

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX091119\  
 Data File : VX012308.D  
 Acq On : 11 Sep 2019 17:58  
 Operator : SY/SP  
 Sample : K4643-17  
 Misc : 5.11g/5.0mL/MSVOA\_X/SOIL  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 T11-C3-(4)

Quant Time: Sep 12 05:40:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091019S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 10 12:55:26 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 162823   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 277224   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 239461   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 101675   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.05  | 65   | 106974   | 46.47 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.94%  |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 83899    | 47.21 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.42%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 327849   | 52.60 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.20% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 124215   | 42.99 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.98%  |          |

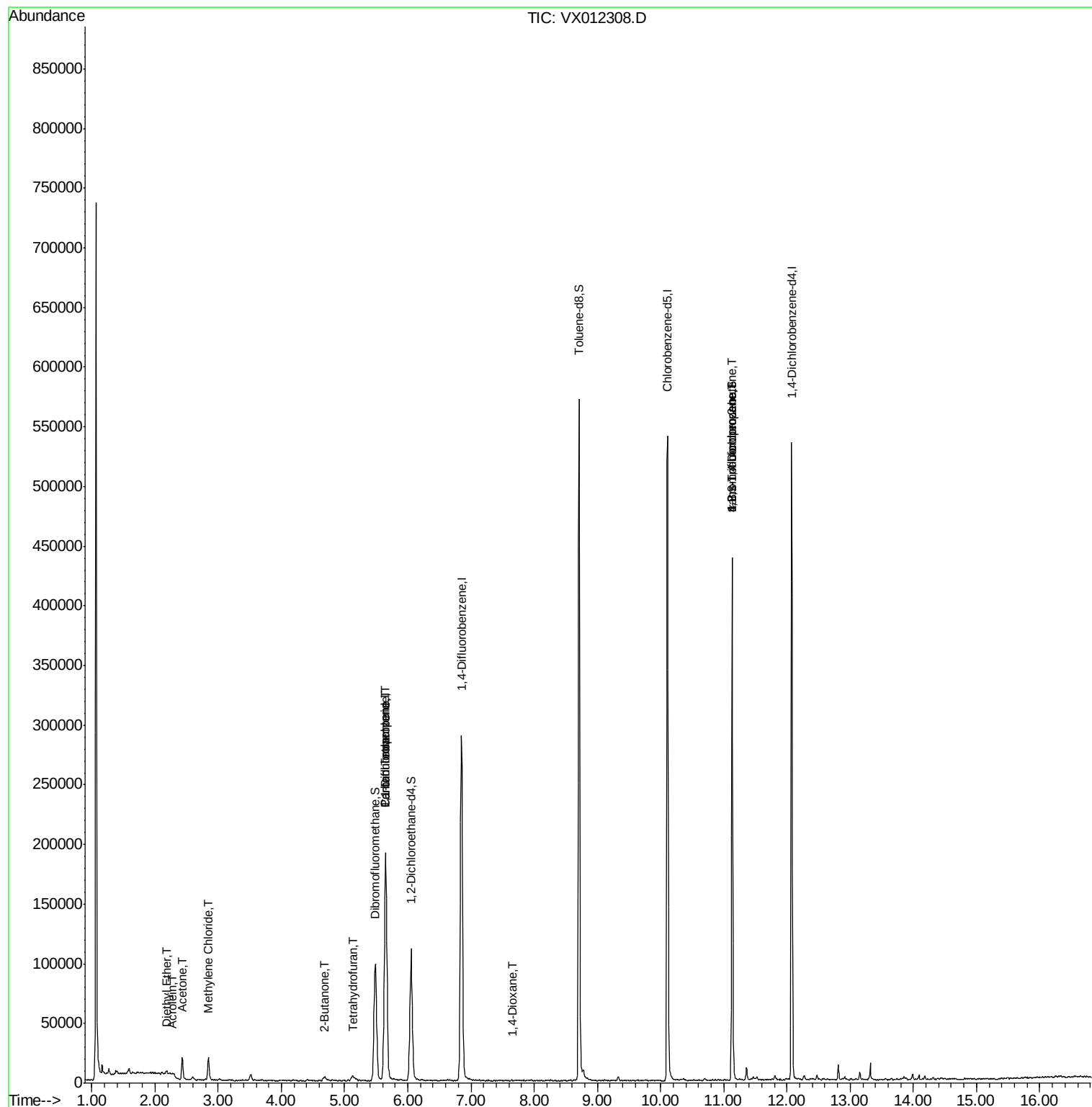
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.62  | 94   | 156      | Below Cal |        | 93     |
| 8) Diethyl Ether               | 2.17  | 74   | 1027     | 1.398     | ug/l   | 62     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 861      | Below Cal | #      | 45     |
| 13) Acrolein                   | 2.28  | 56   | 160      | 1.330     | ug/l # | 12     |
| 16) Acetone                    | 2.43  | 43   | 20296    | 37.244    | ug/l   | 99     |
| 20) Methylene Chloride         | 2.84  | 84   | 8041     | 2.211     | ug/l # | 94     |
| 25) 2-Butanone                 | 4.68  | 43   | 2360     | 3.388     | ug/l # | 87     |
| 29) Tetrahydrofuran            | 5.12  | 42   | 4176     | 11.110    | ug/l   | 97     |
| 36) 1,1-Dichloropropene        | 5.64  | 75   | 14886    | 7.364     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.64  | 117  | 19204    | 8.097     | ug/l # | 15     |
| 49) 1,4-Dioxane                | 7.66  | 88   | 59       | 3.467     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 64563    | 49.429    | ug/l # | 38     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 64563    | 148.102   | ug/l # | 5      |

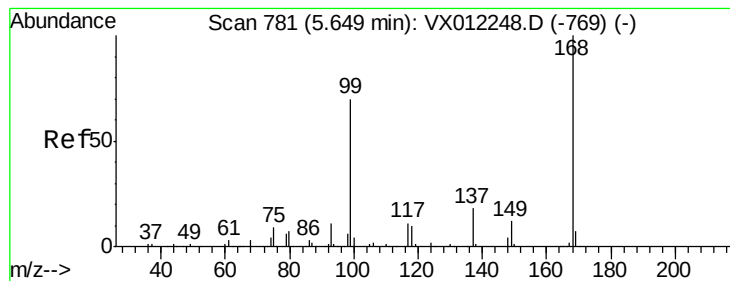
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X091019S.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 10 12:55:26 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.00 min

Lab File: VX012308.D

Acq: 11 Sep 2019 17:58

Instrument :

MSVOA\_X

ClientSampled :

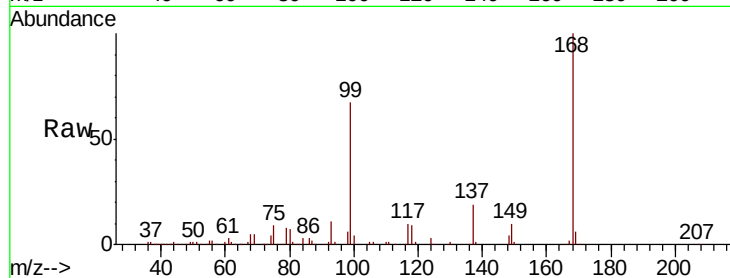
T11-C3-(4)

Tgt Ion:168 Resp: 162823

Ion Ratio Lower Upper

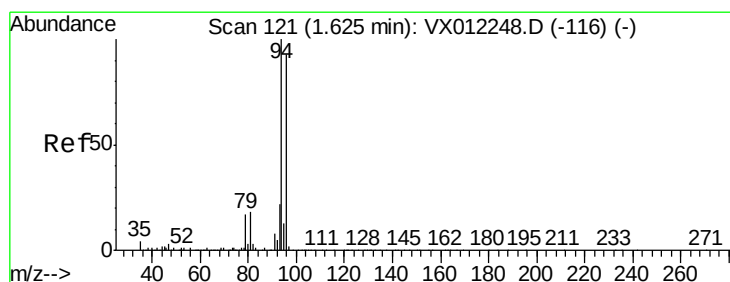
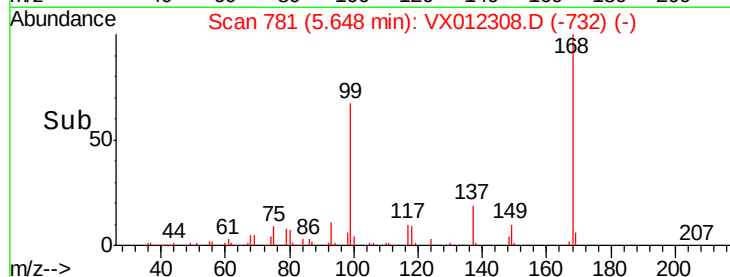
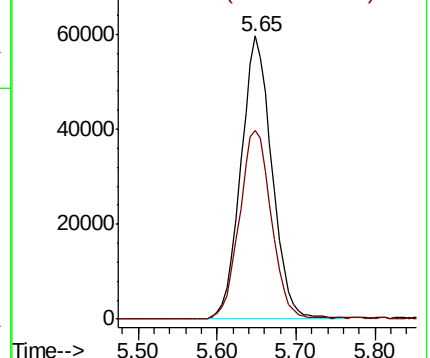
168 100

99 66.6 55.8 83.6



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: 1.62 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX012308.D

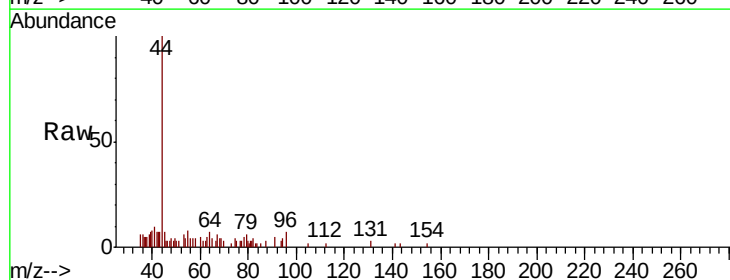
Acq: 11 Sep 2019 17:58

Tgt Ion: 94 Resp: 156

Ion Ratio Lower Upper

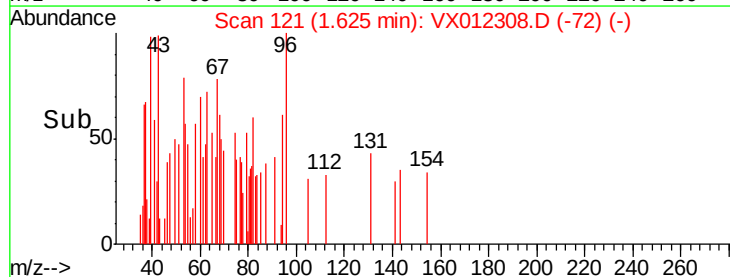
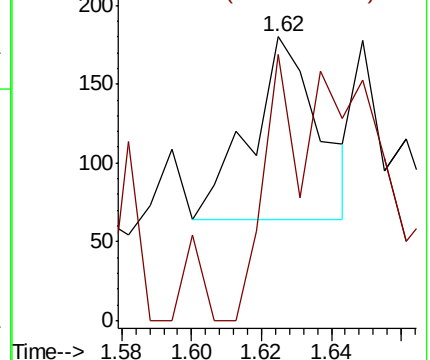
94 100

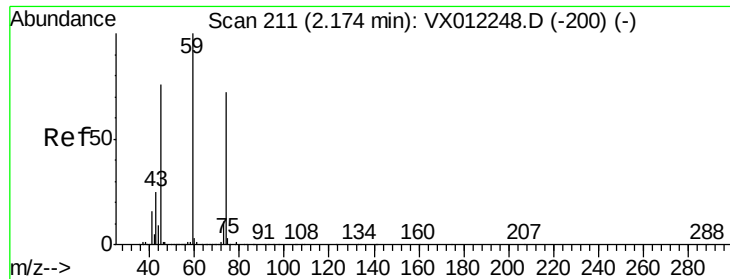
96 99.1 74.0 111.0



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#8

Diethyl Ether

Concen: 1.398 ug/l

RT: 2.17 min Scan# 211

Delta R.T. -0.00 min

Lab File: VX012308.D

Acq: 11 Sep 2019 17:58

Instrument :

MSVOA\_X

ClientSampleId :

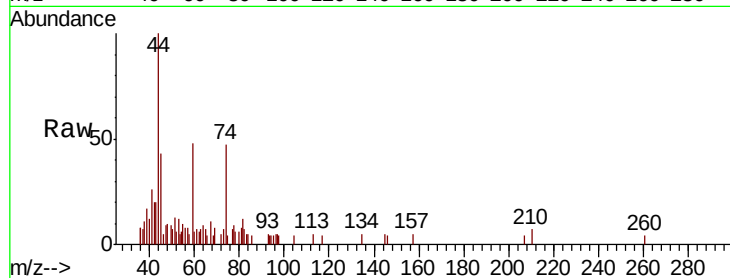
T11-C3-(4)

Tgt Ion: 74 Resp: 1027

Ion Ratio Lower Upper

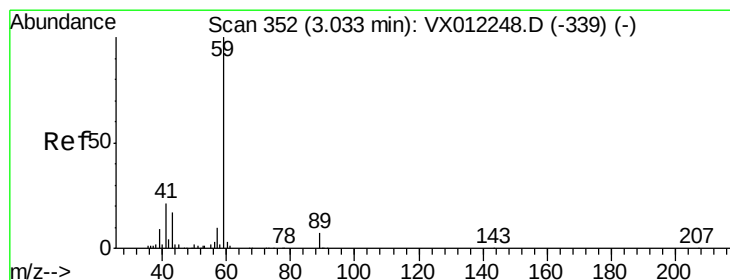
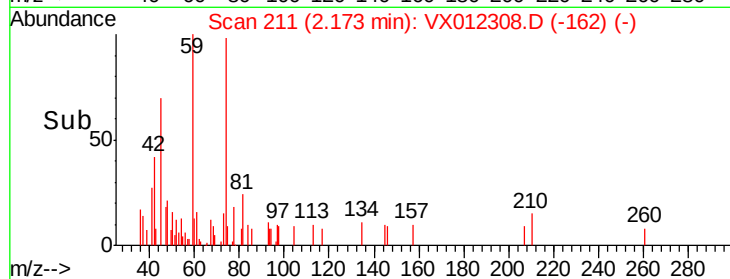
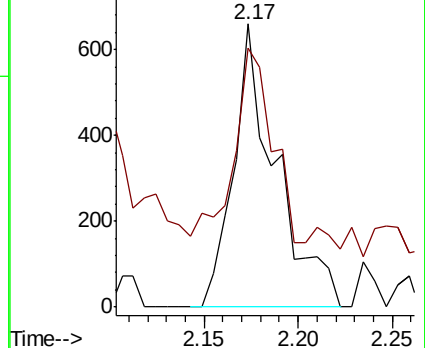
74 100

45 63.9 51.3 153.9



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0



#11

Tert butyl alcohol

Concen: Below Cal

RT: 3.03 min Scan# 351

Delta R.T. -0.01 min

Lab File: VX012308.D

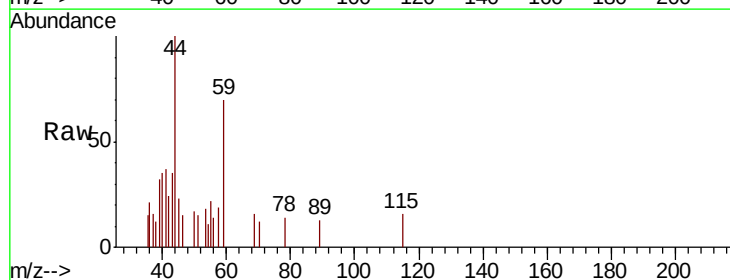
Acq: 11 Sep 2019 17:58

Tgt Ion: 59 Resp: 861

Ion Ratio Lower Upper

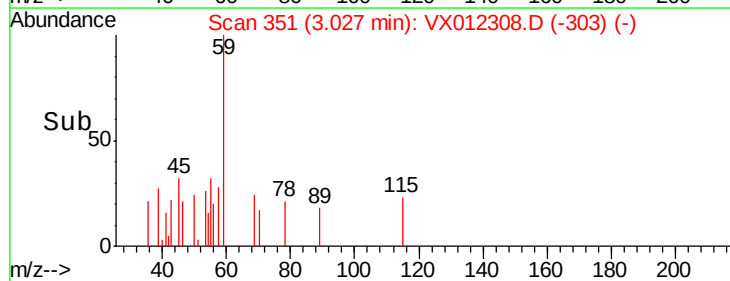
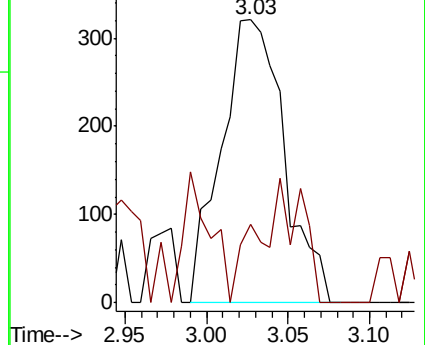
59 100

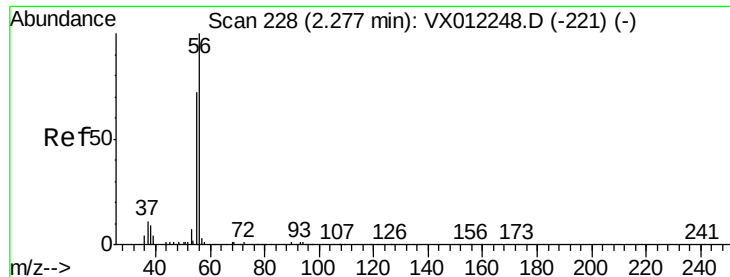
57 30.1 7.8 11.6#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#13

Acrolein

Concen: 1.330 ug/l

RT: 2.28 min Scan# 229

Delta R.T. 0.01 min

Lab File: VX012308.D

Acq: 11 Sep 2019 17:58

Instrument :

MSVOA\_X

ClientSampleId :

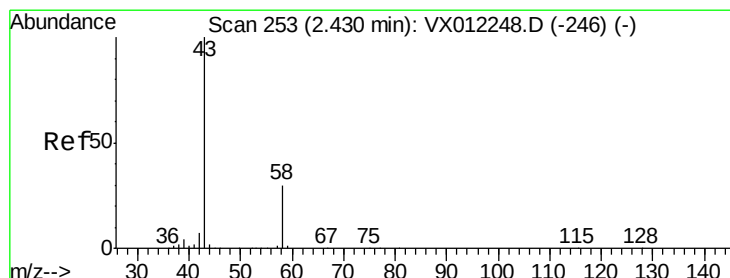
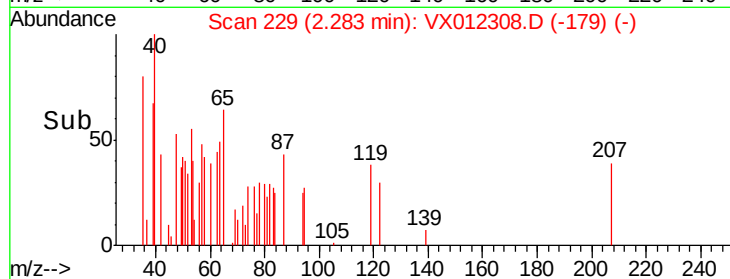
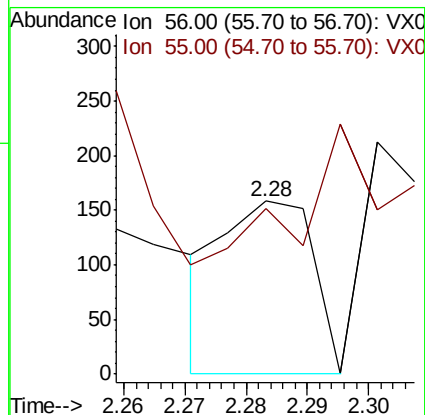
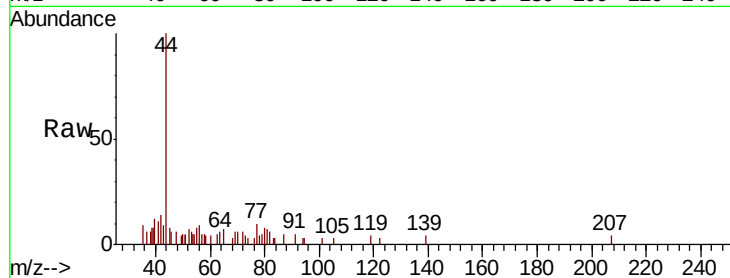
T11-C3-(4)

Tgt Ion: 56 Resp: 160

Ion Ratio Lower Upper

56 100

55 0.0 59.8 89.6#



#16

Acetone

Concen: 37.244 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.00 min

Lab File: VX012308.D

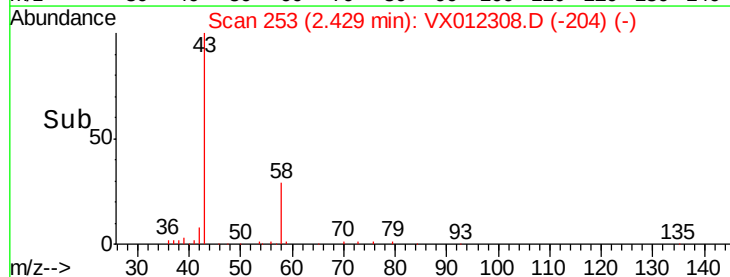
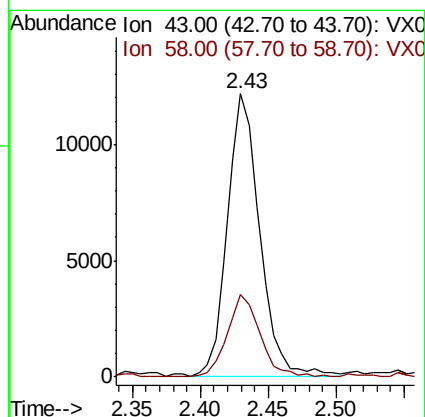
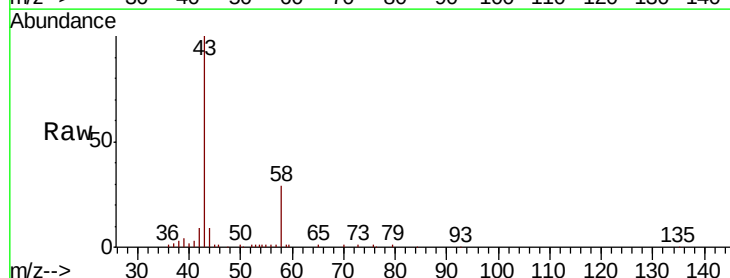
Acq: 11 Sep 2019 17:58

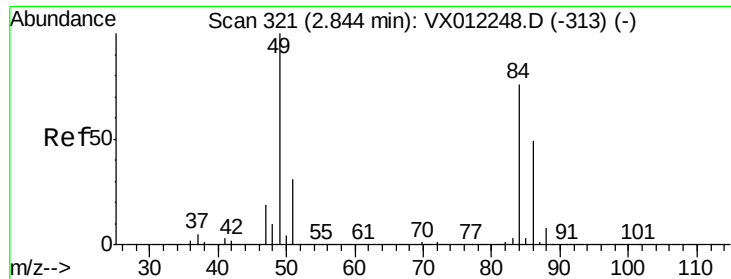
Tgt Ion: 43 Resp: 20296

Ion Ratio Lower Upper

43 100

58 29.0 23.6 35.4

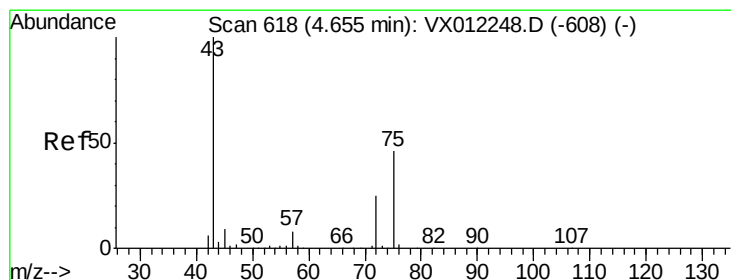
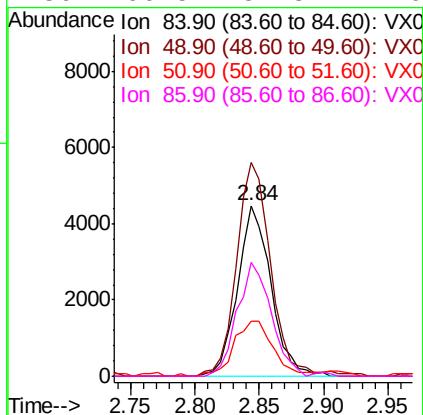
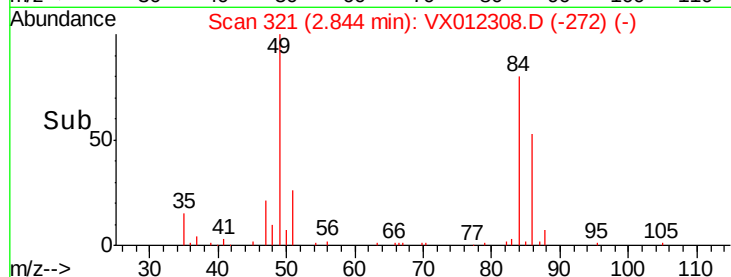
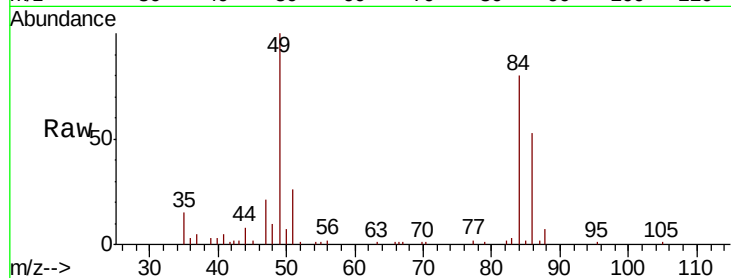




#20  
Methylene Chloride  
Concen: 2.211 ug/l  
RT: 2.84 min Scan# 321  
Delta R.T. 0.00 min  
Lab File: VX012308.D  
Acq: 11 Sep 2019 17:58

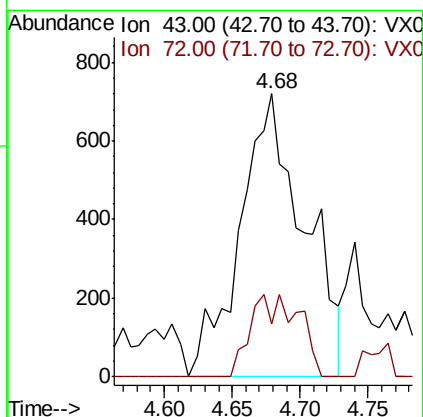
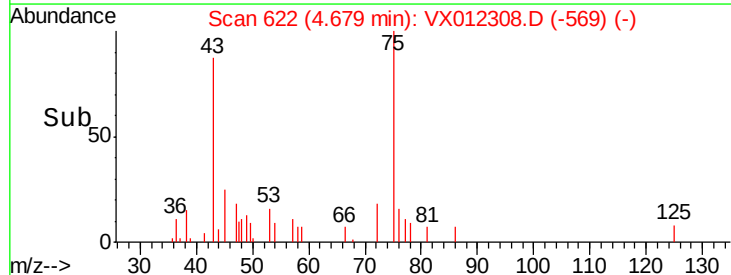
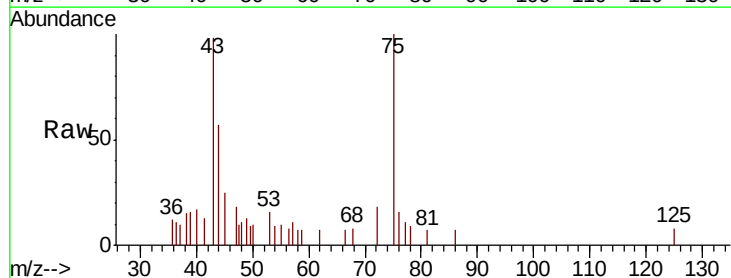
Instrument :  
MSVOA\_X  
ClientSampleId :  
T11-C3-(4)

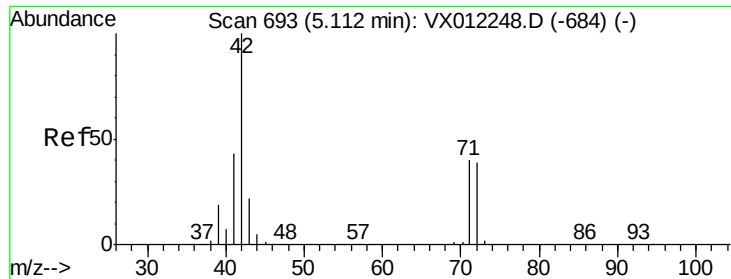
Tgt Ion: 84 Resp: 8041  
Ion Ratio Lower Upper  
84 100  
49 125.1 105.0 157.6  
51 32.5 32.6 48.8#  
86 66.5 51.8 77.6



#25  
2-Butanone  
Concen: 3.388 ug/l  
RT: 4.68 min Scan# 622  
Delta R.T. 0.02 min  
Lab File: VX012308.D  
Acq: 11 Sep 2019 17:58

Tgt Ion: 43 Resp: 2360  
Ion Ratio Lower Upper  
43 100  
72 18.9 20.2 30.2#





#29

Tetrahydrofuran

Concen: 11.110 ug/l

RT: 5.12 min Scan# 695

Delta R.T. 0.01 min

Lab File: VX012308.D

Acq: 11 Sep 2019 17:58

Instrument :

MSVOA\_X

ClientSampleId :

T11-C3-(4)

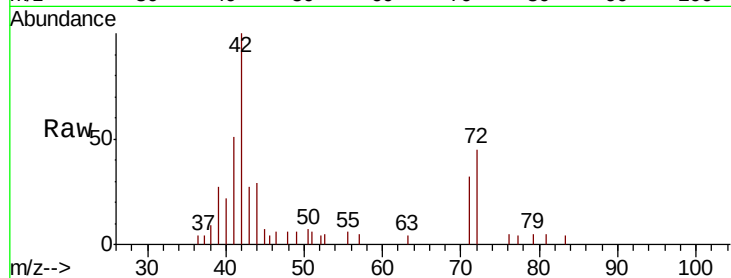
Tgt Ion: 42 Resp: 4176

Ion Ratio Lower Upper

42 100

72 45.3 35.2 52.8

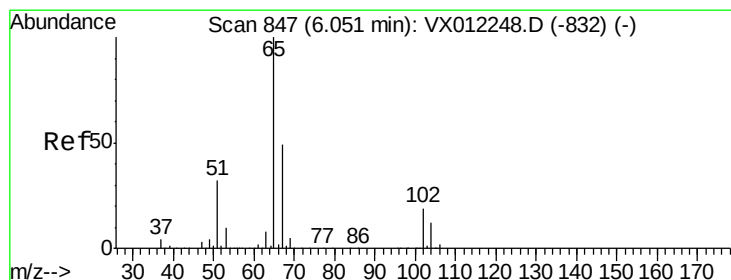
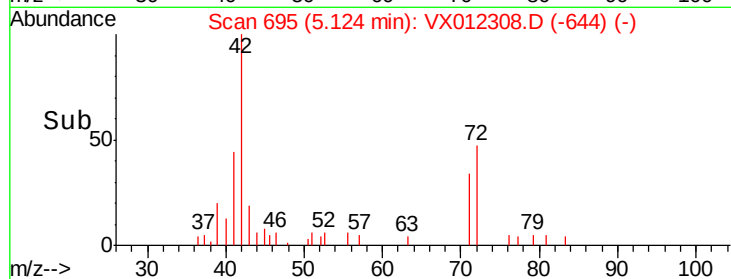
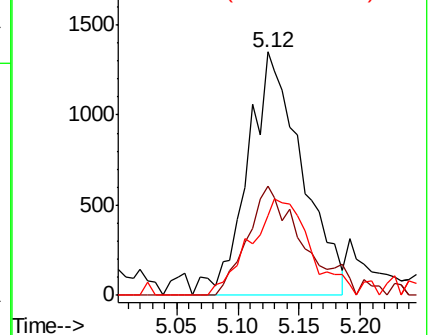
71 43.3 32.5 48.7



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



#33

1,2-Dichloroethane-d4

Concen: 46.470 ug/l

RT: 6.05 min Scan# 847

Delta R.T. -0.00 min

Lab File: VX012308.D

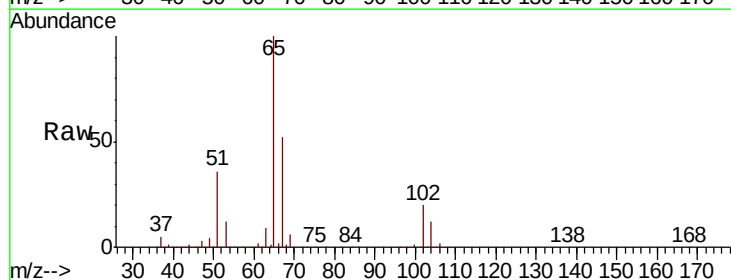
Acq: 11 Sep 2019 17:58

Tgt Ion: 65 Resp: 106974

Ion Ratio Lower Upper

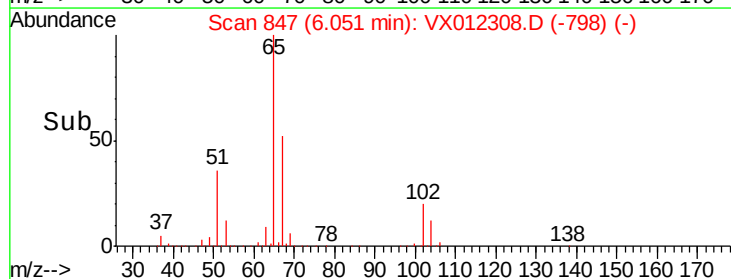
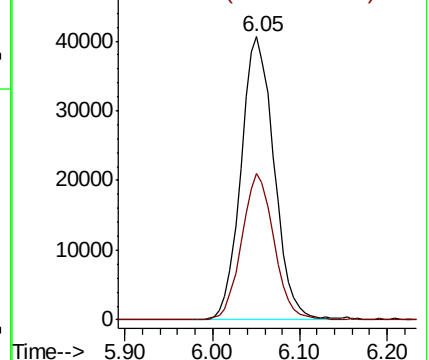
65 100

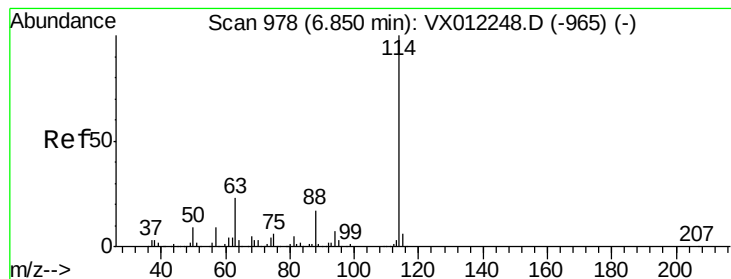
67 50.4 0.0 99.8



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. -0.00 min

Lab File: VX012308.D

Acq: 11 Sep 2019 17:58

Instrument :

MSVOA\_X

ClientSampleId :

T11-C3-(4)

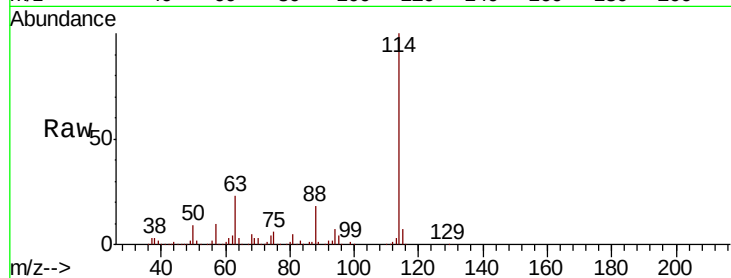
Tgt Ion:114 Resp: 277224

Ion Ratio Lower Upper

114 100

63 23.1 0.0 45.2

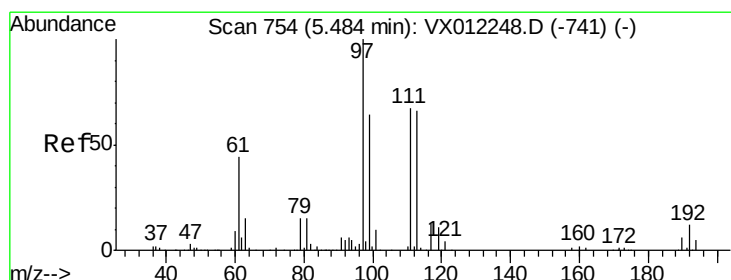
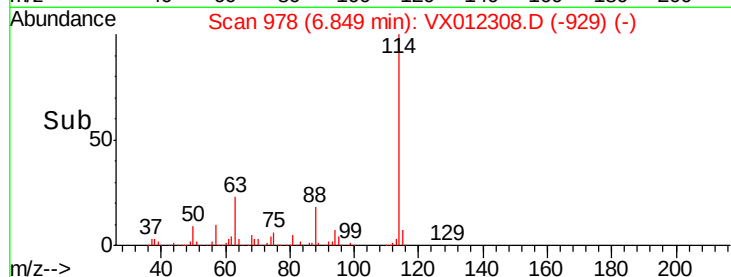
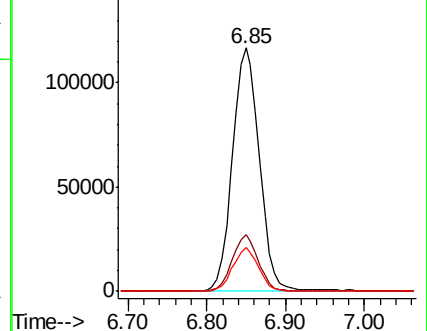
88 18.0 0.0 34.8



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: 47.210 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.01 min

Lab File: VX012308.D

Acq: 11 Sep 2019 17:58

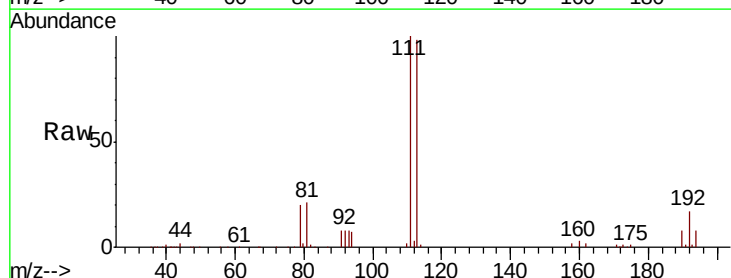
Tgt Ion:113 Resp: 83899

Ion Ratio Lower Upper

113 100

111 102.9 83.0 124.6

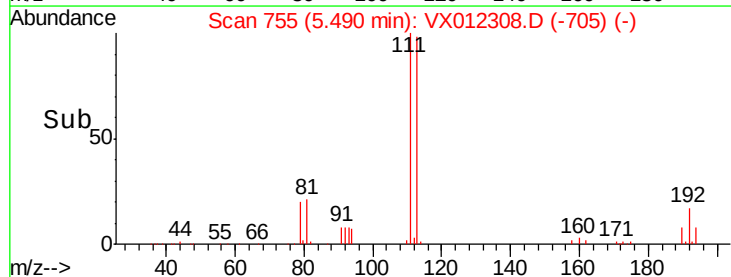
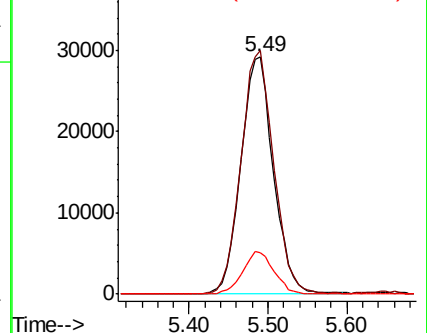
192 17.4 14.3 21.5



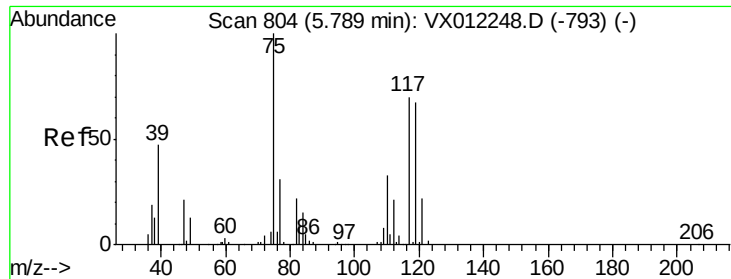
Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



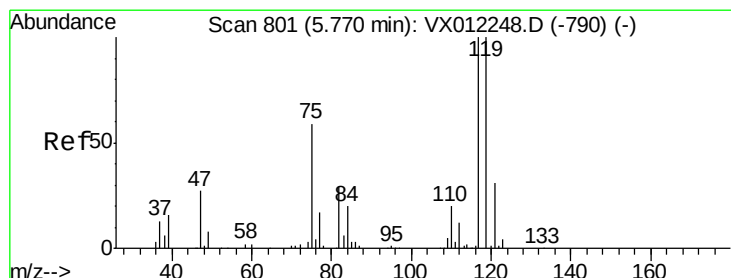
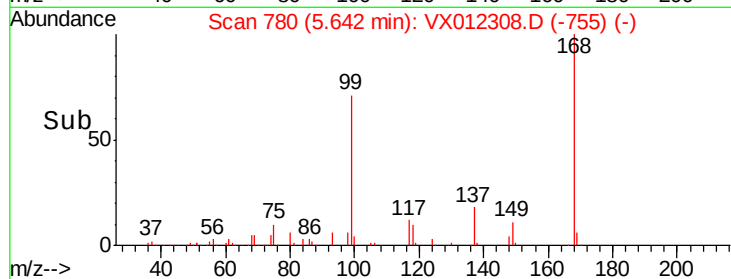
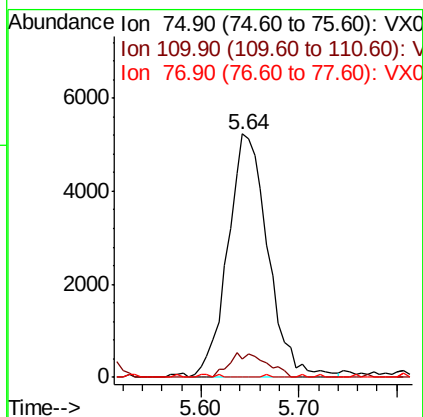
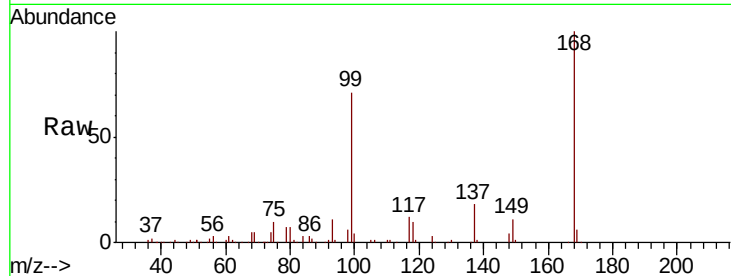




#36  
 1,1-Dichloropropene  
 Concen: 7.364 ug/l  
 RT: 5.64 min Scan# 780  
 Delta R.T. -0.15 min  
 Lab File: VX012308.D  
 Acq: 11 Sep 2019 17:58

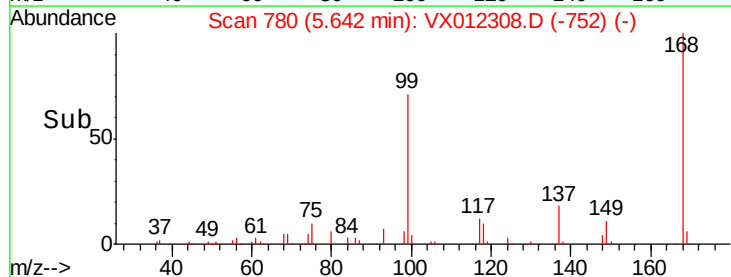
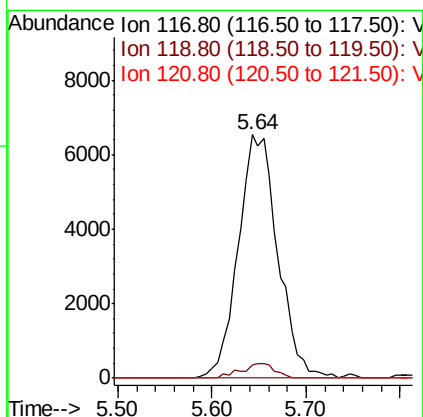
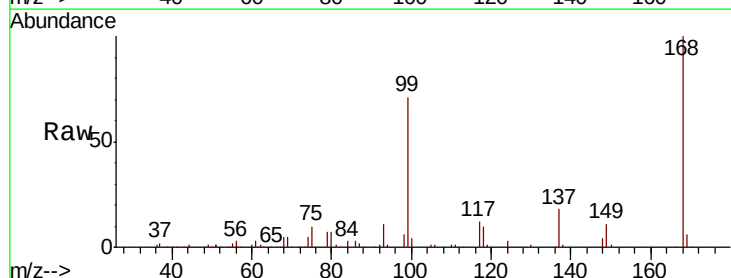
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 T11-C3-(4)

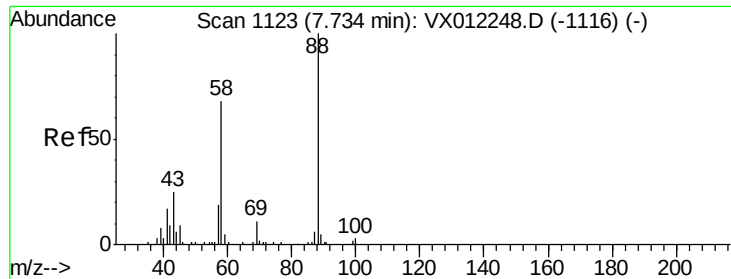
Tgt Ion: 75 Resp: 14886  
 Ion Ratio Lower Upper  
 75 100  
 110 9.4 16.8 50.4#  
 77 0.0 24.5 36.7#



#38  
 Carbon Tetrachloride  
 Concen: 8.097 ug/l  
 RT: 5.64 min Scan# 780  
 Delta R.T. -0.13 min  
 Lab File: VX012308.D  
 Acq: 11 Sep 2019 17:58

Tgt Ion: 117 Resp: 19204  
 Ion Ratio Lower Upper  
 117 100  
 119 5.4 79.6 119.4#  
 121 0.0 24.7 37.1#

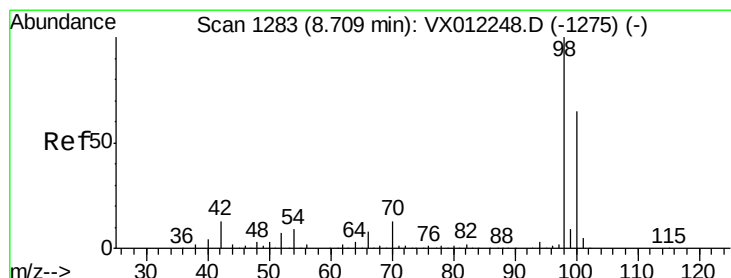
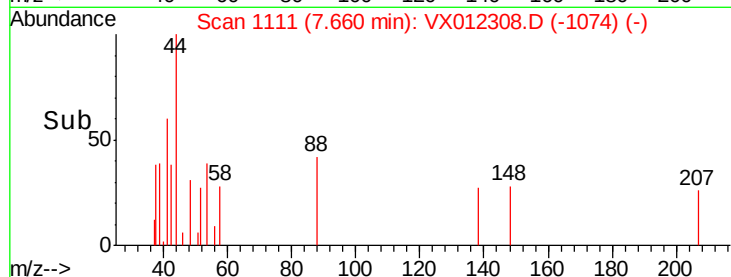
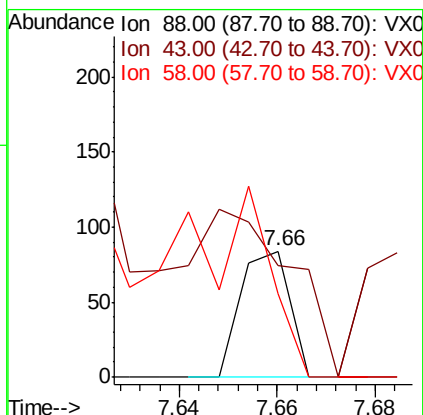
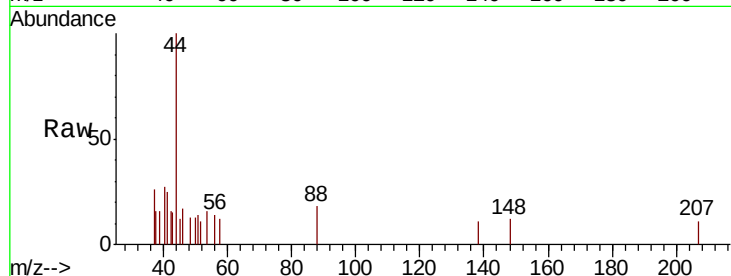




#49  
1,4-Dioxane  
Concen: 3.467 ug/l  
RT: 7.66 min Scan# 1111  
Delta R.T. -0.07 min  
Lab File: VX012308.D  
Acq: 11 Sep 2019 17:58

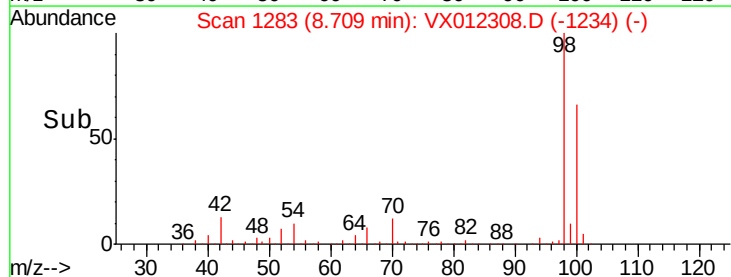
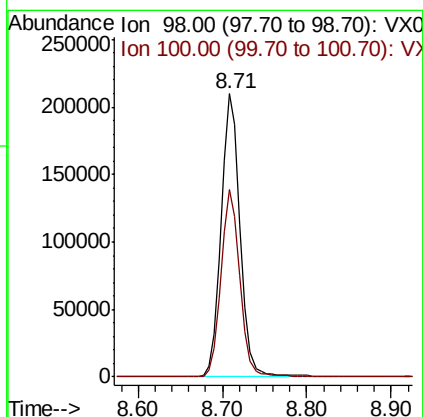
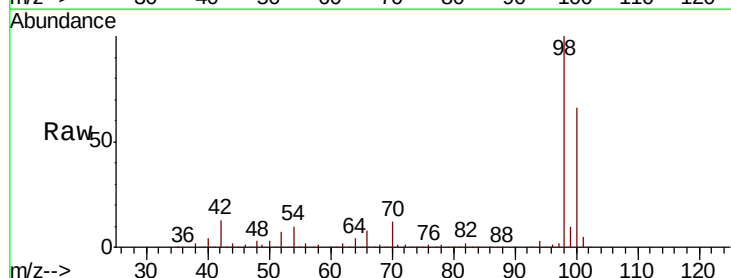
Instrument :  
MSVOA\_X  
ClientSampled :  
T11-C3-(4)

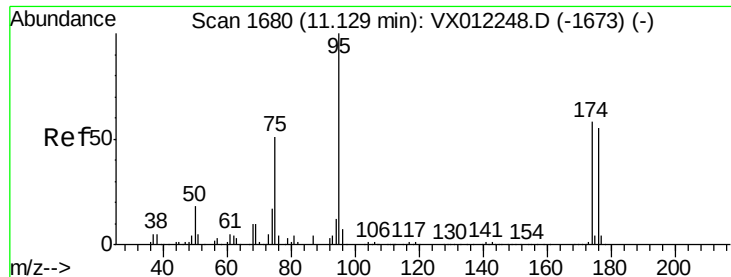
Tgt Ion: 88 Resp: 59  
Ion Ratio Lower Upper  
88 100  
43 269.5 31.0 46.4#  
58 216.9 61.5 92.3#



#50  
Toluene-d8  
Concen: 52.599 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. -0.00 min  
Lab File: VX012308.D  
Acq: 11 Sep 2019 17:58

Tgt Ion: 98 Resp: 327849  
Ion Ratio Lower Upper  
98 100  
100 65.9 54.1 81.1

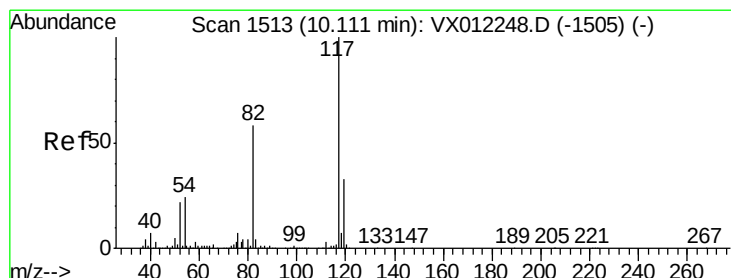
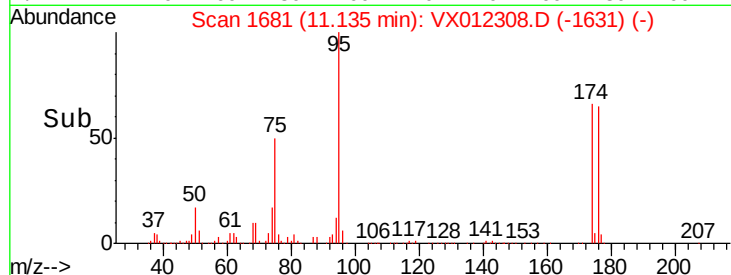
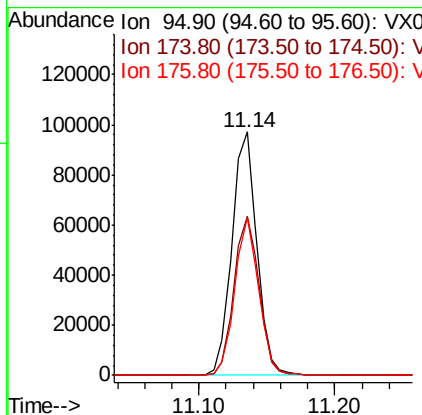
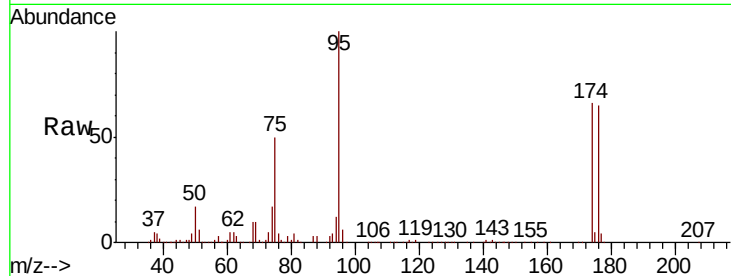




#62  
4-Bromofluorobenzene  
Concen: 42.986 ug/l  
RT: 11.14 min Scan# 1681  
Delta R.T. 0.01 min  
Lab File: VX012308.D  
Acq: 11 Sep 2019 17:58

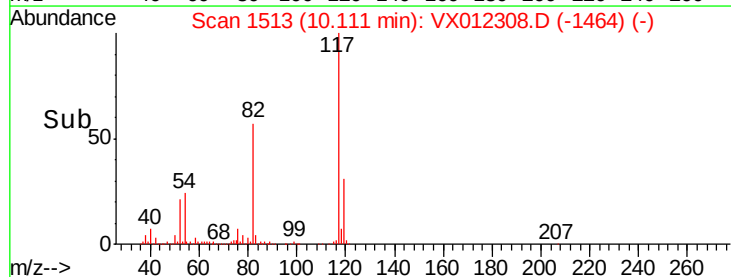
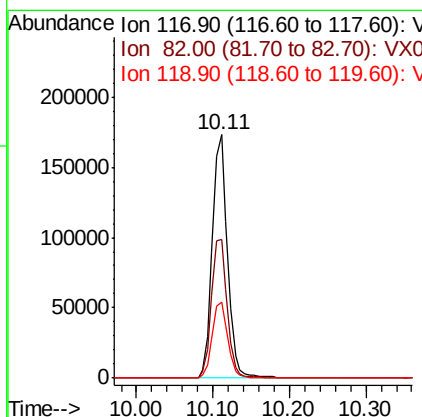
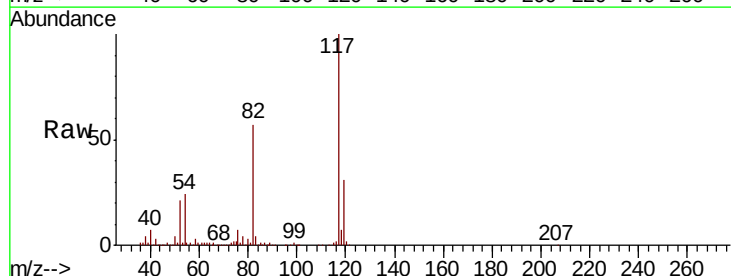
Instrument :  
MSVOA\_X  
ClientSampleId :  
T11-C3-(4)

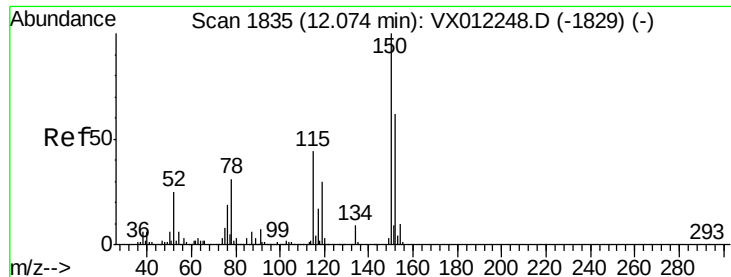
Tgt Ion: 95 Resp: 124215  
Ion Ratio Lower Upper  
95 100  
174 66.1 0.0 127.0  
176 62.6 0.0 125.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. -0.00 min  
Lab File: VX012308.D  
Acq: 11 Sep 2019 17:58

Tgt Ion: 117 Resp: 239461  
Ion Ratio Lower Upper  
117 100  
82 56.8 46.4 69.6  
119 31.3 26.6 39.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. -0.00 min

Lab File: VX012308.D

Acq: 11 Sep 2019 17:58

Instrument :

MSVOA\_X

ClientSampleId :

T11-C3-(4)

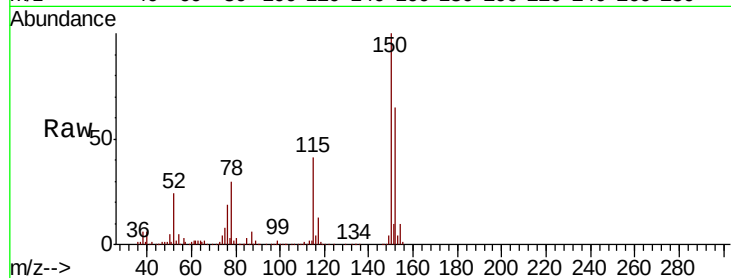
Tgt Ion:152 Resp: 101675

Ion Ratio Lower Upper

152 100

115 63.9 45.5 136.4

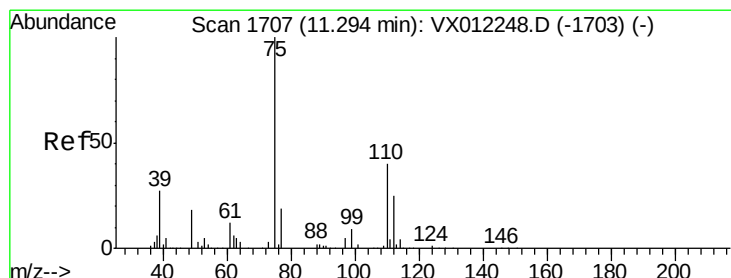
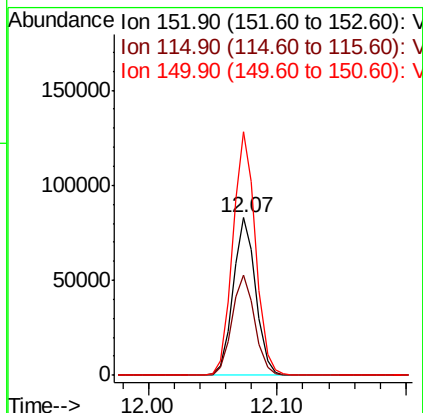
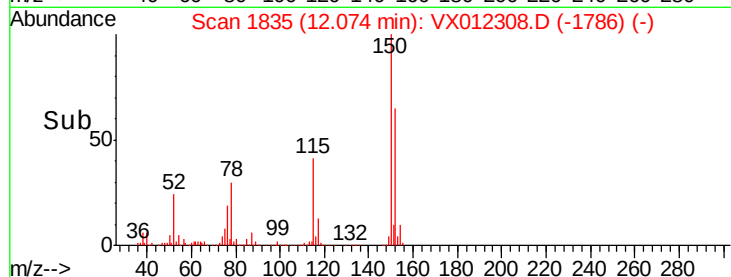
150 155.0 0.0 346.4



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: 49.429 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.16 min

Lab File: VX012308.D

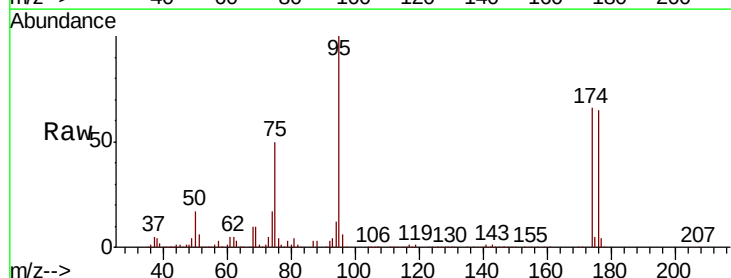
Acq: 11 Sep 2019 17:58

Tgt Ion: 75 Resp: 64563

Ion Ratio Lower Upper

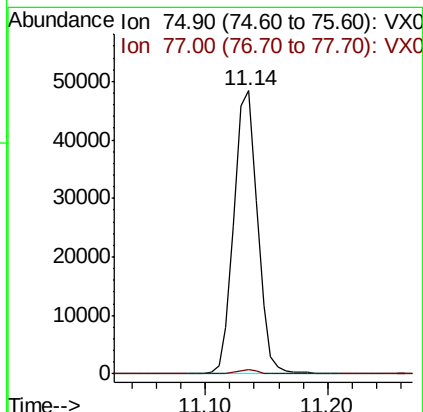
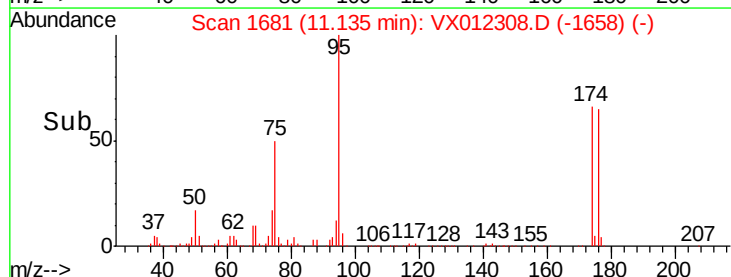
75 100

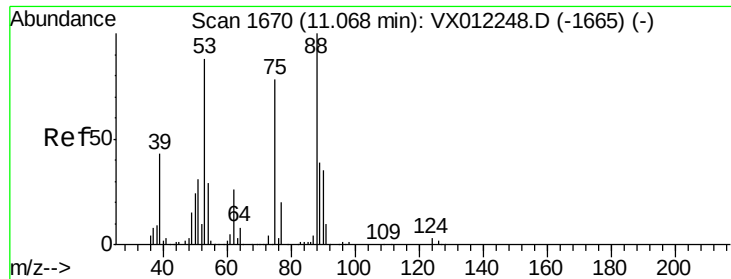
77 1.4 19.7 59.0#



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: 148.102 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. 0.07 min  
 Lab File: VX012308.D  
 Acq: 11 Sep 2019 17:58

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 T11-C3-(4)

Tgt Ion: 75 Resp: 64563  
 Ion Ratio Lower Upper  
 75 100  
 53 0.2 88.1 132.1#  
 89 0.0 43.5 65.3#

