

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD080724\  
 Data File : VD079647.D  
 Acq On : 07 Aug 2024 18:03  
 Operator : RP/MD  
 Sample : P3393-09  
 Misc : 7.56G/5.0ml/MSVOA\_D/SOILA  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Aug 08 01:53:29 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\82D072924S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 30 03:50:47 2024  
 Response via : Initial Calibration

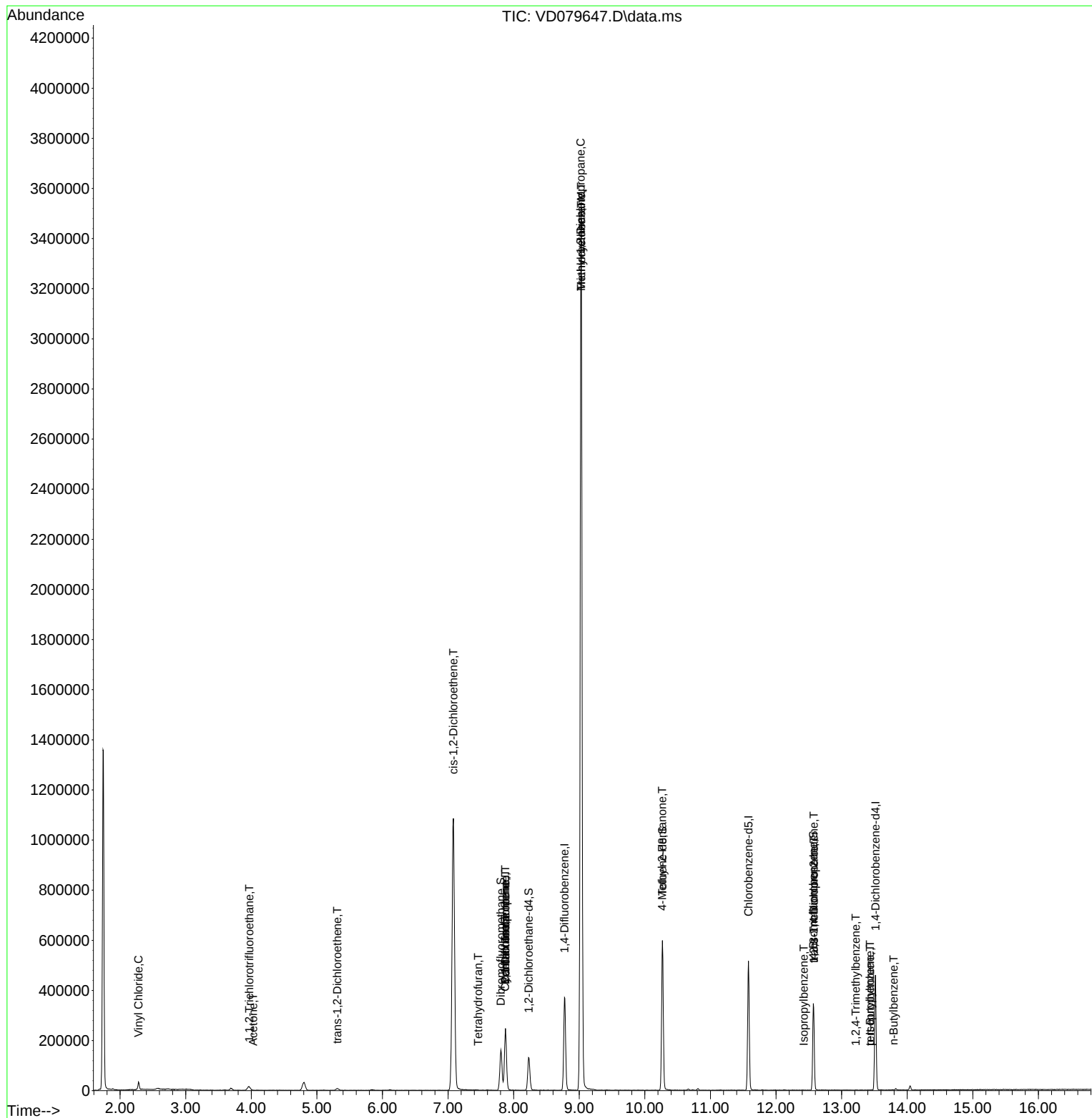
| Compound                      | R.T.   | QIon  | Response | Conc      | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|------------|----------|
| -----                         |        |       |          |           |            |          |
| Internal Standards            |        |       |          |           |            |          |
| 1) Pentafluorobenzene         | 7.875  | 168   | 185184   | 50.000    | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.775  | 114   | 341622   | 50.000    | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.581 | 117   | 302003   | 50.000    | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.516 | 152   | 124705   | 50.000    | ug/l       | 0.00     |
|                               |        |       |          |           |            |          |
| System Monitoring Compounds   |        |       |          |           |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.228  | 65    | 99194    | 52.726    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 50 - 163 | Recovery  | = 105.460% |          |
| 35) Dibromofluoromethane      | 7.804  | 113   | 118486   | 51.243    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 54 - 147 | Recovery  | = 102.480% |          |
| 50) Toluene-d8                | 10.269 | 98    | 423410   | 47.154    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 58 - 134 | Recovery  | = 94.300%  |          |
| 62) 4-Bromofluorobenzene      | 12.569 | 95    | 106476   | 40.977    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 30 - 143 | Recovery  | = 81.960%  |          |
|                               |        |       |          |           |            |          |
| Target Compounds              |        |       |          |           |            | Qvalue   |
| 4) Vinyl Chloride             | 2.281  | 62    | 25484    | 8.017     | ug/l       | 97       |
| 5) Bromomethane               | 2.705  | 94    | 502      | Below Cal | #          | 72       |
| 9) 1,1,2-Trichlorotrifluo...  | 3.969  | 101   | 9528     | 4.765     | ug/l       | 92       |
| 13) Acrolein                  | 3.934  | 56    | 61       | Below Cal | #          | 15       |
| 16) Acetone                   | 4.028  | 43    | 932      | 2.549     | ug/l       | # 37     |
| 20) Methylene Chloride        | 4.805  | 84    | 25503    | Below Cal |            | 89       |
| 21) trans-1,2-Dichloroethene  | 5.310  | 96    | 5309     | 2.362     | ug/l       | # 76     |
| 27) cis-1,2-Dichloroethene    | 7.081  | 96    | 717038   | 279.084   | ug/l       | 97       |
| 29) Tetrahydrofuran           | 7.457  | 42    | 724      | 2.254     | ug/l       | # 27     |
| 31) Cyclohexane               | 7.869  | 56    | 3510     | 1.123     | ug/l       | # 1      |
| 36) 1,1-Dichloropropene       | 7.875  | 75    | 15298    | 4.847     | ug/l       | # 44     |
| 38) Carbon Tetrachloride      | 7.875  | 117   | 18712    | 5.640     | ug/l       | # 16     |
| 39) Methylcyclohexane         | 9.028  | 83    | 16694    | 4.433     | ug/l       | # 1      |
| 44) Trichloroethene           | 9.028  | 130   | 1299073  | 520.608   | ug/l       | 93       |
| 45) 1,2-Dichloropropane       | 9.022  | 63    | 3519     | 1.443     | ug/l       | # 1      |
| 51) 4-Methyl-2-Pentanone      | 10.263 | 43    | 1473     | 1.186     | ug/l       | # 1      |
| 73) Isopropylbenzene          | 12.422 | 105   | 60       | 3.634     | ug/l       | # 48     |
| 76) 1,2,3-Trichloropropane    | 12.575 | 75    | 53746    | 49.306    | ug/l       | # 100    |
| 81) trans-1,4-Dichloro-2-b... | 12.575 | 75    | 53746    | 94.040    | ug/l       | # 19     |
| 83) tert-Butylbenzene         | 13.434 | 119   | 55       | 3.635     | ug/l       | # 31     |
| 84) 1,2,4-Trimethylbenzene    | 13.216 | 105   | 140      | 3.445     | ug/l       | # 29     |
| 86) p-Isopropyltoluene        | 13.434 | 119   | 55       | 3.892     | ug/l       | # 51     |
| 89) n-Butylbenzene            | 13.792 | 91    | 140      | 3.798     | ug/l       | # 34     |
| -----                         |        |       |          |           |            |          |

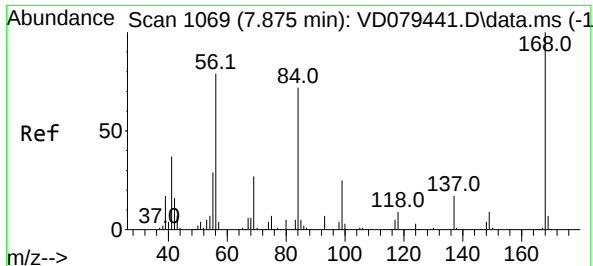
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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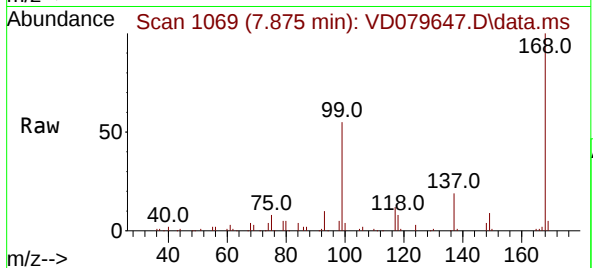
Quant Time: Aug 08 01:53:29 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\82D072924S.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 30 03:50:47 2024  
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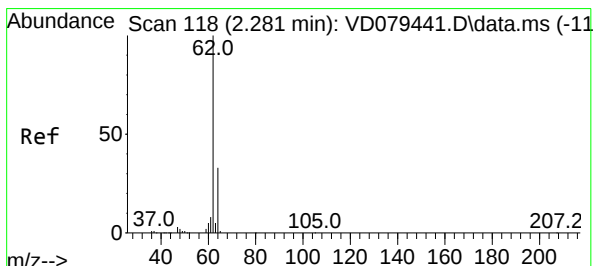
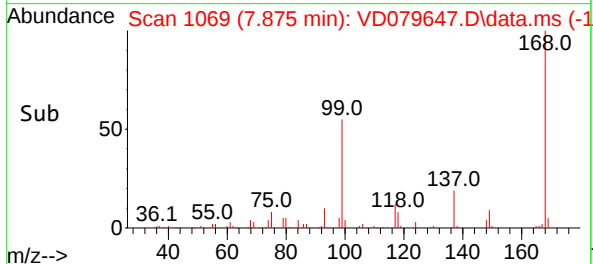
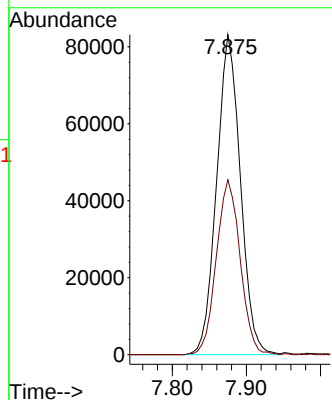


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.875 min Scan# 1069  
Delta R.T. -0.000 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

Instrument :  
MSVOA\_D  
ClientSampleId :

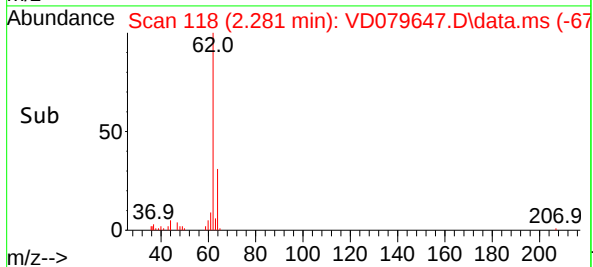
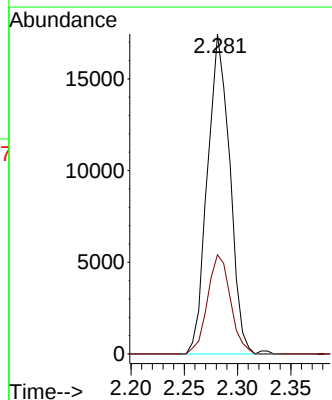
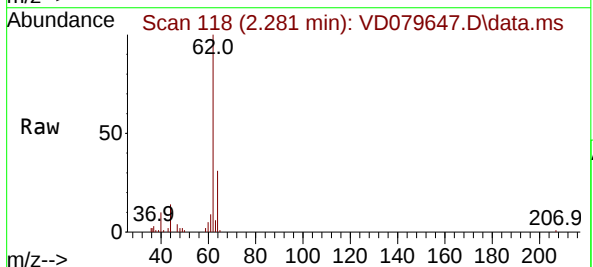


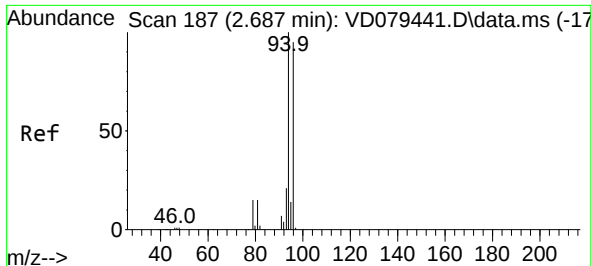
Tgt Ion:168 Resp: 185184  
Ion Ratio Lower Upper  
168 100  
99 54.7 41.1 61.7



#4  
Vinyl Chloride  
Concen: 8.017 ug/l  
RT: 2.281 min Scan# 118  
Delta R.T. -0.000 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

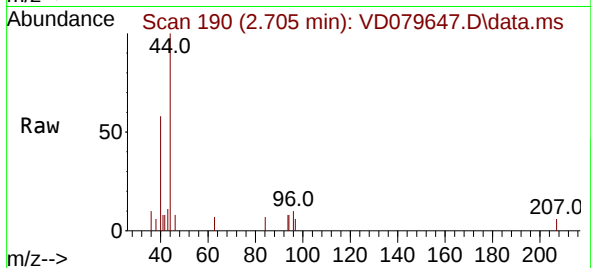
Tgt Ion: 62 Resp: 25484  
Ion Ratio Lower Upper  
62 100  
64 31.0 26.3 39.5



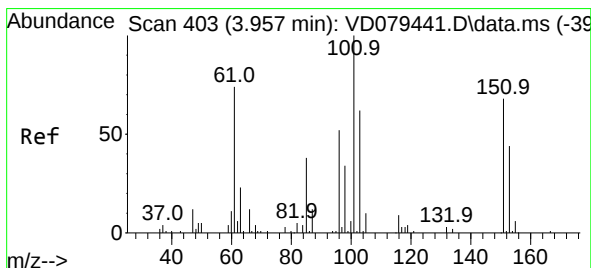
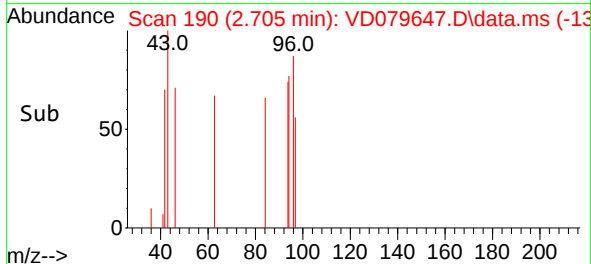
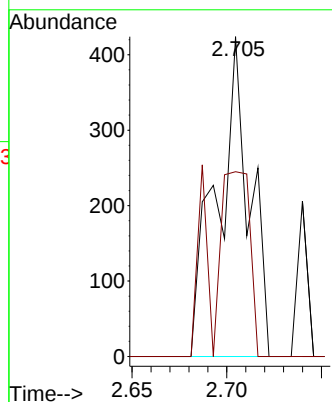


#5  
Bromomethane  
Concen: Below Cal  
RT: 2.705 min Scan# 190  
Delta R.T. 0.018 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

Instrument :  
MSVOA\_D  
ClientSampleId :

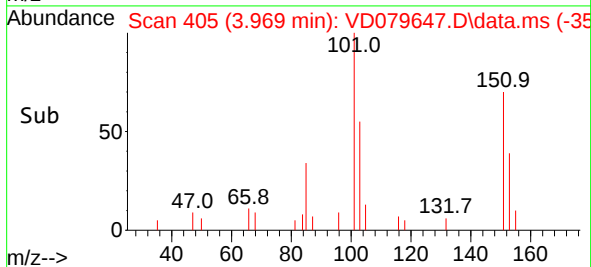
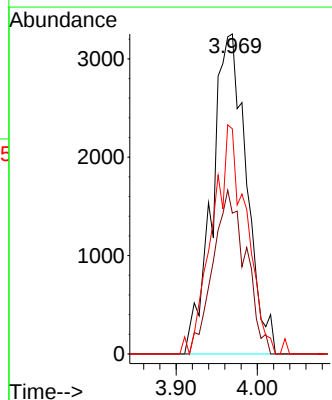
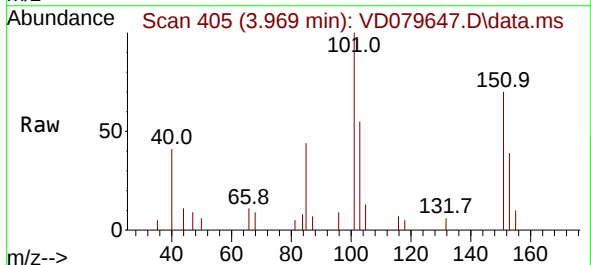


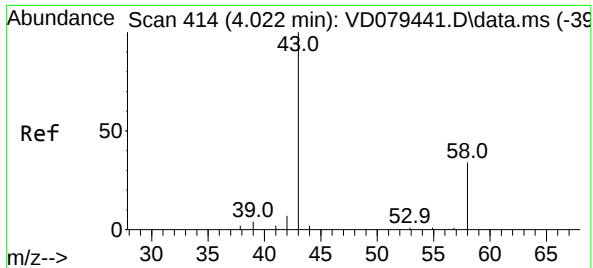
Tgt Ion: 94 Resp: 502  
Ion Ratio Lower Upper  
94 100  
96 69.1 76.9 115.3#



#9  
1,1,2-Trichlorotrifluoroethane  
Concen: 4.765 ug/l  
RT: 3.969 min Scan# 405  
Delta R.T. 0.006 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

Tgt Ion: 101 Resp: 9528  
Ion Ratio Lower Upper  
101 100  
85 49.0 33.5 50.3  
151 70.7 60.3 90.5

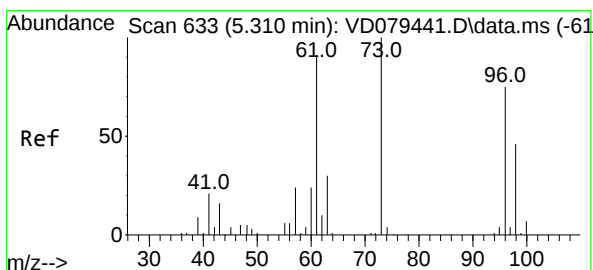
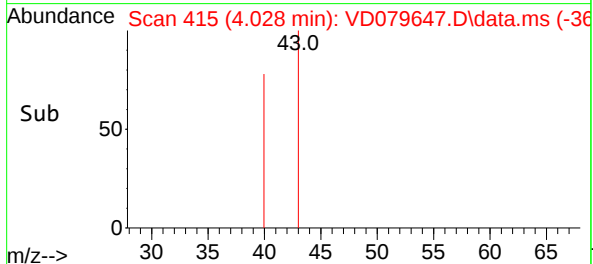
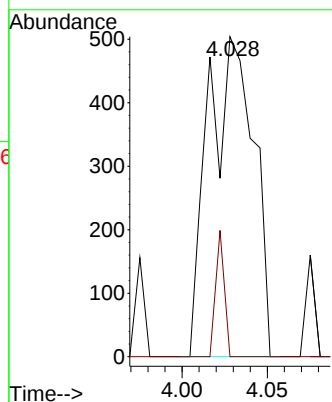
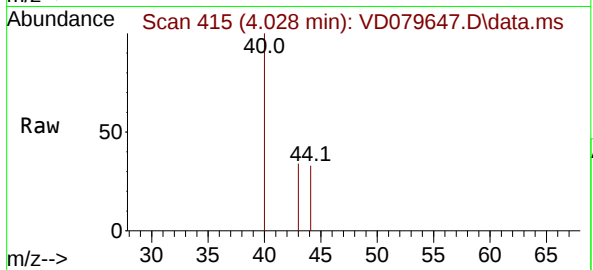




#16  
Acetone  
Concen: 2.549 ug/l  
RT: 4.028 min Scan# 414  
Delta R.T. 0.006 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

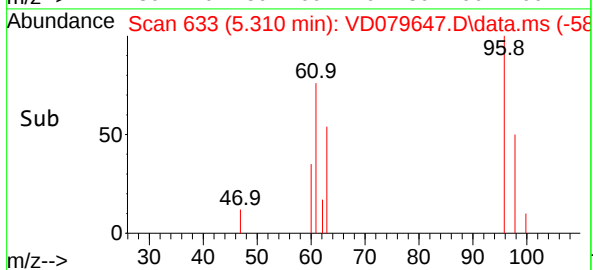
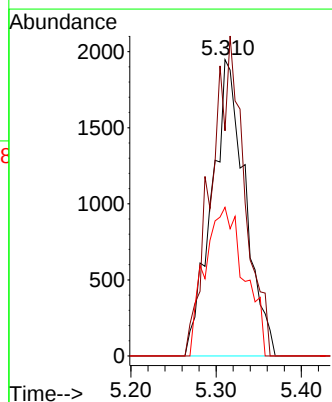
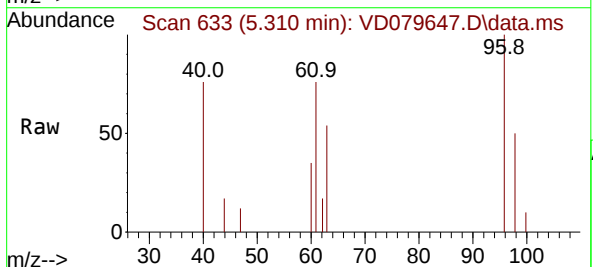
Instrument :  
MSVOA\_D  
ClientSampleId :

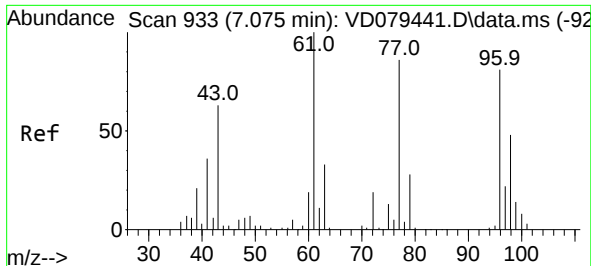
Tgt Ion: 43 Resp: 932  
Ion Ratio Lower Upper  
43 100  
58 0.0 30.4 45.6#



#21  
trans-1,2-Dichloroethene  
Concen: 2.362 ug/l  
RT: 5.310 min Scan# 633  
Delta R.T. -0.000 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

Tgt Ion: 96 Resp: 5309  
Ion Ratio Lower Upper  
96 100  
61 76.0 84.5 126.7#  
98 50.2 50.5 75.7#





#27

cis-1,2-Dichloroethene

Concen: 279.084 ug/l

RT: 7.081 min Scan# 91

Delta R.T. 0.006 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

Instrument :

MSVOA\_D

ClientSampleId :

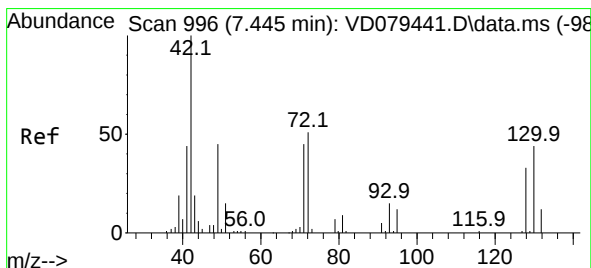
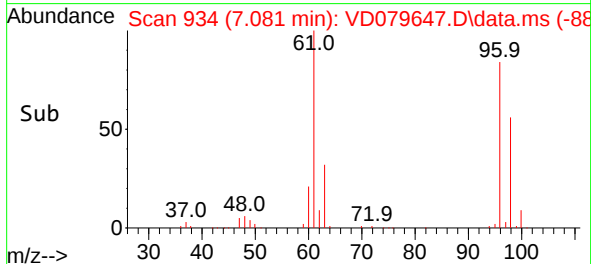
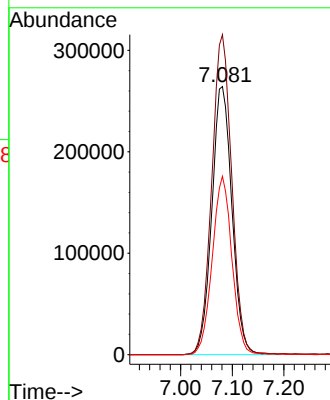
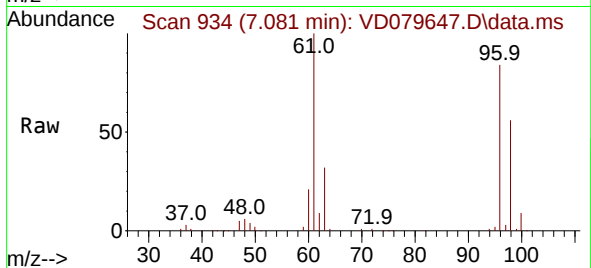
Tgt Ion: 96 Resp: 717038

Ion Ratio Lower Upper

96 100

61 118.5 0.0 229.0

98 64.8 0.0 127.2



#29

Tetrahydrofuran

Concen: 2.254 ug/l

RT: 7.457 min Scan# 998

Delta R.T. 0.012 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

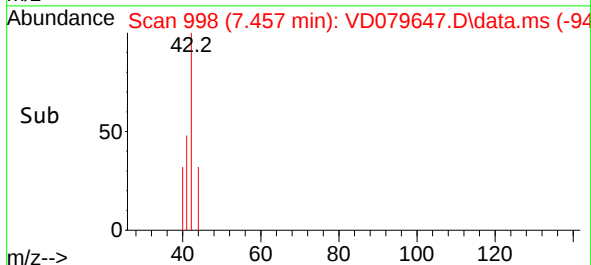
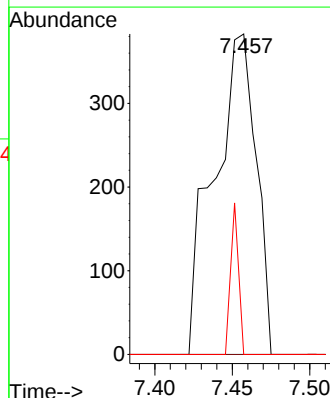
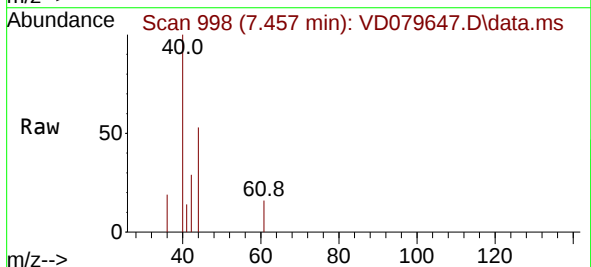
Tgt Ion: 42 Resp: 724

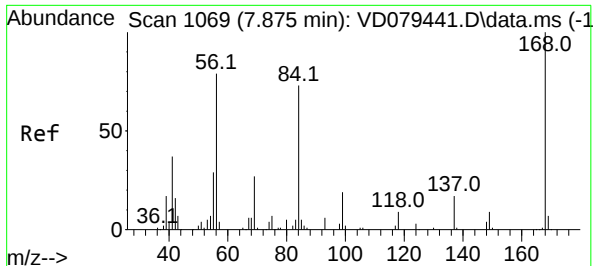
Ion Ratio Lower Upper

42 100

72 0.0 49.4 74.0#

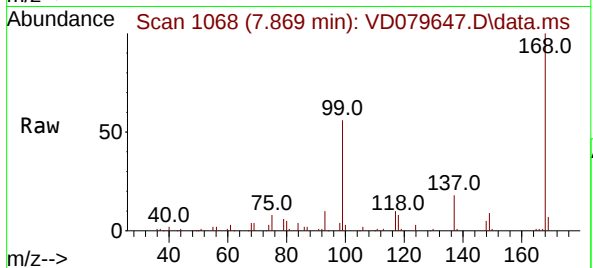
71 8.8 45.0 67.6#



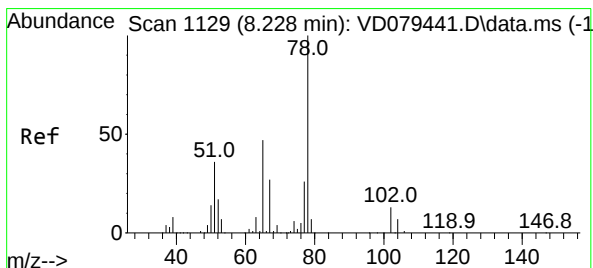
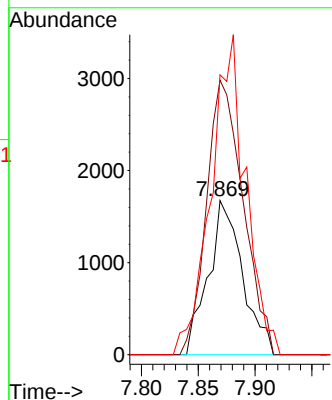
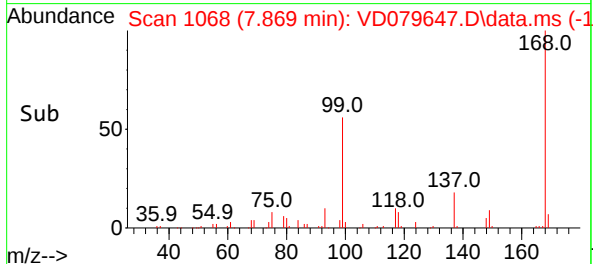


#31  
Cyclohexane  
Concen: 1.123 ug/l  
RT: 7.869 min Scan# 1068  
Delta R.T. -0.012 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

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MSVOA\_D  
ClientSampleId :

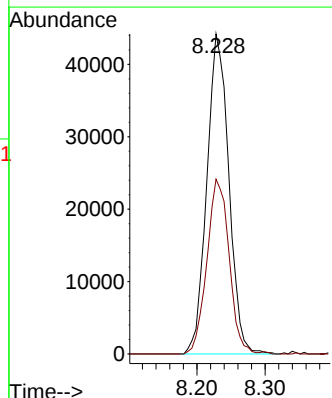
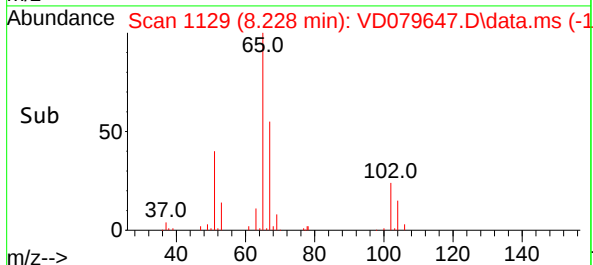
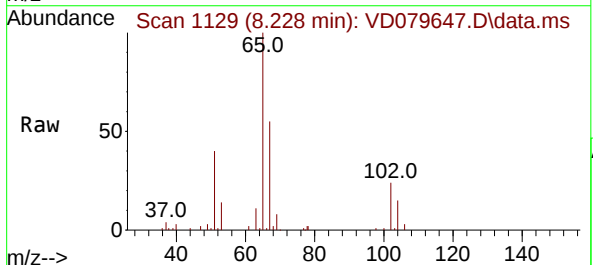


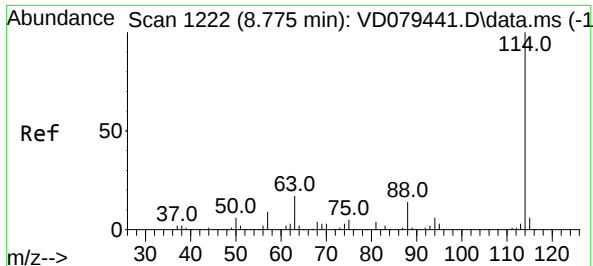
Tgt Ion: 56 Resp: 3510  
Ion Ratio Lower Upper  
56 100  
69 178.1 28.0 42.0#  
84 181.6 87.4 131.0#



#33  
1,2-Dichloroethane-d4  
Concen: 52.726 ug/l  
RT: 8.228 min Scan# 1129  
Delta R.T. -0.000 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

Tgt Ion: 65 Resp: 99194  
Ion Ratio Lower Upper  
65 100  
67 55.3 0.0 111.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.775 min Scan# 11

Delta R.T. -0.000 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

Instrument :

MSVOA\_D

ClientSampleId :

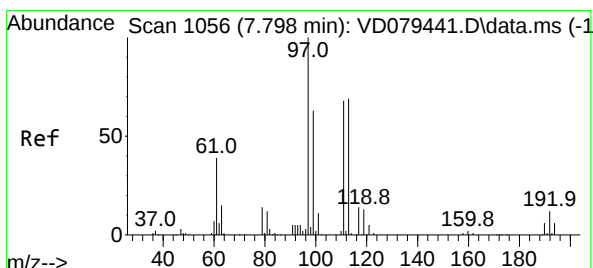
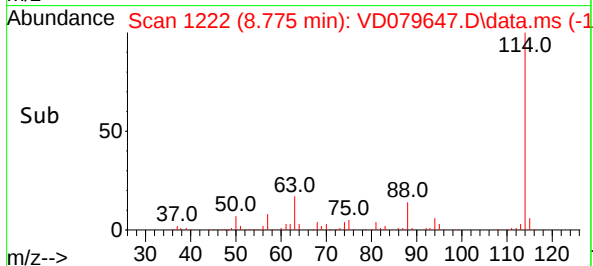
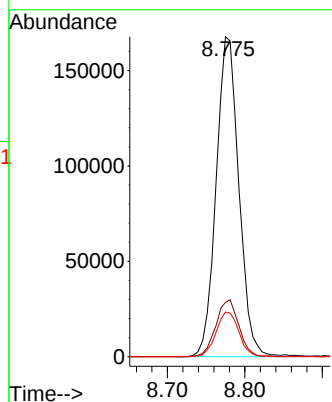
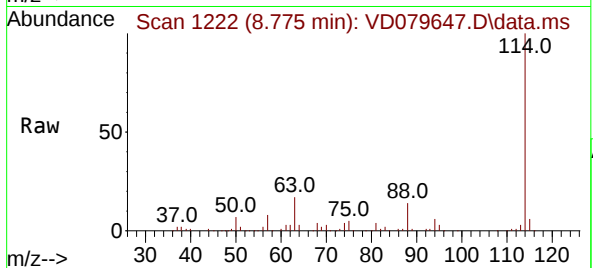
Tgt Ion:114 Resp: 341622

Ion Ratio Lower Upper

114 100

63 16.9 0.0 34.0

88 14.0 0.0 27.2



#35

Dibromofluoromethane

Concen: 51.243 ug/l

RT: 7.804 min Scan# 1057

Delta R.T. -0.000 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

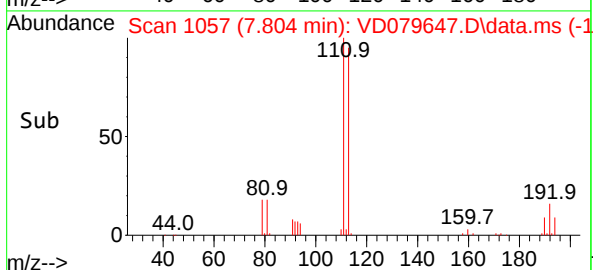
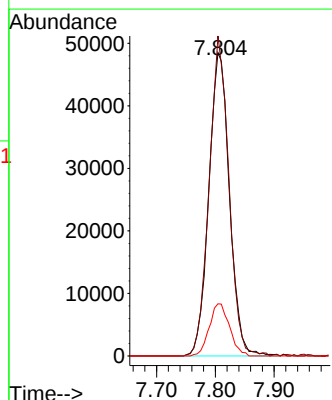
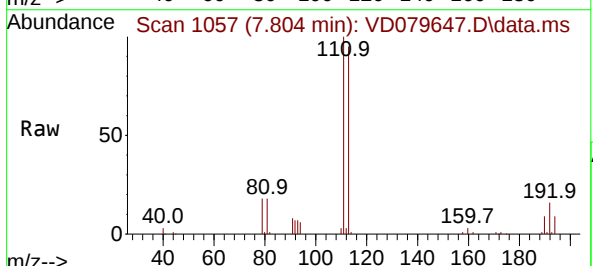
Tgt Ion:113 Resp: 118486

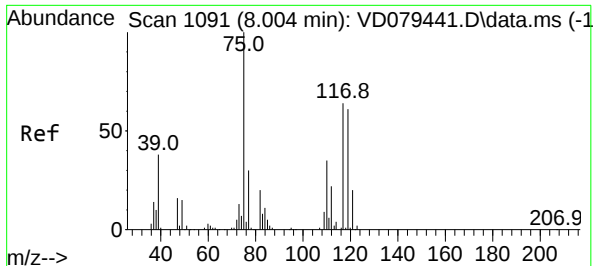
Ion Ratio Lower Upper

113 100

111 100.8 84.0 126.0

192 16.9 15.4 23.0





#36

1,1-Dichloropropene

Concen: 4.847 ug/l

RT: 7.875 min Scan# 1069

Delta R.T. -0.135 min

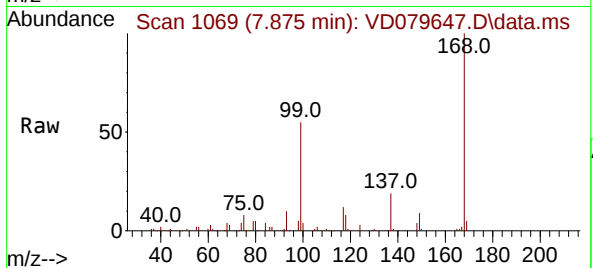
Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

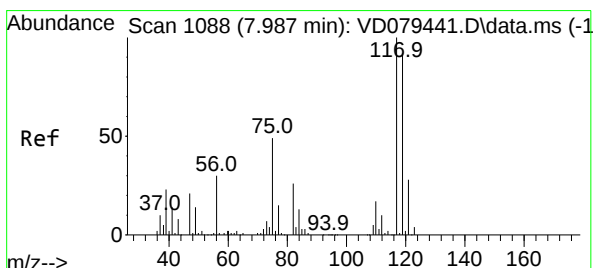
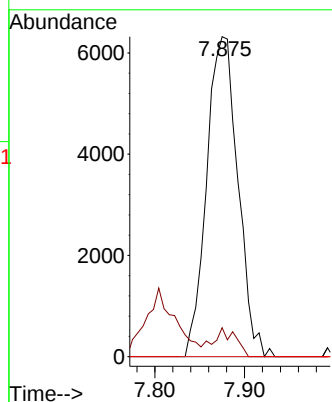
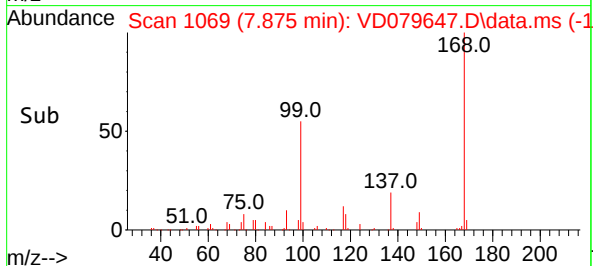
Instrument :

MSVOA\_D

ClientSampleId :



|             |                |
|-------------|----------------|
| Tgt Ion: 75 | Resp: 15298    |
| Ion Ratio   | Lower Upper    |
| 75          | 100            |
| 110         | 6.4 19.6 58.7# |
| 77          | 0.0 26.1 39.1# |



#38

Carbon Tetrachloride

Concen: 5.640 ug/l

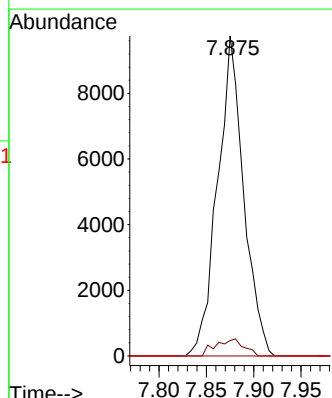
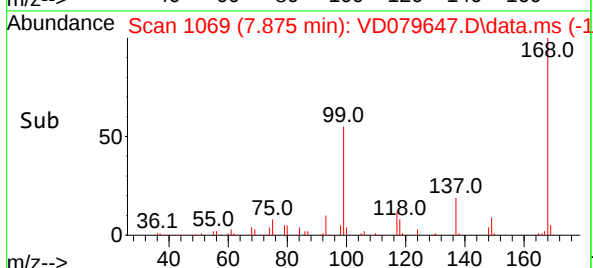
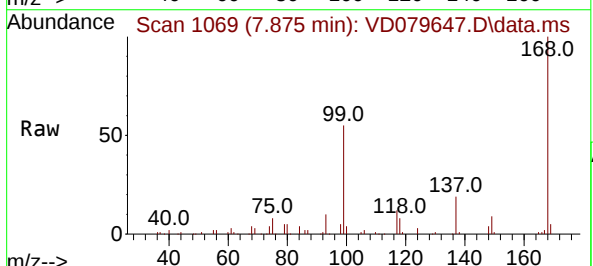
RT: 7.875 min Scan# 1069

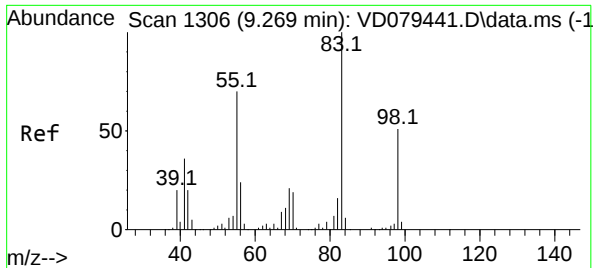
Delta R.T. -0.112 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

|              |                 |
|--------------|-----------------|
| Tgt Ion: 117 | Resp: 18712     |
| Ion Ratio    | Lower Upper     |
| 117          | 100             |
| 119          | 4.8 75.4 113.0# |
| 121          | 0.0 25.0 37.4#  |





#39

Methylcyclohexane

Concen: 4.433 ug/l

RT: 9.028 min Scan# 1265

Delta R.T. -0.247 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

Instrument :

MSVOA\_D

ClientSampleId :

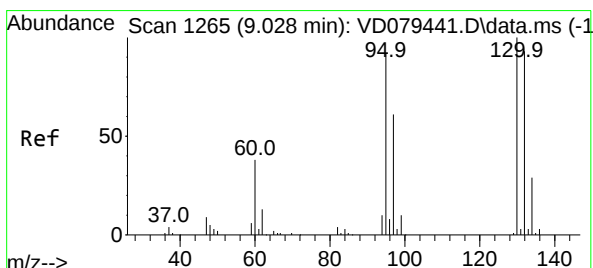
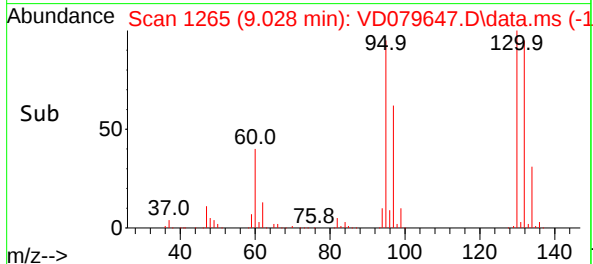
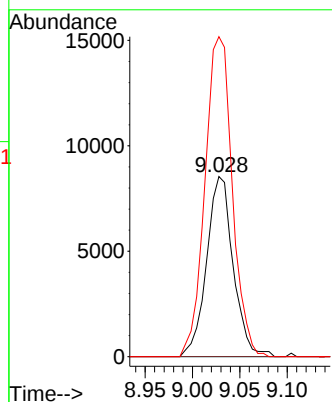
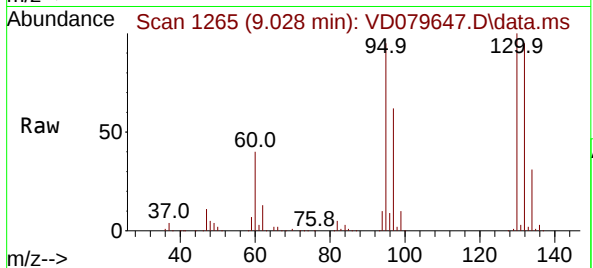
Tgt Ion: 83 Resp: 16694

Ion Ratio Lower Upper

83 100

55 0.0 50.1 75.1#

98 177.6 41.9 62.9#



#44

Trichloroethene

Concen: 520.608 ug/l

RT: 9.028 min Scan# 1265

Delta R.T. -0.000 min

Lab File: VD079647.D

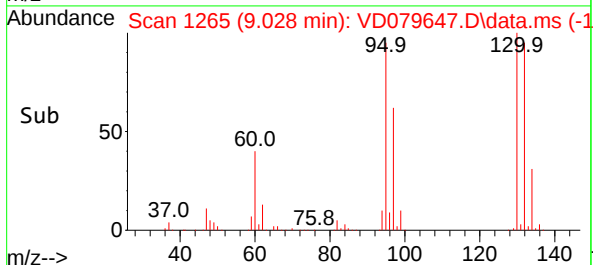
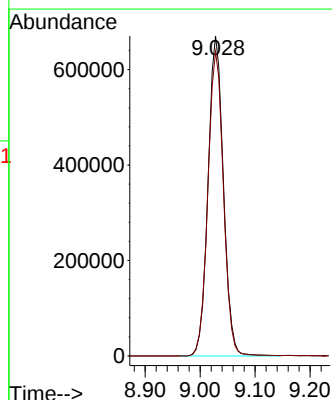
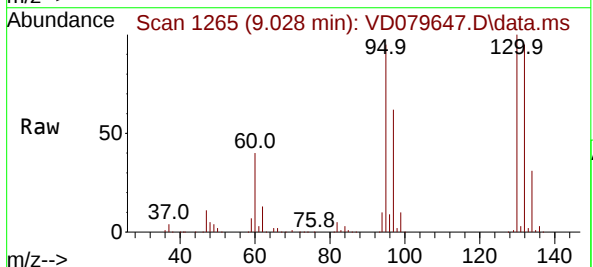
Acq: 07 Aug 2024 18:03

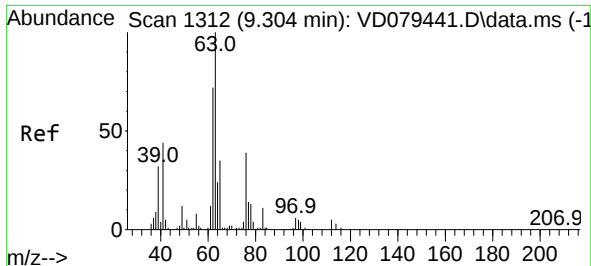
Tgt Ion:130 Resp: 1299073

Ion Ratio Lower Upper

130 100

95 95.1 0.0 177.8





#45

1,2-Dichloropropane

Concen: 1.443 ug/l

RT: 9.022 min Scan# 11

Delta R.T. -0.277 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

Instrument :

MSVOA\_D

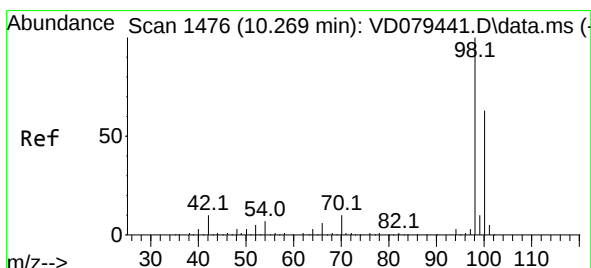
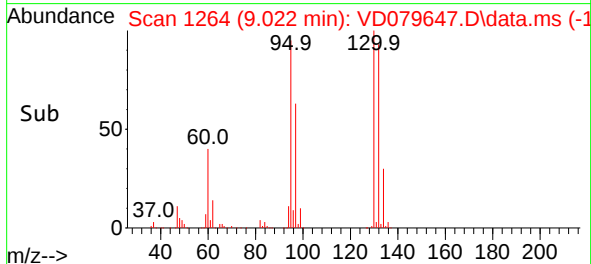
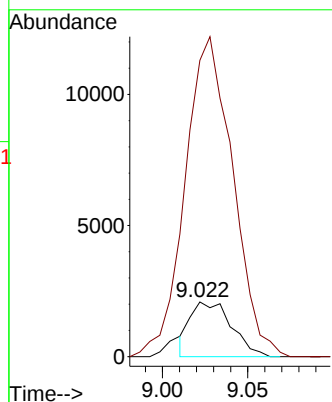
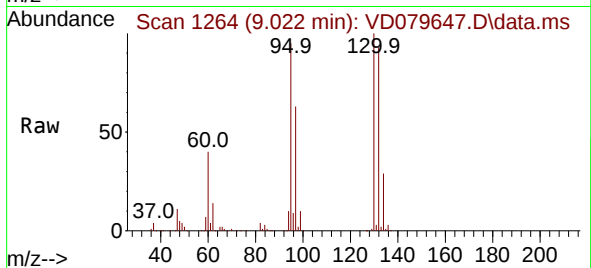
ClientSampleId :

Tgt Ion: 63 Resp: 3519

Ion Ratio Lower Upper

63 100

65 533.4 23.8 35.8#



#50

Toluene-d8

Concen: 47.154 ug/l

RT: 10.269 min Scan# 1476

Delta R.T. 0.006 min

Lab File: VD079647.D

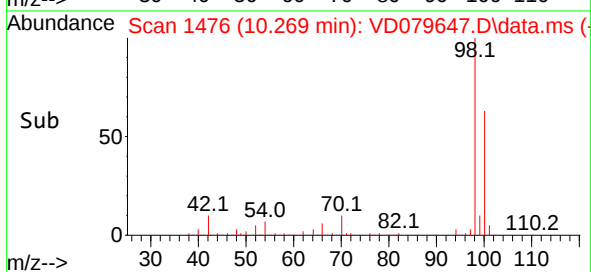
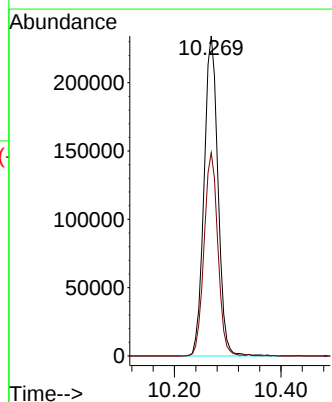
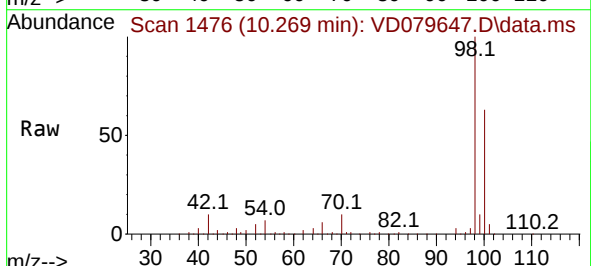
Acq: 07 Aug 2024 18:03

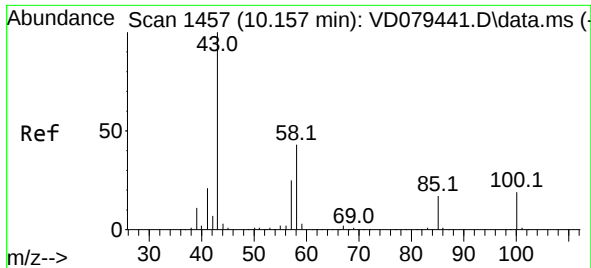
Tgt Ion: 98 Resp: 423410

Ion Ratio Lower Upper

98 100

100 62.8 51.6 77.4

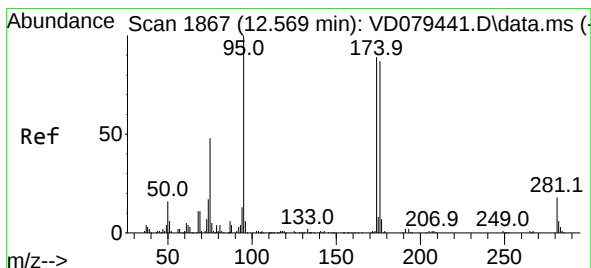
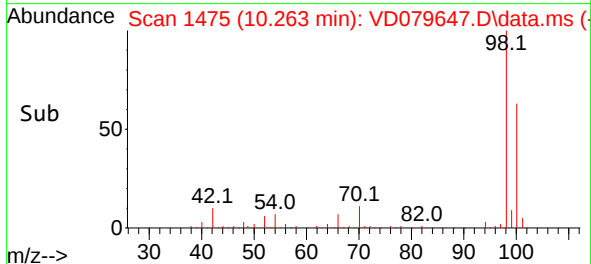
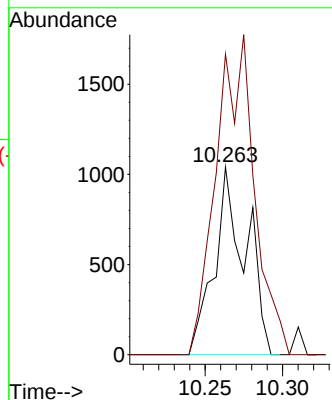
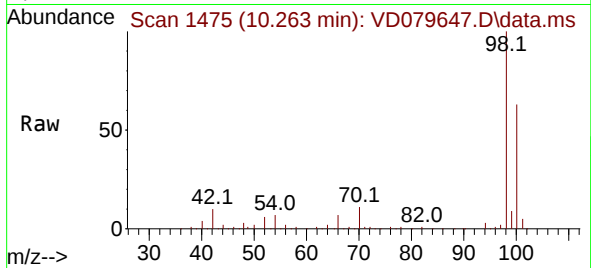




#51  
4-Methyl-2-Pentanone  
Concen: 1.186 ug/l  
RT: 10.263 min Scan# 1457  
Delta R.T. 0.106 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

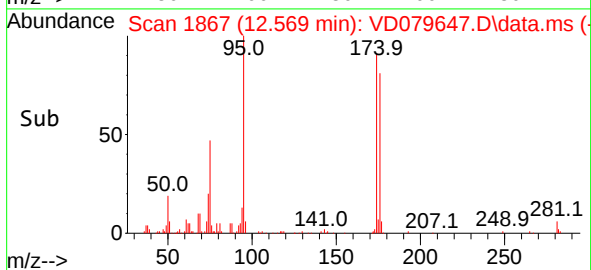
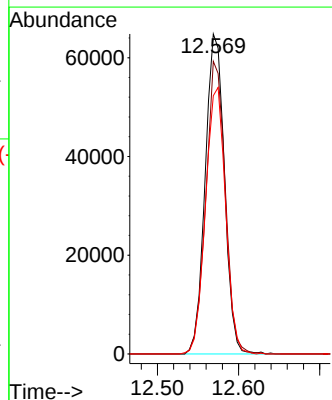
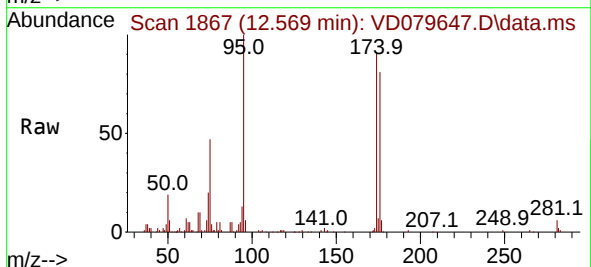
Instrument :  
MSVOA\_D  
ClientSampleId :

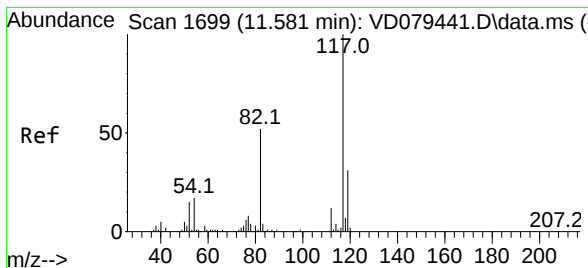
Tgt Ion: 43 Resp: 1473  
Ion Ratio Lower Upper  
43 100  
58 205.6 36.6 55.0#



#62  
4-Bromofluorobenzene  
Concen: 40.977 ug/l  
RT: 12.569 min Scan# 1867  
Delta R.T. -0.000 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

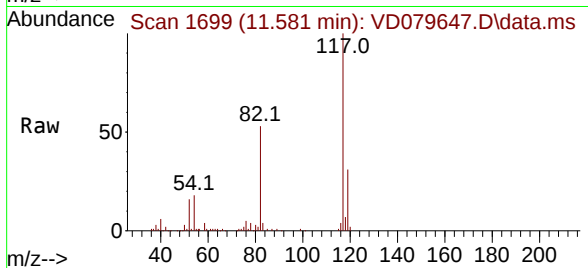
Tgt Ion: 95 Resp: 106476  
Ion Ratio Lower Upper  
95 100  
174 92.6 0.0 195.4  
176 87.0 0.0 192.6



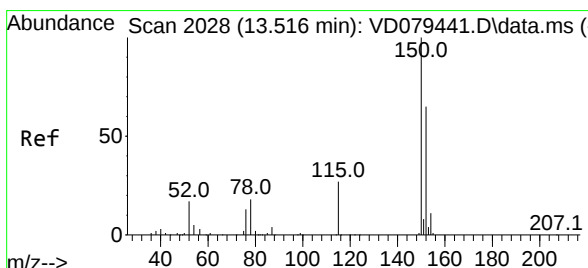
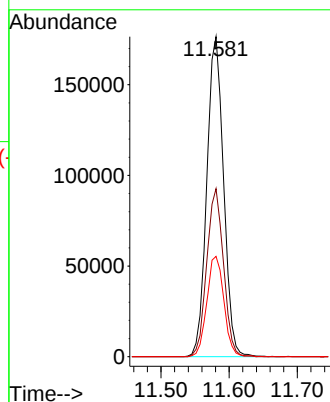
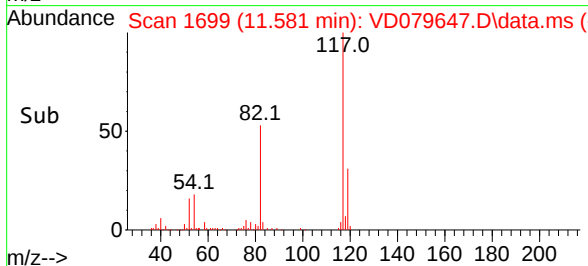


#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.581 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03

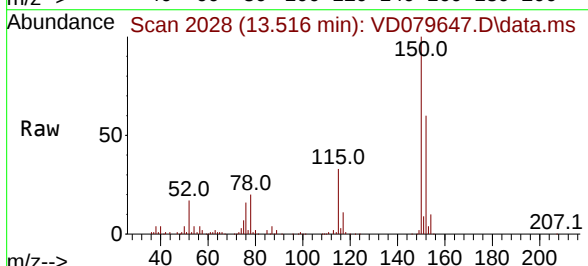
Instrument :  
MSVOA\_D  
ClientSampleId :



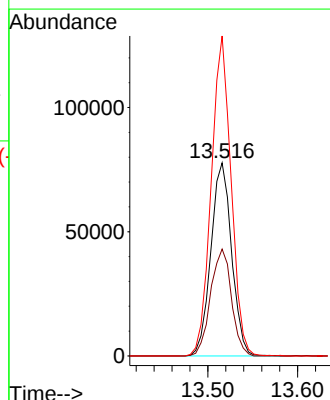
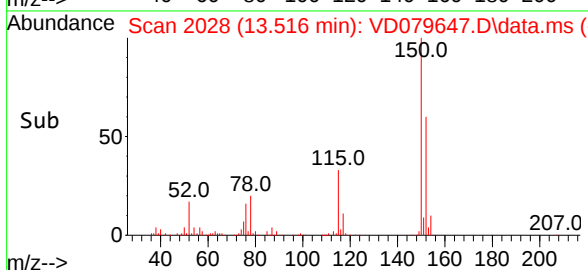
Tgt Ion:117 Resp: 302003  
Ion Ratio Lower Upper  
117 100  
82 52.5 39.8 59.6  
119 31.4 25.7 38.5

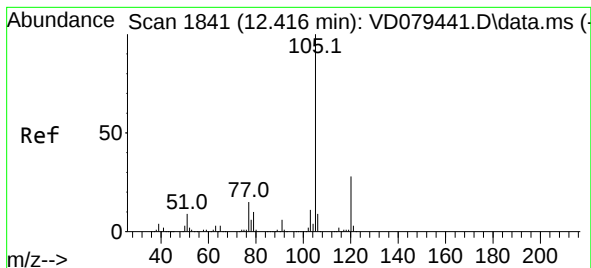


#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.516 min Scan# 2028  
Delta R.T. 0.006 min  
Lab File: VD079647.D  
Acq: 07 Aug 2024 18:03



Tgt Ion:152 Resp: 124705  
Ion Ratio Lower Upper  
152 100  
115 55.7 26.5 79.5  
150 158.6 0.0 341.6





#73

Isopropylbenzene

Concen: 3.634 ug/l

RT: 12.422 min Scan# 1842

Delta R.T. 0.006 min

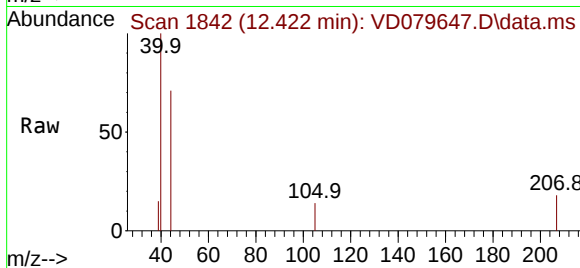
Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

Instrument :

MSVOA\_D

ClientSampleId :

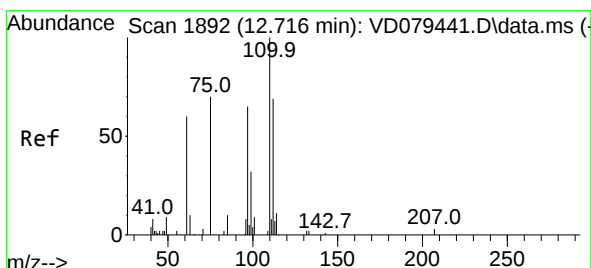
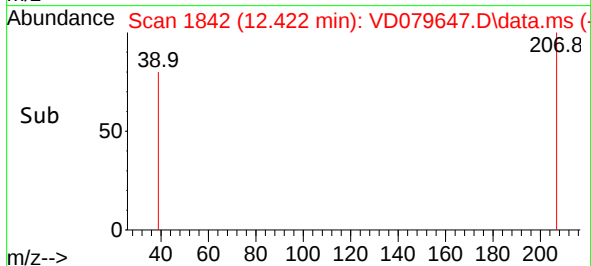
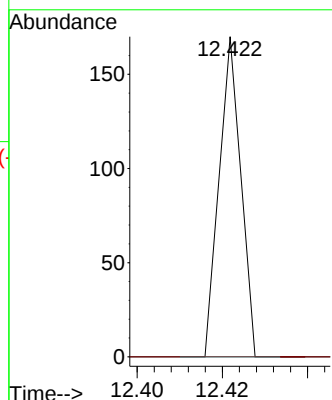


Tgt Ion:105 Resp: 60

Ion Ratio Lower Upper

105 100

120 0.0 13.6 40.7#



#76

1,2,3-Trichloropropane

Concen: 49.306 ug/l

RT: 12.575 min Scan# 1868

Delta R.T. -0.147 min

Lab File: VD079647.D

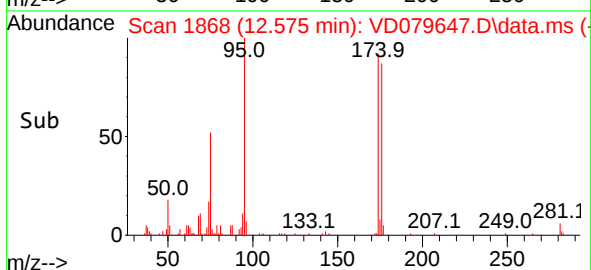
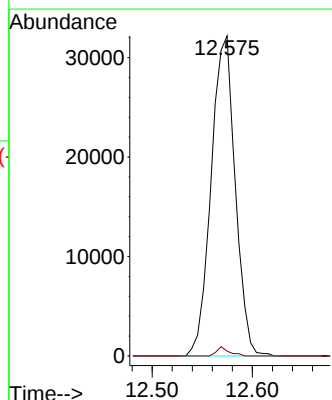
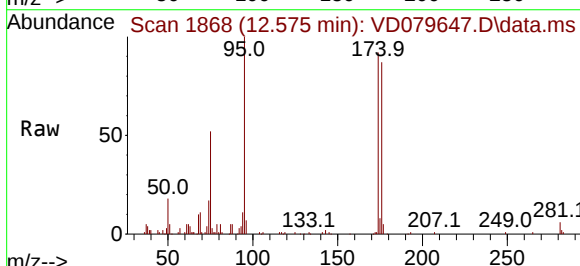
Acq: 07 Aug 2024 18:03

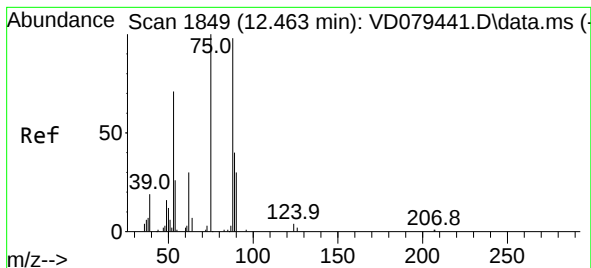
Tgt Ion: 75 Resp: 53746

Ion Ratio Lower Upper

75 100

77 1.5 0.0 0.0#

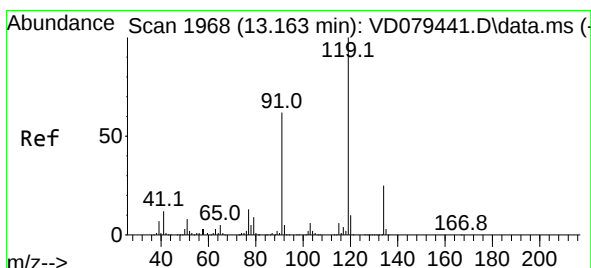
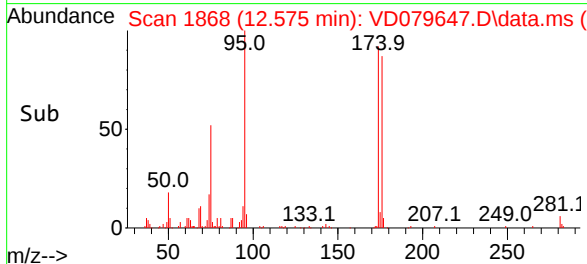
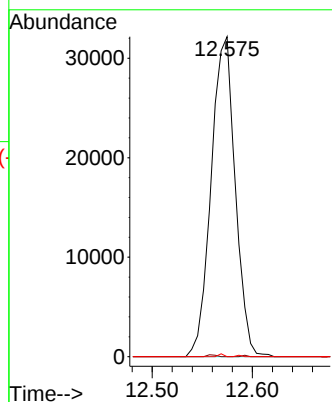
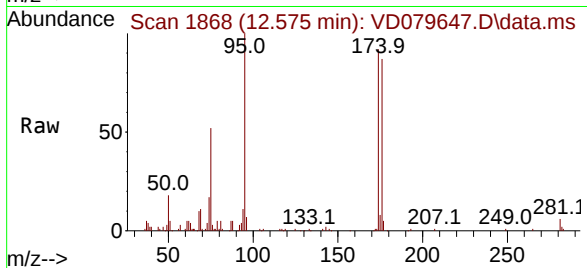




#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 94.040 ug/l  
 RT: 12.575 min Scan# 11  
 Delta R.T. 0.106 min  
 Lab File: VD079647.D  
 Acq: 07 Aug 2024 18:03

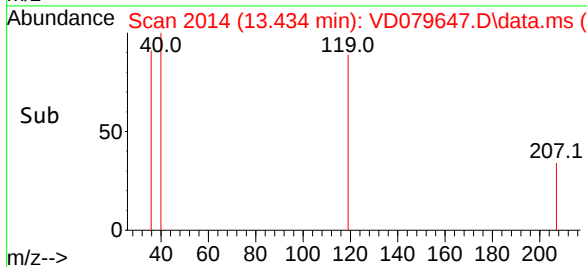
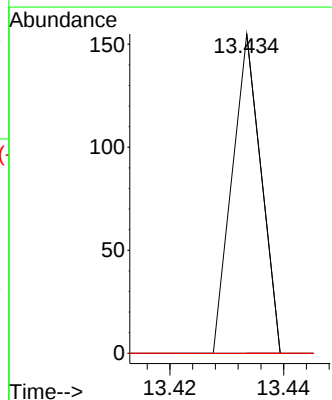
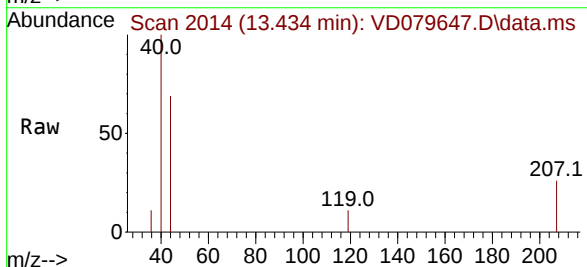
Instrument :  
 MSVOA\_D  
 ClientSampleId :

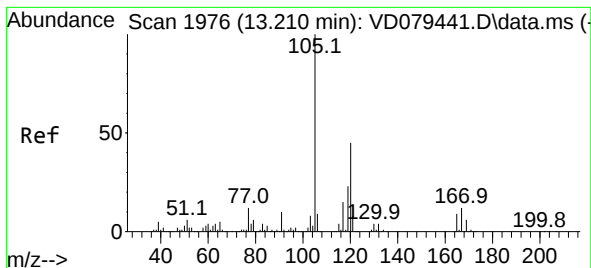
Tgt Ion: 75 Resp: 53746  
 Ion Ratio Lower Upper  
 75 100  
 53 0.2 61.4 92.2#  
 89 0.2 35.4 53.0#



#83  
 tert-Butylbenzene  
 Concen: 3.635 ug/l  
 RT: 13.434 min Scan# 2014  
 Delta R.T. 0.271 min  
 Lab File: VD079647.D  
 Acq: 07 Aug 2024 18:03

Tgt Ion: 119 Resp: 55  
 Ion Ratio Lower Upper  
 119 100  
 91 0.0 28.2 84.7#  
 134 0.0 13.4 40.1#





#84

1,2,4-Trimethylbenzene

Concen: 3.445 ug/l

RT: 13.216 min Scan# 1976

Delta R.T. 0.012 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

Instrument :

MSVOA\_D

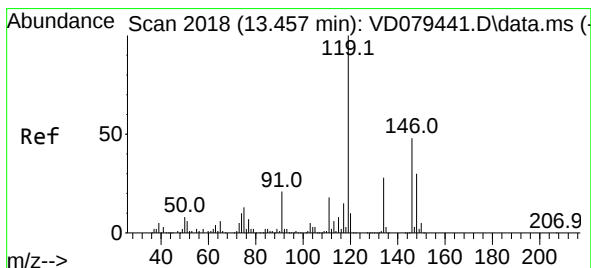
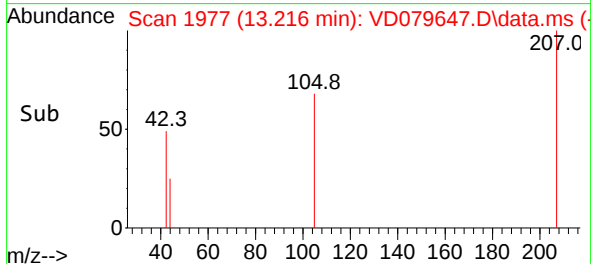
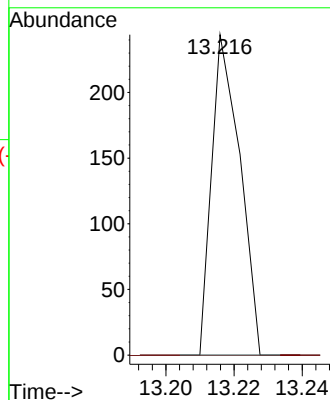
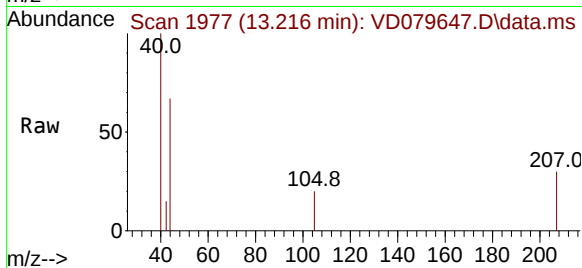
ClientSampleId :

Tgt Ion:105 Resp: 140

Ion Ratio Lower Upper

105 100

120 0.0 23.6 71.0#



#86

p-Isopropyltoluene

Concen: 3.892 ug/l

RT: 13.434 min Scan# 2014

Delta R.T. -0.024 min

Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

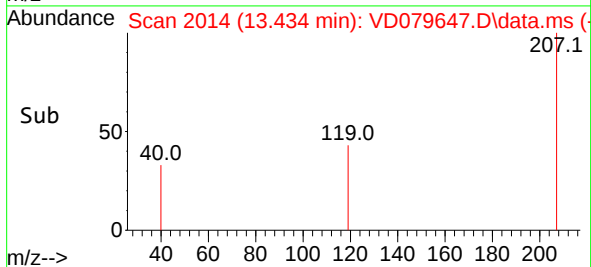
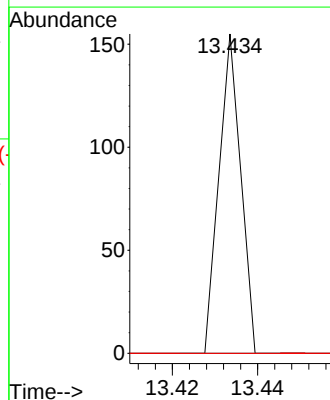
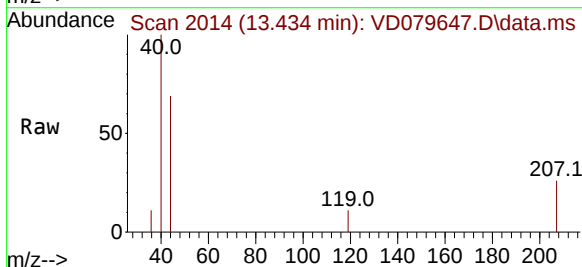
Tgt Ion:119 Resp: 55

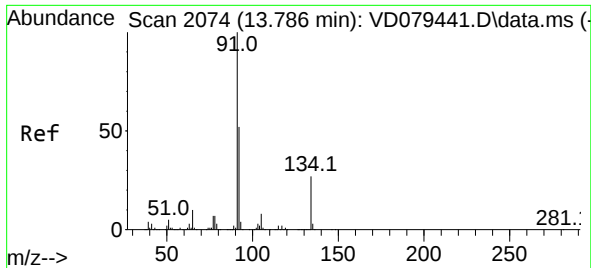
Ion Ratio Lower Upper

119 100

134 0.0 13.7 41.1#

91 0.0 10.7 32.1#





#89

n-Butylbenzene

Concen: 3.798 ug/l

RT: 13.792 min Scan# 20

Delta R.T. 0.011 min

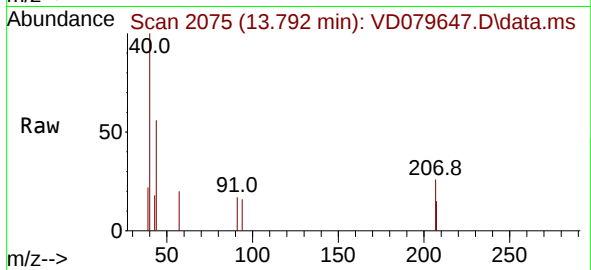
Lab File: VD079647.D

Acq: 07 Aug 2024 18:03

Instrument :

MSVOA\_D

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 140   |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 92       | 0.0   | 25.7  | 77.0# |
| 134      | 0.0   | 13.6  | 40.8# |

