

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\WX092419\  
 Data File : VX012630.D  
 Acq On : 24 Sep 2019 14:10  
 Operator : JC/SP  
 Sample : K4883-01DL 5X  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 MW5-R2-1DL

Quant Time: Sep 25 04:36:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092319W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Sep 23 12:27:01 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 165754   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 286395   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 242211   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 92498    | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 6.05   | 65  | 120691   | 50.00 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.00% |      |
| 35) Dibromofluoromethane    | 5.49   | 113 | 86578    | 50.76 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 101.52% |      |
| 50) Toluene-d8              | 8.71   | 98  | 334427   | 50.91 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 101.82% |      |
| 62) 4-Bromofluorobenzene    | 11.14  | 95  | 115258   | 44.63 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 89.26%  |      |

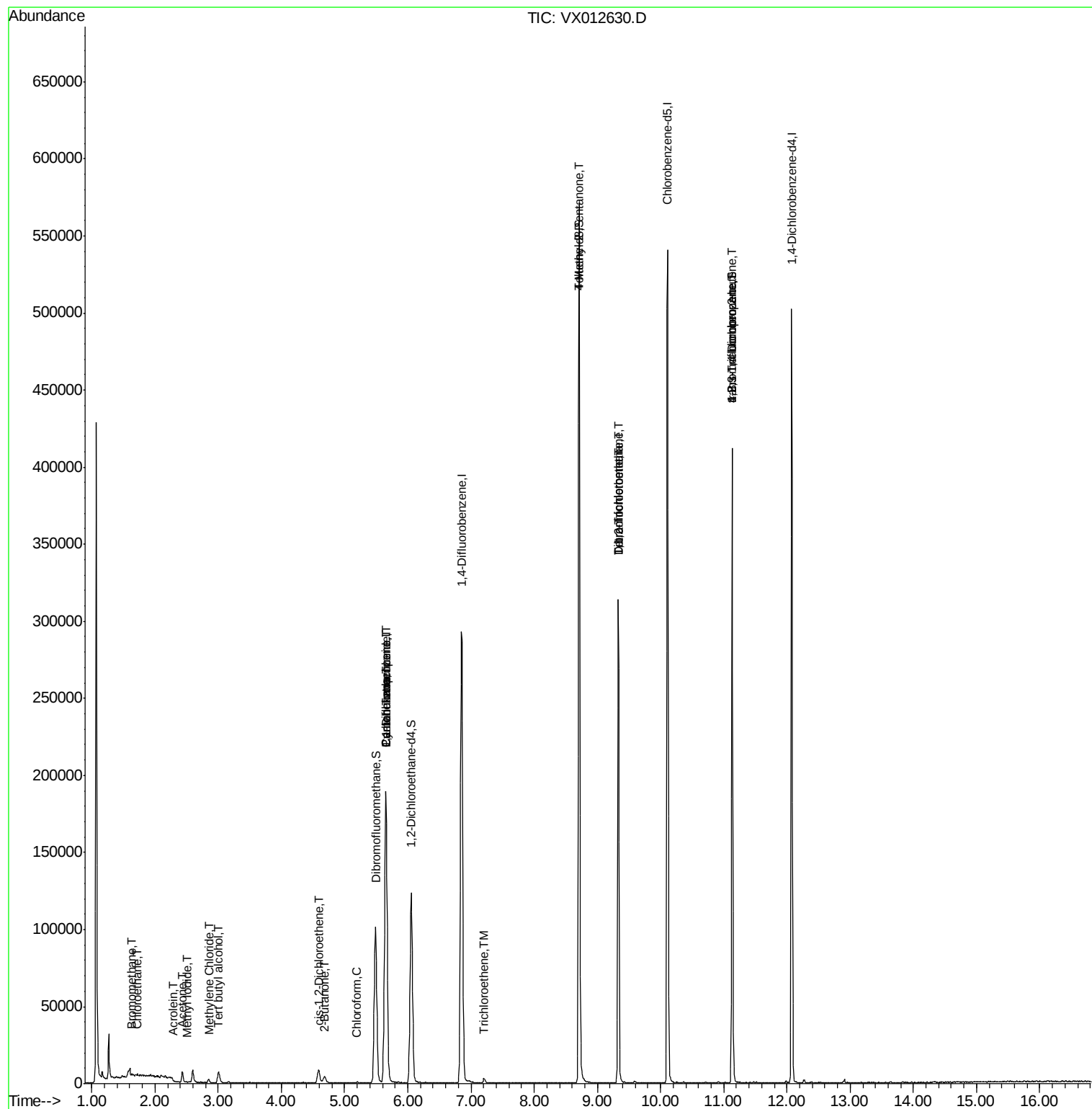
| Target Compounds               |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 5) Bromomethane                | 1.64  | 94  | 394   | 0.471  | ug/l # | 59     |
| 6) Chloroethane                | 1.72  | 64  | 677   | 0.472  | ug/l # | 47     |
| 10) Methyl Iodide              | 2.50  | 142 | 360   | 5.122  | ug/l # | 84     |
| 11) Tert butyl alcohol         | 3.01  | 59  | 4840  | 8.027  | ug/l # | 72     |
| 13) Acrolein                   | 2.29  | 56  | 32    | 10.324 | ug/l # | 15     |
| 16) Acetone                    | 2.44  | 43  | 7701  | 6.024  | ug/l   | 90     |
| 20) Methylene Chloride         | 2.85  | 84  | 1184  | 0.548  | ug/l # | 74     |
| 25) 2-Butanone                 | 4.69  | 43  | 662   | 0.361  | ug/l # | 51     |
| 27) cis-1,2-Dichloroethene     | 4.59  | 96  | 5372  | 2.345  | ug/l   | 83     |
| 30) Chloroform                 | 5.20  | 83  | 775   | 0.204  | ug/l # | 75     |
| 31) Cyclohexane                | 5.65  | 56  | 4273  | 1.272  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.65  | 75  | 14853 | 5.380  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.65  | 117 | 18628 | 6.643  | ug/l # | 15     |
| 44) Trichloroethene            | 7.21  | 130 | 1131  | 0.545  | ug/l   | 83     |
| 51) 4-Methyl-2-Pentanone       | 8.71  | 43  | 1686  | 0.506  | ug/l # | 1      |
| 55) 1,1,2-Trichloroethane      | 9.33  | 97  | 501   | 0.247  | ug/l # | 1      |
| 60) Dibromochloromethane       | 9.33  | 129 | 57094 | 27.790 | ug/l # | 11     |
| 64) Tetrachloroethene          | 9.33  | 164 | 56559 | 33.492 | ug/l   | 92     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75  | 59753 | 24.421 | ug/l # | 38     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75  | 59753 | 69.985 | ug/l # | 8      |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_X\DATA\VX092419\  
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Quant Title : SW846 8260  
QLast Update : Mon Sep 23 12:27:01 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.01 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampleId :

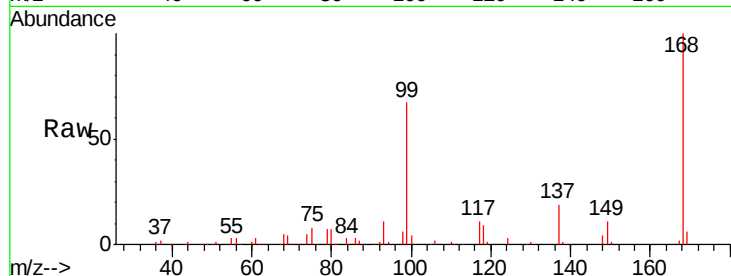
MW5-R2-1DL

Tgt Ion:168 Resp: 165754

Ion Ratio Lower Upper

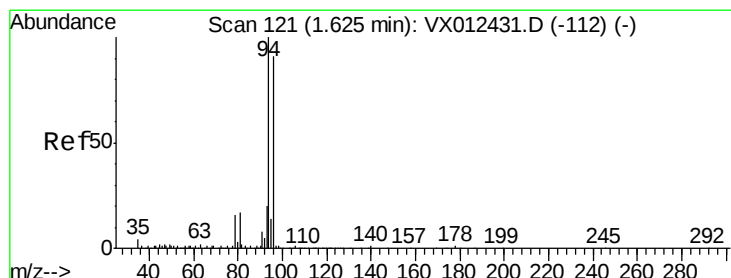
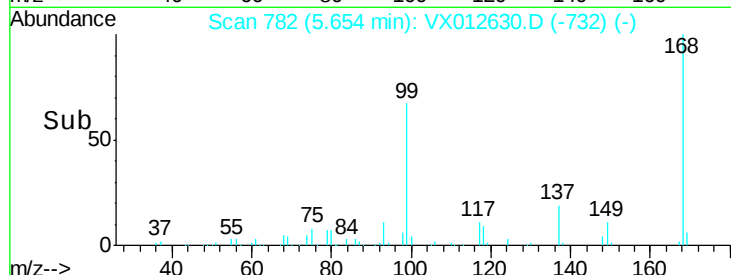
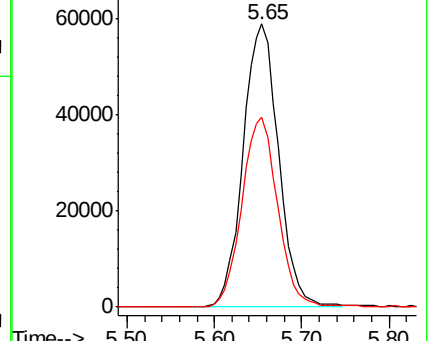
168 100

99 67.0 51.4 77.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#5

Bromomethane

Concen: 0.471 ug/l

RT: 1.64 min Scan# 123

Delta R.T. 0.01 min

Lab File: VX012630.D

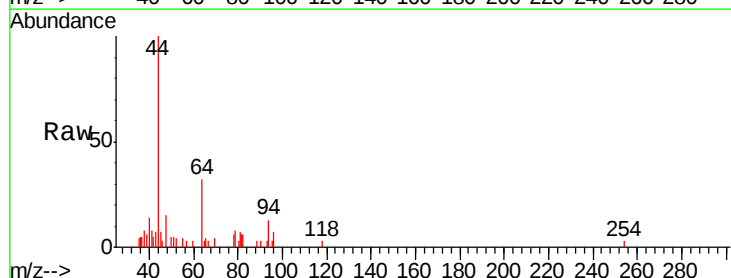
Acq: 24 Sep 2019 14:10

Tgt Ion: 94 Resp: 394

Ion Ratio Lower Upper

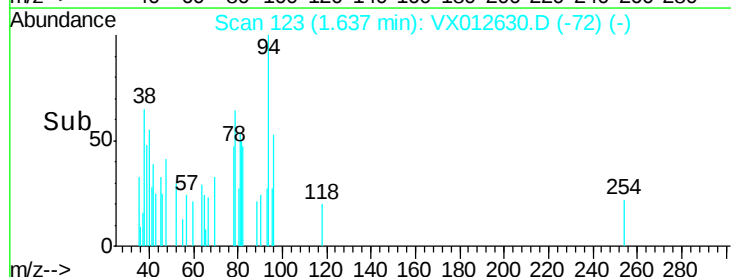
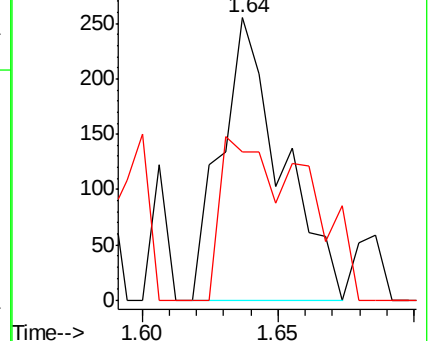
94 100

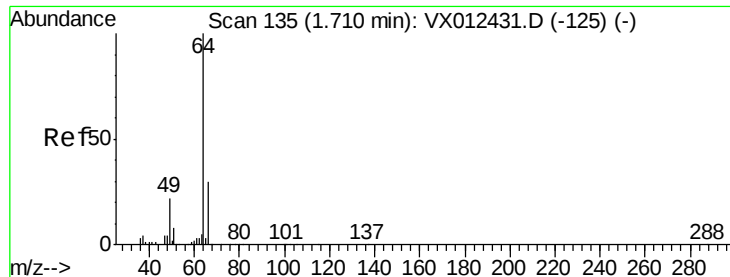
96 52.5 72.8 109.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: 0.472 ug/l

RT: 1.72 min Scan# 137

Delta R.T. 0.01 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampled :

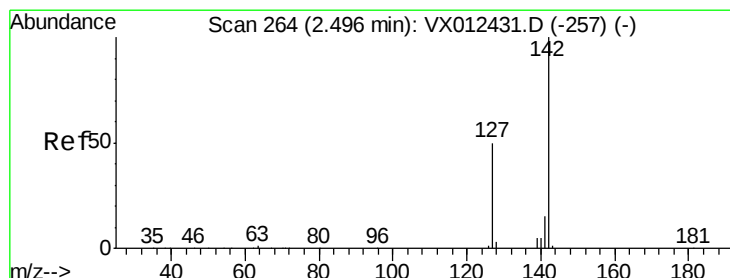
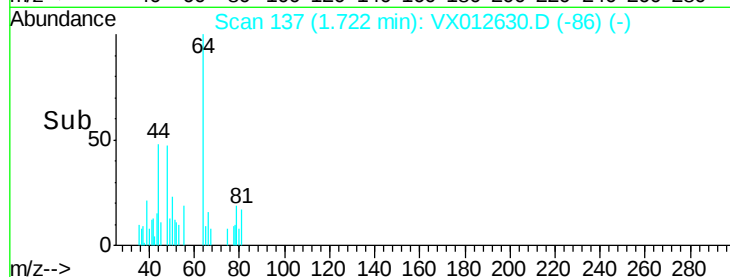
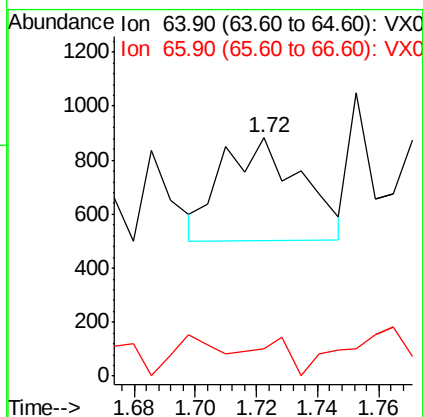
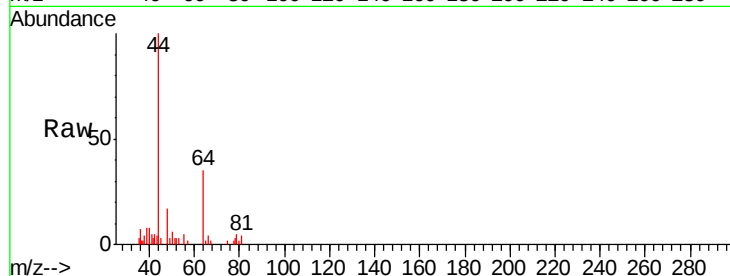
MW5-R2-1DL

Tgt Ion: 64 Resp: 677

Ion Ratio Lower Upper

64 100

66 1.4 24.0 36.0#



#10

Methyl Iodide

Concen: 5.122 ug/l

RT: 2.50 min Scan# 264

Delta R.T. 0.00 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

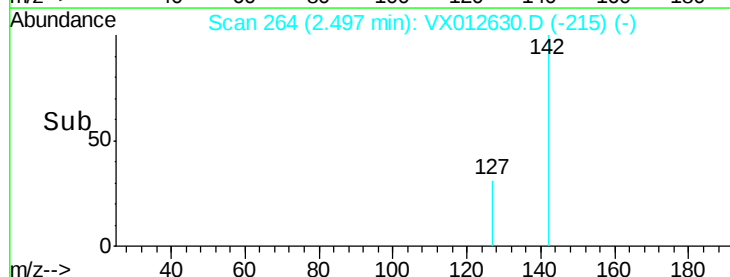
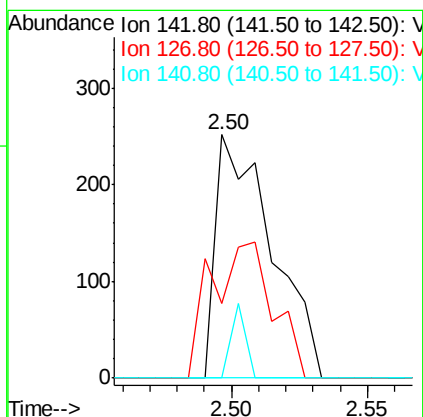
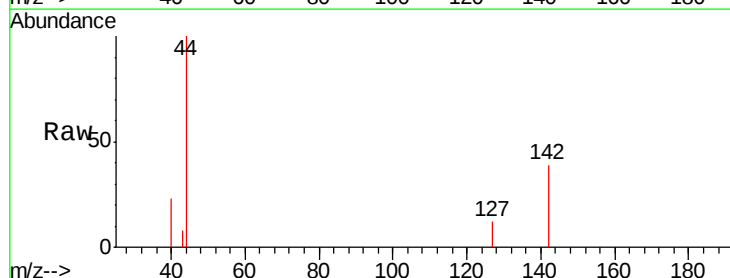
Tgt Ion: 142 Resp: 360

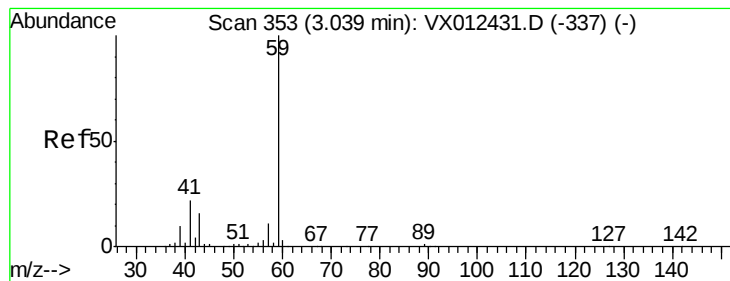
Ion Ratio Lower Upper

142 100

127 61.4 40.8 61.2#

141 7.8 12.1 18.1#



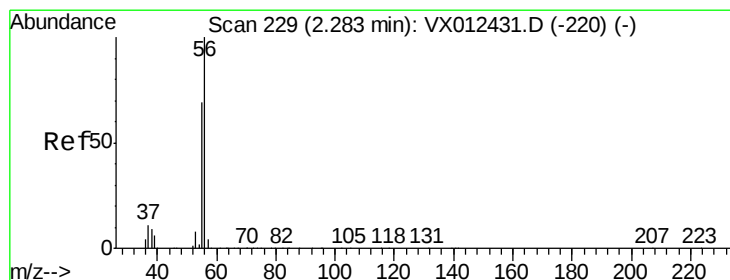
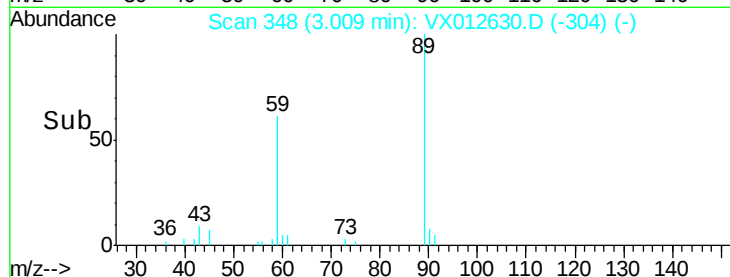
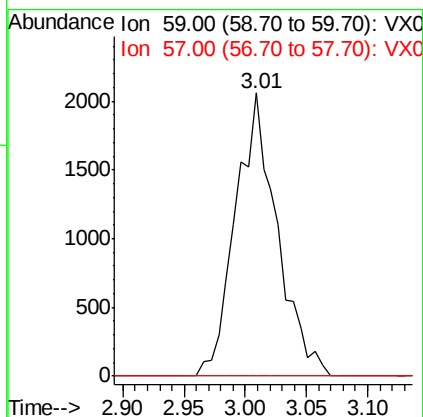
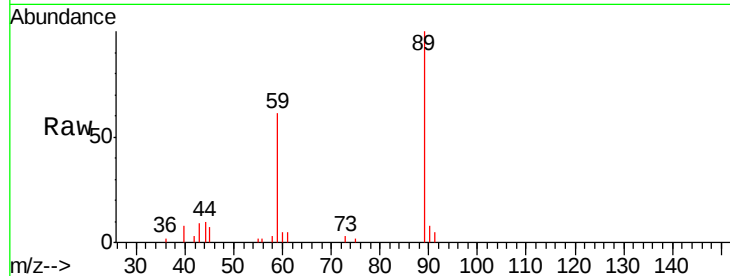


#11

Tert butyl alcohol  
Concen: 8.027 ug/l  
RT: 3.01 min Scan# 348  
Delta R.T. -0.03 min  
Lab File: VX012630.D  
Acq: 24 Sep 2019 14:10

Instrument :  
MSVOA\_X  
ClientSampleId :  
MW5-R2-1DL

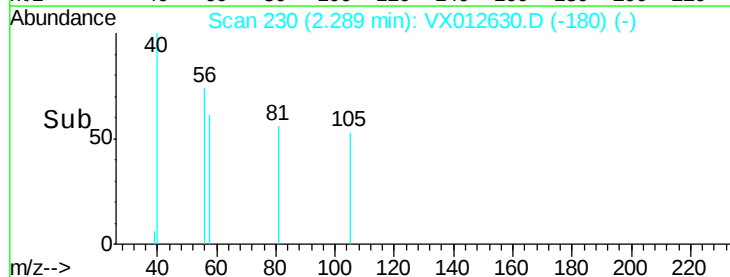
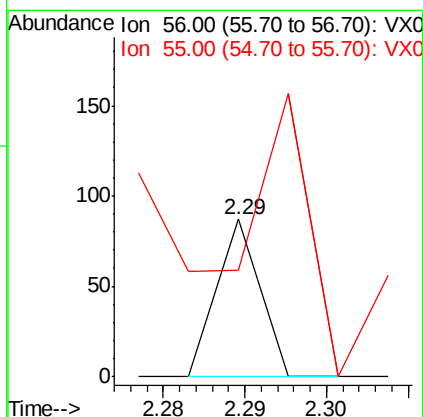
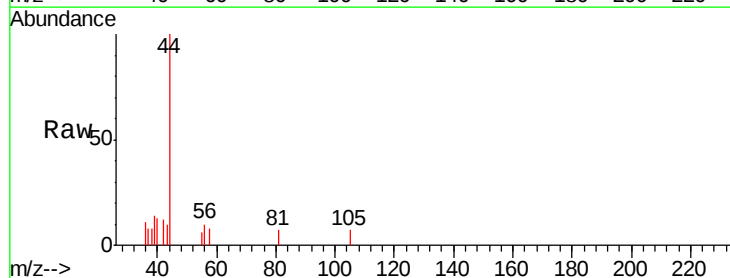
Tgt Ion: 59 Resp: 4840  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.3 12.5#

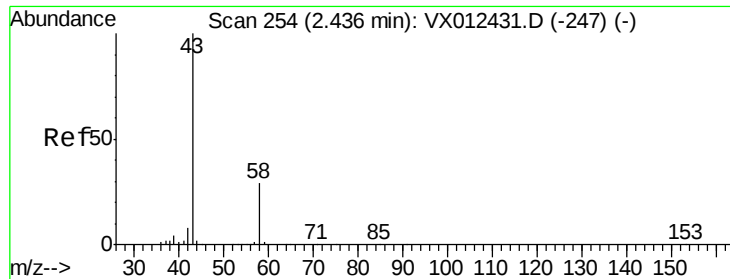


#13

Acrolein  
Concen: 10.324 ug/l  
RT: 2.29 min Scan# 230  
Delta R.T. 0.01 min  
Lab File: VX012630.D  
Acq: 24 Sep 2019 14:10

Tgt Ion: 56 Resp: 32  
Ion Ratio Lower Upper  
56 100  
55 0.0 55.8 83.8#





#16

Acetone

Concen: 6.024 ug/l

RT: 2.44 min Scan# 254

Delta R.T. 0.00 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampleId :

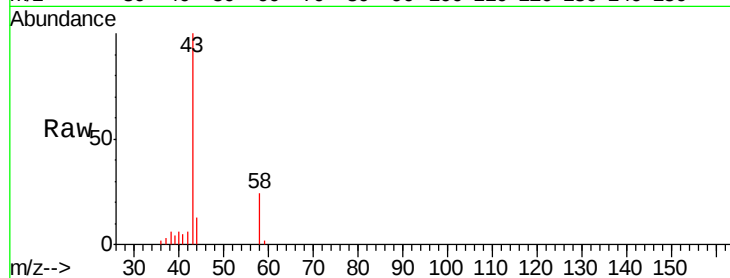
MW5-R2-1DL

Tgt Ion: 43 Resp: 7701

Ion Ratio Lower Upper

43 100

58 23.8 23.3 34.9



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.44

4000

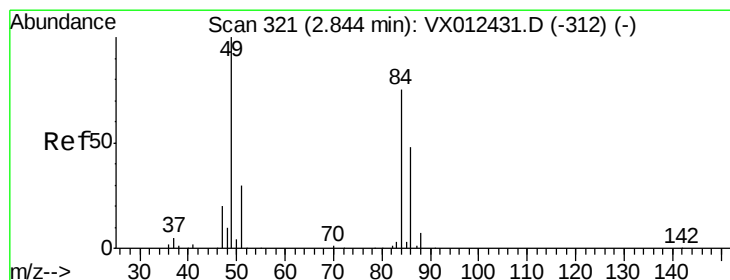
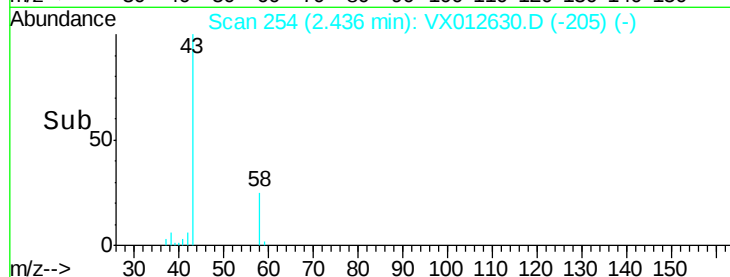
3000

2000

1000

0

Time--> 2.30 2.40 2.50



#20

Methylene Chloride

Concen: 0.548 ug/l

RT: 2.85 min Scan# 322

Delta R.T. 0.01 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Tgt Ion: 84 Resp: 1184

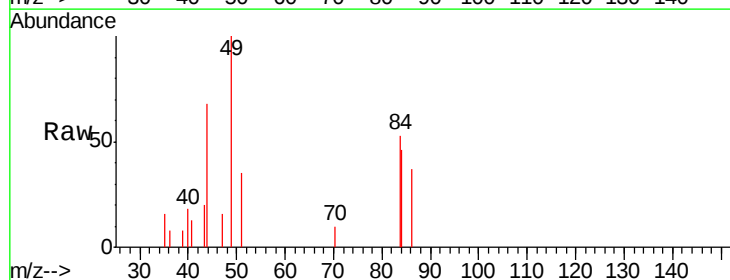
Ion Ratio Lower Upper

84 100

49 100.9 106.8 160.2#

51 35.7 32.3 48.5

86 37.5 51.3 76.9#



Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0

2.85

1000

800

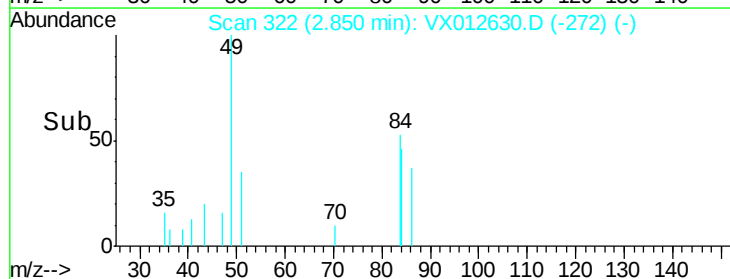
600

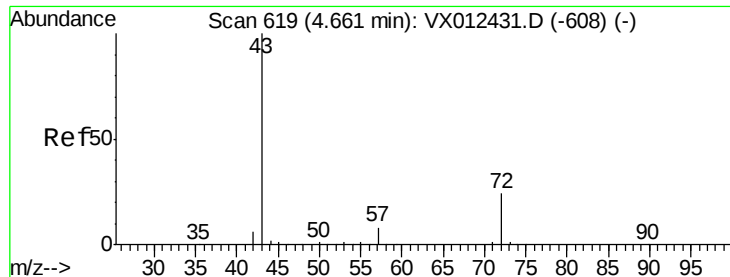
400

200

0

Time--> 2.80 2.85 2.90





#25

2-Butanone

Concen: 0.361 ug/l

RT: 4.69 min Scan# 623

Delta R.T. 0.02 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampled :

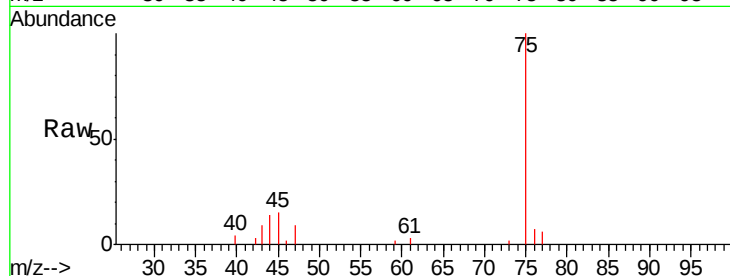
MW5-R2-1DL

Tgt Ion: 43 Resp: 662

Ion Ratio Lower Upper

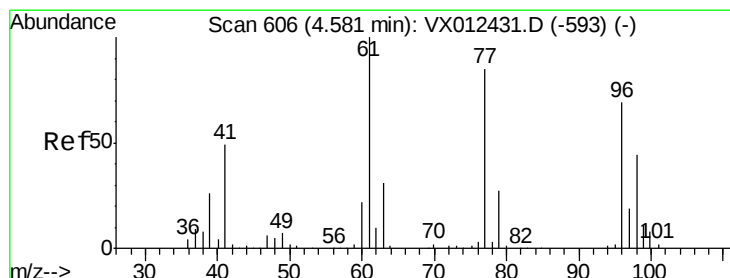
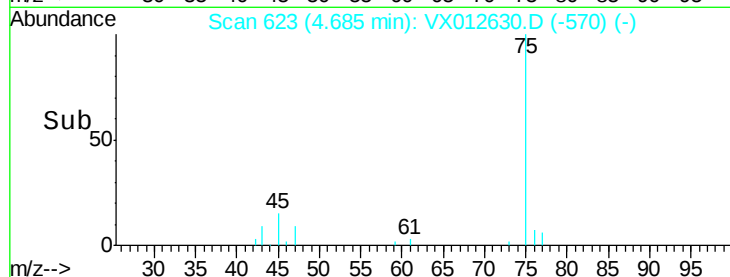
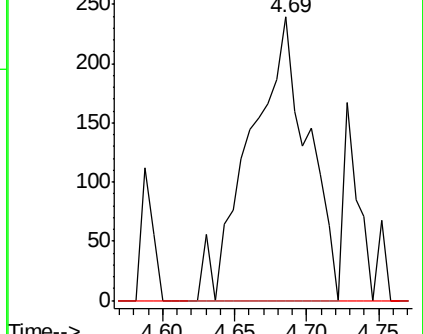
43 100

72 0.0 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



#27

cis-1,2-Dichloroethene

Concen: 2.345 ug/l

RT: 4.59 min Scan# 607

Delta R.T. 0.01 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

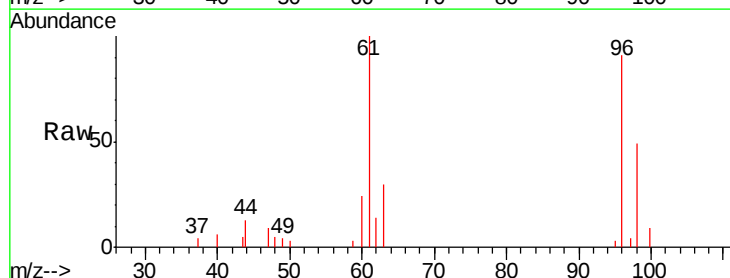
Tgt Ion: 96 Resp: 5372

Ion Ratio Lower Upper

96 100

61 130.2 0.0 319.4

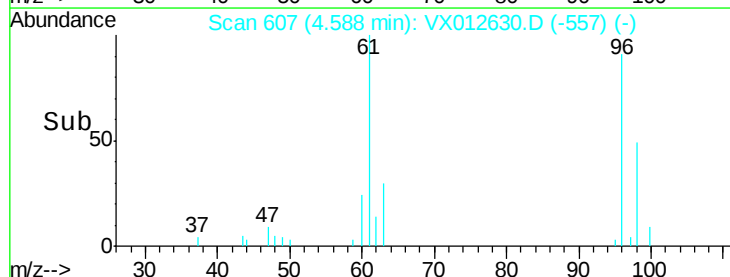
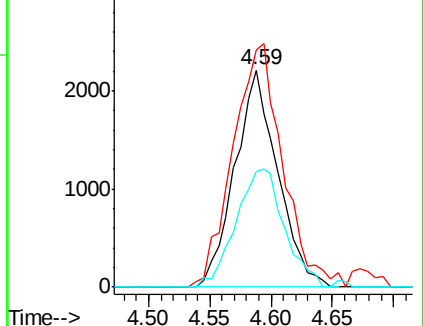
98 61.6 0.0 130.6

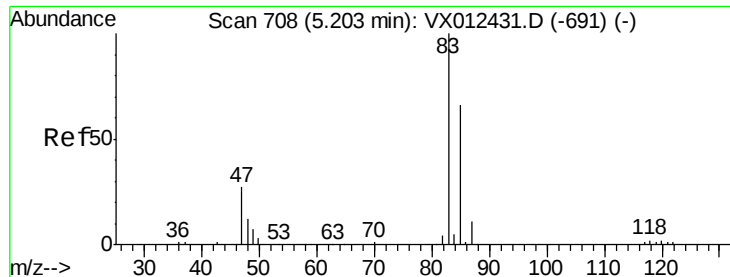


Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0





#30

Chloroform

Concen: 0.204 ug/l

RT: 5.20 min Scan# 707

Delta R.T. -0.01 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampleId :

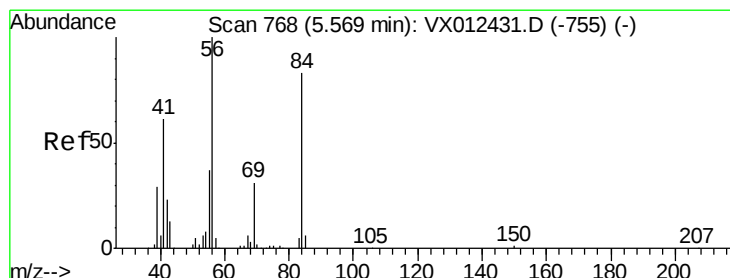
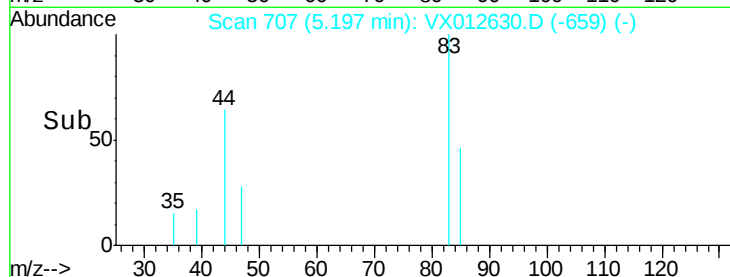
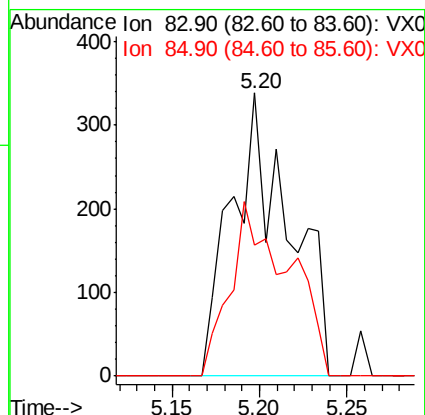
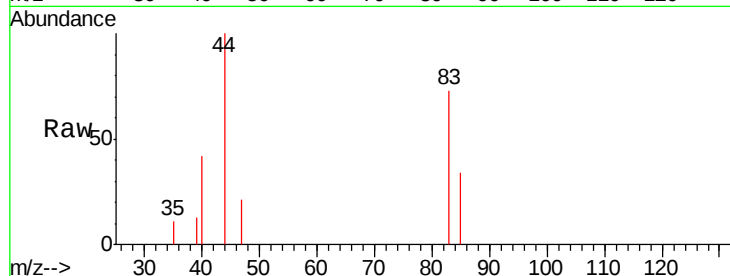
MW5-R2-1DL

Tgt Ion: 83 Resp: 775

Ion Ratio Lower Upper

83 100

85 46.2 53.0 79.4#



#31

Cyclohexane

Concen: 1.272 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.08 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

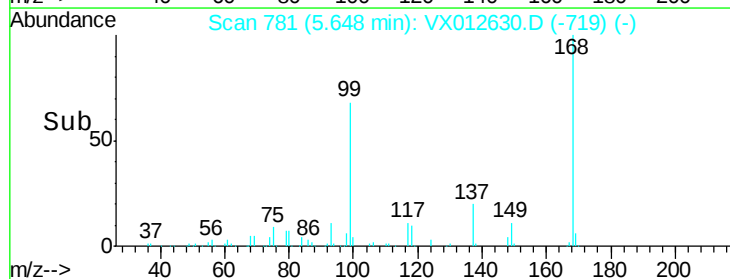
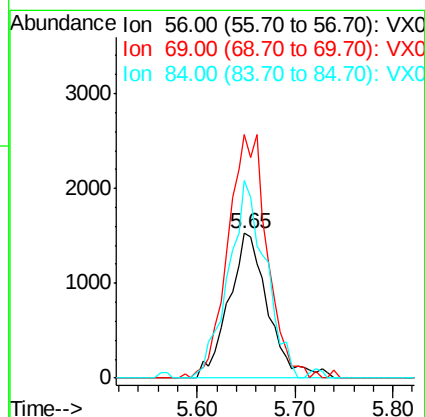
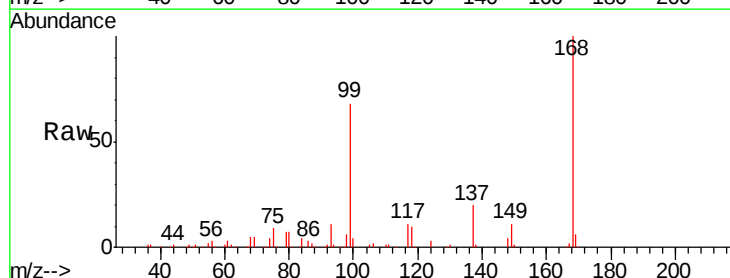
Tgt Ion: 56 Resp: 4273

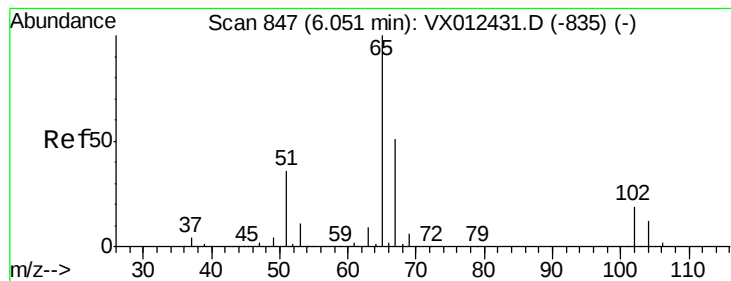
Ion Ratio Lower Upper

56 100

69 168.5 25.0 37.6#

84 136.3 66.4 99.6#





#33

1,2-Dichloroethane-d4

Concen: 50.003 ug/l

RT: 6.05 min Scan# 847

Delta R.T. 0.00 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampleId :

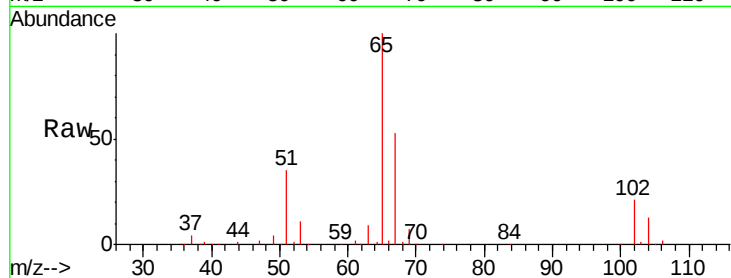
MW5-R2-1DL

Tgt Ion: 65 Resp: 120691

Ion Ratio Lower Upper

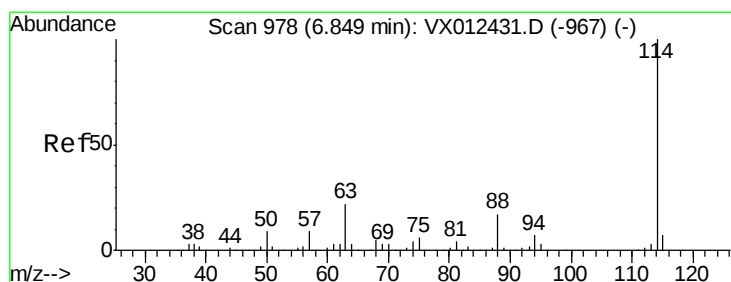
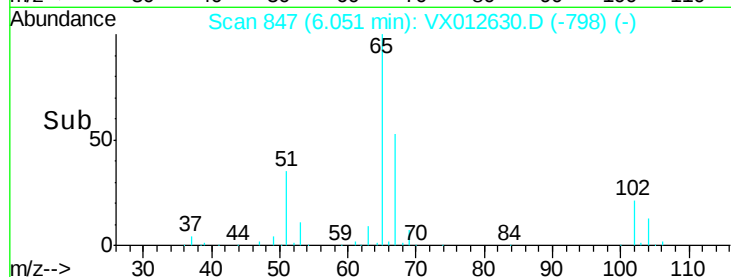
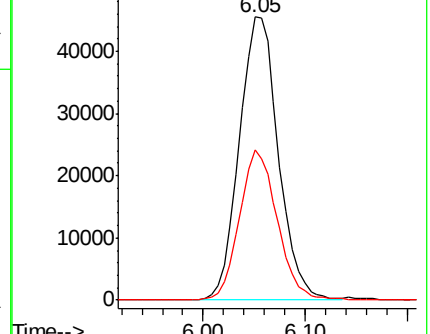
65 100

67 51.4 0.0 101.2



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 979

Delta R.T. 0.01 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

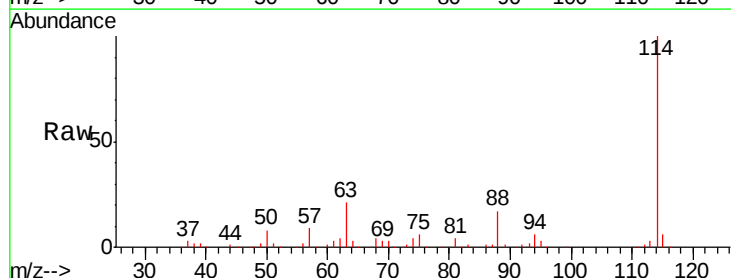
Tgt Ion: 114 Resp: 286395

Ion Ratio Lower Upper

114 100

63 20.9 0.0 43.2

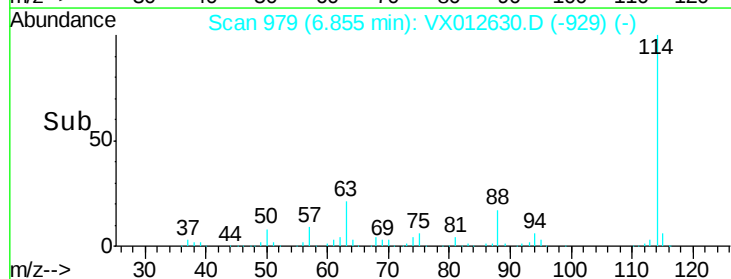
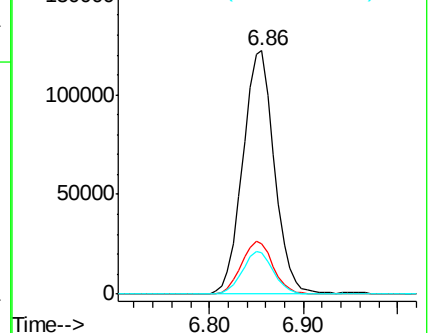
88 16.9 0.0 33.2

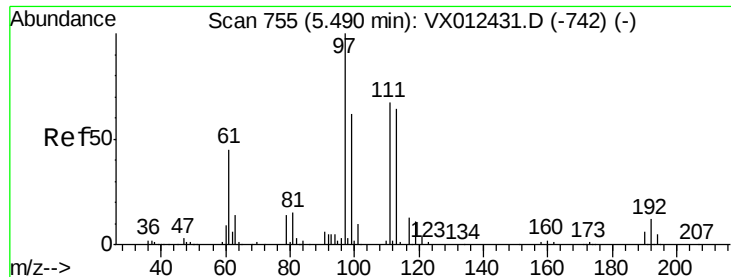


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 50.761 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.00 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampleId :

MW5-R2-1DL

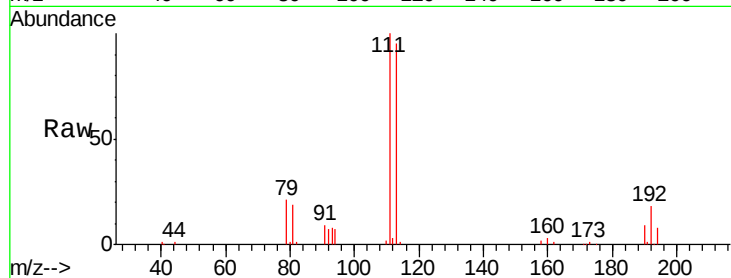
Tgt Ion:113 Resp: 86578

Ion Ratio Lower Upper

113 100

111 104.0 83.4 125.2

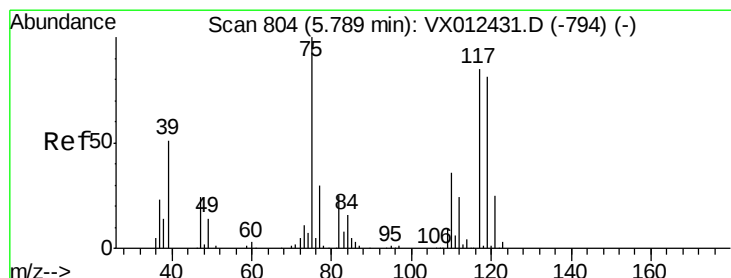
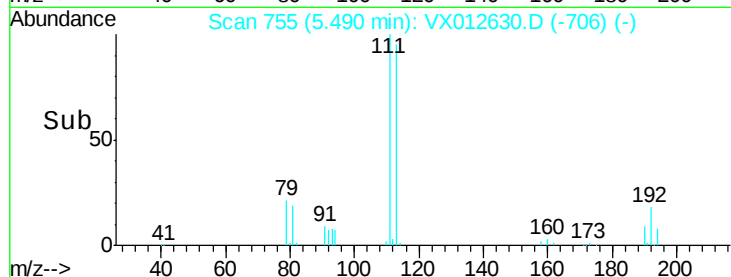
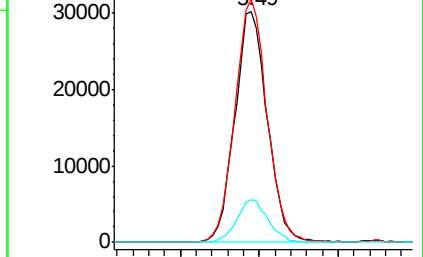
192 17.8 14.4 21.6



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 5.380 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.14 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

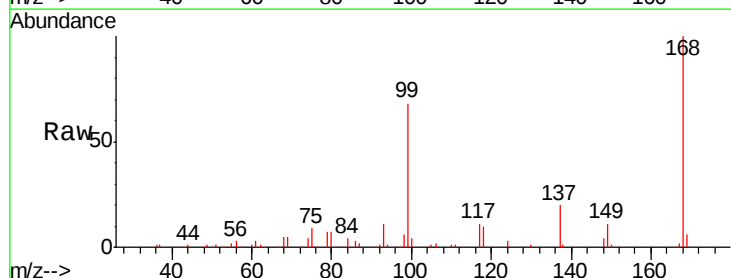
Tgt Ion: 75 Resp: 14853

Ion Ratio Lower Upper

75 100

110 9.1 16.7 50.0#

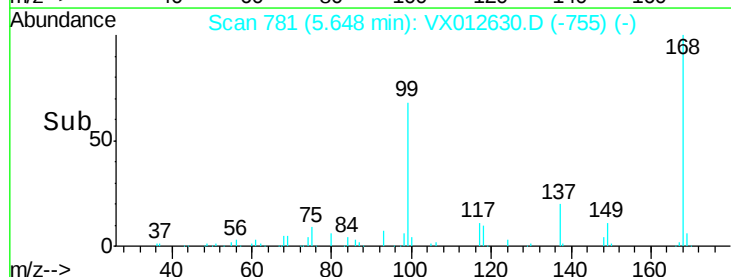
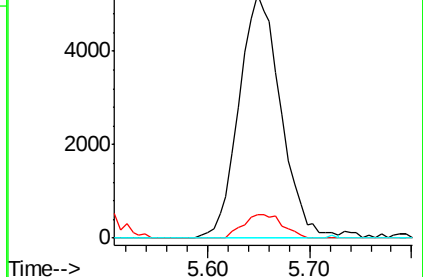
77 0.0 24.2 36.2#

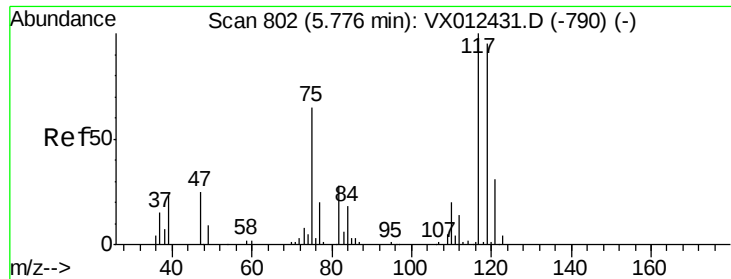


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

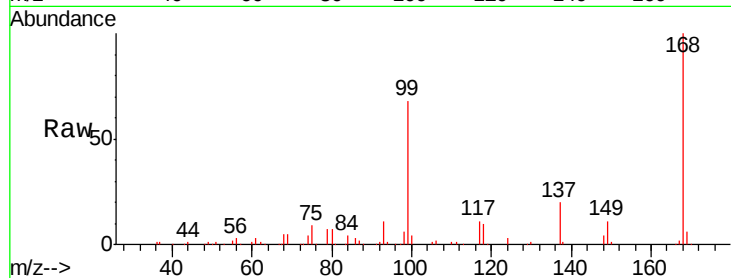




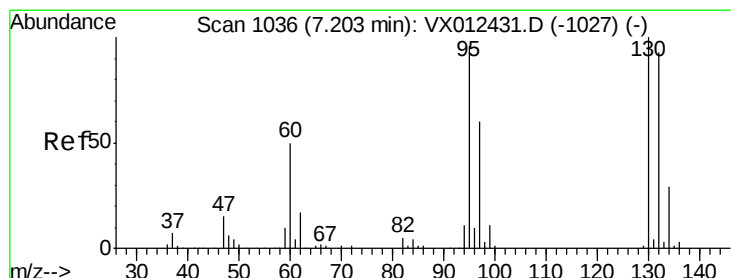
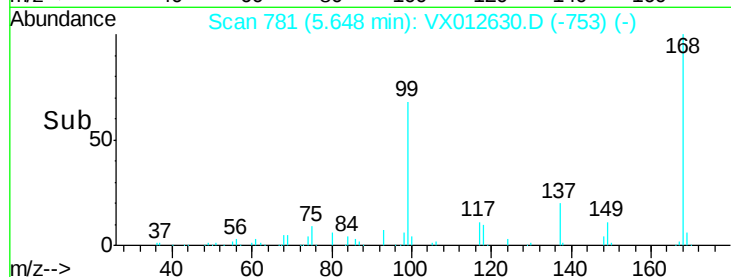
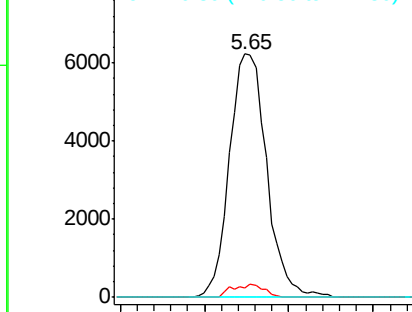
#38  
Carbon Tetrachloride  
Concen: 6.643 ug/l  
RT: 5.65 min Scan# 781  
Delta R.T. -0.13 min  
Lab File: VX012630.D  
Acq: 24 Sep 2019 14:10

Instrument :  
MSVOA\_X  
ClientSampleId :  
MW5-R2-1DL

Tgt Ion:117 Resp: 18628  
Ion Ratio Lower Upper  
117 100  
119 3.8 75.7 113.5#  
121 0.0 24.2 36.4#

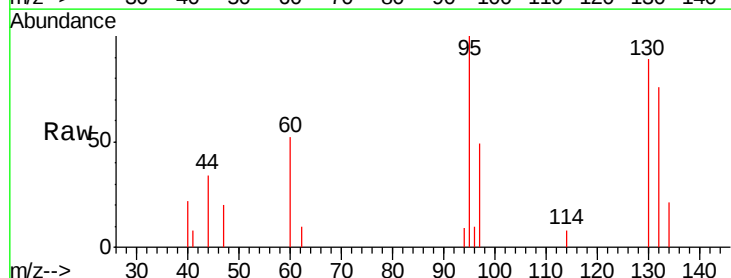


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

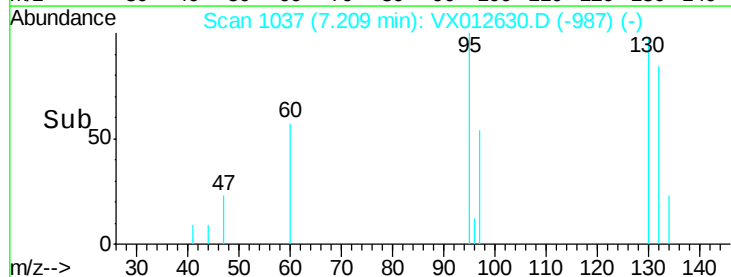
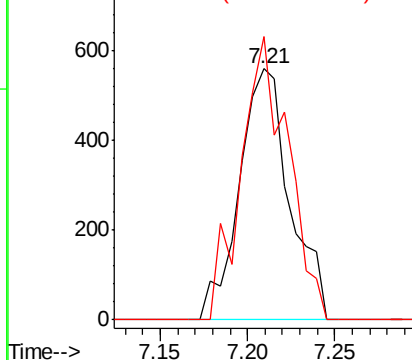


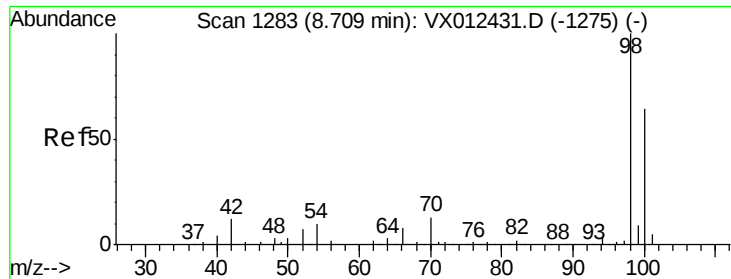
#44  
Trichloroethene  
Concen: 0.545 ug/l  
RT: 7.21 min Scan# 1037  
Delta R.T. 0.01 min  
Lab File: VX012630.D  
Acq: 24 Sep 2019 14:10

Tgt Ion:130 Resp: 1131  
Ion Ratio Lower Upper  
130 100  
95 112.7 0.0 193.0



Abundance Ion 129.80 (129.50 to 130.50): V  
Ion 94.90 (94.60 to 95.60): VX0

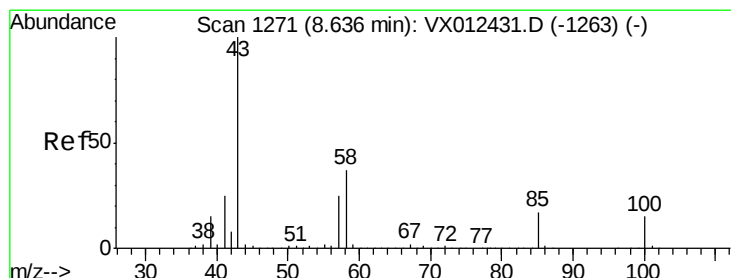
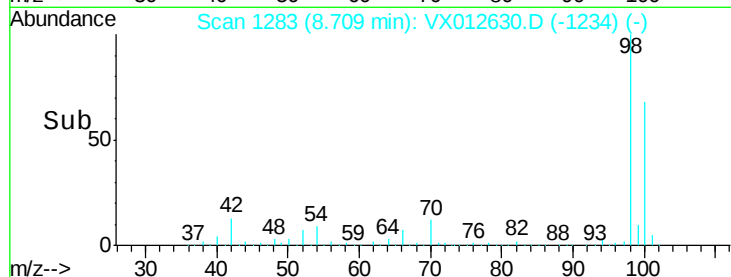
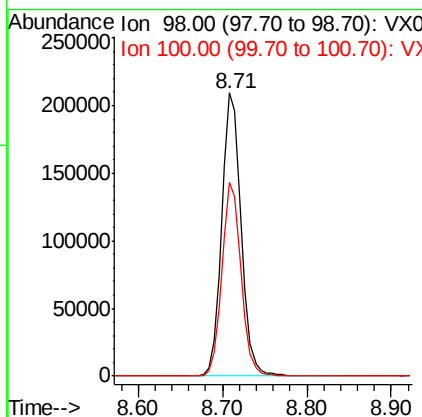
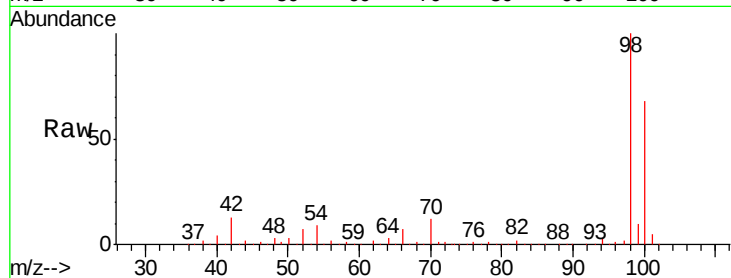




#50  
Toluene-d8  
Concen: 50.915 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX012630.D  
Acq: 24 Sep 2019 14:10

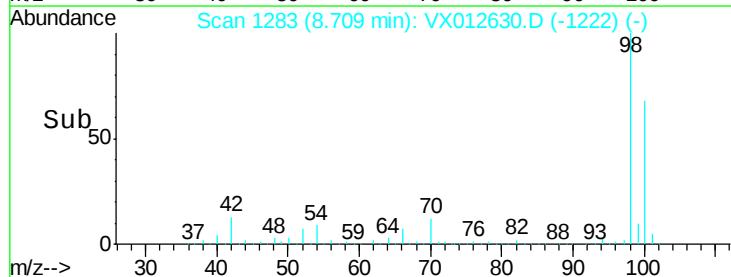
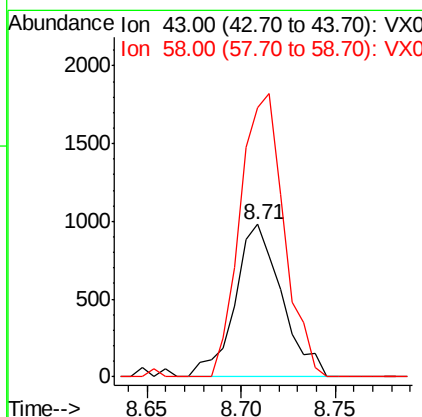
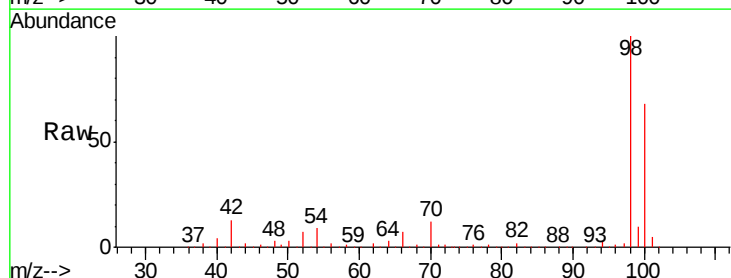
Instrument :  
MSVOA\_X  
ClientSampleId :  
MW5-R2-1DL

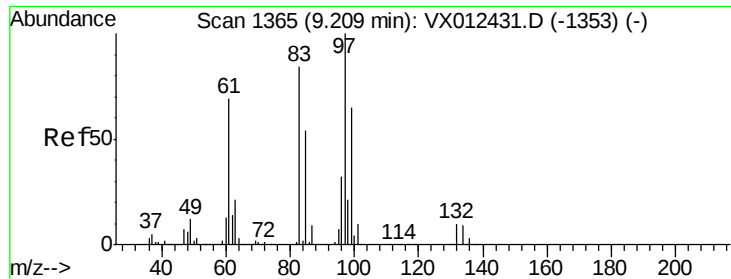
Tgt Ion: 98 Resp: 334427  
Ion Ratio Lower Upper  
98 100  
100 67.6 53.4 80.2



#51  
4-Methyl-2-Pentanone  
Concen: 0.506 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.07 min  
Lab File: VX012630.D  
Acq: 24 Sep 2019 14:10

Tgt Ion: 43 Resp: 1686  
Ion Ratio Lower Upper  
43 100  
58 174.5 29.8 44.6#

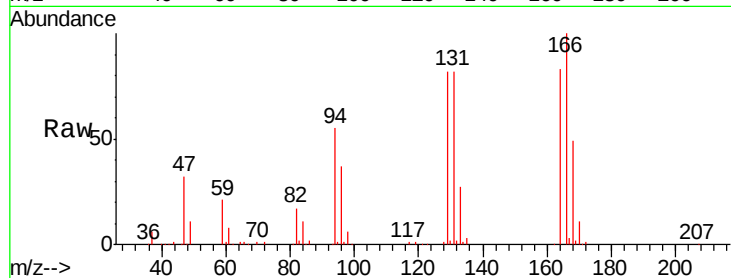




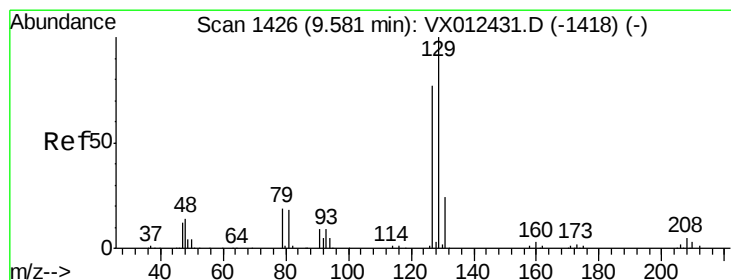
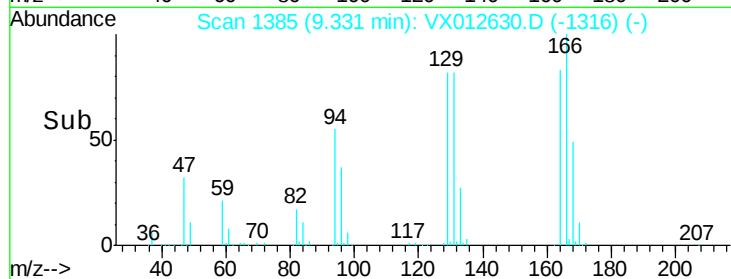
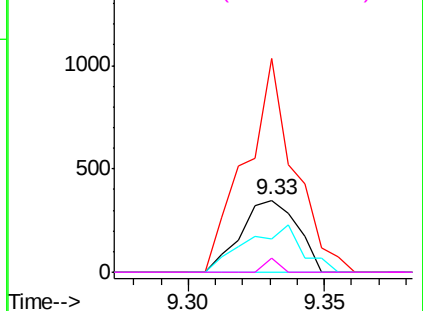
#55  
 1,1,2-Trichloroethane  
 Concen: 0.247 ug/l  
 RT: 9.33 min Scan# 1385  
 Delta R.T. 0.12 min  
 Lab File: VX012630.D  
 Acq: 24 Sep 2019 14:10

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 MW5-R2-1DL

Tgt Ion: 97 Resp: 501  
 Ion Ratio Lower Upper  
 97 100  
 83 296.0 67.4 101.2#  
 85 45.6 43.5 65.3  
 99 19.5 51.8 77.8#

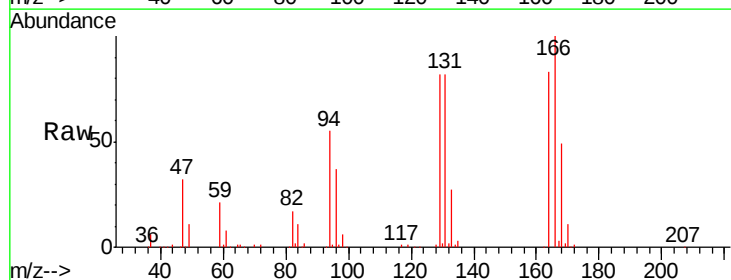


Abundance Ion 96.90 (96.60 to 97.60): VX0  
 Ion 82.90 (82.60 to 83.60): VX0  
 Ion 84.90 (84.60 to 85.60): VX0  
 Ion 98.90 (98.60 to 99.60): VX0

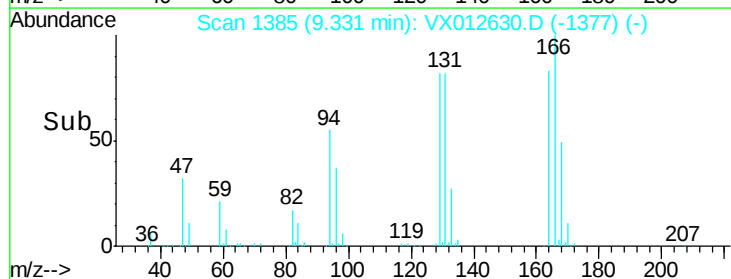
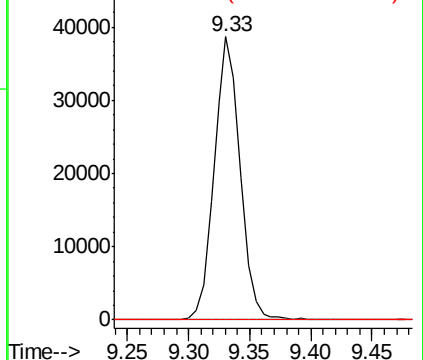


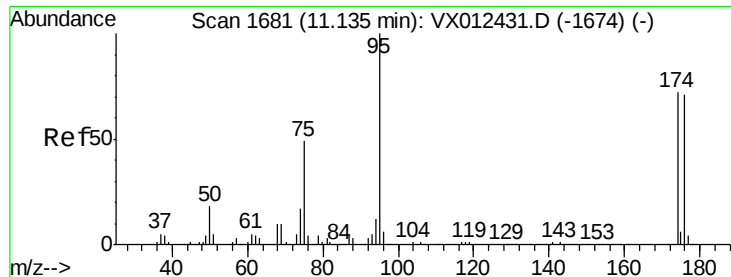
#60  
 Dibromochloromethane  
 Concen: 27.790 ug/l  
 RT: 9.33 min Scan# 1385  
 Delta R.T. -0.25 min  
 Lab File: VX012630.D  
 Acq: 24 Sep 2019 14:10

Tgt Ion: 129 Resp: 57094  
 Ion Ratio Lower Upper  
 129 100  
 127 0.0 38.9 116.6#



Abundance Ion 128.80 (128.50 to 129.50): V  
 Ion 126.80 (126.50 to 127.50): V





#62

4-Bromofluorobenzene

Concen: 44.627 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.00 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampleId :

MW5-R2-1DL

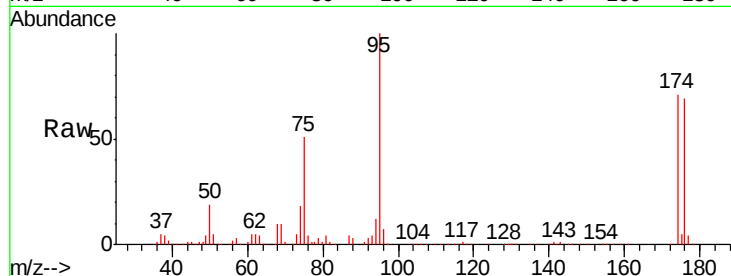
Tgt Ion: 95 Resp: 115258

Ion Ratio Lower Upper

95 100

174 67.5 0.0 140.0

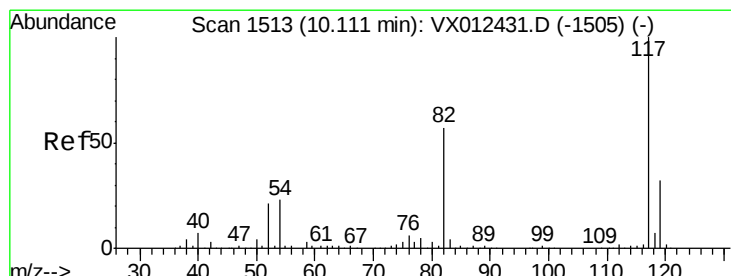
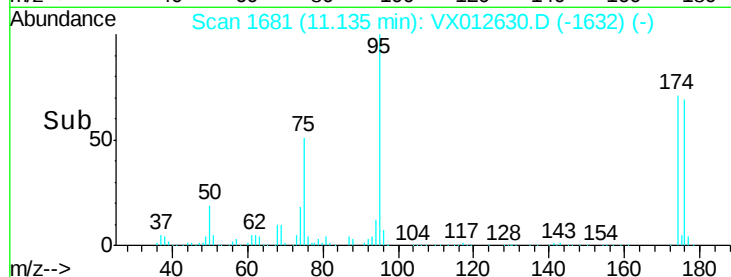
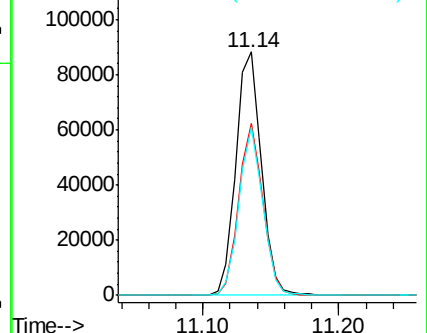
176 64.9 0.0 135.4



Abundance Ion 94.90 (94.60 to 95.60): VX012630.D (-1632) (-)

Ion 173.80 (173.50 to 174.50): VX012630.D (-1632) (-)

Ion 175.80 (175.50 to 176.50): VX012630.D (-1632) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

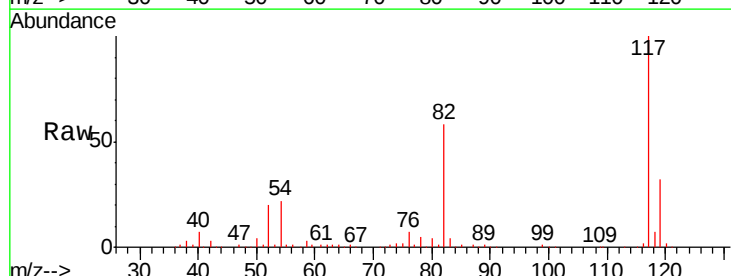
Tgt Ion: 117 Resp: 242211

Ion Ratio Lower Upper

117 100

82 58.5 45.9 68.9

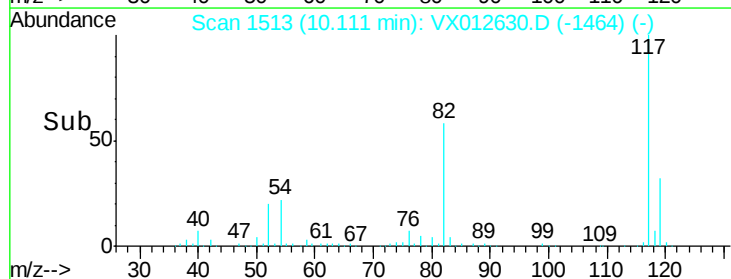
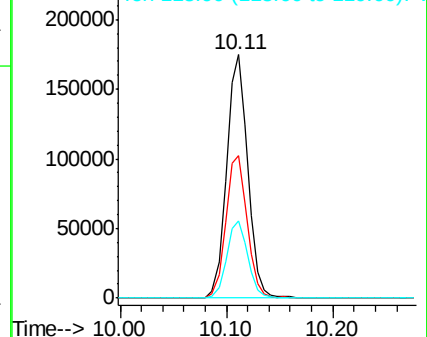
119 32.0 25.3 37.9

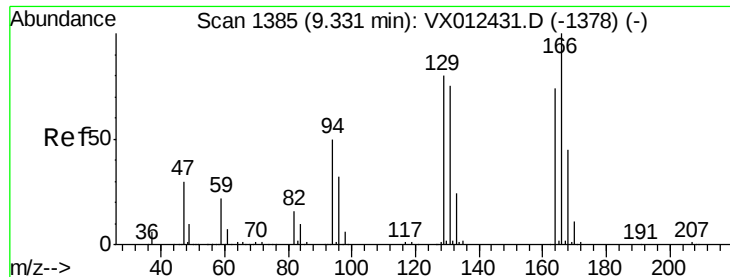


Abundance Ion 116.90 (116.60 to 117.60): VX012630.D (-1464) (-)

Ion 82.00 (81.70 to 82.70): VX012630.D (-1464) (-)

Ion 118.90 (118.60 to 119.60): VX012630.D (-1464) (-)





#64

Tetrachloroethene

Concen: 33.492 ug/l

RT: 9.33 min Scan# 1385

Delta R.T. 0.00 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampleId :

MW5-R2-1DL

Tgt Ion:164 Resp: 56559

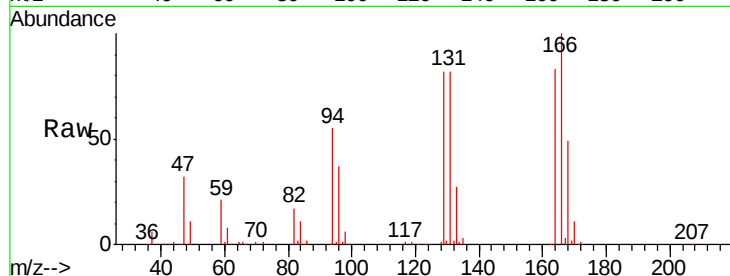
Ion Ratio Lower Upper

164 100

166 120.5 107.8 161.6

129 99.0 86.2 129.2

131 98.5 80.4 120.6

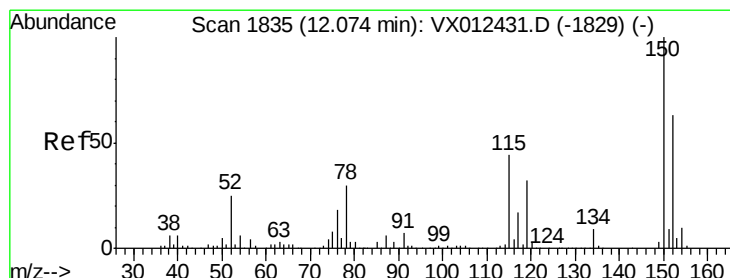
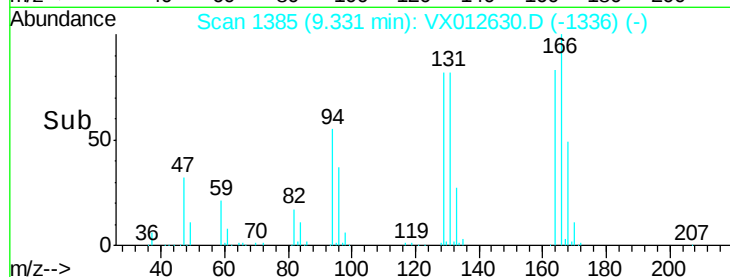
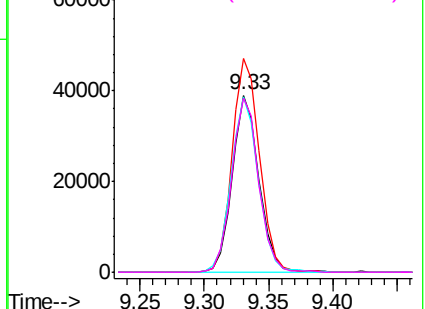


Abundance Ion 163.80 (163.50 to 164.50): V

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: 12.07 min Scan# 1835

Delta R.T. 0.00 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

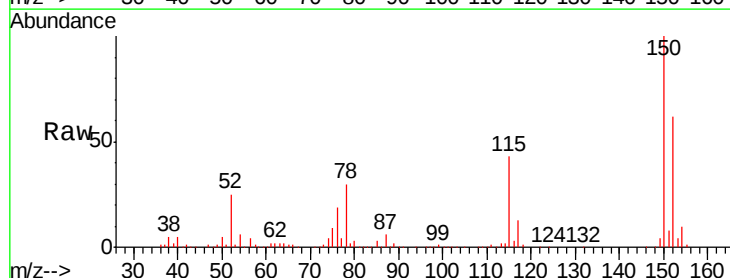
Tgt Ion:152 Resp: 92498

Ion Ratio Lower Upper

152 100

115 66.4 44.1 132.3

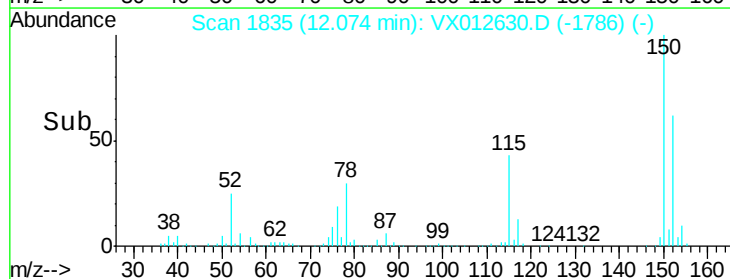
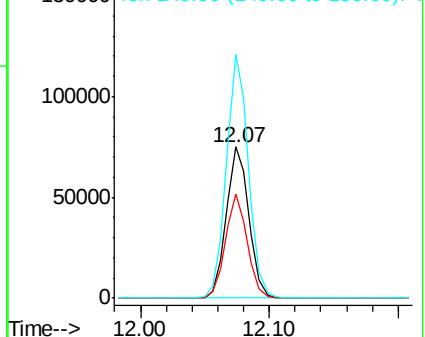
150 157.7 0.0 343.8

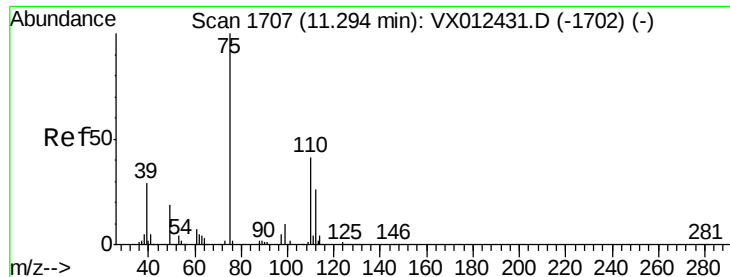


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 24.421 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.16 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

Instrument :

MSVOA\_X

ClientSampleId :

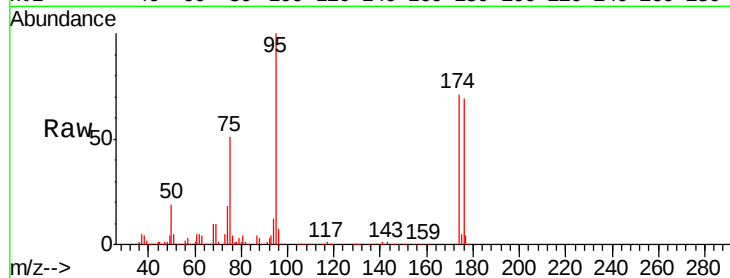
MW5-R2-1DL

Tgt Ion: 75 Resp: 59753

Ion Ratio Lower Upper

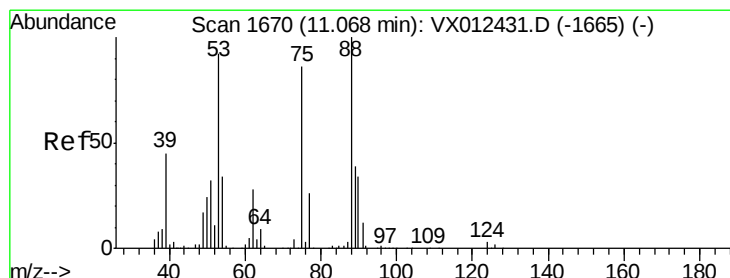
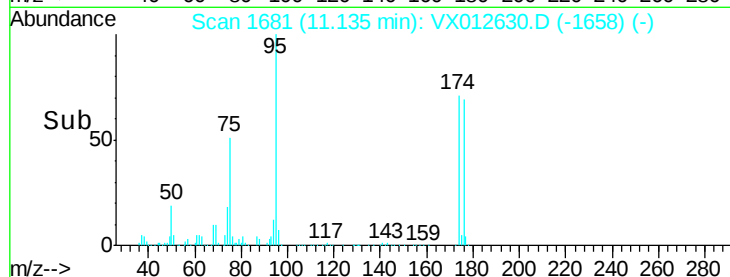
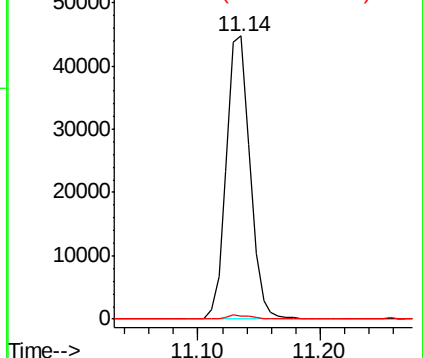
75 100

77 1.4 19.7 59.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0



#81

trans-1,4-Dichloro-2-butene

Concen: 69.985 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.07 min

Lab File: VX012630.D

Acq: 24 Sep 2019 14:10

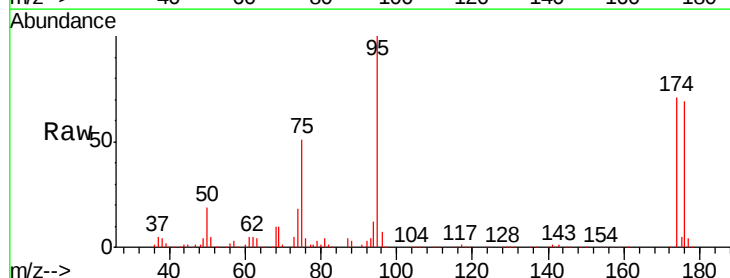
Tgt Ion: 75 Resp: 59753

Ion Ratio Lower Upper

75 100

53 0.2 83.6 125.4#

89 0.0 36.3 54.5#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

