

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY112219\  
 Data File : VY000790.D  
 Acq On : 22 Nov 2019 16:27  
 Operator : SY/MD  
 Sample : K5977-01RE  
 Misc : 3.95G/5ML/MSVOA Y/SOIL  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WS-112119-0-1-GRAB-B1RE

Quant Time: Nov 23 04:02:46 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y103019S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 30 13:30:53 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.80  | 168  | 182567   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.69  | 114  | 299549   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 143045   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 21906    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.14  | 65   | 109707   | 58.07 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 116.14% |          |
| 35) Dibromofluoromethane    | 7.72  | 113  | 83915    | 47.72 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.44%  |          |
| 50) Toluene-d8              | 10.18 | 98   | 305848   | 45.84 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.68%  |          |
| 62) 4-Bromofluorobenzene    | 12.48 | 95   | 34747    | 13.68 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 27.36%  |          |

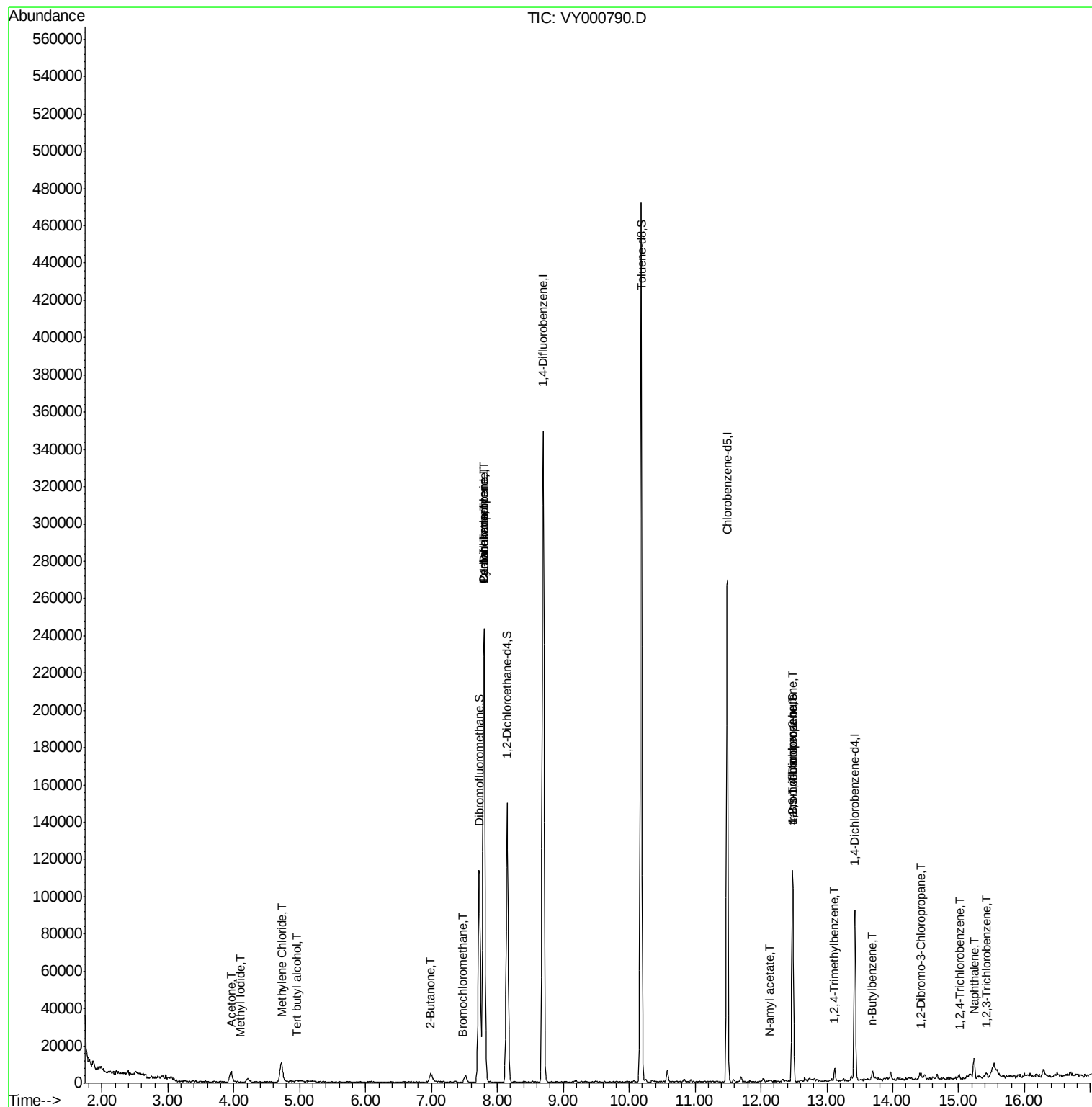
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 10) Methyl Iodide              | 4.11  | 142  | 143      | 3.253   | ug/l # | 41     |
| 11) Tert butyl alcohol         | 4.95  | 59   | 189      | 1.028   | ug/l # | 72     |
| 16) Acetone                    | 3.96  | 43   | 10467    | 20.101  | ug/l # | 73     |
| 20) Methylene Chloride         | 4.72  | 84   | 8437     | 3.781   | ug/l   | 89     |
| 25) 2-Butanone                 | 6.99  | 43   | 2044     | 2.460   | ug/l   | 95     |
| 28) Bromochloromethane         | 7.46  | 49   | 34       | 4.112   | ug/l # | 14     |
| 31) Cyclohexane                | 7.80  | 56   | 4570     | 1.250   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.79  | 75   | 14800    | 5.226   | ug/l # | 47     |
| 38) Carbon Tetrachloride       | 7.80  | 117  | 18167    | 6.667   | ug/l # | 15     |
| 74) N-amyl acetate             | 12.14 | 43   | 552      | 1.190   | ug/l # | 65     |
| 76) 1,2,3-Trichloropropane     | 12.48 | 75   | 18230    | 73.087  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.48 | 75   | 18230    | 163.870 | ug/l # | 13     |
| 84) 1,2,4-Trimethylbenzene     | 13.11 | 105  | 3697     | 2.754   | ug/l   | 98     |
| 89) n-Butylbenzene             | 13.69 | 91   | 1463     | 1.015   | ug/l # | 88     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.42 | 75   | 62       | 1.093   | ug/l # | 9      |
| 93) 1,2,4-Trichlorobenzene     | 15.01 | 180  | 751      | 1.690   | ug/l   | 91     |
| 95) Naphthalene                | 15.23 | 128  | 8694     | 8.815   | ug/l   | 97     |
| 96) 1,2,3-Trichlorobenzene     | 15.42 | 180  | 949      | 2.381   | ug/l   | 73     |

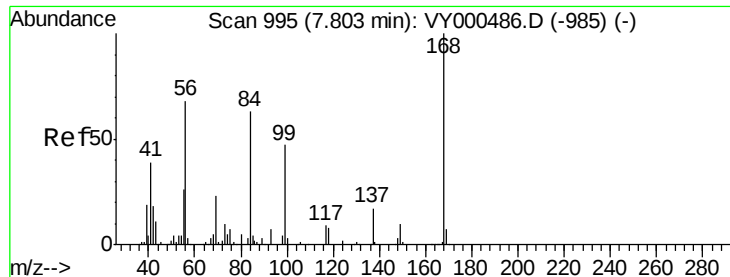
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA Y\DATA\VY112219\  
Data File : VY000790.D  
Acq On : 22 Nov 2019 16:27  
Operator : SY/MD  
Sample : K5977-01RE  
Misc : 3.95G/5ML/MSVOA Y/SOIL  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WS-112119-0-1-GRAB-B1RE

Quant Time: Nov 23 04:02:46 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y103019S.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 30 13:30:53 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.80 min Scan# 994

Delta R.T. -0.01 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

Instrument :

MSVOA\_Y

ClientSampleId :

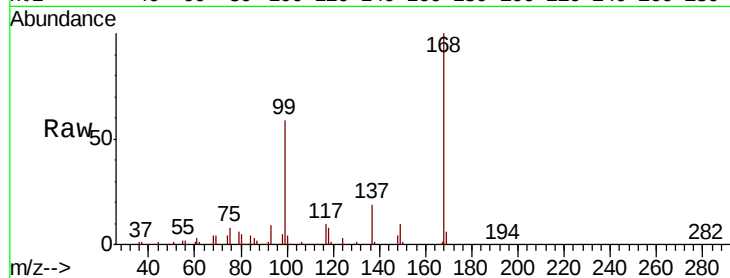
WS-112119-0-1-GRAB-B1RE

Tot Ion:168 Resp: 182567

Ion Ratio Lower Upper

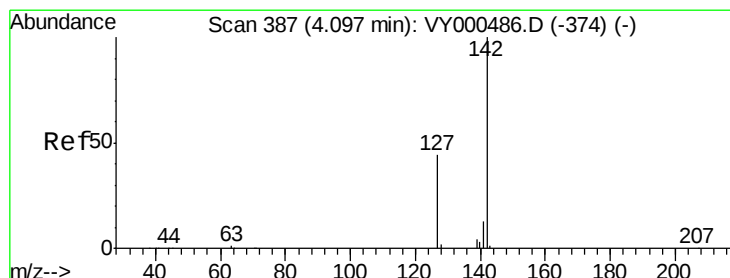
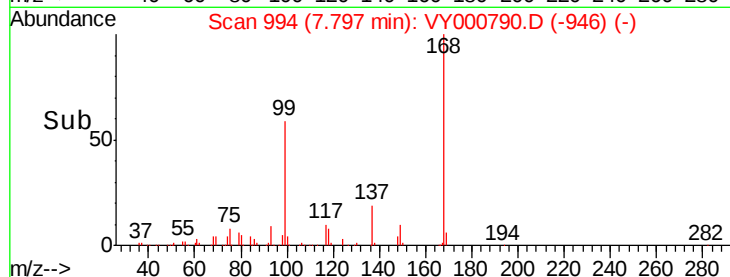
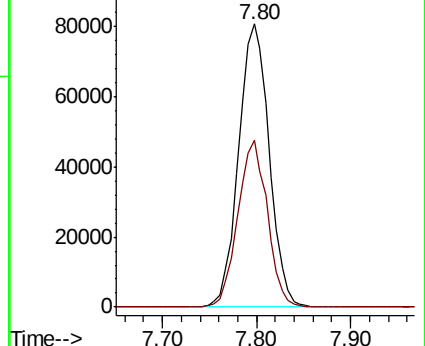
168 100

99 58.9 45.7 68.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VY0



#10

Methyl Iodide

Concen: 3.253 ug/l

RT: 4.11 min Scan# 389

Delta R.T. 0.01 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

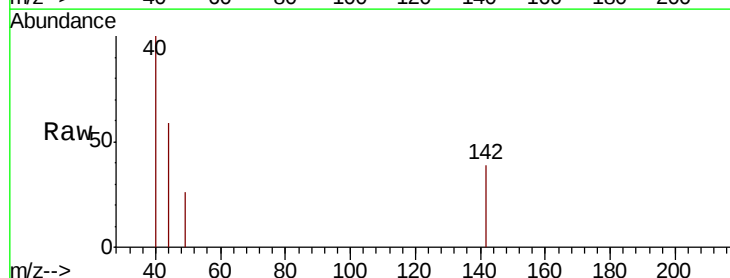
Tgt Ion:142 Resp: 143

Ion Ratio Lower Upper

142 100

127 0.0 33.7 50.5#

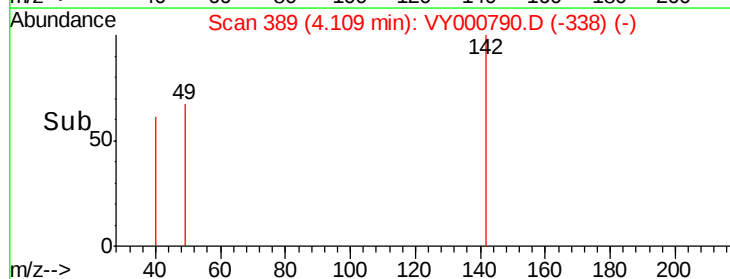
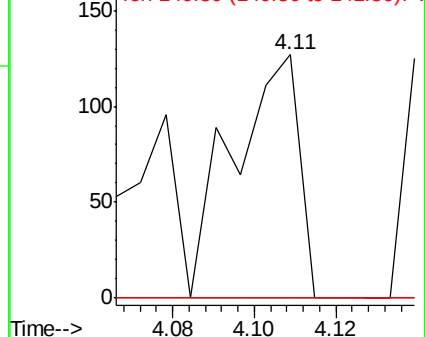
141 0.0 10.9 16.3#

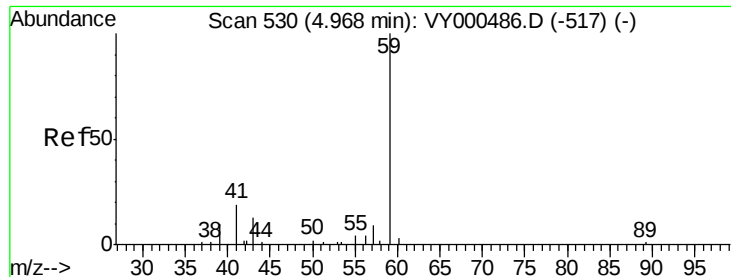


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

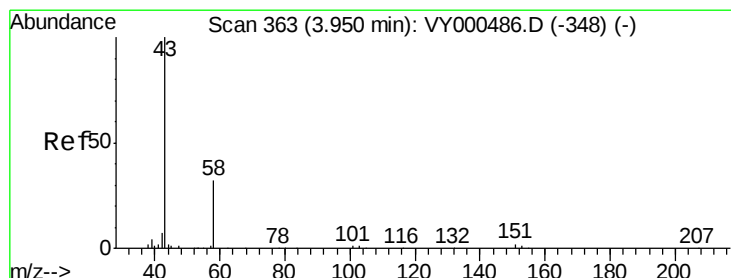
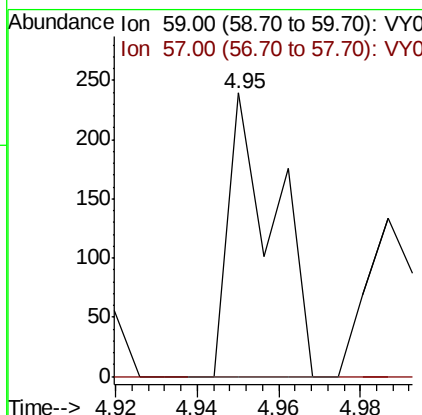
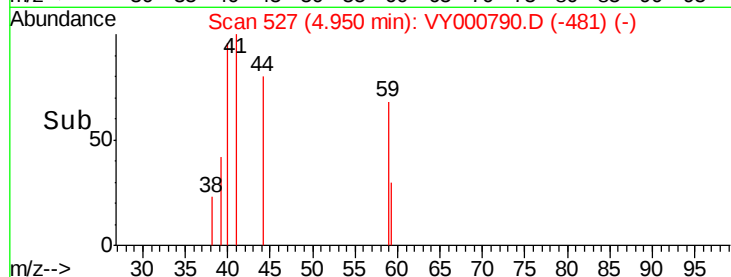
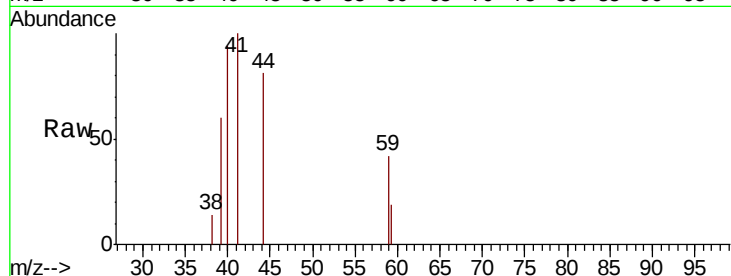




#11  
Tert butyl alcohol  
Concen: 1.028 ug/l  
RT: 4.95 min Scan# 527  
Delta R.T. -0.02 min  
Lab File: VY000790.D  
Acq: 22 Nov 2019 16:27

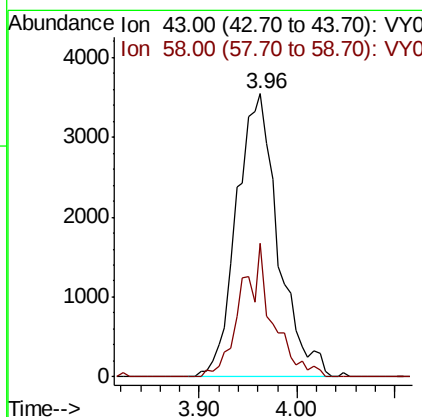
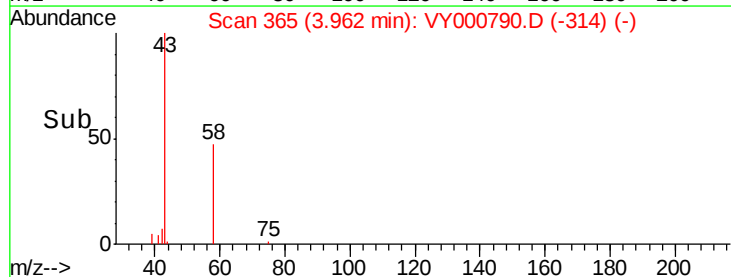
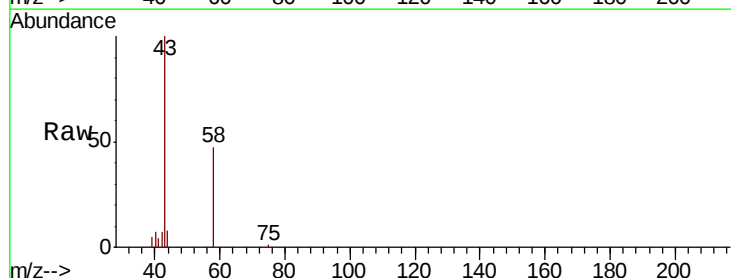
Instrument :  
MSVOA\_Y  
ClientSampleId :  
WS-112119-0-1-GRAB-B1RE

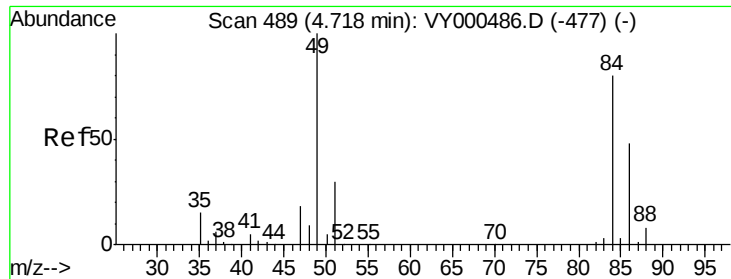
Tot Ion: 59 Resp: 189  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.6 12.8#



#16  
Acetone  
Concen: 20.101 ug/l  
RT: 3.96 min Scan# 365  
Delta R.T. 0.01 min  
Lab File: VY000790.D  
Acq: 22 Nov 2019 16:27

Tgt Ion: 43 Resp: 10467  
Ion Ratio Lower Upper  
43 100  
58 47.4 25.8 38.6#

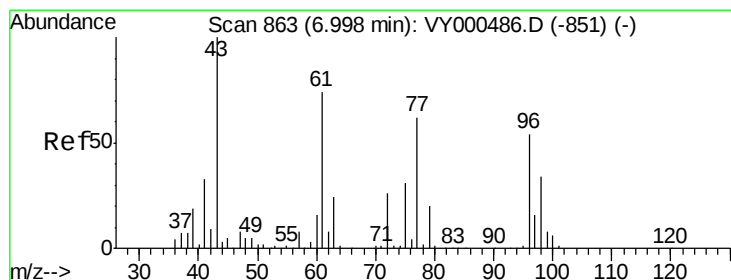
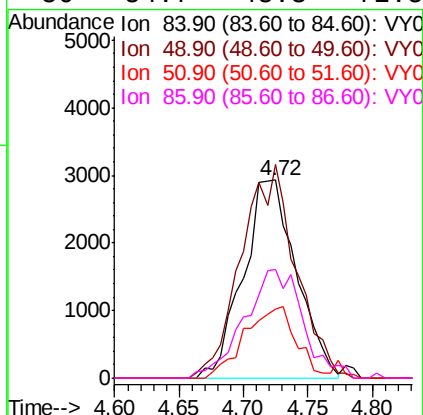
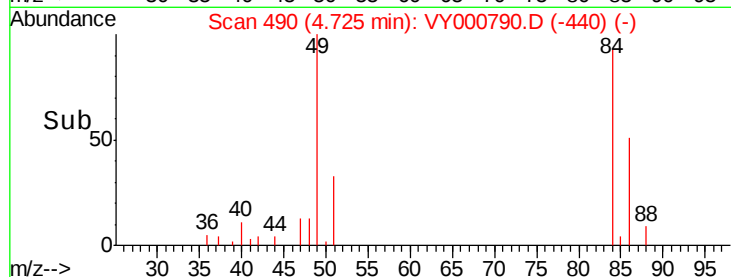
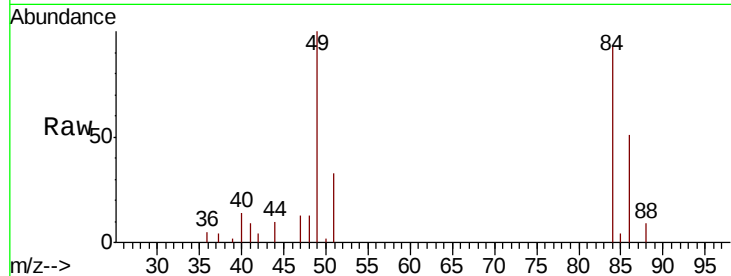




#20  
Methvlene Chloride  
Concen: 3.781 ug/l  
RT: 4.72 min Scan# 490  
Delta R.T. 0.01 min  
Lab File: VY000790.D  
Acq: 22 Nov 2019 16:27

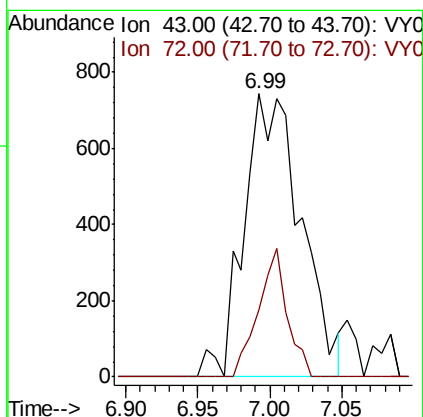
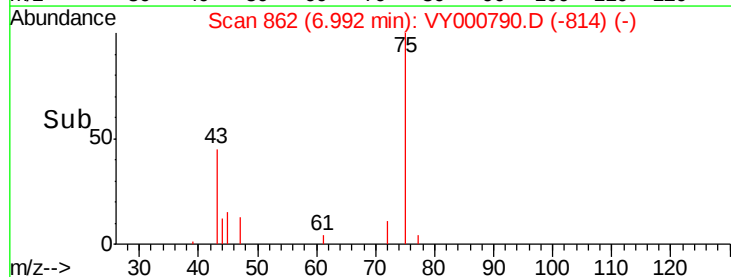
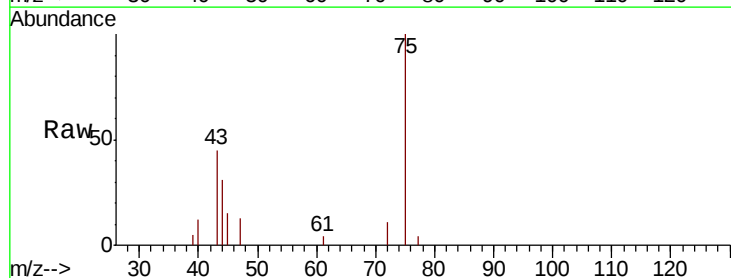
Instrument :  
MSVOA\_Y  
ClientSampleId :  
WS-112119-0-1-GRAB-B1RE

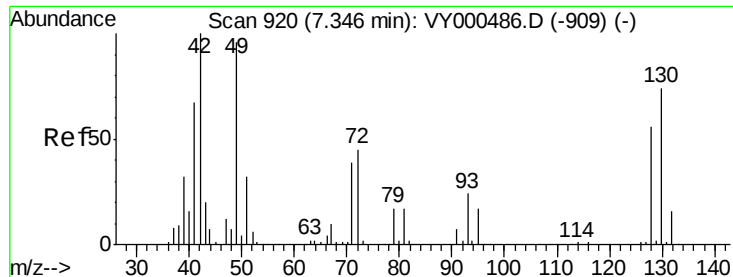
Tot Ion: 84 Resp: 8437  
Ion Ratio Lower Upper  
84 100  
49 107.7 100.2 150.4  
51 35.1 29.6 44.4  
86 54.7 48.3 72.5



#25  
2-Butanone  
Concen: 2.460 ug/l  
RT: 6.99 min Scan# 862  
Delta R.T. -0.01 min  
Lab File: VY000790.D  
Acq: 22 Nov 2019 16:27

Tgt Ion: 43 Resp: 2044  
Ion Ratio Lower Upper  
43 100  
72 23.7 20.9 31.3





#28

Bromochloromethane

Concen: 4.112 ug/l

RT: 7.46 min Scan# 939

Delta R.T. 0.12 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

Instrument :

MSVOA\_Y

ClientSampleId :

WS-112119-0-1-GRAB-B1RE

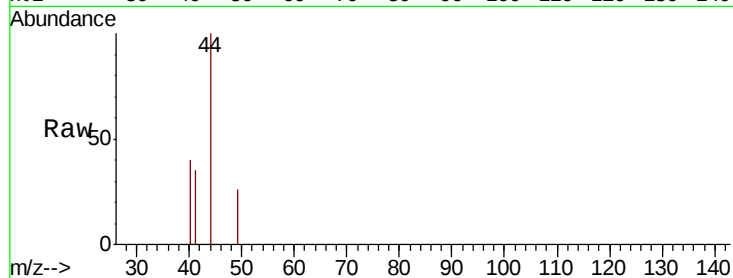
Tot Ion: 49 Resp: 34

Ion Ratio Lower Upper

49 100

129 0.0 0.0 3.6

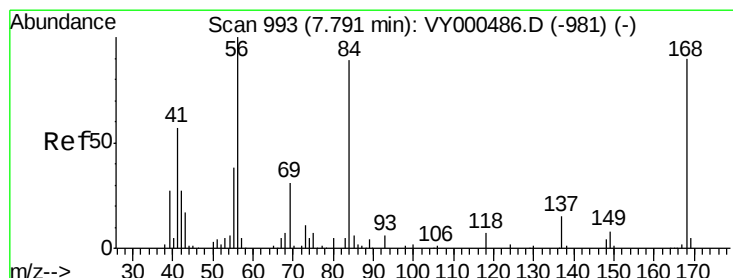
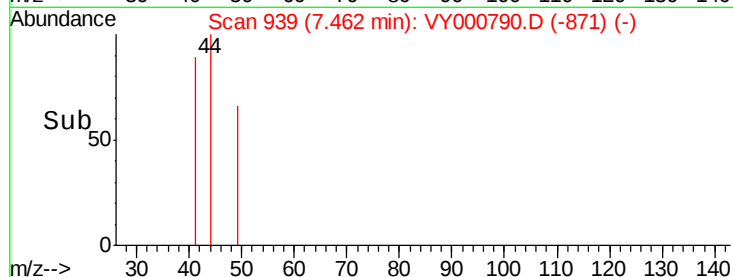
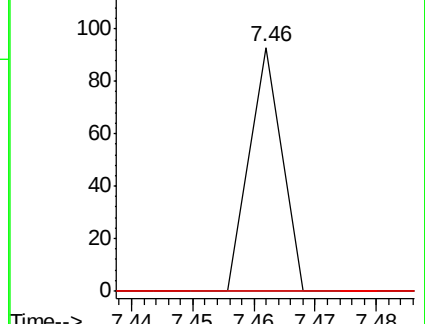
130 0.0 59.4 89.0#



Abundance Ion 48.90 (48.60 to 49.60): VY0

Ion 128.80 (128.50 to 129.50): VY0

Ion 129.80 (129.50 to 130.50): VY0



#31

Cyclohexane

Concen: 1.250 ug/l

RT: 7.80 min Scan# 995

Delta R.T. 0.01 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

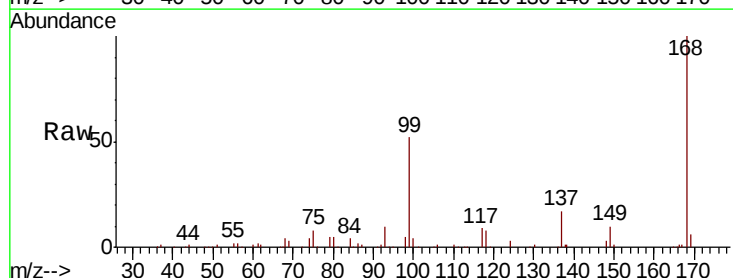
Tgt Ion: 56 Resp: 4570

Ion Ratio Lower Upper

56 100

69 123.9 25.0 37.6#

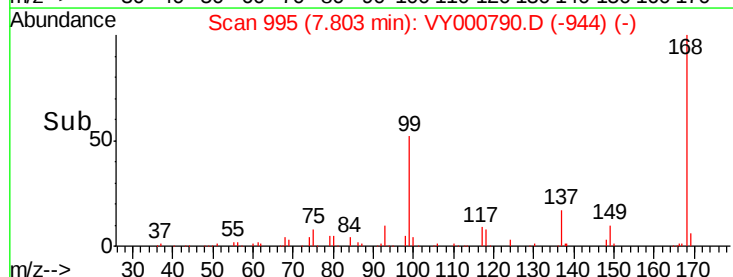
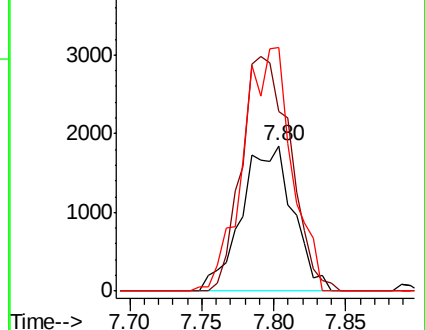
84 167.8 71.4 107.2#

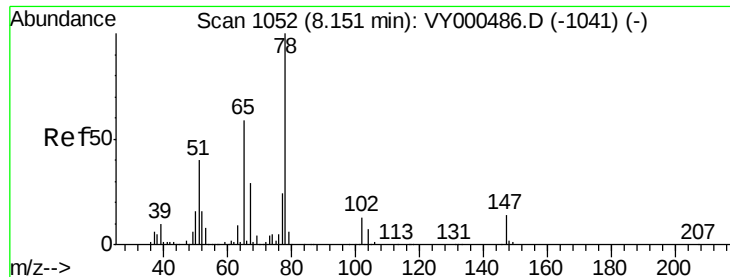


Abundance Ion 56.00 (55.70 to 56.70): VY0

Ion 69.00 (68.70 to 69.70): VY0

Ion 84.00 (83.70 to 84.70): VY0

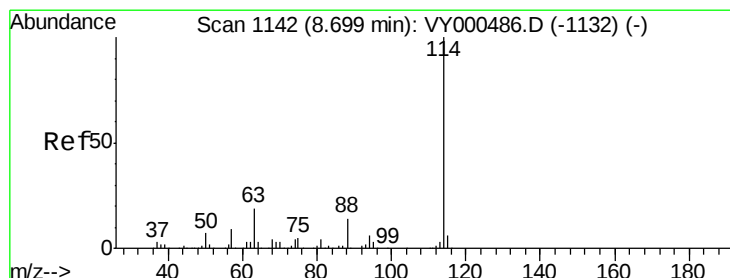
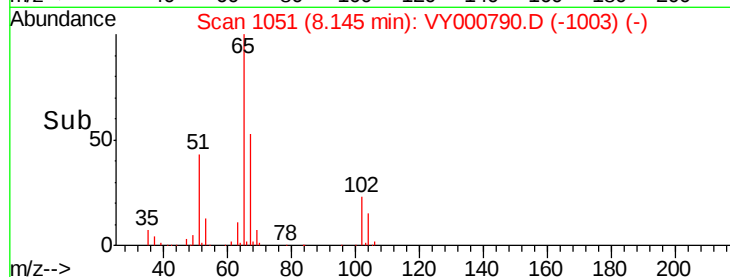
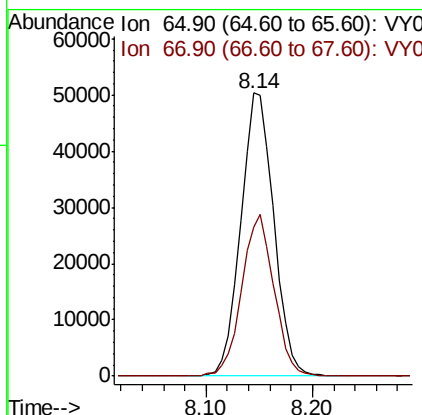
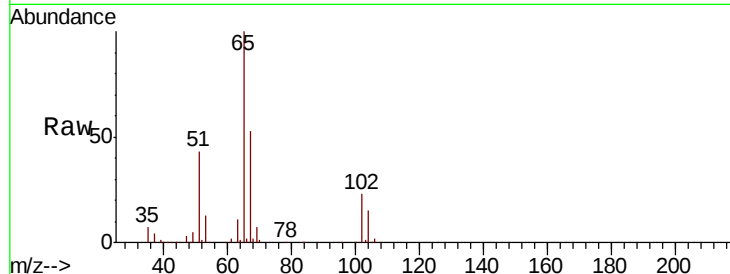




#33  
 1,2-Dichloroethane-d4  
 Concen: 58.067 ug/l  
 RT: 8.14 min Scan# 1051  
 Delta R.T. -0.01 min  
 Lab File: VY000790.D  
 Acq: 22 Nov 2019 16:27

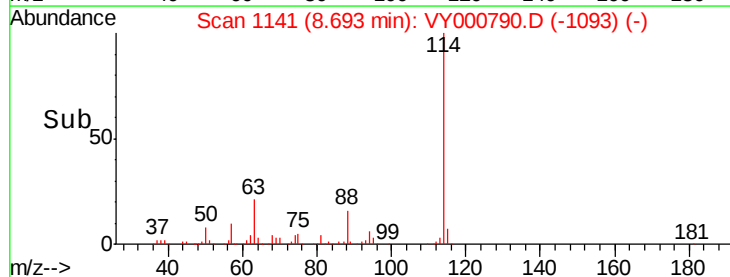
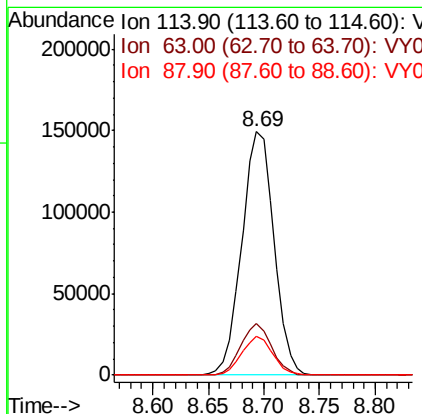
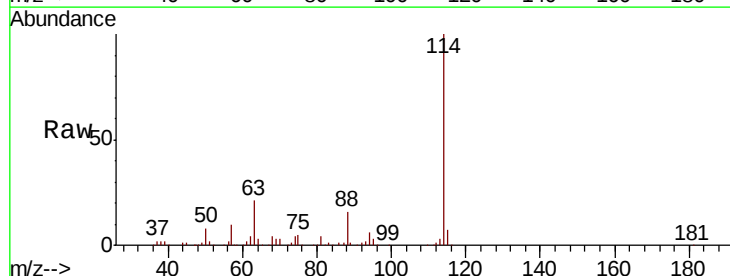
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WS-112119-0-1-GRAB-B1RE

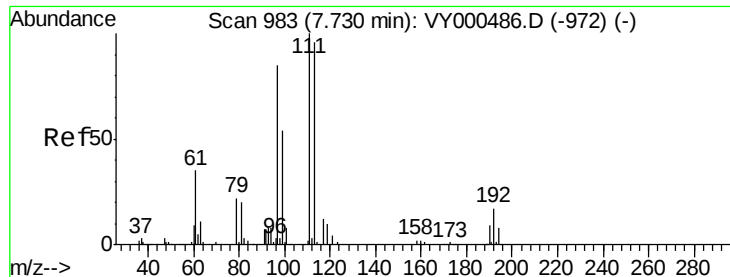
Tot Ion: 65 Resp: 109707  
 Ion Ratio Lower Upper  
 65 100  
 67 55.6 0.0 107.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.69 min Scan# 1141  
 Delta R.T. -0.01 min  
 Lab File: VY000790.D  
 Acq: 22 Nov 2019 16:27

Tgt Ion: 114 Resp: 299549  
 Ion Ratio Lower Upper  
 114 100  
 63 21.5 0.0 38.0  
 88 16.0 0.0 28.6





#35

Dibromofluoromethane

Concen: 47.718 ug/l

RT: 7.72 min Scan# 982

Delta R.T. -0.01 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

Instrument :

MSVOA\_Y

ClientSampleId :

WS-112119-0-1-GRAB-B1RE

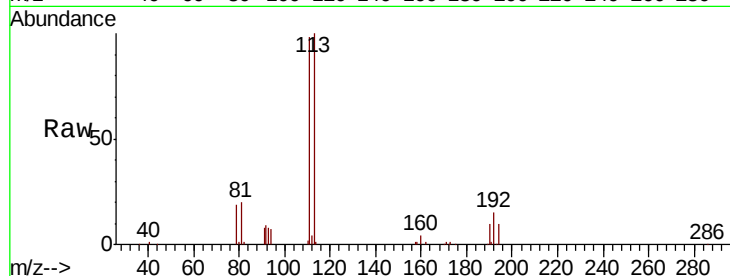
Tot Ion:113 Resp: 83915

Ion Ratio Lower Upper

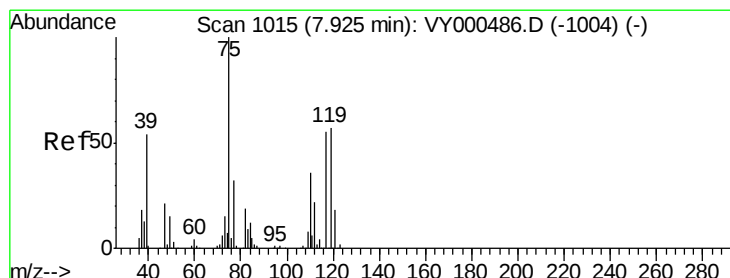
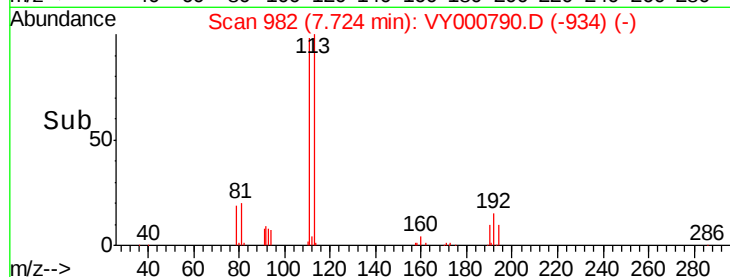
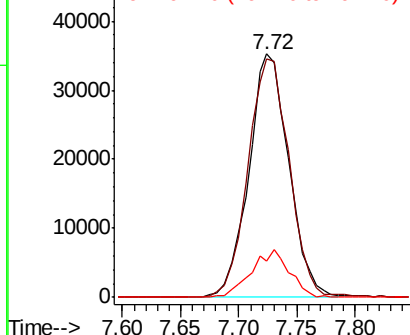
113 100

111 101.2 81.7 122.5

192 18.7 15.0 22.4



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: 5.226 ug/l

RT: 7.79 min Scan# 993

Delta R.T. -0.13 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

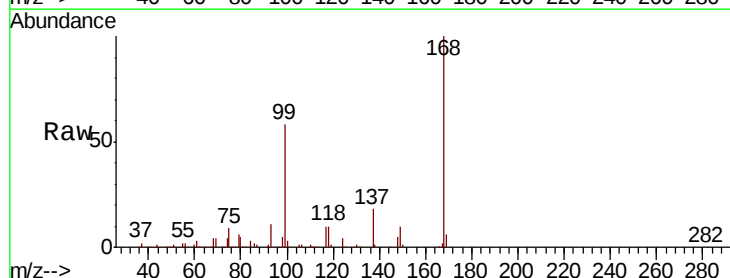
Tgt Ion: 75 Resp: 14800

Ion Ratio Lower Upper

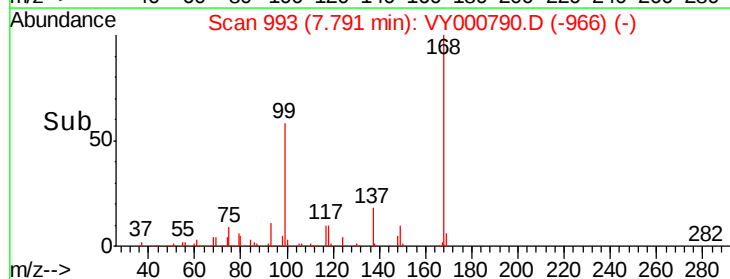
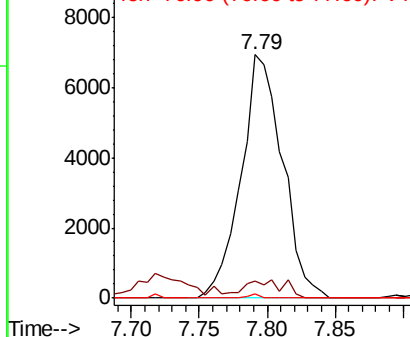
75 100

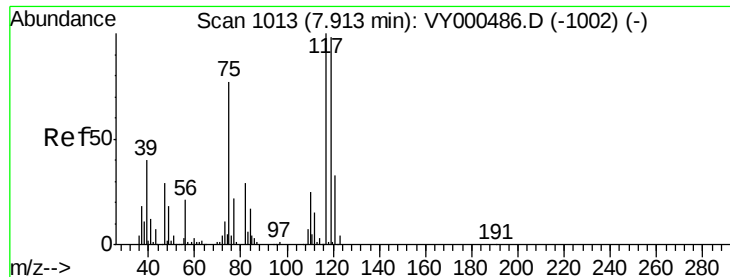
110 6.5 18.1 54.1#

77 0.4 25.0 37.6#



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

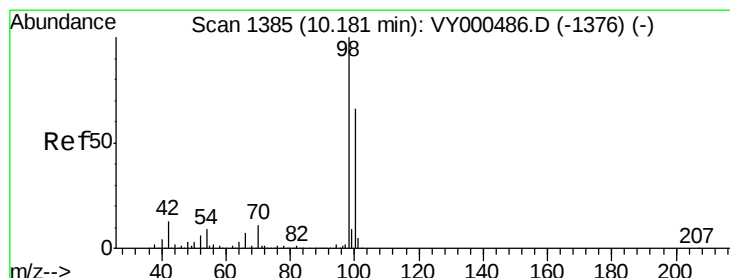
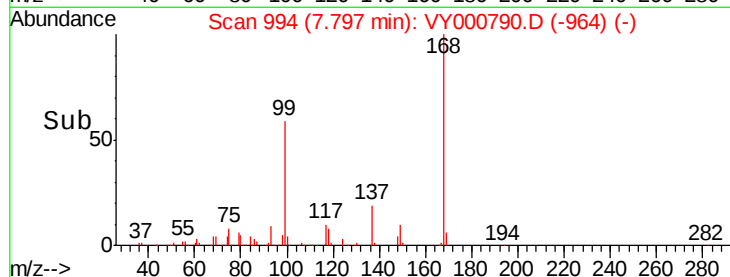
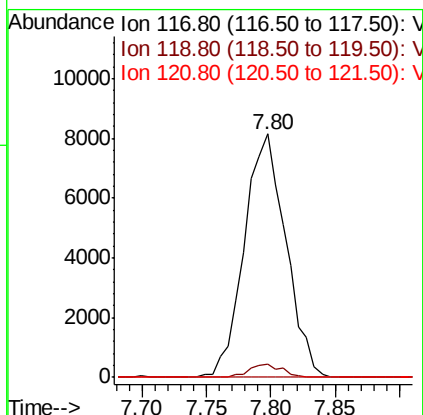
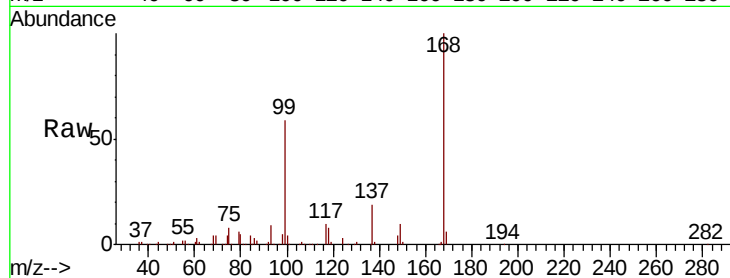




#38  
Carbon Tetrachloride  
Concen: 6.667 ug/l  
RT: 7.80 min Scan# 994  
Delta R.T. -0.12 min  
Lab File: VY000790.D  
Acq: 22 Nov 2019 16:27

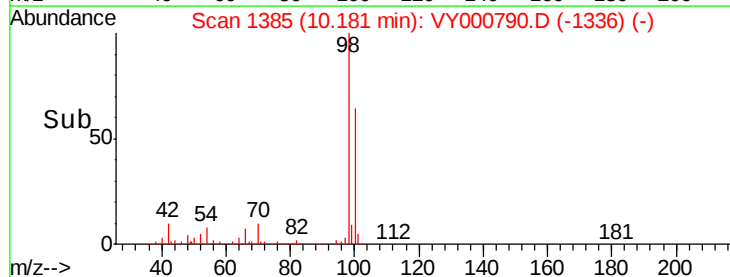
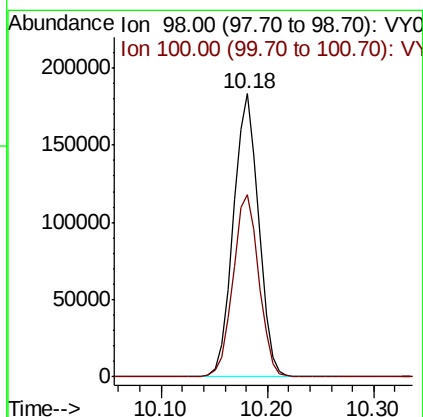
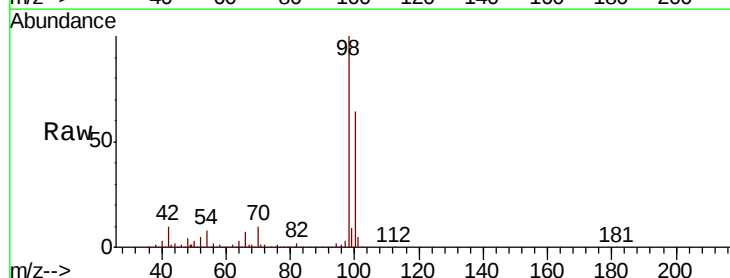
Instrument :  
MSVOA\_Y  
ClientSampleId :  
WS-112119-0-1-GRAB-B1RE

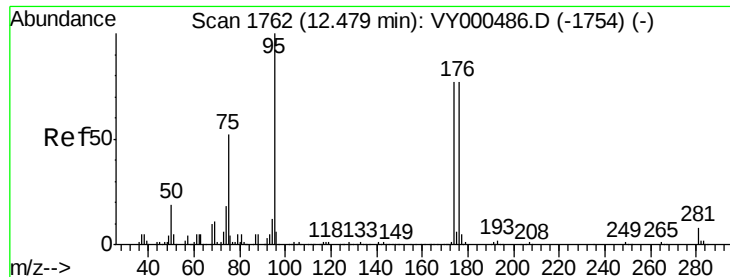
Tot Ion:117 Resp: 18167  
Ion Ratio Lower Upper  
117 100  
119 5.2 78.0 117.0#  
121 0.0 26.6 40.0#



#50  
Toluene-d8  
Concen: 45.835 ug/l  
RT: 10.18 min Scan# 1385  
Delta R.T. 0.00 min  
Lab File: VY000790.D  
Acq: 22 Nov 2019 16:27

Tgt Ion: 98 Resp: 305848  
Ion Ratio Lower Upper  
98 100  
100 65.6 52.9 79.3





#62

4-Bromofluorobenzene

Concen: 13.678 ug/l

RT: 12.48 min Scan# 1762

Delta R.T. 0.00 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

Instrument :

MSVOA\_Y

ClientSampleId :

WS-112119-0-1-GRAB-B1RE

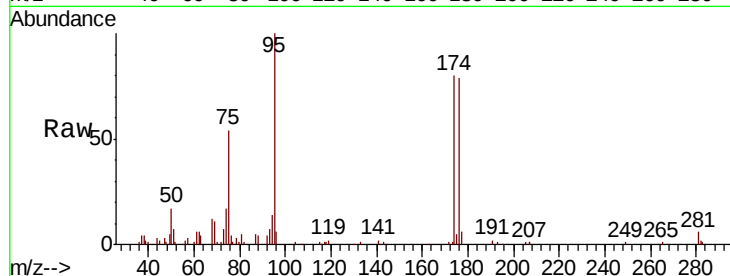
Tot Ion: 95 Resp: 34747

Ion Ratio Lower Upper

95 100

174 71.7 0.0 161.6

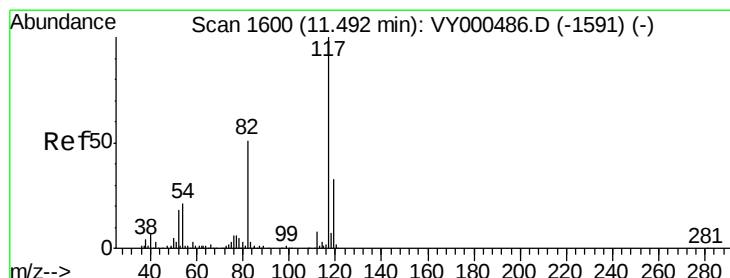
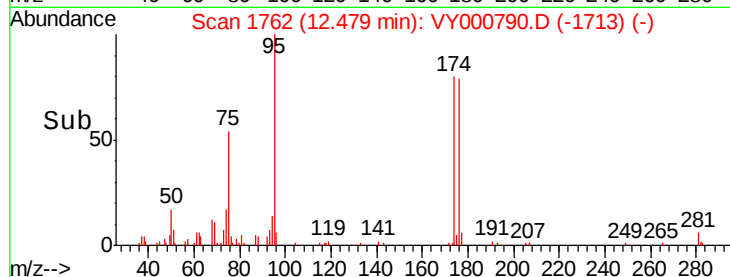
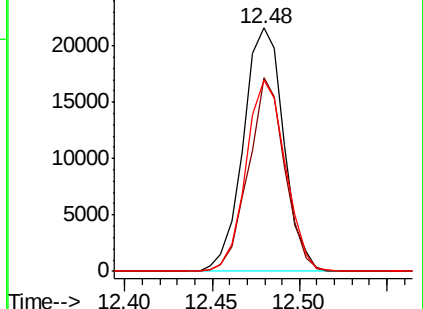
176 76.8 0.0 157.8



Abundance Ion 94.90 (94.60 to 95.60): VY000790.D (-1713) (-)

Ion 173.80 (173.50 to 174.50): VY000790.D (-1713) (-)

Ion 175.80 (175.50 to 176.50): VY000790.D (-1713) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.49 min Scan# 1600

Delta R.T. 0.00 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

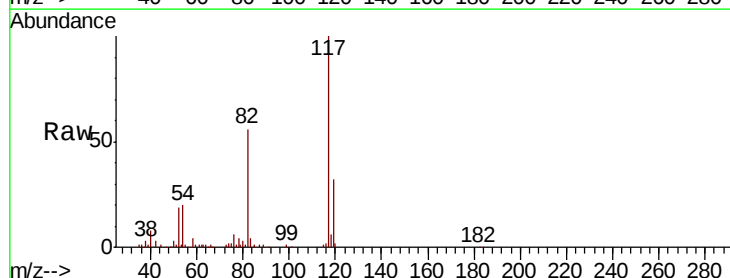
Tgt Ion: 117 Resp: 143045

Ion Ratio Lower Upper

117 100

82 56.1 40.8 61.2

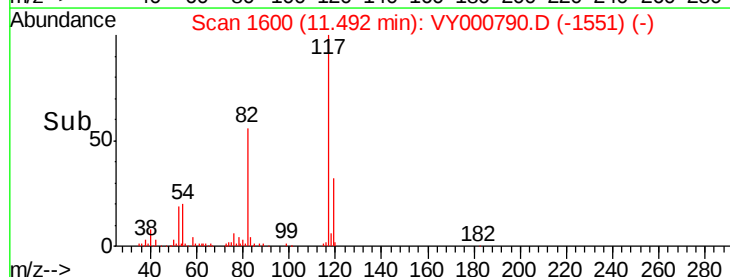
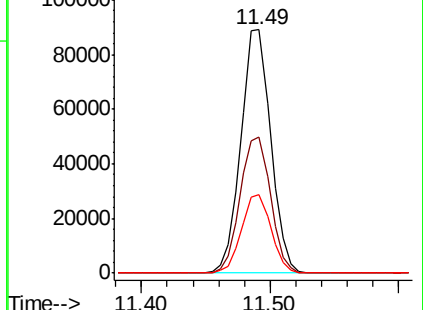
119 32.4 26.2 39.2

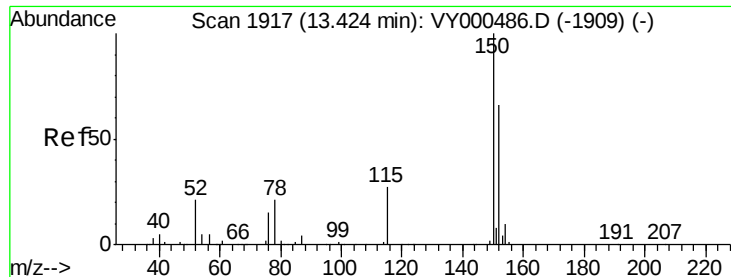


Abundance Ion 116.90 (116.60 to 117.60): VY000790.D (-1551) (-)

Ion 82.00 (81.70 to 82.70): VY000790.D (-1551) (-)

Ion 118.90 (118.60 to 119.60): VY000790.D (-1551) (-)



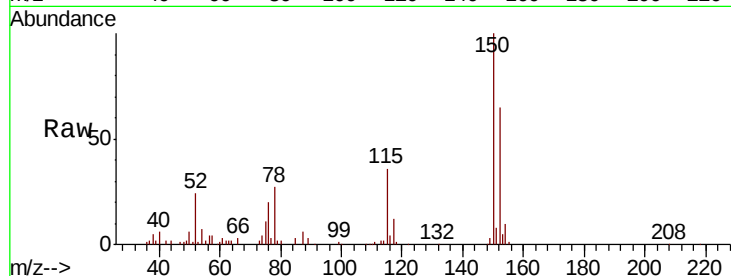


#72

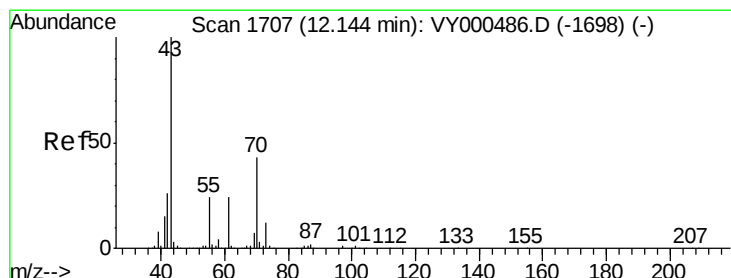
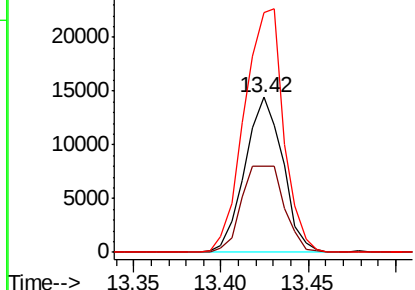
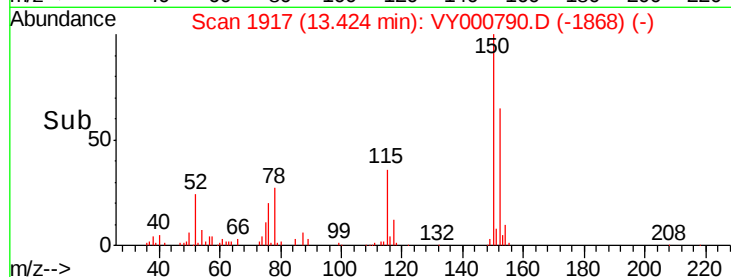
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.42 min Scan# 1917  
Delta R.T. 0.00 min  
Lab File: VY000790.D  
Acq: 22 Nov 2019 16:27

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WS-112119-0-1-GRAB-B1RE

Tot Ion:152 Resp: 21906  
Ion Ratio Lower Upper  
152 100  
115 62.9 29.1 87.4  
150 162.2 0.0 348.8



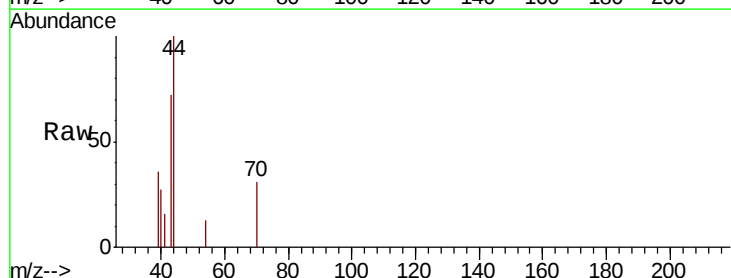
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



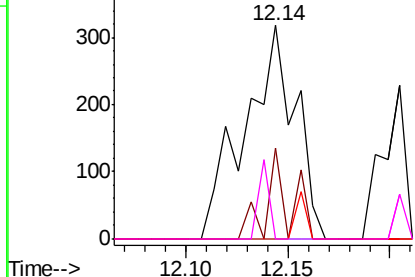
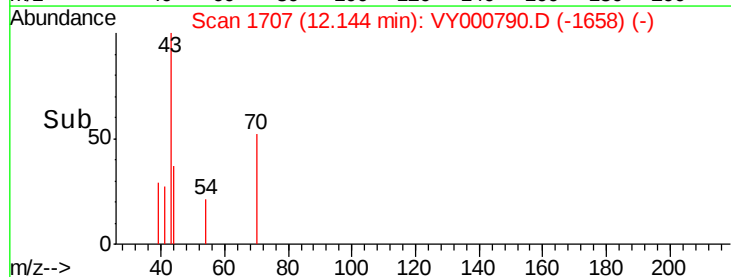
#74

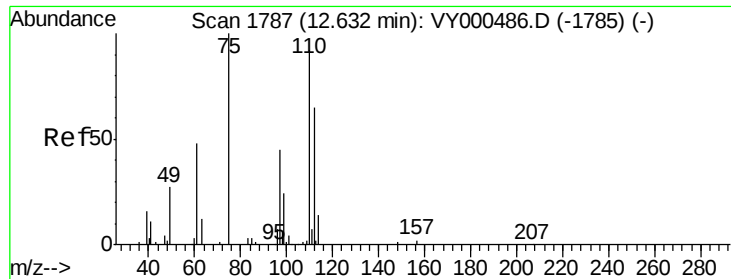
N-ethyl acetate  
Concen: 1.190 ug/l  
RT: 12.14 min Scan# 1707  
Delta R.T. 0.00 min  
Lab File: VY000790.D  
Acq: 22 Nov 2019 16:27

Tgt Ion: 43 Resp: 552  
Ion Ratio Lower Upper  
43 100  
70 19.4 33.1 49.7#  
55 4.7 18.0 27.0#  
61 7.8 19.1 28.7#



Abundance Ion 43.00 (42.70 to 43.70): VY0  
Ion 70.00 (69.70 to 70.70): VY0  
Ion 55.00 (54.70 to 55.70): VY0  
Ion 61.00 (60.70 to 61.70): VY0





#76

1,2,3-Trichloropropane

Concen: 73.087 ug/l

RT: 12.48 min Scan# 1762

Delta R.T. -0.15 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

Instrument :

MSVOA\_Y

ClientSampleId :

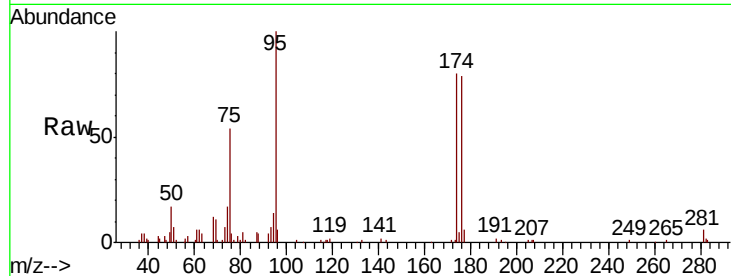
WS-112119-0-1-GRAB-B1RE

Tot Ion: 75 Resp: 18230

Ion Ratio Lower Upper

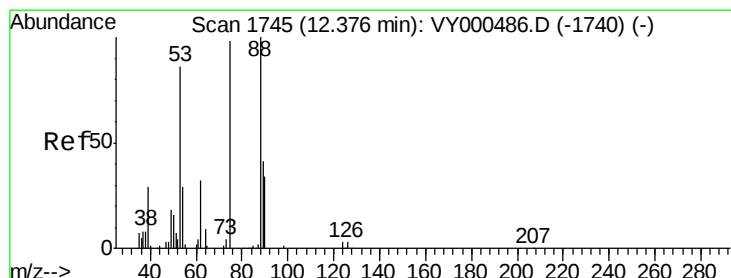
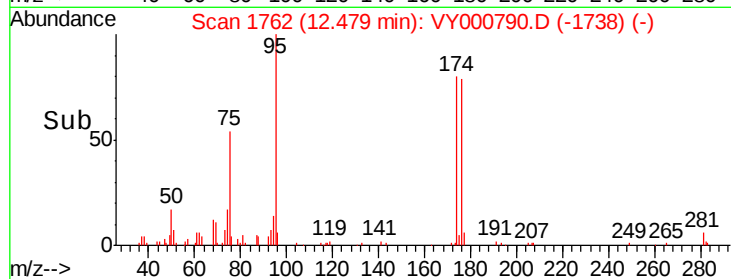
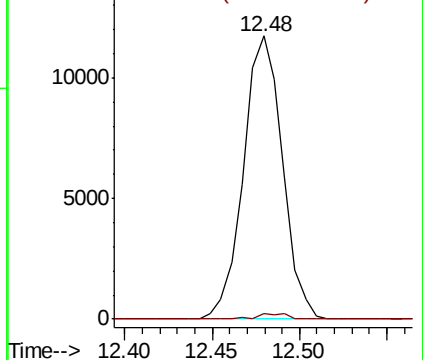
75 100

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: 163.870 ug/l

RT: 12.48 min Scan# 1762

Delta R.T. 0.10 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

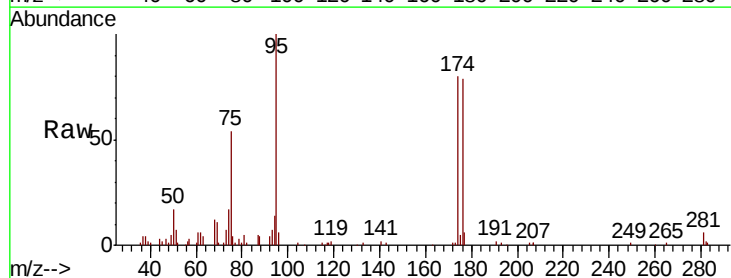
Tgt Ion: 75 Resp: 18230

Ion Ratio Lower Upper

75 100

53 0.0 73.2 109.8#

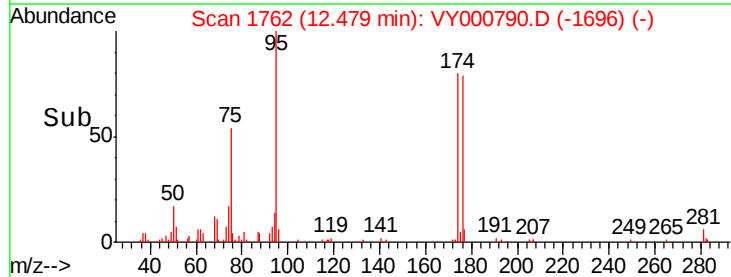
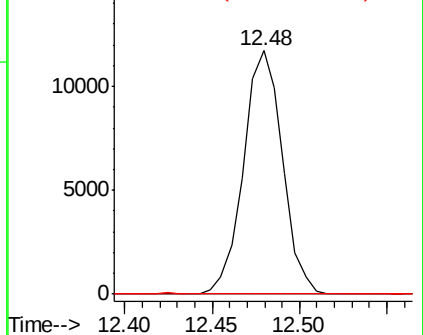
89 0.0 35.9 53.9#

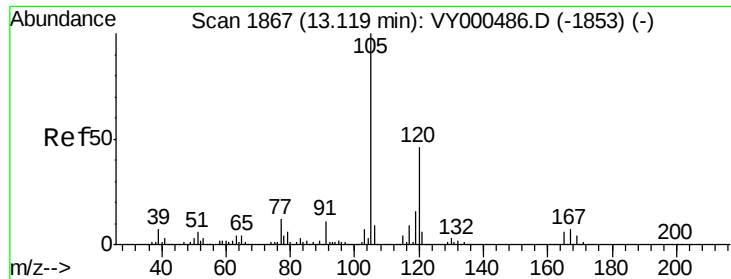


Abundance Ion 74.90 (74.60 to 75.60): VY0

Ion 53.00 (52.70 to 53.70): VY0

Ion 88.90 (88.60 to 89.60): VY0

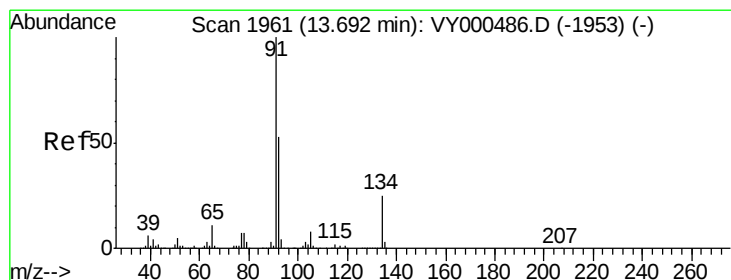
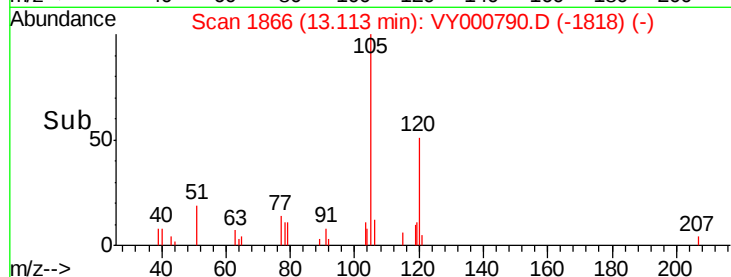
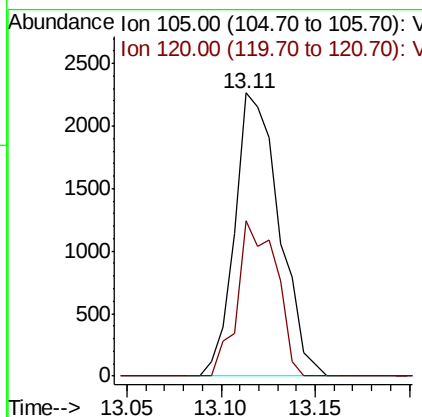
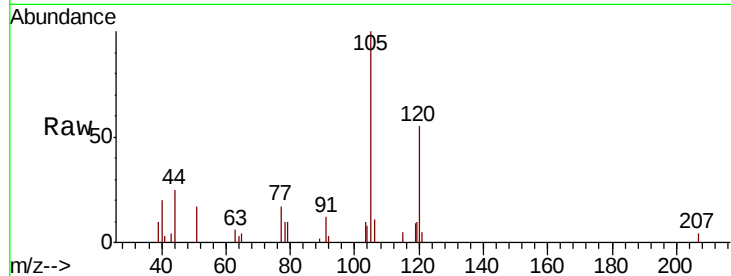




#84  
 1,2,4-Trimethylbenzene  
 Concen: 2.754 ug/l  
 RT: 13.11 min Scan# 1866  
 Delta R.T. -0.01 min  
 Lab File: VY000790.D  
 Acq: 22 Nov 2019 16:27

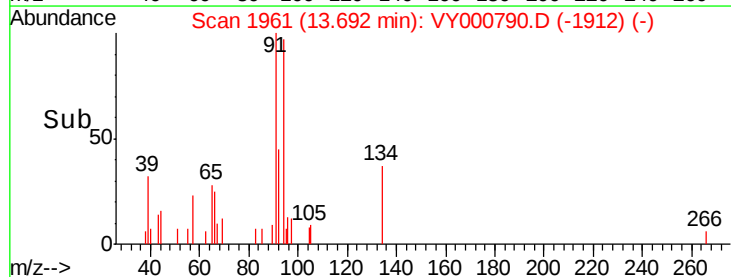
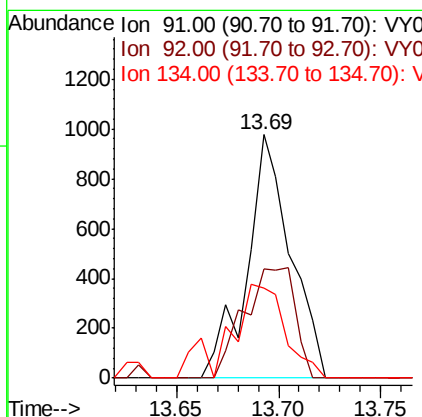
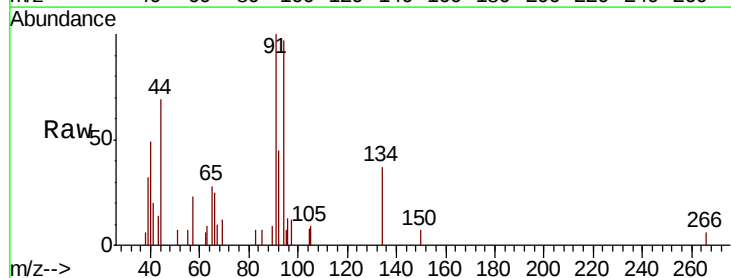
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WS-112119-0-1-GRAB-B1RE

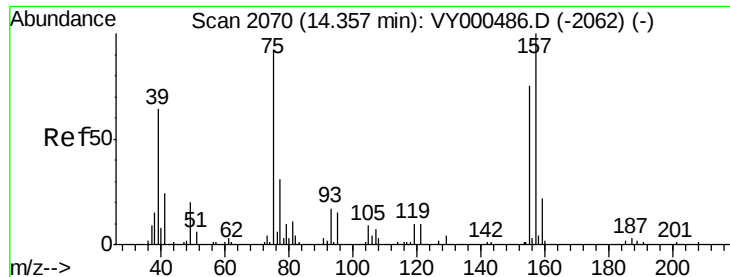
Tot Ion:105 Resp: 3697  
 Ion Ratio Lower Upper  
 105 100  
 120 48.1 23.3 69.9



#89  
 n-Butylbenzene  
 Concen: 1.015 ug/l  
 RT: 13.69 min Scan# 1961  
 Delta R.T. 0.00 min  
 Lab File: VY000790.D  
 Acq: 22 Nov 2019 16:27

Tgt Ion: 91 Resp: 1463  
 Ion Ratio Lower Upper  
 91 100  
 92 52.4 26.8 80.3  
 134 42.9 12.9 38.7#





#92

1,2-Dibromo-3-Chloropropane

Concen: 1.093 ug/l

RT: 14.42 min Scan# 2080

Delta R.T. 0.06 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

Instrument :

MSVOA\_Y

ClientSampleId :

WS-112119-0-1-GRAB-B1RE

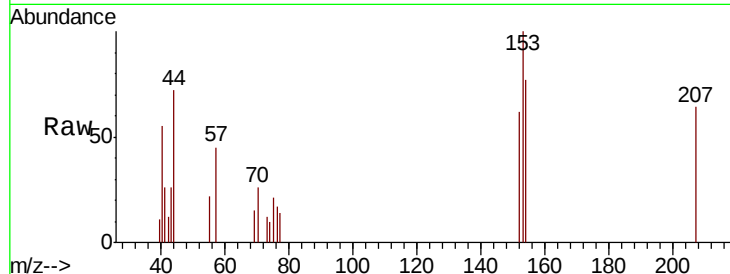
Tot Ion: 75 Resp: 62

Ion Ratio Lower Upper

75 100

155 151.6 42.4 127.1#

157 0.0 55.1 165.3#

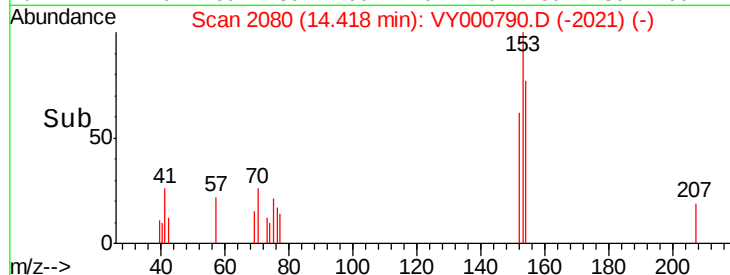


Abundance Ion 74.90 (74.60 to 75.60): VY000486.D (-2062) (-)

Ion 154.80 (154.50 to 155.50): VY000486.D (-2062) (-)

Ion 156.80 (156.50 to 157.50): VY000486.D (-2062) (-)

Time-->

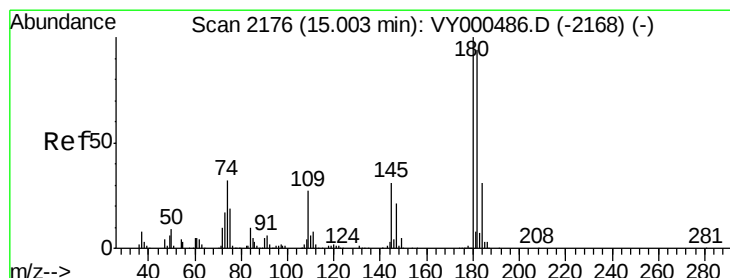


Abundance Ion 74.90 (74.60 to 75.60): VY000790.D (-2021) (-)

Ion 154.80 (154.50 to 155.50): VY000790.D (-2021) (-)

Ion 156.80 (156.50 to 157.50): VY000790.D (-2021) (-)

Time-->



#93

1,2,4-Trichlorobenzene

Concen: 1.690 ug/l

RT: 15.01 min Scan# 2177

Delta R.T. 0.01 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

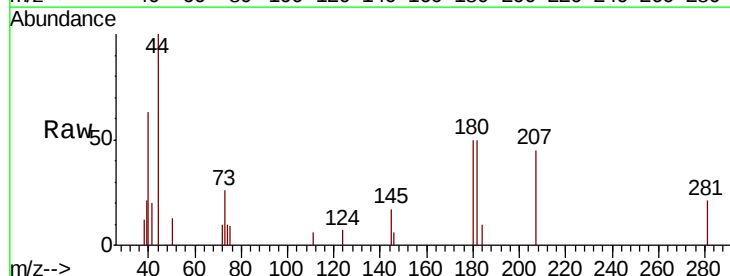
Tgt Ion: 180 Resp: 751

Ion Ratio Lower Upper

180 100

182 84.8 47.8 143.4

145 33.4 16.0 47.9

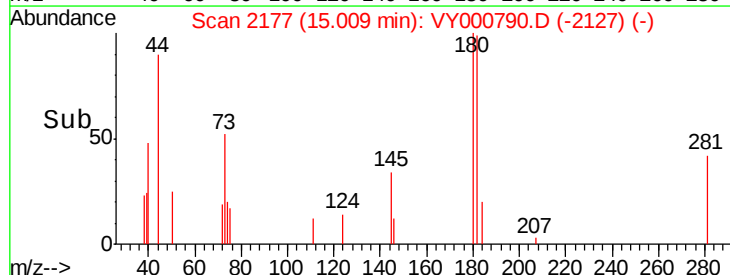


Abundance Ion 179.80 (179.50 to 180.50): VY000486.D (-2168) (-)

Ion 181.80 (181.50 to 182.50): VY000486.D (-2168) (-)

Ion 144.80 (144.50 to 145.50): VY000486.D (-2168) (-)

Time-->

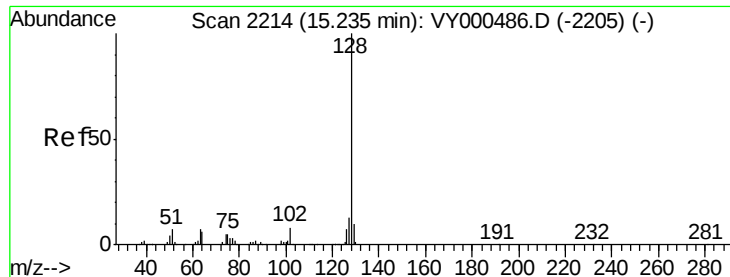


Abundance Ion 179.80 (179.50 to 180.50): VY000790.D (-2127) (-)

Ion 181.80 (181.50 to 182.50): VY000790.D (-2127) (-)

Ion 144.80 (144.50 to 145.50): VY000790.D (-2127) (-)

Time-->



#95

Naphthalene

Concen: 8.815 ug/l

RT: 15.23 min Scan# 2214

Delta R.T. 0.00 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

Instrument :

MSVOA\_Y

ClientSampleId :

WS-112119-0-1-GRAB-B1RE

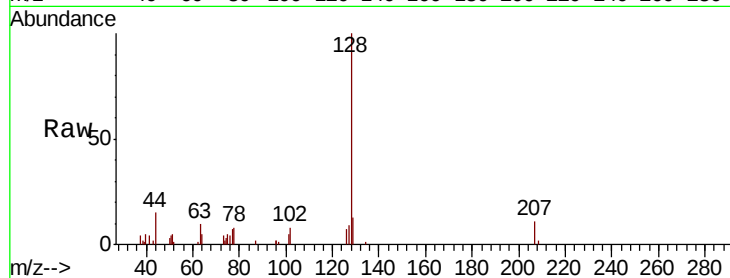
Tot Ion:128 Resp: 8694

Ion Ratio Lower Upper

128 100

127 13.0 9.8 14.6

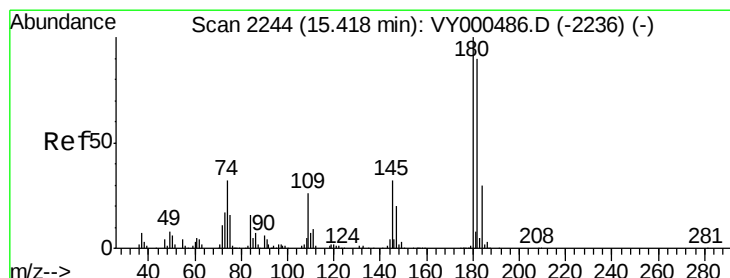
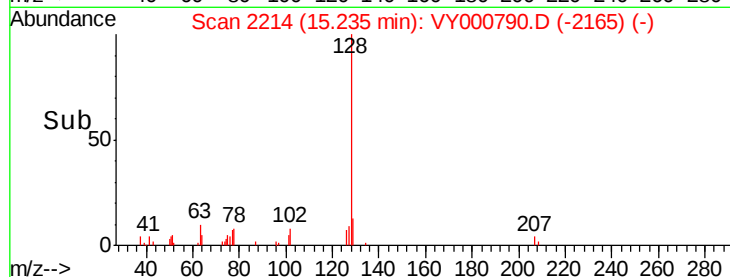
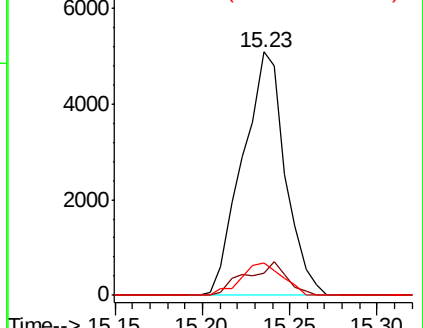
129 12.8 8.7 13.1



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



#96

1,2,3-Trichlorobenzene

Concen: 2.381 ug/l

RT: 15.42 min Scan# 2245

Delta R.T. 0.01 min

Lab File: VY000790.D

Acq: 22 Nov 2019 16:27

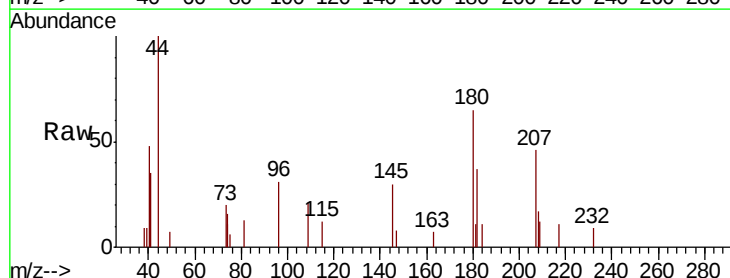
Tgt Ion:180 Resp: 949

Ion Ratio Lower Upper

180 100

182 61.9 47.4 142.3

145 27.6 15.7 47.0



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

