

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD121523\  
 Data File : VD077894.D  
 Acq On : 15 Dec 2023 10:38  
 Operator : RP/MD  
 Sample : VD1215SBL01  
 Misc : 5.00G/5.0ml/MSVOA\_D/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Dec 16 03:57:03 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\82D120823S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 14 14:48:10 2023  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.881  | 168  | 197553   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.781  | 114  | 354296   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.581 | 117  | 339421   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.522 | 152  | 151322   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 33) 1,2-Dichloroethane-d4   | 8.234  | 65    | 96718    | 41.548   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 83.100% |
| 35) Dibromofluoromethane    | 7.810  | 113   | 105650   | 42.571   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 85.140% |
| 50) Toluene-d8              | 10.269 | 98    | 451133   | 45.387   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 90.780% |
| 62) 4-Bromofluorobenzene    | 12.575 | 95    | 130566   | 43.937   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 30 - 143 | Recovery | =    | 87.880% |

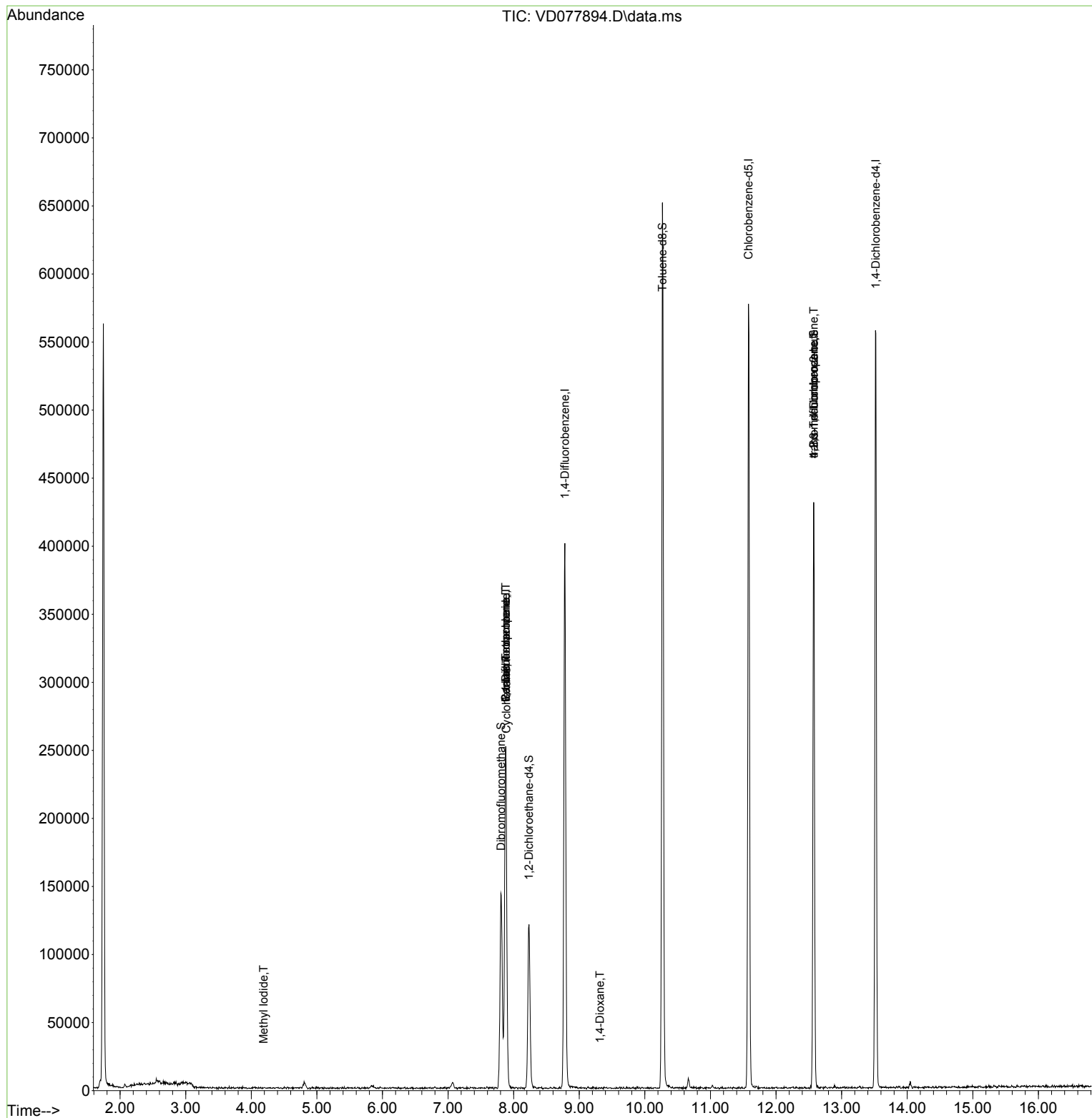
| Target Compounds              |        |     |       |           | Qvalue |     |
|-------------------------------|--------|-----|-------|-----------|--------|-----|
| 10) Methyl Iodide             | 4.187  | 142 | 66    | 6.769     | ug/l # | 46  |
| 11) Tert butyl alcohol        | 5.069  | 59  | 74    | Below Cal | #      | 73  |
| 16) Acetone                   | 4.040  | 43  | 258   | Below Cal | #      | 32  |
| 20) Methylene Chloride        | 4.822  | 84  | 2857  | Below Cal | #      | 89  |
| 25) 2-Butanone                | 7.069  | 43  | 127   | Below Cal | #      | 37  |
| 31) Cyclohexane               | 7.887  | 56  | 4660  | 1.125     | ug/l # | 64  |
| 36) 1,1-Dichloropropene       | 7.881  | 75  | 16039 | 4.040     | ug/l # | 48  |
| 38) Carbon Tetrachloride      | 7.881  | 117 | 20286 | 5.126     | ug/l # | 16  |
| 49) 1,4-Dioxane               | 9.316  | 88  | 62    | 4.309     | ug/l # | 33  |
| 65) Chlorobenzene             | 11.616 | 112 | 95    | Below Cal | #      | 43  |
| 76) 1,2,3-Trichloropropane    | 12.575 | 75  | 67469 | 51.337    | ug/l # | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.575 | 75  | 67469 | 104.012   | ug/l # | 17  |
| 88) 1,4-Dichlorobenzene       | 13.539 | 146 | 275   | Below Cal | #      | 26  |
| 92) 1,2-Dibromo-3-Chloropr... | 14.381 | 75  | 64    | Below Cal | #      | 1   |

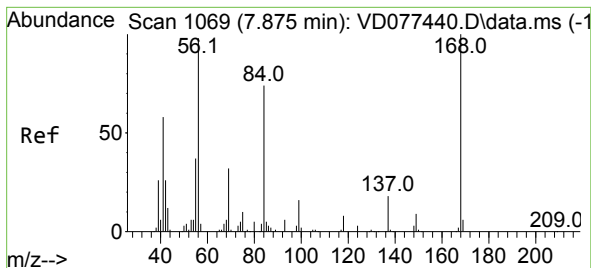
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Dec 16 03:57:03 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\82D120823S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 14 14:48:10 2023  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.881 min Scan# 1

Delta R.T. 0.006 min

Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

Instrument :

MSVOA\_D

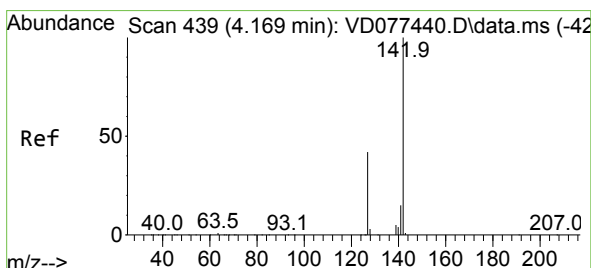
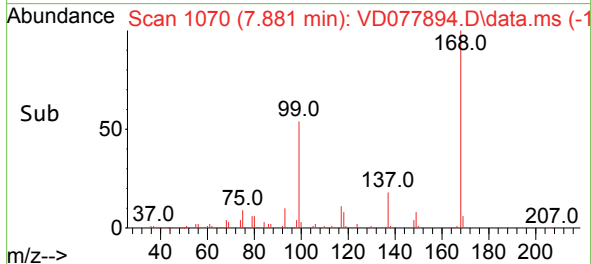
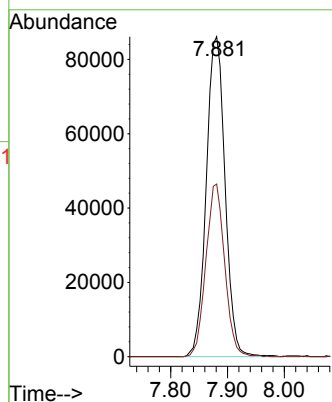
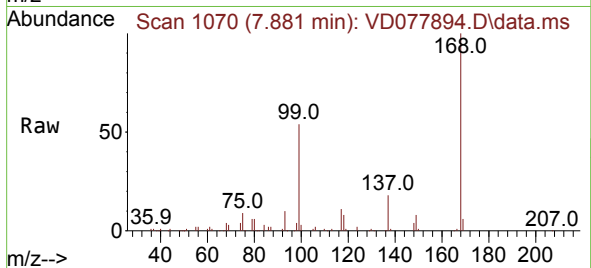
ClientSampleId :

Tgt Ion:168 Resp: 197553

Ion Ratio Lower Upper

168 100

99 54.0 36.7 55.1



#10

Methyl Iodide

Concen: 6.769 ug/l

RT: 4.187 min Scan# 442

Delta R.T. 0.018 min

Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

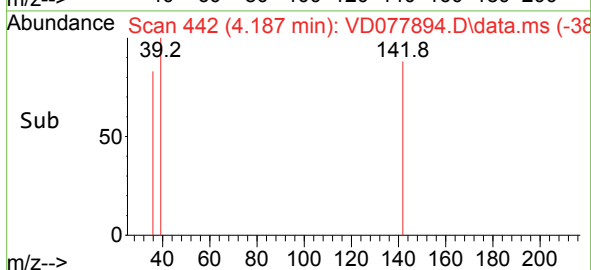
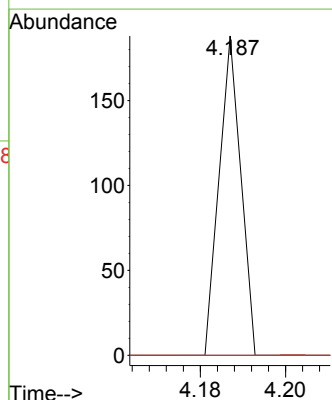
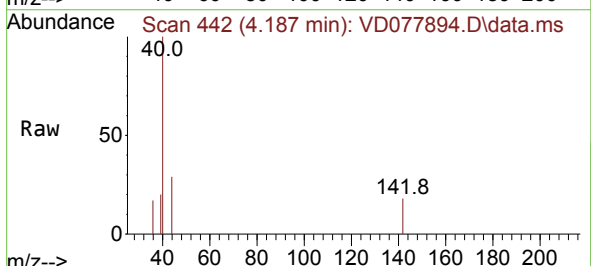
Tgt Ion:142 Resp: 66

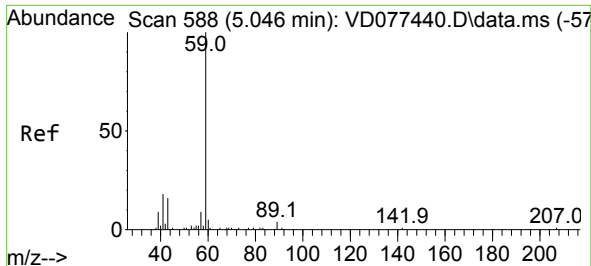
Ion Ratio Lower Upper

142 100

127 0.0 29.4 44.0#

141 0.0 11.1 16.7#





#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.069 min Scan# 59

Delta R.T. 0.023 min

Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

Instrument :

MSVOA\_D

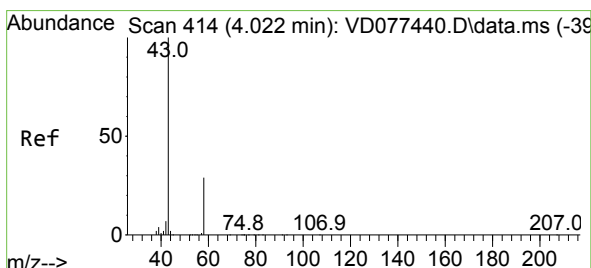
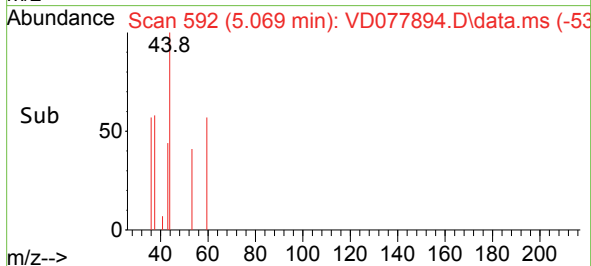
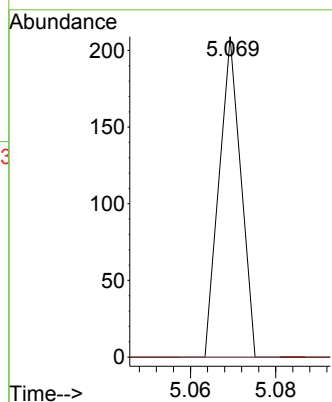
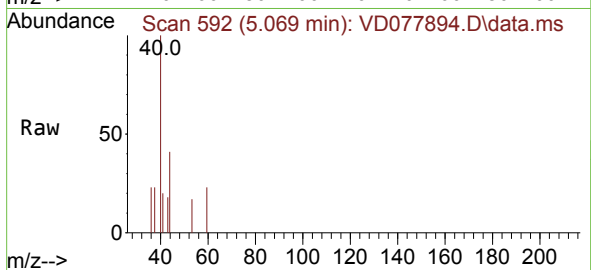
ClientSampleId :

Tgt Ion: 59 Resp: 74

Ion Ratio Lower Upper

59 100

57 0.0 7.8 11.8#



#16

Acetone

Concen: Below Cal

RT: 4.040 min Scan# 417

Delta R.T. 0.018 min

Lab File: VD077894.D

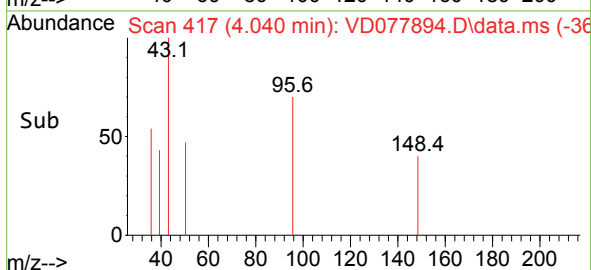
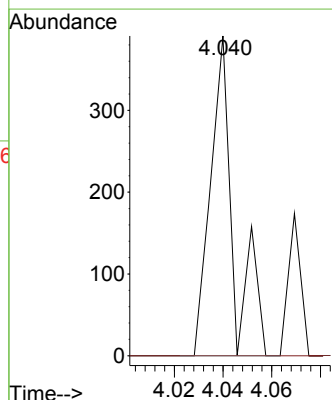
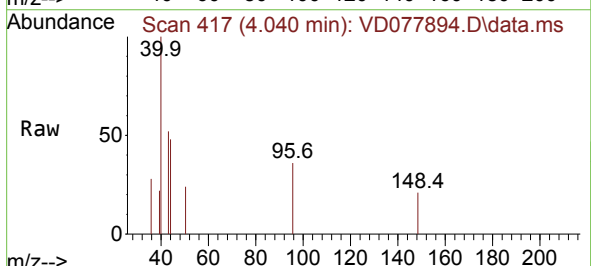
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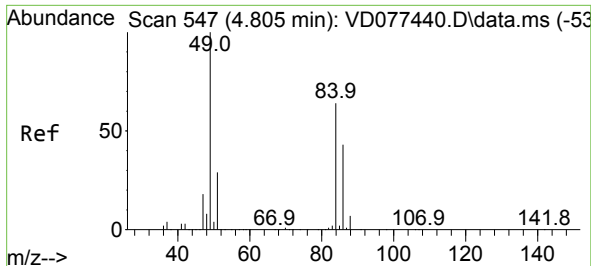
Tgt Ion: 43 Resp: 258

Ion Ratio Lower Upper

43 100

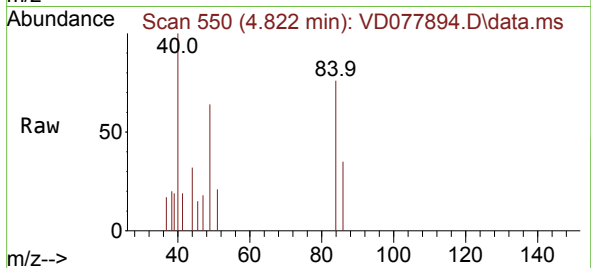
58 0.0 34.7 52.1#



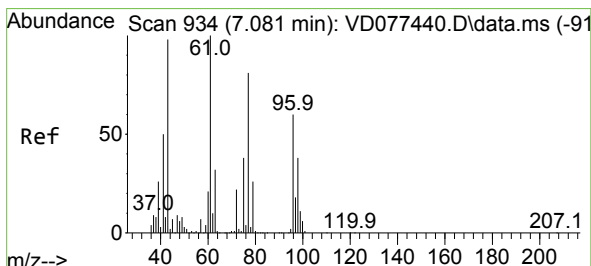
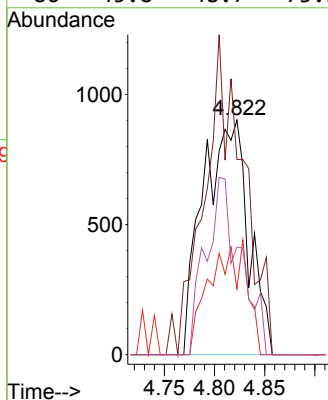
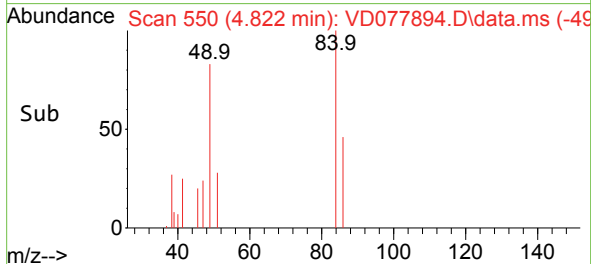


#20  
Methylene Chloride  
Concen: Below Cal  
RT: 4.822 min Scan# 51  
Delta R.T. 0.017 min  
Lab File: VD077894.D  
Acq: 15 Dec 2023 10:38

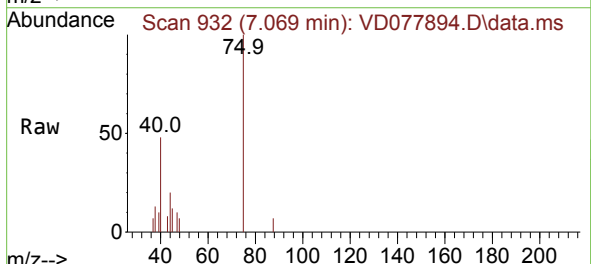
Instrument :  
MSVOA\_D  
ClientSampleId :



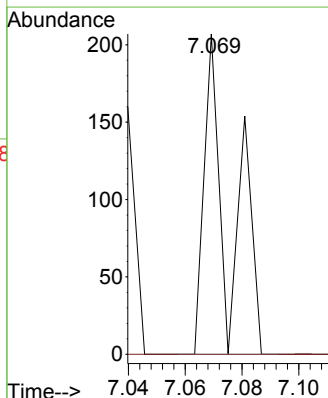
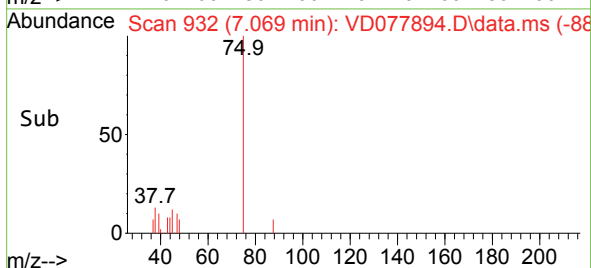
Tgt Ion: 84 Resp: 2857  
Ion Ratio Lower Upper  
84 100  
49 83.2 71.4 107.2  
51 28.1 24.5 36.7  
86 45.8 48.7 73.1#

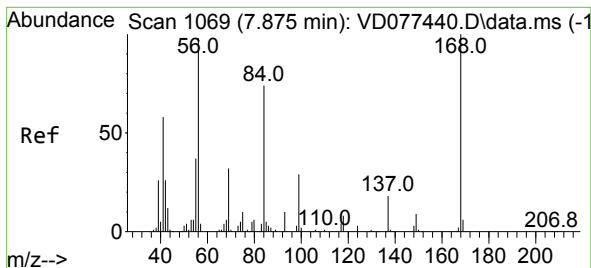


#25  
2-Butanone  
Concen: Below Cal  
RT: 7.069 min Scan# 932  
Delta R.T. -0.012 min  
Lab File: VD077894.D  
Acq: 15 Dec 2023 10:38



Tgt Ion: 43 Resp: 127  
Ion Ratio Lower Upper  
43 100  
72 0.0 30.7 46.1#





#31

Cyclohexane

Concen: 1.125 ug/l

RT: 7.887 min Scan# 1107

Delta R.T. 0.012 min

Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

Instrument :

MSVOA\_D

ClientSampleId :

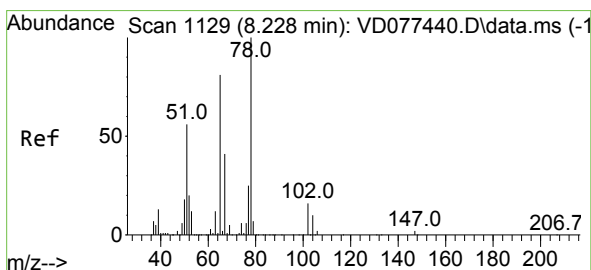
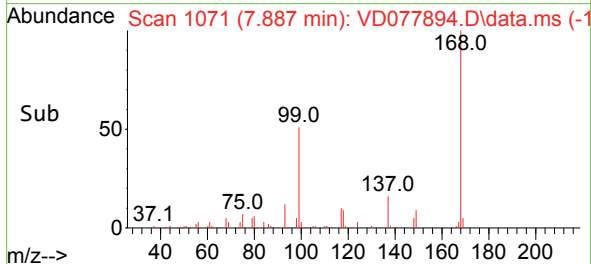
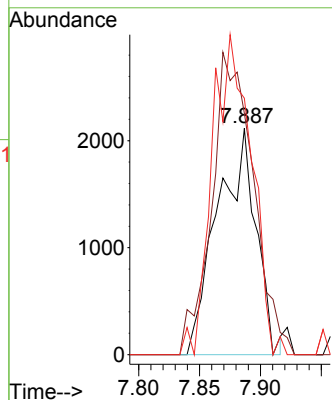
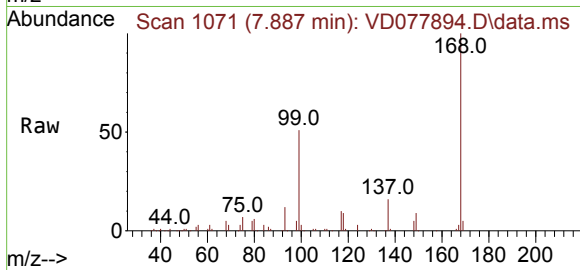
Tgt Ion: 56 Resp: 4660

Ion Ratio Lower Upper

56 100

69 106.7 28.6 43.0#

84 113.3 84.8 127.2



#33

1,2-Dichloroethane-d4

Concen: 41.548 ug/l

RT: 8.234 min Scan# 1130

Delta R.T. 0.006 min

Lab File: VD077894.D

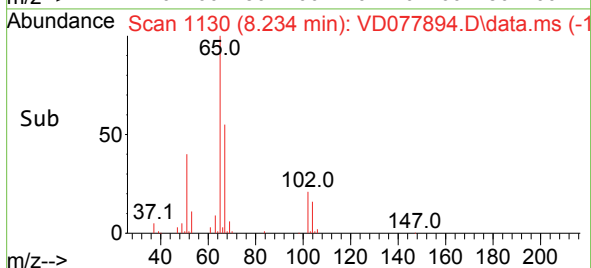
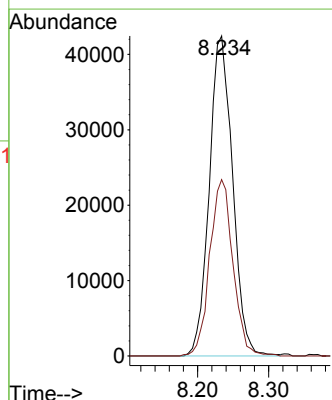
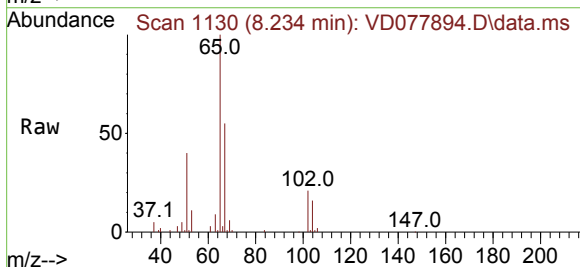
Acq: 15 Dec 2023 10:38

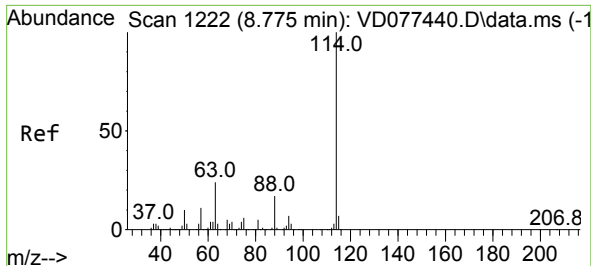
Tgt Ion: 65 Resp: 96718

Ion Ratio Lower Upper

65 100

67 54.9 0.0 115.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.781 min Scan# 11

Delta R.T. 0.006 min

Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

Instrument :

MSVOA\_D

ClientSampleId :

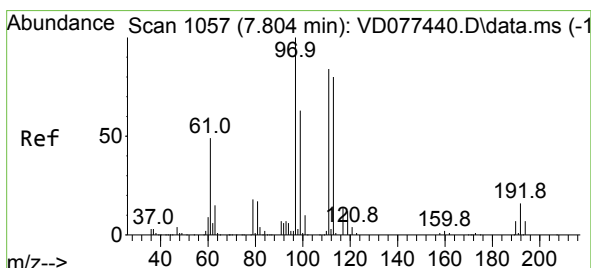
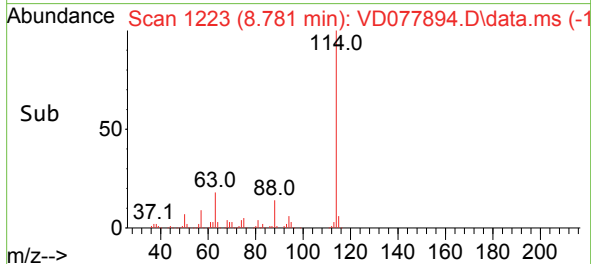
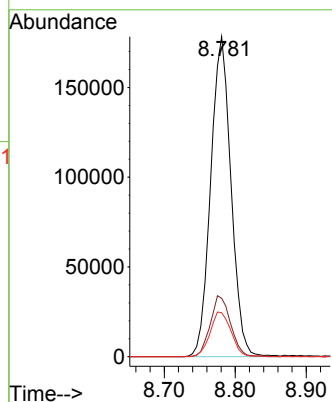
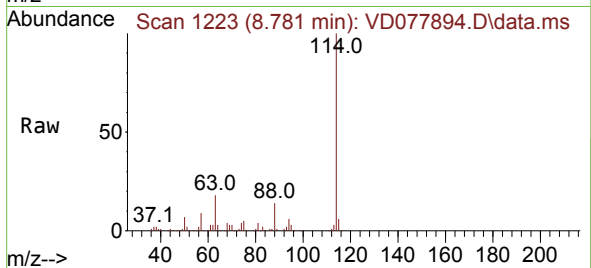
Tgt Ion:114 Resp: 354296

Ion Ratio Lower Upper

114 100

63 18.2 0.0 33.4

88 13.8 0.0 26.2



#35

Dibromofluoromethane

Concen: 42.571 ug/l

RT: 7.810 min Scan# 1058

Delta R.T. 0.006 min

Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

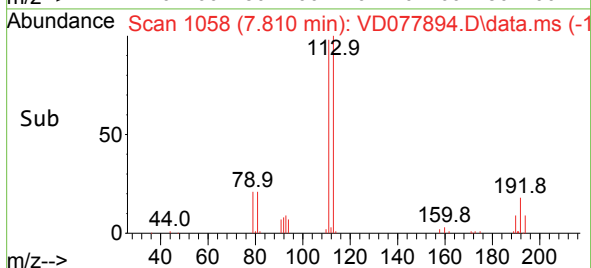
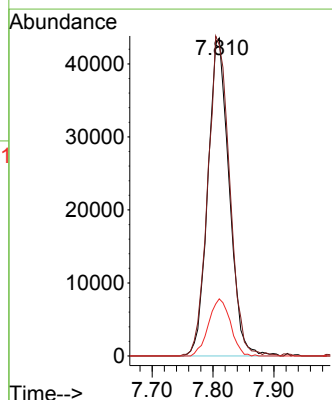
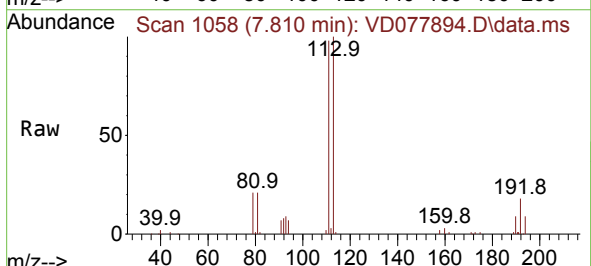
Tgt Ion:113 Resp: 105650

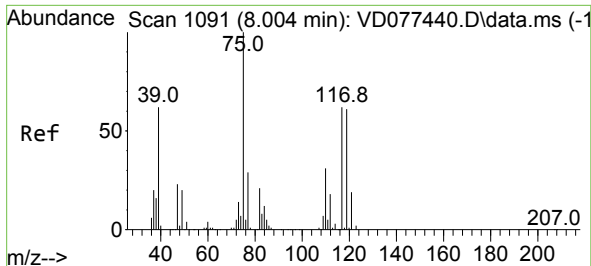
Ion Ratio Lower Upper

113 100

111 103.2 84.7 127.1

192 18.4 16.8 25.2





#36

1,1-Dichloropropene

Concen: 4.040 ug/l

RT: 7.881 min Scan# 1070

Delta R.T. -0.123 min

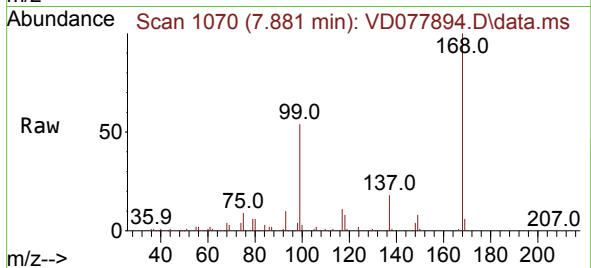
Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

Instrument :

MSVOA\_D

ClientSampleId :



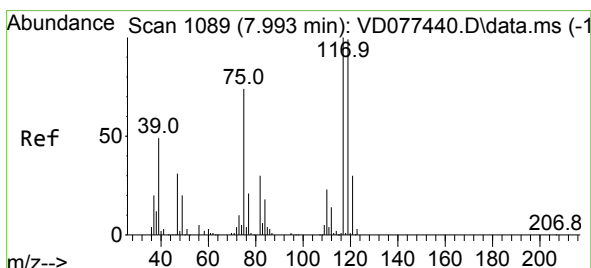
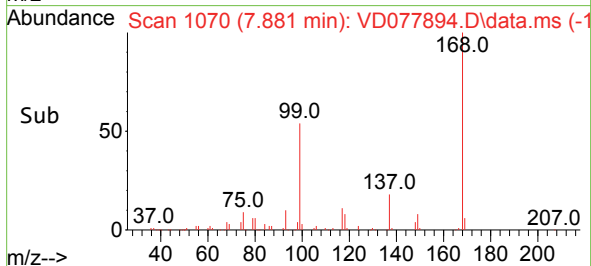
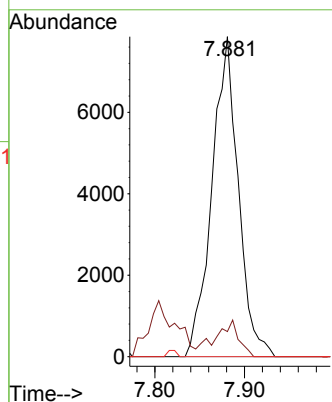
Tgt Ion: 75 Resp: 16039

Ion Ratio Lower Upper

75 100

110 10.2 19.9 59.6#

77 0.0 24.7 37.1#



#38

Carbon Tetrachloride

Concen: 5.126 ug/l

RT: 7.881 min Scan# 1070

Delta R.T. -0.112 min

Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

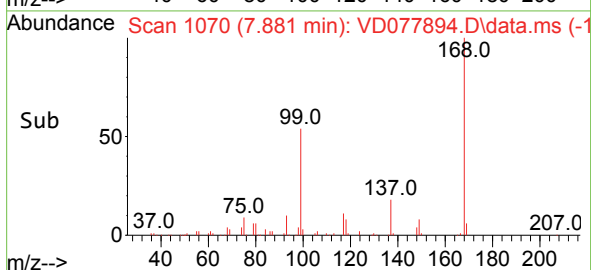
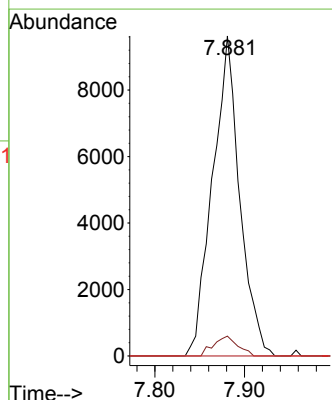
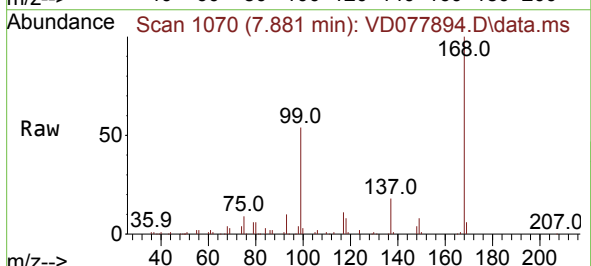
Tgt Ion: 117 Resp: 20286

Ion Ratio Lower Upper

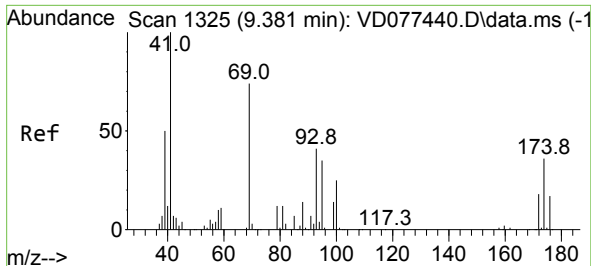
117 100

119 6.2 78.0 117.0#

121 0.0 24.2 36.2#







#49

1,4-Dioxane

Concen: 4.309 ug/l

RT: 9.316 min Scan# 11

Delta R.T. -0.065 min

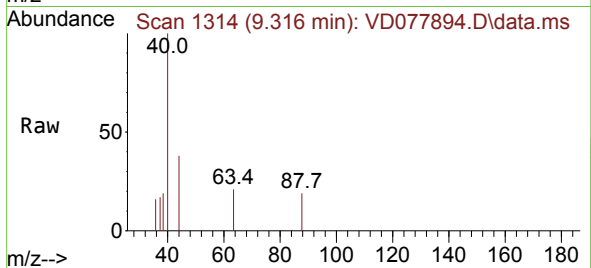
Lab File: VD077894.D

Acq: 15 Dec 2023 10:38

Instrument :

MSVOA\_D

ClientSampleId :



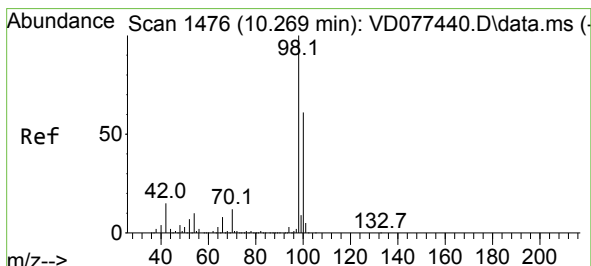
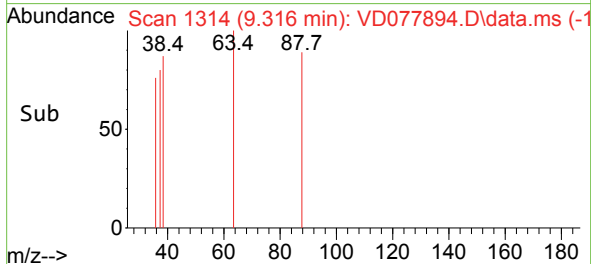
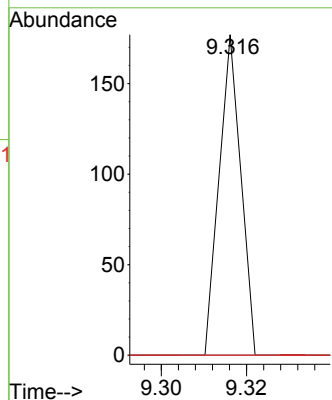
Tgt Ion: 88 Resp: 62

Ion Ratio Lower Upper

88 100

43 0.0 19.0 28.6#

58 0.0 43.5 65.3#



#50

Toluene-d8

Concen: 45.387 ug/l

RT: 10.269 min Scan# 1476

Delta R.T. 0.000 min

Lab File: VD077894.D

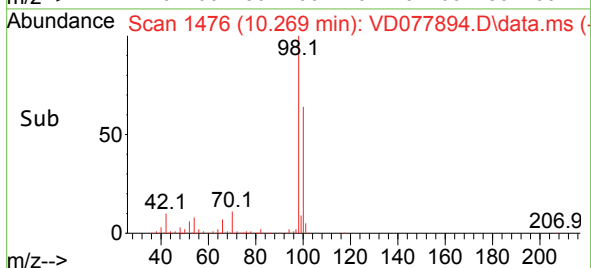
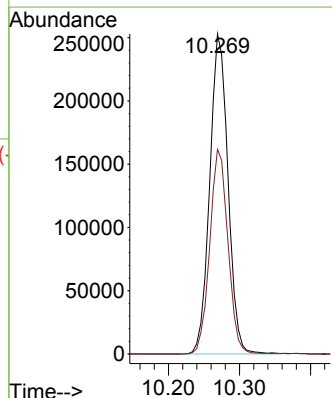
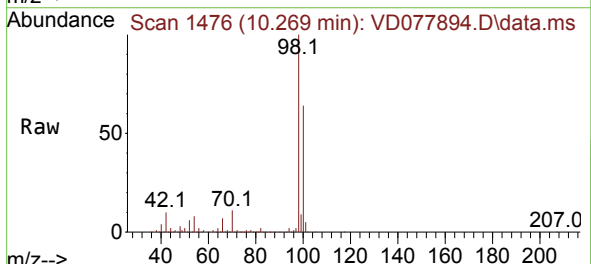
Acq: 15 Dec 2023 10:38

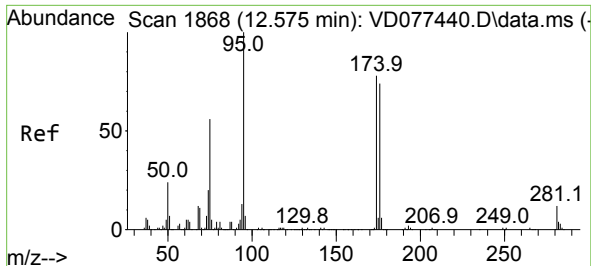
Tgt Ion: 98 Resp: 451133

Ion Ratio Lower Upper

98 100

100 63.8 50.3 75.5

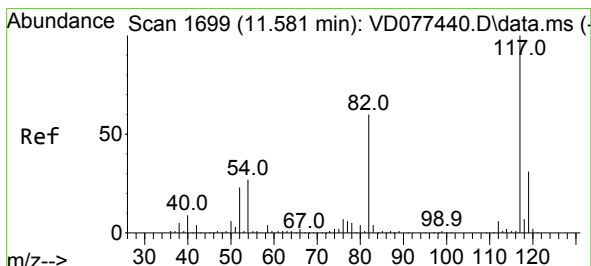
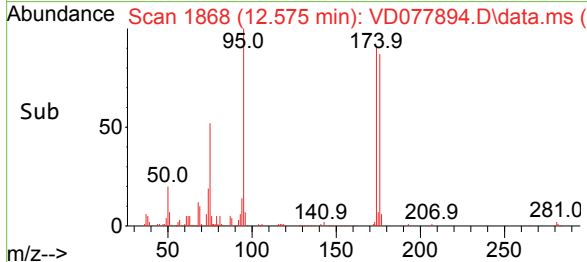
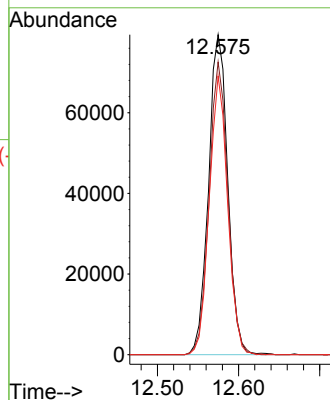
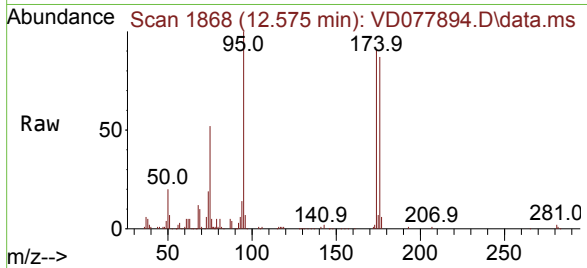




#62  
4-Bromofluorobenzene  
Concen: 43.937 ug/l  
RT: 12.575 min Scan# 1868  
Delta R.T. -0.000 min  
Lab File: VD077894.D  
Acq: 15 Dec 2023 10:38

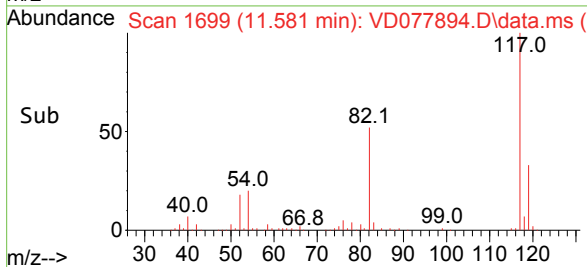
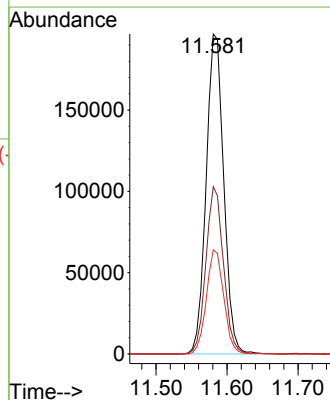
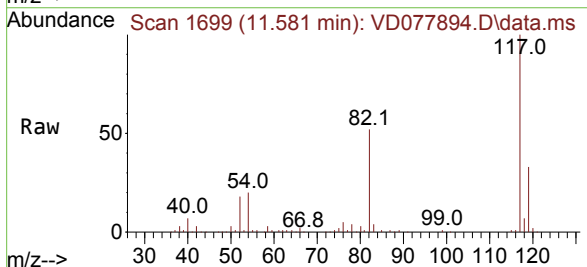
Instrument :  
MSVOA\_D  
ClientSampleId :

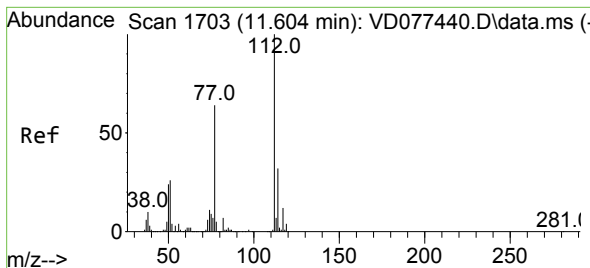
Tgt Ion: 95 Resp: 130566  
Ion Ratio Lower Upper  
95 100  
174 89.3 0.0 201.8  
176 83.2 0.0 191.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.581 min Scan# 1699  
Delta R.T. -0.000 min  
Lab File: VD077894.D  
Acq: 15 Dec 2023 10:38

Tgt Ion: 117 Resp: 339421  
Ion Ratio Lower Upper  
117 100  
82 52.3 38.3 57.5  
119 32.5 25.0 37.4

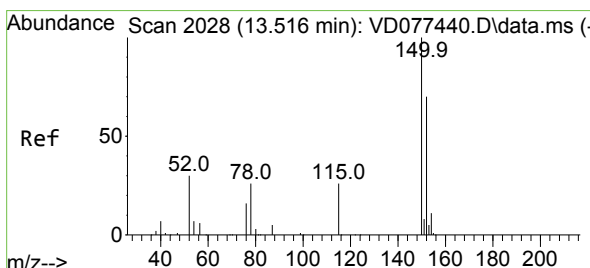
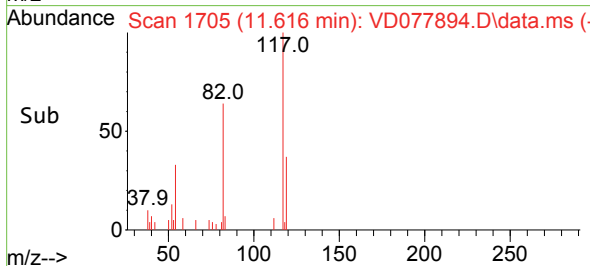
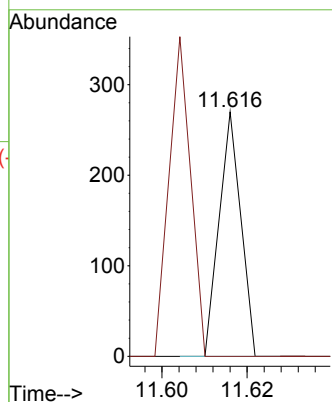
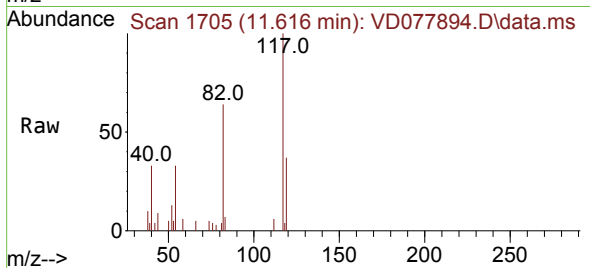




#65  
Chlorobenzene  
Concen: Below Cal  
RT: 11.616 min Scan# 11  
Delta R.T. 0.012 min  
Lab File: VD077894.D  
Acq: 15 Dec 2023 10:38

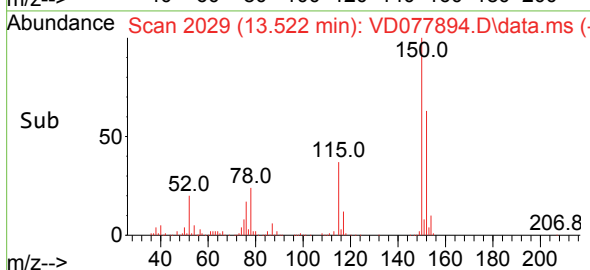
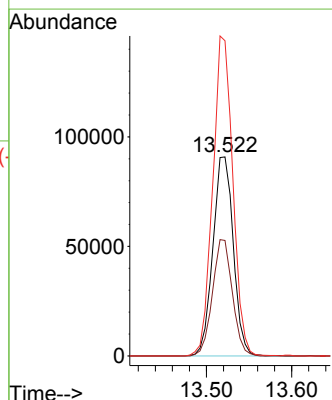
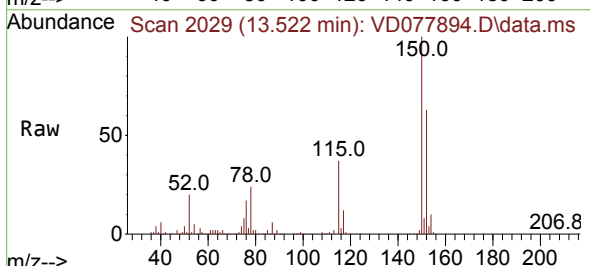
Instrument :  
MSVOA\_D  
ClientSampleId :

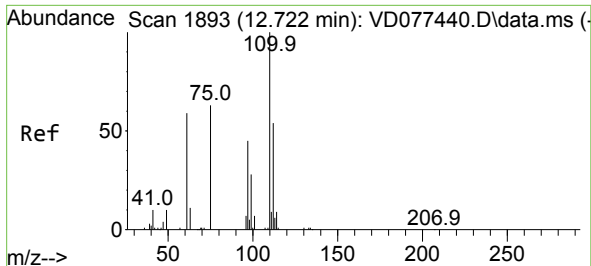
Tgt Ion:112 Resp: 95  
Ion Ratio Lower Upper  
112 100  
114 0.0 25.1 37.7#



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.522 min Scan# 2029  
Delta R.T. 0.006 min  
Lab File: VD077894.D  
Acq: 15 Dec 2023 10:38

Tgt Ion:152 Resp: 151322  
Ion Ratio Lower Upper  
152 100  
115 56.9 27.1 81.3  
150 157.6 0.0 353.6

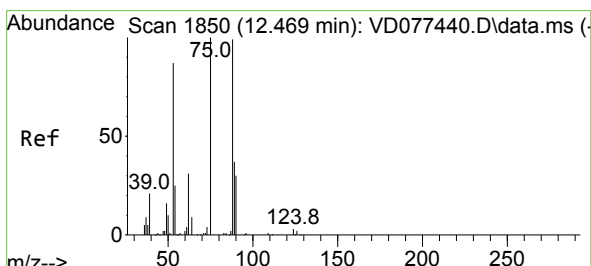
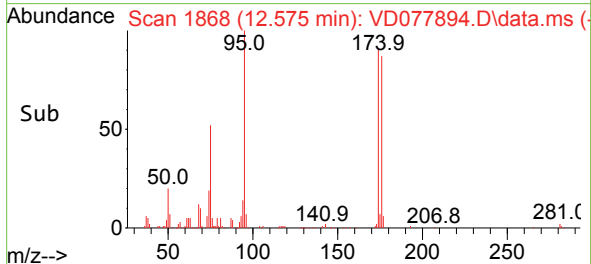
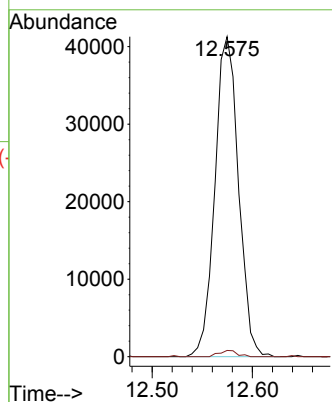
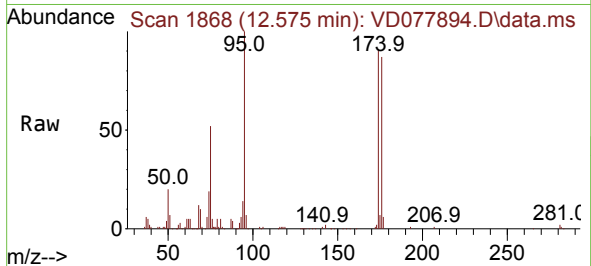




#76  
1,2,3-Trichloropropane  
Concen: 51.337 ug/l  
RT: 12.575 min Scan# 1868  
Delta R.T. -0.147 min  
Lab File: VD077894.D  
Acq: 15 Dec 2023 10:38

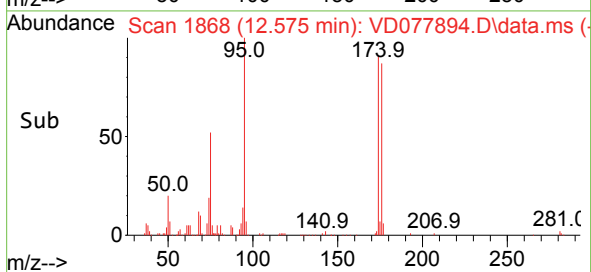
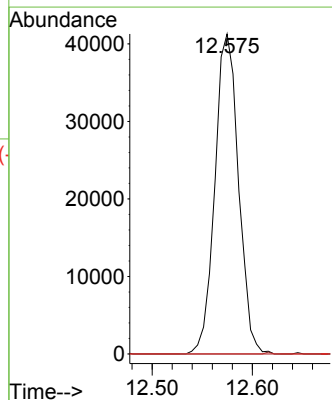
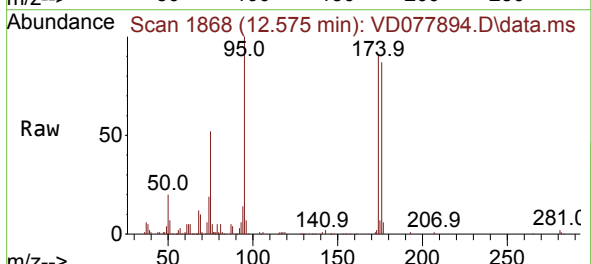
Instrument :  
MSVOA\_D  
ClientSampleId :

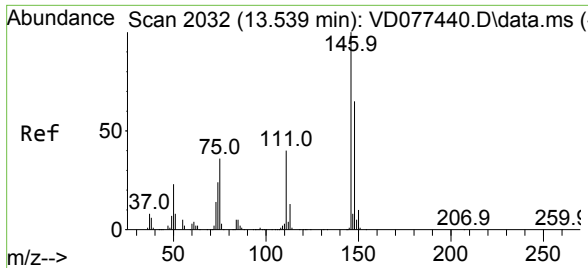
Tgt Ion: 75 Resp: 67469  
Ion Ratio Lower Upper  
75 100  
77 1.5 0.0 0.0#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 104.012 ug/l  
RT: 12.575 min Scan# 1868  
Delta R.T. 0.106 min  
Lab File: VD077894.D  
Acq: 15 Dec 2023 10:38

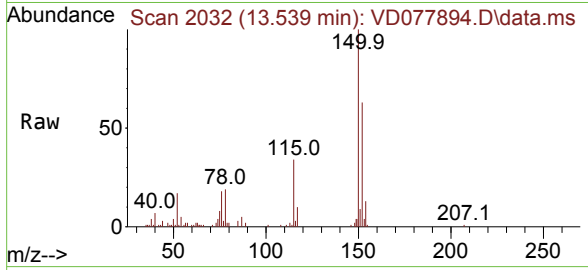
Tgt Ion: 75 Resp: 67469  
Ion Ratio Lower Upper  
75 100  
53 0.0 63.0 94.4#  
89 0.0 37.9 56.9#





#88  
 1,4-Dichlorobenzene  
 Concen: Below Cal  
 RT: 13.539 min Scan# 2032  
 Delta R.T. 0.000 min  
 Lab File: VD077894.D  
 Acq: 15 Dec 2023 10:38

Instrument :  
 MSVOA\_D  
 ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 275   |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 0.0   | 17.4  | 52.3# |
| 148      | 0.0   | 31.7  | 95.1# |

