

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL040424\  
 Data File : VL041134.D  
 Acq On : 4 Apr 2024 20:52  
 Operator : SY/MD  
 Sample : P1953-01 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

Quant Time: Apr 05 03:45:56 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL040424AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Fri Apr 05 03:20:09 2024  
 Response via : Initial Calibration

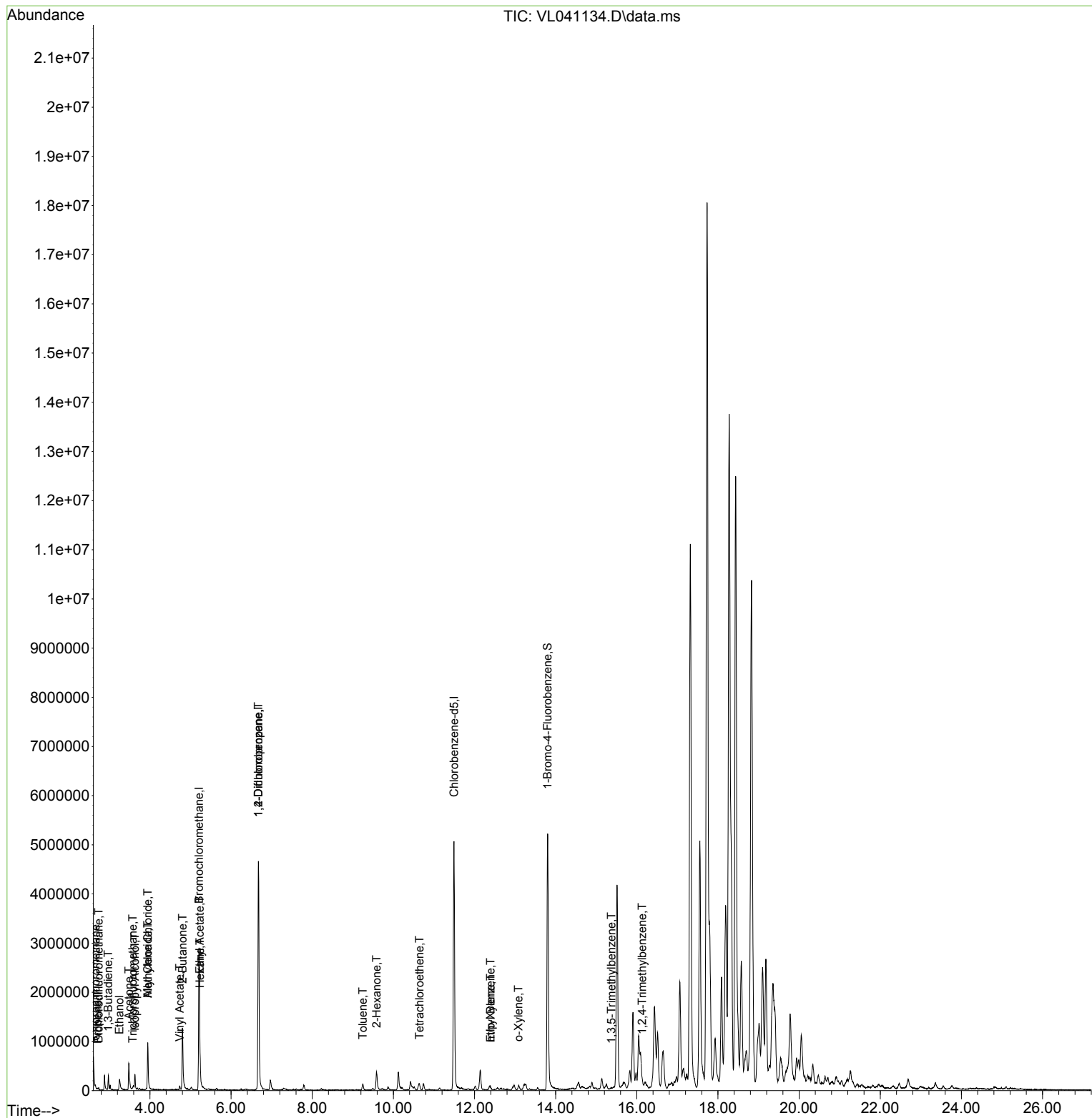
| Compound                    | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|------------|----------|
| -----                       |        |       |          |          |            |          |
| Internal Standards          |        |       |          |          |            |          |
| 1) Bromochloromethane       | 5.211  | 49    | 1376948  | 10.000   | ppbv       | 0.00     |
| 33) 1,4-Difluorobenzene     | 6.674  | 114   | 3478463  | 10.000   | ppbv       | 0.00     |
| 55) Chlorobenzene-d5        | 11.494 | 117   | 3230649  | 10.000   | ppbv       | -0.01    |
| System Monitoring Compounds |        |       |          |          |            |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.802 | 95    | 2611708  | 10.013   | ppbv       | -0.01    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | = 100.100% |          |
| Target Compounds            |        |       |          |          |            |          |
|                             |        |       |          |          | Qvalue     |          |
| 2) Dichlorodifluoromethane  | 2.735  | 85    | 27530    | 0.117    | ppbv       | 91       |
| 3) Chlorodifluoromethane    | 2.658  | 51    | 44801    | 0.211    | ppbv #     | 70       |
| 9) Propene                  | 2.703  | 41    | 11328    | 0.168    | ppbv       | 90       |
| 11) Trichlorofluoromethane  | 3.574  | 101   | 13806    | 0.065    | ppbv #     | 80       |
| 13) Ethanol                 | 3.250  | 45    | 277104   | 17.633   | ppbv       | 99       |
| 15) Acetone                 | 3.481  | 43    | 530672   | 3.559    | ppbv #     | 76       |
| 16) 1,3-Butadiene           | 2.973  | 39    | 67501    | 0.922    | ppbv #     | 20       |
| 19) Isopropyl Alcohol       | 3.626  | 45    | 5671     | 0.062    | ppbv #     | 92       |
| 20) Methylene Chloride      | 3.947  | 84    | 303915   | 4.942    | ppbv       | 94       |
| 21) Allyl Chloride          | 3.947  | 41    | 5366     | 0.059    | ppbv #     | 62       |
| 23) Vinyl Acetate           | 4.735  | 43    | 22934    | 0.148    | ppbv #     | 29       |
| 25) Ethyl Acetate           | 5.227  | 43    | 52486    | 0.187    | ppbv #     | 88       |
| 26) Hexane                  | 5.230  | 57    | 117236   | 0.933    | ppbv #     | 44       |
| 34) 2-Butanone              | 4.803  | 43    | 1501174  | 9.991    | ppbv       | 100      |
| 39) 1,2-Dichloropropane     | 6.674  | 63    | 902053   | 8.906    | ppbv #     | 22       |
| 51) 2-Hexanone              | 9.587  | 43    | 344818   | 1.929    | ppbv       | 98       |
| 52) Tetrachloroethene       | 10.645 | 164   | 18648    | 0.228    | ppbv #     | 71       |
| 53) Toluene                 | 9.246  | 91    | 93510    | 0.346    | ppbv       | 97       |
| 58) Ethyl Benzene           | 12.397 | 91    | 24085    | 0.068    | ppbv       | 99       |
| 59) m/p-Xylene              | 12.397 | 91    | 24085    | 0.075    | ppbv #     | 32       |
| 60) o-Xylene                | 13.085 | 91    | 37635    | 0.123    | ppbv       | 95       |
| 73) 1,3,5-Trimethylbenzene  | 15.375 | 105   | 9385     | 0.031    | ppbv       | 93       |
| 74) 1,2,4-Trimethylbenzene  | 16.133 | 105   | 78443    | 0.227    | ppbv #     | 65       |
| -----                       |        |       |          |          |            |          |

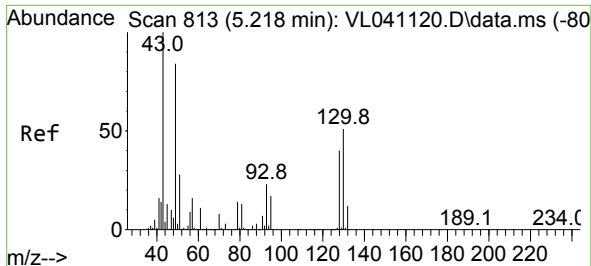
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL040424\  
Data File : VL041134.D  
Acq On : 4 Apr 2024 20:52  
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Sample : P1953-01 4X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Quant Time: Apr 05 03:45:56 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL040424AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Fri Apr 05 03:20:09 2024  
Response via : Initial Calibration

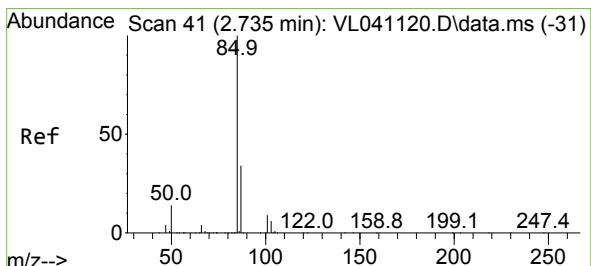
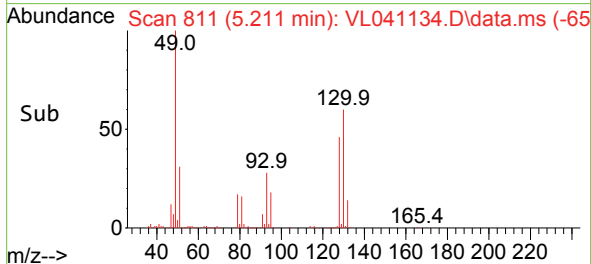
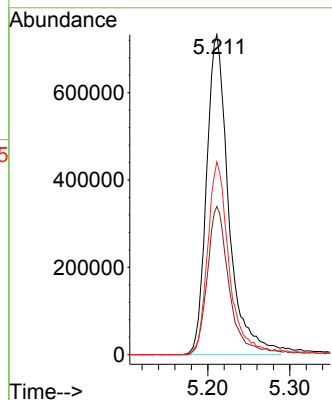
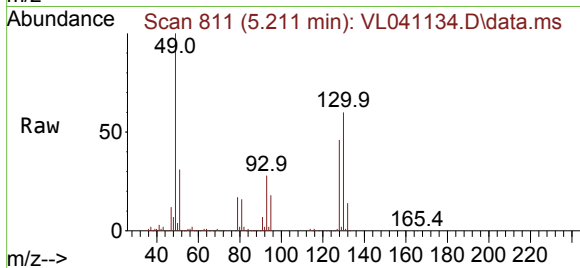




#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.211 min Scan# 81  
 Delta R.T. -0.007 min  
 Lab File: VL041134.D  
 Acq: 4 Apr 2024 20:52

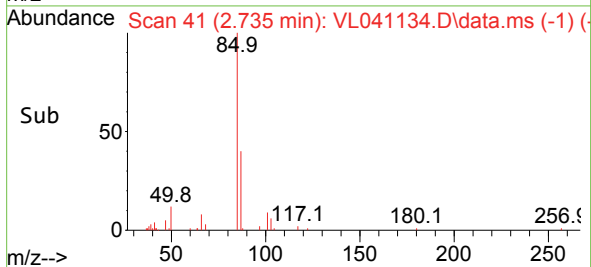
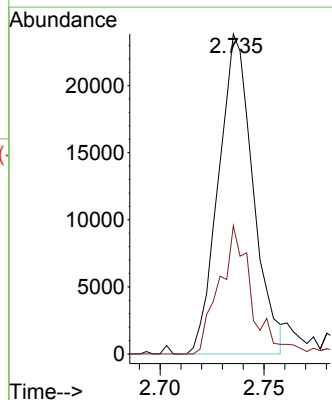
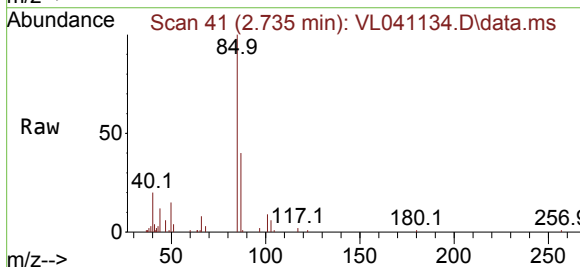
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

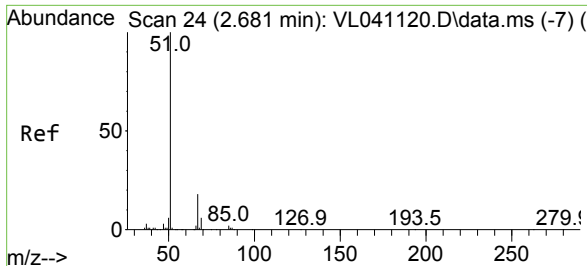
Tgt Ion: 49 Resp: 1376948  
 Ion Ratio Lower Upper  
 49 100  
 128 47.3 23.8 71.5  
 130 60.4 30.3 90.9



#2  
 Dichlorodifluoromethane  
 Concen: 0.117 ppbv  
 RT: 2.735 min Scan# 41  
 Delta R.T. -0.000 min  
 Lab File: VL041134.D  
 Acq: 4 Apr 2024 20:52

Tgt Ion: 85 Resp: 27530  
 Ion Ratio Lower Upper  
 85 100  
 87 40.1 28.1 42.1

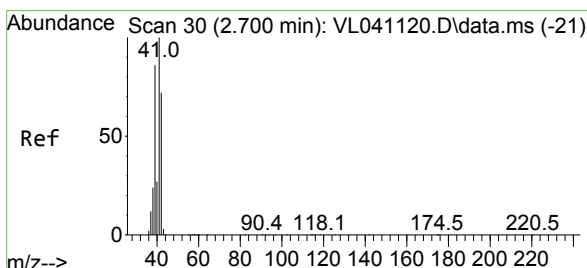
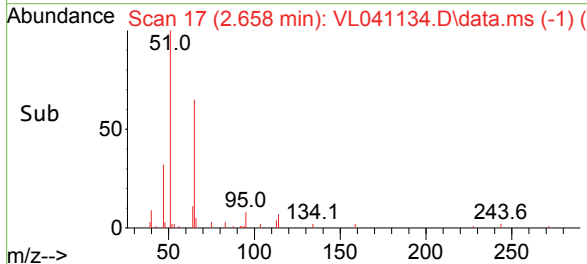
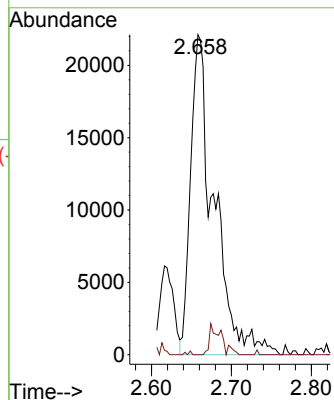
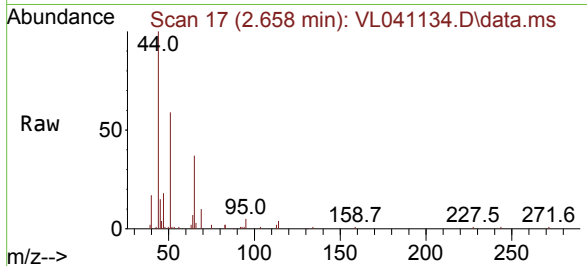




#3  
Chlorodifluoromethane  
Concen: 0.211 ppbv  
RT: 2.658 min Scan# 11  
Delta R.T. -0.023 min  
Lab File: VL041134.D  
Acq: 4 Apr 2024 20:52

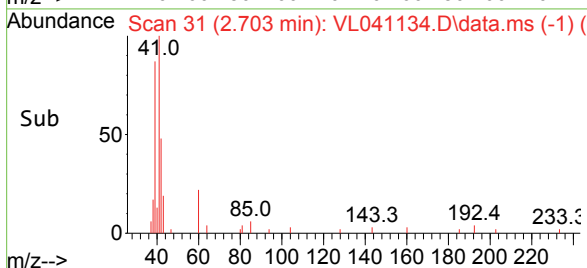
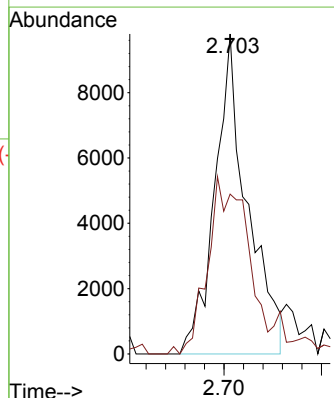
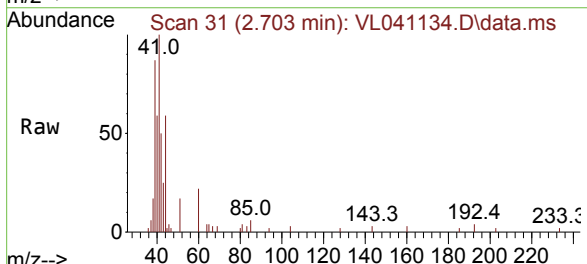
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

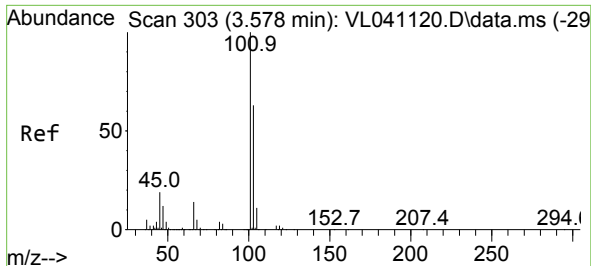
Tgt Ion: 51 Resp: 44801  
Ion Ratio Lower Upper  
51 100  
67 4.9 14.5 21.7#



#9  
Propene  
Concen: 0.168 ppbv  
RT: 2.703 min Scan# 31  
Delta R.T. 0.003 min  
Lab File: VL041134.D  
Acq: 4 Apr 2024 20:52

Tgt Ion: 41 Resp: 11328  
Ion Ratio Lower Upper  
41 100  
42 77.7 55.9 83.9

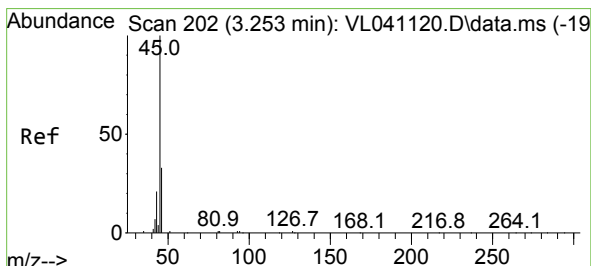
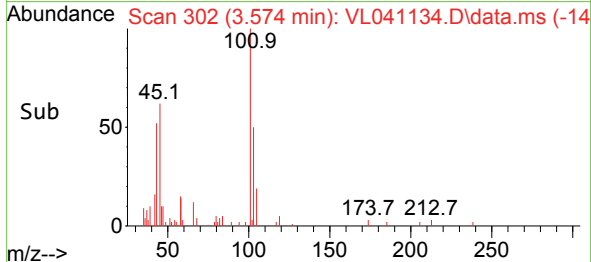
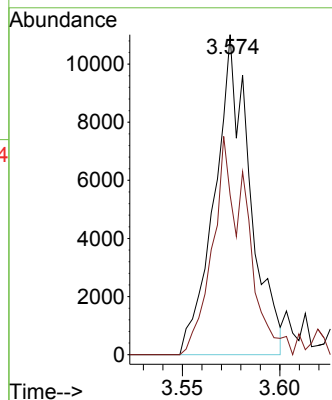
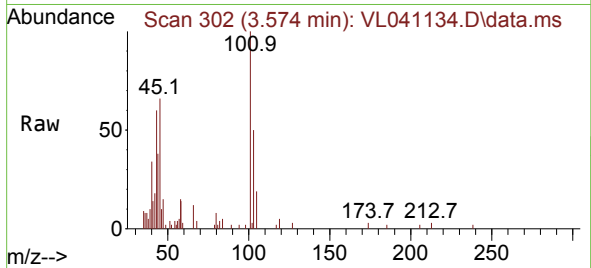




#11  
 Trichlorofluoromethane  
 Concen: 0.065 ppbv  
 RT: 3.574 min Scan# 303  
 Delta R.T. -0.003 min  
 Lab File: VL041134.D  
 Acq: 4 Apr 2024 20:52

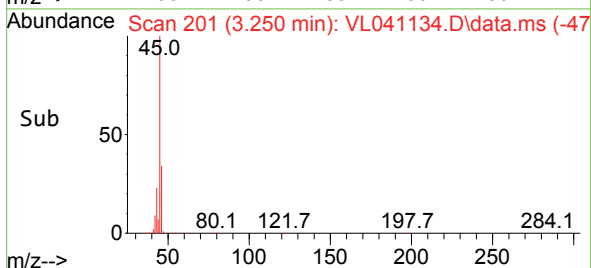
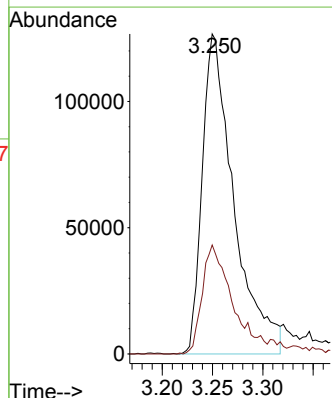
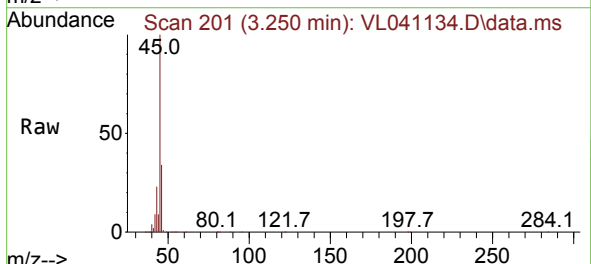
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

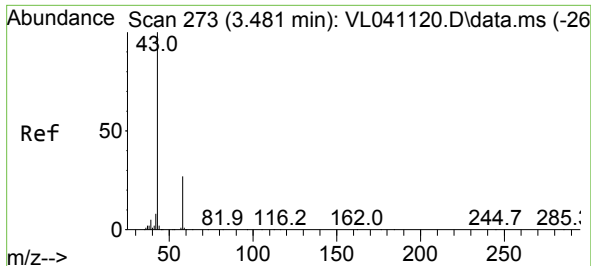
Tgt Ion:101 Resp: 13806  
 Ion Ratio Lower Upper  
 101 100  
 103 49.9 53.0 79.4#



#13  
 Ethanol  
 Concen: 17.633 ppbv  
 RT: 3.250 min Scan# 201  
 Delta R.T. -0.003 min  
 Lab File: VL041134.D  
 Acq: 4 Apr 2024 20:52

Tgt Ion: 45 Resp: 277104  
 Ion Ratio Lower Upper  
 45 100  
 46 36.8 14.6 58.2





#15

Acetone

Concen: 3.559 ppbv

RT: 3.481 min Scan# 21

Delta R.T. -0.000 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Instrument :

MSVOA\_L

ClientSampleId :

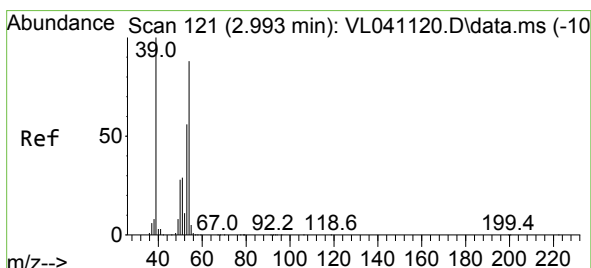
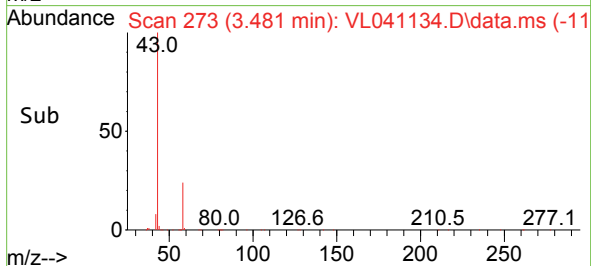
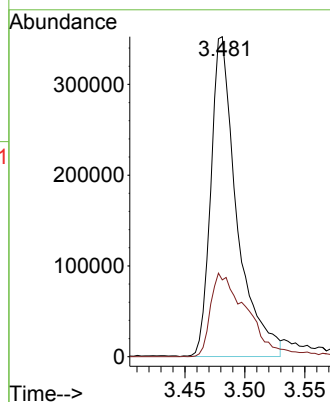
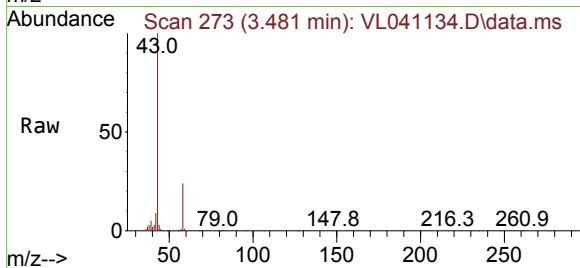
SV1

Tgt Ion: 43 Resp: 530672

Ion Ratio Lower Upper

43 100

58 39.3 21.7 32.5#



#16

1,3-Butadiene

Concen: 0.922 ppbv

RT: 2.973 min Scan# 115

Delta R.T. -0.019 min

Lab File: VL041134.D

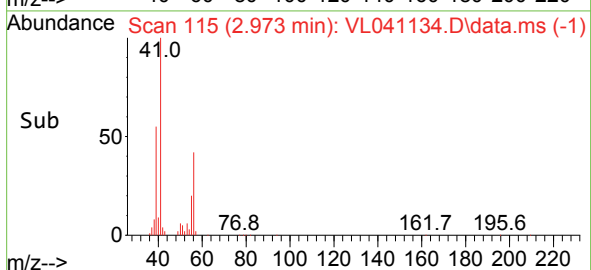
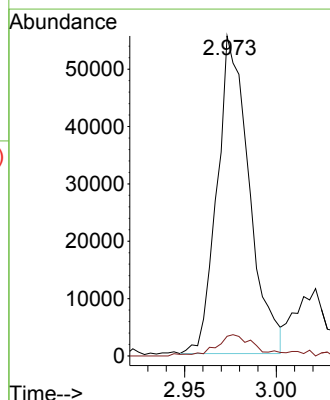
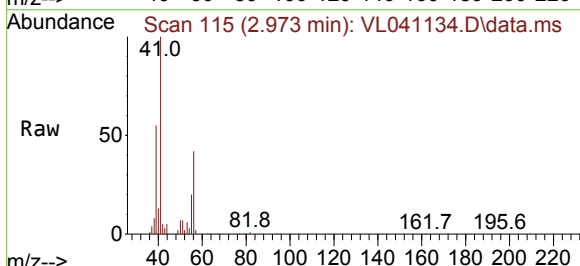
Acq: 4 Apr 2024 20:52

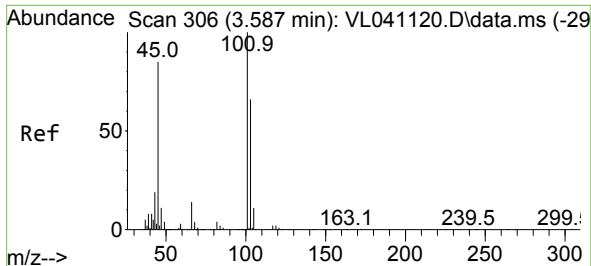
Tgt Ion: 39 Resp: 67501

Ion Ratio Lower Upper

39 100

54 9.2 64.0 96.0#





#19

Isopropyl Alcohol

Concen: 0.062 ppbv

RT: 3.626 min Scan# 318

Delta R.T. 0.038 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Instrument :

MSVOA\_L

ClientSampleId :

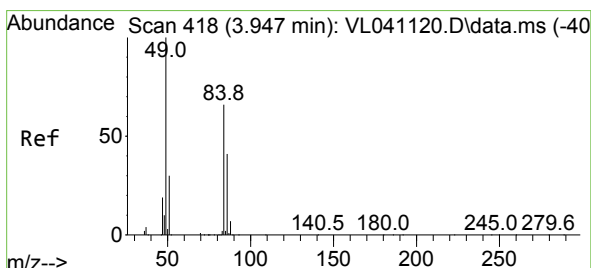
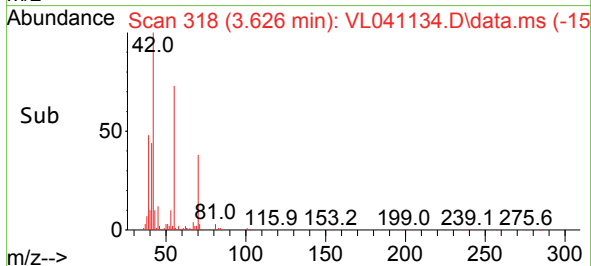
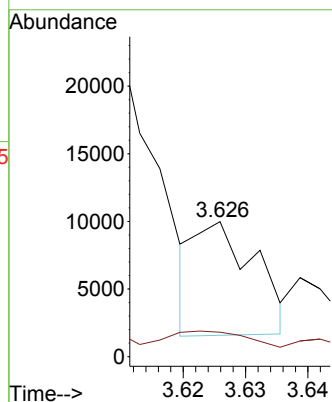
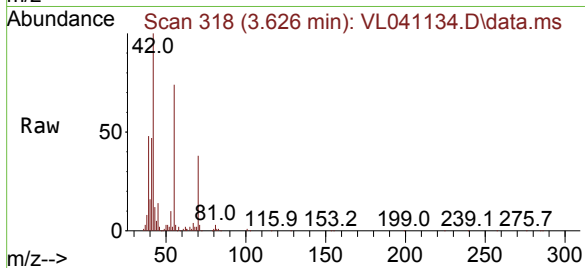
SV1

Tgt Ion: 45 Resp: 5671

Ion Ratio Lower Upper

45 100

58 0.0 2.2 3.4#



#20

Methylene Chloride

Concen: 4.942 ppbv

RT: 3.947 min Scan# 418

Delta R.T. -0.000 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Tgt Ion: 84 Resp: 303915

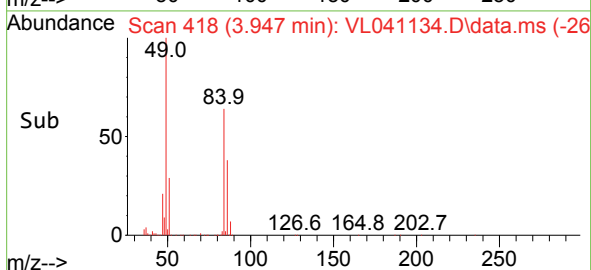
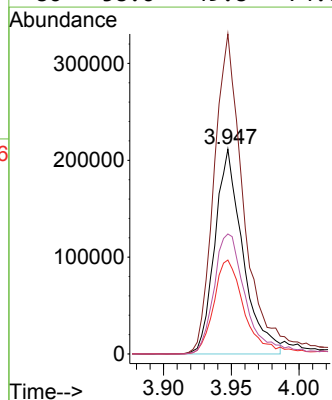
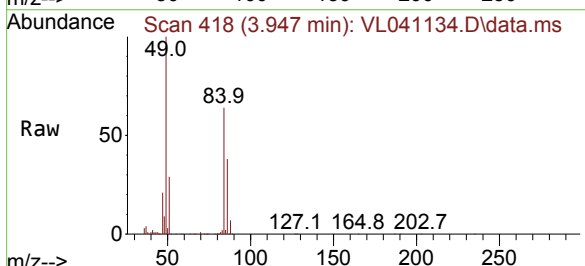
Ion Ratio Lower Upper

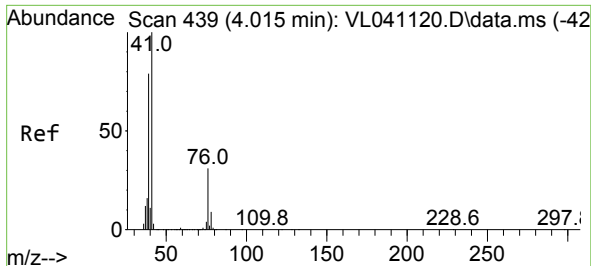
84 100

49 156.1 117.0 175.6

51 45.8 34.9 52.3

86 58.6 49.8 74.6





#21

Allyl Chloride

Concen: 0.059 ppbv

RT: 3.947 min Scan# 41

Delta R.T. -0.068 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Instrument :

MSVOA\_L

ClientSampleId :

SV1

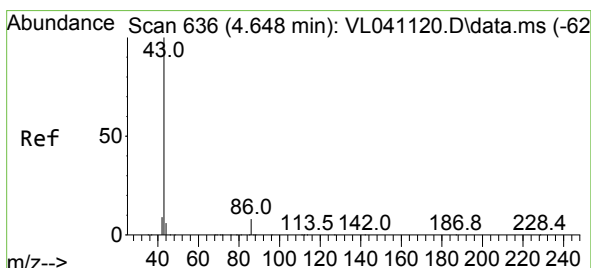
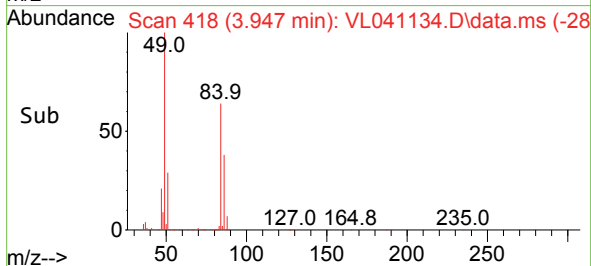
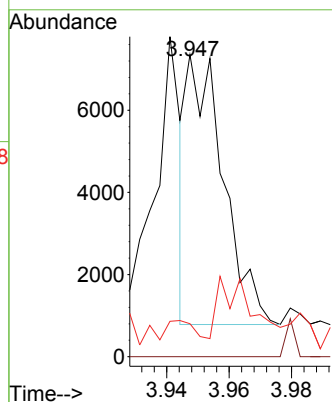
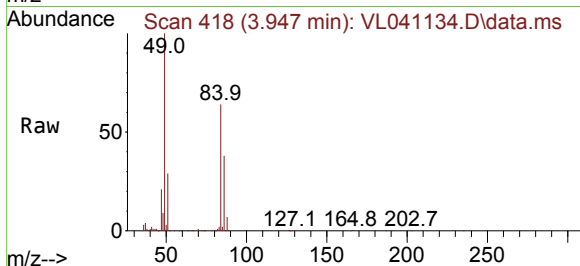
Tgt Ion: 41 Resp: 5366

Ion Ratio Lower Upper

41 100

76 2.9 25.5 38.3#

39 54.2 67.4 101.2#



#23

Vinyl Acetate

Concen: 0.148 ppbv

RT: 4.735 min Scan# 663

Delta R.T. 0.087 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Tgt Ion: 43 Resp: 22934

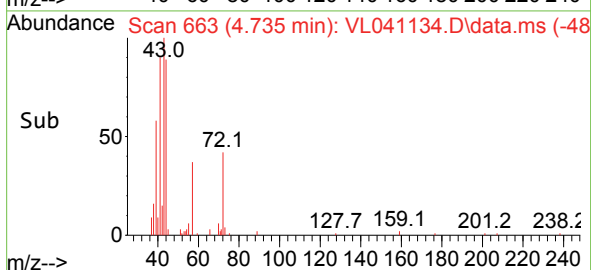
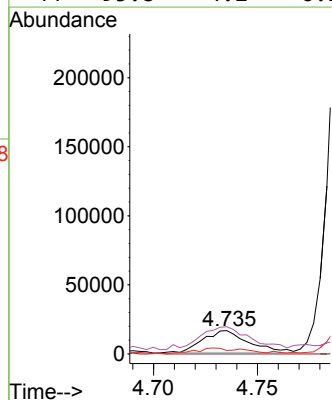
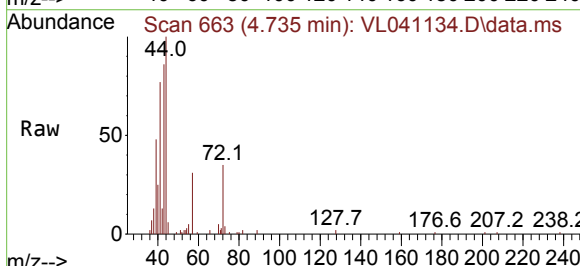
Ion Ratio Lower Upper

43 100

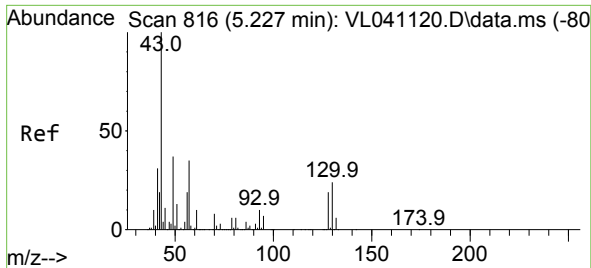
86 0.0 5.4 8.2#

42 10.3 8.0 12.0

44 95.8 4.2 6.2#



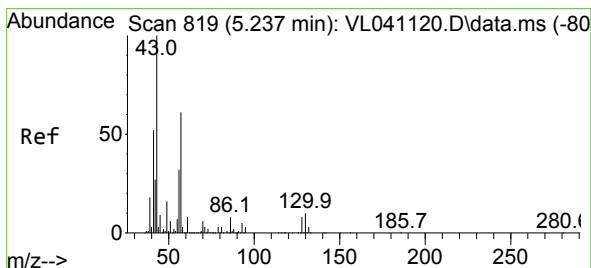
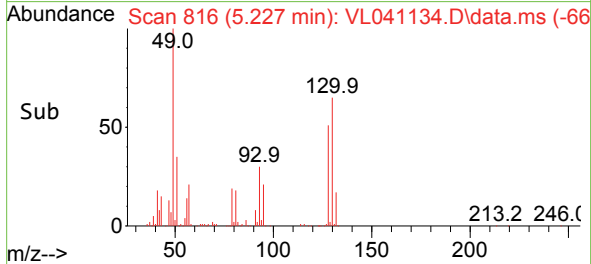
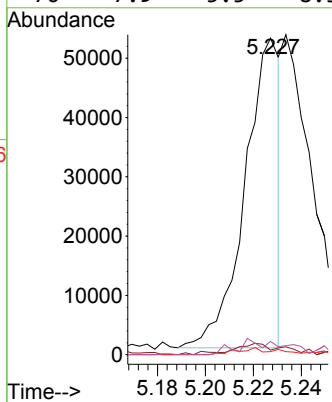
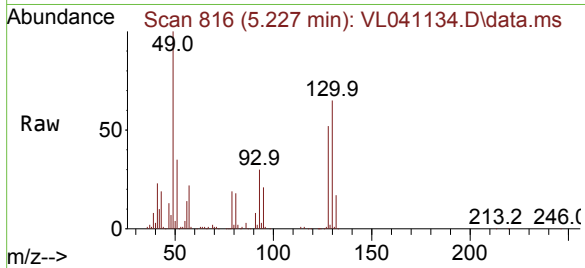




#25  
Ethyl Acetate  
Concen: 0.187 ppbv  
RT: 5.227 min Scan# 816  
Delta R.T. -0.000 min  
Lab File: VL041134.D  
Acq: 4 Apr 2024 20:52

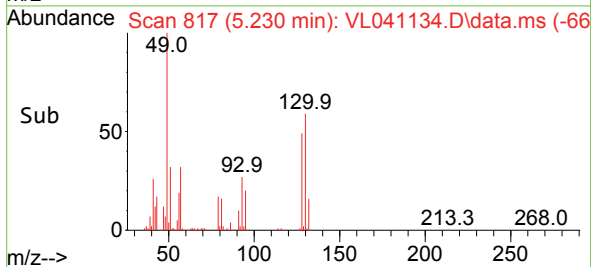
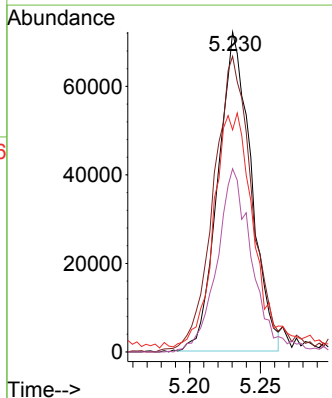
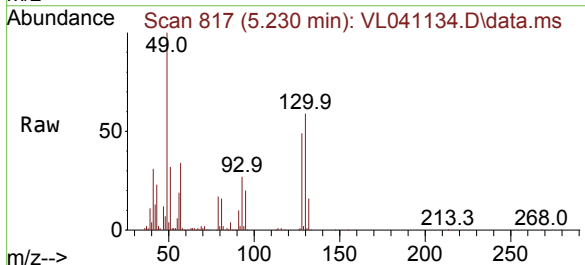
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

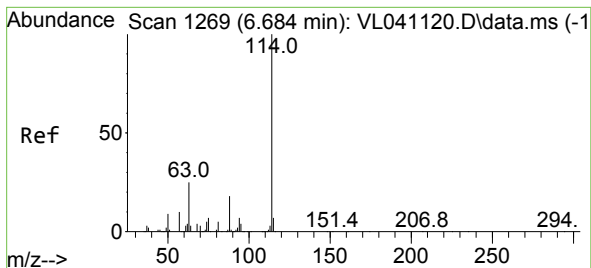
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 43    | Resp: | 52486 |
| Ion Ratio | Lower | Upper |       |
| 43        | 100   |       |       |
| 45        | 6.5   | 8.2   | 12.2# |
| 61        | 3.1   | 8.2   | 12.2# |
| 70        | 7.9   | 5.5   | 8.3   |



#26  
Hexane  
Concen: 0.933 ppbv  
RT: 5.230 min Scan# 817  
Delta R.T. -0.007 min  
Lab File: VL041134.D  
Acq: 4 Apr 2024 20:52

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 57    | Resp: | 117236 |
| Ion Ratio | Lower | Upper |        |
| 57        | 100   |       |        |
| 41        | 110.9 | 73.8  | 110.6# |
| 43        | 96.9  | 184.2 | 276.2# |
| 56        | 61.3  | 43.1  | 64.7   |





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.674 min Scan# 114

Delta R.T. -0.010 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Instrument :

MSVOA\_L

ClientSampleId :

SV1

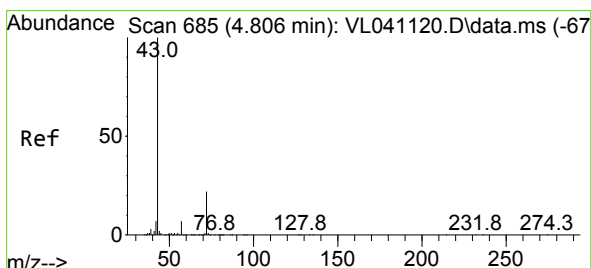
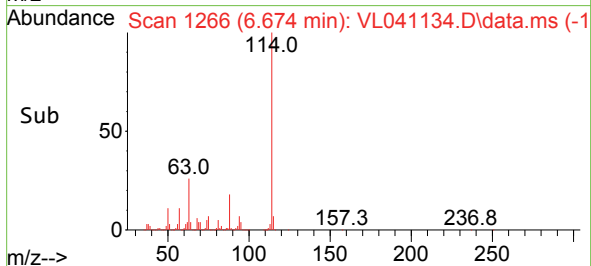
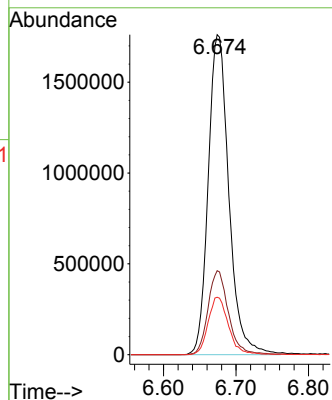
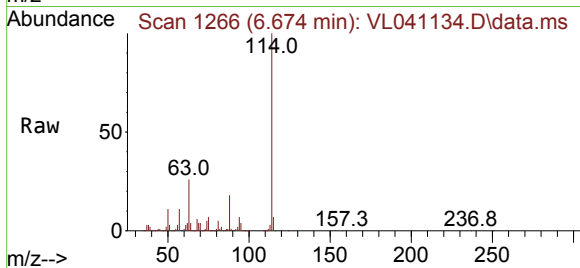
Tgt Ion:114 Resp: 3478463

Ion Ratio Lower Upper

114 100

63 26.1 21.0 31.6

88 17.9 14.6 22.0



#34

2-Butanone

Concen: 9.991 ppbv

RT: 4.803 min Scan# 684

Delta R.T. -0.003 min

Lab File: VL041134.D

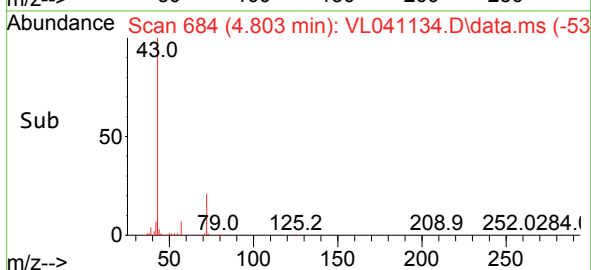
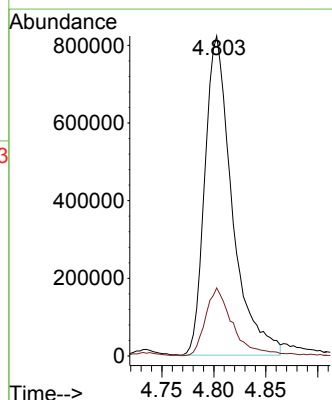
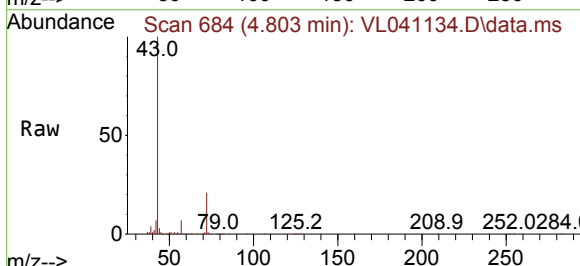
Acq: 4 Apr 2024 20:52

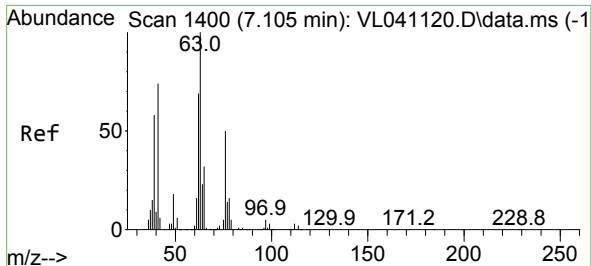
Tgt Ion: 43 Resp: 1501174

Ion Ratio Lower Upper

43 100

72 21.7 17.4 26.0





#39

1,2-Dichloropropane

Concen: 8.906 ppbv

RT: 6.674 min Scan# 1

Delta R.T. -0.431 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Instrument :

MSVOA\_L

ClientSampleId :

SV1

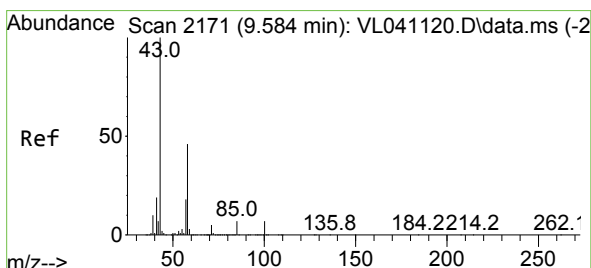
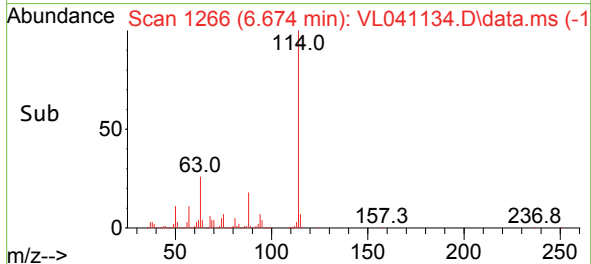
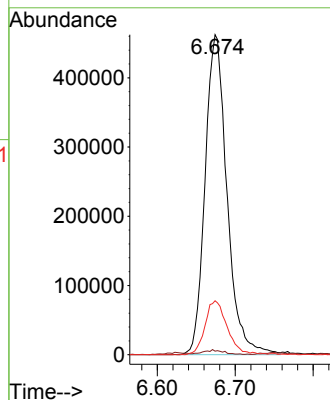
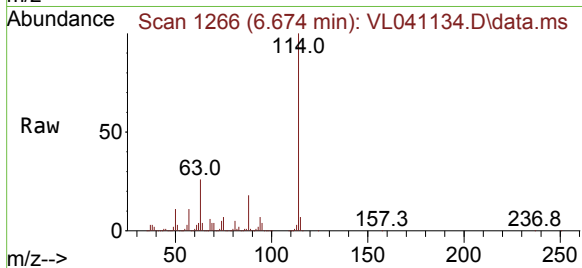
Tgt Ion: 63 Resp: 902053

Ion Ratio Lower Upper

63 100

41 0.5 62.2 93.4#

62 16.9 57.0 85.4#



#51

2-Hexanone

Concen: 1.929 ppbv

RT: 9.587 min Scan# 2172

Delta R.T. 0.003 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

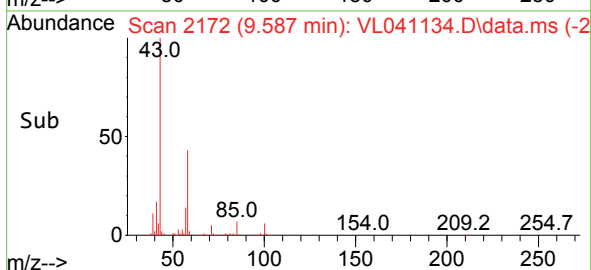
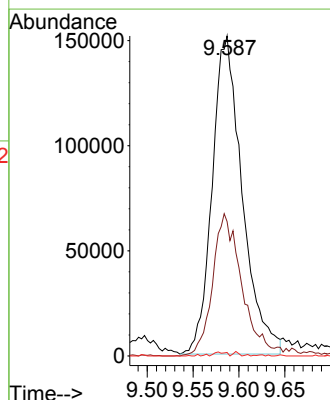
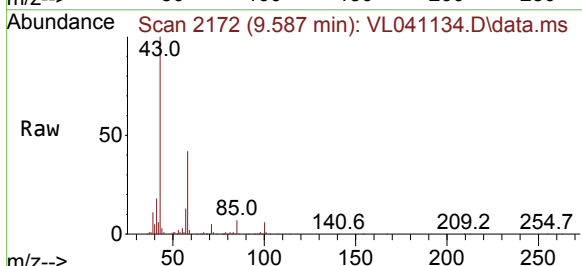
Tgt Ion: 43 Resp: 344818

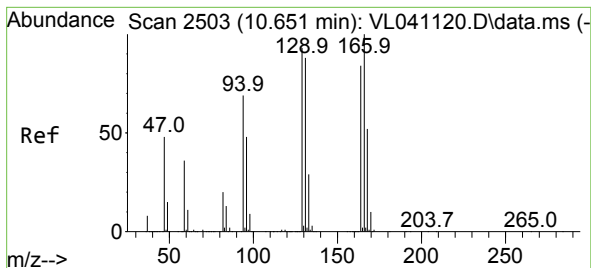
Ion Ratio Lower Upper

43 100

58 45.7 37.4 56.2

98 0.6 0.4 0.6





#52

Tetrachloroethene

Concen: 0.228 ppbv

RT: 10.645 min Scan# 2066

Delta R.T. -0.007 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Instrument :

MSVOA\_L

ClientSampleId :

SV1

Tgt Ion:164 Resp: 18648

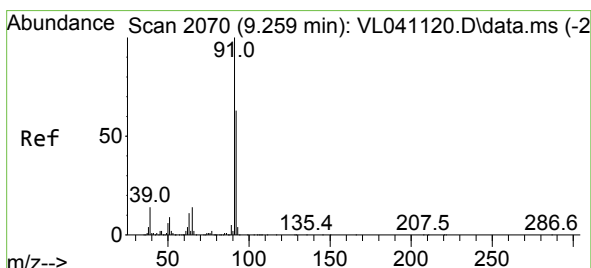
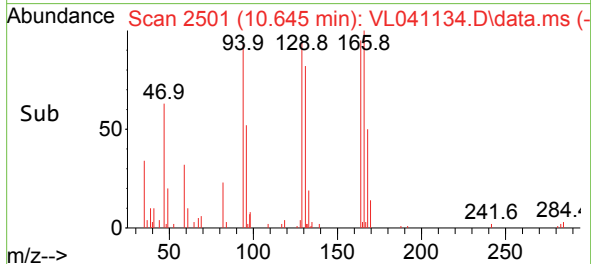
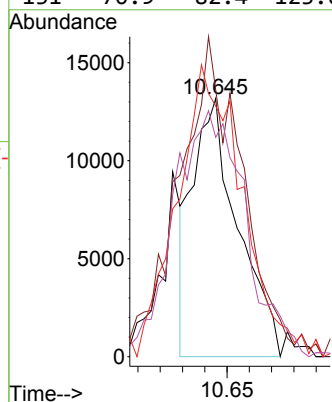
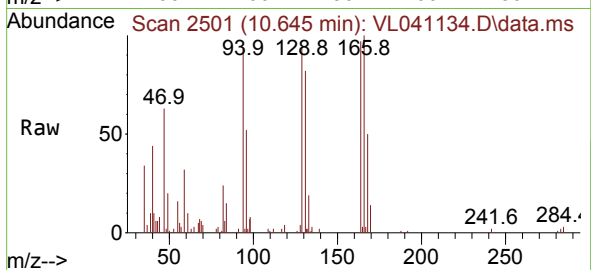
Ion Ratio Lower Upper

164 100

166 89.0 100.6 150.8#

129 84.6 87.2 130.8#

131 70.9 82.4 123.6#



#53

Toluene

Concen: 0.346 ppbv

RT: 9.246 min Scan# 2066

Delta R.T. -0.013 min

Lab File: VL041134.D

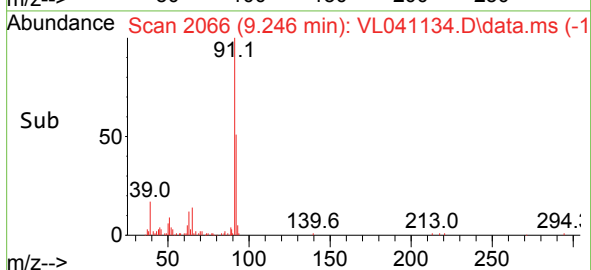
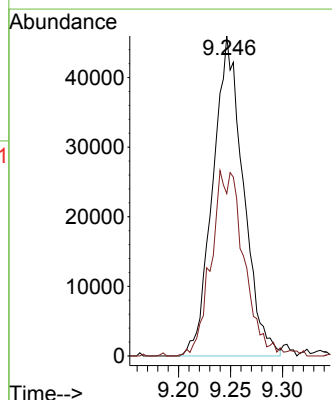
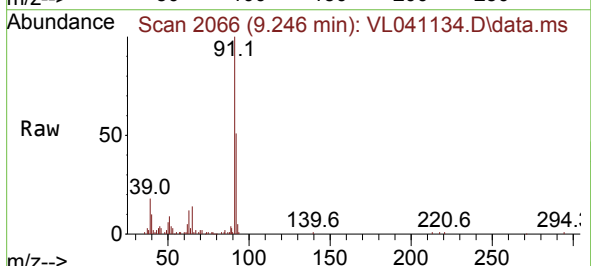
Acq: 4 Apr 2024 20:52

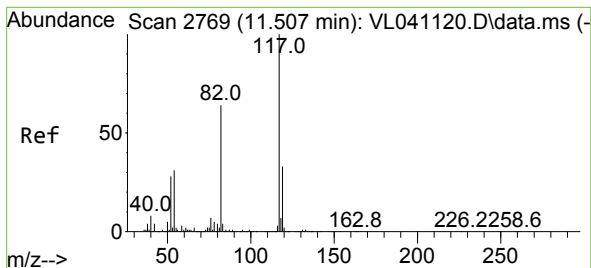
Tgt Ion: 91 Resp: 93510

Ion Ratio Lower Upper

91 100

92 63.2 48.9 73.3





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.494 min Scan# 21

Delta R.T. -0.013 min

Lab File: VL041134.D

Acq: 4 Apr 2024 20:52

Instrument :

MSVOA\_L

ClientSampleId :

SV1

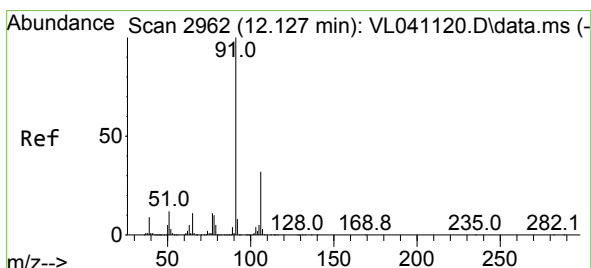
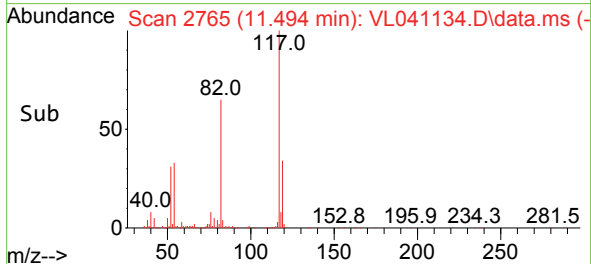
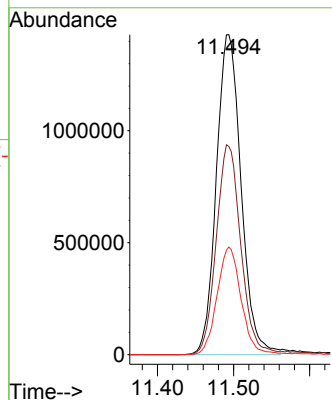
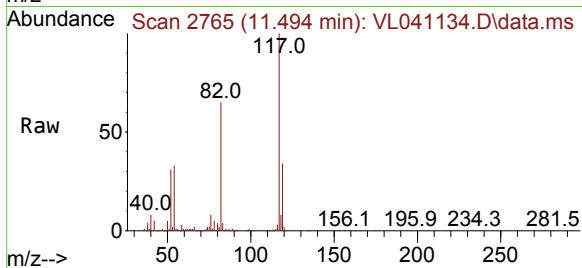
Tgt Ion:117 Resp: 3230649

Ion Ratio Lower Upper

117 100

82 67.0 51.4 77.2

119 33.2 23.7 35.5



#58

Ethyl Benzene

Concen: 0.068 ppbv

RT: 12.397 min Scan# 3046

Delta R.T. 0.270 min

Lab File: VL041134.D

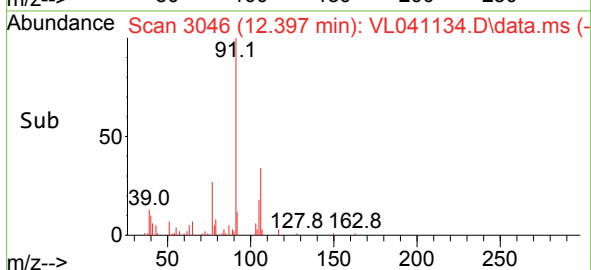
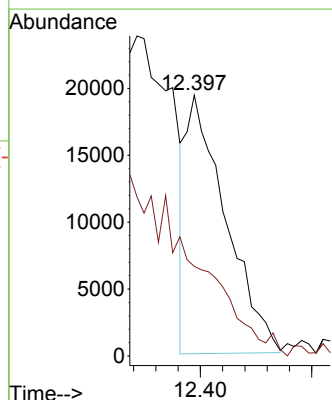
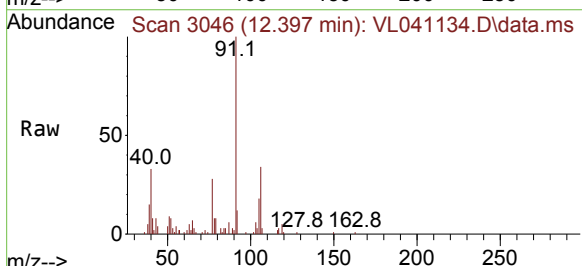
Acq: 4 Apr 2024 20:52

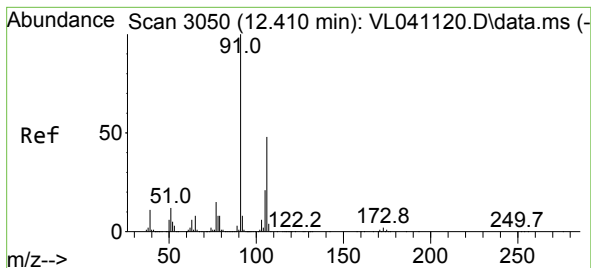
Tgt Ion: 91 Resp: 24085

Ion Ratio Lower Upper

91 100

106 31.4 24.6 36.8

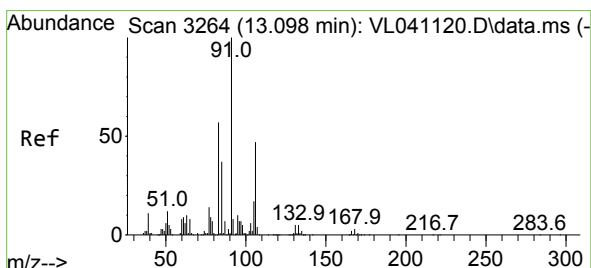
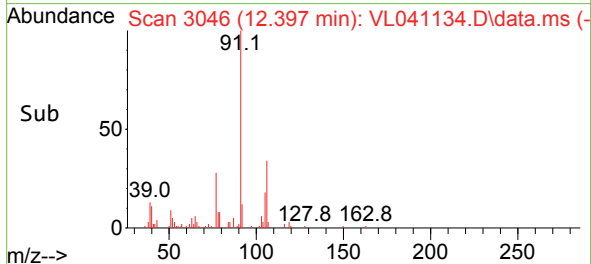
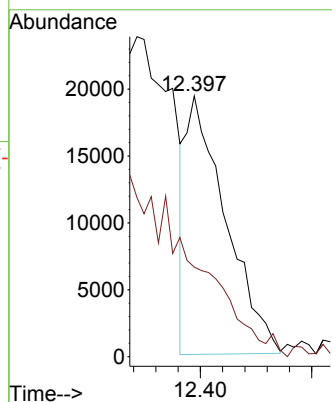
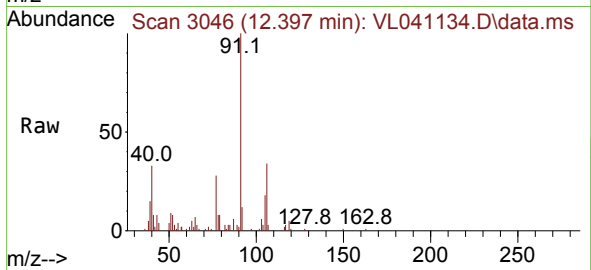




#59  
m/p-Xylene  
Concen: 0.075 ppbv  
RT: 12.397 min Scan# 3050  
Delta R.T. -0.013 min  
Lab File: VL041134.D  
Acq: 4 Apr 2024 20:52

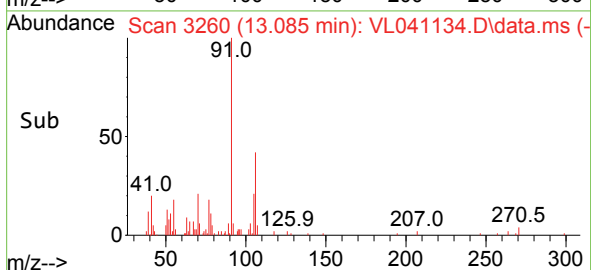
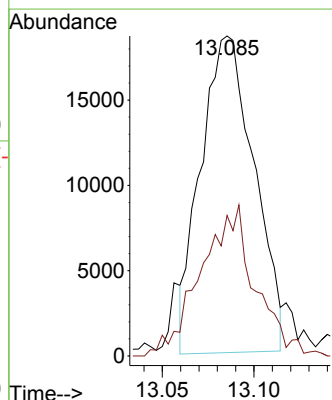
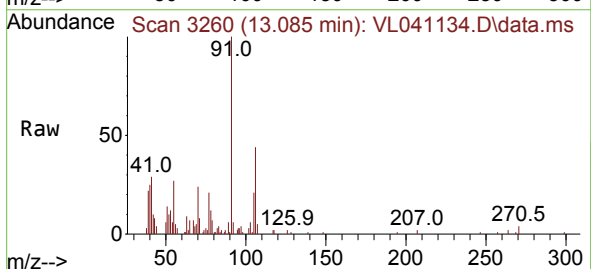
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

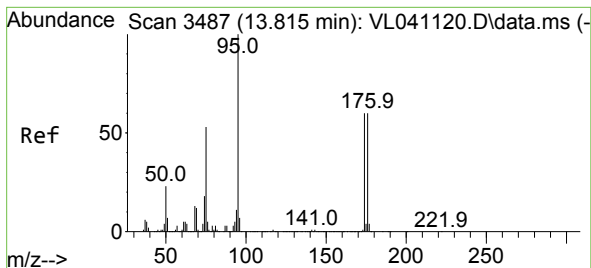
Tgt Ion: 91 Resp: 24085  
Ion Ratio Lower Upper  
91 100  
106 0.0 35.4 53.2#



#60  
o-Xylene  
Concen: 0.123 ppbv  
RT: 13.085 min Scan# 3260  
Delta R.T. -0.013 min  
Lab File: VL041134.D  
Acq: 4 Apr 2024 20:52

Tgt Ion: 91 Resp: 37635  
Ion Ratio Lower Upper  
91 100  
106 48.4 22.4 67.3

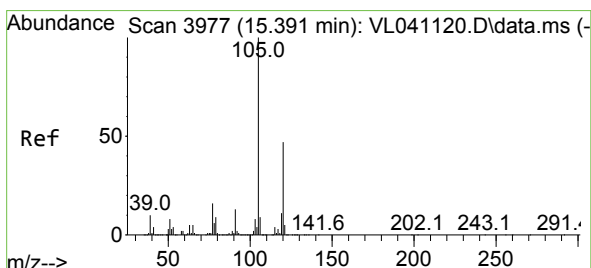
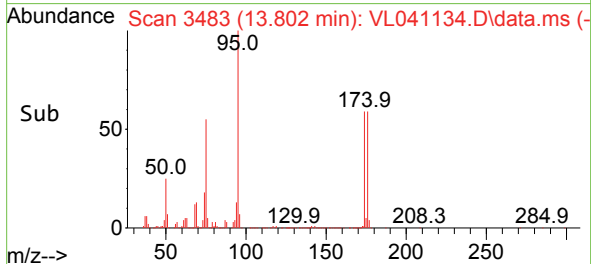
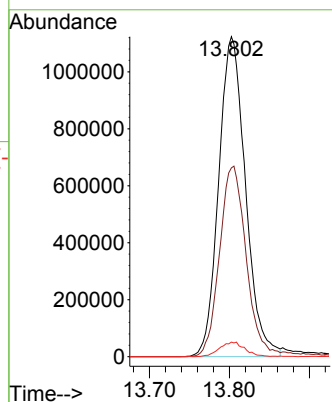
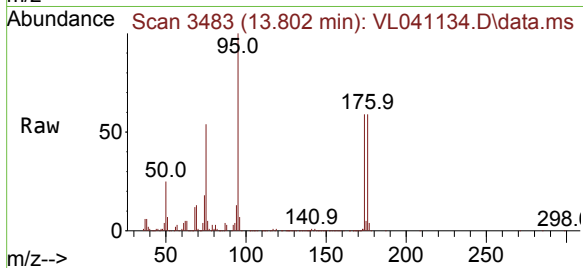




#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.013 ppbv  
RT: 13.802 min Scan# 3483  
Delta R.T. -0.013 min  
Lab File: VL041134.D  
Acq: 4 Apr 2024 20:52

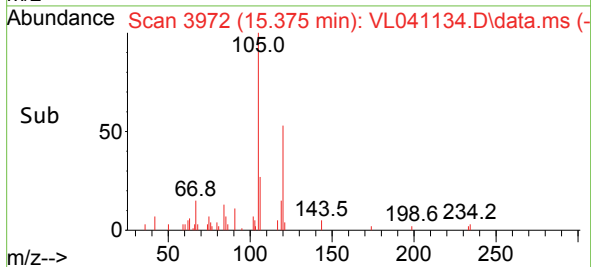
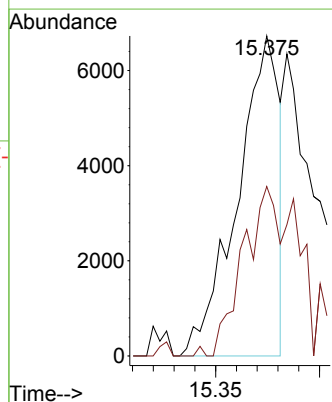
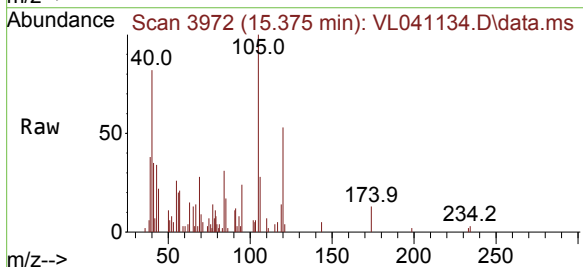
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

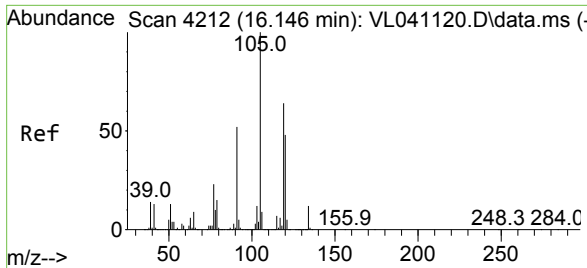
Tgt Ion: 95 Resp: 2611708  
Ion Ratio Lower Upper  
95 100  
174 61.0 47.8 71.8  
175 4.5 3.5 5.3



#73  
1,3,5-Trimethylbenzene  
Concen: 0.031 ppbv  
RT: 15.375 min Scan# 3972  
Delta R.T. -0.016 min  
Lab File: VL041134.D  
Acq: 4 Apr 2024 20:52

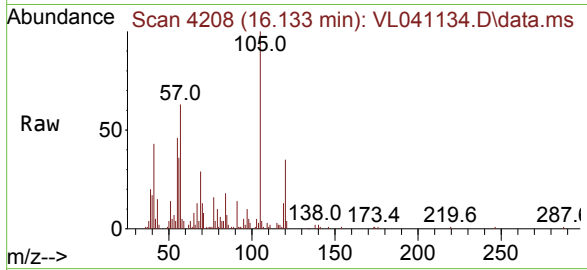
Tgt Ion: 105 Resp: 9385  
Ion Ratio Lower Upper  
105 100  
120 53.0 38.7 58.1





#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.227 ppbv  
 RT: 16.133 min Scan# 41  
 Delta R.T. -0.013 min  
 Lab File: VL041134.D  
 Acq: 4 Apr 2024 20:52

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 78443 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 38.6  | 40.4  | 60.6# |
| 91       | 11.3  | 41.4  | 62.0# |
| 77       | 13.2  | 19.0  | 28.4# |

