

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX071720\  
 Data File : VX0717412.D  
 Acq On : 17 Jul 2020 12:00  
 Operator : JC/SP  
 Sample : VX0717WBL01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jul 18 06:55:18 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071320W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 14 02:59:51 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.64  | 168  | 232392   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 416986   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 446420   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 230236   | 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   | 172969   | 59.30 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 118.60% |          |
| 35) Dibromofluoromethane    | 5.47  | 113  | 149502   | 53.22 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 106.44% |          |
| 50) Toluene-d8              | 8.70  | 98   | 524344   | 51.75 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 103.50% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 207964   | 51.67 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 103.34% |          |

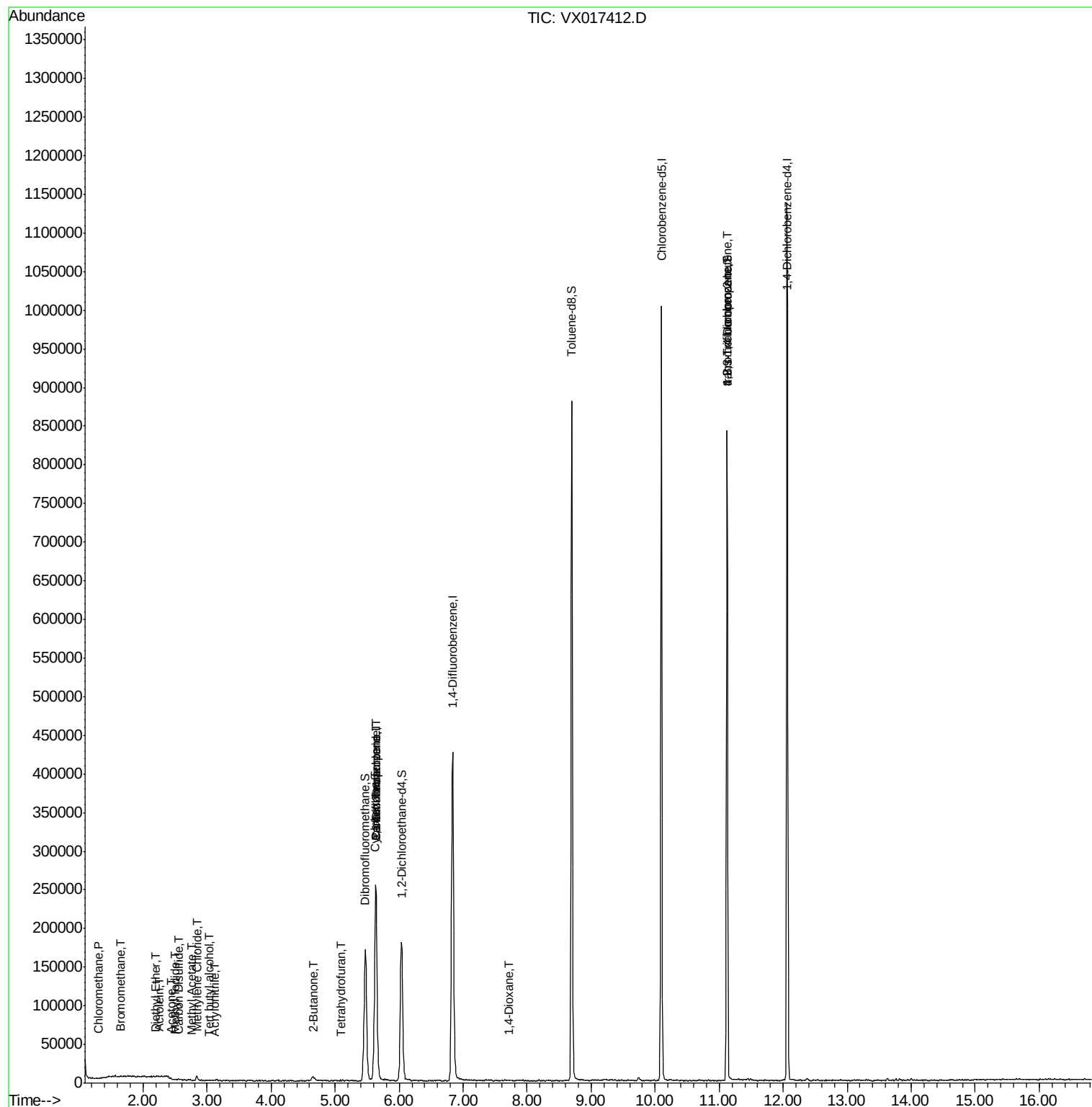
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 3) Chloromethane               | 1.31  | 50   | 693      | 0.313  | ug/l # | 23     |
| 5) Bromomethane                | 1.64  | 94   | 689      | 0.483  | ug/l # | 21     |
| 8) Diethyl Ether               | 2.20  | 74   | 294      | 0.225  | ug/l   | 60     |
| 10) Methyl Iodide              | 2.50  | 142  | 353      | 2.494  | ug/l # | 76     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 231      | 0.470  | ug/l # | 36     |
| 13) Acrolein                   | 2.26  | 56   | 369      | 1.370  | ug/l # | 14     |
| 15) Acrylonitrile              | 3.12  | 53   | 403      | 0.338  | ug/l # | 66     |
| 16) Acetone                    | 2.43  | 43   | 1364     | 1.311  | ug/l   | 93     |
| 17) Carbon Disulfide           | 2.55  | 76   | 1761     | 0.285  | ug/l # | 89     |
| 18) Methyl Acetate             | 2.76  | 43   | 755      | 0.294  | ug/l # | 76     |
| 20) Methylene Chloride         | 2.84  | 84   | 2403     | 0.947  | ug/l # | 90     |
| 25) 2-Butanone                 | 4.66  | 43   | 1058     | 0.640  | ug/l # | 50     |
| 29) Tetrahydrofuran            | 5.09  | 42   | 675      | 0.631  | ug/l # | 31     |
| 31) Cyclohexane                | 5.62  | 56   | 5446     | 1.622  | ug/l # | 19     |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 19103    | 4.981  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.63  | 117  | 23726    | 5.283  | ug/l # | 17     |
| 49) 1,4-Dioxane                | 7.71  | 88   | 20       | 0.321  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 104482   | 24.559 | ug/l # | 37     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 104482   | 62.300 | ug/l # | 11     |

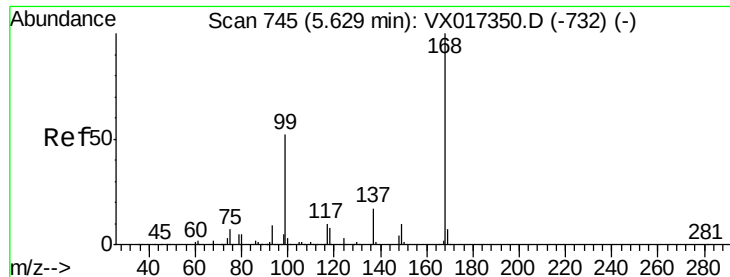
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX071720\  
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Sample : VX0717WBL01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampled :

Quant Time: Jul 18 06:55:18 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X071320W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 14 02:59:51 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.64 min Scan# 747

Delta R.T. 0.01 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

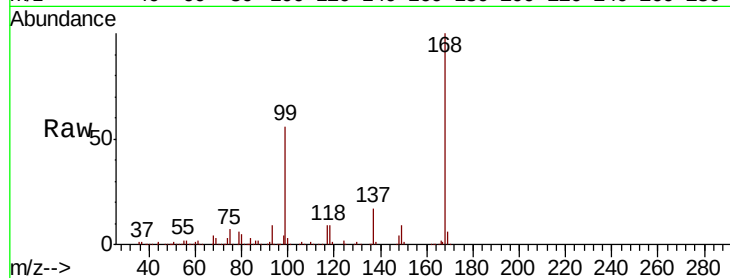
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:168 Resp: 232392

Ion Ratio Lower Upper

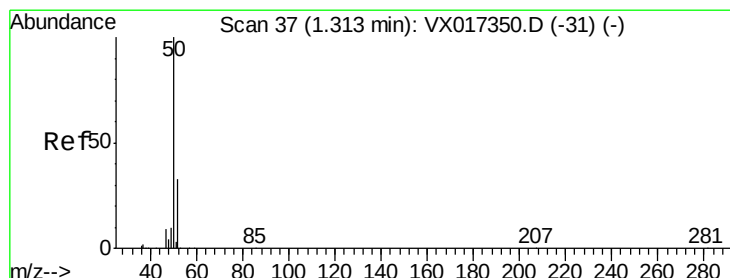
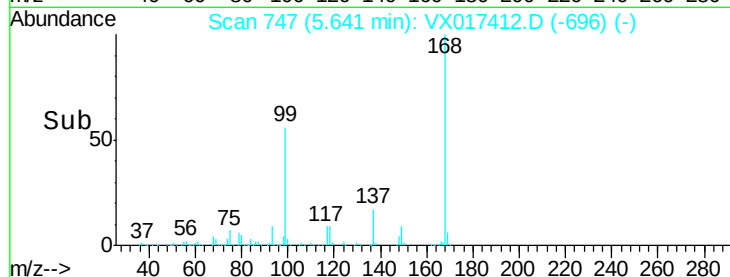
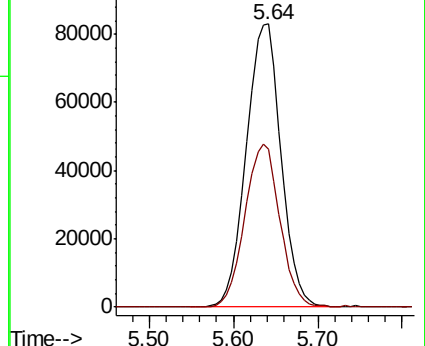
168 100

99 55.7 41.6 62.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: 0.313 ug/l

RT: 1.31 min Scan# 36

Delta R.T. -0.01 min

Lab File: VX017412.D

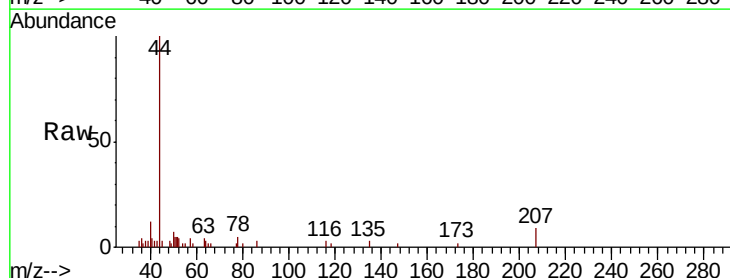
Acq: 17 Jul 2020 12:00

Tgt Ion: 50 Resp: 693

Ion Ratio Lower Upper

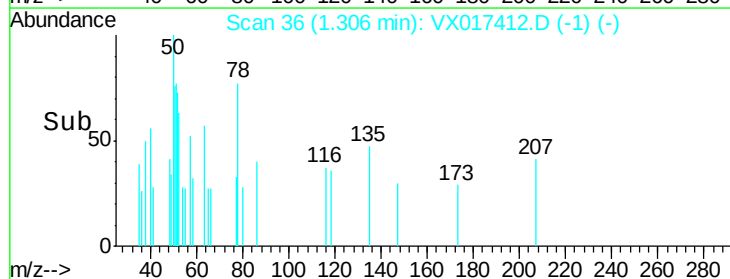
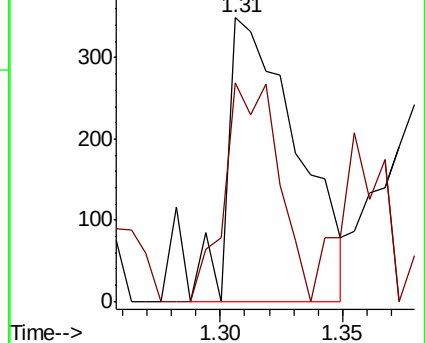
50 100

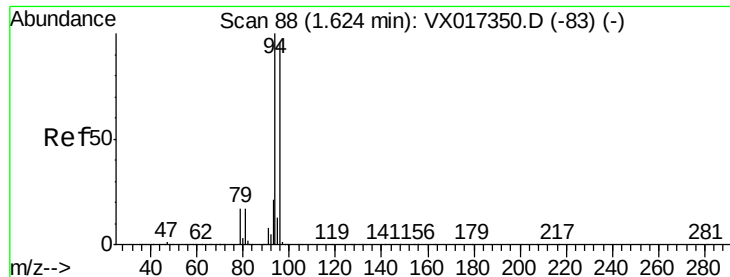
52 77.1 26.7 40.1#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: 0.483 ug/l

RT: 1.64 min Scan# 91

Delta R.T. 0.02 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

Instrument :

MSVOA\_X

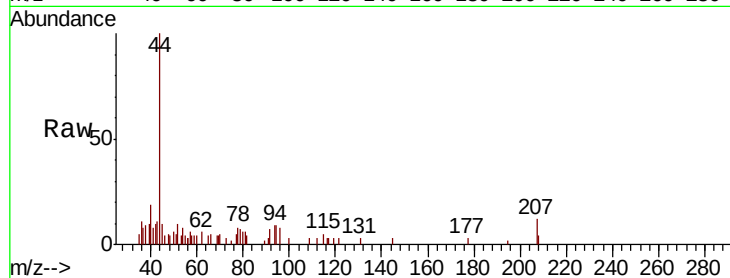
ClientSampled :

Tot Ion: 94 Resp: 689

Ion Ratio Lower Upper

94 100

96 18.4 76.6 115.0#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

400

300

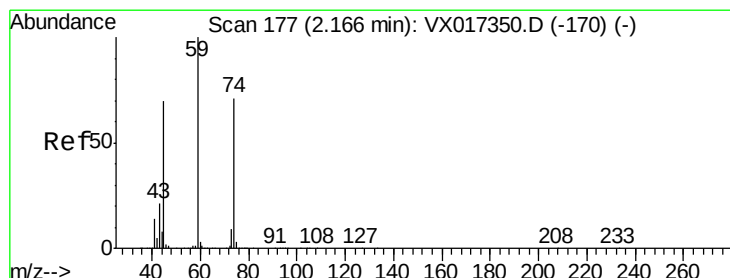
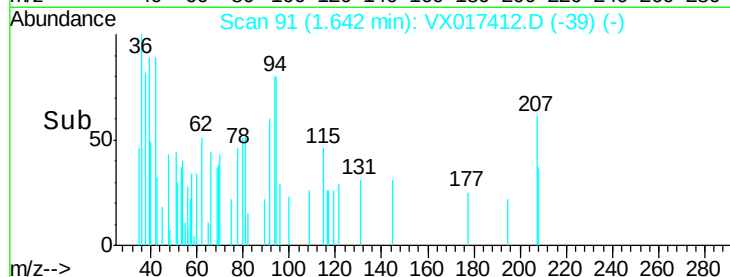
200

100

0

1.60 1.65 1.70

Time-->



#8

Diethyl Ether

Concen: 0.225 ug/l

RT: 2.20 min Scan# 182

Delta R.T. 0.03 min

Lab File: VX017412.D

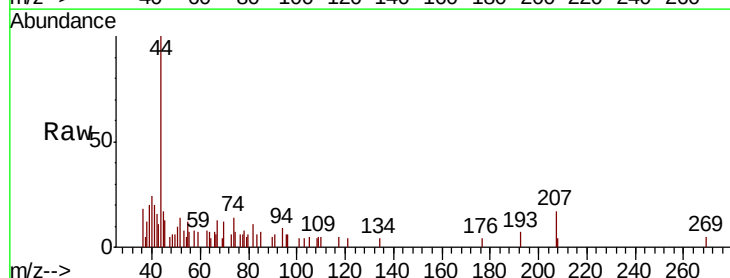
Acq: 17 Jul 2020 12:00

Tgt Ion: 74 Resp: 294

Ion Ratio Lower Upper

74 100

45 56.1 47.2 141.6



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0

2.20

400

300

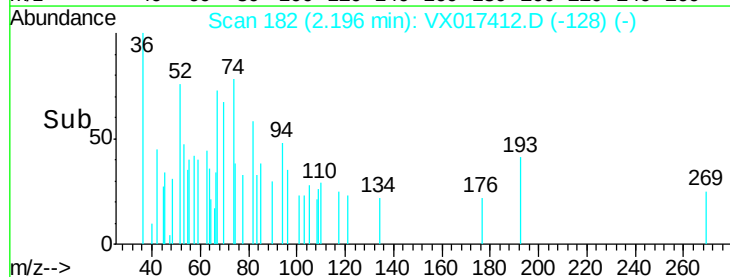
200

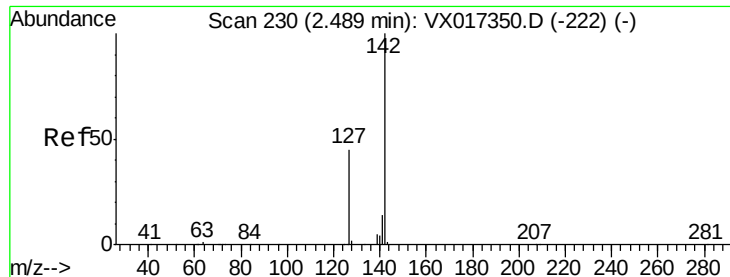
100

0

2.16 2.18 2.20 2.22

Time-->

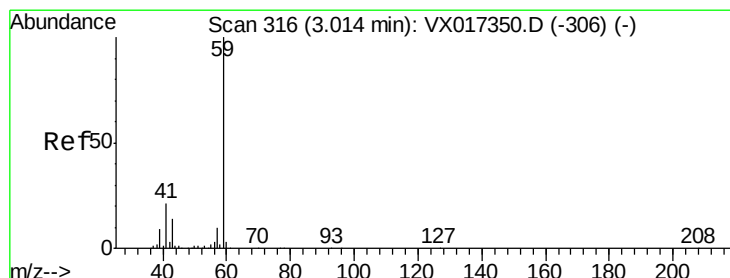
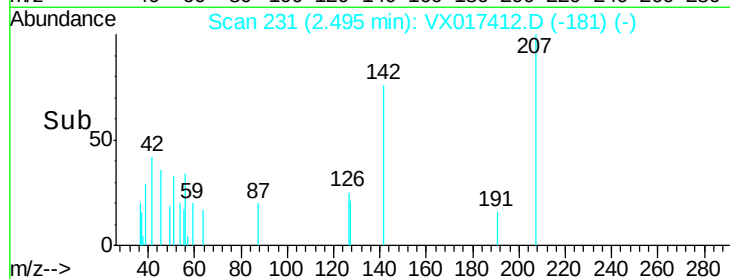
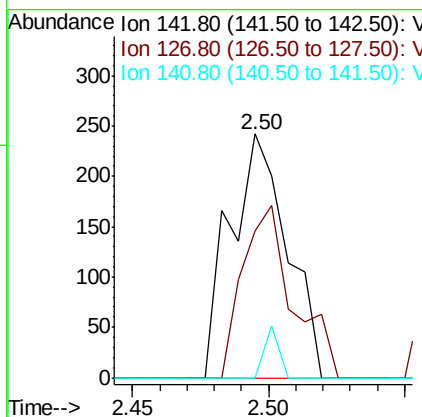
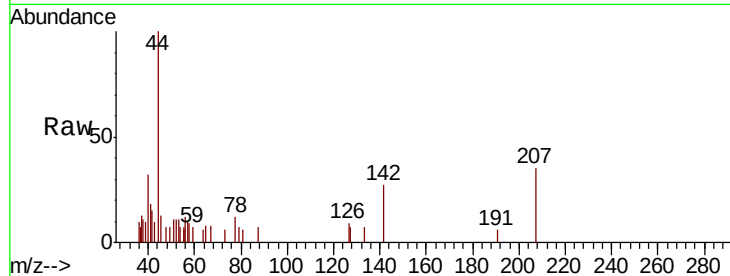




#10  
Methyl Iodide  
Concen: 2.494 ug/l  
RT: 2.50 min Scan# 231  
Delta R.T. 0.01 min  
Lab File: VX017412.D  
Acq: 17 Jul 2020 12:00

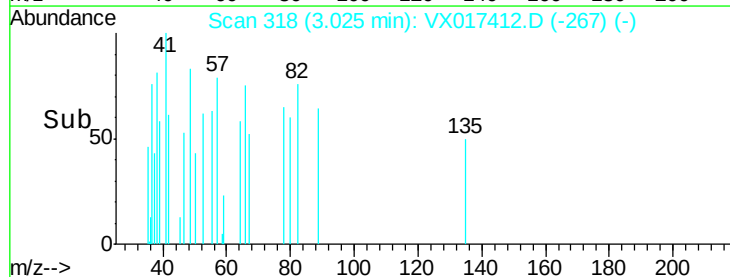
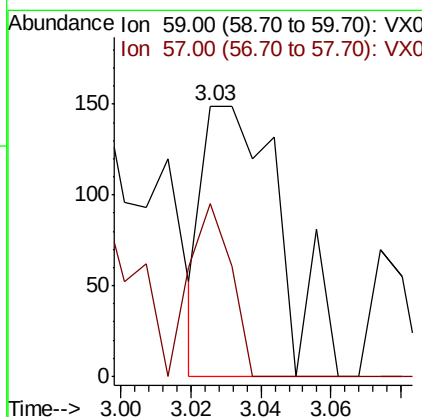
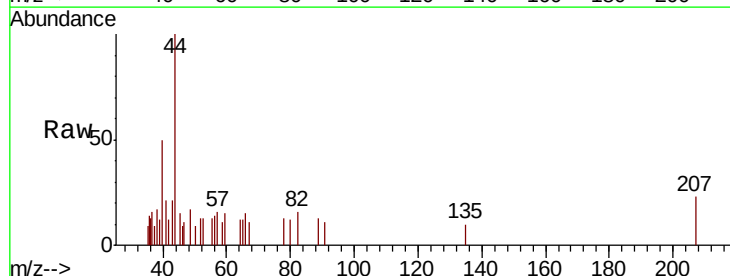
Instrument :  
MSVOA\_X  
ClientSampled :

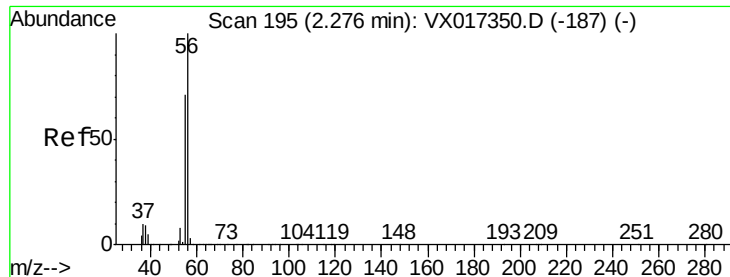
Tot Ion:142 Resp: 353  
Ion Ratio Lower Upper  
142 100  
127 62.3 36.8 55.2#  
141 5.4 11.4 17.0#



#11  
Tert butyl alcohol  
Concen: 0.470 ug/l  
RT: 3.03 min Scan# 318  
Delta R.T. 0.01 min  
Lab File: VX017412.D  
Acq: 17 Jul 2020 12:00

Tgt Ion: 59 Resp: 231  
Ion Ratio Lower Upper  
59 100  
57 34.2 8.3 12.5#





#13

Acrolein

Concen: 1.370 ug/l

RT: 2.26 min Scan# 192

Delta R.T. -0.02 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

Instrument :

MSVOA\_X

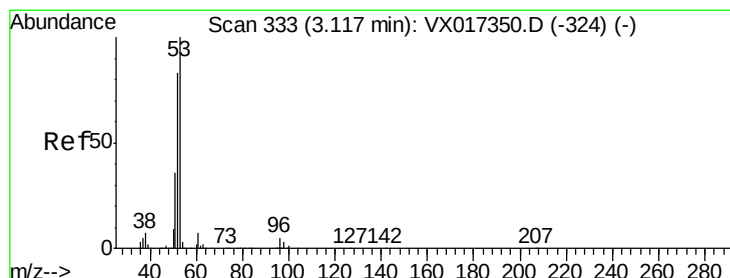
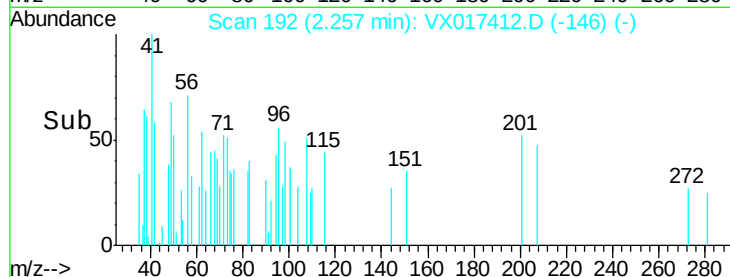
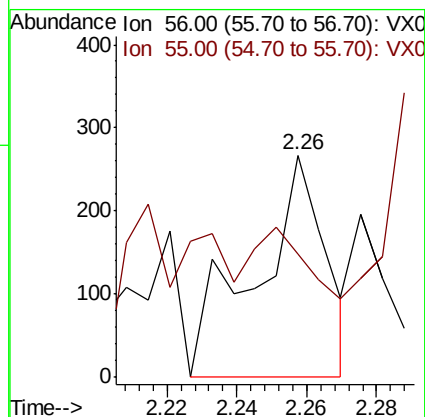
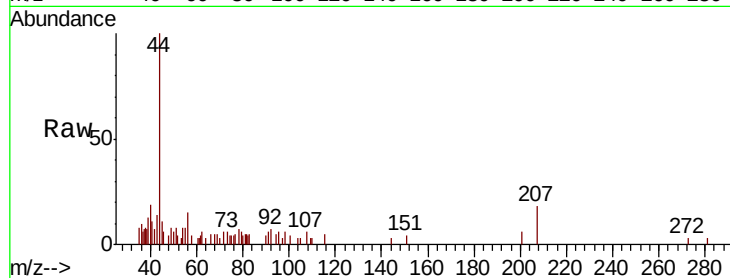
ClientSampled :

Tot Ion: 56 Resp: 369

Ion Ratio Lower Upper

56 100

55 0.0 57.1 85.7#



#15

Acrylonitrile

Concen: 0.338 ug/l

RT: 3.12 min Scan# 333

Delta R.T. -0.00 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

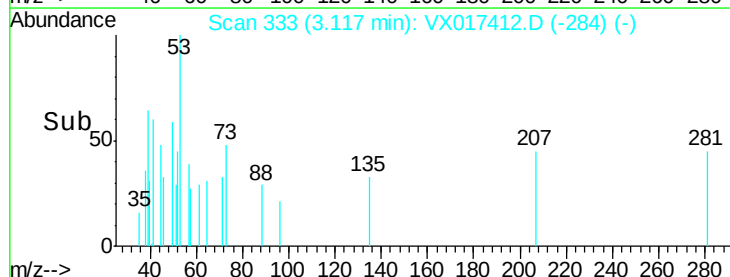
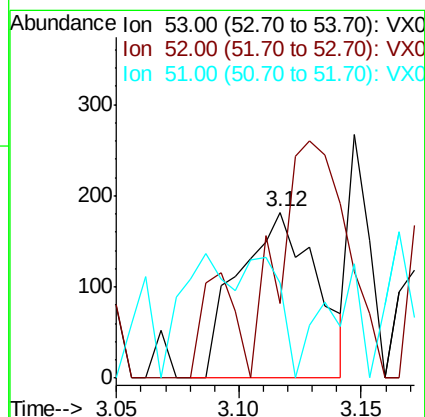
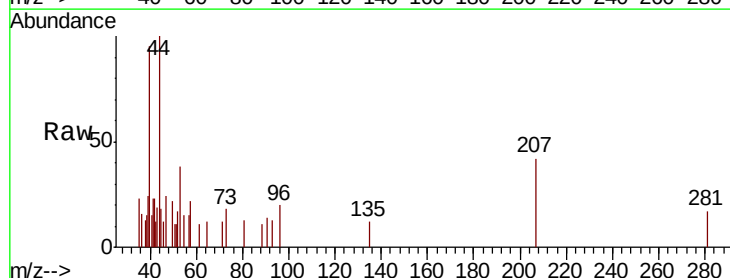
Tgt Ion: 53 Resp: 403

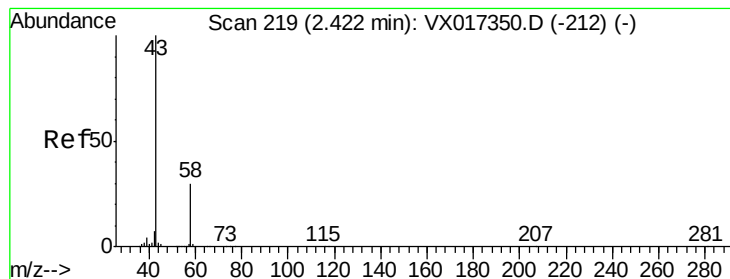
Ion Ratio Lower Upper

53 100

52 124.1 65.8 98.6#

51 33.3 29.2 43.8





#16

Acetone

Concen: 1.311 ug/l

RT: 2.43 min Scan# 220

Delta R.T. 0.01 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

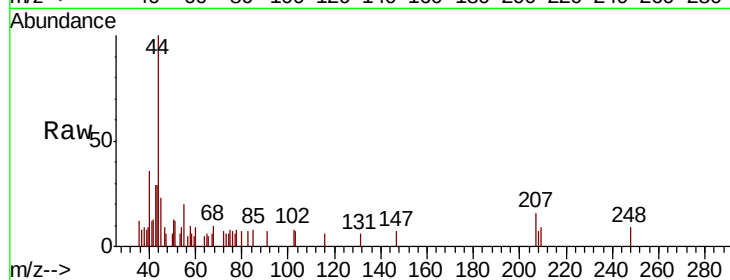
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 43 Resp: 1364

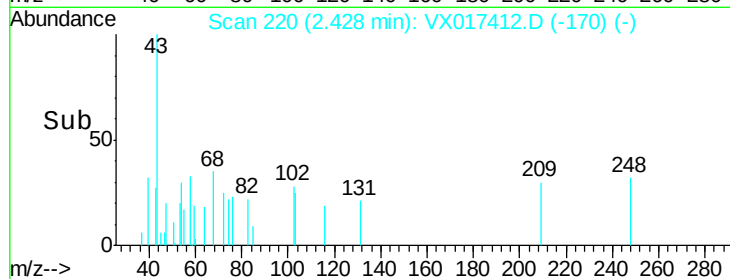
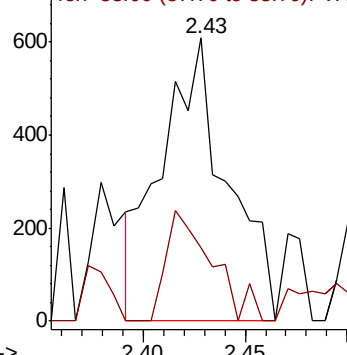
Ion Ratio Lower Upper

43 100

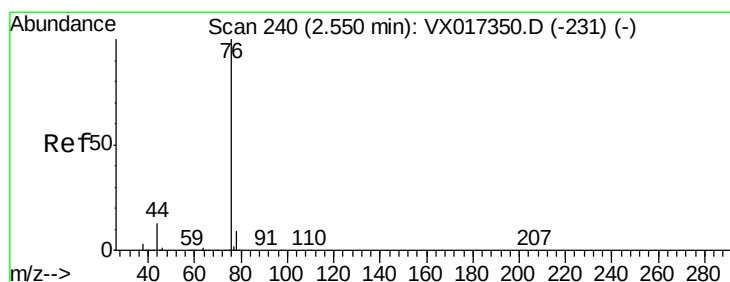
58 26.2 24.2 36.2



Abundance Ion 43.00 (42.70 to 43.70): VX0  
Ion 58.00 (57.70 to 58.70): VX0



Time-->



#17

Carbon Disulfide

Concen: 0.285 ug/l

RT: 2.55 min Scan# 240

Delta R.T. -0.00 min

Lab File: VX017412.D

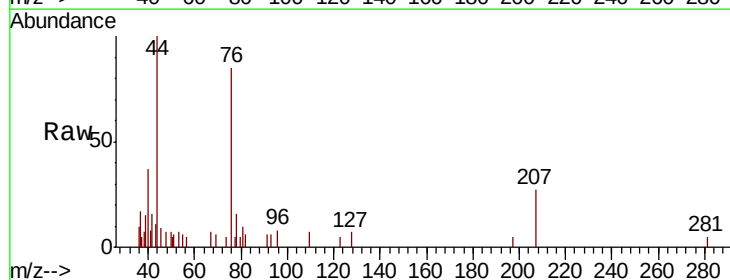
Acq: 17 Jul 2020 12:00

Tgt Ion: 76 Resp: 1761

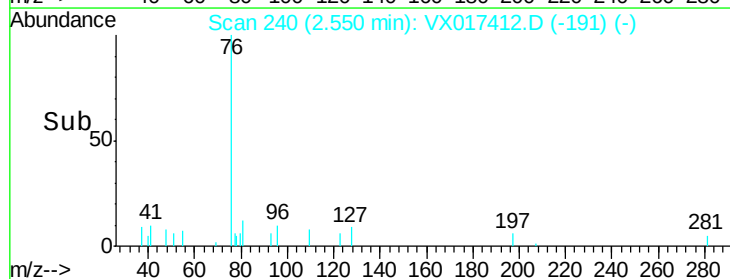
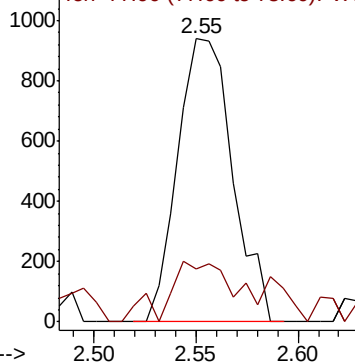
Ion Ratio Lower Upper

76 100

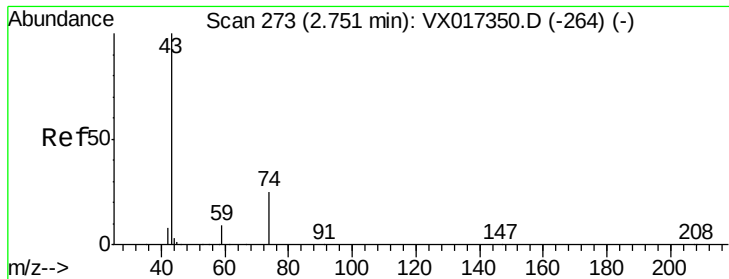
78 13.1 7.3 10.9#



Abundance Ion 75.90 (75.60 to 76.60): VX0  
Ion 77.90 (77.60 to 78.60): VX0



Time-->



#18

Methyl Acetate

Concen: 0.294 ug/l

RT: 2.76 min Scan# 274

Delta R.T. 0.01 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

Instrument :

MSVOA\_X

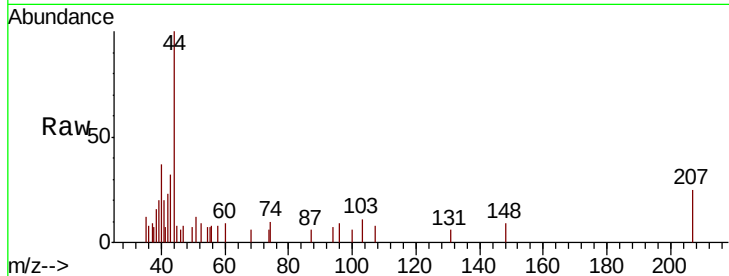
ClientSampled :

Tot Ion: 43 Resp: 755

Ion Ratio Lower Upper

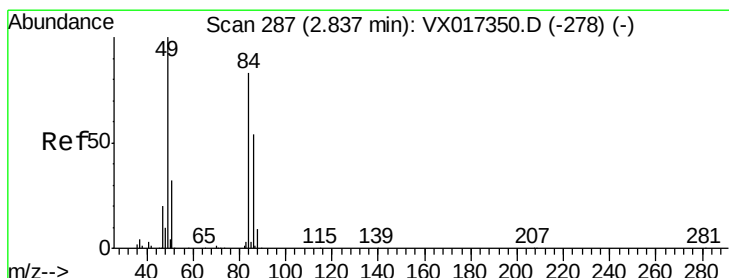
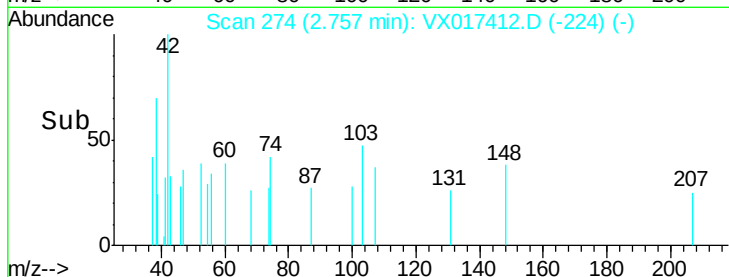
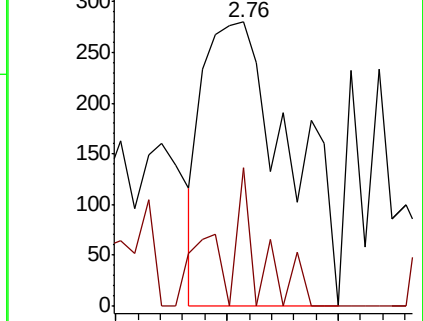
43 100

74 12.3 19.4 29.2#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 74.00 (73.70 to 74.70): VX0



#20

Methylene Chloride

Concen: 0.947 ug/l

RT: 2.84 min Scan# 287

Delta R.T. -0.00 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

Tgt Ion: 84 Resp: 2403

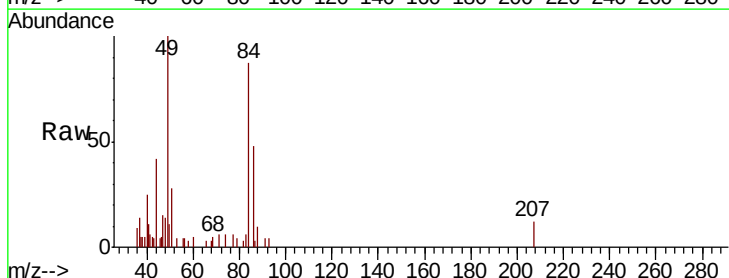
Ion Ratio Lower Upper

84 100

49 114.8 95.8 143.8

51 26.2 31.0 46.4#

86 54.9 51.8 77.8

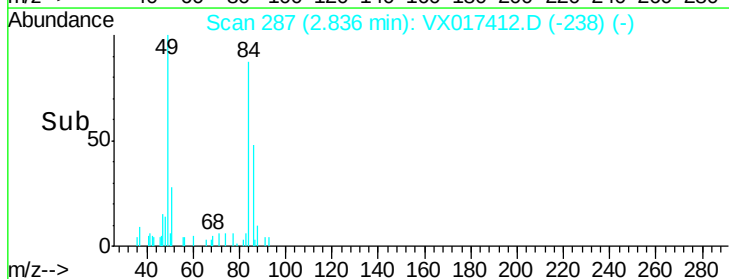
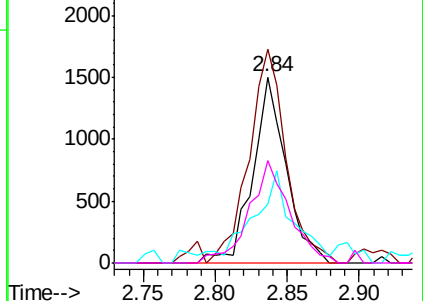


Abundance Ion 83.90 (83.60 to 84.60): VX0

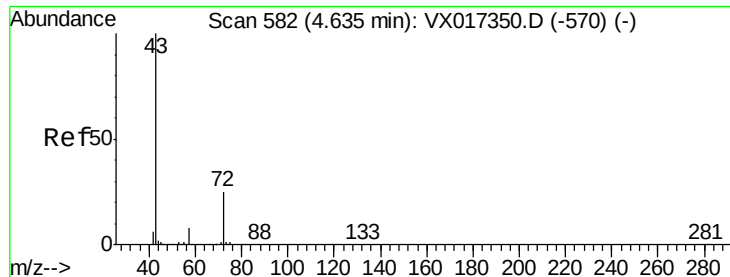
Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0







#25

2-Butanone

Concen: 0.640 ug/l

RT: 4.66 min Scan# 586

Delta R.T. 0.02 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

Instrument :

MSVOA\_X

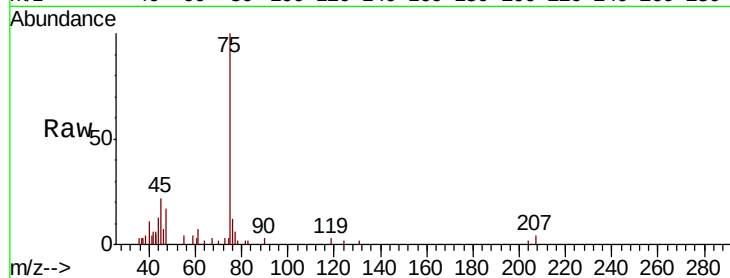
ClientSampleId :

Tot Ion: 43 Resp: 1058

Ion Ratio Lower Upper

43 100

72 0.0 20.4 30.6#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

4.66

300

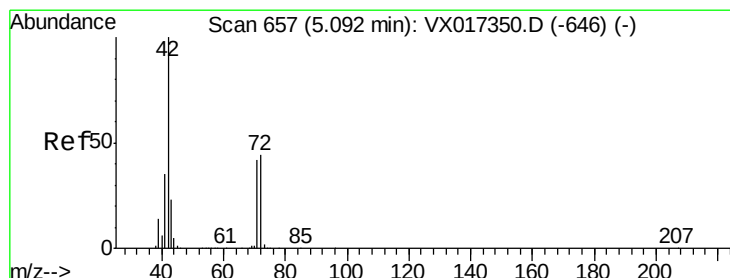
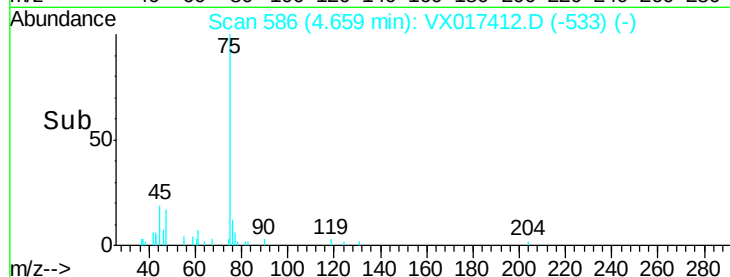
200

100

0

4.60 4.65 4.70 4.75

Time-->



#29

Tetrahydrofuran

Concen: 0.631 ug/l

RT: 5.09 min Scan# 657

Delta R.T. -0.00 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

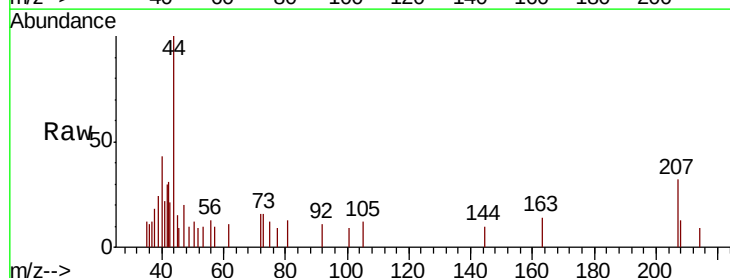
Tgt Ion: 42 Resp: 675

Ion Ratio Lower Upper

42 100

72 0.0 37.2 55.8#

71 0.0 34.4 51.6#



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

500

400

300

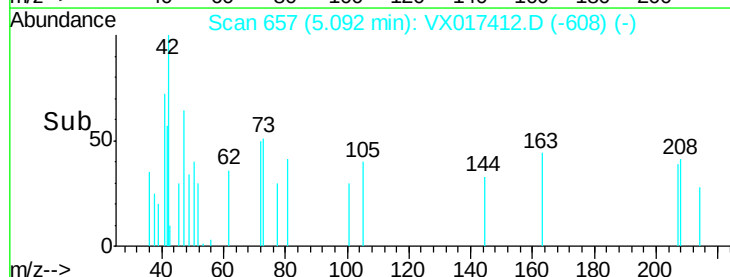
200

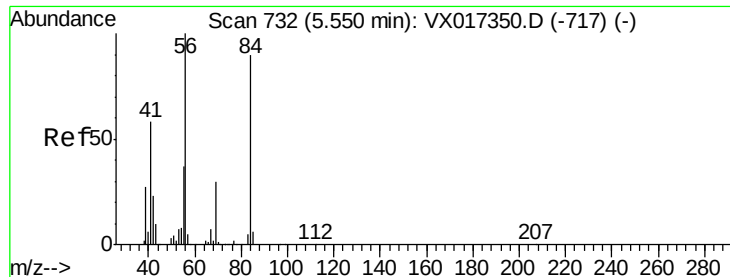
100

0

5.00 5.05 5.10

Time-->

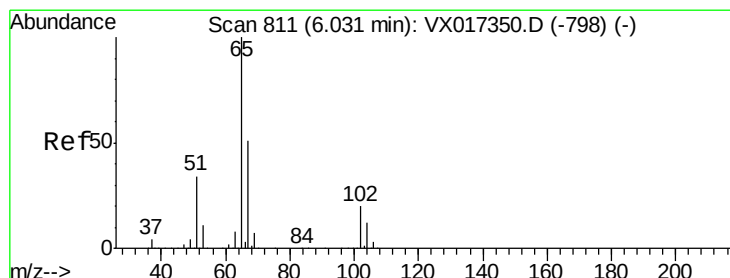
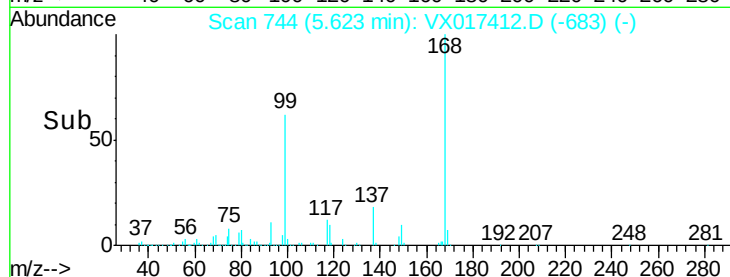
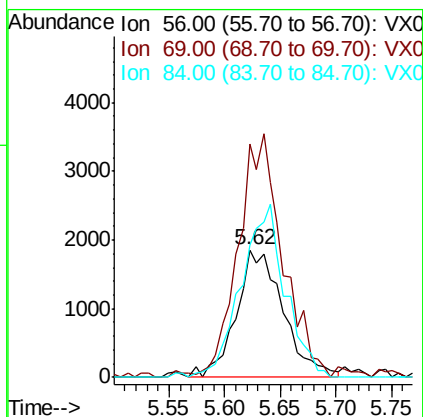
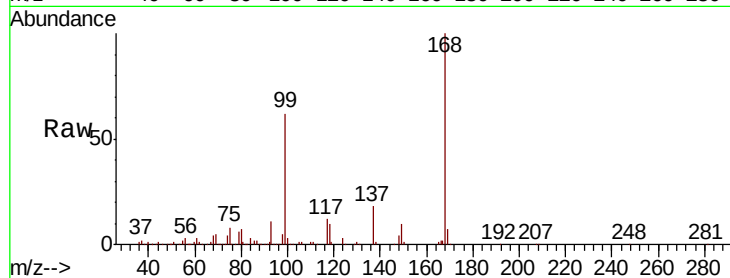




#31  
Cyclohexane  
Concen: 1.622 ug/l  
RT: 5.62 min Scan# 744  
Delta R.T. 0.07 min  
Lab File: VX017412.D  
Acq: 17 Jul 2020 12:00

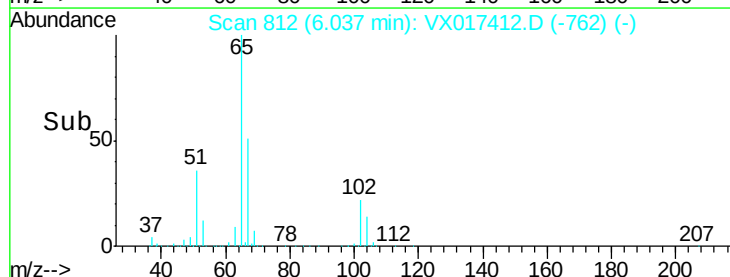
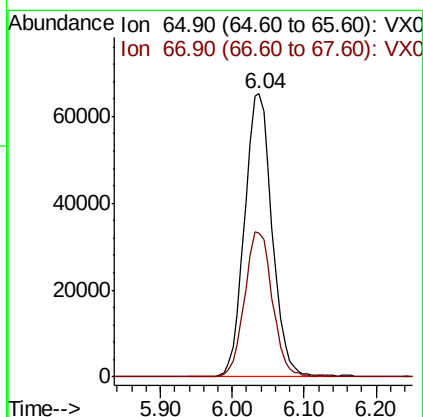
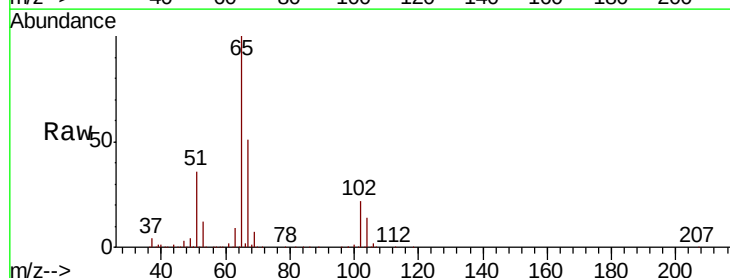
Instrument :  
MSVOA\_X  
ClientSampled :

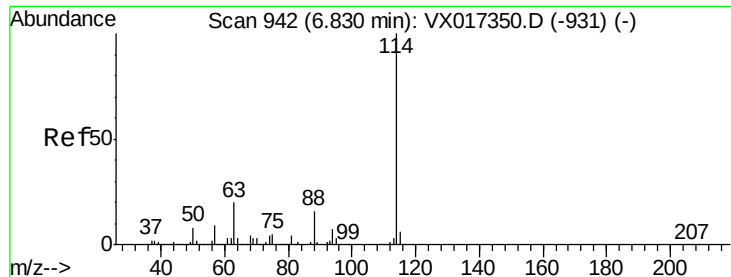
Tot Ion: 56 Resp: 5446  
Ion Ratio Lower Upper  
56 100  
69 180.5 23.7 35.5#  
84 104.4 71.8 107.6



#33  
1,2-Dichloroethane-d4  
Concen: 59.303 ug/l  
RT: 6.04 min Scan# 812  
Delta R.T. 0.01 min  
Lab File: VX017412.D  
Acq: 17 Jul 2020 12:00

Tgt Ion: 65 Resp: 172969  
Ion Ratio Lower Upper  
65 100  
67 52.0 0.0 101.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.84 min Scan# 943

Delta R.T. 0.01 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

Instrument :

MSVOA\_X

ClientSampleId :

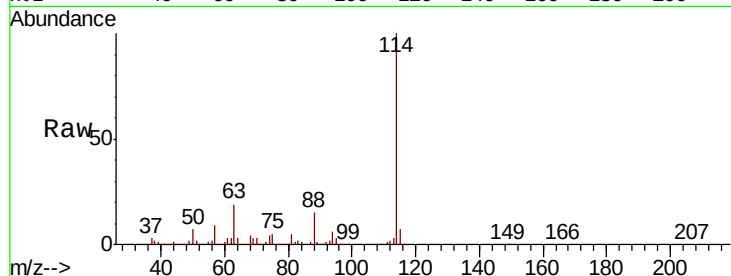
Tot Ion:114 Resp: 416986

Ion Ratio Lower Upper

114 100

63 19.5 0.0 40.0

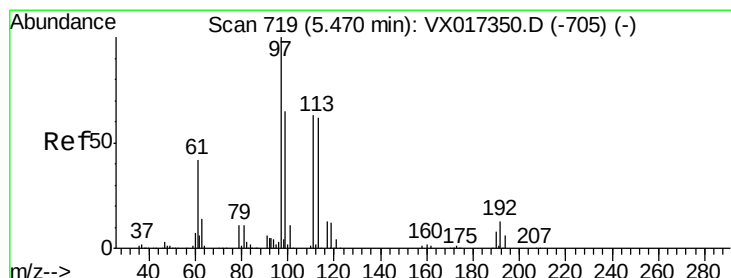
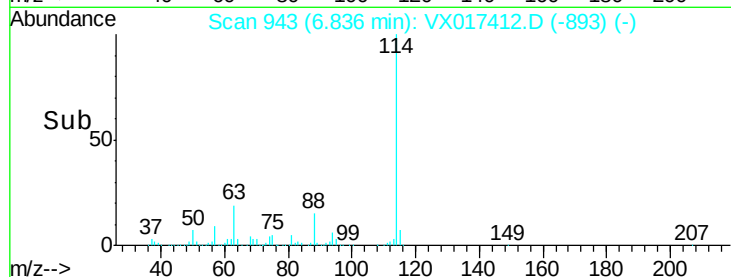
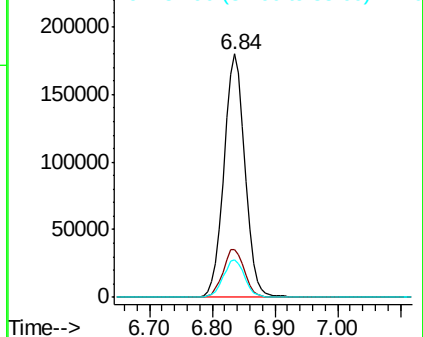
88 15.5 0.0 32.8



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: 53.225 ug/l

RT: 5.47 min Scan# 719

Delta R.T. -0.00 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

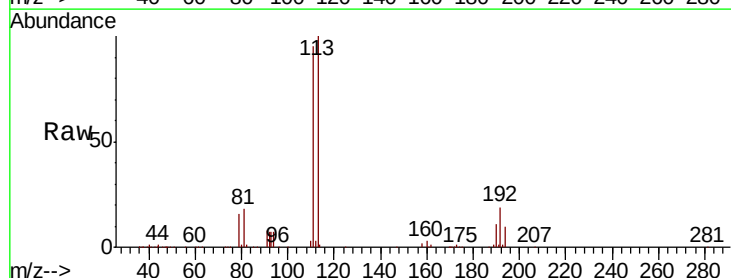
Tgt Ion:113 Resp: 149502

Ion Ratio Lower Upper

113 100

111 101.5 82.4 123.6

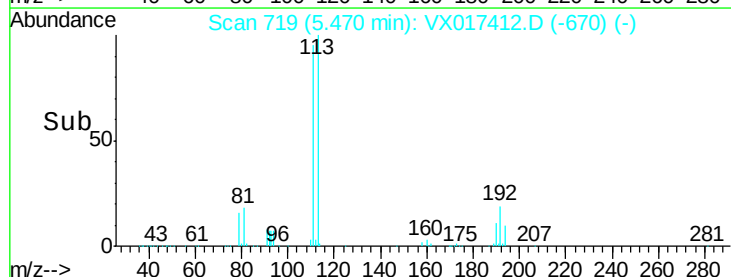
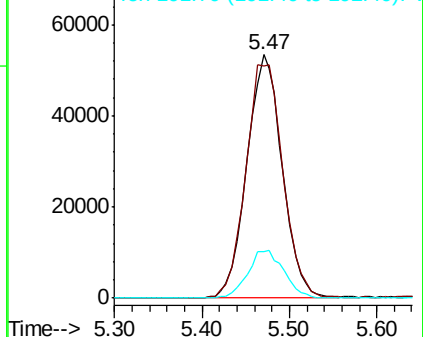
192 20.2 17.2 25.8

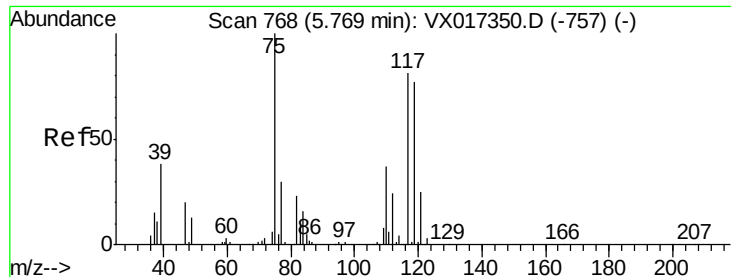


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

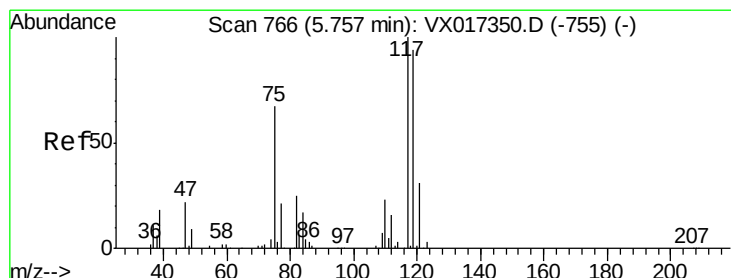
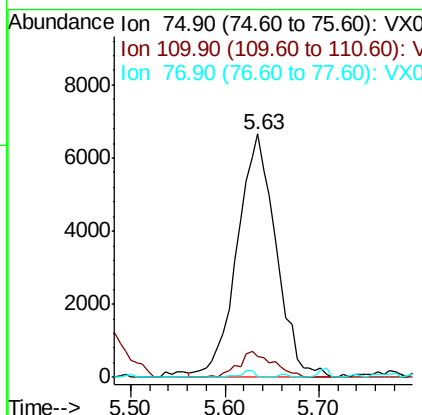
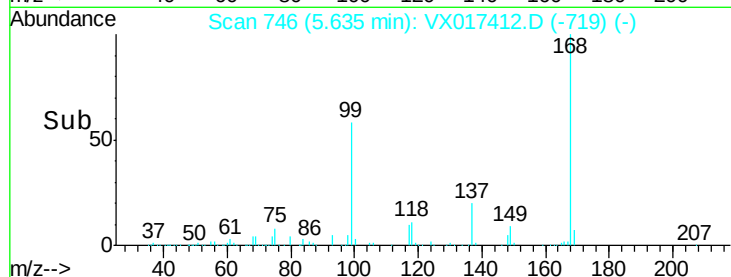
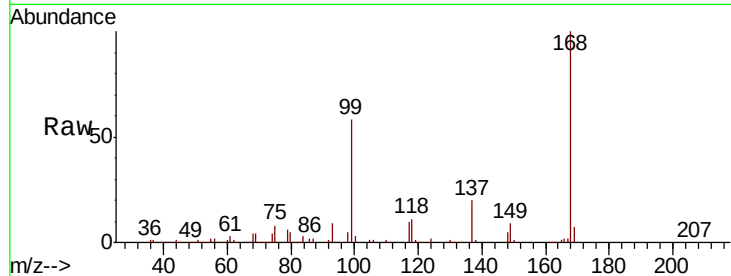




#36  
 1,1-Dichloropropene  
 Concen: 4.981 ug/l  
 RT: 5.63 min Scan# 746  
 Delta R.T. -0.13 min  
 Lab File: VX017412.D  
 Acq: 17 Jul 2020 12:00

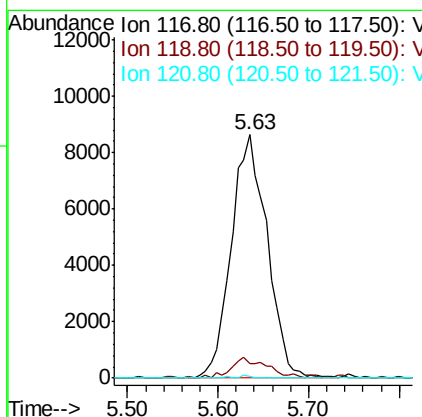
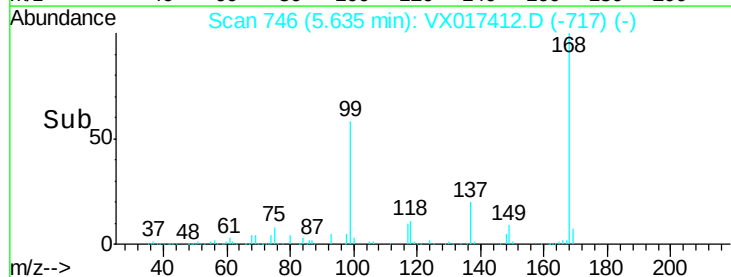
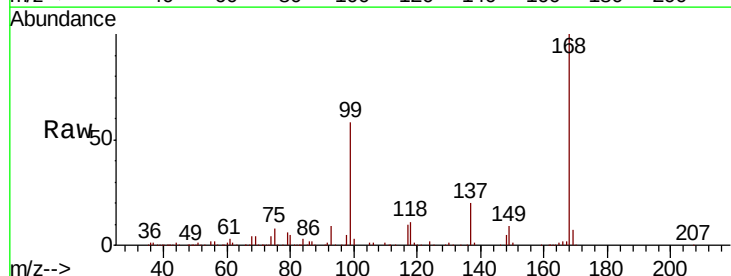
Instrument :  
 MSVOA\_X  
 ClientSampled :

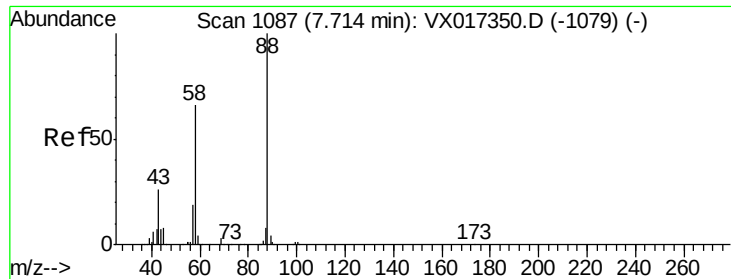
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.5   | 18.6  | 55.8# |
| 77      | 1.0   | 24.9  | 37.3# |



#38  
 Carbon Tetrachloride  
 Concen: 5.283 ug/l  
 RT: 5.63 min Scan# 746  
 Delta R.T. -0.12 min  
 Lab File: VX017412.D  
 Acq: 17 Jul 2020 12:00

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 5.2   | 74.7  | 112.1# |
| 121     | 0.8   | 24.5  | 36.7#  |

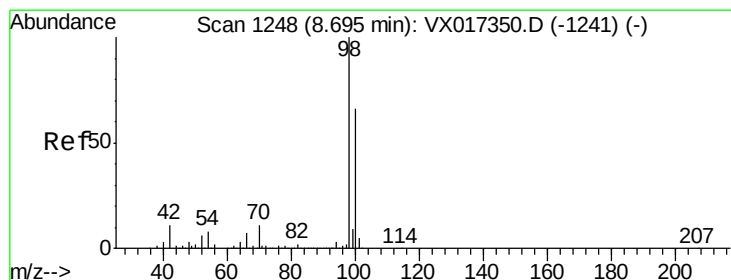
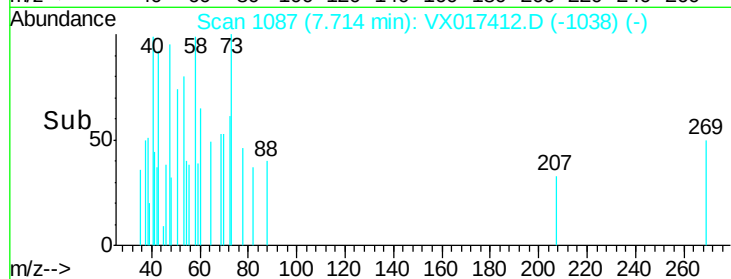
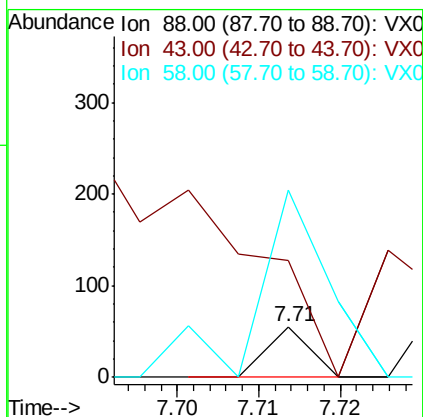
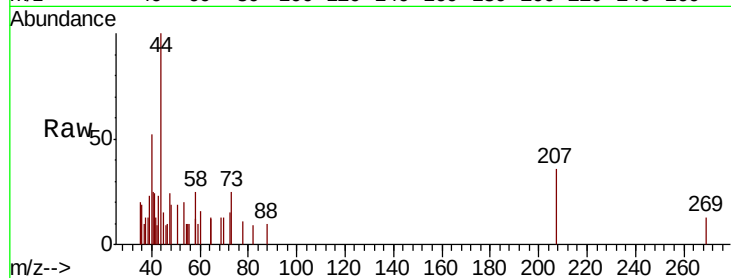




#49  
1,4-Dioxane  
Concen: 0.321 ug/l  
RT: 7.71 min Scan# 1087  
Delta R.T. -0.00 min  
Lab File: VX017412.D  
Acq: 17 Jul 2020 12:00

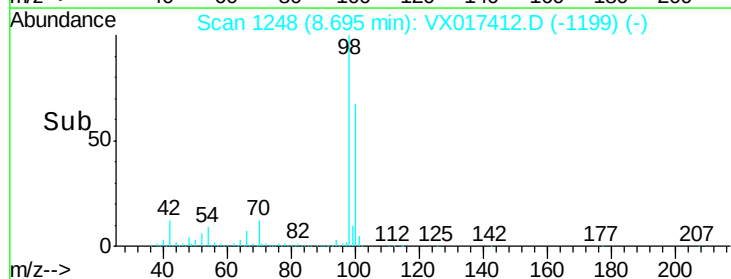
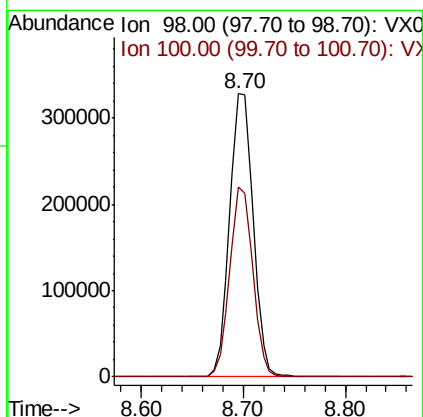
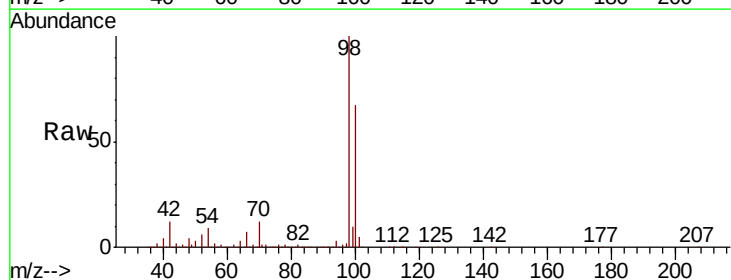
Instrument :  
MSVOA\_X  
ClientSampleId :

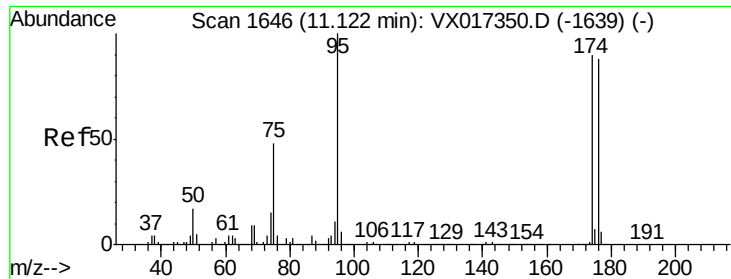
Tot Ion: 88 Resp: 20  
Ion Ratio Lower Upper  
88 100  
43 0.0 25.6 38.4#  
58 630.0 53.9 80.9#



#50  
Toluene-d8  
Concen: 51.751 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VX017412.D  
Acq: 17 Jul 2020 12:00

Tgt Ion: 98 Resp: 524344  
Ion Ratio Lower Upper  
98 100  
100 65.5 53.4 80.2





#62

4-Bromofluorobenzene

Concen: 51.673 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

Instrument :

MSVOA\_X

ClientSampled :

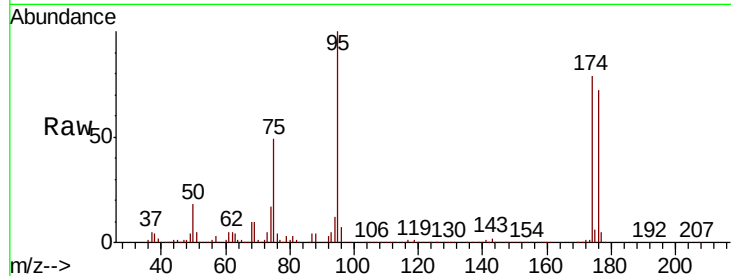
Tot Ion: 95 Resp: 207964

Ion Ratio Lower Upper

95 100

174 82.8 0.0 175.8

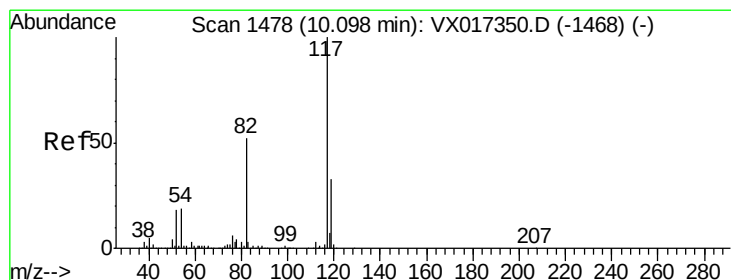
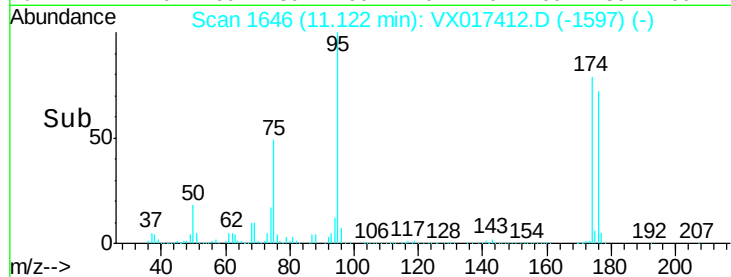
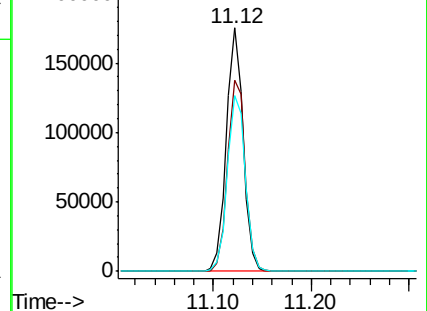
176 77.3 0.0 164.6



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): VX0

Ion 175.80 (175.50 to 176.50): VX0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.10 min Scan# 1478

Delta R.T. -0.00 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

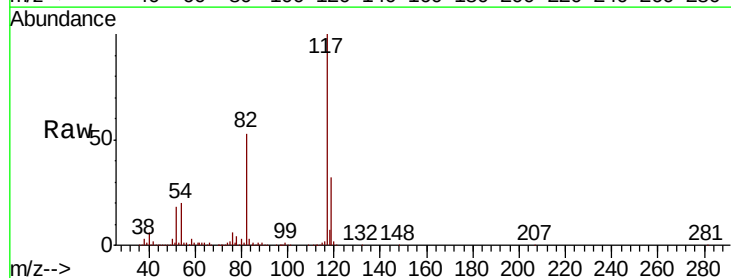
Tgt Ion: 117 Resp: 446420

Ion Ratio Lower Upper

117 100

82 52.6 42.0 63.0

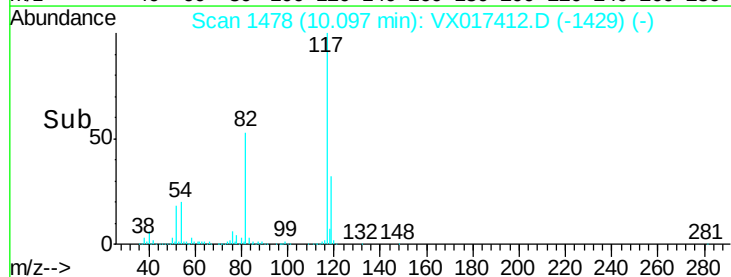
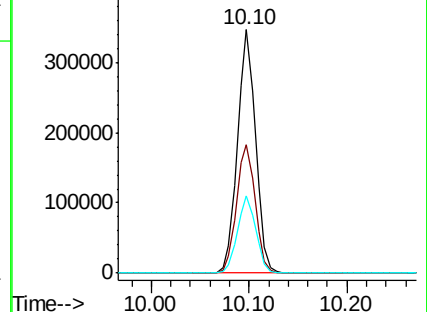
119 31.6 26.3 39.5

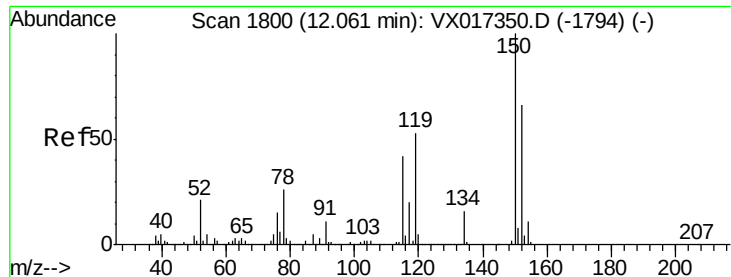


Abundance Ion 116.90 (116.60 to 117.60): VX0

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): VX0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1800

Delta R.T. -0.00 min

Lab File: VX017412.D

Acq: 17 Jul 2020 12:00

Instrument :

MSVOA\_X

ClientSampleId :

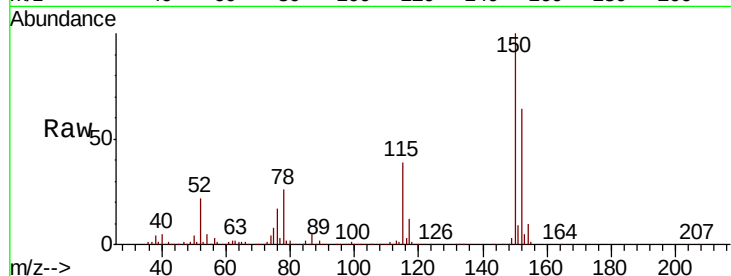
Tot Ion:152 Resp: 230236

Ion Ratio Lower Upper

152 100

115 57.8 39.9 119.7

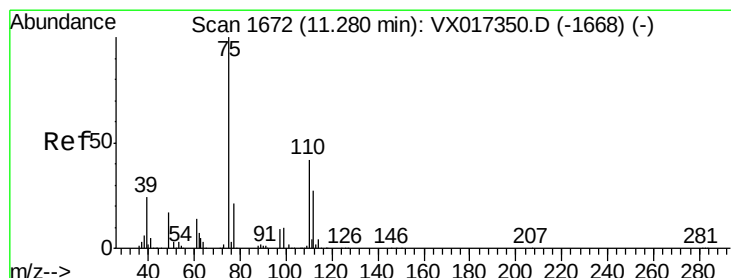
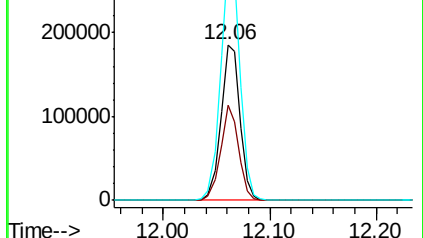
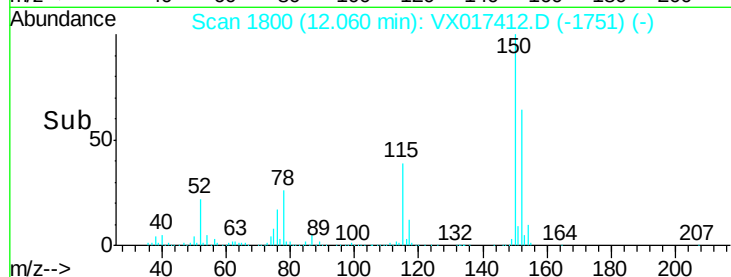
150 156.6 0.0 343.4



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: 24.559 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX017412.D

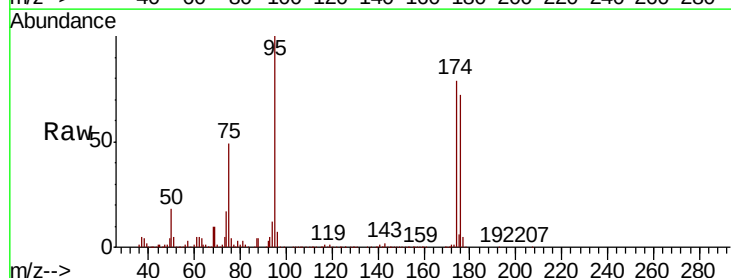
Acq: 17 Jul 2020 12:00

Tgt Ion: 75 Resp: 104482

Ion Ratio Lower Upper

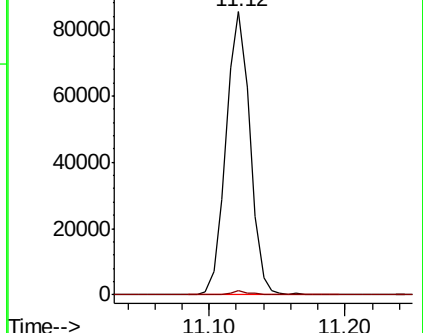
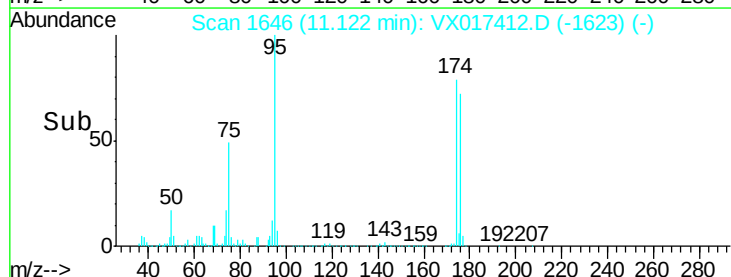
75 100

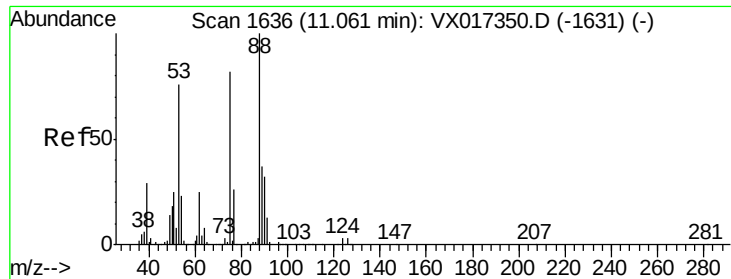
77 1.4 20.3 60.9#



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: 62.300 ug/l  
 RT: 11.12 min Scan# 1646  
 Delta R.T. 0.06 min  
 Lab File: VX017412.D  
 Acq: 17 Jul 2020 12:00

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion: 75 Resp: 104482  
 Ion Ratio Lower Upper  
 75 100  
 53 0.4 76.5 114.7#  
 89 0.0 38.1 57.1#

