

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY031920\  
 Data File : VY002021.D  
 Acq On : 19 Mar 2020 15:05  
 Operator : SY/MD  
 Sample : L1978-01  
 Misc : 5.47G/5ML/MSVOA Y/SOIL  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :

Quant Time: Mar 20 01:57:31 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      | 7.81  | 168  | 134163   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.71  | 114  | 261249   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.50 | 117  | 231370   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.44 | 152  | 85254    | 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   | 84520    | 59.01 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 118.02% |          |
| 35) Dibromofluoromethane    | 7.74  | 113  | 76742    | 53.80 | ug/l    | -0.01    |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 107.60% |          |
| 50) Toluene-d8              | 10.19 | 98   | 314187   | 52.23 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 104.46% |          |
| 62) 4-Bromofluorobenzene    | 12.49 | 95   | 99355    | 47.50 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 95.00%  |          |

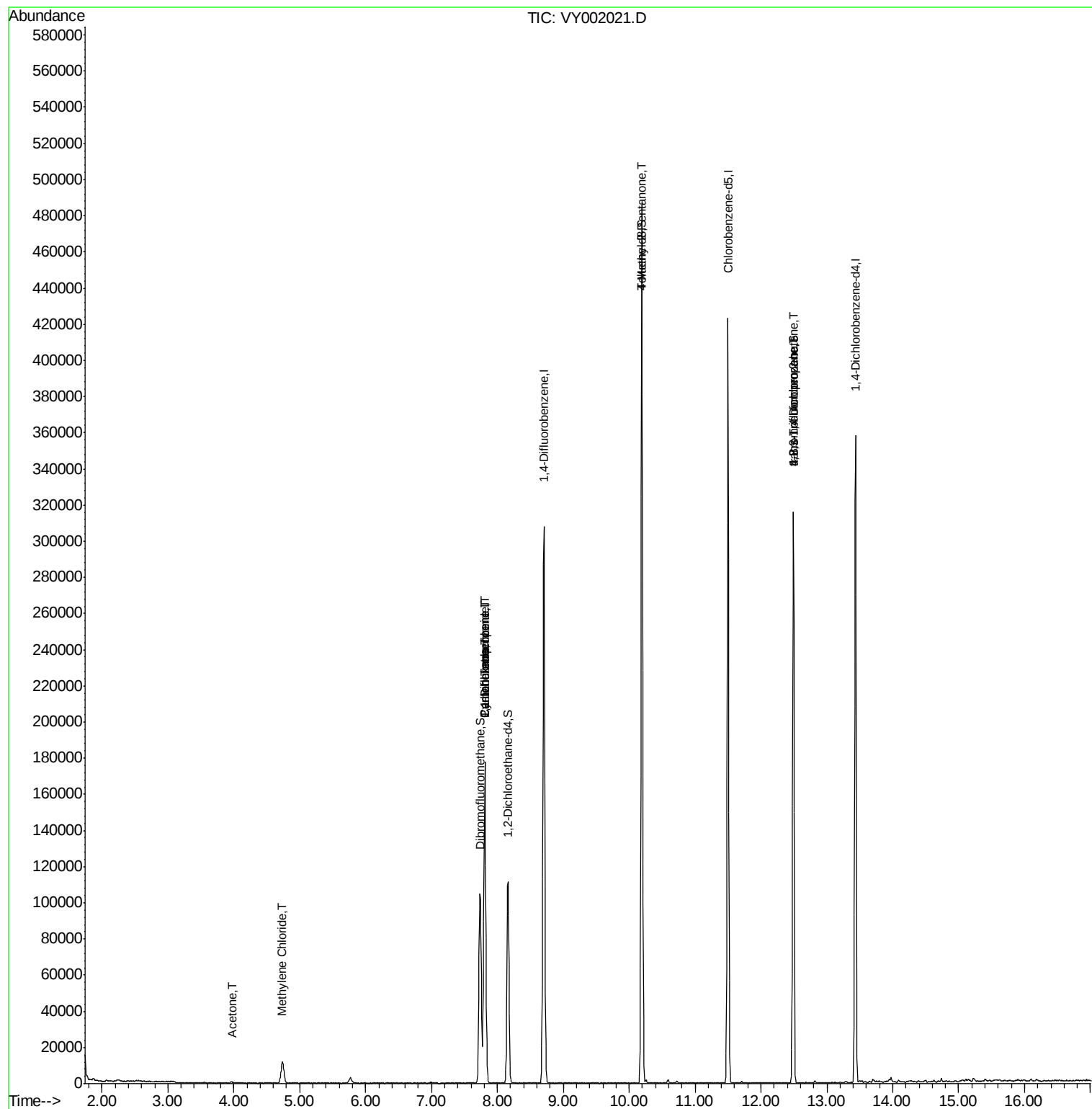
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 2.68  | 94   | 37       | Below Cal |        | 87     |
| 11) Tert butyl alcohol         | 5.00  | 59   | 31       | Below Cal | #      | 74     |
| 16) Acetone                    | 3.97  | 43   | 1290     | 3.092     | ug/l   | 98     |
| 20) Methylene Chloride         | 4.74  | 84   | 9013     | 5.041     | ug/l   | 95     |
| 31) Cyclohexane                | 7.80  | 56   | 3323     | 1.056     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.81  | 75   | 11148    | 4.434     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.81  | 117  | 13998    | 6.518     | ug/l # | 17     |
| 51) 4-Methyl-2-Pentanone       | 10.19 | 43   | 1463     | 1.027     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.49 | 75   | 50283    | 49.707    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.49 | 75   | 50283    | 100.405   | ug/l # | 17     |

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

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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: 7.81 min Scan# 996

Delta R.T. -0.01 min

Lab File: VY002021.D

Acq: 19 Mar 2020 15:05

Instrument :

MSVOA\_Y

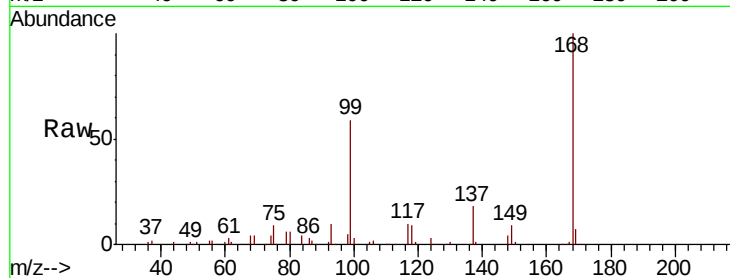
ClientSampleId :

Tot Ion:168 Resp: 134163

Ion Ratio Lower Upper

168 100

99 59.3 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) (-)

7.81

60000

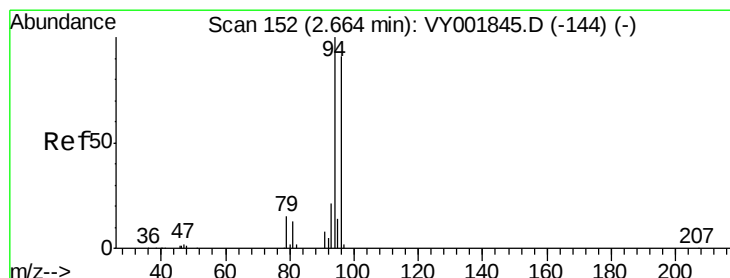
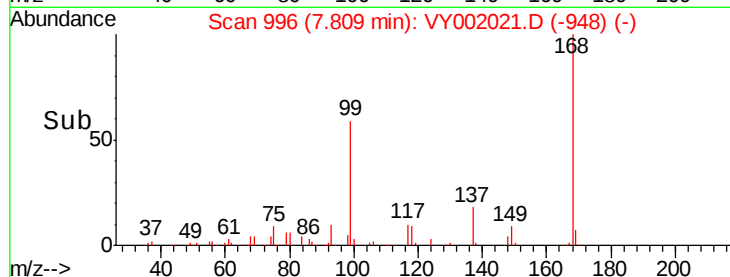
40000

20000

0

7.70 7.80 7.90

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.68 min Scan# 155

Delta R.T. 0.02 min

Lab File: VY002021.D

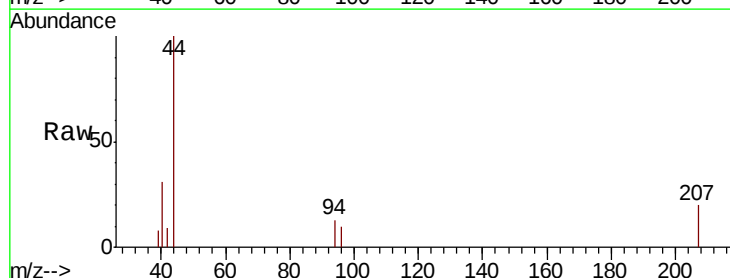
Acq: 19 Mar 2020 15:05

Tgt Ion: 94 Resp: 37

Ion Ratio Lower Upper

94 100

96 79.0 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) (-)

2.68

100

80

60

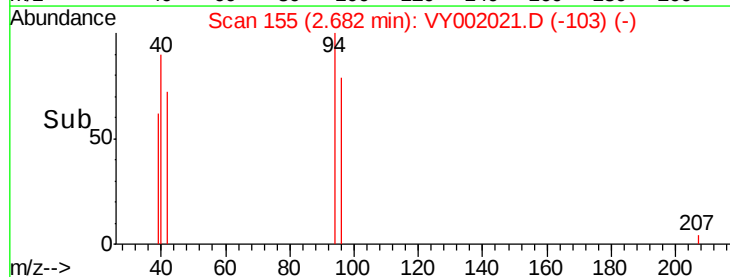
40

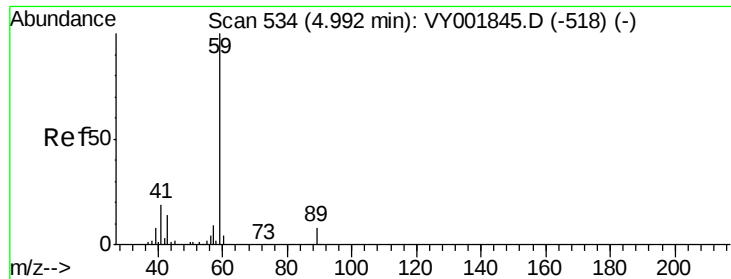
20

0

2.66 2.67 2.68 2.69 2.70

Time-->



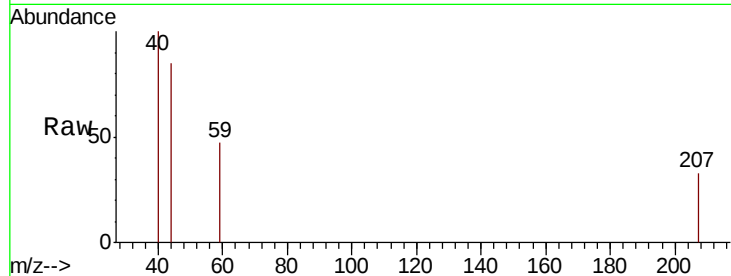


#11

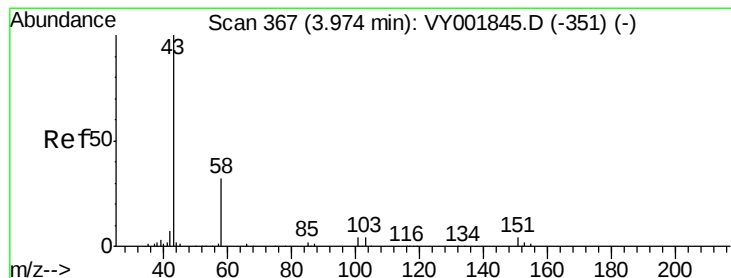
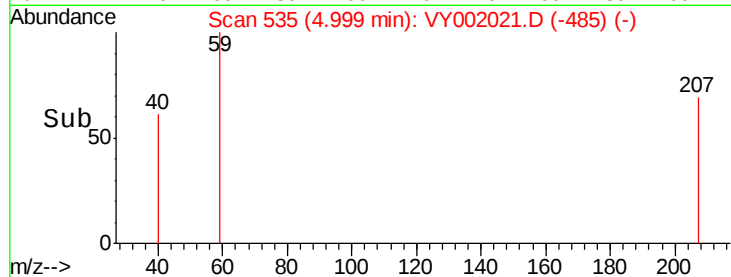
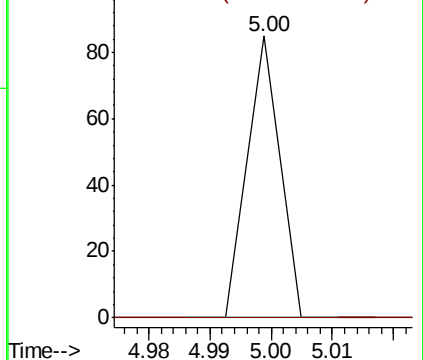
Tert butyl alcohol  
 Concen: Below Cal  
 RT: 5.00 min Scan# 535  
 Delta R.T. 0.01 min  
 Lab File: VY002021.D  
 Acq: 19 Mar 2020 15:05

Instrument :  
 MSVOA\_Y  
 ClientSampled :

Tot Ion: 59 Resp: 31  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 7.4 11.2#



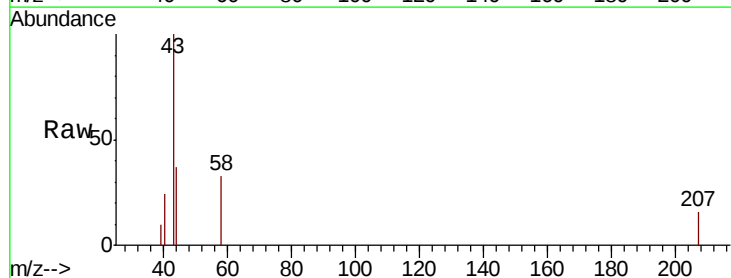
Abundance Ion 59.00 (58.70 to 59.70): VY0  
 Ion 57.00 (56.70 to 57.70): VY0



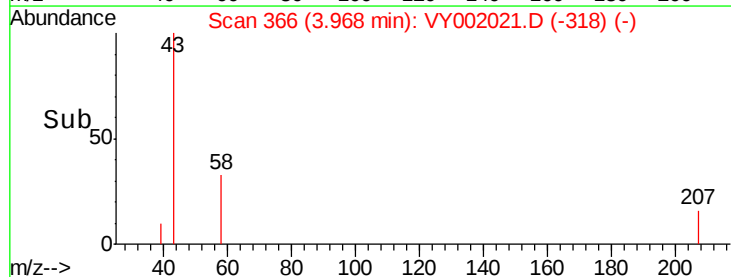
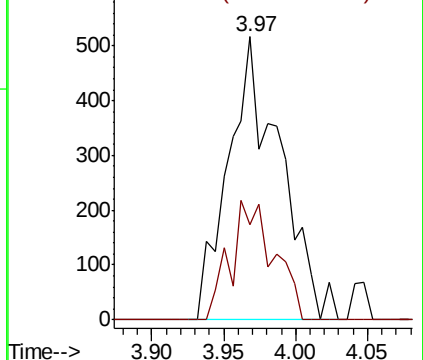
#16

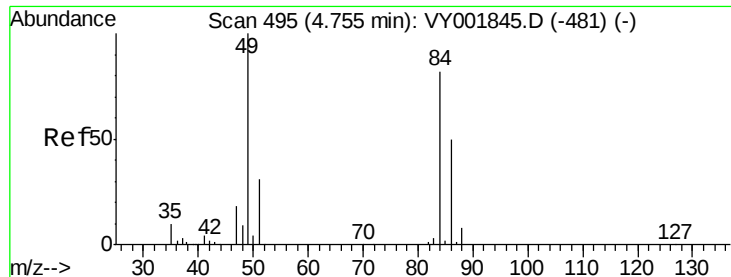
Acetone  
 Concen: 3.092 ug/l  
 RT: 3.97 min Scan# 366  
 Delta R.T. -0.01 min  
 Lab File: VY002021.D  
 Acq: 19 Mar 2020 15:05

Tgt Ion: 43 Resp: 1290  
 Ion Ratio Lower Upper  
 43 100  
 58 33.5 25.9 38.9



Abundance Ion 43.00 (42.70 to 43.70): VY0  
 Ion 58.00 (57.70 to 58.70): VY0

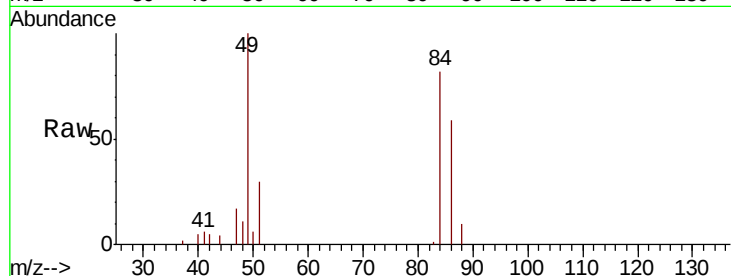




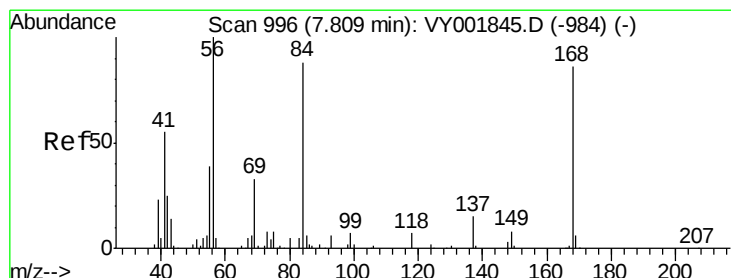
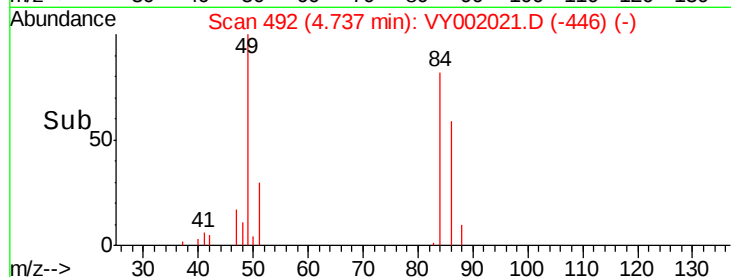
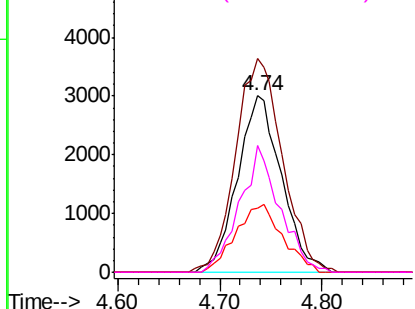
#20  
Methvlene Chloride  
Concen: 5.041 ug/l  
RT: 4.74 min Scan# 492  
Delta R.T. -0.02 min  
Lab File: VY002021.D  
Acq: 19 Mar 2020 15:05

Instrument :  
MSVOA\_Y  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 9013  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 121.3 | 98.2  | 147.2 |
| 51       | 36.7  | 30.2  | 45.2  |
| 86       | 71.7  | 48.9  | 73.3  |

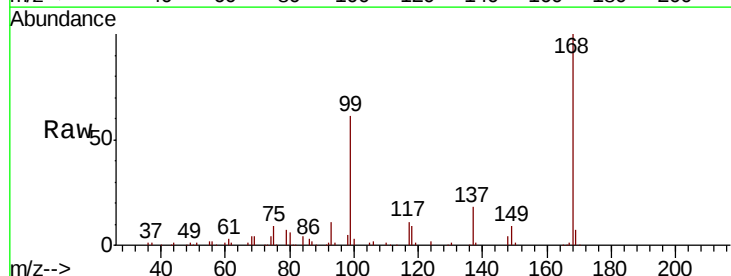


Abundance Ion 83.90 (83.60 to 84.60): VY0  
Ion 48.90 (48.60 to 49.60): VY0  
Ion 50.90 (50.60 to 51.60): VY0  
Ion 85.90 (85.60 to 86.60): VY0

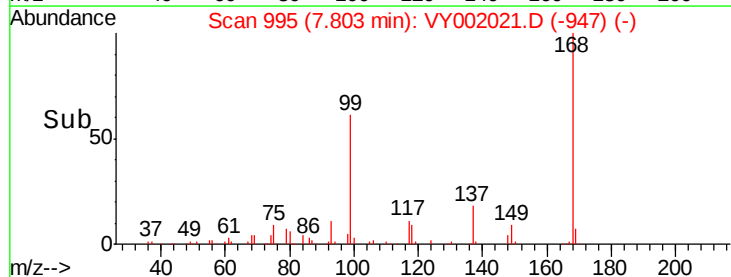
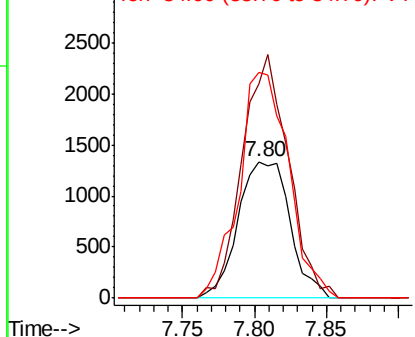


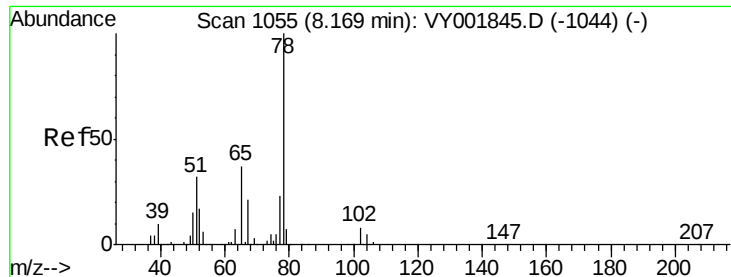
#31  
Cyclohexane  
Concen: 1.056 ug/l  
RT: 7.80 min Scan# 995  
Delta R.T. -0.01 min  
Lab File: VY002021.D  
Acq: 19 Mar 2020 15:05

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 56    | Resp: | 3323   |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 157.1 | 26.7  | 40.1#  |
| 84       | 165.4 | 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

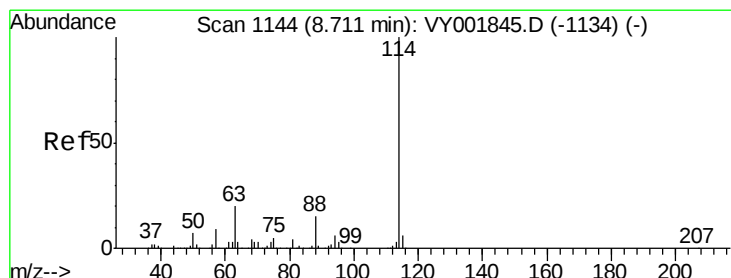
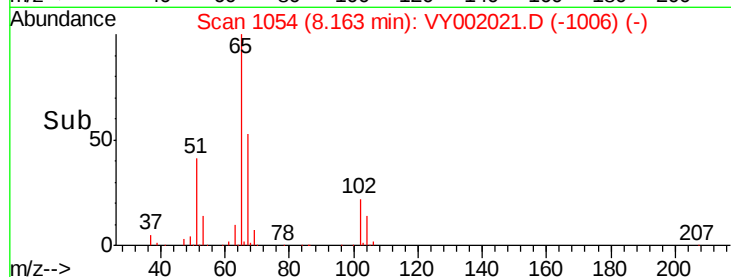
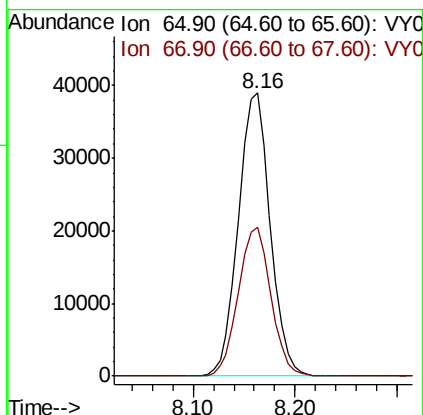
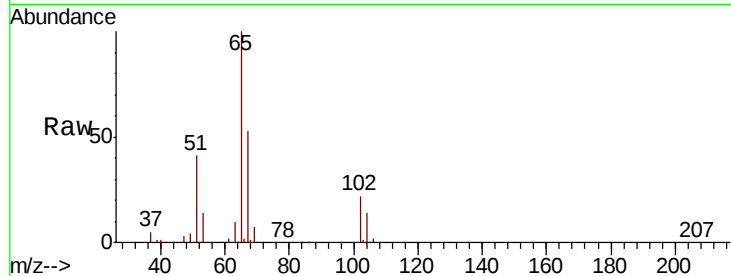




#33  
 1,2-Dichloroethane-d4  
 Concen: 59.011 ug/l  
 RT: 8.16 min Scan# 1054  
 Delta R.T. -0.01 min  
 Lab File: VY002021.D  
 Acq: 19 Mar 2020 15:05

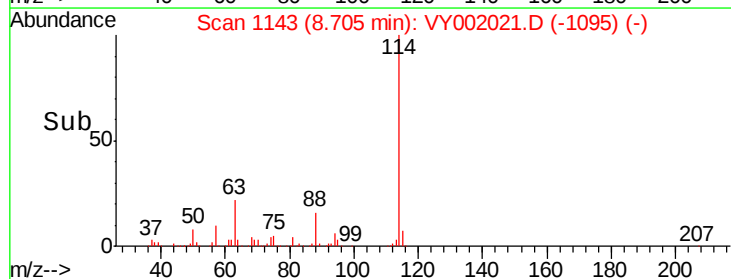
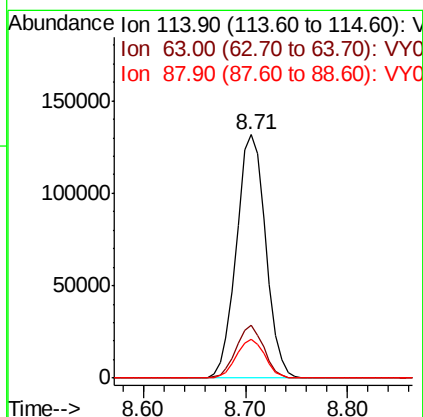
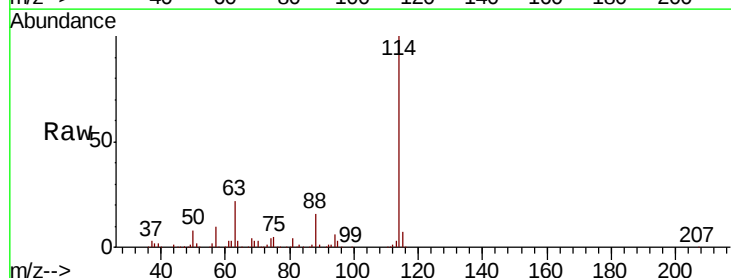
Instrument :  
 MSVOA\_Y  
 ClientSampleId :

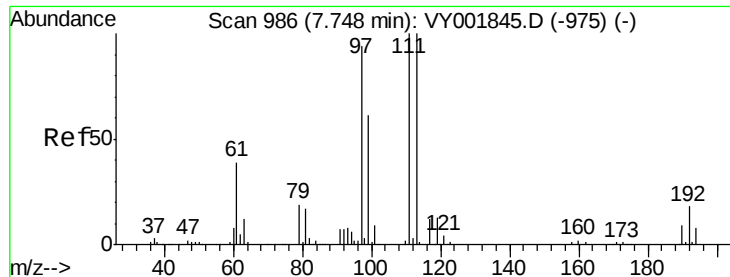
Tot Ion: 65 Resp: 84520  
 Ion Ratio Lower Upper  
 65 100  
 67 53.8 0.0 110.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.71 min Scan# 1143  
 Delta R.T. -0.01 min  
 Lab File: VY002021.D  
 Acq: 19 Mar 2020 15:05

Tgt Ion: 114 Resp: 261249  
 Ion Ratio Lower Upper  
 114 100  
 63 21.5 0.0 39.4  
 88 16.1 0.0 30.4

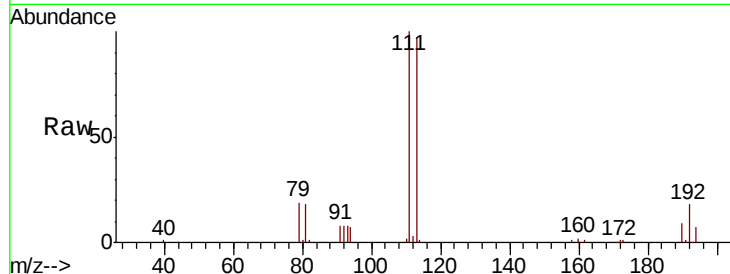




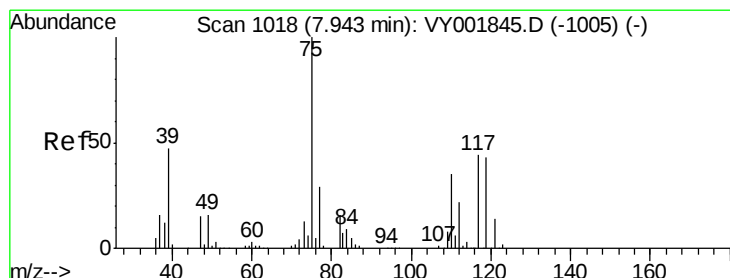
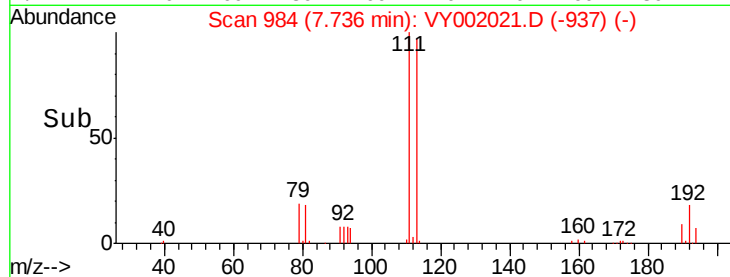
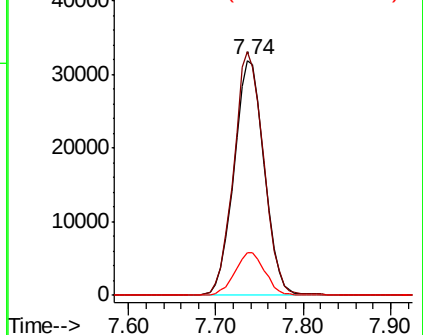
#35  
 Dibromofluoromethane  
 Concen: 53.796 ug/l  
 RT: 7.74 min Scan# 984  
 Delta R.T. -0.01 min  
 Lab File: VY002021.D  
 Acq: 19 Mar 2020 15:05

Instrument :  
 MSVOA\_Y  
 ClientSampleId :

Tot Ion:113 Resp: 76742  
 Ion Ratio Lower Upper  
 113 100  
 111 102.2 81.8 122.8  
 192 18.1 14.2 21.2

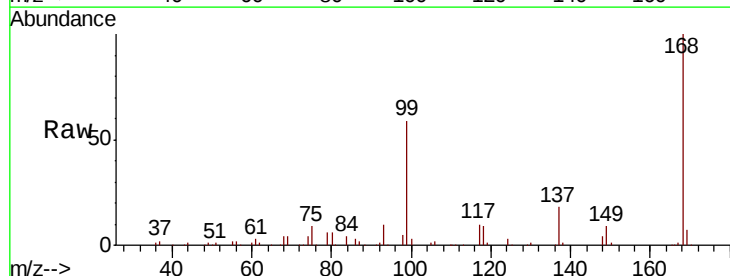


Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

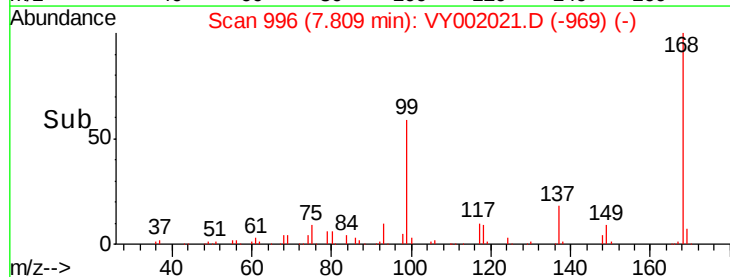
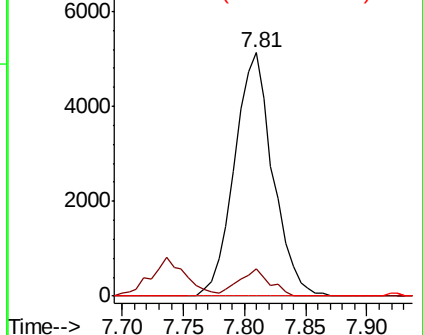


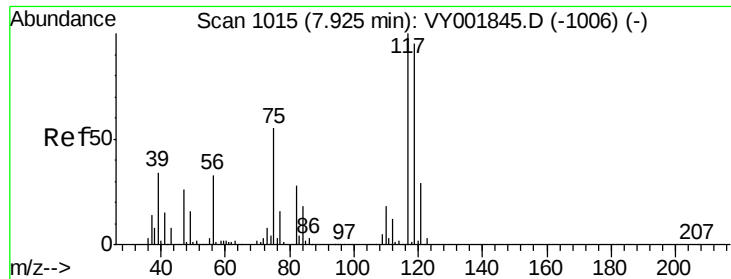
#36  
 1,1-Dichloropropene  
 Concen: 4.434 ug/l  
 RT: 7.81 min Scan# 996  
 Delta R.T. -0.13 min  
 Lab File: VY002021.D  
 Acq: 19 Mar 2020 15:05

Tgt Ion: 75 Resp: 11148  
 Ion Ratio Lower Upper  
 75 100  
 110 9.0 17.4 52.2#  
 77 0.0 24.2 36.2#



Abundance Ion 74.90 (74.60 to 75.60): VY0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VY0

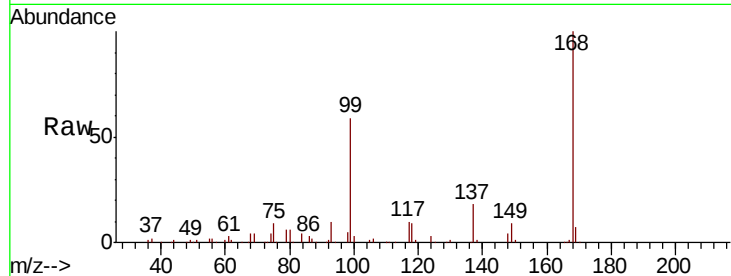




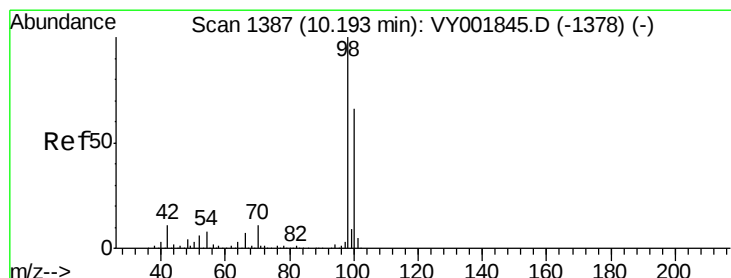
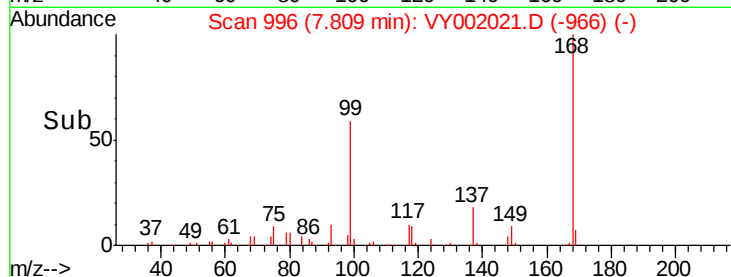
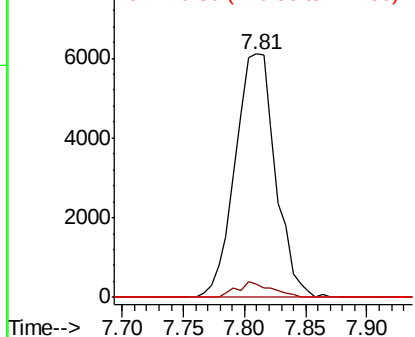
#38  
Carbon Tetrachloride  
Concen: 6.518 ug/l  
RT: 7.81 min Scan# 996  
Delta R.T. -0.12 min  
Lab File: VY002021.D  
Acq: 19 Mar 2020 15:05

Instrument :  
MSVOA\_Y  
ClientSampleId :

Tot Ion:117 Resp: 13998  
Ion Ratio Lower Upper  
117 100  
119 5.5 76.3 114.5#  
121 0.0 23.5 35.3#

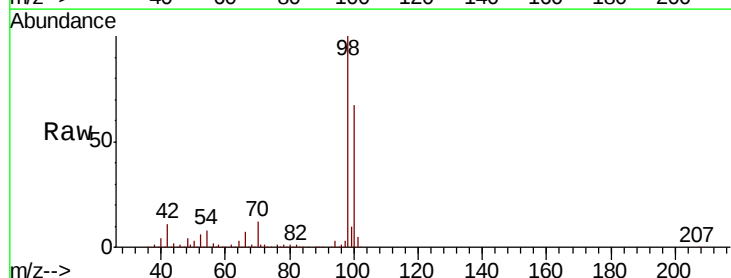


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

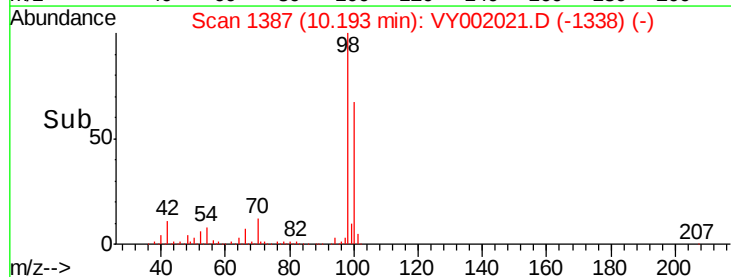
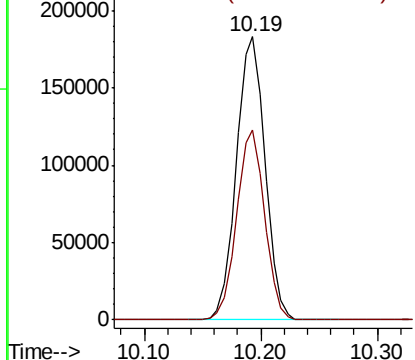


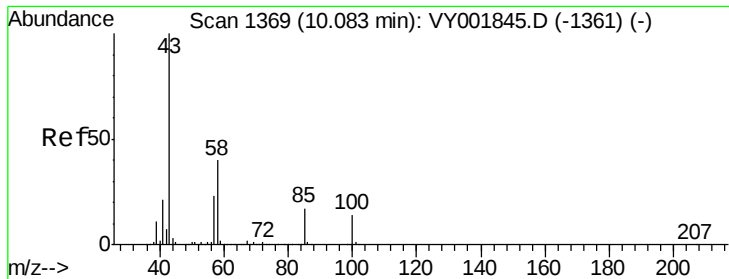
#50  
Toluene-d8  
Concen: 52.230 ug/l  
RT: 10.19 min Scan# 1387  
Delta R.T. 0.00 min  
Lab File: VY002021.D  
Acq: 19 Mar 2020 15:05

Tgt Ion: 98 Resp: 314187  
Ion Ratio Lower Upper  
98 100  
100 65.5 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: 1.027 ug/l

RT: 10.19 min Scan# 1386

Delta R.T. 0.10 min

Lab File: VY002021.D

Acq: 19 Mar 2020 15:05

Instrument :

MSVOA\_Y

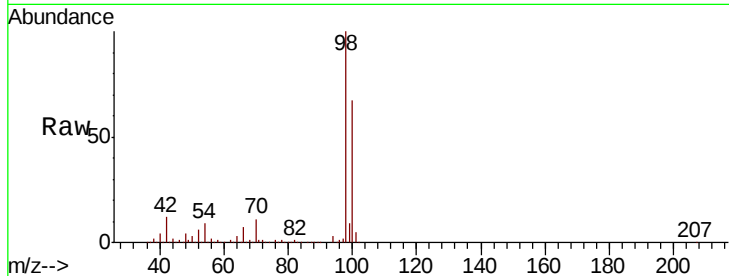
ClientSampleId :

Tot Ion: 43 Resp: 1463

Ion Ratio Lower Upper

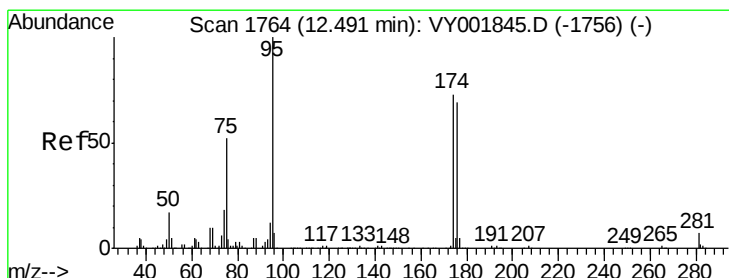
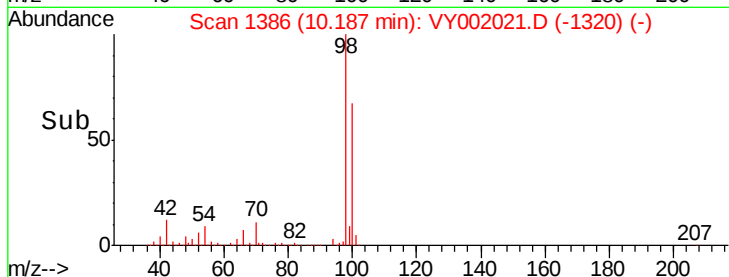
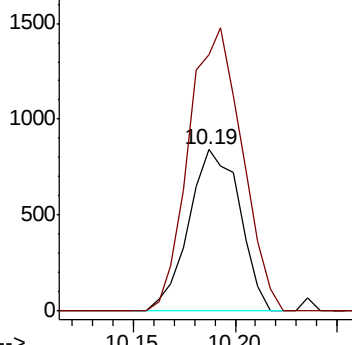
43 100

58 183.0 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: 47.501 ug/l

RT: 12.49 min Scan# 1764

Delta R.T. 0.00 min

Lab File: VY002021.D

Acq: 19 Mar 2020 15:05

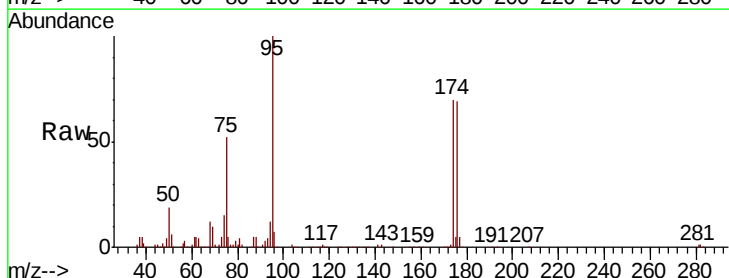
Tgt Ion: 95 Resp: 99355

Ion Ratio Lower Upper

95 100

174 72.8 0.0 145.0

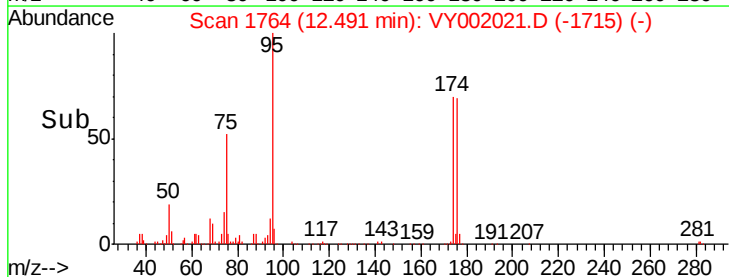
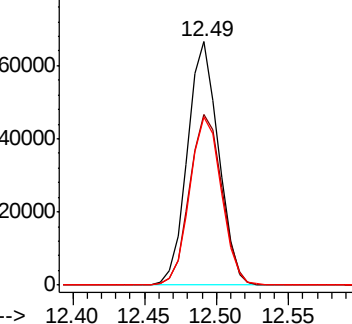
176 70.3 0.0 137.4

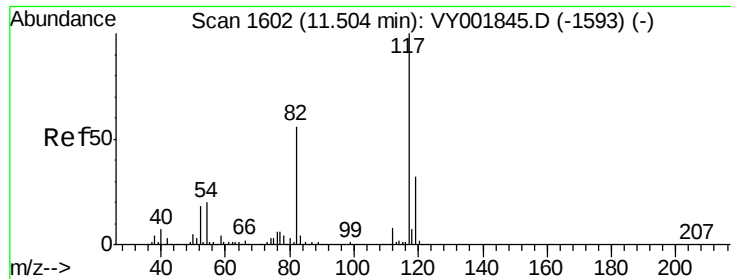


Abundance Ion 94.90 (94.60 to 95.60): VY0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

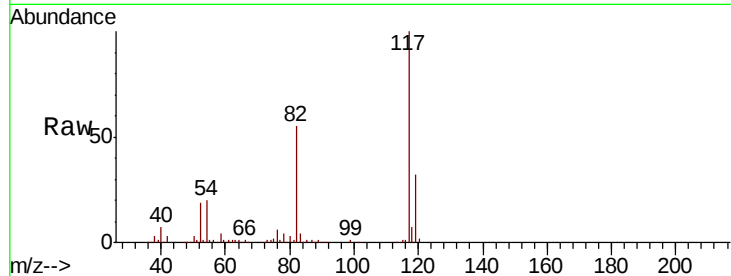




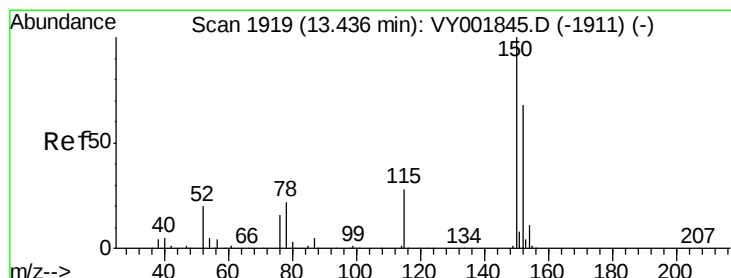
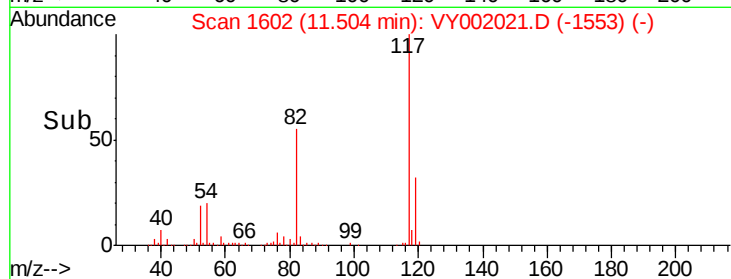
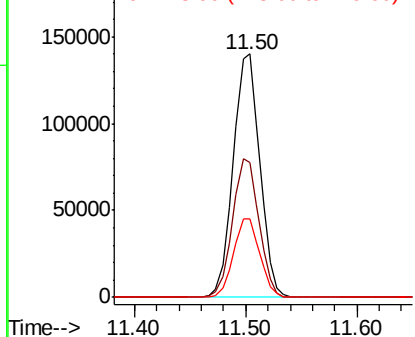
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.50 min Scan# 1602  
Delta R.T. 0.00 min  
Lab File: VY002021.D  
Acq: 19 Mar 2020 15:05

Instrument :  
MSVOA\_Y  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 55.2  | 44.5  | 66.7  |
| 119     | 32.2  | 25.7  | 38.5  |

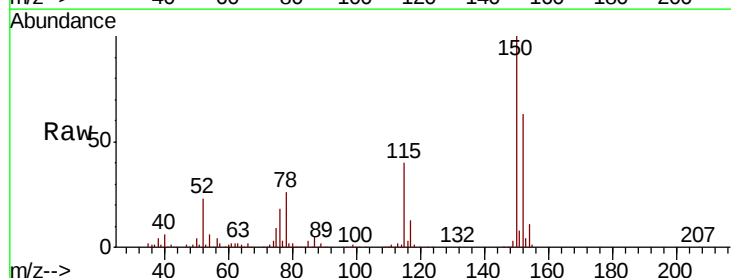


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VY0  
Ion 118.90 (118.60 to 119.60): V

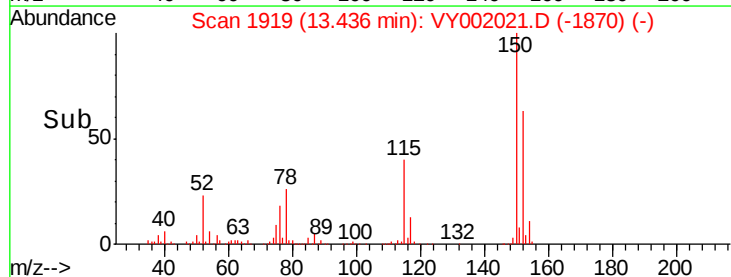
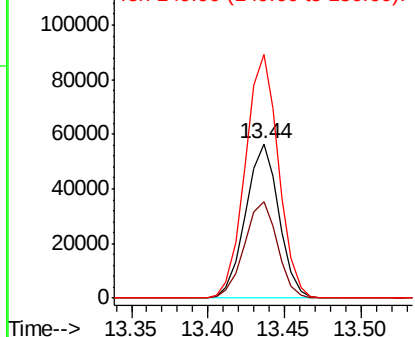


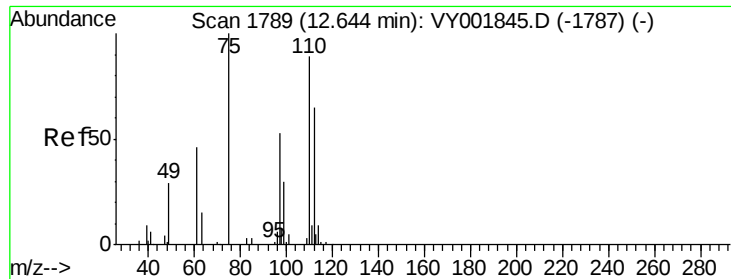
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.44 min Scan# 1919  
Delta R.T. 0.00 min  
Lab File: VY002021.D  
Acq: 19 Mar 2020 15:05

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 62.3  | 29.9  | 89.7  |
| 150     | 157.8 | 0.0   | 340.6 |



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: 49.707 ug/l

RT: 12.49 min Scan# 1764

Delta R.T. -0.15 min

Lab File: VY002021.D

Acq: 19 Mar 2020 15:05

Instrument :

MSVOA\_Y

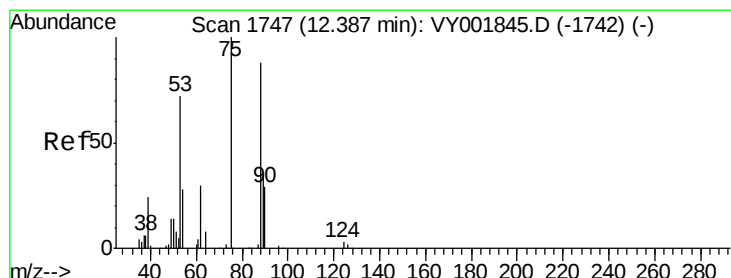
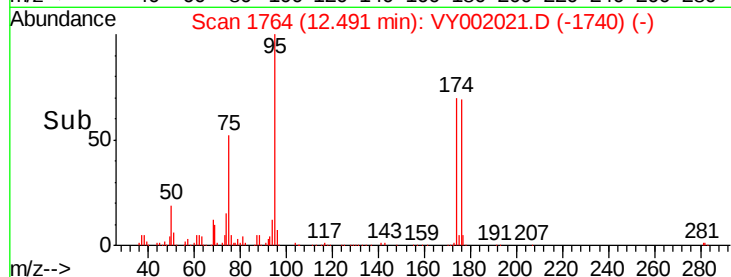
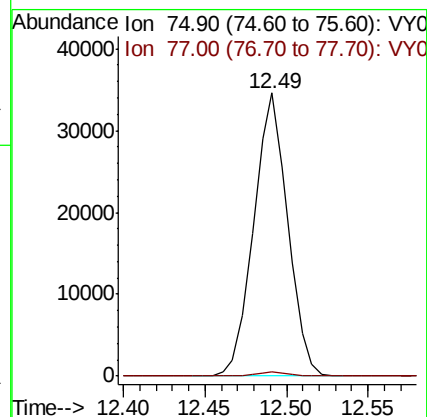
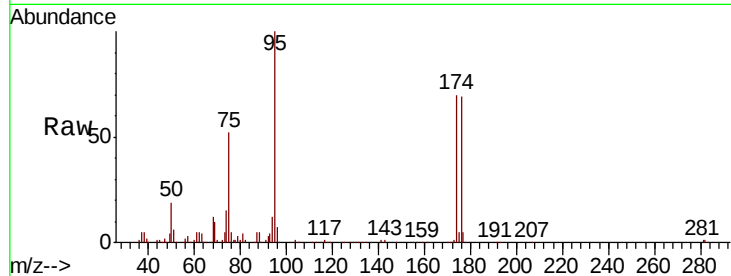
ClientSampleId :

Tot Ion: 75 Resp: 50283

Ion Ratio Lower Upper

75 100

77 1.4 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 100.405 ug/l

RT: 12.49 min Scan# 1764

Delta R.T. 0.10 min

Lab File: VY002021.D

Acq: 19 Mar 2020 15:05

Tgt Ion: 75 Resp: 50283

Ion Ratio Lower Upper

75 100

53 0.0 65.4 98.0#

89 0.2 36.0 54.0#

