

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY101024\  
 Data File : VY019856.D  
 Acq On : 10 Oct 2024 16:04  
 Operator : SY/MD  
 Sample : P4364-09  
 Misc : 5.10g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :

Quant Time: Oct 11 01:44:43 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 10 05:30:07 2024  
 Response via : Initial Calibration

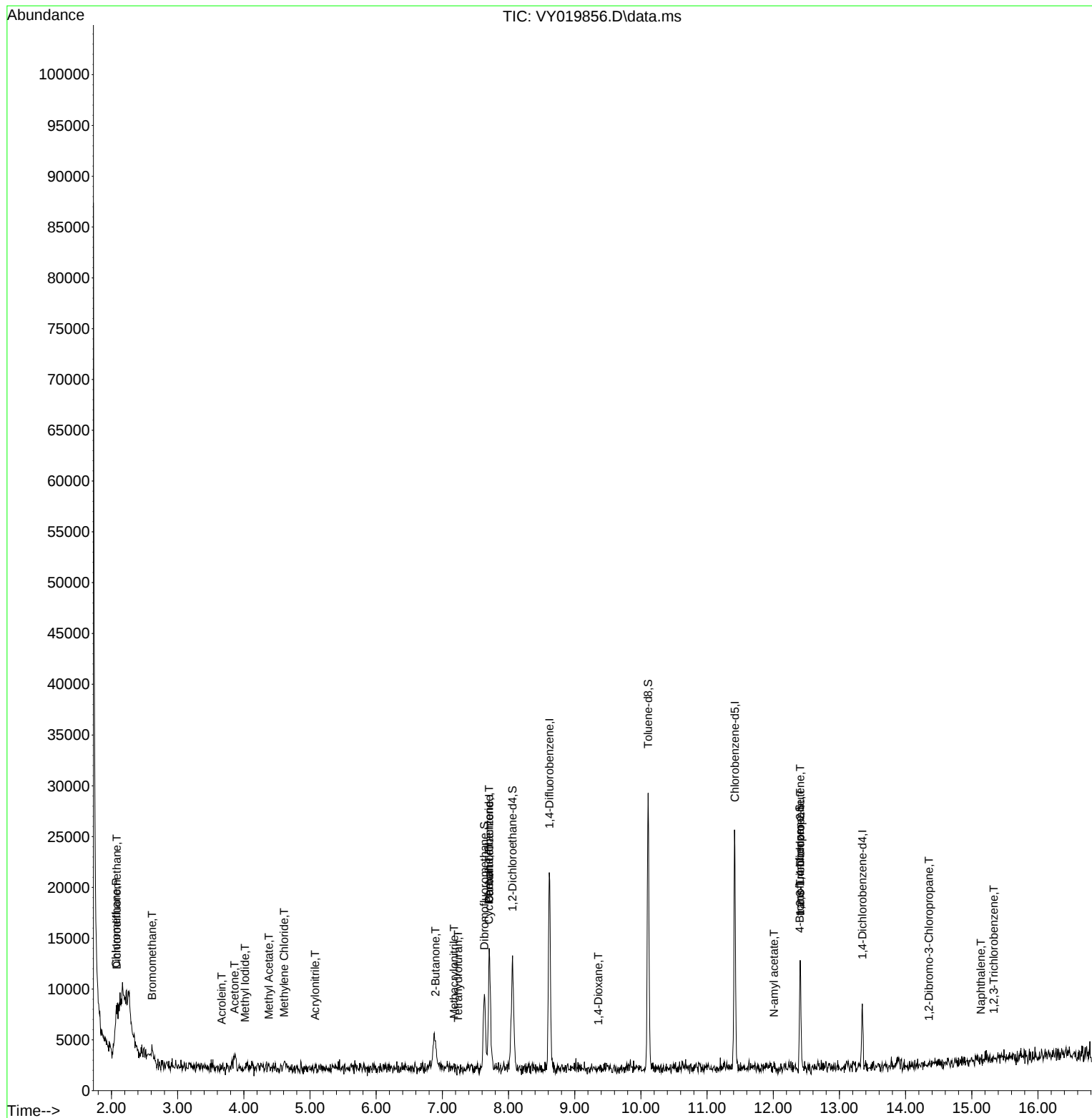
| Compound                      | R.T.   | QIon  | Response | Conc      | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|------------|----------|
| -----                         |        |       |          |           |            |          |
| Internal Standards            |        |       |          |           |            |          |
| 1) Pentafluorobenzene         | 7.707  | 168   | 8182     | 50.000    | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.616  | 114   | 15851    | 50.000    | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.420 | 117   | 11079    | 50.000    | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.346 | 152   | 1471     | 50.000    | ug/l       | 0.00     |
| System Monitoring Compounds   |        |       |          |           |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.061  | 65    | 6927     | 68.758    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 50 - 163 | Recovery  | = 137.520% |          |
| 35) Dibromofluoromethane      | 7.634  | 113   | 5451     | 52.113    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 54 - 147 | Recovery  | = 104.220% |          |
| 50) Toluene-d8                | 10.109 | 98    | 16962    | 43.912    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 58 - 134 | Recovery  | = 87.820%  |          |
| 62) 4-Bromofluorobenzene      | 12.401 | 95    | 3033     | 21.731    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 29 - 146 | Recovery  | = 43.460%  |          |
| Target Compounds              |        |       |          |           |            |          |
|                               |        |       |          |           | Qvalue     |          |
| 2) Dichlorodifluoromethane    | 2.080  | 85    | 82       | 1.077     | ug/l #     | 43       |
| 3) Chloromethane              | 2.068  | 50    | 292      | 2.945     | ug/l #     | 43       |
| 5) Bromomethane               | 2.611  | 94    | 323      | 4.678     | ug/l #     | 59       |
| 10) Methyl Iodide             | 4.019  | 142   | 333      | 3.487     | ug/l #     | 43       |
| 11) Tert butyl alcohol        | 4.854  | 59    | 22       | Below Cal | #          | 74       |
| 13) Acrolein                  | 3.665  | 56    | 61       | 8.240     | ug/l #     | 75       |
| 15) Acrylonitrile             | 5.080  | 53    | 49       | 2.172     | ug/l #     | 18       |
| 16) Acetone                   | 3.860  | 43    | 1311     | 49.990    | ug/l #     | 84       |
| 18) Methyl Acetate            | 4.379  | 43    | 137      | 2.425     | ug/l #     | 87       |
| 20) Methylene Chloride        | 4.610  | 84    | 157      | 1.483     | ug/l #     | 30       |
| 25) 2-Butanone                | 6.896  | 43    | 163      | 4.643     | ug/l #     | 51       |
| 29) Tetrahydrofuran           | 7.238  | 42    | 29       | 1.447     | ug/l #     | 35       |
| 31) Cyclohexane               | 7.701  | 56    | 286      | 1.699     | ug/l #     | 87       |
| 38) Carbon Tetrachloride      | 7.707  | 117   | 995      | 6.159     | ug/l #     | 12       |
| 41) Methacrylonitrile         | 7.177  | 41    | 55       | 1.293     | ug/l #     | 34       |
| 49) 1,4-Dioxane               | 9.353  | 88    | 59       | 84.524    | ug/l #     | 25       |
| 74) N-amyl acetate            | 12.011 | 43    | 40       | 1.221     | ug/l #     | 44       |
| 76) 1,2,3-Trichloropropane    | 12.408 | 75    | 1846     | 120.518   | ug/l #     | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.408 | 75    | 1846     | 258.570   | ug/l #     | 8        |
| 92) 1,2-Dibromo-3-Chloropr... | 14.352 | 75    | 73       | 20.805    | ug/l #     | 5        |
| 95) Naphthalene               | 15.139 | 128   | 223      | 4.526     | ug/l #     | 69       |
| 96) 1,2,3-Trichlorobenzene    | 15.334 | 180   | 26       | 1.177     | ug/l #     | 13       |
| -----                         |        |       |          |           |            |          |

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

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Quant Title : SW846 8260  
QLast Update : Thu Oct 10 05:30:07 2024  
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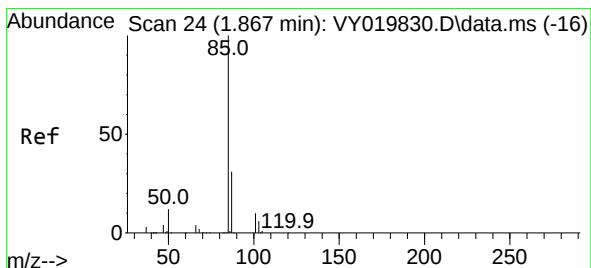
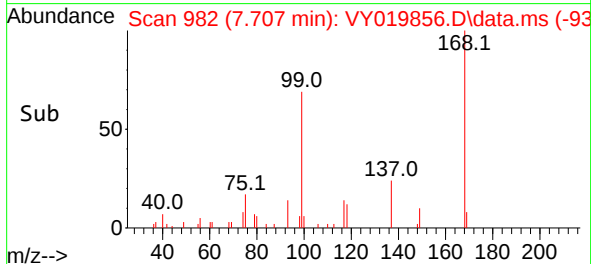
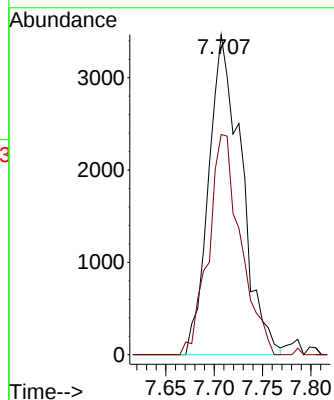
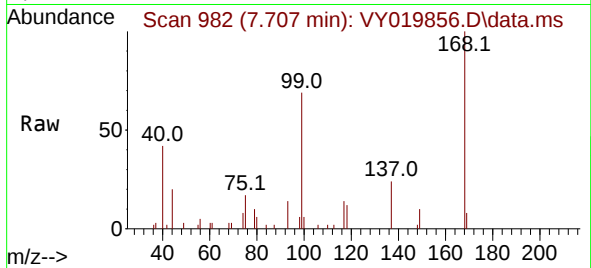




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.707 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

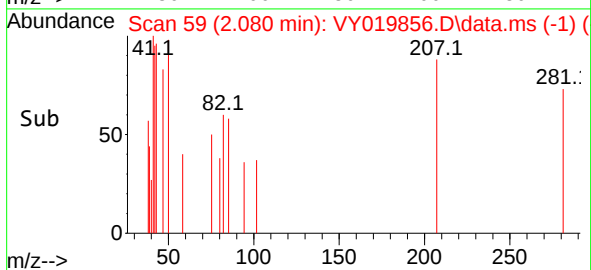
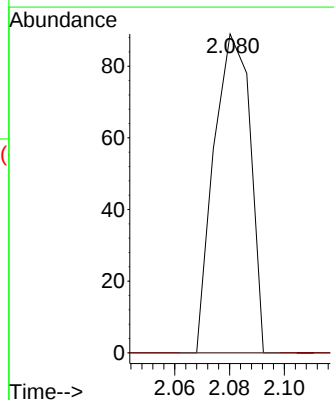
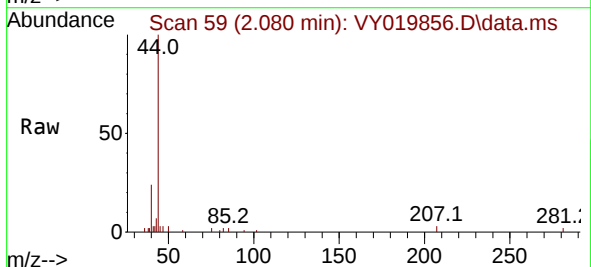
Instrument :  
MSVOA\_Y  
ClientSampleId :

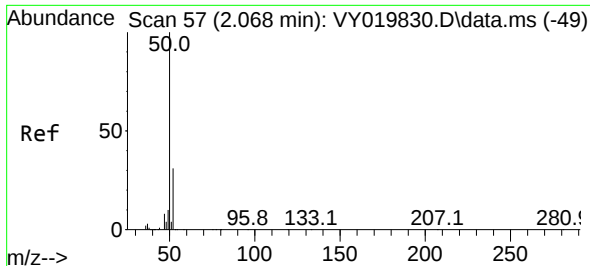
Tgt Ion:168 Resp: 8182  
Ion Ratio Lower Upper  
168 100  
99 68.8 52.6 78.8



#2  
Dichlorodifluoromethane  
Concen: 1.077 ug/l  
RT: 2.080 min Scan# 59  
Delta R.T. 0.213 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Tgt Ion: 85 Resp: 82  
Ion Ratio Lower Upper  
85 100  
87 0.0 15.7 47.1#

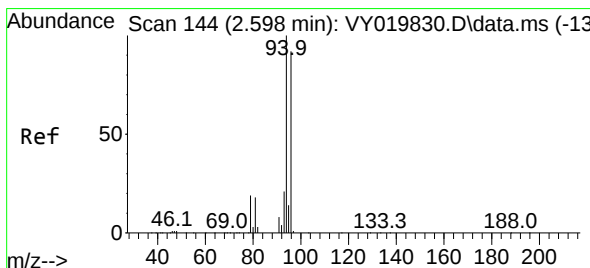
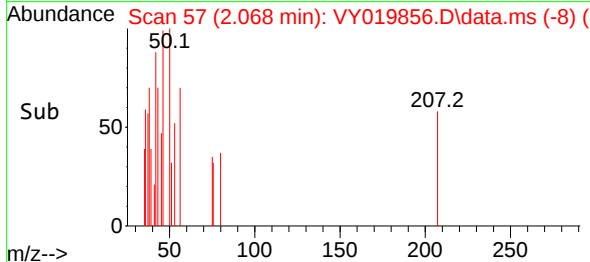
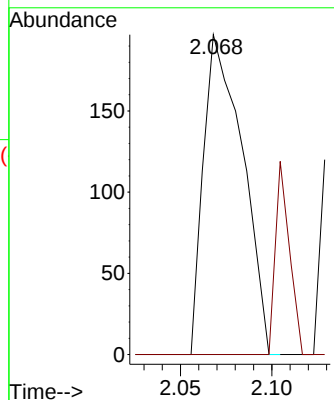
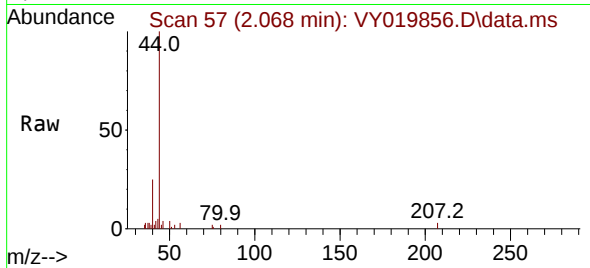




#3  
Chloromethane  
Concen: 2.945 ug/l  
RT: 2.068 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

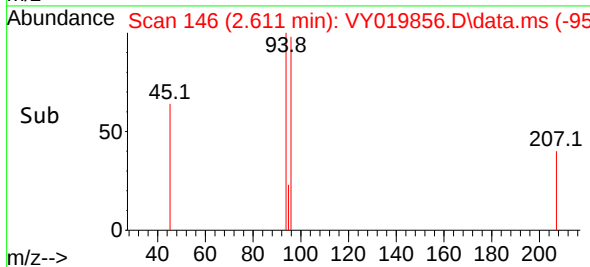
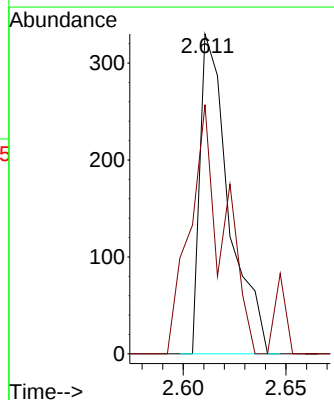
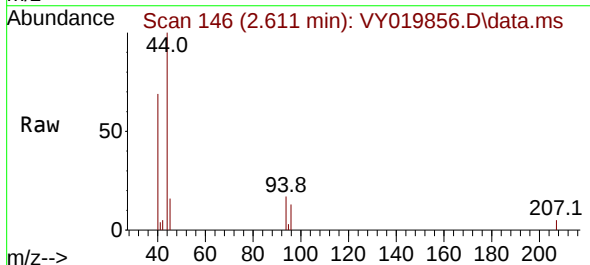
Instrument :  
MSVOA\_Y  
ClientSampleId :

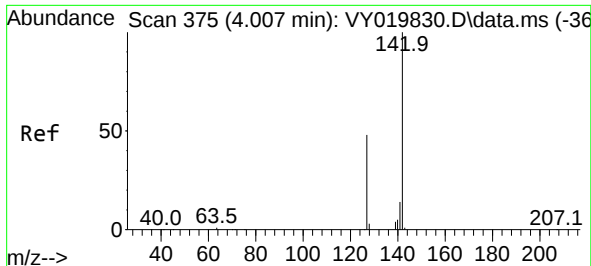
Tgt Ion: 50 Resp: 292  
Ion Ratio Lower Upper  
50 100  
52 0.0 25.1 37.7#



#5  
Bromomethane  
Concen: 4.678 ug/l  
RT: 2.611 min Scan# 146  
Delta R.T. 0.012 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

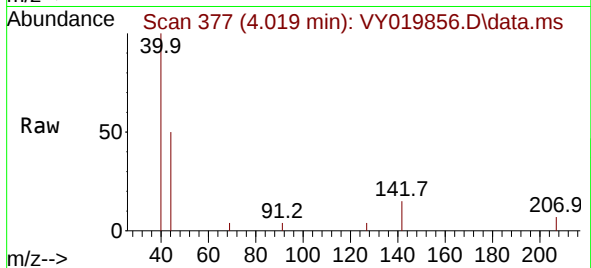
Tgt Ion: 94 Resp: 323  
Ion Ratio Lower Upper  
94 100  
96 52.7 73.6 110.4#



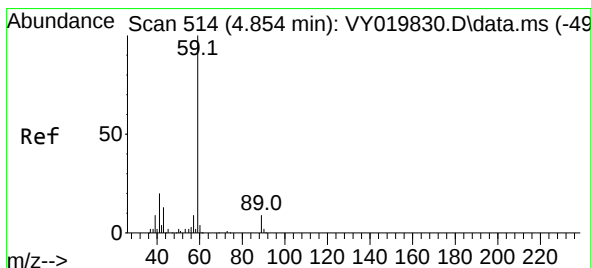
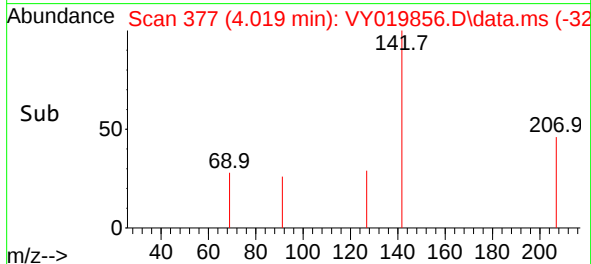
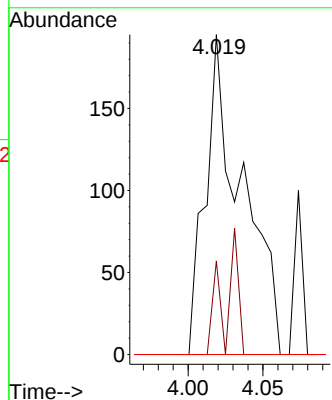


#10  
Methyl Iodide  
Concen: 3.487 ug/l  
RT: 4.019 min Scan# 31  
Delta R.T. 0.012 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Instrument :  
MSVOA\_Y  
ClientSampleId :

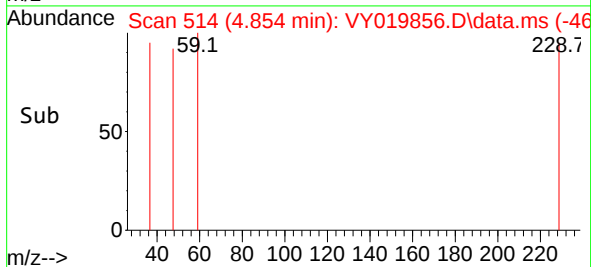
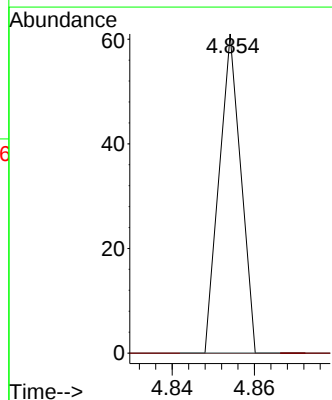
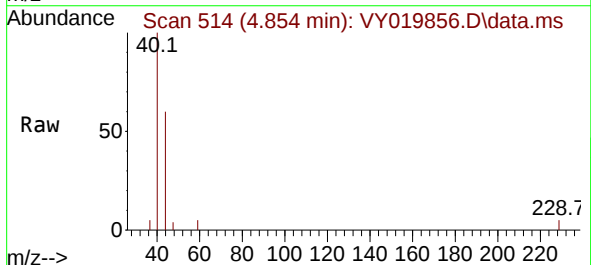


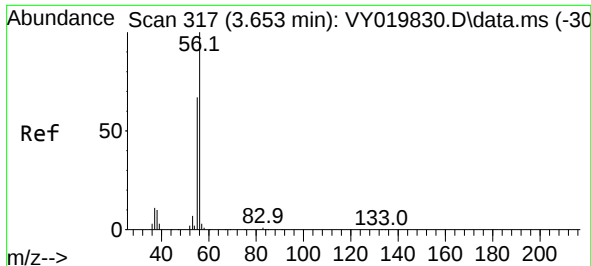
Tgt Ion:142 Resp: 333  
Ion Ratio Lower Upper  
142 100  
127 6.3 39.4 59.2#  
141 0.0 11.7 17.5#



#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 4.854 min Scan# 514  
Delta R.T. 0.000 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

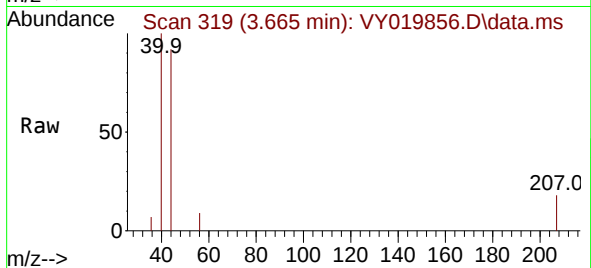
Tgt Ion: 59 Resp: 22  
Ion Ratio Lower Upper  
59 100  
57 0.0 7.7 11.5#



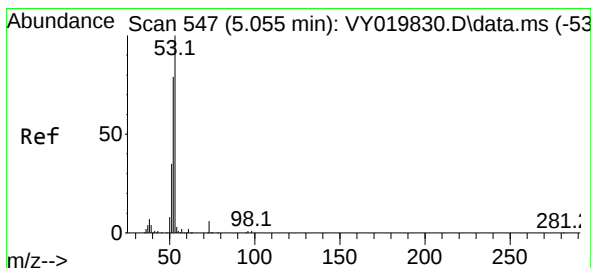
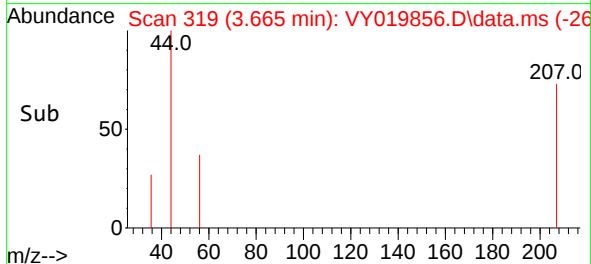
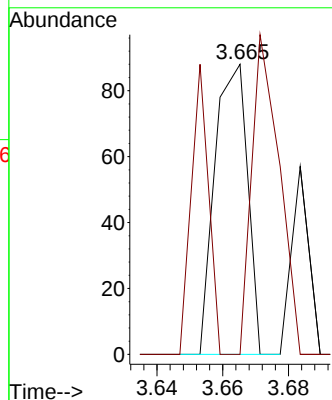


#13  
Acrolein  
Concen: 8.240 ug/l  
RT: 3.665 min Scan# 317  
Delta R.T. 0.012 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Instrument :  
MSVOA\_Y  
ClientSampleId :

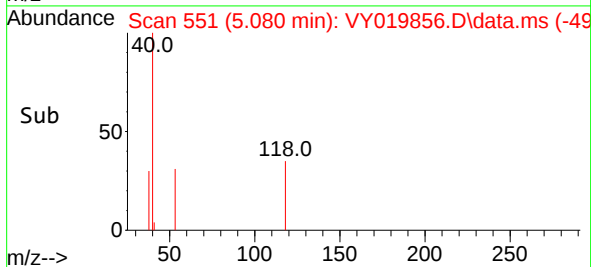
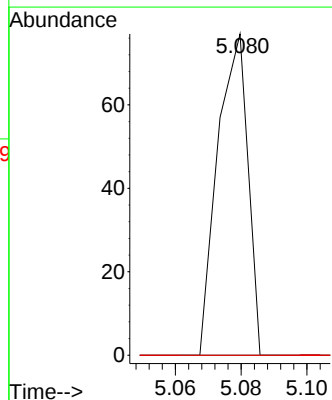
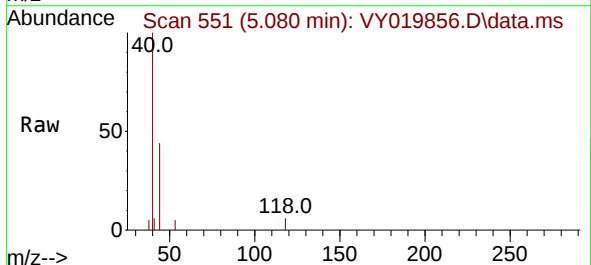


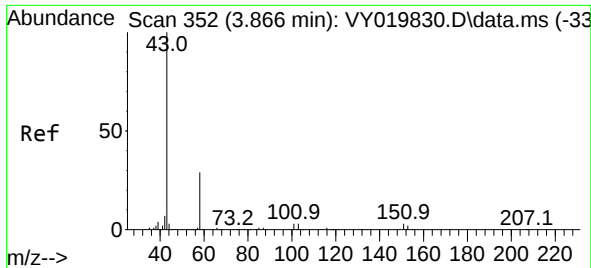
Tgt Ion: 56 Resp: 61  
Ion Ratio Lower Upper  
56 100  
55 91.8 56.9 85.3#



#15  
Acrylonitrile  
Concen: 2.172 ug/l  
RT: 5.080 min Scan# 551  
Delta R.T. 0.024 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Tgt Ion: 53 Resp: 49  
Ion Ratio Lower Upper  
53 100  
52 0.0 65.0 97.6#  
51 0.0 29.9 44.9#

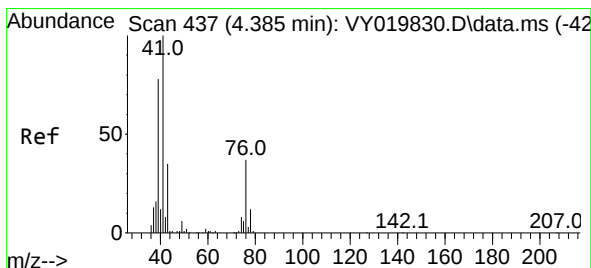
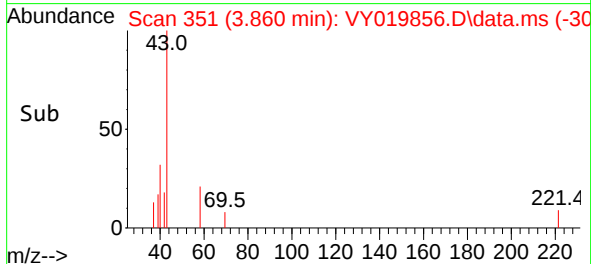
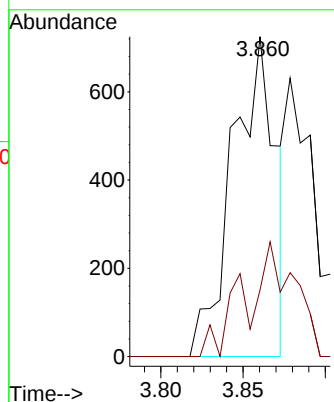
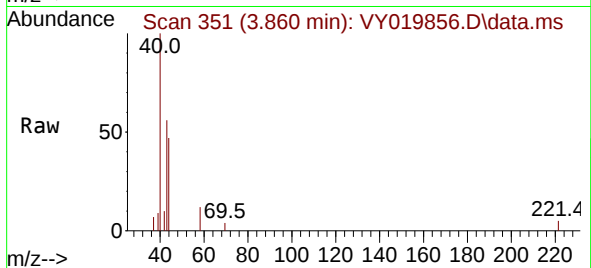




#16  
Acetone  
Concen: 49.990 ug/l  
RT: 3.860 min Scan# 311  
Delta R.T. -0.006 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

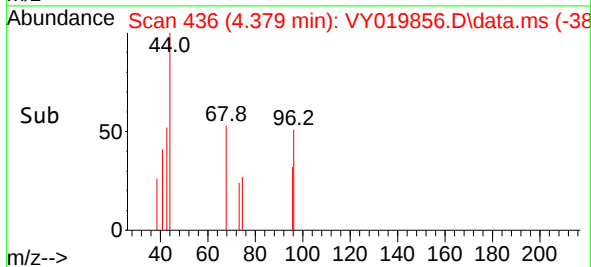
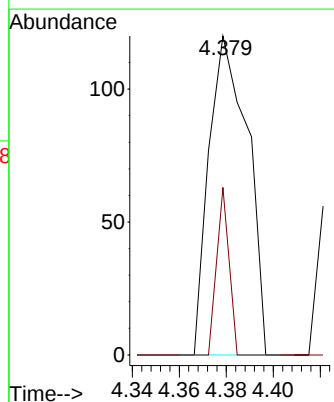
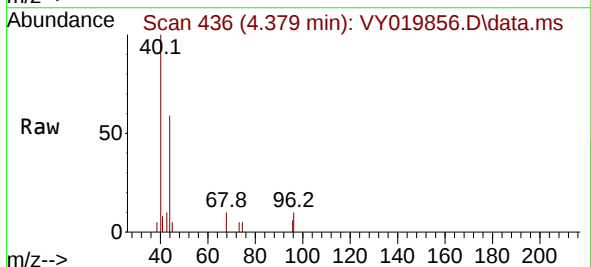
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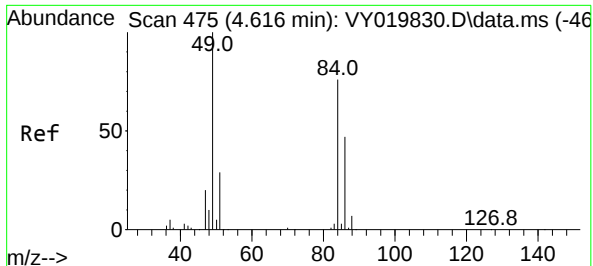
Tgt Ion: 43 Resp: 1311  
Ion Ratio Lower Upper  
43 100  
58 20.8 23.8 35.6#



#18  
Methyl Acetate  
Concen: 2.425 ug/l  
RT: 4.379 min Scan# 436  
Delta R.T. -0.006 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

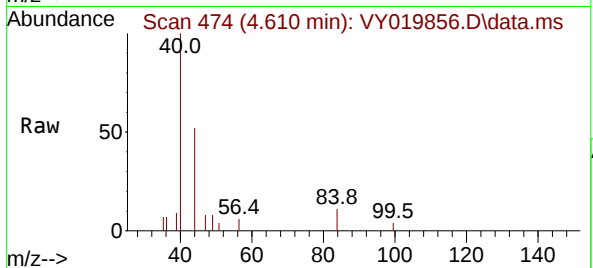
Tgt Ion: 43 Resp: 137  
Ion Ratio Lower Upper  
43 100  
74 16.8 18.6 28.0#



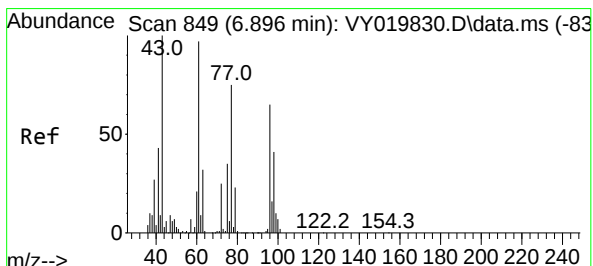
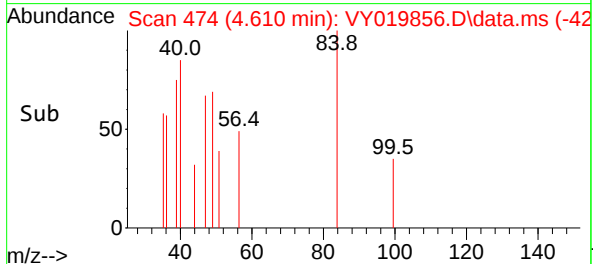
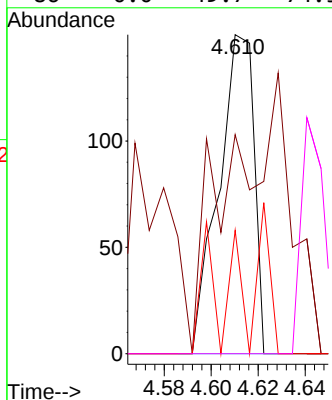


#20  
Methylene Chloride  
Concen: 1.483 ug/l  
RT: 4.610 min Scan# 41  
Delta R.T. -0.006 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Instrument :  
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ClientSampleId :

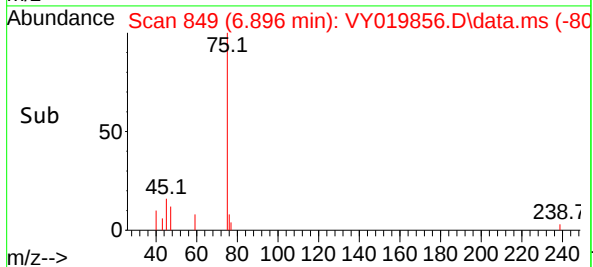
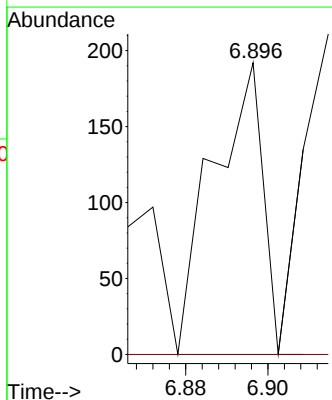
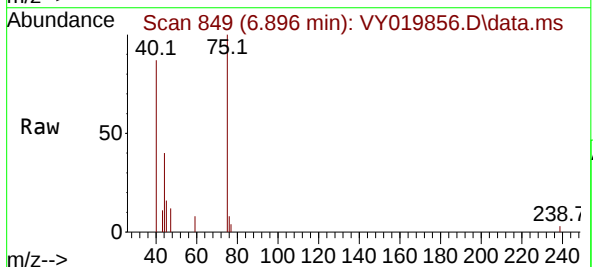


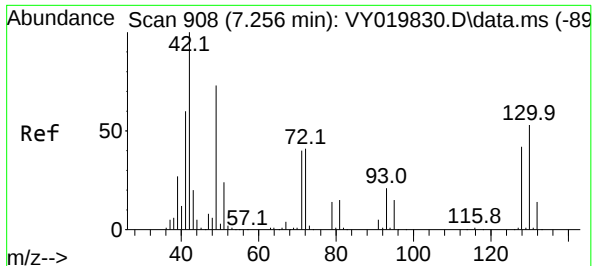
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|----------|-------|-------|--------|
| Tgt Ion: | 84    | Resp: | 157    |
| Ion      | Ratio | Lower | Upper  |
| 84       | 100   |       |        |
| 49       | 32.0  | 104.8 | 157.2# |
| 51       | 38.7  | 30.4  | 45.6   |
| 86       | 0.0   | 49.7  | 74.5#  |



#25  
2-Butanone  
Concen: 4.643 ug/l  
RT: 6.896 min Scan# 849  
Delta R.T. 0.000 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

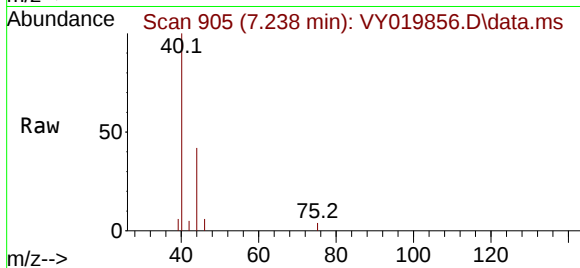
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 163   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 0.0   | 19.8  | 29.6# |



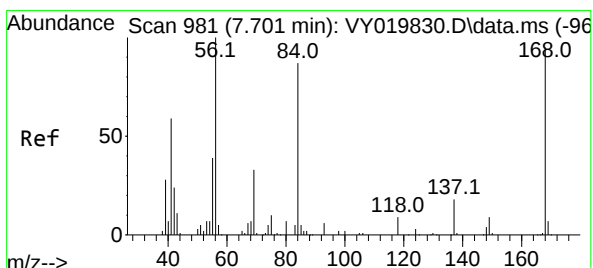
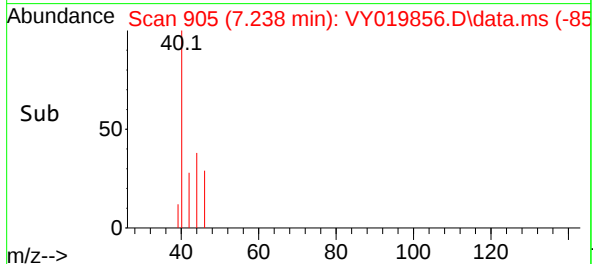
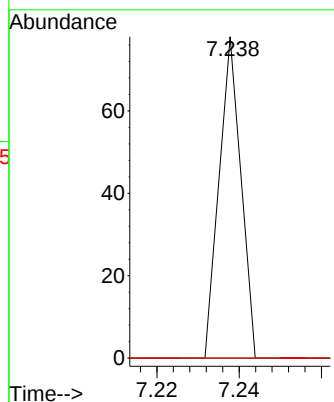


#29  
Tetrahydrofuran  
Concen: 1.447 ug/l  
RT: 7.238 min Scan# 908  
Delta R.T. -0.018 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Instrument :  
MSVOA\_Y  
ClientSampleId :

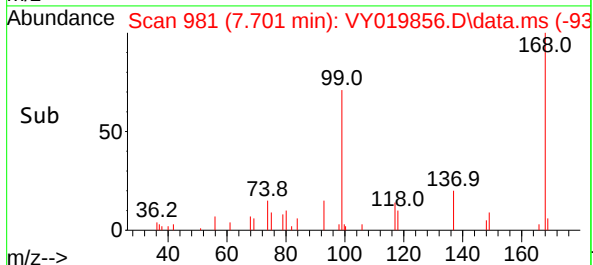
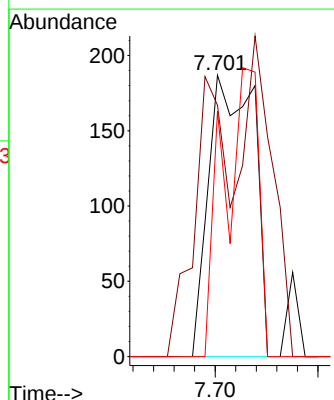
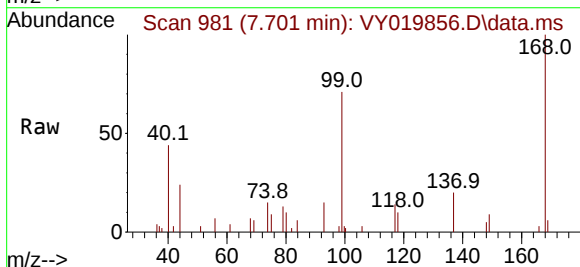


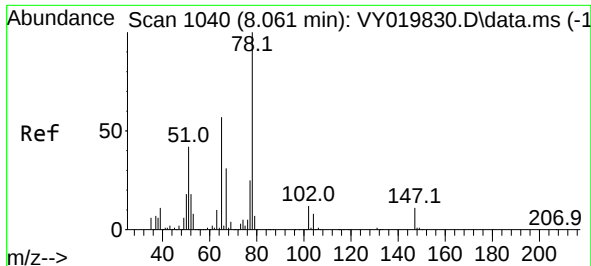
Tgt Ion: 42 Resp: 29  
Ion Ratio Lower Upper  
42 100  
72 0.0 33.4 50.0#  
71 0.0 31.6 47.4#



#31  
Cyclohexane  
Concen: 1.699 ug/l  
RT: 7.701 min Scan# 981  
Delta R.T. 0.000 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Tgt Ion: 56 Resp: 286  
Ion Ratio Lower Upper  
56 100  
69 59.9 26.6 39.8#  
84 87.2 69.6 104.4





#33

1,2-Dichloroethane-d4

Concen: 68.758 ug/l

RT: 8.061 min Scan# 1

Delta R.T. 0.000 min

Lab File: VY019856.D

Acq: 10 Oct 2024 16:04

Instrument :

MSVOA\_Y

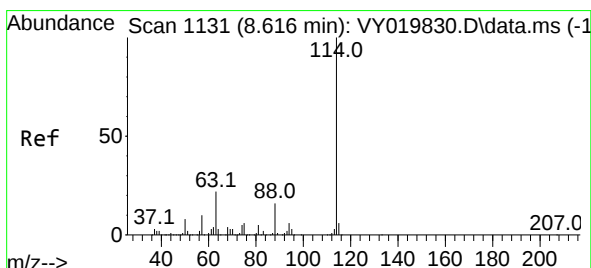
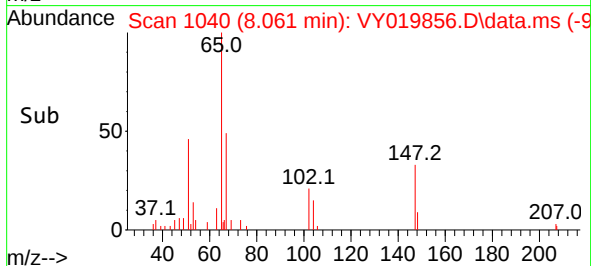
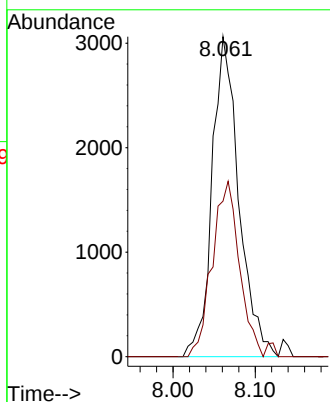
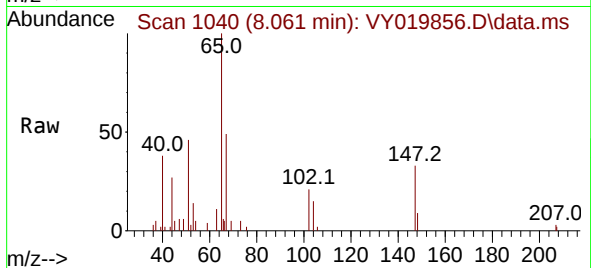
ClientSampleId :

Tgt Ion: 65 Resp: 6927

Ion Ratio Lower Upper

65 100

67 55.5 0.0 105.0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.616 min Scan# 1131

Delta R.T. 0.000 min

Lab File: VY019856.D

Acq: 10 Oct 2024 16:04

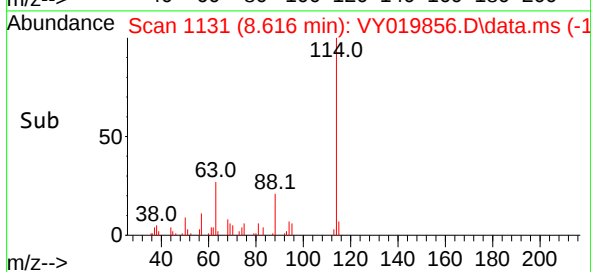
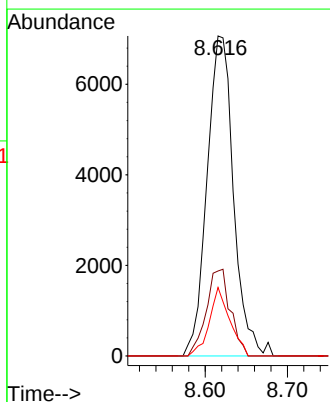
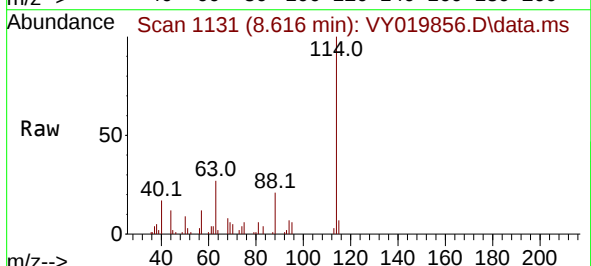
Tgt Ion:114 Resp: 15851

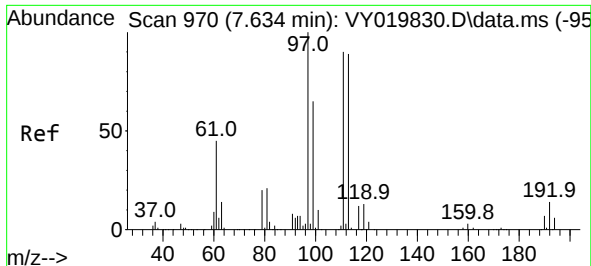
Ion Ratio Lower Upper

114 100

63 26.5 0.0 43.8

88 21.4 0.0 32.0

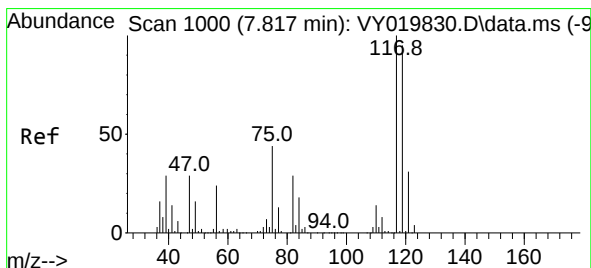
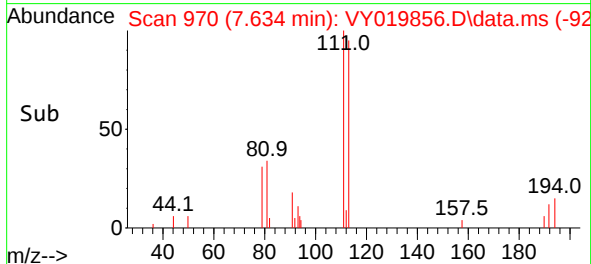
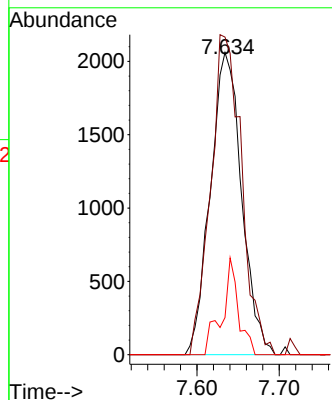
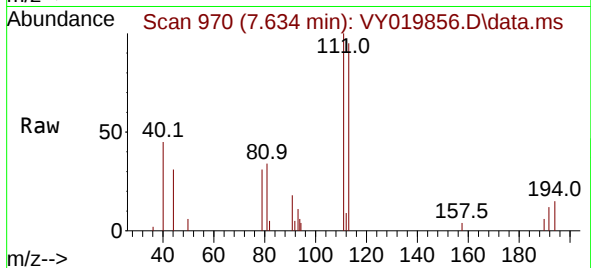




#35  
Dibromofluoromethane  
Concen: 52.113 ug/l  
RT: 7.634 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

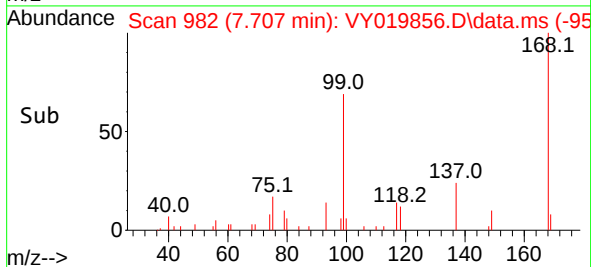
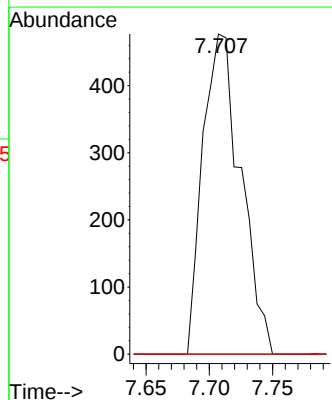
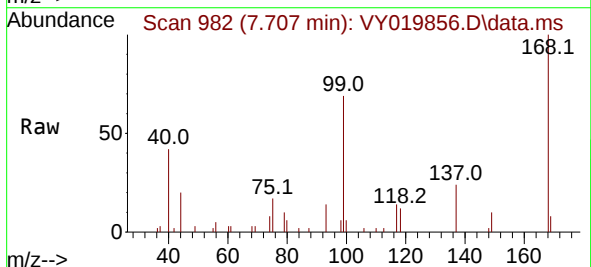
Instrument :  
MSVOA\_Y  
ClientSampleId :

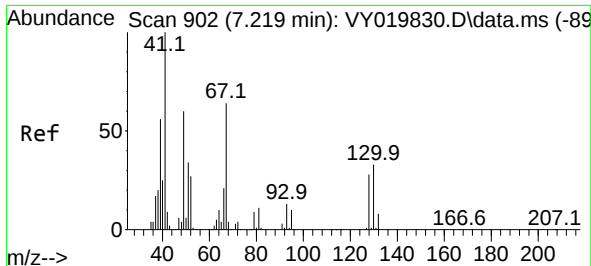
Tgt Ion:113 Resp: 5451  
Ion Ratio Lower Upper  
113 100  
111 104.7 82.9 124.3  
192 16.8 13.6 20.4



#38  
Carbon Tetrachloride  
Concen: 6.159 ug/l  
RT: 7.707 min Scan# 982  
Delta R.T. -0.110 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

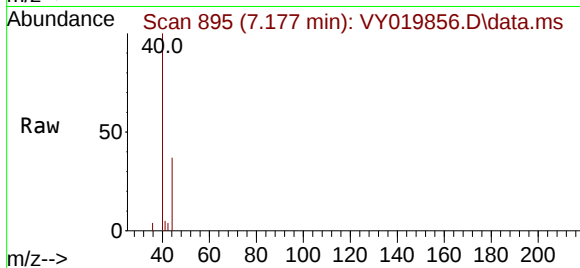
Tgt Ion:117 Resp: 995  
Ion Ratio Lower Upper  
117 100  
119 0.0 76.2 114.4#  
121 0.0 25.0 37.4#



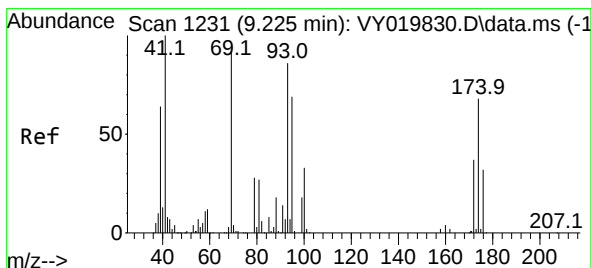
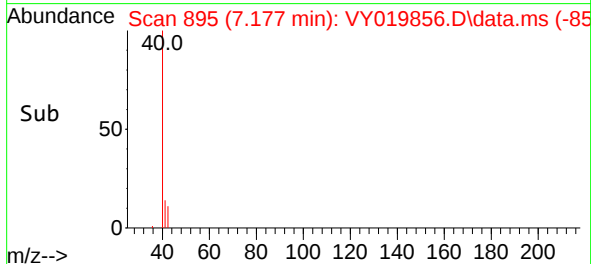
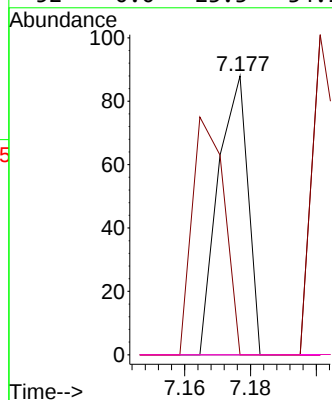


#41  
Methacrylonitrile  
Concen: 1.293 ug/l  
RT: 7.177 min Scan# 89  
Delta R.T. -0.043 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Instrument :  
MSVOA\_Y  
ClientSampleId :

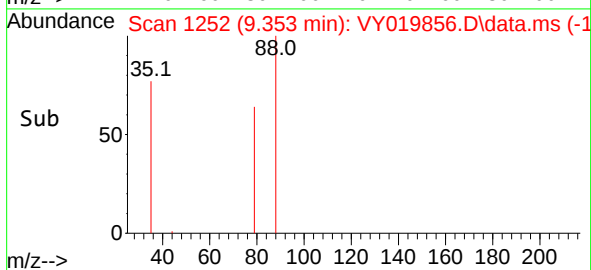
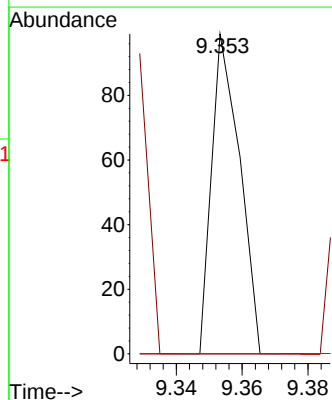
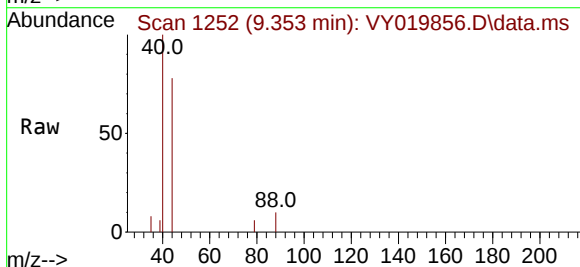


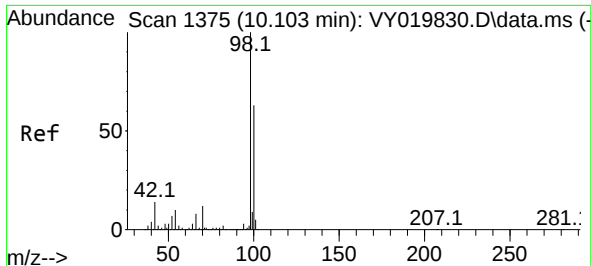
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 55    |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 90.9  | 43.9  | 65.9# |
| 67       | 0.0   | 53.2  | 79.8# |
| 52       | 0.0   | 23.3  | 34.9# |



#49  
1,4-Dioxane  
Concen: 84.524 ug/l  
RT: 9.353 min Scan# 1252  
Delta R.T. 0.128 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 88    | Resp: | 59    |
| Ion      | Ratio | Lower | Upper |
| 88       | 100   |       |       |
| 43       | 0.0   | 28.5  | 42.7# |
| 58       | 0.0   | 52.6  | 78.8# |

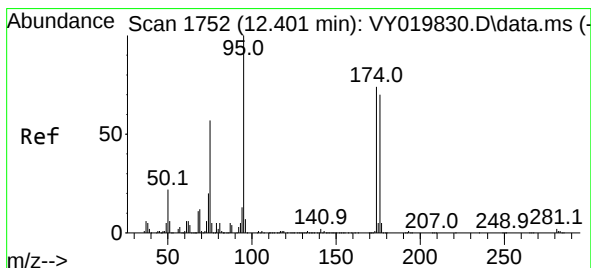
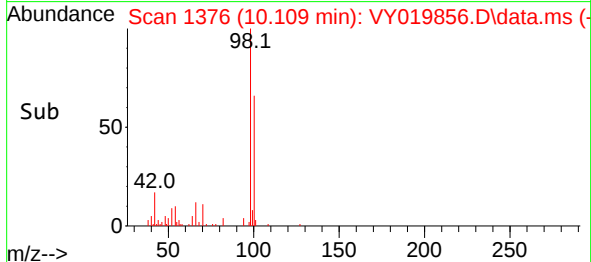
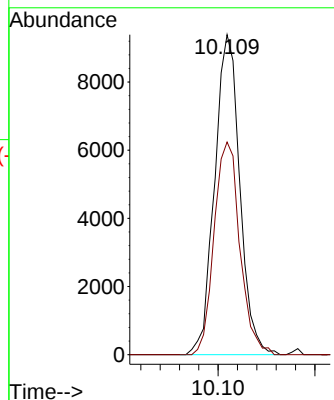
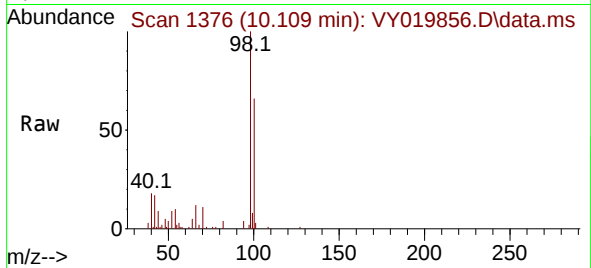




#50  
Toluene-d8  
Concen: 43.912 ug/l  
RT: 10.109 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

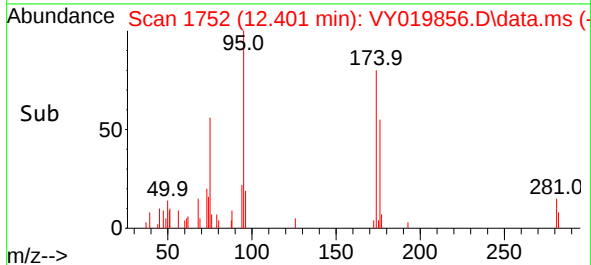
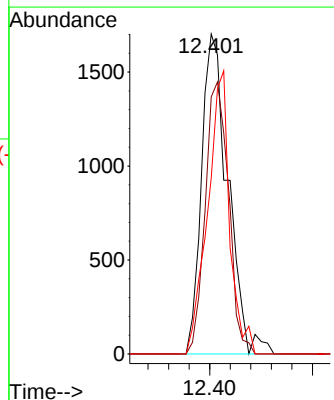
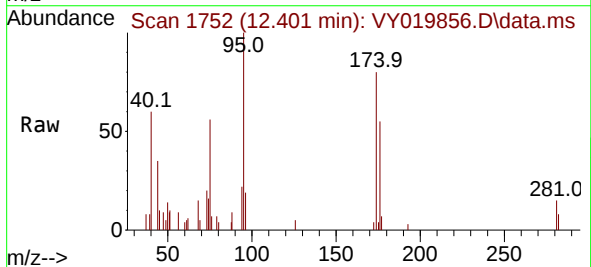
Instrument :  
MSVOA\_Y  
ClientSampleId :

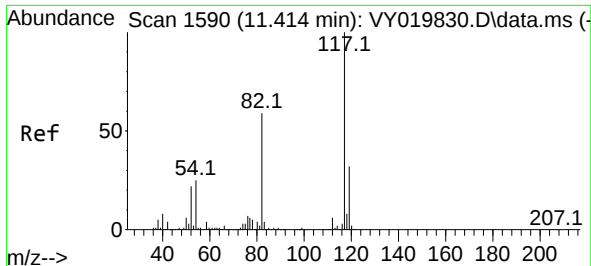
Tgt Ion: 98 Resp: 16962  
Ion Ratio Lower Upper  
98 100  
100 68.0 51.1 76.7



#62  
4-Bromofluorobenzene  
Concen: 21.731 ug/l  
RT: 12.401 min Scan# 1752  
Delta R.T. 0.000 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

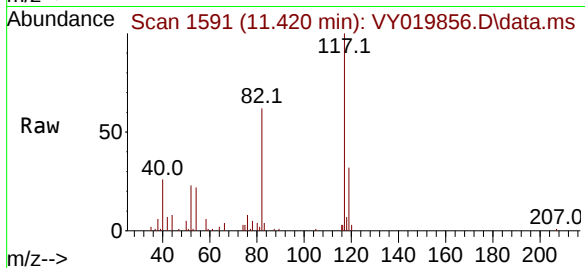
Tgt Ion: 95 Resp: 3033  
Ion Ratio Lower Upper  
95 100  
174 75.3 0.0 148.0  
176 73.7 0.0 142.4



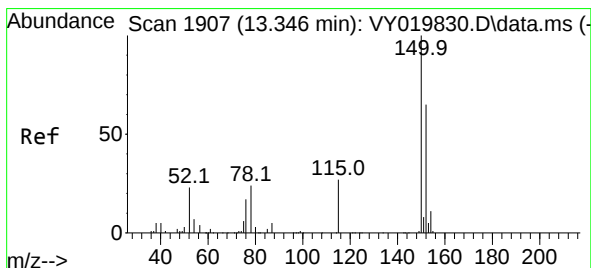
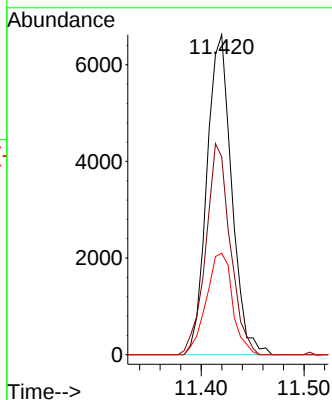
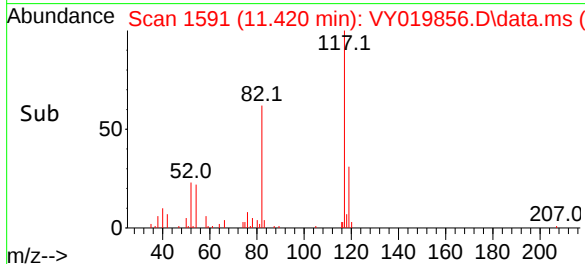


#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.420 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

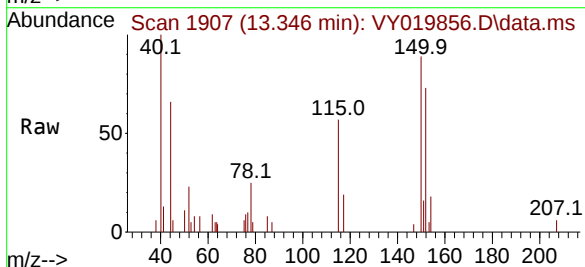
Instrument :  
MSVOA\_Y  
ClientSampleId :



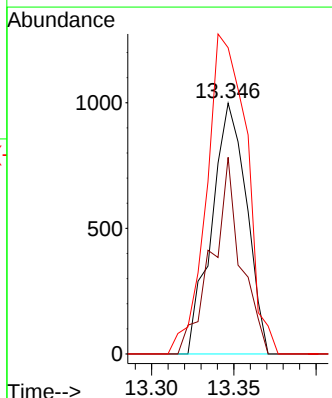
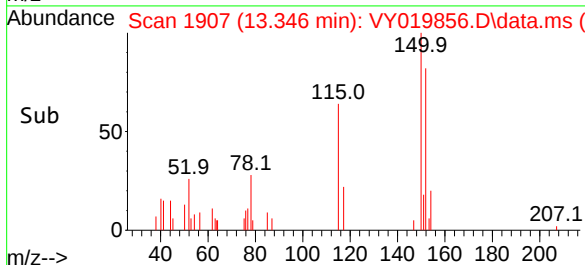
Tgt Ion:117 Resp: 11079  
Ion Ratio Lower Upper  
117 100  
82 61.8 46.9 70.3  
119 31.7 25.4 38.2

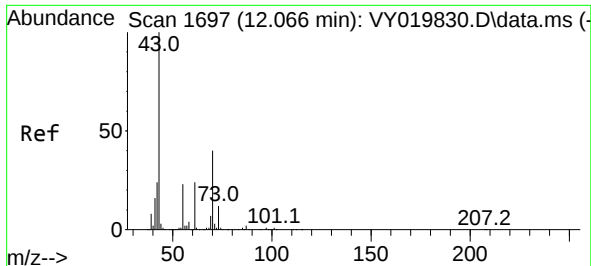


#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.346 min Scan# 1907  
Delta R.T. 0.000 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04



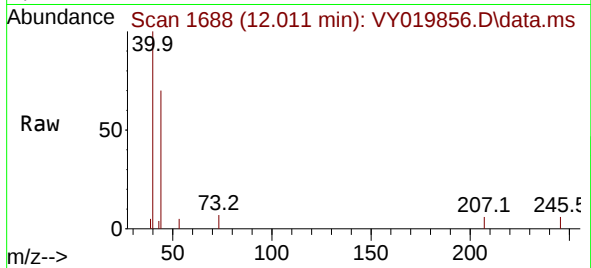
Tgt Ion:152 Resp: 1471  
Ion Ratio Lower Upper  
152 100  
115 65.3 30.8 92.3  
150 146.6 0.0 352.8



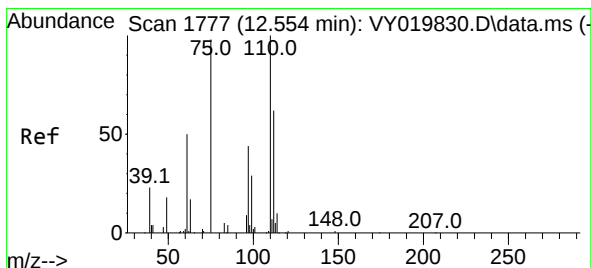
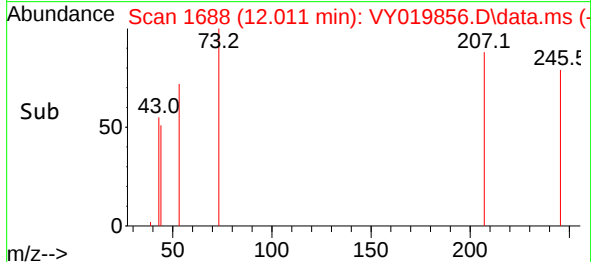
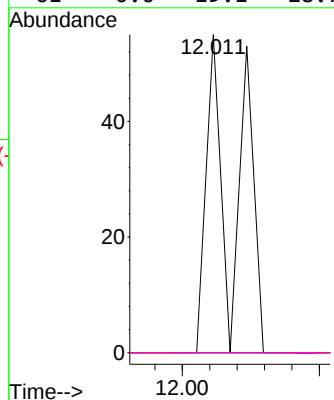


#74  
N-amy1 acetate  
Concen: 1.221 ug/l  
RT: 12.011 min Scan# 1753  
Delta R.T. -0.055 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Instrument :  
MSVOA\_Y  
ClientSampleId :

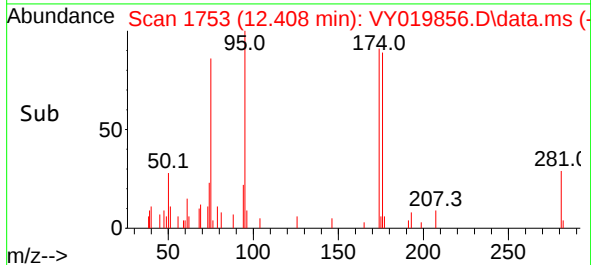
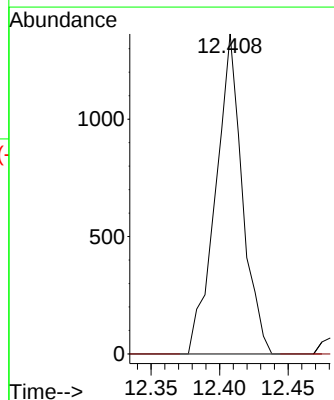
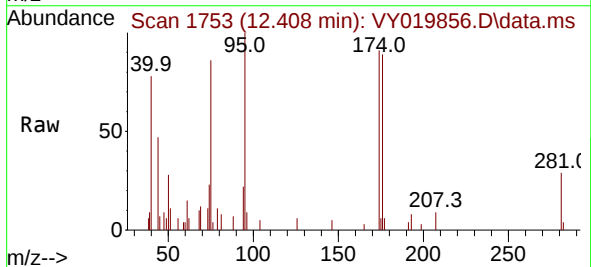


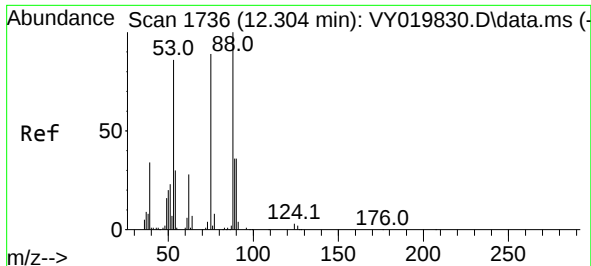
|           |     |       |       |
|-----------|-----|-------|-------|
| Tgt Ion:  | 43  | Resp: | 40    |
| Ion Ratio | 100 | Lower | Upper |
| 70        | 0.0 | 32.8  | 49.2# |
| 55        | 0.0 | 19.3  | 28.9# |
| 61        | 0.0 | 19.1  | 28.7# |



#76  
1,2,3-Trichloropropane  
Concen: 120.518 ug/l  
RT: 12.408 min Scan# 1753  
Delta R.T. -0.146 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

|           |     |       |       |
|-----------|-----|-------|-------|
| Tgt Ion:  | 75  | Resp: | 1846  |
| Ion Ratio | 100 | Lower | Upper |
| 77        | 0.0 | 0.0   | 0.0   |

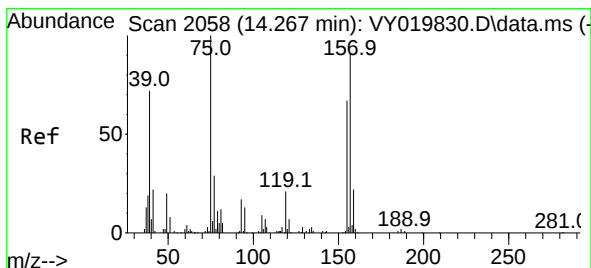
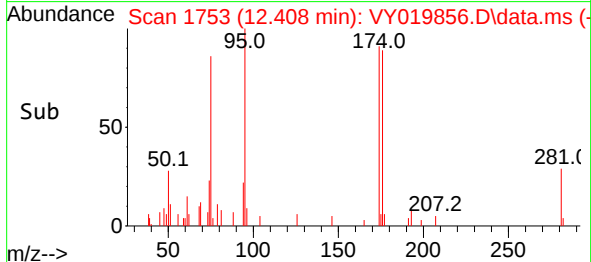
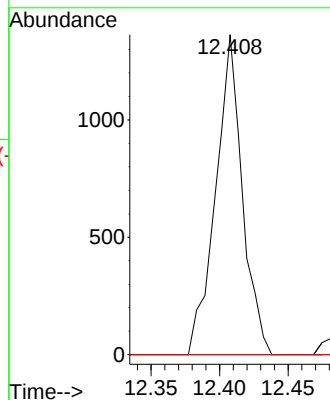
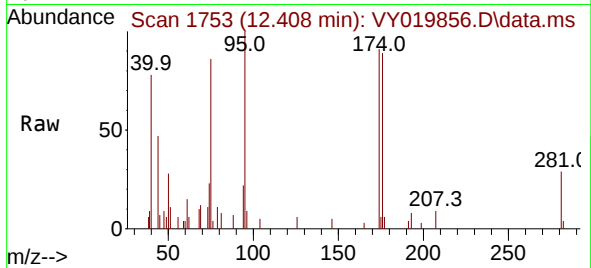




#81  
trans-1,4-Dichloro-2-butene  
Concen: 258.570 ug/l  
RT: 12.408 min Scan# 11  
Delta R.T. 0.104 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

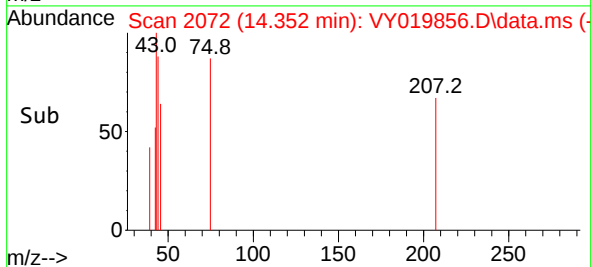
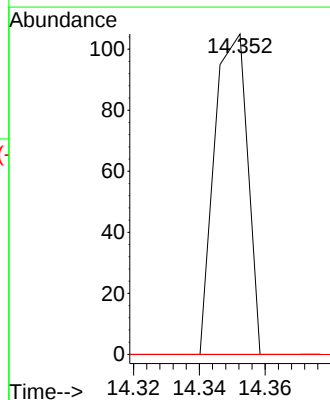
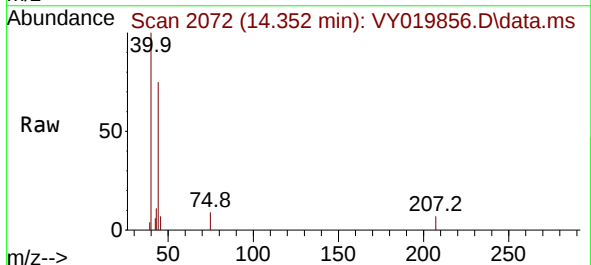
Instrument :  
MSVOA\_Y  
ClientSampleId :

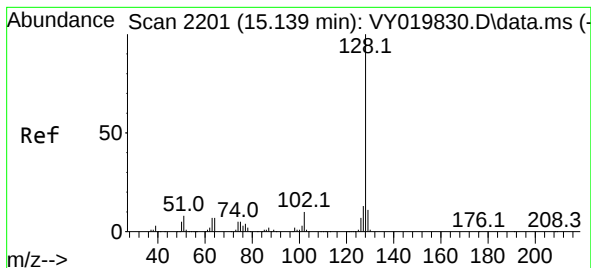
Tgt Ion: 75 Resp: 1846  
Ion Ratio Lower Upper  
75 100  
53 0.0 84.7 127.1#  
89 0.0 35.4 53.2#



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 20.805 ug/l  
RT: 14.352 min Scan# 2072  
Delta R.T. 0.085 min  
Lab File: VY019856.D  
Acq: 10 Oct 2024 16:04

Tgt Ion: 75 Resp: 73  
Ion Ratio Lower Upper  
75 100  
155 0.0 38.5 115.5#  
157 0.0 49.9 149.7#





#95

Naphthalene

Concen: 4.526 ug/l

RT: 15.139 min Scan# 2201

Delta R.T. 0.000 min

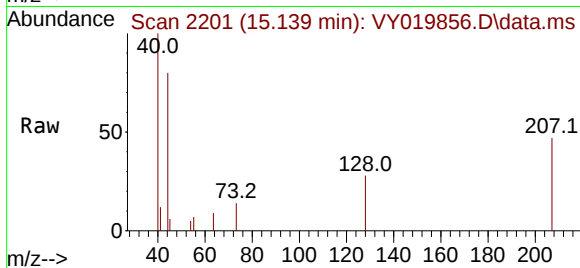
Lab File: VY019856.D

Acq: 10 Oct 2024 16:04

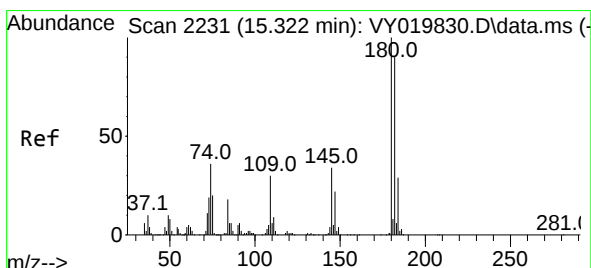
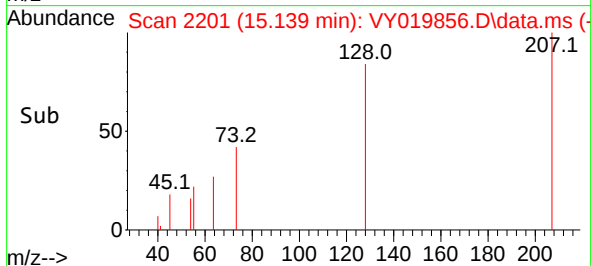
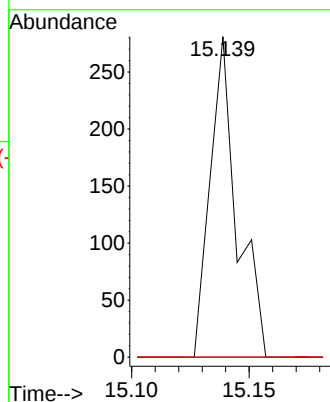
Instrument :

MSVOA\_Y

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 223   |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 0.0   | 10.4  | 15.6# |
| 129      | 0.0   | 8.6   | 12.8# |



#96

1,2,3-Trichlorobenzene

Concen: 1.177 ug/l

RT: 15.334 min Scan# 2233

Delta R.T. 0.012 min

Lab File: VY019856.D

Acq: 10 Oct 2024 16:04

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 26     |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 0.0   | 46.8  | 140.4# |
| 145      | 0.0   | 16.9  | 50.6#  |

