

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY031920\  
 Data File : VY002022.D  
 Acq On : 19 Mar 2020 15:28  
 Operator : SY/MD  
 Sample : L1978-05  
 Misc : 5.26G/5ML/MSVOA Y/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 TP-6-(4-5)

Quant Time: Mar 20 01:57:42 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y030420S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Mar 05 04:05:33 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.82  | 168  | 132596   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.71  | 114  | 253618   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.50 | 117  | 208780   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.44 | 152  | 68415    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.16  | 65   | 81446    | 57.54 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 115.08% |          |
| 35) Dibromofluoromethane    | 7.74  | 113  | 75939    | 54.83 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.66% |          |
| 50) Toluene-d8              | 10.19 | 98   | 304567   | 52.15 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.30% |          |
| 62) 4-Bromofluorobenzene    | 12.49 | 95   | 81577    | 40.17 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 80.34%  |          |

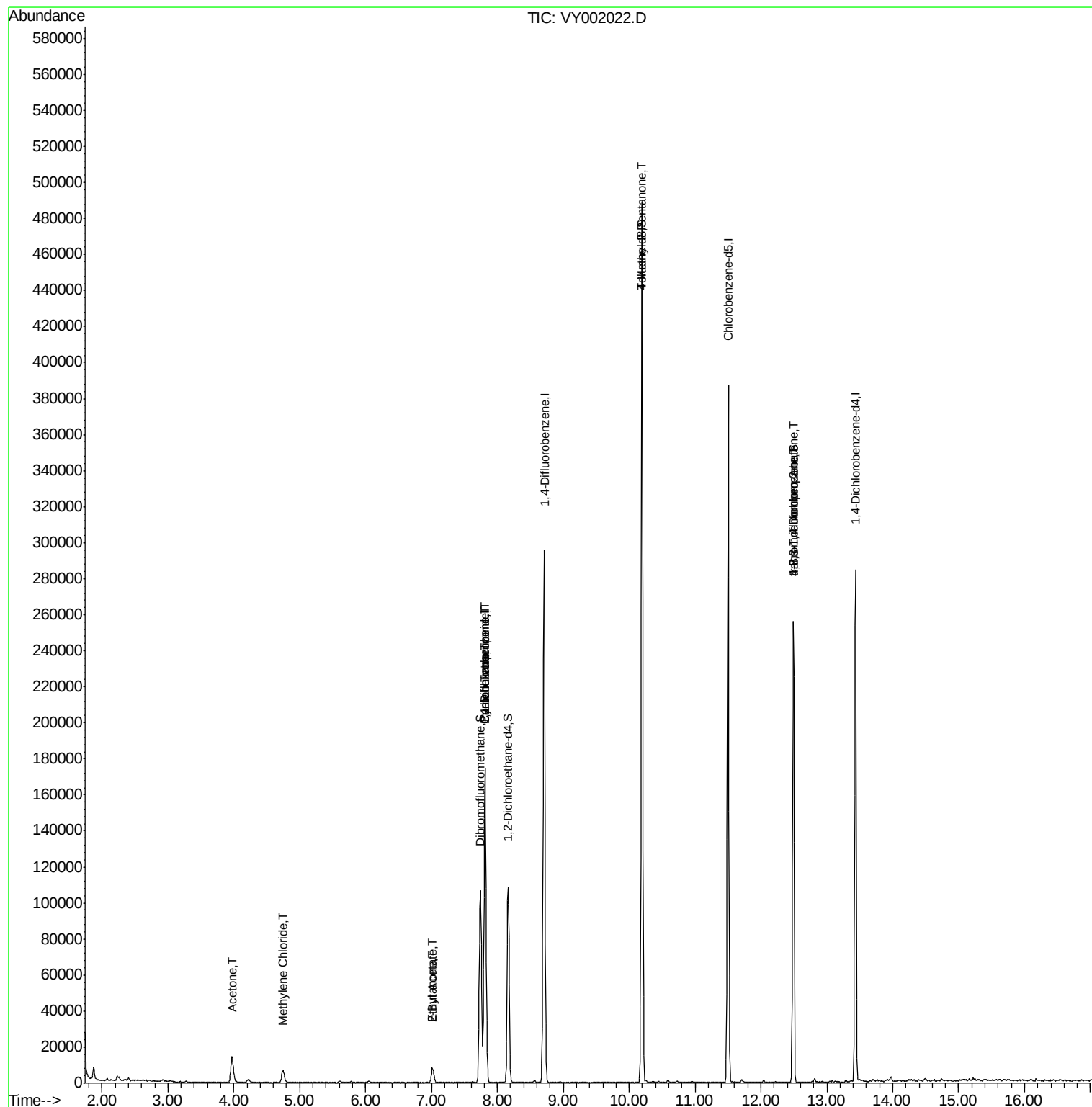
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 2.68  | 94   | 79       | Below Cal | #      | 4      |
| 11) Tert butyl alcohol         | 4.99  | 59   | 78       | Below Cal | #      | 74     |
| 16) Acetone                    | 3.97  | 43   | 25679    | 62.283    | ug/l   | 95     |
| 20) Methylene Chloride         | 4.75  | 84   | 4651     | 2.632     | ug/l   | 90     |
| 25) 2-Butanone                 | 7.02  | 43   | 10246    | 16.342    | ug/l   | 100    |
| 31) Cyclohexane                | 7.81  | 56   | 3117     | 1.002     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.81  | 75   | 11232    | 4.602     | ug/l # | 51     |
| 37) Ethyl Acetate              | 7.02  | 43   | 10246    | 7.223     | ug/l # | 80     |
| 38) Carbon Tetrachloride       | 7.81  | 117  | 13505    | 6.478     | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 10.19 | 43   | 1601     | 1.157     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.49 | 75   | 42646    | 52.533    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.49 | 75   | 42646    | 106.115   | ug/l # | 17     |

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

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y030420S.M  
Quant Title : SW846 8260  
QLast Update : Thu Mar 05 04:05:33 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.82 min Scan# 997

Delta R.T. 0.00 min

Lab File: VY002022.D

Acq: 19 Mar 2020 15:28

Instrument :

MSVOA\_Y

ClientSampleId :

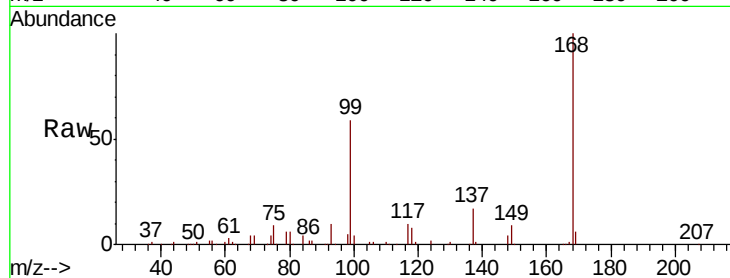
TP-6-(4-5)

Tot Ion:168 Resp: 132596

Ion Ratio Lower Upper

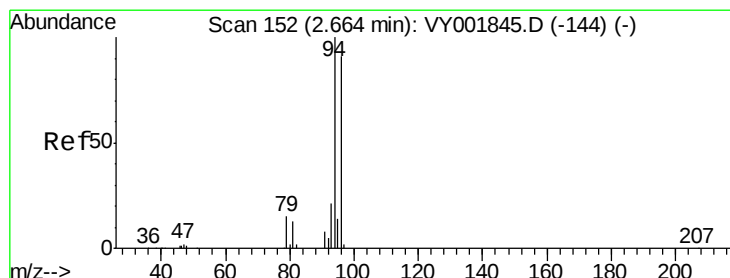
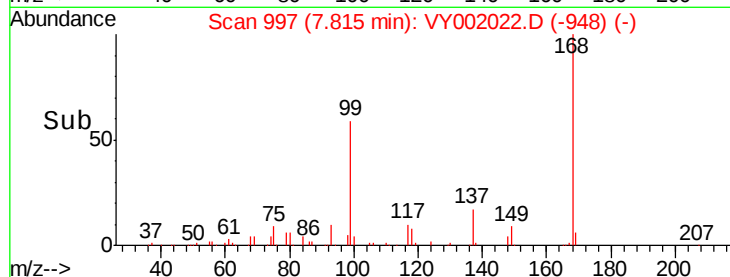
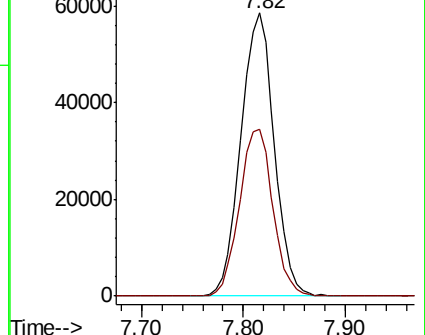
168 100

99 59.2 46.7 70.1



Abundance Ion 167.90 (167.60 to 168.60): VY001845.D (-986) (-)

Ion 98.90 (98.60 to 99.60): VY001845.D (-986) (-)



#5

Bromomethane

Concen: Below Cal

RT: 2.68 min Scan# 154

Delta R.T. 0.01 min

Lab File: VY002022.D

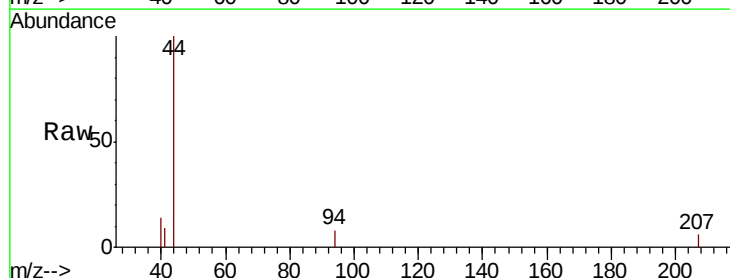
Acq: 19 Mar 2020 15:28

Tgt Ion: 94 Resp: 79

Ion Ratio Lower Upper

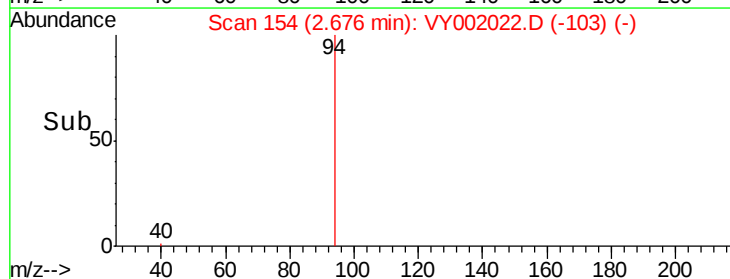
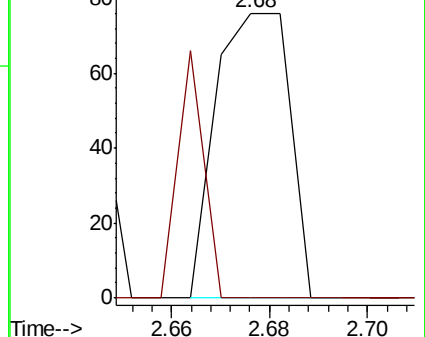
94 100

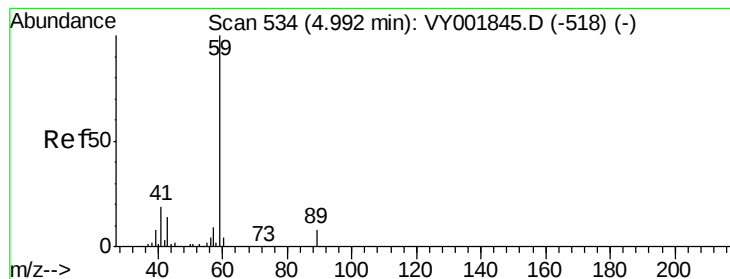
96 0.0 73.2 109.8#



Abundance Ion 93.90 (93.60 to 94.60): VY001845.D (-144) (-)

Ion 95.90 (95.60 to 96.60): VY001845.D (-144) (-)



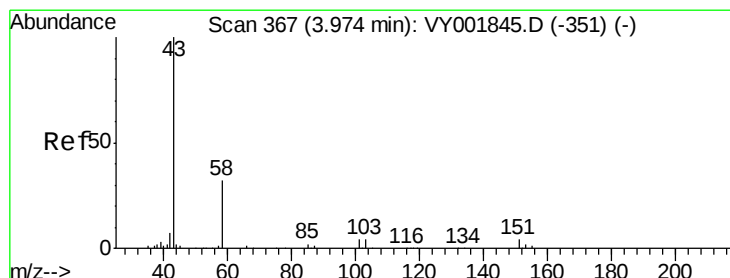
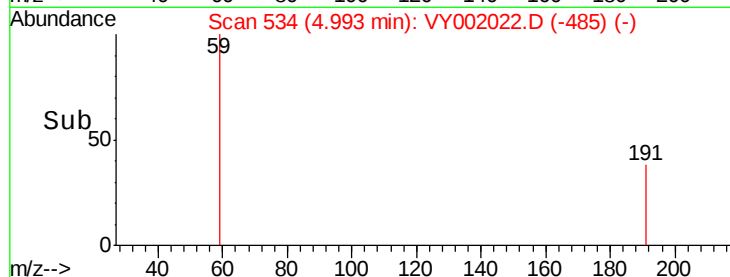
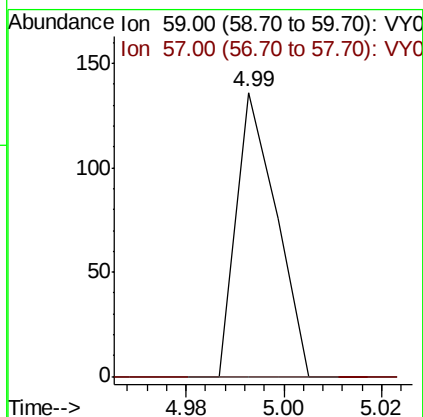
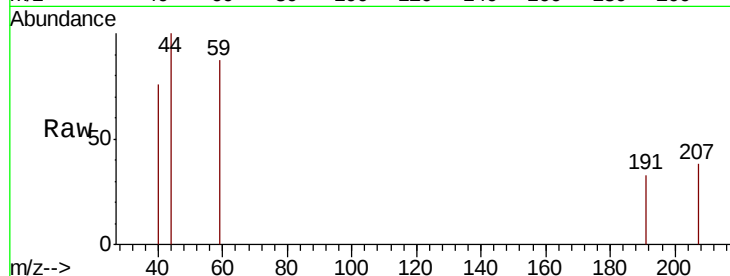


#11

Tert butyl alcohol  
 Concen: Below Cal  
 RT: 4.99 min Scan# 534  
 Delta R.T. 0.00 min  
 Lab File: VY002022.D  
 Acq: 19 Mar 2020 15:28

Instrument :  
 MSVOA\_Y  
 ClientSampled :  
 TP-6-(4-5)

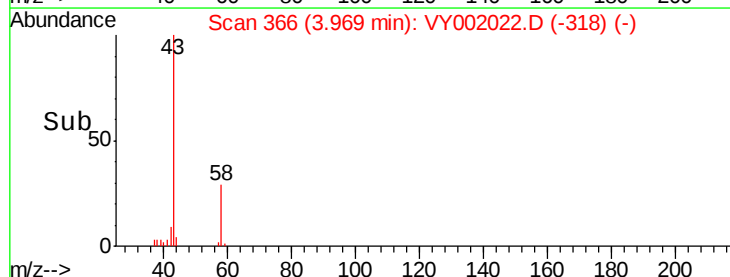
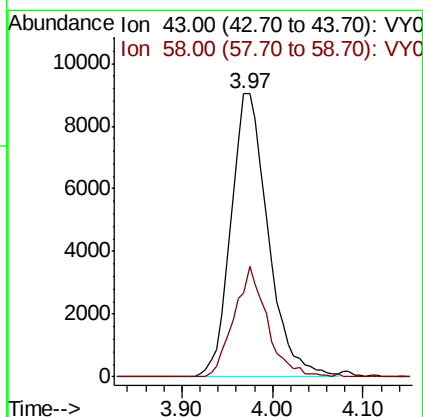
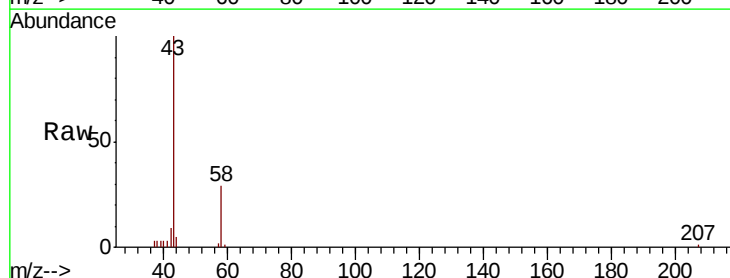
Tot Ion: 59 Resp: 78  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 7.4 11.2#

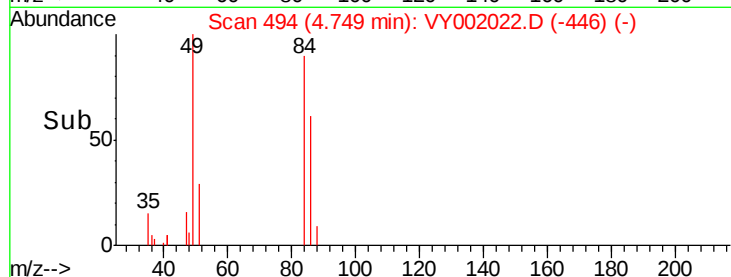
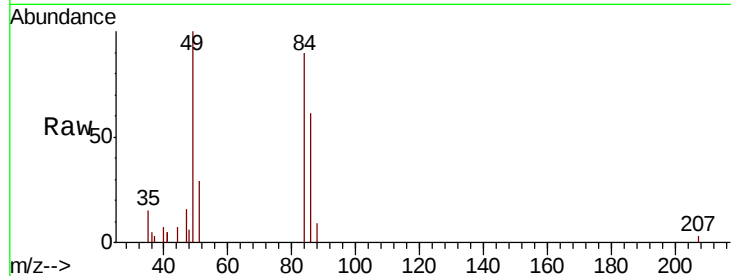
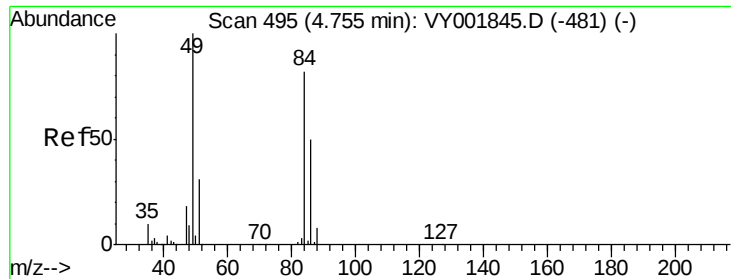


#16

Acetone  
 Concen: 62.283 ug/l  
 RT: 3.97 min Scan# 366  
 Delta R.T. -0.01 min  
 Lab File: VY002022.D  
 Acq: 19 Mar 2020 15:28

Tgt Ion: 43 Resp: 25679  
 Ion Ratio Lower Upper  
 43 100  
 58 29.4 25.9 38.9

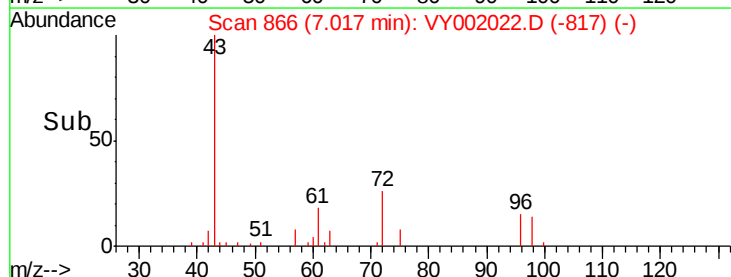
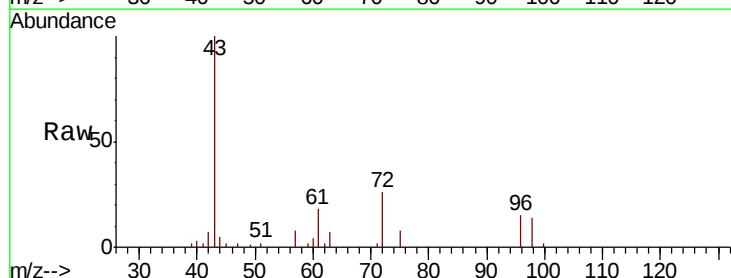
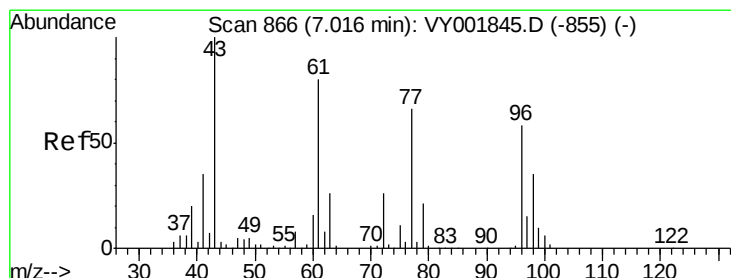
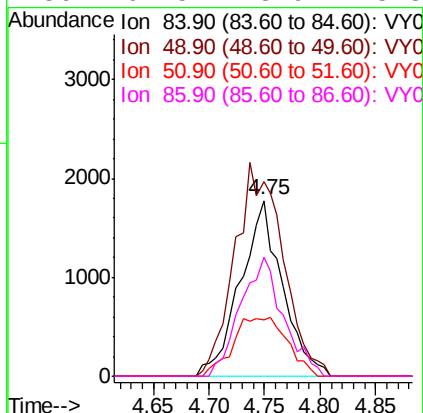




#20  
Methvlene Chloride  
Concen: 2.632 ug/l  
RT: 4.75 min Scan# 494  
Delta R.T. -0.01 min  
Lab File: VY002022.D  
Acq: 19 Mar 2020 15:28

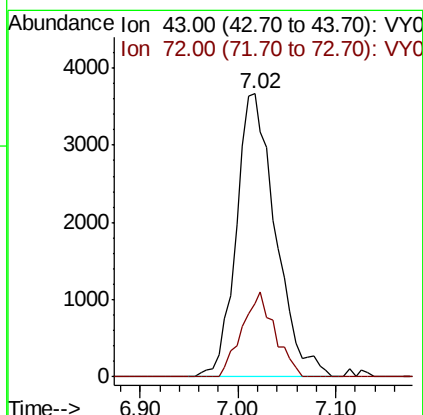
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-6-(4-5)

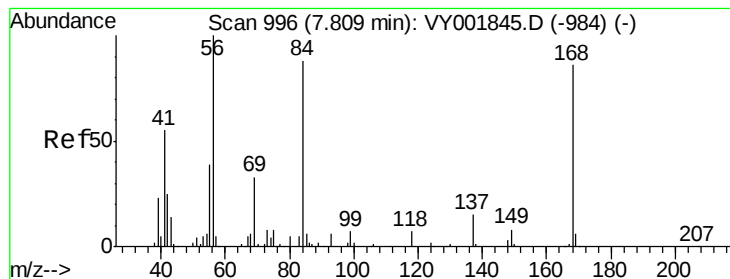
Tot Ion: 84 Resp: 4651  
Ion Ratio Lower Upper  
84 100  
49 111.0 98.2 147.2  
51 31.8 30.2 45.2  
86 67.5 48.9 73.3



#25  
2-Butanone  
Concen: 16.342 ug/l  
RT: 7.02 min Scan# 866  
Delta R.T. 0.00 min  
Lab File: VY002022.D  
Acq: 19 Mar 2020 15:28

Tgt Ion: 43 Resp: 10246  
Ion Ratio Lower Upper  
43 100  
72 25.9 20.9 31.3





#31

Cyclohexane

Concen: 1.002 ug/l

RT: 7.81 min Scan# 996

Delta R.T. 0.00 min

Lab File: VY002022.D

Acq: 19 Mar 2020 15:28

Instrument :

MSVOA\_Y

ClientSampleId :

TP-6-(4-5)

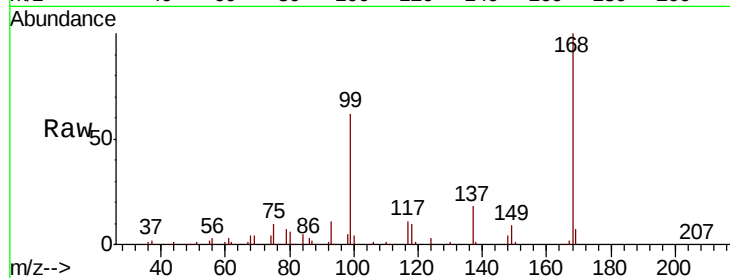
Tot Ion: 56 Resp: 3117

Ion Ratio Lower Upper

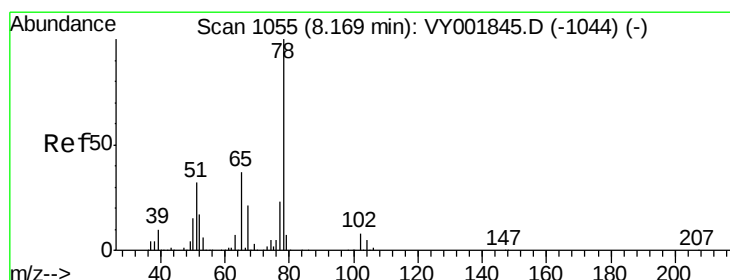
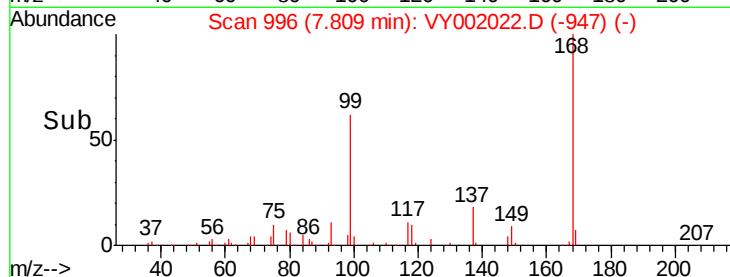
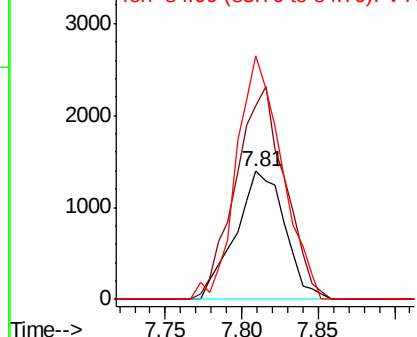
56 100

69 151.4 26.7 40.1#

84 190.0 70.4 105.6#



Abundance Ion 56.00 (55.70 to 56.70): VY0  
Ion 69.00 (68.70 to 69.70): VY0  
Ion 84.00 (83.70 to 84.70): VY0



#33

1,2-Dichloroethane-d4

Concen: 57.537 ug/l

RT: 8.16 min Scan# 1054

Delta R.T. -0.01 min

Lab File: VY002022.D

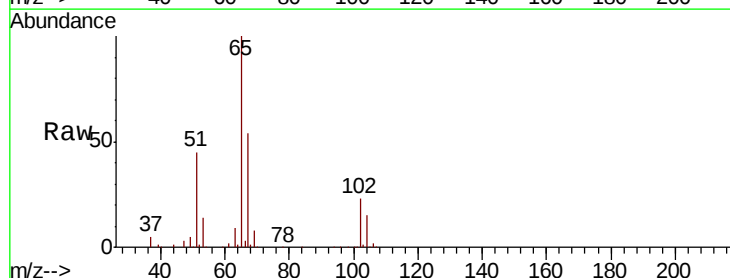
Acq: 19 Mar 2020 15:28

Tgt Ion: 65 Resp: 81446

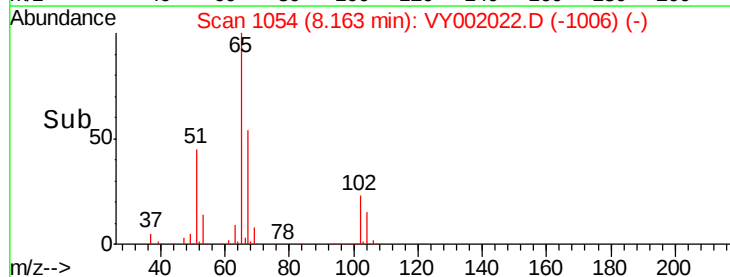
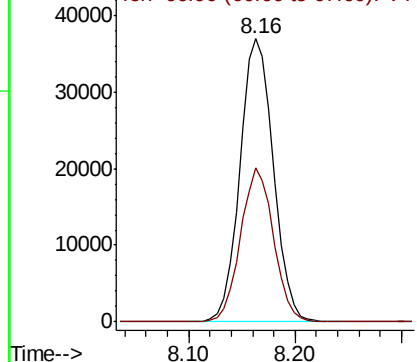
Ion Ratio Lower Upper

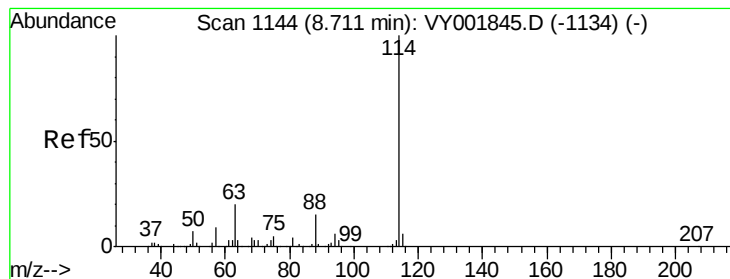
65 100

67 53.7 0.0 110.8



Abundance Ion 64.90 (64.60 to 65.60): VY0  
Ion 66.90 (66.60 to 67.60): VY0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.71 min Scan# 1144

Delta R.T. 0.00 min

Lab File: VY002022.D

Acq: 19 Mar 2020 15:28

Instrument :

MSVOA\_Y

ClientSampleId :

TP-6-(4-5)

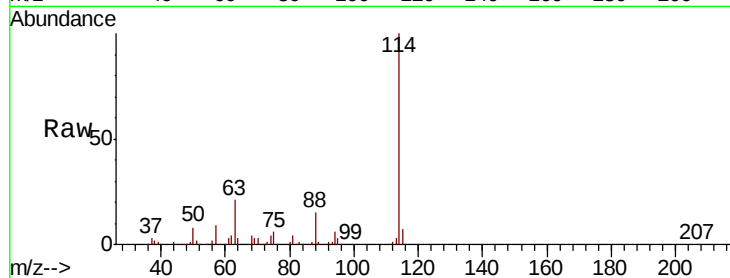
Tot Ion:114 Resp: 253618

Ion Ratio Lower Upper

114 100

63 21.1 0.0 39.4

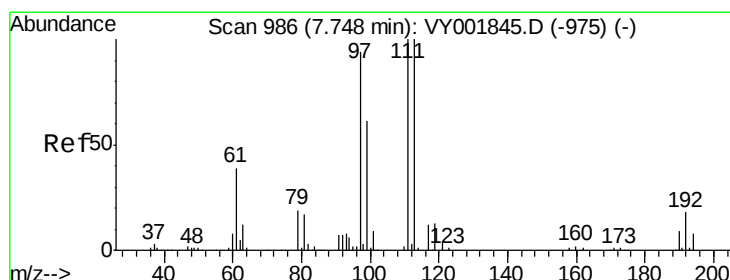
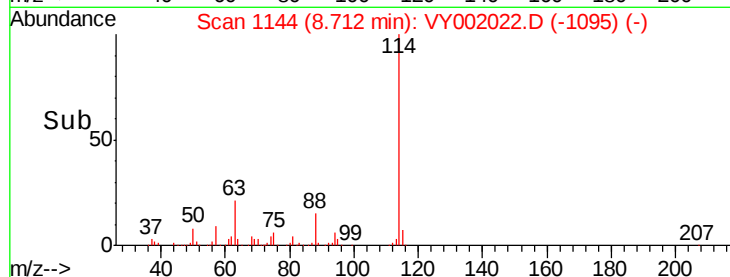
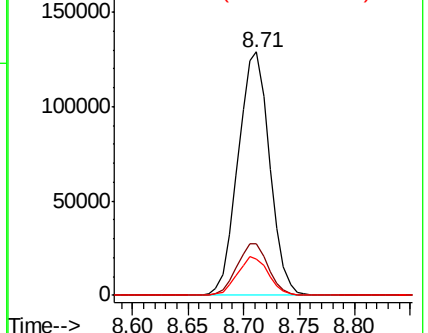
88 15.1 0.0 30.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VY0

Ion 87.90 (87.60 to 88.60): VY0



#35

Dibromofluoromethane

Concen: 54.835 ug/l

RT: 7.74 min Scan# 985

Delta R.T. -0.01 min

Lab File: VY002022.D

Acq: 19 Mar 2020 15:28

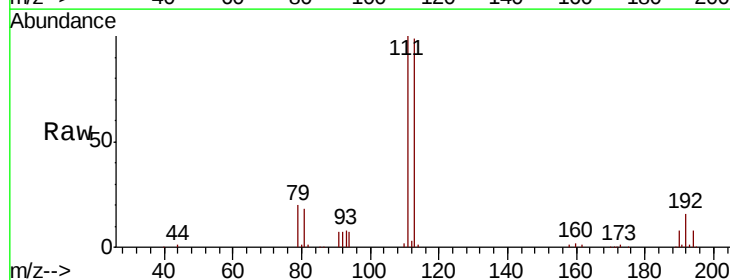
Tgt Ion:113 Resp: 75939

Ion Ratio Lower Upper

113 100

111 101.6 81.8 122.8

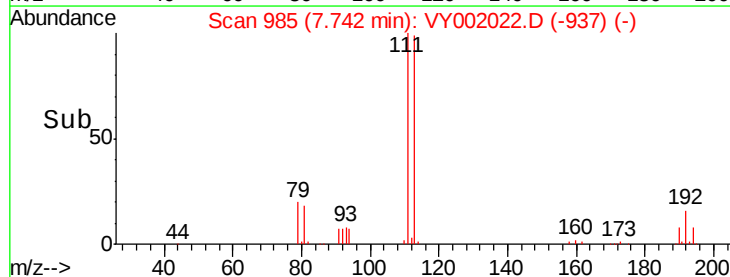
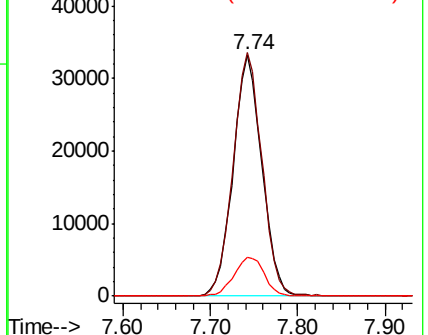
192 16.9 14.2 21.2

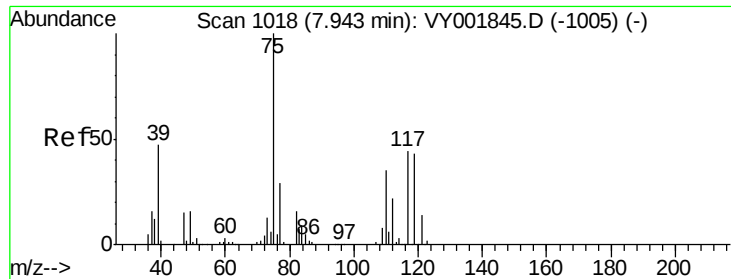


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

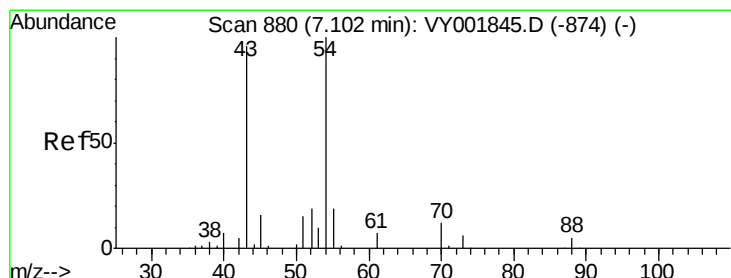
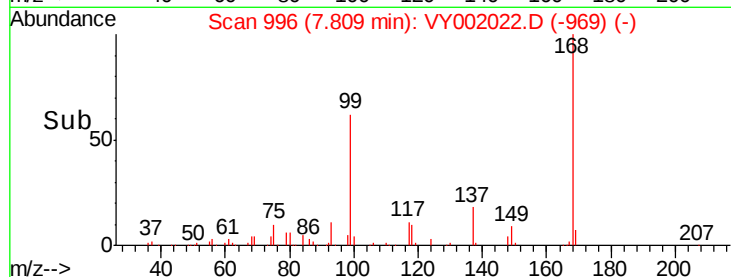
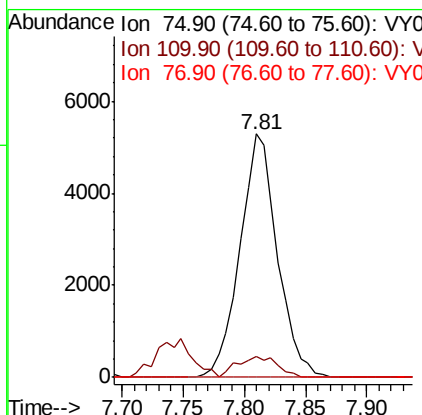
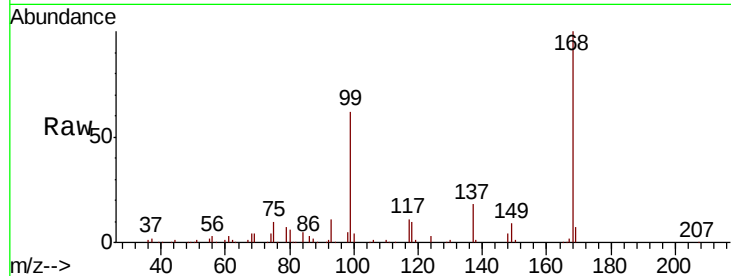




#36  
 1,1-Dichloropropene  
 Concen: 4.602 ug/l  
 RT: 7.81 min Scan# 996  
 Delta R.T. -0.13 min  
 Lab File: VY002022.D  
 Acq: 19 Mar 2020 15:28

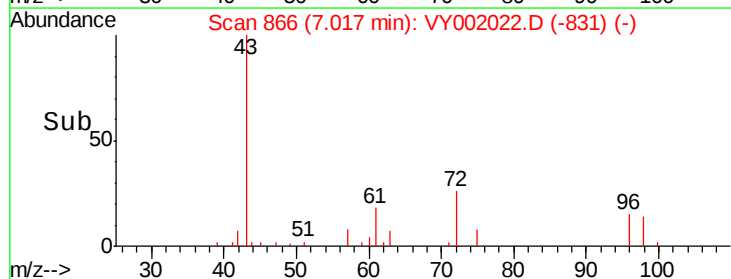
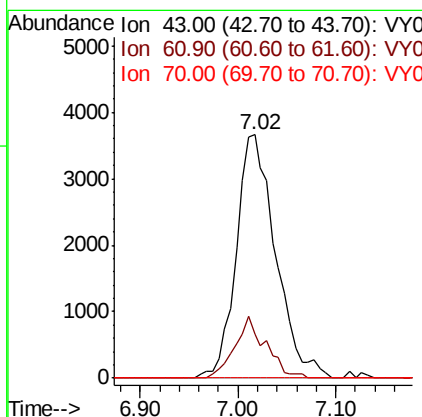
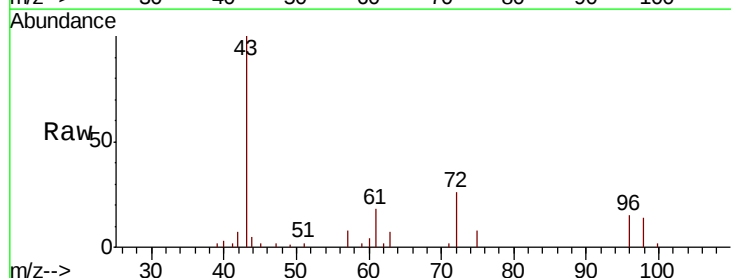
Instrument :  
 MSVOA\_Y  
 ClientSampled :  
 TP-6-(4-5)

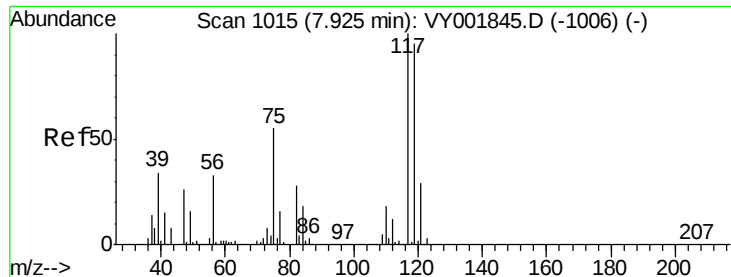
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.2   | 17.4  | 52.2# |
| 77      | 0.0   | 24.2  | 36.2# |



#37  
 Ethyl Acetate  
 Concen: 7.223 ug/l  
 RT: 7.02 min Scan# 866  
 Delta R.T. -0.09 min  
 Lab File: VY002022.D  
 Acq: 19 Mar 2020 15:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 61      | 19.7  | 11.1  | 16.7# |
| 70      | 0.0   | 8.2   | 12.4# |

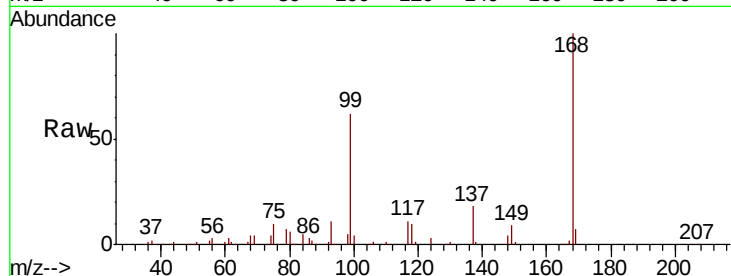




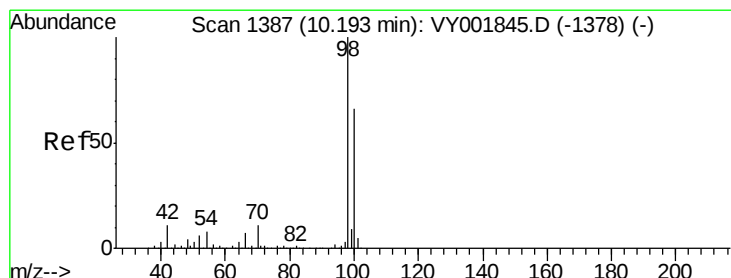
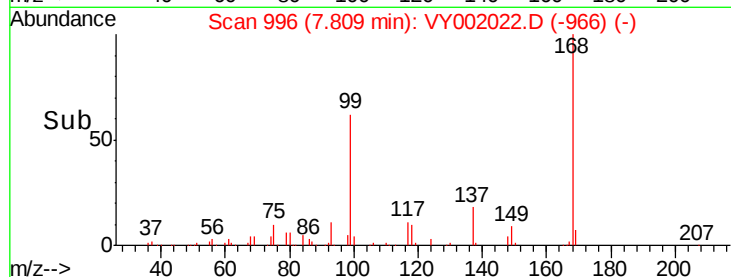
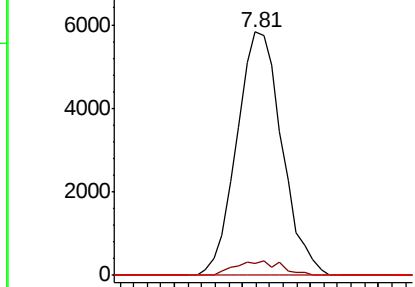
#38  
Carbon Tetrachloride  
Concen: 6.478 ug/l  
RT: 7.81 min Scan# 996  
Delta R.T. -0.12 min  
Lab File: VY002022.D  
Acq: 19 Mar 2020 15:28

Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-6-(4-5)

Tot Ion:117 Resp: 13505  
Ion Ratio Lower Upper  
117 100  
119 4.7 76.3 114.5#  
121 0.0 23.5 35.3#

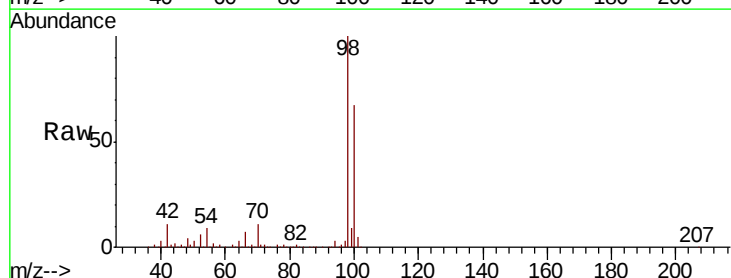


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

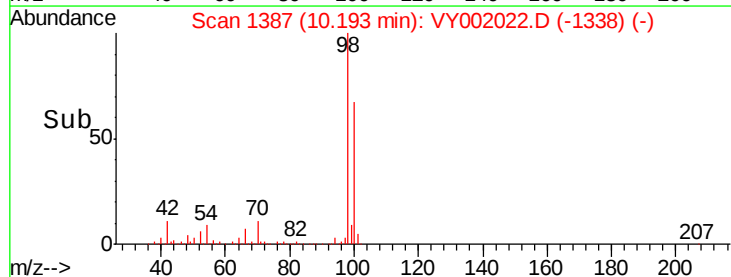
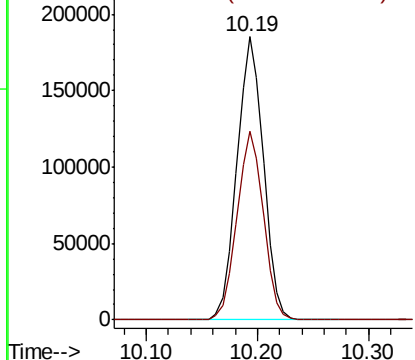


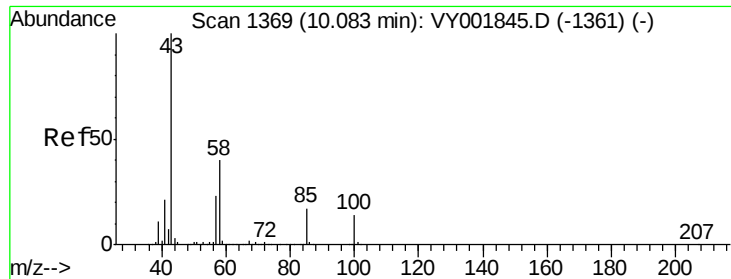
#50  
Toluene-d8  
Concen: 52.154 ug/l  
RT: 10.19 min Scan# 1387  
Delta R.T. 0.00 min  
Lab File: VY002022.D  
Acq: 19 Mar 2020 15:28

Tgt Ion: 98 Resp: 304567  
Ion Ratio Lower Upper  
98 100  
100 66.2 53.0 79.4



Abundance Ion 98.00 (97.70 to 98.70): VY0  
Ion 100.00 (99.70 to 100.70): VY





#51

4-Methyl-2-Pentanone

Concen: 1.157 ug/l

RT: 10.19 min Scan# 1387

Delta R.T. 0.11 min

Lab File: VY002022.D

Acq: 19 Mar 2020 15:28

Instrument :

MSVOA\_Y

ClientSampleId :

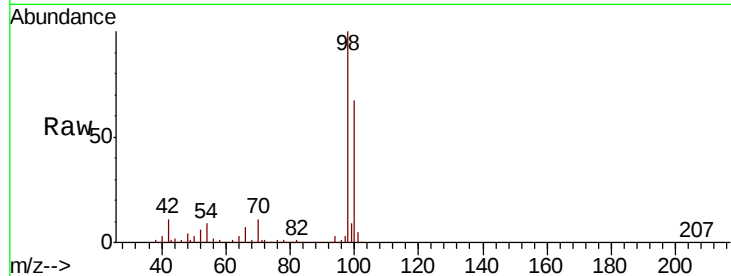
TP-6-(4-5)

Tot Ion: 43 Resp: 1601

Ion Ratio Lower Upper

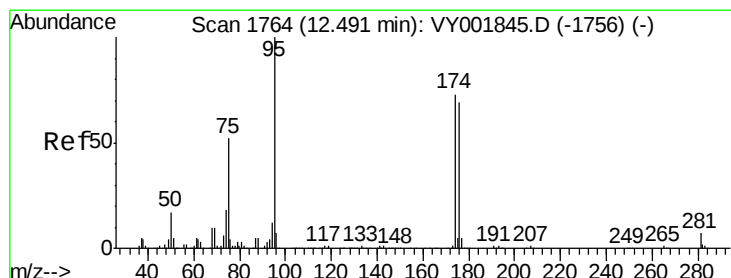
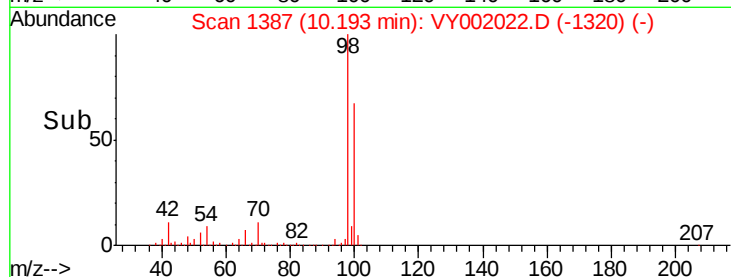
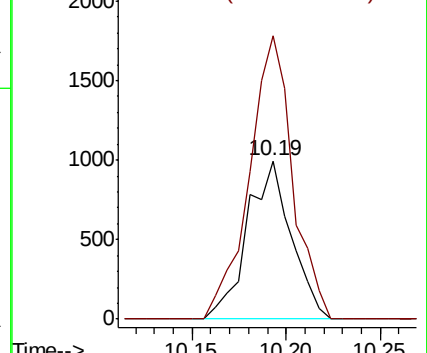
43 100

58 177.6 32.0 48.0#



Abundance Ion 43.00 (42.70 to 43.70): VY0

Ion 58.00 (57.70 to 58.70): VY0



#62

4-Bromofluorobenzene

Concen: 40.175 ug/l

RT: 12.49 min Scan# 1764

Delta R.T. 0.00 min

Lab File: VY002022.D

Acq: 19 Mar 2020 15:28

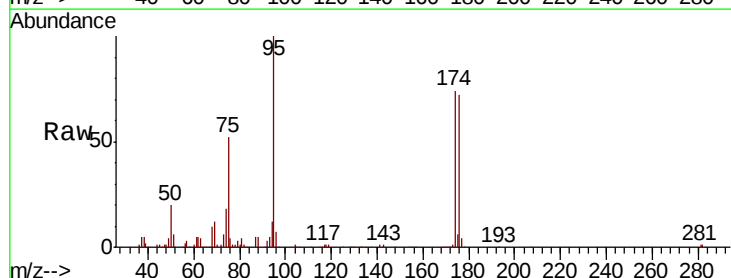
Tgt Ion: 95 Resp: 81577

Ion Ratio Lower Upper

95 100

174 74.5 0.0 145.0

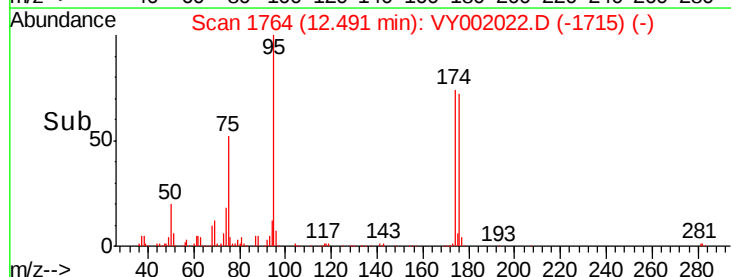
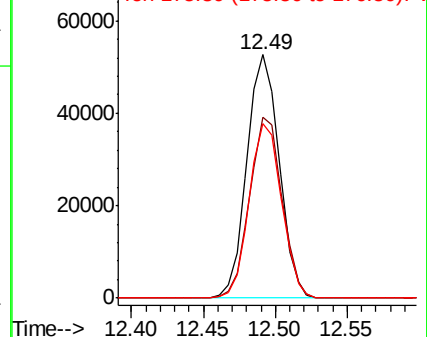
176 72.1 0.0 137.4

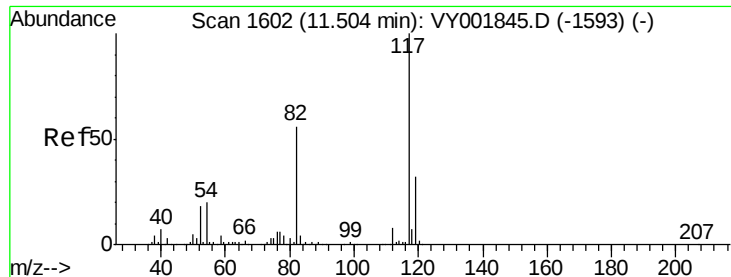


Abundance Ion 94.90 (94.60 to 95.60): VY0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

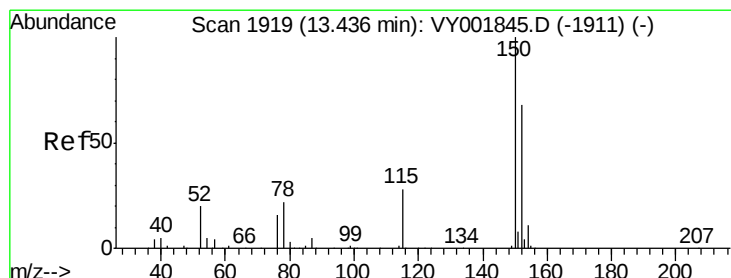
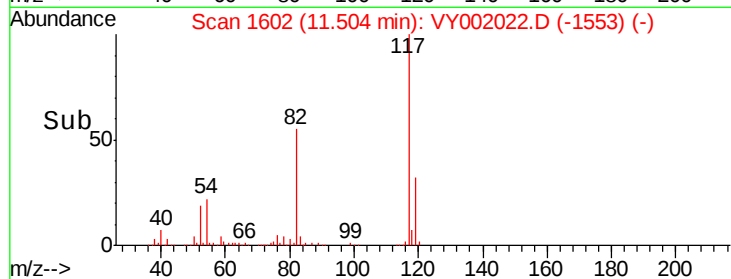
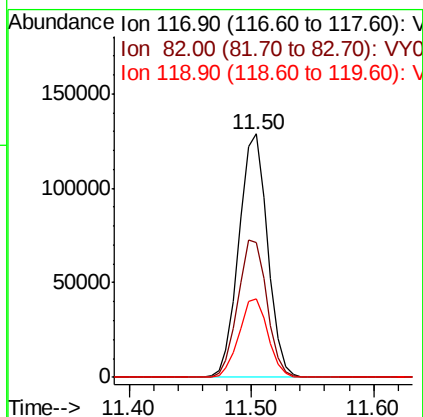
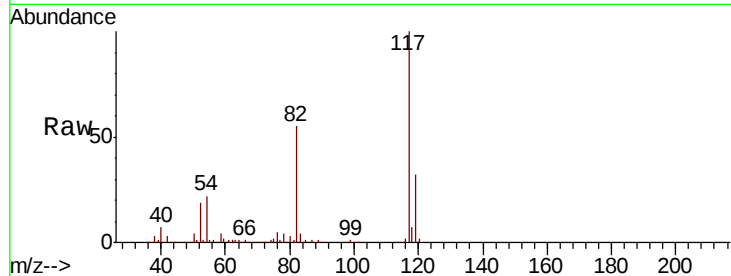




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.50 min Scan# 1602  
Delta R.T. 0.00 min  
Lab File: VY002022.D  
Acq: 19 Mar 2020 15:28

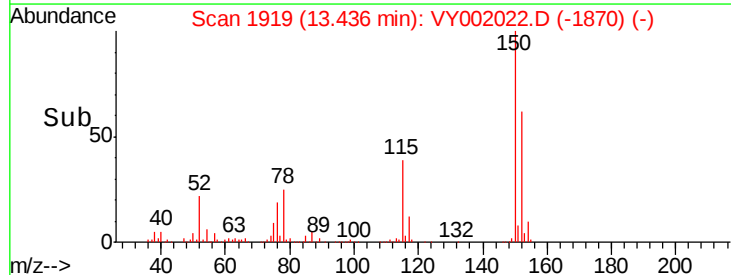
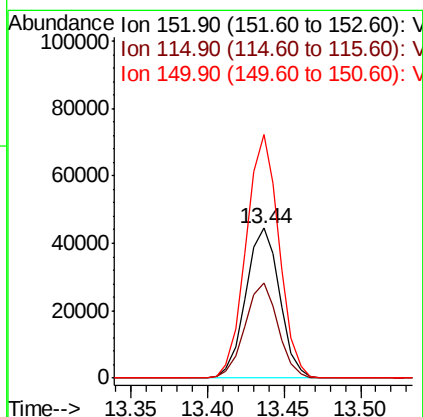
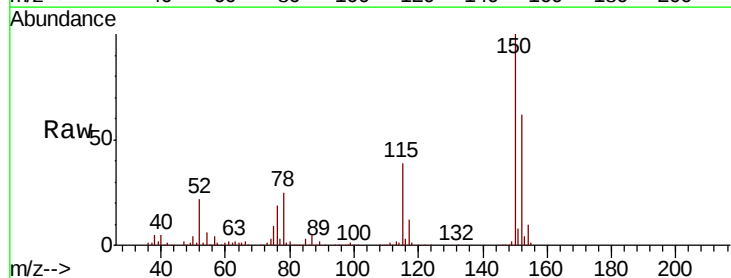
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-6-(4-5)

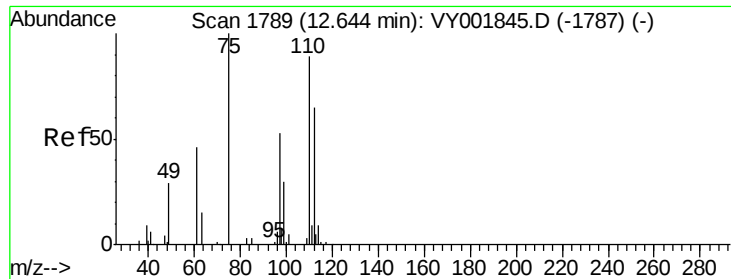
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 55.5  | 44.5  | 66.7  |
| 119     | 32.1  | 25.7  | 38.5  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.44 min Scan# 1919  
Delta R.T. 0.00 min  
Lab File: VY002022.D  
Acq: 19 Mar 2020 15:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 61.6  | 29.9  | 89.7  |
| 150     | 158.2 | 0.0   | 340.6 |





#76

1,2,3-Trichloropropane

Concen: 52.533 ug/l

RT: 12.49 min Scan# 1764

Delta R.T. -0.15 min

Lab File: VY002022.D

Acq: 19 Mar 2020 15:28

Instrument :

MSVOA\_Y

ClientSampleId :

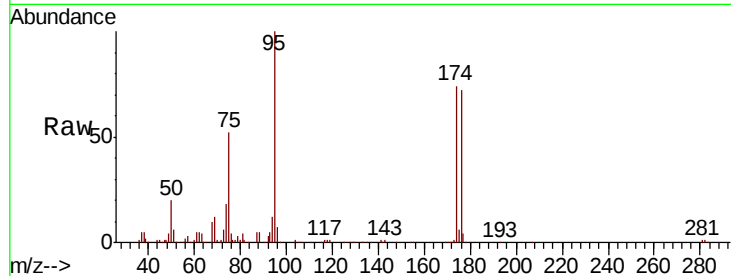
TP-6-(4-5)

Tot Ion: 75 Resp: 42646

Ion Ratio Lower Upper

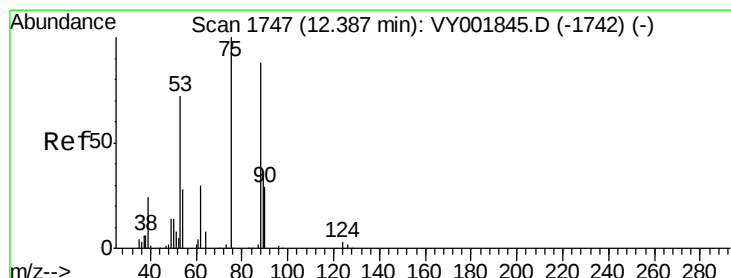
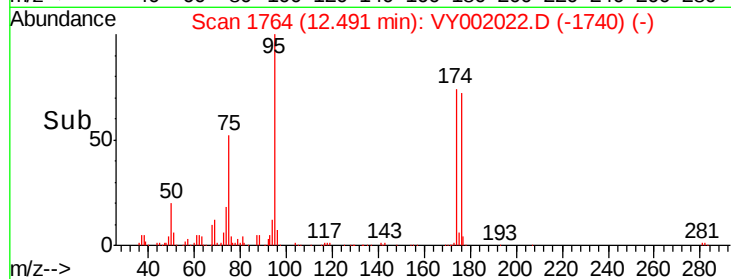
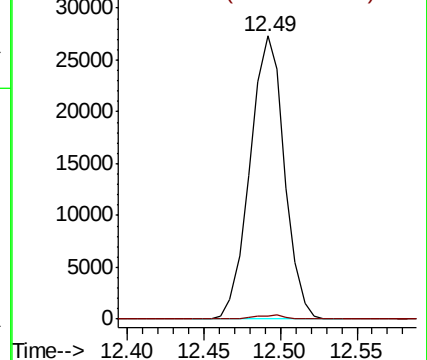
75 100

77 1.4 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VY0

Ion 77.00 (76.70 to 77.70): VY0



#81

trans-1,4-Dichloro-2-butene

Concen: 106.115 ug/l

RT: 12.49 min Scan# 1764

Delta R.T. 0.10 min

Lab File: VY002022.D

Acq: 19 Mar 2020 15:28

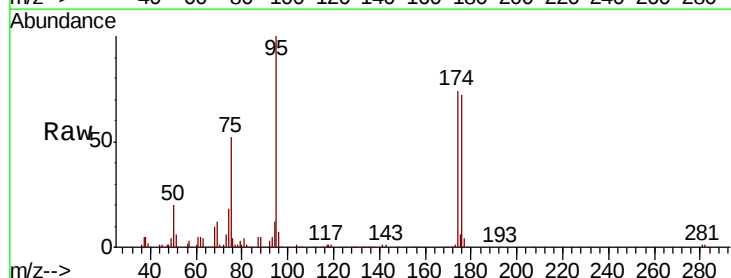
Tgt Ion: 75 Resp: 42646

Ion Ratio Lower Upper

75 100

53 0.0 65.4 98.0#

89 0.0 36.0 54.0#



Abundance Ion 74.90 (74.60 to 75.60): VY0

Ion 53.00 (52.70 to 53.70): VY0

Ion 88.90 (88.60 to 89.60): VY0

