

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX050619\  
 Data File : VX009353.D  
 Acq On : 06 May 2019 16:15  
 Operator : JC/SP  
 Sample : K2697-09  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TB-20190502

Quant Time: May 07 06:36:35 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat May 04 07:18:36 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 184077   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 297818   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 259507   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 113247   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 120763   | 48.06 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.12% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 90638    | 48.41 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.82% |      |
| 50) Toluene-d8            | 8.71   | 98  | 372846   | 49.33 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.66% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 121984   | 44.41 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.82% |      |

## Target Compounds

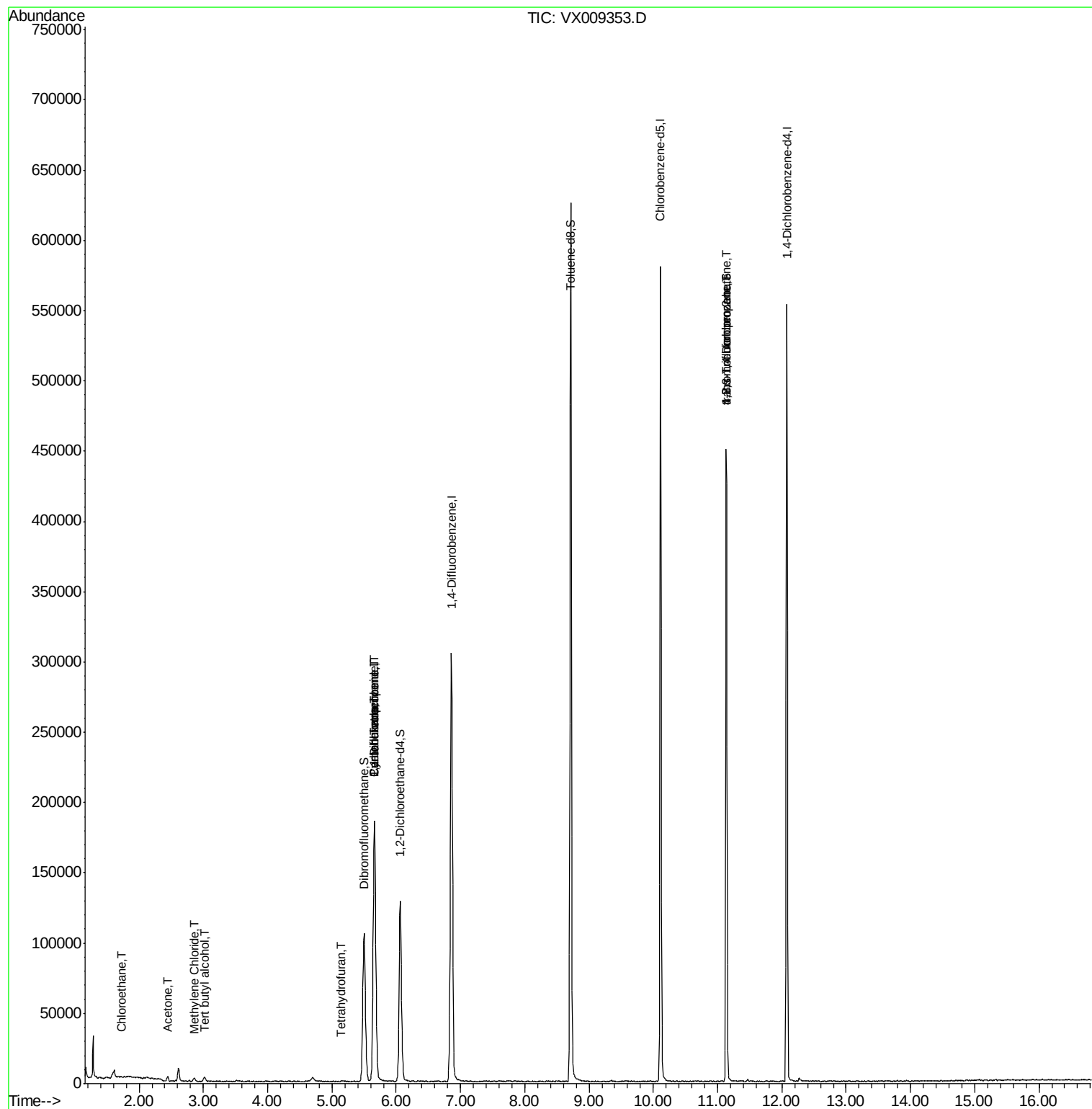
|                                |       |     |       |           | Qvalue |    |
|--------------------------------|-------|-----|-------|-----------|--------|----|
| 6) Chloroethane                | 1.72  | 64  | 321   | 0.221     | ug/l # | 63 |
| 11) Tert butyl alcohol         | 3.02  | 59  | 2071  | 3.560     | ug/l # | 81 |
| 16) Acetone                    | 2.45  | 43  | 3929  | 2.912     | ug/l   | 92 |
| 20) Methylene Chloride         | 2.85  | 84  | 907   | 0.415     | ug/l # | 80 |
| 28) Bromochloromethane         | 5.07  | 49  | 24    | Below Cal | #      | 20 |
| 29) Tetrahydrofuran            | 5.14  | 42  | 324   | 0.240     | ug/l # | 52 |
| 31) Cyclohexane                | 5.67  | 56  | 3795  | 1.021     | ug/l # | 1  |
| 36) 1,1-Dichloropropene        | 5.66  | 75  | 14195 | 5.129     | ug/l # | 51 |
| 38) Carbon Tetrachloride       | 5.67  | 117 | 17030 | 6.772     | ug/l # | 15 |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 62759 | 23.891    | ug/l # | 34 |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 62759 | 61.128    | ug/l # | 10 |

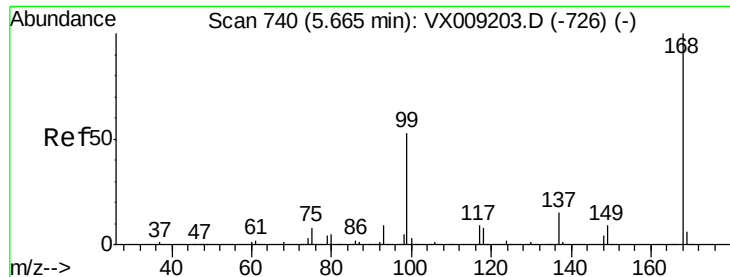
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
Quant Title : SW846 8260  
QLast Update : Sat May 04 07:18:36 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX009353.D

Acq: 06 May 2019 16:15

Instrument :

MSVOA\_X

ClientSampleId :

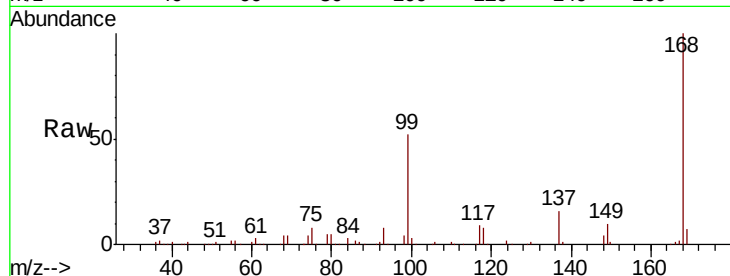
TB-20190502

Tot Ion:168 Resp: 184077

Ion Ratio Lower Upper

168 100

99 52.1 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

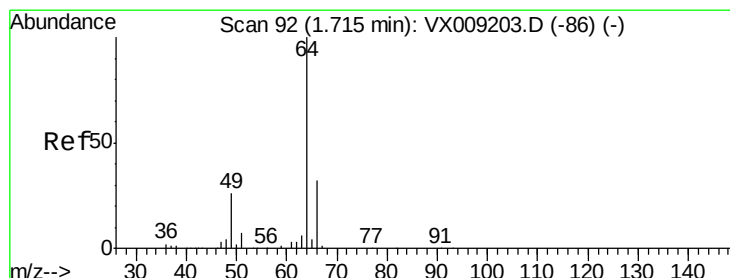
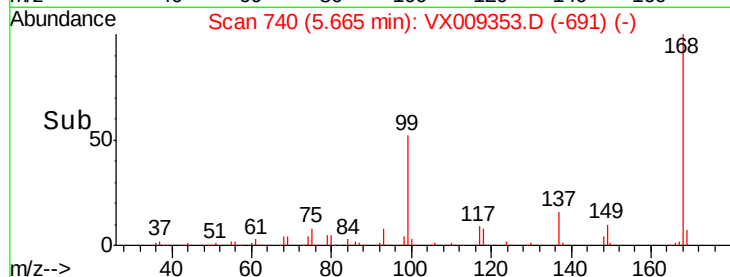
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#6

Chloroethane

Concen: 0.221 ug/l

RT: 1.72 min Scan# 93

Delta R.T. 0.01 min

Lab File: VX009353.D

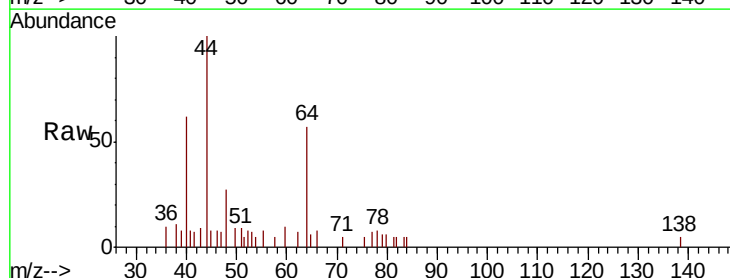
Acq: 06 May 2019 16:15

Tgt Ion: 64 Resp: 321

Ion Ratio Lower Upper

64 100

66 11.0 25.3 37.9#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

800

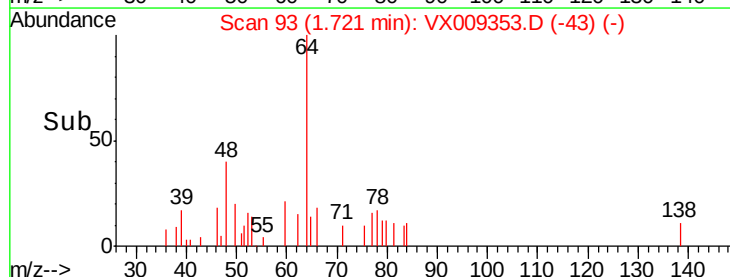
600

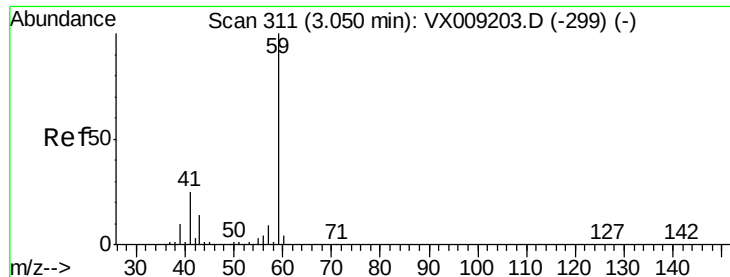
400

200

0

Time--> 1.68 1.70 1.72 1.74

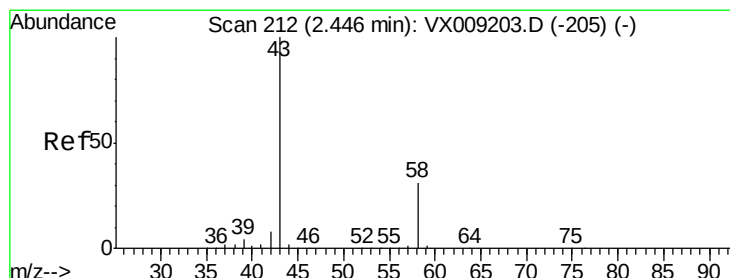
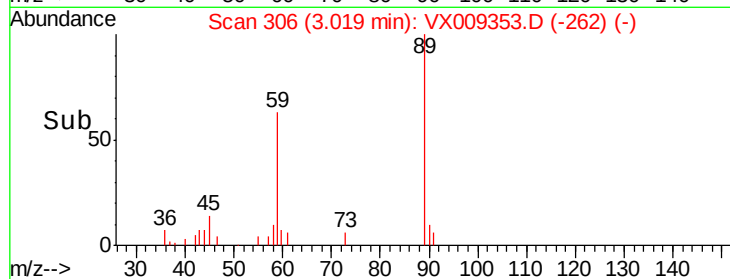
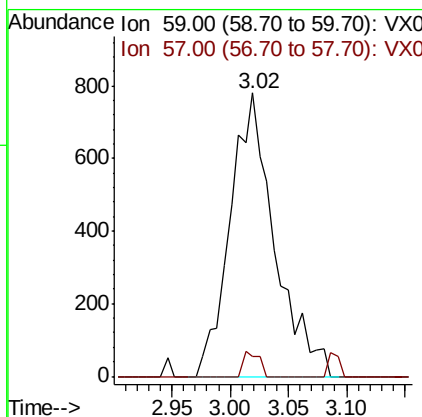
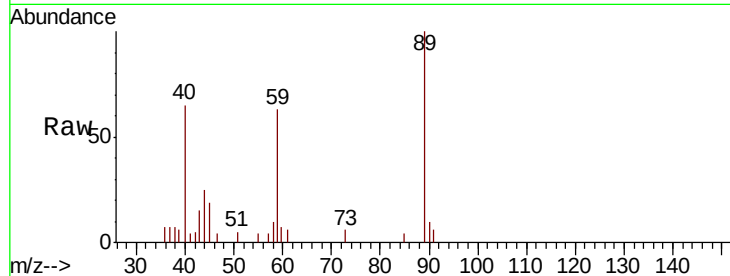




#11  
Tert butyl alcohol  
Concen: 3.560 ug/l  
RT: 3.02 min Scan# 306  
Delta R.T. -0.03 min  
Lab File: VX009353.D  
Acq: 06 May 2019 16:15

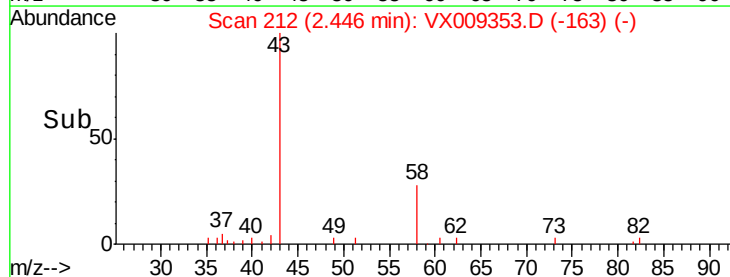
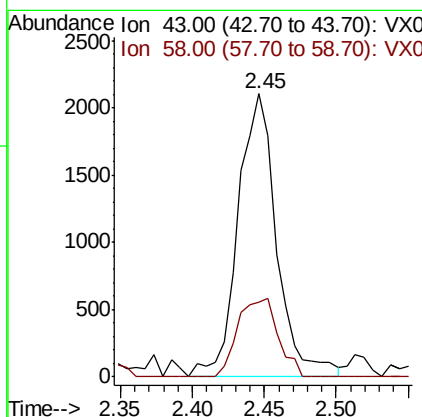
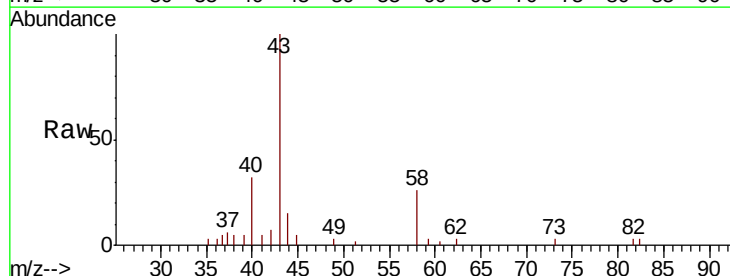
Instrument :  
MSVOA\_X  
ClientSampleId :  
TB-20190502

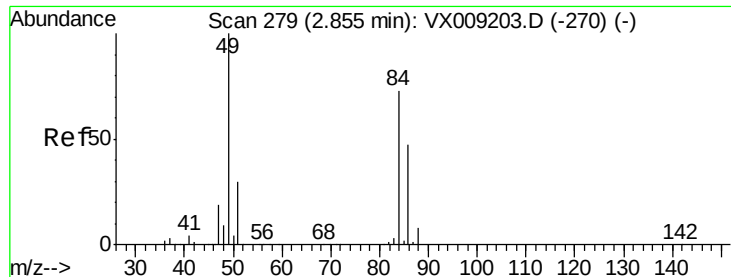
Tot Ion: 59 Resp: 2071  
Ion Ratio Lower Upper  
59 100  
57 3.1 8.2 12.2#



#16  
Acetone  
Concen: 2.912 ug/l  
RT: 2.45 min Scan# 212  
Delta R.T. 0.00 min  
Lab File: VX009353.D  
Acq: 06 May 2019 16:15

Tgt Ion: 43 Resp: 3929  
Ion Ratio Lower Upper  
43 100  
58 26.4 24.9 37.3

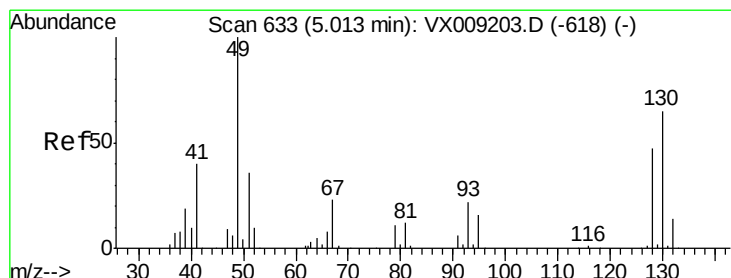
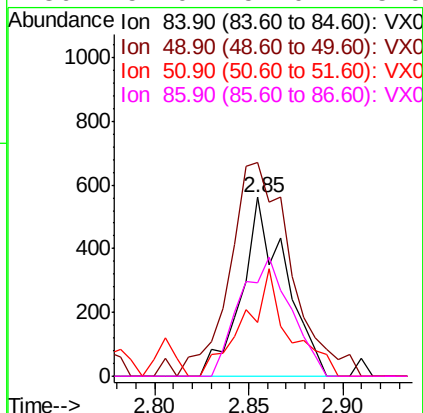
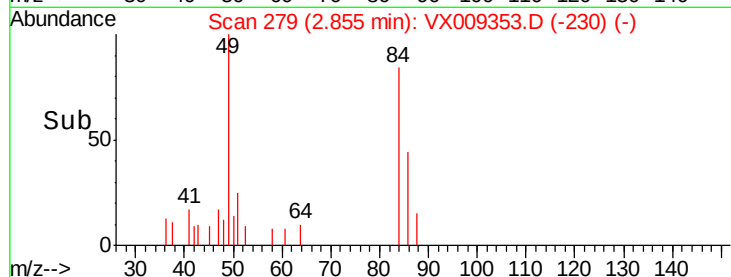
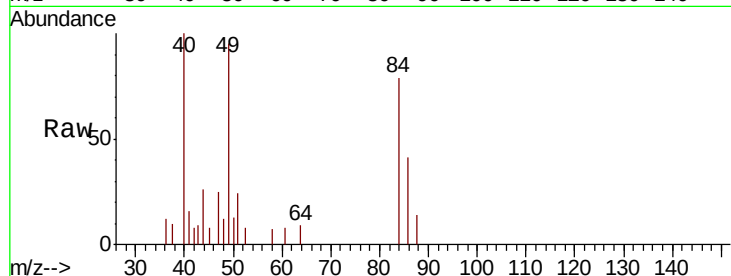




#20  
Methylene Chloride  
Concen: 0.415 ug/l  
RT: 2.85 min Scan# 279  
Delta R.T. 0.00 min  
Lab File: VX009353.D  
Acq: 06 May 2019 16:15

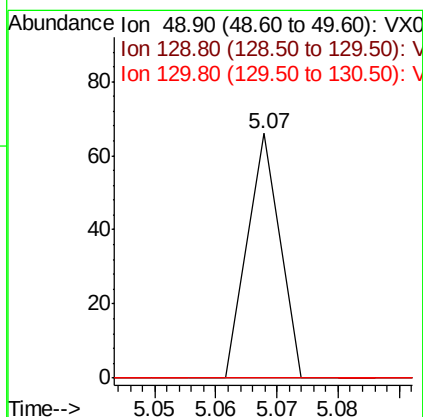
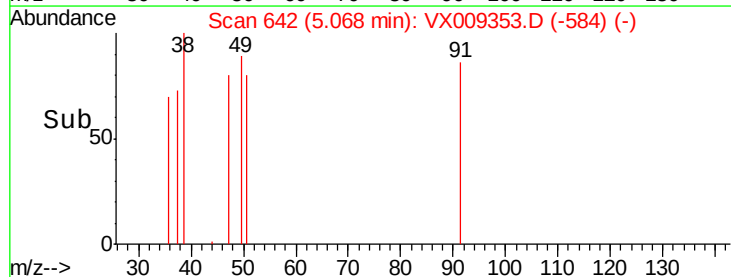
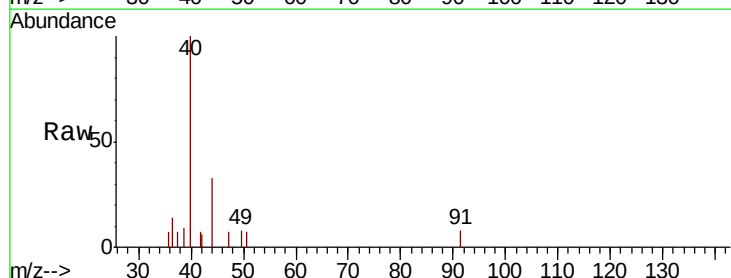
Instrument :  
MSVOA\_X  
ClientSampled :  
TB-20190502

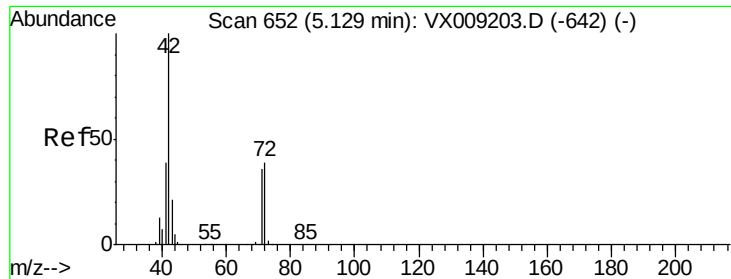
Tot Ion: 84 Resp: 907  
Ion Ratio Lower Upper  
84 100  
49 109.8 109.9 164.9#  
51 30.1 32.7 49.1#  
86 52.0 52.0 78.0



#28  
Bromochloromethane  
Concen: Below Cal  
RT: 5.07 min Scan# 642  
Delta R.T. 0.06 min  
Lab File: VX009353.D  
Acq: 06 May 2019 16:15

Tgt Ion: 49 Resp: 24  
Ion Ratio Lower Upper  
49 100  
129 0.0 0.0 3.8  
130 0.0 51.2 76.8#

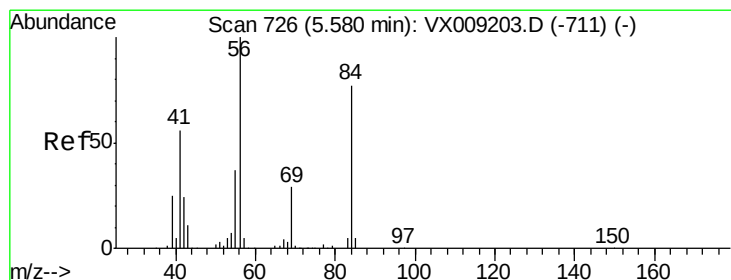
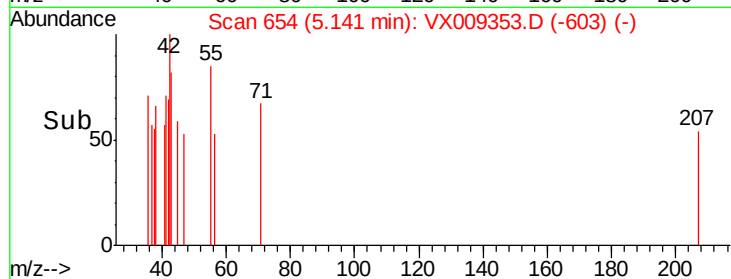
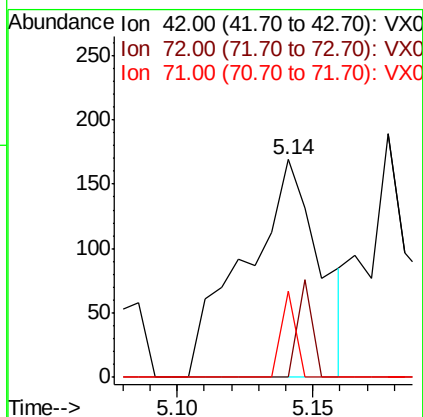
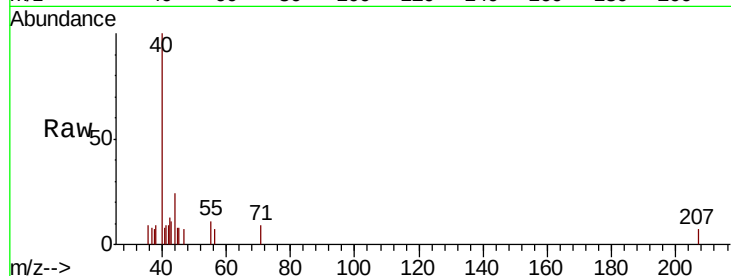




#29  
Tetrahydrofuran  
Concen: 0.240 ug/l  
RT: 5.14 min Scan# 654  
Delta R.T. 0.01 min  
Lab File: VX009353.D  
Acq: 06 May 2019 16:15

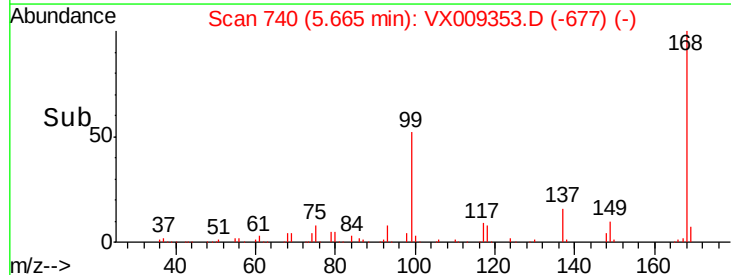
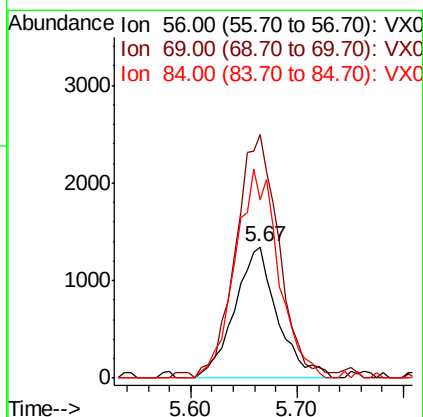
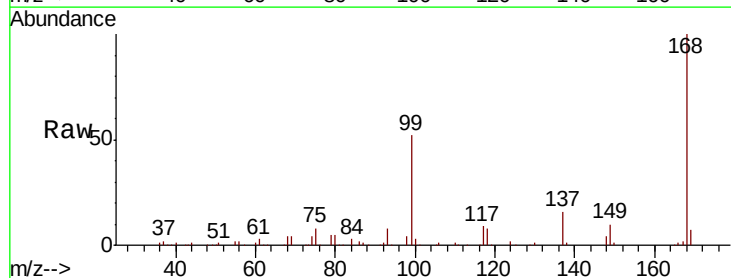
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MSVOA\_X  
ClientSampled :  
TB-20190502

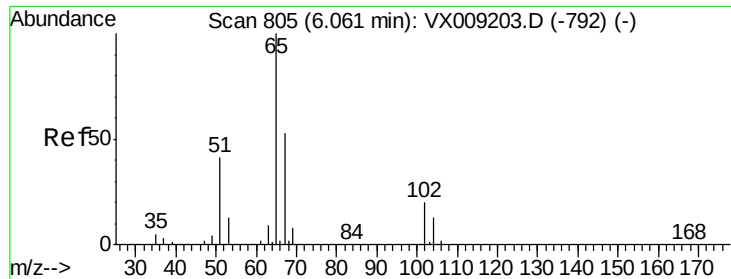
Tot Ion: 42 Resp: 324  
Ion Ratio Lower Upper  
42 100  
72 8.6 30.4 45.6#  
71 7.7 28.6 43.0#



#31  
Cyclohexane  
Concen: 1.021 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. 0.09 min  
Lab File: VX009353.D  
Acq: 06 May 2019 16:15

Tgt Ion: 56 Resp: 3795  
Ion Ratio Lower Upper  
56 100  
69 181.4 23.4 35.0#  
84 135.4 61.9 92.9#

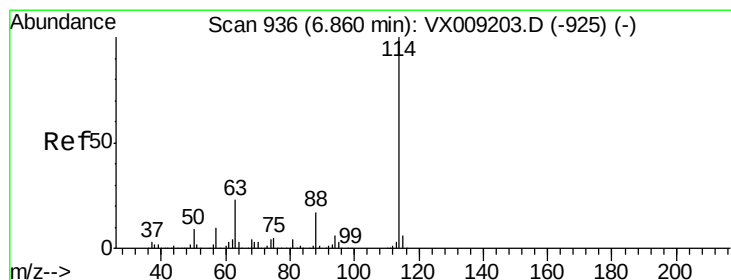
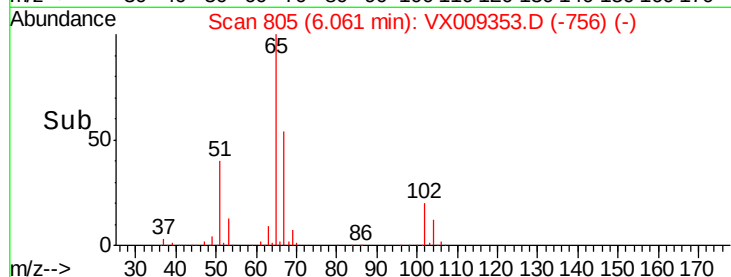
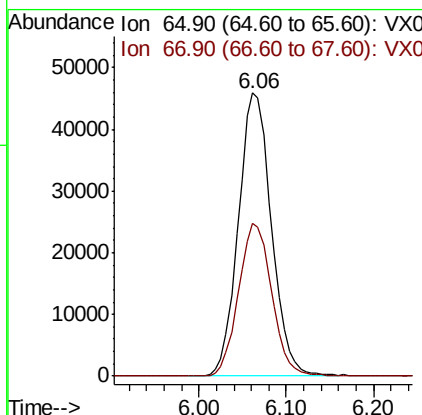
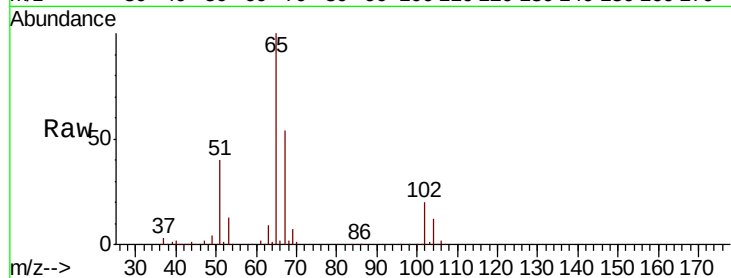




#33  
 1,2-Dichloroethane-d4  
 Concen: 48.058 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. 0.00 min  
 Lab File: VX009353.D  
 Acq: 06 May 2019 16:15

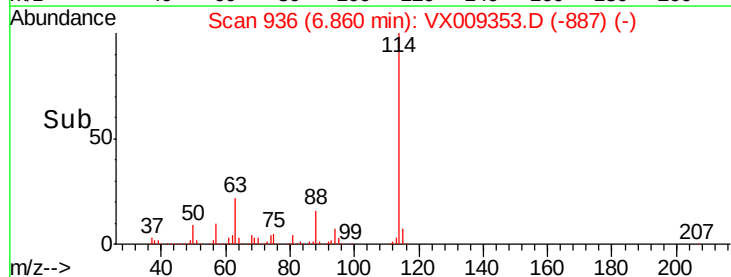
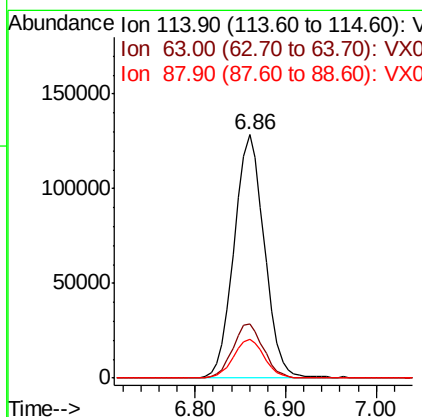
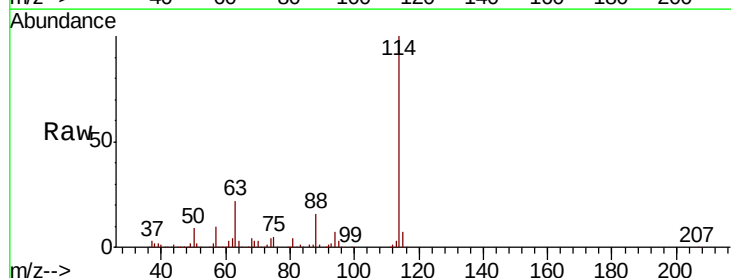
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TB-20190502

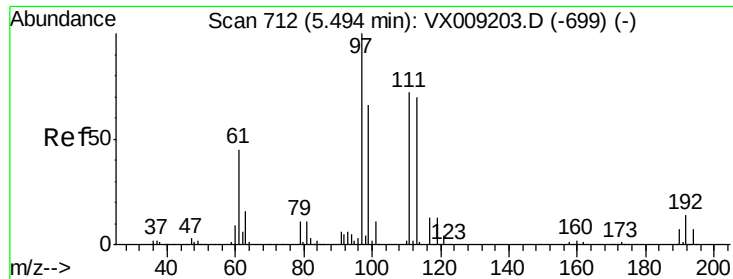
Tot Ion: 65 Resp: 120763  
 Ion Ratio Lower Upper  
 65 100  
 67 54.5 0.0 106.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. 0.00 min  
 Lab File: VX009353.D  
 Acq: 06 May 2019 16:15

Tgt Ion: 114 Resp: 297818  
 Ion Ratio Lower Upper  
 114 100  
 63 22.2 0.0 45.6  
 88 15.9 0.0 33.2

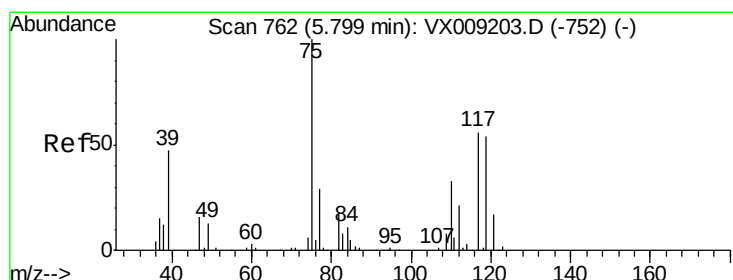
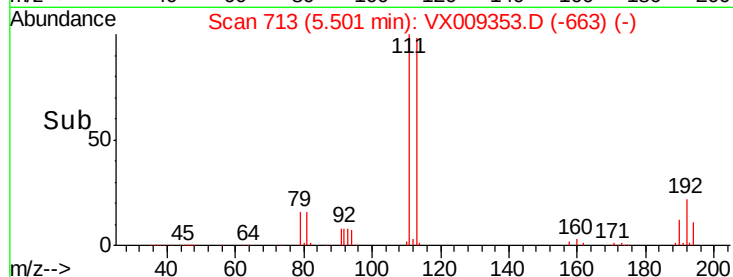
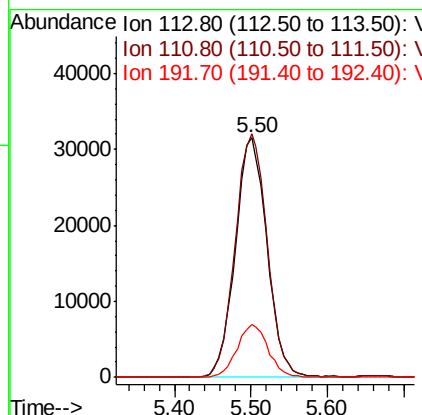
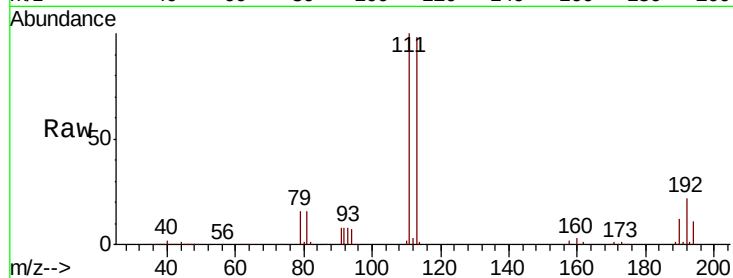




#35  
 Dibromofluoromethane  
 Concen: 48.412 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.01 min  
 Lab File: VX009353.D  
 Acq: 06 May 2019 16:15

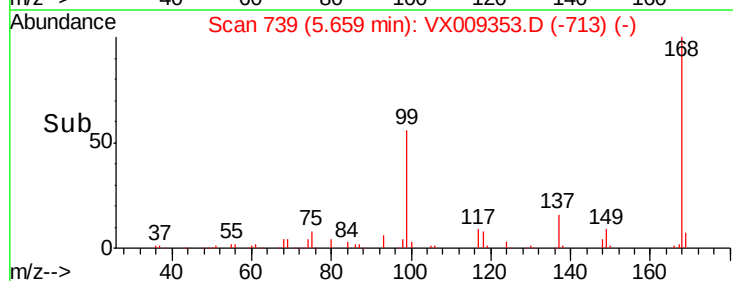
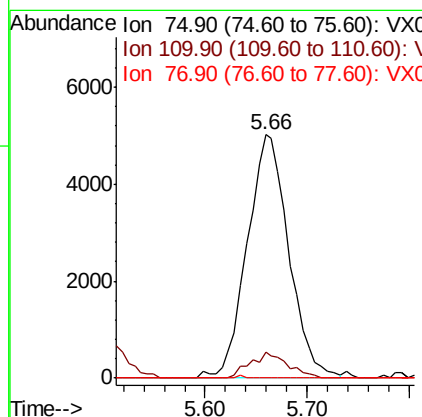
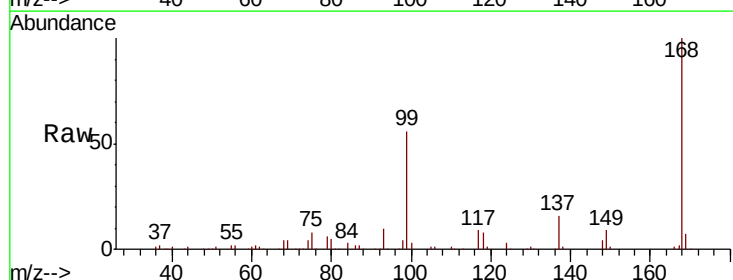
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TB-20190502

Tot Ion:113 Resp: 90638  
 Ion Ratio Lower Upper  
 113 100  
 111 102.8 82.8 124.2  
 192 21.6 17.0 25.6

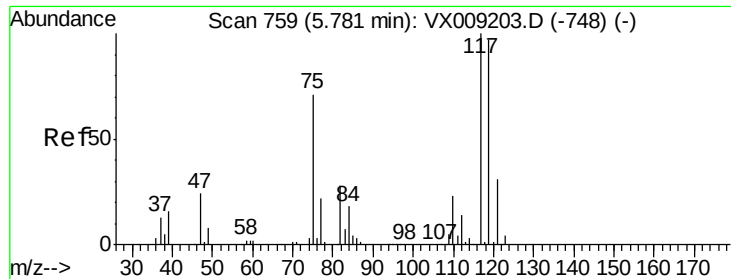


#36  
 1,1-Dichloropropene  
 Concen: 5.129 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.14 min  
 Lab File: VX009353.D  
 Acq: 06 May 2019 16:15

Tgt Ion: 75 Resp: 14195  
 Ion Ratio Lower Upper  
 75 100  
 110 9.5 16.9 50.6#  
 77 0.0 24.8 37.2#



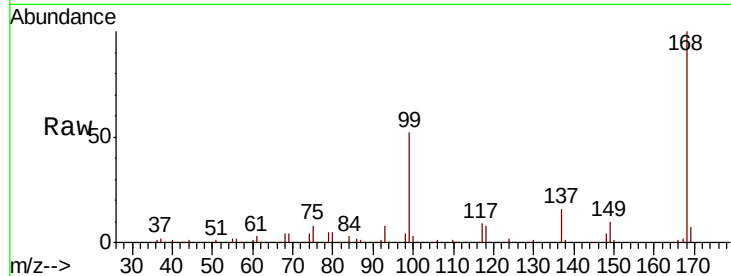




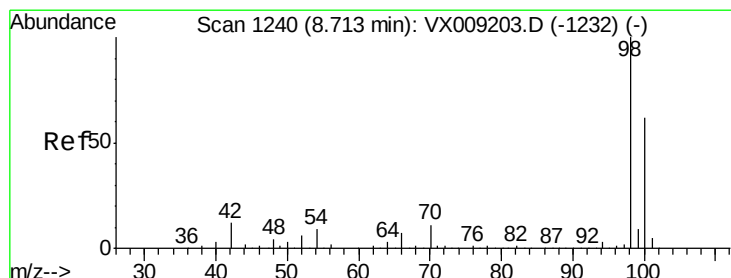
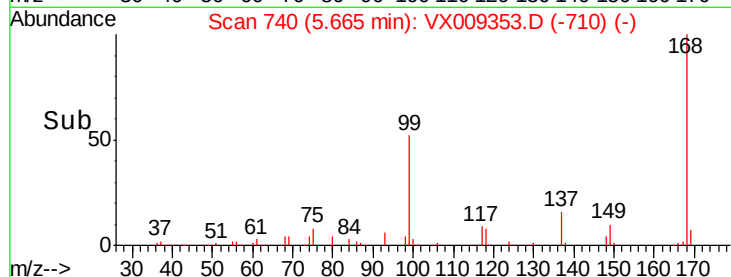
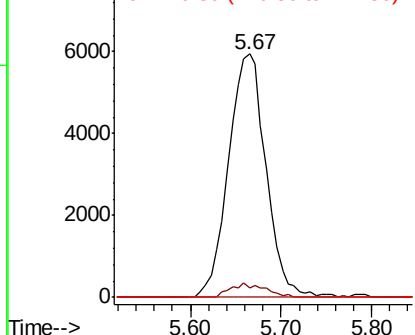
#38  
Carbon Tetrachloride  
Concen: 6.772 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. -0.12 min  
Lab File: VX009353.D  
Acq: 06 May 2019 16:15

Instrument :  
MSVOA\_X  
ClientSampleId :  
TB-20190502

Tot Ion:117 Resp: 17030  
Ion Ratio Lower Upper  
117 100  
119 4.0 77.5 116.3#  
121 0.0 24.7 37.1#

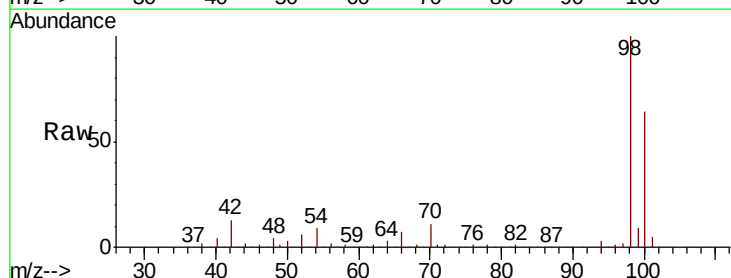


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

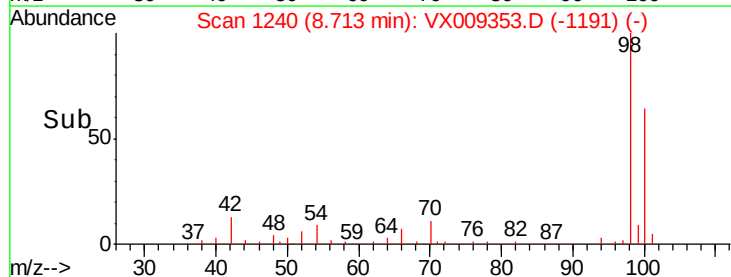
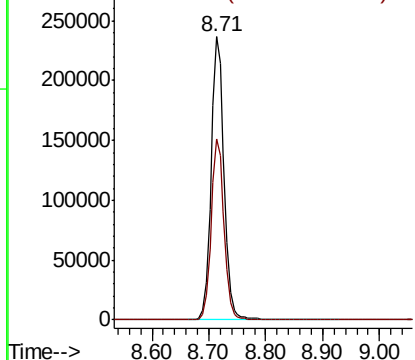


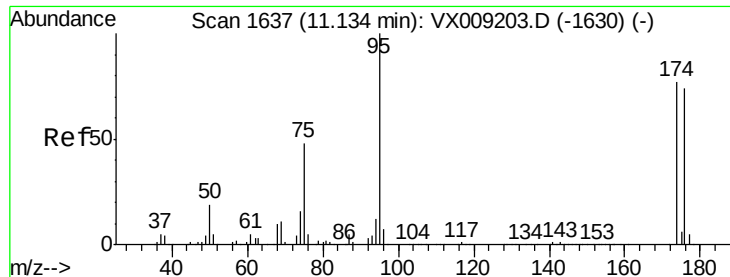
#50  
Toluene-d8  
Concen: 49.328 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX009353.D  
Acq: 06 May 2019 16:15

Tgt Ion: 98 Resp: 372846  
Ion Ratio Lower Upper  
98 100  
100 63.9 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VX0  
Ion 100.00 (99.70 to 100.70): V





#62

4-Bromofluorobenzene

Concen: 44.415 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX009353.D

Acq: 06 May 2019 16:15

Instrument :

MSVOA\_X

ClientSampleId :

TB-20190502

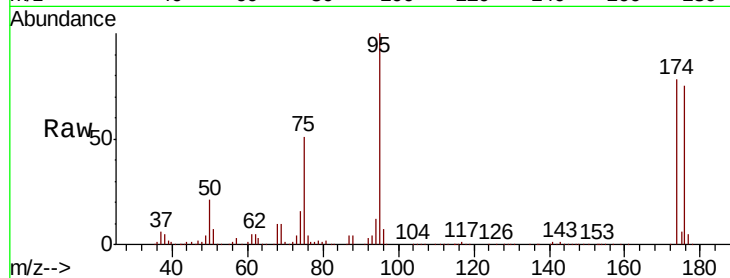
Tot Ion: 95 Resp: 121984

Ion Ratio Lower Upper

95 100

174 82.9 0.0 161.6

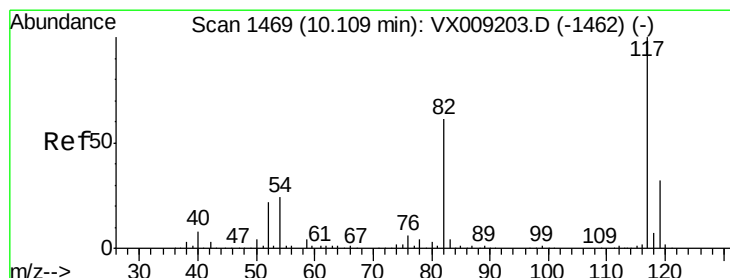
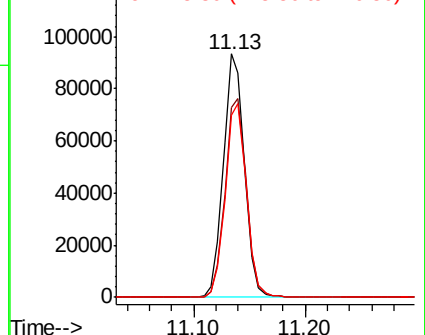
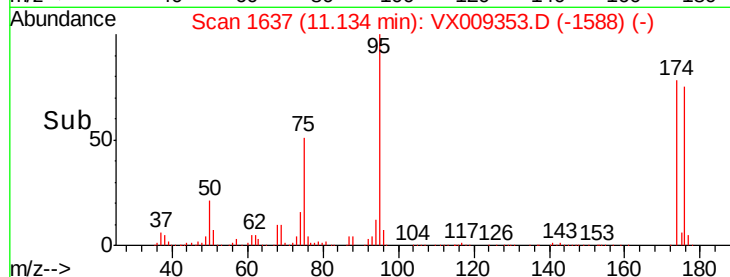
176 80.0 0.0 159.2



Abundance Ion 94.90 (94.60 to 95.60): VX009353.D (-1588) (-)

Ion 173.80 (173.50 to 174.50): VX009353.D (-1588) (-)

Ion 175.80 (175.50 to 176.50): VX009353.D (-1588) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VX009353.D

Acq: 06 May 2019 16:15

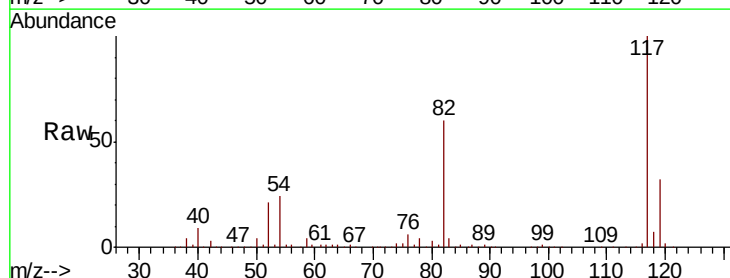
Tgt Ion: 117 Resp: 259507

Ion Ratio Lower Upper

117 100

82 59.6 48.8 73.2

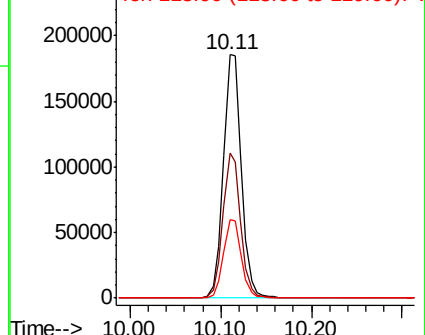
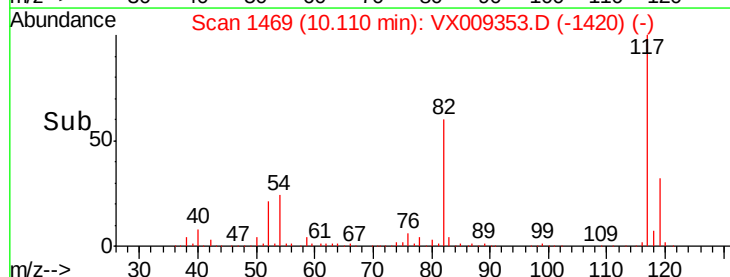
119 32.1 25.8 38.6

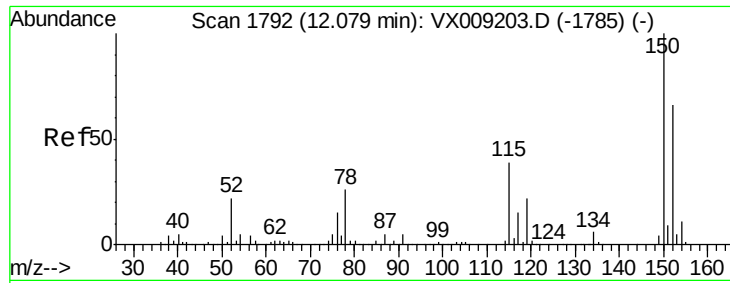


Abundance Ion 116.90 (116.60 to 117.60): VX009353.D (-1420) (-)

Ion 82.00 (81.70 to 82.70): VX009353.D (-1420) (-)

Ion 118.90 (118.60 to 119.60): VX009353.D (-1420) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX009353.D

Acq: 06 May 2019 16:15

Instrument :

MSVOA\_X

ClientSampleId :

TB-20190502

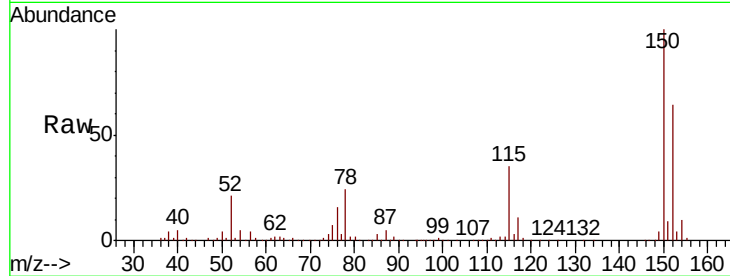
Tot Ion:152 Resp: 113247

Ion Ratio Lower Upper

152 100

115 57.5 41.2 123.6

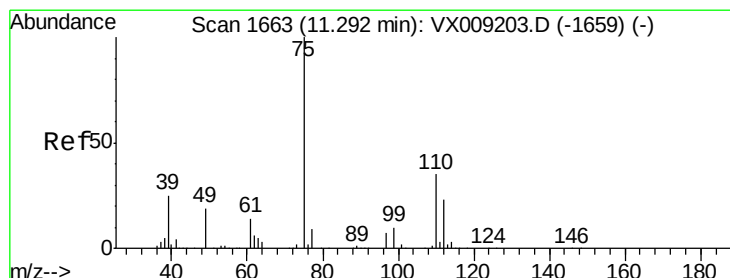
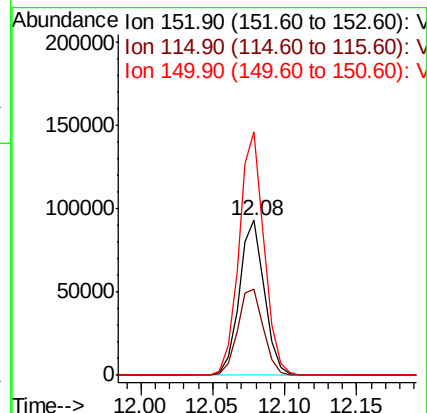
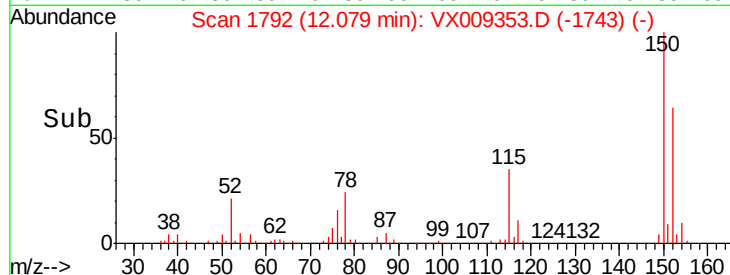
150 155.9 0.0 346.4



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: 23.891 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX009353.D

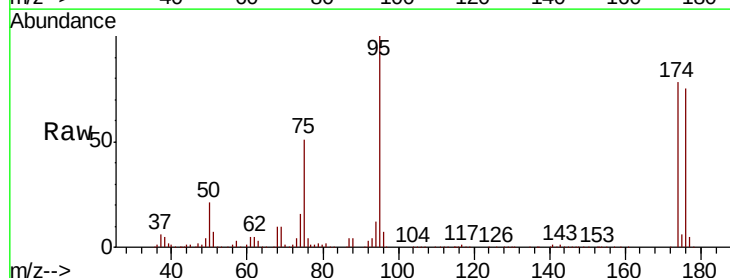
Acq: 06 May 2019 16:15

Tgt Ion: 75 Resp: 62759

Ion Ratio Lower Upper

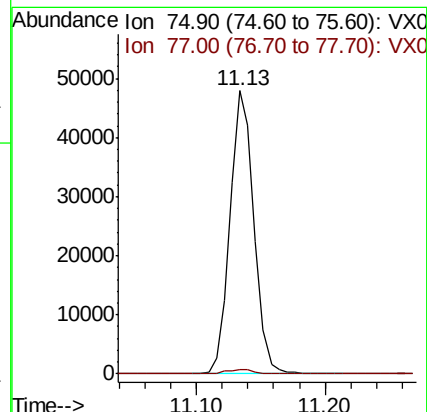
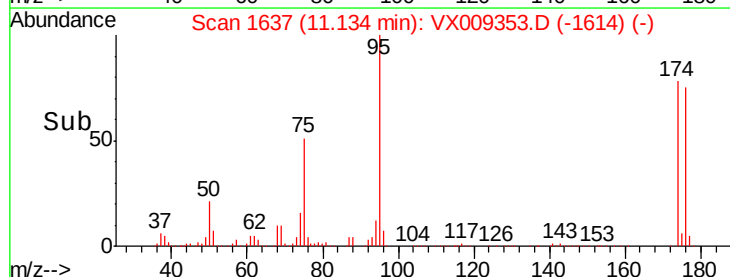
75 100

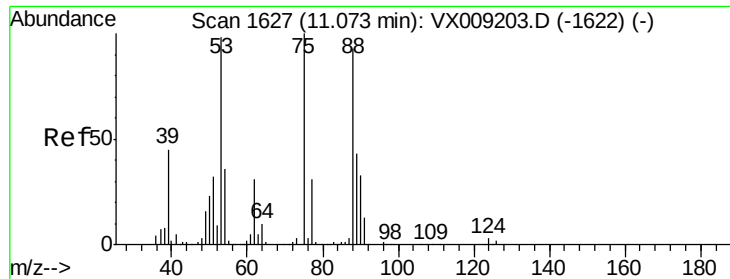
77 1.6 22.1 66.1#



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: 61.128 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX009353.D

Acq: 06 May 2019 16:15

Instrument :

MSVOA\_X

ClientSampleId :

TB-20190502

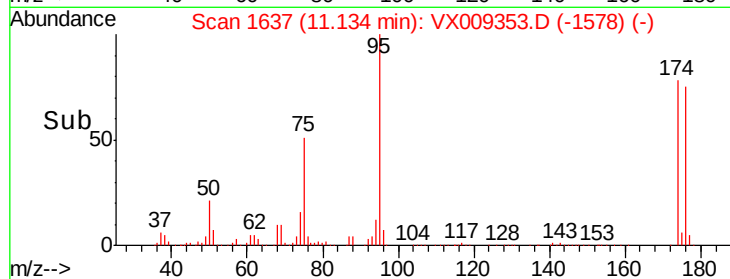
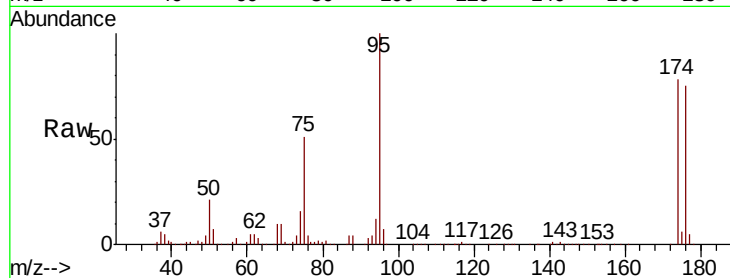
Tot Ion: 75 Resp: 62759

Ion Ratio Lower Upper

75 100

53 0.3 79.0 118.6#

89 0.0 34.7 52.1#



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

