

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062618\  
 Data File : VX002921.D  
 Acq On : 27 Jun 2018 03:41  
 Operator : JC/MD  
 Sample : J3707-15 50X  
 Misc : 5.73g/5mL/100uL/5.00mL/MSVOA\_X/MEOH  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jun 27 04:48:39 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X062518W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jun 25 14:38:05 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 267277   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 368977   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 346388   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 195590   | 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   | 181285   | 49.07 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.14% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 145573   | 49.82 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.64% |          |
| 50) Toluene-d8              | 8.72  | 98   | 524559   | 49.16 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.32% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 185636   | 45.11 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.22% |          |

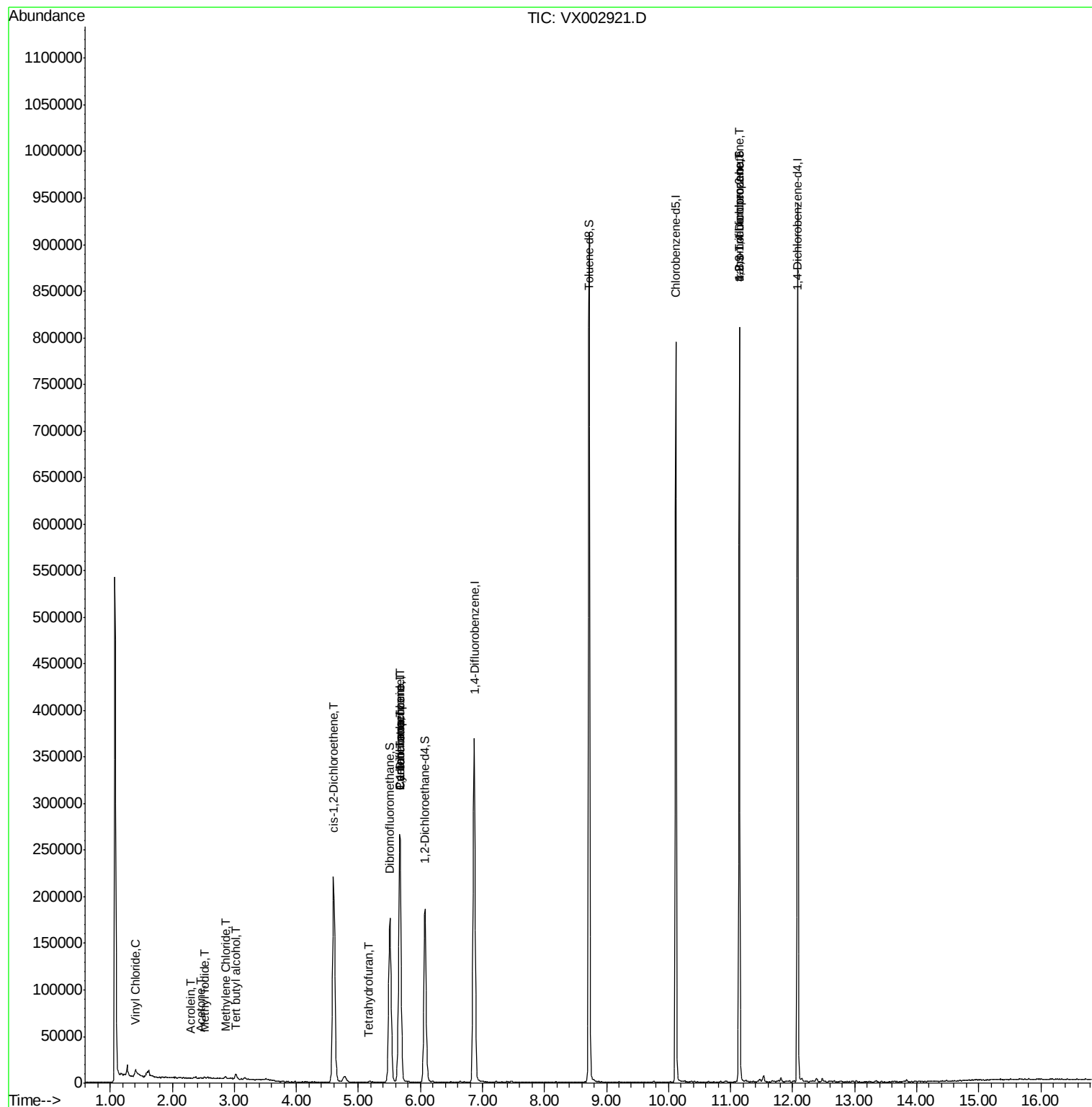
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 651      | Below Cal | #      | 83     |
| 4) Vinyl Chloride              | 1.40  | 62   | 2192     | 0.73      | ug/l # | 1      |
| 5) Bromomethane                | 1.64  | 94   | 911      | Below Cal | #      | 77     |
| 6) Chloroethane                | 1.75  | 64   | 101      | Below Cal | #      | 75     |
| 10) Methyl Iodide              | 2.52  | 142  | 1056     | 6.53      | ug/l # | 42     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 3416     | 4.64      | ug/l # | 82     |
| 13) Acrolein                   | 2.30  | 56   | 203      | 4.72      | ug/l # | 12     |
| 16) Acetone                    | 2.45  | 43   | 1098     | 0.72      | ug/l # | 85     |
| 20) Methylene Chloride         | 2.86  | 84   | 832      | 0.28      | ug/l # | 85     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 138100   | 42.90     | ug/l   | 85     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 518      | 0.36      | ug/l # | 85     |
| 31) Cyclohexane                | 5.67  | 56   | 5231     | 1.13      | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 17946    | 4.44      | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 24011    | 5.41      | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 96658    | 27.28     | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 96658    | 77.20     | ug/l # | 7      |

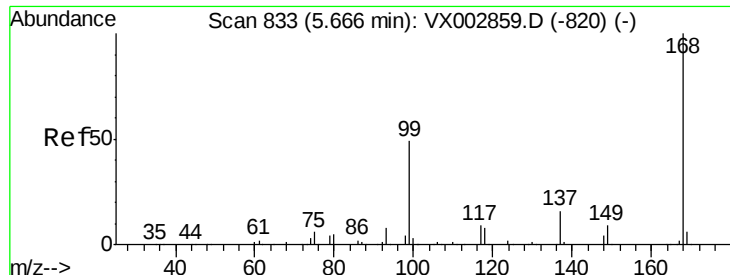
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX062618\  
Data File : VX002921.D  
Acq On : 27 Jun 2018 03:41  
Operator : JC/MD  
Sample : J3707-15 50X  
Misc : 5.73µ/5mL/100µL/5.00mL/MSVOA\_X/MEOH  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampled :

Quant Time: Jun 27 04:48:39 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X062518W.M  
Quant Title : SW846 8260  
QLast Update : Mon Jun 25 14:38:05 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.00 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

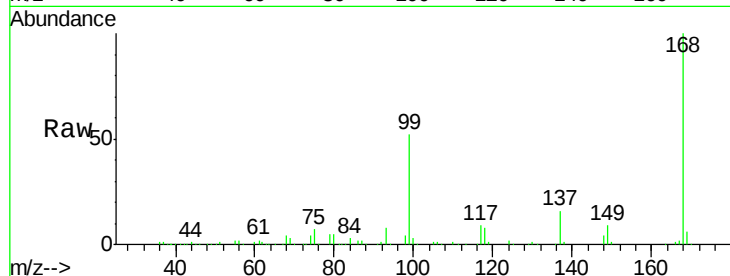
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:168 Resp: 267277

Ion Ratio Lower Upper

168 100

99 51.5 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

100000

80000

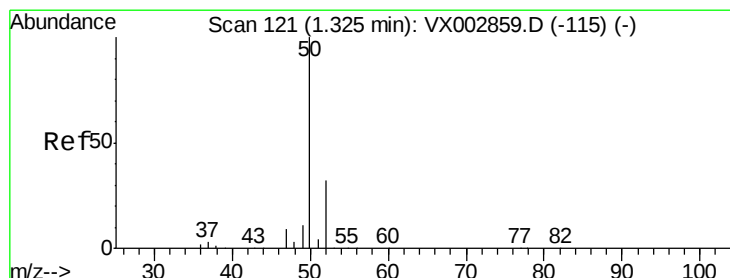
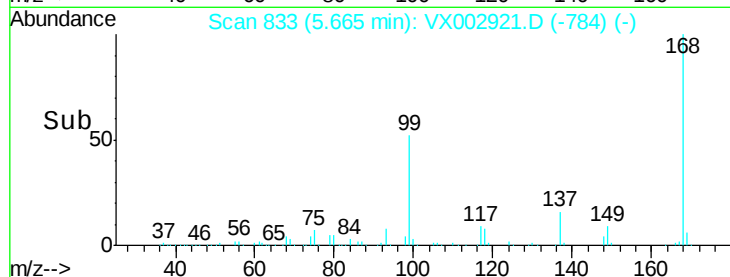
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: Below Cal

RT: 1.33 min Scan# 122

Delta R.T. 0.01 min

Lab File: VX002921.D

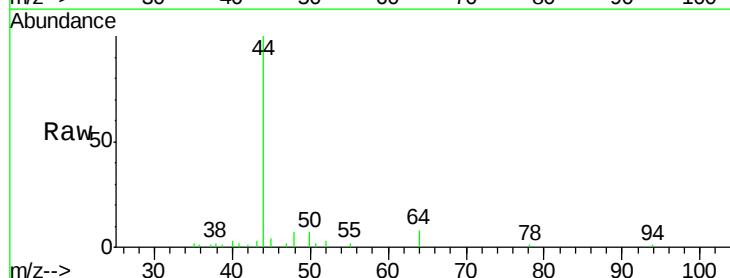
Acq: 27 Jun 2018 03:41

Tgt Ion: 50 Resp: 651

Ion Ratio Lower Upper

50 100

52 22.4 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

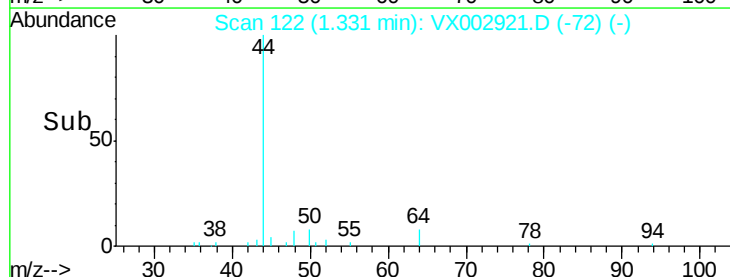
300

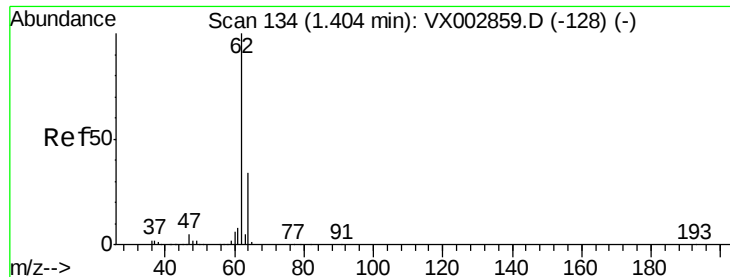
200

100

0

Time--> 1.30 1.35





#4

Vinyl Chloride

Concen: 0.73 ug/l

RT: 1.40 min Scan# 134

Delta R.T. -0.00 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

Instrument :

MSVOA\_X

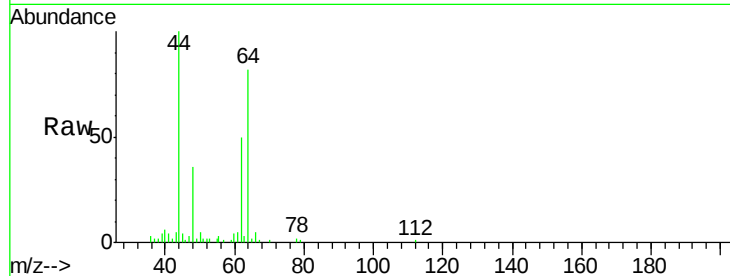
ClientSampleId :

Tot Ion: 62 Resp: 2192

Ion Ratio Lower Upper

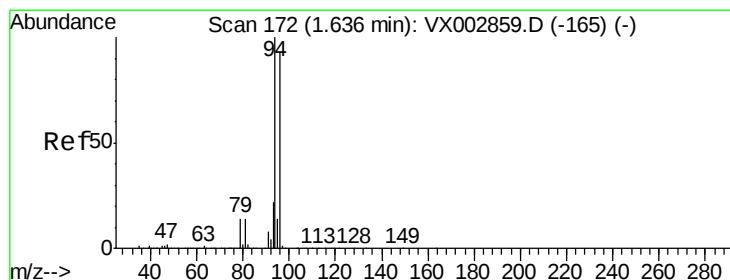
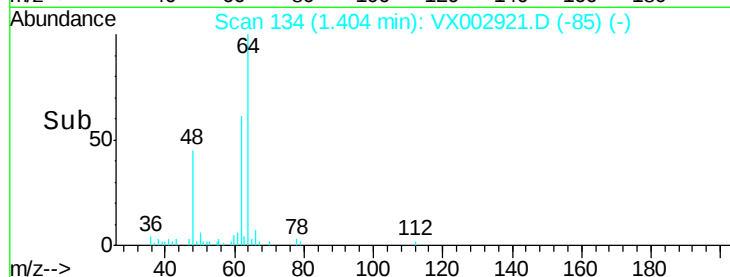
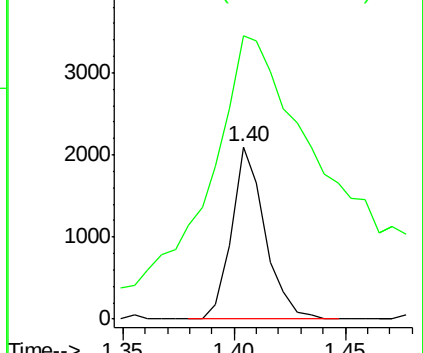
62 100

64 109.4 25.4 38.2#



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0



#5

Bromomethane

Concen: Below Cal

RT: 1.64 min Scan# 173

Delta R.T. 0.01 min

Lab File: VX002921.D

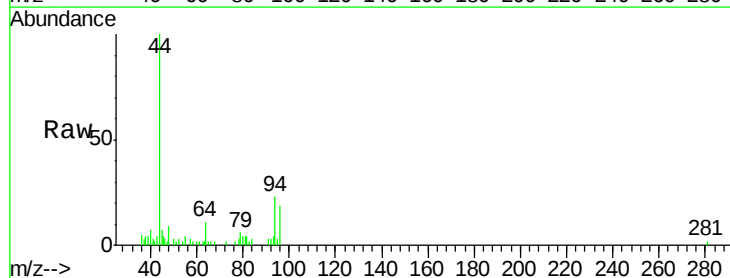
Acq: 27 Jun 2018 03:41

Tgt Ion: 94 Resp: 911

Ion Ratio Lower Upper

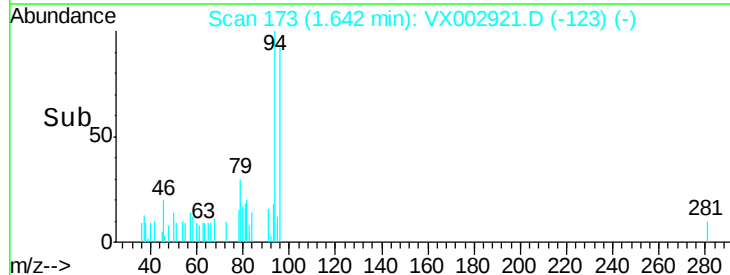
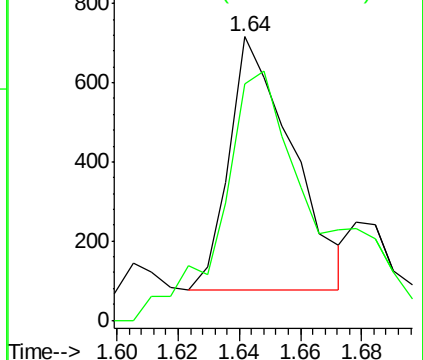
94 100

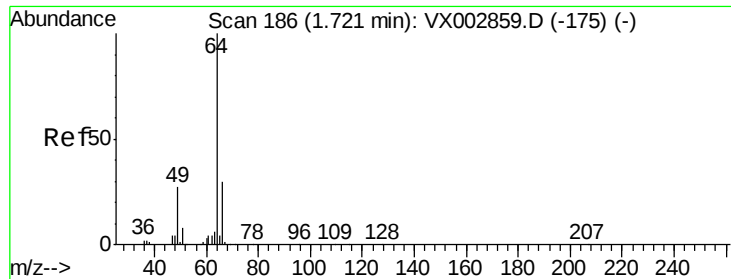
96 71.8 74.9 112.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: Below Cal

RT: 1.75 min Scan# 190

Delta R.T. 0.02 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

Instrument :

MSVOA\_X

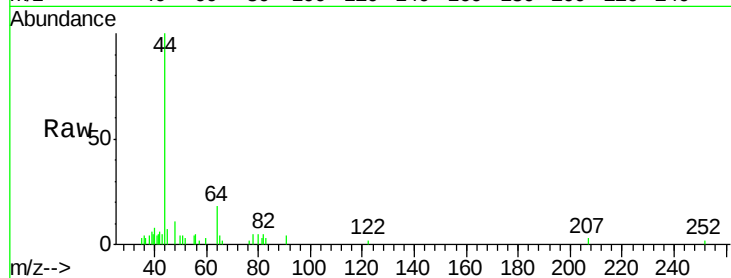
ClientSampleId :

Tot Ion: 64 Resp: 101

Ion Ratio Lower Upper

64 100

66 46.0 25.5 38.3#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1.75

400

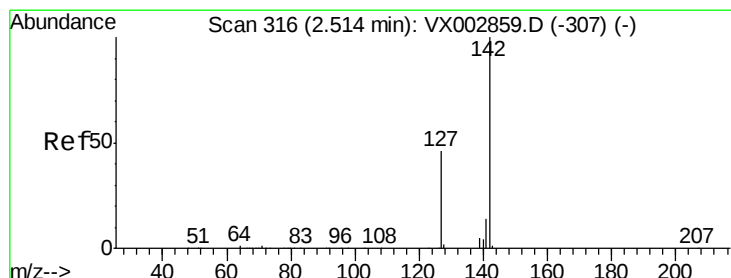
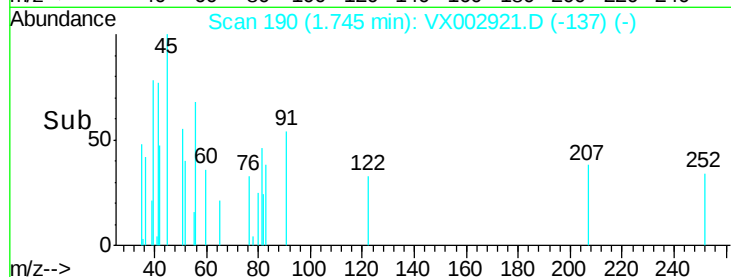
300

200

100

0

Time-->



#10

Methyl Iodide

Concen: 6.53 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

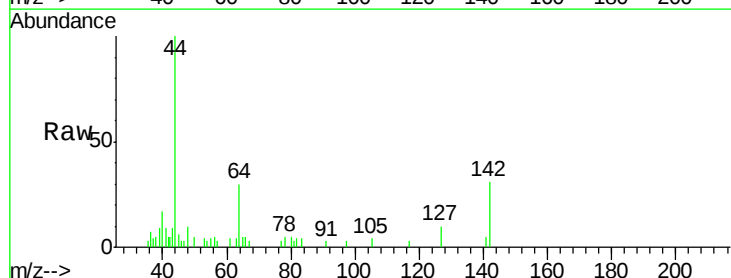
Tgt Ion: 142 Resp: 1056

Ion Ratio Lower Upper

142 100

127 0.0 36.6 55.0#

141 22.4 11.3 16.9#



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

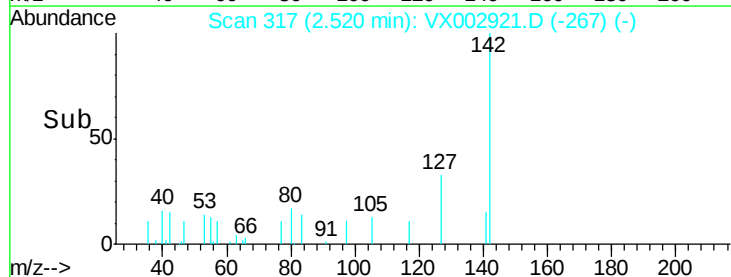
600

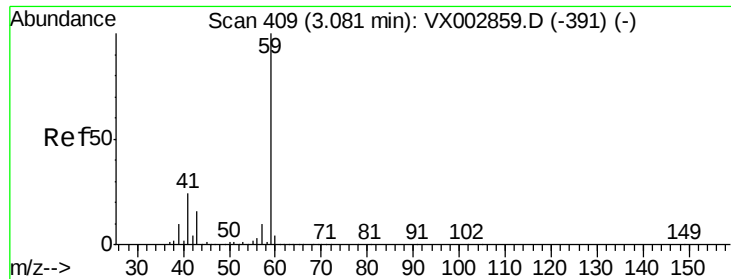
400

200

0

Time-->

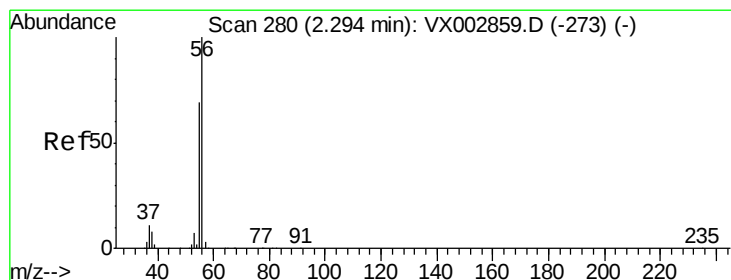
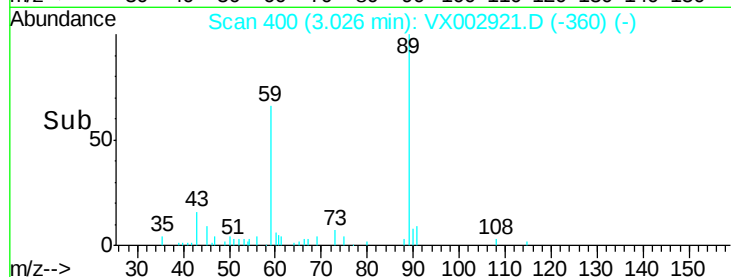
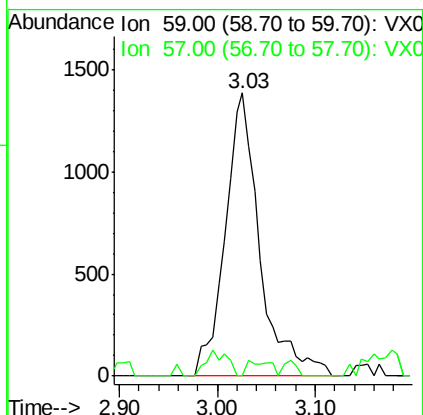
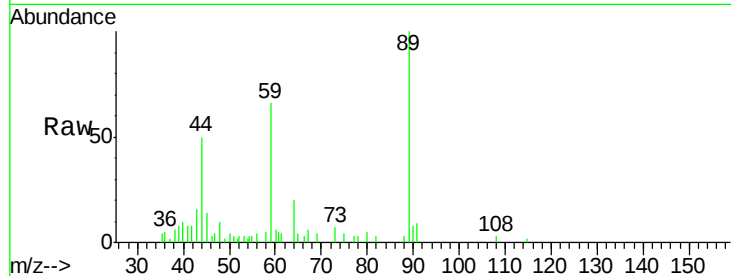




#11  
Tert butyl alcohol  
Concen: 4.64 ug/l  
RT: 3.03 min Scan# 400  
Delta R.T. -0.06 min  
Lab File: VX002921.D  
Acq: 27 Jun 2018 03:41

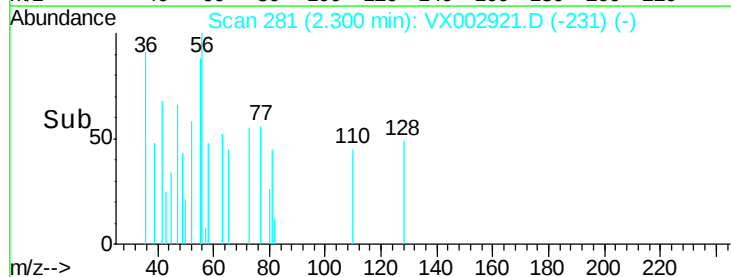
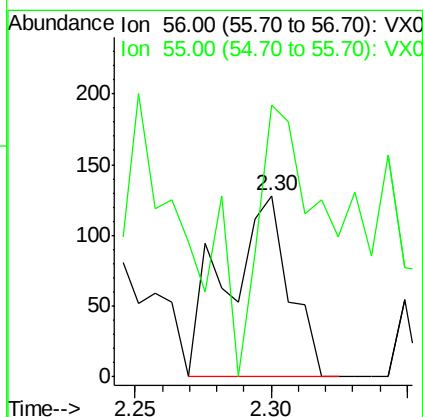
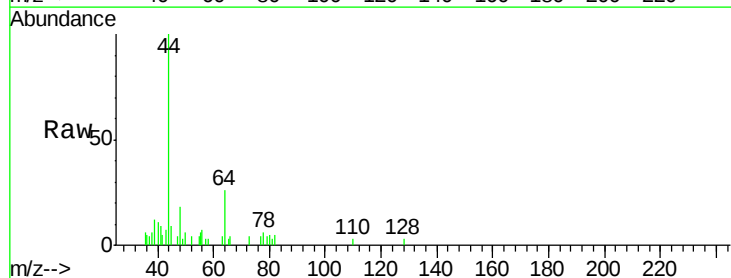
Instrument :  
MSVOA\_X  
ClientSampled :

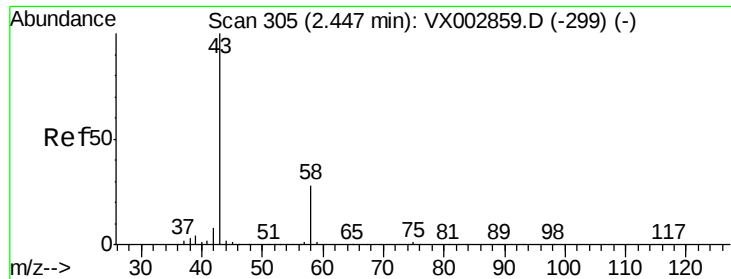
Tot Ion: 59 Resp: 3416  
Ion Ratio Lower Upper  
59 100  
57 3.5 8.2 12.2#



#13  
Acrolein  
Concen: 4.72 ug/l  
RT: 2.30 min Scan# 281  
Delta R.T. 0.01 min  
Lab File: VX002921.D  
Acq: 27 Jun 2018 03:41

Tgt Ion: 56 Resp: 203  
Ion Ratio Lower Upper  
56 100  
55 143.8 57.0 85.4#





#16

Acetone

Concen: 0.72 ug/l

RT: 2.45 min Scan# 306

Delta R.T. 0.01 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

Instrument :

MSVOA\_X

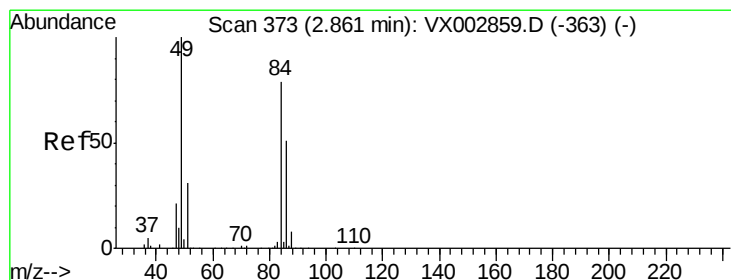
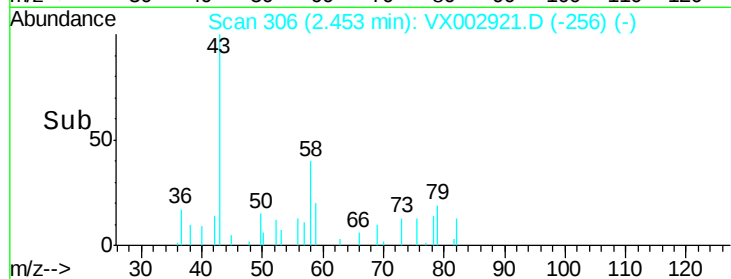
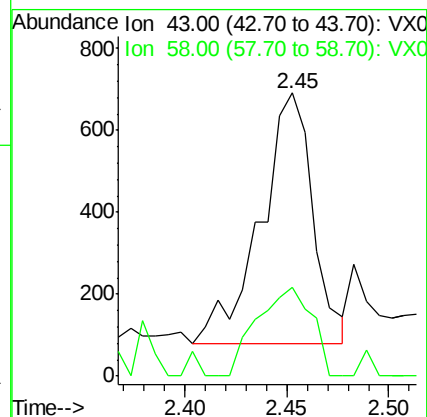
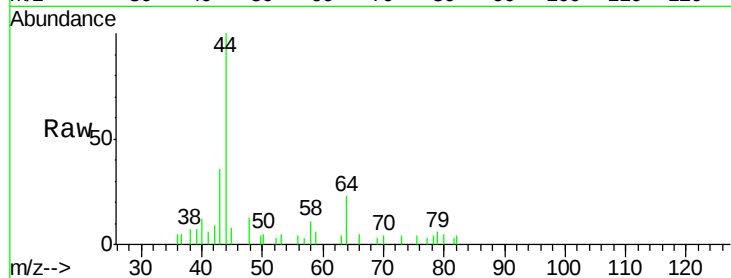
ClientSampleId :

Tot Ion: 43 Resp: 1098

Ion Ratio Lower Upper

43 100

58 35.6 22.1 33.1#



#20

Methylene Chloride

Concen: 0.28 ug/l

RT: 2.86 min Scan# 373

Delta R.T. -0.00 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

Tgt Ion: 84 Resp: 832

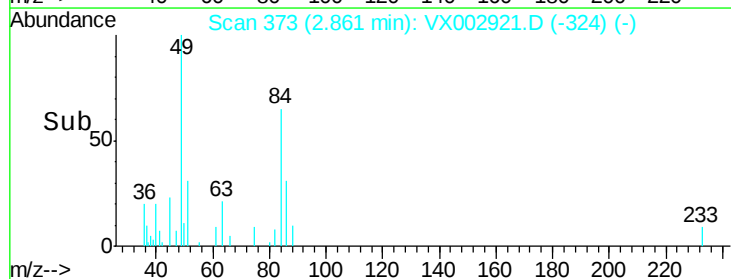
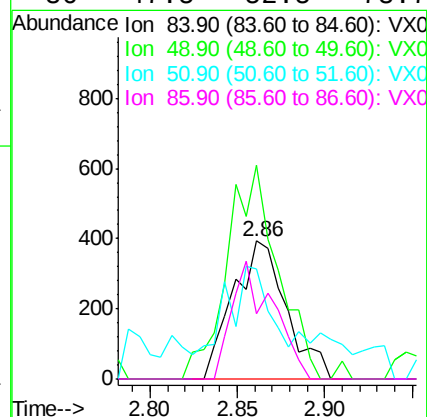
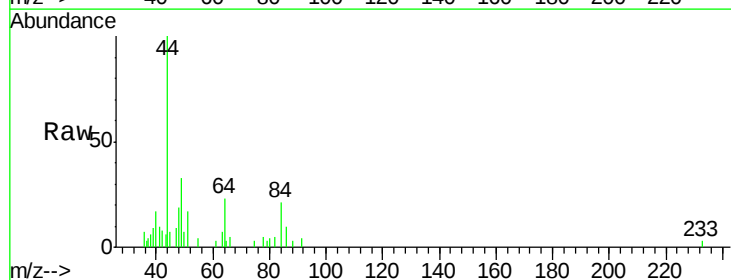
Ion Ratio Lower Upper

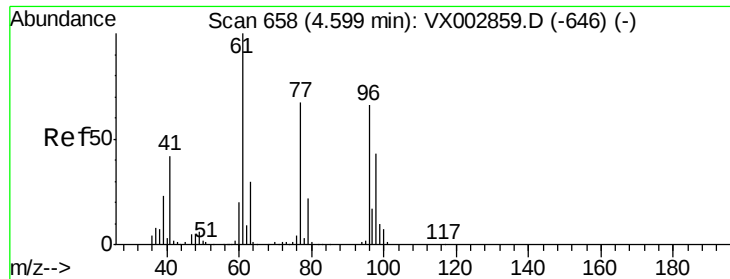
84 100

49 141.6 107.8 161.6

51 61.7 32.8 49.2#

86 47.5 52.5 78.7#



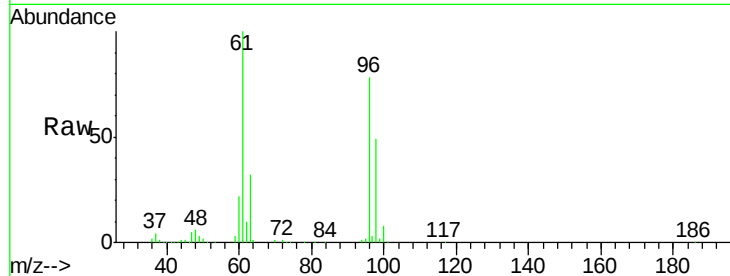


#27

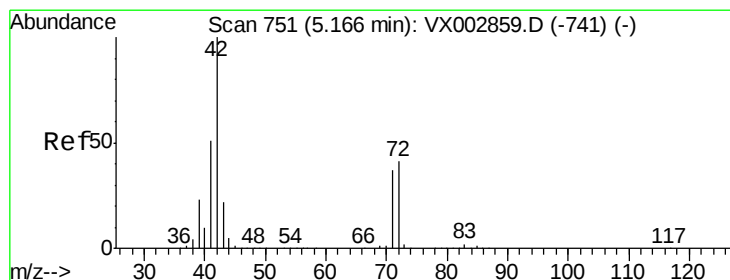
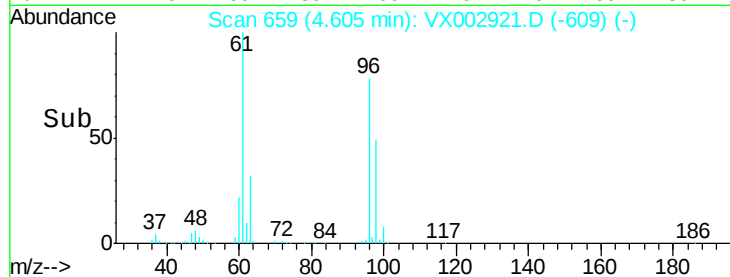
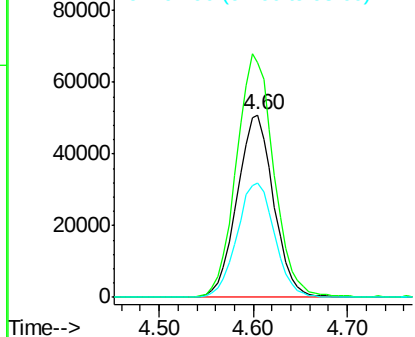
cis-1,2-Dichloroethene  
 Concen: 42.90 ug/l  
 RT: 4.60 min Scan# 659  
 Delta R.T. 0.01 min  
 Lab File: VX002921.D  
 Acq: 27 Jun 2018 03:41

Instrument :  
 MSVOA\_X  
 ClientSampled :

Tot Ion: 96 Resp: 138100  
 Ion Ratio Lower Upper  
 96 100  
 61 137.3 0.0 330.2  
 98 64.9 0.0 130.2



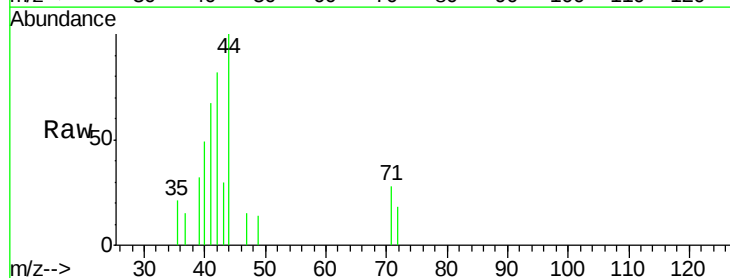
Abundance Ion 95.90 (95.60 to 96.60): VX0  
 Ion 60.90 (60.60 to 61.60): VX0  
 Ion 97.90 (97.60 to 98.60): VX0



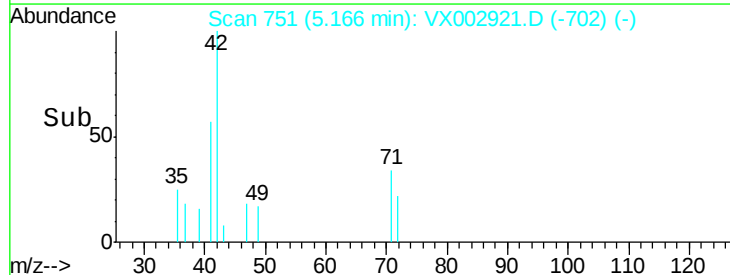
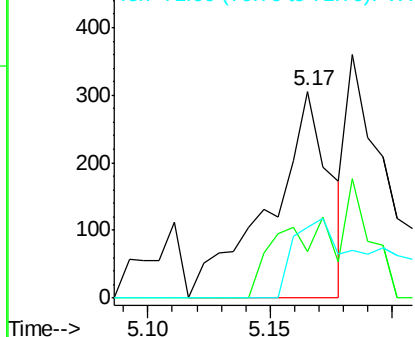
#29

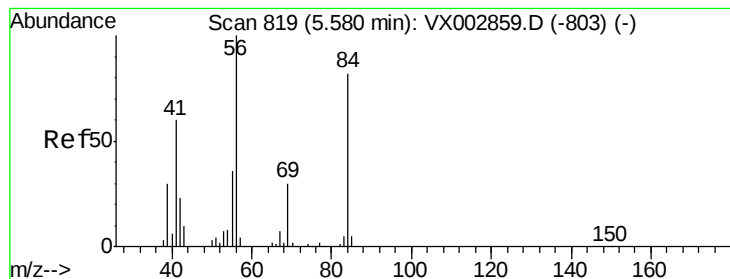
Tetrahydrofuran  
 Concen: 0.36 ug/l  
 RT: 5.17 min Scan# 751  
 Delta R.T. -0.00 min  
 Lab File: VX002921.D  
 Acq: 27 Jun 2018 03:41

Tgt Ion: 42 Resp: 518  
 Ion Ratio Lower Upper  
 42 100  
 72 23.7 32.0 48.0#  
 71 36.3 30.1 45.1



Abundance Ion 42.00 (41.70 to 42.70): VX0  
 Ion 72.00 (71.70 to 72.70): VX0  
 Ion 71.00 (70.70 to 71.70): VX0





#31

Cyclohexane

Concen: 1.13 ug/l

RT: 5.67 min Scan# 833

Delta R.T. 0.09 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

Instrument :  
MSVOA\_X  
ClientSampleId :

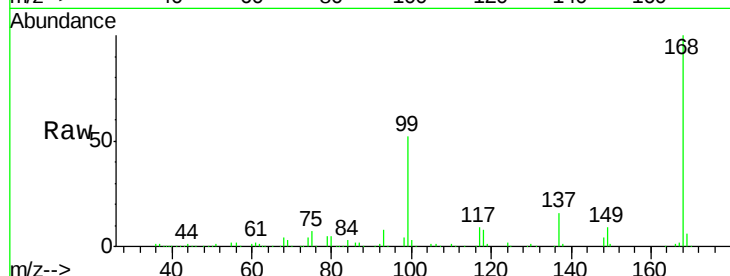
Tot Ion: 56 Resp: 5231

Ion Ratio Lower Upper

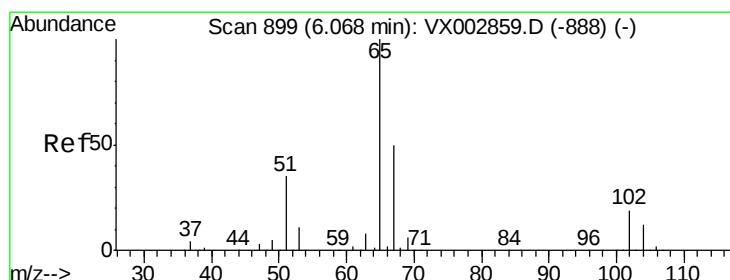
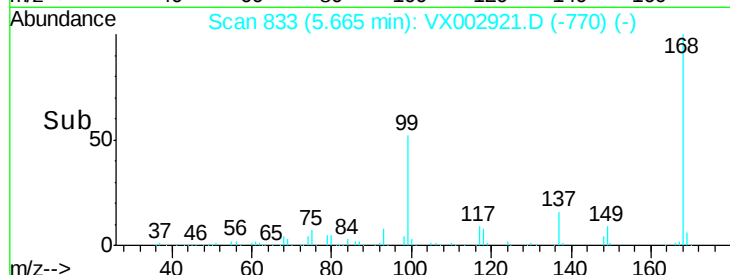
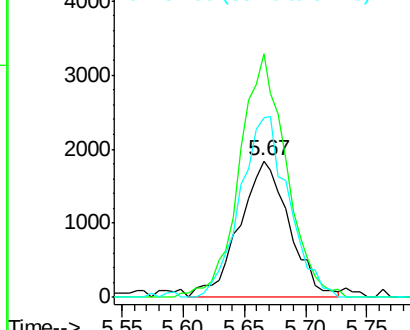
56 100

69 175.0 23.7 35.5#

84 131.7 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: 49.07 ug/l

RT: 6.07 min Scan# 900

Delta R.T. 0.01 min

Lab File: VX002921.D

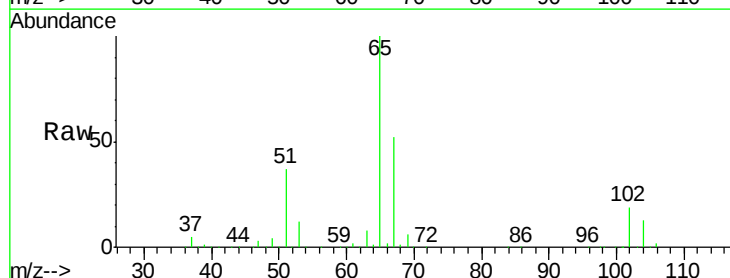
Acq: 27 Jun 2018 03:41

Tgt Ion: 65 Resp: 181285

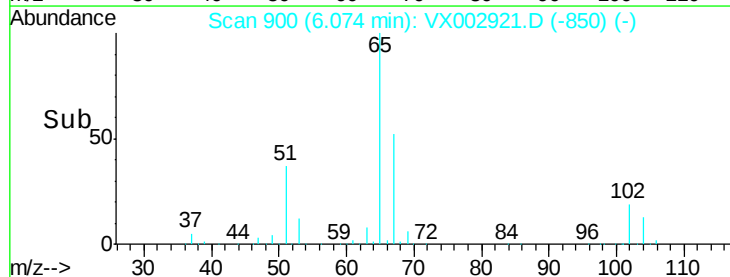
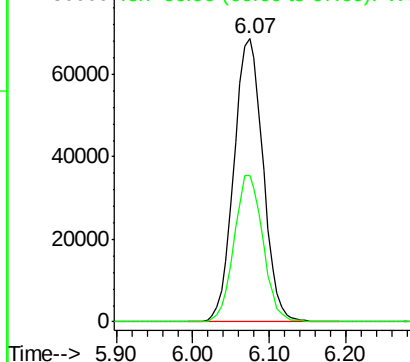
Ion Ratio Lower Upper

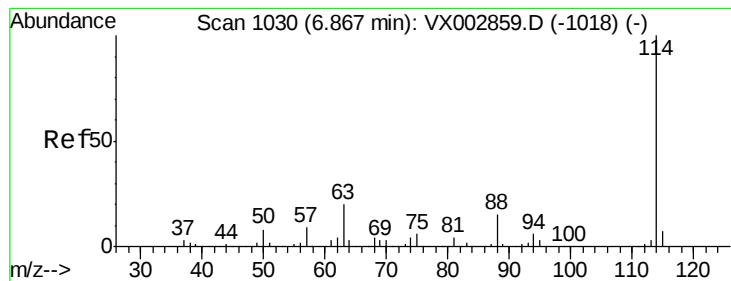
65 100

67 51.2 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: VX002921.D

Acq: 27 Jun 2018 03:41

Instrument :

MSVOA\_X

ClientSampleId :

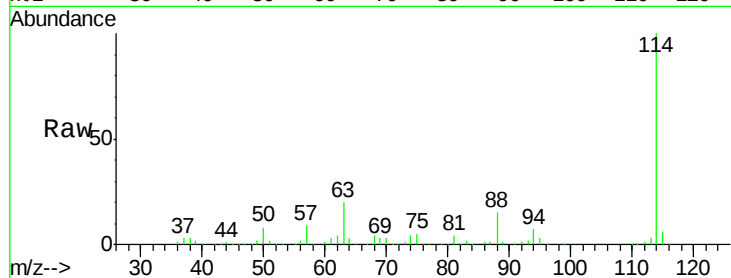
Tot Ion:114 Resp: 368977

Ion Ratio Lower Upper

114 100

63 20.1 0.0 41.4

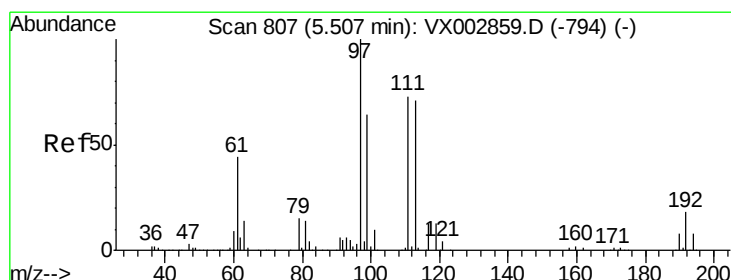
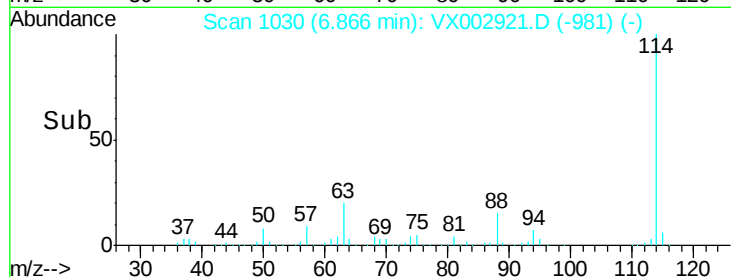
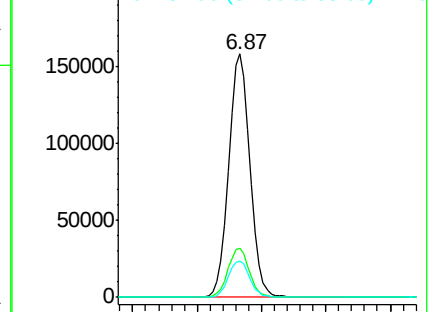
88 15.1 0.0 30.0



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



#35

Dibromofluoromethane

Concen: 49.82 ug/l

RT: 5.51 min Scan# 807

Delta R.T. -0.00 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

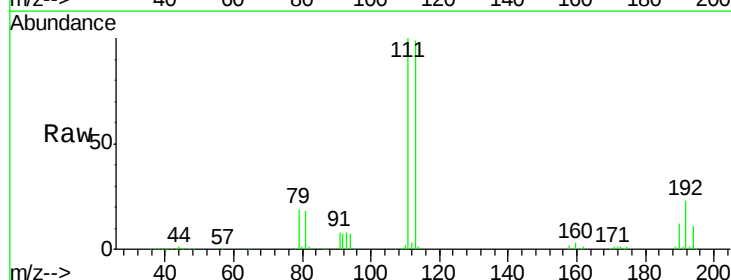
Tgt Ion:113 Resp: 145573

Ion Ratio Lower Upper

113 100

111 101.5 81.4 122.0

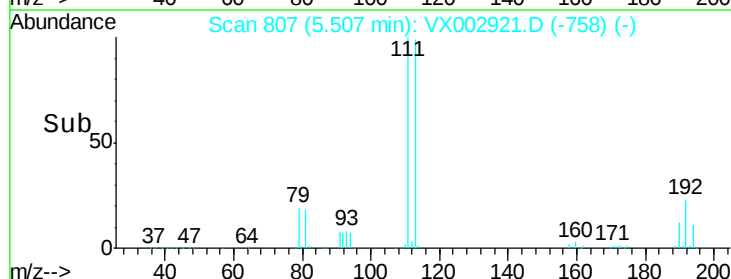
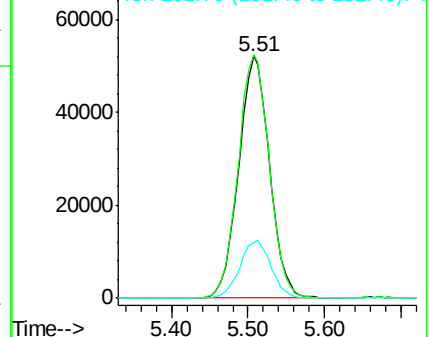
192 24.1 19.1 28.7

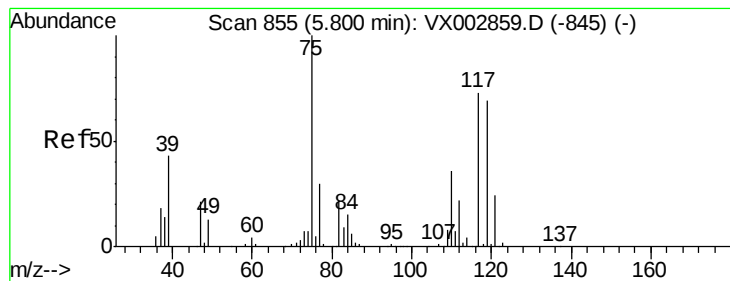


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.44 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.13 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

Instrument :

MSVOA\_X

ClientSampleId :

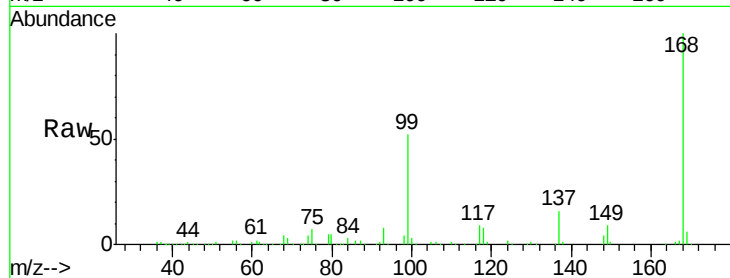
Tot Ion: 75 Resp: 17946

Ion Ratio Lower Upper

75 100

110 10.3 18.1 54.4#

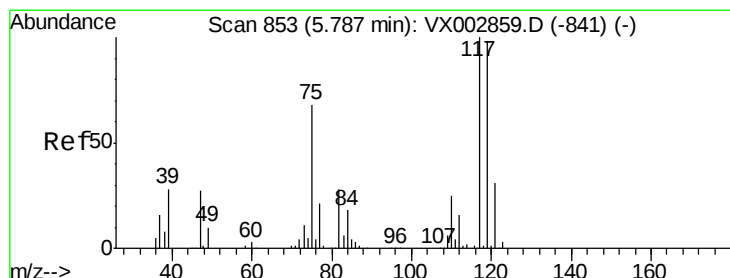
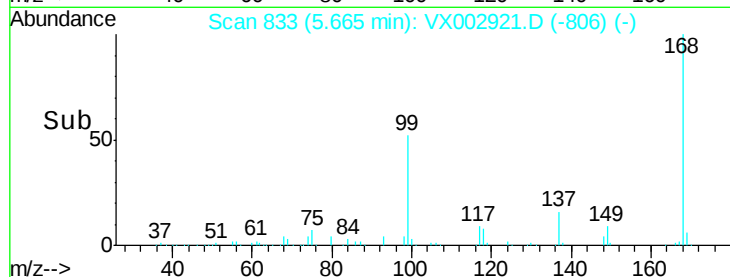
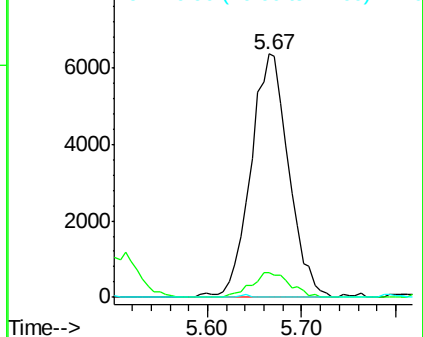
77 0.0 24.3 36.5#



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: 5.41 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.12 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

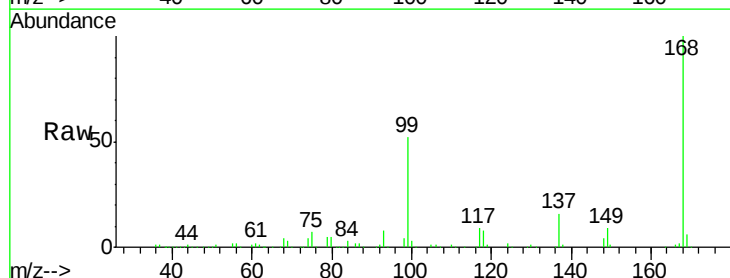
Tgt Ion: 117 Resp: 24011

Ion Ratio Lower Upper

117 100

119 5.6 77.4 116.0#

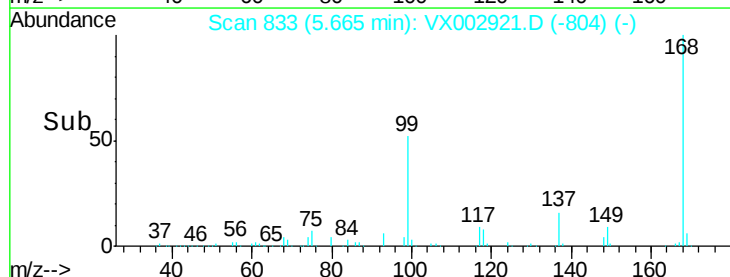
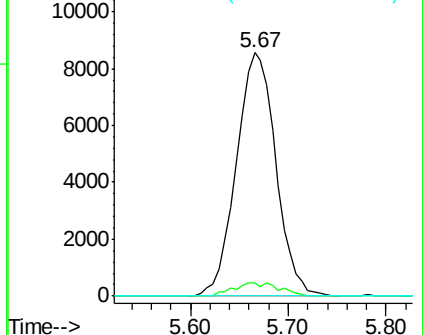
121 0.0 24.4 36.6#

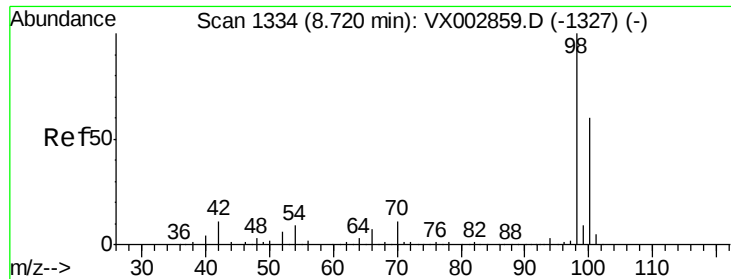


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#50

Toluene-d8

Concen: 49.16 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

Instrument :

MSVOA\_X

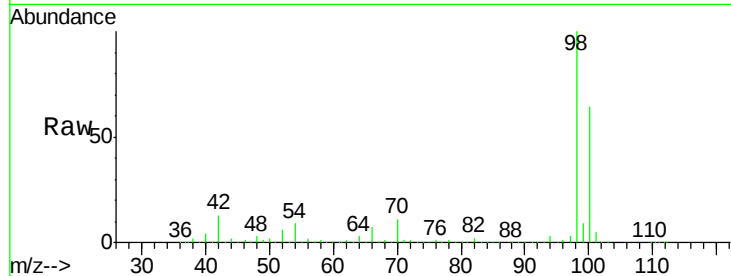
ClientSampleId :

Tot Ion: 98 Resp: 524559

Ion Ratio Lower Upper

98 100

100 63.6 50.9 76.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX

8.72

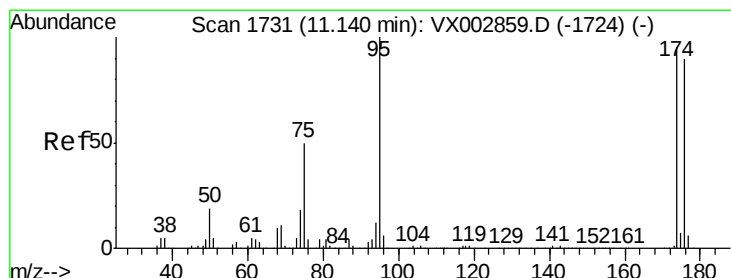
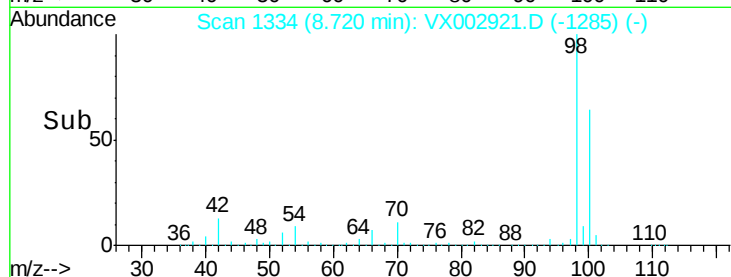
300000

200000

100000

0

Time-->



#62

4-Bromofluorobenzene

Concen: 45.11 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.00 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

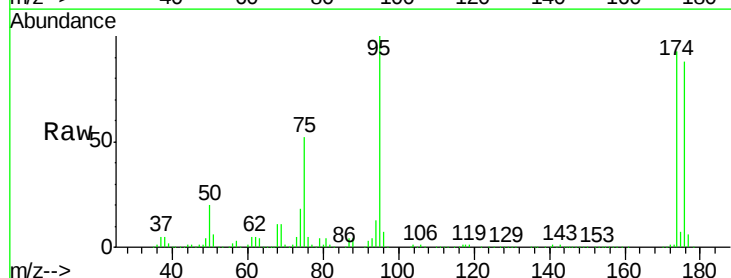
Tgt Ion: 95 Resp: 185636

Ion Ratio Lower Upper

95 100

174 96.1 0.0 187.4

176 92.4 0.0 181.0



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

200000

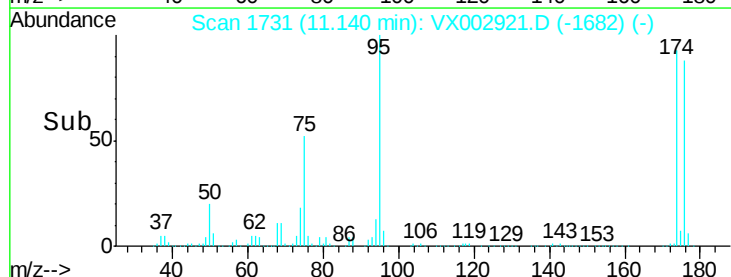
150000

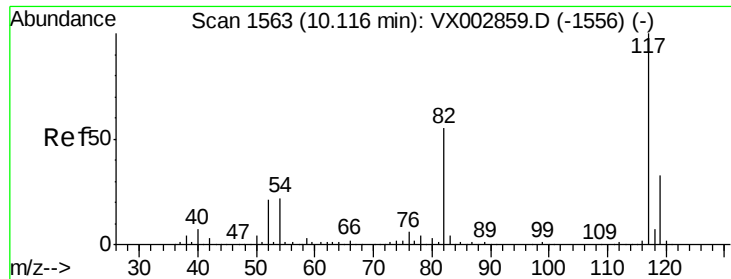
100000

50000

0

Time-->

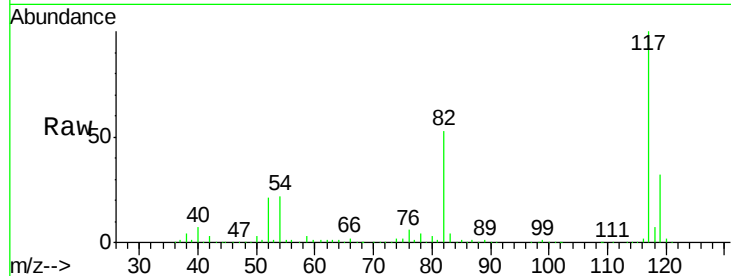




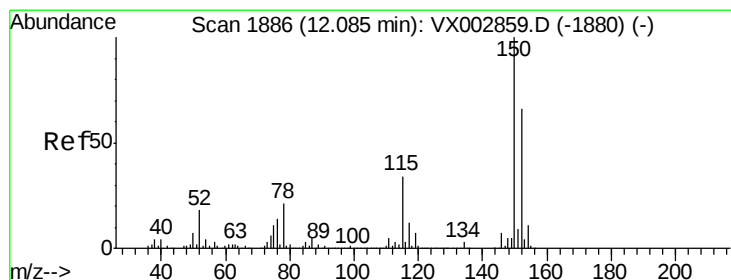
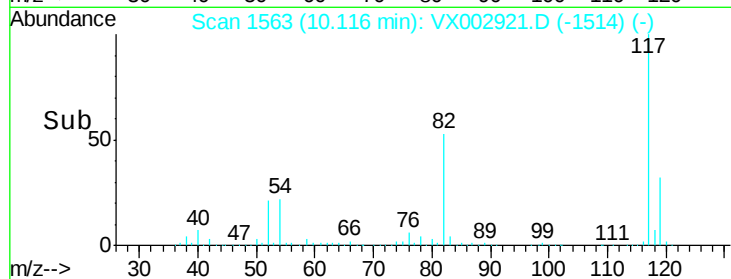
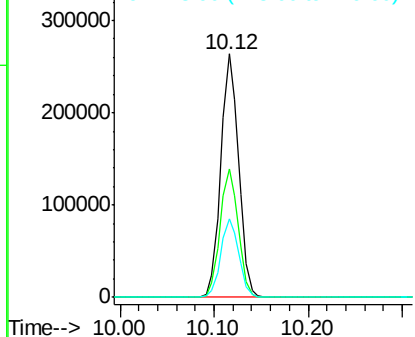
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. -0.00 min  
Lab File: VX002921.D  
Acq: 27 Jun 2018 03:41

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:117 Resp: 346388  
Ion Ratio Lower Upper  
117 100  
82 52.6 45.0 67.4  
119 32.3 25.8 38.6

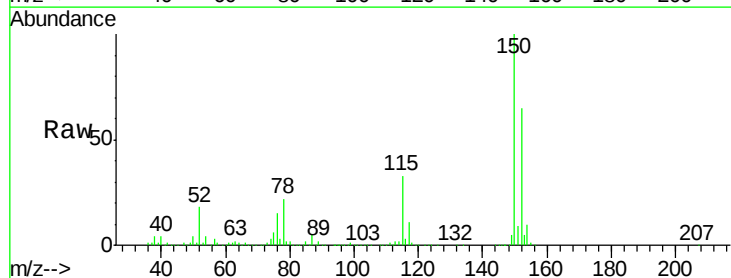


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

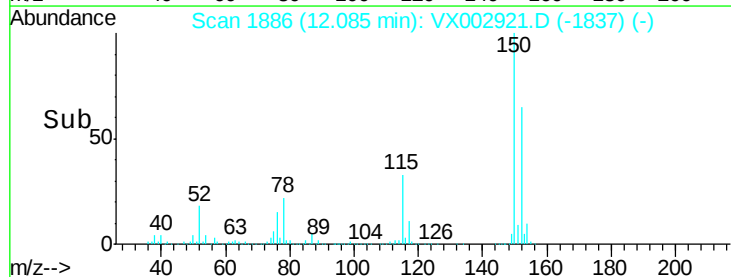
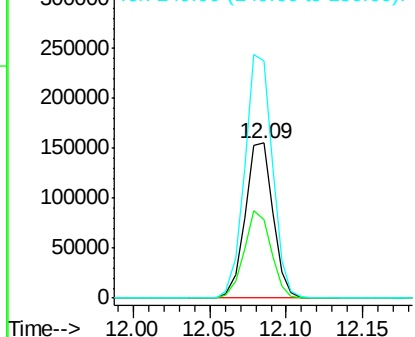


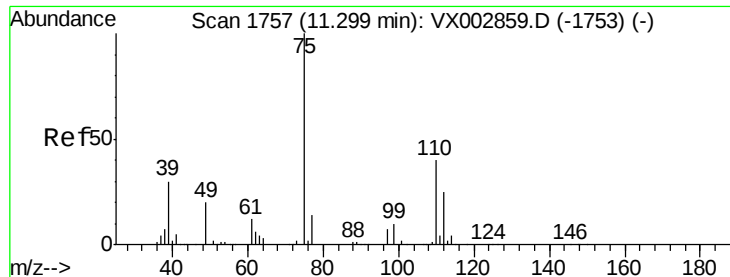
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.09 min Scan# 1886  
Delta R.T. -0.00 min  
Lab File: VX002921.D  
Acq: 27 Jun 2018 03:41

Tgt Ion:152 Resp: 195590  
Ion Ratio Lower Upper  
152 100  
115 54.8 40.1 120.2  
150 156.8 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: 27.28 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

Instrument :

MSVOA\_X

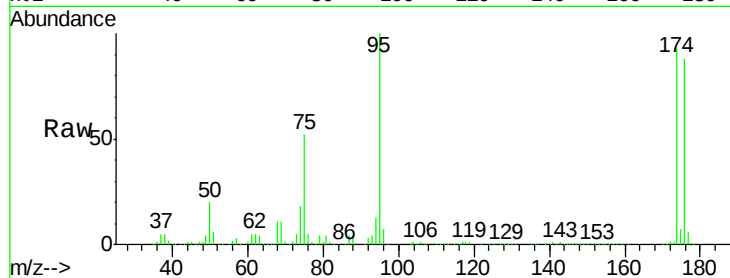
ClientSampled :

Tot Ion: 75 Resp: 96658

Ion Ratio Lower Upper

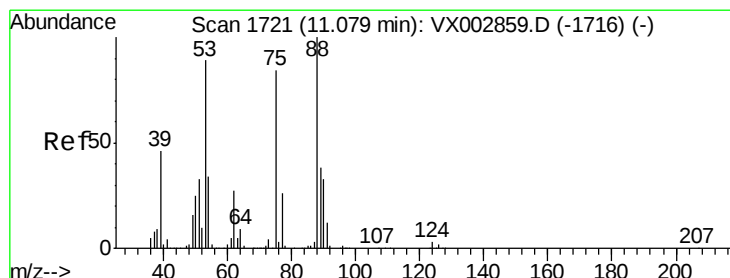
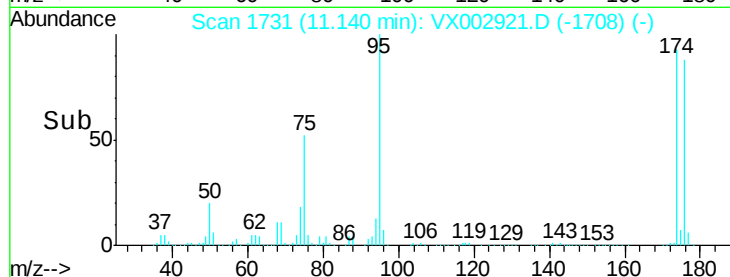
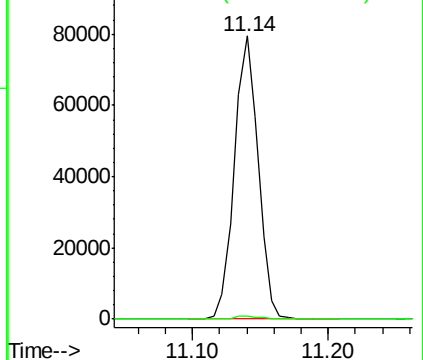
75 100

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: 77.20 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002921.D

Acq: 27 Jun 2018 03:41

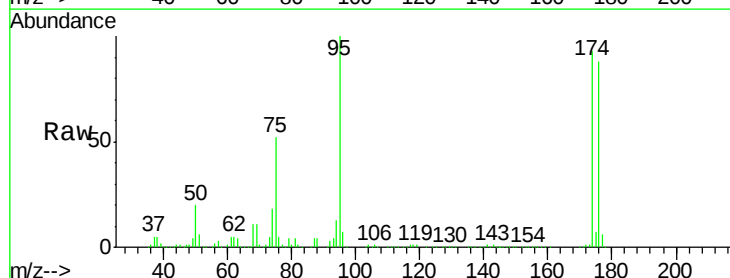
Tgt Ion: 75 Resp: 96658

Ion Ratio Lower Upper

75 100

53 0.4 86.8 130.2#

89 0.0 38.2 57.2#



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

