

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW092418\  
 Data File : VW005590.D  
 Acq On : 24 Sep 2018 17:31  
 Operator : VA/AP  
 Sample : J4770-07  
 Misc : 5.85G/5ML/MSVOA W/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 JC-02-092118-D

Quant Time: Sep 25 04:58:07 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092118S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 21 09:05:42 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 216274   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 329281   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 257290   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 85532    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.31  | 65   | 82637    | 32.43 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 64.86% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 67230    | 32.47 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 64.94% |          |
| 50) Toluene-d8              | 10.33 | 98   | 217884   | 25.84 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 51.68% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 58186    | 18.65 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 37.30% |          |

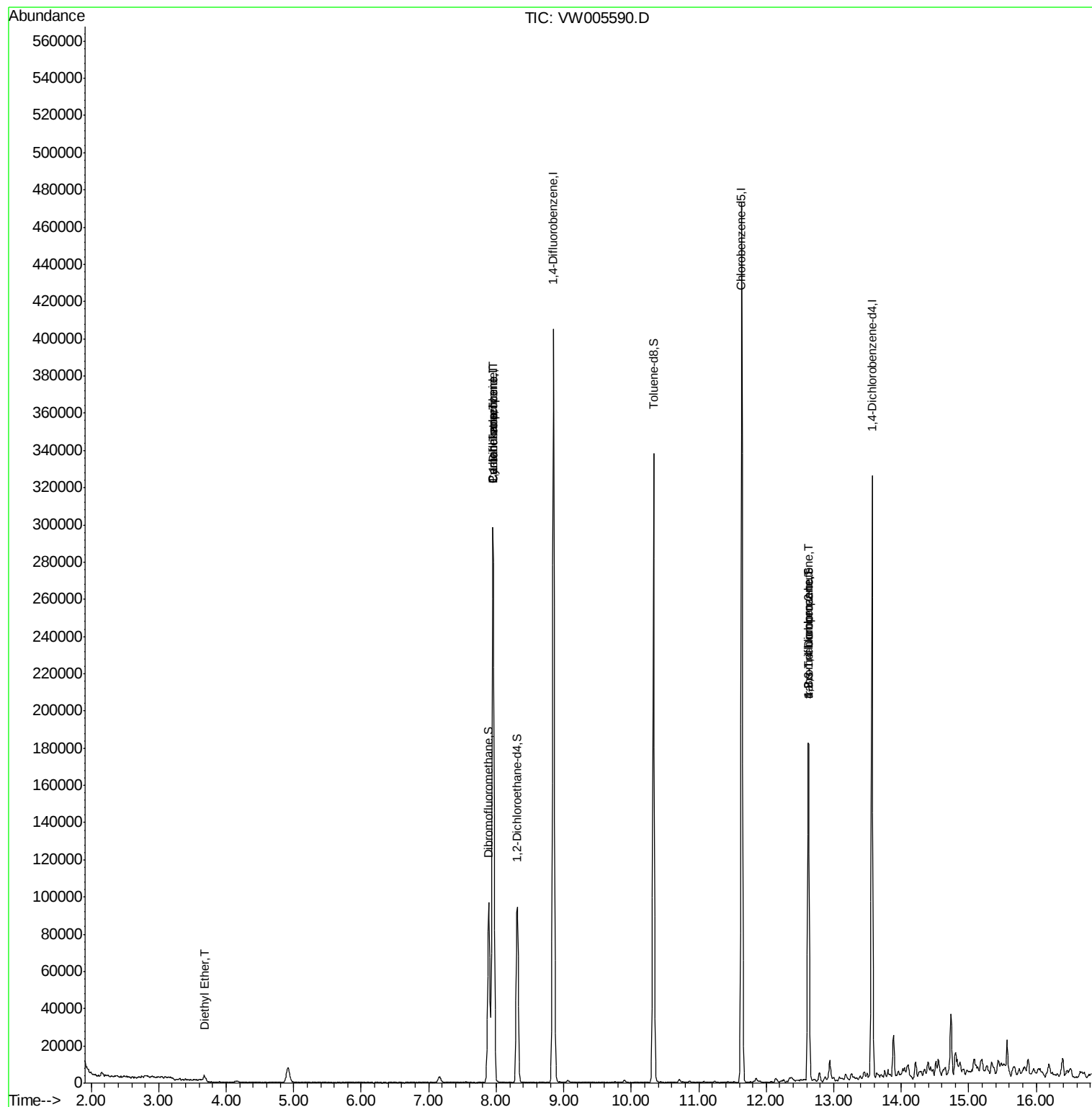
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 2.01  | 85   | 22       | Below Cal | #      | 41     |
| 8) Diethyl Ether               | 3.68  | 74   | 1705     | 1.606     | ug/l   | 96     |
| 11) Tert butyl alcohol         | 5.21  | 59   | 22       | Below Cal | #      | 72     |
| 13) Acrolein                   | 3.68  | 56   | 21       | Below Cal | #      | 13     |
| 16) Acetone                    | 4.15  | 43   | 975      | Below Cal |        | 98     |
| 20) Methylene Chloride         | 4.91  | 84   | 6904     | Below Cal |        | 86     |
| 31) Cyclohexane                | 7.95  | 56   | 4733     | 1.198     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 16322    | 4.924     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 21432    | 6.034     | ug/l # | 17     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 29741    | 40.791    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 29741    | 91.874    | ug/l # | 7      |

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

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JC-02-092118-D

Quant Time: Sep 25 04:58:07 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W092118S.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 21 09:05:42 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.00 min

Lab File: VW005590.D

Acq: 24 Sep 2018 17:31

Instrument :

MSVOA\_W

ClientSampleId :

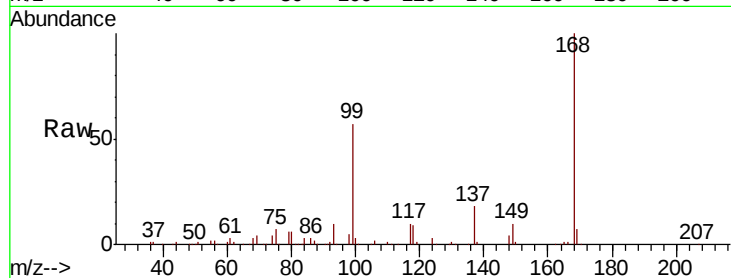
JC-02-092118-D

Tot Ion:168 Resp: 216274

Ion Ratio Lower Upper

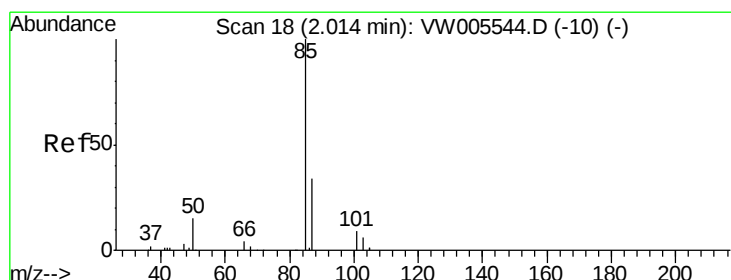
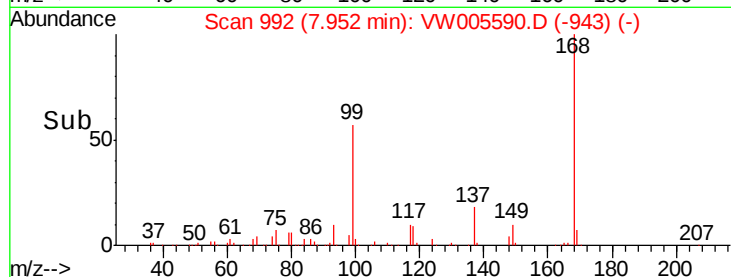
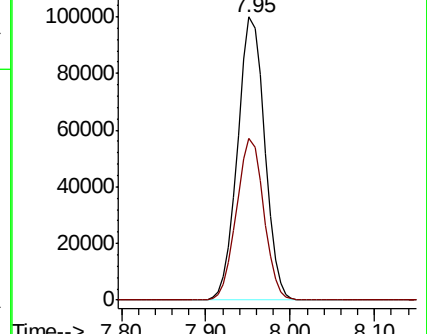
168 100

99 57.0 48.4 72.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 2.01 min Scan# 18

Delta R.T. 0.00 min

Lab File: VW005590.D

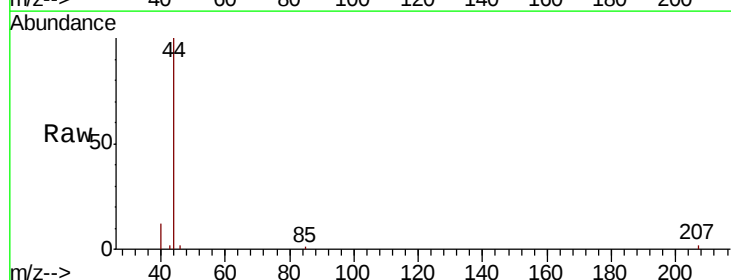
Acq: 24 Sep 2018 17:31

Tgt Ion: 85 Resp: 22

Ion Ratio Lower Upper

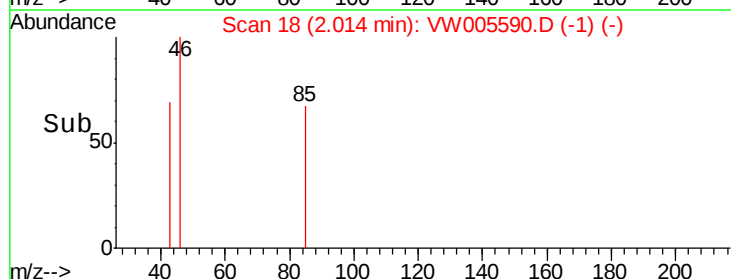
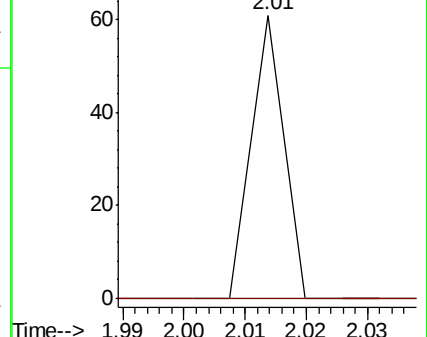
85 100

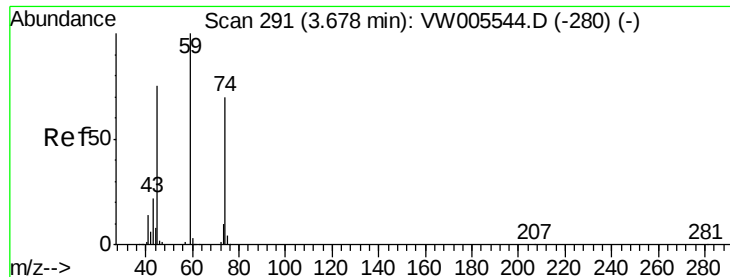
87 0.0 17.0 50.9#



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW





#8

Diethyl Ether

Concen: 1.606 ug/l

RT: 3.68 min Scan# 292

Delta R.T. 0.01 min

Lab File: VW005590.D

Acq: 24 Sep 2018 17:31

Instrument :

MSVOA\_W

ClientSampleId :

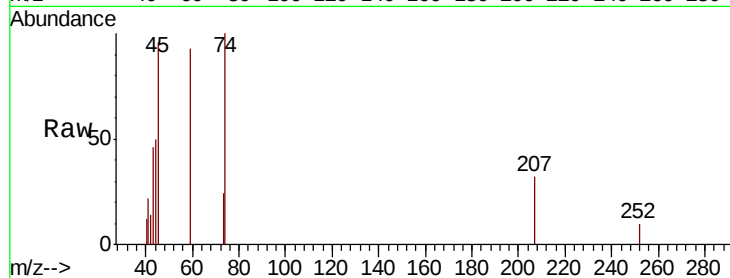
JC-02-092118-D

Tot Ion: 74 Resp: 1705

Ion Ratio Lower Upper

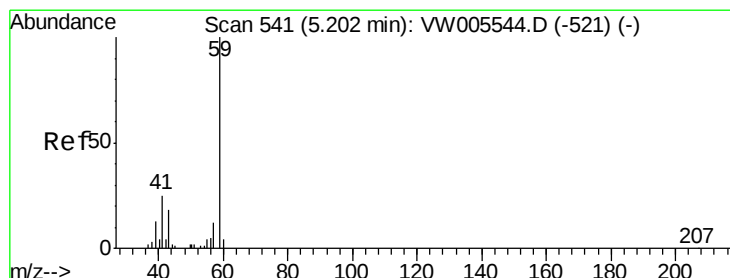
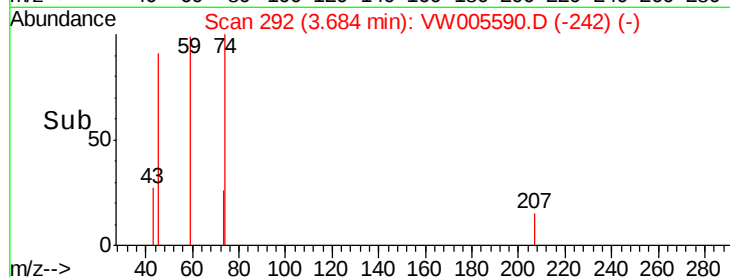
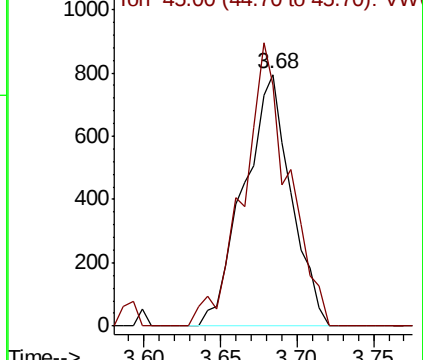
74 100

45 107.6 51.7 155.2



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.21 min Scan# 542

Delta R.T. 0.01 min

Lab File: VW005590.D

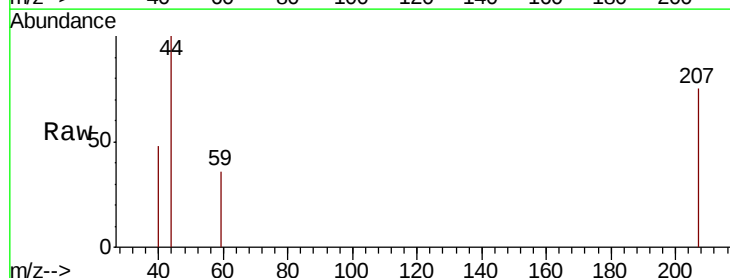
Acq: 24 Sep 2018 17:31

Tgt Ion: 59 Resp: 22

Ion Ratio Lower Upper

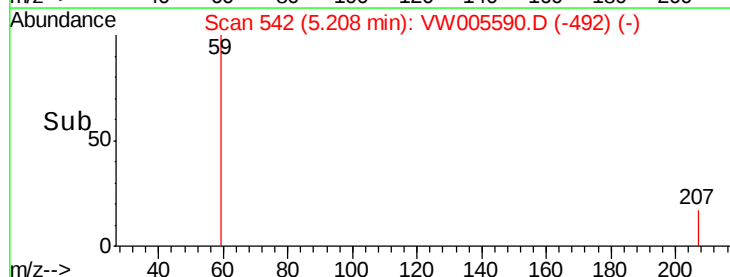
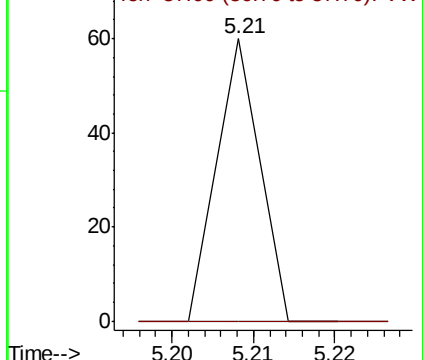
59 100

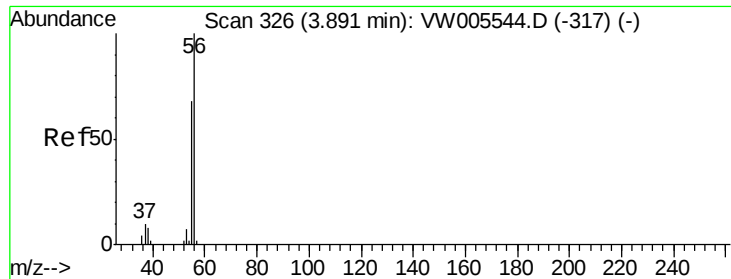
57 0.0 8.3 12.5#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW





#13

Acrolein

Concen: Below Cal

RT: 3.68 min Scan# 291

Delta R.T. -0.21 min

Lab File: VW005590.D

Acq: 24 Sep 2018 17:31

Instrument :

MSVOA\_W

ClientSampleId :

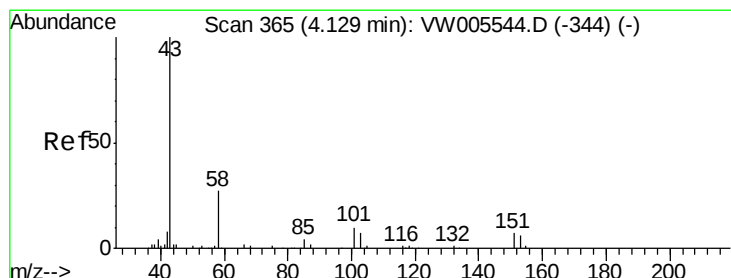
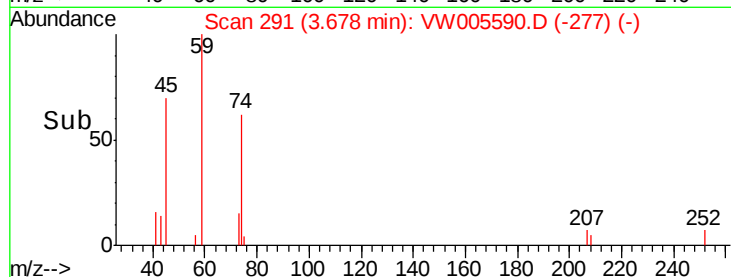
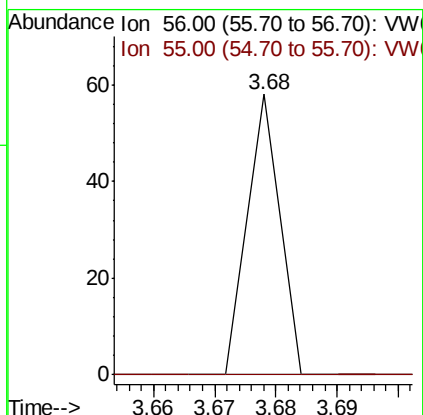
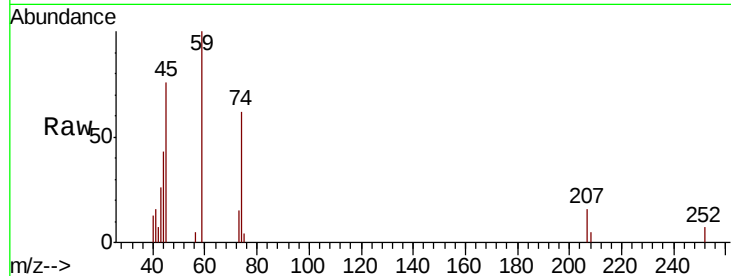
JC-02-092118-D

Tot Ion: 56 Resp: 21

Ion Ratio Lower Upper

56 100

55 0.0 57.8 86.8#



#16

Acetone

Concen: Below Cal

RT: 4.15 min Scan# 368

Delta R.T. 0.02 min

Lab File: VW005590.D

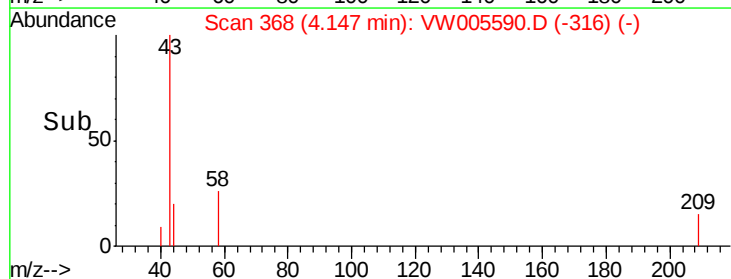
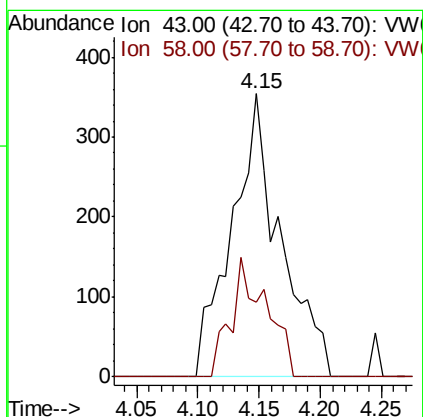
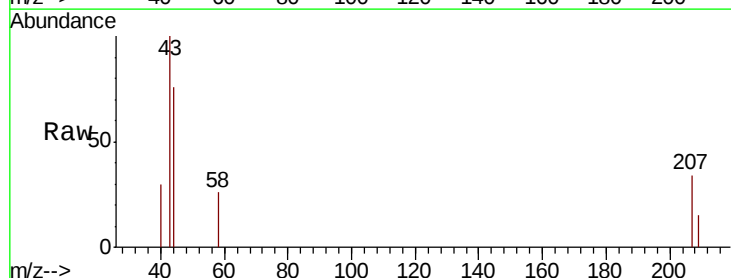
Acq: 24 Sep 2018 17:31

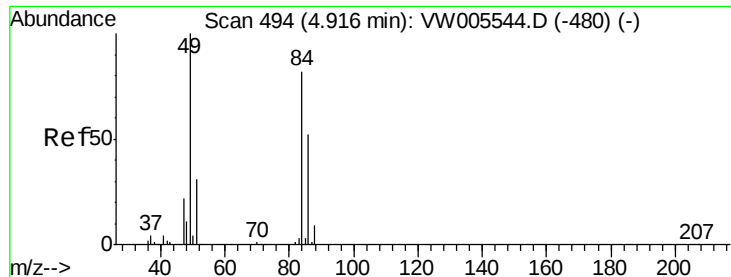
Tgt Ion: 43 Resp: 975

Ion Ratio Lower Upper

43 100

58 26.3 21.8 32.8



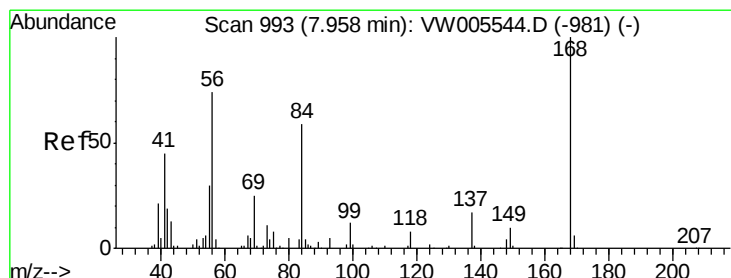
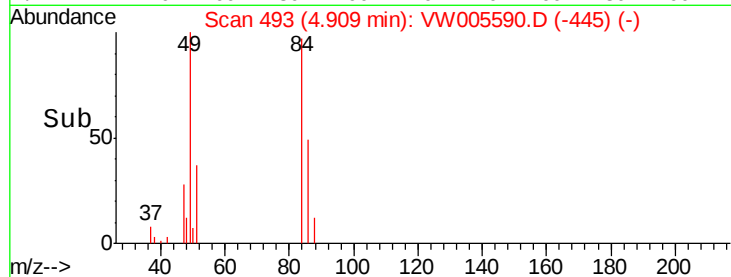
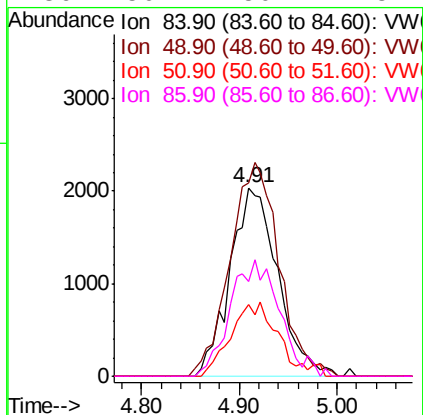
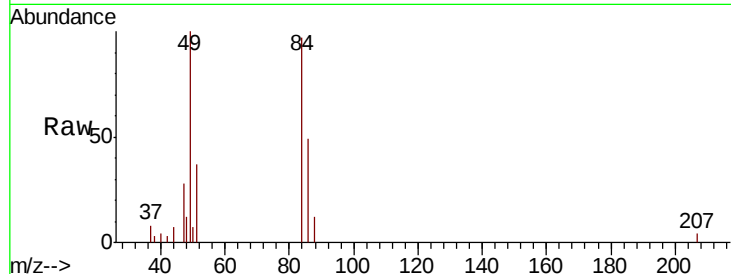


#20

Methylene Chloride  
 Concen: Below Cal  
 RT: 4.91 min Scan# 493  
 Delta R.T. -0.01 min  
 Lab File: VW005590.D  
 Acq: 24 Sep 2018 17:31

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 JC-02-092118-D

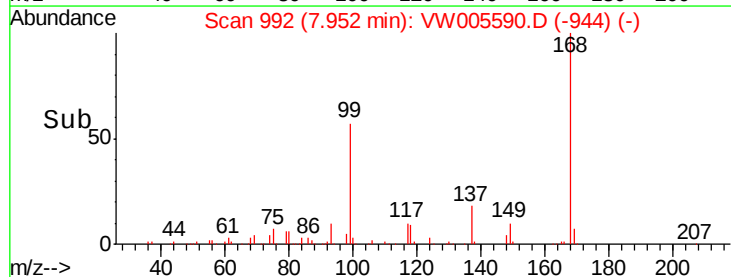
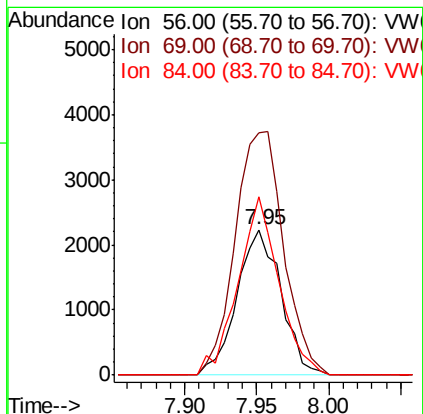
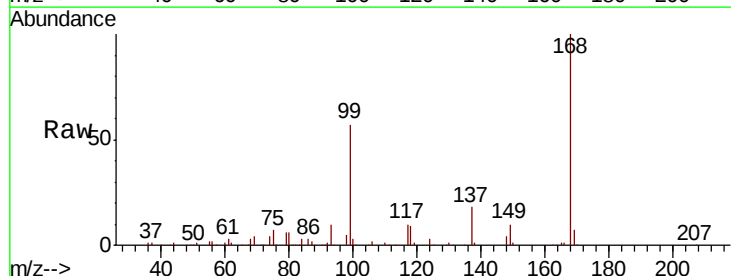
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 6904  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 102.6 | 97.0  | 145.6 |
| 51       | 37.9  | 30.2  | 45.2  |
| 86       | 50.4  | 50.2  | 75.4  |

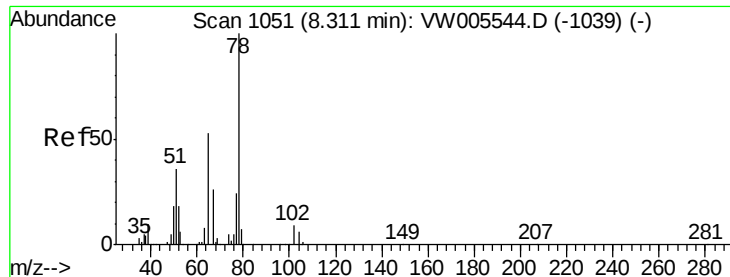


#31

Cyclohexane  
 Concen: 1.198 ug/l  
 RT: 7.95 min Scan# 992  
 Delta R.T. -0.01 min  
 Lab File: VW005590.D  
 Acq: 24 Sep 2018 17:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 56    | Resp: | 4733  |
| Ion      | Ratio | Lower | Upper |
| 56       | 100   |       |       |
| 69       | 167.1 | 27.0  | 40.4# |
| 84       | 122.3 | 64.2  | 96.4# |





#33

1,2-Dichloroethane-d4

Concen: 32.434 ug/l

RT: 8.31 min Scan# 1051

Delta R.T. -0.00 min

Lab File: VW005590.D

Acq: 24 Sep 2018 17:31

Instrument :

MSVOA\_W

ClientSampleId :

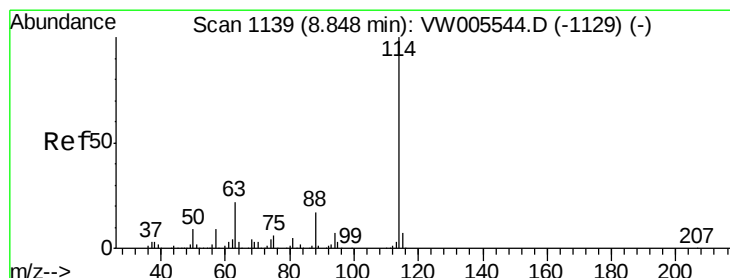
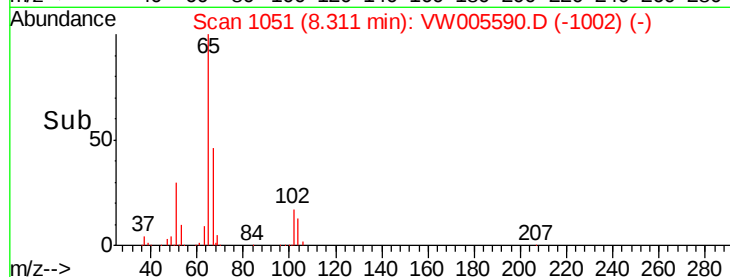
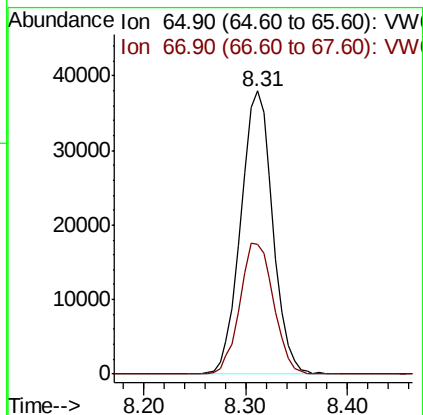
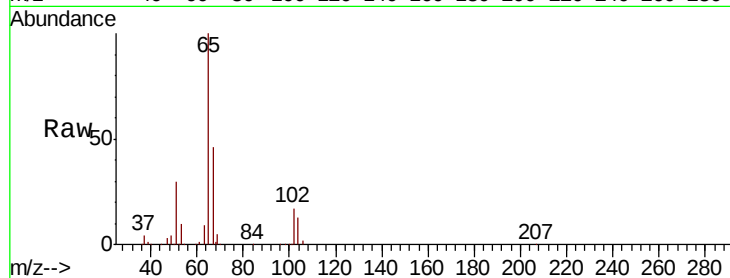
JC-02-092118-D

Tot Ion: 65 Resp: 82637

Ion Ratio Lower Upper

65 100

67 49.0 0.0 100.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.85 min Scan# 1139

Delta R.T. -0.00 min

Lab File: VW005590.D

Acq: 24 Sep 2018 17:31

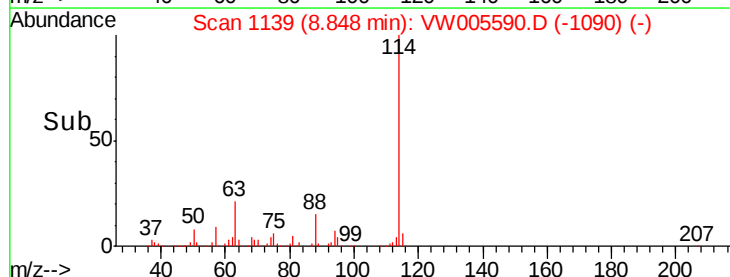
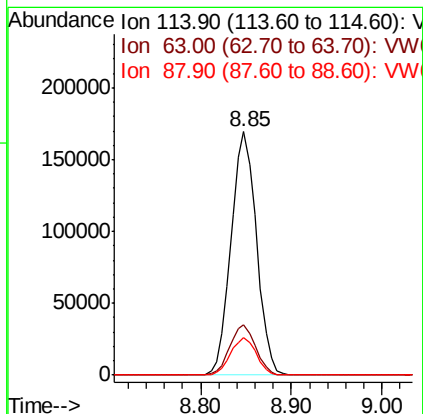
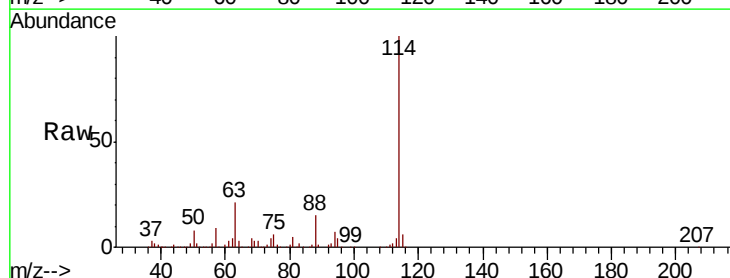
Tgt Ion: 114 Resp: 329281

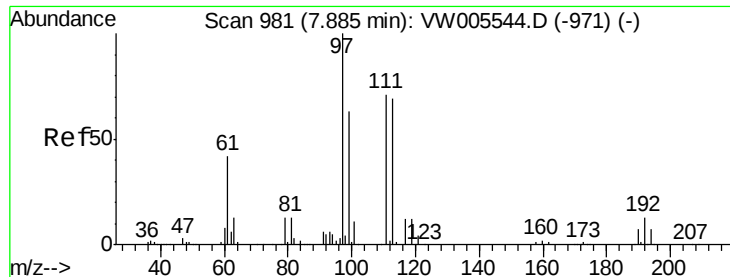
Ion Ratio Lower Upper

114 100

63 20.9 0.0 43.0

88 15.3 0.0 33.0

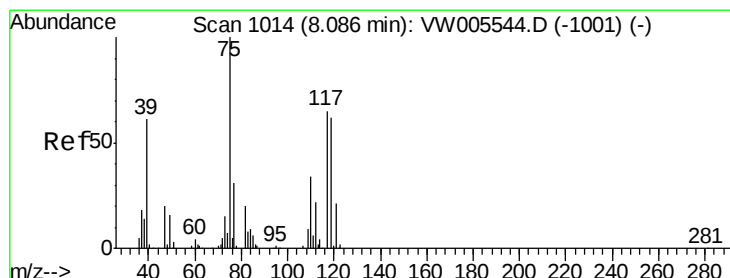
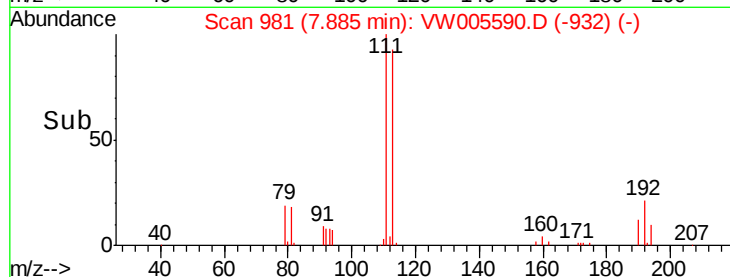
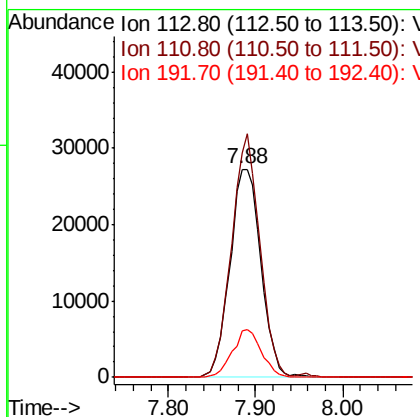
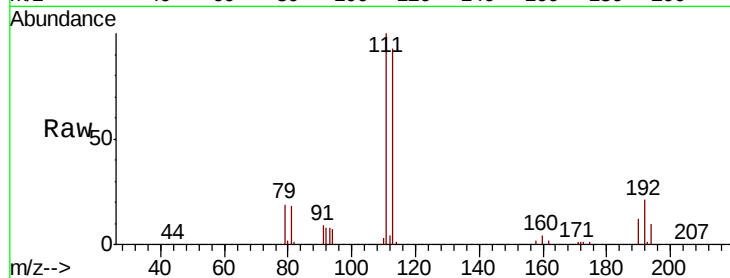




#35  
 Dibromofluoromethane  
 Concen: 32.467 ug/l  
 RT: 7.88 min Scan# 981  
 Delta R.T. -0.00 min  
 Lab File: VW005590.D  
 Acq: 24 Sep 2018 17:31

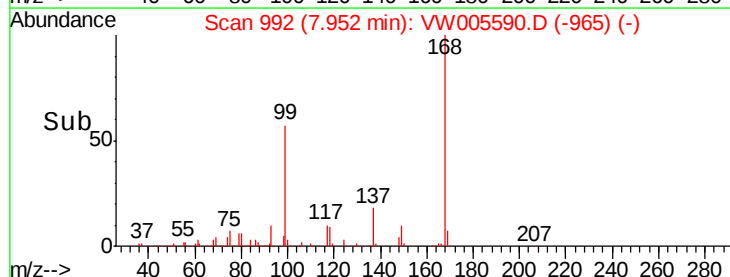
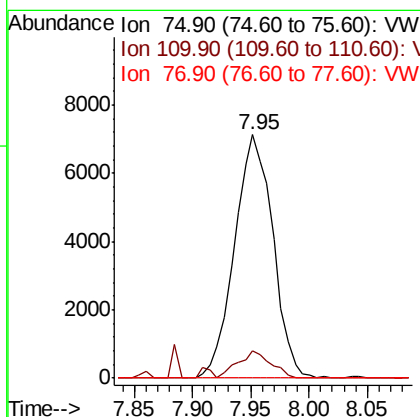
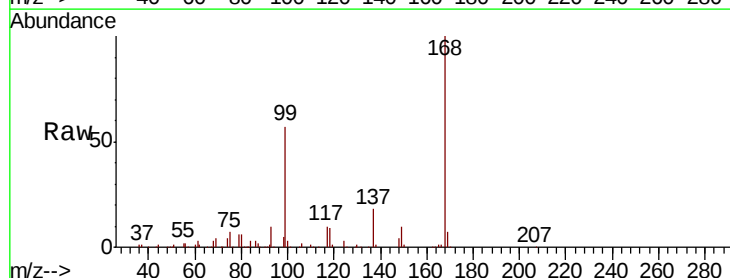
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 JC-02-092118-D

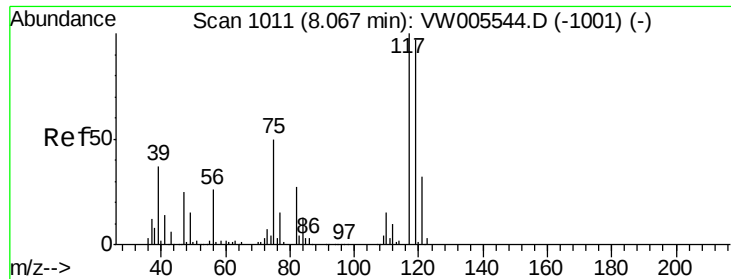
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 106.7 | 82.6  | 123.8 |
| 192     | 21.4  | 17.0  | 25.4  |



#36  
 1,1-Dichloropropene  
 Concen: 4.924 ug/l  
 RT: 7.95 min Scan# 992  
 Delta R.T. -0.13 min  
 Lab File: VW005590.D  
 Acq: 24 Sep 2018 17:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.6   | 17.0  | 50.9# |
| 77      | 0.0   | 24.8  | 37.2# |

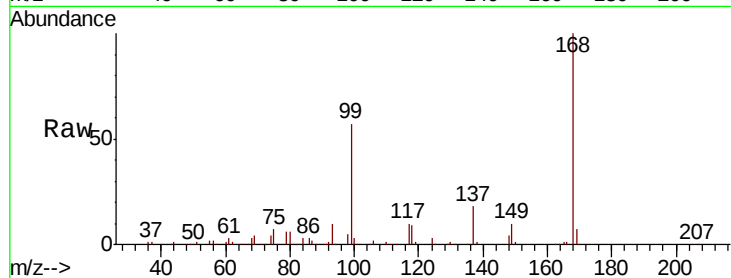




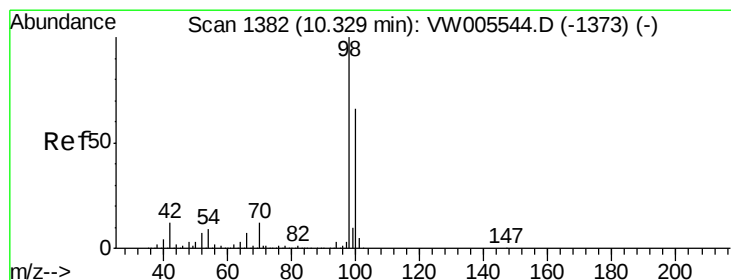
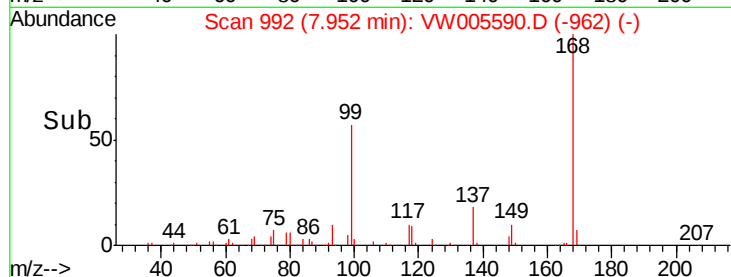
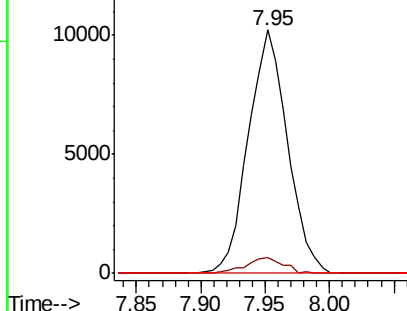
#38  
Carbon Tetrachloride  
Concen: 6.034 ug/l  
RT: 7.95 min Scan# 992  
Delta R.T. -0.12 min  
Lab File: VW005590.D  
Acq: 24 Sep 2018 17:31

Instrument :  
MSVOA\_W  
ClientSampleId :  
JC-02-092118-D

Tot Ion:117 Resp: 21432  
Ion Ratio Lower Upper  
117 100  
119 6.7 77.6 116.4#  
121 0.0 25.7 38.5#

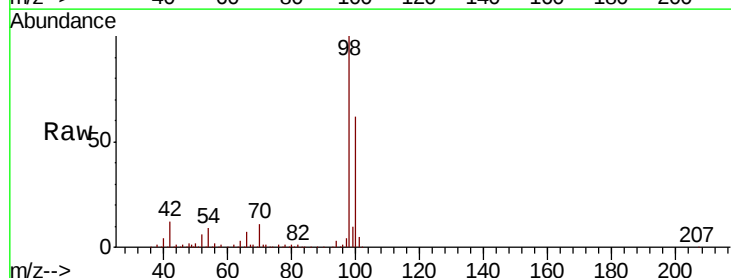


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

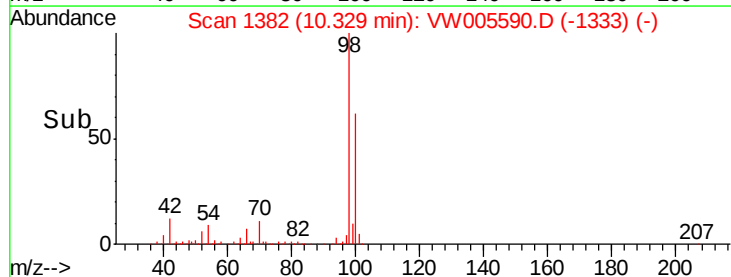
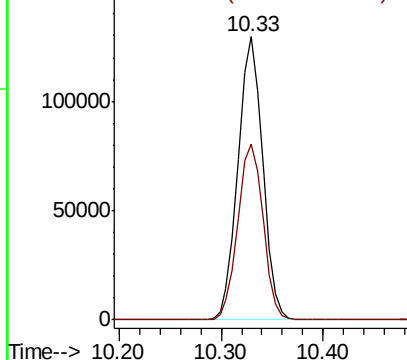


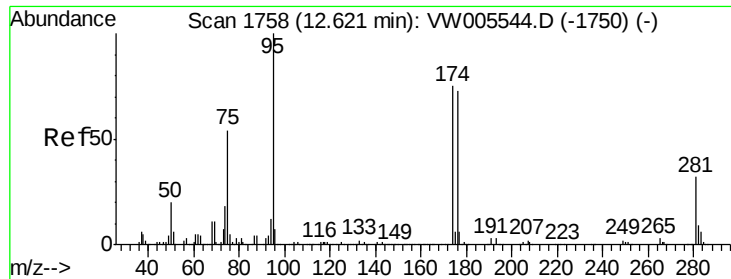
#50  
Toluene-d8  
Concen: 25.842 ug/l  
RT: 10.33 min Scan# 1382  
Delta R.T. -0.00 min  
Lab File: VW005590.D  
Acq: 24 Sep 2018 17:31

Tgt Ion: 98 Resp: 217884  
Ion Ratio Lower Upper  
98 100  
100 63.4 51.6 77.4



Abundance Ion 98.00 (97.70 to 98.70): VW  
Ion 100.00 (99.70 to 100.70): V

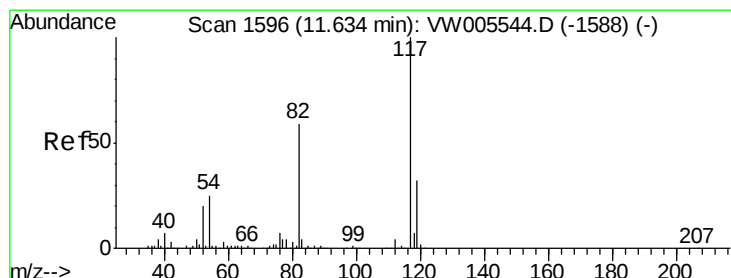
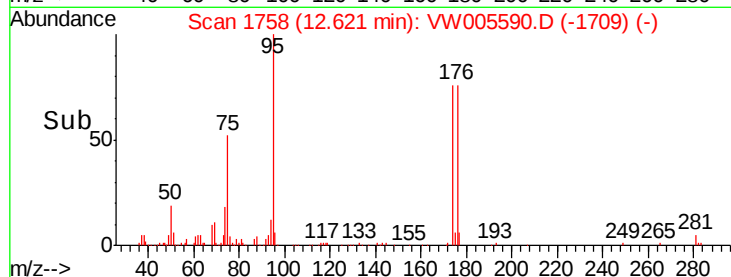
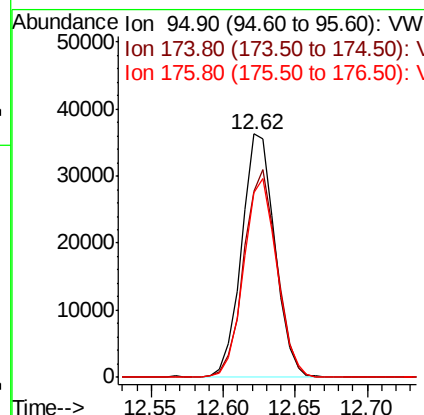
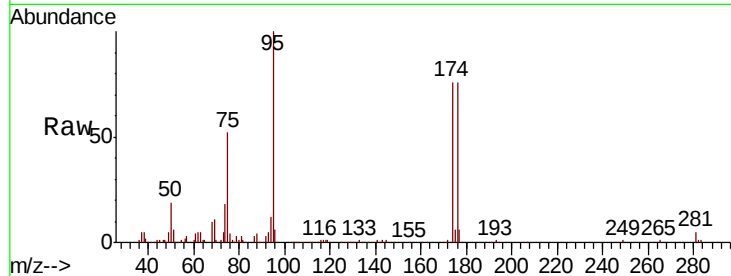




#62  
4-Bromofluorobenzene  
Concen: 18.650 ug/l  
RT: 12.62 min Scan# 1758  
Delta R.T. -0.00 min  
Lab File: VW005590.D  
Acq: 24 Sep 2018 17:31

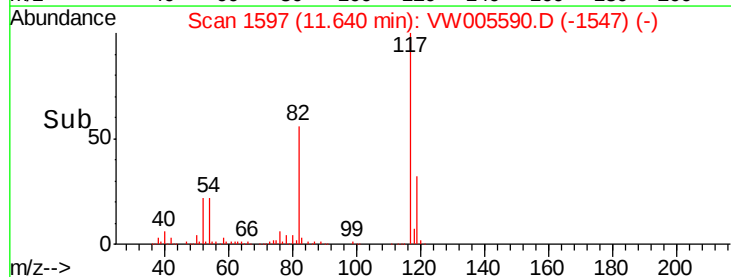
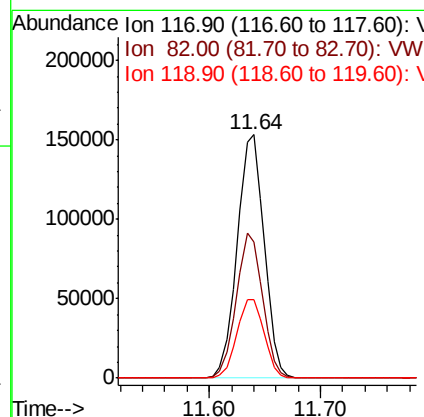
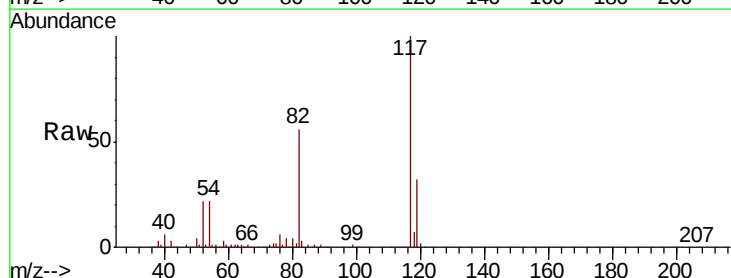
Instrument :  
MSVOA\_W  
ClientSampleId :  
JC-02-092118-D

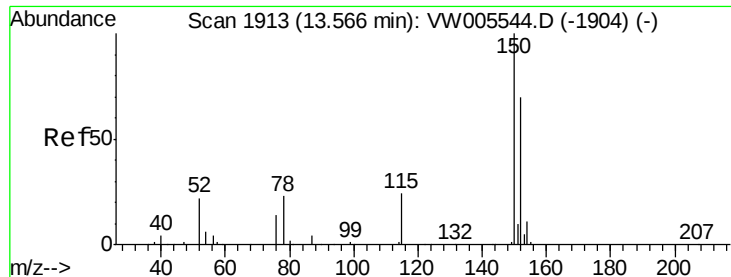
Tot Ion: 95 Resp: 58186  
Ion Ratio Lower Upper  
95 100  
174 84.6 0.0 163.8  
176 81.5 0.0 158.0



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.64 min Scan# 1597  
Delta R.T. 0.01 min  
Lab File: VW005590.D  
Acq: 24 Sep 2018 17:31

Tgt Ion: 117 Resp: 257290  
Ion Ratio Lower Upper  
117 100  
82 55.8 46.9 70.3  
119 32.2 25.7 38.5





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.57 min Scan# 1913

Delta R.T. -0.00 min

Lab File: VW005590.D

Acq: 24 Sep 2018 17:31

Instrument :

MSVOA\_W

ClientSampleId :

JC-02-092118-D

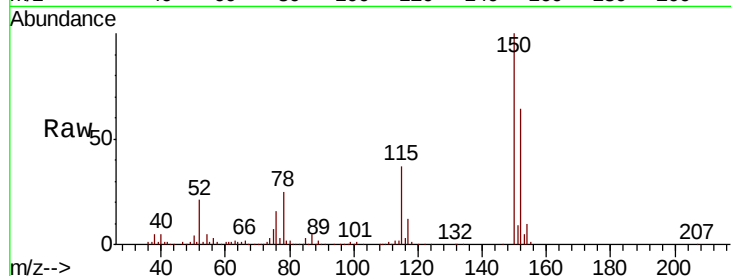
Tot Ion:152 Resp: 85532

Ion Ratio Lower Upper

152 100

115 59.2 30.0 90.0

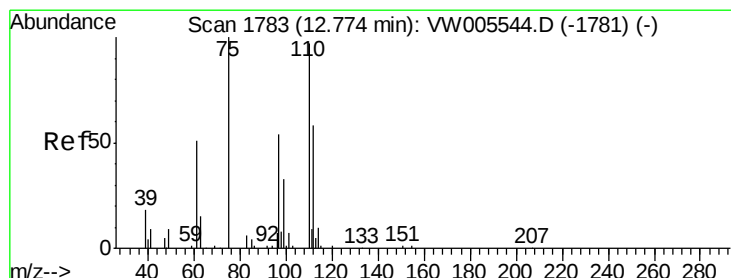
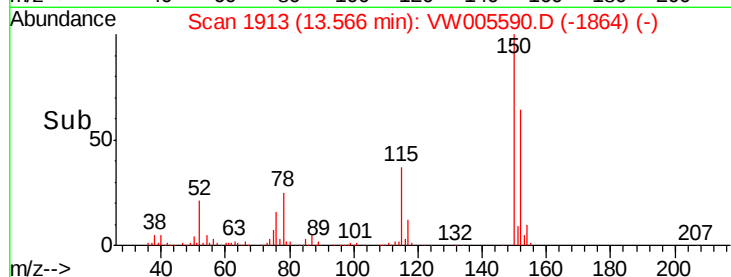
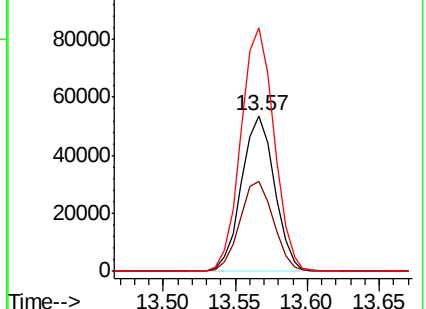
150 156.8 0.0 348.6



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: 40.791 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW005590.D

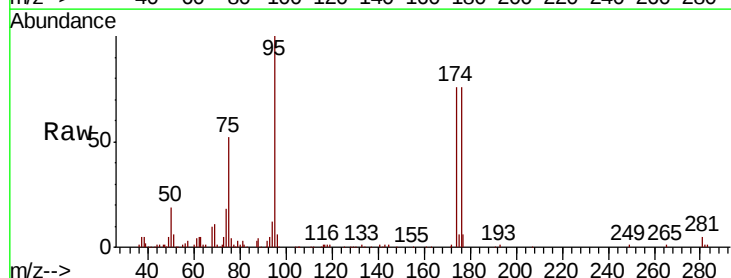
Acq: 24 Sep 2018 17:31

Tgt Ion: 75 Resp: 29741

Ion Ratio Lower Upper

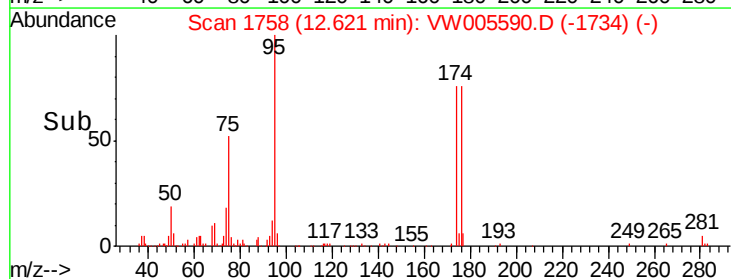
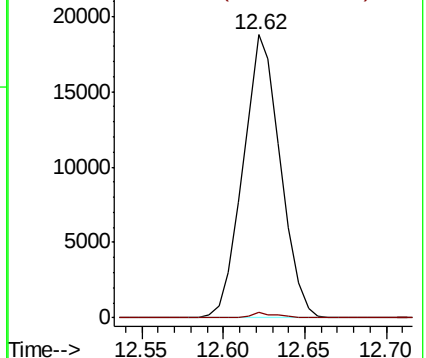
75 100

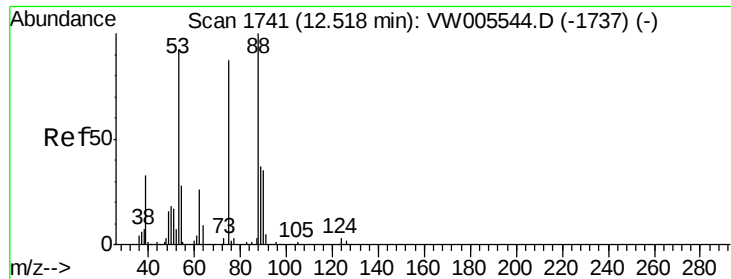
77 1.2 0.0 0.0#



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: 91.874 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.10 min

Lab File: VW005590.D

Acq: 24 Sep 2018 17:31

Instrument :

MSVOA\_W

ClientSampleId :

JC-02-092118-D

Tot Ion: 75 Resp: 29741

Ion Ratio Lower Upper

75 100

53 0.2 85.8 128.6#

89 0.1 37.3 55.9#

