

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VW121222\  
 Data File : VW029617.D  
 Acq On : 13 Dec 2022 00:04  
 Operator : SY/MD  
 Sample : N5928-08  
 Misc : 5.0mL/MSVOA\_V/WATER  
 ALS Vial : 30 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 EXZ71

Quant Time: Dec 13 05:24:42 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVLM120722WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Dec 13 04:57:44 2022  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response   | Conc     | Units  | Dev(Min) |
|-------------------------------|----------------|------|------------|----------|--------|----------|
| -----                         |                |      |            |          |        |          |
| Internal Standards            |                |      |            |          |        |          |
| 1) 1,4-Difluorobenzene        | 5.609          | 114  | 544278     | 50.000   | ug/L   | 0.00     |
| 28) Chlorobenzene-d5          | 8.844          | 117  | 498613     | 50.000   | ug/L   | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.239         | 152  | 261652     | 50.000   | ug/L   | 0.00     |
|                               |                |      |            |          |        |          |
| System Monitoring Compounds   |                |      |            |          |        |          |
| 4) Vinyl Chloride-d3          | 1.304          | 65   | 146304     | 43.896   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 60 - 135 |      | Recovery = | 87.800%  |        |          |
| 7) Chloroethane-d5            | 1.564          | 69   | 117664     | 46.298   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 70 - 130 |      | Recovery = | 92.600%  |        |          |
| 11) 1,1-Dichloroethene-d2     | 2.105          | 63   | 189253     | 36.406   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 60 - 125 |      | Recovery = | 72.820%  |        |          |
| 21) 2-Butanone-d5             | 3.873          | 46   | 170615     | 83.915   | ug/L   | 0.00     |
| Spiked Amount 100.000         | Range 40 - 130 |      | Recovery = | 83.920%  |        |          |
| 24) Chloroform-d              | 4.339          | 84   | 253726     | 40.454   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 70 - 125 |      | Recovery = | 80.900%  |        |          |
| 26) 1,2-Dichloroethane-d4     | 5.024          | 65   | 152188     | 42.485   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 70 - 125 |      | Recovery = | 84.980%  |        |          |
| 32) Benzene-d6                | 5.043          | 84   | 551010     | 41.822   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 70 - 125 |      | Recovery = | 83.640%  |        |          |
| 36) 1,2-Dichloropropane-d6    | 6.063          | 67   | 169969     | 42.235   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 70 - 120 |      | Recovery = | 84.460%  |        |          |
| 41) Toluene-d8                | 7.307          | 98   | 494587     | 39.842   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 80 - 120 |      | Recovery = | 79.680%# |        |          |
| 43) trans-1,3-Dichloroprop... | 7.612          | 79   | 68965      | 33.937   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 60 - 125 |      | Recovery = | 67.880%  |        |          |
| 47) 2-Hexanone-d5             | 8.082          | 63   | 144081     | 83.841   | ug/L   | 0.00     |
| Spiked Amount 100.000         | Range 45 - 130 |      | Recovery = | 83.840%  |        |          |
| 56) 1,1,2,2-Tetrachloroeth... | 10.207         | 84   | 231821     | 40.311   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 65 - 120 |      | Recovery = | 80.620%  |        |          |
| 66) 1,2-Dichlorobenzene-d4    | 11.612         | 152  | 201434     | 40.442   | ug/L   | 0.00     |
| Spiked Amount 50.000          | Range 80 - 120 |      | Recovery = | 80.880%  |        |          |
|                               |                |      |            |          |        |          |
| Target Compounds              |                |      |            |          |        | Qvalue   |
| 5) Vinyl chloride             | 1.310          | 62   | 138386     | 33.838   | ug/L   | 98       |
| 8) Chloroethane               | 1.581          | 64   | 27450      | 12.054   | ug/L   | 99       |
| 12) 1,1-Dichloroethene        | 2.118          | 96   | 15994      | 5.498    | ug/L # | 1        |
| 13) Acetone                   | 2.163          | 43   | 3248       | 2.452    | ug/L   | 95       |
| 17) trans-1,2-Dichloroethene  | 2.757          | 96   | 5620       | 1.677    | ug/L   | 88       |
| 19) 1,1-Dichloroethane        | 3.182          | 63   | 478875     | 83.388   | ug/L   | 99       |
| 20) cis-1,2-Dichloroethene    | 3.902          | 96   | 411560     | 111.651  | ug/L   | 92       |
| 27) 1,2-Dichloroethane        | 5.130          | 62   | 3549       | 0.844    | ug/L   | 95       |
| 30) 1,1,1-Trichloroethane     | 4.600          | 97   | 417738     | 76.898   | ug/L   | 99       |
| 34) Trichloroethene           | 5.905          | 95   | 182612     | 51.851   | ug/L   | 99       |
| 35) Methylcyclohexane         | 6.127          | 83   | 10171      | 1.700    | ug/L   | 93       |
| 39) cis-1,3-Dichloropropene   | 6.979          | 75   | 3937       | 0.706    | ug/L # | 72       |
| 46) Tetrachloroethene         | 7.966          | 164  | 124578     | 43.997   | ug/L   | 98       |
| 52) Ethylbenzene              | 9.005          | 91   | 36807      | 2.314    | ug/L   | 98       |
| 60) Isopropylbenzene          | 9.924          | 105  | 14030      | 0.913    | ug/L # | 96       |
| 62) 1,3,5-Trimethylbenzene    | 10.529         | 105  | 232594     | 17.124   | ug/L   | 99       |
| 63) 1,2,4-Trimethylbenzene    | 10.905         | 105  | 555962     | 41.292   | ug/L   | 100      |
| 71) Naphthalene               | 13.493         | 128  | 66930      | 5.551    | ug/L   | 98       |
| -----                         |                |      |            |          |        |          |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV121222\  
Data File : VV029617.D  
Acq On : 13 Dec 2022 00:04  
Operator : SY/MD  
Sample : N5928-08  
Misc : 5.0mL/MSVOA\_V/WATER  
ALS Vial : 30 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
EXZ71

Quant Time: Dec 13 05:24:42 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVLM120722WMA.M  
Quant Title : VOC Analysis  
QLast Update : Tue Dec 13 04:57:44 2022  
Response via : Initial Calibration

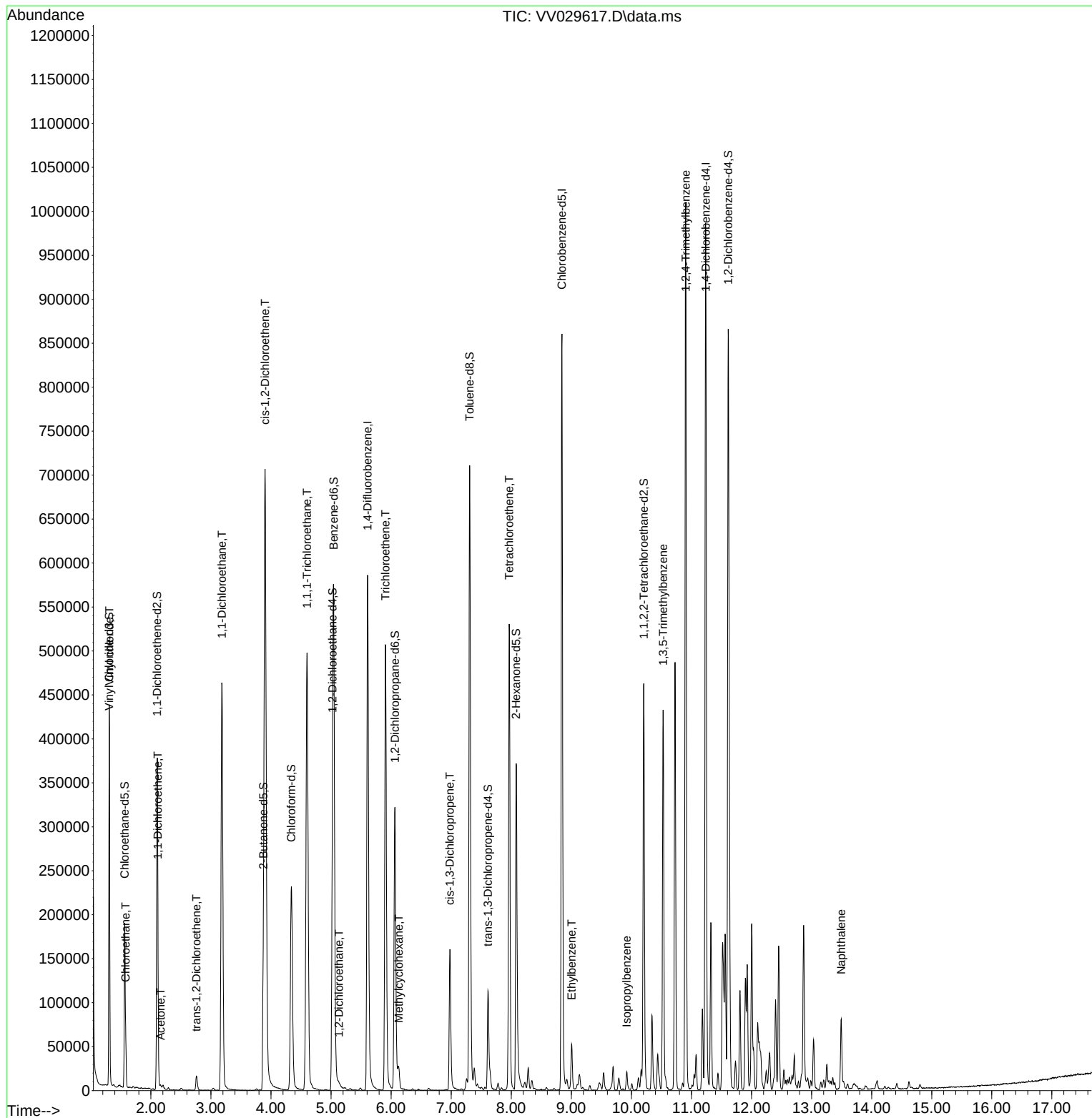
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

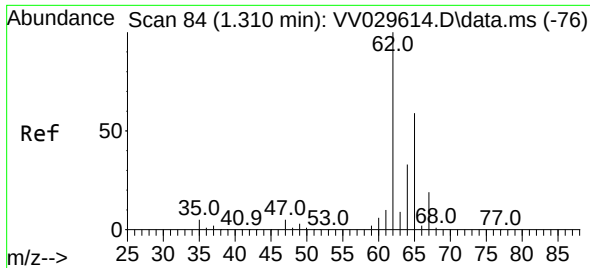
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV121222\  
Data File : VV029617.D  
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Quant Time: Dec 13 05:24:42 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVLM120722WMA.M  
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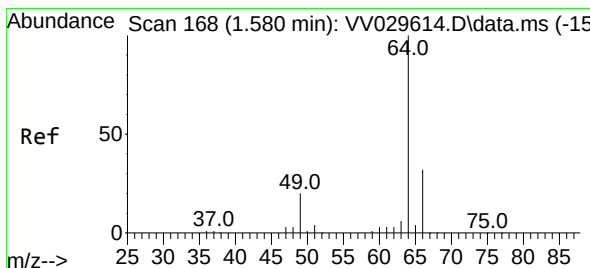
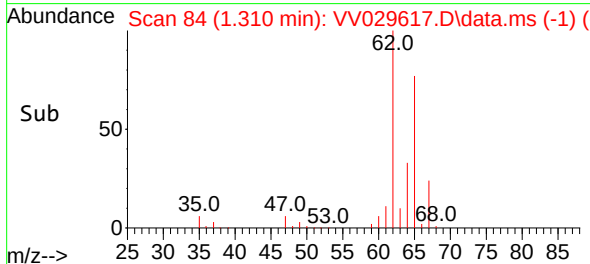
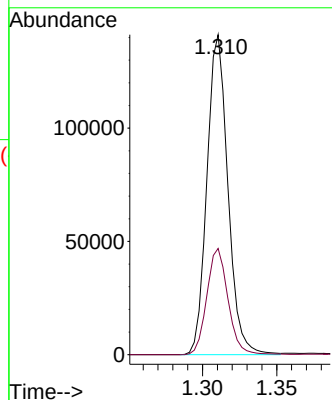
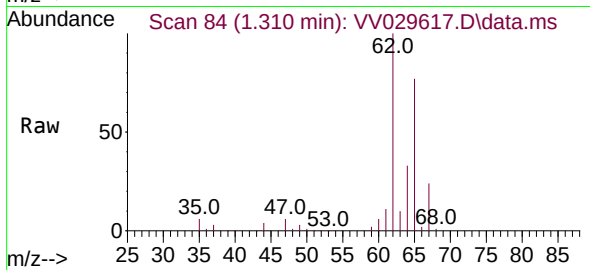




#5  
 Vinyl chloride  
 Concen: 33.838 ug/L  
 RT: 1.310 min Scan# 84  
 Delta R.T. 0.000 min  
 Lab File: VV029617.D  
 Acq: 13 Dec 2022 00:04

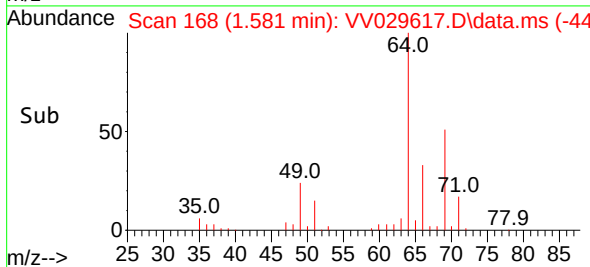
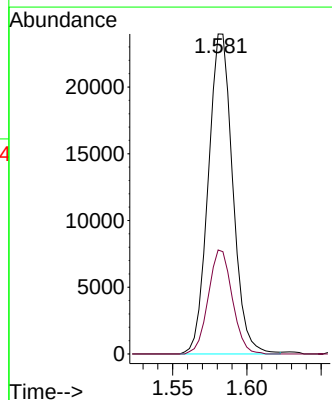
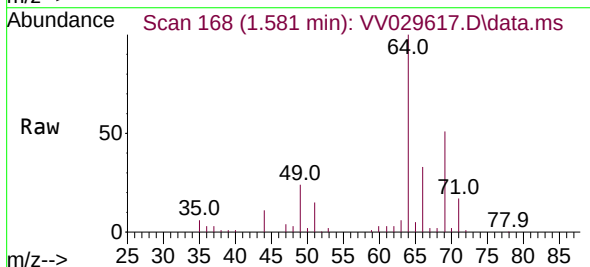
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
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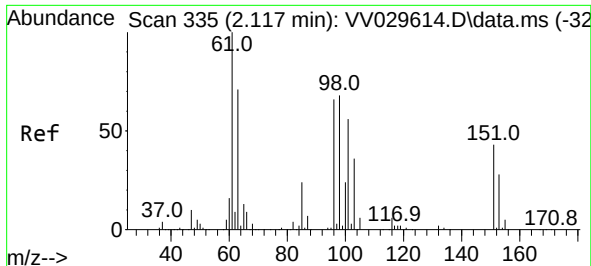
Tgt Ion: 62 Resp: 138386  
 Ion Ratio Lower Upper  
 62 100  
 64 33.2 22.5 41.9



#8  
 Chloroethane  
 Concen: 12.054 ug/L  
 RT: 1.581 min Scan# 168  
 Delta R.T. 0.000 min  
 Lab File: VV029617.D  
 Acq: 13 Dec 2022 00:04

Tgt Ion: 64 Resp: 27450  
 Ion Ratio Lower Upper  
 64 100  
 66 32.5 22.5 41.9





#12

1,1-Dichloroethene

Concen: 5.498 ug/L

RT: 2.118 min Scan# 31

Delta R.T. 0.000 min

Lab File: VV029617.D

Acq: 13 Dec 2022 00:04

Instrument :

MSVOA\_V

ClientSampleId :

EXZ71

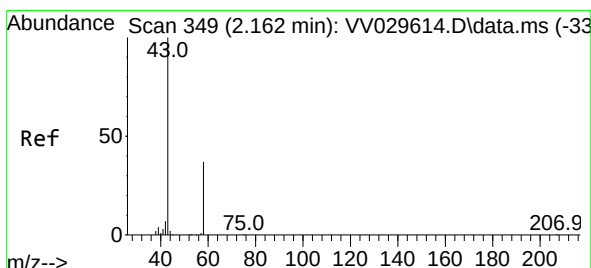
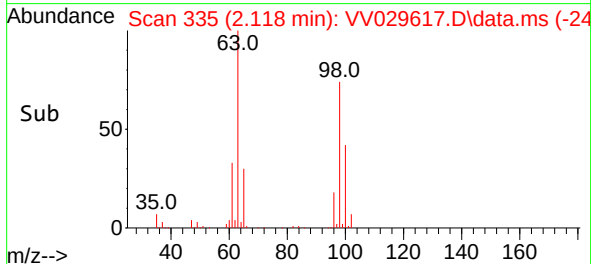
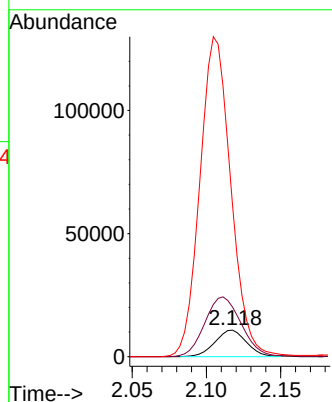
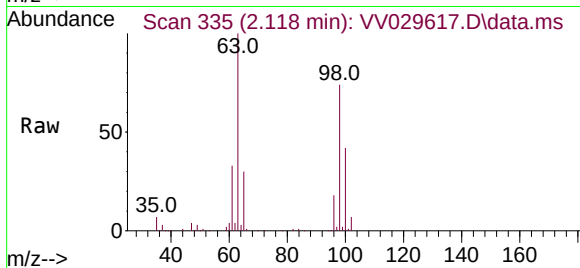
Tgt Ion: 96 Resp: 15994

Ion Ratio Lower Upper

96 100

61 186.4 103.3 191.9

63 570.1 77.3 143.7#



#13

Acetone

Concen: 2.452 ug/L

RT: 2.163 min Scan# 349

Delta R.T. 0.000 min

Lab File: VV029617.D

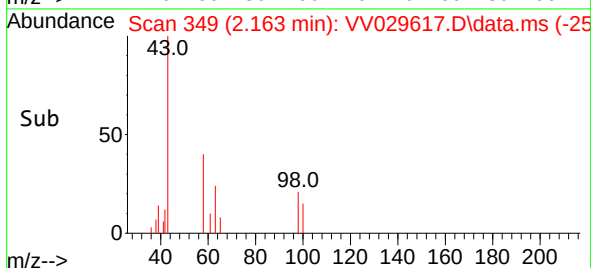
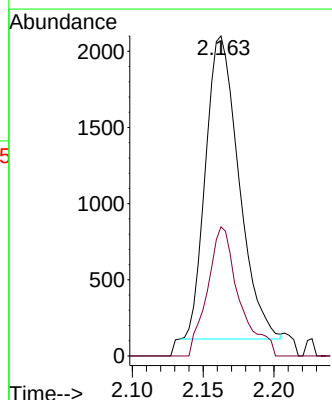
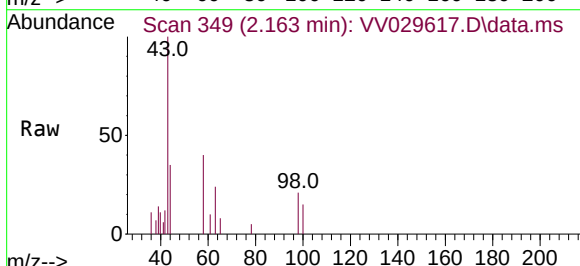
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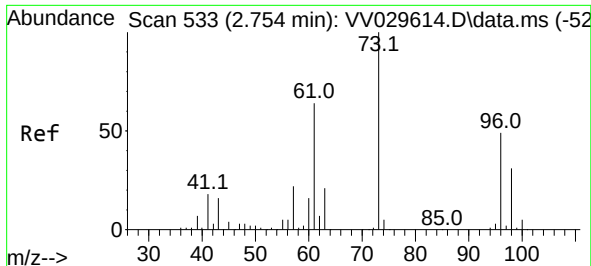
Tgt Ion: 43 Resp: 3248

Ion Ratio Lower Upper

43 100

58 40.4 0.0 74.8

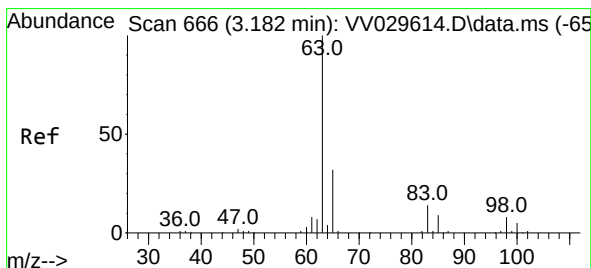
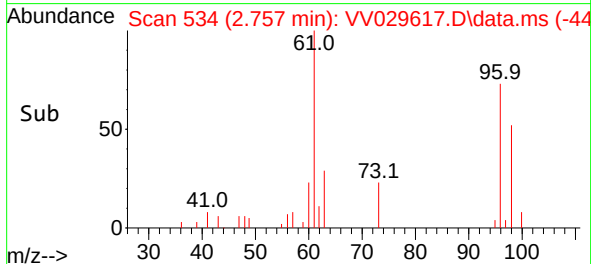
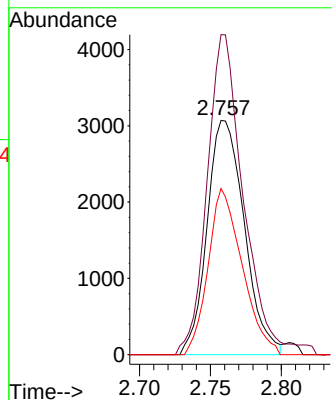
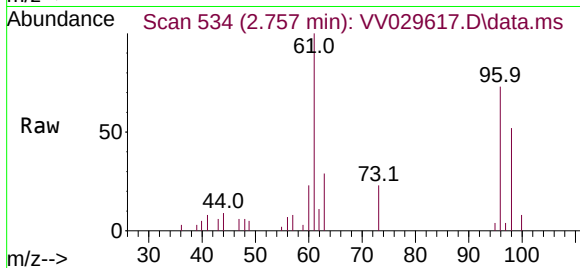




#17  
trans-1,2-Dichloroethene  
Concen: 1.677 ug/L  
RT: 2.757 min Scan# 51  
Delta R.T. 0.003 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

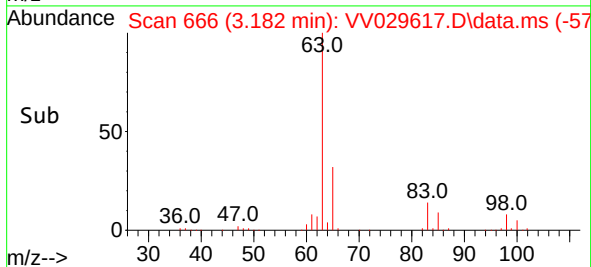
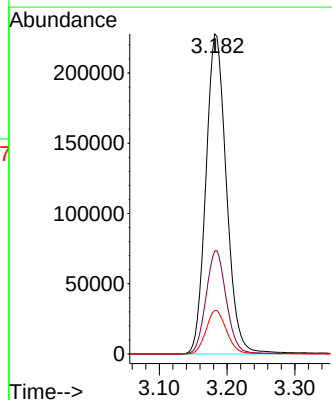
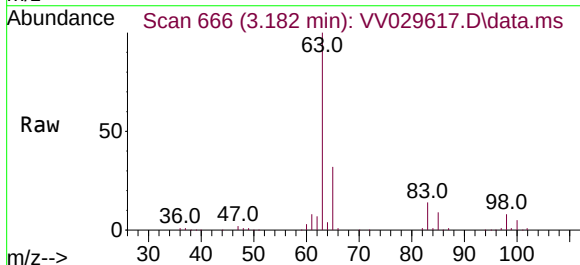
Instrument :  
MSVOA\_V  
ClientSampleId :  
EXZ71

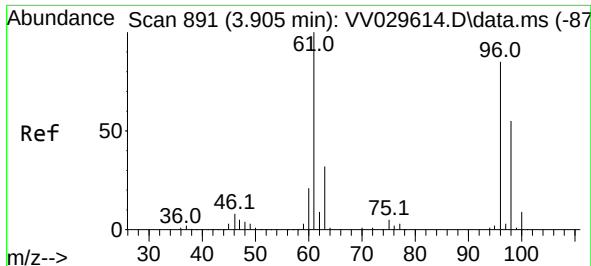
Tgt Ion: 96 Resp: 5620  
Ion Ratio Lower Upper  
96 100  
61 136.6 86.4 160.4  
98 70.9 43.4 80.6



#19  
1,1-Dichloroethane  
Concen: 83.388 ug/L  
RT: 3.182 min Scan# 666  
Delta R.T. 0.000 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

Tgt Ion: 63 Resp: 478875  
Ion Ratio Lower Upper  
63 100  
65 32.2 22.5 41.7  
83 13.6 10.4 19.2

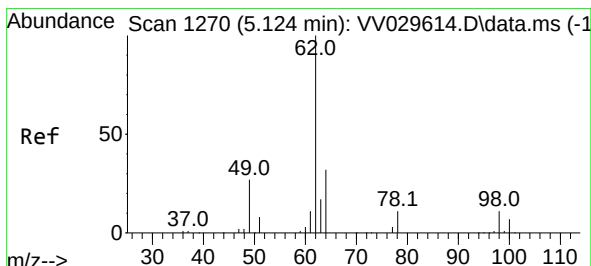
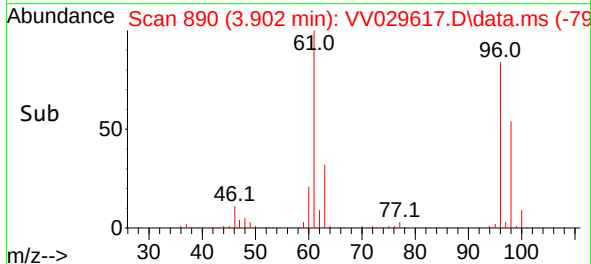
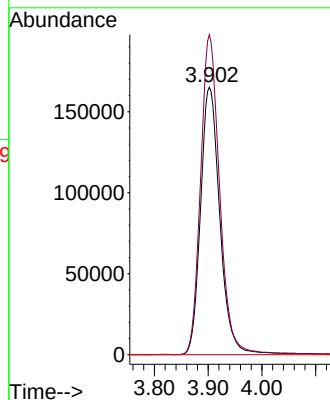
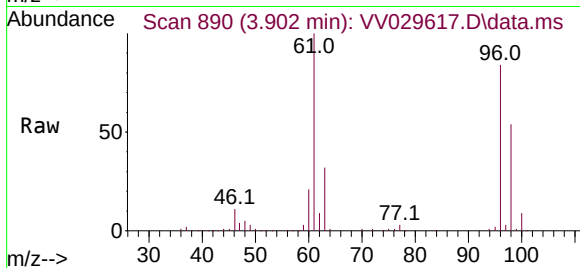




#20  
 cis-1,2-Dichloroethene  
 Concen: 111.651 ug/L  
 RT: 3.902 min Scan# 891  
 Delta R.T. -0.003 min  
 Lab File: VV029617.D  
 Acq: 13 Dec 2022 00:04

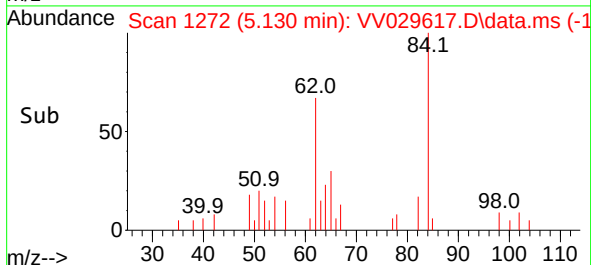
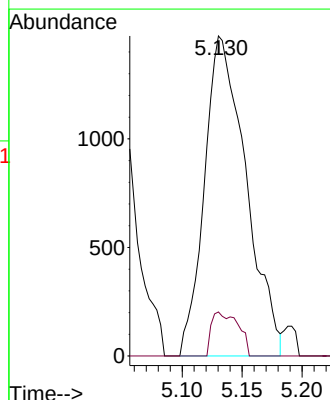
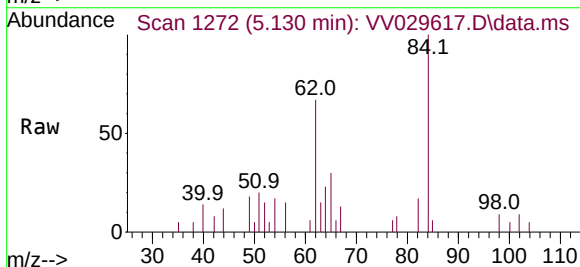
Instrument :  
 MSVOA\_V  
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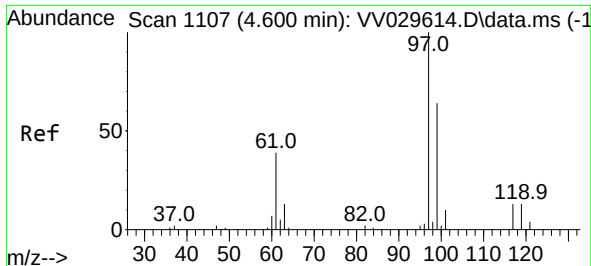
Tgt Ion: 96 Resp: 411560  
 Ion Ratio Lower Upper  
 96 100  
 61 119.6 78.0 144.9  
 68 0.0 0.0 0.0



#27  
 1,2-Dichloroethane  
 Concen: 0.844 ug/L  
 RT: 5.130 min Scan# 1272  
 Delta R.T. 0.007 min  
 Lab File: VV029617.D  
 Acq: 13 Dec 2022 00:04

Tgt Ion: 62 Resp: 3549  
 Ion Ratio Lower Upper  
 62 100  
 98 13.8 9.4 14.0





#30

1,1,1-Trichloroethane

Concen: 76.898 ug/L

RT: 4.600 min Scan# 1107

Delta R.T. 0.000 min

Lab File: VV029617.D

Acq: 13 Dec 2022 00:04

Instrument :

MSVOA\_V

ClientSampleId :

EXZ71

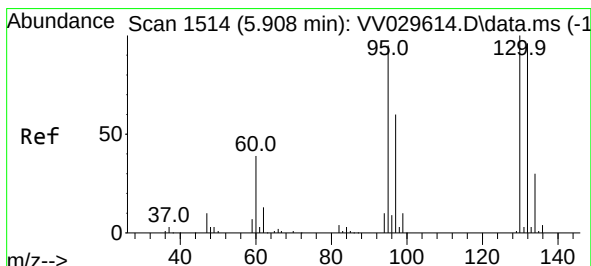
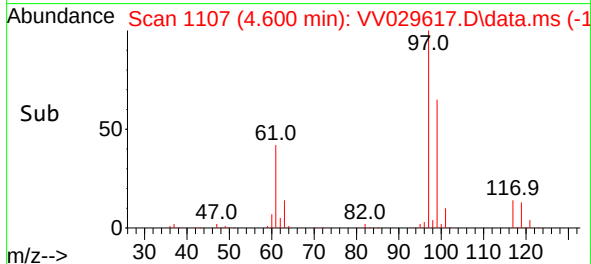
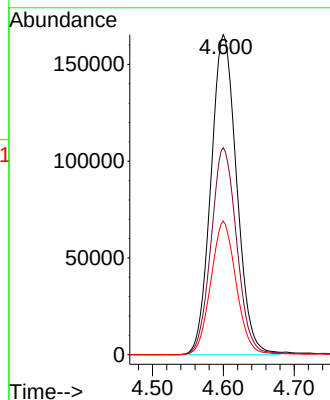
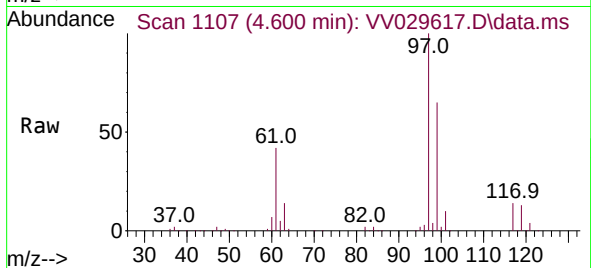
Tgt Ion: 97 Resp: 417738

Ion Ratio Lower Upper

97 100

99 64.4 52.1 78.1

61 41.0 31.8 47.8



#34

Trichloroethene

Concen: 51.851 ug/L

RT: 5.905 min Scan# 1513

Delta R.T. -0.003 min

Lab File: VV029617.D

Acq: 13 Dec 2022 00:04

Tgt Ion: 95 Resp: 182612

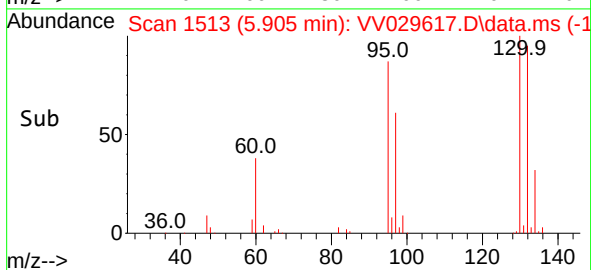
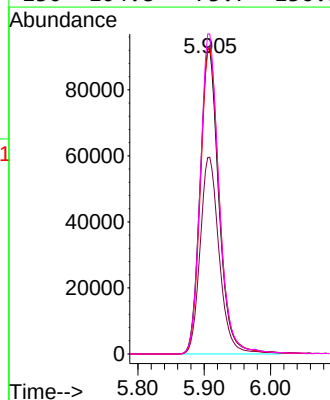
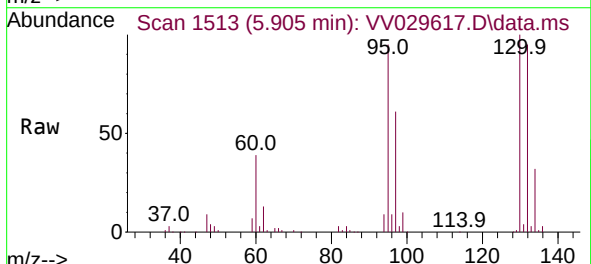
Ion Ratio Lower Upper

95 100

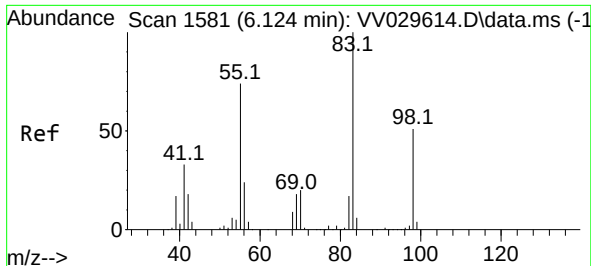
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132 99.2 69.9 129.9

130 104.8 73.7 136.9



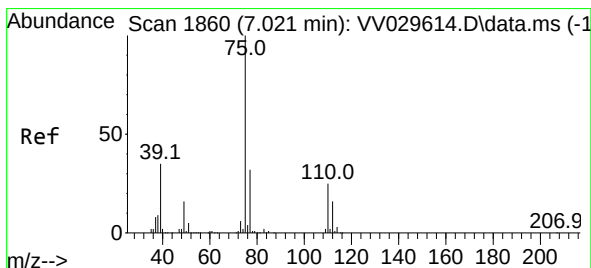
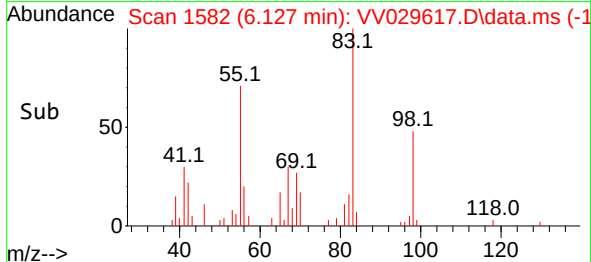
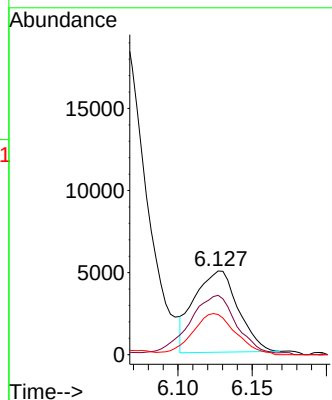
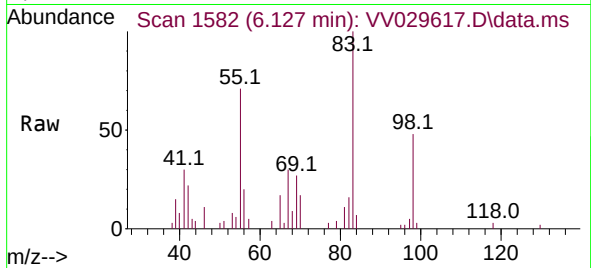




#35  
Methylcyclohexane  
Concen: 1.700 ug/L  
RT: 6.127 min Scan# 11  
Delta R.T. 0.003 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

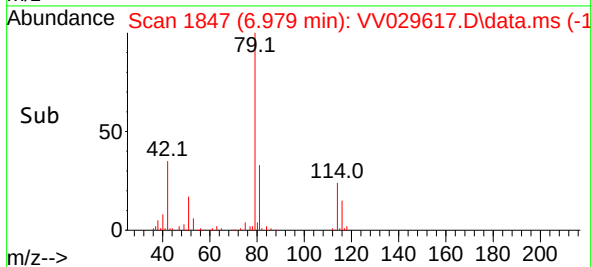
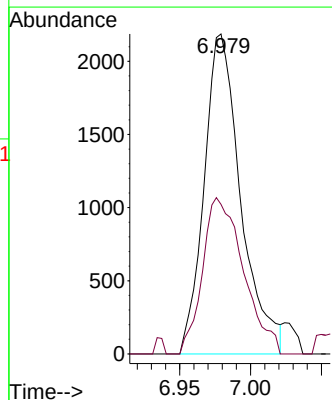
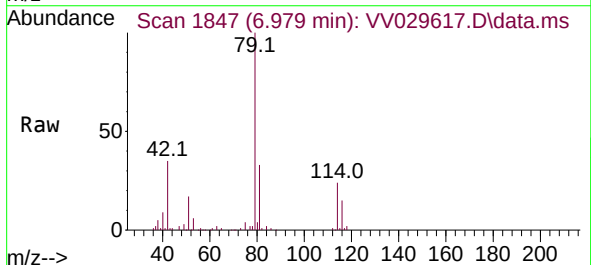
Instrument :  
MSVOA\_V  
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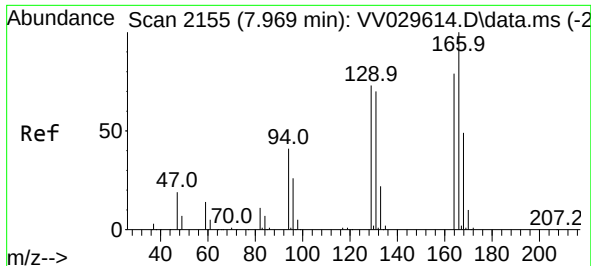
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 10171 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 55       | 79.4  | 55.5  | 83.3  |
| 98       | 50.1  | 39.8  | 59.8  |



#39  
cis-1,3-Dichloropropene  
Concen: 0.706 ug/L  
RT: 6.979 min Scan# 1847  
Delta R.T. -0.042 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 3937  |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 46.7  | 21.9  | 40.7# |



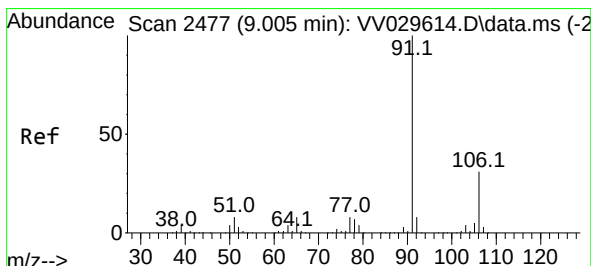
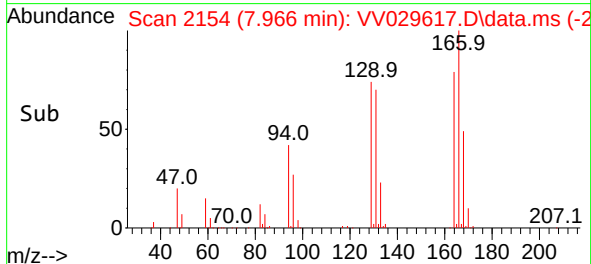
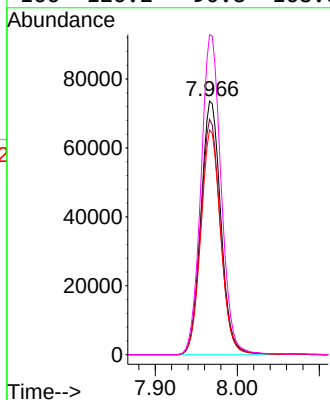
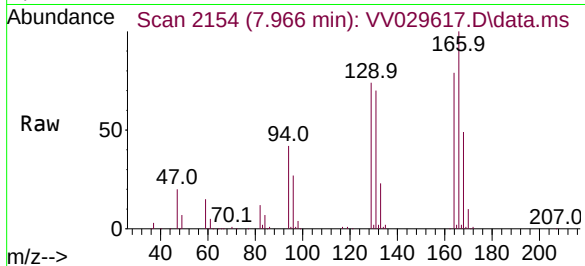


#46  
Tetrachloroethene  
Concen: 43.997 ug/L  
RT: 7.966 min Scan# 2155  
Delta R.T. -0.003 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

Instrument :  
MSVOA\_V  
ClientSampleId :  
EXZ71

Tgt Ion:164 Resp: 124578

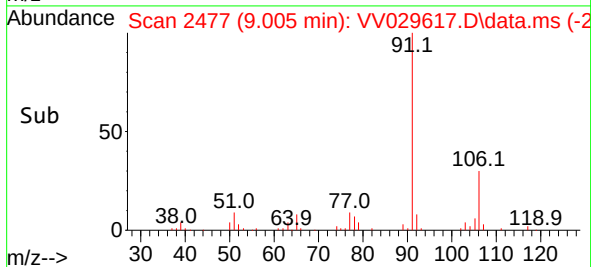
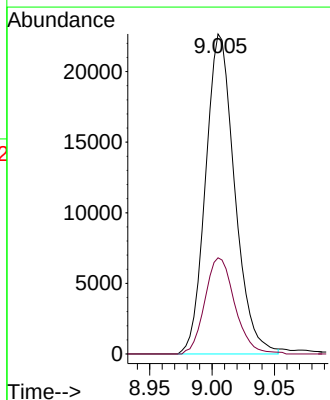
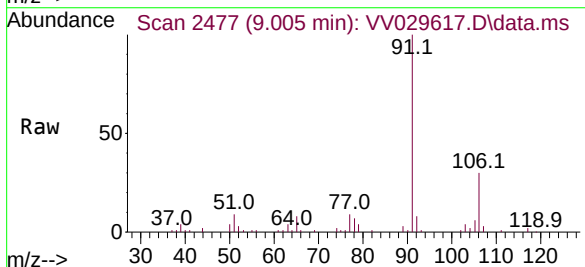
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 129 | 92.8  | 65.3  | 121.3 |
| 131 | 88.5  | 63.1  | 117.1 |
| 166 | 126.2 | 90.8  | 168.6 |

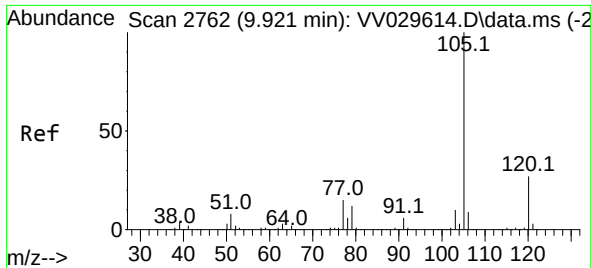


#52  
Ethylbenzene  
Concen: 2.314 ug/L  
RT: 9.005 min Scan# 2477  
Delta R.T. 0.000 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

Tgt Ion: 91 Resp: 36807

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 91  | 100   |       |       |
| 106 | 30.1  | 21.8  | 40.6  |

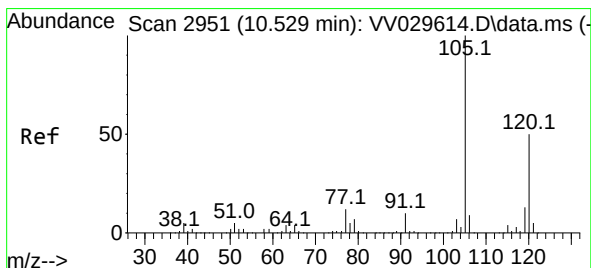
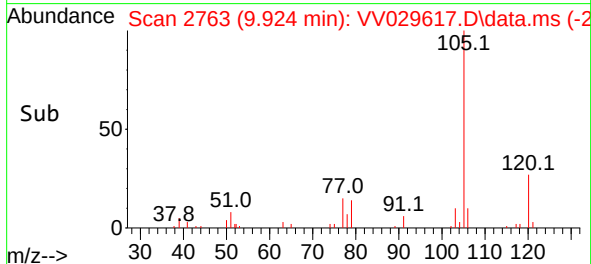
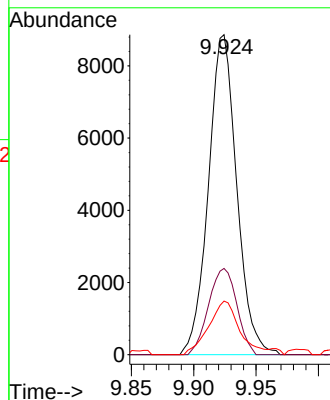
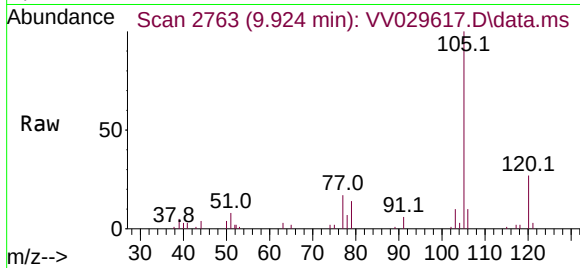




#60  
Isopropylbenzene  
Concen: 0.913 ug/L  
RT: 9.924 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

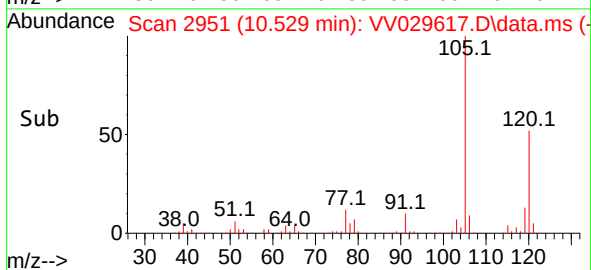
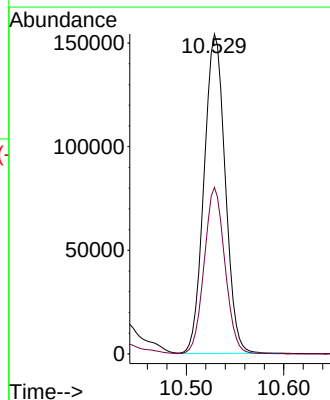
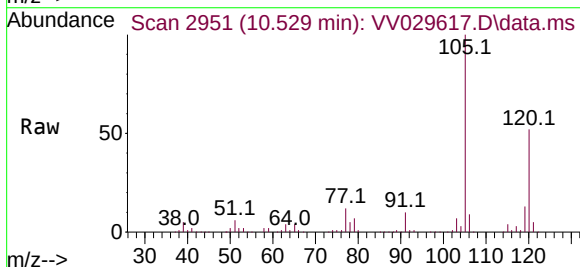
Instrument :  
MSVOA\_V  
ClientSampleId :  
EXZ71

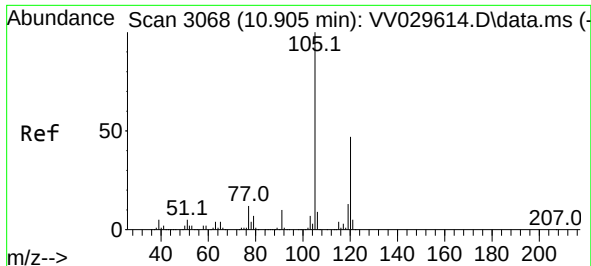
Tgt Ion:105 Resp: 14030  
Ion Ratio Lower Upper  
105 100  
120 26.8 21.1 31.7  
77 18.2 11.6 17.4#



#62  
1,3,5-Trimethylbenzene  
Concen: 17.124 ug/L  
RT: 10.529 min Scan# 2951  
Delta R.T. 0.000 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

Tgt Ion:105 Resp: 232594  
Ion Ratio Lower Upper  
105 100  
120 50.8 40.0 60.0

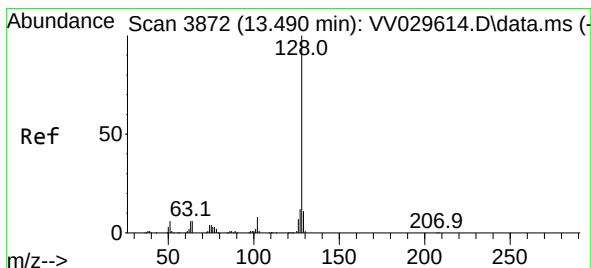
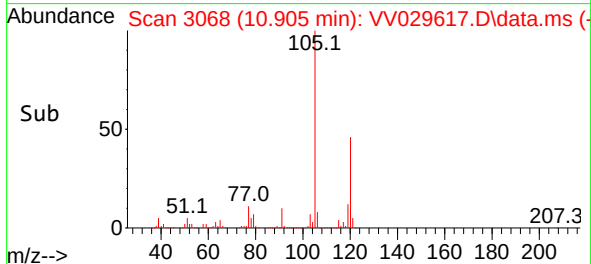
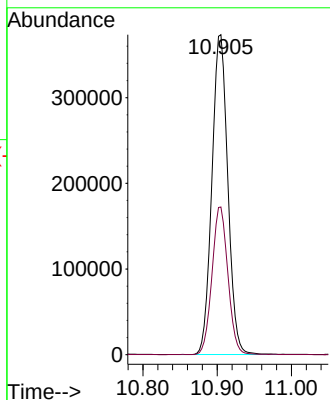
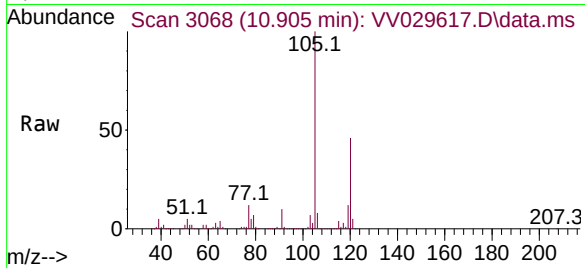




#63  
1,2,4-Trimethylbenzene  
Concen: 41.292 ug/L  
RT: 10.905 min Scan# 3068  
Delta R.T. 0.000 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

Instrument :  
MSVOA\_V  
ClientSampleId :  
EXZ71

Tgt Ion:105 Resp: 555962  
Ion Ratio Lower Upper  
105 100  
120 46.0 36.7 55.1



#71  
Naphthalene  
Concen: 5.551 ug/L  
RT: 13.493 min Scan# 3873  
Delta R.T. 0.003 min  
Lab File: VV029617.D  
Acq: 13 Dec 2022 00:04

Tgt Ion:128 Resp: 66930  
Ion Ratio Lower Upper  
128 100  
127 12.5 10.2 15.4  
129 11.7 8.5 12.7

