

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121222\  
 Data File : VL040001.D  
 Acq On : 13 Dec 2022 7:27  
 Operator : SY/MD  
 Sample : N5969-05DL 10X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SG-3DL

Quant Time: Dec 13 08:04:57 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL111822AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Fri Dec 02 23:21:36 2022  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.169  | 49    | 848306   | 10.000   | ppbv   | 0.01     |
| 33) 1,4-Difluorobenzene     | 6.632  | 114   | 2454191  | 10.000   | ppbv   | 0.01     |
| 55) Chlorobenzene-d5        | 11.446 | 117   | 2230344  | 10.000   | ppbv   | 0.01     |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.761 | 95    | 1708046  | 10.026   | ppbv   | 0.02     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 100.300% |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 4) Chloromethane            | 2.796  | 50    | 3224     | 0.043    | ppbv # | 64       |
| 9) Propene                  | 2.674  | 41    | 28095    | 0.510    | ppbv   | 87       |
| 11) Trichlorofluoromethane  | 3.539  | 101   | 3537     | 0.024    | ppbv # | 73       |
| 13) Ethanol                 | 3.234  | 45    | 12104    | 2.875    | ppbv   | 77       |
| 15) Acetone                 | 3.456  | 43    | 355431   | 3.159    | ppbv   | 93       |
| 16) 1,3-Butadiene           | 2.948  | 39    | 11772    | 0.210    | ppbv # | 19       |
| 17) tert-Butyl alcohol      | 3.883  | 59    | 4607     | 0.036    | ppbv # | 41       |
| 20) Methylene Chloride      | 3.912  | 84    | 60793    | 1.115    | ppbv   | 93       |
| 23) Vinyl Acetate           | 4.594  | 43    | 1416     | 0.031    | ppbv # | 28       |
| 25) Ethyl Acetate           | 5.185  | 43    | 15852    | 0.077    | ppbv # | 74       |
| 26) Hexane                  | 5.192  | 57    | 39546    | 0.438    | ppbv # | 43       |
| 34) 2-Butanone              | 4.780  | 43    | 28516    | 0.243    | ppbv # | 54       |
| 36) Benzene                 | 6.343  | 78    | 16114    | 0.077    | ppbv # | 85       |
| 39) 1,2-Dichloropropane     | 6.629  | 63    | 593567   | 7.303    | ppbv # | 26       |
| 52) Tetrachloroethene       | 10.600 | 164   | 154868   | 1.985    | ppbv   | 98       |
| 53) Toluene                 | 9.205  | 91    | 6146     | 0.026    | ppbv # | 1        |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121222\  
Data File : VL040001.D  
Acq On : 13 Dec 2022 7:27  
Operator : SY/MD  
Sample : N5969-05DL 10X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

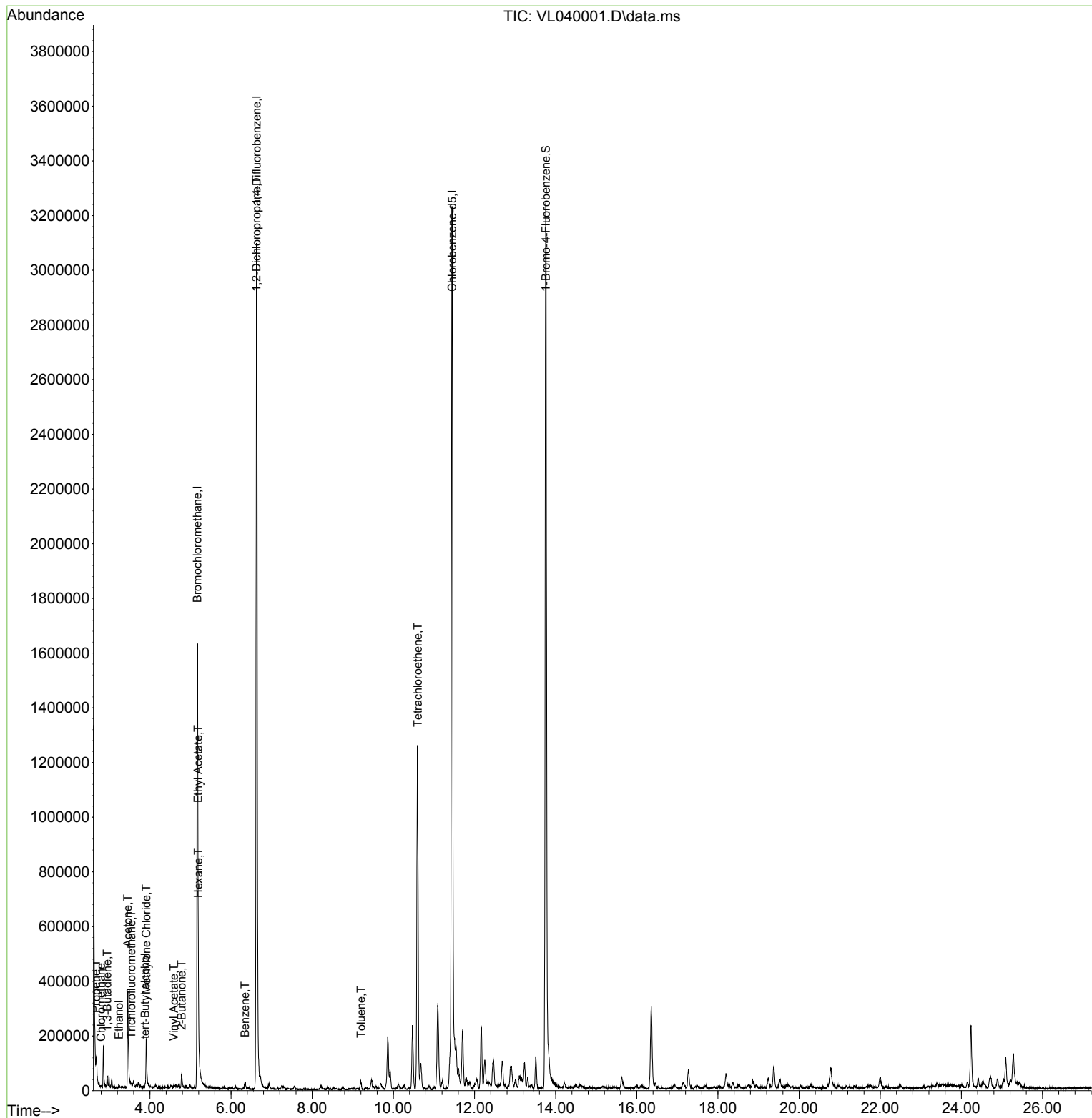
Quant Time: Dec 13 08:04:57 2022

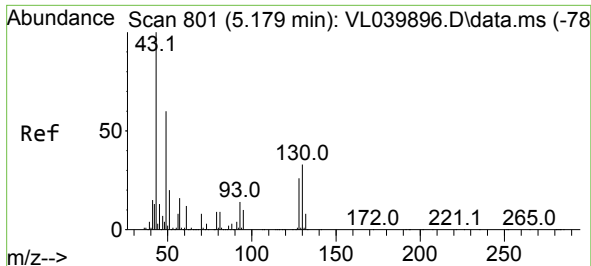
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL111822AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

QLast Update : Fri Dec 02 23:21:36 2022

Response via : Initial Calibration

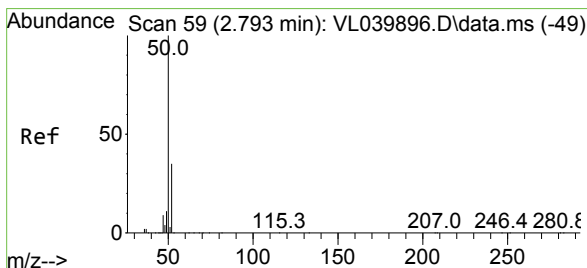
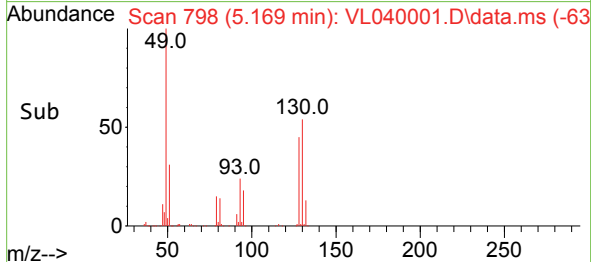
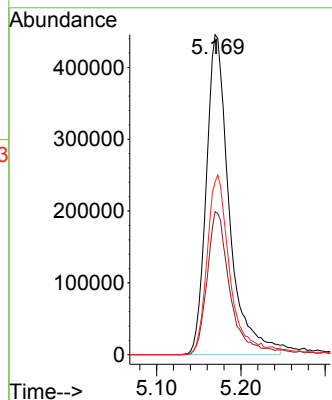
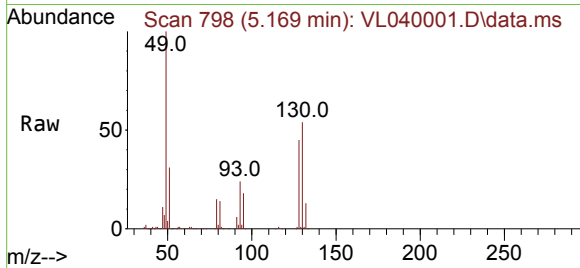




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.169 min Scan# 79  
Delta R.T. 0.013 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

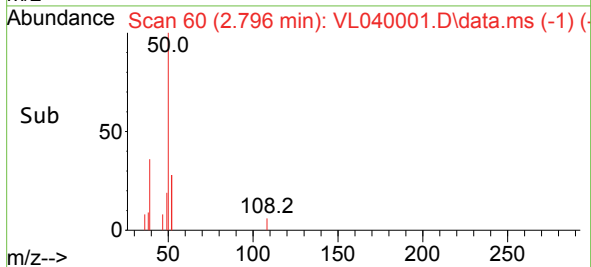
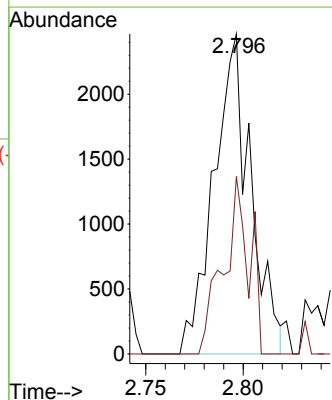
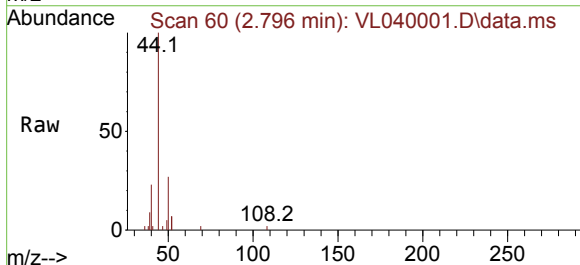
Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

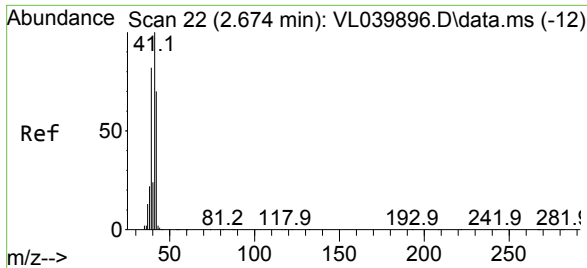
Tgt Ion: 49 Resp: 848306  
Ion Ratio Lower Upper  
49 100  
128 45.7 22.1 66.3  
130 57.9 27.7 83.1



#4  
Chloromethane  
Concen: 0.043 ppbv  
RT: 2.796 min Scan# 60  
Delta R.T. 0.016 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Tgt Ion: 50 Resp: 3224  
Ion Ratio Lower Upper  
50 100  
52 55.4 27.8 41.8

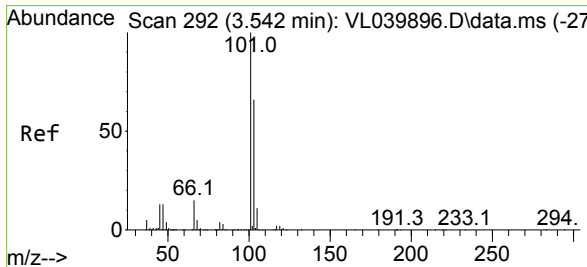
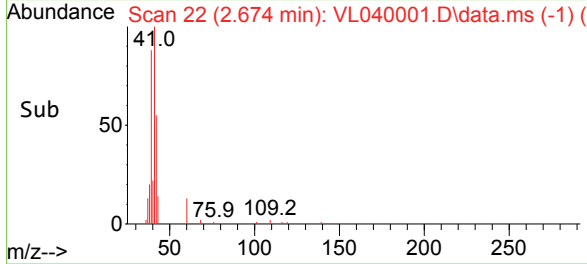
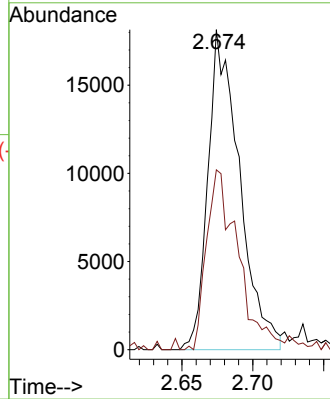
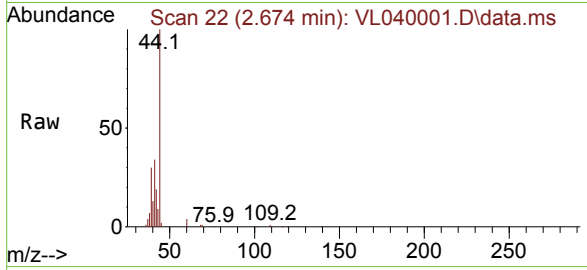




#9  
 Propene  
 Concen: 0.510 ppbv  
 RT: 2.674 min Scan# 21  
 Delta R.T. 0.013 min  
 Lab File: VL040001.D  
 Acq: 13 Dec 2022 7:27

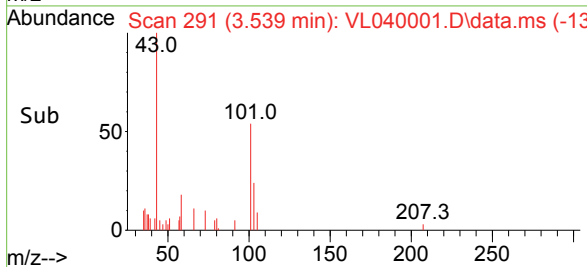
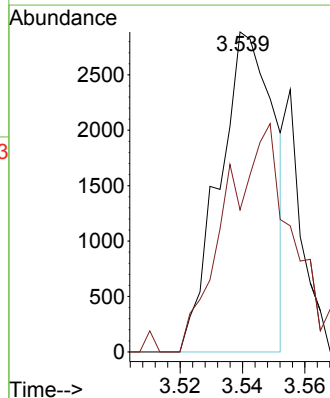
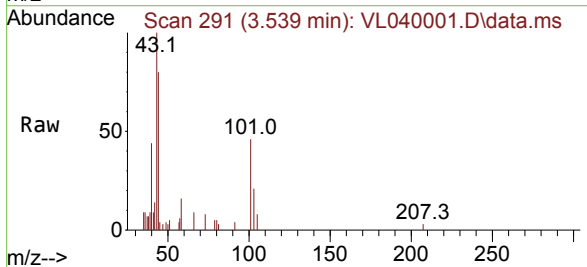
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SG-3DL

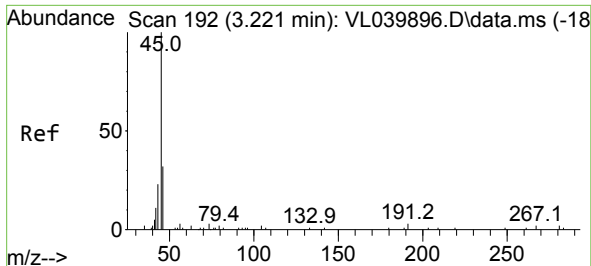
Tgt Ion: 41 Resp: 28095  
 Ion Ratio Lower Upper  
 41 100  
 42 59.2 55.8 83.6



#11  
 Trichlorofluoromethane  
 Concen: 0.024 ppbv  
 RT: 3.539 min Scan# 291  
 Delta R.T. 0.010 min  
 Lab File: VL040001.D  
 Acq: 13 Dec 2022 7:27

Tgt Ion: 101 Resp: 3537  
 Ion Ratio Lower Upper  
 101 100  
 103 44.4 52.6 78.8#

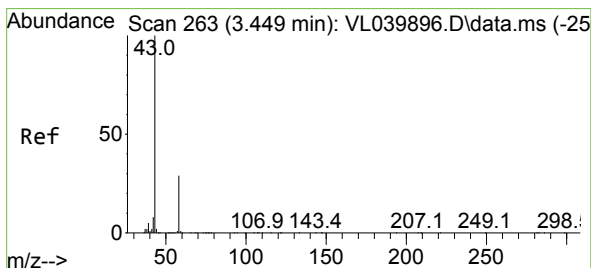
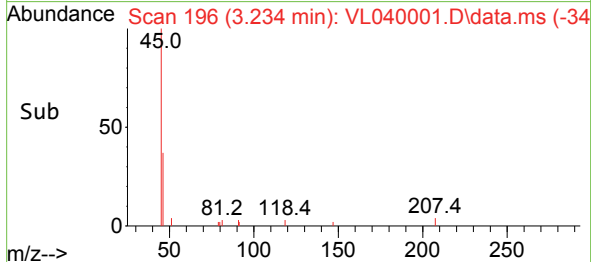
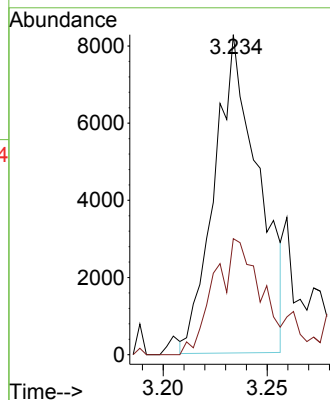
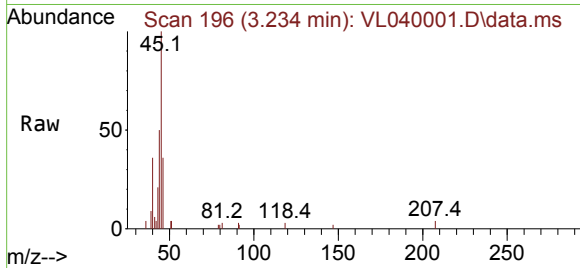




#13  
Ethanol  
Concen: 2.875 ppbv  
RT: 3.234 min Scan# 19  
Delta R.T. 0.020 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

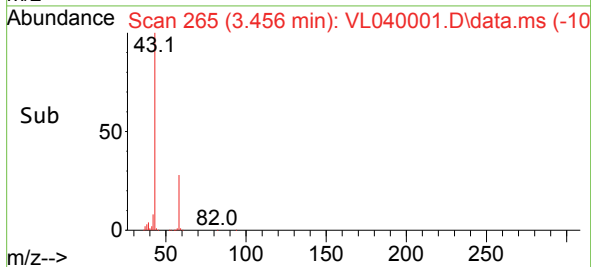
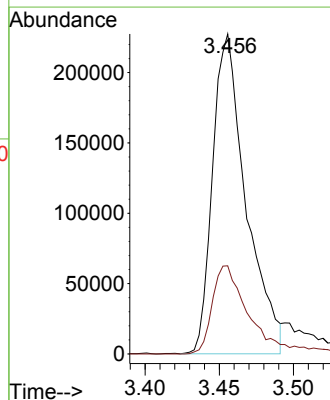
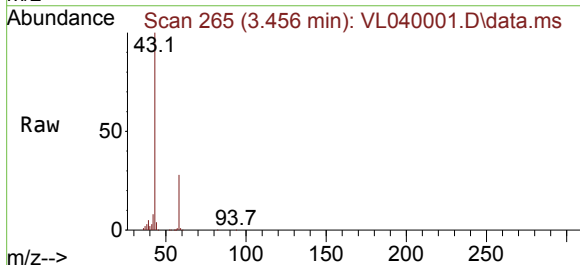
Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

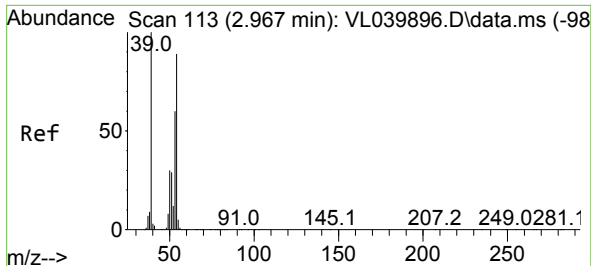
Tgt Ion: 45 Resp: 12104  
Ion Ratio Lower Upper  
45 100  
46 50.0 14.6 58.2



#15  
Acetone  
Concen: 3.159 ppbv  
RT: 3.456 min Scan# 265  
Delta R.T. 0.023 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Tgt Ion: 43 Resp: 355431  
Ion Ratio Lower Upper  
43 100  
58 32.3 22.9 34.3

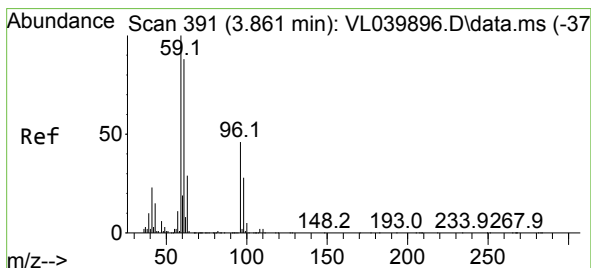
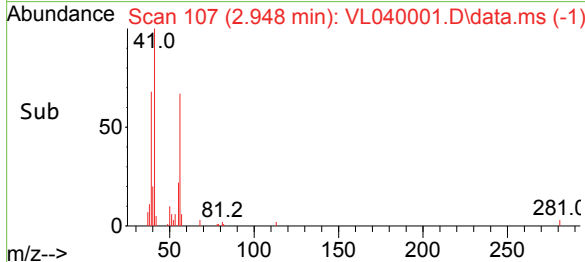
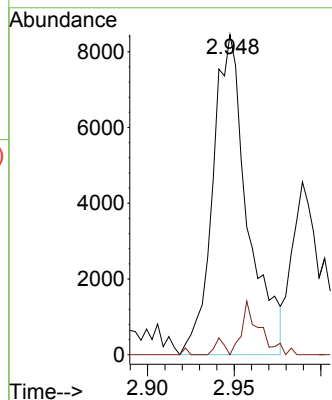
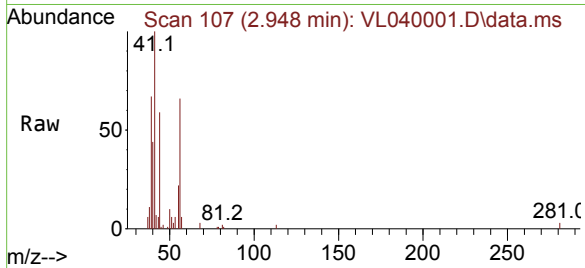




#16  
1,3-Butadiene  
Concen: 0.210 ppbv  
RT: 2.948 min Scan# 113  
Delta R.T. -0.003 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

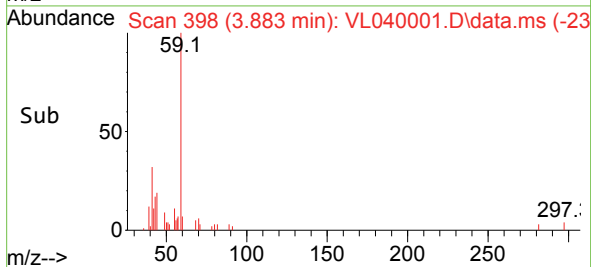
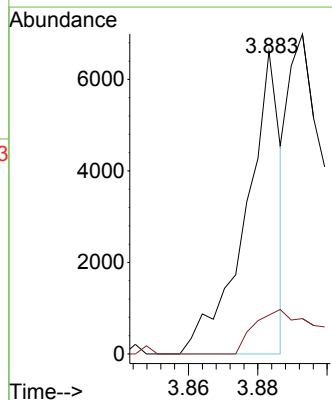
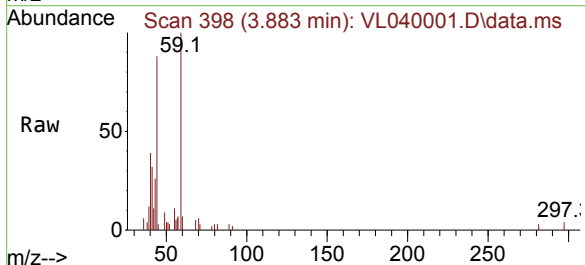
Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

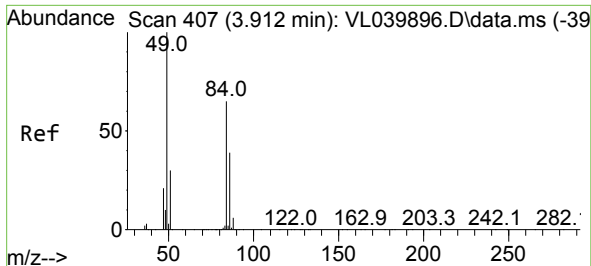
Tgt Ion: 39 Resp: 11772  
Ion Ratio Lower Upper  
39 100  
54 10.1 66.6 99.8#



#17  
tert-Butyl alcohol  
Concen: 0.036 ppbv  
RT: 3.883 min Scan# 398  
Delta R.T. 0.039 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Tgt Ion: 59 Resp: 4607  
Ion Ratio Lower Upper  
59 100  
57 32.6 8.3 12.5#



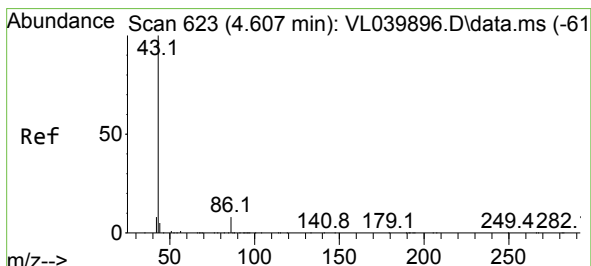
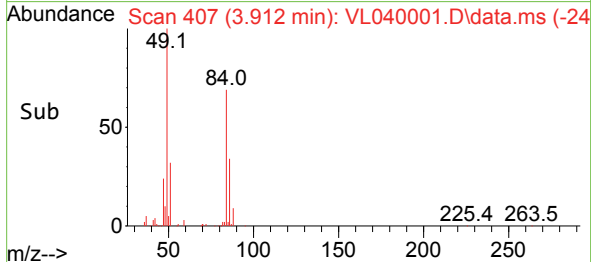
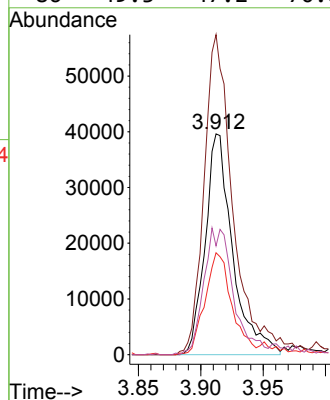
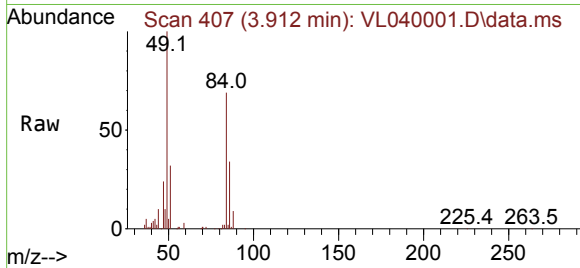


#20  
Methylene Chloride  
Concen: 1.115 ppbv  
RT: 3.912 min Scan# 407  
Delta R.T. 0.016 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

Tgt Ion: 84 Resp: 60793

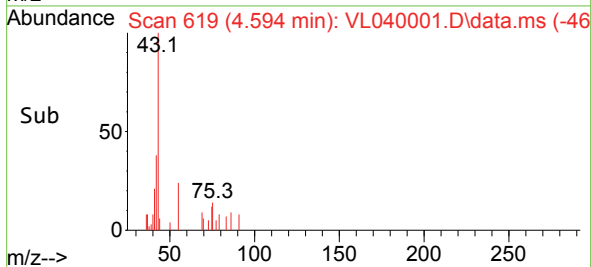
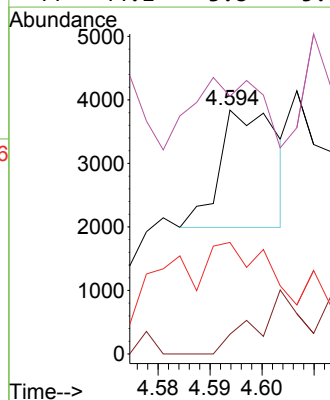
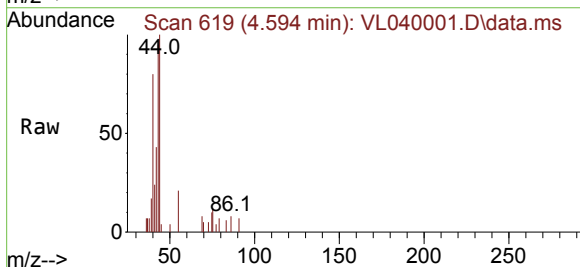
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 84  | 100   |       |       |
| 49  | 143.4 | 122.2 | 183.4 |
| 51  | 45.5  | 36.3  | 54.5  |
| 86  | 49.3  | 47.2  | 70.8  |

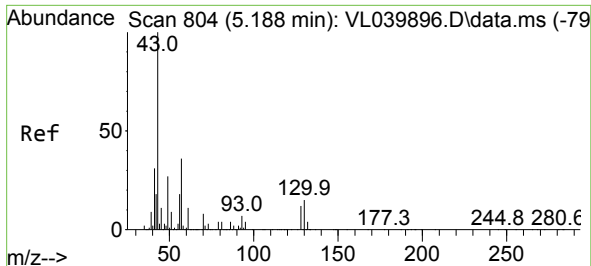


#23  
Vinyl Acetate  
Concen: 0.031 ppbv  
RT: 4.594 min Scan# 619  
Delta R.T. 0.000 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Tgt Ion: 43 Resp: 1416

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 86  | 16.7  | 5.0   | 7.4#  |
| 42  | 36.9  | 7.6   | 11.4# |
| 44  | 44.1  | 3.8   | 5.6#  |

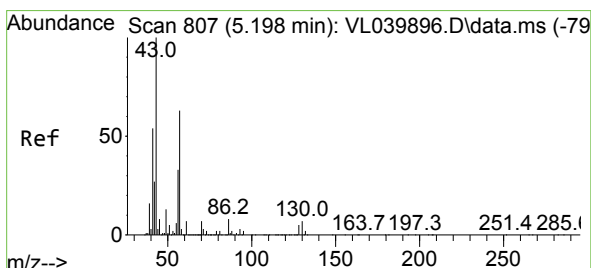
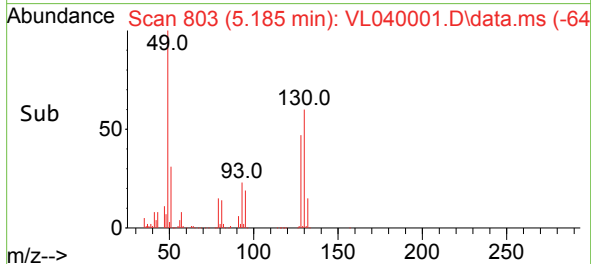
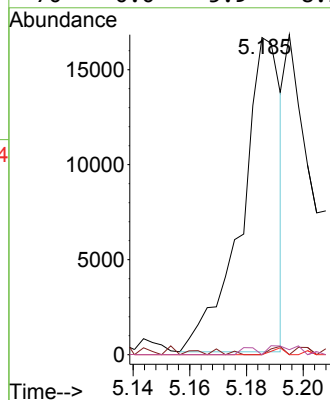
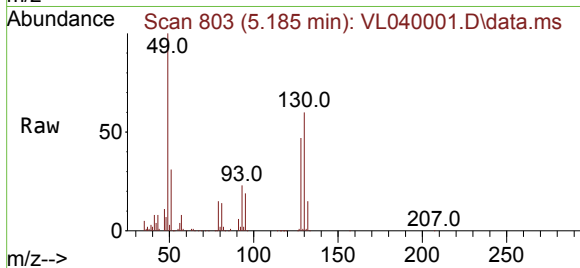




#25  
Ethyl Acetate  
Concen: 0.077 ppbv  
RT: 5.185 min Scan# 804  
Delta R.T. 0.016 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

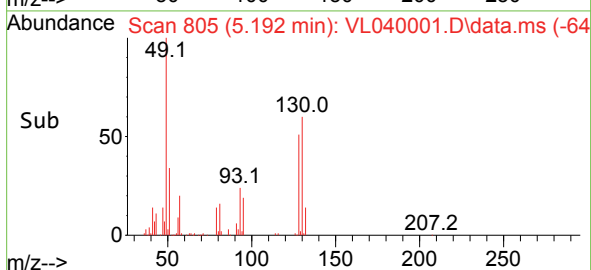
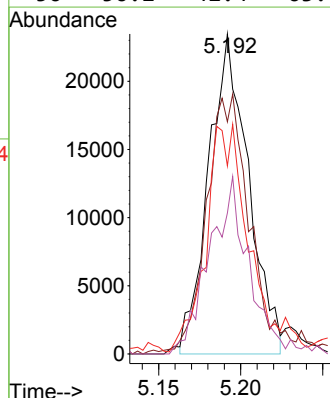
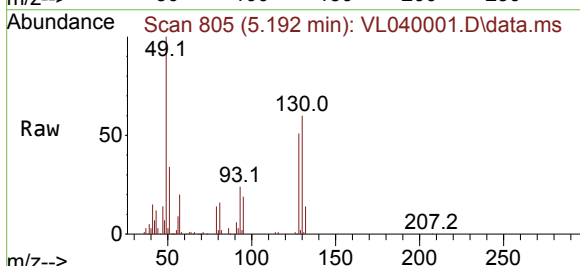
Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

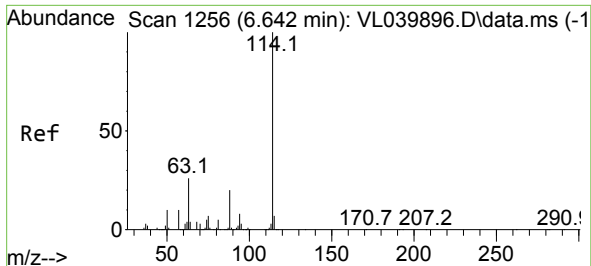
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 43    | Resp: | 15852 |
| Ion Ratio | Lower | Upper |       |
| 43        | 100   |       |       |
| 45        | 0.0   | 8.4   | 12.6# |
| 61        | 0.0   | 8.5   | 12.7# |
| 70        | 0.0   | 5.9   | 8.9#  |



#26  
Hexane  
Concen: 0.438 ppbv  
RT: 5.192 min Scan# 805  
Delta R.T. 0.016 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 57    | Resp: | 39546  |
| Ion Ratio | Lower | Upper |        |
| 57        | 100   |       |        |
| 41        | 92.7  | 72.3  | 108.5  |
| 43        | 84.4  | 188.7 | 283.1# |
| 56        | 56.2  | 42.4  | 63.6   |





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.632 min Scan# 114

Delta R.T. 0.013 min

Lab File: VL040001.D

Acq: 13 Dec 2022 7:27

Instrument :

MSVOA\_L

ClientSampleId :

SG-3DL

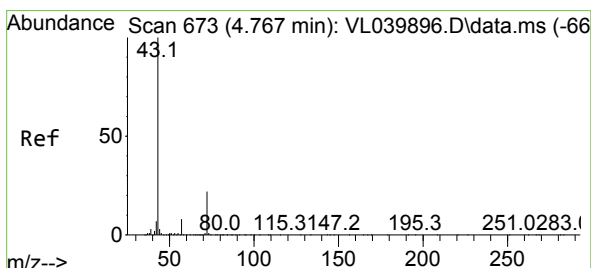
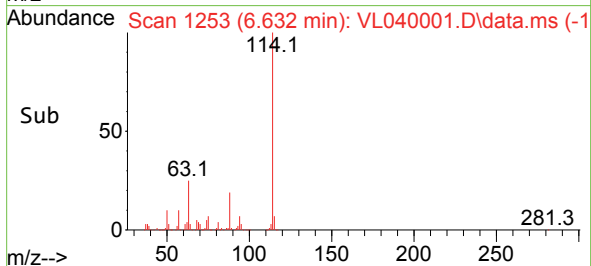
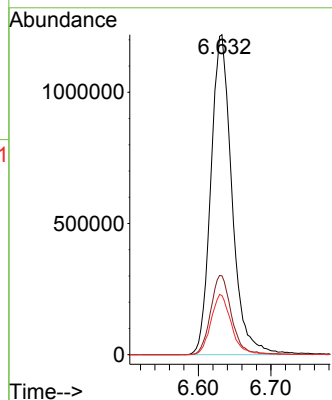
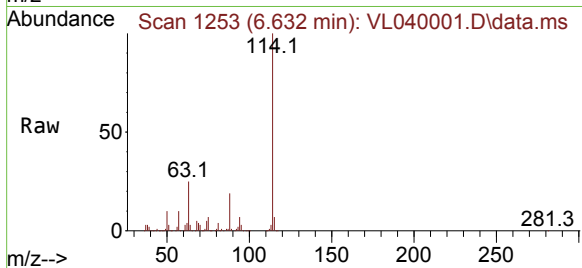
Tgt Ion:114 Resp: 2454191

Ion Ratio Lower Upper

114 100

63 24.8 21.4 32.0

88 18.4 15.3 22.9



#34

2-Butanone

Concen: 0.243 ppbv

RT: 4.780 min Scan# 677

Delta R.T. 0.029 min

Lab File: VL040001.D

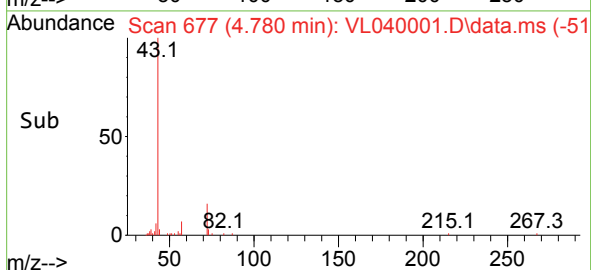
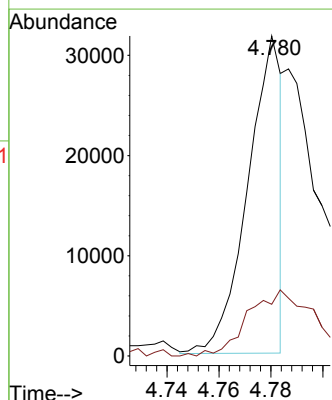
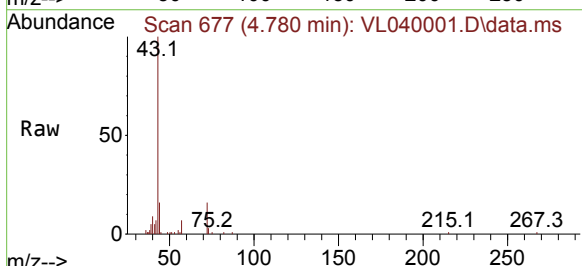
Acq: 13 Dec 2022 7:27

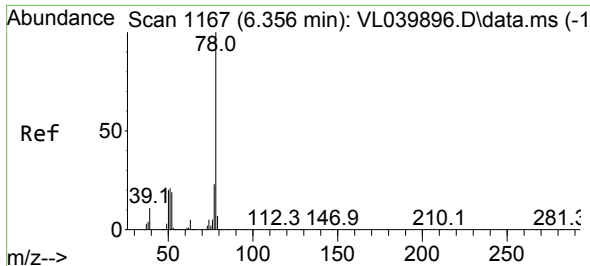
Tgt Ion: 43 Resp: 28516

Ion Ratio Lower Upper

43 100

72 0.0 17.4 26.2#

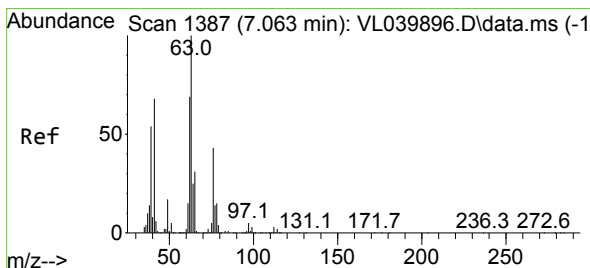
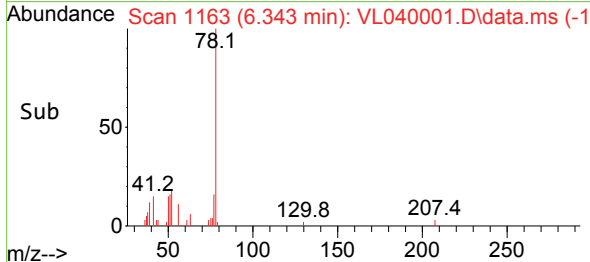
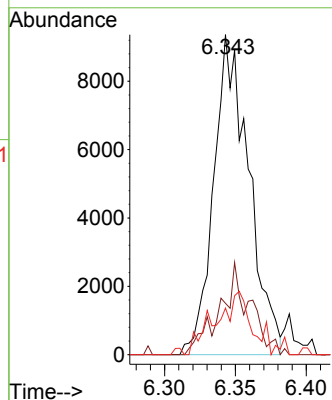
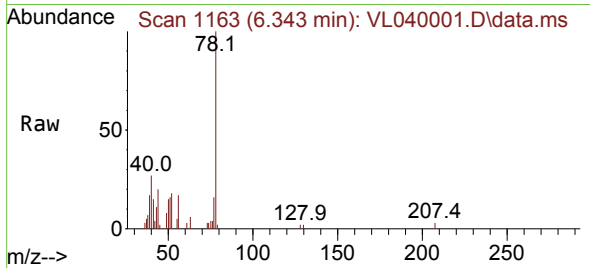




#36  
Benzene  
Concen: 0.077 ppbv  
RT: 6.343 min Scan# 1163  
Delta R.T. 0.010 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

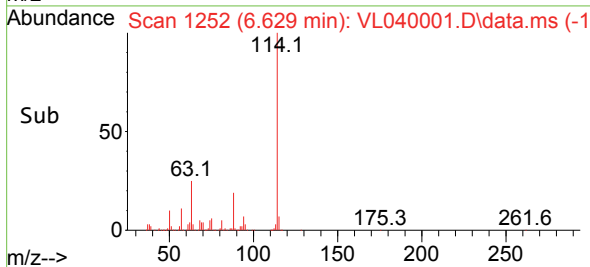
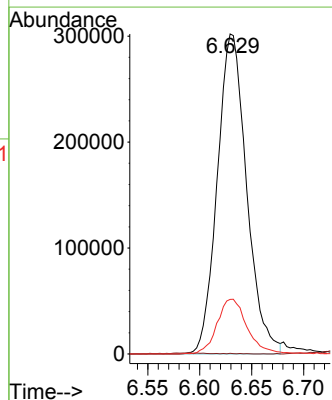
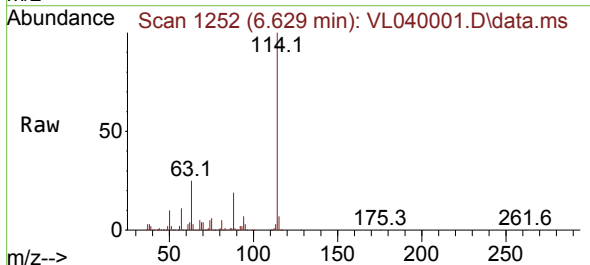
Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

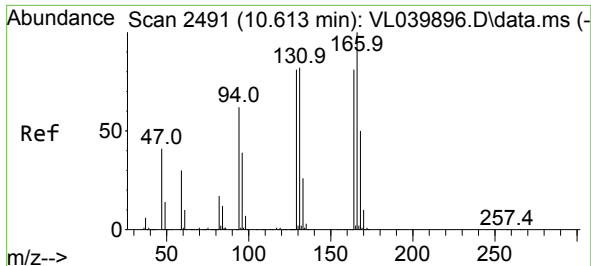
Tgt Ion: 78 Resp: 16114  
Ion Ratio Lower Upper  
78 100  
77 16.1 18.2 27.2#  
50 12.5 15.8 23.8#



#39  
1,2-Dichloropropane  
Concen: 7.303 ppbv  
RT: 6.629 min Scan# 1252  
Delta R.T. -0.405 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Tgt Ion: 63 Resp: 593567  
Ion Ratio Lower Upper  
63 100  
41 0.2 54.7 82.1#  
62 17.0 55.0 82.6#

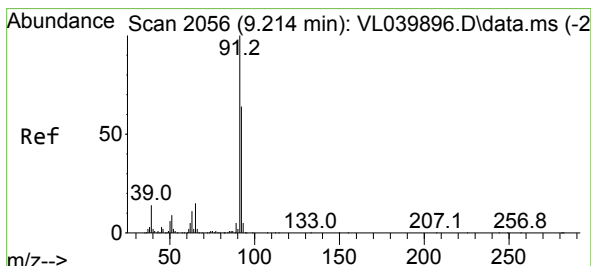
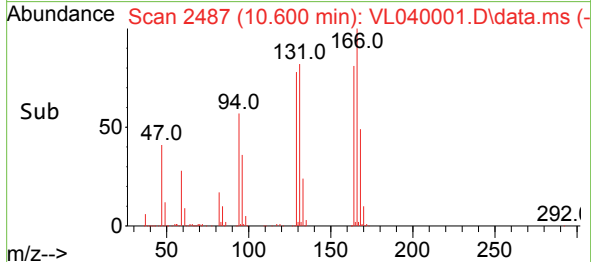
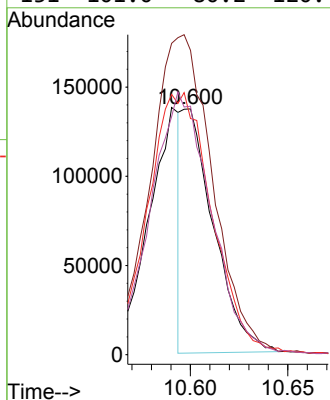
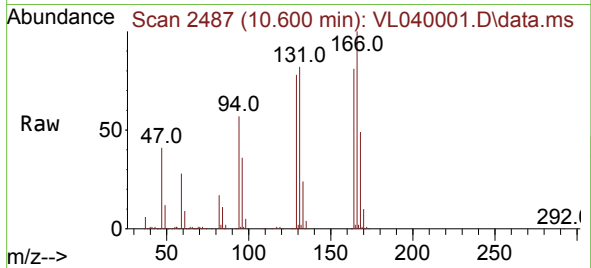




#52  
Tetrachloroethene  
Concen: 1.985 ppbv  
RT: 10.600 min Scan# 2491  
Delta R.T. 0.020 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

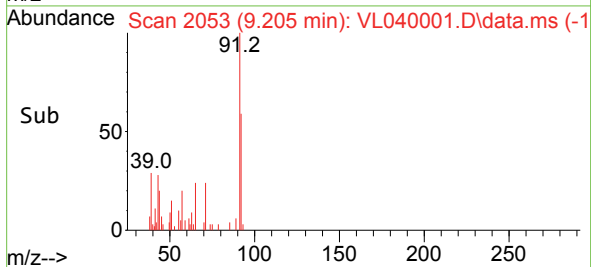
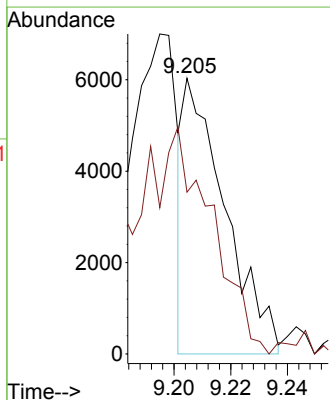
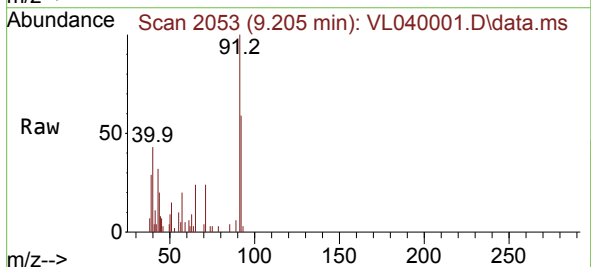
Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

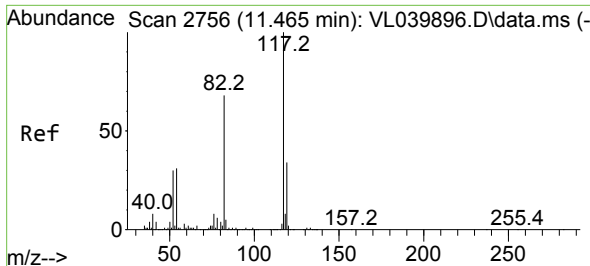
Tgt Ion:164 Resp: 154868  
Ion Ratio Lower Upper  
164 100  
166 123.9 98.3 147.5  
129 94.5 79.7 119.5  
131 101.0 80.2 120.4



#53  
Toluene  
Concen: 0.026 ppbv  
RT: 9.205 min Scan# 2053  
Delta R.T. 0.020 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Tgt Ion: 91 Resp: 6146  
Ion Ratio Lower Upper  
91 100  
92 154.7 49.8 74.6#

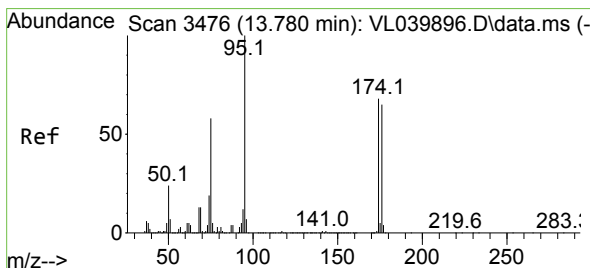
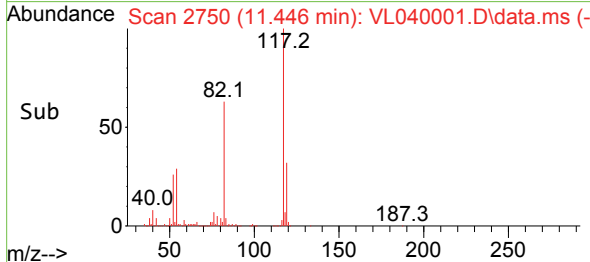
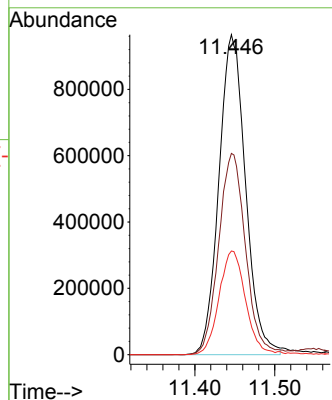
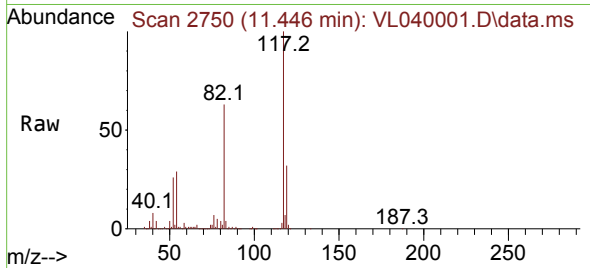




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.446 min Scan# 21  
Delta R.T. 0.013 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-3DL

Tgt Ion:117 Resp: 2230344  
Ion Ratio Lower Upper  
117 100  
82 63.6 52.3 78.5  
119 33.1 25.7 38.5



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.026 ppbv  
RT: 13.761 min Scan# 3470  
Delta R.T. 0.020 min  
Lab File: VL040001.D  
Acq: 13 Dec 2022 7:27

Tgt Ion: 95 Resp: 1708046  
Ion Ratio Lower Upper  
95 100  
174 67.9 53.7 80.5  
175 5.0 4.0 6.0

