

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY043025\  
 Data File : VY022083.D  
 Acq On : 30 Apr 2025 15:11  
 Operator : SY/MD  
 Sample : Q1883-13  
 Misc : 14.29g/5.0mL/MSVOA\_Y/SOIL/B  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 OU4-VSL-18-042325

Quant Time: May 01 01:36:57 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y042225S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Apr 23 02:30:30 2025  
 Response via : Initial Calibration

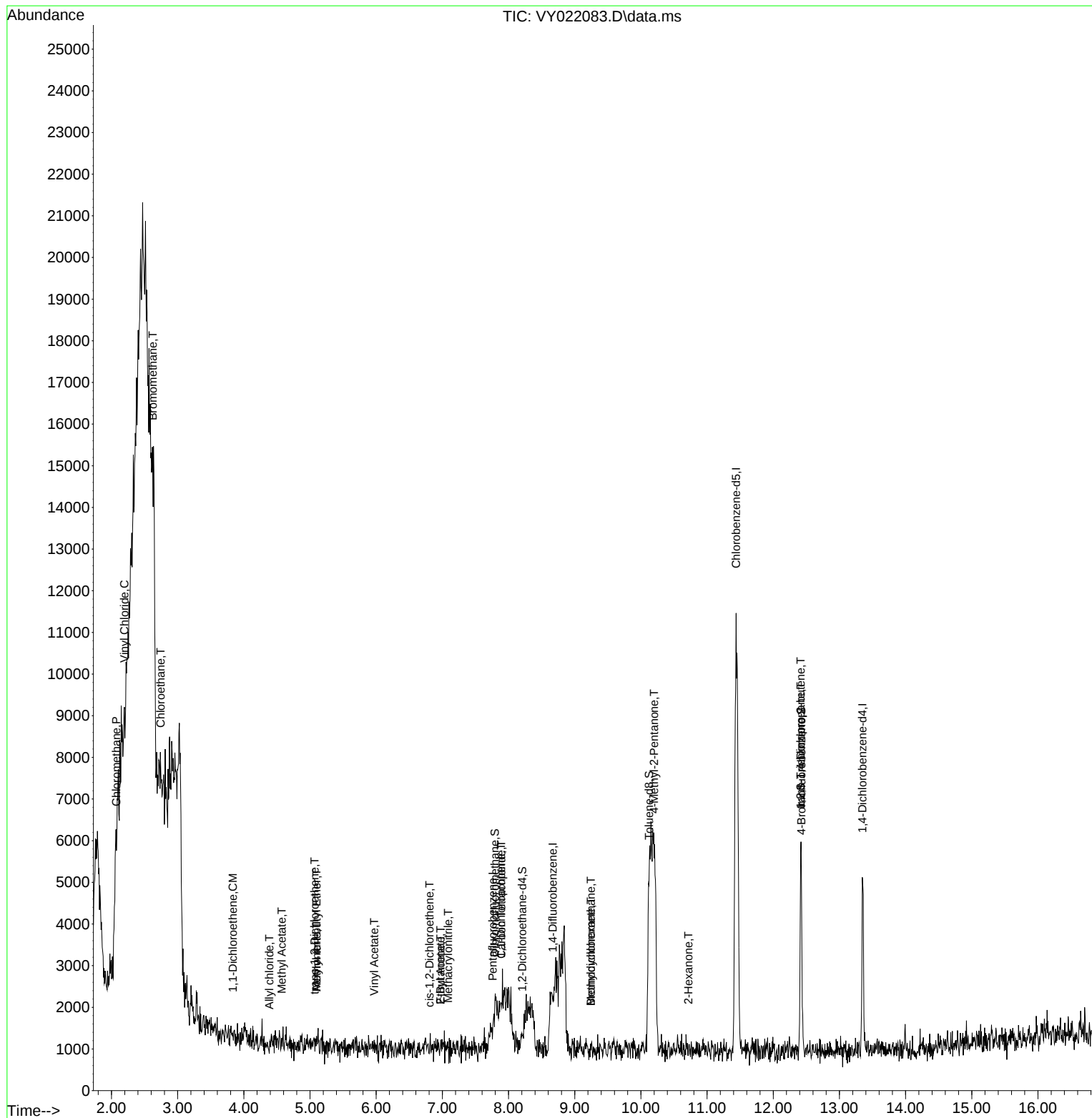
| Compound                      | R.T.   | QIon  | Response | Conc      | Units | Dev(Min)   |
|-------------------------------|--------|-------|----------|-----------|-------|------------|
| -----                         |        |       |          |           |       |            |
| Internal Standards            |        |       |          |           |       |            |
| 1) Pentafluorobenzene         | 7.762  | 168   | 1596     | 50.000    | ug/l  | # 0.06     |
| 34) 1,4-Difluorobenzene       | 8.670  | 114   | 351      | 50.000    | ug/l  | 0.05       |
| 63) Chlorobenzene-d5          | 11.438 | 117   | 11840    | 50.000    | ug/l  | # 0.02     |
| 72) 1,4-Dichlorobenzene-d4    | 13.346 | 152   | 1424     | 50.000    | ug/l  | 0.00       |
|                               |        |       |          |           |       |            |
| System Monitoring Compounds   |        |       |          |           |       |            |
| 33) 1,2-Dichloroethane-d4     | 8.207  | 65    | 182      | 12.346    | ug/l  | 0.15       |
| Spiked Amount                 | 50.000 | Range | 50 - 163 | Recovery  | =     | 24.700%#   |
| 35) Dibromofluoromethane      | 7.793  | 113   | 69       | 29.756    | ug/l  | 0.16       |
| Spiked Amount                 | 50.000 | Range | 54 - 147 | Recovery  | =     | 59.520%    |
| 50) Toluene-d8                | 10.121 | 98    | 2980     | 340.875   | ug/l  | 0.02       |
| Spiked Amount                 | 50.000 | Range | 58 - 134 | Recovery  | =     | 681.740%#  |
| 62) 4-Bromofluorobenzene      | 12.426 | 95    | 2048     | 695.892   | ug/l  | 0.02       |
| Spiked Amount                 | 50.000 | Range | 30 - 143 | Recovery  | =     | 1391.780%# |
|                               |        |       |          |           |       |            |
| Target Compounds              |        |       |          |           |       |            |
|                               |        |       |          |           |       | Qvalue     |
| 3) Chloromethane              | 2.074  | 50    | 67       | 3.460     | ug/l  | # 42       |
| 4) Vinyl Chloride             | 2.196  | 62    | 98       | 4.118     | ug/l  | # 43       |
| 5) Bromomethane               | 2.623  | 94    | 58       | 2.829     | ug/l  | # 3        |
| 6) Chloroethane               | 2.745  | 64    | 117      | 7.220     | ug/l  | # 1        |
| 12) 1,1-Dichloroethene        | 3.836  | 96    | 70       | 4.412     | ug/l  | # 1        |
| 14) Allyl chloride            | 4.385  | 41    | 50       | 2.706     | ug/l  | # 20       |
| 15) Acrylonitrile             | 5.098  | 53    | 19       | 6.355     | ug/l  | # 18       |
| 16) Acetone                   | 3.885  | 43    | 41       | Below Cal | #     | 41         |
| 18) Methyl Acetate            | 4.574  | 43    | 35       | 5.083     | ug/l  | # 44       |
| 19) Methyl tert-butyl Ether   | 5.098  | 73    | 51       | 1.436     | ug/l  | # 55       |
| 21) trans-1,2-Dichloroethene  | 5.067  | 96    | 44       | 2.476     | ug/l  | # 3        |
| 23) Vinyl Acetate             | 5.970  | 43    | 25       | 1.128     | ug/l  | # 66       |
| 25) 2-Butanone                | 6.969  | 43    | 22       | 6.547     | ug/l  | # 41       |
| 27) cis-1,2-Dichloroethene    | 6.805  | 96    | 99       | 4.983     | ug/l  | # 1        |
| 36) 1,1-Dichloropropene       | 7.884  | 75    | 44       | 14.126    | ug/l  | # 39       |
| 37) Ethyl Acetate             | 6.969  | 43    | 22       | 19.665    | ug/l  | # 64       |
| 38) Carbon Tetrachloride      | 7.890  | 117   | 52       | 13.971    | ug/l  | # 12       |
| 39) Methylcyclohexane         | 9.243  | 83    | 29       | 7.398     | ug/l  | # 23       |
| 41) Methacrylonitrile         | 7.085  | 41    | 25       | 40.880    | ug/l  | # 20       |
| 47) Bromodichloromethane      | 9.243  | 83    | 29       | 8.612     | ug/l  | # 25       |
| 51) 4-Methyl-2-Pentanone      | 10.201 | 43    | 48       | 42.620    | ug/l  | # 31       |
| 59) 2-Hexanone                | 10.719 | 43    | 23       | 30.962    | ug/l  | # 18       |
| 76) 1,2,3-Trichloropropane    | 12.414 | 75    | 1194     | 97.891    | ug/l  | # 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.414 | 75    | 1194     | 235.736   | ug/l  | # 16       |
| -----                         |        |       |          |           |       |            |

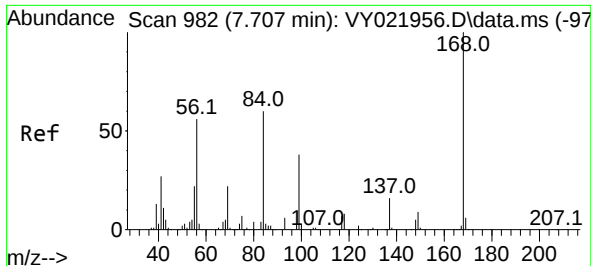
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Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY043025\  
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Sample : Q1883-13  
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ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
OU4-VSL-18-042325

Quant Time: May 01 01:36:57 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y042225S.M  
Quant Title : SW846 8260  
QLast Update : Wed Apr 23 02:30:30 2025  
Response via : Initial Calibration

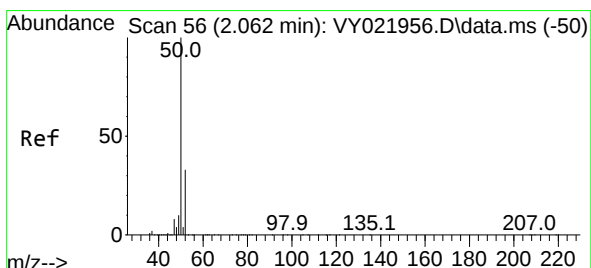
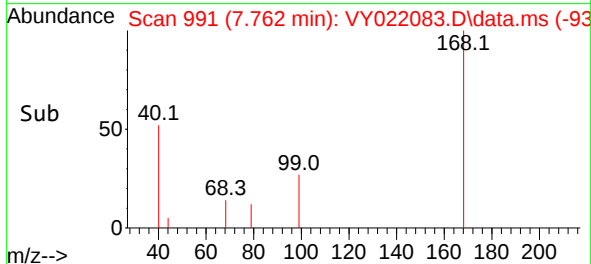
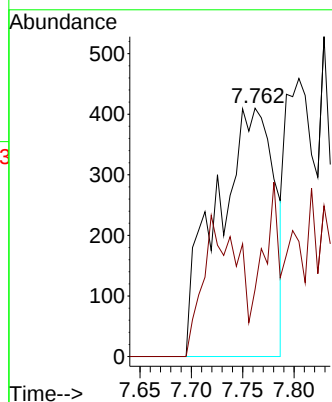
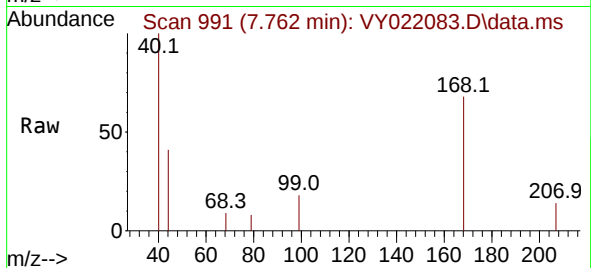




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.762 min Scan# 99  
Delta R.T. 0.055 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

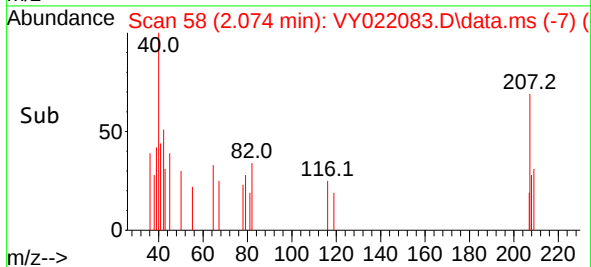
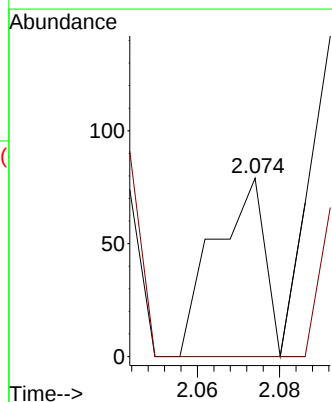
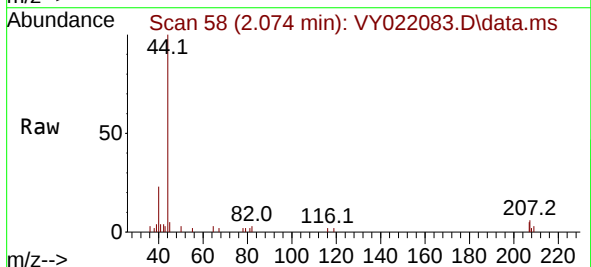
Instrument :  
MSVOA\_Y  
ClientSampleId :  
OU4-VSL-18-042325

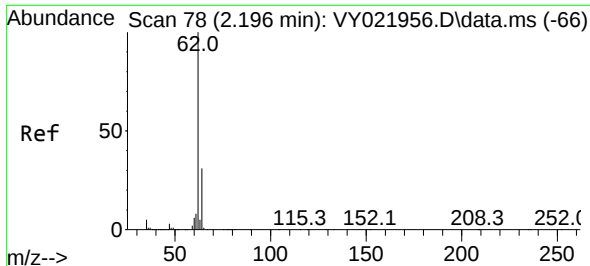
Tgt Ion:168 Resp: 1596  
Ion Ratio Lower Upper  
168 100  
99 27.1 43.1 64.7#



#3  
Chloromethane  
Concen: 3.460 ug/l  
RT: 2.074 min Scan# 58  
Delta R.T. 0.012 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

Tgt Ion: 50 Resp: 67  
Ion Ratio Lower Upper  
50 100  
52 0.0 26.1 39.1#

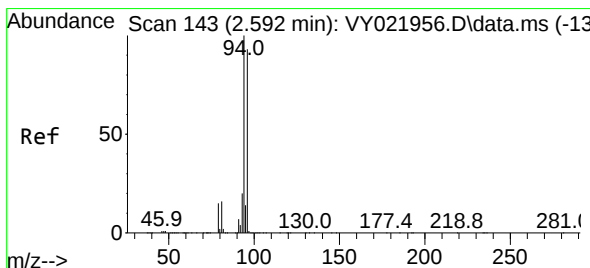
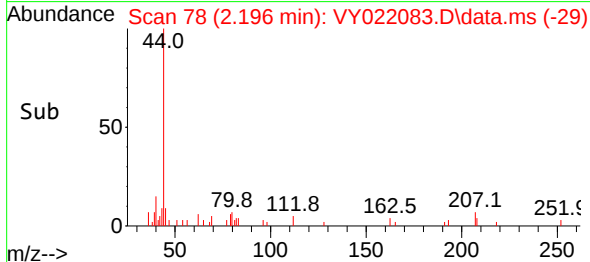
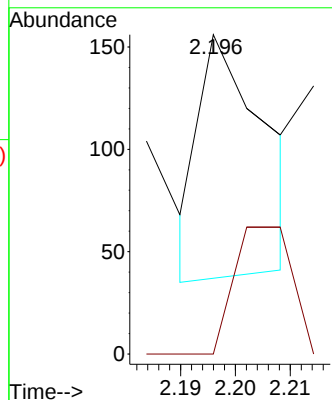
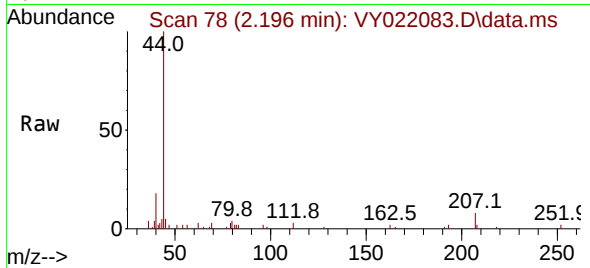




#4  
 Vinyl Chloride  
 Concen: 4.118 ug/l  
 RT: 2.196 min Scan# 78  
 Delta R.T. -0.000 min  
 Lab File: VY022083.D  
 Acq: 30 Apr 2025 15:11

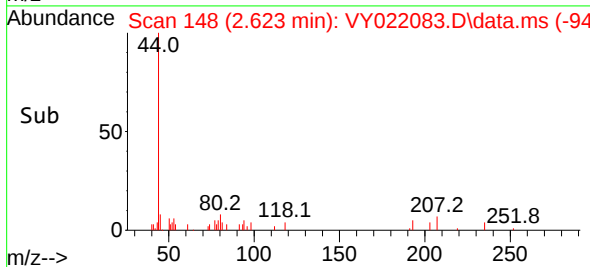
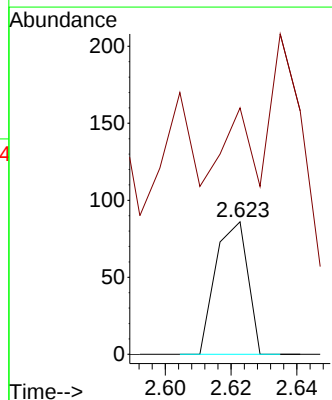
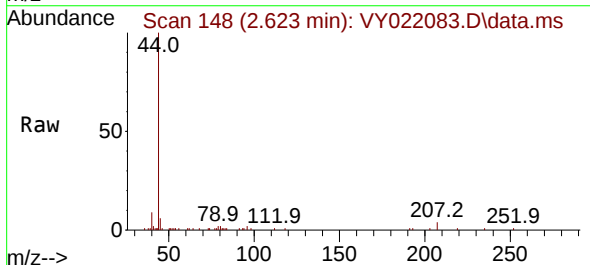
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 OU4-VSL-18-042325

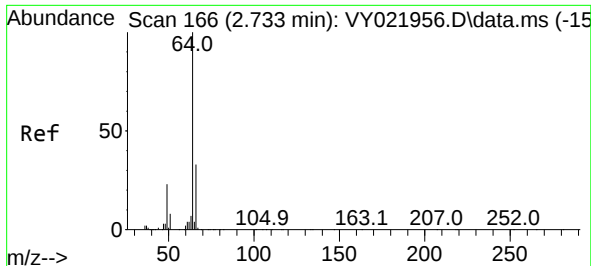
Tgt Ion: 62 Resp: 98  
 Ion Ratio Lower Upper  
 62 100  
 64 0.0 25.1 37.7#



#5  
 Bromomethane  
 Concen: 2.829 ug/l  
 RT: 2.623 min Scan# 148  
 Delta R.T. 0.030 min  
 Lab File: VY022083.D  
 Acq: 30 Apr 2025 15:11

Tgt Ion: 94 Resp: 58  
 Ion Ratio Lower Upper  
 94 100  
 96 0.0 74.6 111.8#

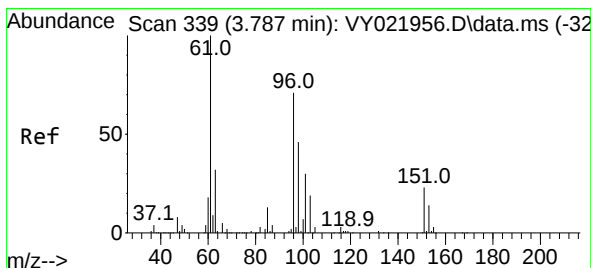
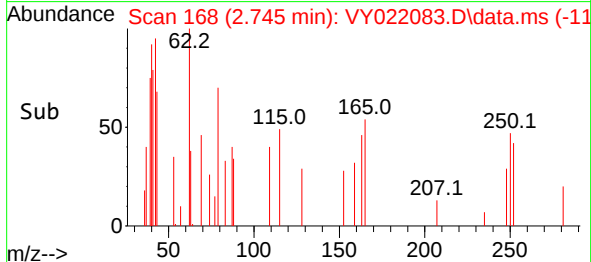
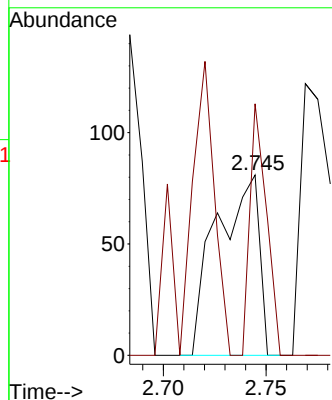
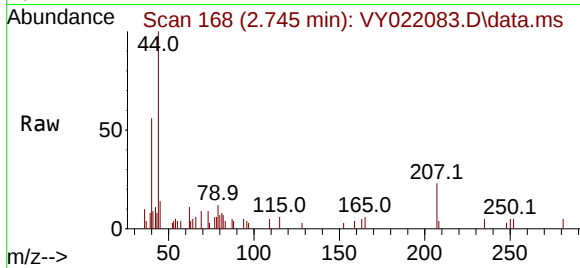




#6  
Chloroethane  
Concen: 7.220 ug/l  
RT: 2.745 min Scan# 117  
Delta R.T. 0.012 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

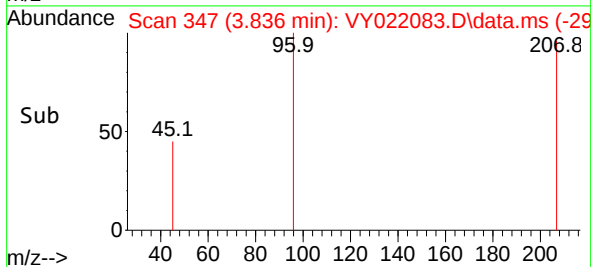
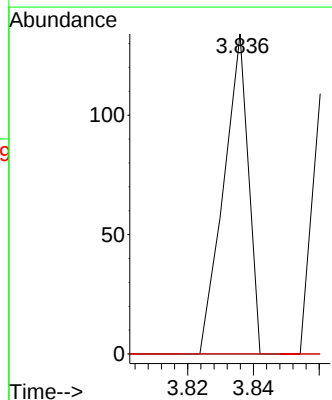
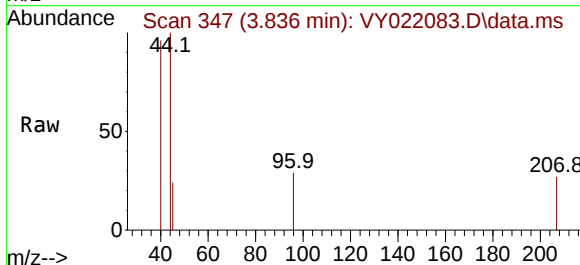
Instrument :  
MSVOA\_Y  
ClientSampleId :  
OU4-VSL-18-042325

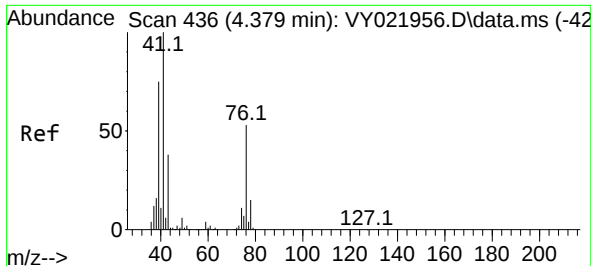
Tgt Ion: 64 Resp: 117  
Ion Ratio Lower Upper  
64 100  
66 139.5 26.2 39.4#



#12  
1,1-Dichloroethene  
Concen: 4.412 ug/l  
RT: 3.836 min Scan# 347  
Delta R.T. 0.049 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

Tgt Ion: 96 Resp: 70  
Ion Ratio Lower Upper  
96 100  
61 0.0 113.0 169.4#  
98 0.0 51.4 77.2#

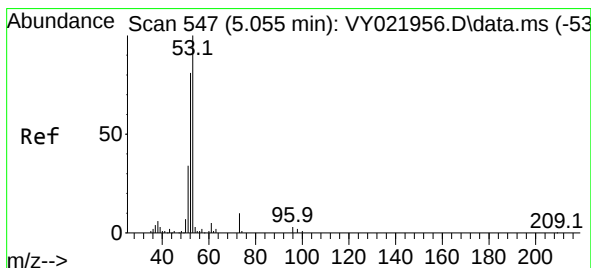
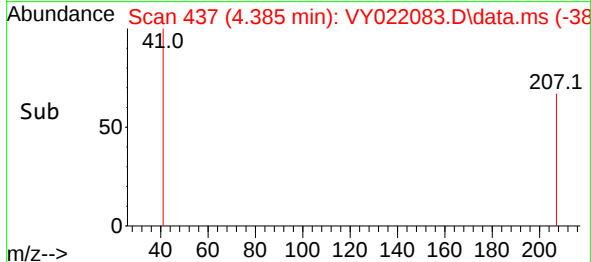
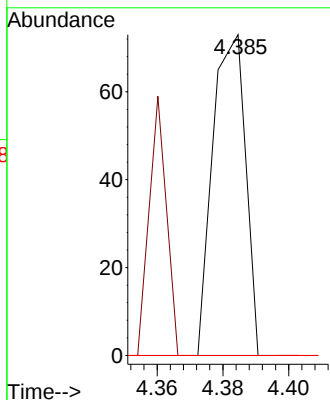
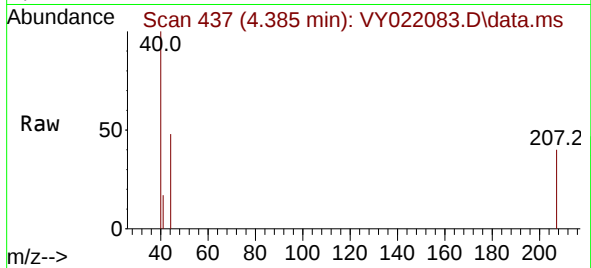




#14  
 Allyl chloride  
 Concen: 2.706 ug/l  
 RT: 4.385 min Scan# 41  
 Delta R.T. 0.006 min  
 Lab File: VY022083.D  
 Acq: 30 Apr 2025 15:11

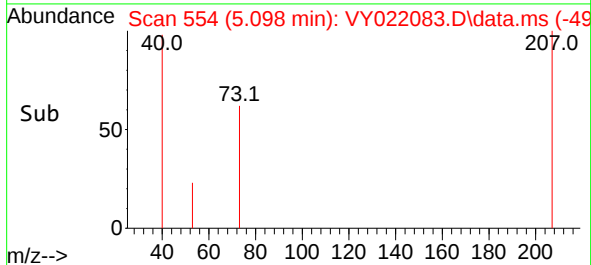
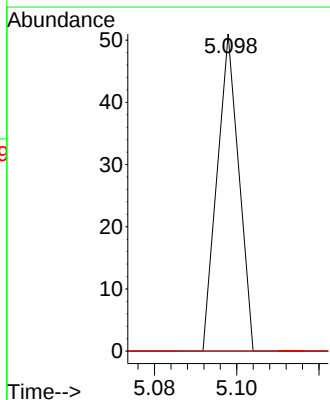
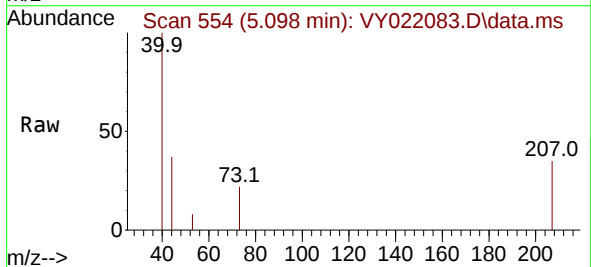
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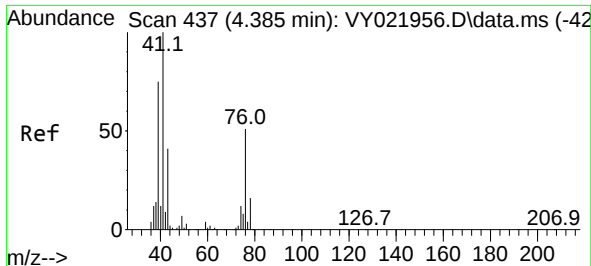
Tgt Ion: 41 Resp: 50  
 Ion Ratio Lower Upper  
 41 100  
 39 0.0 57.2 85.8#  
 76 0.0 39.7 59.5#



#15  
 Acrylonitrile  
 Concen: 6.355 ug/l  
 RT: 5.098 min Scan# 554  
 Delta R.T. 0.043 min  
 Lab File: VY022083.D  
 Acq: 30 Apr 2025 15:11

Tgt Ion: 53 Resp: 19  
 Ion Ratio Lower Upper  
 53 100  
 52 0.0 65.0 97.6#  
 51 0.0 28.9 43.3#

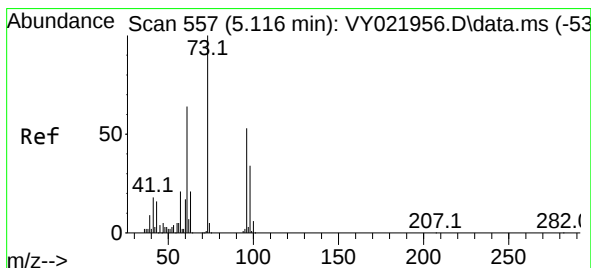
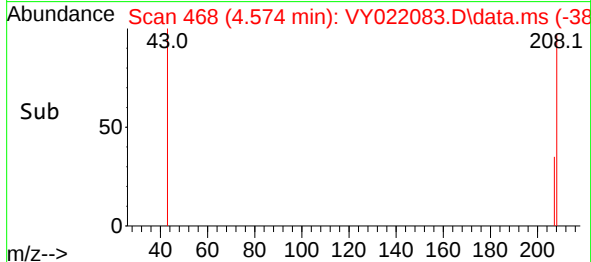
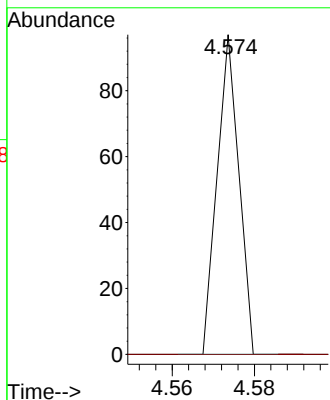
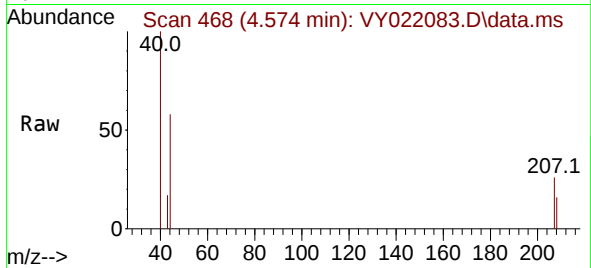




#18  
Methyl Acetate  
Concen: 5.083 ug/l  
RT: 4.574 min Scan# 41  
Delta R.T. 0.189 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

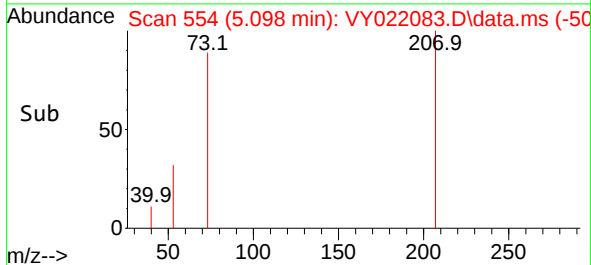
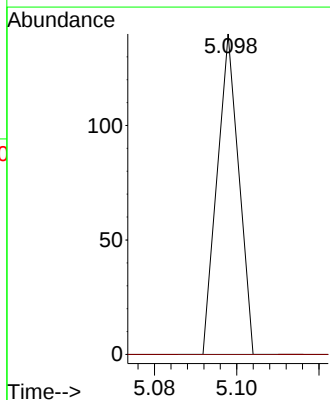
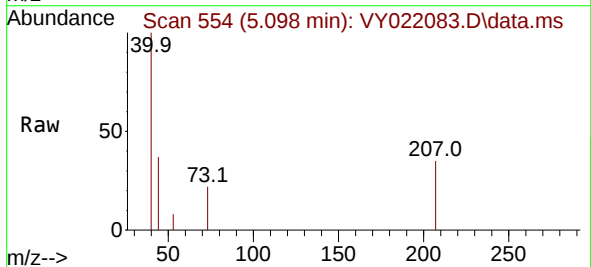
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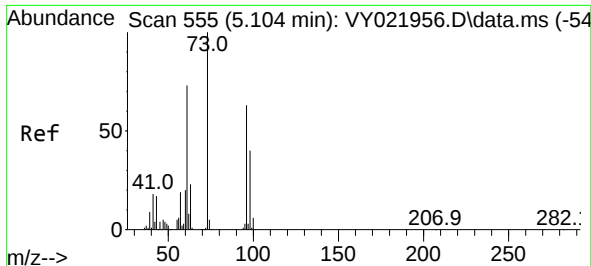
Tgt Ion: 43 Resp: 35  
Ion Ratio Lower Upper  
43 100  
74 0.0 24.2 36.4#



#19  
Methyl tert-butyl Ether  
Concen: 1.436 ug/l  
RT: 5.098 min Scan# 554  
Delta R.T. -0.018 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

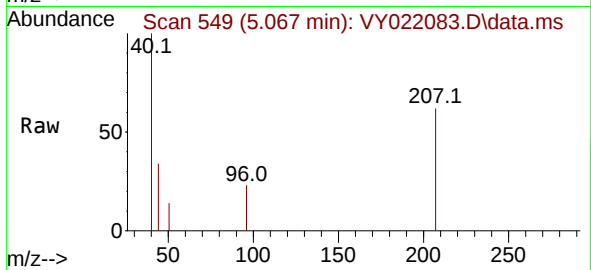
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Ion Ratio Lower Upper  
73 100  
57 0.0 16.9 25.3#



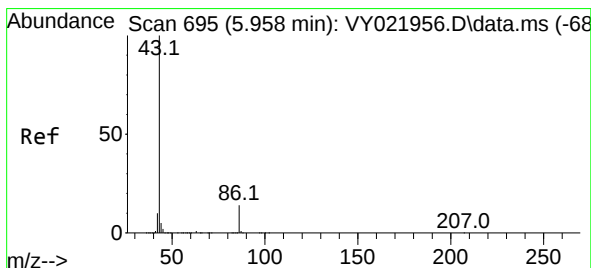
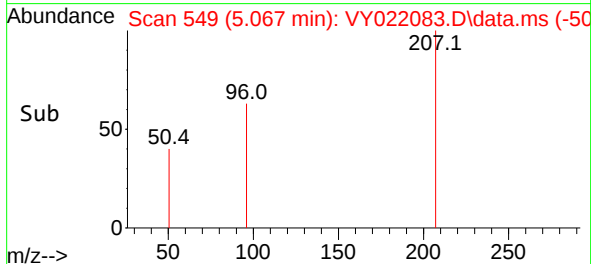
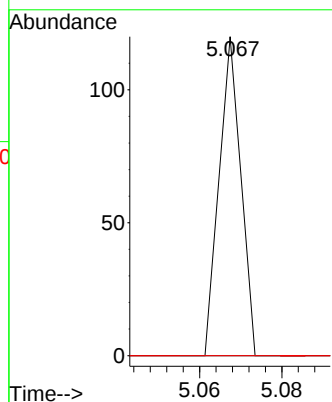


#21  
trans-1,2-Dichloroethene  
Concen: 2.476 ug/l  
RT: 5.067 min Scan# 549  
Delta R.T. -0.037 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

Instrument :  
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ClientSampleId :  
OU4-VSL-18-042325

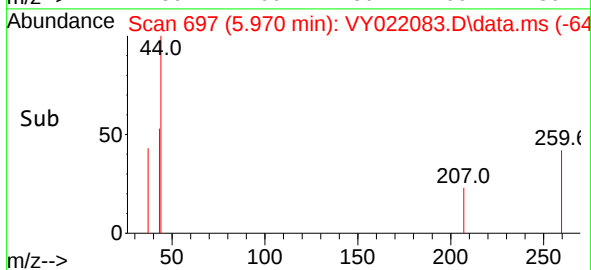
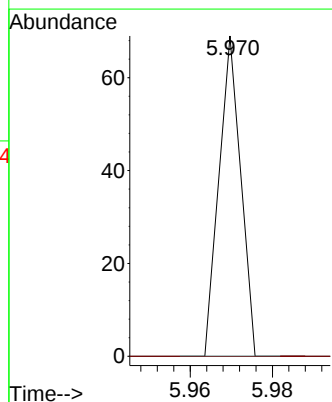
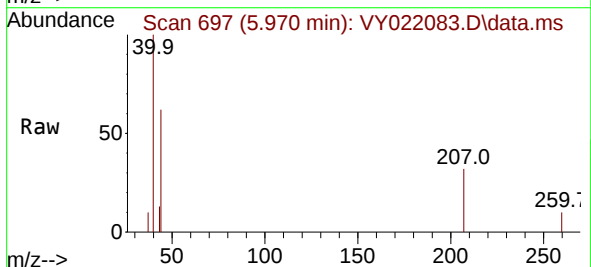


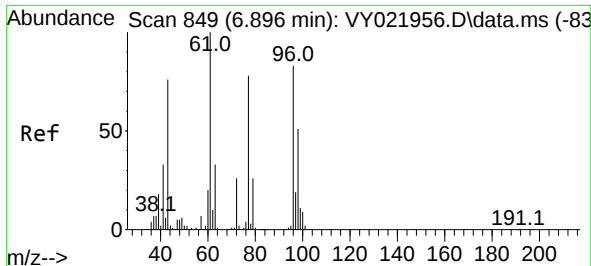
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Ion Ratio Lower Upper  
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61 0.0 92.6 138.8#  
98 0.0 50.2 75.4#



#23  
Vinyl Acetate  
Concen: 1.128 ug/l  
RT: 5.970 min Scan# 697  
Delta R.T. 0.012 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

Tgt Ion: 43 Resp: 25  
Ion Ratio Lower Upper  
43 100  
86 0.0 11.1 16.7#

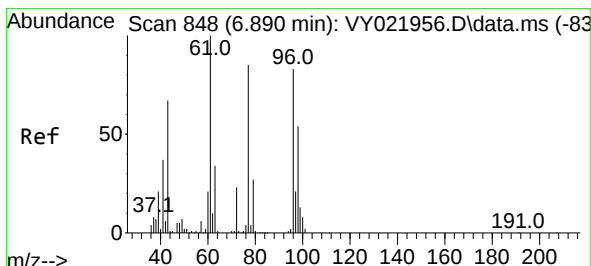
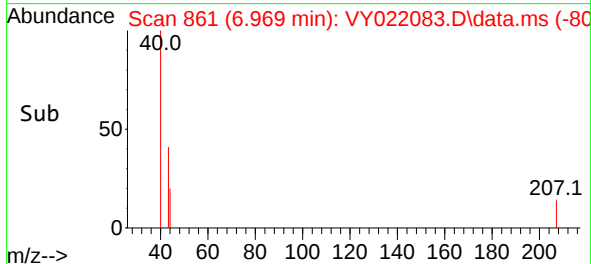
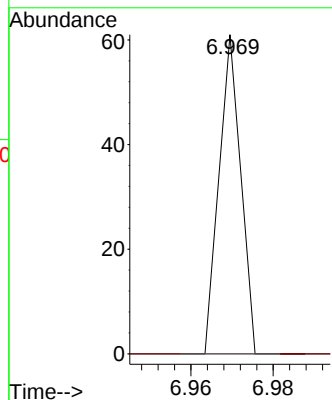
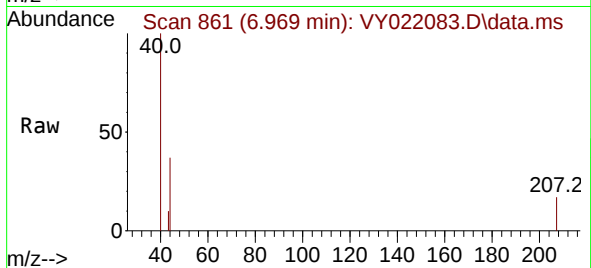




#25  
2-Butanone  
Concen: 6.547 ug/l  
RT: 6.969 min Scan# 80  
Delta R.T. 0.073 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

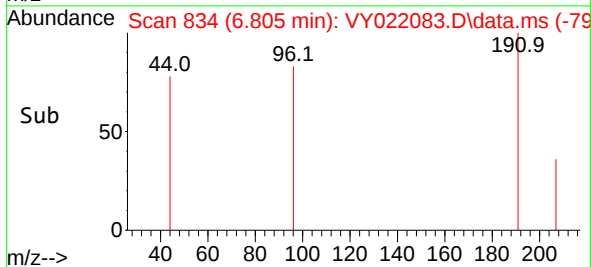
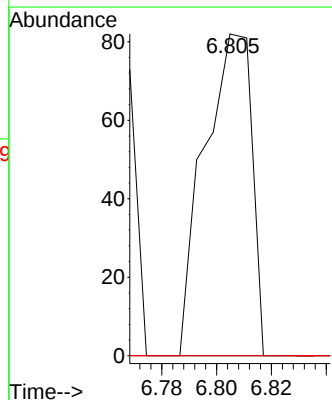
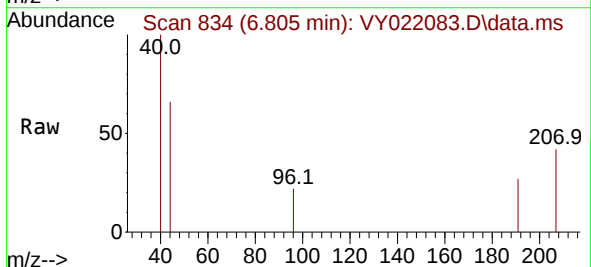
Instrument :  
MSVOA\_Y  
ClientSampleId :  
OU4-VSL-18-042325

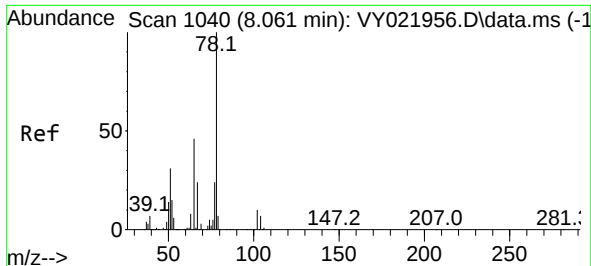
Tgt Ion: 43 Resp: 22  
Ion Ratio Lower Upper  
43 100  
72 0.0 27.0 40.4#



#27  
cis-1,2-Dichloroethene  
Concen: 4.983 ug/l  
RT: 6.805 min Scan# 834  
Delta R.T. -0.085 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

Tgt Ion: 96 Resp: 99  
Ion Ratio Lower Upper  
96 100  
61 0.0 0.0 251.4  
98 0.0 0.0 128.4





#33

1,2-Dichloroethane-d4

Concen: 12.346 ug/l

RT: 8.207 min Scan# 110

Delta R.T. 0.146 min

Lab File: VY022083.D

Acq: 30 Apr 2025 15:11

Instrument :

MSVOA\_Y

ClientSampleId :

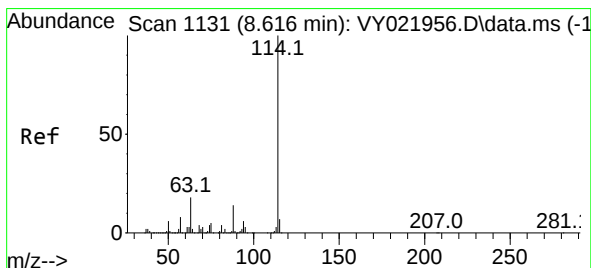
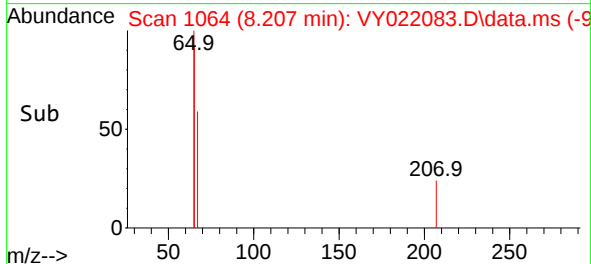
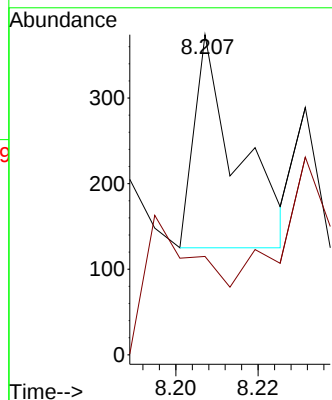
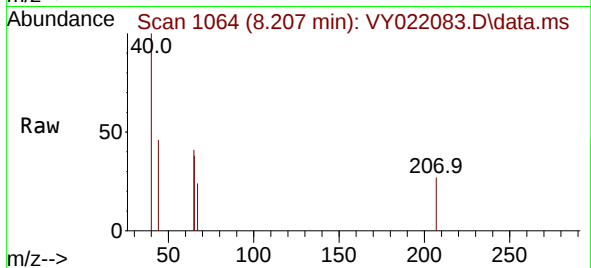
OU4-VSL-18-042325

Tgt Ion: 65 Resp: 182

Ion Ratio Lower Upper

65 100

67 94.5 0.0 105.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.670 min Scan# 1140

Delta R.T. 0.055 min

Lab File: VY022083.D

Acq: 30 Apr 2025 15:11

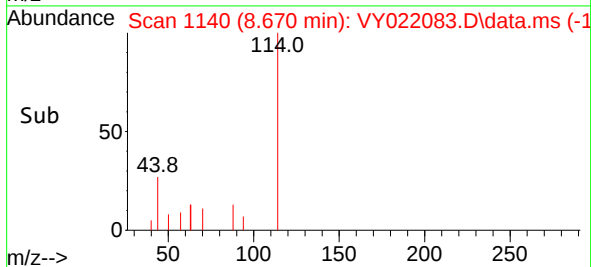
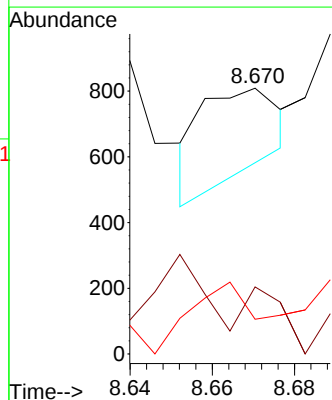
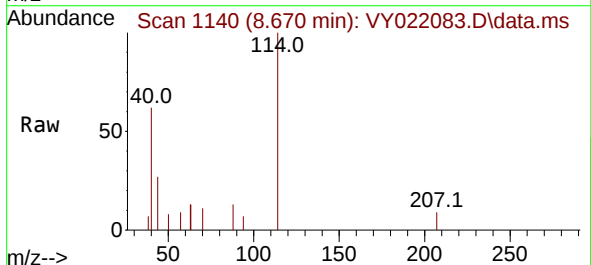
Tgt Ion: 114 Resp: 351

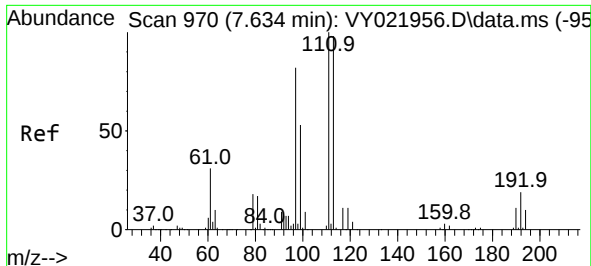
Ion Ratio Lower Upper

114 100

63 27.5 0.0 35.4

88 0.0 0.0 28.2

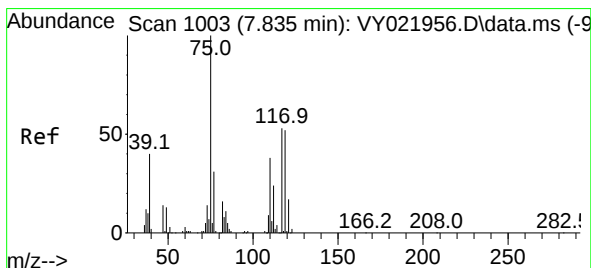
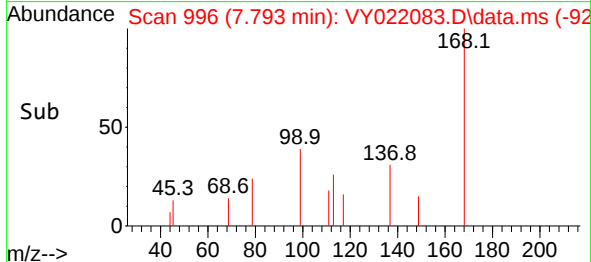
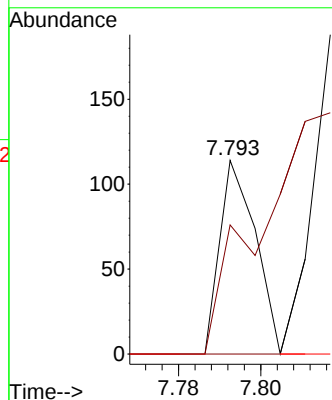
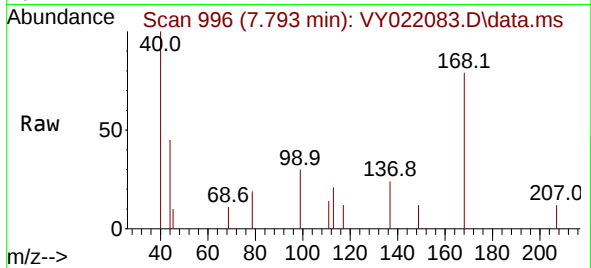




#35  
Dibromofluoromethane  
Concen: 29.756 ug/l  
RT: 7.793 min Scan# 91  
Delta R.T. 0.158 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

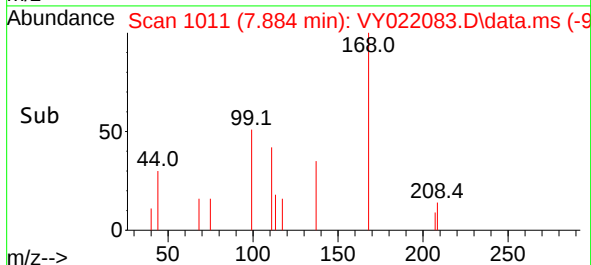
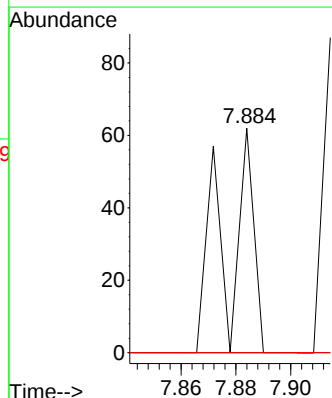
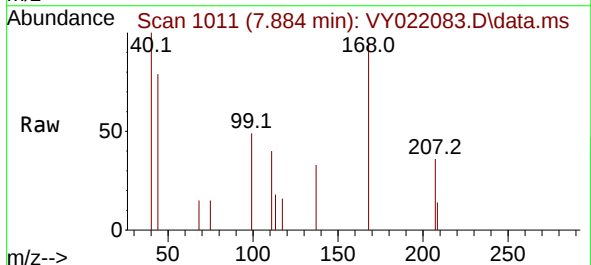
Instrument :  
MSVOA\_Y  
ClientSampleId :  
OU4-VSL-18-042325

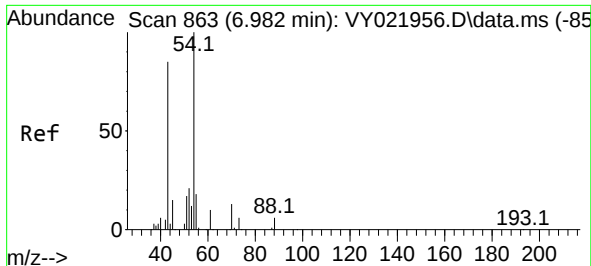
Tgt Ion:113 Resp: 69  
Ion Ratio Lower Upper  
113 100  
111 0.0 81.8 122.8#  
192 0.0 15.6 23.4#



#36  
1,1-Dichloropropene  
Concen: 14.126 ug/l  
RT: 7.884 min Scan# 1011  
Delta R.T. 0.049 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

Tgt Ion: 75 Resp: 44  
Ion Ratio Lower Upper  
75 100  
110 0.0 19.1 57.3#  
77 0.0 25.5 38.3#





#37

Ethyl Acetate

Concen: 19.665 ug/l

RT: 6.969 min Scan# 81

Delta R.T. -0.012 min

Lab File: VY022083.D

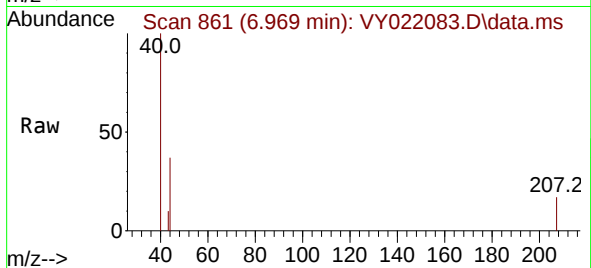
Acq: 30 Apr 2025 15:11

Instrument :

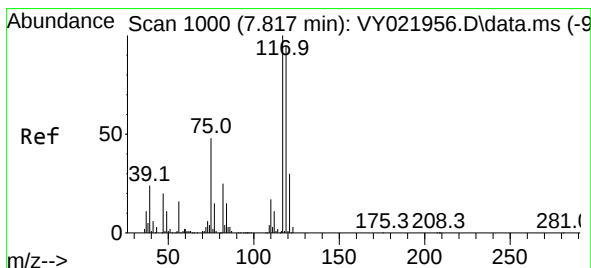
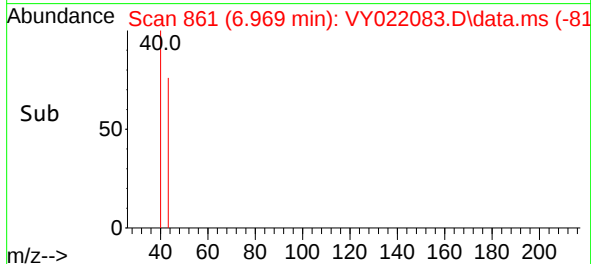
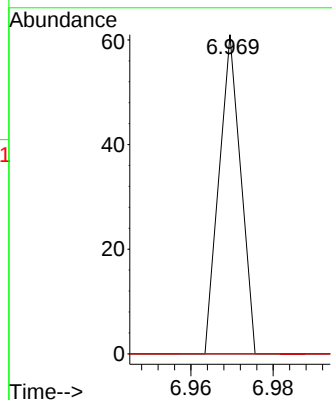
MSVOA\_Y

ClientSampleId :

OU4-VSL-18-042325



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 22    |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 0.0   | 13.8  | 20.6# |
| 70       | 0.0   | 9.2   | 13.8# |



#38

Carbon Tetrachloride

Concen: 13.971 ug/l

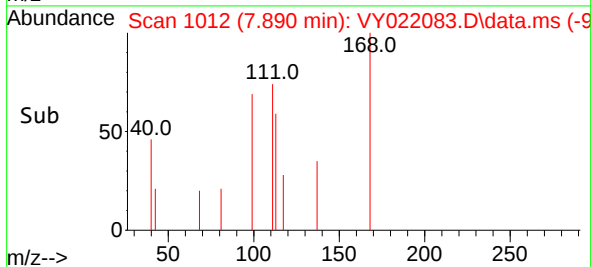
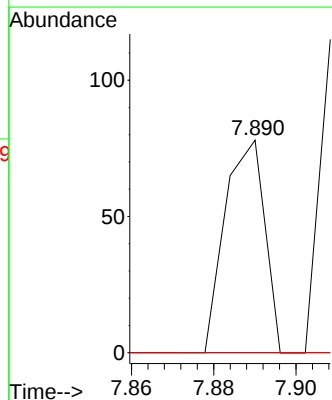
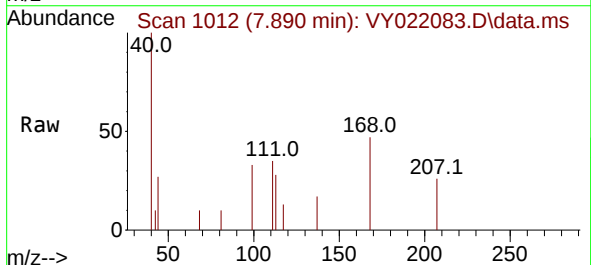
RT: 7.890 min Scan# 1012

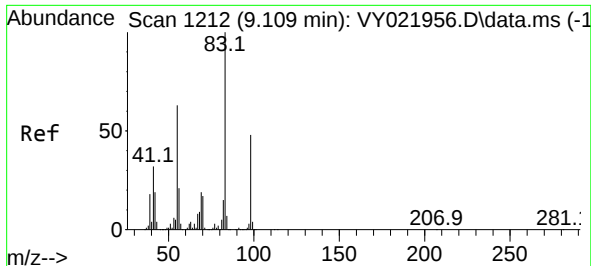
Delta R.T. 0.073 min

Lab File: VY022083.D

Acq: 30 Apr 2025 15:11

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 52     |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 119      | 0.0   | 76.2  | 114.4# |
| 121      | 0.0   | 24.0  | 36.0#  |





#39

Methylcyclohexane

Concen: 7.398 ug/l

RT: 9.243 min Scan# 11

Delta R.T. 0.134 min

Lab File: VY022083.D

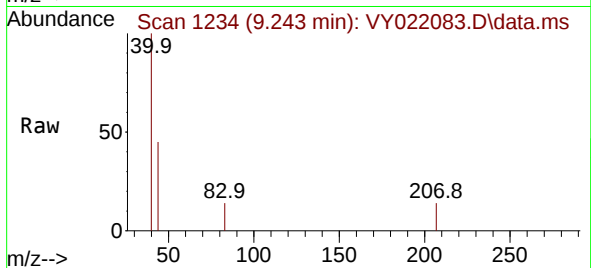
Acq: 30 Apr 2025 15:11

Instrument :

MSVOA\_Y

ClientSampleId :

OU4-VSL-18-042325



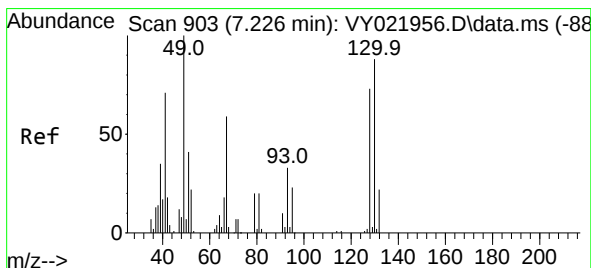
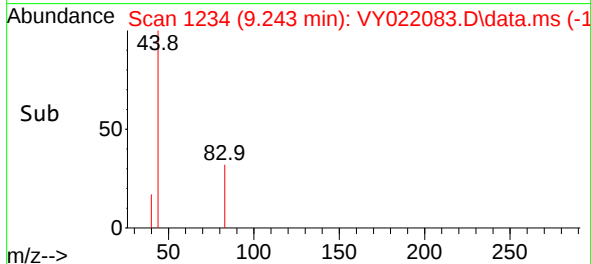
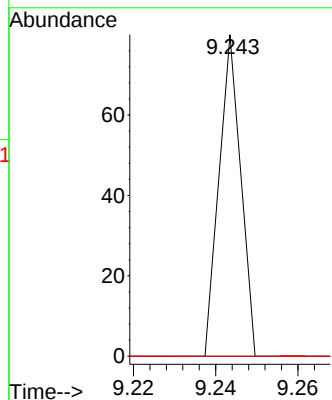
Tgt Ion: 83 Resp: 29

Ion Ratio Lower Upper

83 100

55 0.0 50.6 75.8#

98 0.0 38.6 58.0#



#41

Methacrylonitrile

Concen: 40.880 ug/l

RT: 7.085 min Scan# 880

Delta R.T. -0.140 min

Lab File: VY022083.D

Acq: 30 Apr 2025 15:11

Tgt Ion: 41 Resp: 25

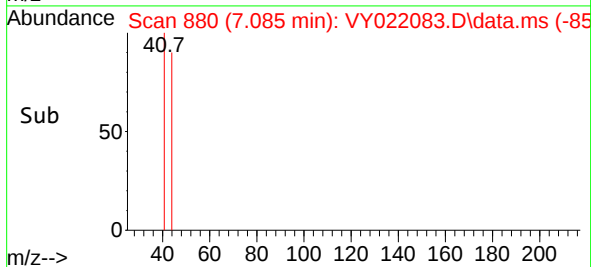
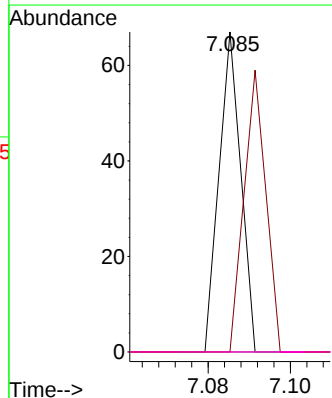
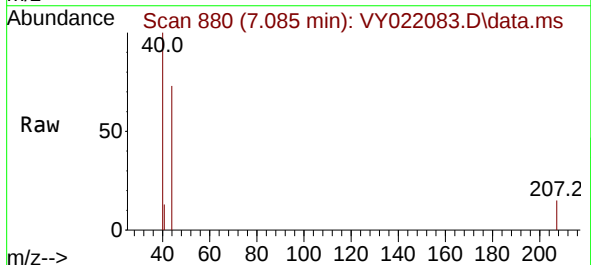
Ion Ratio Lower Upper

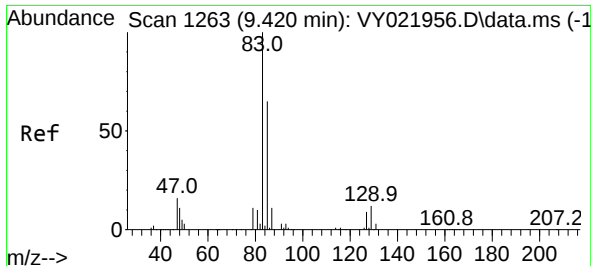
41 100

39 88.0 36.6 55.0#

67 0.0 72.2 108.4#

52 0.0 27.6 41.4#

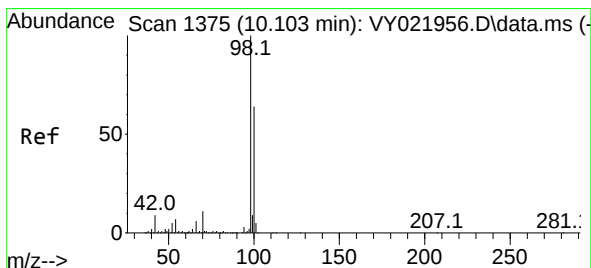
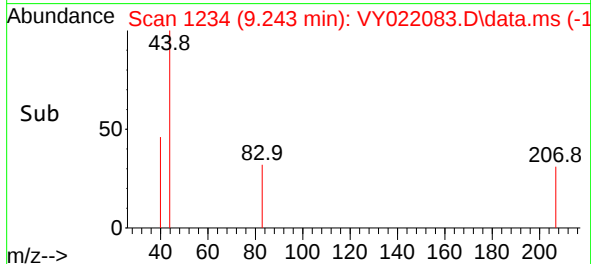
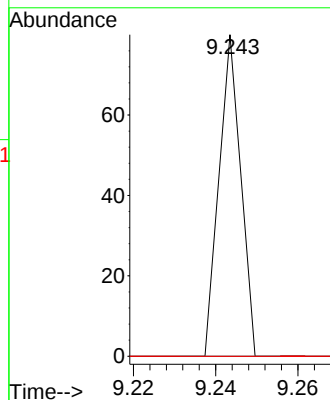
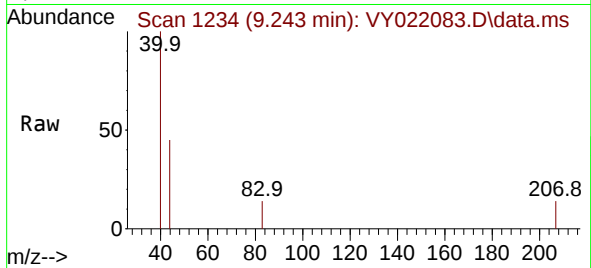




#47  
Bromodichloromethane  
Concen: 8.612 ug/l  
RT: 9.243 min Scan# 11  
Delta R.T. -0.177 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

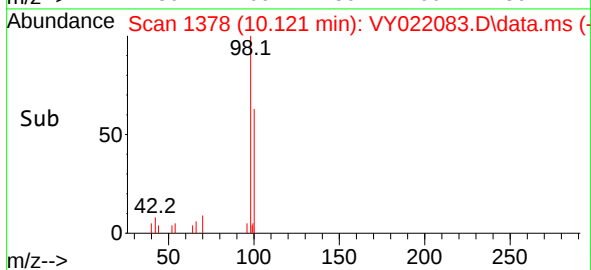
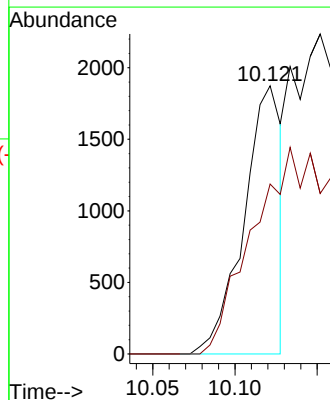
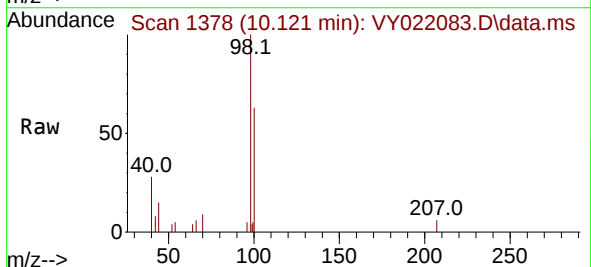
Instrument :  
MSVOA\_Y  
ClientSampleId :  
OU4-VSL-18-042325

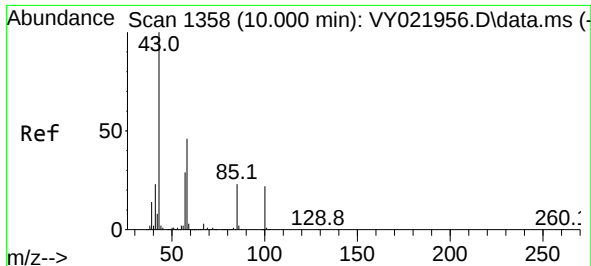
Tgt Ion: 83 Resp: 29  
Ion Ratio Lower Upper  
83 100  
85 0.0 51.8 77.8#  
127 0.0 7.0 10.6#



#50  
Toluene-d8  
Concen: 340.875 ug/l  
RT: 10.121 min Scan# 1378  
Delta R.T. 0.018 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

Tgt Ion: 98 Resp: 2980  
Ion Ratio Lower Upper  
98 100  
100 145.2 51.6 77.4#

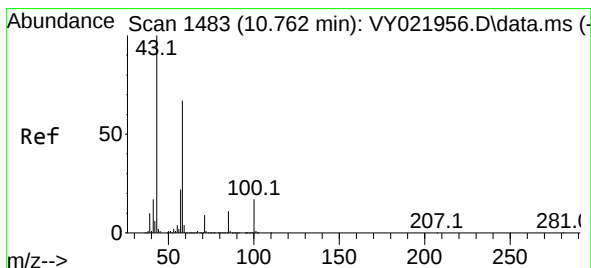
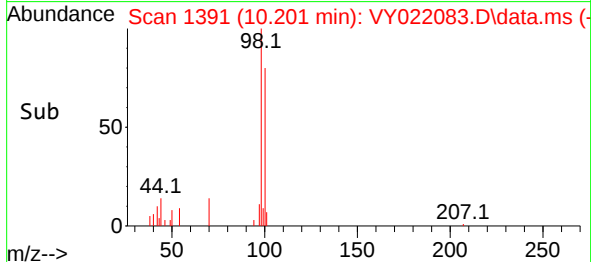
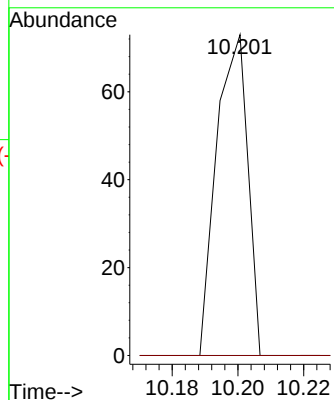
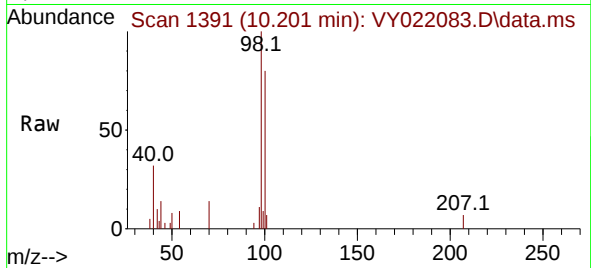




#51  
4-Methyl-2-Pentanone  
Concen: 42.620 ug/l  
RT: 10.201 min Scan# 11  
Delta R.T. 0.201 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

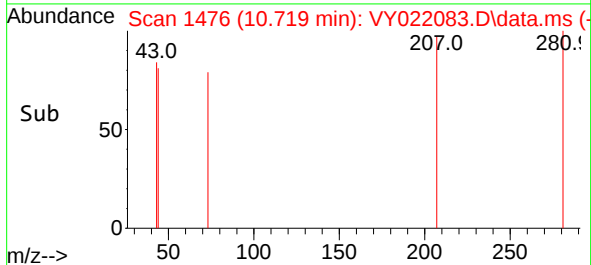
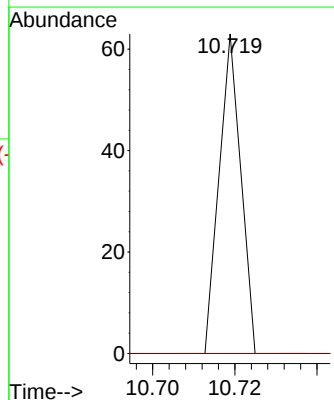
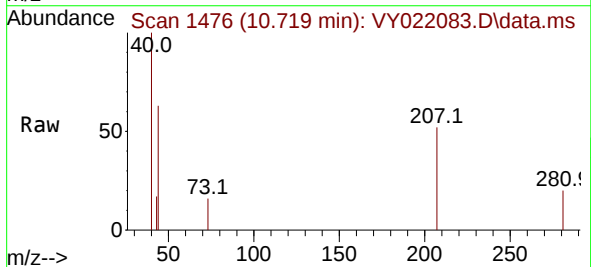
Instrument :  
MSVOA\_Y  
ClientSampleId :  
OU4-VSL-18-042325

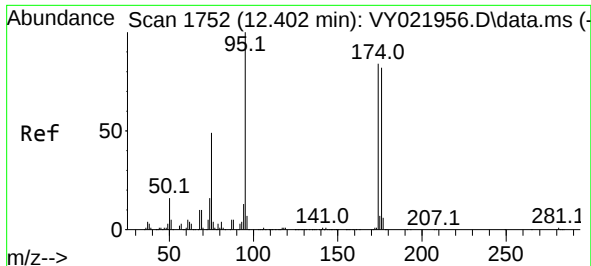
Tgt Ion: 43 Resp: 48  
Ion Ratio Lower Upper  
43 100  
58 0.0 36.6 55.0#



#59  
2-Hexanone  
Concen: 30.962 ug/l  
RT: 10.719 min Scan# 1476  
Delta R.T. -0.043 min  
Lab File: VY022083.D  
Acq: 30 Apr 2025 15:11

Tgt Ion: 43 Resp: 23  
Ion Ratio Lower Upper  
43 100  
58 0.0 32.0 96.0#





#62

4-Bromofluorobenzene

Concen: 695.892 ug/l

RT: 12.426 min Scan# 1

Delta R.T. 0.024 min

Lab File: VY022083.D

Acq: 30 Apr 2025 15:11

Instrument :

MSVOA\_Y

ClientSampleId :

OU4-VSL-18-042325

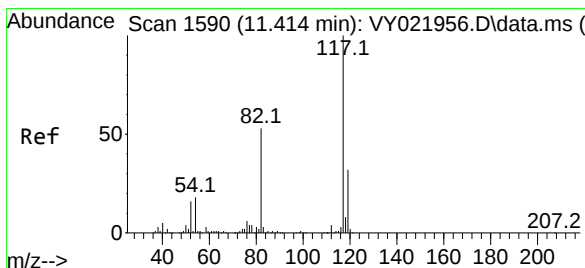
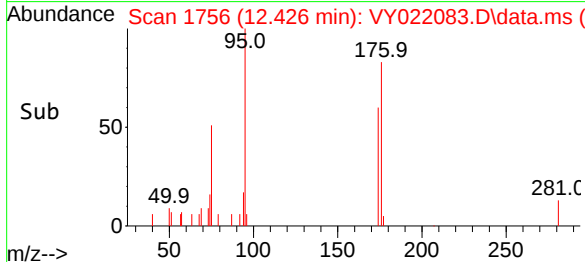
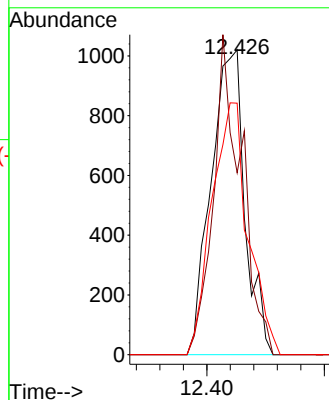
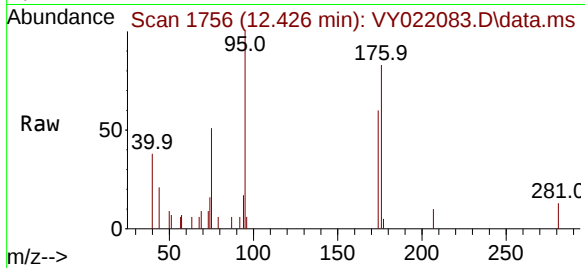
Tgt Ion: 95 Resp: 2048

Ion Ratio Lower Upper

95 100

174 86.9 0.0 179.0

176 88.5 0.0 171.8



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.438 min Scan# 1594

Delta R.T. 0.024 min

Lab File: VY022083.D

Acq: 30 Apr 2025 15:11

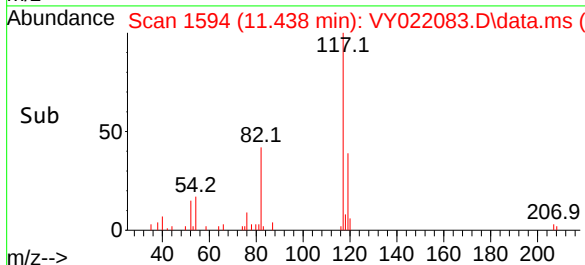
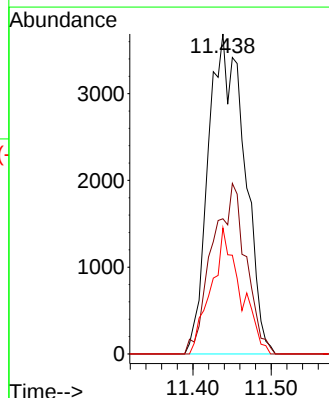
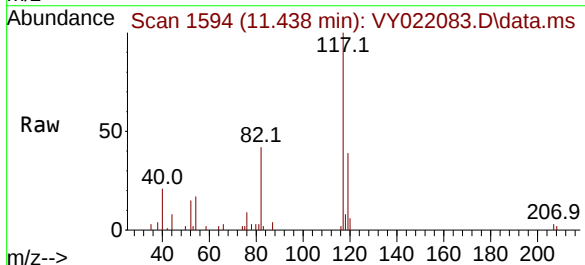
Tgt Ion: 117 Resp: 11840

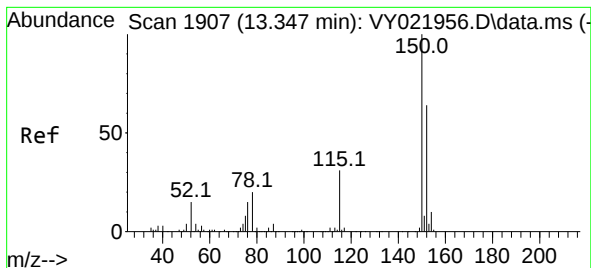
Ion Ratio Lower Upper

117 100

82 42.2 42.1 63.1

119 39.4 25.7 38.5#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VY022083.D

Acq: 30 Apr 2025 15:11

Instrument :

MSVOA\_Y

ClientSampleId :

OU4-VSL-18-042325

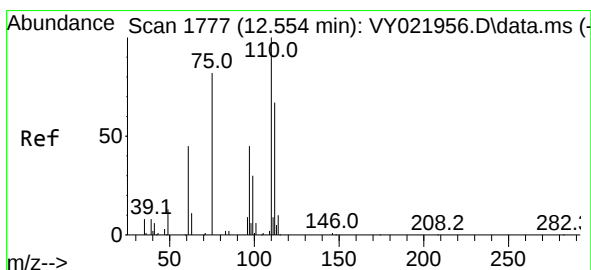
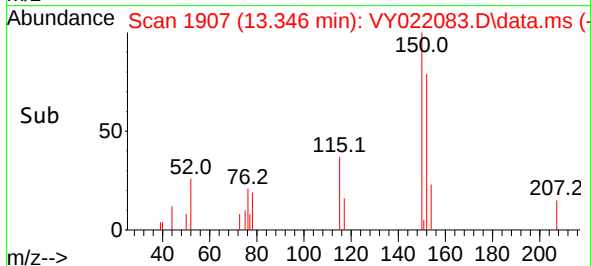
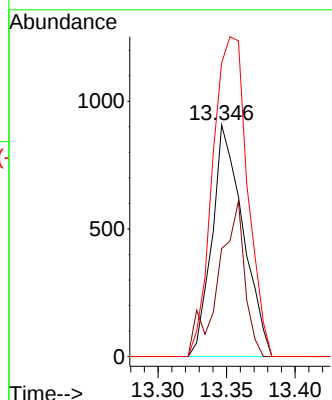
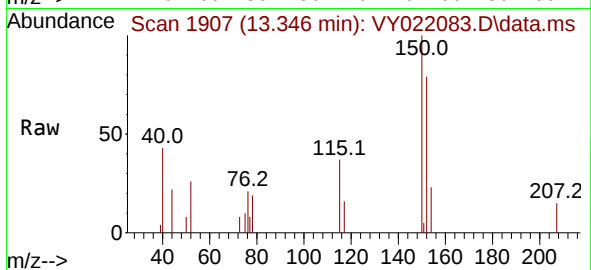
Tgt Ion:152 Resp: 1424

Ion Ratio Lower Upper

152 100

115 56.9 28.0 84.0

150 155.5 0.0 345.6



#76

1,2,3-Trichloropropane

Concen: 97.891 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. -0.140 min

Lab File: VY022083.D

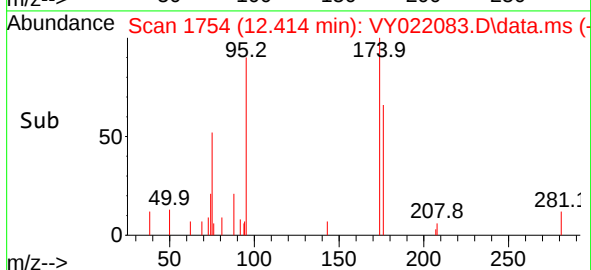
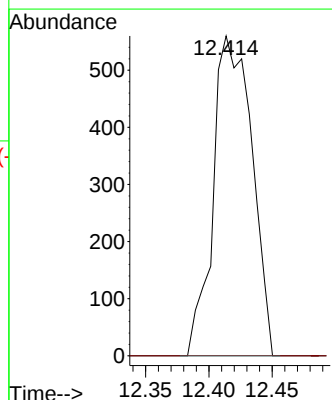
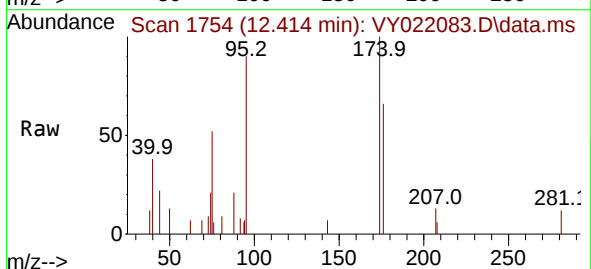
Acq: 30 Apr 2025 15:11

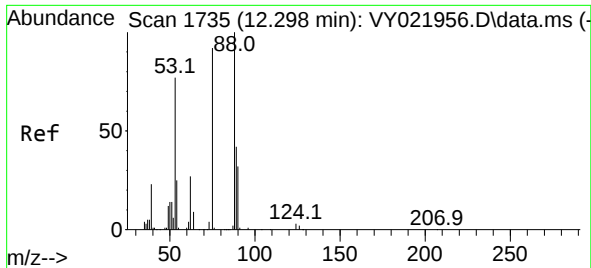
Tgt Ion: 75 Resp: 1194

Ion Ratio Lower Upper

75 100

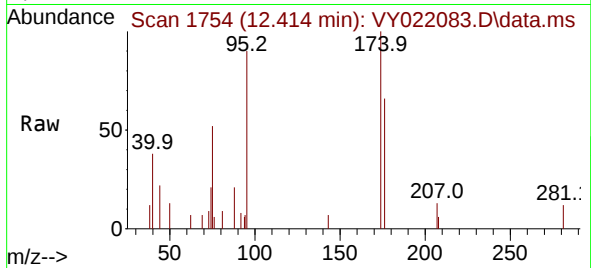
77 0.0 0.0 0.0





#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 235.736 ug/l  
 RT: 12.414 min Scan# 11  
 Delta R.T. 0.116 min  
 Lab File: VY022083.D  
 Acq: 30 Apr 2025 15:11

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 OU4-VSL-18-042325



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 1194  |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 53       | 0.0   | 66.0  | 99.0# |
| 89       | 0.0   | 37.2  | 55.8# |

