

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY030520\  
 Data File : VY001875.D  
 Acq On : 05 Mar 2020 12:44  
 Operator : SY/MD  
 Sample : L1761-01  
 Misc : 7.15G/5ML/MSVOA Y/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :

Quant Time: Mar 06 04:37:16 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      | 7.80  | 168  | 143226   | 50.00 | ug/l  | -0.01    |
| 34) 1,4-Difluorobenzene    | 8.70  | 114  | 277417   | 50.00 | ug/l  | -0.01    |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 248456   | 50.00 | ug/l  | -0.01    |
| 72) 1,4-Dichlorobenzene-d4 | 13.43 | 152  | 104751   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.15  | 65   | 90896    | 59.45  | ug/l    | -0.02    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 118.90% |          |
| 35) Dibromofluoromethane    | 7.73  | 113  | 81650    | 53.90  | ug/l    | -0.02    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 107.80% |          |
| 50) Toluene-d8              | 10.18 | 98   | 336621   | 52.70  | ug/l    | -0.01    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 105.40% |          |
| 62) 4-Bromofluorobenzene    | 12.49 | 95   | 109431   | 49.27  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 98.54%  |          |

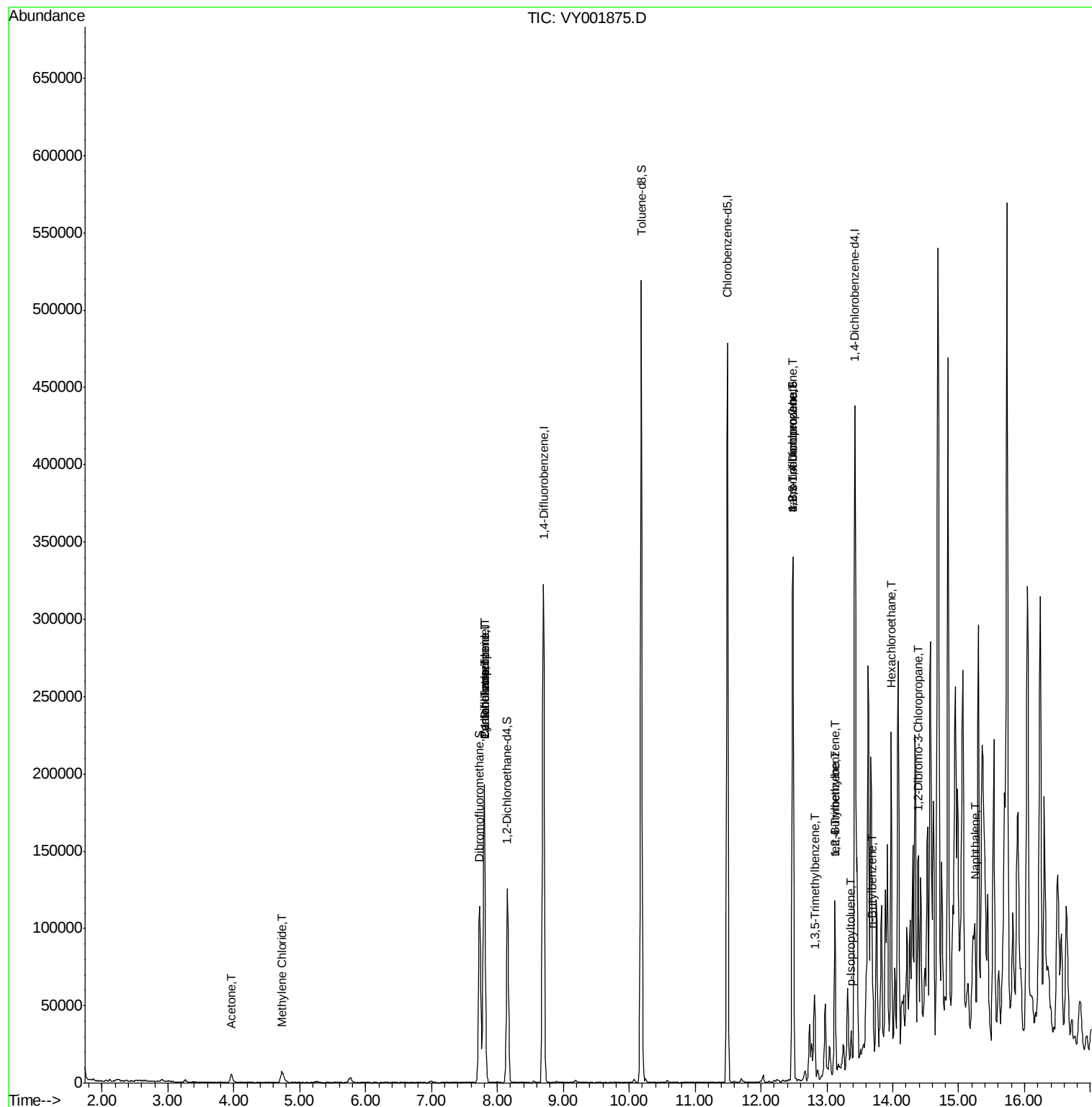
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 2.67  | 94   | 132      | Below Cal | #      | 4      |
| 11) Tert butyl alcohol         | 4.97  | 59   | 65       | Below Cal | #      | 74     |
| 16) Acetone                    | 3.96  | 43   | 9058     | 20.339    | ug/l   | 90     |
| 20) Methylene Chloride         | 4.72  | 84   | 4957     | 2.597     | ug/l   | 91     |
| 31) Cyclohexane                | 7.80  | 56   | 3594     | 1.070     | ug/l # | 17     |
| 36) 1,1-Dichloropropene        | 7.80  | 75   | 12889    | 4.828     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.80  | 117  | 14775    | 6.479     | ug/l # | 14     |
| 76) 1,2,3-Trichloropropane     | 12.48 | 75   | 56981    | 45.844    | ug/l # | 100    |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 20416    | 3.101     | ug/l   | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.48 | 75   | 56981    | 92.602    | ug/l # | 17     |
| 83) tert-Butylbenzene          | 13.12 | 119  | 7302     | 1.335     | ug/l # | 71     |
| 84) 1,2,4-Trimethylbenzene     | 13.12 | 105  | 59227    | 9.066     | ug/l   | 99     |
| 86) p-Isopropyltoluene         | 13.37 | 119  | 10048    | 1.445     | ug/l   | 97     |
| 89) n-Butylbenzene             | 13.70 | 91   | 19712    | 2.733     | ug/l # | 73     |
| 90) Hexachloroethane           | 13.97 | 117  | 8905     | 6.790     | ug/l # | 18     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.39 | 75   | 499      | 1.854     | ug/l # | 1      |
| 95) Naphthalene                | 15.24 | 128  | 23428    | 5.050     | ug/l # | 86     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA Y\DATA\VY030520\  
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Acq On : 05 Mar 2020 12:44  
Operator : SY/MD  
Sample : L1761-01  
Misc : 7.15G/5ML/MSVOA Y/SOIL  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :

Quant Time: Mar 06 04:37:16 2020  
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: 7.80 min Scan# 995

Delta R.T. -0.01 min

Lab File: VY001875.D

Acq: 05 Mar 2020 12:44

Instrument :

MSVOA\_Y

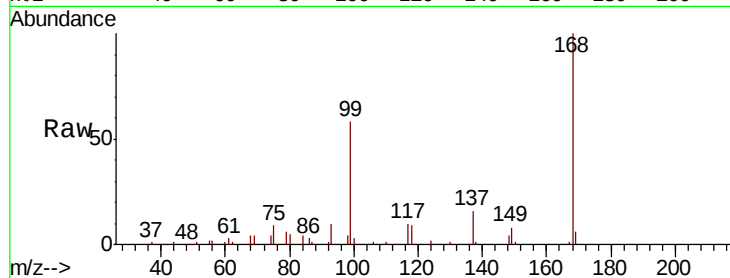
ClientSampled :

Tot Ion:168 Resp: 143226

Ion Ratio Lower Upper

168 100

99 58.1 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) (-)

7.80

60000

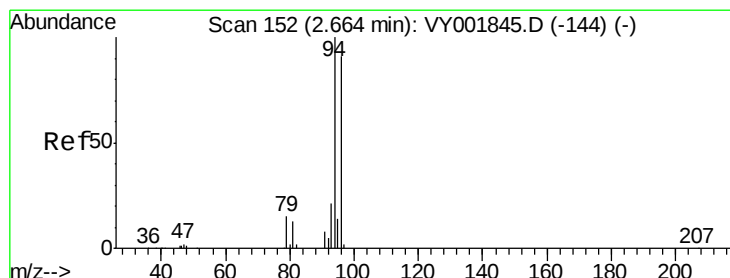
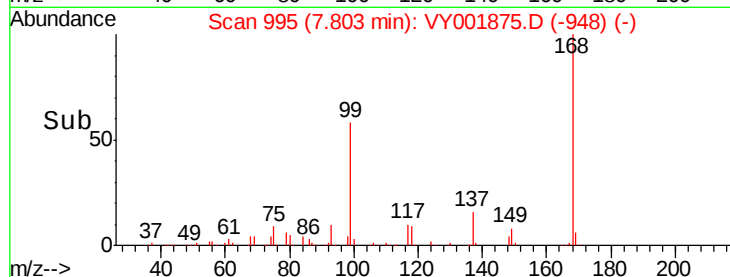
40000

20000

0

7.70 7.80 7.90

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.67 min Scan# 153

Delta R.T. 0.01 min

Lab File: VY001875.D

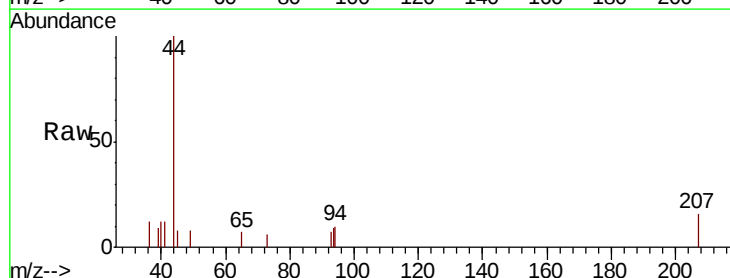
Acq: 05 Mar 2020 12:44

Tgt Ion: 94 Resp: 132

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) (-)

2.67

150

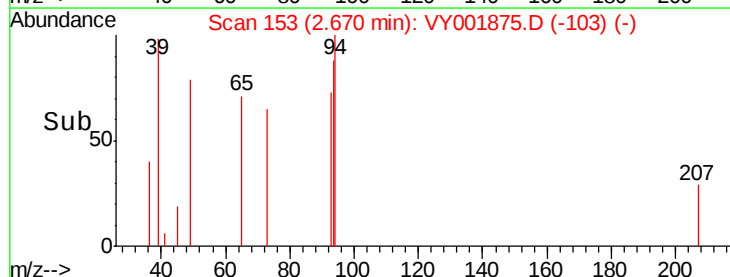
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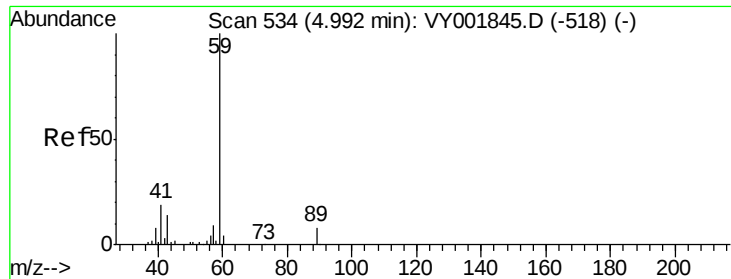
50

0

2.64 2.66 2.68 2.70

Time-->

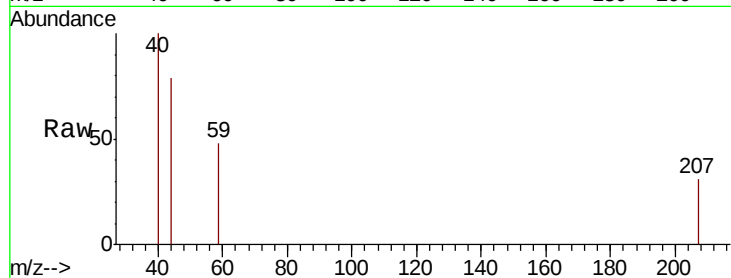




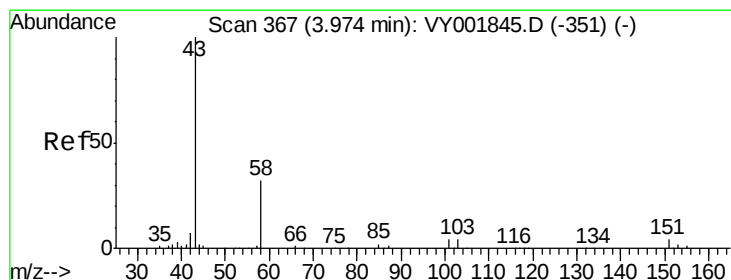
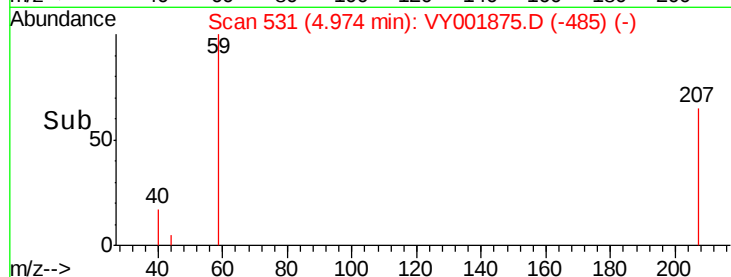
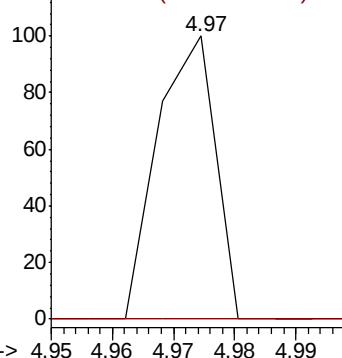
#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 4.97 min Scan# 531  
Delta R.T. -0.02 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

Instrument :  
MSVOA\_Y  
ClientSampled :

Tot Ion: 59 Resp: 65  
Ion Ratio Lower Upper  
59 100  
57 0.0 7.4 11.2#

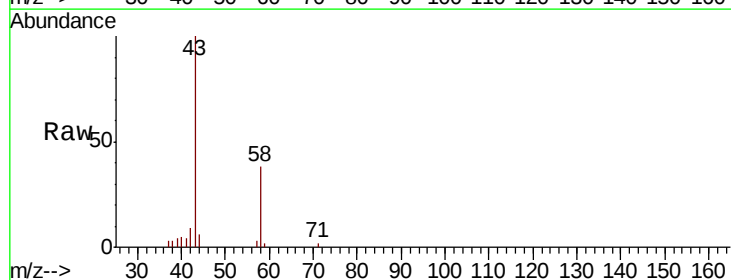


Abundance Ion 59.00 (58.70 to 59.70): VY0  
Ion 57.00 (56.70 to 57.70): VY0

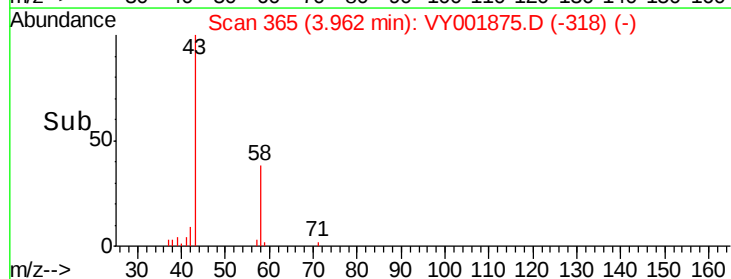
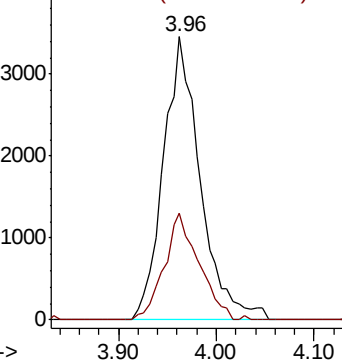


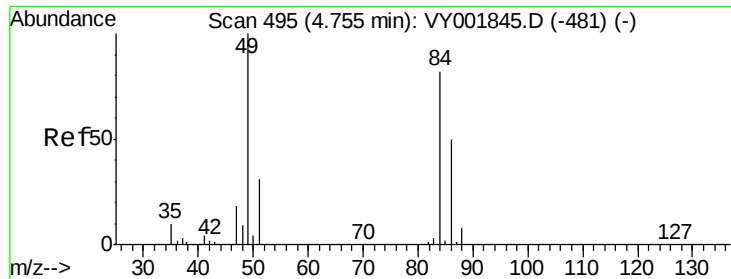
#16  
Acetone  
Concen: 20.339 ug/l  
RT: 3.96 min Scan# 365  
Delta R.T. -0.01 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

Tgt Ion: 43 Resp: 9058  
Ion Ratio Lower Upper  
43 100  
58 37.9 25.9 38.9



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

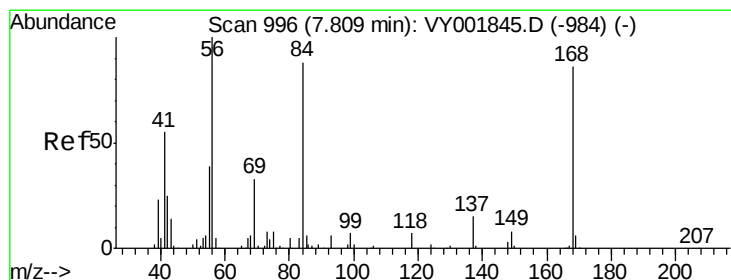
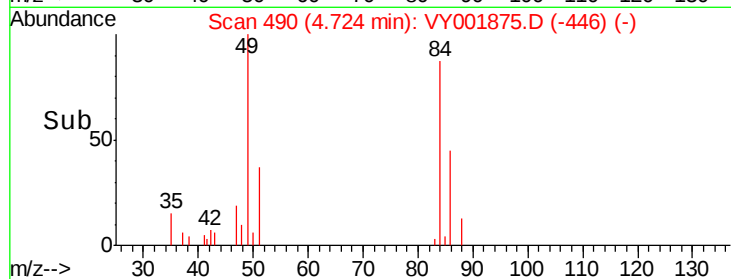
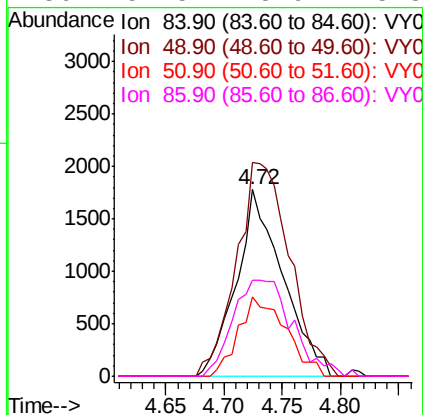
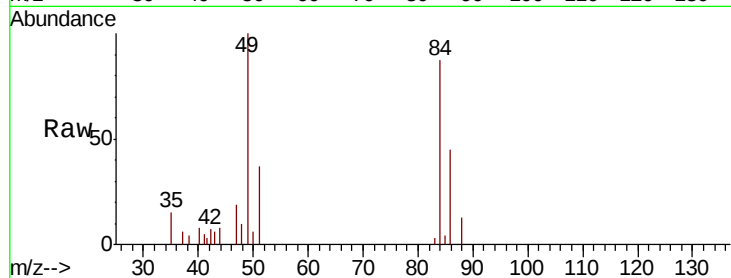




#20  
Methvlene Chloride  
Concen: 2.597 ug/l  
RT: 4.72 min Scan# 490  
Delta R.T. -0.03 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

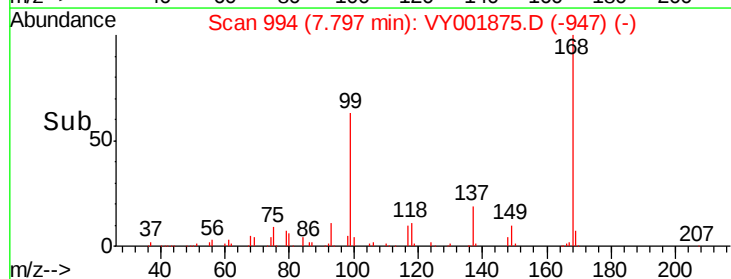
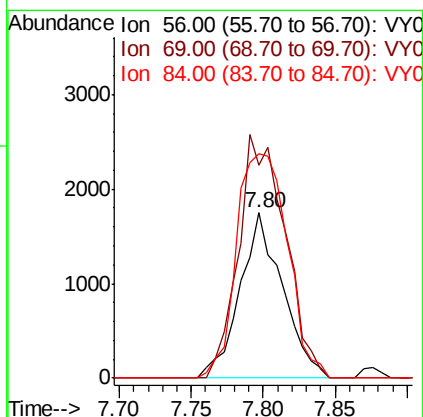
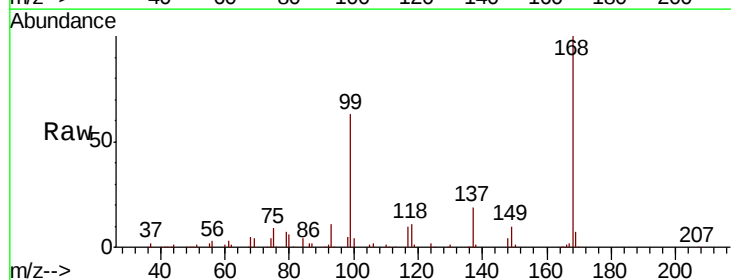
Instrument :  
MSVOA\_Y  
ClientSampleId :

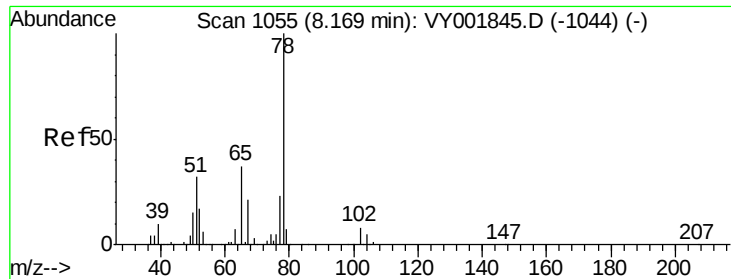
| Tot Ion: | 84    | Resp: | 4957  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 114.3 | 98.2  | 147.2 |
| 51       | 42.8  | 30.2  | 45.2  |
| 86       | 51.5  | 48.9  | 73.3  |



#31  
Cyclohexane  
Concen: 1.070 ug/l  
RT: 7.80 min Scan# 994  
Delta R.T. -0.01 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

| Tgt Ion: | 56    | Resp: | 3594   |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 128.4 | 26.7  | 40.1#  |
| 84       | 135.5 | 70.4  | 105.6# |

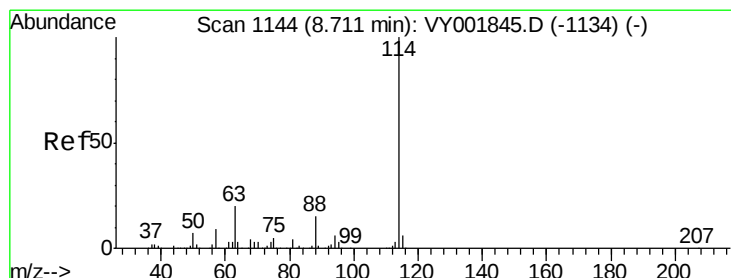
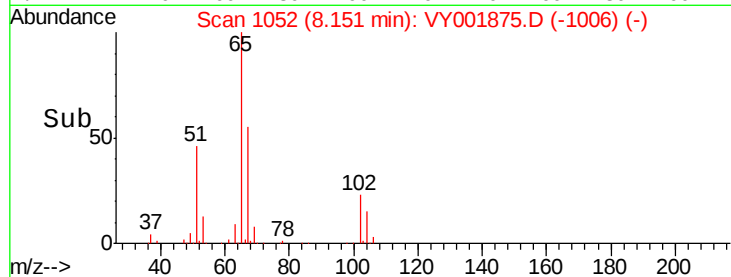
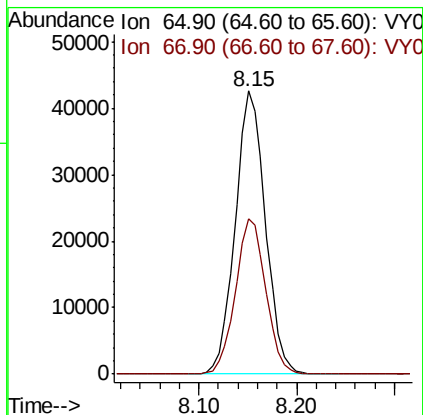
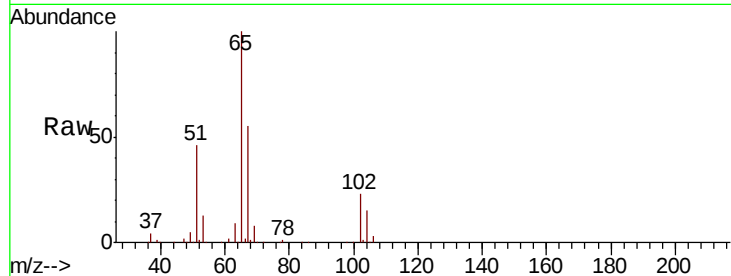




#33  
 1,2-Dichloroethane-d4  
 Concen: 59.447 ug/l  
 RT: 8.15 min Scan# 1052  
 Delta R.T. -0.02 min  
 Lab File: VY001875.D  
 Acq: 05 Mar 2020 12:44

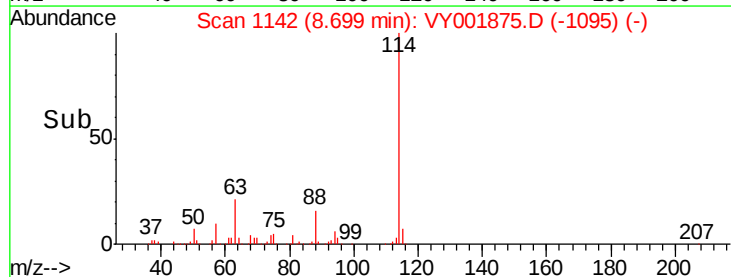
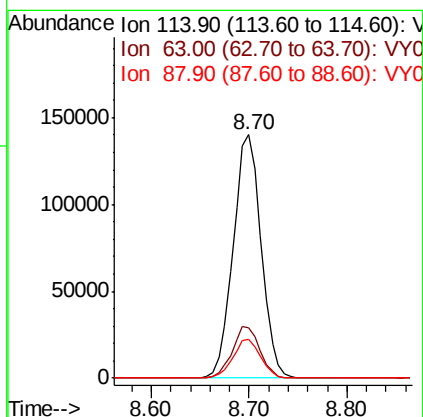
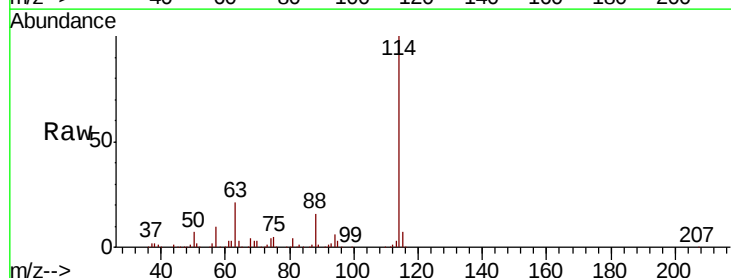
Instrument :  
 MSVOA\_Y  
 ClientSampleId :

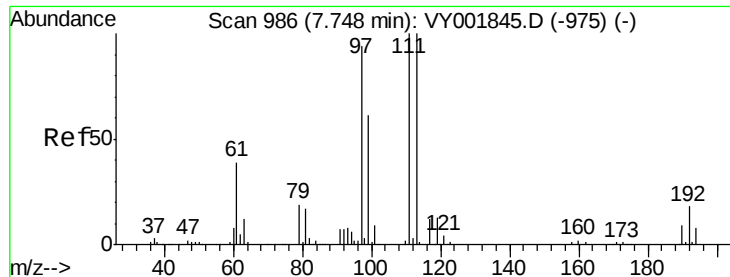
Tot Ion: 65 Resp: 90896  
 Ion Ratio Lower Upper  
 65 100  
 67 55.1 0.0 110.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.70 min Scan# 1142  
 Delta R.T. -0.01 min  
 Lab File: VY001875.D  
 Acq: 05 Mar 2020 12:44

Tgt Ion: 114 Resp: 277417  
 Ion Ratio Lower Upper  
 114 100  
 63 20.9 0.0 39.4  
 88 15.8 0.0 30.4

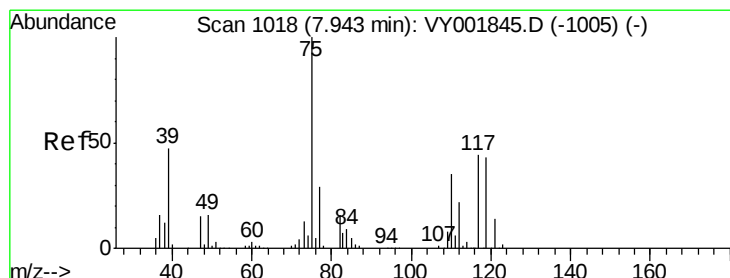
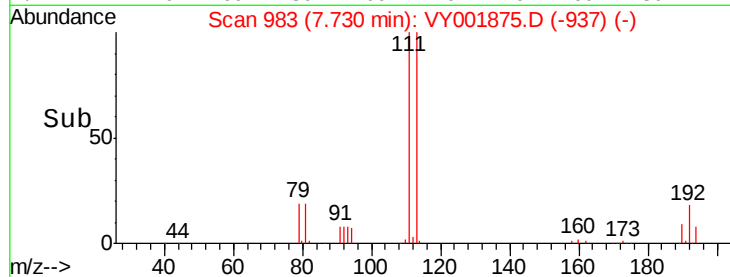
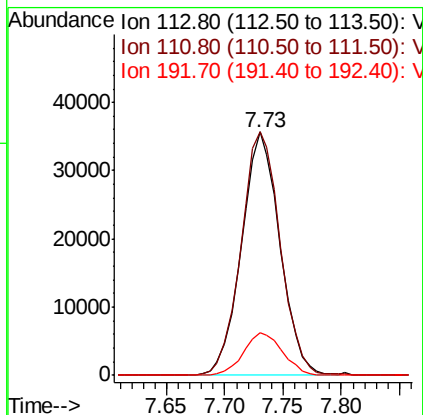
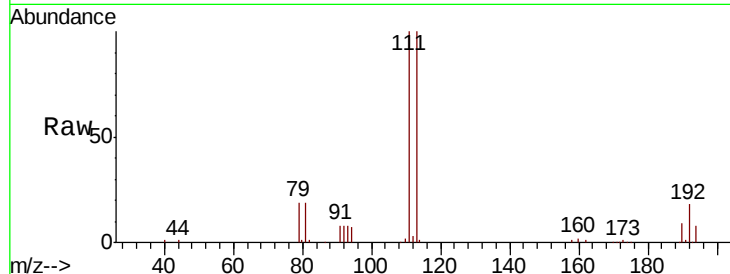




#35  
 Dibromofluoromethane  
 Concen: 53.901 ug/l  
 RT: 7.73 min Scan# 983  
 Delta R.T. -0.02 min  
 Lab File: VY001875.D  
 Acq: 05 Mar 2020 12:44

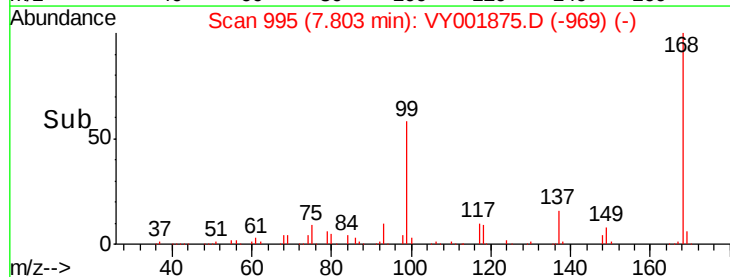
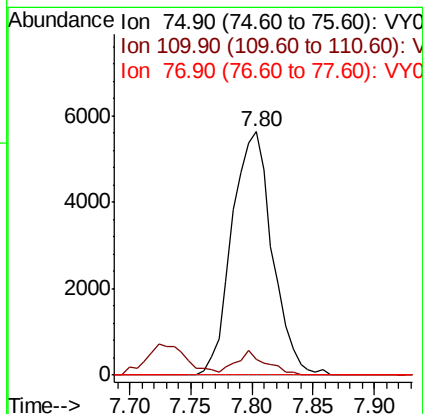
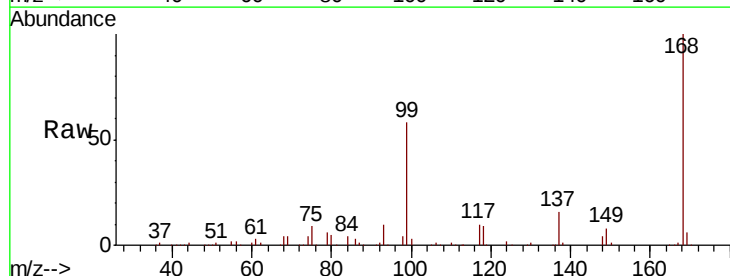
Instrument :  
 MSVOA\_Y  
 ClientSampleId :

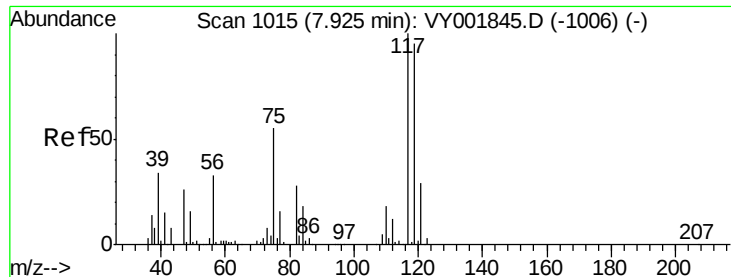
Tot Ion:113 Resp: 81650  
 Ion Ratio Lower Upper  
 113 100  
 111 102.5 81.8 122.8  
 192 18.0 14.2 21.2



#36  
 1,1-Dichloropropene  
 Concen: 4.828 ug/l  
 RT: 7.80 min Scan# 995  
 Delta R.T. -0.14 min  
 Lab File: VY001875.D  
 Acq: 05 Mar 2020 12:44

Tgt Ion: 75 Resp: 12889  
 Ion Ratio Lower Upper  
 75 100  
 110 7.4 17.4 52.2#  
 77 0.0 24.2 36.2#





#38

Carbon Tetrachloride

Concen: 6.479 ug/l

RT: 7.80 min Scan# 995

Delta R.T. -0.12 min

Lab File: VY001875.D

Acq: 05 Mar 2020 12:44

Instrument :

MSVOA\_Y

ClientSampled :

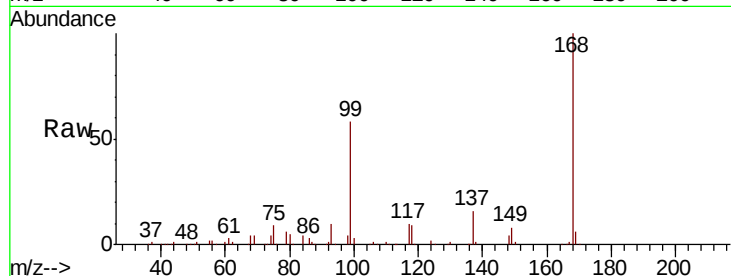
Tot Ion:117 Resp: 14775

Ion Ratio Lower Upper

117 100

119 2.8 76.3 114.5#

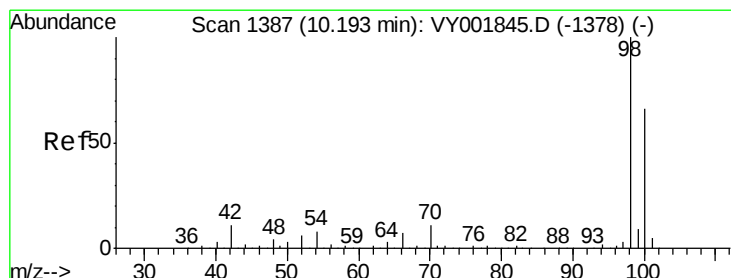
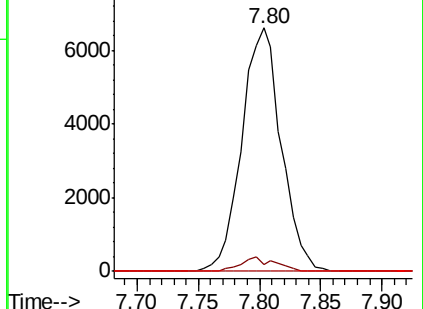
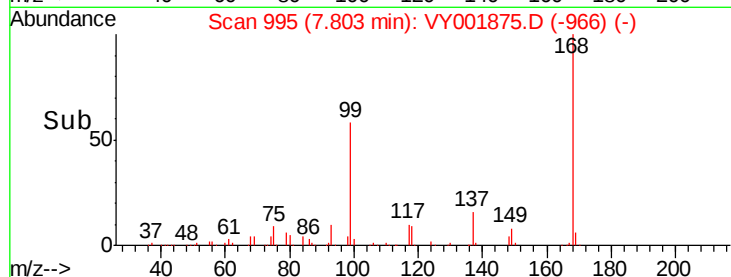
121 0.0 23.5 35.3#



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: 52.698 ug/l

RT: 10.18 min Scan# 1385

Delta R.T. -0.01 min

Lab File: VY001875.D

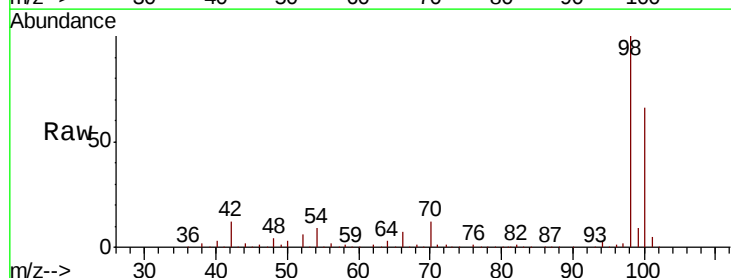
Acq: 05 Mar 2020 12:44

Tgt Ion: 98 Resp: 336621

Ion Ratio Lower Upper

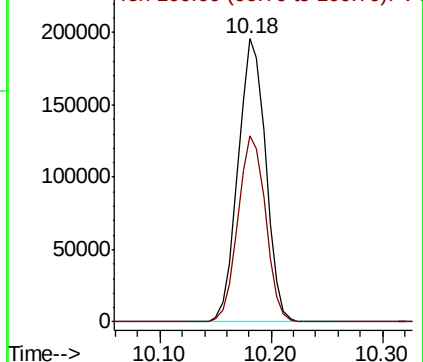
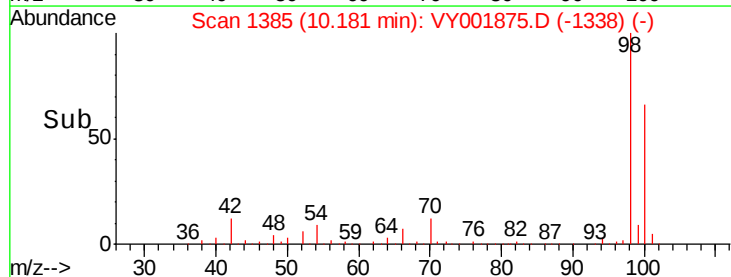
98 100

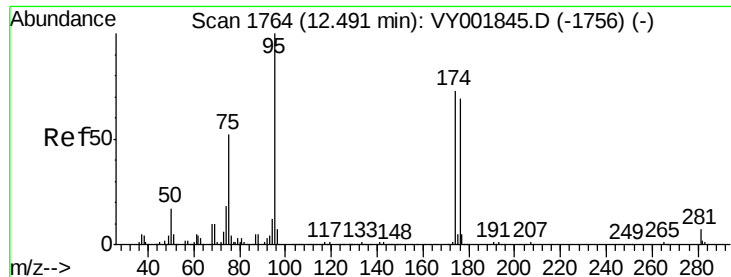
100 65.7 53.0 79.4



Abundance Ion 98.00 (97.70 to 98.70): VY0

Ion 100.00 (99.70 to 100.70): VY

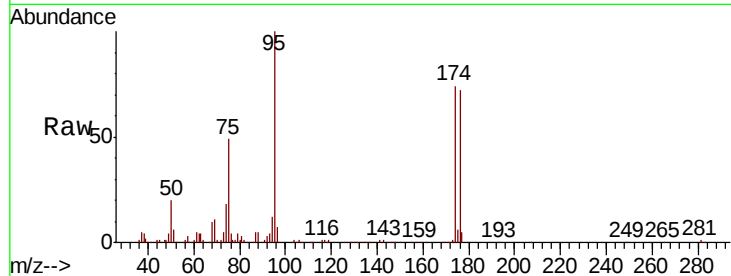




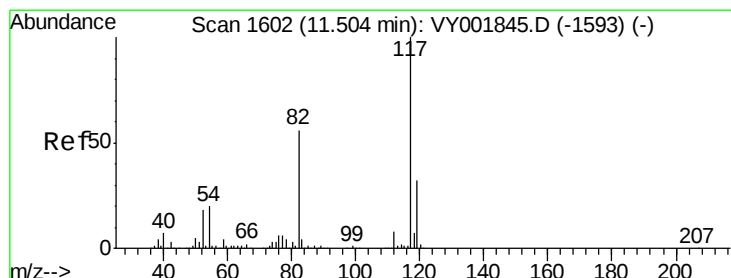
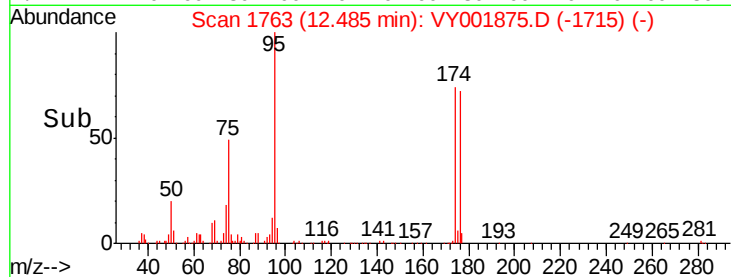
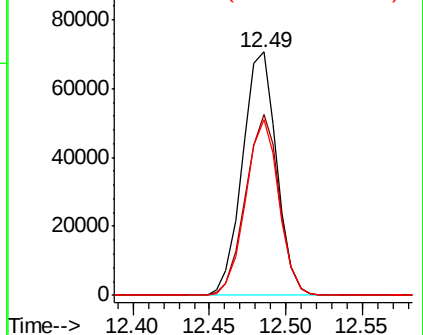
#62  
4-Bromofluorobenzene  
Concen: 49.269 ug/l  
RT: 12.49 min Scan# 1763  
Delta R.T. -0.01 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

Instrument :  
MSVOA\_Y  
ClientSampleId :

| Tot Ion   | 95    | Resp  | 109431 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 174       | 73.1  | 0.0   | 145.0  |
| 176       | 70.3  | 0.0   | 137.4  |

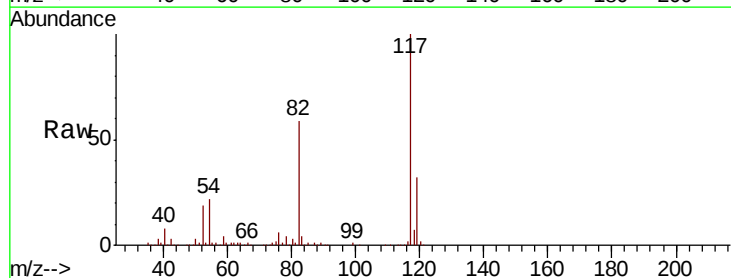


Abundance Ion 94.90 (94.60 to 95.60): VY001845.D (-1756) (-)  
Ion 173.80 (173.50 to 174.50): VY001845.D (-1756) (-)  
Ion 175.80 (175.50 to 176.50): VY001845.D (-1756) (-)

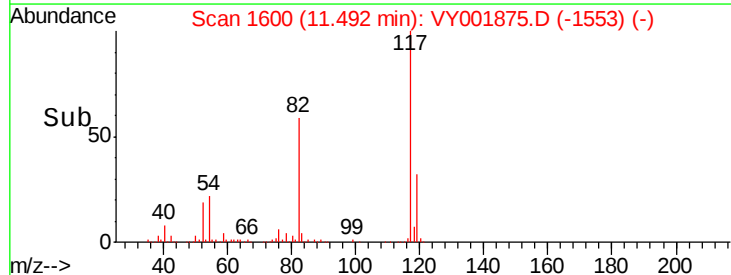
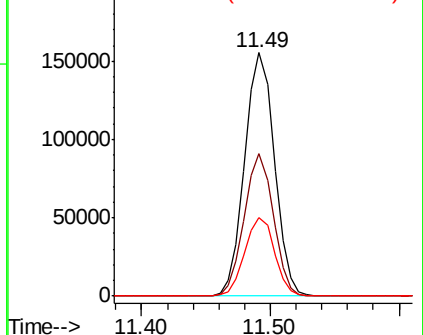


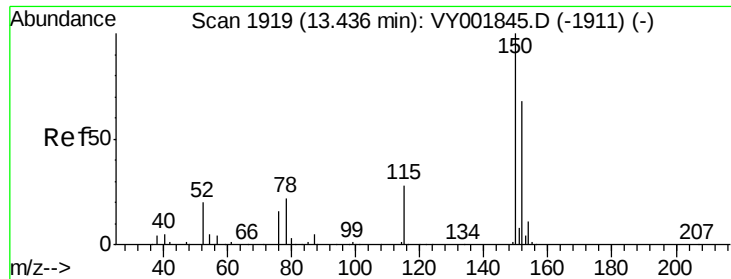
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.49 min Scan# 1600  
Delta R.T. -0.01 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

| Tgt Ion   | 117   | Resp  | 248456 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 58.5  | 44.5  | 66.7   |
| 119       | 32.2  | 25.7  | 38.5   |



Abundance Ion 116.90 (116.60 to 117.60): VY001845.D (-1593) (-)  
Ion 82.00 (81.70 to 82.70): VY001845.D (-1593) (-)  
Ion 118.90 (118.60 to 119.60): VY001845.D (-1593) (-)



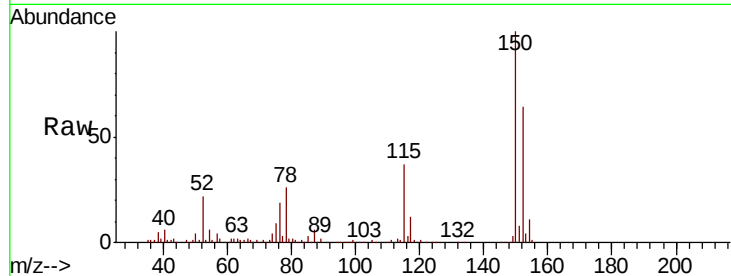


#72

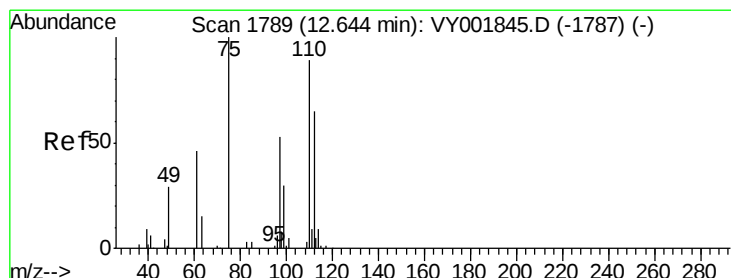
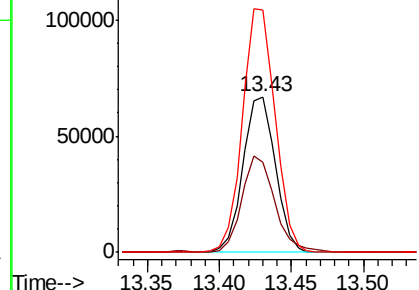
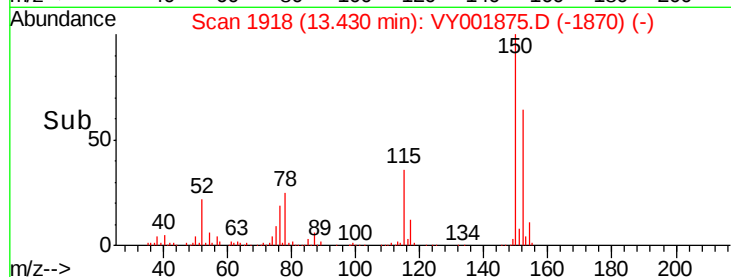
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.43 min Scan# 1918  
Delta R.T. -0.01 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

Instrument :  
MSVOA\_Y  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 63.1  | 29.9  | 89.7  |
| 150     | 157.3 | 0.0   | 340.6 |



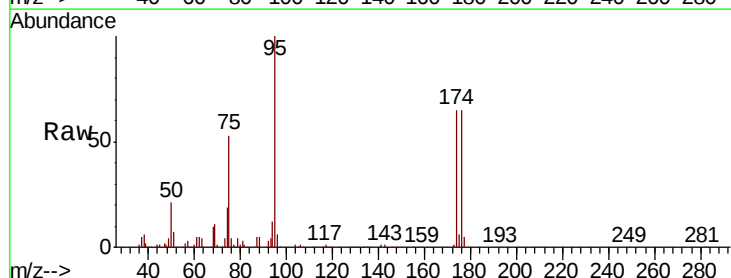
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



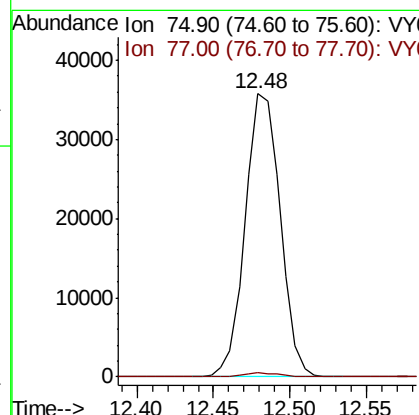
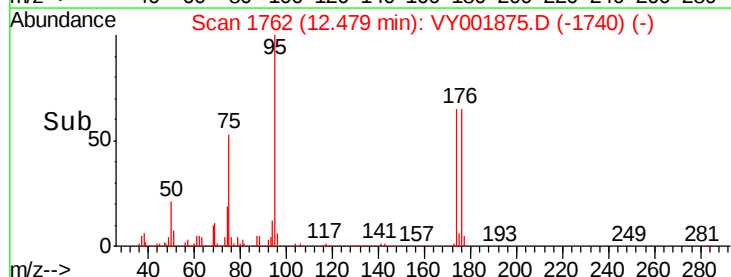
#76

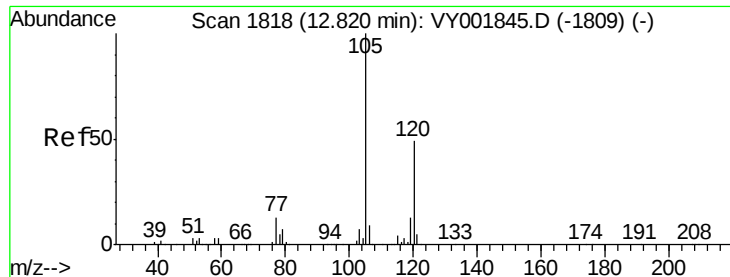
1,2,3-Trichloropropane  
Concen: 45.844 ug/l  
RT: 12.48 min Scan# 1762  
Delta R.T. -0.16 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 1.5   | 0.0   | 0.0#  |



Abundance Ion 74.90 (74.60 to 75.60): VY0  
Ion 77.00 (76.70 to 77.70): VY0





#80

1,3,5-Trimethylbenzene

Concen: 3.101 ug/l

RT: 12.81 min Scan# 1817

Delta R.T. -0.01 min

Lab File: VY001875.D

Acq: 05 Mar 2020 12:44

Instrument :

MSVOA\_Y

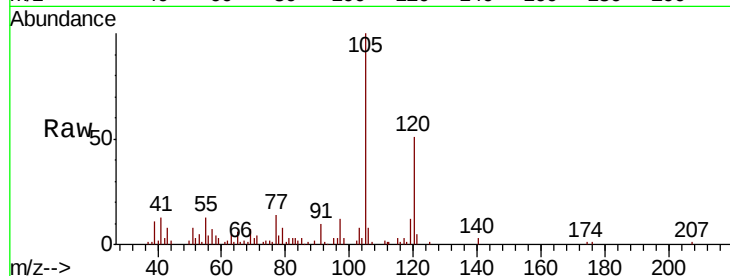
ClientSampleId :

Tot Ion:105 Resp: 20416

Ion Ratio Lower Upper

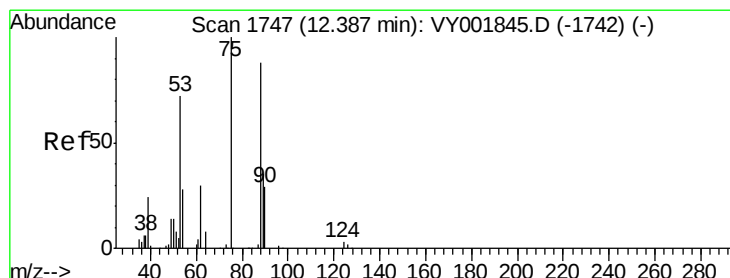
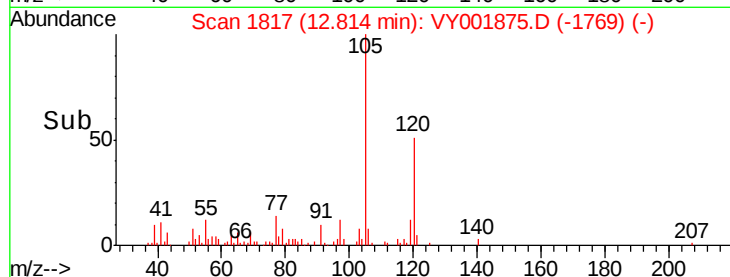
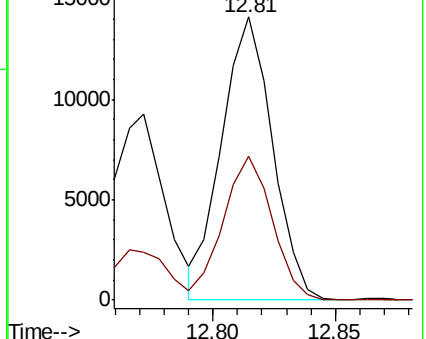
105 100

120 48.9 24.4 73.2



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 92.602 ug/l

RT: 12.48 min Scan# 1762

Delta R.T. 0.09 min

Lab File: VY001875.D

Acq: 05 Mar 2020 12:44

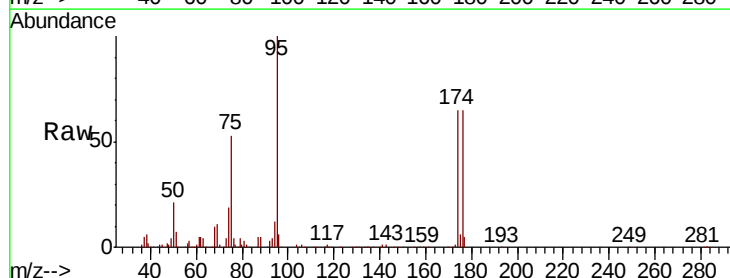
Tgt Ion: 75 Resp: 56981

Ion Ratio Lower Upper

75 100

53 0.0 65.4 98.0#

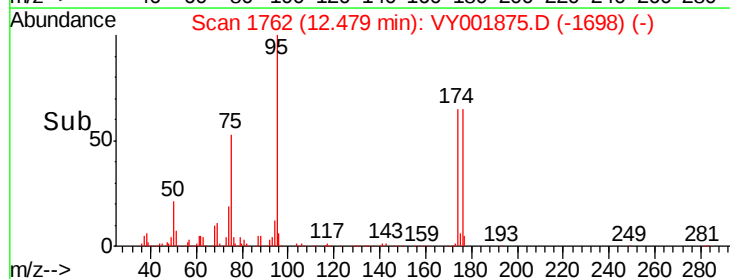
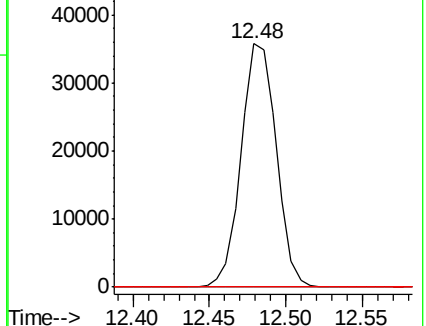
89 0.0 36.0 54.0#

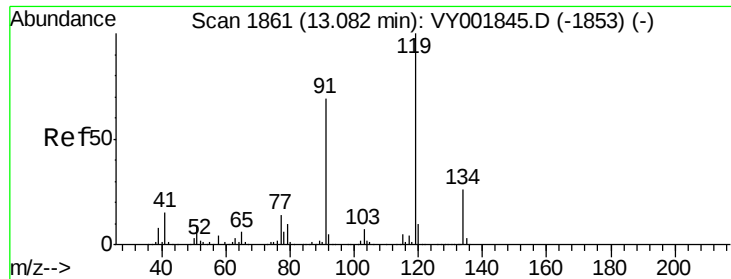


Abundance Ion 74.90 (74.60 to 75.60): VY0

Ion 53.00 (52.70 to 53.70): VY0

Ion 88.90 (88.60 to 89.60): VY0





#83

tert-Butylbenzene

Concen: 1.335 ug/l

RT: 13.12 min Scan# 1867

Delta R.T. 0.04 min

Lab File: VY001875.D

Acq: 05 Mar 2020 12:44

Instrument :

MSVOA\_Y

ClientSampleId :

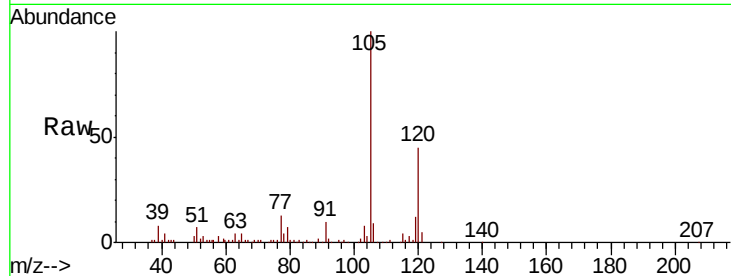
Tot Ion:119 Resp: 7302

Ion Ratio Lower Upper

119 100

91 83.7 34.0 101.8

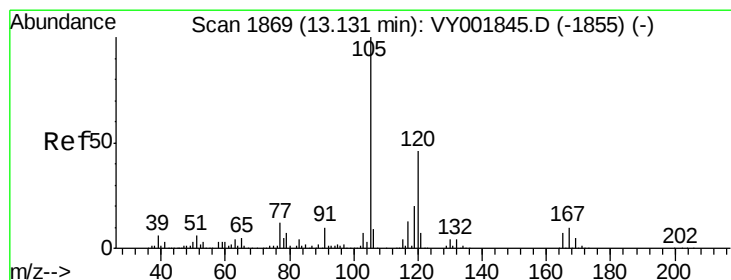
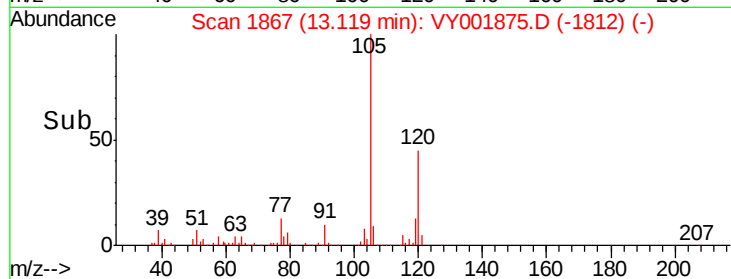
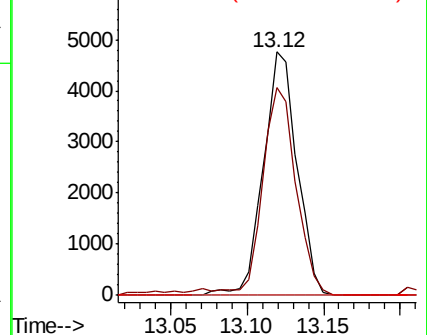
134 0.0 13.5 40.4#



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 91.00 (90.70 to 91.70): VY0

Ion 134.00 (133.70 to 134.70): V



#84

1,2,4-Trimethylbenzene

Concen: 9.066 ug/l

RT: 13.12 min Scan# 1867

Delta R.T. -0.01 min

Lab File: VY001875.D

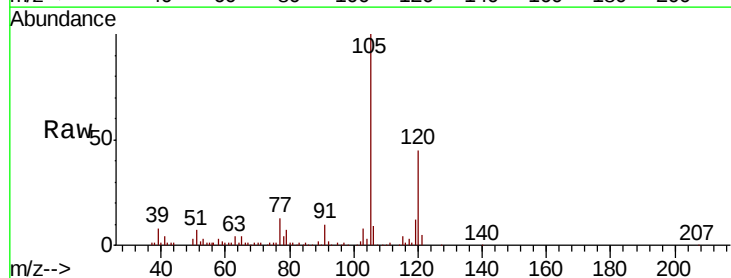
Acq: 05 Mar 2020 12:44

Tgt Ion:105 Resp: 59227

Ion Ratio Lower Upper

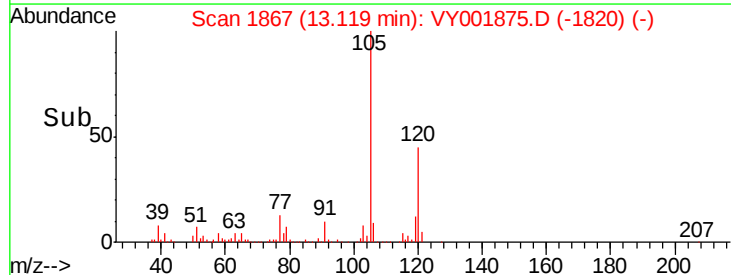
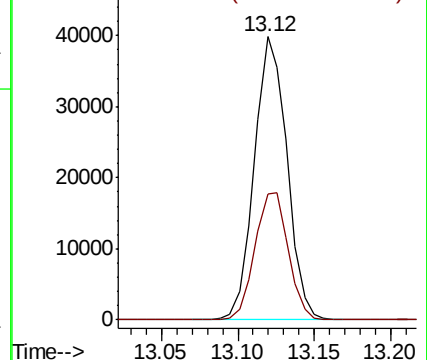
105 100

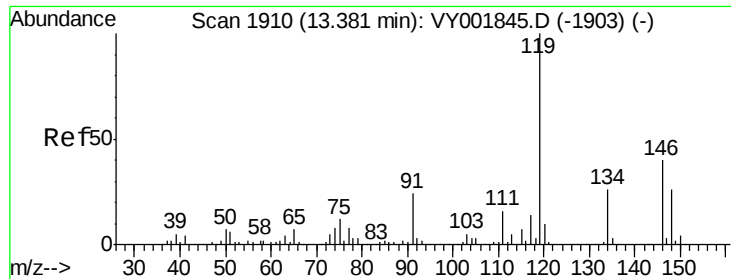
120 45.8 22.6 67.7



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

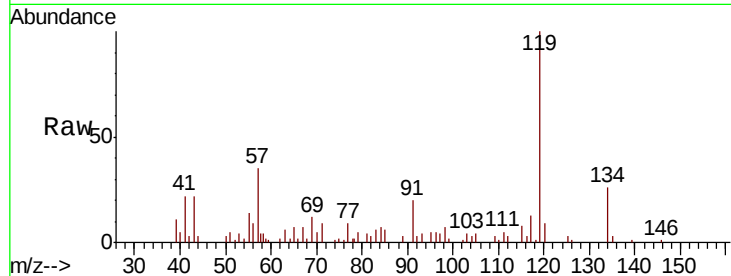




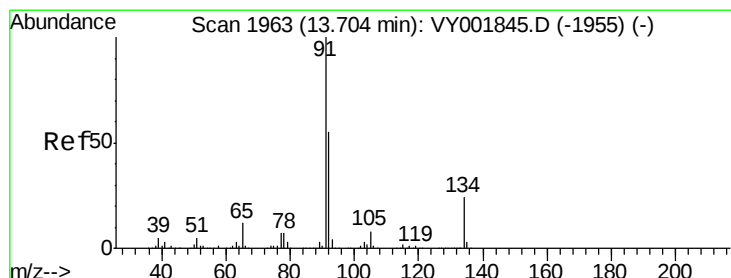
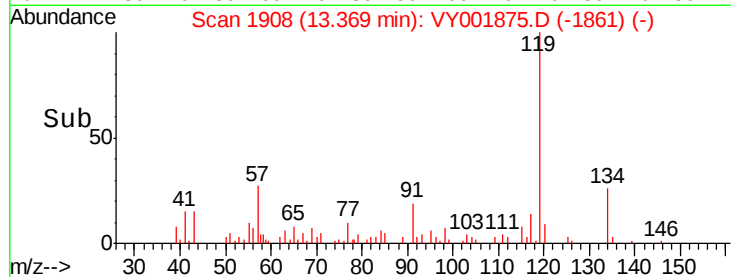
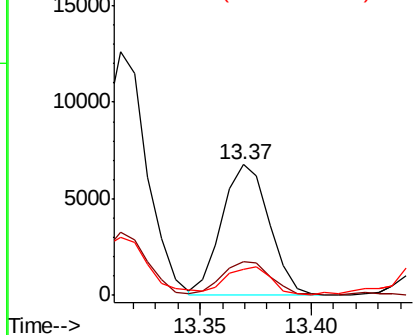
#86  
 p-Isopropyltoluene  
 Concen: 1.445 ug/l  
 RT: 13.37 min Scan# 1908  
 Delta R.T. -0.01 min  
 Lab File: VY001875.D  
 Acq: 05 Mar 2020 12:44

Instrument :  
 MSVOA\_Y  
 ClientSampleId :

Tot Ion:119 Resp: 10048  
 Ion Ratio Lower Upper  
 119 100  
 134 26.4 13.1 39.3  
 91 20.8 11.9 35.7

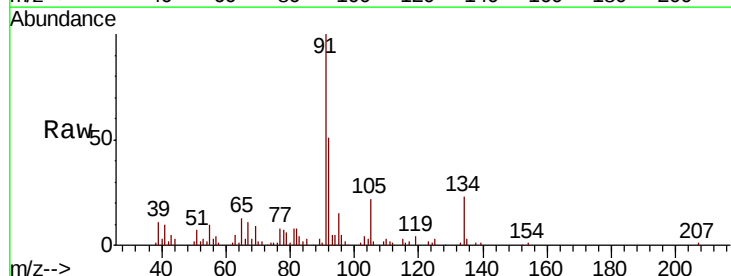


Abundance Ion 119.00 (118.70 to 119.70): V  
 Ion 134.00 (133.70 to 134.70): V  
 Ion 91.00 (90.70 to 91.70): V

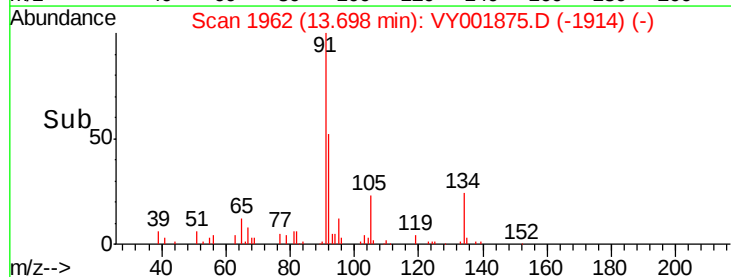
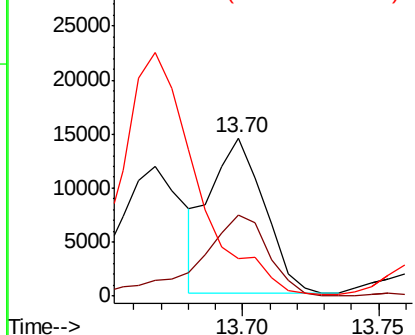


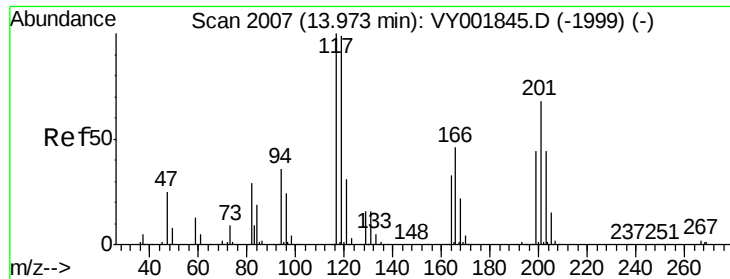
#89  
 n-Butylbenzene  
 Concen: 2.733 ug/l  
 RT: 13.70 min Scan# 1962  
 Delta R.T. -0.01 min  
 Lab File: VY001875.D  
 Acq: 05 Mar 2020 12:44

Tgt Ion: 91 Resp: 19712  
 Ion Ratio Lower Upper  
 91 100  
 92 67.0 27.5 82.4  
 134 0.0 12.5 37.5#



Abundance Ion 91.00 (90.70 to 91.70): VY0  
 Ion 92.00 (91.70 to 92.70): VY0  
 Ion 134.00 (133.70 to 134.70): V





#90

Hexachloroethane

Concen: 6.790 ug/l

RT: 13.97 min Scan# 2007

Delta R.T. 0.00 min

Lab File: VY001875.D

Acq: 05 Mar 2020 12:44

Instrument :

MSVOA\_Y

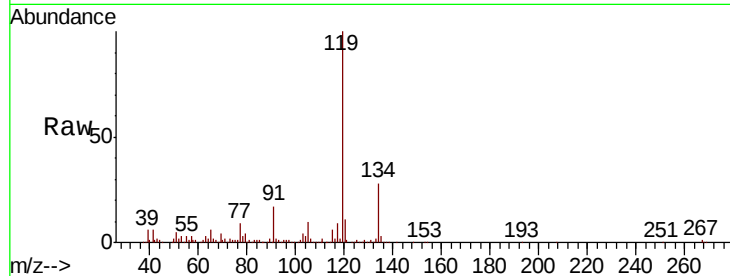
ClientSampleId :

Tot Ion:117 Resp: 8905

Ion Ratio Lower Upper

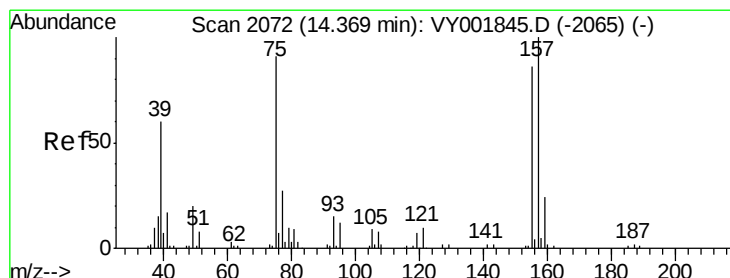
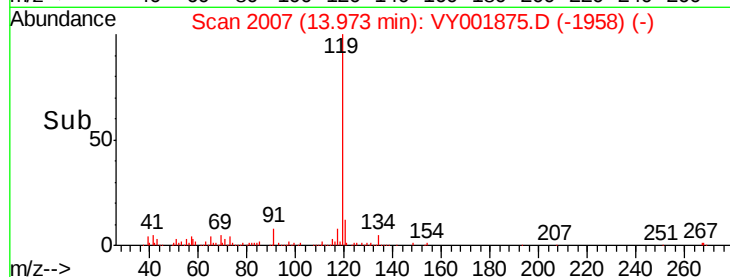
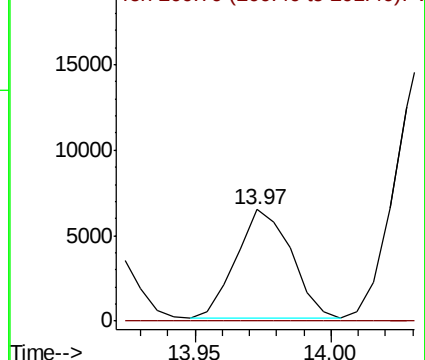
117 100

201 0.0 32.5 97.5#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 200.70 (200.40 to 201.40): V



#92

1,2-Dibromo-3-Chloropropane

Concen: 1.854 ug/l

RT: 14.39 min Scan# 2075

Delta R.T. 0.02 min

Lab File: VY001875.D

Acq: 05 Mar 2020 12:44

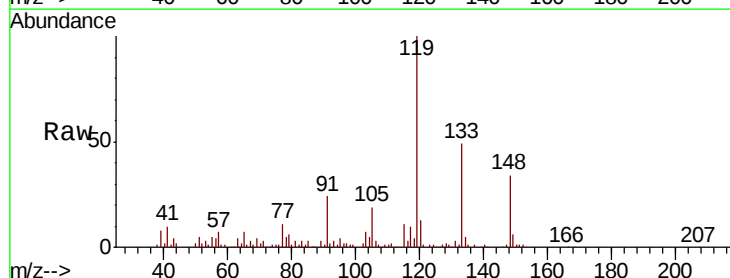
Tgt Ion: 75 Resp: 499

Ion Ratio Lower Upper

75 100

155 0.0 42.9 128.7#

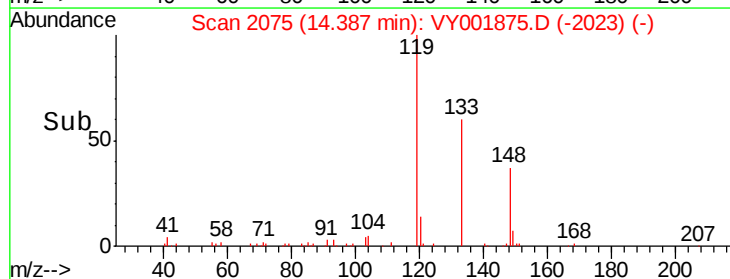
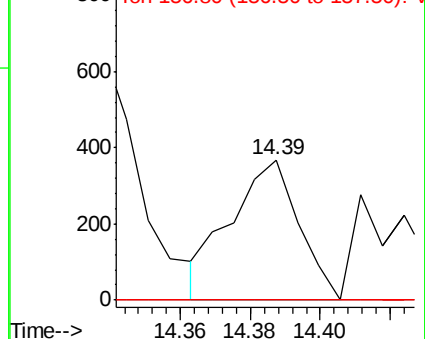
157 0.0 53.1 159.4#

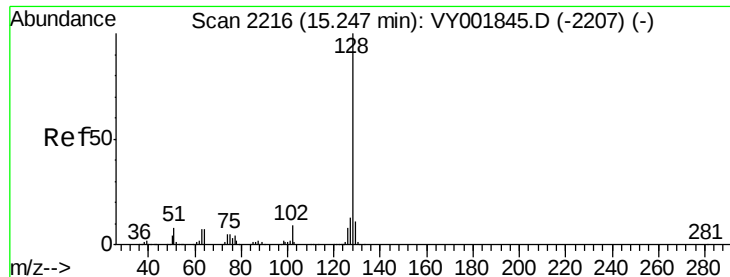


Abundance Ion 74.90 (74.60 to 75.60): VY0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

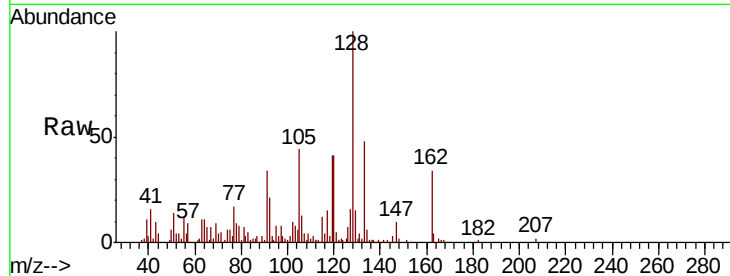




#95  
Naphthalene  
Concen: 5.050 ug/l  
RT: 15.24 min Scan# 2215  
Delta R.T. -0.01 min  
Lab File: VY001875.D  
Acq: 05 Mar 2020 12:44

Instrument :  
MSVOA\_Y  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 16.7  | 10.1  | 15.1# |
| 129     | 17.6  | 8.6   | 13.0# |



Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

