

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY032125\  
 Data File : VY021606.D  
 Acq On : 21 Mar 2025 17:46  
 Operator : SY/MD  
 Sample : Q1614-01  
 Misc : 5.05g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 TR-04-032025

Quant Time: Mar 21 23:13:04 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y030425S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 05 12:42:45 2025  
 Response via : Initial Calibration

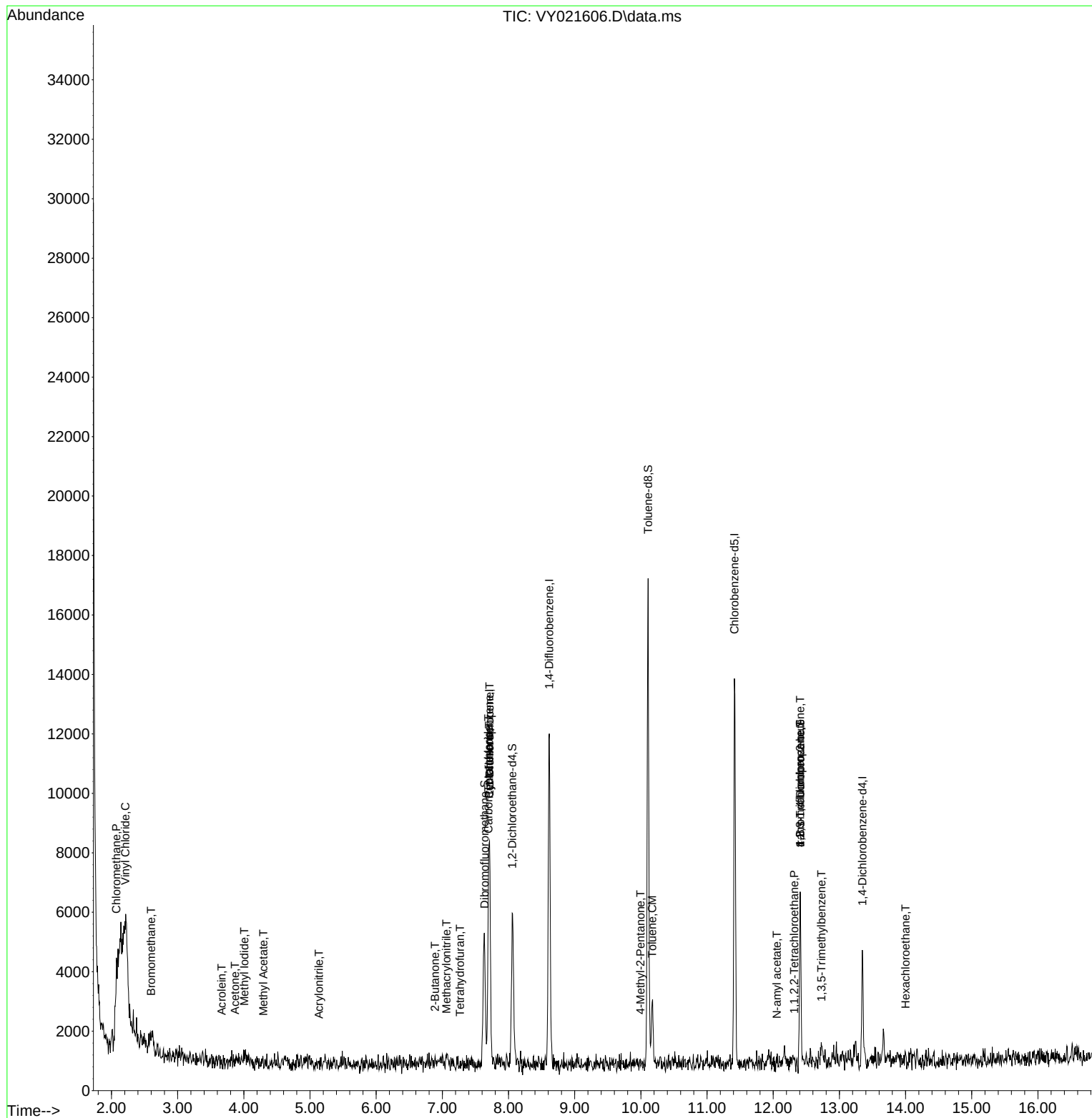
| Compound                      | R.T.   | QIon  | Response | Conc      | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|------------|----------|
| -----                         |        |       |          |           |            |          |
| Internal Standards            |        |       |          |           |            |          |
| 1) Pentafluorobenzene         | 7.707  | 168   | 6645     | 50.000    | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.616  | 114   | 9074     | 50.000    | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.414 | 117   | 7061     | 50.000    | ug/l       | # 0.00   |
| 72) 1,4-Dichlorobenzene-d4    | 13.346 | 152   | 1068     | 50.000    | ug/l       | 0.00     |
| System Monitoring Compounds   |        |       |          |           |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.055  | 65    | 4217     | 60.042    | ug/l       | -0.01    |
| Spiked Amount                 | 50.000 | Range | 50 - 163 | Recovery  | = 120.080% |          |
| 35) Dibromofluoromethane      | 7.640  | 113   | 3219     | 53.970    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 54 - 147 | Recovery  | = 107.940% |          |
| 50) Toluene-d8                | 10.109 | 98    | 10372    | 45.928    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 58 - 134 | Recovery  | = 91.860%  |          |
| 62) 4-Bromofluorobenzene      | 12.408 | 95    | 1736     | 22.598    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 30 - 143 | Recovery  | = 45.200%  |          |
| Target Compounds              |        |       |          |           |            |          |
|                               |        |       |          |           | Qvalue     |          |
| 3) Chloromethane              | 2.074  | 50    | 299      | 3.478     | ug/l #     | 1        |
| 4) Vinyl Chloride             | 2.208  | 62    | 360      | 3.832     | ug/l #     | 42       |
| 5) Bromomethane               | 2.598  | 94    | 162      | 2.386     | ug/l #     | 46       |
| 10) Methyl Iodide             | 4.007  | 142   | 205      | 2.694     | ug/l #     | 61       |
| 11) Tert butyl alcohol        | 5.031  | 59    | 19       | Below Cal | #          | 72       |
| 13) Acrolein                  | 3.665  | 56    | 27       | 7.558     | ug/l #     | 10       |
| 15) Acrylonitrile             | 5.135  | 53    | 22       | 1.422     | ug/l #     | 17       |
| 16) Acetone                   | 3.866  | 43    | 77       | 5.027     | ug/l #     | 47       |
| 18) Methyl Acetate            | 4.293  | 43    | 50       | 1.471     | ug/l #     | 51       |
| 25) 2-Butanone                | 6.890  | 43    | 132      | 6.229     | ug/l #     | 48       |
| 29) Tetrahydrofuran           | 7.268  | 42    | 22       | 1.682     | ug/l #     | 33       |
| 31) Cyclohexane               | 7.707  | 56    | 191      | 1.452     | ug/l #     | 69       |
| 36) 1,1-Dichloropropene       | 7.713  | 75    | 580      | 6.212     | ug/l #     | 41       |
| 38) Carbon Tetrachloride      | 7.695  | 117   | 879      | 8.186     | ug/l #     | 12       |
| 41) Methacrylonitrile         | 7.061  | 41    | 56       | 2.492     | ug/l #     | 24       |
| 51) 4-Methyl-2-Pentanone      | 9.993  | 43    | 58       | 1.403     | ug/l #     | 36       |
| 52) Toluene                   | 10.170 | 92    | 1124     | 6.482     | ug/l       | 94       |
| 74) N-amyl acetate            | 12.054 | 43    | 78       | 4.269     | ug/l #     | 42       |
| 75) 1,1,2,2-Tetrachloroethane | 12.316 | 83    | 41       | 2.762     | ug/l #     | 26       |
| 76) 1,2,3-Trichloropropane    | 12.408 | 75    | 910      | 84.556    | ug/l #     | 100      |
| 80) 1,3,5-Trimethylbenzene    | 12.731 | 105   | 136      | 1.989     | ug/l #     | 52       |
| 81) trans-1,4-Dichloro-2-b... | 12.408 | 75    | 910      | 192.223   | ug/l #     | 9        |
| 90) Hexachloroethane          | 13.999 | 117   | 138      | 8.653     | ug/l #     | 12       |
| -----                         |        |       |          |           |            |          |

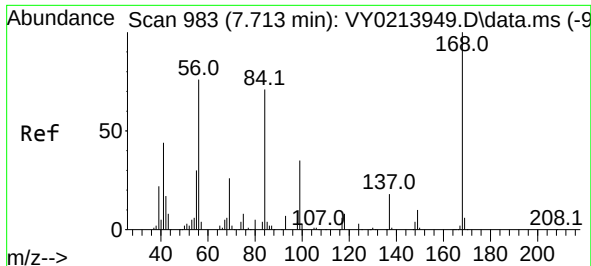
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY032125\  
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Sample : Q1614-01  
Misc : 5.05g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 19 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
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Quant Time: Mar 21 23:13:04 2025  
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Quant Title : SW846 8260  
QLast Update : Wed Mar 05 12:42:45 2025  
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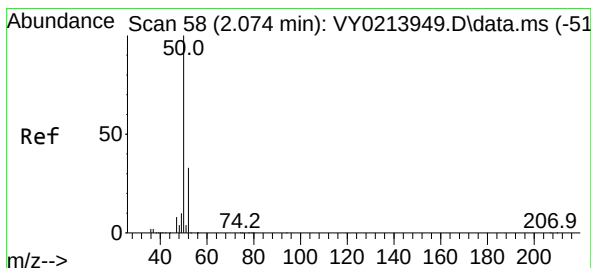
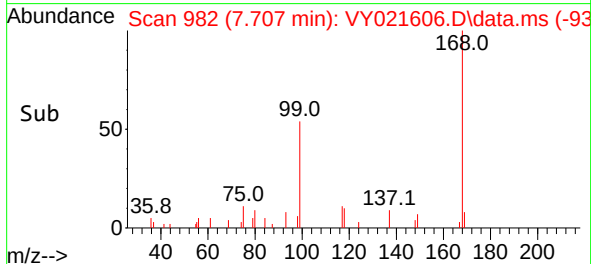
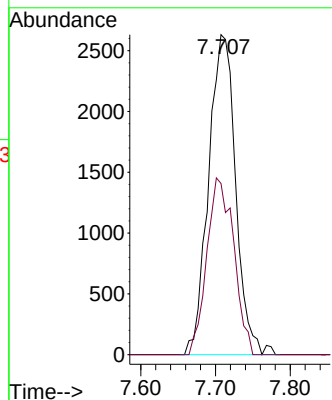
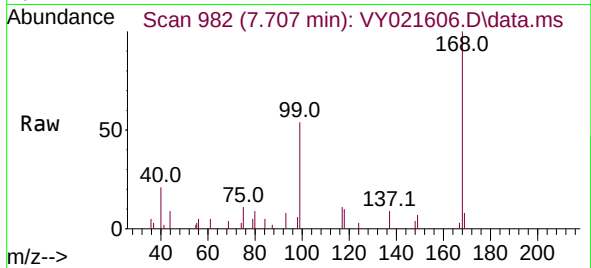




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.707 min Scan# 91  
Delta R.T. -0.006 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

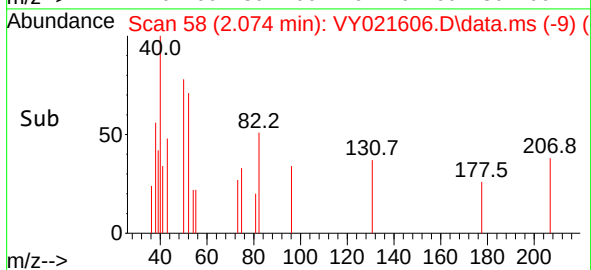
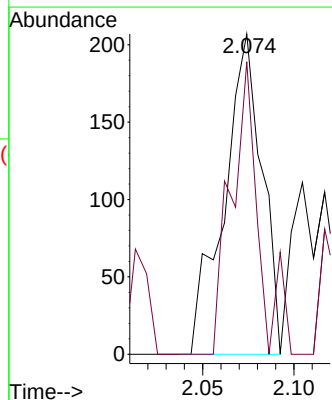
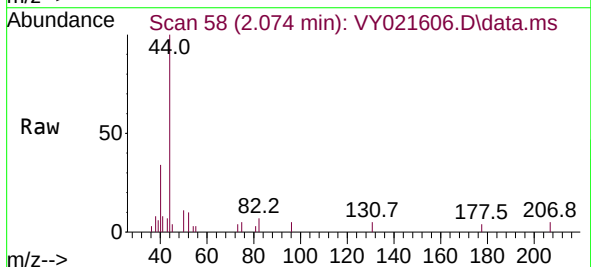
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TR-04-032025

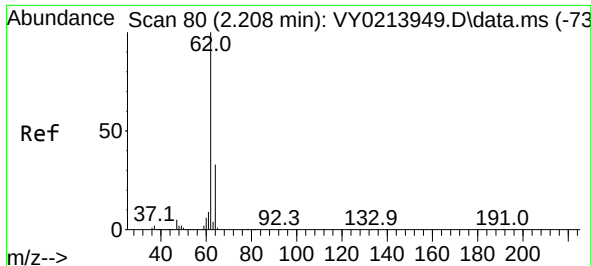
Tgt Ion:168 Resp: 6645  
Ion Ratio Lower Upper  
168 100  
99 53.5 46.0 69.0



#3  
Chloromethane  
Concen: 3.478 ug/l  
RT: 2.074 min Scan# 58  
Delta R.T. 0.000 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

Tgt Ion: 50 Resp: 299  
Ion Ratio Lower Upper  
50 100  
52 91.3 26.2 39.2#

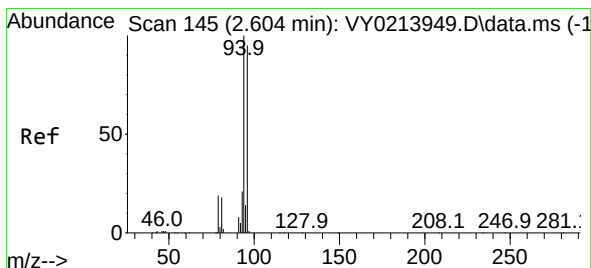
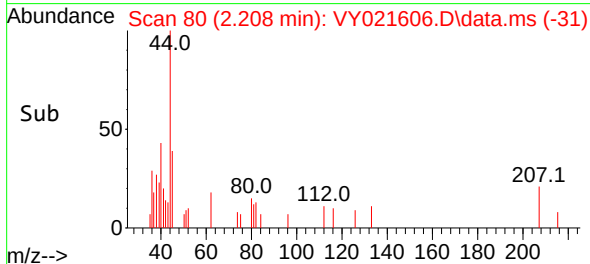
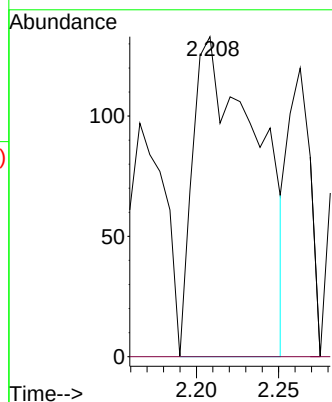
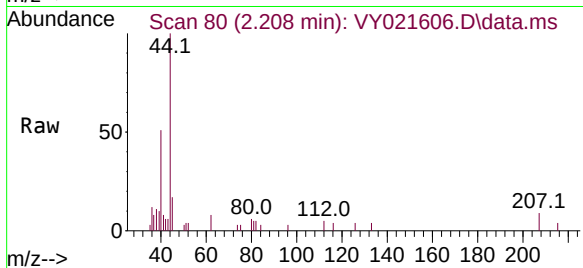




#4  
 Vinyl Chloride  
 Concen: 3.832 ug/l  
 RT: 2.208 min Scan# 80  
 Delta R.T. 0.000 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

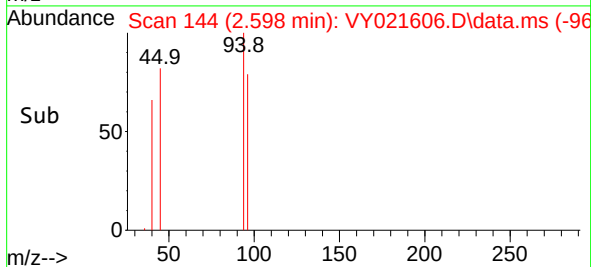
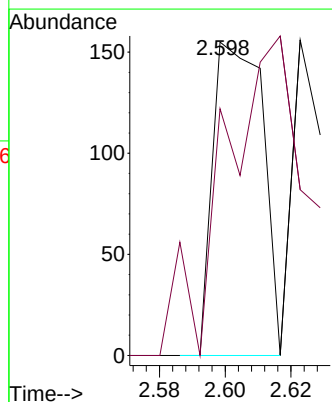
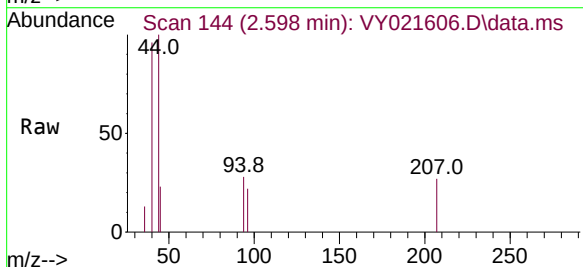
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 TR-04-032025

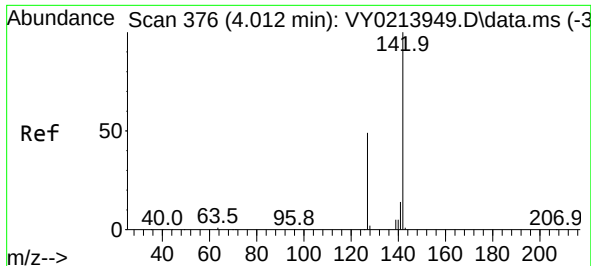
Tgt Ion: 62 Resp: 360  
 Ion Ratio Lower Upper  
 62 100  
 64 0.0 26.2 39.2#



#5  
 Bromomethane  
 Concen: 2.386 ug/l  
 RT: 2.598 min Scan# 144  
 Delta R.T. -0.006 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

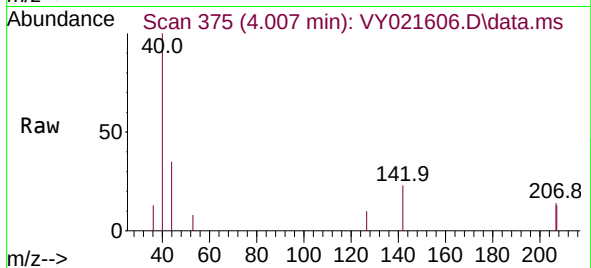
Tgt Ion: 94 Resp: 162  
 Ion Ratio Lower Upper  
 94 100  
 96 42.6 76.3 114.5#



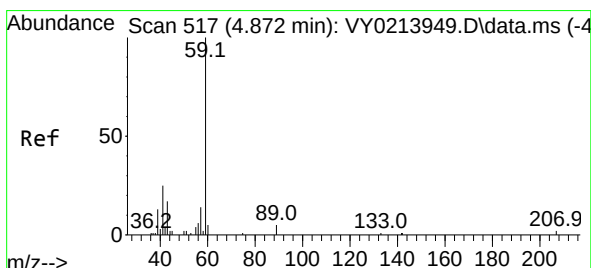
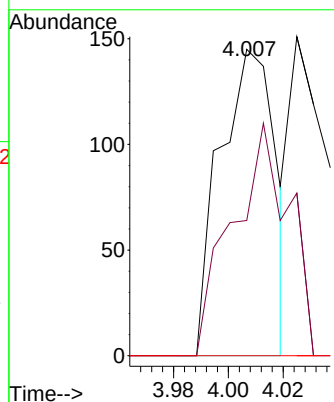
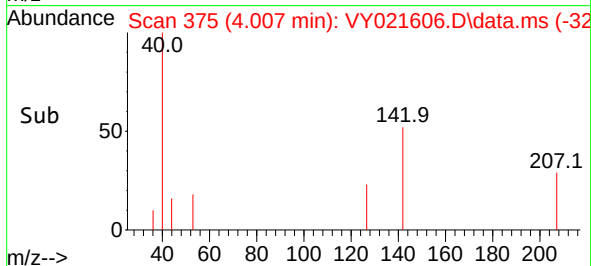


#10  
Methyl Iodide  
Concen: 2.694 ug/l  
RT: 4.007 min Scan# 31  
Delta R.T. -0.006 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

Instrument :  
MSVOA\_Y  
ClientSampleId :  
TR-04-032025

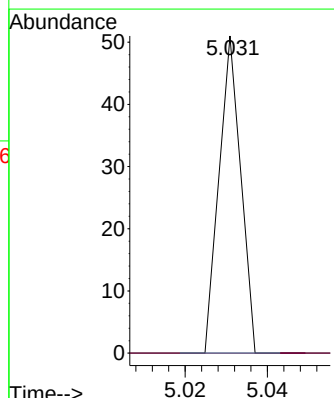
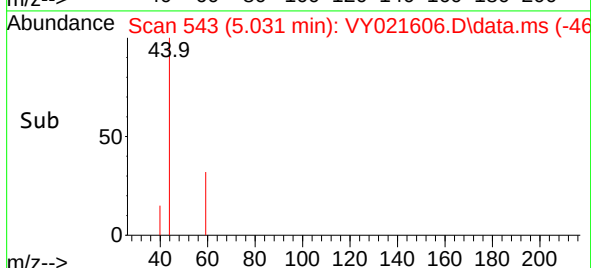
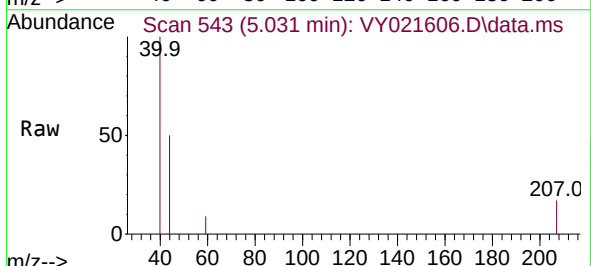


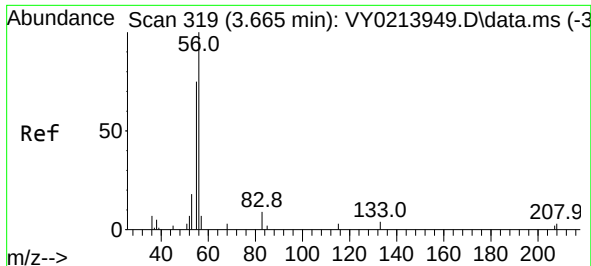
Tgt Ion:142 Resp: 205  
Ion Ratio Lower Upper  
142 100  
127 76.6 39.1 58.7#  
141 0.0 11.8 17.6#



#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 5.031 min Scan# 543  
Delta R.T. 0.159 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

Tgt Ion: 59 Resp: 19  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.2 12.4#

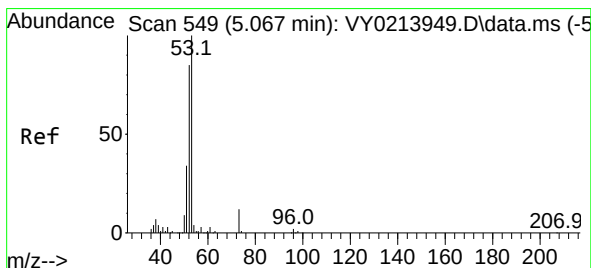
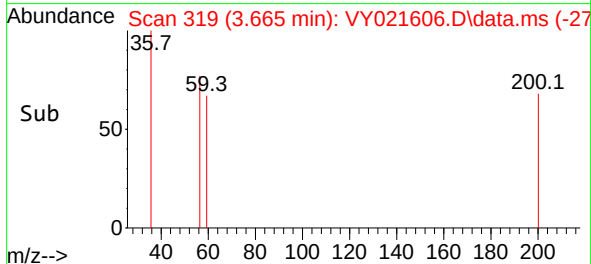
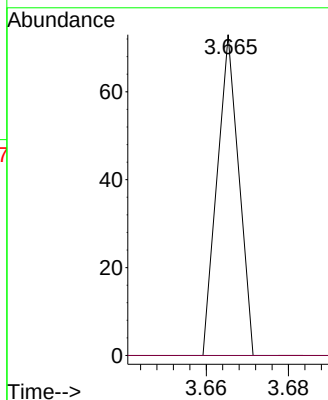
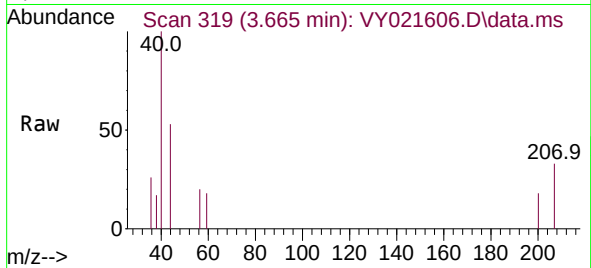




#13  
Acrolein  
Concen: 7.558 ug/l  
RT: 3.665 min Scan# 319  
Delta R.T. 0.000 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

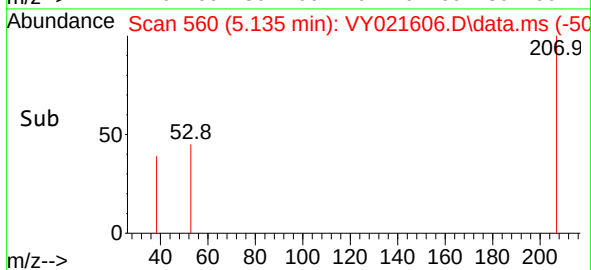
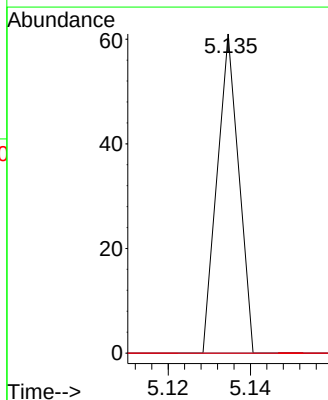
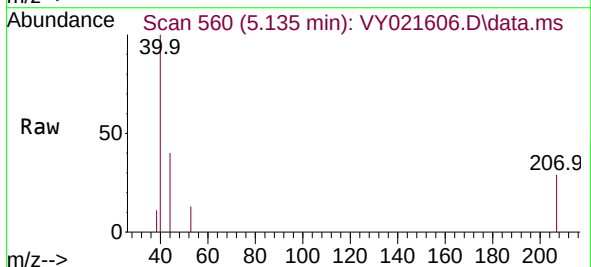
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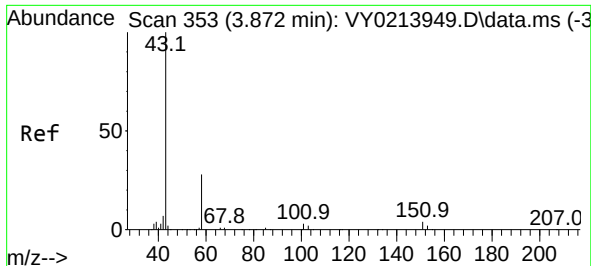
Tgt Ion: 56 Resp: 27  
Ion Ratio Lower Upper  
56 100  
55 0.0 63.4 95.2#



#15  
Acrylonitrile  
Concen: 1.422 ug/l  
RT: 5.135 min Scan# 560  
Delta R.T. 0.068 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

Tgt Ion: 53 Resp: 22  
Ion Ratio Lower Upper  
53 100  
52 0.0 66.3 99.5#  
51 0.0 30.3 45.5#

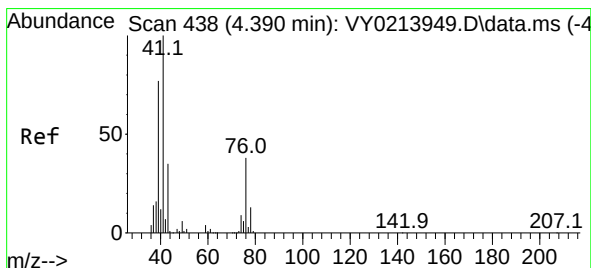
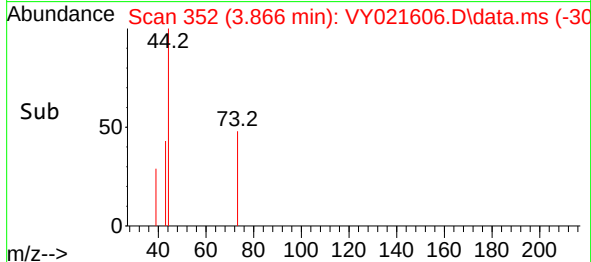
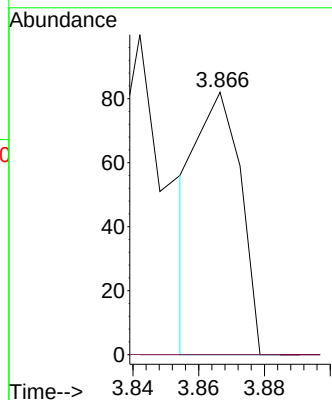
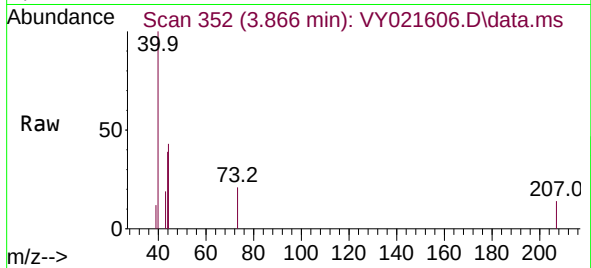




#16  
Acetone  
Concen: 5.027 ug/l  
RT: 3.866 min Scan# 31  
Delta R.T. -0.006 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

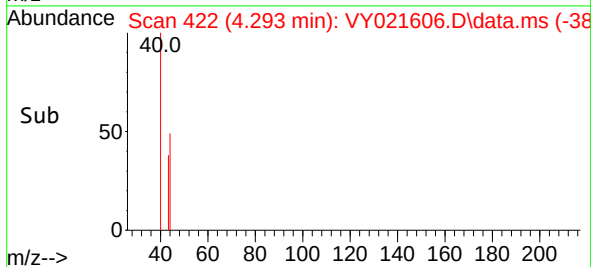
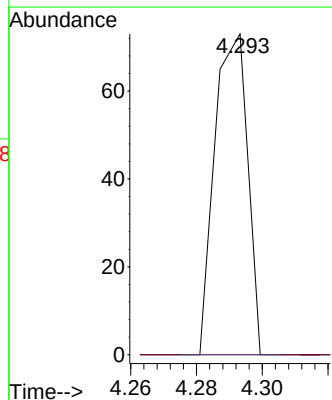
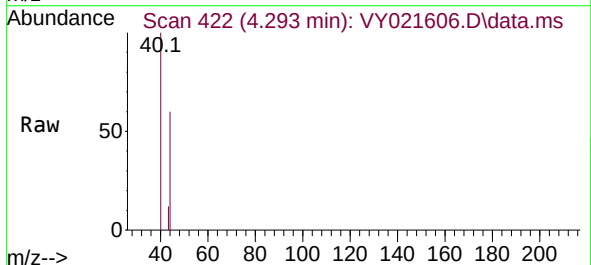
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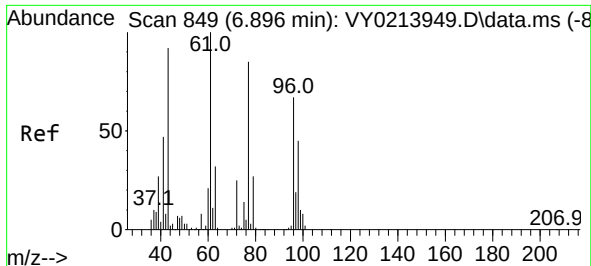
Tgt Ion: 43 Resp: 77  
Ion Ratio Lower Upper  
43 100  
58 0.0 22.1 33.1#



#18  
Methyl Acetate  
Concen: 1.471 ug/l  
RT: 4.293 min Scan# 422  
Delta R.T. -0.097 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

Tgt Ion: 43 Resp: 50  
Ion Ratio Lower Upper  
43 100  
74 0.0 19.4 29.0#

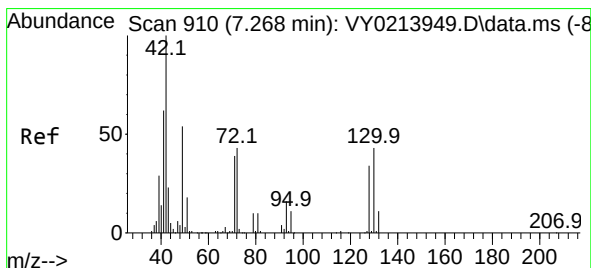
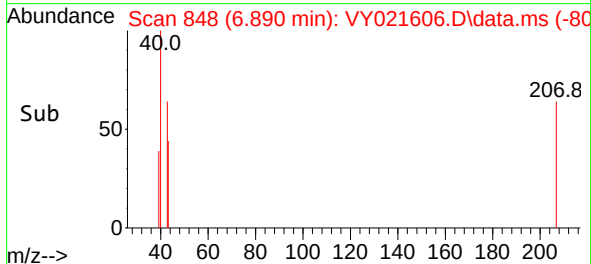
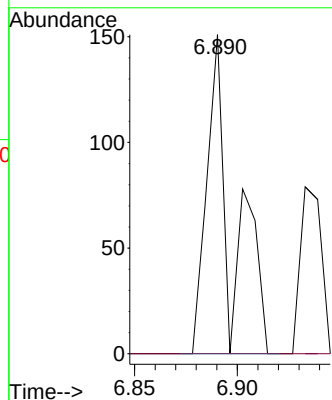
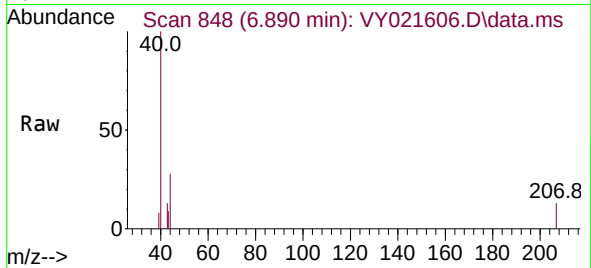




#25  
2-Butanone  
Concen: 6.229 ug/l  
RT: 6.890 min Scan# 849  
Delta R.T. -0.006 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

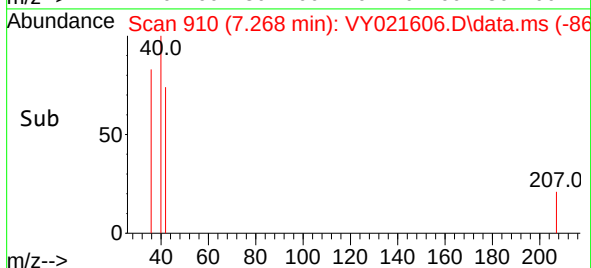
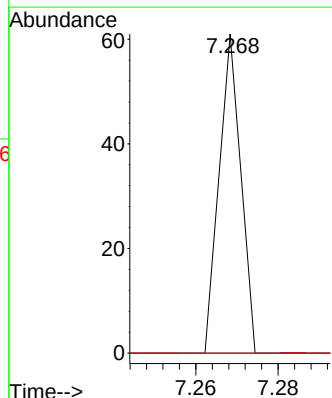
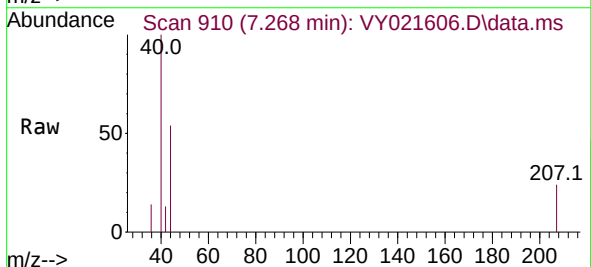
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TR-04-032025

Tgt Ion: 43 Resp: 132  
Ion Ratio Lower Upper  
43 100  
72 0.0 21.4 32.0#

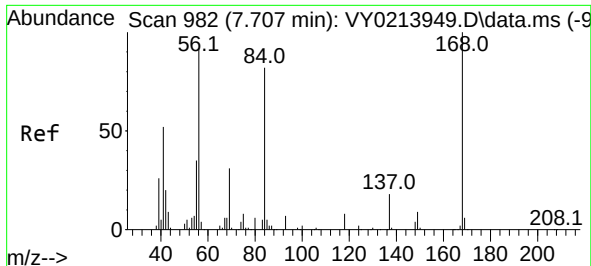


#29  
Tetrahydrofuran  
Concen: 1.682 ug/l  
RT: 7.268 min Scan# 910  
Delta R.T. 0.000 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

Tgt Ion: 42 Resp: 22  
Ion Ratio Lower Upper  
42 100  
72 0.0 34.8 52.2#  
71 0.0 32.6 48.8#



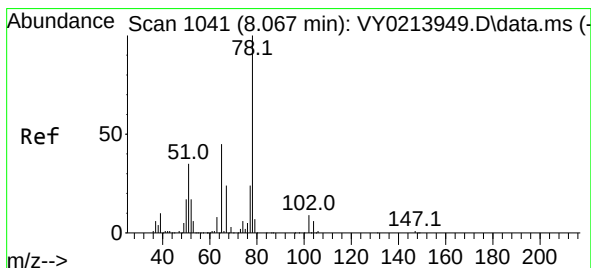
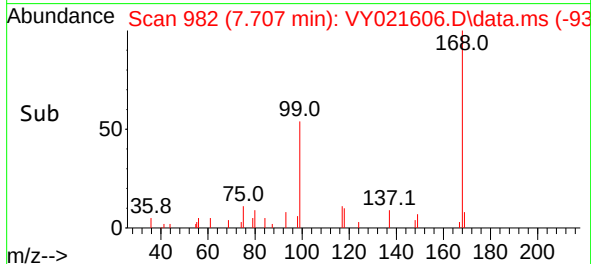
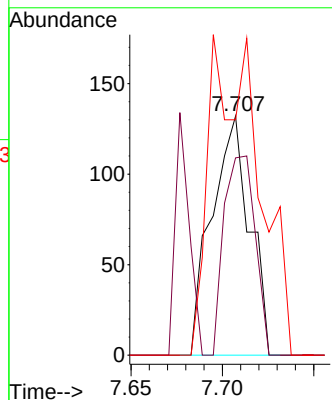
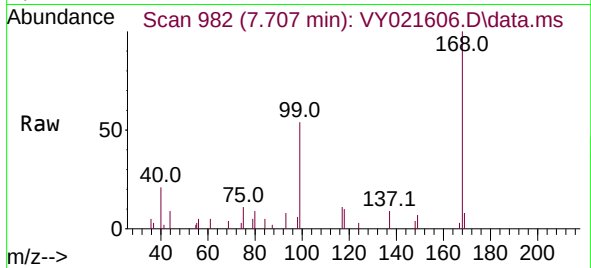




#31  
Cyclohexane  
Concen: 1.452 ug/l  
RT: 7.707 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

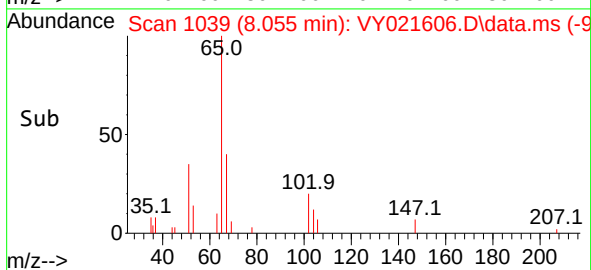
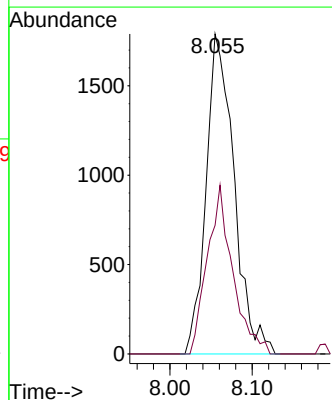
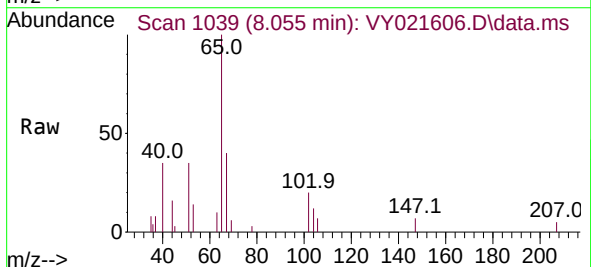
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TR-04-032025

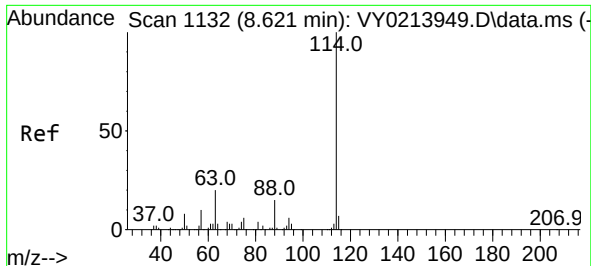
Tgt Ion: 56 Resp: 191  
Ion Ratio Lower Upper  
56 100  
69 82.6 27.0 40.4#  
84 98.5 71.1 106.7



#33  
1,2-Dichloroethane-d4  
Concen: 60.042 ug/l  
RT: 8.055 min Scan# 1039  
Delta R.T. -0.012 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

Tgt Ion: 65 Resp: 4217  
Ion Ratio Lower Upper  
65 100  
67 48.2 0.0 102.8

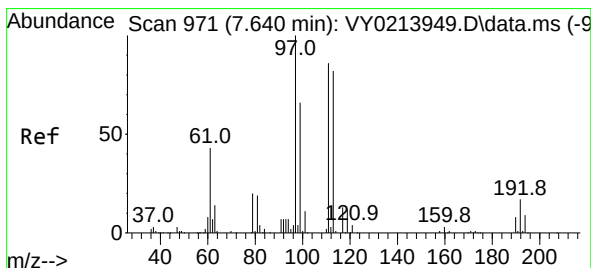
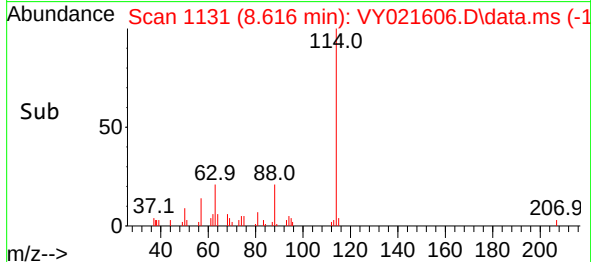
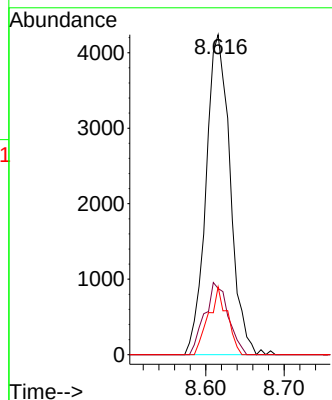
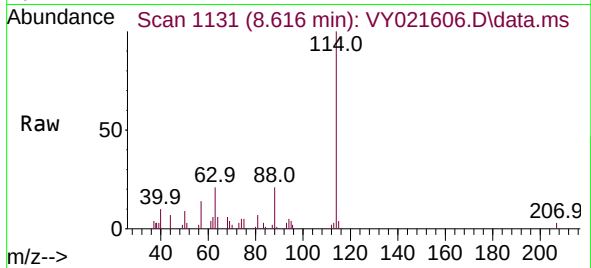




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.616 min Scan# 1132  
Delta R.T. -0.006 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

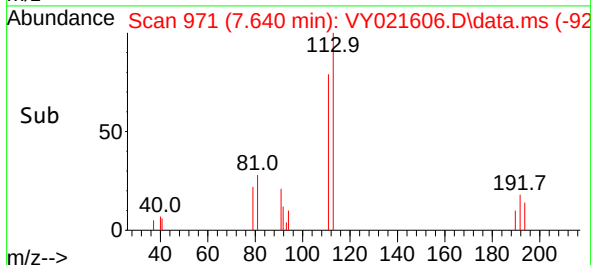
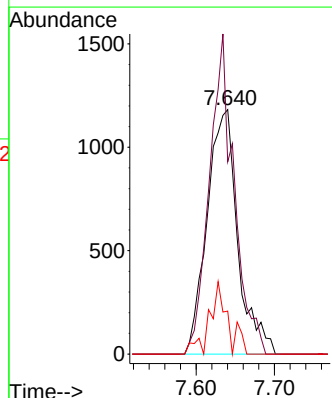
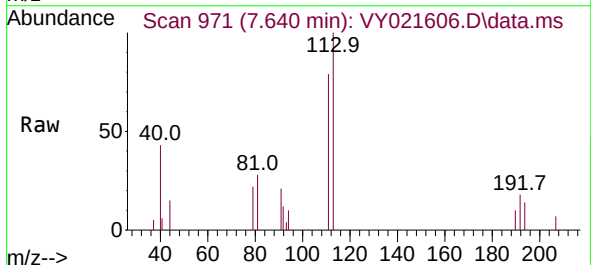
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TR-04-032025

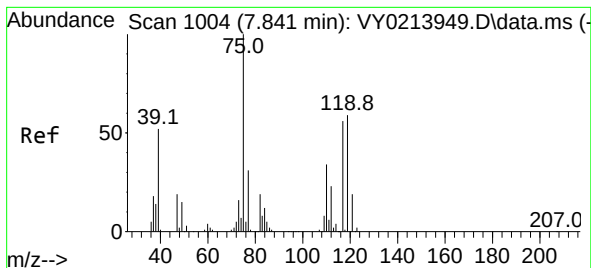
|             |       |          |
|-------------|-------|----------|
| Tgt Ion:114 | Resp: | 9074     |
| Ion Ratio   | Lower | Upper    |
| 114         | 100   |          |
| 63          | 20.7  | 0.0 40.8 |
| 88          | 21.2  | 0.0 30.8 |



#35  
Dibromofluoromethane  
Concen: 53.970 ug/l  
RT: 7.640 min Scan# 971  
Delta R.T. 0.000 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:113 | Resp: | 3219       |
| Ion Ratio   | Lower | Upper      |
| 113         | 100   |            |
| 111         | 105.6 | 82.0 123.0 |
| 192         | 15.1  | 15.9 23.9  |





#36

1,1-Dichloropropene

Concen: 6.212 ug/l

RT: 7.713 min Scan# 91

Delta R.T. -0.128 min

Lab File: VY021606.D

Acq: 21 Mar 2025 17:46

Instrument :

MSVOA\_Y

ClientSampleId :

TR-04-032025

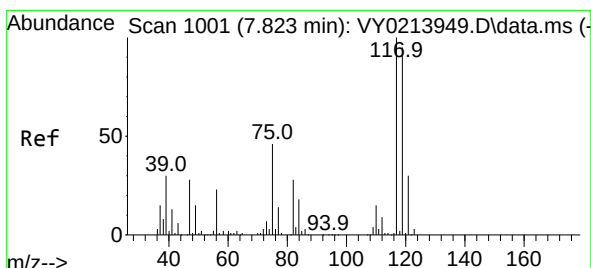
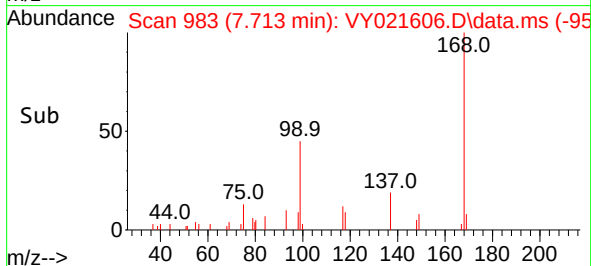
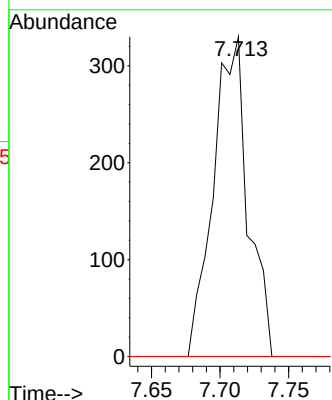
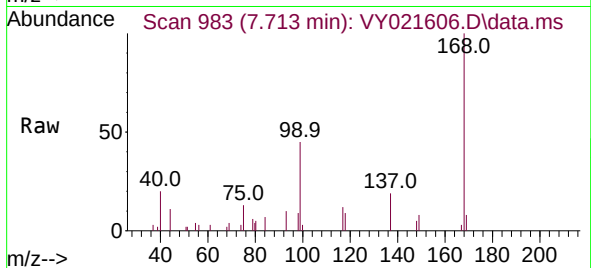
Tgt Ion: 75 Resp: 580

Ion Ratio Lower Upper

75 100

110 0.0 17.3 51.7#

77 0.0 25.4 38.2#



#38

Carbon Tetrachloride

Concen: 8.186 ug/l

RT: 7.695 min Scan# 980

Delta R.T. -0.128 min

Lab File: VY021606.D

Acq: 21 Mar 2025 17:46

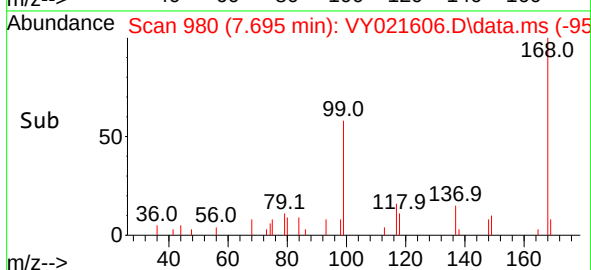
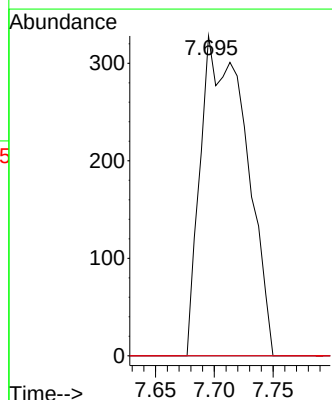
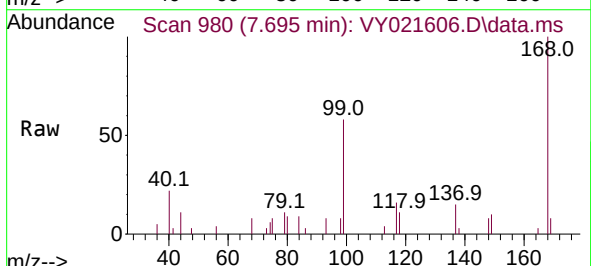
Tgt Ion: 117 Resp: 879

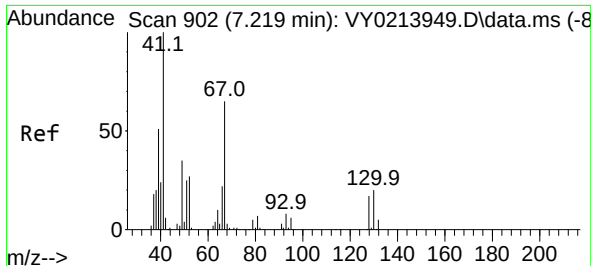
Ion Ratio Lower Upper

117 100

119 0.0 75.8 113.8#

121 0.0 23.9 35.9#

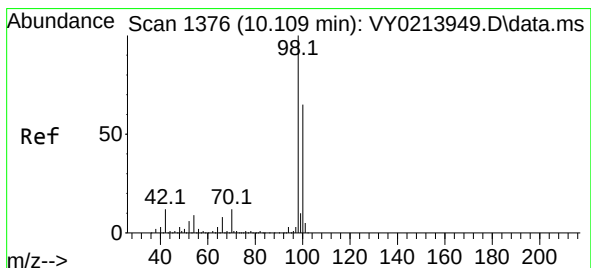
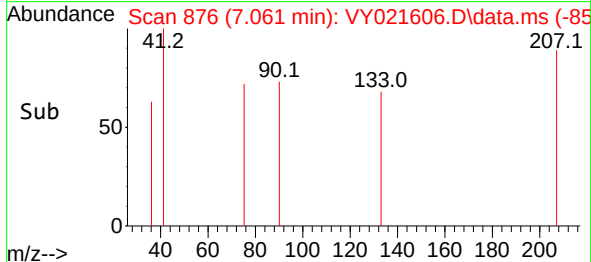
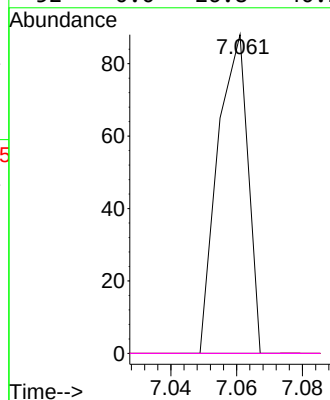
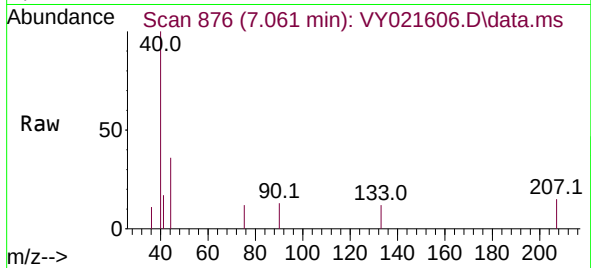




#41  
Methacrylonitrile  
Concen: 2.492 ug/l  
RT: 7.061 min Scan# 81  
Delta R.T. -0.158 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

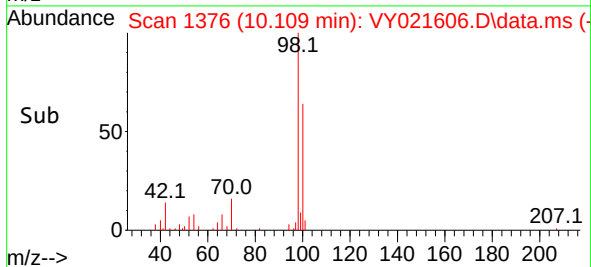
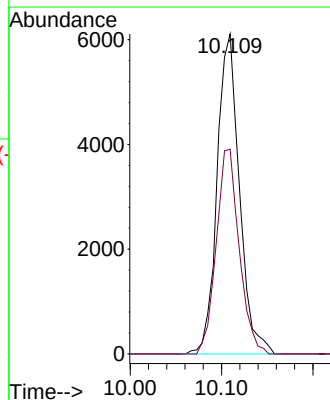
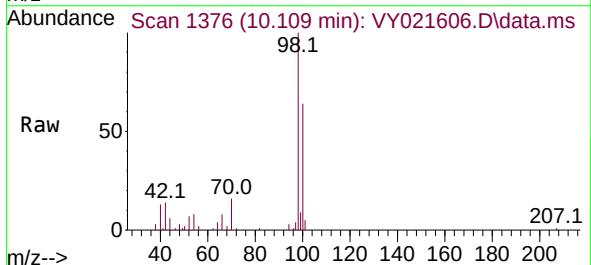
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TR-04-032025

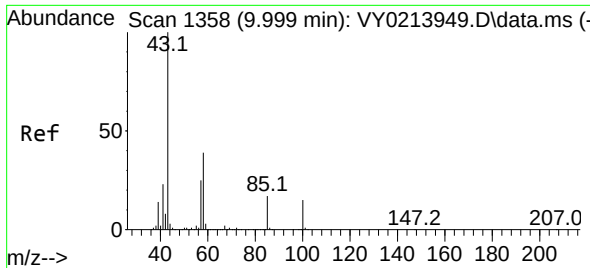
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 56    |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 0.0   | 35.0  | 52.6# |
| 67       | 0.0   | 61.2  | 91.8# |
| 52       | 0.0   | 26.8  | 40.2# |



#50  
Toluene-d8  
Concen: 45.928 ug/l  
RT: 10.109 min Scan# 1376  
Delta R.T. 0.000 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 98    | Resp: | 10372 |
| Ion      | Ratio | Lower | Upper |
| 98       | 100   |       |       |
| 100      | 65.7  | 52.1  | 78.1  |

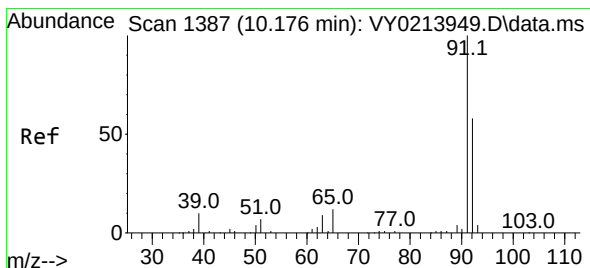
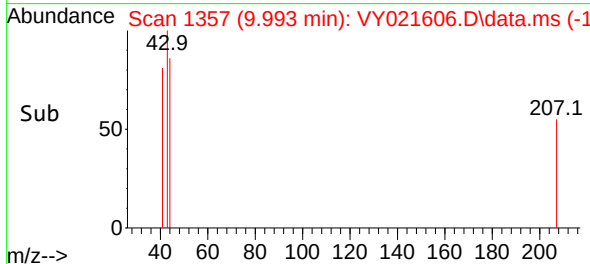
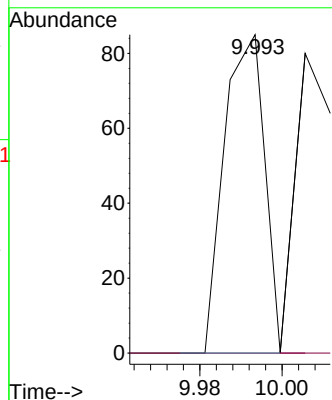
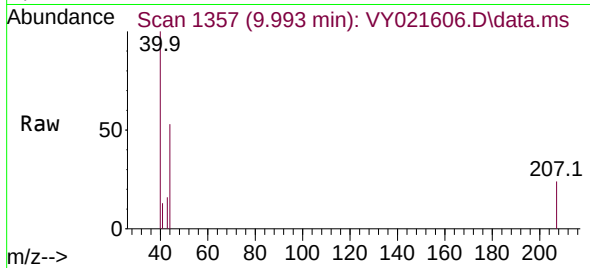




#51  
4-Methyl-2-Pentanone  
Concen: 1.403 ug/l  
RT: 9.993 min Scan# 1357  
Delta R.T. -0.006 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

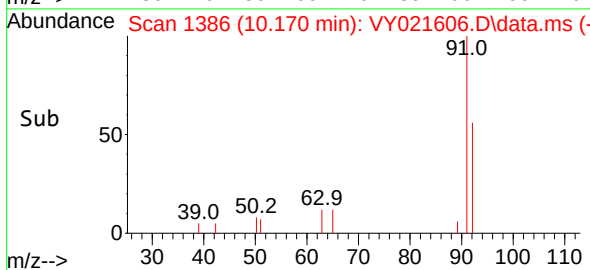
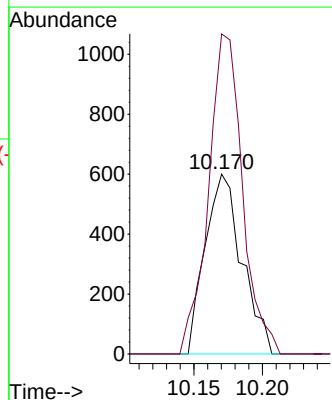
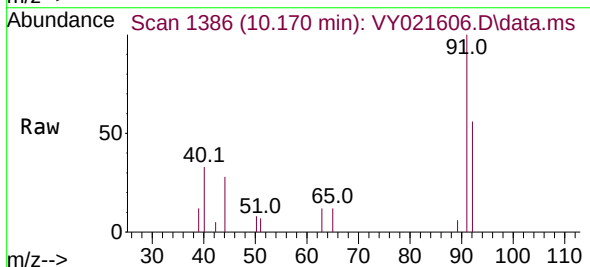
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TR-04-032025

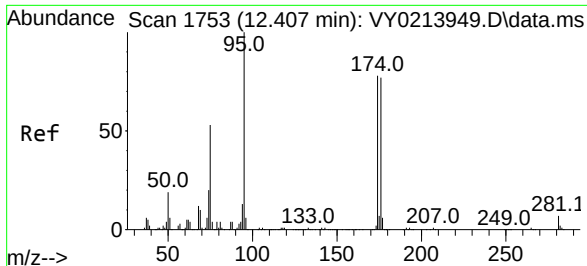
Tgt Ion: 43 Resp: 58  
Ion Ratio Lower Upper  
43 100  
58 0.0 31.4 47.2#



#52  
Toluene  
Concen: 6.482 ug/l  
RT: 10.170 min Scan# 1386  
Delta R.T. -0.006 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

Tgt Ion: 92 Resp: 1124  
Ion Ratio Lower Upper  
92 100  
91 164.1 138.2 207.2

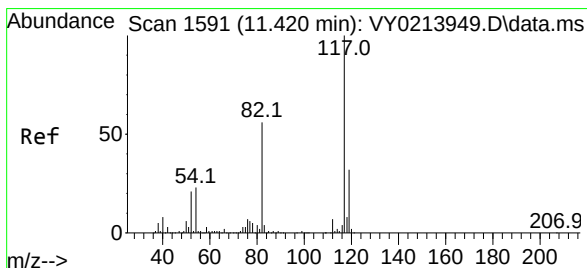
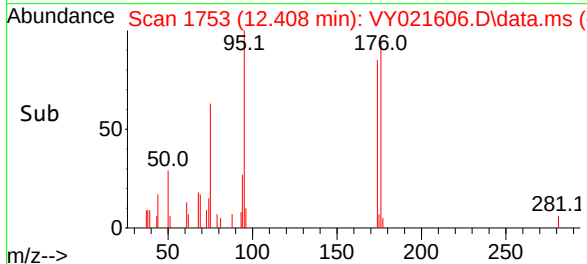
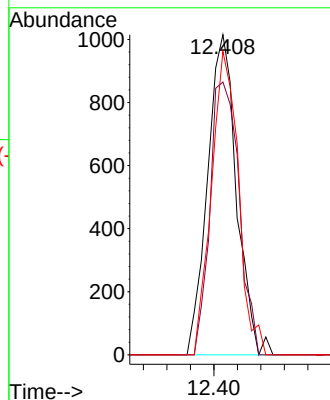
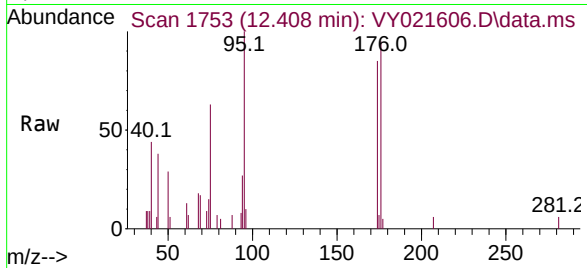




#62  
4-Bromofluorobenzene  
Concen: 22.598 ug/l  
RT: 12.408 min Scan# 1753  
Delta R.T. 0.000 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

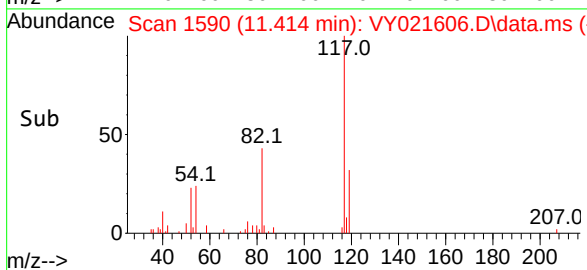
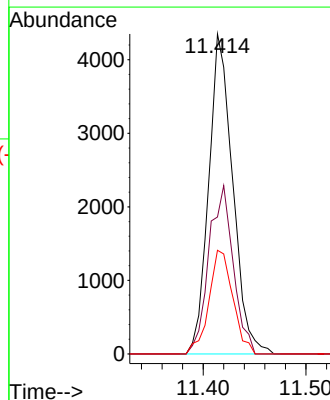
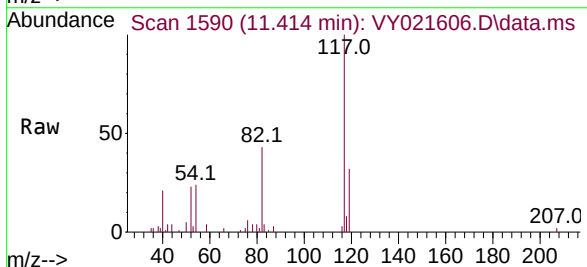
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MSVOA\_Y  
ClientSampleId :  
TR-04-032025

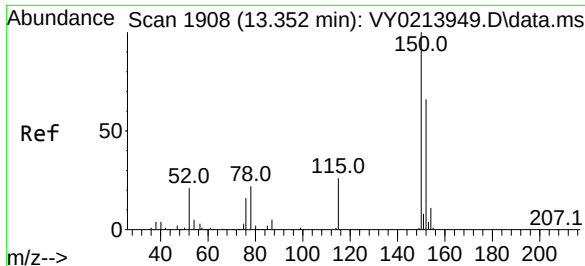
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 95    | Resp: | 1736  |
| Ion      | Ratio | Lower | Upper |
| 95       | 100   |       |       |
| 174      | 85.4  | 0.0   | 165.0 |
| 176      | 88.1  | 0.0   | 160.0 |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.414 min Scan# 1590  
Delta R.T. -0.006 min  
Lab File: VY021606.D  
Acq: 21 Mar 2025 17:46

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 7061  |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 82       | 42.8  | 44.6  | 67.0# |
| 119      | 32.4  | 25.4  | 38.0  |

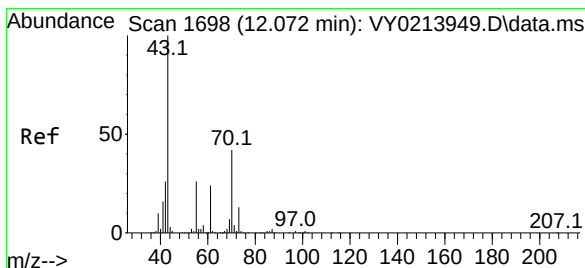
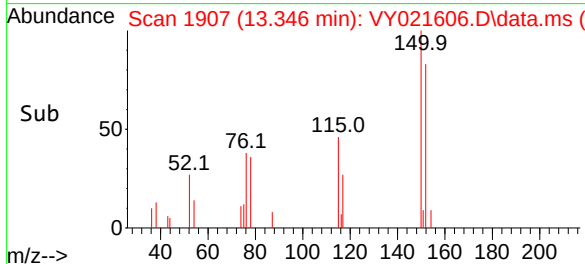
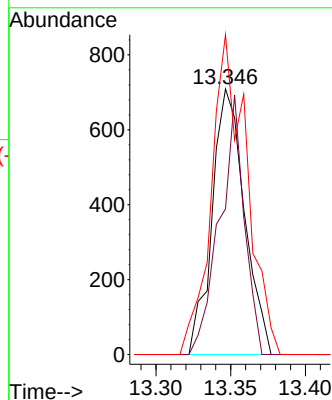
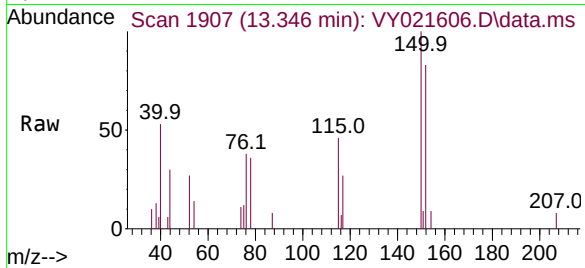




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 13.346 min Scan# 1907  
 Delta R.T. -0.006 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

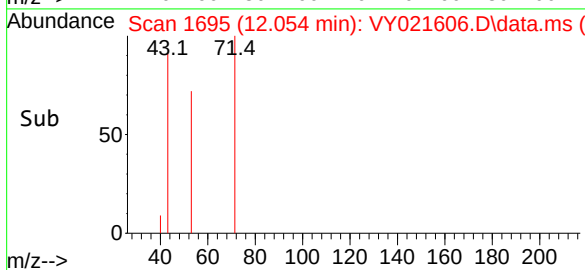
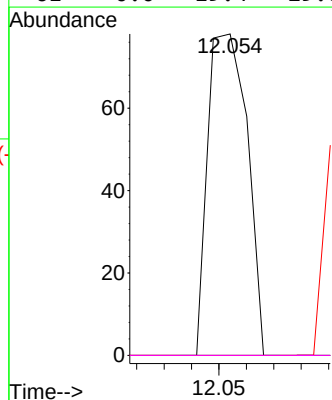
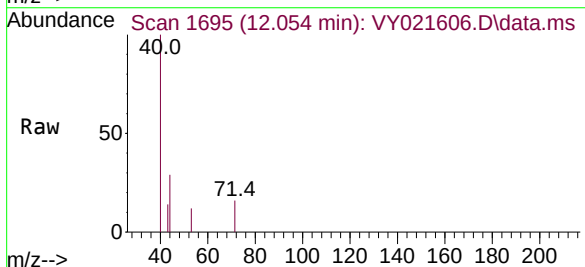
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 TR-04-032025

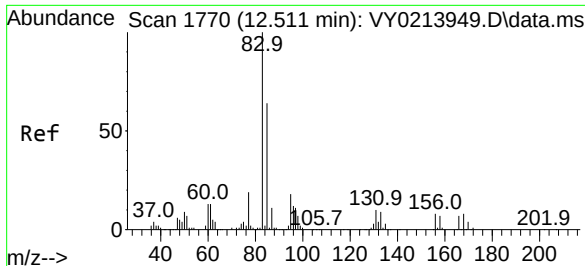
Tgt Ion:152 Resp: 1068  
 Ion Ratio Lower Upper  
 152 100  
 115 73.6 29.0 87.0  
 150 130.8 0.0 347.2



#74  
 N-ethyl acetate  
 Concen: 4.269 ug/l  
 RT: 12.054 min Scan# 1695  
 Delta R.T. -0.018 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

Tgt Ion: 43 Resp: 78  
 Ion Ratio Lower Upper  
 43 100  
 70 0.0 34.6 51.8#  
 55 0.0 21.1 31.7#  
 61 0.0 19.4 29.0#

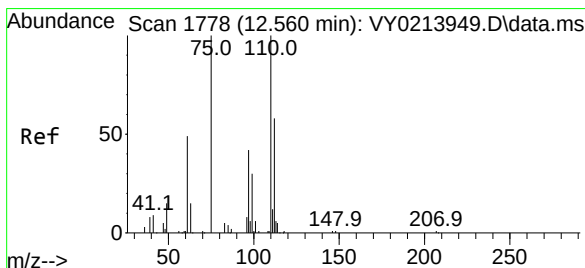
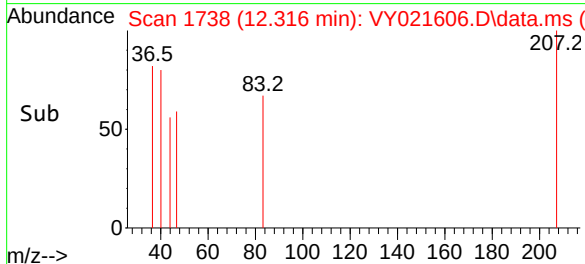
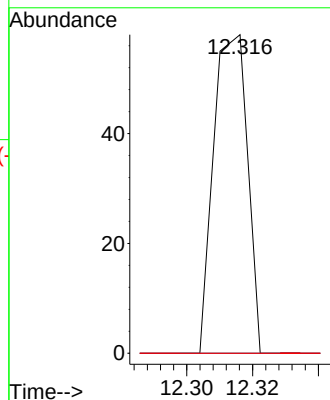
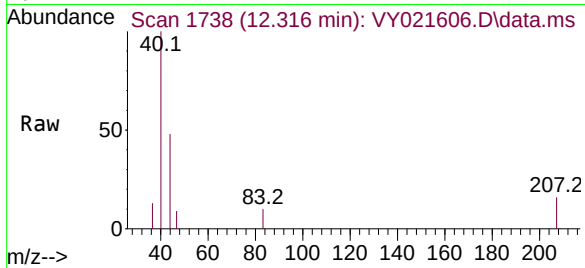




#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 2.762 ug/l  
 RT: 12.316 min Scan# 1753  
 Delta R.T. -0.195 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

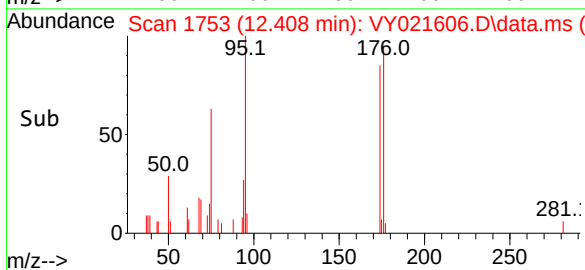
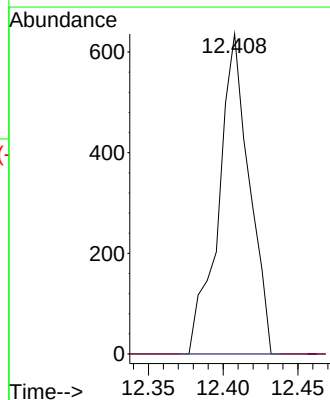
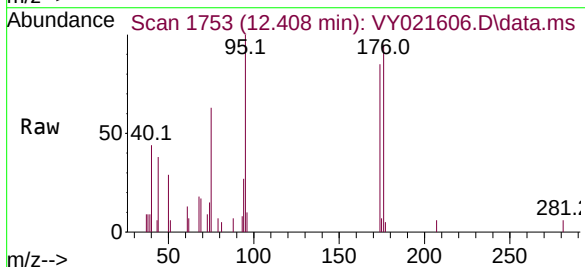
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 TR-04-032025

Tgt Ion: 83 Resp: 41  
 Ion Ratio Lower Upper  
 83 100  
 131 0.0 5.3 16.1#  
 85 0.0 31.9 95.5#

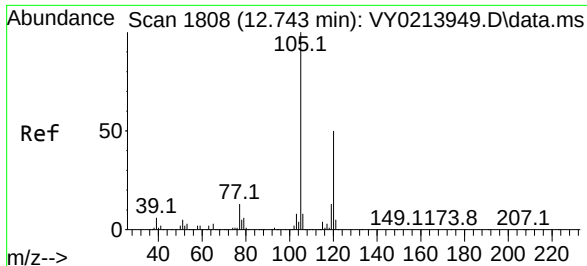


#76  
 1,2,3-Trichloropropane  
 Concen: 84.556 ug/l  
 RT: 12.408 min Scan# 1753  
 Delta R.T. -0.152 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

Tgt Ion: 75 Resp: 910  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 0.0 0.0



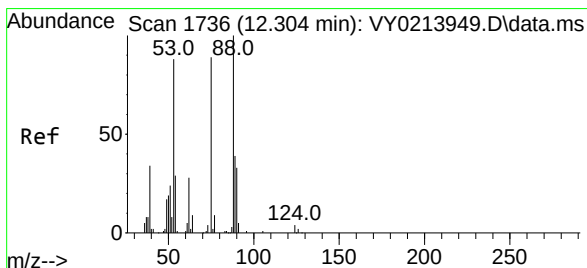
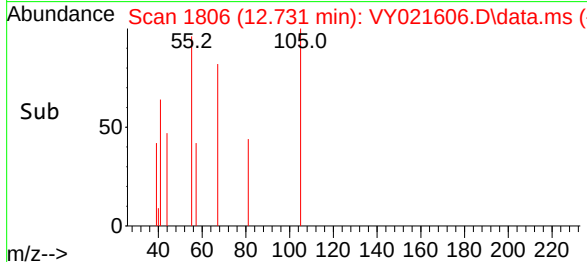
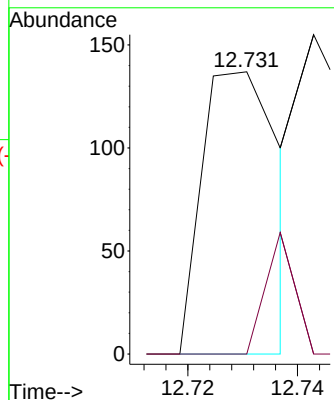
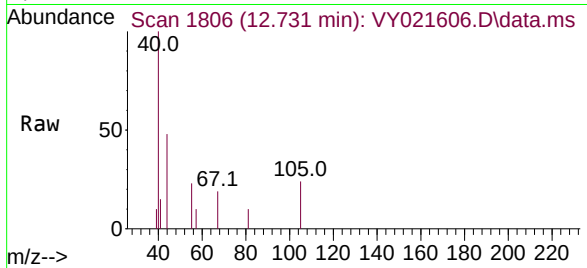




#80  
 1,3,5-Trimethylbenzene  
 Concen: 1.989 ug/l  
 RT: 12.731 min Scan# 11  
 Delta R.T. -0.012 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

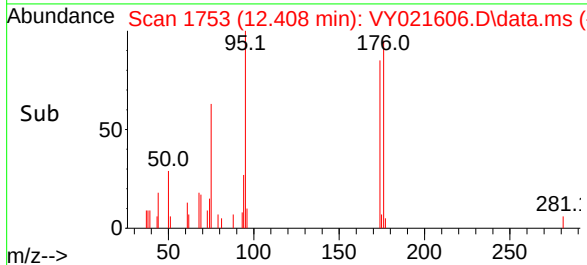
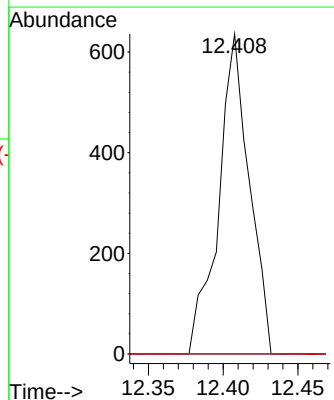
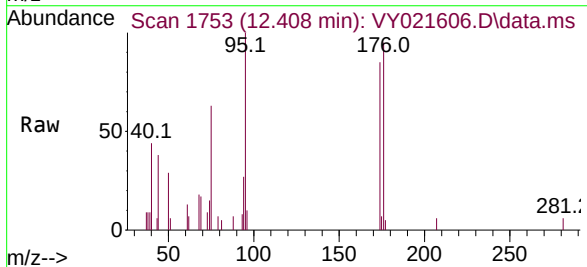
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 TR-04-032025

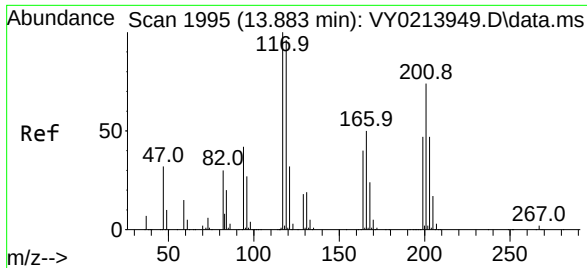
Tgt Ion:105 Resp: 136  
 Ion Ratio Lower Upper  
 105 100  
 120 16.2 24.6 73.6#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 192.223 ug/l  
 RT: 12.408 min Scan# 1753  
 Delta R.T. 0.104 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

Tgt Ion: 75 Resp: 910  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 81.0 121.4#  
 89 0.0 36.9 55.3#





#90  
 Hexachloroethane  
 Concen: 8.653 ug/l  
 RT: 13.999 min Scan# 20  
 Delta R.T. 0.116 min  
 Lab File: VY021606.D  
 Acq: 21 Mar 2025 17:46

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 TR-04-032025

Tgt Ion:117 Resp: 138  
 Ion Ratio Lower Upper  
 117 100  
 201 0.0 37.4 112.2#

