

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111025\  
 Data File : VY023724.D  
 Acq On : 10 Nov 2025 18:52  
 Operator : SY/MD  
 Sample : Q3597-10  
 Misc : 5.88g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 TP-4

Quant Time: Nov 11 02:11:34 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100725S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 08 05:12:50 2025  
 Response via : Initial Calibration

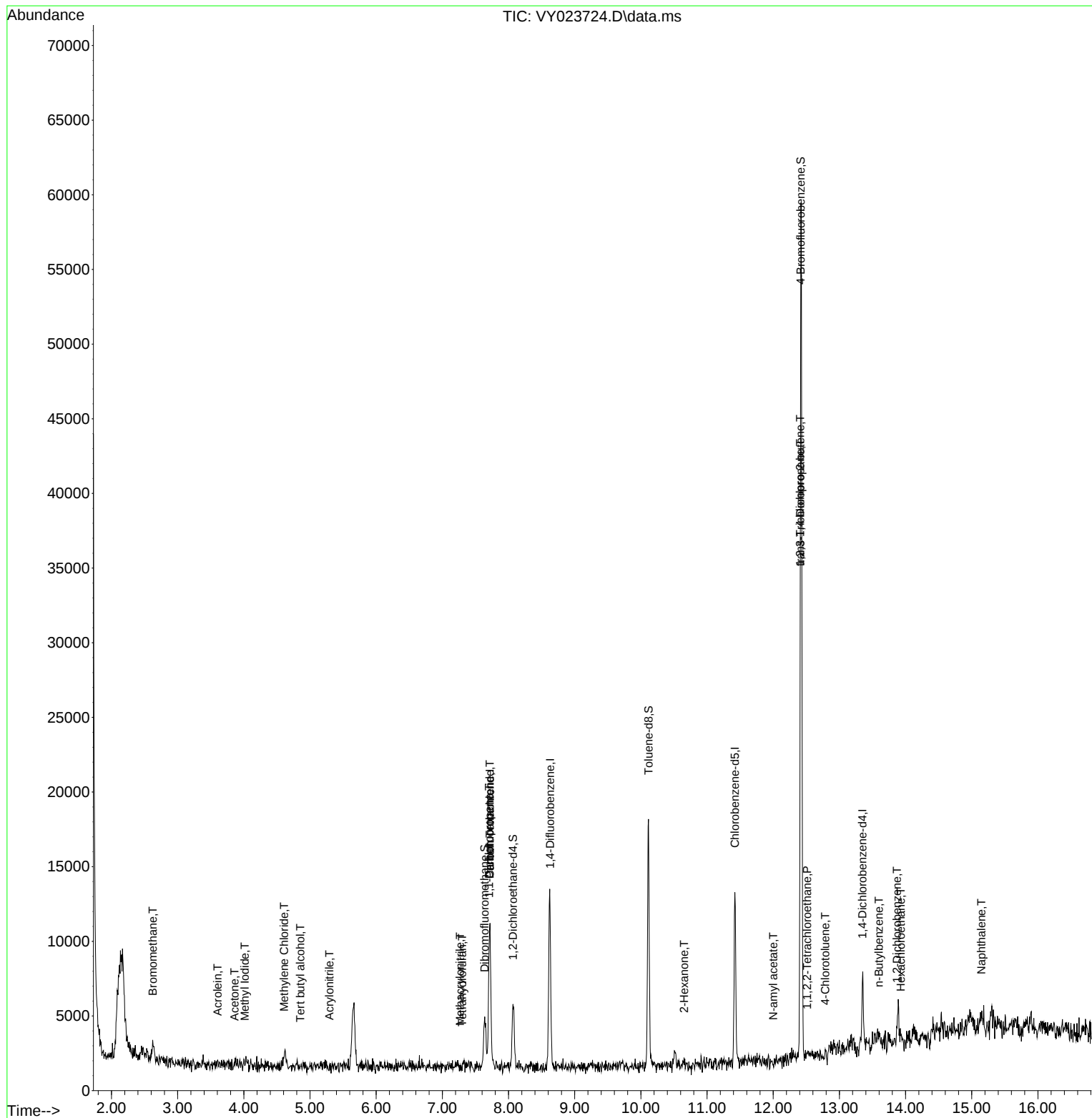
| Compound                      | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|------------|----------|
| -----                         |        |       |          |          |            |          |
| Internal Standards            |        |       |          |          |            |          |
| 1) Pentafluorobenzene         | 7.719  | 168   | 8894     | 50.000   | ug/l       | # 0.01   |
| 34) 1,4-Difluorobenzene       | 8.628  | 114   | 10546    | 50.000   | ug/l       | 0.01     |
| 63) Chlorobenzene-d5          | 11.420 | 117   | 7239     | 50.000   | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.346 | 152   | 1234     | 50.000   | ug/l       | 0.00     |
| System Monitoring Compounds   |        |       |          |          |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.067  | 65    | 4065     | 54.657   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 50 - 163 | Recovery | = 109.320% |          |
| 35) Dibromofluoromethane      | 7.640  | 113   | 2825     | 43.596   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 54 - 147 | Recovery | = 87.200%  |          |
| 50) Toluene-d8                | 10.115 | 98    | 11688    | 48.433   | ug/l       | 0.01     |
| Spiked Amount                 | 50.000 | Range | 58 - 134 | Recovery | = 96.860%  |          |
| 62) 4-Bromofluorobenzene      | 12.414 | 95    | 2056     | 25.806   | ug/l       | 0.01     |
| Spiked Amount                 | 50.000 | Range | 30 - 143 | Recovery | = 51.620%  |          |
| Target Compounds              |        |       |          |          |            |          |
|                               |        |       |          |          | Qvalue     |          |
| 5) Bromomethane               | 2.623  | 94    | 667      | 6.997    | ug/l       | 82       |
| 10) Methyl Iodide             | 4.013  | 142   | 189      | 2.074    | ug/l       | # 40     |
| 11) Tert butyl alcohol        | 4.854  | 59    | 21       | 3.795    | ug/l       | # 72     |
| 13) Acrolein                  | 3.604  | 56    | 25       | 3.198    | ug/l       | # 15     |
| 15) Acrylonitrile             | 5.293  | 53    | 24       | 1.522    | ug/l       | # 18     |
| 16) Acetone                   | 3.860  | 43    | 725      | 40.947   | ug/l       | # 82     |
| 20) Methylene Chloride        | 4.610  | 84    | 603      | 6.298    | ug/l       | # 43     |
| 29) Tetrahydrofuran           | 7.299  | 42    | 23       | 1.876    | ug/l       | # 26     |
| 36) 1,1-Dichloropropene       | 7.707  | 75    | 687      | 8.008    | ug/l       | # 42     |
| 38) Carbon Tetrachloride      | 7.719  | 117   | 878      | 8.440    | ug/l       | # 12     |
| 41) Methacrylonitrile         | 7.268  | 41    | 31       | 1.686    | ug/l       | # 14     |
| 59) 2-Hexanone                | 10.652 | 43    | 306      | 12.229   | ug/l       | # 20     |
| 74) N-amyl acetate            | 11.999 | 43    | 45       | 3.081    | ug/l       | # 37     |
| 75) 1,1,2,2-Tetrachloroethane | 12.511 | 83    | 20       | 1.504    | ug/l       | # 26     |
| 76) 1,2,3-Trichloropropane    | 12.408 | 75    | 903      | 82.942   | ug/l       | # 100    |
| 81) trans-1,4-Dichloro-2-b... | 12.408 | 75    | 903      | 203.389  | ug/l       | # 16     |
| 82) 4-Chlorotoluene           | 12.786 | 91    | 138      | 2.431    | ug/l       | # 38     |
| 89) n-Butylbenzene            | 13.596 | 91    | 204      | 3.159    | ug/l       | # 32     |
| 90) Hexachloroethane          | 13.926 | 117   | 46       | 2.886    | ug/l       | # 6      |
| 91) 1,2-Dichlorobenzene       | 13.871 | 146   | 40       | 1.084    | ug/l       | # 1      |
| 95) Naphthalene               | 15.145 | 128   | 73       | 1.992    | ug/l       | # 56     |
| -----                         |        |       |          |          |            |          |

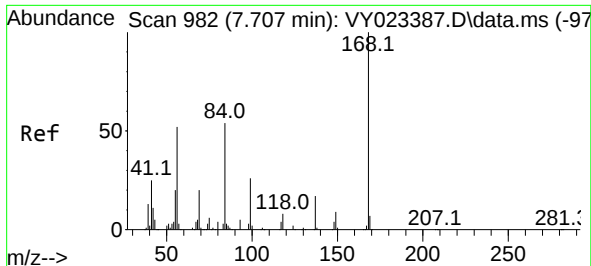
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111025\  
Data File : VY023724.D  
Acq On : 10 Nov 2025 18:52  
Operator : SY/MD  
Sample : Q3597-10  
Misc : 5.88g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

Quant Time: Nov 11 02:11:34 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100725S.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 08 05:12:50 2025  
Response via : Initial Calibration

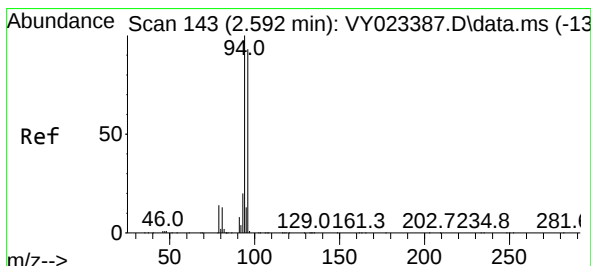
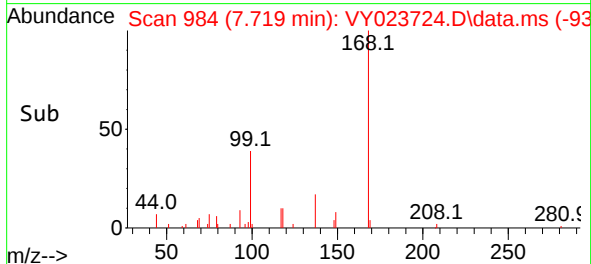
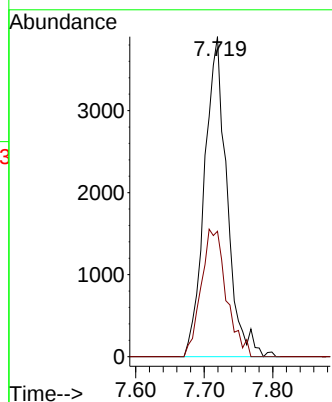
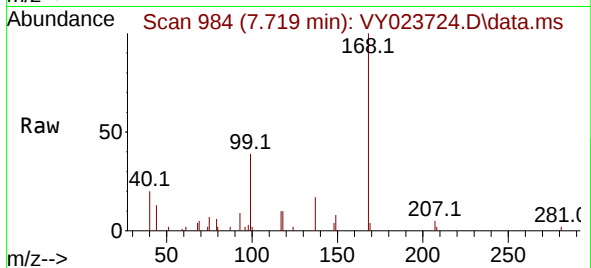




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.719 min Scan# 99  
Delta R.T. 0.012 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

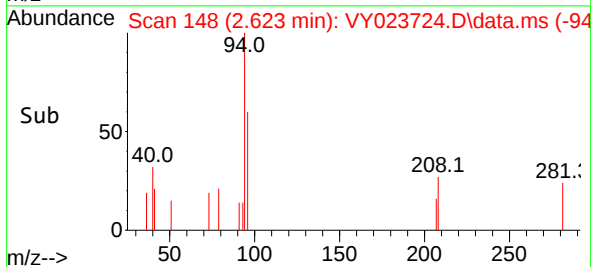
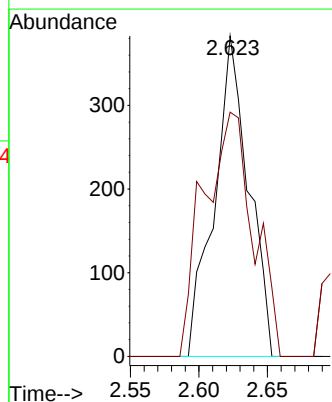
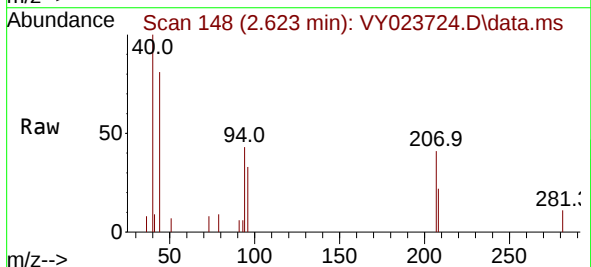
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

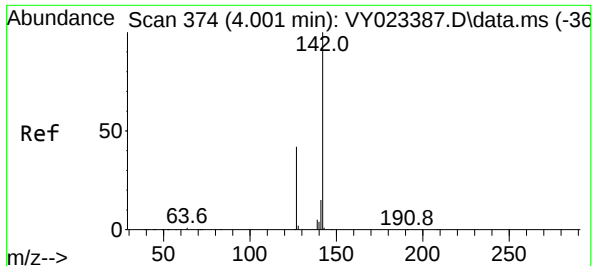
Tgt Ion:168 Resp: 8894  
Ion Ratio Lower Upper  
168 100  
99 39.2 39.7 59.5#



#5  
Bromomethane  
Concen: 6.997 ug/l  
RT: 2.623 min Scan# 148  
Delta R.T. 0.030 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Tgt Ion: 94 Resp: 667  
Ion Ratio Lower Upper  
94 100  
96 76.2 74.5 111.7

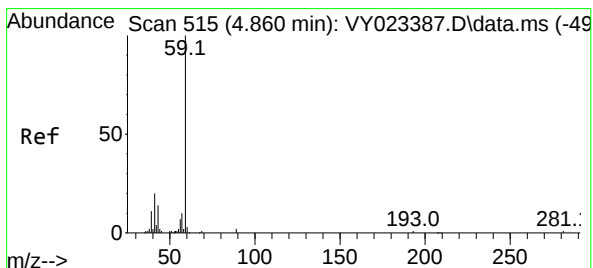
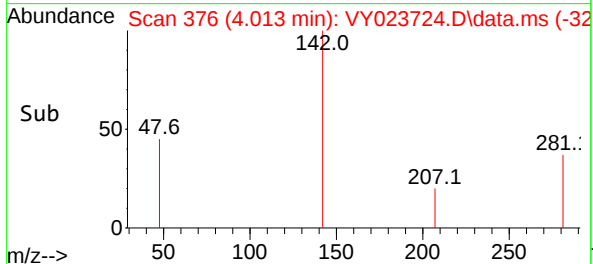
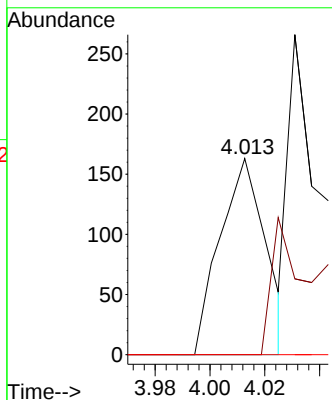
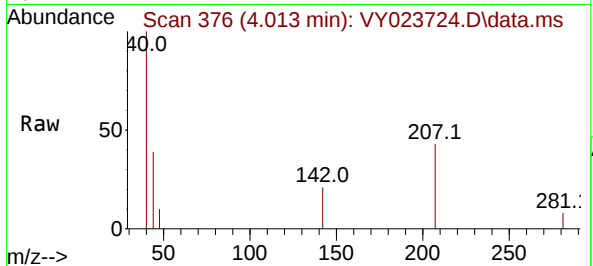




#10  
Methyl Iodide  
Concen: 2.074 ug/l  
RT: 4.013 min Scan# 31  
Delta R.T. 0.012 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

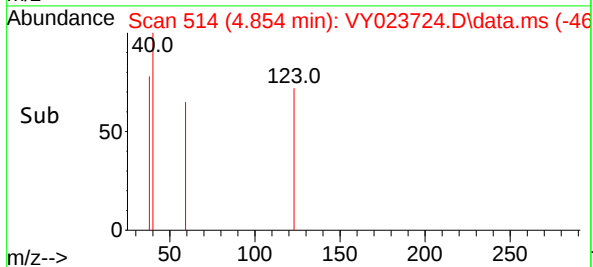
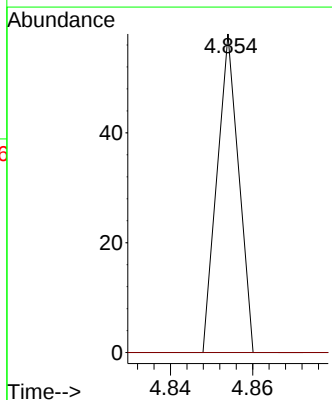
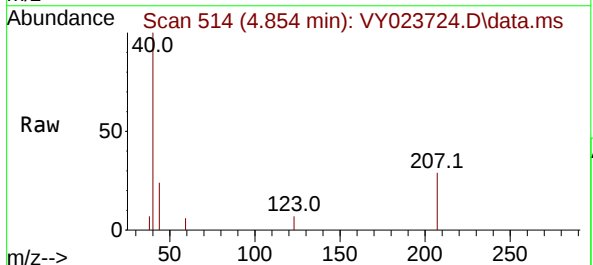
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

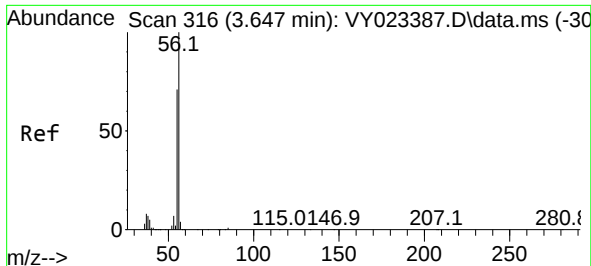
Tgt Ion:142 Resp: 189  
Ion Ratio Lower Upper  
142 100  
127 0.0 34.8 52.2#  
141 0.0 11.6 17.4#



#11  
Tert butyl alcohol  
Concen: 3.795 ug/l  
RT: 4.854 min Scan# 514  
Delta R.T. -0.006 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Tgt Ion: 59 Resp: 21  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.3 12.5#

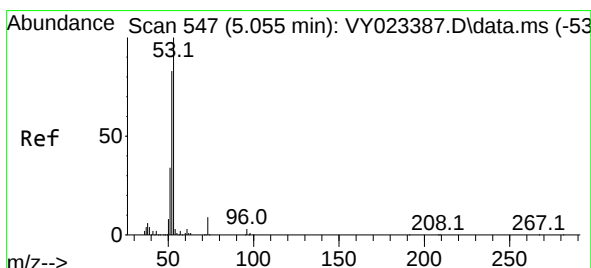
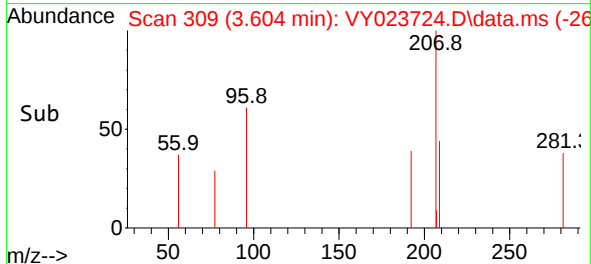
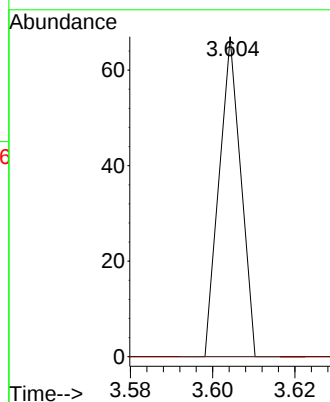
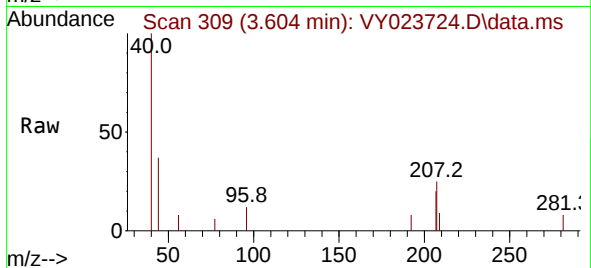




#13  
Acrolein  
Concen: 3.198 ug/l  
RT: 3.604 min Scan# 309  
Delta R.T. -0.043 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

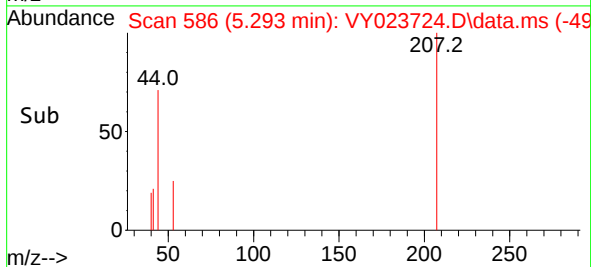
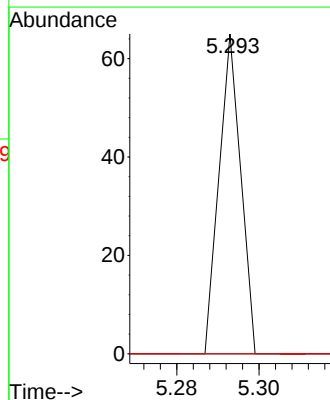
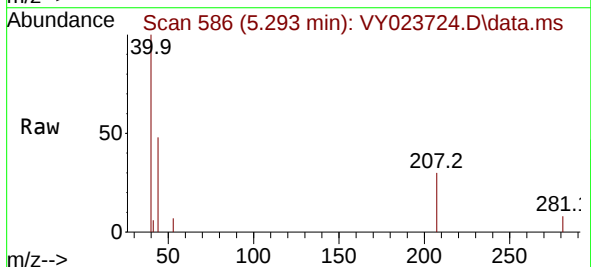
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

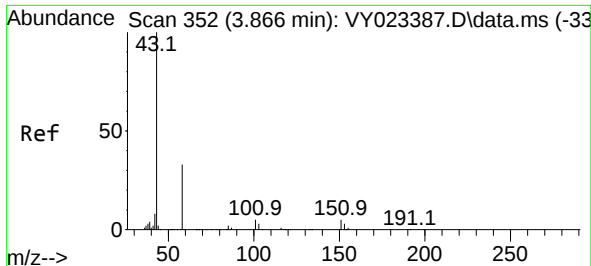
Tgt Ion: 56 Resp: 25  
Ion Ratio Lower Upper  
56 100  
55 0.0 56.1 84.1#



#15  
Acrylonitrile  
Concen: 1.522 ug/l  
RT: 5.293 min Scan# 586  
Delta R.T. 0.238 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Tgt Ion: 53 Resp: 24  
Ion Ratio Lower Upper  
53 100  
52 0.0 64.6 97.0#  
51 0.0 29.5 44.3#

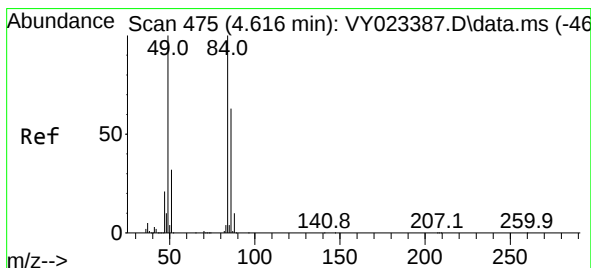
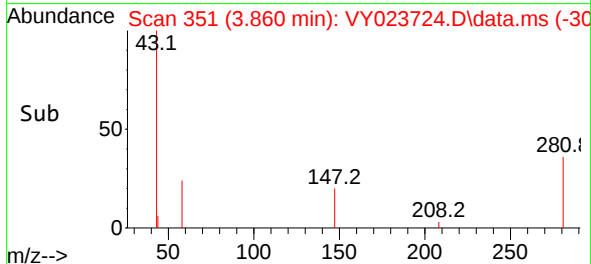
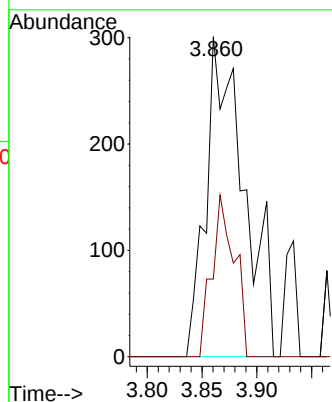
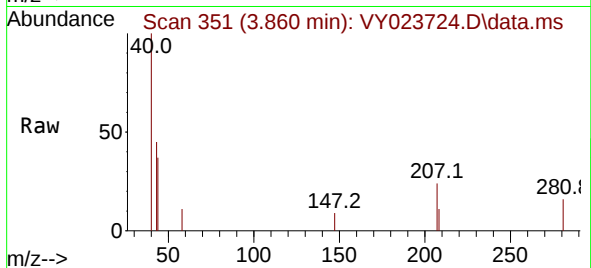




#16  
Acetone  
Concen: 40.947 ug/l  
RT: 3.860 min Scan# 311  
Delta R.T. -0.006 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

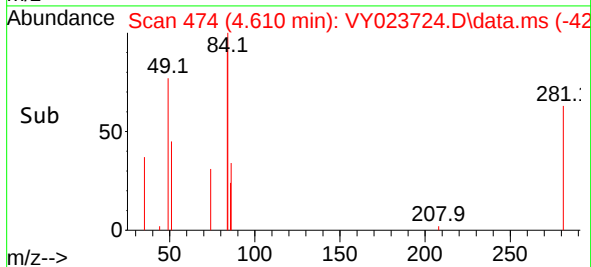
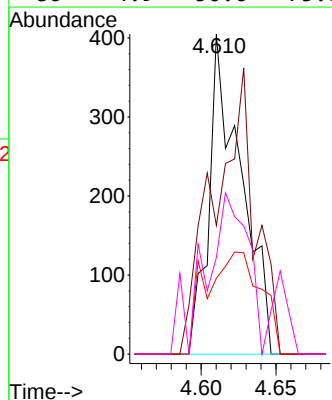
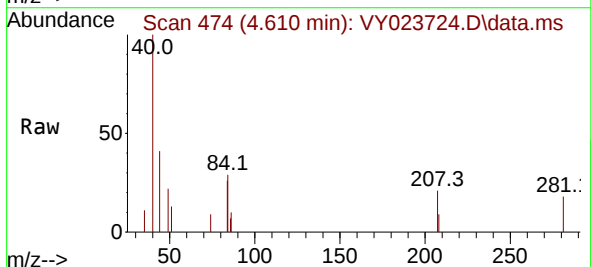
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

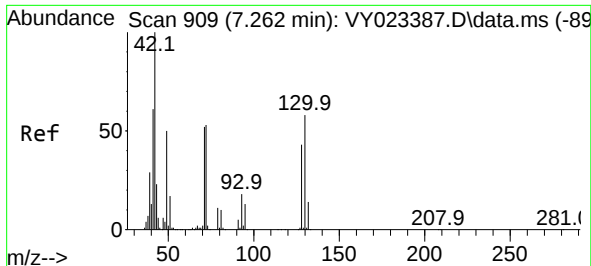
Tgt Ion: 43 Resp: 725  
Ion Ratio Lower Upper  
43 100  
58 24.3 27.7 41.5#



#20  
Methylene Chloride  
Concen: 6.298 ug/l  
RT: 4.610 min Scan# 474  
Delta R.T. -0.006 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Tgt Ion: 84 Resp: 603  
Ion Ratio Lower Upper  
84 100  
49 40.2 80.2 120.4#  
51 23.7 25.9 38.9#  
86 4.9 50.6 75.8#





#29

Tetrahydrofuran

Concen: 1.876 ug/l

RT: 7.299 min Scan# 915

Delta R.T. 0.036 min

Lab File: VY023724.D

Acq: 10 Nov 2025 18:52

Instrument :

MSVOA\_Y

ClientSampleId :

TP-4

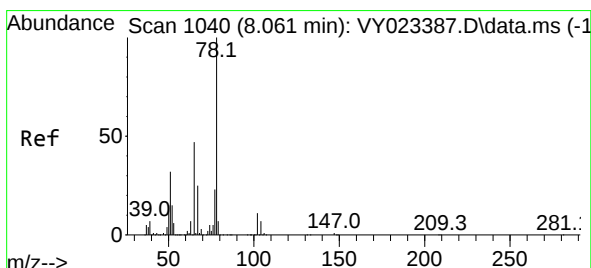
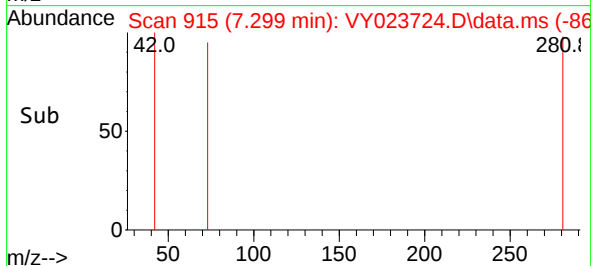
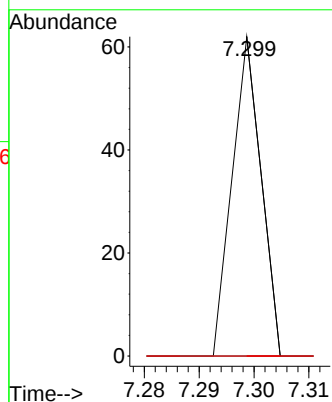
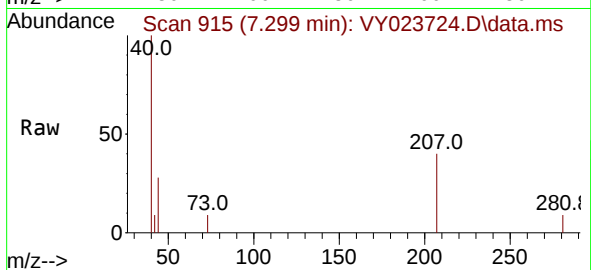
Tgt Ion: 42 Resp: 23

Ion Ratio Lower Upper

42 100

72 0.0 43.0 64.6#

71 0.0 40.1 60.1#



#33

1,2-Dichloroethane-d4

Concen: 54.657 ug/l

RT: 8.067 min Scan# 1041

Delta R.T. 0.006 min

Lab File: VY023724.D

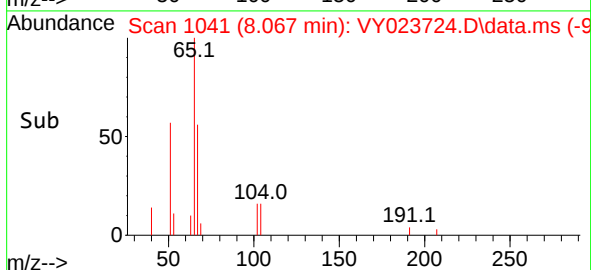
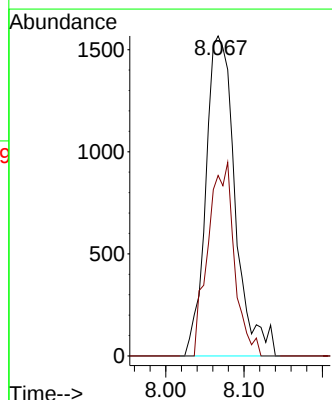
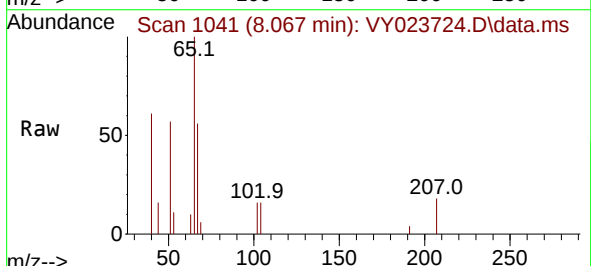
Acq: 10 Nov 2025 18:52

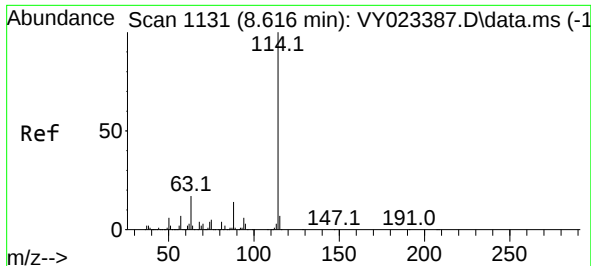
Tgt Ion: 65 Resp: 4065

Ion Ratio Lower Upper

65 100

67 54.3 0.0 105.8

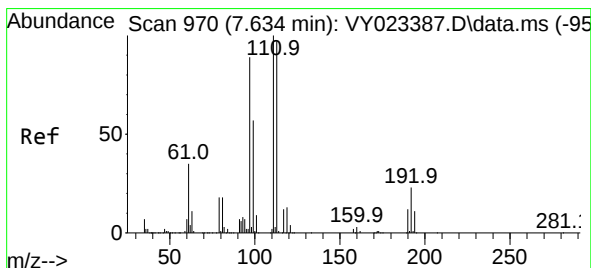
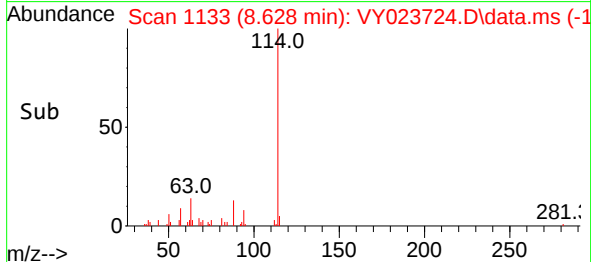
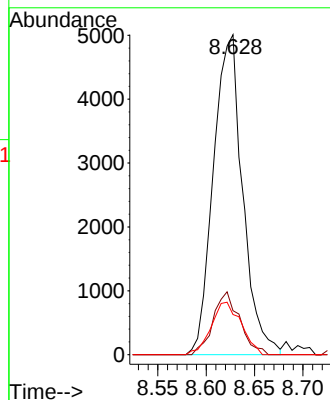
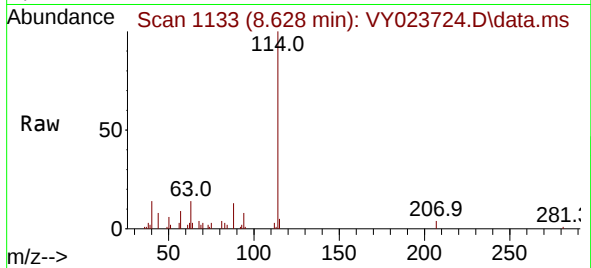




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.628 min Scan# 1133  
Delta R.T. 0.012 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

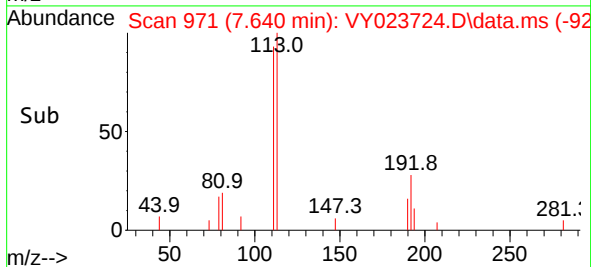
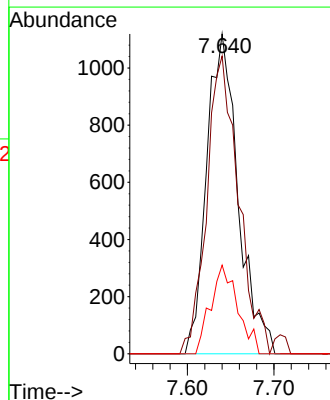
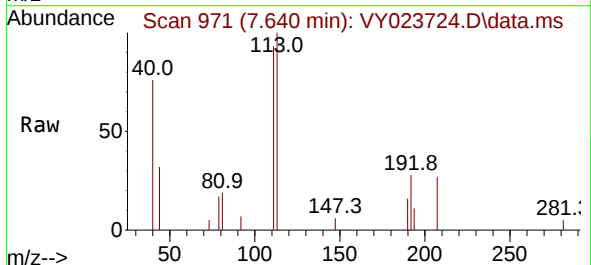
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

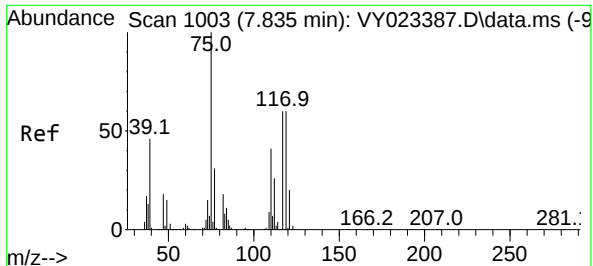
Tgt Ion:114 Resp: 10546  
Ion Ratio Lower Upper  
114 100  
63 13.8 0.0 34.2  
88 12.5 0.0 28.4



#35  
Dibromofluoromethane  
Concen: 43.596 ug/l  
RT: 7.640 min Scan# 971  
Delta R.T. 0.006 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Tgt Ion:113 Resp: 2825  
Ion Ratio Lower Upper  
113 100  
111 93.4 81.8 122.6  
192 23.8 18.0 27.0





#36

1,1-Dichloropropene

Concen: 8.008 ug/l

RT: 7.707 min Scan# 982

Delta R.T. -0.128 min

Lab File: VY023724.D

Acq: 10 Nov 2025 18:52

Instrument :

MSVOA\_Y

ClientSampleId :

TP-4

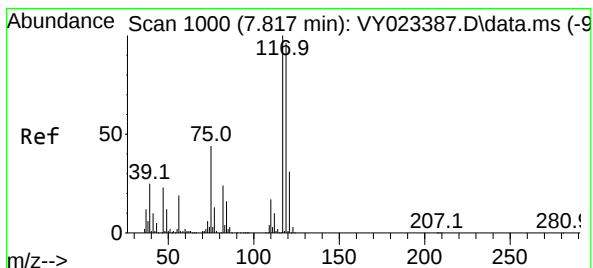
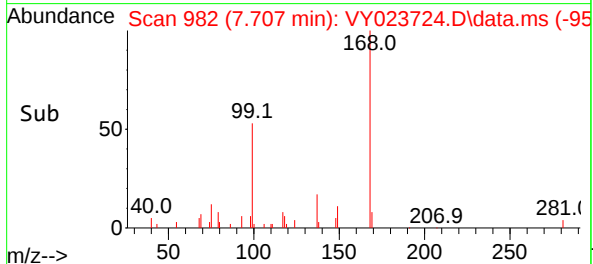
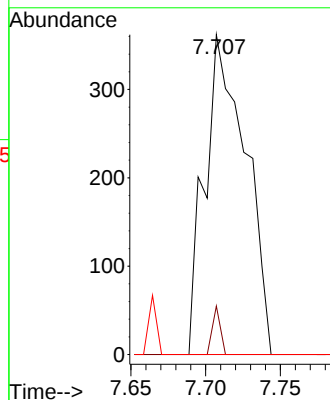
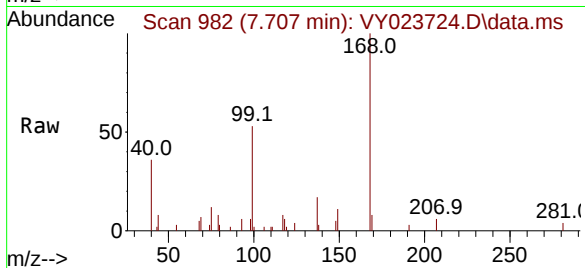
Tgt Ion: 75 Resp: 687

Ion Ratio Lower Upper

75 100

110 2.9 19.9 59.7#

77 0.0 25.0 37.6#



#38

Carbon Tetrachloride

Concen: 8.440 ug/l

RT: 7.719 min Scan# 984

Delta R.T. -0.098 min

Lab File: VY023724.D

Acq: 10 Nov 2025 18:52

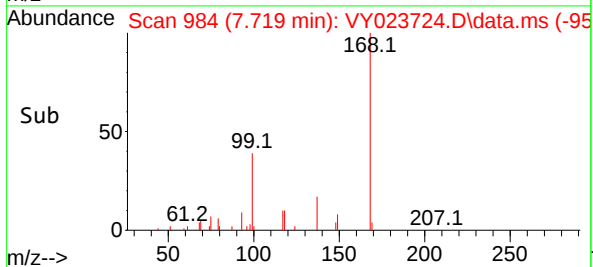
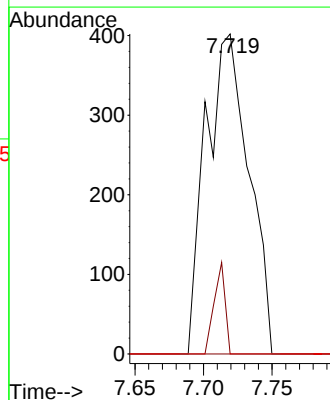
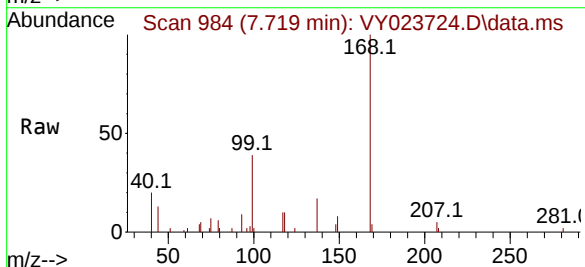
Tgt Ion: 117 Resp: 878

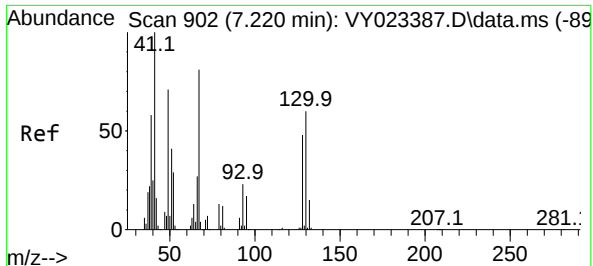
Ion Ratio Lower Upper

117 100

119 0.0 76.8 115.2#

121 0.0 24.5 36.7#

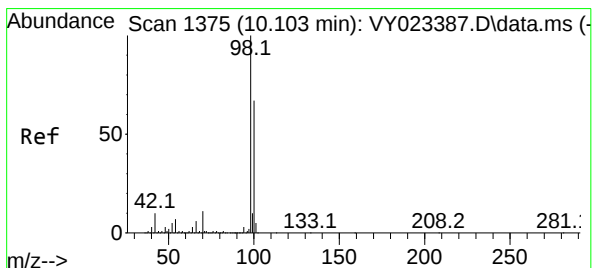
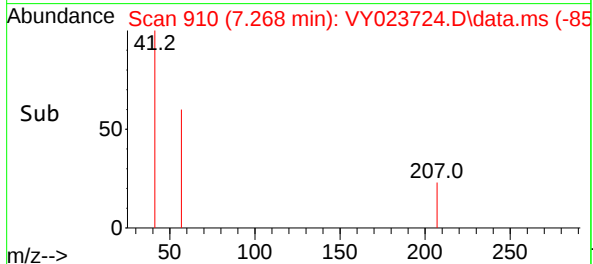
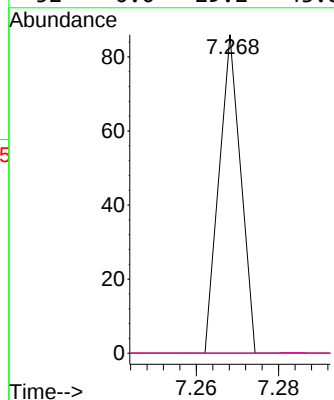
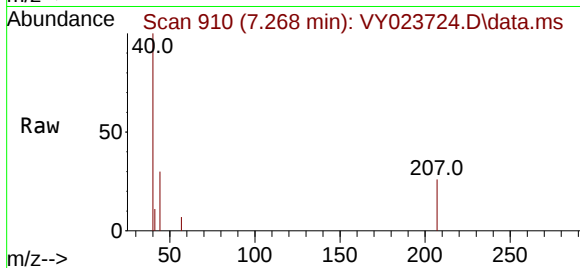




#41  
Methacrylonitrile  
Concen: 1.686 ug/l  
RT: 7.268 min Scan# 910  
Delta R.T. 0.049 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

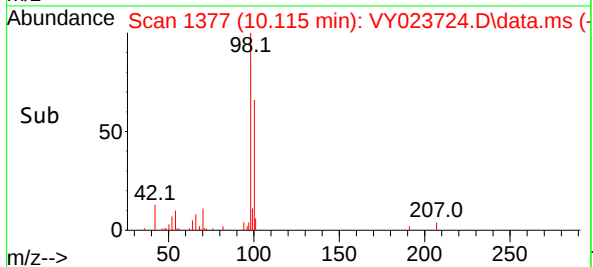
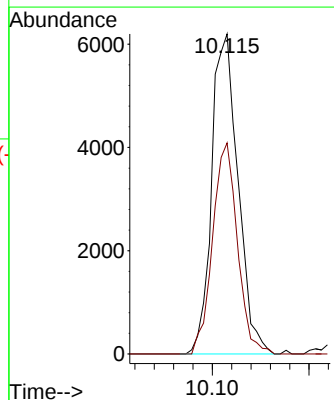
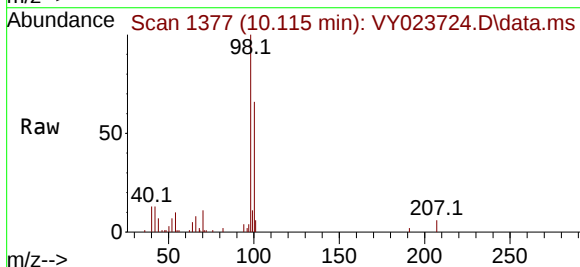
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

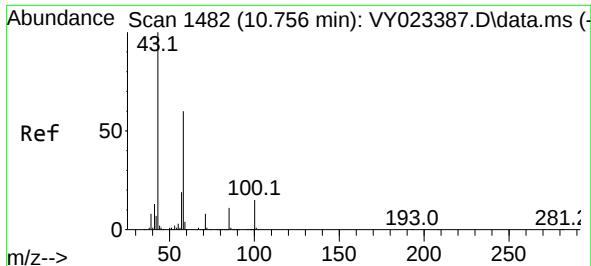
|             |             |
|-------------|-------------|
| Tgt Ion: 41 | Resp: 31    |
| Ion Ratio   | Lower Upper |
| 41 100      |             |
| 39 0.0      | 52.2 78.4#  |
| 67 0.0      | 74.9 112.3# |
| 52 0.0      | 29.2 43.8#  |



#50  
Toluene-d8  
Concen: 48.433 ug/l  
RT: 10.115 min Scan# 1377  
Delta R.T. 0.012 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

|             |             |
|-------------|-------------|
| Tgt Ion: 98 | Resp: 11688 |
| Ion Ratio   | Lower Upper |
| 98 100      |             |
| 100 62.3    | 53.0 79.4   |

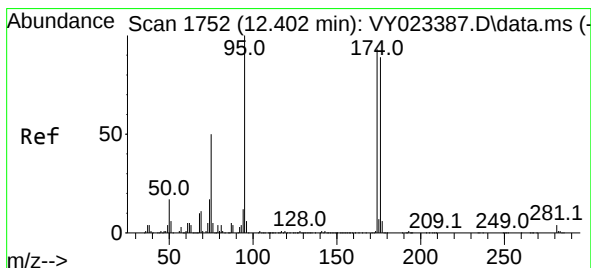
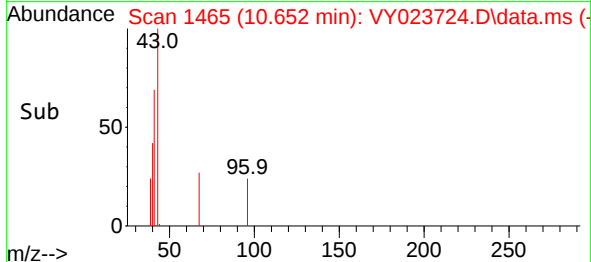
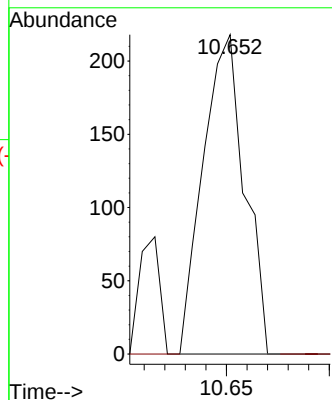
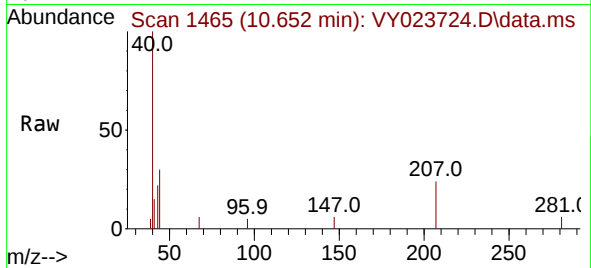




#59  
2-Hexanone  
Concen: 12.229 ug/l  
RT: 10.652 min Scan# 1482  
Delta R.T. -0.104 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

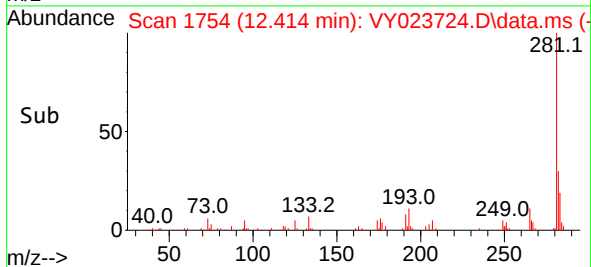
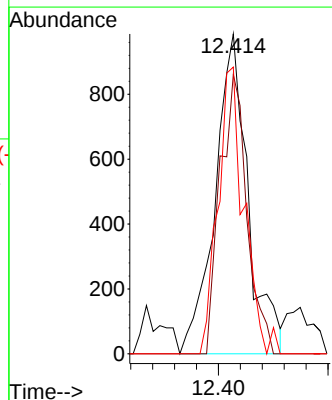
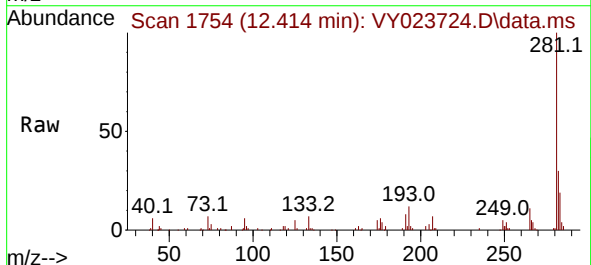
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

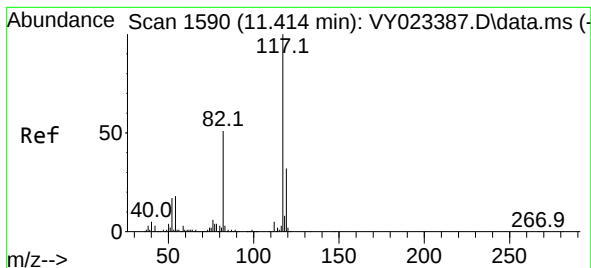
Tgt Ion: 43 Resp: 306  
Ion Ratio Lower Upper  
43 100  
58 0.0 30.5 91.5#



#62  
4-Bromofluorobenzene  
Concen: 25.806 ug/l  
RT: 12.414 min Scan# 1754  
Delta R.T. 0.012 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Tgt Ion: 95 Resp: 2056  
Ion Ratio Lower Upper  
95 100  
174 71.0 0.0 192.8  
176 71.2 0.0 187.6





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY023724.D

Acq: 10 Nov 2025 18:52

Instrument :

MSVOA\_Y

ClientSampleId :

TP-4

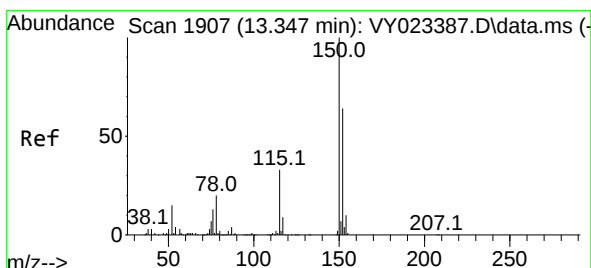
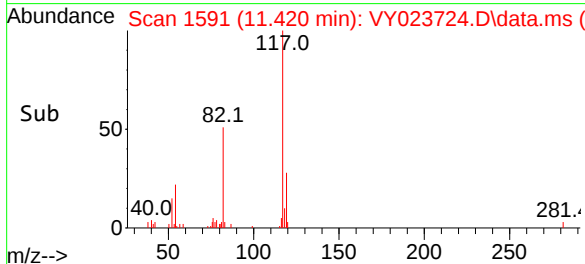
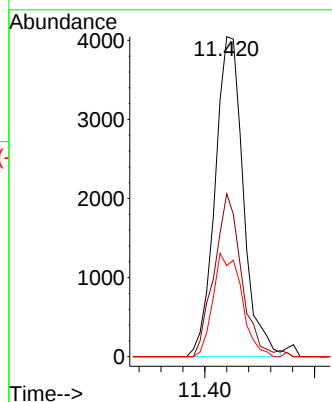
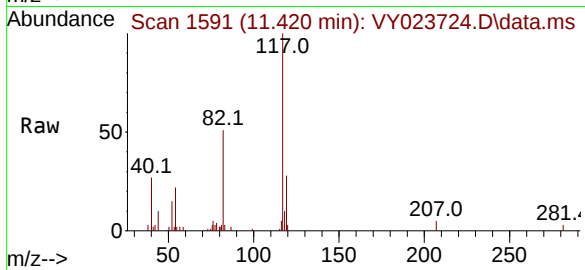
Tgt Ion:117 Resp: 7239

Ion Ratio Lower Upper

117 100

82 50.9 41.0 61.4

119 28.4 25.6 38.4



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VY023724.D

Acq: 10 Nov 2025 18:52

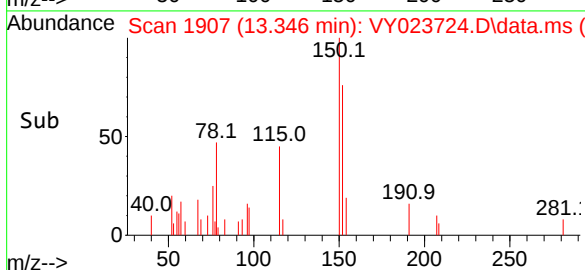
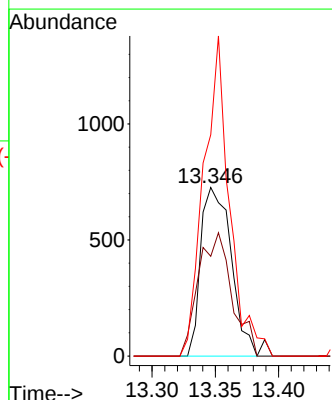
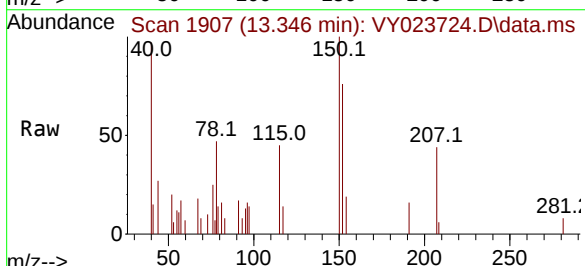
Tgt Ion:152 Resp: 1234

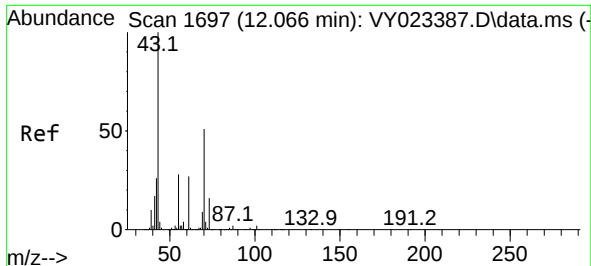
Ion Ratio Lower Upper

152 100

115 79.3 27.1 81.2

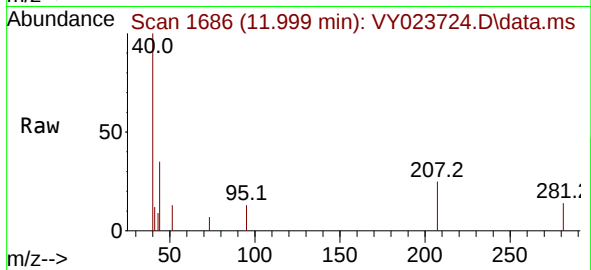
150 157.9 0.0 347.4



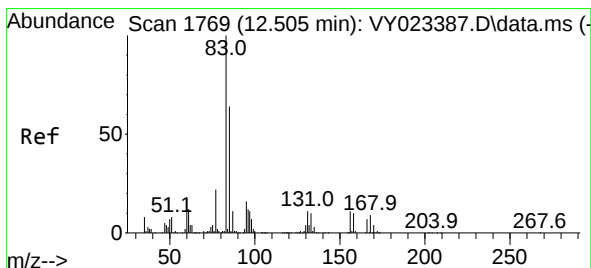
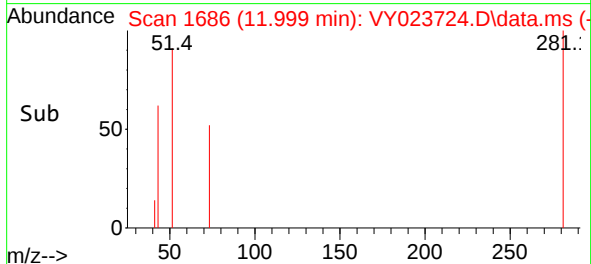
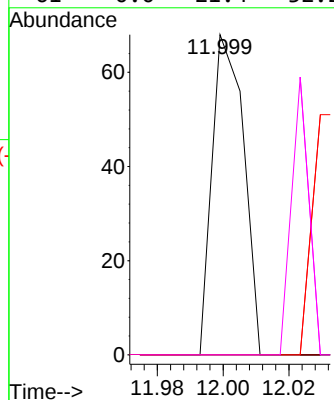


#74  
N-amy1 acetate  
Concen: 3.081 ug/l  
RT: 11.999 min Scan# 1  
Delta R.T. -0.067 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

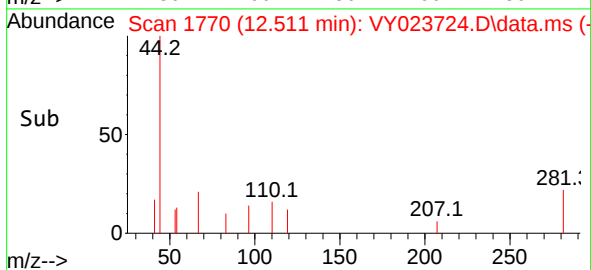
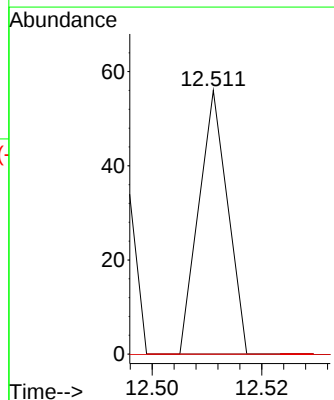
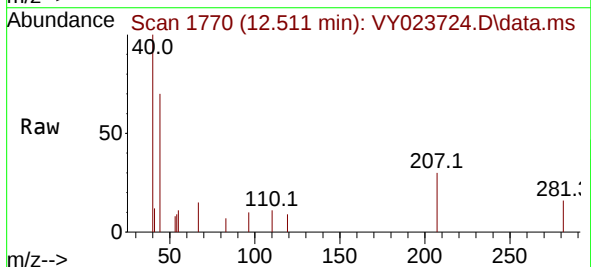


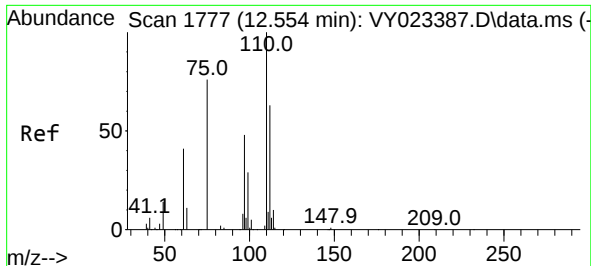
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 45    |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 70       | 0.0   | 41.1  | 61.7# |
| 55       | 0.0   | 23.0  | 34.6# |
| 61       | 0.0   | 21.4  | 32.2# |



#75  
1,1,2,2-Tetrachloroethane  
Concen: 1.504 ug/l  
RT: 12.511 min Scan# 1770  
Delta R.T. 0.006 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 20    |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 131      | 0.0   | 5.9   | 17.6# |
| 85       | 0.0   | 31.8  | 95.3# |

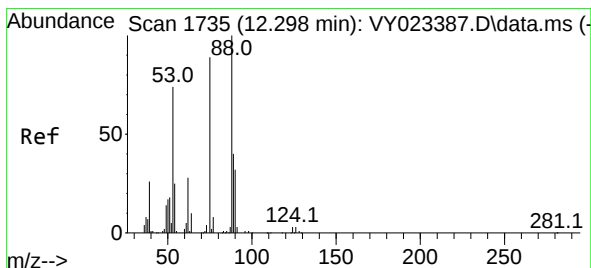
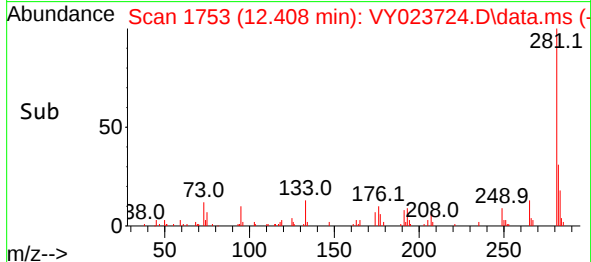
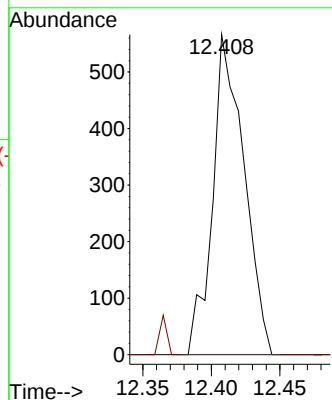
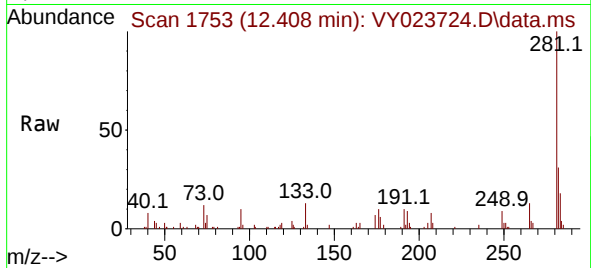




#76  
1,2,3-Trichloropropane  
Concen: 82.942 ug/l  
RT: 12.408 min Scan# 1753  
Delta R.T. -0.146 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

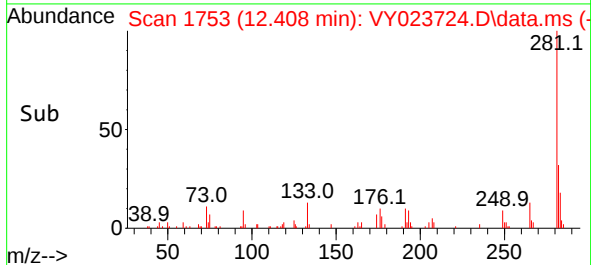
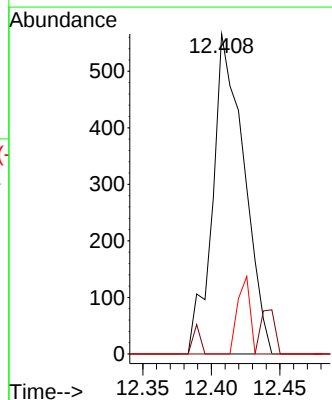
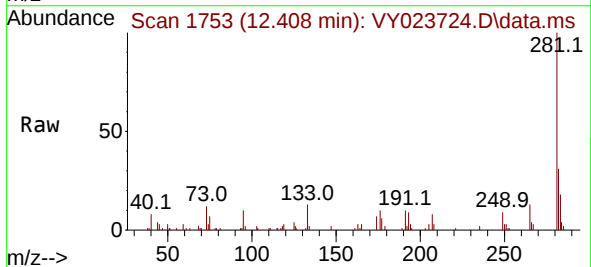
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

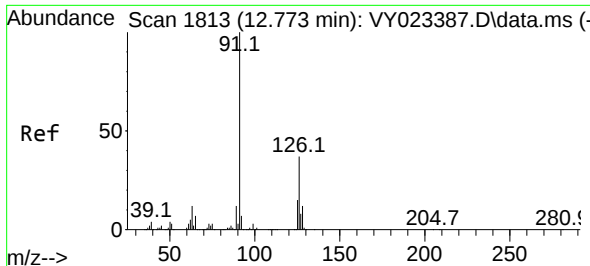
Tgt Ion: 75 Resp: 903  
Ion Ratio Lower Upper  
75 100  
77 0.0 0.0 0.0



#81  
trans-1,4-Dichloro-2-butene  
Concen: 203.389 ug/l  
RT: 12.408 min Scan# 1753  
Delta R.T. 0.110 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Tgt Ion: 75 Resp: 903  
Ion Ratio Lower Upper  
75 100  
53 2.1 68.6 102.8#  
89 0.0 39.0 58.4#

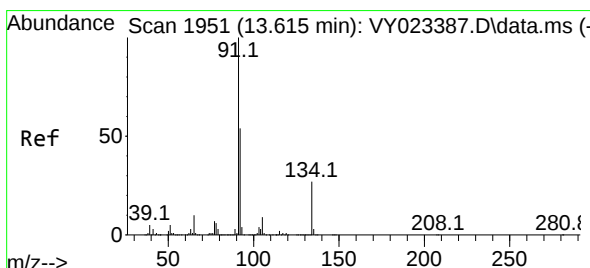
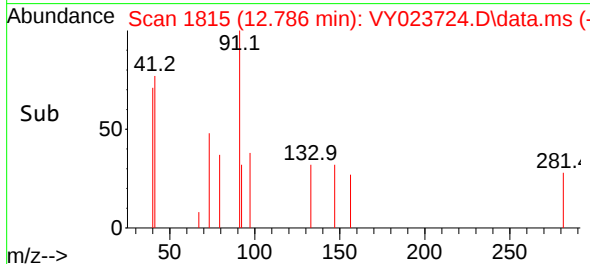
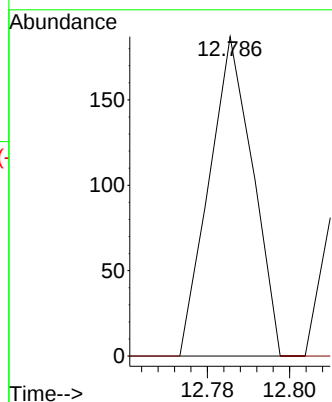
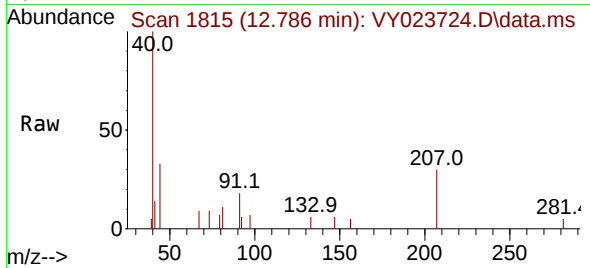




#82  
4-Chlorotoluene  
Concen: 2.431 ug/l  
RT: 12.786 min Scan# 11  
Delta R.T. 0.012 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

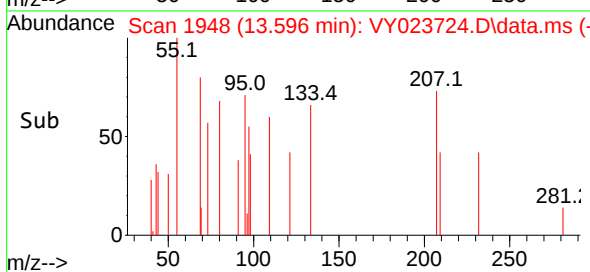
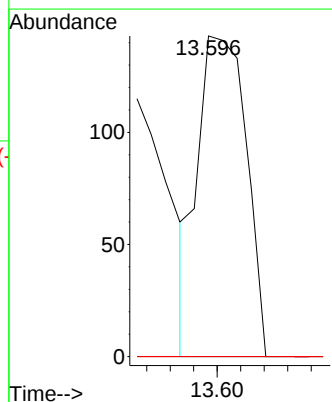
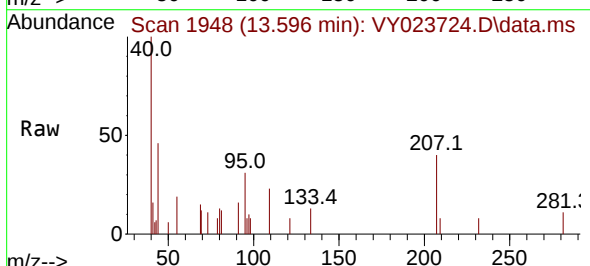
Instrument :  
MSVOA\_Y  
ClientSampleId :  
TP-4

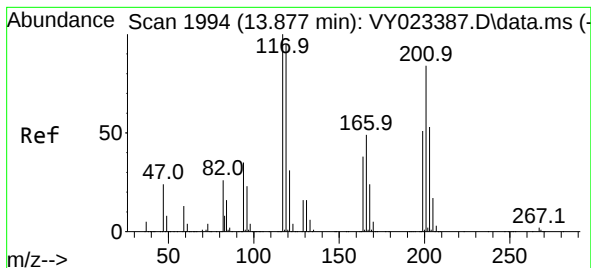
Tgt Ion: 91 Resp: 138  
Ion Ratio Lower Upper  
91 100  
126 0.0 18.4 55.4#



#89  
n-Butylbenzene  
Concen: 3.159 ug/l  
RT: 13.596 min Scan# 1948  
Delta R.T. -0.018 min  
Lab File: VY023724.D  
Acq: 10 Nov 2025 18:52

Tgt Ion: 91 Resp: 204  
Ion Ratio Lower Upper  
91 100  
92 0.0 27.0 80.8#  
134 0.0 14.1 42.2#





#90

Hexachloroethane

Concen: 2.886 ug/l

RT: 13.926 min Scan# 2002

Delta R.T. 0.049 min

Lab File: VY023724.D

Acq: 10 Nov 2025 18:52

Instrument :

MSVOA\_Y

ClientSampleId :

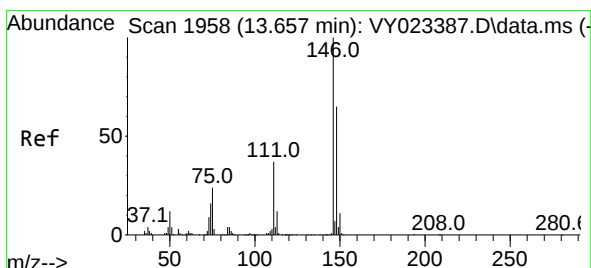
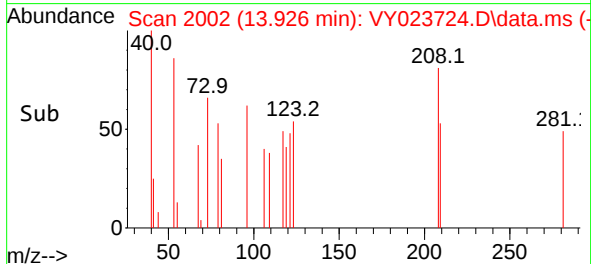
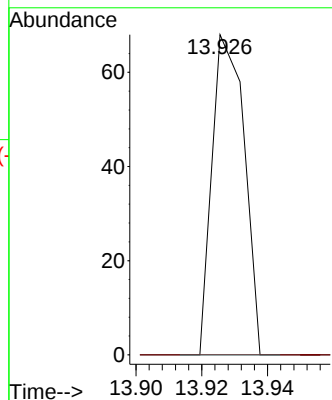
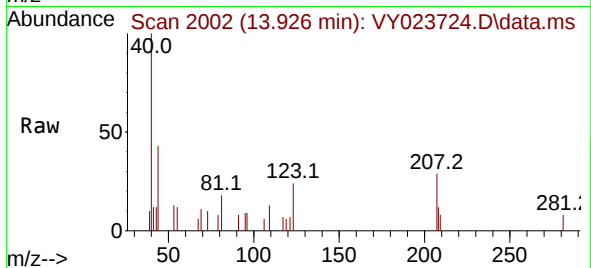
TP-4

Tgt Ion:117 Resp: 46

Ion Ratio Lower Upper

117 100

201 0.0 43.8 131.4#



#91

1,2-Dichlorobenzene

Concen: 1.084 ug/l

RT: 13.871 min Scan# 1993

Delta R.T. 0.213 min

Lab File: VY023724.D

Acq: 10 Nov 2025 18:52

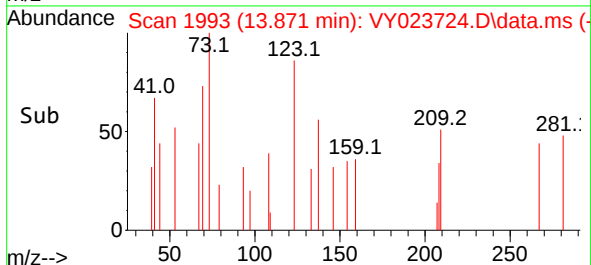
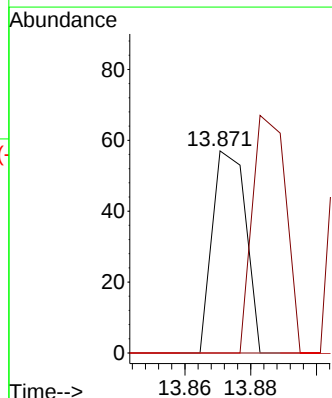
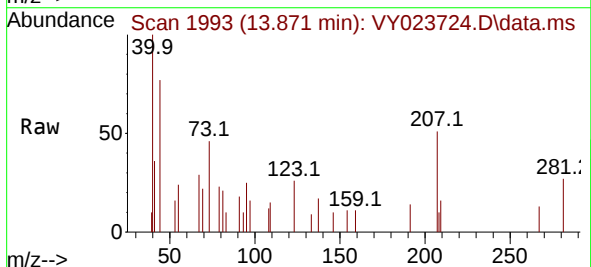
Tgt Ion:146 Resp: 40

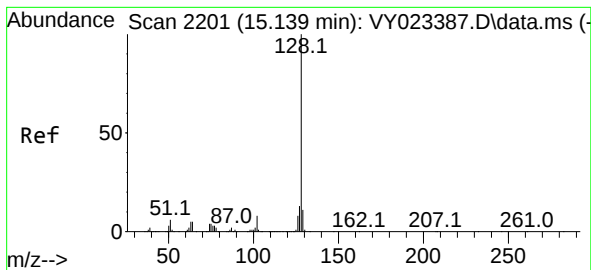
Ion Ratio Lower Upper

146 100

111 117.5 19.0 57.0#

148 0.0 32.1 96.3#





#95

Naphthalene

Concen: 1.992 ug/l

RT: 15.145 min Scan# 21

Delta R.T. 0.006 min

Lab File: VY023724.D

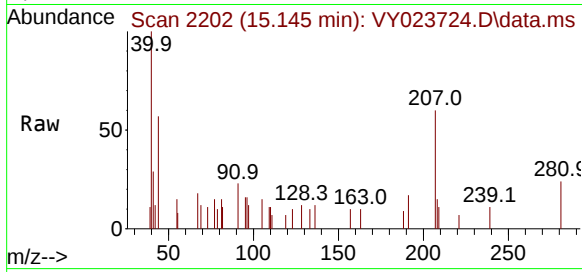
Acq: 10 Nov 2025 18:52

Instrument :

MSVOA\_Y

ClientSampleId :

TP-4



Tgt Ion:128 Resp: 73

Ion Ratio Lower Upper

128 100

127 0.0 10.4 15.6#

129 32.9 8.9 13.3#

