

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN101824\  
 Data File : VN084424.D  
 Acq On : 18 Oct 2024 13:02  
 Operator : JC\MD  
 Sample : P4427-01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 241016059-01-VOA

Quant Time: Oct 19 03:50:42 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N100824W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Oct 09 02:22:28 2024  
 Response via : Initial Calibration

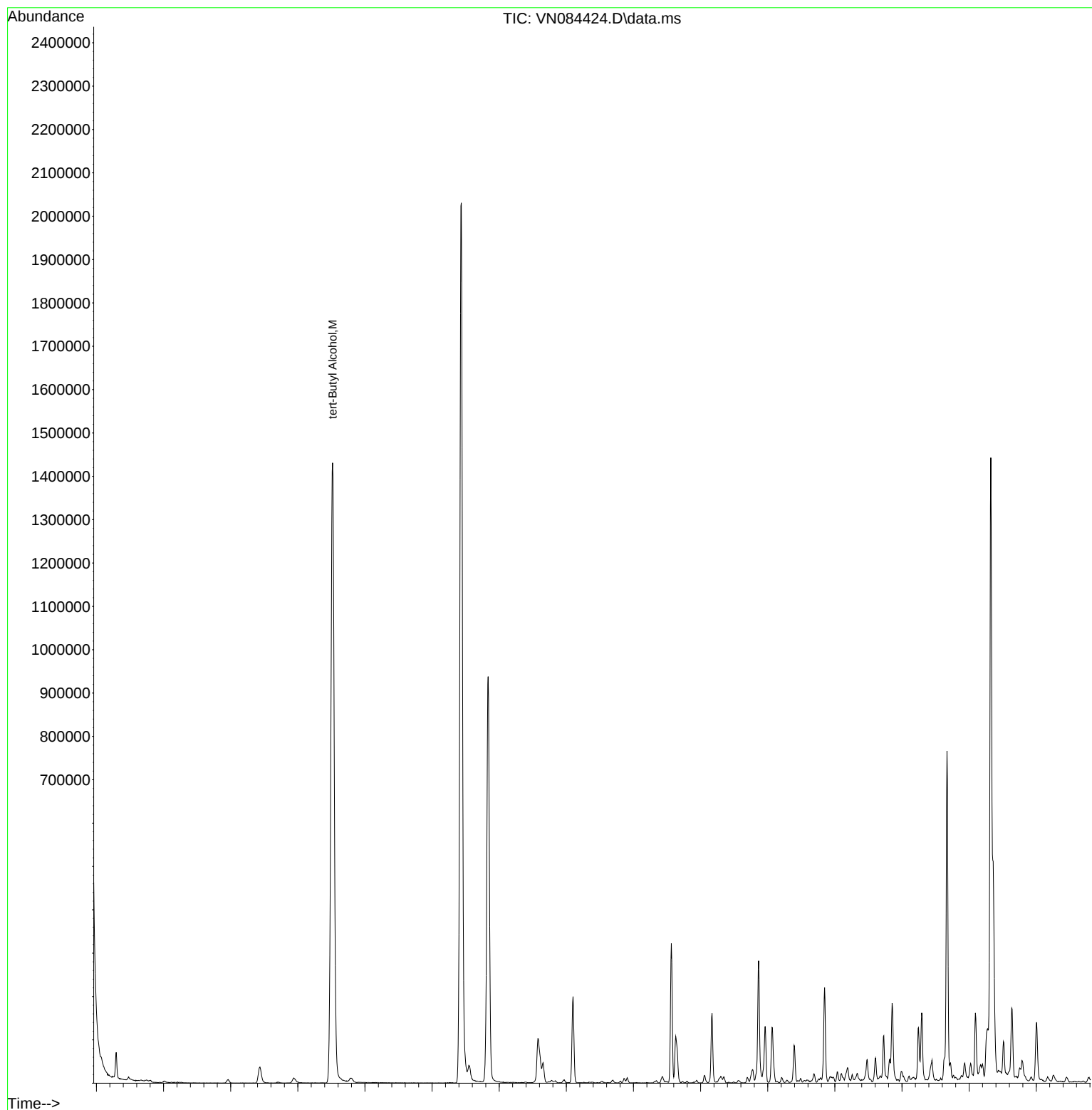
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 7.812  | 128   | 32215    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene     | 9.100  | 114   | 167106   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5        | 11.865 | 117   | 157811   | 30.000   | ug/l   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4   | 8.577  | 65    | 76328    | 29.429   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 110 | Recovery | =      | 98.100%  |
| 60) 4-Bromofluorobenzene    | 12.847 | 95    | 75242    | 28.889   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 63 - 112 | Recovery | =      | 96.300%  |
| 63) Toluene-d8              | 10.565 | 98    | 204629   | 27.990   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 112 | Recovery | =      | 93.300%  |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 8) Diethyl Ether            | 3.965  | 74    | 3877     | 2.949    | ug/l   | 79       |
| 15) Acetone                 | 4.436  | 58    | 14978    | 46.475   | ug/l   | 86       |
| 23) tert-Butyl Alcohol      | 5.518  | 59    | 2820016  | 6516.567 | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether | 5.795  | 73    | 13935m   | 2.079    | ug/l   |          |
| 34) Benzene                 | 8.600  | 78    | 34900    | 4.064    | ug/l # | 75       |
| 45) 1,4-Dioxane             | 9.688  | 88    | 3880     | 91.294   | ug/l   | 97       |
| 62) Toluene                 | 10.629 | 91    | 72662    | 7.865    | ug/l   | 100      |
| 64) Chlorobenzene           | 11.888 | 112   | 7231     | 1.258    | ug/l   | 95       |
| 66) Ethyl Benzene           | 11.959 | 91    | 88756    | 8.843    | ug/l   | 97       |
| 67) m/p-Xylenes             | 12.065 | 106   | 40828    | 10.723   | ug/l   | 99       |
| 68) o-Xylene                | 12.394 | 106   | 20598    | 5.612    | ug/l   | 97       |
| 70) Isopropylbenzene        | 12.694 | 105   | 7946     | 0.848    | ug/l   | 97       |
| 76) 1,3,5-Trimethylbenzene  | 13.176 | 105   | 6817     | 0.864    | ug/l   | 100      |
| 80) 1,2,4-Trimethylbenzene  | 13.482 | 105   | 26081    | 3.258    | ug/l   | 98       |
| 82) p-Isopropyltoluene      | 13.729 | 119   | 54781    | 7.024    | ug/l   | 98       |
| 84) 1,4-Dichlorobenzene     | 13.812 | 146   | 10524    | 2.512    | ug/l   | 98       |
| 91) Naphthalene             | 15.635 | 128   | 155162   | 21.588   | ug/l   | 99       |
| -----                       |        |       |          |          |        |          |

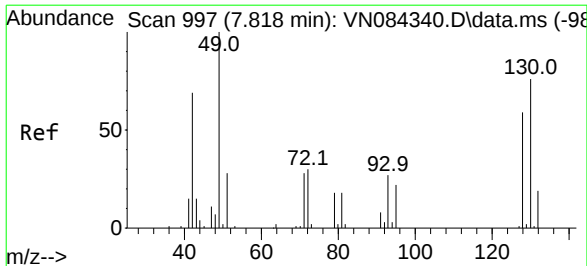
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN101824\  
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Sample : P4427-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
241016059-01-VOA

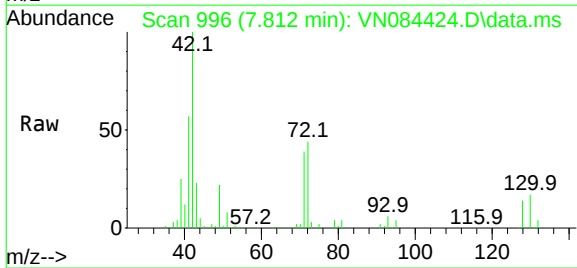
Quant Time: Oct 19 03:50:42 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N100824W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Wed Oct 09 02:22:28 2024  
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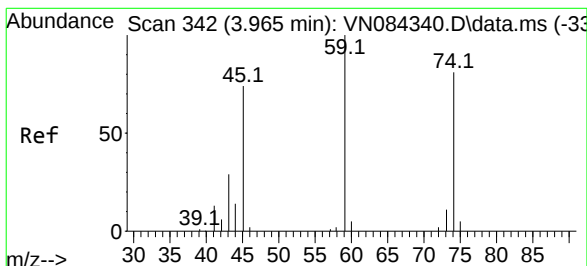
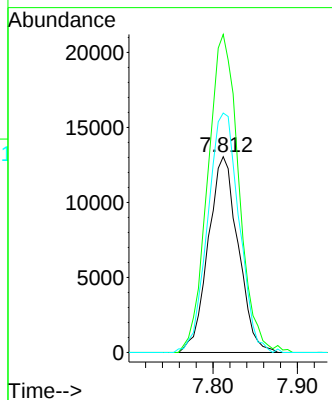
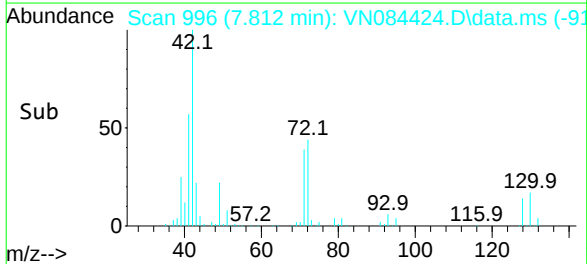


#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.812 min Scan# 99  
Delta R.T. -0.006 min  
Lab File: VN084424.D  
Acq: 18 Oct 2024 13:02

Instrument :  
MSVOA\_N  
ClientSampleId :  
241016059-01-VOA

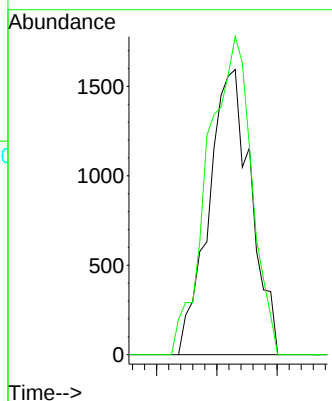
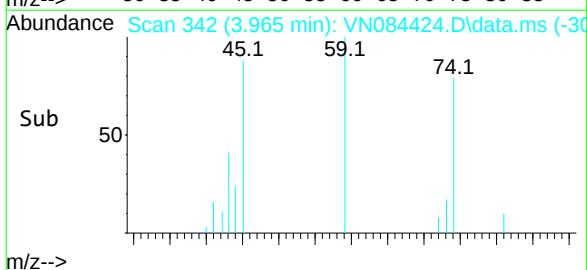
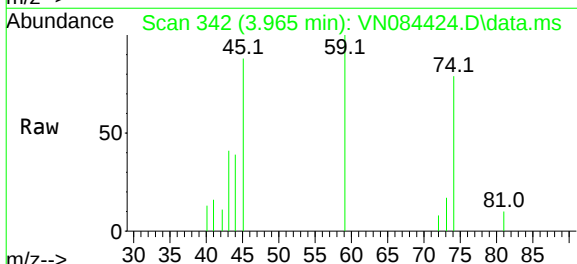


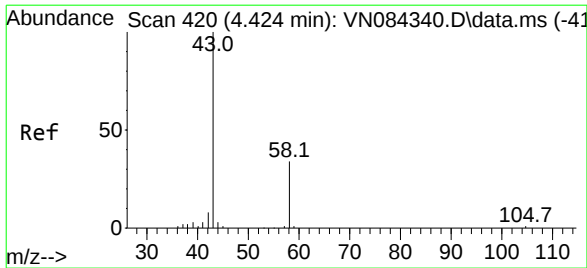
Tgt Ion:128 Resp: 32215  
Ion Ratio Lower Upper  
128 100  
49 167.6 0.0 430.0  
130 128.4 0.0 329.8



#8  
Diethyl Ether  
Concen: 2.949 ug/l  
RT: 3.965 min Scan# 342  
Delta R.T. 0.000 min  
Lab File: VN084424.D  
Acq: 18 Oct 2024 13:02

Tgt Ion: 74 Resp: 3877  
Ion Ratio Lower Upper  
74 100  
45 116.4 19.2 173.2





#15

Acetone

Concen: 46.475 ug/l

RT: 4.436 min Scan# 42

Delta R.T. 0.012 min

Lab File: VN084424.D

Acq: 18 Oct 2024 13:02

Instrument :

MSVOA\_N

ClientSampleId :

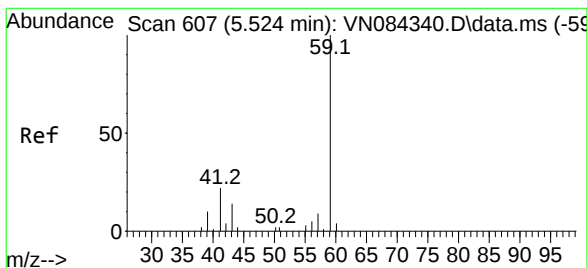
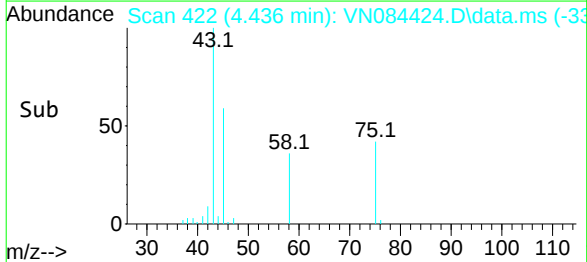
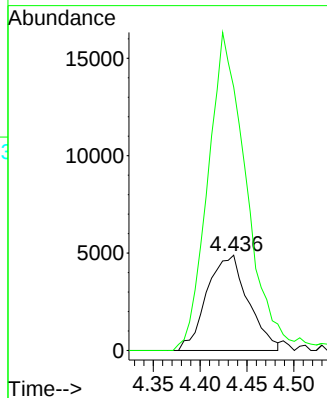
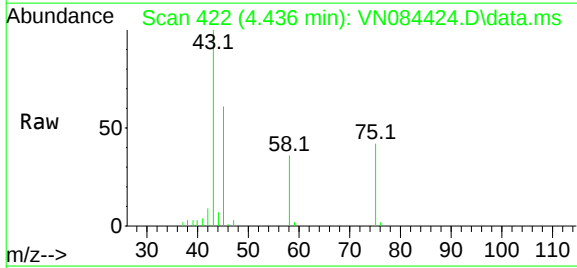
241016059-01-VOA

Tgt Ion: 58 Resp: 14978

Ion Ratio Lower Upper

58 100

43 270.1 237.5 356.3



#23

tert-Butyl Alcohol

Concen: 6516.567 ug/l

RT: 5.518 min Scan# 606

Delta R.T. -0.006 min

Lab File: VN084424.D

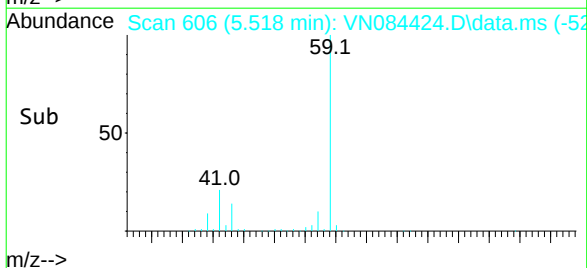
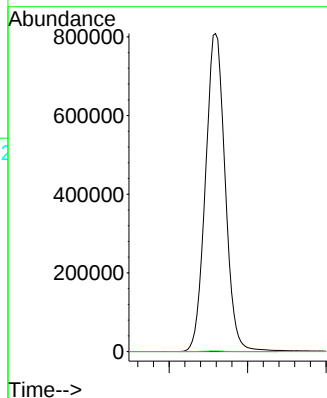
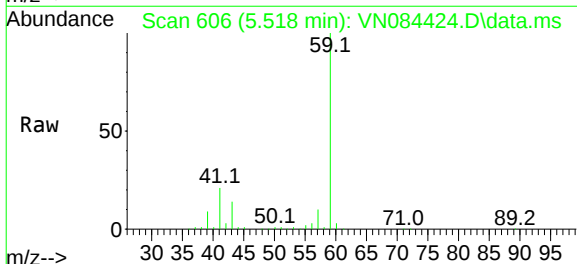
Acq: 18 Oct 2024 13:02

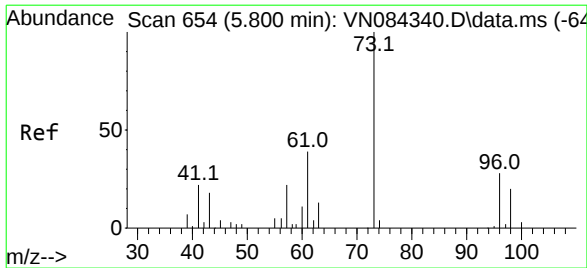
Tgt Ion: 59 Resp: 2820016

Ion Ratio Lower Upper

59 100

52 0.1 0.0 0.0#

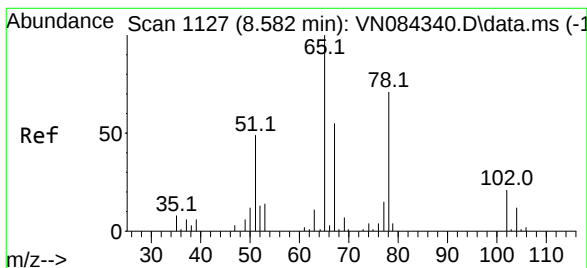
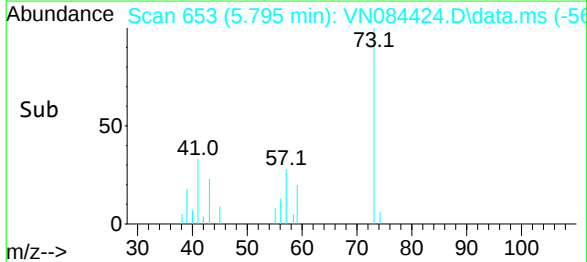
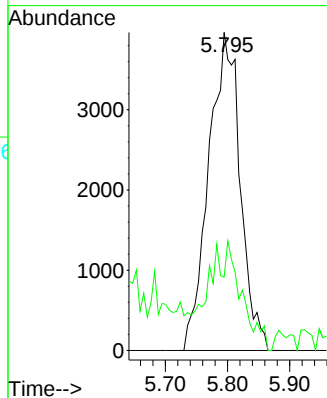
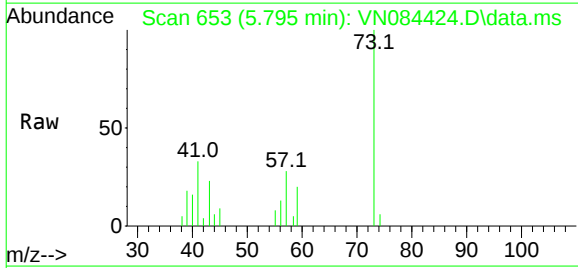




#24  
Methyl tert-Butyl Ether  
Concen: 2.079 ug/l m  
RT: 5.795 min Scan# 65  
Delta R.T. -0.006 min  
Lab File: VN084424.D  
Acq: 18 Oct 2024 13:02

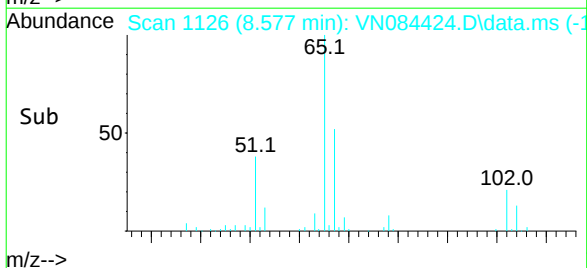
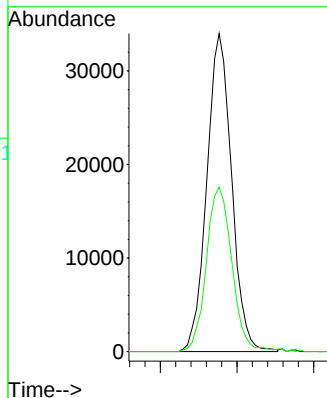
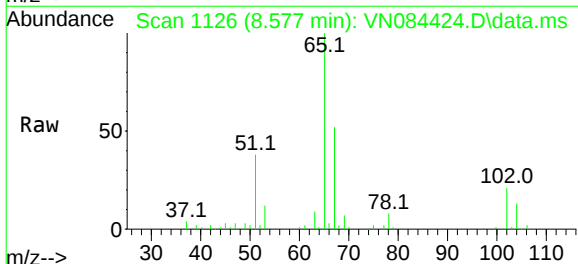
Instrument :  
MSVOA\_N  
ClientSampleId :  
241016059-01-VOA

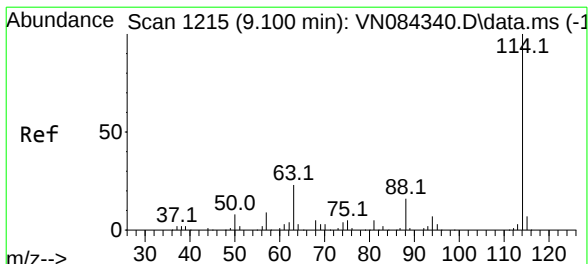
Tgt Ion: 73 Resp: 13935  
Ion Ratio Lower Upper  
73 100  
43 7.3 10.9 16.3#



#27  
1,2-Dichloroethane-d4  
Concen: 29.429 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. -0.006 min  
Lab File: VN084424.D  
Acq: 18 Oct 2024 13:02

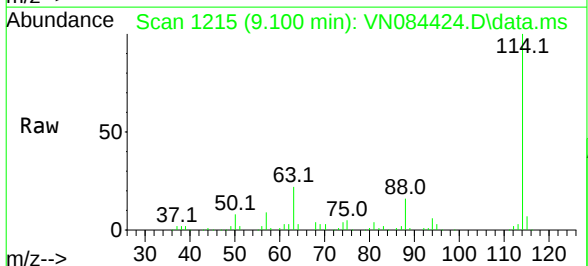
Tgt Ion: 65 Resp: 76328  
Ion Ratio Lower Upper  
65 100  
67 52.5 41.5 62.3





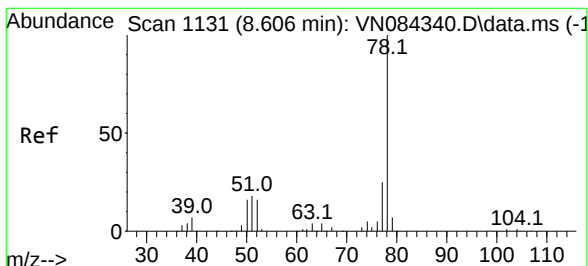
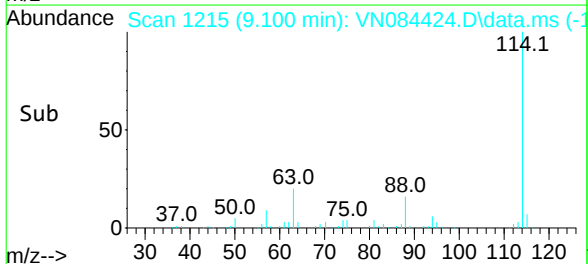
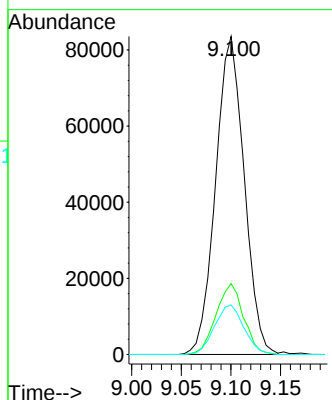
#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 9.100 min Scan# 1215  
 Delta R.T. 0.000 min  
 Lab File: VN084424.D  
 Acq: 18 Oct 2024 13:02

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 241016059-01-VOA



Tgt Ion: 114 Resp: 167106

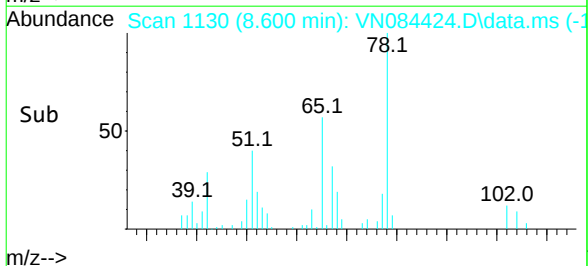
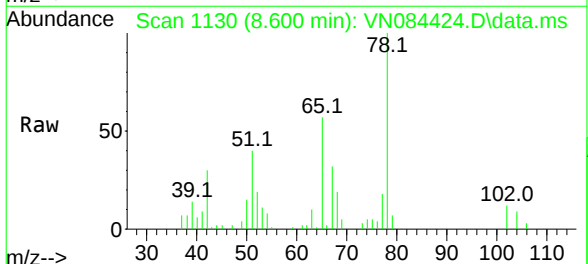
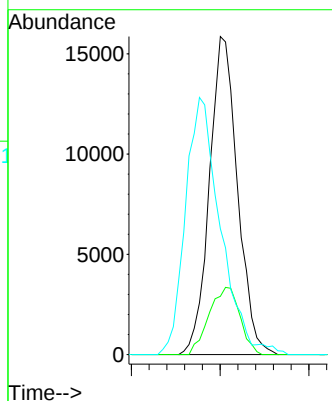
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 21.5  | 17.4  | 26.0  |
| 88  | 16.0  | 13.2  | 19.8  |

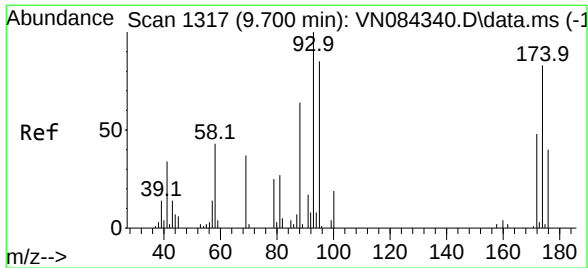


#34  
 Benzene  
 Concen: 4.064 ug/l  
 RT: 8.600 min Scan# 1130  
 Delta R.T. -0.006 min  
 Lab File: VN084424.D  
 Acq: 18 Oct 2024 13:02

Tgt Ion: 78 Resp: 34900

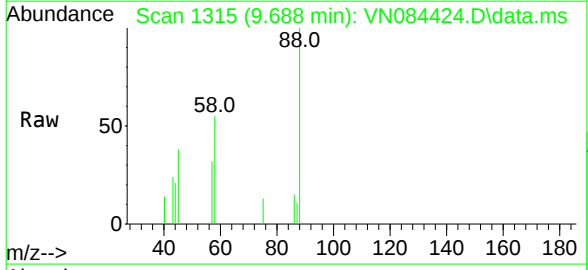
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 78  | 100   |       |       |
| 77  | 18.3  | 19.6  | 29.4# |
| 51  | 38.4  | 15.8  | 23.6# |



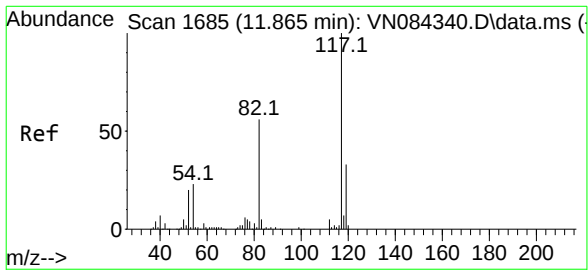
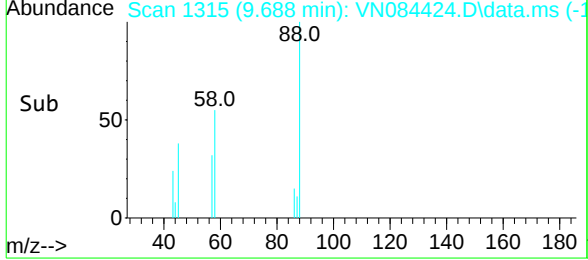
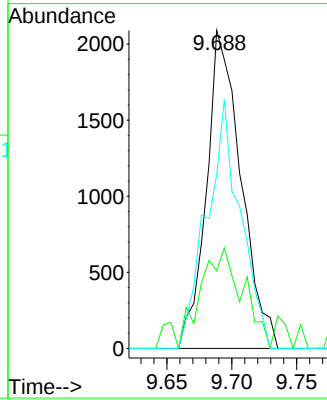


#45  
 1,4-Dioxane  
 Concen: 91.294 ug/l  
 RT: 9.688 min Scan# 1315  
 Delta R.T. -0.012 min  
 Lab File: VN084424.D  
 Acq: 18 Oct 2024 13:02

Instrument :  
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 241016059-01-VOA

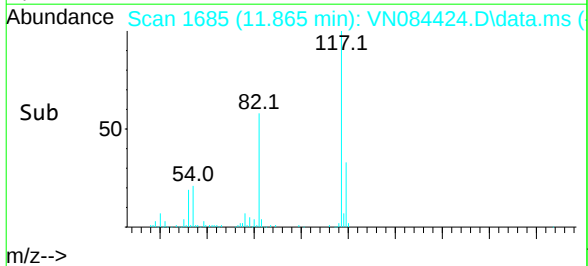
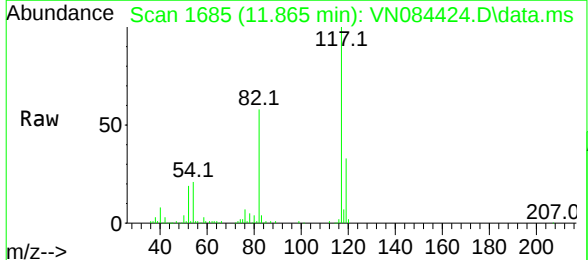
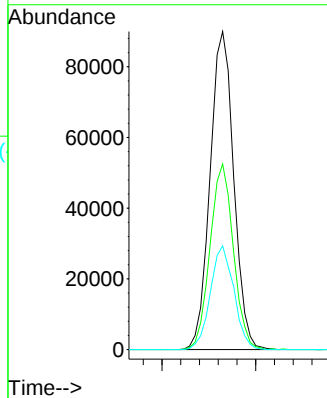


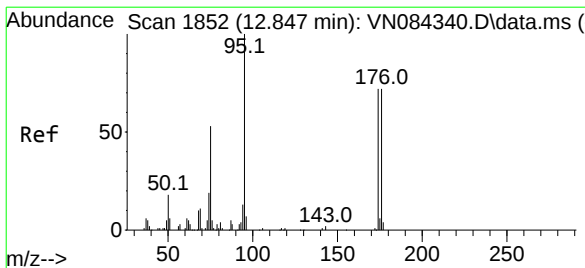
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 88    | Resp: | 3880  |
| Ion      | Ratio | Lower | Upper |
| 88       | 100   |       |       |
| 43       | 30.9  | 22.4  | 33.6  |
| 58       | 76.2  | 59.7  | 89.5  |



#57  
 Chlorobenzene-d5  
 Concen: 30.000 ug/l  
 RT: 11.865 min Scan# 1685  
 Delta R.T. 0.000 min  
 Lab File: VN084424.D  
 Acq: 18 Oct 2024 13:02

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 157811 |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 82       | 57.6  | 46.2  | 69.4   |
| 119      | 32.5  | 25.4  | 38.2   |





#60

4-Bromofluorobenzene

Concen: 28.889 ug/l

RT: 12.847 min Scan# 18

Delta R.T. 0.000 min

Lab File: VN084424.D

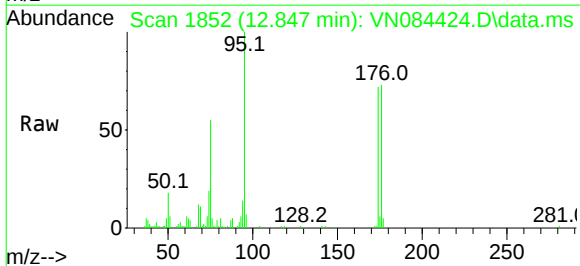
Acq: 18 Oct 2024 13:02

Instrument :

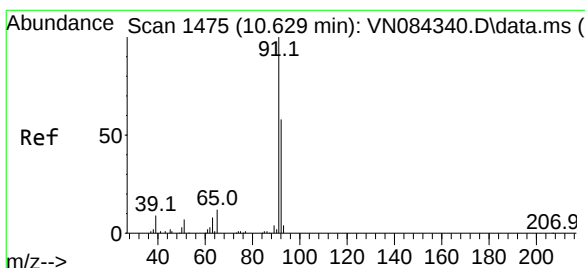
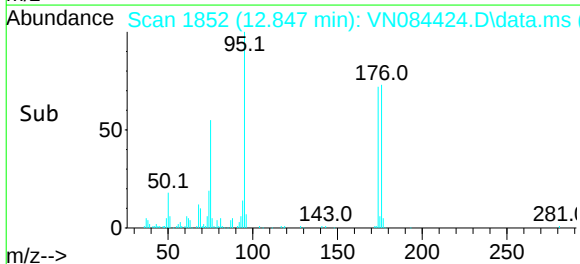
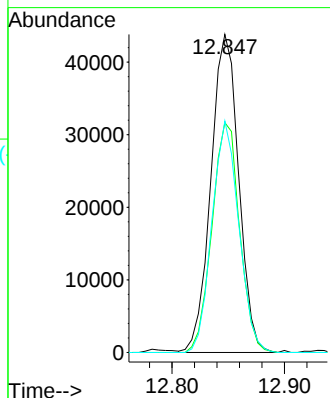
MSVOA\_N

ClientSampleId :

241016059-01-VOA



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 95    | Resp: | 75242 |
| Ion      | Ratio | Lower | Upper |
| 95       | 100   |       |       |
| 174      | 71.8  | 58.2  | 87.2  |
| 176      | 70.2  | 56.4  | 84.6  |



#62

Toluene

Concen: 7.865 ug/l

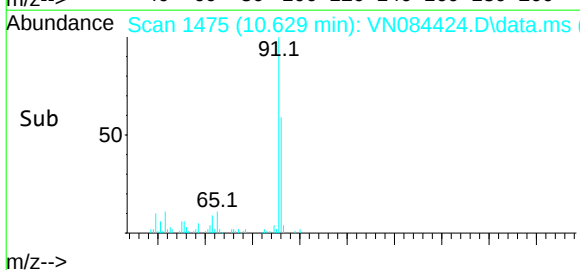
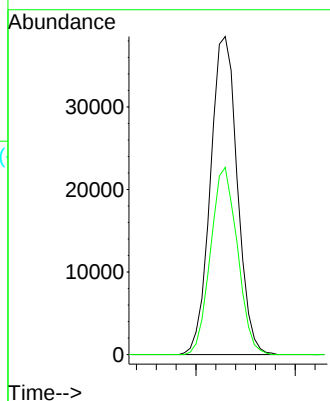
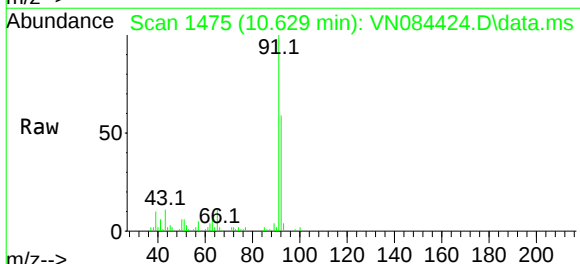
RT: 10.629 min Scan# 1475

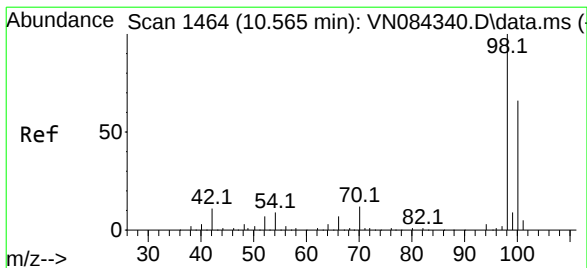
Delta R.T. 0.000 min

Lab File: VN084424.D

Acq: 18 Oct 2024 13:02

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 72662 |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 92       | 58.6  | 47.2  | 70.8  |





#63

Toluene-d8

Concen: 27.990 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN084424.D

Acq: 18 Oct 2024 13:02

Instrument :

MSVOA\_N

ClientSampleId :

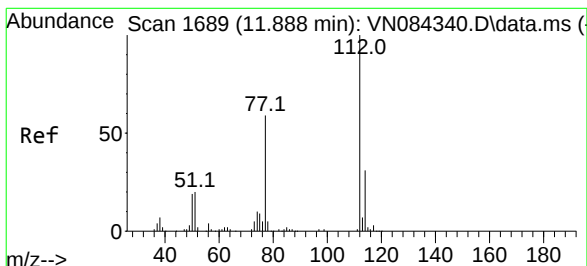
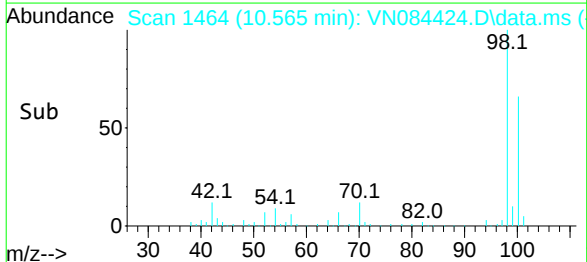
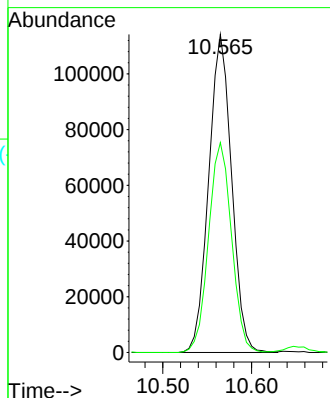
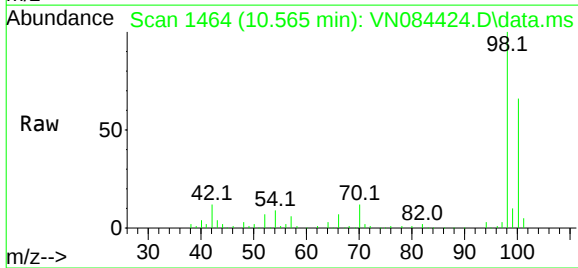
241016059-01-VOA

Tgt Ion: 98 Resp: 204629

Ion Ratio Lower Upper

98 100

100 66.3 52.5 78.7



#64

Chlorobenzene

Concen: 1.258 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN084424.D

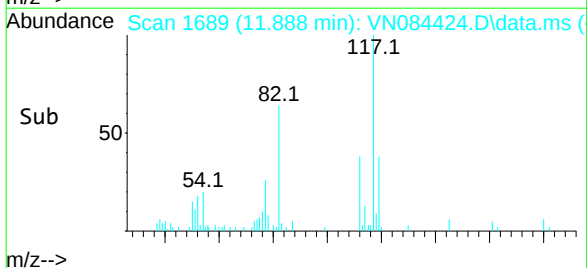
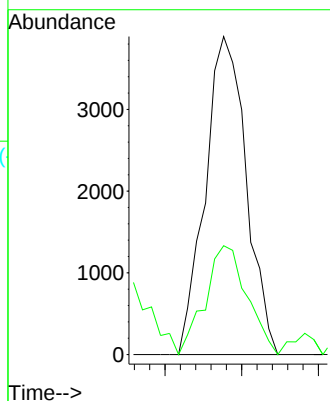
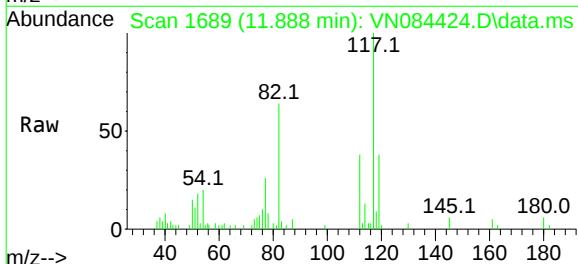
Acq: 18 Oct 2024 13:02

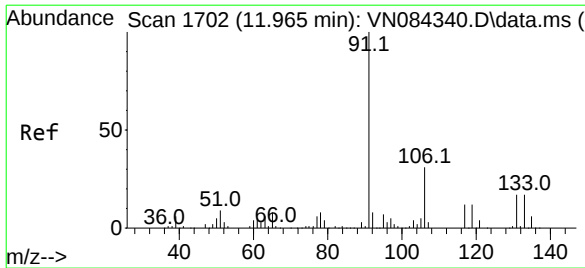
Tgt Ion: 112 Resp: 7231

Ion Ratio Lower Upper

112 100

114 34.2 25.1 37.7





#66

Ethyl Benzene

Concen: 8.843 ug/l

RT: 11.959 min Scan# 1719

Delta R.T. -0.006 min

Lab File: VN084424.D

Acq: 18 Oct 2024 13:02

Instrument :

MSVOA\_N

ClientSampleId :

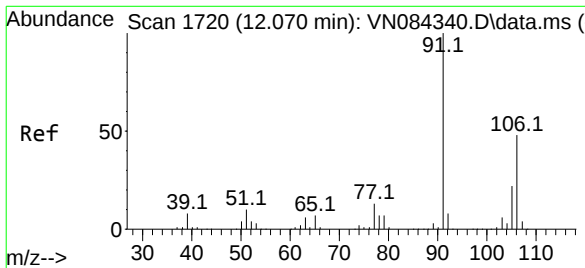
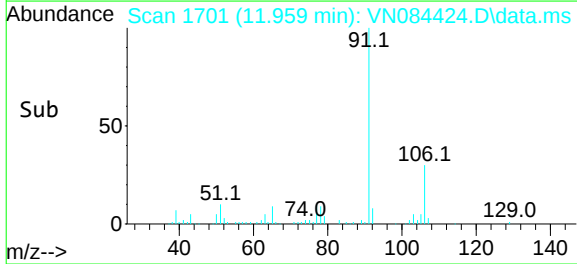
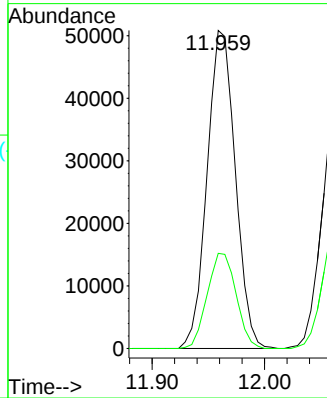
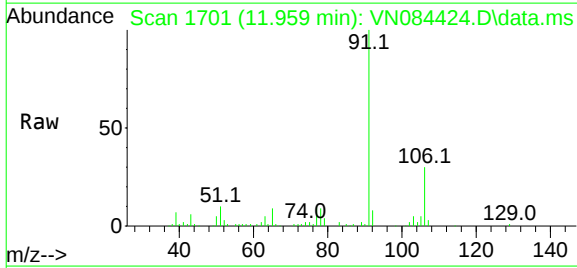
241016059-01-VOA

Tgt Ion: 91 Resp: 88756

Ion Ratio Lower Upper

91 100

106 29.9 25.2 37.8



#67

m/p-Xylenes

Concen: 10.723 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. -0.006 min

Lab File: VN084424.D

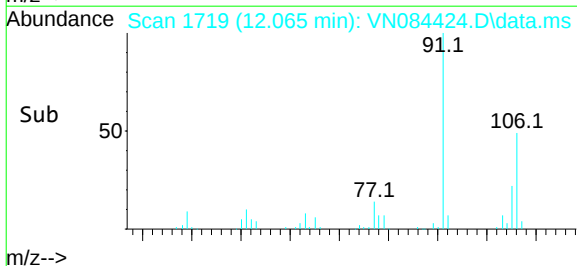
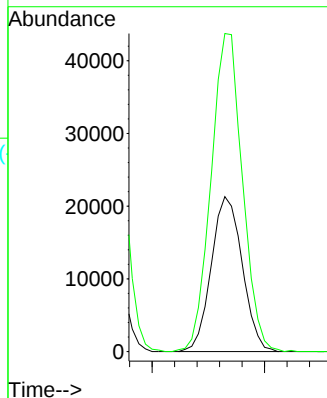
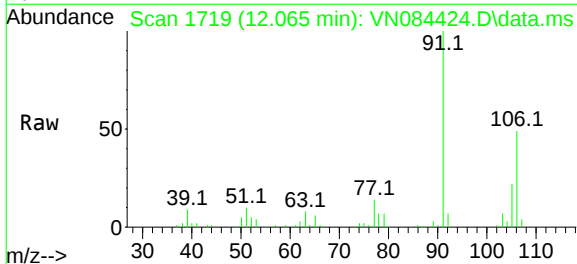
Acq: 18 Oct 2024 13:02

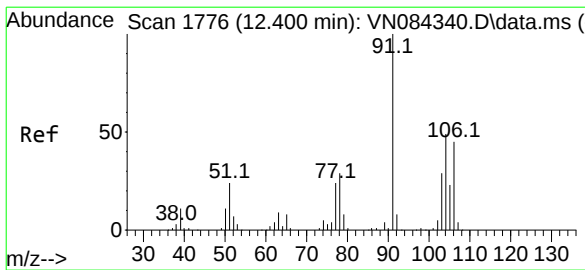
Tgt Ion: 106 Resp: 40828

Ion Ratio Lower Upper

106 100

91 207.4 166.7 250.1





#68

o-Xylene

Concen: 5.612 ug/l

RT: 12.394 min Scan# 17

Delta R.T. -0.006 min

Lab File: VN084424.D

Acq: 18 Oct 2024 13:02

Instrument :

MSVOA\_N

ClientSampleId :

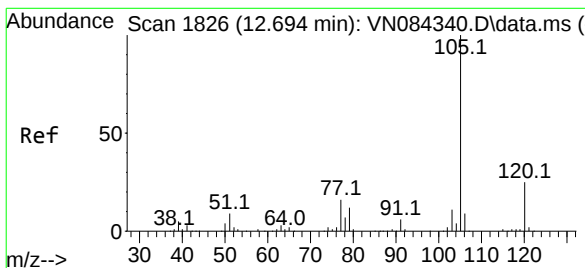
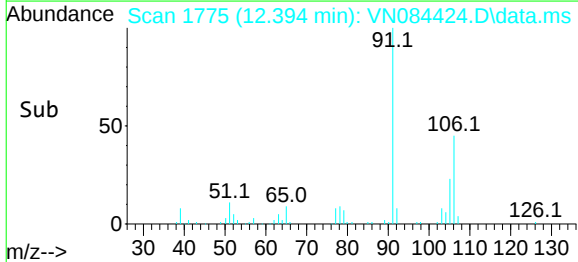
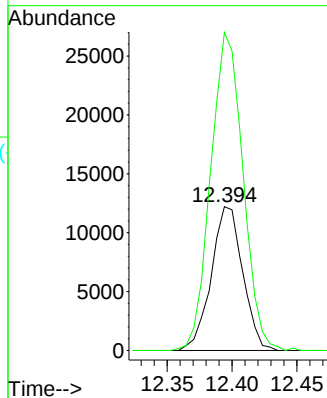
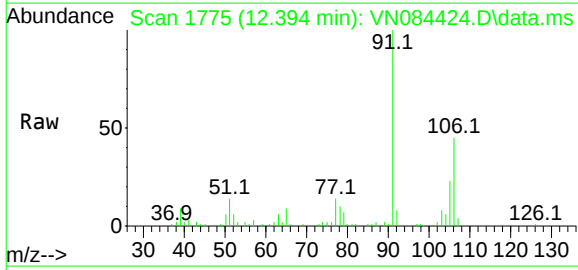
241016059-01-VOA

Tgt Ion:106 Resp: 20598

Ion Ratio Lower Upper

106 100

91 227.0 110.9 332.9



#70

Isopropylbenzene

Concen: 0.848 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. 0.000 min

Lab File: VN084424.D

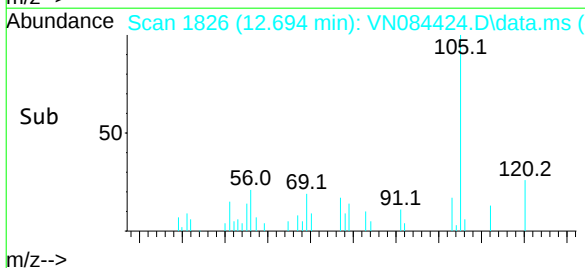
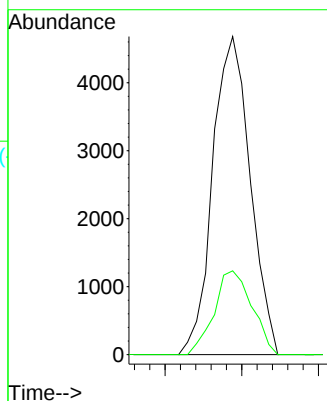
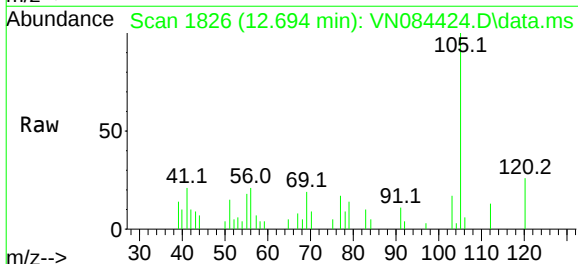
Acq: 18 Oct 2024 13:02

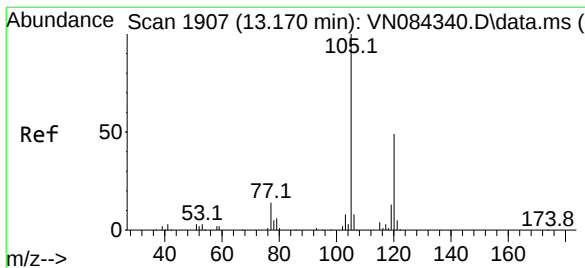
Tgt Ion:105 Resp: 7946

Ion Ratio Lower Upper

105 100

120 26.6 17.4 32.4





#76

1,3,5-Trimethylbenzene

Concen: 0.864 ug/l

RT: 13.176 min Scan# 1907

Delta R.T. 0.006 min

Lab File: VN084424.D

Acq: 18 Oct 2024 13:02

Instrument :

MSVOA\_N

ClientSampleId :

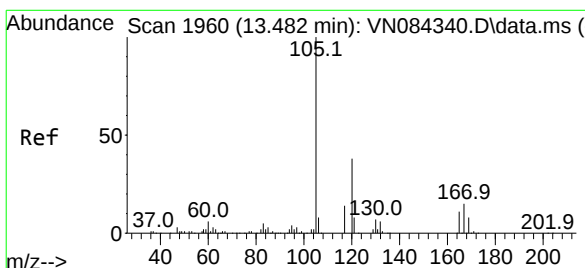
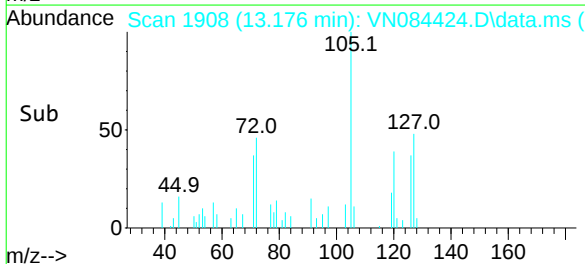
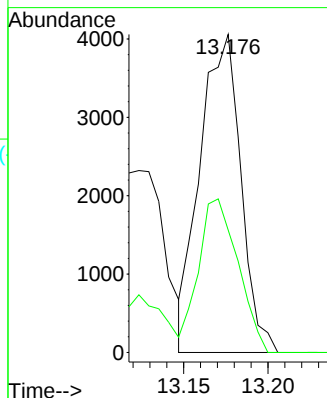
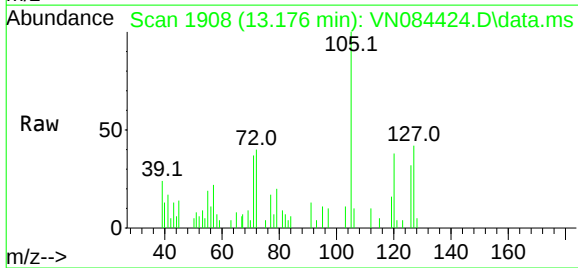
241016059-01-VOA

Tgt Ion:105 Resp: 6817

Ion Ratio Lower Upper

105 100

120 47.0 0.0 94.4



#80

1,2,4-Trimethylbenzene

Concen: 3.258 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.000 min

Lab File: VN084424.D

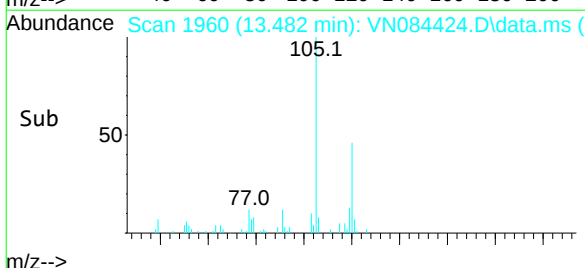
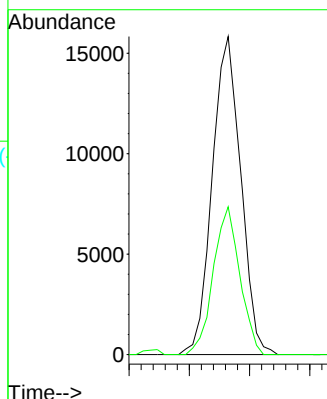
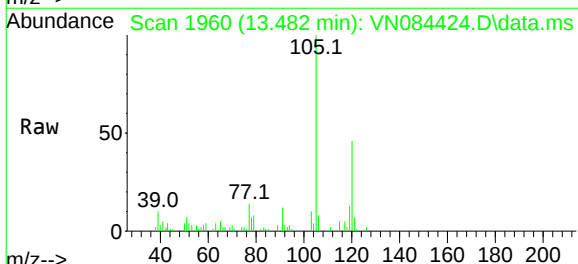
Acq: 18 Oct 2024 13:02

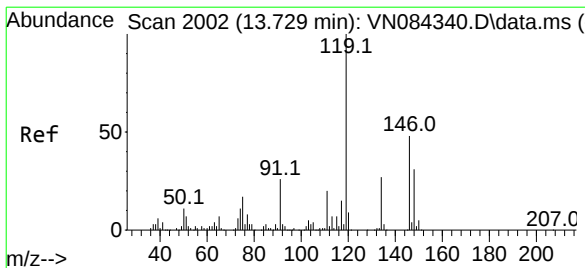
Tgt Ion:105 Resp: 26081

Ion Ratio Lower Upper

105 100

120 43.2 0.0 88.8





#82

p-Isopropyltoluene

Concen: 7.024 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN084424.D

Acq: 18 Oct 2024 13:02

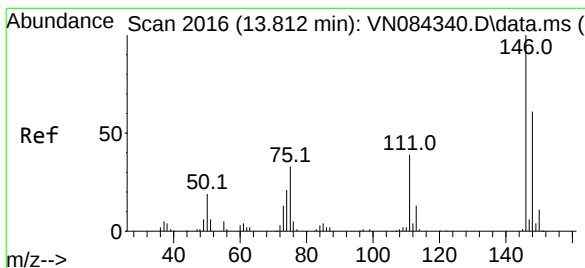
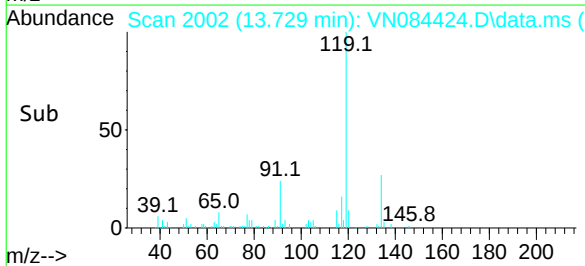
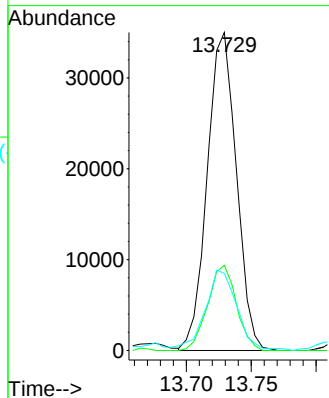
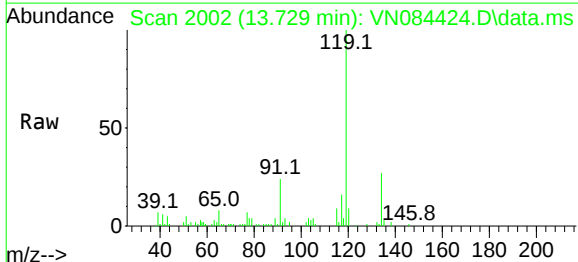
Instrument :

MSVOA\_N

ClientSampleId :

241016059-01-VOA

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 119   | Resp: | 54781 |
| Ion      | Ratio | Lower | Upper |
| 119      | 100   |       |       |
| 134      | 26.2  | 0.0   | 50.2  |
| 91       | 26.5  | 0.0   | 50.6  |



#84

1,4-Dichlorobenzene

Concen: 2.512 ug/l

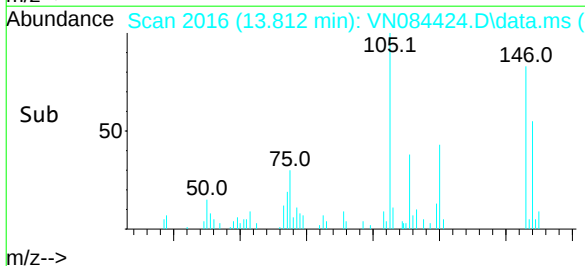
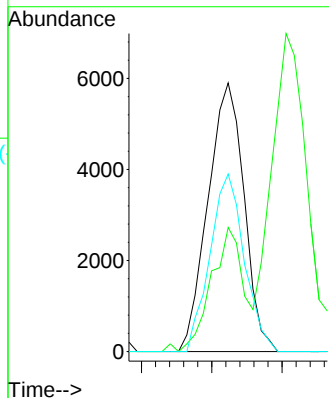
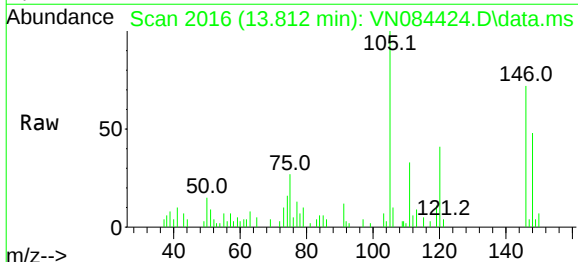
RT: 13.812 min Scan# 2016

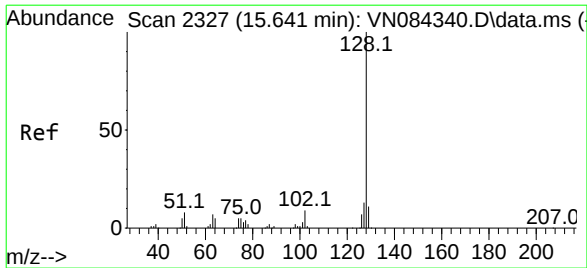
Delta R.T. 0.000 min

Lab File: VN084424.D

Acq: 18 Oct 2024 13:02

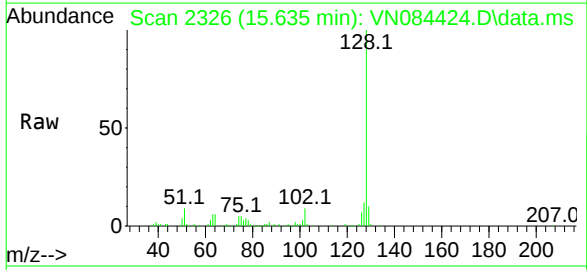
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 10524 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 41.1  | 20.5  | 61.5  |
| 148      | 63.0  | 32.5  | 97.4  |





#91  
Naphthalene  
Concen: 21.588 ug/l  
RT: 15.635 min Scan# 23  
Delta R.T. -0.006 min  
Lab File: VN084424.D  
Acq: 18 Oct 2024 13:02

Instrument :  
MSVOA\_N  
ClientSampleId :  
241016059-01-VOA



Tgt Ion:128 Resp: 155162  
Ion Ratio Lower Upper  
128 100  
127 12.9 10.3 15.5  
129 10.2 8.8 13.2

