

Data File : VW012368.D  
Acq On : 31 Aug 2019 00:20  
Operator : SY/VA  
Sample : K4090-17  
Misc : 5.81G/5ML/MSVOA\_W/SOIL  
ALS Vial : 35 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
OR-02-082919

Quant Time: Aug 31 03:10:31 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
Quant Title : SW846 8260  
QLast Update : Mon Aug 26 07:18:31 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 214119   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 350497   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 291258   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 120079   | 50.00 | ug/l  | 0.00     |

System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 139108   | 54.65 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.30% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 108293   | 51.76 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.52% |      |
| 50) Toluene-d8            | 10.32  | 98  | 430870   | 50.79 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.58% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 139138   | 46.53 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.06%  |      |

Target Compounds

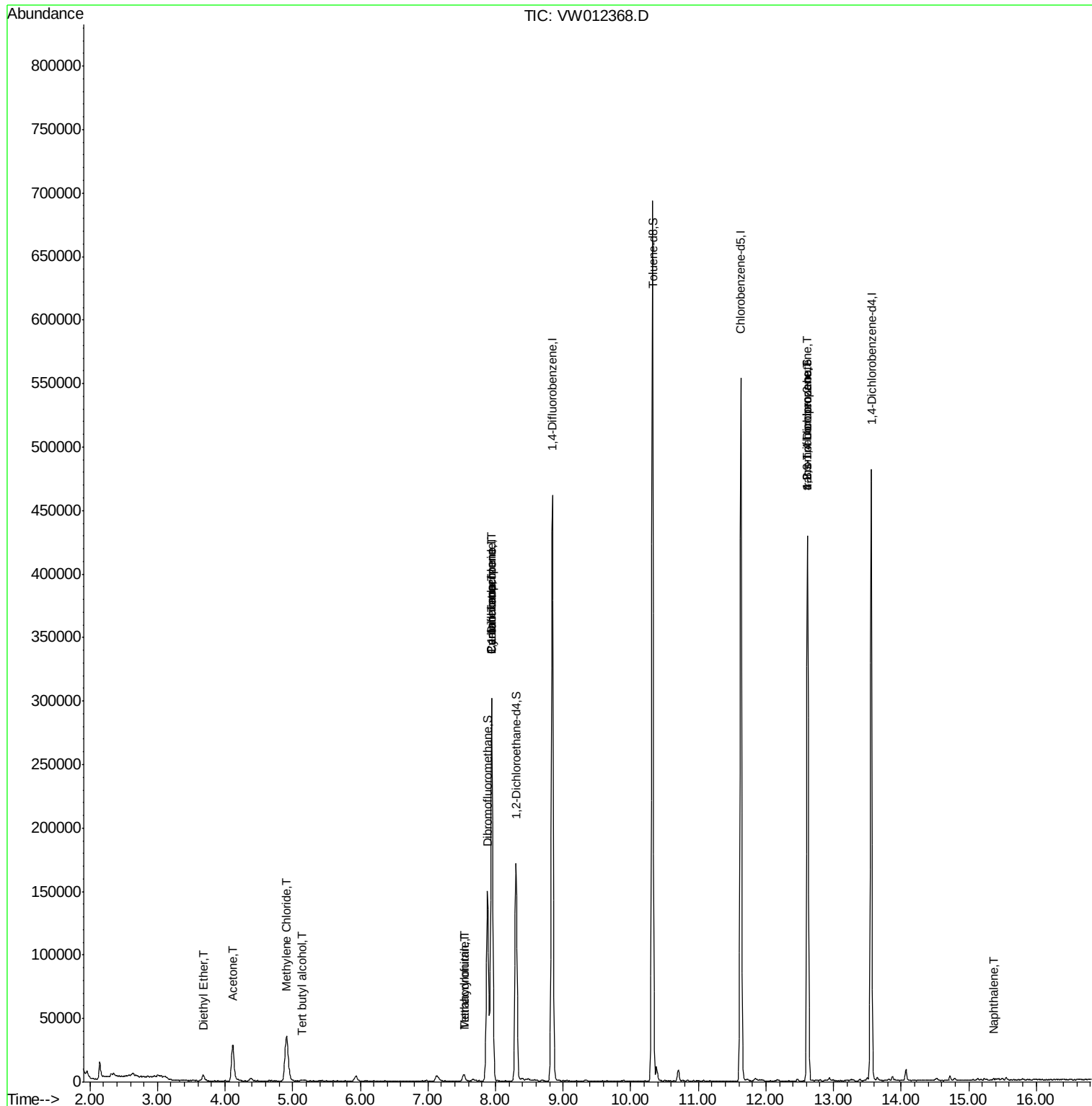
|                                |       |     |       |         |        | Qvalue |
|--------------------------------|-------|-----|-------|---------|--------|--------|
| 8) Diethyl Ether               | 3.68  | 74  | 2376  | 1.994   | ug/l   | 100    |
| 11) Tert butyl alcohol         | 5.14  | 59  | 861   | 5.621   | ug/l # | 76     |
| 16) Acetone                    | 4.12  | 43  | 52235 | 80.282  | ug/l   | 99     |
| 20) Methylene Chloride         | 4.92  | 84  | 26375 | 10.723  | ug/l   | 98     |
| 29) Tetrahydrofuran            | 7.54  | 42  | 4863  | 9.168   | ug/l   | 96     |
| 31) Cyclohexane                | 7.94  | 56  | 5669  | 1.237   | ug/l # | 5      |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 19104 | 5.274   | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 22088 | 7.046   | ug/l # | 17     |
| 41) Methacrylonitrile          | 7.54  | 41  | 3067  | 2.629   | ug/l # | 58     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 74987 | 64.120  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 74987 | 140.585 | ug/l # | 6      |
| 95) Naphthalene                | 15.37 | 128 | 969   | 4.517   | ug/l # | 85     |

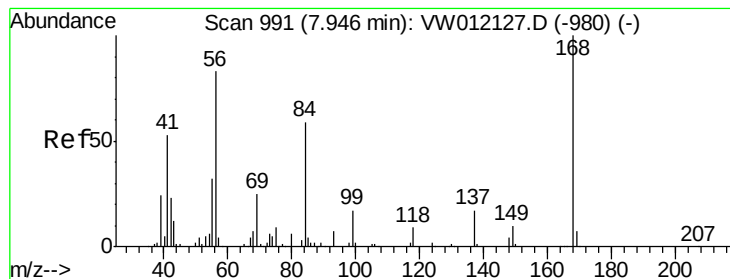
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW012368.D

Acq: 31 Aug 2019 00:20

Instrument :

MSVOA\_W

ClientSampleId :

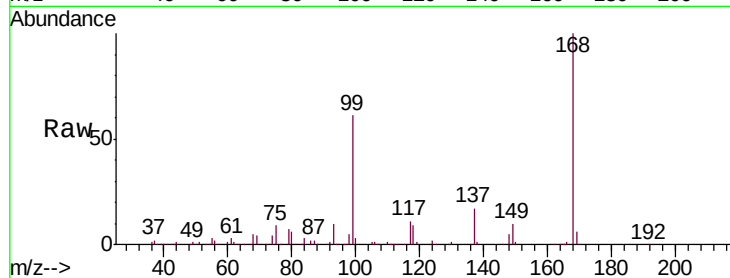
OR-02-082919

Tgt Ion:168 Resp: 214119

Ion Ratio Lower Upper

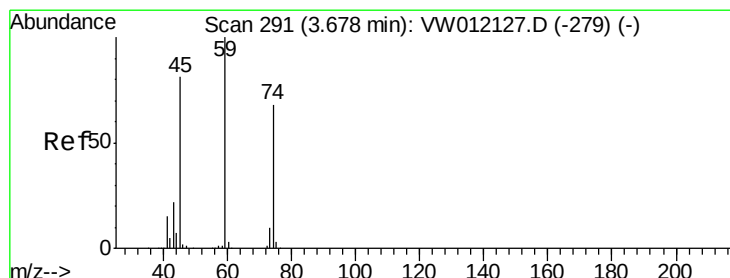
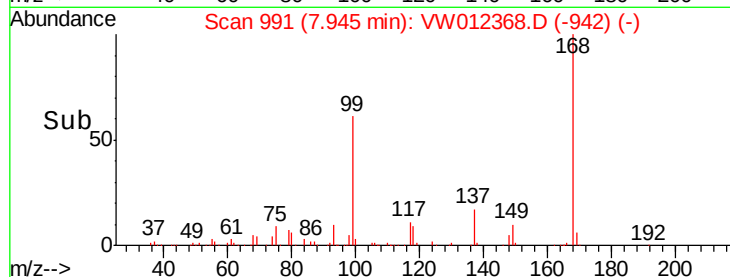
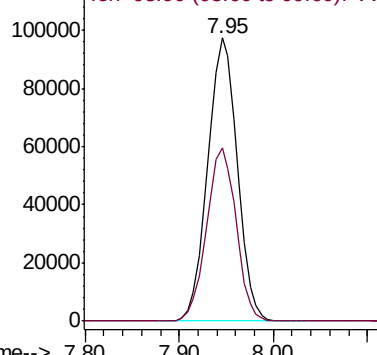
168 100

99 61.1 49.2 73.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#8

Diethyl Ether

Concen: 1.994 ug/l

RT: 3.68 min Scan# 291

Delta R.T. -0.00 min

Lab File: VW012368.D

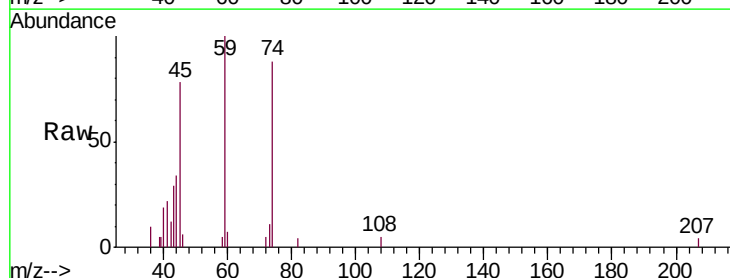
Acq: 31 Aug 2019 00:20

Tgt Ion: 74 Resp: 2376

Ion Ratio Lower Upper

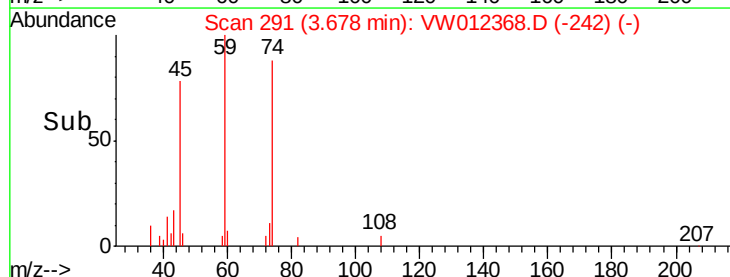
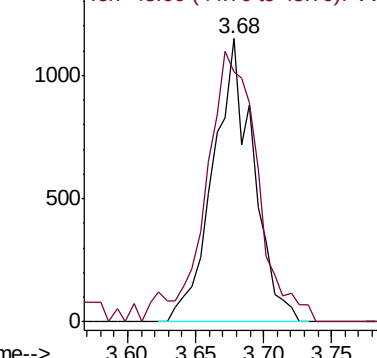
74 100

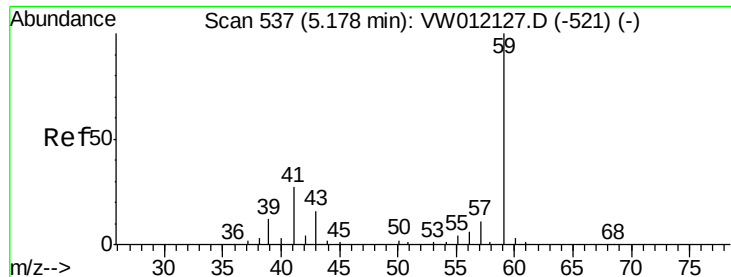
45 118.1 59.2 177.6



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW

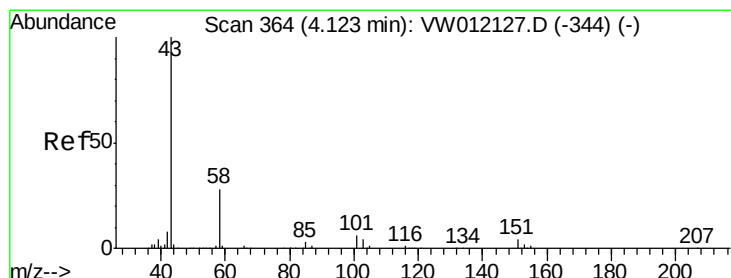
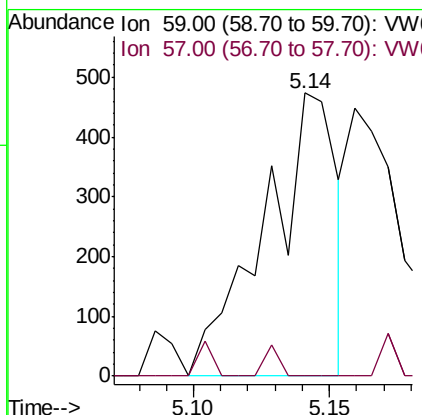
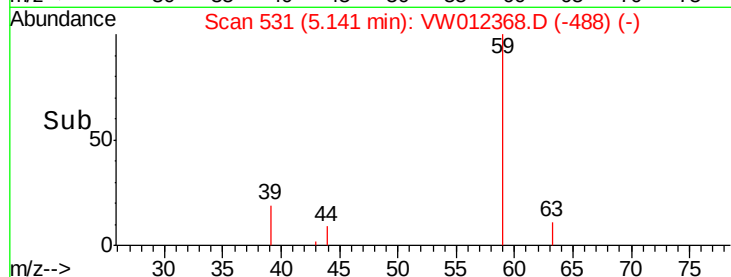
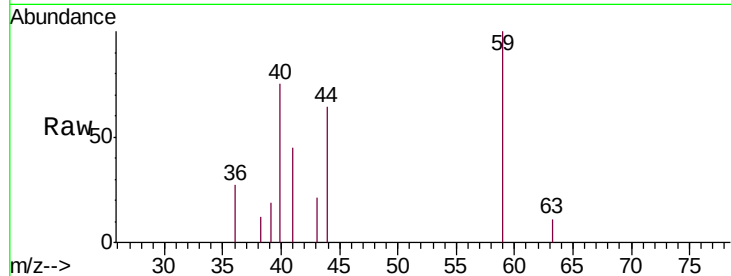




#11  
Tert butyl alcohol  
Concen: 5.621 ug/l  
RT: 5.14 min Scan# 531  
Delta R.T. -0.04 min  
Lab File: VW012368.D  
Acq: 31 Aug 2019 00:20

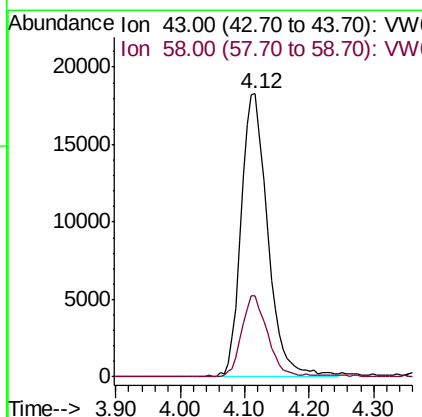
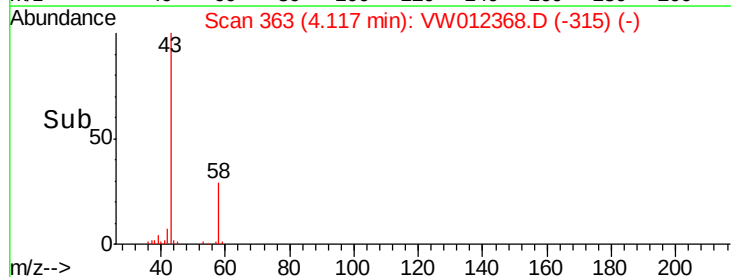
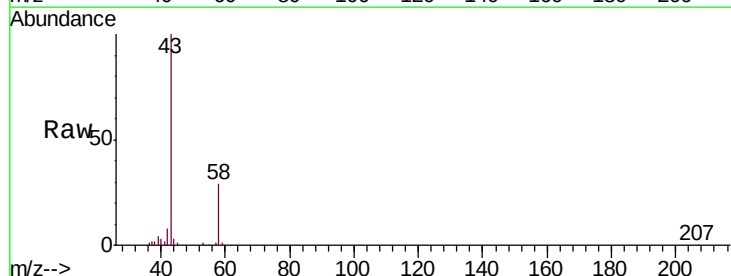
Instrument :  
MSVOA\_W  
ClientSampled :  
OR-02-082919

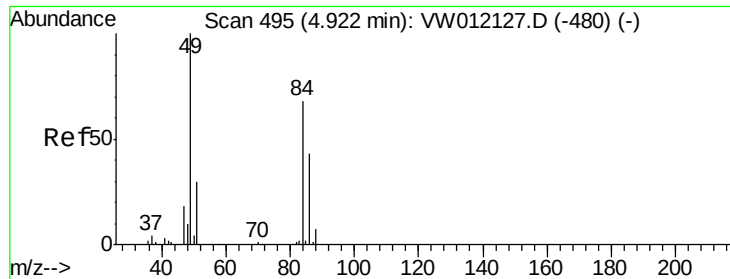
Tgt Ion: 59 Resp: 861  
Ion Ratio Lower Upper  
59 100  
57 2.2 9.0 13.4#



#16  
Acetone  
Concen: 80.282 ug/l  
RT: 4.12 min Scan# 363  
Delta R.T. -0.01 min  
Lab File: VW012368.D  
Acq: 31 Aug 2019 00:20

Tgt Ion: 43 Resp: 52235  
Ion Ratio Lower Upper  
43 100  
58 28.6 22.4 33.6

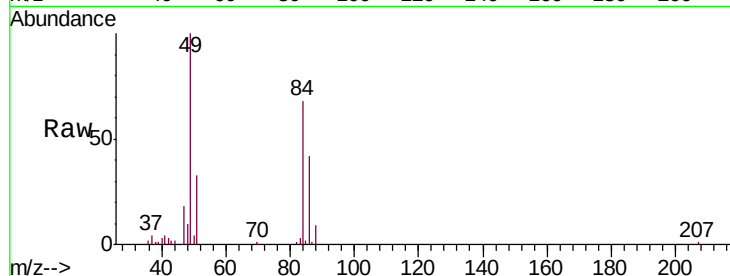




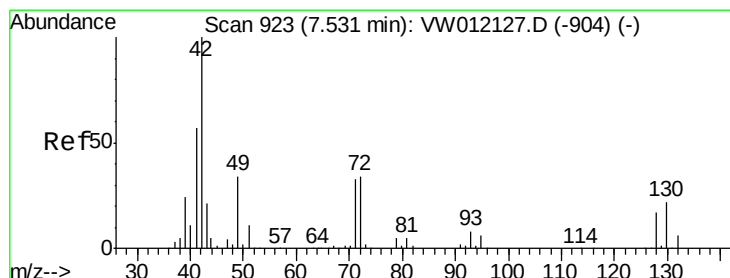
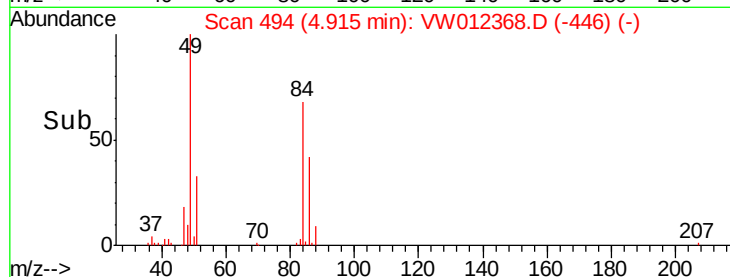
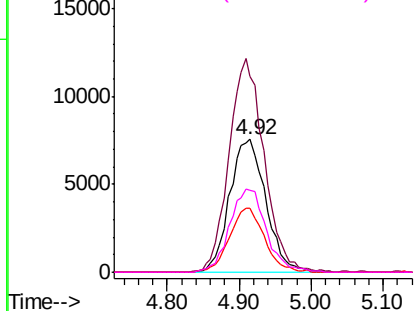
#20  
Methylene Chloride  
Concen: 10.723 ug/l  
RT: 4.92 min Scan# 494  
Delta R.T. -0.01 min  
Lab File: VW012368.D  
Acq: 31 Aug 2019 00:20

Instrument :  
MSVOA\_W  
ClientSampleId :  
OR-02-082919

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 26375 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 147.5 | 117.8 | 176.8 |
| 51       | 48.6  | 35.6  | 53.4  |
| 86       | 61.3  | 51.2  | 76.8  |

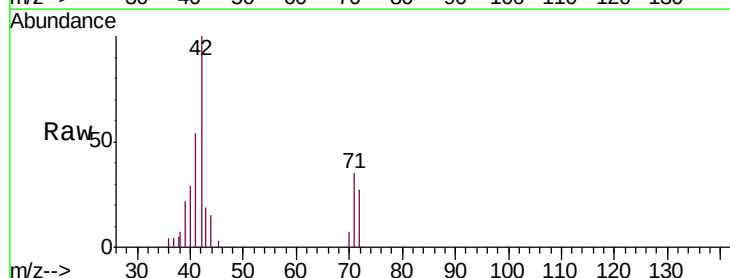


Abundance Ion 83.90 (83.60 to 84.60): VW  
Ion 48.90 (48.60 to 49.60): VW  
Ion 50.90 (50.60 to 51.60): VW  
Ion 85.90 (85.60 to 86.60): VW

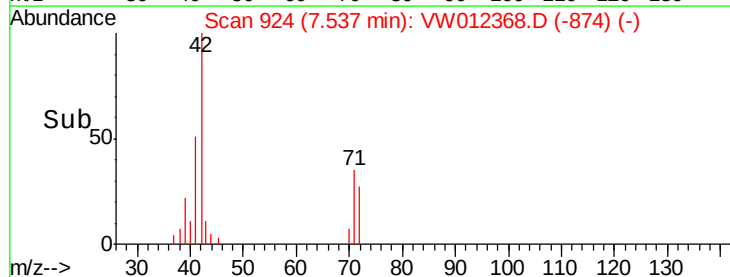
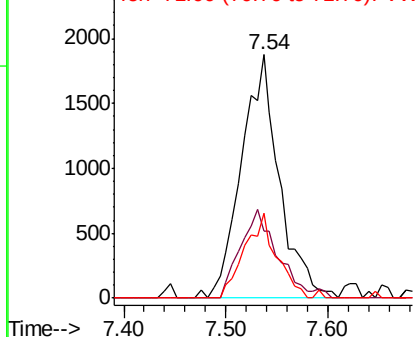


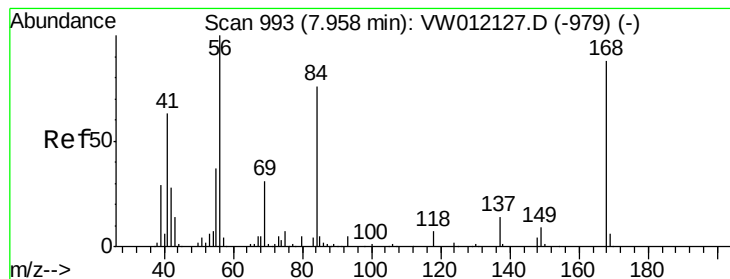
#29  
Tetrahydrofuran  
Concen: 9.168 ug/l  
RT: 7.54 min Scan# 924  
Delta R.T. 0.01 min  
Lab File: VW012368.D  
Acq: 31 Aug 2019 00:20

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 4863  |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 36.1  | 27.3  | 40.9  |
| 71       | 29.3  | 25.5  | 38.3  |



Abundance Ion 42.00 (41.70 to 42.70): VW  
Ion 72.00 (71.70 to 72.70): VW  
Ion 71.00 (70.70 to 71.70): VW





#31

Cyclohexane

Concen: 1.237 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.02 min

Lab File: VW012368.D

Acq: 31 Aug 2019 00:20

Instrument :

MSVOA\_W

ClientSampleId :

OR-02-082919

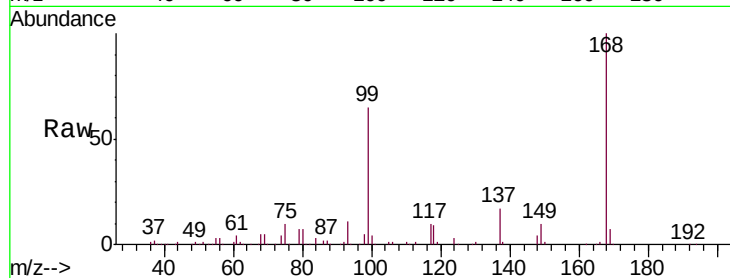
Tgt Ion: 56 Resp: 5669

Ion Ratio Lower Upper

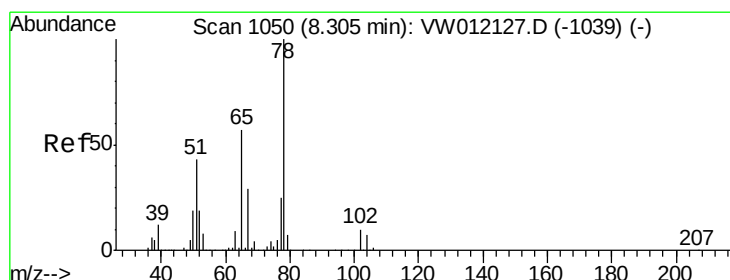
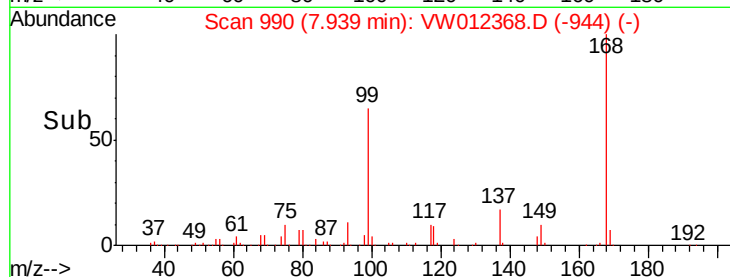
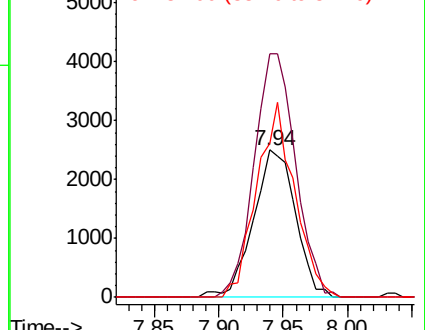
56 100

69 165.4 24.9 37.3#

84 104.6 60.6 90.8#



Abundance Ion 56.00 (55.70 to 56.70): VW  
Ion 69.00 (68.70 to 69.70): VW  
Ion 84.00 (83.70 to 84.70): VW



#33

1,2-Dichloroethane-d4

Concen: 54.652 ug/l

RT: 8.30 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VW012368.D

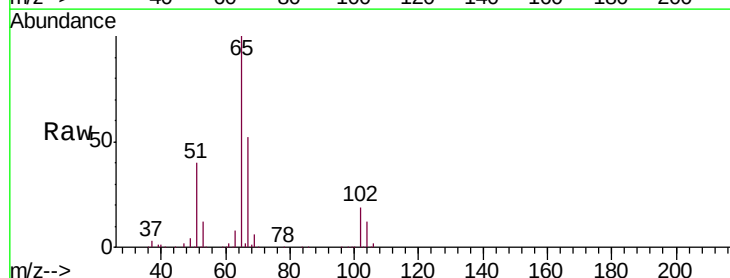
Acq: 31 Aug 2019 00:20

Tgt Ion: 65 Resp: 139108

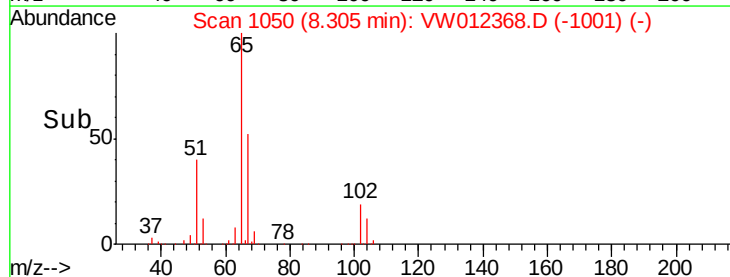
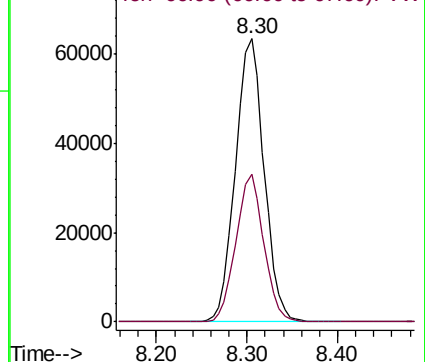
Ion Ratio Lower Upper

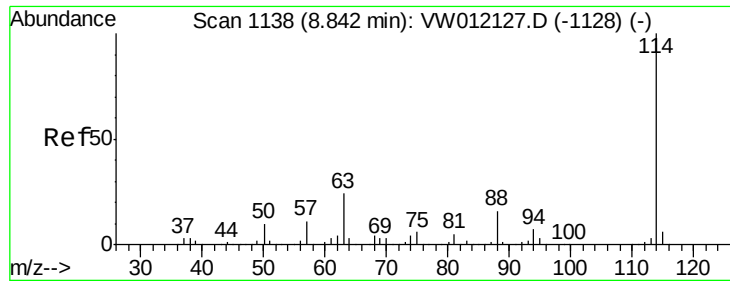
65 100

67 50.6 0.0 102.6



Abundance Ion 64.90 (64.60 to 65.60): VW  
Ion 66.90 (66.60 to 67.60): VW

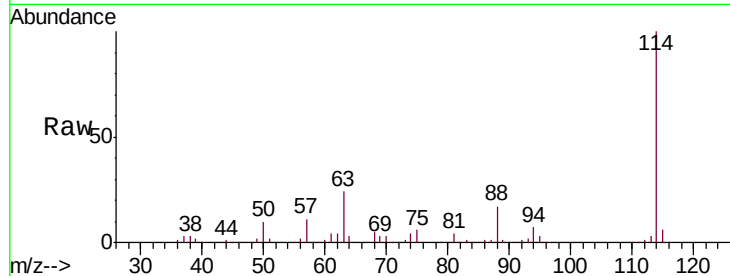




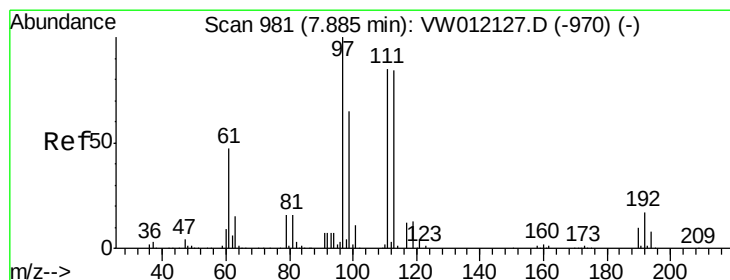
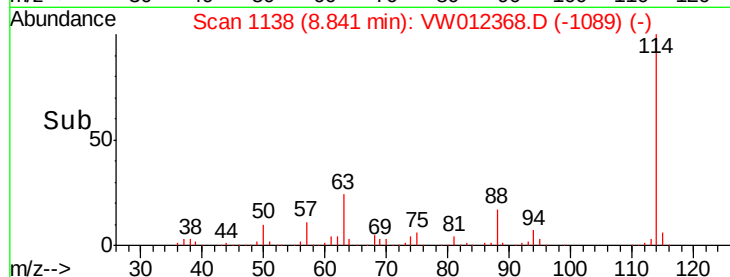
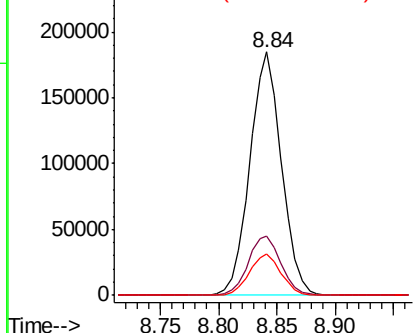
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW012368.D  
 Acq: 31 Aug 2019 00:20

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 OR-02-082919

Tgt Ion:114 Resp: 350497  
 Ion Ratio Lower Upper  
 114 100  
 63 24.3 0.0 48.6  
 88 17.1 0.0 32.2

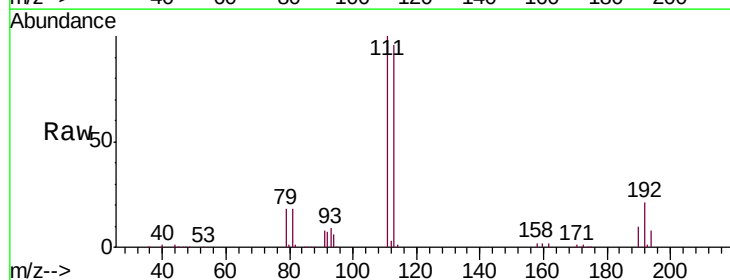


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VW  
 Ion 87.90 (87.60 to 88.60): VW

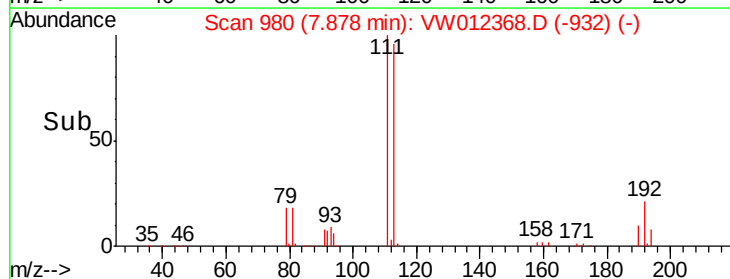
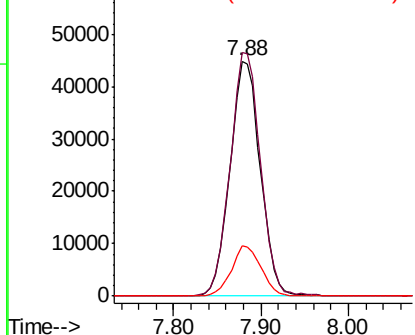


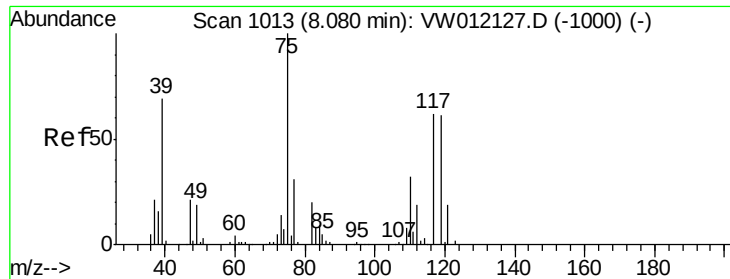
#35  
 Dibromofluoromethane  
 Concen: 51.762 ug/l  
 RT: 7.88 min Scan# 980  
 Delta R.T. -0.01 min  
 Lab File: VW012368.D  
 Acq: 31 Aug 2019 00:20

Tgt Ion:113 Resp: 108293  
 Ion Ratio Lower Upper  
 113 100  
 111 103.5 82.7 124.1  
 192 20.8 16.2 24.2



Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 5.274 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.13 min

Lab File: VW012368.D

Acq: 31 Aug 2019 00:20

Instrument :

MSVOA\_W

ClientSampleId :

OR-02-082919

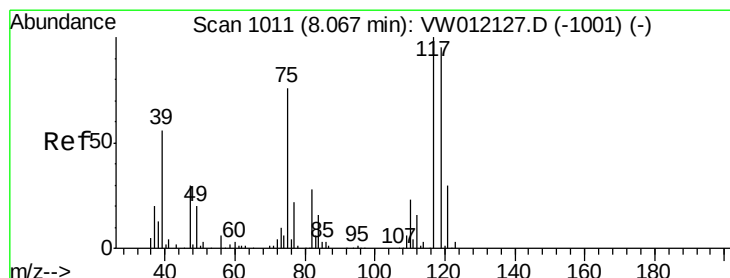
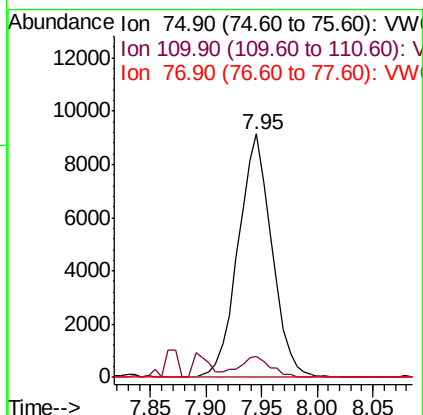
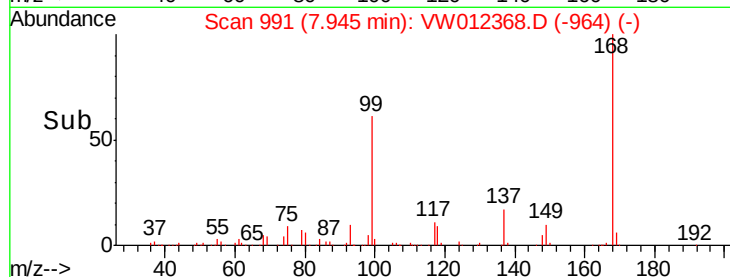
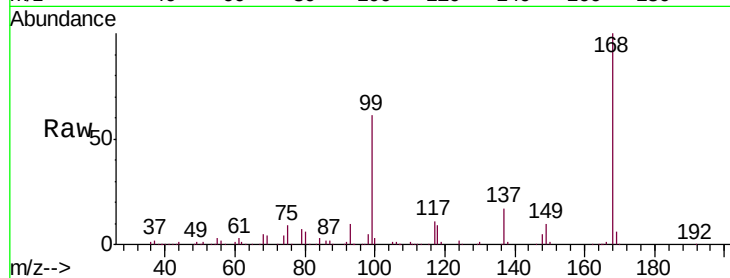
Tgt Ion: 75 Resp: 19104

Ion Ratio Lower Upper

75 100

110 8.0 15.6 46.8#

77 0.0 24.6 36.8#



#38

Carbon Tetrachloride

Concen: 7.046 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.12 min

Lab File: VW012368.D

Acq: 31 Aug 2019 00:20

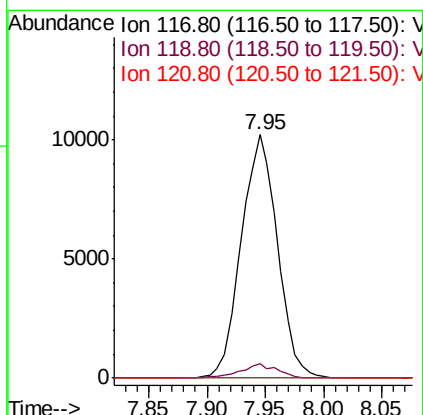
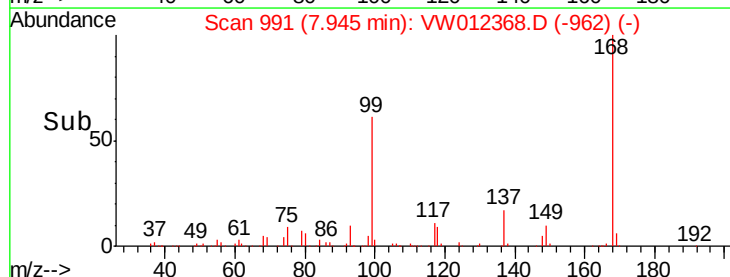
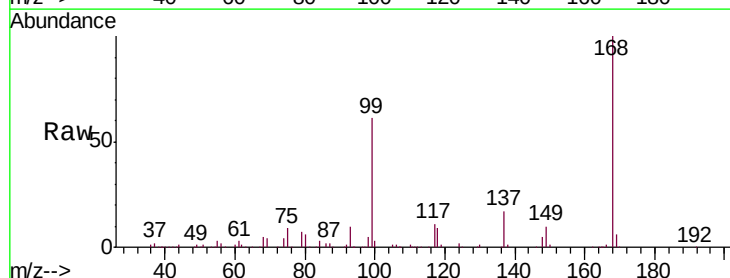
Tgt Ion: 117 Resp: 22088

Ion Ratio Lower Upper

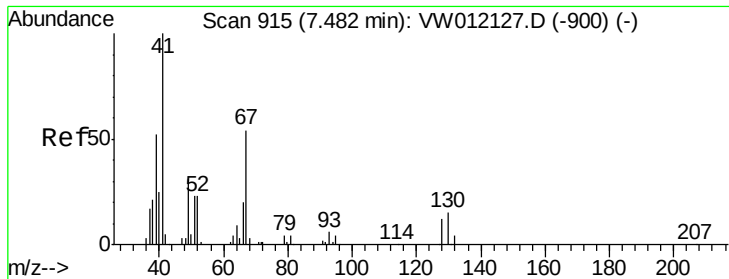
117 100

119 5.9 76.2 114.2#

121 0.0 23.8 35.8#



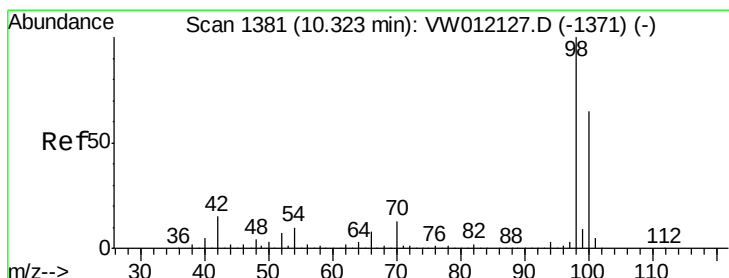
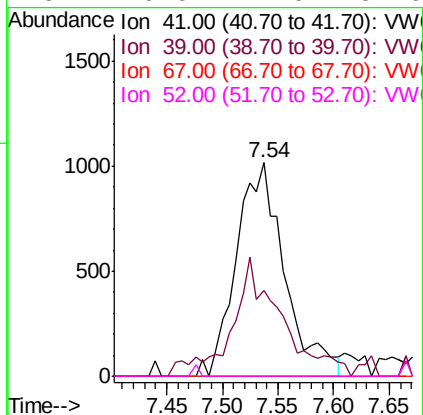
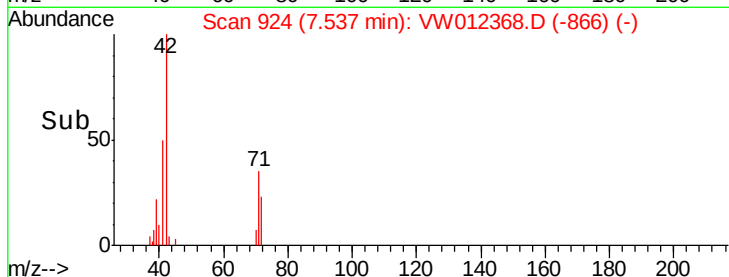
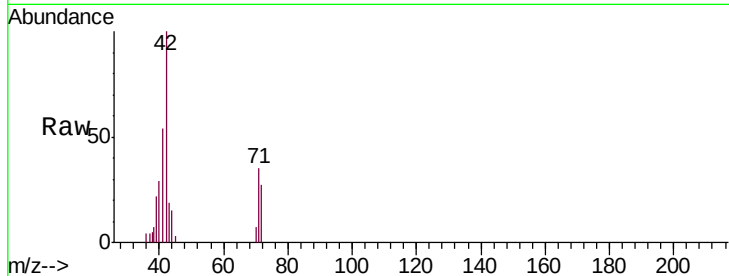




#41  
Methacrylonitrile  
Concen: 2.629 ug/l  
RT: 7.54 min Scan# 924  
Delta R.T. 0.05 min  
Lab File: VW012368.D  
Acq: 31 Aug 2019 00:20

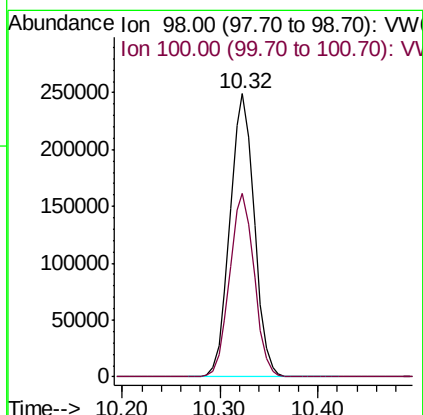
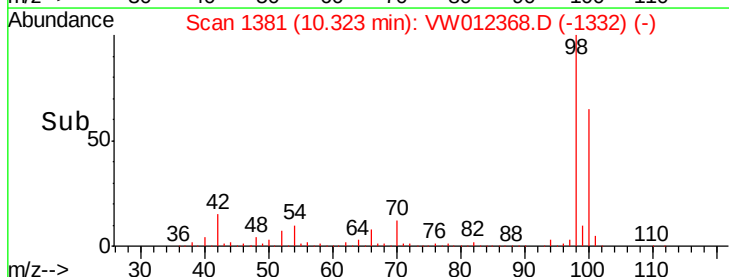
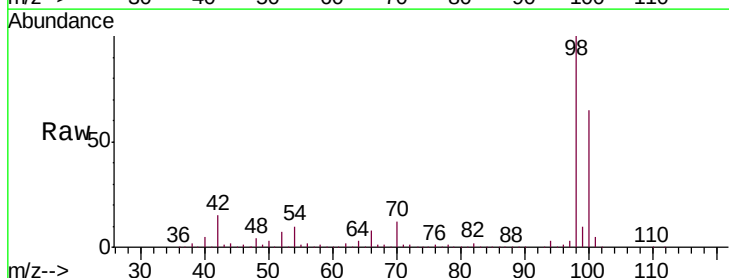
Instrument :  
MSVOA\_W  
ClientSampleId :  
OR-02-082919

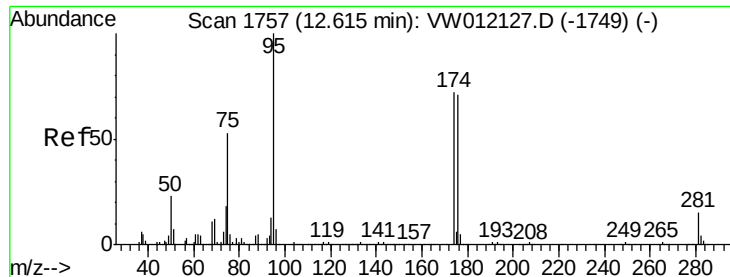
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 3067  |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 56.8  | 45.8  | 68.8  |
| 67       | 0.0   | 46.2  | 69.4# |
| 52       | 0.0   | 21.0  | 31.6# |



#50  
Toluene-d8  
Concen: 50.792 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW012368.D  
Acq: 31 Aug 2019 00:20

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 98    | Resp: | 430870 |
| Ion      | Ratio | Lower | Upper  |
| 98       | 100   |       |        |
| 100      | 65.2  | 52.4  | 78.6   |

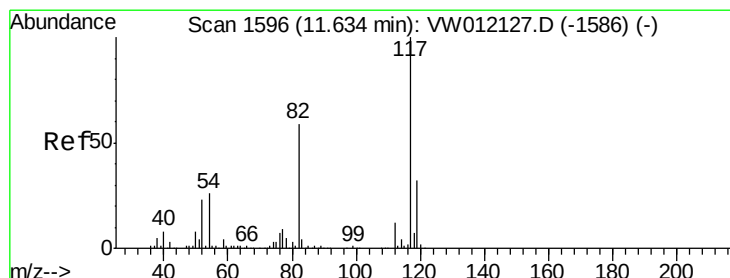
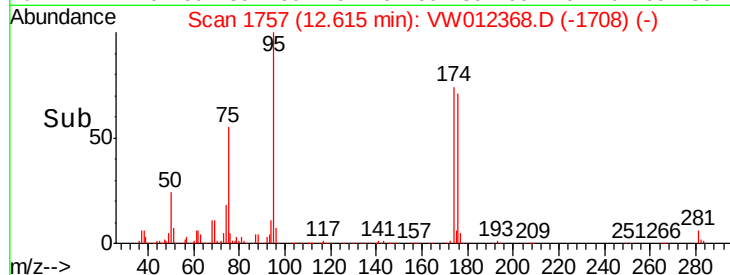
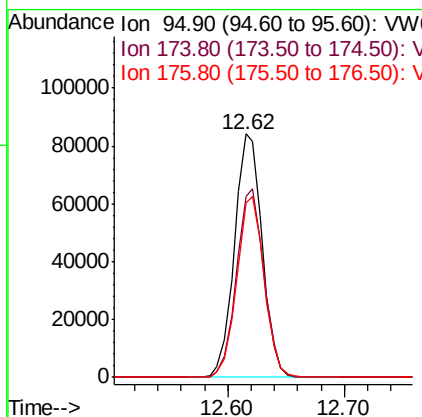
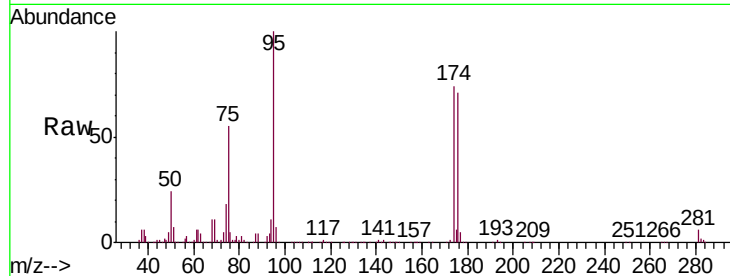




#62  
4-Bromofluorobenzene  
Concen: 46.531 ug/l  
RT: 12.62 min Scan# 1757  
Delta R.T. -0.00 min  
Lab File: VW012368.D  
Acq: 31 Aug 2019 00:20

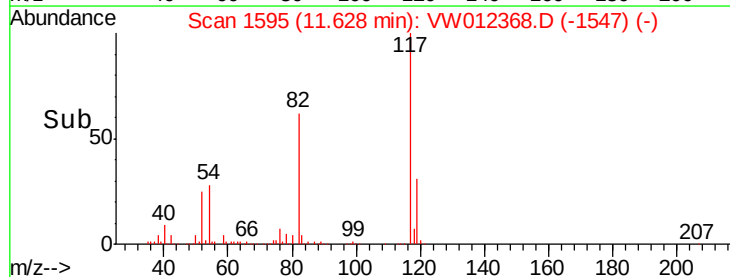
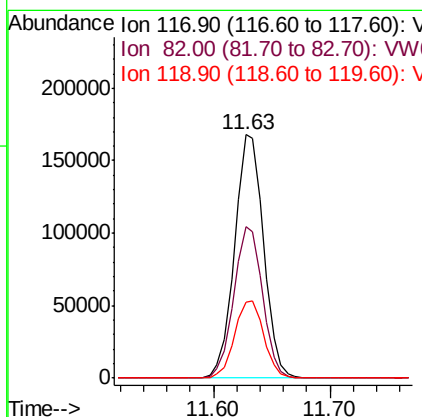
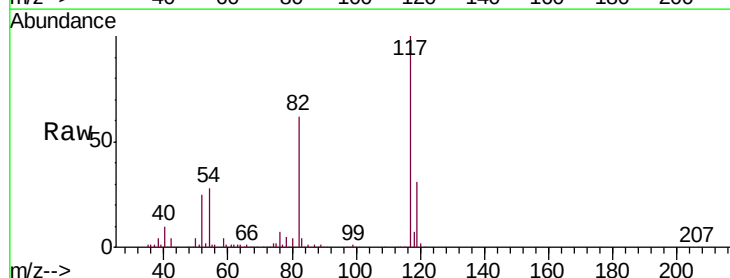
Instrument :  
MSVOA\_W  
ClientSampleId :  
OR-02-082919

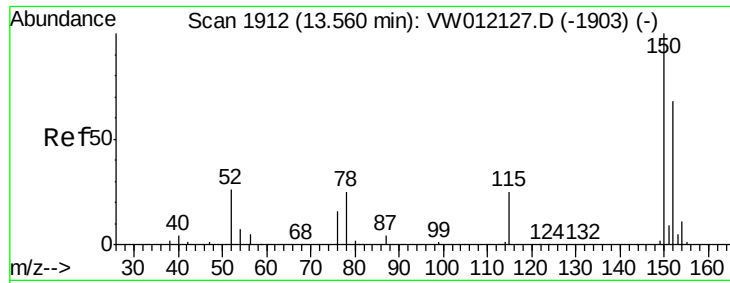
Tgt Ion: 95 Resp: 139138  
Ion Ratio Lower Upper  
95 100  
174 77.0 0.0 150.8  
176 73.4 0.0 148.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1595  
Delta R.T. -0.01 min  
Lab File: VW012368.D  
Acq: 31 Aug 2019 00:20

Tgt Ion: 117 Resp: 291258  
Ion Ratio Lower Upper  
117 100  
82 62.0 47.4 71.2  
119 31.3 25.4 38.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW012368.D

Acq: 31 Aug 2019 00:20

Instrument :

MSVOA\_W

ClientSampleId :

OR-02-082919

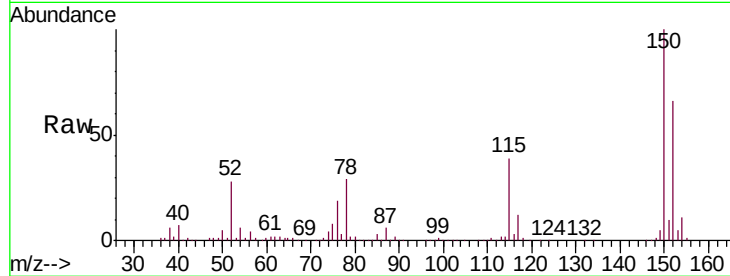
Tgt Ion:152 Resp: 120079

Ion Ratio Lower Upper

152 100

115 60.8 30.1 90.3

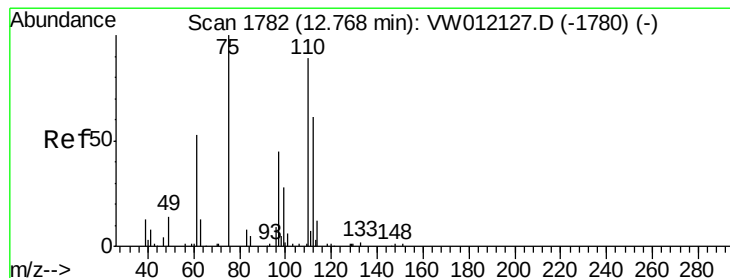
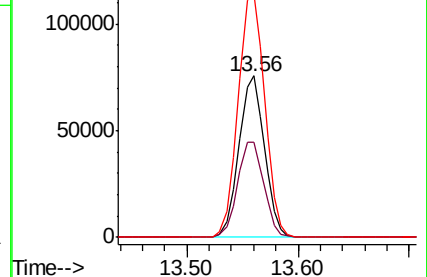
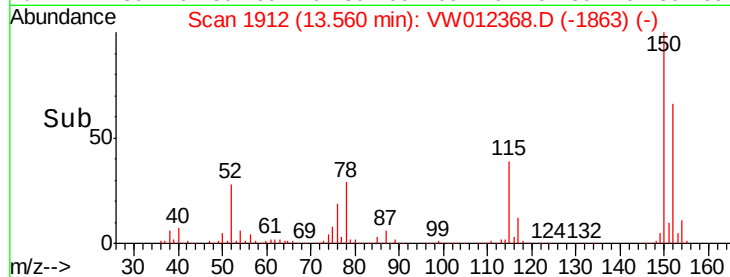
150 156.9 0.0 345.8



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: 64.120 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW012368.D

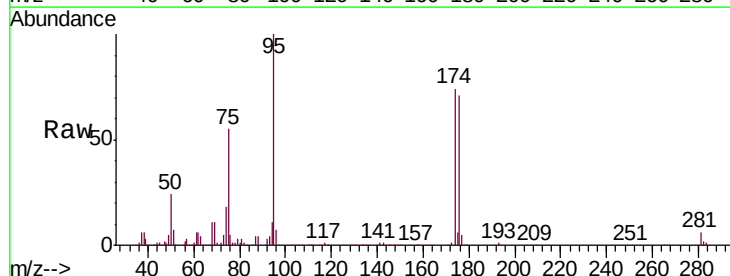
Acq: 31 Aug 2019 00:20

Tgt Ion: 75 Resp: 74987

Ion Ratio Lower Upper

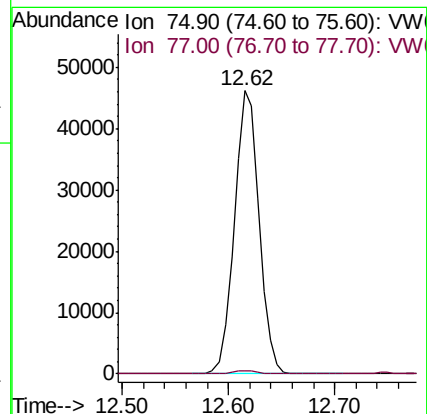
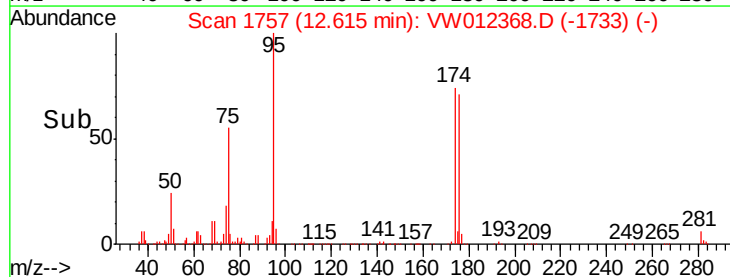
75 100

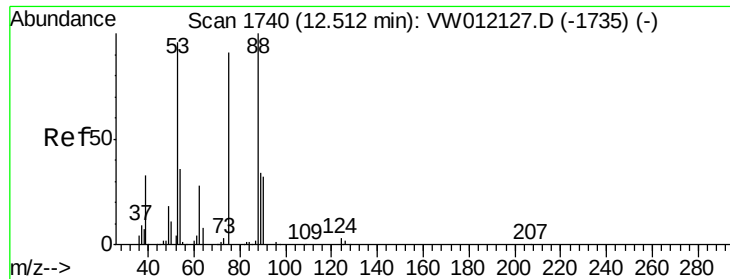
77 1.2 0.0 0.0#



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: 140.585 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW012368.D

Acq: 31 Aug 2019 00:20

Instrument :

MSVOA\_W

ClientSampleId :

OR-02-082919

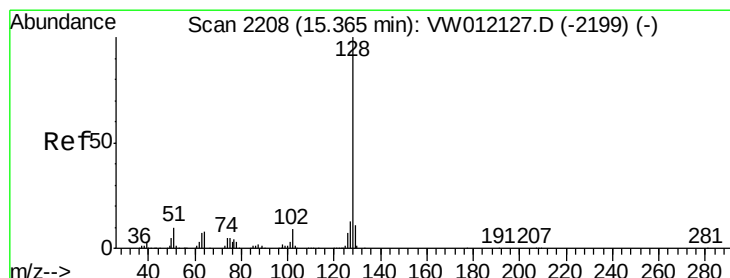
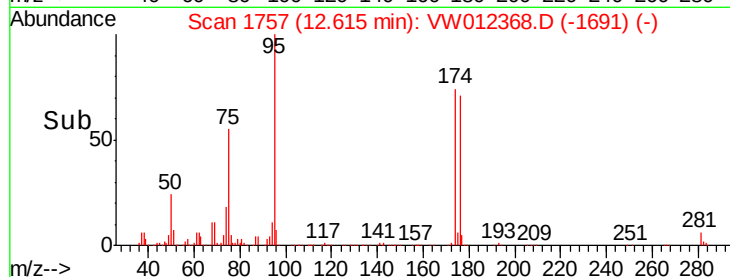
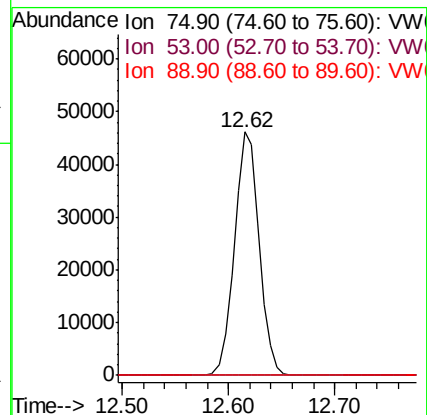
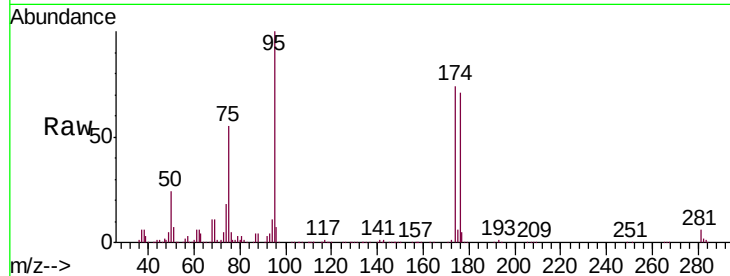
Tgt Ion: 75 Resp: 74987

Ion Ratio Lower Upper

75 100

53 0.2 89.4 134.0#

89 0.1 34.5 51.7#



#95

Naphthalene

Concen: 4.517 ug/l

RT: 15.37 min Scan# 2209

Delta R.T. 0.01 min

Lab File: VW012368.D

Acq: 31 Aug 2019 00:20

Tgt Ion: 128 Resp: 969

Ion Ratio Lower Upper

128 100

127 11.6 10.7 16.1

129 0.0 8.7 13.1#

