

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW090119\  
 Data File : VW012480.D  
 Acq On : 02 Sep 2019 06:16  
 Operator : SY/VA  
 Sample : K4528-06  
 Misc : 4.68G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 T9-12-13-Q4-(1.9)

Quant Time: Sep 02 07:26:47 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  | 200920   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 334767   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 264530   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 88222    | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.31   | 65  | 130962   | 54.83 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 109.66% |      |
| 35) Dibromofluoromethane    | 7.88   | 113 | 68170    | 34.12 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 68.24%  |      |
| 50) Toluene-d8              | 10.32  | 98  | 399355   | 49.29 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.58%  |      |
| 62) 4-Bromofluorobenzene    | 12.62  | 95  | 117567   | 41.16 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 82.32%  |      |

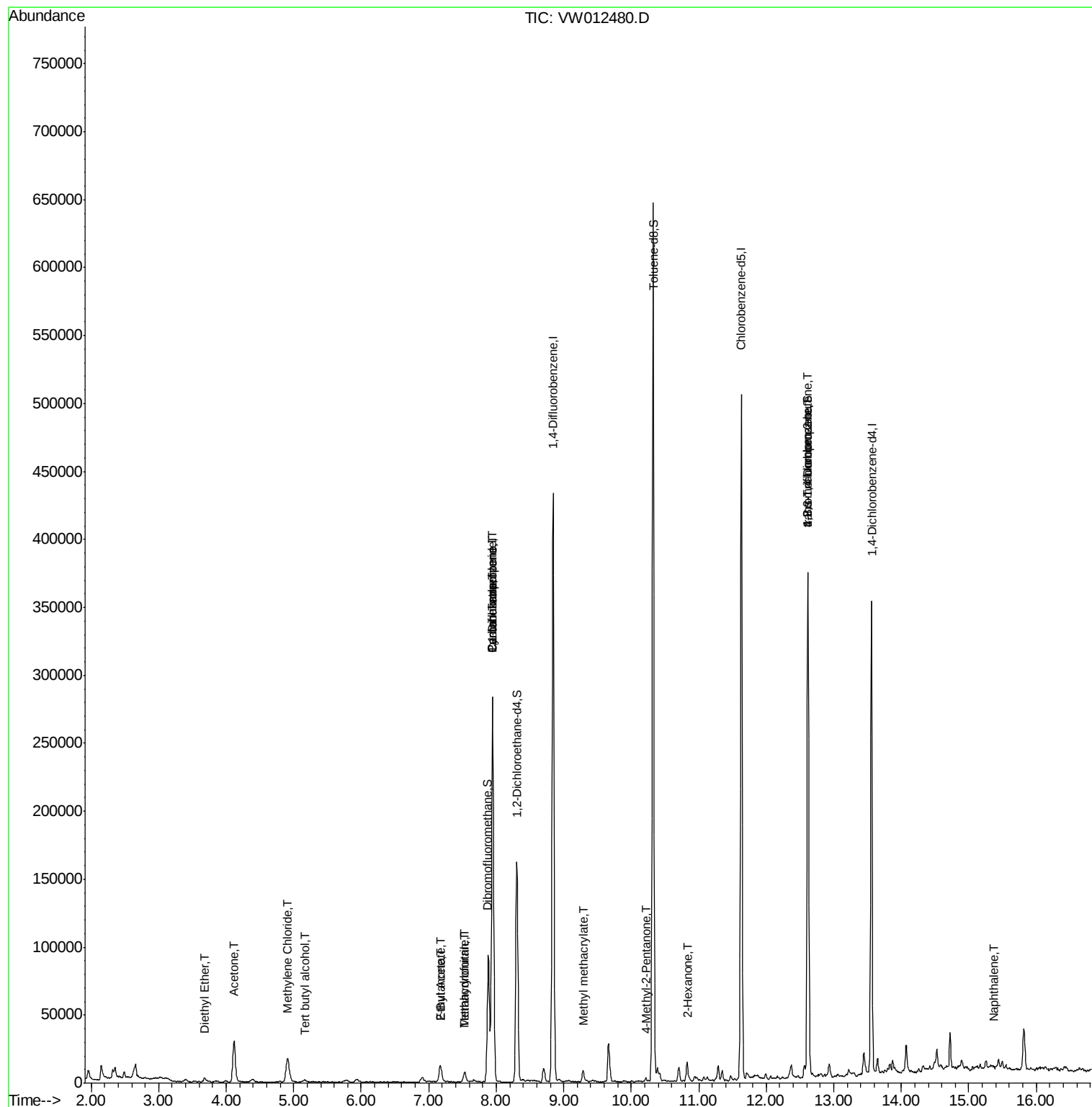
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 8) Diethyl Ether               | 3.68  | 74   | 1384     | 1.238   | ug/l   | 96     |
| 11) Tert butyl alcohol         | 5.16  | 59   | 2415     | 16.802  | ug/l # | 83     |
| 16) Acetone                    | 4.12  | 43   | 55349    | 90.656  | ug/l   | 100    |
| 20) Methylene Chloride         | 4.91  | 84   | 12952    | 5.612   | ug/l   | 93     |
| 25) 2-Butanone                 | 7.17  | 43   | 20464    | 24.666  | ug/l   | 95     |
| 29) Tetrahydrofuran            | 7.53  | 42   | 5781     | 11.614  | ug/l   | 95     |
| 31) Cyclohexane                | 7.95  | 56   | 5070     | 1.178   | ug/l # | 10     |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 16900    | 4.885   | ug/l # | 53     |
| 37) Ethyl Acetate              | 7.17  | 43   | 20464    | 10.795  | ug/l # | 73     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 20400    | 6.813   | ug/l # | 18     |
| 41) Methacrylonitrile          | 7.54  | 41   | 4158     | 3.732   | ug/l # | 52     |
| 48) Methyl methacrylate        | 9.29  | 41   | 1672     | 1.000   | ug/l # | 48     |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 2632     | 1.474   | ug/l   | 91     |
| 59) 2-Hexanone                 | 10.83 | 43   | 10444    | 8.264   | ug/l   | 71     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 64206    | 74.726  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 64206    | 163.839 | ug/l # | 6      |
| 95) Naphthalene                | 15.36 | 128  | 1779     | 4.809   | ug/l # | 78     |

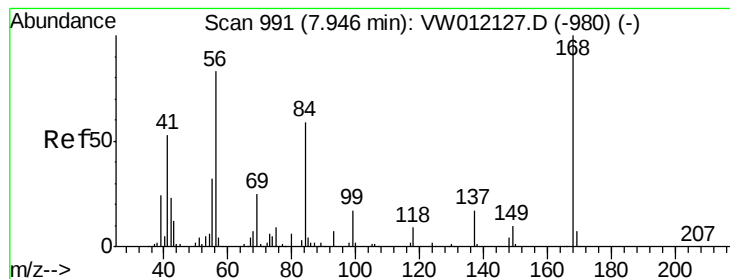
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_W\DATA\VW090119\  
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T9-12-13-Q4-(1.9)

Quant Time: Sep 02 07:26:47 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
Quant Title : SW846 8260  
QLast Update : Mon Aug 26 07:18:31 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

MSVOA\_W

ClientSampleId :

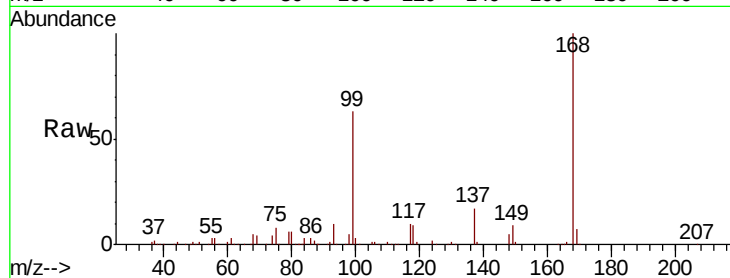
T9-12-13-Q4-(1.9)

Tgt Ion:168 Resp: 200920

Ion Ratio Lower Upper

168 100

99 63.3 49.2 73.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

100000

80000

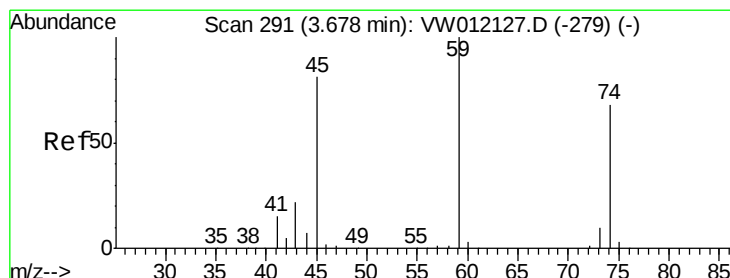
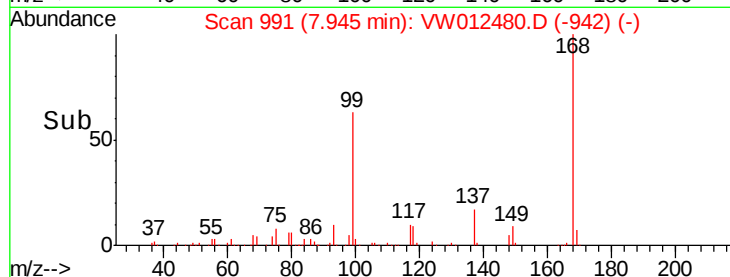
60000

40000

20000

0

Time--> 7.80 7.90 8.00 8.10



#8

Diethyl Ether

Concen: 1.238 ug/l

RT: 3.68 min Scan# 291

Delta R.T. -0.00 min

Lab File: VW012480.D

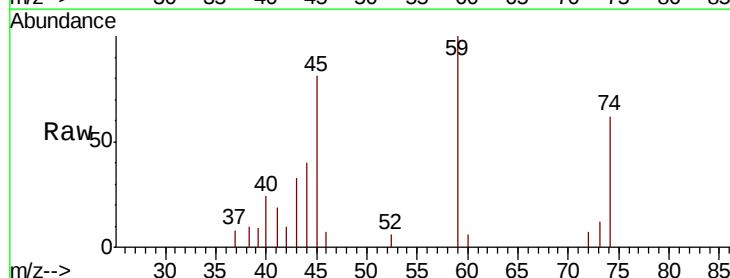
Acq: 02 Sep 2019 06:16

Tgt Ion: 74 Resp: 1384

Ion Ratio Lower Upper

74 100

45 122.5 59.2 177.6



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW

3.68

800

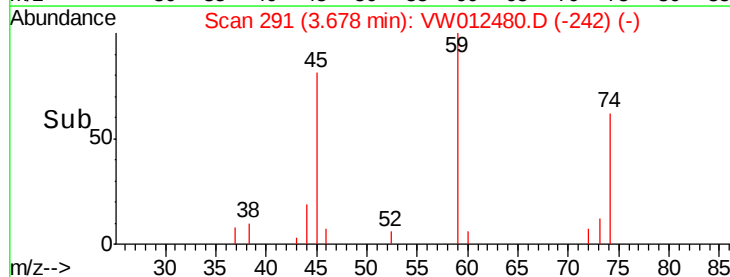
600

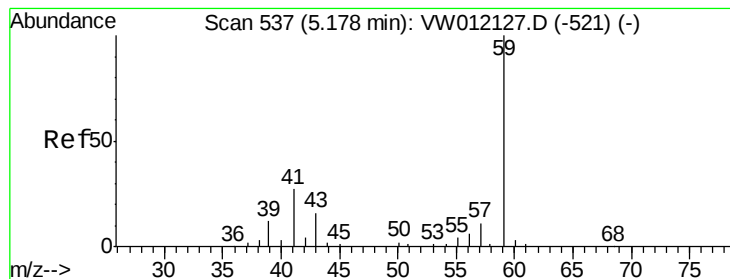
400

200

0

Time--> 3.60 3.65 3.70 3.75





#11

Tert butyl alcohol

Concen: 16.802 ug/l

RT: 5.16 min Scan# 534

Delta R.T. -0.02 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

MSVOA\_W

ClientSampleId :

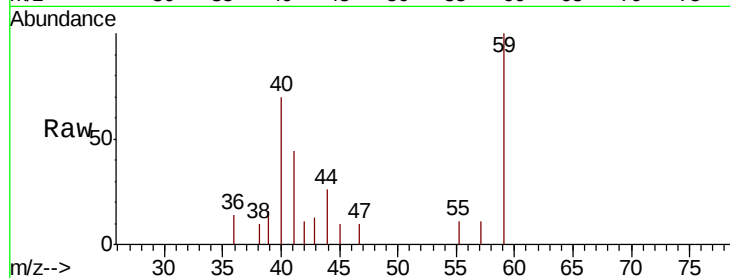
T9-12-13-Q4-(1.9)

Tgt Ion: 59 Resp: 2415

Ion Ratio Lower Upper

59 100

57 4.7 9.0 13.4#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.16

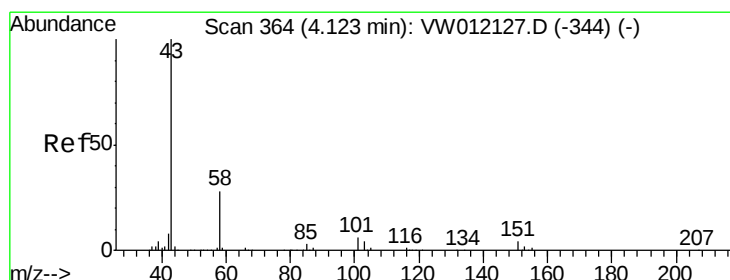
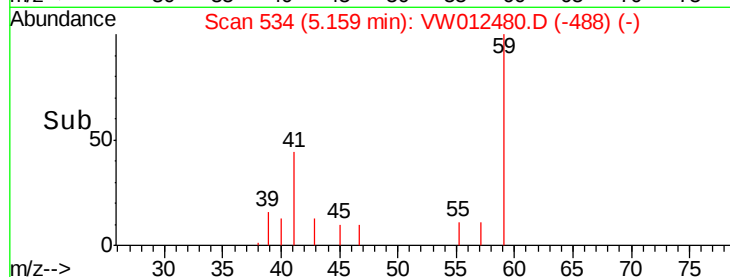
600

400

200

0

Time-->



#16

Acetone

Concen: 90.656 ug/l

RT: 4.12 min Scan# 363

Delta R.T. -0.01 min

Lab File: VW012480.D

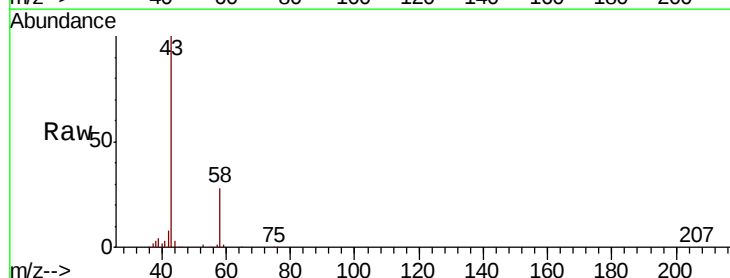
Acq: 02 Sep 2019 06:16

Tgt Ion: 43 Resp: 55349

Ion Ratio Lower Upper

43 100

58 28.0 22.4 33.6



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

4.12

20000

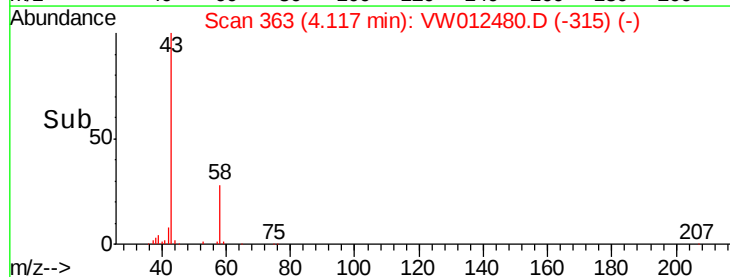
15000

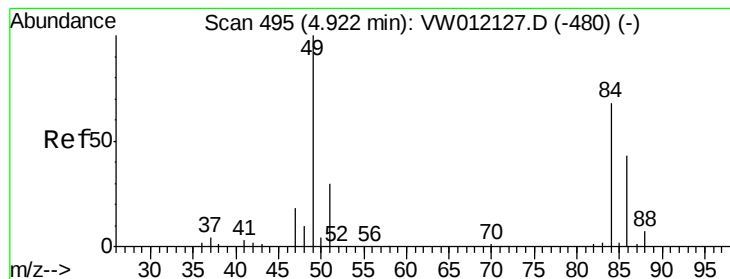
10000

5000

0

Time-->





#20

Methylene Chloride

Concen: 5.612 ug/l

RT: 4.91 min Scan# 493

Delta R.T. -0.01 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

MSVOA\_W

ClientSampleId :

T9-12-13-Q4-(1.9)

Tgt Ion: 84 Resp: 12952

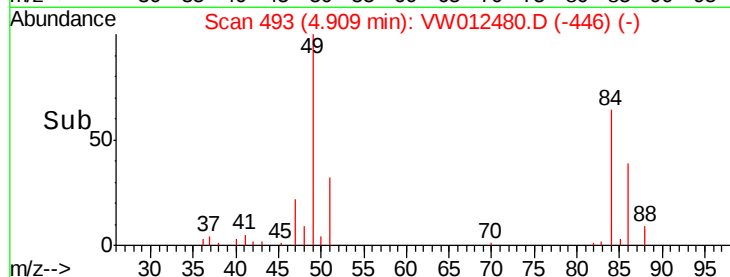
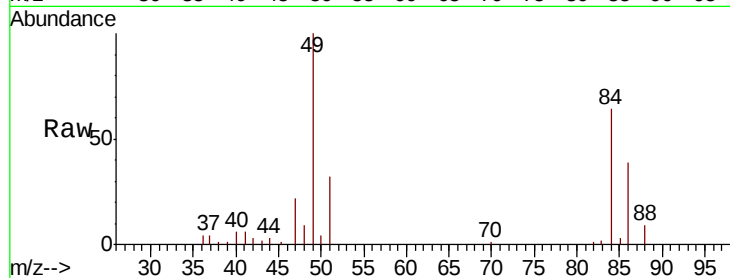
Ion Ratio Lower Upper

84 100

49 156.7 117.8 176.8

51 49.5 35.6 53.4

86 60.8 51.2 76.8



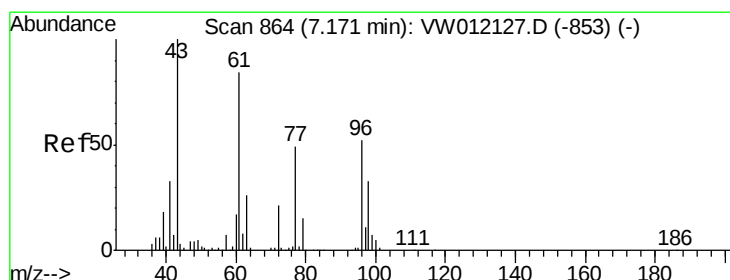
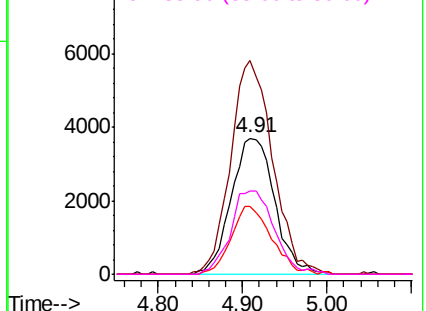
Abundance

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



#25

2-Butanone

Concen: 24.666 ug/l

RT: 7.17 min Scan# 864

Delta R.T. -0.00 min

Lab File: VW012480.D

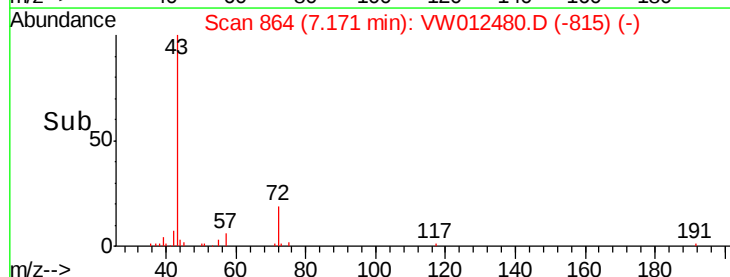
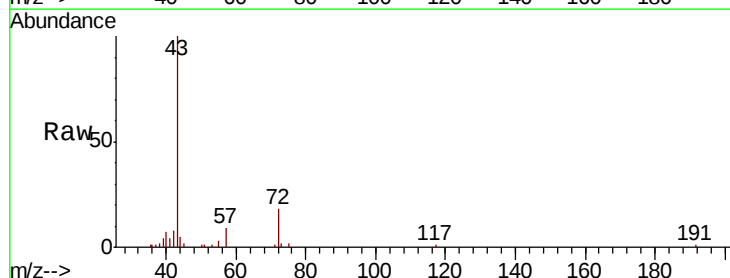
Acq: 02 Sep 2019 06:16

Tgt Ion: 43 Resp: 20464

Ion Ratio Lower Upper

43 100

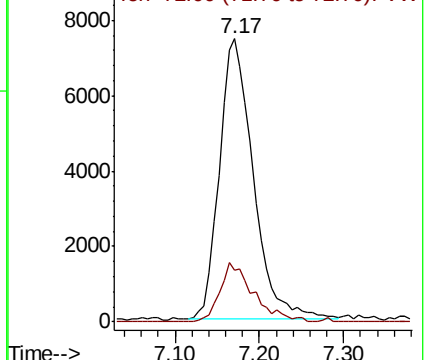
72 18.4 16.6 24.8

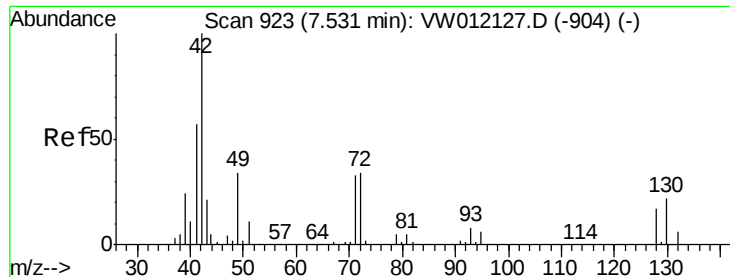


Abundance

Ion 43.00 (42.70 to 43.70): VW

Ion 72.00 (71.70 to 72.70): VW





#29

Tetrahydrofuran

Concen: 11.614 ug/l

RT: 7.53 min Scan# 923

Delta R.T. -0.00 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

MSVOA\_W

ClientSampleId :

T9-12-13-Q4-(1.9)

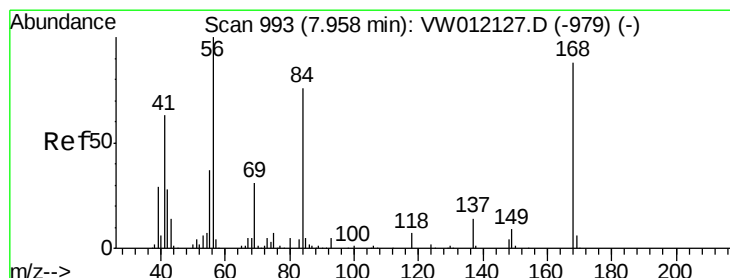
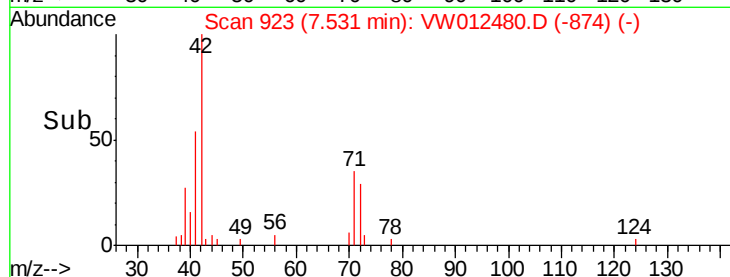
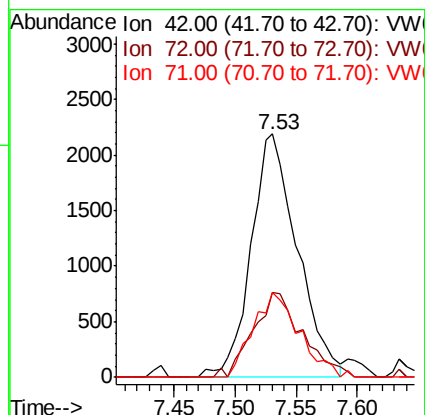
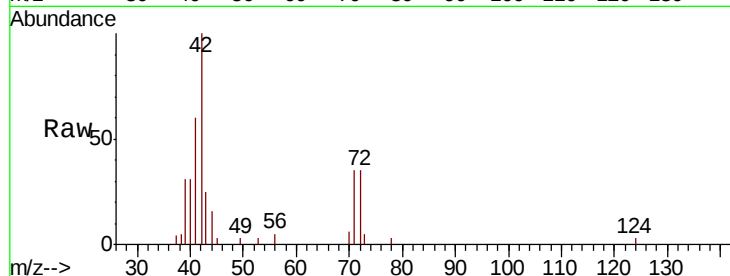
Tgt Ion: 42 Resp: 5781

Ion Ratio Lower Upper

42 100

72 37.1 27.3 40.9

71 34.9 25.5 38.3



#31

Cyclohexane

Concen: 1.178 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

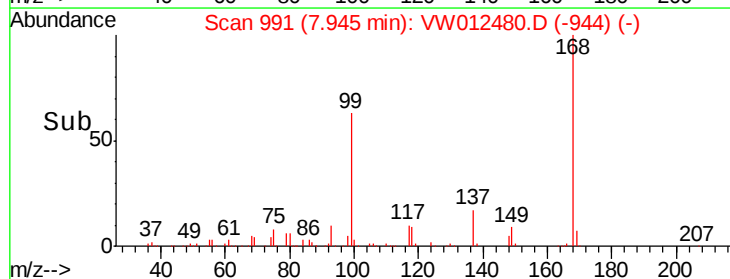
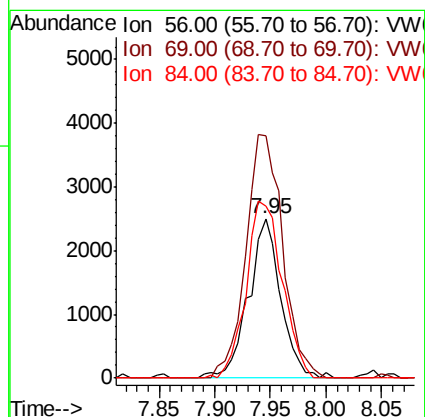
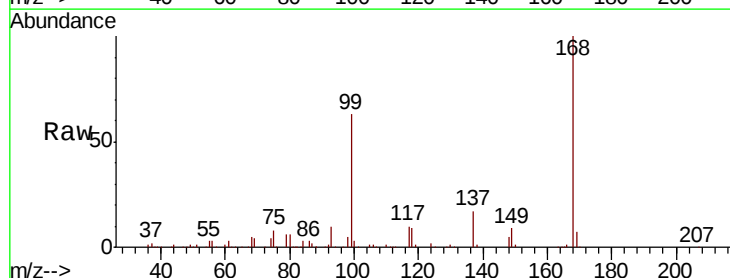
Tgt Ion: 56 Resp: 5070

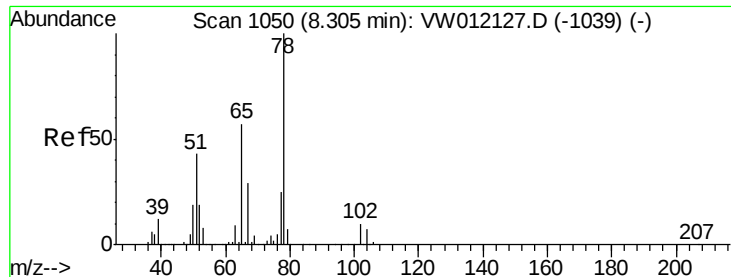
Ion Ratio Lower Upper

56 100

69 151.7 24.9 37.3#

84 107.5 60.6 90.8#





#33

1,2-Dichloroethane-d4

Concen: 54.831 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

MSVOA\_W

ClientSampleId :

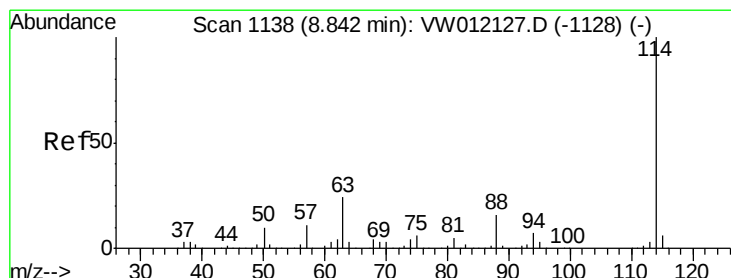
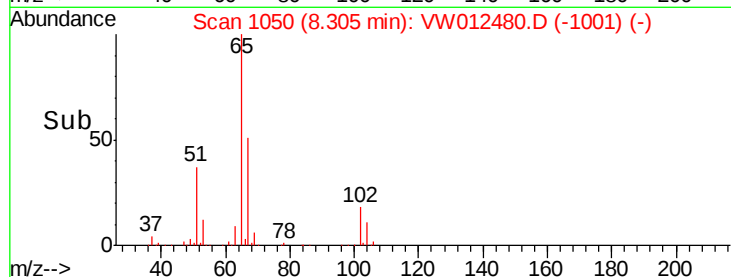
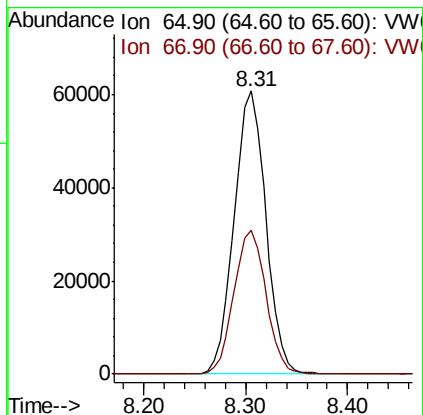
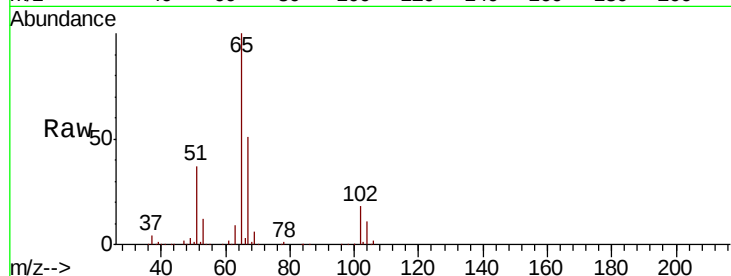
T9-12-13-Q4-(1.9)

Tgt Ion: 65 Resp: 130962

Ion Ratio Lower Upper

65 100

67 51.6 0.0 102.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. -0.00 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

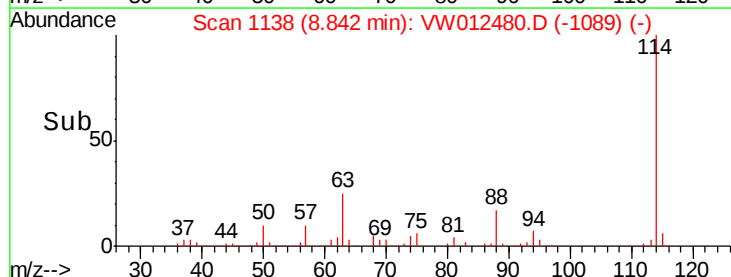
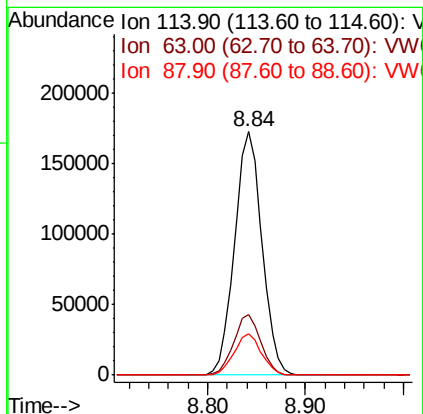
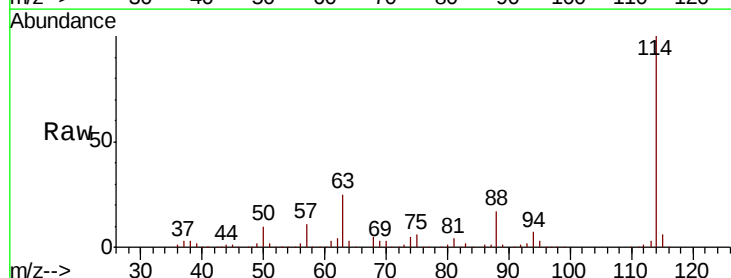
Tgt Ion: 114 Resp: 334767

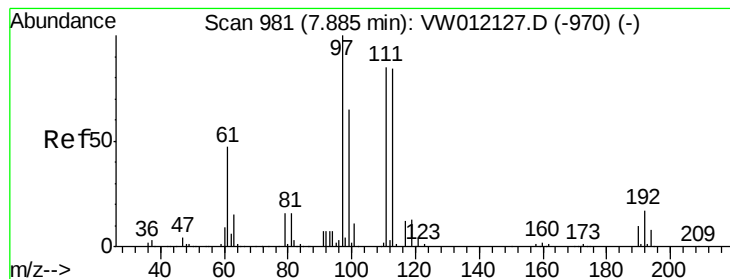
Ion Ratio Lower Upper

114 100

63 24.6 0.0 48.6

88 16.9 0.0 32.2





#35

Dibromofluoromethane

Concen: 34.115 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

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ClientSampleId :

T9-12-13-Q4-(1.9)

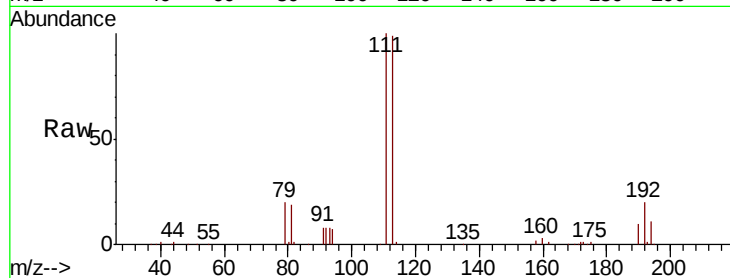
Tgt Ion:113 Resp: 68170

Ion Ratio Lower Upper

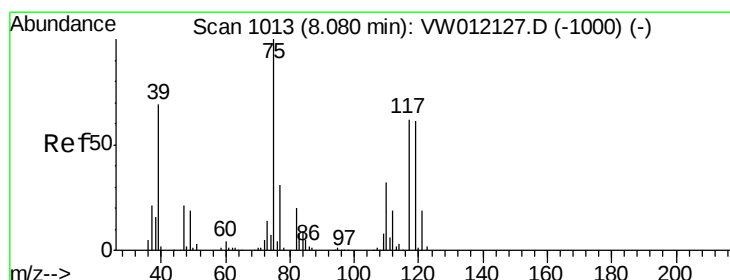
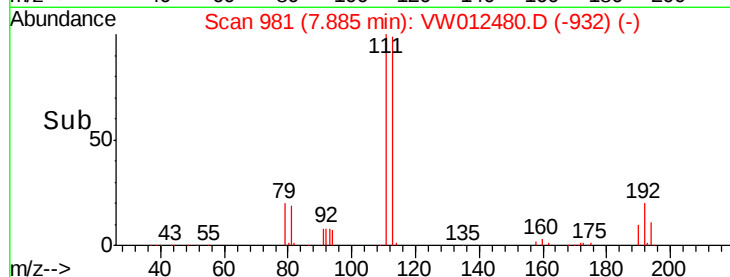
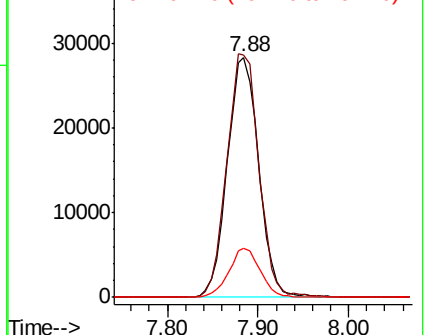
113 100

111 103.3 82.7 124.1

192 20.3 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: 4.885 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.13 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

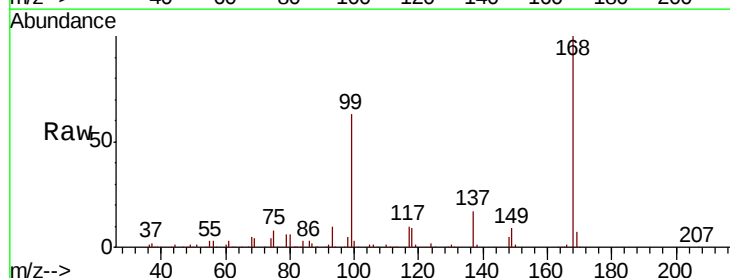
Tgt Ion: 75 Resp: 16900

Ion Ratio Lower Upper

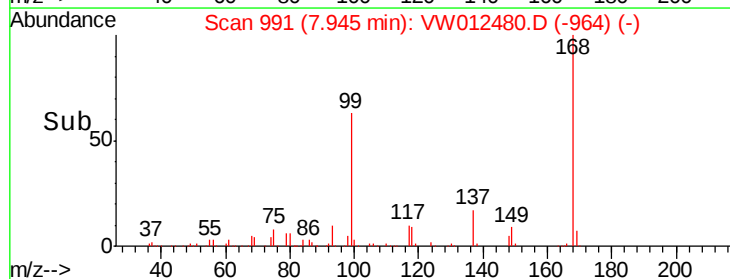
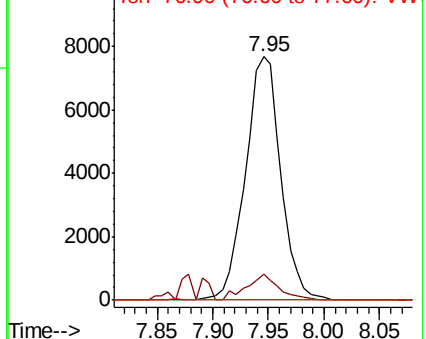
75 100

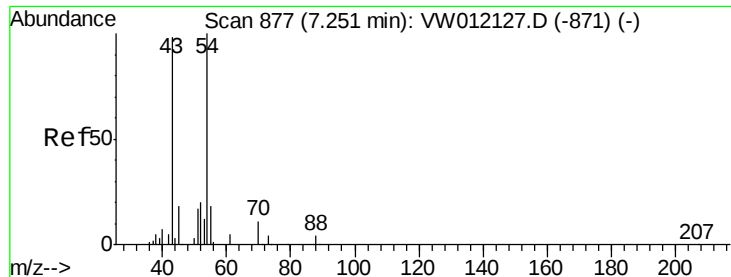
110 10.0 15.6 46.8#

77 0.0 24.6 36.8#



Abundance Ion 74.90 (74.60 to 75.60): VW  
Ion 109.90 (109.60 to 110.60): V  
Ion 76.90 (76.60 to 77.60): VW





#37

Ethyl Acetate

Concen: 10.795 ug/l

RT: 7.17 min Scan# 864

Delta R.T. -0.08 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

MSVOA\_W

ClientSampleId :

T9-12-13-Q4-(1.9)

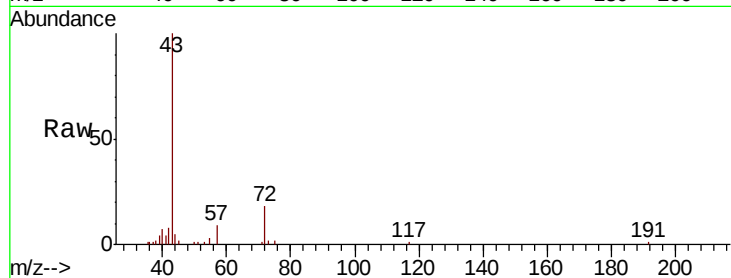
Tgt Ion: 43 Resp: 20464

Ion Ratio Lower Upper

43 100

61 0.0 9.2 13.8#

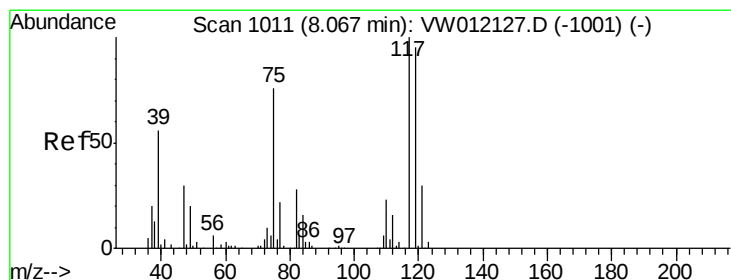
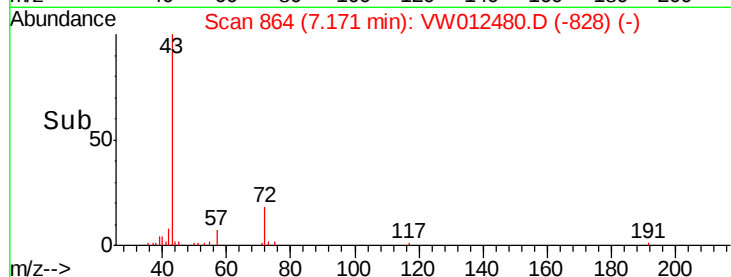
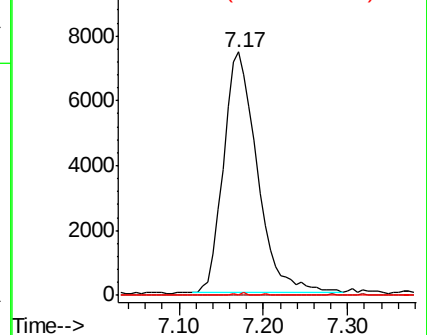
70 0.1 6.9 10.3#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 60.90 (60.60 to 61.60): VW

Ion 70.00 (69.70 to 70.70): VW



#38

Carbon Tetrachloride

Concen: 6.813 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.12 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

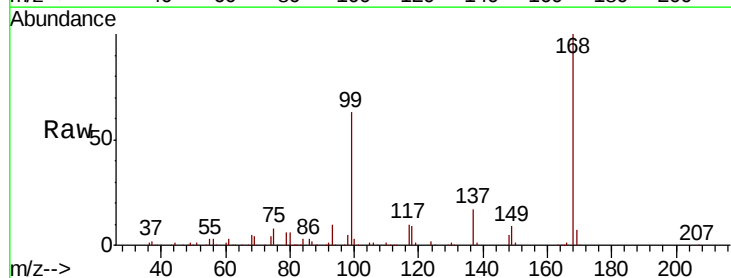
Tgt Ion: 117 Resp: 20400

Ion Ratio Lower Upper

117 100

119 7.8 76.2 114.2#

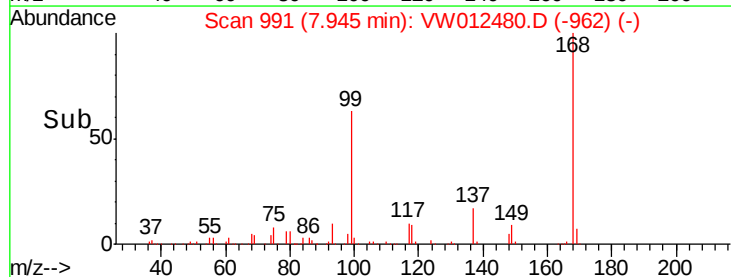
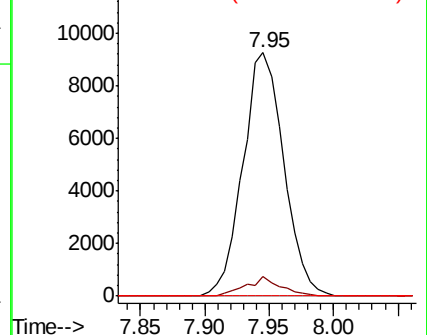
121 0.0 23.8 35.8#

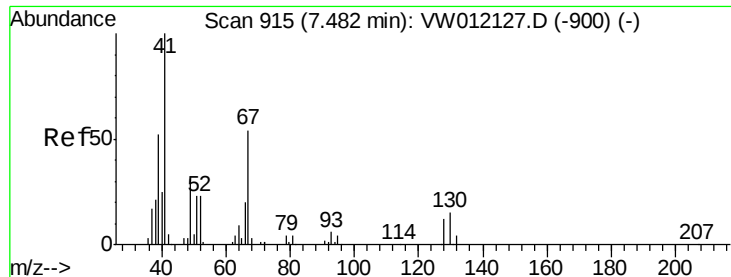


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#41

Methacrylonitrile

Concen: 3.732 ug/l

RT: 7.54 min Scan# 924

Delta R.T. 0.05 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

MSVOA\_W

ClientSampleId :

T9-12-13-Q4-(1.9)

Tgt Ion: 41 Resp: 4158

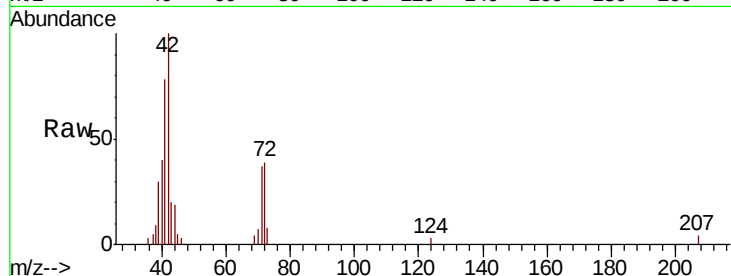
Ion Ratio Lower Upper

41 100

39 44.8 45.8 68.8#

67 0.0 46.2 69.4#

52 0.0 21.0 31.6#

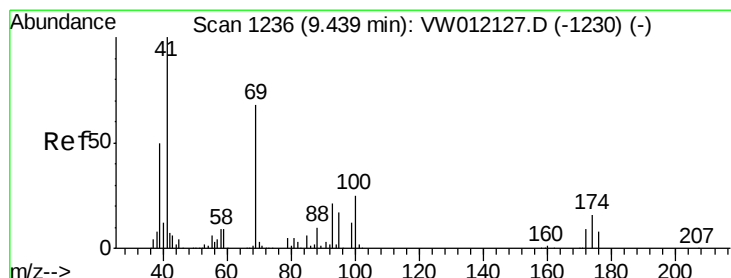
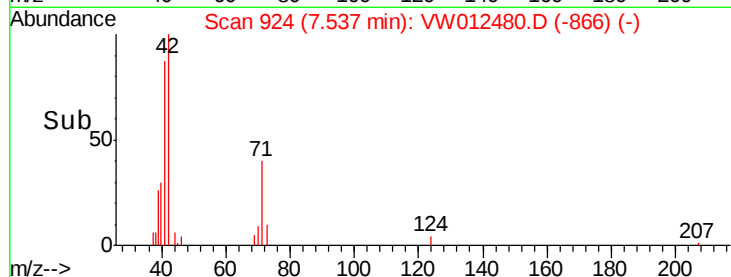
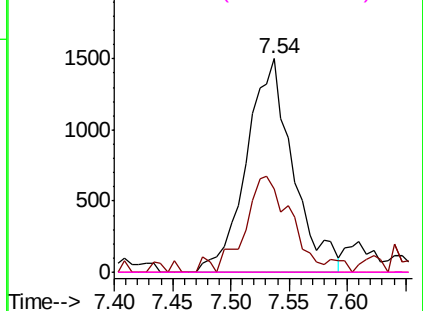


Abundance Ion 41.00 (40.70 to 41.70): VW

Ion 39.00 (38.70 to 39.70): VW

Ion 67.00 (66.70 to 67.70): VW

Ion 52.00 (51.70 to 52.70): VW



#48

Methyl methacrylate

Concen: 1.000 ug/l

RT: 9.29 min Scan# 1211

Delta R.T. -0.15 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

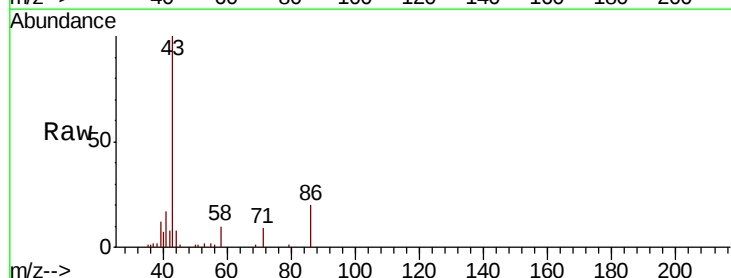
Tgt Ion: 41 Resp: 1672

Ion Ratio Lower Upper

41 100

69 3.8 56.7 85.1#

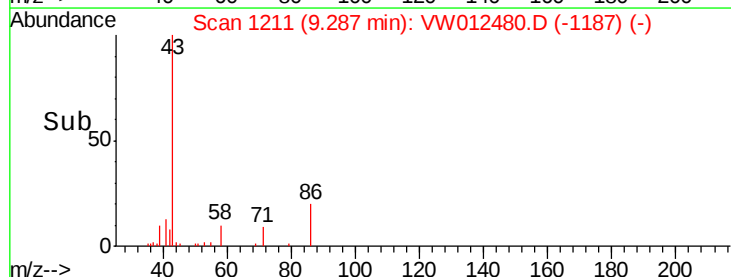
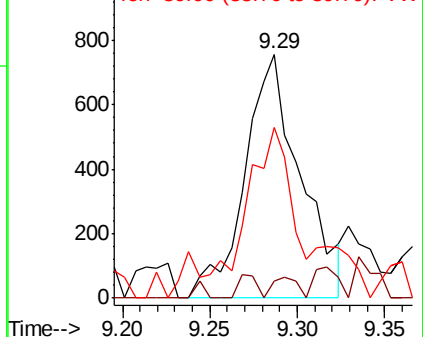
39 43.3 42.0 63.0

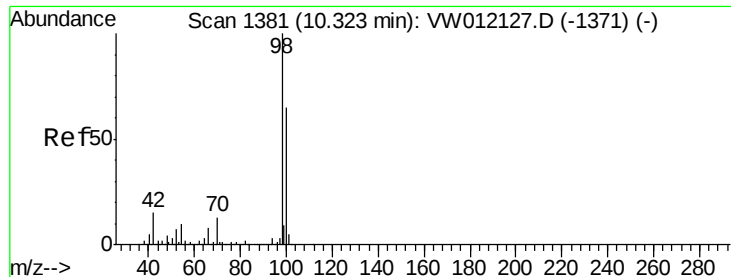


Abundance Ion 41.00 (40.70 to 41.70): VW

Ion 69.00 (68.70 to 69.70): VW

Ion 39.00 (38.70 to 39.70): VW





#50

Toluene-d8

Concen: 49.289 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW012480.D

Acq: 02 Sep 2019 06:16

Instrument :

MSVOA\_W

ClientSampleId :

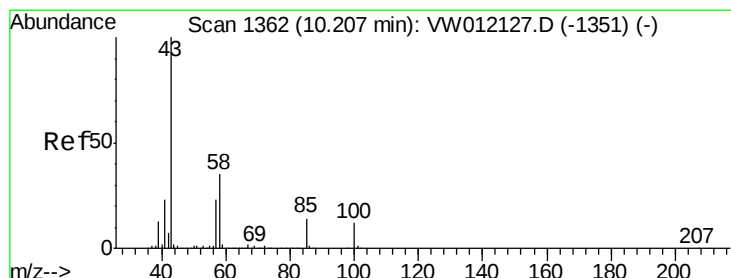
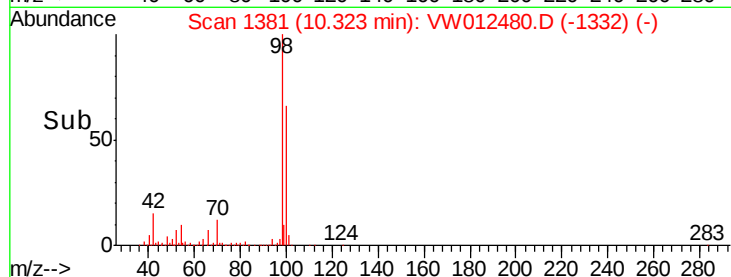
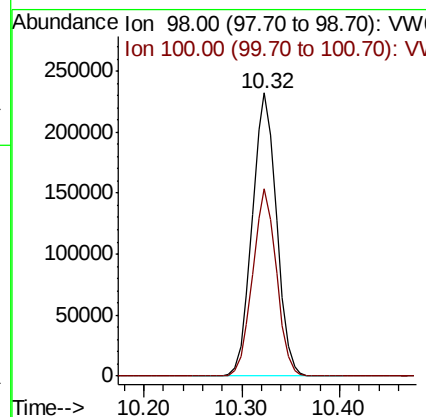
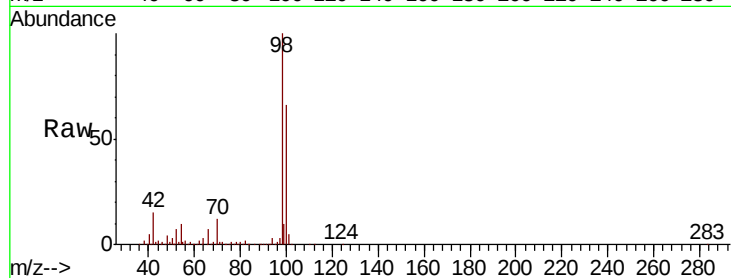
T9-12-13-Q4-(1.9)

Tgt Ion: 98 Resp: 399355

Ion Ratio Lower Upper

98 100

100 64.9 52.4 78.6



#51

4-Methyl-2-Pentanone

Concen: 1.474 ug/l

RT: 10.21 min Scan# 1363

Delta R.T. 0.01 min

Lab File: VW012480.D

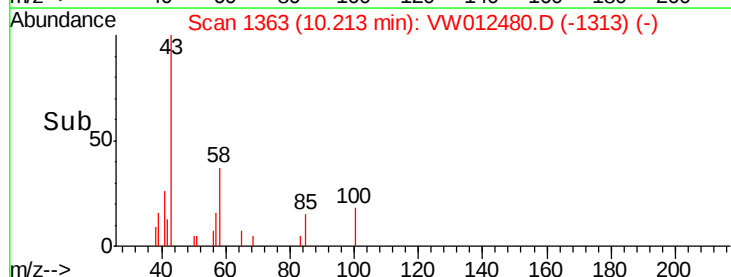
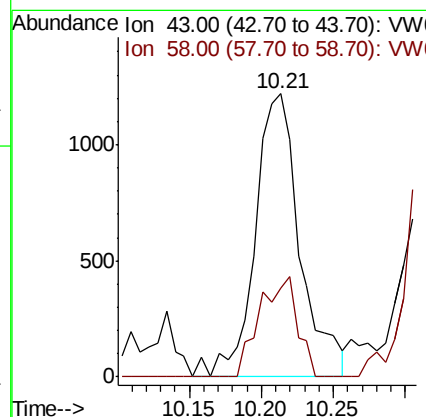
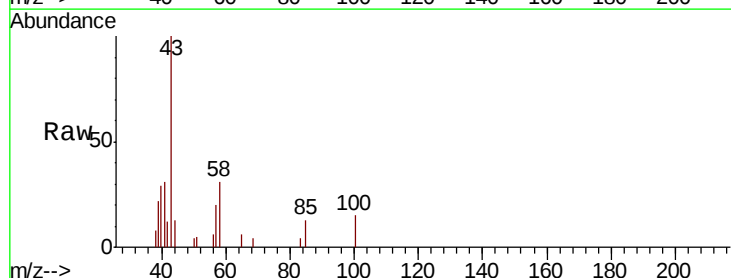
Acq: 02 Sep 2019 06:16

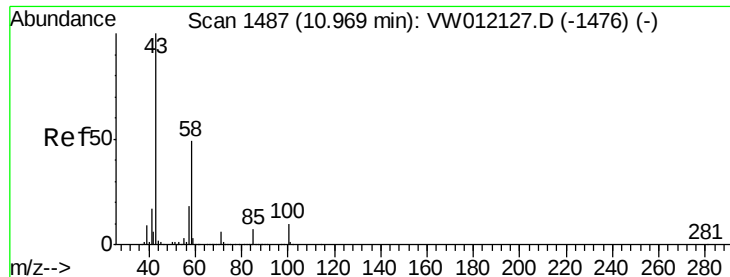
Tgt Ion: 43 Resp: 2632

Ion Ratio Lower Upper

43 100

58 29.8 28.2 42.2

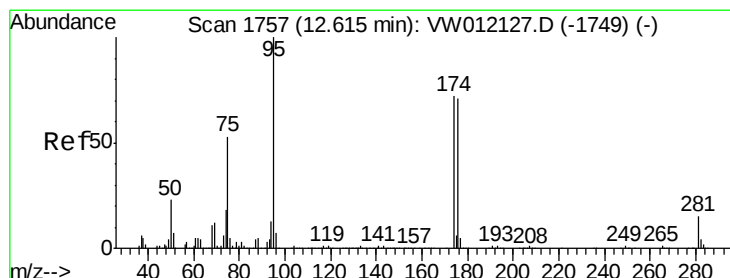
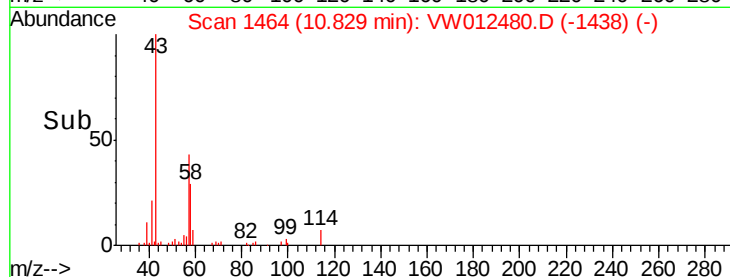
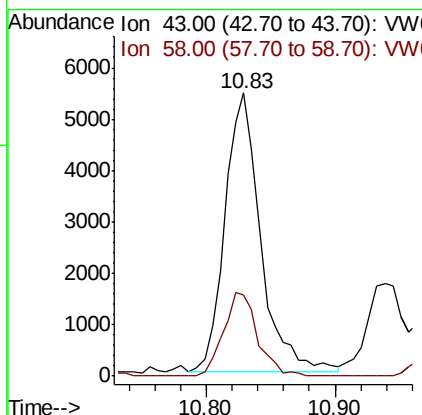
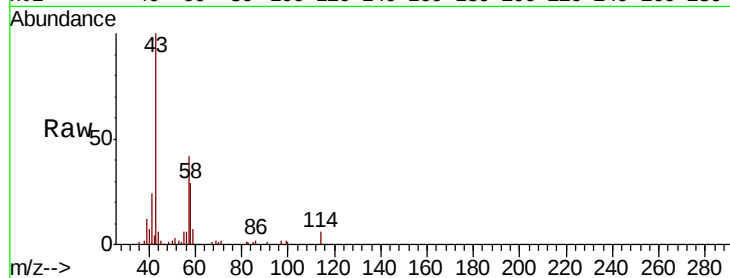




#59  
2-Hexanone  
Concen: 8.264 ug/l  
RT: 10.83 min Scan# 1464  
Delta R.T. -0.14 min  
Lab File: VW012480.D  
Acq: 02 Sep 2019 06:16

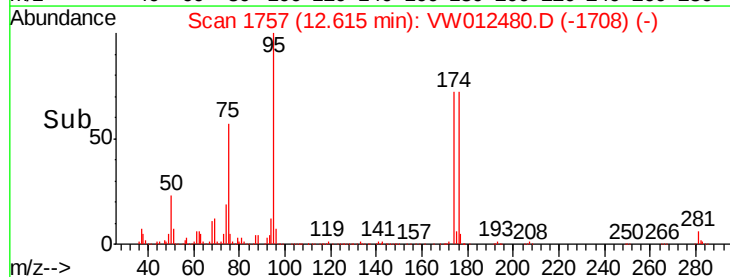
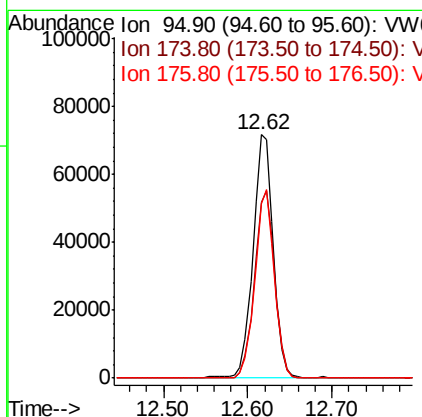
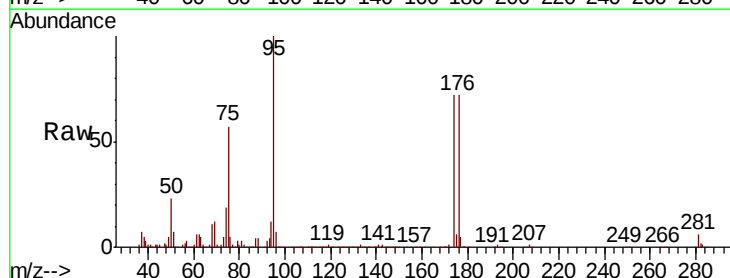
Instrument :  
MSVOA\_W  
ClientSampleId :  
T9-12-13-Q4-(1.9)

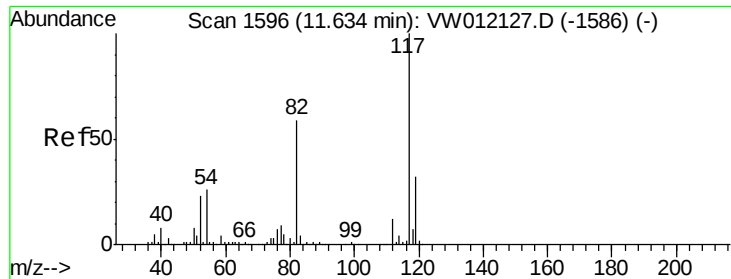
Tgt Ion: 43 Resp: 10444  
Ion Ratio Lower Upper  
43 100  
58 28.7 24.3 72.9



#62  
4-Bromofluorobenzene  
Concen: 41.164 ug/l  
RT: 12.62 min Scan# 1757  
Delta R.T. -0.00 min  
Lab File: VW012480.D  
Acq: 02 Sep 2019 06:16

Tgt Ion: 95 Resp: 117567  
Ion Ratio Lower Upper  
95 100  
174 76.7 0.0 150.8  
176 74.4 0.0 148.6

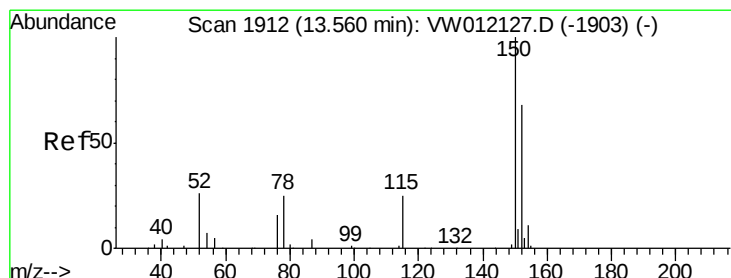
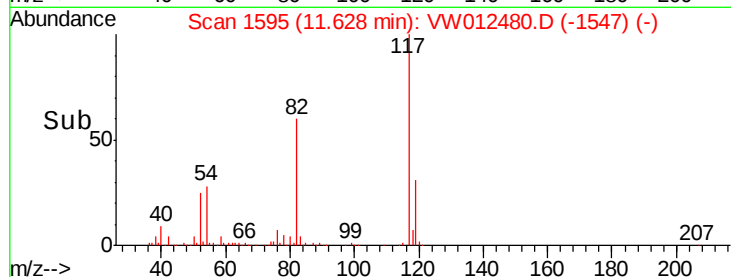
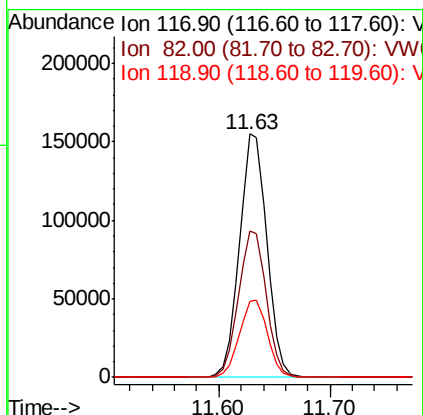
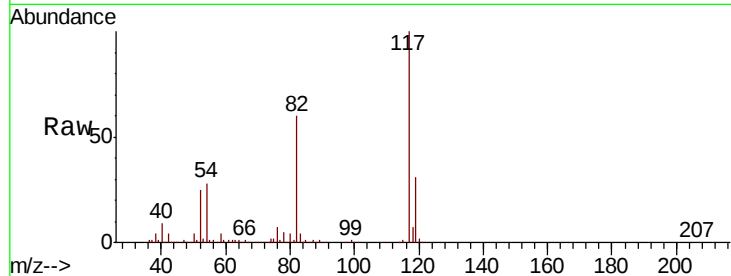




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1595  
Delta R.T. -0.01 min  
Lab File: VW012480.D  
Acq: 02 Sep 2019 06:16

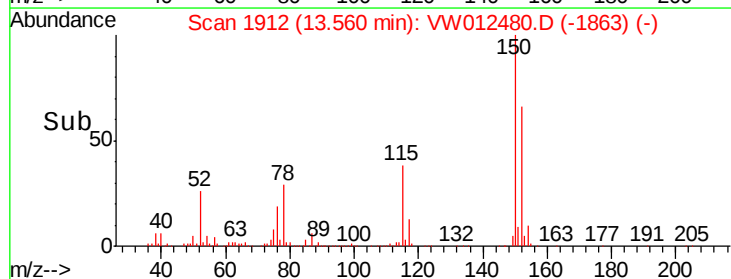
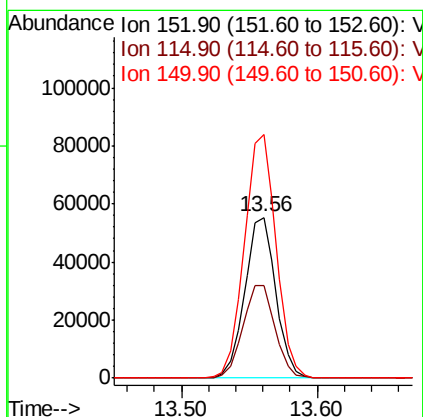
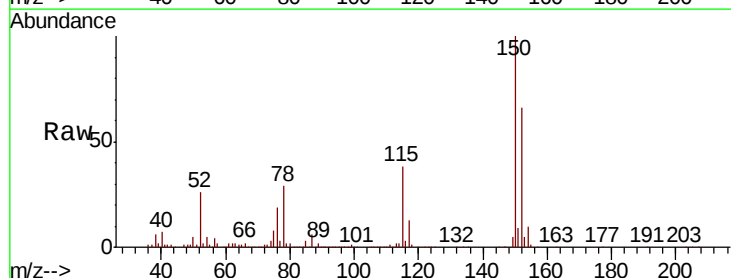
Instrument :  
MSVOA\_W  
ClientSampleId :  
T9-12-13-Q4-(1.9)

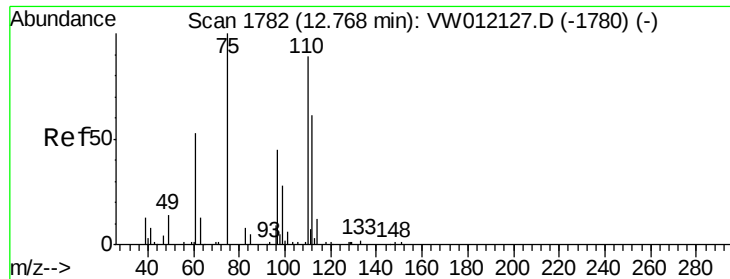
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 60.1  | 47.4  | 71.2  |
| 119     | 31.3  | 25.4  | 38.2  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. -0.00 min  
Lab File: VW012480.D  
Acq: 02 Sep 2019 06:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 60.0  | 30.1  | 90.3  |
| 150     | 154.8 | 0.0   | 345.8 |

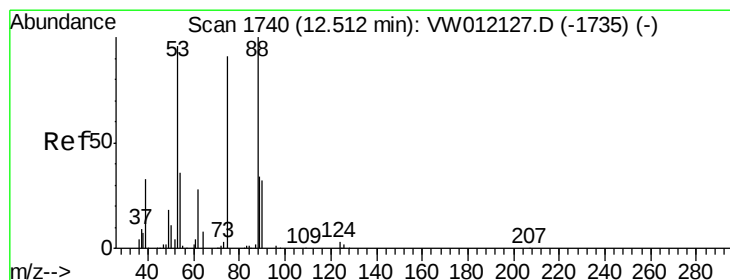
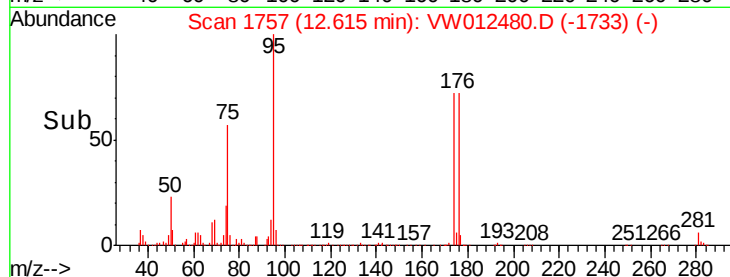
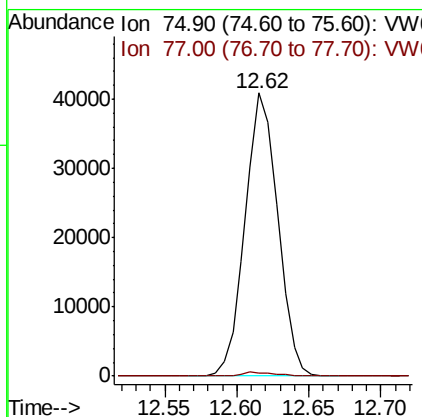
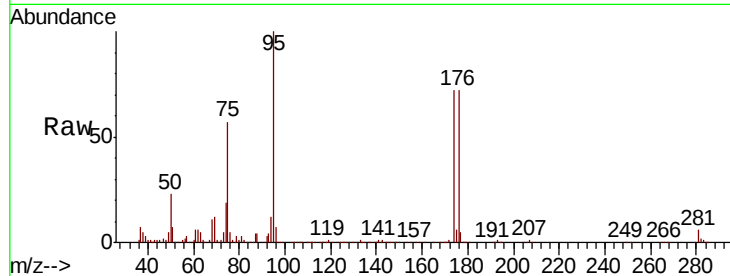




#76  
 1,2,3-Trichloropropane  
 Concen: 74.726 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. -0.15 min  
 Lab File: VW012480.D  
 Acq: 02 Sep 2019 06:16

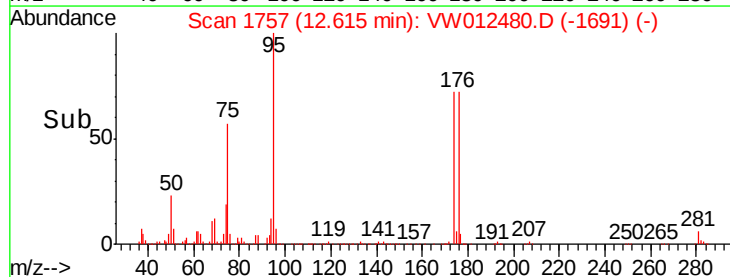
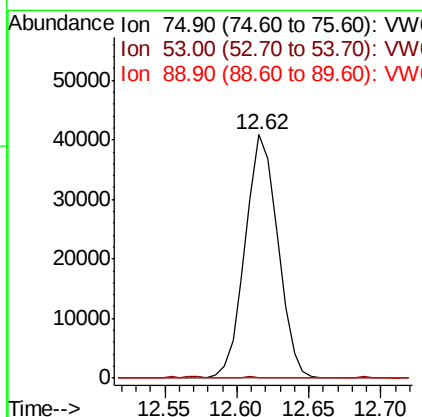
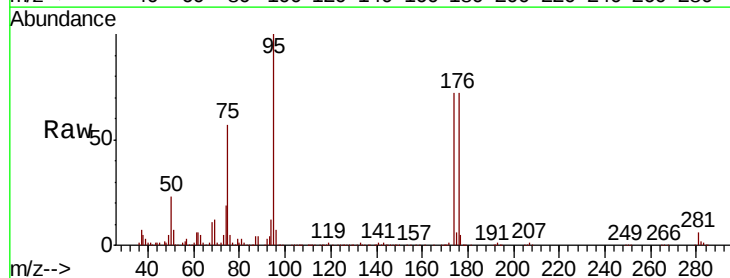
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 T9-12-13-Q4-(1.9)

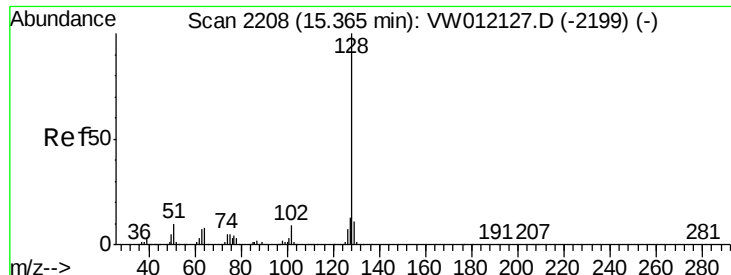
Tgt Ion: 75 Resp: 64206  
 Ion Ratio Lower Upper  
 75 100  
 77 1.6 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 163.839 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. 0.10 min  
 Lab File: VW012480.D  
 Acq: 02 Sep 2019 06:16

Tgt Ion: 75 Resp: 64206  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 89.4 134.0#  
 89 0.0 34.5 51.7#





#95  
Naphthalene  
Concen: 4.809 ug/l  
RT: 15.36 min Scan# 2208  
Delta R.T. 0.00 min  
Lab File: VW012480.D  
Acq: 02 Sep 2019 06:16

Instrument :  
MSVOA\_W  
ClientSampleId :  
T9-12-13-Q4-(1.9)

Tgt Ion:128 Resp: 1779  
Ion Ratio Lower Upper  
128 100  
127 20.6 10.7 16.1#  
129 1.1 8.7 13.1#

