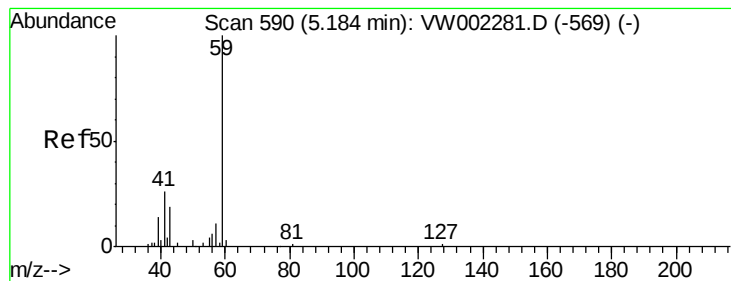
45 109.4 49.5 148.5



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW



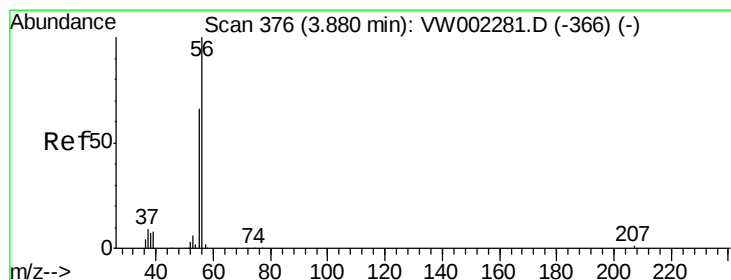
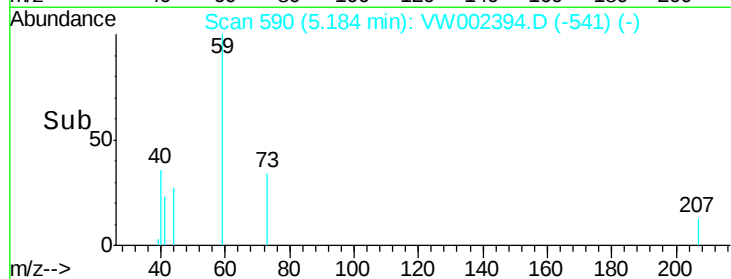
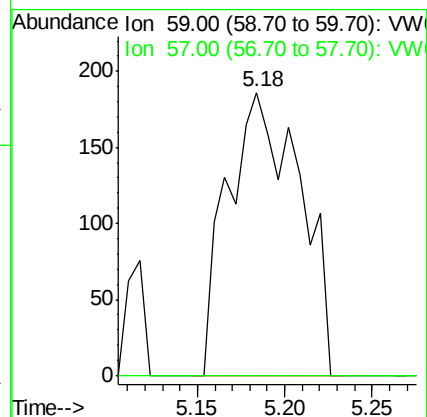
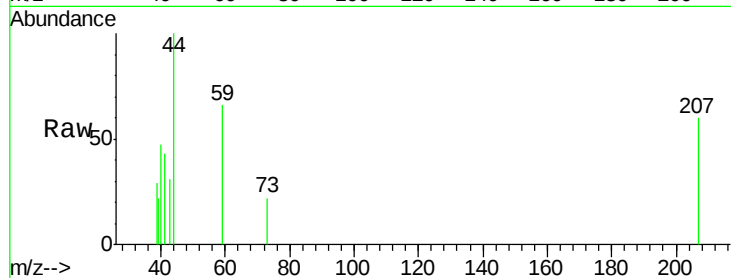


#11

Tert butvl alcohol  
 Concen: 12.48 ug/l  
 RT: 5.18 min Scan# 590  
 Delta R.T. -0.00 min  
 Lab File: VW002394.D  
 Acq: 10 May 2018 21:02

Instrument :  
 MSVOA\_W  
 ClientSampled :

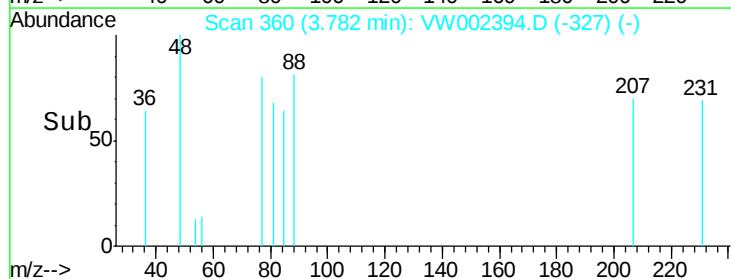
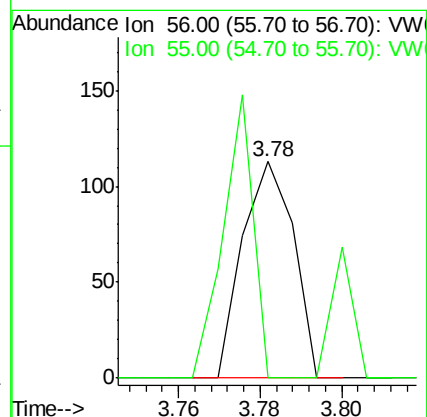
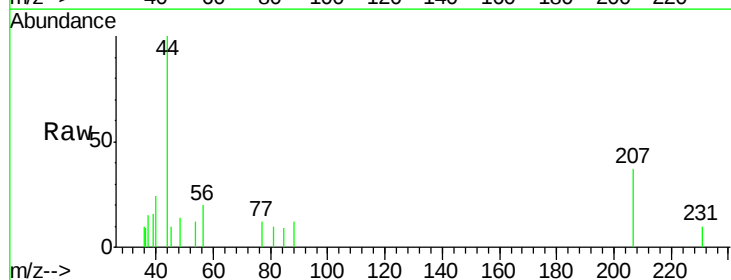
Tot Ion: 59 Resp: 538  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 3.9 5.9#

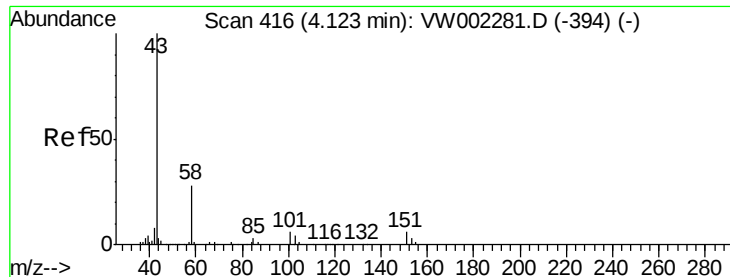


#13

Acrolein  
 Concen: 2.72 ug/l  
 RT: 3.78 min Scan# 360  
 Delta R.T. -0.10 min  
 Lab File: VW002394.D  
 Acq: 10 May 2018 21:02

Tgt Ion: 56 Resp: 98  
 Ion Ratio Lower Upper  
 56 100  
 55 76.5 57.3 85.9

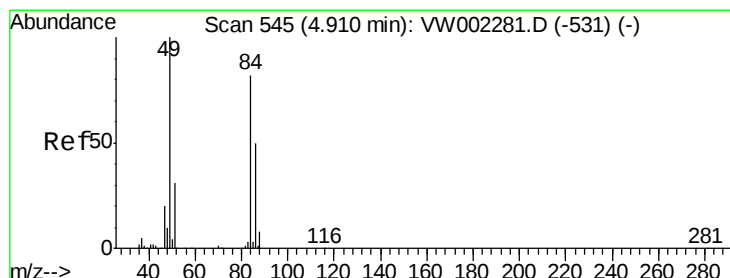
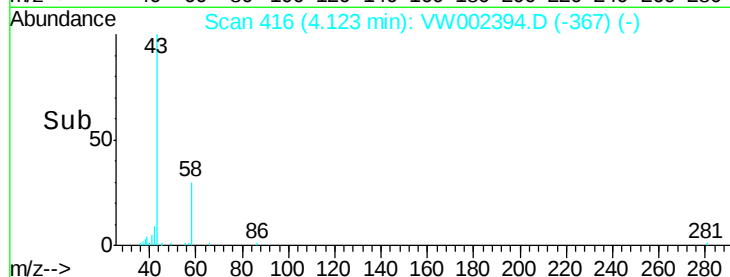
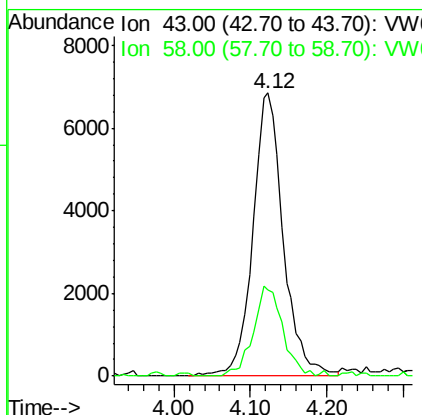
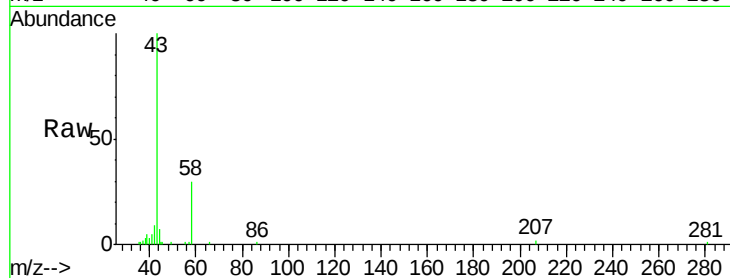




#16  
Acetone  
Concen: 164.33 ug/l  
RT: 4.12 min Scan# 416  
Delta R.T. -0.00 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

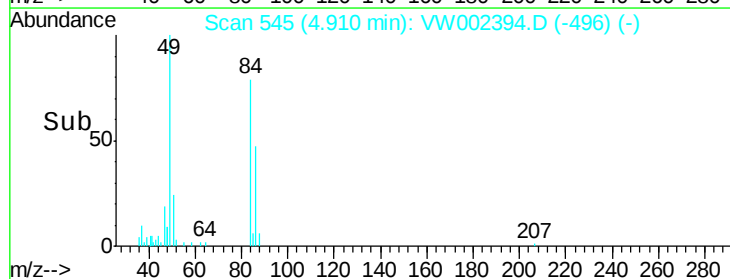
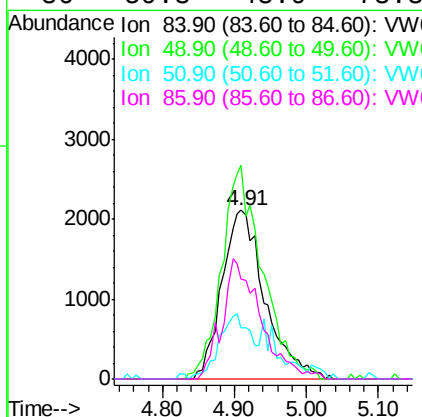
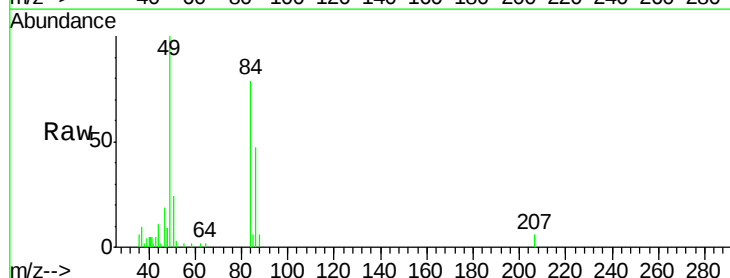
Instrument :  
MSVOA\_W  
ClientSampleId :

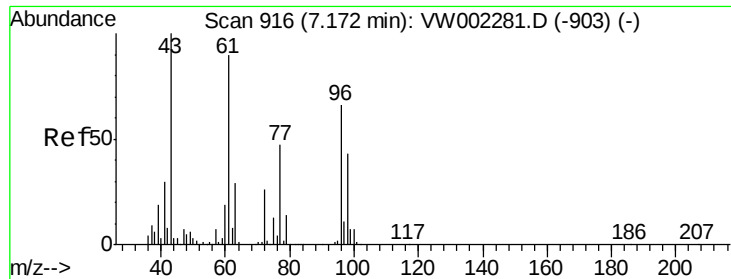
Tot Ion: 43 Resp: 19032  
Ion Ratio Lower Upper  
43 100  
58 30.4 22.2 33.4



#20  
Methylene Chloride  
Concen: 15.70 ug/l  
RT: 4.91 min Scan# 545  
Delta R.T. -0.00 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

Tgt Ion: 84 Resp: 8764  
Ion Ratio Lower Upper  
84 100  
49 126.5 97.7 146.5  
51 30.3 30.2 45.4  
86 59.3 48.9 73.3





#25

2-Butanone

Concen: 4.21 ug/l

RT: 7.17 min Scan# 916

Delta R.T. -0.00 min

Lab File: VW002394.D

Acq: 10 May 2018 21:02

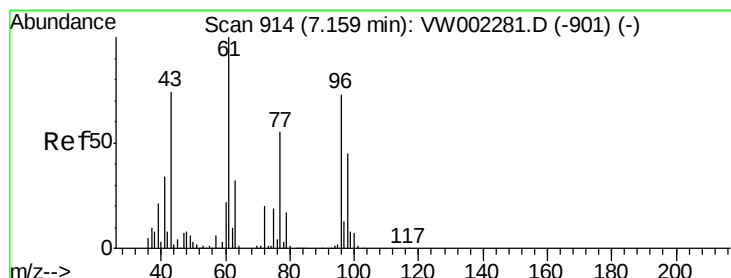
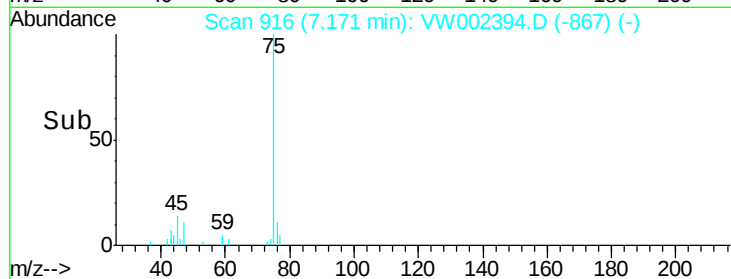
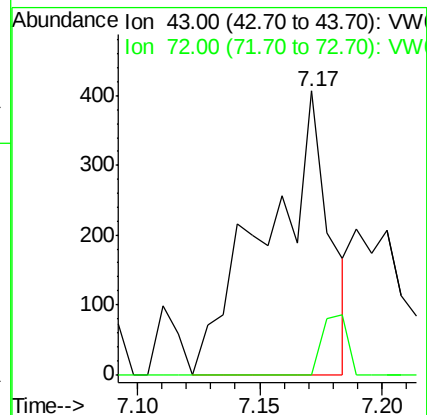
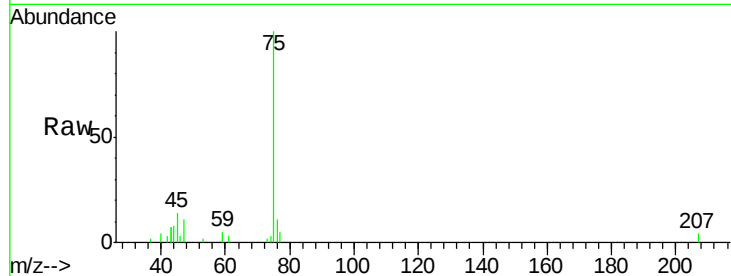
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 43 Resp: 724

Ion Ratio Lower Upper

43 100

72 0.0 20.6 31.0#



#26

2,2-Dichloropropane

Concen: 1.13 ug/l

RT: 7.15 min Scan# 913

Delta R.T. -0.01 min

Lab File: VW002394.D

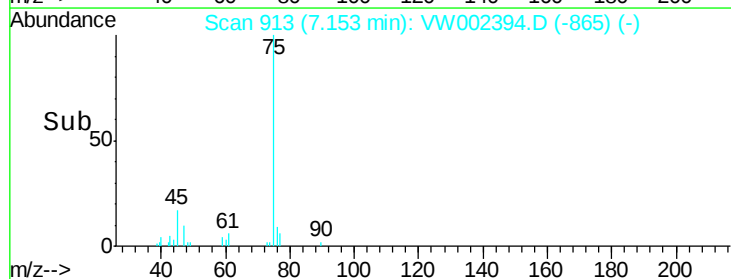
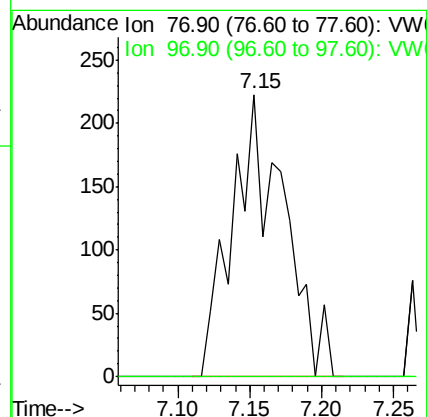
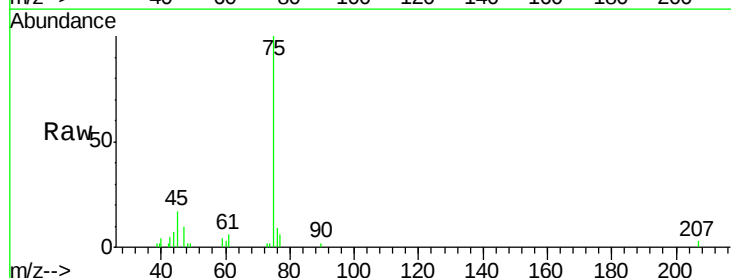
Acq: 10 May 2018 21:02

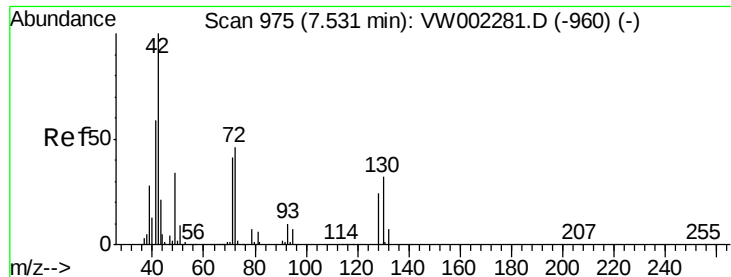
Tgt Ion: 77 Resp: 556

Ion Ratio Lower Upper

77 100

97 0.0 12.7 38.0#

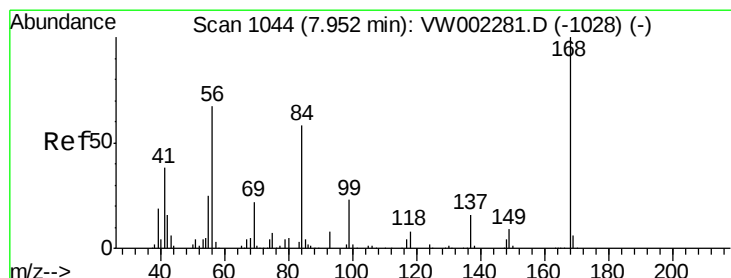
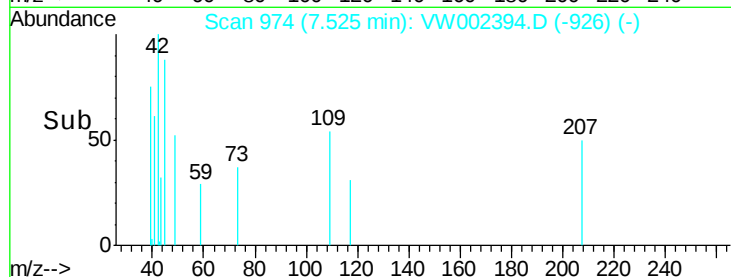
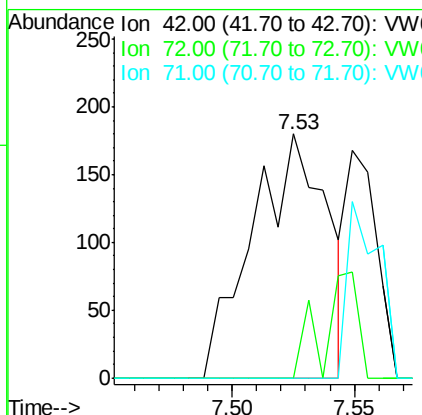
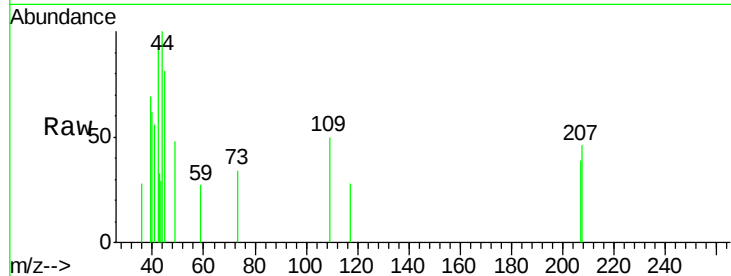




#29  
Tetrahydrofuran  
Concen: 3.39 ug/l  
RT: 7.53 min Scan# 974  
Delta R.T. -0.01 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

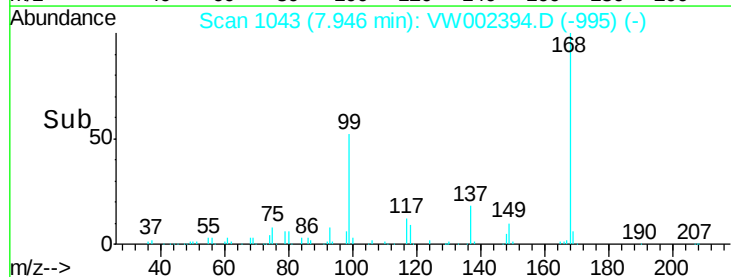
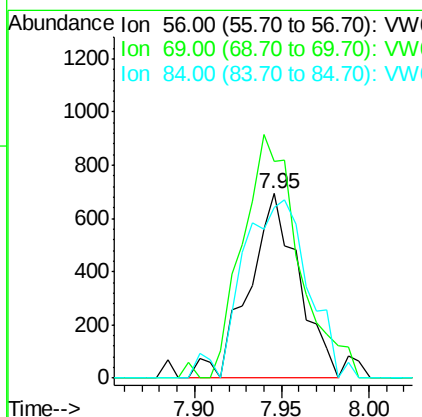
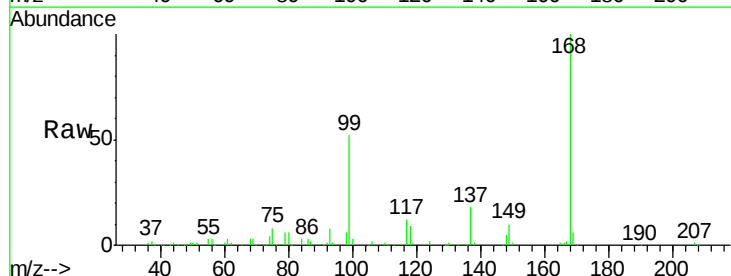
Instrument :  
MSVOA\_W  
ClientSampled :

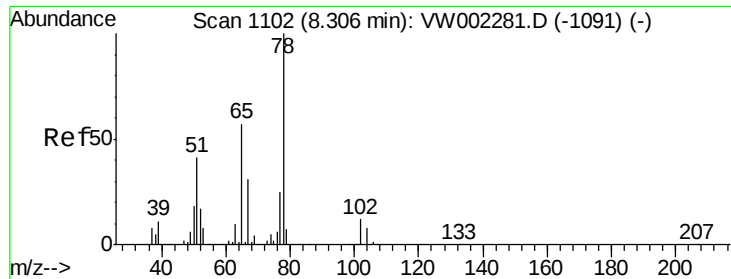
Tot Ion: 42 Resp: 382  
Ion Ratio Lower Upper  
42 100  
72 0.0 34.5 51.7#  
71 0.0 33.0 49.6#



#31  
Cyclohexane  
Concen: 1.57 ug/l  
RT: 7.95 min Scan# 1043  
Delta R.T. -0.01 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

Tgt Ion: 56 Resp: 1382  
Ion Ratio Lower Upper  
56 100  
69 108.5 26.2 39.4#  
84 92.5 69.2 103.8

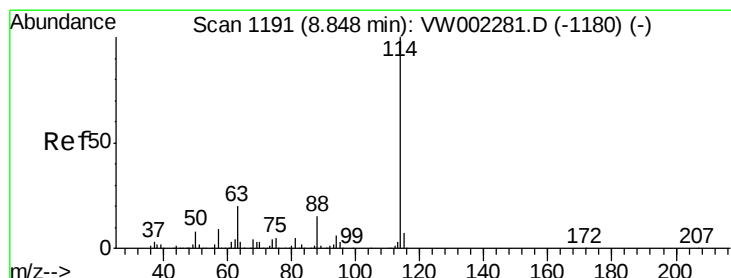
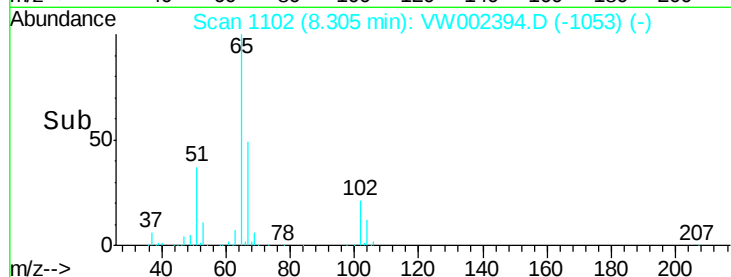
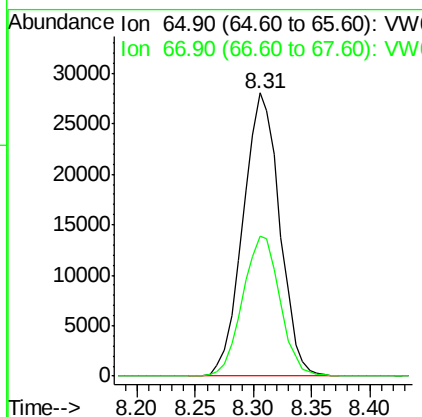
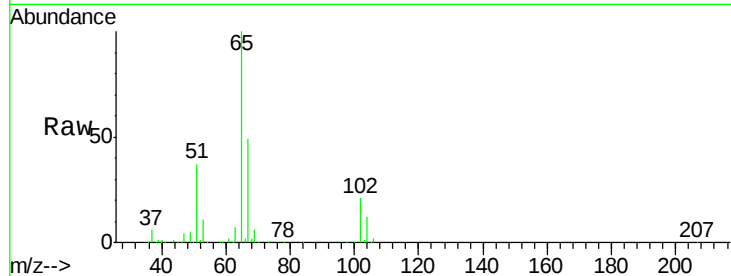




#33  
 1,2-Dichloroethane-d4  
 Concen: 103.47 ug/l  
 RT: 8.31 min Scan# 1102  
 Delta R.T. -0.00 min  
 Lab File: VW002394.D  
 Acq: 10 May 2018 21:02

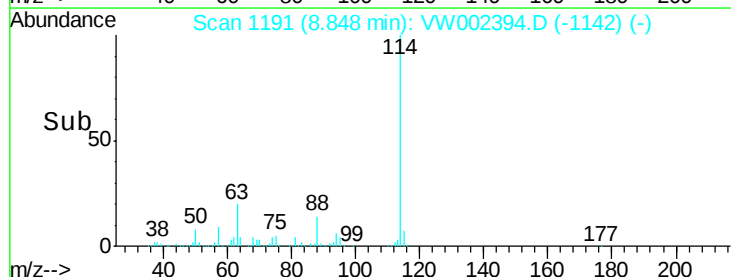
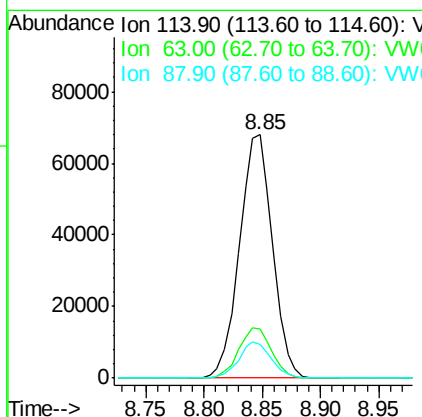
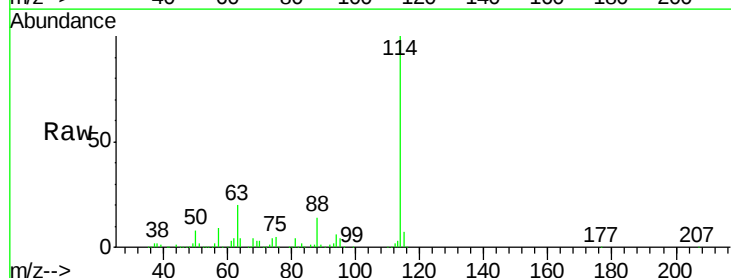
Instrument :  
 MSVOA\_W  
 ClientSampled :

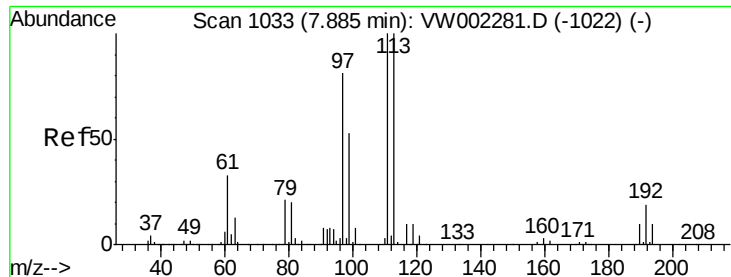
Tot Ion: 65 Resp: 61361  
 Ion Ratio Lower Upper  
 65 100  
 67 50.3 0.0 107.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 8.85 min Scan# 1191  
 Delta R.T. -0.00 min  
 Lab File: VW002394.D  
 Acq: 10 May 2018 21:02

Tgt Ion: 114 Resp: 134435  
 Ion Ratio Lower Upper  
 114 100  
 63 20.2 0.0 39.0  
 88 13.9 0.0 29.6

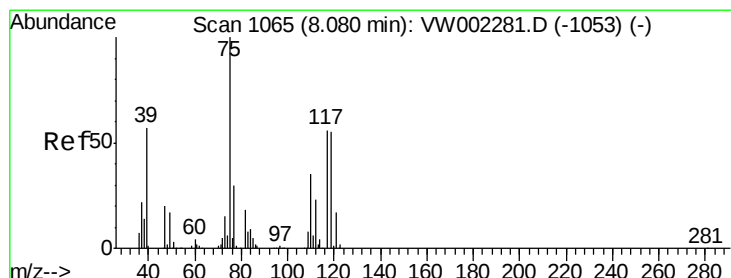
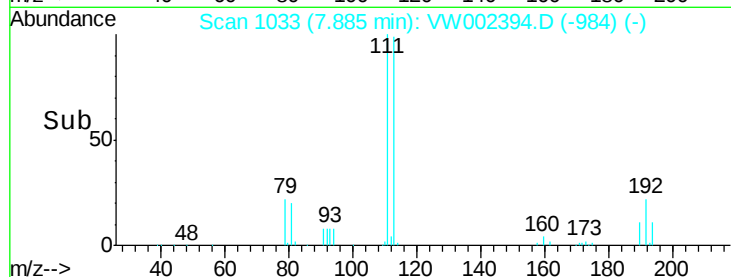
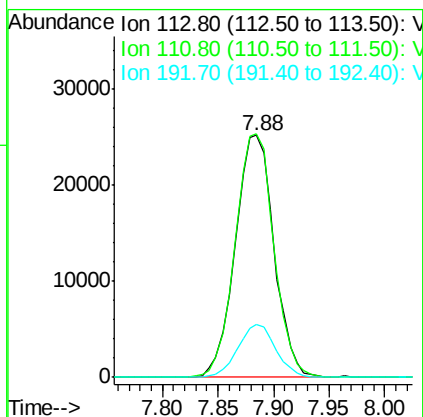
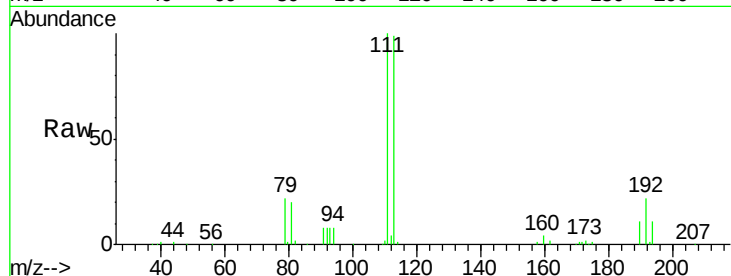




#35  
Dibromofluoromethane  
Concen: 70.51 ug/l  
RT: 7.88 min Scan# 1033  
Delta R.T. -0.00 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

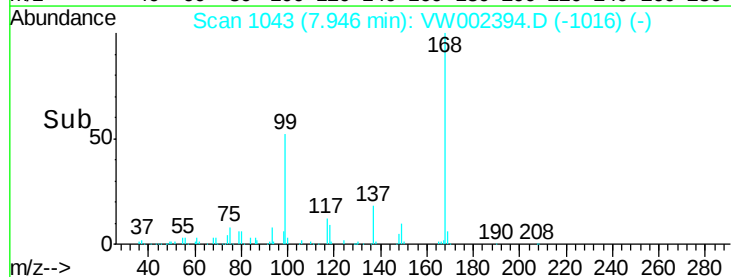
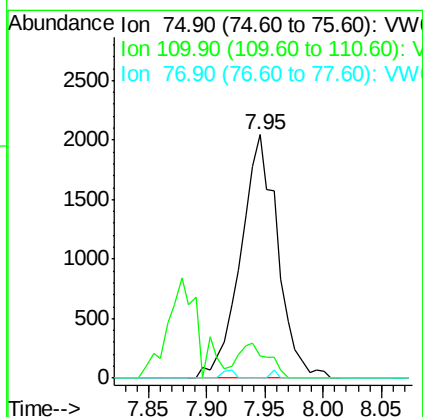
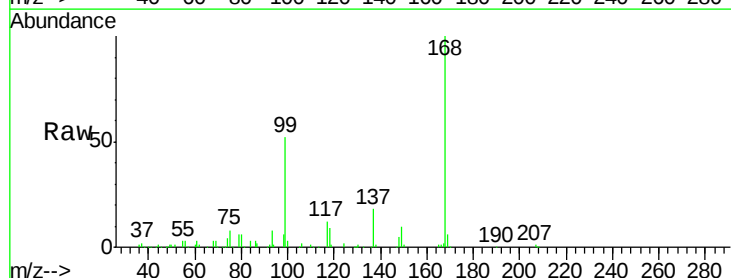
Instrument :  
MSVOA\_W  
ClientSampleId :

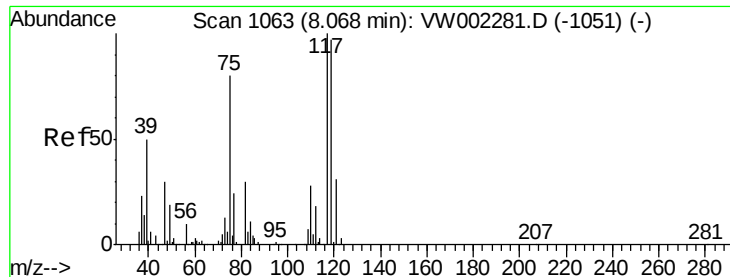
Tot Ion:113 Resp: 60754  
Ion Ratio Lower Upper  
113 100  
111 100.6 81.5 122.3  
192 21.4 16.4 24.6



#36  
1,1-Dichloropropene  
Concen: 3.72 ug/l  
RT: 7.95 min Scan# 1043  
Delta R.T. -0.13 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

Tgt Ion: 75 Resp: 4527  
Ion Ratio Lower Upper  
75 100  
110 11.9 18.1 54.1#  
77 0.6 24.5 36.7#





#38

Carbon Tetrachloride

Concen: 4.85 ug/l

RT: 7.95 min Scan# 1043

Delta R.T. -0.12 min

Lab File: VW002394.D

Acq: 10 May 2018 21:02

Instrument :

MSVOA\_W

ClientSampleId :

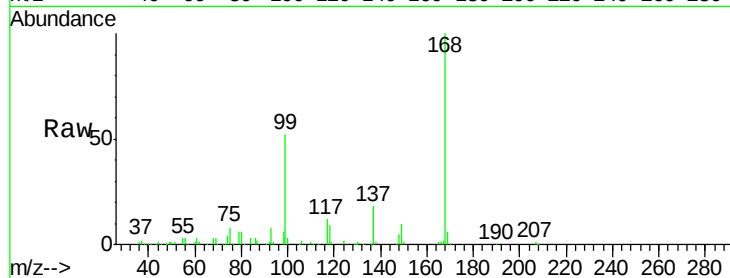
Tot Ion:117 Resp: 5707

Ion Ratio Lower Upper

117 100

119 6.0 77.5 116.3#

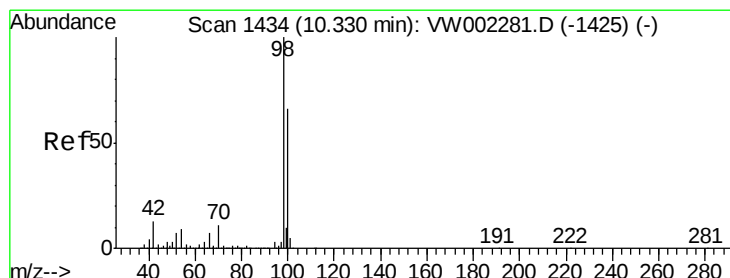
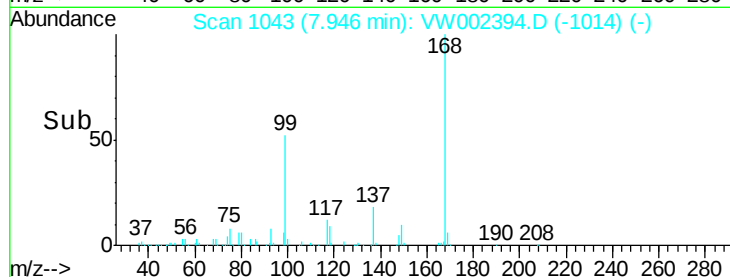
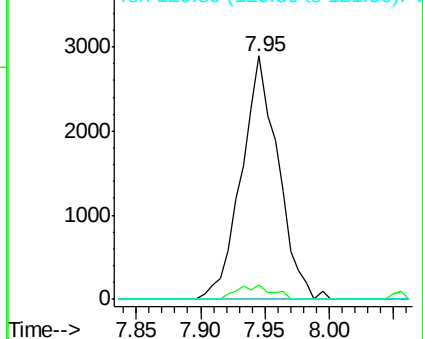
121 0.0 24.4 36.6#



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



#50

Toluene-d8

Concen: 27.37 ug/l

RT: 10.33 min Scan# 1434

Delta R.T. -0.00 min

Lab File: VW002394.D

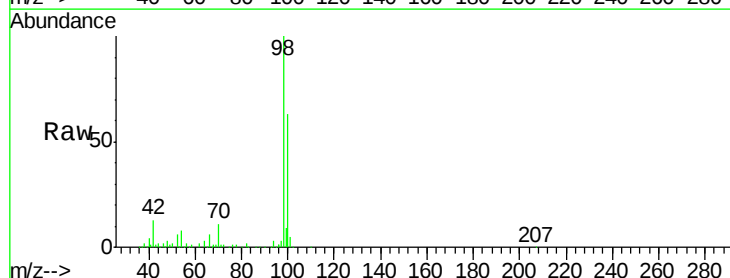
Acq: 10 May 2018 21:02

Tgt Ion: 98 Resp: 89938

Ion Ratio Lower Upper

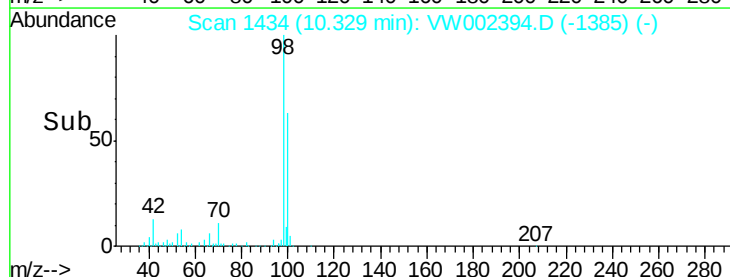
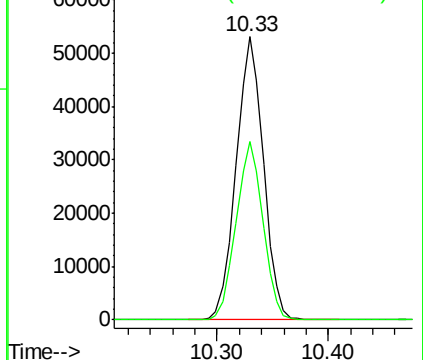
98 100

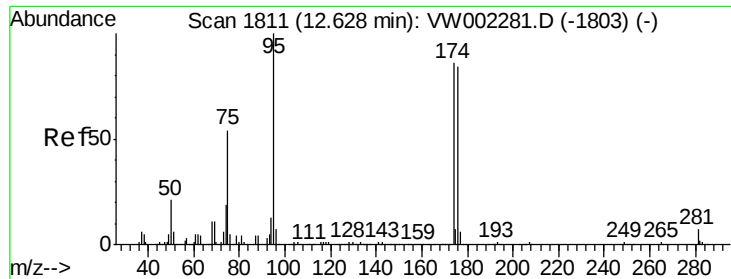
100 62.0 51.4 77.2



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW

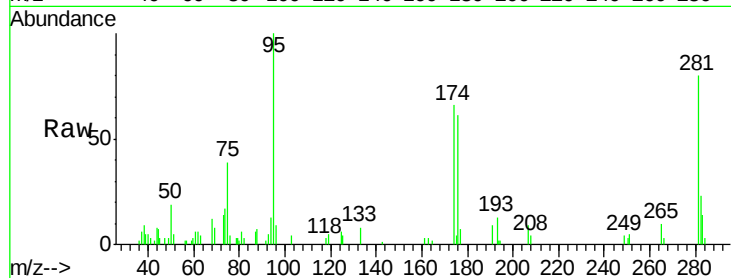




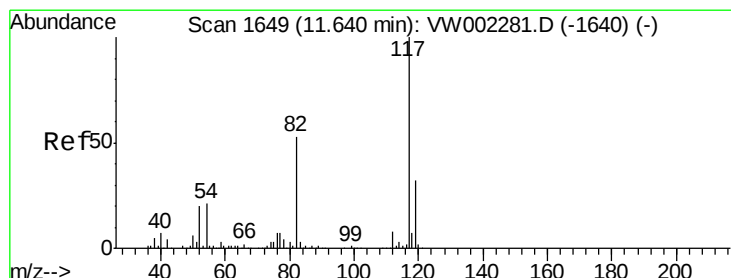
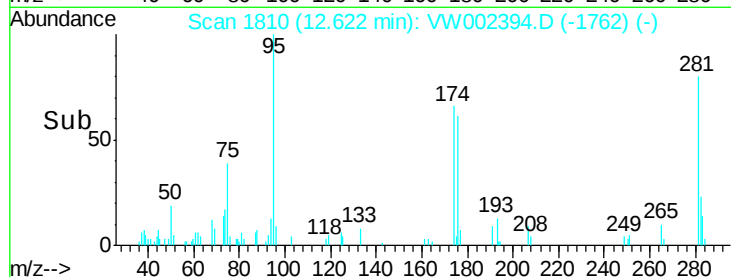
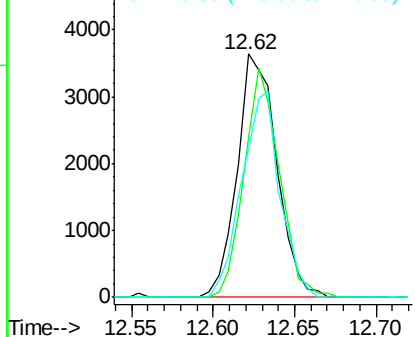
#62  
4-Bromofluorobenzene  
Concen: 5.19 ug/l  
RT: 12.62 min Scan# 1810  
Delta R.T. -0.01 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 95 Resp: 6164  
Ion Ratio Lower Upper  
95 100  
174 84.0 0.0 176.8  
176 81.7 0.0 170.4

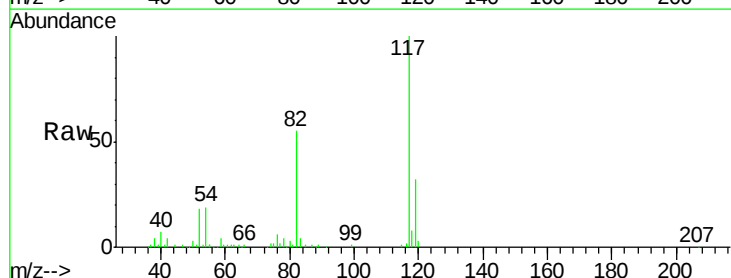


Abundance Ion 94.90 (94.60 to 95.60): VW  
Ion 173.80 (173.50 to 174.50): VW  
Ion 175.80 (175.50 to 176.50): VW

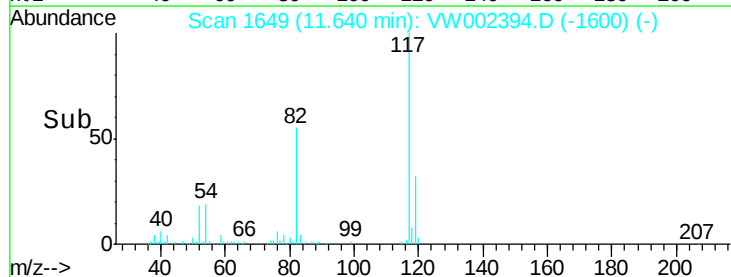
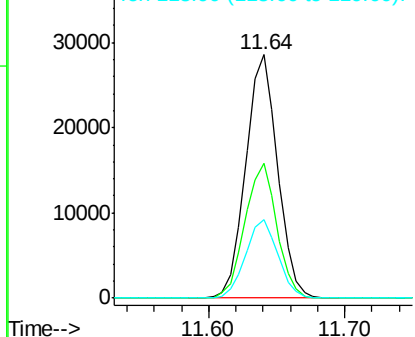


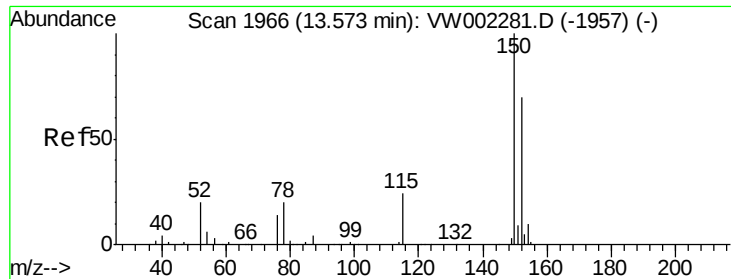
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 11.64 min Scan# 1649  
Delta R.T. -0.00 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

Tgt Ion: 117 Resp: 46846  
Ion Ratio Lower Upper  
117 100  
82 55.3 42.6 63.8  
119 32.1 25.2 37.8



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



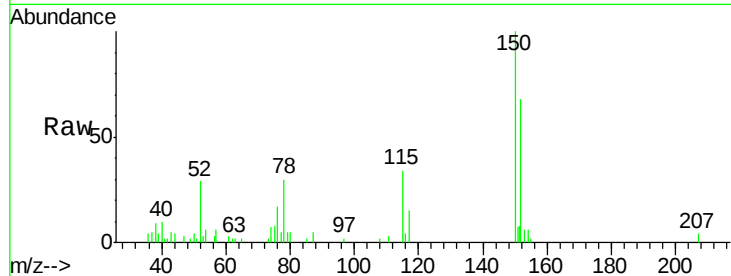


#72

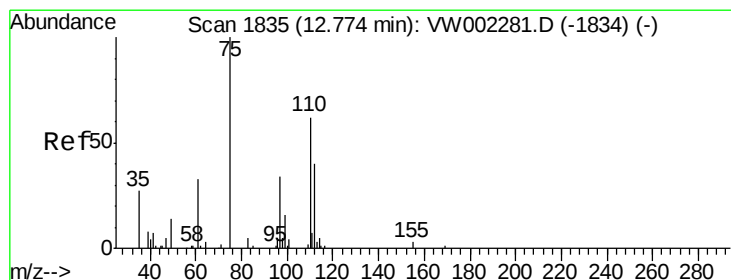
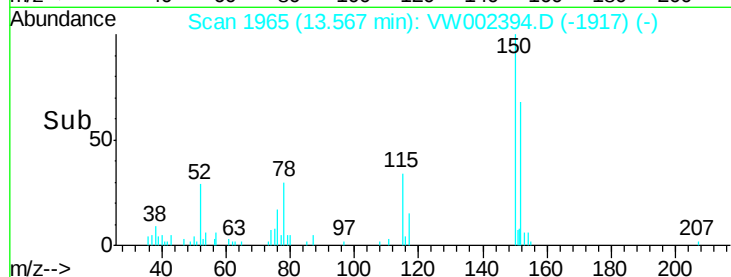
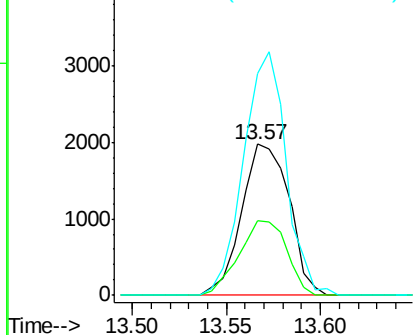
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 13.57 min Scan# 1965  
Delta R.T. -0.01 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion:152 Resp: 3464  
Ion Ratio Lower Upper  
152 100  
115 49.6 28.5 85.5  
150 144.2 0.0 342.6



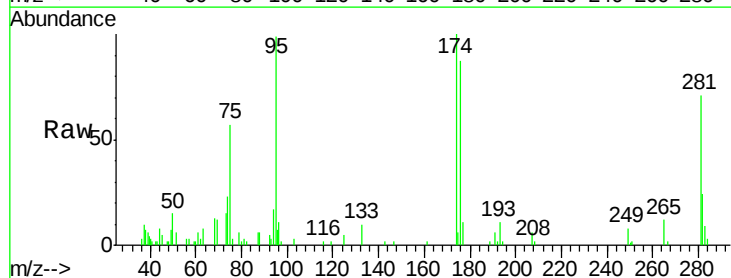
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



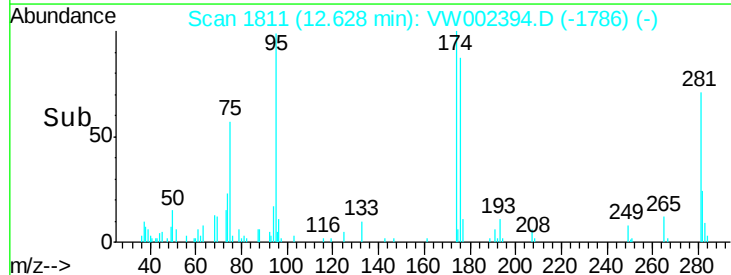
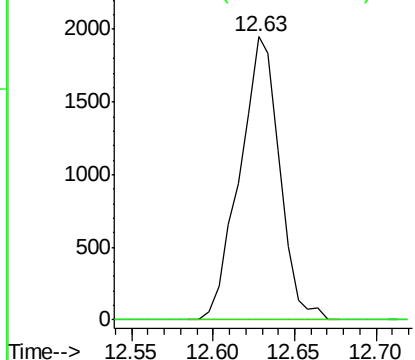
#76

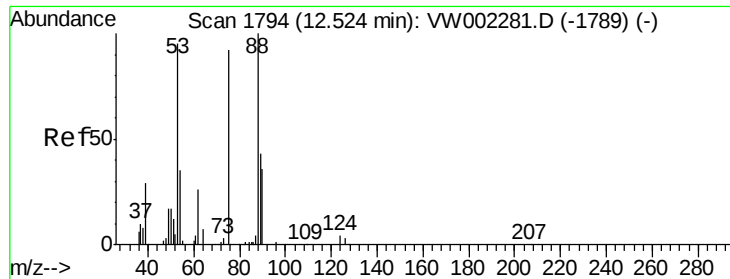
1,2,3-Trichloropropane  
Concen: 107.92 ug/l  
RT: 12.63 min Scan# 1811  
Delta R.T. -0.15 min  
Lab File: VW002394.D  
Acq: 10 May 2018 21:02

Tgt Ion: 75 Resp: 3315  
Ion Ratio Lower Upper  
75 100  
77 0.0 187.5 562.6#



Abundance Ion 74.90 (74.60 to 75.60): VW  
Ion 77.00 (76.70 to 77.70): VW





#81

trans-1,4-Dichloro-2-butene

Concen: 284.27 ug/l

RT: 12.63 min Scan# 1811

Delta R.T. 0.10 min

Lab File: VW002394.D

Acq: 10 May 2018 21:02

Instrument :

MSVOA\_W

ClientSampled :

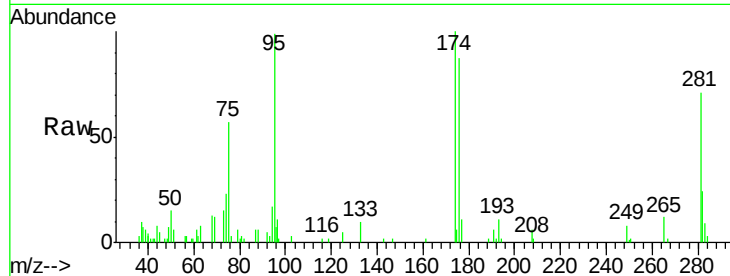
Tot Ion: 75 Resp: 3315

Ion Ratio Lower Upper

75 100

53 0.0 79.9 119.9#

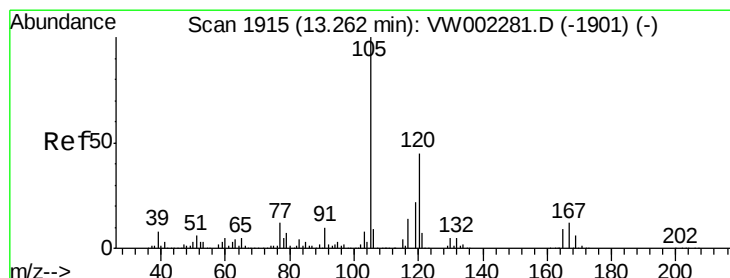
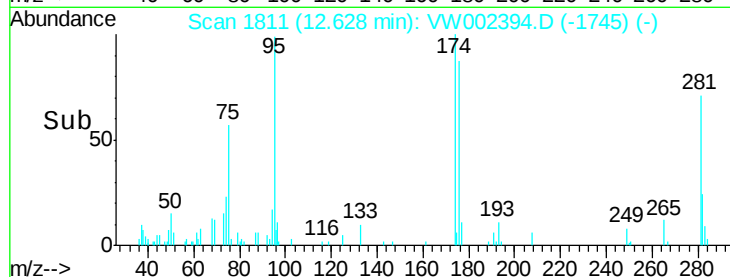
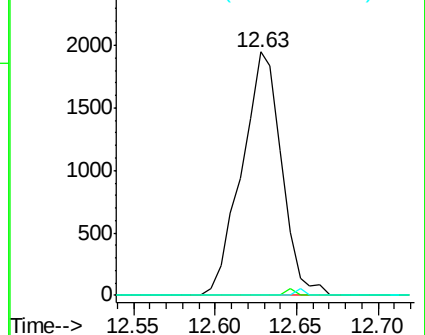
89 0.0 37.6 56.4#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW



#84

1,2,4-Trimethylbenzene

Concen: 1.75 ug/l

RT: 13.26 min Scan# 1914

Delta R.T. -0.01 min

Lab File: VW002394.D

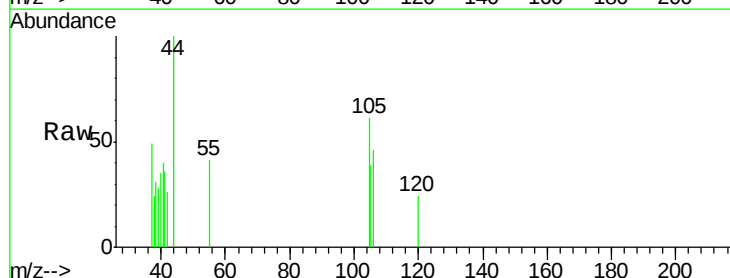
Acq: 10 May 2018 21:02

Tgt Ion: 105 Resp: 344

Ion Ratio Lower Upper

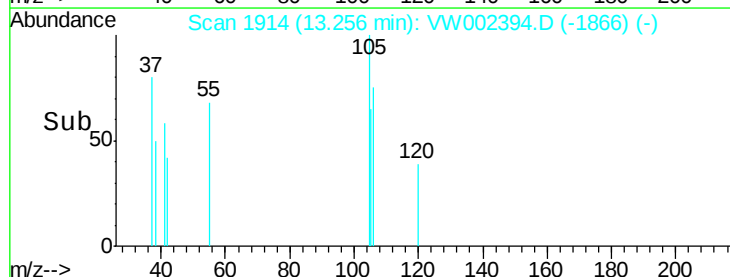
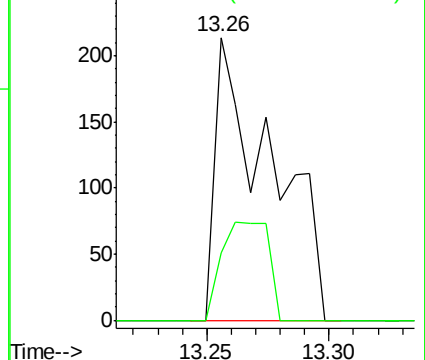
105 100

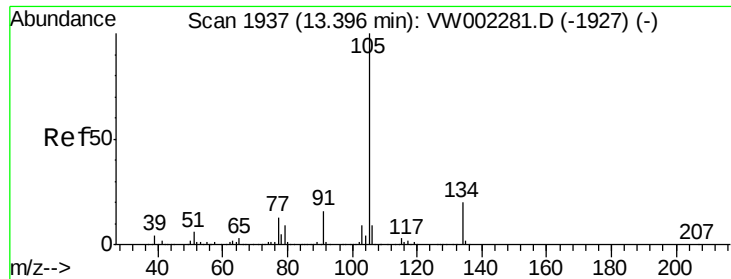
120 28.8 22.5 67.5



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

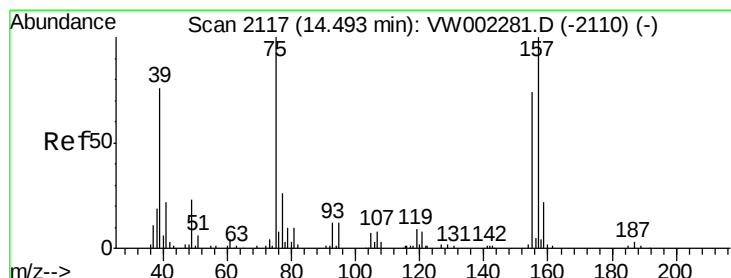
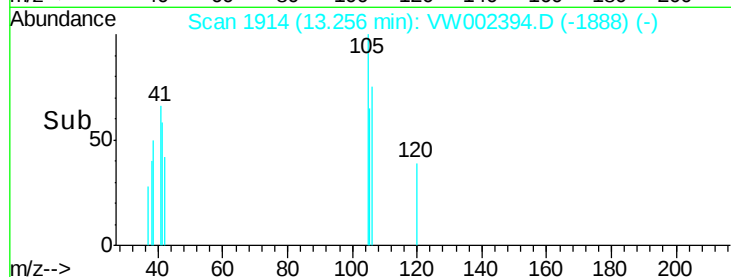
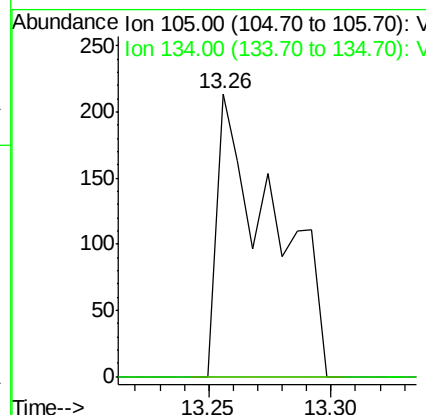
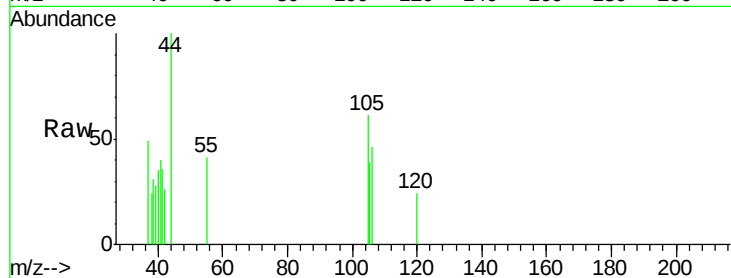




#85  
 sec-Butylbenzene  
 Concen: 1.48 ug/l  
 RT: 13.26 min Scan# 1914  
 Delta R.T. -0.14 min  
 Lab File: VW002394.D  
 Acq: 10 May 2018 21:02

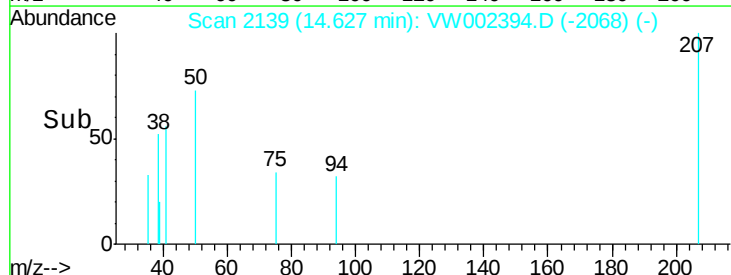
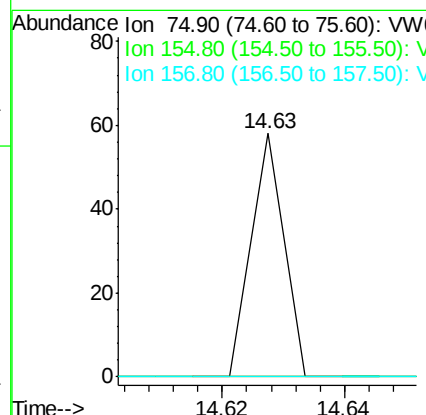
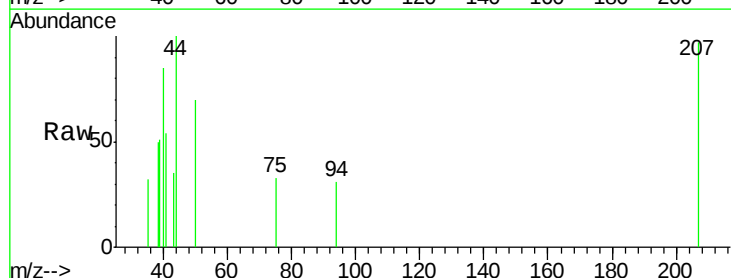
Instrument :  
 MSVOA\_W  
 ClientSampled :

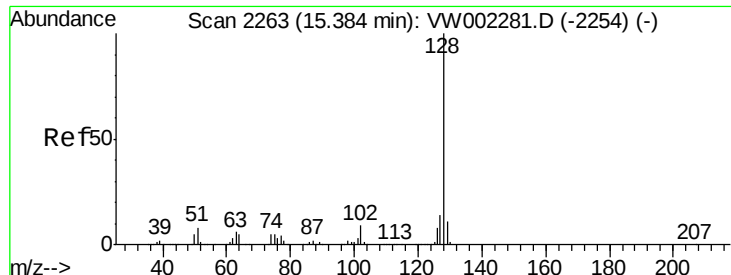
Tot Ion:105 Resp: 344  
 Ion Ratio Lower Upper  
 105 100  
 134 0.0 10.3 30.8#



#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 2.79 ug/l  
 RT: 14.63 min Scan# 2139  
 Delta R.T. 0.13 min  
 Lab File: VW002394.D  
 Acq: 10 May 2018 21:02

Tgt Ion: 75 Resp: 21  
 Ion Ratio Lower Upper  
 75 100  
 155 0.0 43.3 129.8#  
 157 0.0 55.8 167.4#





#95

Naphthalene

Concen: 4.57 ug/l

RT: 15.37 min Scan# 2261

Delta R.T. -0.01 min

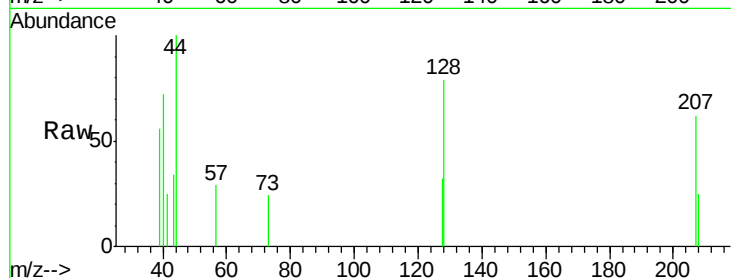
Lab File: VW002394.D

Acq: 10 May 2018 21:02

Instrument :

MSVOA\_W

ClientSampleId :



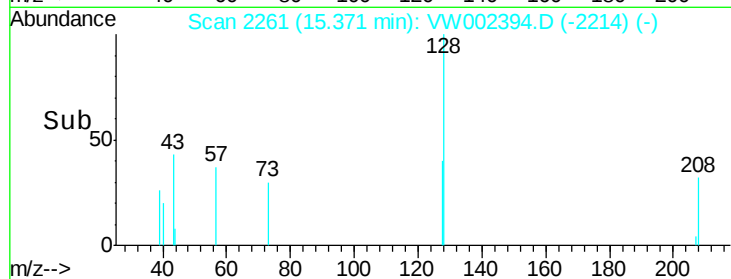
Tot Ion:128 Resp: 612

Ion Ratio Lower Upper

128 100

127 0.0 11.0 16.4#

129 0.0 8.7 13.1#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

