

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD121123\  
 Data File : VD077805.D  
 Acq On : 11 Dec 2023 10:56  
 Operator : JC/SY  
 Sample : 05750-01  
 Misc : 4.68G/10ml/MSVOA\_D/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Dec 11 13:03:50 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\SFAMDLM112923SMA.M  
 Quant Title : SFAM01.0  
 QLast Update : Wed Dec 06 00:24:24 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min)  |
|-------------------------------|--------|-------|----------|----------|--------|-----------|
| -----                         |        |       |          |          |        |           |
| Internal Standards            |        |       |          |          |        |           |
| 1) 1,4-Difluorobenzene        | 8.781  | 114   | 8358     | 25.000   | ug/L   | 0.00      |
| 28) Chlorobenzene-d5          | 11.587 | 117   | 6190     | 25.000   | ug/L   | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 13.522 | 152   | 1603     | 25.000   | ug/L   | 0.00      |
|                               |        |       |          |          |        |           |
| System Monitoring Compounds   |        |       |          |          |        |           |
| 4) Vinyl Chloride-d3          | 2.281  | 65    | 5050     | 22.156   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 30 - 150 | Recovery | =      | 88.640%   |
| 7) Chloroethane-d5            | 2.811  | 69    | 2753     | 15.154   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 30 - 150 | Recovery | =      | 60.600%   |
| 11) 1,1-Dichloroethene-d2     | 3.922  | 65    | 1367     | 23.131   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 45 - 110 | Recovery | =      | 92.520%   |
| 21) 2-Butanone-d5             | 6.999  | 46    | 2188     | 75.955   | ug/L   | 0.01      |
| Spiked Amount                 | 50.000 | Range | 20 - 135 | Recovery | =      | 151.900%# |
| 24) Chloroform-d              | 7.569  | 84    | 7362     | 32.682   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 40 - 150 | Recovery | =      | 130.720%  |
| 26) 1,2-Dichloroethane-d4     | 8.234  | 65    | 2370     | 20.765   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 70 - 130 | Recovery | =      | 83.080%   |
| 32) Benzene-d6                | 8.199  | 84    | 11492    | 30.826   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 20 - 135 | Recovery | =      | 123.320%  |
| 36) 1,2-Dichloropropane-d6    | 9.216  | 67    | 4240     | 37.275   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 70 - 120 | Recovery | =      | 149.120%# |
| 41) Toluene-d8                | 10.269 | 98    | 7861     | 22.909   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 30 - 130 | Recovery | =      | 91.640%   |
| 43) trans-1,3-Dichloroprop... | 10.522 | 79    | 1071     | 21.292   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 30 - 135 | Recovery | =      | 85.160%   |
| 47) 2-Hexanone-d5             | 10.881 | 63    | 1328     | 67.752   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000 | Range | 20 - 135 | Recovery | =      | 135.500%# |
| 56) 1,1,2,2-Tetrachloroeth... | 12.651 | 84    | 4363     | 53.080   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 45 - 120 | Recovery | =      | 212.320%# |
| 66) 1,2-Dichlorobenzene-d4    | 13.810 | 152   | 1158     | 20.193   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 75 - 120 | Recovery | =      | 80.760%   |
|                               |        |       |          |          |        |           |
| Target Compounds              |        |       |          |          |        | Qvalue    |
| 3) Chloromethane              | 2.152  | 50    | 462      | 2.410    | ug/L # | 41        |
| 6) Bromomethane               | 2.711  | 94    | 142      | 1.123    | ug/L   | 94        |
| 8) Chloroethane               | 2.840  | 64    | 646      | 4.334    | ug/L # | 43        |
| 13) Acetone                   | 4.011  | 43    | 347      | 9.402    | ug/L # | 41        |
| 14) Carbon disulfide          | 4.293  | 76    | 179      | 0.444    | ug/L # | 75        |
| 15) Methyl Acetate            | 4.605  | 43    | 76       | 1.438    | ug/L # | 52        |
| 22) 2-Butanone                | 7.081  | 43    | 79       | 1.902    | ug/L # | 65        |
| 34) Trichloroethene           | 9.028  | 95    | 7746     | 77.451   | ug/L   | 97        |
| 35) Methylcyclohexane         | 9.210  | 83    | 1215     | 6.843    | ug/L # | 25        |
| 37) 1,2-Dichloropropane       | 9.222  | 63    | 93       | 0.885    | ug/L # | 87        |
| 40) 4-Methyl-2-pentanone      | 10.269 | 43    | 90       | 1.553    | ug/L # | 44        |
| 45) 1,1,2-Trichloroethane     | 10.810 | 97    | 3420     | 48.477   | ug/L # | 16        |
| 46) Tetrachloroethene         | 10.810 | 164   | 337537   | 4185.468 | ug/L   | 96        |
| 48) 2-Hexanone                | 10.916 | 43    | 207      | 4.201    | ug/L # | 38        |
| 49) Dibromochloromethane      | 10.869 | 129   | 1200     | 14.305   | ug/L # | 12        |
| 51) Chlorobenzene             | 11.610 | 112   | 2994     | 11.283   | ug/L # | 84        |
| 61) 1,2,3-Trichloropropane    | 13.475 | 75    | 141      | 4.782    | ug/L # | 37        |
| 64) 1,3-Dichlorobenzene       | 13.545 | 146   | 1770     | 17.106   | ug/L # | 49        |
| 65) 1,4-Dichlorobenzene       | 13.545 | 146   | 1770     | 16.485   | ug/L # | 49        |

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Sample : 05750-01  
Misc : 4.68G/10ml/MSVOA\_D/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Dec 11 13:03:50 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\SFAMDLM112923SMA.M  
Quant Title : SFAM01.0  
QLast Update : Wed Dec 06 00:24:24 2023  
Response via : Initial Calibration

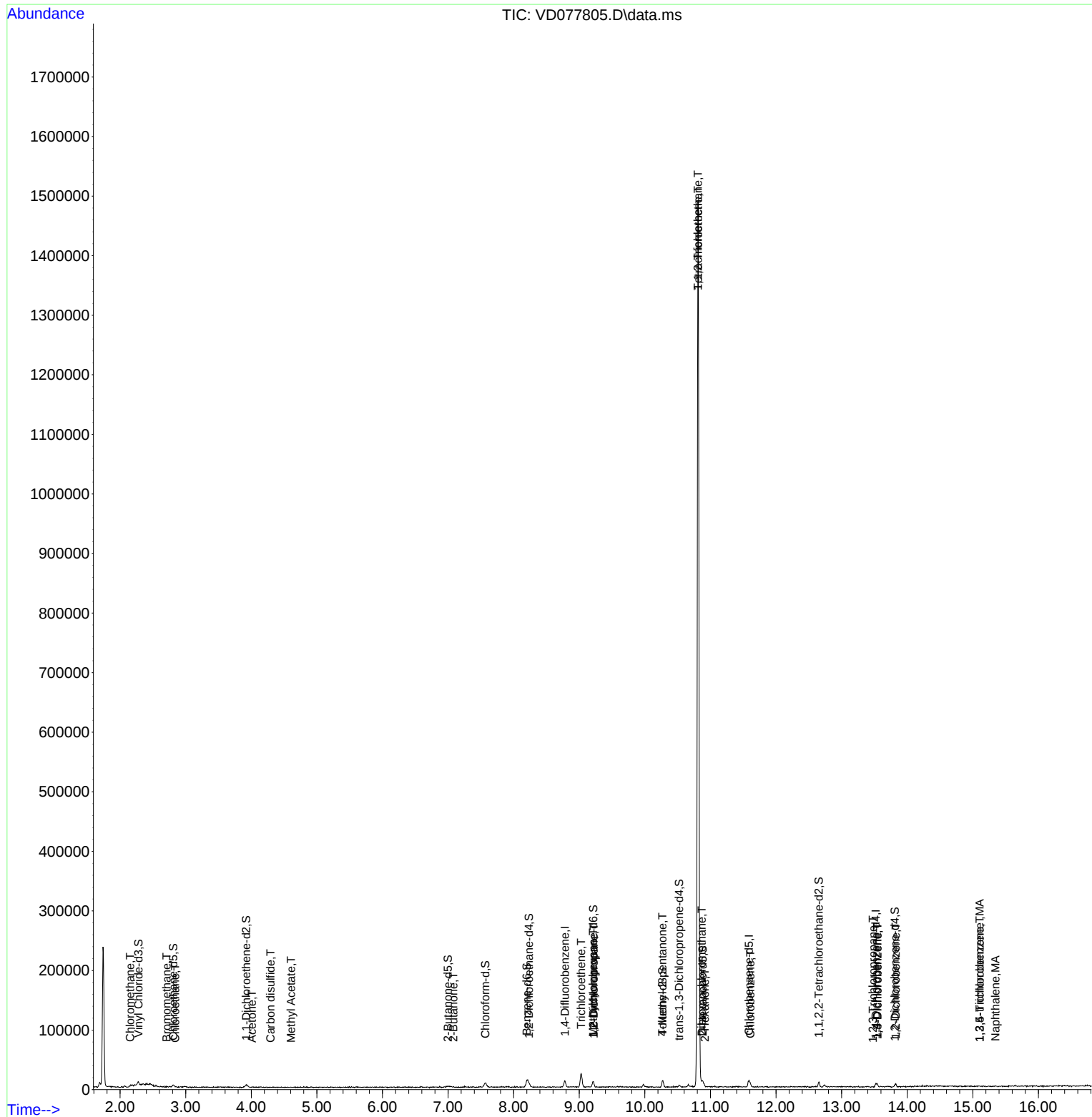
| Compound                   | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|----------------------------|--------|------|----------|-------|--------|----------|
| 67) 1,2-Dichlorobenzene    | 13.828 | 146  | 760      | 8.162 | ug/L # | 72       |
| 69) 1,3,5-Trichlorobenzene | 15.104 | 180  | 193      | 2.739 | ug/L # | 18       |
| 70) 1,2,4-trichlorobenzene | 15.104 | 180  | 193      | 3.227 | ug/L # | 12       |
| 71) Naphthalene            | 15.345 | 128  | 60       | 0.549 | ug/L # | 69       |

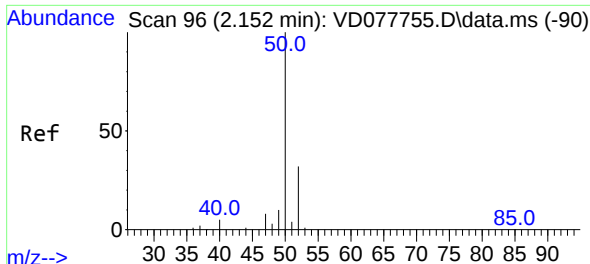
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD121123\  
Data File : VD077805.D  
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ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

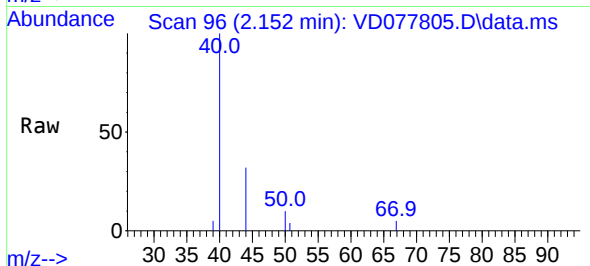
Quant Time: Dec 11 13:03:50 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\SFAMDLM112923SMA.M  
Quant Title : SFAM01.0  
QLast Update : Wed Dec 06 00:24:24 2023  
Response via : Initial Calibration



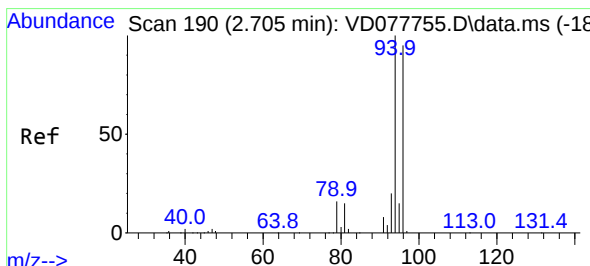
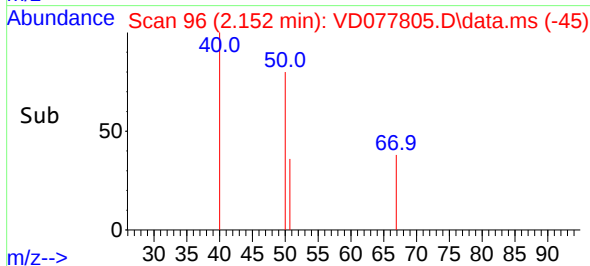
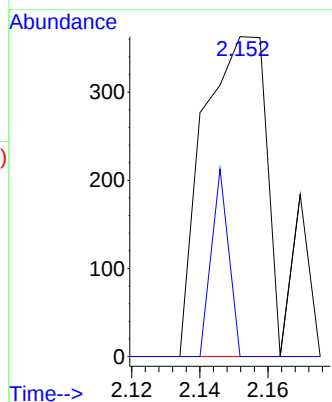


#3  
Chloromethane  
Concen: 2.410 ug/L  
RT: 2.152 min Scan# 90  
Delta R.T. -0.000 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Instrument :  
MSVOA\_D  
ClientSampleId :

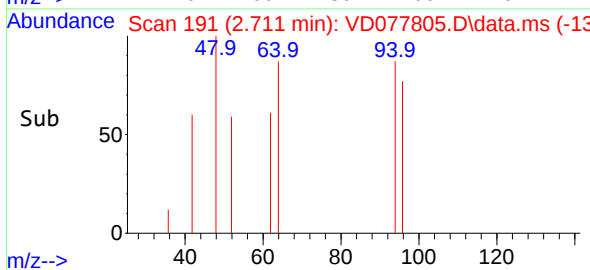
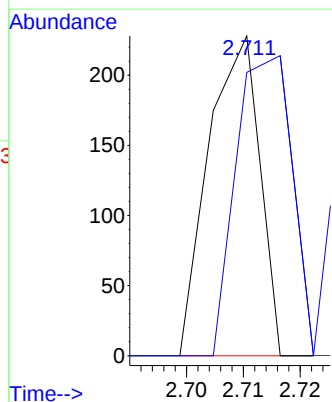
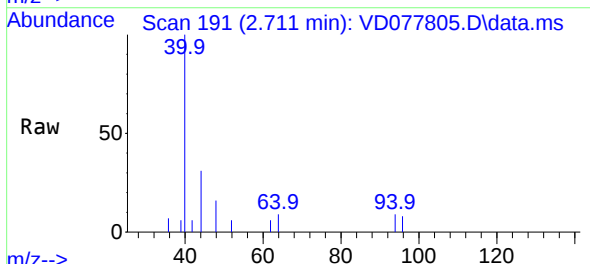


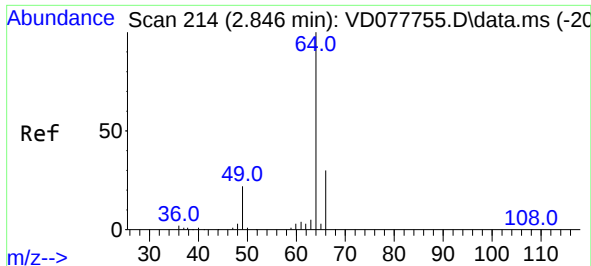
Tgt Ion: 50 Resp: 462  
Ion Ratio Lower Upper  
50 100  
52 0.0 23.2 43.2#



#6  
Bromomethane  
Concen: 1.123 ug/L  
RT: 2.711 min Scan# 191  
Delta R.T. 0.006 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Tgt Ion: 94 Resp: 142  
Ion Ratio Lower Upper  
94 100  
96 88.6 66.0 122.6

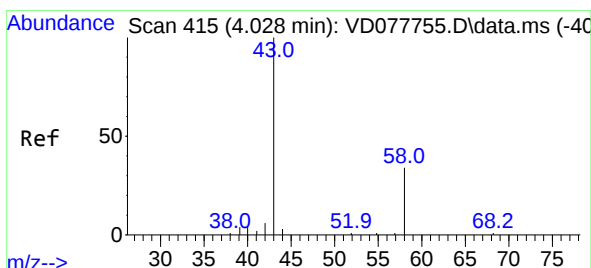
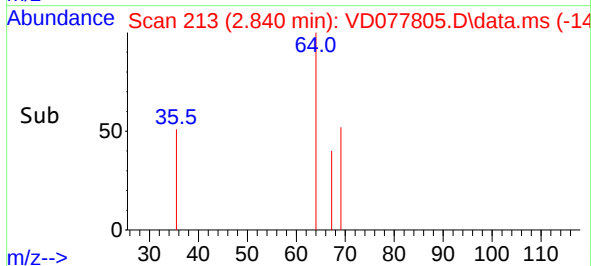
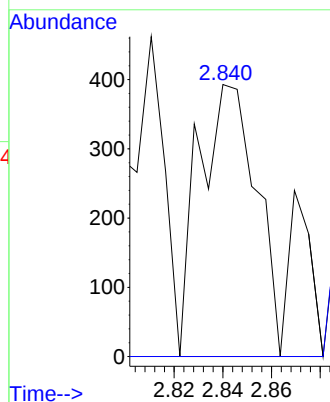
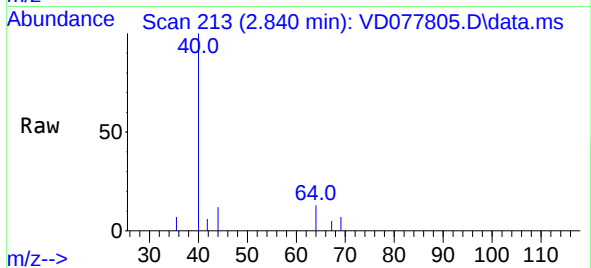




#8  
Chloroethane  
Concen: 4.334 ug/L  
RT: 2.840 min Scan# 214  
Delta R.T. -0.006 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

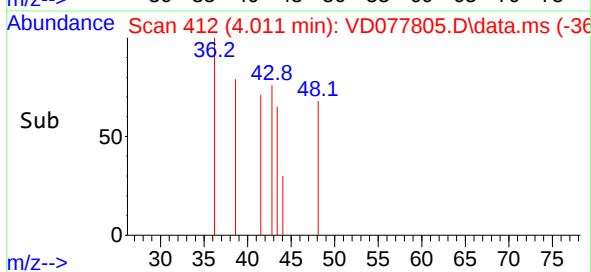
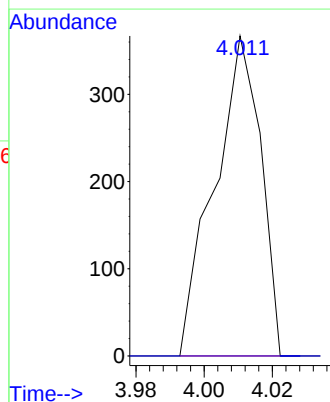
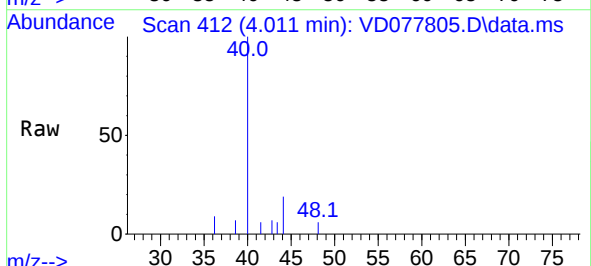
Instrument :  
MSVOA\_D  
ClientSampleId :

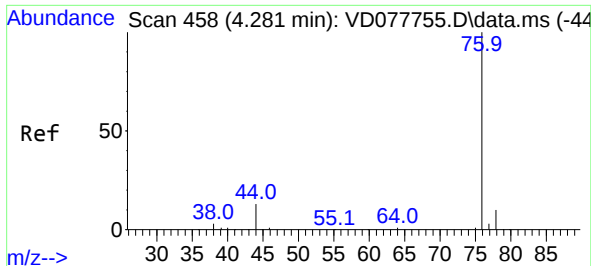
Tgt Ion: 64 Resp: 646  
Ion Ratio Lower Upper  
64 100  
66 0.0 22.0 41.0#



#13  
Acetone  
Concen: 9.402 ug/L  
RT: 4.011 min Scan# 412  
Delta R.T. -0.018 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Tgt Ion: 43 Resp: 347  
Ion Ratio Lower Upper  
43 100  
58 0.0 0.0 67.2

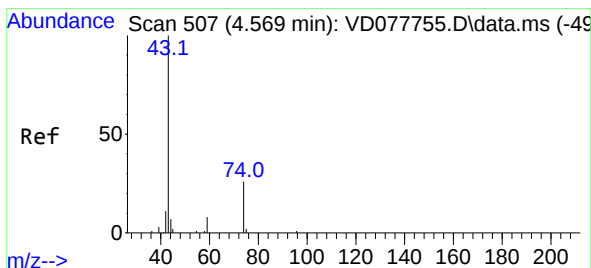
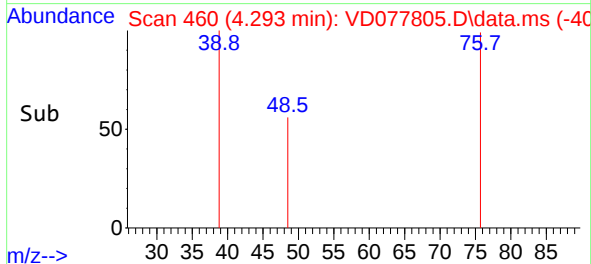
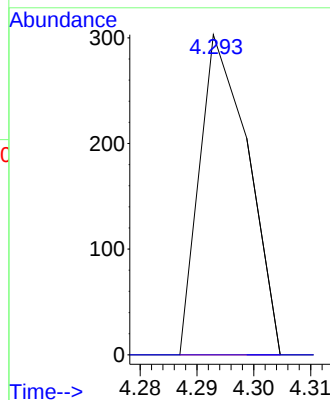
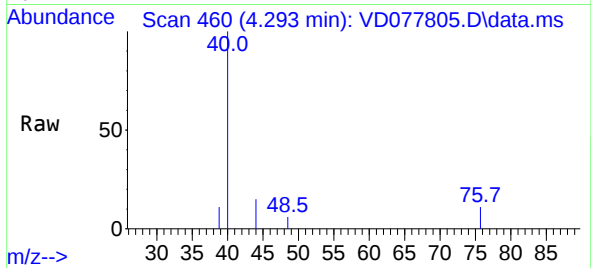




#14  
Carbon disulfide  
Concen: 0.444 ug/L  
RT: 4.293 min Scan# 41  
Delta R.T. 0.012 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

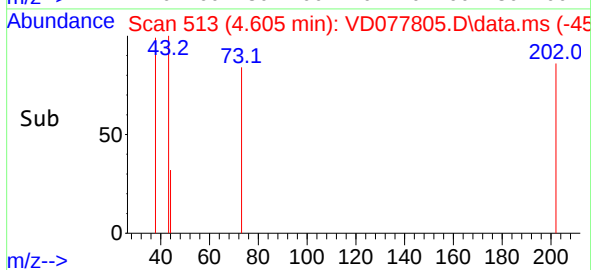
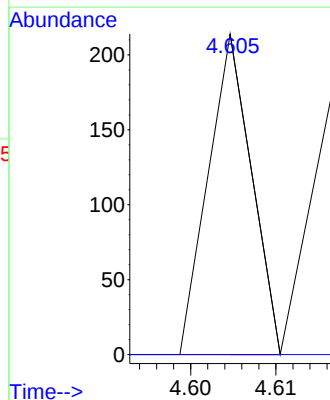
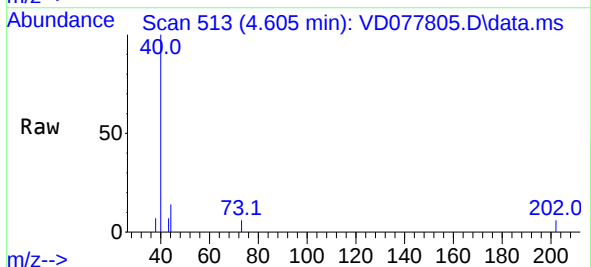
Instrument :  
MSVOA\_D  
ClientSampleId :

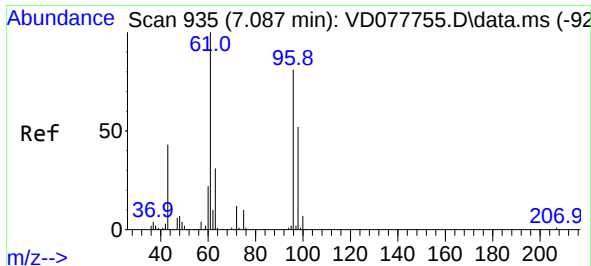
Tgt Ion: 76 Resp: 179  
Ion Ratio Lower Upper  
76 100  
78 0.0 7.2 10.8#



#15  
Methyl Acetate  
Concen: 1.438 ug/L  
RT: 4.605 min Scan# 513  
Delta R.T. 0.041 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Tgt Ion: 43 Resp: 76  
Ion Ratio Lower Upper  
43 100  
74 0.0 18.6 27.8#





#22

2-Butanone

Concen: 1.902 ug/L

RT: 7.081 min Scan# 91

Delta R.T. -0.000 min

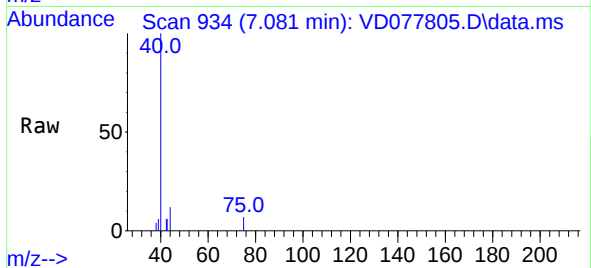
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Instrument :

MSVOA\_D

ClientSampleId :

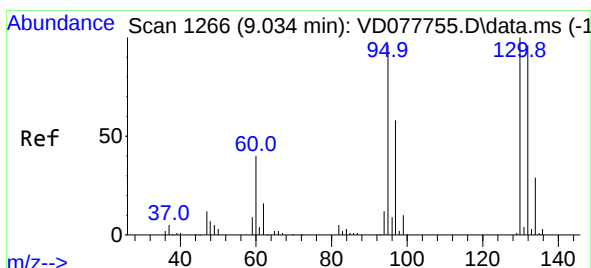
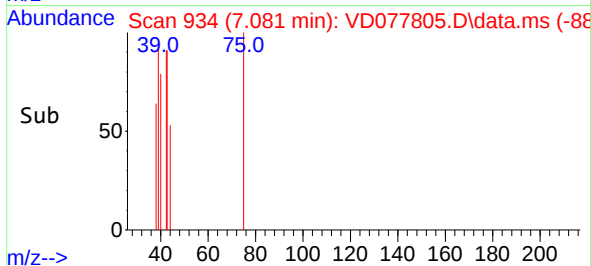
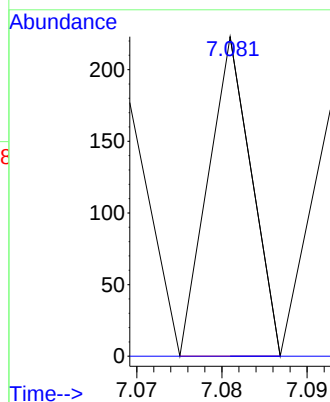


Tgt Ion: 43 Resp: 79

Ion Ratio Lower Upper

43 100

72 0.0 7.2 21.6#



#34

Trichloroethene

Concen: 77.451 ug/L

RT: 9.028 min Scan# 1265

Delta R.T. -0.006 min

Lab File: VD077805.D

Acq: 11 Dec 2023 10:56

Tgt Ion: 95 Resp: 7746

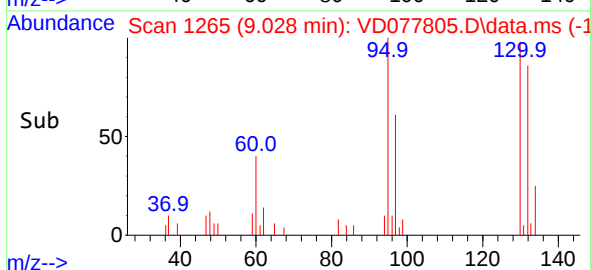
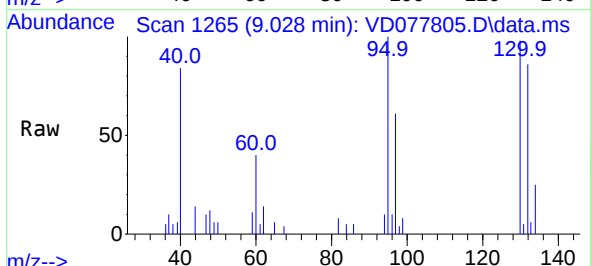
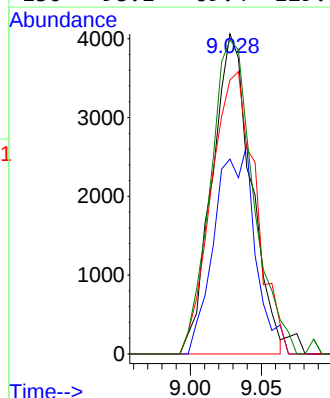
Ion Ratio Lower Upper

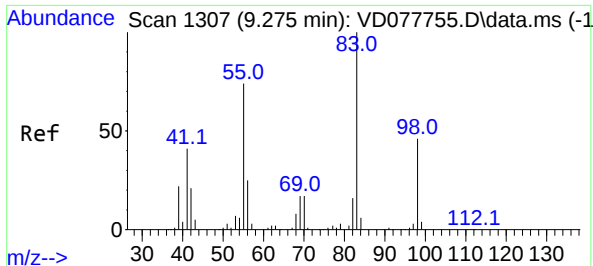
95 100

97 60.9 44.2 82.0

132 91.9 67.5 125.3

130 98.1 69.4 129.0

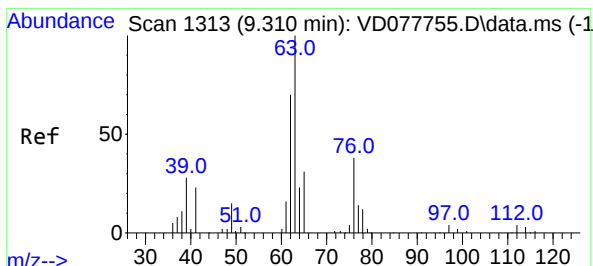
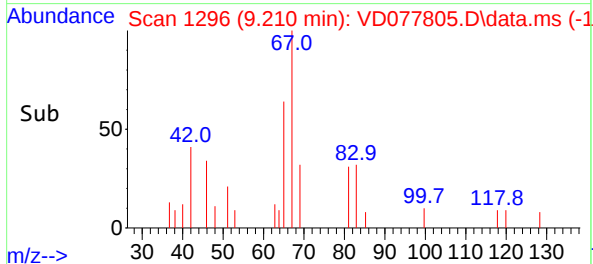
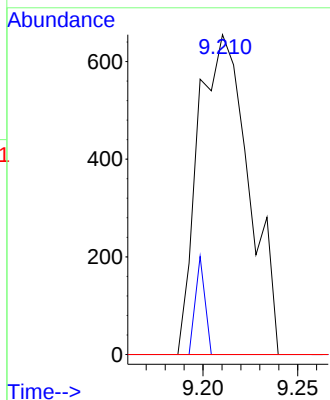
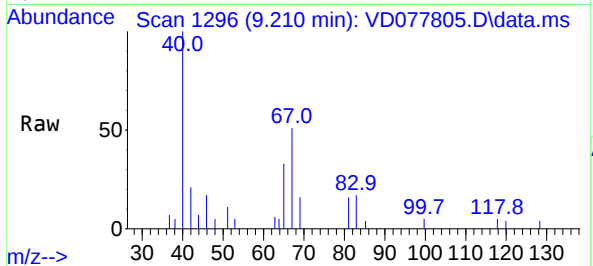




#35  
Methylcyclohexane  
Concen: 6.843 ug/L  
RT: 9.210 min Scan# 1296  
Delta R.T. -0.065 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

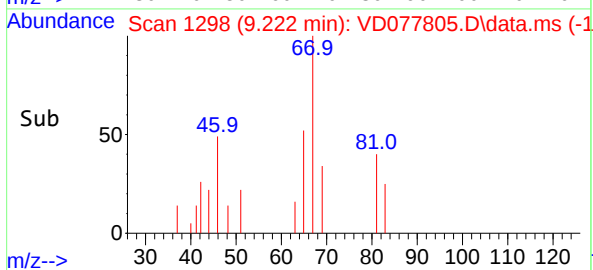
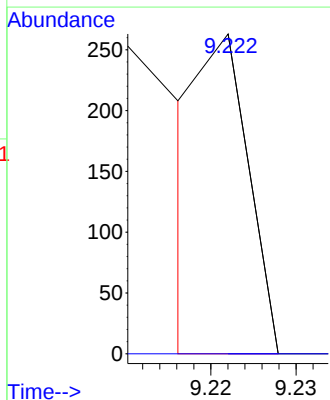
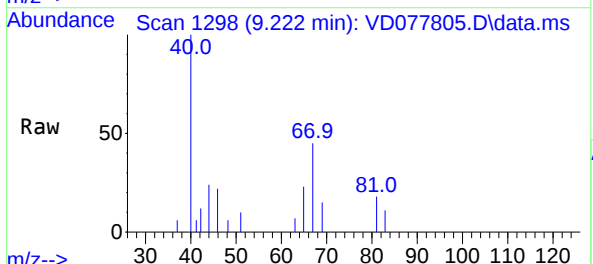
Instrument :  
MSVOA\_D  
ClientSampleId :

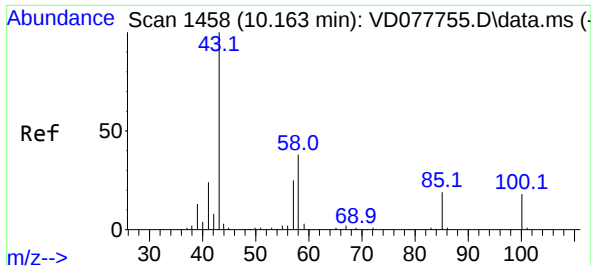
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 55      | 0.0   | 59.8  | 89.6# |
| 98      | 11.1  | 38.5  | 57.7# |



#37  
1,2-Dichloropropane  
Concen: 0.885 ug/L  
RT: 9.222 min Scan# 1298  
Delta R.T. -0.082 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

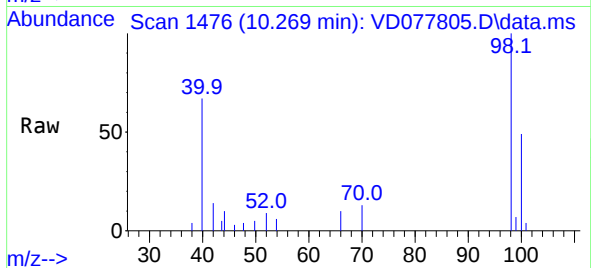
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 112     | 0.0   | 3.5   | 5.3#  |



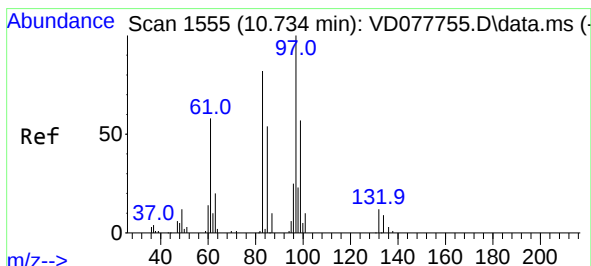
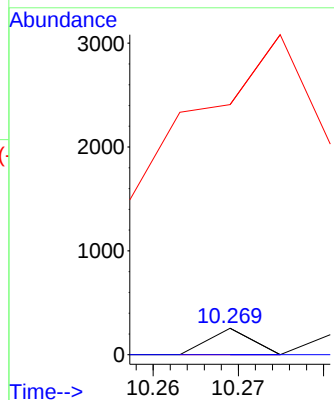
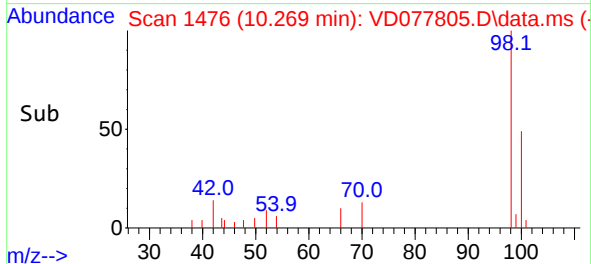


#40  
4-Methyl-2-pentanone  
Concen: 1.553 ug/L  
RT: 10.269 min Scan# 1458  
Delta R.T. 0.106 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

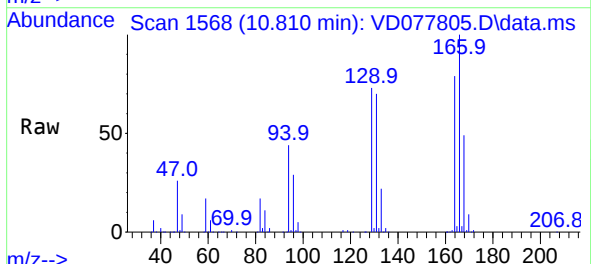
Instrument :  
MSVOA\_D  
ClientSampleId :



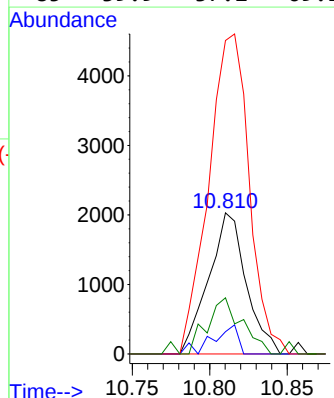
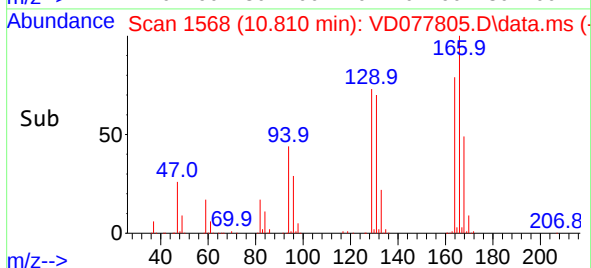
Tgt Ion: 43 Resp: 90  
Ion Ratio Lower Upper  
43 100  
58 0.0 31.0 46.4#  
100 0.0 11.9 17.9#

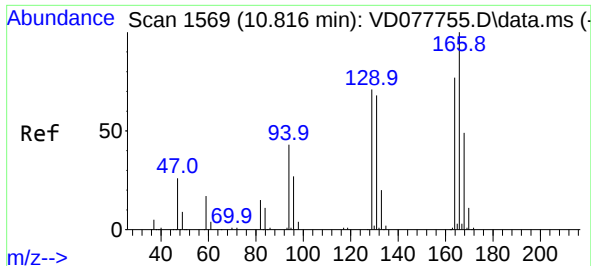


#45  
1,1,2-Trichloroethane  
Concen: 48.477 ug/L  
RT: 10.810 min Scan# 1568  
Delta R.T. 0.076 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56



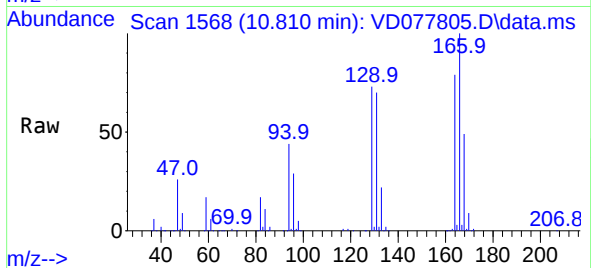
Tgt Ion: 97 Resp: 3420  
Ion Ratio Lower Upper  
97 100  
99 15.8 41.7 77.5#  
83 222.2 63.6 118.2#  
85 39.9 37.2 69.2



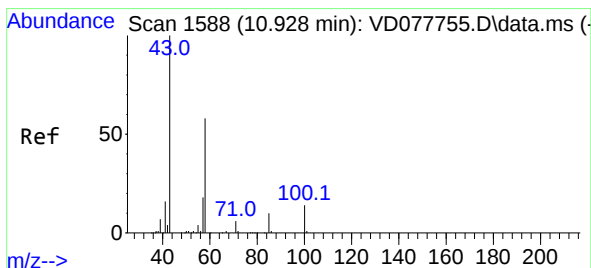
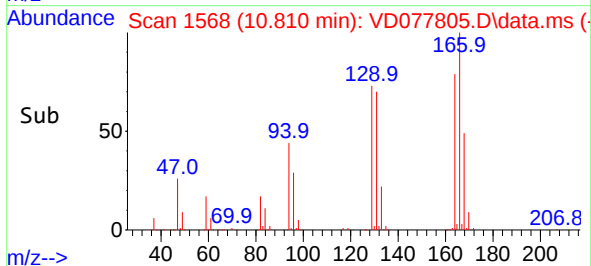
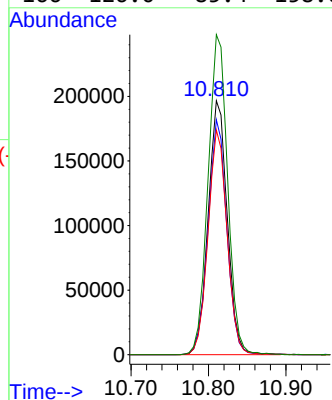


#46  
Tetrachloroethene  
Concen: 4185.468 ug/L  
RT: 10.810 min Scan# 1569  
Delta R.T. -0.006 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Instrument :  
MSVOA\_D  
ClientSampleId :

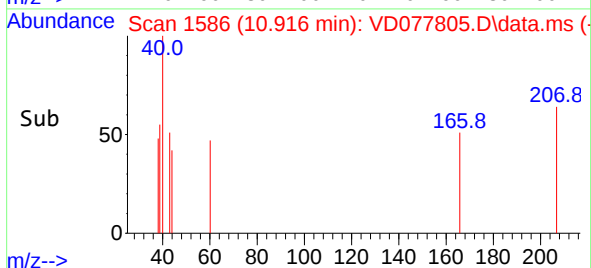
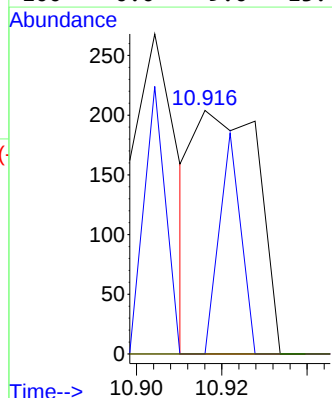
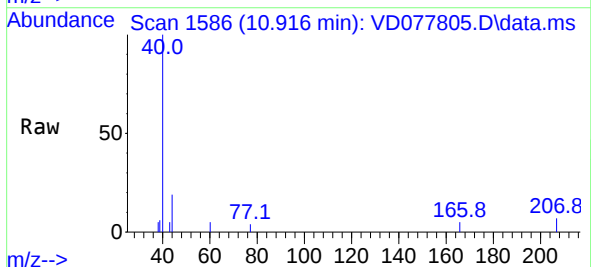


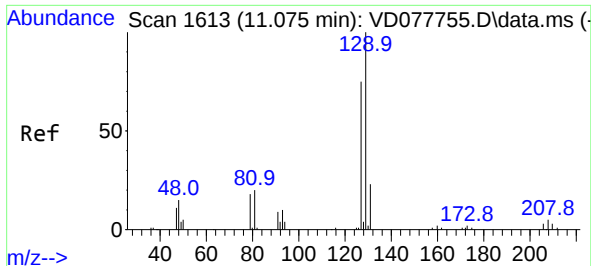
Tgt Ion:164 Resp: 337537  
Ion Ratio Lower Upper  
164 100  
129 92.5 61.5 114.3  
131 88.5 59.1 109.9  
166 126.0 85.4 158.6



#48  
2-Hexanone  
Concen: 4.201 ug/L  
RT: 10.916 min Scan# 1586  
Delta R.T. -0.006 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

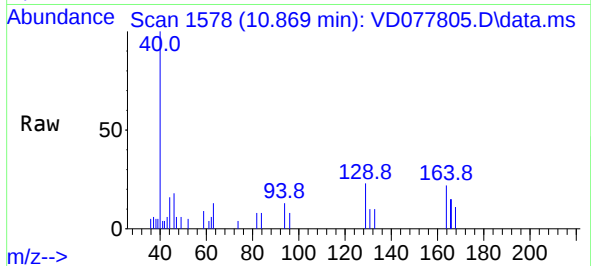
Tgt Ion: 43 Resp: 207  
Ion Ratio Lower Upper  
43 100  
58 0.0 43.0 64.6#  
57 0.0 13.8 20.8#  
100 0.0 9.0 13.4#



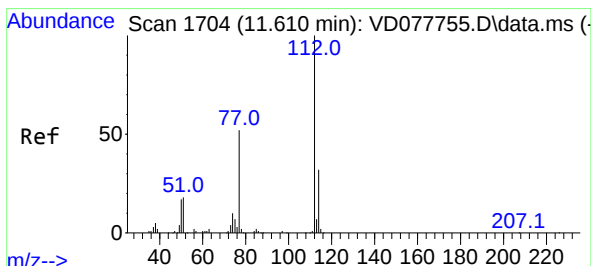
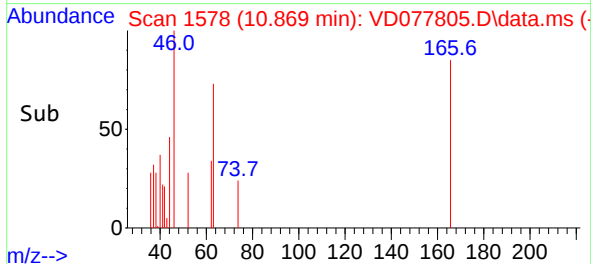
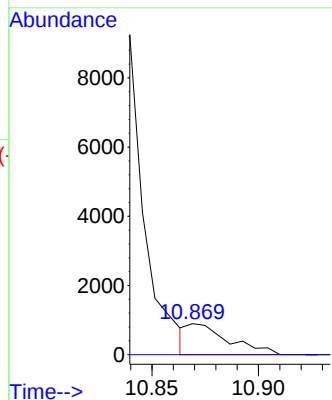


#49  
Dibromochloromethane  
Concen: 14.305 ug/L  
RT: 10.869 min Scan# 11  
Delta R.T. -0.212 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Instrument :  
MSVOA\_D  
ClientSampleId :

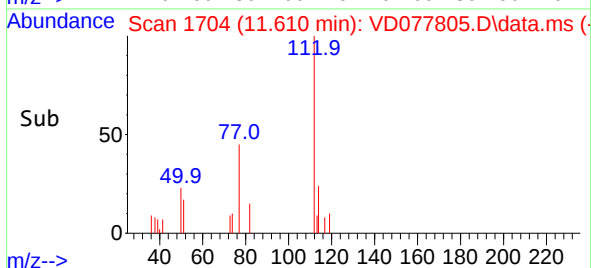
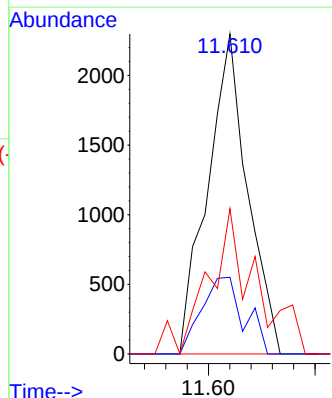
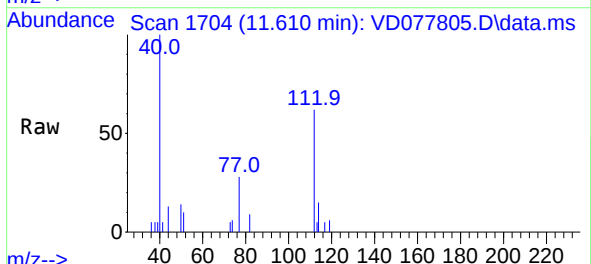


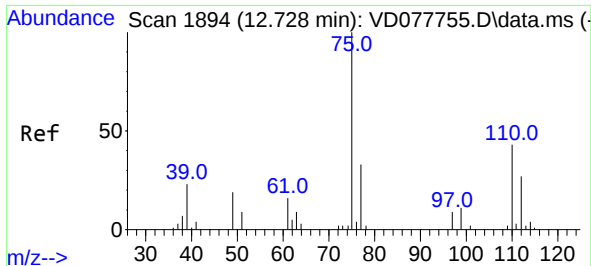
Tgt Ion:129 Resp: 1200  
Ion Ratio Lower Upper  
129 100  
127 0.0 52.8 98.2#



#51  
Chlorobenzene  
Concen: 11.283 ug/L  
RT: 11.610 min Scan# 1704  
Delta R.T. -0.000 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Tgt Ion:112 Resp: 2994  
Ion Ratio Lower Upper  
112 100  
114 23.9 22.5 41.9  
77 45.4 46.4 69.6#

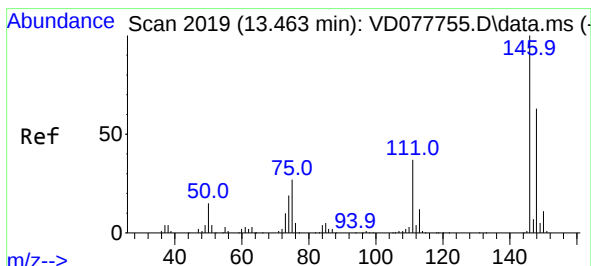
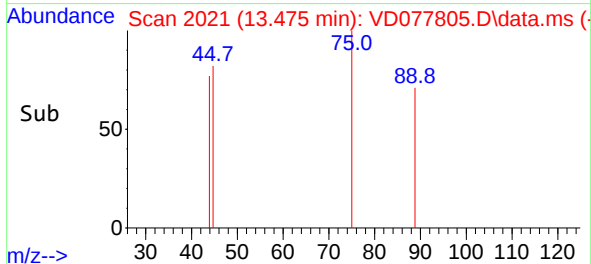
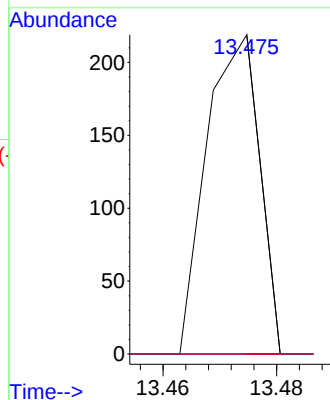
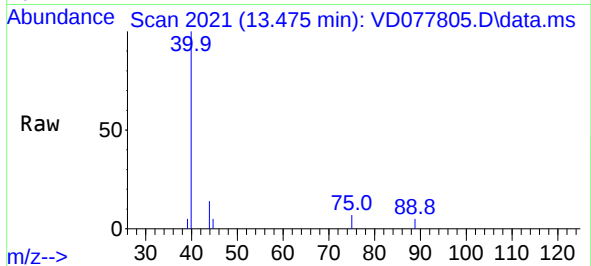




#61  
1,2,3-Trichloropropane  
Concen: 4.782 ug/L  
RT: 13.475 min Scan# 2033  
Delta R.T. 0.747 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

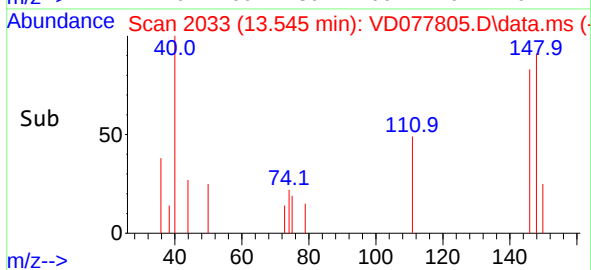
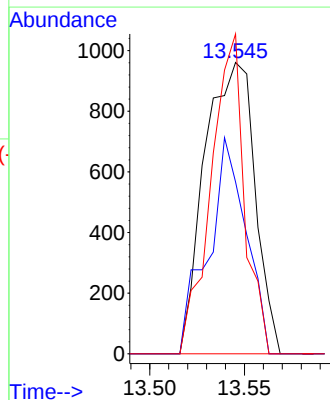
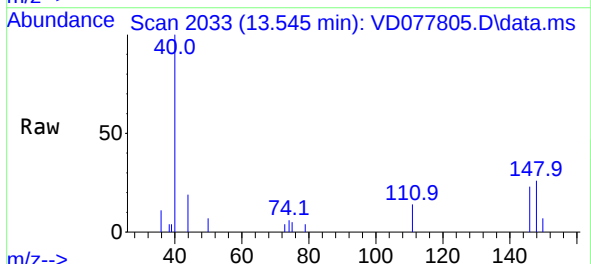
Instrument :  
MSVOA\_D  
ClientSampleId :

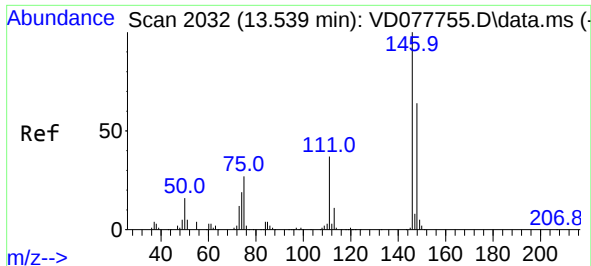
Tgt Ion: 75 Resp: 141  
Ion Ratio Lower Upper  
75 100  
77 0.0 26.8 40.2#  
110 0.0 33.4 50.2#



#64  
1,3-Dichlorobenzene  
Concen: 17.106 ug/L  
RT: 13.545 min Scan# 2033  
Delta R.T. 0.082 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Tgt Ion: 146 Resp: 1770  
Ion Ratio Lower Upper  
146 100  
111 59.0 26.6 49.4#  
148 109.8 44.0 81.6#





#65

1,4-Dichlorobenzene

Concen: 16.485 ug/L

RT: 13.545 min Scan# 2033

Delta R.T. 0.006 min

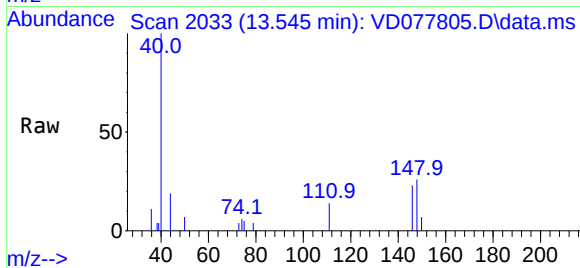
Lab File: VD077805.D

Acq: 11 Dec 2023 10:56

Instrument :

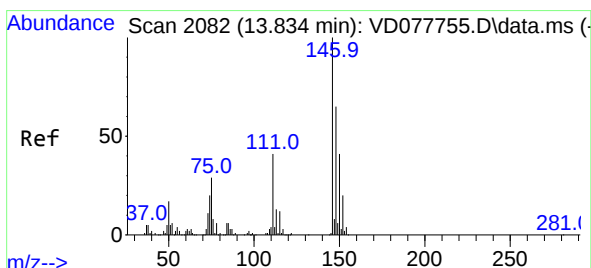
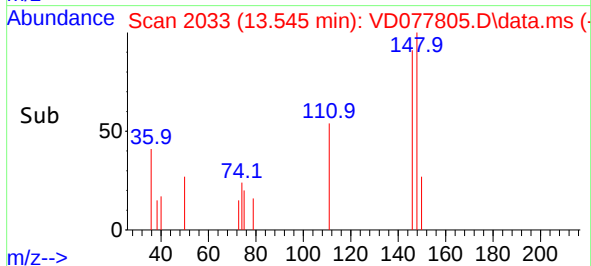
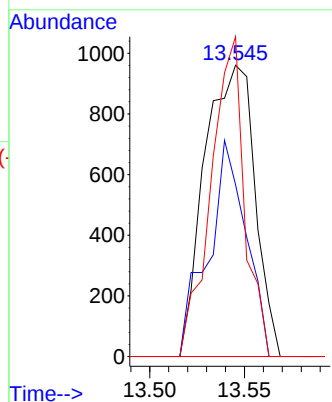
MSVOA\_D

ClientSampleId :



Tgt Ion:146 Resp: 1770

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 59.0  | 26.4  | 49.0# |
| 148 | 109.8 | 44.0  | 81.8# |



#67

1,2-Dichlorobenzene

Concen: 8.162 ug/L

RT: 13.828 min Scan# 2081

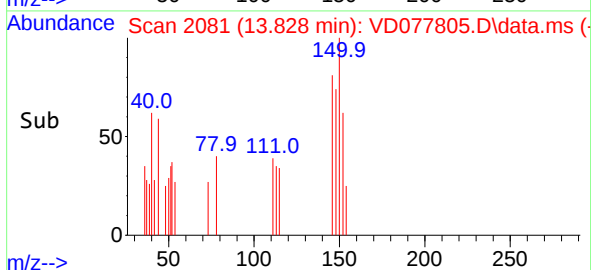
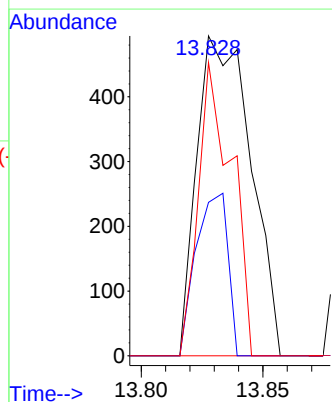
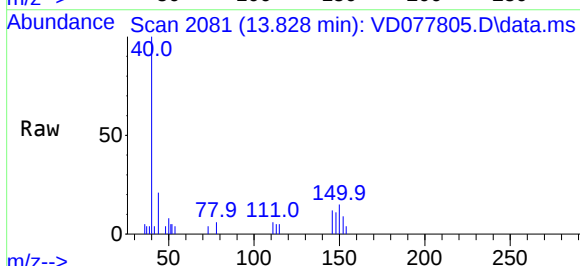
Delta R.T. -0.006 min

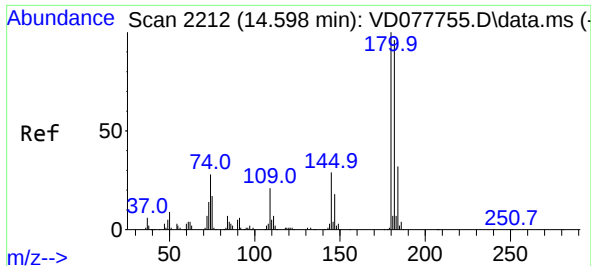
Lab File: VD077805.D

Acq: 11 Dec 2023 10:56

Tgt Ion:146 Resp: 760

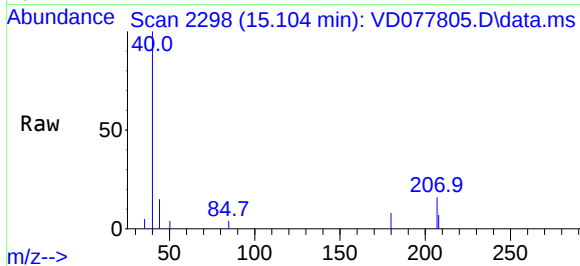
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 48.0  | 31.4  | 47.2# |
| 148 | 91.7  | 50.2  | 75.2# |



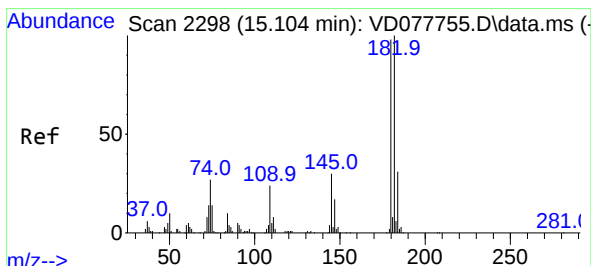
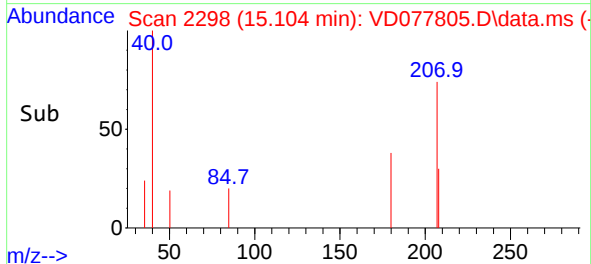
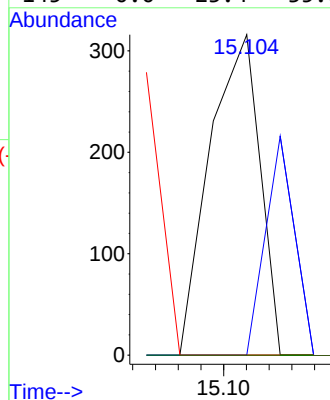


#69  
 1,3,5-Trichlorobenzene  
 Concen: 2.739 ug/L  
 RT: 15.104 min Scan# 21  
 Delta R.T. 0.506 min  
 Lab File: VD077805.D  
 Acq: 11 Dec 2023 10:56

Instrument :  
 MSVOA\_D  
 ClientSampleId :

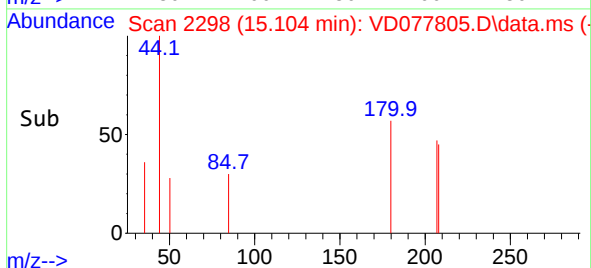
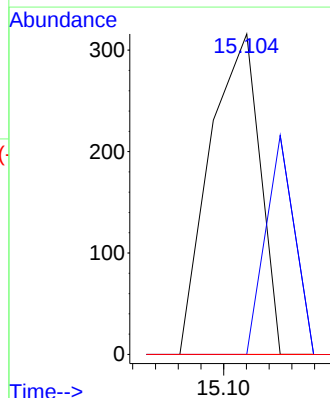
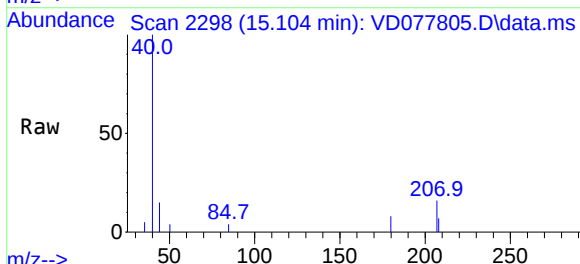


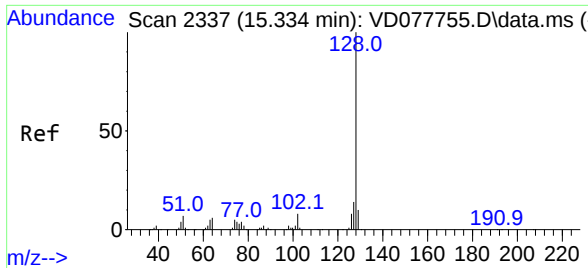
Tgt Ion:180 Resp: 193  
 Ion Ratio Lower Upper  
 180 100  
 182 0.0 77.0 115.4#  
 184 0.0 24.3 36.5#  
 145 0.0 23.4 35.0#



#70  
 1,2,4-trichlorobenzene  
 Concen: 3.227 ug/L  
 RT: 15.104 min Scan# 2298  
 Delta R.T. -0.000 min  
 Lab File: VD077805.D  
 Acq: 11 Dec 2023 10:56

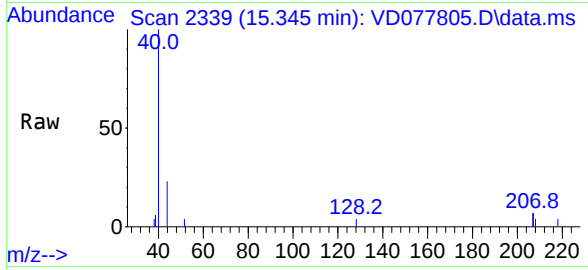
Tgt Ion:180 Resp: 193  
 Ion Ratio Lower Upper  
 180 100  
 182 0.0 77.0 115.6#  
 145 0.0 23.9 35.9#





#71  
Naphthalene  
Concen: 0.549 ug/L  
RT: 15.345 min Scan# 21  
Delta R.T. 0.006 min  
Lab File: VD077805.D  
Acq: 11 Dec 2023 10:56

Instrument :  
MSVOA\_D  
ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 60    |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 0.0   | 10.5  | 15.7# |
| 129      | 0.0   | 8.7   | 13.1# |

