

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY101424\  
 Data File : VY019893.D  
 Acq On : 14 Oct 2024 16:27  
 Operator : SY/MD  
 Sample : P4395-01  
 Misc : 5.24g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :

Quant Time: Oct 15 01:38:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 10 05:30:07 2024  
 Response via : Initial Calibration

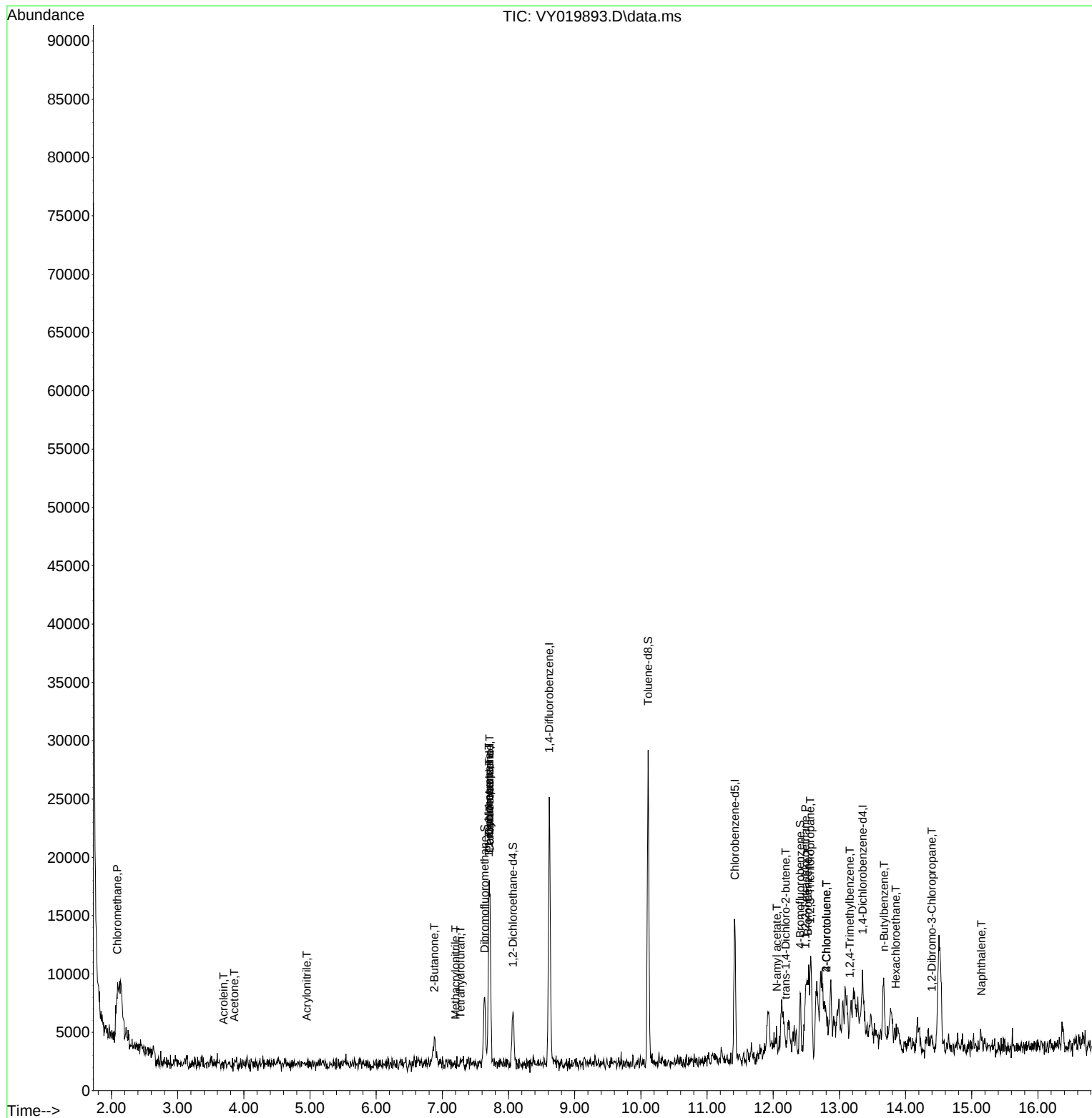
| Compound                      | R.T.   | QIon  | Response | Conc     | Units | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|-------|----------|
| -----                         |        |       |          |          |       |          |
| Internal Standards            |        |       |          |          |       |          |
| 1) Pentafluorobenzene         | 7.713  | 168   | 11525    | 50.000   | ug/l  | # 0.00   |
| 34) 1,4-Difluorobenzene       | 8.616  | 114   | 18133    | 50.000   | ug/l  | 0.00     |
| 63) Chlorobenzene-d5          | 11.420 | 117   | 6780     | 50.000   | ug/l  | # 0.00   |
| 72) 1,4-Dichlorobenzene-d4    | 13.353 | 152   | 898      | 50.000   | ug/l  | # 0.00   |
| System Monitoring Compounds   |        |       |          |          |       |          |
| 33) 1,2-Dichloroethane-d4     | 8.067  | 65    | 3656     | 25.763   | ug/l  | 0.00     |
| Spiked Amount                 | 50.000 | Range | 50 - 163 | Recovery | =     | 51.520%  |
| 35) Dibromofluoromethane      | 7.640  | 113   | 3751     | 31.348   | ug/l  | 0.00     |
| Spiked Amount                 | 50.000 | Range | 54 - 147 | Recovery | =     | 62.700%  |
| 50) Toluene-d8                | 10.109 | 98    | 15969    | 36.139   | ug/l  | 0.00     |
| Spiked Amount                 | 50.000 | Range | 58 - 134 | Recovery | =     | 72.280%  |
| 62) 4-Bromofluorobenzene      | 12.408 | 95    | 1687     | 10.566   | ug/l  | 0.00     |
| Spiked Amount                 | 50.000 | Range | 29 - 146 | Recovery | =     | 21.140%# |
| Target Compounds              |        |       |          |          |       |          |
|                               |        |       |          |          |       | Qvalue   |
| 3) Chloromethane              | 2.086  | 50    | 201      | 1.439    | ug/l  | # 43     |
| 13) Acrolein                  | 3.696  | 56    | 44       | 4.220    | ug/l  | # 15     |
| 15) Acrylonitrile             | 4.952  | 53    | 112      | 3.524    | ug/l  | # 18     |
| 16) Acetone                   | 3.854  | 43    | 157      | 4.250    | ug/l  | # 36     |
| 25) 2-Butanone                | 6.878  | 43    | 229      | 4.631    | ug/l  | # 41     |
| 29) Tetrahydrofuran           | 7.274  | 42    | 52       | 1.842    | ug/l  | # 26     |
| 31) Cyclohexane               | 7.707  | 56    | 388      | 1.636    | ug/l  | # 47     |
| 36) 1,1-Dichloropropene       | 7.701  | 75    | 1204     | 6.984    | ug/l  | # 43     |
| 38) Carbon Tetrachloride      | 7.713  | 117   | 1340     | 7.251    | ug/l  | # 13     |
| 41) Methacrylonitrile         | 7.201  | 41    | 54       | 1.110    | ug/l  | # 13     |
| 74) N-amyl acetate            | 12.054 | 43    | 219      | 10.947   | ug/l  | # 37     |
| 75) 1,1,2,2-Tetrachloroethane | 12.487 | 83    | 195      | 14.529   | ug/l  | # 73     |
| 76) 1,2,3-Trichloropropane    | 12.560 | 75    | 27       | 1.535    | ug/l  | # 100    |
| 77) Bromobenzene              | 12.523 | 156   | 586      | 36.560   | ug/l  | # 7      |
| 79) 2-Chlorotoluene           | 12.804 | 91    | 76       | 1.452    | ug/l  | 73       |
| 81) trans-1,4-Dichloro-2-b... | 12.188 | 75    | 46       | 10.555   | ug/l  | # 22     |
| 82) 4-Chlorotoluene           | 12.804 | 91    | 76       | 1.421    | ug/l  | 73       |
| 84) 1,2,4-Trimethylbenzene    | 13.157 | 105   | 117      | 1.935    | ug/l  | # 30     |
| 89) n-Butylbenzene            | 13.676 | 91    | 110      | 1.699    | ug/l  | # 33     |
| 90) Hexachloroethane          | 13.852 | 117   | 27       | 2.091    | ug/l  | # 12     |
| 92) 1,2-Dibromo-3-Chloropr... | 14.395 | 75    | 37       | 17.274   | ug/l  | # 1      |
| 95) Naphthalene               | 15.145 | 128   | 1378     | 45.813   | ug/l  | # 83     |
| -----                         |        |       |          |          |       |          |

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

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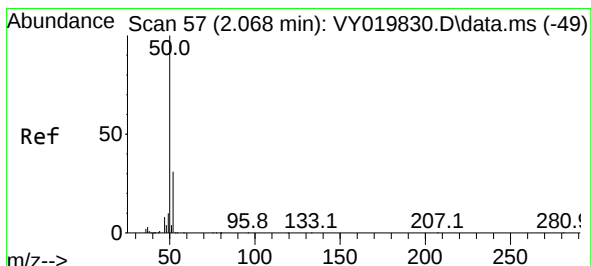
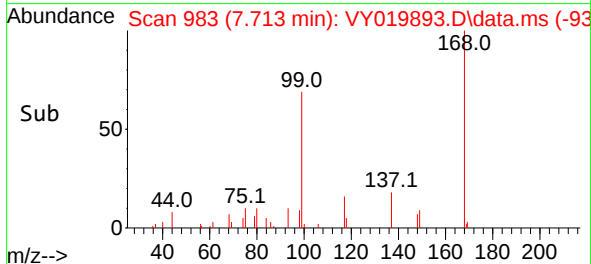
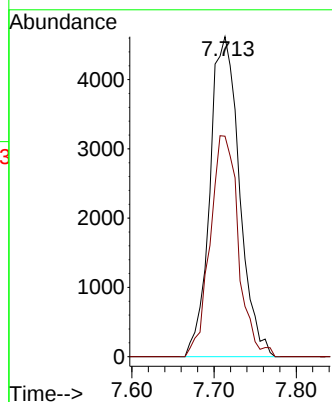
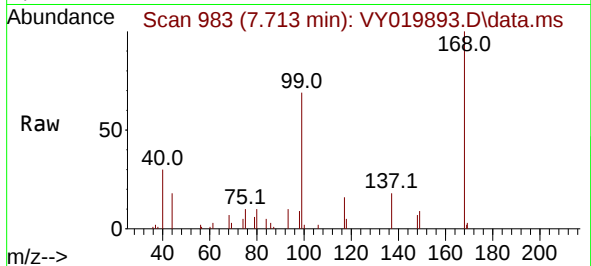




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.713 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

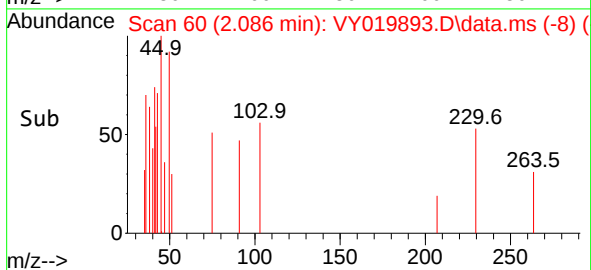
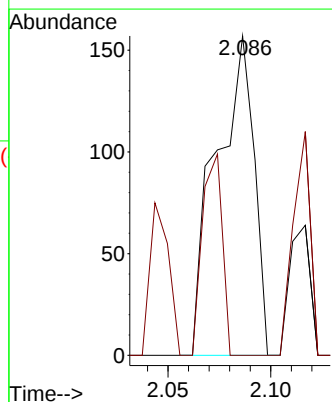
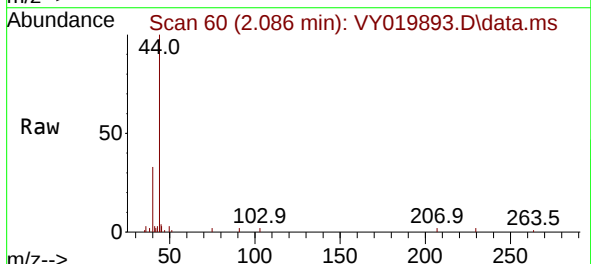
Instrument :  
MSVOA\_Y  
ClientSampleId :

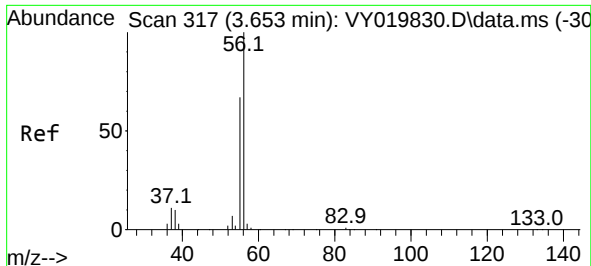
Tgt Ion:168 Resp: 11525  
Ion Ratio Lower Upper  
168 100  
99 68.9 39.1 58.7#



#3  
Chloromethane  
Concen: 1.439 ug/l  
RT: 2.086 min Scan# 60  
Delta R.T. 0.019 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

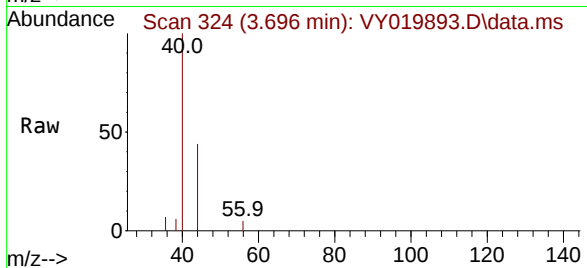
Tgt Ion: 50 Resp: 201  
Ion Ratio Lower Upper  
50 100  
52 0.0 25.6 38.4#



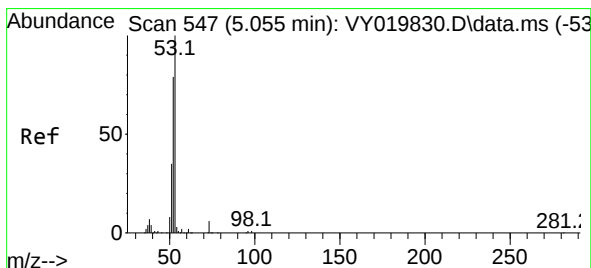
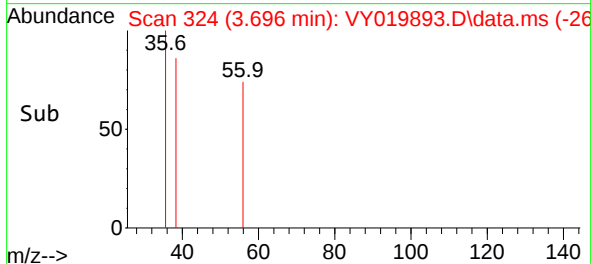
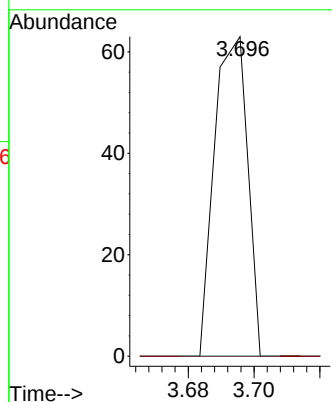


#13  
Acrolein  
Concen: 4.220 ug/l  
RT: 3.696 min Scan# 317  
Delta R.T. 0.043 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

Instrument :  
MSVOA\_Y  
ClientSampleId :

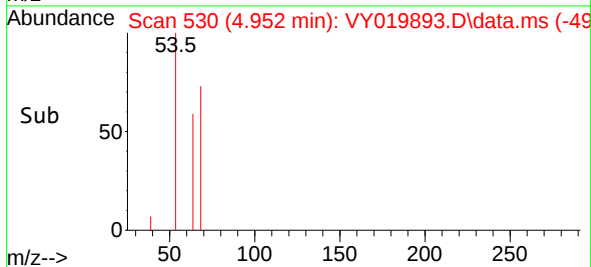
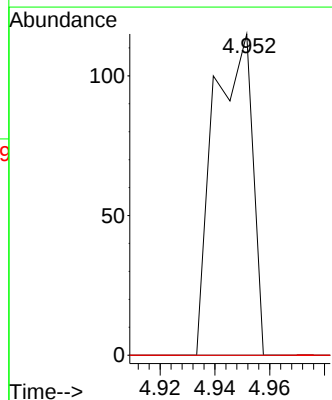
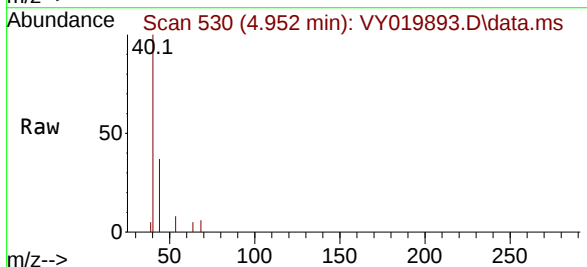


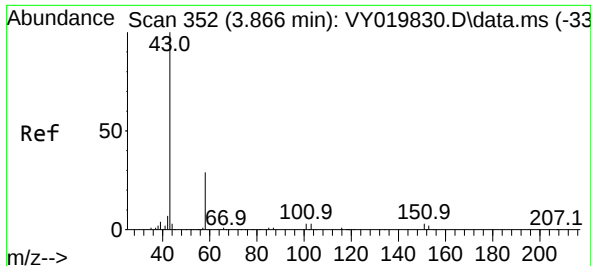
Tgt Ion: 56 Resp: 44  
Ion Ratio Lower Upper  
56 100  
55 0.0 55.7 83.5#



#15  
Acrylonitrile  
Concen: 3.524 ug/l  
RT: 4.952 min Scan# 530  
Delta R.T. -0.103 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

Tgt Ion: 53 Resp: 112  
Ion Ratio Lower Upper  
53 100  
52 0.0 64.7 97.1#  
51 0.0 28.4 42.6#

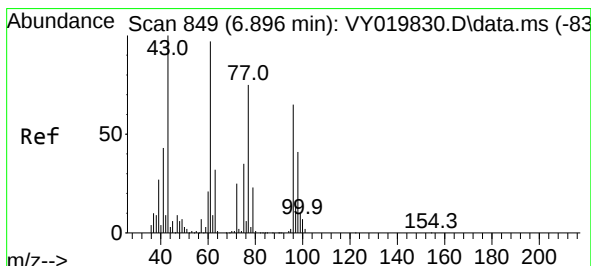
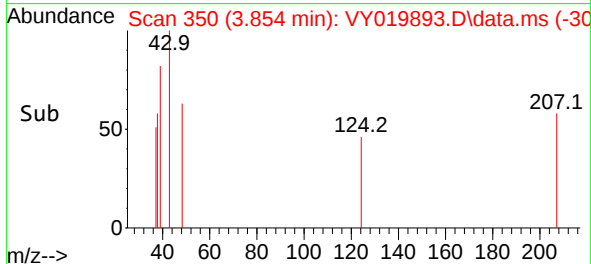
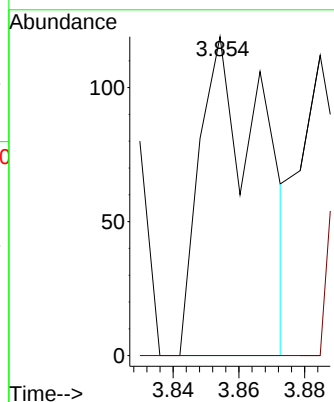
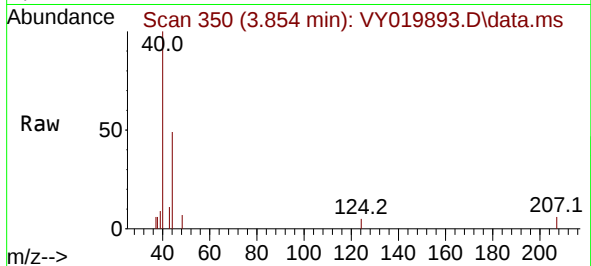




#16  
Acetone  
Concen: 4.250 ug/l  
RT: 3.854 min Scan# 31  
Delta R.T. -0.018 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

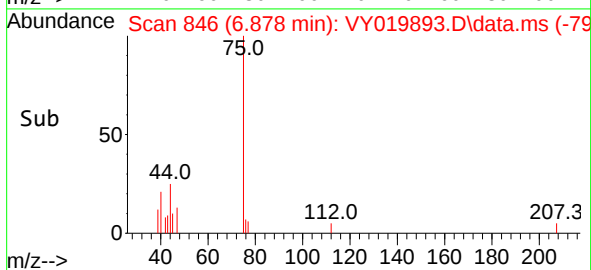
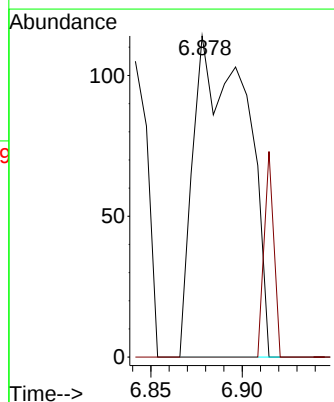
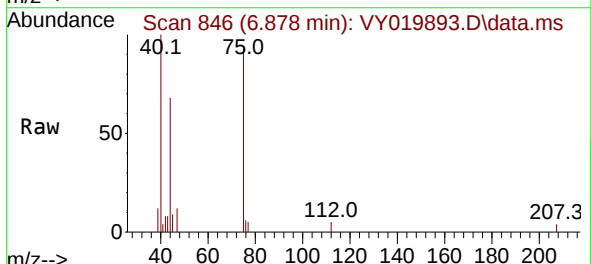
Instrument :  
MSVOA\_Y  
ClientSampleId :

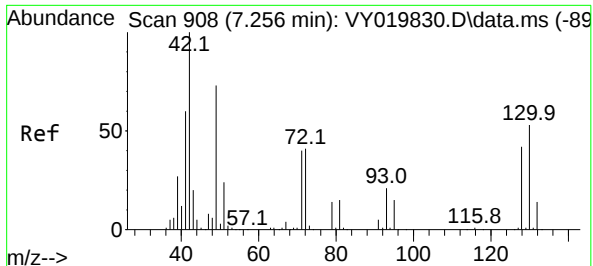
Tgt Ion: 43 Resp: 157  
Ion Ratio Lower Upper  
43 100  
58 0.0 31.7 47.5#



#25  
2-Butanone  
Concen: 4.631 ug/l  
RT: 6.878 min Scan# 846  
Delta R.T. -0.012 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

Tgt Ion: 43 Resp: 229  
Ion Ratio Lower Upper  
43 100  
72 0.0 27.3 40.9#





#29

Tetrahydrofuran

Concen: 1.842 ug/l

RT: 7.274 min Scan# 911

Delta R.T. 0.013 min

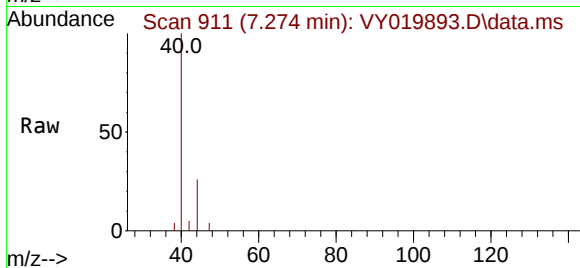
Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

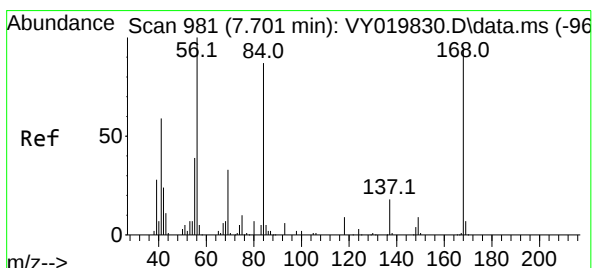
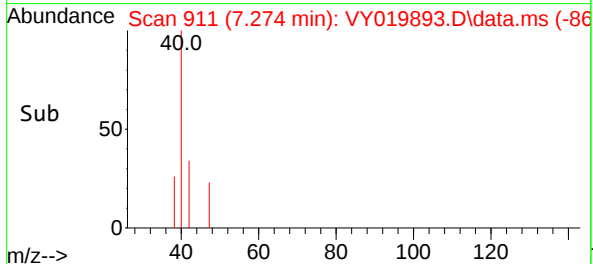
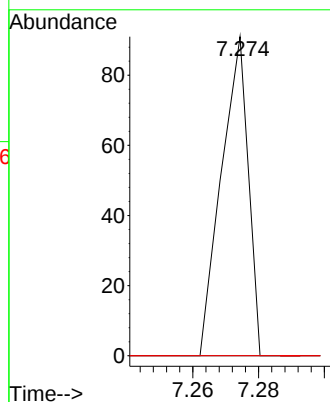
Instrument :

MSVOA\_Y

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 52    |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 43.0  | 64.4# |
| 71       | 0.0   | 40.8  | 61.2# |



#31

Cyclohexane

Concen: 1.636 ug/l

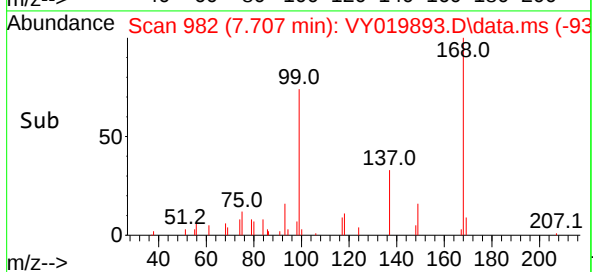
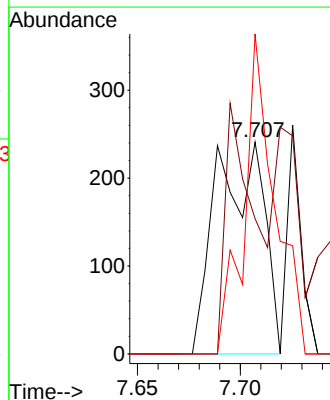
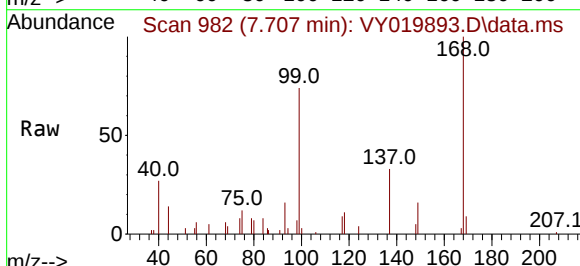
RT: 7.707 min Scan# 982

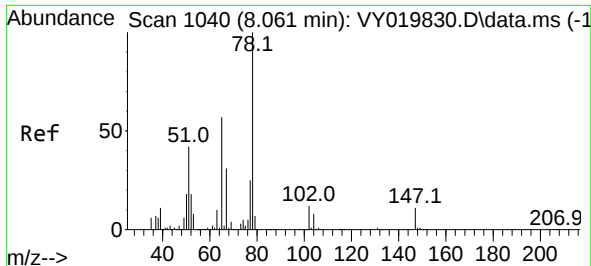
Delta R.T. 0.006 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 56    | Resp: | 388    |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 63.9  | 28.7  | 43.1#  |
| 84       | 151.0 | 77.7  | 116.5# |





#33

1,2-Dichloroethane-d4

Concen: 25.763 ug/l

RT: 8.067 min Scan# 1104

Delta R.T. 0.006 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

Instrument :

MSVOA\_Y

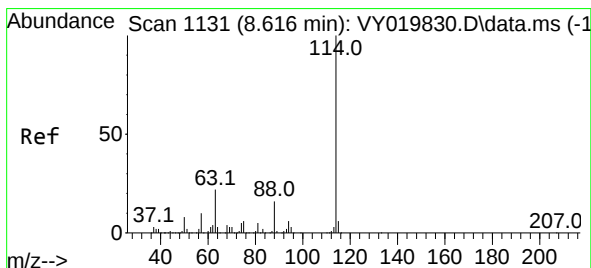
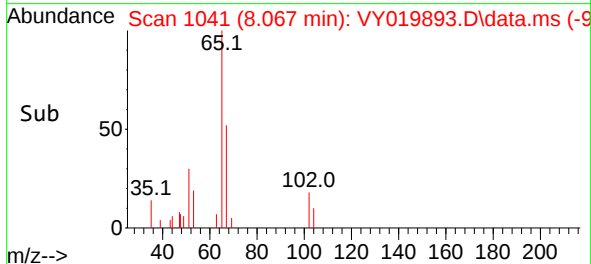
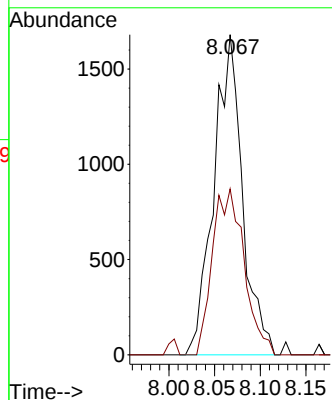
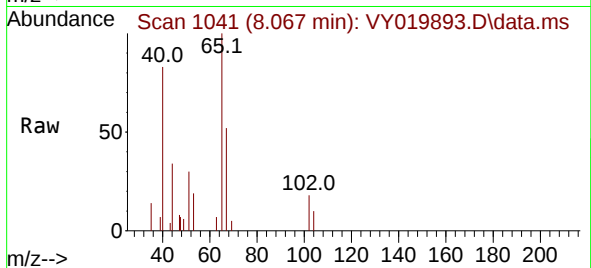
ClientSampleId :

Tgt Ion: 65 Resp: 3656

Ion Ratio Lower Upper

65 100

67 57.3 0.0 109.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.616 min Scan# 1131

Delta R.T. 0.000 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

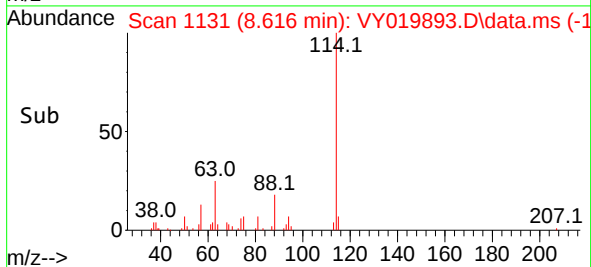
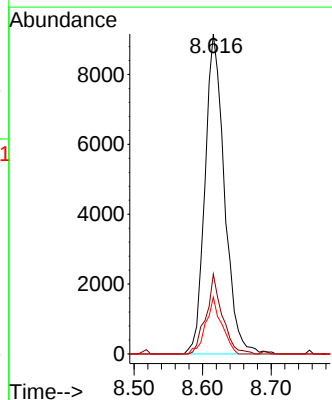
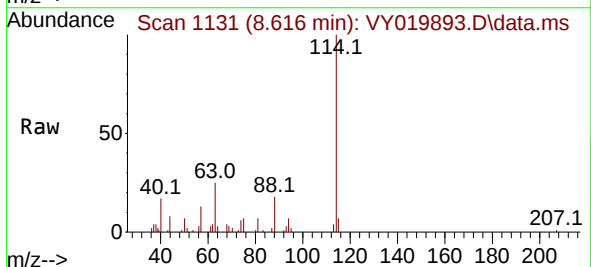
Tgt Ion: 114 Resp: 18133

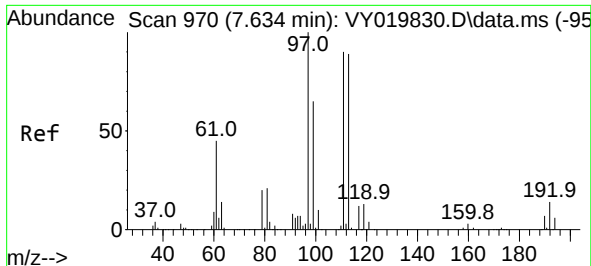
Ion Ratio Lower Upper

114 100

63 25.0 0.0 35.0

88 17.8 0.0 27.2





#35

Dibromofluoromethane

Concen: 31.348 ug/l

RT: 7.640 min Scan# 91

Delta R.T. 0.006 min

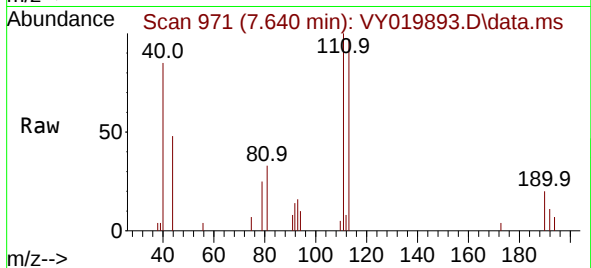
Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

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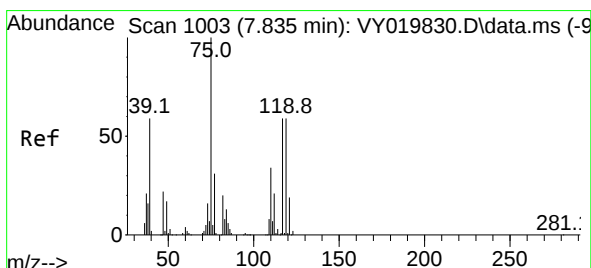
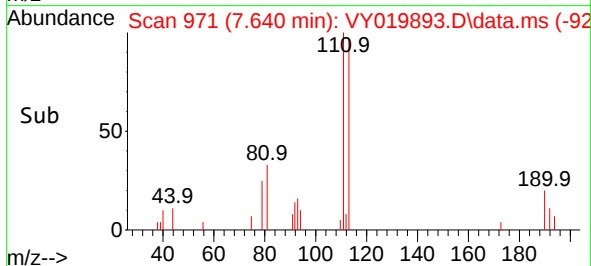
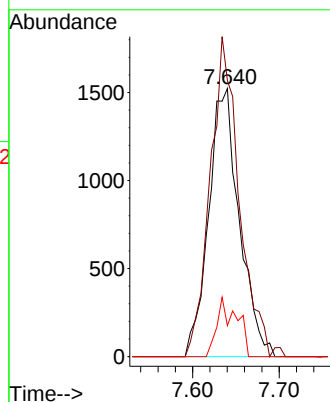
Tgt Ion:113 Resp: 3751

Ion Ratio Lower Upper

113 100

111 113.1 82.2 123.4

192 14.2 15.9 23.9#



#36

1,1-Dichloropropene

Concen: 6.984 ug/l

RT: 7.701 min Scan# 981

Delta R.T. -0.134 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

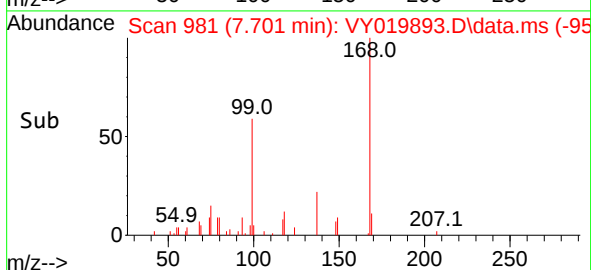
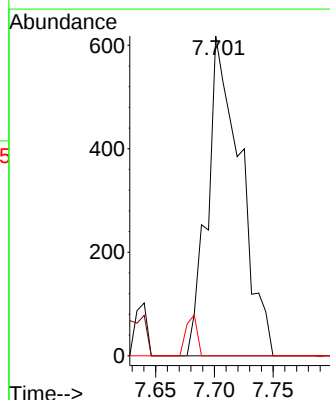
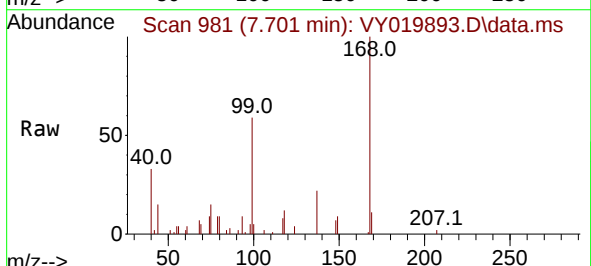
Tgt Ion: 75 Resp: 1204

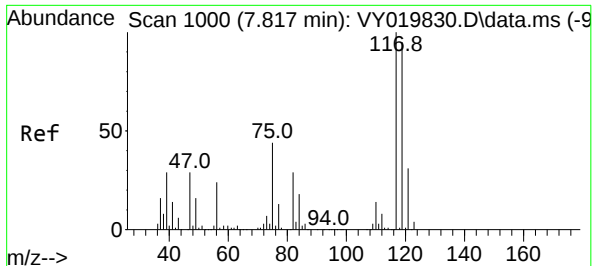
Ion Ratio Lower Upper

75 100

110 0.0 19.0 57.0#

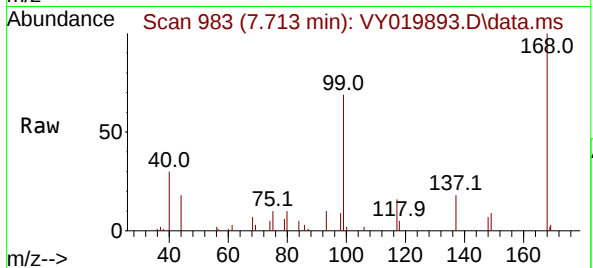
77 4.2 25.3 37.9#



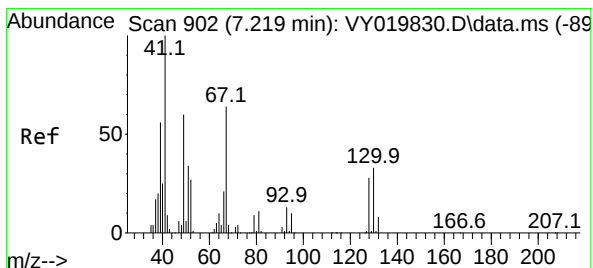
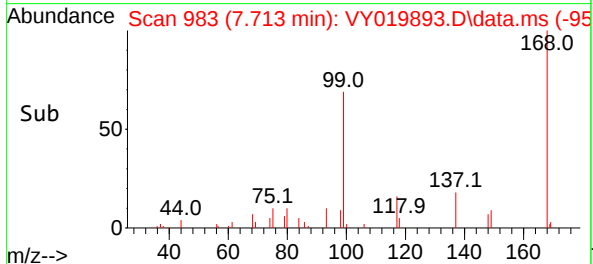
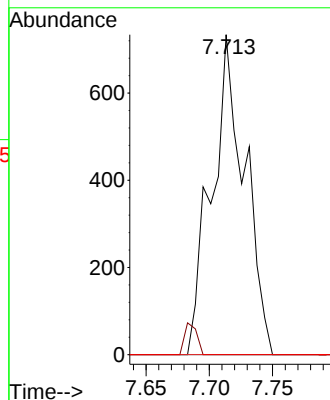


#38  
Carbon Tetrachloride  
Concen: 7.251 ug/l  
RT: 7.713 min Scan# 911  
Delta R.T. -0.103 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

Instrument :  
MSVOA\_Y  
ClientSampleId :

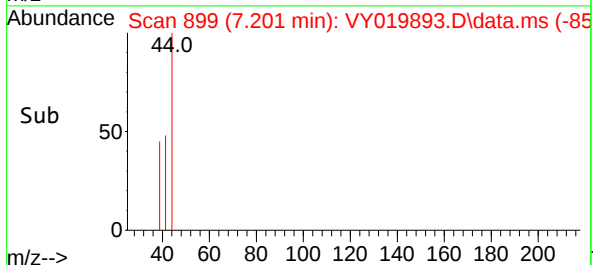
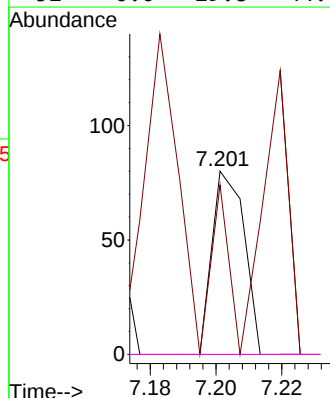
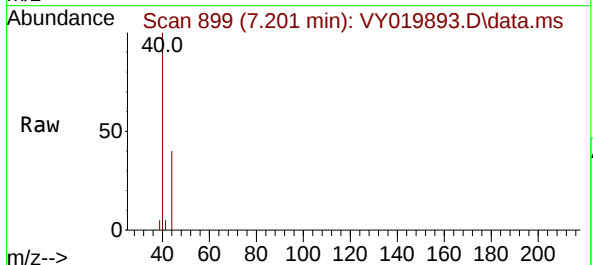


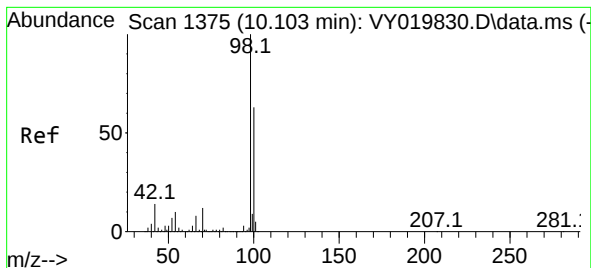
Tgt Ion:117 Resp: 1340  
Ion Ratio Lower Upper  
117 100  
119 0.0 75.8 113.6#  
121 0.0 24.0 36.0#



#41  
Methacrylonitrile  
Concen: 1.110 ug/l  
RT: 7.201 min Scan# 899  
Delta R.T. -0.018 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

Tgt Ion: 41 Resp: 54  
Ion Ratio Lower Upper  
41 100  
39 124.1 48.0 72.0#  
67 0.0 75.1 112.7#  
52 0.0 29.8 44.6#





#50

Toluene-d8

Concen: 36.139 ug/l

RT: 10.109 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

Instrument :

MSVOA\_Y

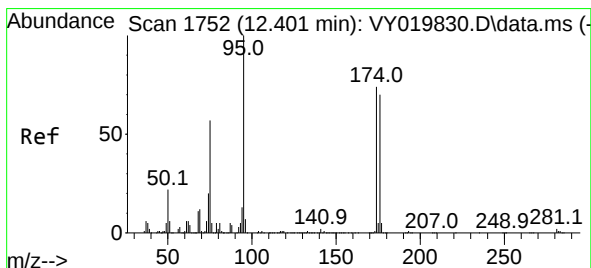
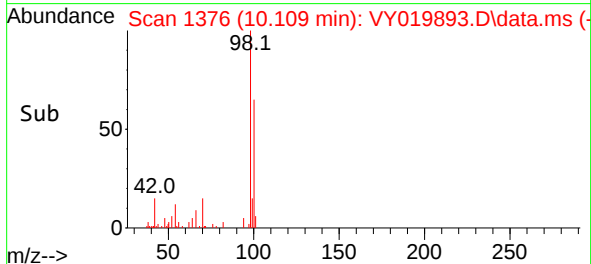
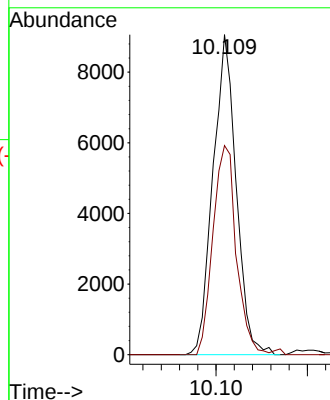
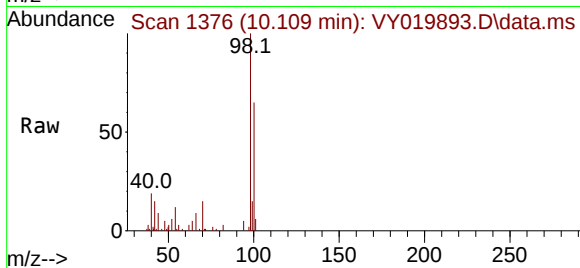
ClientSampleId :

Tgt Ion: 98 Resp: 15969

Ion Ratio Lower Upper

98 100

100 65.8 52.0 78.0



#62

4-Bromofluorobenzene

Concen: 10.566 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

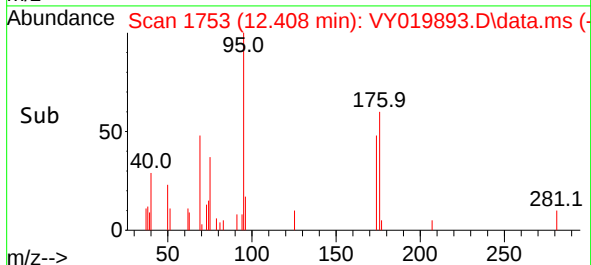
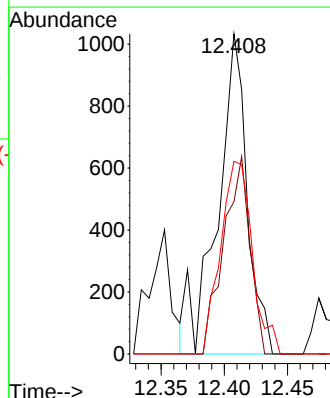
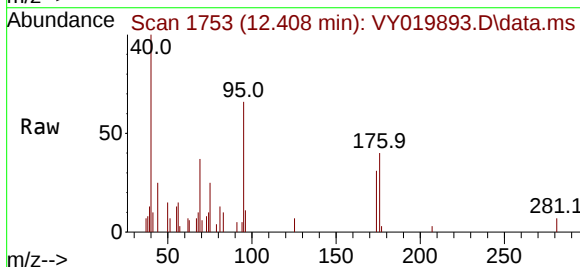
Tgt Ion: 95 Resp: 1687

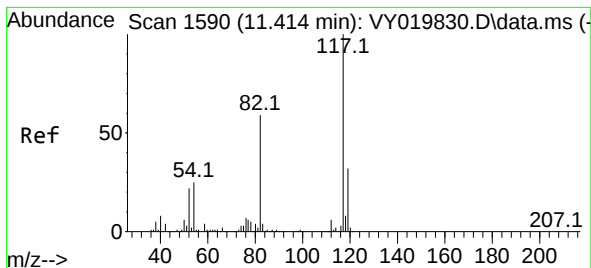
Ion Ratio Lower Upper

95 100

174 54.6 0.0 175.6

176 64.3 0.0 171.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.000 min

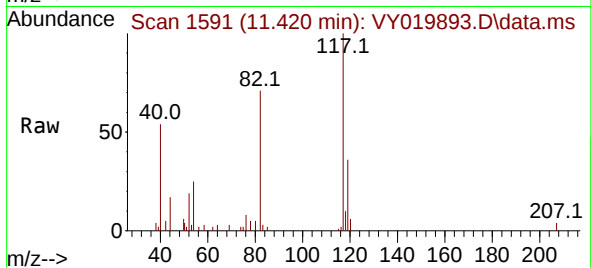
Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

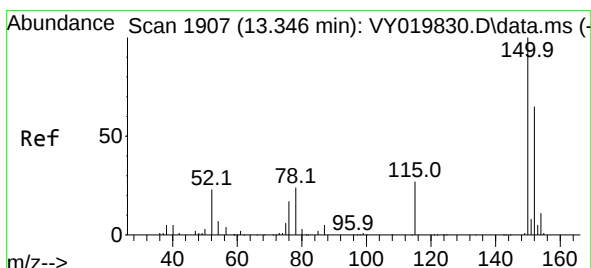
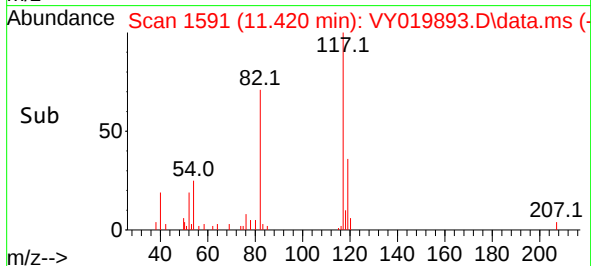
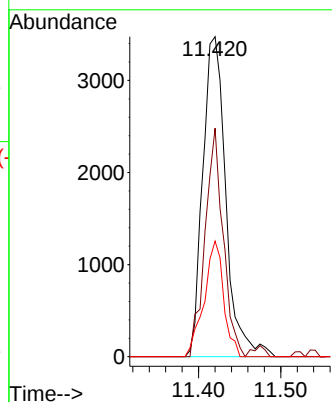
Instrument :

MSVOA\_Y

ClientSampleId :



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 117   | Resp: | 6780  |
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 82        | 71.4  | 42.4  | 63.6# |
| 119       | 36.1  | 25.9  | 38.9  |



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

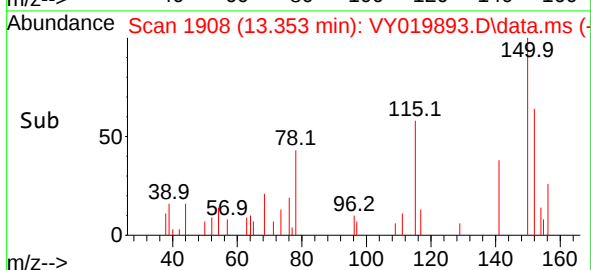
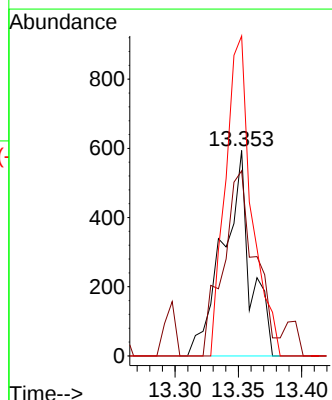
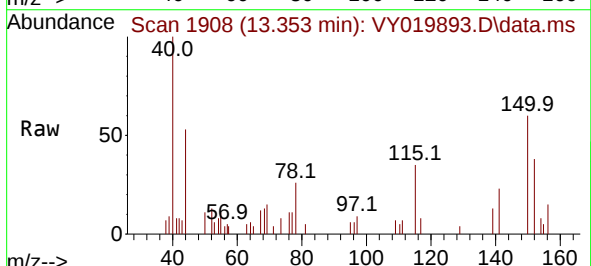
RT: 13.353 min Scan# 1908

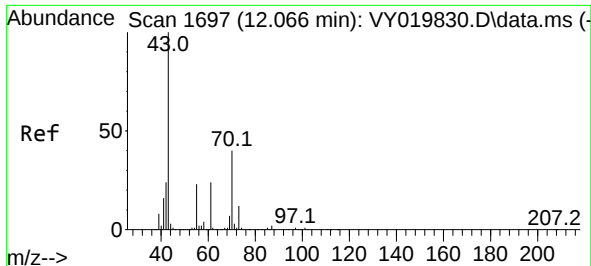
Delta R.T. 0.006 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

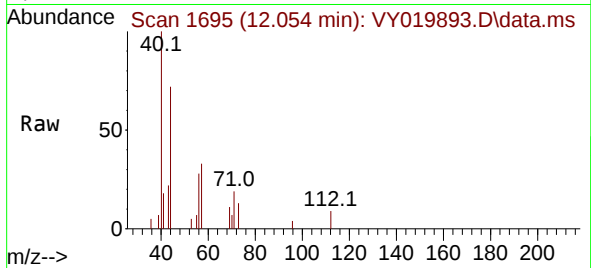
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 152   | Resp: | 898   |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 115       | 107.0 | 28.2  | 84.7# |
| 150       | 149.3 | 0.0   | 345.6 |



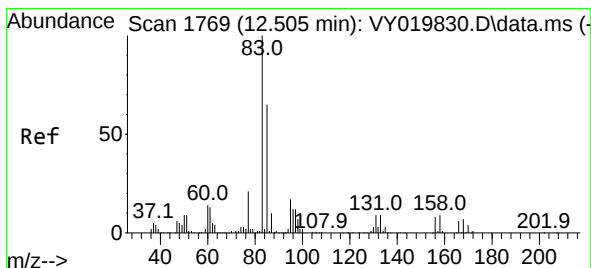
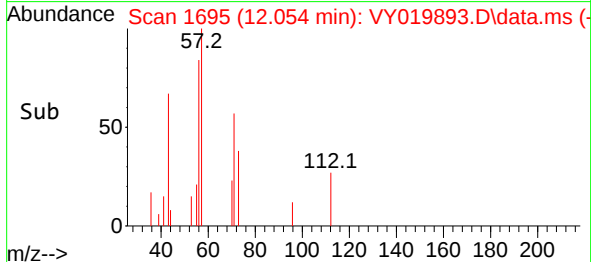
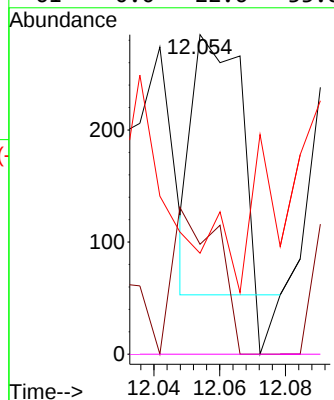


#74  
N-amy1 acetate  
Concen: 10.947 ug/l  
RT: 12.054 min Scan# 1  
Delta R.T. -0.018 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

Instrument :  
MSVOA\_Y  
ClientSampleId :

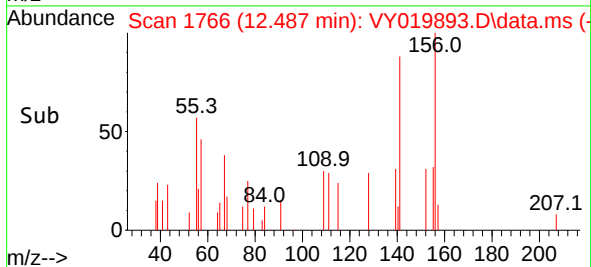
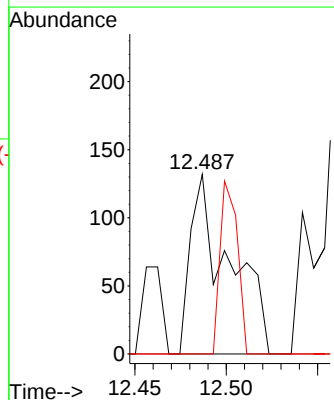
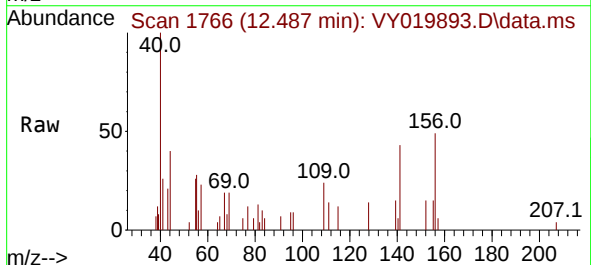


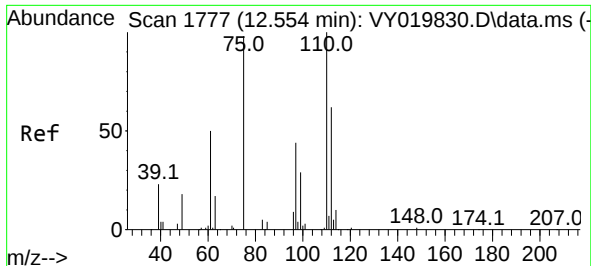
|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 219   |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 70 0.0      | 41.4 62.2#  |
| 55 0.0      | 23.3 34.9#  |
| 61 0.0      | 22.6 33.8#  |



#75  
1,1,2,2-Tetrachloroethane  
Concen: 14.529 ug/l  
RT: 12.487 min Scan# 1766  
Delta R.T. -0.024 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

|             |             |
|-------------|-------------|
| Tgt Ion: 83 | Resp: 195   |
| Ion Ratio   | Lower Upper |
| 83 100      |             |
| 131 0.0     | 5.0 14.9#   |
| 85 43.1     | 32.0 96.0   |

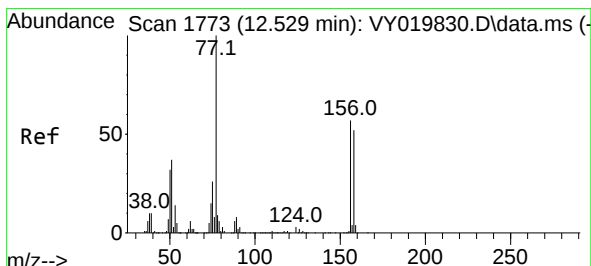
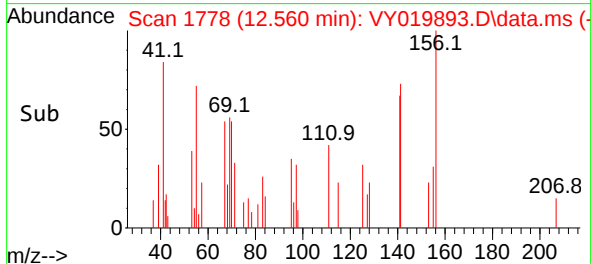
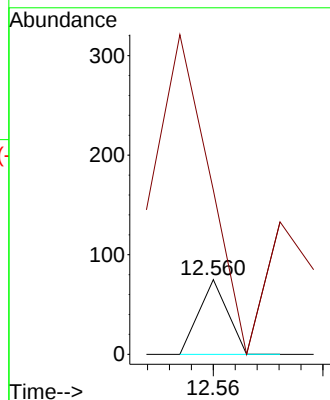
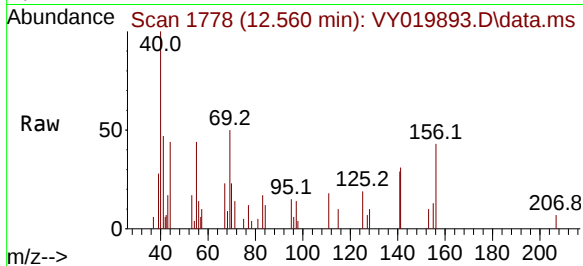




#76  
1,2,3-Trichloropropane  
Concen: 1.535 ug/l  
RT: 12.560 min Scan# 1778  
Delta R.T. 0.000 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

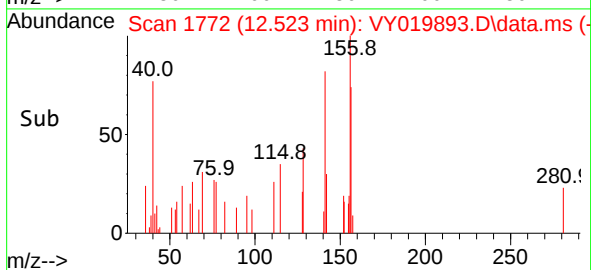
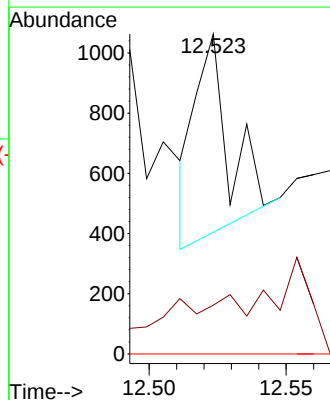
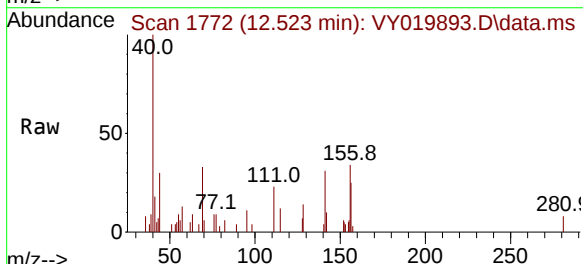
Instrument :  
MSVOA\_Y  
ClientSampleId :

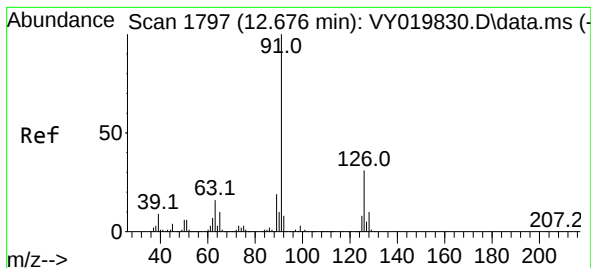
Tgt Ion: 75 Resp: 27  
Ion Ratio Lower Upper  
75 100  
77 1140.7 0.0 0.0#



#77  
Bromobenzene  
Concen: 36.560 ug/l  
RT: 12.523 min Scan# 1772  
Delta R.T. -0.012 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

Tgt Ion: 156 Resp: 586  
Ion Ratio Lower Upper  
156 100  
77 50.0 87.1 261.3#  
158 0.0 48.6 145.9#





#79

2-Chlorotoluene

Concen: 1.452 ug/l

RT: 12.804 min Scan# 11

Delta R.T. 0.122 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

Instrument :

MSVOA\_Y

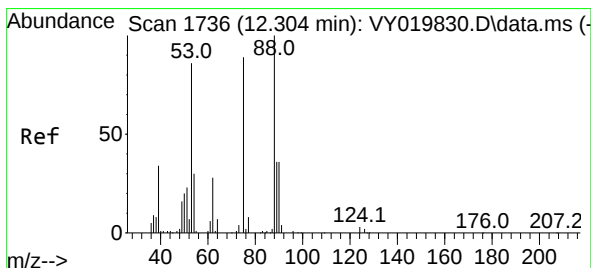
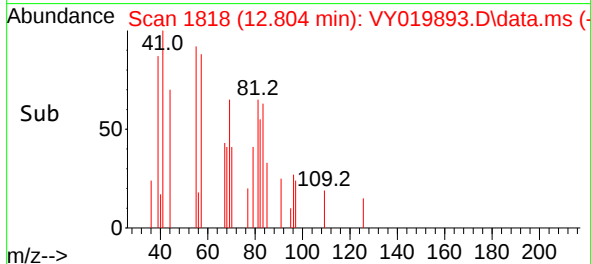
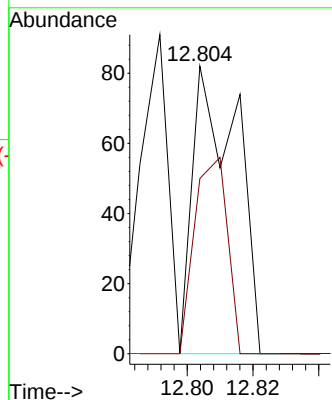
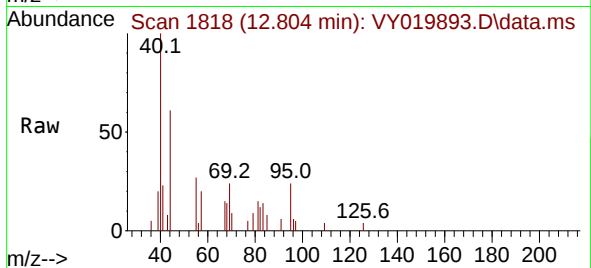
ClientSampleId :

Tgt Ion: 91 Resp: 76

Ion Ratio Lower Upper

91 100

126 51.3 17.8 53.5



#81

trans-1,4-Dichloro-2-butene

Concen: 10.555 ug/l

RT: 12.188 min Scan# 1717

Delta R.T. -0.116 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

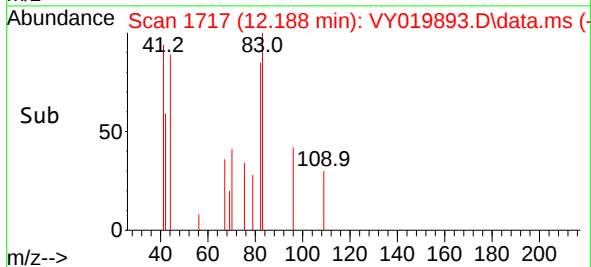
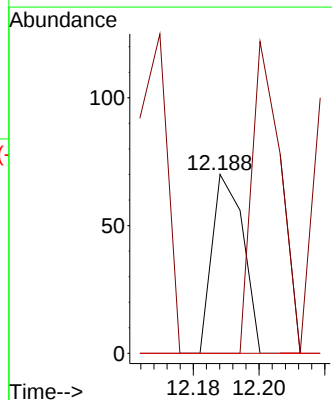
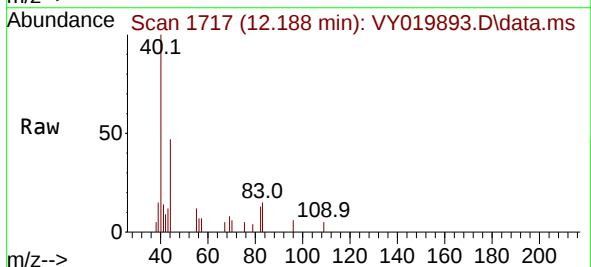
Tgt Ion: 75 Resp: 46

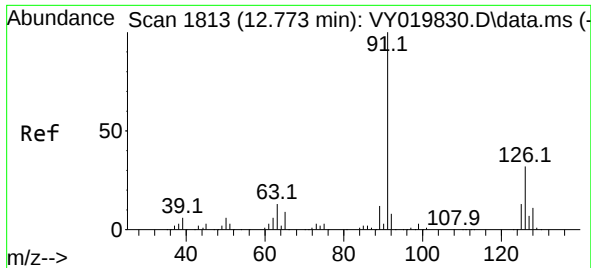
Ion Ratio Lower Upper

75 100

53 158.7 66.8 100.2#

89 0.0 35.8 53.6#

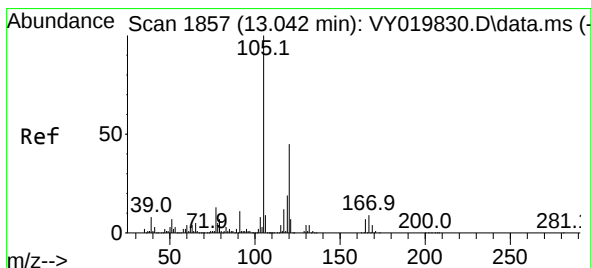
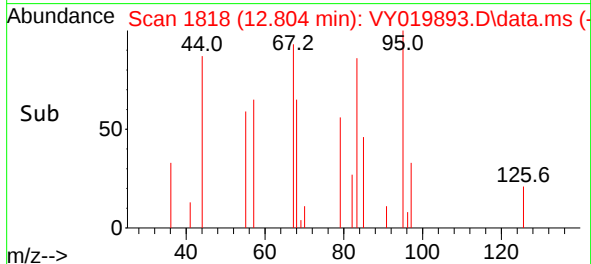
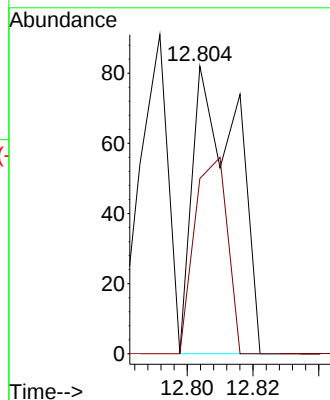
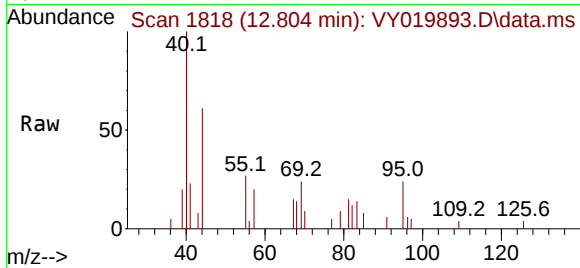




#82  
4-Chlorotoluene  
Concen: 1.421 ug/l  
RT: 12.804 min Scan# 1818  
Delta R.T. 0.025 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

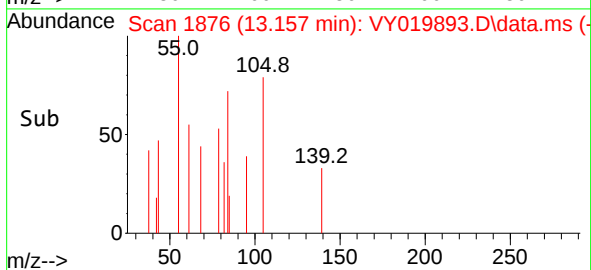
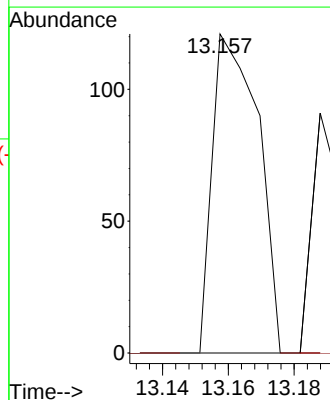
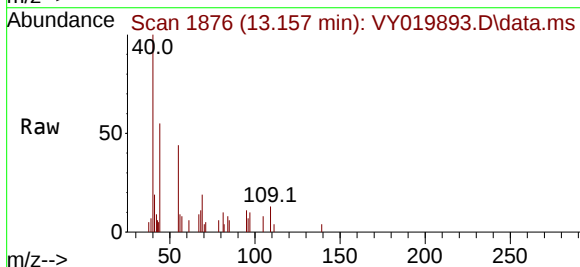
Instrument :  
MSVOA\_Y  
ClientSampleId :

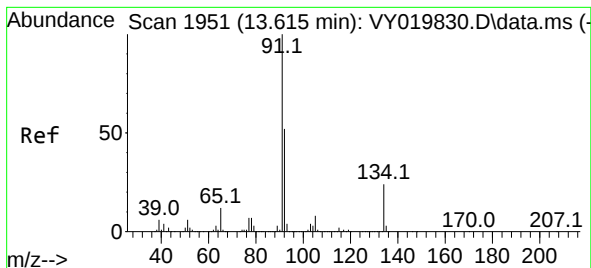
Tgt Ion: 91 Resp: 76  
Ion Ratio Lower Upper  
91 100  
126 51.3 17.6 52.9



#84  
1,2,4-Trimethylbenzene  
Concen: 1.935 ug/l  
RT: 13.157 min Scan# 1876  
Delta R.T. 0.110 min  
Lab File: VY019893.D  
Acq: 14 Oct 2024 16:27

Tgt Ion: 105 Resp: 117  
Ion Ratio Lower Upper  
105 100  
120 0.0 23.2 69.6#





#89

n-Butylbenzene

Concen: 1.699 ug/l

RT: 13.676 min Scan# 1951

Delta R.T. 0.055 min

Lab File: VY019893.D

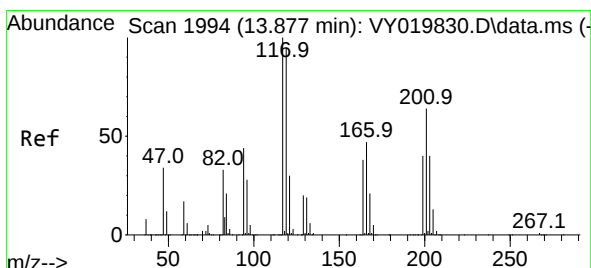
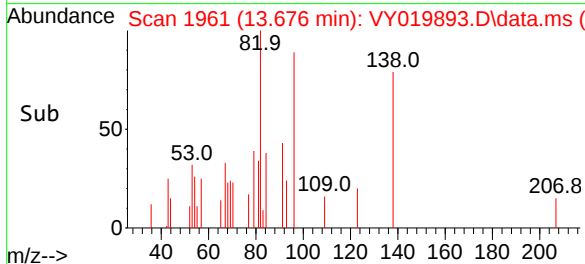
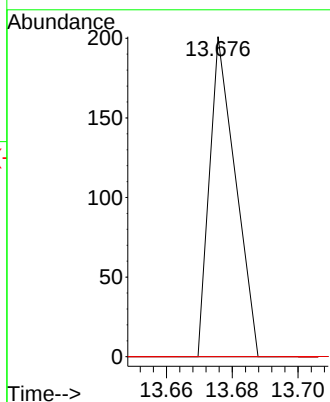
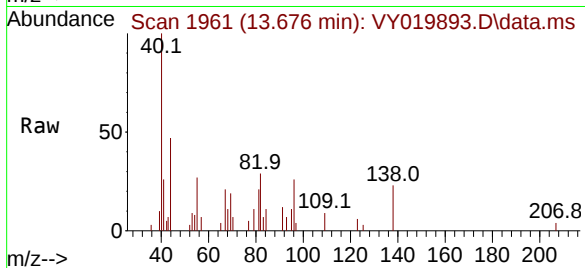
Acq: 14 Oct 2024 16:27

Instrument :

MSVOA\_Y

ClientSampleId :

|             |       |            |
|-------------|-------|------------|
| Tgt Ion: 91 | Resp: | 110        |
| Ion Ratio   | Lower | Upper      |
| 91          | 100   |            |
| 92          | 0.0   | 26.6 79.7# |
| 134         | 0.0   | 12.9 38.7# |



#90

Hexachloroethane

Concen: 2.091 ug/l

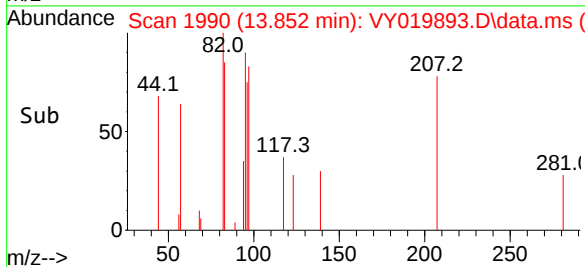
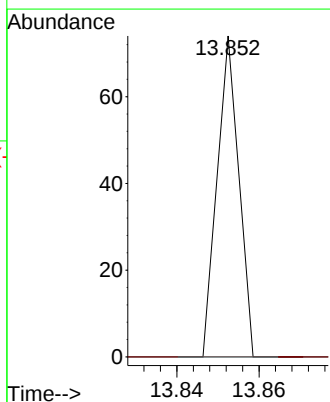
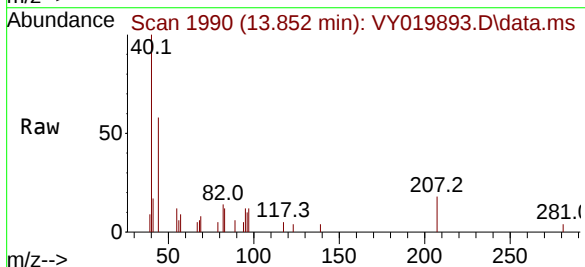
RT: 13.852 min Scan# 1990

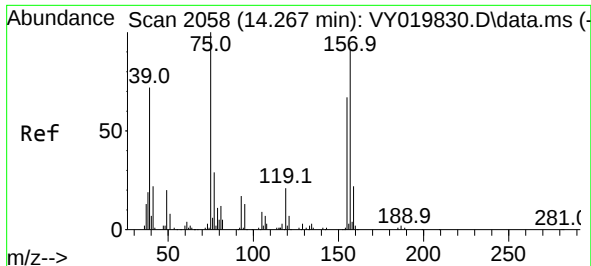
Delta R.T. -0.030 min

Lab File: VY019893.D

Acq: 14 Oct 2024 16:27

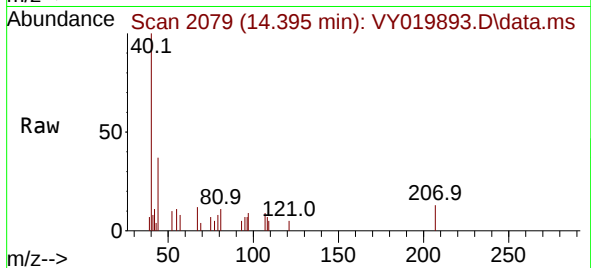
|              |       |             |
|--------------|-------|-------------|
| Tgt Ion: 117 | Resp: | 27          |
| Ion Ratio    | Lower | Upper       |
| 117          | 100   |             |
| 201          | 0.0   | 37.4 112.2# |



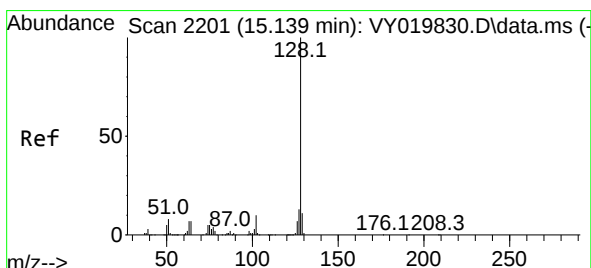
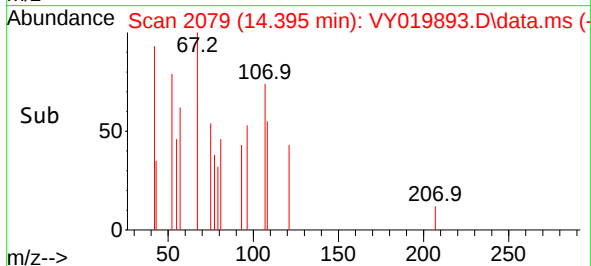
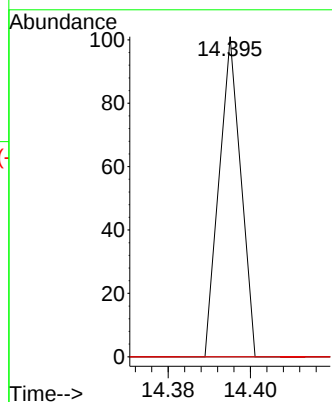


#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 17.274 ug/l  
 RT: 14.395 min Scan# 2058  
 Delta R.T. 0.122 min  
 Lab File: VY019893.D  
 Acq: 14 Oct 2024 16:27

Instrument :  
 MSVOA\_Y  
 ClientSampleId :



Tgt Ion: 75 Resp: 37  
 Ion Ratio Lower Upper  
 75 100  
 155 0.0 48.6 145.8#  
 157 0.0 62.7 188.2#



#95  
 Naphthalene  
 Concen: 45.813 ug/l  
 RT: 15.145 min Scan# 2202  
 Delta R.T. 0.000 min  
 Lab File: VY019893.D  
 Acq: 14 Oct 2024 16:27

Tgt Ion: 128 Resp: 1378  
 Ion Ratio Lower Upper  
 128 100  
 127 6.8 10.6 16.0#  
 129 3.6 8.6 13.0#

