

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW092019\  
 Data File : VW013207.D  
 Acq On : 21 Sep 2019 02:38  
 Operator : SY/VA  
 Sample : K4939-01  
 Misc : 6.43G/5ML/MSVOA W/SOIL  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Sep 21 04:58:10 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 20 15:58:08 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 373385   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 573350   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 467016   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.55 | 152  | 145820   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.30  | 65   | 167033   | 54.81 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.62% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 161017   | 51.06 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.12% |          |
| 50) Toluene-d8              | 10.32 | 98   | 669126   | 50.70 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.40% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 180976   | 40.14 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 80.28%  |          |

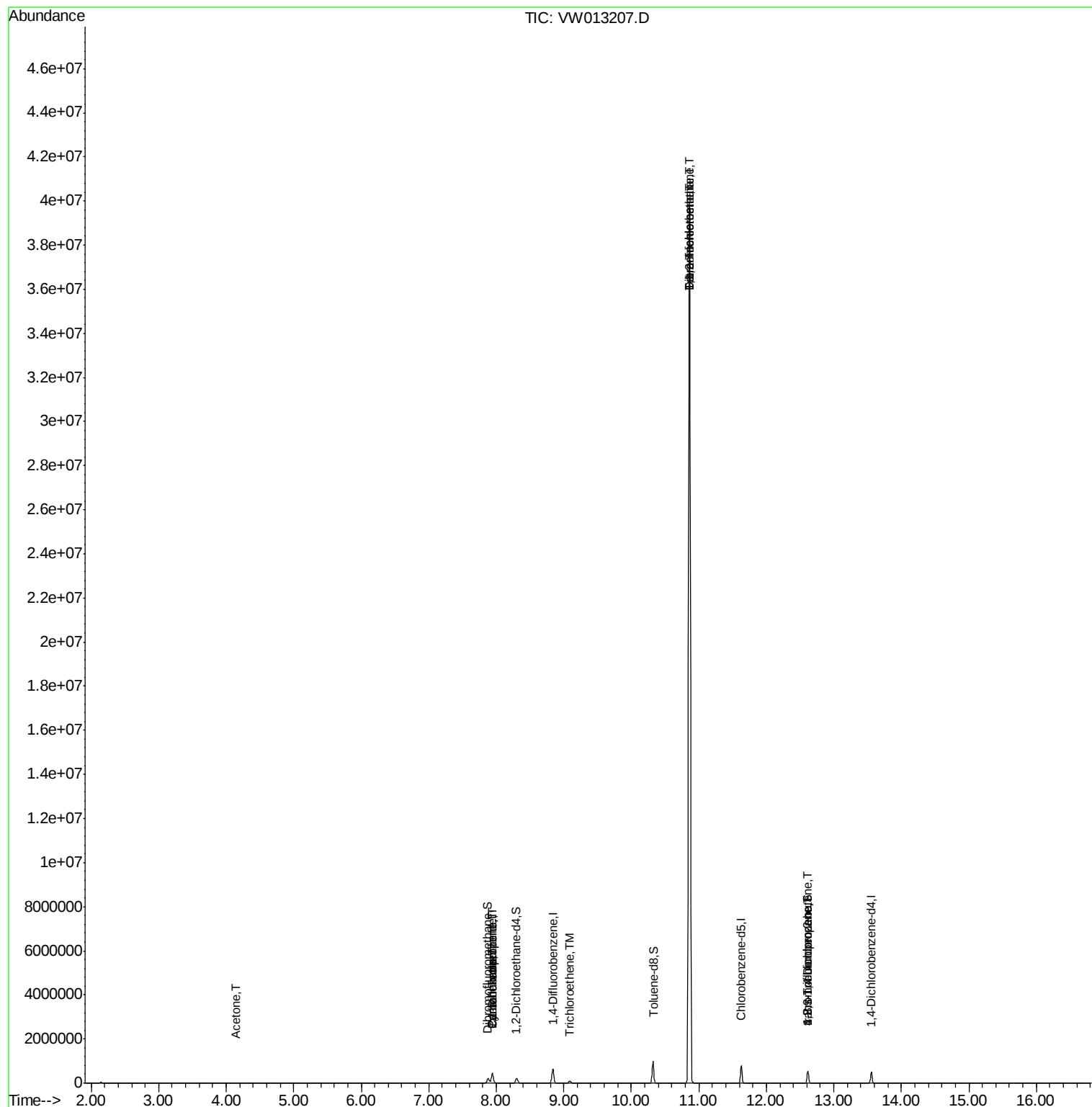
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.23  | 59   | 397      | Below Cal | #      | 73     |
| 16) Acetone                    | 4.14  | 43   | 7303     | 10.627    | ug/l   | 92     |
| 20) Methylene Chloride         | 4.90  | 84   | 9747     | Below Cal |        | 99     |
| 26) 2,2-Dichloropropane        | 7.13  | 77   | 514      | Below Cal | #      | 52     |
| 31) Cyclohexane                | 7.94  | 56   | 6828     | 1.034     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 24948    | 4.492     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 32755    | 6.580     | ug/l # | 18     |
| 44) Trichloroethene            | 9.09  | 130  | 38646    | 8.892     | ug/l   | 98     |
| 55) 1,1,2-Trichloroethane      | 10.86 | 97   | 80103    | 29.189    | ug/l # | 1      |
| 60) Dibromochloromethane       | 10.86 | 129  | 9328705  | 2993.759  | ug/l # | 11     |
| 64) Tetrachloroethene          | 10.86 | 164  | 10573618 | 2984.020  | ug/l   | 95     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 87533    | 67.972    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 87533    | 152.523   | ug/l # | 12     |

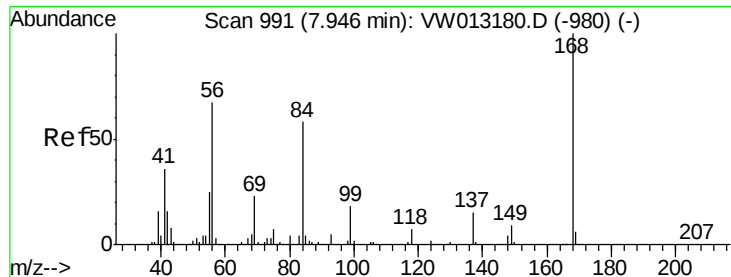
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW092019\  
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Sample : K4939-01  
Misc : 6.43G/5ML/MSVOA W/SOIL  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: Sep 21 04:58:10 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 20 15:58:08 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: VW013207.D

Acq: 21 Sep 2019 02:38

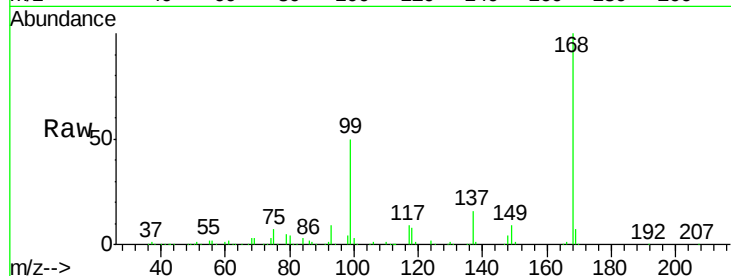
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion:168 Resp: 373385

Ion Ratio Lower Upper

168 100

99 50.0 40.2 60.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

150000

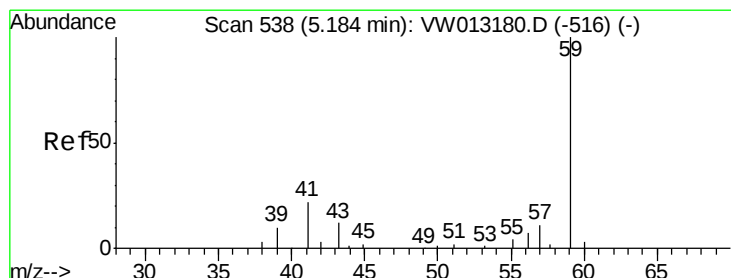
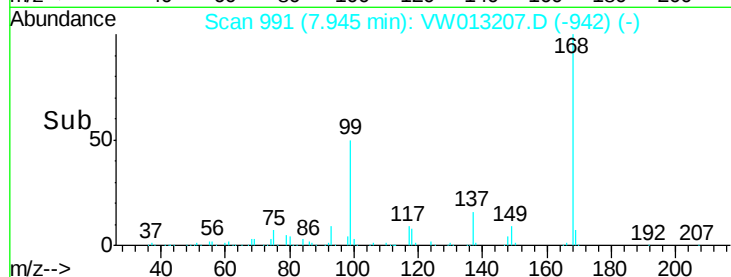
100000

50000

0

Time-->

7.80 7.90 8.00 8.10



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.23 min Scan# 546

Delta R.T. 0.05 min

Lab File: VW013207.D

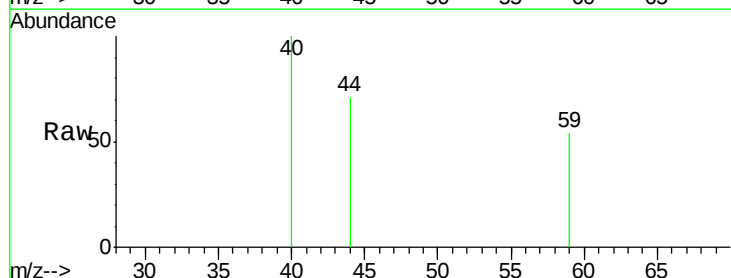
Acq: 21 Sep 2019 02:38

Tgt Ion: 59 Resp: 397

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.23

200

150

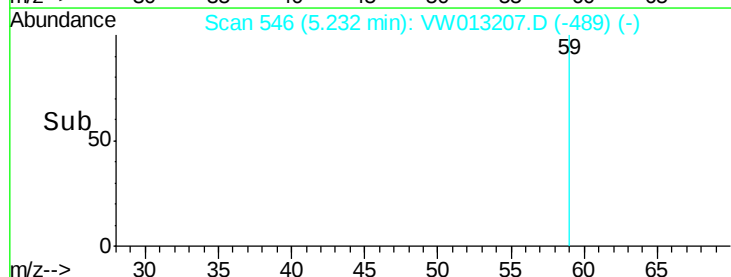
100

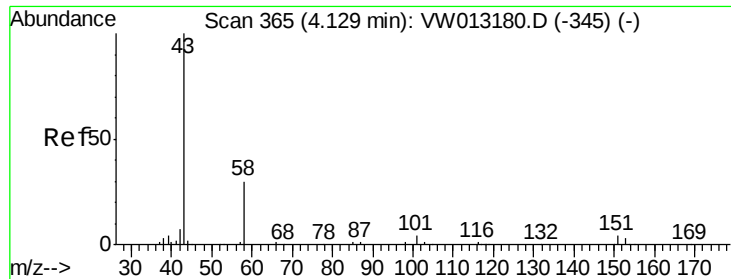
50

0

Time-->

5.20 5.25 5.30





#16

Acetone

Concen: 10.627 ug/l

RT: 4.14 min Scan# 367

Delta R.T. 0.01 min

Lab File: VW013207.D

Acq: 21 Sep 2019 02:38

Instrument :

MSVOA\_W

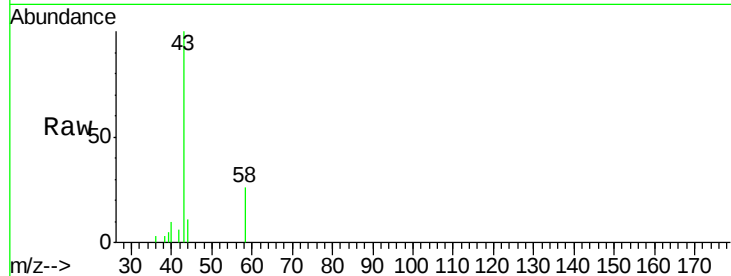
ClientSampled :

Tot Ion: 43 Resp: 7303

Ion Ratio Lower Upper

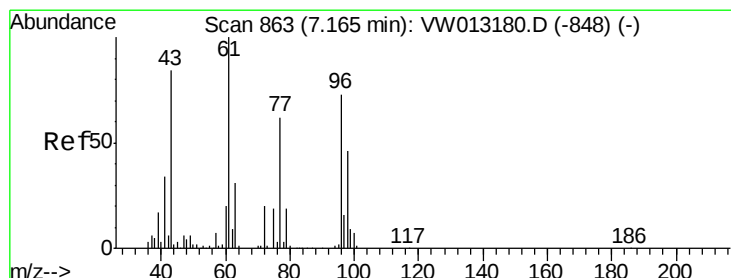
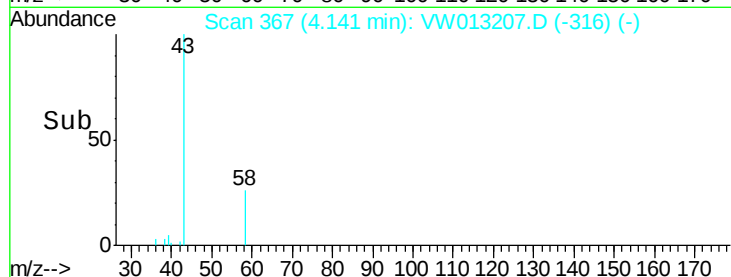
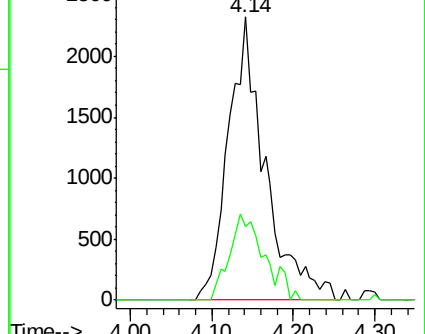
43 100

58 25.9 24.1 36.1



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#26

2,2-Dichloropropane

Concen: Below Cal

RT: 7.13 min Scan# 858

Delta R.T. -0.03 min

Lab File: VW013207.D

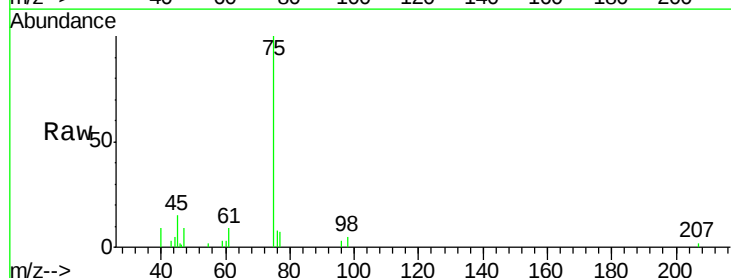
Acq: 21 Sep 2019 02:38

Tgt Ion: 77 Resp: 514

Ion Ratio Lower Upper

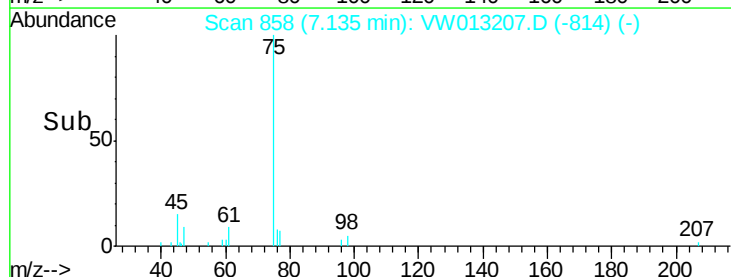
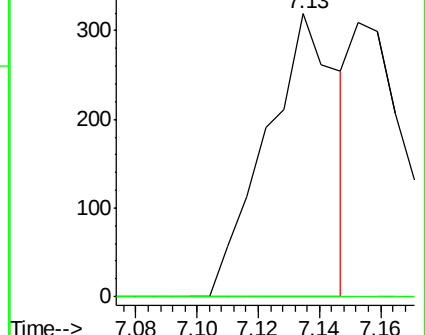
77 100

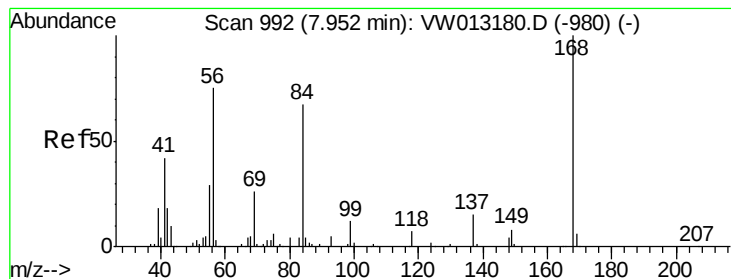
97 0.0 11.8 35.4#



Abundance Ion 76.90 (76.60 to 77.60): VW

Ion 96.90 (96.60 to 97.60): VW





#31

Cyclohexane

Concen: 1.034 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.01 min

Lab File: VW013207.D

Acq: 21 Sep 2019 02:38

Instrument :

MSVOA\_W

ClientSampled :

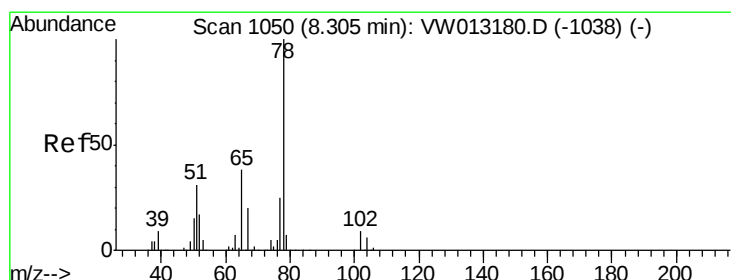
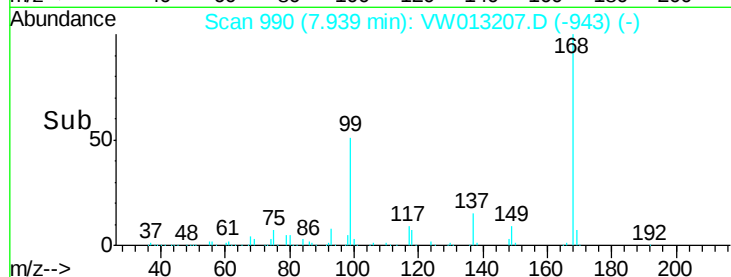
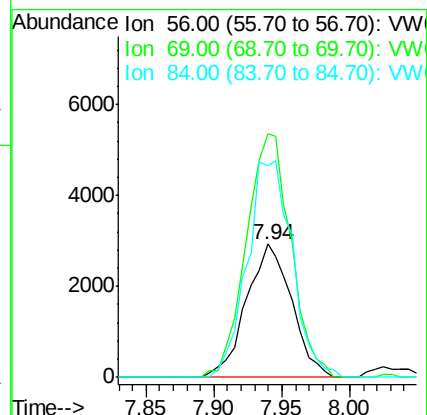
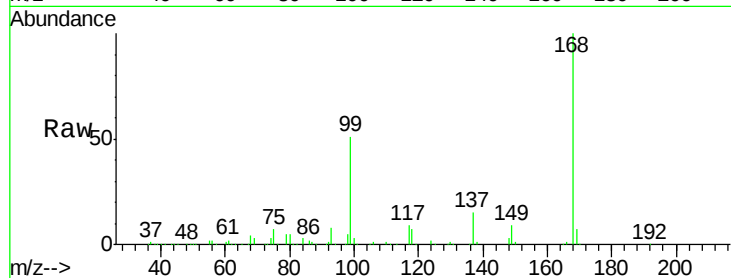
Tot Ion: 56 Resp: 6828

Ion Ratio Lower Upper

56 100

69 182.7 27.2 40.8#

84 158.8 70.8 106.2#



#33

1,2-Dichloroethane-d4

Concen: 54.812 ug/l

RT: 8.30 min Scan# 1049

Delta R.T. -0.01 min

Lab File: VW013207.D

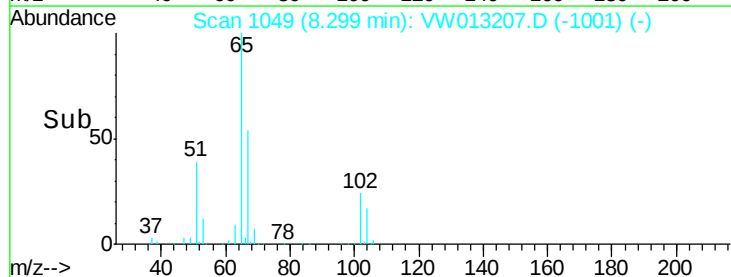
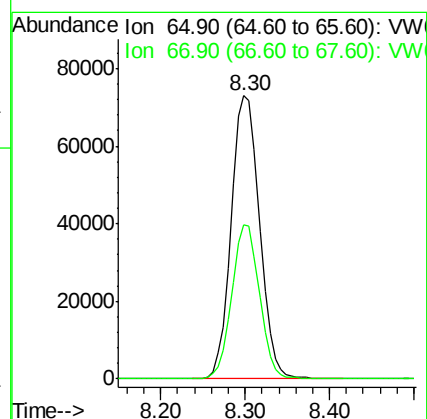
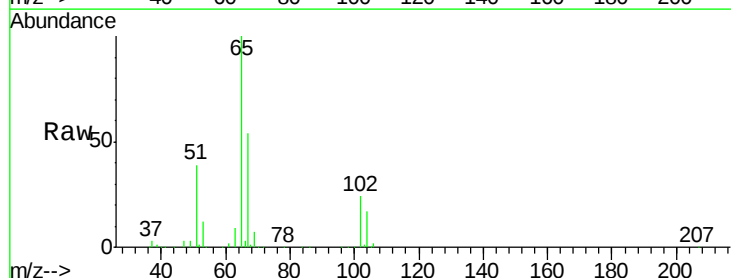
Acq: 21 Sep 2019 02:38

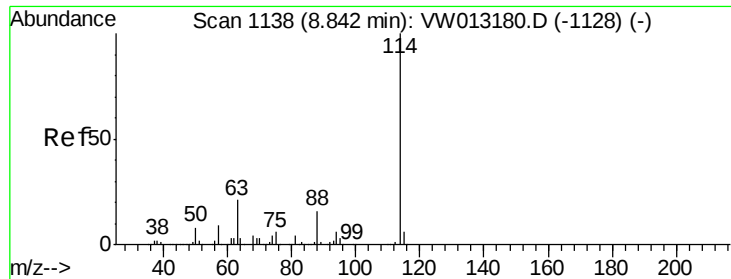
Tgt Ion: 65 Resp: 167033

Ion Ratio Lower Upper

65 100

67 53.0 0.0 106.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1137

Delta R.T. -0.01 min

Lab File: VW013207.D

Acq: 21 Sep 2019 02:38

Instrument :

MSVOA\_W

ClientSampleId :

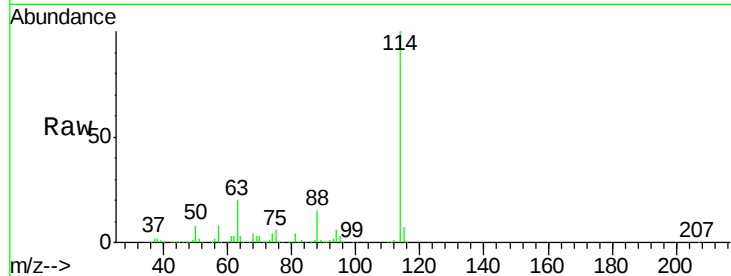
Tot Ion:114 Resp: 573350

Ion Ratio Lower Upper

114 100

63 20.3 0.0 41.4

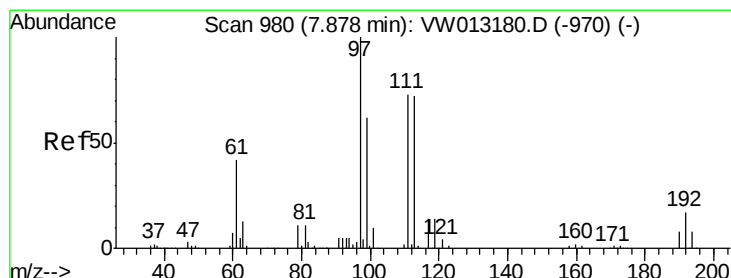
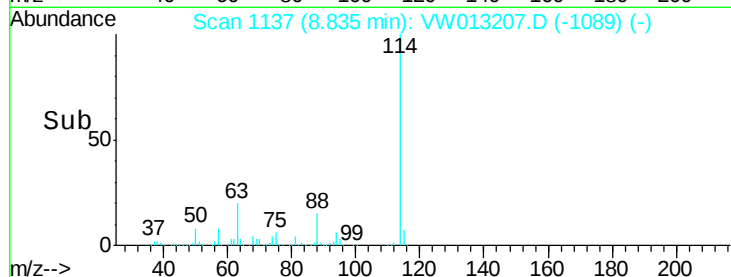
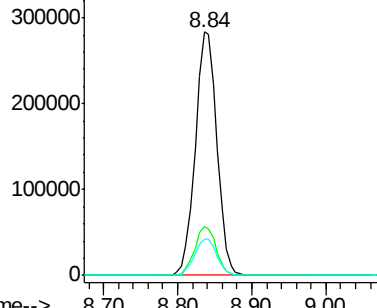
88 15.1 0.0 32.0



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: 51.061 ug/l

RT: 7.88 min Scan# 980

Delta R.T. -0.00 min

Lab File: VW013207.D

Acq: 21 Sep 2019 02:38

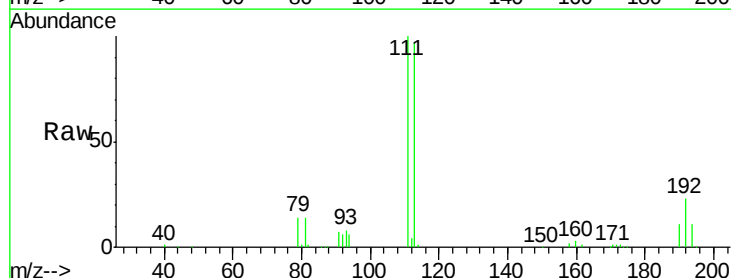
Tgt Ion:113 Resp: 161017

Ion Ratio Lower Upper

113 100

111 103.0 81.9 122.9

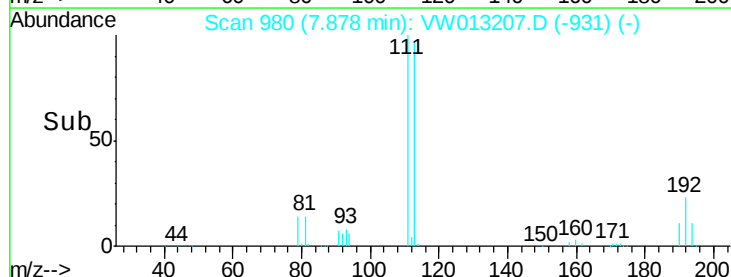
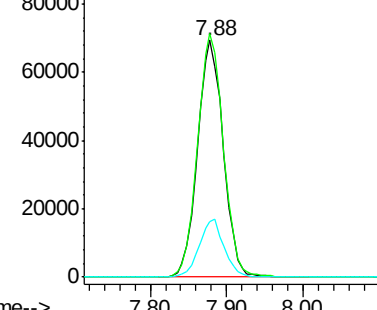
192 23.5 19.1 28.7

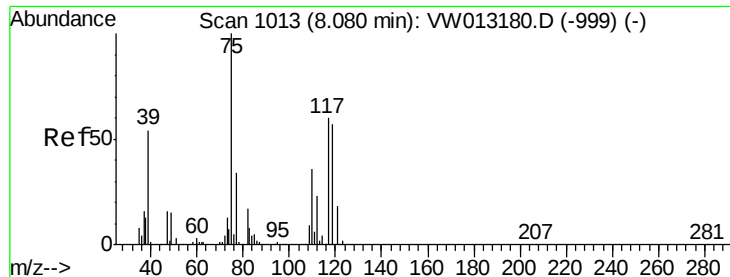


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

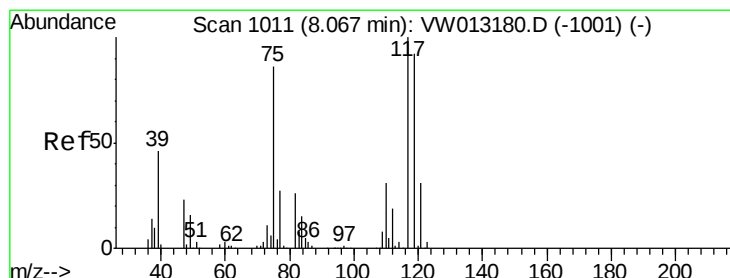
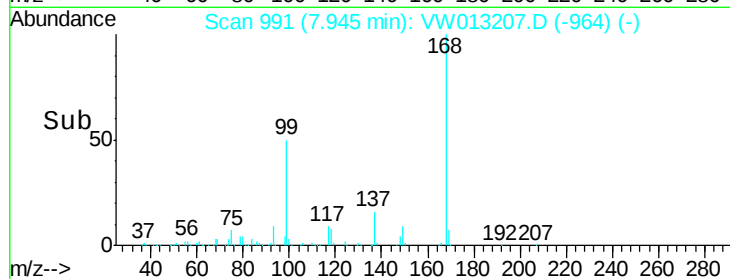
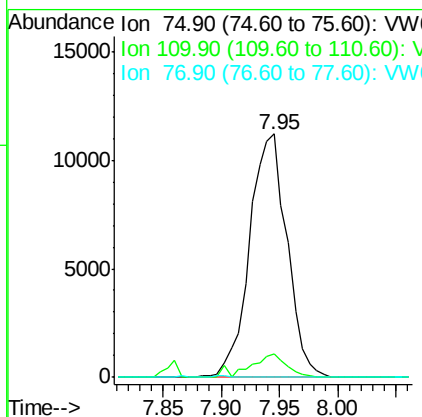
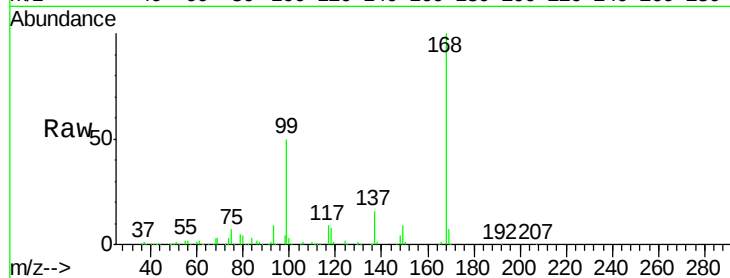




#36  
 1,1-Dichloropropene  
 Concen: 4.492 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW013207.D  
 Acq: 21 Sep 2019 02:38

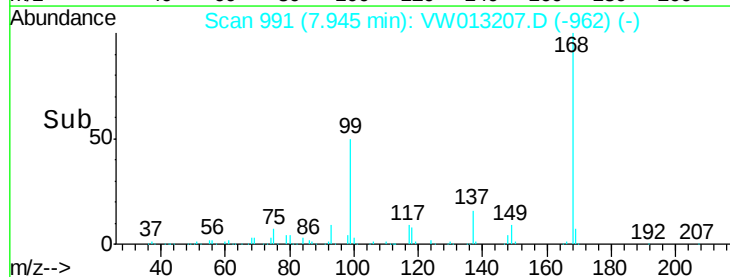
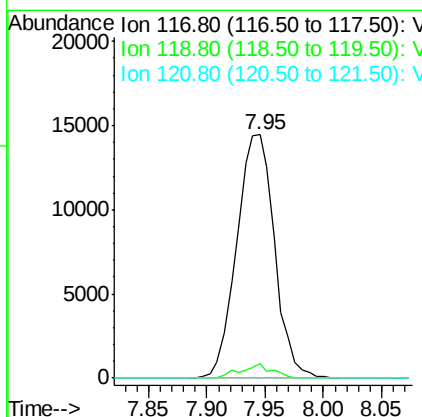
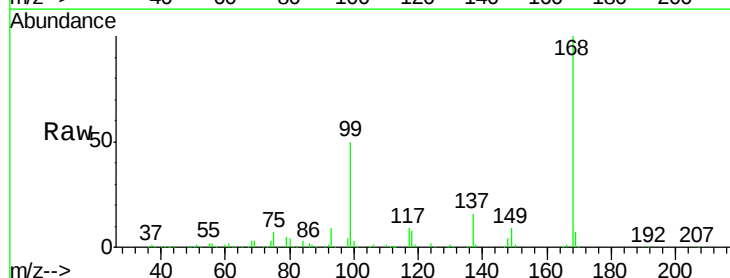
Instrument :  
 MSVOA\_W  
 ClientSampleId :

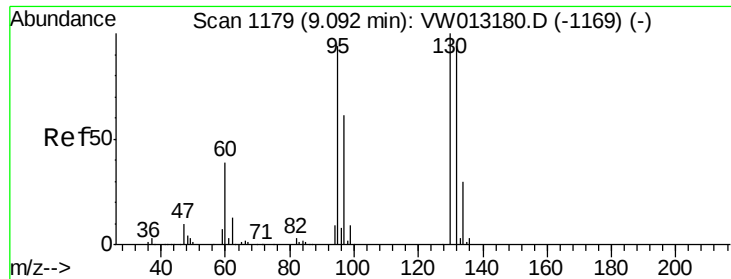
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.6   | 18.1  | 54.3# |
| 77      | 0.0   | 25.8  | 38.6# |



#38  
 Carbon Tetrachloride  
 Concen: 6.580 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.12 min  
 Lab File: VW013207.D  
 Acq: 21 Sep 2019 02:38

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.1   | 73.5  | 110.3# |
| 121     | 0.0   | 25.0  | 37.6#  |





#44

Trichloroethene

Concen: 8.892 ug/l

RT: 9.09 min Scan# 1178

Delta R.T. -0.01 min

Lab File: VW013207.D

Acq: 21 Sep 2019 02:38

Instrument :

MSVOA\_W

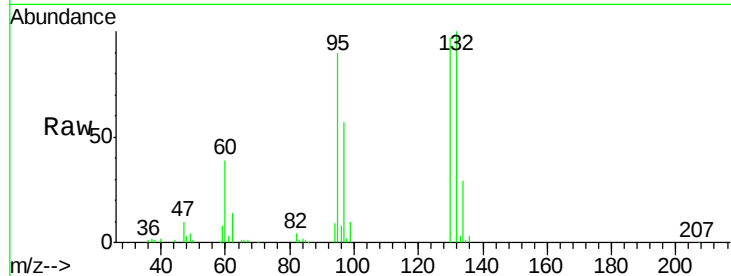
ClientSampleId :

Tot Ion:130 Resp: 38646

Ion Ratio Lower Upper

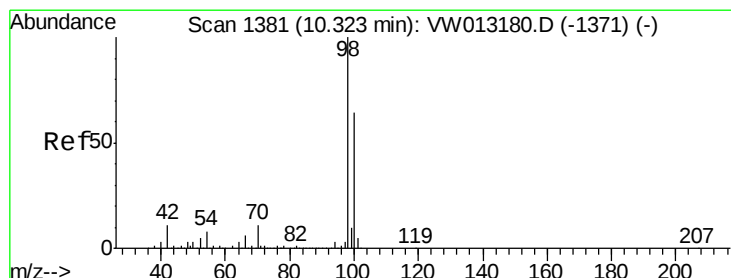
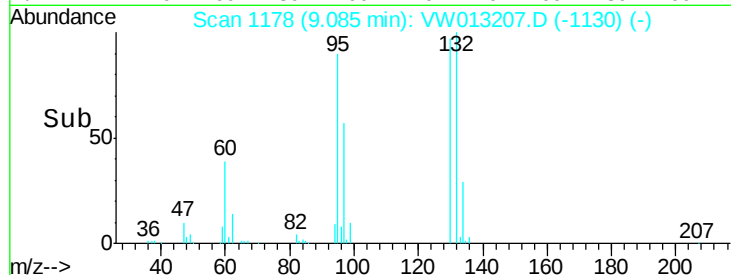
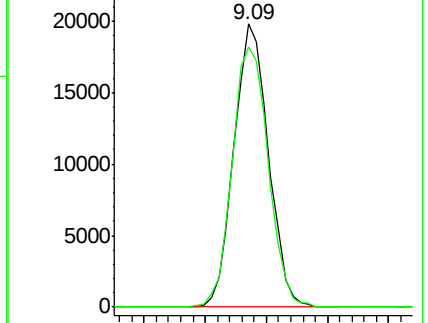
130 100

95 92.0 0.0 188.0



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VW



#50

Toluene-d8

Concen: 50.701 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW013207.D

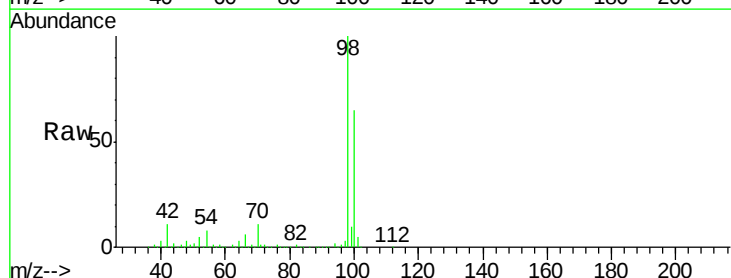
Acq: 21 Sep 2019 02:38

Tgt Ion: 98 Resp: 669126

Ion Ratio Lower Upper

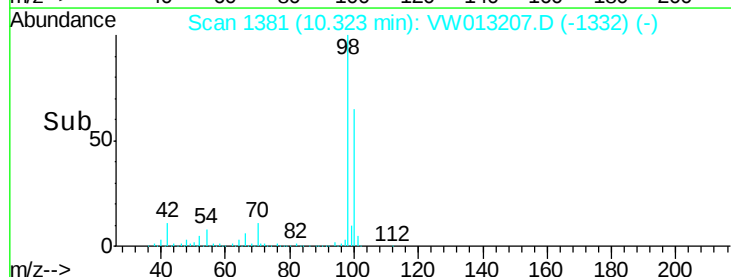
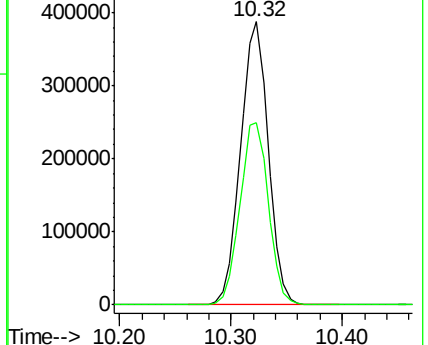
98 100

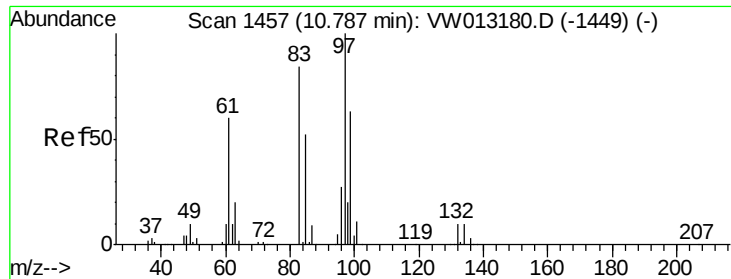
100 66.5 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW

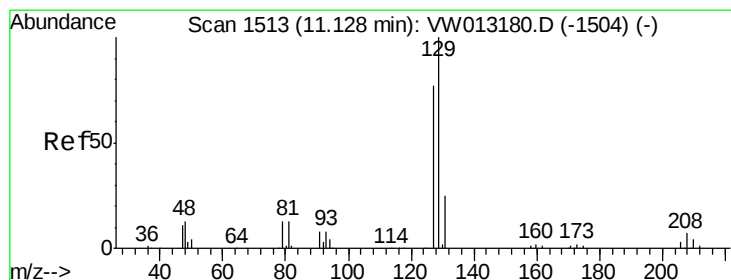
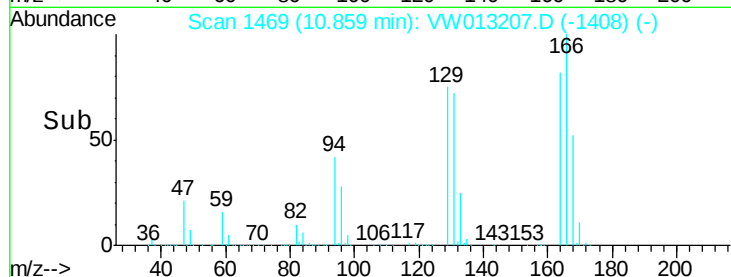
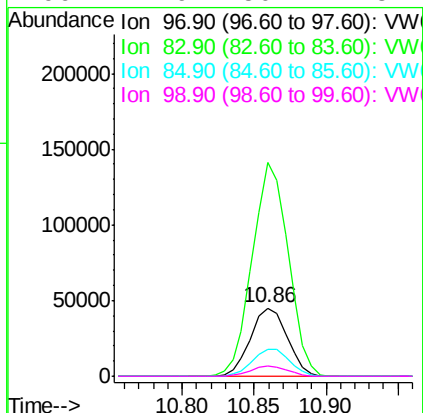
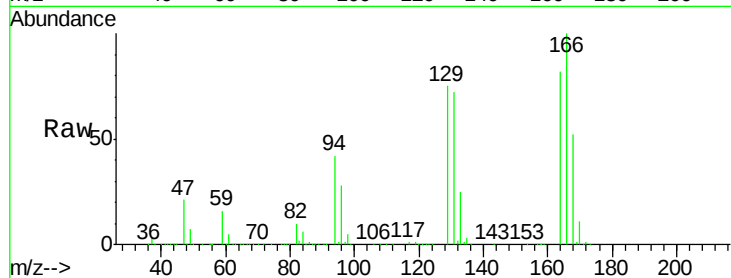




#55  
 1,1,2-Trichloroethane  
 Concen: 29.189 ug/l  
 RT: 10.86 min Scan# 1469  
 Delta R.T. 0.07 min  
 Lab File: VW013207.D  
 Acq: 21 Sep 2019 02:38

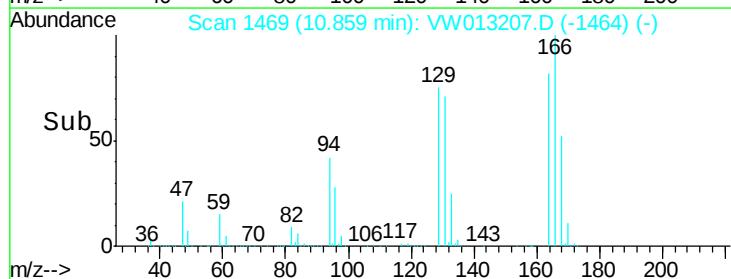
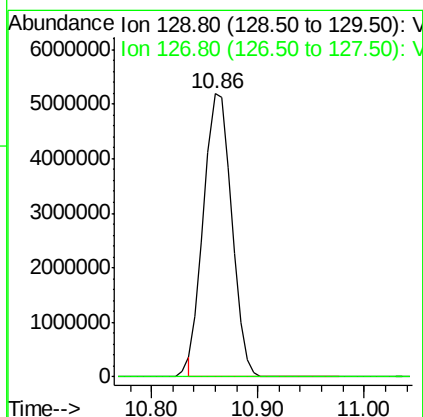
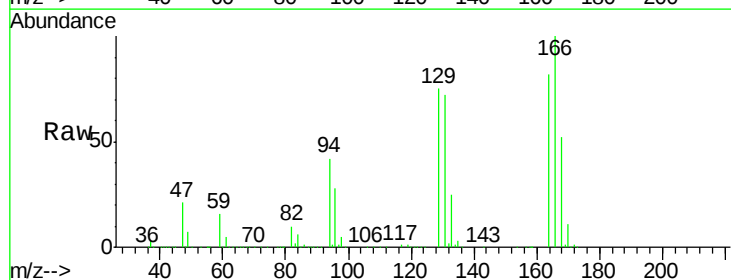
Instrument :  
 MSVOA\_W  
 ClientSampleId :

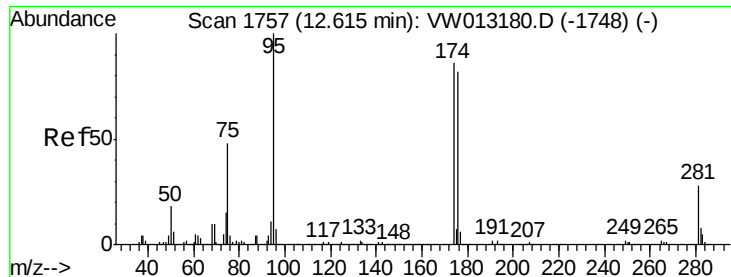
| Tot Ion | 97    | 83    | 85   | 99   |
|---------|-------|-------|------|------|
| Resp    | 80103 | 314.6 | 40.3 | 14.9 |
| Ratio   | 100   | 100   | 100  | 100  |
| Lower   |       | 67.6  | 41.9 | 50.1 |
| Upper   |       | 101.4 | 62.9 | 75.1 |



#60  
 Dibromochloromethane  
 Concen: 2993.759 ug/l  
 RT: 10.86 min Scan# 1469  
 Delta R.T. -0.27 min  
 Lab File: VW013207.D  
 Acq: 21 Sep 2019 02:38

| Tgt Ion | 129     | 127   |
|---------|---------|-------|
| Resp    | 9328705 | 0.0   |
| Ratio   | 100     | 0.0   |
| Lower   |         | 38.8  |
| Upper   |         | 116.4 |





#62

4-Bromofluorobenzene

Concen: 40.144 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.00 min

Lab File: VW013207.D

Acq: 21 Sep 2019 02:38

Instrument :

MSVOA\_W

ClientSampleId :

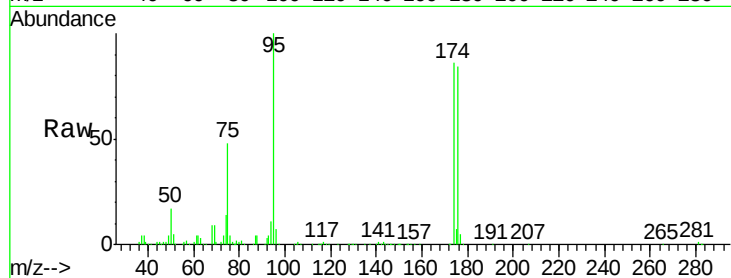
Tot Ion: 95 Resp: 180976

Ion Ratio Lower Upper

95 100

174 88.3 0.0 178.4

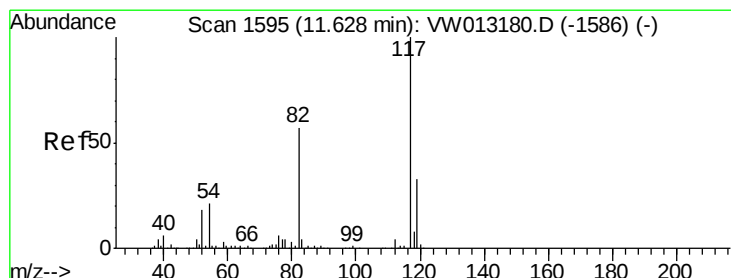
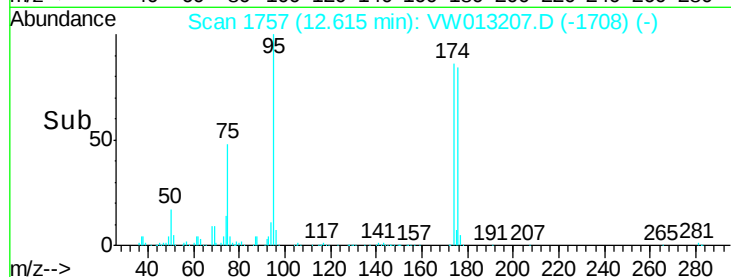
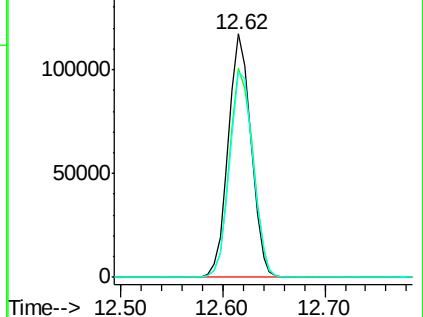
176 87.1 0.0 172.2



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# 1595

Delta R.T. -0.00 min

Lab File: VW013207.D

Acq: 21 Sep 2019 02:38

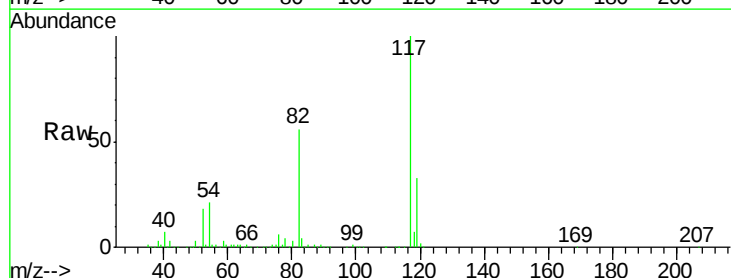
Tgt Ion: 117 Resp: 467016

Ion Ratio Lower Upper

117 100

82 56.2 45.9 68.9

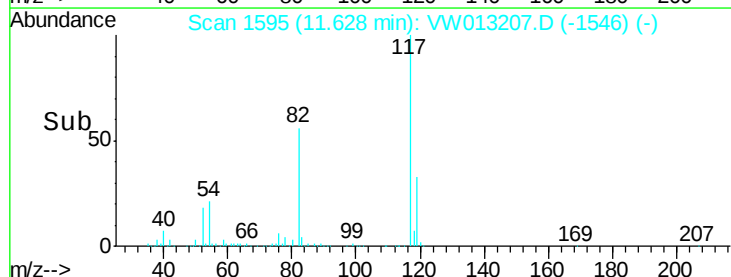
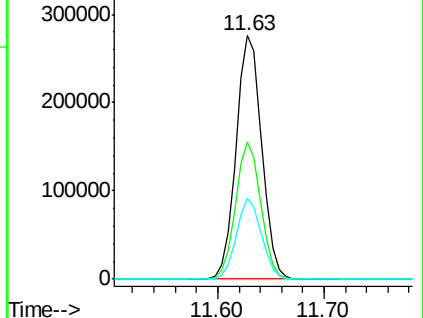
119 33.1 26.2 39.2

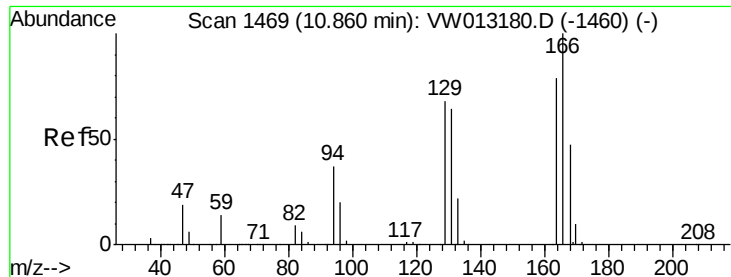


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW

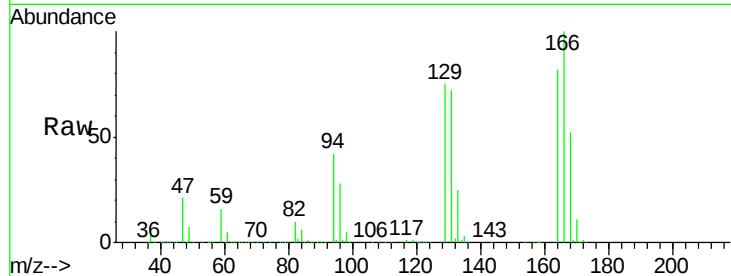




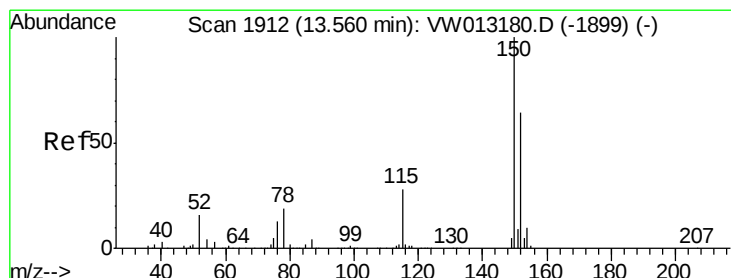
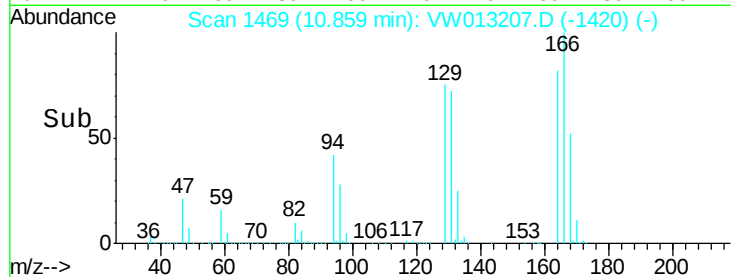
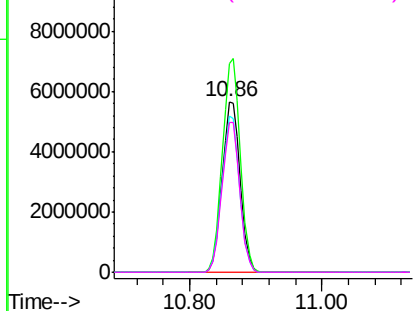
#64  
Tetrachloroethene  
Concen: 2984.020 ug/l  
RT: 10.86 min Scan# 1469  
Delta R.T. -0.00 min  
Lab File: VW013207.D  
Acq: 21 Sep 2019 02:38

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion:164 Resp:10573618  
Ion Ratio Lower Upper  
164 100  
166 122.4 101.2 151.8  
129 91.6 68.8 103.2  
131 87.6 65.2 97.8

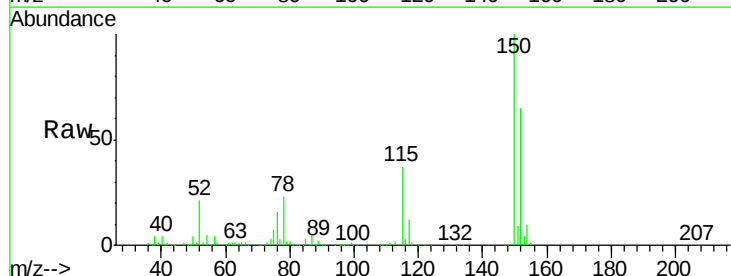


Abundance Ion 163.80 (163.50 to 164.50): V  
Ion 165.80 (165.50 to 166.50): V  
Ion 128.80 (128.50 to 129.50): V  
Ion 130.80 (130.50 to 131.50): V

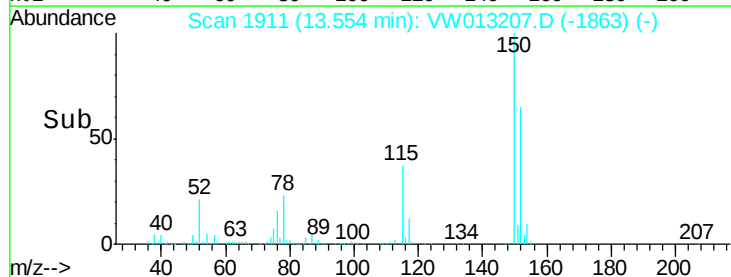
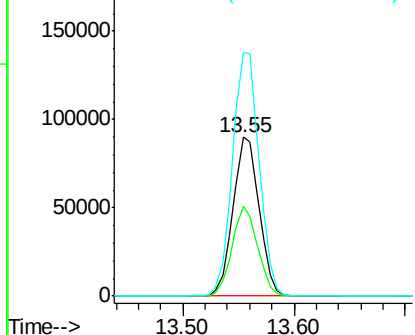


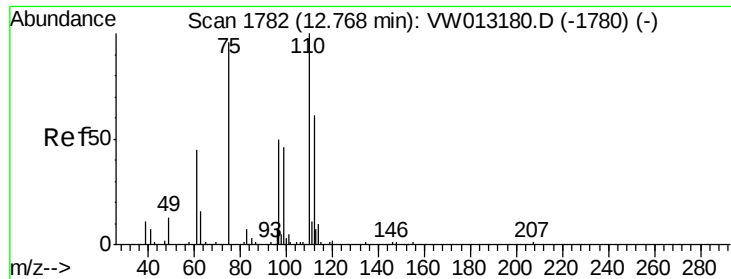
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.55 min Scan# 1911  
Delta R.T. -0.01 min  
Lab File: VW013207.D  
Acq: 21 Sep 2019 02:38

Tgt Ion:152 Resp: 145820  
Ion Ratio Lower Upper  
152 100  
115 55.3 27.3 81.9  
150 156.8 0.0 349.0



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

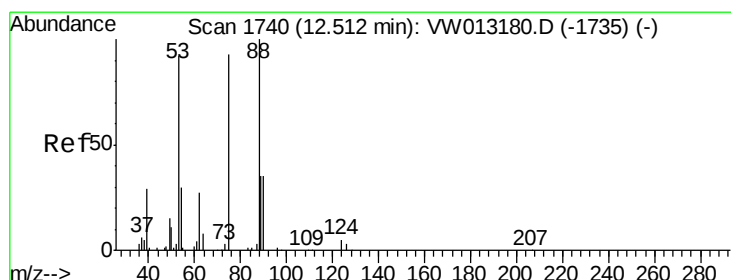
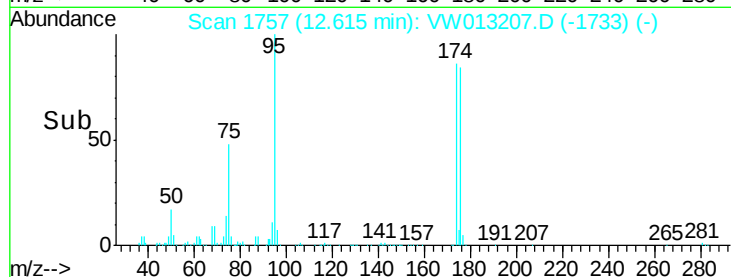
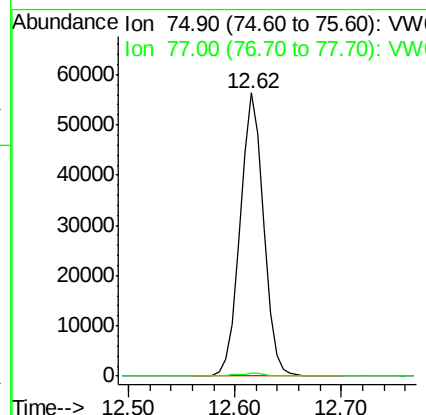
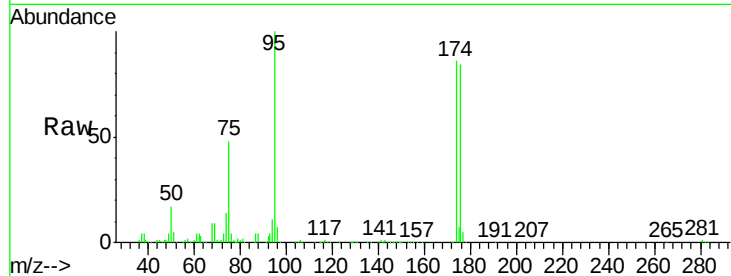




#76  
 1,2,3-Trichloropropane  
 Concen: 67.972 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. -0.15 min  
 Lab File: VW013207.D  
 Acq: 21 Sep 2019 02:38

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Tot Ion: 75 Resp: 87533  
 Ion Ratio Lower Upper  
 75 100  
 77 1.4 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 152.523 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. 0.10 min  
 Lab File: VW013207.D  
 Acq: 21 Sep 2019 02:38

Tgt Ion: 75 Resp: 87533  
 Ion Ratio Lower Upper  
 75 100  
 53 0.1 76.6 114.8#  
 89 0.0 33.5 50.3#

