

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN092724\  
 Data File : VN084206.D  
 Acq On : 27 Sep 2024 16:18  
 Operator : JC\MD  
 Sample : PB163689ZHE#3  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

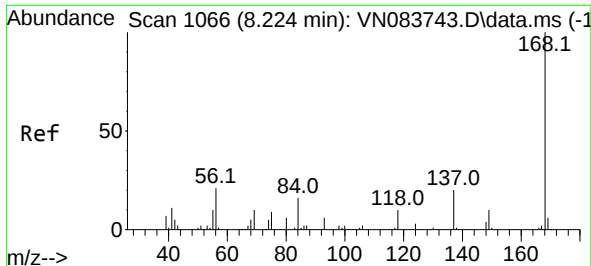
Quant Time: Sep 28 01:00:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N091024W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 11 15:18:56 2024  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response   | Conc      | Units  | Dev(Min) |
|-------------------------------|----------------|------|------------|-----------|--------|----------|
| -----                         |                |      |            |           |        |          |
| Internal Standards            |                |      |            |           |        |          |
| 1) Pentafluorobenzene         | 8.224          | 168  | 180778     | 50.000    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100          | 114  | 320374     | 50.000    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865         | 117  | 275905     | 50.000    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788         | 152  | 116965     | 50.000    | ug/l   | 0.00     |
|                               |                |      |            |           |        |          |
| System Monitoring Compounds   |                |      |            |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577          | 65   | 131695     | 48.313    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 74 - 125 |      | Recovery = | 96.620%   |        |          |
| 35) Dibromofluoromethane      | 8.165          | 113  | 100287     | 48.897    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 75 - 124 |      | Recovery = | 97.800%   |        |          |
| 50) Toluene-d8                | 10.565         | 98   | 383010     | 54.018    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 86 - 113 |      | Recovery = | 108.040%  |        |          |
| 62) 4-Bromofluorobenzene      | 12.847         | 95   | 129421     | 44.242    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 77 - 121 |      | Recovery = | 88.480%   |        |          |
|                               |                |      |            |           |        |          |
| Target Compounds              |                |      |            |           |        | Qvalue   |
| 3) Chloromethane              | 2.359          | 50   | 131        | Below Cal | #      | 6        |
| 11) Tert butyl alcohol        | 5.530          | 59   | 500        | 1.370     | ug/l # | 71       |
| 16) Acetone                   | 4.430          | 43   | 63562      | 58.168    | ug/l   | 100      |
| 18) Methyl Acetate            | 5.030          | 43   | 1985       | Below Cal | #      | 57       |
| 20) Methylene Chloride        | 5.283          | 84   | 9117       | 4.077     | ug/l   | 96       |
| 25) 2-Butanone                | 7.494          | 43   | 9036       | 6.291     | ug/l   | 96       |
| 29) Tetrahydrofuran           | 7.836          | 42   | 919        | 1.082     | ug/l # | 32       |
| 31) Cyclohexane               | 8.224          | 56   | 4749       | 1.205     | ug/l # | 3        |
| 36) 1,1-Dichloropropene       | 8.218          | 75   | 16781      | 5.436     | ug/l # | 50       |
| 37) Ethyl Acetate             | 7.559          | 43   | 3431       | 1.224     | ug/l # | 82       |
| 38) Carbon Tetrachloride      | 8.224          | 117  | 20781      | 5.934     | ug/l # | 16       |
| 42) 1,2-Dichloroethane        | 8.688          | 62   | 1197       | 0.345     | ug/l # | 77       |
| 43) Isopropyl Acetate         | 8.688          | 43   | 335146     | 66.002    | ug/l # | 72       |
| 45) 1,2-Dichloropropane       | 9.741          | 63   | 1372       | 0.611     | ug/l # | 42       |
| 48) Methyl methacrylate       | 9.665          | 41   | 3292       | 1.366     | ug/l # | 45       |
| 51) 4-Methyl-2-Pentanone      | 10.441         | 43   | 13779      | 4.985     | ug/l # | 81       |
| 53) t-1,3-Dichloropropene     | 10.724         | 75   | 788        | 0.228     | ug/l # | 42       |
| 54) cis-1,3-Dichloropropene   | 10.359         | 75   | 40938      | 11.294    | ug/l # | 61       |
| 56) Ethyl methacrylate        | 10.988         | 69   | 1153       | 0.353     | ug/l # | 1        |
| 57) 1,3-Dichloropropane       | 11.200         | 76   | 5857       | 1.606     | ug/l # | 42       |
| 59) 2-Hexanone                | 11.200         | 43   | 68263      | 33.386    | ug/l # | 55       |
| 74) N-amyl acetate            | 12.482         | 43   | 1586       | 0.411     | ug/l # | 45       |
| 76) 1,2,3-Trichloropropane    | 12.847         | 75   | 70152      | 29.724    | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847         | 75   | 70152      | 77.849    | ug/l # | 9        |
| 95) Naphthalene               | 15.641         | 128  | 59172      | 9.136     | ug/l   | 98       |
| -----                         |                |      |            |           |        |          |

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

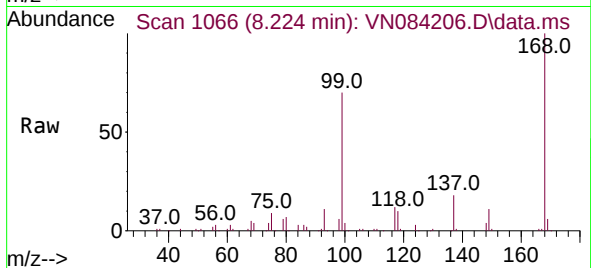
Quant Time: Sep 28 01:00:47 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N091024W.M  
Quant Title : SW846 8260  
QLast Update : Wed Sep 11 15:18:56 2024  
Response via : Initial Calibration



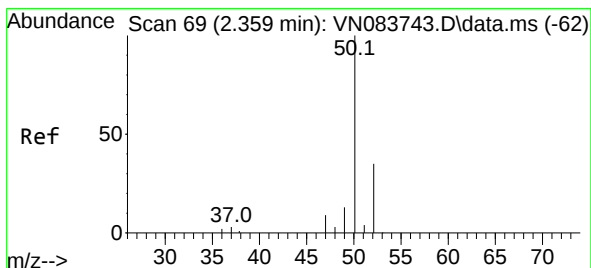
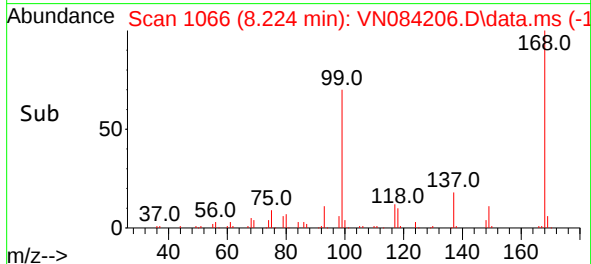
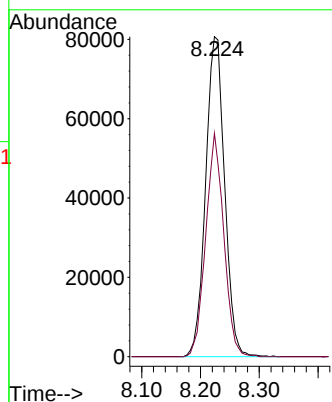


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

Instrument :  
MSVOA\_N  
ClientSampleId :

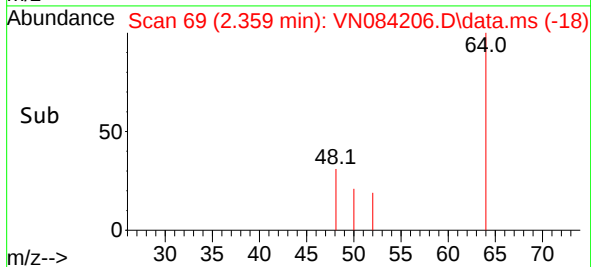
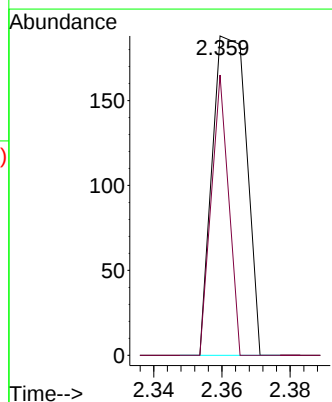
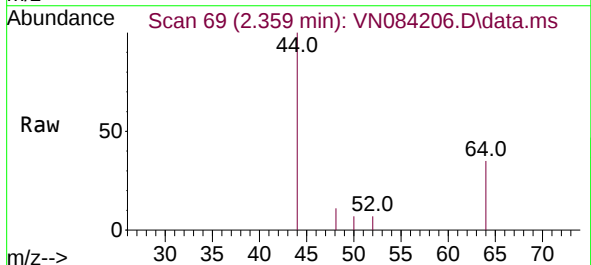


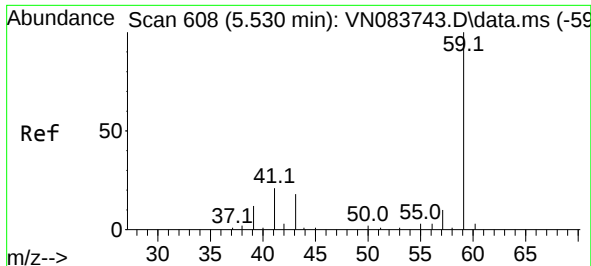
Tgt Ion:168 Resp: 180778  
Ion Ratio Lower Upper  
168 100  
99 69.8 54.2 81.2



#3  
Chloromethane  
Concen: Below Cal  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

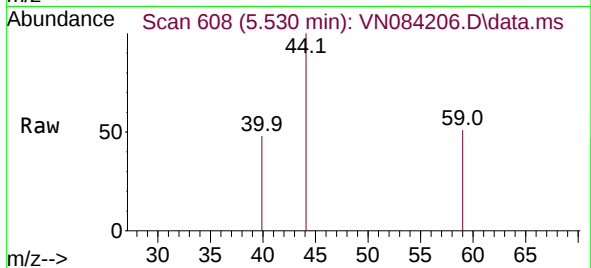
Tgt Ion: 50 Resp: 131  
Ion Ratio Lower Upper  
50 100  
52 87.8 27.2 40.8#



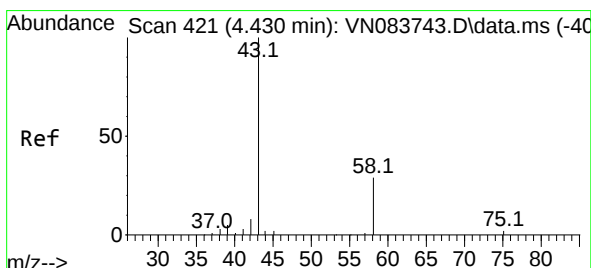
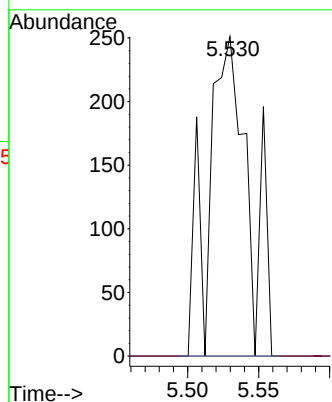
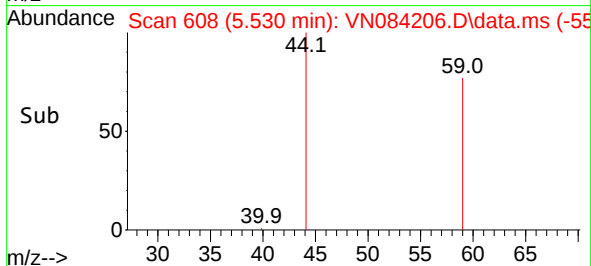


#11  
Tert butyl alcohol  
Concen: 1.370 ug/l  
RT: 5.530 min Scan# 608  
Delta R.T. 0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

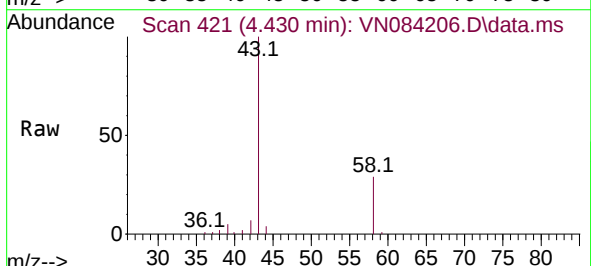
Instrument :  
MSVOA\_N  
ClientSampleId :



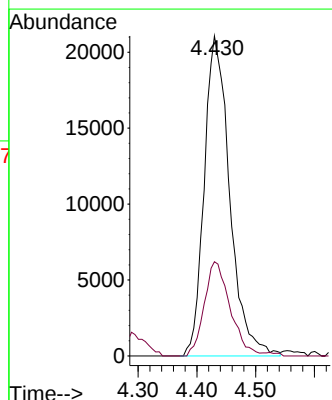
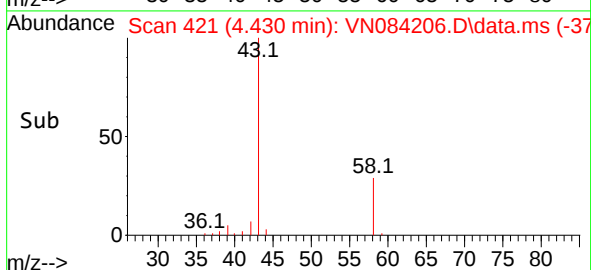
Tgt Ion: 59 Resp: 500  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.7 13.1#

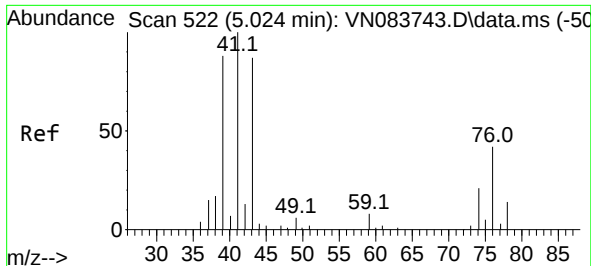


#16  
Acetone  
Concen: 58.168 ug/l  
RT: 4.430 min Scan# 421  
Delta R.T. 0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18



Tgt Ion: 43 Resp: 63562  
Ion Ratio Lower Upper  
43 100  
58 29.5 23.7 35.5





#18

Methyl Acetate

Concen: Below Cal

RT: 5.030 min Scan# 51

Delta R.T. 0.006 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

Instrument :

MSVOA\_N

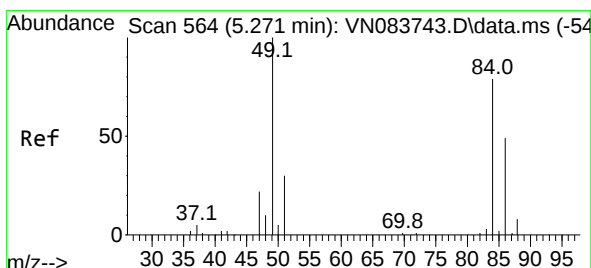
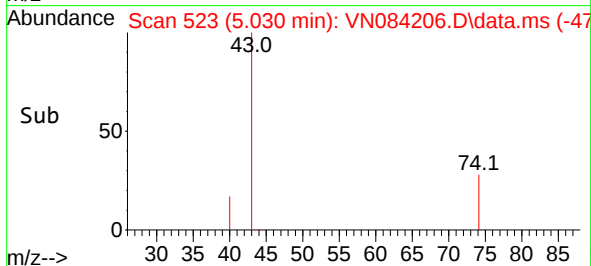
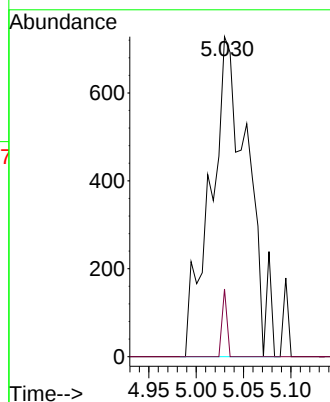
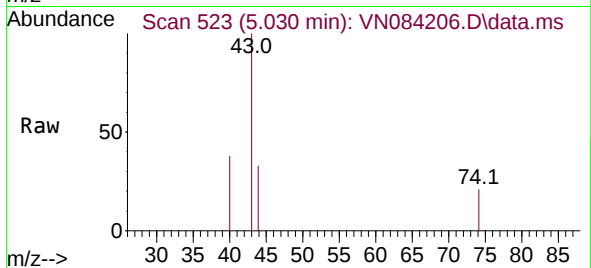
ClientSampleId :

Tgt Ion: 43 Resp: 1985

Ion Ratio Lower Upper

43 100

74 2.7 19.0 28.4#



#20

Methylene Chloride

Concen: 4.077 ug/l

RT: 5.283 min Scan# 566

Delta R.T. 0.012 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

Tgt Ion: 84 Resp: 9117

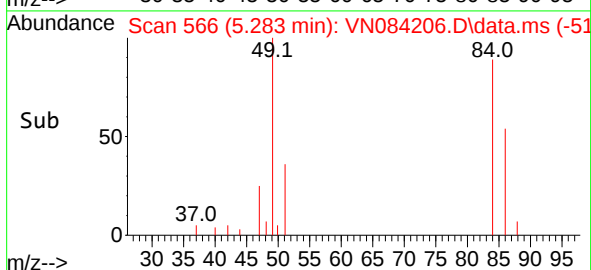
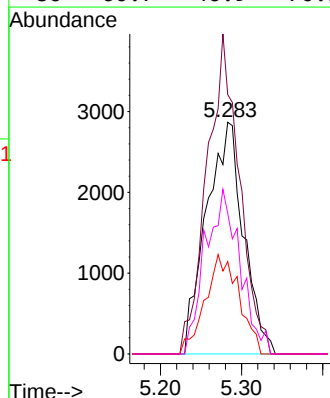
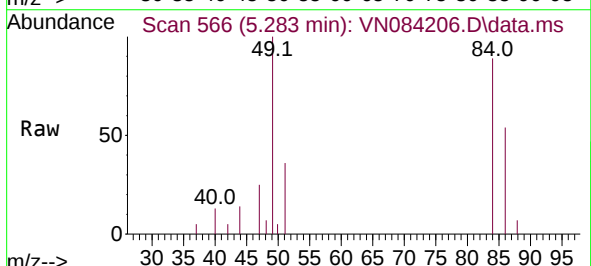
Ion Ratio Lower Upper

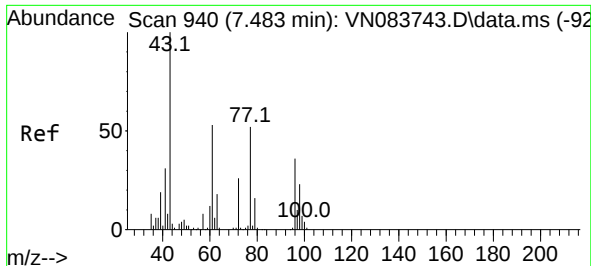
84 100

49 112.0 93.4 140.0

51 39.8 29.2 43.8

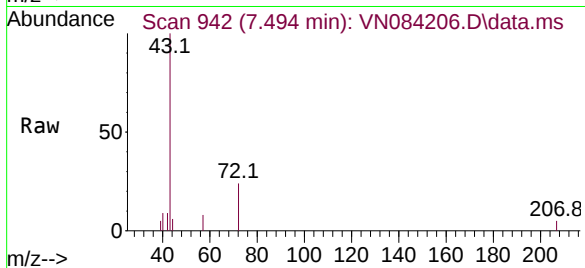
86 60.7 46.9 70.3



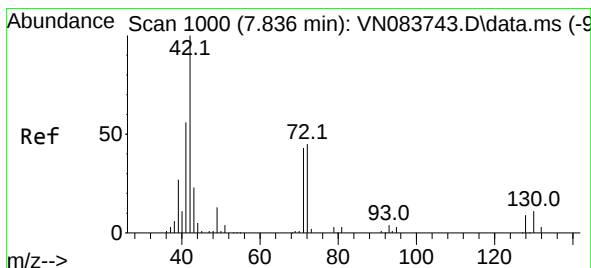
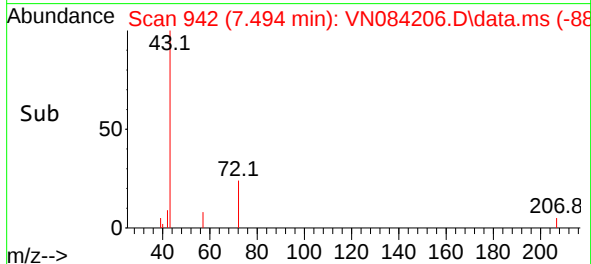
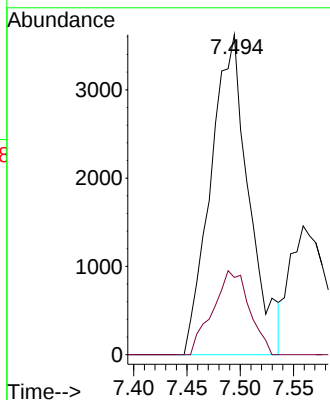


#25  
2-Butanone  
Concen: 6.291 ug/l  
RT: 7.494 min Scan# 940  
Delta R.T. 0.012 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

Instrument :  
MSVOA\_N  
ClientSampleId :

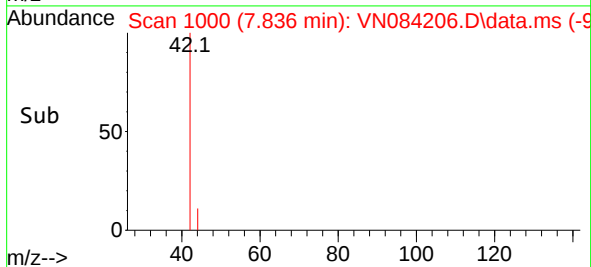
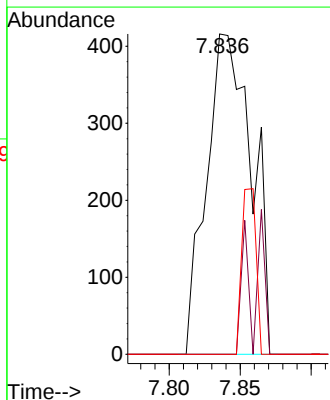
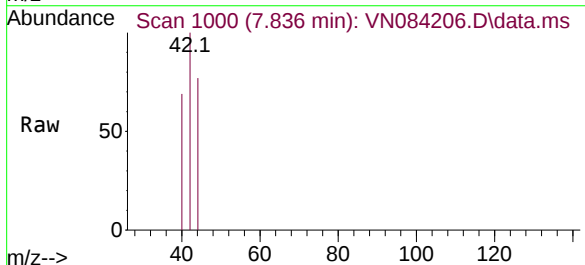


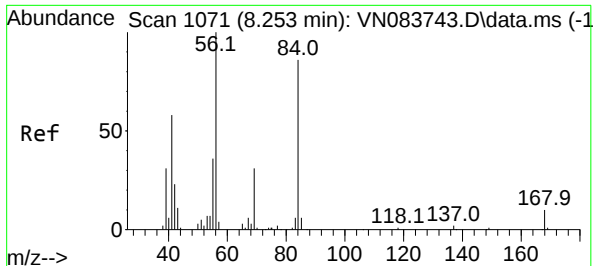
Tgt Ion: 43 Resp: 9036  
Ion Ratio Lower Upper  
43 100  
72 24.2 20.8 31.2



#29  
Tetrahydrofuran  
Concen: 1.082 ug/l  
RT: 7.836 min Scan# 1000  
Delta R.T. 0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

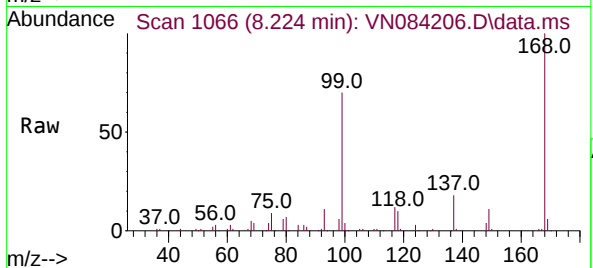
Tgt Ion: 42 Resp: 919  
Ion Ratio Lower Upper  
42 100  
72 0.0 35.9 53.9#  
71 0.0 33.9 50.9#



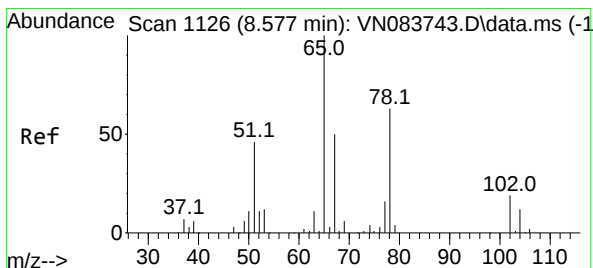
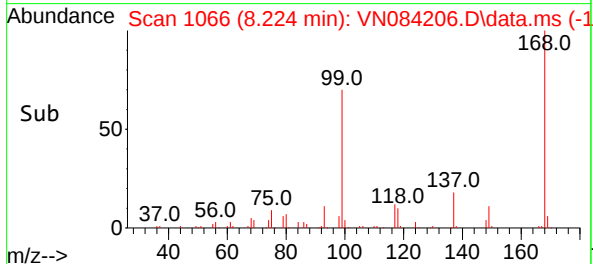
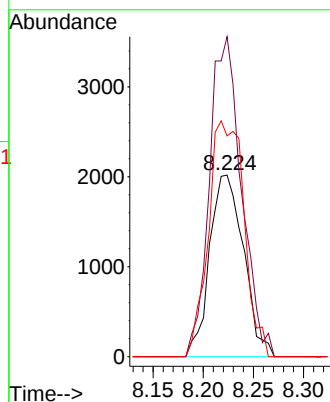


#31  
Cyclohexane  
Concen: 1.205 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.029 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

Instrument :  
MSVOA\_N  
ClientSampleId :

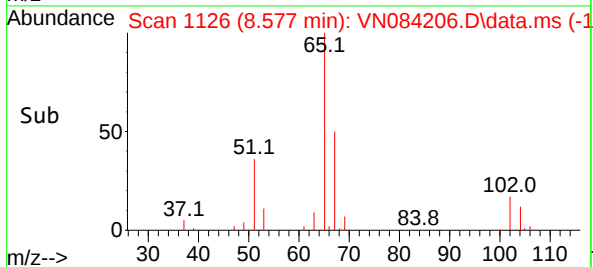
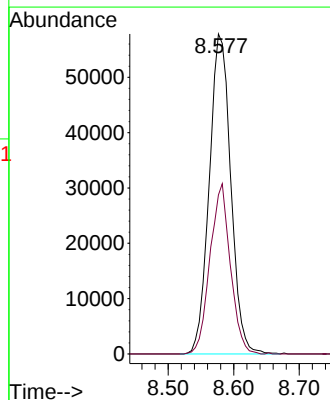
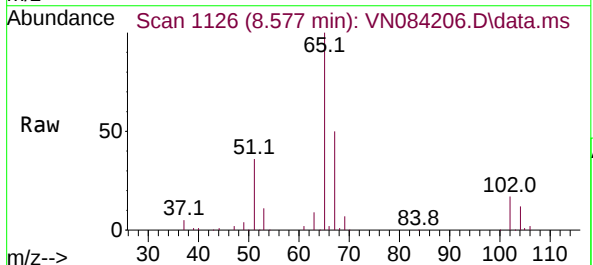


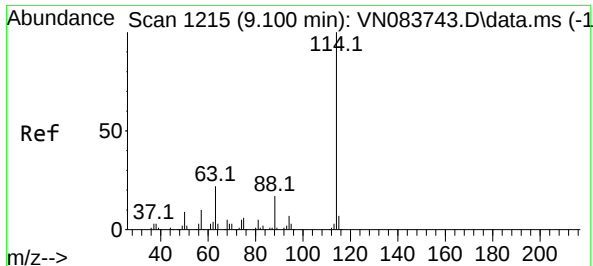
Tgt Ion: 56 Resp: 4749  
Ion Ratio Lower Upper  
56 100  
69 176.2 26.9 40.3#  
84 121.6 69.2 103.8#



#33  
1,2-Dichloroethane-d4  
Concen: 48.313 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. 0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

Tgt Ion: 65 Resp: 131695  
Ion Ratio Lower Upper  
65 100  
67 50.3 0.0 100.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

Instrument :

MSVOA\_N

ClientSampleId :

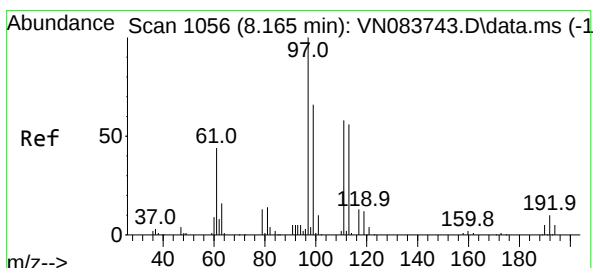
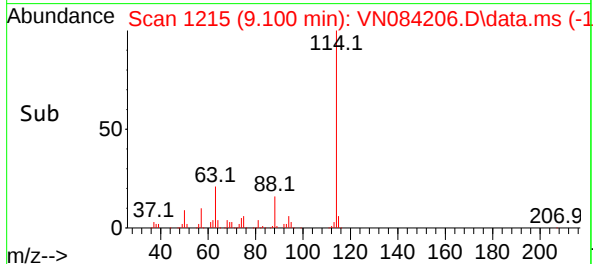
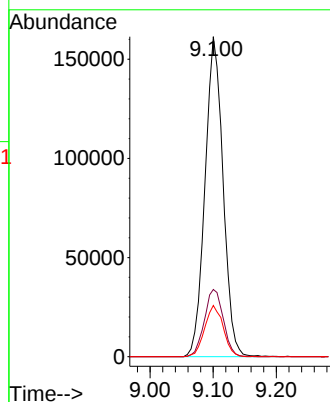
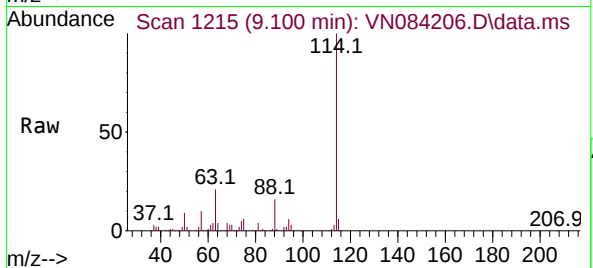
Tgt Ion:114 Resp: 320374

Ion Ratio Lower Upper

114 100

63 21.0 0.0 43.4

88 16.0 0.0 32.6



#35

Dibromofluoromethane

Concen: 48.897 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

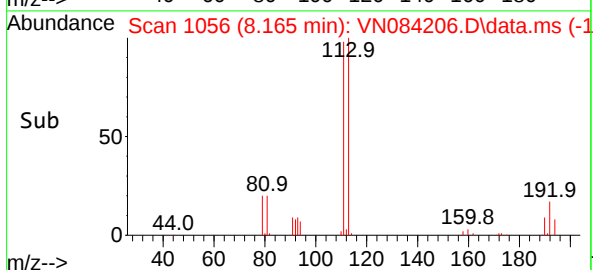
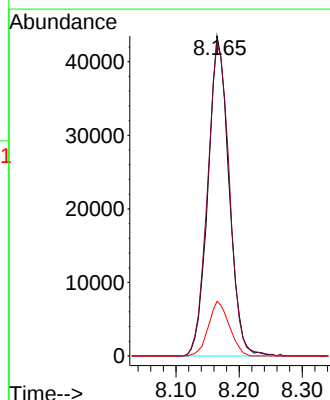
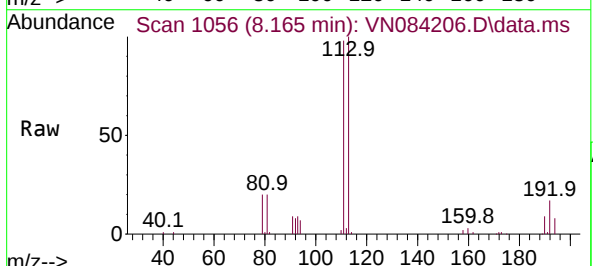
Tgt Ion:113 Resp: 100287

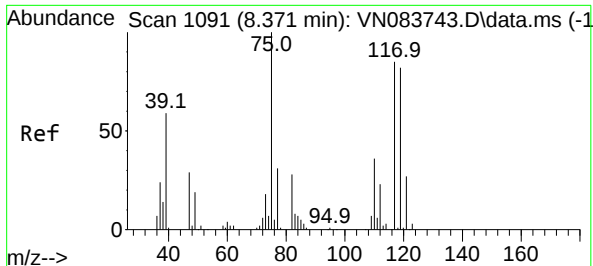
Ion Ratio Lower Upper

113 100

111 102.2 82.6 124.0

192 17.0 14.3 21.5





#36

1,1-Dichloropropene

Concen: 5.436 ug/l

RT: 8.218 min Scan# 1

Delta R.T. -0.153 min

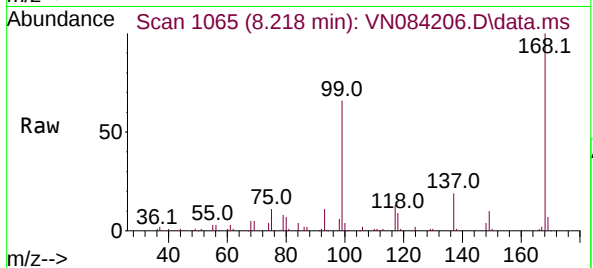
Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

Instrument :

MSVOA\_N

ClientSampleId :



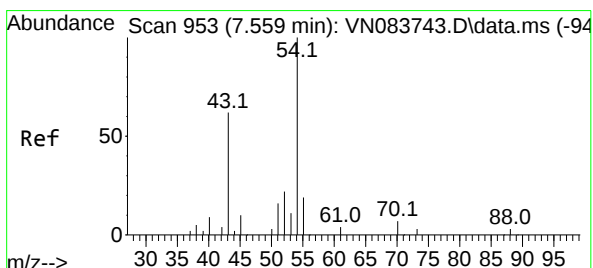
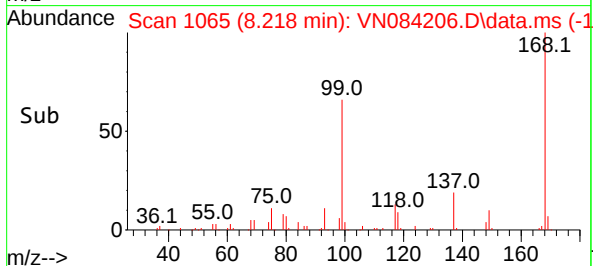
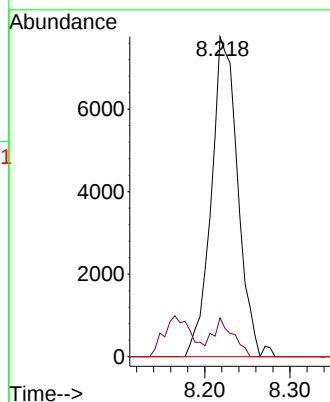
Tgt Ion: 75 Resp: 16781

Ion Ratio Lower Upper

75 100

110 9.0 16.7 50.1#

77 0.0 25.2 37.8#



#37

Ethyl Acetate

Concen: 1.224 ug/l

RT: 7.559 min Scan# 953

Delta R.T. 0.000 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

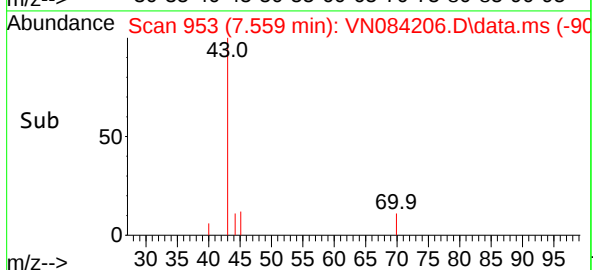
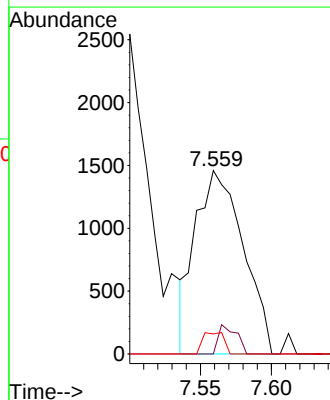
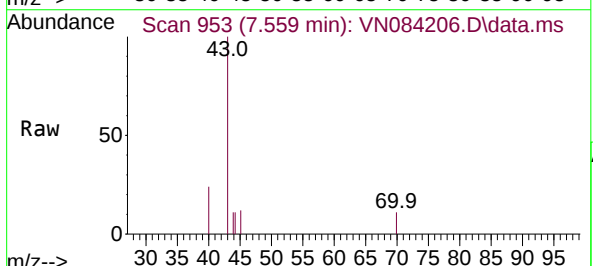
Tgt Ion: 43 Resp: 3431

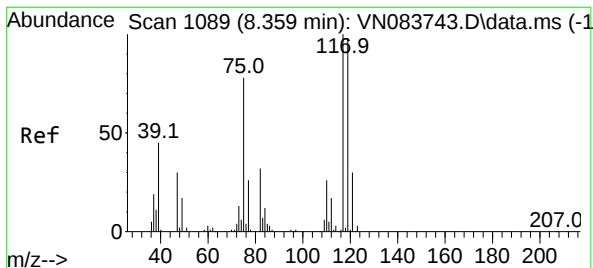
Ion Ratio Lower Upper

43 100

61 5.9 11.1 16.7#

70 5.2 8.8 13.2#





#38

Carbon Tetrachloride

Concen: 5.934 ug/l

RT: 8.224 min Scan# 1106

Delta R.T. -0.135 min

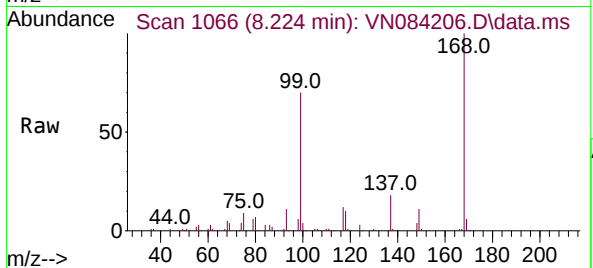
Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

Instrument :

MSVOA\_N

ClientSampleId :



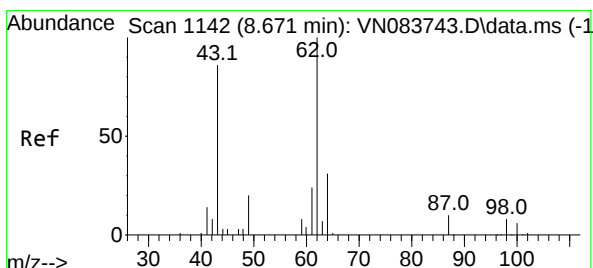
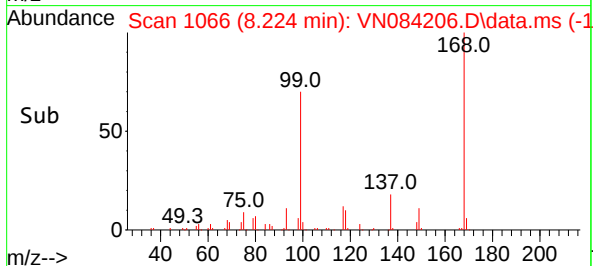
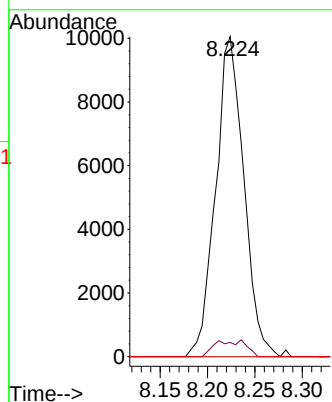
Tgt Ion:117 Resp: 20781

Ion Ratio Lower Upper

117 100

119 4.4 76.1 114.1#

121 0.0 24.1 36.1#



#42

1,2-Dichloroethane

Concen: 0.345 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.018 min

Lab File: VN084206.D

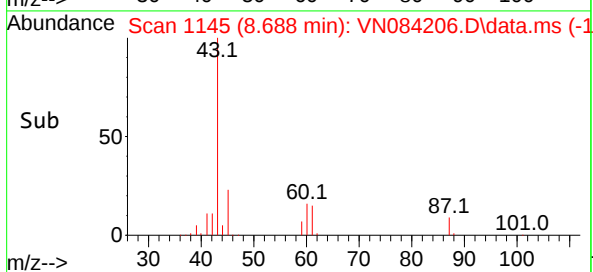
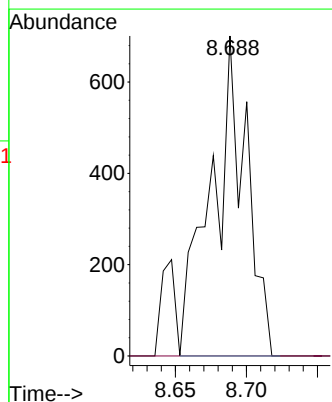
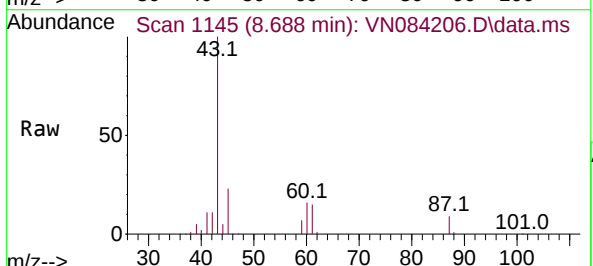
Acq: 27 Sep 2024 16:18

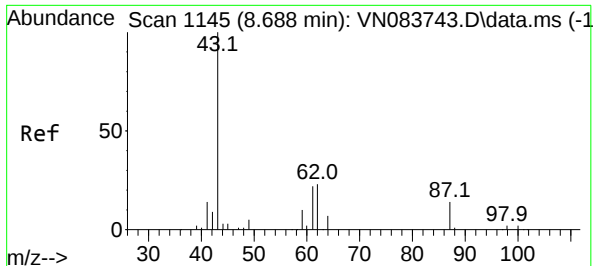
Tgt Ion: 62 Resp: 1197

Ion Ratio Lower Upper

62 100

98 0.0 0.0 16.6

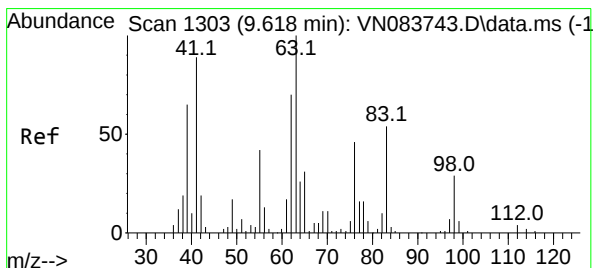
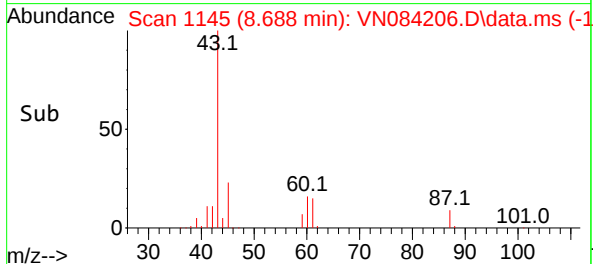
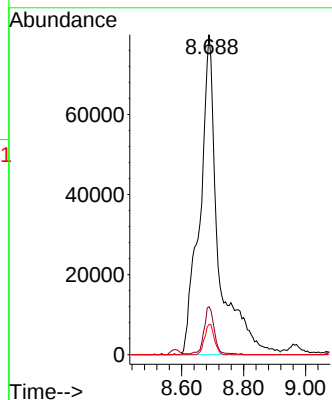
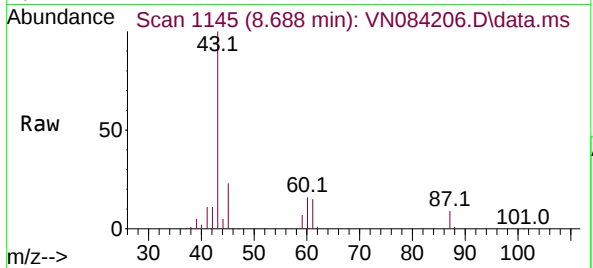




#43  
Isopropyl Acetate  
Concen: 66.002 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

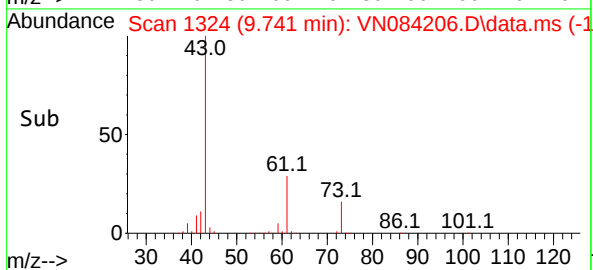
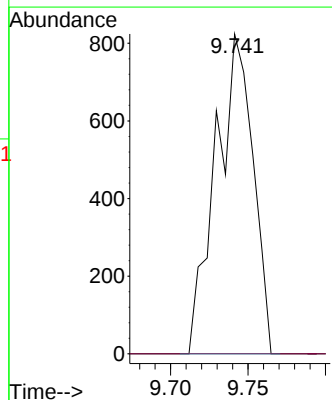
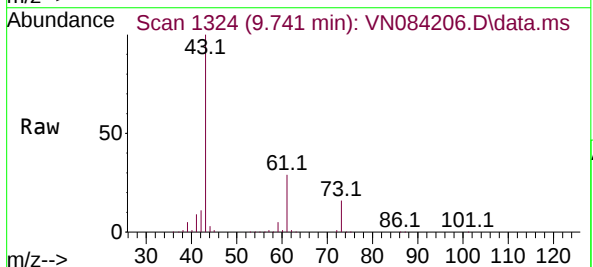
Instrument :  
MSVOA\_N  
ClientSampleId :

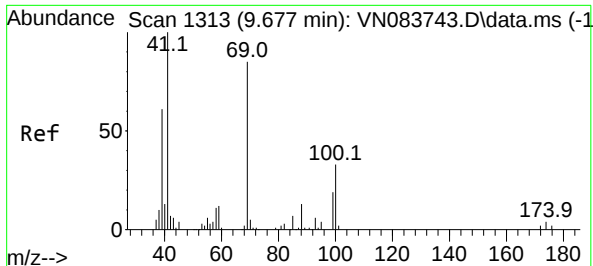
Tgt Ion: 43 Resp: 335146  
Ion Ratio Lower Upper  
43 100  
61 8.3 19.4 29.0#  
87 4.9 9.8 14.6#



#45  
1,2-Dichloropropane  
Concen: 0.611 ug/l  
RT: 9.741 min Scan# 1324  
Delta R.T. 0.124 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

Tgt Ion: 63 Resp: 1372  
Ion Ratio Lower Upper  
63 100  
65 0.0 25.9 38.9#





#48

Methyl methacrylate

Concen: 1.366 ug/l

RT: 9.665 min Scan# 11

Delta R.T. -0.012 min

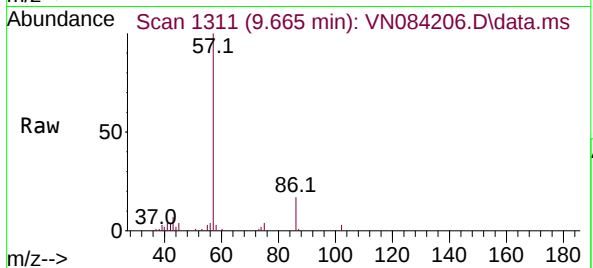
Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

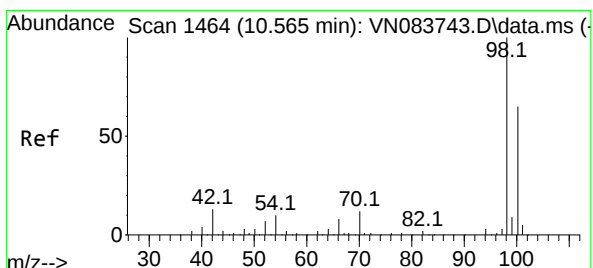
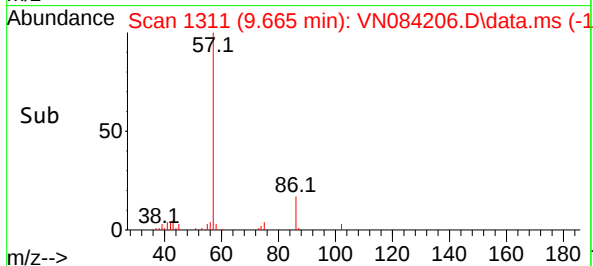
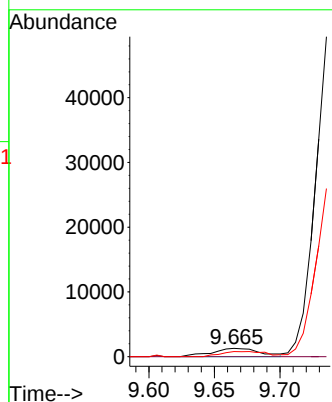
Instrument :

MSVOA\_N

ClientSampleId :



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 41    | Resp: | 3292  |
| Ion Ratio | Lower | Upper |       |
| 41        | 100   |       |       |
| 69        | 0.0   | 64.3  | 96.5# |
| 39        | 55.8  | 48.9  | 73.3  |



#50

Toluene-d8

Concen: 54.018 ug/l

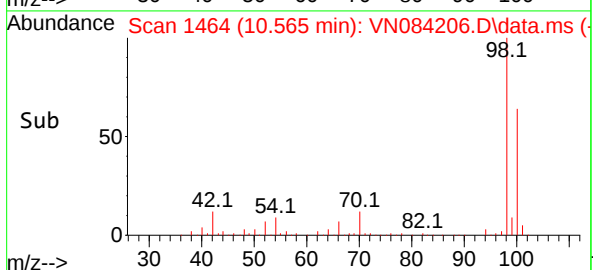
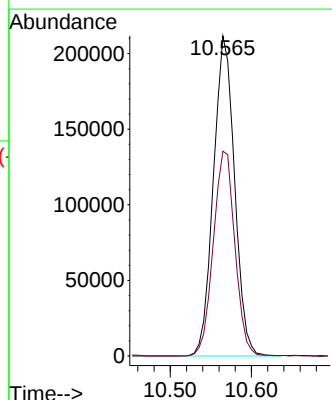
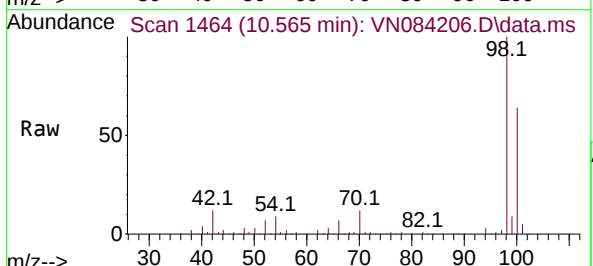
RT: 10.565 min Scan# 1464

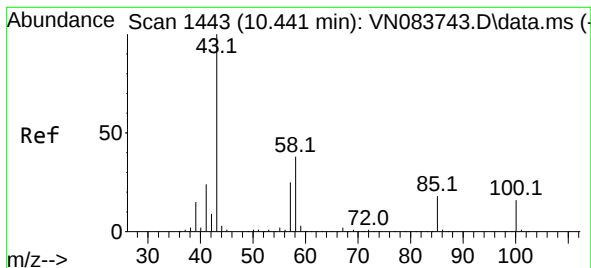
Delta R.T. 0.000 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 98    | Resp: | 383010 |
| Ion Ratio | Lower | Upper |        |
| 98        | 100   |       |        |
| 100       | 65.5  | 52.0  | 78.0   |

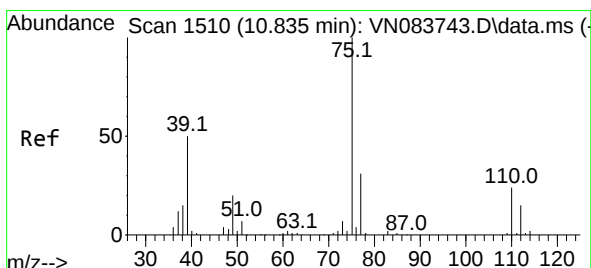
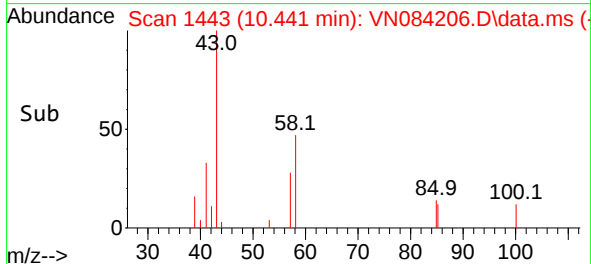
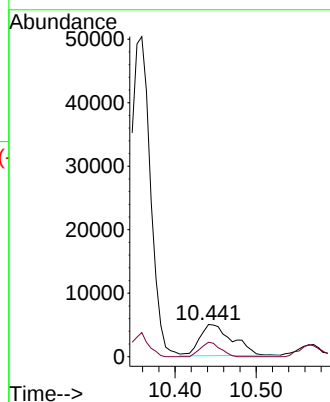
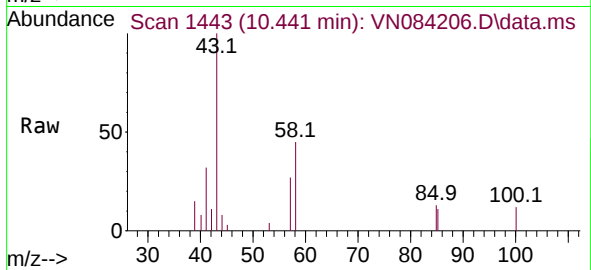




#51  
4-Methyl-2-Pentanone  
Concen: 4.985 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

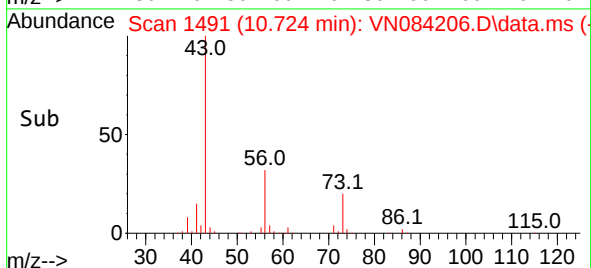
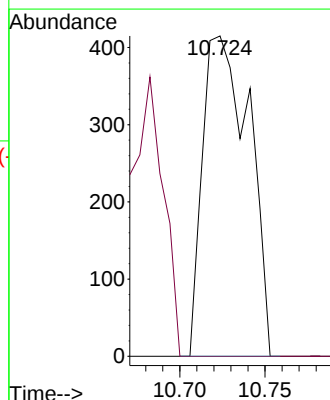
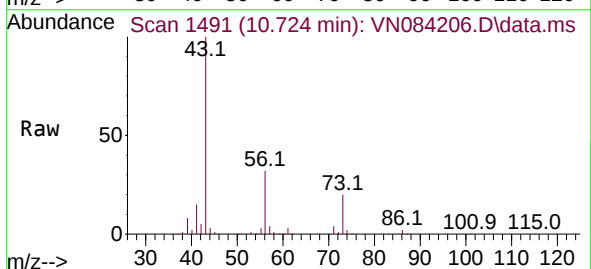
Instrument :  
MSVOA\_N  
ClientSampleId :

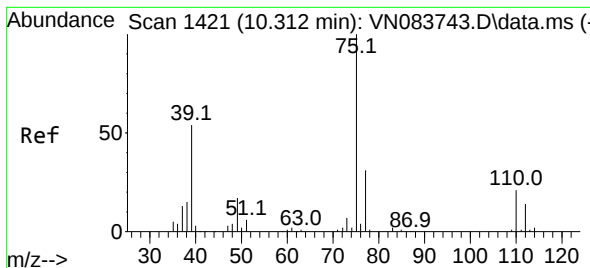
Tgt Ion: 43 Resp: 13779  
Ion Ratio Lower Upper  
43 100  
58 27.9 31.6 47.4#



#53  
t-1,3-Dichloropropene  
Concen: 0.228 ug/l  
RT: 10.724 min Scan# 1491  
Delta R.T. -0.112 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

Tgt Ion: 75 Resp: 788  
Ion Ratio Lower Upper  
75 100  
77 0.0 25.8 38.6#

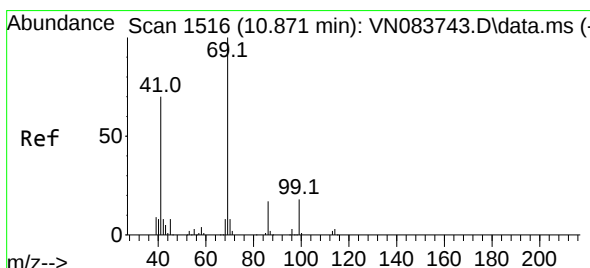
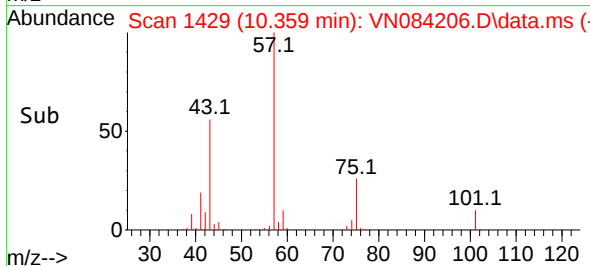
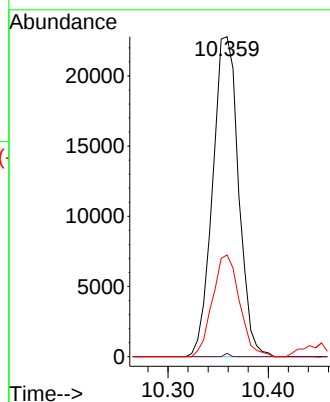
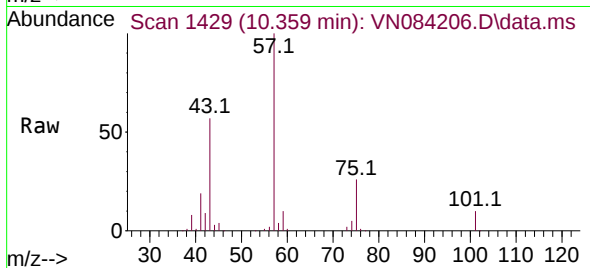




#54  
 cis-1,3-Dichloropropene  
 Concen: 11.294 ug/l  
 RT: 10.359 min Scan# 1429  
 Delta R.T. 0.047 min  
 Lab File: VN084206.D  
 Acq: 27 Sep 2024 16:18

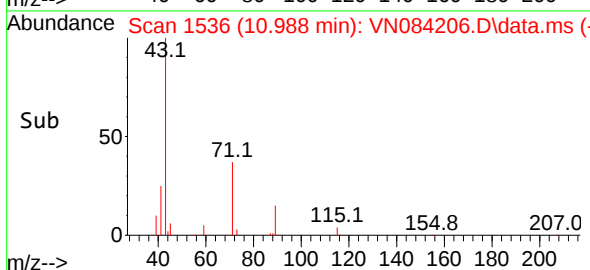
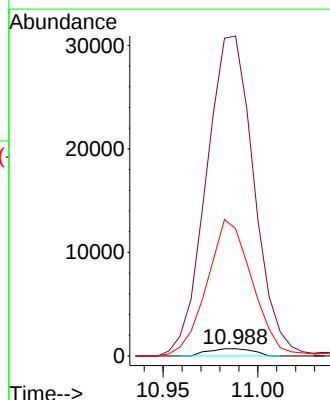
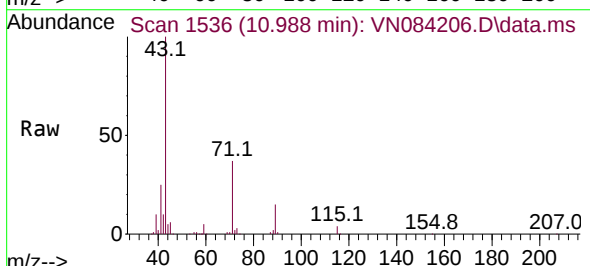
Instrument :  
 MSVOA\_N  
 ClientSampleId :

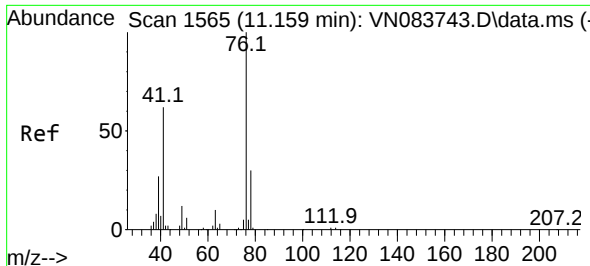
Tgt Ion: 75 Resp: 40938  
 Ion Ratio Lower Upper  
 75 100  
 77 1.0 25.0 37.6#  
 39 31.8 42.6 64.0#



#56  
 Ethyl methacrylate  
 Concen: 0.353 ug/l  
 RT: 10.988 min Scan# 1536  
 Delta R.T. 0.118 min  
 Lab File: VN084206.D  
 Acq: 27 Sep 2024 16:18

Tgt Ion: 69 Resp: 1153  
 Ion Ratio Lower Upper  
 69 100  
 41 4704.7 53.9 80.9#  
 39 1922.9 32.6 48.8#





#57

1,3-Dichloropropane

Concen: 1.606 ug/l

RT: 11.200 min Scan# 1572

Delta R.T. 0.041 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

Instrument :

MSVOA\_N

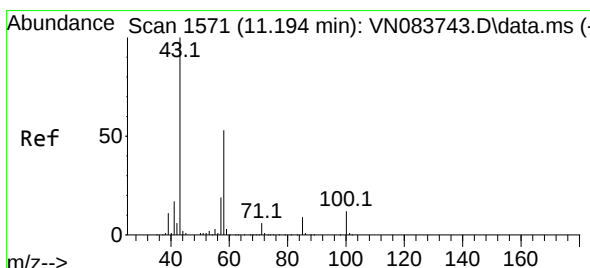
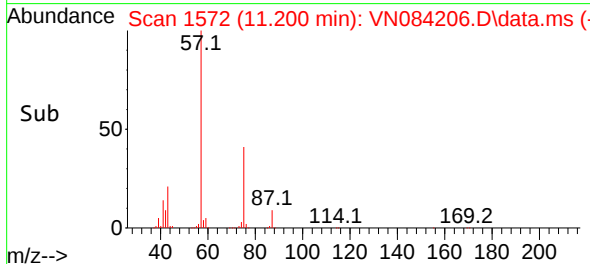
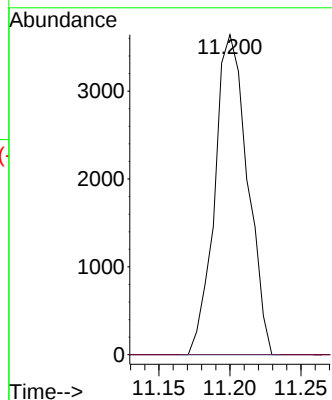
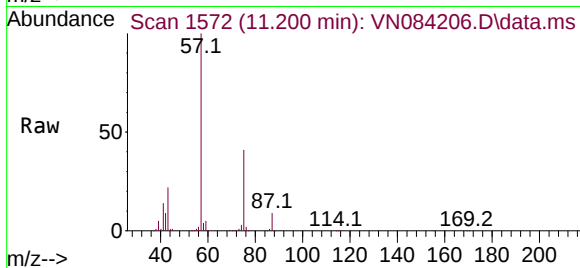
ClientSampleId :

Tgt Ion: 76 Resp: 5857

Ion Ratio Lower Upper

76 100

78 0.0 25.8 38.6#



#59

2-Hexanone

Concen: 33.386 ug/l

RT: 11.200 min Scan# 1572

Delta R.T. 0.006 min

Lab File: VN084206.D

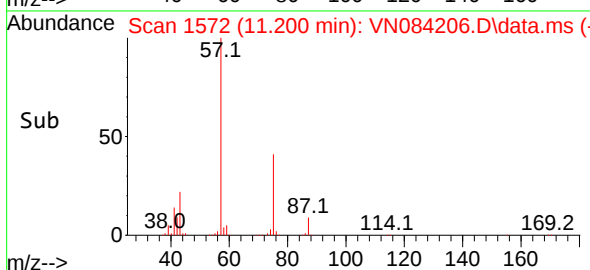
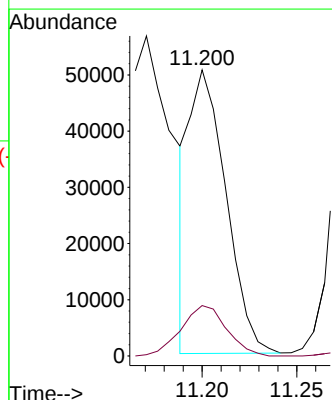
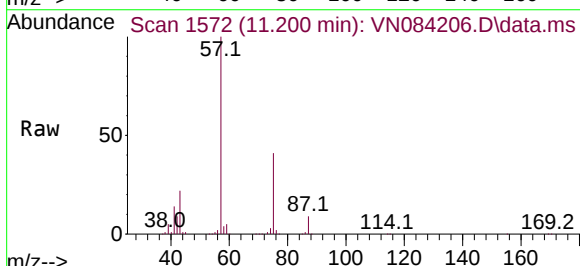
Acq: 27 Sep 2024 16:18

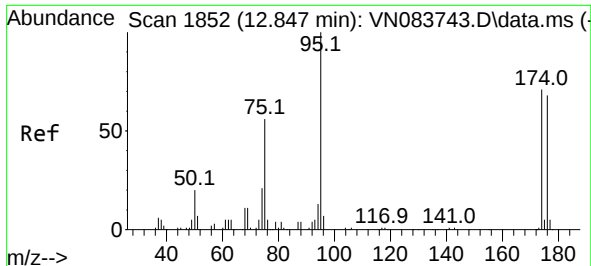
Tgt Ion: 43 Resp: 68263

Ion Ratio Lower Upper

43 100

58 22.0 27.2 81.5#





#62

4-Bromofluorobenzene

Concen: 44.242 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

Instrument :

MSVOA\_N

ClientSampleId :

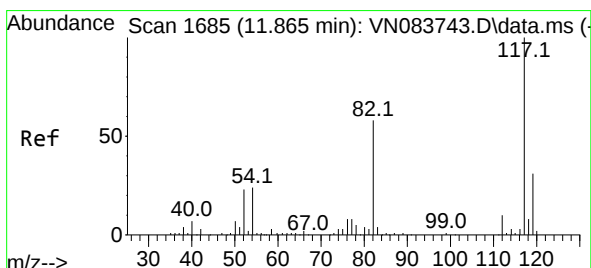
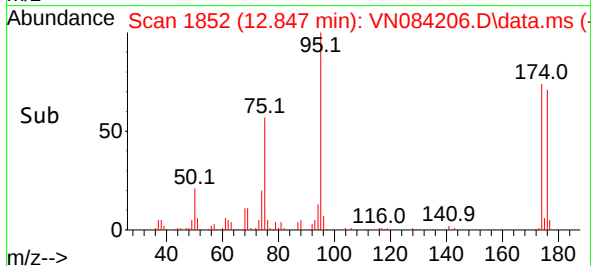
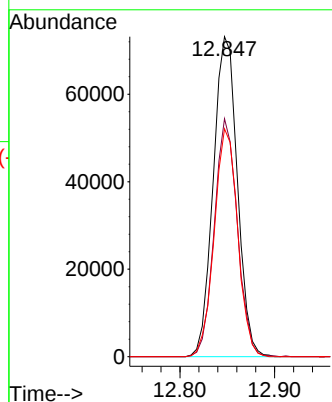
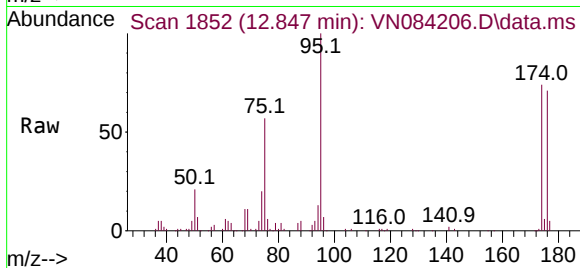
Tgt Ion: 95 Resp: 129421

Ion Ratio Lower Upper

95 100

174 71.1 0.0 139.8

176 69.1 0.0 131.4



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN084206.D

Acq: 27 Sep 2024 16:18

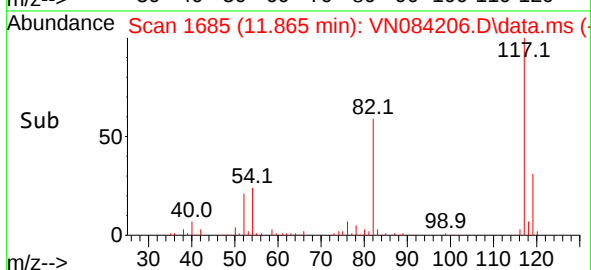
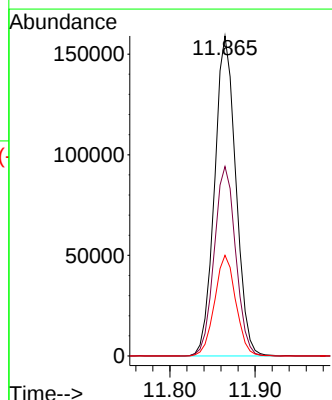
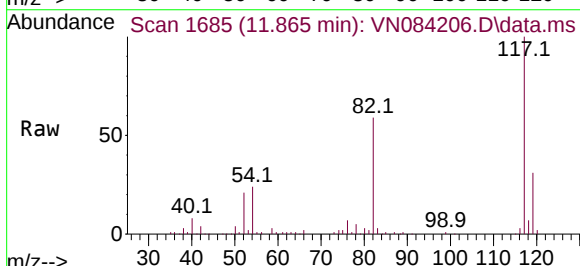
Tgt Ion: 117 Resp: 275905

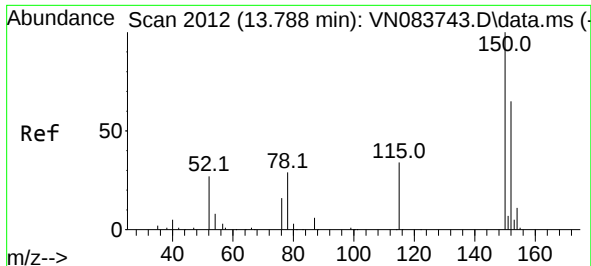
Ion Ratio Lower Upper

117 100

82 59.2 47.4 71.0

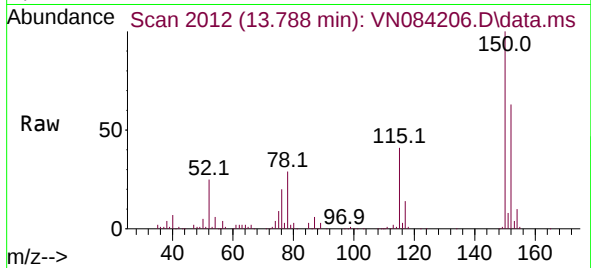
119 31.4 26.3 39.5



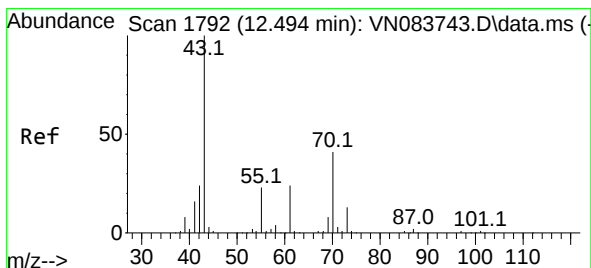
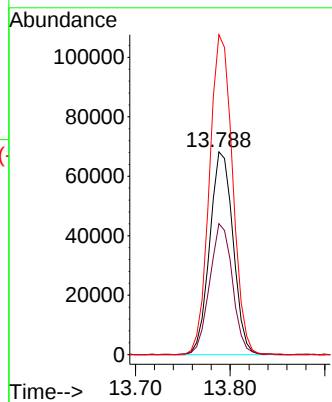
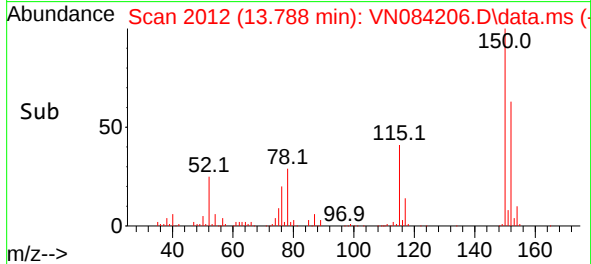


#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 20  
Delta R.T. 0.000 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

Instrument :  
MSVOA\_N  
ClientSampleId :

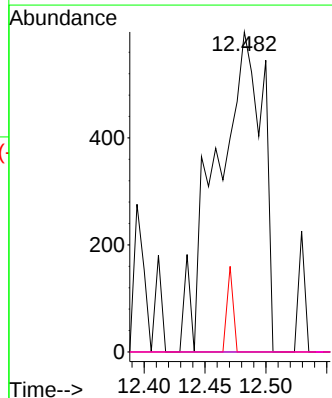
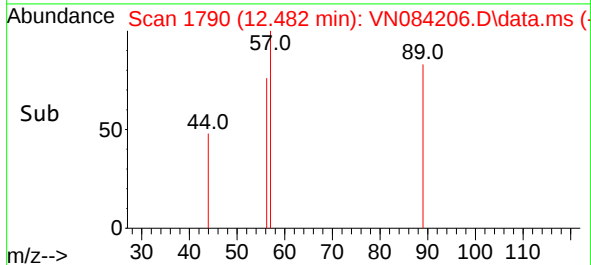
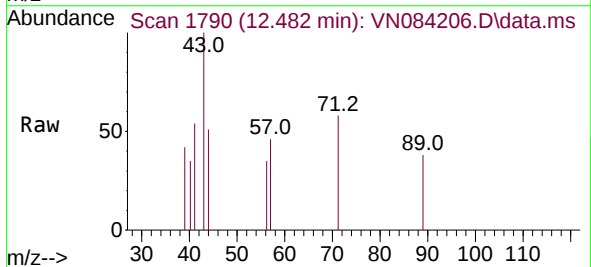


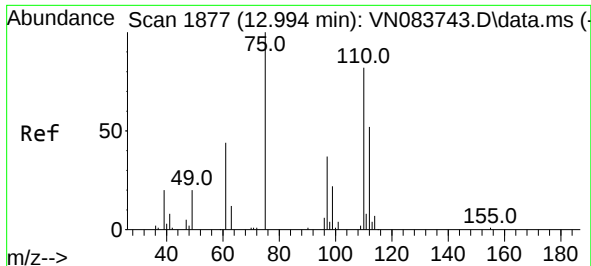
Tgt Ion:152 Resp: 116965  
Ion Ratio Lower Upper  
152 100  
115 63.3 32.2 96.6  
150 156.7 0.0 348.6



#74  
N-ethyl acetate  
Concen: 0.411 ug/l  
RT: 12.482 min Scan# 1790  
Delta R.T. -0.012 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

Tgt Ion: 43 Resp: 1586  
Ion Ratio Lower Upper  
43 100  
70 0.0 34.5 51.7#  
55 3.5 18.6 28.0#  
61 0.0 19.2 28.8#

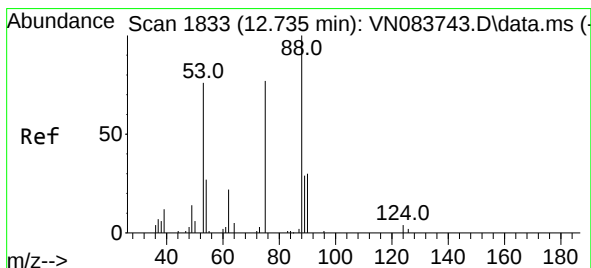
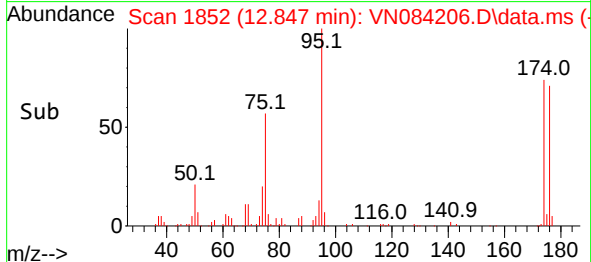
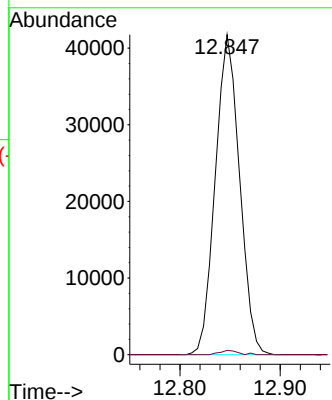
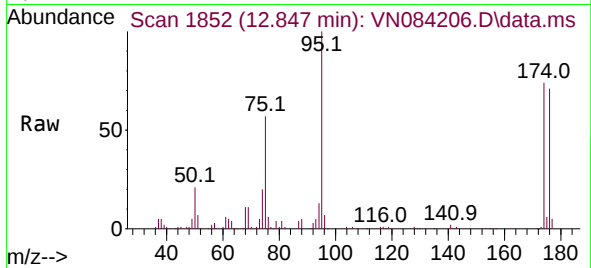




#76  
1,2,3-Trichloropropane  
Concen: 29.724 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.147 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

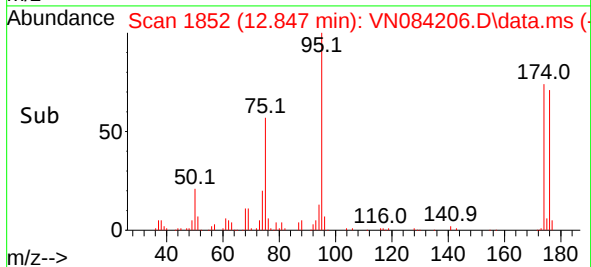
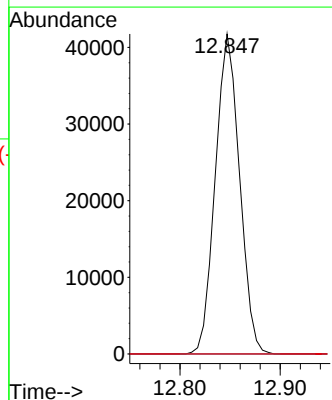
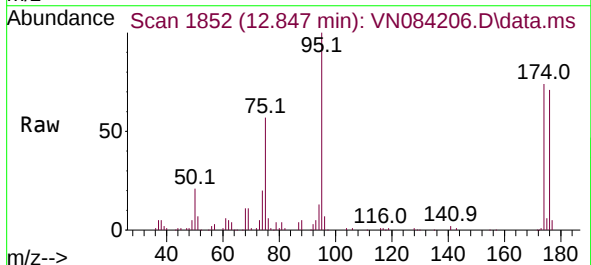
Instrument :  
MSVOA\_N  
ClientSampleId :

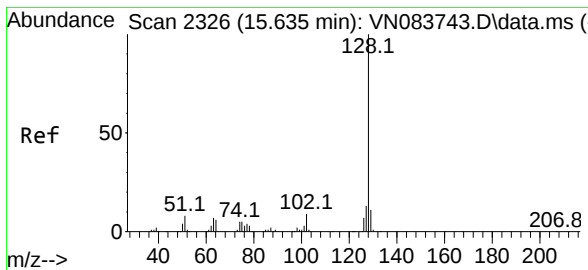
Tgt Ion: 75 Resp: 70152  
Ion Ratio Lower Upper  
75 100  
77 1.0 95.2 285.6#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 77.849 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.112 min  
Lab File: VN084206.D  
Acq: 27 Sep 2024 16:18

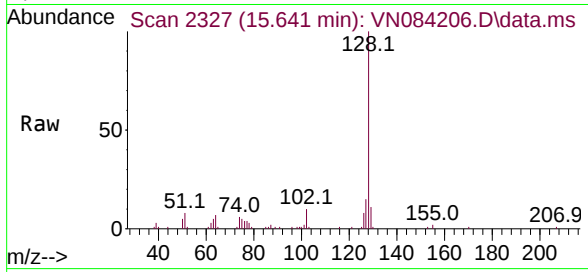
Tgt Ion: 75 Resp: 70152  
Ion Ratio Lower Upper  
75 100  
53 0.0 81.2 121.8#  
89 0.0 35.7 53.5#





#95  
 Naphthalene  
 Concen: 9.136 ug/l  
 RT: 15.641 min Scan# 21  
 Delta R.T. 0.006 min  
 Lab File: VN084206.D  
 Acq: 27 Sep 2024 16:18

Instrument :  
 MSVOA\_N  
 ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 59172 |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 12.9  | 10.2  | 15.2  |
| 129      | 11.9  | 8.7   | 13.1  |

