

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX061218\  
 Data File : VX002476.D  
 Acq On : 12 Jun 2018 19:31  
 Operator : JC/MD  
 Sample : J3402-03  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jun 13 01:27:51 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X060418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 05 03:22:35 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 193684   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 286130   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 261415   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 141108   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 154733   | 56.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 112.60% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 115338   | 51.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.52% |          |
| 50) Toluene-d8              | 8.72  | 98   | 453756   | 52.61 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.22% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 153318   | 46.10 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.20%  |          |

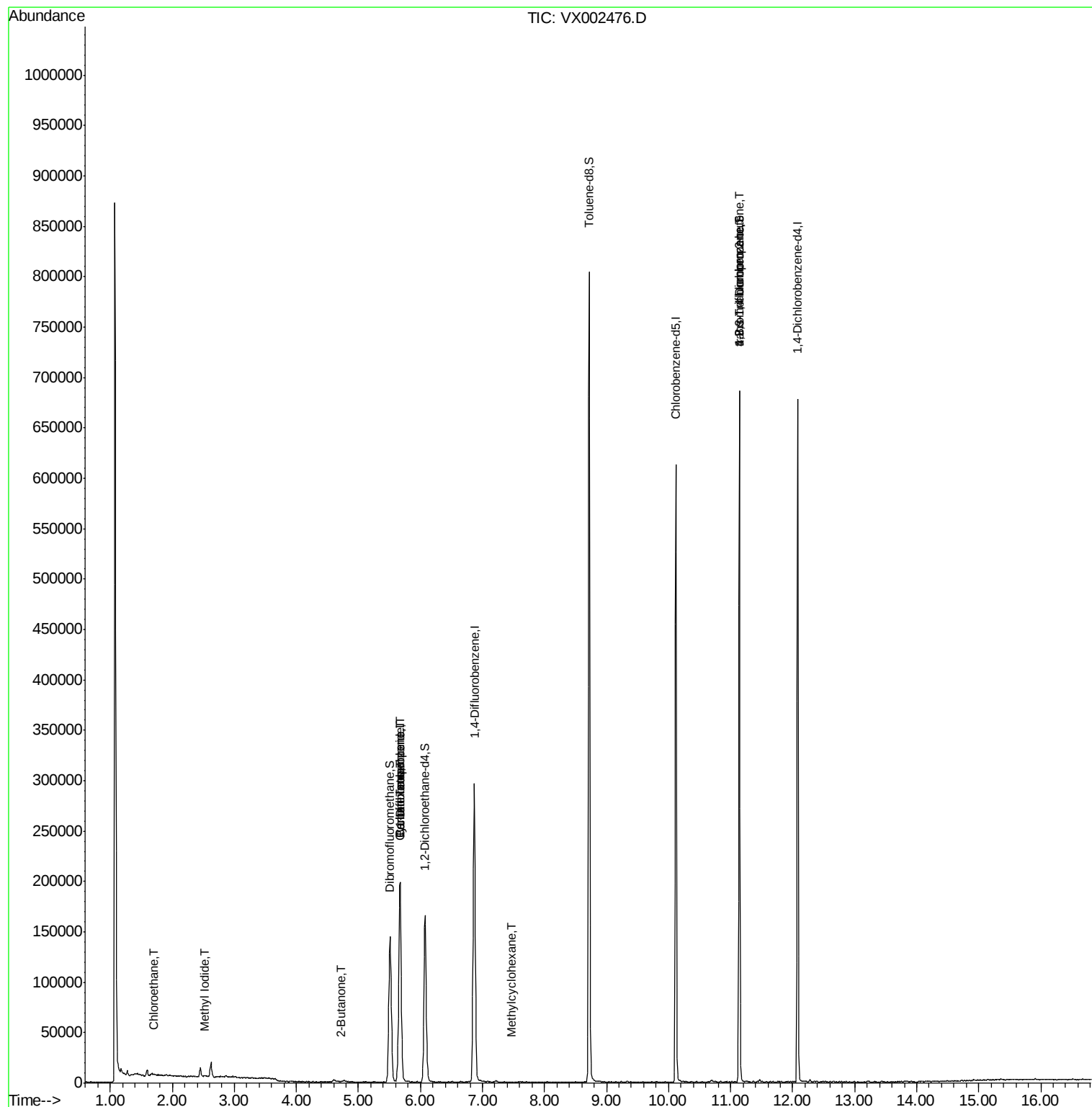
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 556      | Below Cal |        | 93     |
| 5) Bromomethane                | 1.67  | 94   | 946      | Below Cal |        | 99     |
| 6) Chloroethane                | 1.70  | 64   | 455      | 0.28      | ug/l # | 43     |
| 8) Diethyl Ether               | 2.20  | 74   | 140      | Below Cal | #      | 46     |
| 10) Methyl Iodide              | 2.53  | 142  | 1150     | 0.39      | ug/l # | 94     |
| 11) Tert butyl alcohol         | 3.09  | 59   | 183      | Below Cal | #      | 38     |
| 13) Acrolein                   | 2.30  | 56   | 176      | Below Cal | #      | 47     |
| 15) Acrylonitrile              | 3.18  | 53   | 213      | Below Cal | #      | 1      |
| 16) Acetone                    | 2.45  | 43   | 9646     | Below Cal |        | 99     |
| 18) Methyl Acetate             | 2.79  | 43   | 705      | Below Cal | #      | 86     |
| 19) Methyl tert-butyl Ether    | 3.15  | 73   | 41       | Below Cal | #      | 54     |
| 20) Methylene Chloride         | 2.85  | 84   | 636      | Below Cal | #      | 80     |
| 22) Diisopropyl ether          | 3.89  | 45   | 117      | Below Cal | #      | 41     |
| 25) 2-Butanone                 | 4.72  | 43   | 647      | 0.34      | ug/l # | 52     |
| 28) Bromochloromethane         | 5.04  | 49   | 25       | Below Cal | #      | 13     |
| 31) Cyclohexane                | 5.66  | 56   | 4377     | 1.25      | ug/l # | 24     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 14371    | 4.78      | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 18317    | 5.82      | ug/l # | 15     |
| 39) Methylcyclohexane          | 7.48  | 83   | 22       | 0.27      | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 85019    | 27.46     | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 85019    | 96.25     | ug/l # | 7      |

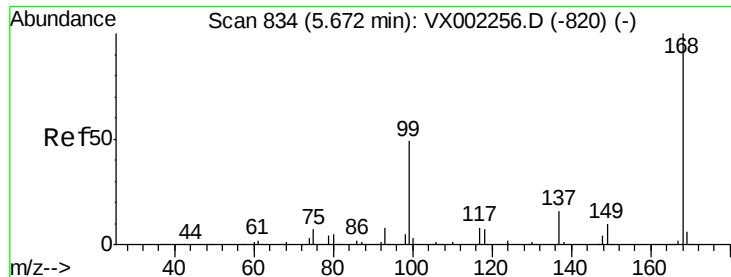
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX061218\  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X060418W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jun 05 03:22:35 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.00 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

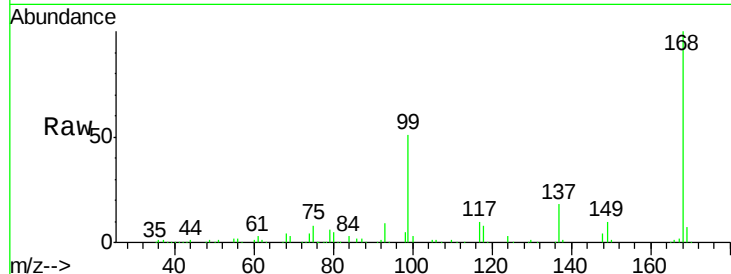
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:168 Resp: 193684

Ion Ratio Lower Upper

168 100

99 50.6 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

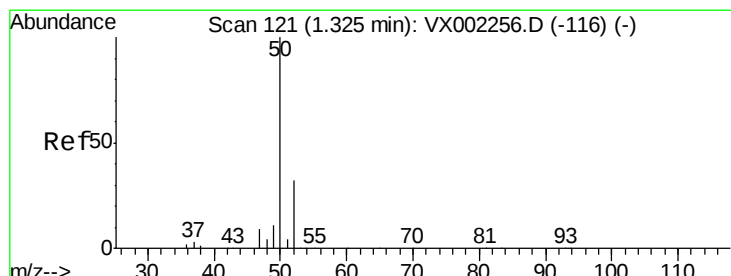
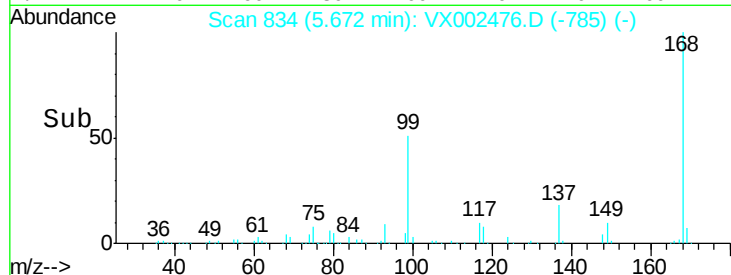
60000

40000

20000

0

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 1.33 min Scan# 122

Delta R.T. 0.01 min

Lab File: VX002476.D

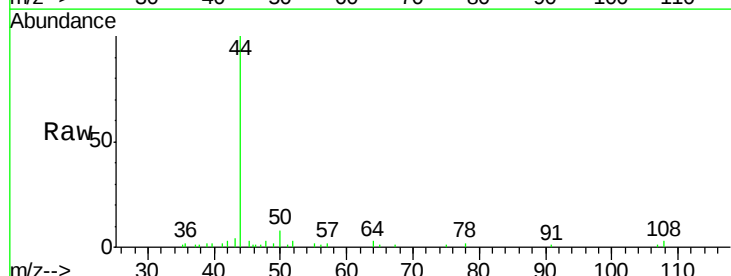
Acq: 12 Jun 2018 19:31

Tgt Ion: 50 Resp: 556

Ion Ratio Lower Upper

50 100

52 36.2 25.7 38.5



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.33

400

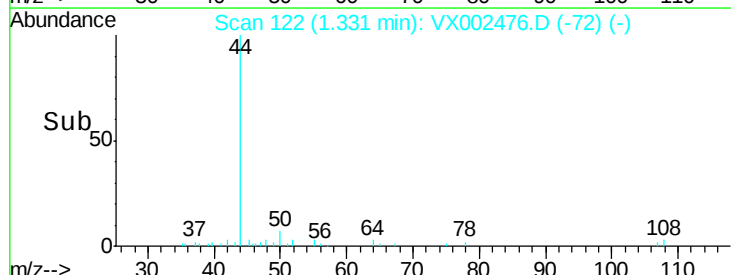
300

200

100

0

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.67 min Scan# 177

Delta R.T. 0.03 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

Instrument :

MSVOA\_X

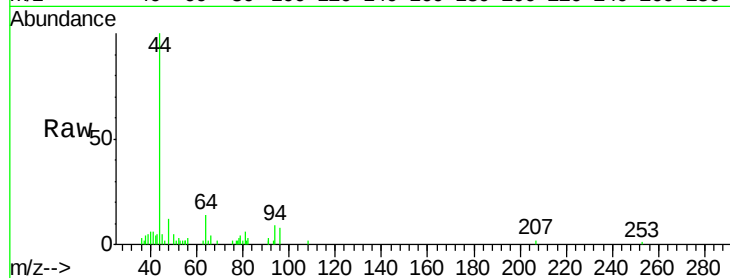
ClientSampled :

Tot Ion: 94 Resp: 946

Ion Ratio Lower Upper

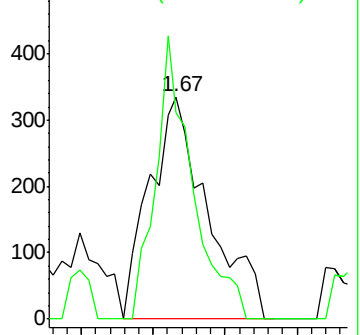
94 100

96 92.8 74.9 112.3

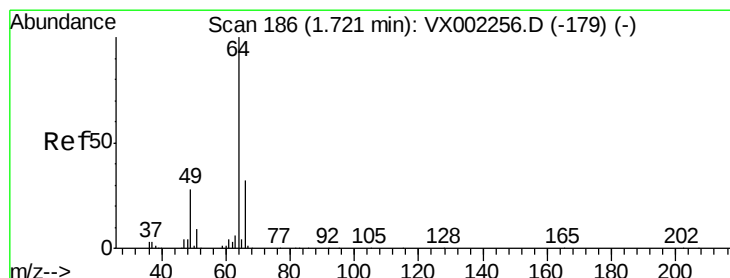
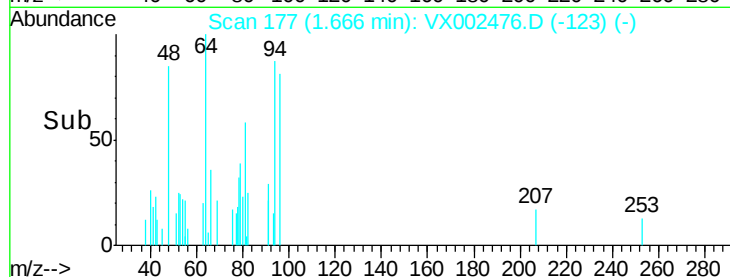


Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



Time-->



#6

Chloroethane

Concen: 0.28 ug/l

RT: 1.70 min Scan# 183

Delta R.T. -0.02 min

Lab File: VX002476.D

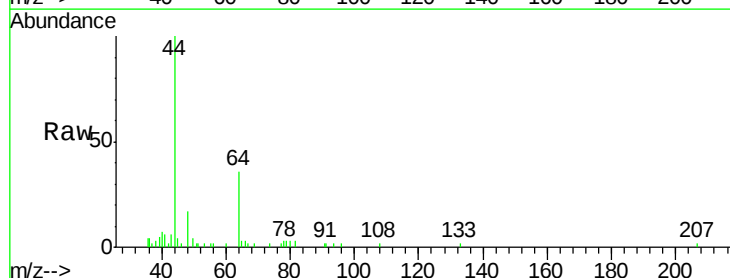
Acq: 12 Jun 2018 19:31

Tgt Ion: 64 Resp: 455

Ion Ratio Lower Upper

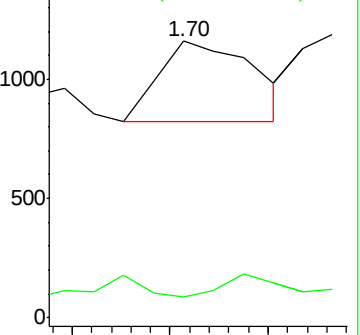
64 100

66 0.0 25.5 38.3#

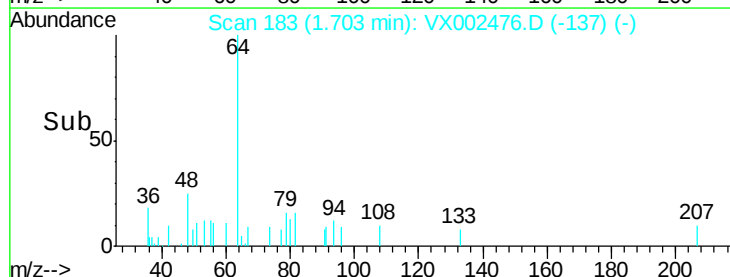


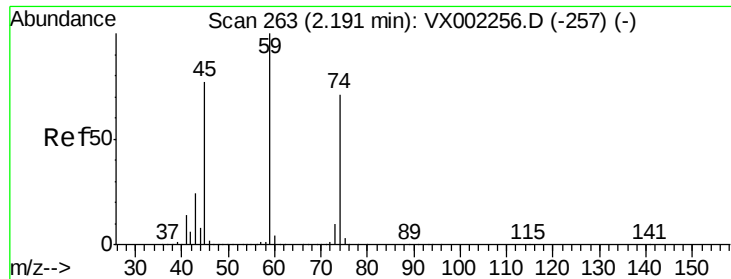
Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



Time-->





#8

Diethyl Ether

Concen: Below Cal

RT: 2.20 min Scan# 264

Delta R.T. 0.01 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

Instrument :

MSVOA\_X

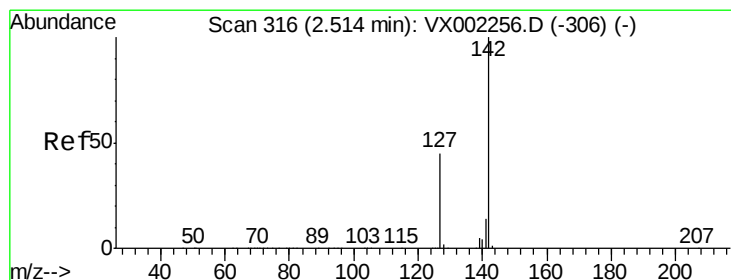
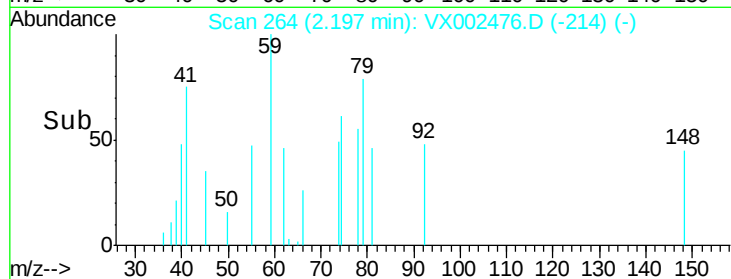
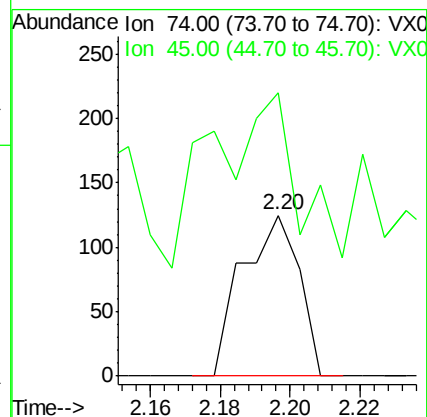
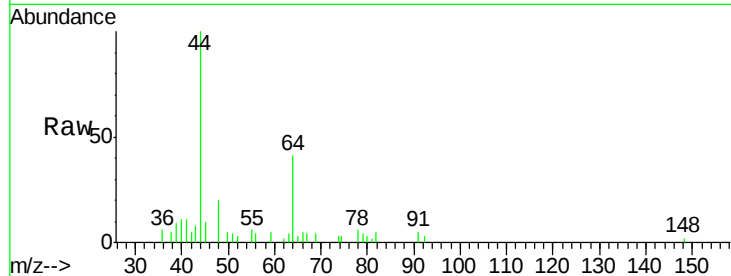
ClientSampled :

Tot Ion: 74 Resp: 140

Ion Ratio Lower Upper

74 100

45 162.1 53.1 159.4#



#10

Methyl Iodide

Concen: 0.39 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.01 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

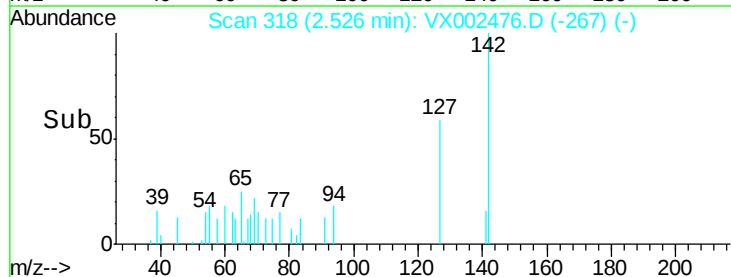
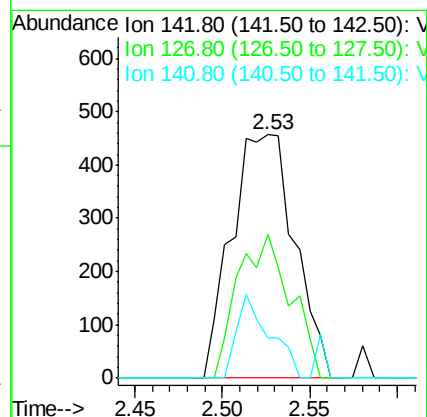
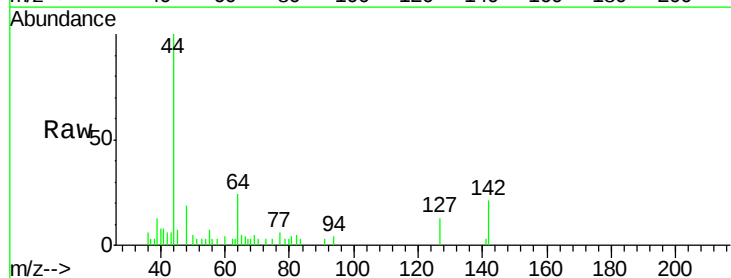
Tgt Ion:142 Resp: 1150

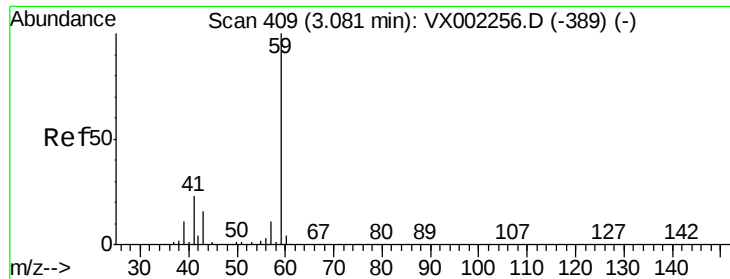
Ion Ratio Lower Upper

142 100

127 49.1 36.6 55.0

141 17.8 11.3 16.9#



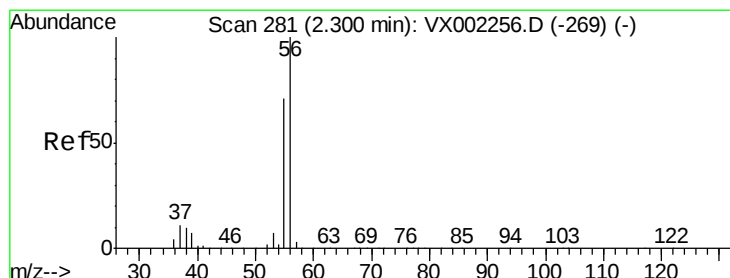
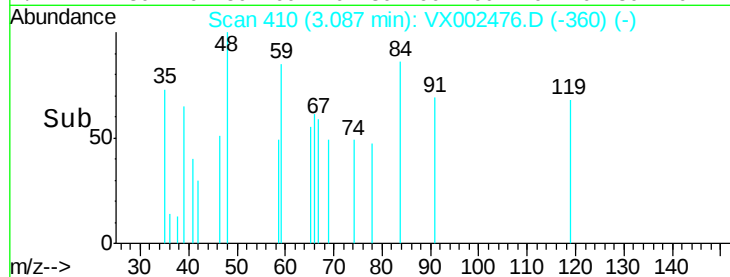
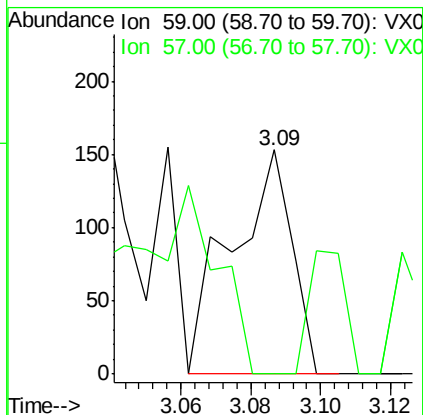
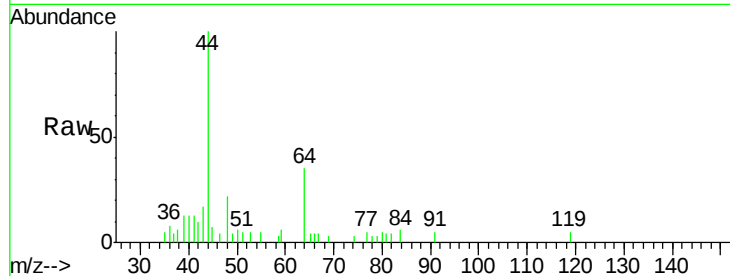


#11

Tert butyl alcohol  
Concen: Below Cal  
RT: 3.09 min Scan# 410  
Delta R.T. 0.01 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

Instrument :  
MSVOA\_X  
ClientSampled :

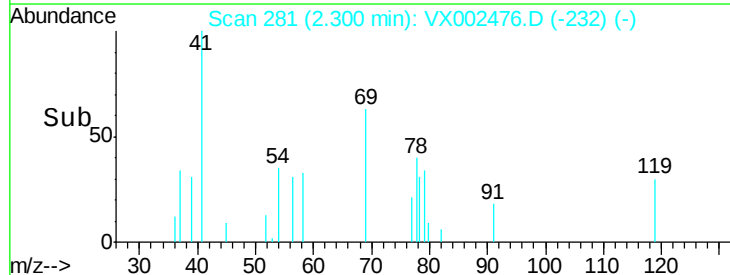
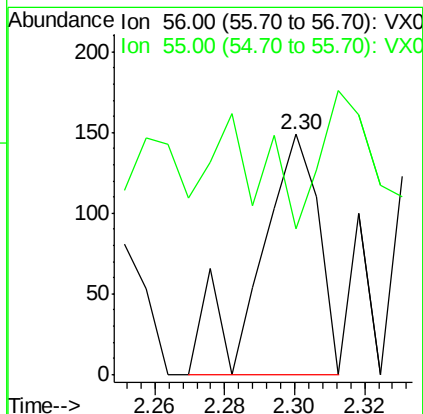
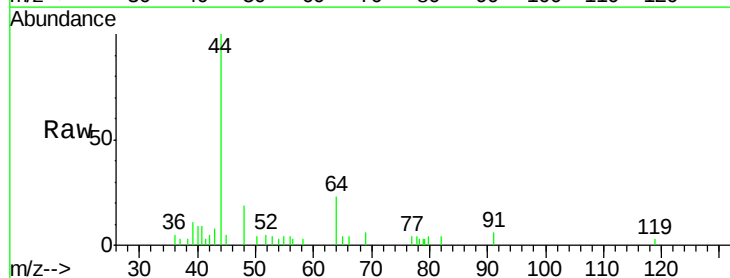
Tot Ion: 59 Resp: 183  
Ion Ratio Lower Upper  
59 100  
57 33.3 8.2 12.2#

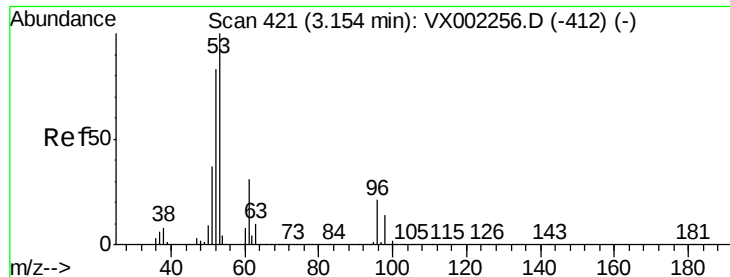


#13

Acrolein  
Concen: Below Cal  
RT: 2.30 min Scan# 281  
Delta R.T. 0.00 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

Tgt Ion: 56 Resp: 176  
Ion Ratio Lower Upper  
56 100  
55 115.3 57.0 85.4#





#15

Acrylonitrile

Concen: Below Cal

RT: 3.18 min Scan# 425

Delta R.T. 0.03 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

Instrument :  
MSVOA\_X  
ClientSampled :

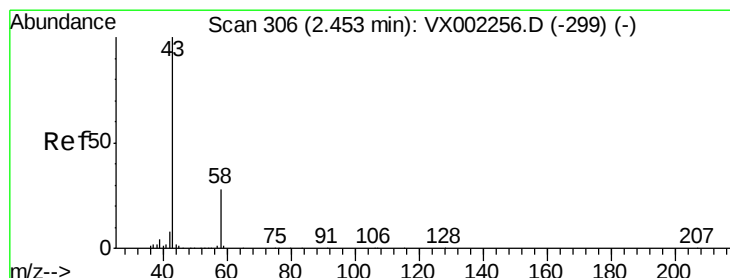
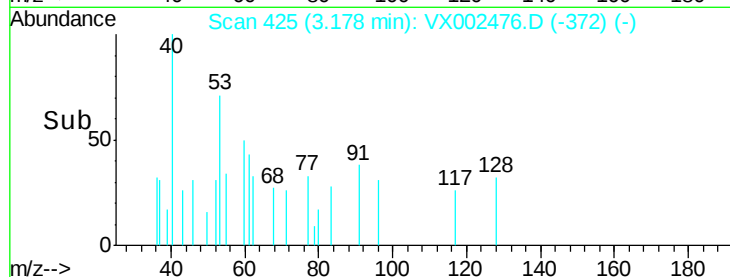
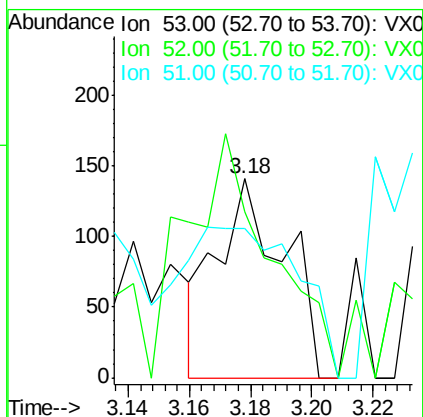
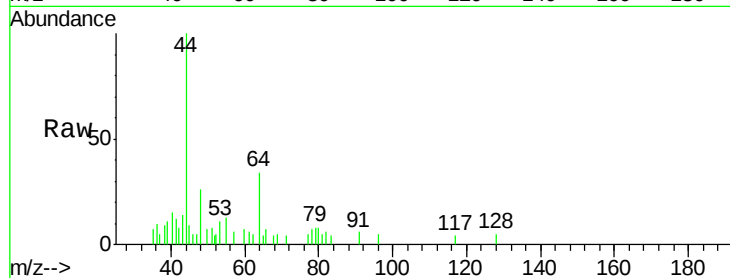
Tot Ion: 53 Resp: 213

Ion Ratio Lower Upper

53 100

52 154.9 66.7 100.1#

51 135.2 29.9 44.9#



#16

Acetone

Concen: Below Cal

RT: 2.45 min Scan# 306

Delta R.T. 0.00 min

Lab File: VX002476.D

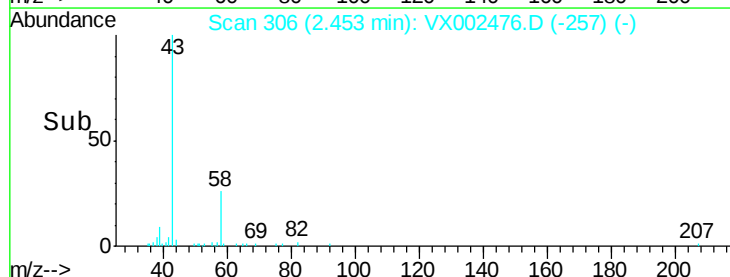
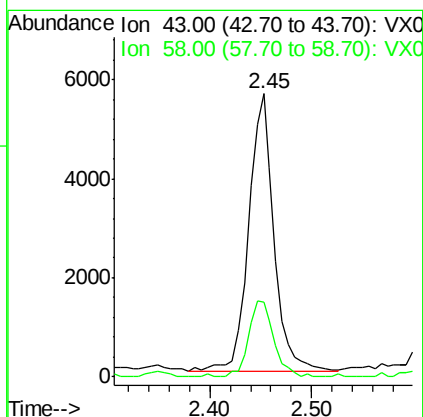
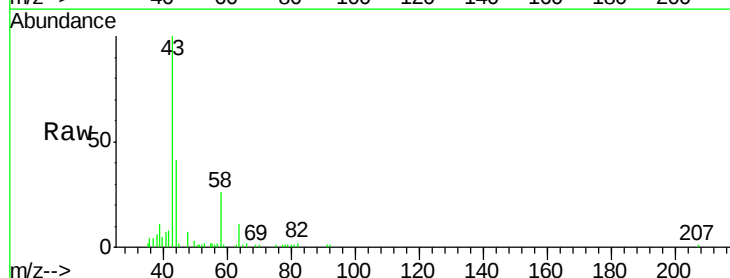
Acq: 12 Jun 2018 19:31

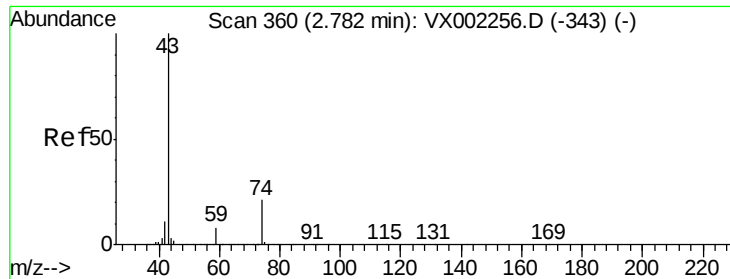
Tgt Ion: 43 Resp: 9646

Ion Ratio Lower Upper

43 100

58 27.0 22.1 33.1

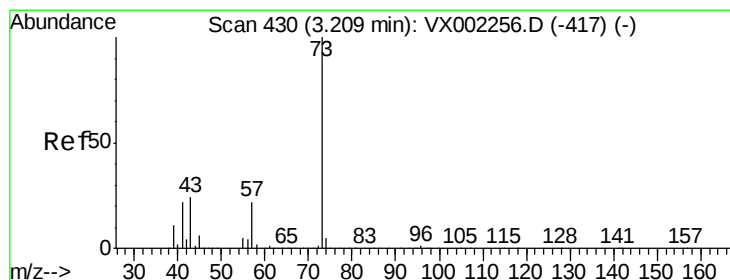
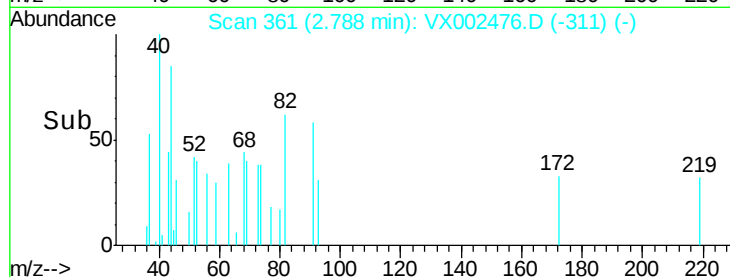
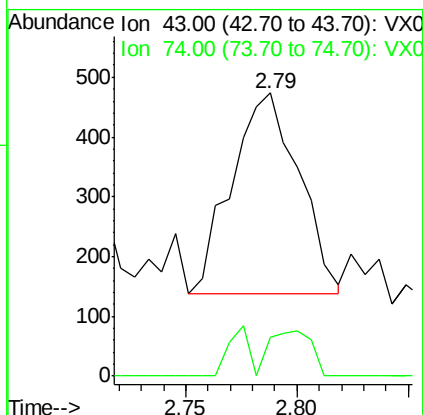
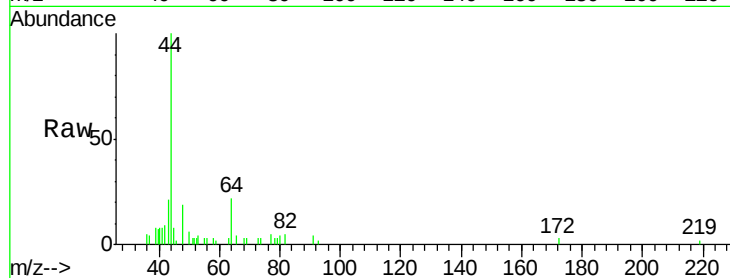




#18  
Methyl Acetate  
Concen: Below Cal  
RT: 2.79 min Scan# 361  
Delta R.T. 0.01 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

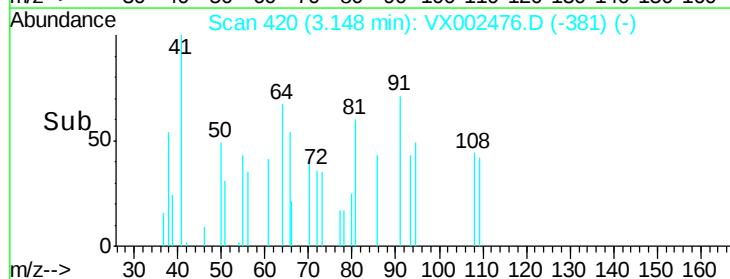
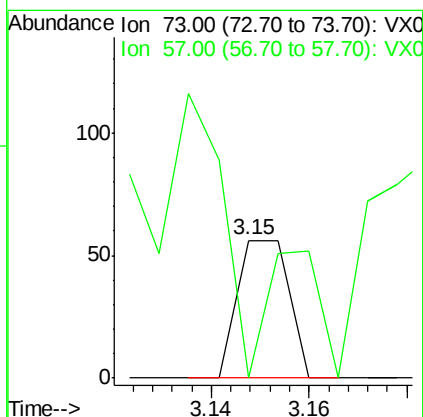
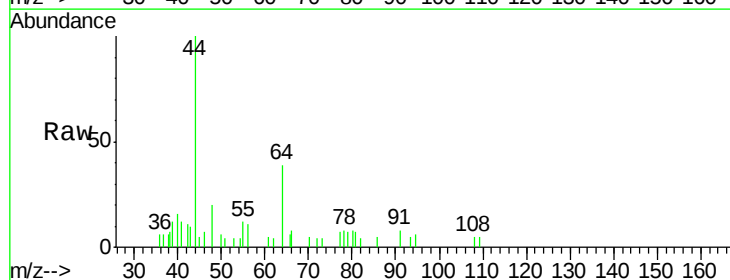
Instrument :  
MSVOA\_X  
ClientSampled :

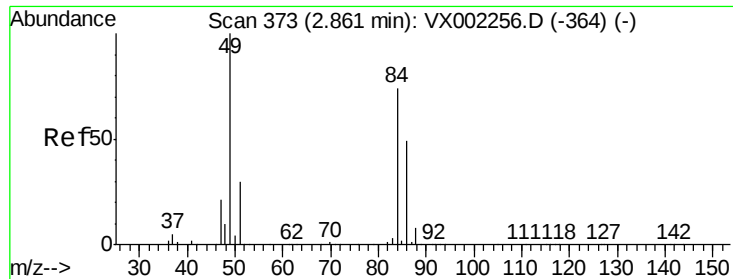
Tot Ion: 43 Resp: 705  
Ion Ratio Lower Upper  
43 100  
74 14.2 16.7 25.1#



#19  
Methyl tert-butyl Ether  
Concen: Below Cal  
RT: 3.15 min Scan# 420  
Delta R.T. -0.06 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

Tgt Ion: 73 Resp: 41  
Ion Ratio Lower Upper  
73 100  
57 0.0 17.7 26.5#

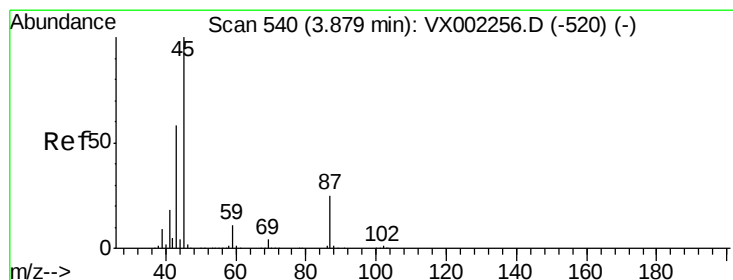
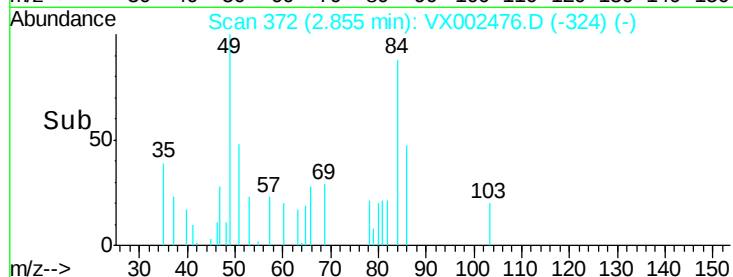
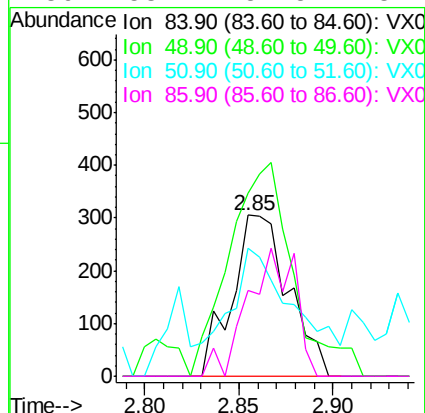
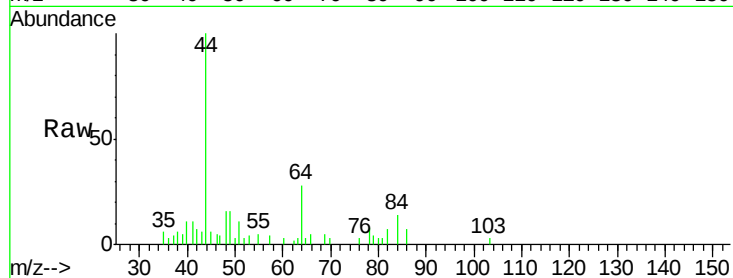




#20  
Methvlene Chloride  
Concen: Below Cal  
RT: 2.85 min Scan# 372  
Delta R.T. -0.01 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

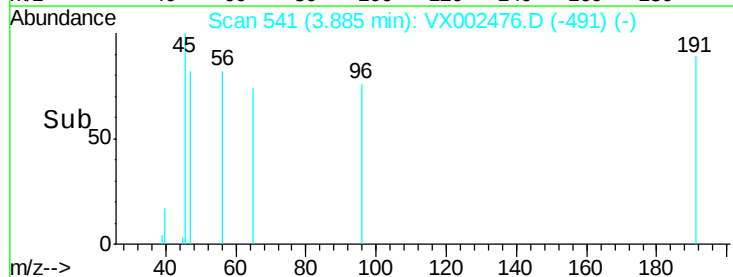
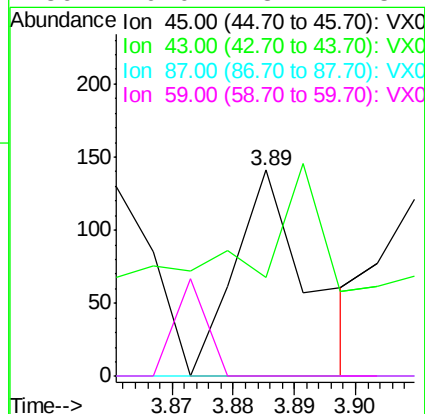
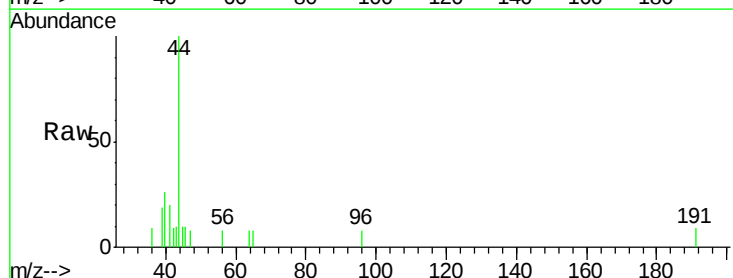
Instrument :  
MSVOA\_X  
ClientSampleId :

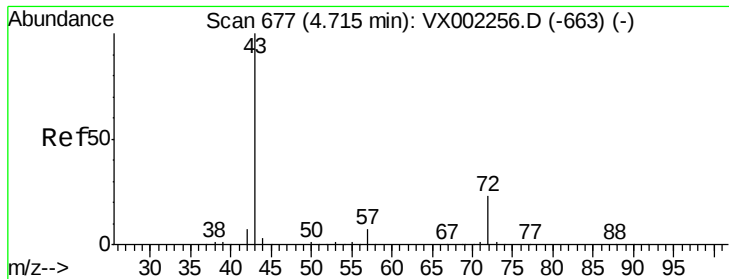
Tot Ion: 84 Resp: 636  
Ion Ratio Lower Upper  
84 100  
49 114.1 107.8 161.6  
51 61.6 32.8 49.2#  
86 53.1 52.5 78.7



#22  
Diisopropyl ether  
Concen: Below Cal  
RT: 3.89 min Scan# 541  
Delta R.T. 0.01 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

Tgt Ion: 45 Resp: 117  
Ion Ratio Lower Upper  
45 100  
43 7.1 46.8 70.2#  
87 0.0 20.2 30.4#  
59 0.0 8.7 13.1#





#25

2-Butanone

Concen: 0.34 ug/l

RT: 4.72 min Scan# 678

Delta R.T. 0.01 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

Instrument :

MSVOA\_X

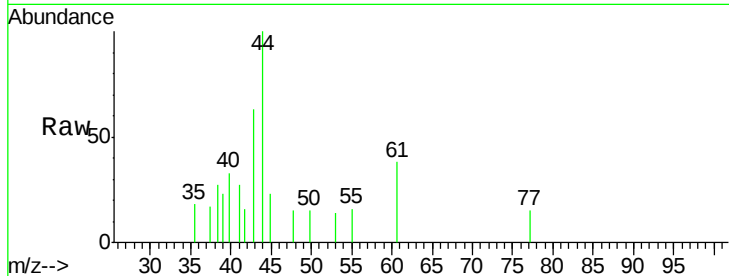
ClientSampleId :

Tot Ion: 43 Resp: 647

Ion Ratio Lower Upper

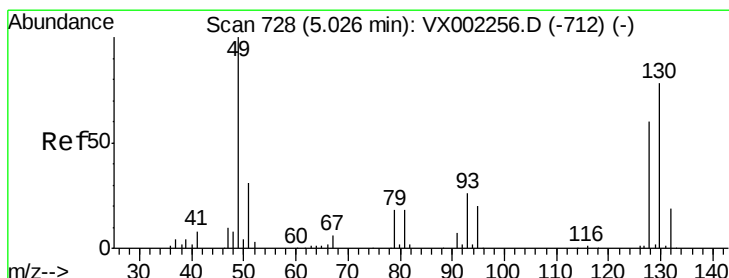
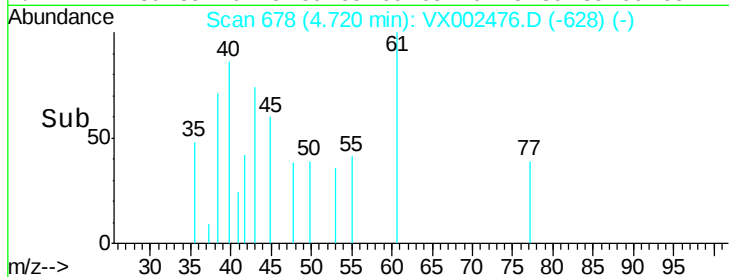
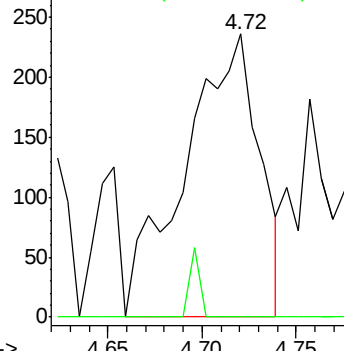
43 100

72 0.0 18.5 27.7#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



#28

Bromochloromethane

Concen: Below Cal

RT: 5.04 min Scan# 730

Delta R.T. 0.01 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

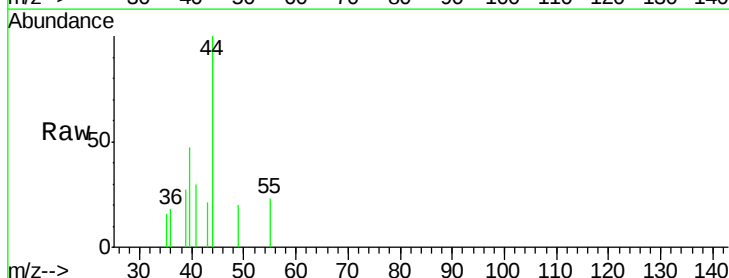
Tgt Ion: 49 Resp: 25

Ion Ratio Lower Upper

49 100

129 0.0 0.0 4.2

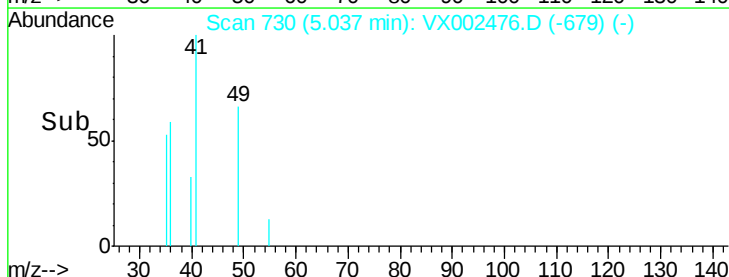
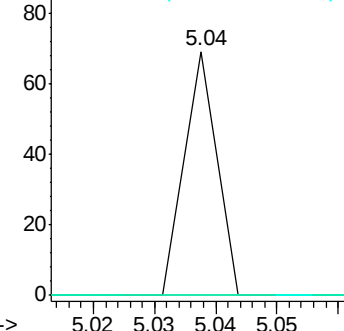
130 0.0 61.2 91.8#

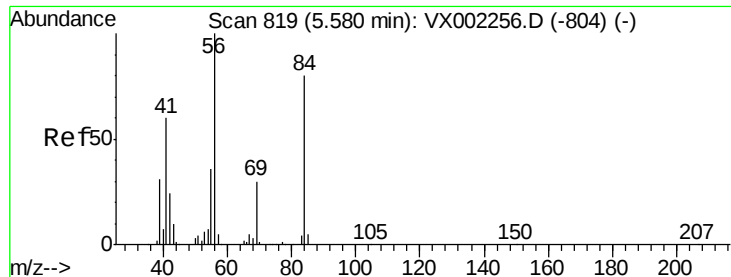


Abundance Ion 48.90 (48.60 to 49.60): VX0

Ion 128.80 (128.50 to 129.50): V

Ion 129.80 (129.50 to 130.50): V

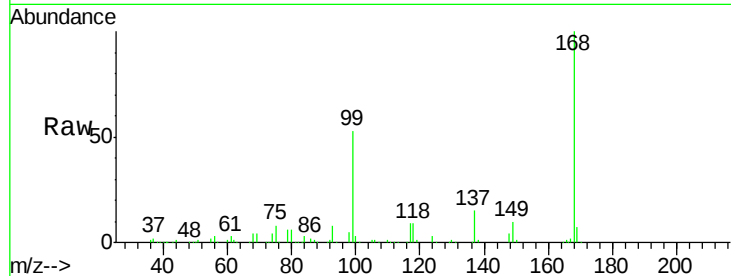




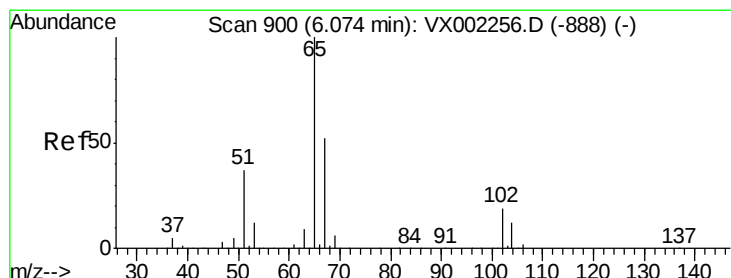
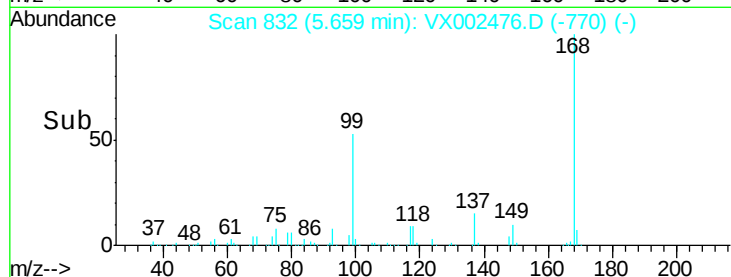
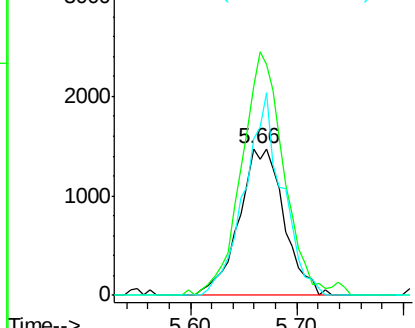
#31  
Cyclohexane  
Concen: 1.25 ug/l  
RT: 5.66 min Scan# 832  
Delta R.T. 0.08 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 56 Resp: 4377  
Ion Ratio Lower Upper  
56 100  
69 138.5 23.7 35.5#  
84 106.3 64.1 96.1#

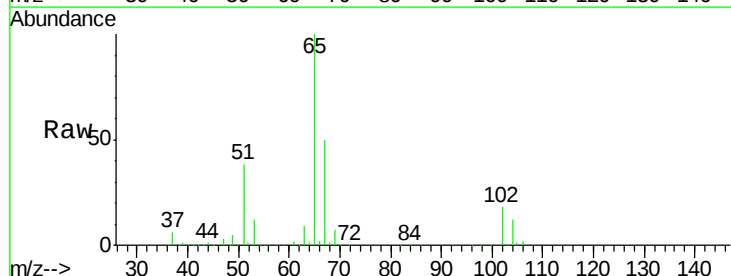


Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0

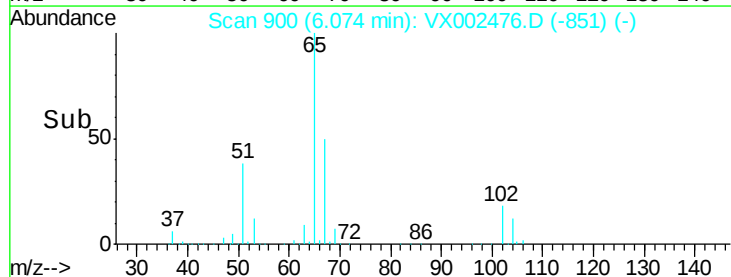
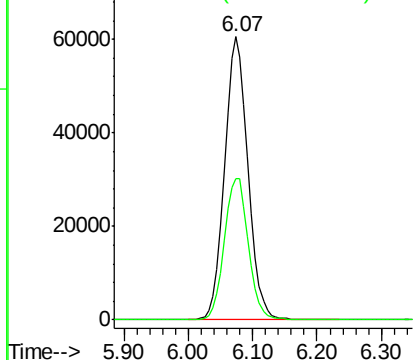


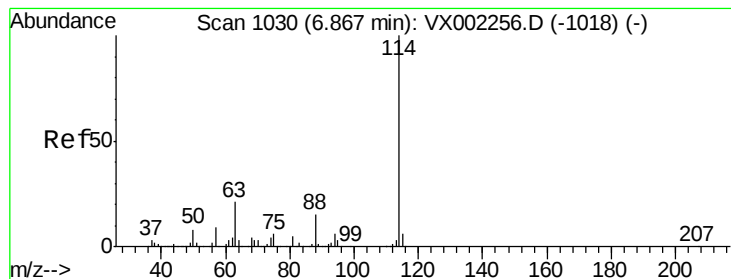
#33  
1,2-Dichloroethane-d4  
Concen: 56.30 ug/l  
RT: 6.07 min Scan# 900  
Delta R.T. -0.00 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

Tgt Ion: 65 Resp: 154733  
Ion Ratio Lower Upper  
65 100  
67 51.8 0.0 102.6



Abundance Ion 64.90 (64.60 to 65.60): VX0  
Ion 66.90 (66.60 to 67.60): VX0





#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 6.87 min Scan# 1030

Delta R.T. -0.00 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

Instrument :  
MSVOA\_X  
ClientSampleId :

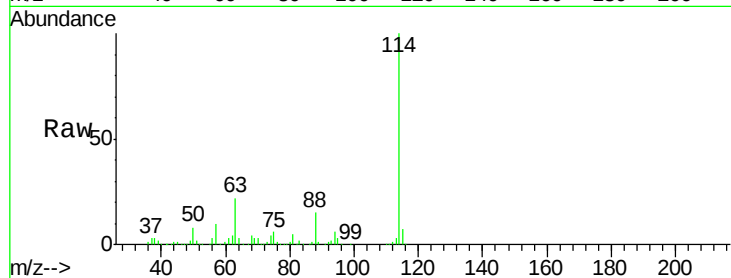
Tot Ion:114 Resp: 286130

Ion Ratio Lower Upper

114 100

63 21.8 0.0 41.4

88 14.8 0.0 30.0



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

150000

100000

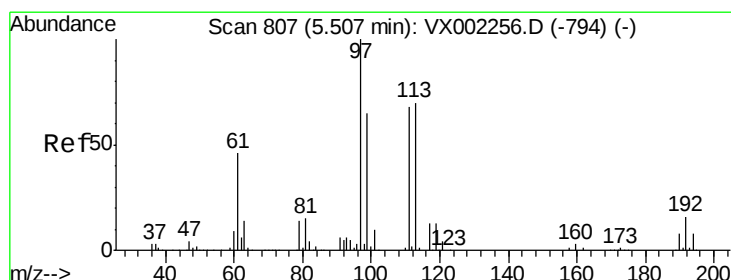
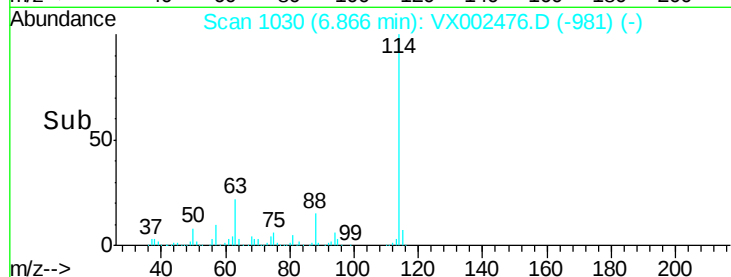
50000

0

6.87

6.80 6.90 7.00

Time-->



#35

Dibromofluoromethane

Concen: 51.26 ug/l

RT: 5.51 min Scan# 808

Delta R.T. 0.01 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

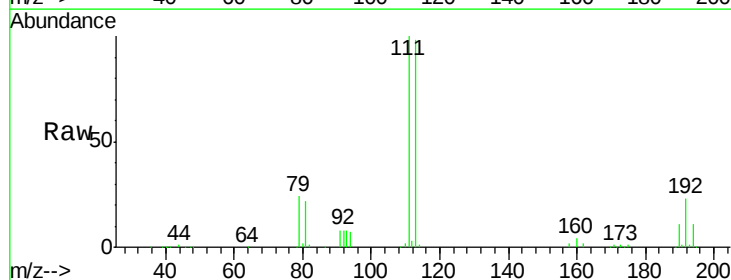
Tgt Ion:113 Resp: 115338

Ion Ratio Lower Upper

113 100

111 103.0 81.4 122.0

192 22.9 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

50000

40000

30000

20000

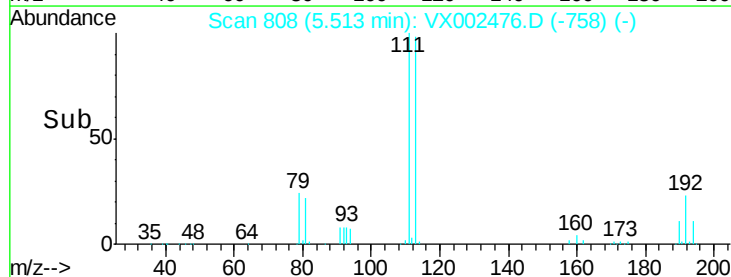
10000

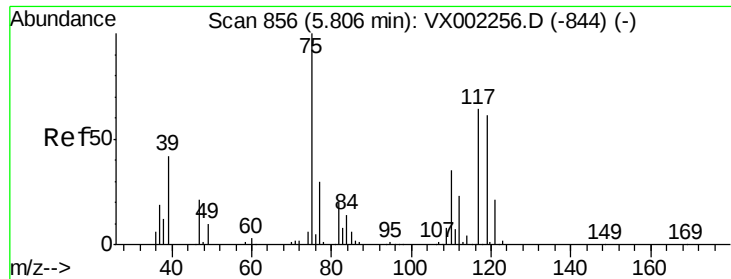
0

5.51

5.40 5.50 5.60 5.70

Time-->

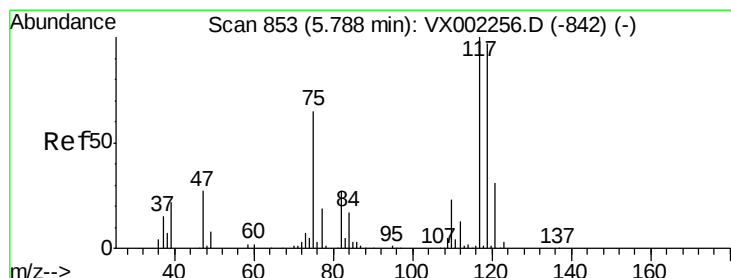
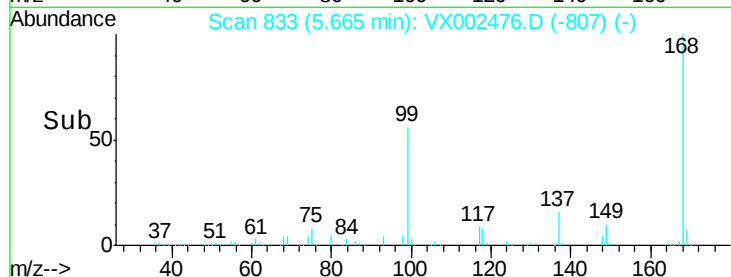
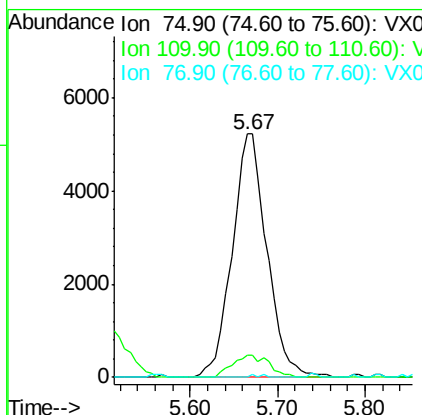
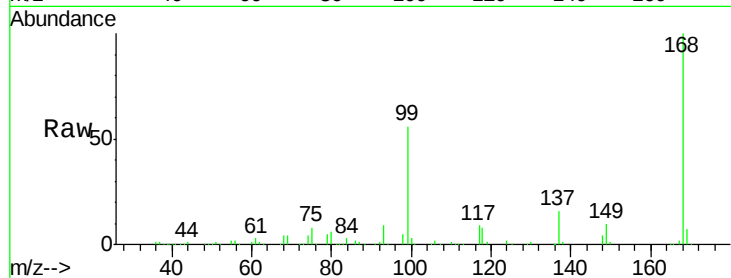




#36  
 1,1-Dichloropropene  
 Concen: 4.78 ug/l  
 RT: 5.67 min Scan# 833  
 Delta R.T. -0.14 min  
 Lab File: VX002476.D  
 Acq: 12 Jun 2018 19:31

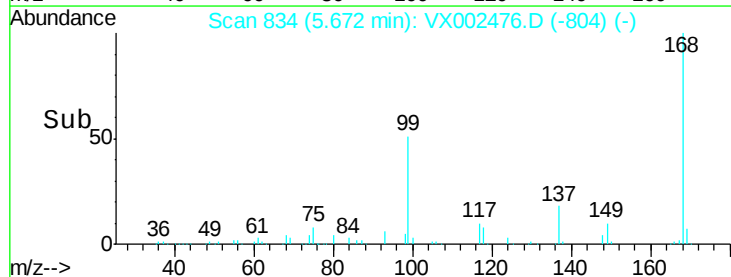
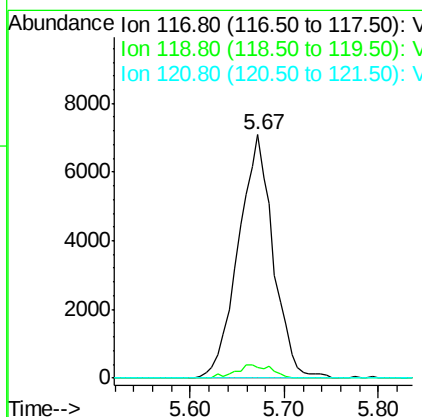
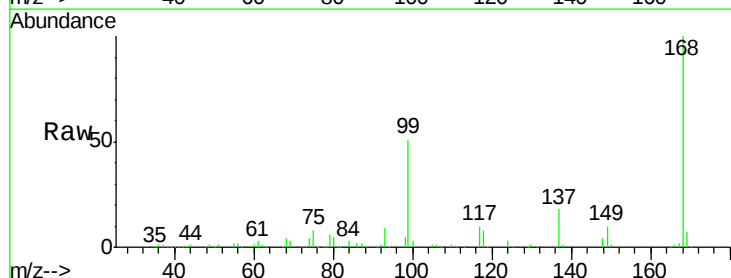
Instrument :  
 MSVOA\_X  
 ClientSampleId :

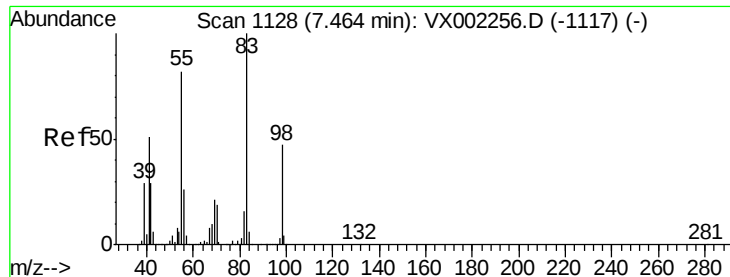
Tot Ion: 75 Resp: 14371  
 Ion Ratio Lower Upper  
 75 100  
 110 9.5 18.1 54.4#  
 77 0.3 24.3 36.5#



#38  
 Carbon Tetrachloride  
 Concen: 5.82 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.12 min  
 Lab File: VX002476.D  
 Acq: 12 Jun 2018 19:31

Tgt Ion:117 Resp: 18317  
 Ion Ratio Lower Upper  
 117 100  
 119 4.2 77.4 116.0#  
 121 0.0 24.4 36.6#

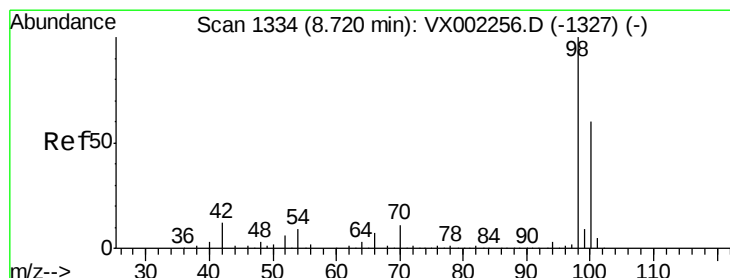
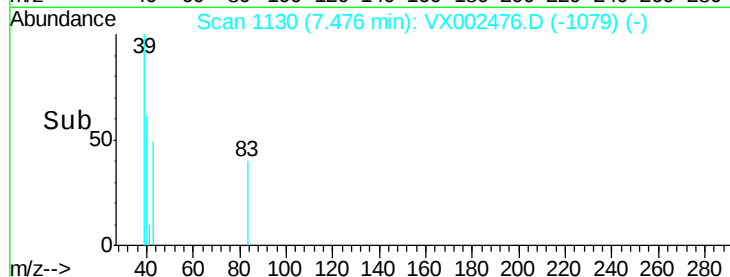
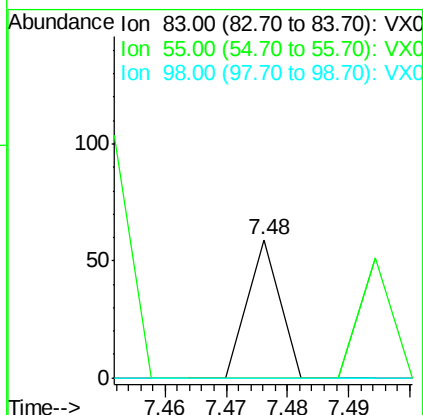
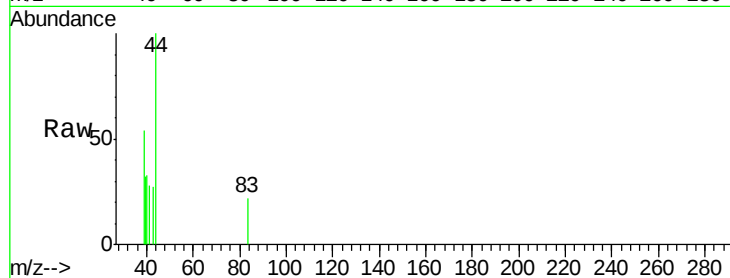




#39  
Methylcyclohexane  
Concen: 0.27 ug/l  
RT: 7.48 min Scan# 1130  
Delta R.T. 0.01 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

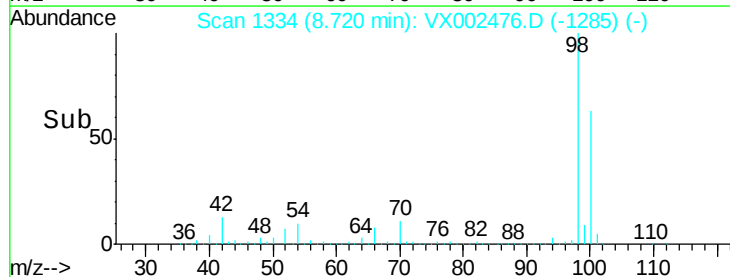
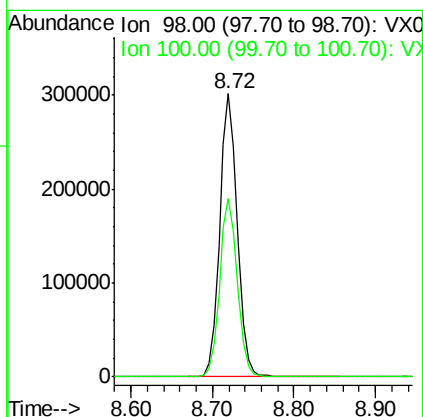
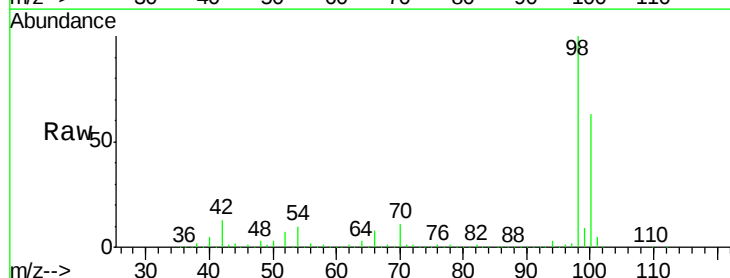
Instrument :  
MSVOA\_X  
ClientSampleId :

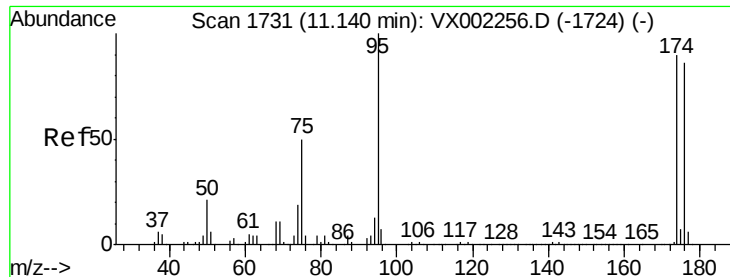
Tot Ion: 83 Resp: 22  
Ion Ratio Lower Upper  
83 100  
55 0.0 65.4 98.0#  
98 0.0 37.4 56.0#



#50  
Toluene-d8  
Concen: 52.61 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. -0.00 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

Tgt Ion: 98 Resp: 453756  
Ion Ratio Lower Upper  
98 100  
100 63.3 50.9 76.3

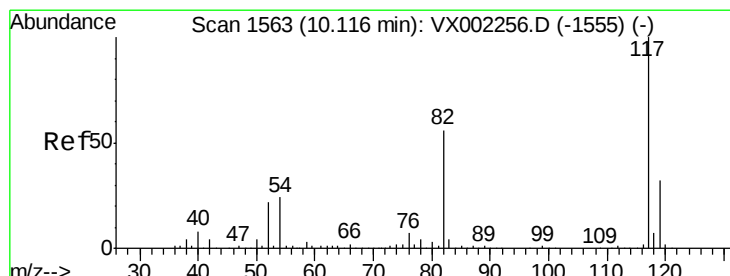
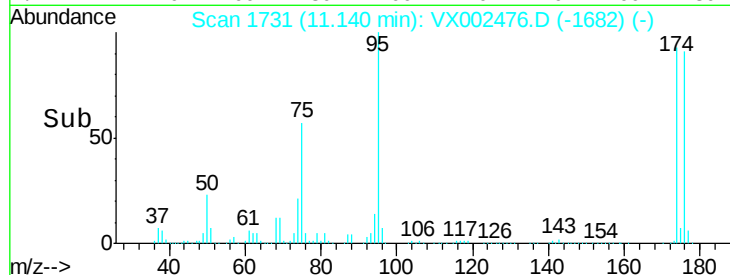
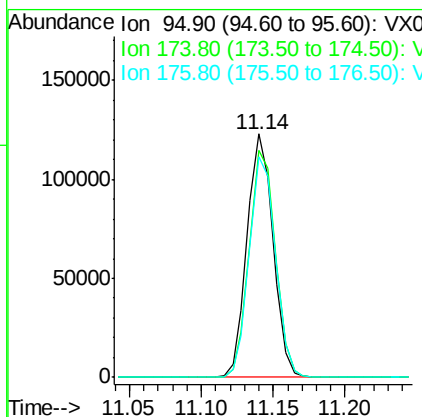
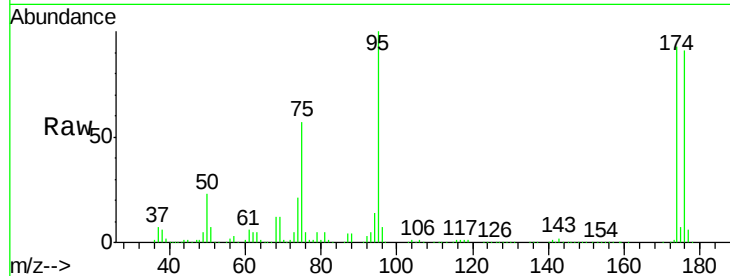




#62  
4-Bromofluorobenzene  
Concen: 46.10 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. -0.00 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

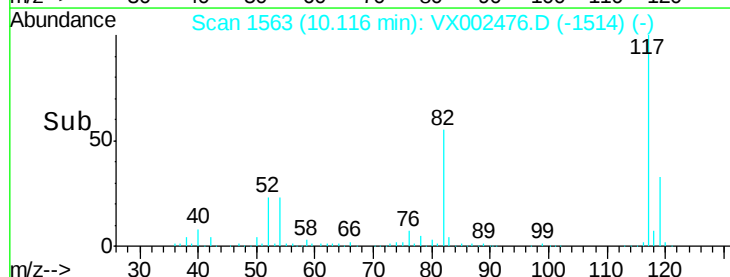
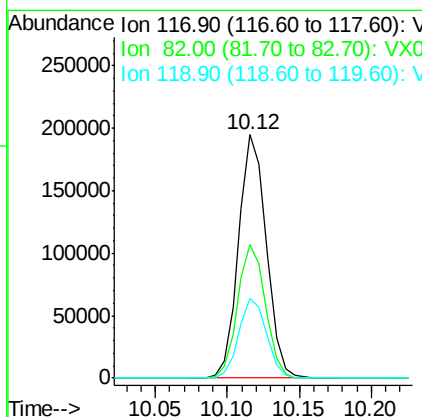
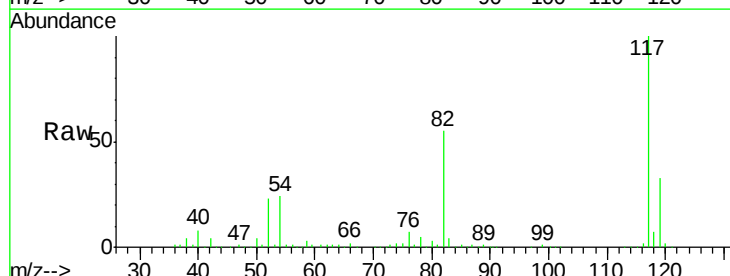
Instrument :  
MSVOA\_X  
ClientSampleId :

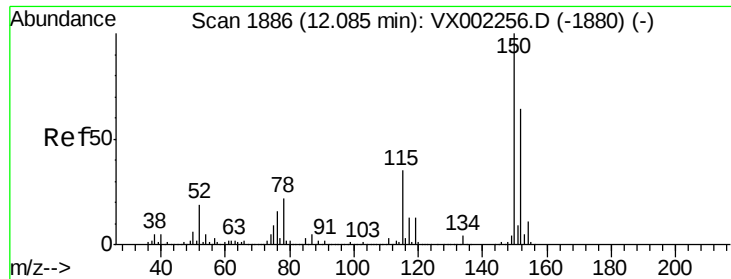
Tot Ion: 95 Resp: 153318  
Ion Ratio Lower Upper  
95 100  
174 94.0 0.0 187.4  
176 91.4 0.0 181.0



#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. -0.00 min  
Lab File: VX002476.D  
Acq: 12 Jun 2018 19:31

Tgt Ion: 117 Resp: 261415  
Ion Ratio Lower Upper  
117 100  
82 55.0 45.0 67.4  
119 32.9 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.09 min Scan# 1886

Delta R.T. -0.00 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

Instrument :

MSVOA\_X

ClientSampleId :

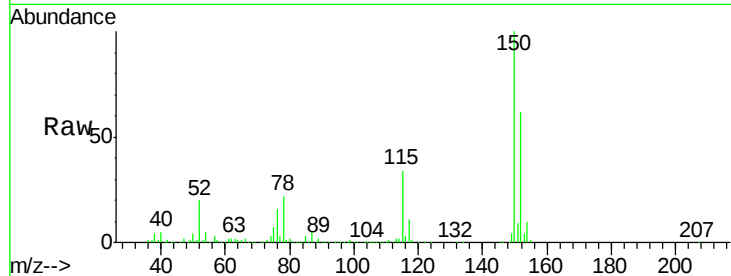
Tot Ion:152 Resp: 141108

Ion Ratio Lower Upper

152 100

115 56.0 40.1 120.2

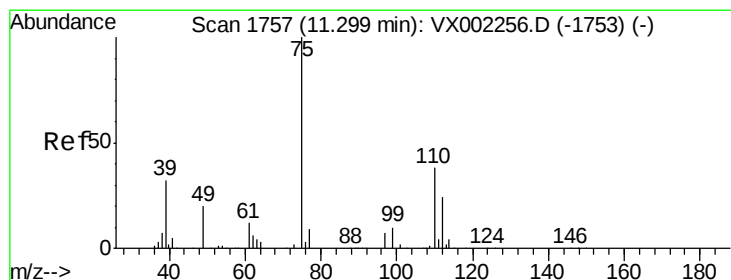
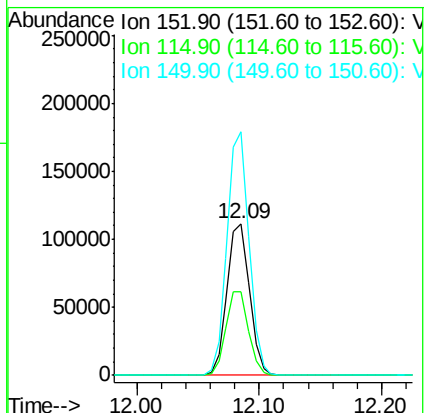
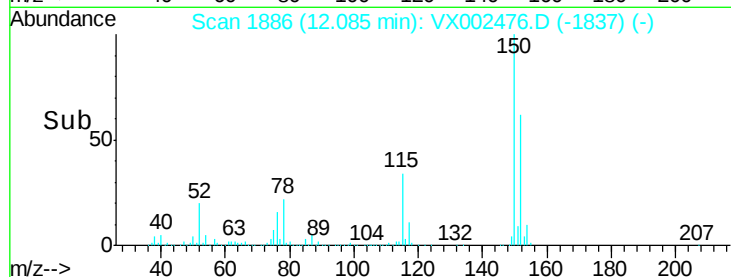
150 157.1 0.0 347.2



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: 27.46 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002476.D

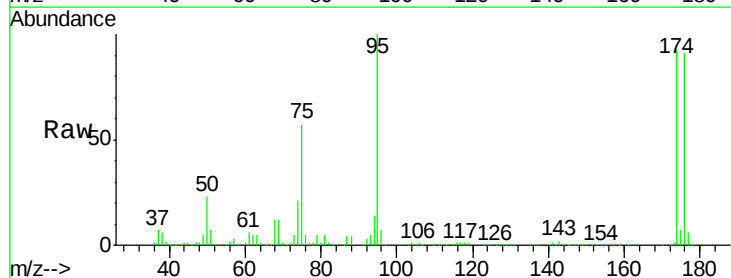
Acq: 12 Jun 2018 19:31

Tgt Ion: 75 Resp: 85019

Ion Ratio Lower Upper

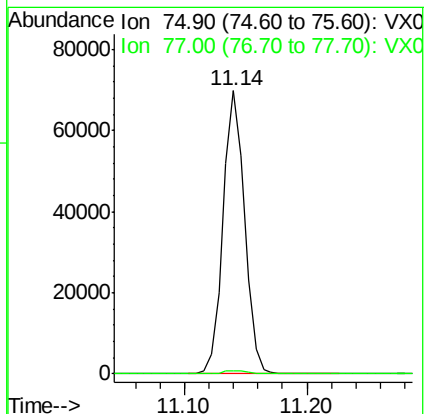
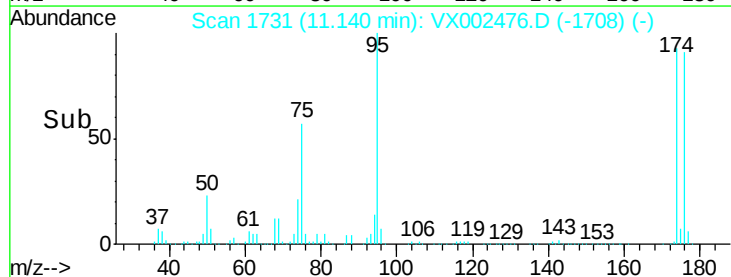
75 100

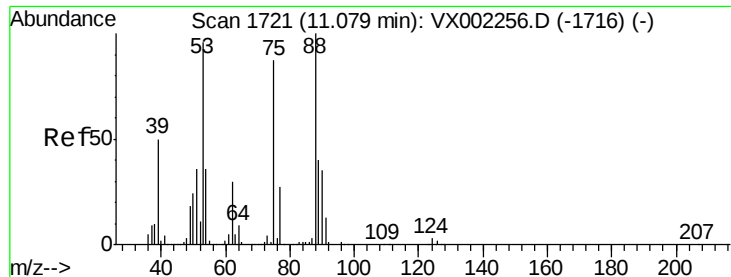
77 1.2 22.8 68.3#



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: 96.25 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002476.D

Acq: 12 Jun 2018 19:31

Instrument :

MSVOA\_X

ClientSampleId :

Tot Ion: 75 Resp: 85019

Ion Ratio Lower Upper

75 100

53 0.1 86.8 130.2#

89 0.0 38.2 57.2#

