

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062620\  
 Data File : VX016976.D  
 Acq On : 26 Jun 2020 12:27  
 Operator : JC/SP  
 Sample : L3094-05  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jun 27 03:01:13 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X062620W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jun 26 08:34:16 2020  
 Response via : Initial Calibration

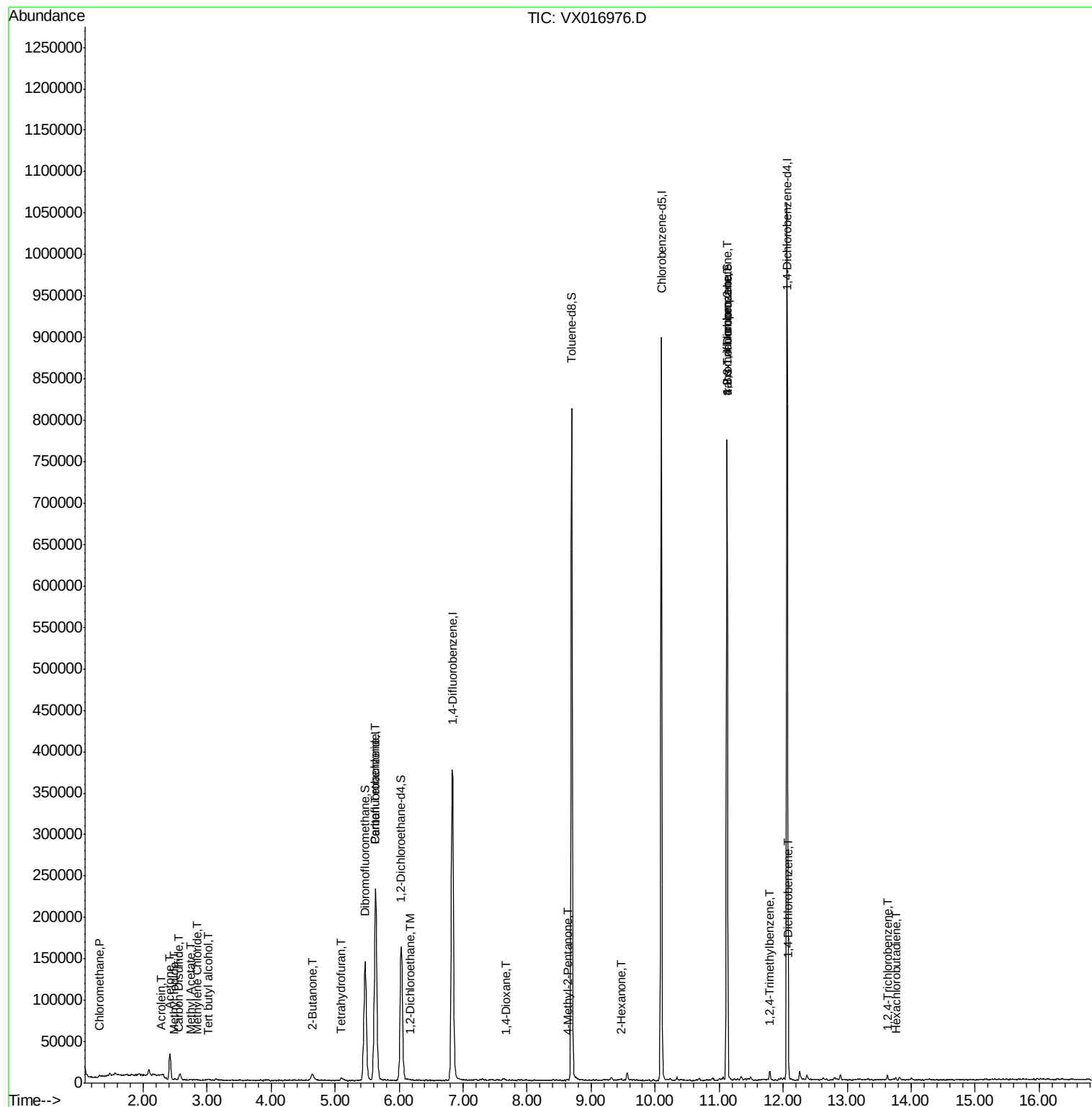
| Internal Standards             | R.T.   | QIon | Response | Conc      | Units   | Dev(Min) |
|--------------------------------|--------|------|----------|-----------|---------|----------|
| 1) Pentafluorobenzene          | 5.64   | 168  | 203290   | 50.00     | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene        | 6.83   | 114  | 360846   | 50.00     | ug/l    | 0.00     |
| 63) Chlorobenzene-d5           | 10.10  | 117  | 360846   | 50.00     | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4     | 12.06  | 152  | 190043   | 50.00     | ug/l    | 0.00     |
| System Monitoring Compounds    |        |      |          |           |         |          |
| 33) 1,2-Dichloroethane-d4      | 6.03   | 65   | 158368   | 51.59     | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =         | 103.18% |          |
| 35) Dibromofluoromethane       | 5.47   | 113  | 121127   | 50.82     | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =         | 101.64% |          |
| 50) Toluene-d8                 | 8.70   | 98   | 455321   | 52.12     | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =         | 104.24% |          |
| 62) 4-Bromofluorobenzene       | 11.12  | 95   | 190218   | 56.31     | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =         | 112.62% |          |
| Target Compounds               |        |      |          |           |         |          |
|                                |        |      |          |           | Qvalue  |          |
| 3) Chloromethane               | 1.32   | 50   | 1323     | 0.531     | ug/l    | 96       |
| 5) Bromomethane                | 1.63   | 94   | 222      | Below Cal |         | 95       |
| 10) Methyl Iodide              | 2.49   | 142  | 307      | 2.887     | ug/l #  | 70       |
| 11) Tert butyl alcohol         | 3.02   | 59   | 1432     | 2.471     | ug/l #  | 90       |
| 13) Acrolein                   | 2.28   | 56   | 825      | 1.921     | ug/l #  | 43       |
| 16) Acetone                    | 2.42   | 43   | 34354    | 28.628    | ug/l    | 99       |
| 17) Carbon Disulfide           | 2.56   | 76   | 1962     | 0.275     | ug/l #  | 90       |
| 18) Methyl Acetate             | 2.75   | 43   | 1105     | 0.378     | ug/l #  | 83       |
| 20) Methylene Chloride         | 2.84   | 84   | 661      | 0.242     | ug/l #  | 63       |
| 25) 2-Butanone                 | 4.65   | 43   | 12198    | 6.669     | ug/l    | 98       |
| 29) Tetrahydrofuran            | 5.09   | 42   | 2761     | 2.296     | ug/l #  | 34       |
| 38) Carbon Tetrachloride       | 5.63   | 117  | 22530    | 5.958     | ug/l #  | 17       |
| 42) 1,2-Dichloroethane         | 6.17   | 62   | 901      | 0.223     | ug/l    | 90       |
| 49) 1,4-Dioxane                | 7.67   | 88   | 23       | 0.367     | ug/l #  | 1        |
| 51) 4-Methyl-2-Pentanone       | 8.63   | 43   | 944      | 0.255     | ug/l    | 94       |
| 59) 2-Hexanone                 | 9.47   | 43   | 781      | 0.281     | ug/l    | 95       |
| 76) 1,2,3-Trichloropropane     | 11.12  | 75   | 105606   | 26.479    | ug/l #  | 37       |
| 81) trans-1,4-Dichloro-2-buten | 11.12  | 75   | 105606   | 67.227    | ug/l #  | 9        |
| 84) 1,2,4-Trimethylbenzene     | 11.79  | 105  | 3436     | 0.312     | ug/l #  | 55       |
| 88) 1,4-Dichlorobenzene        | 12.09  | 146  | 1284     | 0.207     | ug/l #  | 25       |
| 93) 1,2,4-Trichlorobenzene     | 13.63  | 180  | 763      | 0.203     | ug/l #  | 71       |
| 94) Hexachlorobutadiene        | 13.77  | 225  | 303      | 0.224     | ug/l    | 83       |

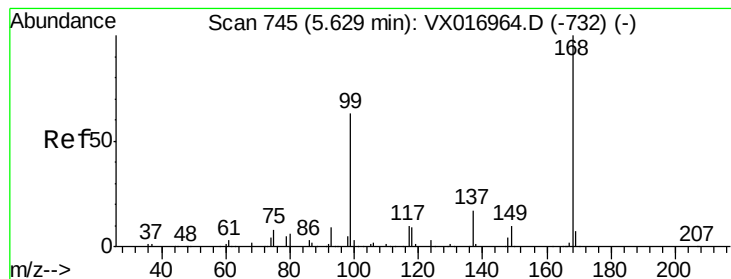
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX062620\  
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Quant Time: Jun 27 03:01:13 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X062620W.M  
Quant Title : SW846 8260  
QLast Update : Fri Jun 26 08:34:16 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.64 min Scan# 746

Delta R.T. 0.01 min

Lab File: VX016976.D

Acq: 26 Jun 2020 12:27

Instrument :

MSVOA\_X

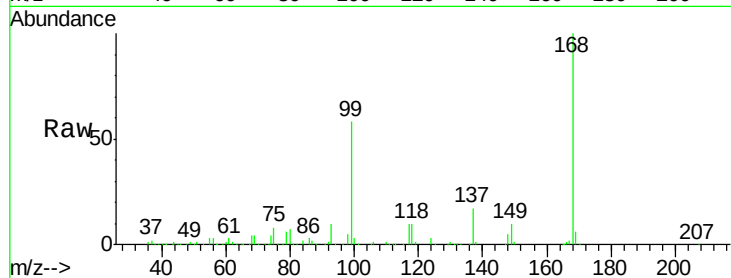
ClientSampleId :

Tot Ion:168 Resp: 203290

Ion Ratio Lower Upper

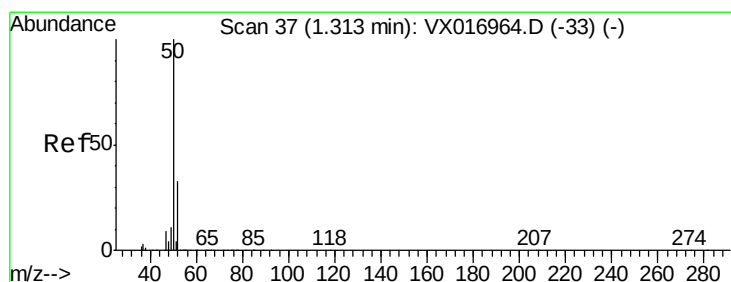
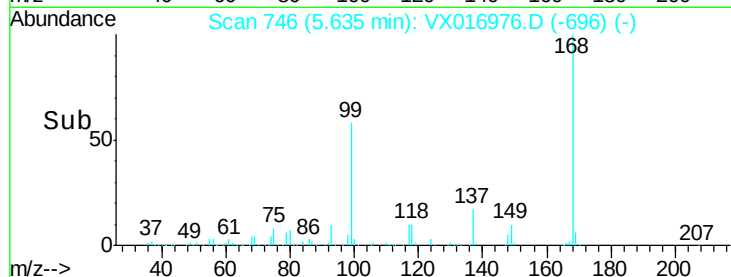
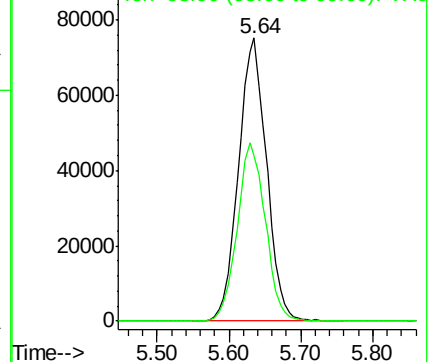
168 100

99 58.4 50.2 75.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: 0.531 ug/l

RT: 1.32 min Scan# 38

Delta R.T. 0.01 min

Lab File: VX016976.D

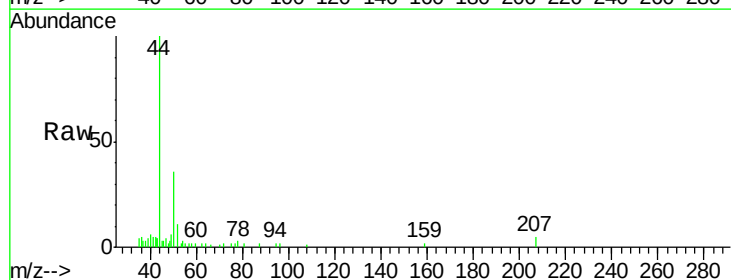
Acq: 26 Jun 2020 12:27

Tgt Ion: 50 Resp: 1323

Ion Ratio Lower Upper

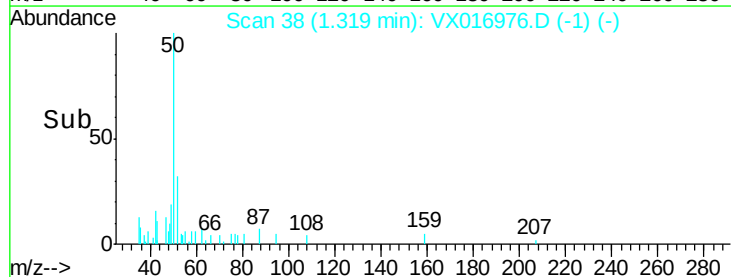
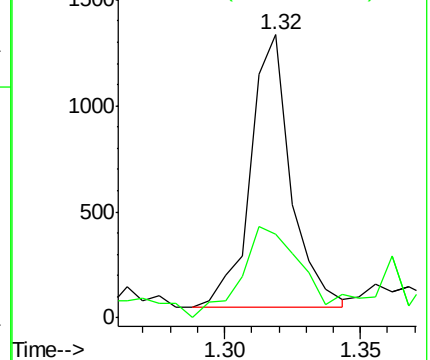
50 100

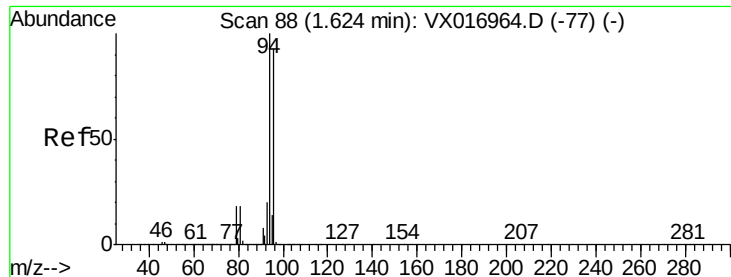
52 30.8 26.6 40.0



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: Below Cal

RT: 1.63 min Scan# 89

Delta R.T. 0.01 min

Lab File: VX016976.D

Acq: 26 Jun 2020 12:27

Instrument :

MSVOA\_X

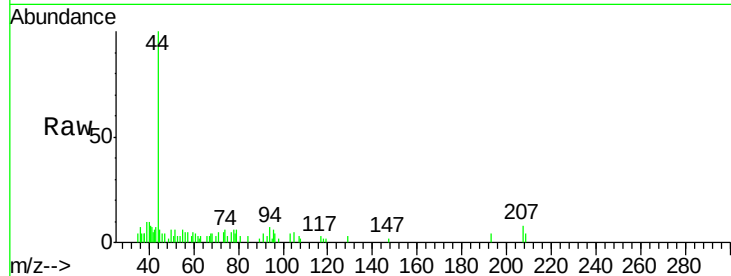
ClientSampleId :

Tot Ion: 94 Resp: 222

Ion Ratio Lower Upper

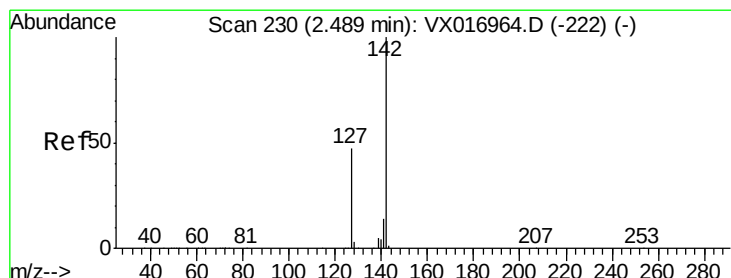
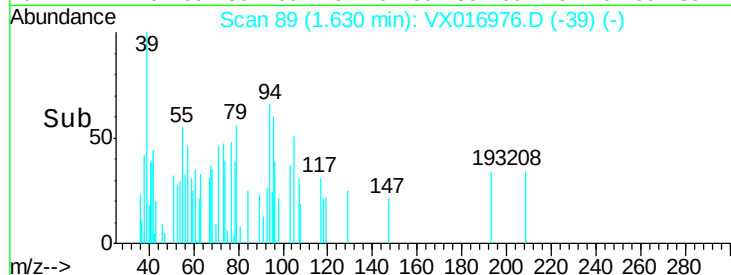
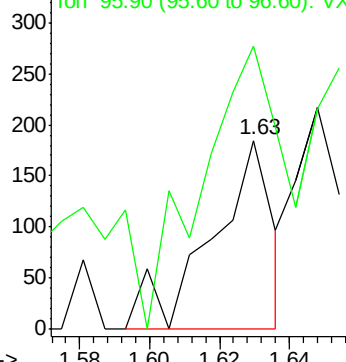
94 100

96 87.6 74.2 111.2



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#10

Methyl Iodide

Concen: 2.887 ug/l

RT: 2.49 min Scan# 230

Delta R.T. 0.00 min

Lab File: VX016976.D

Acq: 26 Jun 2020 12:27

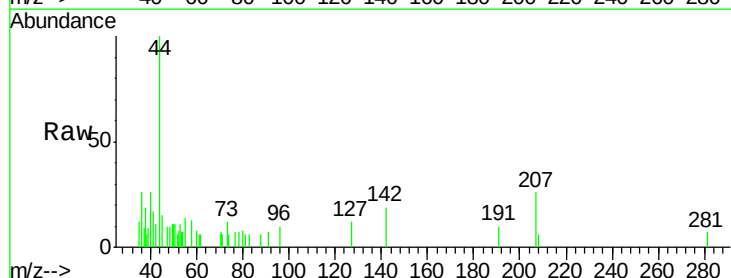
Tgt Ion: 142 Resp: 307

Ion Ratio Lower Upper

142 100

127 65.8 37.4 56.0#

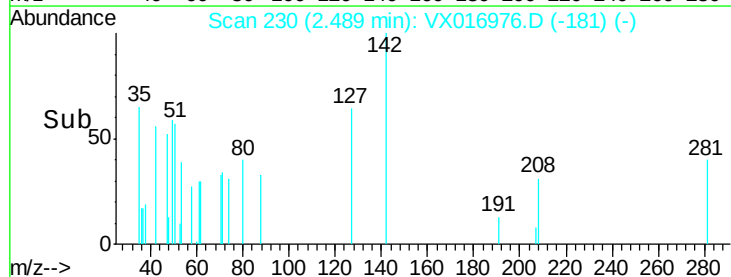
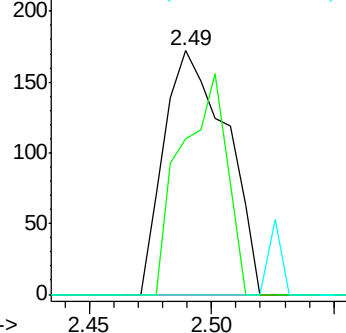
141 0.0 11.7 17.5#

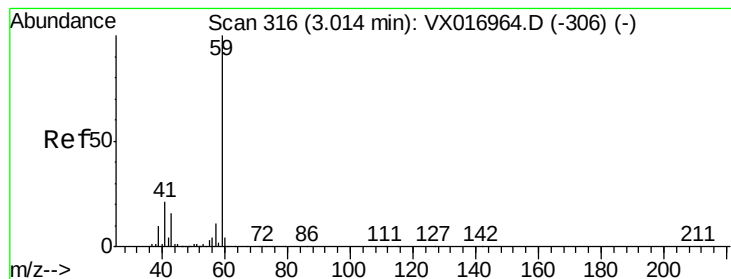


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V



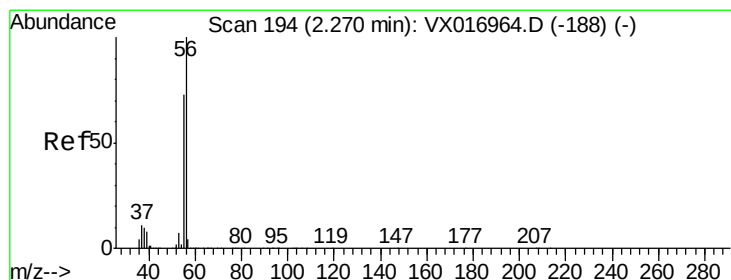
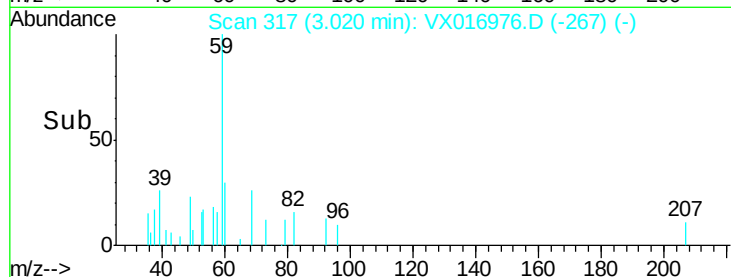
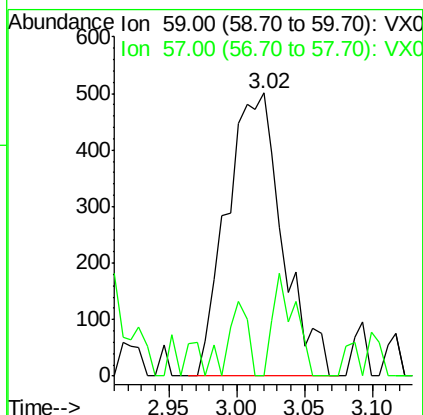
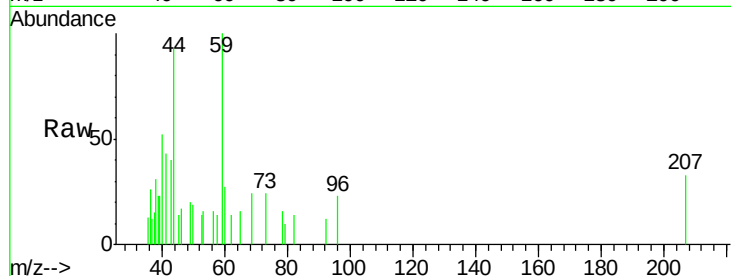


#11

Tert butyl alcohol  
Concen: 2.471 ug/l  
RT: 3.02 min Scan# 317  
Delta R.T. 0.01 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

Instrument :  
MSVOA\_X  
ClientSampled :

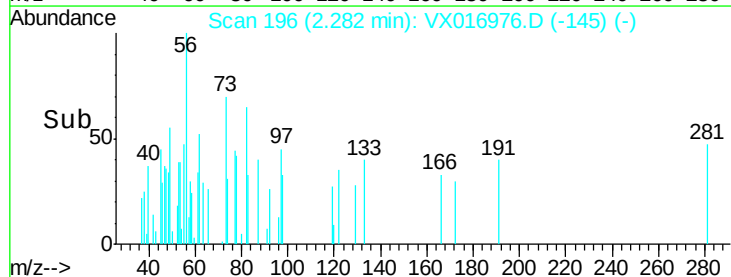
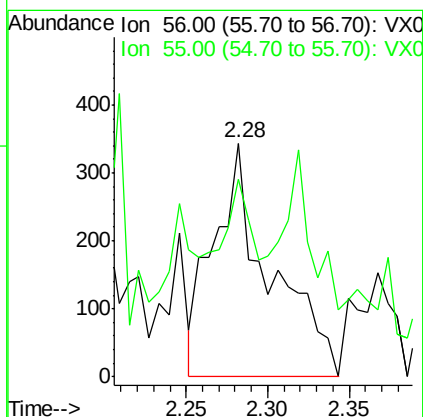
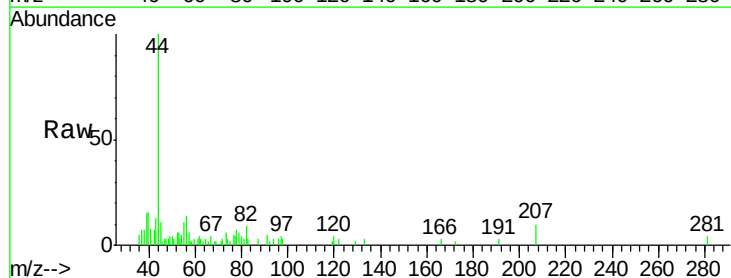
Tot Ion: 59 Resp: 1432  
Ion Ratio Lower Upper  
59 100  
57 14.5 8.5 12.7#

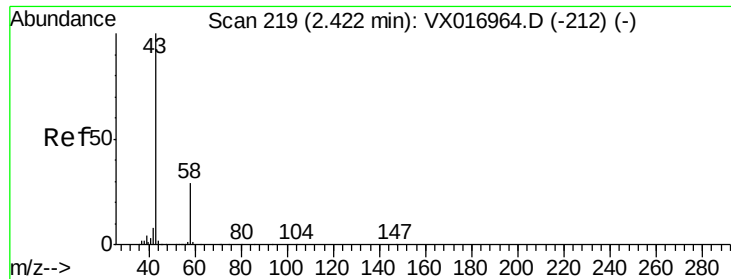


#13

Acrolein  
Concen: 1.921 ug/l  
RT: 2.28 min Scan# 196  
Delta R.T. 0.01 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

Tgt Ion: 56 Resp: 825  
Ion Ratio Lower Upper  
56 100  
55 24.7 57.5 86.3#





#16

Acetone

Concen: 28.628 ug/l

RT: 2.42 min Scan# 218

Delta R.T. -0.01 min

Lab File: VX016976.D

Acq: 26 Jun 2020 12:27

Instrument :

MSVOA\_X

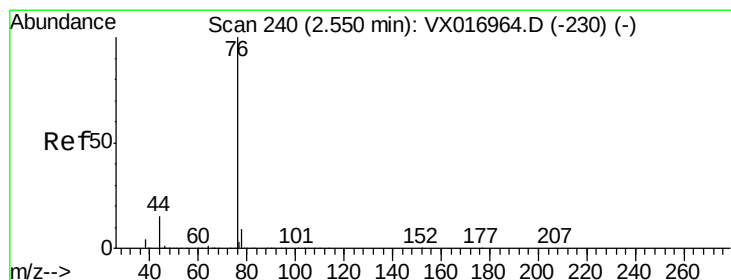
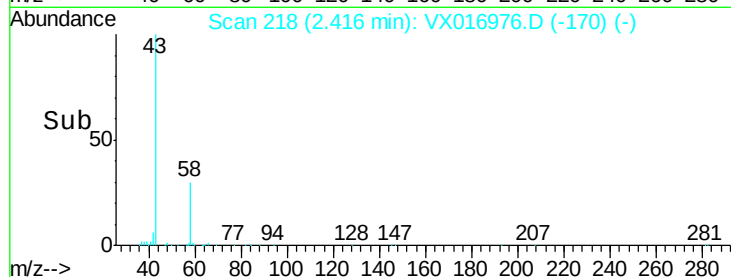
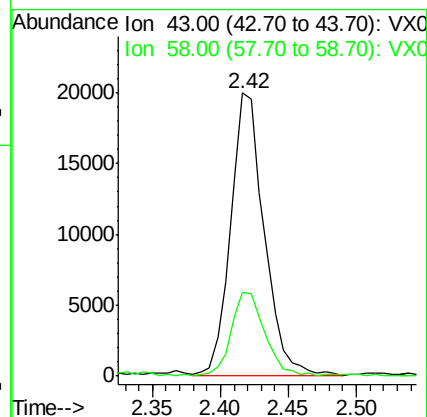
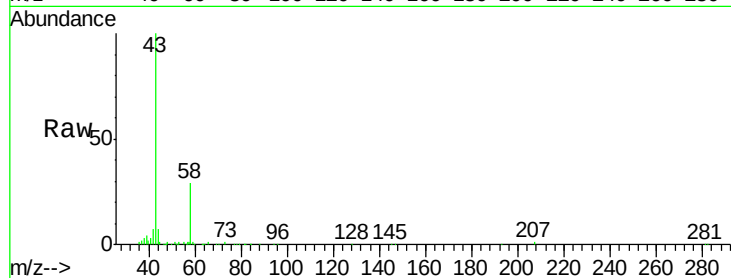
ClientSampleId :

Tot Ion: 43 Resp: 34354

Ion Ratio Lower Upper

43 100

58 29.1 23.5 35.3



#17

Carbon Disulfide

Concen: 0.275 ug/l

RT: 2.56 min Scan# 241

Delta R.T. 0.01 min

Lab File: VX016976.D

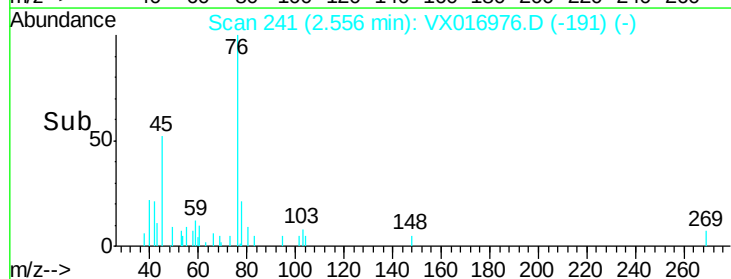
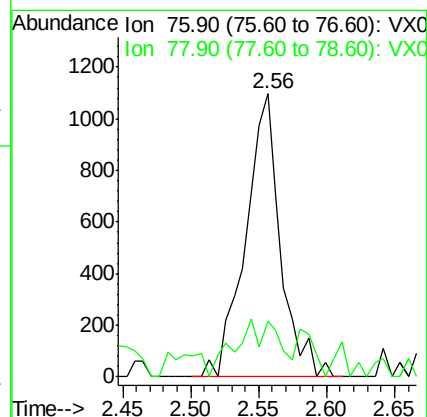
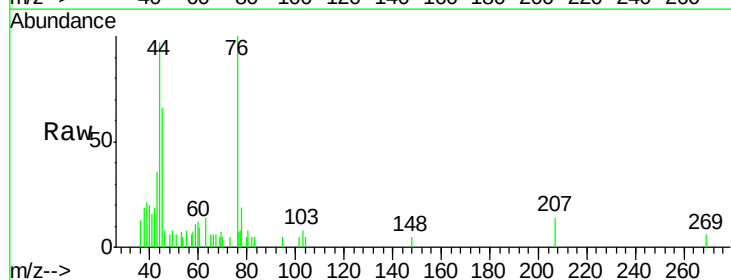
Acq: 26 Jun 2020 12:27

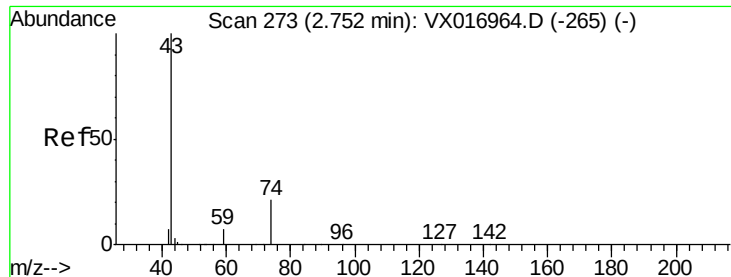
Tgt Ion: 76 Resp: 1962

Ion Ratio Lower Upper

76 100

78 12.1 7.0 10.4#

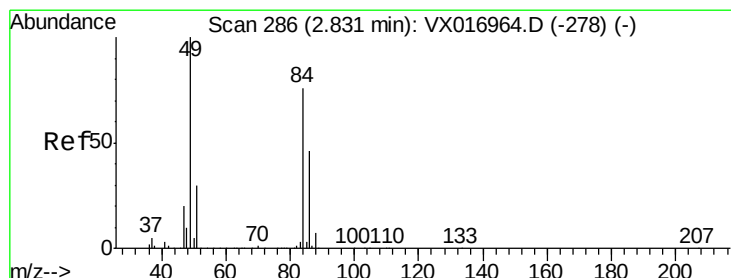
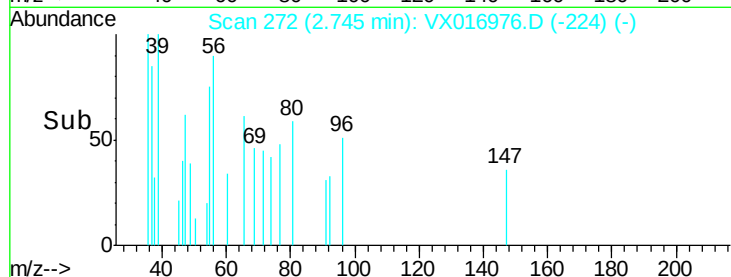
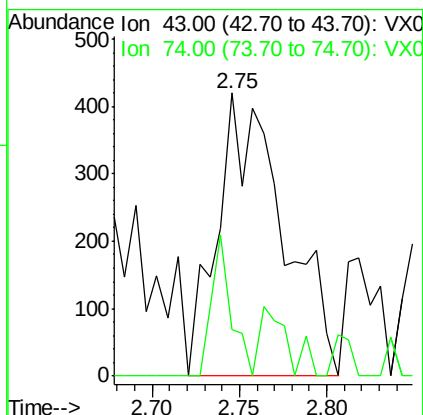
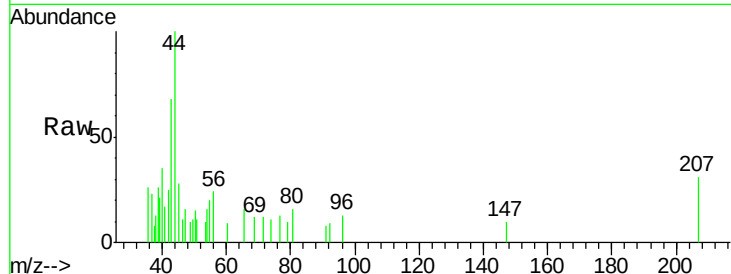




#18  
Methyl Acetate  
Concen: 0.378 ug/l  
RT: 2.75 min Scan# 272  
Delta R.T. -0.01 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

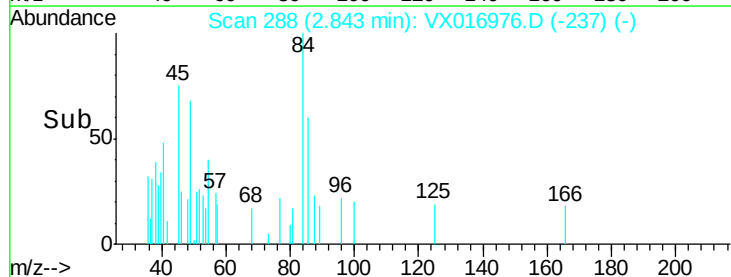
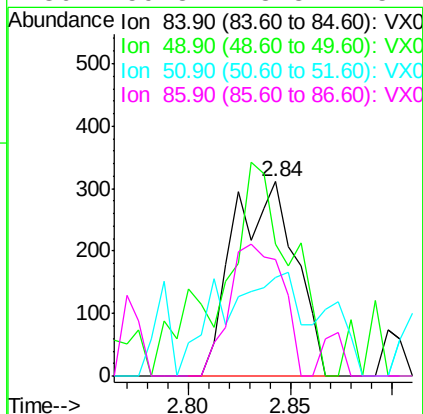
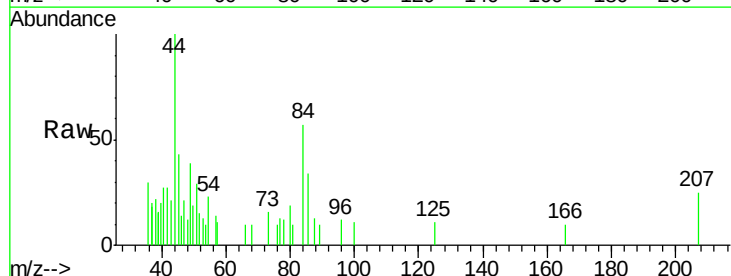
Instrument :  
MSVOA\_X  
ClientSampleId :

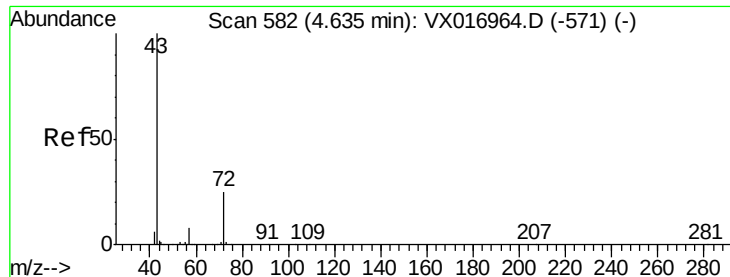
Tot Ion: 43 Resp: 1105  
Ion Ratio Lower Upper  
43 100  
74 14.8 18.3 27.5#



#20  
Methylene Chloride  
Concen: 0.242 ug/l  
RT: 2.84 min Scan# 288  
Delta R.T. 0.01 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

Tgt Ion: 84 Resp: 661  
Ion Ratio Lower Upper  
84 100  
49 68.2 105.6 158.4#  
51 59.8 31.2 46.8#  
86 59.8 48.8 73.2

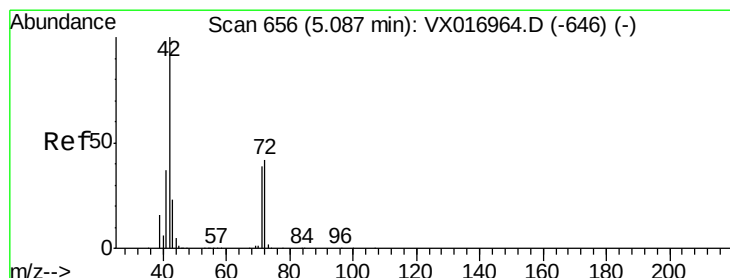
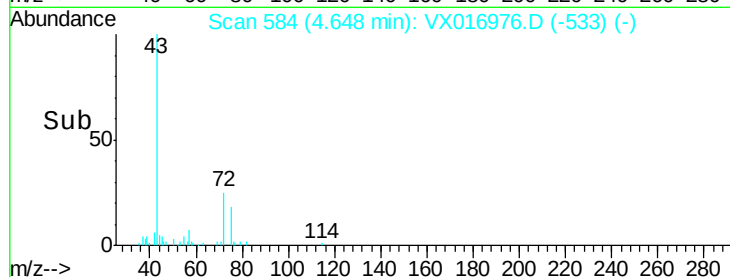
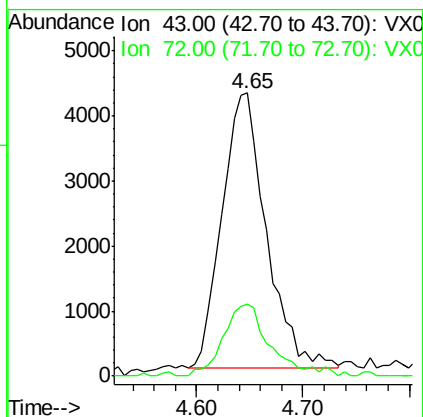
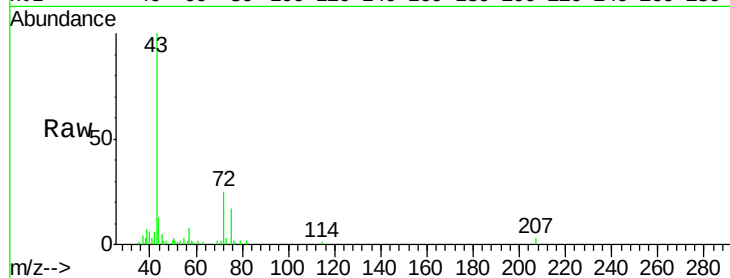




#25  
2-Butanone  
Concen: 6.669 ug/l  
RT: 4.65 min Scan# 584  
Delta R.T. 0.01 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

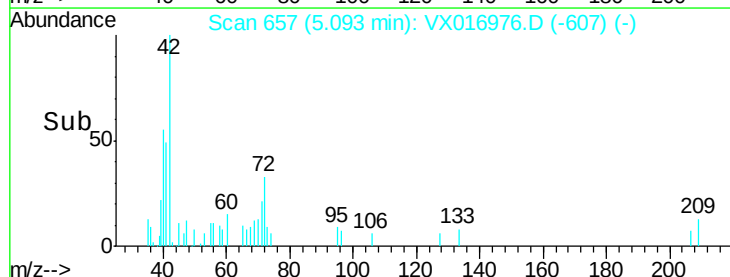
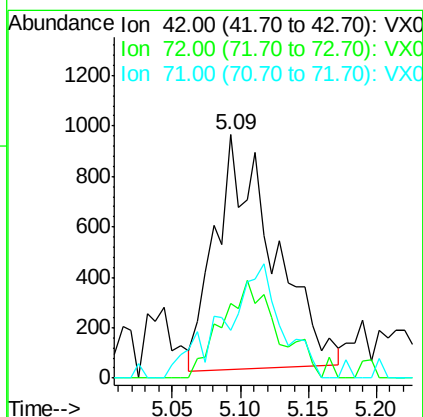
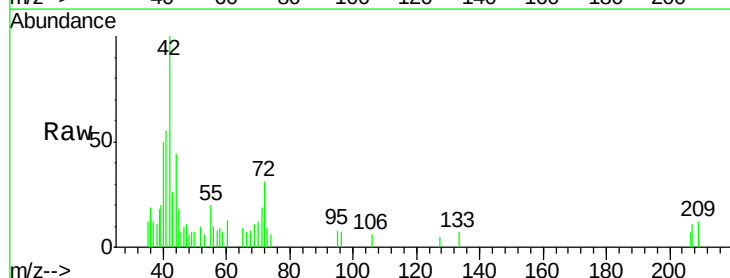
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 43 Resp: 12198  
Ion Ratio Lower Upper  
43 100  
72 26.2 20.0 30.0

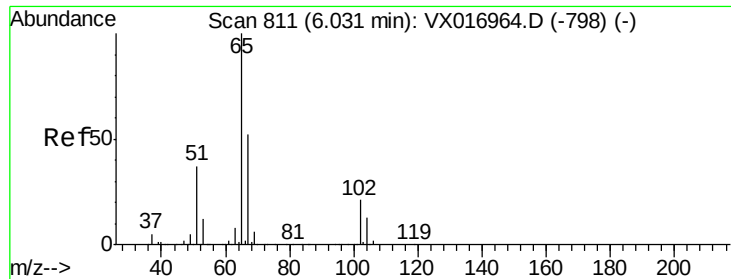


#29  
Tetrahydrofuran  
Concen: 2.296 ug/l  
RT: 5.09 min Scan# 657  
Delta R.T. 0.01 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

Tgt Ion: 42 Resp: 2761  
Ion Ratio Lower Upper  
42 100  
72 0.0 34.1 51.1#  
71 0.0 32.1 48.1#



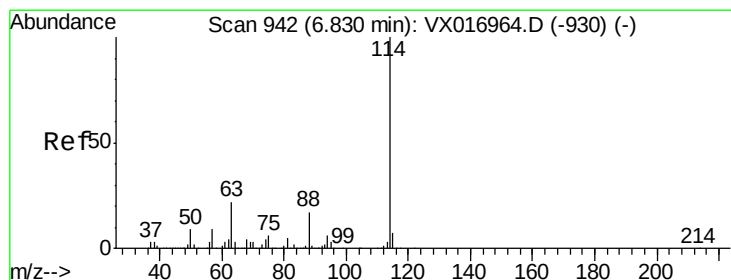
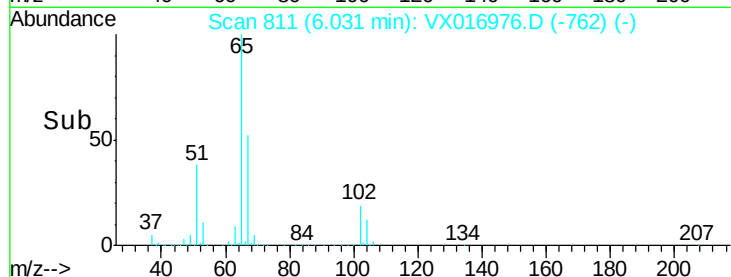
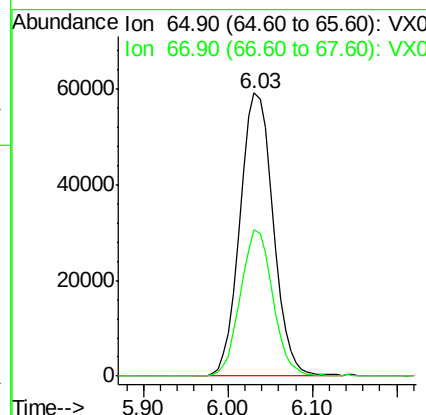
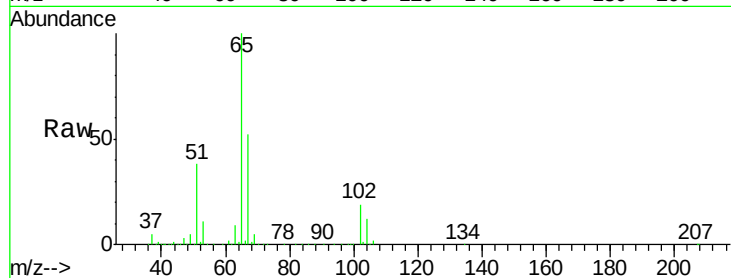




#33  
 1,2-Dichloroethane-d4  
 Concen: 51.587 ug/l  
 RT: 6.03 min Scan# 811  
 Delta R.T. -0.00 min  
 Lab File: VX016976.D  
 Acq: 26 Jun 2020 12:27

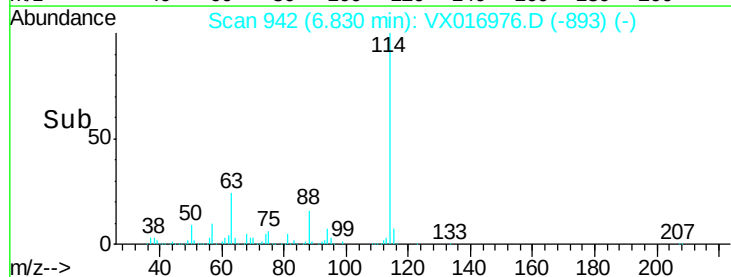
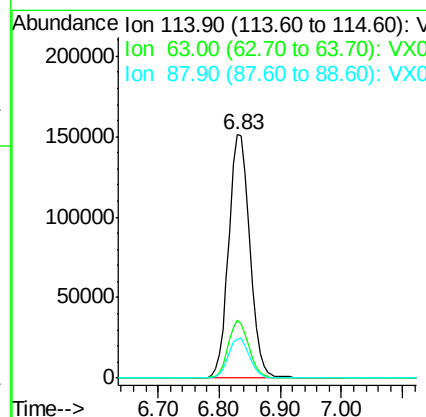
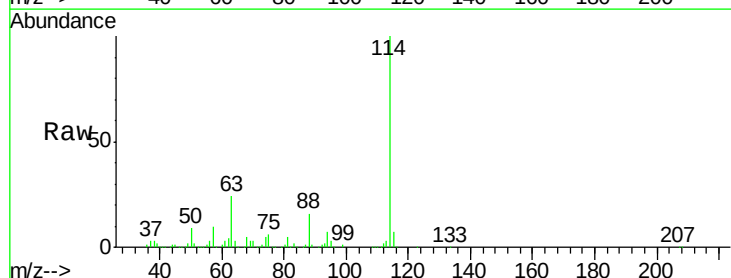
Instrument :  
 MSVOA\_X  
 ClientSampleId :

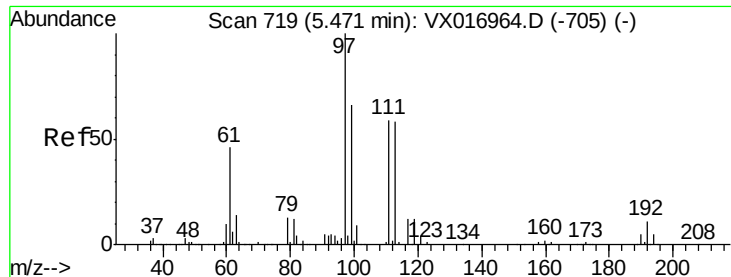
Tot Ion: 65 Resp: 158368  
 Ion Ratio Lower Upper  
 65 100  
 67 50.4 0.0 102.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.83 min Scan# 942  
 Delta R.T. -0.00 min  
 Lab File: VX016976.D  
 Acq: 26 Jun 2020 12:27

Tgt Ion: 114 Resp: 360846  
 Ion Ratio Lower Upper  
 114 100  
 63 23.8 0.0 44.4  
 88 15.7 0.0 33.2

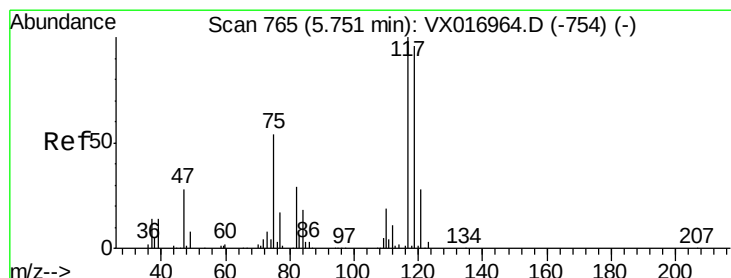
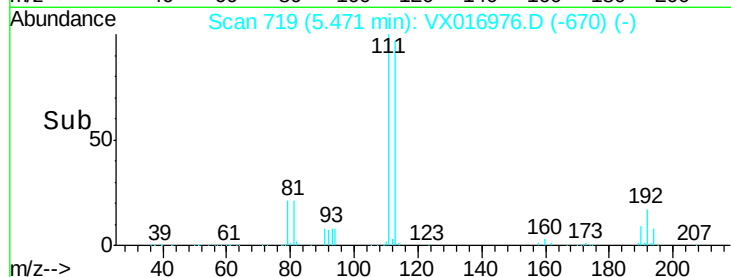
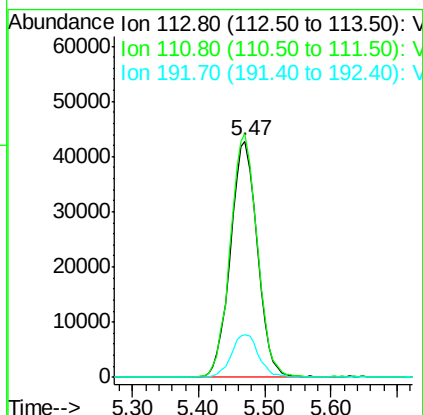
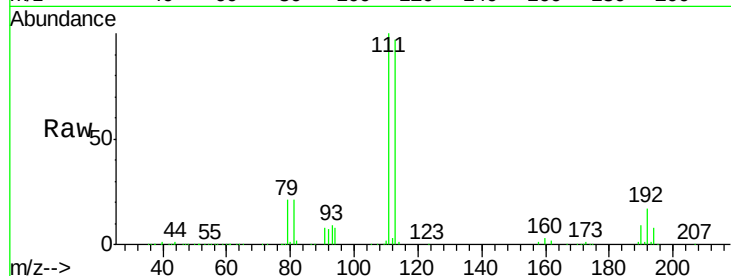




#35  
 Dibromofluoromethane  
 Concen: 50.823 ug/l  
 RT: 5.47 min Scan# 719  
 Delta R.T. -0.00 min  
 Lab File: VX016976.D  
 Acq: 26 Jun 2020 12:27

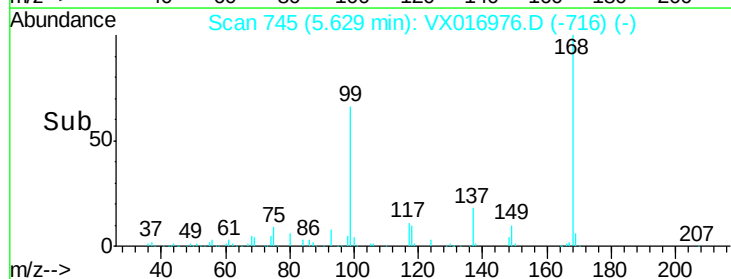
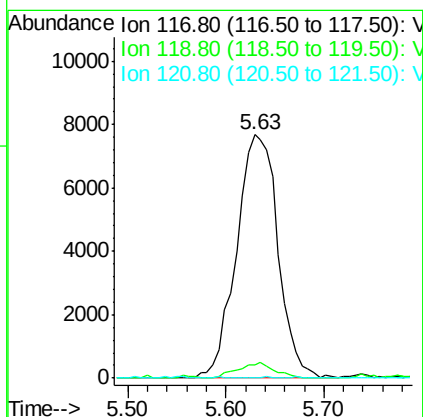
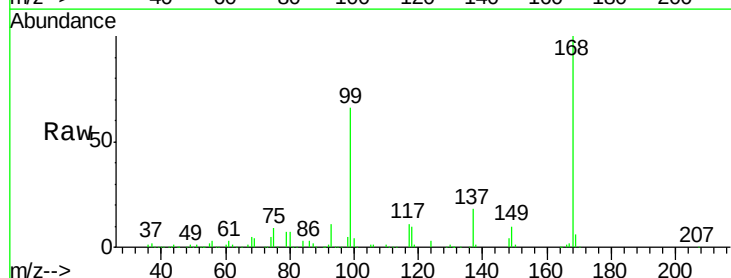
Instrument :  
 MSVOA\_X  
 ClientSampled :

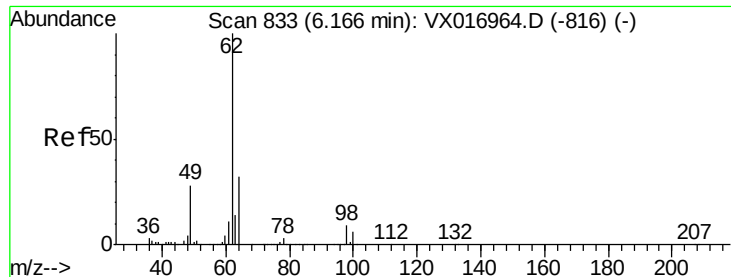
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.1 | 84.3  | 126.5 |
| 192     | 18.4  | 15.2  | 22.8  |



#38  
 Carbon Tetrachloride  
 Concen: 5.958 ug/l  
 RT: 5.63 min Scan# 745  
 Delta R.T. -0.12 min  
 Lab File: VX016976.D  
 Acq: 26 Jun 2020 12:27

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 5.7   | 76.6  | 114.8# |
| 121     | 0.0   | 22.5  | 33.7#  |

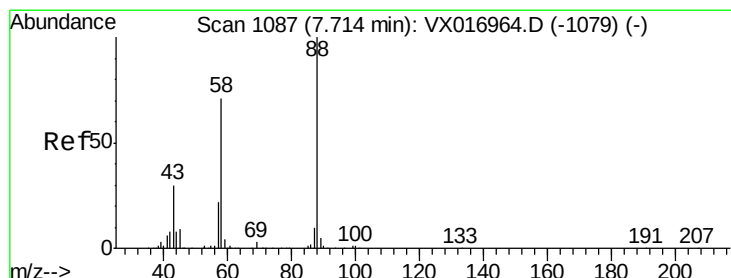
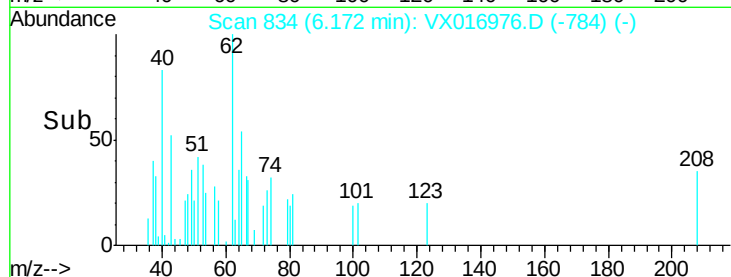
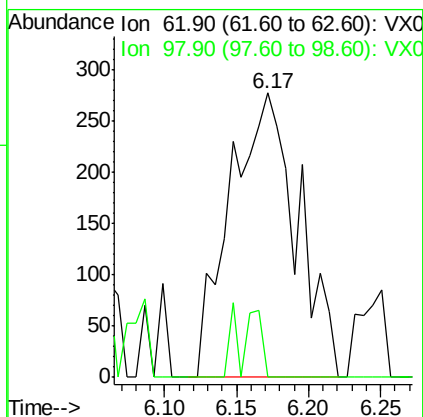
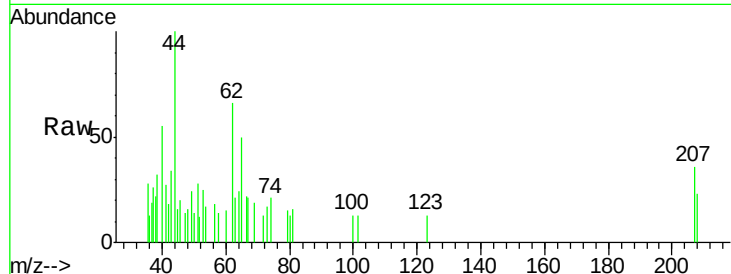




#42  
 1,2-Dichloroethane  
 Concen: 0.223 ug/l  
 RT: 6.17 min Scan# 834  
 Delta R.T. 0.01 min  
 Lab File: VX016976.D  
 Acq: 26 Jun 2020 12:27

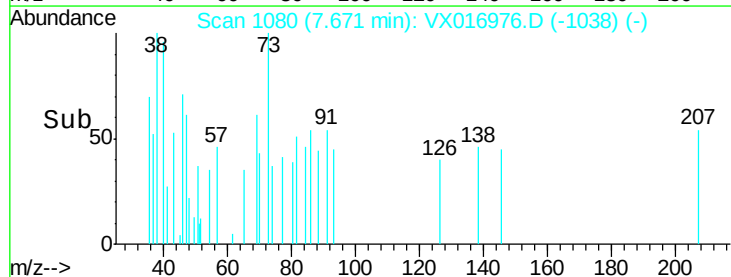
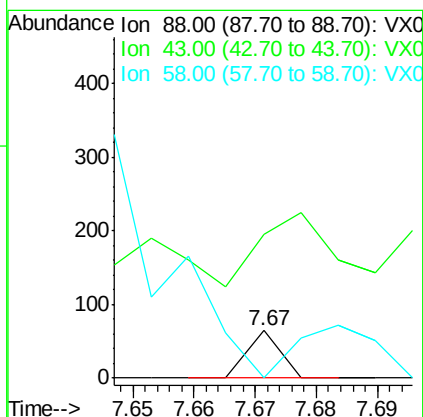
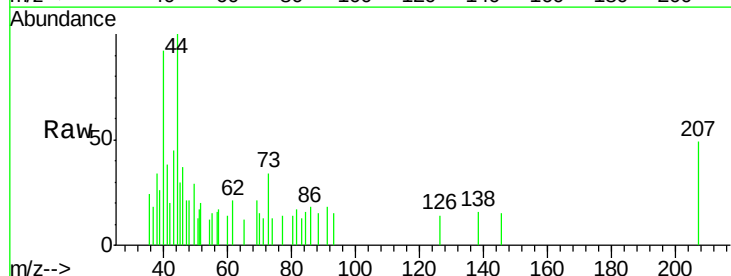
Instrument :  
 MSVOA\_X  
 ClientSampled :

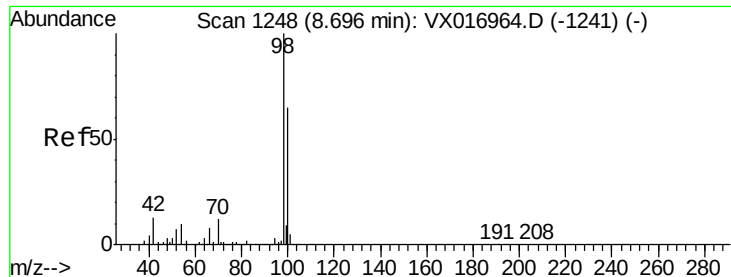
Tot Ion: 62 Resp: 901  
 Ion Ratio Lower Upper  
 62 100  
 98 5.1 0.0 17.2



#49  
 1,4-Dioxane  
 Concen: 0.367 ug/l  
 RT: 7.67 min Scan# 1080  
 Delta R.T. -0.04 min  
 Lab File: VX016976.D  
 Acq: 26 Jun 2020 12:27

Tgt Ion: 88 Resp: 23  
 Ion Ratio Lower Upper  
 88 100  
 43 434.8 28.1 42.1#  
 58 282.6 56.1 84.1#

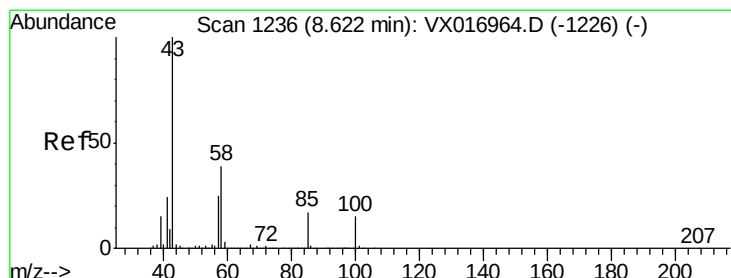
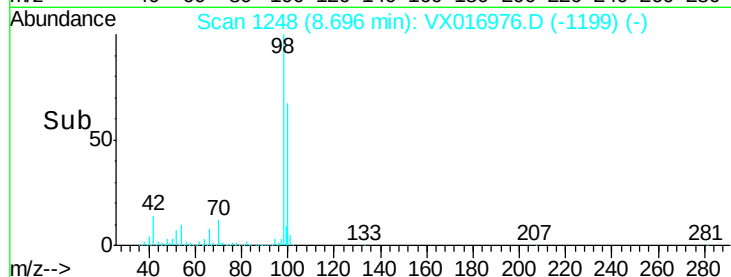
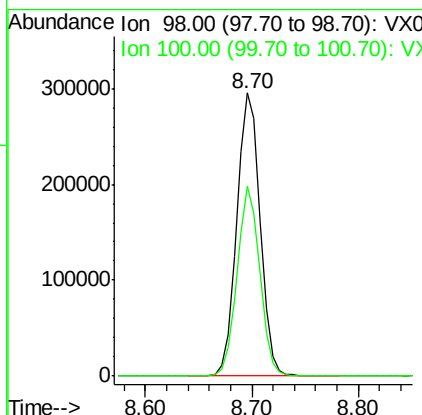
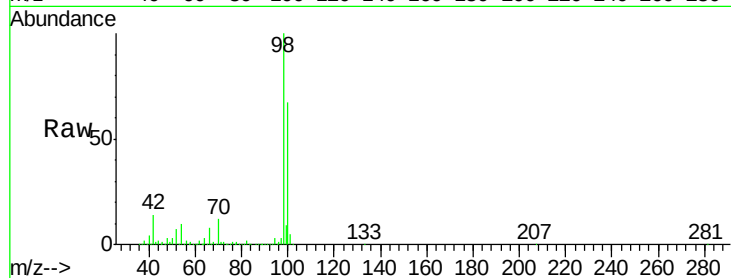




#50  
Toluene-d8  
Concen: 52.119 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

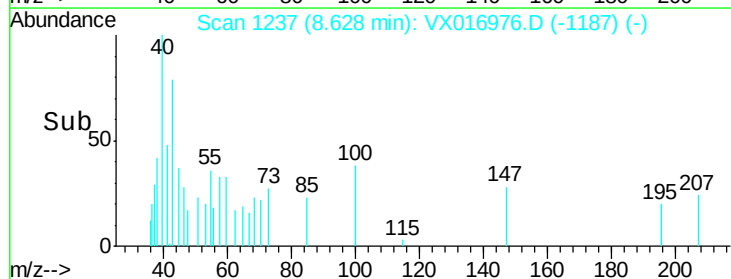
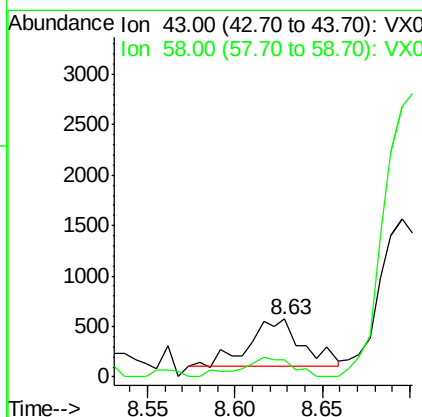
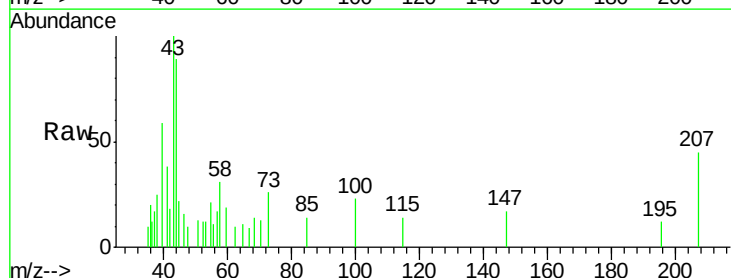
Instrument :  
MSVOA\_X  
ClientSampleId :

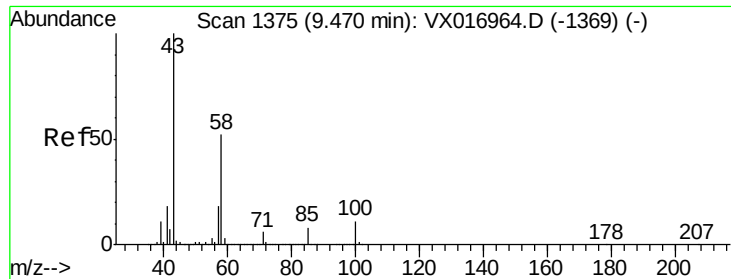
Tot Ion: 98 Resp: 455321  
Ion Ratio Lower Upper  
98 100  
100 65.1 52.2 78.2



#51  
4-Methyl-2-Pentanone  
Concen: 0.255 ug/l  
RT: 8.63 min Scan# 1237  
Delta R.T. 0.01 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

Tgt Ion: 43 Resp: 944  
Ion Ratio Lower Upper  
43 100  
58 41.8 30.4 45.6

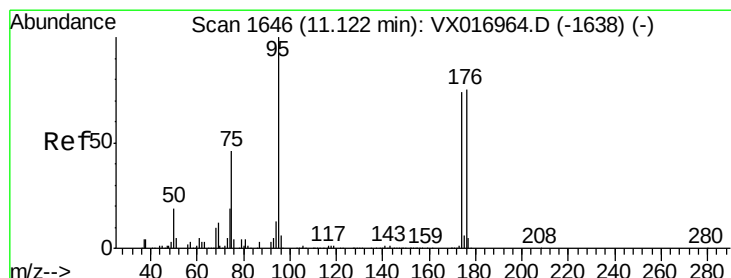
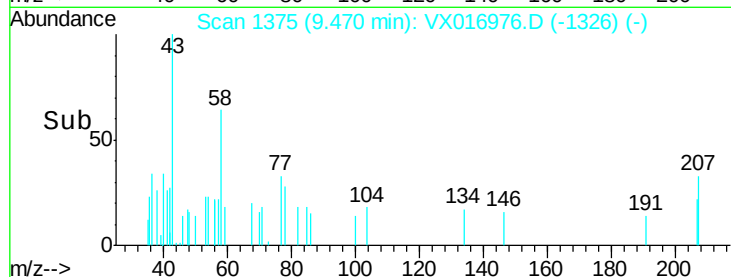
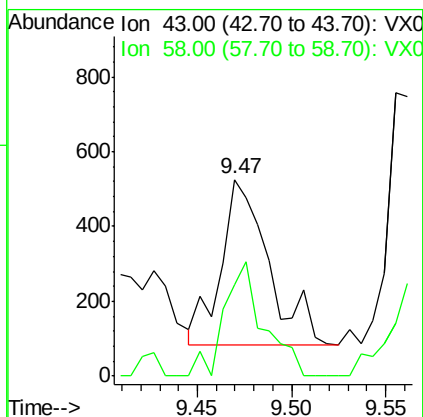
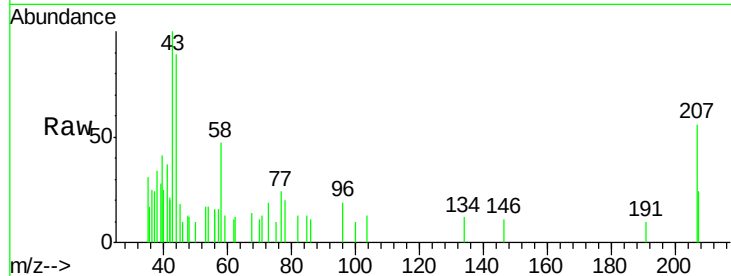




#59  
2-Hexanone  
Concen: 0.281 ug/l  
RT: 9.47 min Scan# 1375  
Delta R.T. -0.00 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

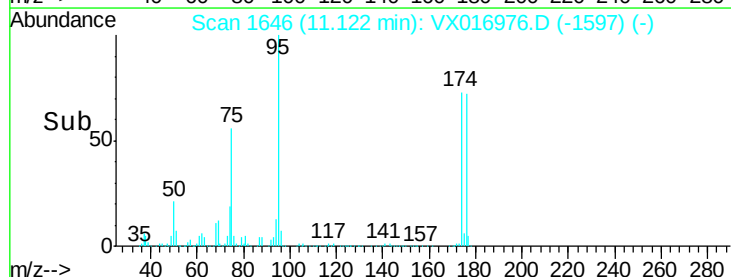
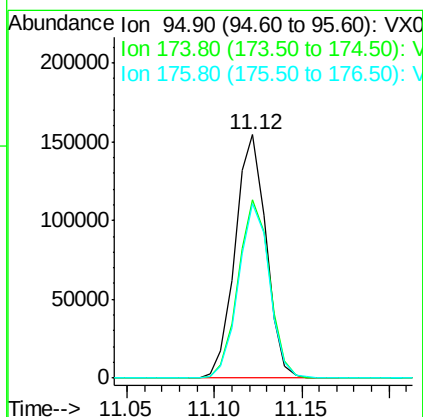
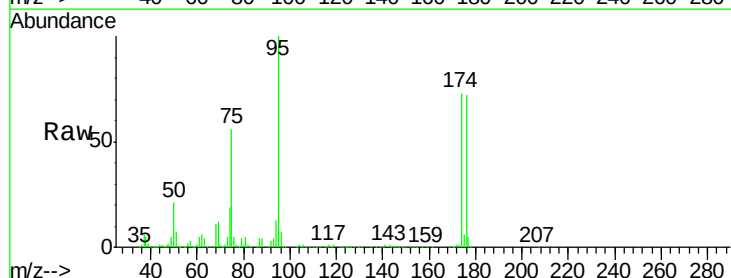
Instrument :  
MSVOA\_X  
ClientSampleId :

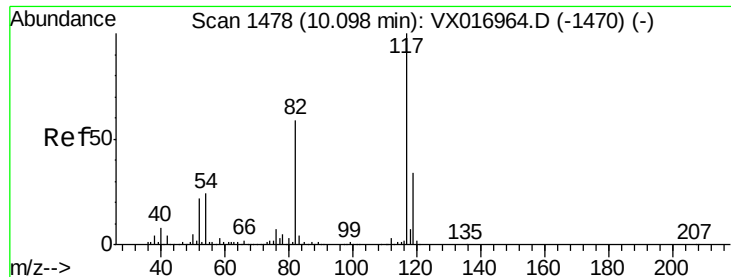
Tot Ion: 43 Resp: 781  
Ion Ratio Lower Upper  
43 100  
58 56.5 26.3 78.9



#62  
4-Bromofluorobenzene  
Concen: 56.307 ug/l  
RT: 11.12 min Scan# 1646  
Delta R.T. -0.00 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

Tgt Ion: 95 Resp: 190218  
Ion Ratio Lower Upper  
95 100  
174 74.8 0.0 149.6  
176 71.8 0.0 148.2

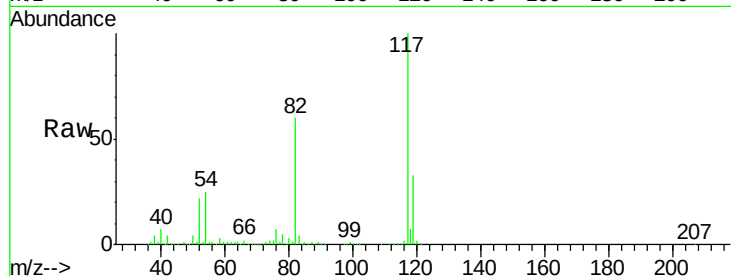




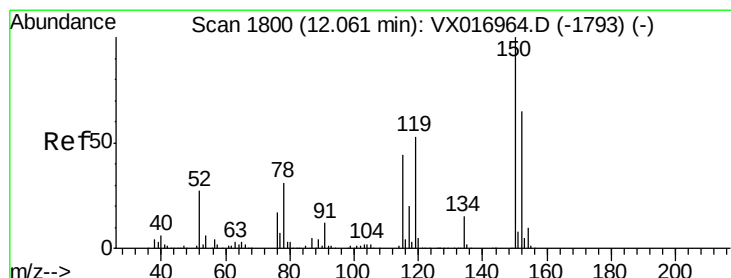
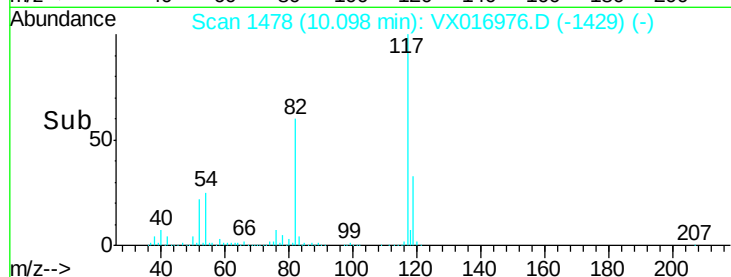
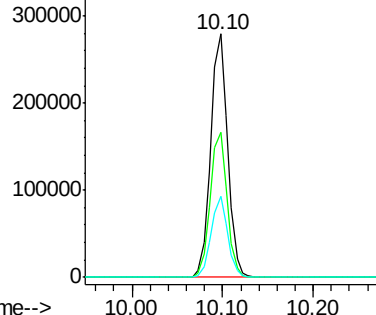
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.10 min Scan# 1478  
Delta R.T. -0.00 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

Instrument :  
MSVOA\_X  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 59.7  | 46.8  | 70.2  |
| 119     | 33.1  | 27.3  | 40.9  |

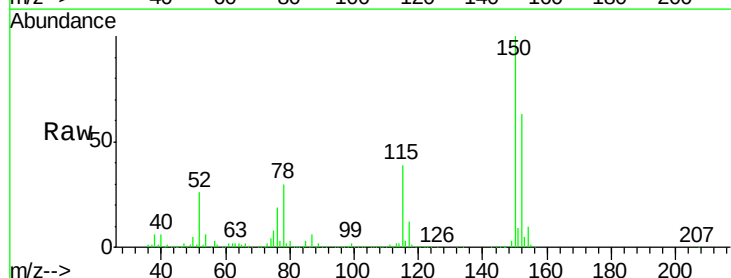


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

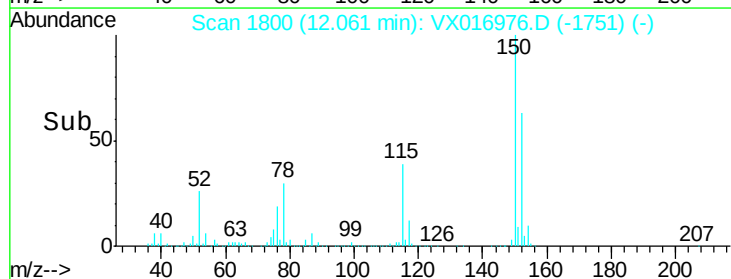
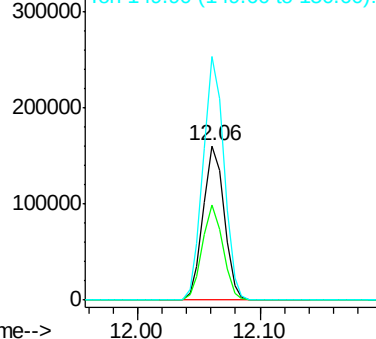


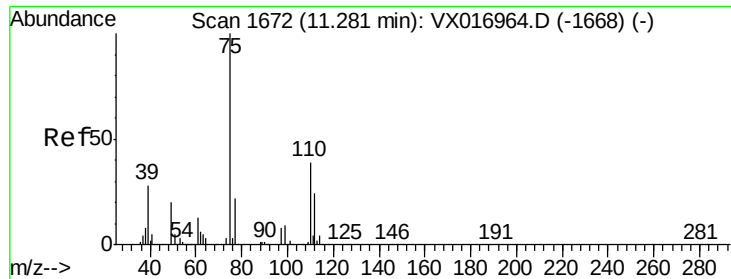
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.06 min Scan# 1800  
Delta R.T. -0.00 min  
Lab File: VX016976.D  
Acq: 26 Jun 2020 12:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 60.6  | 42.8  | 128.4 |
| 150     | 156.9 | 0.0   | 347.8 |



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: 26.479 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX016976.D

Acq: 26 Jun 2020 12:27

Instrument :

MSVOA\_X

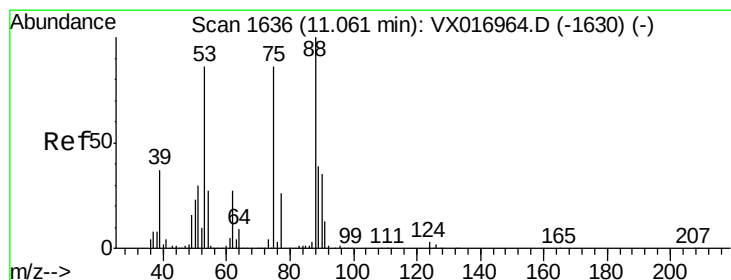
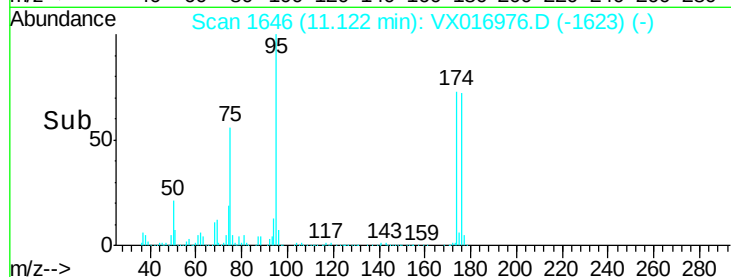
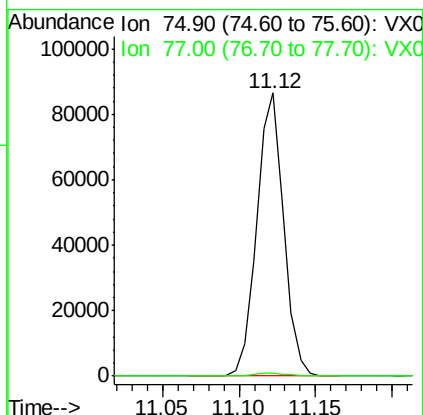
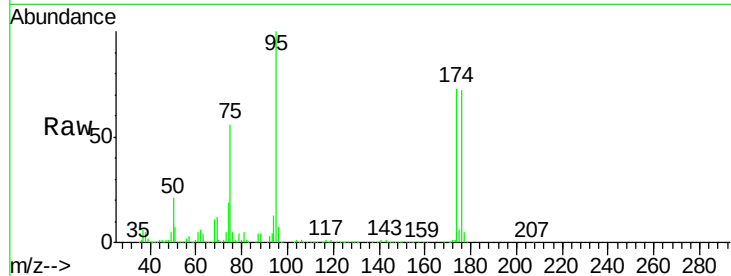
ClientSampleId :

Tot Ion: 75 Resp: 105606

Ion Ratio Lower Upper

75 100

77 1.4 20.3 61.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 67.227 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.06 min

Lab File: VX016976.D

Acq: 26 Jun 2020 12:27

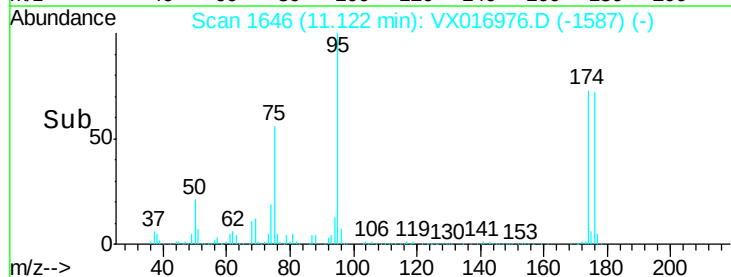
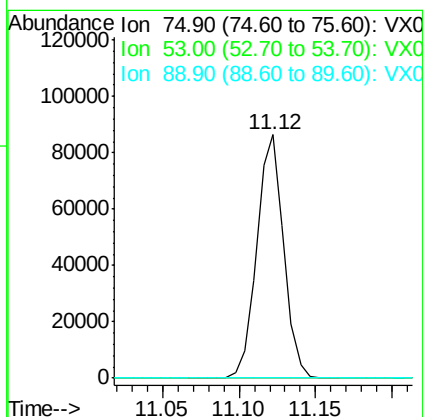
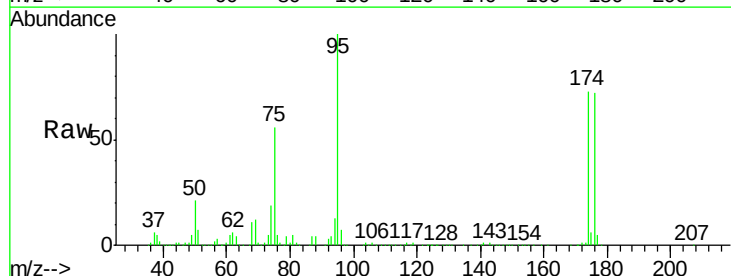
Tgt Ion: 75 Resp: 105606

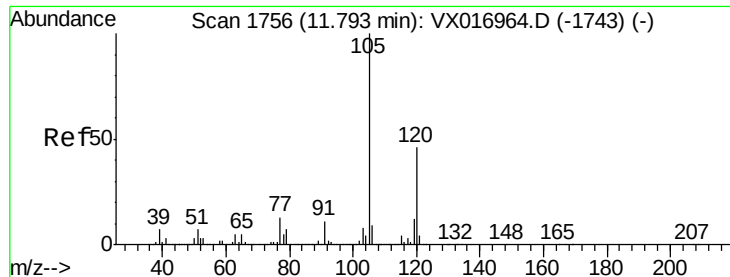
Ion Ratio Lower Upper

75 100

53 0.2 81.9 122.9#

89 0.0 35.5 53.3#

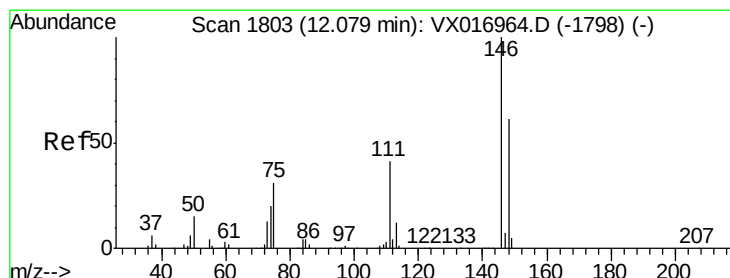
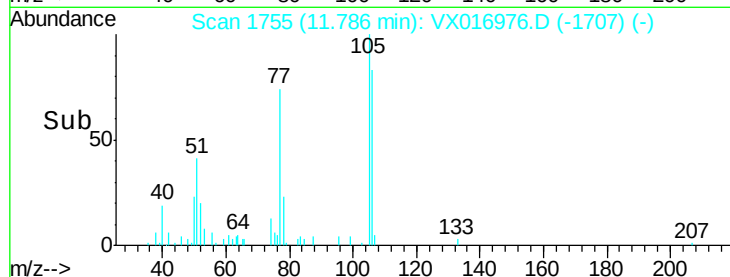
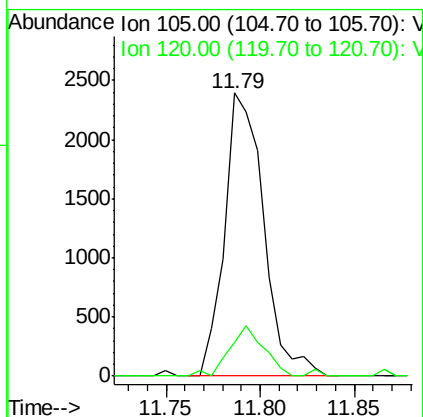
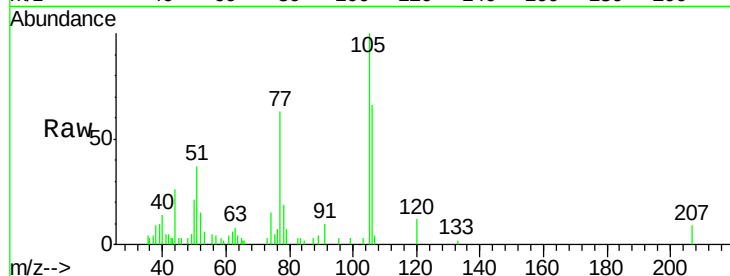




#84  
 1,2,4-Trimethylbenzene  
 Concen: 0.312 ug/l  
 RT: 11.79 min Scan# 1755  
 Delta R.T. -0.01 min  
 Lab File: VX016976.D  
 Acq: 26 Jun 2020 12:27

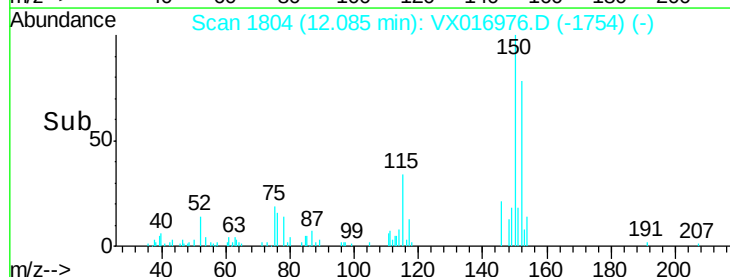
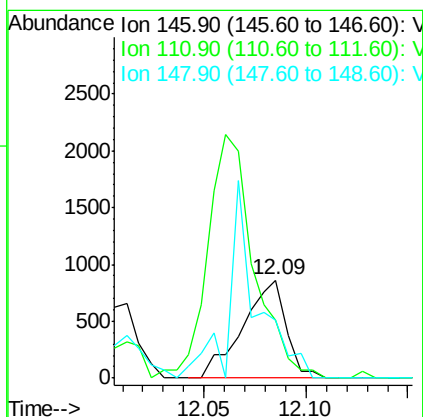
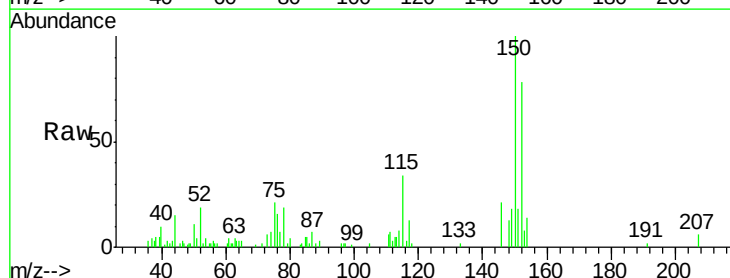
Instrument :  
 MSVOA\_X  
 ClientSampled :

Tot Ion:105 Resp: 3436  
 Ion Ratio Lower Upper  
 105 100  
 120 15.7 22.4 67.3#

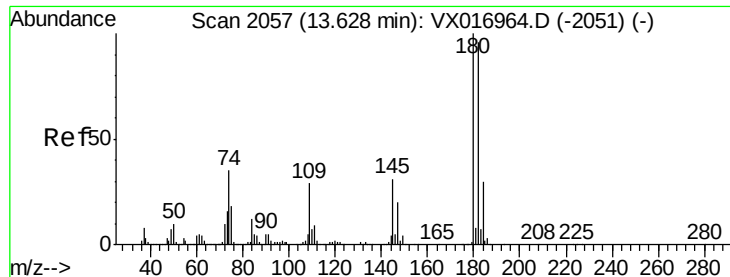


#88  
 1,4-Dichlorobenzene  
 Concen: 0.207 ug/l  
 RT: 12.09 min Scan# 1804  
 Delta R.T. 0.01 min  
 Lab File: VX016976.D  
 Acq: 26 Jun 2020 12:27

Tgt Ion:146 Resp: 1284  
 Ion Ratio Lower Upper  
 146 100  
 111 0.0 19.9 59.7#  
 148 0.0 31.3 93.9#







#93

1,2,4-Trichlorobenzene

Concen: 0.203 ug/l

RT: 13.63 min Scan# 2058

Delta R.T. 0.01 min

Lab File: VX016976.D

Acq: 26 Jun 2020 12:27

Instrument :

MSVOA\_X

ClientSampleId :

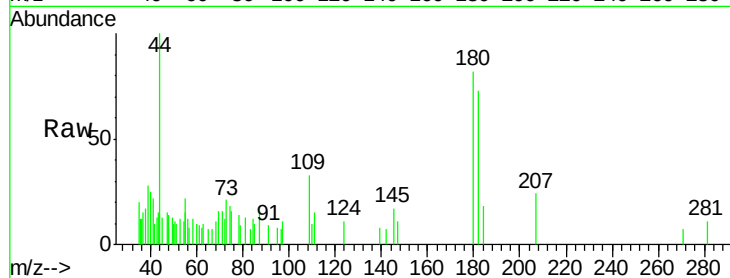
Tot Ion:180 Resp: 763

Ion Ratio Lower Upper

180 100

182 118.9 46.4 139.1

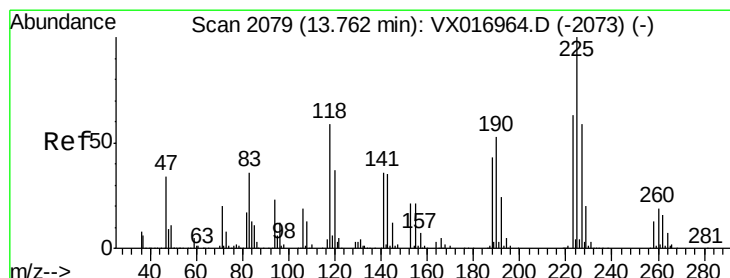
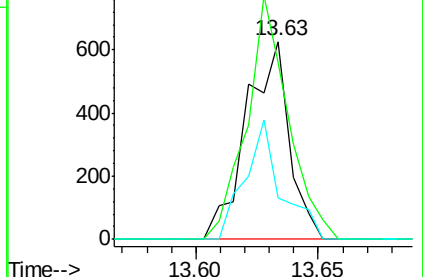
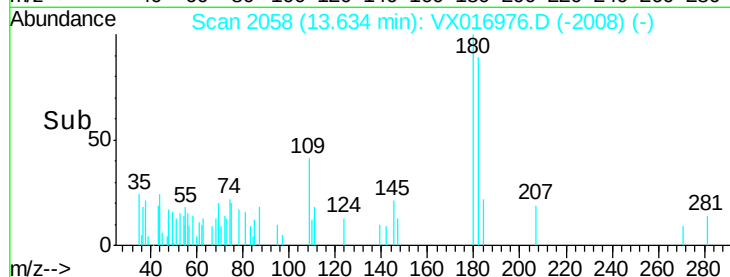
145 50.6 15.5 46.5#



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: 0.224 ug/l

RT: 13.77 min Scan# 2080

Delta R.T. 0.01 min

Lab File: VX016976.D

Acq: 26 Jun 2020 12:27

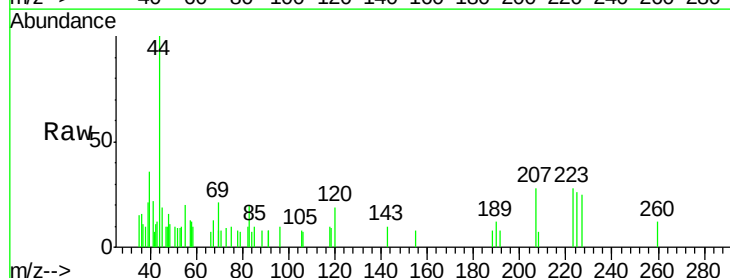
Tgt Ion:225 Resp: 303

Ion Ratio Lower Upper

225 100

223 67.0 31.1 93.2

227 81.8 30.3 90.9



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

