

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW081719\  
 Data File : VW011967.D  
 Acq On : 16 Aug 2019 16:09  
 Operator : SY/VA  
 Sample : K4366-04  
 Misc : 5.49G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 PX-4

Quant Time: Aug 17 05:00:21 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W072719S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jul 27 00:23:30 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 228969   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 379344   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 321408   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 137818   | 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   | 142553   | 54.22 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 108.44% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 114251   | 53.68 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 107.36% |          |
| 50) Toluene-d8              | 10.32 | 98   | 468361   | 53.75 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 107.50% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 153802   | 49.51 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 99.02%  |          |

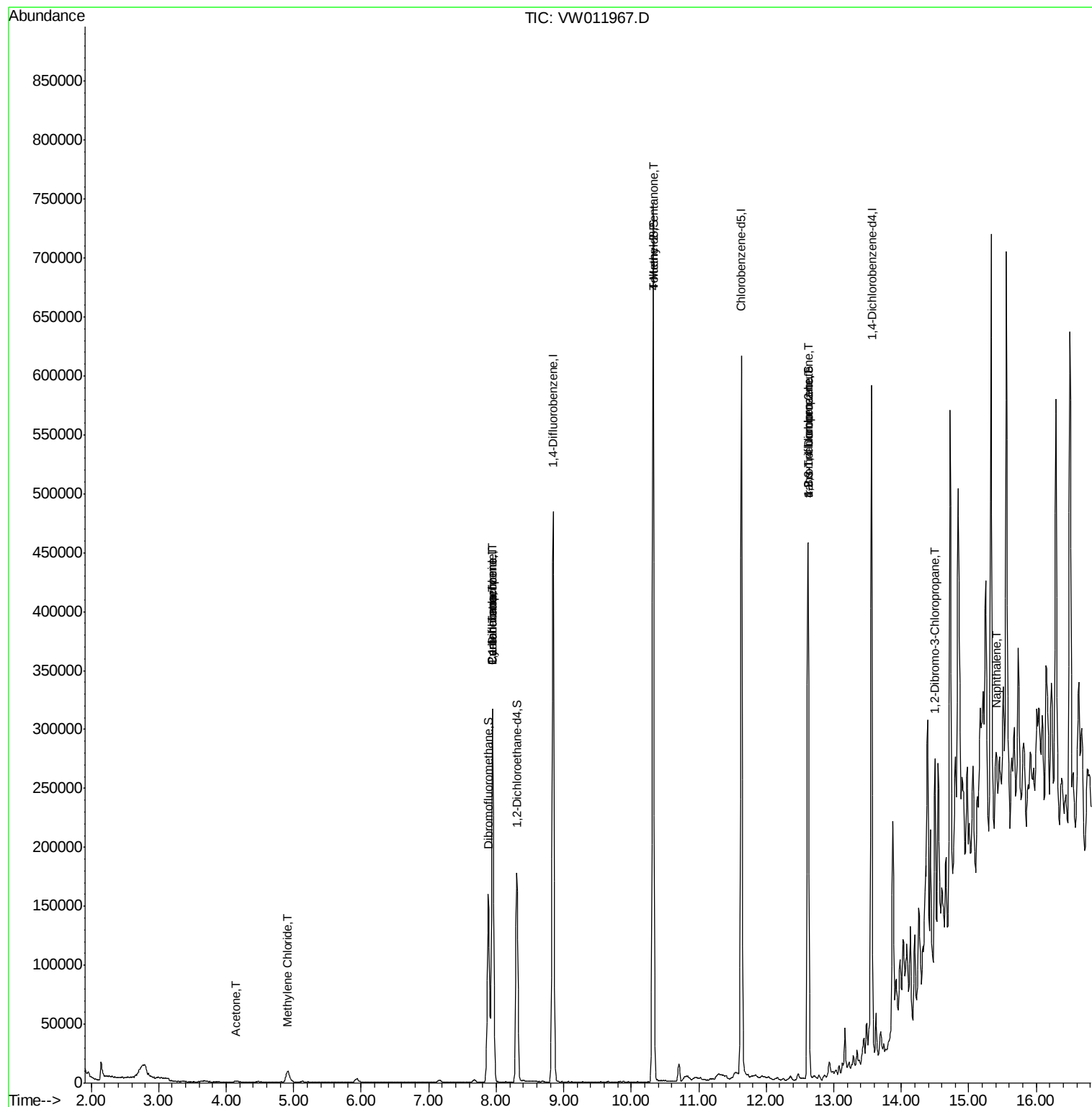
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.13  | 59   | 272      | Below Cal | #      | 72     |
| 16) Acetone                    | 4.14  | 43   | 1655     | 1.979     | ug/l # | 79     |
| 20) Methylene Chloride         | 4.90  | 84   | 7166     | 2.484     | ug/l   | 94     |
| 31) Cyclohexane                | 7.95  | 56   | 5456     | 1.110     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 19561    | 4.959     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 22799    | 6.752     | ug/l # | 17     |
| 51) 4-Methyl-2-Pentanone       | 10.32 | 43   | 2927     | 1.348     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 81724    | 56.042    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 81724    | 129.157   | ug/l # | 6      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.50 | 75   | 362      | 1.098     | ug/l # | 40     |
| 95) Naphthalene                | 15.41 | 128  | 199      | 2.101     | ug/l # | 1      |

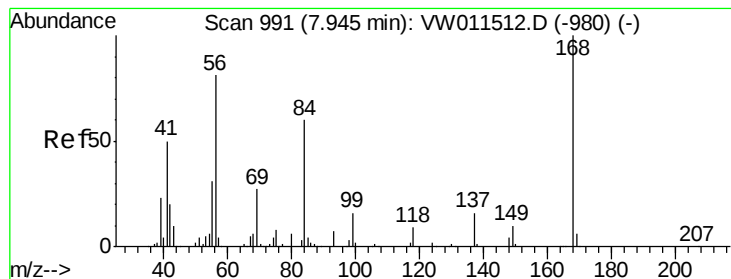
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_W  
ClientSampled :  
PX-4

Quant Time: Aug 17 05:00:21 2019  
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Quant Title : SW846 8260  
QLast Update : Sat Jul 27 00:23:30 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: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampleId :

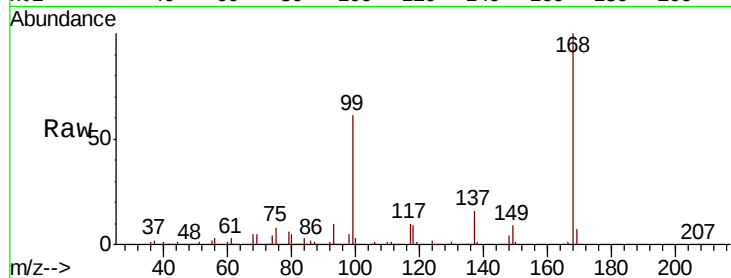
PX-4

Tgt Ion:168 Resp: 228969

Ion Ratio Lower Upper

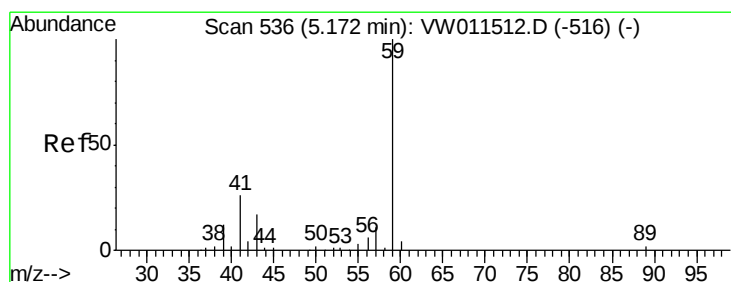
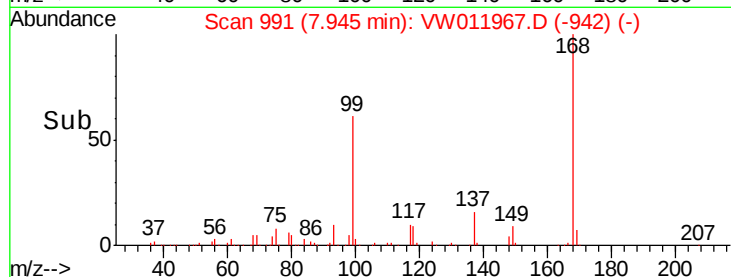
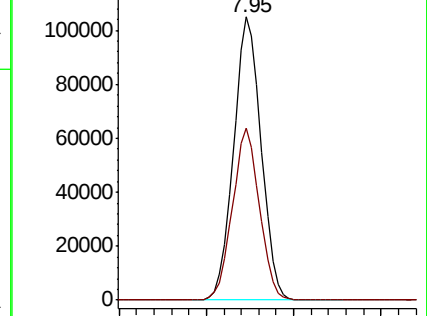
168 100

99 60.7 48.2 72.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.13 min Scan# 529

Delta R.T. -0.04 min

Lab File: VW011967.D

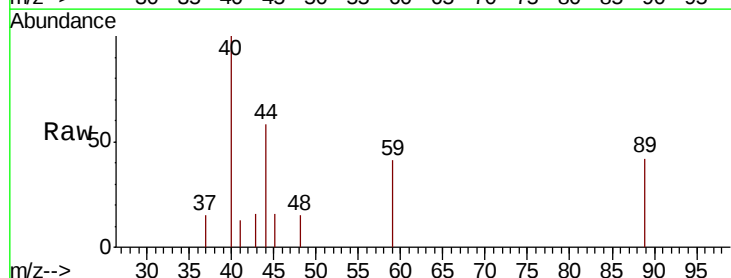
Acq: 16 Aug 2019 16:09

Tgt Ion: 59 Resp: 272

Ion Ratio Lower Upper

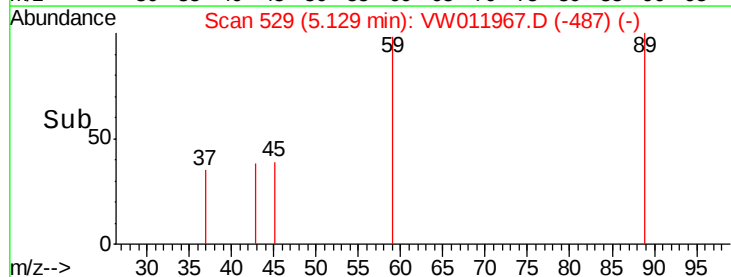
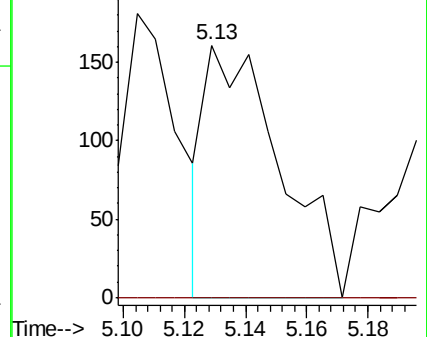
59 100

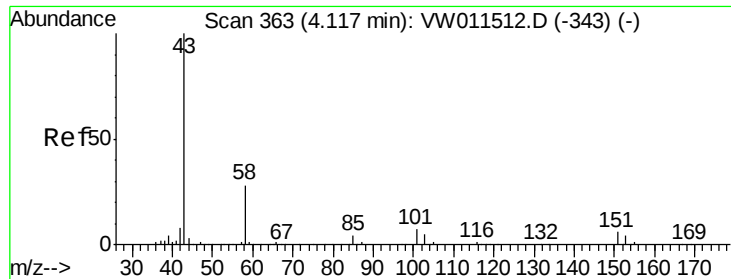
57 0.0 8.5 12.7#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW





#16

Acetone

Concen: 1.979 ug/l

RT: 4.14 min Scan# 367

Delta R.T. 0.02 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampled :

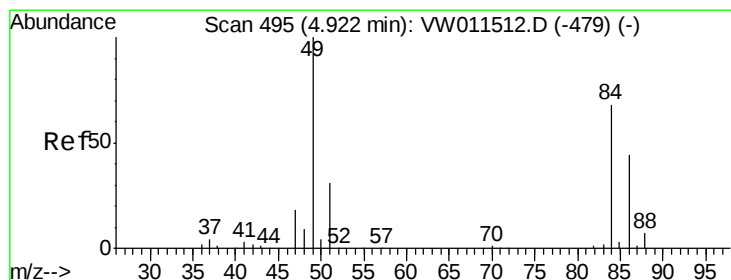
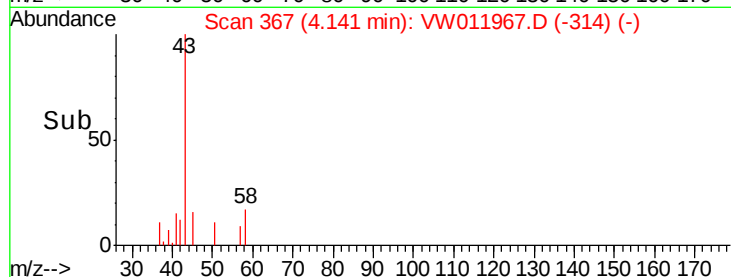
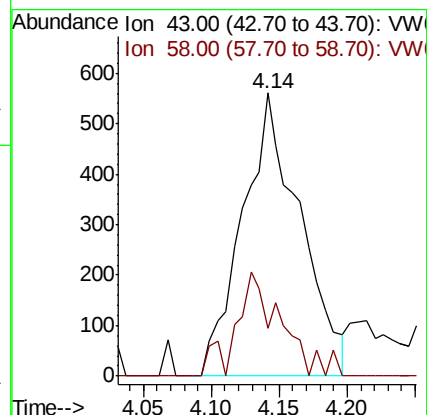
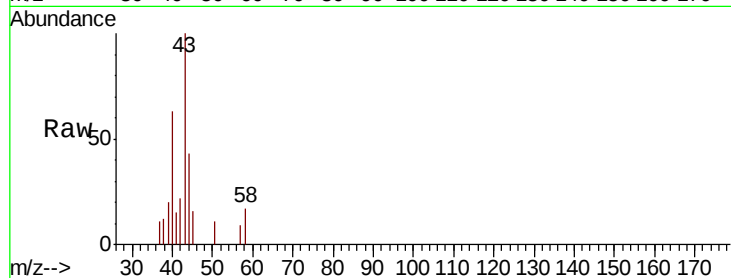
PX-4

Tgt Ion: 43 Resp: 1655

Ion Ratio Lower Upper

43 100

58 16.9 22.3 33.5#



#20

Methylene Chloride

Concen: 2.484 ug/l

RT: 4.90 min Scan# 492

Delta R.T. -0.02 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Tgt Ion: 84 Resp: 7166

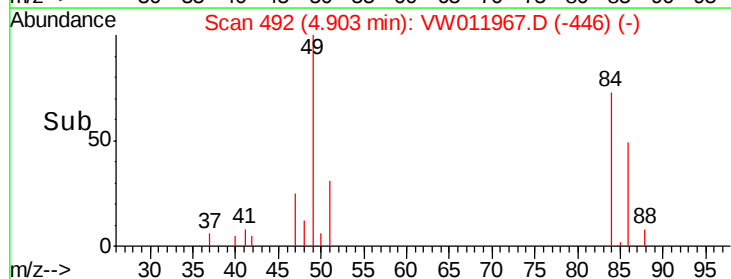
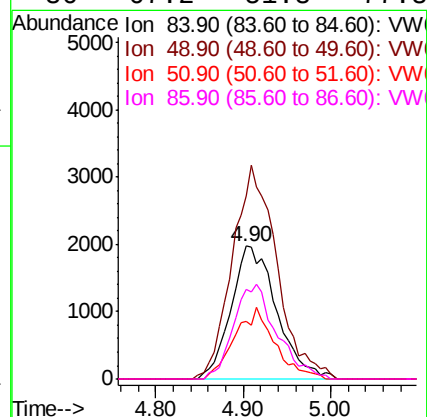
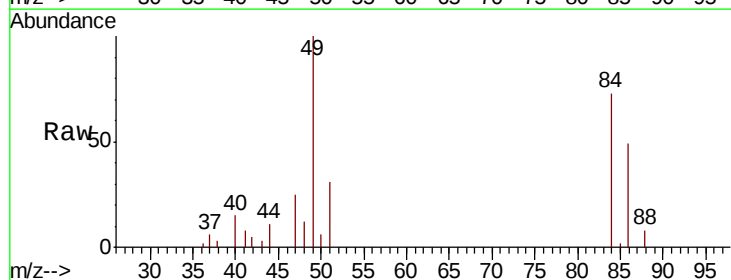
Ion Ratio Lower Upper

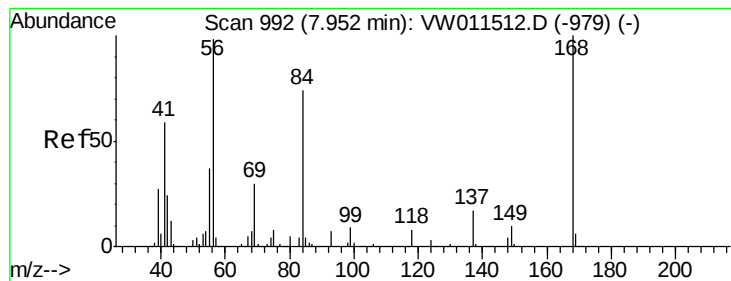
84 100

49 137.8 117.8 176.6

51 43.1 37.0 55.4

86 67.2 51.8 77.8





#31

Cyclohexane

Concen: 1.110 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampled :

PX-4

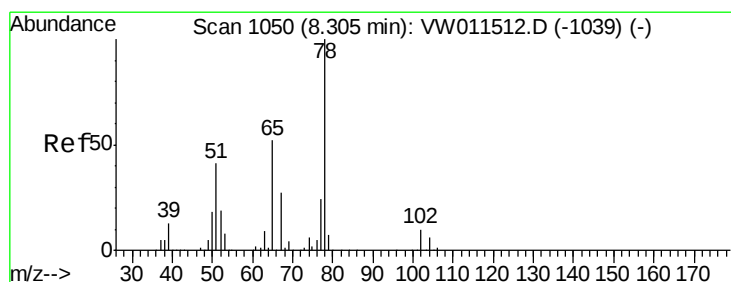
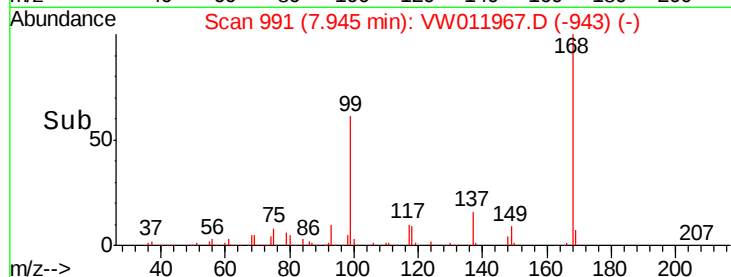
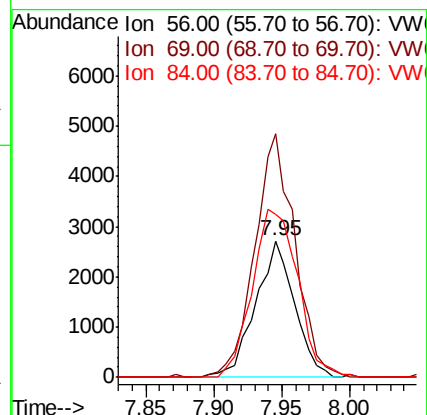
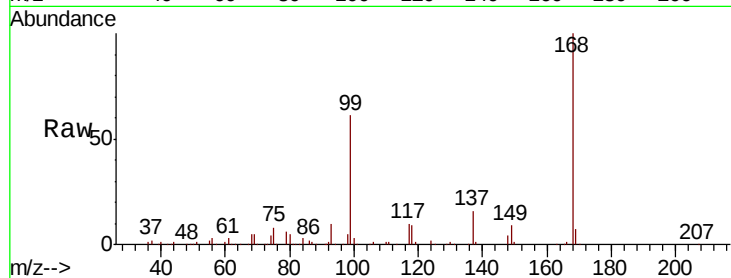
Tgt Ion: 56 Resp: 5456

Ion Ratio Lower Upper

56 100

69 178.9 24.3 36.5#

84 119.4 60.4 90.6#



#33

1,2-Dichloroethane-d4

Concen: 54.219 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VW011967.D

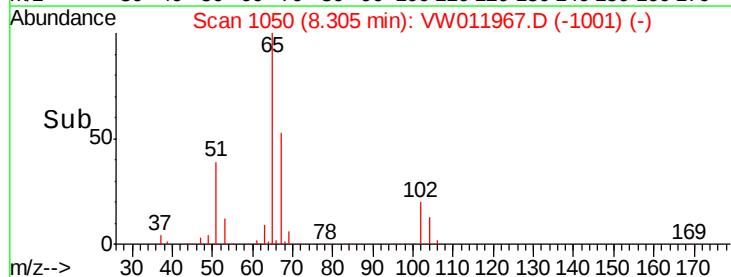
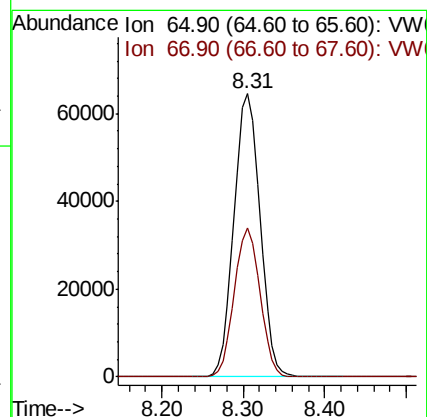
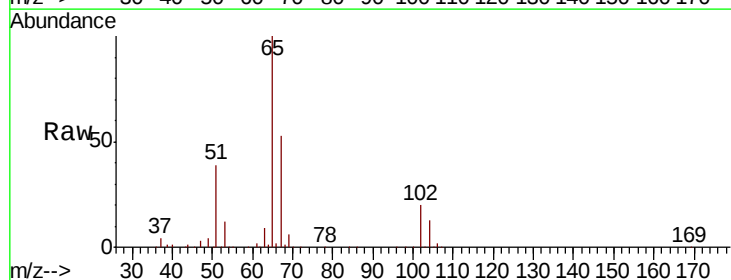
Acq: 16 Aug 2019 16:09

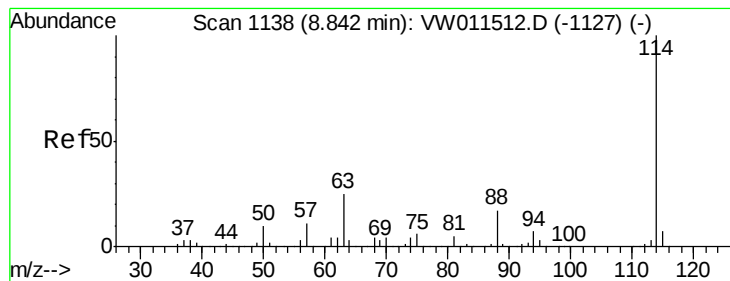
Tgt Ion: 65 Resp: 142553

Ion Ratio Lower Upper

65 100

67 52.0 0.0 105.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. -0.00 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampled :

PX-4

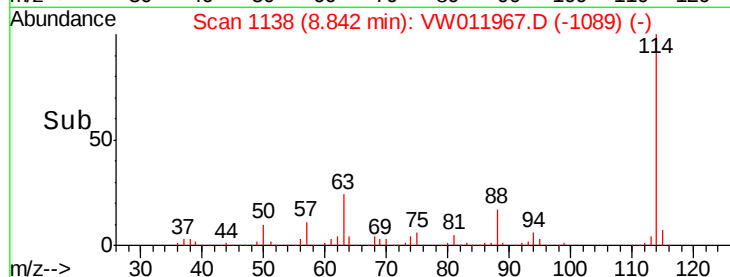
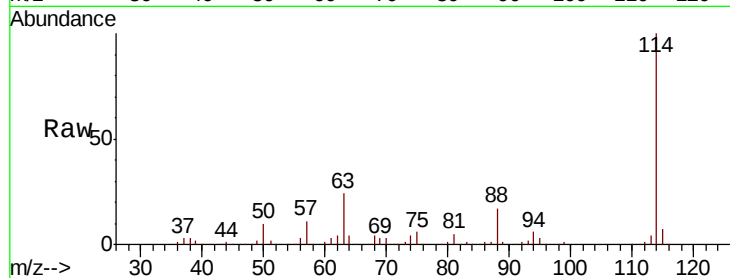
Tgt Ion:114 Resp: 379344

Ion Ratio Lower Upper

114 100

63 24.0 0.0 49.2

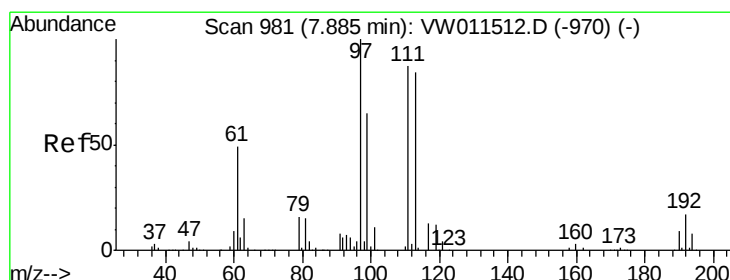
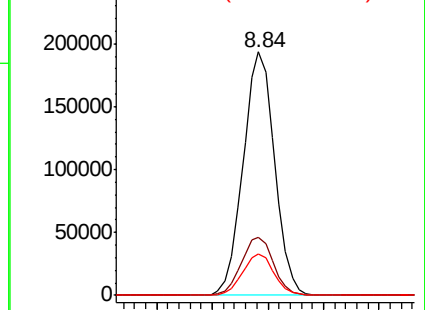
88 17.0 0.0 33.8



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: 53.685 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

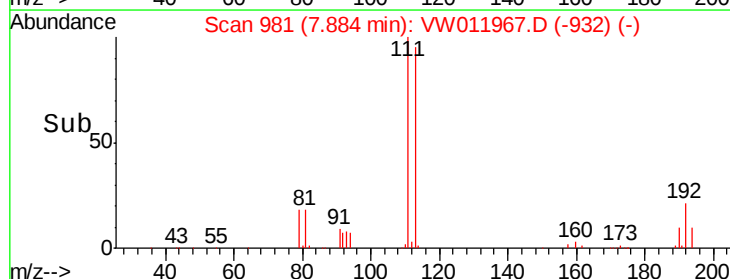
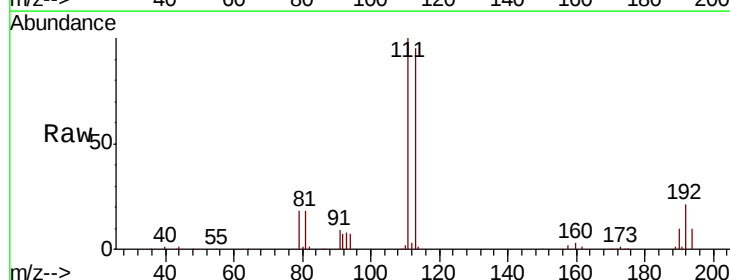
Tgt Ion:113 Resp: 114251

Ion Ratio Lower Upper

113 100

111 102.8 82.7 124.1

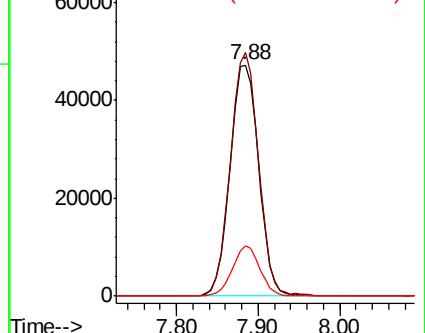
192 20.7 16.1 24.1

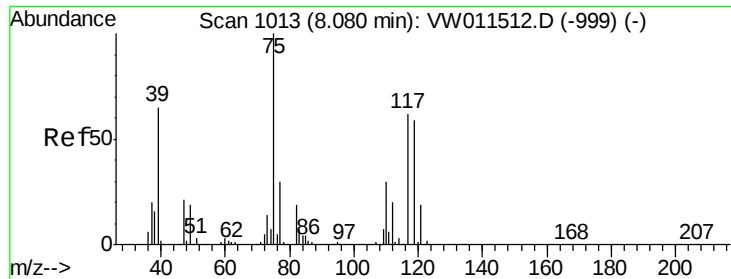


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

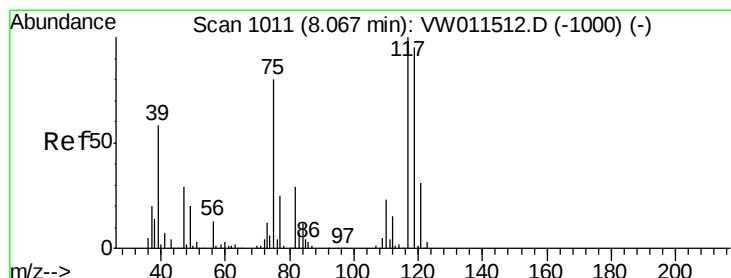
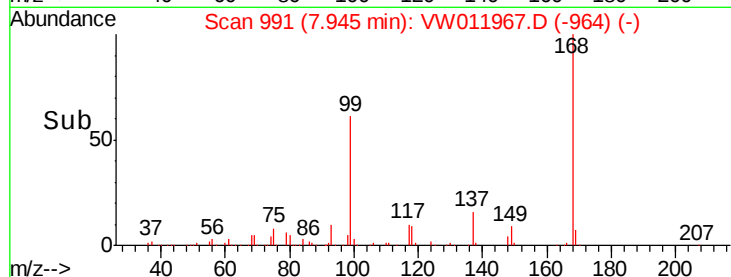
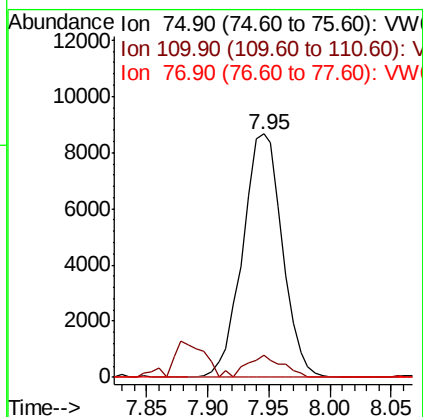
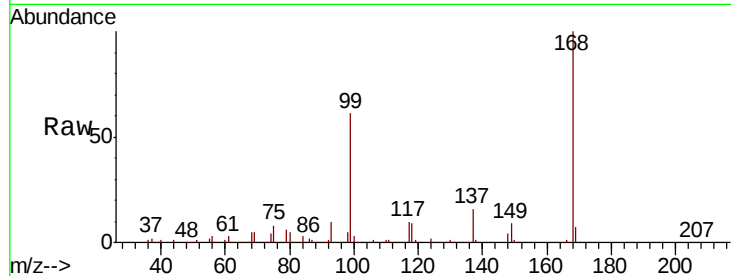




#36  
 1,1-Dichloropropene  
 Concen: 4.959 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW011967.D  
 Acq: 16 Aug 2019 16:09

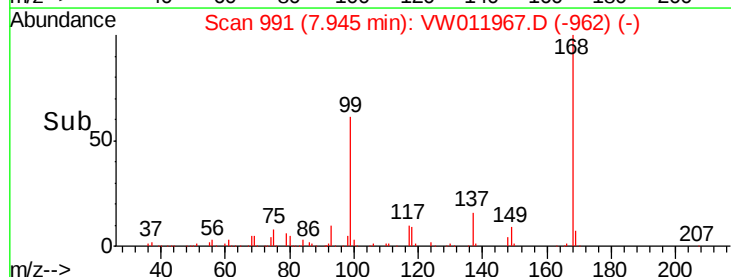
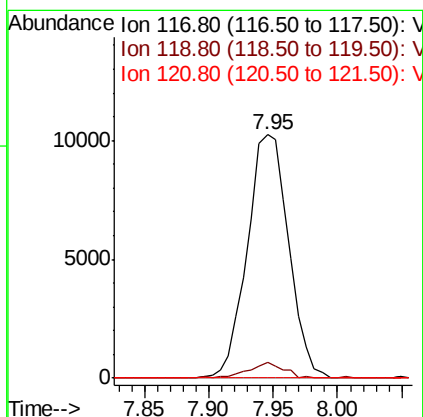
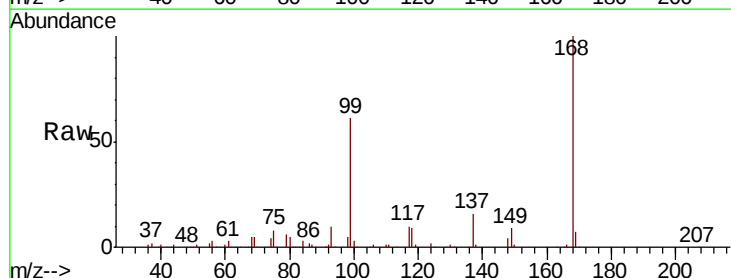
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 PX-4

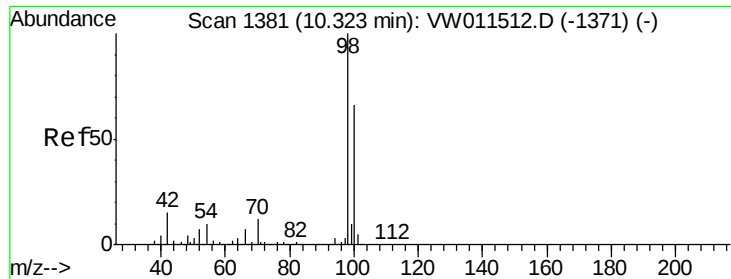
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.9   | 15.6  | 46.8# |
| 77      | 0.0   | 24.3  | 36.5# |



#38  
 Carbon Tetrachloride  
 Concen: 6.752 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.12 min  
 Lab File: VW011967.D  
 Acq: 16 Aug 2019 16:09

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.3   | 75.8  | 113.6# |
| 121     | 0.0   | 24.7  | 37.1#  |





#50

Toluene-d8

Concen: 53.752 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampleId :

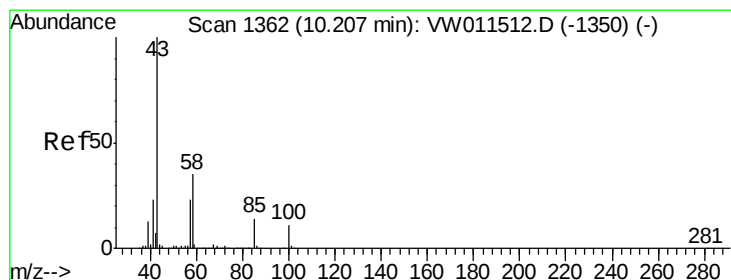
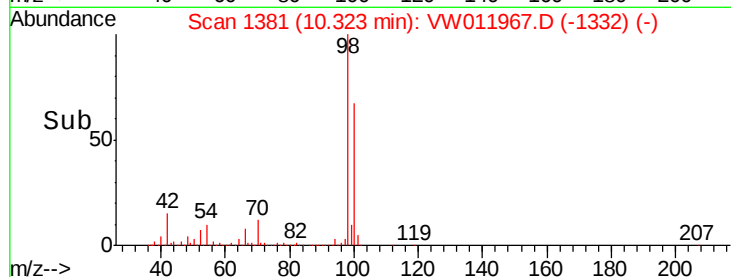
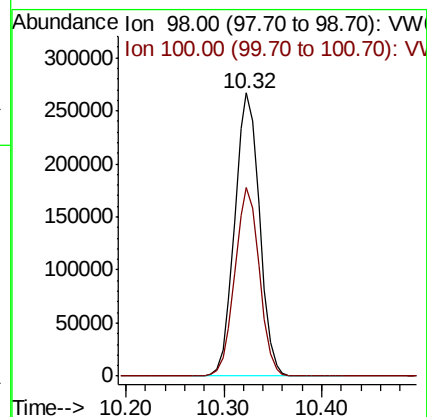
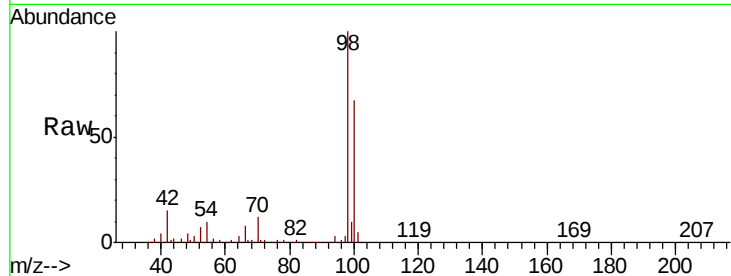
PX-4

Tgt Ion: 98 Resp: 468361

Ion Ratio Lower Upper

98 100

100 65.6 52.7 79.1



#51

4-Methyl-2-Pentanone

Concen: 1.348 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. 0.12 min

Lab File: VW011967.D

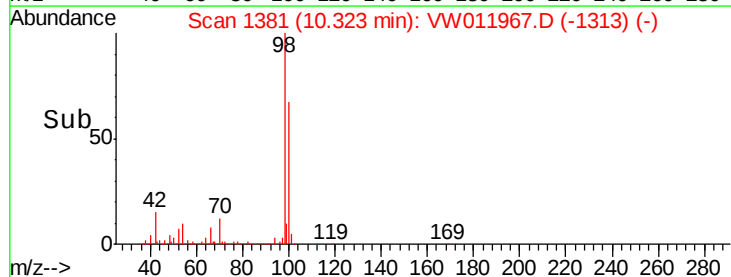
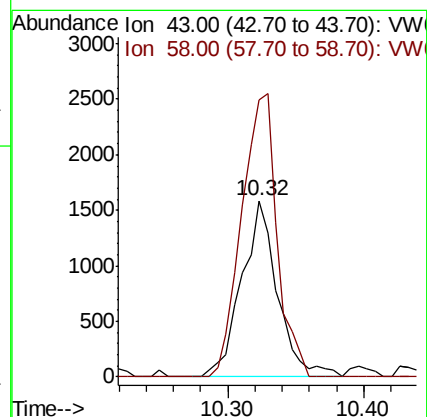
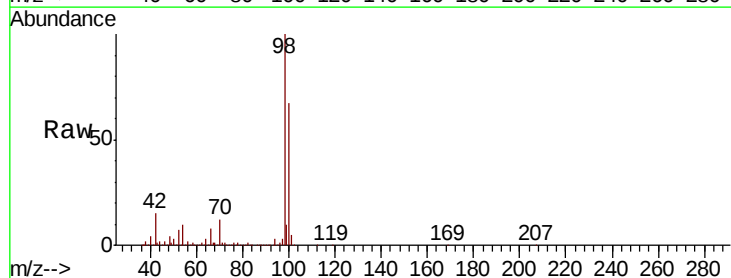
Acq: 16 Aug 2019 16:09

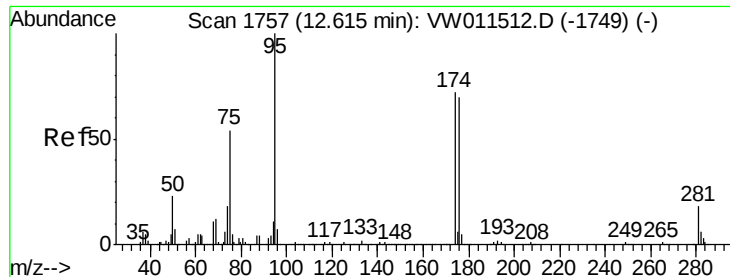
Tgt Ion: 43 Resp: 2927

Ion Ratio Lower Upper

43 100

58 158.6 28.2 42.2#





#62

4-Bromofluorobenzene

Concen: 49.510 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.01 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampleId :

PX-4

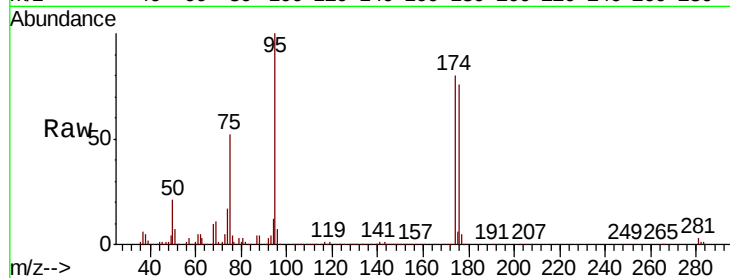
Tgt Ion: 95 Resp: 153802

Ion Ratio Lower Upper

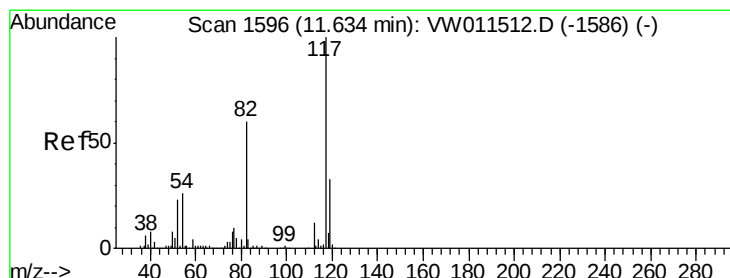
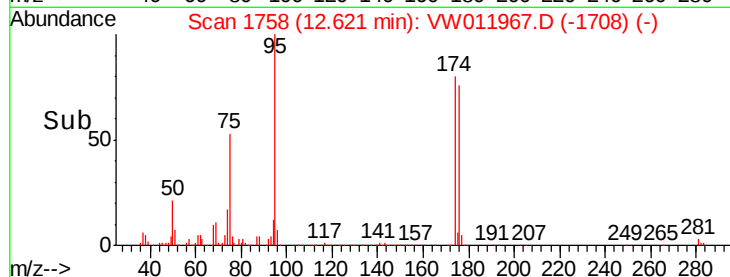
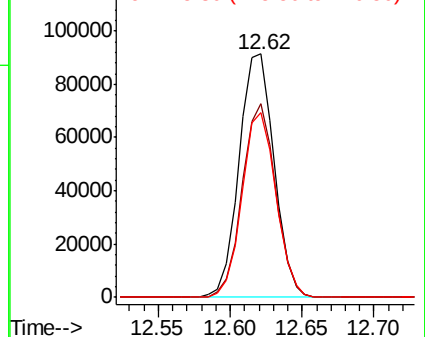
95 100

174 76.5 0.0 150.2

176 73.5 0.0 144.4



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



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.63 min Scan# 1596

Delta R.T. -0.00 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

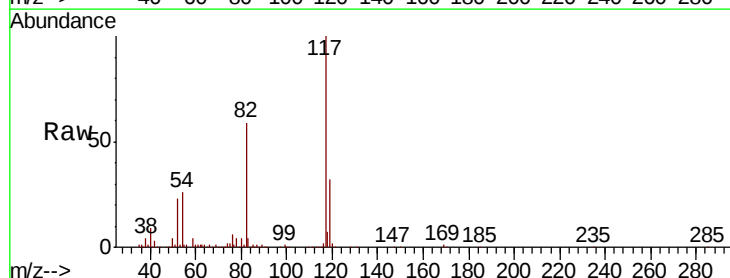
Tgt Ion: 117 Resp: 321408

Ion Ratio Lower Upper

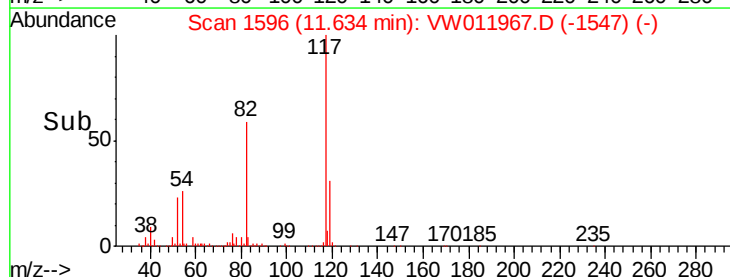
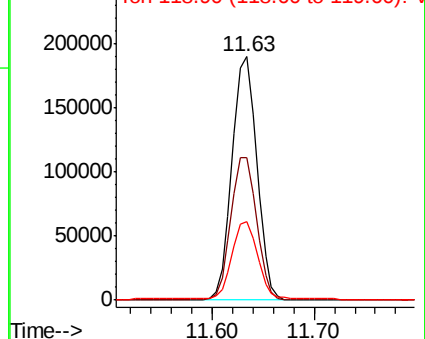
117 100

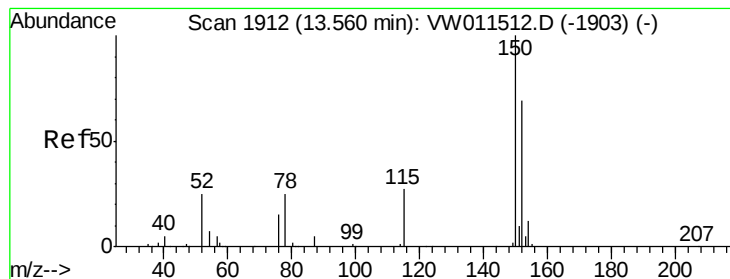
82 58.6 47.9 71.9

119 31.7 26.2 39.2



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





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampleId :

PX-4

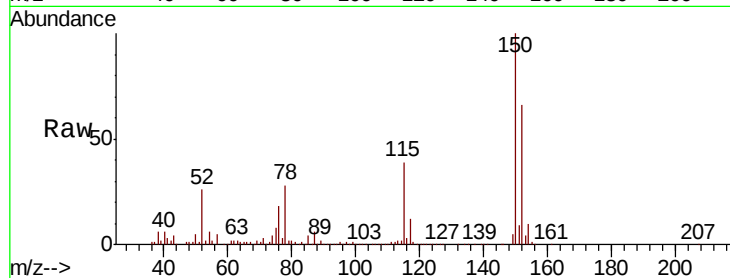
Tgt Ion:152 Resp: 137818

Ion Ratio Lower Upper

152 100

115 60.7 30.5 91.5

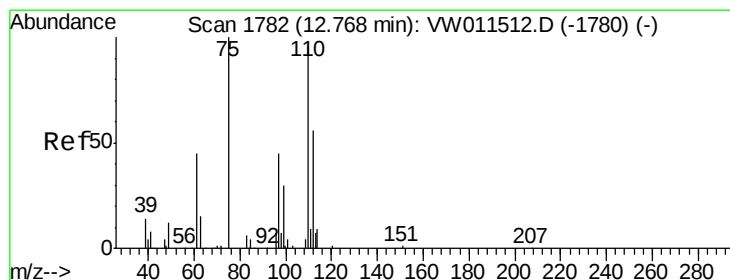
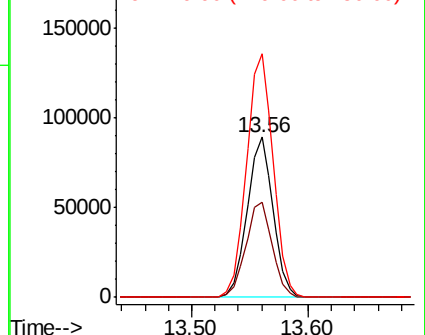
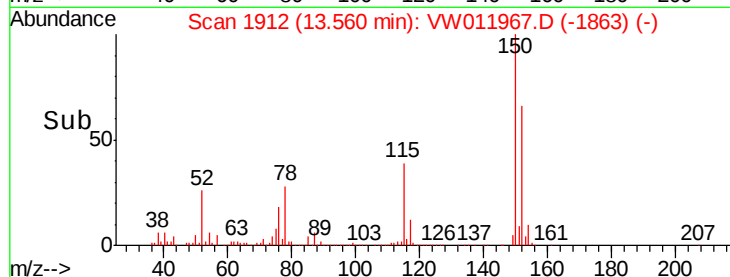
150 156.8 0.0 352.6



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: 56.042 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW011967.D

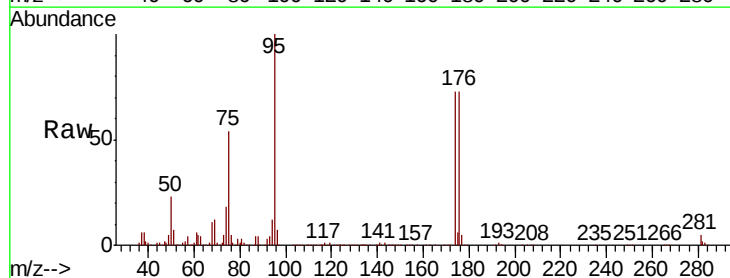
Acq: 16 Aug 2019 16:09

Tgt Ion: 75 Resp: 81724

Ion Ratio Lower Upper

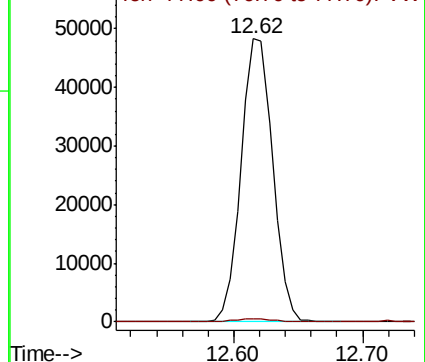
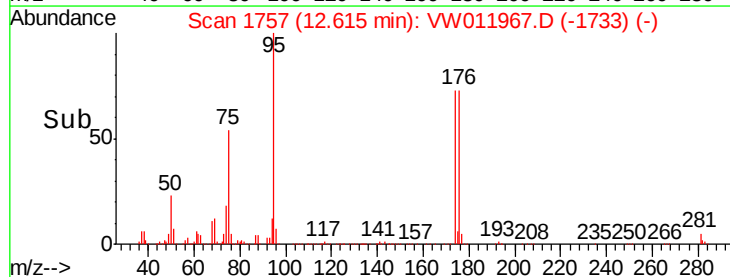
75 100

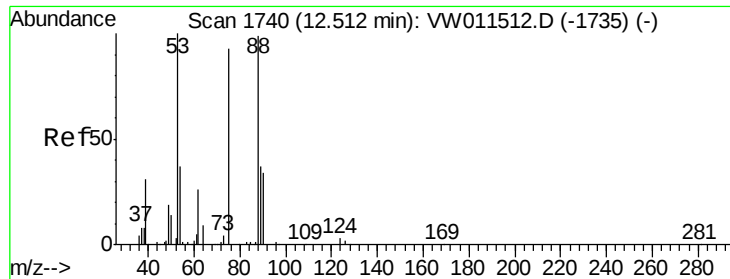
77 1.5 0.0 0.0#



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: 129.157 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampleId :

PX-4

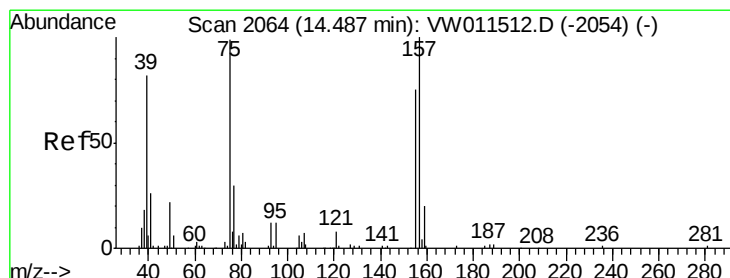
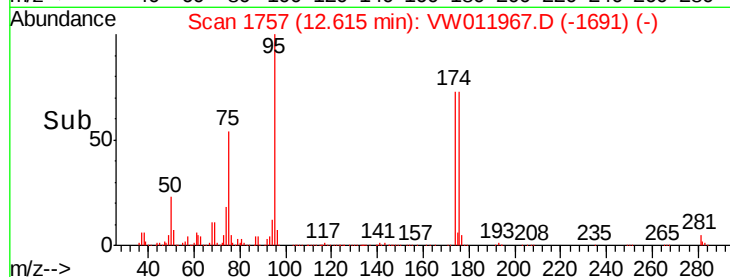
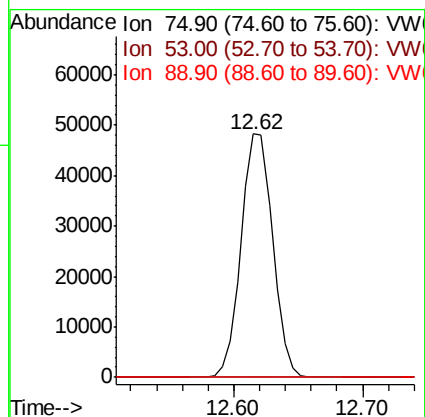
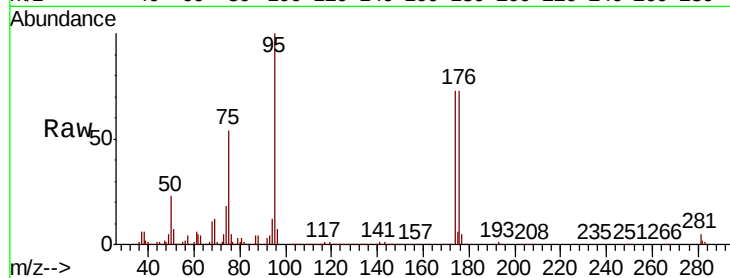
Tgt Ion: 75 Resp: 81724

Ion Ratio Lower Upper

75 100

53 0.0 88.0 132.0#

89 0.0 35.3 52.9#



#92

1,2-Dibromo-3-Chloropropane

Concen: 1.098 ug/l

RT: 14.50 min Scan# 2066

Delta R.T. 0.01 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

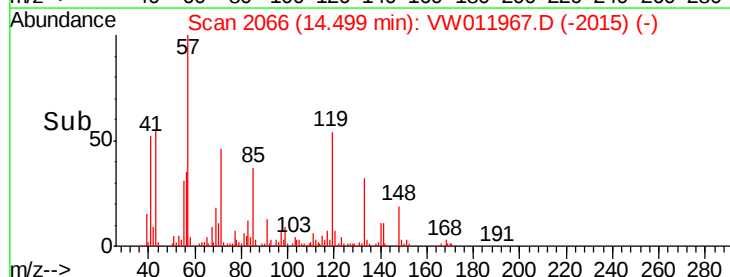
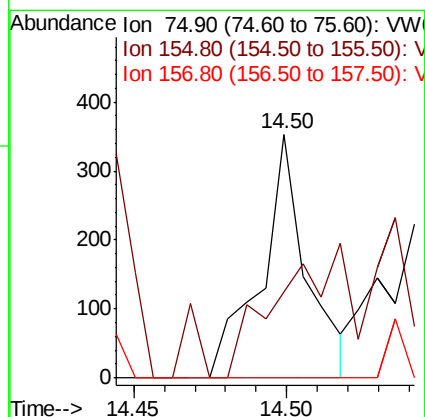
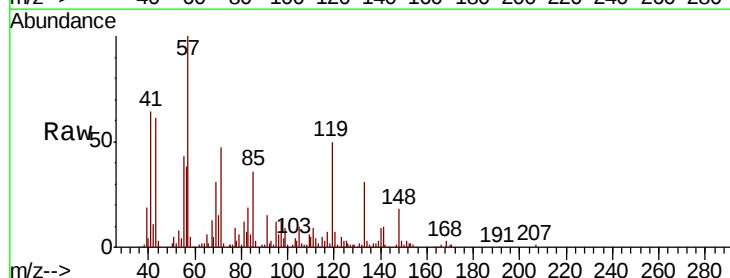
Tgt Ion: 75 Resp: 362

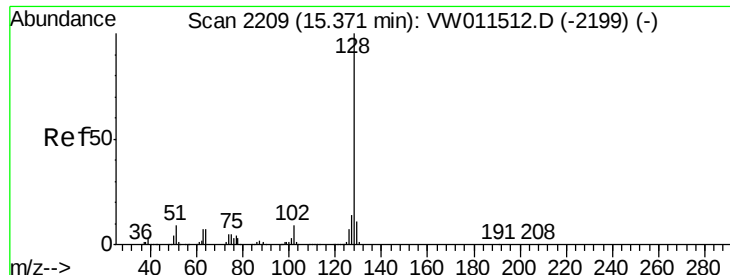
Ion Ratio Lower Upper

75 100

155 85.9 38.2 114.6

157 0.0 48.9 146.7#





#95

Naphthalene

Concen: 2.101 ug/l

RT: 15.41 min Scan# 2216

Delta R.T. 0.04 min

Lab File: VW011967.D

Acq: 16 Aug 2019 16:09

Instrument :

MSVOA\_W

ClientSampleId :

PX-4

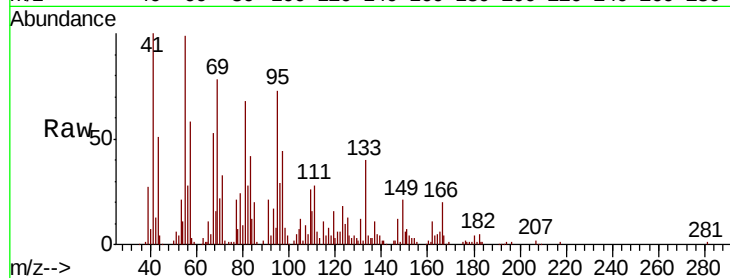
Tgt Ion:128 Resp: 199

Ion Ratio Lower Upper

128 100

127 483.9 10.6 16.0#

129 283.4 8.6 13.0#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

