

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX051120\  
 Data File : VX016157.D  
 Acq On : 11 May 2020 18:20  
 Operator : JC/SP  
 Sample : PB128751TB  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB128751TB

Quant Time: May 12 07:00:45 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X050420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 06 06:43:32 2020  
 Response via : Initial Calibration

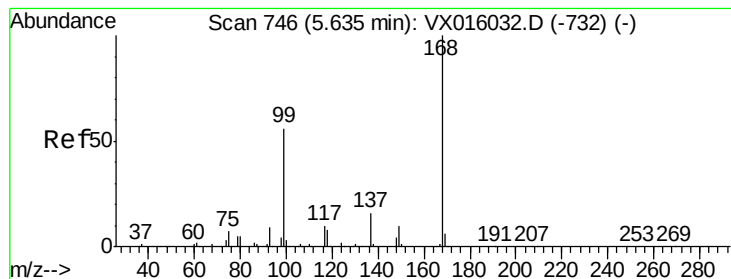
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.63  | 168  | 295508   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 493076   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 488041   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 251664   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.04  | 65   | 181758   | 46.74 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.48%  |          |
| 35) Dibromofluoromethane    | 5.47  | 113  | 145082   | 46.44 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.88%  |          |
| 50) Toluene-d8              | 8.70  | 98   | 607621   | 50.48 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.96% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 242301   | 52.93 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.86% |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 3.00  | 59   | 316      | 0.321     | ug/l # | 72     |
| 13) Acrolein                   | 2.28  | 56   | 155      | 0.252     | ug/l # | 14     |
| 16) Acetone                    | 2.42  | 43   | 5689     | 3.279     | ug/l # | 86     |
| 17) Carbon Disulfide           | 2.55  | 76   | 1290     | Below Cal |        | 97     |
| 20) Methylene Chloride         | 2.84  | 84   | 12232    | 3.420     | ug/l   | 93     |
| 25) 2-Butanone                 | 4.66  | 43   | 2243     | 0.802     | ug/l   | 92     |
| 29) Tetrahydrofuran            | 5.11  | 42   | 645      | 0.348     | ug/l # | 65     |
| 31) Cyclohexane                | 5.63  | 56   | 5561     | 1.029     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 22706    | 4.678     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.63  | 117  | 28185    | 5.713     | ug/l # | 13     |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 2418     | 0.440     | ug/l   | 98     |
| 75) 1,1,2,2-Tetrachloroethane  | 11.12 | 83   | 214      | 2.112     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 121880   | 21.342    | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 121880   | 50.859    | ug/l # | 13     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.63 min Scan# 746

Delta R.T. -0.00 min

Lab File: VX016157.D

Acq: 11 May 2020 18:20

Instrument :

MSVOA\_X

ClientSampleId :

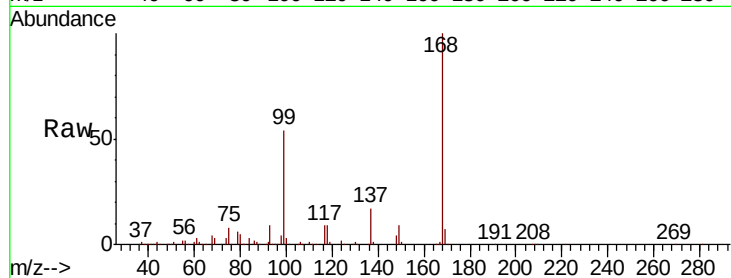
PB128751TB

Tot Ion:168 Resp: 295508

Ion Ratio Lower Upper

168 100

99 54.4 45.0 67.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.63

120000

100000

80000

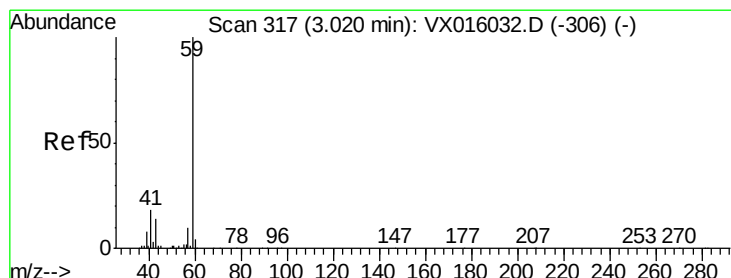
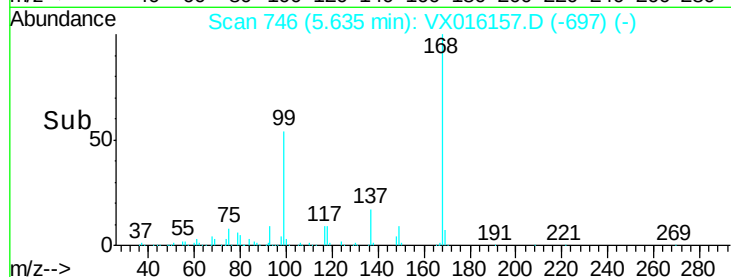
60000

40000

20000

0

Time-->



#11

Tert butyl alcohol

Concen: 0.321 ug/l

RT: 3.00 min Scan# 314

Delta R.T. -0.02 min

Lab File: VX016157.D

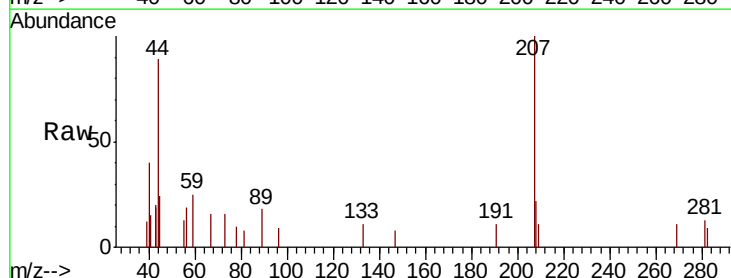
Acq: 11 May 2020 18:20

Tgt Ion: 59 Resp: 316

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

3.00

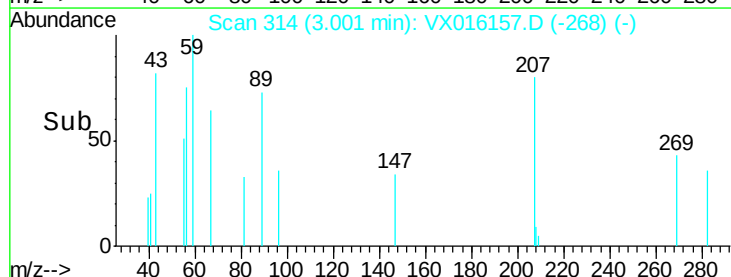
150

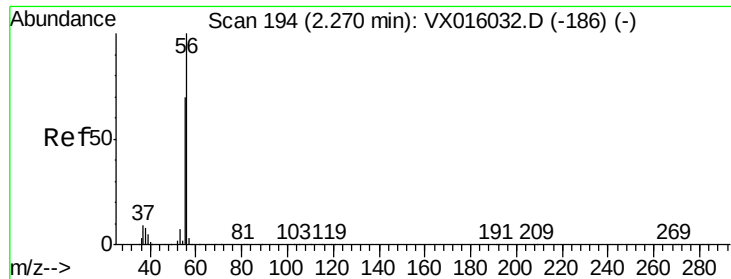
100

50

0

Time-->





#13

Acrolein

Concen: 0.252 ug/l

RT: 2.28 min Scan# 196

Delta R.T. 0.01 min

Lab File: VX016157.D

Acq: 11 May 2020 18:20

Instrument :

MSVOA\_X

ClientSampleId :

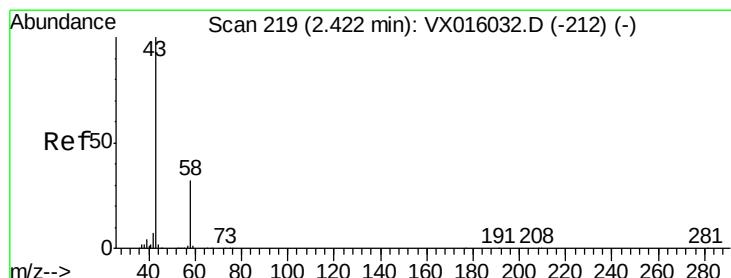
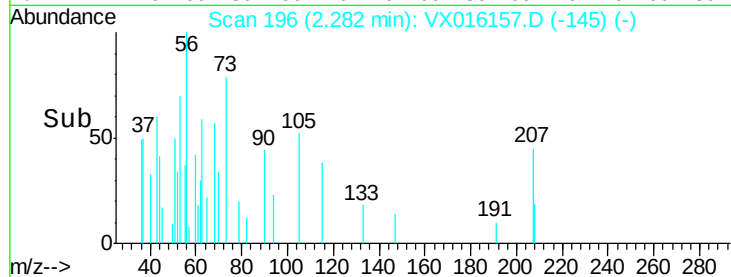
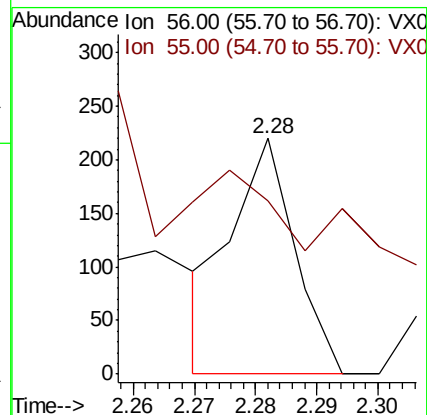
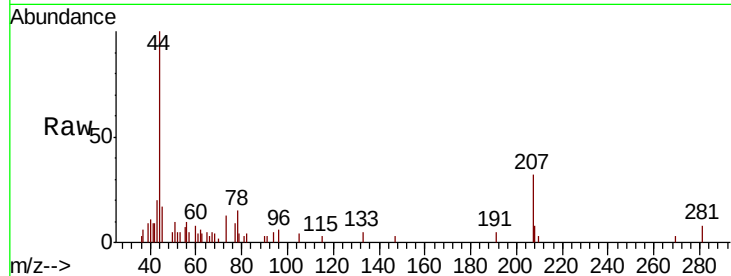
PB128751TB

Tot Ion: 56 Resp: 155

Ion Ratio Lower Upper

56 100

55 0.0 56.5 84.7#



#16

Acetone

Concen: 3.279 ug/l

RT: 2.42 min Scan# 219

Delta R.T. -0.00 min

Lab File: VX016157.D

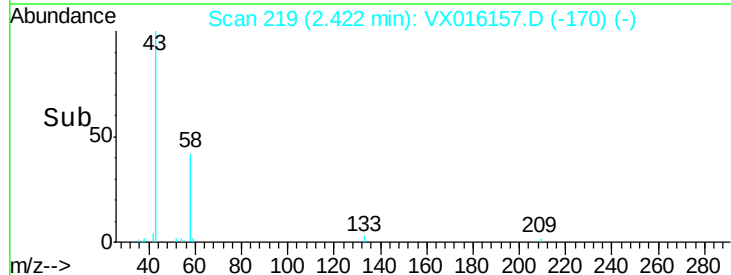
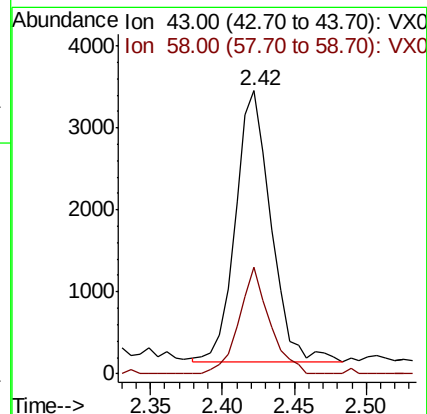
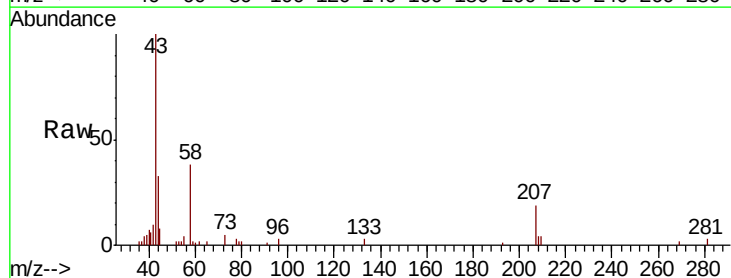
Acq: 11 May 2020 18:20

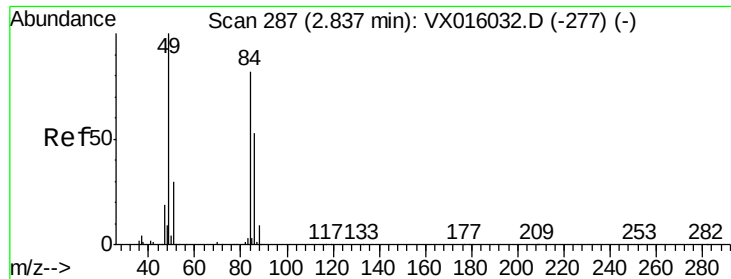
Tgt Ion: 43 Resp: 5689

Ion Ratio Lower Upper

43 100

58 39.3 25.4 38.0#

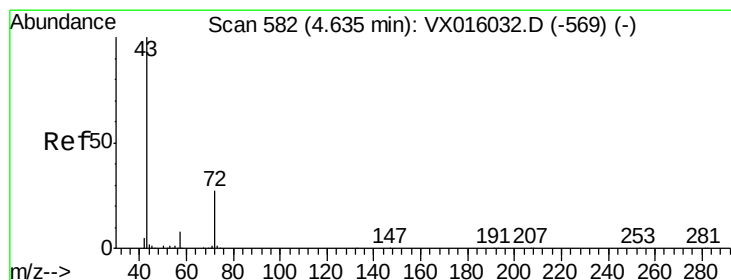
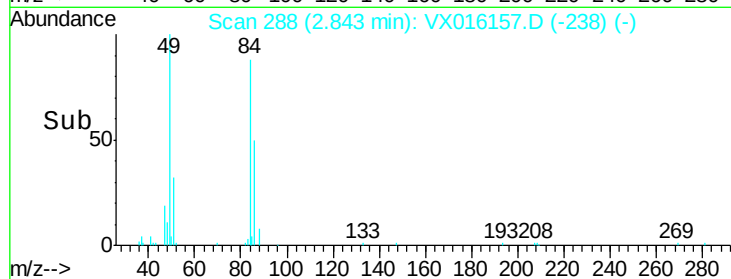
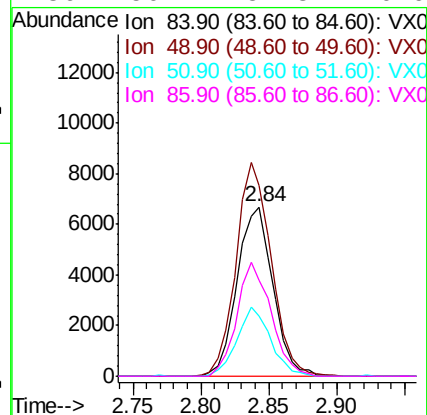
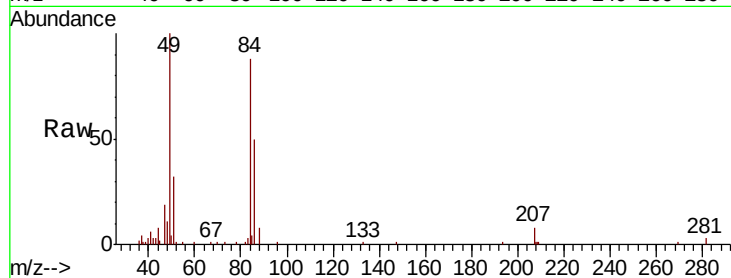




#20  
Methylene Chloride  
Concen: 3.420 ug/l  
RT: 2.84 min Scan# 288  
Delta R.T. 0.01 min  
Lab File: VX016157.D  
Acq: 11 May 2020 18:20

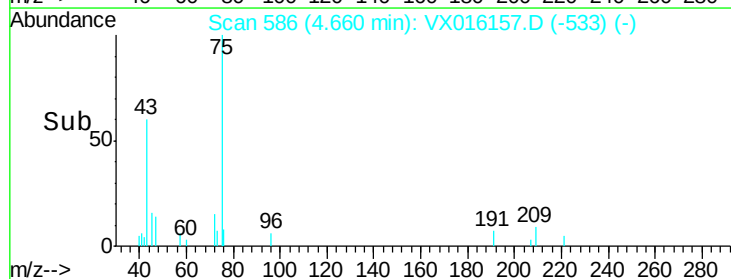
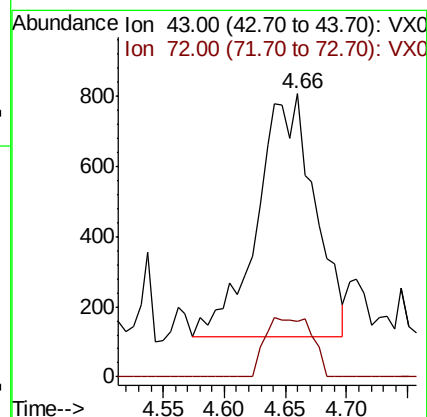
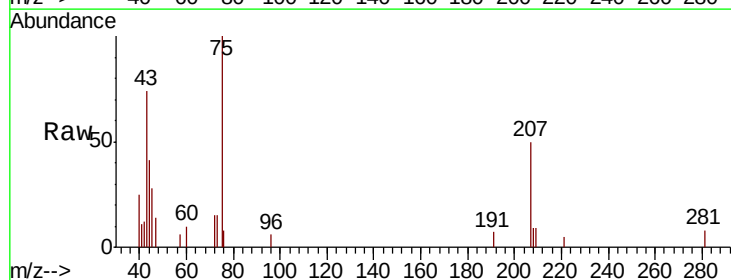
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB128751TB

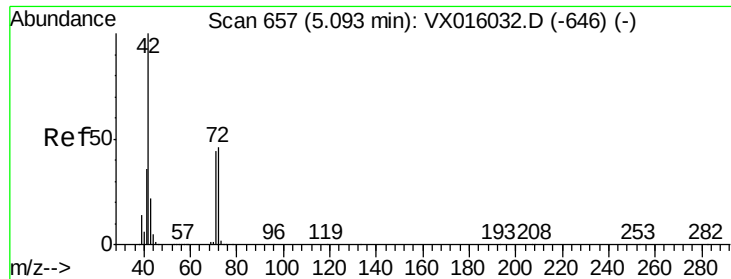
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 12232 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 113.1 | 97.3  | 145.9 |
| 51       | 35.7  | 29.3  | 43.9  |
| 86       | 56.7  | 51.3  | 76.9  |



#25  
2-Butanone  
Concen: 0.802 ug/l  
RT: 4.66 min Scan# 586  
Delta R.T. 0.02 min  
Lab File: VX016157.D  
Acq: 11 May 2020 18:20

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 2243  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 23.0  | 21.8  | 32.8  |





#29

Tetrahydrofuran

Concen: 0.348 ug/l

RT: 5.11 min Scan# 660

Delta R.T. 0.02 min

Lab File: VX016157.D

Acq: 11 May 2020 18:20

Instrument :

MSVOA\_X

ClientSampled :

PB128751TB

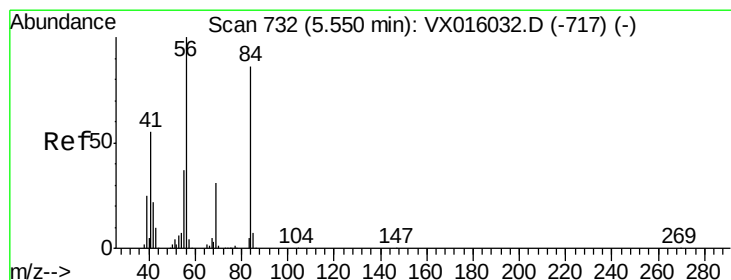
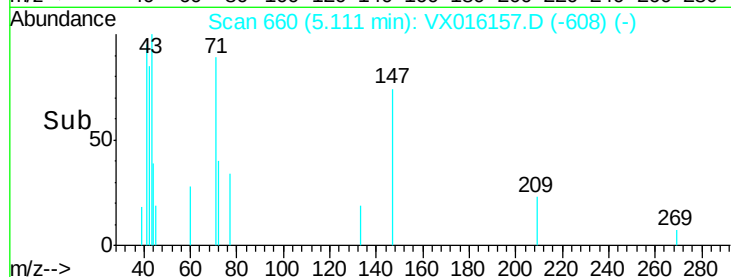
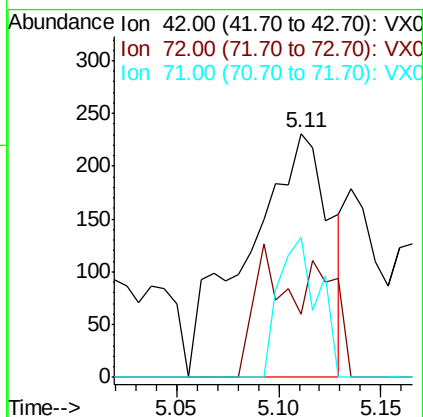
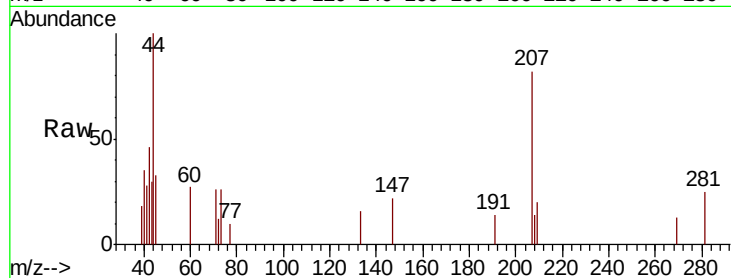
Tot Ion: 42 Resp: 645

Ion Ratio Lower Upper

42 100

72 16.7 37.1 55.7#

71 27.8 34.5 51.7#



#31

Cyclohexane

Concen: 1.029 ug/l

RT: 5.63 min Scan# 745

Delta R.T. 0.08 min

Lab File: VX016157.D

Acq: 11 May 2020 18:20

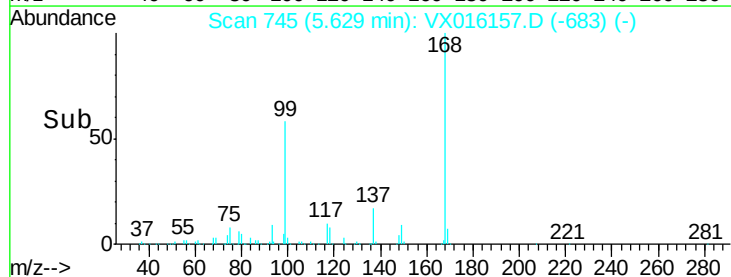
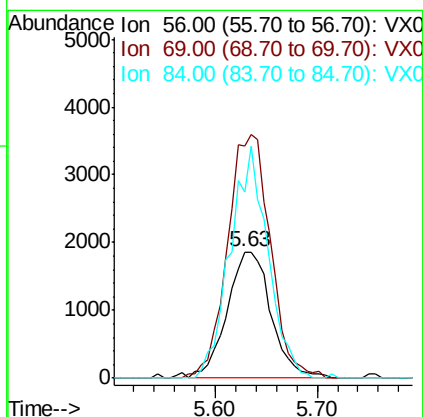
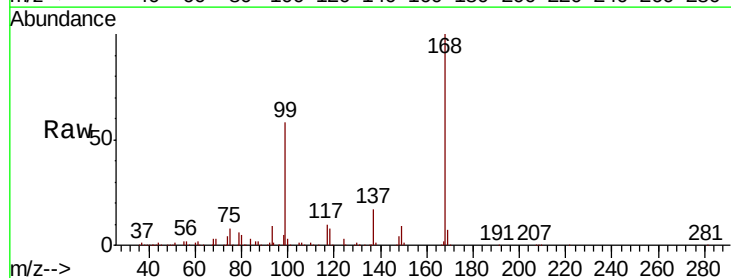
Tgt Ion: 56 Resp: 5561

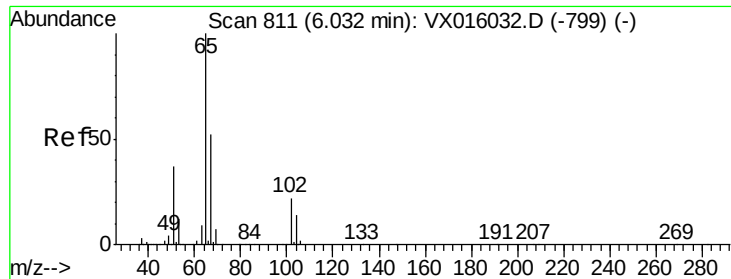
Ion Ratio Lower Upper

56 100

69 184.5 25.0 37.6#

84 147.5 69.0 103.6#

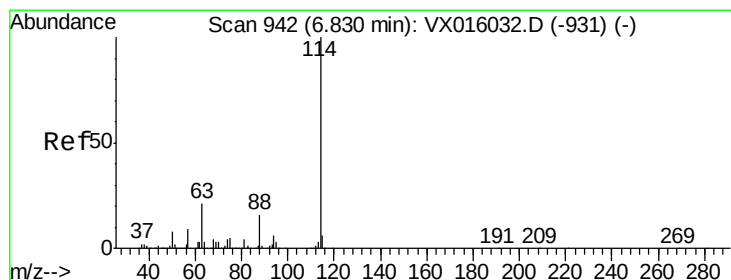
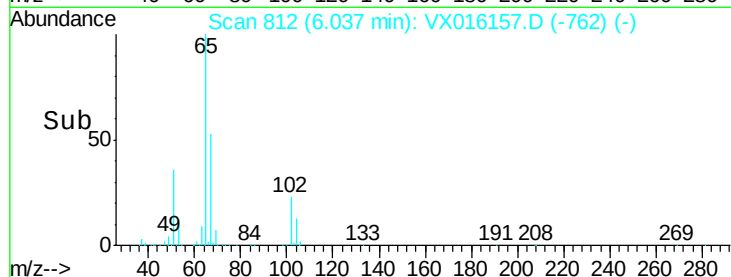
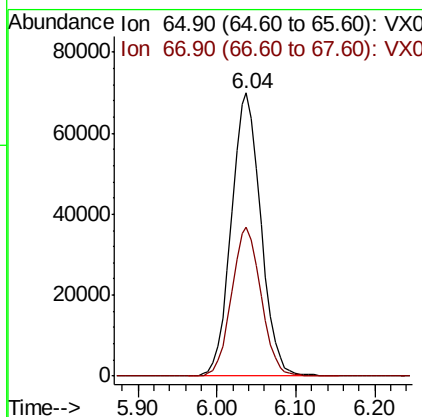
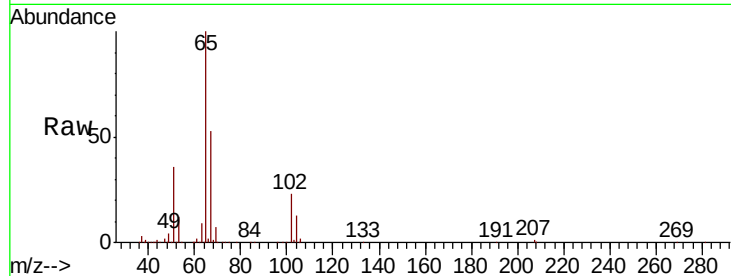




#33  
 1,2-Dichloroethane-d4  
 Concen: 46.741 ug/l  
 RT: 6.04 min Scan# 812  
 Delta R.T. 0.01 min  
 Lab File: VX016157.D  
 Acq: 11 May 2020 18:20

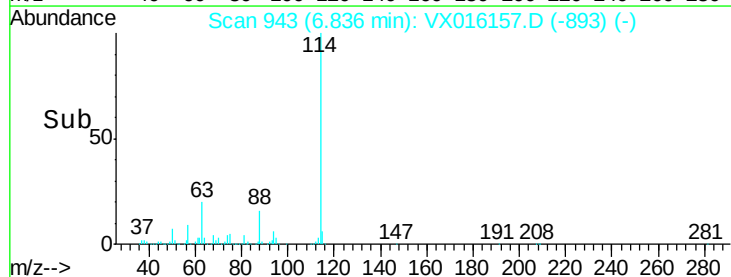
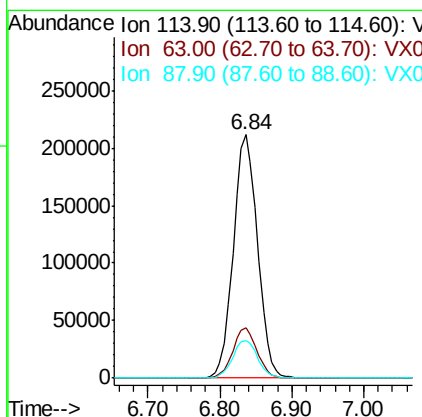
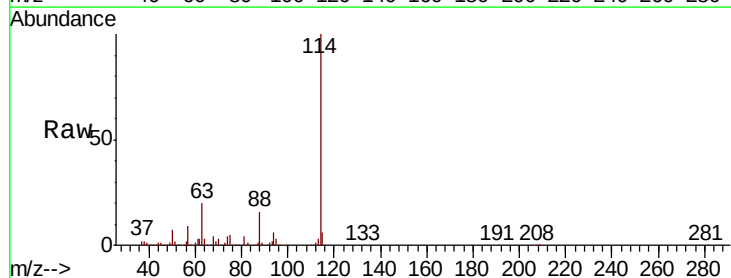
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB128751TB

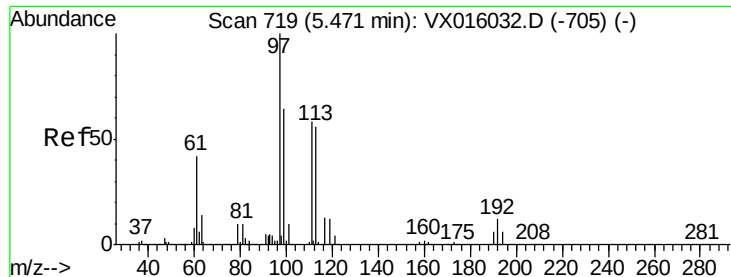
Tot Ion: 65 Resp: 181758  
 Ion Ratio Lower Upper  
 65 100  
 67 52.6 0.0 104.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.84 min Scan# 943  
 Delta R.T. 0.01 min  
 Lab File: VX016157.D  
 Acq: 11 May 2020 18:20

Tgt Ion: 114 Resp: 493076  
 Ion Ratio Lower Upper  
 114 100  
 63 20.4 0.0 42.8  
 88 15.6 0.0 31.4

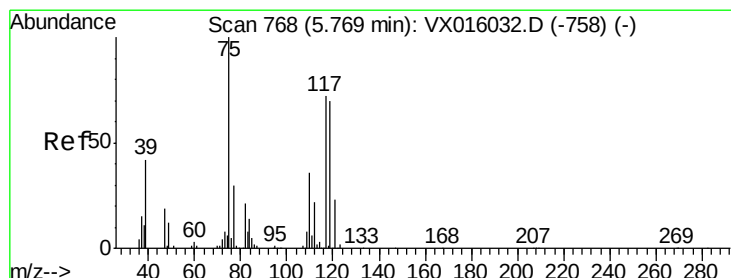
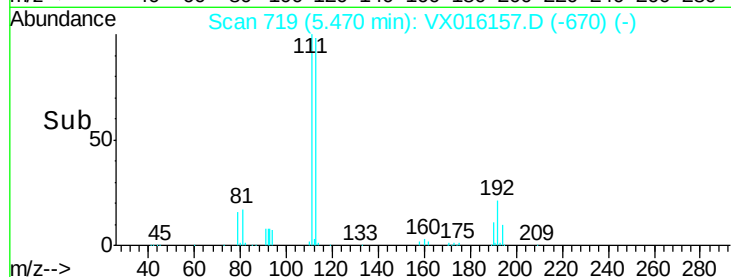
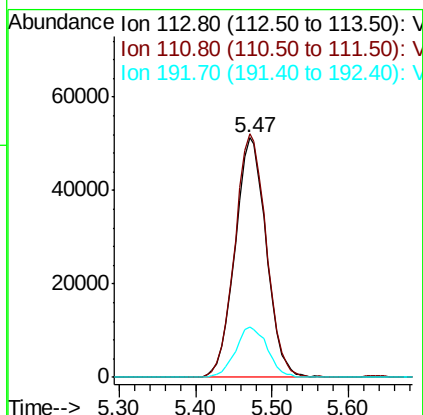
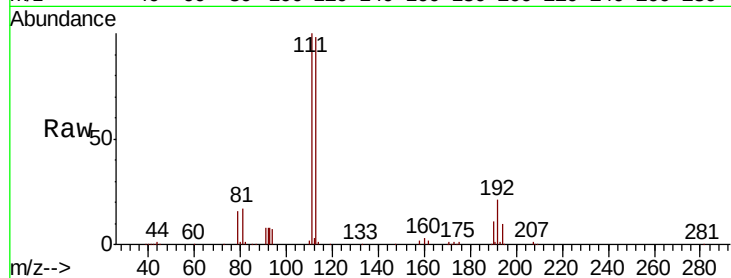




#35  
Dibromofluoromethane  
Concen: 46.443 ug/l  
RT: 5.47 min Scan# 719  
Delta R.T. -0.00 min  
Lab File: VX016157.D  
Acq: 11 May 2020 18:20

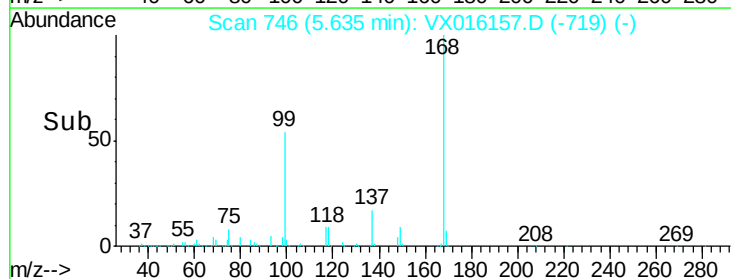
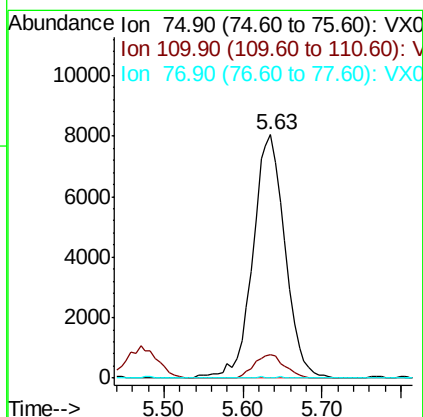
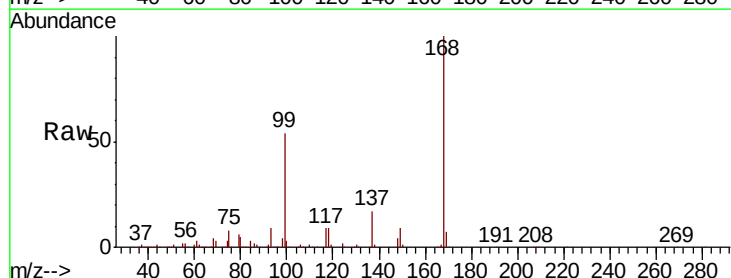
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB128751TB

Tot Ion:113 Resp: 145082  
Ion Ratio Lower Upper  
113 100  
111 102.4 81.6 122.4  
192 21.6 17.0 25.4

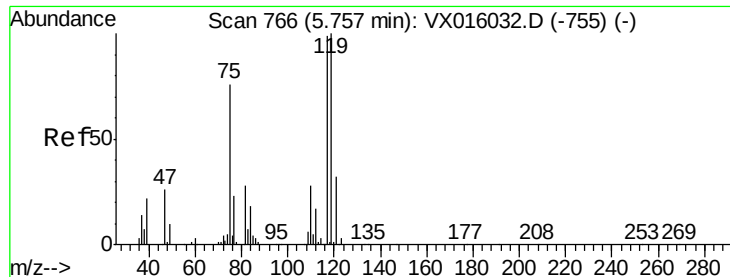


#36  
1,1-Dichloropropene  
Concen: 4.678 ug/l  
RT: 5.63 min Scan# 746  
Delta R.T. -0.13 min  
Lab File: VX016157.D  
Acq: 11 May 2020 18:20

Tgt Ion: 75 Resp: 22706  
Ion Ratio Lower Upper  
75 100  
110 9.0 18.1 54.1#  
77 0.1 25.0 37.6#







#38

Carbon Tetrachloride

Concen: 5.713 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.13 min

Lab File: VX016157.D

Acq: 11 May 2020 18:20

Instrument :

MSVOA\_X

ClientSampleId :

PB128751TB

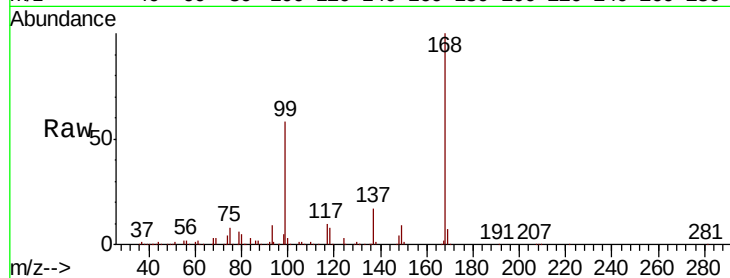
Tot Ion:117 Resp: 28185

Ion Ratio Lower Upper

117 100

119 4.3 80.3 120.5#

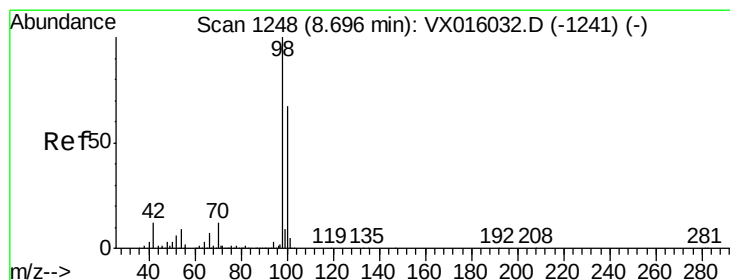
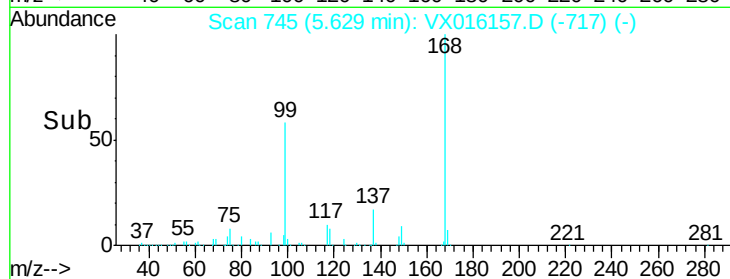
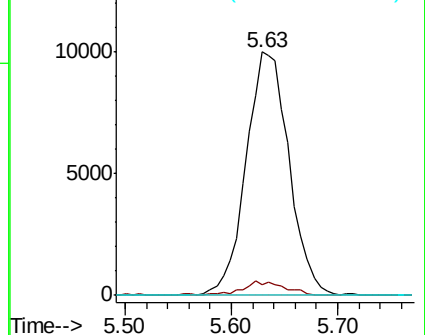
121 0.0 25.7 38.5#



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: 50.482 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. -0.00 min

Lab File: VX016157.D

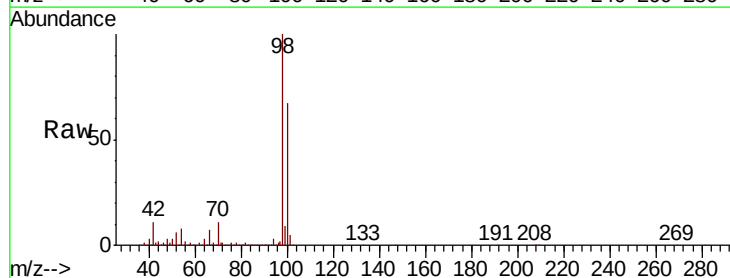
Acq: 11 May 2020 18:20

Tgt Ion: 98 Resp: 607621

Ion Ratio Lower Upper

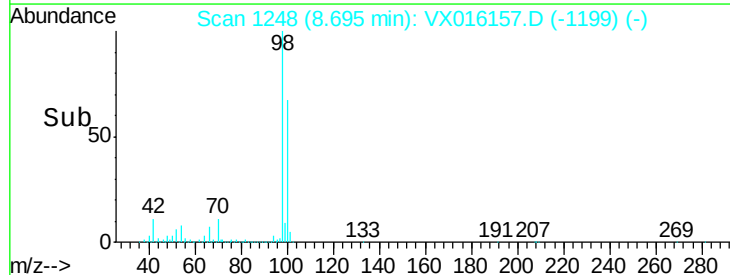
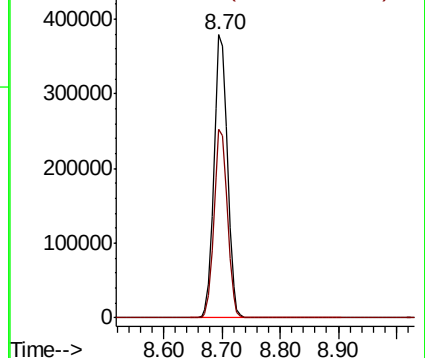
98 100

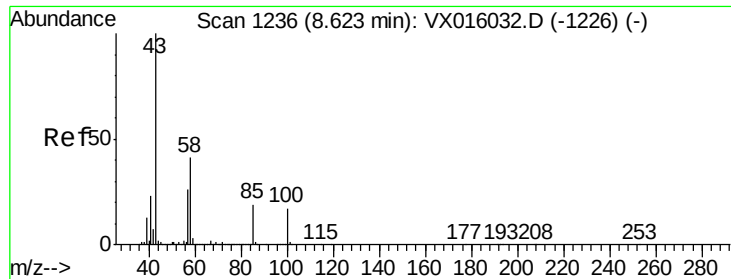
100 66.4 53.7 80.5



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

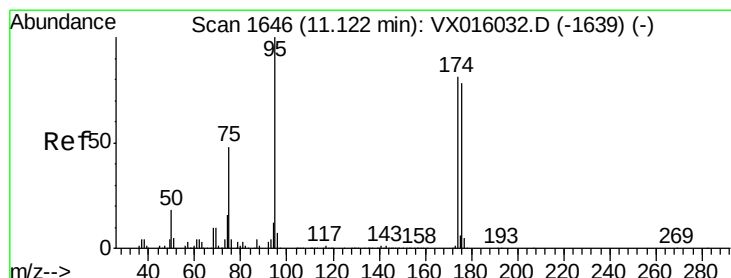
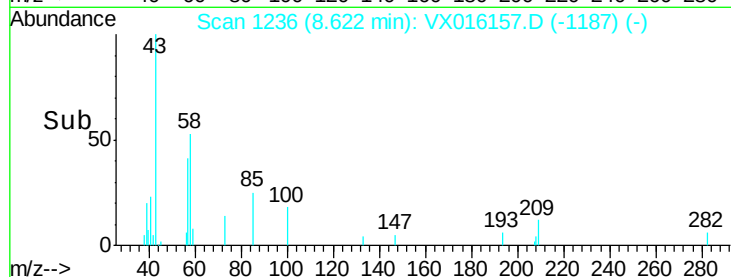
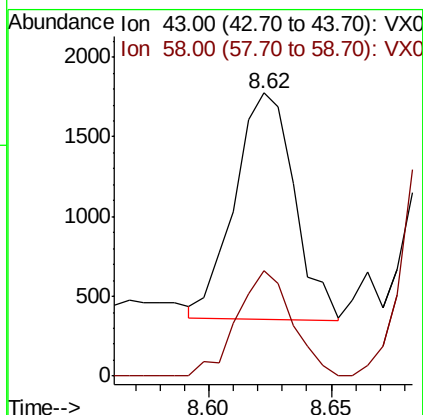
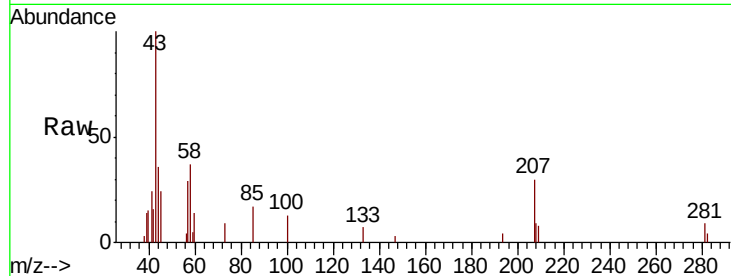




#51  
 4-Methyl-2-Pentanone  
 Concen: 0.440 ug/l  
 RT: 8.62 min Scan# 1236  
 Delta R.T. -0.00 min  
 Lab File: VX016157.D  
 Acq: 11 May 2020 18:20

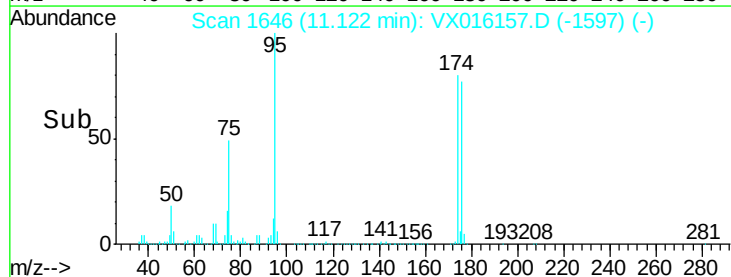
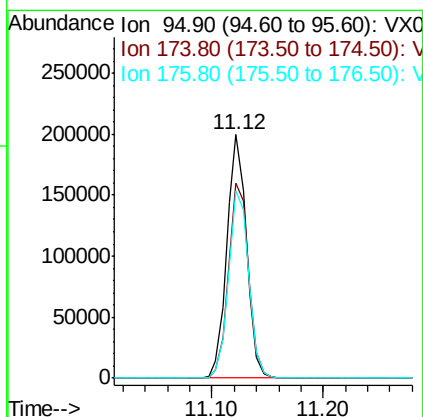
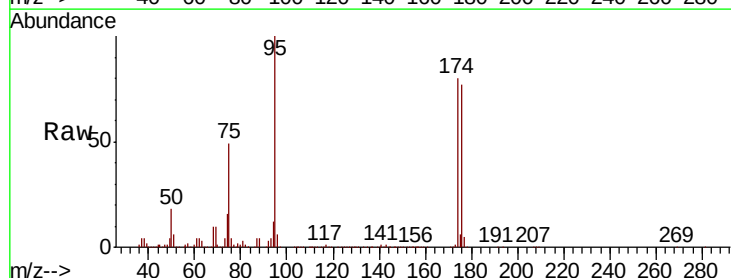
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB128751TB

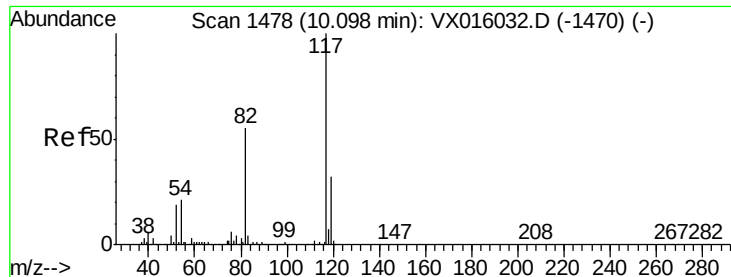
Tot Ion: 43 Resp: 2418  
 Ion Ratio Lower Upper  
 43 100  
 58 42.8 33.0 49.4



#62  
 4-Bromofluorobenzene  
 Concen: 52.926 ug/l  
 RT: 11.12 min Scan# 1646  
 Delta R.T. -0.00 min  
 Lab File: VX016157.D  
 Acq: 11 May 2020 18:20

Tgt Ion: 95 Resp: 242301  
 Ion Ratio Lower Upper  
 95 100  
 174 82.3 0.0 159.4  
 176 79.1 0.0 157.6

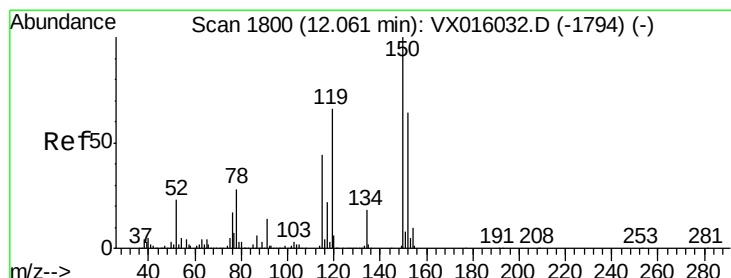
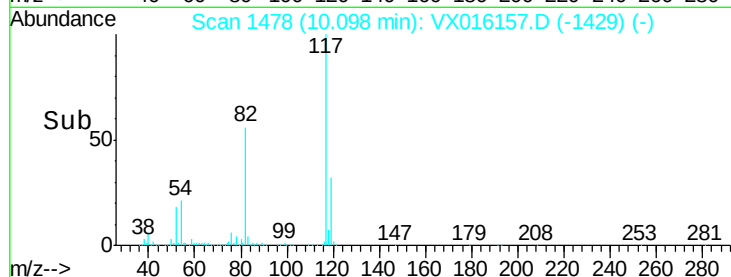
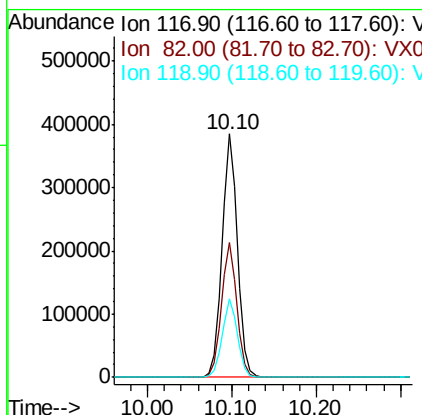
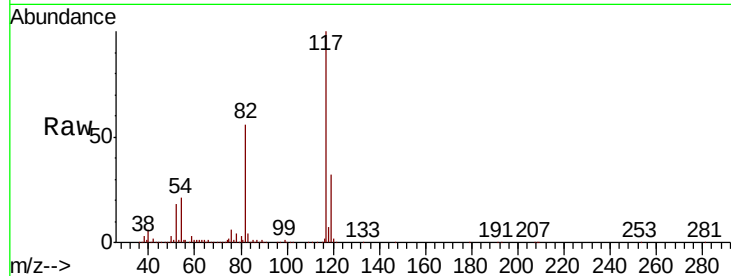




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.10 min Scan# 1478  
Delta R.T. -0.00 min  
Lab File: VX016157.D  
Acq: 11 May 2020 18:20

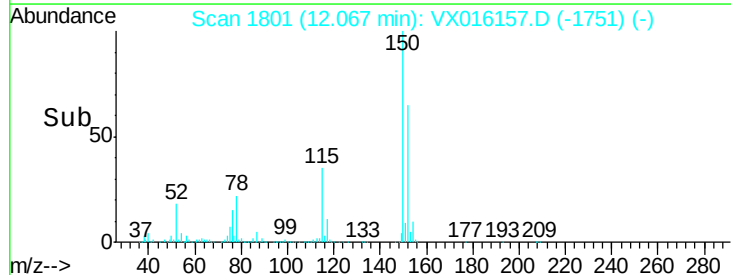
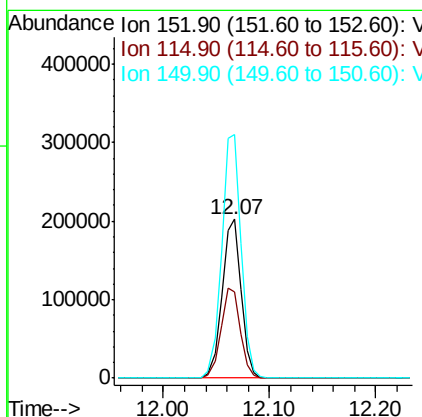
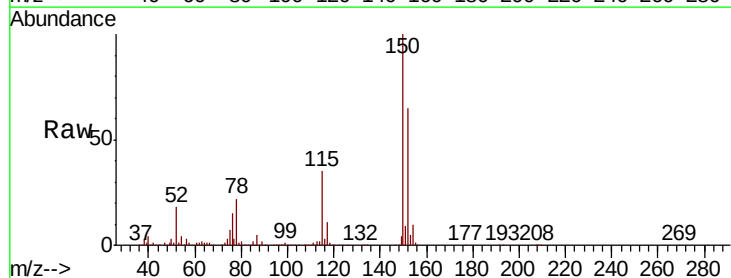
Instrument :  
MSVOA\_X  
ClientSampled :  
PB128751TB

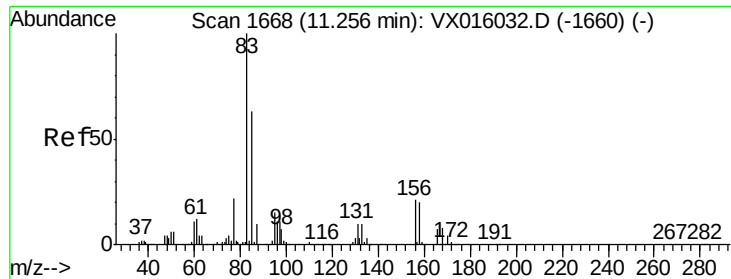
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 55.5  | 44.4  | 66.6  |
| 119     | 32.1  | 25.5  | 38.3  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1801  
Delta R.T. 0.01 min  
Lab File: VX016157.D  
Acq: 11 May 2020 18:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 57.6  | 41.3  | 124.1 |
| 150     | 156.6 | 0.0   | 352.2 |





#75

1,1,2,2-Tetrachloroethane

Concen: 2.112 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.13 min

Lab File: VX016157.D

Acq: 11 May 2020 18:20

Instrument :

MSVOA\_X

ClientSampleId :

PB128751TB

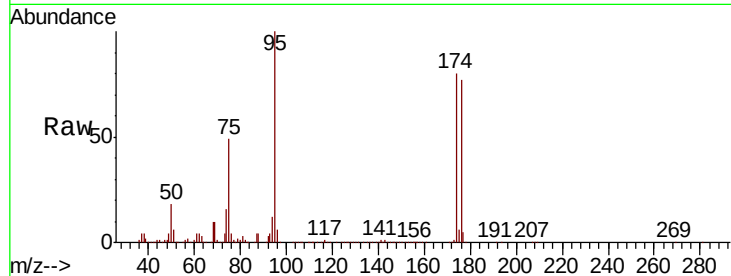
Tot Ion: 83 Resp: 214

Ion Ratio Lower Upper

83 100

131 150.5 5.1 15.4#

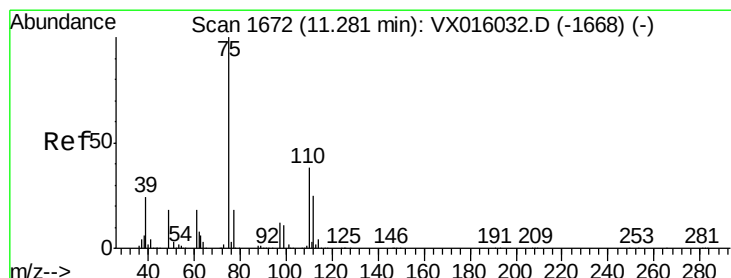
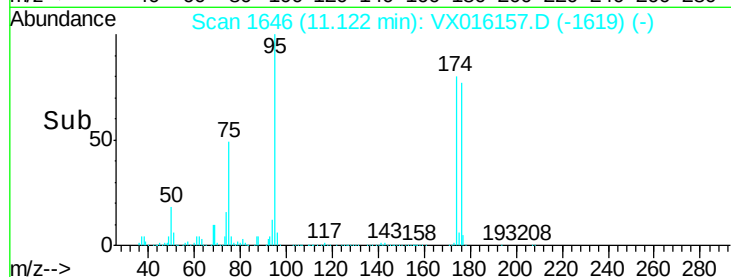
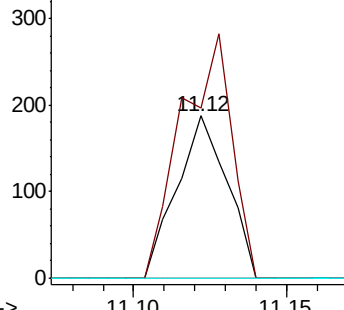
85 0.0 32.0 96.0#



Abundance Ion 82.90 (82.60 to 83.60): VX0

Ion 130.80 (130.50 to 131.50): V

Ion 84.90 (84.60 to 85.60): VX0



#76

1,2,3-Trichloropropane

Concen: 21.342 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX016157.D

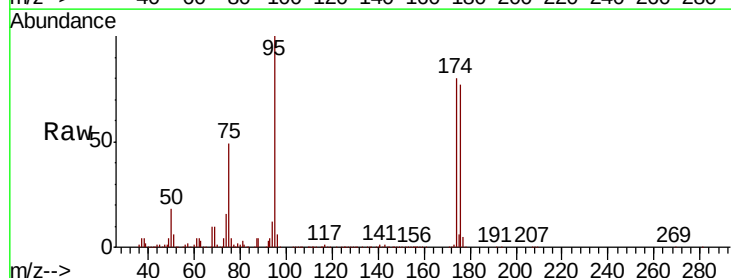
Acq: 11 May 2020 18:20

Tgt Ion: 75 Resp: 121880

Ion Ratio Lower Upper

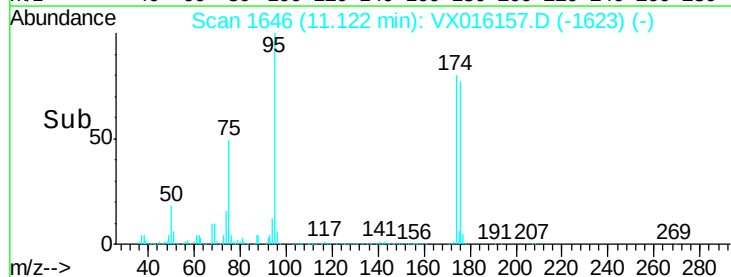
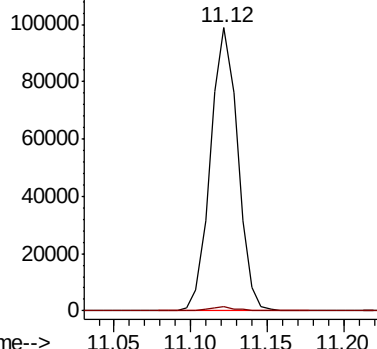
75 100

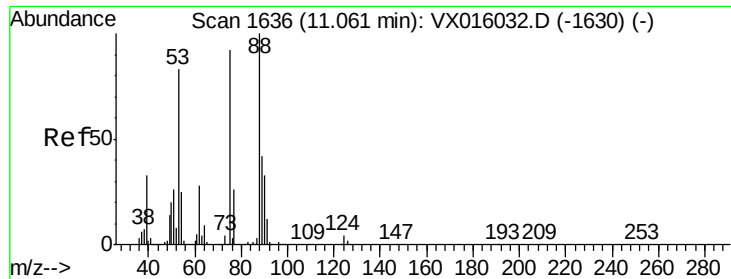
77 1.5 21.2 63.6#



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: 50.859 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.06 min

Lab File: VX016157.D

Acq: 11 May 2020 18:20

Instrument :

MSVOA\_X

ClientSampleId :

PB128751TB

Tot Ion: 75 Resp: 121880

Ion Ratio Lower Upper

75 100

53 0.1 73.1 109.7#

89 0.0 36.7 55.1#

