

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL092723\  
 Data File : VL040725.D  
 Acq On : 27 Sep 2023 13:28  
 Operator : SY/MD  
 Sample : 04616-01DL 20X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Sep 28 01:44:02 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091423AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Tue Sep 19 05:12:43 2023  
 Response via : Initial Calibration

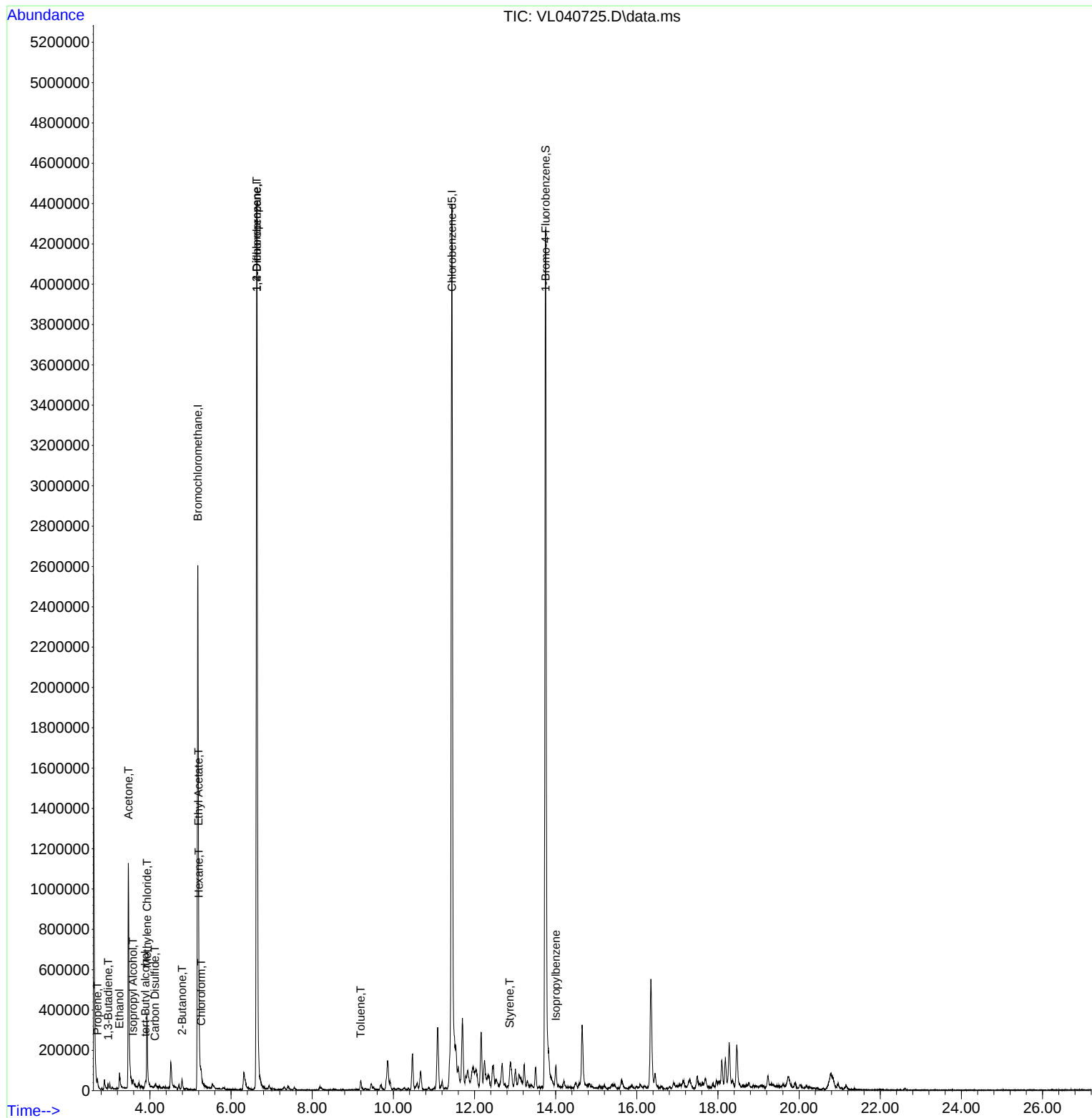
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.179  | 49    | 1261068  | 10.000   | ppbv   | -0.02    |
| 33) 1,4-Difluorobenzene     | 6.636  | 114   | 3517678  | 10.000   | ppbv   | -0.03    |
| 55) Chlorobenzene-d5        | 11.442 | 117   | 3076036  | 10.000   | ppbv   | -0.04    |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.751 | 95    | 2239907  | 9.425    | ppbv   | -0.04    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 94.200%  |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 9) Propene                  | 2.703  | 41    | 6353     | 0.107    | ppbv # | 61       |
| 13) Ethanol                 | 3.250  | 45    | 80331    | 4.586    | ppbv   | 99       |
| 15) Acetone                 | 3.468  | 43    | 1231688  | 7.405    | ppbv   | 94       |
| 16) 1,3-Butadiene           | 2.970  | 39    | 6102     | 0.084    | ppbv # | 9        |
| 17) tert-Butyl alcohol      | 3.890  | 59    | 30979    | 0.182    | ppbv   | 97       |
| 19) Isopropyl Alcohol       | 3.584  | 45    | 26209    | 0.261    | ppbv # | 93       |
| 20) Methylene Chloride      | 3.928  | 84    | 132679   | 1.482    | ppbv   | 95       |
| 25) Ethyl Acetate           | 5.198  | 43    | 56190    | 0.209    | ppbv # | 80       |
| 26) Hexane                  | 5.205  | 57    | 79705    | 0.628    | ppbv # | 41       |
| 27) Carbon Disulfide        | 4.121  | 76    | 11794    | 0.067    | ppbv # | 73       |
| 29) Chloroform              | 5.263  | 83    | 14038    | 0.064    | ppbv   | 88       |
| 34) 2-Butanone              | 4.793  | 43    | 55982    | 0.316    | ppbv # | 85       |
| 39) 1,2-Dichloropropane     | 6.632  | 63    | 837358   | 8.351    | ppbv # | 22       |
| 53) Toluene                 | 9.192  | 91    | 16730    | 0.061    | ppbv # | 20       |
| 61) Styrene                 | 12.864 | 104   | 7925     | 0.060    | ppbv # | 27       |
| 62) Isopropylbenzene        | 14.008 | 105   | 91379    | 0.193    | ppbv   | 98       |
| -----                       |        |       |          |          |        |          |

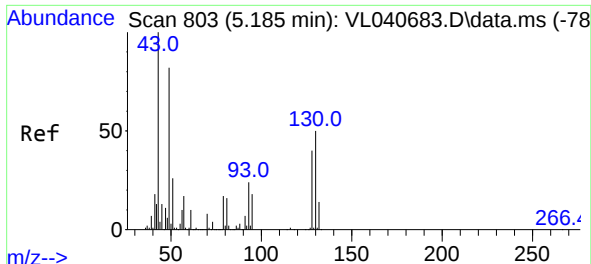
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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MSVOA\_L  
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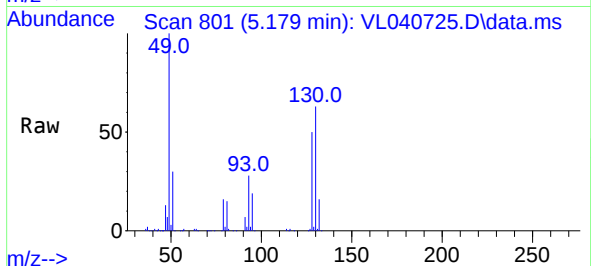
Quant Time: Sep 28 01:44:02 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091423AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Sep 19 05:12:43 2023  
Response via : Initial Calibration



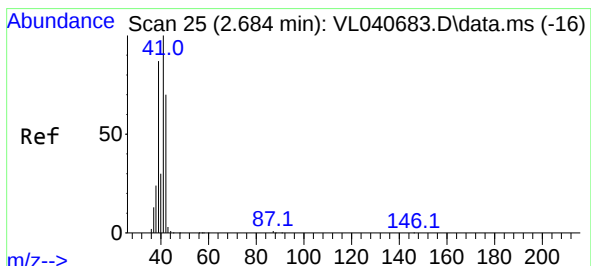
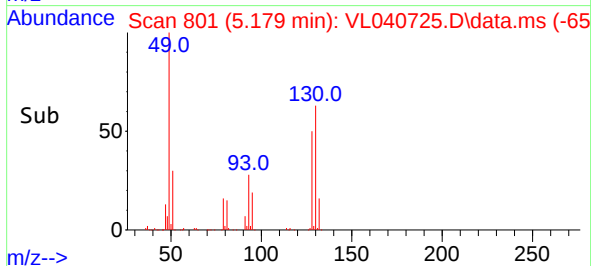
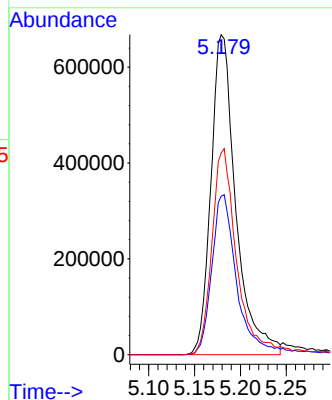


#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.179 min Scan# 80  
Delta R.T. -0.019 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Instrument :  
MSVOA\_L  
ClientSampleId :

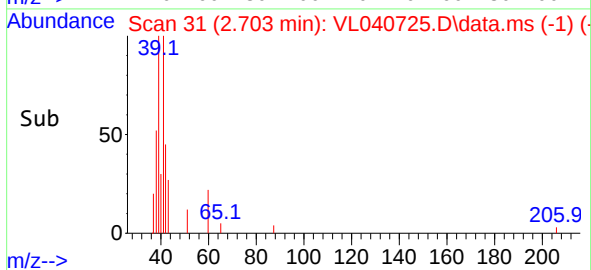
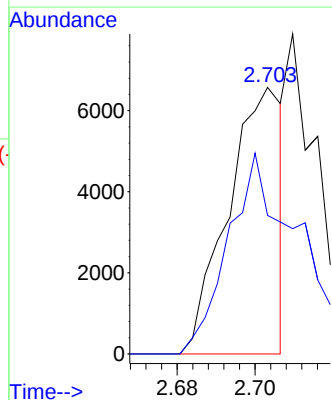
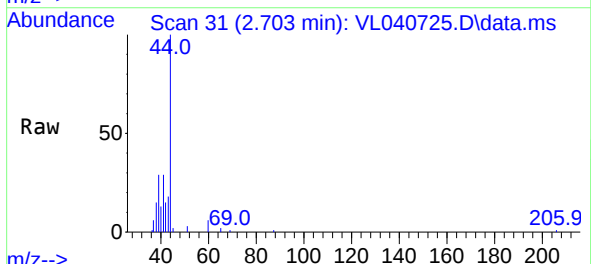


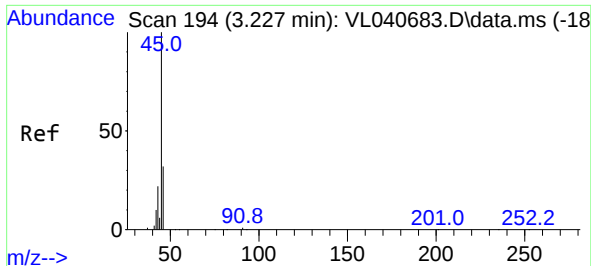
Tgt Ion: 49 Resp: 1261068  
Ion Ratio Lower Upper  
49 100  
128 51.9 25.4 76.0  
130 66.1 32.3 96.8



#9  
Propene  
Concen: 0.107 ppbv  
RT: 2.703 min Scan# 31  
Delta R.T. 0.007 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Tgt Ion: 41 Resp: 6353  
Ion Ratio Lower Upper  
41 100  
42 103.0 56.7 85.1#

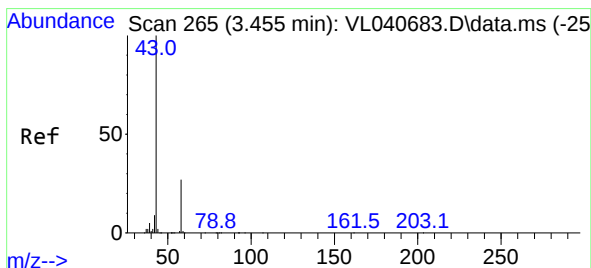
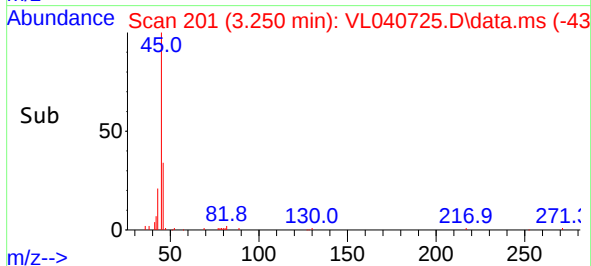
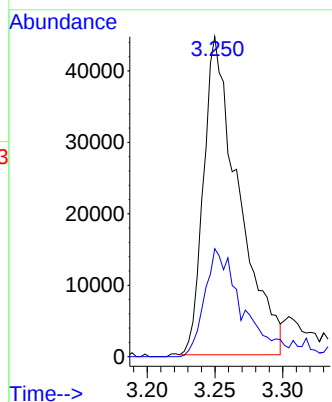
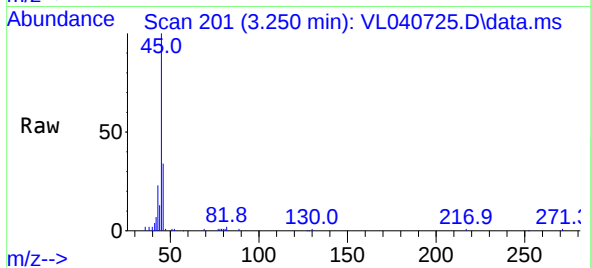




#13  
Ethanol  
Concen: 4.586 ppbv  
RT: 3.250 min Scan# 201  
Delta R.T. 0.007 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

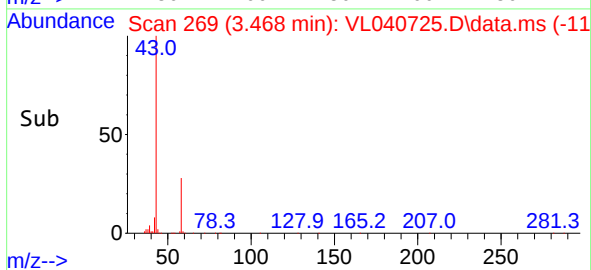
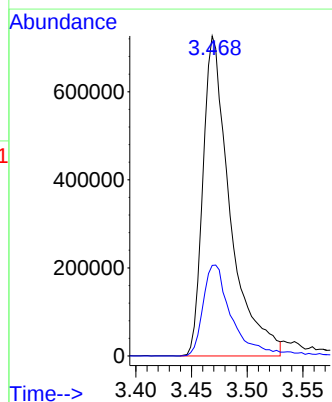
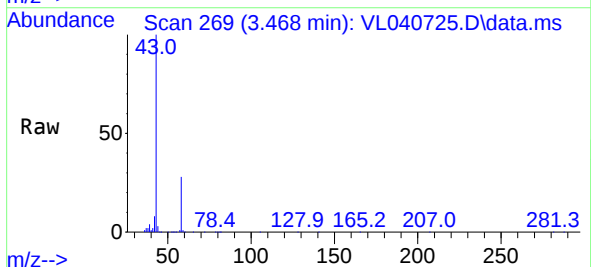
Instrument :  
MSVOA\_L  
ClientSampleId :

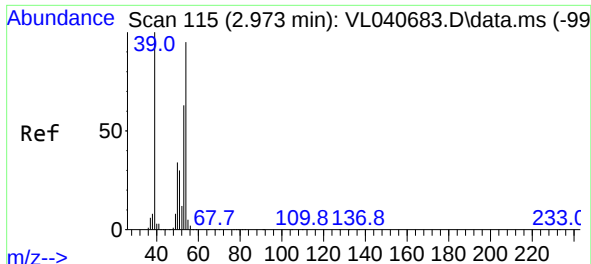
Tgt Ion: 45 Resp: 80331  
Ion Ratio Lower Upper  
45 100  
46 38.9 15.2 61.0



#15  
Acetone  
Concen: 7.405 ppbv  
RT: 3.468 min Scan# 269  
Delta R.T. -0.003 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Tgt Ion: 43 Resp: 1231688  
Ion Ratio Lower Upper  
43 100  
58 31.5 22.6 34.0





#16

1,3-Butadiene

Concen: 0.084 ppbv

RT: 2.970 min Scan# 115

Delta R.T. -0.019 min

Lab File: VL040725.D

Acq: 27 Sep 2023 13:28

Instrument :

MSVOA\_L

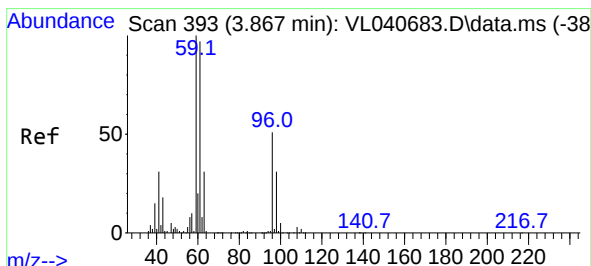
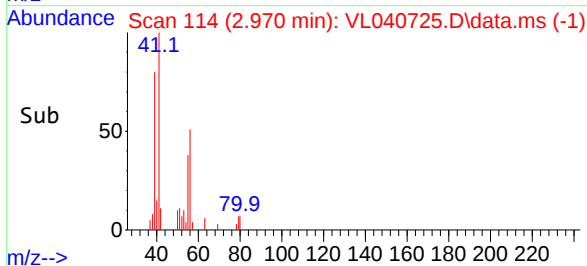
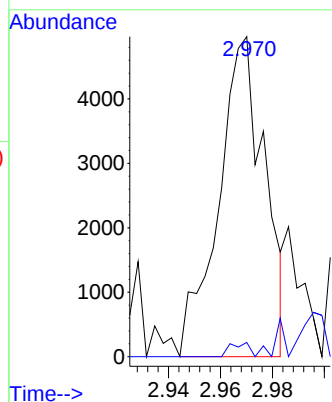
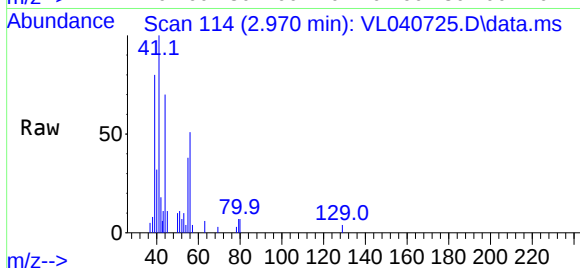
ClientSampleId :

Tgt Ion: 39 Resp: 6102

Ion Ratio Lower Upper

39 100

54 0.0 64.8 97.2#



#17

tert-Butyl alcohol

Concen: 0.182 ppbv

RT: 3.890 min Scan# 400

Delta R.T. 0.007 min

Lab File: VL040725.D

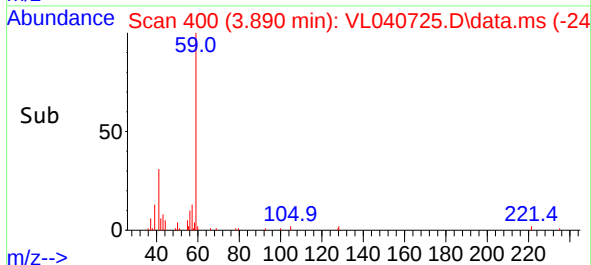
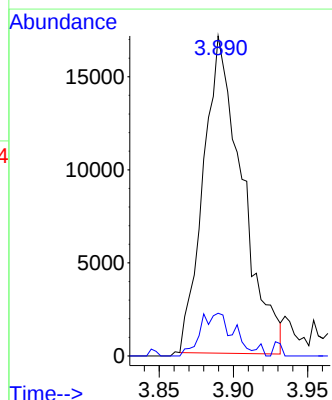
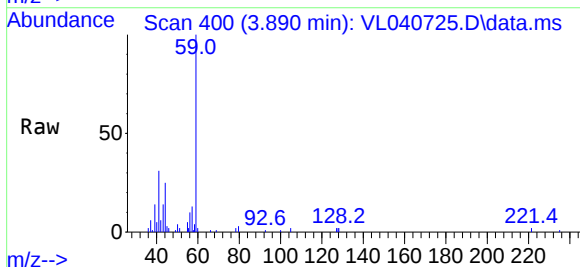
Acq: 27 Sep 2023 13:28

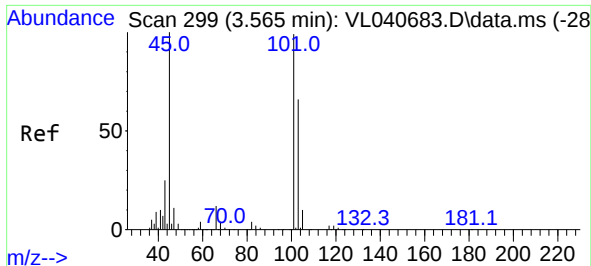
Tgt Ion: 59 Resp: 30979

Ion Ratio Lower Upper

59 100

57 12.1 8.7 13.1





#19

Isopropyl Alcohol

Concen: 0.261 ppbv

RT: 3.584 min Scan# 305

Delta R.T. 0.007 min

Lab File: VL040725.D

Acq: 27 Sep 2023 13:28

Instrument :

MSVOA\_L

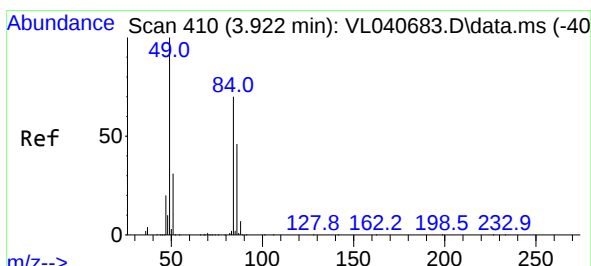
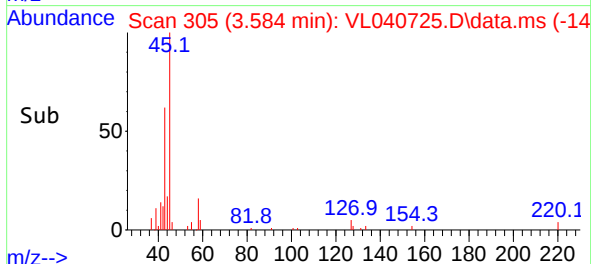
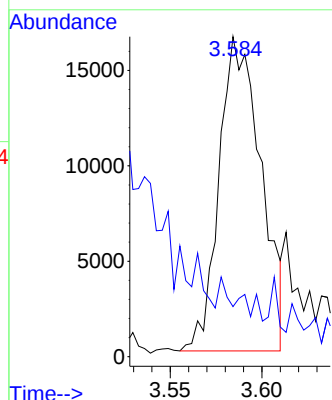
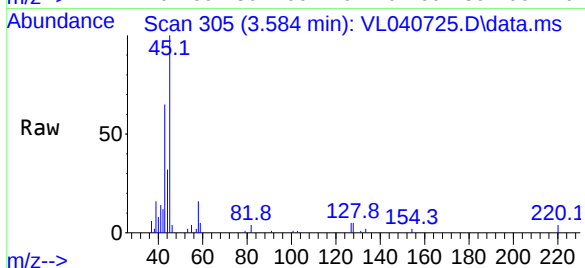
ClientSampleId :

Tgt Ion: 45 Resp: 26209

Ion Ratio Lower Upper

45 100

58 0.0 1.9 2.9#



#20

Methylene Chloride

Concen: 1.482 ppbv

RT: 3.928 min Scan# 412

Delta R.T. -0.009 min

Lab File: VL040725.D

Acq: 27 Sep 2023 13:28

Tgt Ion: 84 Resp: 132679

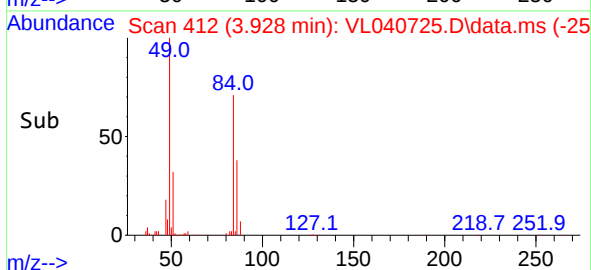
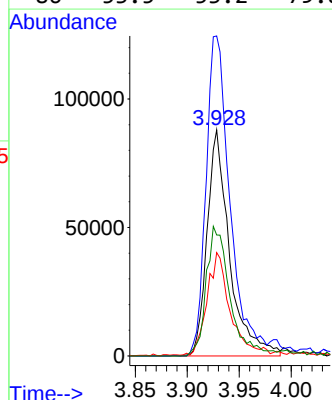
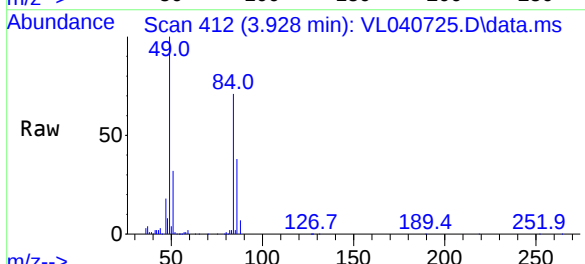
Ion Ratio Lower Upper

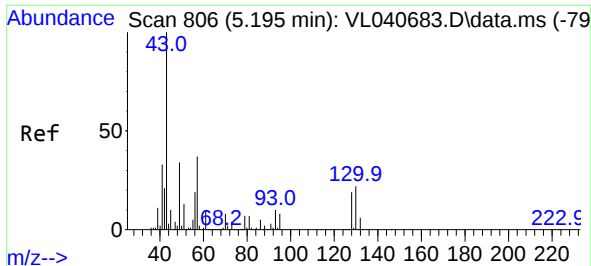
84 100

49 141.6 114.4 171.6

51 45.4 35.5 53.3

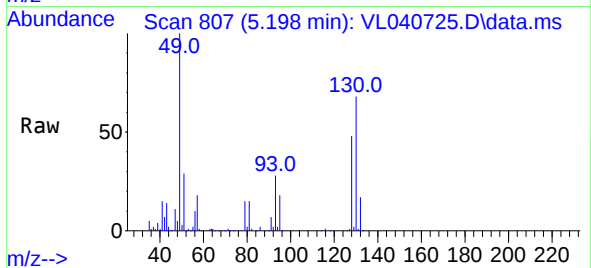
86 53.5 53.2 79.8





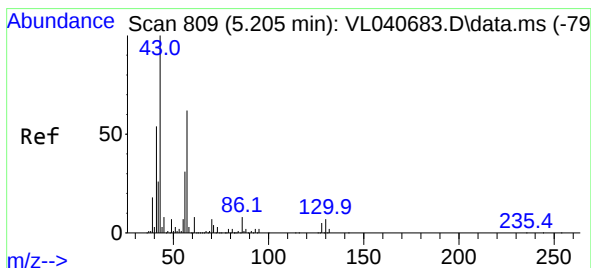
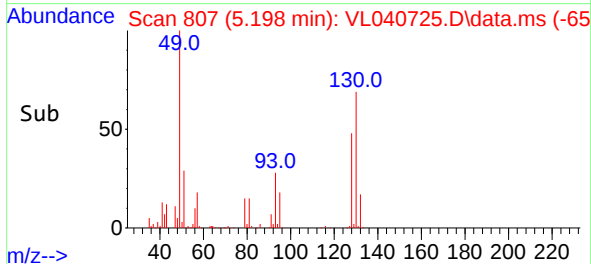
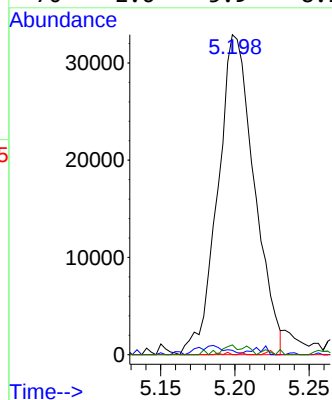
#25  
Ethyl Acetate  
Concen: 0.209 ppbv  
RT: 5.198 min Scan# 806  
Delta R.T. -0.013 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Instrument :  
MSVOA\_L  
ClientSampleId :



Tgt Ion: 43 Resp: 56190

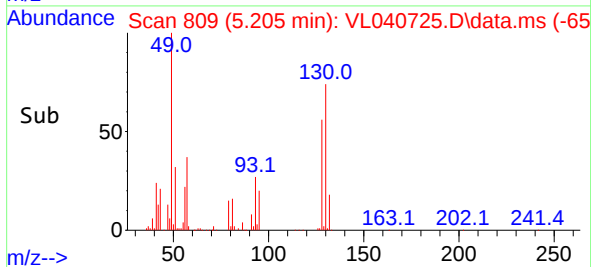
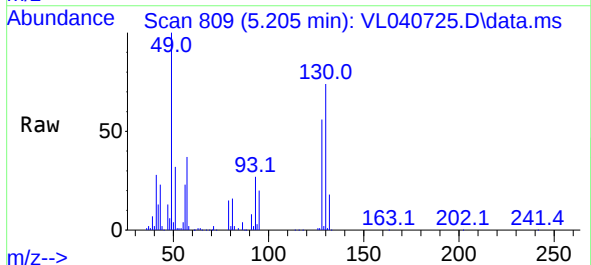
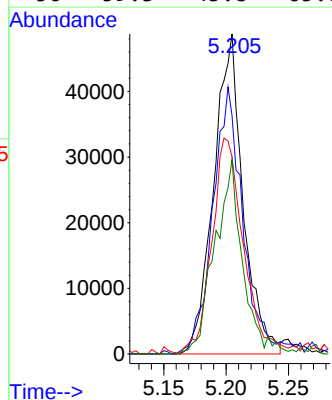
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 45  | 3.3   | 8.2   | 12.4# |
| 61  | 0.2   | 8.2   | 12.4# |
| 70  | 2.6   | 5.9   | 8.9#  |

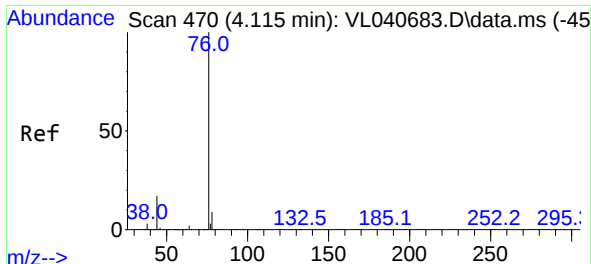


#26  
Hexane  
Concen: 0.628 ppbv  
RT: 5.205 min Scan# 809  
Delta R.T. -0.016 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Tgt Ion: 57 Resp: 79705

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 57  | 100   |       |        |
| 41  | 88.7  | 75.2  | 112.8  |
| 43  | 76.0  | 185.6 | 278.4# |
| 56  | 59.3  | 43.8  | 65.8   |

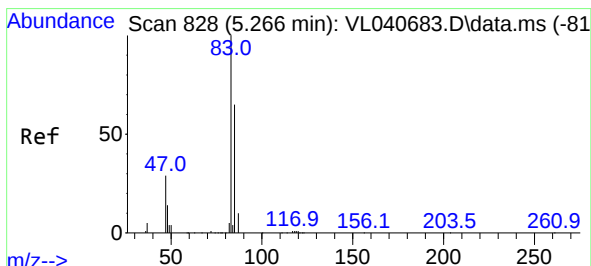
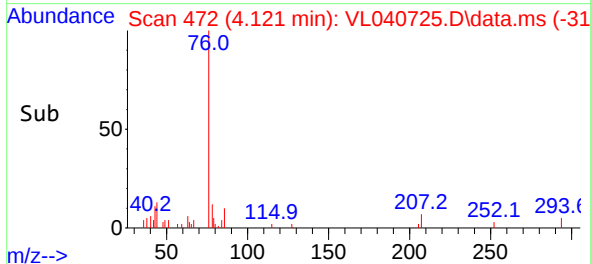
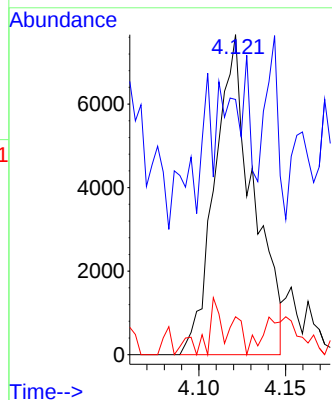
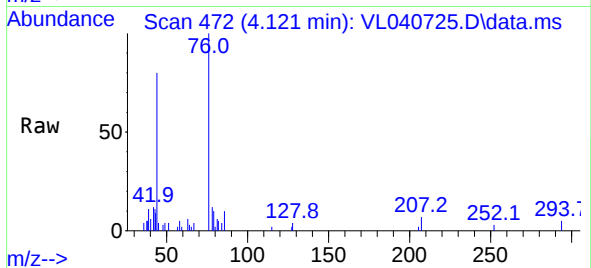




#27  
Carbon Disulfide  
Concen: 0.067 ppbv  
RT: 4.121 min Scan# 41  
Delta R.T. -0.009 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

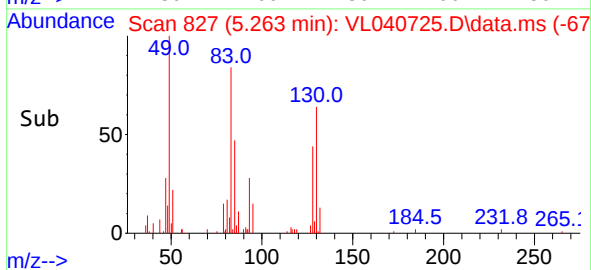
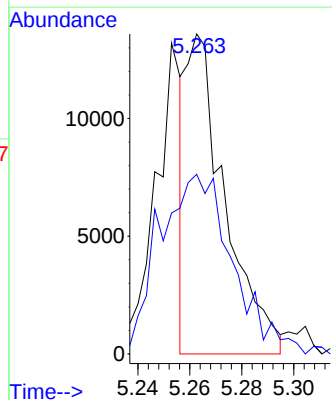
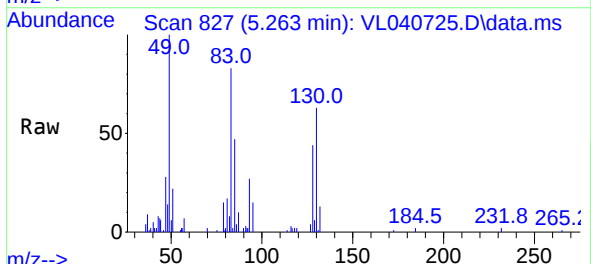
Instrument :  
MSVOA\_L  
ClientSampleId :

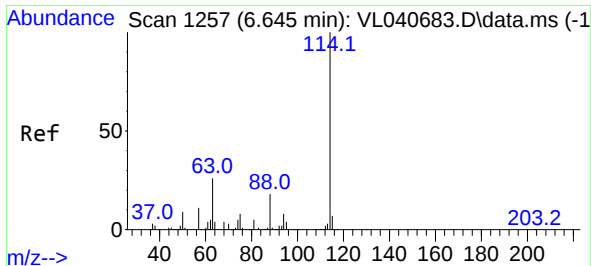
Tgt Ion: 76 Resp: 11794  
Ion Ratio Lower Upper  
76 100  
44 0.0 14.5 21.7#  
78 10.3 7.7 11.5



#29  
Chloroform  
Concen: 0.064 ppbv  
RT: 5.263 min Scan# 827  
Delta R.T. -0.019 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Tgt Ion: 83 Resp: 14038  
Ion Ratio Lower Upper  
83 100  
85 55.0 51.8 77.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.636 min Scan# 11

Delta R.T. -0.026 min

Lab File: VL040725.D

Acq: 27 Sep 2023 13:28

Instrument :

MSVOA\_L

ClientSampleId :

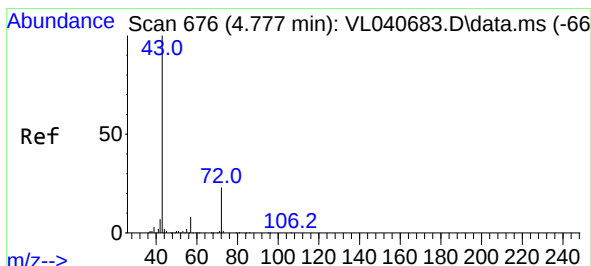
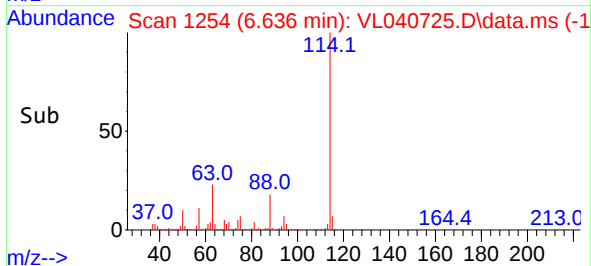
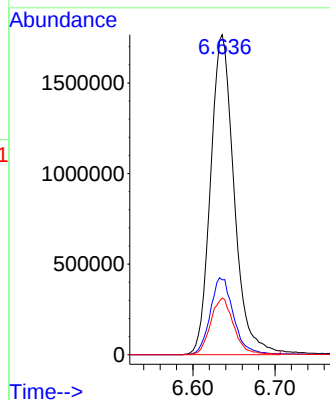
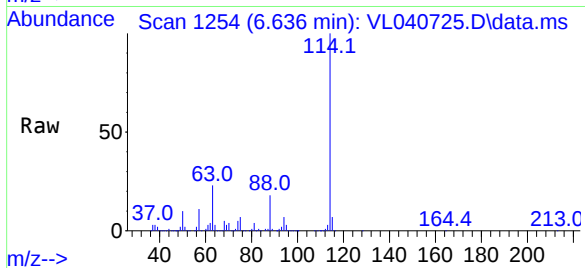
Tgt Ion:114 Resp: 3517678

Ion Ratio Lower Upper

114 100

63 24.2 21.1 31.7

88 17.6 14.5 21.7



#34

2-Butanone

Concen: 0.316 ppbv

RT: 4.793 min Scan# 681

Delta R.T. 0.003 min

Lab File: VL040725.D

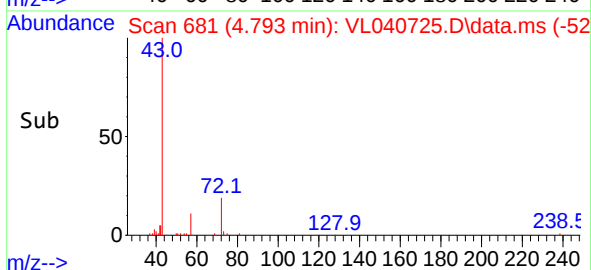
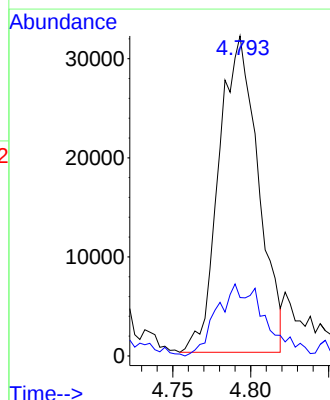
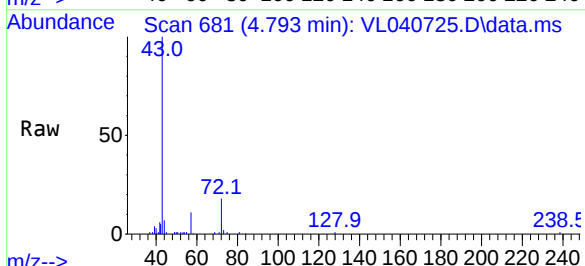
Acq: 27 Sep 2023 13:28

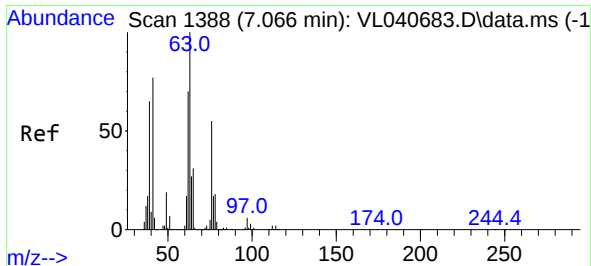
Tgt Ion: 43 Resp: 55982

Ion Ratio Lower Upper

43 100

72 30.4 18.6 27.8#





#39

1,2-Dichloropropane

Concen: 8.351 ppbv

RT: 6.632 min Scan# 11

Delta R.T. -0.450 min

Lab File: VL040725.D

Acq: 27 Sep 2023 13:28

Instrument :

MSVOA\_L

ClientSampleId :

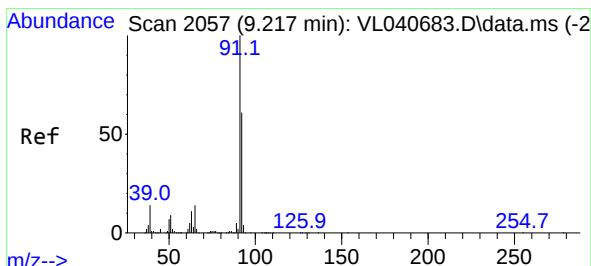
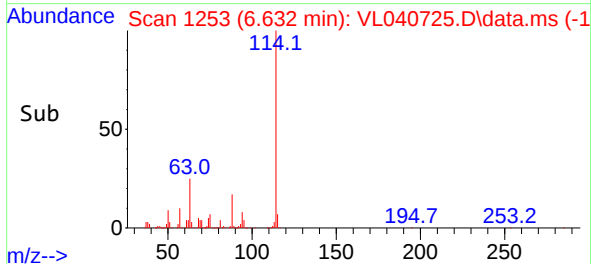
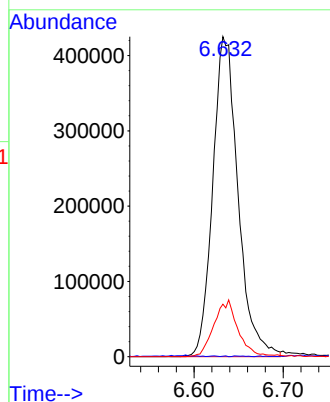
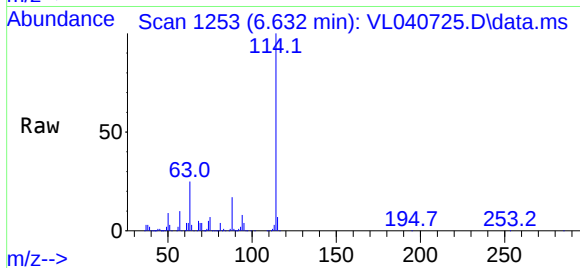
Tgt Ion: 63 Resp: 837358

Ion Ratio Lower Upper

63 100

41 0.0 61.6 92.4#

62 16.4 55.8 83.8#



#53

Toluene

Concen: 0.061 ppbv

RT: 9.192 min Scan# 2049

Delta R.T. -0.038 min

Lab File: VL040725.D

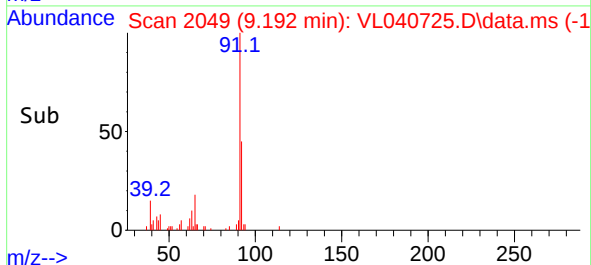
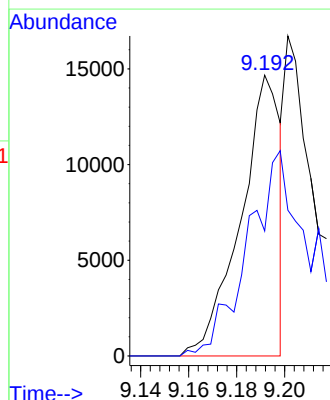
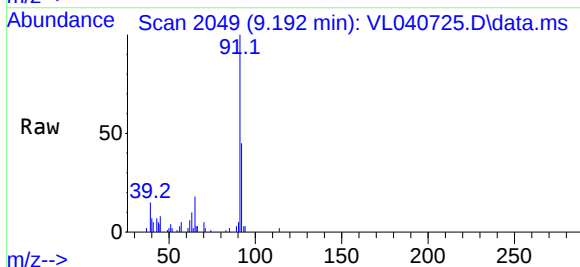
Acq: 27 Sep 2023 13:28

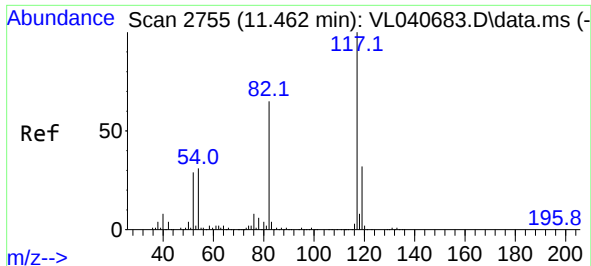
Tgt Ion: 91 Resp: 16730

Ion Ratio Lower Upper

91 100

92 0.0 48.5 72.7#

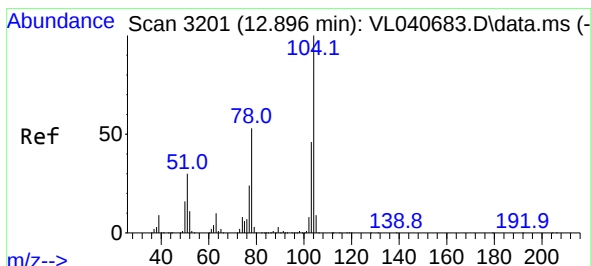
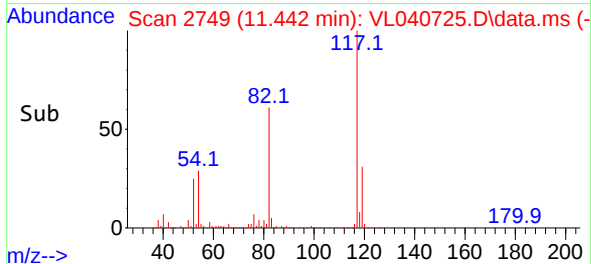
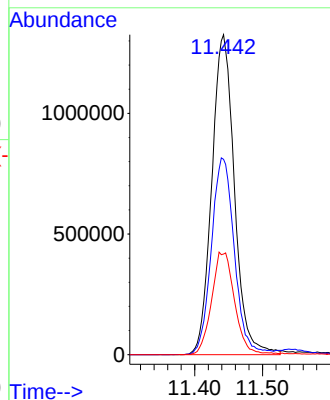
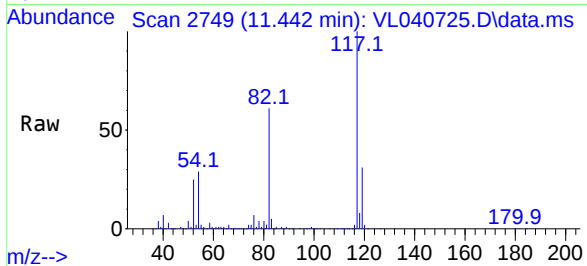




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.442 min Scan# 21  
Delta R.T. -0.035 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

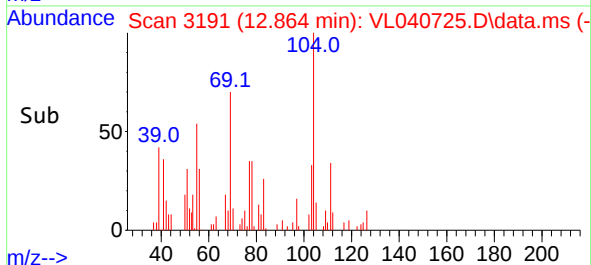
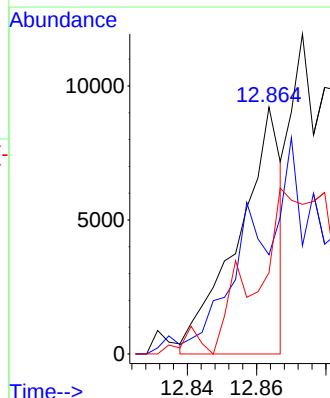
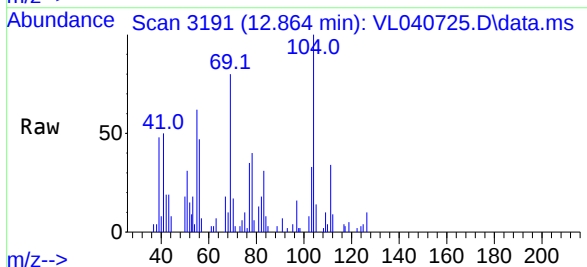
Instrument :  
MSVOA\_L  
ClientSampleId :

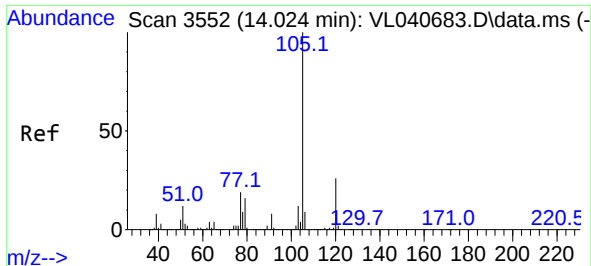
Tgt Ion:117 Resp: 3076036  
Ion Ratio Lower Upper  
117 100  
82 62.6 51.4 77.0  
119 33.1 24.7 37.1



#61  
Styrene  
Concen: 0.060 ppbv  
RT: 12.864 min Scan# 3191  
Delta R.T. -0.042 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Tgt Ion:104 Resp: 7925  
Ion Ratio Lower Upper  
104 100  
78 0.0 43.4 65.0#  
103 0.0 37.2 55.8#

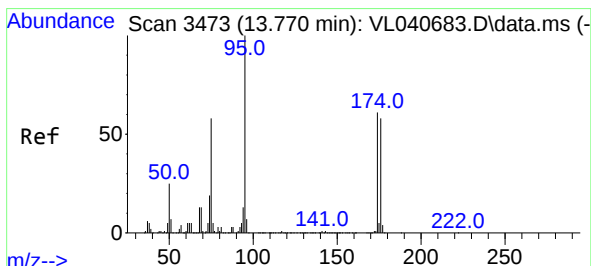
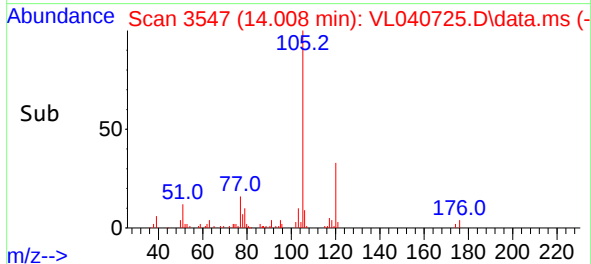
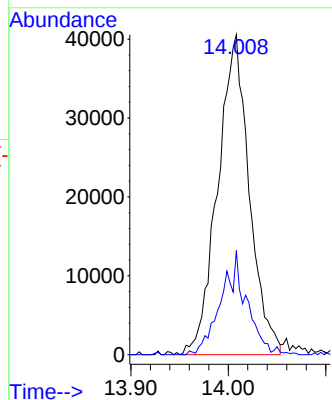
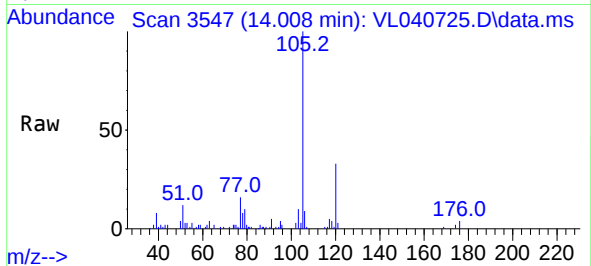




#62  
Isopropylbenzene  
Concen: 0.193 ppbv  
RT: 14.008 min Scan# 31  
Delta R.T. -0.029 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Instrument :  
MSVOA\_L  
ClientSampleId :

Tgt Ion:105 Resp: 91379  
Ion Ratio Lower Upper  
105 100  
120 26.5 20.2 30.4



#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.425 ppbv  
RT: 13.751 min Scan# 3467  
Delta R.T. -0.035 min  
Lab File: VL040725.D  
Acq: 27 Sep 2023 13:28

Tgt Ion: 95 Resp: 2239907  
Ion Ratio Lower Upper  
95 100  
174 66.8 48.9 73.3  
175 4.7 3.5 5.3

