

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX091420\  
 Data File : VX018381.D  
 Acq On : 14 Sep 2020 13:34  
 Operator : JC/SP  
 Sample : L3993-13  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Sep 15 05:10:35 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082120W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 21 03:03:56 2020  
 Response via : Initial Calibration

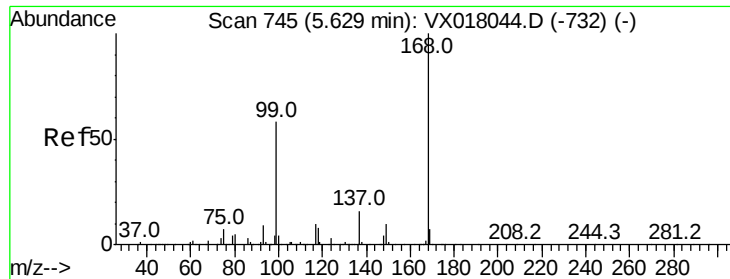
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.63  | 168  | 460138   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.83  | 114  | 730273   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 681377   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 323837   | 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   | 322304   | 50.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.92% |          |
| 35) Dibromofluoromethane    | 5.46  | 113  | 248251   | 49.91 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.82%  |          |
| 50) Toluene-d8              | 8.70  | 98   | 891928   | 48.15 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.30%  |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 320072   | 43.92 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.84%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 10) Methyl Iodide              | 2.50  | 142  | 706      | 5.423  | ug/l # | 58     |
| 11) Tert butyl alcohol         | 3.00  | 59   | 2392     | 1.926  | ug/l   | 97     |
| 13) Acrolein                   | 2.28  | 56   | 385      | 0.748  | ug/l   | 98     |
| 16) Acetone                    | 2.43  | 43   | 4861     | 1.953  | ug/l # | 86     |
| 20) Methylene Chloride         | 2.83  | 84   | 7139     | 0.240  | ug/l # | 84     |
| 25) 2-Butanone                 | 4.63  | 43   | 1259     | 0.308  | ug/l # | 67     |
| 29) Tetrahydrofuran            | 5.29  | 42   | 638      | 0.245  | ug/l   | 97     |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 36284    | 5.387  | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 5.64  | 117  | 48900    | 6.442  | ug/l # | 18     |
| 49) 1,4-Dioxane                | 7.72  | 88   | 56       | 0.491  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 168547   | 23.397 | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 168547   | 63.191 | ug/l # | 12     |
| 93) 1,2,4-Trichlorobenzene     | 13.63 | 180  | 1410     | 0.217  | ug/l   | 82     |
| 94) Hexachlorobutadiene        | 13.77 | 225  | 638      | 0.249  | ug/l   | 93     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.00 min

Lab File: VX018381.D

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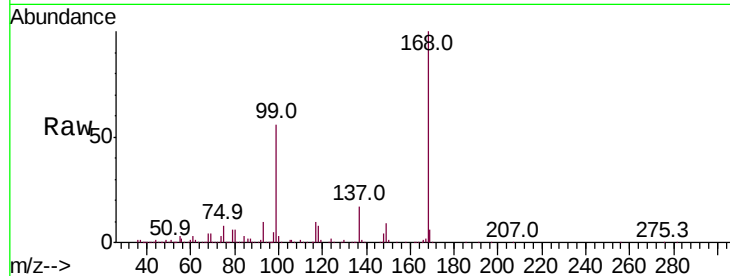
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:168 Resp: 460138

Ion Ratio Lower Upper

168 100

99 56.5 46.3 69.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.63

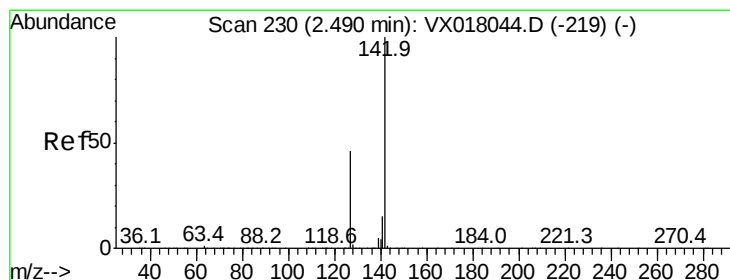
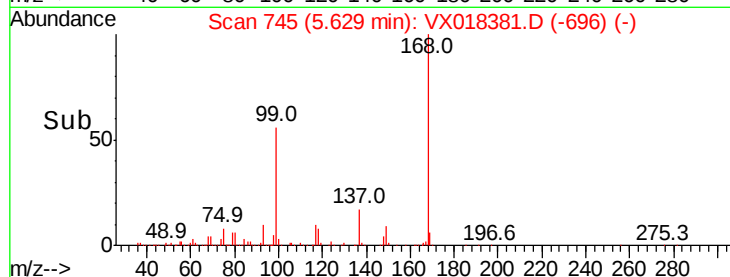
150000

100000

50000

0

Time-->



#10

Methyl Iodide

Concen: 5.423 ug/l

RT: 2.50 min Scan# 232

Delta R.T. 0.01 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

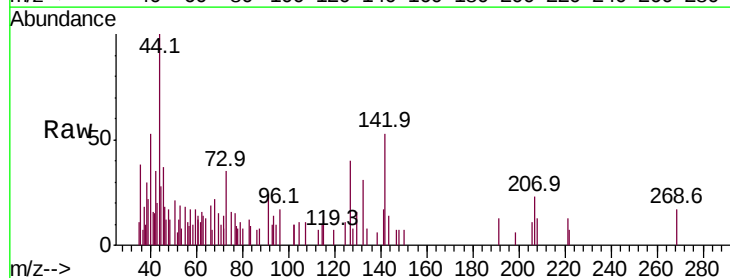
Tgt Ion:142 Resp: 706

Ion Ratio Lower Upper

142 100

127 62.0 37.0 55.6#

141 55.1 11.5 17.3#



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

2.50

600

500

400

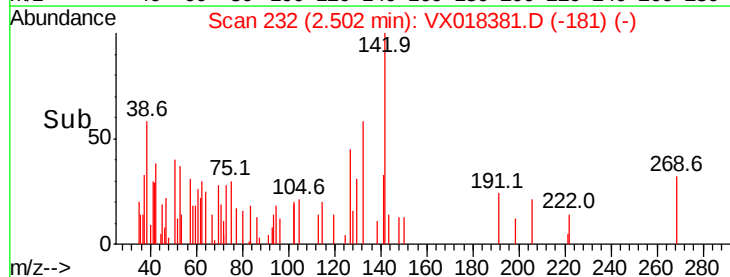
300

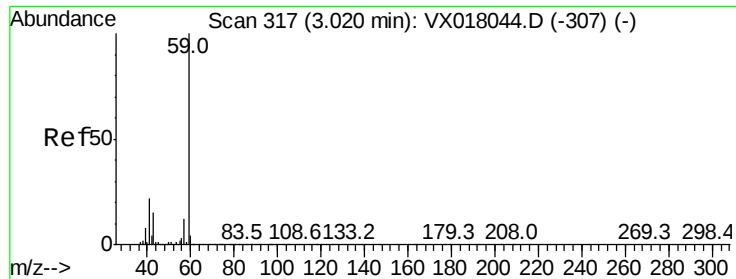
200

100

0

Time-->



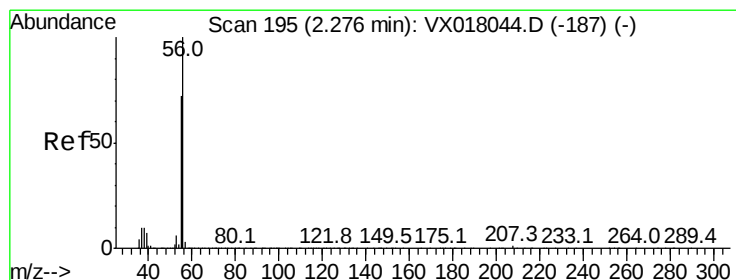
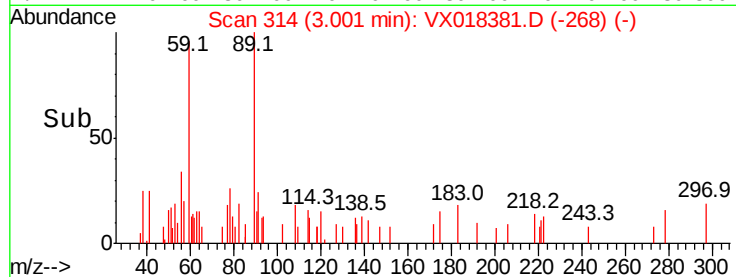
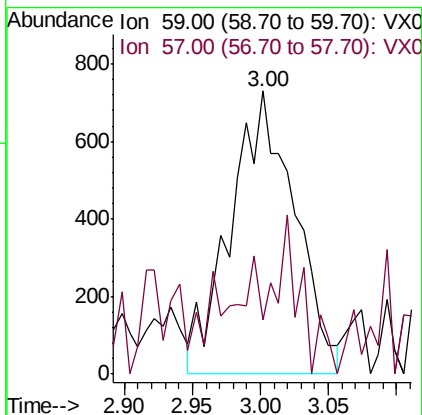
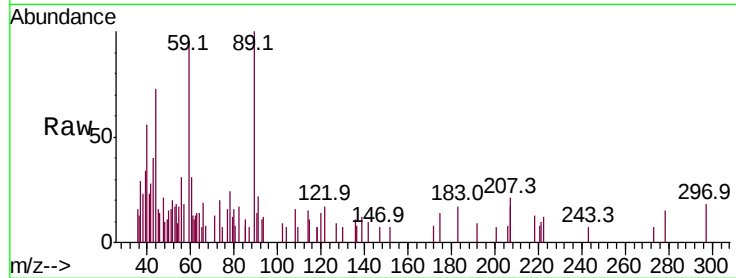


#11

Tert butyl alcohol  
 Concen: 1.926 ug/l  
 RT: 3.00 min Scan# 314  
 Delta R.T. -0.02 min  
 Lab File: VX018381.D  
 Acq: 14 Sep 2020 13:34

Instrument :  
 MSVOA\_X  
 ClientSampled :

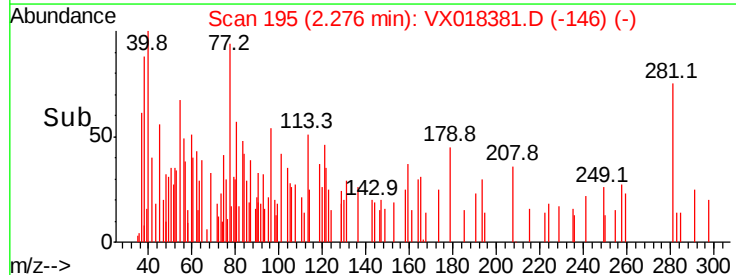
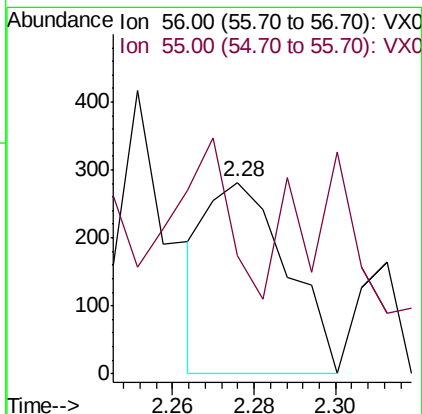
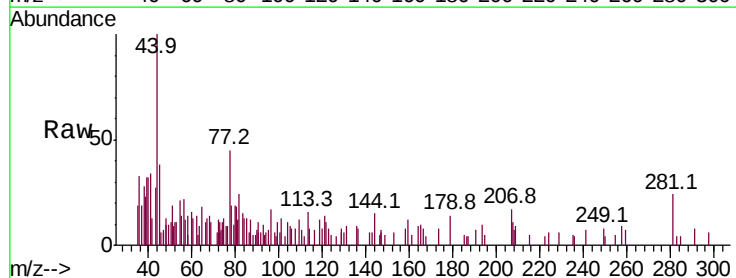
Tot Ion: 59 Resp: 2392  
 Ion Ratio Lower Upper  
 59 100  
 57 12.2 8.9 13.3

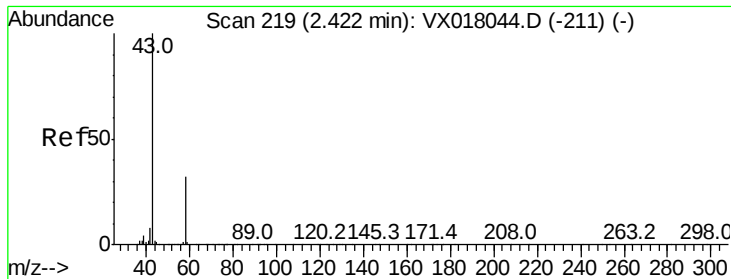


#13

Acrolein  
 Concen: 0.748 ug/l  
 RT: 2.28 min Scan# 195  
 Delta R.T. -0.00 min  
 Lab File: VX018381.D  
 Acq: 14 Sep 2020 13:34

Tgt Ion: 56 Resp: 385  
 Ion Ratio Lower Upper  
 56 100  
 55 69.6 57.0 85.6





#16

Acetone

Concen: 1.953 ug/l

RT: 2.43 min Scan# 220

Delta R.T. 0.01 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

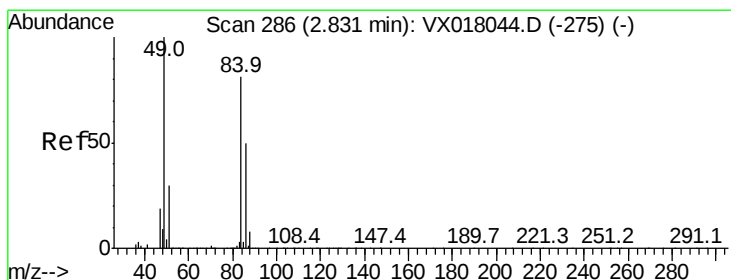
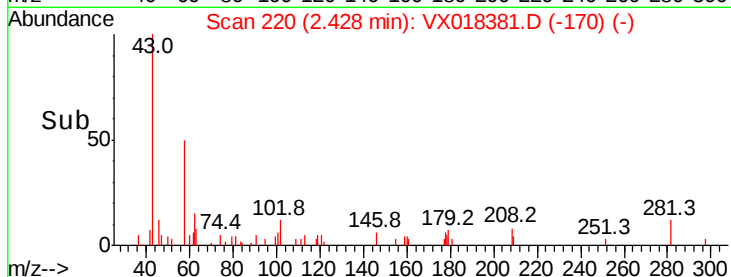
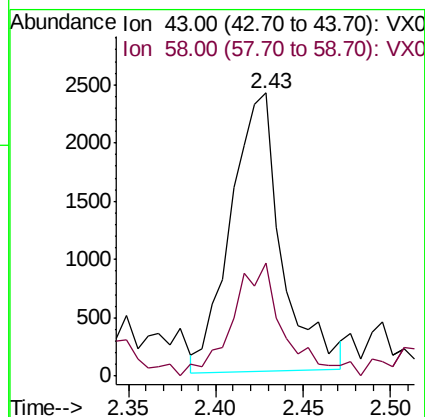
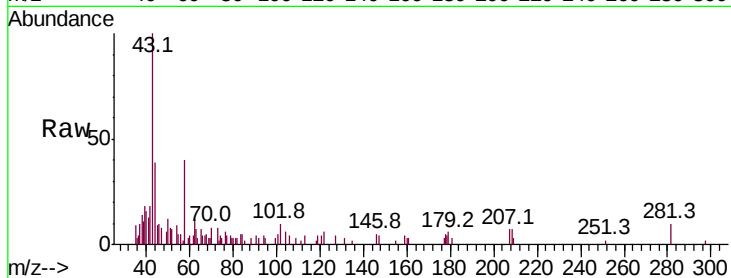
Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 43 Resp: 4861

Ion Ratio Lower Upper

43 100

58 39.6 25.5 38.3#



#20

Methylene Chloride

Concen: 0.240 ug/l

RT: 2.83 min Scan# 286

Delta R.T. 0.00 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

Tgt Ion: 84 Resp: 7139

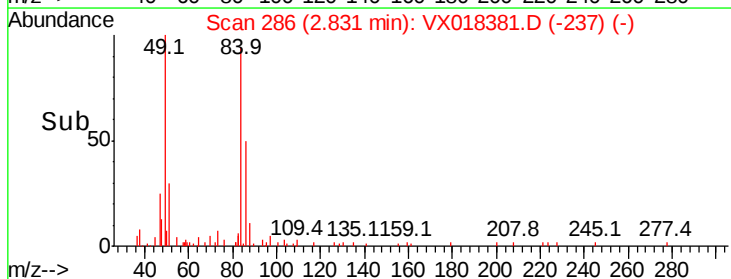
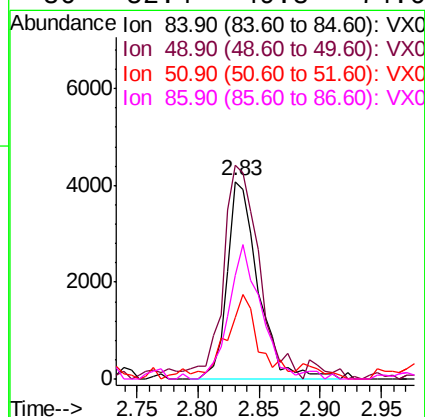
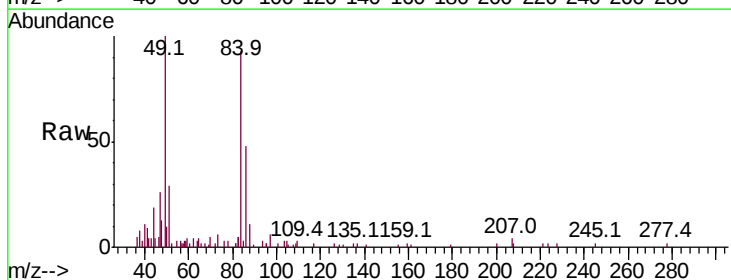
Ion Ratio Lower Upper

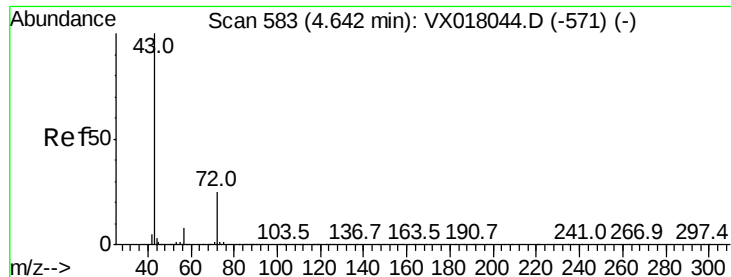
84 100

49 102.9 98.6 148.0

51 29.0 29.6 44.4#

86 52.4 49.8 74.6

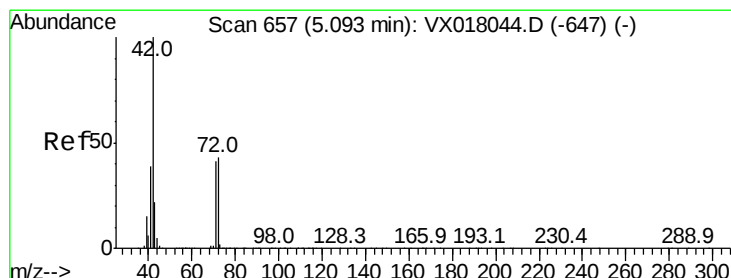
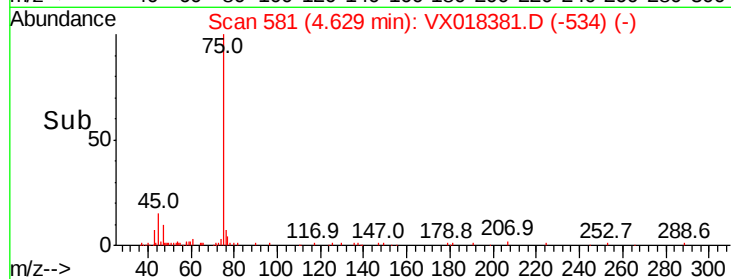
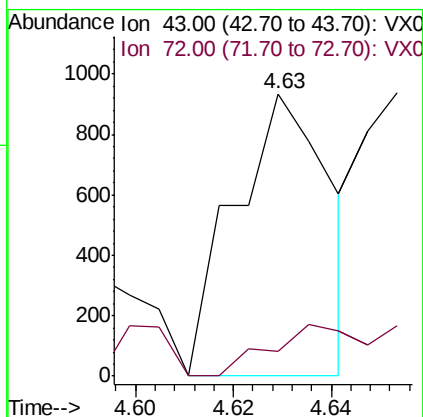
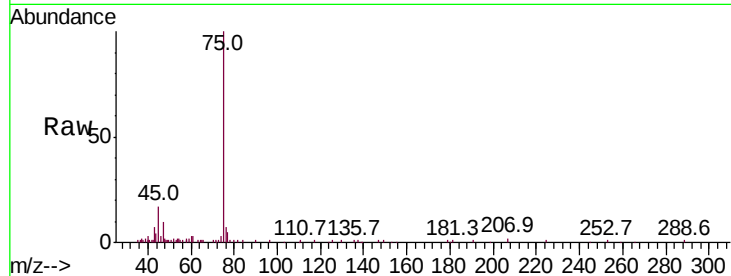




#25  
2-Butanone  
Concen: 0.308 ug/l  
RT: 4.63 min Scan# 581  
Delta R.T. -0.01 min  
Lab File: VX018381.D  
Acq: 14 Sep 2020 13:34

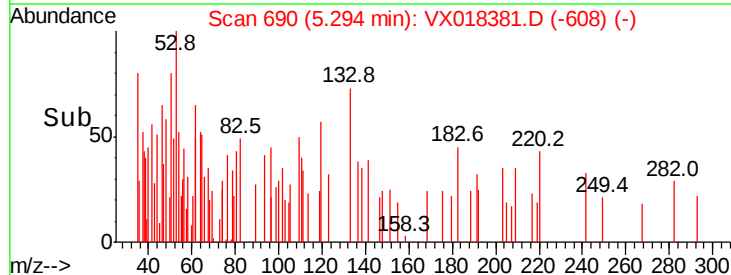
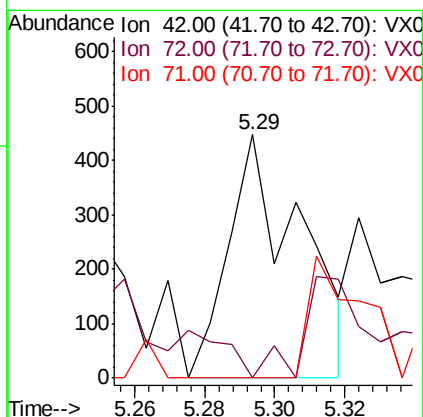
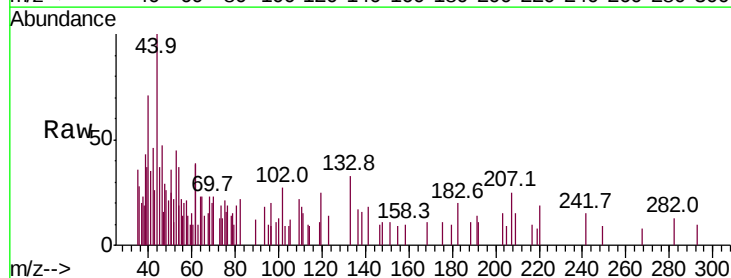
Instrument :  
MSVOA\_X  
ClientSampled :

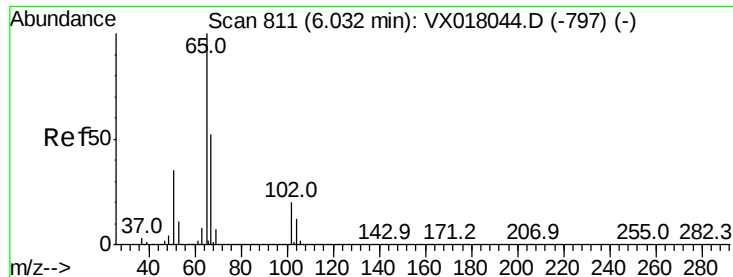
Tot Ion: 43 Resp: 1259  
Ion Ratio Lower Upper  
43 100  
72 8.0 19.8 29.6#



#29  
Tetrahydrofuran  
Concen: 0.245 ug/l  
RT: 5.29 min Scan# 690  
Delta R.T. 0.20 min  
Lab File: VX018381.D  
Acq: 14 Sep 2020 13:34

Tgt Ion: 42 Resp: 638  
Ion Ratio Lower Upper  
42 100  
72 43.6 34.2 51.4  
71 43.3 32.1 48.1





#33

1,2-Dichloroethane-d4

Concen: 50.455 ug/l

RT: 6.03 min Scan# 811

Delta R.T. -0.00 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

Instrument :

MSVOA\_X

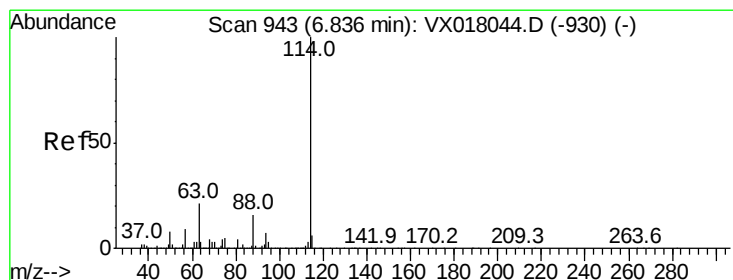
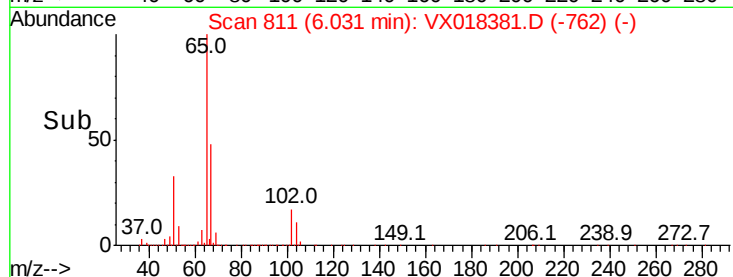
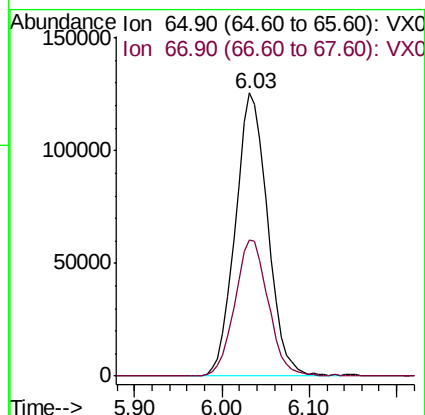
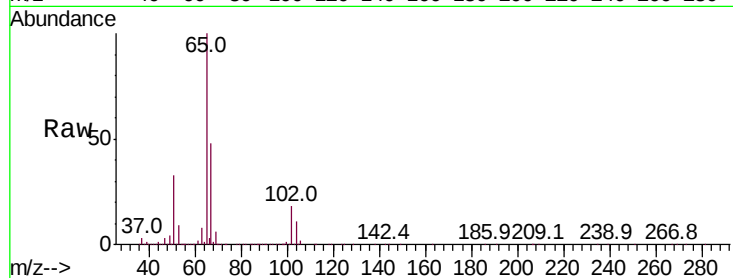
ClientSampleId :

Tot Ion: 65 Resp: 322304

Ion Ratio Lower Upper

65 100

67 49.7 0.0 105.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.83 min Scan# 942

Delta R.T. -0.01 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

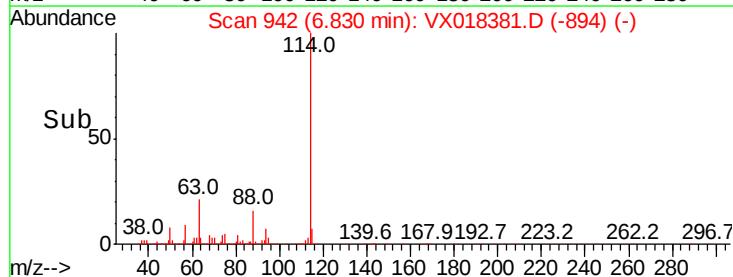
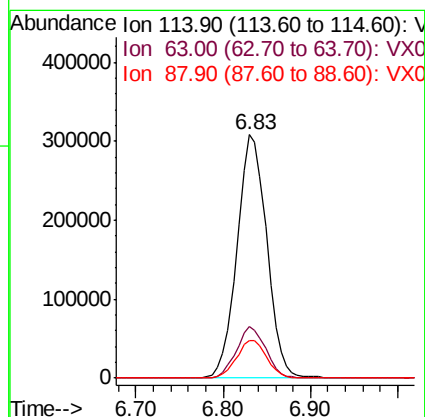
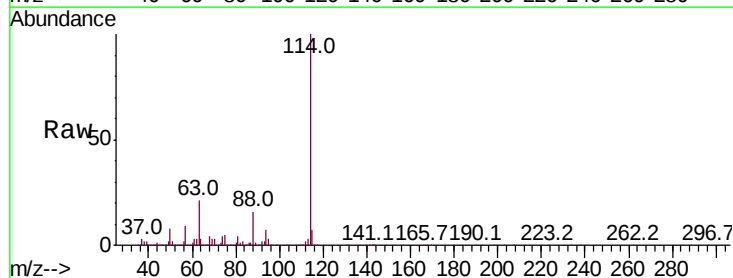
Tgt Ion: 114 Resp: 730273

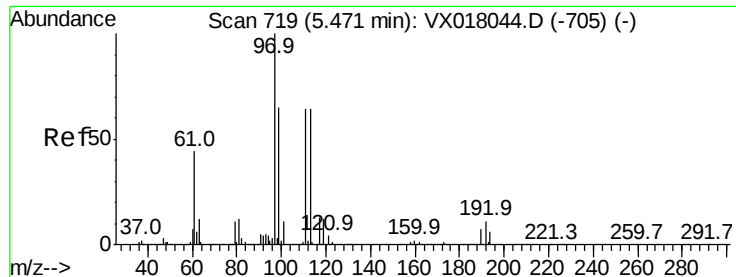
Ion Ratio Lower Upper

114 100

63 21.2 0.0 42.6

88 15.6 0.0 31.8

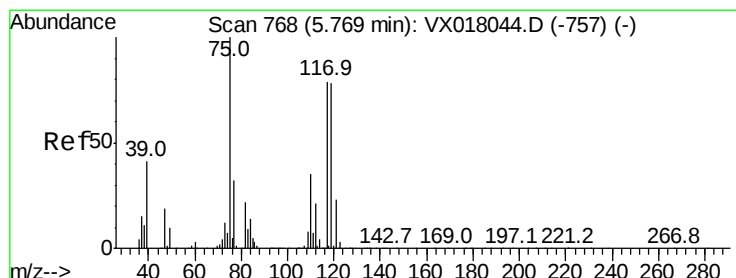
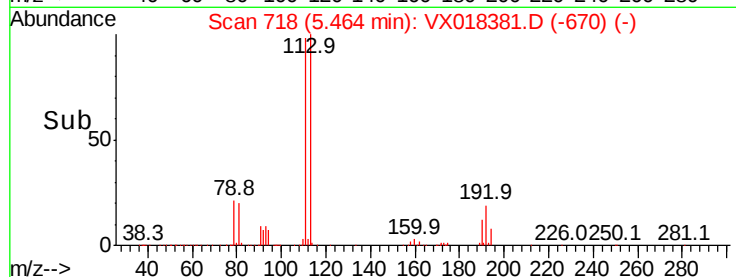
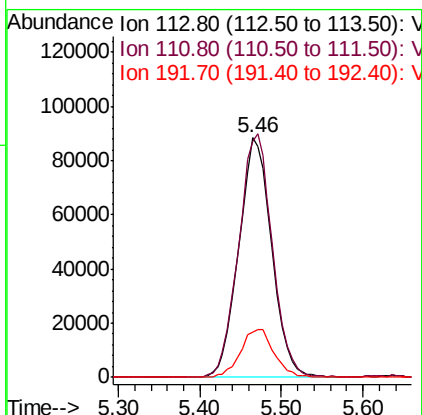
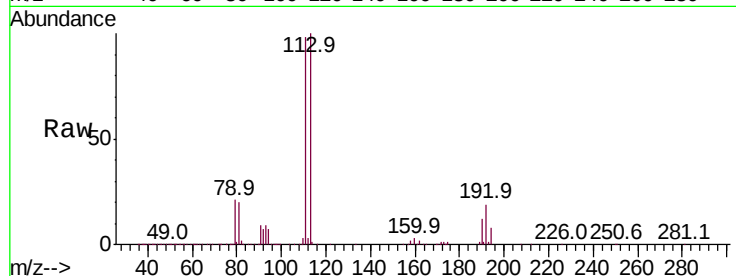




#35  
 Dibromofluoromethane  
 Concen: 49.915 ug/l  
 RT: 5.46 min Scan# 718  
 Delta R.T. -0.01 min  
 Lab File: VX018381.D  
 Acq: 14 Sep 2020 13:34

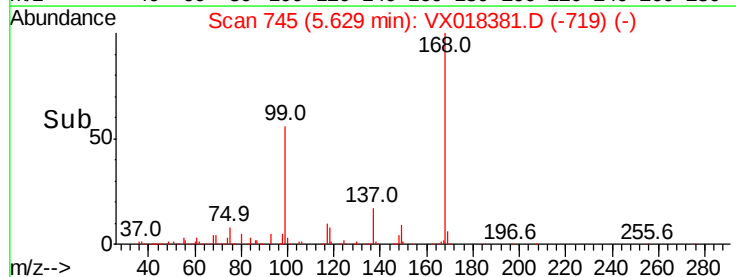
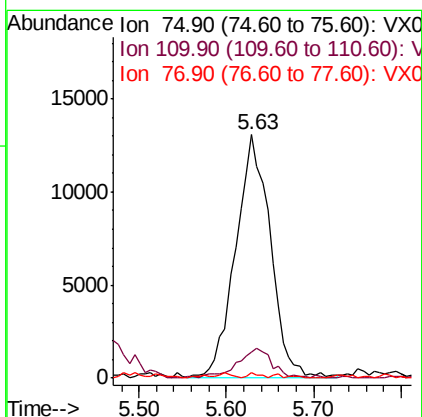
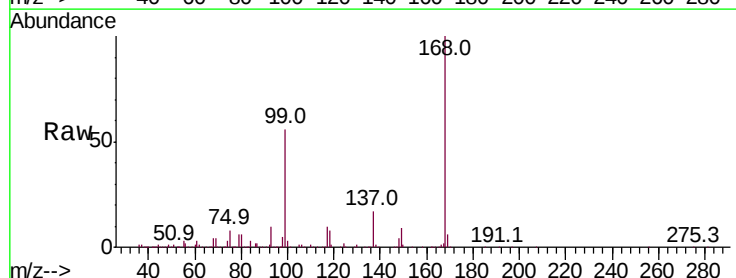
Instrument :  
 MSVOA\_X  
 ClientSampleId :

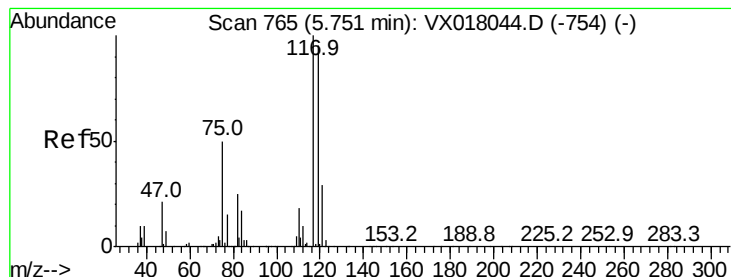
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.8 | 81.6  | 122.4 |
| 192     | 20.4  | 15.8  | 23.8  |



#36  
 1,1-Dichloropropene  
 Concen: 5.387 ug/l  
 RT: 5.63 min Scan# 745  
 Delta R.T. -0.14 min  
 Lab File: VX018381.D  
 Acq: 14 Sep 2020 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 12.1  | 18.0  | 54.0# |
| 77      | 0.7   | 24.4  | 36.6# |





#38

Carbon Tetrachloride

Concen: 6.442 ug/l

RT: 5.64 min Scan# 746

Delta R.T. -0.12 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

Instrument :

MSVOA\_X

ClientSampleId :

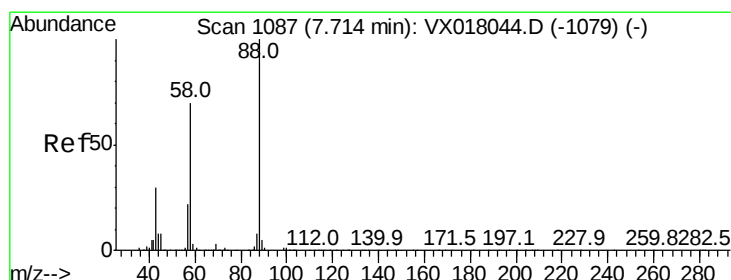
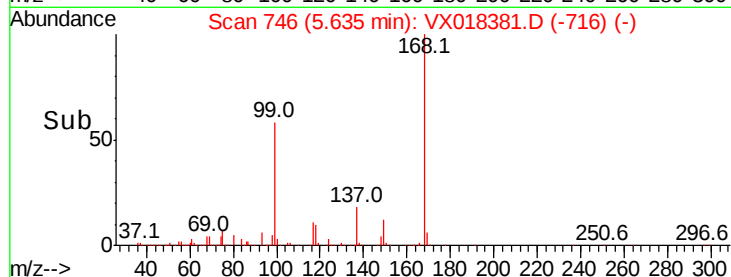
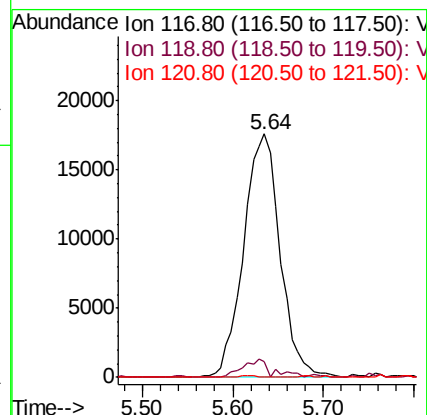
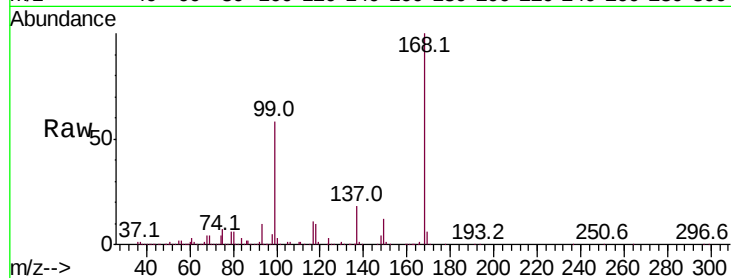
Tot Ion:117 Resp: 48900

Ion Ratio Lower Upper

117 100

119 6.4 75.8 113.6#

121 0.0 23.4 35.0#



#49

1,4-Dioxane

Concen: 0.491 ug/l

RT: 7.72 min Scan# 1088

Delta R.T. 0.01 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

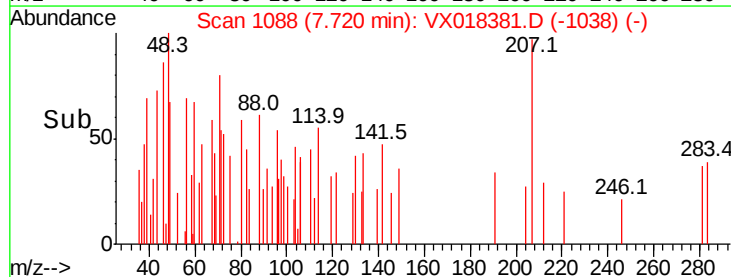
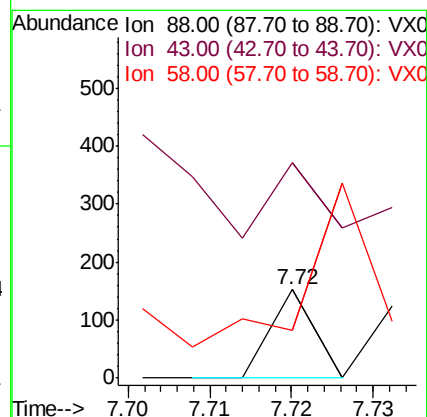
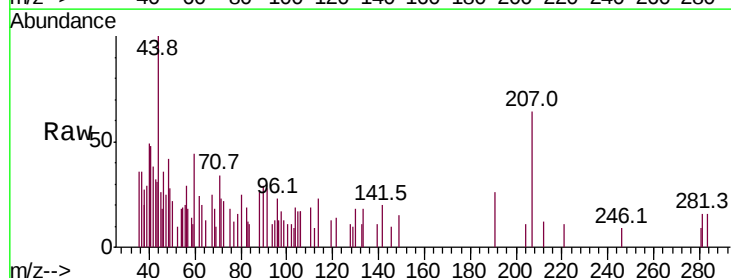
Tgt Ion: 88 Resp: 56

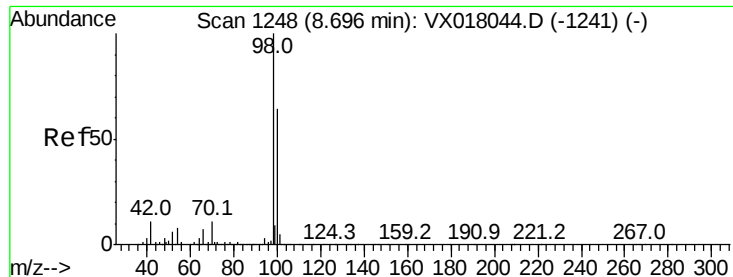
Ion Ratio Lower Upper

88 100

43 0.0 27.4 41.0#

58 516.1 56.4 84.6#





#50

Toluene-d8

Concen: 48.150 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. -0.00 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

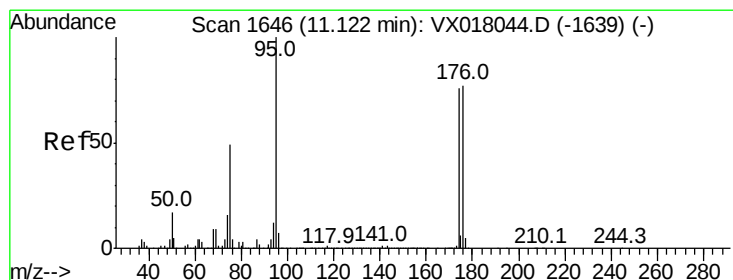
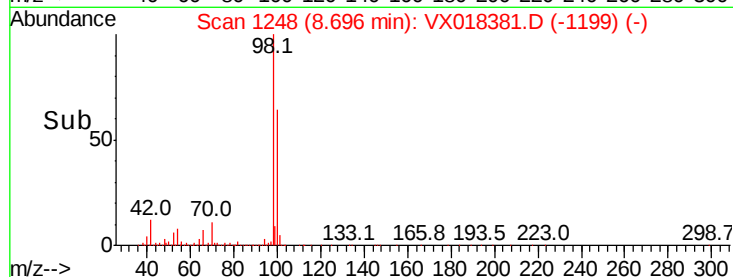
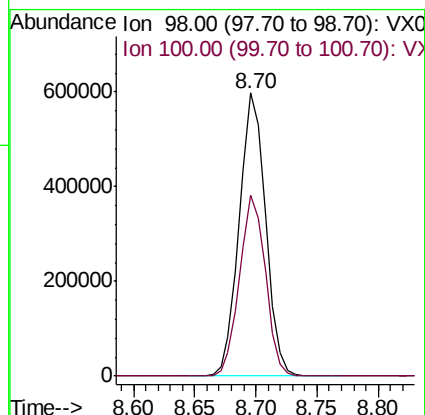
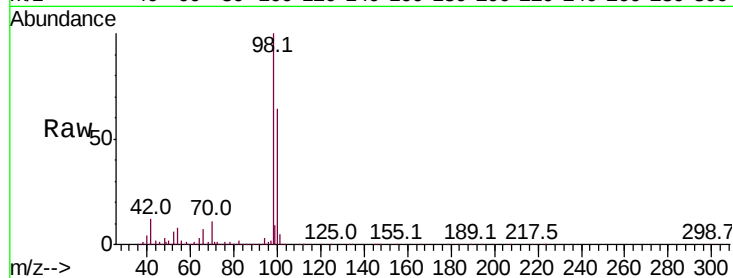
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 98 Resp: 891928

Ion Ratio Lower Upper

98 100

100 63.2 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 43.917 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

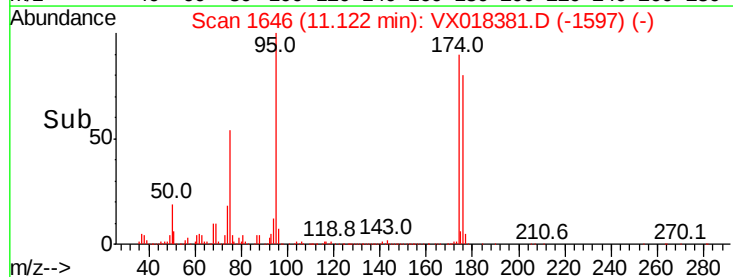
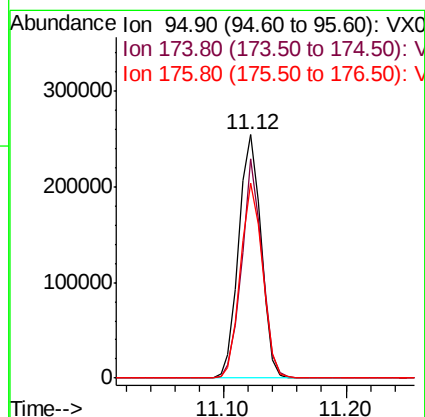
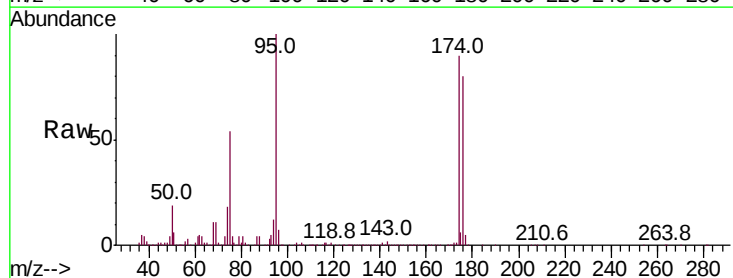
Tgt Ion: 95 Resp: 320072

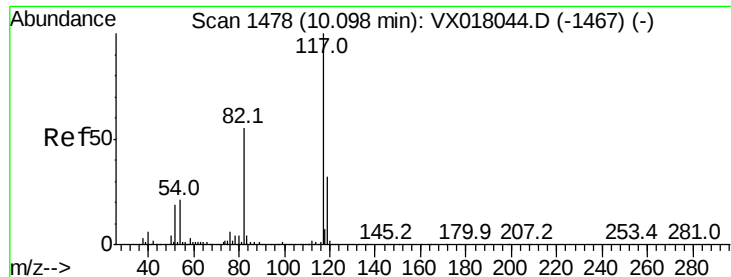
Ion Ratio Lower Upper

95 100

174 82.1 0.0 160.2

176 79.6 0.0 155.8

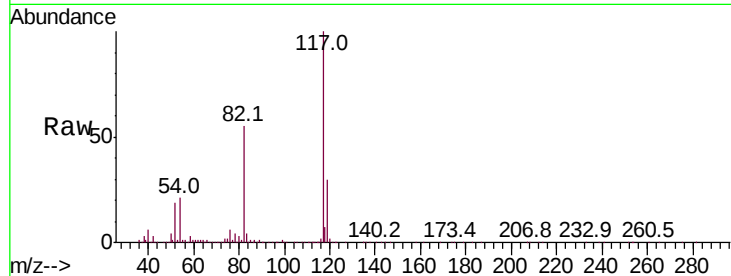




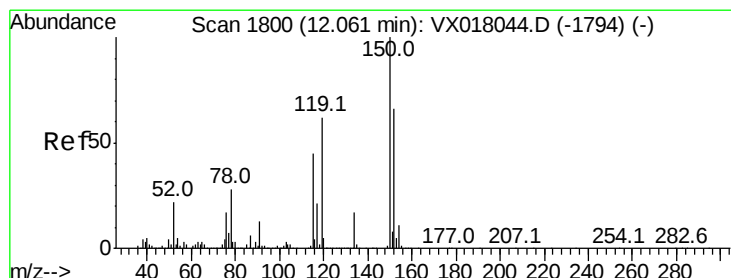
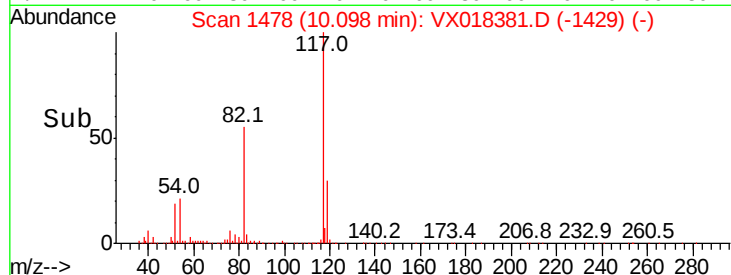
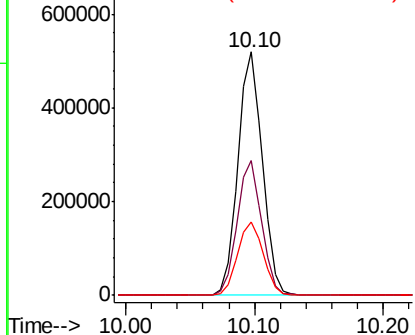
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.10 min Scan# 1478  
Delta R.T. -0.00 min  
Lab File: VX018381.D  
Acq: 14 Sep 2020 13:34

Instrument :  
MSVOA\_X  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 55.5  | 44.2  | 66.2  |
| 119     | 30.2  | 25.7  | 38.5  |

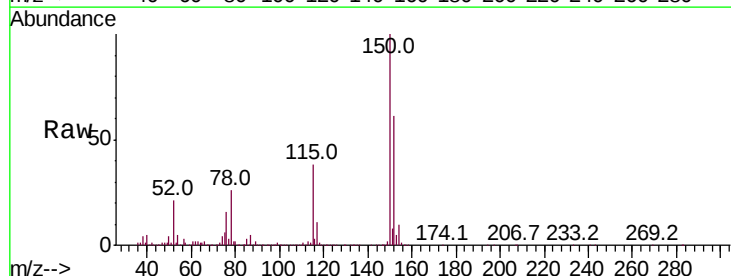


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

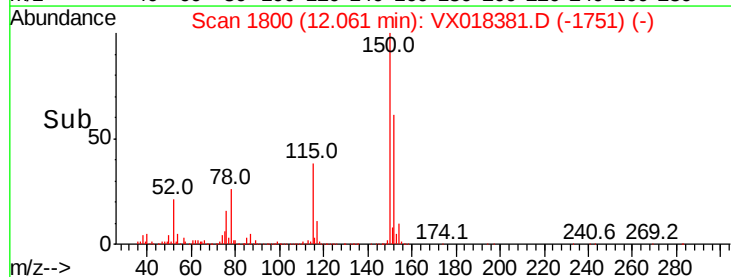
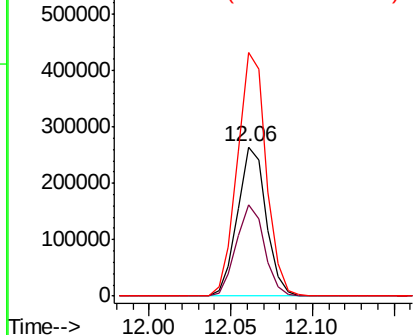


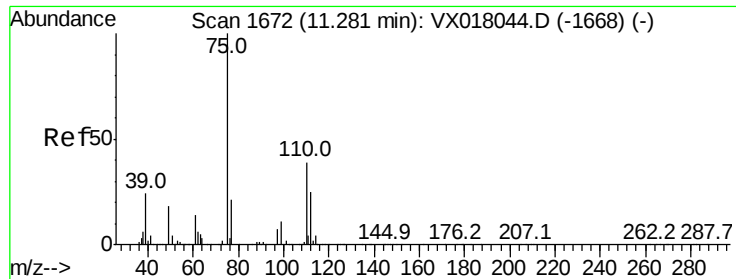
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.06 min Scan# 1800  
Delta R.T. -0.00 min  
Lab File: VX018381.D  
Acq: 14 Sep 2020 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 60.5  | 41.5  | 124.5 |
| 150     | 163.4 | 0.0   | 343.8 |



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: 23.397 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

Instrument :

MSVOA\_X

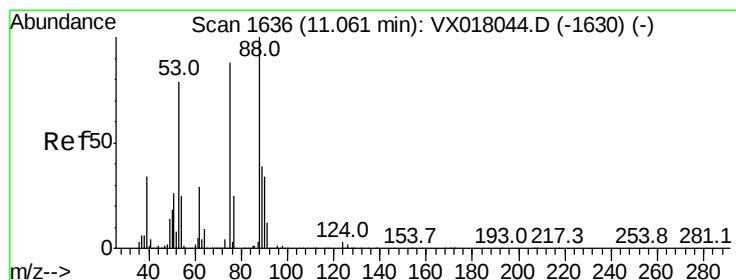
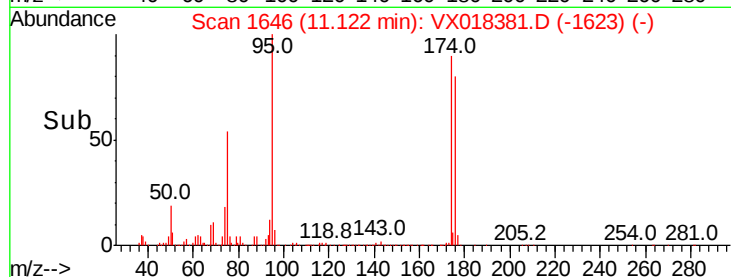
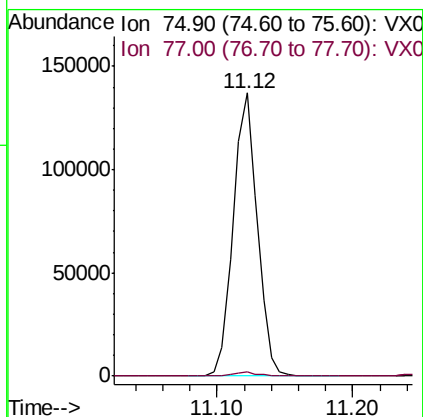
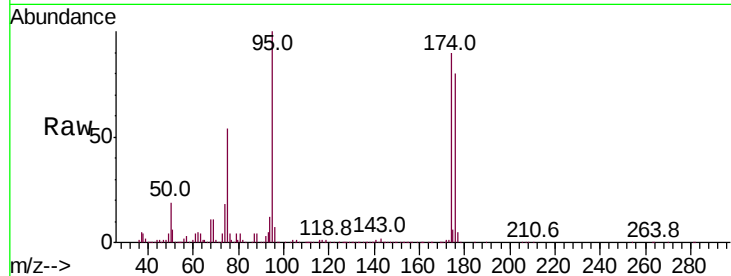
ClientSampleId :

Tot Ion: 75 Resp: 168547

Ion Ratio Lower Upper

75 100

77 1.4 20.8 62.2#



#81

trans-1,4-Dichloro-2-butene

Concen: 63.191 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.06 min

Lab File: VX018381.D

Acq: 14 Sep 2020 13:34

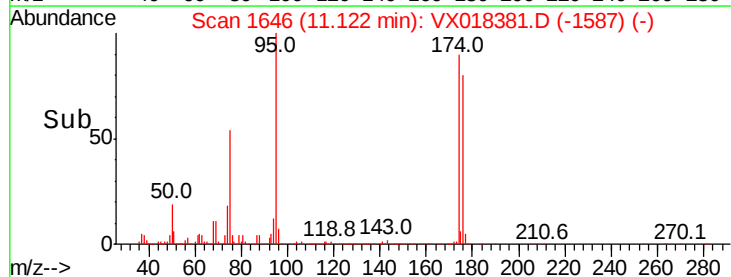
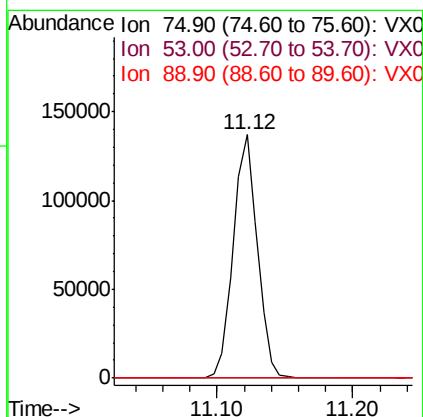
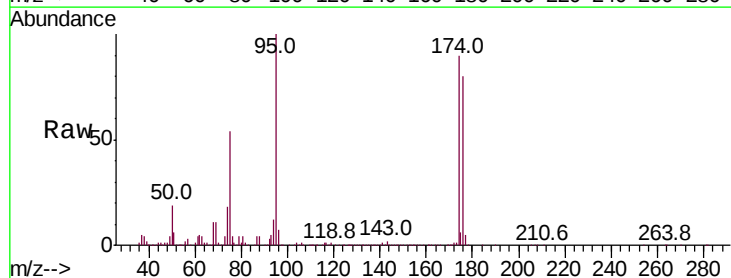
Tgt Ion: 75 Resp: 168547

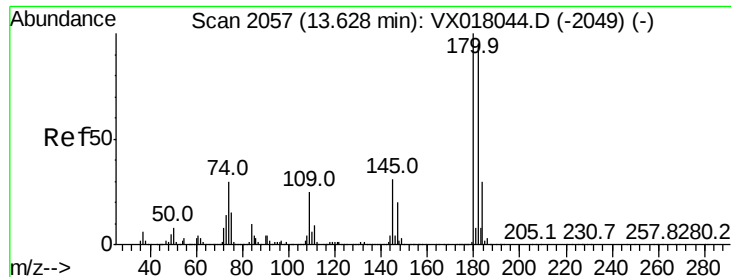
Ion Ratio Lower Upper

75 100

53 0.5 74.7 112.1#

89 0.0 36.6 54.8#

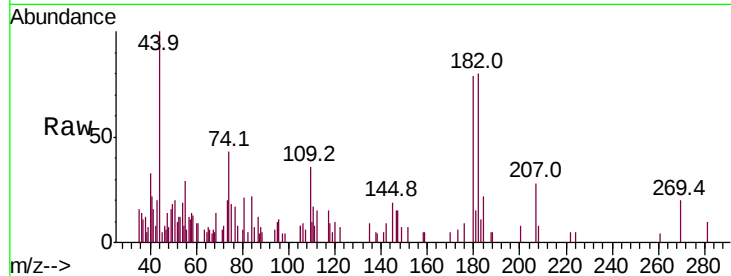




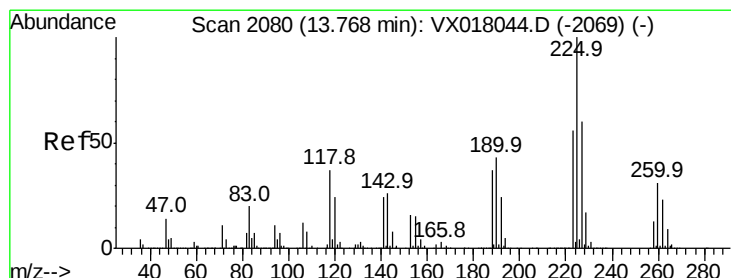
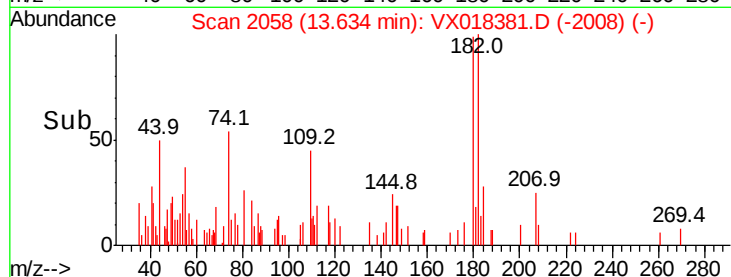
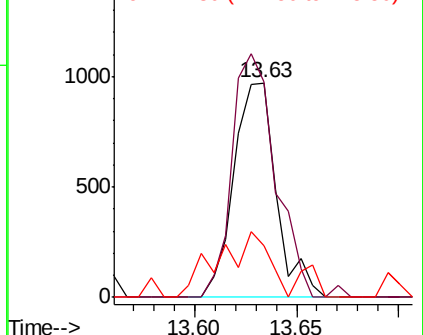
#93  
 1,2,4-Trichlorobenzene  
 Concen: 0.217 ug/l  
 RT: 13.63 min Scan# 2058  
 Delta R.T. 0.01 min  
 Lab File: VX018381.D  
 Acq: 14 Sep 2020 13:34

Instrument :  
 MSVOA\_X  
 ClientSampled :

Tot Ion:180 Resp: 1410  
 Ion Ratio Lower Upper  
 180 100  
 182 115.2 47.5 142.6  
 145 36.2 15.7 47.1

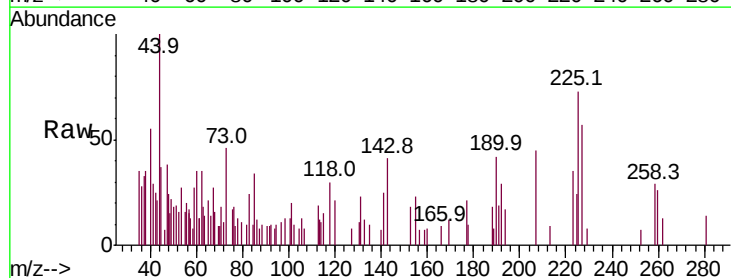


Abundance Ion 179.80 (179.50 to 180.50): V  
 Ion 181.80 (181.50 to 182.50): V  
 Ion 144.80 (144.50 to 145.50): V



#94  
 Hexachlorobutadiene  
 Concen: 0.249 ug/l  
 RT: 13.77 min Scan# 2080  
 Delta R.T. -0.00 min  
 Lab File: VX018381.D  
 Acq: 14 Sep 2020 13:34

Tgt Ion:225 Resp: 638  
 Ion Ratio Lower Upper  
 225 100  
 223 63.2 30.7 92.1  
 227 56.6 32.6 97.8



Abundance Ion 224.70 (224.40 to 225.40): V  
 Ion 222.70 (222.40 to 223.40): V  
 Ion 226.70 (226.40 to 227.40): V

