

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX101218\  
 Data File : VX005288.D  
 Acq On : 12 Oct 2018 12:57  
 Operator : JC/MD  
 Sample : VX1012WBL01  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1012WBL01

Quant Time: Oct 12 17:05:40 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 12 11:28:43 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 248701   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 356552   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 322689   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 160038   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |       |
|-----------------------------|--------|-----|----------|-------|---------|-------|
| System Monitoring Compounds |        |     |          |       |         |       |
| 33) 1,2-Dichloroethane-d4   | 6.06   | 65  | 142410   | 51.59 | ug/l    | -0.01 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 103.18% |       |
| 35) Dibromofluoromethane    | 5.50   | 113 | 113425   | 48.03 | ug/l    | 0.00  |
| Spiked Amount               | 50.000 |     | Recovery | =     | 96.06%  |       |
| 50) Toluene-d8              | 8.71   | 98  | 424852   | 52.40 | ug/l    | 0.00  |
| Spiked Amount               | 50.000 |     | Recovery | =     | 104.80% |       |
| 62) 4-Bromofluorobenzene    | 11.14  | 95  | 140347   | 46.08 | ug/l    | 0.00  |
| Spiked Amount               | 50.000 |     | Recovery | =     | 92.16%  |       |

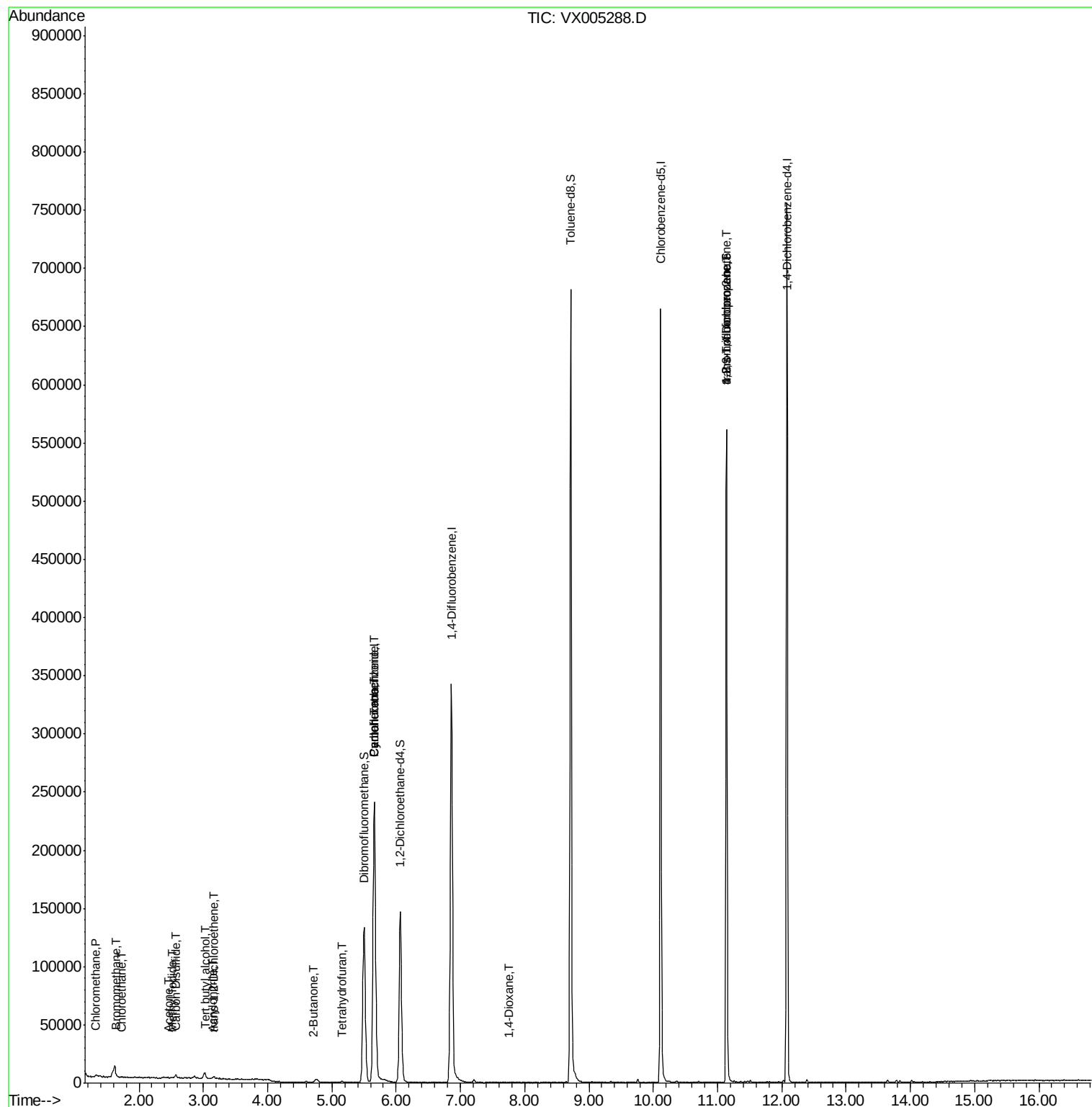
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 626      | 0.22      | ug/l # | 77     |
| 5) Bromomethane                | 1.64  | 94   | 1057     | 1.23      | ug/l # | 79     |
| 6) Chloroethane                | 1.72  | 64   | 515      | 0.61      | ug/l # | 50     |
| 10) Methyl Iodide              | 2.52  | 142  | 646      | 2.74      | ug/l # | 75     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 3425     | 4.40      | ug/l # | 80     |
| 13) Acrolein                   | 2.29  | 56   | 218      | Below Cal | #      | 73     |
| 15) Acrylonitrile              | 3.14  | 53   | 822      | 0.47      | ug/l # | 80     |
| 16) Acetone                    | 2.45  | 43   | 1242     | 0.78      | ug/l   | 100    |
| 17) Carbon Disulfide           | 2.57  | 76   | 3801     | 0.58      | ug/l   | 98     |
| 20) Methylene Chloride         | 2.86  | 84   | 788      | Below Cal |        | 91     |
| 21) trans-1,2-Dichloroethene   | 3.17  | 96   | 658      | 0.27      | ug/l # | 85     |
| 25) 2-Butanone                 | 4.71  | 43   | 937      | 0.40      | ug/l   | 98     |
| 29) Tetrahydrofuran            | 5.15  | 42   | 699      | 0.47      | ug/l # | 65     |
| 31) Cyclohexane                | 5.66  | 56   | 4594     | 1.21      | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 22160    | 6.39      | ug/l # | 15     |
| 44) Trichloroethene            | 7.21  | 130  | 882      | Below Cal |        | 72     |
| 49) 1,4-Dioxane                | 7.76  | 88   | 46       | 0.65      | ug/l # | 56     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 69951    | 22.53     | ug/l # | 37     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 69951    | 68.47     | ug/l # | 10     |

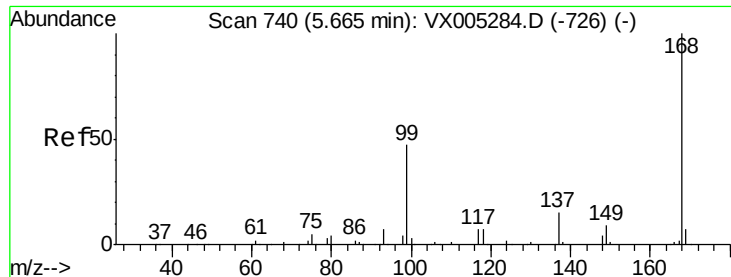
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_X\DATA\VX101218\  
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Sample : VX1012WBL01  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleID :  
VX1012WBL01

Quant Time: Oct 12 17:05:40 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
Quant Title : SW846 8260  
QLast Update : Fri Oct 12 11:28:43 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.01 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampled :

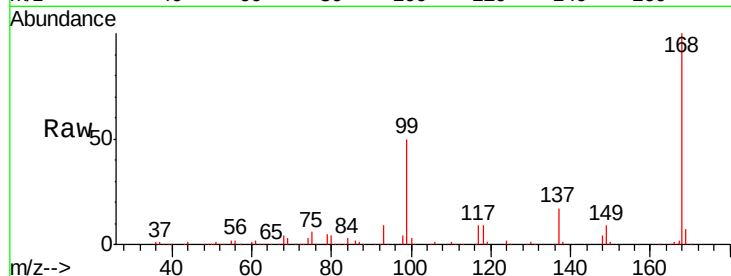
VX1012WBL01

Tgt Ion: 168 Resp: 248701

Ion Ratio Lower Upper

168 100

99 50.0 39.9 59.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

80000

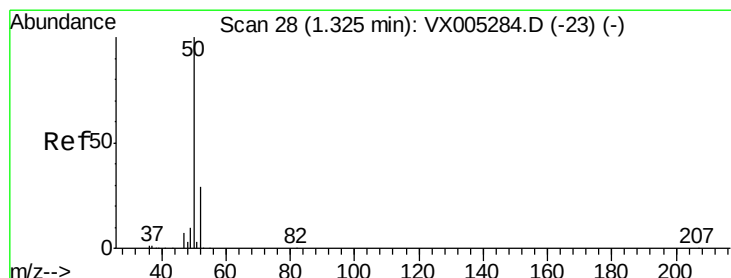
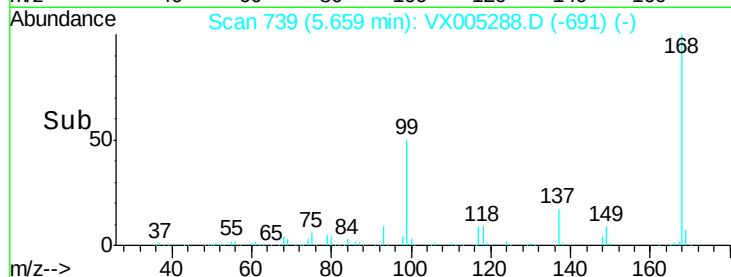
60000

40000

20000

0

Time-->



#3

Chloromethane

Concen: 0.22 ug/l

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX005288.D

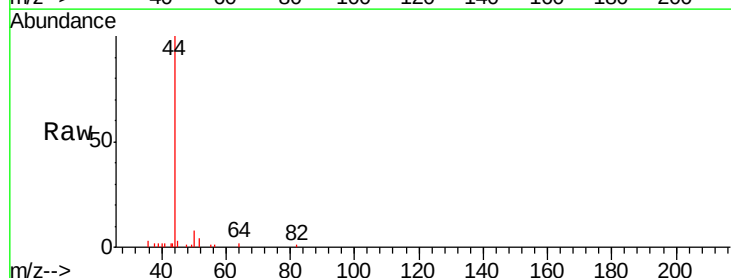
Acq: 12 Oct 2018 12:57

Tgt Ion: 50 Resp: 626

Ion Ratio Lower Upper

50 100

52 45.5 26.2 39.2#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

400

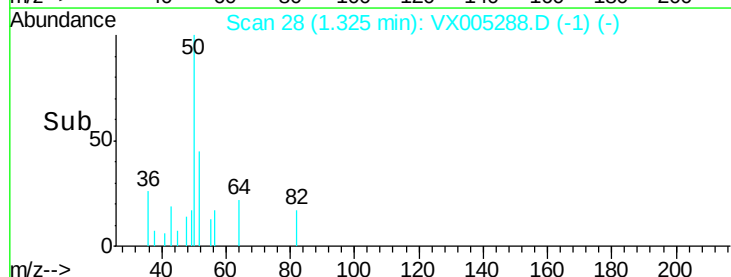
300

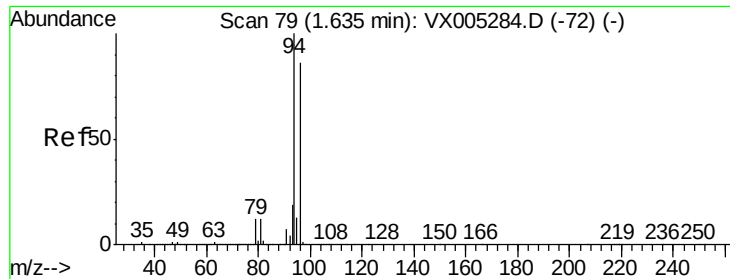
200

100

0

Time-->





#5

Bromomethane

Concen: 1.23 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampleId :

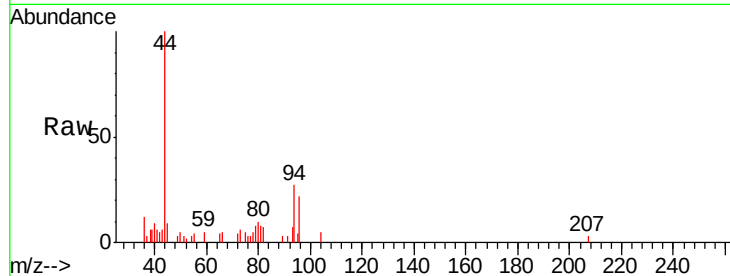
VX1012WBL01

Tgt Ion: 94 Resp: 1057

Ion Ratio Lower Upper

94 100

96 72.9 74.5 111.7#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

600

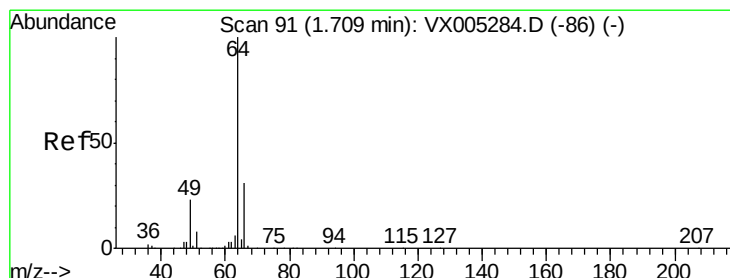
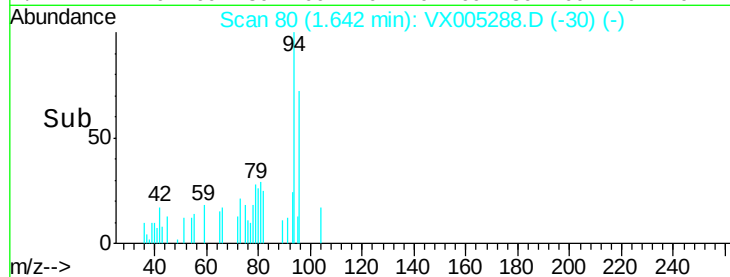
400

200

0

1.60 1.65 1.70

Time-->



#6

Chloroethane

Concen: 0.61 ug/l

RT: 1.72 min Scan# 93

Delta R.T. 0.01 min

Lab File: VX005288.D

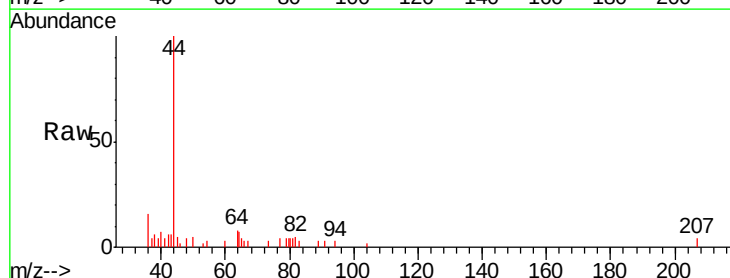
Acq: 12 Oct 2018 12:57

Tgt Ion: 64 Resp: 515

Ion Ratio Lower Upper

64 100

66 3.4 24.6 36.8#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1.72

400

300

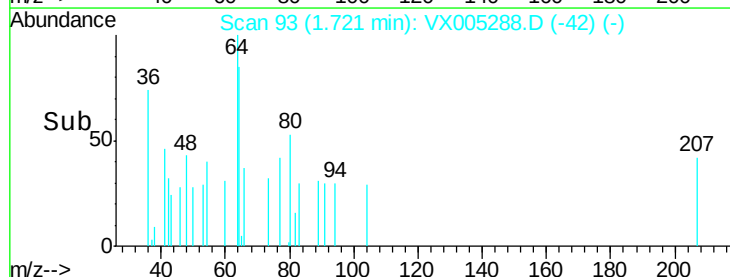
200

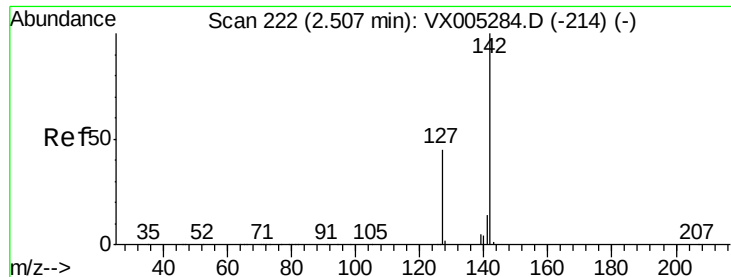
100

0

1.65 1.70 1.75

Time-->

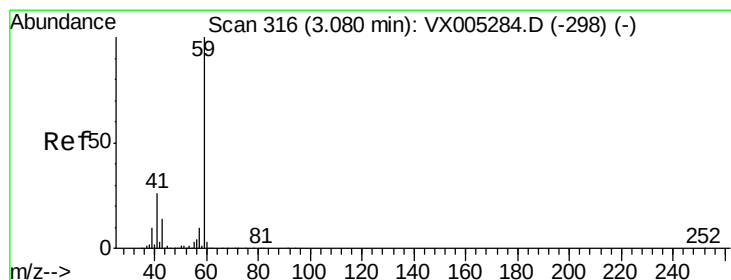
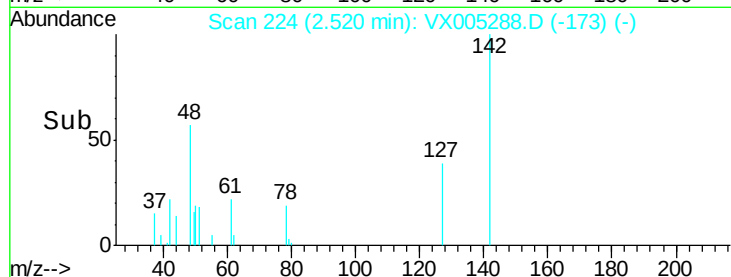
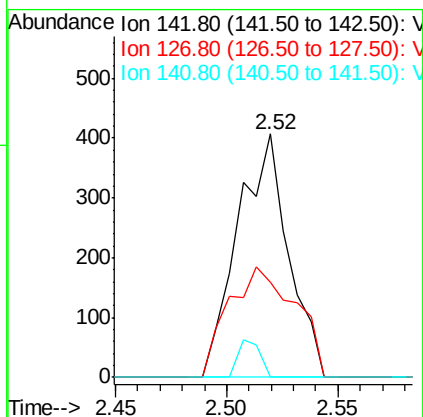
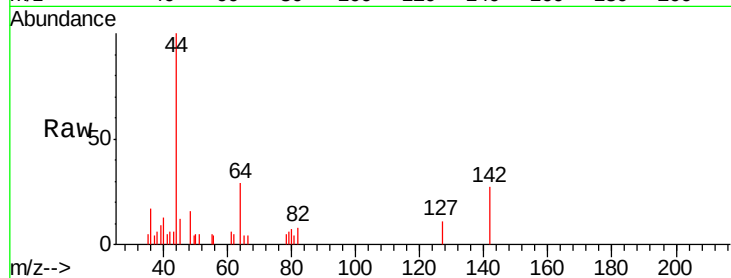




#10  
Methyl Iodide  
Concen: 2.74 ug/l  
RT: 2.52 min Scan# 224  
Delta R.T. 0.01 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

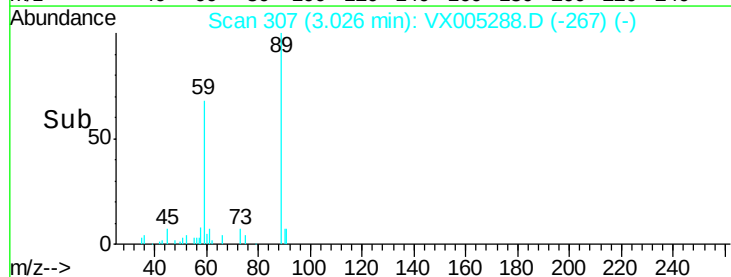
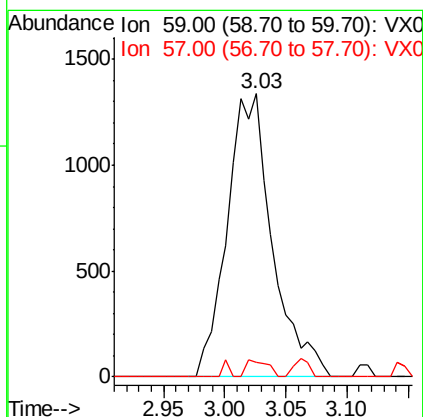
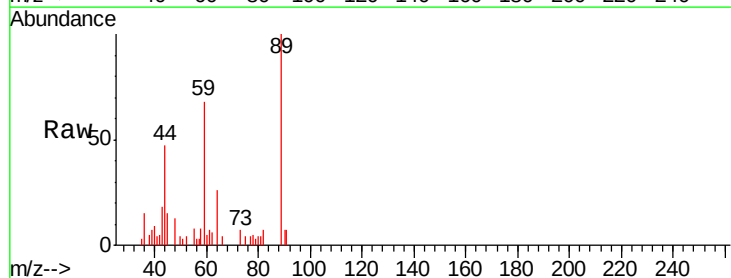
Instrument :  
MSVOA\_X  
ClientSampled :  
VX1012WBL01

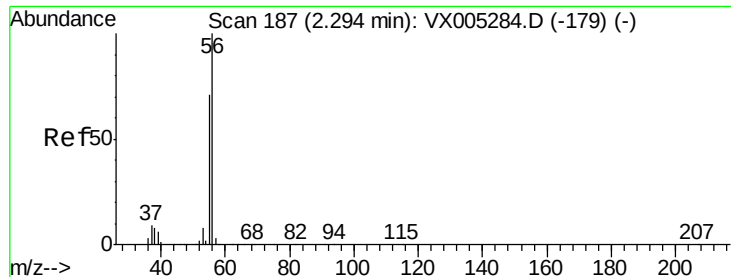
Tgt Ion:142 Resp: 646  
Ion Ratio Lower Upper  
142 100  
127 59.3 33.8 50.6#  
141 6.7 11.4 17.0#



#11  
Tert butyl alcohol  
Concen: 4.40 ug/l  
RT: 3.03 min Scan# 307  
Delta R.T. -0.05 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

Tgt Ion: 59 Resp: 3425  
Ion Ratio Lower Upper  
59 100  
57 2.9 8.2 12.4#





#13

Acrolein

Concen: Below Cal

RT: 2.29 min Scan# 187

Delta R.T. 0.00 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampleId :

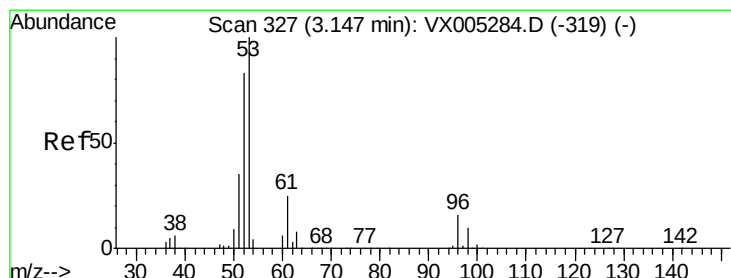
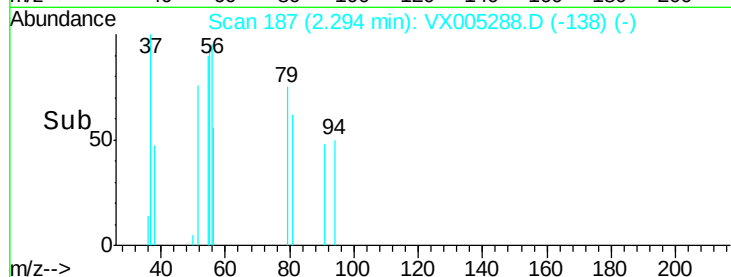
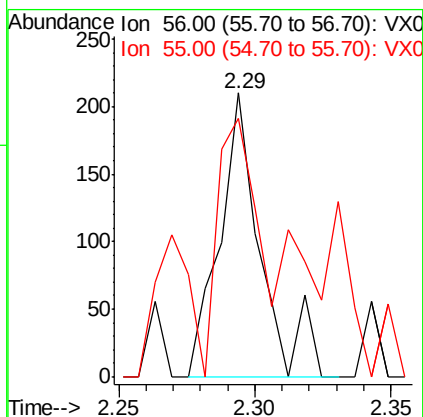
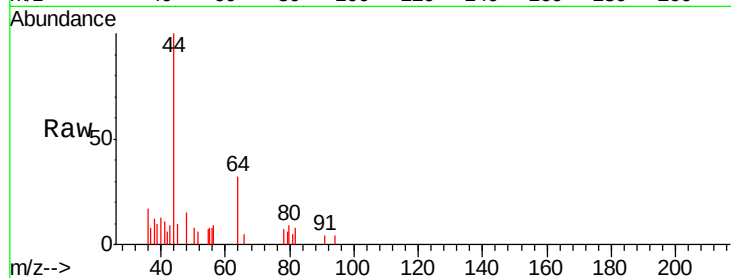
VX1012WBL01

Tgt Ion: 56 Resp: 218

Ion Ratio Lower Upper

56 100

55 90.4 54.7 82.1#



#15

Acrylonitrile

Concen: 0.47 ug/l

RT: 3.14 min Scan# 326

Delta R.T. -0.01 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

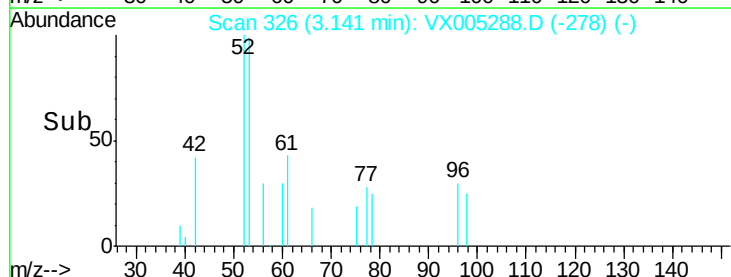
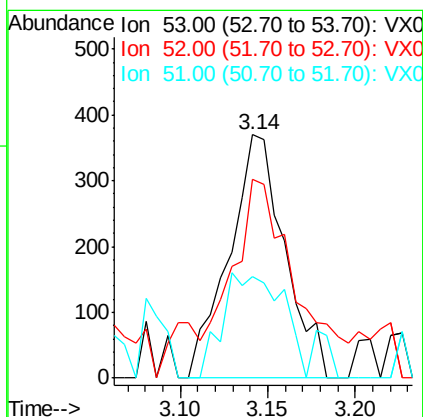
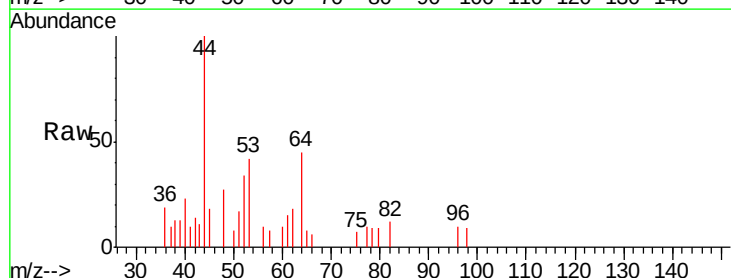
Tgt Ion: 53 Resp: 822

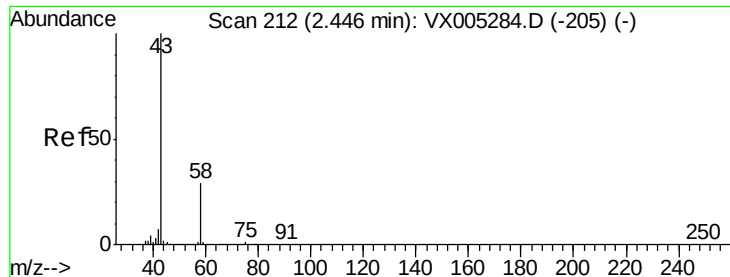
Ion Ratio Lower Upper

53 100

52 63.7 65.2 97.8#

51 46.5 28.2 42.2#





#16

Acetone

Concen: 0.78 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampleId :

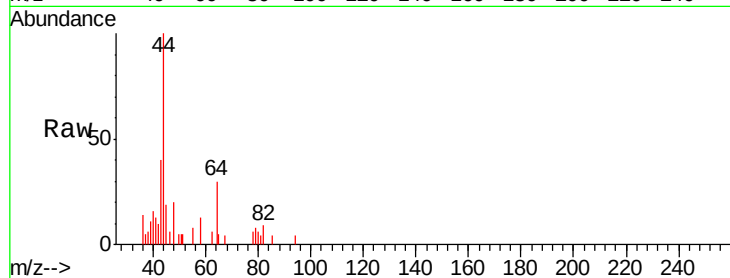
VX1012WBL01

Tgt Ion: 43 Resp: 1242

Ion Ratio Lower Upper

43 100

58 32.5 26.2 39.4



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.45

600

500

400

300

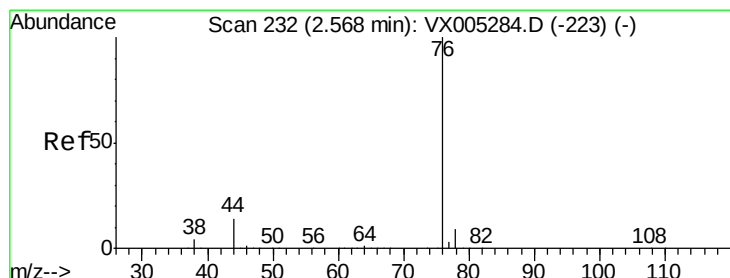
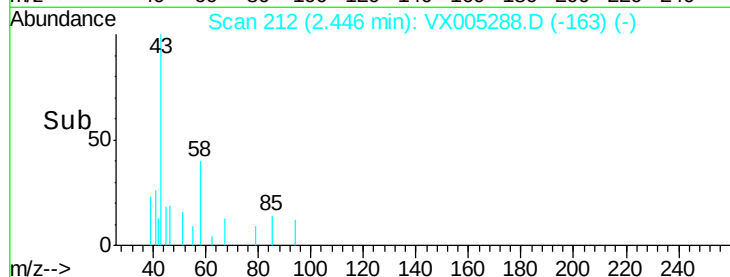
200

100

0

Time-->

2.40 2.45 2.50



#17

Carbon Disulfide

Concen: 0.58 ug/l

RT: 2.57 min Scan# 232

Delta R.T. 0.00 min

Lab File: VX005288.D

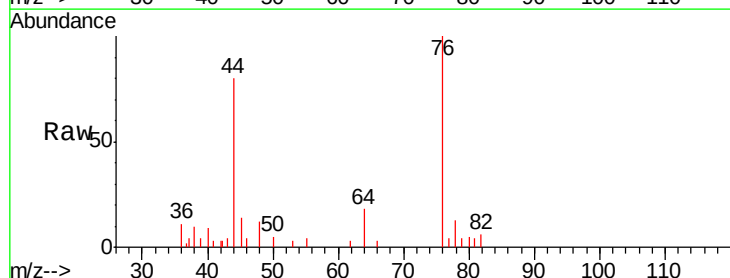
Acq: 12 Oct 2018 12:57

Tgt Ion: 76 Resp: 3801

Ion Ratio Lower Upper

76 100

78 9.4 7.0 10.6



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2500

2000

1500

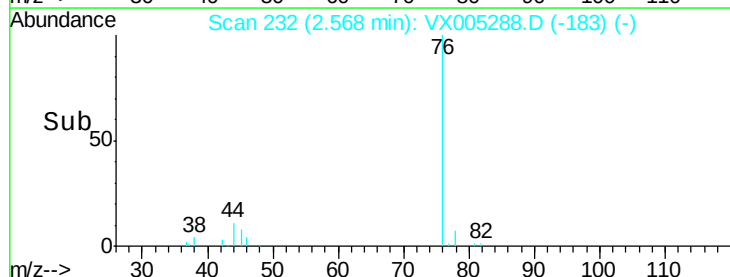
1000

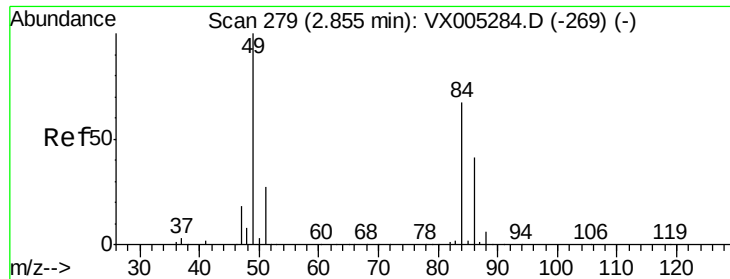
500

0

Time-->

2.50 2.55 2.60 2.65

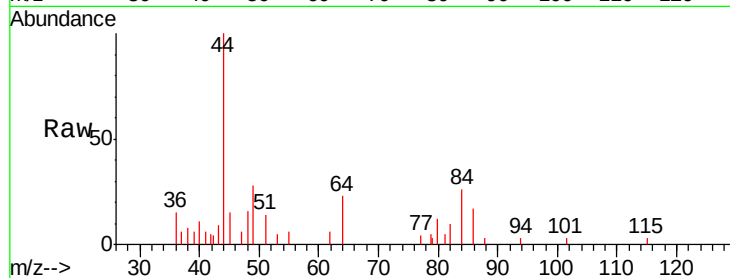




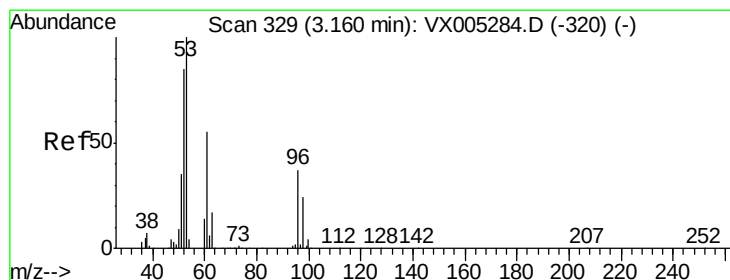
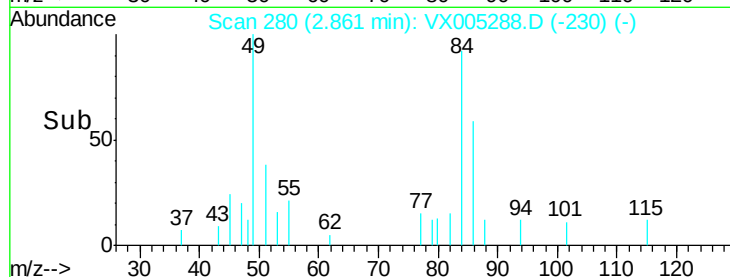
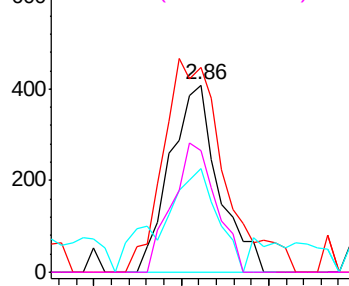
#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.86 min Scan# 280  
Delta R.T. 0.01 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX1012WBL01

Tgt Ion: 84 Resp: 788  
Ion Ratio Lower Upper  
84 100  
49 109.0 101.2 151.8  
51 39.6 29.5 44.3  
86 64.8 52.3 78.5

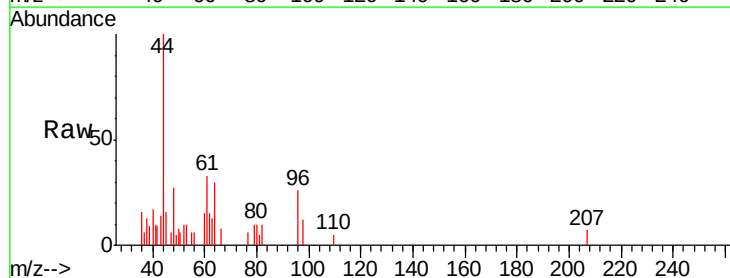


Abundance Ion 83.90 (83.60 to 84.60): VX0  
Ion 48.90 (48.60 to 49.60): VX0  
Ion 50.90 (50.60 to 51.60): VX0  
Ion 85.90 (85.60 to 86.60): VX0

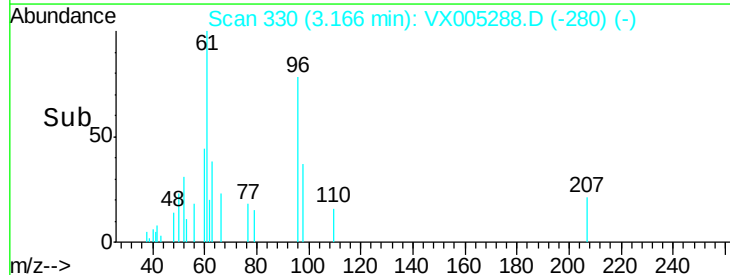
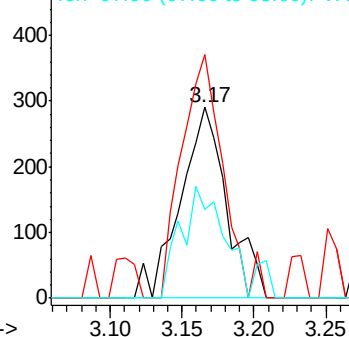


#21  
trans-1,2-Dichloroethene  
Concen: 0.27 ug/l  
RT: 3.17 min Scan# 330  
Delta R.T. 0.01 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

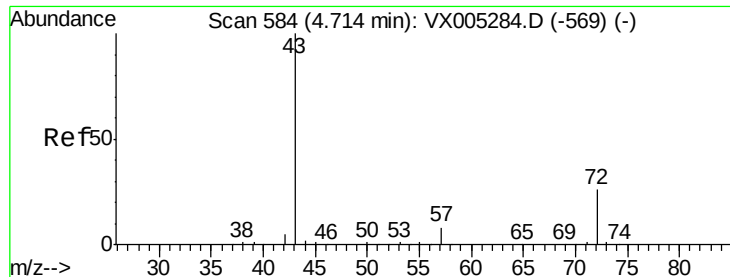
Tgt Ion: 96 Resp: 658  
Ion Ratio Lower Upper  
96 100  
61 127.5 113.8 170.6  
98 46.7 51.8 77.8#



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



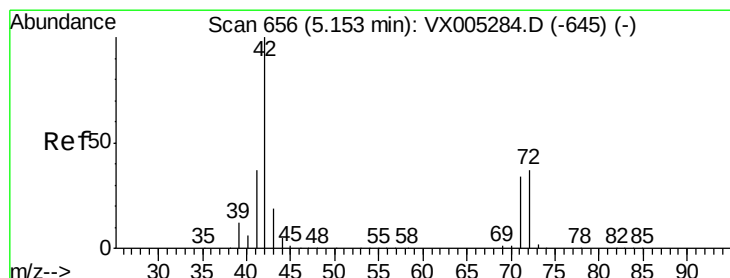
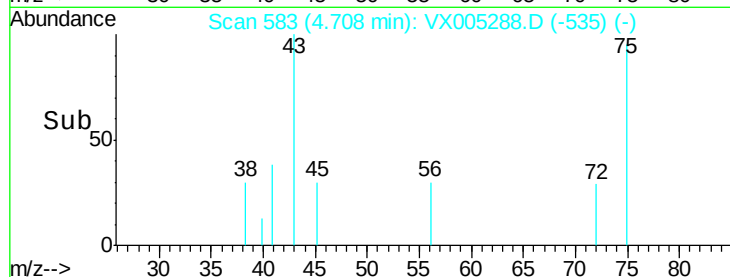
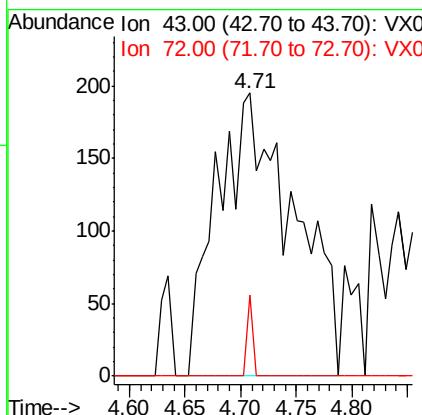
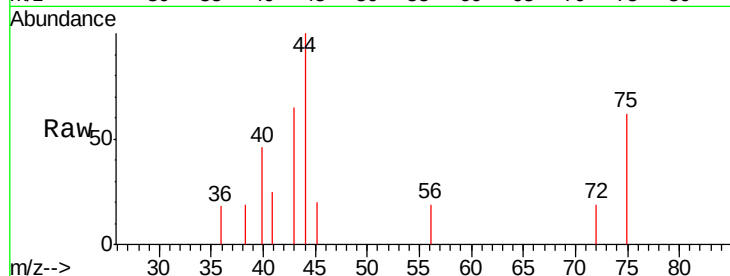




#25  
2-Butanone  
Concen: 0.40 ug/l  
RT: 4.71 min Scan# 583  
Delta R.T. -0.01 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

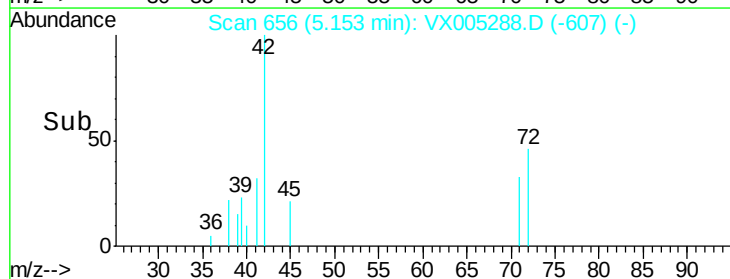
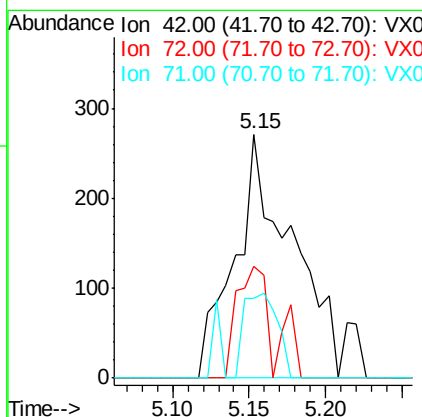
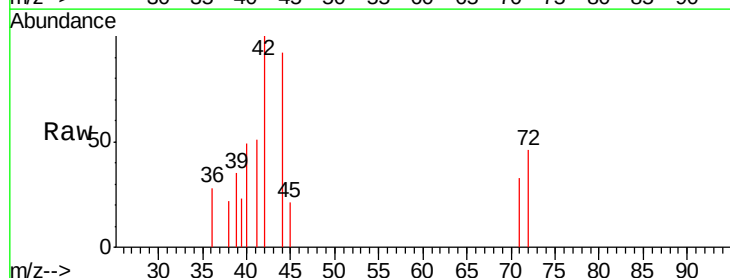
Instrument :  
MSVOA\_X  
ClientSampled :  
VX1012WBL01

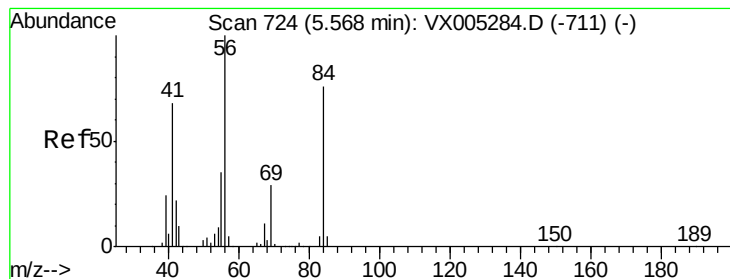
Tgt Ion: 43 Resp: 937  
Ion Ratio Lower Upper  
43 100  
72 28.7 22.0 33.0



#29  
Tetrahydrofuran  
Concen: 0.47 ug/l  
RT: 5.15 min Scan# 656  
Delta R.T. 0.00 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

Tgt Ion: 42 Resp: 699  
Ion Ratio Lower Upper  
42 100  
72 22.9 37.4 56.0#  
71 21.0 34.5 51.7#





#31

Cyclohexane

Concen: 1.21 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.09 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampleId :

VX1012WBL01

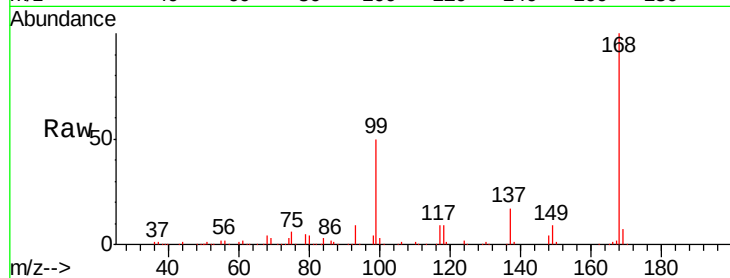
Tgt Ion: 56 Resp: 4594

Ion Ratio Lower Upper

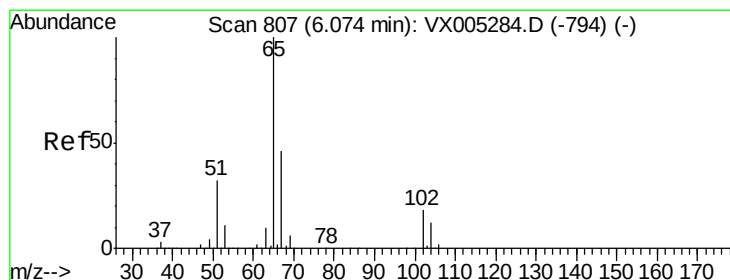
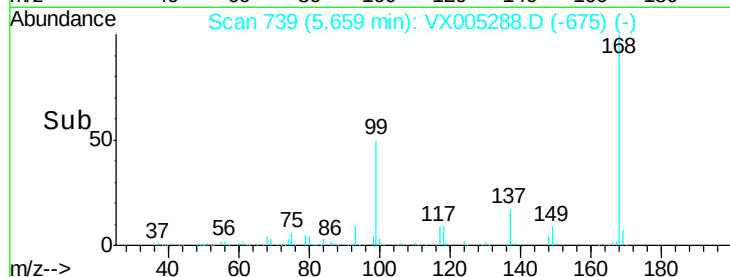
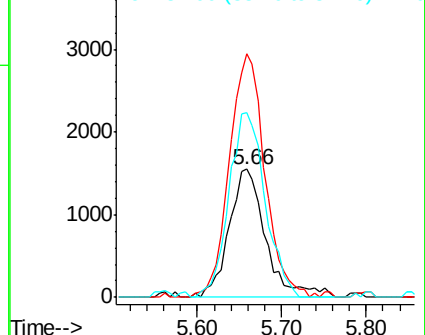
56 100

69 190.4 25.4 38.2#

84 144.9 71.4 107.2#



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: 51.59 ug/l

RT: 6.06 min Scan# 805

Delta R.T. -0.01 min

Lab File: VX005288.D

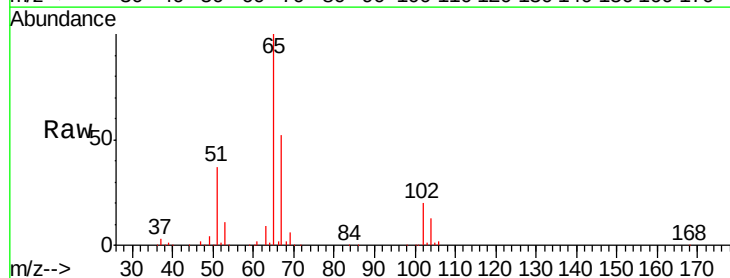
Acq: 12 Oct 2018 12:57

Tgt Ion: 65 Resp: 142410

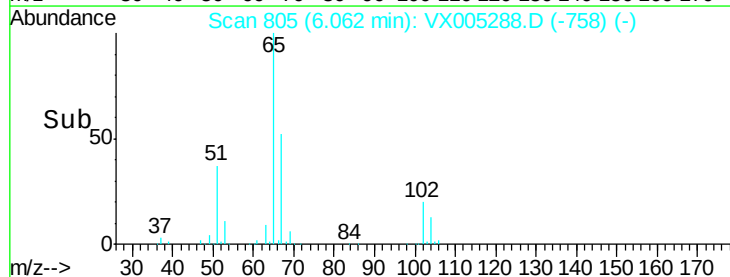
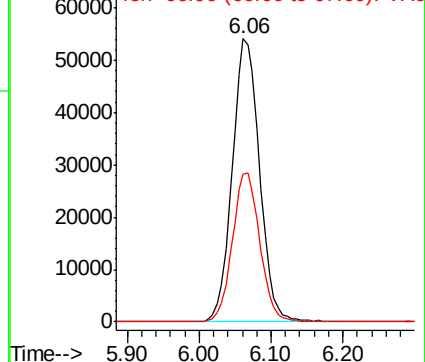
Ion Ratio Lower Upper

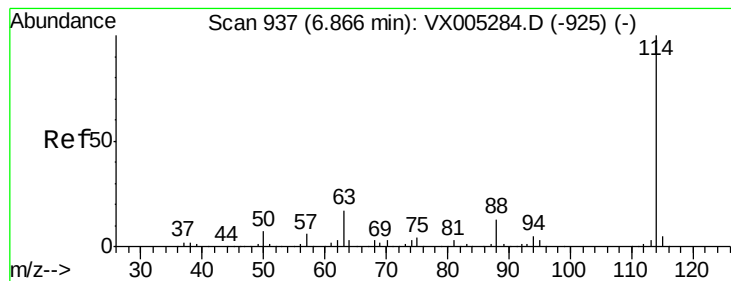
65 100

67 53.0 0.0 106.8



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: 6.86 min Scan# 936

Delta R.T. -0.01 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampleId :

VX1012WBL01

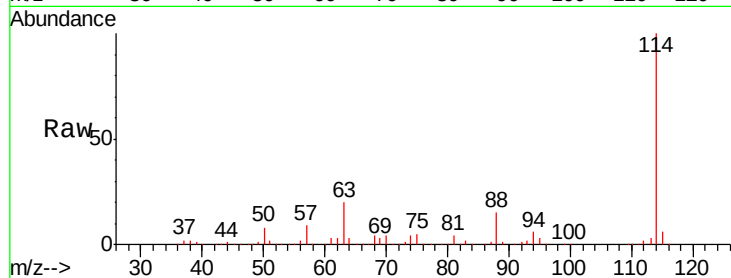
Tgt Ion:114 Resp: 356552

Ion Ratio Lower Upper

114 100

63 20.0 0.0 39.0

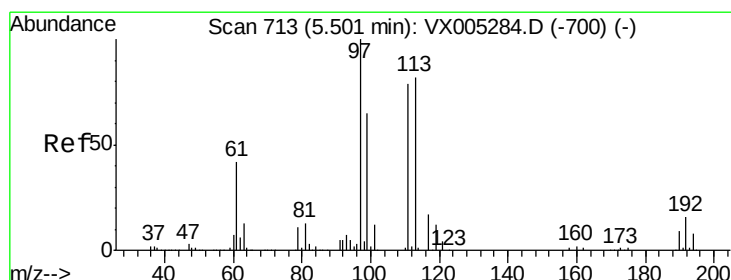
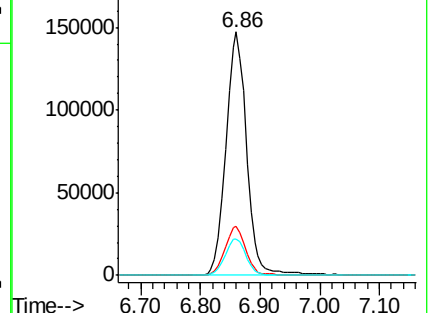
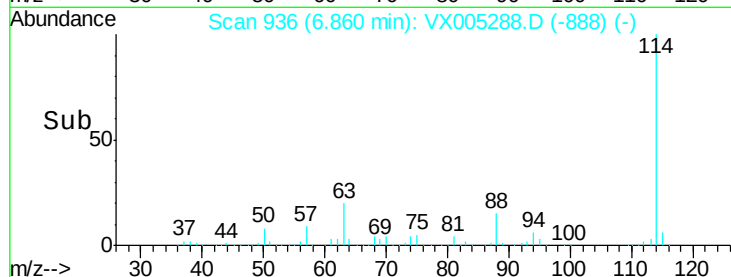
88 14.8 0.0 30.4



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: 48.03 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

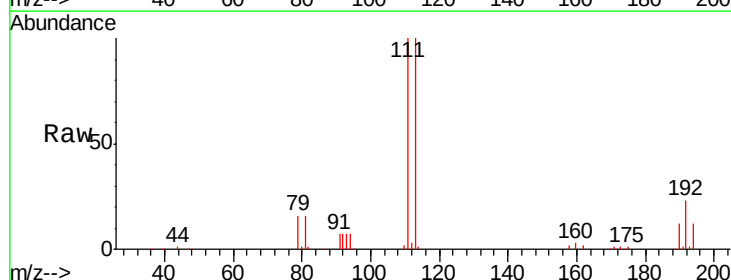
Tgt Ion:113 Resp: 113425

Ion Ratio Lower Upper

113 100

111 101.6 82.4 123.6

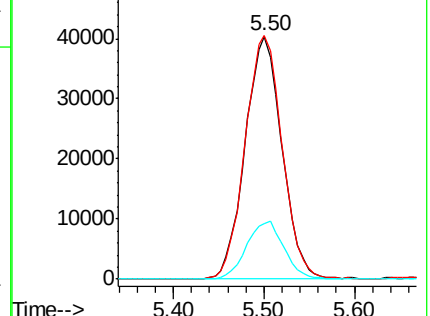
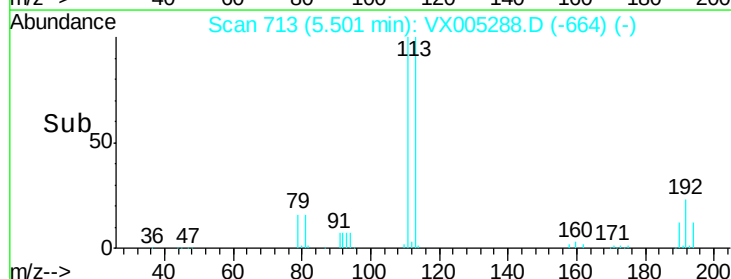
192 24.1 19.4 29.2

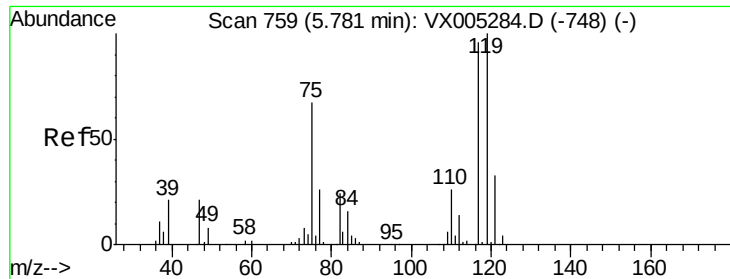


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#38

Carbon Tetrachloride

Concen: 6.39 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.12 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampled :

VX1012WBL01

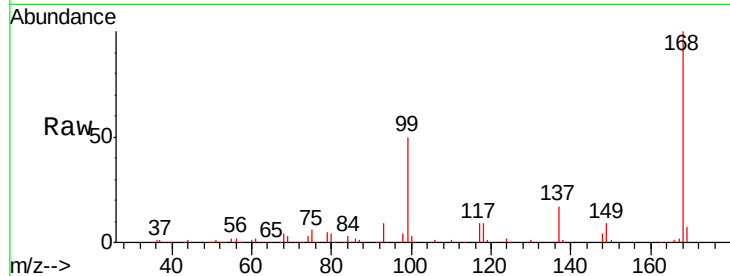
Tgt Ion:117 Resp: 22160

Ion Ratio Lower Upper

117 100

119 5.9 78.8 118.2#

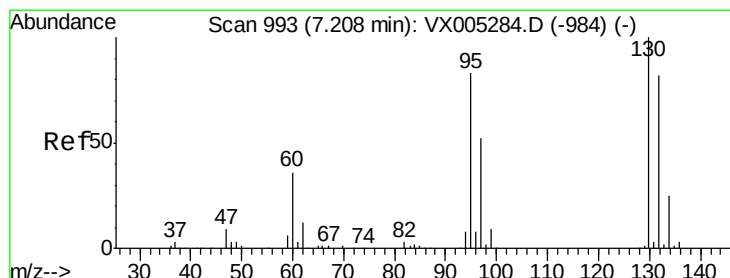
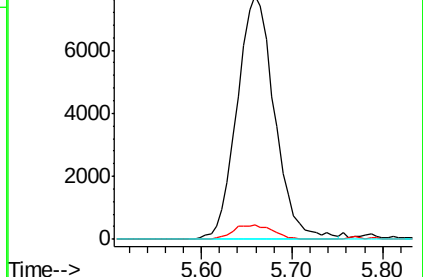
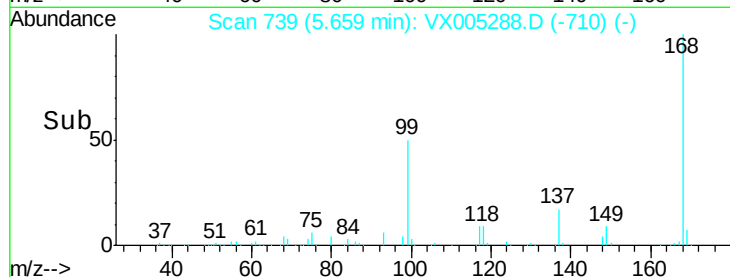
121 0.0 24.9 37.3#



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



#44

Trichloroethene

Concen: Below Cal

RT: 7.21 min Scan# 993

Delta R.T. 0.00 min

Lab File: VX005288.D

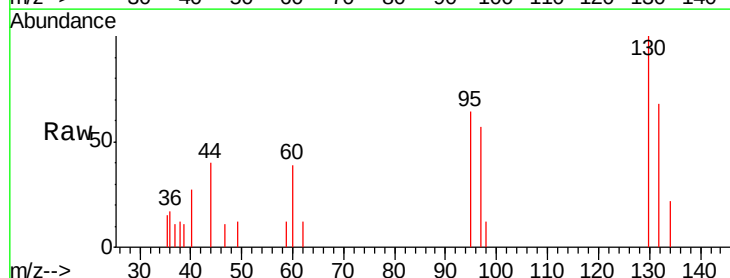
Acq: 12 Oct 2018 12:57

Tgt Ion:130 Resp: 882

Ion Ratio Lower Upper

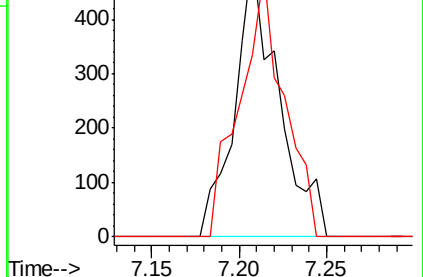
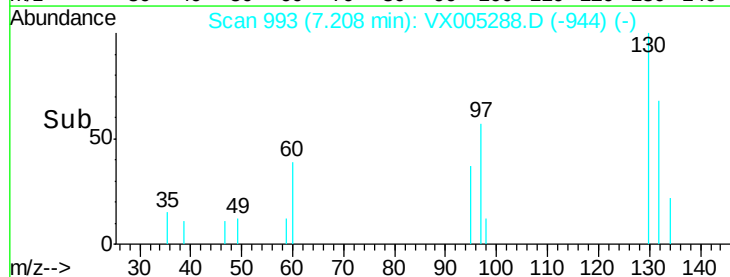
130 100

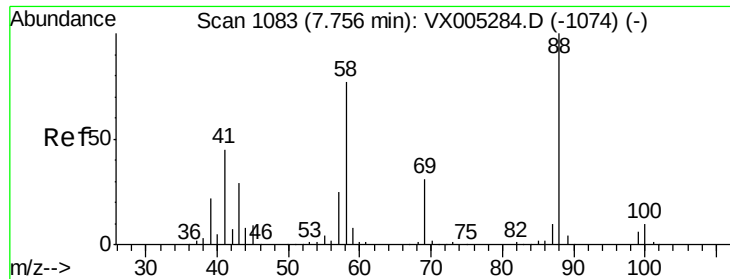
95 64.3 0.0 181.6



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

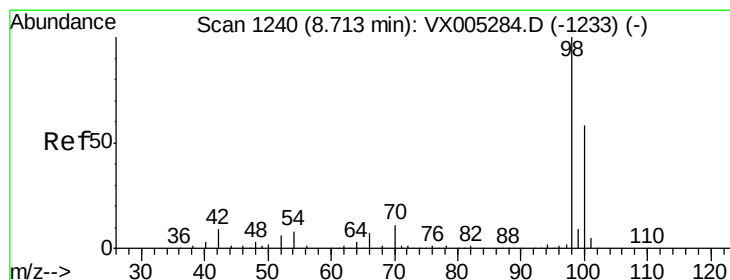
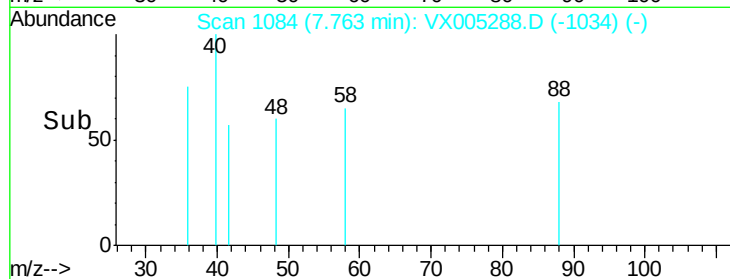
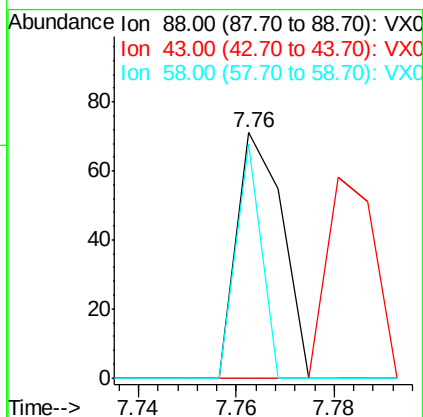
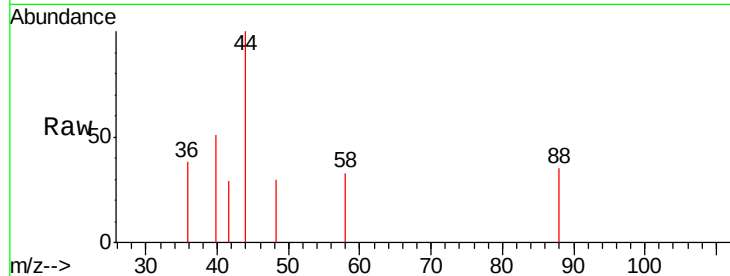




#49  
1,4-Dioxane  
Concen: 0.65 ug/l  
RT: 7.76 min Scan# 1084  
Delta R.T. 0.01 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

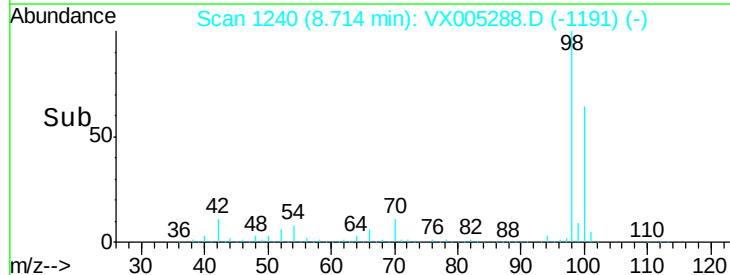
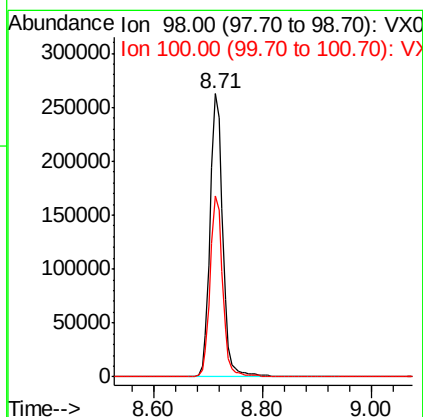
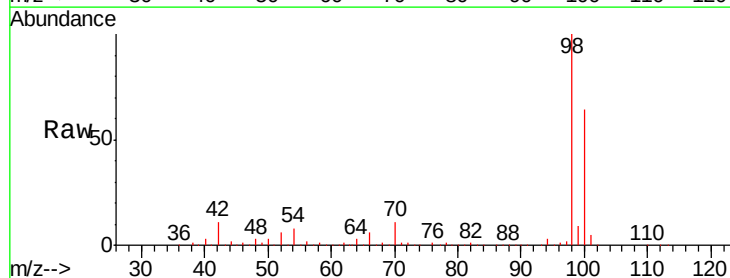
Instrument :  
MSVOA\_X  
ClientSampleId :  
VX1012WBL01

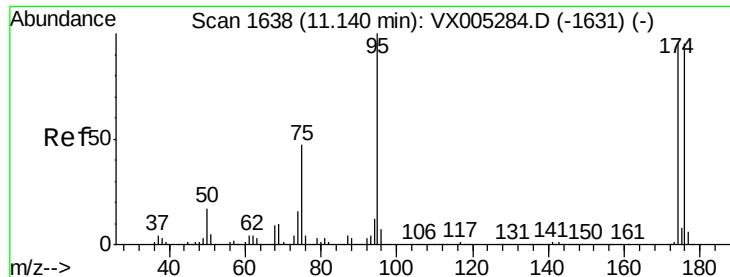
Tgt Ion: 88 Resp: 46  
Ion Ratio Lower Upper  
88 100  
43 87.0 24.7 37.1#  
58 54.3 55.3 82.9#



#50  
Toluene-d8  
Concen: 52.40 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

Tgt Ion: 98 Resp: 424852  
Ion Ratio Lower Upper  
98 100  
100 63.6 52.9 79.3

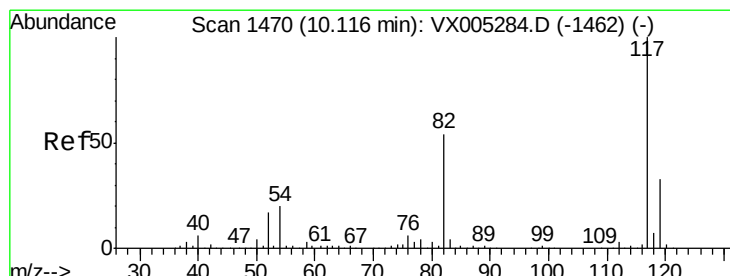
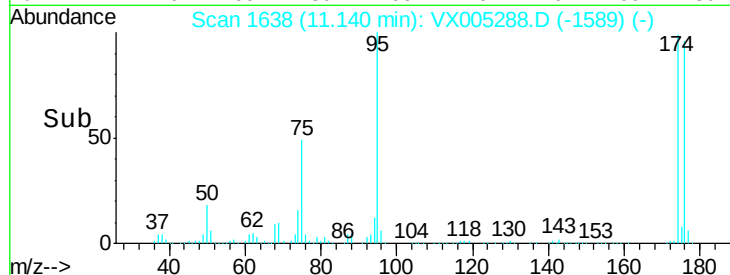
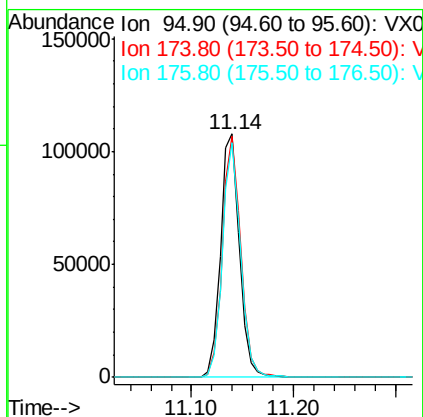
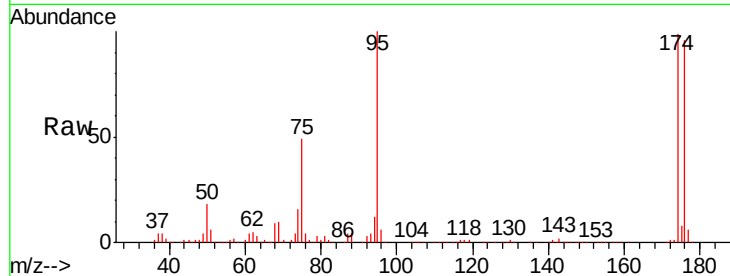




#62  
4-Bromofluorobenzene  
Concen: 46.08 ug/l  
RT: 11.14 min Scan# 1638  
Delta R.T. 0.00 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

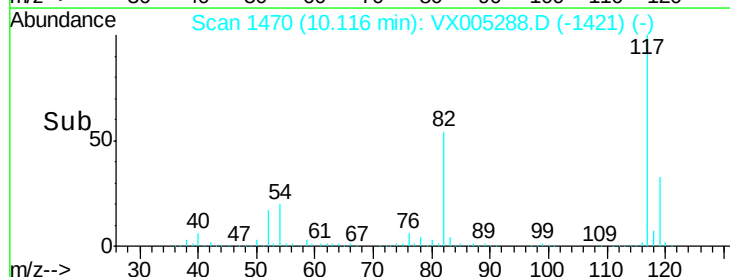
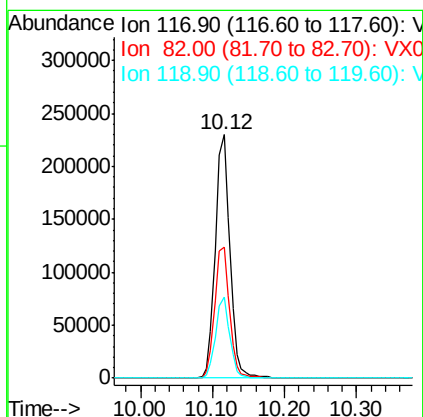
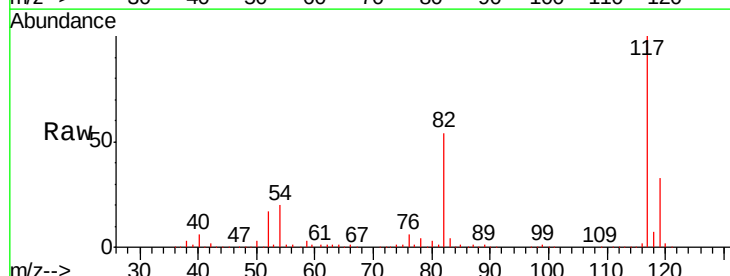
Instrument :  
MSVOA\_X  
ClientSampleId :  
VX1012WBL01

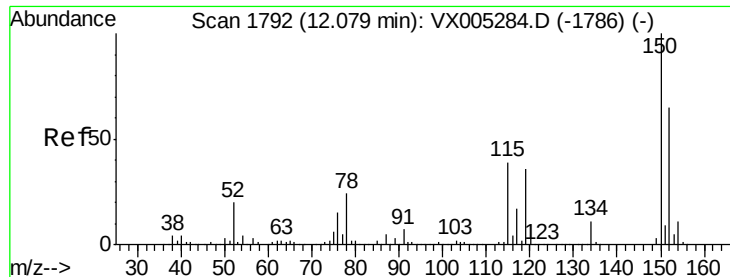
Tgt Ion: 95 Resp: 140347  
Ion Ratio Lower Upper  
95 100  
174 95.8 0.0 185.2  
176 92.2 0.0 178.6



#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VX005288.D  
Acq: 12 Oct 2018 12:57

Tgt Ion: 117 Resp: 322689  
Ion Ratio Lower Upper  
117 100  
82 53.6 47.8 71.6  
119 33.1 29.3 43.9





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampleId :

VX1012WBL01

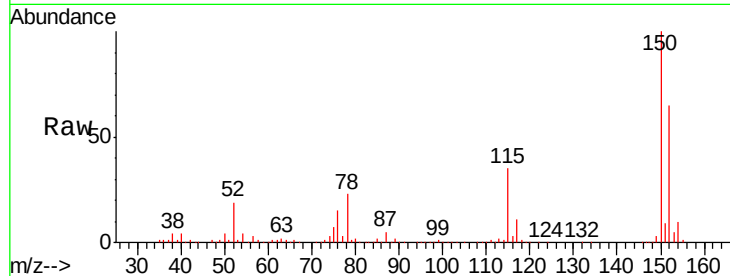
Tgt Ion:152 Resp: 160038

Ion Ratio Lower Upper

152 100

115 54.7 39.0 117.0

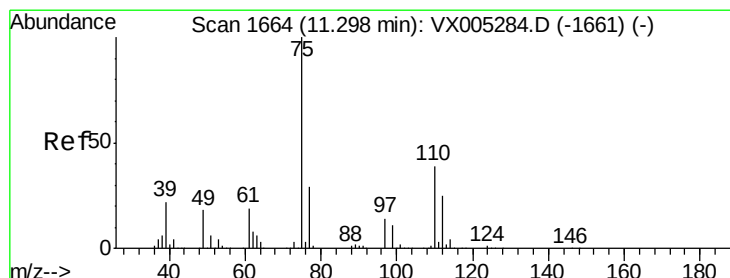
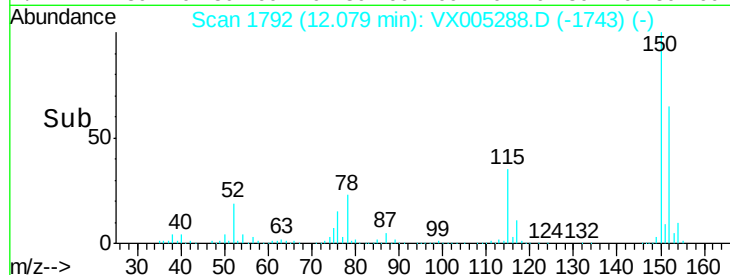
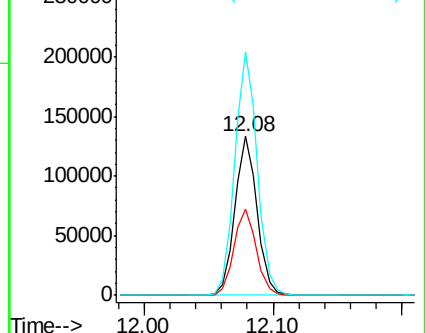
150 155.5 0.0 351.0



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 22.53 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX005288.D

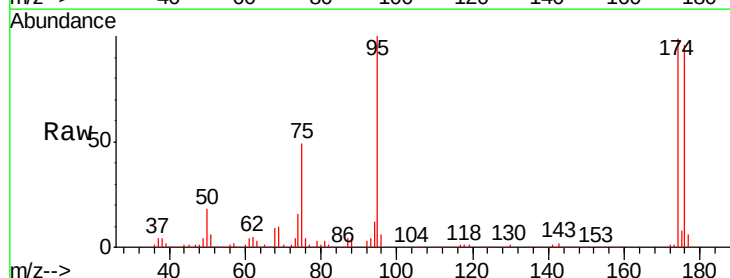
Acq: 12 Oct 2018 12:57

Tgt Ion: 75 Resp: 69951

Ion Ratio Lower Upper

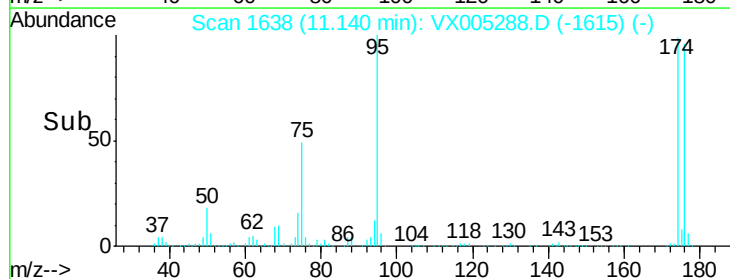
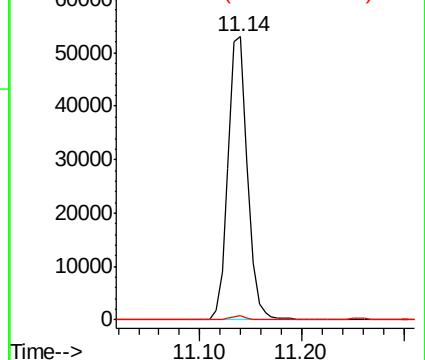
75 100

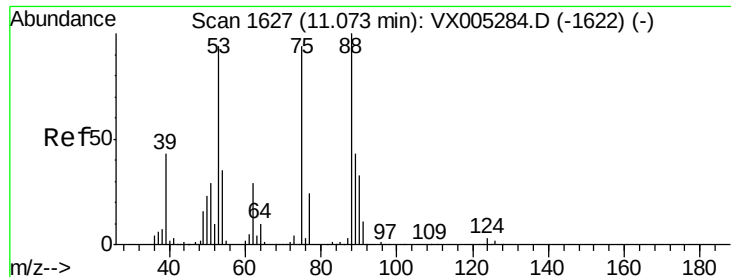
77 1.3 20.2 60.6#



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: 68.47 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.07 min

Lab File: VX005288.D

Acq: 12 Oct 2018 12:57

Instrument :

MSVOA\_X

ClientSampleId :

VX1012WBL01

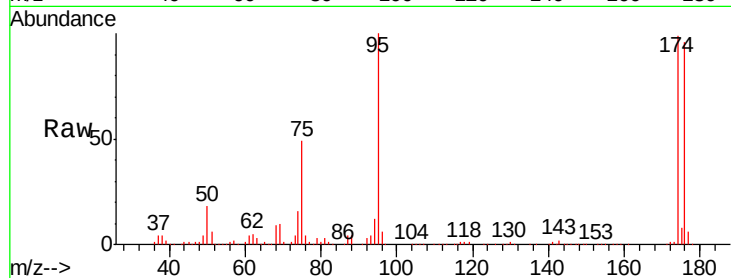
Tgt Ion: 75 Resp: 69951

Ion Ratio Lower Upper

75 100

53 0.1 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

