

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY050923\  
 Data File : VY013662.D  
 Acq On : 09 May 2023 12:51  
 Operator : KP/MD  
 Sample : 02658-01RE  
 Misc : 5.02g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 503RE

Quant Time: May 10 05:35:43 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y042423S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 25 02:39:58 2023  
 Response via : Initial Calibration

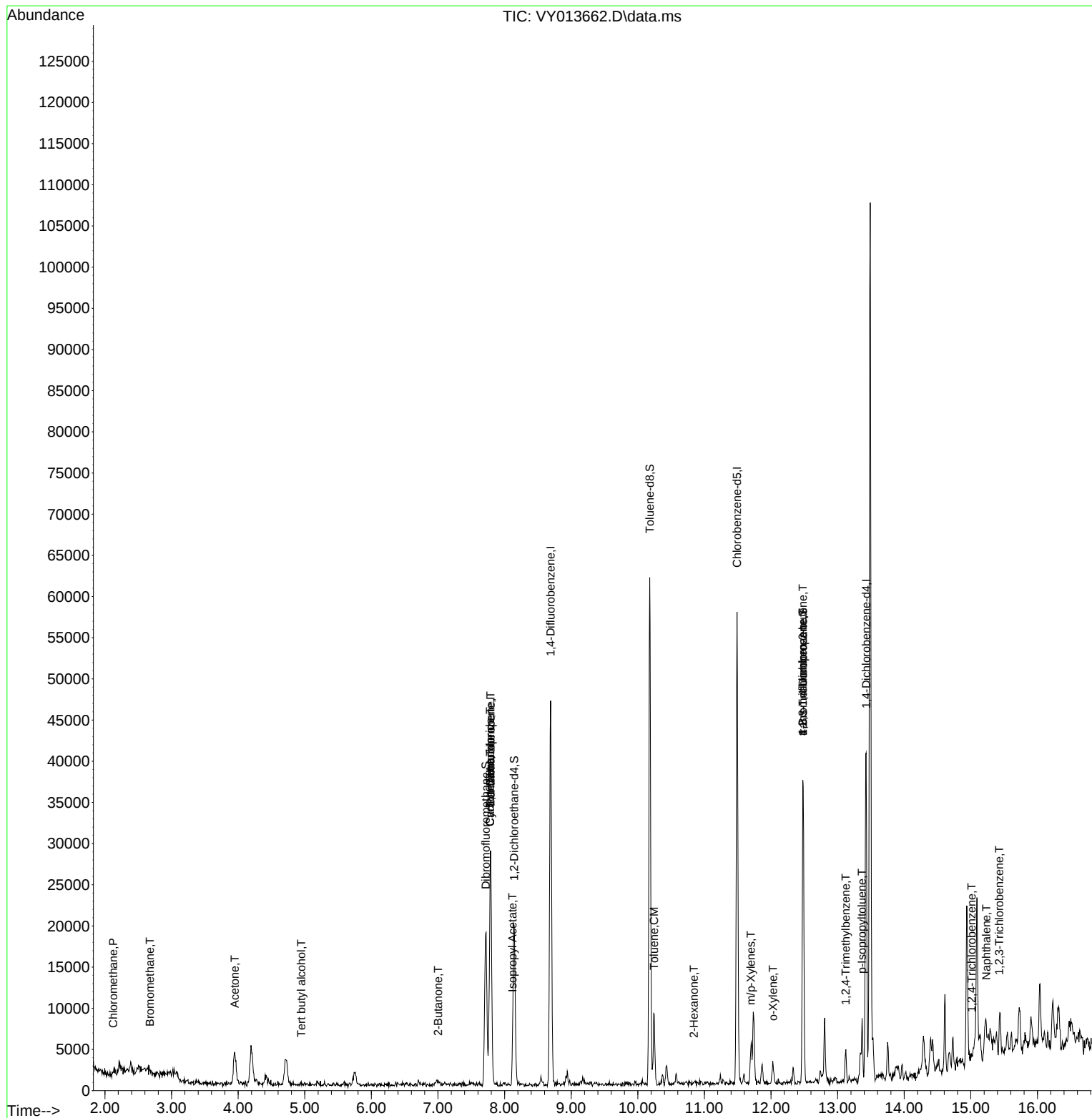
| Compound                      | R.T.   | QIon  | Response | Conc      | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|--------|----------|
| -----                         |        |       |          |           |        |          |
| Internal Standards            |        |       |          |           |        |          |
| 1) Pentafluorobenzene         | 7.789  | 168   | 21535    | 50.000    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.691  | 114   | 34303    | 50.000    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.490 | 117   | 30752    | 50.000    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.428 | 152   | 10644    | 50.000    | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.143  | 65    | 15481    | 65.578    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 50 - 163 | Recovery  | =      | 131.160% |
| 35) Dibromofluoromethane      | 7.716  | 113   | 13190    | 61.136    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 54 - 147 | Recovery  | =      | 122.280% |
| 50) Toluene-d8                | 10.179 | 98    | 39626    | 51.629    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 58 - 134 | Recovery  | =      | 103.260% |
| 62) 4-Bromofluorobenzene      | 12.477 | 95    | 10804    | 41.755    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 30 - 143 | Recovery  | =      | 83.520%  |
| Target Compounds              |        |       |          |           |        |          |
|                               |        |       |          |           | Qvalue |          |
| 3) Chloromethane              | 2.125  | 50    | 289      | 1.053     | ug/l # | 42       |
| 5) Bromomethane               | 2.674  | 94    | 241      | 1.107     | ug/l   | 87       |
| 11) Tert butyl alcohol        | 4.948  | 59    | 86       | 3.876     | ug/l # | 89       |
| 16) Acetone                   | 3.948  | 43    | 7174     | 77.167    | ug/l   | 98       |
| 20) Methylene Chloride        | 4.710  | 84    | 1473     | Below Cal | #      | 70       |
| 25) 2-Butanone                | 7.003  | 43    | 937      | 7.947     | ug/l # | 47       |
| 31) Cyclohexane               | 7.783  | 56    | 761      | 1.800     | ug/l # | 50       |
| 36) 1,1-Dichloropropene       | 7.789  | 75    | 1656     | 4.625     | ug/l # | 43       |
| 38) Carbon Tetrachloride      | 7.783  | 117   | 2057     | 5.481     | ug/l # | 16       |
| 43) Isopropyl Acetate         | 8.118  | 43    | 778      | 1.711     | ug/l # | 85       |
| 52) Toluene                   | 10.246 | 92    | 3211     | 5.290     | ug/l   | 95       |
| 59) 2-Hexanone                | 10.843 | 43    | 226      | 1.227     | ug/l # | 26       |
| 68) m/p-Xylenes               | 11.697 | 106   | 1417     | 3.169     | ug/l   | 99       |
| 69) o-Xylene                  | 12.032 | 106   | 579      | 1.369     | ug/l   | 79       |
| 76) 1,2,3-Trichloropropane    | 12.477 | 75    | 5859     | 40.816    | ug/l # | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.477 | 75    | 5859     | 83.491    | ug/l # | 12       |
| 84) 1,2,4-Trimethylbenzene    | 13.123 | 105   | 2134     | 3.340     | ug/l   | 98       |
| 86) p-Isopropyltoluene        | 13.367 | 119   | 3535     | 5.145     | ug/l   | 91       |
| 93) 1,2,4-Trichlorobenzene    | 15.013 | 180   | 264      | 1.319     | ug/l # | 57       |
| 95) Naphthalene               | 15.233 | 128   | 1411     | 3.250     | ug/l # | 95       |
| 96) 1,2,3-Trichlorobenzene    | 15.428 | 180   | 256      | 1.435     | ug/l # | 62       |
| -----                         |        |       |          |           |        |          |

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

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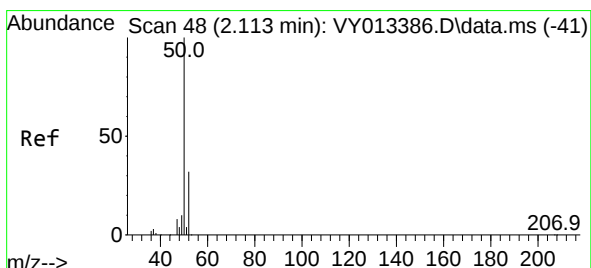
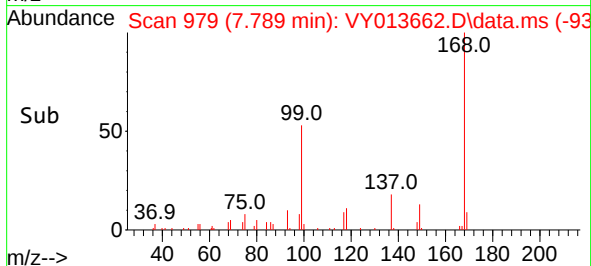
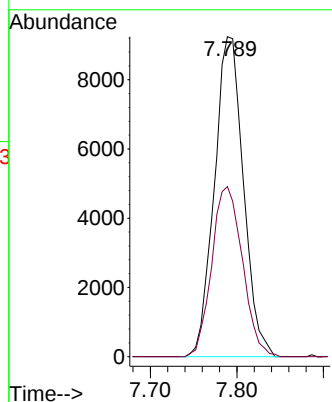
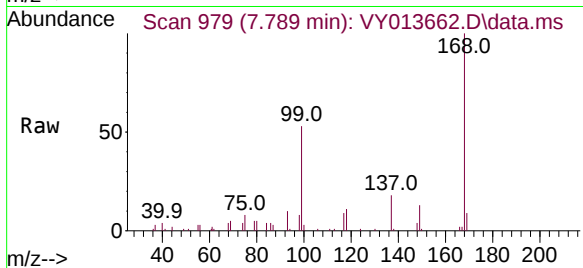




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.789 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

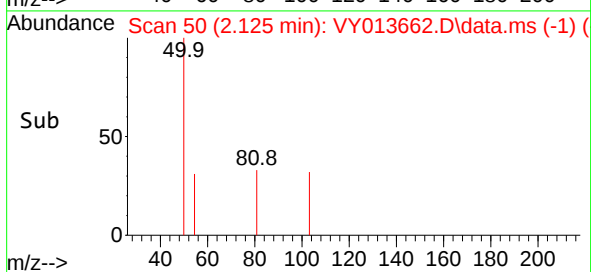
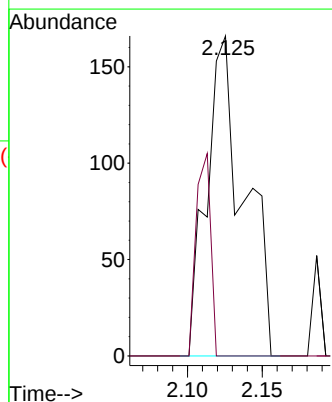
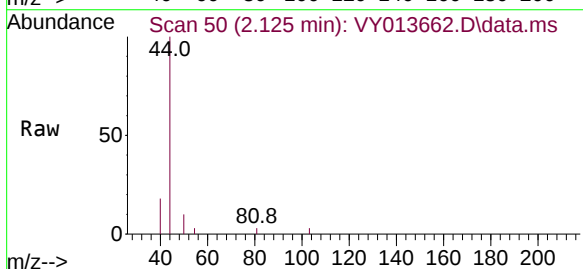
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

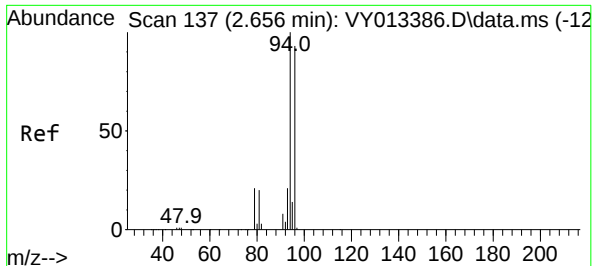
Tgt Ion:168 Resp: 21535  
Ion Ratio Lower Upper  
168 100  
99 53.2 41.8 62.6



#3  
Chloromethane  
Concen: 1.053 ug/l  
RT: 2.125 min Scan# 50  
Delta R.T. 0.012 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion: 50 Resp: 289  
Ion Ratio Lower Upper  
50 100  
52 0.0 25.9 38.9#

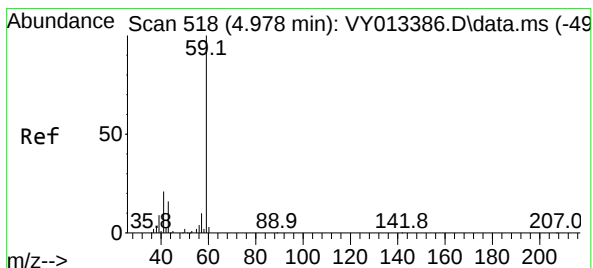
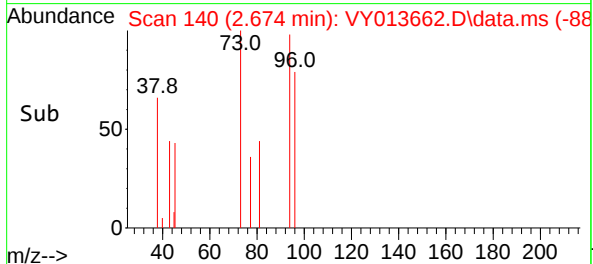
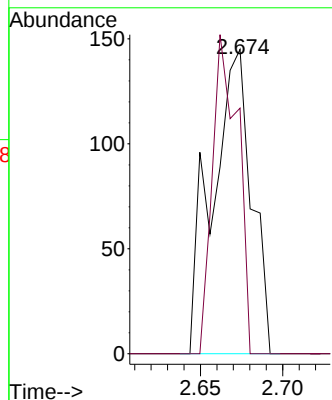
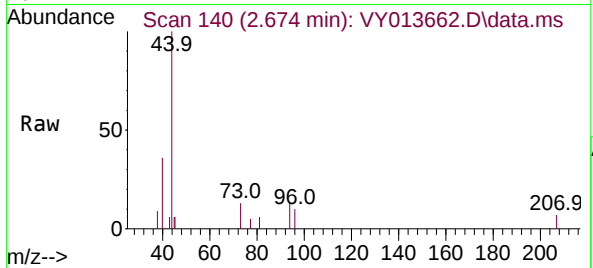




#5  
Bromomethane  
Concen: 1.107 ug/l  
RT: 2.674 min Scan# 14  
Delta R.T. 0.018 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

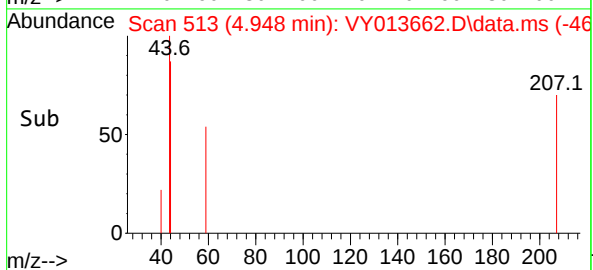
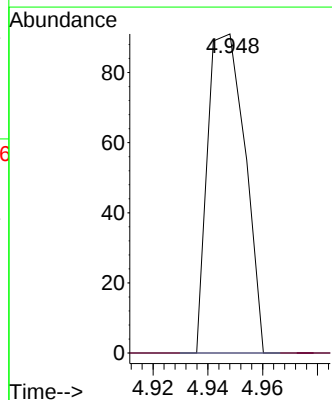
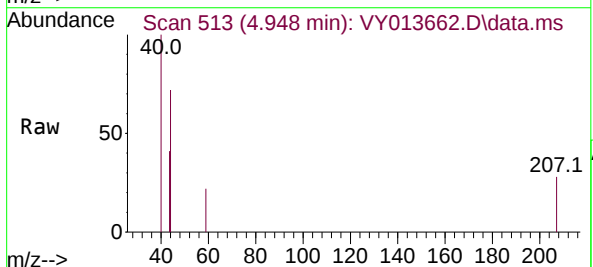
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

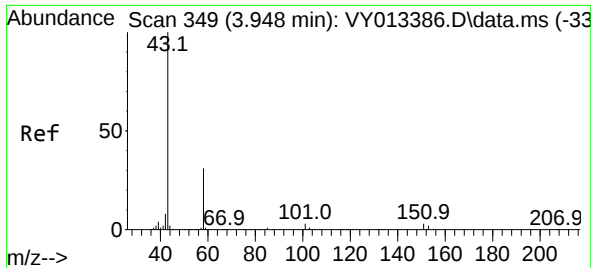
Tgt Ion: 94 Resp: 241  
Ion Ratio Lower Upper  
94 100  
96 80.7 74.2 111.2



#11  
Tert butyl alcohol  
Concen: 3.876 ug/l  
RT: 4.948 min Scan# 513  
Delta R.T. -0.030 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion: 59 Resp: 86  
Ion Ratio Lower Upper  
59 100  
57 0.0 3.0 4.4#





#16

Acetone

Concen: 77.167 ug/l

RT: 3.948 min Scan# 349

Delta R.T. 0.000 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

Instrument :

MSVOA\_Y

ClientSampleId :

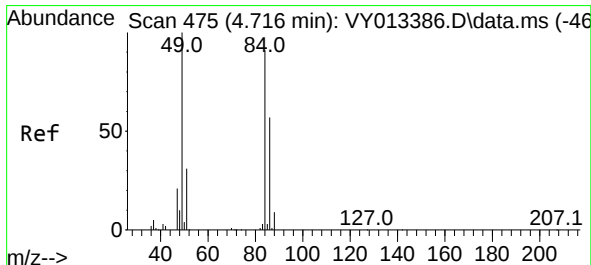
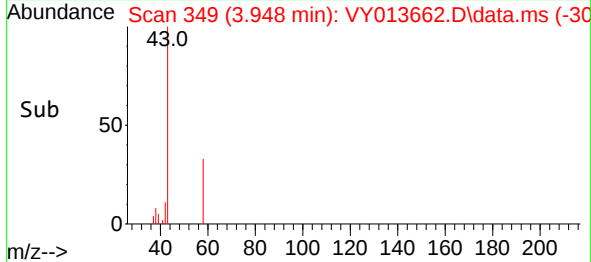
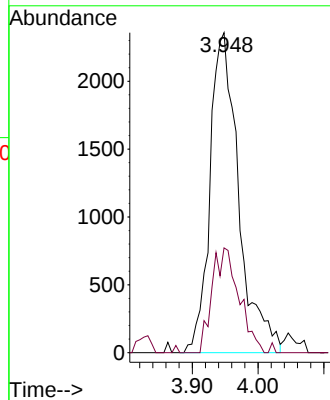
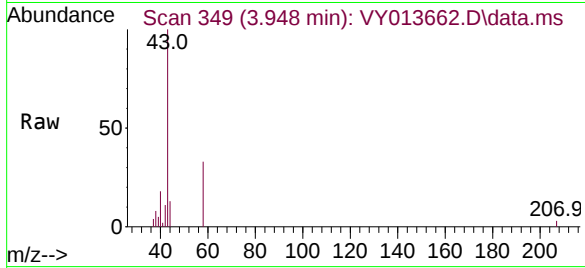
503RE

Tgt Ion: 43 Resp: 7174

Ion Ratio Lower Upper

43 100

58 32.7 25.4 38.0



#20

Methylene Chloride

Concen: Below Cal

RT: 4.710 min Scan# 474

Delta R.T. -0.006 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

Tgt Ion: 84 Resp: 1473

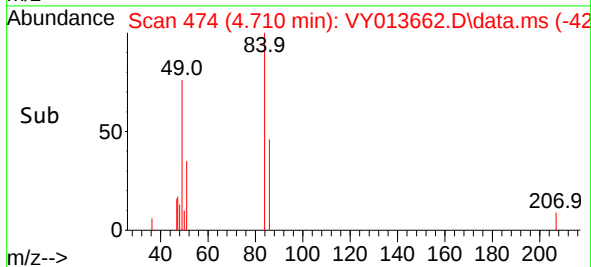
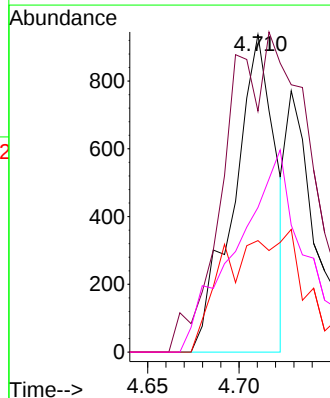
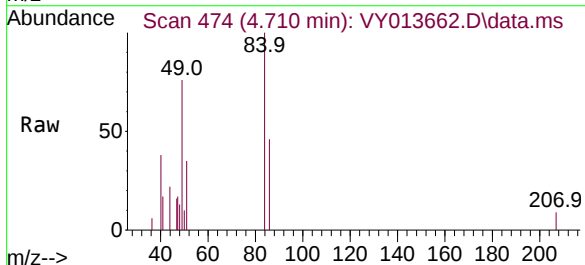
Ion Ratio Lower Upper

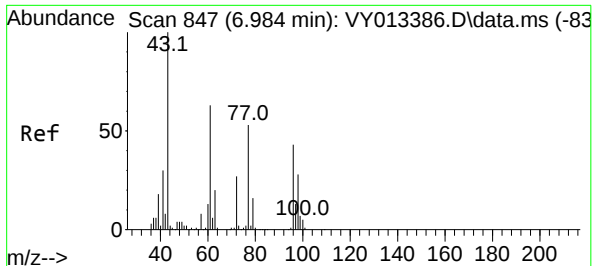
84 100

49 63.5 88.0 132.0#

51 35.1 27.4 41.0

86 45.6 50.4 75.6#





#25

2-Butanone

Concen: 7.947 ug/l

RT: 7.003 min Scan# 81

Delta R.T. 0.019 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

Instrument :

MSVOA\_Y

ClientSampleId :

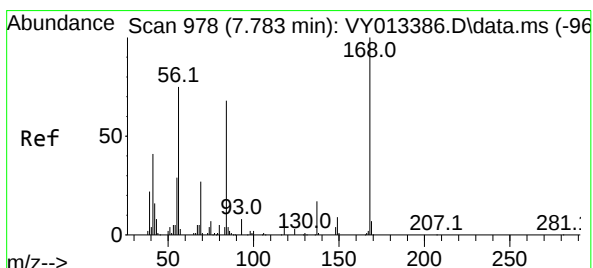
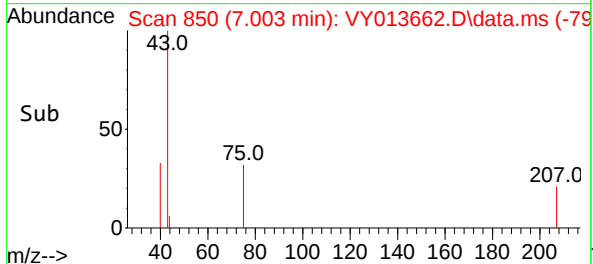
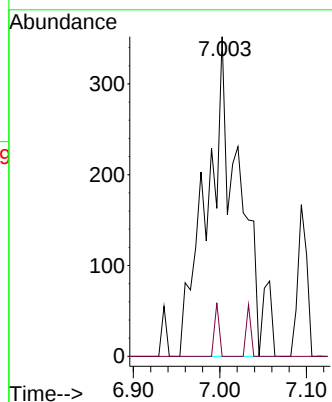
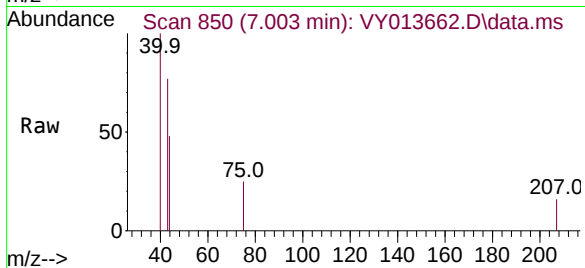
503RE

Tgt Ion: 43 Resp: 937

Ion Ratio Lower Upper

43 100

72 0.0 21.9 32.9#



#31

Cyclohexane

Concen: 1.800 ug/l

RT: 7.783 min Scan# 978

Delta R.T. -0.000 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

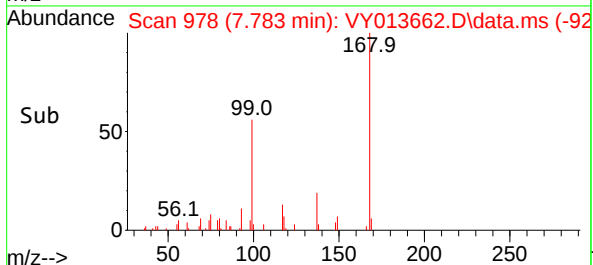
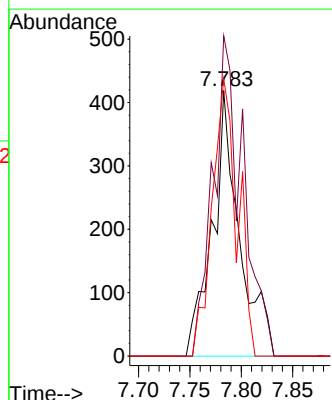
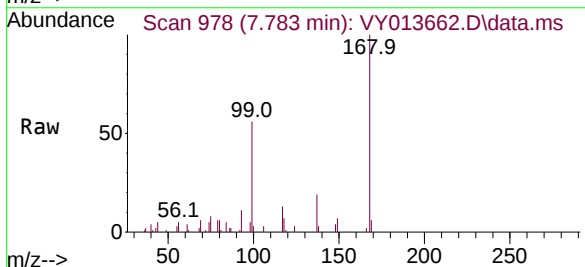
Tgt Ion: 56 Resp: 761

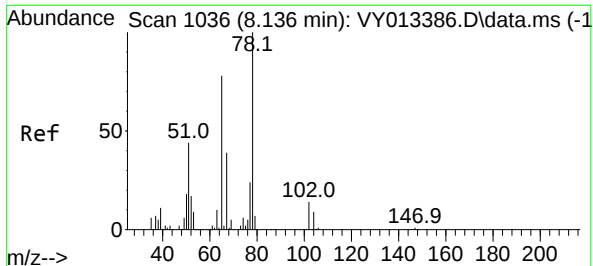
Ion Ratio Lower Upper

56 100

69 120.5 29.2 43.8#

84 104.3 73.0 109.6





#33

1,2-Dichloroethane-d4

Concen: 65.578 ug/l

RT: 8.143 min Scan# 1037

Delta R.T. 0.007 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

Instrument :

MSVOA\_Y

ClientSampleId :

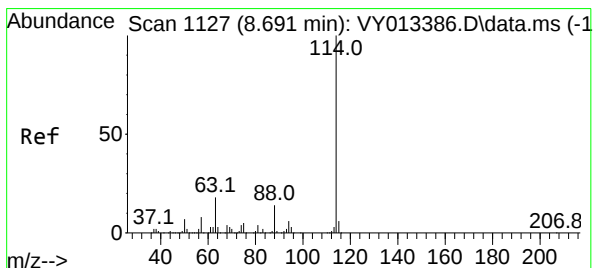
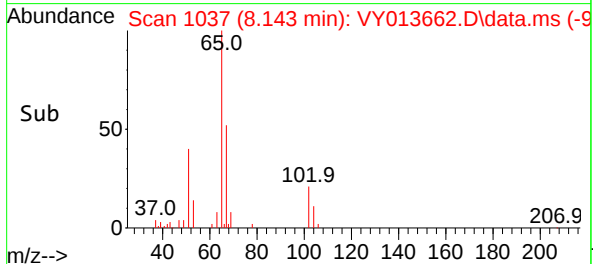
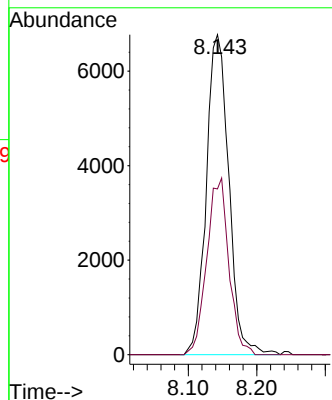
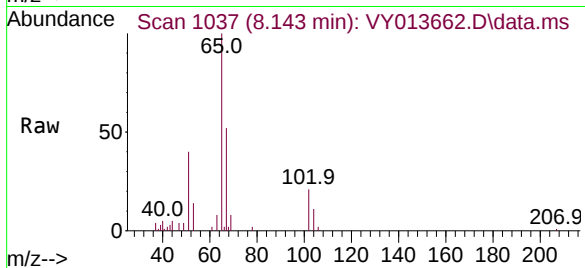
503RE

Tgt Ion: 65 Resp: 15481

Ion Ratio Lower Upper

65 100

67 54.0 0.0 103.4



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.691 min Scan# 1127

Delta R.T. 0.000 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

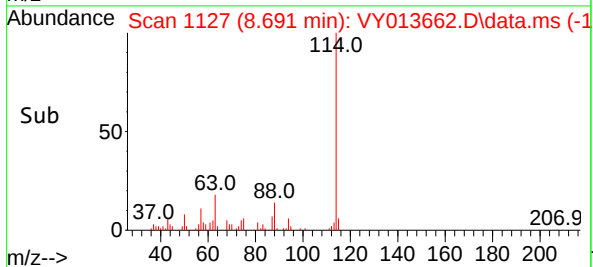
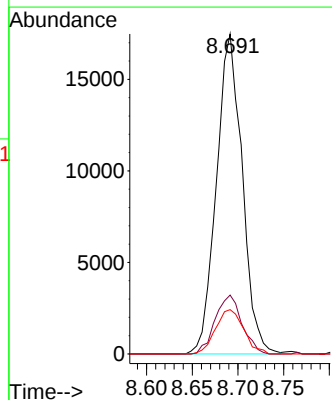
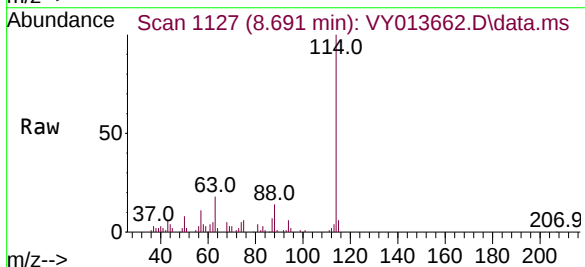
Tgt Ion: 114 Resp: 34303

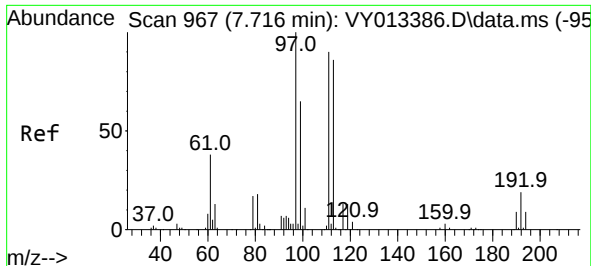
Ion Ratio Lower Upper

114 100

63 18.4 0.0 36.6

88 13.9 0.0 28.8

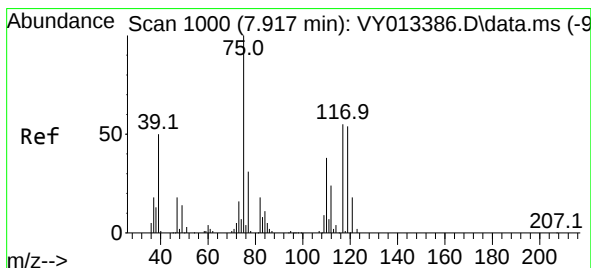
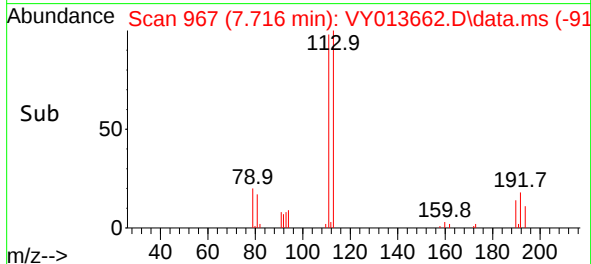
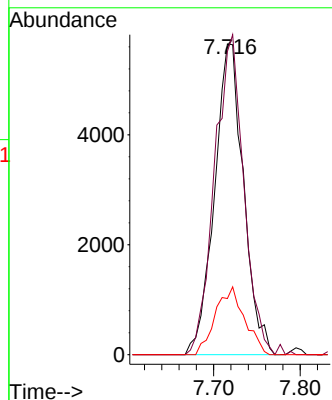
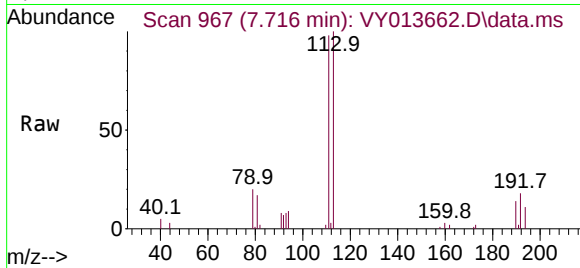




#35  
Dibromofluoromethane  
Concen: 61.136 ug/l  
RT: 7.716 min Scan# 911  
Delta R.T. -0.000 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

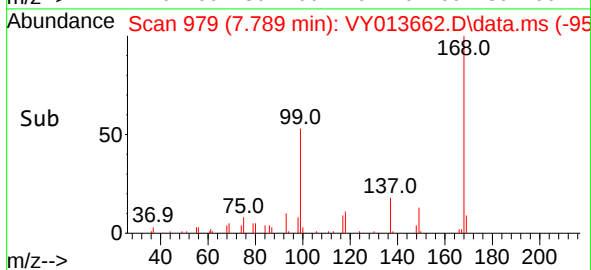
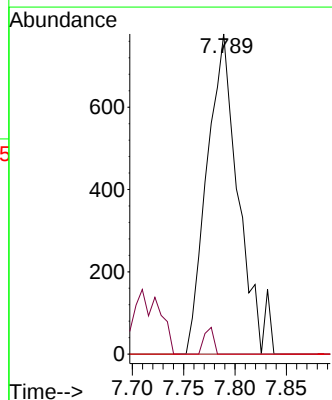
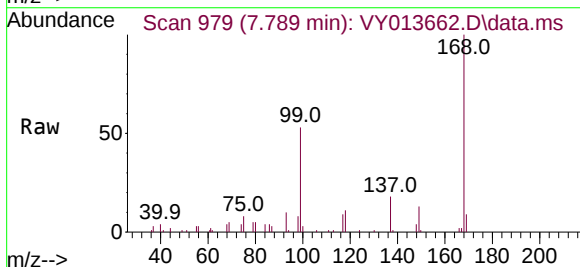
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

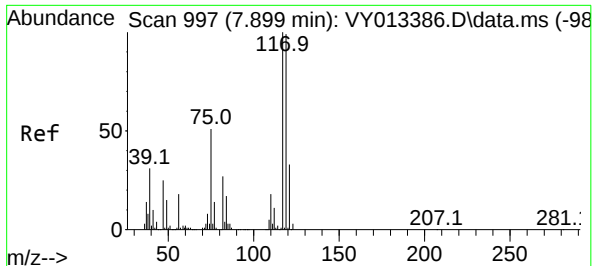
Tgt Ion:113 Resp: 13190  
Ion Ratio Lower Upper  
113 100  
111 102.7 82.2 123.2  
192 21.8 16.7 25.1



#36  
1,1-Dichloropropene  
Concen: 4.625 ug/l  
RT: 7.789 min Scan# 979  
Delta R.T. -0.128 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion: 75 Resp: 1656  
Ion Ratio Lower Upper  
75 100  
110 2.5 18.7 56.1#  
77 0.0 24.6 37.0#

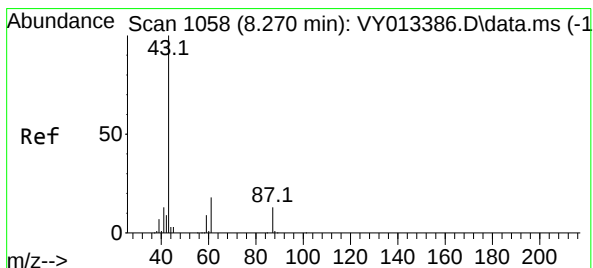
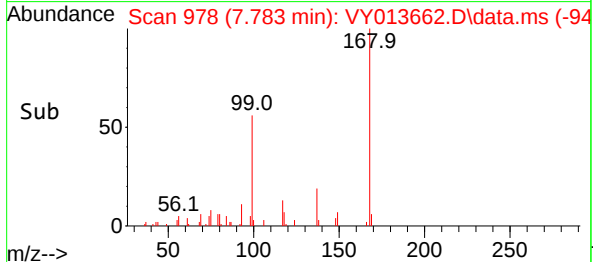
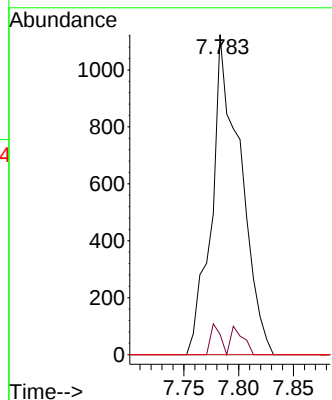
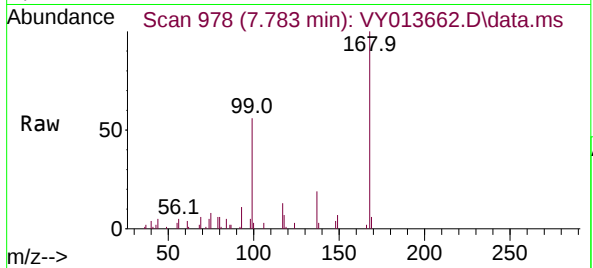




#38  
Carbon Tetrachloride  
Concen: 5.481 ug/l  
RT: 7.783 min Scan# 91  
Delta R.T. -0.116 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

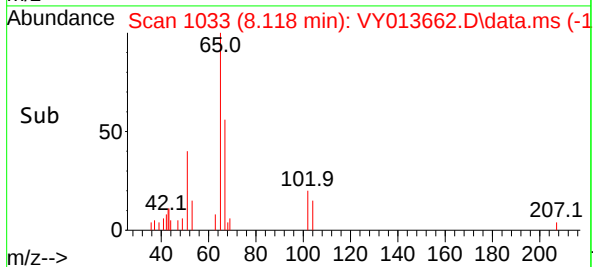
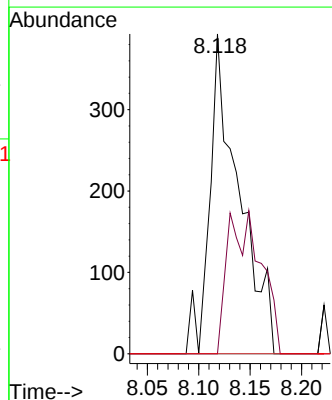
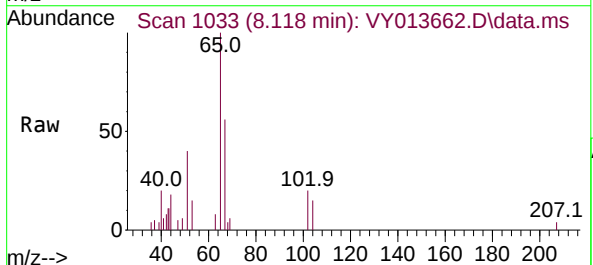
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

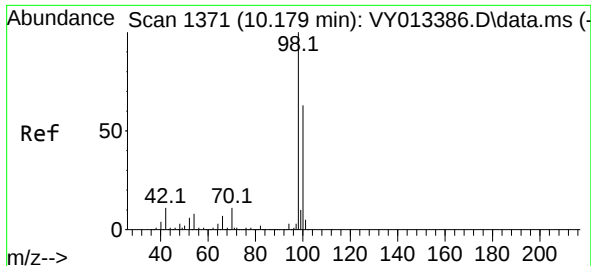
Tgt Ion:117 Resp: 2057  
Ion Ratio Lower Upper  
117 100  
119 6.3 79.0 118.6#  
121 0.0 26.6 40.0#



#43  
Isopropyl Acetate  
Concen: 1.711 ug/l  
RT: 8.118 min Scan# 1033  
Delta R.T. -0.152 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion: 43 Resp: 778  
Ion Ratio Lower Upper  
43 100  
61 24.6 22.2 33.4  
87 0.0 11.0 16.6#

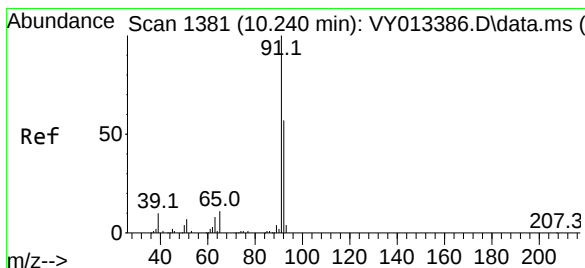
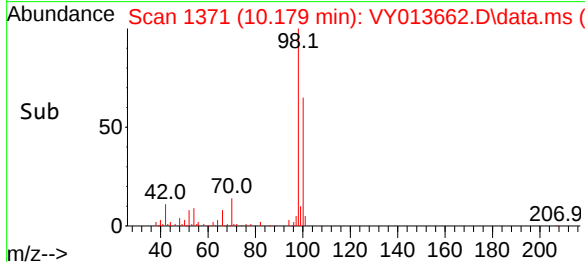
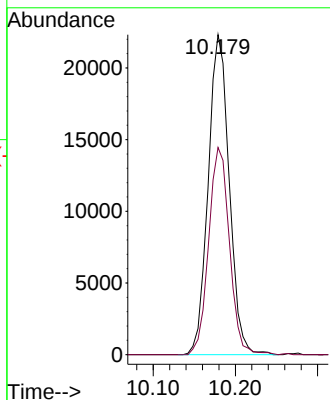
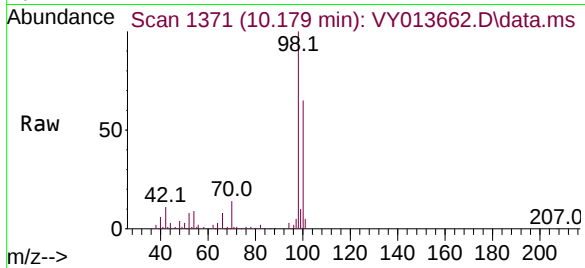




#50  
Toluene-d8  
Concen: 51.629 ug/l  
RT: 10.179 min Scan# 1371  
Delta R.T. -0.000 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

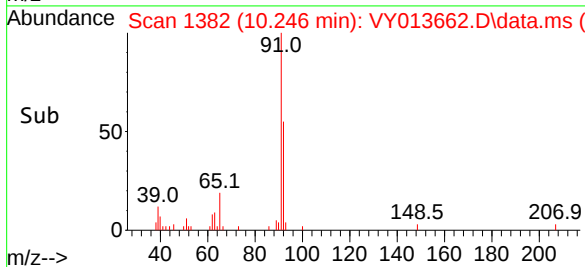
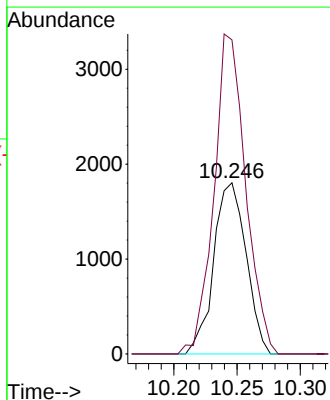
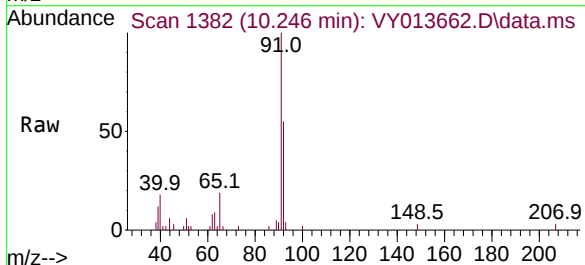
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

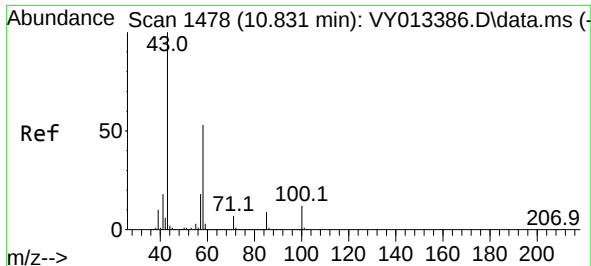
Tgt Ion: 98 Resp: 39626  
Ion Ratio Lower Upper  
98 100  
100 64.1 50.5 75.7



#52  
Toluene  
Concen: 5.290 ug/l  
RT: 10.246 min Scan# 1382  
Delta R.T. 0.006 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion: 92 Resp: 3211  
Ion Ratio Lower Upper  
92 100  
91 182.8 140.2 210.4

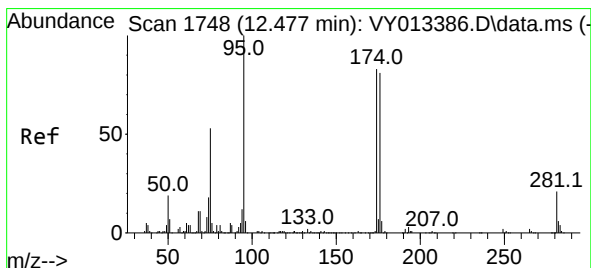
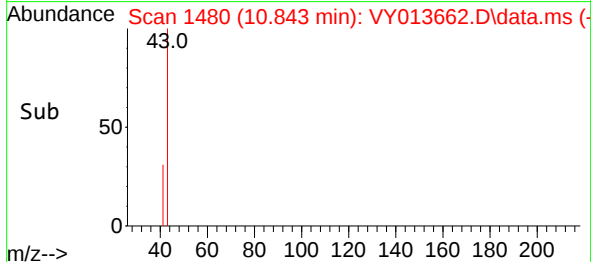
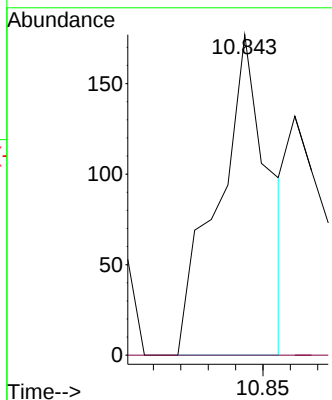
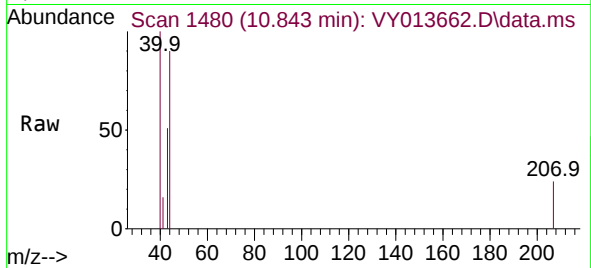




#59  
2-Hexanone  
Concen: 1.227 ug/l  
RT: 10.843 min Scan# 1478  
Delta R.T. 0.012 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

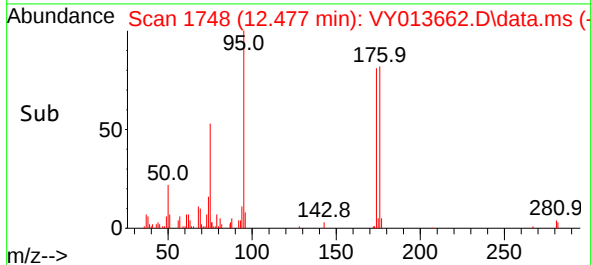
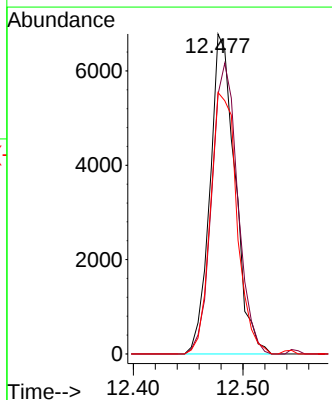
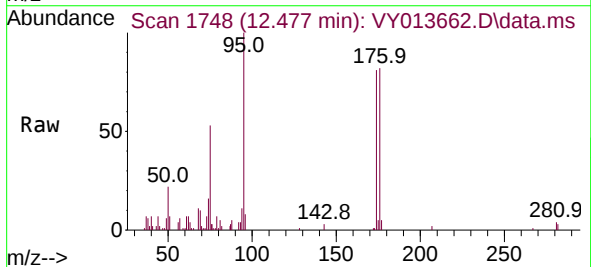
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

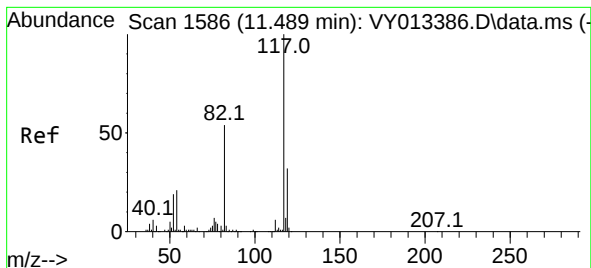
Tgt Ion: 43 Resp: 226  
Ion Ratio Lower Upper  
43 100  
58 0.0 26.3 78.8#



#62  
4-Bromofluorobenzene  
Concen: 41.755 ug/l  
RT: 12.477 min Scan# 1748  
Delta R.T. 0.000 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion: 95 Resp: 10804  
Ion Ratio Lower Upper  
95 100  
174 93.7 0.0 182.0  
176 86.4 0.0 175.4

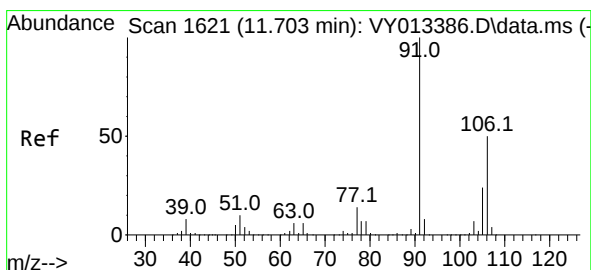
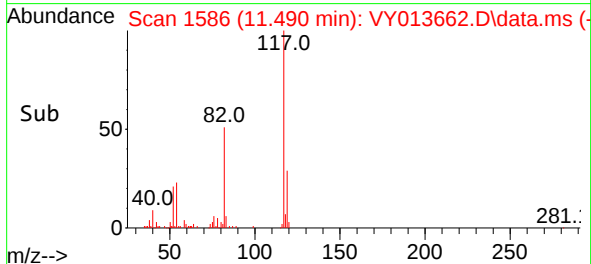
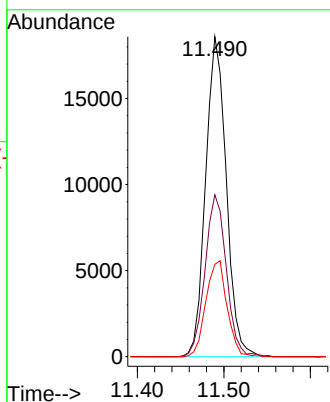
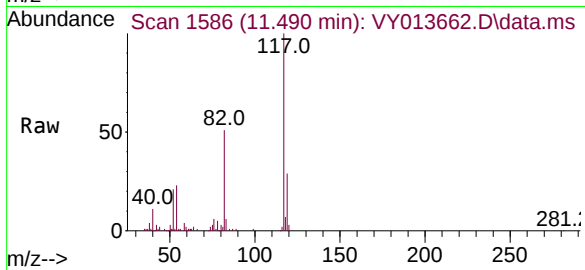




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.490 min Scan# 117  
Delta R.T. 0.001 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

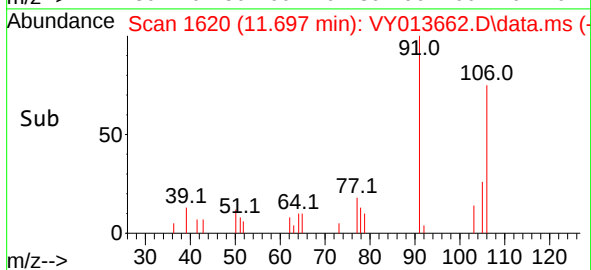
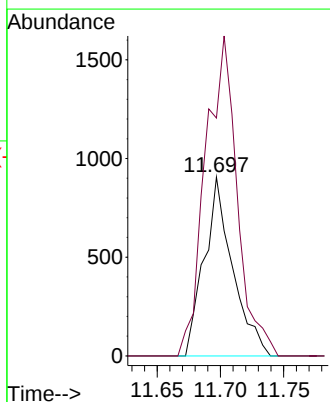
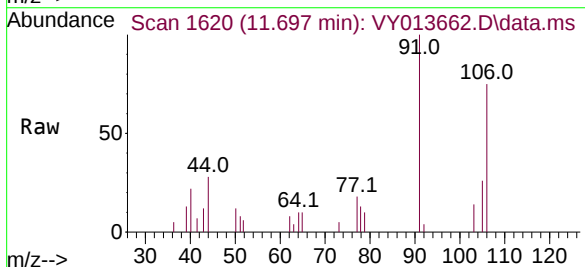
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

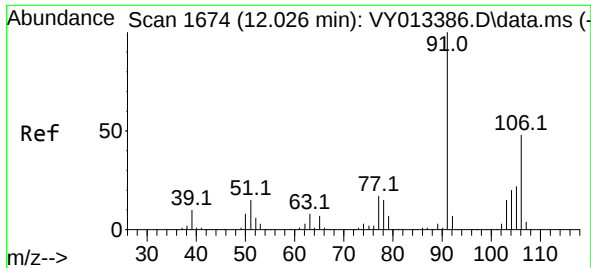
Tgt Ion:117 Resp: 30752  
Ion Ratio Lower Upper  
117 100  
82 50.6 43.0 64.6  
119 28.9 25.5 38.3



#68  
m/p-Xylenes  
Concen: 3.169 ug/l  
RT: 11.697 min Scan# 1620  
Delta R.T. -0.006 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion:106 Resp: 1417  
Ion Ratio Lower Upper  
106 100  
91 199.6 160.9 241.3

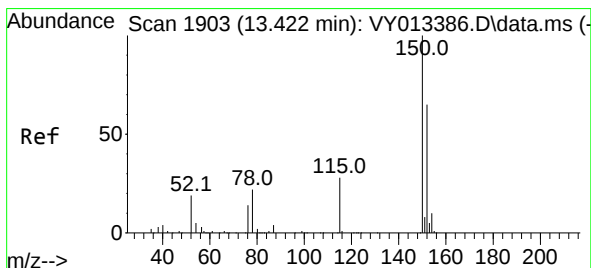
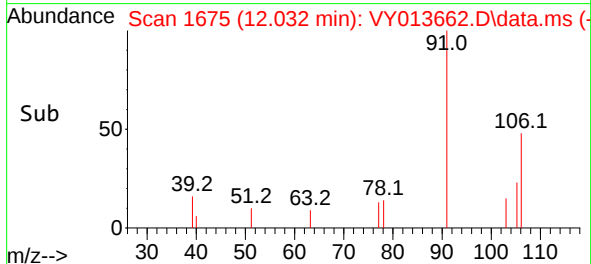
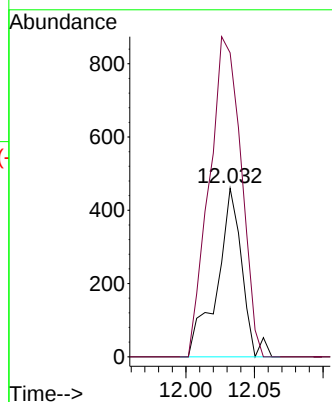
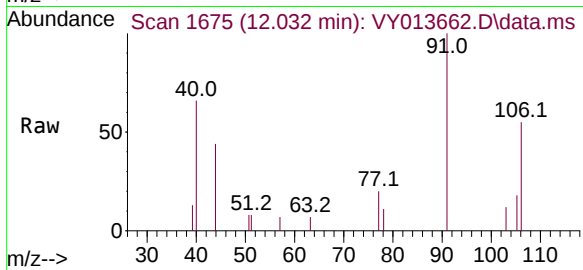




#69  
o-Xylene  
Concen: 1.369 ug/l  
RT: 12.032 min Scan# 110  
Delta R.T. 0.006 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

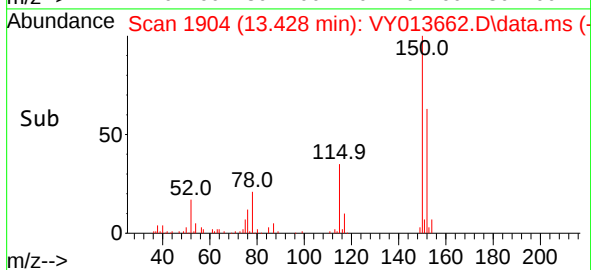
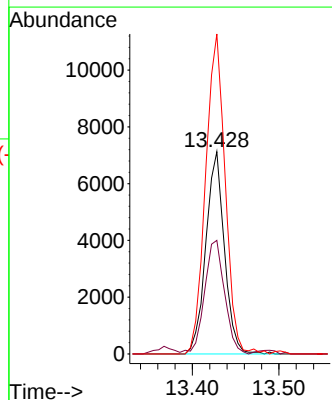
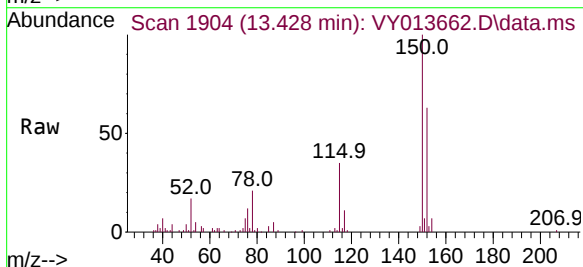
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

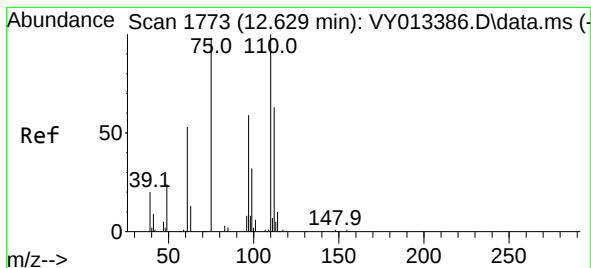
Tgt Ion:106 Resp: 579  
Ion Ratio Lower Upper  
106 100  
91 244.0 105.5 316.4



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.428 min Scan# 1904  
Delta R.T. 0.006 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion:152 Resp: 10644  
Ion Ratio Lower Upper  
152 100  
115 60.3 28.1 84.2  
150 166.4 0.0 352.0

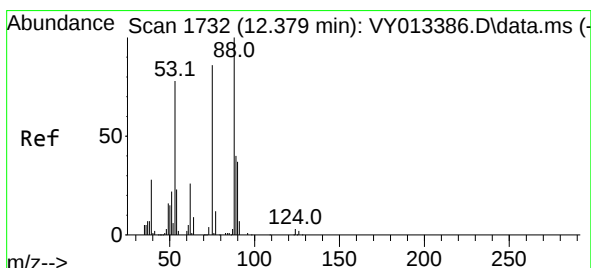
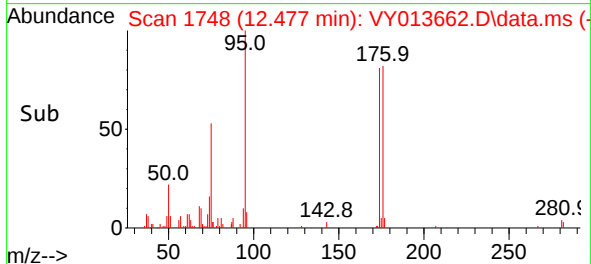
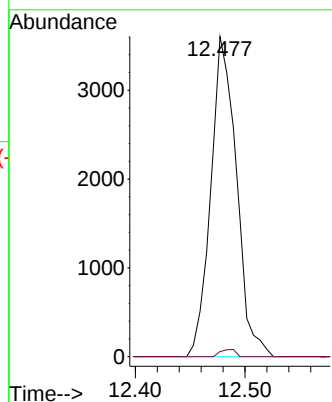
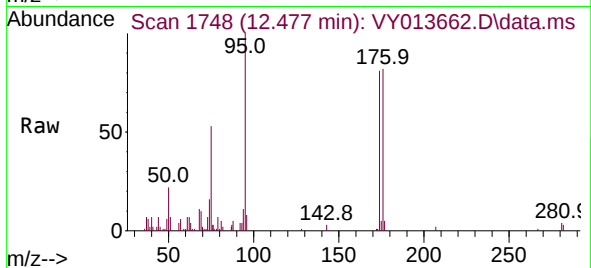




#76  
1,2,3-Trichloropropane  
Concen: 40.816 ug/l  
RT: 12.477 min Scan# 1748  
Delta R.T. -0.152 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

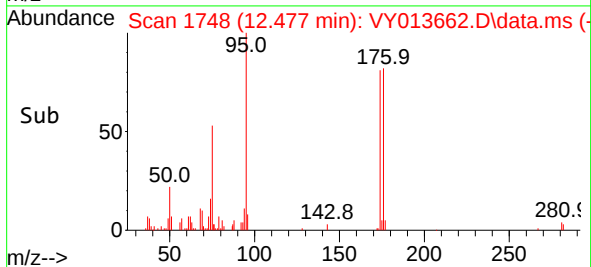
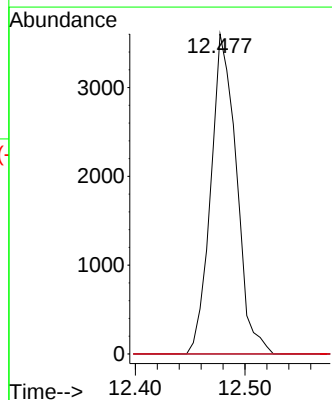
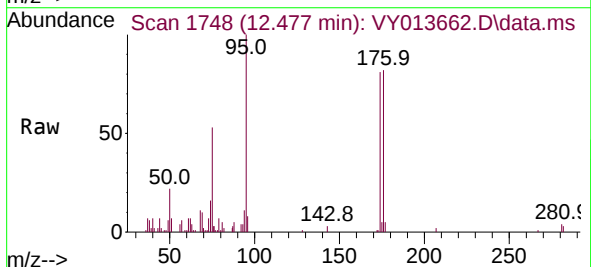
Instrument :  
MSVOA\_Y  
ClientSampleId :  
503RE

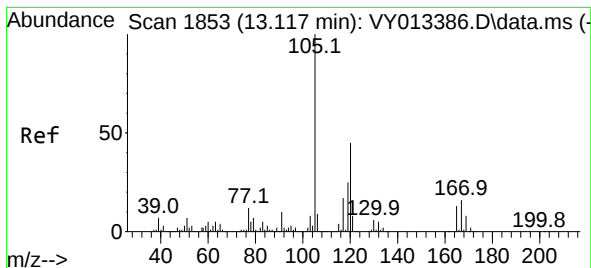
Tgt Ion: 75 Resp: 5859  
Ion Ratio Lower Upper  
75 100  
77 1.3 0.0 0.0#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 83.491 ug/l  
RT: 12.477 min Scan# 1748  
Delta R.T. 0.098 min  
Lab File: VY013662.D  
Acq: 09 May 2023 12:51

Tgt Ion: 75 Resp: 5859  
Ion Ratio Lower Upper  
75 100  
53 0.0 73.2 109.8#  
89 0.0 38.0 57.0#





#84

1,2,4-Trimethylbenzene

Concen: 3.340 ug/l

RT: 13.123 min Scan# 1853

Delta R.T. 0.006 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

Instrument :

MSVOA\_Y

ClientSampleId :

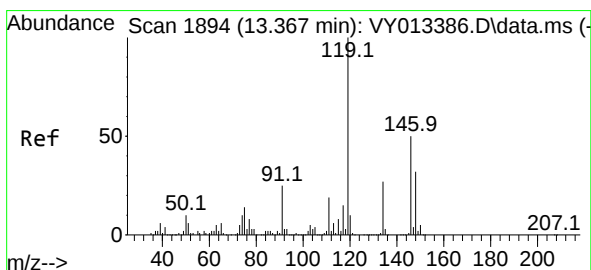
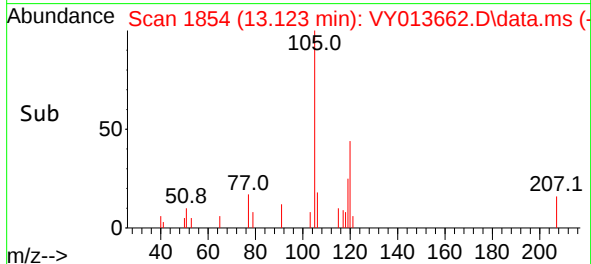
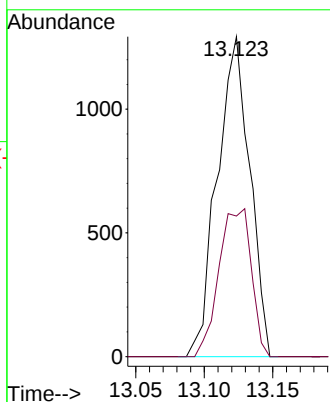
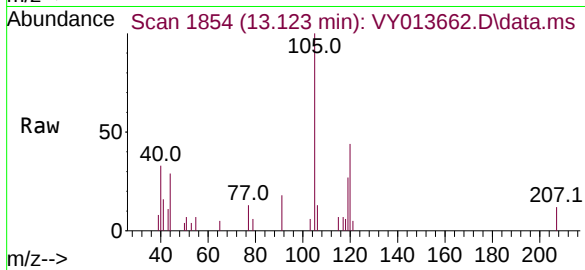
503RE

Tgt Ion:105 Resp: 2134

Ion Ratio Lower Upper

105 100

120 46.0 22.3 66.9



#86

p-Isopropyltoluene

Concen: 5.145 ug/l

RT: 13.367 min Scan# 1894

Delta R.T. 0.000 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

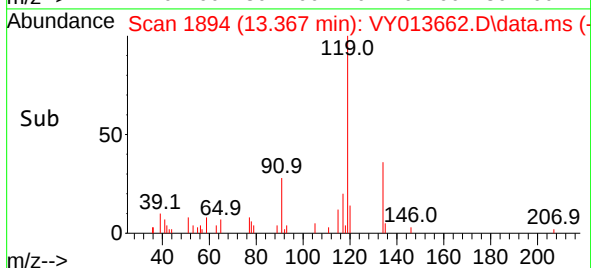
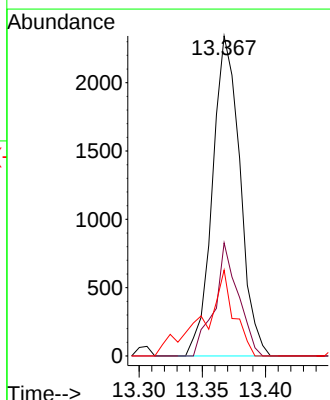
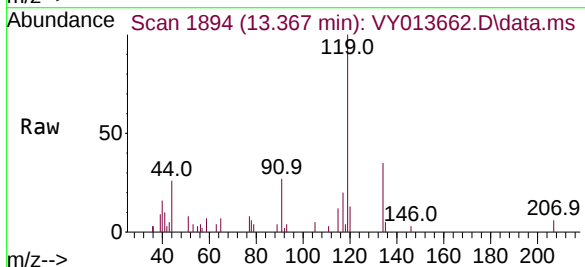
Tgt Ion:119 Resp: 3535

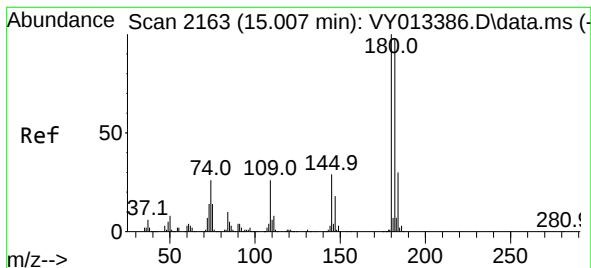
Ion Ratio Lower Upper

119 100

134 30.4 13.4 40.2

91 30.2 12.1 36.3





#93

1,2,4-Trichlorobenzene

Concen: 1.319 ug/l

RT: 15.013 min Scan# 2163

Delta R.T. 0.006 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

Instrument :

MSVOA\_Y

ClientSampleId :

503RE

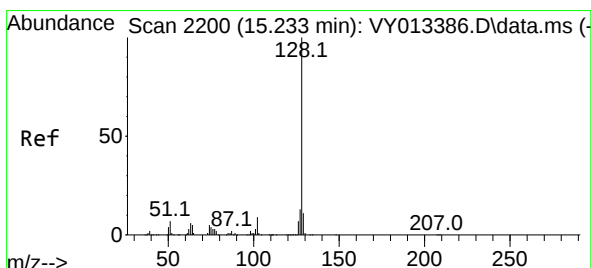
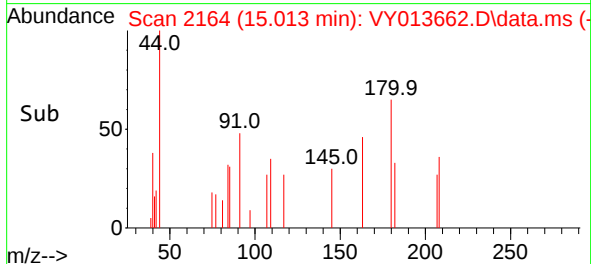
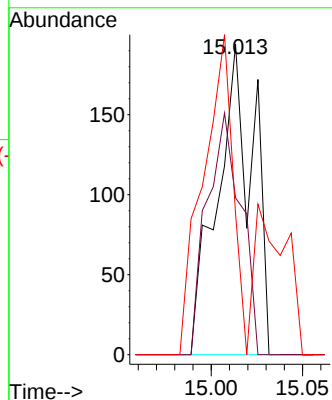
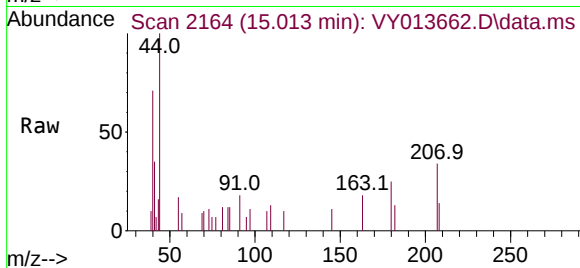
Tgt Ion:180 Resp: 264

Ion Ratio Lower Upper

180 100

182 73.9 48.5 145.5

145 86.4 15.0 45.0#



#95

Naphthalene

Concen: 3.250 ug/l

RT: 15.233 min Scan# 2200

Delta R.T. -0.000 min

Lab File: VY013662.D

Acq: 09 May 2023 12:51

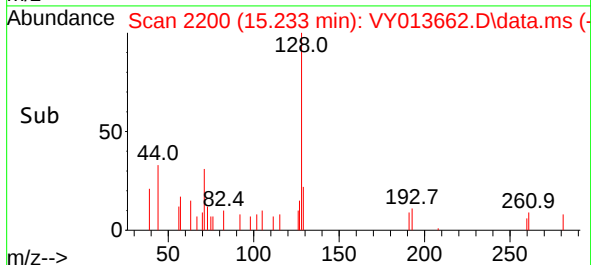
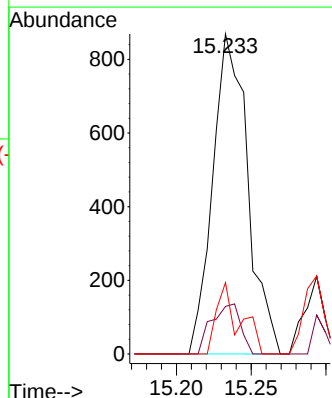
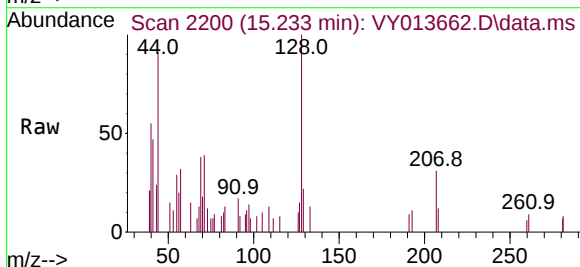
Tgt Ion:128 Resp: 1411

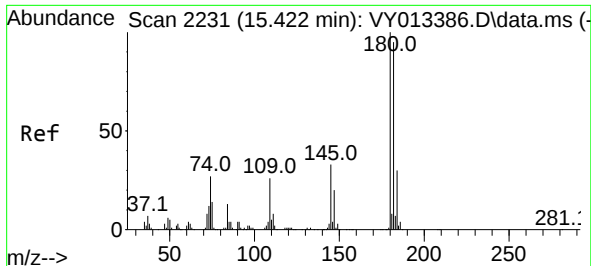
Ion Ratio Lower Upper

128 100

127 13.0 10.7 16.1

129 14.6 8.8 13.2#





#96  
 1,2,3-Trichlorobenzene  
 Concen: 1.435 ug/l  
 RT: 15.428 min Scan# 21  
 Delta R.T. 0.006 min  
 Lab File: VY013662.D  
 Acq: 09 May 2023 12:51

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 503RE

Tgt Ion:180 Resp: 256  
 Ion Ratio Lower Upper  
 180 100  
 182 101.6 47.1 141.3  
 145 103.1 15.9 47.7#

