

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW091519\  
 Data File : VW012993.D  
 Acq On : 14 Sep 2019 15:04  
 Operator : SY/VA  
 Sample : K4719-15  
 Misc : 5.37G/5ML/MSVOA W/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Sep 16 06:52:48 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W091419S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 13 17:26:01 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 105207   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 150701   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 119581   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 38450    | 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   | 56057    | 57.69 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 115.38% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 44402    | 54.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.60% |          |
| 50) Toluene-d8              | 10.32 | 98   | 174121   | 54.42 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.84% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 46760    | 40.64 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 81.28%  |          |

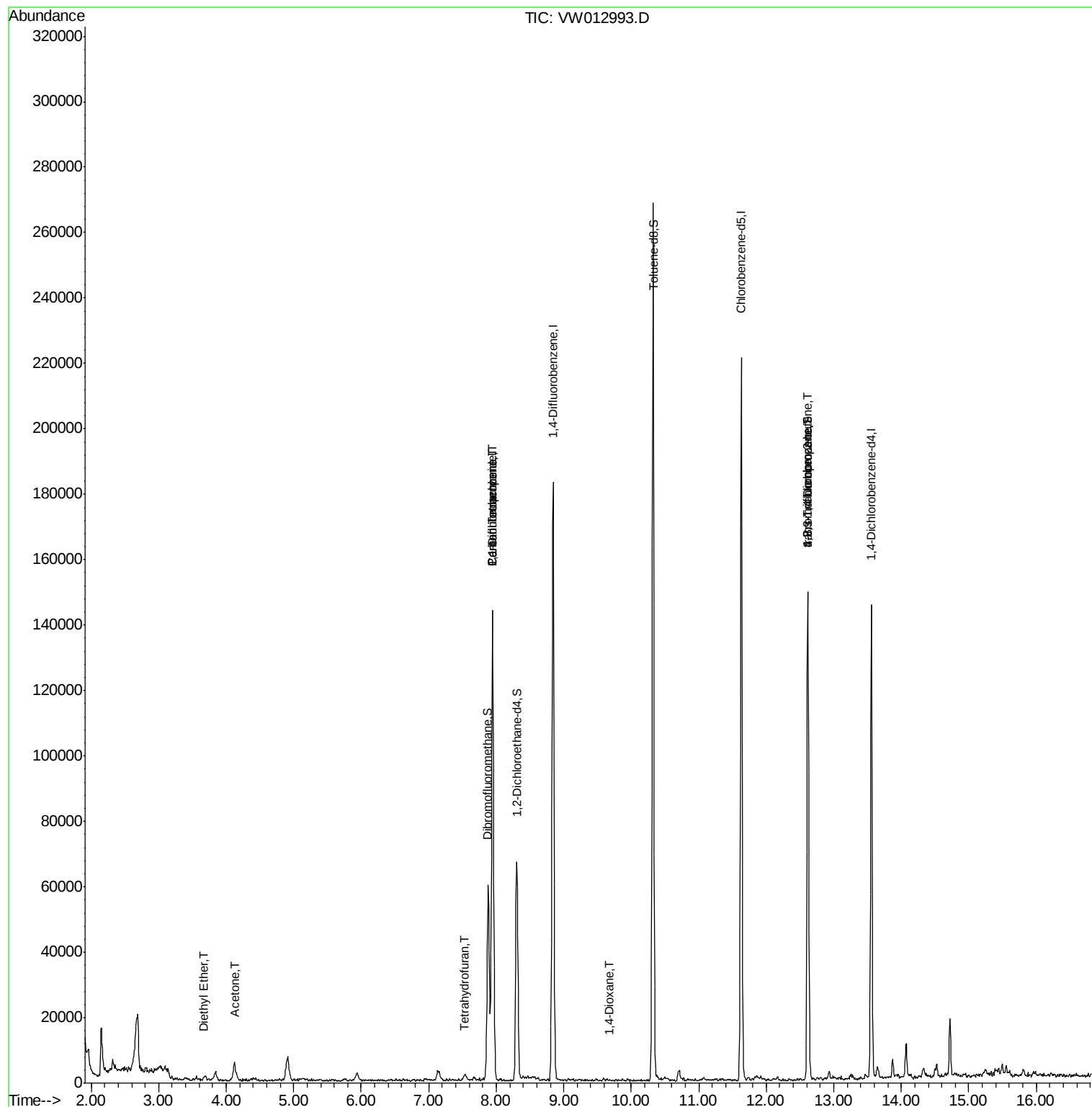
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 2.17  | 85   | 55       | Below Cal | #      | 44     |
| 3) Chloromethane               | 2.21  | 50   | 248      | Below Cal |        | 98     |
| 8) Diethyl Ether               | 3.67  | 74   | 416      | 1.012     | ug/l # | 11     |
| 11) Tert butyl alcohol         | 5.18  | 59   | 311      | Below Cal |        | 96     |
| 13) Acrolein                   | 3.87  | 56   | 28       | Below Cal | #      | 15     |
| 16) Acetone                    | 4.12  | 43   | 10216    | 31.358    | ug/l   | 93     |
| 26) 2,2-Dichloropropane        | 7.17  | 77   | 32       | Below Cal | #      | 55     |
| 29) Tetrahydrofuran            | 7.52  | 42   | 678      | 3.851     | ug/l # | 32     |
| 31) Cyclohexane                | 7.95  | 56   | 2307     | Below Cal | #      | 14     |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 7865     | 6.531     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 10311    | 8.355     | ug/l # | 15     |
| 49) 1,4-Dioxane                | 9.66  | 88   | 19       | 2.650     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 24210    | 71.884    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 24210    | 163.068   | ug/l # | 7      |

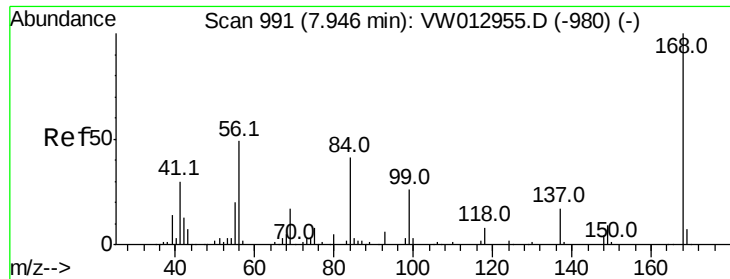
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW091519\  
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ClientSampleId :

Quant Time: Sep 16 06:52:48 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W091419S.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 13 17:26:01 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: VW012993.D

Acq: 14 Sep 2019 15:04

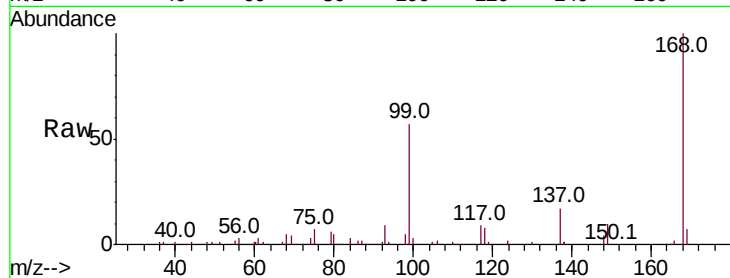
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion:168 Resp: 105207

Ion Ratio Lower Upper

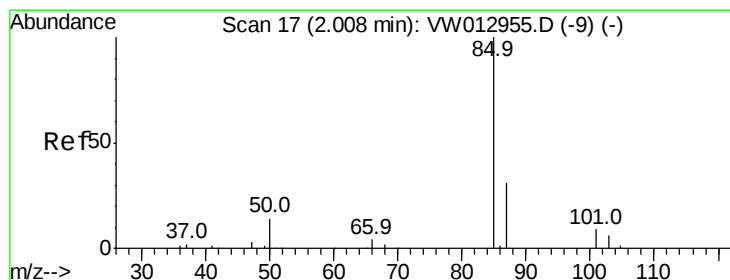
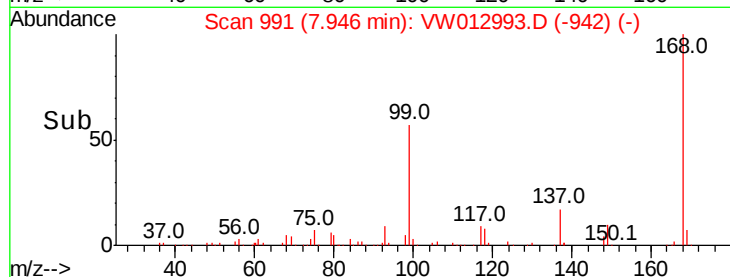
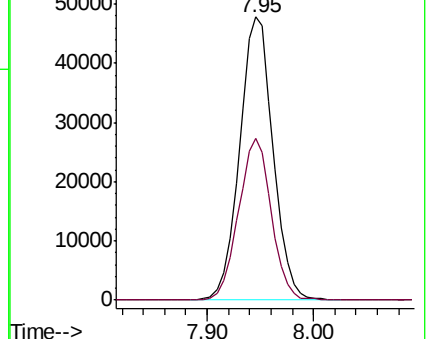
168 100

99 57.2 46.2 69.2



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: 2.17 min Scan# 44

Delta R.T. 0.17 min

Lab File: VW012993.D

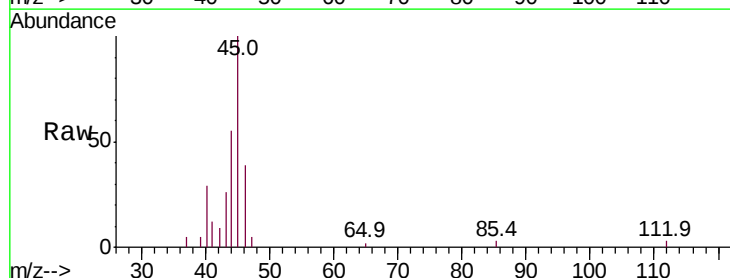
Acq: 14 Sep 2019 15:04

Tgt Ion: 85 Resp: 55

Ion Ratio Lower Upper

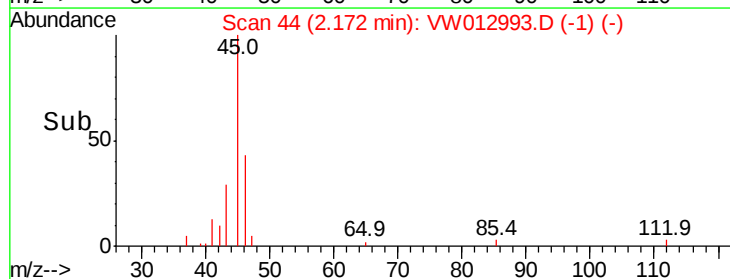
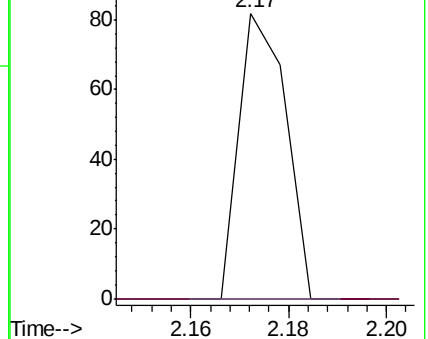
85 100

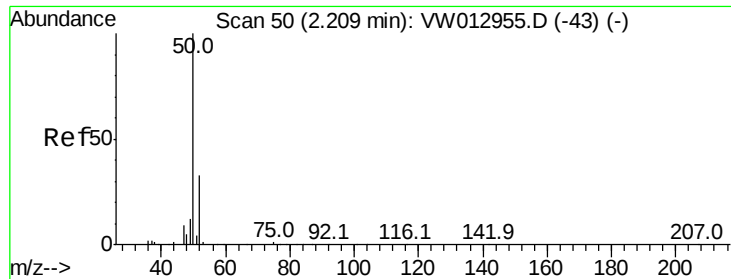
87 0.0 15.4 46.4#



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW





#3

Chloromethane

Concen: Below Cal

RT: 2.21 min Scan# 51

Delta R.T. 0.01 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

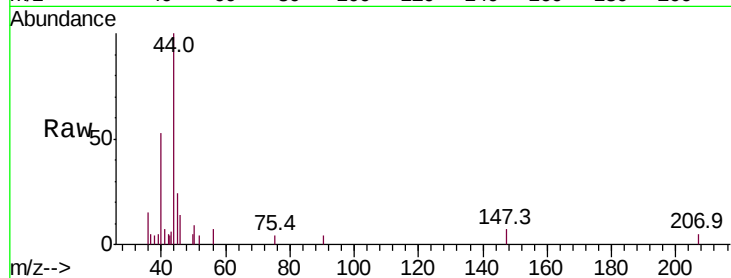
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 50 Resp: 248

Ion Ratio Lower Upper

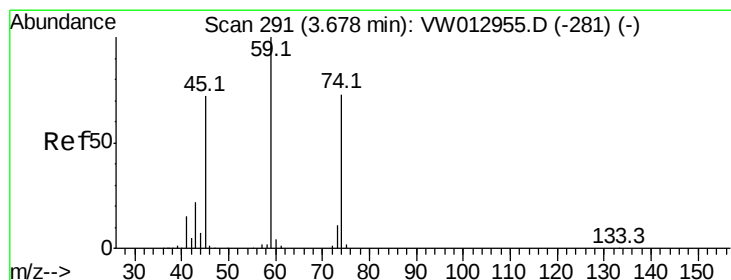
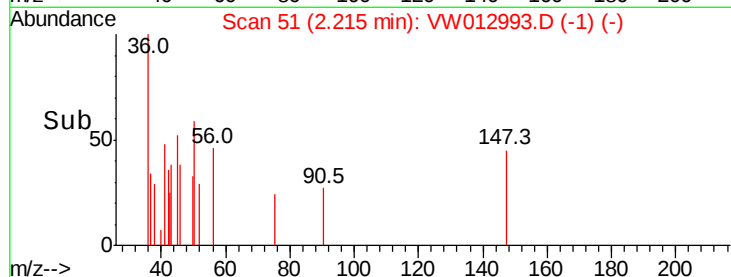
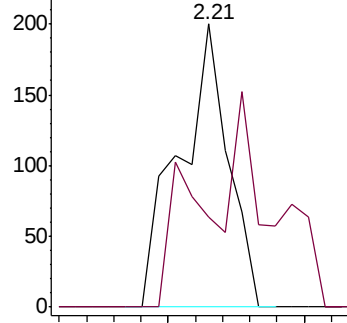
50 100

52 32.0 26.6 39.8



Abundance Ion 49.90 (49.60 to 50.60): VW

Ion 51.90 (51.60 to 52.60): VW



#8

Diethyl Ether

Concen: 1.012 ug/l

RT: 3.67 min Scan# 289

Delta R.T. -0.01 min

Lab File: VW012993.D

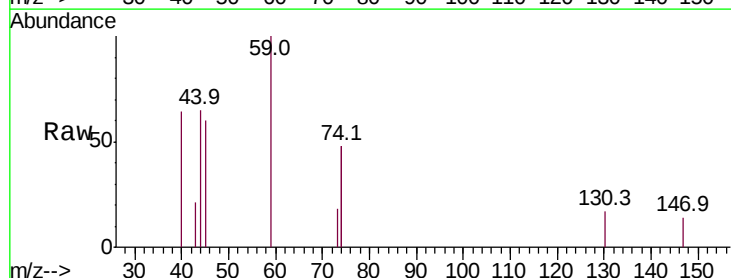
Acq: 14 Sep 2019 15:04

Tgt Ion: 74 Resp: 416

Ion Ratio Lower Upper

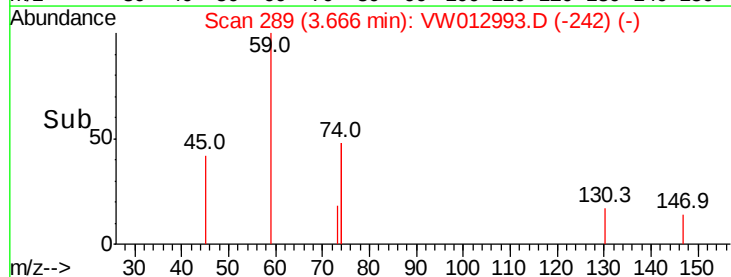
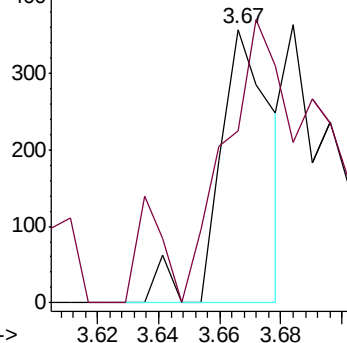
74 100

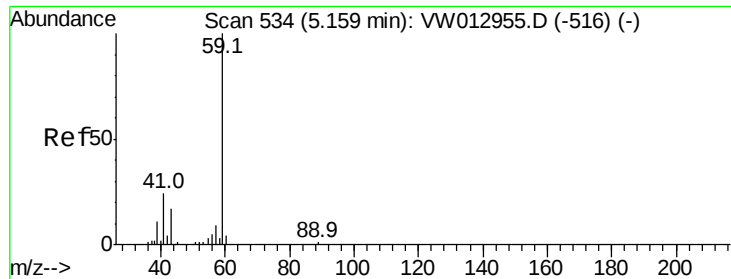
45 200.5 53.8 161.4#



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW



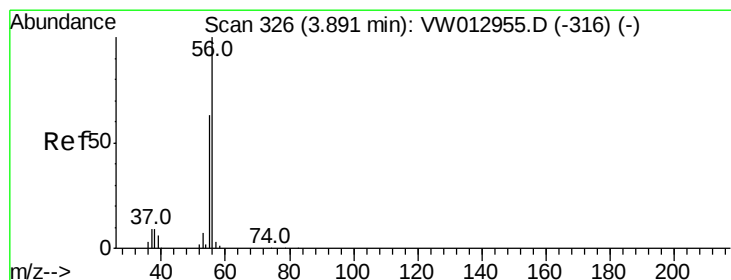
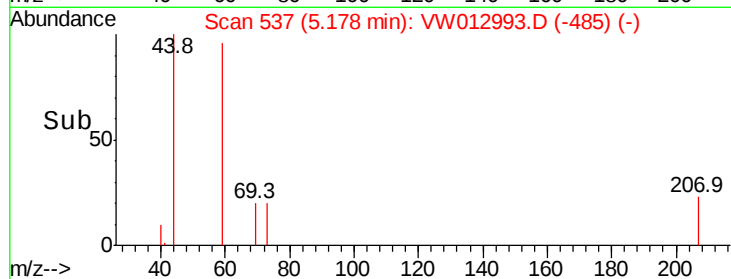
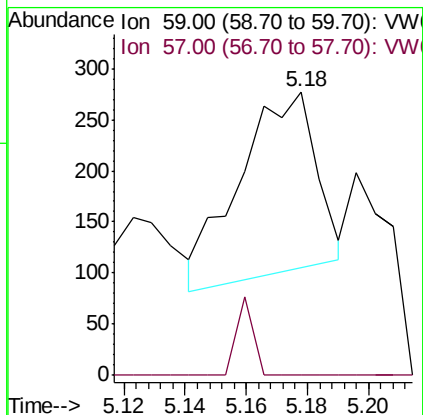
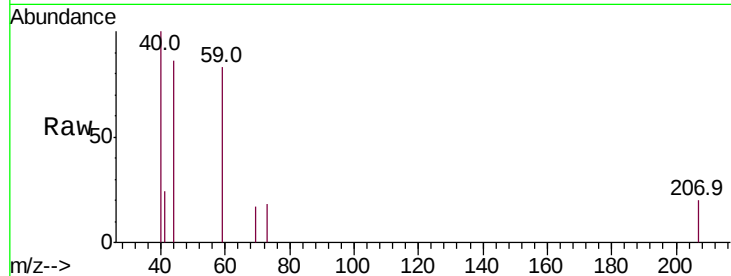


#11

Tert butyl alcohol  
Concen: Below Cal  
RT: 5.18 min Scan# 537  
Delta R.T. 0.02 min  
Lab File: VW012993.D  
Acq: 14 Sep 2019 15:04

Instrument :  
MSVOA\_W  
ClientSampled :

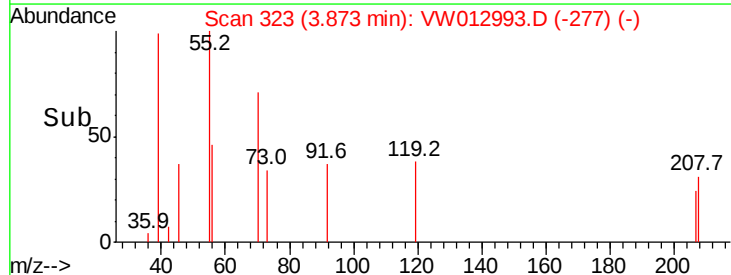
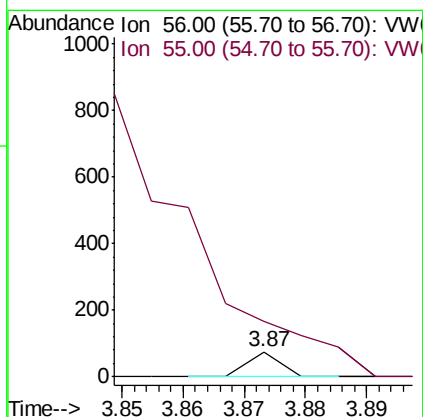
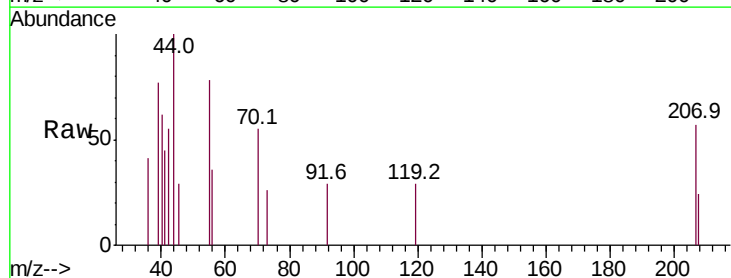
Tot Ion: 59 Resp: 311  
Ion Ratio Lower Upper  
59 100  
57 9.0 8.5 12.7

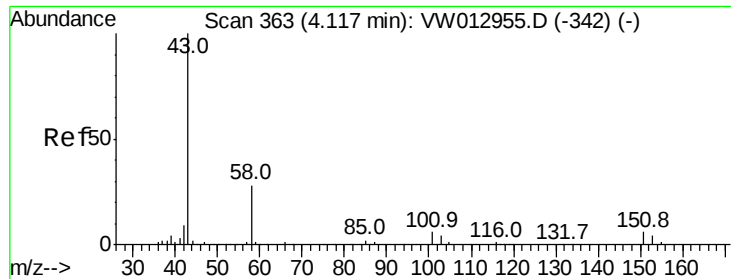


#13

Acrolein  
Concen: Below Cal  
RT: 3.87 min Scan# 323  
Delta R.T. -0.02 min  
Lab File: VW012993.D  
Acq: 14 Sep 2019 15:04

Tgt Ion: 56 Resp: 28  
Ion Ratio Lower Upper  
56 100  
55 0.0 55.8 83.8#





#16

Acetone

Concen: 31.358 ug/l

RT: 4.12 min Scan# 364

Delta R.T. 0.01 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

Instrument :

MSVOA\_W

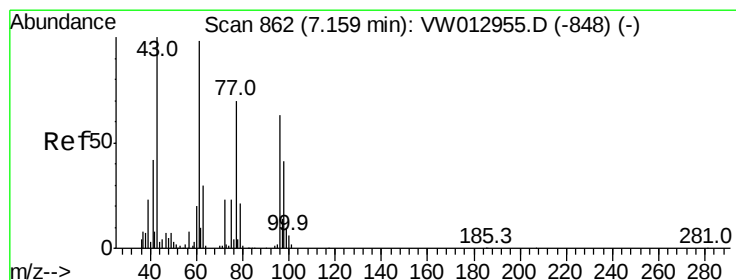
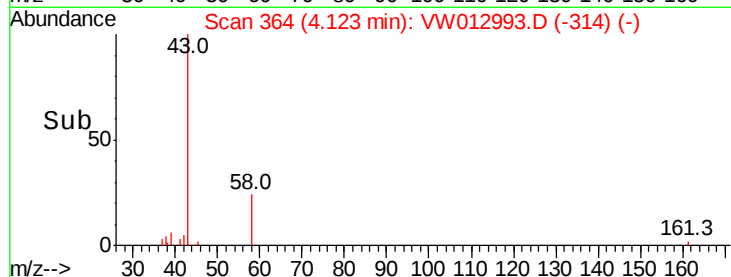
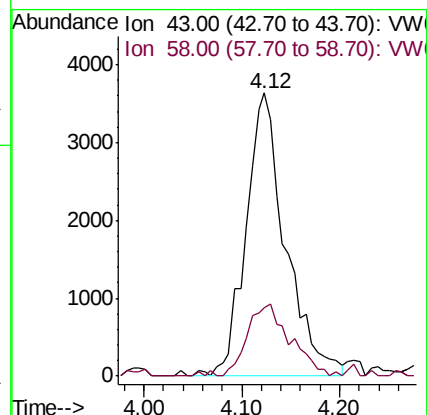
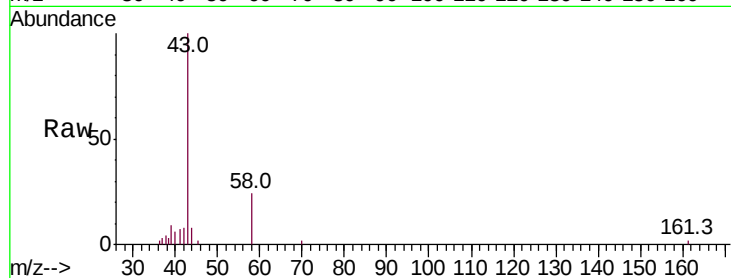
ClientSampled :

Tot Ion: 43 Resp: 10216

Ion Ratio Lower Upper

43 100

58 24.1 22.3 33.5



#26

2,2-Dichloropropane

Concen: Below Cal

RT: 7.17 min Scan# 863

Delta R.T. 0.01 min

Lab File: VW012993.D

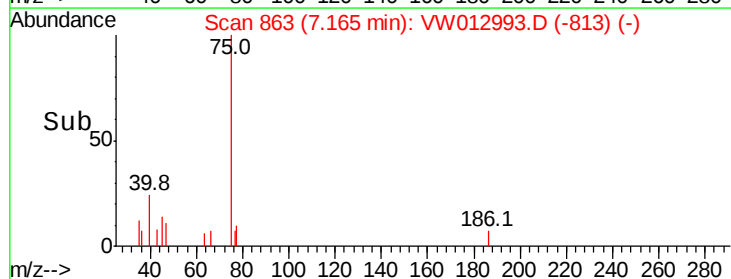
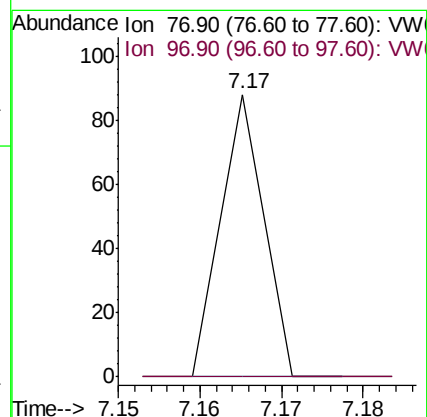
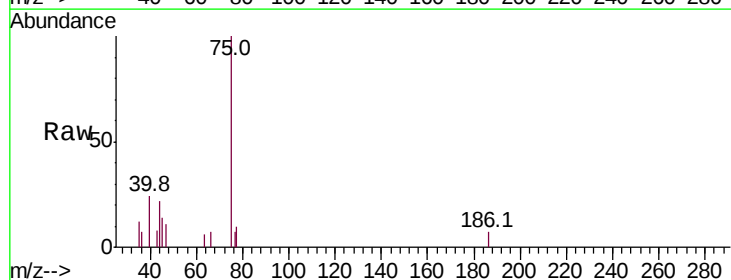
Acq: 14 Sep 2019 15:04

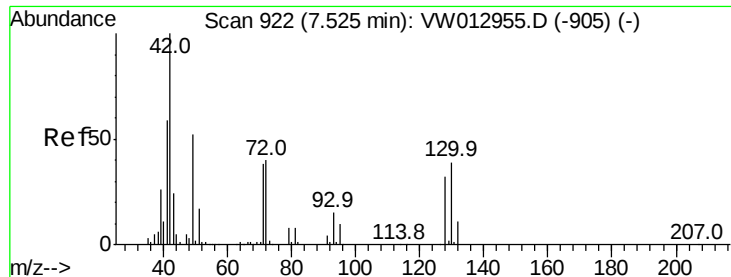
Tgt Ion: 77 Resp: 32

Ion Ratio Lower Upper

77 100

97 0.0 10.7 32.1#

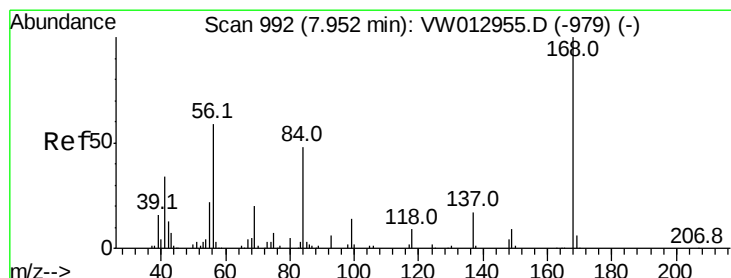
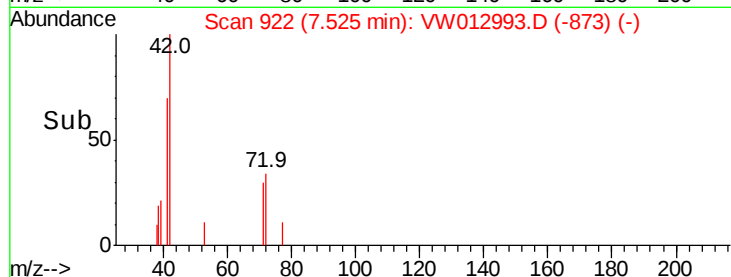
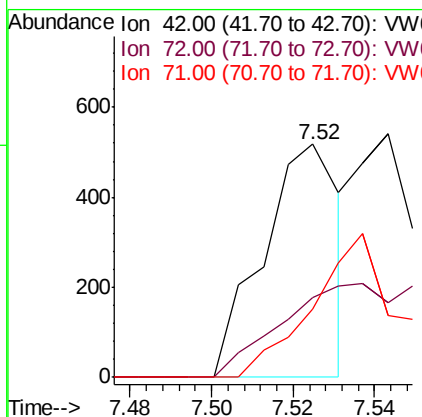
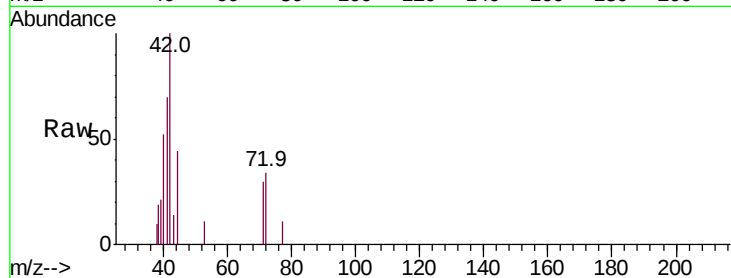




#29  
Tetrahydrofuran  
Concen: 3.851 ug/l  
RT: 7.52 min Scan# 922  
Delta R.T. 0.00 min  
Lab File: VW012993.D  
Acq: 14 Sep 2019 15:04

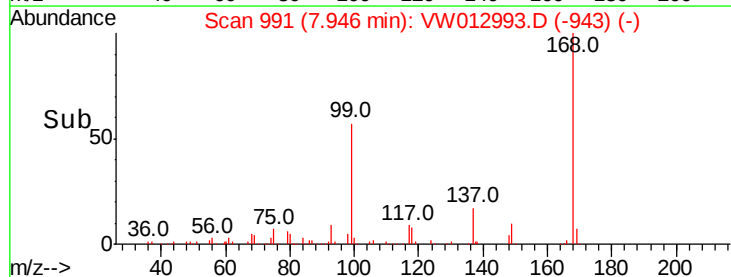
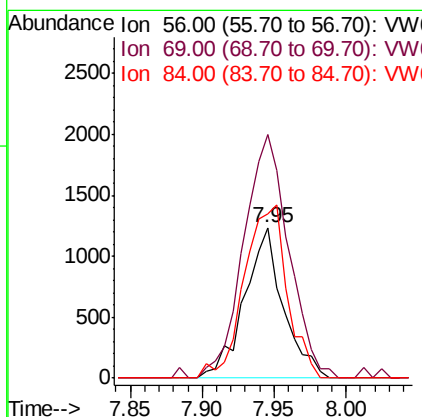
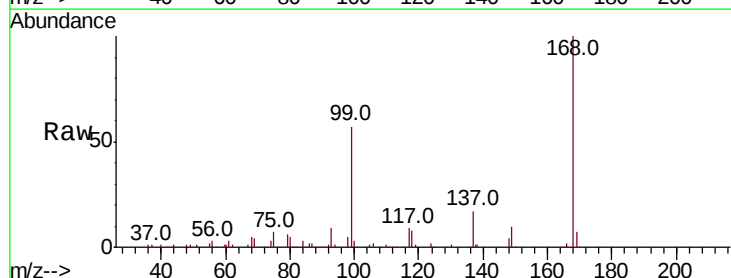
Instrument :  
MSVOA\_W  
ClientSampleId :

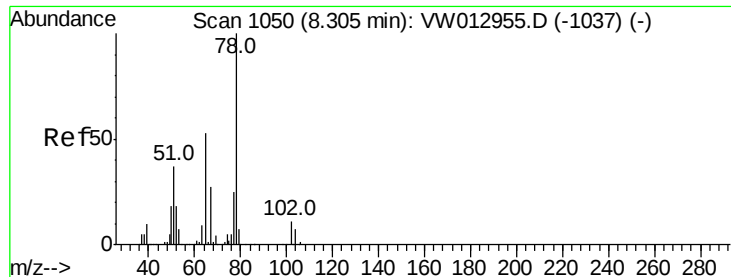
Tot Ion: 42 Resp: 678  
Ion Ratio Lower Upper  
42 100  
72 86.4 31.4 47.0#  
71 72.7 29.8 44.8#



#31  
Cyclohexane  
Concen: Below Cal  
RT: 7.95 min Scan# 991  
Delta R.T. -0.01 min  
Lab File: VW012993.D  
Acq: 14 Sep 2019 15:04

Tgt Ion: 56 Resp: 2307  
Ion Ratio Lower Upper  
56 100  
69 161.9 27.0 40.6#  
84 109.2 66.2 99.2#





#33

1,2-Dichloroethane-d4

Concen: 57.692 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. 0.00 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

Instrument :

MSVOA\_W

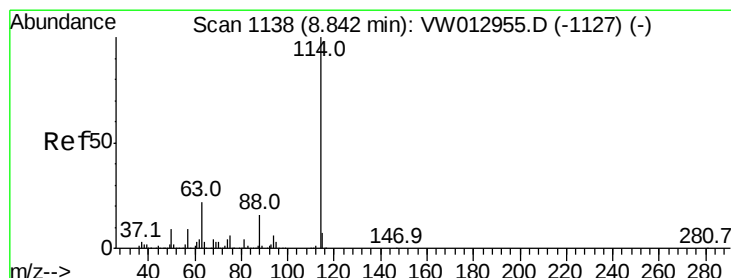
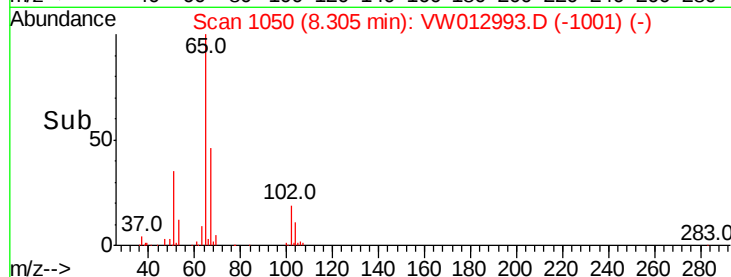
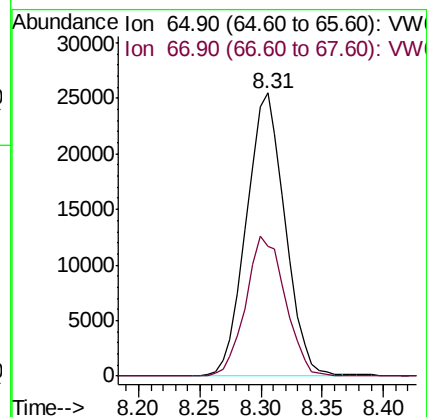
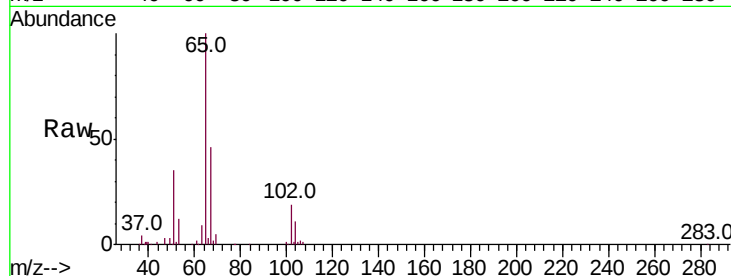
ClientSampled :

Tot Ion: 65 Resp: 56057

Ion Ratio Lower Upper

65 100

67 50.3 0.0 101.2



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. 0.00 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

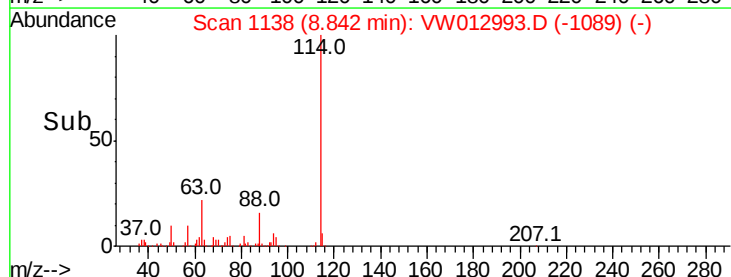
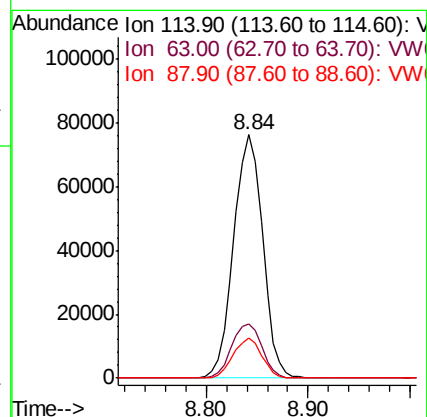
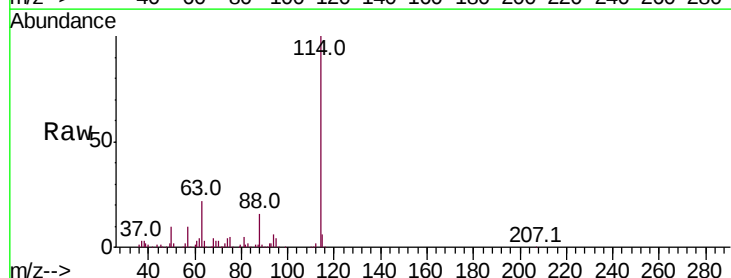
Tgt Ion: 114 Resp: 150701

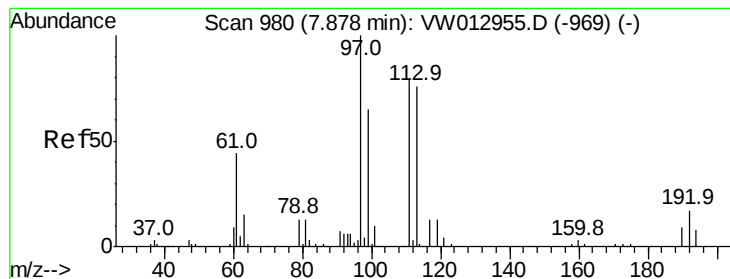
Ion Ratio Lower Upper

114 100

63 22.1 0.0 43.4

88 16.3 0.0 31.6





#35

Dibromofluoromethane

Concen: 54.300 ug/l

RT: 7.88 min Scan# 980

Delta R.T. 0.00 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

Instrument :

MSVOA\_W

ClientSampleId :

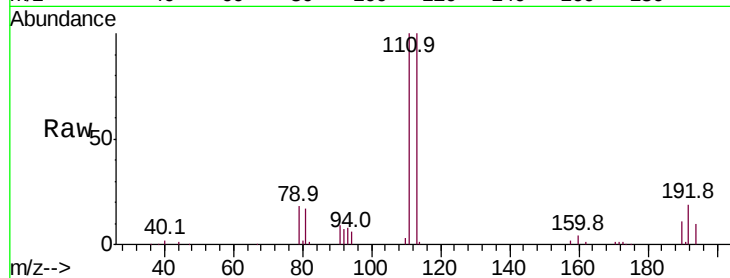
Tot Ion:113 Resp: 44402

Ion Ratio Lower Upper

113 100

111 100.4 82.8 124.2

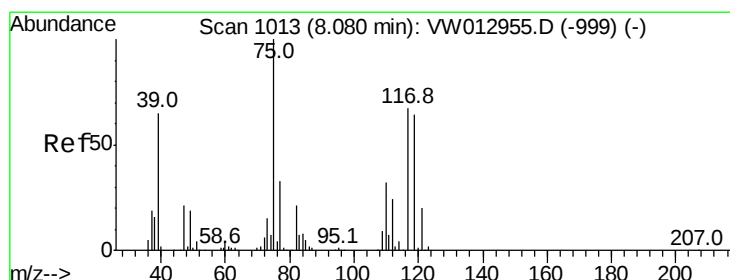
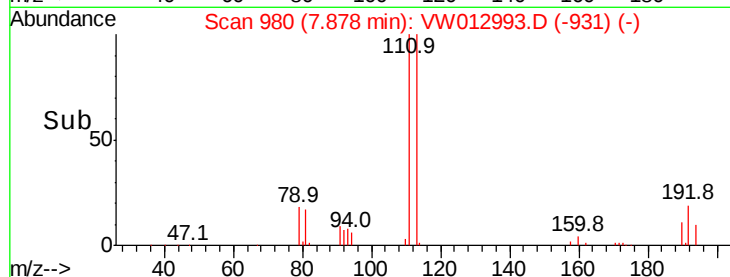
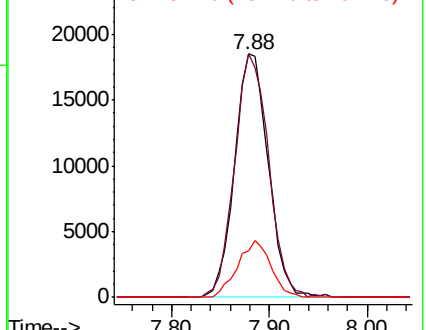
192 22.9 17.8 26.8



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: 6.531 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.13 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

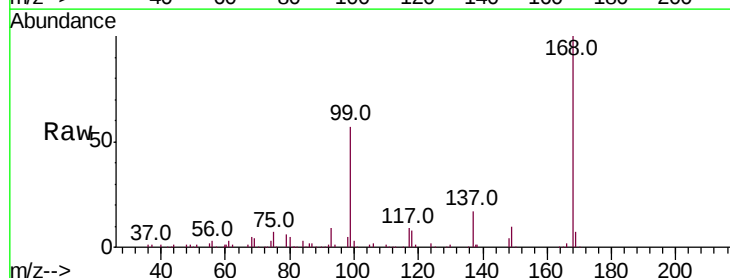
Tgt Ion: 75 Resp: 7865

Ion Ratio Lower Upper

75 100

110 8.7 16.4 49.1#

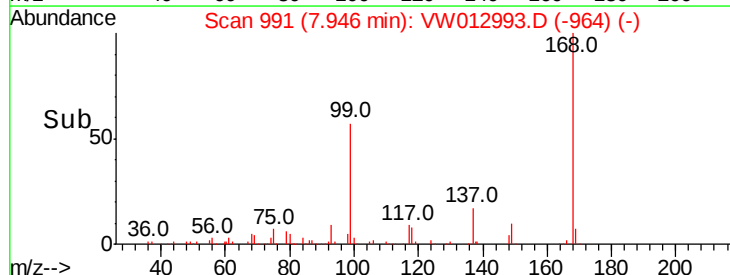
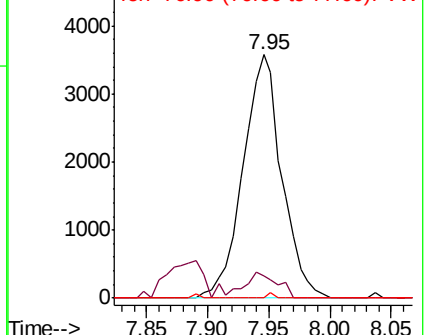
77 0.4 25.1 37.7#

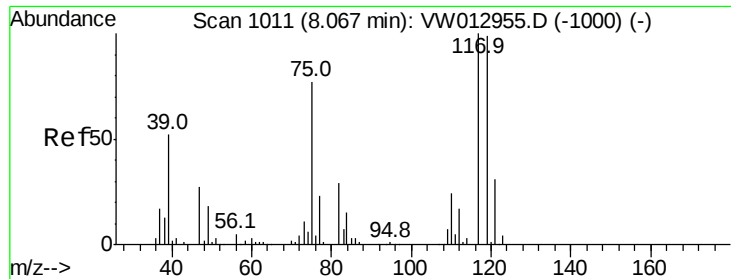


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW





#38

Carbon Tetrachloride

Concen: 8.355 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.12 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

Instrument :

MSVOA\_W

ClientSampleId :

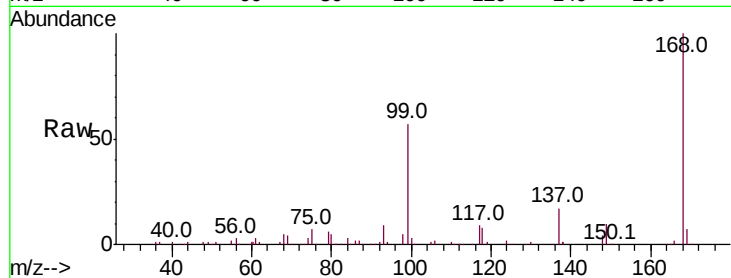
Tot Ion:117 Resp: 10311

Ion Ratio Lower Upper

117 100

119 6.0 79.4 119.0#

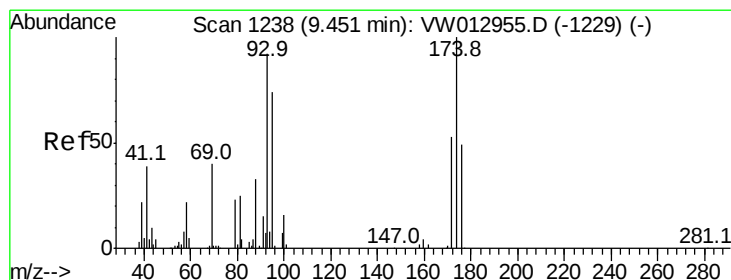
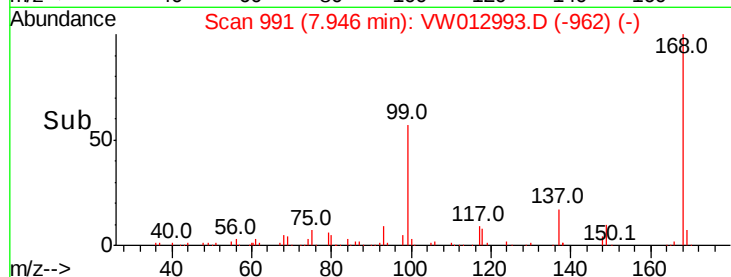
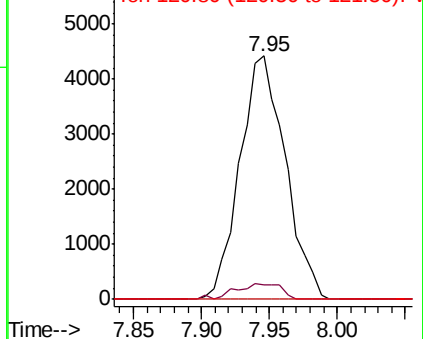
121 0.0 24.6 36.8#



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



#49

1,4-Dioxane

Concen: 2.650 ug/l

RT: 9.66 min Scan# 1273

Delta R.T. 0.21 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

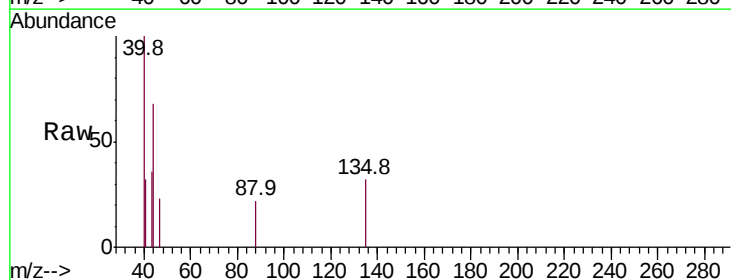
Tgt Ion: 88 Resp: 19

Ion Ratio Lower Upper

88 100

43 631.6 31.3 46.9#

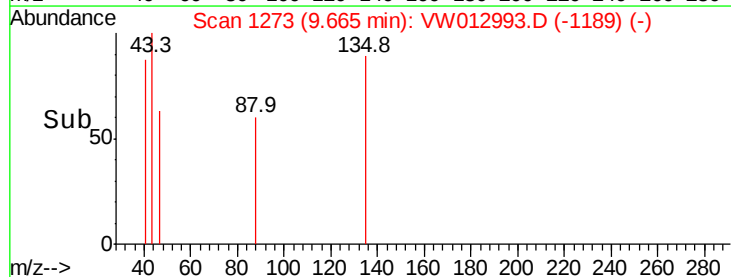
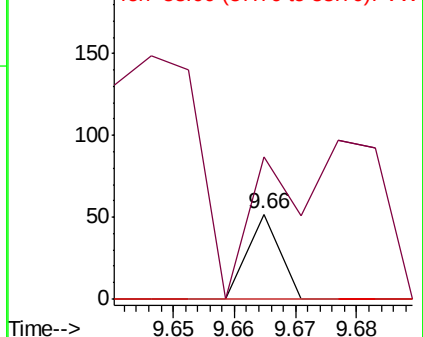
58 0.0 60.2 90.2#

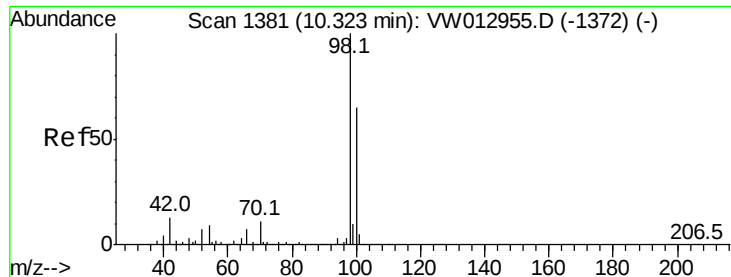


Abundance Ion 88.00 (87.70 to 88.70): VW

Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

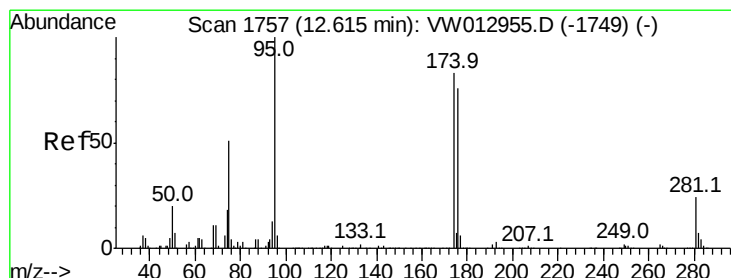
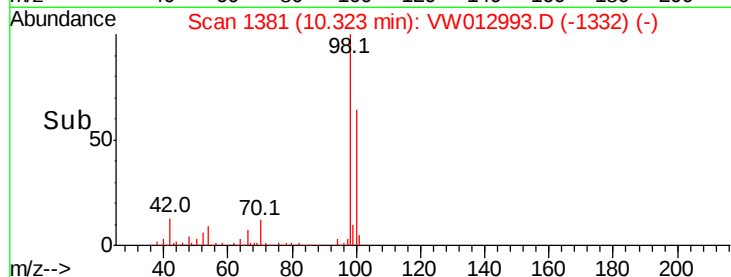
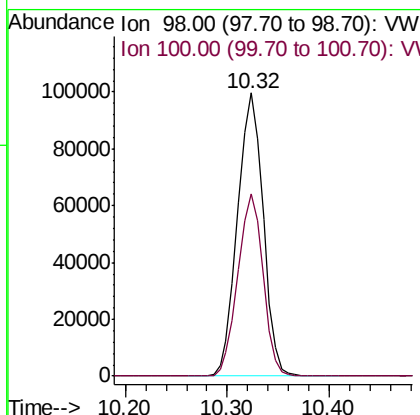
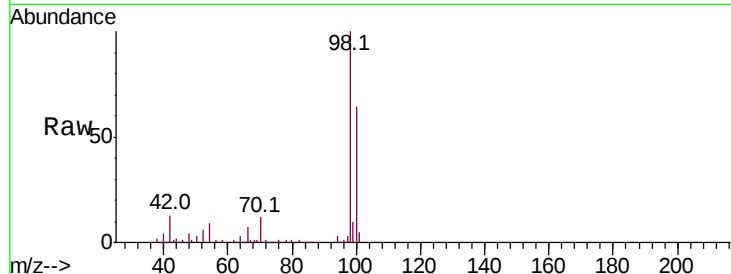




#50  
Toluene-d8  
Concen: 54.416 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. 0.00 min  
Lab File: VW012993.D  
Acq: 14 Sep 2019 15:04

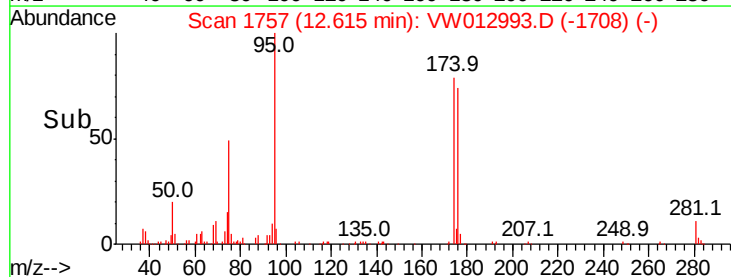
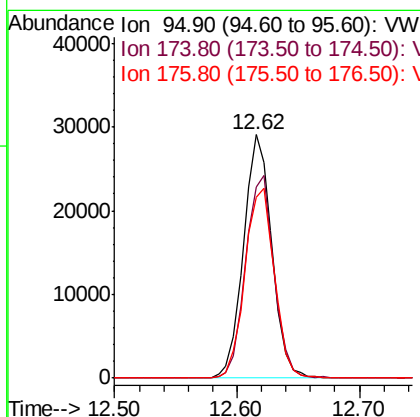
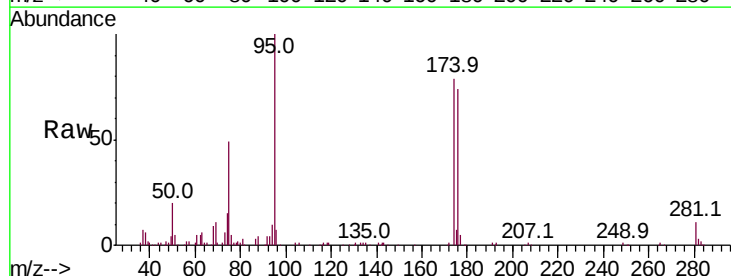
Instrument :  
MSVOA\_W  
ClientSampled :

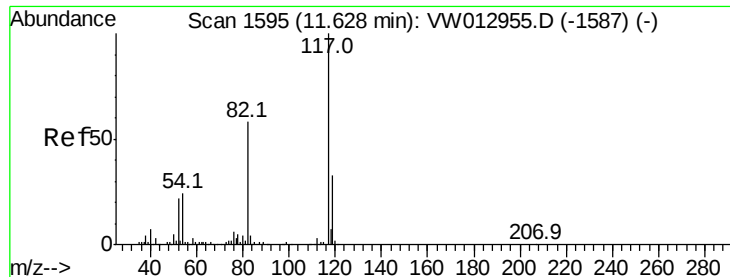
Tot Ion: 98 Resp: 174121  
Ion Ratio Lower Upper  
98 100  
100 63.0 52.1 78.1



#62  
4-Bromofluorobenzene  
Concen: 40.640 ug/l  
RT: 12.62 min Scan# 1757  
Delta R.T. 0.00 min  
Lab File: VW012993.D  
Acq: 14 Sep 2019 15:04

Tgt Ion: 95 Resp: 46760  
Ion Ratio Lower Upper  
95 100  
174 83.6 0.0 170.4  
176 81.1 0.0 164.6





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.63 min Scan# 1595

Delta R.T. 0.00 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

Instrument :

MSVOA\_W

ClientSampleId :

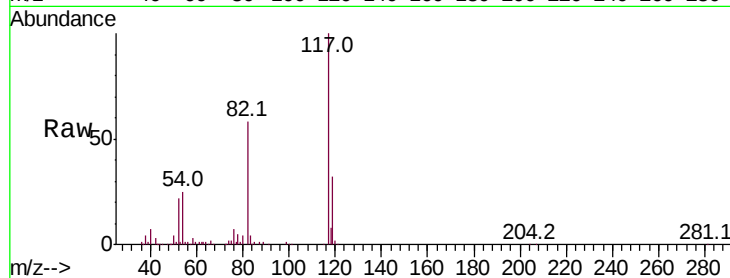
Tot Ion:117 Resp: 119581

Ion Ratio Lower Upper

117 100

82 57.8 46.3 69.5

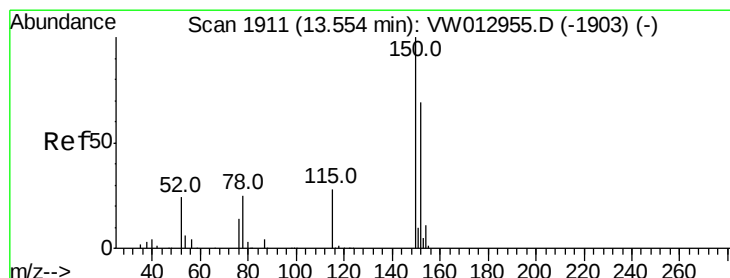
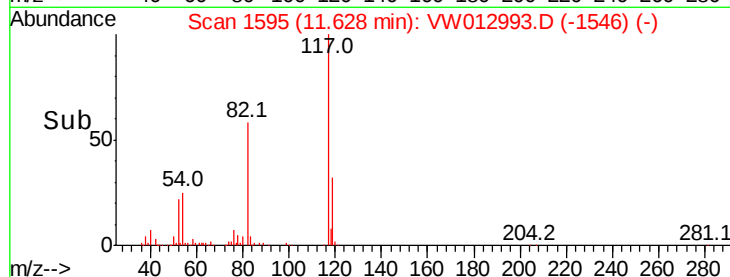
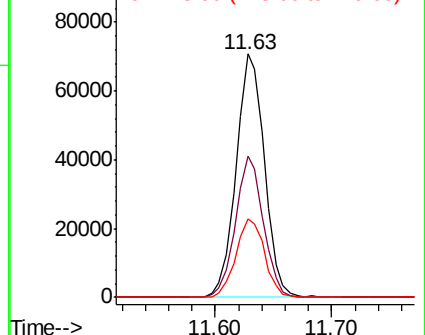
119 32.2 26.2 39.4



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. 0.01 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

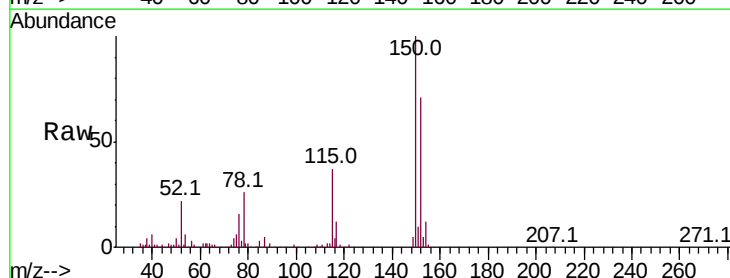
Tgt Ion:152 Resp: 38450

Ion Ratio Lower Upper

152 100

115 57.7 28.8 86.4

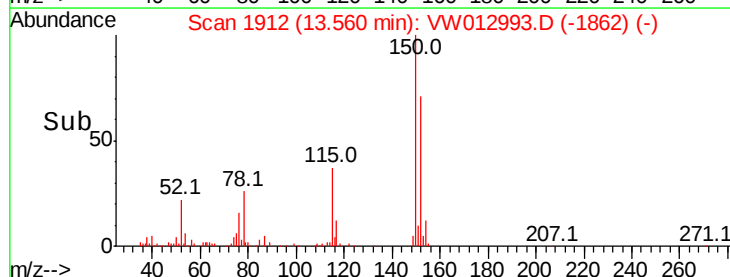
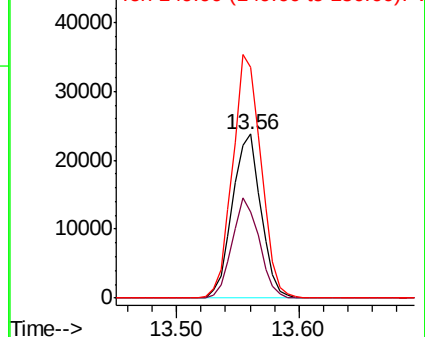
150 147.2 0.0 340.2

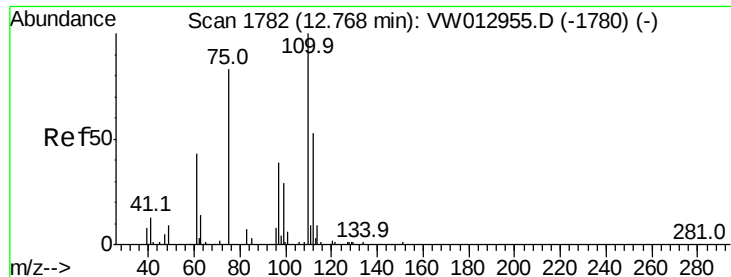


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 71.884 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

Instrument :

MSVOA\_W

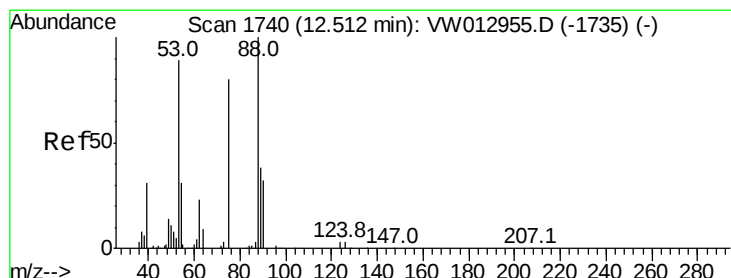
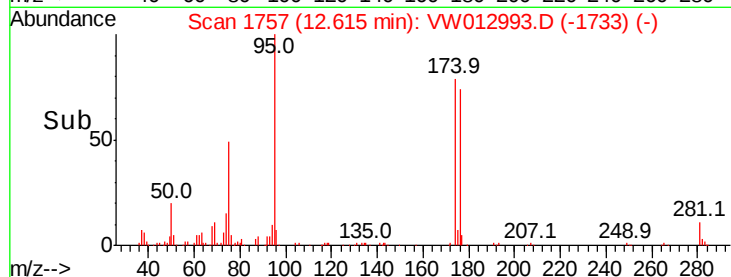
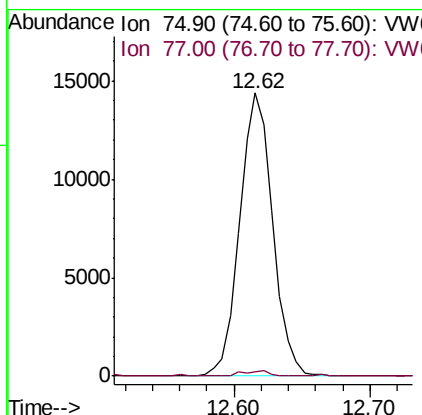
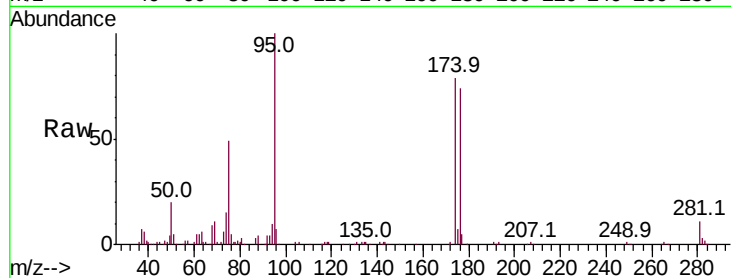
ClientSampleId :

Tot Ion: 75 Resp: 24210

Ion Ratio Lower Upper

75 100

77 1.6 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 163.068 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW012993.D

Acq: 14 Sep 2019 15:04

Tgt Ion: 75 Resp: 24210

Ion Ratio Lower Upper

75 100

53 0.1 85.6 128.4#

89 0.0 37.2 55.8#

