

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN102023\  
 Data File : VN079622.D  
 Acq On : 20 Oct 2023 12:29  
 Operator : JC\MD  
 Sample : VN1020WBL01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Oct 20 23:48:07 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N101723W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Oct 18 02:19:15 2023  
 Response via : Initial Calibration

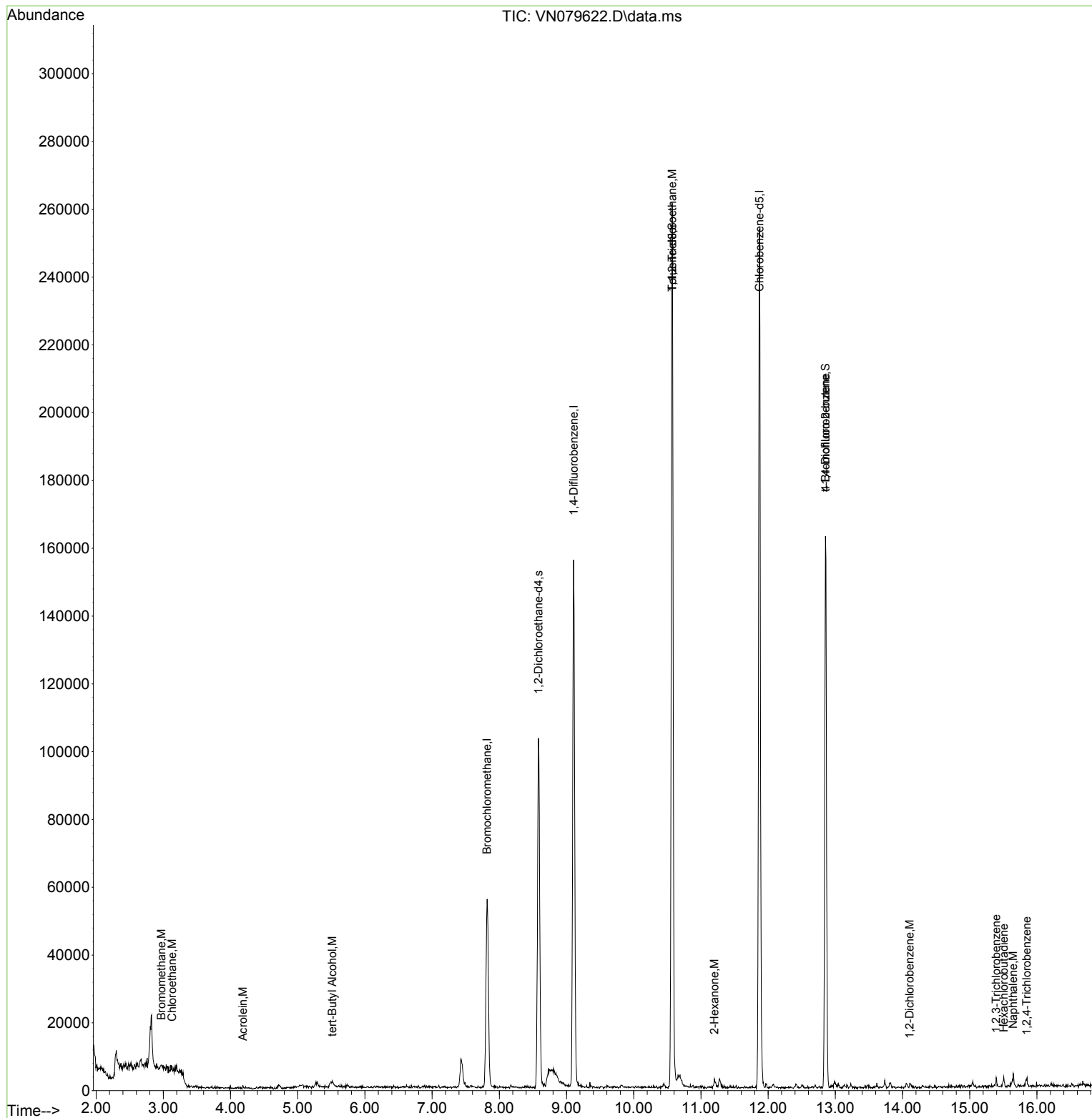
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 7.818  | 128   | 18967    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene     | 9.106  | 114   | 127463   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5        | 11.871 | 117   | 148558   | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4   | 8.583  | 65    | 82745    | 30.684   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 110 | Recovery | =      | 102.267% |
| 60) 4-Bromofluorobenzene    | 12.853 | 95    | 56038    | 20.627   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 63 - 112 | Recovery | =      | 68.767%  |
| 63) Toluene-d8              | 10.571 | 98    | 183317   | 28.797   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 112 | Recovery | =      | 96.000%  |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 5) Bromomethane             | 2.971  | 94    | 1031     | 0.432    | ug/l # | 38       |
| 6) Chloroethane             | 3.130  | 64    | 685      | 0.253    | ug/l # | 46       |
| 13) Acrolein                | 4.183  | 56    | 408      | 0.801    | ug/l   | 87       |
| 23) tert-Butyl Alcohol      | 5.512  | 59    | 920      | 1.865    | ug/l # | 100      |
| 50) 1,1,2-Trichloroethane   | 10.571 | 97    | 6488     | 2.386    | ug/l # | 1        |
| 59) 2-Hexanone              | 11.200 | 43    | 1673     | 0.658    | ug/l # | 61       |
| 77) t-1,4-Dichloro-2-butene | 12.853 | 75    | 31521    | 30.132   | ug/l # | 7        |
| 87) 1,2-Dichlorobenzene     | 14.106 | 146   | 849      | 0.208    | ug/l # | 56       |
| 89) 1,2,4-Trichlorobenzene  | 15.847 | 180   | 341      | 0.237    | ug/l # | 28       |
| 90) Hexachlorobutadiene     | 15.506 | 225   | 462      | 0.454    | ug/l   | 91       |
| 91) Naphthalene             | 15.647 | 128   | 3601     | 0.972    | ug/l # | 85       |
| 92) 1,2,3-Trichlorobenzene  | 15.394 | 180   | 668      | 0.465    | ug/l   | 79       |
| -----                       |        |       |          |          |        |          |

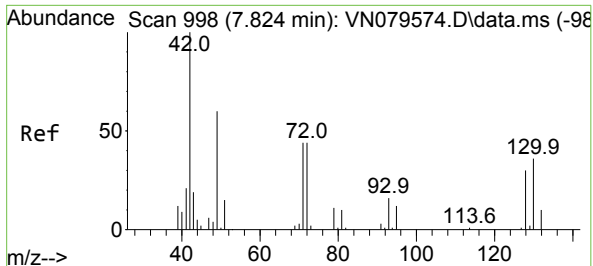
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN102023\  
Data File : VN079622.D  
Acq On : 20 Oct 2023 12:29  
Operator : JC\MD  
Sample : VN1020WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Oct 20 23:48:07 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N101723W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Wed Oct 18 02:19:15 2023  
Response via : Initial Calibration

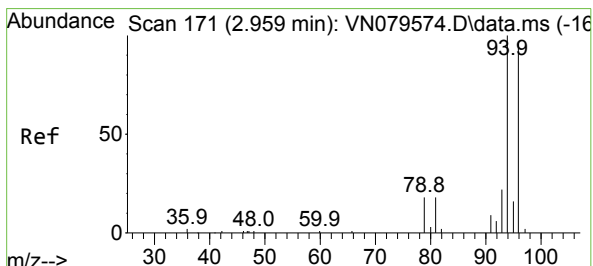
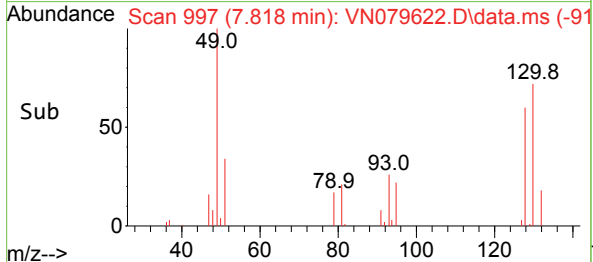
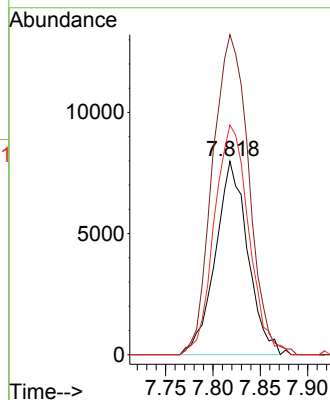
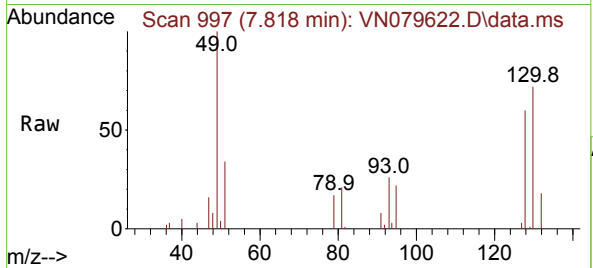




#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.818 min Scan# 91  
Delta R.T. -0.006 min  
Lab File: VN079622.D  
Acq: 20 Oct 2023 12:29

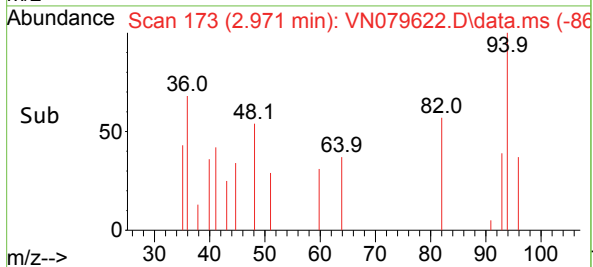
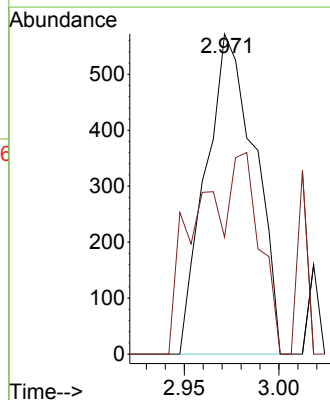
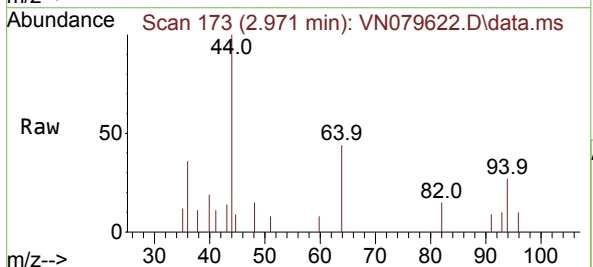
Instrument :  
MSVOA\_N  
ClientSampleId :

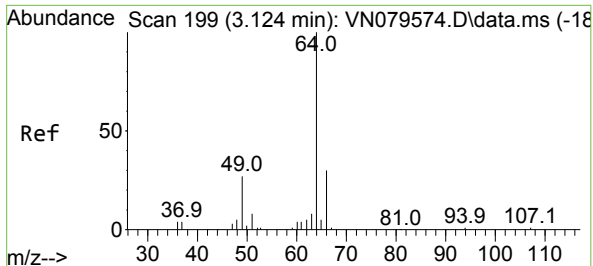
Tgt Ion:128 Resp: 18967  
Ion Ratio Lower Upper  
128 100  
49 185.2 0.0 468.5  
130 126.1 0.0 320.7



#5  
Bromomethane  
Concen: 0.432 ug/l  
RT: 2.971 min Scan# 173  
Delta R.T. 0.012 min  
Lab File: VN079622.D  
Acq: 20 Oct 2023 12:29

Tgt Ion: 94 Resp: 1031  
Ion Ratio Lower Upper  
94 100  
96 36.5 77.8 116.6#





#6

Chloroethane

Concen: 0.253 ug/l

RT: 3.130 min Scan# 20

Delta R.T. 0.006 min

Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

Instrument :

MSVOA\_N

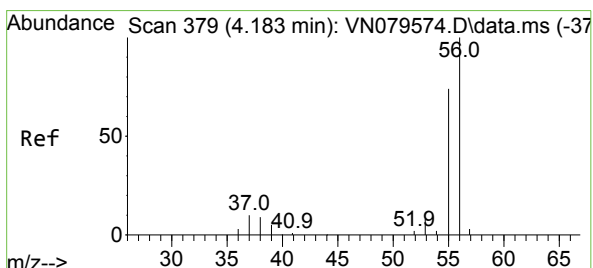
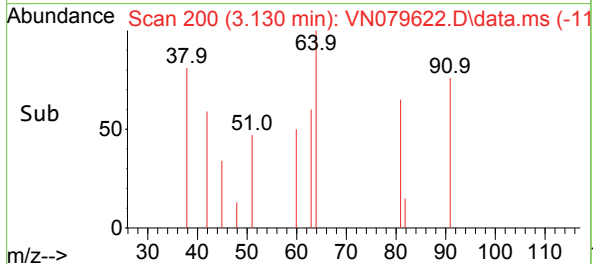
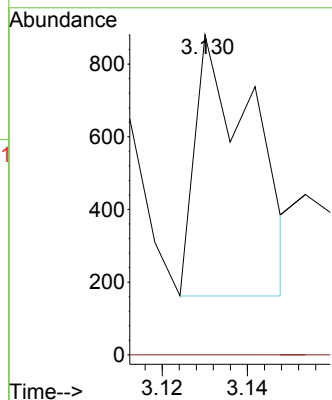
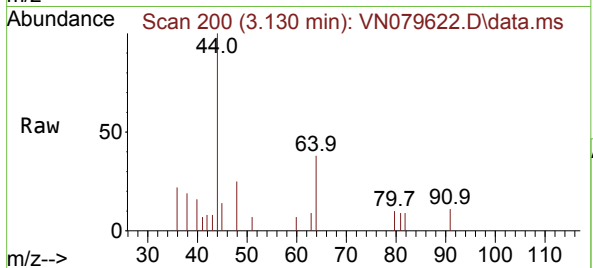
ClientSampleId :

Tgt Ion: 64 Resp: 685

Ion Ratio Lower Upper

64 100

66 0.0 23.3 34.9#



#13

Acrolein

Concen: 0.801 ug/l

RT: 4.183 min Scan# 379

Delta R.T. 0.000 min

Lab File: VN079622.D

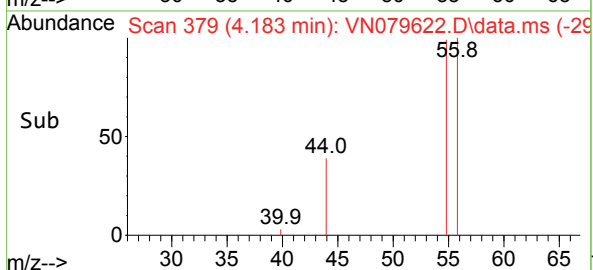
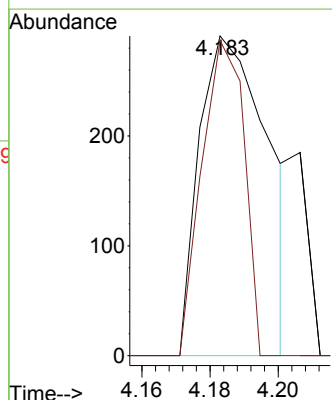
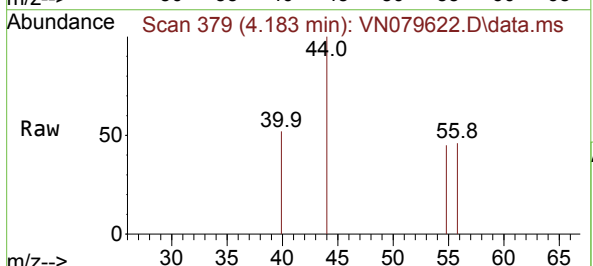
Acq: 20 Oct 2023 12:29

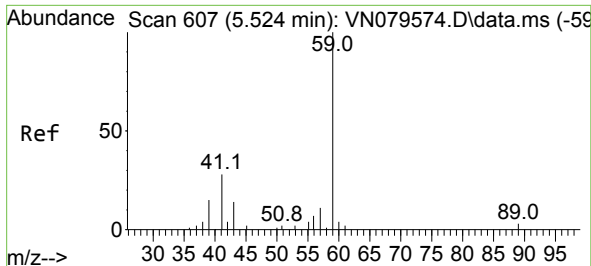
Tgt Ion: 56 Resp: 408

Ion Ratio Lower Upper

56 100

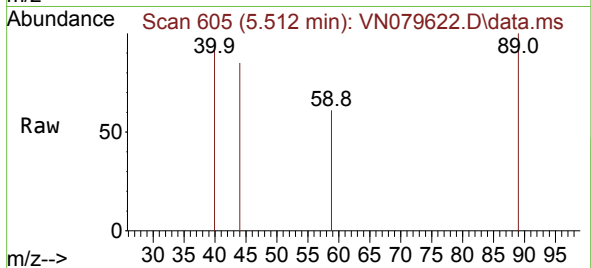
55 60.5 57.1 85.7



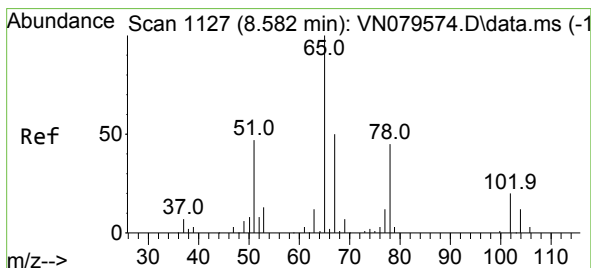
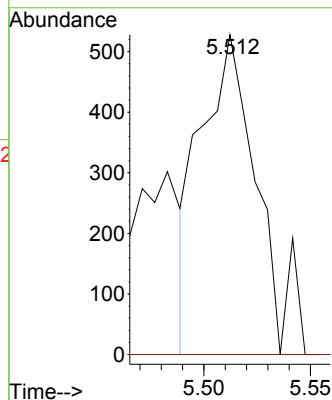
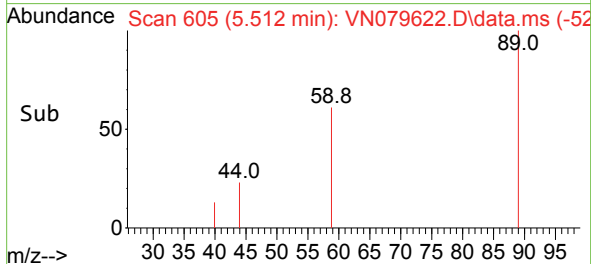


#23  
tert-Butyl Alcohol  
Concen: 1.865 ug/l  
RT: 5.512 min Scan# 607  
Delta R.T. -0.012 min  
Lab File: VN079622.D  
Acq: 20 Oct 2023 12:29

Instrument :  
MSVOA\_N  
ClientSampleId :

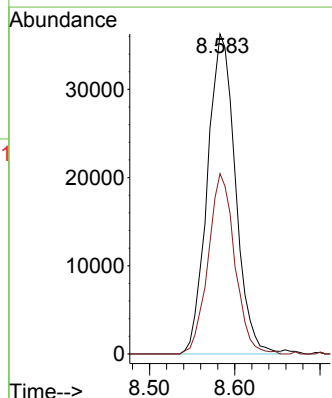
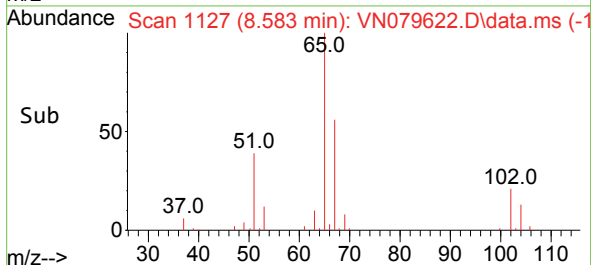
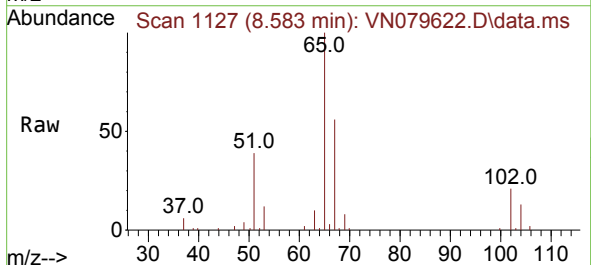


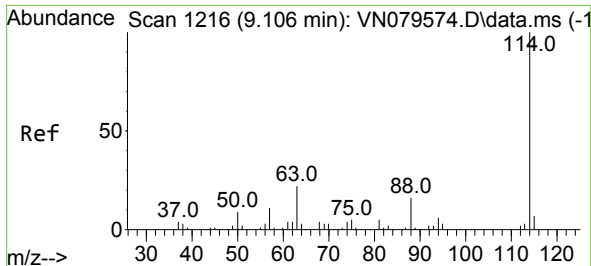
Tgt Ion: 59 Resp: 920  
Ion Ratio Lower Upper  
59 100  
52 0.0 0.0 0.0



#27  
1,2-Dichloroethane-d4  
Concen: 30.684 ug/l  
RT: 8.583 min Scan# 1127  
Delta R.T. 0.000 min  
Lab File: VN079622.D  
Acq: 20 Oct 2023 12:29

Tgt Ion: 65 Resp: 82745  
Ion Ratio Lower Upper  
65 100  
67 53.5 42.1 63.1





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.106 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

Instrument :

MSVOA\_N

ClientSampleId :

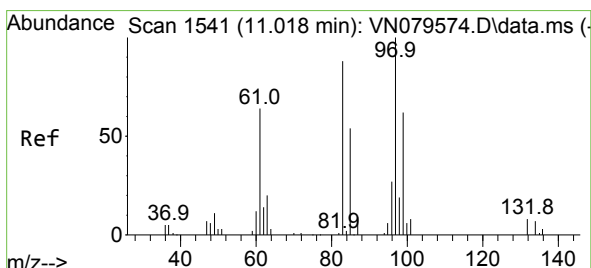
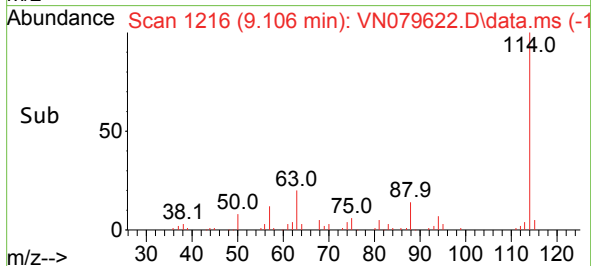
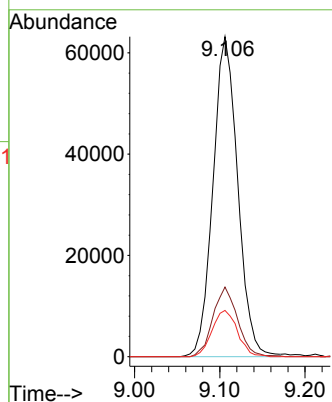
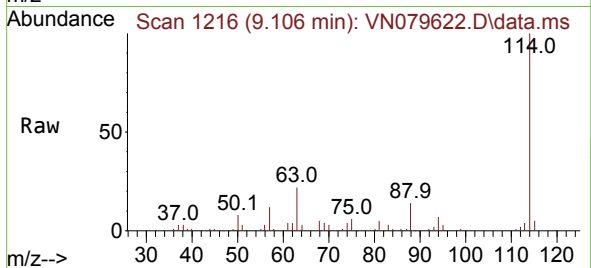
Tgt Ion:114 Resp: 127463

Ion Ratio Lower Upper

114 100

63 21.5 18.1 27.1

88 14.8 12.2 18.2



#50

1,1,2-Trichloroethane

Concen: 2.386 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. -0.447 min

Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

Tgt Ion: 97 Resp: 6488

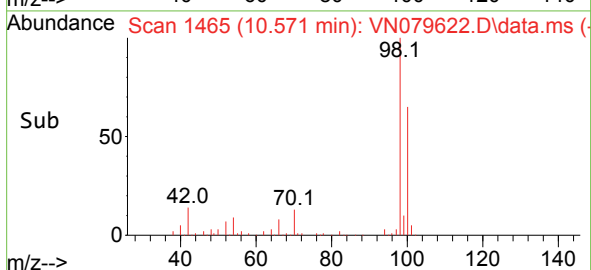
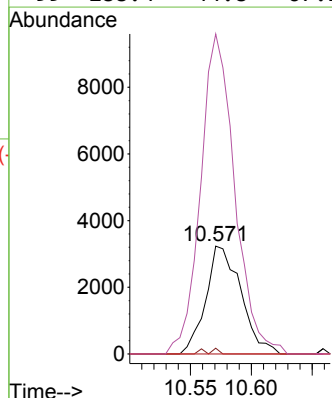
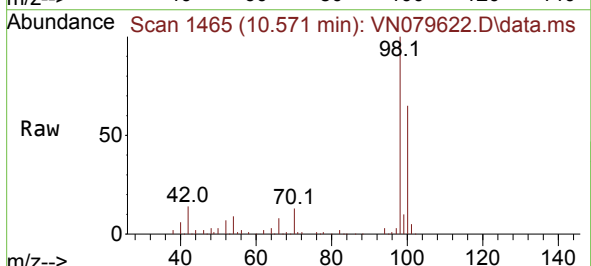
Ion Ratio Lower Upper

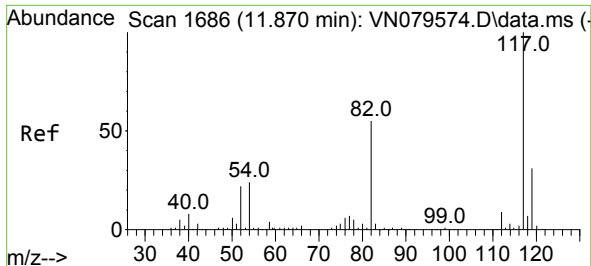
97 100

83 5.3 68.2 102.4#

85 0.0 42.9 64.3#

99 288.4 44.8 67.2#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.871 min Scan# 1

Delta R.T. 0.000 min

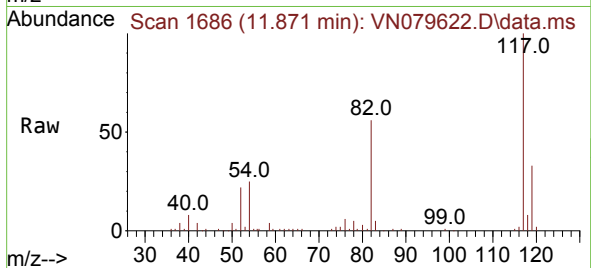
Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

Instrument :

MSVOA\_N

ClientSampleId :



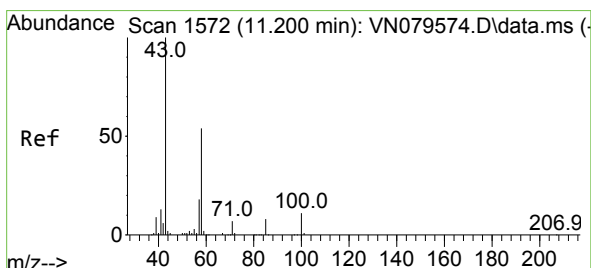
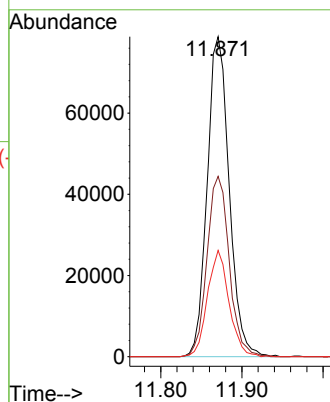
Tgt Ion:117 Resp: 148558

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
|-----|-------|-------|-------|

|     |     |  |  |
|-----|-----|--|--|
| 117 | 100 |  |  |
|-----|-----|--|--|

|    |      |      |      |
|----|------|------|------|
| 82 | 56.9 | 46.2 | 69.2 |
|----|------|------|------|

|     |      |      |      |
|-----|------|------|------|
| 119 | 32.5 | 25.2 | 37.8 |
|-----|------|------|------|



#59

2-Hexanone

Concen: 0.658 ug/l

RT: 11.200 min Scan# 1572

Delta R.T. 0.000 min

Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

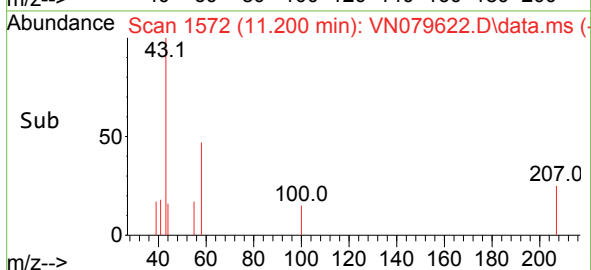
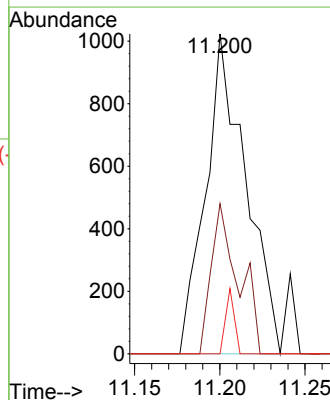
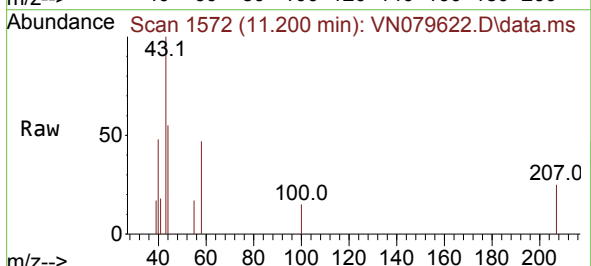
Tgt Ion: 43 Resp: 1673

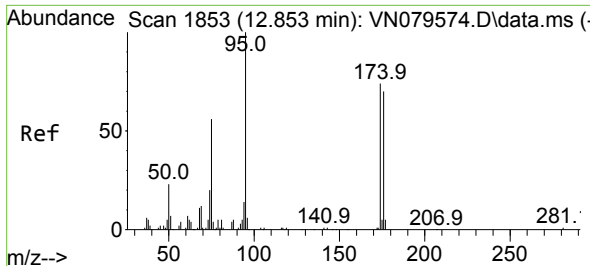
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
|-----|-------|-------|-------|

|    |     |  |  |
|----|-----|--|--|
| 43 | 100 |  |  |
|----|-----|--|--|

|    |      |      |       |
|----|------|------|-------|
| 58 | 25.6 | 42.3 | 63.5# |
|----|------|------|-------|

|    |     |      |       |
|----|-----|------|-------|
| 57 | 0.0 | 13.9 | 20.9# |
|----|-----|------|-------|

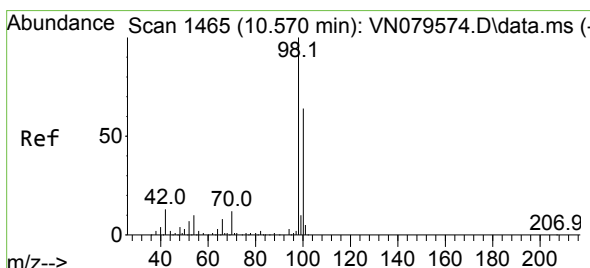
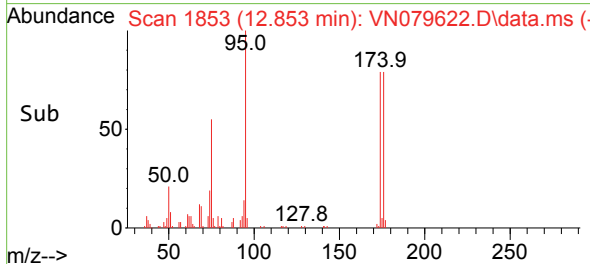
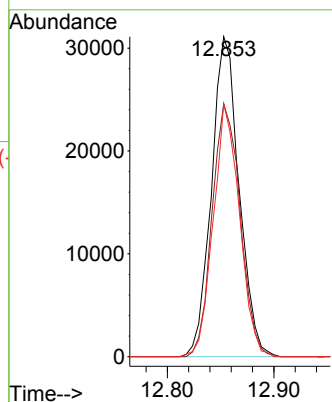
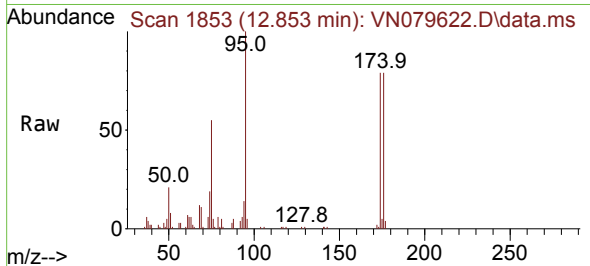




#60  
4-Bromofluorobenzene  
Concen: 20.627 ug/l  
RT: 12.853 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VN079622.D  
Acq: 20 Oct 2023 12:29

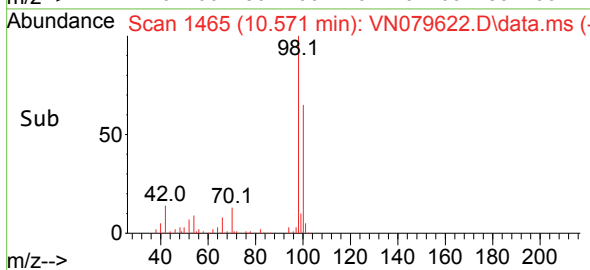
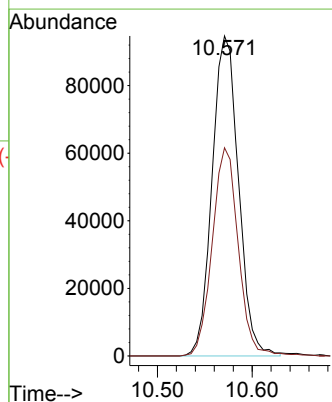
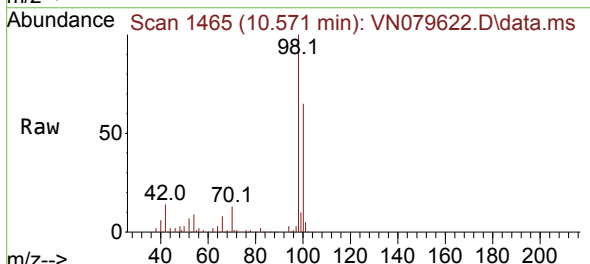
Instrument :  
MSVOA\_N  
ClientSampleId :

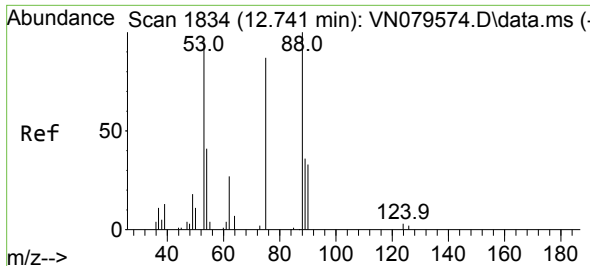
Tgt Ion: 95 Resp: 56038  
Ion Ratio Lower Upper  
95 100  
174 80.3 60.5 90.7  
176 74.9 57.2 85.8



#63  
Toluene-d8  
Concen: 28.797 ug/l  
RT: 10.571 min Scan# 1465  
Delta R.T. 0.000 min  
Lab File: VN079622.D  
Acq: 20 Oct 2023 12:29

Tgt Ion: 98 Resp: 183317  
Ion Ratio Lower Upper  
98 100  
100 63.3 51.6 77.4





#77

t-1,4-Dichloro-2-butene

Concen: 30.132 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. 0.112 min

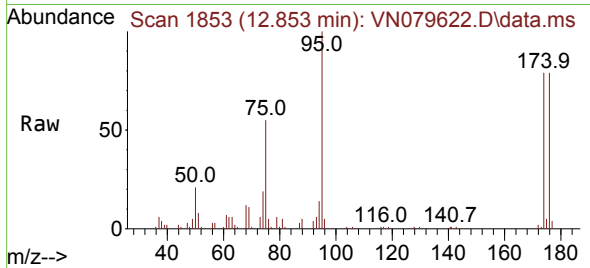
Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

Instrument :

MSVOA\_N

ClientSampleId :



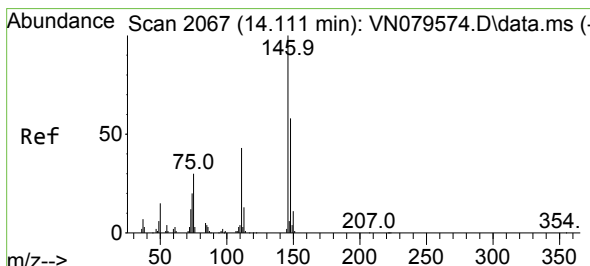
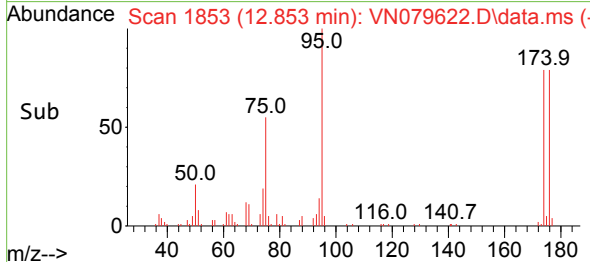
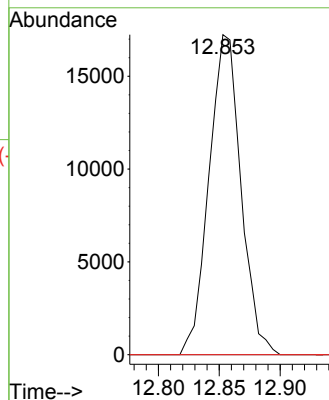
Tgt Ion: 75 Resp: 31521

Ion Ratio Lower Upper

75 100

53 0.0 53.0 159.1#

89 0.0 22.6 67.7#



#87

1,2-Dichlorobenzene

Concen: 0.208 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. -0.006 min

Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

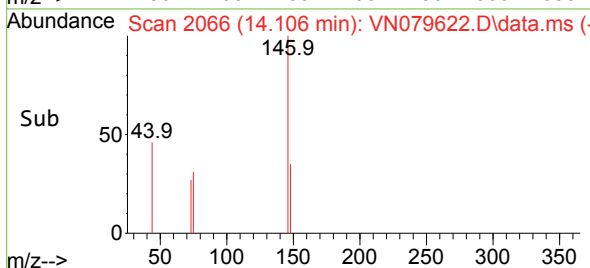
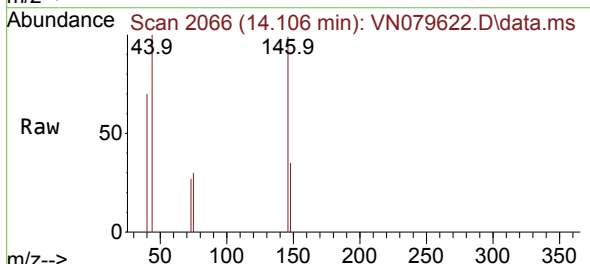
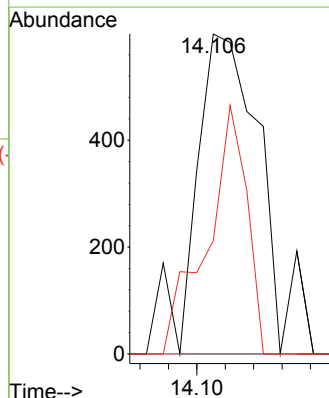
Tgt Ion: 146 Resp: 849

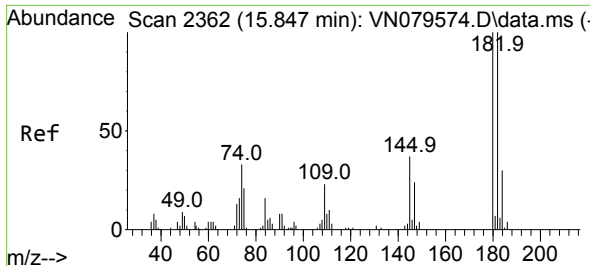
Ion Ratio Lower Upper

146 100

111 0.0 22.0 66.0#

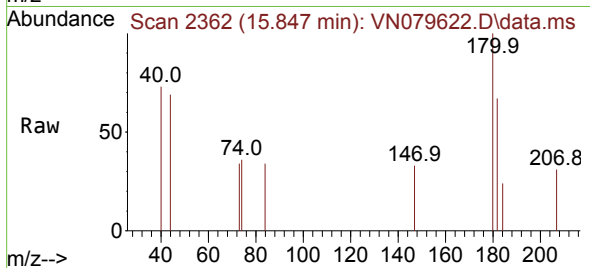
148 40.9 31.1 93.5



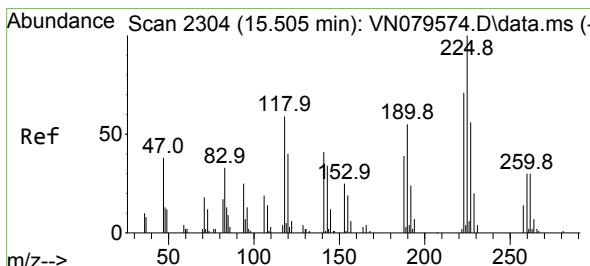
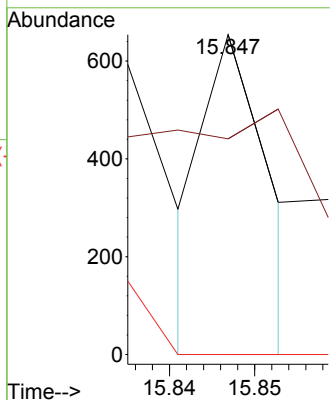
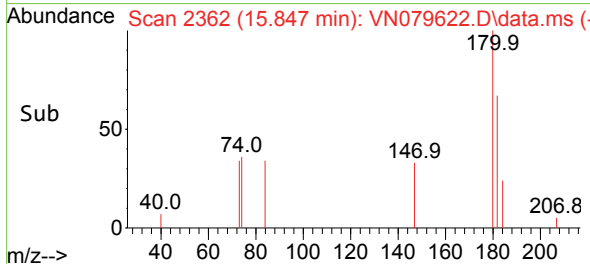


#89  
 1,2,4-Trichlorobenzene  
 Concen: 0.237 ug/l  
 RT: 15.847 min Scan# 21  
 Delta R.T. 0.000 min  
 Lab File: VN079622.D  
 Acq: 20 Oct 2023 12:29

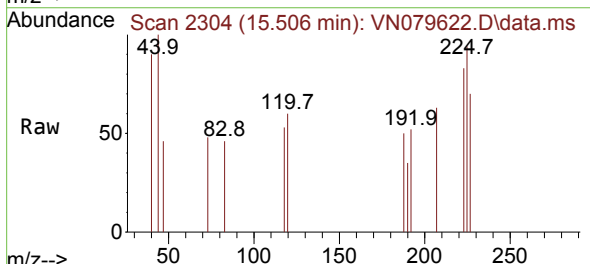
Instrument :  
 MSVOA\_N  
 ClientSampleId :



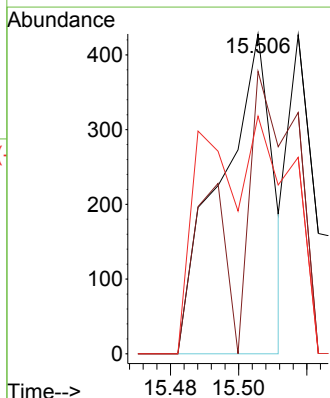
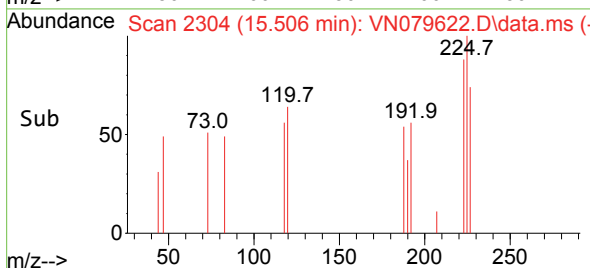
Tgt Ion:180 Resp: 341  
 Ion Ratio Lower Upper  
 180 100  
 182 166.6 74.2 111.4#  
 145 0.0 25.4 38.2#

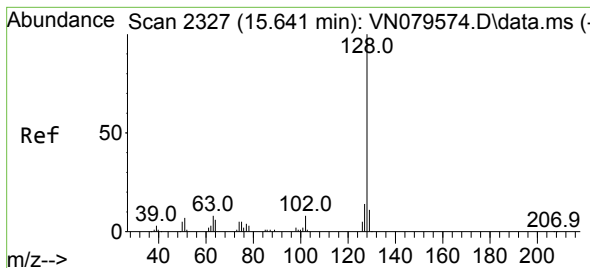


#90  
 Hexachlorobutadiene  
 Concen: 0.454 ug/l  
 RT: 15.506 min Scan# 2304  
 Delta R.T. 0.000 min  
 Lab File: VN079622.D  
 Acq: 20 Oct 2023 12:29



Tgt Ion:225 Resp: 462  
 Ion Ratio Lower Upper  
 225 100  
 223 74.7 0.0 126.0  
 227 61.7 0.0 127.0





#91

Naphthalene

Concen: 0.972 ug/l

RT: 15.647 min Scan# 21

Delta R.T. 0.006 min

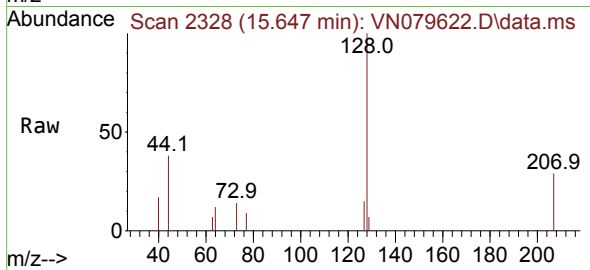
Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

Instrument :

MSVOA\_N

ClientSampleId :



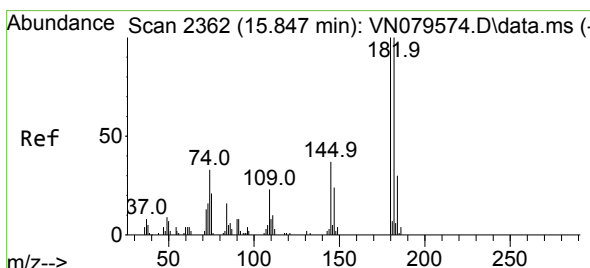
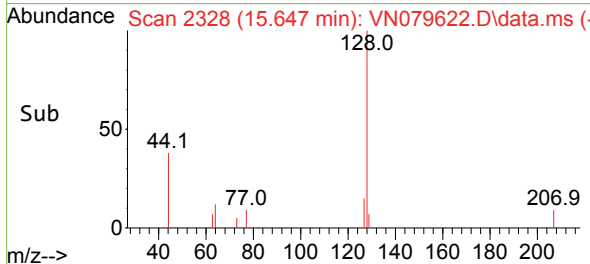
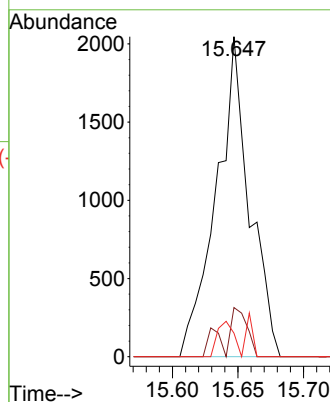
Tgt Ion:128 Resp: 3601

Ion Ratio Lower Upper

128 100

127 7.4 10.9 16.3#

129 5.5 8.6 12.8#



#92

1,2,3-Trichlorobenzene

Concen: 0.465 ug/l

RT: 15.394 min Scan# 2285

Delta R.T. -0.453 min

Lab File: VN079622.D

Acq: 20 Oct 2023 12:29

Tgt Ion:180 Resp: 668

Ion Ratio Lower Upper

180 100

182 105.5 0.0 185.6

145 8.4 0.0 63.6

