

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX091818\  
 Data File : VX004664.D  
 Acq On : 18 Sep 2018 18:03  
 Operator : JC/MD  
 Sample : J4936-38  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 132-1-VOLT

Quant Time: Sep 19 02:38:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 12 02:17:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 230642   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 359576   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 327617   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 183396   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 6.07   | 65  | 142891   | 48.05 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 96.10% |      |
| 35) Dibromofluoromethane    | 5.50   | 113 | 133869   | 40.68 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 81.36% |      |
| 50) Toluene-d8              | 8.71   | 98  | 480139   | 43.51 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 87.02% |      |
| 62) 4-Bromofluorobenzene    | 11.14  | 95  | 172018   | 43.67 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 87.34% |      |

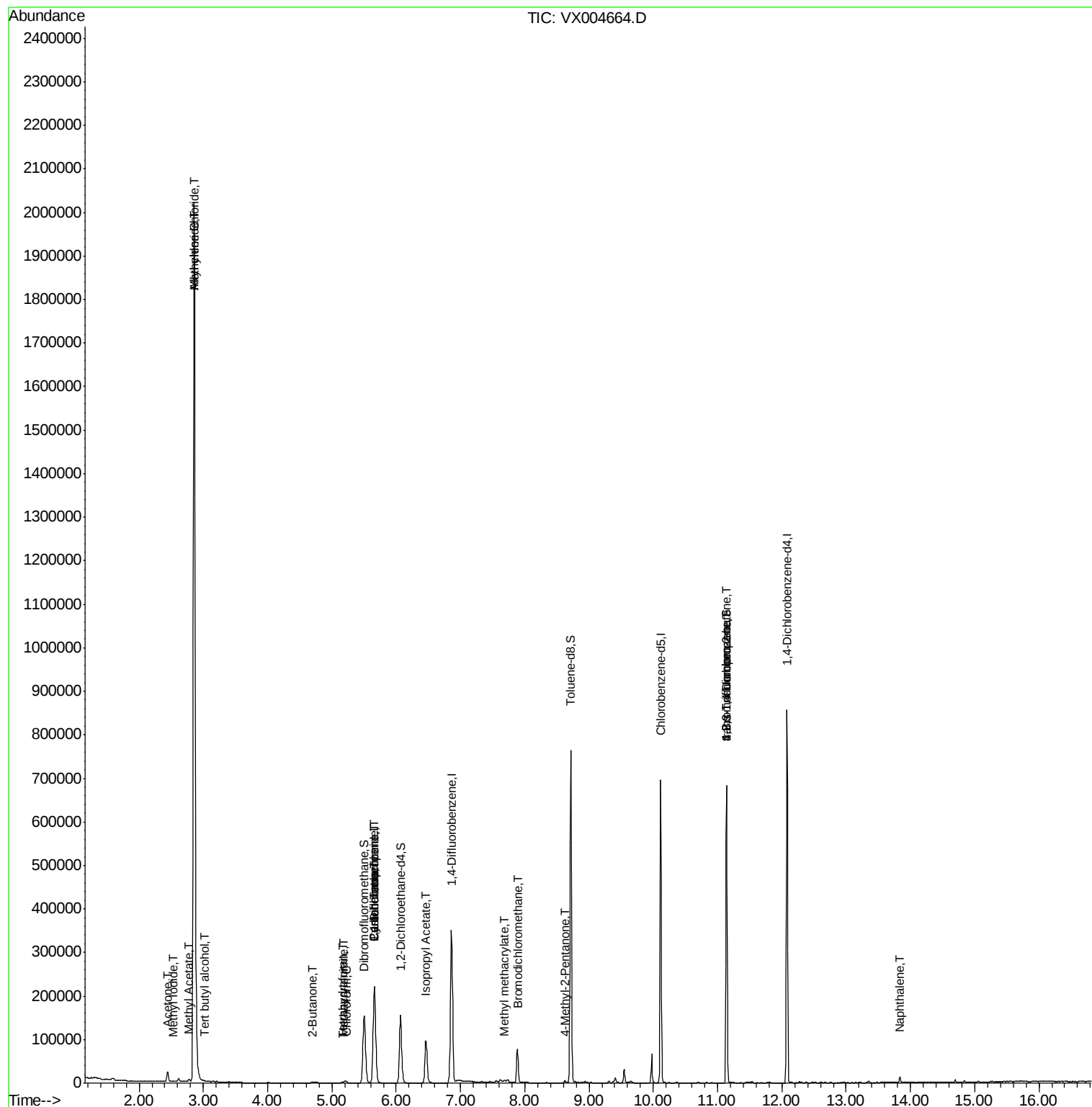
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.65  | 94   | 226      | Below Cal |        | 99     |
| 10) Methyl Iodide              | 2.53  | 142  | 171      | 4.307     | ug/l # | 41     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 523      | 0.737     | ug/l # | 72     |
| 14) Allyl chloride             | 2.85  | 41   | 42478    | 8.574     | ug/l # | 28     |
| 16) Acetone                    | 2.45  | 43   | 23969    | 16.513    | ug/l   | 95     |
| 18) Methyl Acetate             | 2.78  | 43   | 5869     | 1.441     | ug/l   | 97     |
| 20) Methylene Chloride         | 2.85  | 84   | 1008540  | 338.711   | ug/l   | 90     |
| 25) 2-Butanone                 | 4.70  | 43   | 5336     | 2.310     | ug/l   | 100    |
| 29) Tetrahydrofuran            | 5.17  | 42   | 2027     | 1.455     | ug/l   | 90     |
| 30) Chloroform                 | 5.22  | 83   | 5554     | 1.129     | ug/l   | 90     |
| 31) Cyclohexane                | 5.66  | 56   | 3708     | 0.862     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 14661    | 3.358     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 19515    | 4.577     | ug/l # | 15     |
| 41) Methacrylonitrile          | 5.18  | 41   | 1298     | 0.474     | ug/l # | 42     |
| 43) Isopropyl Acetate          | 6.46  | 43   | 126811   | 19.230    | ug/l   | 100    |
| 47) Bromodichloromethane       | 7.90  | 83   | 1106     | 0.297     | ug/l # | 87     |
| 48) Methyl methacrylate        | 7.69  | 41   | 6245     | 1.914     | ug/l # | 19     |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 1817     | 0.390     | ug/l # | 34     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 79310    | 21.495    | ug/l # | 37     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 79310    | 68.514    | ug/l # | 10     |
| 95) Naphthalene                | 13.83 | 128  | 8878     | 0.709     | ug/l   | 99     |

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

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Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.01 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampleId :

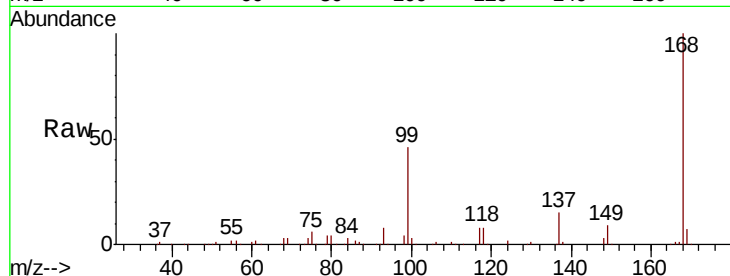
132-1-VOLT

Tgt Ion:168 Resp: 230642

Ion Ratio Lower Upper

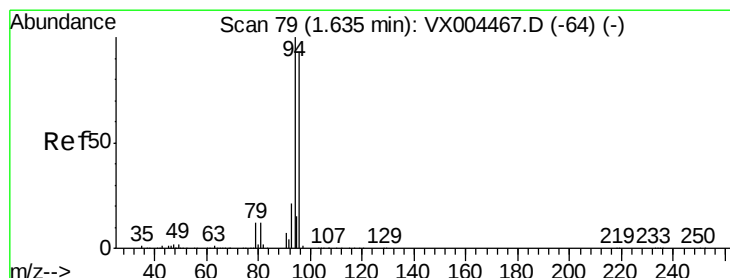
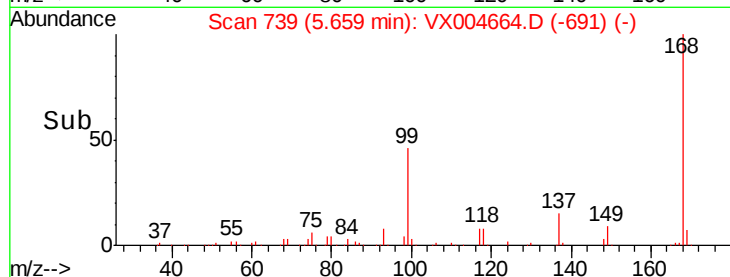
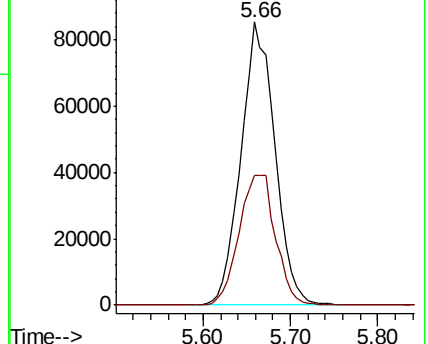
168 100

99 46.0 39.9 59.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX004664.D

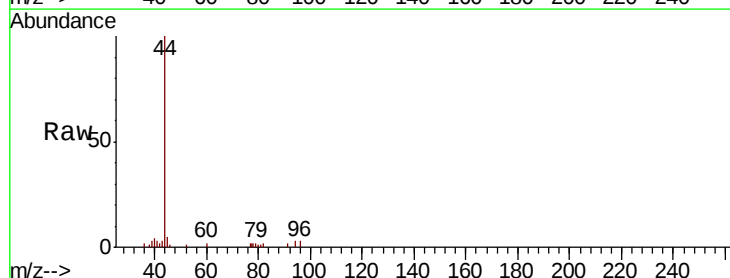
Acq: 18 Sep 2018 18:03

Tgt Ion: 94 Resp: 226

Ion Ratio Lower Upper

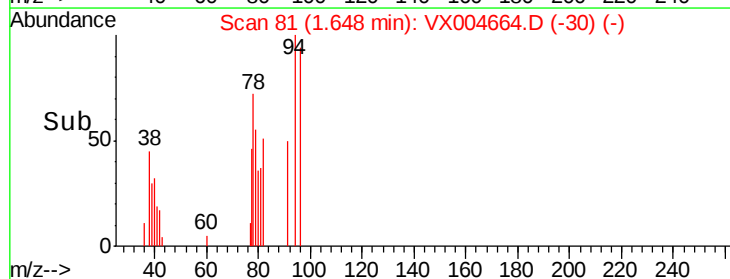
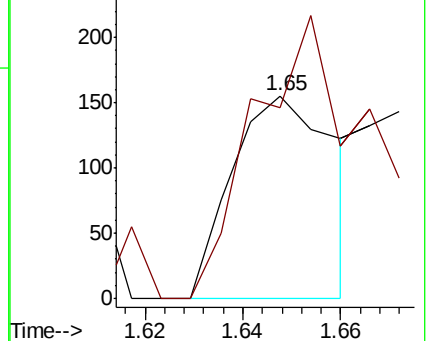
94 100

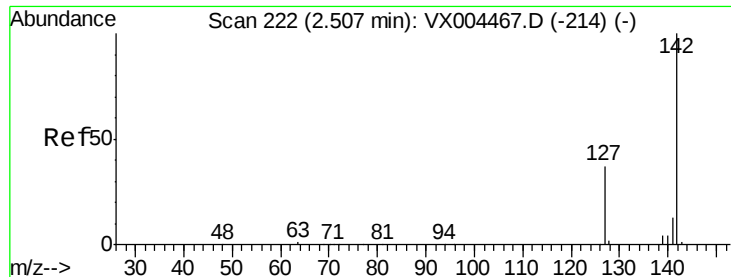
96 94.2 74.5 111.7



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

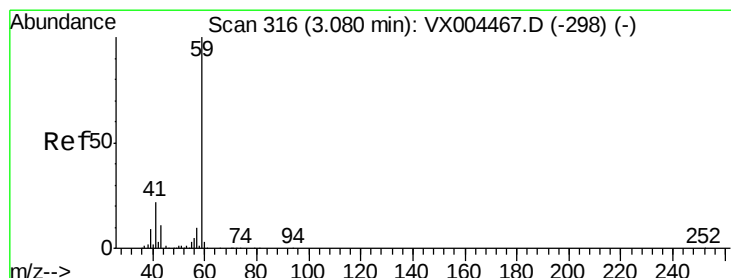
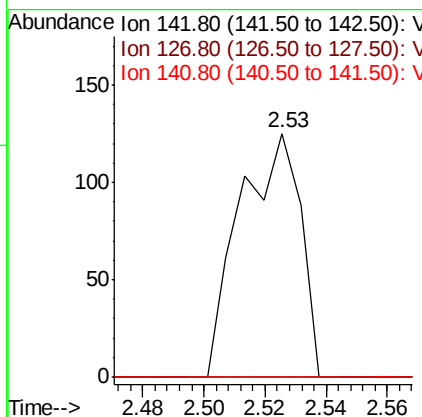
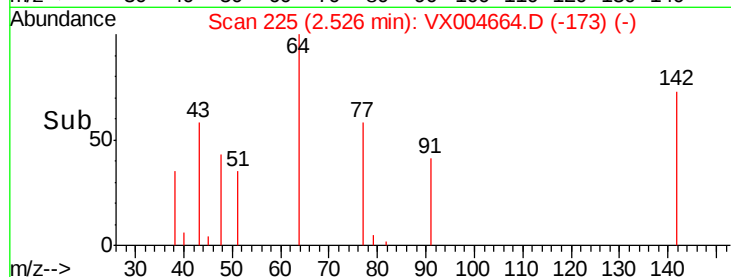
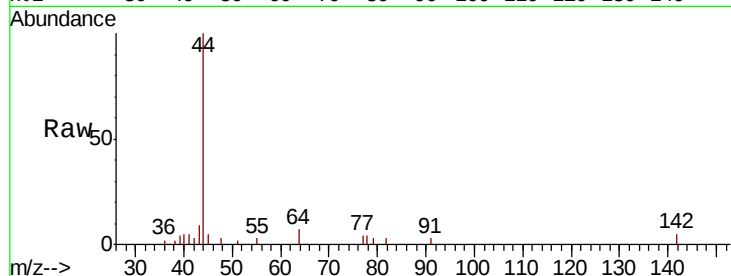




#10  
Methyl Iodide  
Concen: 4.307 ug/l  
RT: 2.53 min Scan# 225  
Delta R.T. 0.02 min  
Lab File: VX004664.D  
Acq: 18 Sep 2018 18:03

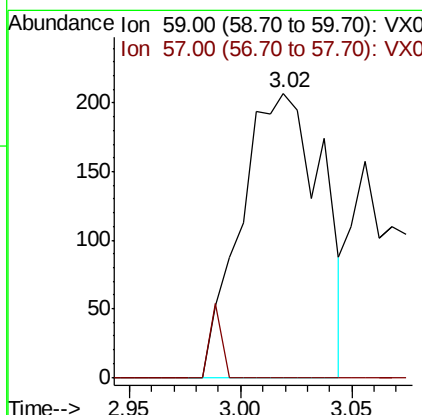
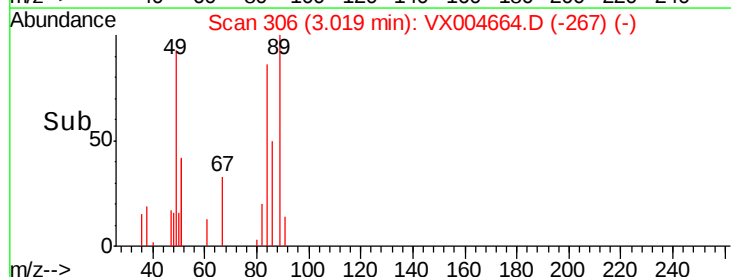
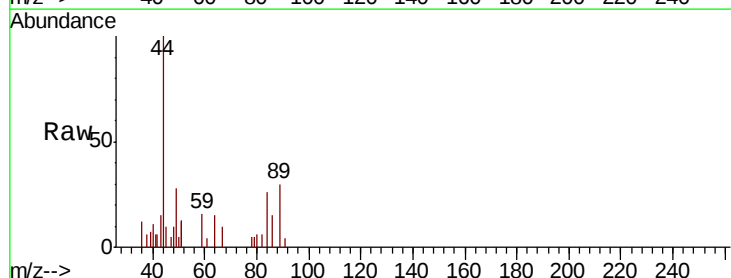
Instrument :  
MSVOA\_X  
ClientSampleId :  
132-1-VOLT

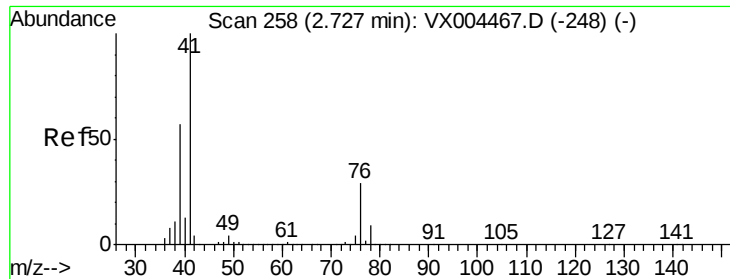
Tgt Ion: 142 Resp: 171  
Ion Ratio Lower Upper  
142 100  
127 0.0 33.8 50.6#  
141 0.0 11.4 17.0#



#11  
Tert butyl alcohol  
Concen: 0.737 ug/l  
RT: 3.02 min Scan# 306  
Delta R.T. -0.06 min  
Lab File: VX004664.D  
Acq: 18 Sep 2018 18:03

Tgt Ion: 59 Resp: 523  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.2 12.4#

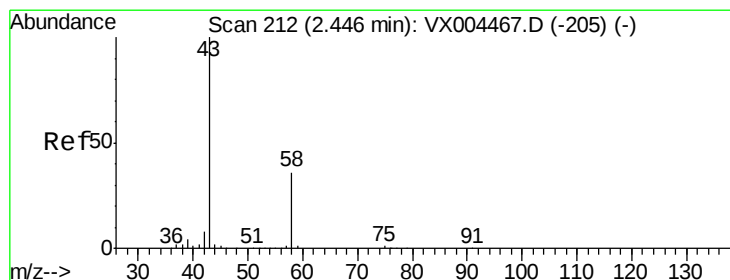
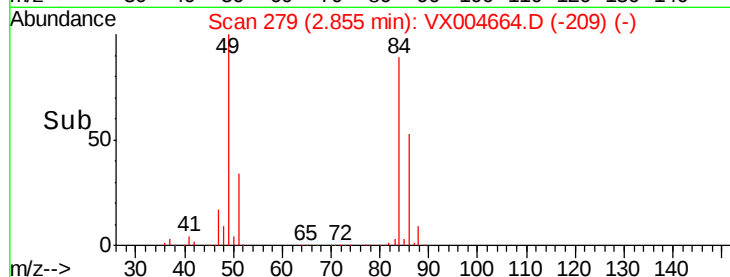
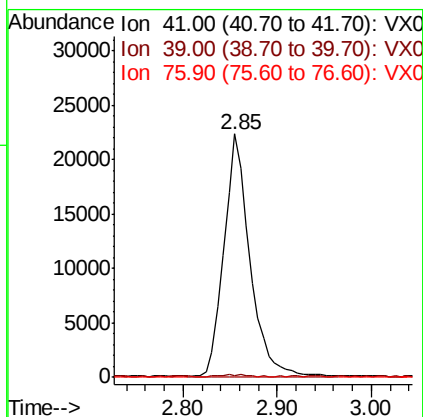
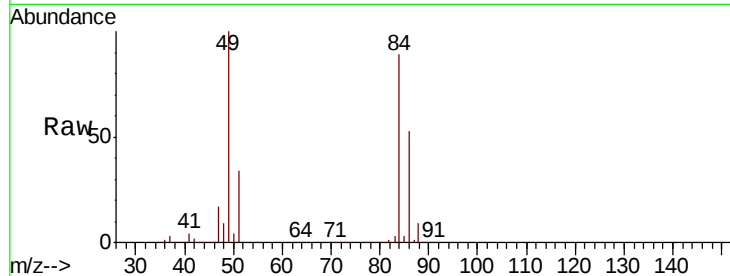




#14  
 Allyl chloride  
 Concen: 8.574 ug/l  
 RT: 2.85 min Scan# 279  
 Delta R.T. 0.13 min  
 Lab File: VX004664.D  
 Acq: 18 Sep 2018 18:03

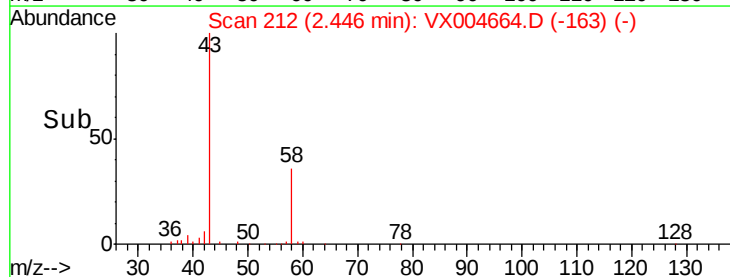
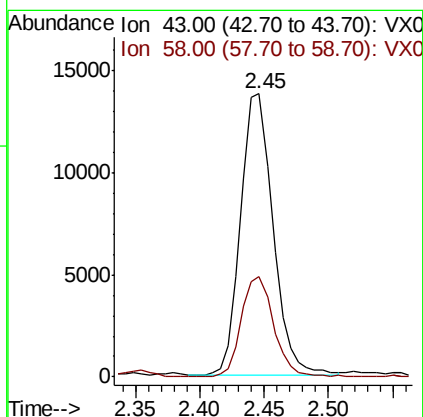
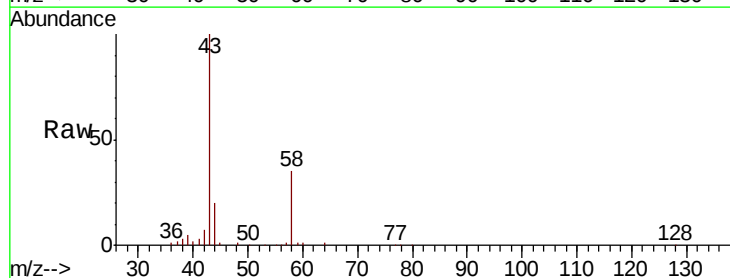
Instrument :  
 MSVOA\_X  
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 132-1-VOLT

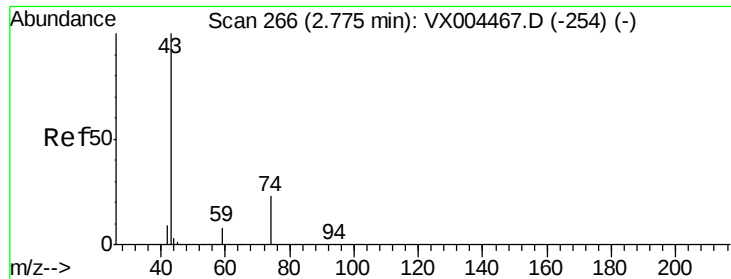
Tgt Ion: 41 Resp: 42478  
 Ion Ratio Lower Upper  
 41 100  
 39 0.8 48.9 73.3#  
 76 0.0 26.7 40.1#



#16  
 Acetone  
 Concen: 16.513 ug/l  
 RT: 2.45 min Scan# 212  
 Delta R.T. 0.00 min  
 Lab File: VX004664.D  
 Acq: 18 Sep 2018 18:03

Tgt Ion: 43 Resp: 23969  
 Ion Ratio Lower Upper  
 43 100  
 58 35.6 26.2 39.4

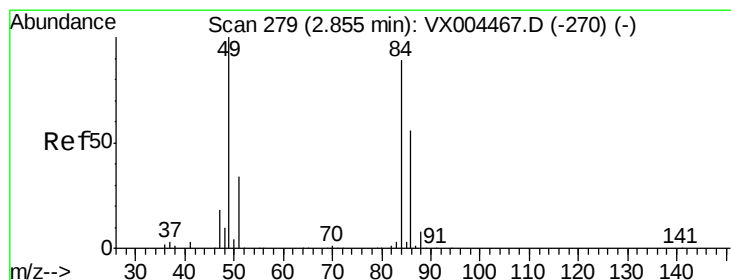
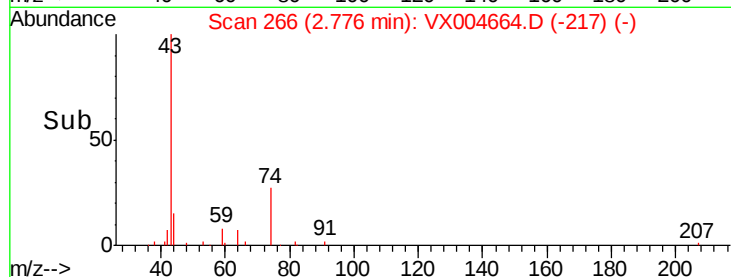
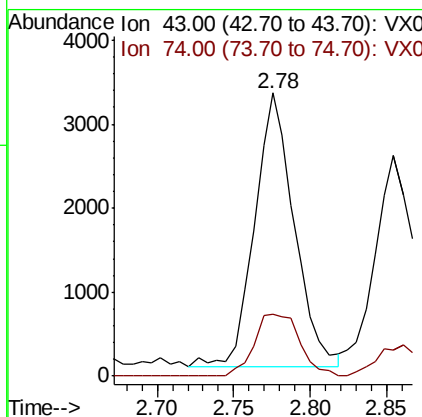
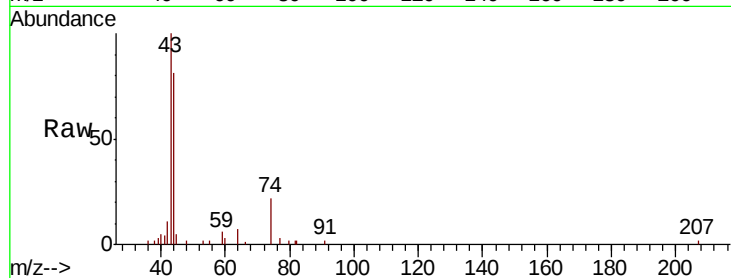




#18  
Methyl Acetate  
Concen: 1.441 ug/l  
RT: 2.78 min Scan# 266  
Delta R.T. 0.00 min  
Lab File: VX004664.D  
Acq: 18 Sep 2018 18:03

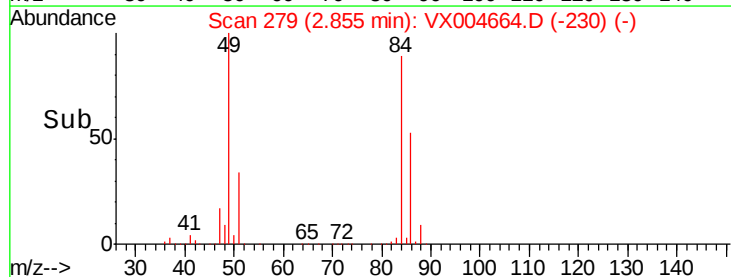
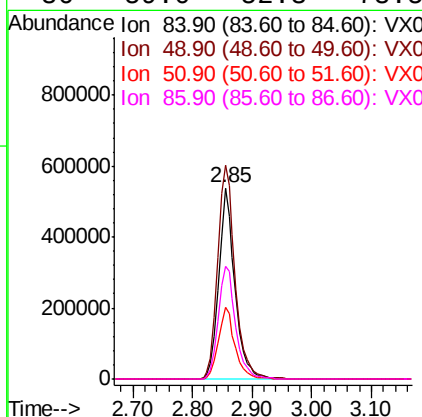
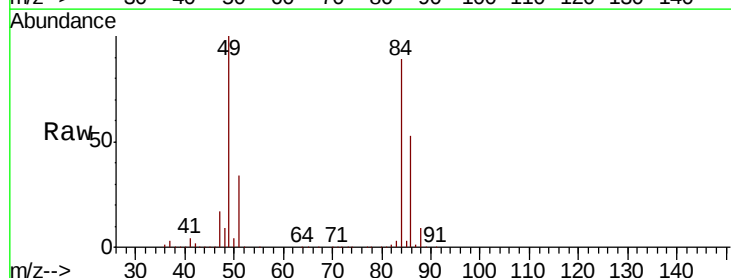
Instrument :  
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ClientSampleId :  
132-1-VOLT

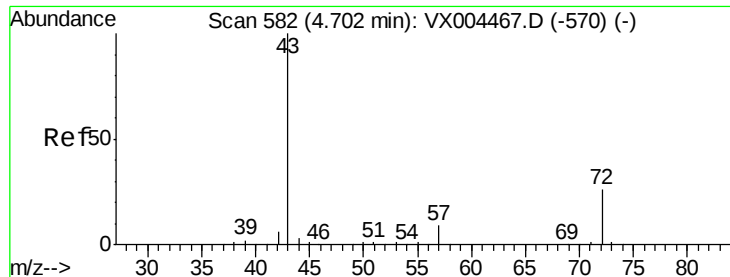
Tgt Ion: 43 Resp: 5869  
Ion Ratio Lower Upper  
43 100  
74 26.0 19.4 29.2



#20  
Methylene Chloride  
Concen: 338.711 ug/l  
RT: 2.85 min Scan# 279  
Delta R.T. 0.00 min  
Lab File: VX004664.D  
Acq: 18 Sep 2018 18:03

Tgt Ion: 84 Resp: 1008540  
Ion Ratio Lower Upper  
84 100  
49 111.8 101.2 151.8  
51 37.9 29.5 44.3  
86 59.0 52.3 78.5





#25

2-Butanone

Concen: 2.310 ug/l

RT: 4.70 min Scan# 582

Delta R.T. 0.00 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampleId :

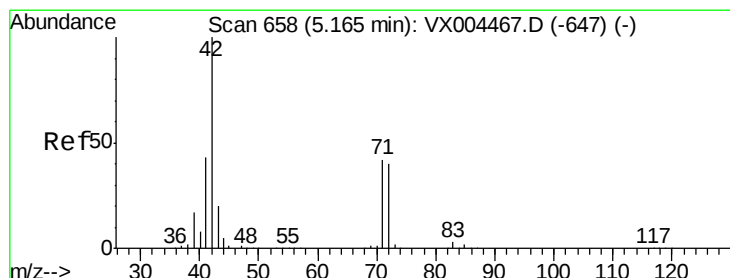
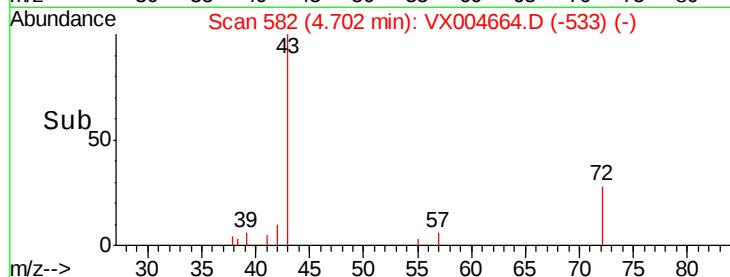
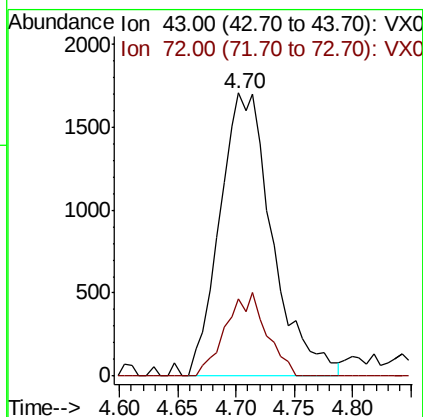
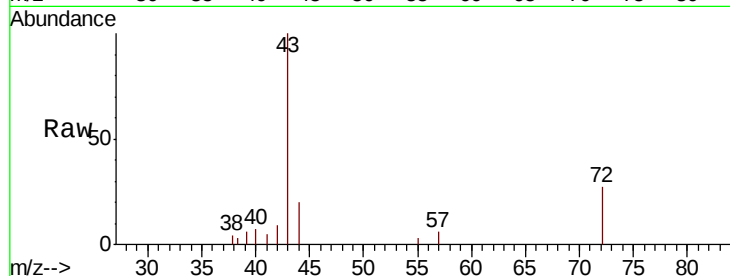
132-1-VOLT

Tgt Ion: 43 Resp: 5336

Ion Ratio Lower Upper

43 100

72 27.3 22.0 33.0



#29

Tetrahydrofuran

Concen: 1.455 ug/l

RT: 5.17 min Scan# 658

Delta R.T. 0.00 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

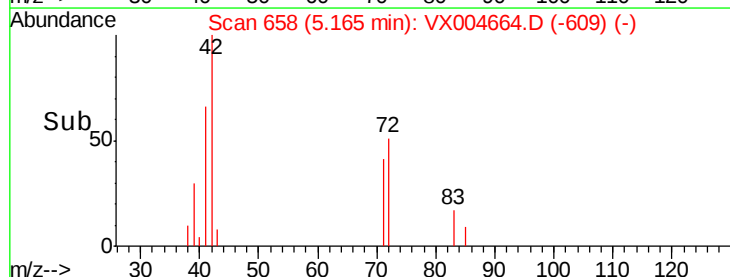
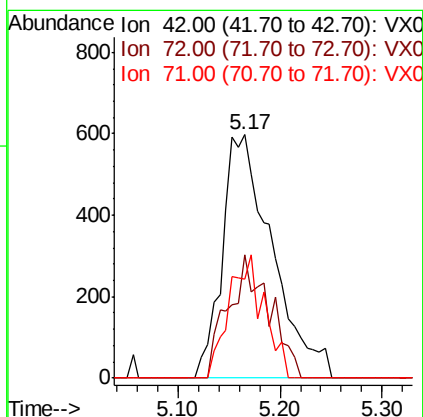
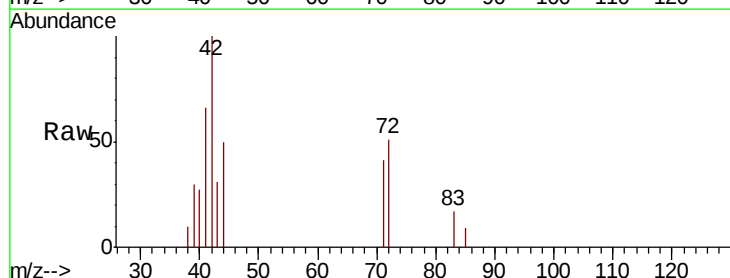
Tgt Ion: 42 Resp: 2027

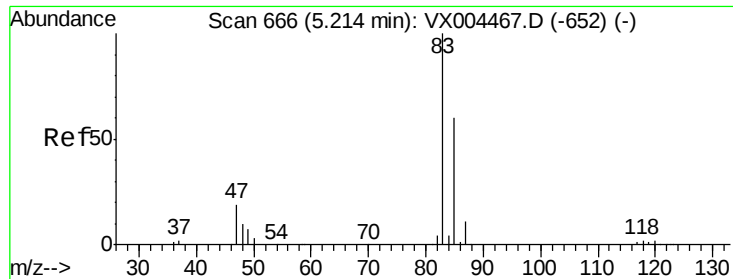
Ion Ratio Lower Upper

42 100

72 41.7 37.4 56.0

71 35.6 34.5 51.7

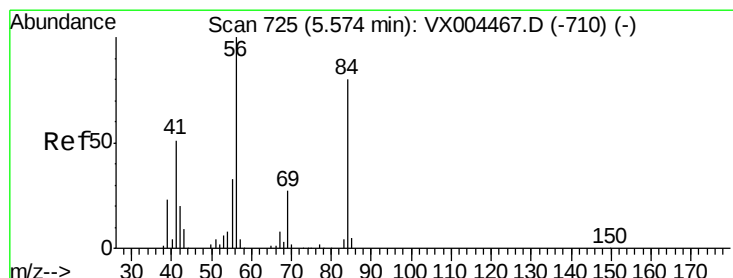
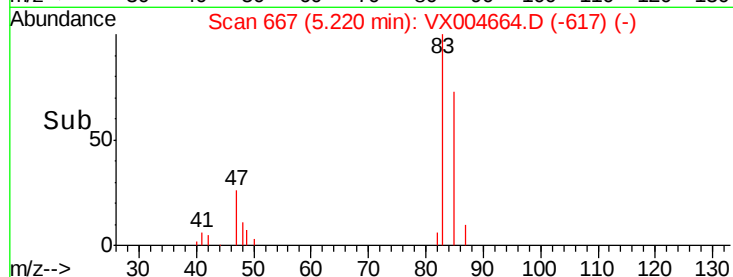
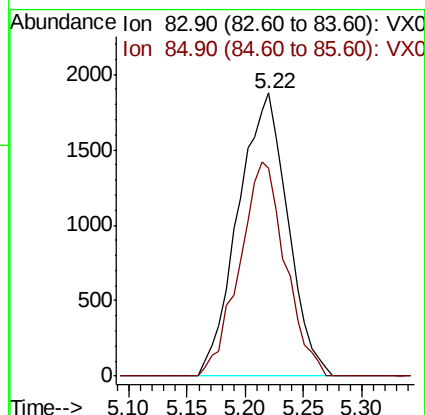
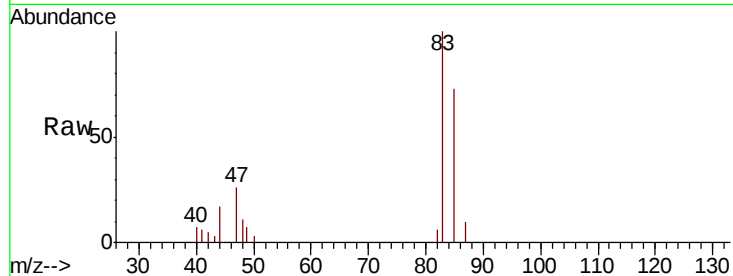




#30  
Chloroform  
Concen: 1.129 ug/l  
RT: 5.22 min Scan# 667  
Delta R.T. 0.01 min  
Lab File: VX004664.D  
Acq: 18 Sep 2018 18:03

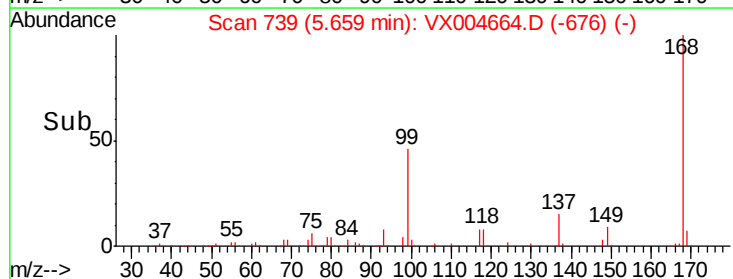
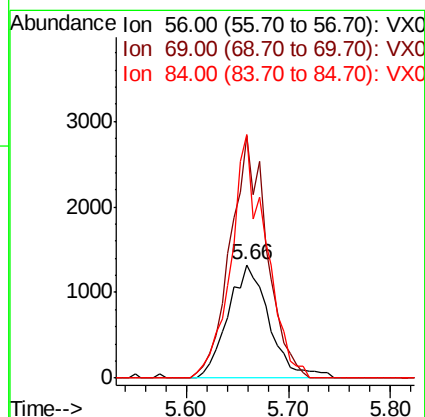
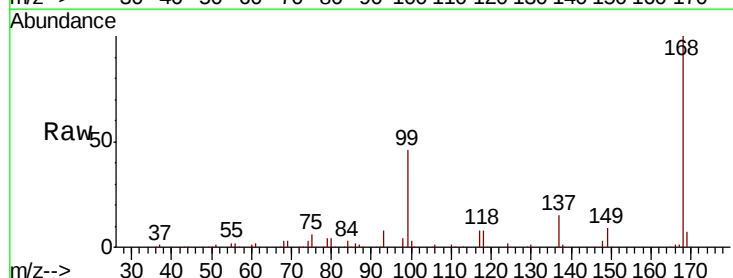
Instrument :  
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132-1-VOLT

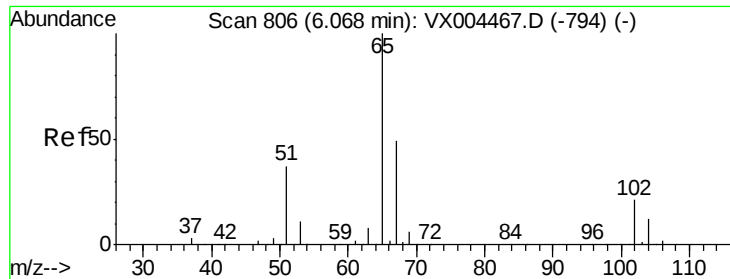
Tgt Ion: 83 Resp: 5554  
Ion Ratio Lower Upper  
83 100  
85 73.3 52.6 79.0



#31  
Cyclohexane  
Concen: 0.862 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. 0.09 min  
Lab File: VX004664.D  
Acq: 18 Sep 2018 18:03

Tgt Ion: 56 Resp: 3708  
Ion Ratio Lower Upper  
56 100  
69 214.8 25.4 38.2#  
84 215.4 71.4 107.2#

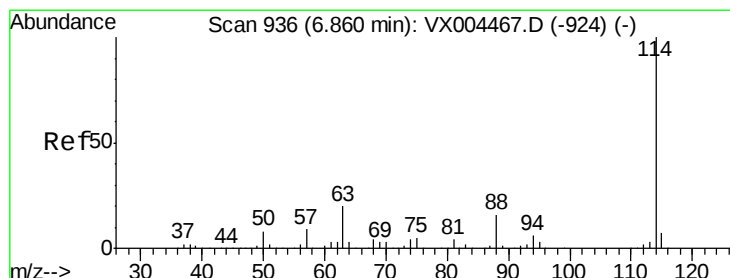
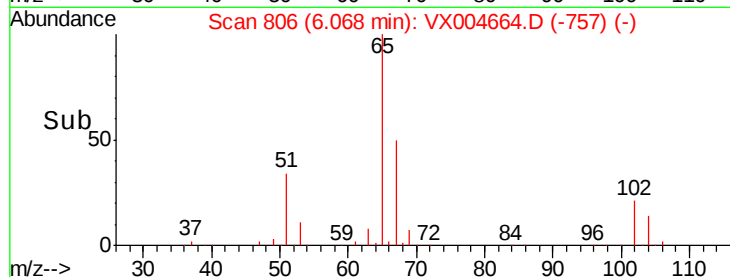
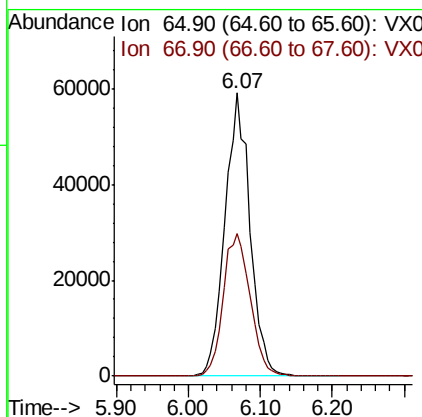
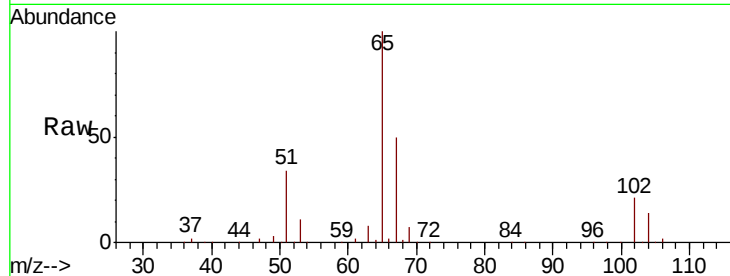




#33  
 1,2-Dichloroethane-d4  
 Concen: 48.048 ug/l  
 RT: 6.07 min Scan# 806  
 Delta R.T. 0.00 min  
 Lab File: VX004664.D  
 Acq: 18 Sep 2018 18:03

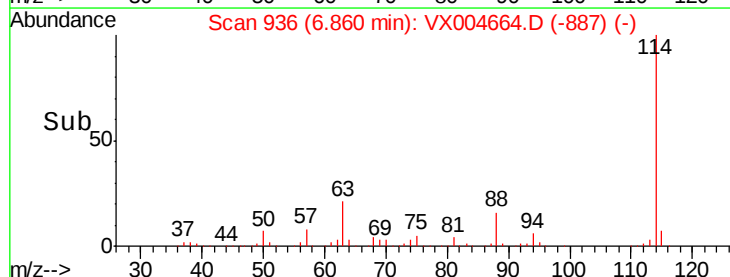
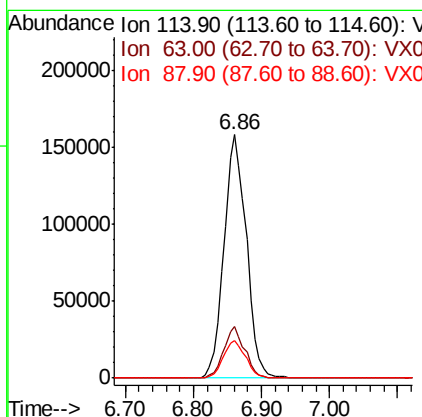
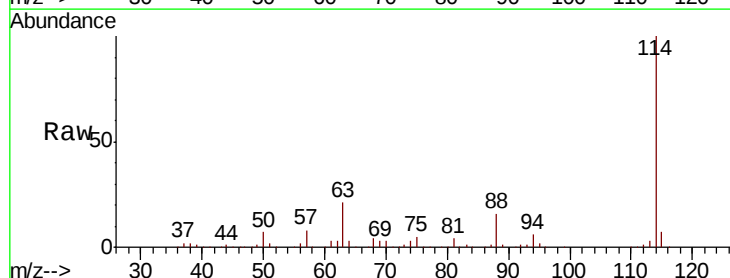
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 132-1-VOLT

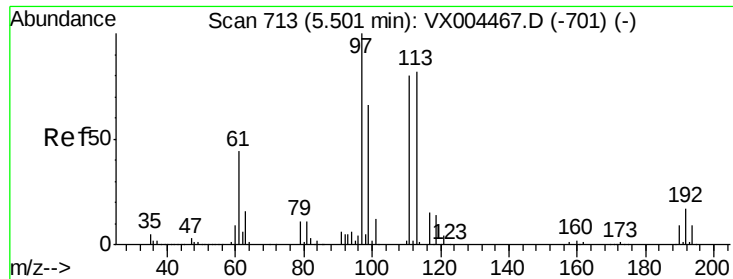
Tgt Ion: 65 Resp: 142891  
 Ion Ratio Lower Upper  
 65 100  
 67 54.0 0.0 106.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. 0.00 min  
 Lab File: VX004664.D  
 Acq: 18 Sep 2018 18:03

Tgt Ion: 114 Resp: 359576  
 Ion Ratio Lower Upper  
 114 100  
 63 21.3 0.0 39.0  
 88 15.6 0.0 30.4





#35

Dibromofluoromethane

Concen: 40.684 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampleId :

132-1-VOLT

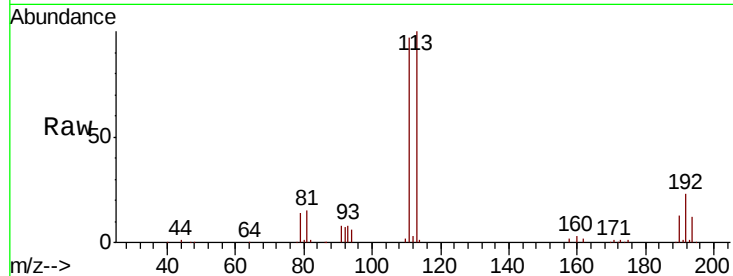
Tgt Ion:113 Resp: 133869

Ion Ratio Lower Upper

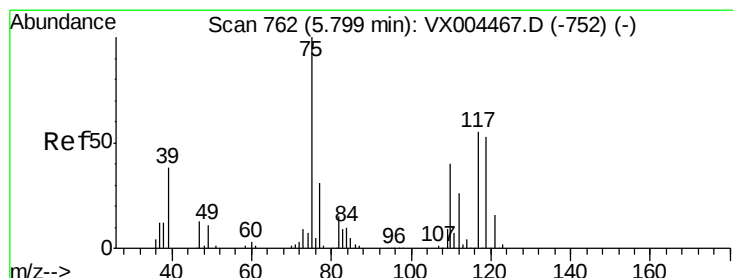
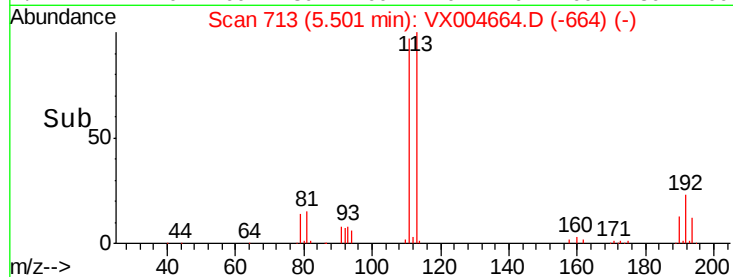
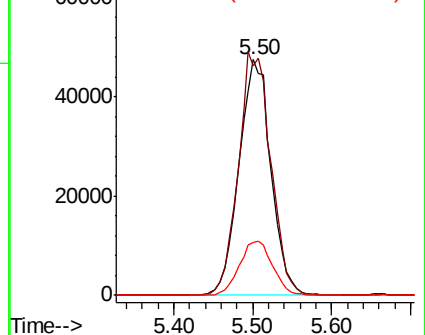
113 100

111 104.6 82.4 123.6

192 23.8 19.4 29.2



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: 3.358 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

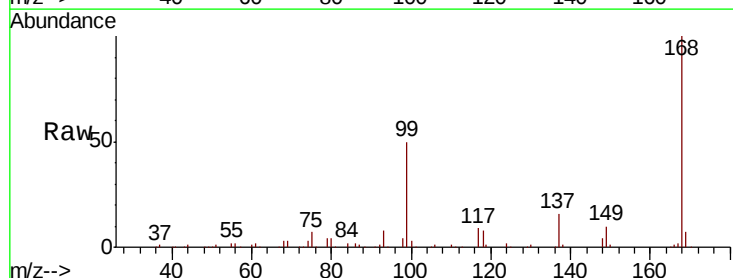
Tgt Ion: 75 Resp: 14661

Ion Ratio Lower Upper

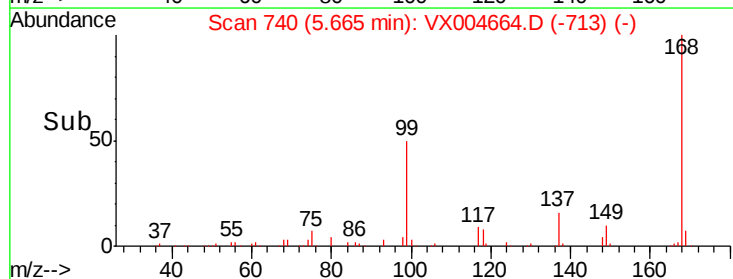
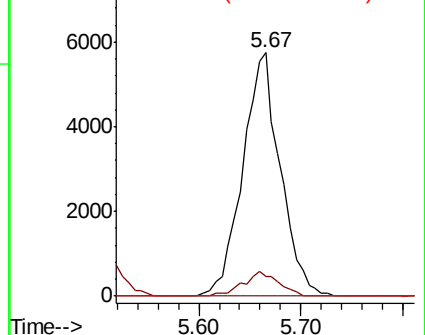
75 100

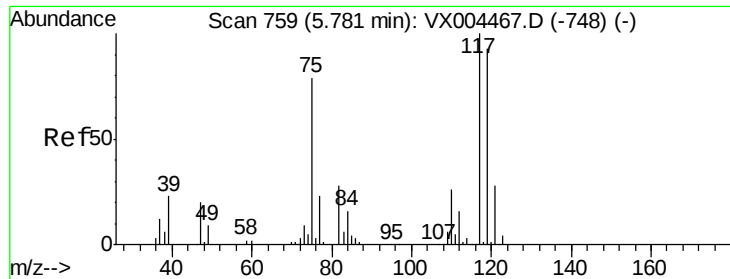
110 9.5 18.0 54.0#

77 0.0 24.6 36.8#



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: 4.577 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.12 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampleId :

132-1-VOLT

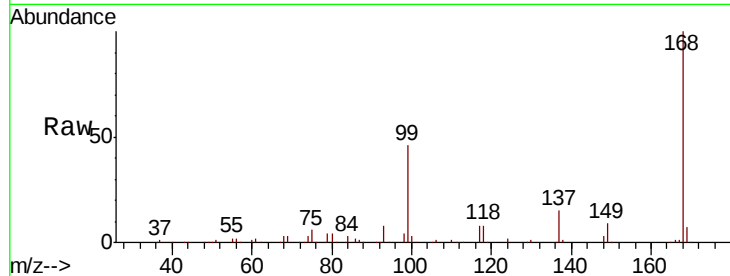
Tgt Ion: 117 Resp: 19515

Ion Ratio Lower Upper

117 100

119 5.8 78.8 118.2#

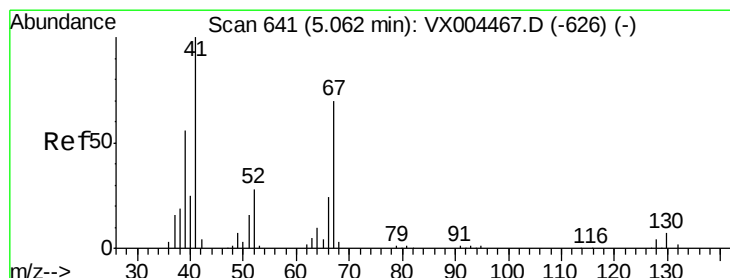
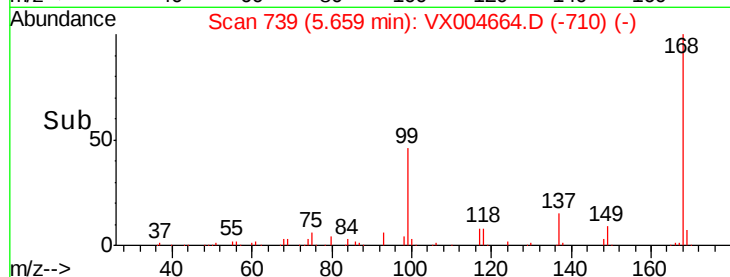
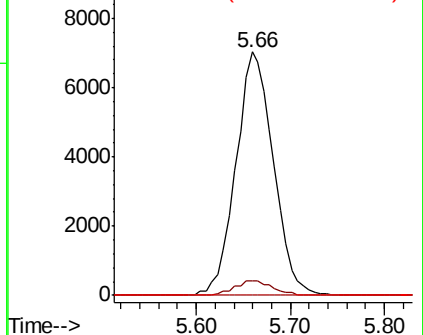
121 0.0 24.9 37.3#



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



#41

Methacrylonitrile

Concen: 0.474 ug/l

RT: 5.18 min Scan# 660

Delta R.T. 0.12 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Tgt Ion: 41 Resp: 1298

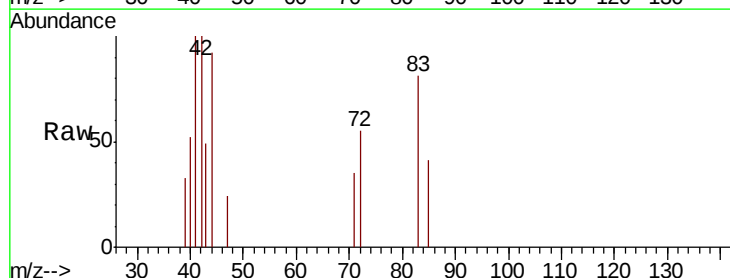
Ion Ratio Lower Upper

41 100

39 39.0 42.4 63.6#

67 0.0 59.2 88.8#

52 0.0 23.0 34.4#

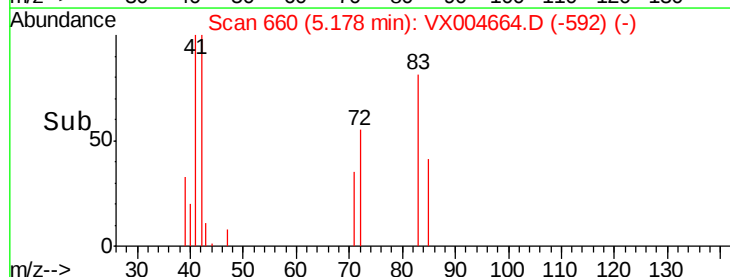
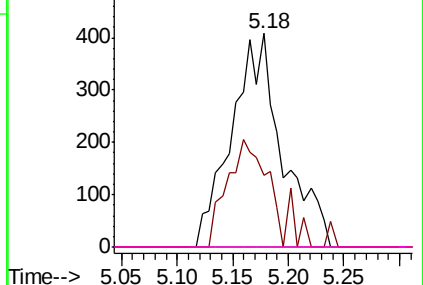


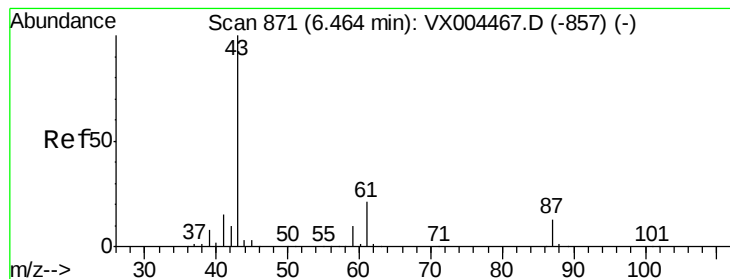
Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

Ion 67.00 (66.70 to 67.70): VX0

Ion 52.00 (51.70 to 52.70): VX0





#43

Isopropyl Acetate

Concen: 19.230 ug/l

RT: 6.46 min Scan# 870

Delta R.T. -0.01 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampleId :

132-1-VOLT

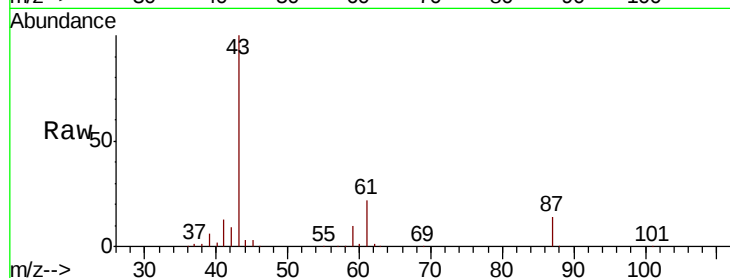
Tgt Ion: 43 Resp: 126811

Ion Ratio Lower Upper

43 100

61 21.3 17.0 25.4

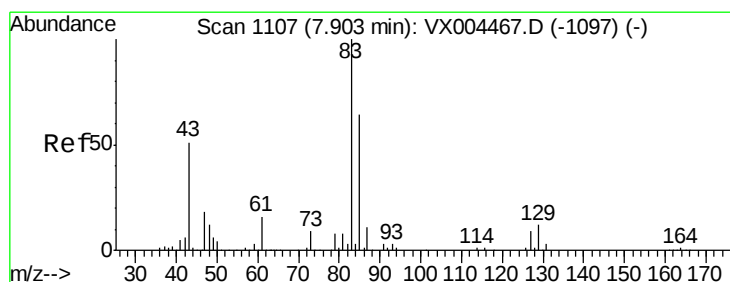
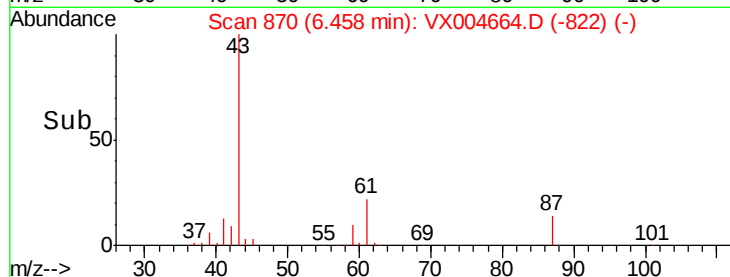
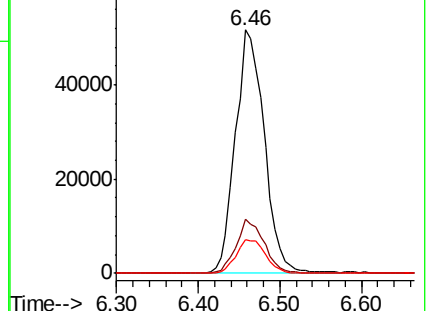
87 14.1 11.4 17.2



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0



#47

Bromodichloromethane

Concen: 0.297 ug/l

RT: 7.90 min Scan# 1106

Delta R.T. -0.01 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

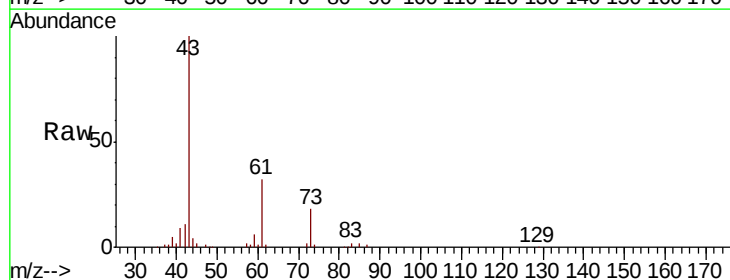
Tgt Ion: 83 Resp: 1106

Ion Ratio Lower Upper

83 100

85 72.0 50.9 76.3

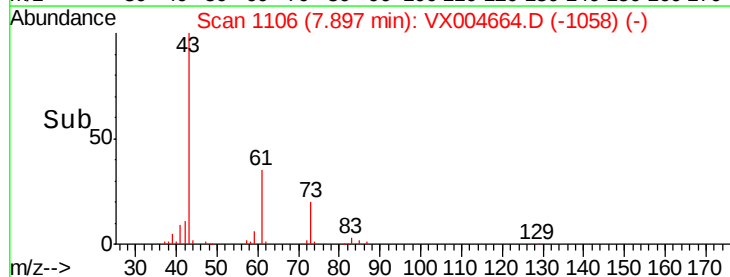
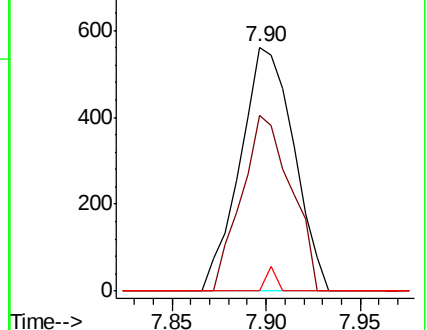
127 0.0 7.3 10.9#

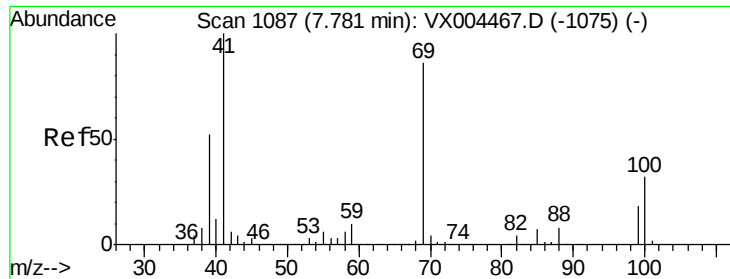


Abundance Ion 82.90 (82.60 to 83.60): VX0

Ion 84.90 (84.60 to 85.60): VX0

Ion 126.80 (126.50 to 127.50): V





#48

Methyl methacrylate

Concen: 1.914 ug/l

RT: 7.69 min Scan# 1072

Delta R.T. -0.09 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampleId :

132-1-VOLT

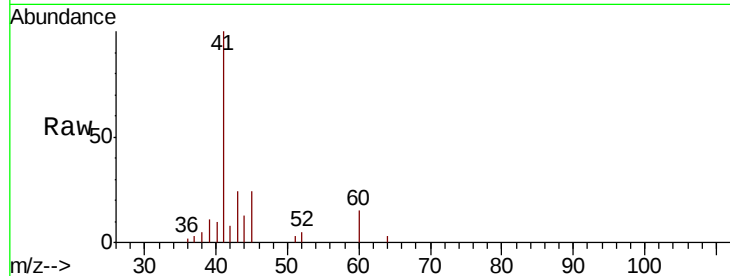
Tgt Ion: 41 Resp: 6245

Ion Ratio Lower Upper

41 100

69 0.0 70.2 105.4#

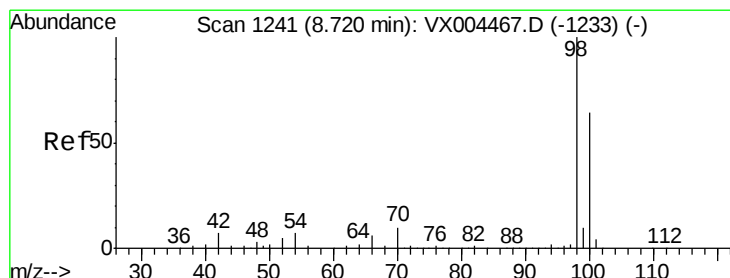
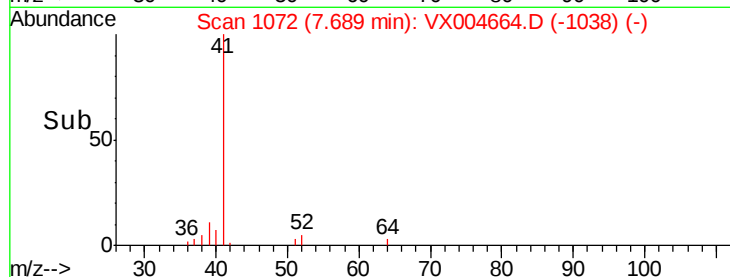
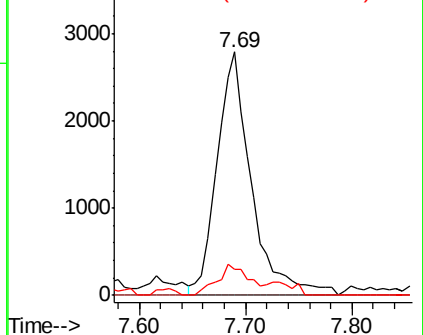
39 12.1 42.7 64.1#



Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0



#50

Toluene-d8

Concen: 43.512 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.01 min

Lab File: VX004664.D

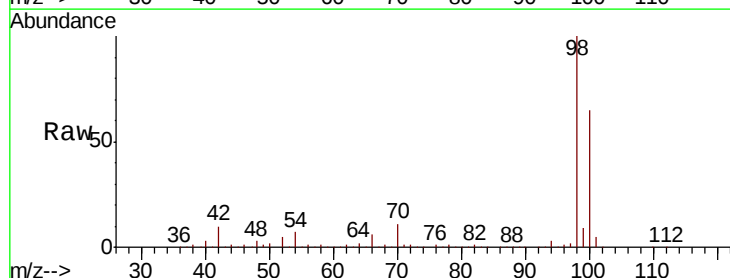
Acq: 18 Sep 2018 18:03

Tgt Ion: 98 Resp: 480139

Ion Ratio Lower Upper

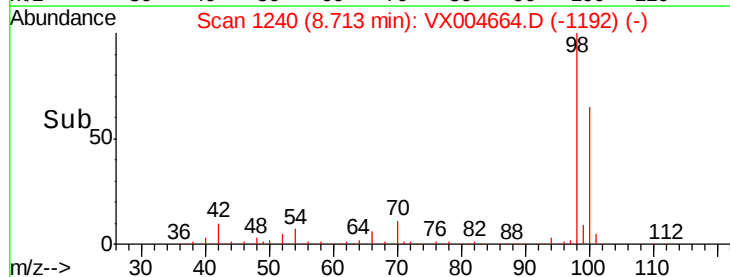
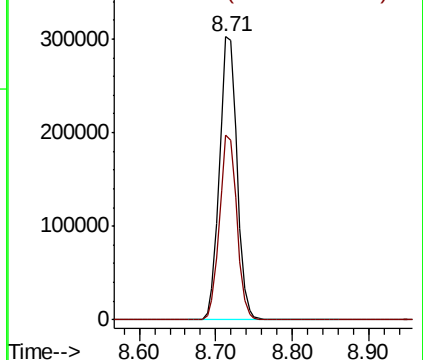
98 100

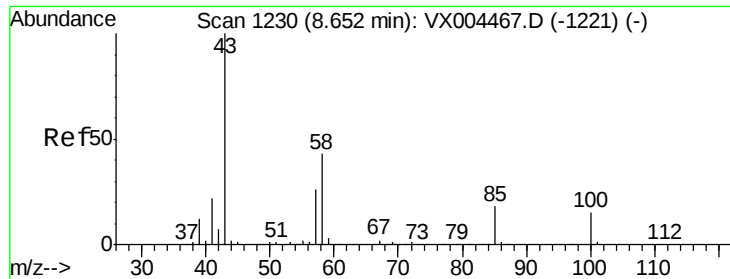
100 64.5 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V





#51

4-Methyl-2-Pentanone

Concen: 0.390 ug/l

RT: 8.62 min Scan# 1225

Delta R.T. -0.03 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampled :

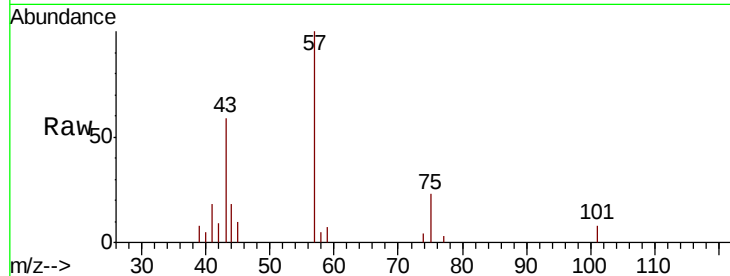
132-1-VOLT

Tgt Ion: 43 Resp: 1817

Ion Ratio Lower Upper

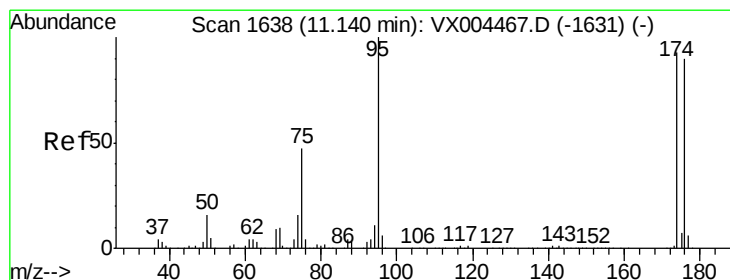
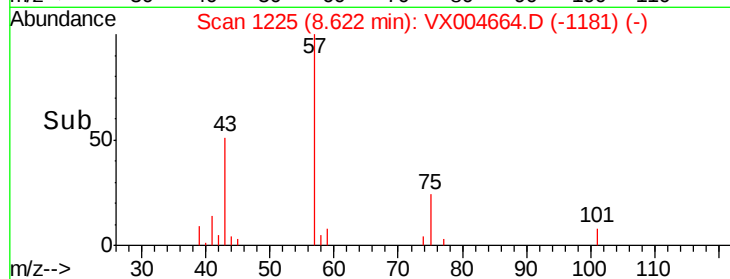
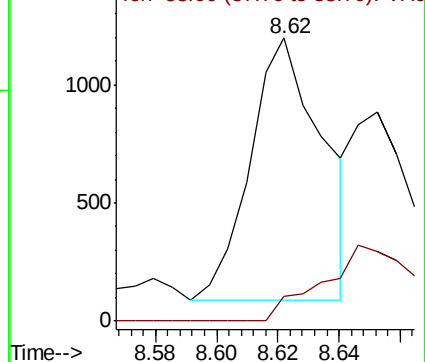
43 100

58 0.0 33.1 49.7#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#62

4-Bromofluorobenzene

Concen: 43.672 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.00 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

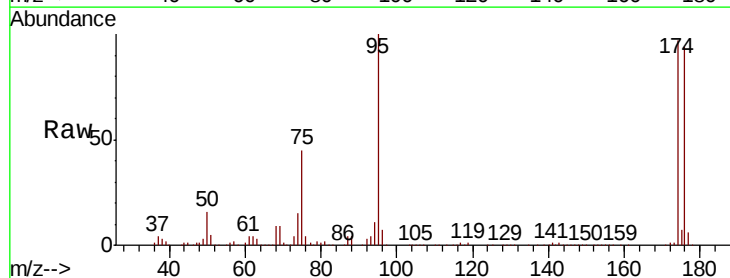
Tgt Ion: 95 Resp: 172018

Ion Ratio Lower Upper

95 100

174 93.9 0.0 185.2

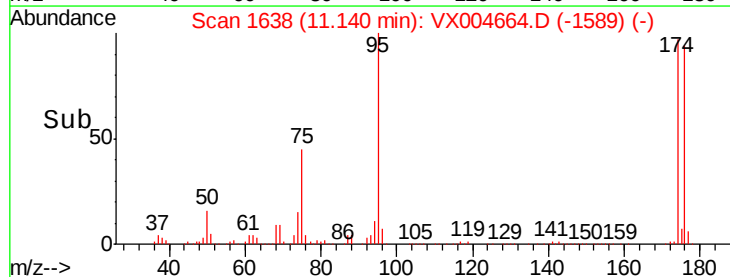
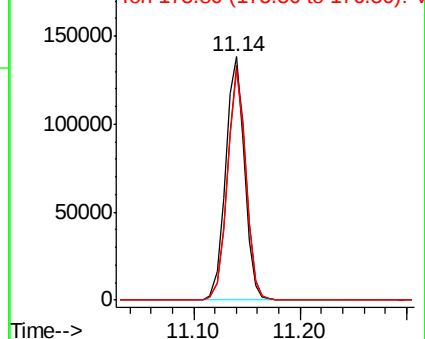
176 91.6 0.0 178.6

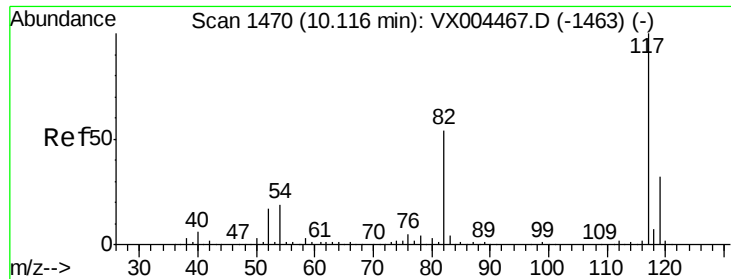


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

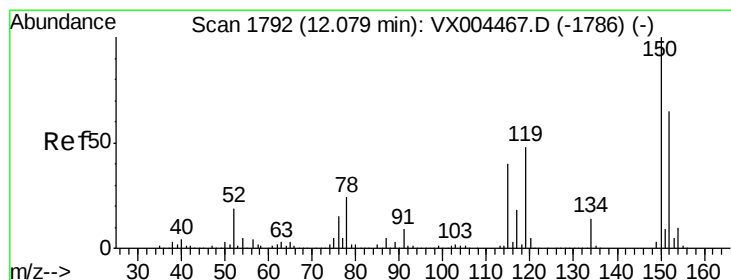
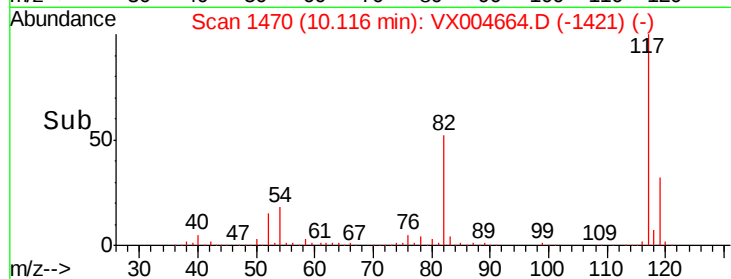
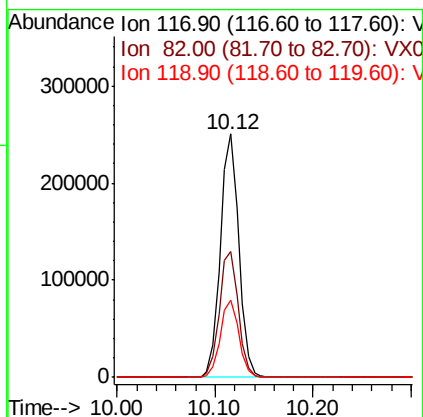
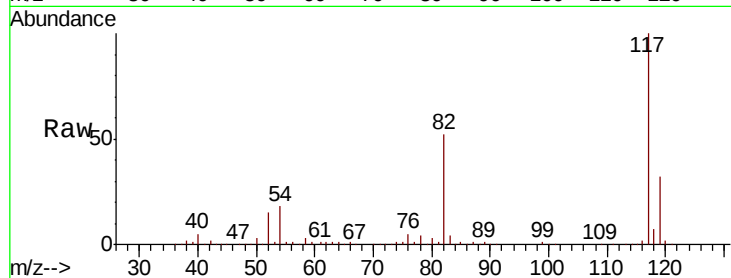




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VX004664.D  
Acq: 18 Sep 2018 18:03

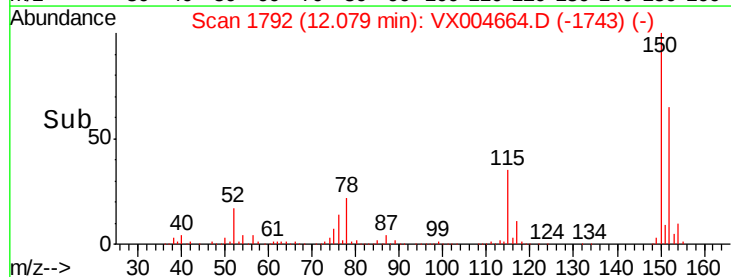
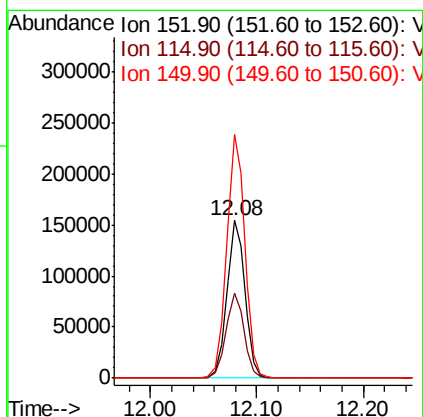
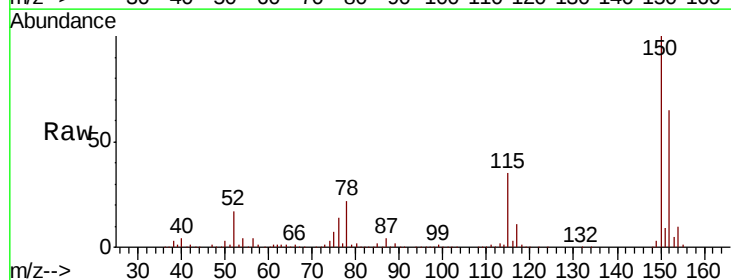
Instrument :  
MSVOA\_X  
ClientSampleId :  
132-1-VOLT

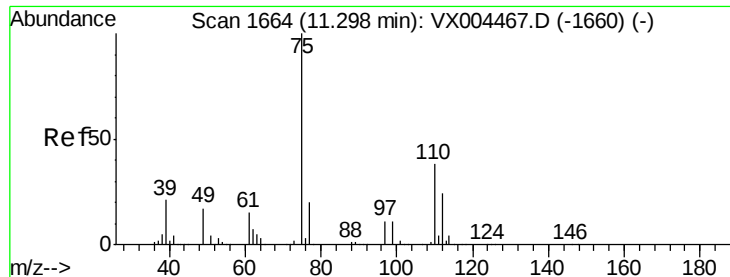
Tgt Ion:117 Resp: 327617  
Ion Ratio Lower Upper  
117 100  
82 51.8 47.8 71.6  
119 31.9 29.3 43.9



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX004664.D  
Acq: 18 Sep 2018 18:03

Tgt Ion:152 Resp: 183396  
Ion Ratio Lower Upper  
152 100  
115 53.9 39.0 117.0  
150 155.1 0.0 351.0





#76

1,2,3-Trichloropropane

Concen: 21.495 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampleId :

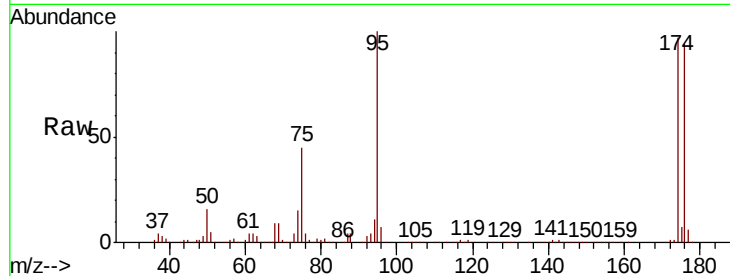
132-1-VOLT

Tgt Ion: 75 Resp: 79310

Ion Ratio Lower Upper

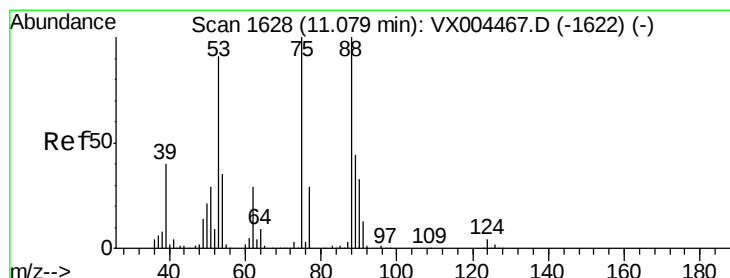
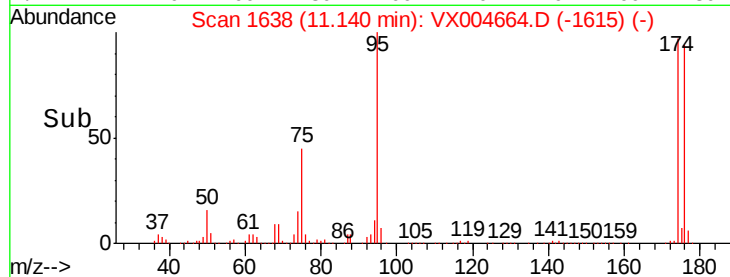
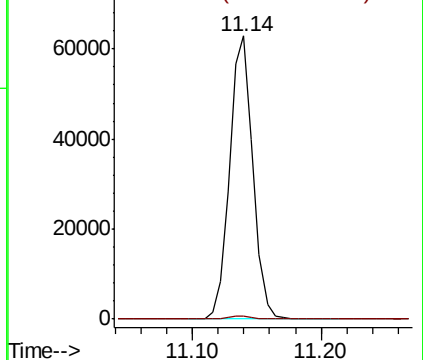
75 100

77 1.2 20.2 60.6#



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: 68.514 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.06 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

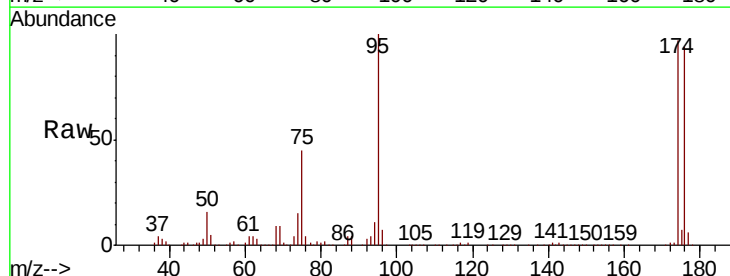
Tgt Ion: 75 Resp: 79310

Ion Ratio Lower Upper

75 100

53 0.0 80.1 120.1#

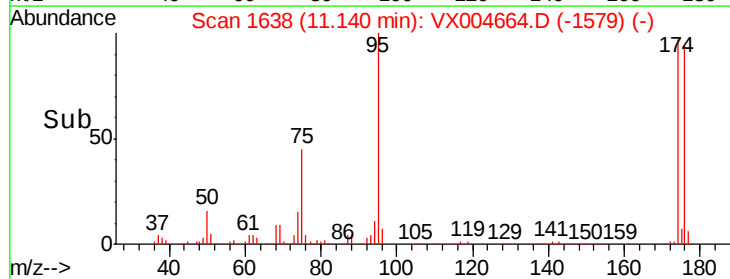
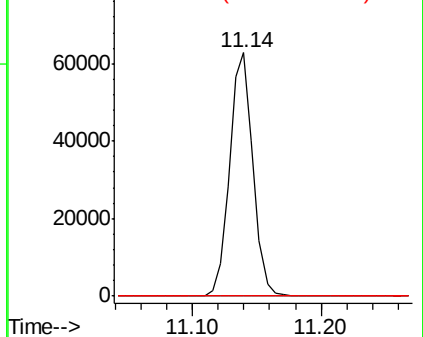
89 0.0 37.2 55.8#

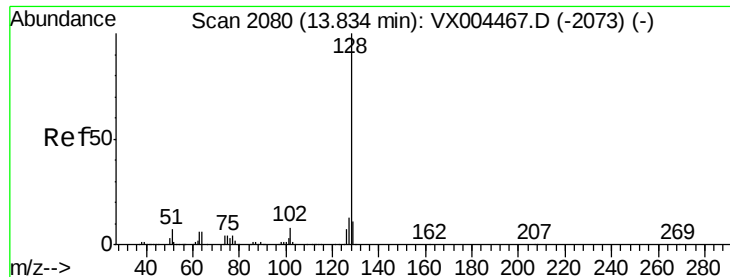


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#95

Naphthalene

Concen: 0.709 ug/l

RT: 13.83 min Scan# 2080

Delta R.T. 0.00 min

Lab File: VX004664.D

Acq: 18 Sep 2018 18:03

Instrument :

MSVOA\_X

ClientSampleId :

132-1-VOLT

Tgt Ion:128 Resp: 8878

Ion Ratio Lower Upper

128 100

127 13.1 10.2 15.2

129 10.7 8.6 12.8

