

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL012424\  
 Data File : VL041021.D  
 Acq On : 24 Jan 2024 18:15  
 Operator : SY/MD  
 Sample : P1187-14 LOQ 0.03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOQ-AIR-02-QT1-2024

Quant Time: Jan 25 03:21:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL012324AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Thu Jan 25 03:13:06 2024  
 Response via : Initial Calibration

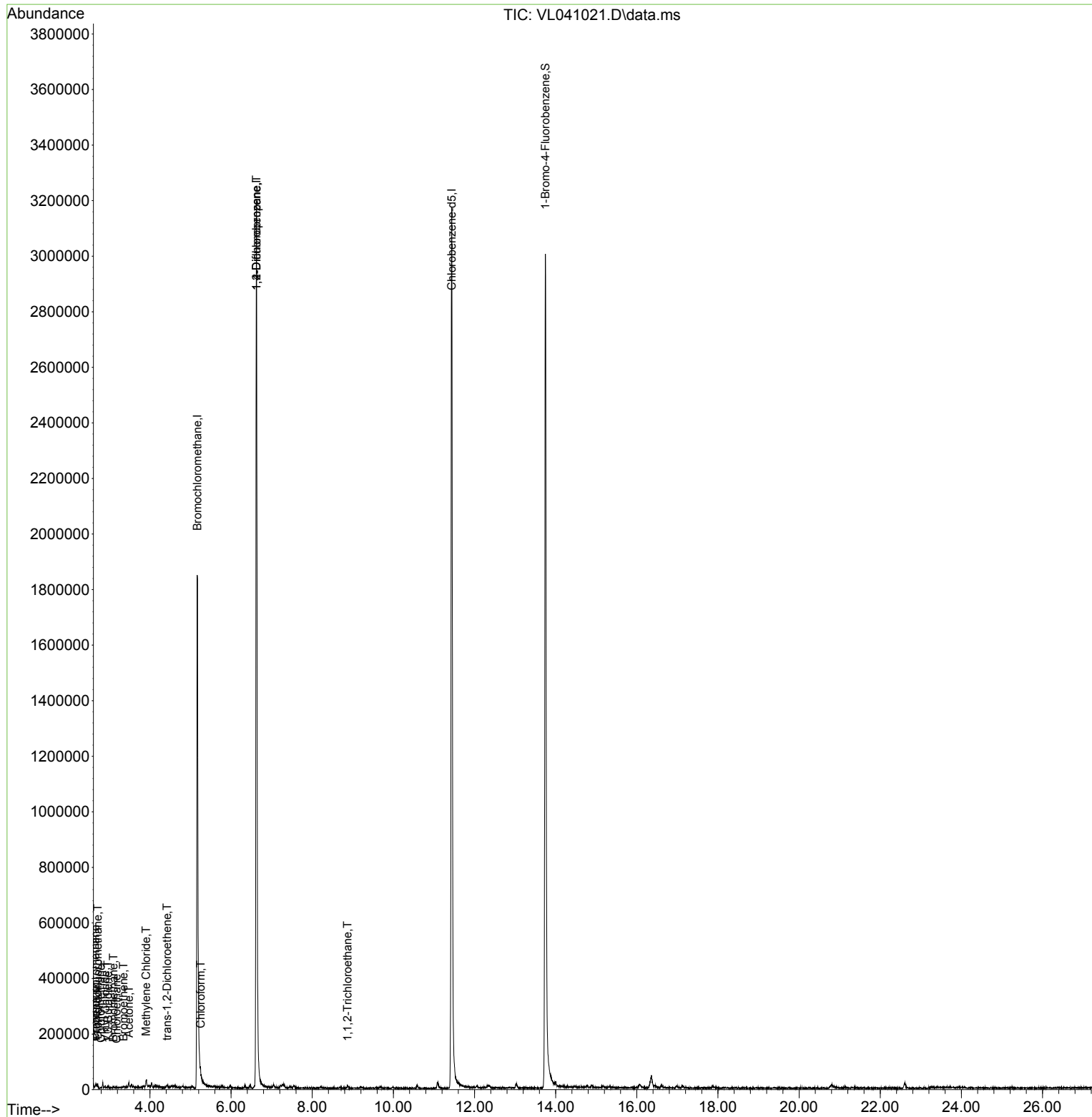
| Compound                     | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|------------------------------|--------|-------|----------|----------|------------|----------|
| -----                        |        |       |          |          |            |          |
| Internal Standards           |        |       |          |          |            |          |
| 1) Bromochloromethane        | 5.166  | 49    | 972373   | 10.000   | ppbv       | 0.00     |
| 33) 1,4-Difluorobenzene      | 6.626  | 114   | 2291482  | 10.000   | ppbv       | 0.00     |
| 55) Chlorobenzene-d5         | 11.436 | 117   | 1968288  | 10.000   | ppbv       | 0.00     |
| System Monitoring Compounds  |        |       |          |          |            |          |
| 68) 1-Bromo-4-Fluorobenzene  | 13.748 | 95    | 1518721  | 10.216   | ppbv       | 0.00     |
| Spiked Amount                | 10.000 | Range | 65 - 135 | Recovery | = 102.200% |          |
| Target Compounds             |        |       |          |          |            |          |
|                              |        |       |          |          | Qvalue     |          |
| 2) Dichlorodifluoromethane   | 2.709  | 85    | 8479     | 0.039    | ppbv #     | 77       |
| 3) Chlorodifluoromethane     | 2.655  | 51    | 6162     | 0.038    | ppbv       | 95       |
| 4) Chloromethane             | 2.790  | 50    | 2677     | 0.044    | ppbv       | 93       |
| 5) Vinyl Chloride            | 2.902  | 62    | 2124     | 0.035    | ppbv       | 98       |
| 6) Bromomethane              | 3.099  | 94    | 1140     | 0.044    | ppbv #     | 55       |
| 7) Chloroethane              | 3.176  | 64    | 921      | 0.043    | ppbv       | 89       |
| 9) Propene                   | 2.674  | 41    | 1989     | 0.037    | ppbv #     | 15       |
| 14) Bromoethene              | 3.346  | 108   | 1551     | 0.032    | ppbv #     | 67       |
| 15) Acetone                  | 3.481  | 43    | 16998    | 0.137    | ppbv #     | 87       |
| 16) 1,3-Butadiene            | 2.967  | 39    | 1994     | 0.034    | ppbv       | 94       |
| 20) Methylene Chloride       | 3.909  | 84    | 1766     | 0.037    | ppbv #     | 35       |
| 22) trans-1,2-Dichloroethene | 4.423  | 96    | 1801     | 0.033    | ppbv #     | 28       |
| 29) Chloroform               | 5.253  | 83    | 6801     | 0.040    | ppbv #     | 77       |
| 39) 1,2-Dichloropropane      | 6.626  | 63    | 604341   | 8.106    | ppbv #     | 25       |
| 47) 1,1,2-Trichloroethane    | 8.873  | 97    | 2570     | 0.032    | ppbv #     | 72       |
| -----                        |        |       |          |          |            |          |

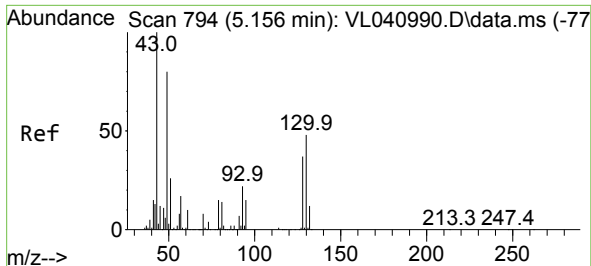
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL012424\  
Data File : VL041021.D  
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Misc : 400mL/MSVOA\_L  
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Instrument :  
MSVOA\_L  
ClientSampleId :  
LOQ-AIR-02-QT1-2024

Quant Time: Jan 25 03:21:47 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL012324AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Jan 25 03:13:06 2024  
Response via : Initial Calibration

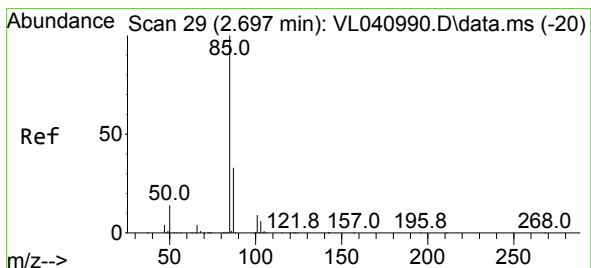
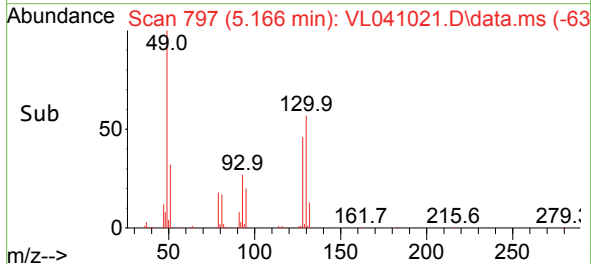
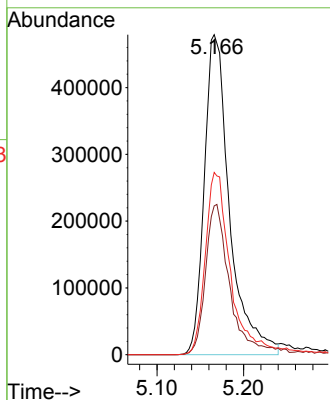
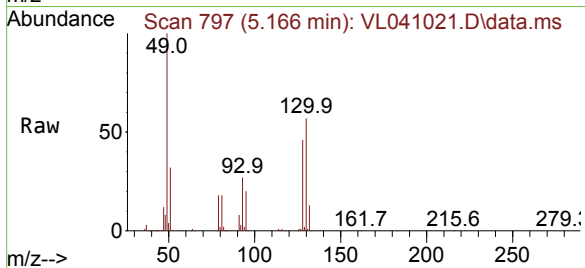




#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.166 min Scan# 794  
 Delta R.T. 0.010 min  
 Lab File: VL041021.D  
 Acq: 24 Jan 2024 18:15

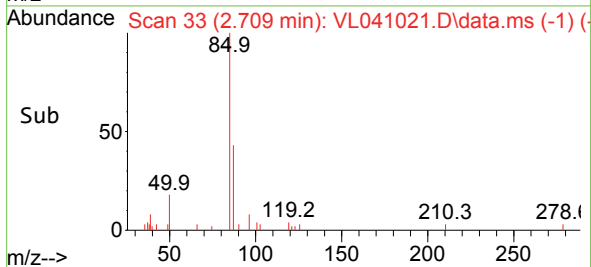
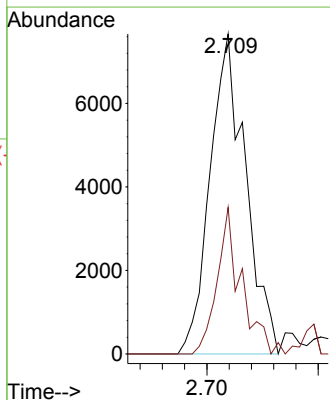
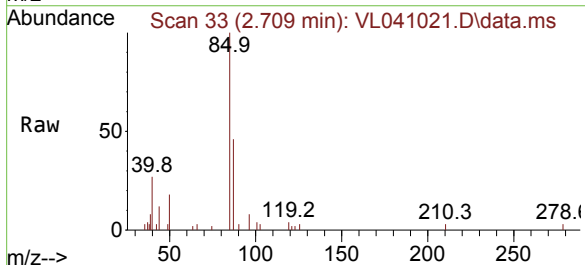
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOQ-AIR-02-QT1-2024

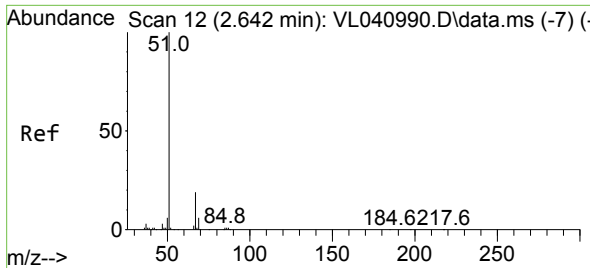
Tgt Ion: 49 Resp: 972373  
 Ion Ratio Lower Upper  
 49 100  
 128 46.3 23.9 71.7  
 130 58.4 31.1 93.5



#2  
 Dichlorodifluoromethane  
 Concen: 0.039 ppbv  
 RT: 2.709 min Scan# 33  
 Delta R.T. 0.010 min  
 Lab File: VL041021.D  
 Acq: 24 Jan 2024 18:15

Tgt Ion: 85 Resp: 8479  
 Ion Ratio Lower Upper  
 85 100  
 87 45.8 26.3 39.5#

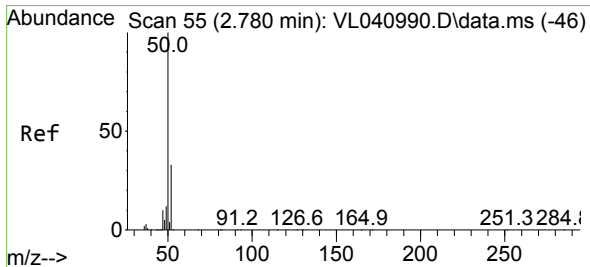
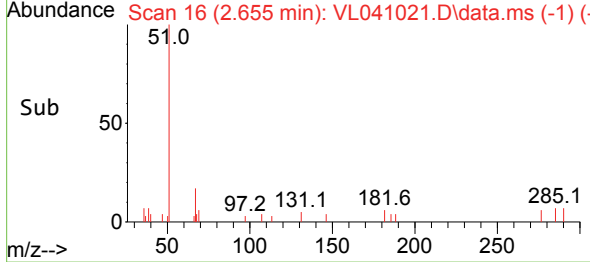
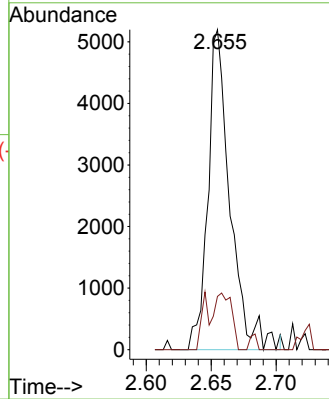
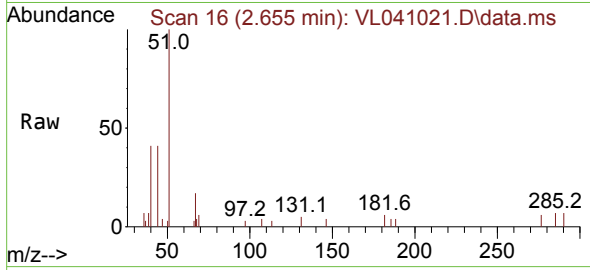




#3  
Chlorodifluoromethane  
Concen: 0.038 ppbv  
RT: 2.655 min Scan# 11  
Delta R.T. 0.010 min  
Lab File: VL041021.D  
Acq: 24 Jan 2024 18:15

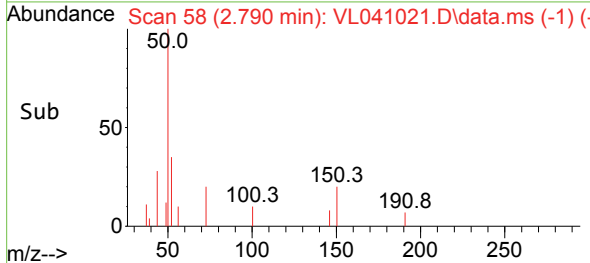
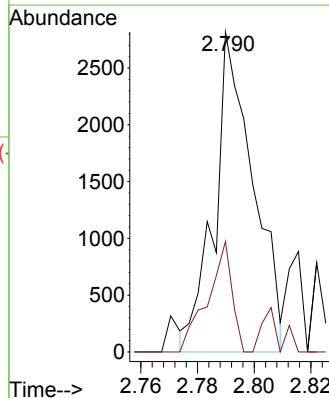
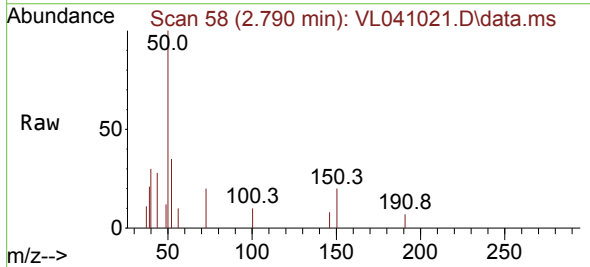
Instrument :  
MSVOA\_L  
ClientSampleId :  
LOQ-AIR-02-QT1-2024

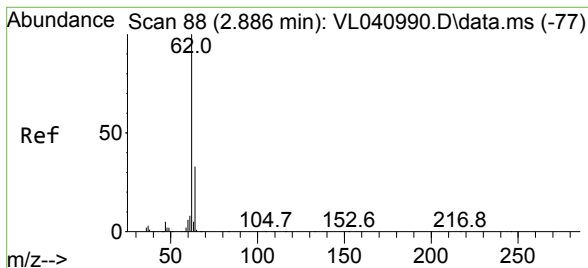
Tgt Ion: 51 Resp: 6162  
Ion Ratio Lower Upper  
51 100  
67 21.0 14.8 22.2



#4  
Chloromethane  
Concen: 0.044 ppbv  
RT: 2.790 min Scan# 58  
Delta R.T. 0.006 min  
Lab File: VL041021.D  
Acq: 24 Jan 2024 18:15

Tgt Ion: 50 Resp: 2677  
Ion Ratio Lower Upper  
50 100  
52 37.0 26.2 39.4

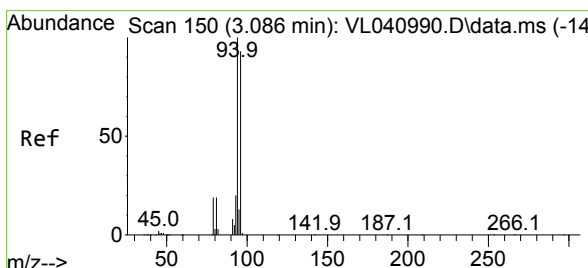
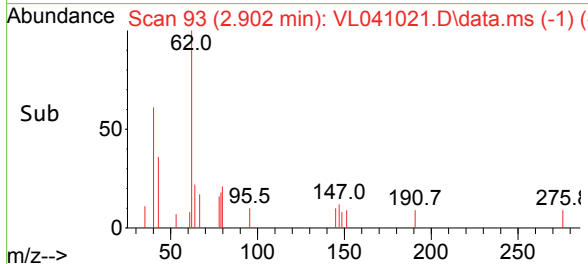
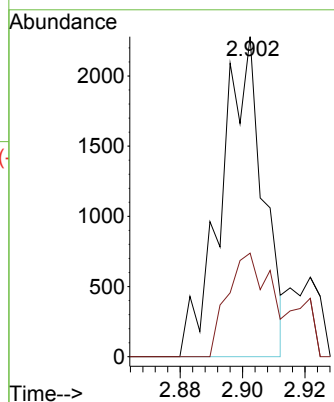
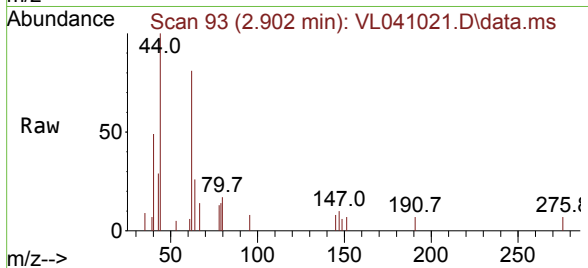




#5  
 Vinyl Chloride  
 Concen: 0.035 ppbv  
 RT: 2.902 min Scan# 91  
 Delta R.T. 0.013 min  
 Lab File: VL041021.D  
 Acq: 24 Jan 2024 18:15

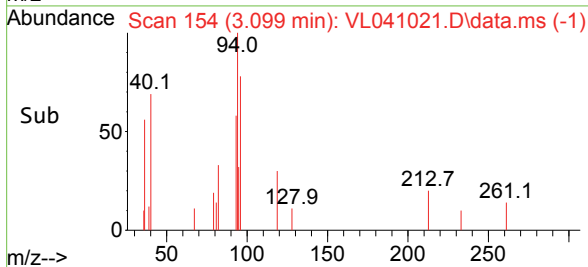
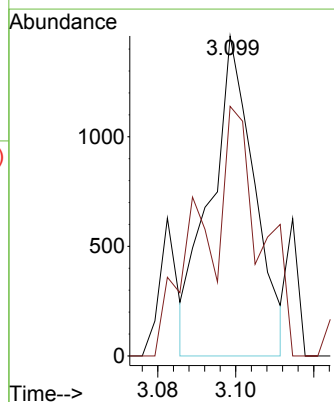
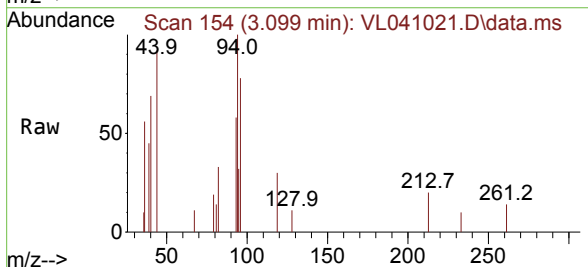
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOQ-AIR-02-QT1-2024

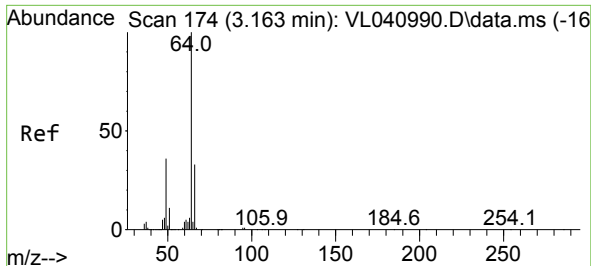
Tgt Ion: 62 Resp: 2124  
 Ion Ratio Lower Upper  
 62 100  
 64 32.4 26.6 40.0



#6  
 Bromomethane  
 Concen: 0.044 ppbv  
 RT: 3.099 min Scan# 154  
 Delta R.T. 0.010 min  
 Lab File: VL041021.D  
 Acq: 24 Jan 2024 18:15

Tgt Ion: 94 Resp: 1140  
 Ion Ratio Lower Upper  
 94 100  
 96 50.1 74.2 111.4#

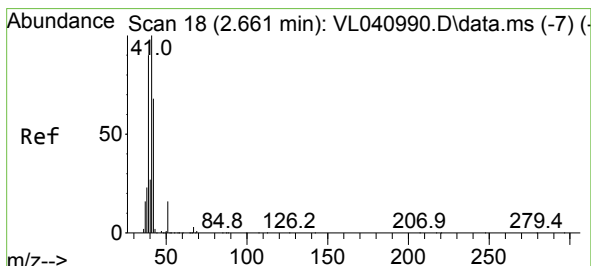
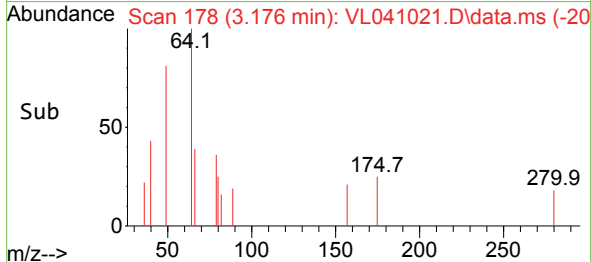
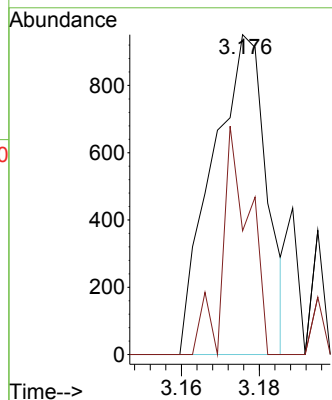
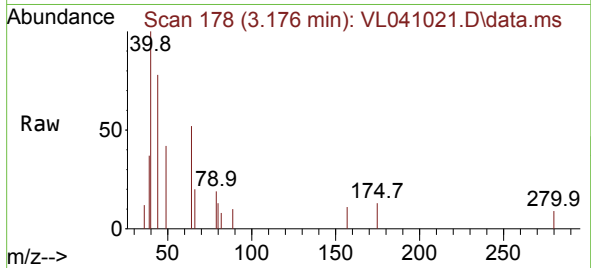




#7  
Chloroethane  
Concen: 0.043 ppbv  
RT: 3.176 min Scan# 11  
Delta R.T. 0.010 min  
Lab File: VL041021.D  
Acq: 24 Jan 2024 18:15

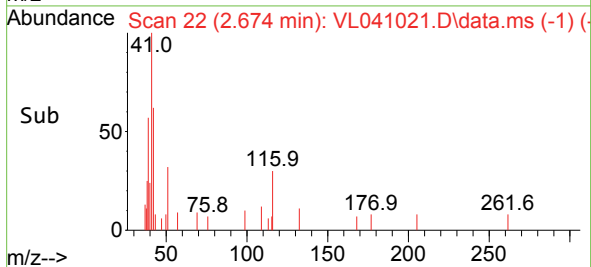
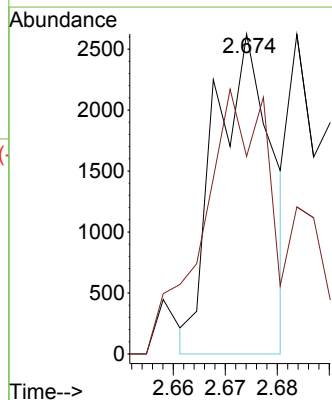
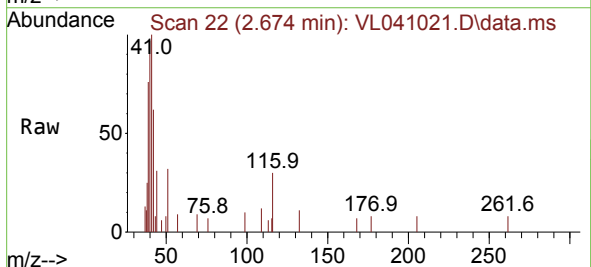
Instrument :  
MSVOA\_L  
ClientSampleId :  
LOQ-AIR-02-QT1-2024

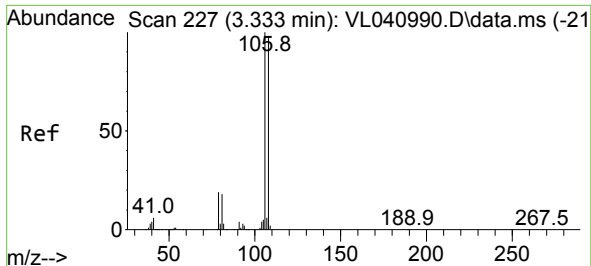
Tgt Ion: 64 Resp: 921  
Ion Ratio Lower Upper  
64 100  
66 38.7 26.0 39.0



#9  
Propene  
Concen: 0.037 ppbv  
RT: 2.674 min Scan# 22  
Delta R.T. 0.010 min  
Lab File: VL041021.D  
Acq: 24 Jan 2024 18:15

Tgt Ion: 41 Resp: 1989  
Ion Ratio Lower Upper  
41 100  
42 145.6 59.0 88.4#





#14

Bromoethene

Concen: 0.032 ppbv

RT: 3.346 min Scan# 21

Delta R.T. 0.013 min

Lab File: VL041021.D

Acq: 24 Jan 2024 18:15

Instrument :

MSVOA\_L

ClientSampleId :

LOQ-AIR-02-QT1-2024

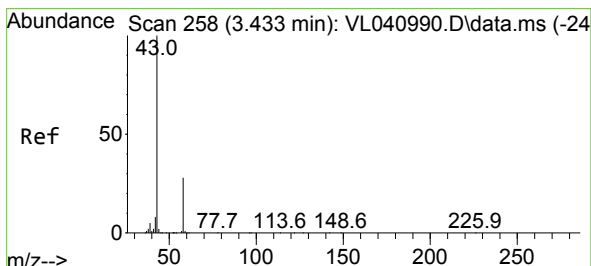
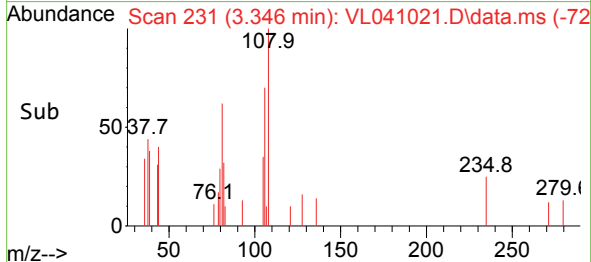
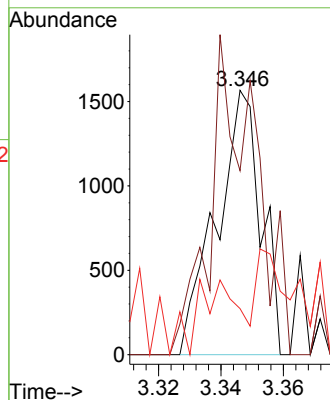
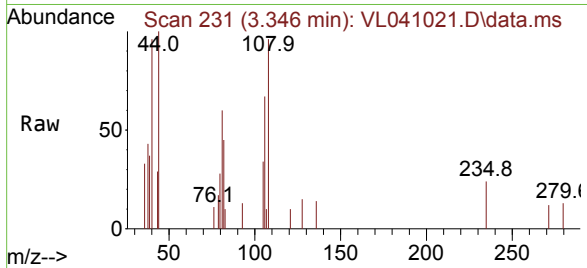
Tgt Ion:108 Resp: 1551

Ion Ratio Lower Upper

108 100

106 133.8 86.4 129.6#

79 55.3 16.2 24.4#



#15

Acetone

Concen: 0.137 ppbv

RT: 3.481 min Scan# 273

Delta R.T. 0.045 min

Lab File: VL041021.D

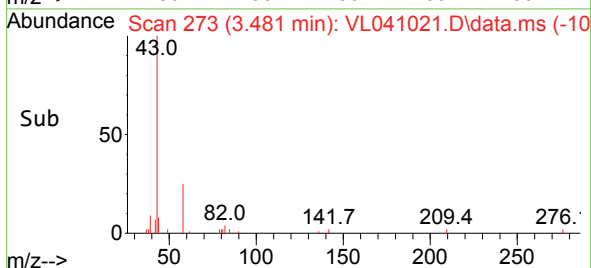
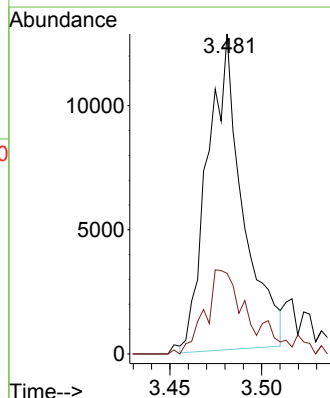
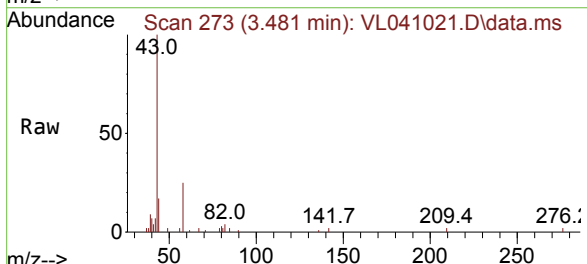
Acq: 24 Jan 2024 18:15

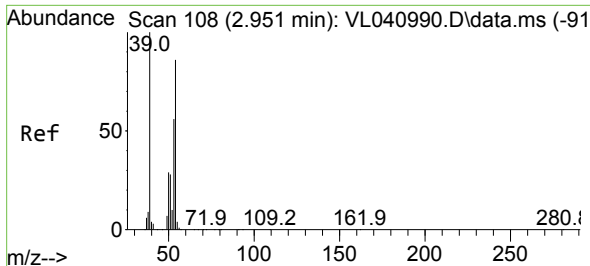
Tgt Ion: 43 Resp: 16998

Ion Ratio Lower Upper

43 100

58 34.6 22.2 33.2#

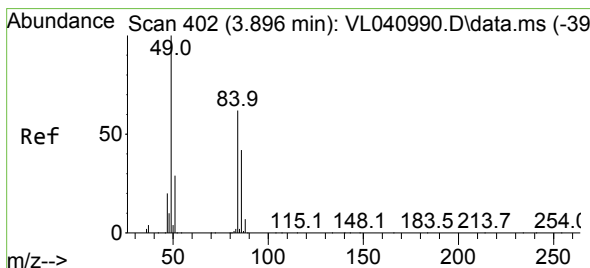
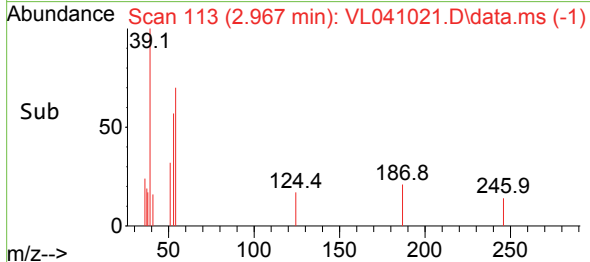
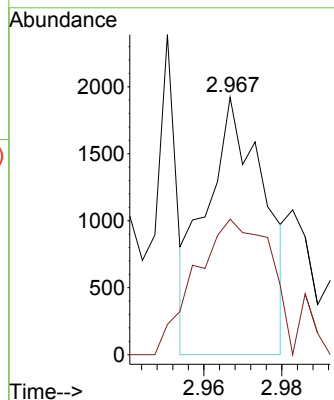
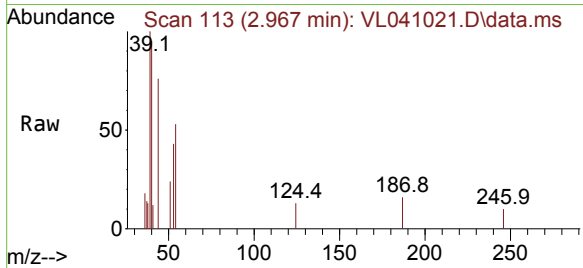




#16  
1,3-Butadiene  
Concen: 0.034 ppbv  
RT: 2.967 min Scan# 113  
Delta R.T. 0.013 min  
Lab File: VL041021.D  
Acq: 24 Jan 2024 18:15

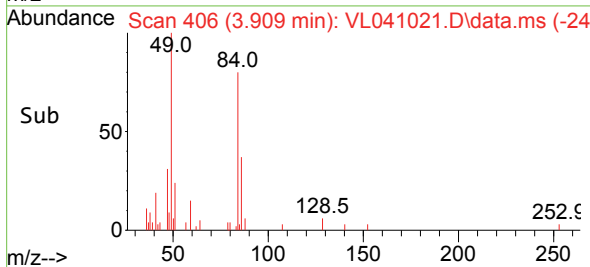
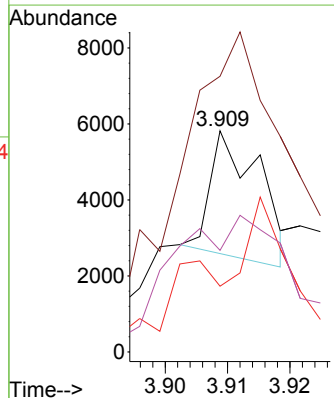
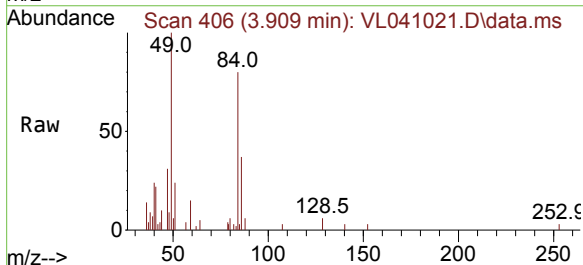
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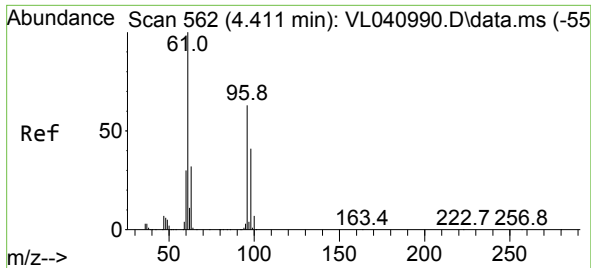
Tgt Ion: 39 Resp: 1994  
Ion Ratio Lower Upper  
39 100  
54 73.3 62.7 94.1



#20  
Methylene Chloride  
Concen: 0.037 ppbv  
RT: 3.909 min Scan# 406  
Delta R.T. 0.010 min  
Lab File: VL041021.D  
Acq: 24 Jan 2024 18:15

Tgt Ion: 84 Resp: 1766  
Ion Ratio Lower Upper  
84 100  
49 86.2 128.1 192.1#  
51 0.0 36.5 54.7#  
86 0.0 54.1 81.1#

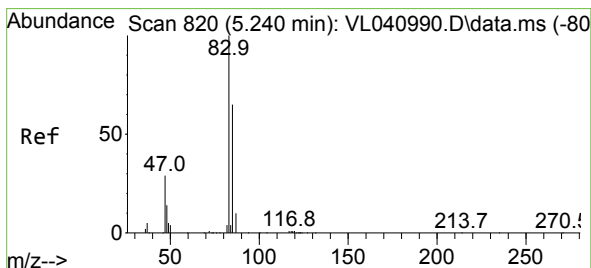
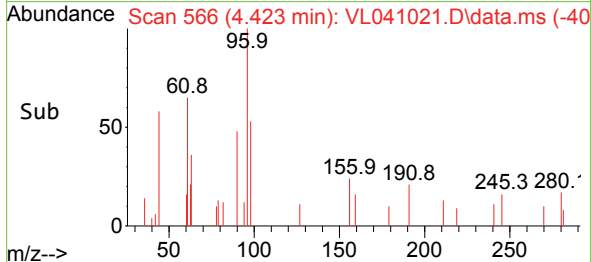
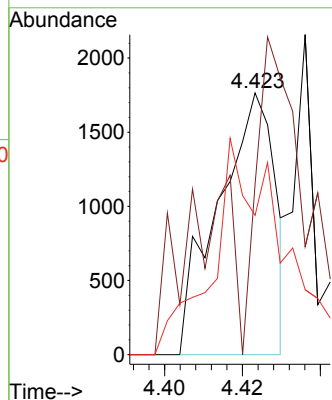
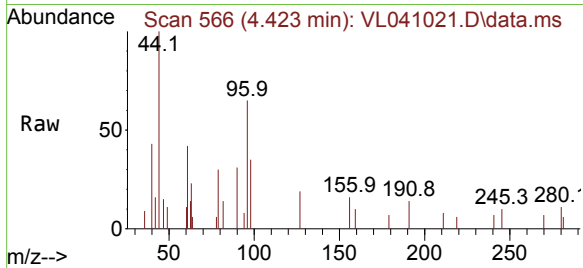




#22  
trans-1,2-Dichloroethene  
Concen: 0.033 ppbv  
RT: 4.423 min Scan# 566  
Delta R.T. 0.013 min  
Lab File: VL041021.D  
Acq: 24 Jan 2024 18:15

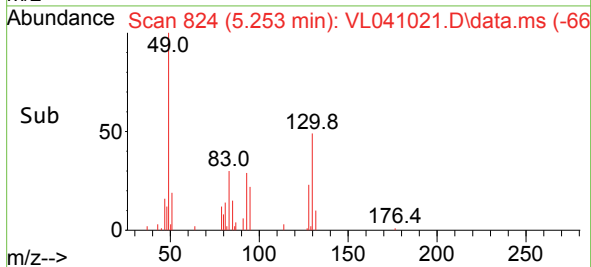
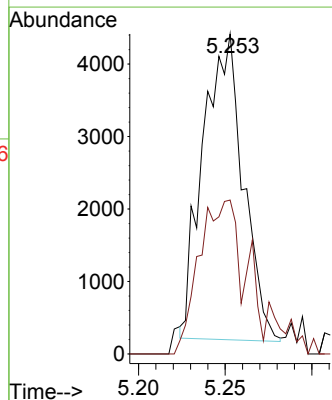
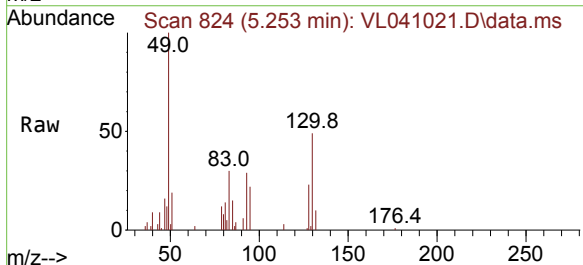
Instrument :  
MSVOA\_L  
ClientSampleId :  
LOQ-AIR-02-QT1-2024

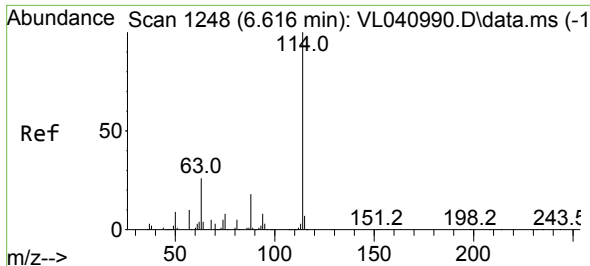
Tgt Ion: 96 Resp: 1801  
Ion Ratio Lower Upper  
96 100  
61 46.1 126.0 189.0#  
98 33.6 51.2 76.8#



#29  
Chloroform  
Concen: 0.040 ppbv  
RT: 5.253 min Scan# 824  
Delta R.T. 0.013 min  
Lab File: VL041021.D  
Acq: 24 Jan 2024 18:15

Tgt Ion: 83 Resp: 6801  
Ion Ratio Lower Upper  
83 100  
85 46.3 51.6 77.4#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.626 min Scan# 1251

Delta R.T. 0.010 min

Lab File: VL041021.D

Acq: 24 Jan 2024 18:15

Instrument :

MSVOA\_L

ClientSampleId :

LOQ-AIR-02-QT1-2024

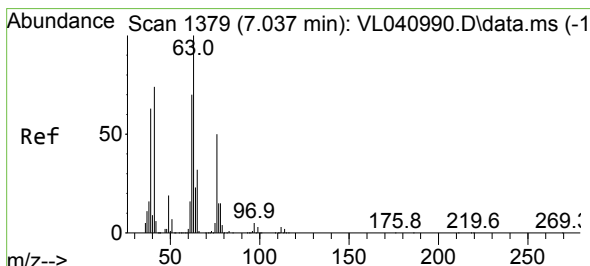
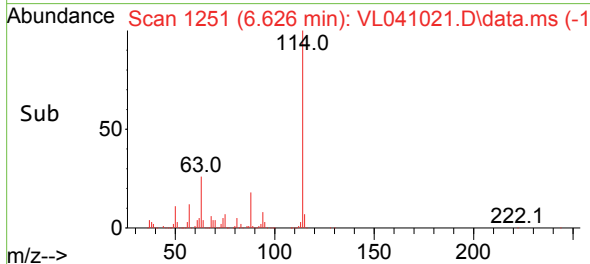
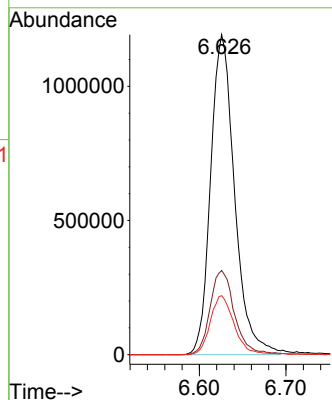
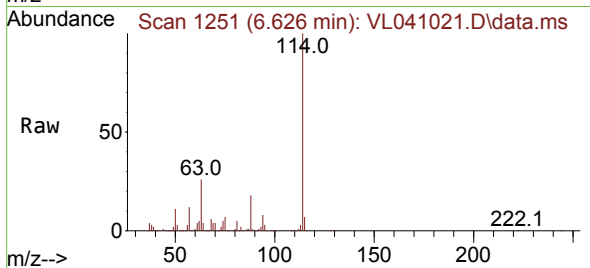
Tgt Ion:114 Resp: 2291482

Ion Ratio Lower Upper

114 100

63 27.0 20.8 31.2

88 18.6 14.3 21.5



#39

1,2-Dichloropropane

Concen: 8.106 ppbv

RT: 6.626 min Scan# 1251

Delta R.T. -0.412 min

Lab File: VL041021.D

Acq: 24 Jan 2024 18:15

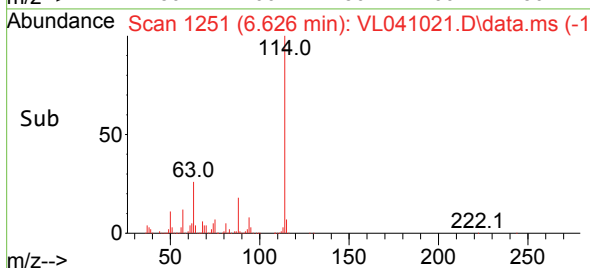
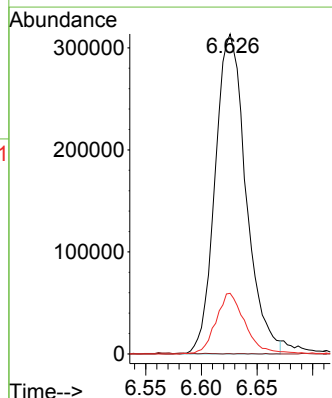
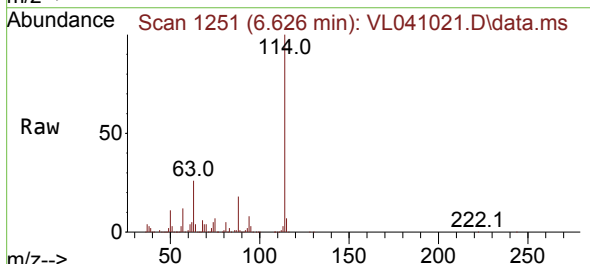
Tgt Ion: 63 Resp: 604341

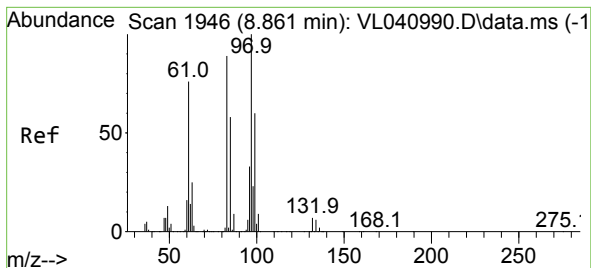
Ion Ratio Lower Upper

63 100

41 0.0 59.6 89.4#

62 19.0 55.6 83.4#





#47

1,1,2-Trichloroethane

Concen: 0.032 ppbv

RT: 8.873 min Scan# 1946

Delta R.T. 0.013 min

Lab File: VL041021.D

Acq: 24 Jan 2024 18:15

Instrument :

MSVOA\_L

ClientSampleId :

LOQ-AIR-02-QT1-2024

Tgt Ion: 97 Resp: 2570

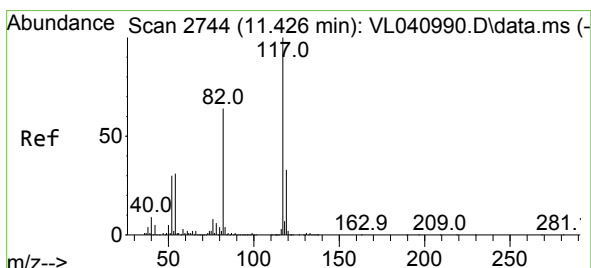
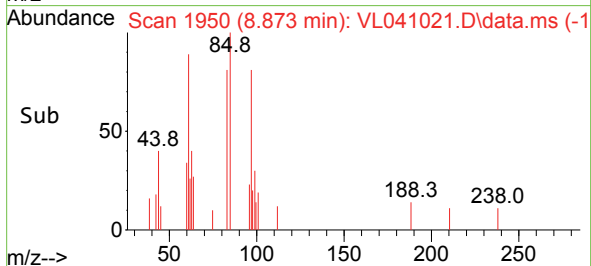
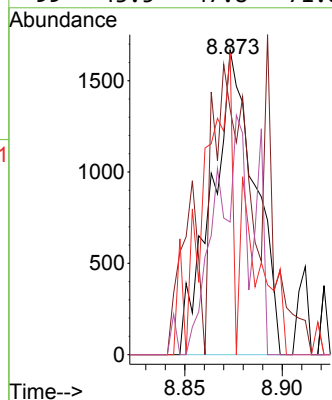
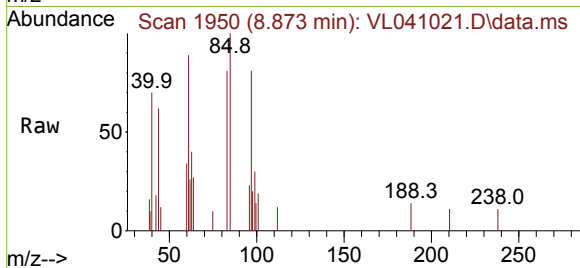
Ion Ratio Lower Upper

97 100

83 53.1 71.5 107.3#

85 70.8 46.1 69.1#

99 43.5 47.8 71.8#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.436 min Scan# 2747

Delta R.T. 0.006 min

Lab File: VL041021.D

Acq: 24 Jan 2024 18:15

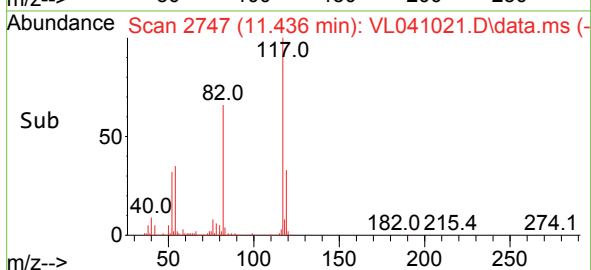
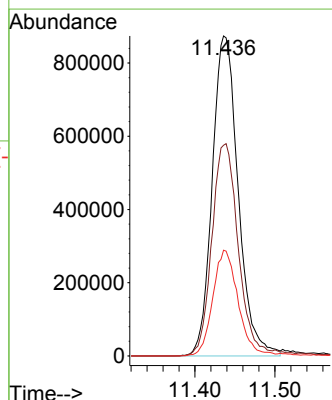
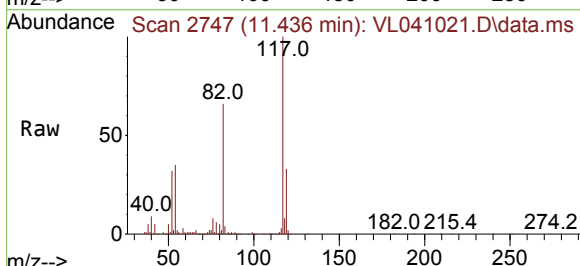
Tgt Ion: 117 Resp: 1968288

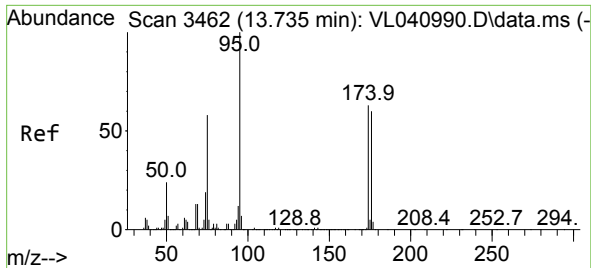
Ion Ratio Lower Upper

117 100

82 69.2 51.7 77.5

119 33.0 23.8 35.6





#68

1-Bromo-4-Fluorobenzene

Concen: 10.216 ppbv

RT: 13.748 min Scan# 34

Delta R.T. 0.010 min

Lab File: VL041021.D

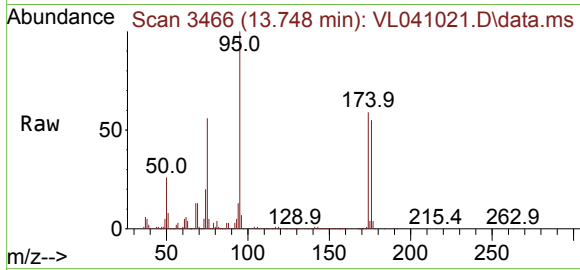
Acq: 24 Jan 2024 18:15

Instrument :

MSVOA\_L

ClientSampleId :

LOQ-AIR-02-QT1-2024



Tgt Ion: 95 Resp: 1518721

Ion Ratio Lower Upper

95 100

174 59.0 49.1 73.7

175 4.2 3.7 5.5

