

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL040825\  
 Data File : VL042265.D  
 Acq On : 08 Apr 2025 15:56  
 Operator : SY/MD  
 Sample : Q1728-12 10X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SSSG-B1-3-04012025

Quant Time: Apr 09 01:57:00 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL032725AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Fri Mar 28 02:00:52 2025  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| Internal Standards           |        |       |          |          |        |          |
| 1) Bromochloromethane        | 2.803  | 49    | 157608   | 10.000   | ppbv   | 0.02     |
| 33) 1,4-Difluorobenzene      | 3.984  | 114   | 427230   | 10.000   | ppbv   | 0.03     |
| 55) Chlorobenzene-d5         | 8.904  | 117   | 370747   | 10.000   | ppbv   | 0.03     |
|                              |        |       |          |          |        |          |
| System Monitoring Compounds  |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene  | 10.396 | 95    | 284068   | 9.330    | ppbv   | 0.03     |
| Spiked Amount                | 10.000 | Range | 65 - 135 | Recovery | =      | 93.300%  |
|                              |        |       |          |          |        |          |
| Target Compounds             |        |       |          |          |        |          |
|                              |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 1.505  | 85    | 1295     | 0.056    | ppbv   | 97       |
| 4) Chloromethane             | 1.541  | 50    | 441      | 0.046    | ppbv # | 88       |
| 8) Dichlorotetrafluoroethane | 1.505  | 85    | 1295     | 0.065    | ppbv # | 20       |
| 9) Propene                   | 1.897  | 41    | 1989     | 0.183    | ppbv   | 93       |
| 13) Ethanol                  | 1.897  | 45    | 17693    | 17.177   | ppbv # | 27       |
| 15) Acetone                  | 1.845  | 43    | 49256    | 2.235    | ppbv   | 95       |
| 16) 1,3-Butadiene            | 1.609  | 39    | 2770     | 0.257    | ppbv # | 22       |
| 17) tert-Butyl alcohol       | 2.055  | 59    | 1481     | 0.054    | ppbv # | 94       |
| 19) Isopropyl Alcohol        | 1.897  | 45    | 17693    | 1.423    | ppbv # | 60       |
| 20) Methylene Chloride       | 2.072  | 84    | 2797     | 0.341    | ppbv # | 90       |
| 23) Vinyl Acetate            | 2.476  | 43    | 310      | 0.032    | ppbv # | 56       |
| 26) Hexane                   | 2.842  | 57    | 1498     | 0.068    | ppbv # | 34       |
| 29) Chloroform               | 2.865  | 83    | 20569    | 0.636    | ppbv   | 95       |
| 34) 2-Butanone               | 2.577  | 43    | 1386     | 0.045    | ppbv   | 99       |
| 39) 1,2-Dichloropropane      | 3.981  | 63    | 108938   | 7.063    | ppbv # | 22       |
| 53) Toluene                  | 6.969  | 91    | 2041     | 0.041    | ppbv # | 1        |
| -----                        |        |       |          |          |        |          |

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

Quant Time: Apr 09 01:57:00 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL032725AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 26 06:05:16 2022  
QLast Update : Fri Mar 28 02:00:52 2025  
Response via : Initial Calibration

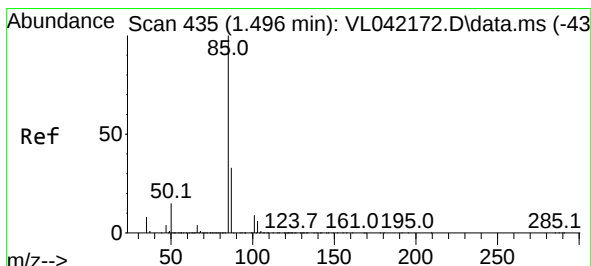
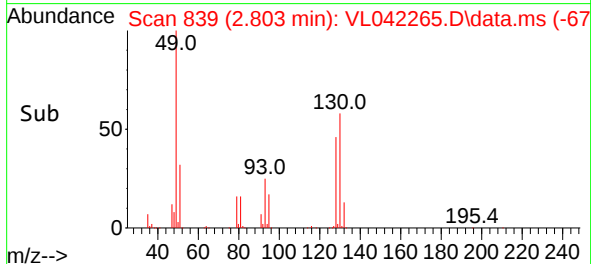
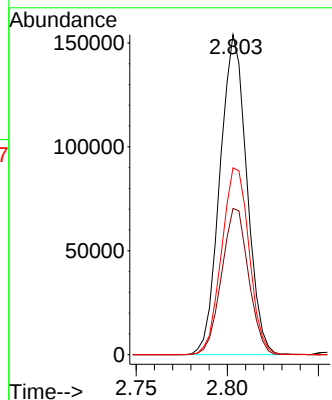
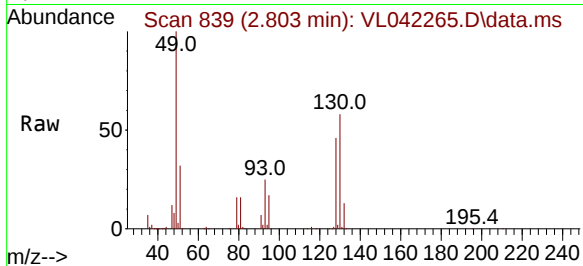




#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 2.803 min Scan# 81  
 Delta R.T. 0.019 min  
 Lab File: VL042265.D  
 Acq: 08 Apr 2025 15:56

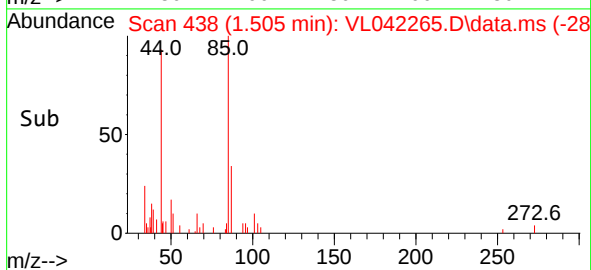
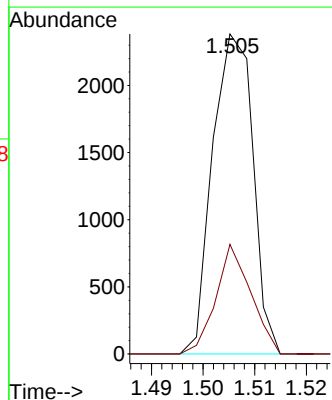
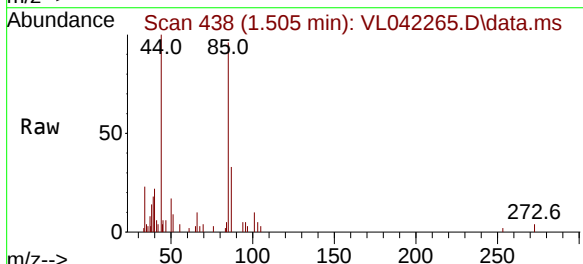
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SSSG-B1-3-04012025

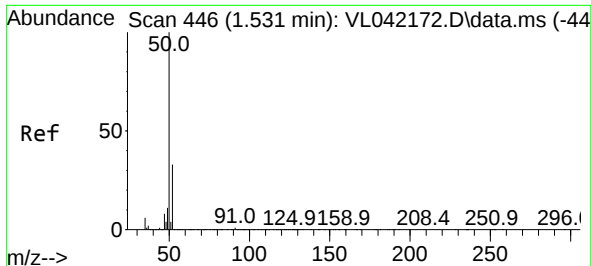
Tgt Ion: 49 Resp: 157608  
 Ion Ratio Lower Upper  
 49 100  
 128 46.0 22.9 68.5  
 130 60.1 28.8 86.4



#2  
 Dichlorodifluoromethane  
 Concen: 0.056 ppbv  
 RT: 1.505 min Scan# 438  
 Delta R.T. 0.009 min  
 Lab File: VL042265.D  
 Acq: 08 Apr 2025 15:56

Tgt Ion: 85 Resp: 1295  
 Ion Ratio Lower Upper  
 85 100  
 87 34.3 26.1 39.1

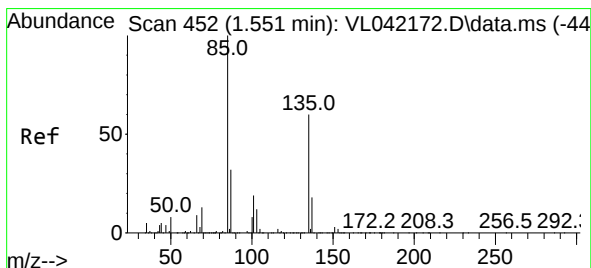
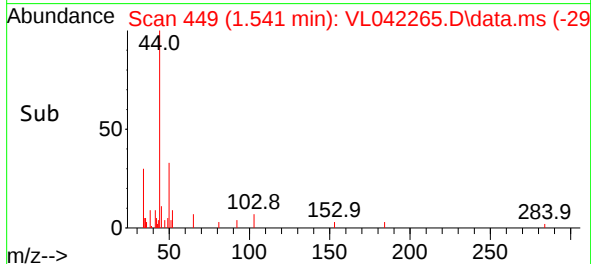
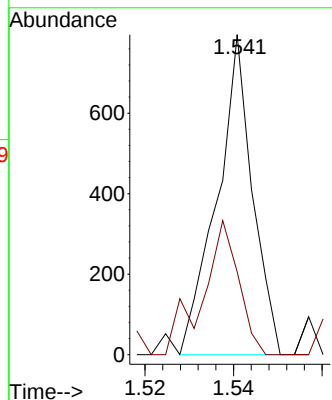
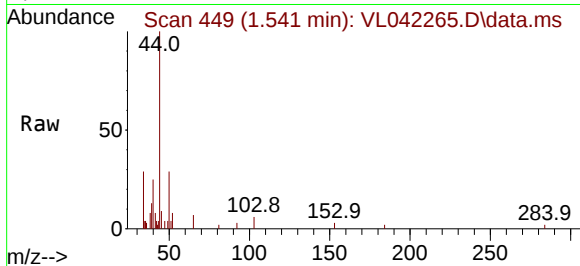




#4  
Chloromethane  
Concen: 0.046 ppbv  
RT: 1.541 min Scan# 441  
Delta R.T. 0.009 min  
Lab File: VL042265.D  
Acq: 08 Apr 2025 15:56

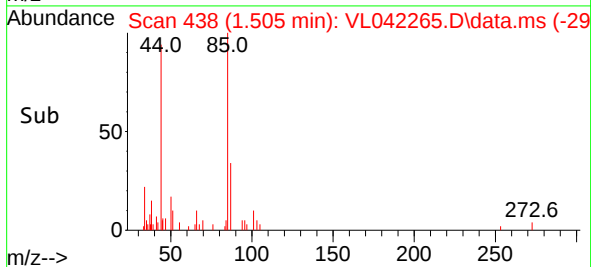
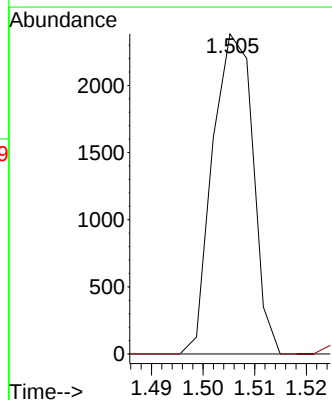
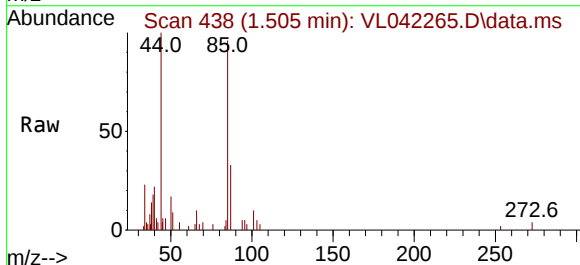
Instrument :  
MSVOA\_L  
ClientSampleId :  
SSSG-B1-3-04012025

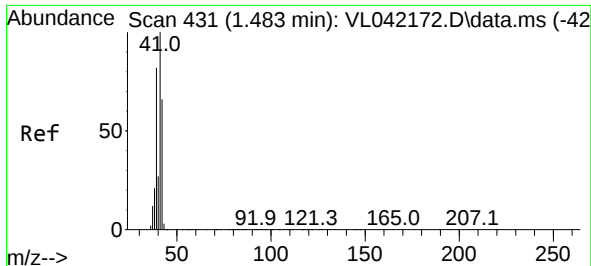
Tgt Ion: 50 Resp: 441  
Ion Ratio Lower Upper  
50 100  
52 25.9 26.1 39.1#



#8  
Dichlorotetrafluoroethane  
Concen: 0.065 ppbv  
RT: 1.505 min Scan# 438  
Delta R.T. -0.046 min  
Lab File: VL042265.D  
Acq: 08 Apr 2025 15:56

Tgt Ion: 85 Resp: 1295  
Ion Ratio Lower Upper  
85 100  
135 1.9 52.4 78.6#

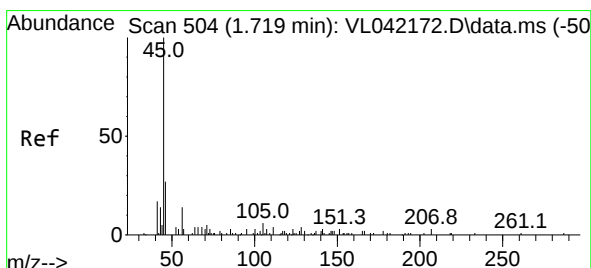
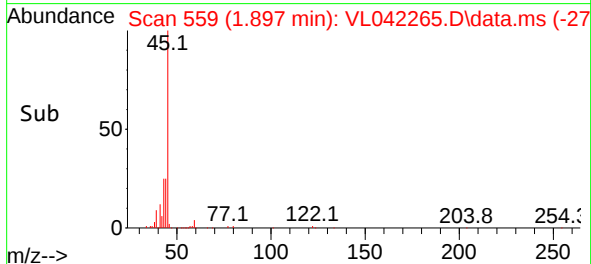
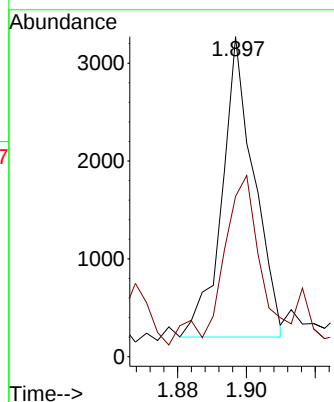
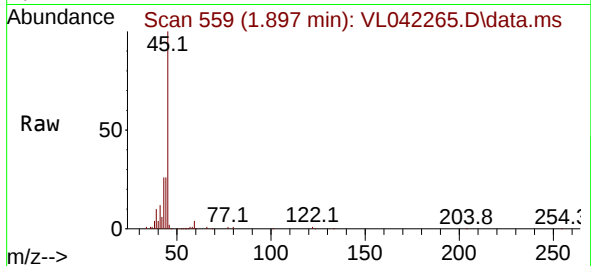




#9  
 Propene  
 Concen: 0.183 ppbv  
 RT: 1.897 min Scan# 51  
 Delta R.T. 0.414 min  
 Lab File: VL042265.D  
 Acq: 08 Apr 2025 15:56

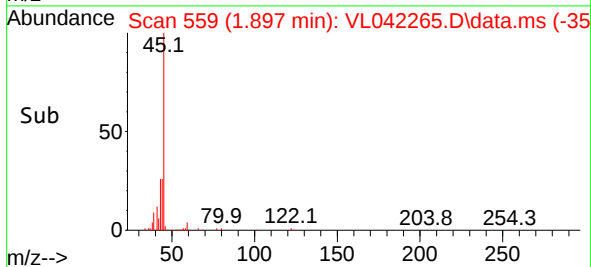
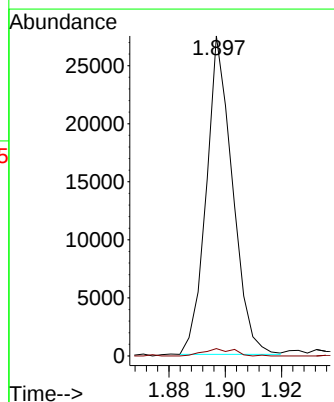
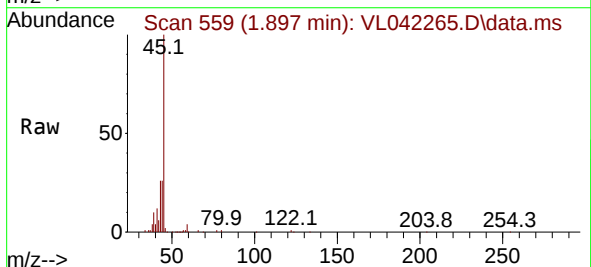
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 SSSG-B1-3-04012025

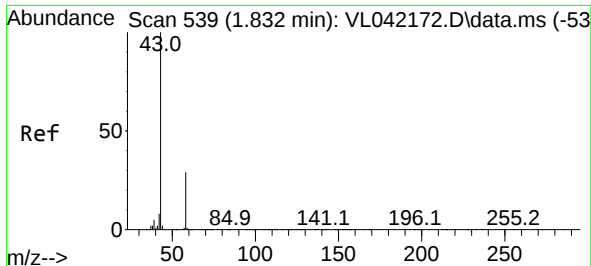
Tgt Ion: 41 Resp: 1989  
 Ion Ratio Lower Upper  
 41 100  
 42 75.2 55.4 83.2



#13  
 Ethanol  
 Concen: 17.177 ppbv  
 RT: 1.897 min Scan# 559  
 Delta R.T. 0.178 min  
 Lab File: VL042265.D  
 Acq: 08 Apr 2025 15:56

Tgt Ion: 45 Resp: 17693  
 Ion Ratio Lower Upper  
 45 100  
 46 0.0 20.2 80.8#





#15

Acetone

Concen: 2.235 ppbv

RT: 1.845 min Scan# 54

Delta R.T. 0.013 min

Lab File: VL042265.D

Acq: 08 Apr 2025 15:56

Instrument :

MSVOA\_L

ClientSampleId :

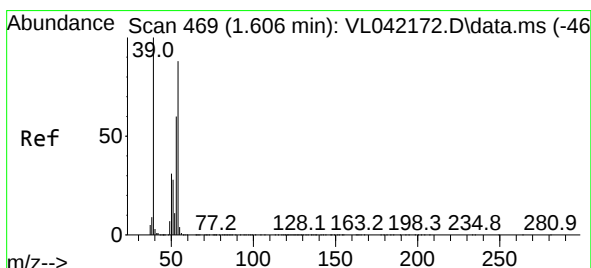
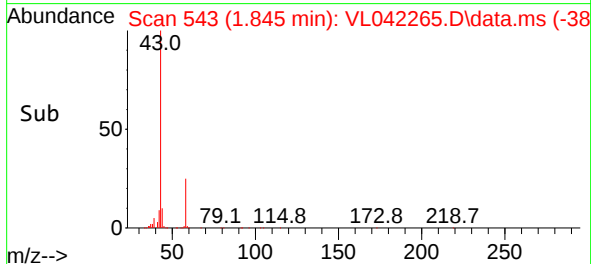
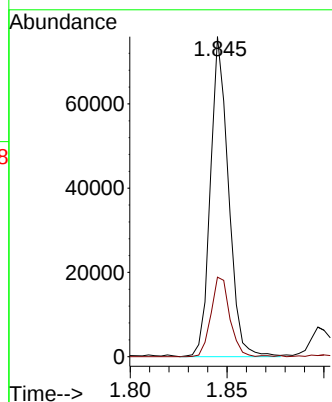
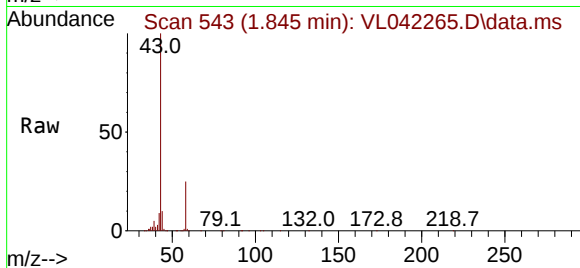
SSSG-B1-3-04012025

Tgt Ion: 43 Resp: 49256

Ion Ratio Lower Upper

43 100

58 26.1 23.2 34.8



#16

1,3-Butadiene

Concen: 0.257 ppbv

RT: 1.609 min Scan# 470

Delta R.T. 0.003 min

Lab File: VL042265.D

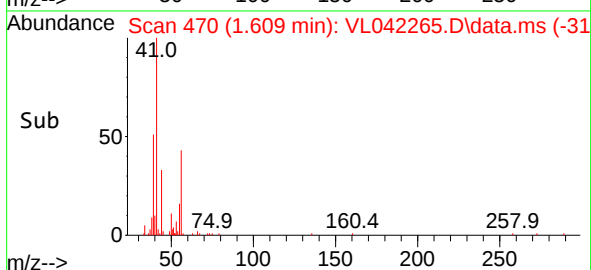
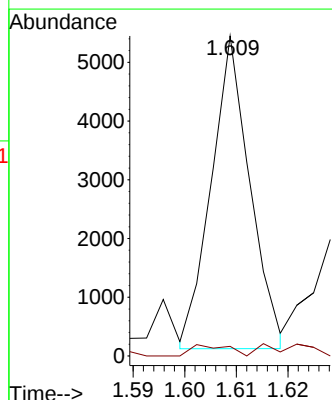
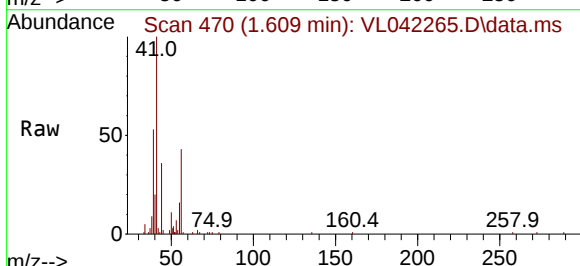
Acq: 08 Apr 2025 15:56

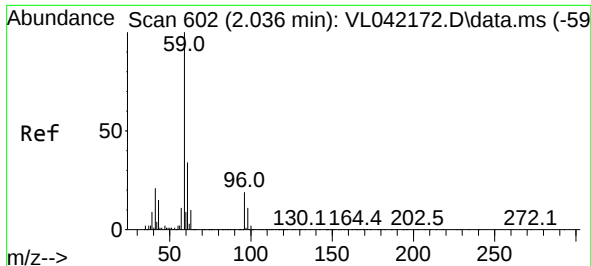
Tgt Ion: 39 Resp: 2770

Ion Ratio Lower Upper

39 100

54 9.2 60.7 91.1#

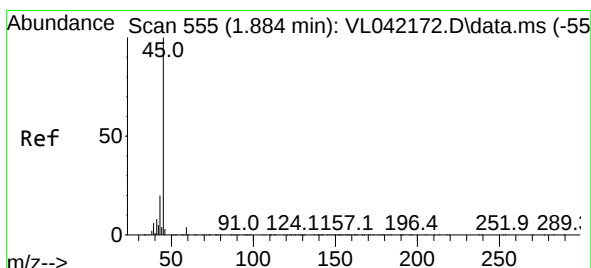
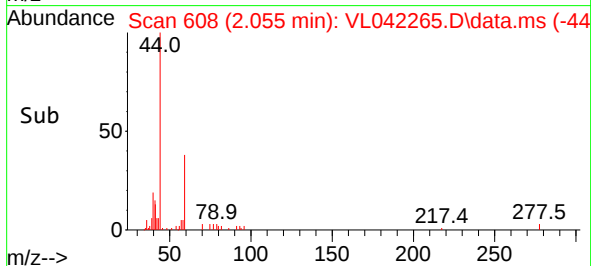
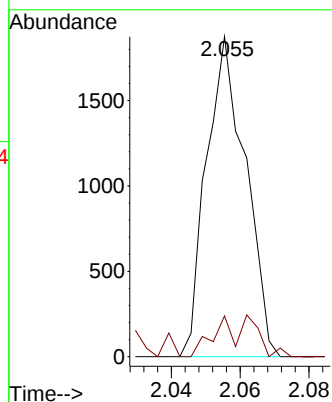
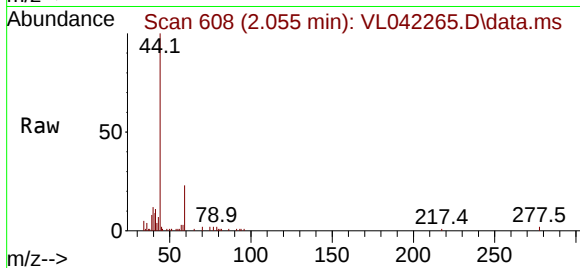




#17  
tert-Butyl alcohol  
Concen: 0.054 ppbv  
RT: 2.055 min Scan# 602  
Delta R.T. 0.019 min  
Lab File: VL042265.D  
Acq: 08 Apr 2025 15:56

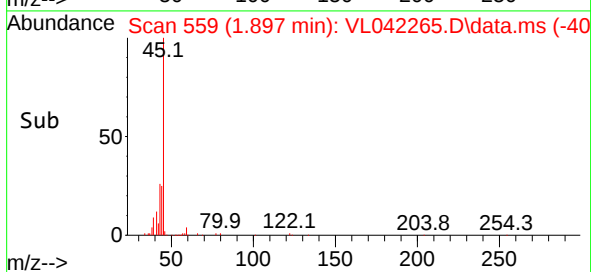
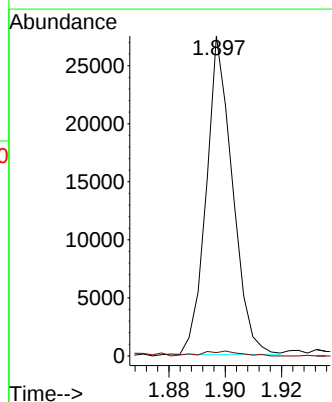
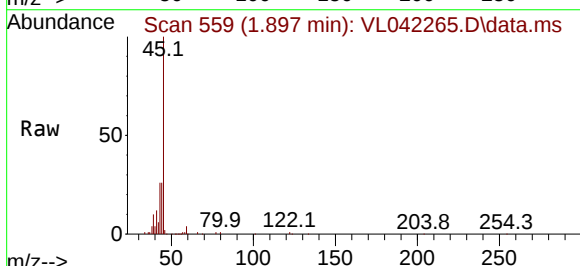
Instrument :  
MSVOA\_L  
ClientSampleId :  
SSSG-B1-3-04012025

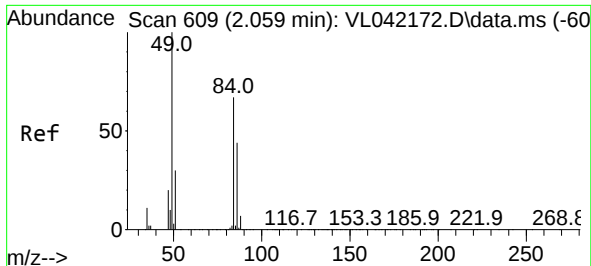
Tgt Ion: 59 Resp: 1481  
Ion Ratio Lower Upper  
59 100  
57 13.4 8.9 13.3#



#19  
Isopropyl Alcohol  
Concen: 1.423 ppbv  
RT: 1.897 min Scan# 559  
Delta R.T. 0.013 min  
Lab File: VL042265.D  
Acq: 08 Apr 2025 15:56

Tgt Ion: 45 Resp: 17693  
Ion Ratio Lower Upper  
45 100  
58 72.6 36.9 55.3#





#20

Methylene Chloride

Concen: 0.341 ppbv

RT: 2.072 min Scan# 61

Delta R.T. 0.013 min

Lab File: VL042265.D

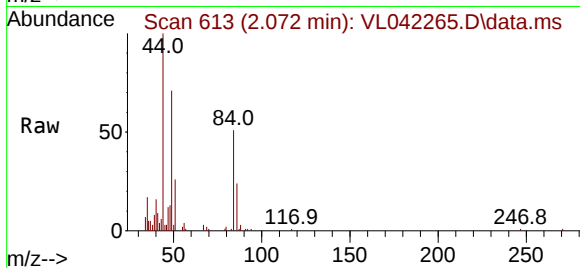
Acq: 08 Apr 2025 15:56

Instrument :

MSVOA\_L

ClientSampleId :

SSSG-B1-3-04012025



Tgt Ion: 84 Resp: 2797

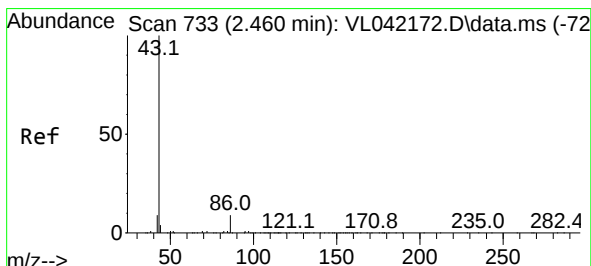
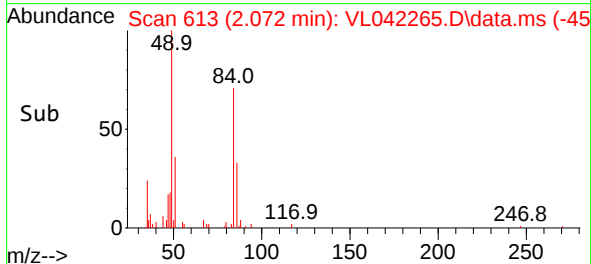
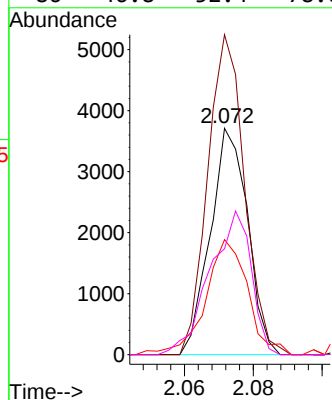
Ion Ratio Lower Upper

84 100

49 141.4 120.2 180.4

51 46.5 37.4 56.0

86 46.8 52.4 78.6#



#23

Vinyl Acetate

Concen: 0.032 ppbv

RT: 2.476 min Scan# 738

Delta R.T. 0.016 min

Lab File: VL042265.D

Acq: 08 Apr 2025 15:56

Tgt Ion: 43 Resp: 310

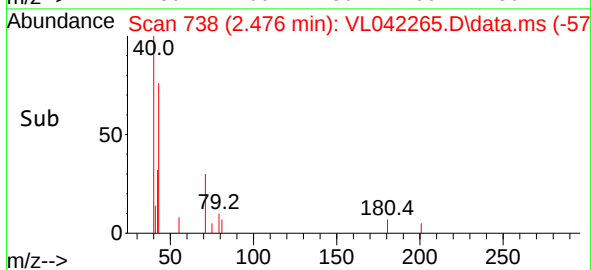
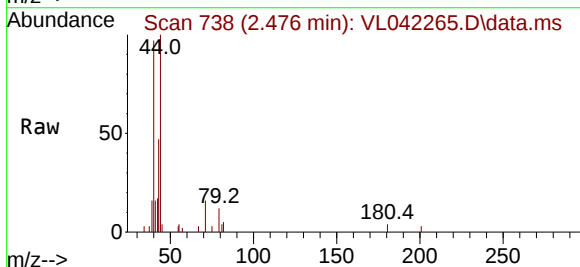
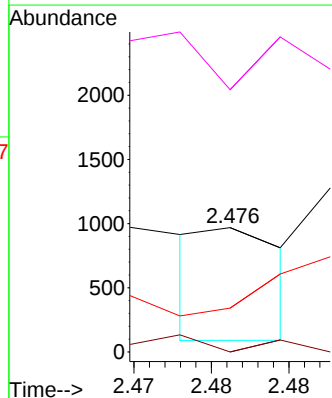
Ion Ratio Lower Upper

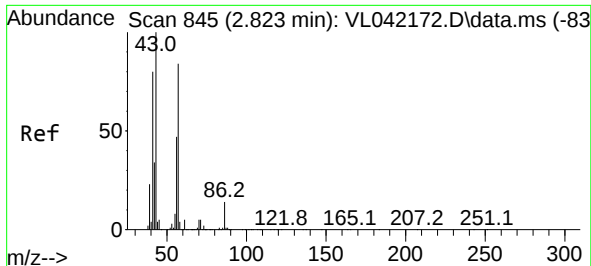
43 100

86 0.0 5.5 8.3#

42 39.2 8.6 13.0#

44 0.0 6.2 9.4#

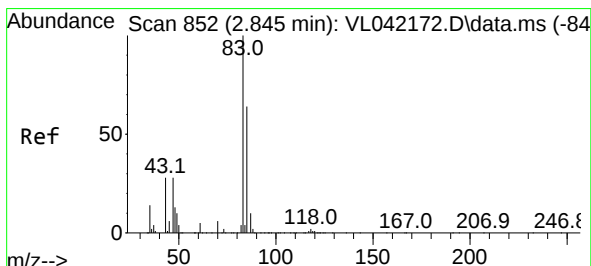
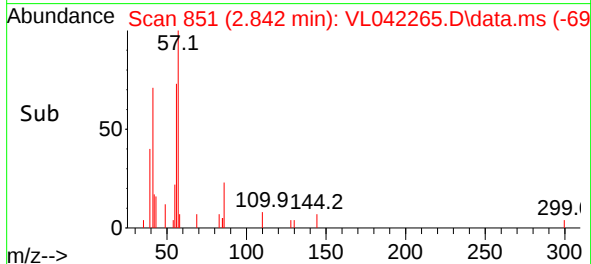
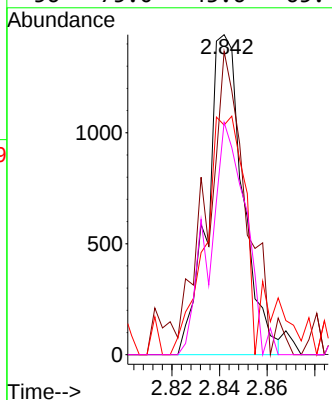
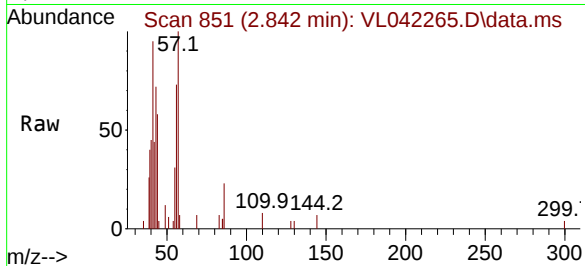




#26  
Hexane  
Concen: 0.068 ppbv  
RT: 2.842 min Scan# 851  
Delta R.T. 0.019 min  
Lab File: VL042265.D  
Acq: 08 Apr 2025 15:56

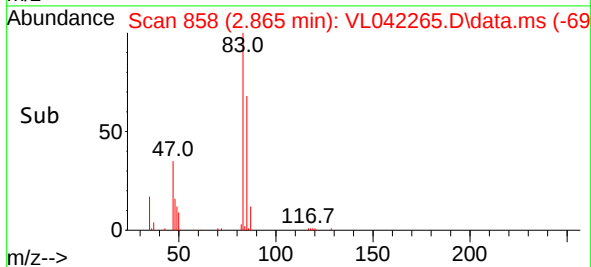
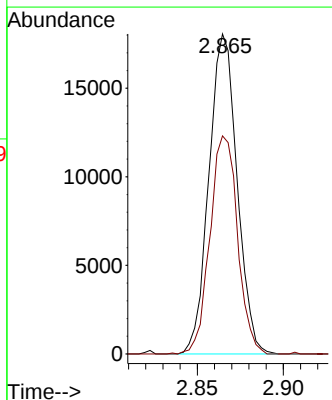
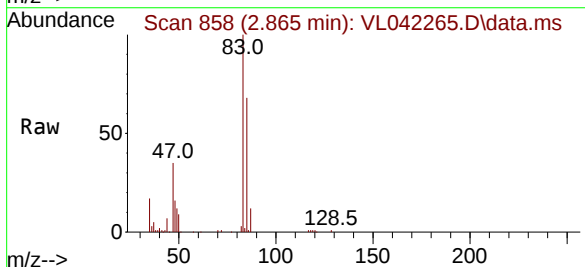
Instrument :  
MSVOA\_L  
ClientSampleId :  
SSSG-B1-3-04012025

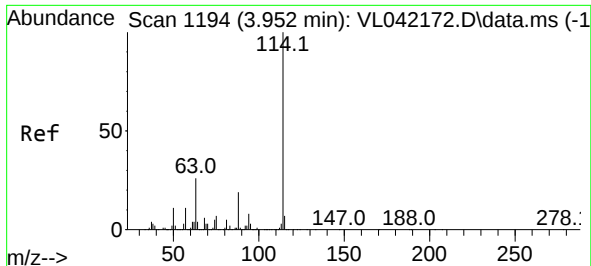
Tgt Ion: 57 Resp: 1498  
Ion Ratio Lower Upper  
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41 121.8 76.6 114.8#  
43 100.6 207.8 311.8#  
56 75.0 43.6 65.4#



#29  
Chloroform  
Concen: 0.636 ppbv  
RT: 2.865 min Scan# 858  
Delta R.T. 0.019 min  
Lab File: VL042265.D  
Acq: 08 Apr 2025 15:56

Tgt Ion: 83 Resp: 20569  
Ion Ratio Lower Upper  
83 100  
85 68.2 51.4 77.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.984 min Scan# 1194

Delta R.T. 0.032 min

Lab File: VL042265.D

Acq: 08 Apr 2025 15:56

Instrument :

MSVOA\_L

ClientSampleId :

SSSG-B1-3-04012025

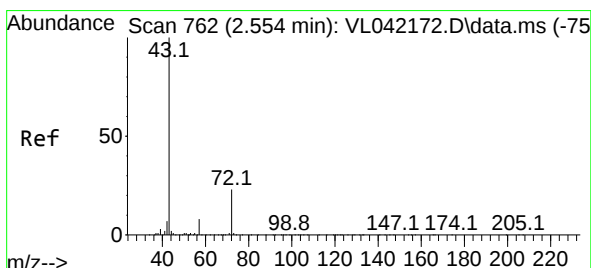
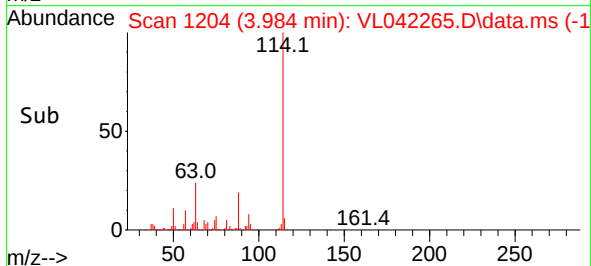
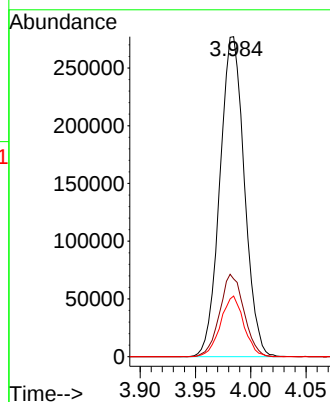
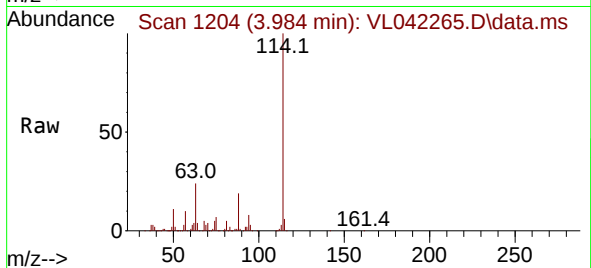
Tgt Ion:114 Resp: 427230

Ion Ratio Lower Upper

114 100

63 25.5 20.7 31.1

88 18.1 15.0 22.4



#34

2-Butanone

Concen: 0.045 ppbv

RT: 2.577 min Scan# 769

Delta R.T. 0.022 min

Lab File: VL042265.D

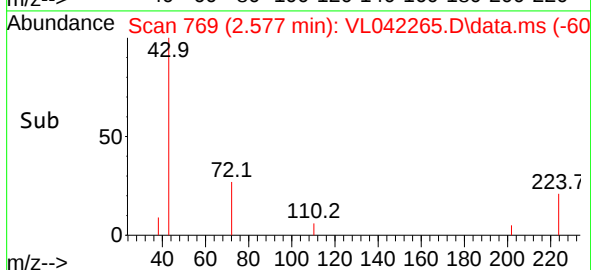
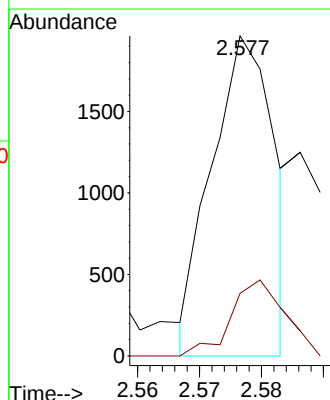
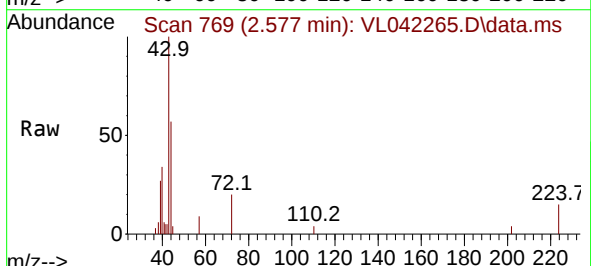
Acq: 08 Apr 2025 15:56

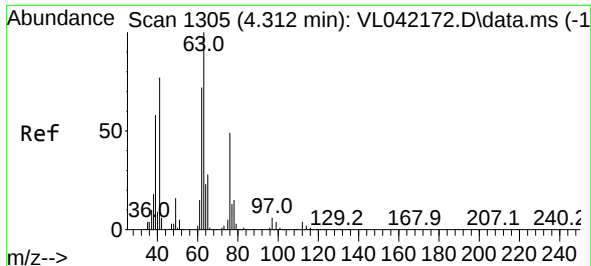
Tgt Ion: 43 Resp: 1386

Ion Ratio Lower Upper

43 100

72 23.3 18.2 27.2





#39

1,2-Dichloropropane

Concen: 7.063 ppbv

RT: 3.981 min Scan# 11

Delta R.T. -0.330 min

Lab File: VL042265.D

Acq: 08 Apr 2025 15:56

Instrument :

MSVOA\_L

ClientSampleId :

SSSG-B1-3-04012025

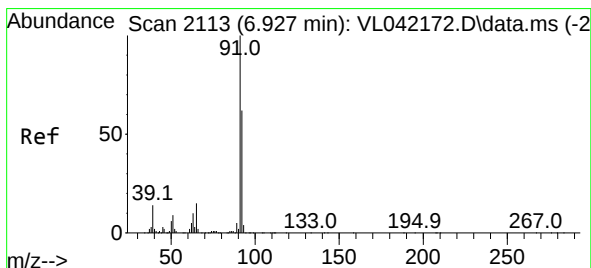
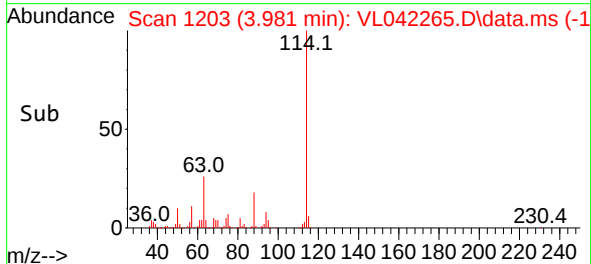
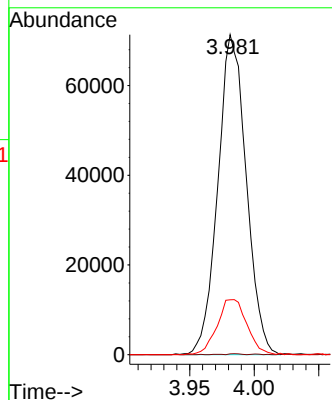
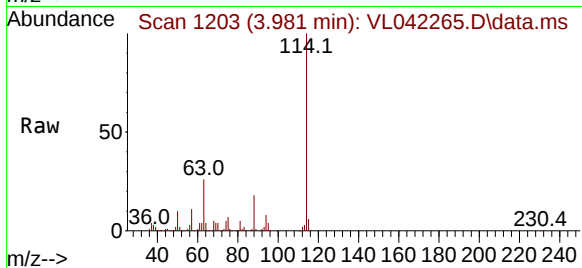
Tgt Ion: 63 Resp: 108938

Ion Ratio Lower Upper

63 100

41 0.2 61.7 92.5#

62 17.1 57.6 86.4#



#53

Toluene

Concen: 0.041 ppbv

RT: 6.969 min Scan# 2126

Delta R.T. 0.042 min

Lab File: VL042265.D

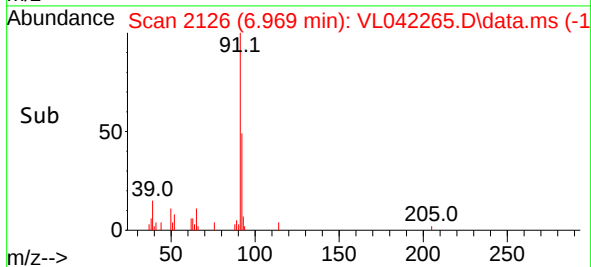
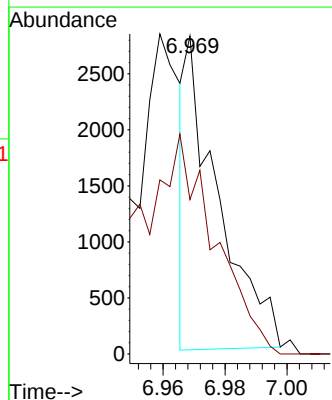
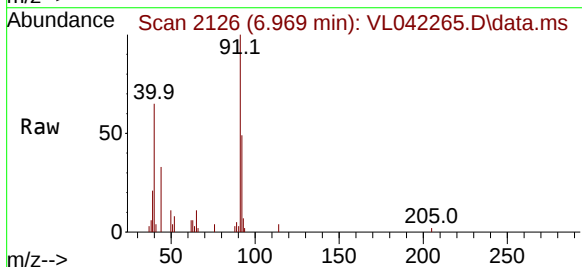
Acq: 08 Apr 2025 15:56

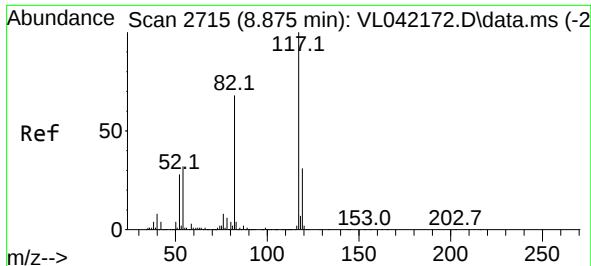
Tgt Ion: 91 Resp: 2041

Ion Ratio Lower Upper

91 100

92 167.0 48.4 72.6#

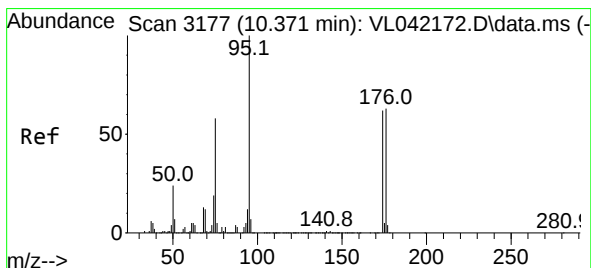
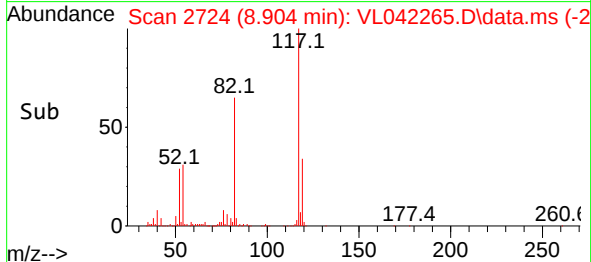
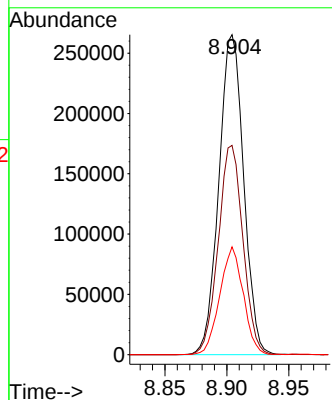
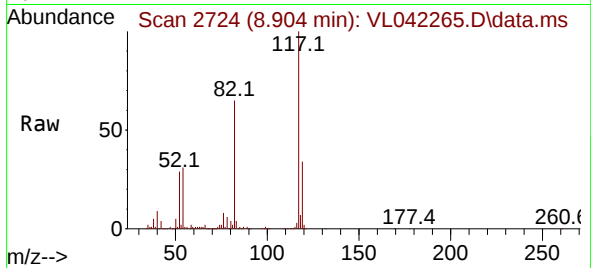




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.904 min Scan# 21  
Delta R.T. 0.029 min  
Lab File: VL042265.D  
Acq: 08 Apr 2025 15:56

Instrument :  
MSVOA\_L  
ClientSampleId :  
SSSG-B1-3-04012025

Tgt Ion: 117 Resp: 370747  
Ion Ratio Lower Upper  
117 100  
82 65.1 55.8 83.6  
119 32.1 25.5 38.3



#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.330 ppbv  
RT: 10.396 min Scan# 3185  
Delta R.T. 0.026 min  
Lab File: VL042265.D  
Acq: 08 Apr 2025 15:56

Tgt Ion: 95 Resp: 284068  
Ion Ratio Lower Upper  
95 100  
174 61.0 50.6 76.0  
175 4.5 3.8 5.6

