

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL012021\  
 Data File : VL036251.D  
 Acq On : 20 Jan 2021 17:53  
 Operator : SY/AP  
 Sample : M1171-03  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-3

Manual Integrations  
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MMDadoda  
 1/21/2021 10:36:10 AM

Quant Time: Jan 21 01:35:34 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL011321AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Thu Jan 14 16:13:38 2021  
 QLast Update : Thu Jan 14 16:13:38 2021  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.661  | 49    | 1392747  | 10.00    | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene     | 7.172  | 114   | 2887338  | 10.00    | ppbv   | 0.00     |
| 55) Chlorobenzene-d5        | 12.082 | 117   | 2547759  | 10.00    | ppbv   | 0.00     |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 14.413 | 95    | 2150092  | 10.20    | ppbv   | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 102.00%  |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane  | 3.044  | 85    | 31204    | 0.17     | ppbv   | 94       |
| 3) Chlorodifluoromethane    | 2.986  | 51    | 82089    | 0.48     | ppbv # | 83       |
| 4) Chloromethane            | 3.137  | 50    | 35870    | 0.42     | ppbv   | 91       |
| 9) Propene                  | 3.015  | 41    | 69982    | 0.86     | ppbv   | 87       |
| 11) Trichlorofluoromethane  | 3.947  | 101   | 47616m   | 0.25     | ppbv   |          |
| 13) Ethanol                 | 3.607  | 45    | 1059137  | 82.81    | ppbv   | 84       |
| 15) Acetone                 | 3.848  | 43    | 710982   | 4.17     | ppbv   | 98       |
| 19) Isopropyl Alcohol       | 3.976  | 45    | 316672   | 3.08     | ppbv # | 98       |
| 20) Methylene Chloride      | 4.340  | 84    | 966665   | 17.76    | ppbv   | 96       |
| 26) Hexane                  | 5.684  | 57    | 911723   | 6.39     | ppbv # | 38       |
| 29) Chloroform              | 5.748  | 83    | 52851    | 0.26     | ppbv   | 99       |
| 30) Cyclohexane             | 7.124  | 84    | 19781m   | 0.18     | ppbv   |          |
| 34) 2-Butanone              | 5.243  | 43    | 112413   | 0.53     | ppbv   | 96       |
| 35) Carbon Tetrachloride    | 7.008  | 117   | 14652m   | 0.08     | ppbv   |          |
| 36) Benzene                 | 6.893  | 78    | 76985m   | 0.29     | ppbv   |          |
| 44) 2,2,4-Trimethylpentane  | 7.860  | 57    | 60617m   | 0.12     | ppbv   |          |
| 52) Tetrachloroethene       | 11.211 | 164   | 5173m    | 0.05     | ppbv   |          |
| 53) Toluene                 | 9.802  | 91    | 355745m  | 1.20     | ppbv   |          |
| 58) Ethyl Benzene           | 12.709 | 91    | 87798m   | 0.23     | ppbv   |          |
| 59) m/p-Xylene              | 12.966 | 91    | 367749m  | 1.13     | ppbv   |          |
| 60) o-Xylene                | 13.683 | 91    | 116597   | 0.37     | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene  | 16.760 | 105   | 81694m   | 0.24     | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

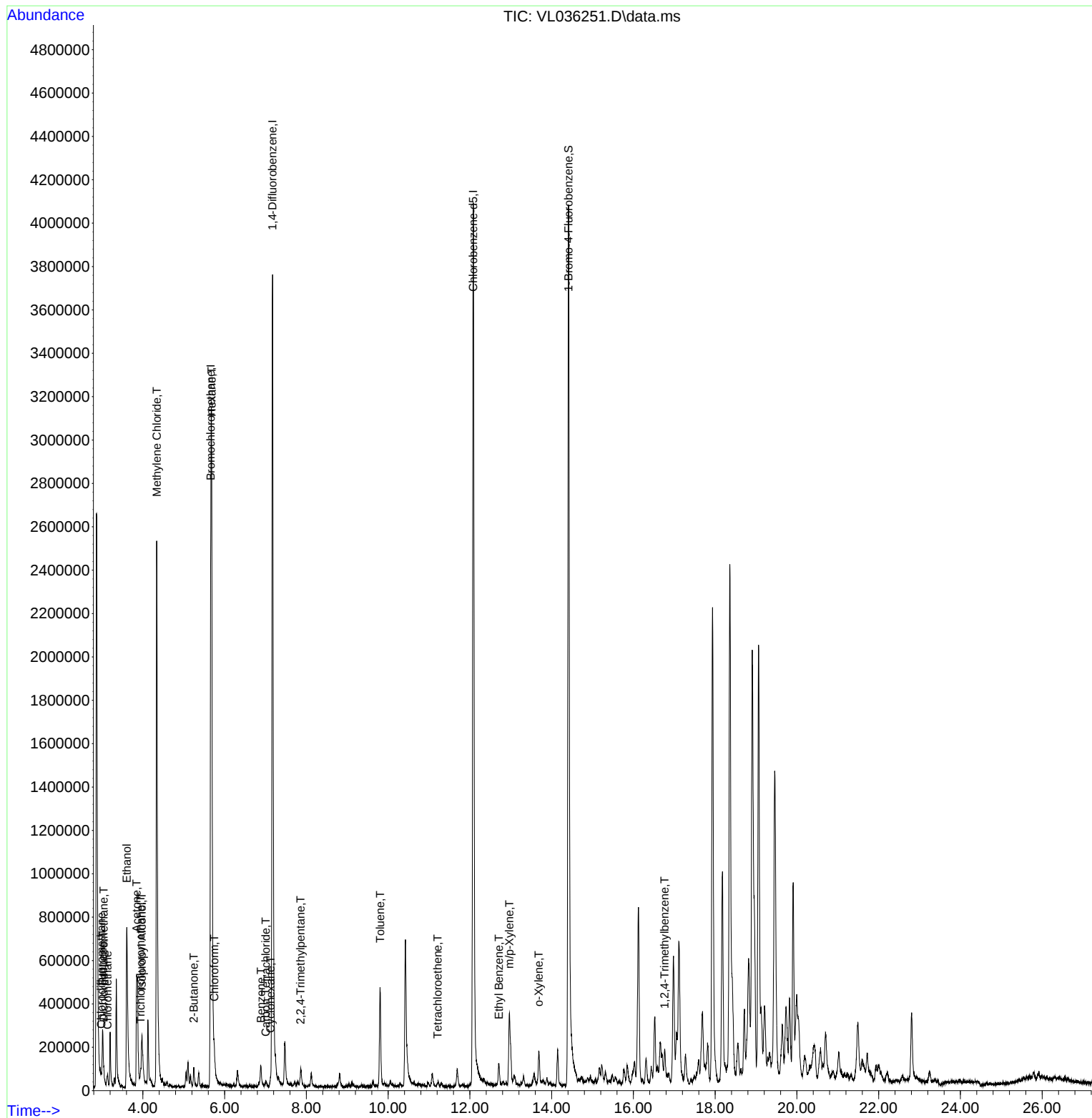
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL012021\  
Data File : VL036251.D  
Acq On : 20 Jan 2021 17:53  
Operator : SY/AP  
Sample : M1171-03  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

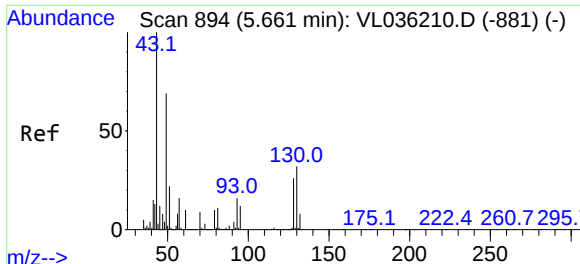
Instrument :  
MSVOA\_L  
ClientSampleId :  
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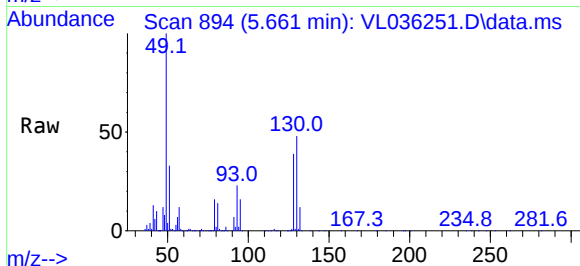
Quant Time: Jan 21 01:35:34 2021  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL011321AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Jan 14 16:13:38 2021  
QLast Update : Thu Jan 14 16:13:38 2021  
Response via : Initial Calibration





#1  
Bromochloromethane  
Concen: 10.00 ppbv  
RT: 5.661 min Scan# 894  
Delta R.T. -0.000 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3

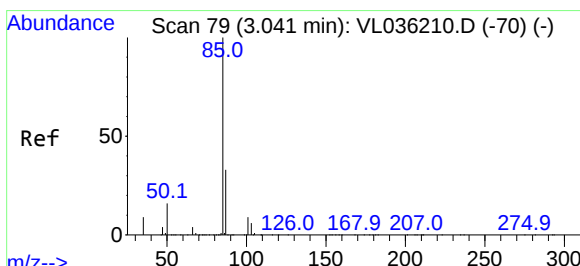
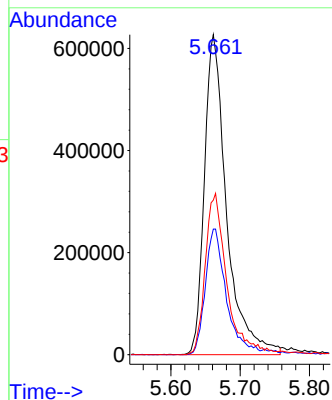
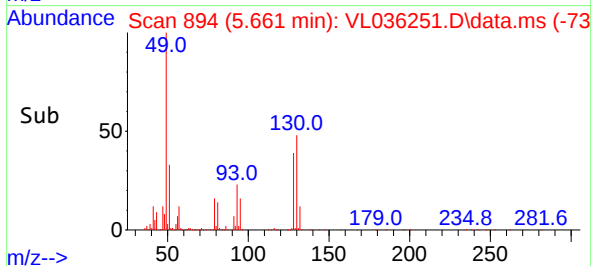


Tgt Ion: 49 Resp: 1392747

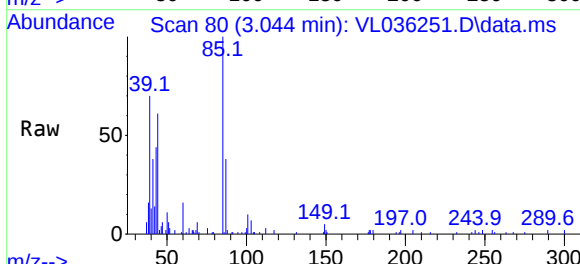
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 49  | 100   |       |       |
| 128 | 39.1  | 20.1  | 60.2  |
| 130 | 50.4  | 25.3  | 75.9  |

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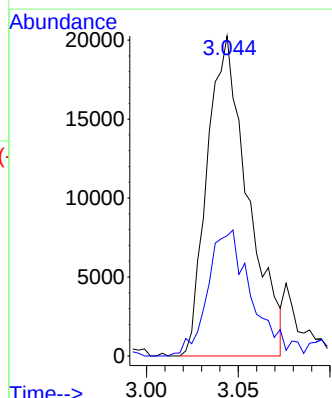
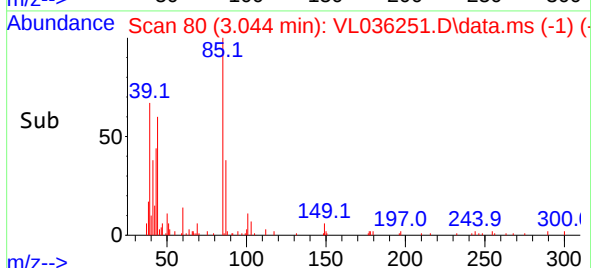


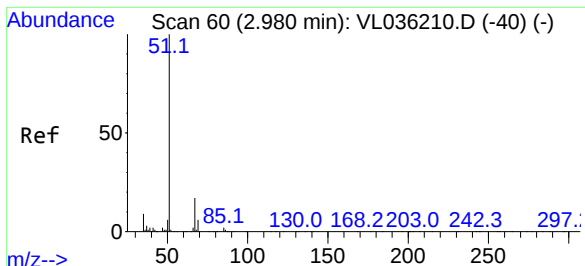
#2  
Dichlorodifluoromethane  
Concen: 0.17 ppbv  
RT: 3.044 min Scan# 80  
Delta R.T. 0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53



Tgt Ion: 85 Resp: 31204

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 85  | 100   |       |       |
| 87  | 36.6  | 26.4  | 39.6  |





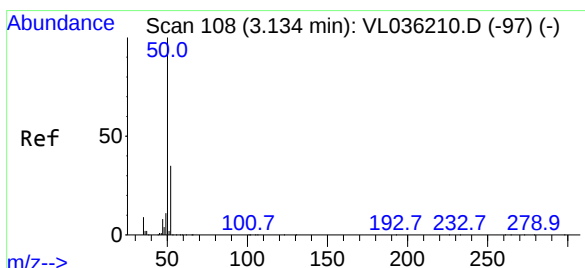
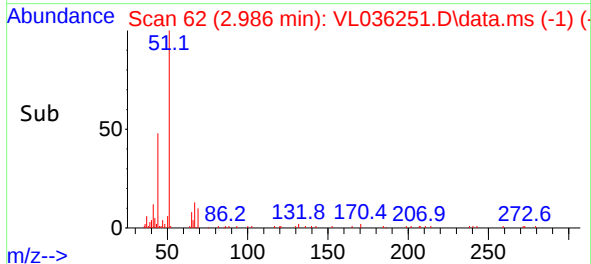
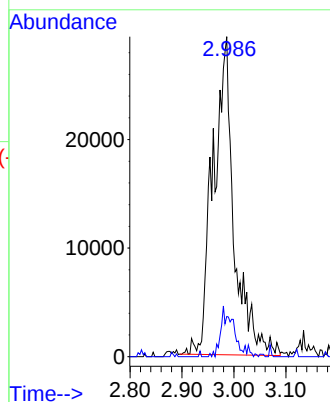
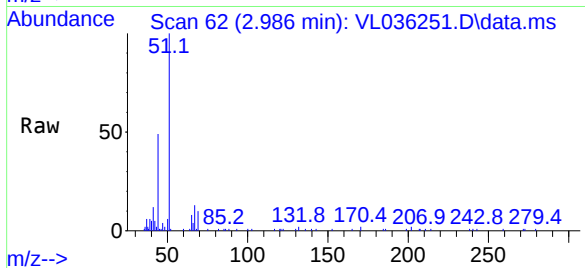
#3  
Chlorodifluoromethane  
Concen: 0.48 ppbv  
RT: 2.986 min Scan# 62  
Delta R.T. 0.006 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 51 Resp: 82089  
Ion Ratio Lower Upper  
51 100  
67 10.1 14.0 21.0#

Instrument :  
MSVOA\_L  
ClientSampled :  
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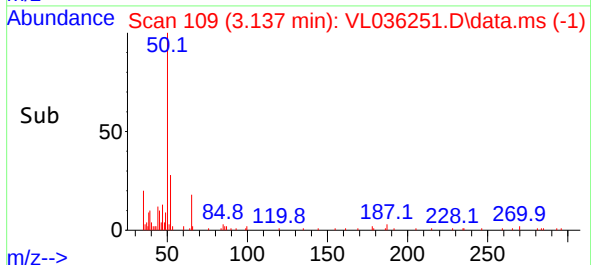
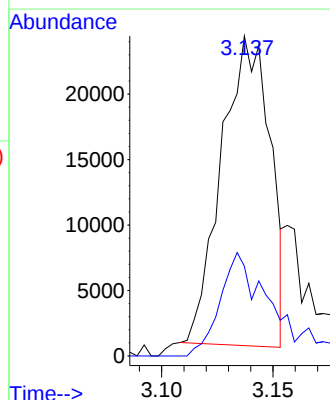
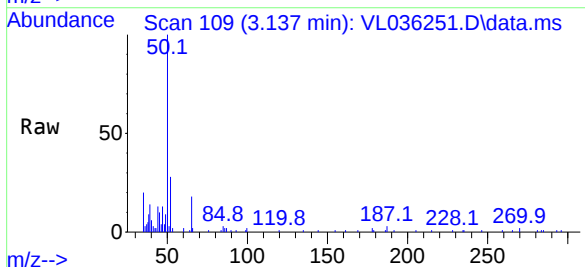
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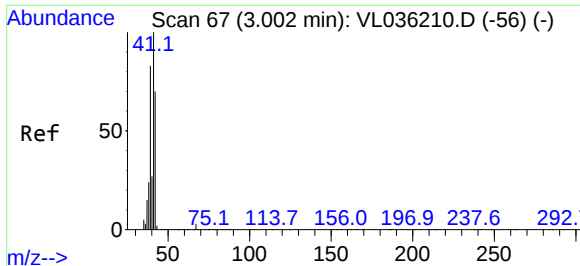
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#4  
Chloromethane  
Concen: 0.42 ppbv  
RT: 3.137 min Scan# 109  
Delta R.T. 0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 50 Resp: 35870  
Ion Ratio Lower Upper  
50 100  
52 29.9 27.8 41.8





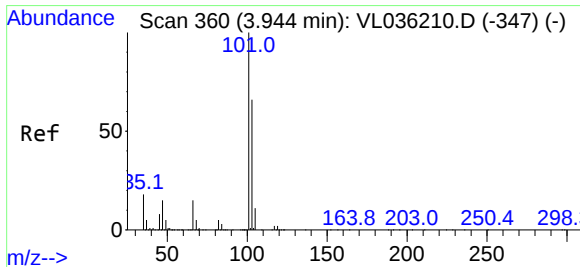
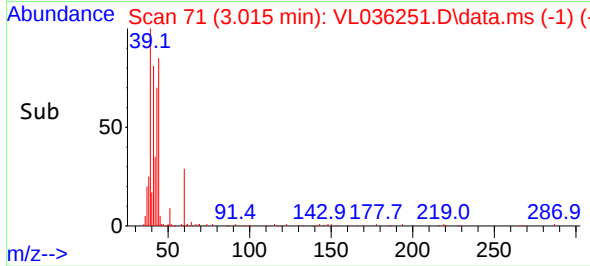
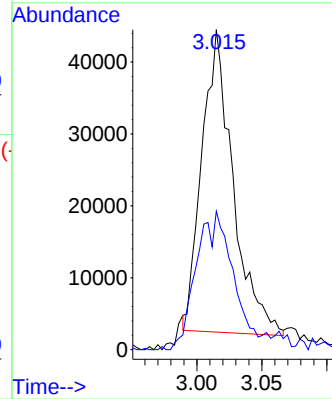
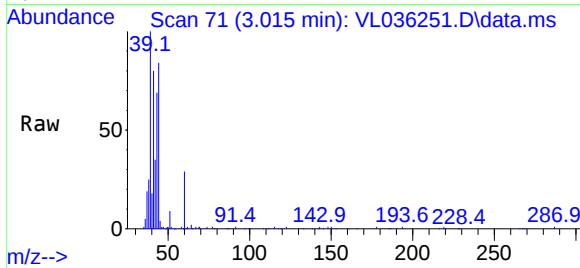
#9  
Propene  
Concen: 0.86 ppbv  
RT: 3.015 min Scan# 71  
Delta R.T. 0.013 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 41 Resp: 69982  
Ion Ratio Lower Upper  
41 100  
42 60.5 57.1 85.7

Instrument :  
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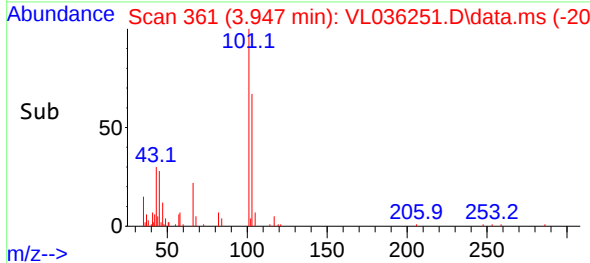
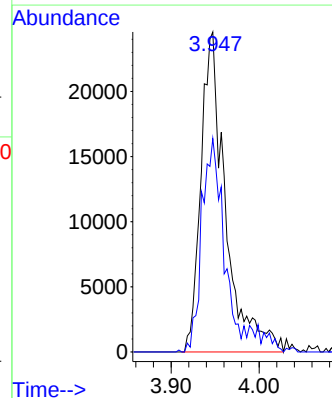
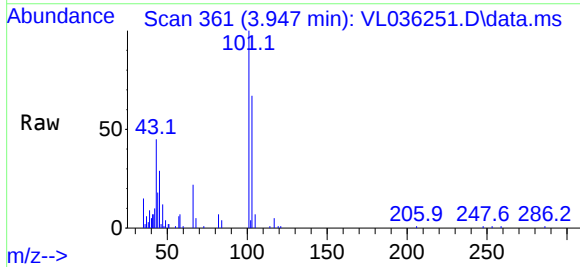
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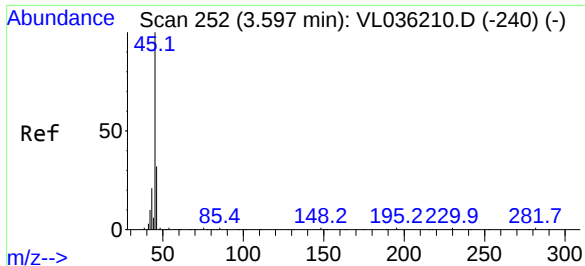
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#11  
Trichlorofluoromethane  
Concen: 0.25 ppbv m  
RT: 3.947 min Scan# 361  
Delta R.T. 0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 101 Resp: 47616  
Ion Ratio Lower Upper  
101 100  
103 66.7 52.6 78.8





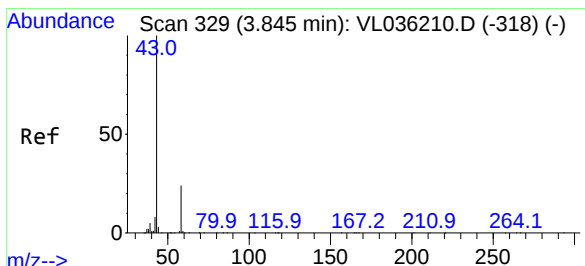
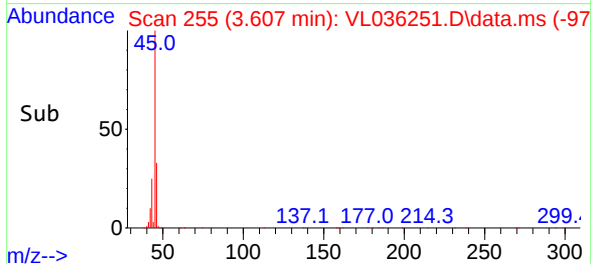
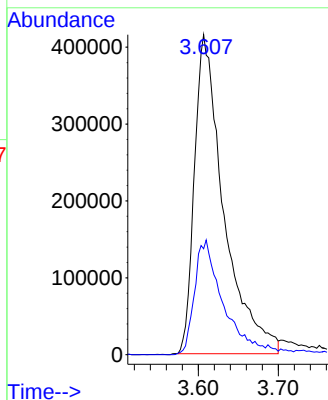
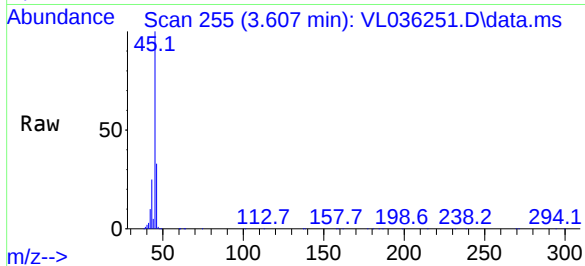
#13  
Ethanol  
Concen: 82.81 ppbv  
RT: 3.607 min Scan# 255  
Delta R.T. 0.009 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 45 Resp: 1059137  
Ion Ratio Lower Upper  
45 100  
46 37.5 19.2 77.0

Instrument :  
MSVOA\_L  
ClientSampled :  
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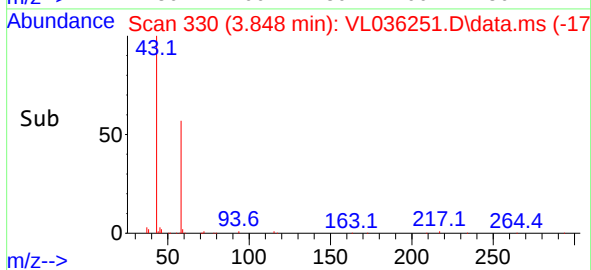
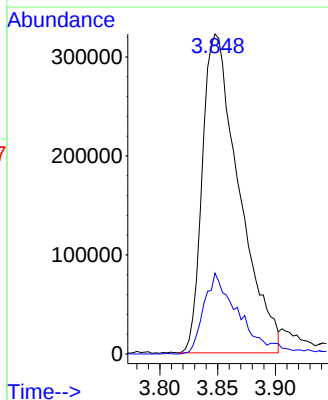
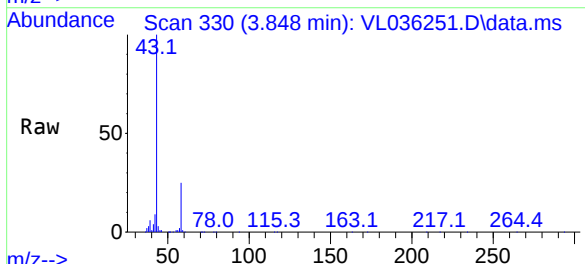
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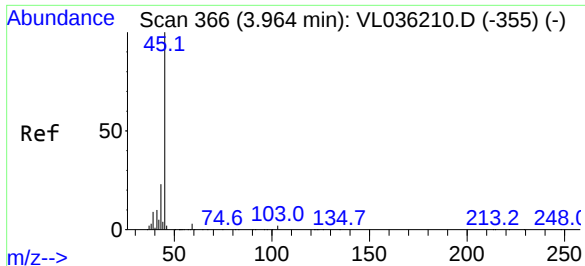
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#15  
Acetone  
Concen: 4.17 ppbv  
RT: 3.848 min Scan# 330  
Delta R.T. 0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

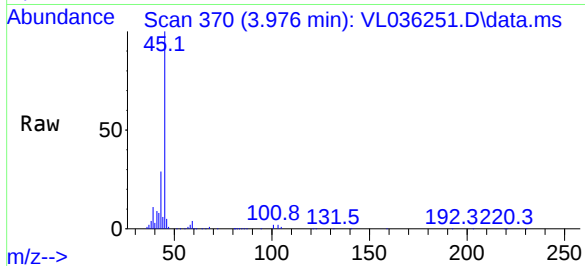
Tgt Ion: 43 Resp: 710982  
Ion Ratio Lower Upper  
43 100  
58 25.1 20.9 31.3





#19  
Isopropyl Alcohol  
Concen: 3.08 ppbv  
RT: 3.976 min Scan# 370  
Delta R.T. 0.013 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

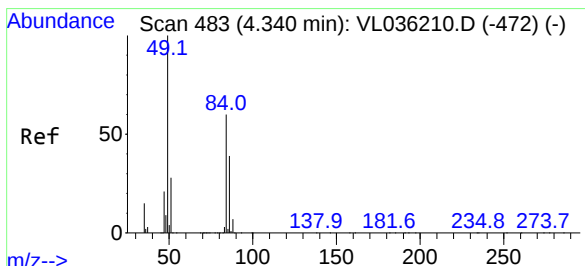
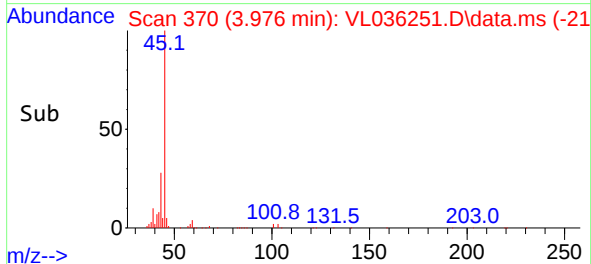
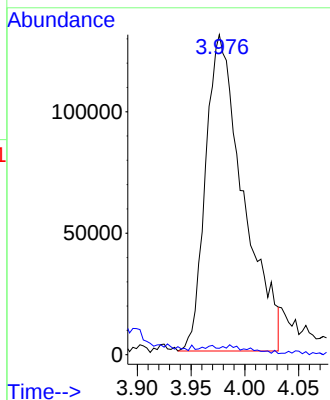
Instrument :  
MSVOA\_L  
ClientSampled :  
IA-3



Tgt Ion: 45 Resp: 316672  
Ion Ratio Lower Upper  
45 100  
58 3.1 1.9 2.9#

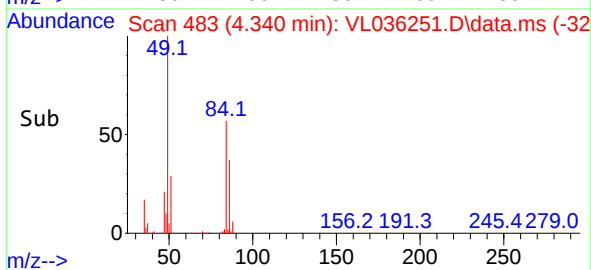
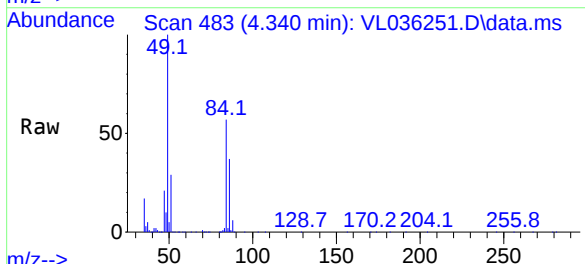
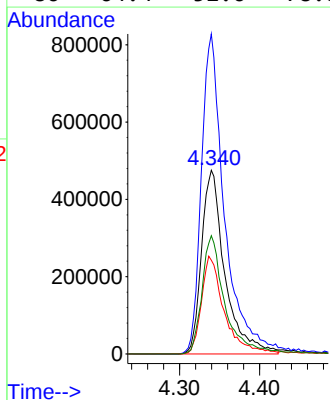
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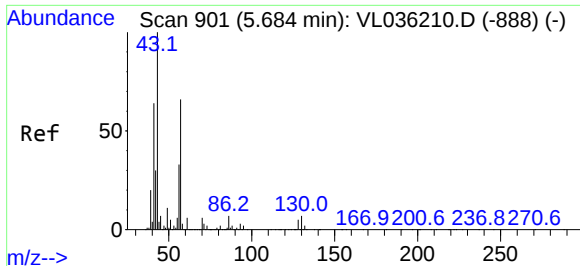
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#20  
Methylene Chloride  
Concen: 17.76 ppbv  
RT: 4.340 min Scan# 483  
Delta R.T. -0.000 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

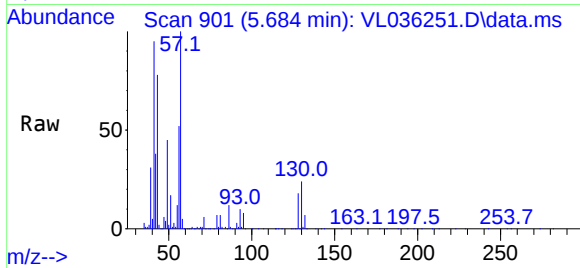
Tgt Ion: 84 Resp: 966665  
Ion Ratio Lower Upper  
84 100  
49 174.2 134.1 201.1  
51 50.9 37.4 56.0  
86 64.4 52.6 78.8





#26  
Hexane  
Concen: 6.39 ppbv  
RT: 5.684 min Scan# 901  
Delta R.T. -0.000 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
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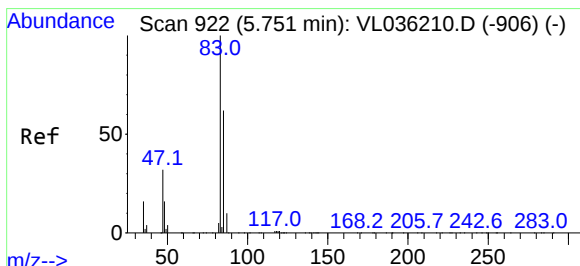
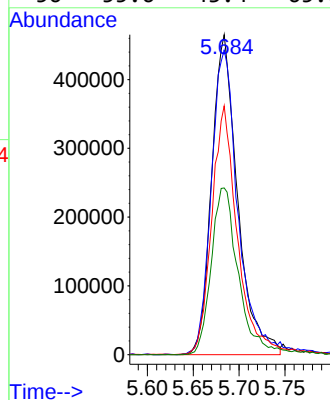
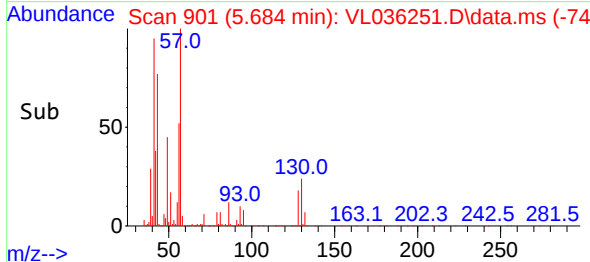


Tgt Ion: 57 Resp: 911723

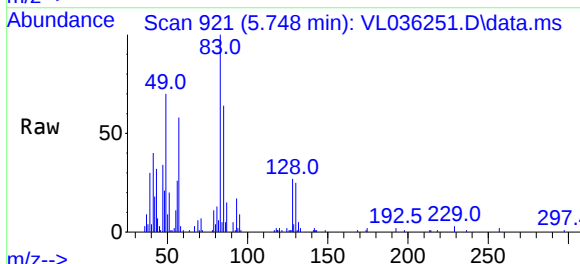
| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 57  | 100   |       |        |
| 41  | 101.6 | 83.0  | 124.6  |
| 43  | 78.2  | 202.4 | 303.6# |
| 56  | 55.6  | 43.4  | 65.0   |

Manual Integrations  
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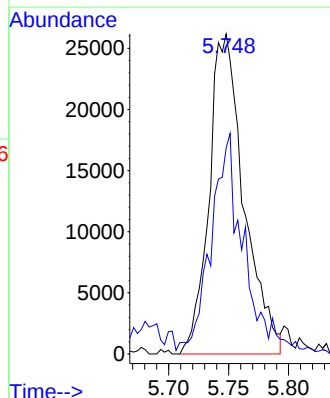
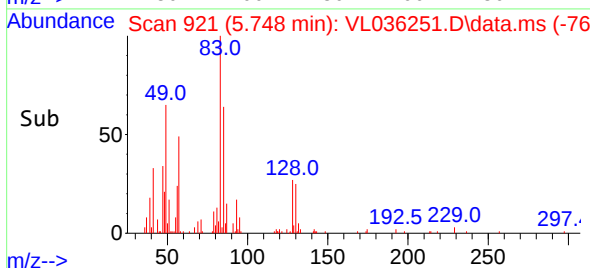


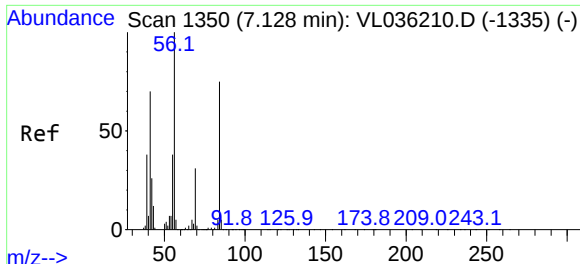
#29  
Chloroform  
Concen: 0.26 ppbv  
RT: 5.748 min Scan# 921  
Delta R.T. -0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53



Tgt Ion: 83 Resp: 52851

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 83  | 100   |       |       |
| 85  | 60.8  | 49.3  | 73.9  |





#30  
Cyclohexane  
Concen: 0.18 ppbv m  
RT: 7.124 min Scan# 1349  
Delta R.T. -0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

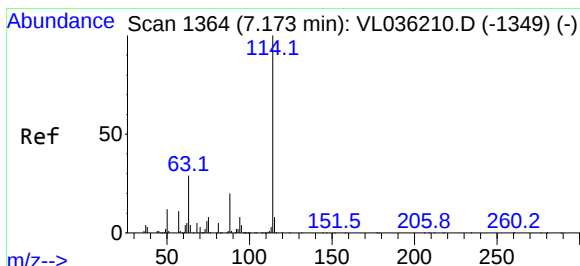
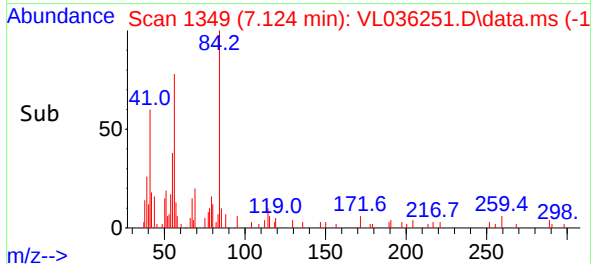
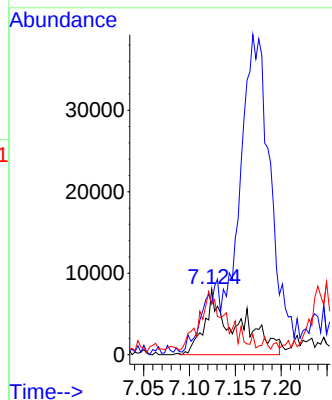
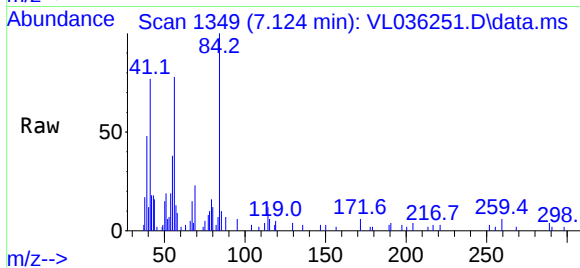
Tgt Ion: 84 Resp: 19781

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 84  | 100   |       |        |
| 56  | 0.0   | 119.4 | 179.0# |
| 41  | 0.0   | 79.4  | 119.0# |

Instrument :  
MSVOA\_L  
ClientSampled :  
IA-3

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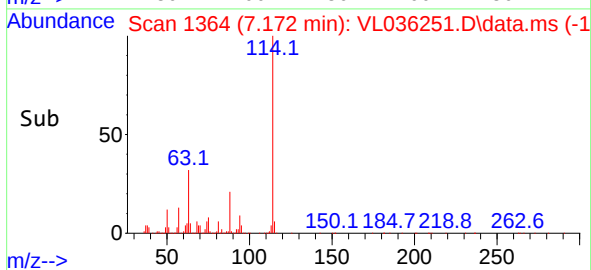
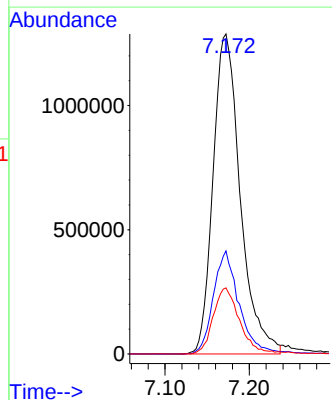
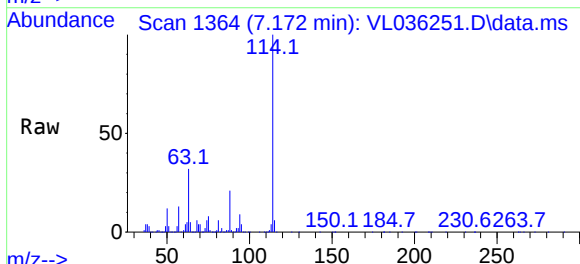
MMDadoda  
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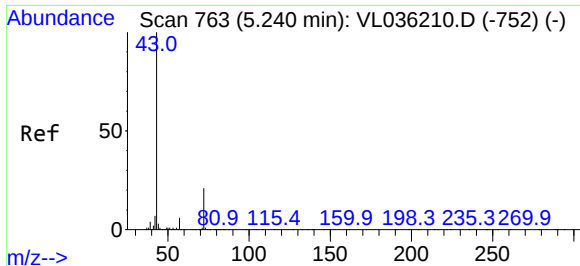


#33  
1,4-Difluorobenzene  
Concen: 10.00 ppbv  
RT: 7.172 min Scan# 1364  
Delta R.T. -0.000 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 114 Resp: 2887338

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 30.9  | 24.7  | 37.1  |
| 88  | 20.4  | 16.6  | 24.8  |





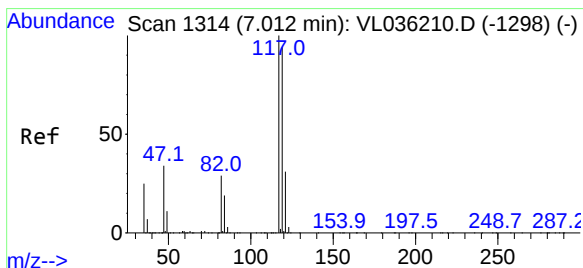
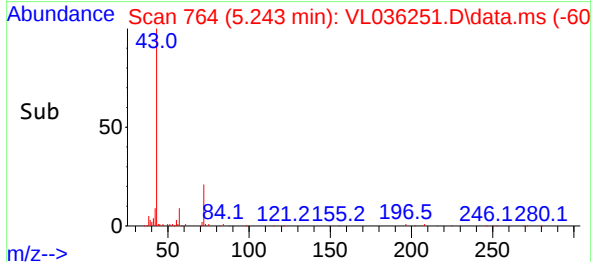
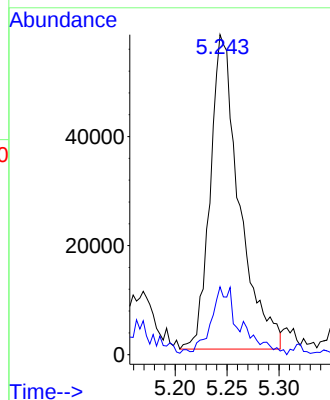
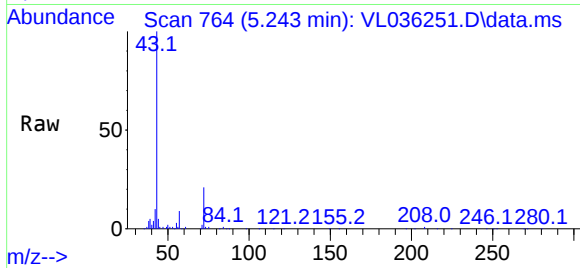
#34  
2-Butanone  
Concen: 0.53 ppbv  
RT: 5.243 min Scan# 764  
Delta R.T. 0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 43 Resp: 112413  
Ion Ratio Lower Upper  
43 100  
72 22.1 16.1 24.1

Instrument :  
MSVOA\_L  
ClientSampled :  
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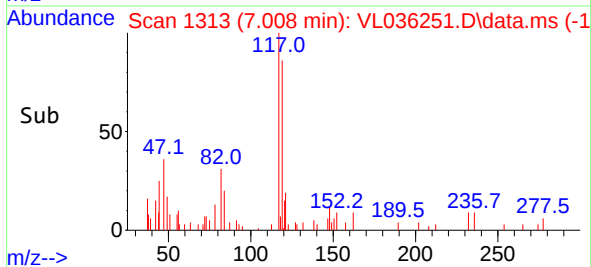
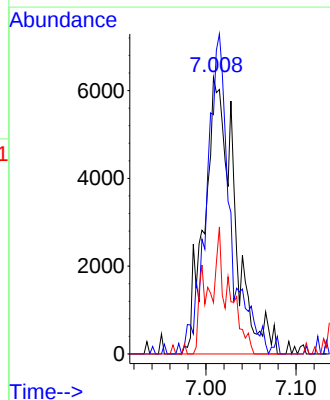
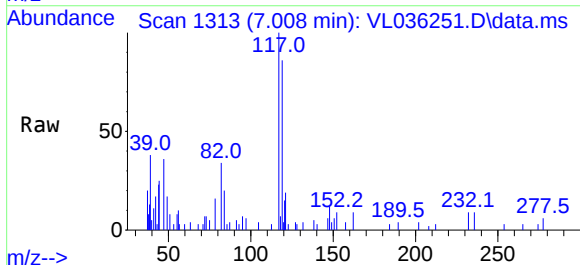
Manual Integrations  
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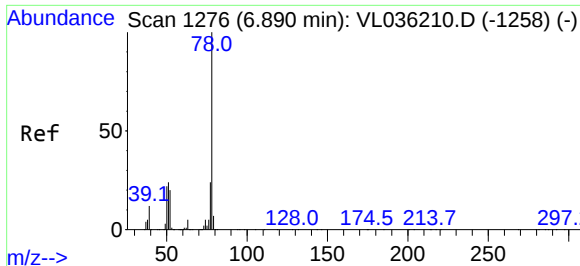
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#35  
Carbon Tetrachloride  
Concen: 0.08 ppbv m  
RT: 7.008 min Scan# 1313  
Delta R.T. -0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

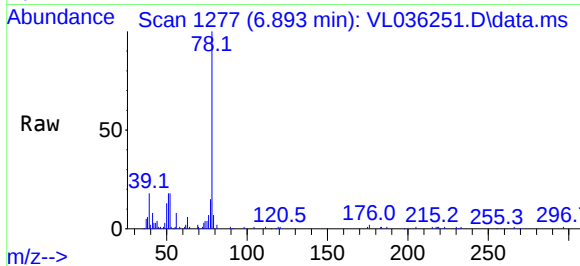
Tgt Ion: 117 Resp: 14652  
Ion Ratio Lower Upper  
117 100  
119 86.4 74.9 112.3  
121 18.6 25.0 37.6#





#36  
Benzene  
Concen: 0.29 ppbv m  
RT: 6.893 min Scan# 1277  
Delta R.T. 0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

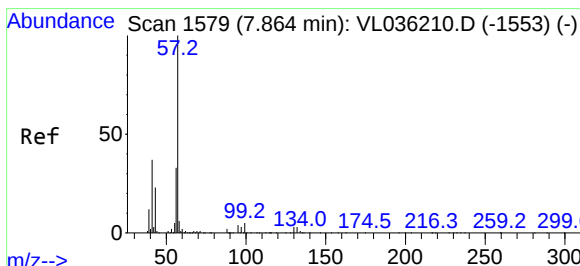
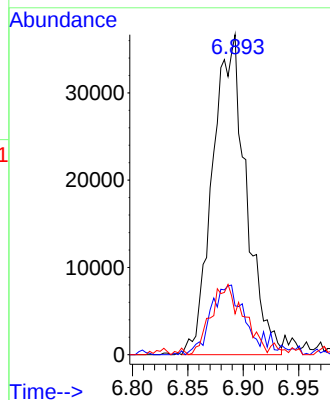
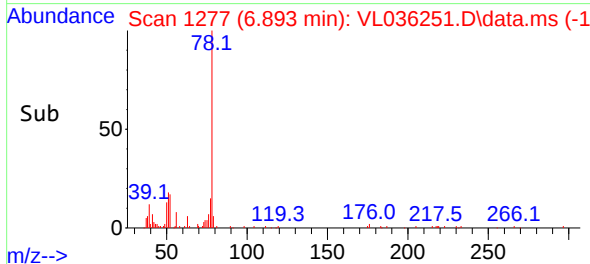
Instrument :  
MSVOA\_L  
ClientSampled :  
IA-3



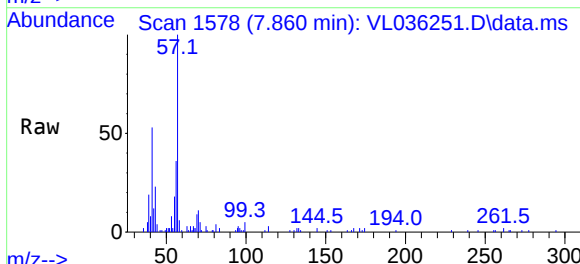
Tgt Ion: 78 Resp: 76985  
Ion Ratio Lower Upper  
78 100  
77 15.3 19.4 29.0#  
50 12.8 17.4 26.2#

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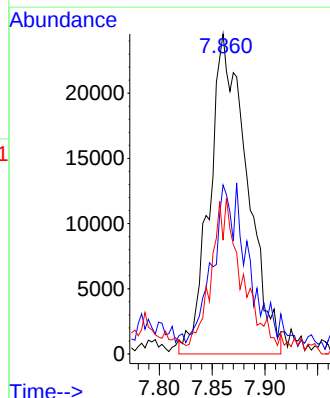
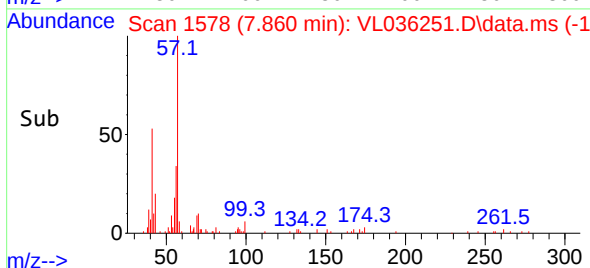
MMDadoda  
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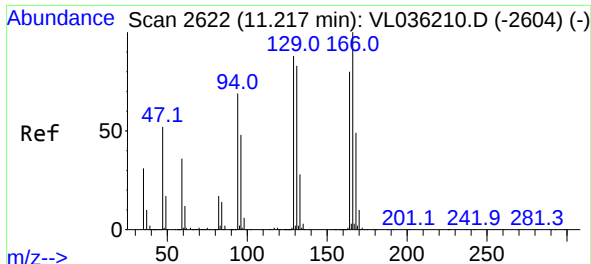


#44  
2,2,4-Trimethylpentane  
Concen: 0.12 ppbv m  
RT: 7.860 min Scan# 1578  
Delta R.T. -0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53



Tgt Ion: 57 Resp: 60617  
Ion Ratio Lower Upper  
57 100  
41 0.0 28.5 42.7#  
56 44.6 25.5 38.3#





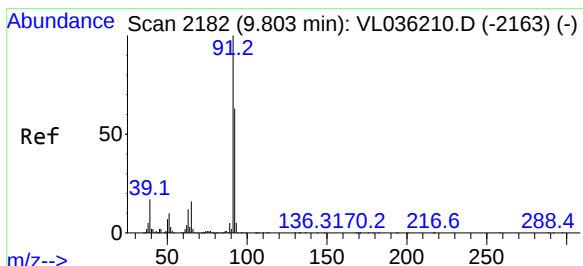
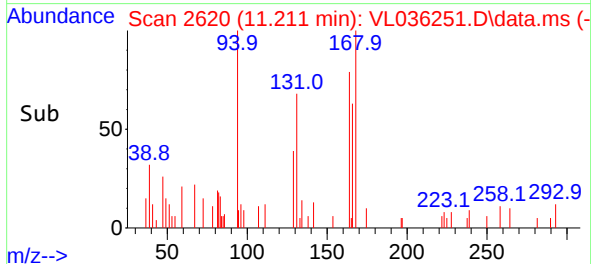
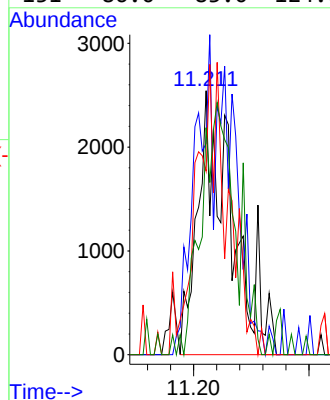
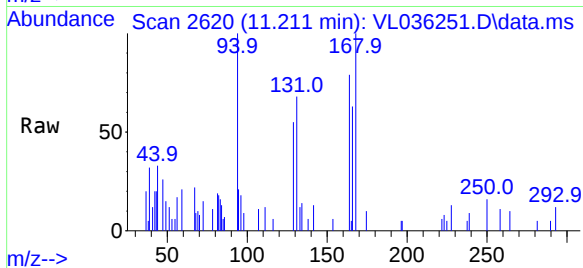
#52  
Tetrachloroethene  
Concen: 0.05 ppbv m  
RT: 11.211 min Scan# 2620  
Delta R.T. -0.007 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 5173   |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 166      | 80.0  | 99.9  | 149.9# |
| 129      | 69.5  | 88.2  | 132.4# |
| 131      | 86.0  | 83.0  | 124.6  |

Instrument :  
MSVOA\_L  
ClientSampled :  
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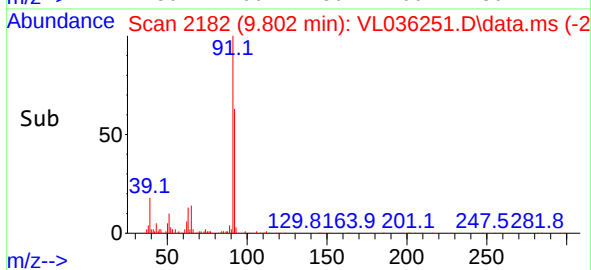
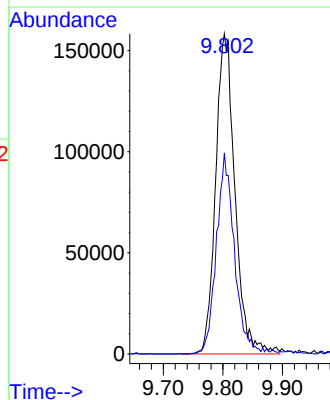
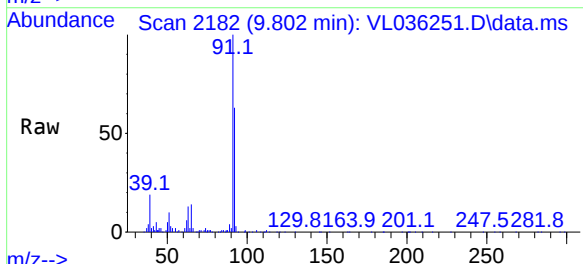
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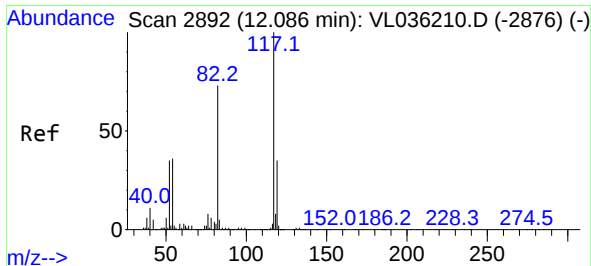
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#53  
Toluene  
Concen: 1.20 ppbv m  
RT: 9.802 min Scan# 2182  
Delta R.T. -0.000 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 355745 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 59.6  | 48.5  | 72.7   |





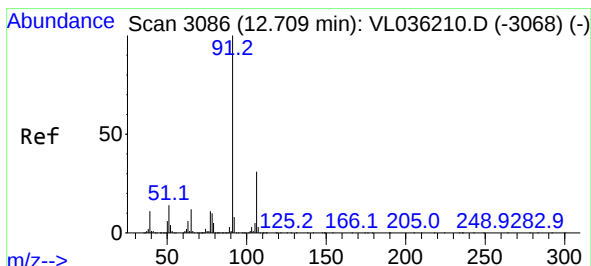
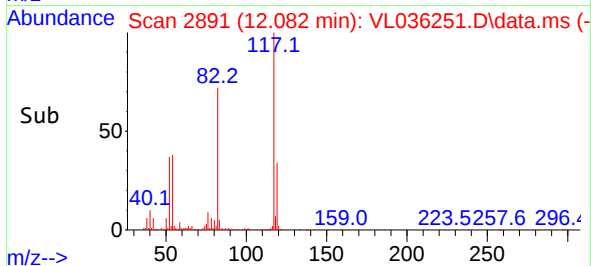
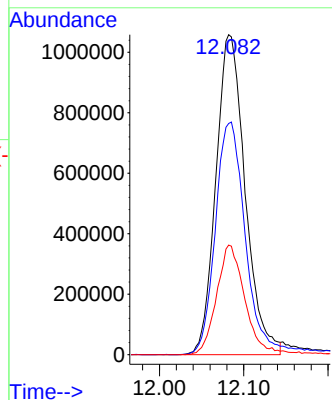
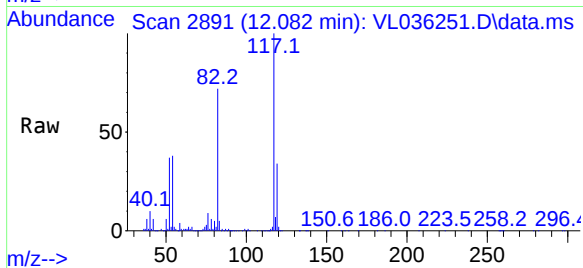
#55  
Chlorobenzene-d5  
Concen: 10.00 ppbv  
RT: 12.082 min Scan# 2891  
Delta R.T. -0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Instrument :  
MSVOA\_L  
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Tgt Ion:117 Resp: 2547759  
Ion Ratio Lower Upper  
117 100  
82 77.5 59.7 89.5  
119 33.7 28.6 43.0

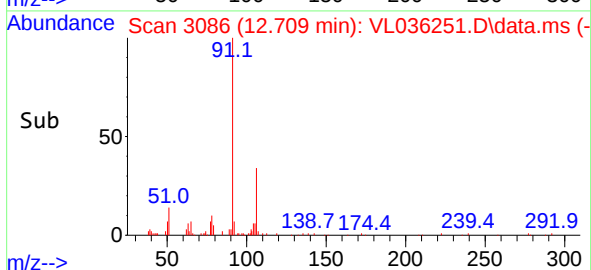
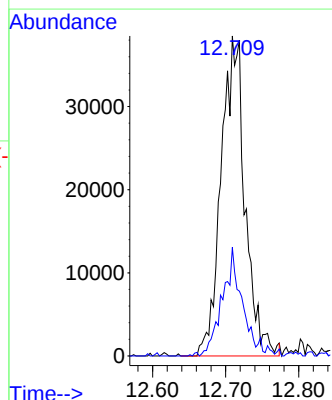
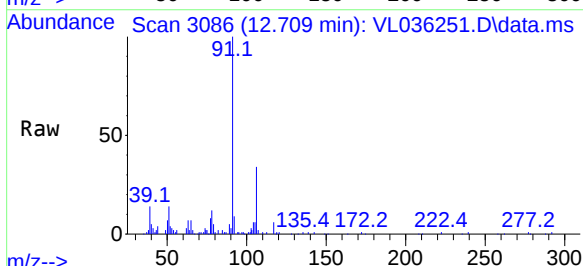
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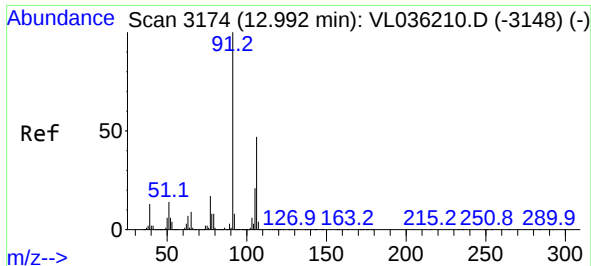
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#58  
Ethyl Benzene  
Concen: 0.23 ppbv m  
RT: 12.709 min Scan# 3086  
Delta R.T. -0.000 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 91 Resp: 87798  
Ion Ratio Lower Upper  
91 100  
106 33.9 24.8 37.2





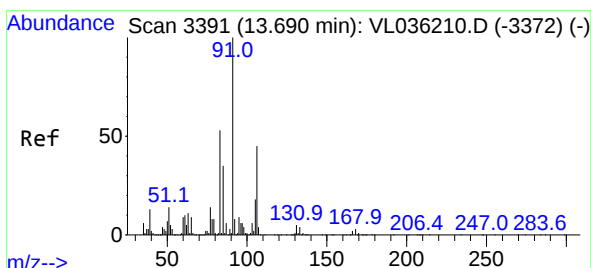
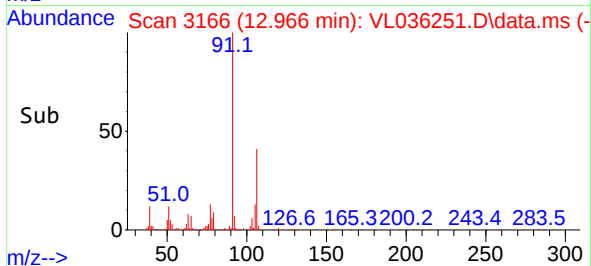
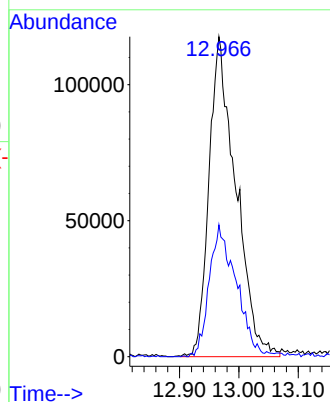
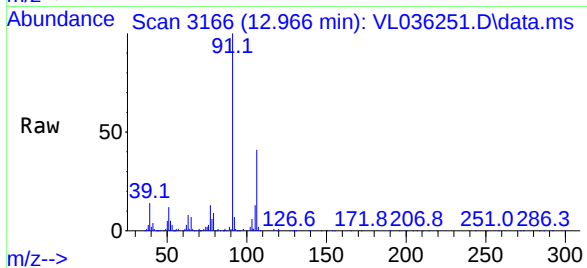
#59  
m/p-Xylene  
Concen: 1.13 ppbv m  
RT: 12.966 min Scan# 3166  
Delta R.T. -0.026 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
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Tgt Ion: 91 Resp: 367749  
Ion Ratio Lower Upper  
91 100  
106 0.0 34.6 51.8#

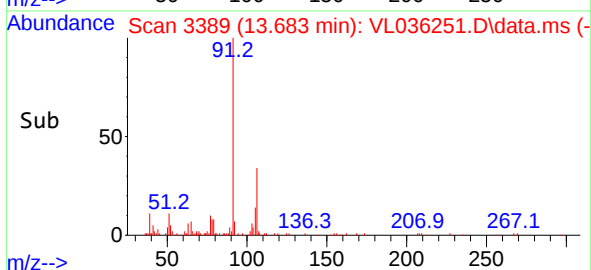
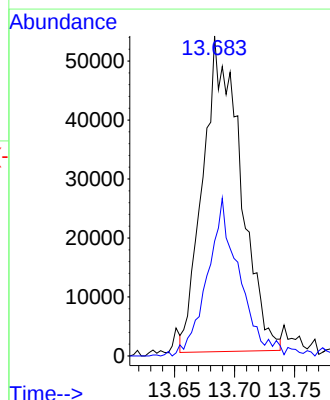
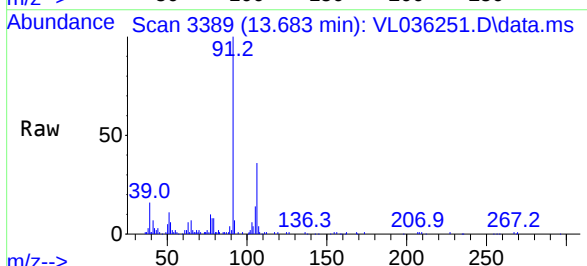
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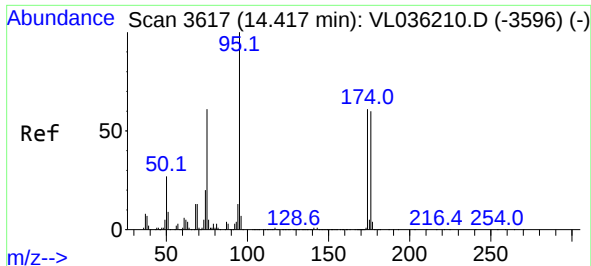
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#60  
o-Xylene  
Concen: 0.37 ppbv  
RT: 13.683 min Scan# 3389  
Delta R.T. -0.007 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 91 Resp: 116597  
Ion Ratio Lower Upper  
91 100  
106 44.4 21.9 65.8





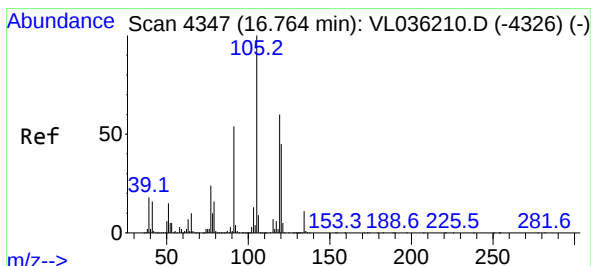
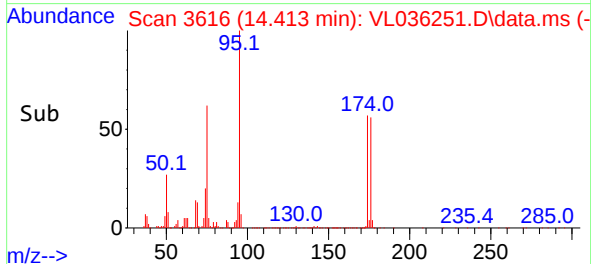
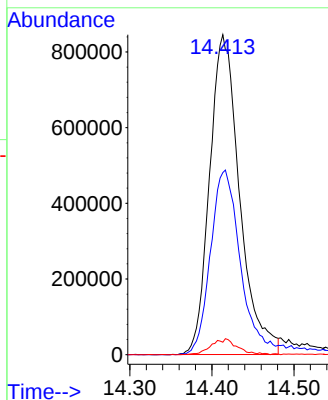
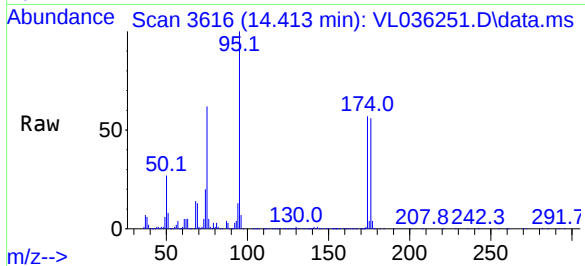
#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.20 ppbv  
RT: 14.413 min Scan# 3616  
Delta R.T. -0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 95 Resp: 2150092  
Ion Ratio Lower Upper  
95 100  
174 60.8 49.4 74.0  
175 4.4 3.8 5.8

Instrument :  
MSVOA\_L  
ClientSampled :  
IA-3

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#74  
1,2,4-Trimethylbenzene  
Concen: 0.24 ppbv m  
RT: 16.760 min Scan# 4346  
Delta R.T. -0.003 min  
Lab File: VL036251.D  
Acq: 20 Jan 2021 17:53

Tgt Ion: 105 Resp: 81694  
Ion Ratio Lower Upper  
105 100  
120 39.5 36.2 54.2  
91 15.9 43.3 64.9#  
77 18.6 19.1 28.7#

