

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN110223\  
 Data File : VN079831.D  
 Acq On : 03 Nov 2023 07:32  
 Operator : JC\MD  
 Sample : 05222-16  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 52 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Nov 03 08:53:08 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N110123W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Nov 02 05:49:08 2023  
 Response via : Initial Calibration

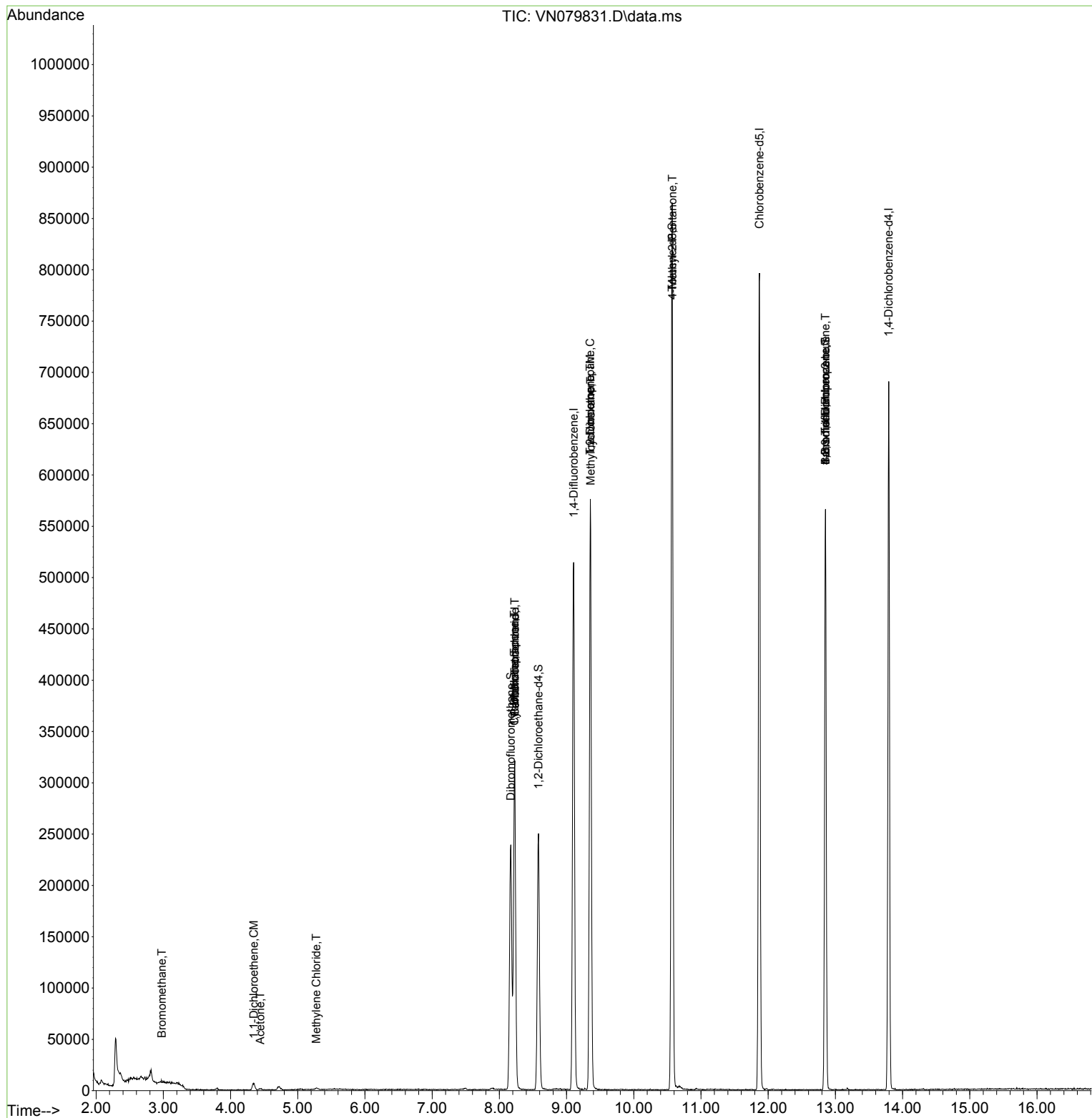
| Compound                      | R.T.   | QIon  | Response | Conc      | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|------------|----------|
| -----                         |        |       |          |           |            |          |
| Internal Standards            |        |       |          |           |            |          |
| 1) Pentafluorobenzene         | 8.230  | 168   | 222059   | 50.000    | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.106  | 114   | 433489   | 50.000    | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.870 | 117   | 452708   | 50.000    | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.794 | 152   | 174278   | 50.000    | ug/l       | 0.00     |
| System Monitoring Compounds   |        |       |          |           |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.582  | 65    | 199797   | 59.057    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery  | = 118.120% |          |
| 35) Dibromofluoromethane      | 8.171  | 113   | 169601   | 55.280    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery  | = 110.560% |          |
| 50) Toluene-d8                | 10.571 | 98    | 573782   | 50.801    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery  | = 101.600% |          |
| 62) 4-Bromofluorobenzene      | 12.853 | 95    | 191713   | 51.180    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 83 - 123 | Recovery  | = 102.360% |          |
| Target Compounds              |        |       |          |           |            |          |
|                               |        |       |          |           | Qvalue     |          |
| 3) Chloromethane              | 2.365  | 50    | 1982     | Below Cal | #          | 87       |
| 5) Bromomethane               | 2.977  | 94    | 589      | 0.277     | ug/l #     | 81       |
| 12) 1,1-Dichloroethene        | 4.347  | 96    | 3784     | 1.583     | ug/l #     | 65       |
| 16) Acetone                   | 4.442  | 43    | 2216     | 1.865     | ug/l #     | 40       |
| 20) Methylene Chloride        | 5.277  | 84    | 927      | 0.309     | ug/l #     | 56       |
| 31) Cyclohexane               | 8.224  | 56    | 5710     | 1.277     | ug/l #     | 16       |
| 36) 1,1-Dichloropropene       | 8.224  | 75    | 20716    | 4.729     | ug/l #     | 48       |
| 38) Carbon Tetrachloride      | 8.230  | 117   | 23970    | 5.429     | ug/l #     | 14       |
| 39) Methylcyclohexane         | 9.359  | 83    | 2742     | 0.665     | ug/l #     | 1        |
| 44) Trichloroethene           | 9.353  | 130   | 196984   | 60.502    | ug/l       | 98       |
| 45) 1,2-Dichloropropane       | 9.353  | 63    | 818      | 0.244     | ug/l #     | 1        |
| 51) 4-Methyl-2-Pentanone      | 10.576 | 43    | 3290     | 0.829     | ug/l #     | 1        |
| 71) Bromoform                 | 12.853 | 173   | 1717     | 0.683     | ug/l #     | 1        |
| 76) 1,2,3-Trichloropropane    | 12.853 | 75    | 104899   | 25.638    | ug/l #     | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.853 | 75    | 104899   | 69.755    | ug/l #     | 15       |
| -----                         |        |       |          |           |            |          |

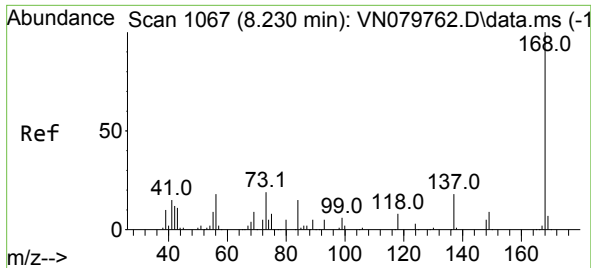
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN110223\  
Data File : VN079831.D  
Acq On : 03 Nov 2023 07:32  
Operator : JC\MD  
Sample : 05222-16  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 52 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Nov 03 08:53:08 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N110123W.M  
Quant Title : SW846 8260  
QLast Update : Thu Nov 02 05:49:08 2023  
Response via : Initial Calibration

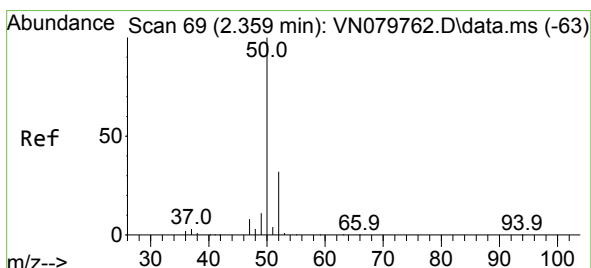
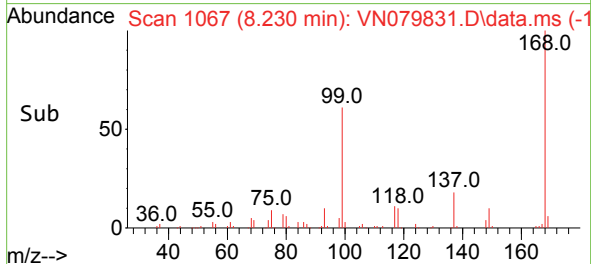
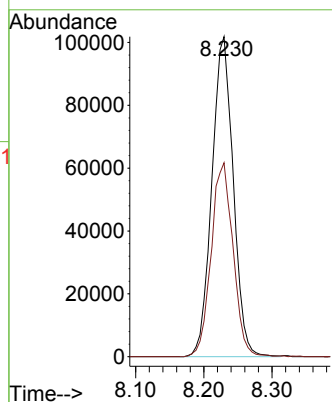
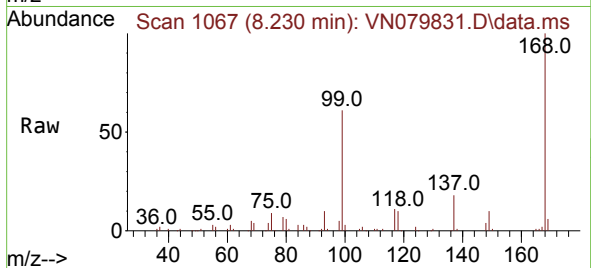




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.230 min Scan# 1  
Delta R.T. 0.001 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

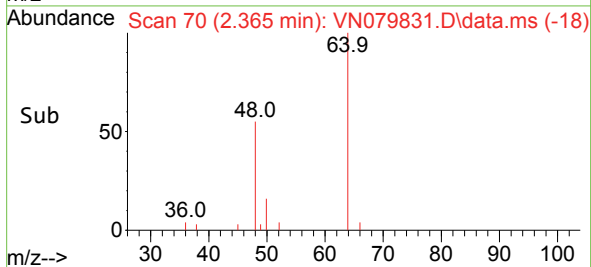
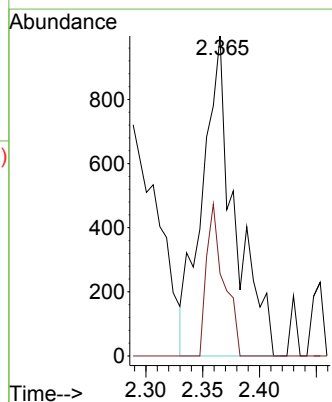
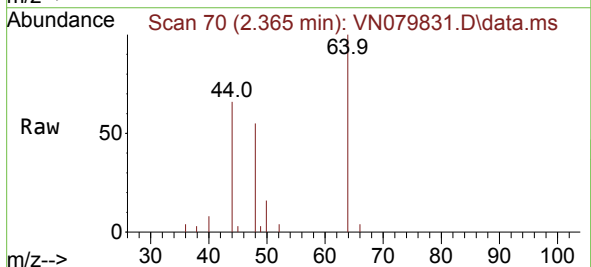
Instrument :  
MSVOA\_N  
ClientSampleId :

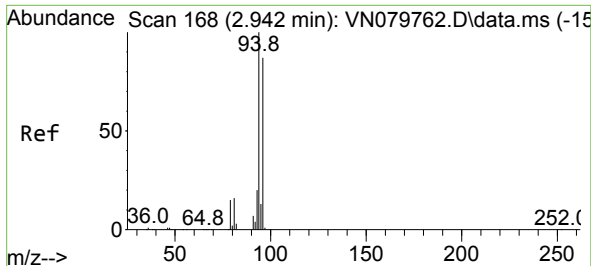
Tgt Ion:168 Resp: 222059  
Ion Ratio Lower Upper  
168 100  
99 60.6 53.0 79.6



#3  
Chloromethane  
Concen: Below Cal  
RT: 2.365 min Scan# 70  
Delta R.T. 0.006 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

Tgt Ion: 50 Resp: 1982  
Ion Ratio Lower Upper  
50 100  
52 25.8 26.5 39.7#

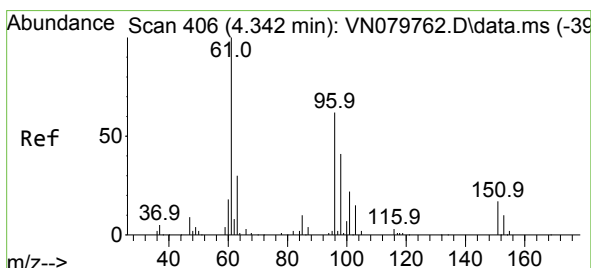
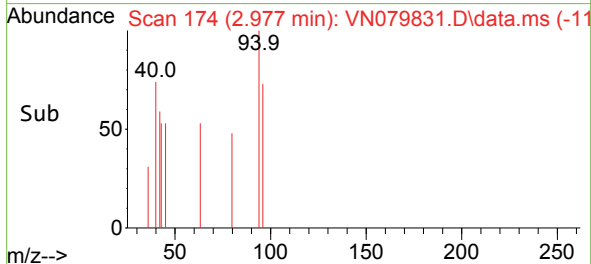
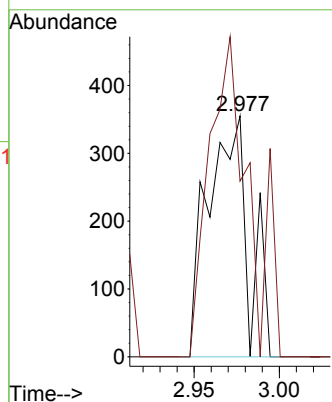
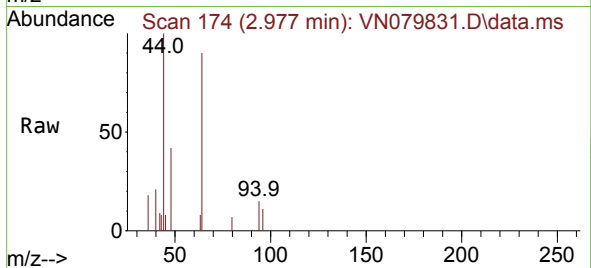




#5  
Bromomethane  
Concen: 0.277 ug/l  
RT: 2.977 min Scan# 11  
Delta R.T. 0.024 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

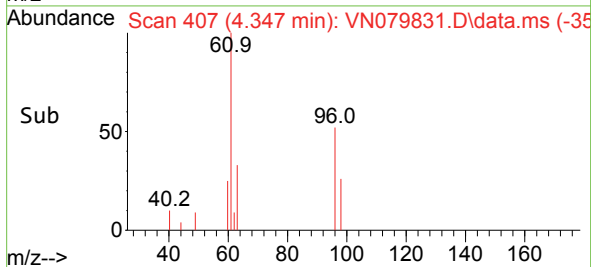
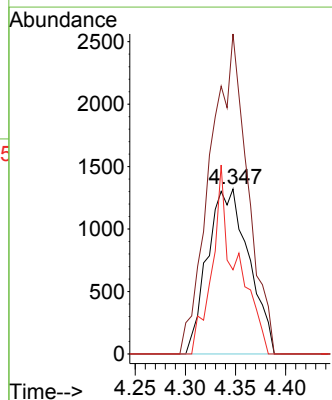
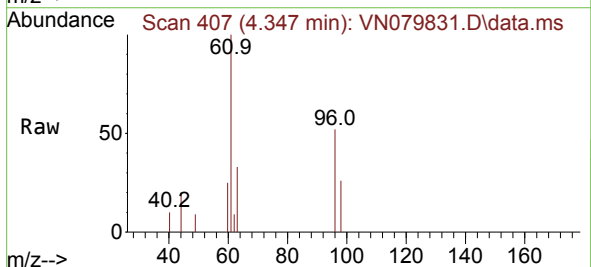
Instrument :  
MSVOA\_N  
ClientSampleId :

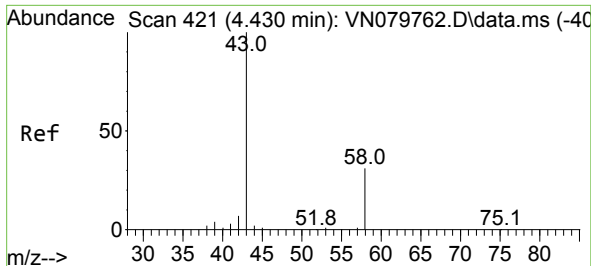
Tgt Ion: 94 Resp: 589  
Ion Ratio Lower Upper  
94 100  
96 73.0 73.1 109.7#



#12  
1,1-Dichloroethene  
Concen: 1.583 ug/l  
RT: 4.347 min Scan# 407  
Delta R.T. 0.000 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

Tgt Ion: 96 Resp: 3784  
Ion Ratio Lower Upper  
96 100  
61 193.9 112.7 169.1#  
98 51.0 51.2 76.8#

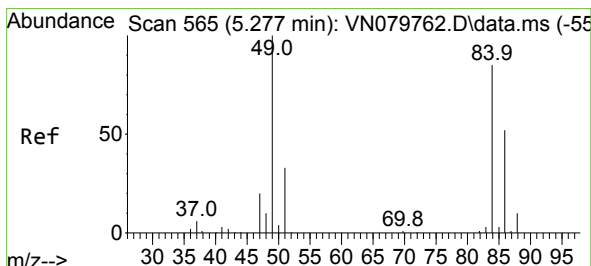
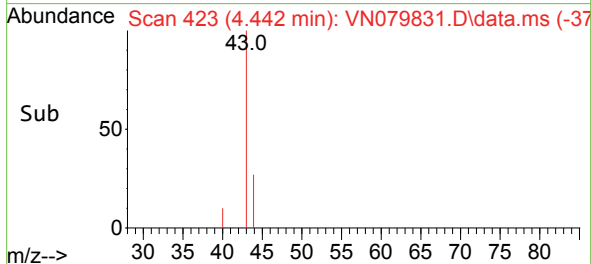
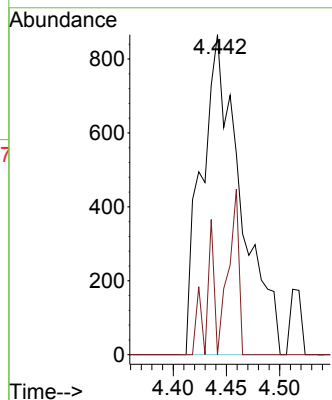
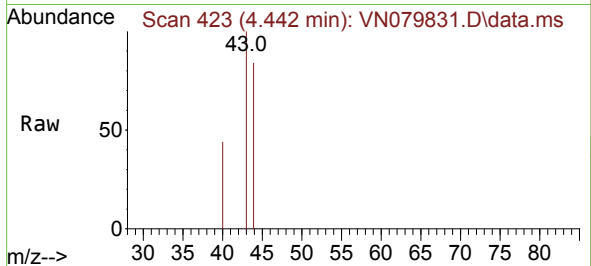




#16  
Acetone  
Concen: 1.865 ug/l  
RT: 4.442 min Scan# 41  
Delta R.T. 0.012 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

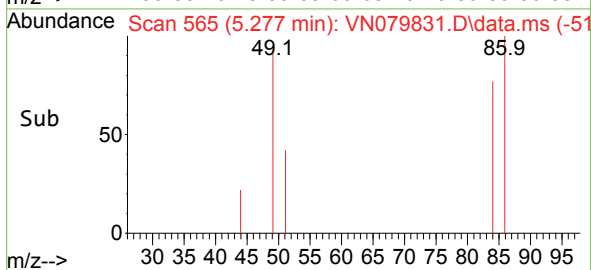
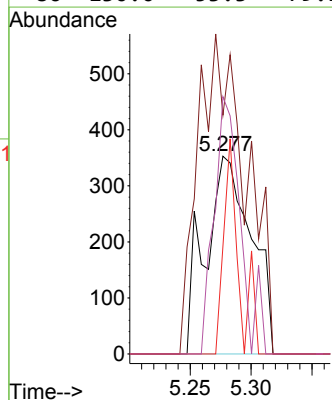
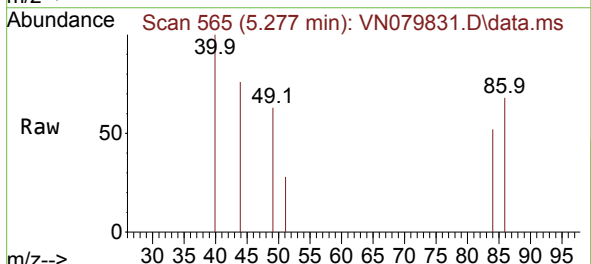
Instrument :  
MSVOA\_N  
ClientSampleId :

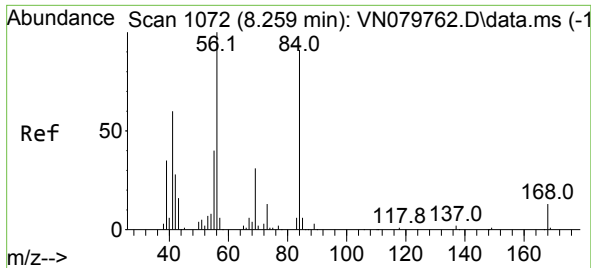
Tgt Ion: 43 Resp: 2216  
Ion Ratio Lower Upper  
43 100  
58 0.0 28.0 42.0#



#20  
Methylene Chloride  
Concen: 0.309 ug/l  
RT: 5.277 min Scan# 565  
Delta R.T. 0.006 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

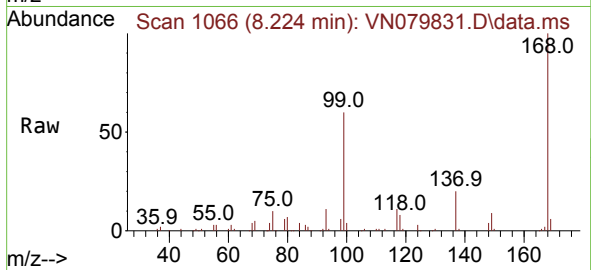
Tgt Ion: 84 Resp: 927  
Ion Ratio Lower Upper  
84 100  
49 120.7 79.7 119.5#  
51 54.4 25.2 37.8#  
86 130.0 53.3 79.9#



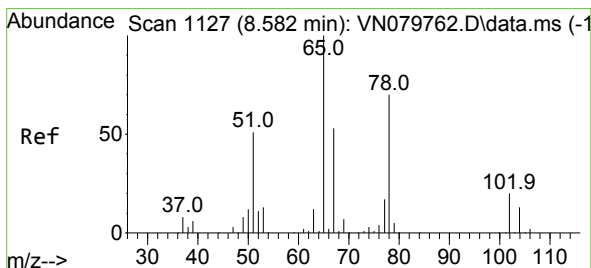
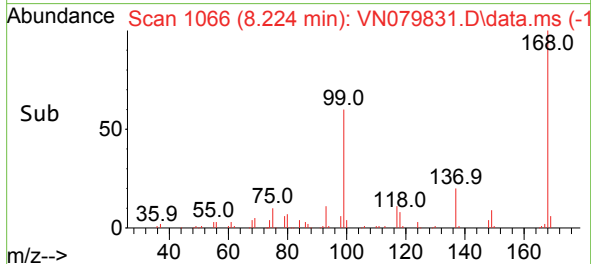
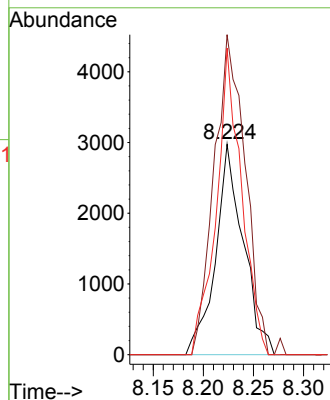


#31  
Cyclohexane  
Concen: 1.277 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.035 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

Instrument :  
MSVOA\_N  
ClientSampleId :

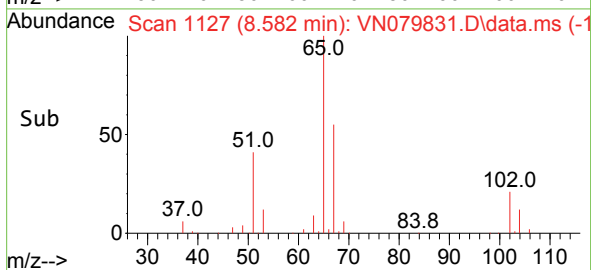
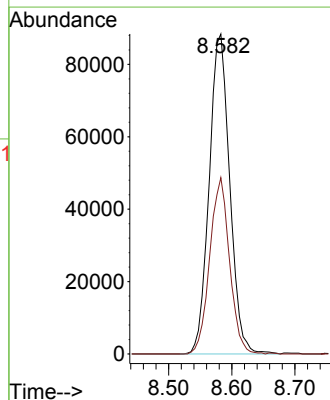
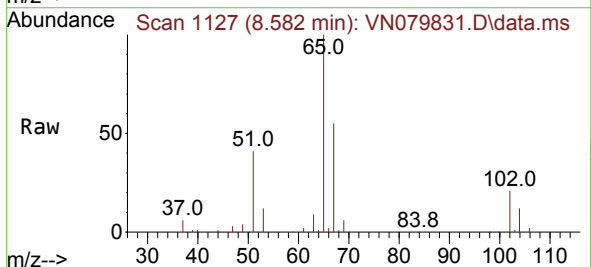


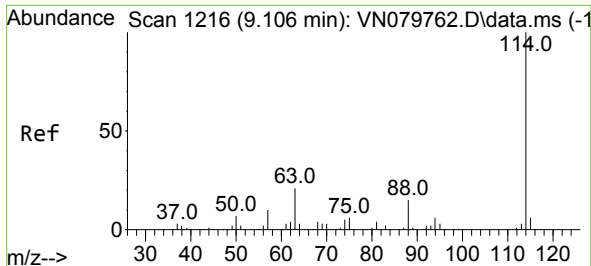
Tgt Ion: 56 Resp: 5710  
Ion Ratio Lower Upper  
56 100  
69 152.0 26.8 40.2#  
84 145.6 81.8 122.6#



#33  
1,2-Dichloroethane-d4  
Concen: 59.057 ug/l  
RT: 8.582 min Scan# 1127  
Delta R.T. 0.000 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

Tgt Ion: 65 Resp: 199797  
Ion Ratio Lower Upper  
65 100  
67 53.0 0.0 106.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.106 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN079831.D

Acq: 03 Nov 2023 07:32

Instrument :

MSVOA\_N

ClientSampleId :

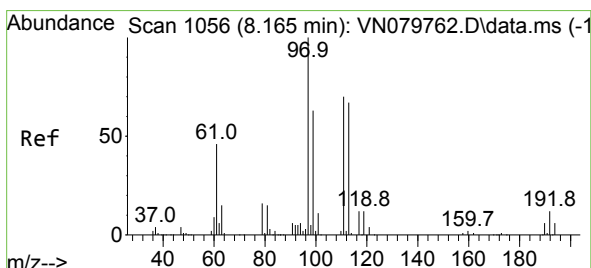
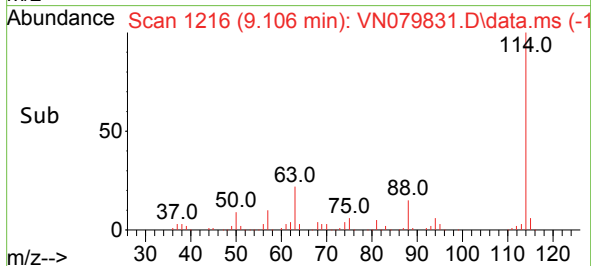
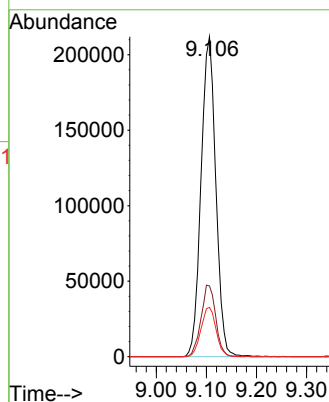
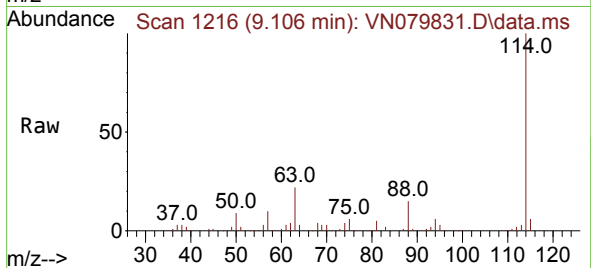
Tgt Ion:114 Resp: 433489

Ion Ratio Lower Upper

114 100

63 22.1 0.0 36.4

88 15.4 0.0 30.6



#35

Dibromofluoromethane

Concen: 55.280 ug/l

RT: 8.171 min Scan# 1057

Delta R.T. 0.000 min

Lab File: VN079831.D

Acq: 03 Nov 2023 07:32

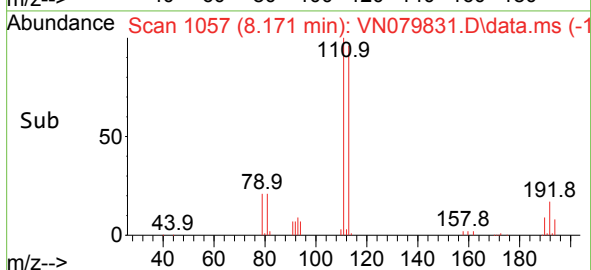
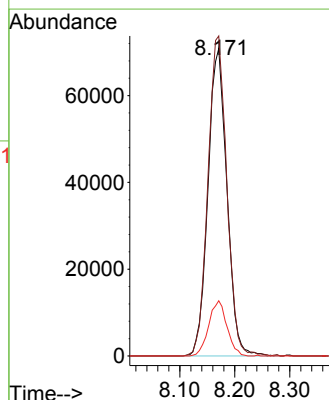
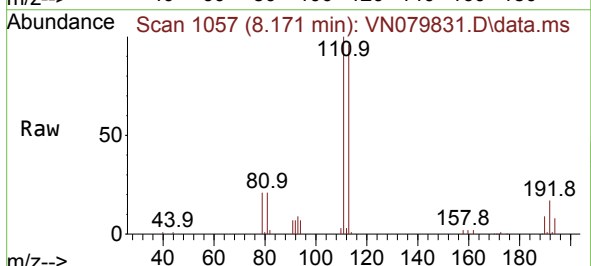
Tgt Ion:113 Resp: 169601

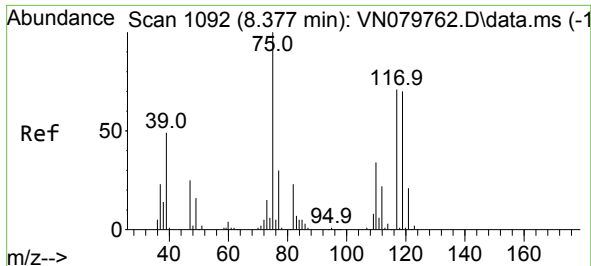
Ion Ratio Lower Upper

113 100

111 103.8 82.6 123.8

192 17.3 12.7 19.1





#36

1,1-Dichloropropene

Concen: 4.729 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.153 min

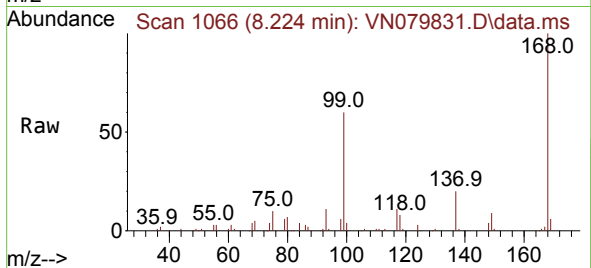
Lab File: VN079831.D

Acq: 03 Nov 2023 07:32

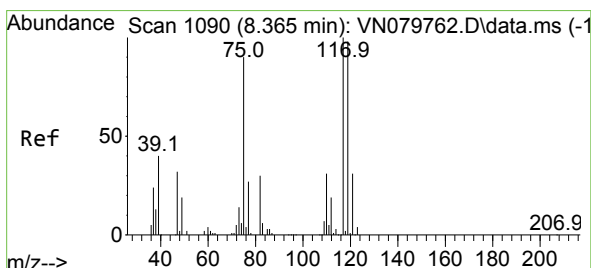
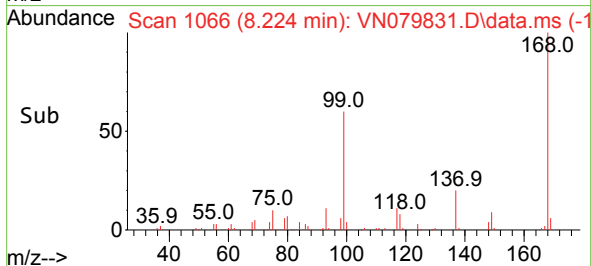
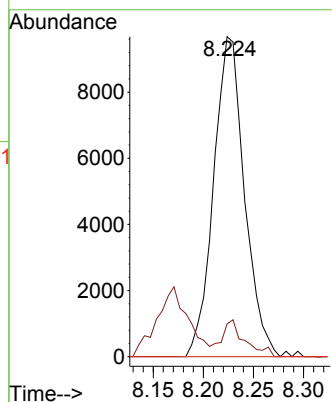
Instrument :

MSVOA\_N

ClientSampleId :



|             |                |
|-------------|----------------|
| Tgt Ion: 75 | Resp: 20716    |
| Ion Ratio   | Lower Upper    |
| 75          | 100            |
| 110         | 8.6 19.1 57.3# |
| 77          | 0.0 25.0 37.4# |



#38

Carbon Tetrachloride

Concen: 5.429 ug/l

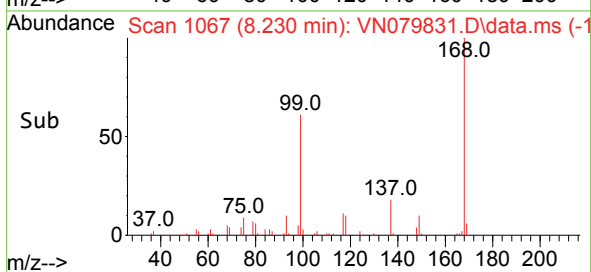
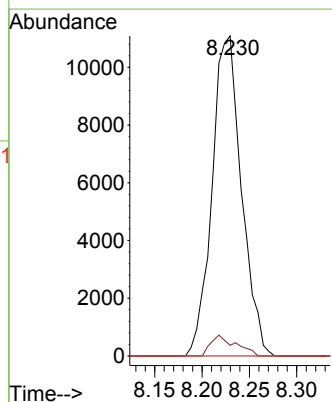
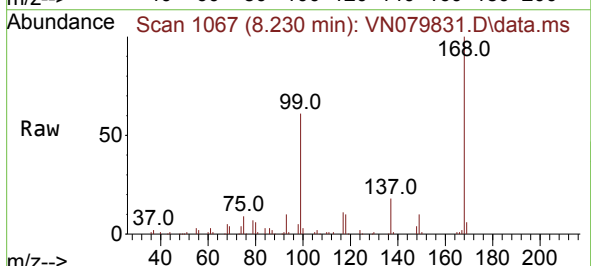
RT: 8.230 min Scan# 1067

Delta R.T. -0.129 min

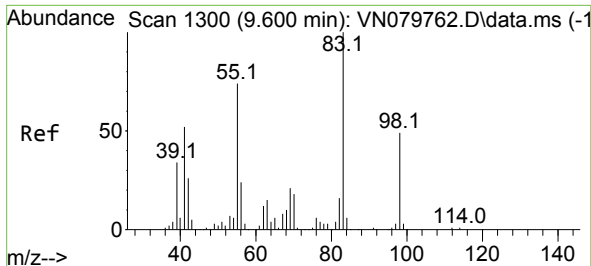
Lab File: VN079831.D

Acq: 03 Nov 2023 07:32

|              |                 |
|--------------|-----------------|
| Tgt Ion: 117 | Resp: 23970     |
| Ion Ratio    | Lower Upper     |
| 117          | 100             |
| 119          | 3.3 77.3 115.9# |
| 121          | 0.0 23.3 34.9#  |

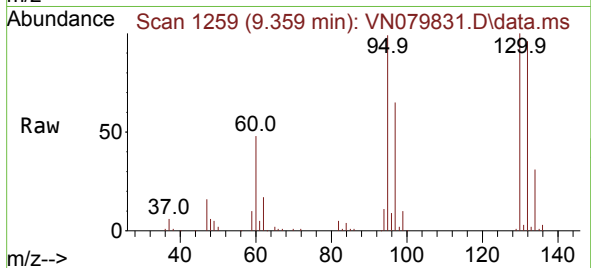




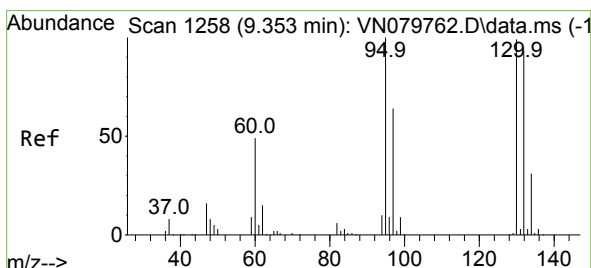
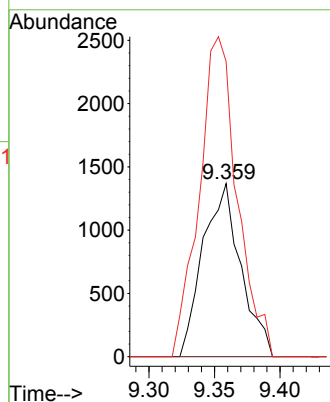
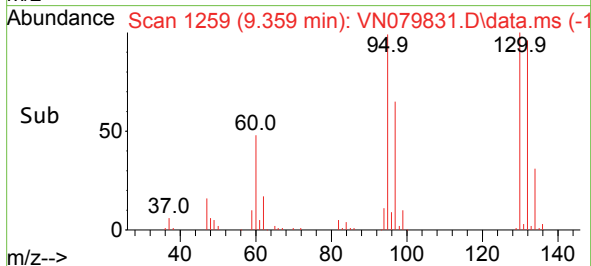


#39  
Methylcyclohexane  
Concen: 0.665 ug/l  
RT: 9.359 min Scan# 1259  
Delta R.T. -0.247 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

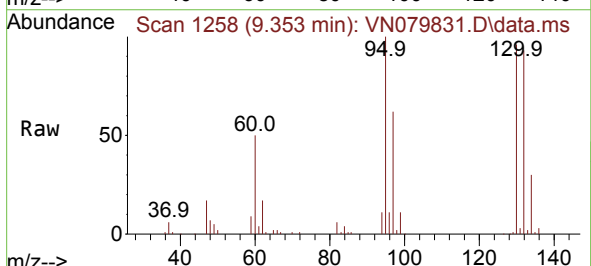
Instrument :  
MSVOA\_N  
ClientSampleId :



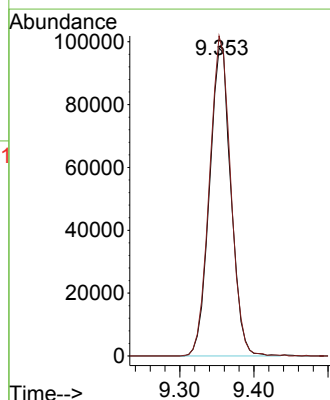
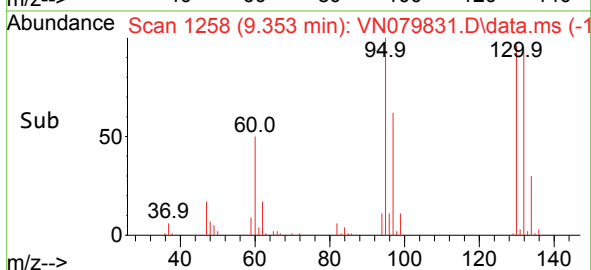
Tgt Ion: 83 Resp: 2742  
Ion Ratio Lower Upper  
83 100  
55 0.0 49.1 73.7#  
98 170.5 40.6 61.0#

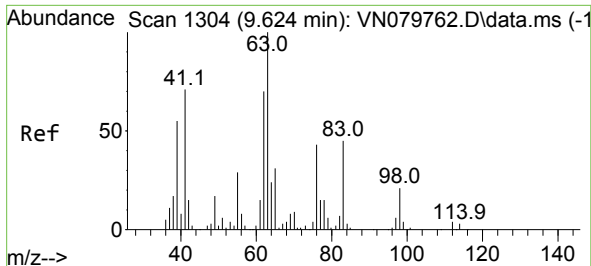


#44  
Trichloroethene  
Concen: 60.502 ug/l  
RT: 9.353 min Scan# 1258  
Delta R.T. 0.000 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32



Tgt Ion:130 Resp: 196984  
Ion Ratio Lower Upper  
130 100  
95 103.9 0.0 204.6





#45

1,2-Dichloropropane

Concen: 0.244 ug/l

RT: 9.353 min Scan# 1258

Delta R.T. -0.271 min

Lab File: VN079831.D

Acq: 03 Nov 2023 07:32

Instrument :

MSVOA\_N

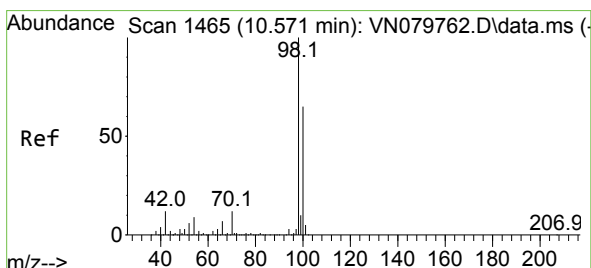
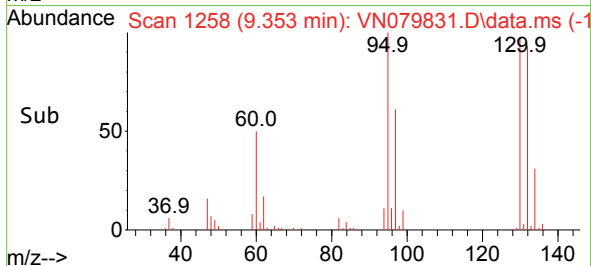
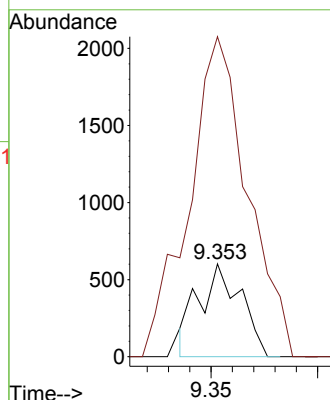
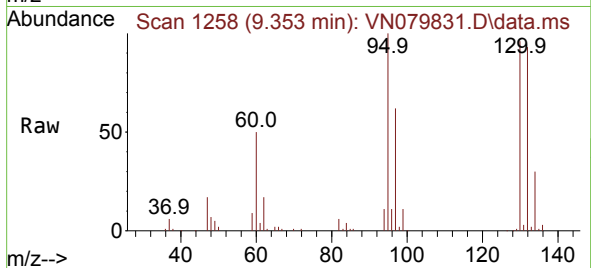
ClientSampleId :

Tgt Ion: 63 Resp: 818

Ion Ratio Lower Upper

63 100

65 280.1 23.9 35.9#



#50

Toluene-d8

Concen: 50.801 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. 0.000 min

Lab File: VN079831.D

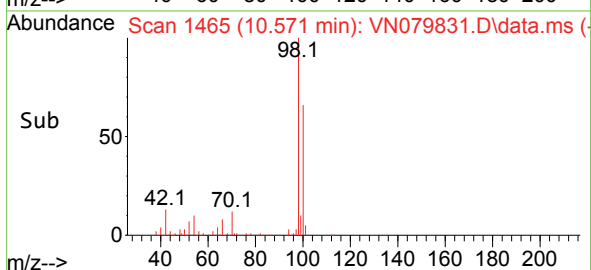
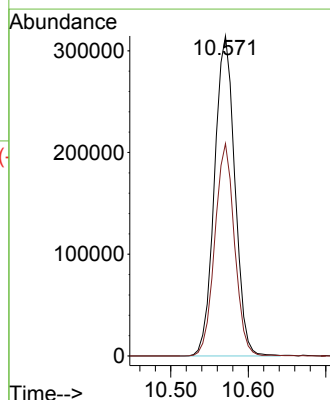
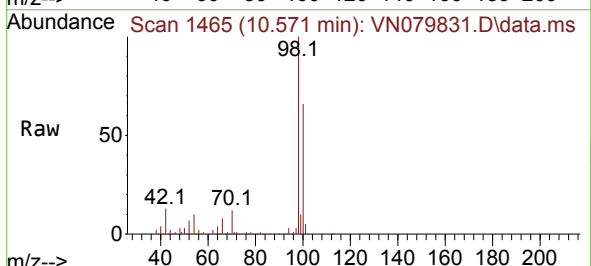
Acq: 03 Nov 2023 07:32

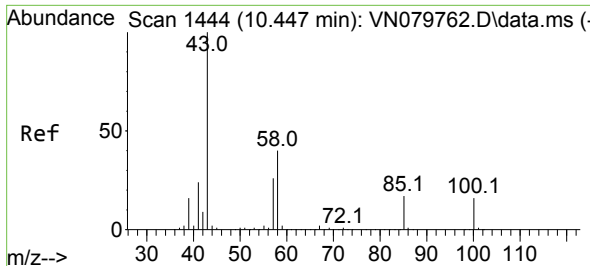
Tgt Ion: 98 Resp: 573782

Ion Ratio Lower Upper

98 100

100 64.4 52.0 78.0

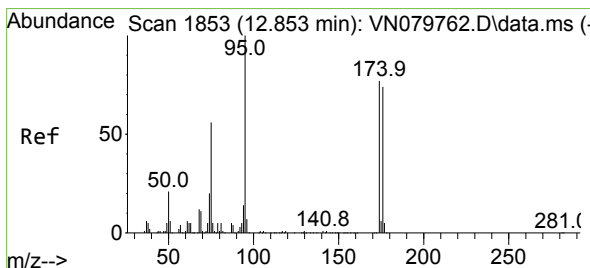
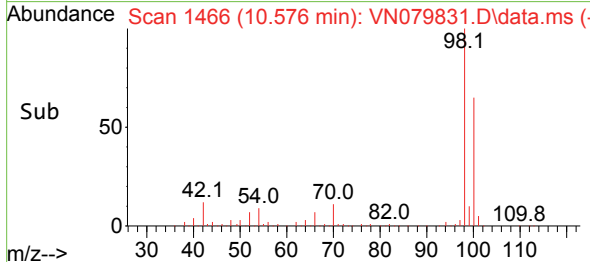
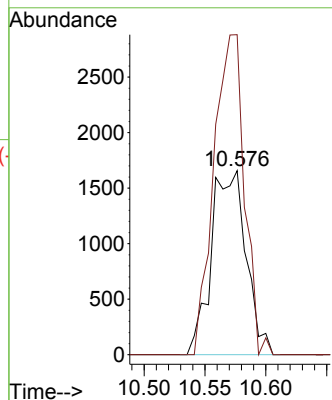
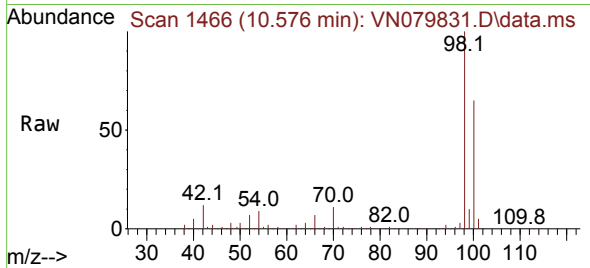




#51  
4-Methyl-2-Pentanone  
Concen: 0.829 ug/l  
RT: 10.576 min Scan# 1444  
Delta R.T. 0.129 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

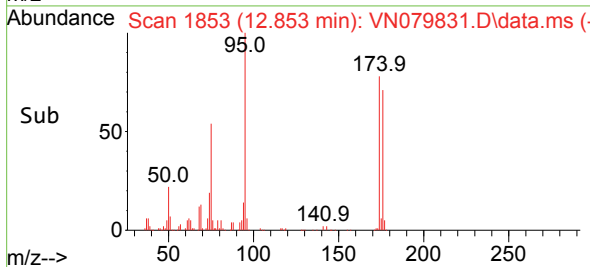
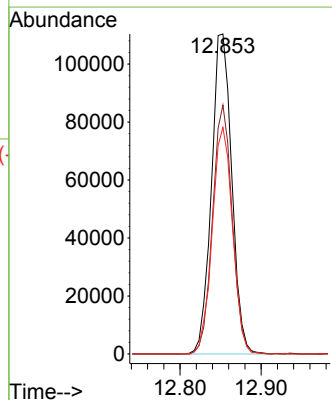
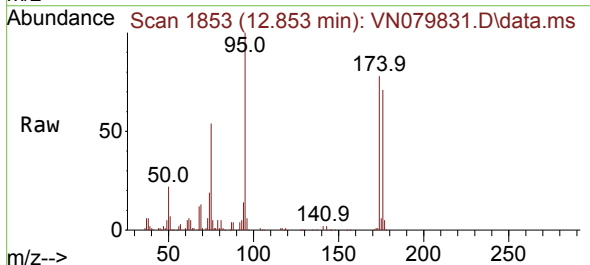
Instrument :  
MSVOA\_N  
ClientSampleId :

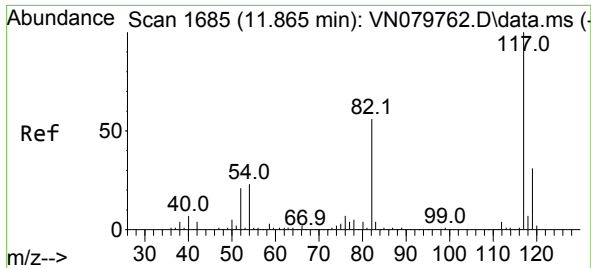
Tgt Ion: 43 Resp: 3290  
Ion Ratio Lower Upper  
43 100  
58 153.3 36.6 54.8#



#62  
4-Bromofluorobenzene  
Concen: 51.180 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.000 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

Tgt Ion: 95 Resp: 191713  
Ion Ratio Lower Upper  
95 100  
174 75.3 0.0 143.8  
176 70.7 0.0 135.8

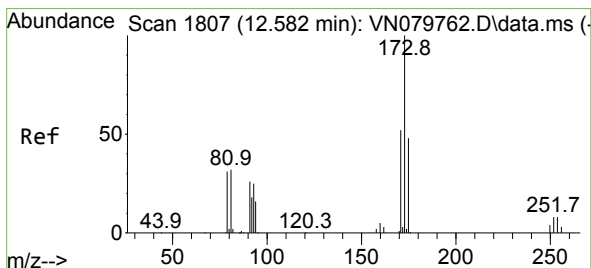
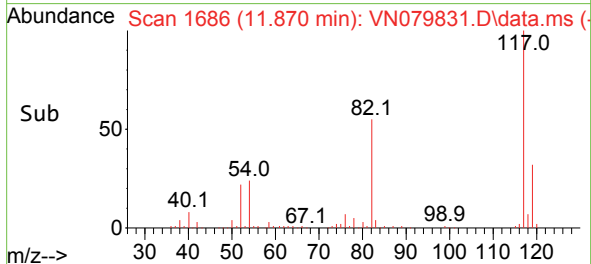
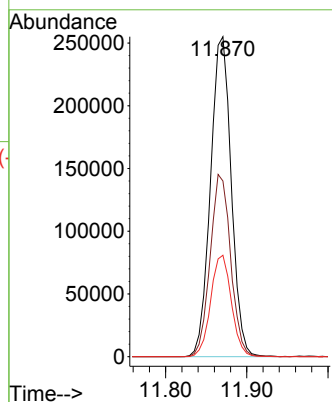
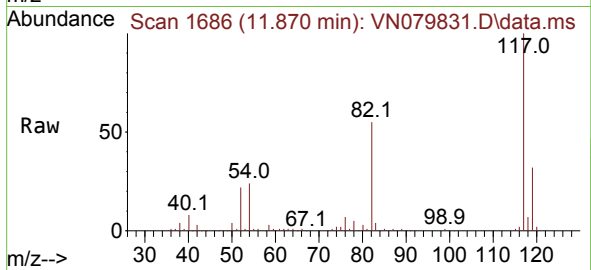




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.870 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

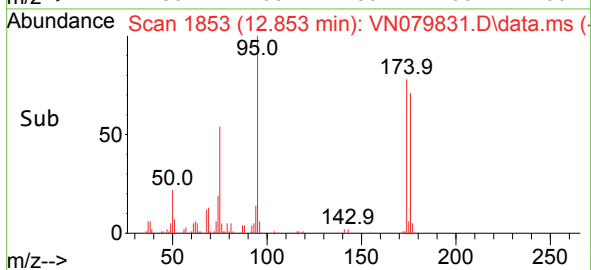
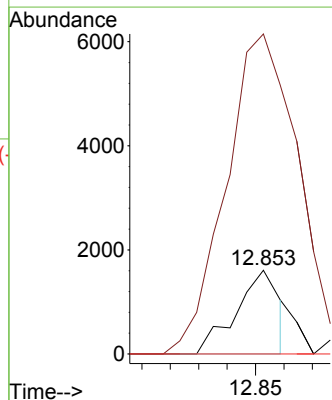
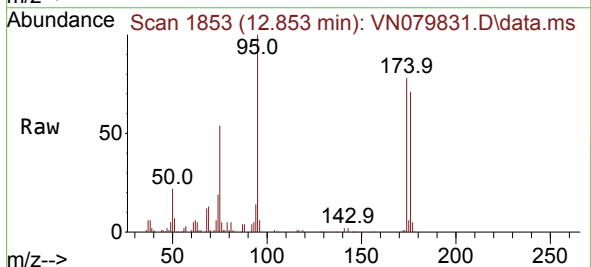
Instrument :  
MSVOA\_N  
ClientSampleId :

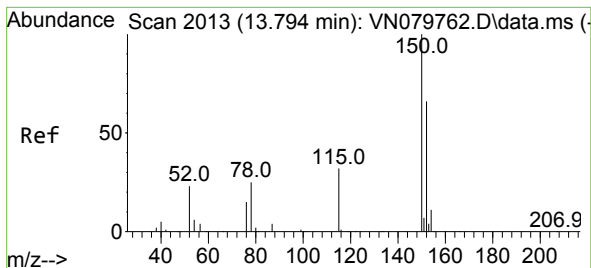
Tgt Ion:117 Resp: 452708  
Ion Ratio Lower Upper  
117 100  
82 54.9 44.0 66.0  
119 31.7 25.6 38.4



#71  
Bromoform  
Concen: 0.683 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.271 min  
Lab File: VN079831.D  
Acq: 03 Nov 2023 07:32

Tgt Ion:173 Resp: 1717  
Ion Ratio Lower Upper  
173 100  
175 491.5 24.3 73.0#  
254 0.0 0.0 0.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.794 min Scan# 20

Delta R.T. 0.000 min

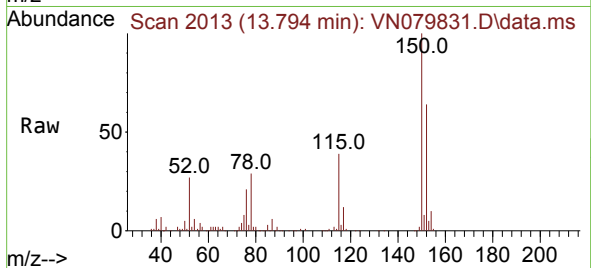
Lab File: VN079831.D

Acq: 03 Nov 2023 07:32

Instrument :

MSVOA\_N

ClientSampleId :



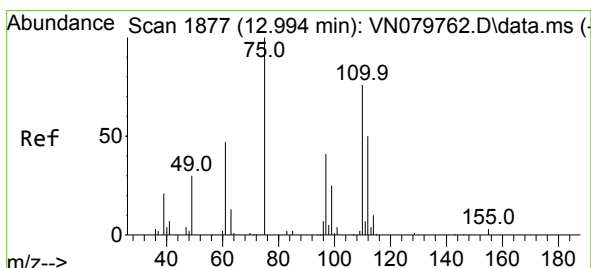
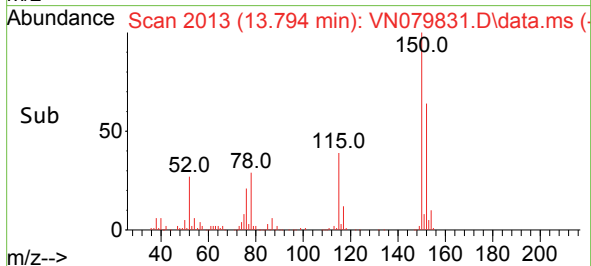
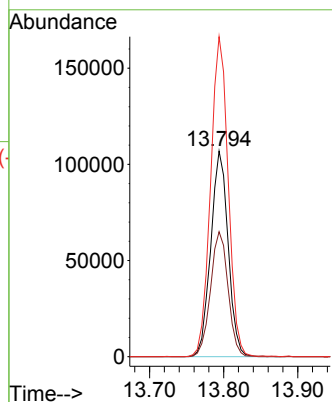
Tgt Ion:152 Resp: 174278

Ion Ratio Lower Upper

152 100

115 61.2 32.3 96.8

150 157.4 0.0 355.8



#76

1,2,3-Trichloropropane

Concen: 25.638 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. -0.141 min

Lab File: VN079831.D

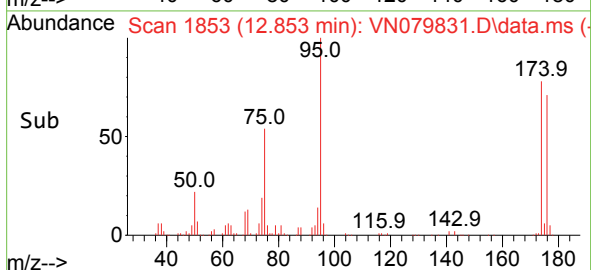
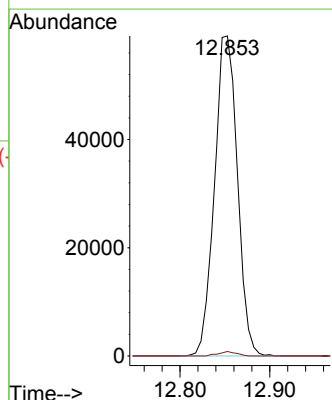
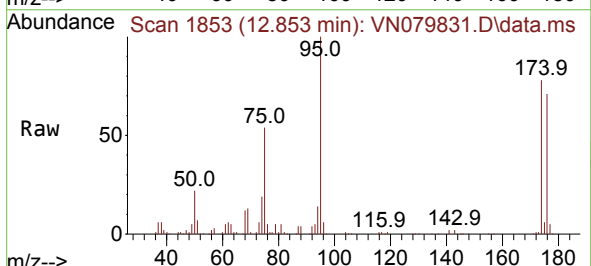
Acq: 03 Nov 2023 07:32

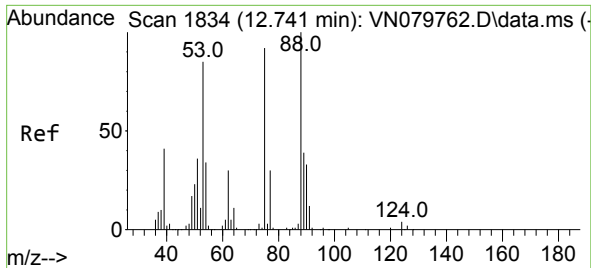
Tgt Ion: 75 Resp: 104899

Ion Ratio Lower Upper

75 100

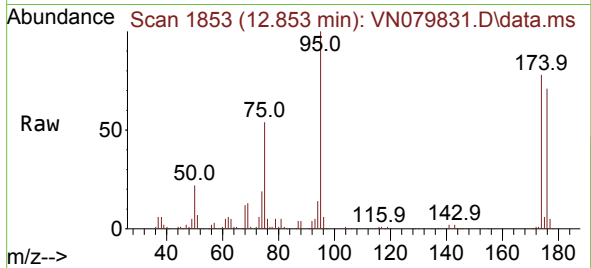
77 1.1 84.5 253.5#





#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 69.755 ug/l  
 RT: 12.853 min Scan# 11  
 Delta R.T. 0.118 min  
 Lab File: VN079831.D  
 Acq: 03 Nov 2023 07:32

Instrument :  
 MSVOA\_N  
 ClientSampleId :



Tgt Ion: 75 Resp: 104899  
 Ion Ratio Lower Upper  
 75 100  
 53 0.2 67.4 101.2#  
 89 0.1 38.8 58.2#

