

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX071720\  
 Data File : VX017420.D  
 Acq On : 17 Jul 2020 15:25  
 Operator : JC/SP  
 Sample : L3188-17  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jul 18 06:58:43 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      | 5.63  | 168  | 244512   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.83  | 114  | 433324   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 459242   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 254567   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.03  | 65   | 173906   | 56.67 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 113.34% |          |
| 35) Dibromofluoromethane    | 5.46  | 113  | 152066   | 52.10 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.20% |          |
| 50) Toluene-d8              | 8.70  | 98   | 549069   | 52.15 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.30% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 221791   | 53.03 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.06% |          |

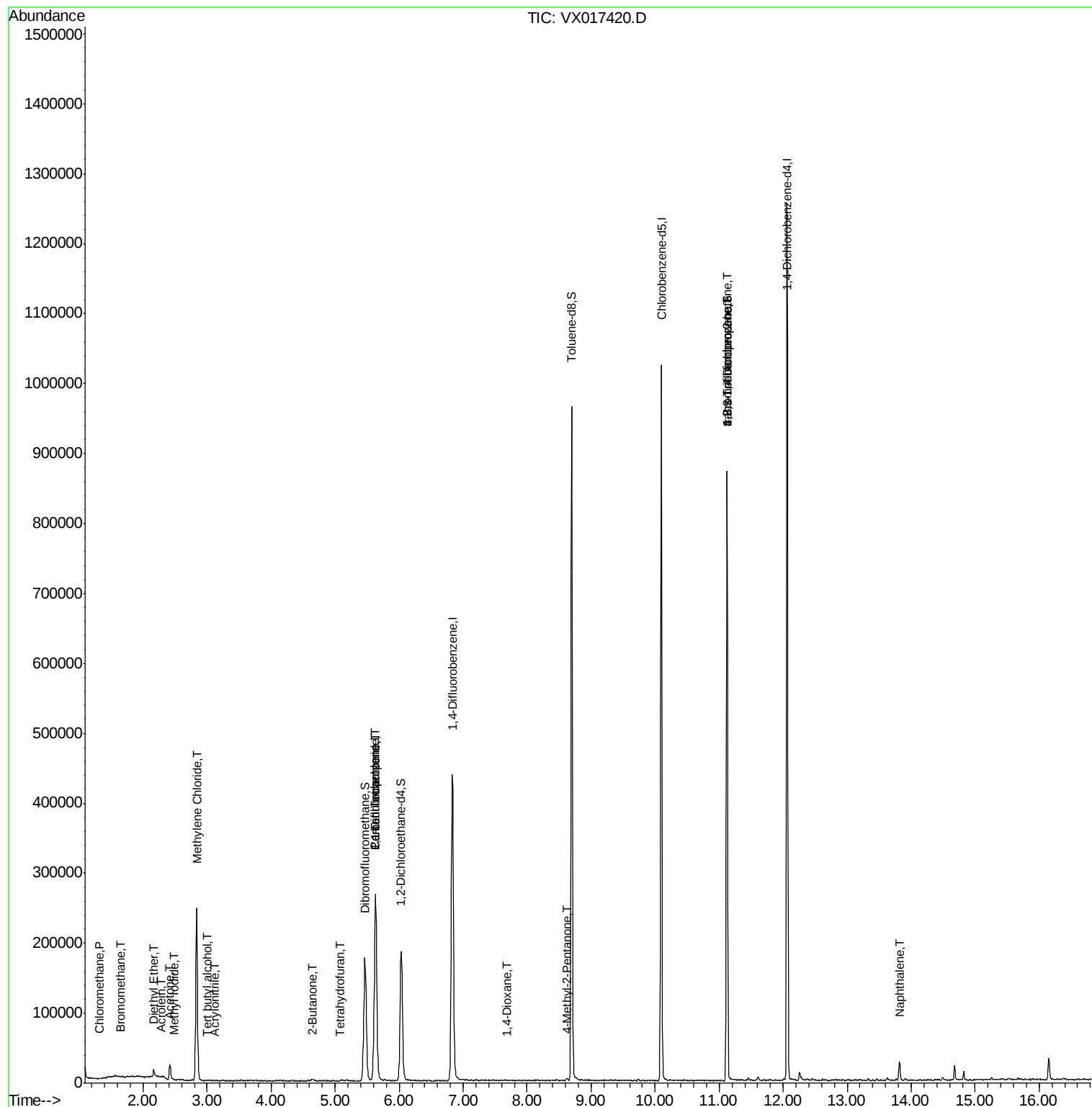
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 699      | 0.300  | ug/l # | 56     |
| 5) Bromomethane                | 1.65  | 94   | 354      | 0.236  | ug/l # | 2      |
| 8) Diethyl Ether               | 2.17  | 74   | 4100     | 2.982  | ug/l   | 96     |
| 10) Methyl Iodide              | 2.49  | 142  | 145      | 2.421  | ug/l # | 54     |
| 11) Tert butyl alcohol         | 3.00  | 59   | 353      | 0.683  | ug/l # | 79     |
| 13) Acrolein                   | 2.29  | 56   | 214      | 0.755  | ug/l # | 1      |
| 15) Acrylonitrile              | 3.12  | 53   | 426      | 0.340  | ug/l # | 41     |
| 16) Acetone                    | 2.42  | 43   | 23948    | 21.874 | ug/l   | 98     |
| 20) Methylene Chloride         | 2.84  | 84   | 113177   | 42.369 | ug/l   | 93     |
| 25) 2-Butanone                 | 4.65  | 43   | 1364     | 0.784  | ug/l # | 62     |
| 29) Tetrahydrofuran            | 5.08  | 42   | 495      | 0.440  | ug/l # | 83     |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 18147    | 4.553  | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 5.63  | 117  | 24886    | 5.333  | ug/l # | 20     |
| 49) 1,4-Dioxane                | 7.68  | 88   | 28       | 0.433  | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 1701     | 0.424  | ug/l # | 80     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 112364   | 23.887 | ug/l # | 37     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 112364   | 60.596 | ug/l # | 11     |
| 95) Naphthalene                | 13.82 | 128  | 16003    | 1.026  | ug/l   | 99     |

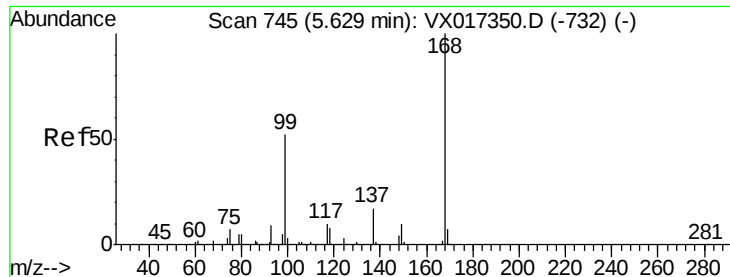
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX071720\  
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ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Jul 18 06:58:43 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: 5.63 min Scan# 745

Delta R.T. 0.00 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

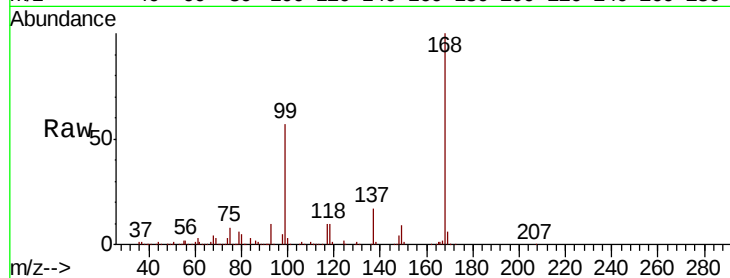
Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion:168 Resp: 244512

Ion Ratio Lower Upper

168 100

99 56.7 41.6 62.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.63

80000

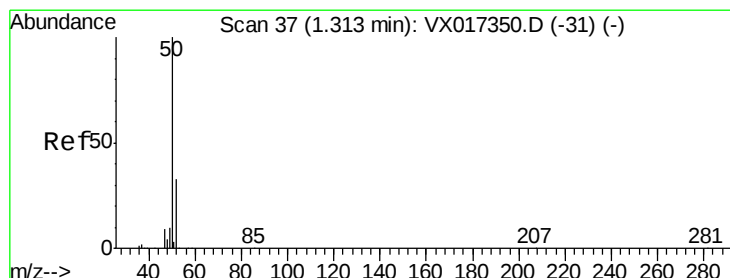
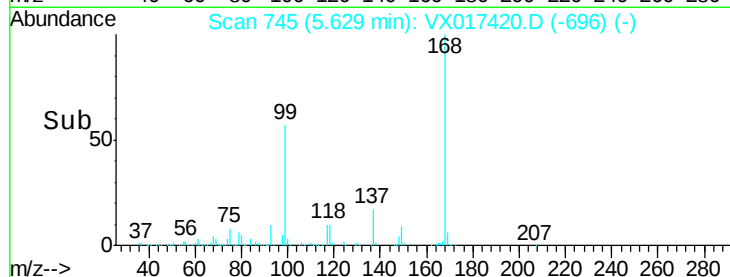
60000

40000

20000

0

Time-->



#3

Chloromethane

Concen: 0.300 ug/l

RT: 1.32 min Scan# 38

Delta R.T. 0.01 min

Lab File: VX017420.D

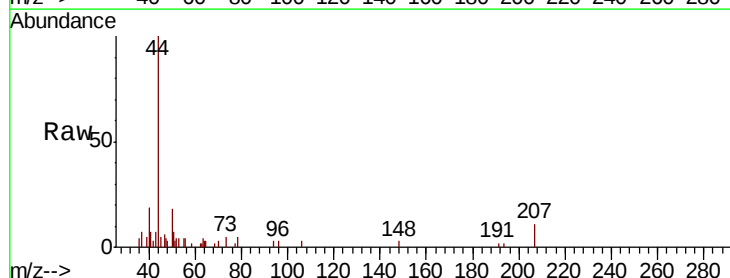
Acq: 17 Jul 2020 15:25

Tgt Ion: 50 Resp: 699

Ion Ratio Lower Upper

50 100

52 8.4 26.7 40.1#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

500

400

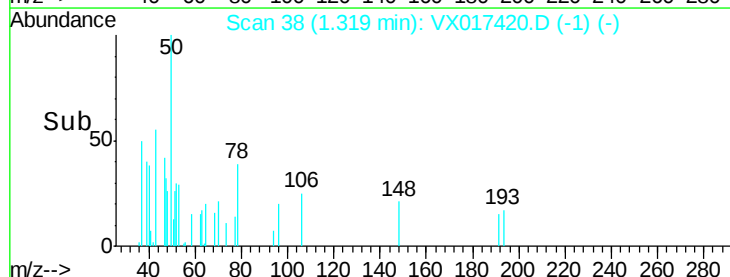
300

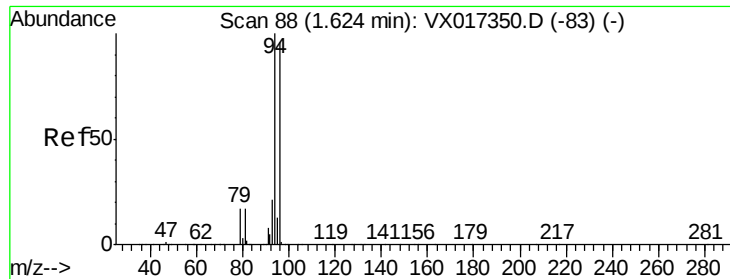
200

100

0

Time-->





#5

Bromomethane

Concen: 0.236 ug/l

RT: 1.65 min Scan# 92

Delta R.T. 0.02 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

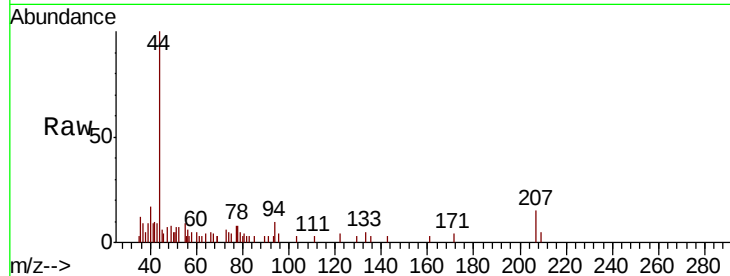
Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 94 Resp: 354

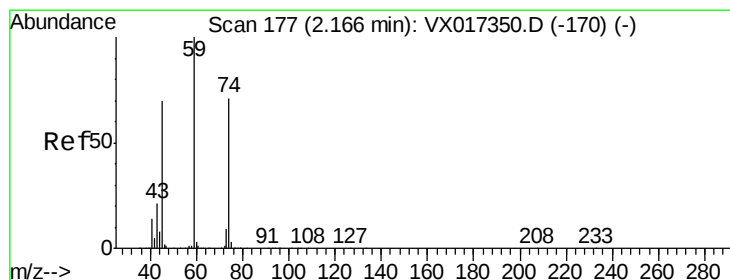
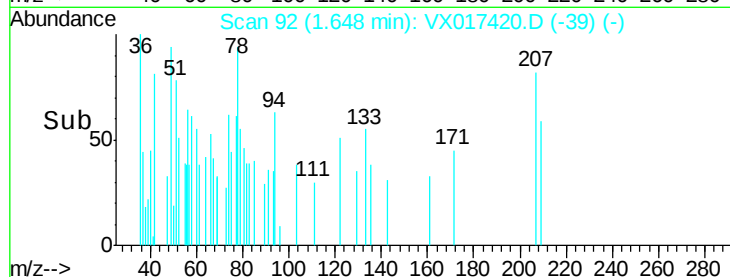
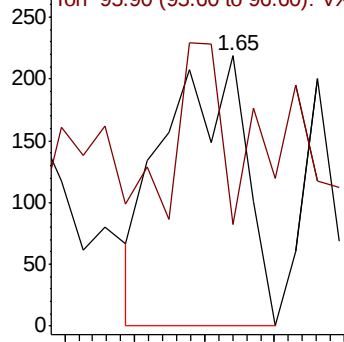
Ion Ratio Lower Upper

94 100

96 0.0 76.6 115.0#



Abundance Ion 93.90 (93.60 to 94.60): VX0  
Ion 95.90 (95.60 to 96.60): VX0



#8

Diethyl Ether

Concen: 2.982 ug/l

RT: 2.17 min Scan# 178

Delta R.T. 0.01 min

Lab File: VX017420.D

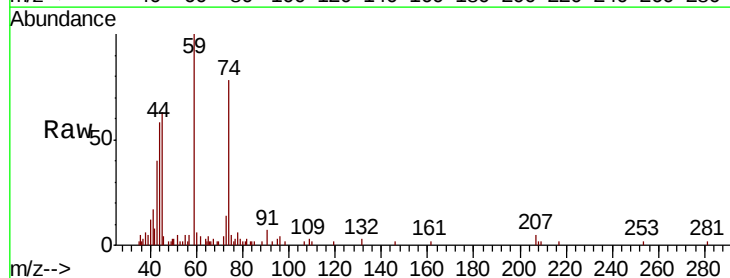
Acq: 17 Jul 2020 15:25

Tgt Ion: 74 Resp: 4100

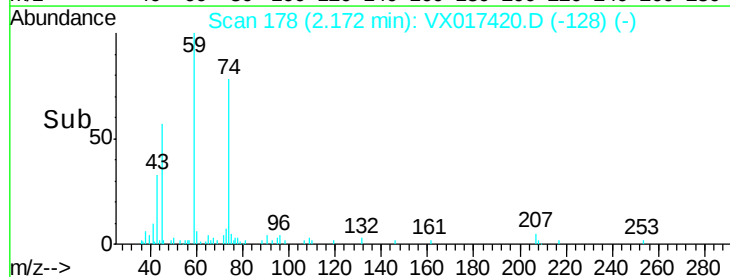
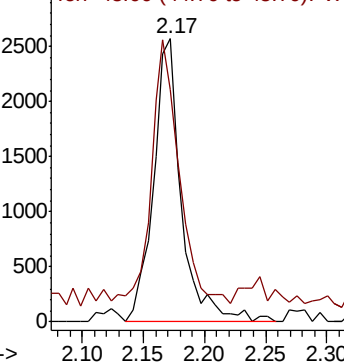
Ion Ratio Lower Upper

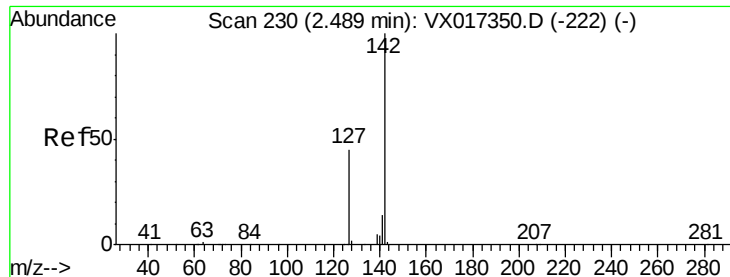
74 100

45 90.7 47.2 141.6



Abundance Ion 74.00 (73.70 to 74.70): VX0  
Ion 45.00 (44.70 to 45.70): VX0

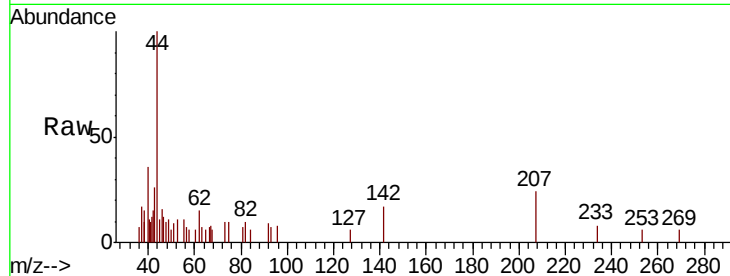




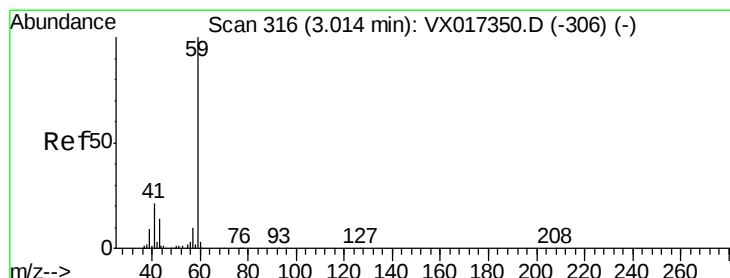
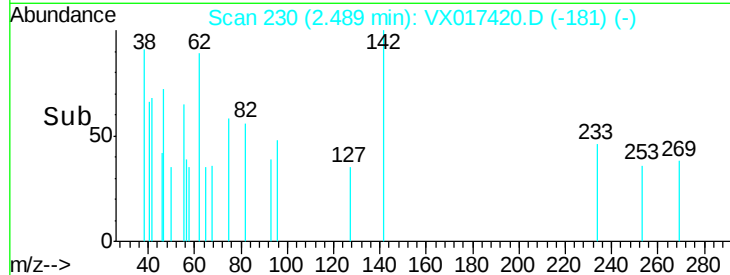
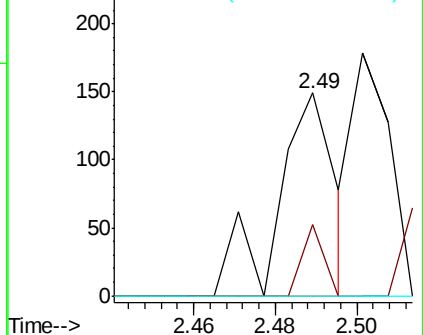
#10  
Methyl Iodide  
Concen: 2.421 ug/l  
RT: 2.49 min Scan# 230  
Delta R.T. 0.00 min  
Lab File: VX017420.D  
Acq: 17 Jul 2020 15:25

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion:142 Resp: 145  
Ion Ratio Lower Upper  
142 100  
127 13.1 36.8 55.2#  
141 0.0 11.4 17.0#

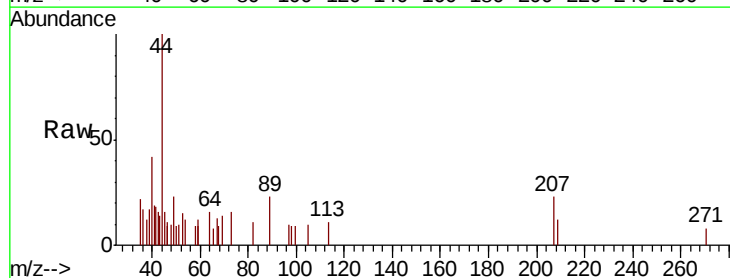


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

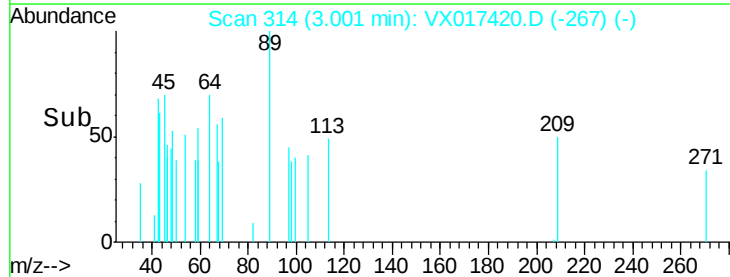
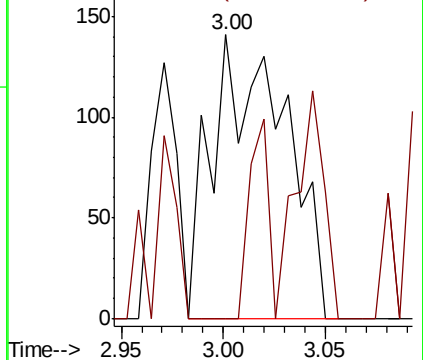


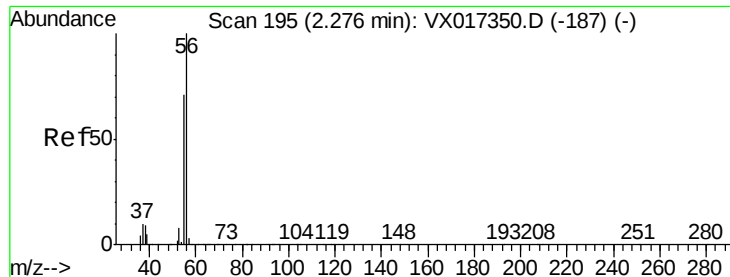
#11  
Tert butyl alcohol  
Concen: 0.683 ug/l  
RT: 3.00 min Scan# 314  
Delta R.T. -0.01 min  
Lab File: VX017420.D  
Acq: 17 Jul 2020 15:25

Tgt Ion: 59 Resp: 353  
Ion Ratio Lower Upper  
59 100  
57 18.1 8.3 12.5#



Abundance Ion 59.00 (58.70 to 59.70): VX0  
Ion 57.00 (56.70 to 57.70): VX0





#13

Acrolein

Concen: 0.755 ug/l

RT: 2.29 min Scan# 198

Delta R.T. 0.02 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

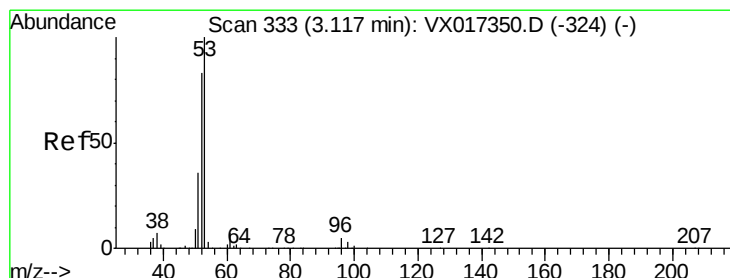
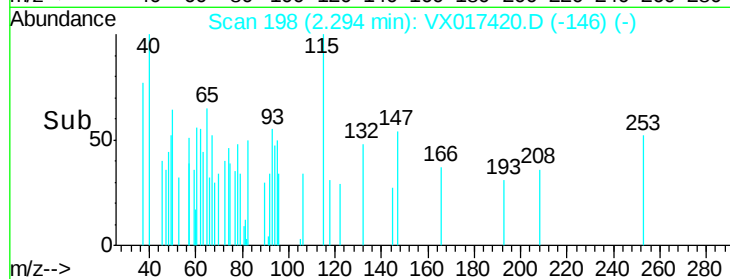
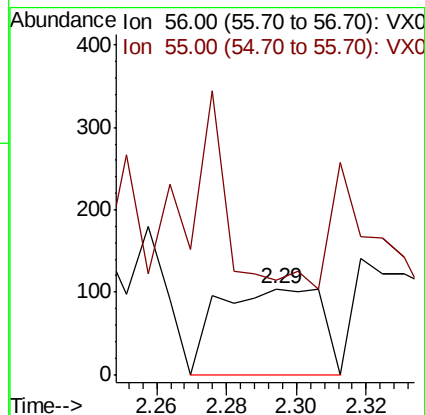
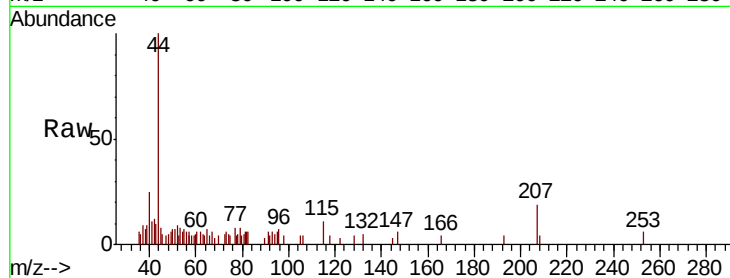
Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 56 Resp: 214

Ion Ratio Lower Upper

56 100

55 186.0 57.1 85.7#



#15

Acrylonitrile

Concen: 0.340 ug/l

RT: 3.12 min Scan# 333

Delta R.T. 0.00 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

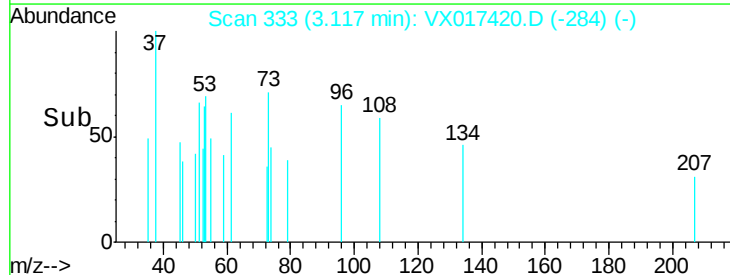
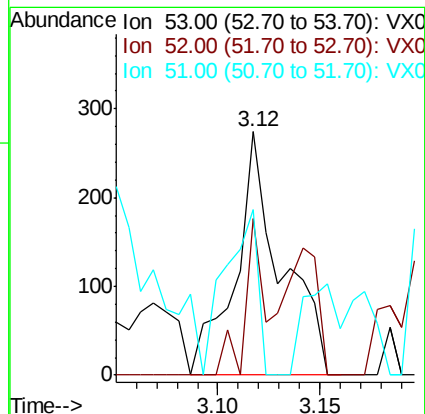
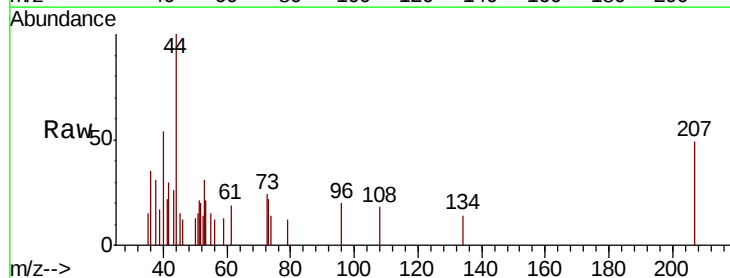
Tgt Ion: 53 Resp: 426

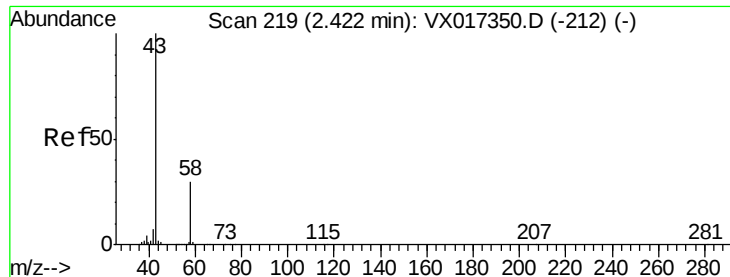
Ion Ratio Lower Upper

53 100

52 30.8 65.8 98.6#

51 0.0 29.2 43.8#





#16

Acetone

Concen: 21.874 ug/l

RT: 2.42 min Scan# 218

Delta R.T. -0.01 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

Instrument :

MSVOA\_X

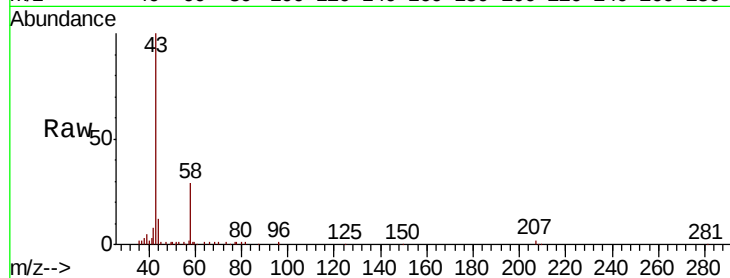
ClientSampleId :

Tot Ion: 43 Resp: 23948

Ion Ratio Lower Upper

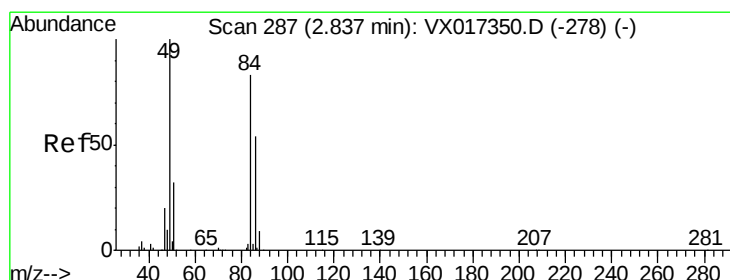
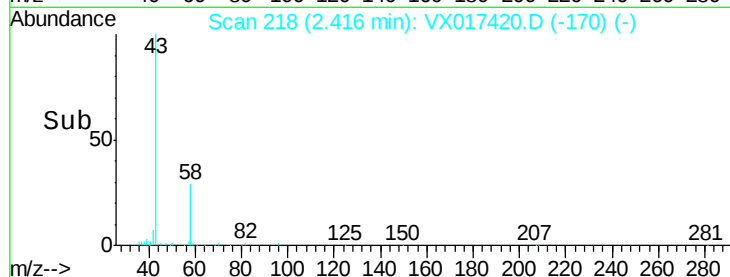
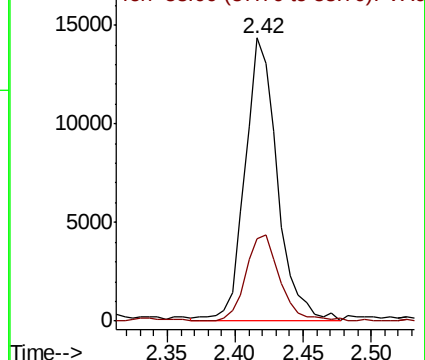
43 100

58 29.2 24.2 36.2



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#20

Methylene Chloride

Concen: 42.369 ug/l

RT: 2.84 min Scan# 287

Delta R.T. 0.00 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

Tgt Ion: 84 Resp: 113177

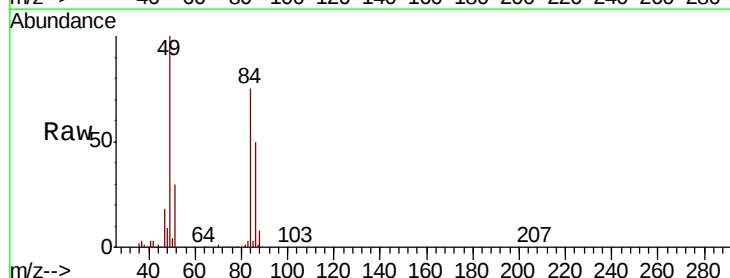
Ion Ratio Lower Upper

84 100

49 133.3 95.8 143.8

51 39.3 31.0 46.4

86 66.2 51.8 77.8

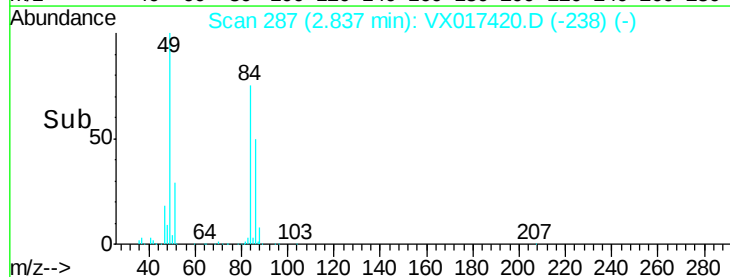
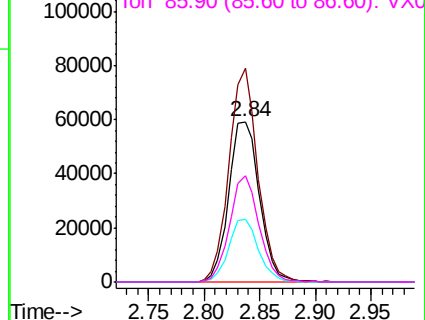


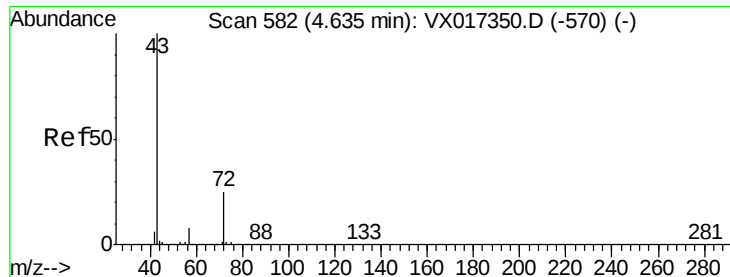
Abundance Ion 83.90 (83.60 to 84.60): VX0

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

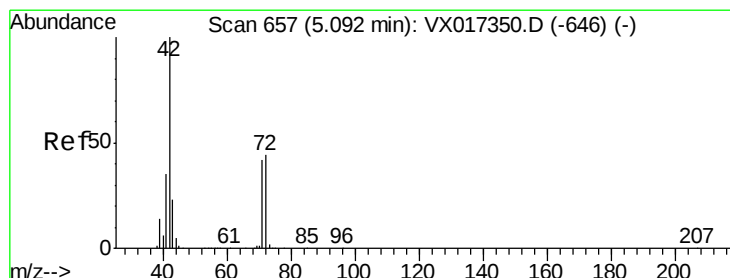
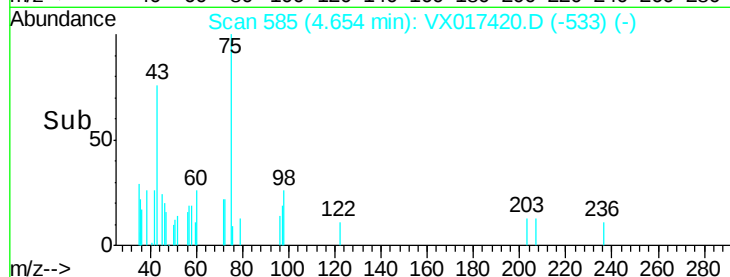
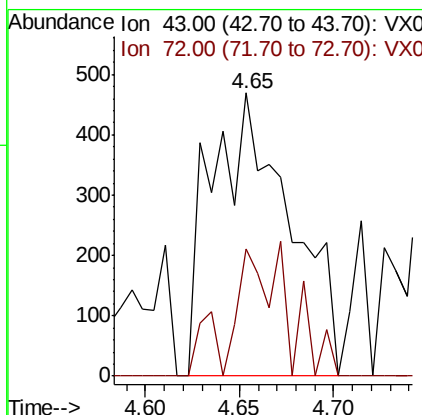
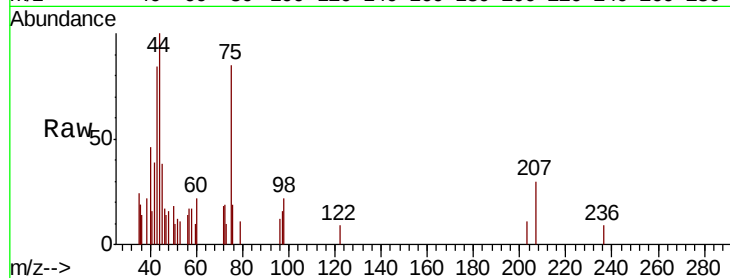




#25  
2-Butanone  
Concen: 0.784 ug/l  
RT: 4.65 min Scan# 585  
Delta R.T. 0.02 min  
Lab File: VX017420.D  
Acq: 17 Jul 2020 15:25

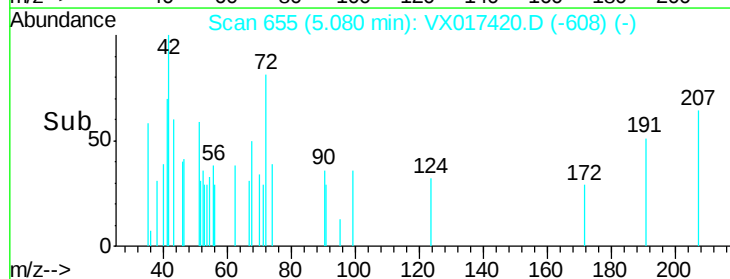
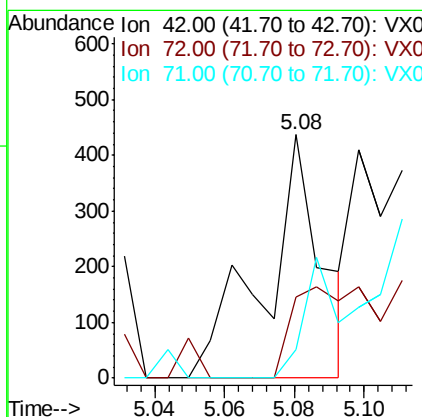
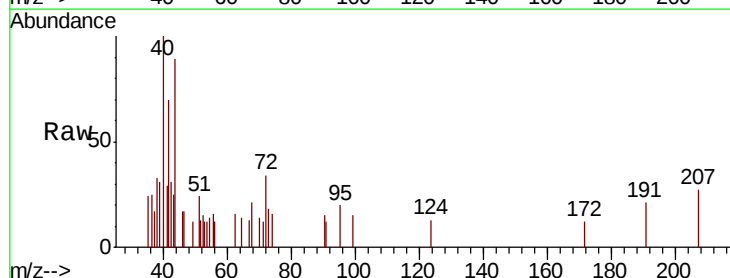
Instrument :  
MSVOA\_X  
ClientSampled :

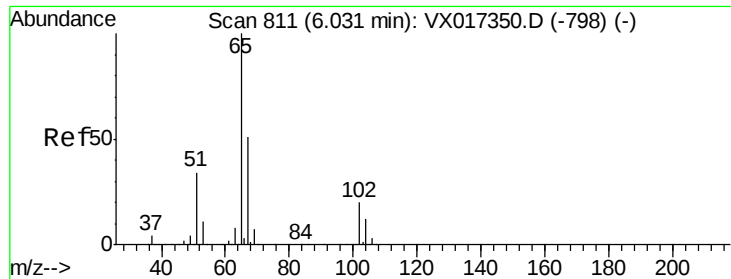
Tot Ion: 43 Resp: 1364  
Ion Ratio Lower Upper  
43 100  
72 44.8 20.4 30.6#



#29  
Tetrahydrofuran  
Concen: 0.440 ug/l  
RT: 5.08 min Scan# 655  
Delta R.T. -0.01 min  
Lab File: VX017420.D  
Acq: 17 Jul 2020 15:25

Tgt Ion: 42 Resp: 495  
Ion Ratio Lower Upper  
42 100  
72 52.7 37.2 55.8  
71 27.3 34.4 51.6#





#33

1,2-Dichloroethane-d4

Concen: 56.668 ug/l

RT: 6.03 min Scan# 811

Delta R.T. 0.00 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

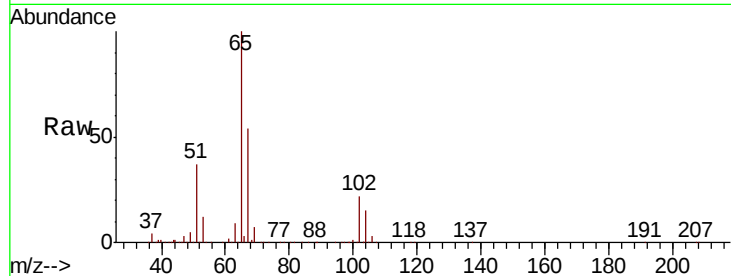
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 65 Resp: 173906

Ion Ratio Lower Upper

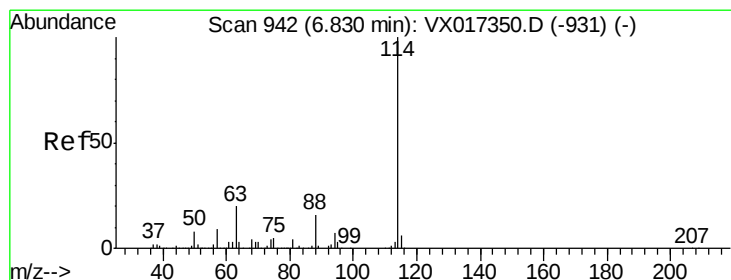
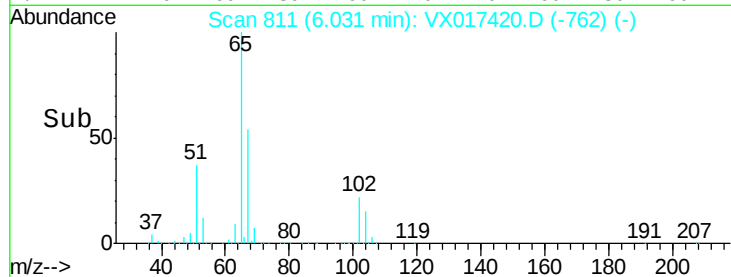
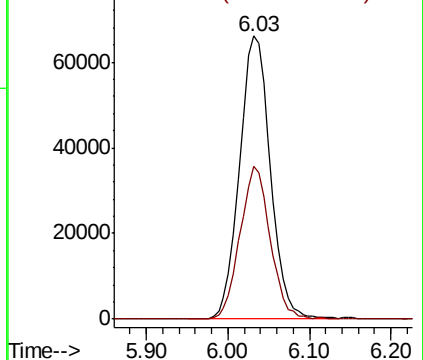
65 100

67 52.8 0.0 101.6



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.83 min Scan# 942

Delta R.T. 0.00 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

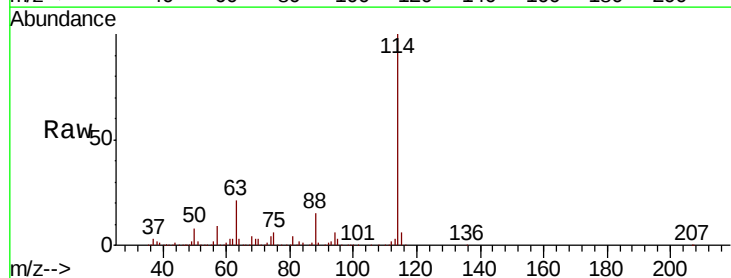
Tgt Ion: 114 Resp: 433324

Ion Ratio Lower Upper

114 100

63 20.8 0.0 40.0

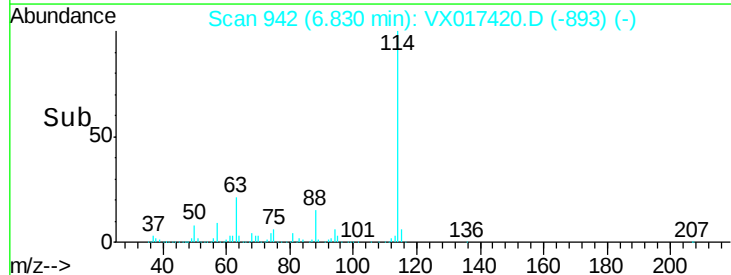
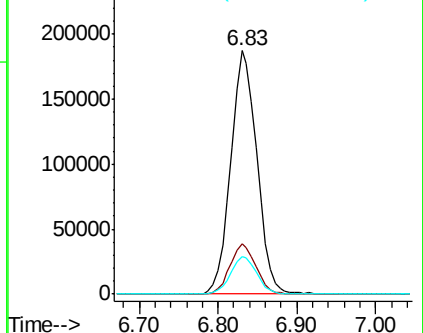
88 15.2 0.0 32.8

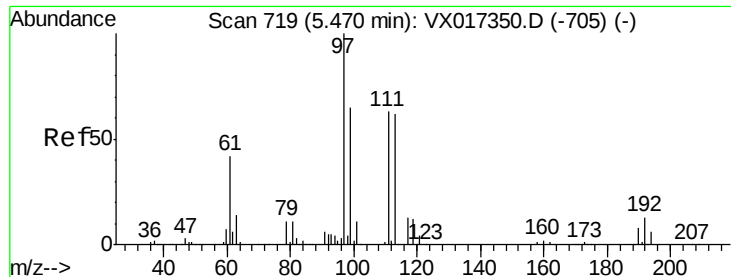


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0

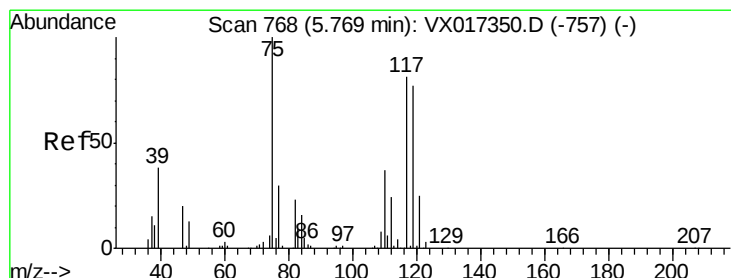
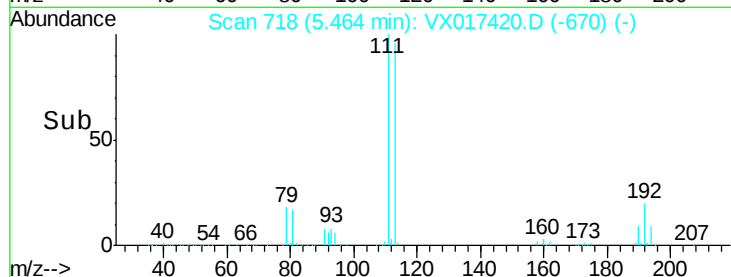
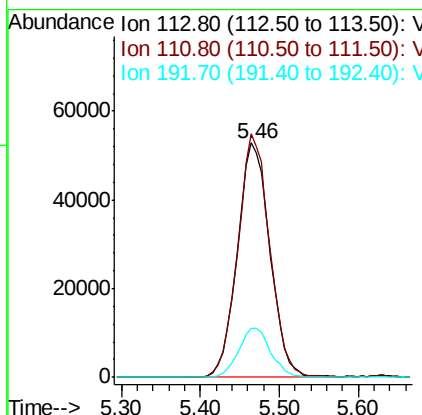
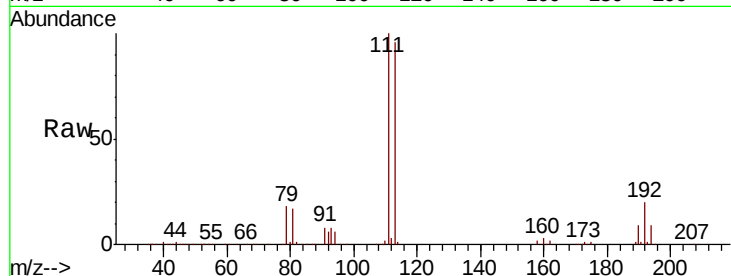




#35  
 Dibromofluoromethane  
 Concen: 52.096 ug/l  
 RT: 5.46 min Scan# 718  
 Delta R.T. -0.01 min  
 Lab File: VX017420.D  
 Acq: 17 Jul 2020 15:25

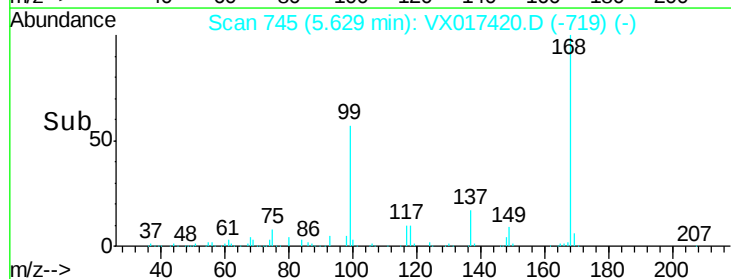
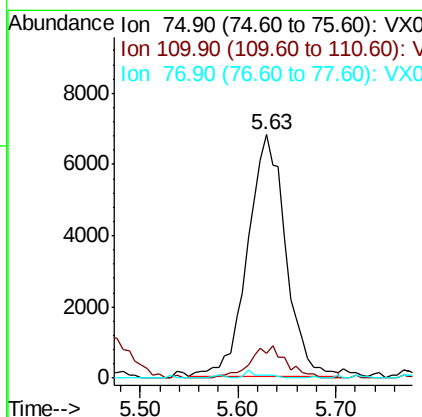
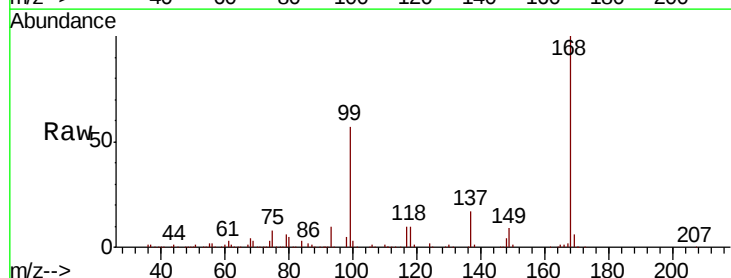
Instrument :  
 MSVOA\_X  
 ClientSampleId :

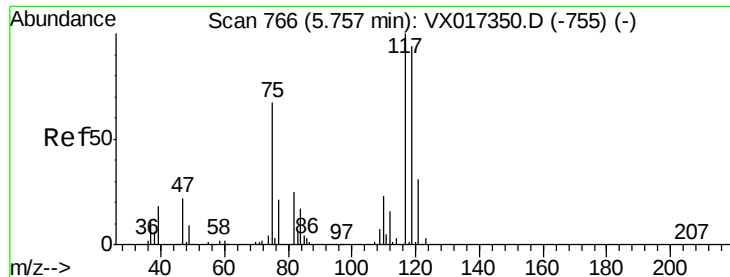
Tot Ion:113 Resp: 152066  
 Ion Ratio Lower Upper  
 113 100  
 111 101.4 82.4 123.6  
 192 20.7 17.2 25.8



#36  
 1,1-Dichloropropene  
 Concen: 4.553 ug/l  
 RT: 5.63 min Scan# 745  
 Delta R.T. -0.14 min  
 Lab File: VX017420.D  
 Acq: 17 Jul 2020 15:25

Tgt Ion: 75 Resp: 18147  
 Ion Ratio Lower Upper  
 75 100  
 110 12.7 18.6 55.8#  
 77 0.0 24.9 37.3#





#38

Carbon Tetrachloride

Concen: 5.333 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.13 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

Instrument :

MSVOA\_X

ClientSampleId :

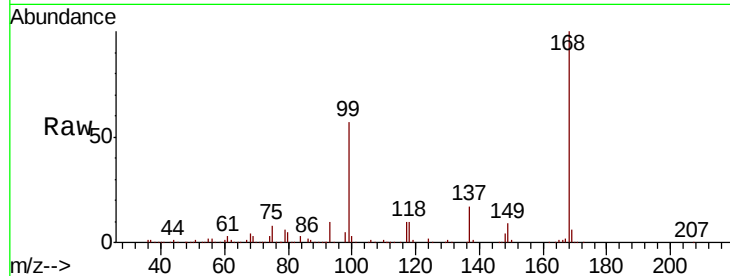
Tot Ion:117 Resp: 24886

Ion Ratio Lower Upper

117 100

119 8.6 74.7 112.1#

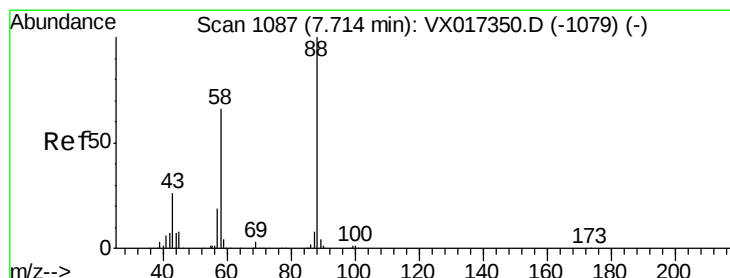
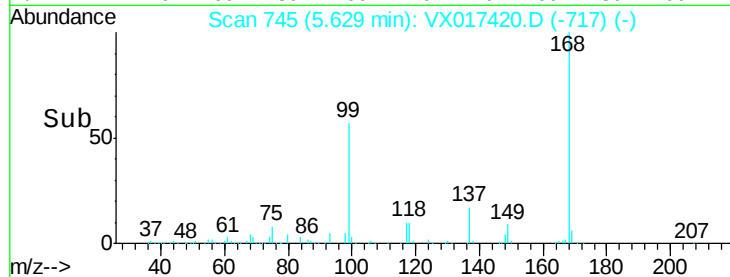
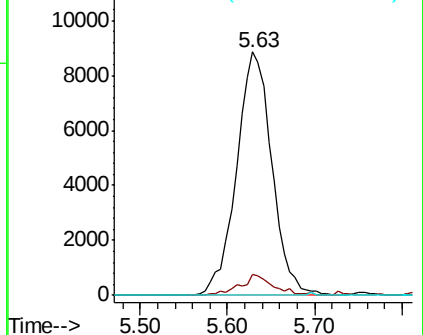
121 0.0 24.5 36.7#



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



#49

1,4-Dioxane

Concen: 0.433 ug/l

RT: 7.68 min Scan# 1082

Delta R.T. -0.03 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

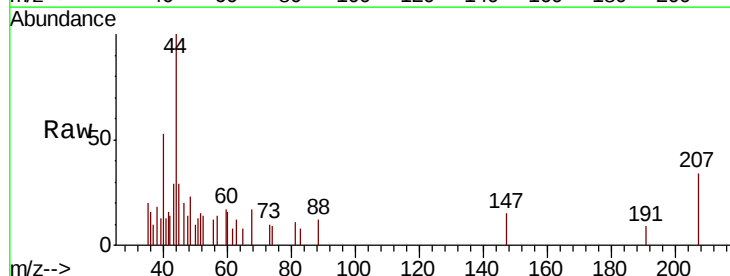
Tgt Ion: 88 Resp: 28

Ion Ratio Lower Upper

88 100

43 0.0 25.6 38.4#

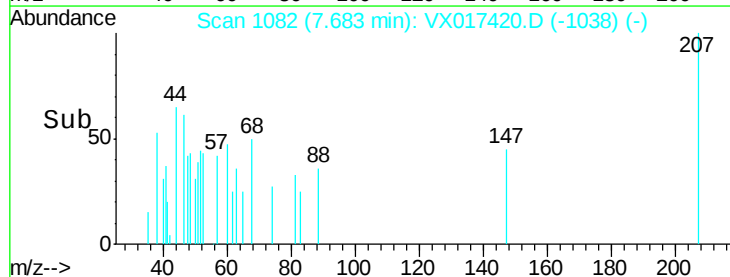
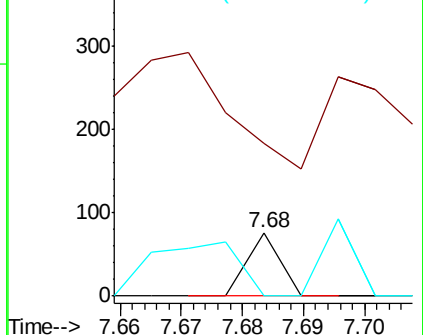
58 228.6 53.9 80.9#

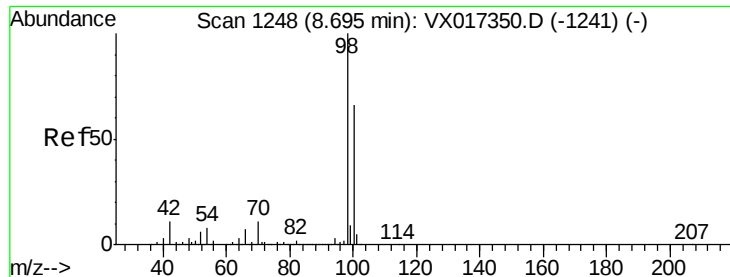


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#50

Toluene-d8

Concen: 52.148 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. 0.00 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

Instrument :

MSVOA\_X

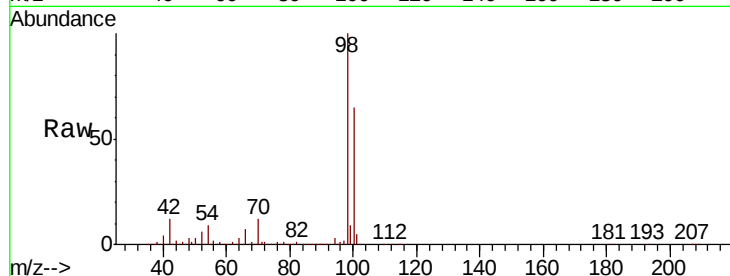
ClientSampleId :

Tot Ion: 98 Resp: 549069

Ion Ratio Lower Upper

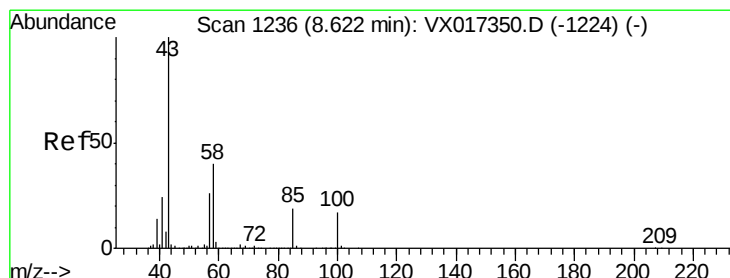
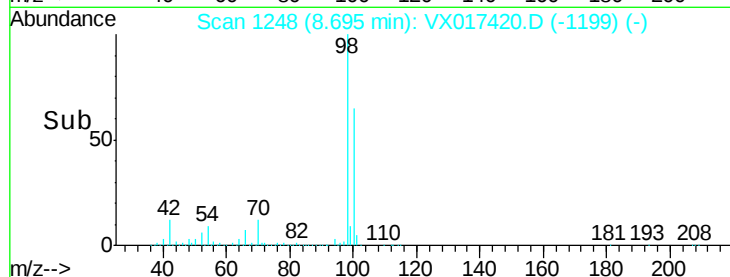
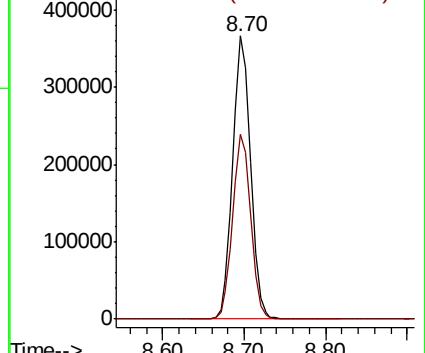
98 100

100 65.9 53.4 80.2



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX



#51

4-Methyl-2-Pentanone

Concen: 0.424 ug/l

RT: 8.62 min Scan# 1236

Delta R.T. 0.00 min

Lab File: VX017420.D

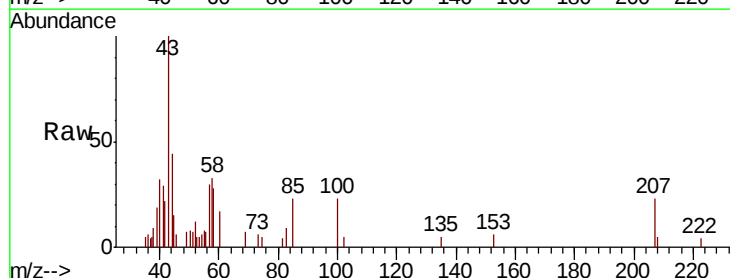
Acq: 17 Jul 2020 15:25

Tgt Ion: 43 Resp: 1701

Ion Ratio Lower Upper

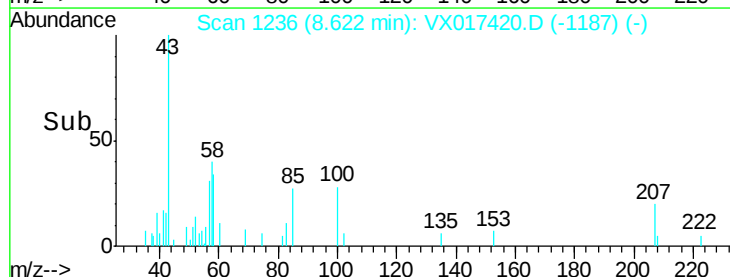
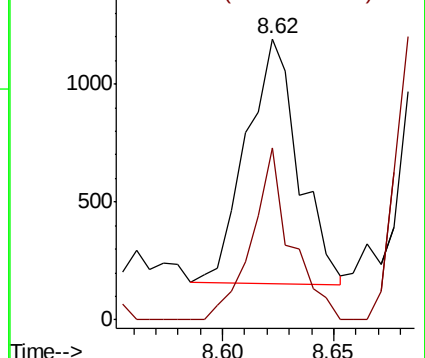
43 100

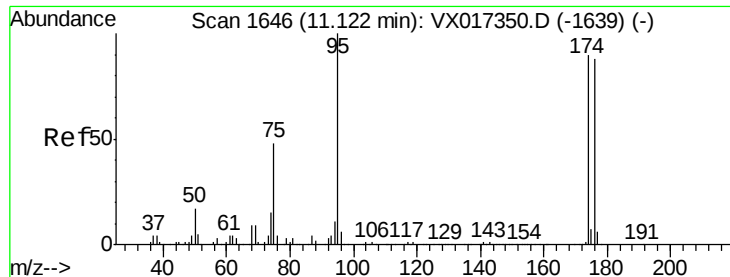
58 52.6 32.2 48.2#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

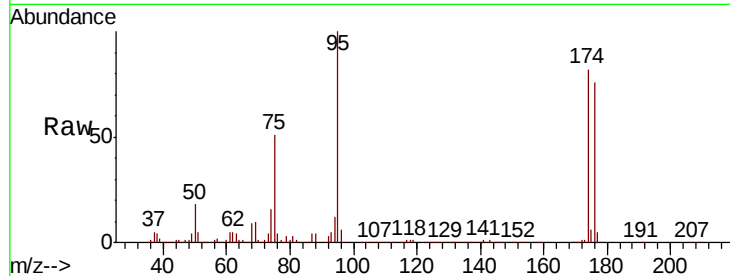




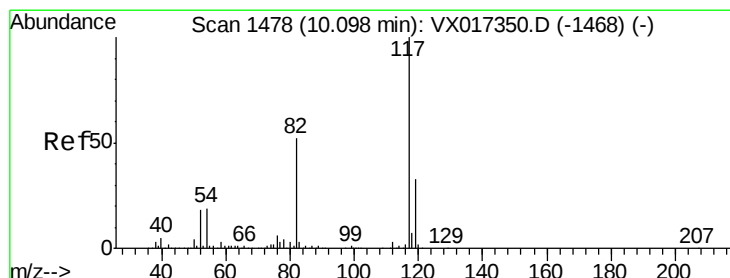
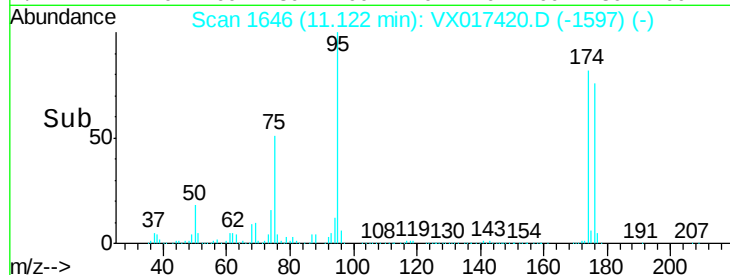
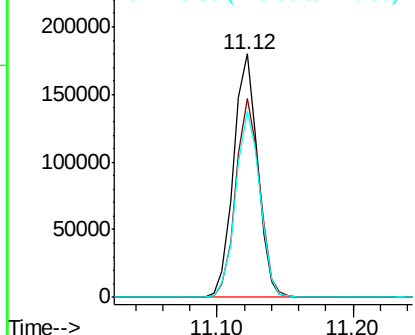
#62  
4-Bromofluorobenzene  
Concen: 53.031 ug/l  
RT: 11.12 min Scan# 1646  
Delta R.T. 0.00 min  
Lab File: VX017420.D  
Acq: 17 Jul 2020 15:25

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 95 Resp: 221791  
Ion Ratio Lower Upper  
95 100  
174 81.5 0.0 175.8  
176 76.9 0.0 164.6

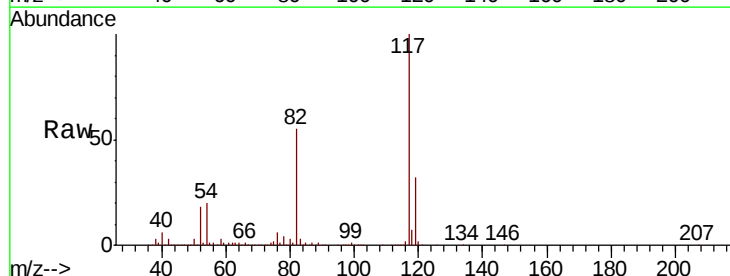


Abundance Ion 94.90 (94.60 to 95.60): VX0  
Ion 173.80 (173.50 to 174.50): V  
Ion 175.80 (175.50 to 176.50): V

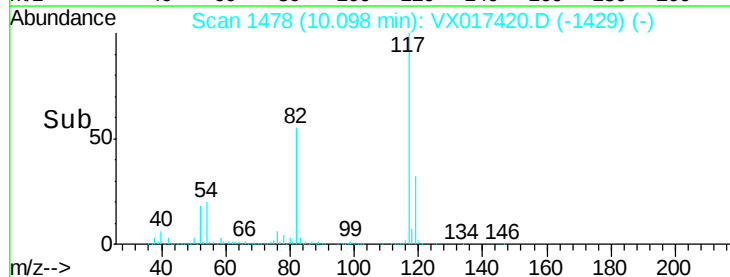
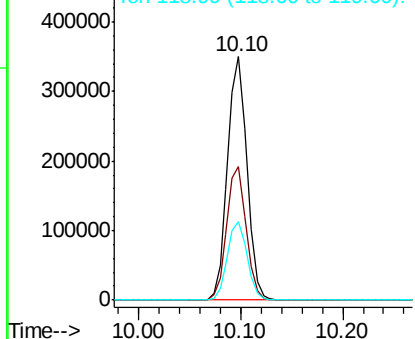


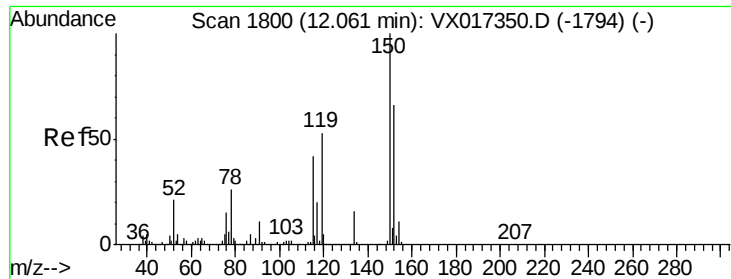
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.10 min Scan# 1478  
Delta R.T. 0.00 min  
Lab File: VX017420.D  
Acq: 17 Jul 2020 15:25

Tgt Ion: 117 Resp: 459242  
Ion Ratio Lower Upper  
117 100  
82 54.7 42.0 63.0  
119 32.4 26.3 39.5



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





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1800

Delta R.T. 0.00 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

Instrument :

MSVOA\_X

ClientSampleId :

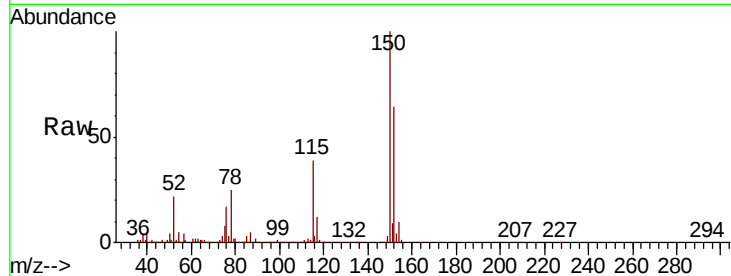
Tot Ion:152 Resp: 254567

Ion Ratio Lower Upper

152 100

115 57.4 39.9 119.7

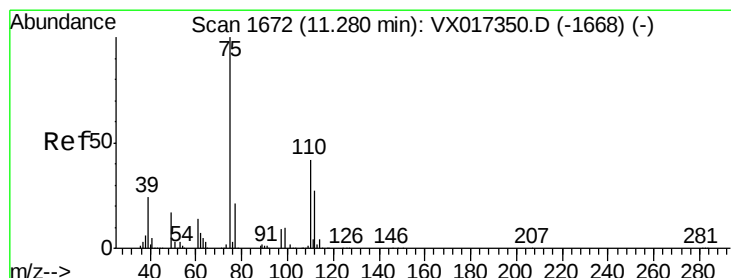
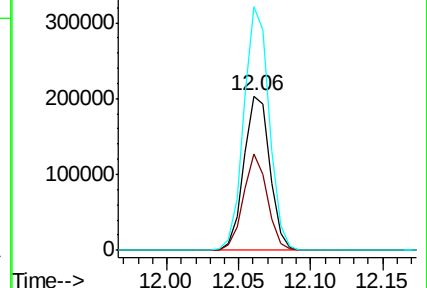
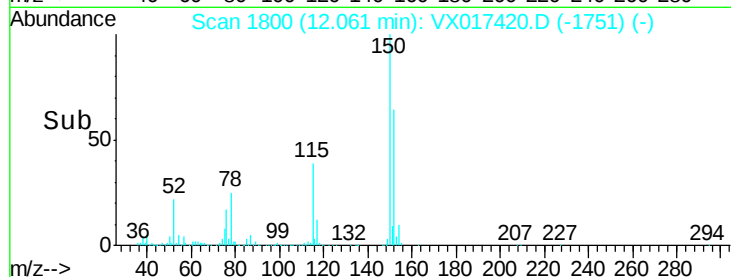
150 153.6 0.0 343.4



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: 23.887 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX017420.D

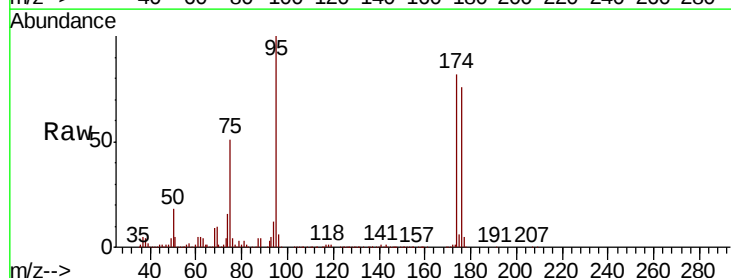
Acq: 17 Jul 2020 15:25

Tgt Ion: 75 Resp: 112364

Ion Ratio Lower Upper

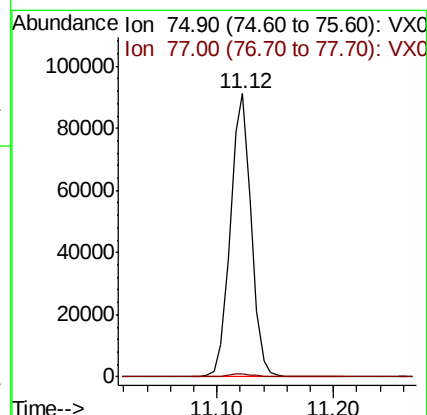
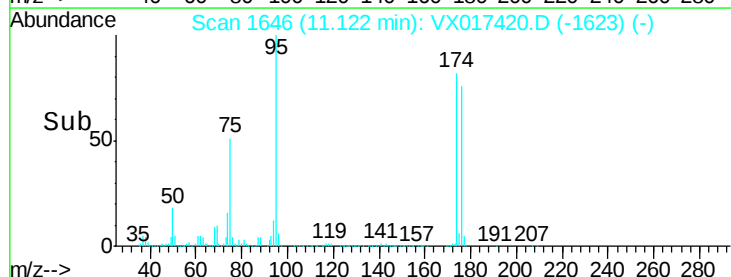
75 100

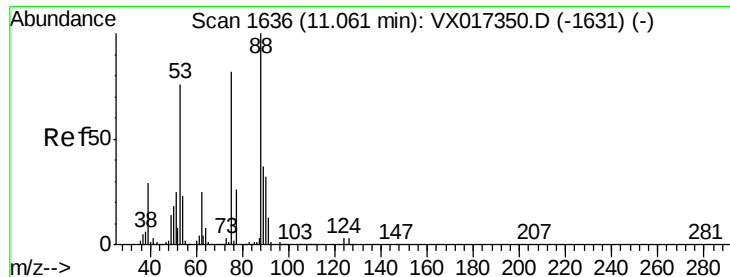
77 1.2 20.3 60.9#



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: 60.596 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.06 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

Instrument :

MSVOA\_X

ClientSampleId :

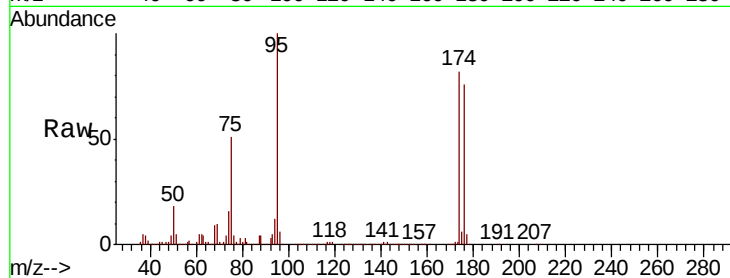
Tot Ion: 75 Resp: 112364

Ion Ratio Lower Upper

75 100

53 0.4 76.5 114.7#

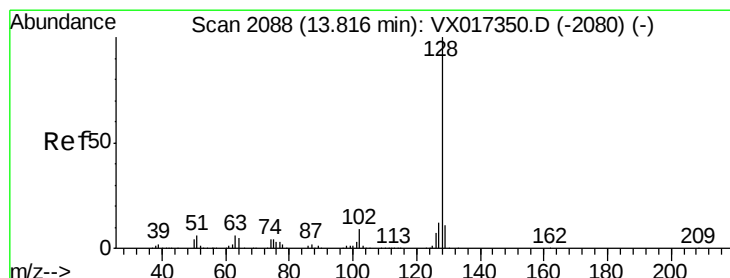
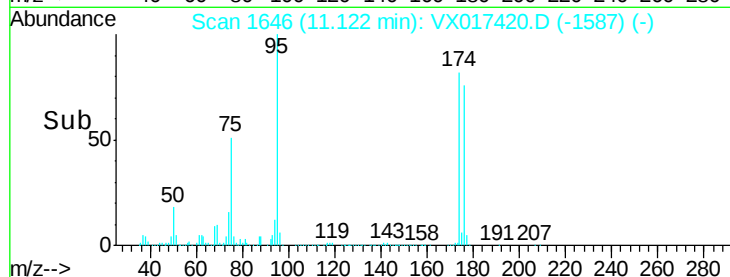
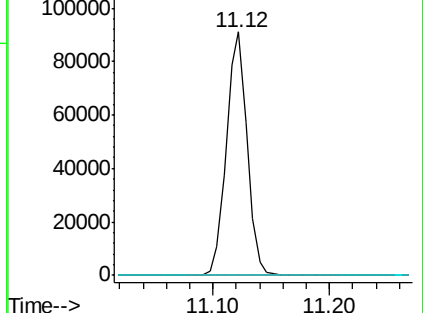
89 0.0 38.1 57.1#



Abundance Ion 74.90 (74.60 to 75.60): VX017420.D (-1587) (-)

Ion 53.00 (52.70 to 53.70): VX017420.D (-1587) (-)

Ion 88.90 (88.60 to 89.60): VX017420.D (-1587) (-)



#95

Naphthalene

Concen: 1.026 ug/l

RT: 13.82 min Scan# 2088

Delta R.T. 0.00 min

Lab File: VX017420.D

Acq: 17 Jul 2020 15:25

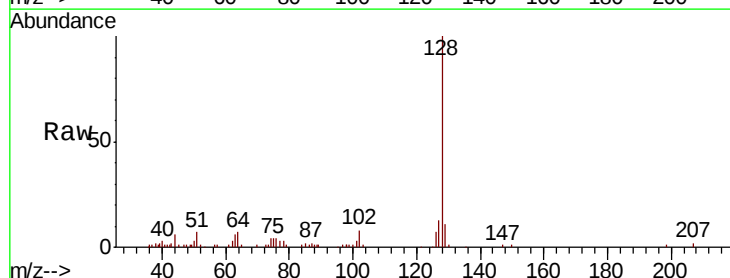
Tgt Ion: 128 Resp: 16003

Ion Ratio Lower Upper

128 100

127 13.2 10.2 15.4

129 11.3 8.9 13.3



Abundance Ion 128.00 (127.70 to 128.70): VX017420.D (-2039) (-)

Ion 127.00 (126.70 to 127.70): VX017420.D (-2039) (-)

Ion 129.00 (128.70 to 129.70): VX017420.D (-2039) (-)

